Harris Avenue Shipyard

Remedial Investigation/ Feasibility Study

Appendix D
Data Gaps Investigation Summary

Attachment D.2
Laboratory Analytical Data Reports

FINAL

ALS LABORATORY GROUP - EVERETT
DATA SUMMARY SHEET

PARAMETER: SEMIVOLATILES INSTR. MTHD: NWTPH-DX EXTRCT MTHD: TPH-DX

QC BATCH # DS013113 1ST ANAL. SEQ

EXT. DATES 1/31/2013 MATRIX SOIL

ASSOCIATED SAMPLES EV13010133-1-4 EV13010139-1-6

EV13010138-2,3,4,6,8,10,13,14,17***

BLANK AND DUPLICATE RESULTS

ANALYTE:	BLANK RESULTS:	DUPLICATE: EV13010139-1	ORIGINAL:	%RPD:
DIESEL	<25 mg/Kg	<25 mg/Kg	<25 mg/Kg	
MOTOR OIL	<50 mg/Kg	<50 mg/Kg	<50 mg/Kg	

SPIKE/ SPIKE DUPLICATE RESULTS

SPIKE ID	AMOUNT SPIKED	BLANK SPIKE %RECOVERY	BLANK SPIKE DUP %RECOVERY	REL % DIFF	MATRIX SPK %RECOVERY EV13010139-1
DIESEL	125 mg/Kg	93%	90%	3%	101%
PENTACOSANE	5 mg/Kg	92%	89%	3%	95%

SPIKE ID	AMOUNT SPIKED	MATRIX SPIKE %RECOVERY EV13010138-13	MATRIX SPK DUP %RECOVERY EV13010138-13	MS REL % DIFF
DIESEL	125 mg/Kg	*	*	
PENTACOSANE	5 mg/Kg	**	**	

* Spike recovery outside QC limits due to matrix interference.

** Surrogate recovery outside QC limits due to co-eluting compounds.

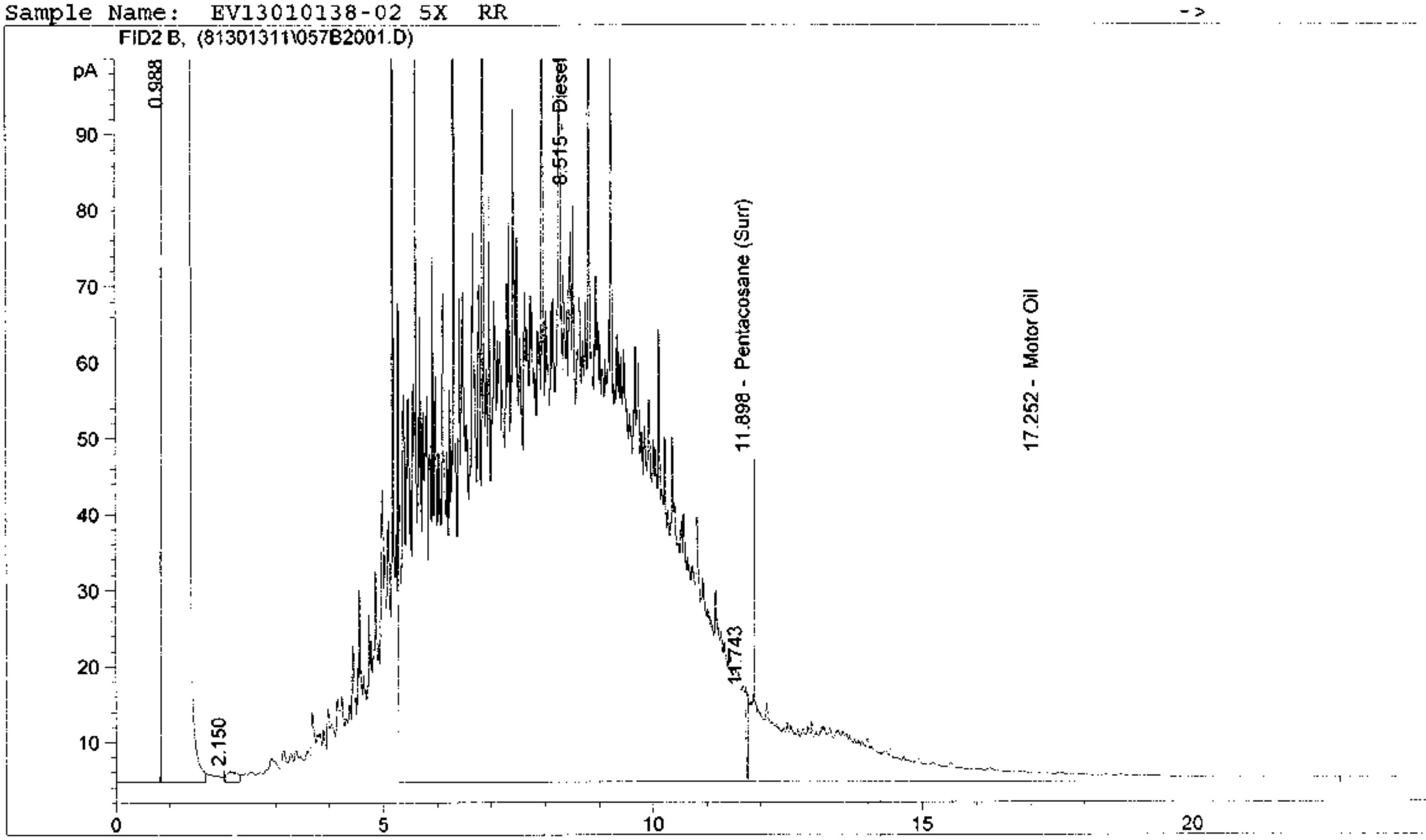
*** MS and MSD on sample no. EV13010138-13 were included in this analysis as per client request.

NOTES: IF NUMBER OF ANALYTES DON'T ALLOW LISTING ALL COMPOUNDS, THE RAW DATA MAY BE SUBMITTED
RAW DATA FOR QC RUN ON A SPECIFIC SAMPLE SHOULD BE INCLUDED WITH ORIGINAL SAMPLE ANALYSIS RAW DATA

DATASUM.XLS

Instrument #98   Data File: C:\HPCHEM\1\DATA\81301311\057B2001.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\BDMO0812.M
Injection Date & Time: 1/31/2013 5:57:48 PM   1/31/2013 5:57:48 PM
Report Creation: 2/6/2013   9:19:17 AM

Sample Name: EV13010138-02 5X   RR



Ret. Time	Signal	Compound Name	Response	Amount ug/mL
8.515	FID2 B,	Diesel	18280.902	1393.827
11.898		Pentacosane (Surr)	42.747	1.876
17.252		Motor Oil	1599.484	98.225

×5 = 941.

25.19g

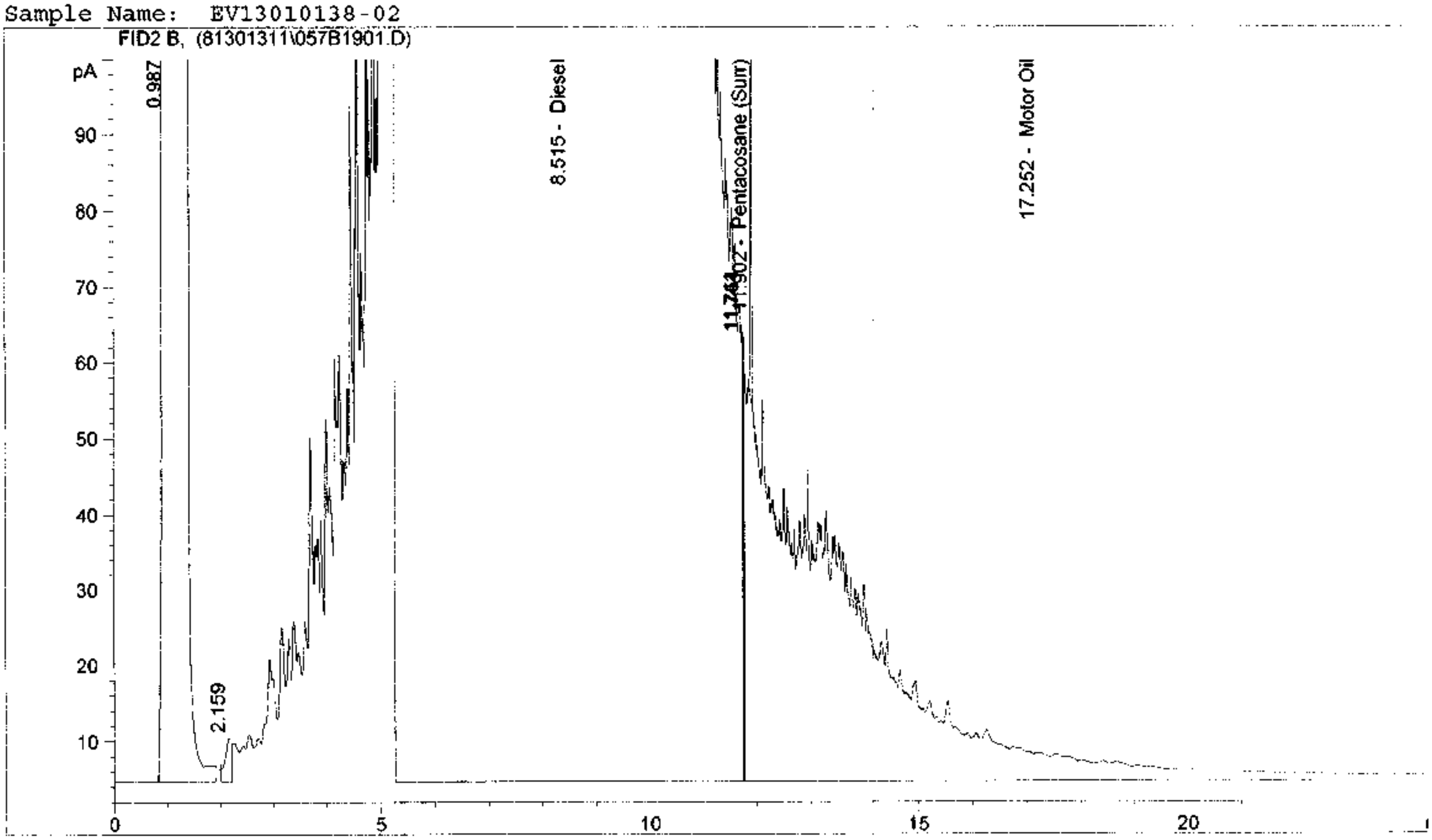
$D = 1393.827\ \mu g/mL \times \frac{10\ mL}{25.19g} \times 5 = 2800\ mg/kg$ Weathered Diesel Fuel

REVIEWED BY RB
& DATE 2/1/13

02.06.13

Instrument #98   Data File: C:\HPCHEM\1\DATA\81301311\057B1901.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\BDMO0812.M
Injection Date & Time: 1/31/2013 5:27:44 PM   1/31/2013 5:27:44 PM
Report Creation: 2/6/2013   9:17:47 AM

Sample Name: EV13010138-02



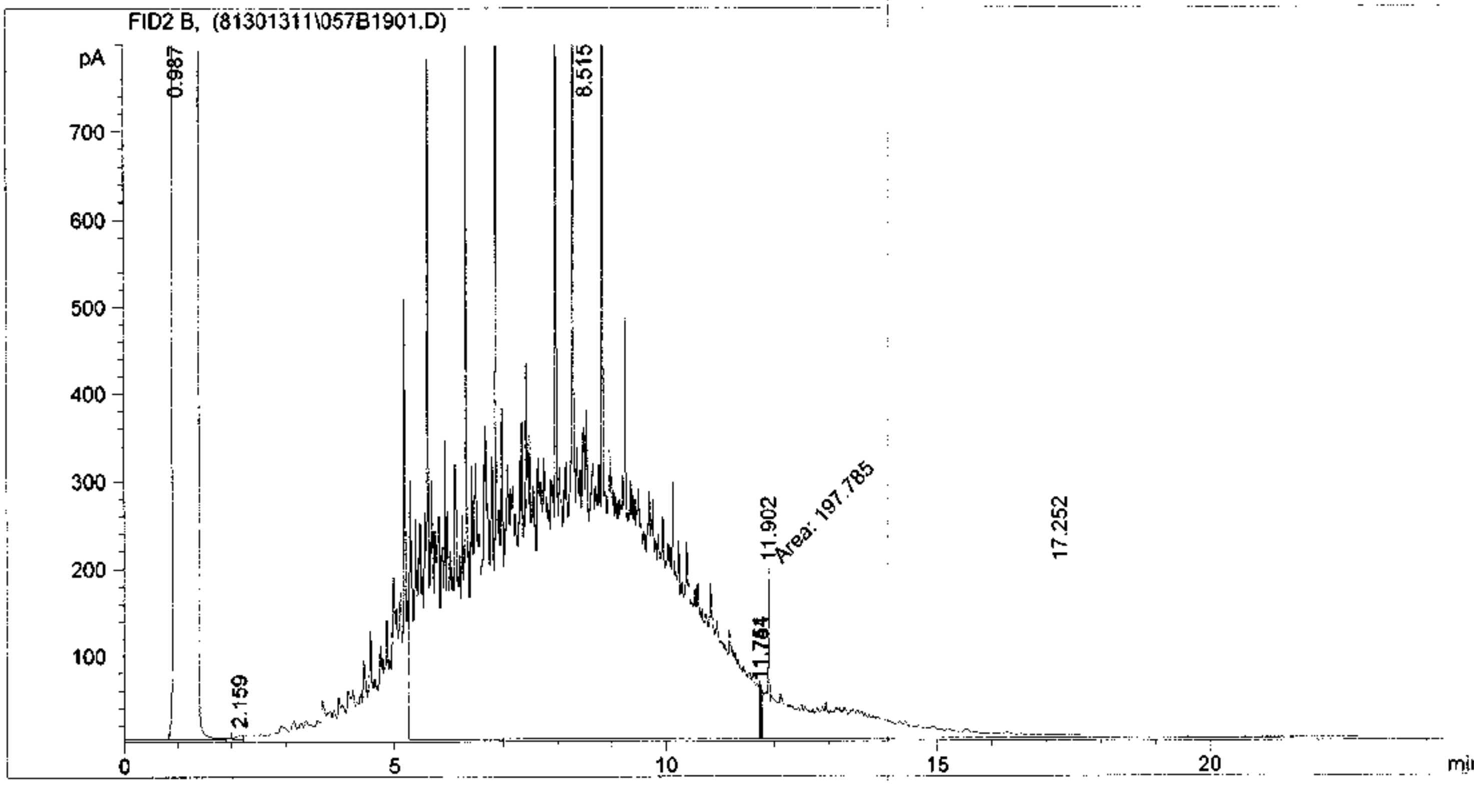
Ret. Time	Signal	Compound Name	Response	Amount ug/mL	
8.515	FID2 B,	Diesel	91069.992	6943.630	
11.902		Pentacosane (Surr)	197.785	8.682	87%
17.252		Motor Oil	6725.463	413.013	

25.19g

$O = 413.013\ \mu g/mL \times \frac{10\,mL}{25.19g} = 160$ mg/kg Lube Oil
(bias high due to Diesel Range Product overlap)

REVIEWED BY NS
& DATE 2/7/13

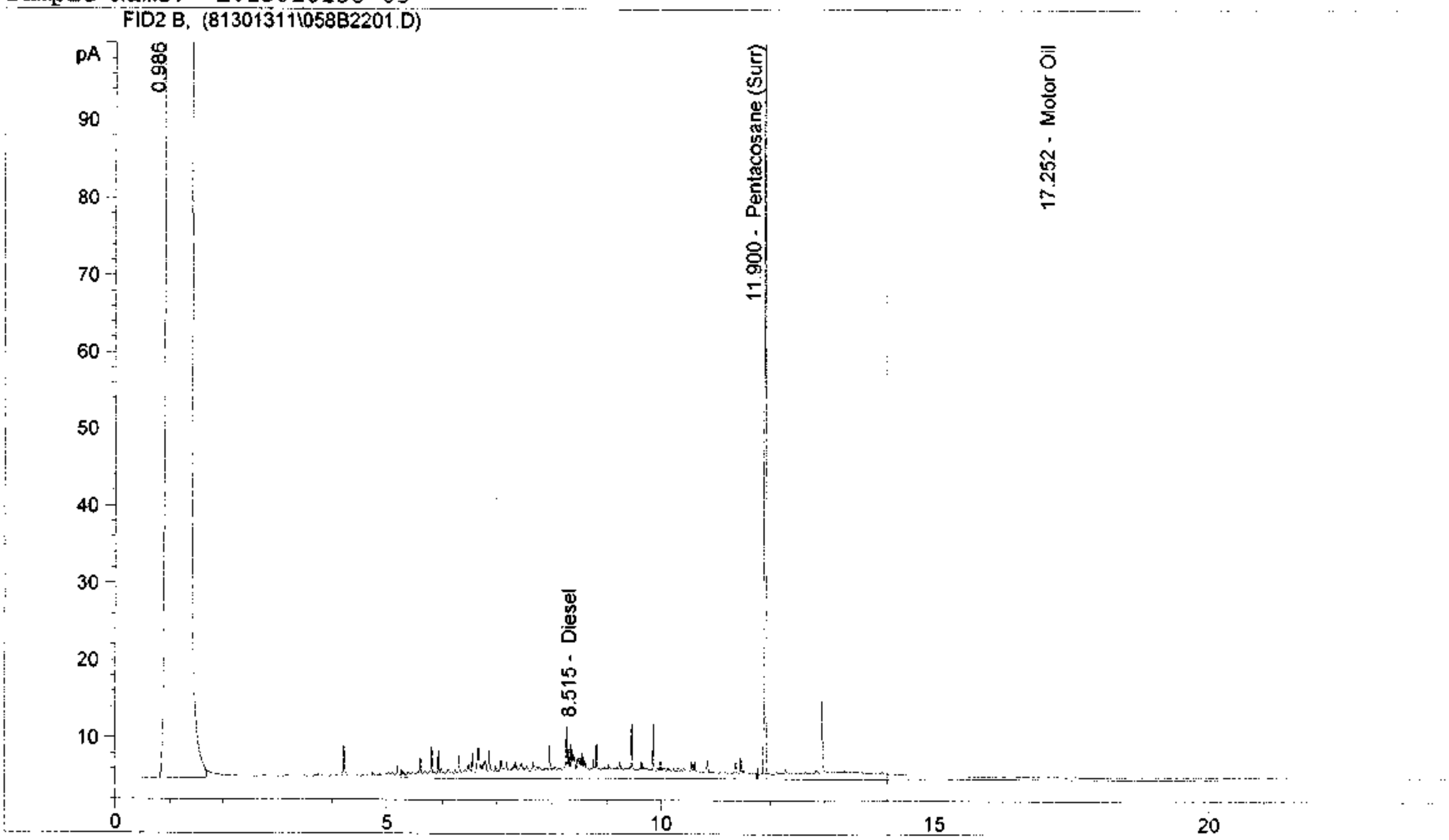
02.06.13ES



*** End of Report ***

Instrument #98 Data File: C:\HPCHEM\1\DATA\81301311\058B2201.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\BDMO0812.M
Injection Date & Time: 1/31/2013 6:57:50 PM 1/31/2013 6:57:50 PM
Report Creation: 2/1/2013 8:39:48 AM

Sample Name: EV13010138-03



Ret. Time	Signal	Compound Name	Response	Amount ug/mL	
8.515	FID2 B,	Diesel	529.122	40.343	
11.900		Pentacosane (Surr)	207.701	9.117	91%
17.252		Motor Oil	319.968	19.649	

26.30g

D < 25 mg/kg

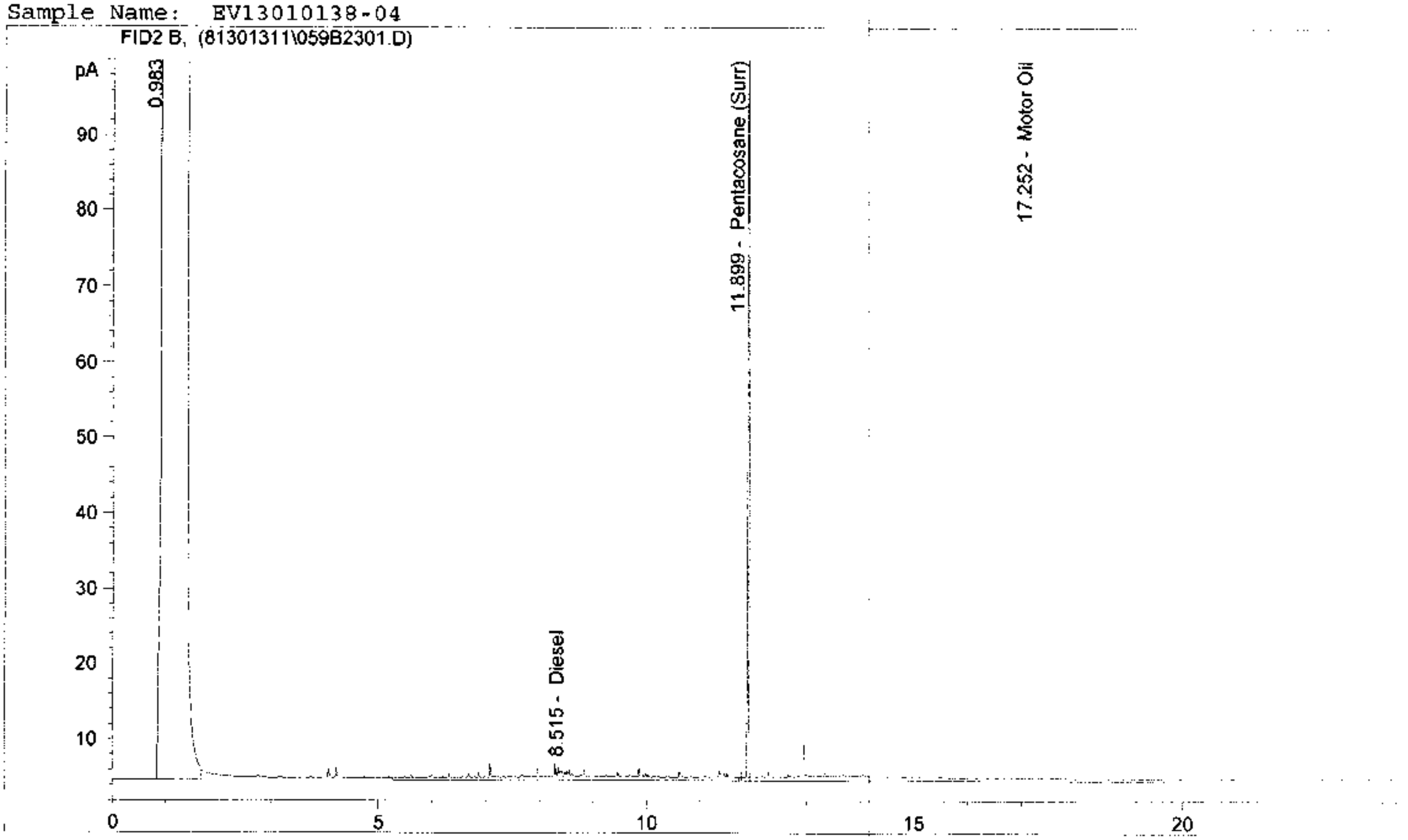
O < 50 mg/kg

REVIEWED BY MB
& DATE 2/1/13

02.05.13 e1

Instrument #98 Data File: C:\HPCHEM\1\DATA\81301311\059B2301.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\BDMO0812.M
Injection Date & Time: 1/31/2013 7:27:48 PM 1/31/2013 7:27:48 PM
Report Creation: 2/1/2013 8:40:10 AM

Sample Name: EV13010138-04



Ret. Time	Signal	Compound Name	Response	Amount ug/mL	
8.515	FID2 B,	Diesel	183.789	14.013	
11.899		Pentacosane (Surr)	204.499	8.977	90%
17.252		Motor Oil	265.030	16.276	

27.128

D < 25 mg/kg

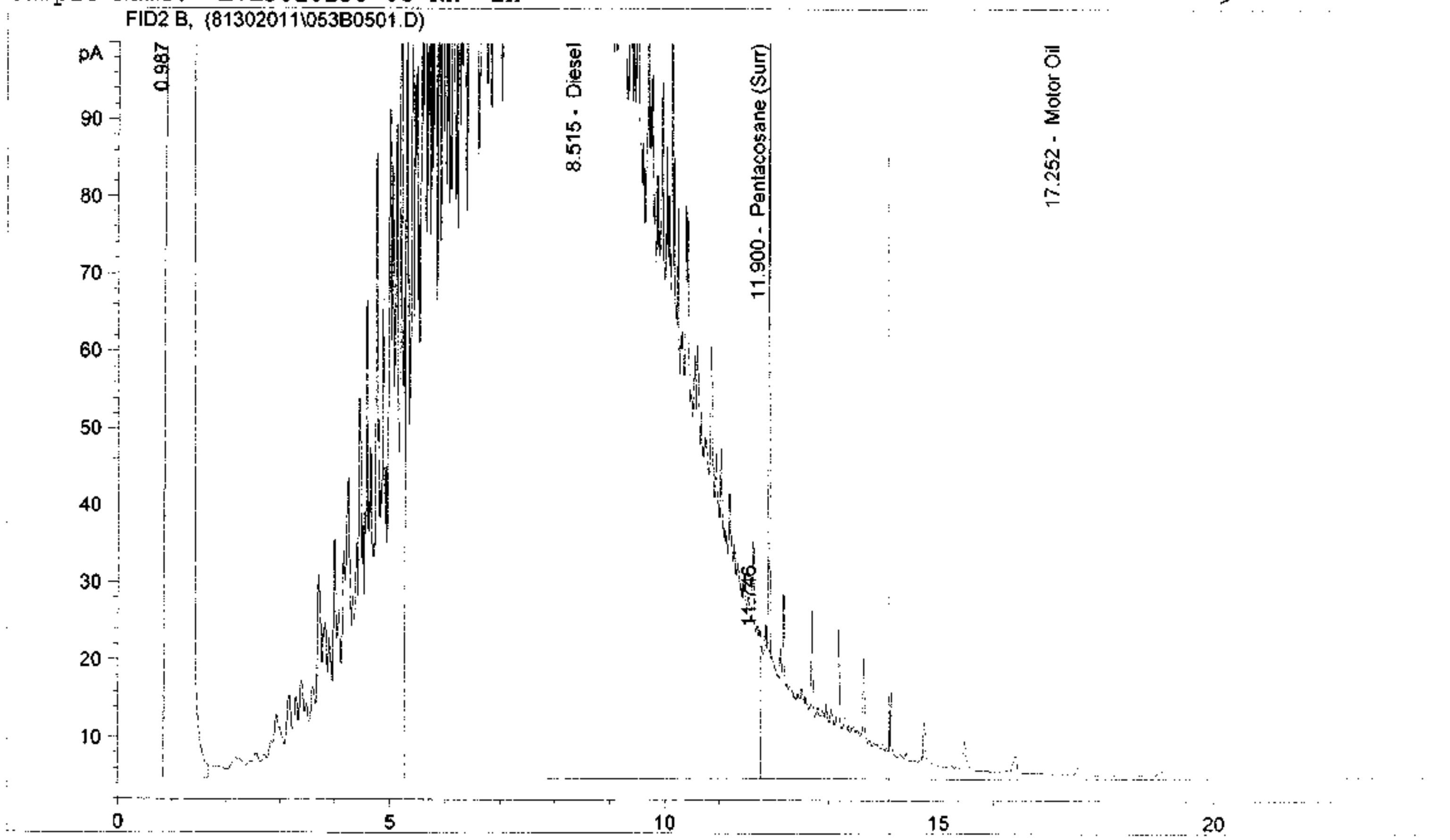
O < 50 mg/kg

REVIEWED BY & DATE NS 2/1/13

02.05.13 ES

Instrument #98 Data File: C:\HPCHEM\1\DATA\81302011\053B0501.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\BDMO0812.M
Injection Date & Time: 2/1/2013 9:44:06 AM 2/1/2013 9:44:06 AM
Report Creation: 2/1/2013 12:48:35 PM

Sample Name: EV13010138-06 RR 2X



Ret. Time	Signal	Compound Name	Response	Amount ug/mL	
8.515	FID2 B,	Diesel	38754.398	2954.828	
11.900		Pentacosane (Surr)	107.471	4.718	x2 = 94%.
17.252		Motor Oil	1826.834	112.186	

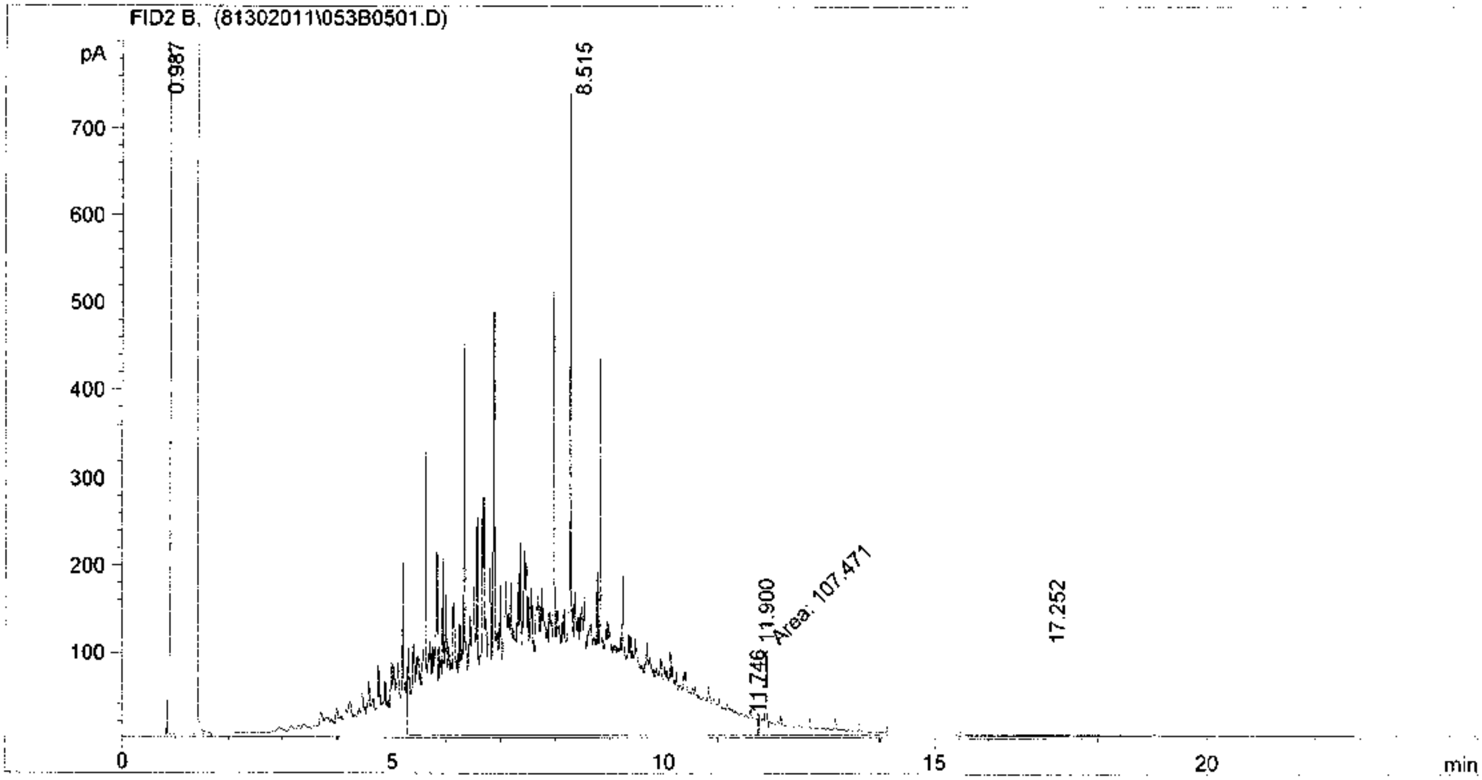
23.61g

D = 2954.828 ug/mL x $\frac{10\ mL}{23.61g}$ x 2 = 2500 mg/kg Weathered Diesel Fuel

O < 100 mg/kg

REVIEWED BY & DATE NB 2/1/13

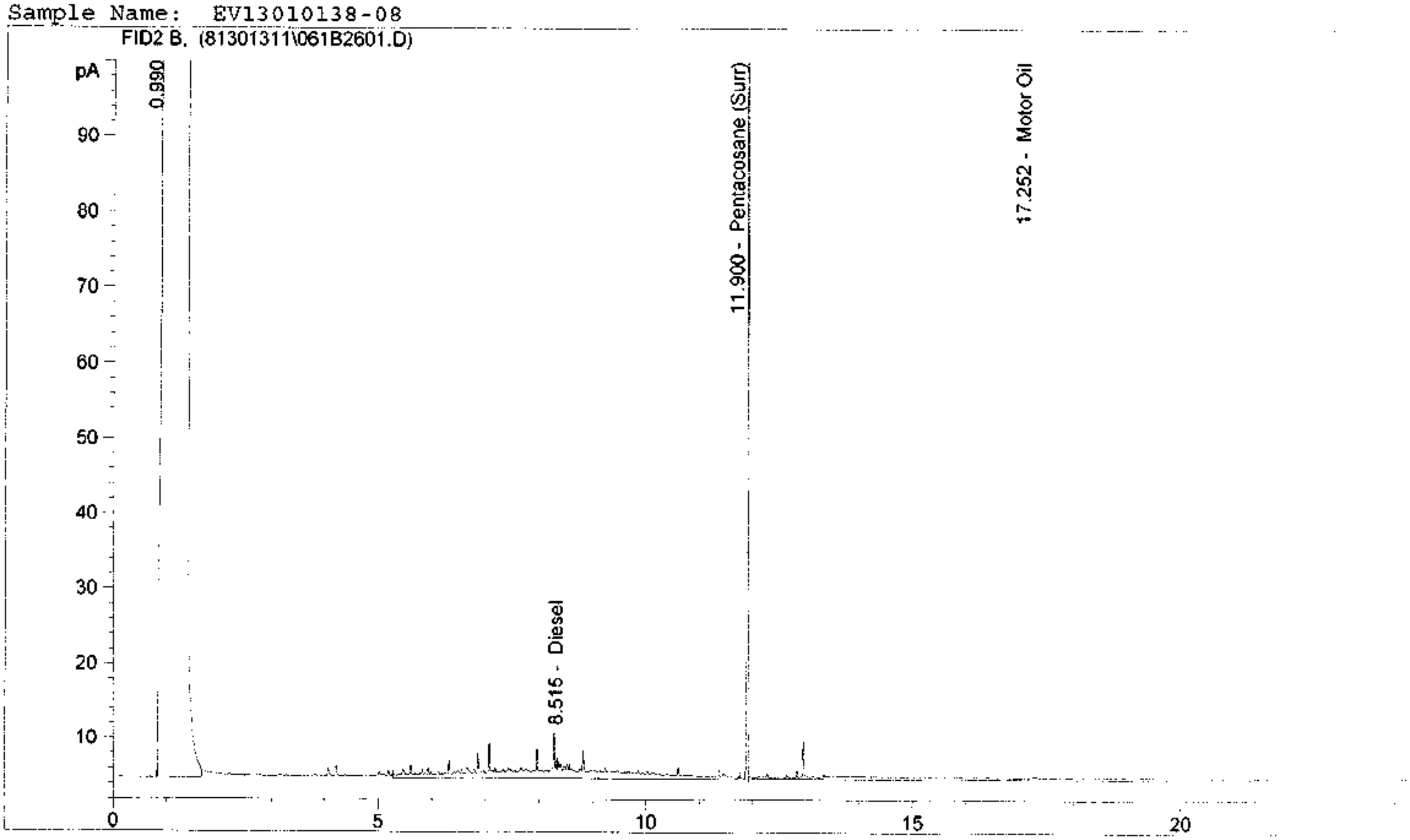
02.05.13



*** End of Report ***

Instrument #98   Data File: C:\HPCHEM\1\DATA\81301311\061B2601.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\BDMO0812.M
Injection Date & Time: 1/31/2013 8:57:37 PM   1/31/2013 8:57:37 PM
Report Creation: 2/1/2013   8:41:04 AM

Sample Name: EV13010138-08



Ret. Time	Signal	Compound Name	Response	Amount ug/mL
8.515	FID2 B,	Diesel	317.068	24.175
11.900		Pentacosane (Surr)	179.360	7.873 79%
17.252		Motor Oil	197.273	12.115

32.02g

D < 25 mg/kg

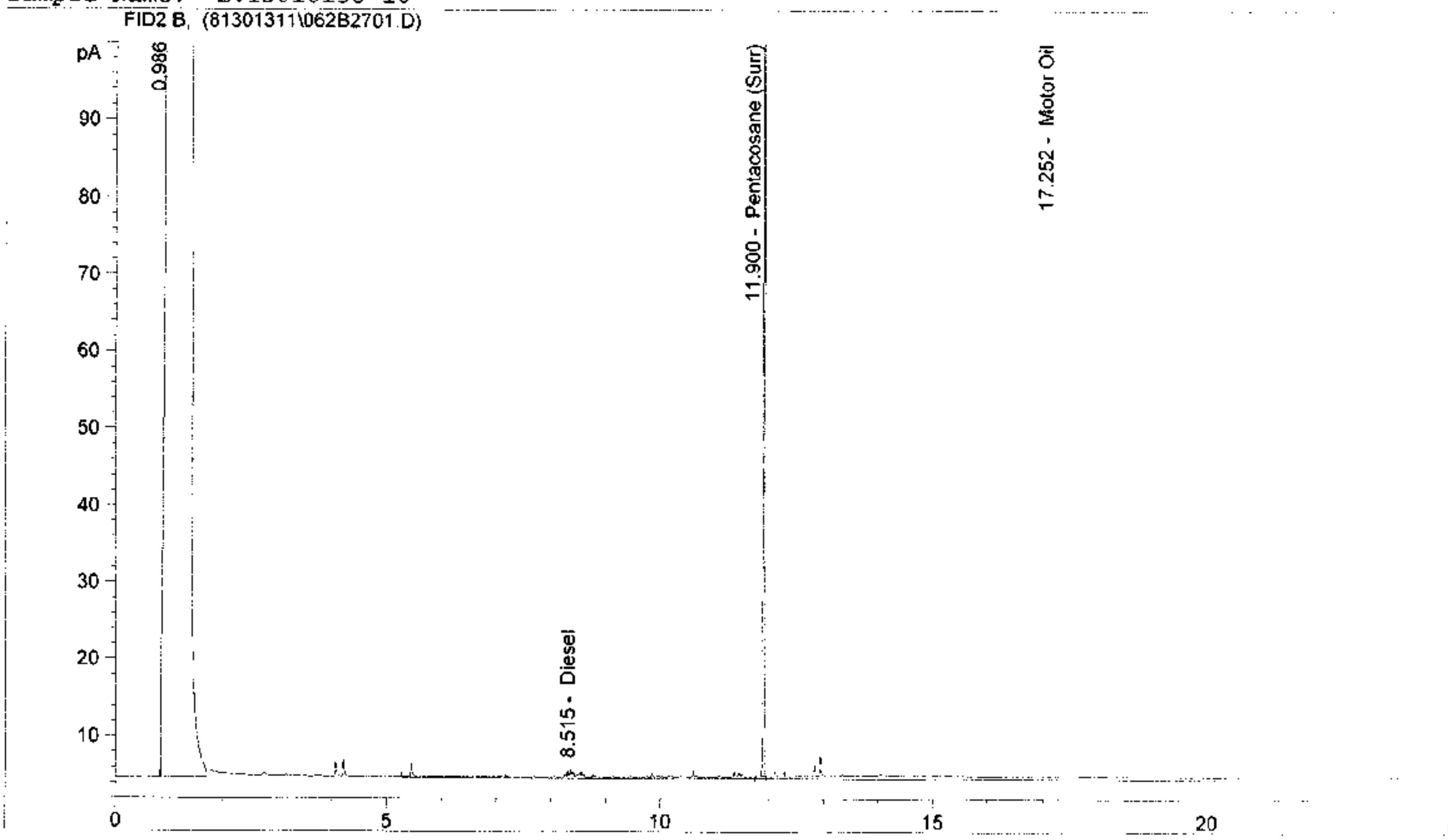
O < 50 mg/kg

REVIEWED BY MS
& DATE 2/11/13

02.05-13 B

Instrument #98 Data File: C:\HPCHEM\1\DATA\81301311\062B2701.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\BDMO0812.M
Injection Date & Time: 1/31/2013 9:27:32 PM 1/31/2013 9:27:32 PM
Report Creation: 2/1/2013 8:41:25 AM

Sample Name: EV13010138-10



Ret. Time	Signal	Compound Name	Response	Amount ug/mL
8.515	FID2 B,	Diesel	82.843	6.316
11.900		Pentacosane (Surr)	197.645	8.676 87%
17.252		Motor Oil	251.337	15.435

27.31g

D < 25 mg/kg

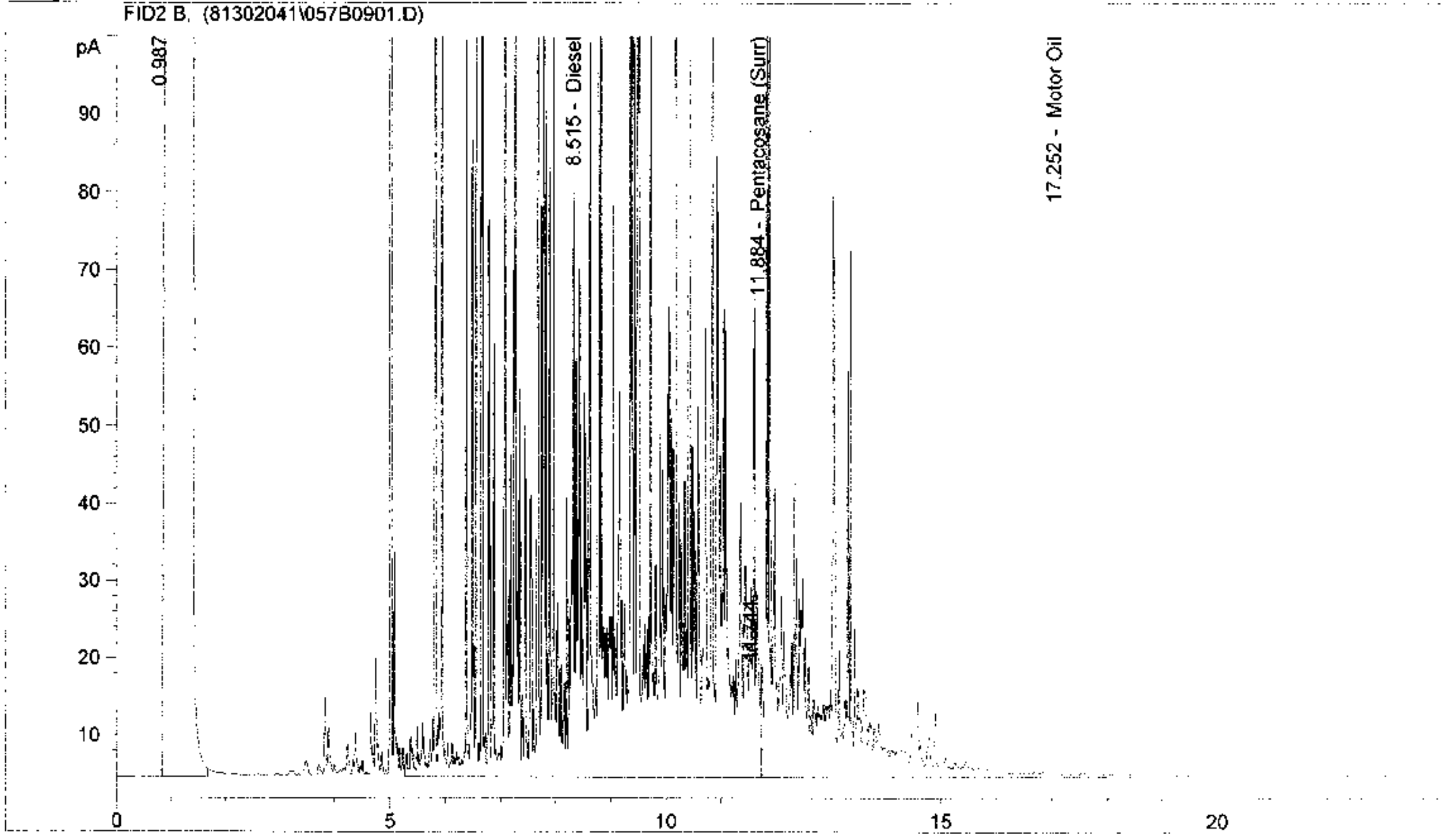
O < 50 mg/kg

REVIEWED BY & DATE NB 2/1/13

02.05.13 EJ

Instrument #98   Data File: C:\HPCHEM\1\DATA\81302041\057B0901.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\BDMO0812.M
Injection Date & Time: 2/4/2013 1:47:39 PM   2/4/2013 1:47:39 PM
Report Creation: 2/4/2013   2:39:26 PM

Sample Name: EV13010138-13 RR 10X ->



Ret. Time	Signal	Compound Name	Response	Amount ug/mL
8.515	FID2 B,	Diesel	14139.627	1078.076
11.884		Pentacosane (Surr)	191.326	8.398 *
17.252		Motor Oil	2199.389	135.065

* Surrogate recovery outside QC limits due to co-eluting compounds   26.52g

D = 1078.076 ug/mL × $\frac{10\,mL}{26.52g}$ × 10 = 4100 mg/kg Unidentified Diesel Range Product

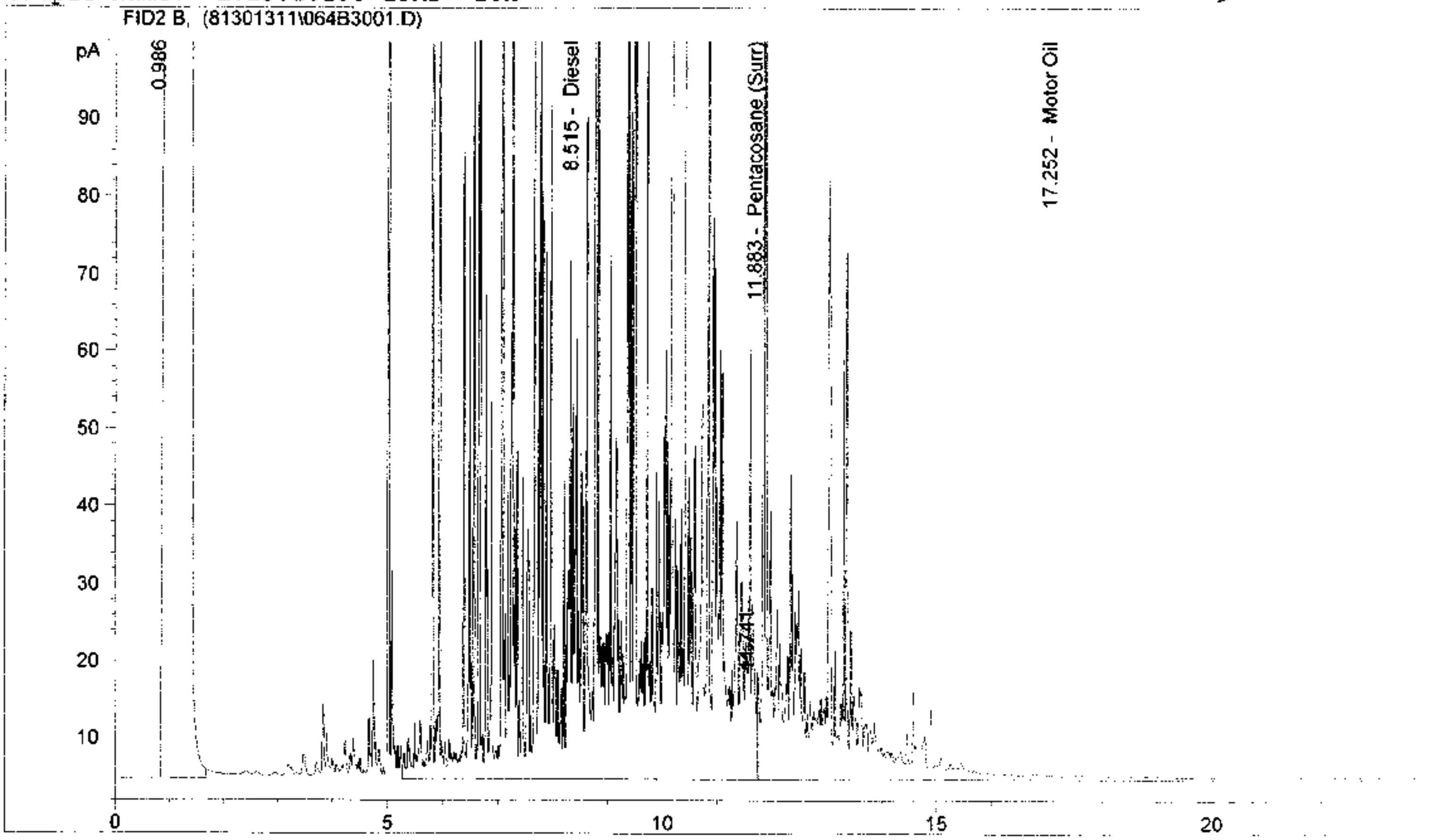
O = 135.065 ug/mL × $\frac{10\,mL}{26.52g}$ × 10 = 510 mg/kg Unidentified Oil Range Product

REVIEWED BY & DATE RS 2/1/13

02.04.13

Instrument #98 Data File: C:\HPCHEM\1\DATA\81301311\064B3001.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\BDMO0812.M
Injection Date & Time: 1/31/2013 10:57:16 PM 1/31/2013 10:57:16 PM
Report Creation: 2/4/2013 1:32:44 PM

Sample Name: EV13010138-13MS 10X ->



Ret. Time	Signal	Compound Name	Response	Amount ug/mL
8.515	FID2 B,	Diesel	12744.157	971.678
11.883		Pentacosane (Surr)	169.739	7.451 *
17.252		Motor Oil	2041.430	125.365

* Surrogate recovery outside QC limits due to co-eluting compounds 24.26g

$D = 971.678$ ug/mL $\times \frac{10 mL}{24.26g} \times 10 =$ 4000 mg/kg

$TV = 250$ ug/mL $\times \frac{10 mL}{24.26g} \times 10 =$ 1000 mg/kg

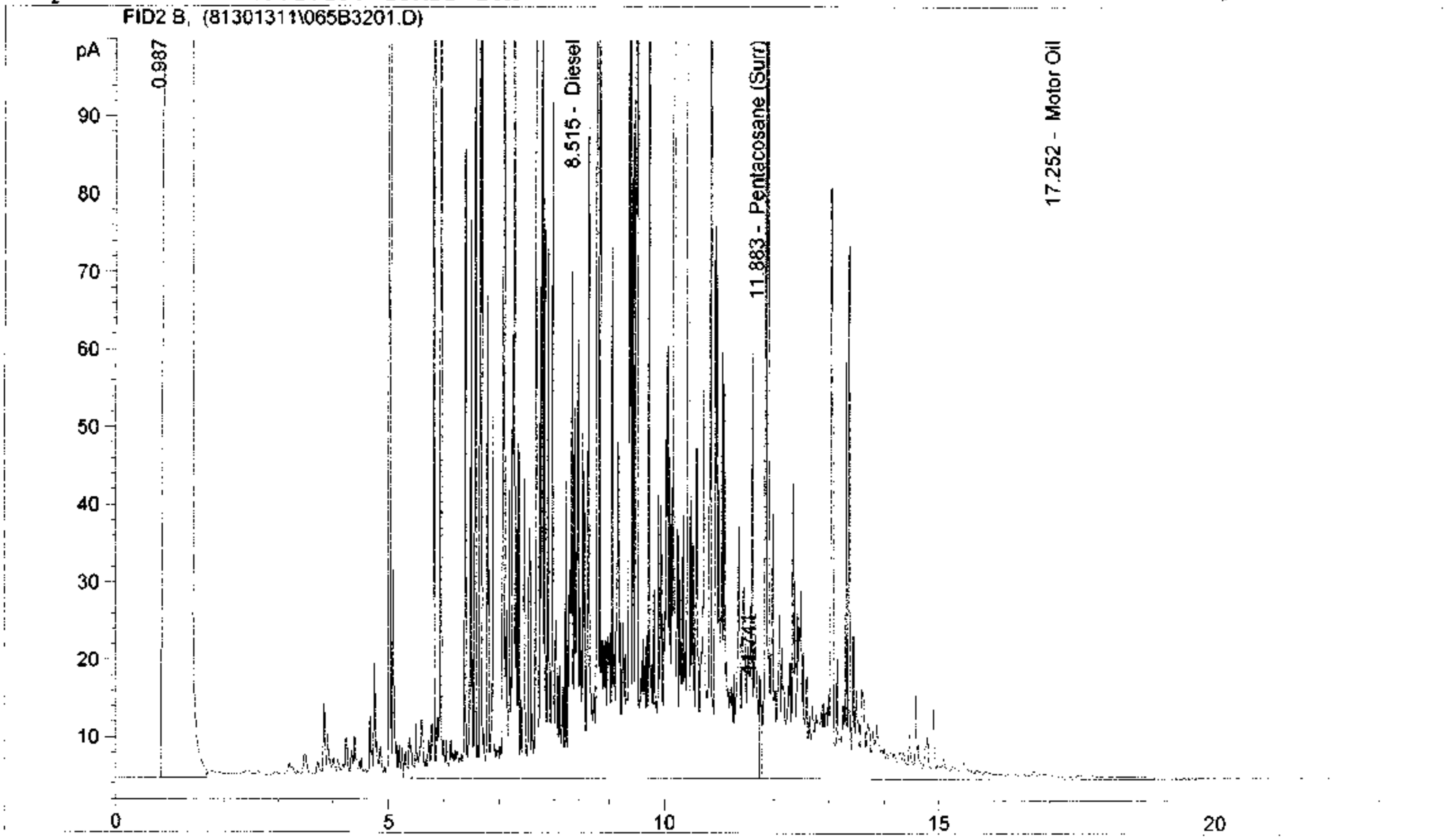
Spike Recovery outside QC limits due to matrix interference.

REVIEWED BY NS
& DATE 2/1/13

02.04.13

Instrument #98 Data File: C:\HPCHEM\1\DATA\81301311\065B3201.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\BDMO0812.M
Injection Date & Time: 1/31/2013 11:57:03 PM 1/31/2013 11:57:03 PM
Report Creation: 2/1/2013 8:44:31 AM

Sample Name: EV13010138-13MSD 10X ->



Ret. Time	Signal	Compound Name	Response	Amount ug/mL
8.515	FID2 B,	Diesel	12569.386	958.353
11.883		Pentacosane (Surr)	174.804	7.673 *
17.252		Motor Oil	2115.434	129.909

* Surrogate recovery outside QC limits due to co-eluting compounds 24.26g

$D = 958.353\ \mu g/mL \times \frac{10\,mL}{24.26\,g} \times 10 = 4000\ mg/kg$

$TV = 250\ \mu g/mL \times \frac{10\,mL}{24.26\,g} \times 10 = 1000\ mg/kg$

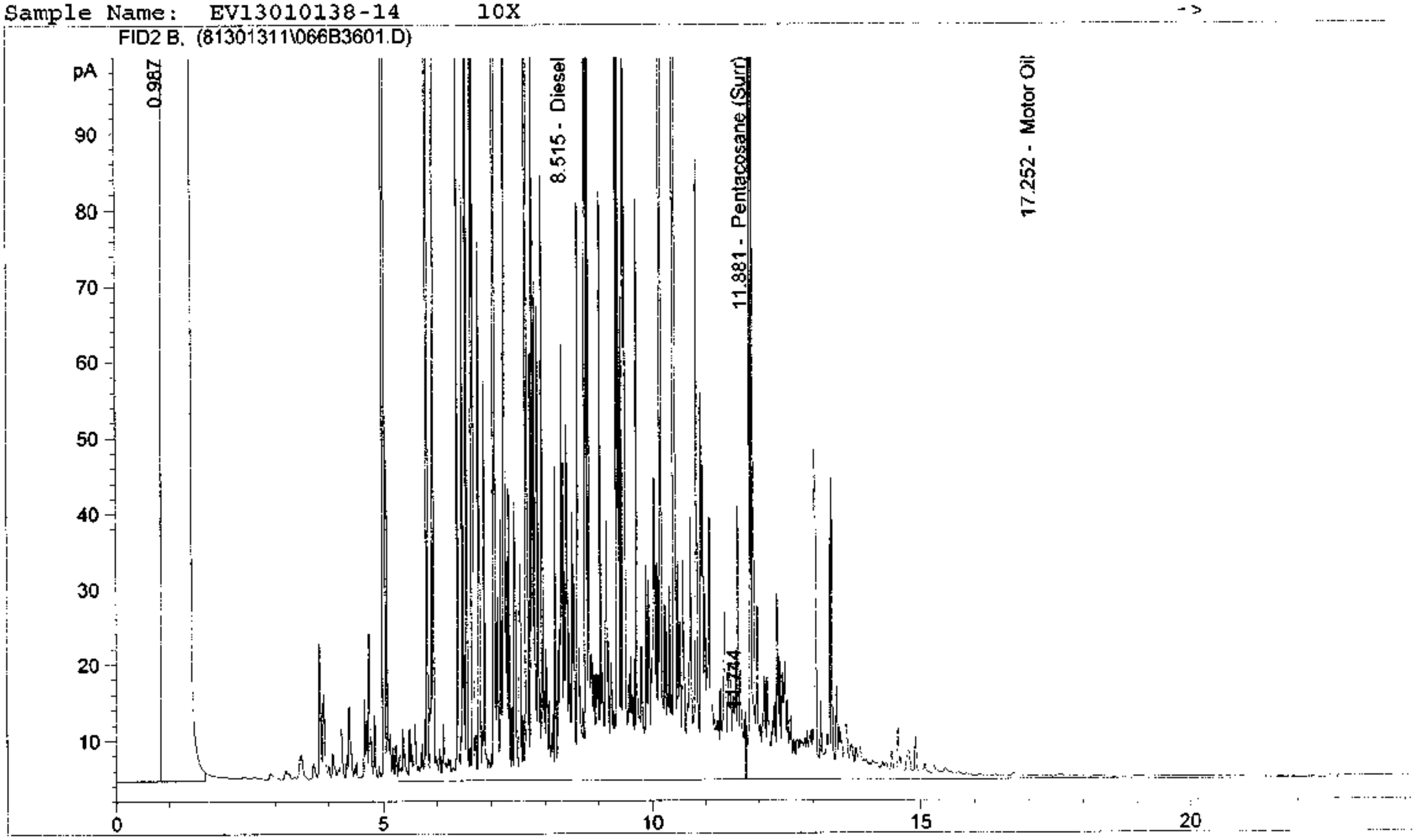
Spike Recovery outside QC limits due to matrix interference

REVIEWED BY NB
& DATE 2/1/13

02.04.10

Instrument #98   Data File: C:\HPCHEM\1\DATA\81301311\066B3601.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\BDMO0812.M
Injection Date & Time: 2/1/2013 1:56:33 AM   2/1/2013 1:56:33 AM
Report Creation: 2/6/2013   9:01:33 AM

Sample Name: EV13010138-14   10X



Ret. Time	Signal	Compound Name	Response	Amount ug/mL
8.515	FID2 B,	Diesel	10966.229	836.120
11.881		Pentacosane (Surr)	125.104	5.492 *
17.252		Motor Oil	1404.288	86.238

* surrogate recovery outside QC limits due to co-eluting compounds   15.01g

D = 836.120 ug/mL × 10mL / 15.01g × 10 = 5600 mg/kg Unidentified Diesel Range Product

O < 100 ug/mL × 10mL / 15.01g × 10 < 670 mg/kg **

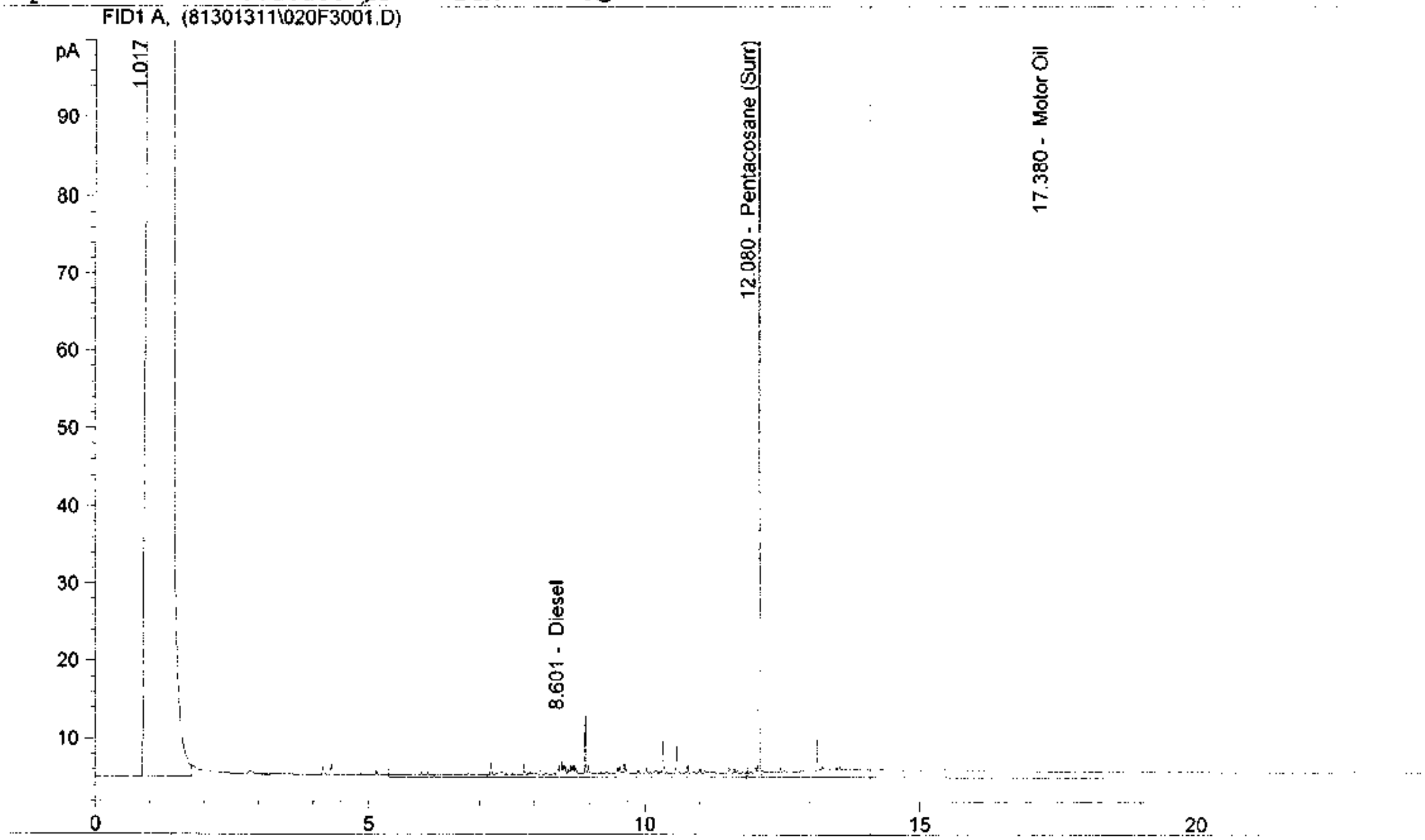
** reporting limit raised due to low % solids

REVIEWED BY & DATE RS 2/11/13

02-06-13

Instrument #98 Data File: C:\HPCHEM\1\DATA\81301311\020F3001.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\FDMO0912.M
Injection Date & Time: 1/31/2013 10:57:16 PM 1/31/2013 10:57:16 PM
Report Creation: 2/1/2013 8:20:43 AM

Sample Name: EV13010138-~~15~~ 17 SGA EJ ->



Ret. Time	Signal	Compound Name	Response	Amount ug/mL	
8.601	FID1 A,	Diesel	198.013	16.441	
12.080		Pentacosane (Surr)	186.632	8.415	84%
17.380		Motor Oil	507.792	29.871	

26.73g

D < 25 mg/kg

O < 50 mg/kg

REVIEWED BY & DATE MB 2/1/13

02-05-13 [illegible]

ALS LABORATORY GROUP - EVERETT
DATA SUMMARY SHEET

PARAMETER: SEMIVOLATILES INSTR. MTHD. NWTPH-DX EXTRCT MTHD: NWTPH-DX

QC BATCH #: DW020113 1ST ANAL SEQ 81302011

EXT DATES 2/1/2013 MATRIX H20

ASSOCIATED SAMPLES EV13010138-7,15,16

BLANK AND DUPLICATE RESULTS

ANALYTE:	BLANK RESULTS:	DUPLICATE:	ORIGINAL:	%RPD:
DIESEL	<130ug/L			
MOTOR OIL	<250ug/L			

SPIKE/ SPIKE DUPLICATE RESULTS

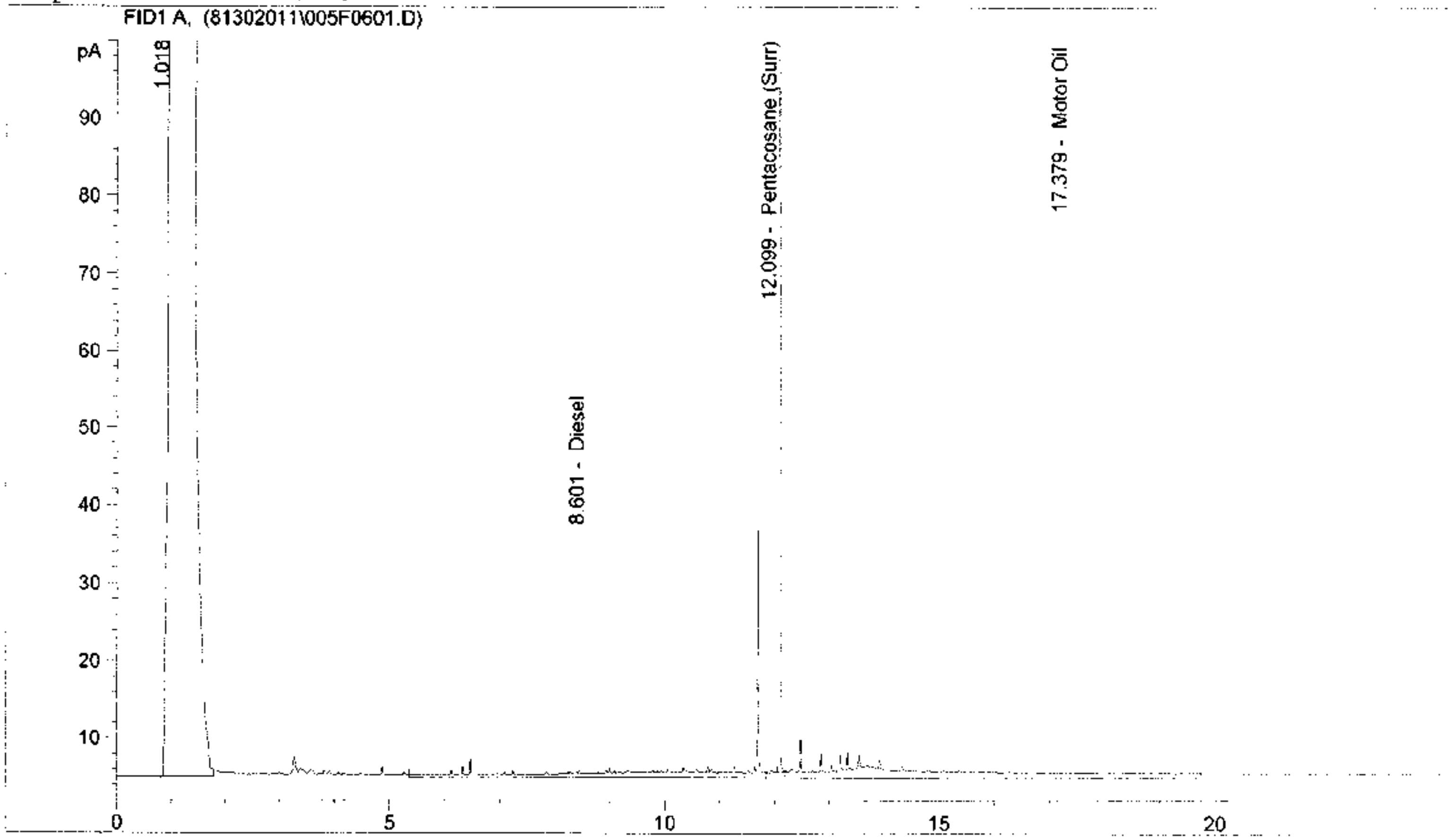
SPIKE ID	AMOUNT SPIKED	BLANK SPIKE %RECOVERY	MATRIX SPIKE %RECOVERY	BLANK SPIKE DUP %RECOVERY	REL % DIFF
DIESEL	1.25 mg/L	84%		86%	2%
PENTACOSANE	0.1mg/L	91%		90%	1%

NOTES: IF NUMBER OF ANALYTES DON'T ALLOW LISTING ALL COMPOUNDS, THE RAW DATA MAY BE SUBMITTED

RAW DATA FOR QC RUN ON A SPECIFIC SAMPLE SHOULD BE INCLUDED WITH ORIGINAL SAMPLE ANALYSIS RAW DATA

Instrument #98   Data File: C:\HPCHEM\1\DATA\81302011\005F0601.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\FDMO0912.M
Injection Date & Time: 2/1/2013 11:12:20 AM   2/1/2013 11:12:20 AM
Report Creation: 2/1/2013   1:09:34 PM

Sample Name: MB-020113W



Ret. Time	Signal	Compound Name	Response	Amount ug/mL	
8.601	FID1 A,	Diesel	243.028	20.179	
12.099		Pentacosane (Surr)	796.325	35.906	90%
17.379		Motor Oil	490.957	28.880	

D < 50 ug/mL x $\frac{1.0 \text{ mL}}{400 \text{ mL}}$ < 130 ug/L

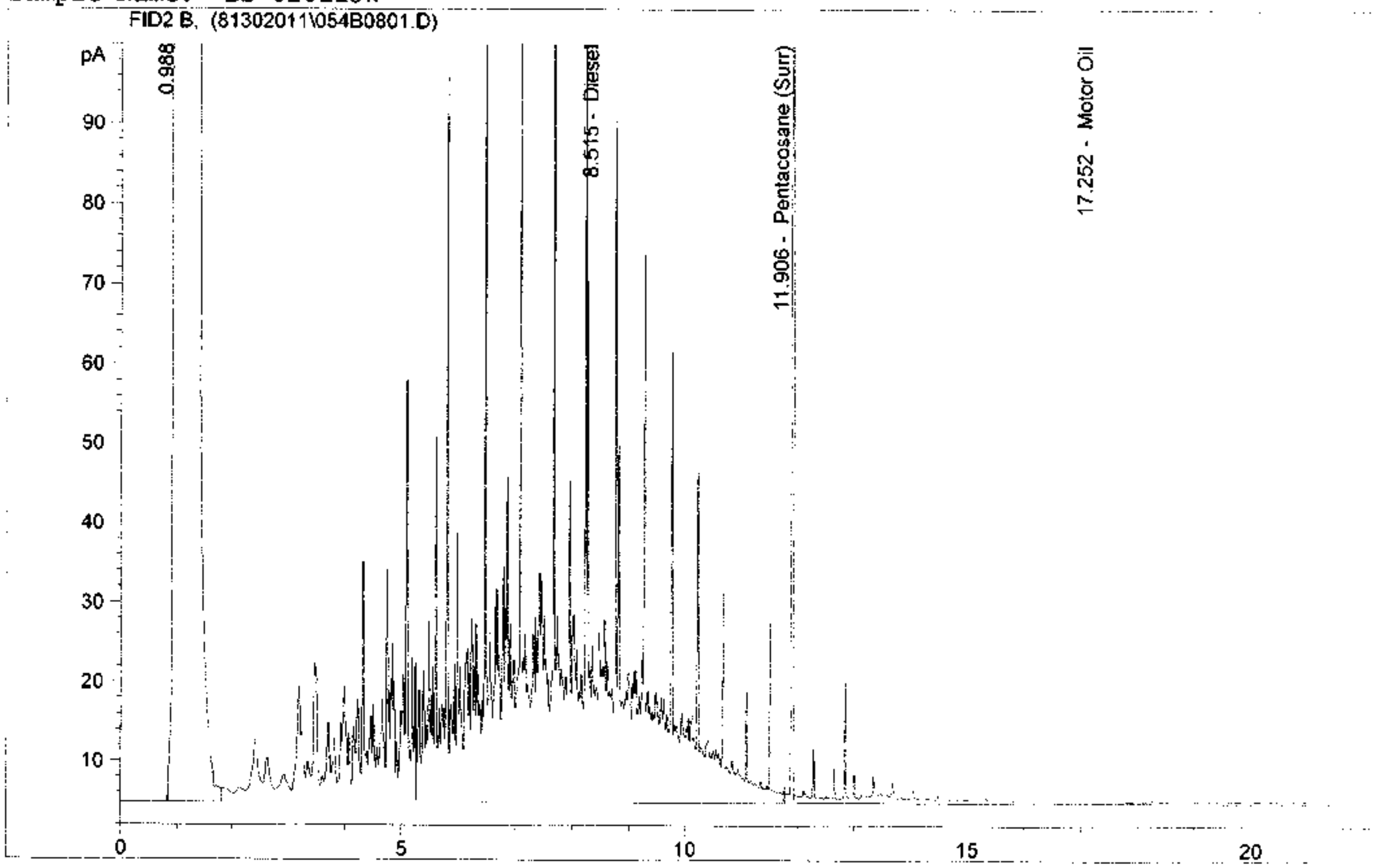
O < 100 ug/mL x $\frac{1.0 \text{ mL}}{400 \text{ mL}}$ < 250 ug/L

REVIEWED BY & DATE MB 2/1/13

02.01.13 EJ

Instrument #98 Data File: C:\HPCHEM\1\DATA\81302011\054B0801.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\BDMO0812.M
Injection Date & Time: 2/1/2013 12:12:28 PM 2/1/2013 12:12:28 PM
Report Creation: 2/1/2013 1:05:53 PM

Sample Name: BS-020113W



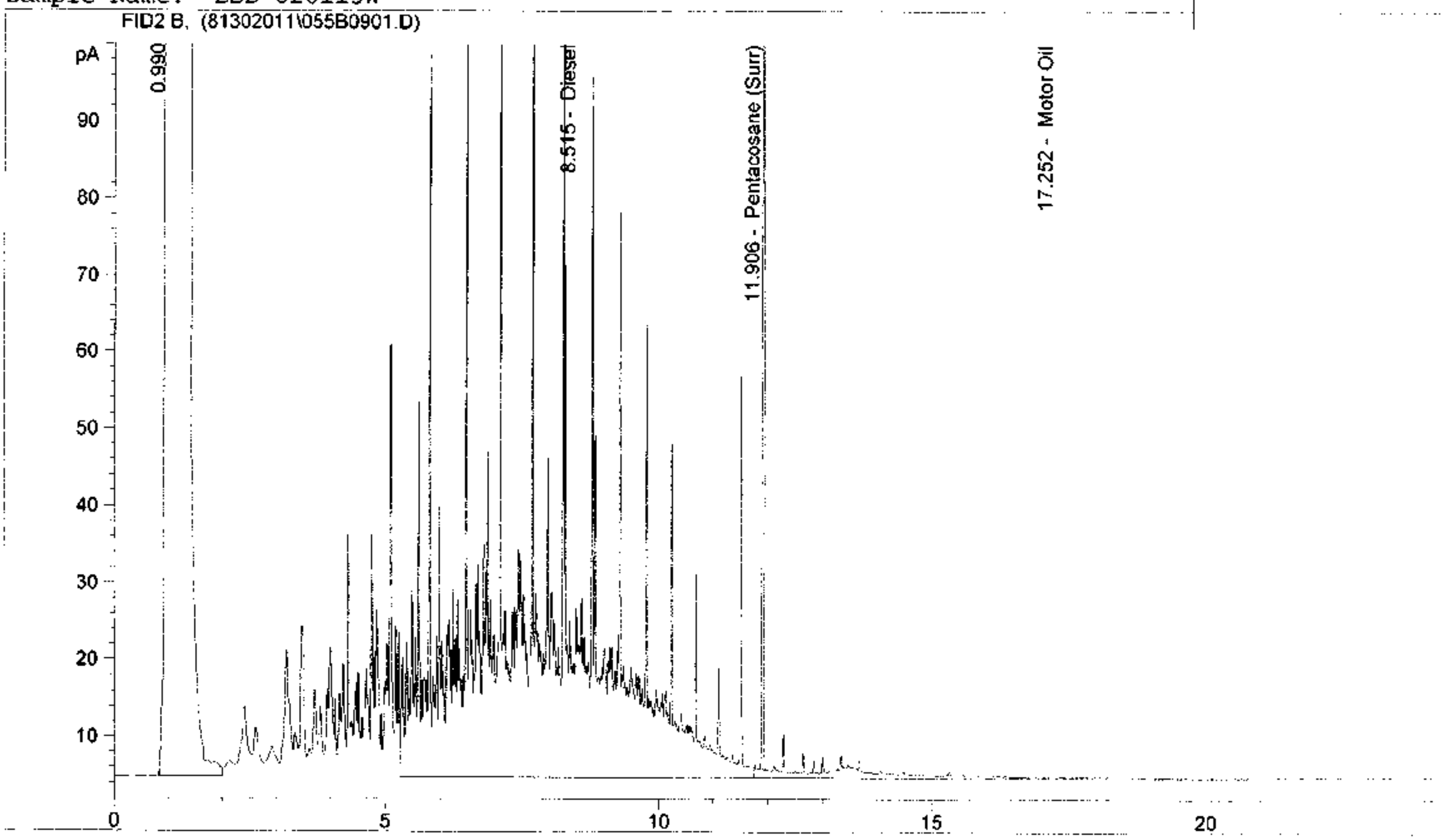
Ret. Time	Signal	Compound Name	Response	Amount ug/mL	
8.515	FID2 B,	Diesel	5530.896	421.703	84%
11.906		Pentacosane (Surr)	828.213	36.355	91%
17.252		Motor Oil	322.989	19.835	

REVIEWED BY & DATE B 2/11/13

02 01 13 E?

Instrument #98 Data File: C:\HPCHEM\1\DATA\81302011\055B0901.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\BDMO0812.M
Injection Date & Time: 2/1/2013 12:42:29 PM 2/1/2013 12:42:29 PM
Report Creation: 2/1/2013 1:08:41 PM

Sample Name: BSD-020113W



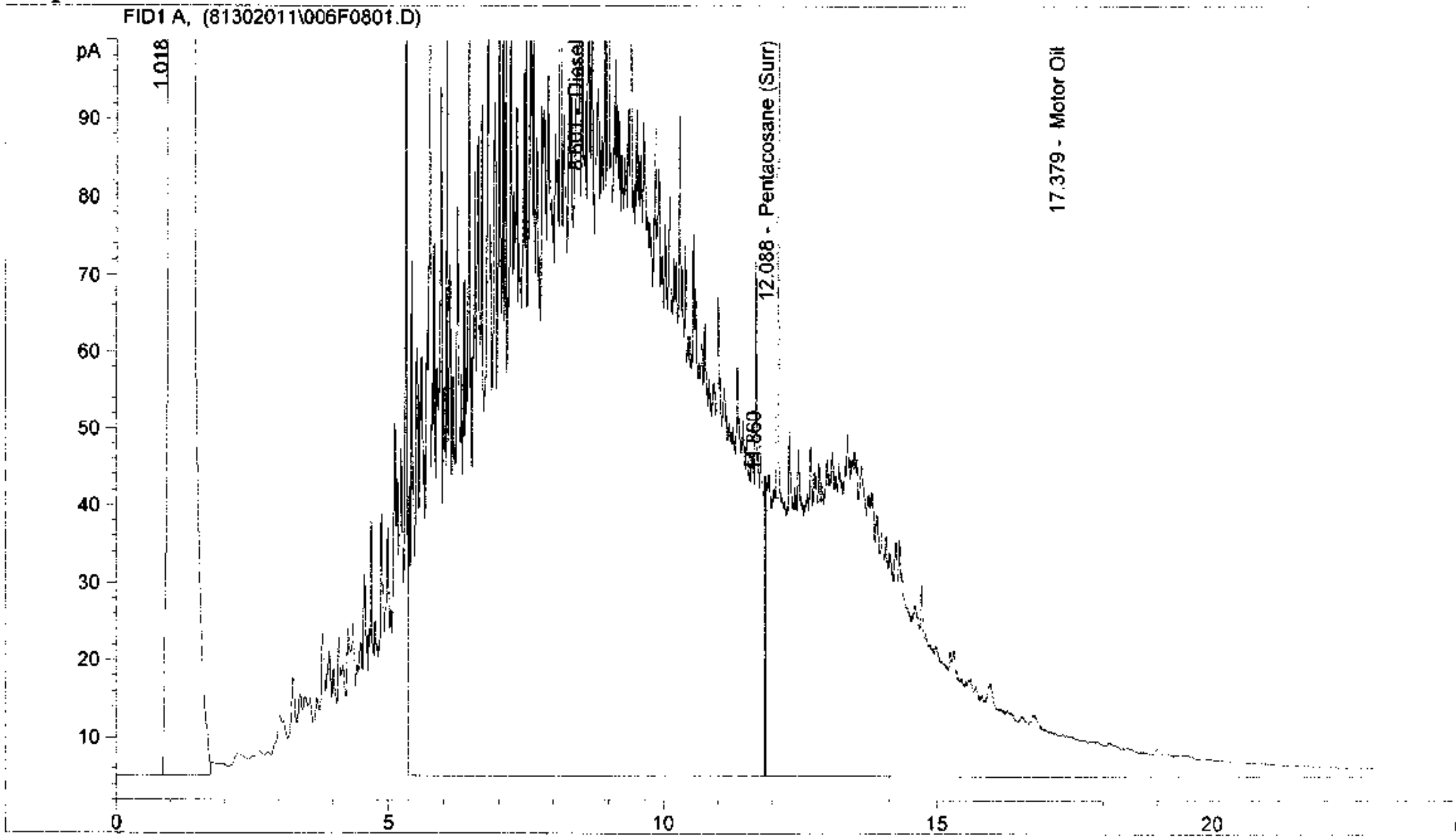
Ret. Time	Signal	Compound Name	Response	Amount ug/mL	
8.515	FID2 B,	Diesel	5669.969	432.307	86%
11.906		Pentacosane (Surr)	813.114	35.692	90%
17.252		Motor Oil	246.031	15.109	

REVIEWED BY MS
& DATE 2/1/13

02.01.13 EB

Instrument #98 Data File: C:\HPCHEM\1\DATA\81302011\006F0801.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\FDMO0912.M
Injection Date & Time: 2/1/2013 12:12:28 PM 2/1/2013 12:12:28 PM
Report Creation: 2/1/2013 12:46:04 PM

Sample Name: EV13010138-07 W



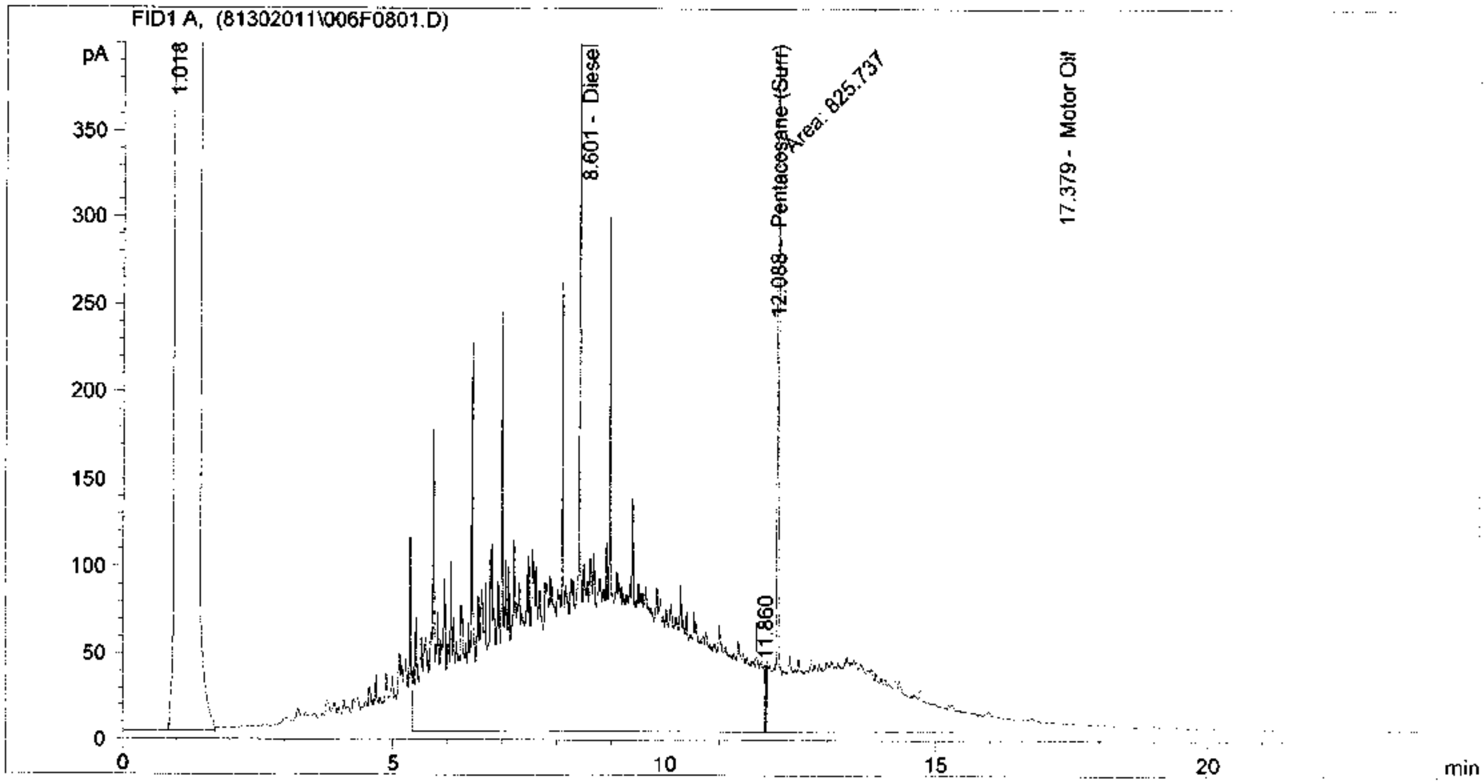
Ret. Time	Signal	Compound Name	Response	Amount ug/mL	
8.601	FID1 A,	Diesel	26290.854	2182.913	
12.088		Pentacosane (Surr)	825.737	37.232	93%
17.379		Motor Oil	8177.431	481.037	

D = 2182.913 ug/mL x 1.0mL / 400mL = 5500 ug/L Weathered Diesel Fuel

O = 481.031 ug/mL x 1.0mL / 400mL = 1200 ug/L Lube Oil
(bias high due to Diesel Range Product overlap)

REVIEWED BY & DATE RB 2/11/13

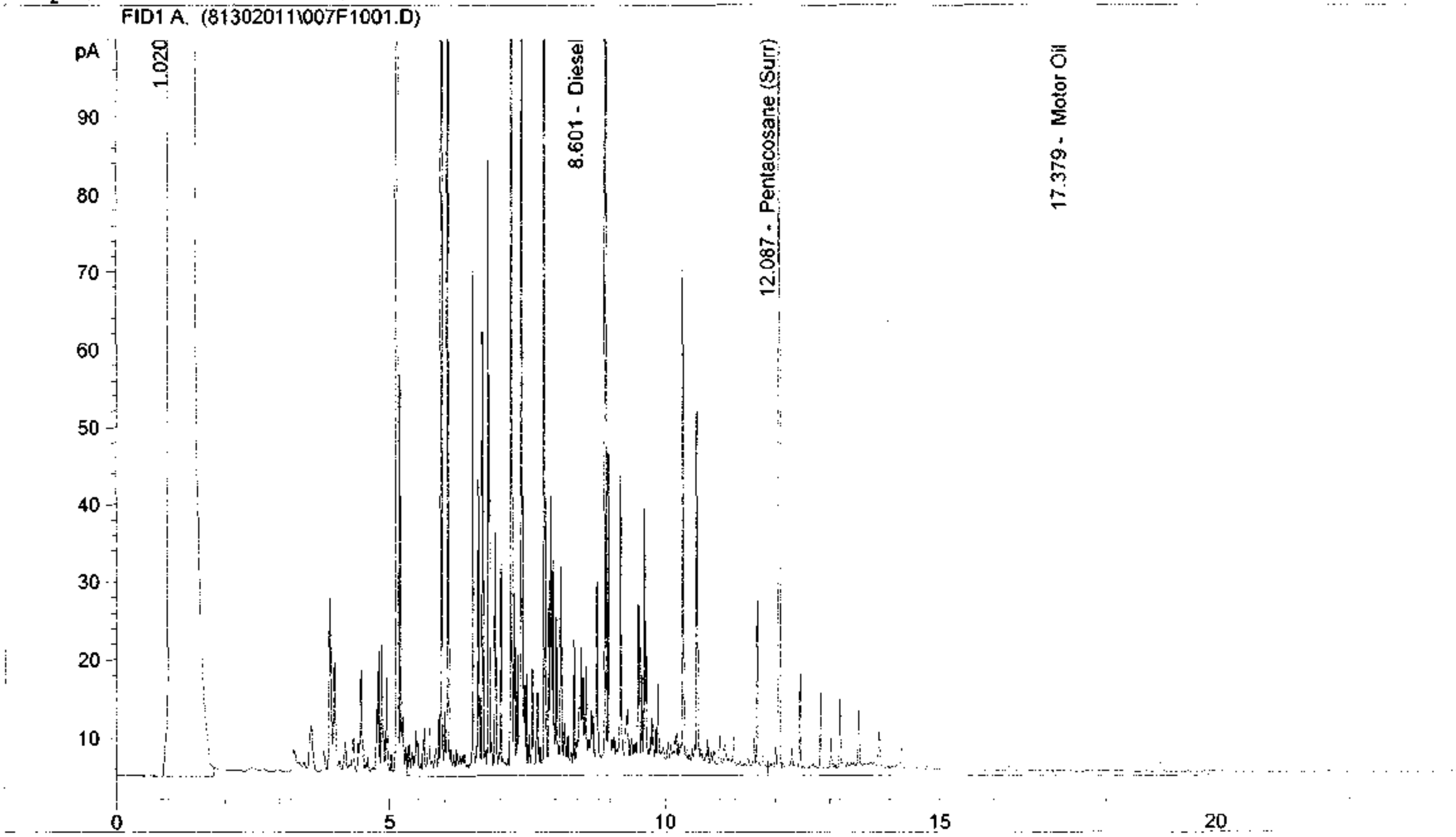
02-01-13 B



*** End of Report ***

Instrument #98 Data File: C:\HPCHEM\1\DATA\81302011\007F1001.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\FDMO0912.M
Injection Date & Time: 2/1/2013 1:12:37 PM 2/1/2013 1:12:37 PM
Report Creation: 2/1/2013 1:47:13 PM

Sample Name: EV13010138-15 RR W SGA ->



Ret. Time	Signal	Compound Name	Response	Amount ug/mL	
8.601	FID1 A,	Diesel	4045.028	335.856	
12.087		Pentacosane (Surr)	829.777	37.415	94%
17.379		Motor Oil	564.831	33.226	

D = 335.856 ug/mL x $\frac{1.0 mL}{400 mL}$ = 840 ug/L Unidentified Diesel Range Product

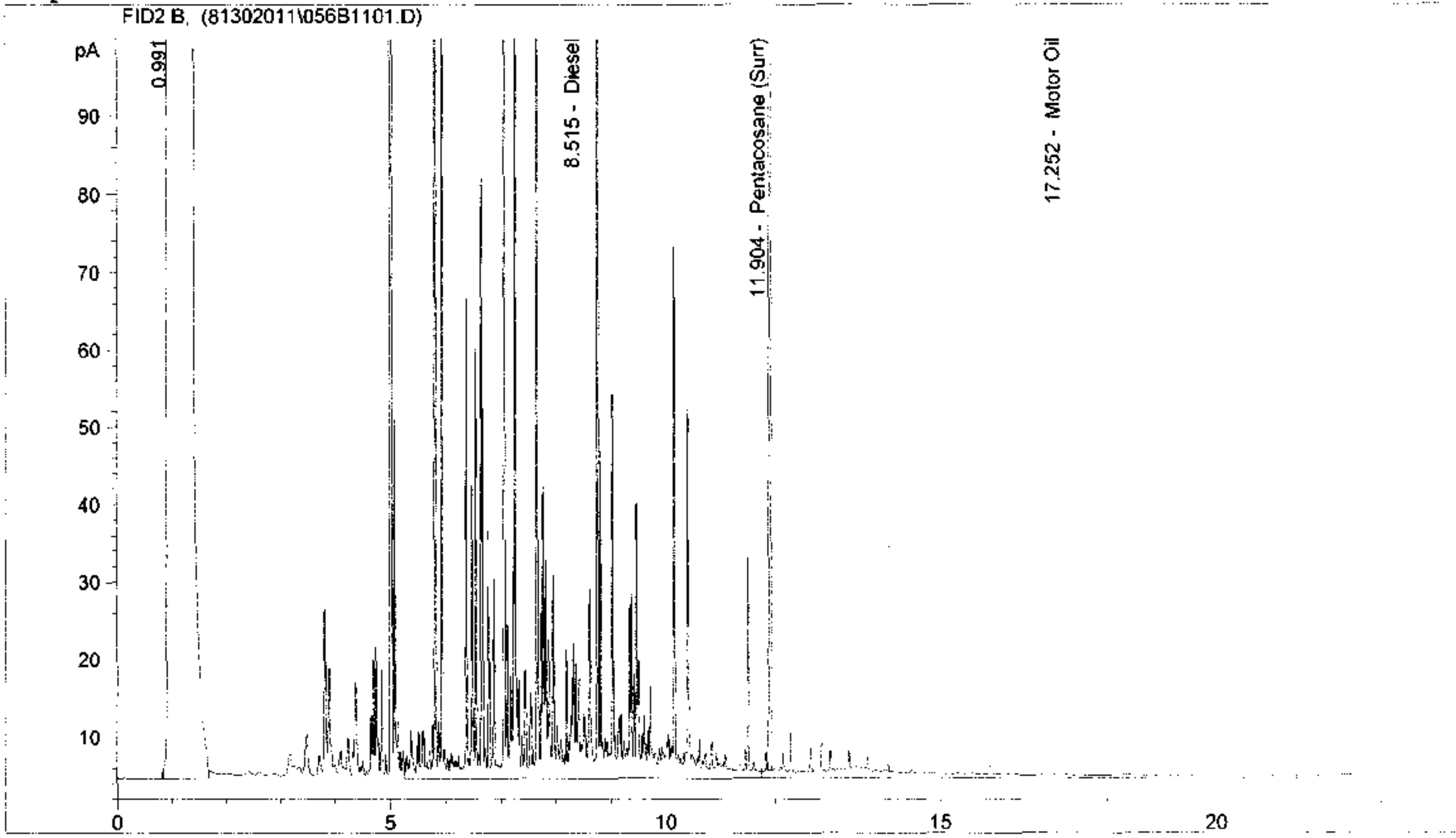
O < 250 ug/L

REVIEWED BY RB
& DATE 2/11/13

02.01.13 EB

Instrument #98 Data File: C:\HPCHEM\1\DATA\81302011\056B1101.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\BDMO0812.M
Injection Date & Time: 2/1/2013 1:42:52 PM 2/1/2013 1:42:52 PM
Report Creation: 2/1/2013 3:27:48 PM

Sample Name: EV13010138-16 RR SGA W ->



Ret. Time	Signal	Compound Name	Response	Amount ug/mL	
8.515	FID2 B,	Diesel	3821.236	291.350	
11.904		Pentacosane (Surr)	855.593	37.557	94%
17.252		Motor Oil	392.996	24.134	

$D = 291.350\ ug/mL \times \frac{1.0 mL}{400 mL} = 730\ ug/L$ Unidentified Diesel Range Product

$O < 250\ ug/L$

REVIEWED BY & DATE MS 2/11/13

02.01.13 EJ

ALS LABORATORY GROUP-EVERETT
DATA SUMMARY SHEET

PARAMETER: NW-GAS/BTEX   INSTR. MTHD.: 8021   EXTRCT MTHD: 5030/5035

QC BATCH #: GS013013S   1ST ANAL. SEQ.: 71301301

EXT. DATES: 1/30/13   1/31/13   MATRIX: SOIL

ASSOCIATED SAMPLES: EV13010133-1-4   EV13010145-2-4   EV23010138-2,3,4,6,8,10,13,14,17

BLANK AND DUPLICATE RESULTS

ANALYTE:	BLANK RESULTS:	DUPLICATE:	ORIGINAL:	%RPD:
Gasoline	<3.0 mg/Kg			
MTBE	<0.1 mg/Kg			
Benzene	<0.03 mg/Kg			
Toluene	<0.05 mg/Kg			
Ethylbenzene	<0.05 mg/Kg			
Xylenes	<0.2 mg/Kg			

SPIKE/ SPIKE DUPLICATE RESULTS

SPIKE ID	AMOUNT SPIKED	BS %RECOVERY	BSD %RECOVERY	REL%DIFF	MS %RECOVERY	MSD	REL % DIFF
			EV13010138-13				
Gasoline	25 mg/Kg	70	78	**10.8**	* 29.0	31.0	**6.7**
MTBE	2.0 mg/Kg	89	87	**2.3**	102	102	**0.0**
Benzene	1.0 mg/Kg	91	90	**1.1**	96	92	**4.3**
Toluene	1.0 mg/Kg	95	94	**1.1**	105	107	**1.9**
Ethylbenzene	1.0 mg/Kg	95	94	**1.1**	112	106	**5.5**
Xylenes	3.0 mg/kg	94	92	**2.2**	112	106	**5.5**
Triflourotoluene	0.5 mg/Kg	103	104	**1.0**	82	78	**5.0**

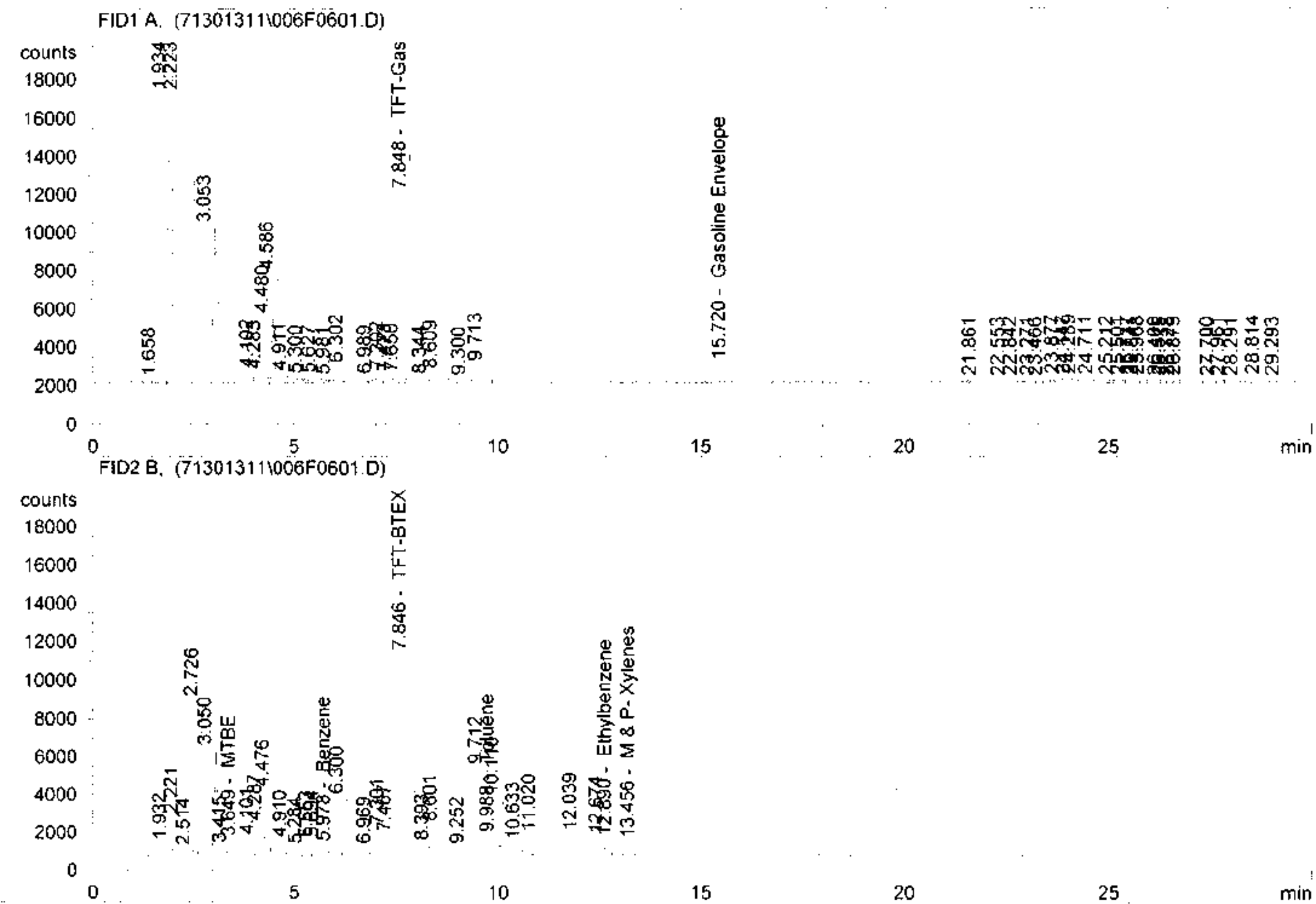
*Spike recovery low due to nonhomogenous sample matrix.

NOTES: IF NUMBER OF ANALYTES DON'T ALLOW LISTING ALL COMPOUNDS, THE RAW DATA MAY BE SUBMITTED
RAW DATA FOR QC RUN ON A SPECIFIC SAMPLE SHOULD BE INCLUDED WITH ORIGINAL SAMPLE ANALYSIS RAW DATA

Gas/BTEX   Instrument 70
Data File: C:\HPCHEM\1\DATA\71301311\006F0601.D
Injection Date & Time: 1/31/2013   10:49:33 AM
Report Created on: 2/1/2013   9:41:28 AM
Operator: DLC
Aquistion Method: GX0712.M
Analysis Method: C:\HPCHEM\1\METHODS\GX0712.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:MB-013113S   Dilution: X 0.0



Ret. Time	Compound Name	Area	Amount ug/L	
7.848	TFT-Gas	77867.531	9.350	94%
15.720	Gasoline Envelope	59484.145	12.246	

Gas < 3.0 mg/kg

Ret. Time	Compound Name	Area	Amount ug/L	
3.649	MTBE	9992.110	0.246	
5.978	Benzene	5197.307	0.311	
7.846	TFT-BTEX	295977.500	9.603	96%
9.988	Toluene	4654.376	0.560	
12.890	Ethylbenzene	4208.957	0.853	
13.456	M & P- Xylenes	3533.101	0.690	
0.000	O-Xylene	0.000	0.000	

REVIEWED BY & DATE NB 2/1/13

B<0.03 mg/kg   T,E <0.05 mg/kg   X<0.2 mg/kg

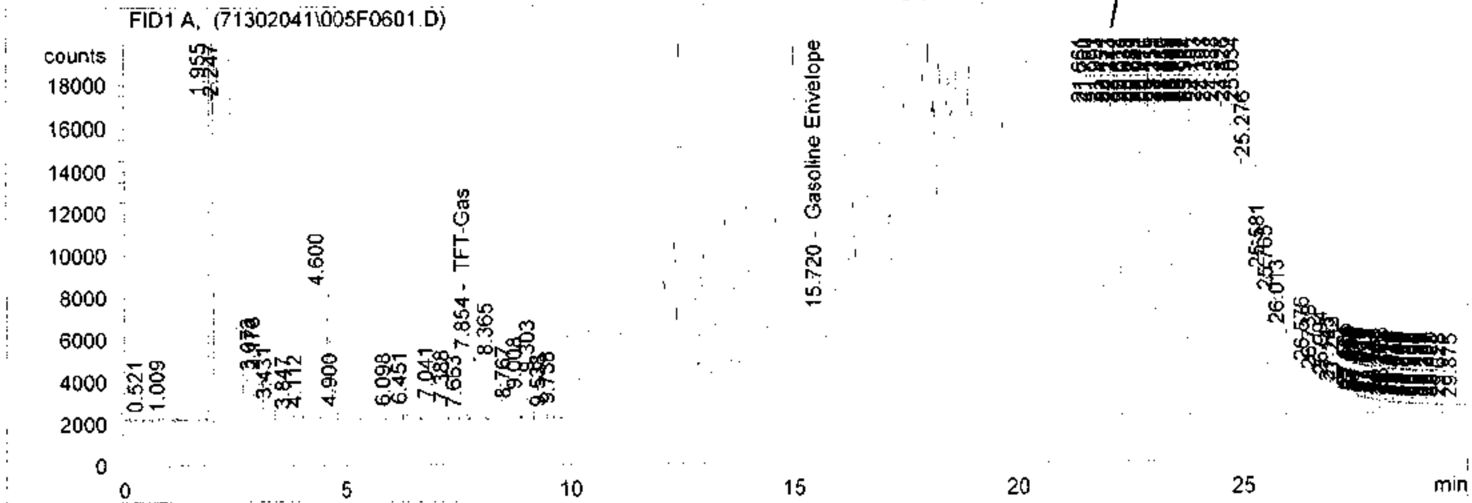
25130C

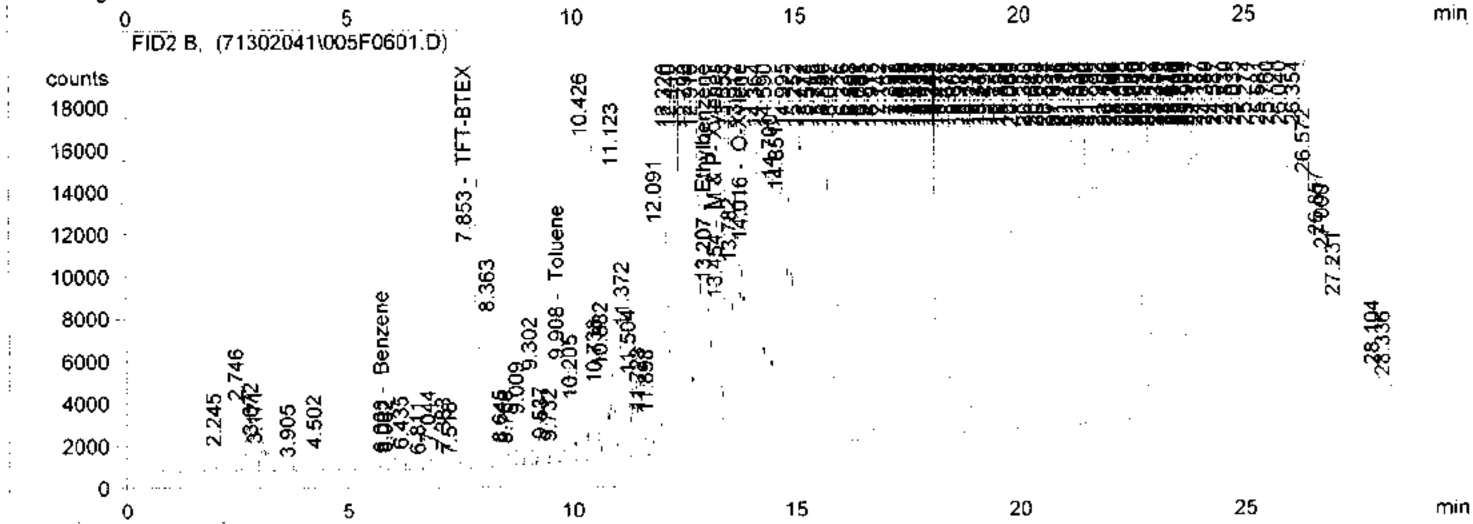
Gas/BTEX   Instrument 70
Data File: C:\HPCHEM\1\DATA\71302041\005F0601.D
Injection Date & Time: 2/4/2013   10:35:39 AM
Report Created on: 2/5/2013   8:06:31 AM
Operator: DLC
Aquistion Method: GX0712.M
Analysis Method: C:\HPCHEM\1\METHODS\GX0712.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:EV13010138-02 25   Dilution: X 4.0

semivolatile product





88.871
9.22g
6.16 ml

Ret. Time	Compound Name	Area	Amount ug/L
7.854	TFT-Gas	18302.586	2.198
15.720	Gasoline Envelope	9.415e+006	1938.372

Gas $< 500 \mu g/L \frac{\times 5 ml}{0.025 ml} \frac{\times 0.00616 L}{9.22 g} < 67 mg/kg$ *

Ret. Time	Compound Name	Area	Amount ug/L
0.000	MTBE	0.000	0.000
6.003	Benzene	3167.906	0.293
7.853	TFT-BTEX	83454.852	2.772
9.908	Toluene	36159.641	0.922
13.207	Ethylbenzene	83307.203	2.105
13.454	M & P- Xylenes	146730.344	2.522
14.016	O-Xylene	287883.437	4.223

REVIEWED BY & DATE 13 2/11/13

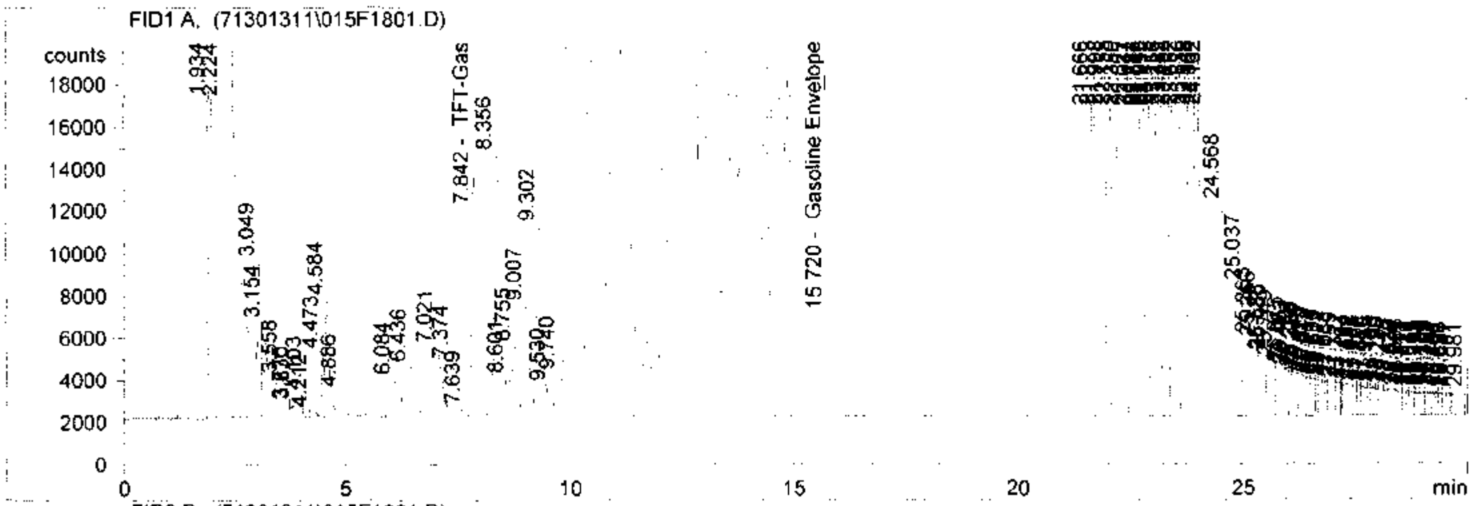
* Reporting limit raised due to semivolatile range product overlapping

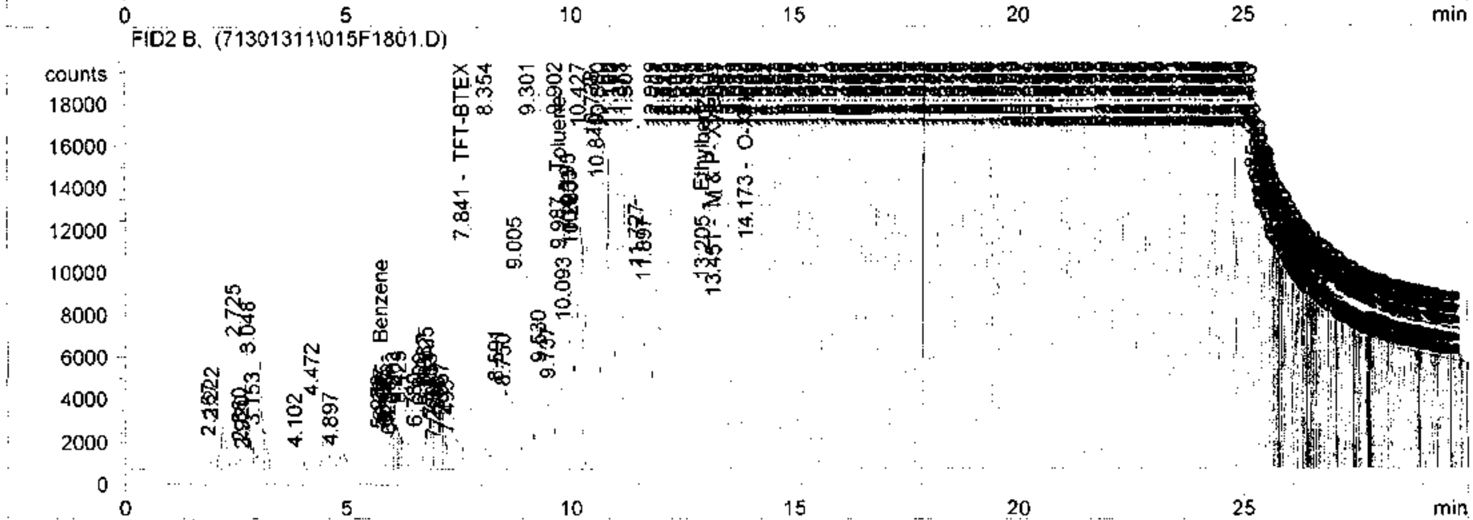
2-5-13 DC

Gas/BTEX   Instrument 70
Data File: C:\HPCHEM\1\DATA\71301311\015F1801.D
Injection Date & Time: 1/31/2013 6:16:39 PM
Report Created on: 2/1/2013   9:44:10 AM
Operator: DLC
Aquistion Method: GX0712.M
Analysis Method: C:\HPCHEM\1\METHODS\GX0712.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:EV13010138-02   Dilution: X 0.0





Ret. Time	Compound Name	Area	Amount ug/L
7.842	TFT-Gas	72014.391	8.647
15.720	Gasoline Envelope	3.625e+007	7461.855 RR

88.87%
9.22g
6.16ml

Ret. Time	Compound Name	Area	Amount ug/L
0.000	MTBE	0.000	0.000
6.027	Benzene	3182.602	0.293
7.841	TFT-BTEX	293626.719	9.527 95%
9.987	Toluene	53950.234	1.127
13.205	Ethylbenzene	291065.250	5.395
13.451	M & P- Xylenes	442658.469	6.310
14.173	O-Xylene	143542.734	2.105

REVIEWED BY & DATE   NS 2/1/13

B<0.03 mg/kg   T<0.05 mg/kg   E= 0.18 mg/kg   X = 0.28 mg/kg

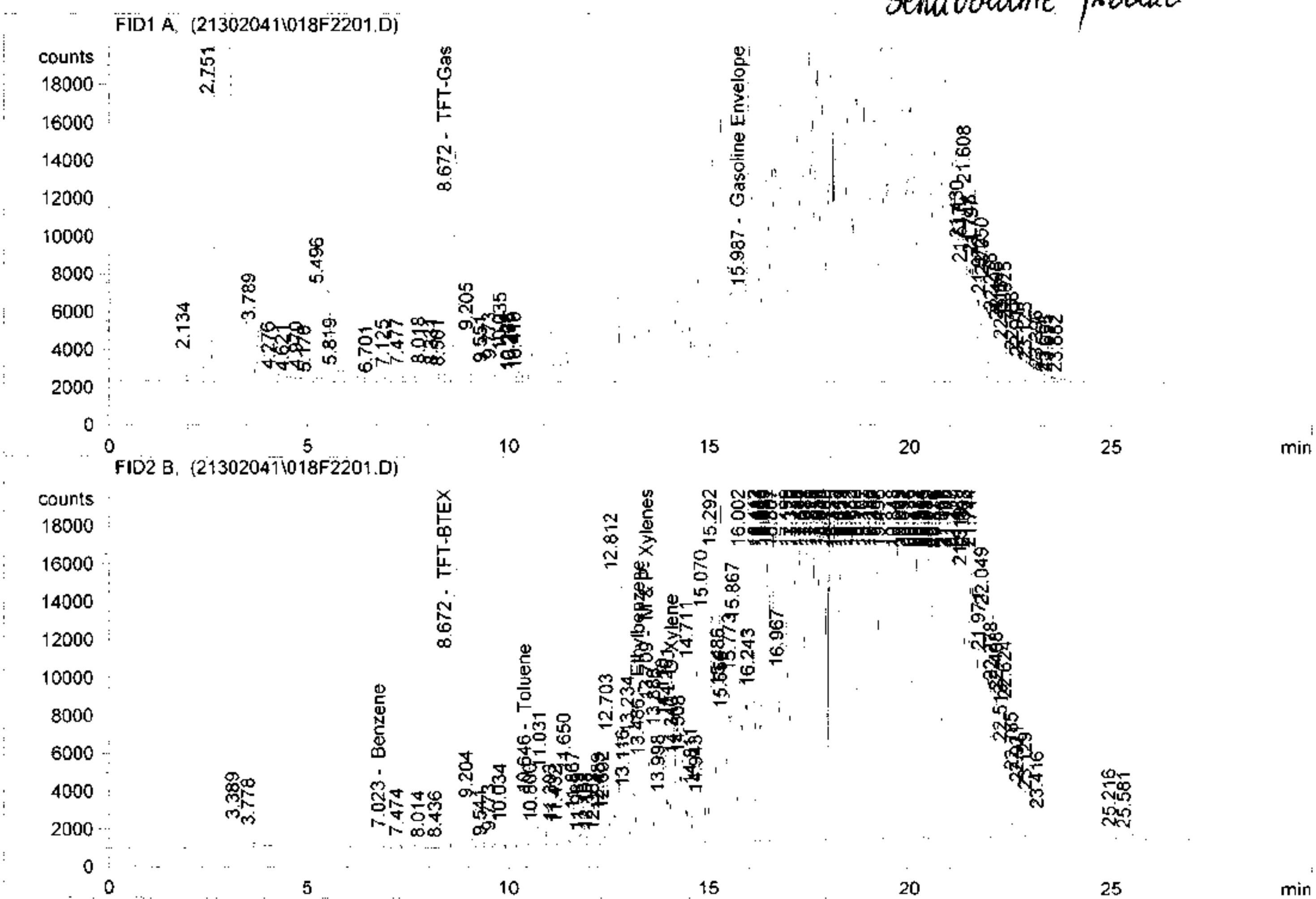
2-5-13 DC

Gas/BTEX Instrument 2
Data File: C:\HPCHEM\2\DATA\21302041\018F2201.D
Injection Date & Time: 2/4/2013 8:28:10 PM
Report Created on: 2/5/2013 8:00:57 AM
Operator: DLC
Aquistion Method: GASB1012.M
Analysis Method: C:\HPCHEM\2\METHODS\GASB1012.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:EV13010138-03 Dilution: X 0.0

semivolatile product



Ret. Time	Compound Name	Area	Amount ug/L
8.672	TFT-Gas	84585.992	7.865 79%
15.987	Gasoline Envelope	4.412e+006	770.291

92.45%
10.23g
5.84 ml

Gas $< 200 \times \frac{5ml}{0.1ml} \times \frac{0.00584L}{10.23g} < 5.7$ mg/kg *

Ret. Time	Compound Name	Area	Amount ug/L
0.000	MTBE	0.000	0.000
7.023	Benzene	7567.895	0.189
8.672	TFT-BTEX	139571.516	8.711 87%
10.646	Toluene	18468.260	0.463
13.486	Ethylbenzene	27922.994	1.118
13.709	M & P- Xylenes	61736.984	1.492
14.340	O-Xylene	26242.299	0.628

REVIEWED BY & DATE NS 2/11/13

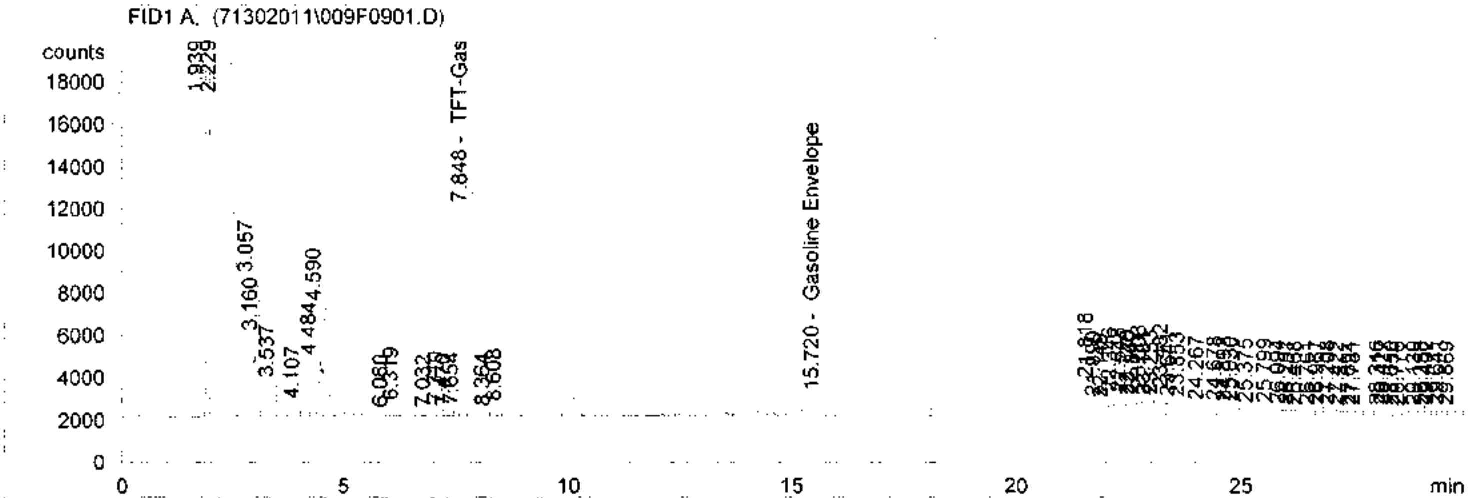
*Reporting limit raised due to semivol range product overlap.

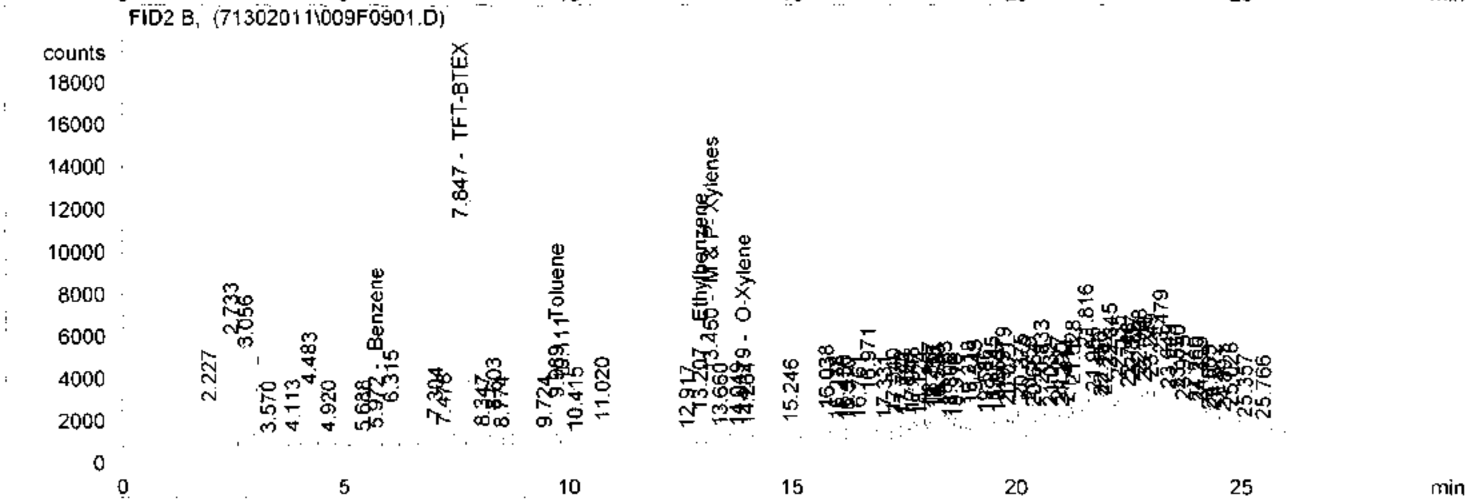
B <0.03 mg/kg T,E <0.05 mg/kg X <0.5 mg/kg 2-5-13 DC

Gas/BTEX   Instrument 70
Data File: C:\HPCHEM\1\DATA\71302011\009F0901.D
Injection Date & Time: 2/1/2013   1:04:15 PM
Report Created on: 2/4/2013   7:59:09 AM
Operator: DLC
Aquistion Method: GX0712.M
Analysis Method: C:\HPCHEM\1\METHODS\GX0712.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:EV13010138-04 RR   Dilution: X 0.0





Ret. Time	Compound Name	Area	Amount ug/L
7.848	TFT-Gas	67855.727	8.147 81%
15.720	Gasoline Envelope	165569.359	34.086

Gas < 3.0 mg/kg

Ret. Time	Compound Name	Area	Amount ug/L
0.000	MTBE	0.000	0.000
5.972	Benzene	4390.618	0.304
7.847	TFT-BTEX	269143.062	8.740 87%
9.989	Toluene	9584.714	0.617
13.207	Ethylbenzene	6867.924	0.895
13.450	M & P- Xylenes	16094.037	0.850
14.179	O-Xylene	5330.090	0.078

REVIEWED BY & DATE NB 2/11/13

B <0.03 mg/kg   T,E <0.05 mg/kg   X<0.2 mg/kg

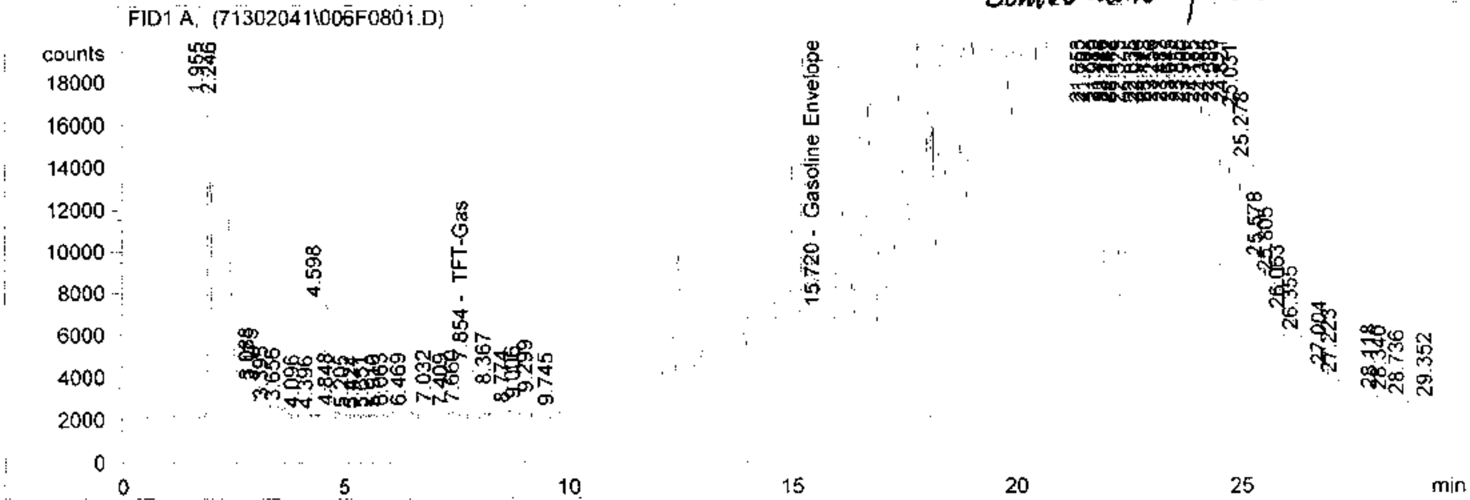
2-5-13 DC

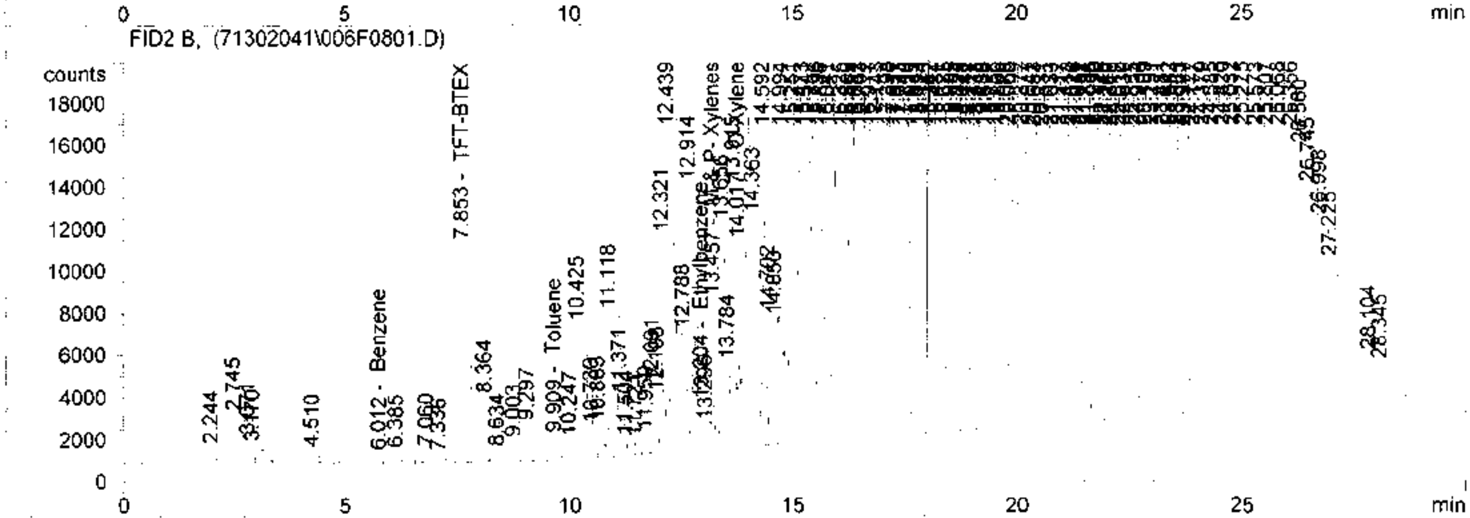
Gas/BTEX   Instrument 70
Data File: C:\HPCHEM\1\DATA\71302041\006F0801.D
Injection Date & Time: 2/4/2013   11:48:29 AM
Report Created on: 2/5/2013   8:07:24 AM
Operator: DLC
Aquistion Method: GX0712.M
Analysis Method: C:\HPCHEM\1\METHODS\GX0712.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:EV13010138-06 20   Dilution: X 5.0

Semivolatile product





Ret. Time	Compound Name	Area	Amount ug/L
7.854	TFT-Gas	17394.576	2.089
15.720	Gasoline Envelope	6.667e+006	1372.568

83.831
9.01g
6.74ml

$$\text{Gas} < 500 \times \frac{5ml}{0.02ml} \; \frac{\times 0.00674L}{9.01g} < 94\,mg/kg\ *$$

Ret. Time	Compound Name	Area	Amount ug/L
0.000	MTBE	0.000	0.000
6.012	Benzene	5239.598	0.312
7.853	TFT-BTEX	61744.922	2.074
9.909	Toluene	8893.244	0.609
13.204	Ethylbenzene	10549.855	0.953
13.457	M & P- Xylenes	59861.484	1.410
14.017	O-Xylene	143796.812	2.109

REVIEWED BY & DATE ns 2/11/3

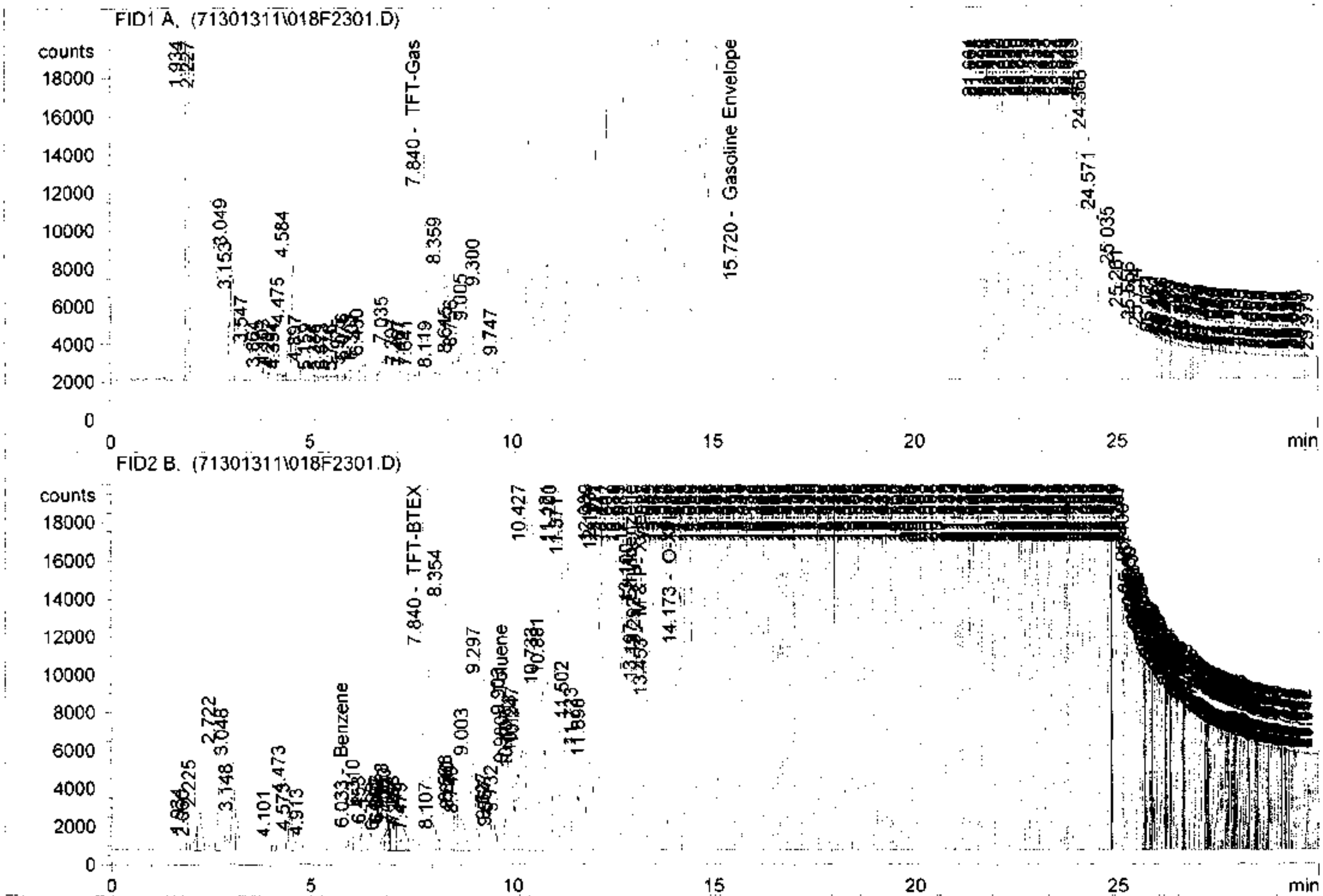
* Reporting limit raised due to semivol.-range product overlapping.

2-5-13 DC

Gas/BTEX   Instrument 70
Data File: C:\HPCHEM\1\DATA\71301311\018F2301.D
Injection Date & Time: 1/31/2013   9:13:26 PM
Report Created on: 2/1/2013   9:51:34 AM
Operator: DLC
Aquistion Method: GX0712.M
Analysis Method: C:\HPCHEM\1\METHODS\GX0712.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:EV13010138-06   Dilution: X 0.0



83.83%
9.01g
6.74 ml

Ret. Time	Compound Name	Area	Amount ug/L
7.840	TFT-Gas	77561.461	9.313
15.720	Gasoline Envelope	3.455e+007	7112.165 RR

Ret. Time	Compound Name	Area	Amount ug/L
0.000	MTBE	0.000	0.000
6.033	Benzene	6450.484	0.323
7.840	TFT-BTEX	297029.156	9.637 96%
9.980	Toluene	23081.168	0.772
13.197	Ethylbenzene	79538.602	2.046
13.453	M & P- Xylenes	247875.062	3.817
14.173	O-Xylene	64649.145	0.948

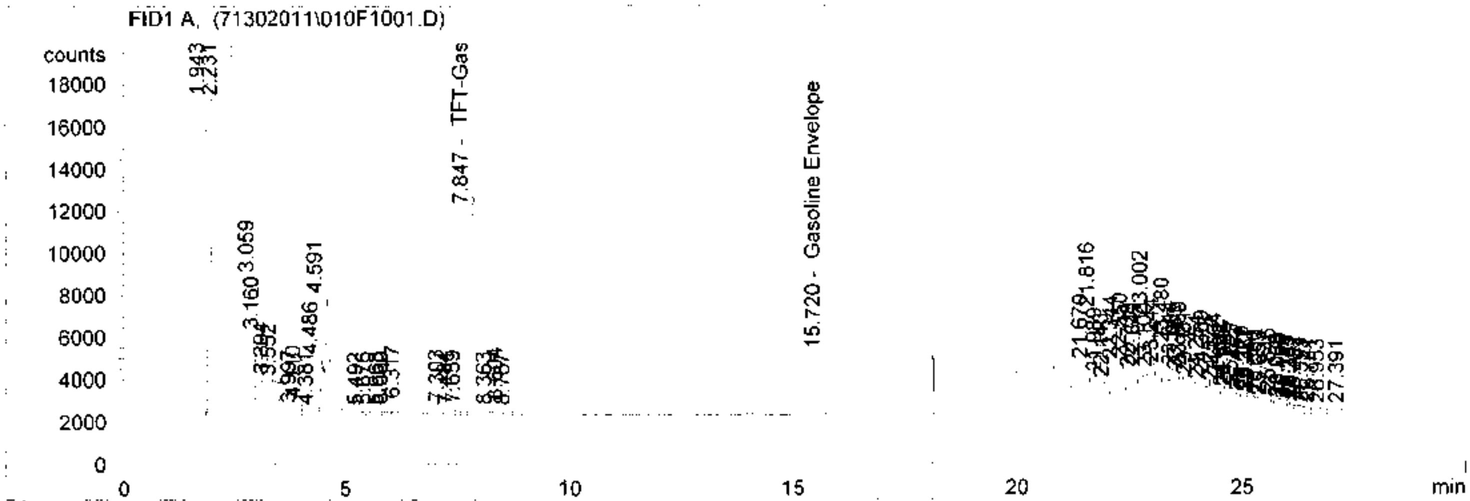
REVIEWED BY & DATE NB 2/1/13

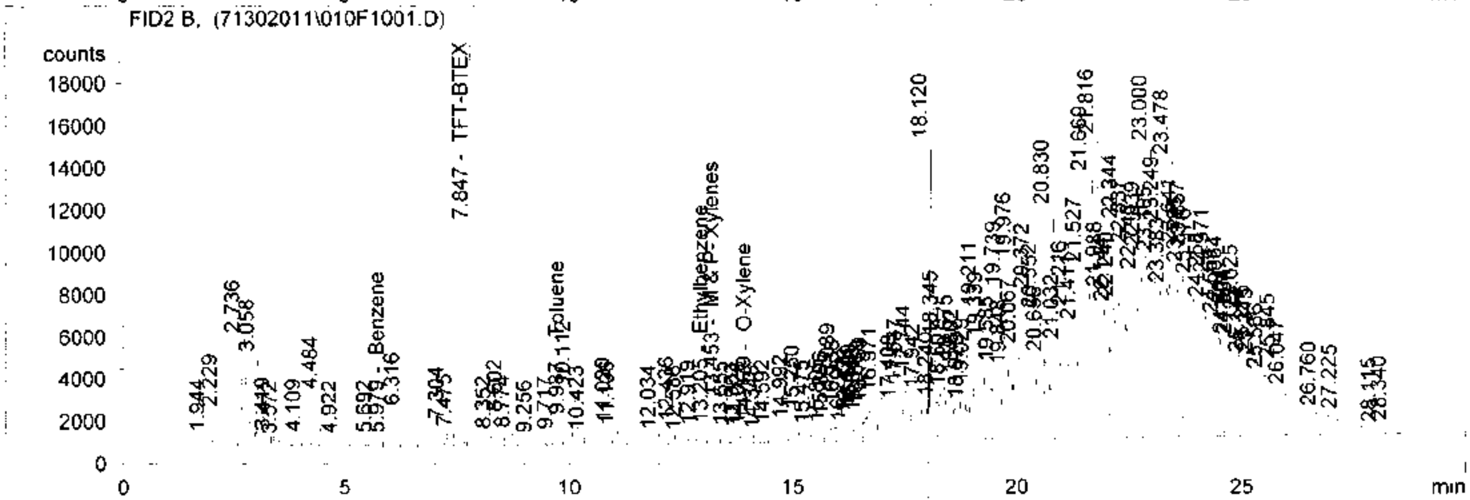
B <0.03 mg/kg   T <0.05 mg/kg   E = 0.077 mg/kg   x <0.2 mg/kg
2.5.13 DC

```
Gas/BTEX    Instrument 70
Data File: C:\HPCHEM\1\DATA\71302011\010F1001.D
Injection Date & Time: 2/1/2013    1:39:55 PM
Report Created on:    2/4/2013    7:59:24 AM
Operator: DLC
Aquistion Method: GX0712.M
Analysis Method: C:\HPCHEM\1\METHODS\GX0712.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:EV13010138-08 RR         Dilution: X 0.0
```





Ret. Time	Compound Name	Area	Amount ug/L
7.847	TFT-Gas	66046.914	7.930 79%
15.720	Gasoline Envelope	251470.266	51.770

76.48%
9.10g
7.80ml

Gas < 3.0 mg/kg

Ret. Time	Compound Name	Area	Amount ug/L
0.000	MTBE	0.000	0.000
5.979	Benzene	3480.073	0.295
7.847	TFT-BTEX	255860.219	8.314 83%
9.987	Toluene	5812.011	0.573
13.205	Ethylbenzene	4202.594	0.853
13.453	M & P- Xylenes	10297.370	0.776
14.179	O-Xylene	3749.739	0.055

REVIEWED BY RB
& DATE 2/1/13

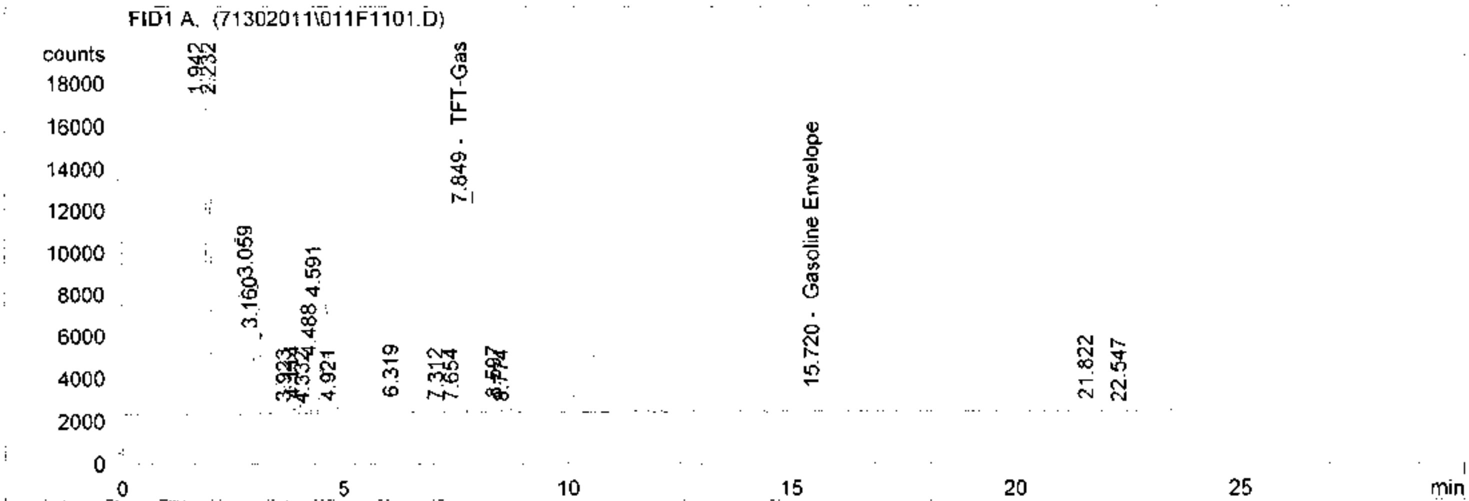
B < 0.03 mg/kg   T,E < 0.05 mg/kg   x < 0.2 mg/kg

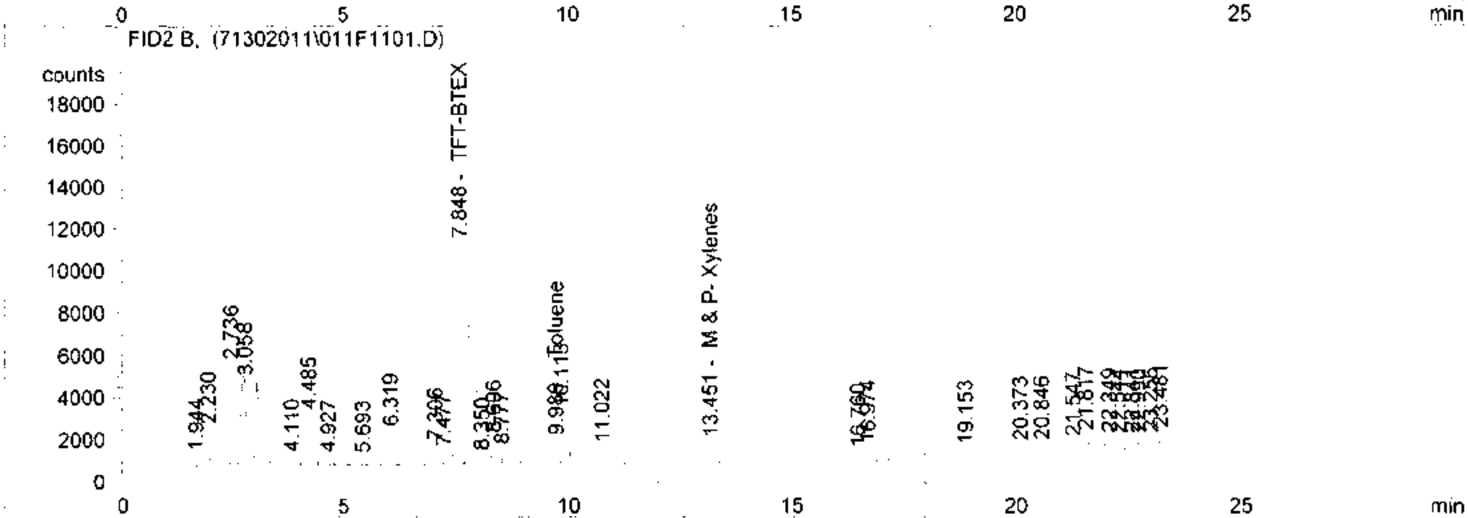
2-5-13 DC

Gas/BTEX   Instrument 70
Data File: C:\HPCHEM\1\DATA\71302011\011F1101.D
Injection Date & Time: 2/1/2013   2:15:36 PM
Report Created on: 2/4/2013   7:59:36 AM
Operator: DLC
Aquistion Method: GX0712.M
Analysis Method: C:\HPCHEM\1\METHODS\GX0712.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:EV13010138-10 RR   Dilution: X 0.0





Ret. Time	Compound Name	Area	Amount ug/L
7.849	TFT-Gas	64644.125	7.762 78%
15.720	Gasoline Envelope	22765.174	4.687

Gas < 3.0 mg/kg

Ret. Time	Compound Name	Area	Amount ug/L
0.000	MTBE	0.000	0.000
0.000	Benzene	0.000	0.000
7.848	TFT-BTEX	254214.109	8.261 83%
9.989	Toluene	5333.806	0.568
0.000	Ethylbenzene	0.000	0.000
13.451	M & P- Xylenes	4743.940	0.705
0.000	O-Xylene	0.000	0.000

REVIEWED BY & DATE NS 2/1/13

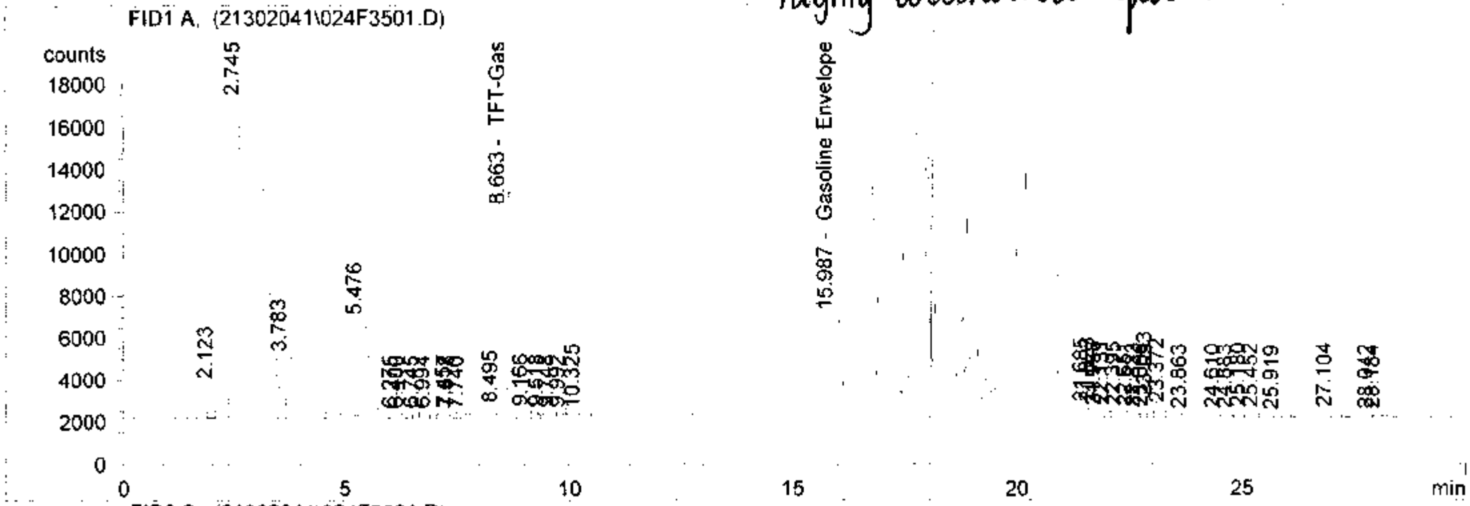
B < 0.03 mg/kg   T,E < 0.05 mg/kg   x < 0.2 mg/kg

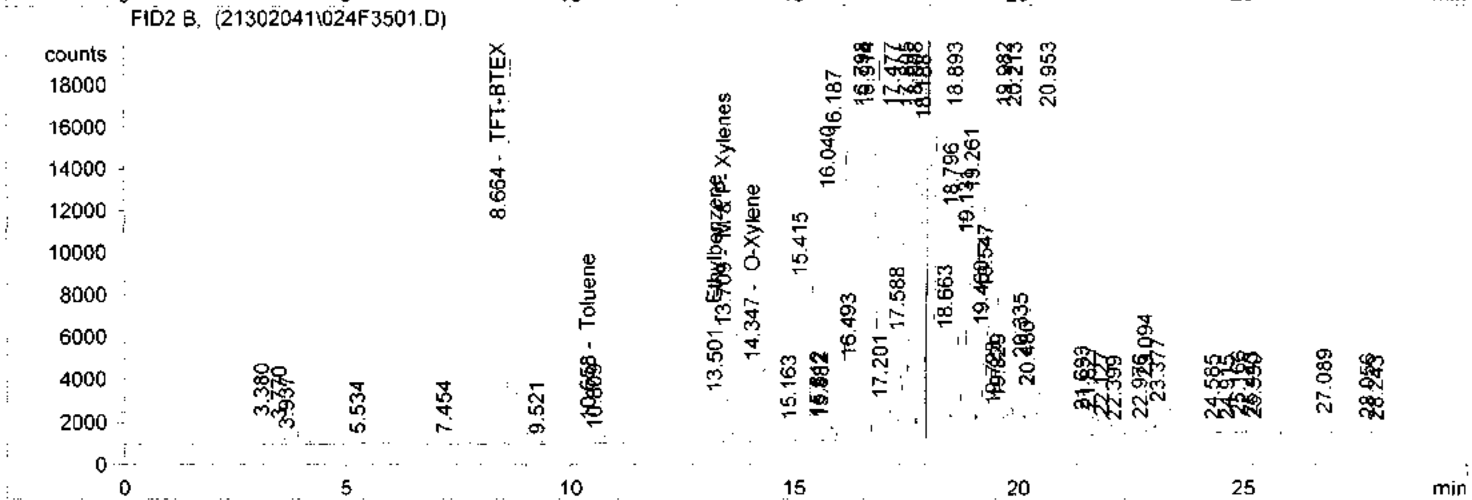
0-5-13 DC

Gas/BTEX   Instrument 2
Data File: C:\HPCHEM\2\DATA\21302041\024F3501.D
Injection Date & Time: 2/5/2013   4:17:19 AM
Report Created on: 2/5/2013   8:00:14 AM
Operator: DLC
Aquistion Method: GASB1012.M
Analysis Method: C:\HPCHEM\2\METHODS\GASB1012.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:EV13010138-13   Dilution: X 0.0   highly weathered gasoline





Ret. Time	Compound Name	Area	Amount ug/L
8.663	TFT-Gas	80366.906	7.473 75%
15.987	Gasoline Envelope	1.104e+006	192.655

87.63%
8.99g
6.27ml

$$\text{Gas} = 192.655\,\mu g/L \times \frac{5\,mL}{0.1\,mL} \times \frac{0.00627L}{8.99g} = 6.7\,mg/kg$$

Ret. Time	Compound Name	Area	Amount ug/L
0.000	MTBE	0.000	0.000
0.000	Benzene	0.000	0.000
8.664	TFT-BTEX	135891.547	8.485 85%
10.658	Toluene	5209.464	0.182
13.501	Ethylbenzene	11133.963	0.696
13.709	M & P- Xylenes	42931.070	1.095
14.347	O-Xylene	24201.979	0.580

REVIEWED BY & DATE RS 2/11/13

B < 0.03 mg/kg   T,E < 0.05 mg/kg   X < 0.2 mg/kg

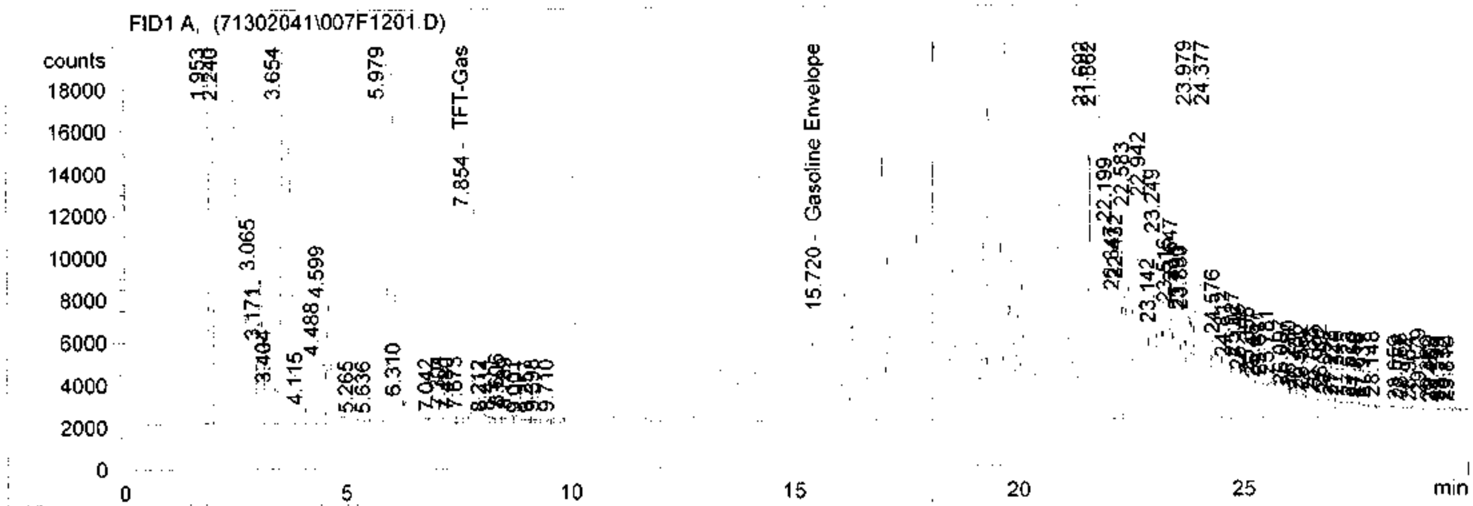
3-5-13 DC

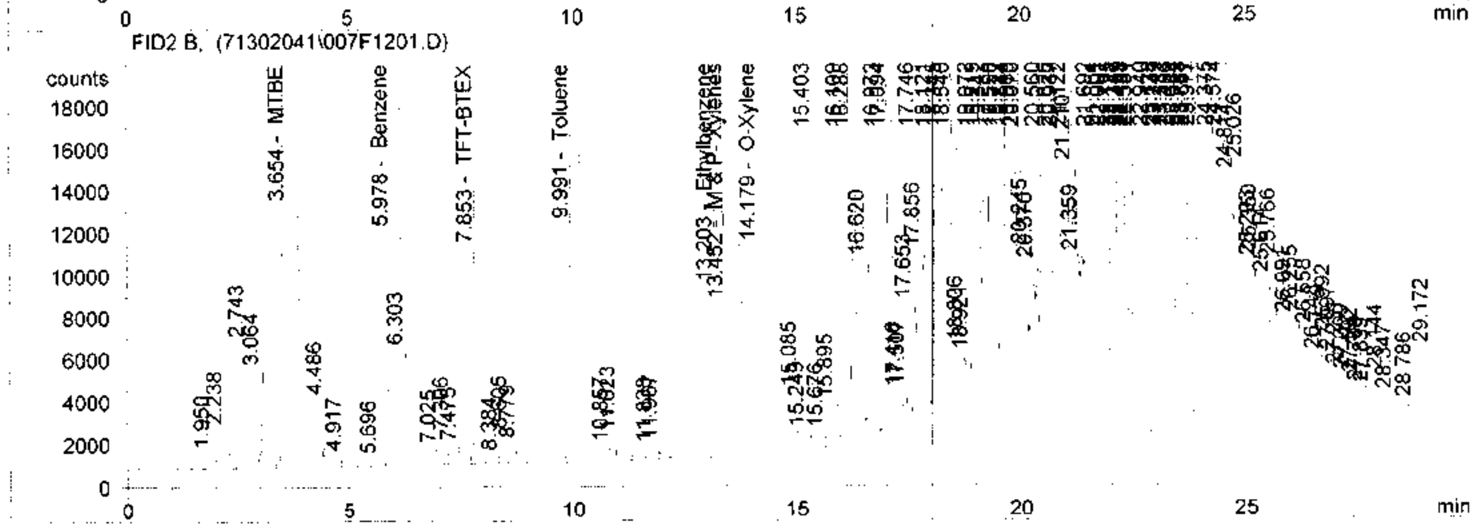
Gas/BTEX   Instrument 70
Data File: C:\HPCHEM\1\DATA\71302041\007F1201.D
Injection Date & Time: 2/4/2013   2:10:33 PM
Report Created on: 2/5/2013   8:08:25 AM
Operator: DLC
Aquistion Method: GX0712.M
Analysis Method: C:\HPCHEM\1\METHODS\GX0712.M

See Carl
for MS, MSDs

FID1 A equivalent to FID analysis.
FID2 B equivalent to FID analysis.

Sample Name: EV13010138-13 MB MSBTEX   Dilution: X 0.0





Ret. Time	Compound Name	Area	Amount ug/L
7.854	TFT-Gas	66049.016	7.930
15.720	Gasoline Envelope	3.201e+006	659.019

REVIEWED BY & DATE MS 2/11/13

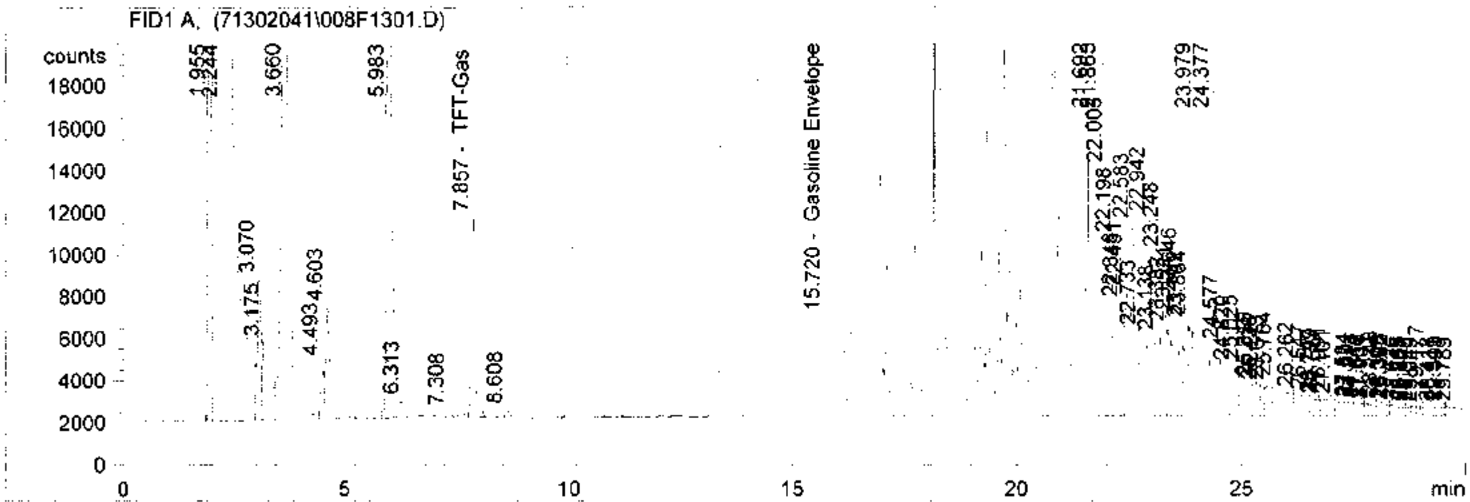
Ret. Time	Compound Name	Area	Amount ug/L	
3.654	MTBE	1.661e+006	40.829	÷40×100=102%
5.978	Benzene	2.054e+006	19.103	÷20×100=96%
7.853	TFT-BTEX	251972.516	8.189	÷10×100 = 82%
9.991	Toluene	1.780e+006	20.963	105%
13.203	Ethylbenzene	1.366e+006	22.415	112%
13.452	M & P- Xylenes	3.429e+006	44.528	÷60×100=112%
14.179	O-Xylene	1.528e+006	22.407	

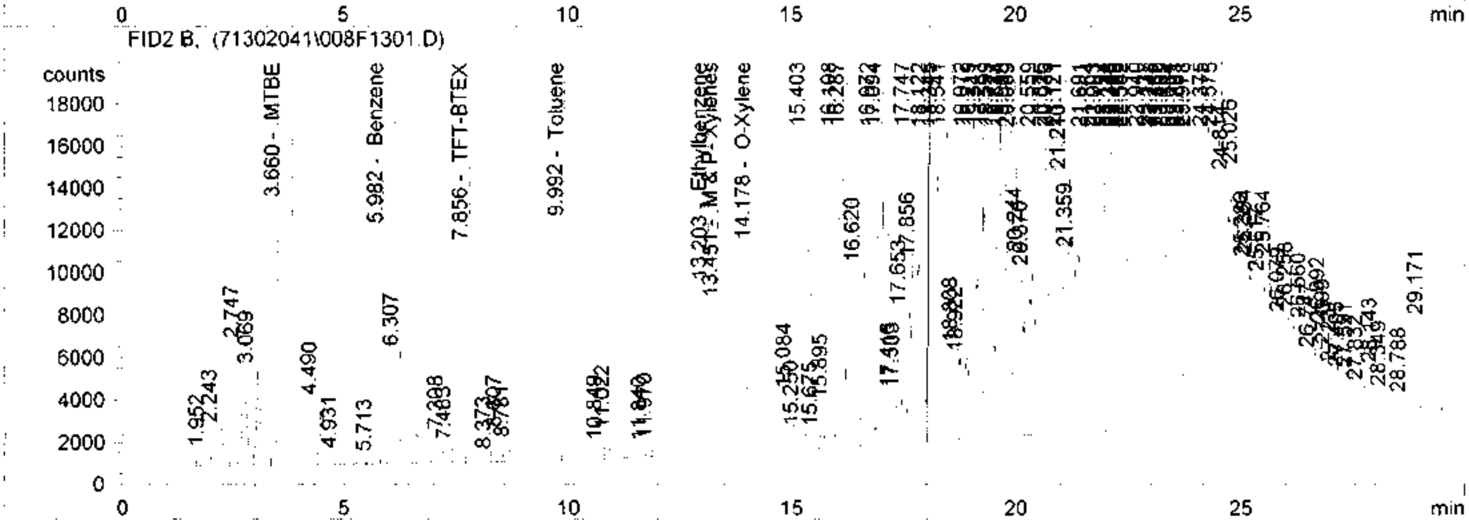
2-5-13 DC

Gas/BTEX   Instrument 70
Data File: C:\HPCHEM\1\DATA\71302041\008F1301.D
Injection Date & Time: 2/4/2013   2:46:13 PM
Report Created on: 2/5/2013   8:08:36 AM
Operator: DLC
Aquistion Method: GX0712.M
Analysis Method: C:\HPCHEM\1\METHODS\GX0712.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

MSDBTEX
Sample Name:EV13010138-13 MB   Dilution: X 0.0





Ret. Time	Compound Name	Area	Amount ug/L
7.857	TFT-Gas	56840.180	6.825
15.720	Gasoline Envelope	2.928e+006	602.718

REVIEWED BY & DATE
2/11/13

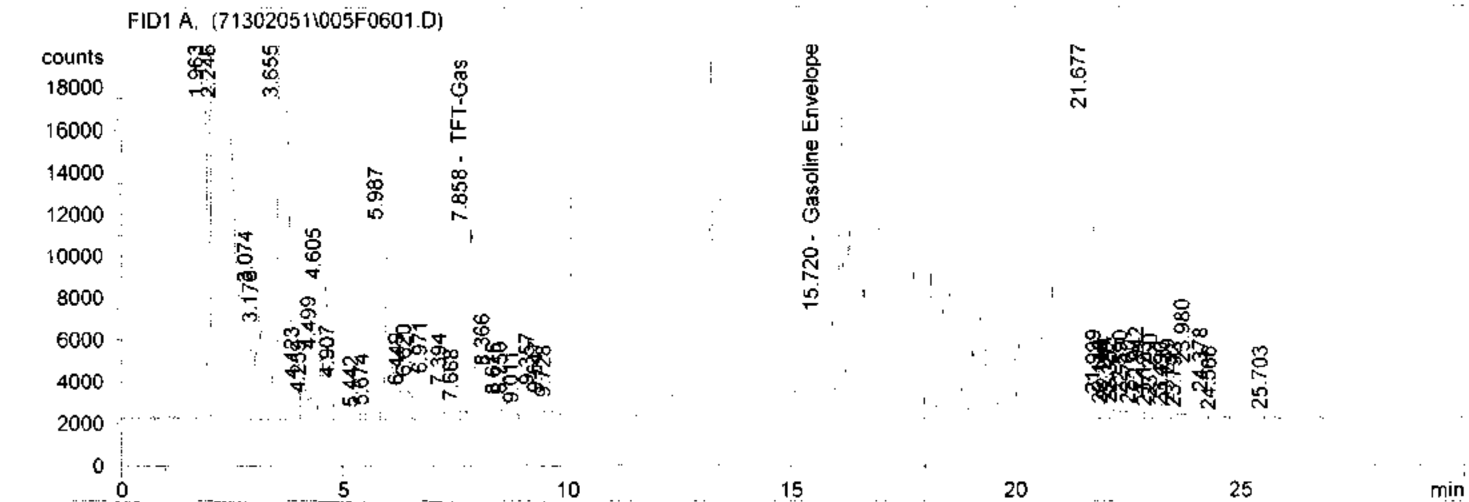
Ret. Time	Compound Name	Area	Amount ug/L	
3.660	MTBE	1.657e+006	40.743	102%
5.982	Benzene	1.983e+006	18.454	92%
7.856	TFT-BTEX	239103.734	7.775	78%
9.992	Toluene	1.709e+006	20.142	107%
13.203	Ethylbenzene	1.290e+006	21.209	106%
13.451	M & P- Xylenes	3.244e+006	42.165	} 106%
14.178	O-Xylene	1.479e+006	21.696	

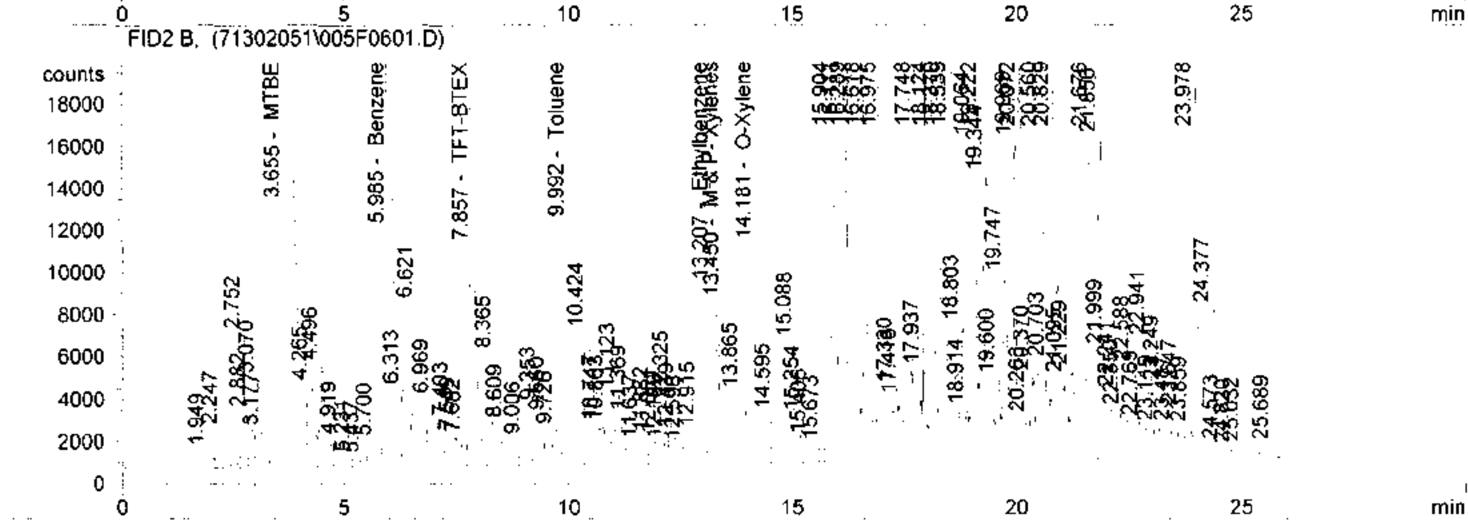
2-5-13 DC

Gas/BTEX   Instrument 70
Data File: C:\HPCHEM\1\DATA\71302051\005F0601.D
Injection Date & Time: 2/5/2013   11:41:35 AM
Report Created on: 2/5/2013   1:00:13 PM
Operator: DLC
Aquistion Method: GX0712.M
Analysis Method: C:\HPCHEM\1\METHODS\GX0712.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:EV13010138-13 MG MSGAS   Dilution: X 0.0





Ret. Time	Compound Name	Area	Amount ug/L
7.858	TFT-Gas	59151.891	7.102 71%
15.720	Gasoline Envelope	1.642e+006	338.018

87.63/
10.15g
6.43ml

$$\text{Gas} = \frac{338.018\,\mu g/L - 192.655\,\mu g/L}{500} \times 100 = 29\% *$$

Ret. Time	Compound Name	Area	Amount ug/L
3.655	MTBE	2.274e+006	55.907
5.985	Benzene	448007.937	4.374
7.857	TFT-BTEX	224436.172	7.303
9.992	Toluene	1.888e+006	22.202
13.207	Ethylbenzene	363862.125	6.548
13.450	M & P- Xylenes	1.568e+006	20.708
14.181	O-Xylene	579352.188	8.498

REVIEWED BY & DATE ND 2/11/13

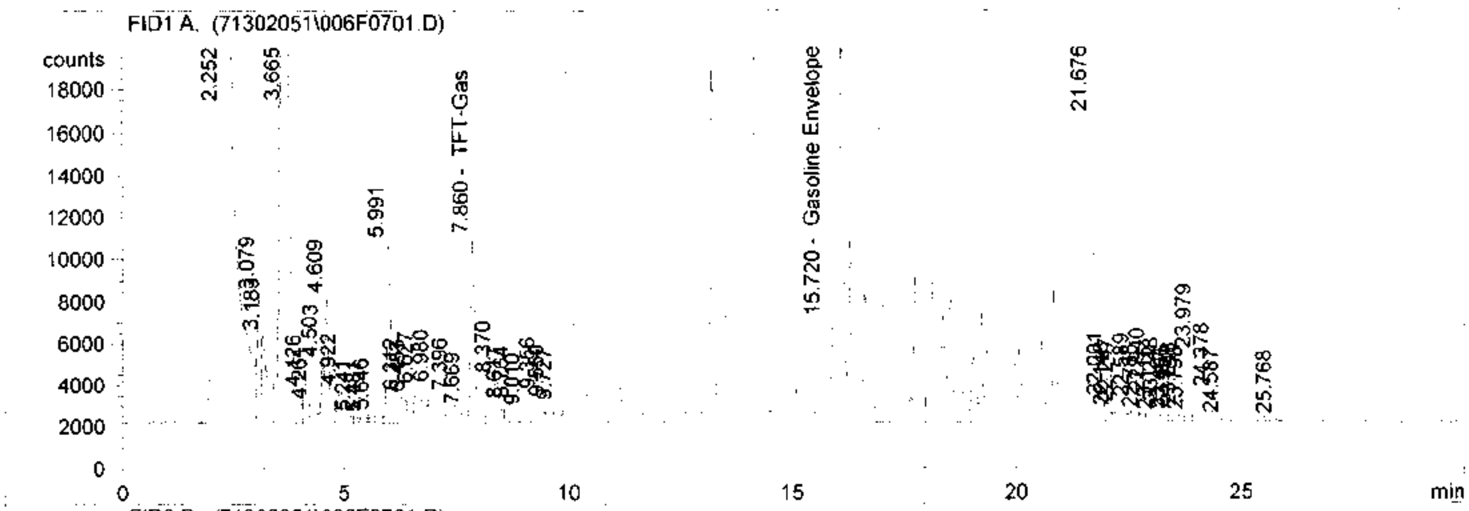
* Spike recovery low due to nonhomogenous sample matrix

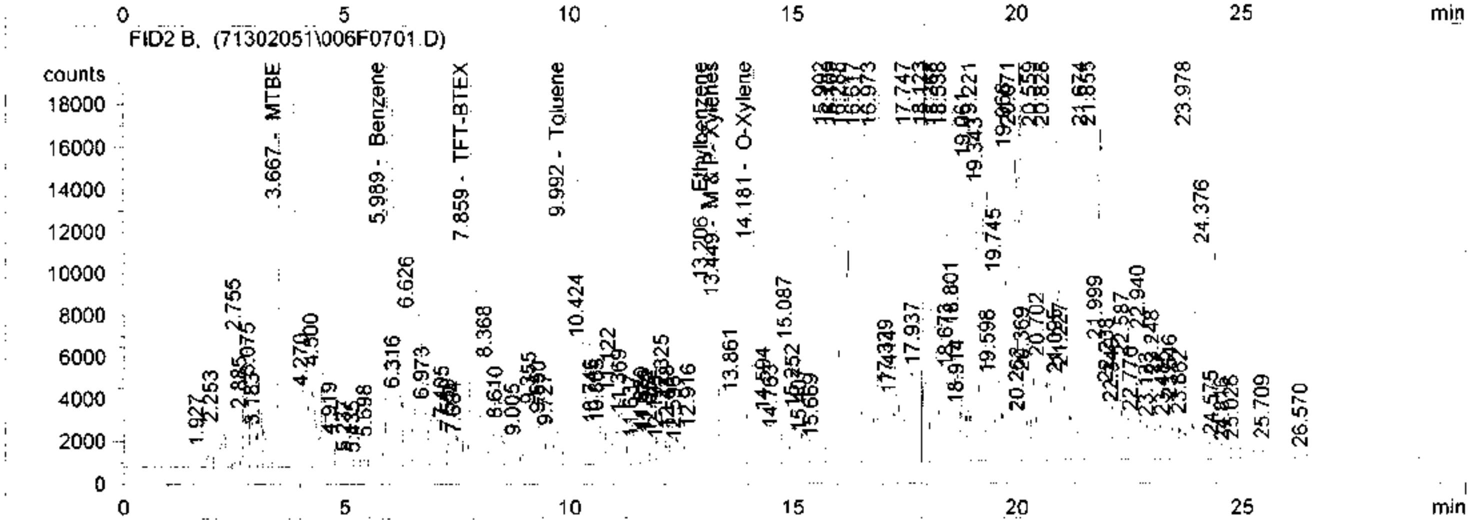
2-5-13 DC

Gas/BTEX   Instrument 70
Data File: C:\HPCHEM\1\DATA\71302051\006F0701.D
Injection Date & Time: 2/5/2013   12:21:21 PM
Report Created on: 2/5/2013   1:00:25 PM
Operator: DLC
Aquistion Method: GX0712.M
Analysis Method: C:\HPCHEM\1\METHODS\GX0712.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

MSD GAS
Sample Name:EV13010138-13 MG   Dilution: X 0.0





Ret. Time	Compound Name	Area	Amount ug/L
7.860	TFT-Gas	57015.387	6.846
15.720	Gasoline Envelope	1.678e+006	345.392

68%

$$\frac{345.392\,\mu g/L - 192.655\,\mu g/L}{500} \times 100 = 31\%\ *$$

Ret. Time	Compound Name	Area	Amount ug/L
3.667	MTBE	2.197e+006	54.020
5.989	Benzene	418653.219	4.104
7.859	TFT-BTEX	208951.469	6.806
9.992	Toluene	1.781e+006	20.975
13.206	Ethylbenzene	342191.687	6.205
13.449	M & P- Xylenes	1.478e+006	19.561
14.181	O-Xylene	544587.125	7.988

REVIEWED BY & DATE NB 2/11/13

* Spike recovery low due to nonhomogenous sample matrix

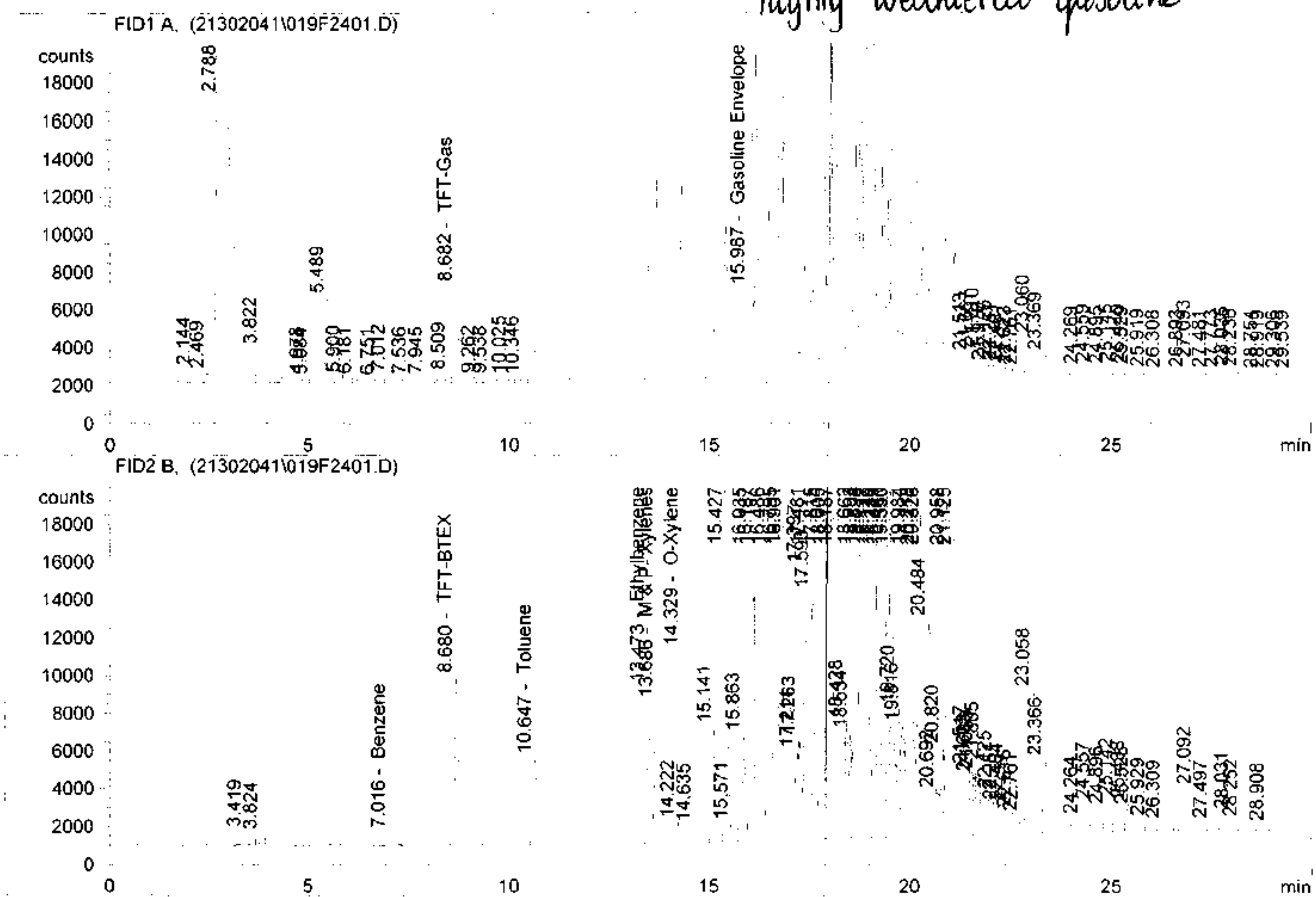
2-5-13 DC

Gas/BTEX Instrument 2
Data File: C:\HPCHEM\2\DATA\21302041\019F2401.D
Injection Date & Time: 2/4/2013 9:40:37 PM
Report Created on: 2/5/2013 8:01:58 AM
Operator: DLC
Aquistion Method: GASB1012.M
Analysis Method: C:\HPCHEM\2\METHODS\GASB1012.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:EV13010138-14 50 Dilution: X 2.0

highly weathered gasoline



Ret. Time	Compound Name	Area	Amount ug/L
8.682	TFT-Gas	40796.258	3.794
15.987	Gasoline Envelope	5.272e+006	920.350

×2 = 76%

78.96%
9.63g
7.56ml

$$Gas = 920.350\,\mu g/L \times \frac{5\,ml}{0.05\,ml} \times \frac{0.00756\,L}{9.63\,g} = 72\,mg/kg$$

Ret. Time	Compound Name	Area	Amount ug/L
0.000	MTBE	0.000	0.000
7.016	Benzene	5700.644	0.152
8.680	TFT-BTEX	66835.477	4.251
10.647	Toluene	38149.410	0.880
13.473	Ethylbenzene	74244.937	2.284
13.686	M & P- Xylenes	196428.703	4.341
14.329	O-Xylene	136548.344	3.270

×2 = 85%

REVIEWED BY & DATE NS 2/11/13

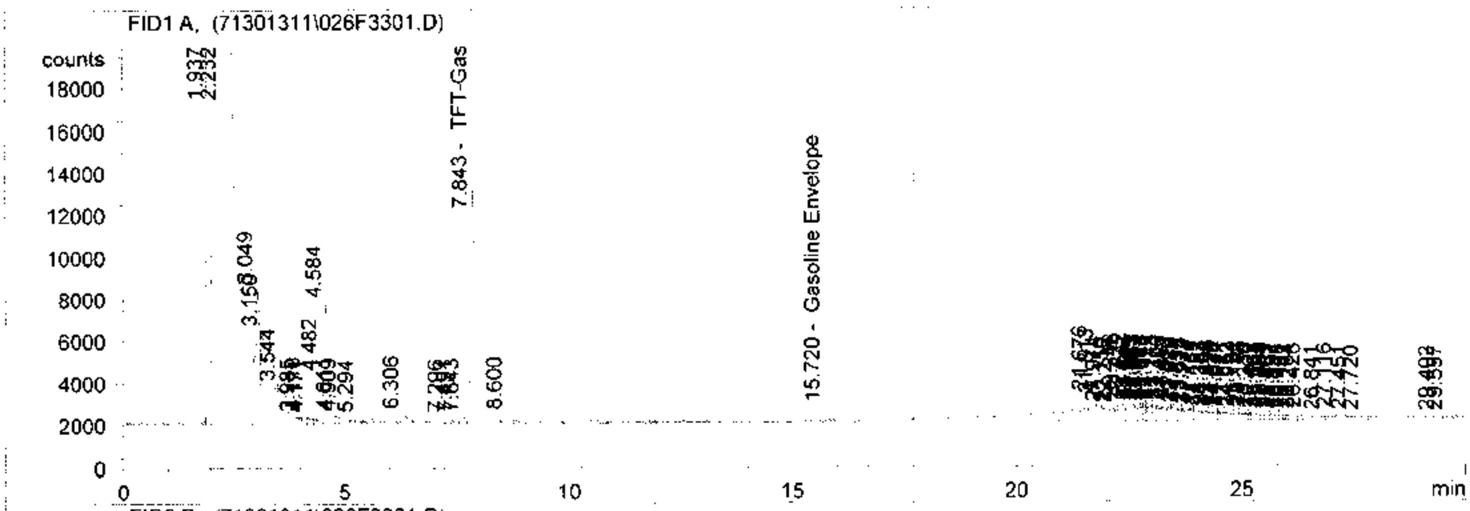
B < 0.06 mg/kg T < 0.1 mg/kg E = 0.18 mg/kg x = 0.60 mg/kg

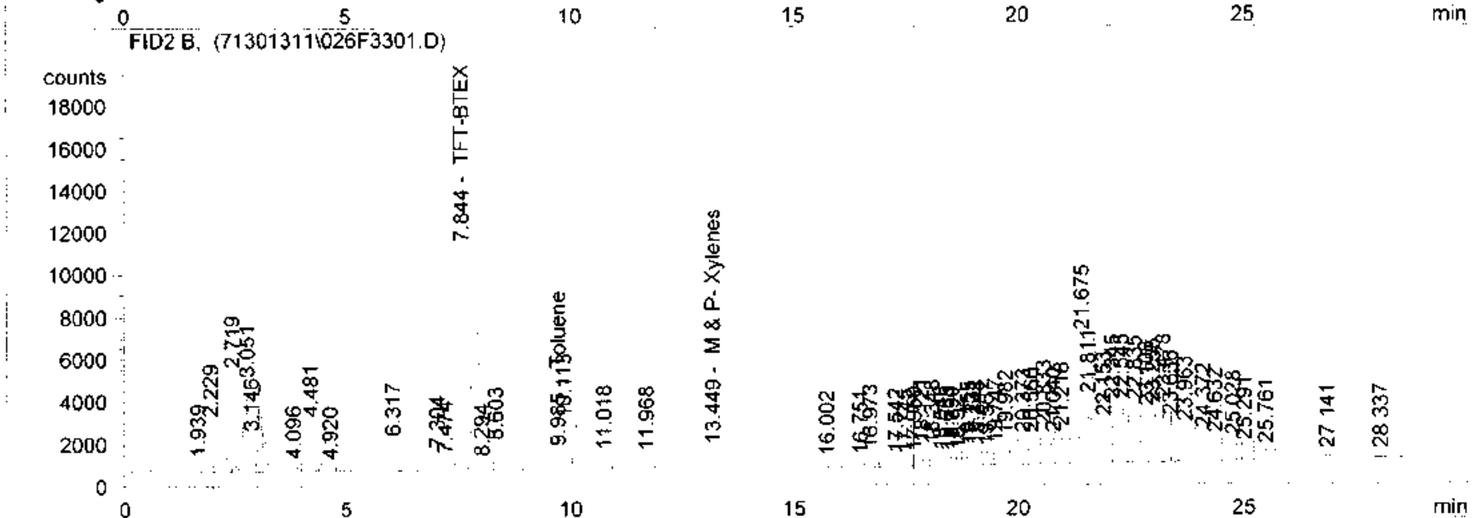
2-5-13DC

Gas/BTEX   Instrument 70
Data File: C:\HPCHEM\1\DATA\71301311\026F3301.D
Injection Date & Time: 2/1/2013   3:05:23 AM
Report Created on: 2/1/2013   9:55:04 AM
Operator: DLC
Aquistion Method: GX0712.M
Analysis Method: C:\HPCHEM\1\METHODS\GX0712.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:EV13010138-17   Dilution: X 0.0





88.08%
10.02g
6.36ml

Ret. Time	Compound Name	Area	Amount ug/L	
7.843	TFT-Gas	70466.367	8.461	85%
15.720	Gasoline Envelope	100906.484	20.774	

Gas < 3.0 mg/kg

Ret. Time	Compound Name	Area	Amount ug/L	
0.000	MTBE	0.000	0.000	
0.000	Benzene	0.000	0.000	
7.844	TFT-BTEX	278391.500	9.038	90%
9.985	Toluene	4422.543	0.557	
0.000	Ethylbenzene	0.000	0.000	
13.449	M & P- Xylenes	5071.565	0.709	
0.000	O-Xylene	0.000	0.000	

REVIEWED BY & DATE RB 2/1/13

B <0.03 mg/kg   T,E <0.05 mg/kg   x <0.2 mg/kg

2-5-13 DC

ALS LABORATORY GROUPS - EVERETT
DATA SUMMARY SHEET

PARAMETER	GAS/BTEX	INSTR. MTHD: 8021	EXTRCT MTHD. 5030
QC BATCH #	GW013113	1ST ANAL SEQ	21301311
EXT. DATES	1/31/2013	MATRIX	H2O

ASSOCIATED SAMPLES: V13010138-7,15,16,18,19

BLANK AND DUPLICATE RESULTS

ANALYTE:	BLANK RESULTS:	DUPLICATE:	ORIGINAL:	%RPD:
Gasoline	<50 ug/L			
MTBE	<3 ug/L			
Benzene	<1 ug/L			
Toluene	<1 ug/L			
Ethylbenzene	<1 ug/L			
Xylenes	<3 ug/L			

SPIKE/ SPIKE DUPLICATE RESULTS

SPIKE ID	AMOUNT SPIKED	BLANK SPIKE %RECOVERY	MS %RECOVERY	BLANK SPIKE DUP %RECOVERY	REL % DIFF
Gasoline	500 ug/L	77		79	**2.6**
MTBE	40 ug/L	107		109	**1.9**
Benzene	20 ug/L	105		110	**4.7**
Toluene	20 ug/L	103		108	**4.7**
Ethylbenzene	20 ug/L	101		106	**4.8**
Xylenes	60 ug/L	104		109	**4.7**
Triflourotoluene	10 ug/L	105		110	**4.7**

NOTES: IF NUMBER OF ANALYTES DON'T ALLOW LISTING ALL COMPOUNDS, THE RAW DATA MAY BE SUBMITTED

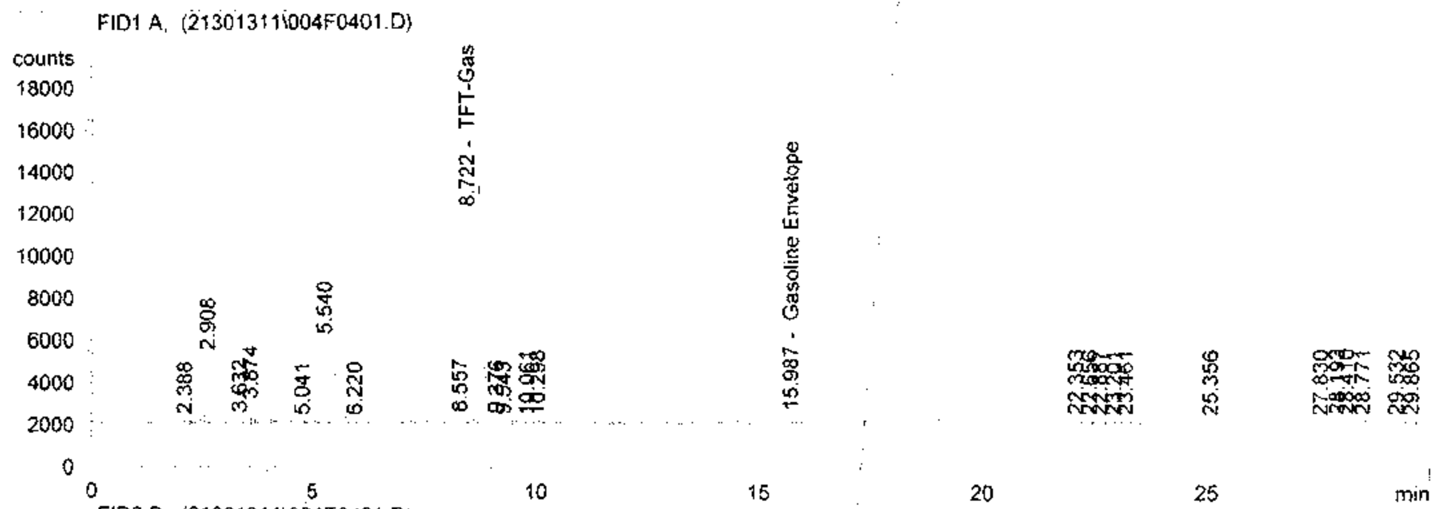
RAW DATA FOR QC RUN ON A SPECIFIC SAMPLE SHOULD BE INCLUDED WITH ORIGINAL SAMPLE ANALYSIS RAW DATA

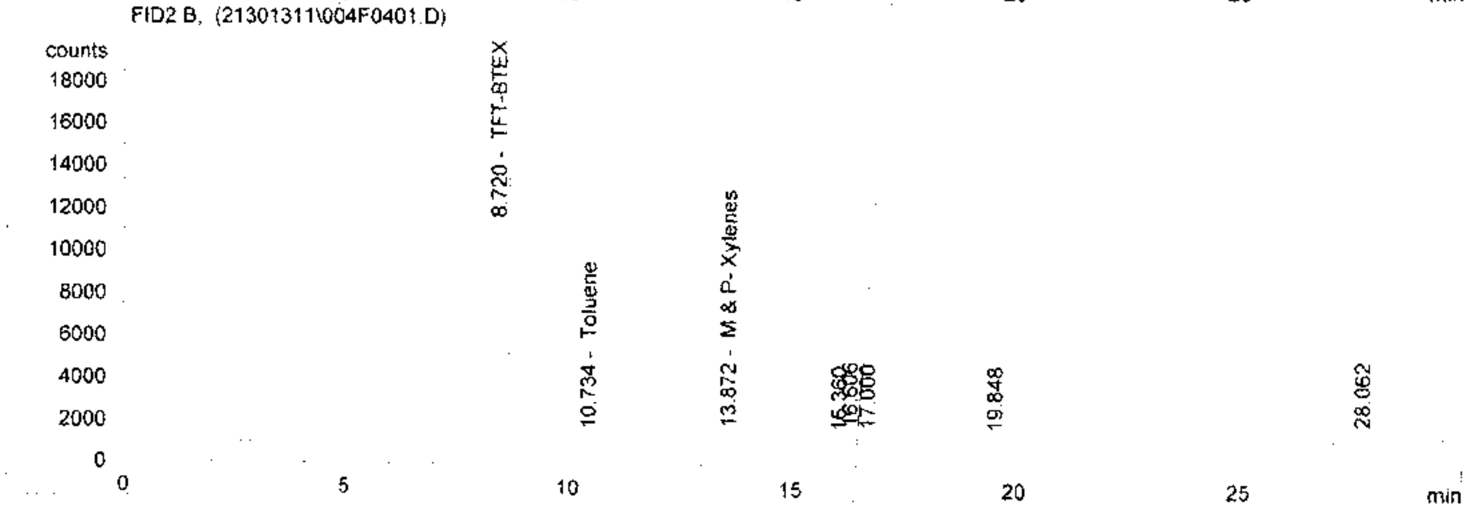
DATASUM.XLS

Gas/BTEX Instrument 2
Data File: C:\HPCHEM\2\DATA\21301311\004F0401.D
Injection Date & Time: 1/31/2013 9:39:06 AM
Report Created on: 1/31/2013 3:36:26 PM
Operator: DLC
Aquistion Method: GASB1012.M
Analysis Method: C:\HPCHEM\2\METHODS\GASB1012.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:MB-013113W Dilution: X 0.0





Ret. Time	Compound Name	Area	Amount ug/L
8.722	TFT-Gas	88033.531	8.186 82%
15.987	Gasoline Envelope	72865.852	12.721

Gas < 50 µg/L

Ret. Time	Compound Name	Area	Amount ug/L
0.000	MTBE	0.000	0.000
0.000	Benzene	0.000	0.000
8.720	TFT-BTEX	162730.188	10.131 101%
10.734	Toluene	3924.174	0.154
0.000	Ethylbenzene	0.000	0.000
13.872	M & P- Xylenes	4705.627	0.286
0.000	O-Xylene	0.000	0.000

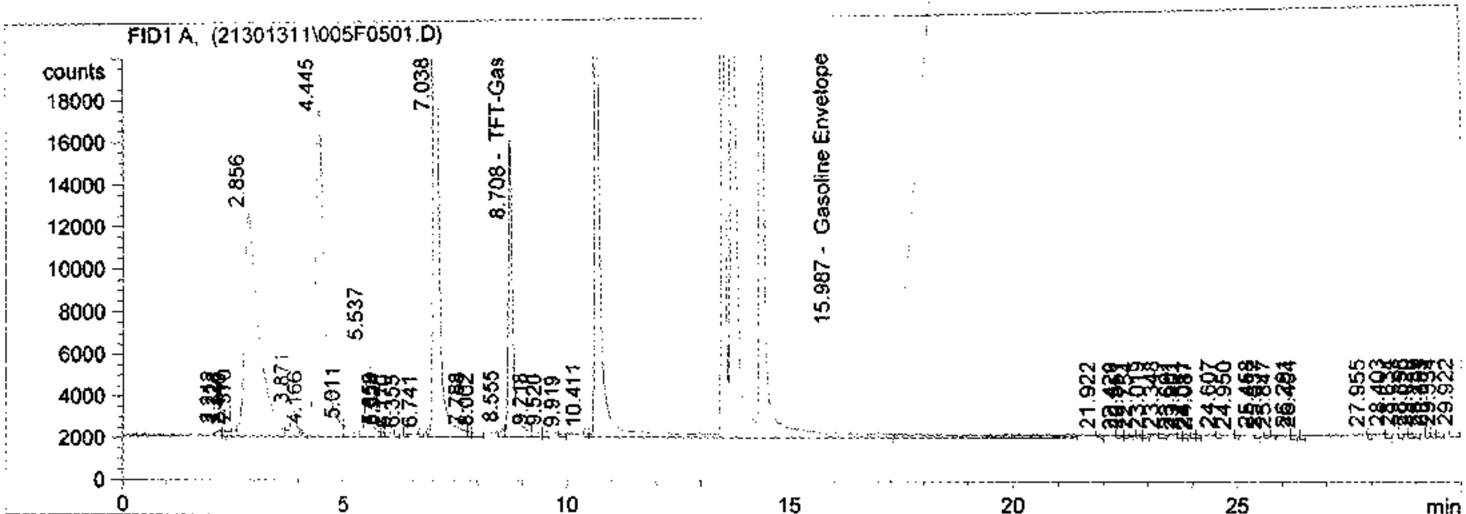
REVIEWED BY MB
& DATE 2/11/13

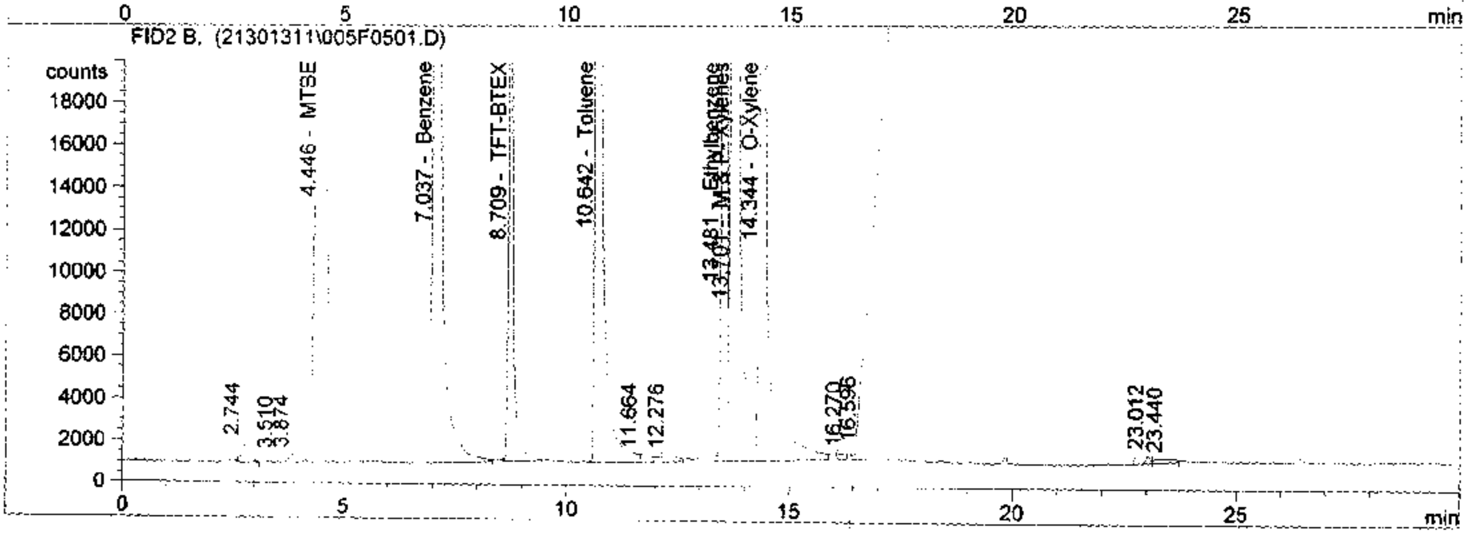
MTBE < 3 µg/L B,T,E < 1 µg/L X < 3 µg/L

Gas/BTEX   Instrument 2
Data File: C:\HPCHEM\2\DATA\21301311\005F0501.D
Injection Date & Time: 1/31/2013 10:15:52 AM
Report Created on: 1/31/2013 12:41:40 PM
Operator: DLC
Aquistion Method: GASB1012.M
Analysis Method: C:\HPCHEM\2\METHODS\GASB1012.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:BS-013113W   Dilution: X 0.0





Ret. Time	Compound Name	Area	Amount ug/L
8.708	TFT-Gas	93943.117	8.735
15.987	Gasoline Envelope	1.593e+006	278.086

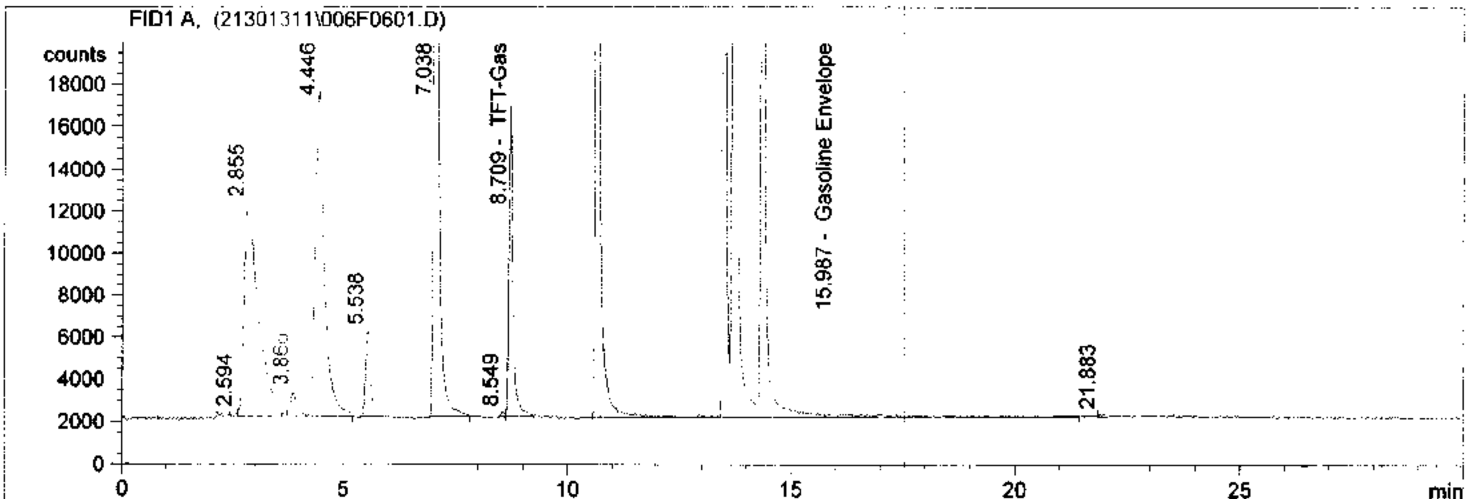
REVIEWED BY TB
& DATE 2/1/13

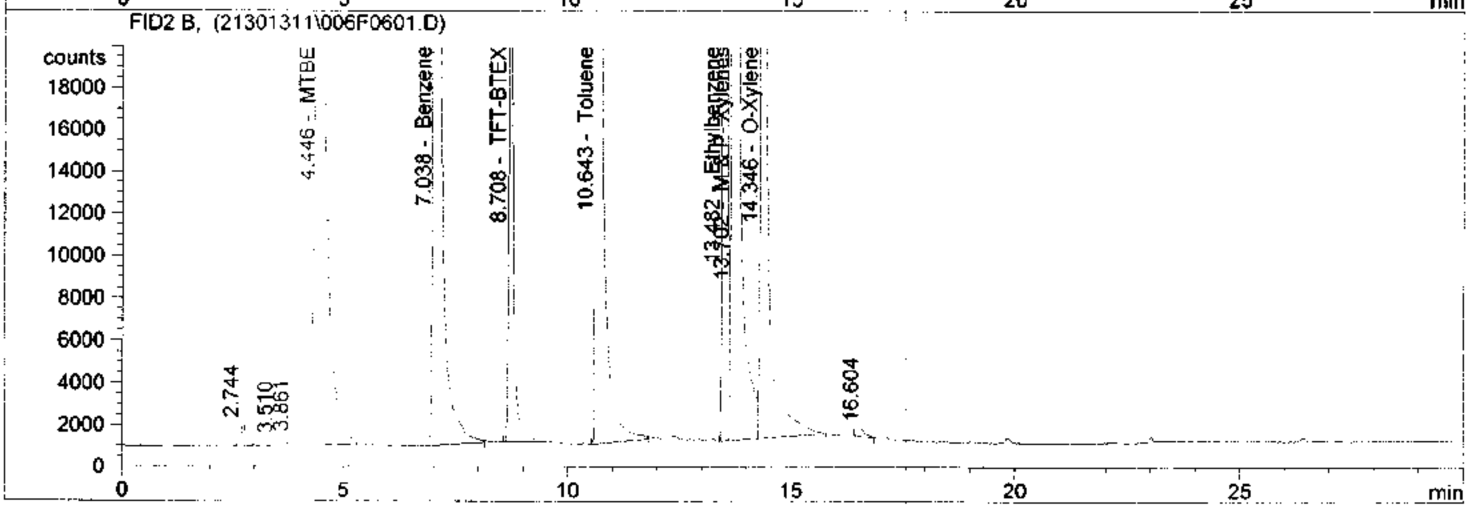
Ret. Time	Compound Name	Area	Amount ug/L	
4.446	MTBE	606624.812	42.792	÷40x100=107
7.037	Benzene	1.090e+006	21.089	÷20x100=105
8.709	TFT-BTEX	168210.844	10.467	÷10x100=105
10.642	Toluene	972697.313	20.694	103
13.481	Ethylbenzene	782422.250	20.106	101
13.701	M & P- Xylenes	1.927e+006	40.952	
14.344	O-Xylene	897001.125	21.482	÷60x100=104

Gas/BTEX   Instrument 2
Data File: C:\HPCHEM\2\DATA\21301311\006F0601.D
Injection Date & Time: 1/31/2013   10:52:25 AM
Report Created on: 1/31/2013   12:41:51 PM
Operator: DLC
Aquistion Method: GASB1012.M
Analysis Method: C:\HPCHEM\2\METHODS\GASB1012.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:BSD-013113W   Dilution: X 0.0





Ret. Time	Compound Name	Area	Amount ug/L
8.709	TFT-Gas	92788.734	8.628
15.987	Gasoline Envelope	1.591e+006	277.706

REVIEWED BY B
& DATE 2/11/13

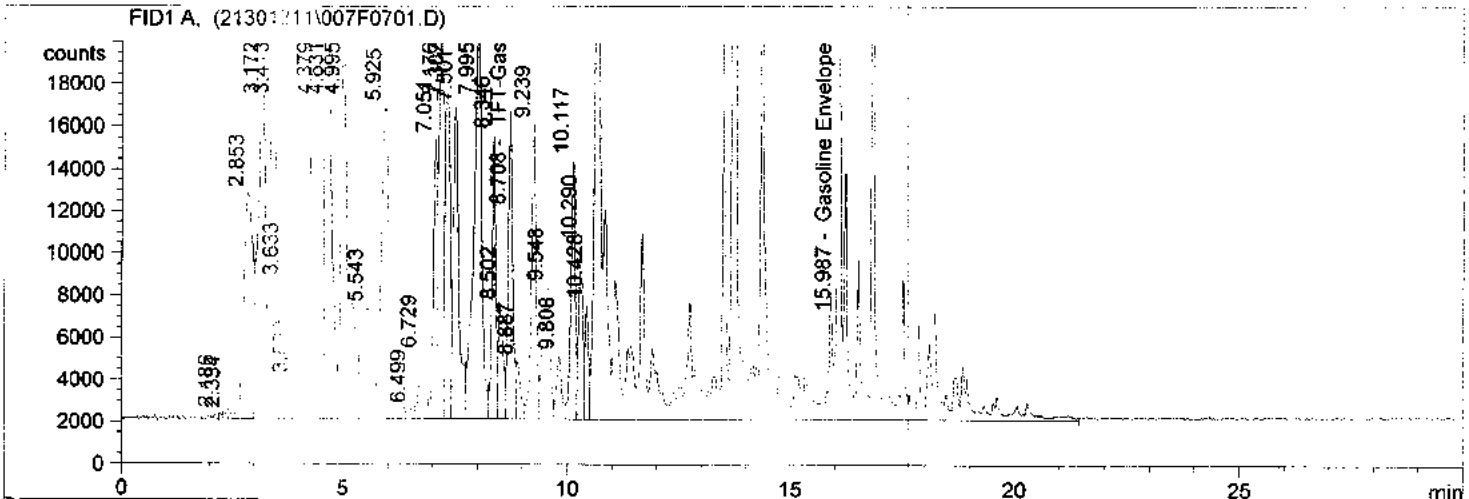
Ret. Time	Compound Name	Area	Amount ug/L	
4.446	MTBE	619316.500	43.688	109 /
7.038	Benzene	1.133e+006	21.916	110 /
8.708	TFT-BTEX	177601.313	11.043	110 /
10.643	Toluene	1.011e+006	21.509	108 /
13.482	Ethylbenzene	822571.187	21.116	106 /
13.702	M & P- Xylenes	2.028e+006	43.079	} 104 /
14.346	O-Xylene	920984.938	22.056	

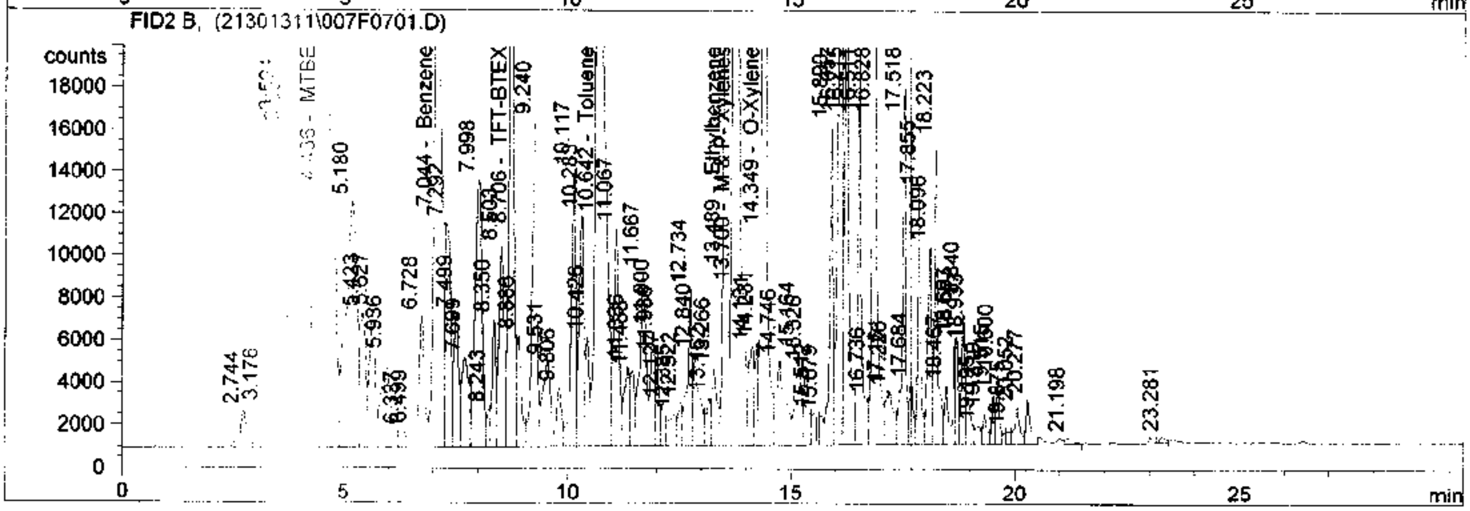
1-31-13 DC

Gas/BTEX Instrument 2
Data File: C:\HPCHEM\2\DATA\21301311\007F0701.D
Injection Date & Time: 1/31/2013 11:29:01 AM
Report Created on: 1/31/2013 12:42:01 PM
Operator: DLC
Aquistion Method: GASB1012.M
Analysis Method: C:\HPCHEM\2\METHODS\GASB1012.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name: BG-013113W Dilution: X 0.0





Ret. Time	Compound Name	Area	Amount ug/L
8.708	TFT-Gas	99244.172	9.228 92%
15.987	Gasoline Envelope	2.192e+006	382.641 ÷500x100 = 77

Ret. Time	Compound Name	Area	Amount ug/L
4.436	MTBE	1.137e+006	80.237
7.044	Benzene	360337.312	6.998
8.706	TFT-BTEX	185141.766	11.505
10.642	Toluene	1.273e+006	27.060
13.489	Ethylbenzene	259652.516	6.950
13.700	M & P-Xylenes	1.071e+006	22.843
14.349	O-Xylene	394069.031	9.437

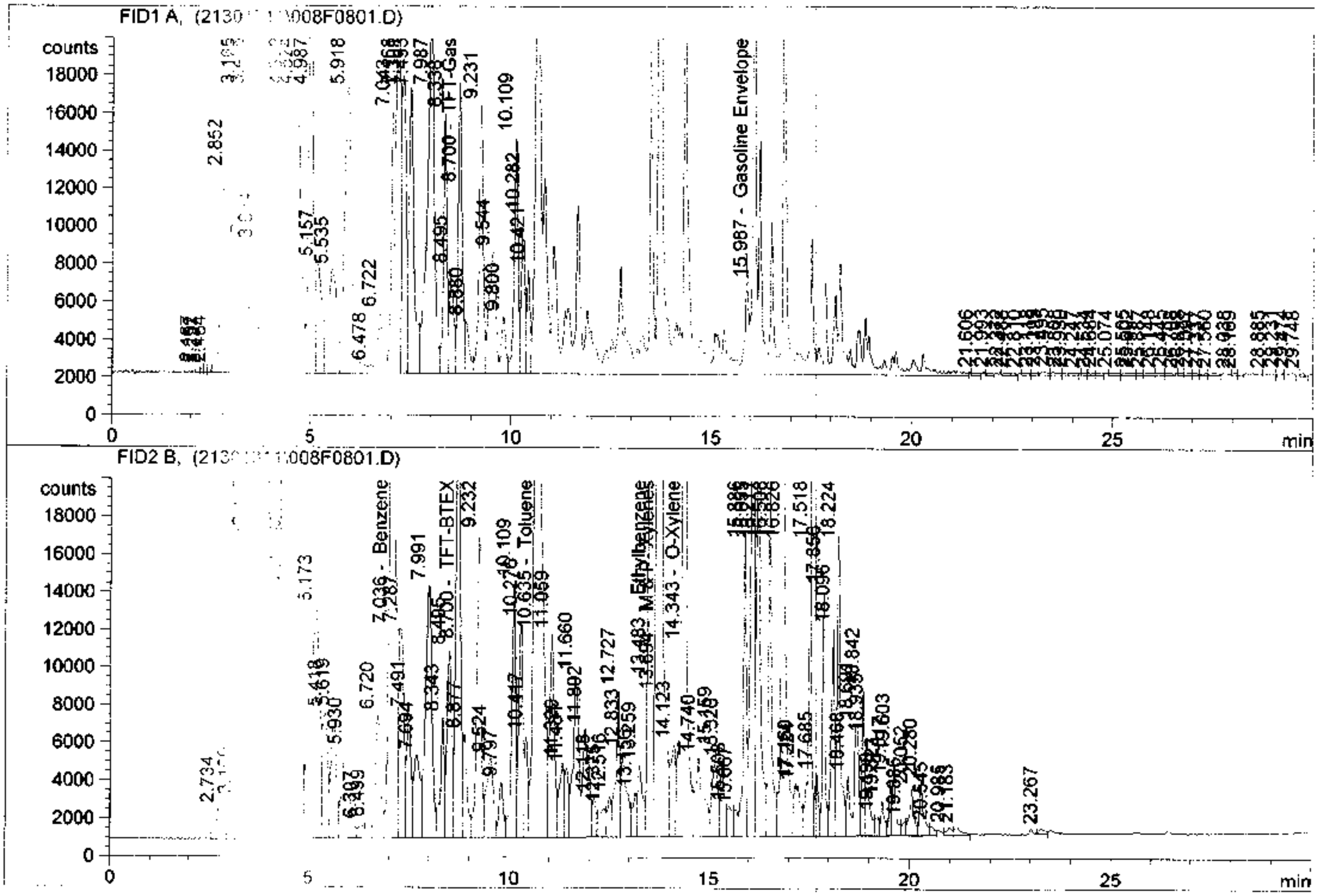
REVIEWED BY & DATE TB 2/1/13

1-31-13 DC

Gas/BTEX Instrument 2
Data File: C:\HPCHEM\2\DATA\21301311\008F0801.D
Injection Date & Time: 1/31/2013 12:05:44 PM
Report Created on: 1/31/2013 12:42:17 PM
Operator: DLC
Aquistion Method: GASB1012.M
Analysis Method: C:\HPCHEM\2\METHODS\GASB1012.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name: BGD-013113W   Dilution: X 0.0



Ret. Time	Compound Name	Area	Amount ug/L
8.700	TFT-Gas	103411.266	9.616 96%
15.987	Gasoline Envelope	2.270e+006	396.393 79%

Ret. Time	Compound Name	Area	Amount ug/L
4.431	MTBE	1.191e+006	84.023
7.036	Benzene	381091.469	7.398
8.700	TFT-BTEX	198756.406	12.340
10.635	Toluene	1.339e+006	28.452
13.483	Ethylbenzene	269068.281	7.187
13.694	M & P Xylenes	1.117e+006	23.813
14.343	O-Xylene	430357.437	10.306

REVIEWED BY & DATE RS 2/1/13

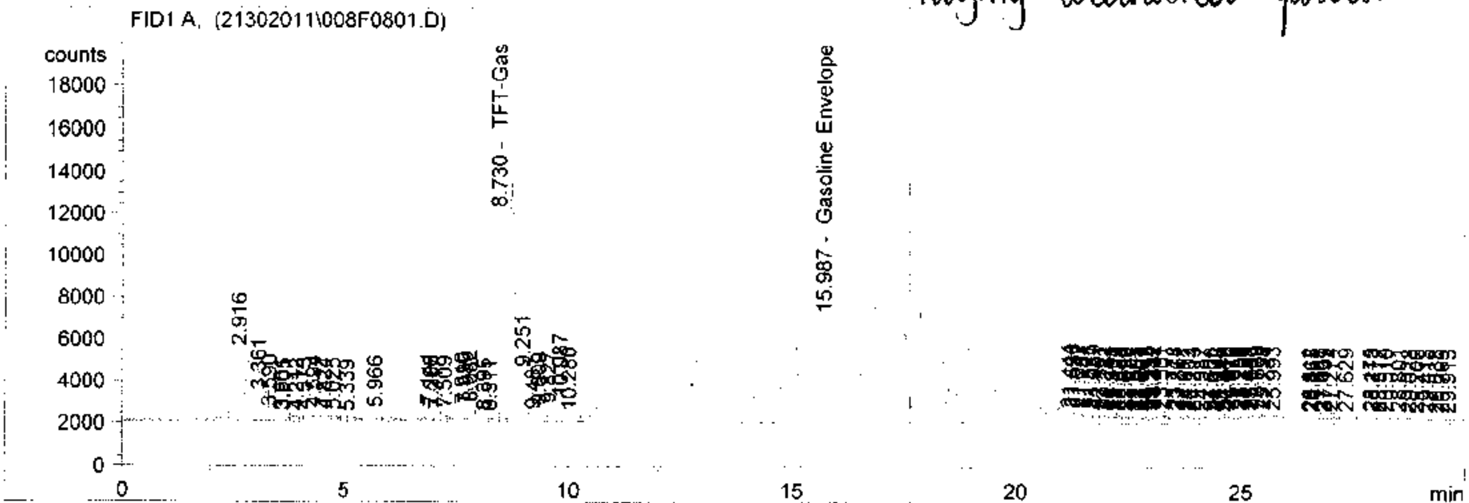
1-31-13 DC

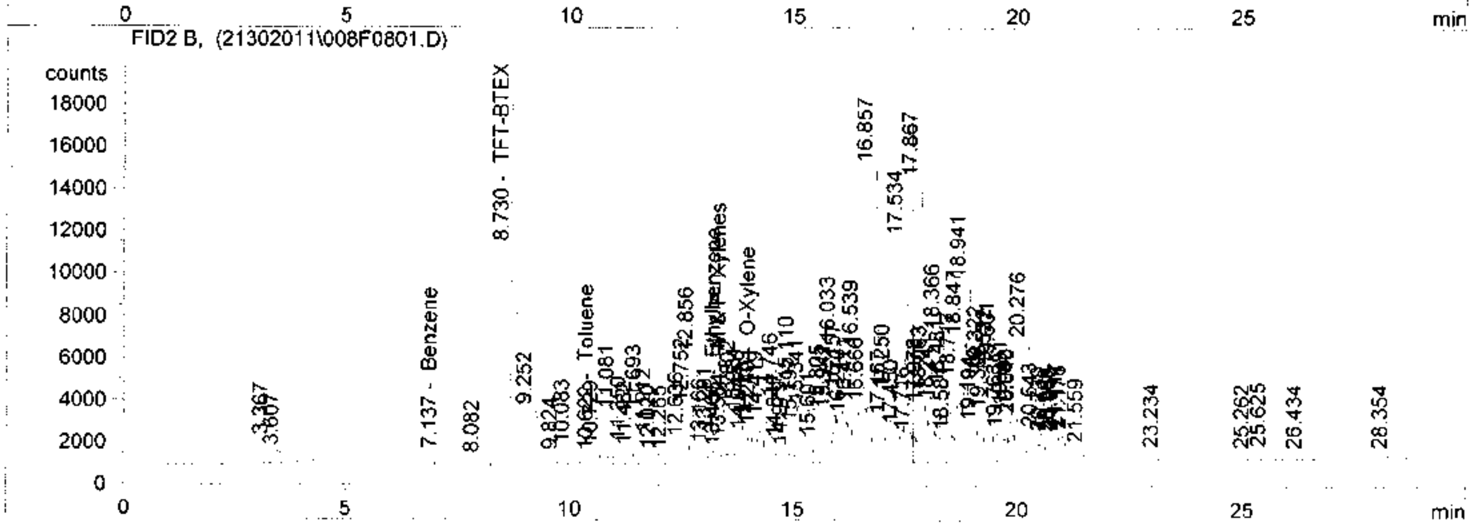
Gas/BTEX   Instrument 2
Data File: C:\HPCHEM\2\DATA\21302011\008F0801.D
Injection Date & Time: 2/1/2013   12:34:43 PM
Report Created on: 2/1/2013   1:08:59 PM
Operator: DLC
Aquistion Method: GASB1012.M
Analysis Method: C:\HPCHEM\2\METHODS\GASB1012.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:EV13010138-07 5M   Dilution: X 0.0

highly weathered gasoline





Ret. Time	Compound Name	Area	Amount ug/L
8.730	TFT-Gas	85008.016	7.905
15.987	Gasoline Envelope	649405.500	113.377

79%

Gas = 110 µg/L

Ret. Time	Compound Name	Area	Amount ug/L
0.000	MTBE	0.000	0.000
7.137	Benzene	5462.745	0.148
8.730	TFT-BTEX	155091.078	9.663
10.622	Toluene	2824.681	0.131
13.466	Ethylbenzene	3151.286	0.495
13.584	M & P- Xylenes	6815.371	0.331
14.249	O-Xylene	10879.219	0.261

97%

REVIEWED BY & DATE NB 2/1/13

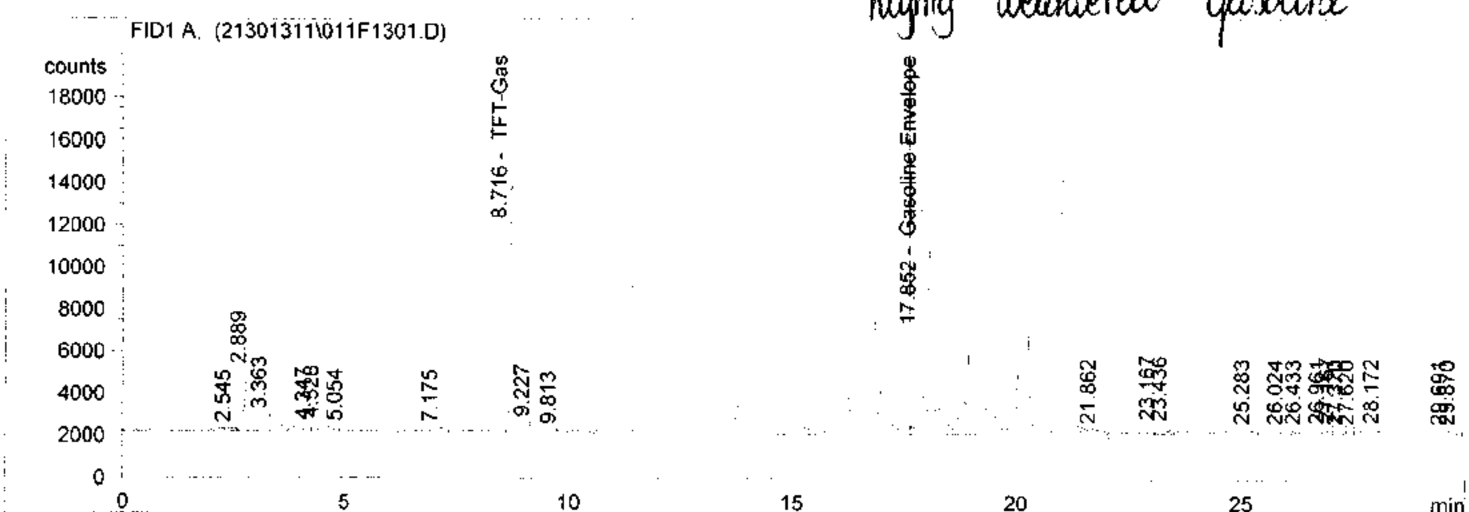
B,T,E < 1 µg/L   X < 3 µg/L

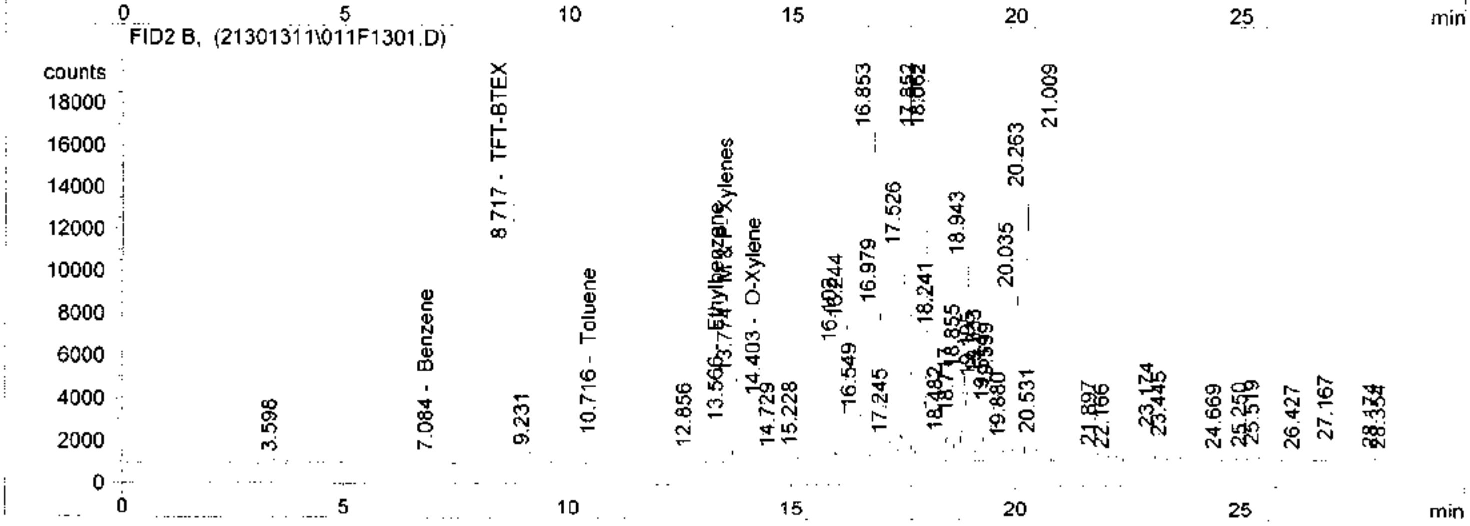
2-1-13 DC

Gas/BTEX   Instrument 2
Data File: C:\HPCHEM\2\DATA\21301311\011F1301.D
Injection Date & Time: 1/31/2013   3:08:40 PM
Report Created on: 2/1/2013   12:36:41 PM
Operator: DLC
Aquistion Method: GASB1012.M
Analysis Method: C:\HPCHEM\2\METHODS\GASB1012.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:EV13010138-15 5M   Dilution: X 0.0   highly weathered gasoline





Ret. Time	Compound Name	Area	Amount ug/L
8.716	TFT-Gas	84280.438	7.837 78%
17.852	Gasoline Envelope	525247.750	91.700

Gas = 92 µg/L

Ret. Time	Compound Name	Area	Amount ug/L
0.000	MTBE	0.000	0.000
7.084	Benzene	4429.005	0.128
8.717	TFT-BTEX	164170.641	10.219 102%
10.716	Toluene	9683.677	0.276
13.566	Ethylbenzene	9781.494	0.661
13.774	M & P- Xylenes	38661.309	1.004
14.403	O-Xylene	21720.383	0.520

REVIEWED BY & DATE NB 2/1/13

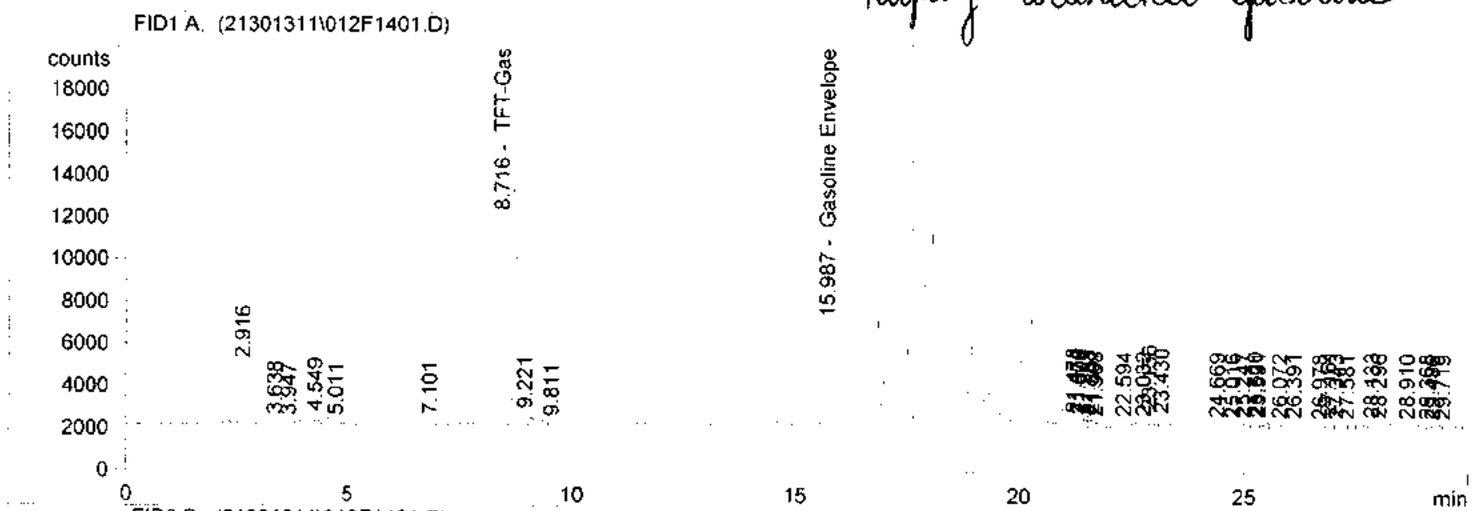
B,T,E < 1 µg/L   X < 3 µg/L

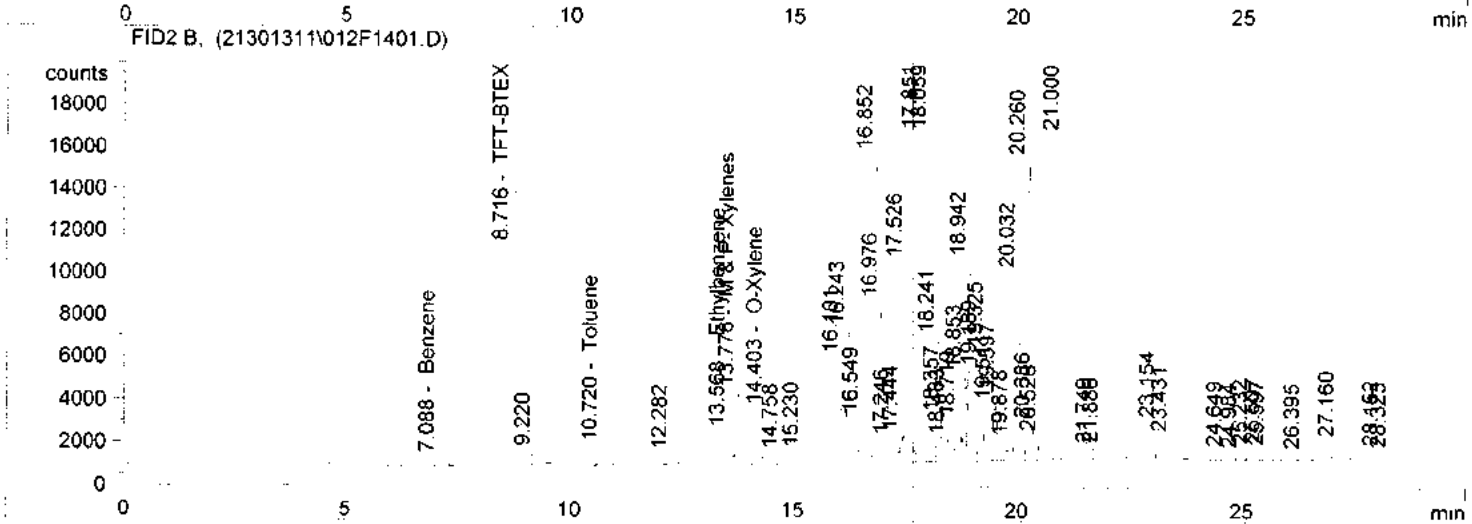
2-1-13 DC

Gas/BTEX Instrument 2
Data File: C:\HPCHEM\2\DATA\21301311\012F1401.D
Injection Date & Time: 1/31/2013 3:45:15 PM
Report Created on: 2/1/2013 8:56:49 AM
Operator: DLC
Aquistion Method: GASB1012.M
Analysis Method: C:\HPCHEM\2\METHODS\GASB1012.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:EV13010138-16 5M Dilution: X 0.0 highly weathered gasoline





Ret. Time	Compound Name	Area	Amount ug/L	
8.716	TFT-Gas	83342.836	7.750	78%
15.987	Gasoline Envelope	570295.688	99.565	

Gas = 100 μg/L

Ret. Time	Compound Name	Area	Amount ug/L	
0.000	MTBE	0.000	0.000	
7.088	Benzene	3357.825	0.107	
8.716	TFT-BTEX	159833.719	9.953	100%
10.720	Toluene	7559.121	0.231	
13.568	Ethylbenzene	8372.591	0.626	
13.776	M & P- Xylenes	32743.203	0.879	
14.403	O-Xylene	19110.168	0.458	

REVIEWED BY & DATE NB 2/1/13

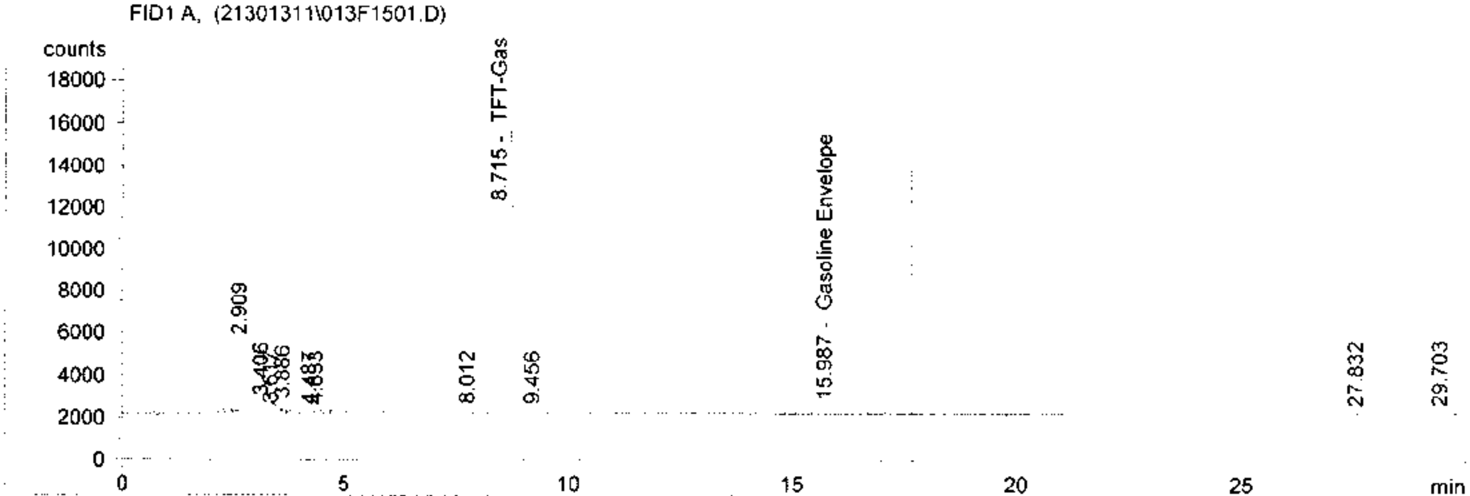
B,T,E < 1 μg/L X < 3 μg/L

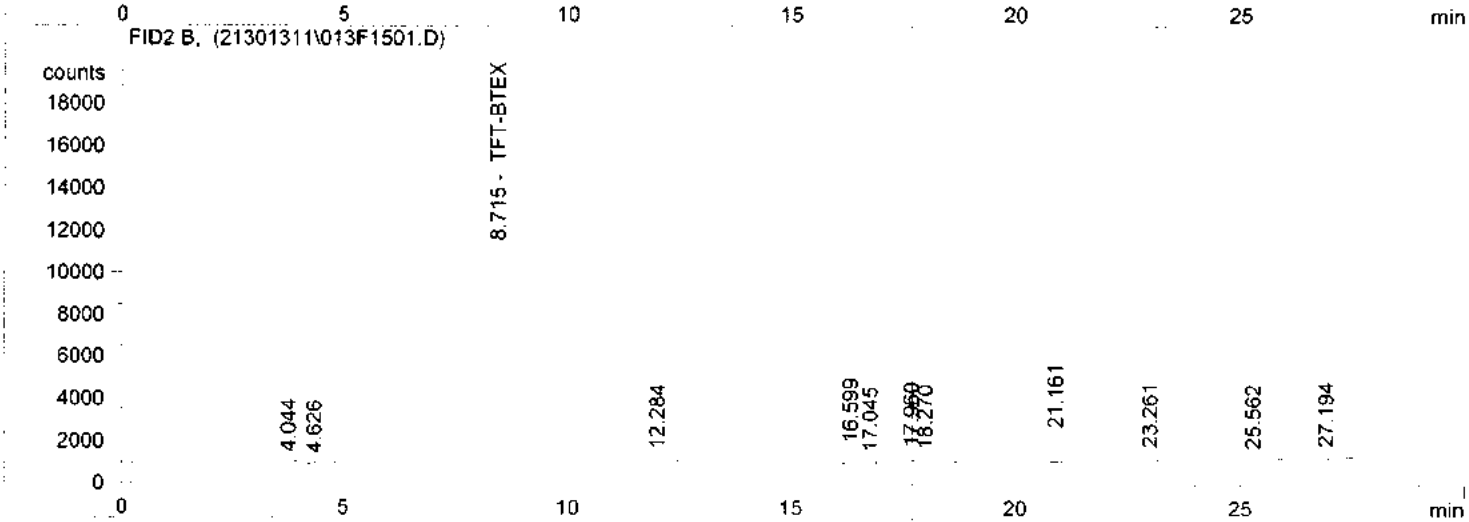
2-1-13DC

Gas/BTEX Instrument 2
Data File: C:\HPCHEM\2\DATA\21301311\013F1501.D
Injection Date & Time: 1/31/2013 4:21:51 PM
Report Created on: 2/1/2013 8:58:54 AM
Operator: DLC
Aquistion Method: GASB1012.M
Analysis Method: C:\HPCHEM\2\METHODS\GASB1012.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:EV13010138-18 5M Dilution: X 0.0





Ret. Time	Compound Name	Area	Amount ug/L
8.715	TFT-Gas	103466.516	9.621 96%
15.987	Gasoline Envelope	17088.695	2.983

Gas < 50 µg/L

Ret. Time	Compound Name	Area	Amount ug/L
0.000	MTBE	0.000	0.000
0.000	Benzene	0.000	0.000
8.715	TFT-BTEX	198032.156	12.296 123%
0.000	Toluene	0.000	0.000
0.000	Ethylbenzene	0.000	0.000
0.000	M & P- Xylenes	0.000	0.000
0.000	O-Xylene	0.000	0.000

REVIEWED BY & DATE 13 2/1/13

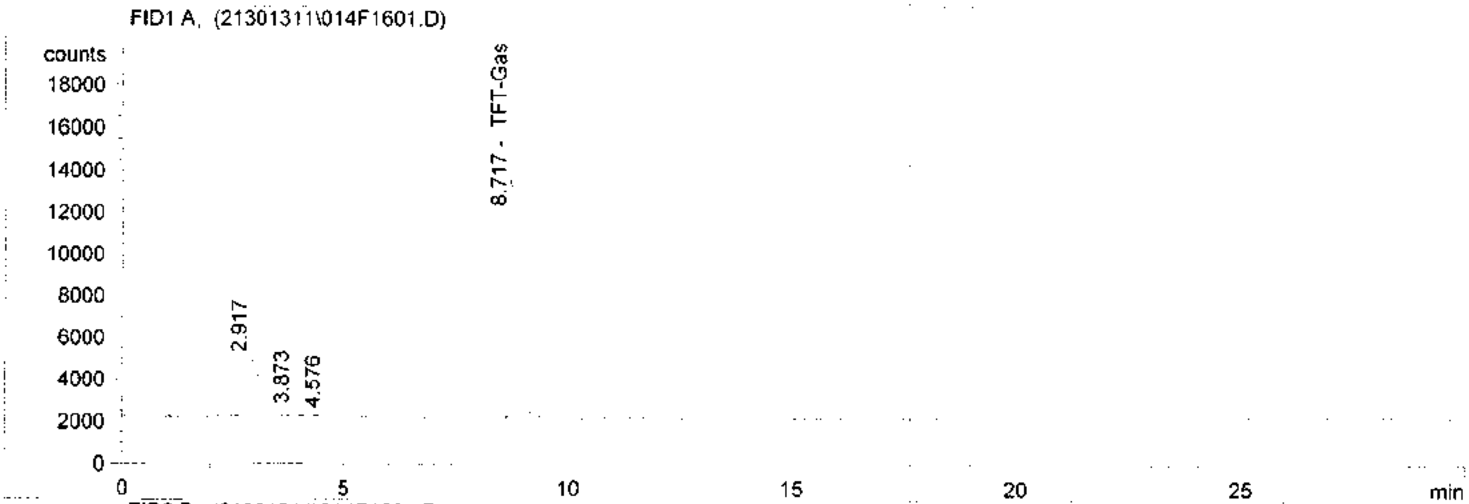
B,T,E < 1 µg/L X < 3 µg/L

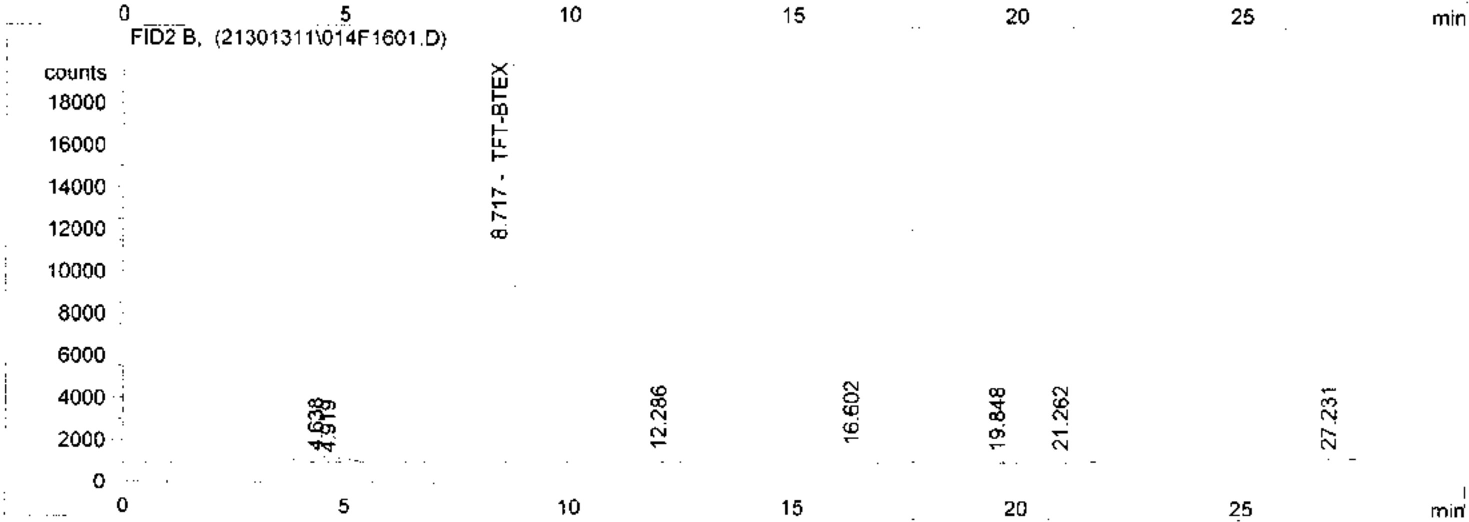
2-1-13 DC

Gas/BTEX   Instrument 2
Data File: C:\HPCHEM\2\DATA\21301311\014F1601.D
Injection Date & Time: 1/31/2013   4:58:29 PM
Report Created on: 2/1/2013   8:59:05 AM
Operator: DLC
Aquistion Method: GASB1012.M
Analysis Method: C:\HPCHEM\2\METHODS\GASB1012.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:EV13010138-19 5M   Dilution: X 0.0





Ret. Time	Compound Name	Area	Amount ug/L	
8.717	TFT-Gas	84677.227	7.874	79%
0.000	Gasoline Envelope	0.000	0.000	

Gas < 50 µg/L

Ret. Time	Compound Name	Area	Amount ug/L	
0.000	MTBE	0.000	0.000	
0.000	Benzene	0.000	0.000	
8.717	TFT-BTEX	174059.172	10.826	108%
0.000	Toluene	0.000	0.000	
0.000	Ethylbenzene	0.000	0.000	
0.000	M & P- Xylenes	0.000	0.000	
0.000	O-Xylene	0.000	0.000	

REVIEWED BY & DATE MB 2/11/13

B,T,E < 1 µg/L   X < 3 µg/L

2-1-13 DC

March 22, 2013

Mr. Stephen Bentsen
Floyd Snider Inc.
601 Union St., Suite 600
Seattle, WA 98101

Dear Mr. Bentsen,

On January 30th, 19 samples were received by our laboratory and assigned our laboratory project number EV13010138. The project was identified as your POB - Harris. The sample identification and requested analyses are outlined on the attached chain of custody record.

Please do not hesitate to call me if you have any questions or if I can be of further assistance.

Sincerely,

ALS Laboratory Group

Rick Bagan
Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13010138 -01
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	1/30/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/29/2013 9:05:00 AM
CLIENT SAMPLE ID	FS-19-3.0-3.5-012913	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,4-Dichlorobenzene	EPA-8270 SIM	U	0.050	10	MG/KG	02/15/2013	LAP
1,2-Dichlorobenzene	EPA-8270 SIM	U	0.20	10	MG/KG	02/15/2013	LAP
N-Nitroso-Di-N-Propylamine	EPA-8270 SIM	U	0.20	10	MG/KG	02/15/2013	LAP
Hexachloroethane	EPA-8270 SIM	U	0.20	10	MG/KG	02/15/2013	LAP
2,4-Dichlorophenol	EPA-8270 SIM	U	0.20	10	MG/KG	02/15/2013	LAP
1,2,4-Trichlorobenzene	EPA-8270 SIM	U	0.10	10	MG/KG	02/15/2013	LAP
Naphthalene	EPA-8270 SIM	**0.23**	0.20	10	MG/KG	02/15/2013	LAP
2-Methylnaphthalene	EPA-8270 SIM	**0.22**	0.20	10	MG/KG	02/15/2013	LAP
1-Methylnaphthalene	EPA-8270 SIM	**0.22**	0.20	10	MG/KG	02/15/2013	LAP
Acenaphthylene	EPA-8270 SIM	**0.33**	0.20	10	MG/KG	02/15/2013	LAP
Acenaphthene	EPA-8270 SIM	**0.19**	0.17	10	MG/KG	02/15/2013	LAP
2,4-Dinitrotoluene	EPA-8270 SIM	U	0.10	10	MG/KG	02/15/2013	LAP
Fluorene	EPA-8270 SIM	U	0.20	10	MG/KG	02/15/2013	LAP
Pentachlorophenol	EPA-8270 SIM	U	1.0	10	MG/KG	02/15/2013	LAP
Phenanthrene	EPA-8270 SIM	**0.91**	0.20	10	MG/KG	02/15/2013	LAP
Anthracene	EPA-8270 SIM	**0.23**	0.20	10	MG/KG	02/15/2013	LAP
Fluoranthene	EPA-8270 SIM	**1.2**	0.20	10	MG/KG	02/15/2013	LAP
Pyrene	EPA-8270 SIM	**2.6**	0.20	10	MG/KG	02/15/2013	LAP
3,3-Dichlorobenzidine	EPA-8270 SIM	U	1.0	10	MG/KG	02/15/2013	LAP
Benzo[A]Anthracene	EPA-8270 SIM	**0.44**	0.065	10	MG/KG	02/15/2013	LAP
Chrysene	EPA-8270 SIM	**0.87**	0.072	10	MG/KG	02/15/2013	LAP
Benzo[B]Fluoranthene	EPA-8270 SIM	**1.0**	0.20	10	MG/KG	02/15/2013	LAP
Benzo[K]Fluoranthene	EPA-8270 SIM	**0.74**	0.20	10	MG/KG	02/15/2013	LAP
Benzo[A]Pyrene	EPA-8270 SIM	**0.56**	0.17	10	MG/KG	02/15/2013	LAP
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	U	0.20	10	MG/KG	02/15/2013	LAP
Dibenz[A,H]Anthracene	EPA-8270 SIM	**0.44**	0.18	10	MG/KG	02/15/2013	LAP
Benzo[G,H,I]Perylene	EPA-8270 SIM	**0.73**	0.20	10	MG/KG	02/15/2013	LAP
Pyridine	EPA-8270	U	2000	10	UG/KG	02/15/2013	LAP
N-Nitrosodimethylamine	EPA-8270	U	1000	10	UG/KG	02/15/2013	LAP
Phenol	EPA-8270	U	1000	10	UG/KG	02/15/2013	LAP
Aniline	EPA-8270	U	1000	10	UG/KG	02/15/2013	LAP
Bis(2-Chloroethyl)Ether	EPA-8270	U	1000	10	UG/KG	02/15/2013	LAP
2-Chlorophenol	EPA-8270	ND- UT	360	10	UG/KG	02/15/2013	LAP
1,3-Dichlorobenzene	EPA-8270	U	1000	10	UG/KG	02/15/2013	LAP
Benzyl Alcohol	EPA-8270	U	1000	10	UG/KG	02/15/2013	LAP
2-Methylphenol	EPA-8270	U	1000	10	UG/KG	02/15/2013	LAP
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	2500	10	UG/KG	02/15/2013	LAP
3&4-Methylphenol	EPA-8270	U	1000	10	UG/KG	02/15/2013	LAP

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ALS Laboratory Group A Campbell Brothers Limited Company

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13010138 -01
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	1/30/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/29/2013 9:05:00 AM
CLIENT SAMPLE ID	FS-19-3.0-3.5-012913	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Nitrobenzene	EPA-8270	U	1000	10	UG/KG	02/15/2013	LAP
Isophorone	EPA-8270	U	1000	10	UG/KG	02/15/2013	LAP
2-Nitrophenol	EPA-8270	U	1000	10	UG/KG	02/15/2013	LAP
2,4-Dimethylphenol	EPA-8270	U	1000	10	UG/KG	02/15/2013	LAP
Benzoic Acid	EPA-8270	U	10000	10	UG/KG	02/15/2013	LAP
Bis(2-Chloroethoxy)Methane	EPA-8270	U	2500	10	UG/KG	02/15/2013	LAP
4-Chloroaniline	EPA-8270	U	10000	10	UG/KG	02/15/2013	LAP
2,6-Dichlorophenol	EPA-8270	U	2500	10	UG/KG	02/15/2013	LAP
Hexachlorobutadiene	EPA-8270	U	1000	10	UG/KG	02/15/2013	LAP
4-Chloro-3-Methylphenol	EPA-8270	U	5000	10	UG/KG	02/15/2013	LAP
Hexachlorocyclopentadiene	EPA-8270	U	1000	10	UG/KG	02/15/2013	LAP
2,4,6-Trichlorophenol	EPA-8270	U	1000	10	UG/KG	02/15/2013	LAP
2,4,5-Trichlorophenol	EPA-8270	U	1000	10	UG/KG	02/15/2013	LAP
2-Chloronaphthalene	EPA-8270	U	1000	10	UG/KG	02/15/2013	LAP
2-Nitroaniline	EPA-8270	U	1000	10	UG/KG	02/15/2013	LAP
Dimethylphthalate	EPA-8270	U	1000	10	UG/KG	02/15/2013	LAP
2,6-Dinitrotoluene	EPA-8270	U	1000	10	UG/KG	02/15/2013	LAP
3-Nitroaniline	EPA-8270	U	10000	10	UG/KG	02/15/2013	LAP
2,4-Dinitrophenol	EPA-8270	U	1000	10	UG/KG	02/15/2013	LAP
4-Nitrophenol	EPA-8270	U	1000	10	UG/KG	02/15/2013	LAP
Dibenzofuran	EPA-8270	U	1000	10	UG/KG	02/15/2013	LAP
2,3,4,6-Tetrachlorophenol	EPA-8270	U	1000	10	UG/KG	02/15/2013	LAP
Diethylphthalate	EPA-8270	U	1000	10	UG/KG	02/15/2013	LAP
4-Chlorophenyl-Phenylether	EPA-8270	U	1000	10	UG/KG	02/15/2013	LAP
4-Nitroaniline	EPA-8270	U	2500	10	UG/KG	02/15/2013	LAP
4,6-Dinitro-2-Methylphenol	EPA-8270	U	1000	10	UG/KG	02/15/2013	LAP
N-Nitrosodiphenylamine	EPA-8270	U	1000	10	UG/KG	02/15/2013	LAP
Azobenzene	EPA-8270	U	1000	10	UG/KG	02/15/2013	LAP
4-Bromophenyl-Phenylether	EPA-8270	U	1000	10	UG/KG	02/15/2013	LAP
Hexachlorobenzene	EPA-8270	U	800	10	UG/KG	02/15/2013	LAP
Carbazole	EPA-8270	U	2500	10	UG/KG	02/15/2013	LAP
Di-N-Butylphthalate	EPA-8270	U	1000	10	UG/KG	02/15/2013	LAP
Butylbenzylphthalate	EPA-8270	U	1000	10	UG/KG	02/15/2013	LAP
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	1000	10	UG/KG	02/15/2013	LAP
Di-N-Octylphthalate	EPA-8270	U	1000	10	UG/KG	02/15/2013	LAP
Mercury	EPA-7471	**3.1**	0.20	10	MG/KG	02/05/2013	RAL
Antimony	EPA-6020	**0.87**	0.50	5	MG/KG	02/01/2013	RAL
Arsenic	EPA-6020	**29**	1.0	5	MG/KG	02/01/2013	RAL

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CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13010138 -01
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	1/30/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/29/2013 9:05:00 AM
CLIENT SAMPLE ID	FS-19-3.0-3.5-012913	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Beryllium	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Cadmium	EPA-6020	**0.81**	0.50	5	MG/KG	02/01/2013	RAL
Chromium	EPA-6020	**38**	0.50	5	MG/KG	02/01/2013	RAL
Copper	EPA-6020	**490**	0.50	5	MG/KG	02/01/2013	RAL
Lead	EPA-6020	**260**	0.50	5	MG/KG	02/01/2013	RAL
Nickel	EPA-6020	**80**	0.50	5	MG/KG	02/01/2013	RAL
Selenium	EPA-6020	U	5.0	5	MG/KG	02/01/2013	RAL
Silver	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Thallium	EPA-6020	U	5.0	5	MG/KG	02/01/2013	RAL
Zinc	EPA-6020	**400**	2.9	5	MG/KG	02/01/2013	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
2,4,6-Tribromophenol 10X Dilution	EPA-8270 SIM	**1030 GS1**	02/15/2013	LAP
Terphenyl-d14 10X Dilution	EPA-8270 SIM	**70.3**	02/15/2013	LAP
2-Fluorophenol 10X Dilution	EPA-8270	**76.6**	02/15/2013	LAP
Phenol-d5 10X Dilution	EPA-8270	**51.9**	02/15/2013	LAP
Nitrobenzene-d5 10X Dilution	EPA-8270	**55.3**	02/15/2013	LAP
2-Fluorobiphenyl 10X Dilution	EPA-8270	**59.9**	02/15/2013	LAP
2,4,6-Tribromophenol 10X Dilution	EPA-8270	**1030 DS2**	02/15/2013	LAP
Terphenyl-d14 10X Dilution	EPA-8270	**70.3**	02/15/2013	LAP

DS2 - Due to high dilution factor surrogate results should be considered uncontrolled.
GS1 - Surrogate outside of control limits due to matrix effect.
U - Analyte analyzed for but not detected at level above reporting limit.
UT - Analyte analyzed for but not detected at level above the MDL.

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ALS Laboratory Group A Campbell Brothers Limited Company

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE:	3/20/2013
		ALS JOB#:	EV13010138
		ALS SAMPLE#:	-02
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	1/30/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/29/2013 10:00:00 AM
CLIENT SAMPLE ID	FS-19-7.0-7.5-012913	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	67	4	MG/KG	02/04/2013	DLC
Benzene	EPA-8021	U	0.030	1	MG/KG	01/31/2013	DLC
Toluene	EPA-8021	U	0.050	1	MG/KG	01/31/2013	DLC
Ethylbenzene	EPA-8021	**0.18**	0.050	1	MG/KG	01/31/2013	DLC
Xylenes	EPA-8021	**0.28**	0.20	1	MG/KG	01/31/2013	DLC
C5-C6 Aliphatics	NWVPH	U	5.0	1	MG/KG	02/09/2013	DLC
>C6-C8 Aliphatics	NWVPH	**9.3**	5.0	1	MG/KG	02/09/2013	DLC
>C8-C10 Aliphatics	NWVPH	U	5.0	1	MG/KG	02/09/2013	DLC
>C8-C10 Aromatics	NWVPH	**56**	5.0	1	MG/KG	02/09/2013	DLC
Hexane	NWVPH	U	0.20	1	MG/KG	02/09/2013	DLC
TPH-Diesel Range	NWTPH-DX	**2800**	120	5	MG/KG	01/31/2013	EBS
TPH-Oil Range	NWTPH-DX	**160**	50	1	MG/KG	01/31/2013	EBS
>C8-C10 Aliphatics	NWEPH	**30**	5.0	1	MG/KG	02/01/2013	EBS
>C10-C12 Aliphatics	NWEPH	**230**	5.0	1	MG/KG	02/01/2013	EBS
>C12-C16 Aliphatics	NWEPH	**1200**	5.0	1	MG/KG	02/01/2013	EBS
>C16-C21 Aliphatics	NWEPH	**1100**	5.0	1	MG/KG	02/01/2013	EBS
>C21-C34 Aliphatics	NWEPH	**430**	5.0	1	MG/KG	02/01/2013	EBS
>C8-C10 Aromatics	NWEPH	U	5.0	1	MG/KG	02/01/2013	EBS
>C10-C12 Aromatics	NWEPH	**18**	5.0	1	MG/KG	02/01/2013	EBS
>C12-C16 Aromatics	NWEPH	**200**	5.0	1	MG/KG	02/01/2013	EBS
>C16-C21 Aromatics	NWEPH	**780**	5.0	1	MG/KG	02/01/2013	EBS
>C21-C34 Aromatics	NWEPH	**240**	5.0	1	MG/KG	02/01/2013	EBS
1,4-Dichlorobenzene	EPA-8270 SIM	U	0.0050	1	MG/KG	02/13/2013	LAP
1,2-Dichlorobenzene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
N-Nitroso-Di-N-Propylamine	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Hexachloroethane	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
2,4-Dichlorophenol	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
1,2,4-Trichlorobenzene	EPA-8270 SIM	U	0.010	1	MG/KG	02/13/2013	LAP
Naphthalene	EPA-8270 SIM	**0.031**	0.020	1	MG/KG	02/13/2013	LAP
2-Methylnaphthalene	EPA-8270 SIM	**0.63**	0.020	1	MG/KG	02/13/2013	LAP
1-Methylnaphthalene	EPA-8270 SIM	**1.8**	0.020	1	MG/KG	02/13/2013	LAP
Acenaphthylene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Acenaphthene	EPA-8270 SIM	**0.28**	0.017	1	MG/KG	02/13/2013	LAP
2,4-Dinitrotoluene	EPA-8270 SIM	U	0.010	1	MG/KG	02/13/2013	LAP
Fluorene	EPA-8270 SIM	**0.72**	0.020	1	MG/KG	02/13/2013	LAP
Pentachlorophenol	EPA-8270 SIM	U	0.10	1	MG/KG	02/13/2013	LAP
Phenanthrene	EPA-8270 SIM	**1.1**	0.020	1	MG/KG	02/13/2013	LAP
Anthracene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13010138 -02
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	1/30/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/29/2013 10:00:00 AM
CLIENT SAMPLE ID	FS-19-7.0-7.5-012913	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Fluoranthene	EPA-8270 SIM	**0.054**	0.020	1	MG/KG	02/13/2013	LAP
Pyrene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
3,3-Dichlorobenzidine	EPA-8270 SIM	U	0.10	1	MG/KG	02/13/2013	LAP
Benzo[A]Anthracene	EPA-8270 SIM	**0.025**	0.0065	1	MG/KG	02/13/2013	LAP
Chrysene	EPA-8270 SIM	**0.048**	0.0072	1	MG/KG	02/13/2013	LAP
Benzo[B]Fluoranthene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Benzo[K]Fluoranthene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Benzo[A]Pyrene	EPA-8270 SIM	U	0.017	1	MG/KG	02/13/2013	LAP
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Dibenz[A,H]Anthracene	EPA-8270 SIM	U	0.018	1	MG/KG	02/13/2013	LAP
Benzo[G,H,I]Perylene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Pyridine	EPA-8270	U	200	1	UG/KG	02/13/2013	LAP
N-Nitrosodimethylamine	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Phenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Aniline	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Bis(2-Chloroethyl)Ether	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Chlorophenol	EPA-8270	ND- UT	35	1	UG/KG	02/13/2013	LAP
1,3-Dichlorobenzene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Benzyl Alcohol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Methylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
3&4-Methylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Nitrobenzene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Isophorone	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Nitrophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,4-Dimethylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Benzoic Acid	EPA-8270	U	1000	1	UG/KG	02/13/2013	LAP
Bis(2-Chloroethoxy)Methane	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
4-Chloroaniline	EPA-8270	U	1000	1	UG/KG	02/13/2013	LAP
2,6-Dichlorophenol	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
Hexachlorobutadiene	EPA-8270	U	140	1	UG/KG	02/13/2013	LAP
4-Chloro-3-Methylphenol	EPA-8270	U	500	1	UG/KG	02/13/2013	LAP
Hexachlorocyclopentadiene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,4,6-Trichlorophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,4,5-Trichlorophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Chloronaphthalene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Nitroaniline	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Dimethylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13010138 -02
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	1/30/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/29/2013 10:00:00 AM
CLIENT SAMPLE ID	FS-19-7.0-7.5-012913	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
2,6-Dinitrotoluene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
3-Nitroaniline	EPA-8270	U	1000	1	UG/KG	02/13/2013	LAP
2,4-Dinitrophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Nitrophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Dibenzofuran	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,3,4,6-Tetrachlorophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Diethylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Chlorophenyl-Phenylether	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Nitroaniline	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
4,6-Dinitro-2-Methylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
N-Nitrosodiphenylamine	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Azobenzene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Bromophenyl-Phenylether	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Hexachlorobenzene	EPA-8270	U	80	1	UG/KG	02/13/2013	LAP
Carbazole	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
Di-N-Butylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Butylbenzylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Di-N-Octylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Mercury	EPA-7471	U	0.020	1	MG/KG	02/05/2013	RAL
Antimony	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Arsenic	EPA-6020	**2.5**	1.0	5	MG/KG	02/01/2013	RAL
Beryllium	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Cadmium	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Chromium	EPA-6020	**31**	0.50	5	MG/KG	02/01/2013	RAL
Copper	EPA-6020	**20**	0.50	5	MG/KG	02/01/2013	RAL
Lead	EPA-6020	**2.2**	0.50	5	MG/KG	02/01/2013	RAL
Nickel	EPA-6020	**42**	0.50	5	MG/KG	02/01/2013	RAL
Selenium	EPA-6020	U	5.0	5	MG/KG	02/01/2013	RAL
Silver	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Thallium	EPA-6020	U	4.9	5	MG/KG	02/01/2013	RAL
Zinc	EPA-6020	**29**	2.8	5	MG/KG	02/01/2013	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT 4X Dilution	NWTPH-GX	**87.9**	02/04/2013	DLC
TFT	EPA-8021	**95.3**	01/31/2013	DLC
TFT - Aliphatic	NWVPH	**86.8**	02/09/2013	DLC

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CERTIFICATE OF ANALYSIS

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CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	1/30/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/29/2013 10:00:00 AM
CLIENT SAMPLE ID	FS-19-7.0-7.5-012913	WDOE ACCREDITATION:	C601

DATA RESULTS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT - Aromatic	NWVPH	**89.8**	02/09/2013	DLC
TFT - Hexane	NWVPH	**91.5**	02/09/2013	DLC
C25	NWTPH-DX	**86.8**	01/31/2013	EBS
C25 5X Dilution	NWTPH-DX	**93.8**	01/31/2013	EBS
C25	NWEPH	**101**	02/01/2013	EBS
p-Terphenyl	NWEPH	**114**	02/01/2013	EBS
2,4,6-Tribromophenol	EPA-8270 SIM	**800 DS1**	02/13/2013	LAP
Terphenyl-d14	EPA-8270 SIM	**117**	02/13/2013	LAP
2-Fluorophenol	EPA-8270	**87.6**	02/13/2013	LAP
Phenol-d5	EPA-8270	**66.4**	02/13/2013	LAP
Nitrobenzene-d5	EPA-8270	**70.2**	02/13/2013	LAP
2-Fluorobiphenyl	EPA-8270	**85.9**	02/13/2013	LAP
2,4,6-Tribromophenol	EPA-8270	**800 DS1**	02/13/2013	LAP
Terphenyl-d14	EPA-8270	**117**	02/13/2013	LAP

DS1 - Surrogate outside of control limits due to matrix effect.
U - Analyte analyzed for but not detected at level above reporting limit.
UT - Analyte analyzed for but not detected at level above the MDL.
Chromatogram indicates that it is likely that sample contains weathered diesel and lube oil.
Gasoline range reporting limit raised due to semivolatile range product overlap.
Oil range product results biased high due to diesel range product overlap.

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CERTIFICATE OF ANALYSIS

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CLIENT PROJECT:	POB - Harris		COLLECTION DATE:	1/29/2013 10:20:00 AM
CLIENT SAMPLE ID	FS-19-11.5-12.0-012913		WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	5.7	1	MG/KG	02/04/2013	DLC
Benzene	EPA-8021	U	0.030	1	MG/KG	02/04/2013	DLC
Toluene	EPA-8021	U	0.050	1	MG/KG	02/04/2013	DLC
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	02/04/2013	DLC
Xylenes	EPA-8021	U	0.20	1	MG/KG	02/04/2013	DLC
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	01/31/2013	EBS
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	01/31/2013	EBS
1,4-Dichlorobenzene	EPA-8270 SIM	U	0.0050	1	MG/KG	02/13/2013	LAP
1,2-Dichlorobenzene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
N-Nitroso-Di-N-Propylamine	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Hexachloroethane	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
2,4-Dichlorophenol	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
1,2,4-Trichlorobenzene	EPA-8270 SIM	U	0.010	1	MG/KG	02/13/2013	LAP
Naphthalene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
2-Methylnaphthalene	EPA-8270 SIM	**0.27**	0.020	1	MG/KG	02/13/2013	LAP
1-Methylnaphthalene	EPA-8270 SIM	**0.22**	0.020	1	MG/KG	02/13/2013	LAP
Acenaphthylene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Acenaphthene	EPA-8270 SIM	**0.089**	0.017	1	MG/KG	02/13/2013	LAP
2,4-Dinitrotoluene	EPA-8270 SIM	U	0.010	1	MG/KG	02/13/2013	LAP
Fluorene	EPA-8270 SIM	**0.12**	0.020	1	MG/KG	02/13/2013	LAP
Pentachlorophenol	EPA-8270 SIM	U	0.10	1	MG/KG	02/13/2013	LAP
Phenanthrene	EPA-8270 SIM	**0.28**	0.020	1	MG/KG	02/13/2013	LAP
Anthracene	EPA-8270 SIM	**0.024**	0.020	1	MG/KG	02/13/2013	LAP
Fluoranthene	EPA-8270 SIM	**0.068**	0.020	1	MG/KG	02/13/2013	LAP
Pyrene	EPA-8270 SIM	**0.073**	0.020	1	MG/KG	02/13/2013	LAP
3,3-Dichlorobenzidine	EPA-8270 SIM	U	0.10	1	MG/KG	02/13/2013	LAP
Benzo[A]Anthracene	EPA-8270 SIM	**0.015**	0.0065	1	MG/KG	02/13/2013	LAP
Chrysene	EPA-8270 SIM	**0.015**	0.0072	1	MG/KG	02/13/2013	LAP
Benzo[B]Fluoranthene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Benzo[K]Fluoranthene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Benzo[A]Pyrene	EPA-8270 SIM	U	0.017	1	MG/KG	02/13/2013	LAP
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Dibenz[A,H]Anthracene	EPA-8270 SIM	U	0.018	1	MG/KG	02/13/2013	LAP
Benzo[G,H,I]Perylene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Pyridine	EPA-8270	U	200	1	UG/KG	02/13/2013	LAP
N-Nitrosodimethylamine	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Phenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Aniline	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP

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ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13010138 -03
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	1/30/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/29/2013 10:20:00 AM
CLIENT SAMPLE ID	FS-19-11.5-12.0-012913	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Bis(2-Chloroethyl)Ether	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Chlorophenol	EPA-8270	ND- UT	34	1	UG/KG	02/13/2013	LAP
1,3-Dichlorobenzene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Benzyl Alcohol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Methylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
3&4-Methylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Nitrobenzene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Isophorone	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Nitrophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,4-Dimethylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Benzoic Acid	EPA-8270	U	1000	1	UG/KG	02/13/2013	LAP
Bis(2-Chloroethoxy)Methane	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
4-Chloroaniline	EPA-8270	U	1000	1	UG/KG	02/13/2013	LAP
2,6-Dichlorophenol	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
Hexachlorobutadiene	EPA-8270	U	140	1	UG/KG	02/13/2013	LAP
4-Chloro-3-Methylphenol	EPA-8270	U	500	1	UG/KG	02/13/2013	LAP
Hexachlorocyclopentadiene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,4,6-Trichlorophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,4,5-Trichlorophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Chloronaphthalene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Nitroaniline	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Dimethylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,6-Dinitrotoluene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
3-Nitroaniline	EPA-8270	U	1000	1	UG/KG	02/13/2013	LAP
2,4-Dinitrophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Nitrophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Dibenzofuran	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,3,4,6-Tetrachlorophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Diethylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Chlorophenyl-Phenylether	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Nitroaniline	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
4,6-Dinitro-2-Methylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
N-Nitrosodiphenylamine	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Azobenzene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Bromophenyl-Phenylether	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Hexachlorobenzene	EPA-8270	U	80	1	UG/KG	02/13/2013	LAP
Carbazole	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP

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CLIENT SAMPLE ID	FS-19-11.5-12.0-012913	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Di-N-Butylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Butylbenzylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Di-N-Octylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Mercury	EPA-7471	U	0.020	1	MG/KG	02/05/2013	RAL
Antimony	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Arsenic	EPA-6020	**1.9**	1.0	5	MG/KG	02/01/2013	RAL
Beryllium	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Cadmium	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Chromium	EPA-6020	**31**	0.50	5	MG/KG	02/01/2013	RAL
Copper	EPA-6020	**14**	0.50	5	MG/KG	02/01/2013	RAL
Lead	EPA-6020	**1.5**	0.50	5	MG/KG	02/01/2013	RAL
Nickel	EPA-6020	**31**	0.50	5	MG/KG	02/01/2013	RAL
Selenium	EPA-6020	U	5.0	5	MG/KG	02/01/2013	RAL
Silver	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Thallium	EPA-6020	U	4.7	5	MG/KG	02/01/2013	RAL
Zinc	EPA-6020	**23**	2.7	5	MG/KG	02/01/2013	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**78.7**	02/04/2013	DLC
TFT	EPA-8021	**87.1**	02/04/2013	DLC
C25	NWTPH-DX	**91.2**	01/31/2013	EBS
2,4,6-Tribromophenol	EPA-8270 SIM	**80.5**	02/13/2013	LAP
Terphenyl-d14	EPA-8270 SIM	**84.5**	02/13/2013	LAP
2-Fluorophenol	EPA-8270	**62.5**	02/13/2013	LAP
Phenol-d5	EPA-8270	**43.8**	02/13/2013	LAP
Nitrobenzene-d5	EPA-8270	**68.7**	02/13/2013	LAP
2-Fluorobiphenyl	EPA-8270	**76.0**	02/13/2013	LAP
2,4,6-Tribromophenol	EPA-8270	**80.5**	02/13/2013	LAP
Terphenyl-d14	EPA-8270	**84.5**	02/13/2013	LAP

U - Analyte analyzed for but not detected at level above reporting limit.
UT - Analyte analyzed for but not detected at level above the MDL.
Gasoline range reporting limit raised due to semivolatile range product overlap.

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13010138 -04
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	1/30/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/29/2013 11:20:00 AM
CLIENT SAMPLE ID	FS-19-27.0-27.5-012913	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	02/01/2013	DLC
Benzene	EPA-8021	U	0.030	1	MG/KG	02/01/2013	DLC
Toluene	EPA-8021	U	0.050	1	MG/KG	02/01/2013	DLC
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	02/01/2013	DLC
Xylenes	EPA-8021	U	0.20	1	MG/KG	02/01/2013	DLC
C5-C6 Aliphatics	NWVPH	U	5.0	1	MG/KG	02/08/2013	DLC
>C6-C8 Aliphatics	NWVPH	U	5.0	1	MG/KG	02/08/2013	DLC
>C8-C10 Aliphatics	NWVPH	U	5.0	1	MG/KG	02/08/2013	DLC
>C8-C10 Aromatics	NWVPH	U	5.0	1	MG/KG	02/08/2013	DLC
Hexane	NWVPH	U	0.20	1	MG/KG	02/08/2013	DLC
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	01/31/2013	EBS
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	01/31/2013	EBS
>C8-C10 Aliphatics	NWEPH	U	5.0	1	MG/KG	02/01/2013	EBS
>C10-C12 Aliphatics	NWEPH	U	5.0	1	MG/KG	02/01/2013	EBS
>C12-C16 Aliphatics	NWEPH	U	5.0	1	MG/KG	02/01/2013	EBS
>C16-C21 Aliphatics	NWEPH	U	5.0	1	MG/KG	02/01/2013	EBS
>C21-C34 Aliphatics	NWEPH	U	5.0	1	MG/KG	02/01/2013	EBS
>C8-C10 Aromatics	NWEPH	U	5.0	1	MG/KG	02/01/2013	EBS
>C10-C12 Aromatics	NWEPH	U	5.0	1	MG/KG	02/01/2013	EBS
>C12-C16 Aromatics	NWEPH	U	5.0	1	MG/KG	02/01/2013	EBS
>C16-C21 Aromatics	NWEPH	U	5.0	1	MG/KG	02/01/2013	EBS
>C21-C34 Aromatics	NWEPH	U	5.0	1	MG/KG	02/01/2013	EBS
1,4-Dichlorobenzene	EPA-8270 SIM	U	0.0050	1	MG/KG	02/13/2013	LAP
1,2-Dichlorobenzene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
N-Nitroso-Di-N-Propylamine	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Hexachloroethane	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
2,4-Dichlorophenol	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
1,2,4-Trichlorobenzene	EPA-8270 SIM	U	0.010	1	MG/KG	02/13/2013	LAP
Naphthalene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
2-Methylnaphthalene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
1-Methylnaphthalene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Acenaphthylene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Acenaphthene	EPA-8270 SIM	**0.041**	0.017	1	MG/KG	02/13/2013	LAP
2,4-Dinitrotoluene	EPA-8270 SIM	U	0.010	1	MG/KG	02/13/2013	LAP
Fluorene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Pentachlorophenol	EPA-8270 SIM	U	0.10	1	MG/KG	02/13/2013	LAP
Phenanthrene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Anthracene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE:	3/20/2013
		ALS JOB#:	EV13010138
		ALS SAMPLE#:	-04
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	1/30/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/29/2013 11:20:00 AM
CLIENT SAMPLE ID	FS-19-27.0-27.5-012913	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Fluoranthene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Pyrene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
3,3-Dichlorobenzidine	EPA-8270 SIM	U	0.10	1	MG/KG	02/13/2013	LAP
Benzo[A]Anthracene	EPA-8270 SIM	U	0.0065	1	MG/KG	02/13/2013	LAP
Chrysene	EPA-8270 SIM	U	0.0072	1	MG/KG	02/13/2013	LAP
Benzo[B]Fluoranthene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Benzo[K]Fluoranthene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Benzo[A]Pyrene	EPA-8270 SIM	U	0.017	1	MG/KG	02/13/2013	LAP
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Dibenz[A,H]Anthracene	EPA-8270 SIM	U	0.018	1	MG/KG	02/13/2013	LAP
Benzo[G,H,I]Perylene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Pyridine	EPA-8270	U	200	1	UG/KG	02/13/2013	LAP
N-Nitrosodimethylamine	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Phenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Aniline	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Bis(2-Chloroethyl)Ether	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Chlorophenol	EPA-8270	ND- UT	35	1	UG/KG	02/13/2013	LAP
1,3-Dichlorobenzene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Benzyl Alcohol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Methylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
3&4-Methylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Nitrobenzene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Isophorone	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Nitrophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,4-Dimethylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Benzoic Acid	EPA-8270	U	1000	1	UG/KG	02/13/2013	LAP
Bis(2-Chloroethoxy)Methane	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
4-Chloroaniline	EPA-8270	U	1000	1	UG/KG	02/13/2013	LAP
2,6-Dichlorophenol	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
Hexachlorobutadiene	EPA-8270	U	140	1	UG/KG	02/13/2013	LAP
4-Chloro-3-Methylphenol	EPA-8270	U	500	1	UG/KG	02/13/2013	LAP
Hexachlorocyclopentadiene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,4,6-Trichlorophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,4,5-Trichlorophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Chloronaphthalene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Nitroaniline	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Dimethylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13010138 -04
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	1/30/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/29/2013 11:20:00 AM
CLIENT SAMPLE ID	FS-19-27.0-27.5-012913	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
2,6-Dinitrotoluene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
3-Nitroaniline	EPA-8270	U	1000	1	UG/KG	02/13/2013	LAP
2,4-Dinitrophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Nitrophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Dibenzofuran	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,3,4,6-Tetrachlorophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Diethylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Chlorophenyl-Phenylether	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Nitroaniline	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
4,6-Dinitro-2-Methylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
N-Nitrosodiphenylamine	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Azobenzene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Bromophenyl-Phenylether	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Hexachlorobenzene	EPA-8270	U	80	1	UG/KG	02/13/2013	LAP
Carbazole	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
Di-N-Butylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Butylbenzylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Di-N-Octylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Mercury	EPA-7471	U	0.020	1	MG/KG	02/05/2013	RAL
Antimony	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Arsenic	EPA-6020	**3.6**	1.0	5	MG/KG	02/01/2013	RAL
Beryllium	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Cadmium	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Chromium	EPA-6020	**36**	0.50	5	MG/KG	02/01/2013	RAL
Copper	EPA-6020	**21**	0.50	5	MG/KG	02/01/2013	RAL
Lead	EPA-6020	**2.0**	0.50	5	MG/KG	02/01/2013	RAL
Nickel	EPA-6020	**52**	0.50	5	MG/KG	02/01/2013	RAL
Selenium	EPA-6020	U	5.0	5	MG/KG	02/01/2013	RAL
Silver	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Thallium	EPA-6020	U	4.9	5	MG/KG	02/01/2013	RAL
Zinc	EPA-6020	**24**	2.8	5	MG/KG	02/01/2013	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**81.5**	02/01/2013	DLC
TFT	EPA-8021	**87.4**	02/01/2013	DLC
TFT - Aliphatic	NWVPH	**75.4**	02/08/2013	DLC

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE:	3/20/2013
		ALS JOB#:	EV13010138
		ALS SAMPLE#:	-04
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	1/30/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/29/2013 11:20:00 AM
CLIENT SAMPLE ID	FS-19-27.0-27.5-012913	WDOE ACCREDITATION:	C601

DATA RESULTS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT - Aromatic	NWVPH	**82.4**	02/08/2013	DLC
TFT - Hexane	NWVPH	**87.7**	02/08/2013	DLC
C25	NWTPH-DX	**89.8**	01/31/2013	EBS
C25	NWEPH	**100**	02/01/2013	EBS
p-Terphenyl	NWEPH	**108**	02/01/2013	EBS
2,4,6-Tribromophenol	EPA-8270 SIM	**62.0**	02/13/2013	LAP
Terphenyl-d14	EPA-8270 SIM	**80.2**	02/13/2013	LAP
2-Fluorophenol	EPA-8270	**33.8 DS1**	02/13/2013	LAP
Phenol-d5	EPA-8270	**13.4 DS1**	02/13/2013	LAP
Nitrobenzene-d5	EPA-8270	**63.4**	02/13/2013	LAP
2-Fluorobiphenyl	EPA-8270	**51.8**	02/13/2013	LAP
2,4,6-Tribromophenol	EPA-8270	**62.0**	02/13/2013	LAP
Terphenyl-d14	EPA-8270	**80.2**	02/13/2013	LAP

DS1 - Surrogate outside of control limits due to matrix effect.
U - Analyte analyzed for but not detected at level above reporting limit.
UT - Analyte analyzed for but not detected at level above the MDL.

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13010138 -05
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	1/30/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/29/2013 12:25:00 PM
CLIENT SAMPLE ID	FS-20-2.5-3.0-012913	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,4-Dichlorobenzene	EPA-8270 SIM	U	0.0050	1	MG/KG	02/13/2013	LAP
1,2-Dichlorobenzene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
N-Nitroso-Di-N-Propylamine	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Hexachloroethane	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
2,4-Dichlorophenol	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
1,2,4-Trichlorobenzene	EPA-8270 SIM	U	0.010	1	MG/KG	02/13/2013	LAP
Naphthalene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
2-Methylnaphthalene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
1-Methylnaphthalene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Acenaphthylene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Acenaphthene	EPA-8270 SIM	U	0.017	1	MG/KG	02/13/2013	LAP
2,4-Dinitrotoluene	EPA-8270 SIM	U	0.010	1	MG/KG	02/13/2013	LAP
Fluorene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Pentachlorophenol	EPA-8270 SIM	U	0.10	1	MG/KG	02/13/2013	LAP
Phenanthrene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Anthracene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Fluoranthene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Pyrene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
3,3-Dichlorobenzidine	EPA-8270 SIM	U	0.10	1	MG/KG	02/13/2013	LAP
Benzo[A]Anthracene	EPA-8270 SIM	U	0.0065	1	MG/KG	02/13/2013	LAP
Chrysene	EPA-8270 SIM	U	0.0072	1	MG/KG	02/13/2013	LAP
Benzo[B]Fluoranthene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Benzo[K]Fluoranthene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Benzo[A]Pyrene	EPA-8270 SIM	U	0.017	1	MG/KG	02/13/2013	LAP
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Dibenz[A,H]Anthracene	EPA-8270 SIM	U	0.018	1	MG/KG	02/13/2013	LAP
Benzo[G,H,I]Perylene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Pyridine	EPA-8270	U	200	1	UG/KG	02/13/2013	LAP
N-Nitrosodimethylamine	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Phenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Aniline	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Bis(2-Chloroethyl)Ether	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Chlorophenol	EPA-8270	ND- UT	33	1	UG/KG	02/13/2013	LAP
1,3-Dichlorobenzene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Benzyl Alcohol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Methylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
3&4-Methylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP

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CERTIFICATE OF ANALYSIS

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CLIENT SAMPLE ID	FS-20-2.5-3.0-012913	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Nitrobenzene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Isophorone	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Nitrophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,4-Dimethylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Benzoic Acid	EPA-8270	U	1000	1	UG/KG	02/13/2013	LAP
Bis(2-Chloroethoxy)Methane	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
4-Chloroaniline	EPA-8270	U	1000	1	UG/KG	02/13/2013	LAP
2,6-Dichlorophenol	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
Hexachlorobutadiene	EPA-8270	U	130	1	UG/KG	02/13/2013	LAP
4-Chloro-3-Methylphenol	EPA-8270	U	500	1	UG/KG	02/13/2013	LAP
Hexachlorocyclopentadiene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,4,6-Trichlorophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,4,5-Trichlorophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Chloronaphthalene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Nitroaniline	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Dimethylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,6-Dinitrotoluene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
3-Nitroaniline	EPA-8270	U	1000	1	UG/KG	02/13/2013	LAP
2,4-Dinitrophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Nitrophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Dibenzofuran	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,3,4,6-Tetrachlorophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Diethylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Chlorophenyl-Phenylether	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Nitroaniline	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
4,6-Dinitro-2-Methylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
N-Nitrosodiphenylamine	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Azobenzene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Bromophenyl-Phenylether	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Hexachlorobenzene	EPA-8270	U	80	1	UG/KG	02/13/2013	LAP
Carbazole	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
Di-N-Butylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Butylbenzylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Di-N-Octylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Mercury	EPA-7471	**0.024**	0.020	1	MG/KG	02/05/2013	RAL
Antimony	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Arsenic	EPA-6020	**9.2**	1.0	5	MG/KG	02/01/2013	RAL

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13010138 -05
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	1/30/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/29/2013 12:25:00 PM
CLIENT SAMPLE ID	FS-20-2.5-3.0-012913	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Beryllium	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Cadmium	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Chromium	EPA-6020	**36**	0.50	5	MG/KG	02/01/2013	RAL
Copper	EPA-6020	**19**	0.50	5	MG/KG	02/01/2013	RAL
Lead	EPA-6020	**2.5**	0.50	5	MG/KG	02/01/2013	RAL
Nickel	EPA-6020	**40**	0.50	5	MG/KG	02/01/2013	RAL
Selenium	EPA-6020	U	5.0	5	MG/KG	02/01/2013	RAL
Silver	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Thallium	EPA-6020	U	4.8	5	MG/KG	02/01/2013	RAL
Zinc	EPA-6020	**30**	2.8	5	MG/KG	02/01/2013	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
2,4,6-Tribromophenol	EPA-8270 SIM	**82.3**	02/13/2013	LAP
Terphenyl-d14	EPA-8270 SIM	**93.4**	02/13/2013	LAP
2-Fluorophenol	EPA-8270	**43.6 DS1**	02/13/2013	LAP
Phenol-d5	EPA-8270	**23.3 DS1**	02/13/2013	LAP
Nitrobenzene-d5	EPA-8270	**75.4**	02/13/2013	LAP
2-Fluorobiphenyl	EPA-8270	**67.4**	02/13/2013	LAP
2,4,6-Tribromophenol	EPA-8270	**82.3**	02/13/2013	LAP
Terphenyl-d14	EPA-8270	**93.4**	02/13/2013	LAP

UT - Analyte analyzed for but not detected at level above the MDL.
DS1 - Surrogate outside of control limits due to matrix effect.
U - Analyte analyzed for but not detected at level above reporting limit.

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ALS Laboratory Group A Campbell Brothers Limited Company

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE:	3/20/2013
		ALS JOB#:	EV13010138
		ALS SAMPLE#:	-06
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	1/30/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/29/2013 1:00:00 PM
CLIENT SAMPLE ID	FS-20-10.5-11.0-012913	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	94	5	MG/KG	02/04/2013	DLC
Benzene	EPA-8021	U	0.030	1	MG/KG	01/31/2013	DLC
Toluene	EPA-8021	U	0.050	1	MG/KG	01/31/2013	DLC
Ethylbenzene	EPA-8021	**0.076**	0.050	1	MG/KG	01/31/2013	DLC
Xylenes	EPA-8021	U	0.20	1	MG/KG	01/31/2013	DLC
C5-C6 Aliphatics	NWVPH	U	5.0	1	MG/KG	02/09/2013	DLC
>C6-C8 Aliphatics	NWVPH	U	5.0	1	MG/KG	02/09/2013	DLC
>C8-C10 Aliphatics	NWVPH	U	5.0	1	MG/KG	02/09/2013	DLC
>C8-C10 Aromatics	NWVPH	**31**	5.0	1	MG/KG	02/09/2013	DLC
Hexane	NWVPH	U	0.20	1	MG/KG	02/09/2013	DLC
TPH-Diesel Range	NWTPH-DX	**2500**	50	2	MG/KG	02/01/2013	EBS
TPH-Oil Range	NWTPH-DX	U	100	2	MG/KG	02/01/2013	EBS
>C8-C10 Aliphatics	NWEPH	**36**	5.0	1	MG/KG	02/01/2013	EBS
>C10-C12 Aliphatics	NWEPH	**220**	5.0	1	MG/KG	02/01/2013	EBS
>C12-C16 Aliphatics	NWEPH	**930**	5.0	1	MG/KG	02/01/2013	EBS
>C16-C21 Aliphatics	NWEPH	**750**	5.0	1	MG/KG	02/01/2013	EBS
>C21-C34 Aliphatics	NWEPH	**190**	5.0	1	MG/KG	02/01/2013	EBS
>C8-C10 Aromatics	NWEPH	U	5.0	1	MG/KG	02/01/2013	EBS
>C10-C12 Aromatics	NWEPH	**43**	5.0	1	MG/KG	02/01/2013	EBS
>C12-C16 Aromatics	NWEPH	**320**	5.0	1	MG/KG	02/01/2013	EBS
>C16-C21 Aromatics	NWEPH	**710**	5.0	1	MG/KG	02/01/2013	EBS
>C21-C34 Aromatics	NWEPH	**150**	5.0	1	MG/KG	02/01/2013	EBS
1,4-Dichlorobenzene	EPA-8270 SIM	U	0.12	25	MG/KG	02/15/2013	LAP
1,2-Dichlorobenzene	EPA-8270 SIM	U	0.50	25	MG/KG	02/15/2013	LAP
N-Nitroso-Di-N-Propylamine	EPA-8270 SIM	U	0.50	25	MG/KG	02/15/2013	LAP
Hexachloroethane	EPA-8270 SIM	U	0.50	25	MG/KG	02/15/2013	LAP
2,4-Dichlorophenol	EPA-8270 SIM	U	0.50	25	MG/KG	02/15/2013	LAP
1,2,4-Trichlorobenzene	EPA-8270 SIM	U	0.25	25	MG/KG	02/15/2013	LAP
Naphthalene	EPA-8270 SIM	U	0.50	25	MG/KG	02/15/2013	LAP
2-Methylnaphthalene	EPA-8270 SIM	**6.2**	0.50	25	MG/KG	02/15/2013	LAP
1-Methylnaphthalene	EPA-8270 SIM	**6.6**	0.50	25	MG/KG	02/15/2013	LAP
Acenaphthylene	EPA-8270 SIM	U	0.50	25	MG/KG	02/15/2013	LAP
Acenaphthene	EPA-8270 SIM	**1.6**	0.42	25	MG/KG	02/15/2013	LAP
2,4-Dinitrotoluene	EPA-8270 SIM	U	0.25	25	MG/KG	02/15/2013	LAP
Fluorene	EPA-8270 SIM	**2.9**	0.50	25	MG/KG	02/15/2013	LAP
Pentachlorophenol	EPA-8270 SIM	U	2.5	25	MG/KG	02/15/2013	LAP
Phenanthrene	EPA-8270 SIM	**4.7**	0.50	25	MG/KG	02/15/2013	LAP
Anthracene	EPA-8270 SIM	U	0.50	25	MG/KG	02/15/2013	LAP

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13010138 -06
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	1/30/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/29/2013 1:00:00 PM
CLIENT SAMPLE ID	FS-20-10.5-11.0-012913	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Fluoranthene	EPA-8270 SIM	**1.4**	0.50	25	MG/KG	02/15/2013	LAP
Pyrene	EPA-8270 SIM	**1.3**	0.50	25	MG/KG	02/15/2013	LAP
3,3-Dichlorobenzidine	EPA-8270 SIM	U	2.5	25	MG/KG	02/15/2013	LAP
Benzo[A]Anthracene	EPA-8270 SIM	**0.32**	0.16	25	MG/KG	02/15/2013	LAP
Chrysene	EPA-8270 SIM	**0.28**	0.18	25	MG/KG	02/15/2013	LAP
Benzo[B]Fluoranthene	EPA-8270 SIM	U	0.50	25	MG/KG	02/15/2013	LAP
Benzo[K]Fluoranthene	EPA-8270 SIM	U	0.50	25	MG/KG	02/15/2013	LAP
Benzo[A]Pyrene	EPA-8270 SIM	U	0.42	25	MG/KG	02/15/2013	LAP
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	U	0.50	25	MG/KG	02/15/2013	LAP
Dibenz[A,H]Anthracene	EPA-8270 SIM	U	0.45	25	MG/KG	02/15/2013	LAP
Benzo[G,H,I]Perylene	EPA-8270 SIM	U	0.50	25	MG/KG	02/15/2013	LAP
Pyridine	EPA-8270	U	5000	25	UG/KG	02/15/2013	LAP
N-Nitrosodimethylamine	EPA-8270	U	2500	25	UG/KG	02/15/2013	LAP
Phenol	EPA-8270	U	2500	25	UG/KG	02/15/2013	LAP
Aniline	EPA-8270	U	2500	25	UG/KG	02/15/2013	LAP
Bis(2-Chloroethyl)Ether	EPA-8270	U	2500	25	UG/KG	02/15/2013	LAP
2-Chlorophenol	EPA-8270	ND- UT	880	25	UG/KG	02/15/2013	LAP
1,3-Dichlorobenzene	EPA-8270	U	2500	25	UG/KG	02/15/2013	LAP
Benzyl Alcohol	EPA-8270	U	2500	25	UG/KG	02/15/2013	LAP
2-Methylphenol	EPA-8270	U	2500	25	UG/KG	02/15/2013	LAP
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	6200	25	UG/KG	02/15/2013	LAP
3&4-Methylphenol	EPA-8270	U	2500	25	UG/KG	02/15/2013	LAP
Nitrobenzene	EPA-8270	U	2500	25	UG/KG	02/15/2013	LAP
Isophorone	EPA-8270	U	2500	25	UG/KG	02/15/2013	LAP
2-Nitrophenol	EPA-8270	U	2500	25	UG/KG	02/15/2013	LAP
2,4-Dimethylphenol	EPA-8270	U	2500	25	UG/KG	02/15/2013	LAP
Benzoic Acid	EPA-8270	U	25000	25	UG/KG	02/15/2013	LAP
Bis(2-Chloroethoxy)Methane	EPA-8270	U	6200	25	UG/KG	02/15/2013	LAP
4-Chloroaniline	EPA-8270	U	25000	25	UG/KG	02/15/2013	LAP
2,6-Dichlorophenol	EPA-8270	U	6200	25	UG/KG	02/15/2013	LAP
Hexachlorobutadiene	EPA-8270	U	2500	25	UG/KG	02/15/2013	LAP
4-Chloro-3-Methylphenol	EPA-8270	U	12000	25	UG/KG	02/15/2013	LAP
Hexachlorocyclopentadiene	EPA-8270	U	2500	25	UG/KG	02/15/2013	LAP
2,4,6-Trichlorophenol	EPA-8270	U	2500	25	UG/KG	02/15/2013	LAP
2,4,5-Trichlorophenol	EPA-8270	U	2500	25	UG/KG	02/15/2013	LAP
2-Chloronaphthalene	EPA-8270	U	2500	25	UG/KG	02/15/2013	LAP
2-Nitroaniline	EPA-8270	U	2500	25	UG/KG	02/15/2013	LAP
Dimethylphthalate	EPA-8270	U	2500	25	UG/KG	02/15/2013	LAP

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13010138 -06
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	1/30/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/29/2013 1:00:00 PM
CLIENT SAMPLE ID	FS-20-10.5-11.0-012913	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
2,6-Dinitrotoluene	EPA-8270	U	2500	25	UG/KG	02/15/2013	LAP
3-Nitroaniline	EPA-8270	U	25000	25	UG/KG	02/15/2013	LAP
2,4-Dinitrophenol	EPA-8270	U	2500	25	UG/KG	02/15/2013	LAP
4-Nitrophenol	EPA-8270	U	2500	25	UG/KG	02/15/2013	LAP
Dibenzofuran	EPA-8270	U	2500	25	UG/KG	02/15/2013	LAP
2,3,4,6-Tetrachlorophenol	EPA-8270	U	2500	25	UG/KG	02/15/2013	LAP
Diethylphthalate	EPA-8270	U	2500	25	UG/KG	02/15/2013	LAP
4-Chlorophenyl-Phenylether	EPA-8270	U	2500	25	UG/KG	02/15/2013	LAP
4-Nitroaniline	EPA-8270	U	6200	25	UG/KG	02/15/2013	LAP
4,6-Dinitro-2-Methylphenol	EPA-8270	U	2500	25	UG/KG	02/15/2013	LAP
N-Nitrosodiphenylamine	EPA-8270	U	2500	25	UG/KG	02/15/2013	LAP
Azobenzene	EPA-8270	U	2500	25	UG/KG	02/15/2013	LAP
4-Bromophenyl-Phenylether	EPA-8270	U	2500	25	UG/KG	02/15/2013	LAP
Hexachlorobenzene	EPA-8270	U	2000	25	UG/KG	02/15/2013	LAP
Carbazole	EPA-8270	U	6200	25	UG/KG	02/15/2013	LAP
Di-N-Butylphthalate	EPA-8270	U	2500	25	UG/KG	02/15/2013	LAP
Butylbenzylphthalate	EPA-8270	U	2500	25	UG/KG	02/15/2013	LAP
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	2500	25	UG/KG	02/15/2013	LAP
Di-N-Octylphthalate	EPA-8270	U	2500	25	UG/KG	02/15/2013	LAP
Mercury	EPA-7471	**0.028**	0.020	1	MG/KG	02/05/2013	RAL
Antimony	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Arsenic	EPA-6020	**2.4**	1.0	5	MG/KG	02/01/2013	RAL
Beryllium	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Cadmium	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Chromium	EPA-6020	**32**	0.50	5	MG/KG	02/01/2013	RAL
Copper	EPA-6020	**19**	0.50	5	MG/KG	02/01/2013	RAL
Lead	EPA-6020	**3.9**	0.50	5	MG/KG	02/01/2013	RAL
Nickel	EPA-6020	**37**	0.52	5	MG/KG	02/01/2013	RAL
Selenium	EPA-6020	U	5.0	5	MG/KG	02/01/2013	RAL
Silver	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Thallium	EPA-6020	U	5.2	5	MG/KG	02/01/2013	RAL
Zinc	EPA-6020	**32**	3.0	5	MG/KG	02/01/2013	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT 5X Dilution	NWTPH-GX	**104**	02/04/2013	DLC
TFT	EPA-8021	**96.4**	01/31/2013	DLC
TFT - Aliphatic	NWVPH	**74.3**	02/09/2013	DLC

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ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13010138 -06
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	1/30/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/29/2013 1:00:00 PM
CLIENT SAMPLE ID	FS-20-10.5-11.0-012913	WDOE ACCREDITATION:	C601

DATA RESULTS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT - Aromatic	NWVPH	**74.9**	02/09/2013	DLC
TFT - Hexane	NWVPH	**80.8**	02/09/2013	DLC
C25 2X Dilution	NWTPH-DX	**94.4**	02/01/2013	EBS
C25	NWEPH	**102**	02/01/2013	EBS
p-Terphenyl	NWEPH	**117**	02/01/2013	EBS
2,4,6-Tribromophenol 25X Dilution	EPA-8270 SIM	**311 DS2**	02/15/2013	LAP
Terphenyl-d14 25X Dilution	EPA-8270 SIM	**93.4**	02/15/2013	LAP
2-Fluorophenol 25X Dilution	EPA-8270	**87.6**	02/15/2013	LAP
Phenol-d5 25X Dilution	EPA-8270	**55.2**	02/15/2013	LAP
Nitrobenzene-d5 25X Dilution	EPA-8270	**73.1**	02/15/2013	LAP
2-Fluorobiphenyl 25X Dilution	EPA-8270	**83.3**	02/15/2013	LAP
2,4,6-Tribromophenol 25X Dilution	EPA-8270	**311 DS2**	02/15/2013	LAP
Terphenyl-d14 25X Dilution	EPA-8270	**93.4**	02/15/2013	LAP

DS2 - Due to high dilution factor surrogate results should be considered uncontrolled.
U - Analyte analyzed for but not detected at level above reporting limit.
UT - Analyte analyzed for but not detected at level above the MDL.
Chromatogram indicates that it is likely that sample contains weathered diesel.
Gasoline range reporting limit raised due to semivolatile range product overlap.

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13010138 -07
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	1/30/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/29/2013 1:15:00 PM
CLIENT SAMPLE ID	FS-19-GW-012913	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	**110**	50	1	UG/L	02/01/2013	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	02/01/2013	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	02/01/2013	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	02/01/2013	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	02/01/2013	DLC
TPH-Diesel Range	NWTPH-DX	**5500**	130	1	UG/L	02/01/2013	EBS
TPH-Oil Range	NWTPH-DX	**1200**	250	1	UG/L	02/01/2013	EBS
Naphthalene	EPA-8270 SIM	**0.36**	0.020	1	UG/L	02/12/2013	LAP
2-Methylnaphthalene	EPA-8270 SIM	**4.1**	0.020	1	UG/L	02/12/2013	LAP
1-Methylnaphthalene	EPA-8270 SIM	**5.0**	0.020	1	UG/L	02/12/2013	LAP
Acenaphthylene	EPA-8270 SIM	U	0.020	1	UG/L	02/12/2013	LAP
Acenaphthene	EPA-8270 SIM	**3.3**	0.020	1	UG/L	02/12/2013	LAP
Fluorene	EPA-8270 SIM	**1.6**	0.020	1	UG/L	02/12/2013	LAP
Phenanthrene	EPA-8270 SIM	**1.9**	0.020	1	UG/L	02/12/2013	LAP
Anthracene	EPA-8270 SIM	**0.13**	0.020	1	UG/L	02/12/2013	LAP
Fluoranthene	EPA-8270 SIM	**0.27**	0.020	1	UG/L	02/12/2013	LAP
Pyrene	EPA-8270 SIM	**0.31**	0.033	1	UG/L	02/12/2013	LAP
Benzo[A]Anthracene	EPA-8270 SIM	U	0.018	1	UG/L	02/12/2013	LAP
Chrysene	EPA-8270 SIM	**0.043**	0.0064	1	UG/L	02/12/2013	LAP
Benzo[B]Fluoranthene	EPA-8270 SIM	**0.020 JT**	0.010	1	UG/L	02/12/2013	LAP
Benzo[K]Fluoranthene	EPA-8270 SIM	ND- UT	0.0070	1	UG/L	02/12/2013	LAP
Benzo[A]Pyrene	EPA-8270 SIM	**0.012 JT**	0.0096	1	UG/L	02/12/2013	LAP
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	ND- UT	0.0050	1	UG/L	02/12/2013	LAP
Dibenz[A,H]Anthracene	EPA-8270 SIM	**0.0080 JT**	0.0062	1	UG/L	02/12/2013	LAP
Benzo[G,H,I]Perylene	EPA-8270 SIM	U	0.020	1	UG/L	02/12/2013	LAP
Pyridine	EPA-8270	U	4.0	1	UG/L	02/12/2013	LAP
N-Nitrosodimethylamine	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Phenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Aniline	EPA-8270	U	4.0	1	UG/L	02/12/2013	LAP
Bis(2-Chloroethyl)Ether	EPA-8270	U	1.0	1	UG/L	02/12/2013	LAP
2-Chlorophenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
1,3-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
1,4-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Benzyl Alcohol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
1,2-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
3&4-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13010138 -07
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	1/30/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/29/2013 1:15:00 PM
CLIENT SAMPLE ID	FS-19-GW-012913	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
N-Nitroso-Di-N-Propylamine	EPA-8270	ND- UT	0.70	1	UG/L	02/12/2013	LAP
Hexachloroethane	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Nitrobenzene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Isophorone	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2-Nitrophenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2,4-Dimethylphenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Benzoic Acid	EPA-8270	U	10	1	UG/L	02/12/2013	LAP
Bis(2-Chloroethoxy)Methane	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2,4-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
1,2,4-Trichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
4-Chloroaniline	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2,6-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Hexachlorobutadiene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
4-Chloro-3-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Hexachlorocyclopentadiene	EPA-8270	U	4.0	1	UG/L	02/12/2013	LAP
2,4,6-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2,4,5-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2-Chloronaphthalene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2-Nitroaniline	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Dimethylphthalate	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2,6-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
3-Nitroaniline	EPA-8270	U	5.0	1	UG/L	02/12/2013	LAP
2,4-Dinitrophenol	EPA-8270	U	10	1	UG/L	02/12/2013	LAP
4-Nitrophenol	EPA-8270	U	5.0	1	UG/L	02/12/2013	LAP
Dibenzofuran	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2,4-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2,3,4,6-Tetrachlorophenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Diethylphthalate	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
4-Chlorophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
4-Nitroaniline	EPA-8270	U	4.0	1	UG/L	02/12/2013	LAP
4,6-Dinitro-2-Methylphenol	EPA-8270	U	4.0	1	UG/L	02/12/2013	LAP
N-Nitrosodiphenylamine	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Azobenzene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
4-Bromophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Hexachlorobenzene	EPA-8270	U	1.0	1	UG/L	02/12/2013	LAP
Pentachlorophenol	EPA-8270	U	5.0	1	UG/L	02/12/2013	LAP
Carbazole	EPA-8270	**4.4**	2.0	1	UG/L	02/12/2013	LAP
Di-N-Butylphthalate	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13010138 -07
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	1/30/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/29/2013 1:15:00 PM
CLIENT SAMPLE ID	FS-19-GW-012913	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Butylbenzylphthalate	EPA-8270	U	1.0	1	UG/L	02/12/2013	LAP
3,3-Dichlorobenzidine	EPA-8270	U	5.0	1	UG/L	02/12/2013	LAP
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Di-N-Octylphthalate	EPA-8270	U	1.0	1	UG/L	02/12/2013	LAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**79.0**	02/01/2013	DLC
TFT	EPA-8021	**96.6**	02/01/2013	DLC
C25	NWTPH-DX	**93.1**	02/01/2013	EBS
Terphenyl-d14	EPA-8270 SIM	**84.5**	02/12/2013	LAP
2-Fluorophenol	EPA-8270	**33.4**	02/12/2013	LAP
Phenol-d5	EPA-8270	**21.8**	02/12/2013	LAP
Nitrobenzene-d5	EPA-8270	**78.1**	02/12/2013	LAP
2-Fluorobiphenyl	EPA-8270	**74.2**	02/12/2013	LAP
2,4,6-Tribromophenol	EPA-8270	**67.7**	02/12/2013	LAP
Terphenyl-d14	EPA-8270	**84.5**	02/12/2013	LAP

JT - Analyte was positively identified. Reported result is an estimate below the associated quantitation limit but above the MDL.
U - Analyte analyzed for but not detected at level above reporting limit.
UT - Analyte analyzed for but not detected at level above the MDL.
Chromatogram indicates that it is likely that sample contains highly weathered gasoline, weathered diesel and lube oil.
Oil range product results biased high due to diesel range product overlap.

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ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13010138 -08
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	1/30/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/29/2013 2:20:00 PM
CLIENT SAMPLE ID	FS-20-15.5-16.0-012913	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	02/01/2013	DLC
Benzene	EPA-8021	U	0.030	1	MG/KG	02/01/2013	DLC
Toluene	EPA-8021	U	0.050	1	MG/KG	02/01/2013	DLC
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	02/01/2013	DLC
Xylenes	EPA-8021	U	0.20	1	MG/KG	02/01/2013	DLC
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	01/31/2013	EBS
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	01/31/2013	EBS
1,4-Dichlorobenzene	EPA-8270 SIM	U	0.0050	1	MG/KG	02/13/2013	LAP
1,2-Dichlorobenzene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
N-Nitroso-Di-N-Propylamine	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Hexachloroethane	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
2,4-Dichlorophenol	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
1,2,4-Trichlorobenzene	EPA-8270 SIM	U	0.010	1	MG/KG	02/13/2013	LAP
Naphthalene	EPA-8270 SIM	**0.022**	0.020	1	MG/KG	02/13/2013	LAP
2-Methylnaphthalene	EPA-8270 SIM	**0.027**	0.020	1	MG/KG	02/13/2013	LAP
1-Methylnaphthalene	EPA-8270 SIM	**0.033**	0.020	1	MG/KG	02/13/2013	LAP
Acenaphthylene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Acenaphthene	EPA-8270 SIM	**0.14**	0.017	1	MG/KG	02/13/2013	LAP
2,4-Dinitrotoluene	EPA-8270 SIM	U	0.010	1	MG/KG	02/13/2013	LAP
Fluorene	EPA-8270 SIM	**0.031**	0.020	1	MG/KG	02/13/2013	LAP
Pentachlorophenol	EPA-8270 SIM	U	0.10	1	MG/KG	02/13/2013	LAP
Phenanthrene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Anthracene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Fluoranthene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Pyrene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
3,3-Dichlorobenzidine	EPA-8270 SIM	U	0.10	1	MG/KG	02/13/2013	LAP
Benzo[A]Anthracene	EPA-8270 SIM	U	0.0065	1	MG/KG	02/13/2013	LAP
Chrysene	EPA-8270 SIM	U	0.0072	1	MG/KG	02/13/2013	LAP
Benzo[B]Fluoranthene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Benzo[K]Fluoranthene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Benzo[A]Pyrene	EPA-8270 SIM	U	0.017	1	MG/KG	02/13/2013	LAP
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Dibenz[A,H]Anthracene	EPA-8270 SIM	U	0.018	1	MG/KG	02/13/2013	LAP
Benzo[G,H,I]Perylene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Pyridine	EPA-8270	U	200	1	UG/KG	02/13/2013	LAP
N-Nitrosodimethylamine	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Phenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Aniline	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP

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ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13010138 -08
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	1/30/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/29/2013 2:20:00 PM
CLIENT SAMPLE ID	FS-20-15.5-16.0-012913	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Bis(2-Chloroethyl)Ether	EPA-8270	U	120	1	UG/KG	02/13/2013	LAP
2-Chlorophenol	EPA-8270	ND- UT	40	1	UG/KG	02/13/2013	LAP
1,3-Dichlorobenzene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Benzyl Alcohol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Methylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
3&4-Methylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Nitrobenzene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Isophorone	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Nitrophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,4-Dimethylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Benzoic Acid	EPA-8270	U	1000	1	UG/KG	02/13/2013	LAP
Bis(2-Chloroethoxy)Methane	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
4-Chloroaniline	EPA-8270	U	1000	1	UG/KG	02/13/2013	LAP
2,6-Dichlorophenol	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
Hexachlorobutadiene	EPA-8270	U	160	1	UG/KG	02/13/2013	LAP
4-Chloro-3-Methylphenol	EPA-8270	U	500	1	UG/KG	02/13/2013	LAP
Hexachlorocyclopentadiene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,4,6-Trichlorophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,4,5-Trichlorophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Chloronaphthalene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Nitroaniline	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Dimethylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,6-Dinitrotoluene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
3-Nitroaniline	EPA-8270	U	1000	1	UG/KG	02/13/2013	LAP
2,4-Dinitrophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Nitrophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Dibenzofuran	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,3,4,6-Tetrachlorophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Diethylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Chlorophenyl-Phenylether	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Nitroaniline	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
4,6-Dinitro-2-Methylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
N-Nitrosodiphenylamine	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Azobenzene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Bromophenyl-Phenylether	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Hexachlorobenzene	EPA-8270	U	80	1	UG/KG	02/13/2013	LAP
Carbazole	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP

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ALS Laboratory Group A Campbell Brothers Limited Company

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13010138 -08
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	1/30/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/29/2013 2:20:00 PM
CLIENT SAMPLE ID	FS-20-15.5-16.0-012913	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Di-N-Butylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Butylbenzylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Di-N-Octylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Mercury	EPA-7471	U	0.020	1	MG/KG	02/05/2013	RAL
Antimony	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Arsenic	EPA-6020	**2.6**	1.0	5	MG/KG	02/01/2013	RAL
Beryllium	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Cadmium	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Chromium	EPA-6020	**33**	0.50	5	MG/KG	02/01/2013	RAL
Copper	EPA-6020	**10**	0.50	5	MG/KG	02/01/2013	RAL
Lead	EPA-6020	**1.7**	0.50	5	MG/KG	02/01/2013	RAL
Nickel	EPA-6020	**29**	0.58	5	MG/KG	02/01/2013	RAL
Selenium	EPA-6020	U	5.0	5	MG/KG	02/01/2013	RAL
Silver	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Thallium	EPA-6020	U	5.7	5	MG/KG	02/01/2013	RAL
Zinc	EPA-6020	**24**	3.3	5	MG/KG	02/01/2013	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**79.3**	02/01/2013	DLC
TFT	EPA-8021	**83.1**	02/01/2013	DLC
C25	NWTPH-DX	**78.7**	01/31/2013	EBS
2,4,6-Tribromophenol	EPA-8270 SIM	**84.4**	02/13/2013	LAP
Terphenyl-d14	EPA-8270 SIM	**87.0**	02/13/2013	LAP
2-Fluorophenol	EPA-8270	**10.5 DS1**	02/13/2013	LAP
Phenol-d5	EPA-8270	**24.2 DS1**	02/13/2013	LAP
Nitrobenzene-d5	EPA-8270	**66.8**	02/13/2013	LAP
2-Fluorobiphenyl	EPA-8270	**59.9**	02/13/2013	LAP
2,4,6-Tribromophenol	EPA-8270	**84.4**	02/13/2013	LAP
Terphenyl-d14	EPA-8270	**87.0**	02/13/2013	LAP

DS1 - Surrogate outside of control limits due to matrix effect.
U - Analyte analyzed for but not detected at level above reporting limit.
UT - Analyte analyzed for but not detected at level above the MDL.

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ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13010138 -09
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	1/30/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/29/2013 2:00:00 PM
CLIENT SAMPLE ID	MW-10-2.0-3.0-012913	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,4-Dichlorobenzene	EPA-8270 SIM	U	0.0050	1	MG/KG	02/13/2013	LAP
1,2-Dichlorobenzene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
N-Nitroso-Di-N-Propylamine	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Hexachloroethane	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
2,4-Dichlorophenol	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
1,2,4-Trichlorobenzene	EPA-8270 SIM	U	0.010	1	MG/KG	02/13/2013	LAP
Naphthalene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
2-Methylnaphthalene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
1-Methylnaphthalene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Acenaphthylene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Acenaphthene	EPA-8270 SIM	U	0.017	1	MG/KG	02/13/2013	LAP
2,4-Dinitrotoluene	EPA-8270 SIM	U	0.010	1	MG/KG	02/13/2013	LAP
Fluorene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Pentachlorophenol	EPA-8270 SIM	U	0.10	1	MG/KG	02/13/2013	LAP
Phenanthrene	EPA-8270 SIM	**0.021**	0.020	1	MG/KG	02/13/2013	LAP
Anthracene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Fluoranthene	EPA-8270 SIM	**0.029**	0.020	1	MG/KG	02/13/2013	LAP
Pyrene	EPA-8270 SIM	**0.038**	0.020	1	MG/KG	02/13/2013	LAP
3,3-Dichlorobenzidine	EPA-8270 SIM	U	0.10	1	MG/KG	02/13/2013	LAP
Benzo[A]Anthracene	EPA-8270 SIM	**0.014**	0.0065	1	MG/KG	02/13/2013	LAP
Chrysene	EPA-8270 SIM	**0.019**	0.0072	1	MG/KG	02/13/2013	LAP
Benzo[B]Fluoranthene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Benzo[K]Fluoranthene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Benzo[A]Pyrene	EPA-8270 SIM	**0.042**	0.017	1	MG/KG	02/13/2013	LAP
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Dibenz[A,H]Anthracene	EPA-8270 SIM	U	0.018	1	MG/KG	02/13/2013	LAP
Benzo[G,H,I]Perylene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Pyridine	EPA-8270	U	200	1	UG/KG	02/13/2013	LAP
N-Nitrosodimethylamine	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Phenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Aniline	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Bis(2-Chloroethyl)Ether	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Chlorophenol	EPA-8270	ND- UT	35	1	UG/KG	02/13/2013	LAP
1,3-Dichlorobenzene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Benzyl Alcohol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Methylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
3&4-Methylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP

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ALS Laboratory Group A Campbell Brothers Limited Company

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13010138 -09
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	1/30/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/29/2013 2:00:00 PM
CLIENT SAMPLE ID	MW-10-2.0-3.0-012913	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Nitrobenzene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Isophorone	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Nitrophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,4-Dimethylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Benzoic Acid	EPA-8270	U	1000	1	UG/KG	02/13/2013	LAP
Bis(2-Chloroethoxy)Methane	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
4-Chloroaniline	EPA-8270	U	1000	1	UG/KG	02/13/2013	LAP
2,6-Dichlorophenol	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
Hexachlorobutadiene	EPA-8270	U	140	1	UG/KG	02/13/2013	LAP
4-Chloro-3-Methylphenol	EPA-8270	U	500	1	UG/KG	02/13/2013	LAP
Hexachlorocyclopentadiene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,4,6-Trichlorophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,4,5-Trichlorophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Chloronaphthalene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Nitroaniline	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Dimethylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,6-Dinitrotoluene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
3-Nitroaniline	EPA-8270	U	1000	1	UG/KG	02/13/2013	LAP
2,4-Dinitrophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Nitrophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Dibenzofuran	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,3,4,6-Tetrachlorophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Diethylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Chlorophenyl-Phenylether	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Nitroaniline	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
4,6-Dinitro-2-Methylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
N-Nitrosodiphenylamine	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Azobenzene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Bromophenyl-Phenylether	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Hexachlorobenzene	EPA-8270	U	80	1	UG/KG	02/13/2013	LAP
Carbazole	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
Di-N-Butylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Butylbenzylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Di-N-Octylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Mercury	EPA-7471	**0.063**	0.020	1	MG/KG	02/05/2013	RAL
Antimony	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Arsenic	EPA-6020	**5.2**	1.0	5	MG/KG	02/01/2013	RAL

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13010138 -09
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	1/30/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/29/2013 2:00:00 PM
CLIENT SAMPLE ID	MW-10-2.0-3.0-012913	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Beryllium	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Cadmium	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Chromium	EPA-6020	**44**	0.50	5	MG/KG	02/01/2013	RAL
Copper	EPA-6020	**35**	0.50	5	MG/KG	02/01/2013	RAL
Lead	EPA-6020	**28**	0.50	5	MG/KG	02/01/2013	RAL
Nickel	EPA-6020	**44**	0.51	5	MG/KG	02/01/2013	RAL
Selenium	EPA-6020	U	5.0	5	MG/KG	02/01/2013	RAL
Silver	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Thallium	EPA-6020	U	5.0	5	MG/KG	02/01/2013	RAL
Zinc	EPA-6020	**75**	2.9	5	MG/KG	02/01/2013	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
2,4,6-Tribromophenol	EPA-8270 SIM	**76.6**	02/13/2013	LAP
Terphenyl-d14	EPA-8270 SIM	**100**	02/13/2013	LAP
2-Fluorophenol	EPA-8270	**4.39 DS1**	02/13/2013	LAP
Phenol-d5	EPA-8270	**16.7 DS1**	02/13/2013	LAP
Nitrobenzene-d5	EPA-8270	**37.0 DS1**	02/13/2013	LAP
2-Fluorobiphenyl	EPA-8270	**55.7**	02/13/2013	LAP
2,4,6-Tribromophenol	EPA-8270	**76.6**	02/13/2013	LAP
Terphenyl-d14	EPA-8270	**100**	02/13/2013	LAP

UT - Analyte analyzed for but not detected at level above the MDL.
DS1 - Surrogate outside of control limits due to matrix effect.
U - Analyte analyzed for but not detected at level above reporting limit.

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13010138 -10
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	1/30/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/29/2013 2:10:00 PM
CLIENT SAMPLE ID	MW-10-11.0-11.5-012913	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	02/01/2013	DLC
Benzene	EPA-8021	U	0.030	1	MG/KG	02/01/2013	DLC
Toluene	EPA-8021	U	0.050	1	MG/KG	02/01/2013	DLC
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	02/01/2013	DLC
Xylenes	EPA-8021	U	0.20	1	MG/KG	02/01/2013	DLC
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	01/31/2013	EBS
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	01/31/2013	EBS
1,4-Dichlorobenzene	EPA-8270 SIM	U	0.0050	1	MG/KG	02/13/2013	LAP
1,2-Dichlorobenzene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
N-Nitroso-Di-N-Propylamine	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Hexachloroethane	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
2,4-Dichlorophenol	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
1,2,4-Trichlorobenzene	EPA-8270 SIM	U	0.010	1	MG/KG	02/13/2013	LAP
Naphthalene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
2-Methylnaphthalene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
1-Methylnaphthalene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Acenaphthylene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Acenaphthene	EPA-8270 SIM	U	0.017	1	MG/KG	02/13/2013	LAP
2,4-Dinitrotoluene	EPA-8270 SIM	U	0.010	1	MG/KG	02/13/2013	LAP
Fluorene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Pentachlorophenol	EPA-8270 SIM	U	0.10	1	MG/KG	02/13/2013	LAP
Phenanthrene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Anthracene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Fluoranthene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Pyrene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
3,3-Dichlorobenzidine	EPA-8270 SIM	U	0.10	1	MG/KG	02/13/2013	LAP
Benzo[A]Anthracene	EPA-8270 SIM	U	0.0065	1	MG/KG	02/13/2013	LAP
Chrysene	EPA-8270 SIM	U	0.0072	1	MG/KG	02/13/2013	LAP
Benzo[B]Fluoranthene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Benzo[K]Fluoranthene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Benzo[A]Pyrene	EPA-8270 SIM	U	0.017	1	MG/KG	02/13/2013	LAP
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Dibenz[A,H]Anthracene	EPA-8270 SIM	U	0.018	1	MG/KG	02/13/2013	LAP
Benzo[G,H,I]Perylene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Pyridine	EPA-8270	U	200	1	UG/KG	02/13/2013	LAP
N-Nitrosodimethylamine	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Phenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Aniline	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13010138 -10
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	1/30/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/29/2013 2:10:00 PM
CLIENT SAMPLE ID	MW-10-11.0-11.5-012913	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Bis(2-Chloroethyl)Ether	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Chlorophenol	EPA-8270	ND- UT	34	1	UG/KG	02/13/2013	LAP
1,3-Dichlorobenzene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Benzyl Alcohol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Methylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
3&4-Methylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Nitrobenzene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Isophorone	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Nitrophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,4-Dimethylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Benzoic Acid	EPA-8270	U	1000	1	UG/KG	02/13/2013	LAP
Bis(2-Chloroethoxy)Methane	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
4-Chloroaniline	EPA-8270	U	1000	1	UG/KG	02/13/2013	LAP
2,6-Dichlorophenol	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
Hexachlorobutadiene	EPA-8270	U	140	1	UG/KG	02/13/2013	LAP
4-Chloro-3-Methylphenol	EPA-8270	U	500	1	UG/KG	02/13/2013	LAP
Hexachlorocyclopentadiene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,4,6-Trichlorophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,4,5-Trichlorophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Chloronaphthalene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Nitroaniline	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Dimethylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,6-Dinitrotoluene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
3-Nitroaniline	EPA-8270	U	1000	1	UG/KG	02/13/2013	LAP
2,4-Dinitrophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Nitrophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Dibenzofuran	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,3,4,6-Tetrachlorophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Diethylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Chlorophenyl-Phenylether	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Nitroaniline	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
4,6-Dinitro-2-Methylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
N-Nitrosodiphenylamine	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Azobenzene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Bromophenyl-Phenylether	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Hexachlorobenzene	EPA-8270	U	80	1	UG/KG	02/13/2013	LAP
Carbazole	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP

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CERTIFICATE OF ANALYSIS

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CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	1/30/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/29/2013 2:10:00 PM
CLIENT SAMPLE ID	MW-10-11.0-11.5-012913	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Di-N-Butylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Butylbenzylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Di-N-Octylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Mercury	EPA-7471	U	0.020	1	MG/KG	02/05/2013	RAL
Antimony	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Arsenic	EPA-6020	**1.7**	1.0	5	MG/KG	02/01/2013	RAL
Beryllium	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Cadmium	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Chromium	EPA-6020	**38**	0.50	5	MG/KG	02/01/2013	RAL
Copper	EPA-6020	**16**	0.50	5	MG/KG	02/01/2013	RAL
Lead	EPA-6020	**2.1**	0.50	5	MG/KG	02/01/2013	RAL
Nickel	EPA-6020	**38**	0.50	5	MG/KG	02/01/2013	RAL
Selenium	EPA-6020	U	5.0	5	MG/KG	02/01/2013	RAL
Silver	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Thallium	EPA-6020	U	5.0	5	MG/KG	02/01/2013	RAL
Zinc	EPA-6020	**29**	2.9	5	MG/KG	02/01/2013	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**77.6**	02/01/2013	DLC
TFT	EPA-8021	**82.6**	02/01/2013	DLC
C25	NWTPH-DX	**86.8**	01/31/2013	EBS
2,4,6-Tribromophenol	EPA-8270 SIM	**79.7**	02/13/2013	LAP
Terphenyl-d14	EPA-8270 SIM	**101**	02/13/2013	LAP
2-Fluorophenol	EPA-8270	**40.7 DS1**	02/13/2013	LAP
Phenol-d5	EPA-8270	**30.5 DS1**	02/13/2013	LAP
Nitrobenzene-d5	EPA-8270	**71.1**	02/13/2013	LAP
2-Fluorobiphenyl	EPA-8270	**66.1**	02/13/2013	LAP
2,4,6-Tribromophenol	EPA-8270	**79.7**	02/13/2013	LAP
Terphenyl-d14	EPA-8270	**101**	02/13/2013	LAP

DS1 - Surrogate outside of control limits due to matrix effect.
U - Analyte analyzed for but not detected at level above reporting limit.
UT - Analyte analyzed for but not detected at level above the MDL.

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ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13010138 -12
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	1/30/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/30/2013 8:35:00 AM
CLIENT SAMPLE ID	FS-21-3.5-4.0-013013	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,4-Dichlorobenzene	EPA-8270 SIM	U	2.5	500	MG/KG	02/15/2013	LAP
1,2-Dichlorobenzene	EPA-8270 SIM	U	10	500	MG/KG	02/15/2013	LAP
N-Nitroso-Di-N-Propylamine	EPA-8270 SIM	U	10	500	MG/KG	02/15/2013	LAP
Hexachloroethane	EPA-8270 SIM	U	10	500	MG/KG	02/15/2013	LAP
2,4-Dichlorophenol	EPA-8270 SIM	U	10	500	MG/KG	02/15/2013	LAP
1,2,4-Trichlorobenzene	EPA-8270 SIM	U	5.0	500	MG/KG	02/15/2013	LAP
Naphthalene	EPA-8270 SIM	**300**	10	500	MG/KG	02/15/2013	LAP
2-Methylnaphthalene	EPA-8270 SIM	**140**	10	500	MG/KG	02/15/2013	LAP
1-Methylnaphthalene	EPA-8270 SIM	**80**	10	500	MG/KG	02/15/2013	LAP
Acenaphthylene	EPA-8270 SIM	U	10	500	MG/KG	02/15/2013	LAP
Acenaphthene	EPA-8270 SIM	**150**	8.5	500	MG/KG	02/15/2013	LAP
2,4-Dinitrotoluene	EPA-8270 SIM	U	5.0	500	MG/KG	02/15/2013	LAP
Fluorene	EPA-8270 SIM	**130**	10	500	MG/KG	02/15/2013	LAP
Pentachlorophenol	EPA-8270 SIM	U	50	500	MG/KG	02/15/2013	LAP
Phenanthrene	EPA-8270 SIM	**450**	10	500	MG/KG	02/15/2013	LAP
Anthracene	EPA-8270 SIM	**63**	10	500	MG/KG	02/15/2013	LAP
Fluoranthene	EPA-8270 SIM	**200**	10	500	MG/KG	02/15/2013	LAP
Pyrene	EPA-8270 SIM	**190**	10	500	MG/KG	02/15/2013	LAP
3,3-Dichlorobenzidine	EPA-8270 SIM	U	50	500	MG/KG	02/15/2013	LAP
Benzo[A]Anthracene	EPA-8270 SIM	**38**	3.2	500	MG/KG	02/15/2013	LAP
Chrysene	EPA-8270 SIM	**38**	3.6	500	MG/KG	02/15/2013	LAP
Benzo[B]Fluoranthene	EPA-8270 SIM	**20**	10	500	MG/KG	02/15/2013	LAP
Benzo[K]Fluoranthene	EPA-8270 SIM	**23**	10	500	MG/KG	02/15/2013	LAP
Benzo[A]Pyrene	EPA-8270 SIM	**16**	8.5	500	MG/KG	02/15/2013	LAP
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	U	10	500	MG/KG	02/15/2013	LAP
Dibenz[A,H]Anthracene	EPA-8270 SIM	U	9.0	500	MG/KG	02/15/2013	LAP
Benzo[G,H,I]Perylene	EPA-8270 SIM	U	10	500	MG/KG	02/15/2013	LAP
Pyridine	EPA-8270	U	1.00E+05	500	UG/KG	02/15/2013	LAP
N-Nitrosodimethylamine	EPA-8270	U	50000	500	UG/KG	02/15/2013	LAP
Phenol	EPA-8270	U	50000	500	UG/KG	02/15/2013	LAP
Aniline	EPA-8270	U	50000	500	UG/KG	02/15/2013	LAP
Bis(2-Chloroethyl)Ether	EPA-8270	U	50000	500	UG/KG	02/15/2013	LAP
2-Chlorophenol	EPA-8270	ND- UT	17000	500	UG/KG	02/15/2013	LAP
1,3-Dichlorobenzene	EPA-8270	U	50000	500	UG/KG	02/15/2013	LAP
Benzyl Alcohol	EPA-8270	U	50000	500	UG/KG	02/15/2013	LAP
2-Methylphenol	EPA-8270	U	50000	500	UG/KG	02/15/2013	LAP
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	1.20E+05	500	UG/KG	02/15/2013	LAP
3&4-Methylphenol	EPA-8270	U	50000	500	UG/KG	02/15/2013	LAP

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13010138 -12
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	1/30/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/30/2013 8:35:00 AM
CLIENT SAMPLE ID	FS-21-3.5-4.0-013013	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Nitrobenzene	EPA-8270	U	50000	500	UG/KG	02/15/2013	LAP
Isophorone	EPA-8270	U	50000	500	UG/KG	02/15/2013	LAP
2-Nitrophenol	EPA-8270	U	50000	500	UG/KG	02/15/2013	LAP
2,4-Dimethylphenol	EPA-8270	U	50000	500	UG/KG	02/15/2013	LAP
Benzoic Acid	EPA-8270	U	5.00E+05	500	UG/KG	02/15/2013	LAP
Bis(2-Chloroethoxy)Methane	EPA-8270	U	1.20E+05	500	UG/KG	02/15/2013	LAP
4-Chloroaniline	EPA-8270	U	5.00E+05	500	UG/KG	02/15/2013	LAP
2,6-Dichlorophenol	EPA-8270	U	1.20E+05	500	UG/KG	02/15/2013	LAP
Hexachlorobutadiene	EPA-8270	U	50000	500	UG/KG	02/15/2013	LAP
4-Chloro-3-Methylphenol	EPA-8270	U	2.50E+05	500	UG/KG	02/15/2013	LAP
Hexachlorocyclopentadiene	EPA-8270	U	50000	500	UG/KG	02/15/2013	LAP
2,4,6-Trichlorophenol	EPA-8270	U	50000	500	UG/KG	02/15/2013	LAP
2,4,5-Trichlorophenol	EPA-8270	U	50000	500	UG/KG	02/15/2013	LAP
2-Chloronaphthalene	EPA-8270	U	50000	500	UG/KG	02/15/2013	LAP
2-Nitroaniline	EPA-8270	U	50000	500	UG/KG	02/15/2013	LAP
Dimethylphthalate	EPA-8270	U	50000	500	UG/KG	02/15/2013	LAP
2,6-Dinitrotoluene	EPA-8270	U	50000	500	UG/KG	02/15/2013	LAP
3-Nitroaniline	EPA-8270	U	5.00E+05	500	UG/KG	02/15/2013	LAP
2,4-Dinitrophenol	EPA-8270	U	50000	500	UG/KG	02/15/2013	LAP
4-Nitrophenol	EPA-8270	U	50000	500	UG/KG	02/15/2013	LAP
Dibenzofuran	EPA-8270	**94000**	50000	500	UG/KG	02/15/2013	LAP
2,3,4,6-Tetrachlorophenol	EPA-8270	U	50000	500	UG/KG	02/15/2013	LAP
Diethylphthalate	EPA-8270	U	50000	500	UG/KG	02/15/2013	LAP
4-Chlorophenyl-Phenylether	EPA-8270	U	50000	500	UG/KG	02/15/2013	LAP
4-Nitroaniline	EPA-8270	U	1.20E+05	500	UG/KG	02/15/2013	LAP
4,6-Dinitro-2-Methylphenol	EPA-8270	U	50000	500	UG/KG	02/15/2013	LAP
N-Nitrosodiphenylamine	EPA-8270	U	50000	500	UG/KG	02/15/2013	LAP
Azobenzene	EPA-8270	U	50000	500	UG/KG	02/15/2013	LAP
4-Bromophenyl-Phenylether	EPA-8270	U	50000	500	UG/KG	02/15/2013	LAP
Hexachlorobenzene	EPA-8270	U	40000	500	UG/KG	02/15/2013	LAP
Carbazole	EPA-8270	U	1.20E+05	500	UG/KG	02/15/2013	LAP
Di-N-Butylphthalate	EPA-8270	U	50000	500	UG/KG	02/15/2013	LAP
Butylbenzylphthalate	EPA-8270	U	50000	500	UG/KG	02/15/2013	LAP
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	50000	500	UG/KG	02/15/2013	LAP
Di-N-Octylphthalate	EPA-8270	U	50000	500	UG/KG	02/15/2013	LAP
Mercury	EPA-7471	**0.047**	0.020	1	MG/KG	02/05/2013	RAL
Antimony	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Arsenic	EPA-6020	**24**	1.0	5	MG/KG	02/01/2013	RAL

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CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/30/2013 8:35:00 AM
CLIENT SAMPLE ID	FS-21-3.5-4.0-013013	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Beryllium	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Cadmium	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Chromium	EPA-6020	**42**	0.50	5	MG/KG	02/01/2013	RAL
Copper	EPA-6020	**37**	0.50	5	MG/KG	02/01/2013	RAL
Lead	EPA-6020	**9.4**	0.50	5	MG/KG	02/01/2013	RAL
Nickel	EPA-6020	**54**	0.50	5	MG/KG	02/01/2013	RAL
Selenium	EPA-6020	U	5.0	5	MG/KG	02/01/2013	RAL
Silver	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Thallium	EPA-6020	U	5.0	5	MG/KG	02/01/2013	RAL
Zinc	EPA-6020	**66**	2.9	5	MG/KG	02/01/2013	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
2,4,6-Tribromophenol 500X Dilution	EPA-8270 SIM	**109**	02/15/2013	LAP
Terphenyl-d14 500X Dilution	EPA-8270 SIM	**183 DS2**	02/15/2013	LAP
2-Fluorophenol 500X Dilution	EPA-8270	**283 DS2**	02/15/2013	LAP
Phenol-d5 500X Dilution	EPA-8270	**200 DS2**	02/15/2013	LAP
Nitrobenzene-d5 500X Dilution	EPA-8270	**216 DS2**	02/15/2013	LAP
2-Fluorobiphenyl 500X Dilution	EPA-8270	**288 DS2**	02/15/2013	LAP
2,4,6-Tribromophenol 500X Dilution	EPA-8270	**218 DS2**	02/15/2013	LAP
Terphenyl-d14 500X Dilution	EPA-8270	**367 DS2**	02/15/2013	LAP

DS2 - Due to high dilution factor surrogate results should be considered uncontrolled.
U - Analyte analyzed for but not detected at level above reporting limit.
UT - Analyte analyzed for but not detected at level above the MDL.

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DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	**6.7**	3.0	1	MG/KG	02/05/2013	DLC
Benzene	EPA-8021	U	0.030	1	MG/KG	02/05/2013	DLC
Toluene	EPA-8021	U	0.050	1	MG/KG	02/05/2013	DLC
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	02/05/2013	DLC
Xylenes	EPA-8021	U	0.20	1	MG/KG	02/05/2013	DLC
C5-C6 Aliphatics	NWVPH	U	5.0	1	MG/KG	02/08/2013	DLC
>C6-C8 Aliphatics	NWVPH	U	5.0	1	MG/KG	02/08/2013	DLC
>C8-C10 Aliphatics	NWVPH	U	5.0	1	MG/KG	02/08/2013	DLC
>C8-C10 Aromatics	NWVPH	**9.1**	5.0	1	MG/KG	02/08/2013	DLC
Hexane	NWVPH	U	0.20	1	MG/KG	02/08/2013	DLC
TPH-Diesel Range	NWTPH-DX	**4100**	250	10	MG/KG	02/04/2013	EBS
TPH-Oil Range	NWTPH-DX	**510**	500	10	MG/KG	02/04/2013	EBS
>C8-C10 Aliphatics	NWEPH	U	5.0	1	MG/KG	02/01/2013	EBS
>C10-C12 Aliphatics	NWEPH	U	5.0	1	MG/KG	02/01/2013	EBS
>C12-C16 Aliphatics	NWEPH	**28**	5.0	1	MG/KG	02/01/2013	EBS
>C16-C21 Aliphatics	NWEPH	**34**	5.0	1	MG/KG	02/01/2013	EBS
>C21-C34 Aliphatics	NWEPH	**32**	5.0	1	MG/KG	02/01/2013	EBS
>C8-C10 Aromatics	NWEPH	**10**	5.0	1	MG/KG	02/01/2013	EBS
>C10-C12 Aromatics	NWEPH	**330**	5.0	1	MG/KG	02/01/2013	EBS
>C12-C16 Aromatics	NWEPH	**640**	5.0	1	MG/KG	02/01/2013	EBS
>C16-C21 Aromatics	NWEPH	**2300**	5.0	1	MG/KG	02/01/2013	EBS
>C21-C34 Aromatics	NWEPH	**1000**	5.0	1	MG/KG	02/01/2013	EBS
1,4-Dichlorobenzene	EPA-8270 SIM	U	0.0050	1	MG/KG	02/13/2013	LAP
1,2-Dichlorobenzene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
N-Nitroso-Di-N-Propylamine	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Hexachloroethane	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
2,4-Dichlorophenol	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
1,2,4-Trichlorobenzene	EPA-8270 SIM	U	0.010	1	MG/KG	02/13/2013	LAP
Naphthalene	EPA-8270 SIM	**0.87**	0.020	1	MG/KG	02/13/2013	LAP
2-Methylnaphthalene	EPA-8270 SIM	**0.65**	0.020	1	MG/KG	02/13/2013	LAP
1-Methylnaphthalene	EPA-8270 SIM	**0.43**	0.020	1	MG/KG	02/13/2013	LAP
Acenaphthylene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Acenaphthene	EPA-8270 SIM	**0.91**	0.017	1	MG/KG	02/13/2013	LAP
2,4-Dinitrotoluene	EPA-8270 SIM	U	0.010	1	MG/KG	02/13/2013	LAP
Fluorene	EPA-8270 SIM	**0.79**	0.020	1	MG/KG	02/13/2013	LAP
Pentachlorophenol	EPA-8270 SIM	U	0.10	1	MG/KG	02/13/2013	LAP
Phenanthrene	EPA-8270 SIM	**2.6**	0.020	1	MG/KG	02/13/2013	LAP
Anthracene	EPA-8270 SIM	**0.47**	0.020	1	MG/KG	02/13/2013	LAP

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DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Fluoranthene	EPA-8270 SIM	**2.1**	0.020	1	MG/KG	02/13/2013	LAP
Pyrene	EPA-8270 SIM	**2.0**	0.020	1	MG/KG	02/13/2013	LAP
3,3-Dichlorobenzidine	EPA-8270 SIM	U	0.10	1	MG/KG	02/13/2013	LAP
Benzo[A]Anthracene	EPA-8270 SIM	**0.52**	0.0065	1	MG/KG	02/13/2013	LAP
Chrysene	EPA-8270 SIM	**0.48**	0.0072	1	MG/KG	02/13/2013	LAP
Benzo[B]Fluoranthene	EPA-8270 SIM	**0.43**	0.020	1	MG/KG	02/13/2013	LAP
Benzo[K]Fluoranthene	EPA-8270 SIM	**0.27**	0.020	1	MG/KG	02/13/2013	LAP
Benzo[A]Pyrene	EPA-8270 SIM	**0.32**	0.017	1	MG/KG	02/13/2013	LAP
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	**0.044**	0.020	1	MG/KG	02/13/2013	LAP
Dibenz[A,H]Anthracene	EPA-8270 SIM	**0.12**	0.018	1	MG/KG	02/13/2013	LAP
Benzo[G,H,I]Perylene	EPA-8270 SIM	**0.20**	0.020	1	MG/KG	02/13/2013	LAP
Pyridine	EPA-8270	U	200	1	UG/KG	02/13/2013	LAP
N-Nitrosodimethylamine	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Phenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Aniline	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Bis(2-Chloroethyl)Ether	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Chlorophenol	EPA-8270	ND- UT	34	1	UG/KG	02/13/2013	LAP
1,3-Dichlorobenzene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Benzyl Alcohol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Methylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
3&4-Methylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Nitrobenzene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Isophorone	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Nitrophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,4-Dimethylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Benzoic Acid	EPA-8270	U	1000	1	UG/KG	02/13/2013	LAP
Bis(2-Chloroethoxy)Methane	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
4-Chloroaniline	EPA-8270	U	1000	1	UG/KG	02/13/2013	LAP
2,6-Dichlorophenol	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
Hexachlorobutadiene	EPA-8270	U	140	1	UG/KG	02/13/2013	LAP
4-Chloro-3-Methylphenol	EPA-8270	U	500	1	UG/KG	02/13/2013	LAP
Hexachlorocyclopentadiene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,4,6-Trichlorophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,4,5-Trichlorophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Chloronaphthalene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Nitroaniline	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Dimethylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP

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DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
2,6-Dinitrotoluene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
3-Nitroaniline	EPA-8270	U	1000	1	UG/KG	02/13/2013	LAP
2,4-Dinitrophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Nitrophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Dibenzofuran	EPA-8270	**530**	100	1	UG/KG	02/13/2013	LAP
2,3,4,6-Tetrachlorophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Diethylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Chlorophenyl-Phenylether	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Nitroaniline	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
4,6-Dinitro-2-Methylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
N-Nitrosodiphenylamine	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Azobenzene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Bromophenyl-Phenylether	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Hexachlorobenzene	EPA-8270	U	80	1	UG/KG	02/13/2013	LAP
Carbazole	EPA-8270	**560**	250	1	UG/KG	02/13/2013	LAP
Di-N-Butylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Butylbenzylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Di-N-Octylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Mercury	EPA-7471	**0.033**	0.020	1	MG/KG	02/05/2013	RAL
Antimony	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Arsenic	EPA-6020	**3.1**	1.0	5	MG/KG	02/01/2013	RAL
Beryllium	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Cadmium	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Chromium	EPA-6020	**37**	0.50	5	MG/KG	02/01/2013	RAL
Copper	EPA-6020	**21**	0.50	5	MG/KG	02/01/2013	RAL
Lead	EPA-6020	**2.4**	0.50	5	MG/KG	02/01/2013	RAL
Nickel	EPA-6020	**44**	0.50	5	MG/KG	02/01/2013	RAL
Selenium	EPA-6020	U	5.0	5	MG/KG	02/01/2013	RAL
Silver	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Thallium	EPA-6020	U	5.0	5	MG/KG	02/01/2013	RAL
Zinc	EPA-6020	**36**	2.9	5	MG/KG	02/01/2013	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**74.7**	02/05/2013	DLC
TFT	EPA-8021	**84.9**	02/05/2013	DLC
TFT - Aliphatic	NWVPH	**75.2**	02/08/2013	DLC

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DATA RESULTS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT - Aromatic	NWVPH	**77.1**	02/08/2013	DLC
TFT - Hexane	NWVPH	**80.5**	02/08/2013	DLC
C25 10X Dilution	NWTPH-DX	**840 DS3**	02/04/2013	EBS
C25	NWEPH	**106**	02/01/2013	EBS
p-Terphenyl	NWEPH	**165**	02/01/2013	EBS
2,4,6-Tribromophenol	EPA-8270 SIM	**86.4**	02/13/2013	LAP
Terphenyl-d14	EPA-8270 SIM	**93.8**	02/13/2013	LAP
2-Fluorophenol	EPA-8270	**13.3 DS1**	02/13/2013	LAP
Phenol-d5	EPA-8270	**31.5 DS1**	02/13/2013	LAP
Nitrobenzene-d5	EPA-8270	**64.9**	02/13/2013	LAP
2-Fluorobiphenyl	EPA-8270	**77.0**	02/13/2013	LAP
2,4,6-Tribromophenol	EPA-8270	**86.4**	02/13/2013	LAP
Terphenyl-d14	EPA-8270	**93.8**	02/13/2013	LAP

DS1 - Surrogate outside of control limits due to matrix effect.
DS3 - Surrogate outside of control limits due to coeluting compounds.
U - Analyte analyzed for but not detected at level above reporting limit.
UT - Analyte analyzed for but not detected at level above the MDL.
Chromatogram indicates that it is likely that sample contains highly weathered gasoline, an unidentified diesel range product and an unidentified oil range product.

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ALS Laboratory Group A Campbell Brothers Limited Company

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13010138 -14
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	1/30/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/30/2013 10:00:00 AM
CLIENT SAMPLE ID	FS-21-13.5-14.0-013013	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	**72**	6.0	2	MG/KG	02/04/2013	DLC
Benzene	EPA-8021	U	0.060	2	MG/KG	02/04/2013	DLC
Toluene	EPA-8021	U	0.10	2	MG/KG	02/04/2013	DLC
Ethylbenzene	EPA-8021	**0.18**	0.10	2	MG/KG	02/04/2013	DLC
Xylenes	EPA-8021	**0.60**	0.40	2	MG/KG	02/04/2013	DLC
TPH-Diesel Range	NWTPH-DX	**5600**	250	10	MG/KG	02/01/2013	EBS
TPH-Oil Range	NWTPH-DX	U	670	10	MG/KG	02/01/2013	EBS
1,4-Dichlorobenzene	EPA-8270 SIM	U	0.50	100	MG/KG	02/14/2013	LAP
1,2-Dichlorobenzene	EPA-8270 SIM	U	2.0	100	MG/KG	02/14/2013	LAP
N-Nitroso-Di-N-Propylamine	EPA-8270 SIM	U	2.0	100	MG/KG	02/14/2013	LAP
Hexachloroethane	EPA-8270 SIM	U	2.0	100	MG/KG	02/14/2013	LAP
2,4-Dichlorophenol	EPA-8270 SIM	U	2.0	100	MG/KG	02/14/2013	LAP
1,2,4-Trichlorobenzene	EPA-8270 SIM	U	1.0	100	MG/KG	02/14/2013	LAP
Naphthalene	EPA-8270 SIM	**320**	2.0	100	MG/KG	02/14/2013	LAP
2-Methylnaphthalene	EPA-8270 SIM	**130**	2.0	100	MG/KG	02/14/2013	LAP
1-Methylnaphthalene	EPA-8270 SIM	**73**	2.0	100	MG/KG	02/14/2013	LAP
Acenaphthylene	EPA-8270 SIM	U	2.0	100	MG/KG	02/14/2013	LAP
Acenaphthene	EPA-8270 SIM	**120**	1.7	100	MG/KG	02/14/2013	LAP
2,4-Dinitrotoluene	EPA-8270 SIM	U	1.0	100	MG/KG	02/14/2013	LAP
Fluorene	EPA-8270 SIM	**100**	2.0	100	MG/KG	02/14/2013	LAP
Pentachlorophenol	EPA-8270 SIM	U	10	100	MG/KG	02/14/2013	LAP
Phenanthrene	EPA-8270 SIM	**330**	2.0	100	MG/KG	02/14/2013	LAP
Anthracene	EPA-8270 SIM	**40**	2.0	100	MG/KG	02/14/2013	LAP
Fluoranthene	EPA-8270 SIM	**130**	2.0	100	MG/KG	02/14/2013	LAP
Pyrene	EPA-8270 SIM	**120**	2.0	100	MG/KG	02/14/2013	LAP
3,3-Dichlorobenzidine	EPA-8270 SIM	U	10	100	MG/KG	02/14/2013	LAP
Benzo[A]Anthracene	EPA-8270 SIM	**24**	0.65	100	MG/KG	02/14/2013	LAP
Chrysene	EPA-8270 SIM	**24**	0.72	100	MG/KG	02/14/2013	LAP
Benzo[B]Fluoranthene	EPA-8270 SIM	**16**	2.0	100	MG/KG	02/14/2013	LAP
Benzo[K]Fluoranthene	EPA-8270 SIM	**12**	2.0	100	MG/KG	02/14/2013	LAP
Benzo[A]Pyrene	EPA-8270 SIM	**16**	1.7	100	MG/KG	02/14/2013	LAP
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	**2.1**	2.0	100	MG/KG	02/14/2013	LAP
Dibenz[A,H]Anthracene	EPA-8270 SIM	**4.7**	1.8	100	MG/KG	02/14/2013	LAP
Benzo[G,H,I]Perylene	EPA-8270 SIM	**8.1**	2.0	100	MG/KG	02/14/2013	LAP
Pyridine	EPA-8270	U	20000	100	UG/KG	02/14/2013	LAP
N-Nitrosodimethylamine	EPA-8270	U	10000	100	UG/KG	02/14/2013	LAP
Phenol	EPA-8270	U	10000	100	UG/KG	02/14/2013	LAP
Aniline	EPA-8270	U	10000	100	UG/KG	02/14/2013	LAP

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13010138 -14
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	1/30/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/30/2013 10:00:00 AM
CLIENT SAMPLE ID	FS-21-13.5-14.0-013013	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Bis(2-Chloroethyl)Ether	EPA-8270	U	10000	100	UG/KG	02/14/2013	LAP
2-Chlorophenol	EPA-8270	ND- UT	5400	100	UG/KG	02/14/2013	LAP
1,3-Dichlorobenzene	EPA-8270	U	10000	100	UG/KG	02/14/2013	LAP
Benzyl Alcohol	EPA-8270	U	10000	100	UG/KG	02/14/2013	LAP
2-Methylphenol	EPA-8270	U	10000	100	UG/KG	02/14/2013	LAP
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	25000	100	UG/KG	02/14/2013	LAP
3&4-Methylphenol	EPA-8270	U	10000	100	UG/KG	02/14/2013	LAP
Nitrobenzene	EPA-8270	U	10000	100	UG/KG	02/14/2013	LAP
Isophorone	EPA-8270	U	10000	100	UG/KG	02/14/2013	LAP
2-Nitrophenol	EPA-8270	U	10000	100	UG/KG	02/14/2013	LAP
2,4-Dimethylphenol	EPA-8270	U	10000	100	UG/KG	02/14/2013	LAP
Benzoic Acid	EPA-8270	U	1.00E+05	100	UG/KG	02/14/2013	LAP
Bis(2-Chloroethoxy)Methane	EPA-8270	U	25000	100	UG/KG	02/14/2013	LAP
4-Chloroaniline	EPA-8270	U	1.00E+05	100	UG/KG	02/14/2013	LAP
2,6-Dichlorophenol	EPA-8270	U	25000	100	UG/KG	02/14/2013	LAP
Hexachlorobutadiene	EPA-8270	U	10000	100	UG/KG	02/14/2013	LAP
4-Chloro-3-Methylphenol	EPA-8270	U	50000	100	UG/KG	02/14/2013	LAP
Hexachlorocyclopentadiene	EPA-8270	U	10000	100	UG/KG	02/14/2013	LAP
2,4,6-Trichlorophenol	EPA-8270	U	10000	100	UG/KG	02/14/2013	LAP
2,4,5-Trichlorophenol	EPA-8270	U	10000	100	UG/KG	02/14/2013	LAP
2-Chloronaphthalene	EPA-8270	U	10000	100	UG/KG	02/14/2013	LAP
2-Nitroaniline	EPA-8270	U	10000	100	UG/KG	02/14/2013	LAP
Dimethylphthalate	EPA-8270	U	10000	100	UG/KG	02/14/2013	LAP
2,6-Dinitrotoluene	EPA-8270	U	10000	100	UG/KG	02/14/2013	LAP
3-Nitroaniline	EPA-8270	U	1.00E+05	100	UG/KG	02/14/2013	LAP
2,4-Dinitrophenol	EPA-8270	U	10000	100	UG/KG	02/14/2013	LAP
4-Nitrophenol	EPA-8270	U	10000	100	UG/KG	02/14/2013	LAP
Dibenzofuran	EPA-8270	**76000**	10000	100	UG/KG	02/14/2013	LAP
2,3,4,6-Tetrachlorophenol	EPA-8270	U	10000	100	UG/KG	02/14/2013	LAP
Diethylphthalate	EPA-8270	U	10000	100	UG/KG	02/14/2013	LAP
4-Chlorophenyl-Phenylether	EPA-8270	U	10000	100	UG/KG	02/14/2013	LAP
4-Nitroaniline	EPA-8270	U	25000	100	UG/KG	02/14/2013	LAP
4,6-Dinitro-2-Methylphenol	EPA-8270	U	10000	100	UG/KG	02/14/2013	LAP
N-Nitrosodiphenylamine	EPA-8270	U	10000	100	UG/KG	02/14/2013	LAP
Azobenzene	EPA-8270	U	10000	100	UG/KG	02/14/2013	LAP
4-Bromophenyl-Phenylether	EPA-8270	U	10000	100	UG/KG	02/14/2013	LAP
Hexachlorobenzene	EPA-8270	U	8000	100	UG/KG	02/14/2013	LAP
Carbazole	EPA-8270	**110000**	25000	100	UG/KG	02/14/2013	LAP

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE:	3/20/2013
		ALS JOB#:	EV13010138
		ALS SAMPLE#:	-14
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	1/30/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/30/2013 10:00:00 AM
CLIENT SAMPLE ID	FS-21-13.5-14.0-013013	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Di-N-Butylphthalate	EPA-8270	U	10000	100	UG/KG	02/14/2013	LAP
Butylbenzylphthalate	EPA-8270	U	10000	100	UG/KG	02/14/2013	LAP
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	10000	100	UG/KG	02/14/2013	LAP
Di-N-Octylphthalate	EPA-8270	U	10000	100	UG/KG	02/14/2013	LAP
Mercury	EPA-7471	**0.026**	0.020	1	MG/KG	02/05/2013	RAL
Antimony	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Arsenic	EPA-6020	**4.0**	1.0	5	MG/KG	02/01/2013	RAL
Beryllium	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Cadmium	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Chromium	EPA-6020	**34**	0.50	5	MG/KG	02/01/2013	RAL
Copper	EPA-6020	**24**	0.50	5	MG/KG	02/01/2013	RAL
Lead	EPA-6020	**15**	0.50	5	MG/KG	02/01/2013	RAL
Nickel	EPA-6020	**32**	0.56	5	MG/KG	02/01/2013	RAL
Selenium	EPA-6020	U	5.0	5	MG/KG	02/01/2013	RAL
Silver	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Thallium	EPA-6020	U	5.5	5	MG/KG	02/01/2013	RAL
Zinc	EPA-6020	**34**	3.2	5	MG/KG	02/01/2013	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT 2X Dilution	NWTPH-GX	**75.9**	02/04/2013	DLC
TFT 2X Dilution	EPA-8021	**85.0**	02/04/2013	DLC
C25 10X Dilution	NWTPH-DX	**549 DS3**	02/01/2013	EBS
2,4,6-Tribromophenol 100X Dilution	EPA-8270 SIM	**246 GS1**	02/14/2013	LAP
Terphenyl-d14 100X Dilution	EPA-8270 SIM	**103**	02/14/2013	LAP
2-Fluorophenol 100X Dilution	EPA-8270	**91.9**	02/14/2013	LAP
Phenol-d5 100X Dilution	EPA-8270	**56.5**	02/14/2013	LAP
Nitrobenzene-d5 100X Dilution	EPA-8270	**71.8**	02/14/2013	LAP
2-Fluorobiphenyl 100X Dilution	EPA-8270	**95.0**	02/14/2013	LAP
2,4,6-Tribromophenol 100X Dilution	EPA-8270	**246 DS1**	02/14/2013	LAP
Terphenyl-d14 100X Dilution	EPA-8270	**103**	02/14/2013	LAP

DS1 - Surrogate outside of control limits due to matrix effect.
GS1 - Surrogate outside of control limits due to matrix effect.
U - Analyte analyzed for but not detected at level above reporting limit.
UT - Analyte analyzed for but not detected at level above the MDL.
DS3 - Surrogate outside of control limits due to coeluting compounds.
Chromatogram indicates that it is likely that sample contains highly weathered gasoline and an unidentified diesel range product.

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ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13010138 -15
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	1/30/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/30/2013 10:50:00 AM
CLIENT SAMPLE ID	FS-21-GW-013013	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	**92**	50	1	UG/L	01/31/2013	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	01/31/2013	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	01/31/2013	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	01/31/2013	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	01/31/2013	DLC
TPH-Diesel Range	NWTPH-DX	**840**	130	1	UG/L	02/01/2013	EBS
TPH-Oil Range	NWTPH-DX	U	250	1	UG/L	02/01/2013	EBS
Naphthalene	EPA-8270 SIM	**240**	0.020	1	UG/L	02/12/2013	LAP
2-Methylnaphthalene	EPA-8270 SIM	**59**	0.020	1	UG/L	02/12/2013	LAP
1-Methylnaphthalene	EPA-8270 SIM	**39**	0.020	1	UG/L	02/12/2013	LAP
Acenaphthylene	EPA-8270 SIM	**0.25**	0.020	1	UG/L	02/12/2013	LAP
Acenaphthene	EPA-8270 SIM	**65**	0.020	1	UG/L	02/12/2013	LAP
Fluorene	EPA-8270 SIM	**37**	0.020	1	UG/L	02/12/2013	LAP
Phenanthrene	EPA-8270 SIM	**68**	0.020	1	UG/L	02/12/2013	LAP
Anthracene	EPA-8270 SIM	**71**	0.020	1	UG/L	02/12/2013	LAP
Fluoranthene	EPA-8270 SIM	**9.6**	0.020	1	UG/L	02/12/2013	LAP
Pyrene	EPA-8270 SIM	**8.1**	0.033	1	UG/L	02/12/2013	LAP
Benzo[A]Anthracene	EPA-8270 SIM	**0.49**	0.018	1	UG/L	02/12/2013	LAP
Chrysene	EPA-8270 SIM	**0.42**	0.0064	1	UG/L	02/12/2013	LAP
Benzo[B]Fluoranthene	EPA-8270 SIM	**0.13**	0.010	1	UG/L	02/12/2013	LAP
Benzo[K]Fluoranthene	EPA-8270 SIM	**0.12**	0.0070	1	UG/L	02/12/2013	LAP
Benzo[A]Pyrene	EPA-8270 SIM	**0.087**	0.0096	1	UG/L	02/12/2013	LAP
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	**0.012 JT**	0.0050	1	UG/L	02/12/2013	LAP
Dibenz[A,H]Anthracene	EPA-8270 SIM	**0.028**	0.0062	1	UG/L	02/12/2013	LAP
Benzo[G,H,I]Perylene	EPA-8270 SIM	**0.057**	0.020	1	UG/L	02/12/2013	LAP
Pyridine	EPA-8270	U	4.0	1	UG/L	02/12/2013	LAP
N-Nitrosodimethylamine	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Phenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Aniline	EPA-8270	U	4.0	1	UG/L	02/12/2013	LAP
Bis(2-Chloroethyl)Ether	EPA-8270	U	1.0	1	UG/L	02/12/2013	LAP
2-Chlorophenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
1,3-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
1,4-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Benzyl Alcohol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
1,2-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
3&4-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP

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CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	1/30/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/30/2013 10:50:00 AM
CLIENT SAMPLE ID	FS-21-GW-013013	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
N-Nitroso-Di-N-Propylamine	EPA-8270	ND- UT	0.70	1	UG/L	02/12/2013	LAP
Hexachloroethane	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Nitrobenzene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Isophorone	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2-Nitrophenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2,4-Dimethylphenol	EPA-8270	**5.1**	2.0	1	UG/L	02/12/2013	LAP
Benzoic Acid	EPA-8270	U	10	1	UG/L	02/12/2013	LAP
Bis(2-Chloroethoxy)Methane	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2,4-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
1,2,4-Trichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
4-Chloroaniline	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2,6-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Hexachlorobutadiene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
4-Chloro-3-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Hexachlorocyclopentadiene	EPA-8270	U	4.0	1	UG/L	02/12/2013	LAP
2,4,6-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2,4,5-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2-Chloronaphthalene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2-Nitroaniline	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Dimethylphthalate	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2,6-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
3-Nitroaniline	EPA-8270	U	5.0	1	UG/L	02/12/2013	LAP
2,4-Dinitrophenol	EPA-8270	U	10	1	UG/L	02/12/2013	LAP
4-Nitrophenol	EPA-8270	U	5.0	1	UG/L	02/12/2013	LAP
Dibenzofuran	EPA-8270	**31**	2.0	1	UG/L	02/12/2013	LAP
2,4-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2,3,4,6-Tetrachlorophenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Diethylphthalate	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
4-Chlorophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
4-Nitroaniline	EPA-8270	U	4.0	1	UG/L	02/12/2013	LAP
4,6-Dinitro-2-Methylphenol	EPA-8270	U	4.0	1	UG/L	02/12/2013	LAP
N-Nitrosodiphenylamine	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Azobenzene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
4-Bromophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Hexachlorobenzene	EPA-8270	U	1.0	1	UG/L	02/12/2013	LAP
Pentachlorophenol	EPA-8270	U	5.0	1	UG/L	02/12/2013	LAP
Carbazole	EPA-8270	**48**	2.0	1	UG/L	02/12/2013	LAP
Di-N-Butylphthalate	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
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ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13010138 -15
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	1/30/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/30/2013 10:50:00 AM
CLIENT SAMPLE ID	FS-21-GW-013013	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Butylbenzylphthalate	EPA-8270	U	1.0	1	UG/L	02/12/2013	LAP
3,3-Dichlorobenzidine	EPA-8270	U	5.0	1	UG/L	02/12/2013	LAP
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Di-N-Octylphthalate	EPA-8270	U	1.0	1	UG/L	02/12/2013	LAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**78.4**	01/31/2013	DLC
TFT	EPA-8021	**102**	01/31/2013	DLC
C25	NWTPH-DX	**93.5**	02/01/2013	EBS
Terphenyl-d14	EPA-8270 SIM	**91.2**	02/12/2013	LAP
2-Fluorophenol	EPA-8270	**47.6**	02/12/2013	LAP
Phenol-d5	EPA-8270	**25.5**	02/12/2013	LAP
Nitrobenzene-d5	EPA-8270	**85.0**	02/12/2013	LAP
2-Fluorobiphenyl	EPA-8270	**77.6**	02/12/2013	LAP
2,4,6-Tribromophenol	EPA-8270	**80.0**	02/12/2013	LAP
Terphenyl-d14	EPA-8270	**91.2**	02/12/2013	LAP

JT - Analyte was positively identified. Reported result is an estimate below the associated quantitation limit but above the MDL.
UT - Analyte analyzed for but not detected at level above the MDL.
U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains highly weathered gasoline and an unidentified diesel range product.

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13010138 -16
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	1/30/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/30/2013 11:30:00 AM
CLIENT SAMPLE ID	FS-79-GW-013013	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	**100**	50	1	UG/L	01/31/2013	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	01/31/2013	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	01/31/2013	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	01/31/2013	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	01/31/2013	DLC
TPH-Diesel Range	NWTPH-DX	**730**	130	1	UG/L	02/01/2013	EBS
TPH-Oil Range	NWTPH-DX	U	250	1	UG/L	02/01/2013	EBS
Naphthalene	EPA-8270 SIM	**210**	0.020	1	UG/L	02/12/2013	LAP
2-Methylnaphthalene	EPA-8270 SIM	**45**	0.020	1	UG/L	02/12/2013	LAP
1-Methylnaphthalene	EPA-8270 SIM	**30**	0.020	1	UG/L	02/12/2013	LAP
Acenaphthylene	EPA-8270 SIM	**0.19**	0.020	1	UG/L	02/12/2013	LAP
Acenaphthene	EPA-8270 SIM	**48**	0.020	1	UG/L	02/12/2013	LAP
Fluorene	EPA-8270 SIM	**29**	0.020	1	UG/L	02/12/2013	LAP
Phenanthrene	EPA-8270 SIM	**58**	0.020	1	UG/L	02/12/2013	LAP
Anthracene	EPA-8270 SIM	**5.2**	0.020	1	UG/L	02/12/2013	LAP
Fluoranthene	EPA-8270 SIM	**9.1**	0.020	1	UG/L	02/12/2013	LAP
Pyrene	EPA-8270 SIM	**7.0**	0.033	1	UG/L	02/12/2013	LAP
Benzo[A]Anthracene	EPA-8270 SIM	U	0.018	1	UG/L	02/12/2013	LAP
Chrysene	EPA-8270 SIM	**0.29**	0.0064	1	UG/L	02/12/2013	LAP
Benzo[B]Fluoranthene	EPA-8270 SIM	**0.067**	0.010	1	UG/L	02/12/2013	LAP
Benzo[K]Fluoranthene	EPA-8270 SIM	**0.063**	0.0070	1	UG/L	02/12/2013	LAP
Benzo[A]Pyrene	EPA-8270 SIM	**0.040**	0.0096	1	UG/L	02/12/2013	LAP
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	ND- UT	0.0050	1	UG/L	02/12/2013	LAP
Dibenz[A,H]Anthracene	EPA-8270 SIM	**0.0094 JT**	0.0062	1	UG/L	02/12/2013	LAP
Benzo[G,H,I]Perylene	EPA-8270 SIM	U	0.020	1	UG/L	02/12/2013	LAP
Pyridine	EPA-8270	U	4.0	1	UG/L	02/12/2013	LAP
N-Nitrosodimethylamine	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Phenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Aniline	EPA-8270	U	4.0	1	UG/L	02/12/2013	LAP
Bis(2-Chloroethyl)Ether	EPA-8270	U	1.0	1	UG/L	02/12/2013	LAP
2-Chlorophenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
1,3-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
1,4-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Benzyl Alcohol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
1,2-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
3&4-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13010138 -16
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	1/30/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/30/2013 11:30:00 AM
CLIENT SAMPLE ID	FS-79-GW-013013	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
N-Nitroso-Di-N-Propylamine	EPA-8270	ND- UT	0.70	1	UG/L	02/12/2013	LAP
Hexachloroethane	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Nitrobenzene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Isophorone	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2-Nitrophenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2,4-Dimethylphenol	EPA-8270	**4.7**	2.0	1	UG/L	02/12/2013	LAP
Benzoic Acid	EPA-8270	U	10	1	UG/L	02/12/2013	LAP
Bis(2-Chloroethoxy)Methane	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2,4-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
1,2,4-Trichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
4-Chloroaniline	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2,6-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Hexachlorobutadiene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
4-Chloro-3-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Hexachlorocyclopentadiene	EPA-8270	U	4.0	1	UG/L	02/12/2013	LAP
2,4,6-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2,4,5-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2-Chloronaphthalene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2-Nitroaniline	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Dimethylphthalate	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2,6-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
3-Nitroaniline	EPA-8270	U	5.0	1	UG/L	02/12/2013	LAP
2,4-Dinitrophenol	EPA-8270	U	10	1	UG/L	02/12/2013	LAP
4-Nitrophenol	EPA-8270	U	5.0	1	UG/L	02/12/2013	LAP
Dibenzofuran	EPA-8270	**24**	2.0	1	UG/L	02/12/2013	LAP
2,4-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2,3,4,6-Tetrachlorophenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Diethylphthalate	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
4-Chlorophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
4-Nitroaniline	EPA-8270	U	4.0	1	UG/L	02/12/2013	LAP
4,6-Dinitro-2-Methylphenol	EPA-8270	U	4.0	1	UG/L	02/12/2013	LAP
N-Nitrosodiphenylamine	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Azobenzene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
4-Bromophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Hexachlorobenzene	EPA-8270	U	1.0	1	UG/L	02/12/2013	LAP
Pentachlorophenol	EPA-8270	U	5.0	1	UG/L	02/12/2013	LAP
Carbazole	EPA-8270	**39**	2.0	1	UG/L	02/12/2013	LAP
Di-N-Butylphthalate	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP

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ALS Laboratory Group A Campbell Brothers Limited Company

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE:	3/20/2013
		ALS JOB#:	EV13010138
		ALS SAMPLE#:	-16
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	1/30/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/30/2013 11:30:00 AM
CLIENT SAMPLE ID	FS-79-GW-013013	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Butylbenzylphthalate	EPA-8270	U	1.0	1	UG/L	02/12/2013	LAP
3,3-Dichlorobenzidine	EPA-8270	U	5.0	1	UG/L	02/12/2013	LAP
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Di-N-Octylphthalate	EPA-8270	U	1.0	1	UG/L	02/12/2013	LAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**77.5**	01/31/2013	DLC
TFT	EPA-8021	**99.5**	01/31/2013	DLC
C25	NWTPH-DX	**93.9**	02/01/2013	EBS
Terphenyl-d14	EPA-8270 SIM	**84.6**	02/12/2013	LAP
2-Fluorophenol	EPA-8270	**36.2**	02/12/2013	LAP
Phenol-d5	EPA-8270	**23.7**	02/12/2013	LAP
Nitrobenzene-d5	EPA-8270	**81.5**	02/12/2013	LAP
2-Fluorobiphenyl	EPA-8270	**71.6**	02/12/2013	LAP
2,4,6-Tribromophenol	EPA-8270	**71.0**	02/12/2013	LAP
Terphenyl-d14	EPA-8270	**84.6**	02/12/2013	LAP

JT - Analyte was positively identified. Reported result is an estimate below the associated quantitation limit but above the MDL.
U - Analyte analyzed for but not detected at level above reporting limit.
UT - Analyte analyzed for but not detected at level above the MDL.
Chromatogram indicates that it is likely that sample contains highly weathered gasoline and an unidentified diesel range product.

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ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13010138 -17
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	1/30/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/30/2013 11:25:00 AM
CLIENT SAMPLE ID	FS-21-22.0-22.5-013013	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	02/01/2013	DLC
Benzene	EPA-8021	U	0.030	1	MG/KG	02/01/2013	DLC
Toluene	EPA-8021	U	0.050	1	MG/KG	02/01/2013	DLC
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	02/01/2013	DLC
Xylenes	EPA-8021	U	0.20	1	MG/KG	02/01/2013	DLC
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	01/31/2013	EBS
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	01/31/2013	EBS
1,4-Dichlorobenzene	EPA-8270 SIM	U	0.0050	1	MG/KG	02/13/2013	LAP
1,2-Dichlorobenzene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
N-Nitroso-Di-N-Propylamine	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Hexachloroethane	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
2,4-Dichlorophenol	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
1,2,4-Trichlorobenzene	EPA-8270 SIM	U	0.010	1	MG/KG	02/13/2013	LAP
Naphthalene	EPA-8270 SIM	**0.024**	0.020	1	MG/KG	02/13/2013	LAP
2-Methylnaphthalene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
1-Methylnaphthalene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Acenaphthylene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Acenaphthene	EPA-8270 SIM	**0.036**	0.017	1	MG/KG	02/13/2013	LAP
2,4-Dinitrotoluene	EPA-8270 SIM	U	0.010	1	MG/KG	02/13/2013	LAP
Fluorene	EPA-8270 SIM	**0.044**	0.020	1	MG/KG	02/13/2013	LAP
Pentachlorophenol	EPA-8270 SIM	U	0.10	1	MG/KG	02/13/2013	LAP
Phenanthrene	EPA-8270 SIM	**0.18**	0.020	1	MG/KG	02/13/2013	LAP
Anthracene	EPA-8270 SIM	**0.021**	0.020	1	MG/KG	02/13/2013	LAP
Fluoranthene	EPA-8270 SIM	**0.12**	0.020	1	MG/KG	02/13/2013	LAP
Pyrene	EPA-8270 SIM	**0.098**	0.020	1	MG/KG	02/13/2013	LAP
3,3-Dichlorobenzidine	EPA-8270 SIM	U	0.10	1	MG/KG	02/13/2013	LAP
Benzo[A]Anthracene	EPA-8270 SIM	**0.021**	0.0065	1	MG/KG	02/13/2013	LAP
Chrysene	EPA-8270 SIM	**0.018**	0.0072	1	MG/KG	02/13/2013	LAP
Benzo[B]Fluoranthene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Benzo[K]Fluoranthene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Benzo[A]Pyrene	EPA-8270 SIM	U	0.017	1	MG/KG	02/13/2013	LAP
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Dibenz[A,H]Anthracene	EPA-8270 SIM	U	0.018	1	MG/KG	02/13/2013	LAP
Benzo[G,H,I]Perylene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Pyridine	EPA-8270	U	200	1	UG/KG	02/13/2013	LAP
N-Nitrosodimethylamine	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Phenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Aniline	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13010138 -17
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	1/30/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/30/2013 11:25:00 AM
CLIENT SAMPLE ID	FS-21-22.0-22.5-013013	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Bis(2-Chloroethyl)Ether	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Chlorophenol	EPA-8270	ND- UT	35	1	UG/KG	02/13/2013	LAP
1,3-Dichlorobenzene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Benzyl Alcohol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Methylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
3&4-Methylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Nitrobenzene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Isophorone	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Nitrophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,4-Dimethylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Benzoic Acid	EPA-8270	U	1000	1	UG/KG	02/13/2013	LAP
Bis(2-Chloroethoxy)Methane	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
4-Chloroaniline	EPA-8270	U	1000	1	UG/KG	02/13/2013	LAP
2,6-Dichlorophenol	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
Hexachlorobutadiene	EPA-8270	U	140	1	UG/KG	02/13/2013	LAP
4-Chloro-3-Methylphenol	EPA-8270	U	500	1	UG/KG	02/13/2013	LAP
Hexachlorocyclopentadiene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,4,6-Trichlorophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,4,5-Trichlorophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Chloronaphthalene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Nitroaniline	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Dimethylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,6-Dinitrotoluene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
3-Nitroaniline	EPA-8270	U	1000	1	UG/KG	02/13/2013	LAP
2,4-Dinitrophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Nitrophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Dibenzofuran	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,3,4,6-Tetrachlorophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Diethylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Chlorophenyl-Phenylether	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Nitroaniline	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
4,6-Dinitro-2-Methylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
N-Nitrosodiphenylamine	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Azobenzene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Bromophenyl-Phenylether	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Hexachlorobenzene	EPA-8270	U	80	1	UG/KG	02/13/2013	LAP
Carbazole	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP

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ALS Laboratory Group A Campbell Brothers Limited Company

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13010138 -17
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	1/30/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/30/2013 11:25:00 AM
CLIENT SAMPLE ID	FS-21-22.0-22.5-013013	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Di-N-Butylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Butylbenzylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Di-N-Octylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Mercury	EPA-7471	U	0.020	1	MG/KG	02/05/2013	RAL
Antimony	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Arsenic	EPA-6020	**3.0**	1.0	5	MG/KG	02/01/2013	RAL
Beryllium	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Cadmium	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Chromium	EPA-6020	**38**	0.50	5	MG/KG	02/01/2013	RAL
Copper	EPA-6020	**17**	0.50	5	MG/KG	02/01/2013	RAL
Lead	EPA-6020	**1.6**	0.50	5	MG/KG	02/01/2013	RAL
Nickel	EPA-6020	**47**	0.50	5	MG/KG	02/01/2013	RAL
Selenium	EPA-6020	U	5.0	5	MG/KG	02/01/2013	RAL
Silver	EPA-6020	U	0.50	5	MG/KG	02/01/2013	RAL
Thallium	EPA-6020	U	4.9	5	MG/KG	02/01/2013	RAL
Zinc	EPA-6020	**24**	2.9	5	MG/KG	02/01/2013	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**84.6**	02/01/2013	DLC
TFT	EPA-8021	**90.4**	02/01/2013	DLC
C25	NWTPH-DX	**84.2**	01/31/2013	EBS
2,4,6-Tribromophenol	EPA-8270 SIM	**65.9**	02/13/2013	LAP
Terphenyl-d14	EPA-8270 SIM	**84.6**	02/13/2013	LAP
2-Fluorophenol	EPA-8270	**66.6**	02/13/2013	LAP
Phenol-d5	EPA-8270	**42.3**	02/13/2013	LAP
Nitrobenzene-d5	EPA-8270	**70.0**	02/13/2013	LAP
2-Fluorobiphenyl	EPA-8270	**73.0**	02/13/2013	LAP
2,4,6-Tribromophenol	EPA-8270	**65.9**	02/13/2013	LAP
Terphenyl-d14	EPA-8270	**84.6**	02/13/2013	LAP

U - Analyte analyzed for but not detected at level above reporting limit.
UT - Analyte analyzed for but not detected at level above the MDL.

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13010138 -18
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	1/30/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/29/2013 12:00:00 PM
CLIENT SAMPLE ID	FS-19-TB-012913	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	01/31/2013	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	01/31/2013	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	01/31/2013	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	01/31/2013	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	01/31/2013	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**96.2**	01/31/2013	DLC
TFT	EPA-8021	**123**	01/31/2013	DLC

U - Analyte analyzed for but not detected at level above reporting limit.

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13010138 -19
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	1/30/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/30/2013 12:00:00 PM
CLIENT SAMPLE ID	FS-21-TB-013013	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	01/31/2013	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	01/31/2013	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	01/31/2013	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	01/31/2013	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	01/31/2013	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**78.7**	01/31/2013	DLC
TFT	EPA-8021	**108**	01/31/2013	DLC

U - Analyte analyzed for but not detected at level above reporting limit.

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS SDG#: WDOE ACCREDITATION:	3/20/2013 EV13010138 C601
CLIENT CONTACT:	Stephen Bentsen		
CLIENT PROJECT:	POB - Harris		

LABORATORY BLANK RESULTS

MBG-013013S - Batch 3411 - Soil by NWTPH-GX

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	01/30/2013	DLC

MBG-013113W - Batch 3424 - Water by NWTPH-GX

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	01/31/2013	DLC

MB-013013S - Batch 3411 - Soil by EPA-8021

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	U	0.030	1	MG/KG	01/30/2013	DLC
Toluene	EPA-8021	U	0.050	1	MG/KG	01/30/2013	DLC
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	01/30/2013	DLC
Xylenes	EPA-8021	U	0.20	1	MG/KG	01/30/2013	DLC

MB-013113W - Batch 3424 - Water by EPA-8021

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	U	1.0	1	UG/L	01/31/2013	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	01/31/2013	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	01/31/2013	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	01/31/2013	DLC

MBLK-272013 - Batch R80141 - Soil by NWVPH

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
C5-C6 Aliphatics	NWVPH	U	5.0	1	MG/KG	02/08/2013	DLC
>C6-C8 Aliphatics	NWVPH	U	5.0	1	MG/KG	02/08/2013	DLC
>C8-C10 Aliphatics	NWVPH	U	5.0	1	MG/KG	02/08/2013	DLC
>C8-C10 Aromatics	NWVPH	U	5.0	1	MG/KG	02/08/2013	DLC
Hexane	NWVPH	U	0.20	1	MG/KG	02/08/2013	DLC

MB-013113S - Batch 3427 - Soil by NWTPH-DX

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	01/31/2013	EBS
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	01/31/2013	EBS

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ALS Laboratory Group A Campbell Brothers Limited Company

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE:	3/20/2013
		ALS SDG#:	EV13010138
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Stephen Bentsen		
CLIENT PROJECT:	POB - Harris		

LABORATORY BLANK RESULTS

MB-020113W - Batch 3422 - Water by NWTPH-DX

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range	NWTPH-DX	U	130	1	UG/L	02/01/2013	EBS
TPH-Oil Range	NWTPH-DX	U	250	1	UG/L	02/01/2013	EBS

MBLK-1252013 - Batch R79952 - Soil by NWEPH

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
>C8-C10 Aliphatics	NWEPH	U	5.0	1	MG/KG	01/25/2013	EBS
>C10-C12 Aliphatics	NWEPH	U	5.0	1	MG/KG	01/25/2013	EBS
>C12-C16 Aliphatics	NWEPH	U	5.0	1	MG/KG	01/25/2013	EBS
>C16-C21 Aliphatics	NWEPH	U	5.0	1	MG/KG	01/25/2013	EBS
>C21-C34 Aliphatics	NWEPH	U	5.0	1	MG/KG	01/25/2013	EBS
>C8-C10 Aromatics	NWEPH	U	5.0	1	MG/KG	01/25/2013	EBS
>C10-C12 Aromatics	NWEPH	U	5.0	1	MG/KG	01/25/2013	EBS
>C12-C16 Aromatics	NWEPH	U	5.0	1	MG/KG	01/25/2013	EBS
>C16-C21 Aromatics	NWEPH	U	5.0	1	MG/KG	01/25/2013	EBS
>C21-C34 Aromatics	NWEPH	U	5.0	1	MG/KG	01/25/2013	EBS

MBLK-212013 - Batch R79952 - Soil by NWEPH

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
>C8-C10 Aliphatics	NWEPH	U	5.0	1	MG/KG	02/01/2013	EBS
>C10-C12 Aliphatics	NWEPH	U	5.0	1	MG/KG	02/01/2013	EBS
>C12-C16 Aliphatics	NWEPH	U	5.0	1	MG/KG	02/01/2013	EBS
>C16-C21 Aliphatics	NWEPH	U	5.0	1	MG/KG	02/01/2013	EBS
>C21-C34 Aliphatics	NWEPH	U	5.0	1	MG/KG	02/01/2013	EBS
>C8-C10 Aromatics	NWEPH	U	5.0	1	MG/KG	02/01/2013	EBS
>C10-C12 Aromatics	NWEPH	U	5.0	1	MG/KG	02/01/2013	EBS
>C12-C16 Aromatics	NWEPH	U	5.0	1	MG/KG	02/01/2013	EBS
>C16-C21 Aromatics	NWEPH	U	5.0	1	MG/KG	02/01/2013	EBS
>C21-C34 Aromatics	NWEPH	U	5.0	1	MG/KG	02/01/2013	EBS

MB-020413S - Batch 3467 - Soil by EPA-8270 SIM

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,4-Dichlorobenzene	EPA-8270 SIM	U	0.0050	1	MG/KG	02/13/2013	LAP
1,2-Dichlorobenzene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
N-Nitroso-Di-N-Propylamine	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Hexachloroethane	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP

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ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS SDG#: WDOE ACCREDITATION:	3/20/2013 EV13010138 C601
CLIENT CONTACT:	Stephen Bentsen		
CLIENT PROJECT:	POB - Harris		

LABORATORY BLANK RESULTS

MB-020413S - Batch 3467 - Soil by EPA-8270 SIM

2,4-Dichlorophenol	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
1,2,4-Trichlorobenzene	EPA-8270 SIM	U	0.010	1	MG/KG	02/13/2013	LAP
Naphthalene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
2-Methylnaphthalene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
1-Methylnaphthalene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Acenaphthylene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Acenaphthene	EPA-8270 SIM	U	0.017	1	MG/KG	02/13/2013	LAP
2,4-Dinitrotoluene	EPA-8270 SIM	U	0.010	1	MG/KG	02/13/2013	LAP
Fluorene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Pentachlorophenol	EPA-8270 SIM	U	0.10	1	MG/KG	02/13/2013	LAP
Phenanthrene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Anthracene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Fluoranthene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Pyrene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
3,3-Dichlorobenzidine	EPA-8270 SIM	U	0.10	1	MG/KG	02/13/2013	LAP
Benzo[A]Anthracene	EPA-8270 SIM	U	0.0065	1	MG/KG	02/13/2013	LAP
Chrysene	EPA-8270 SIM	U	0.0072	1	MG/KG	02/13/2013	LAP
Benzo[B]Fluoranthene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Benzo[K]Fluoranthene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Benzo[A]Pyrene	EPA-8270 SIM	U	0.017	1	MG/KG	02/13/2013	LAP
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Dibenz[A,H]Anthracene	EPA-8270 SIM	U	0.018	1	MG/KG	02/13/2013	LAP
Benzo[G,H,I]Perylene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP

MB-020513W - Batch 3442 - Water by EPA-8270 SIM

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Naphthalene	EPA-8270 SIM	U	0.020	1	UG/L	02/12/2013	LAP
2-Methylnaphthalene	EPA-8270 SIM	U	0.020	1	UG/L	02/12/2013	LAP
1-Methylnaphthalene	EPA-8270 SIM	U	0.020	1	UG/L	02/12/2013	LAP
Acenaphthylene	EPA-8270 SIM	U	0.020	1	UG/L	02/12/2013	LAP
Acenaphthene	EPA-8270 SIM	U	0.020	1	UG/L	02/12/2013	LAP
Fluorene	EPA-8270 SIM	U	0.020	1	UG/L	02/12/2013	LAP
Phenanthrene	EPA-8270 SIM	U	0.020	1	UG/L	02/12/2013	LAP
Anthracene	EPA-8270 SIM	U	0.020	1	UG/L	02/12/2013	LAP
Fluoranthene	EPA-8270 SIM	U	0.020	1	UG/L	02/12/2013	LAP
Pyrene	EPA-8270 SIM	U	0.033	1	UG/L	02/12/2013	LAP
Benzo[A]Anthracene	EPA-8270 SIM	U	0.018	1	UG/L	02/12/2013	LAP
Chrysene	EPA-8270 SIM	UT	0.0064	1	UG/L	02/12/2013	LAP
Benzo[B]Fluoranthene	EPA-8270 SIM	UT	0.010	1	UG/L	02/12/2013	LAP

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS SDG#: WDOE ACCREDITATION:	3/20/2013 EV13010138 C601
CLIENT CONTACT:	Stephen Bentsen		
CLIENT PROJECT:	POB - Harris		

LABORATORY BLANK RESULTS

MB-020513W - Batch 3442 - Water by EPA-8270 SIM

Benzo[K]Fluoranthene	EPA-8270 SIM	UT	0.0070	1	UG/L	02/12/2013	LAP
Benzo[A]Pyrene	EPA-8270 SIM	UT	0.0096	1	UG/L	02/12/2013	LAP
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	UT	0.0050	1	UG/L	02/12/2013	LAP
Dibenz[A,H]Anthracene	EPA-8270 SIM	UT	0.0062	1	UG/L	02/12/2013	LAP
Benzo[G,H,I]Perylene	EPA-8270 SIM	U	0.020	1	UG/L	02/12/2013	LAP

UT - Analyte analyzed for but not detected at level above the MDL.

MB-020413S - Batch 3466 - Soil by EPA-8270

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Pyridine	EPA-8270	U	200	1	UG/KG	02/13/2013	LAP
N-Nitrosodimethylamine	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Phenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Aniline	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Bis(2-Chloroethyl)Ether	EPA-8270	U	120	1	UG/KG	02/13/2013	LAP
2-Chlorophenol	EPA-8270	UT	41	1	UG/KG	02/13/2013	LAP
1,3-Dichlorobenzene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
1,4-Dichlorobenzene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Benzyl Alcohol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Methylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
3&4-Methylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
N-Nitroso-Di-N-Propylamine	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
Nitrobenzene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Isophorone	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Nitrophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,4-Dimethylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Benzoic Acid	EPA-8270	U	1000	1	UG/KG	02/13/2013	LAP
Bis(2-Chloroethoxy)Methane	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
1,2,4-Trichlorobenzene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Chloroaniline	EPA-8270	U	1000	1	UG/KG	02/13/2013	LAP
2,6-Dichlorophenol	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
Hexachlorobutadiene	EPA-8270	U	160	1	UG/KG	02/13/2013	LAP
4-Chloro-3-Methylphenol	EPA-8270	U	500	1	UG/KG	02/13/2013	LAP
Hexachlorocyclopentadiene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,4,6-Trichlorophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,4,5-Trichlorophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Chloronaphthalene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Nitroaniline	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Dimethylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP

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CLIENT CONTACT:	Stephen Bentsen		
CLIENT PROJECT:	POB - Harris		

LABORATORY BLANK RESULTS

MB-020413S - Batch 3466 - Soil by EPA-8270

2,6-Dinitrotoluene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
3-Nitroaniline	EPA-8270	U	1000	1	UG/KG	02/13/2013	LAP
2,4-Dinitrophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Nitrophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Dibenzofuran	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,4-Dinitrotoluene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,3,4,6-Tetrachlorophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Diethylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Chlorophenyl-Phenylether	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Nitroaniline	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
4,6-Dinitro-2-Methylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
N-Nitrosodiphenylamine	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Azobenzene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Bromophenyl-Phenylether	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Hexachlorobenzene	EPA-8270	U	80	1	UG/KG	02/13/2013	LAP
Pentachlorophenol	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
Carbazole	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
Di-N-Butylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Pyrene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Butylbenzylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Di-N-Octylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
Phenol-d5	EPA-8270	**GS6**	02/13/2013	LAP

UT - Analyte analyzed for but not detected at level above the MDL.
GS6 - Surrogate outside of control limits. Single surrogate outlier per fraction is acceptable as per Method 8270D.

MB-020513W - Batch 3440 - Water by EPA-8270

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Pyridine	EPA-8270	U	4.0	1	UG/L	02/12/2013	LAP
N-Nitrosodimethylamine	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Phenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Aniline	EPA-8270	U	4.0	1	UG/L	02/12/2013	LAP
Bis(2-Chloroethyl)Ether	EPA-8270	U	1.0	1	UG/L	02/12/2013	LAP
2-Chlorophenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
1,3-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
1,4-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Benzyl Alcohol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101		DATE: ALS SDG#: WDOE ACCREDITATION:	3/20/2013 EV13010138 C601
CLIENT CONTACT:	Stephen Bentsen			
CLIENT PROJECT:	POB - Harris			

LABORATORY BLANK RESULTS

MB-020513W - Batch 3440 - Water by EPA-8270

1,2-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
3&4-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
N-Nitroso-Di-N-Propylamine	EPA-8270	UT	0.70	1	UG/L	02/12/2013	LAP
Hexachloroethane	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Nitrobenzene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Isophorone	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2-Nitrophenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2,4-Dimethylphenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Benzoic Acid	EPA-8270	U	10	1	UG/L	02/12/2013	LAP
Bis(2-Chloroethoxy)Methane	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2,4-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
1,2,4-Trichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
4-Chloroaniline	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2,6-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Hexachlorobutadiene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
4-Chloro-3-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Hexachlorocyclopentadiene	EPA-8270	U	4.0	1	UG/L	02/12/2013	LAP
2,4,6-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2,4,5-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2-Chloronaphthalene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2-Nitroaniline	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Dimethylphthalate	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2,6-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
3-Nitroaniline	EPA-8270	U	5.0	1	UG/L	02/12/2013	LAP
2,4-Dinitrophenol	EPA-8270	U	10	1	UG/L	02/12/2013	LAP
4-Nitrophenol	EPA-8270	U	5.0	1	UG/L	02/12/2013	LAP
Dibenzofuran	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2,4-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2,3,4,6-Tetrachlorophenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Diethylphthalate	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
4-Chlorophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
4-Nitroaniline	EPA-8270	U	4.0	1	UG/L	02/12/2013	LAP
4,6-Dinitro-2-Methylphenol	EPA-8270	U	4.0	1	UG/L	02/12/2013	LAP
N-Nitrosodiphenylamine	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Azobenzene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
4-Bromophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Hexachlorobenzene	EPA-8270	U	1.0	1	UG/L	02/12/2013	LAP
Pentachlorophenol	EPA-8270	U	5.0	1	UG/L	02/12/2013	LAP

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CLIENT CONTACT:	Stephen Bentsen		
CLIENT PROJECT:	POB - Harris		

LABORATORY BLANK RESULTS

MB-020513W - Batch 3440 - Water by EPA-8270

Carbazole	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Di-N-Butylphthalate	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Butylbenzylphthalate	EPA-8270	U	1.0	1	UG/L	02/12/2013	LAP
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Di-N-Octylphthalate	EPA-8270	U	1.0	1	UG/L	02/12/2013	LAP

UT - Analyte analyzed for but not detected at level above the MDL.

MBLK-252013 - Batch R80138 - Soil by EPA-7471

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Mercury	EPA-7471	U	0.020	1	MG/KG	02/05/2013	RAL

MB-013013S - Batch 3419 - Soil by EPA-6020

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Antimony	EPA-6020	U	0.10	1	MG/KG	01/31/2013	RAL
Arsenic	EPA-6020	U	0.20	1	MG/KG	01/31/2013	RAL
Beryllium	EPA-6020	U	0.10	1	MG/KG	01/31/2013	RAL
Cadmium	EPA-6020	U	0.10	1	MG/KG	01/31/2013	RAL
Chromium	EPA-6020	U	0.10	1	MG/KG	01/31/2013	RAL
Copper	EPA-6020	U	0.10	1	MG/KG	01/31/2013	RAL
Lead	EPA-6020	U	0.10	1	MG/KG	01/31/2013	RAL
Nickel	EPA-6020	U	0.10	1	MG/KG	01/31/2013	RAL
Selenium	EPA-6020	U	1.0	1	MG/KG	01/31/2013	RAL
Silver	EPA-6020	U	0.10	1	MG/KG	01/31/2013	RAL
Thallium	EPA-6020	U	0.87	1	MG/KG	01/31/2013	RAL
Zinc	EPA-6020	U	0.50	1	MG/KG	01/31/2013	RAL

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CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE:	3/20/2013
		ALS SDG#:	EV13010138
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Stephen Bentsen		
CLIENT PROJECT:	POB - Harris		

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 3411 - Soil by NWTPH-GX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range - BS	NWTPH-GX	**70.1**			01/30/2013	DLC
TPH-Volatile Range - BSD	NWTPH-GX	**77.6**	**10**		01/30/2013	DLC

ALS Test Batch ID: 3424 - Water by NWTPH-GX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range - BS	NWTPH-GX	**76.5**			01/31/2013	DLC
TPH-Volatile Range - BSD	NWTPH-GX	**79.3**	**4**		01/31/2013	DLC

ALS Test Batch ID: 3411 - Soil by EPA-8021

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Benzene - BS	EPA-8021	**90.9**			01/30/2013	DLC
Benzene - BSD	EPA-8021	**89.9**	**1**		01/30/2013	DLC
Toluene - BS	EPA-8021	**95.2**			01/30/2013	DLC
Toluene - BSD	EPA-8021	**93.8**	**1**		01/30/2013	DLC
Ethylbenzene - BS	EPA-8021	**95.4**			01/30/2013	DLC
Ethylbenzene - BSD	EPA-8021	**94.1**	**1**		01/30/2013	DLC
Xylenes - BS	EPA-8021	**93.7**			01/30/2013	DLC
Xylenes - BSD	EPA-8021	**92.1**	**2**		01/30/2013	DLC

ALS Test Batch ID: 3424 - Water by EPA-8021

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Benzene - BS	EPA-8021	**105**			01/31/2013	DLC
Benzene - BSD	EPA-8021	**110**	**4**		01/31/2013	DLC
Toluene - BS	EPA-8021	**103**			01/31/2013	DLC
Toluene - BSD	EPA-8021	**108**	**4**		01/31/2013	DLC
Ethylbenzene - BS	EPA-8021	**101**			01/31/2013	DLC
Ethylbenzene - BSD	EPA-8021	**106**	**5**		01/31/2013	DLC
Xylenes - BS	EPA-8021	**104**			01/31/2013	DLC
Xylenes - BSD	EPA-8021	**109**	**4**		01/31/2013	DLC

ALS Test Batch ID: R80141 - Soil by NWVPH

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
C5-C6 Aliphatics - BS	NWVPH	**85.4**			02/08/2013	DLC
C5-C6 Aliphatics - BSD	NWVPH	**93.7**	**9**		02/08/2013	DLC

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CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS SDG#: WDOE ACCREDITATION:	3/20/2013 EV13010138 C601
CLIENT CONTACT:	Stephen Bentsen		
CLIENT PROJECT:	POB - Harris		

LABORATORY CONTROL SAMPLE RESULTS

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
>C6-C8 Aliphatics - BS	NWVPH	**85.8**			02/08/2013	DLC
>C6-C8 Aliphatics - BSD	NWVPH	**90.6**	**5**		02/08/2013	DLC
>C8-C10 Aliphatics - BS	NWVPH	**89.2**			02/08/2013	DLC
>C8-C10 Aliphatics - BSD	NWVPH	**92.6**	**4**		02/08/2013	DLC
>C8-C10 Aromatics - BS	NWVPH	**97.1**			02/08/2013	DLC
>C8-C10 Aromatics - BSD	NWVPH	**100**	**3**		02/08/2013	DLC
Hexane - BS	NWVPH	**98.1**			02/08/2013	DLC
Hexane - BSD	NWVPH	**108**	**10**		02/08/2013	DLC

ALS Test Batch ID: 3427 - Soil by NWTPH-DX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range - BS	NWTPH-DX	**93.0**			01/31/2013	EBS
TPH-Diesel Range - BSD	NWTPH-DX	**90.2**	**3**		01/31/2013	EBS

ALS Test Batch ID: 3422 - Water by NWTPH-DX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range - BS	NWTPH-DX	**84.3**			02/01/2013	EBS
TPH-Diesel Range - BSD	NWTPH-DX	**86.5**	**2**		02/01/2013	EBS

ALS Test Batch ID: R79952 - Soil by NWEPH

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
>C8-C10 Aliphatics - BS	NWEPH	**88.0**			01/25/2013	EBS
>C8-C10 Aliphatics - BSD	NWEPH	**77.8**	**12**		01/25/2013	EBS
>C10-C12 Aliphatics - BS	NWEPH	**91.1**			01/25/2013	EBS
>C10-C12 Aliphatics - BSD	NWEPH	**83.0**	**9**		01/25/2013	EBS
>C12-C16 Aliphatics - BS	NWEPH	**90.5**			01/25/2013	EBS
>C12-C16 Aliphatics - BSD	NWEPH	**84.3**	**7**		01/25/2013	EBS
>C16-C21 Aliphatics - BS	NWEPH	**90.4**			01/25/2013	EBS
>C16-C21 Aliphatics - BSD	NWEPH	**84.8**	**6**		01/25/2013	EBS
>C21-C34 Aliphatics - BS	NWEPH	**101**			01/25/2013	EBS
>C21-C34 Aliphatics - BSD	NWEPH	**93.4**	**7**		01/25/2013	EBS
>C8-C10 Aromatics - BS	NWEPH	**93.2**			01/25/2013	EBS
>C8-C10 Aromatics - BSD	NWEPH	**83.6**	**11**		01/25/2013	EBS
>C10-C12 Aromatics - BS	NWEPH	**92.6**			01/25/2013	EBS
>C10-C12 Aromatics - BSD	NWEPH	**84.1**	**10**		01/25/2013	EBS
>C12-C16 Aromatics - BS	NWEPH	**93.7**			01/25/2013	EBS

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CLIENT CONTACT:	Stephen Bentsen			
CLIENT PROJECT:	POB - Harris			

LABORATORY CONTROL SAMPLE RESULTS

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
>C12-C16 Aromatics - BSD	NWEPH	**86.8**	**8**		01/25/2013	EBS
>C16-C21 Aromatics - BS	NWEPH	**93.0**			01/25/2013	EBS
>C16-C21 Aromatics - BSD	NWEPH	**87.6**	**6**		01/25/2013	EBS
>C21-C34 Aromatics - BS	NWEPH	**98.7**			01/25/2013	EBS
>C21-C34 Aromatics - BSD	NWEPH	**93.0**	**6**		01/25/2013	EBS

ALS Test Batch ID: 3466 - Soil by EPA-8270

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Phenol - BS	EPA-8270	**51.9**			02/13/2013	LAP
Phenol - BSD	EPA-8270	**53.8**	**4**		02/14/2013	LAP
2-Chlorophenol - BS	EPA-8270	**70.1**			02/13/2013	LAP
2-Chlorophenol - BSD	EPA-8270	**74.6**	**6**		02/14/2013	LAP
1,4-Dichlorobenzene - BS	EPA-8270	**69.1**			02/13/2013	LAP
1,4-Dichlorobenzene - BSD	EPA-8270	**66.9**	**3**		02/14/2013	LAP
N-Nitroso-Di-N-Propylamine - BS	EPA-8270	**52.5**			02/13/2013	LAP
N-Nitroso-Di-N-Propylamine - BSD	EPA-8270	**55.7**	**6**		02/14/2013	LAP
1,2,4-Trichlorobenzene - BS	EPA-8270	**71.4**			02/13/2013	LAP
1,2,4-Trichlorobenzene - BSD	EPA-8270	**69.5**	**3**		02/14/2013	LAP
4-Chloro-3-Methylphenol - BS	EPA-8270	**55.8**			02/13/2013	LAP
4-Chloro-3-Methylphenol - BSD	EPA-8270	**64.4**	**14**		02/14/2013	LAP
4-Nitrophenol - BS	EPA-8270	**54.4**			02/13/2013	LAP
4-Nitrophenol - BSD	EPA-8270	**62.3**	**14**		02/14/2013	LAP
2,4-Dinitrotoluene - BS	EPA-8270	**71.3**			02/13/2013	LAP
2,4-Dinitrotoluene - BSD	EPA-8270	**70.3**	**1**		02/14/2013	LAP
Pentachlorophenol - BS	EPA-8270	**60.8**			02/13/2013	LAP
Pentachlorophenol - BSD	EPA-8270	**69.2**	**13**		02/14/2013	LAP
Pyrene - BS	EPA-8270	**85.3**			02/13/2013	LAP
Pyrene - BSD	EPA-8270	**81.9**	**4**		02/14/2013	LAP

ALS Test Batch ID: 3440 - Water by EPA-8270

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Phenol - BS	EPA-8270	**28.5**			02/12/2013	LAP
Phenol - BSD	EPA-8270	**24.5**	**15**		02/12/2013	LAP
2-Chlorophenol - BS	EPA-8270	**82.5**			02/12/2013	LAP
2-Chlorophenol - BSD	EPA-8270	**85.0**	**3**		02/12/2013	LAP
1,4-Dichlorobenzene - BS	EPA-8270	**83.3**			02/12/2013	LAP
1,4-Dichlorobenzene - BSD	EPA-8270	**87.1**	**5**		02/12/2013	LAP

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE:	3/20/2013
		ALS SDG#:	EV13010138
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Stephen Bentsen		
CLIENT PROJECT:	POB - Harris		

LABORATORY CONTROL SAMPLE RESULTS

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
N-Nitroso-Di-N-Propylamine - BS	EPA-8270	**96.6**			02/12/2013	LAP
N-Nitroso-Di-N-Propylamine - BSD	EPA-8270	**109**	**13**		02/12/2013	LAP
1,2,4-Trichlorobenzene - BS	EPA-8270	**82.6**			02/12/2013	LAP
1,2,4-Trichlorobenzene - BSD	EPA-8270	**88.4**	**7**		02/12/2013	LAP
4-Chloro-3-Methylphenol - BS	EPA-8270	**85.3**			02/12/2013	LAP
4-Chloro-3-Methylphenol - BSD	EPA-8270	**84.3**	**1**		02/12/2013	LAP
4-Nitrophenol - BS	EPA-8270	**16.5**			02/12/2013	LAP
4-Nitrophenol - BSD	EPA-8270	**15.4**	**7**		02/12/2013	LAP
2,4-Dinitrotoluene - BS	EPA-8270	**70.1**			02/12/2013	LAP
2,4-Dinitrotoluene - BSD	EPA-8270	**69.7**	**1**		02/12/2013	LAP
Pentachlorophenol - BS	EPA-8270	**71.1**			02/12/2013	LAP
Pentachlorophenol - BSD	EPA-8270	**73.3**	**3**		02/12/2013	LAP

ALS Test Batch ID: R80138 - Soil by EPA-7471

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Mercury - BS	EPA-7471	**97.7**			02/05/2013	RAL
Mercury - BSD	EPA-7471	**103**	**5**		02/05/2013	RAL

ALS Test Batch ID: 3419 - Soil by EPA-6020

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Antimony - BS	EPA-6020	**101**			01/31/2013	RAL
Antimony - BSD	EPA-6020	**101**	**0**		01/31/2013	RAL
Arsenic - BS	EPA-6020	**99.9**			01/31/2013	RAL
Arsenic - BSD	EPA-6020	**99.0**	**1**		01/31/2013	RAL
Beryllium - BS	EPA-6020	**104**			01/31/2013	RAL
Beryllium - BSD	EPA-6020	**104**	**0**		01/31/2013	RAL
Cadmium - BS	EPA-6020	**102**			01/31/2013	RAL
Cadmium - BSD	EPA-6020	**103**	**1**		01/31/2013	RAL
Chromium - BS	EPA-6020	**103**			01/31/2013	RAL
Chromium - BSD	EPA-6020	**102**	**1**		01/31/2013	RAL
Copper - BS	EPA-6020	**103**			01/31/2013	RAL
Copper - BSD	EPA-6020	**102**	**1**		01/31/2013	RAL
Lead - BS	EPA-6020	**105**			01/31/2013	RAL
Lead - BSD	EPA-6020	**105**	**1**		01/31/2013	RAL
Nickel - BS	EPA-6020	**104**			01/31/2013	RAL
Nickel - BSD	EPA-6020	**103**	**1**		01/31/2013	RAL
Selenium - BS	EPA-6020	**101**			01/31/2013	RAL

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101		DATE: ALS SDG#: WDOE ACCREDITATION:	3/20/2013 EV13010138 C601
CLIENT CONTACT:	Stephen Bentsen			
CLIENT PROJECT:	POB - Harris			

LABORATORY CONTROL SAMPLE RESULTS

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Selenium - BSD	EPA-6020	**103**	**2**		01/31/2013	RAL
Silver - BS	EPA-6020	**104**			01/31/2013	RAL
Silver - BSD	EPA-6020	**103**	**1**		01/31/2013	RAL
Thallium - BS	EPA-6020	**102**			01/31/2013	RAL
Thallium - BSD	EPA-6020	**104**	**2**		01/31/2013	RAL
Zinc - BS	EPA-6020	**101**			01/31/2013	RAL
Zinc - BSD	EPA-6020	**99.6**	**2**		01/31/2013	RAL

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ALS Laboratory Group A Campbell Brothers Limited Company

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS SDG#: WDOE ACCREDITATION:	3/20/2013 EV13010138 C601
CLIENT CONTACT:	Stephen Bentsen		
CLIENT PROJECT:	POB - Harris		

MATRIX SPIKE RESULTS

ALS Test Batch ID: 3440 - Water
Parent Sample: BATCH QC

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Phenol - MS	EPA-8270	**23.1**			02/13/2013	LAP
Phenol - MSD	EPA-8270	**24.4**	**6**		02/12/2013	LAP
2-Chlorophenol - MS	EPA-8270	**76.3**			02/13/2013	LAP
2-Chlorophenol - MSD	EPA-8270	**81.2**	**6**		02/12/2013	LAP
1,4-Dichlorobenzene - MS	EPA-8270	**71.6**			02/13/2013	LAP
1,4-Dichlorobenzene - MSD	EPA-8270	**79.2**	**10**		02/12/2013	LAP
N-Nitroso-Di-N-Propylamine - MS	EPA-8270	**85.4**			02/13/2013	LAP
N-Nitroso-Di-N-Propylamine - MSD	EPA-8270	**102**	**18**		02/12/2013	LAP
1,2,4-Trichlorobenzene - MS	EPA-8270	**74.4**			02/13/2013	LAP
1,2,4-Trichlorobenzene - MSD	EPA-8270	**77.4**	**4**		02/12/2013	LAP
4-Chloro-3-Methylphenol - MS	EPA-8270	**66.4**			02/13/2013	LAP
4-Chloro-3-Methylphenol - MSD	EPA-8270	**76.0**	**13**		02/12/2013	LAP
4-Nitrophenol - MS	EPA-8270	**16.2**			02/13/2013	LAP
4-Nitrophenol - MSD	EPA-8270	**13.9**	**15**		02/12/2013	LAP
2,4-Dinitrotoluene - MS	EPA-8270	**68.4**			02/13/2013	LAP
2,4-Dinitrotoluene - MSD	EPA-8270	**62.4**	**6**		02/12/2013	LAP
Pentachlorophenol - MS	EPA-8270	**65.7**			02/13/2013	LAP
Pentachlorophenol - MSD	EPA-8270	**56.2**	**15**		02/12/2013	LAP
2-Fluorobiphenyl - MSD	EPA-8270	**109**		GS6	02/12/2013	LAP

GS6 - Surrogate outside of control limits. Single surrogate outlier per fraction is acceptable as per Method 8270D.

ALS Test Batch ID: 3466 - Soil
Parent Sample: FS-21-8.0-9.0-013013

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Phenol - MS	EPA-8270	**30.5**		SQ2	02/15/2013	LAP
Phenol - MSD	EPA-8270	**31.5**	**3**	SQ2	02/13/2013	LAP
2-Chlorophenol - MS	EPA-8270	**31.8**		SQ2	02/15/2013	LAP
2-Chlorophenol - MSD	EPA-8270	**32.3**	**1**	SQ2	02/13/2013	LAP
1,4-Dichlorobenzene - MS	EPA-8270	**70.8**			02/15/2013	LAP
1,4-Dichlorobenzene - MSD	EPA-8270	**72.1**	**2**		02/13/2013	LAP
N-Nitroso-Di-N-Propylamine - MS	EPA-8270	**27.9**		SQ2	02/15/2013	LAP
N-Nitroso-Di-N-Propylamine - MSD	EPA-8270	**41.3**	**39**		02/13/2013	LAP
1,2,4-Trichlorobenzene - MS	EPA-8270	**91.7**			02/15/2013	LAP
1,2,4-Trichlorobenzene - MSD	EPA-8270	**84.6**	**8**		02/13/2013	LAP
4-Chloro-3-Methylphenol - MS	EPA-8270	**150**		SQ2	02/15/2013	LAP
4-Chloro-3-Methylphenol - MSD	EPA-8270	**149**	**1**	SQ2	02/13/2013	LAP
4-Nitrophenol - MS	EPA-8270	**68.4**			02/15/2013	LAP

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ALS Laboratory Group A Campbell Brothers Limited Company

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS SDG#: WDOE ACCREDITATION:	3/20/2013 EV13010138 C601
CLIENT CONTACT:	Stephen Bentsen		
CLIENT PROJECT:	POB - Harris		

MATRIX SPIKE RESULTS

4-Nitrophenol - MSD	EPA-8270	**64.6**	**6**		02/13/2013	LAP
2,4-Dinitrotoluene - MS	EPA-8270	**75.5**			02/15/2013	LAP
2,4-Dinitrotoluene - MSD	EPA-8270	**71.1**	**6**		02/13/2013	LAP
Pentachlorophenol - MS	EPA-8270	**70.7**			02/15/2013	LAP
Pentachlorophenol - MSD	EPA-8270	**76.5**	**8**		02/13/2013	LAP
Pyrene - MS	EPA-8270	**23.3**		SQ2	02/15/2013	LAP
Pyrene - MSD	EPA-8270	**26.6**	**1**	SQ2	02/13/2013	LAP
2-Fluorophenol - MS	EPA-8270	**32.8**		DS1	02/15/2013	LAP
2-Fluorophenol - MSD	EPA-8270	**26.4**		DS1	02/13/2013	LAP
Phenol-d5 - MS	EPA-8270	**34.5**		DS1	02/15/2013	LAP
Phenol-d5 - MSD	EPA-8270	**35.0**		DS1	02/13/2013	LAP

SQ2 - Spike outside of control limits due to matrix effect. DS1 - Surrogate outside of control limits due to matrix effect.

APPROVED BY

Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

ALS ENVIRONMENTAL

Sample Receiving Checklist

Client: Floyd/Snider ALS Job #: EV13010138

Project: POB- Harris

Received Date: 1/30/13 Received Time: 2:50 By: QB

Type of shipping container: Cooler X Box ___ Other ___

Shipped via: UPS/FedEx ___ US Postal Service ___ Courier ___ Hand Delivered X by Carl

	Yes	No	N/A
Were custody seals on outside of sample? If yes, how many? ___ Where? ___ Custody seal date: ___ Seal name: ___		X	
Was Chain of Custody properly filled out (ink, signed, dated, etc.)?	X		
Did all bottles have labels?	X		
Did all bottle labels and tags agree with Chain of Custody?	X		
Were samples received within hold time?	X		
Did all bottles arrive in good condition (unbroken, etc.)?	X		
Was sufficient amount of sample sent for the tests indicated?	X		
Was correct preservation added to samples?	X		

If no, Sample Control added preservative to the following: Recieved 16 5035 high kits

Sample Number	Reagent	Analyte

Were VOA vials checked for absence of air bubbles? ___ ___ X

Bubbles present in sample #: ___

Temperature of cooler upon receipt: 5.9°C on Ice Cold Cool Ambient N/A

Explain any discrepancies: ___

Was client contacted? ___ Who was called? ___ By whom? ___ Date: ___

Outcome of call: ___

ALS Environmental
8620 Holly Drive, Suite 100
Everett, WA 98208
Phone (425) 356-2600
Fax (425) 356-2626
http://www.alsglobal.com

Chain Of Custody/ Laboratory Analysis Request

ALS Job# (Laboratory Use Only): EV13010138

Date 1/29/13 Page 1 Of 3

PROJECT ID: POB-Harris
REPORT TO COMPANY: Floyd|Snider
PROJECT MANAGER: Stephen Bentsen
ADDRESS: 601 Union St. Ste. 600

PHONE: 206-292-2078 FAX: 206-682-7867
P.O. #: POB-Harris T. 4030 E-MAIL:
INVOICE TO COMPANY: Same as above
ATTENTION:
ADDRESS:

LABORATORY COPY

	SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA-8021	MTBE by EPA-8021 ☐ EPA-8260 ☐	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	EDB / EDC by EPA 8260 SIM (water)	EDB / EDC by EPA 8260 (soil)	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM ☑	PCB ☐ Pesticides ☐ by EPA 8081/8082	Metals-MTCA-5 ☐ RCRA-8 ☐ Pri Pol ☐ TAL ☐ Project Spec List	Metals Other (Specify) EPA 6010C 7471	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	~~Extract~~ Archive	NWEPH / NWVPH / USEPA 8021						NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1.	FS-19-3.0-3.5-012913	1/29/13	0905	S	1										X	X		X										1	
2.	~~FS-19-8.0-8.5-012913~~		~~0930~~	~~S~~																									
3.	~~FS19-6.0-6.5-012913~~		~~0935~~	~~S~~																									
4.	FS-19-7.0-7.5-012913	1/29/13	1000	S	2		X	X	X						X	X		X				X						5	
5.	FS-19-11.5-12.0-012913		1020	S	3		X	X	X						X	X		X										3	
6.	FS-19-27.0-27.5-012913		1120	S	4		X	X	X						X	X		X				X						5	
7.	FS-20-2.5-3.0-012913		1225	S	5										X	X		X										1	
8.	FS-20-10.5-11.0-012913		1300	S	6		X	X	X						X	X		X				X						5	
9.	FS-19-GW-012913		1315	W	7		X	X	X						X	X												6	
10.	FS-20-15.5-16.0-012913		1420	S	8		X	X	X						X	X		X										3	

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):
1. Relinquished By: [signature] (Erin Murray) Floyd|Snider 1/30/13
Received By: [signature] ALS 1/30/13 1320
2. Relinquished By:
Received By:

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis
10 (Standard) 5 3 2 1 SAME DAY

Fuels & Hydrocarbon Analysis
5 (Standard) 3 1 SAME DAY

OTHER:
Specify:

* Turnaround request less than standard may incur Rush Charges

ALS Environmental
8620 Holly Drive, Suite 100
Everett, WA 98208
Phone (425) 356-2600
Fax (425) 356-2626
http://www.alsglobal.com

Chain Of Custody/ Laboratory Analysis Request

ALS Job# (Laboratory Use Only) EV13010138

Date 1/29/13 Page 2 Of 3

PROJECT ID: POB-Harris
REPORT TO COMPANY: Floyd/Snider
PROJECT MANAGER: Stephen Bentsen
ADDRESS: 601 Union St. Ste. 600
Seattle, WA
PHONE: 206-292-2078 FAX: 206-682-7867
P.O. #: POB-Harris T. 4030 E-MAIL: stephen.bentsen@floydsnider.com
INVOICE TO COMPANY: Same as above
ATTENTION:
ADDRESS:

ANALYSIS REQUESTED / OTHER (Specify)

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA-8021	MTBE by EPA-8021 ☐ EPA-8260 ☐	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	EDB / EDC by EPA 8260 SIM (water)	EDB / EDC by EPA 8260 (soil)	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM ☑	PCB ☐ Pesticides ☐ by EPA 8081/8082	Metals-MTCA-5 ☐ RCRA-8 ☐ Pri Pol ☐ TAL ☐	Metals Other (Specify) Project specific list. EPA 6010 EPA 7471	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	Archive	NWEPH/NWVPH/EPA 8021	MS/MSD-TPH-Dx,Gx, SVOCs					NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. MW-10-2.0-3.0-012913	1/29/13	1400	S	9										X	X			X									1	
2. MW-10-11.0-11.5-012913	↓	1410	S	10		X	X	X						X	X			X									3	
3. MW-10-15.0-15.5-012913	1/29/13	1500	S	11																X							3	
4. FS-21-3.5-4.0-013013	1/30/13	0835	S	12										X	X			X									1	
5. FS-21-8.0-9.0-013013	1/30/13	0920	S	13		X	X	X						X	X			X			X	X					11	
6. FS-21-13.5-14.0-013013	1/30/13	1000	S	14		X	X	X						X	X			X									3	
7. FS-21-GW-013013	1/30/13	1050	W	15		X	X	X						X	X												6	
8. FS-79-GW-013013	1/30/13	1130	W	16		X	X	X						X	X												6	
9. FS-21-22.0-22.5-013013	1/30/13	1125	S	17		X	X	X						X	X			X									3	
10. FS-19-TB-012913	1/29/13	1200	W	18			X	X																			2	

LABORATORY COPY

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):
1. Relinquished By: (Erin Murray) [signature] Floyd/Snider 1/30/13
Received By: [signature] ALS 1/30/13 1320
2. Relinquished By:
Received By:

TURNAROUND REQUESTED in Business Days*
Organic, Metals & Inorganic Analysis: 10 (Standard) 5 3 2 1 SAME DAY
Fuels & Hydrocarbon Analysis: 5 (Standard) 3 1 SAME DAY
OTHER:
Specify:

* Turnaround request less than standard may incur Rush Charges

ALS Environmental
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Everett, WA 98208
Phone (425) 356-2600
Fax (425) 356-2626
http://www.alsglobal.com

Chain Of Custody/ Laboratory Analysis Request

ALS Job# (Laboratory Use Only): EV13010138

Date 1/30/13 Page 3 Of 3

PROJECT ID: POB-Ham
REPORT TO COMPANY: Floyd/Snider
PROJECT MANAGER: Stephen Bratton
ADDRESS: 601 Union St. Ste. 600
PHONE: 206-292-2078 FAX: 206-682-7867
P.O. #: E-MAIL:
INVOICE TO COMPANY:
ATTENTION:
ADDRESS:

ANALYSIS REQUESTED: NWTPH-HCID; NWTPH-DX; NWTPH-GX; BTEX by EPA-8021; MTBE by EPA-8021 ☐ EPA-8260 ☐; Halogenated Volatiles by EPA 8260; Volatile Organic Compounds by EPA 8260; EDB / EDC by EPA 8260 SIM (water); EDB / EDC by EPA 8260 (soil); Semivolatile Organic Compounds by EPA 8270; Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM ☐; PCB ☐ Pesticides ☐ by EPA 8081/8082; Metals-MTCA-5 ☐ RCRA-8 ☐ Pri Pol ☐ TAL ☐; Metals Other (Specify); TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐

OTHER (Specify)

	SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA-8021	MTBE	Halogenated Volatiles	VOC 8260	EDB/EDC water	EDB/EDC soil	SVOC 8270	PAH	PCB/Pesticides	Metals	Metals Other	TCLP	OTHER							NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1.	FS-21-TB-013013	1/30/13	1200	W	19			X	X																			2	
2.																													
3.																													
4.																													
5.																													
6.																													
7.																													
8.																													
9.																													
10.																													

LABORATORY COPY

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):
1. Relinquished By: Emm (Erin Murray) Floyd/Snider 1/30/13
Received By: ALS 1/30/13 1320
2. Relinquished By:
Received By:

TURNAROUND REQUESTED in Business Days*
Organic, Metals & Inorganic Analysis: 10 (Standard) 5 3 2 1 SAME DAY
Fuels & Hydrocarbon Analysis: 5 (Standard) 3 1 SAME DAY
OTHER: Specify:

* Turnaround request less than standard may incur Rush Charges

Data Path : C:\msdchem\1\data\021413B\
Data File : B1403.D
Acq On : 14 Feb 2013 2:06 pm
Operator : LAP
Sample : EV13020005-01
Misc : 30g -> 1mL
ALS Vial : 3 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\SIMSCAN2.M
Quant Title : SVOCs by SW-846 Method 8270D SIM/Scan mode

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: TICINT.P

****

Peak Number 1 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.253	805.09 ng	217614000	1,4-Dichlorobenzene-d4	6.527

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	64
2	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	40
3	Acetic acid, cyano-, 1,1-dimethy...	141	C7H11NO2	001116-98-9	27
4	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	23
5	Propanenitrile, 3-ethoxy-	99	C5H9NO	002141-62-0	9

****

Peak Number 2 Octane, 2,3,7-trimethyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.177	46.64 ng	40246700	Naphthalene-d8	9.162

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 2,3,7-trimethyl-	156	C11H24	062016-34-6	83
2	Nonane, 2,6-dimethyl-	156	C11H24	017302-28-2	64
3	Octane, 2-bromo-	192	C8H17Br	000557-35-7	53
4	Octane, 2-iodo-	240	C8H17I	000557-36-8	53
5	3-Bromooctane	192	C8H17Br	000999-64-4	53

****

Peak Number 3 Dodecane, 2,7,10-trimethyl- Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.907	24.32 ng	68965700	Acenaphthene-d10	13.294

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Dodecane, 2,7,10-trimethyl-	212	C15H32	074645-98-0	80
2	Dodecane, 2,6,11-trimethyl-	212	C15H32	031295-56-4	80
3	Dodecane, 2,6,10-trimethyl-	212	C15H32	003891-98-3	72
4	Hexadecane	226	C16H34	000544-76-3	64
5	Hydroxylamine, O-decyl-	173	C10H23NO	029812-79-1	58

****

Peak Number 4 10-Methylnonadecane Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.

R.T.	EstConc	Area	Relative to ISTD	R.T.
1[illegible].057	31.78 ng	88712900	Acenaphthene-d10	13.294

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	10-Methylnonadecane	282	C20H42	000000-00-0	80
2	Tetratetracontane	619	C44H90	007098-22-8	80
3	Tritetracontane	605	C43H88	007098-21-7	80
4	Hexadecane, 7,9-dimethyl-	254	C18H38	021164-95-4	72
5	Tridecane, 7-hexyl-	268	C19H40	007225-66-3	72

****

Peak Number 5 Benzo[b]naphtho[2,3-d]furan Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.403	25.21 ng	74452800	Chrysene-d12	23.131

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzo[b]naphtho[2,3-d]furan	218	C16H10O	000243-42-5	83
2	Allopregnane	288	C21H36	000641-85-0	66
3	Phenanthro[9,10-b]furan	218	C16H10O	000000-00-0	42
4	Naphthalene, 1-(phenylmethyl)-	218	C17H14	000611-45-0	27
5	Naphthalene, 2-(phenylmethyl)-	218	C17H14	000613-59-2	27

****

Peak Number 6 Benzo[k]fluoranthene Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
2[illegible].257	31.13 ng	31239000	Perylene-d12	26.267

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzo[k]fluoranthene	252	C20H12	000207-08-9	97
2	Perylene	252	C20H12	000198-55-0	93
3	Benzo[e]pyrene	252	C20H12	000192-97-2	91
4	Benzo[j]fluoranthene	252	C20H12	000205-82-3	90
5	Perylene	252	C20H12	000198-55-0	90

```
Data Path : C:\msdchem\1\data\021313\
Data File : 01305.D
Acq On    : 12 Feb 2013   2:54 pm
Operator  : LAP
Sample    : EV13010005-02
Misc      : 30g -> 1mL
ALS Vial  : 5   Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\SIMSCAN2.M
Quant Title  : SVOCs by SW-846 Method 8270D SIM/Scan mode

TIC Library   : C:\DATABASE\NBS75K.L
TIC Integration Parameters: TICINT.P

***************************************************************************
Peak Number  1  3-Hexen-2-one                        Concentration Rank  8

  R.T.      EstConc           Area        Relative to ISTD         R.T.
---------------------------------------------------------------------------
  [illegible].670    5.11 ng          579074   1,4-Dichlorobenzene-d4       6.561

 Hit# of  5    Tentative ID                     MW  MolForm        CAS#        Qual
---------------------------------------------------------------------------
 1 3-Hexen-2-one                                98 C6H10O         000763-93-9 86
 2 2-Pentene, 2,4-dimethyl-                     98 C7H14          000625-65-0 86
 3 Furan, 2-methoxy-                            98 C5H6O2         025414-22-6 86
 4 3-Penten-2-one, 4-methyl-                    98 C6H10O         000141-79-7 8[illegible]
 5 2-Pentene, 3,4-dimethyl-, (Z)-               98 C7H14          004914-91-4 78


***************************************************************************
Peak Number  2  2-Pentanone, 4-hydroxy-4-me...  Concentration Rank  1

  R.T.      EstConc           Area        Relative to ISTD         R.T.
---------------------------------------------------------------------------
  [illegible] 2577.39 ng       292107000   1,4-Dichlorobenzene-d4       6.561

 Hit# of  5    Tentative ID                     MW  MolForm        CAS#        Qual
---------------------------------------------------------------------------
 1 2-Pentanone, 4-hydroxy-4-methyl-            116 C6H12O2        000123-42-2 78
 2 2-Pentanone, 4-hydroxy-4-methyl-            116 C6H12O2        000123-42-2 50
 3 2-Pentanone, 5-methoxy-                     116 C6H12O2        017429-04-8 45
 4 2-Pentanone, 5-methoxy-                     116 C6H12O2        017429-04-8 45
 5 Acetic acid, 1,1-dimethylethyl e...         116 C6H12O2        000540-88-5 33


***************************************************************************
Peak Number  3  Phenol, 4-(2,2,4-trimethylp...  Concentration Rank  9

  R.T.      EstConc           Area        Relative to ISTD         R.T.
---------------------------------------------------------------------------
 1[illegible].247    4.95 ng          983887   Phenanthrene-d10            16.714

 Hit# of  5    Tentative ID                     MW  MolForm        CAS#        Qual
---------------------------------------------------------------------------
 1 Phenol, 4-(2,2,4-trimethylpentyl)-          206 C14H22O        000000-00-0 64
 2 Phenol, p-tert-butyl-                       150 C10H14O        000098-54-4 59
 3 Phenol, m-tert-butyl-                       150 C10H14O        000585-34-2 59
 4 Phenol, 4,4'-(1,2-diethyl-1,2-et...         270 C18H22O2       000084-16-2 53
 5 Propane, 1,3-bis(ethylthio)-                164 C7H16S2        033672-52-6 52


***************************************************************************
Peak Number  4  Benzo[a]pyrene                       Concentration Rank  6

  R.T.      EstConc           Area        Relative to ISTD         R.T.
```

[illegible]5.997	5.32 ng	859206	Perylene-d12	26.233

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzo[e]pyrene	252	C20H12	000192-97-2	90
2	Benzo[a]pyrene	252	C20H12	000050-32-8	90
3	Benzo[k]fluoranthene	252	C20H12	000207-08-9	89
4	Benzo[k]fluoranthene	252	C20H12	000207-08-9	89
5	Perylene	252	C20H12	000198-55-0	89

****

Peak Number 5 .beta.-Sitosterol Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
[illegible].067	6.71 ng	1083960	Perylene-d12	26.233

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	.beta.-Sitosterol	414	C29H50O	000083-46-5	84
2	.gamma.-Sitosterol	414	C29H50O	000083-47-6	41
3	4(1H)-Pyrimidinone, 2-(ethylthio)-	156	C6H8N2OS	006965-19-1	9
4	Phenanthrene, 1,2,3,4,4a,9,10,10...	228	C17H24	000471-79-4	9
5	[illegible]r[illegible]panedioic acid, (phenylmethyl...	304	C18H24O4	032046-34-7	9

[illegible].M Fri Feb 15 10:21:14 2013

Library Search Compound Report

Data Path : C:\msdchem\1\data\021113\
Data File : B1152.D
Acq On : 12 Feb 2013 7:45 pm
Operator : LAP
Sample : EV13020005-04
Misc : 1000mL -> 1mL
ALS Vial : 52 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\SIMSCAN2.M
Quant Title : SVOCs by SW-846 Method 8270D SIM/Scan mode

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: TICINT.P

No Library Search Compounds Detected

****

Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\data\021113\
Data File : B1153.D
Acq On : 12 Feb 2013 8:25 pm
Operator : LAP
Sample : EV13020005-05
Misc : 30g -> 1mL
ALS Vial : 53 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\SIMSCAN2.M
Quant Title : SVOCs by SW-846 Method 8270D SIM/Scan mode

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: TICINT.P

					--Internal Standard--			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
2-Propanone, 1-...	2.745	5.9	ng	762946	1	6.584	2600120	20.0
3-Penten-2-one,...	3.705	4.2	ng	543571	1	6.584	2600120	20.0
2-Pentanone, 4-...	4.310	1254.7	ng	163123000	1	6.584	2600120	20.0
Caprolactam	10.139	3.6	ng	136568	2	9.186	760156	20.0
2,6,10-Dodecatr...	25.576	2.9	ng	613146	6	26.250	4204650	20.0

Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\data\021113\
Data File : B1154.D
Acq On : 12 Feb 2013 9:05 pm
Operator : LAP
Sample : EV13020005-06
Misc : 30g -> 1mL
ALS Vial : 54 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\SIMSCAN2.M
Quant Title : SVOCs by SW-846 Method 8270D SIM/Scan mode

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: TICINT.P

					--Internal Standard--			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
2-Propanone, 1-...	2.733	4.3	ng	597957	1	6.584	2766350	20.0
1-Pentene, 3,4-...	3.693	4.1	ng	561311	1	6.584	2766350	20.0
Propane, 1-(1-m...	4.013	23.9	ng	3312500	1	6.584	2766350	20.0
2-Pentanone, 4-...	4.333	1885.6	ng	260814000	1	6.584	2766350	20.0
Propane, 1-(1-m...	5.178	4.8	ng	669641	1	6.584	2766350	20.0
Caprolactam	10.115	3.8	ng	214323	2	9.186	1136660	20.0
Phenol, 2-(1,1-...	15.918	4.7	ng	953777	4	16.736	4076710	20.0
Phenol, 4-(2,2,...	16.328	4.8	ng	972008	4	16.736	4076710	20.0
9-Octadecenamid...	25.224	6.4	ng	1241180	6	26.251	3871760	20.0
2,6,10-Dodecatr...	25.569	3.0	ng	589084	6	26.251	3871760	20.0

Data Path : C:\msdchem\1\data\021113\
Data File : BI166.D
Acq On : 13 Feb 2013 4:52 am
Operator : LAP
Sample : EV1300005-07 (Sig #1); EV13010138-07 (Sig #2)
Misc : 30g -> 1mL
ALS Vial : 66 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\SIMSCAN2.M
Quant Title : SVOCs by SW-846 Method 8270D SIM/Scan mode

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: TICINT.P

****

Peak Number 1 3-Penten-2-one, 4-methyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.870	6.51 ng	589744	1,4-Dichlorobenzene-d4	6.573

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Penten-2-one, 4-methyl-	98	C6H10O	000141-79-7	90
2	Furan, 2-methoxy-	98	C5H6O2	025414-22-6	86
3	3-Hexen-2-one	98	C6H10O	000763-93-9	86
4	2-Pentene, 2,4-dimethyl-	98	C7H14	000625-65-0	86
5	2-Pentene, 4,4-dimethyl-, (Z)-	98	C7H14	000762-63-0	86

****

Peak Number 2 Tetradecanoic acid Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.298	4.50 ng	610100	Phenanthrene-d10	16.737

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Tetradecanoic acid	228	C14H28O2	000544-63-8	91
2	Tetradecanoic acid	228	C14H28O2	000544-63-8	45
3	Oxazolid-2-one, 4-methyl-5-phenyl-	177	C10H11NO2	000000-00-0	27
4	Tetradecanoic acid	228	C14H28O2	000544-63-8	15
5	Benzenamine, 3-methyl-	107	C7H9N	000108-44-1	14

ALS LABORATORY GROUP - EVERETT
DATA SUMMARY SHEET

PARAMETER: SEMIVOLATILES   INSTR MTHD: NWTPH-DX   EXTRCT MTHD: NWTPH-DX

QC BATCH #: DS020413   1ST ANAL. SEQ. 81302041

EXT. DATES: 2/4/2013   2/5/2013   MATRIX: SOIL

ASSOCIATED SAMPLES: EV13020005-2,6,7 ,   EV13020015-1-3

BLANK AND DUPLICATE RESULTS

ANALYTE:	BLANK RESULTS:	DUPLICATE:	ORIGINAL:	%RPD:
		EV13020005-7		
DIESEL	<25 mg/Kg	<25 mg/Kg	<25 mg/Kg	
MOTOR OIL	<50 mg/Kg	<50 mg/Kg	<50 mg/Kg	

SPIKE/ SPIKE DUPLICATE RESULTS

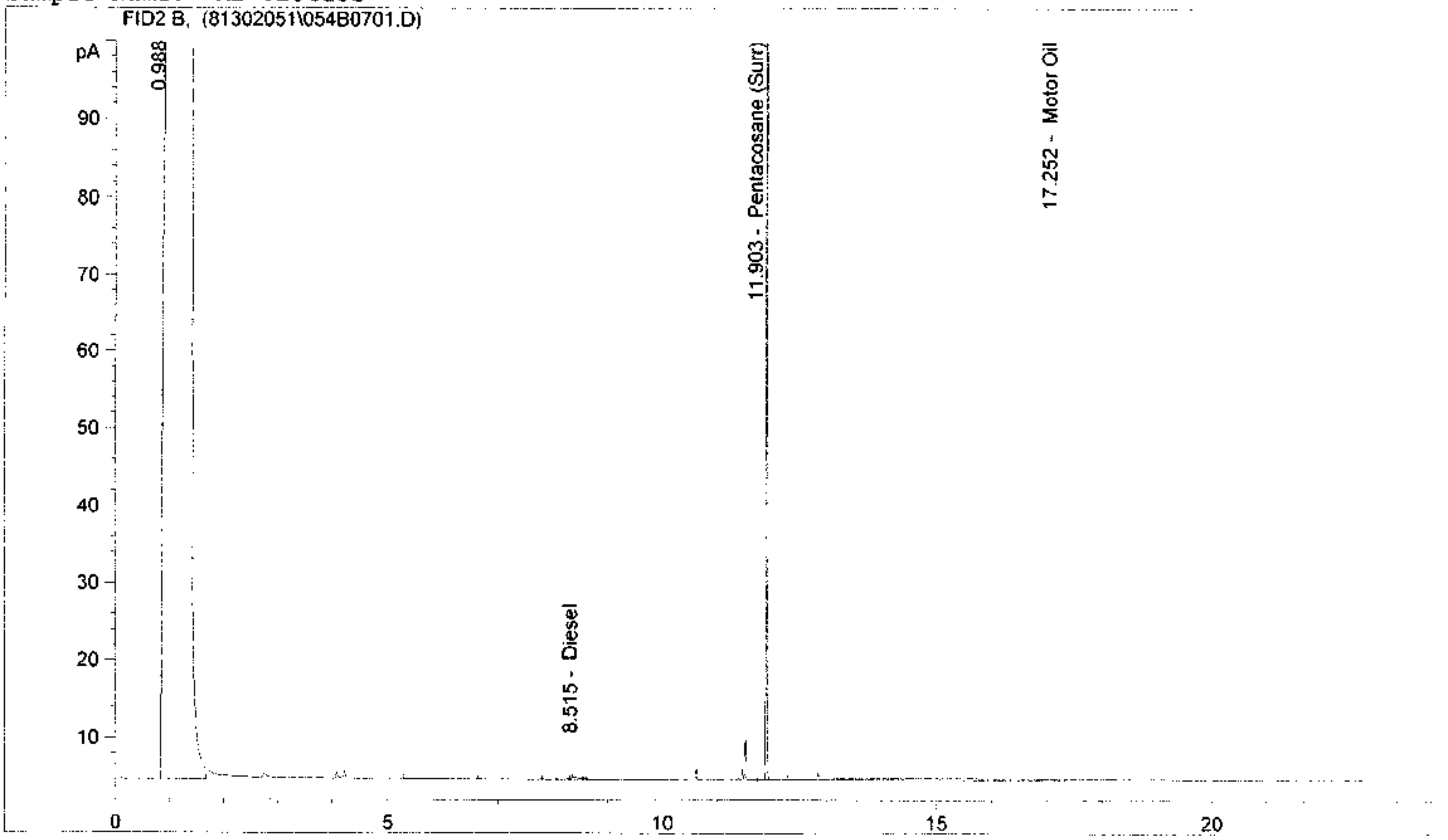
SPIKE ID	AMOUNT SPIKED	BLANK SPIKE %RECOVERY	MATRIX SPIKE %RECOVERY	BLANK SPIKE DUP %RECOVERY	REL % DIFF
			EV13020005-7		
DIESEL	125 mg/Kg	90%	92%	98%	6%
PENTACOSANE	5 mg/Kg	99%	101%	105%	4%

NOTES: IF NUMBER OF ANALYTES DON'T ALLOW LISTING ALL COMPOUNDS, THE RAW DATA MAY BE SUBMITTED
RAW DATA FOR QC RUN ON A SPECIFIC SAMPLE SHOULD BE INCLUDED WITH ORIGINAL SAMPLE ANALYSIS RAW DATA

DATASUM.XLS

```
Instrument #98        Data File: C:\HPCHEM\1\DATA\81302051\054B0701.D
Operator:   EBS
Method:     C:\HPCHEM\1\METHODS\BDMO0812.M
Injection Date & Time: 2/5/2013 10:44:16 AM      2/5/2013 10:44:16 AM
Report Creation:       2/5/2013              2:45:22 PM
```

Sample Name: MB-020413S



Ret. Time	Signal	Compound Name	Response	Amount ug/mL	
8.515	FID2 B,	Diesel	26.197	1.997	
11.903		Pentacosane (Surr)	197.990	8.691	87%
17.252		Motor Oil	104.774	6.434	

$D < 50\ \mu g/mL \times \frac{10\ mL}{20.0\ g} < 25\ mg/kg$

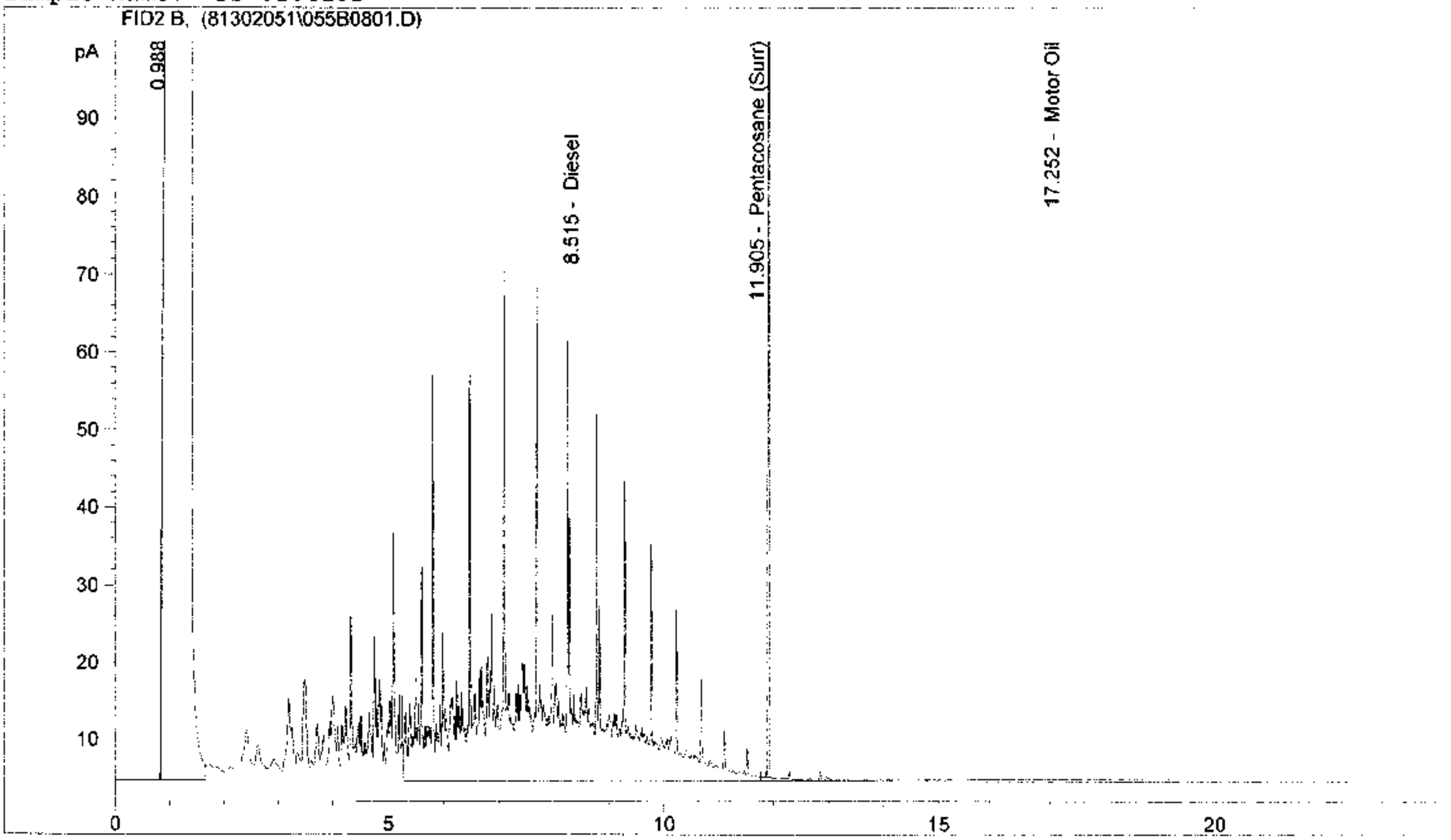
$O < 100\ \mu g/mL \times \frac{10\ mL}{20.0\ g} < 50\ mg/kg$

REVIEWED BY & DATE MB 2/7/13

02.05.13 EI

Instrument #98   Data File: C:\HPCHEM\1\DATA\81302051\055B0801.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\BDMO0812.M
Injection Date & Time: 2/5/2013 11:14:26 AM   2/5/2013 11:14:26 AM
Report Creation: 2/5/2013   2:45:41 PM

Sample Name: BS-020413S



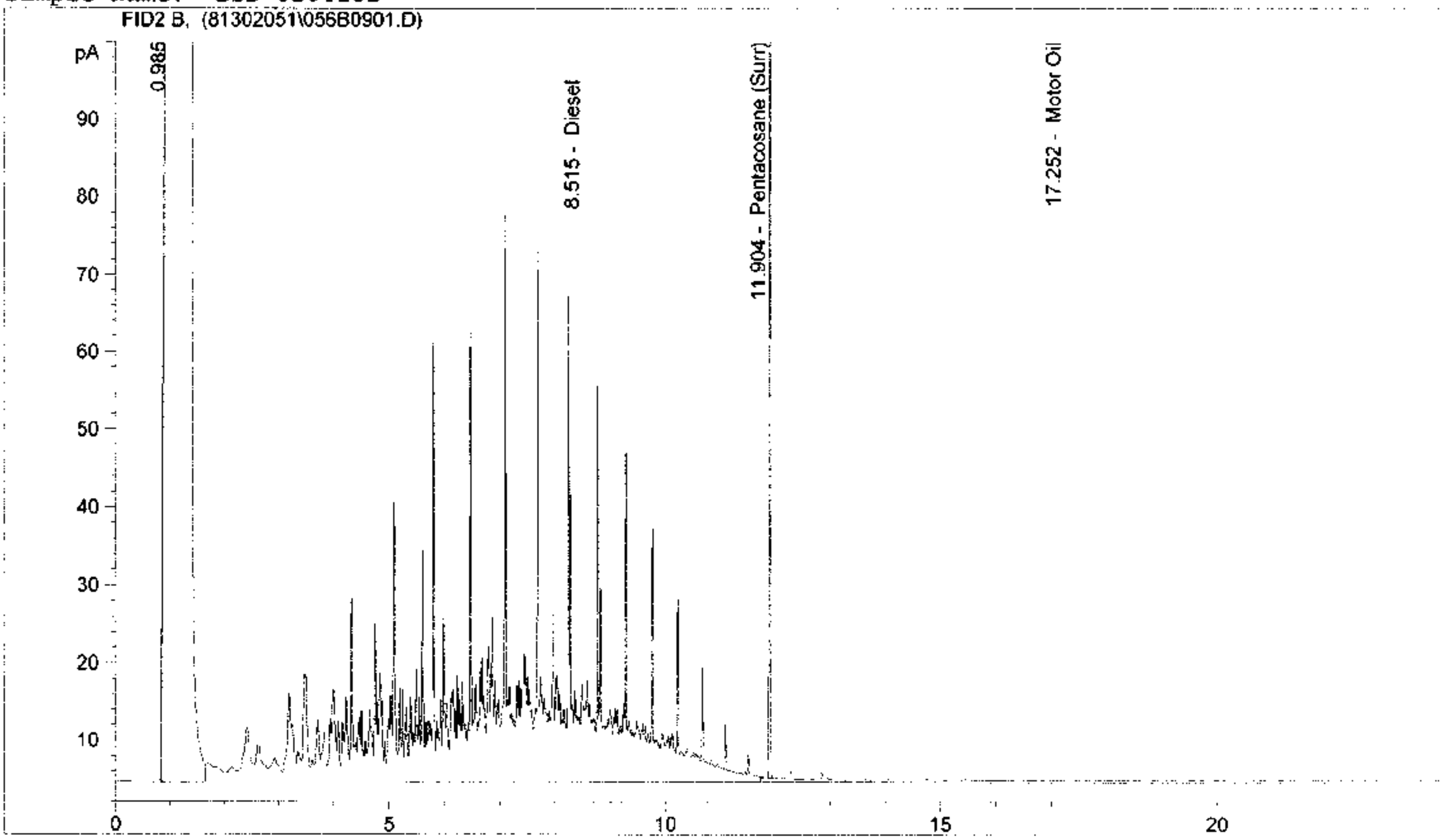
Ret. Time	Signal	Compound Name	Response	Amount ug/mL	
8.515	FID2 B,	Diesel	2951.140	225.010	90%
11.905		Pentacosane (Surr)	225.865	9.915	99%
17.252		Motor Oil	137.744	8.459	

REVIEWED BY & DATE BS 2/7/13

02.05.13 EJ

Instrument #98 Data File: C:\HPCHEM\1\DATA\81302051\056B0901.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\BDMO0812.M
Injection Date & Time: 2/5/2013 11:44:36 AM 2/5/2013 11:44:36 AM
Report Creation: 2/5/2013 2:46:00 PM

Sample Name: BSD-020413S



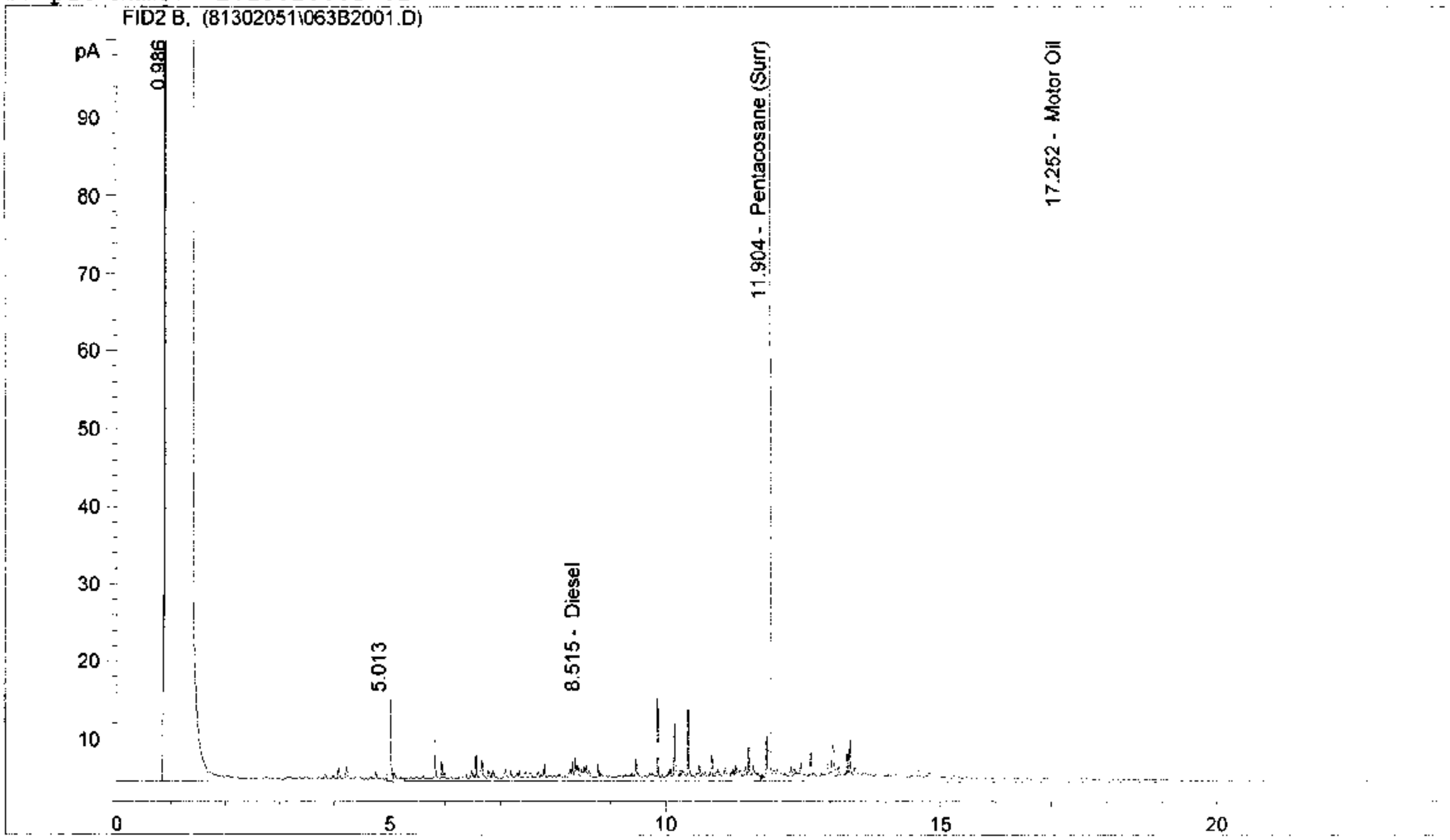
Ret. Time	Signal	Compound Name	Response	Amount ug/mL	
8.515	FID2 B,	Diesel	3225.952	245.963	98 %
11.904		Pentacosane (Surr)	239.945	10.533	105 %
17.252		Motor Oil	188.170	11.556	

REVIEWED BY & DATE [initials] 2/7/13

02.05.13 [initials]

Instrument #98   Data File: C:\HPCHEM\1\DATA\81302051\063B2001.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\BDMO0812.M
Injection Date & Time: 2/5/2013 5:40:33 PM   2/5/2013 5:40:33 PM
Report Creation: 2/6/2013   11:10:43 AM

Sample Name: EV13020005-02



Ret. Time	Signal	Compound Name	Response	Amount ug/mL
8.515	FID2 B,	Diesel	345.007	26.305
11.904		Pentacosane (Surr)	239.276	10.503 105%
17.252		Motor Oil	305.208	18.743

26.04g

D < 25 mg/kg

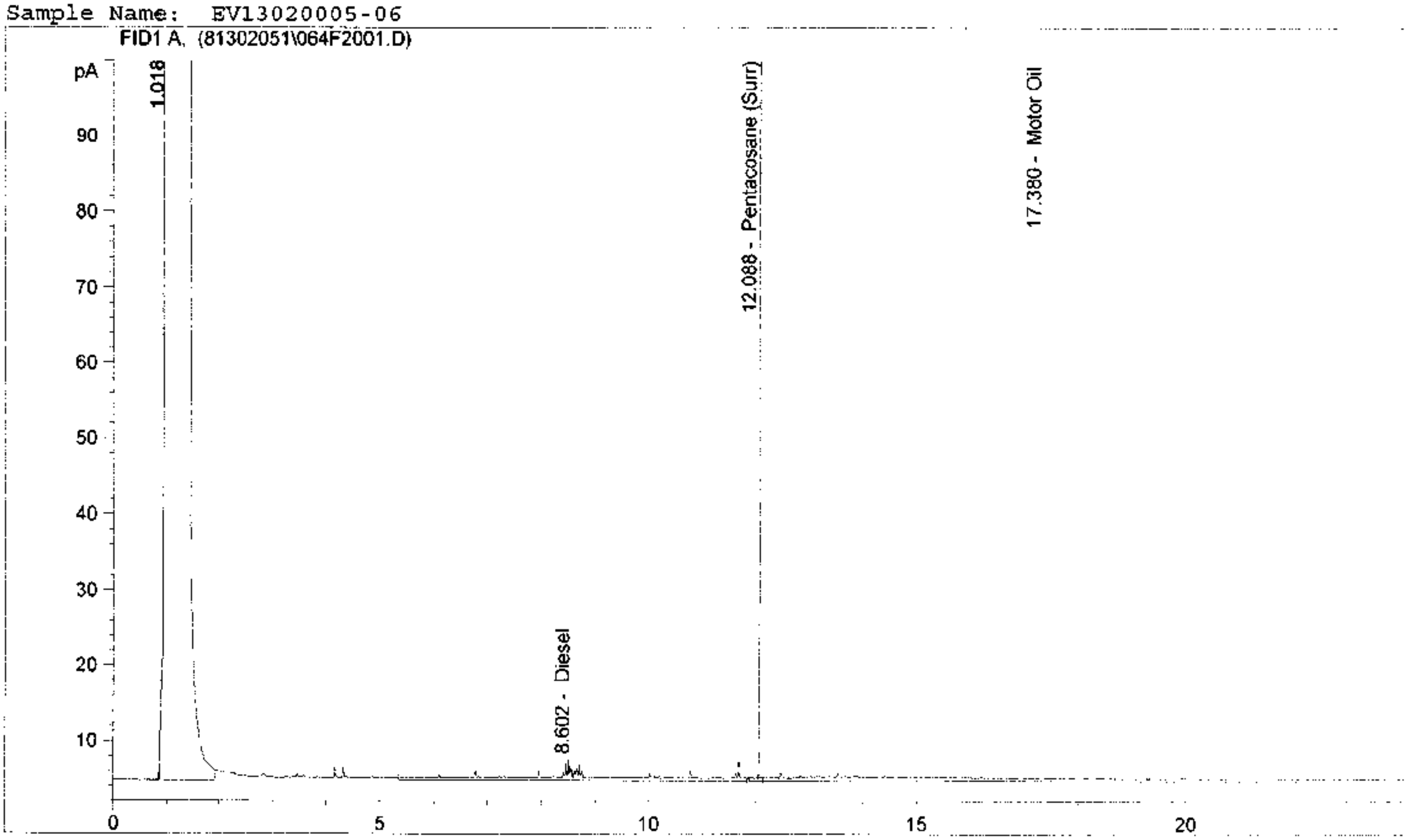
O < 50 mg/kg

REVIEWED BY TB
& DATE 2/7/13

02.06.13 EJ

Instrument #98 Data File: C:\HPCHEM\1\DATA\81302051\064F2001.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\FDMO0213.M
Injection Date & Time: 2/5/2013 5:40:33 PM 2/5/2013 5:40:33 PM
Report Creation: 2/6/2013 11:09:06 AM

Sample Name: EV13020005-06



Ret. Time	Signal	Compound Name	Response	Amount ug/mL
8.602	FID1 A,	Diesel	165.224	12.565
12.088		Pentacosane (Surr)	238.813	10.273 /03%
17.380		Motor Oil	262.284	22.858

28.52g

D< 25 mg/kg

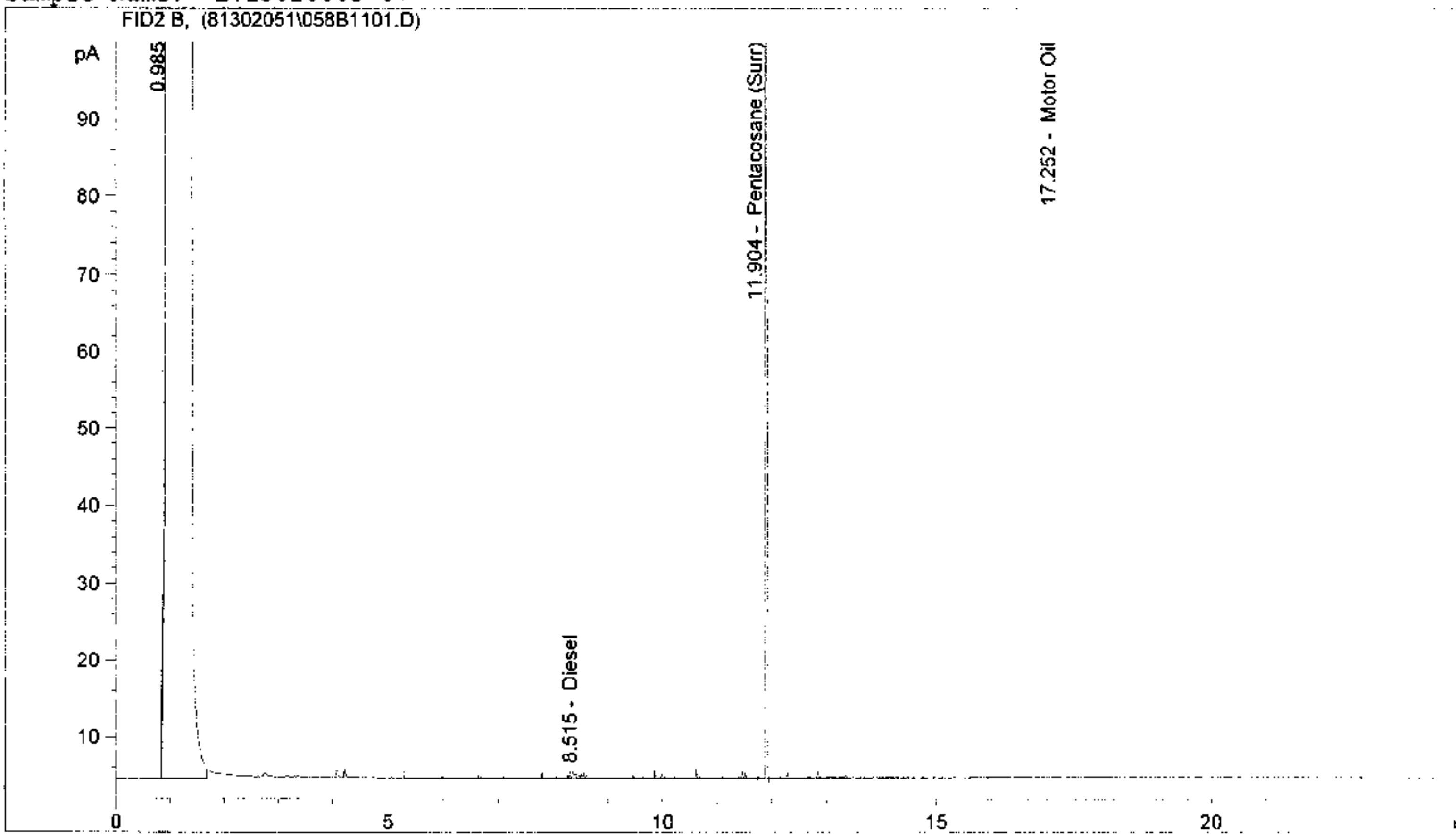
O<50 mg/kg

REVIEWED BY RB
& DATE 2/7/13

02.06.BEJ

Instrument #98 Data File: C:\HPCHEM\1\DATA\81302051\058B1101.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\BDMO0812.M
Injection Date & Time: 2/5/2013 12:44:56 PM 2/5/2013 12:44:56 PM
Report Creation: 2/5/2013 2:44:13 PM

Sample Name: EV13020005-07



Ret. Time	Signal	Compound Name	Response	Amount ug/mL	
8.515	FID2 B,	Diesel	39.690	3.026	
11.904		Pentacosane (Surr)	244.078	10.714	107
17.252		Motor Oil	129.889	7.977	

25.650

D < 25 mg/kg

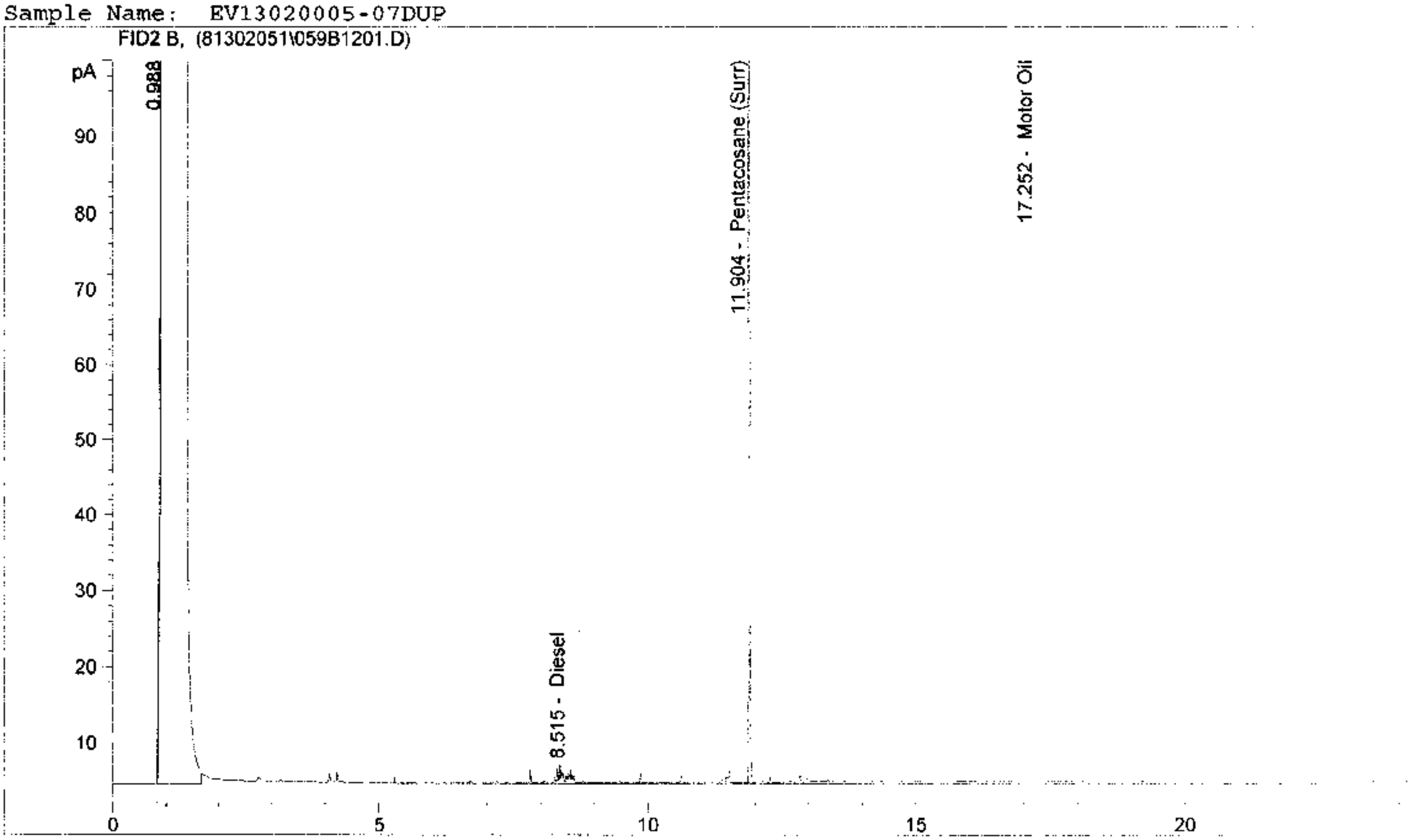
O < 50 mg/kg

REVIEWED BY & DATE ns 2/7/13

02.05.13

Instrument #98 Data File: C:\HPCHEM\1\DATA\81302051\059B1201.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\BDMO0812.M
Injection Date & Time: 2/5/2013 1:15:08 PM 2/5/2013 1:15:08 PM
Report Creation: 2/5/2013 2:44:32 PM

Sample Name: EV13020005-07DUP



Ret. Time	Signal	Compound Name	Response	Amount ug/mL	
8.515	FID2 B,	Diesel	85.215	6.497	
11.904		Pentacosane (Surr)	232.402	10.201	102%
17.252		Motor Oil	180.676	11.095	

25.68g

D < 25 mg/kg

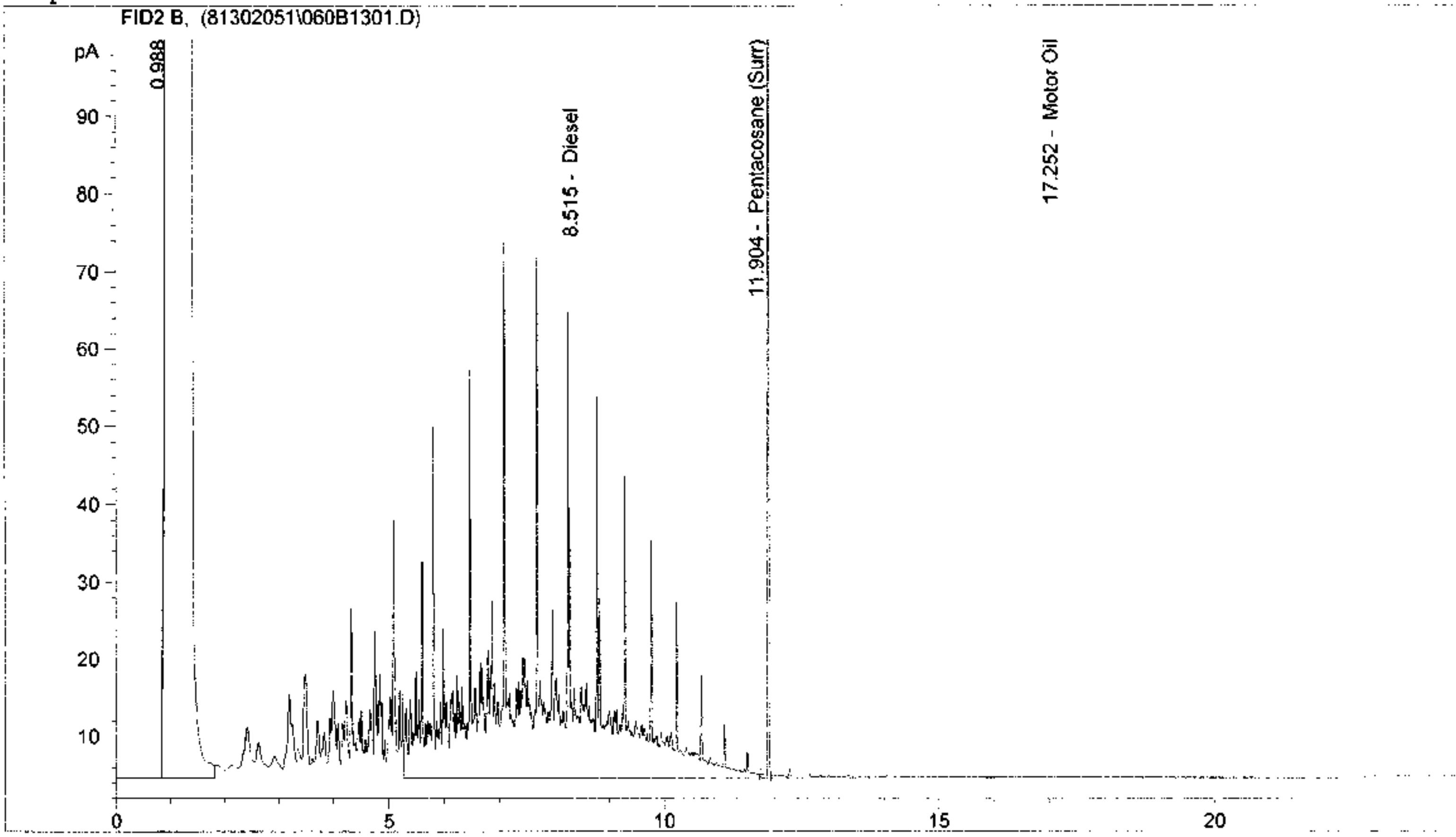
O < 50 mg/kg

REVIEWED BY & DATE 2/7/13

02.05.13

Instrument #98 Data File: C:\HPCHEM\1\DATA\81302051\060B1301.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\BDMO0812.M
Injection Date & Time: 2/5/2013 1:45:15 PM 2/5/2013 1:45:15 PM
Report Creation: 2/5/2013 2:44:53 PM

Sample Name: EV13020005-07MS



Ret. Time	Signal	Compound Name	Response	Amount ug/mL	
8.515	FID2 B,	Diesel	2986.750	227.725	
11.904		Pentacosane (Surr)	229.249	10.063	101%
17.252		Motor Oil	127.475	7.828	

25.68g

D = 227.725 ug/mL x $\frac{10 mL}{25.68g}$ = 89 mg/kg

TV = 250 ug/mL x $\frac{10 mL}{25.68g}$ = 97 mg/kg

Spike Recovery = $\frac{89}{97}$ x 100 = 92%

REVIEWED BY & DATE AB 2/17/13

02.05.13 [illegible]

ALS LABORATORY GROUP - EVERETT
DATA SUMMARY SHEET

PARAMETER: SEMIVOLATILES INSTR. MTHD: NWTPH-DX EXTRCT MTHD: NWTPH-DX

QC BATCH #: DW020113 1ST ANAL. SEQ. 81302011

EXT. DATES: 2/1/2013 2/4/2013 MATRIX: H20

2/5/2013

ASSOCIATED SAMPLES: EV13010138-7,15,16 EV13020005-4 EV13020007-1-8

EV13020010-1-4

BLANK AND DUPLICATE RESULTS

ANALYTE:	BLANK RESULTS:	DUPLICATE:	ORIGINAL:	%RPD:
DIESEL	<130ug/L			
MOTOR OIL	<250ug/L			

SPIKE/ SPIKE DUPLICATE RESULTS

SPIKE ID	AMOUNT SPIKED	BLANK SPIKE %RECOVERY	MATRIX SPIKE %RECOVERY	BLANK SPIKE DUP %RECOVERY	REL % DIFF
DIESEL	1.25 mg/L	84%		86%	2%
PENTACOSANE	0.1mg/L	91%		90%	1%

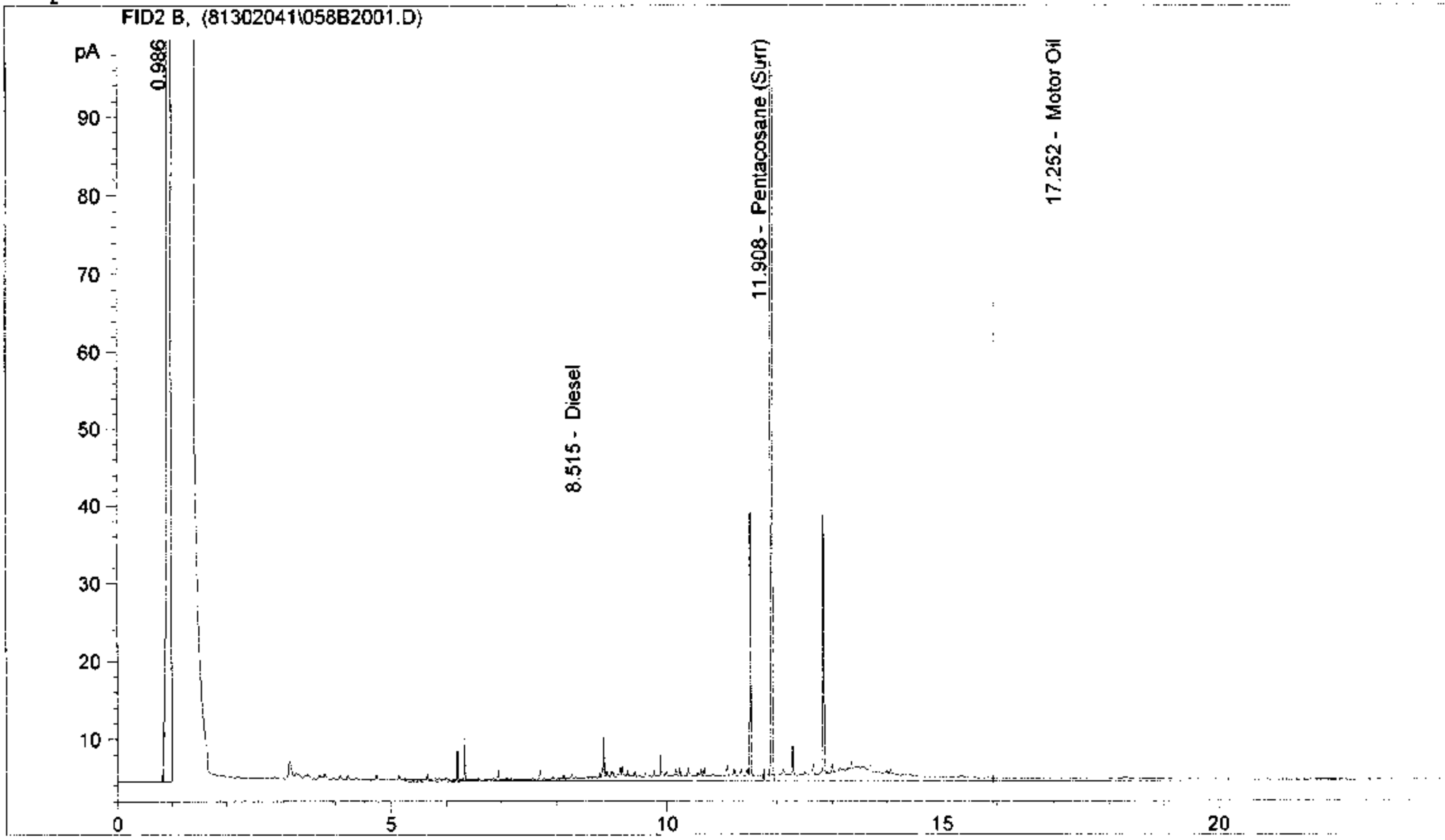
NOTES: IF NUMBER OF ANALYTES DON'T ALLOW LISTING ALL COMPOUNDS, THE RAW DATA MAY BE SUBMITTED

RAW DATA FOR QC RUN ON A SPECIFIC SAMPLE SHOULD BE INCLUDED WITH ORIGINAL SAMPLE ANALYSIS RAW DATA

DATASUM.XLS

Instrument #98   Data File: C:\HPCHEM\1\DATA\81302041\058B2001.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\BDMO0812.M
Injection Date & Time: 2/4/2013 7:32:47 PM   2/4/2013 7:32:47 PM
Report Creation: 2/5/2013   9:14:21 AM

Sample Name: MB-020113 W



Ret. Time	Signal	Compound Name	Response	Amount ug/mL	
8.515	FID2 B,	Diesel	254.371	19.395	
11.908		Pentacosane (Surr)	760.200	33.370	83%
17.252		Motor Oil	363.643	22.331	

$0 < 50\ \mu g/mL \times \frac{1.0\ mL}{400\ mL} < 120\ \mu g/L$

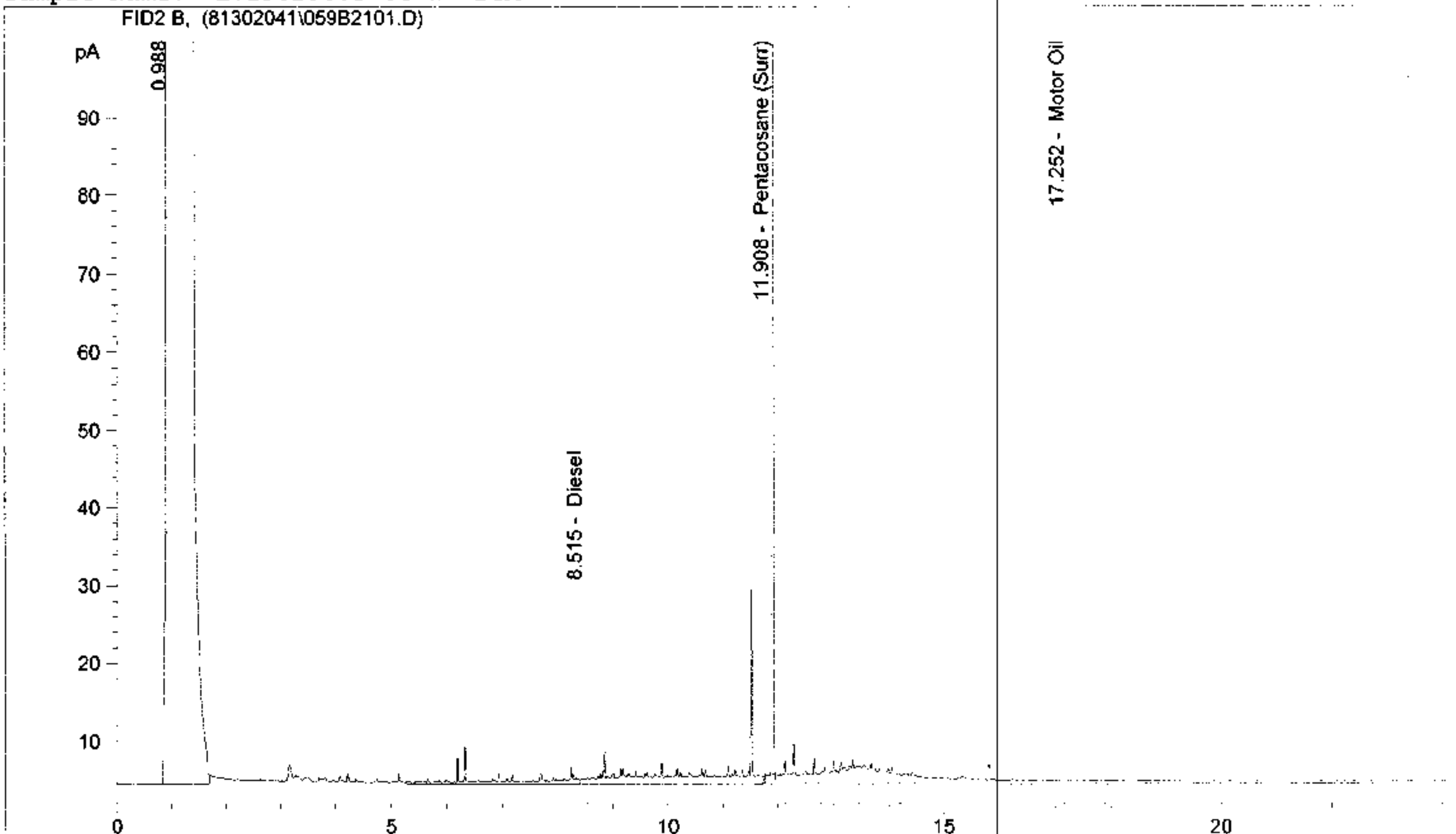
$0 < 100\ \mu g/mL \times \frac{1.0\ mL}{400\ mL} < 250\ \mu g/L$

REVIEWED BY & DATE MS 2/7/13

02.05.13 EB

Instrument #98 Data File: C:\HPCHEM\1\DATA\81302041\059B2101.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\BDMO0812.M
Injection Date & Time: 2/4/2013 8:02:46 PM 2/4/2013 8:02:46 PM
Report Creation: 2/5/2013 9:14:02 AM

Sample Name: EV13020005-04 W SGA ->



Ret. Time	Signal	Compound Name	Response	Amount ug/mL
8.515	FID2 B,	Diesel	294.911	22.485
11.908		Pentacosane (Surr)	803.690	35.279 88%
17.252		Motor Oil	441.369	27.105

D < 130 ug/L

O < 250 ug/L

REVIEWED BY & DATE ns 2/7/13

02.05.13 EBS

ALS LABORATORY GROUP-EVERETT
DATA SUMMARY SHEET

PARAMETER: NW-GAS/BTEX INSTR MTHD: 8021 EXTRCT MTHD 5030/5035

QC BATCH #: GS013013S 1ST ANAL. SEQ. 71301301

EXT. DATES 1/30/13 1/31/13 2/1/13 MATRIX SOIL

ASSOCIATED SAMPLES EV13010133-1-4 EV13010145-2-4 EV23010138-2,3,4,6,8,10,13,14,17

EV13020005-2,6,7

BLANK AND DUPLICATE RESULTS

ANALYTE:	BLANK RESULTS:	DUPLICATE:	ORIGINAL:	%RPD:
Gasoline	<3.0 mg/Kg			
MTBE	<0.1 mg/Kg			
Benzene	<0.03 mg/Kg			
Toluene	<0.05 mg/Kg			
Ethylbenzene	<0.05 mg/Kg			
Xylenes	<0.2 mg/Kg			

SPIKE/ SPIKE DUPLICATE RESULTS

SPIKE ID	AMOUNT SPIKED	BS %RECOVERY	BSD %RECOVERY	REL%DIFF		MS %RECOVERY	MSD	REL % DIFF
				EV13010138-13				
Gasoline	25 mg/Kg	70	78	10.8	*	29.0	31.0	6.7
MTBE	2.0 mg/Kg	89	87	2.3		102	102	0.0
Benzene	1.0 mg/Kg	91	90	1.1		96	92	4.3
Toluene	1.0 mg/Kg	95	94	1.1		105	107	1.9
Ethylbenzene	1.0 mg/Kg	95	94	1.1		112	106	5.5
Xylenes	3.0 mg/kg	94	92	2.2		112	106	5.5
Triflourotoluene	0.5 mg/Kg	103	104	1.0		82	78	5.0

*Spike recovery low due to nonhomogenous sample matrix.

NOTES. IF NUMBER OF ANALYTES DON'T ALLOW LISTING ALL COMPOUNDS, THE RAW DATA MAY BE SUBMITTED

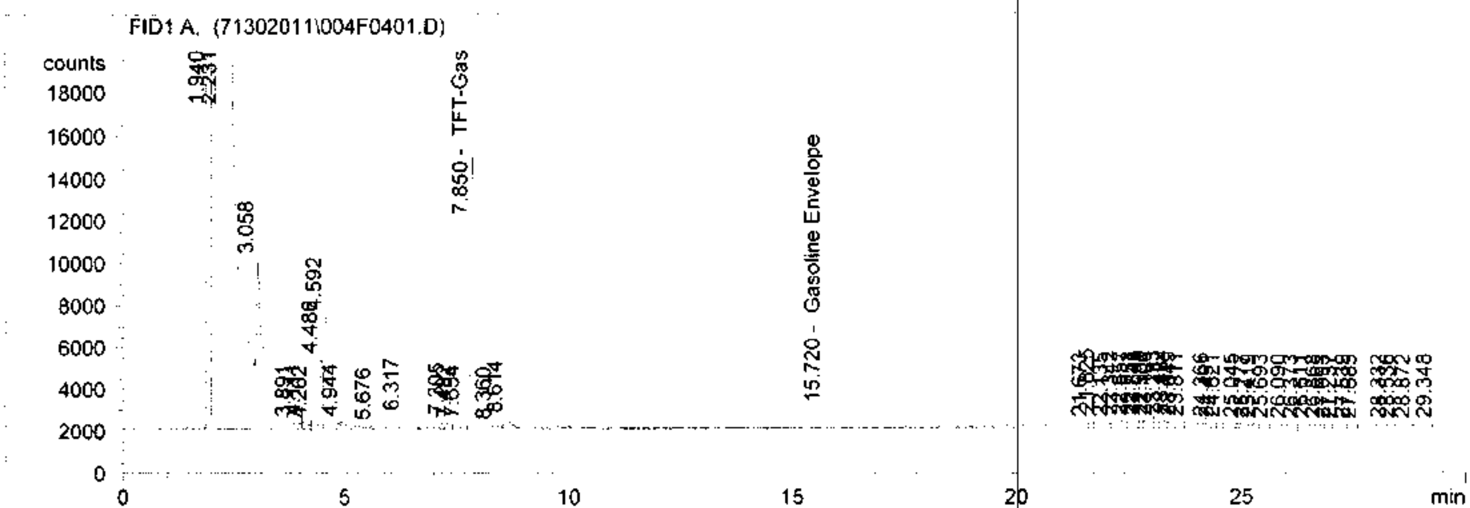
RAW DATA FOR QC RUN ON A SPECIFIC SAMPLE SHOULD BE INCLUDED WITH ORIGINAL SAMPLE ANALYSIS RAW DATA

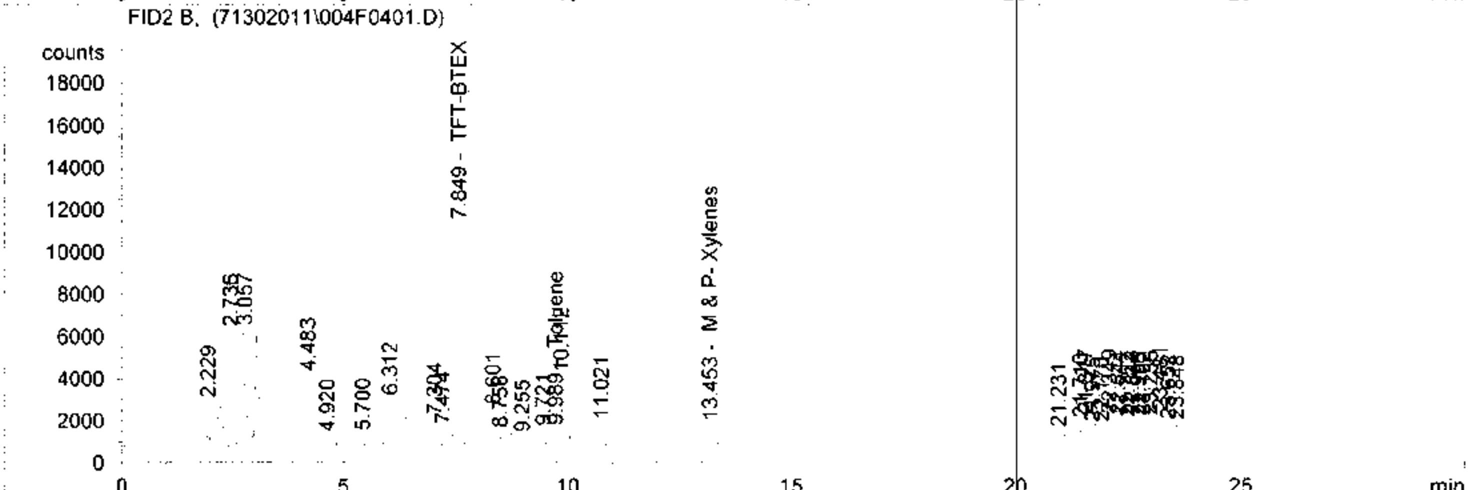
DATASUM XLS

Gas/BTEX   Instrument 70
Data File: C:\HPCHEM\1\DATA\71302011\004F0401.D
Injection Date & Time: 2/1/2013   10:06:13 AM
Report Created on: 2/6/2013   12:04:35 PM
Operator: DLC
Aquistion Method: GX0712.M
Analysis Method: C:\HPCHEM\1\METHODS\GX0712.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:MB-020113S   Dilution: X 0.0





Ret. Time	Compound Name	Area	Amount ug/L	
7.850	TFT-Gas	81313.344	9.763	98%
15.720	Gasoline Envelope	35702.859	7.350	

Gas < 3.0 mg/kg

Ret. Time	Compound Name	Area	Amount ug/L	
0.000	MTBE	0.000	0.000	
0.000	Benzene	0.000	0.000	
7.849	TFT-BTEX	323403.750	10.485	105%
9.989	Toluene	3289.454	0.544	
0.000	Ethylbenzene	0.000	0.000	
13.453	M & P- Xylenes	5025.521	0.709	
0.000	O-Xylene	0.000	0.000	

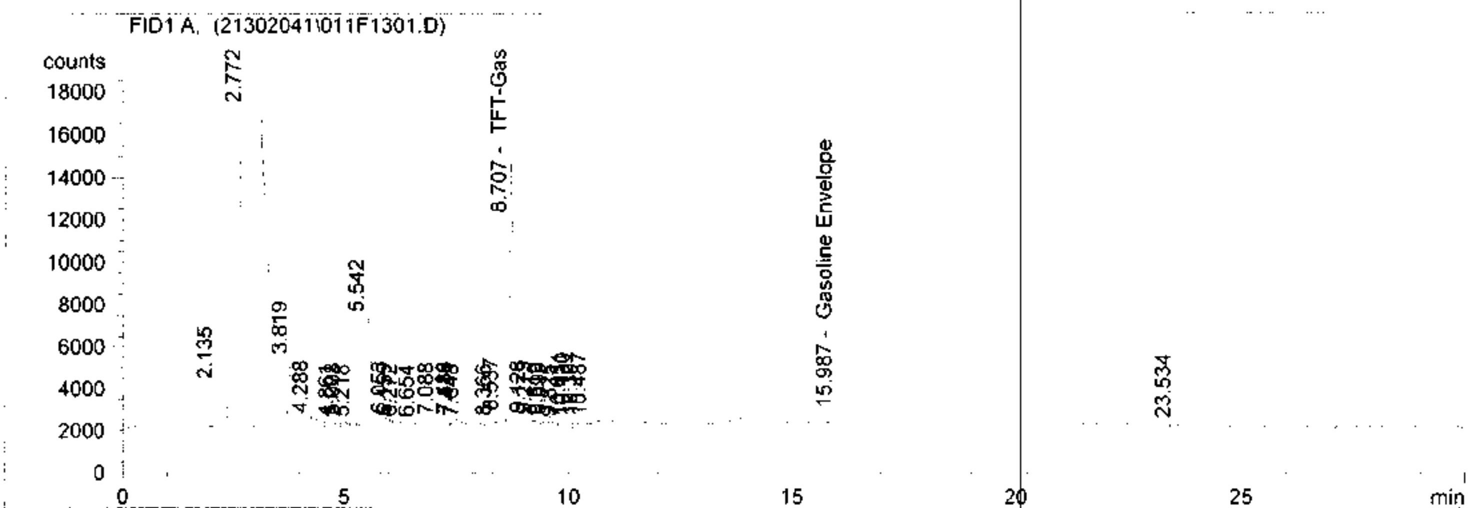
REVIEWED BY DB
& DATE 2/7/13

B <0.03 mg/kg   T,E <0.05 mg/kg   X <0.2 mg/kg   2-6-13 DC

Gas/BTEX   Instrument 2
Data File: C:\HPCHEM\2\DATA\21302041\011F1301.D
Injection Date & Time: 2/4/2013   2:59:44 PM
Report Created on: 2/5/2013   8:54:05 AM
Operator: DLC
Aquistion Method: GASB1012.M
Analysis Method: C:\HPCHEM\2\METHODS\GASB1012.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:EV13020005-02 RR   Dilution: X 0.0



Ret. Time	Compound Name	Area	Amount ug/L
8.707	TFT-Gas	89867.789	8.357 84%
15.987	Gasoline Envelope	164916.813	28.792

Gas <3.0 mg/kg

Ret. Time	Compound Name	Area	Amount ug/L
0.000	MTBE	0.000	0.000
7.066	Benzene	4640.841	0.132
8.707	TFT-BTEX	162899.969	10.142 101%
10.703	Toluene	3403.922	0.143
13.590	M & P- Xylenes	2570.519	0.241
13.810	Ethylbenzene	12222.853	0.723
14.428	O-Xylene	4609.410	0.110

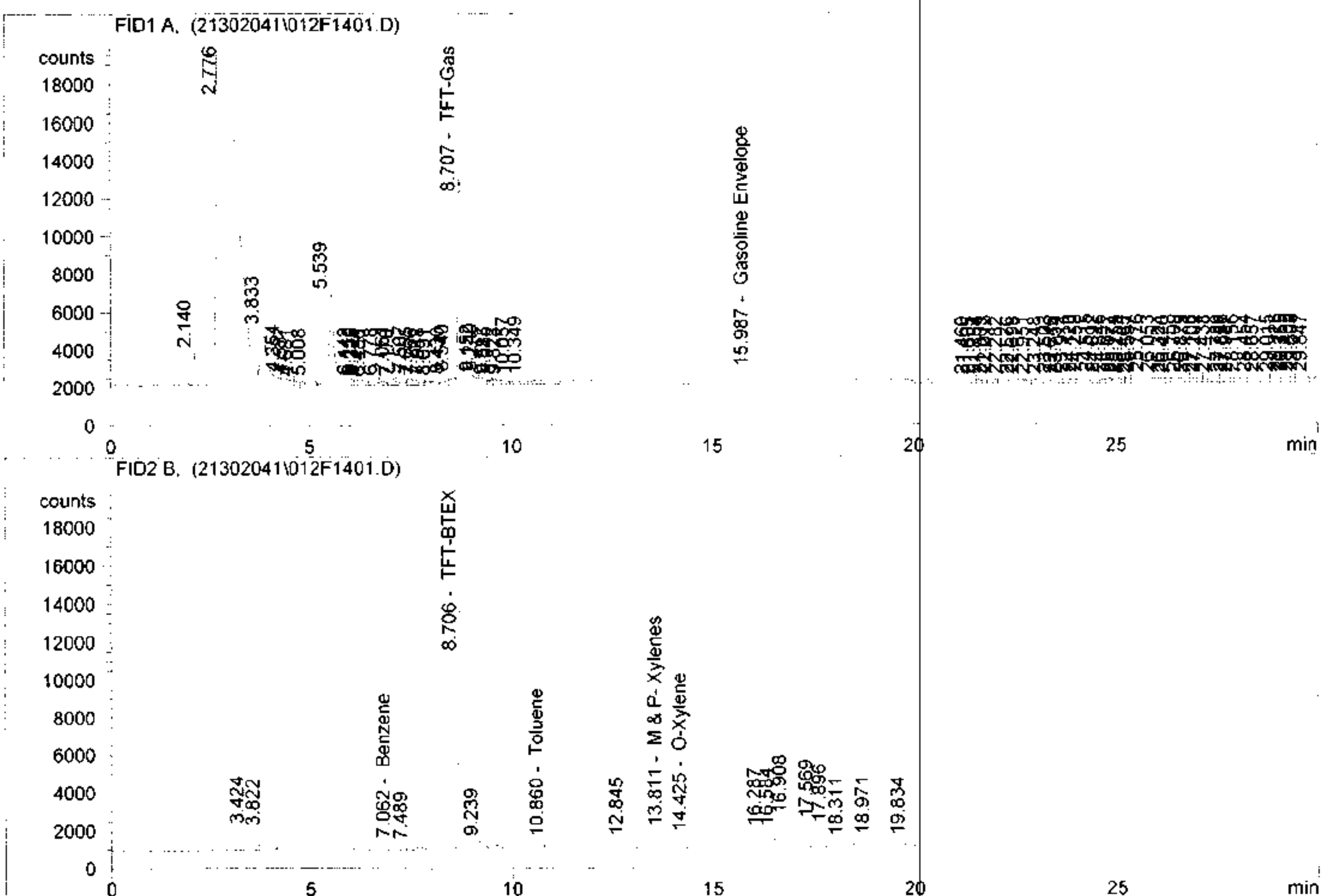
REVIEWED BY & DATE MS 2/17/13

B<0.03 mg/kg   T,E <0.05 mg/kg   X<0.2 mg/kg   2-6-13 DC

Gas/BTEX   Instrument 2
Data File: C:\HPCHEM\2\DATA\21302041\012F1401.D
Injection Date & Time: 2/4/2013   3:36:13 PM
Report Created on: 2/5/2013   8:54:16 AM
Operator: DLC
Aquistion Method: GASB1012.M
Analysis Method: C:\HPCHEM\2\METHODS\GASB1012.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:EV13020005-06 RR   Dilution: X 0.0



Ret. Time	Compound Name	Area	Amount ug/L	
8.707	TFT-Gas	81283.062	7.558	76%
15.987	Gasoline Envelope	148367.531	25.903	

Gas < 3.0 mg/kg

Ret. Time	Compound Name	Area	Amount ug/L	
0.000	MTBE	0.000	0.000	
7.062	Benzene	3432.212	0.109	
8.706	TFT-BTEX	147312.859	9.186	92%
10.860	Toluene	3694.675	0.150	
0.000	Ethylbenzene	0.000	0.000	
13.811	M & P- Xylenes	11505.275	0.430	
14.425	O-Xylene	5260.361	0.126	

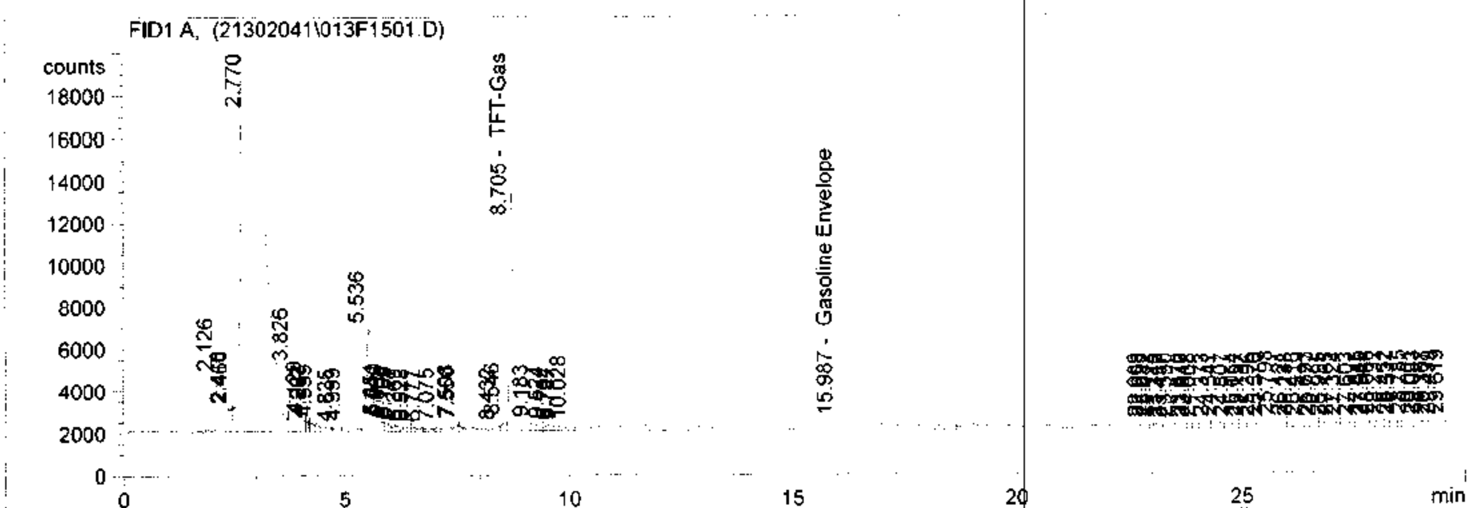
REVIEWED BY NS
& DATE 2/12/13

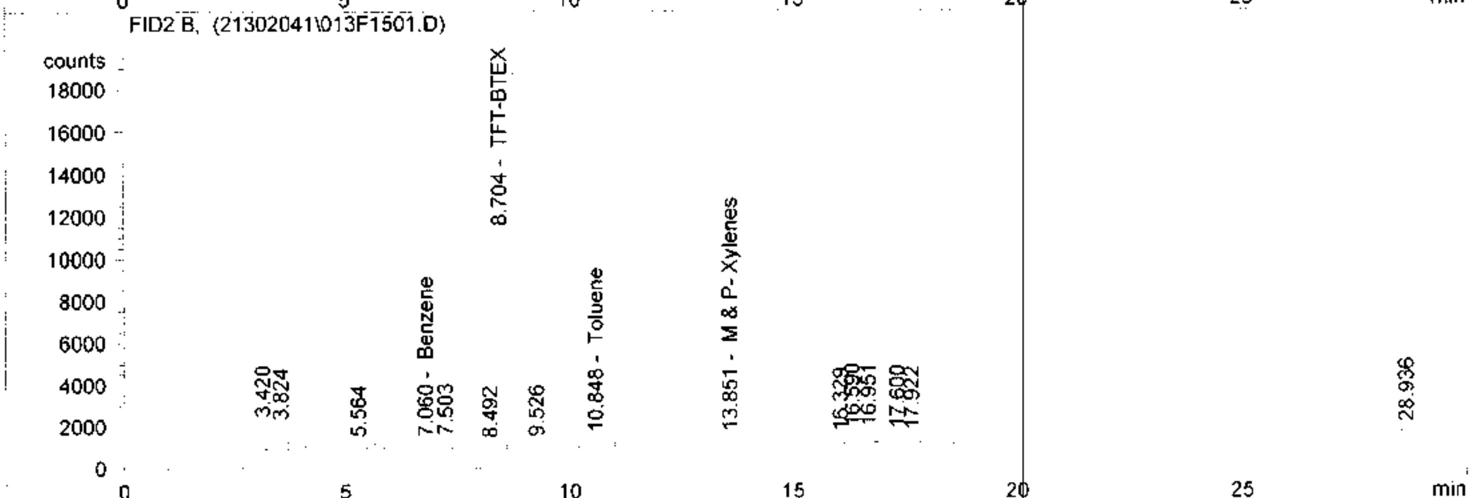
B < 0.03 mg/kg   T, E < 0.05 mg/kg   X < 0.2 mg/kg
2-6-13 DC

Gas/BTEX   Instrument 2
Data File: C:\HPCHEM\2\DATA\21302041\013F1501.D
Injection Date & Time: 2/4/2013   4:12:58 PM
Report Created on: 2/5/2013   8:54:28 AM
Operator: DLC
Aquistion Method: GASB1012.M
Analysis Method: C:\HPCHEM\2\METHODS\GASB1012.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:EV13020005-07 RR   Dilution: X 0.0





Ret. Time	Compound Name	Area	Amount ug/L
8.705	TFT-Gas	84510.797	7.858 79%
15.987	Gasoline Envelope	111616.164	19.487

Gas <~~50~~ 3.0 mg/kg

Ret. Time	Compound Name	Area	Amount ug/L
0.000	MTBE	0.000	0.000
7.060	Benzene	2678.855	0.094
8.704	TFT-BTEX	158485.516	9.871 99%
10.848	Toluene	4293.942	0.162
0.000	Ethylbenzene	0.000	0.000
13.851	M & P- Xylenes	4147.729	0.274
0.000	O-Xylene	0.000	0.000

REVIEWED BY & DATE PB 2/7/13

B <0.03 mg/kg   T/E <0.05 mg/kg   X <0.2 mg/kg

2-6-13 DC

ALS LABORATORY GROUPS - EVERETT
DATA SUMMARY SHEET

PARAMETER: GAS/BTEX   INSTR. MTHD. 8021   EXTRCT MTHD: 5030

QC BATCH #: GW020113   1ST ANAL. SEQ. 21302011

EXT. DATES: 2/1/2013   MATRIX: H2O

ASSOCIATED SAMPLES: EV13020005-4,9   EV13020007-1-9

BLANK AND DUPLICATE RESULTS

ANALYTE:	BLANK RESULTS:	DUPLICATE:	ORIGINAL:	%RPD:
Gasoline	<50 ug/L			
MTBE	<3 ug/L			
Benzene	<1 ug/L			
Toluene	<1 ug/L			
Ethylbenzene	<1 ug/L			
Xylenes	<3 ug/L			

SPIKE/ SPIKE DUPLICATE RESULTS

SPIKE ID	AMOUNT SPIKED	BLANK SPIKE %RECOVERY	MS %RECOVERY	BLANK SPIKE DUP %RECOVERY	REL % DIFF
Gasoline	500 ug/L	62		61	1.6
MTBE	40 ug/L	103		102	1.0
Benzene	20 ug/L	105		101	3.9
Toluene	20 ug/L	103		99	4.0
Ethylbenzene	20 ug/L	100		97	3.0
Xylenes	60 ug/L	102		101	1.0
Triflourotoluene	10 ug/L	98		94	4.2

NOTES: IF NUMBER OF ANALYTES DON'T ALLOW LISTING ALL COMPOUNDS, THE RAW DATA MAY BE SUBMITTED

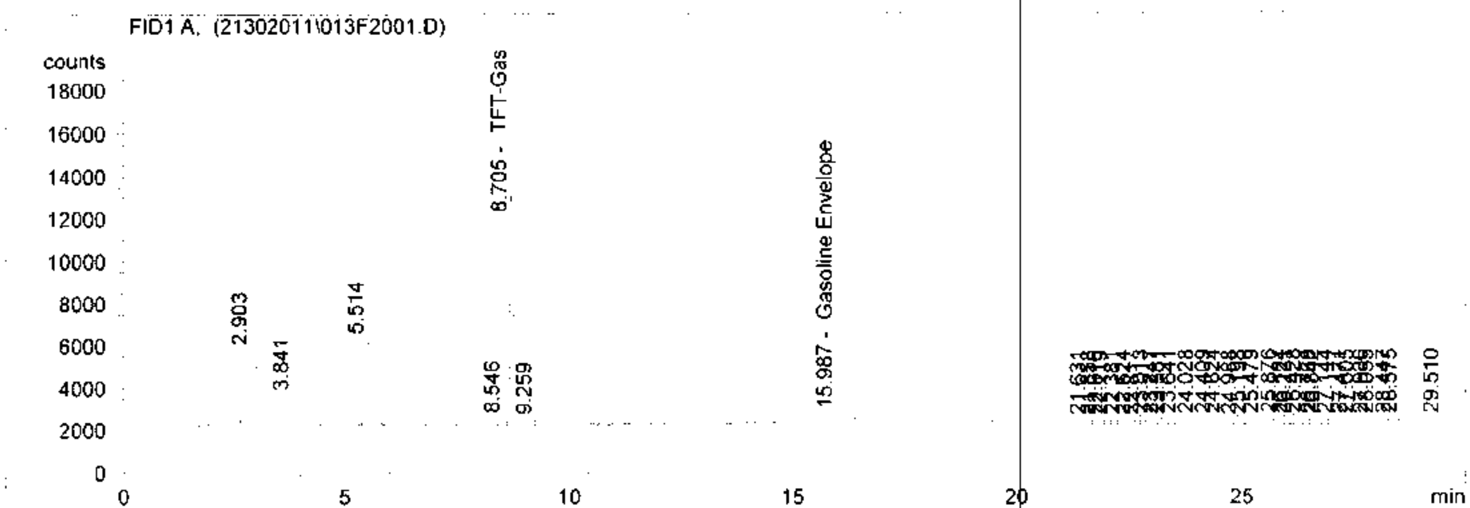
RAW DATA FOR QC RUN ON A SPECIFIC SAMPLE SHOULD BE INCLUDED WITH ORIGINAL SAMPLE ANALYSIS RAW DATA

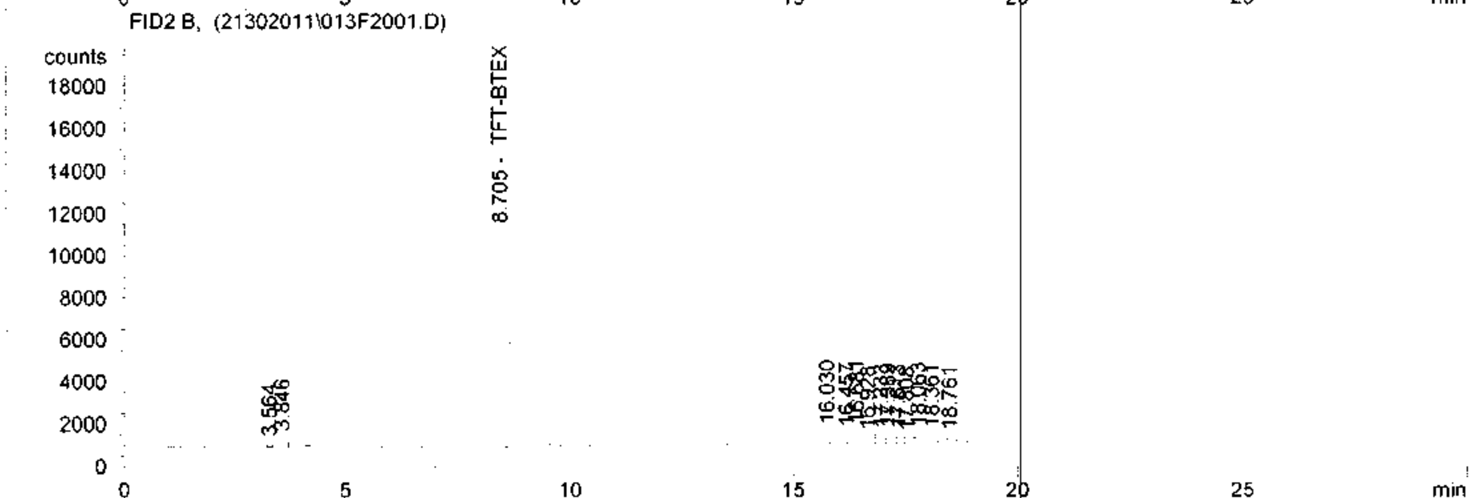
DATASUM.XLS

Gas/BTEX   Instrument 2
Data File: C:\HPCHEM\2\DATA\21302011\013F2001.D
Injection Date & Time: 2/1/2013   7:52:23 PM
Report Created on: 2/4/2013   8:22:35 AM
Operator: DLC
Aquistion Method: GASB1012.M
Analysis Method: C:\HPCHEM\2\METHODS\GASB1012.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:MB-020113W   Dilution: X 0.0





Ret. Time	Compound Name	Area	Amount ug/L	
8.705	TFT-Gas	85883.438	7.986	80%
15.987	Gasoline Envelope	96810.406	16.902	

Gas < 50 µg/L

Ret. Time	Compound Name	Area	Amount ug/L	
0.000	MTBE	0.000	0.000	
0.000	Benzene	0.000	0.000	
8.705	TFT-BTEX	162395.578	10.111	101%
0.000	Toluene	0.000	0.000	
0.000	Ethylbenzene	0.000	0.000	
0.000	M & P- Xylenes	0.000	0.000	
0.000	O-Xylene	0.000	0.000	

REVIEWED BY & DATE JB 2/12/13

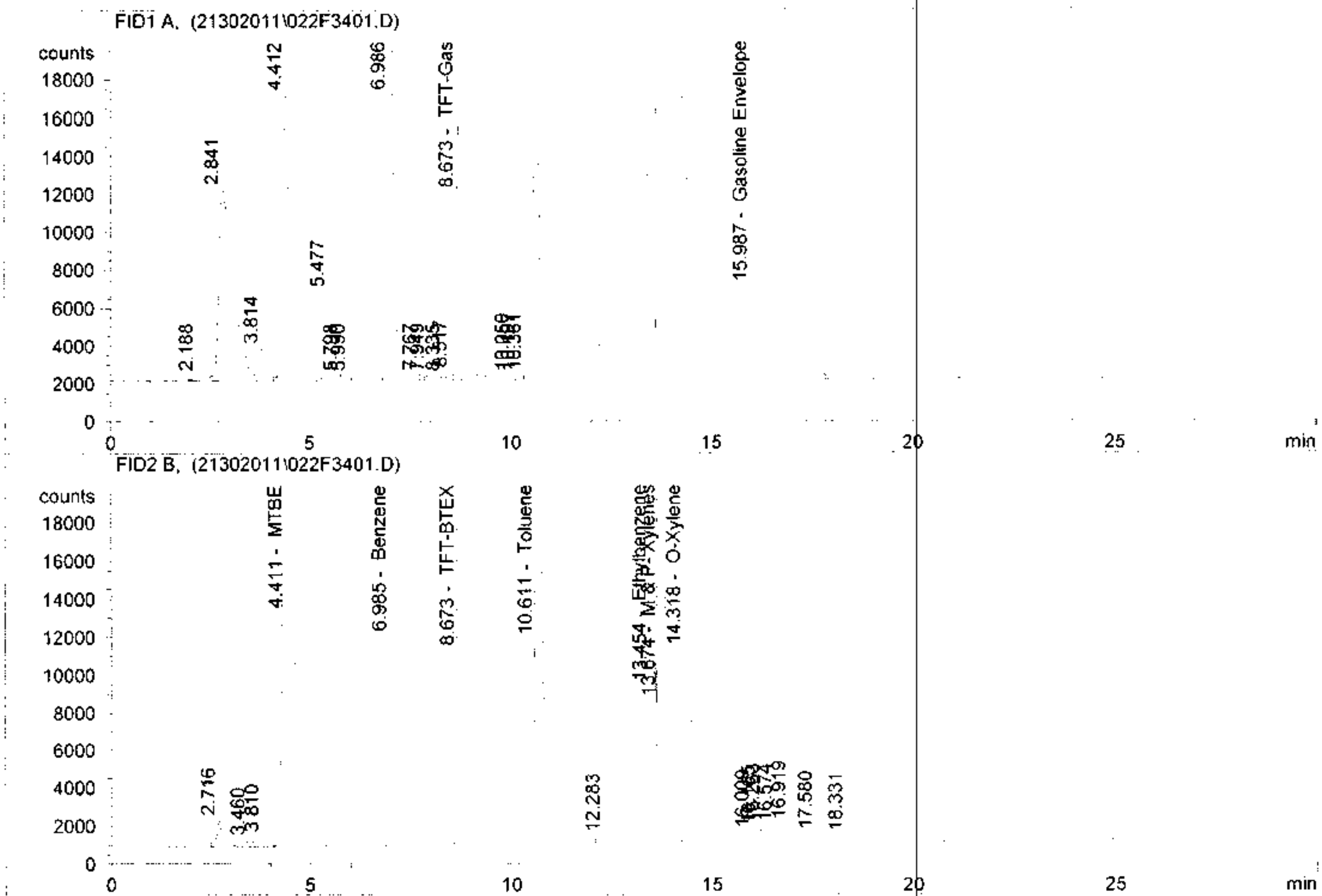
MTBE < 3 µg/L   B,T,E < 1 µg/L   X < 3 µg/L

2-4-13 DC

Gas/BTEX Instrument 2
Data File: C:\HPCHEM\2\DATA\21302011\022F3401.D
Injection Date & Time: 2/2/2013 4:16:17 AM
Report Created on: 2/4/2013 8:22:57 AM
Operator: DLC
Aquistion Method: GASB1012.M
Analysis Method: C:\HPCHEM\2\METHODS\GASB1012.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:BS-020113W Dilution: X 0.0



Ret. Time	Compound Name	Area	Amount ug/L
8.673	TFT-Gas	94563.977	8.793
15.987	Gasoline Envelope	1.724e+006	300.956

Ret. Time	Compound Name	Area	Amount ug/L	
4.411	MTBE	581464.125	41.018	÷40×100=103%
6.985	Benzene	1.082e+006	20.934	÷20×100=105%
8.673	TFT-BTEX	156547.594	9.752	÷10×100=98%
10.611	Toluene	967725.500	20.589	103%
13.454	Ethylbenzene	775368.188	19.928	100%
13.674	M & P- Xylenes	1.905e+006	40.487	} ÷60×100=102%
14.318	O-Xylene	866895.562	20.761	

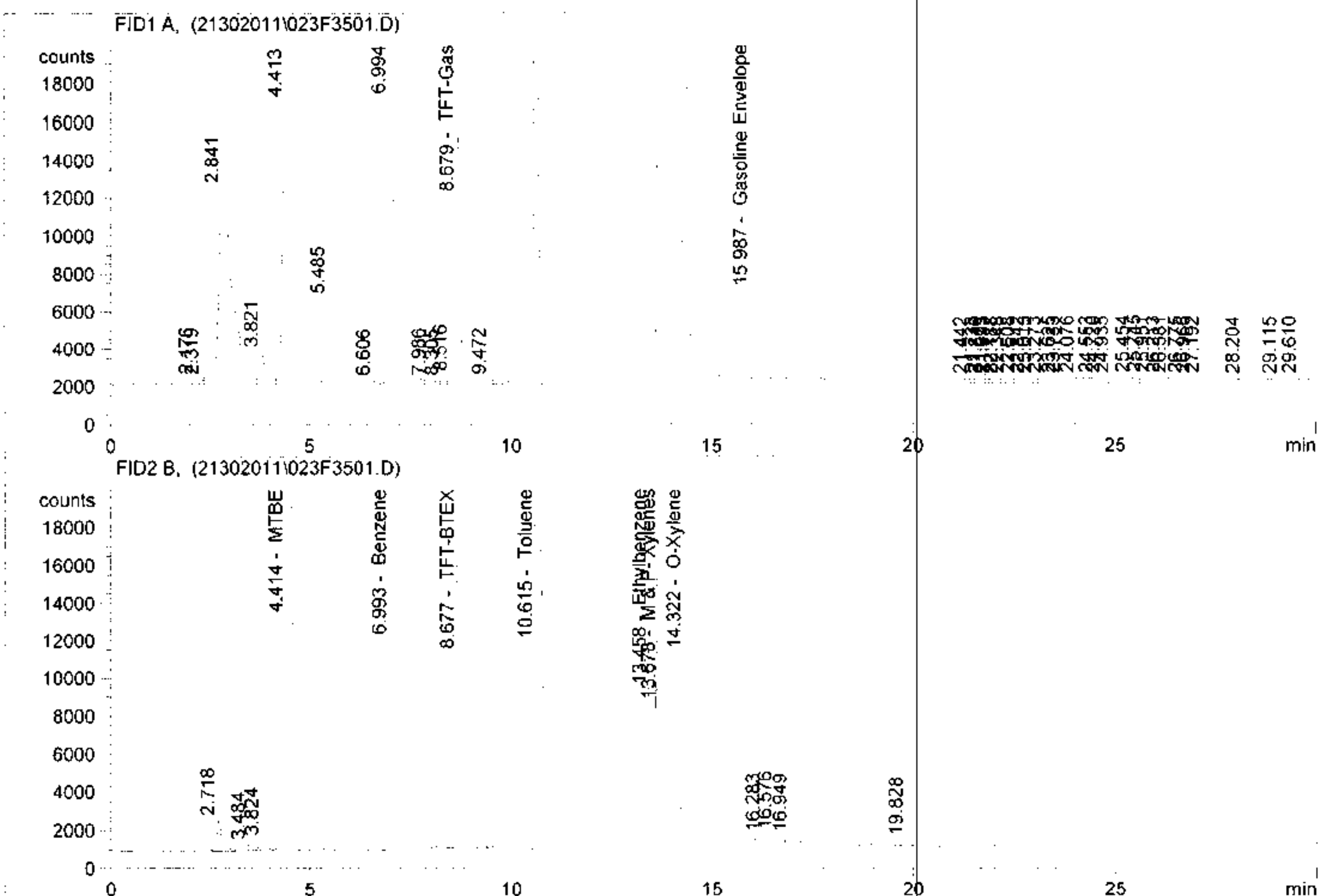
REVIEWED BY & DATE MS 2/7/13

2-4-13 DC

Gas/BTEX Instrument 2
Data File: C:\HPCHEM\2\DATA\21302011\023F3501.D
Injection Date & Time: 2/2/2013 4:52:15 AM
Report Created on: 2/4/2013 8:23:09 AM
Operator: DLC
Aquistion Method: GASB1012.M
Analysis Method: C:\HPCHEM\2\METHODS\GASB1012.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:BSD-020113W Dilution: X 0.0



Ret. Time	Compound Name	Area	Amount ug/L
8.679	TFT-Gas	91459.883	8.505
15.987	Gasoline Envelope	1.668e+006	291.174

Ret. Time	Compound Name	Area	Amount ug/L	
4.414	MTBE	577223.063	40.718	102%
6.993	Benzene	1.047e+006	20.261	101%
8.677	TFT-BTEX	150415.016	9.376	94%
10.615	Toluene	930471.063	19.799	99%
13.458	Ethylbenzene	757185.125	19.471	97%
13.678	M & P- Xylenes	1.862e+006	39.563	} 101%
14.322	O-Xylene	871193.250	20.864	

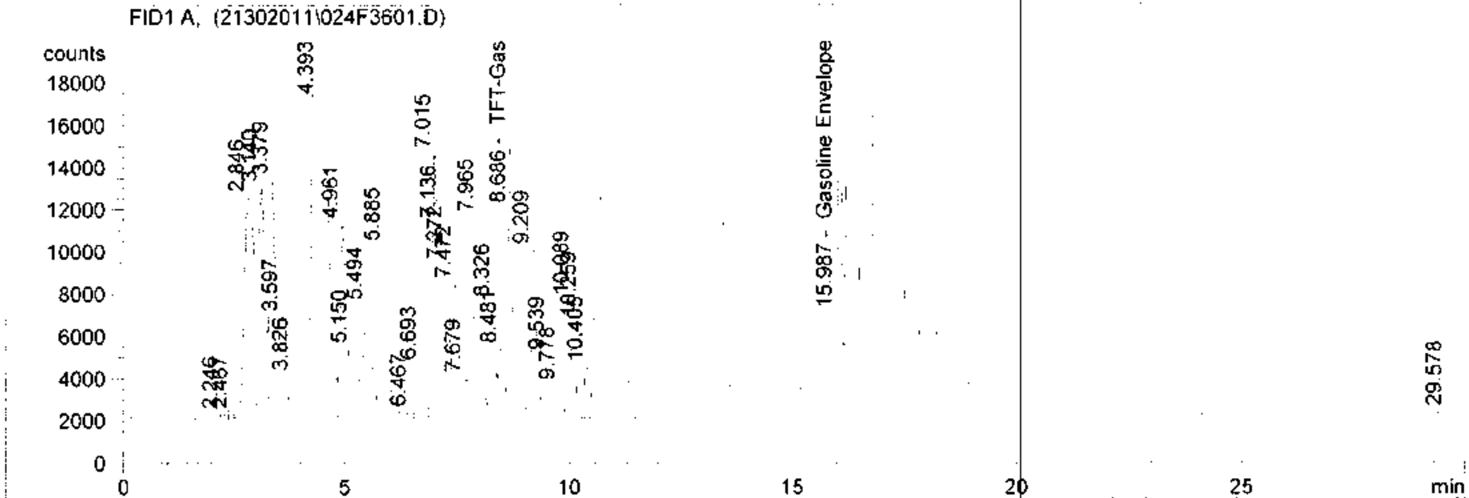
REVIEWED BY & DATE MB 2/7/13

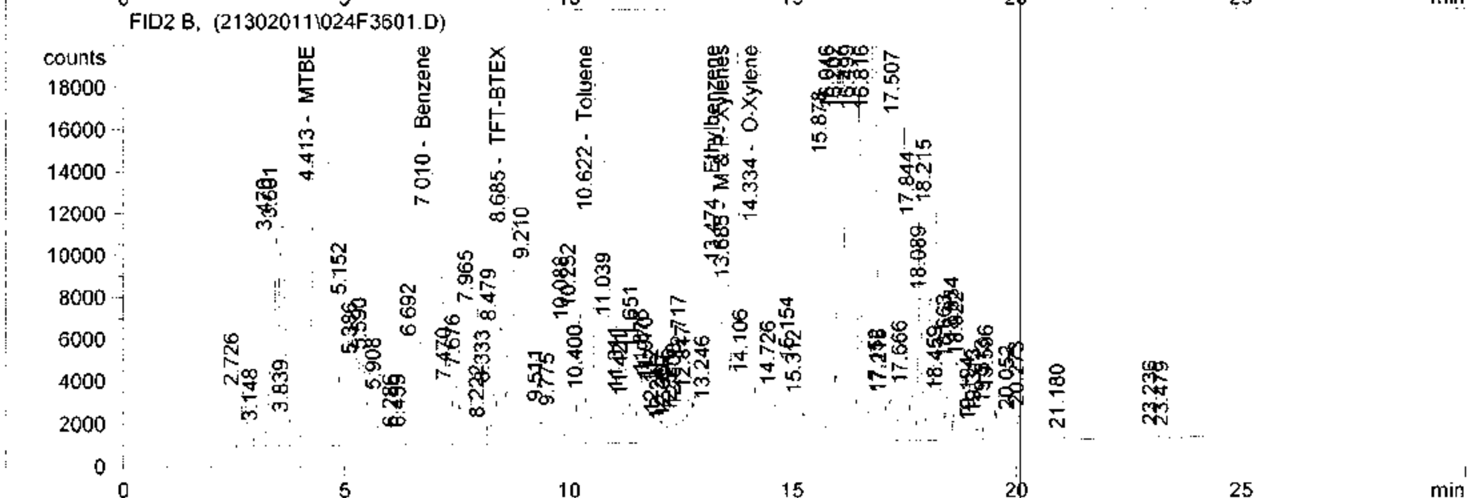
2-4-13 DC

Gas/BTEX   Instrument 2
Data File: C:\HPCHEM\2\DATA\21302011\024F3601.D
Injection Date & Time: 2/2/2013   5:28:21 AM
Report Created on: 2/4/2013   8:23:20 AM
Operator: DLC
Aquistion Method: GASB1012.M
Analysis Method: C:\HPCHEM\2\METHODS\GASB1012.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:BG-020113W   Dilution: X 0.0





Ret. Time	Compound Name	Area	Amount ug/L
8.686	TFT-Gas	97627.586	9.078 91%
15.987	Gasoline Envelope	1.784e+006	311.458 ÷500×100=62

Ret. Time	Compound Name	Area	Amount ug/L
4.413	MTBE	1.001e+006	70.587
7.010	Benzene	345415.062	6.710
8.685	TFT-BTEX	178529.563	11.100
10.622	Toluene	1.169e+006	24.847
13.474	Ethylbenzene	236490.016	6.367
13.685	M & P- Xylenes	1.002e+006	21.382
14.334	O-Xylene	373462.719	8.944

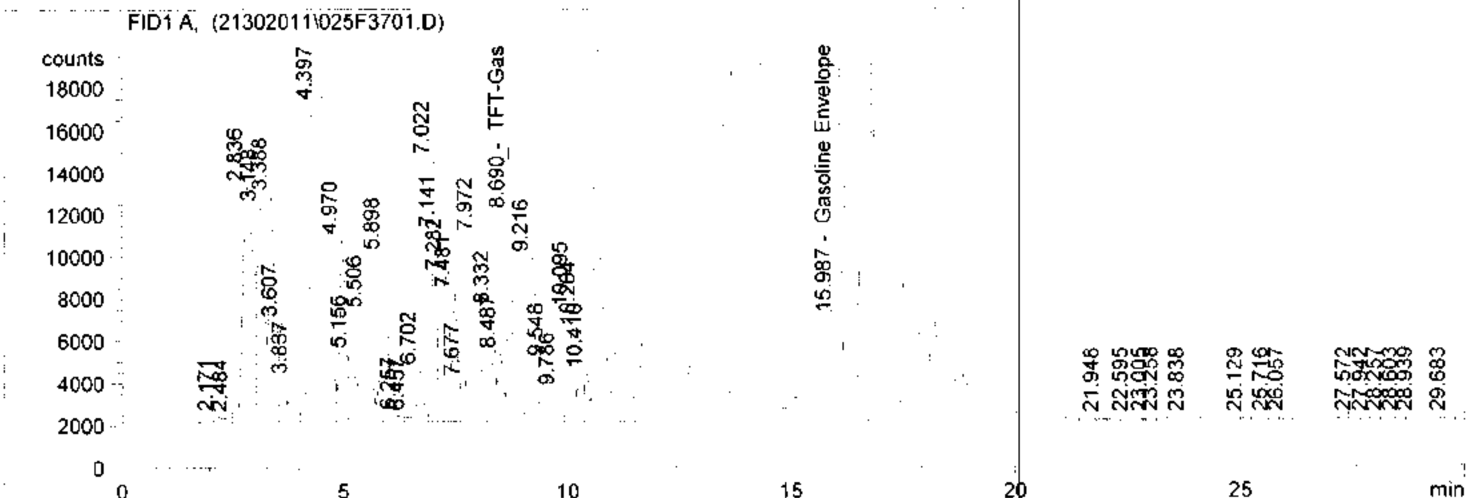
REVIEWED BY & DATE MB 2/7/13

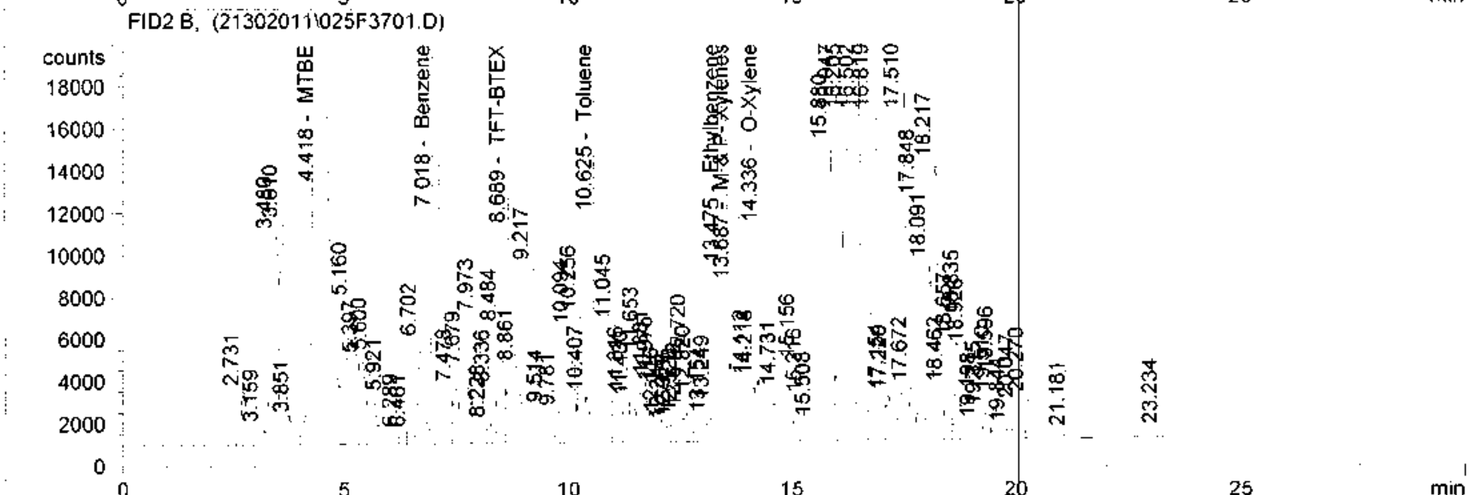
2-4-13 DC

Gas/BTEX Instrument 2
Data File: C:\HPCHEM\2\DATA\21302011\025F3701.D
Injection Date & Time: 2/2/2013 6:04:34 AM
Report Created on: 2/4/2013 8:23:37 AM
Operator: DLC
Aquistion Method: GASB1012.M
Analysis Method: C:\HPCHEM\2\METHODS\GASB1012.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:BGD-020113W Dilution: X 0.0





Ret. Time	Compound Name	Area	Amount ug/L	
8.690	TFT-Gas	98651.125	9.173	92%
15.987	Gasoline Envelope	1.756e+006	306.488	61%

Ret. Time	Compound Name	Area	Amount ug/L
4.418	MTBE	1.022e+006	72.111
7.018	Benzene	346928.469	6.739
8.689	TFT-BTEX	158939.187	9.899
10.625	Toluene	1.189e+006	25.280
13.475	Ethylbenzene	235743.906	6.348
13.687	M & P- Xylenes	1.012e+006	21.601
14.336	O-Xylene	361562.688	8.659

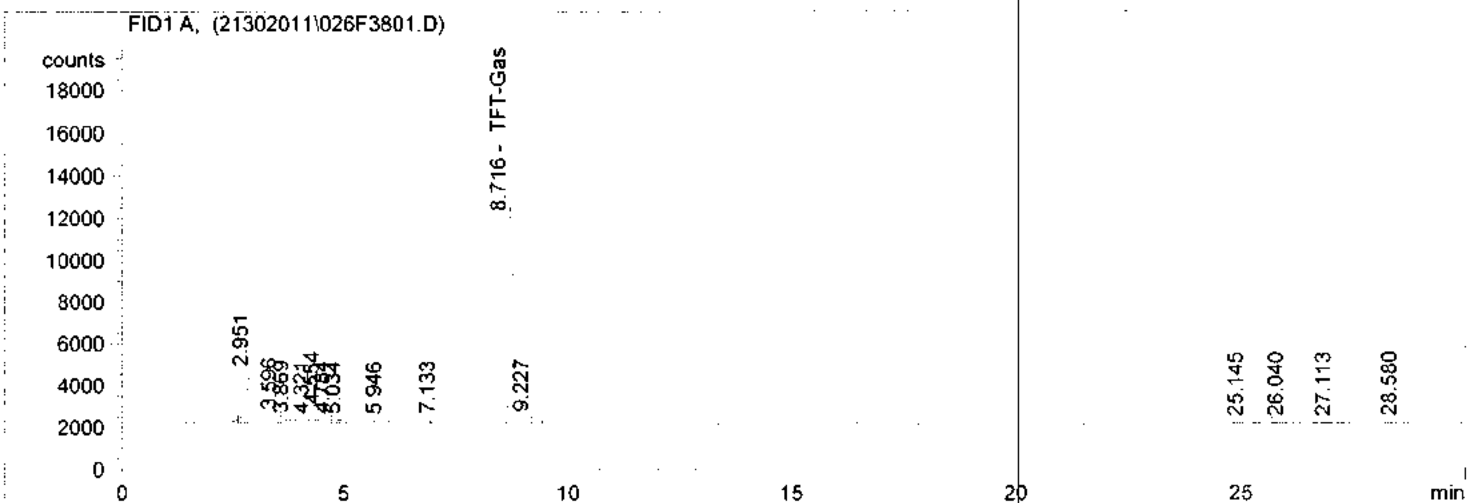
REVIEWED BY & DATE NS 2/7/13

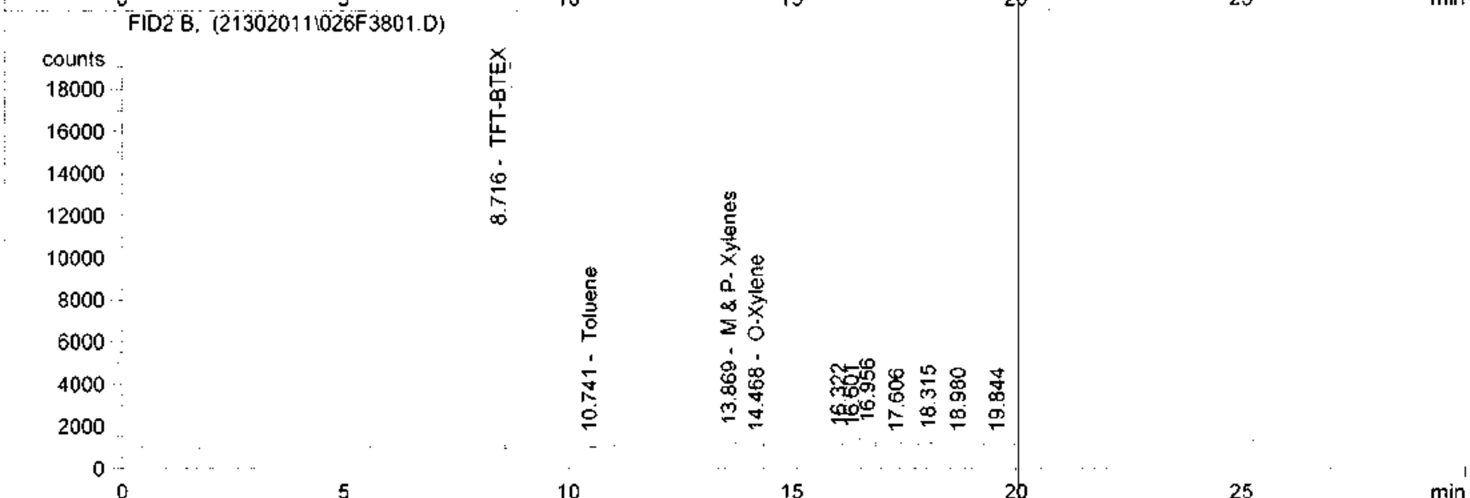
2-4-13 DC

Gas/BTEX   Instrument 2
Data File: C:\HPCHEM\2\DATA\21302011\026F3801.D
Injection Date & Time: 2/2/2013   6:40:54 AM
Report Created on: 2/4/2013   8:23:56 AM
Operator: DLC
Aquistion Method: GASB1012.M
Analysis Method: C:\HPCHEM\2\METHODS\GASB1012.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:EV13020005-04 5M   Dilution: X 0.0





Ret. Time	Compound Name	Area	Amount ug/L	
8.716	TFT-Gas	82898.461	7.708	77%
0.000	Gasoline Envelope	0.000	0.000	

Gas < 50 µg/L

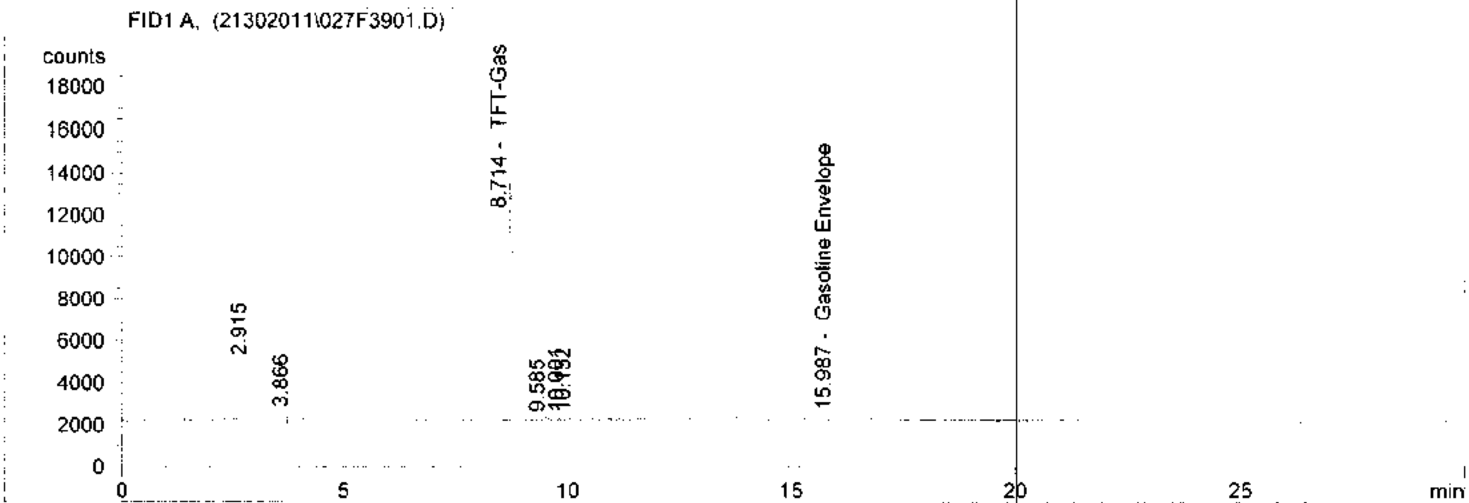
Ret. Time	Compound Name	Area	Amount ug/L	
0.000	MTBE	0.000	0.000	
0.000	Benzene	0.000	0.000	
8.716	TFT-BTEX	157086.578	9.785	98%
10.741	Toluene	4621.798	0.169	
0.000	Ethylbenzene	0.000	0.000	
13.869	M & P- Xylenes	10399.551	0.406	
14.468	O-Xylene	4562.593	0.109	

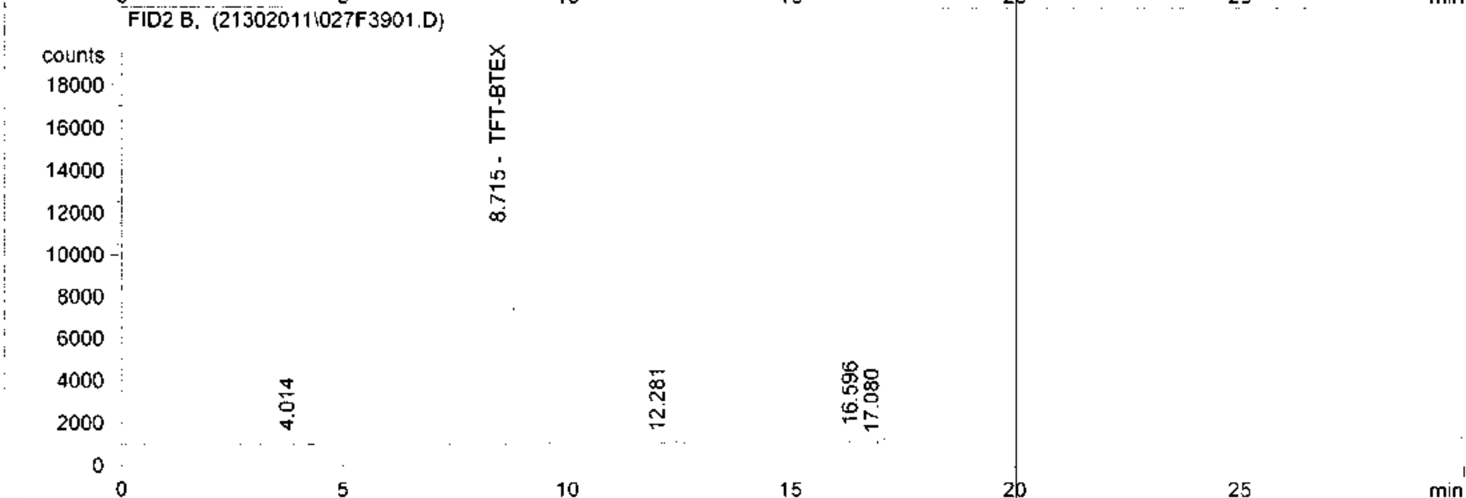
REVIEWED BY & DATE [initials] 2/7/13

Gas/BTEX Instrument 2
Data File: C:\HPCHEM\2\DATA\21302011\027F3901.D
Injection Date & Time: 2/2/2013 7:17:14 AM
Report Created on: 2/4/2013 8:24:07 AM
Operator: DLC
Aquistion Method: GASB1012.M
Analysis Method: C:\HPCHEM\2\METHODS\GASB1012.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:EV13020005-09 5M Dilution: X 0.0





Ret. Time	Compound Name	Area	Amount ug/L	
8.714	TFT-Gas	92120.305	8.566	86%
15.987	Gasoline Envelope	34933.734	6.099	

Gas < 50 µg/L

Ret. Time	Compound Name	Area	Amount ug/L	
0.000	MTBE	0.000	0.000	
0.000	Benzene	0.000	0.000	
8.715	TFT-BTEX	162638.000	10.125	101%
0.000	Toluene	0.000	0.000	
0.000	Ethylbenzene	0.000	0.000	
0.000	M & P- Xylenes	0.000	0.000	
0.000	O-Xylene	0.000	0.000	

B,T,E < 1 µg/L X < 3 µg/L

REVIEWED BY [initials]
& DATE 2/7/13

2-1-13DC

March 20, 2013

Mr. Stephen Bentsen
Floyd Snider Inc.
601 Union St., Suite 600
Seattle, WA 98101

Dear Mr. Bentsen,

On February 1st, 9 samples were received by our laboratory and assigned our laboratory project number EV13020005. The project was identified as your POB - Harris. The sample identification and requested analyses are outlined on the attached chain of custody record.

Please do not hesitate to call me if you have any questions or if I can be of further assistance.

Sincerely,

ALS Laboratory Group

Rick Bagan
Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13020005 -01
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/1/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/30/2013 11:50:00 AM
CLIENT SAMPLE ID	FS-23-3.0-3.5-013013	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,4-Dichlorobenzene	EPA-8270 SIM	U	0.10	20	MG/KG	02/15/2013	LAP
1,2-Dichlorobenzene	EPA-8270 SIM	U	0.40	20	MG/KG	02/15/2013	LAP
N-Nitroso-Di-N-Propylamine	EPA-8270 SIM	U	0.40	20	MG/KG	02/15/2013	LAP
Hexachloroethane	EPA-8270 SIM	U	0.40	20	MG/KG	02/15/2013	LAP
2,4-Dichlorophenol	EPA-8270 SIM	U	0.40	20	MG/KG	02/15/2013	LAP
1,2,4-Trichlorobenzene	EPA-8270 SIM	U	0.20	20	MG/KG	02/15/2013	LAP
Naphthalene	EPA-8270 SIM	**1.2**	0.40	20	MG/KG	02/15/2013	LAP
2-Methylnaphthalene	EPA-8270 SIM	**1.6**	0.40	20	MG/KG	02/15/2013	LAP
1-Methylnaphthalene	EPA-8270 SIM	**1.3**	0.40	20	MG/KG	02/15/2013	LAP
Acenaphthylene	EPA-8270 SIM	U	0.40	20	MG/KG	02/15/2013	LAP
Acenaphthene	EPA-8270 SIM	**3.5**	0.34	20	MG/KG	02/15/2013	LAP
2,4-Dinitrotoluene	EPA-8270 SIM	U	0.20	20	MG/KG	02/15/2013	LAP
Fluorene	EPA-8270 SIM	**3.0**	0.40	20	MG/KG	02/15/2013	LAP
Pentachlorophenol	EPA-8270 SIM	U	2.0	20	MG/KG	02/15/2013	LAP
Phenanthrene	EPA-8270 SIM	**9.9**	0.40	20	MG/KG	02/15/2013	LAP
Anthracene	EPA-8270 SIM	**2.0**	0.40	20	MG/KG	02/15/2013	LAP
Fluoranthene	EPA-8270 SIM	**5.6**	0.40	20	MG/KG	02/15/2013	LAP
Pyrene	EPA-8270 SIM	**6.5**	0.40	20	MG/KG	02/15/2013	LAP
3,3-Dichlorobenzidine	EPA-8270 SIM	U	2.0	20	MG/KG	02/15/2013	LAP
Benzo[A]Anthracene	EPA-8270 SIM	**1.4**	0.13	20	MG/KG	02/15/2013	LAP
Chrysene	EPA-8270 SIM	**1.7**	0.14	20	MG/KG	02/15/2013	LAP
Benzo[B]Fluoranthene	EPA-8270 SIM	**1.0**	0.40	20	MG/KG	02/15/2013	LAP
Benzo[K]Fluoranthene	EPA-8270 SIM	**0.76**	0.40	20	MG/KG	02/15/2013	LAP
Benzo[A]Pyrene	EPA-8270 SIM	**1.2**	0.34	20	MG/KG	02/15/2013	LAP
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	**0.86**	0.40	20	MG/KG	02/15/2013	LAP
Dibenz[A,H]Anthracene	EPA-8270 SIM	**0.81**	0.36	20	MG/KG	02/15/2013	LAP
Benzo[G,H,I]Perylene	EPA-8270 SIM	**0.54**	0.40	20	MG/KG	02/15/2013	LAP
Pyridine	EPA-8270	U	200	1	UG/KG	02/14/2013	LAP
N-Nitrosodimethylamine	EPA-8270	U	100	1	UG/KG	02/14/2013	LAP
Phenol	EPA-8270	U	100	1	UG/KG	02/14/2013	LAP
Aniline	EPA-8270	U	100	1	UG/KG	02/14/2013	LAP
Bis(2-Chloroethyl)Ether	EPA-8270	U	100	1	UG/KG	02/14/2013	LAP
2-Chlorophenol	EPA-8270	ND- UT	33	1	UG/KG	02/14/2013	LAP
1,3-Dichlorobenzene	EPA-8270	U	100	1	UG/KG	02/14/2013	LAP
Benzyl Alcohol	EPA-8270	U	100	1	UG/KG	02/14/2013	LAP
2-Methylphenol	EPA-8270	U	100	1	UG/KG	02/14/2013	LAP
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	250	1	UG/KG	02/14/2013	LAP
3&4-Methylphenol	EPA-8270	U	100	1	UG/KG	02/14/2013	LAP

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ALS Laboratory Group A Campbell Brothers Limited Company

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE:	3/20/2013
		ALS JOB#:	EV13020005
		ALS SAMPLE#:	-01
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/1/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/30/2013 11:50:00 AM
CLIENT SAMPLE ID	FS-23-3.0-3.5-013013	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Nitrobenzene	EPA-8270	U	100	1	UG/KG	02/14/2013	LAP
Isophorone	EPA-8270	U	100	1	UG/KG	02/14/2013	LAP
2-Nitrophenol	EPA-8270	U	100	1	UG/KG	02/14/2013	LAP
2,4-Dimethylphenol	EPA-8270	U	100	1	UG/KG	02/14/2013	LAP
Benzoic Acid	EPA-8270	U	1000	1	UG/KG	02/14/2013	LAP
Bis(2-Chloroethoxy)Methane	EPA-8270	U	250	1	UG/KG	02/14/2013	LAP
4-Chloroaniline	EPA-8270	U	1000	1	UG/KG	02/14/2013	LAP
2,6-Dichlorophenol	EPA-8270	U	250	1	UG/KG	02/14/2013	LAP
Hexachlorobutadiene	EPA-8270	U	130	1	UG/KG	02/14/2013	LAP
4-Chloro-3-Methylphenol	EPA-8270	U	500	1	UG/KG	02/14/2013	LAP
Hexachlorocyclopentadiene	EPA-8270	U	100	1	UG/KG	02/14/2013	LAP
2,4,6-Trichlorophenol	EPA-8270	U	100	1	UG/KG	02/14/2013	LAP
2,4,5-Trichlorophenol	EPA-8270	U	100	1	UG/KG	02/14/2013	LAP
2-Chloronaphthalene	EPA-8270	U	100	1	UG/KG	02/14/2013	LAP
2-Nitroaniline	EPA-8270	U	100	1	UG/KG	02/14/2013	LAP
Dimethylphthalate	EPA-8270	U	100	1	UG/KG	02/14/2013	LAP
2,6-Dinitrotoluene	EPA-8270	U	100	1	UG/KG	02/14/2013	LAP
3-Nitroaniline	EPA-8270	U	1000	1	UG/KG	02/14/2013	LAP
2,4-Dinitrophenol	EPA-8270	U	100	1	UG/KG	02/14/2013	LAP
4-Nitrophenol	EPA-8270	U	100	1	UG/KG	02/14/2013	LAP
Dibenzofuran	EPA-8270	**1800**	100	1	UG/KG	02/14/2013	LAP
2,3,4,6-Tetrachlorophenol	EPA-8270	U	100	1	UG/KG	02/14/2013	LAP
Diethylphthalate	EPA-8270	U	100	1	UG/KG	02/14/2013	LAP
4-Chlorophenyl-Phenylether	EPA-8270	U	100	1	UG/KG	02/14/2013	LAP
4-Nitroaniline	EPA-8270	U	250	1	UG/KG	02/14/2013	LAP
4,6-Dinitro-2-Methylphenol	EPA-8270	U	100	1	UG/KG	02/14/2013	LAP
N-Nitrosodiphenylamine	EPA-8270	U	100	1	UG/KG	02/14/2013	LAP
Azobenzene	EPA-8270	U	100	1	UG/KG	02/14/2013	LAP
4-Bromophenyl-Phenylether	EPA-8270	U	100	1	UG/KG	02/14/2013	LAP
Hexachlorobenzene	EPA-8270	U	80	1	UG/KG	02/14/2013	LAP
Carbazole	EPA-8270	**1900**	250	1	UG/KG	02/14/2013	LAP
Di-N-Butylphthalate	EPA-8270	U	100	1	UG/KG	02/14/2013	LAP
Butylbenzylphthalate	EPA-8270	U	100	1	UG/KG	02/14/2013	LAP
Bis(2-Ethylhexyl)Phthalate	EPA-8270	**160**	100	1	UG/KG	02/14/2013	LAP
Di-N-Octylphthalate	EPA-8270	U	100	1	UG/KG	02/14/2013	LAP
Mercury	EPA-7471	**0.11**	0.020	1	MG/KG	02/05/2013	RAL
Antimony	EPA-6020	**13**	0.50	5	MG/KG	02/11/2013	RAL
Arsenic	EPA-6020	**150**	1.0	5	MG/KG	02/11/2013	RAL

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ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13020005 -01
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/1/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/30/2013 11:50:00 AM
CLIENT SAMPLE ID	FS-23-3.0-3.5-013013	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Beryllium	EPA-6020	U	0.50	5	MG/KG	02/11/2013	RAL
Cadmium	EPA-6020	**1.7**	0.50	5	MG/KG	02/11/2013	RAL
Chromium	EPA-6020	**44**	0.50	5	MG/KG	02/11/2013	RAL
Copper	EPA-6020	**470**	0.50	5	MG/KG	02/11/2013	RAL
Lead	EPA-6020	**200**	0.50	5	MG/KG	02/11/2013	RAL
Nickel	EPA-6020	**45**	0.50	5	MG/KG	02/11/2013	RAL
Selenium	EPA-6020	U	5.0	5	MG/KG	02/11/2013	RAL
Silver	EPA-6020	U	0.50	5	MG/KG	02/11/2013	RAL
Thallium	EPA-6020	U	4.7	5	MG/KG	02/11/2013	RAL
Zinc	EPA-6020	**1500**	27	50	MG/KG	02/06/2013	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
Terphenyl-d14 20X Dilution	EPA-8270 SIM	**5.12 DS2**	02/15/2013	LAP
2-Fluorophenol	EPA-8270	**94.5**	02/14/2013	LAP
Phenol-d5	EPA-8270	**81.0**	02/14/2013	LAP
Nitrobenzene-d5	EPA-8270	**85.3**	02/14/2013	LAP
2-Fluorobiphenyl	EPA-8270	**77.9**	02/14/2013	LAP
2,4,6-Tribromophenol	EPA-8270	**376 DS1**	02/14/2013	LAP
Terphenyl-d14	EPA-8270	**98.6**	02/14/2013	LAP

DS2 - Due to high dilution factor surrogate results should be considered uncontrolled.
U - Analyte analyzed for but not detected at level above reporting limit.
UT - Analyte analyzed for but not detected at level above the MDL.
DS1 - Surrogate outside of control limits due to matrix effect.

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13020005 -02
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/1/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/30/2013 12:20:00 PM
CLIENT SAMPLE ID	FS-23-7.0-7.5-013013	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	02/04/2013	DLC
Benzene	EPA-8021	U	0.030	1	MG/KG	02/04/2013	DLC
Toluene	EPA-8021	U	0.050	1	MG/KG	02/04/2013	DLC
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	02/04/2013	DLC
Xylenes	EPA-8021	U	0.20	1	MG/KG	02/04/2013	DLC
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	02/05/2013	EBS
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	02/05/2013	EBS
1,4-Dichlorobenzene	EPA-8270 SIM	U	0.0050	1	MG/KG	02/13/2013	LAP
1,2-Dichlorobenzene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
N-Nitroso-Di-N-Propylamine	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Hexachloroethane	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
2,4-Dichlorophenol	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
1,2,4-Trichlorobenzene	EPA-8270 SIM	U	0.010	1	MG/KG	02/13/2013	LAP
Naphthalene	EPA-8270 SIM	**0.12**	0.020	1	MG/KG	02/13/2013	LAP
2-Methylnaphthalene	EPA-8270 SIM	**0.050**	0.020	1	MG/KG	02/13/2013	LAP
1-Methylnaphthalene	EPA-8270 SIM	**0.026**	0.020	1	MG/KG	02/13/2013	LAP
Acenaphthylene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Acenaphthene	EPA-8270 SIM	U	0.017	1	MG/KG	02/13/2013	LAP
2,4-Dinitrotoluene	EPA-8270 SIM	U	0.010	1	MG/KG	02/13/2013	LAP
Fluorene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Pentachlorophenol	EPA-8270 SIM	U	0.10	1	MG/KG	02/13/2013	LAP
Phenanthrene	EPA-8270 SIM	**0.039**	0.020	1	MG/KG	02/13/2013	LAP
Anthracene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Fluoranthene	EPA-8270 SIM	**0.11**	0.020	1	MG/KG	02/13/2013	LAP
Pyrene	EPA-8270 SIM	**0.13**	0.020	1	MG/KG	02/13/2013	LAP
3,3-Dichlorobenzidine	EPA-8270 SIM	U	0.10	1	MG/KG	02/13/2013	LAP
Benzo[A]Anthracene	EPA-8270 SIM	**0.063**	0.0065	1	MG/KG	02/13/2013	LAP
Chrysene	EPA-8270 SIM	**0.074**	0.0072	1	MG/KG	02/13/2013	LAP
Benzo[B]Fluoranthene	EPA-8270 SIM	**0.058**	0.020	1	MG/KG	02/13/2013	LAP
Benzo[K]Fluoranthene	EPA-8270 SIM	**0.052**	0.020	1	MG/KG	02/13/2013	LAP
Benzo[A]Pyrene	EPA-8270 SIM	**0.085**	0.017	1	MG/KG	02/13/2013	LAP
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	**0.047**	0.020	1	MG/KG	02/13/2013	LAP
Dibenz[A,H]Anthracene	EPA-8270 SIM	**0.065**	0.018	1	MG/KG	02/13/2013	LAP
Benzo[G,H,I]Perylene	EPA-8270 SIM	**0.071**	0.020	1	MG/KG	02/13/2013	LAP
Pyridine	EPA-8270	U	200	1	UG/KG	02/13/2013	LAP
N-Nitrosodimethylamine	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Phenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Aniline	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP

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ALS Laboratory Group A Campbell Brothers Limited Company

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE:	3/20/2013
		ALS JOB#:	EV13020005
		ALS SAMPLE#:	-02
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/1/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/30/2013 12:20:00 PM
CLIENT SAMPLE ID	FS-23-7.0-7.5-013013	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Bis(2-Chloroethyl)Ether	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Chlorophenol	EPA-8270	ND- UT	33	1	UG/KG	02/13/2013	LAP
1,3-Dichlorobenzene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Benzyl Alcohol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Methylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
3&4-Methylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Nitrobenzene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Isophorone	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Nitrophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,4-Dimethylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Benzoic Acid	EPA-8270	U	1000	1	UG/KG	02/13/2013	LAP
Bis(2-Chloroethoxy)Methane	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
4-Chloroaniline	EPA-8270	U	1000	1	UG/KG	02/13/2013	LAP
2,6-Dichlorophenol	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
Hexachlorobutadiene	EPA-8270	U	130	1	UG/KG	02/13/2013	LAP
4-Chloro-3-Methylphenol	EPA-8270	U	500	1	UG/KG	02/13/2013	LAP
Hexachlorocyclopentadiene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,4,6-Trichlorophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,4,5-Trichlorophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Chloronaphthalene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Nitroaniline	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Dimethylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,6-Dinitrotoluene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
3-Nitroaniline	EPA-8270	U	1000	1	UG/KG	02/13/2013	LAP
2,4-Dinitrophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Nitrophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Dibenzofuran	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,3,4,6-Tetrachlorophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Diethylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Chlorophenyl-Phenylether	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Nitroaniline	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
4,6-Dinitro-2-Methylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
N-Nitrosodiphenylamine	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Azobenzene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Bromophenyl-Phenylether	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Hexachlorobenzene	EPA-8270	U	80	1	UG/KG	02/13/2013	LAP
Carbazole	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP

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ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13020005 -02
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/1/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/30/2013 12:20:00 PM
CLIENT SAMPLE ID	FS-23-7.0-7.5-013013	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Di-N-Butylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Butylbenzylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Di-N-Octylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Mercury	EPA-7471	**0.021**	0.020	1	MG/KG	02/05/2013	RAL
Antimony	EPA-6020	U	0.50	5	MG/KG	02/11/2013	RAL
Arsenic	EPA-6020	**2.3**	1.0	5	MG/KG	02/11/2013	RAL
Beryllium	EPA-6020	U	0.50	5	MG/KG	02/11/2013	RAL
Cadmium	EPA-6020	U	0.50	5	MG/KG	02/11/2013	RAL
Chromium	EPA-6020	**35**	0.50	5	MG/KG	02/11/2013	RAL
Copper	EPA-6020	**15**	0.50	5	MG/KG	02/11/2013	RAL
Lead	EPA-6020	**31**	0.50	5	MG/KG	02/11/2013	RAL
Nickel	EPA-6020	**27**	0.50	5	MG/KG	02/11/2013	RAL
Selenium	EPA-6020	U	5.0	5	MG/KG	02/11/2013	RAL
Silver	EPA-6020	U	0.50	5	MG/KG	02/11/2013	RAL
Thallium	EPA-6020	U	4.7	5	MG/KG	02/11/2013	RAL
Zinc	EPA-6020	**30**	2.7	5	MG/KG	02/11/2013	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**83.6**	02/04/2013	DLC
TFT	EPA-8021	**101**	02/04/2013	DLC
C25	NWTPH-DX	**105**	02/05/2013	EBS
Terphenyl-d14	EPA-8270 SIM	**97.0**	02/13/2013	LAP
2-Fluorophenol	EPA-8270	**8.88 DS1**	02/13/2013	LAP
Phenol-d5	EPA-8270	**20.7 DS1**	02/13/2013	LAP
Nitrobenzene-d5	EPA-8270	**64.2**	02/13/2013	LAP
2-Fluorobiphenyl	EPA-8270	**59.3**	02/13/2013	LAP
2,4,6-Tribromophenol	EPA-8270	**86.3**	02/13/2013	LAP
Terphenyl-d14	EPA-8270	**97.0**	02/13/2013	LAP

DS1 - Surrogate outside of control limits due to matrix effect.
U - Analyte analyzed for but not detected at level above reporting limit.
UT - Analyte analyzed for but not detected at level above the MDL.

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13020005 -04
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/1/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/30/2013 3:56:00 PM
CLIENT SAMPLE ID	FS-22-GW-013013	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	02/02/2013	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	02/02/2013	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	02/02/2013	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	02/02/2013	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	02/02/2013	DLC
TPH-Diesel Range	NWTPH-DX	U	130	1	UG/L	02/04/2013	EBS
TPH-Oil Range	NWTPH-DX	U	250	1	UG/L	02/04/2013	EBS
Naphthalene	EPA-8270 SIM	**0.032**	0.020	1	UG/L	02/12/2013	LAP
2-Methylnaphthalene	EPA-8270 SIM	U	0.020	1	UG/L	02/12/2013	LAP
1-Methylnaphthalene	EPA-8270 SIM	U	0.020	1	UG/L	02/12/2013	LAP
Acenaphthylene	EPA-8270 SIM	U	0.020	1	UG/L	02/12/2013	LAP
Acenaphthene	EPA-8270 SIM	U	0.020	1	UG/L	02/12/2013	LAP
Fluorene	EPA-8270 SIM	U	0.020	1	UG/L	02/12/2013	LAP
Phenanthrene	EPA-8270 SIM	**0.033**	0.020	1	UG/L	02/12/2013	LAP
Anthracene	EPA-8270 SIM	U	0.020	1	UG/L	02/12/2013	LAP
Fluoranthene	EPA-8270 SIM	U	0.020	1	UG/L	02/12/2013	LAP
Pyrene	EPA-8270 SIM	U	0.033	1	UG/L	02/12/2013	LAP
Benzo[A]Anthracene	EPA-8270 SIM	**0.049**	0.018	1	UG/L	02/12/2013	LAP
Chrysene	EPA-8270 SIM	ND- UT	0.0064	1	UG/L	02/12/2013	LAP
Benzo[B]Fluoranthene	EPA-8270 SIM	ND- UT	0.010	1	UG/L	02/12/2013	LAP
Benzo[K]Fluoranthene	EPA-8270 SIM	ND- UT	0.0070	1	UG/L	02/12/2013	LAP
Benzo[A]Pyrene	EPA-8270 SIM	ND- UT	0.0096	1	UG/L	02/12/2013	LAP
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	ND- UT	0.0050	1	UG/L	02/12/2013	LAP
Dibenz[A,H]Anthracene	EPA-8270 SIM	ND- UT	0.0062	1	UG/L	02/12/2013	LAP
Benzo[G,H,I]Perylene	EPA-8270 SIM	U	0.020	1	UG/L	02/12/2013	LAP
Pyridine	EPA-8270	U	4.0	1	UG/L	02/12/2013	LAP
N-Nitrosodimethylamine	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Phenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Aniline	EPA-8270	U	4.0	1	UG/L	02/12/2013	LAP
Bis(2-Chloroethyl)Ether	EPA-8270	U	1.0	1	UG/L	02/12/2013	LAP
2-Chlorophenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
1,3-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
1,4-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Benzyl Alcohol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
1,2-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
3&4-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP

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ALS Laboratory Group A Campbell Brothers Limited Company

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13020005 -04
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/1/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/30/2013 3:56:00 PM
CLIENT SAMPLE ID	FS-22-GW-013013	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
N-Nitroso-Di-N-Propylamine	EPA-8270	ND- UT	0.70	1	UG/L	02/12/2013	LAP
Hexachloroethane	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Nitrobenzene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Isophorone	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2-Nitrophenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2,4-Dimethylphenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Benzoic Acid	EPA-8270	U	10	1	UG/L	02/12/2013	LAP
Bis(2-Chloroethoxy)Methane	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2,4-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
1,2,4-Trichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
4-Chloroaniline	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2,6-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Hexachlorobutadiene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
4-Chloro-3-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Hexachlorocyclopentadiene	EPA-8270	U	4.0	1	UG/L	02/12/2013	LAP
2,4,6-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2,4,5-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2-Chloronaphthalene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2-Nitroaniline	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Dimethylphthalate	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2,6-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
3-Nitroaniline	EPA-8270	U	5.0	1	UG/L	02/12/2013	LAP
2,4-Dinitrophenol	EPA-8270	U	10	1	UG/L	02/12/2013	LAP
4-Nitrophenol	EPA-8270	U	5.0	1	UG/L	02/12/2013	LAP
Dibenzofuran	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2,4-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2,3,4,6-Tetrachlorophenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Diethylphthalate	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
4-Chlorophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
4-Nitroaniline	EPA-8270	U	4.0	1	UG/L	02/12/2013	LAP
4,6-Dinitro-2-Methylphenol	EPA-8270	U	4.0	1	UG/L	02/12/2013	LAP
N-Nitrosodiphenylamine	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Azobenzene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
4-Bromophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Hexachlorobenzene	EPA-8270	U	1.0	1	UG/L	02/12/2013	LAP
Pentachlorophenol	EPA-8270	U	5.0	1	UG/L	02/12/2013	LAP
Carbazole	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Di-N-Butylphthalate	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13020005 -04
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/1/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/30/2013 3:56:00 PM
CLIENT SAMPLE ID	FS-22-GW-013013	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Butylbenzylphthalate	EPA-8270	U	1.0	1	UG/L	02/12/2013	LAP
3,3-Dichlorobenzidine	EPA-8270	U	5.0	1	UG/L	02/12/2013	LAP
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Di-N-Octylphthalate	EPA-8270	U	1.0	1	UG/L	02/12/2013	LAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**77.1**	02/02/2013	DLC
TFT	EPA-8021	**97.9**	02/02/2013	DLC
C25	NWTPH-DX	**88.2**	02/04/2013	EBS
Terphenyl-d14	EPA-8270 SIM	**89.9**	02/12/2013	LAP
2-Fluorophenol	EPA-8270	**39.3**	02/12/2013	LAP
Phenol-d5	EPA-8270	**24.6**	02/12/2013	LAP
Nitrobenzene-d5	EPA-8270	**78.0**	02/12/2013	LAP
2-Fluorobiphenyl	EPA-8270	**79.4**	02/12/2013	LAP
2,4,6-Tribromophenol	EPA-8270	**67.6**	02/12/2013	LAP
Terphenyl-d14	EPA-8270	**89.9**	02/12/2013	LAP

UT - Analyte analyzed for but not detected at level above the MDL.
U - Analyte analyzed for but not detected at level above reporting limit.

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE:	3/20/2013
		ALS JOB#:	EV13020005
		ALS SAMPLE#:	-05
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/1/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/30/2013 2:40:00 PM
CLIENT SAMPLE ID	FS-22-3.0-3.5-013013	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,4-Dichlorobenzene	EPA-8270 SIM	U	0.0050	1	MG/KG	02/12/2013	LAP
1,2-Dichlorobenzene	EPA-8270 SIM	U	0.020	1	MG/KG	02/12/2013	LAP
N-Nitroso-Di-N-Propylamine	EPA-8270 SIM	U	0.020	1	MG/KG	02/12/2013	LAP
Hexachloroethane	EPA-8270 SIM	U	0.020	1	MG/KG	02/12/2013	LAP
2,4-Dichlorophenol	EPA-8270 SIM	U	0.020	1	MG/KG	02/12/2013	LAP
1,2,4-Trichlorobenzene	EPA-8270 SIM	U	0.010	1	MG/KG	02/12/2013	LAP
Naphthalene	EPA-8270 SIM	U	0.020	1	MG/KG	02/12/2013	LAP
2-Methylnaphthalene	EPA-8270 SIM	U	0.020	1	MG/KG	02/12/2013	LAP
1-Methylnaphthalene	EPA-8270 SIM	U	0.020	1	MG/KG	02/12/2013	LAP
Acenaphthylene	EPA-8270 SIM	U	0.020	1	MG/KG	02/12/2013	LAP
Acenaphthene	EPA-8270 SIM	U	0.017	1	MG/KG	02/12/2013	LAP
2,4-Dinitrotoluene	EPA-8270 SIM	U	0.010	1	MG/KG	02/12/2013	LAP
Fluorene	EPA-8270 SIM	U	0.020	1	MG/KG	02/12/2013	LAP
Pentachlorophenol	EPA-8270 SIM	U	0.10	1	MG/KG	02/12/2013	LAP
Phenanthrene	EPA-8270 SIM	U	0.020	1	MG/KG	02/12/2013	LAP
Anthracene	EPA-8270 SIM	U	0.020	1	MG/KG	02/12/2013	LAP
Fluoranthene	EPA-8270 SIM	U	0.020	1	MG/KG	02/12/2013	LAP
Pyrene	EPA-8270 SIM	U	0.020	1	MG/KG	02/12/2013	LAP
3,3-Dichlorobenzidine	EPA-8270 SIM	U	0.10	1	MG/KG	02/12/2013	LAP
Benzo[A]Anthracene	EPA-8270 SIM	U	0.0065	1	MG/KG	02/12/2013	LAP
Chrysene	EPA-8270 SIM	U	0.0072	1	MG/KG	02/12/2013	LAP
Benzo[B]Fluoranthene	EPA-8270 SIM	U	0.020	1	MG/KG	02/12/2013	LAP
Benzo[K]Fluoranthene	EPA-8270 SIM	U	0.020	1	MG/KG	02/12/2013	LAP
Benzo[A]Pyrene	EPA-8270 SIM	U	0.017	1	MG/KG	02/12/2013	LAP
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	U	0.020	1	MG/KG	02/12/2013	LAP
Dibenz[A,H]Anthracene	EPA-8270 SIM	U	0.018	1	MG/KG	02/12/2013	LAP
Benzo[G,H,I]Perylene	EPA-8270 SIM	U	0.020	1	MG/KG	02/12/2013	LAP
Pyridine	EPA-8270	U	200	1	UG/KG	02/12/2013	LAP
N-Nitrosodimethylamine	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
Phenol	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
Aniline	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
Bis(2-Chloroethyl)Ether	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
2-Chlorophenol	EPA-8270	ND- UT	33	1	UG/KG	02/12/2013	LAP
1,3-Dichlorobenzene	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
Benzyl Alcohol	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
2-Methylphenol	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	250	1	UG/KG	02/12/2013	LAP
3&4-Methylphenol	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13020005 -05
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/1/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/30/2013 2:40:00 PM
CLIENT SAMPLE ID	FS-22-3.0-3.5-013013	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Nitrobenzene	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
Isophorone	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
2-Nitrophenol	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
2,4-Dimethylphenol	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
Benzoic Acid	EPA-8270	U	1000	1	UG/KG	02/12/2013	LAP
Bis(2-Chloroethoxy)Methane	EPA-8270	U	250	1	UG/KG	02/12/2013	LAP
4-Chloroaniline	EPA-8270	U	1000	1	UG/KG	02/12/2013	LAP
2,6-Dichlorophenol	EPA-8270	U	250	1	UG/KG	02/12/2013	LAP
Hexachlorobutadiene	EPA-8270	U	130	1	UG/KG	02/12/2013	LAP
4-Chloro-3-Methylphenol	EPA-8270	U	500	1	UG/KG	02/12/2013	LAP
Hexachlorocyclopentadiene	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
2,4,6-Trichlorophenol	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
2,4,5-Trichlorophenol	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
2-Chloronaphthalene	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
2-Nitroaniline	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
Dimethylphthalate	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
2,6-Dinitrotoluene	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
3-Nitroaniline	EPA-8270	U	1000	1	UG/KG	02/12/2013	LAP
2,4-Dinitrophenol	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
4-Nitrophenol	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
Dibenzofuran	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
2,3,4,6-Tetrachlorophenol	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
Diethylphthalate	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
4-Chlorophenyl-Phenylether	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
4-Nitroaniline	EPA-8270	U	250	1	UG/KG	02/12/2013	LAP
4,6-Dinitro-2-Methylphenol	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
N-Nitrosodiphenylamine	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
Azobenzene	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
4-Bromophenyl-Phenylether	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
Hexachlorobenzene	EPA-8270	U	80	1	UG/KG	02/12/2013	LAP
Carbazole	EPA-8270	U	250	1	UG/KG	02/12/2013	LAP
Di-N-Butylphthalate	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
Butylbenzylphthalate	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
Di-N-Octylphthalate	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
Mercury	EPA-7471	**0.023**	0.020	1	MG/KG	02/05/2013	RAL
Antimony	EPA-6020	U	0.50	5	MG/KG	02/11/2013	RAL
Arsenic	EPA-6020	**3.2**	1.0	5	MG/KG	02/11/2013	RAL

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CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/1/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/30/2013 2:40:00 PM
CLIENT SAMPLE ID	FS-22-3.0-3.5-013013	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Beryllium	EPA-6020	U	0.50	5	MG/KG	02/11/2013	RAL
Cadmium	EPA-6020	U	0.50	5	MG/KG	02/11/2013	RAL
Chromium	EPA-6020	**38**	0.50	5	MG/KG	02/11/2013	RAL
Copper	EPA-6020	**20**	0.50	5	MG/KG	02/11/2013	RAL
Lead	EPA-6020	**3.8**	0.50	5	MG/KG	02/11/2013	RAL
Nickel	EPA-6020	**39**	0.50	5	MG/KG	02/11/2013	RAL
Selenium	EPA-6020	U	5.0	5	MG/KG	02/11/2013	RAL
Silver	EPA-6020	U	0.50	5	MG/KG	02/11/2013	RAL
Thallium	EPA-6020	U	4.8	5	MG/KG	02/11/2013	RAL
Zinc	EPA-6020	**33**	2.8	5	MG/KG	02/11/2013	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
Terphenyl-d14	EPA-8270 SIM	**78.2**	02/12/2013	LAP
2-Fluorophenol	EPA-8270	**4.38 DS1**	02/12/2013	LAP
Phenol-d5	EPA-8270	**10.6 DS1**	02/12/2013	LAP
Nitrobenzene-d5	EPA-8270	**40.4**	02/12/2013	LAP
2-Fluorobiphenyl	EPA-8270	**44.7 DS1**	02/12/2013	LAP
2,4,6-Tribromophenol	EPA-8270	**60.7**	02/12/2013	LAP
Terphenyl-d14	EPA-8270	**78.2**	02/12/2013	LAP

DS1 - Surrogate outside of control limits due to matrix effect.
U - Analyte analyzed for but not detected at level above reporting limit.
UT - Analyte analyzed for but not detected at level above the MDL.

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE:	3/20/2013
		ALS JOB#:	EV13020005
		ALS SAMPLE#:	-06
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/1/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/30/2013 3:10:00 PM
CLIENT SAMPLE ID	FS-22-7.0-8.0-013013	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	02/04/2013	DLC
Benzene	EPA-8021	U	0.030	1	MG/KG	02/04/2013	DLC
Toluene	EPA-8021	U	0.050	1	MG/KG	02/04/2013	DLC
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	02/04/2013	DLC
Xylenes	EPA-8021	U	0.20	1	MG/KG	02/04/2013	DLC
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	02/05/2013	EBS
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	02/05/2013	EBS
1,4-Dichlorobenzene	EPA-8270 SIM	U	0.0050	1	MG/KG	02/12/2013	LAP
1,2-Dichlorobenzene	EPA-8270 SIM	U	0.020	1	MG/KG	02/12/2013	LAP
N-Nitroso-Di-N-Propylamine	EPA-8270 SIM	U	0.020	1	MG/KG	02/12/2013	LAP
Hexachloroethane	EPA-8270 SIM	U	0.020	1	MG/KG	02/12/2013	LAP
2,4-Dichlorophenol	EPA-8270 SIM	U	0.020	1	MG/KG	02/12/2013	LAP
1,2,4-Trichlorobenzene	EPA-8270 SIM	U	0.010	1	MG/KG	02/12/2013	LAP
Naphthalene	EPA-8270 SIM	U	0.020	1	MG/KG	02/12/2013	LAP
2-Methylnaphthalene	EPA-8270 SIM	U	0.020	1	MG/KG	02/12/2013	LAP
1-Methylnaphthalene	EPA-8270 SIM	U	0.020	1	MG/KG	02/12/2013	LAP
Acenaphthylene	EPA-8270 SIM	U	0.020	1	MG/KG	02/12/2013	LAP
Acenaphthene	EPA-8270 SIM	U	0.017	1	MG/KG	02/12/2013	LAP
2,4-Dinitrotoluene	EPA-8270 SIM	U	0.010	1	MG/KG	02/12/2013	LAP
Fluorene	EPA-8270 SIM	U	0.020	1	MG/KG	02/12/2013	LAP
Pentachlorophenol	EPA-8270 SIM	U	0.10	1	MG/KG	02/12/2013	LAP
Phenanthrene	EPA-8270 SIM	U	0.020	1	MG/KG	02/12/2013	LAP
Anthracene	EPA-8270 SIM	U	0.020	1	MG/KG	02/12/2013	LAP
Fluoranthene	EPA-8270 SIM	U	0.020	1	MG/KG	02/12/2013	LAP
Pyrene	EPA-8270 SIM	U	0.020	1	MG/KG	02/12/2013	LAP
3,3-Dichlorobenzidine	EPA-8270 SIM	U	0.10	1	MG/KG	02/12/2013	LAP
Benzo[A]Anthracene	EPA-8270 SIM	U	0.0065	1	MG/KG	02/12/2013	LAP
Chrysene	EPA-8270 SIM	U	0.0072	1	MG/KG	02/12/2013	LAP
Benzo[B]Fluoranthene	EPA-8270 SIM	U	0.020	1	MG/KG	02/12/2013	LAP
Benzo[K]Fluoranthene	EPA-8270 SIM	U	0.020	1	MG/KG	02/12/2013	LAP
Benzo[A]Pyrene	EPA-8270 SIM	U	0.017	1	MG/KG	02/12/2013	LAP
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	U	0.020	1	MG/KG	02/12/2013	LAP
Dibenz[A,H]Anthracene	EPA-8270 SIM	U	0.018	1	MG/KG	02/12/2013	LAP
Benzo[G,H,I]Perylene	EPA-8270 SIM	U	0.020	1	MG/KG	02/12/2013	LAP
Pyridine	EPA-8270	U	200	1	UG/KG	02/12/2013	LAP
N-Nitrosodimethylamine	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
Phenol	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
Aniline	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13020005 -06
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/1/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/30/2013 3:10:00 PM
CLIENT SAMPLE ID	FS-22-7.0-8.0-013013	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Bis(2-Chloroethyl)Ether	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
2-Chlorophenol	EPA-8270	ND- UT	34	1	UG/KG	02/12/2013	LAP
1,3-Dichlorobenzene	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
Benzyl Alcohol	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
2-Methylphenol	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	250	1	UG/KG	02/12/2013	LAP
3&4-Methylphenol	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
Nitrobenzene	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
Isophorone	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
2-Nitrophenol	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
2,4-Dimethylphenol	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
Benzoic Acid	EPA-8270	U	1000	1	UG/KG	02/12/2013	LAP
Bis(2-Chloroethoxy)Methane	EPA-8270	U	250	1	UG/KG	02/12/2013	LAP
4-Chloroaniline	EPA-8270	U	1000	1	UG/KG	02/12/2013	LAP
2,6-Dichlorophenol	EPA-8270	U	250	1	UG/KG	02/12/2013	LAP
Hexachlorobutadiene	EPA-8270	U	140	1	UG/KG	02/12/2013	LAP
4-Chloro-3-Methylphenol	EPA-8270	U	500	1	UG/KG	02/12/2013	LAP
Hexachlorocyclopentadiene	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
2,4,6-Trichlorophenol	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
2,4,5-Trichlorophenol	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
2-Chloronaphthalene	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
2-Nitroaniline	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
Dimethylphthalate	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
2,6-Dinitrotoluene	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
3-Nitroaniline	EPA-8270	U	1000	1	UG/KG	02/12/2013	LAP
2,4-Dinitrophenol	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
4-Nitrophenol	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
Dibenzofuran	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
2,3,4,6-Tetrachlorophenol	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
Diethylphthalate	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
4-Chlorophenyl-Phenylether	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
4-Nitroaniline	EPA-8270	U	250	1	UG/KG	02/12/2013	LAP
4,6-Dinitro-2-Methylphenol	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
N-Nitrosodiphenylamine	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
Azobenzene	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
4-Bromophenyl-Phenylether	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
Hexachlorobenzene	EPA-8270	U	80	1	UG/KG	02/12/2013	LAP
Carbazole	EPA-8270	U	250	1	UG/KG	02/12/2013	LAP

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ALS Laboratory Group A Campbell Brothers Limited Company

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13020005 -06
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/1/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/30/2013 3:10:00 PM
CLIENT SAMPLE ID	FS-22-7.0-8.0-013013	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Di-N-Butylphthalate	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
Butylbenzylphthalate	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
Di-N-Octylphthalate	EPA-8270	U	100	1	UG/KG	02/12/2013	LAP
Mercury	EPA-7471	**0.025**	0.020	1	MG/KG	02/05/2013	RAL
Antimony	EPA-6020	U	0.50	5	MG/KG	02/11/2013	RAL
Arsenic	EPA-6020	**3.8**	1.0	5	MG/KG	02/11/2013	RAL
Beryllium	EPA-6020	U	0.50	5	MG/KG	02/11/2013	RAL
Cadmium	EPA-6020	U	0.50	5	MG/KG	02/11/2013	RAL
Chromium	EPA-6020	**41**	0.50	5	MG/KG	02/11/2013	RAL
Copper	EPA-6020	**23**	0.50	5	MG/KG	02/11/2013	RAL
Lead	EPA-6020	**2.9**	0.50	5	MG/KG	02/11/2013	RAL
Nickel	EPA-6020	**43**	0.50	5	MG/KG	02/11/2013	RAL
Selenium	EPA-6020	U	5.0	5	MG/KG	02/11/2013	RAL
Silver	EPA-6020	U	0.50	5	MG/KG	02/11/2013	RAL
Thallium	EPA-6020	U	4.9	5	MG/KG	02/11/2013	RAL
Zinc	EPA-6020	**43**	2.8	5	MG/KG	02/11/2013	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**75.6**	02/04/2013	DLC
TFT	EPA-8021	**91.9**	02/04/2013	DLC
C25	NWTPH-DX	**103**	02/05/2013	EBS
Terphenyl-d14	EPA-8270 SIM	**78.7**	02/12/2013	LAP
2-Fluorophenol	EPA-8270	**14.6 DS1**	02/12/2013	LAP
Phenol-d5	EPA-8270	**21.5 DS1**	02/12/2013	LAP
Nitrobenzene-d5	EPA-8270	**48.9**	02/12/2013	LAP
2-Fluorobiphenyl	EPA-8270	**56.9**	02/12/2013	LAP
2,4,6-Tribromophenol	EPA-8270	**63.5**	02/12/2013	LAP
Terphenyl-d14	EPA-8270	**78.7**	02/12/2013	LAP

DS1 - Surrogate outside of control limits due to matrix effect.
U - Analyte analyzed for but not detected at level above reporting limit.
UT - Analyte analyzed for but not detected at level above the MDL.

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13020005 -07
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/1/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/30/2013 3:10:00 PM
CLIENT SAMPLE ID	FS-78-7.0-8.0-013013	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	02/04/2013	DLC
Benzene	EPA-8021	U	0.030	1	MG/KG	02/04/2013	DLC
Toluene	EPA-8021	U	0.050	1	MG/KG	02/04/2013	DLC
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	02/04/2013	DLC
Xylenes	EPA-8021	U	0.20	1	MG/KG	02/04/2013	DLC
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	02/05/2013	EBS
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	02/05/2013	EBS
1,4-Dichlorobenzene	EPA-8270 SIM	U	0.0050	1	MG/KG	02/13/2013	LAP
1,2-Dichlorobenzene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
N-Nitroso-Di-N-Propylamine	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Hexachloroethane	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
2,4-Dichlorophenol	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
1,2,4-Trichlorobenzene	EPA-8270 SIM	U	0.010	1	MG/KG	02/13/2013	LAP
Naphthalene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
2-Methylnaphthalene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
1-Methylnaphthalene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Acenaphthylene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Acenaphthene	EPA-8270 SIM	U	0.017	1	MG/KG	02/13/2013	LAP
2,4-Dinitrotoluene	EPA-8270 SIM	U	0.010	1	MG/KG	02/13/2013	LAP
Fluorene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Pentachlorophenol	EPA-8270 SIM	U	0.10	1	MG/KG	02/13/2013	LAP
Phenanthrene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Anthracene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Fluoranthene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Pyrene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
3,3-Dichlorobenzidine	EPA-8270 SIM	U	0.10	1	MG/KG	02/13/2013	LAP
Benzo[A]Anthracene	EPA-8270 SIM	U	0.0065	1	MG/KG	02/13/2013	LAP
Chrysene	EPA-8270 SIM	U	0.0072	1	MG/KG	02/13/2013	LAP
Benzo[B]Fluoranthene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Benzo[K]Fluoranthene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Benzo[A]Pyrene	EPA-8270 SIM	U	0.017	1	MG/KG	02/13/2013	LAP
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Dibenz[A,H]Anthracene	EPA-8270 SIM	U	0.018	1	MG/KG	02/13/2013	LAP
Benzo[G,H,I]Perylene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Pyridine	EPA-8270	U	200	1	UG/KG	02/13/2013	LAP
N-Nitrosodimethylamine	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Phenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Aniline	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP

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ALS Laboratory Group A Campbell Brothers Limited Company

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13020005 -07
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/1/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/30/2013 3:10:00 PM
CLIENT SAMPLE ID	FS-78-7.0-8.0-013013	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Bis(2-Chloroethyl)Ether	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Chlorophenol	EPA-8270	ND- UT	33	1	UG/KG	02/13/2013	LAP
1,3-Dichlorobenzene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Benzyl Alcohol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Methylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
3&4-Methylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Nitrobenzene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Isophorone	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Nitrophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,4-Dimethylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Benzoic Acid	EPA-8270	U	1000	1	UG/KG	02/13/2013	LAP
Bis(2-Chloroethoxy)Methane	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
4-Chloroaniline	EPA-8270	U	1000	1	UG/KG	02/13/2013	LAP
2,6-Dichlorophenol	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
Hexachlorobutadiene	EPA-8270	U	130	1	UG/KG	02/13/2013	LAP
4-Chloro-3-Methylphenol	EPA-8270	U	500	1	UG/KG	02/13/2013	LAP
Hexachlorocyclopentadiene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,4,6-Trichlorophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,4,5-Trichlorophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Chloronaphthalene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Nitroaniline	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Dimethylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,6-Dinitrotoluene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
3-Nitroaniline	EPA-8270	U	1000	1	UG/KG	02/13/2013	LAP
2,4-Dinitrophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Nitrophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Dibenzofuran	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,3,4,6-Tetrachlorophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Diethylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Chlorophenyl-Phenylether	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Nitroaniline	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
4,6-Dinitro-2-Methylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
N-Nitrosodiphenylamine	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Azobenzene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Bromophenyl-Phenylether	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Hexachlorobenzene	EPA-8270	U	80	1	UG/KG	02/13/2013	LAP
Carbazole	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP

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ALS Laboratory Group A Campbell Brothers Limited Company

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13020005 -07
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/1/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/30/2013 3:10:00 PM
CLIENT SAMPLE ID	FS-78-7.0-8.0-013013	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Di-N-Butylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Butylbenzylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Di-N-Octylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Mercury	EPA-7471	**0.025**	0.020	1	MG/KG	02/05/2013	RAL
Antimony	EPA-6020	U	0.50	5	MG/KG	02/11/2013	RAL
Arsenic	EPA-6020	**3.1**	1.0	5	MG/KG	02/11/2013	RAL
Beryllium	EPA-6020	U	0.50	5	MG/KG	02/11/2013	RAL
Cadmium	EPA-6020	U	0.50	5	MG/KG	02/11/2013	RAL
Chromium	EPA-6020	**35**	0.50	5	MG/KG	02/11/2013	RAL
Copper	EPA-6020	**19**	0.50	5	MG/KG	02/11/2013	RAL
Lead	EPA-6020	**2.3**	0.50	5	MG/KG	02/11/2013	RAL
Nickel	EPA-6020	**37**	0.50	5	MG/KG	02/11/2013	RAL
Selenium	EPA-6020	U	5.0	5	MG/KG	02/11/2013	RAL
Silver	EPA-6020	U	0.50	5	MG/KG	02/11/2013	RAL
Thallium	EPA-6020	U	4.7	5	MG/KG	02/11/2013	RAL
Zinc	EPA-6020	**35**	2.7	5	MG/KG	02/11/2013	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**78.6**	02/04/2013	DLC
TFT	EPA-8021	**98.7**	02/04/2013	DLC
C25	NWTPH-DX	**107**	02/05/2013	EBS
Terphenyl-d14	EPA-8270 SIM	**90.9**	02/13/2013	LAP
2-Fluorophenol	EPA-8270	**75.1**	02/13/2013	LAP
Phenol-d5	EPA-8270	**49.4**	02/13/2013	LAP
Nitrobenzene-d5	EPA-8270	**77.4**	02/13/2013	LAP
2-Fluorobiphenyl	EPA-8270	**83.8**	02/13/2013	LAP
2,4,6-Tribromophenol	EPA-8270	**77.3**	02/13/2013	LAP
Terphenyl-d14	EPA-8270	**90.9**	02/13/2013	LAP

U - Analyte analyzed for but not detected at level above reporting limit.
UT - Analyte analyzed for but not detected at level above the MDL.

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ALS Laboratory Group A Campbell Brothers Limited Company

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE:	3/20/2013
		ALS JOB#:	EV13020005
		ALS SAMPLE#:	-09
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/1/2013
CLIENT PROJECT:	POB - Harris	COLLECTION DATE:	1/30/2013 12:00:00 PM
CLIENT SAMPLE ID	FS-23-TB-013013	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	02/02/2013	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	02/02/2013	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	02/02/2013	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	02/02/2013	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	02/02/2013	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**85.7**	02/02/2013	DLC
TFT	EPA-8021	**101**	02/02/2013	DLC

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS SDG#: WDOE ACCREDITATION:	3/20/2013 EV13020005 C601
CLIENT CONTACT:	Stephen Bentsen		
CLIENT PROJECT:	POB - Harris		

LABORATORY BLANK RESULTS

MBG-013013S - Batch 3411 - Soil by NWTPH-GX

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	01/30/2013	DLC

MBG-020113W - Batch 3425 - Water by NWTPH-GX

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	02/01/2013	DLC

MB-013013S - Batch 3411 - Soil by EPA-8021

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	U	0.030	1	MG/KG	01/30/2013	DLC
Toluene	EPA-8021	U	0.050	1	MG/KG	01/30/2013	DLC
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	01/30/2013	DLC
Xylenes	EPA-8021	U	0.20	1	MG/KG	01/30/2013	DLC

MB-020113W - Batch 3425 - Water by EPA-8021

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	U	1.0	1	UG/L	02/01/2013	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	02/01/2013	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	02/01/2013	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	02/01/2013	DLC

MB-020413S - Batch 3436 - Soil by NWTPH-DX

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	02/05/2013	EBS
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	02/05/2013	EBS

MB-020113W - Batch 3422 - Water by NWTPH-DX

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range	NWTPH-DX	U	130	1	UG/L	02/01/2013	EBS
TPH-Oil Range	NWTPH-DX	U	250	1	UG/L	02/01/2013	EBS

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS SDG#: WDOE ACCREDITATION:	3/20/2013 EV13020005 C601
CLIENT CONTACT:	Stephen Bentsen		
CLIENT PROJECT:	POB - Harris		

LABORATORY BLANK RESULTS

MB-020413S - Batch 3467 - Soil by EPA-8270 SIM

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,4-Dichlorobenzene	EPA-8270 SIM	U	0.0050	1	MG/KG	02/13/2013	LAP
1,2-Dichlorobenzene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
N-Nitroso-Di-N-Propylamine	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Hexachloroethane	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
2,4-Dichlorophenol	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
1,2,4-Trichlorobenzene	EPA-8270 SIM	U	0.010	1	MG/KG	02/13/2013	LAP
Naphthalene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
2-Methylnaphthalene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
1-Methylnaphthalene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Acenaphthylene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Acenaphthene	EPA-8270 SIM	U	0.017	1	MG/KG	02/13/2013	LAP
2,4-Dinitrotoluene	EPA-8270 SIM	U	0.010	1	MG/KG	02/13/2013	LAP
Fluorene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Pentachlorophenol	EPA-8270 SIM	U	0.10	1	MG/KG	02/13/2013	LAP
Phenanthrene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Anthracene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Fluoranthene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Pyrene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
3,3-Dichlorobenzidine	EPA-8270 SIM	U	0.10	1	MG/KG	02/13/2013	LAP
Benzo[A]Anthracene	EPA-8270 SIM	U	0.0065	1	MG/KG	02/13/2013	LAP
Chrysene	EPA-8270 SIM	U	0.0072	1	MG/KG	02/13/2013	LAP
Benzo[B]Fluoranthene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Benzo[K]Fluoranthene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Benzo[A]Pyrene	EPA-8270 SIM	U	0.017	1	MG/KG	02/13/2013	LAP
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP
Dibenz[A,H]Anthracene	EPA-8270 SIM	U	0.018	1	MG/KG	02/13/2013	LAP
Benzo[G,H,I]Perylene	EPA-8270 SIM	U	0.020	1	MG/KG	02/13/2013	LAP

MB-020513W - Batch 3442 - Water by EPA-8270 SIM

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Naphthalene	EPA-8270 SIM	U	0.020	1	UG/L	02/12/2013	LAP
2-Methylnaphthalene	EPA-8270 SIM	U	0.020	1	UG/L	02/12/2013	LAP
1-Methylnaphthalene	EPA-8270 SIM	U	0.020	1	UG/L	02/12/2013	LAP
Acenaphthylene	EPA-8270 SIM	U	0.020	1	UG/L	02/12/2013	LAP
Acenaphthene	EPA-8270 SIM	U	0.020	1	UG/L	02/12/2013	LAP
Fluorene	EPA-8270 SIM	U	0.020	1	UG/L	02/12/2013	LAP
Phenanthrene	EPA-8270 SIM	U	0.020	1	UG/L	02/12/2013	LAP

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CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS SDG#: WDOE ACCREDITATION:	3/20/2013 EV13020005 C601
CLIENT CONTACT:	Stephen Bentsen		
CLIENT PROJECT:	POB - Harris		

LABORATORY BLANK RESULTS

MB-020513W - Batch 3442 - Water by EPA-8270 SIM

Anthracene	EPA-8270 SIM	U	0.020	1	UG/L	02/12/2013	LAP
Fluoranthene	EPA-8270 SIM	U	0.020	1	UG/L	02/12/2013	LAP
Pyrene	EPA-8270 SIM	U	0.033	1	UG/L	02/12/2013	LAP
Benzo[A]Anthracene	EPA-8270 SIM	U	0.018	1	UG/L	02/12/2013	LAP
Chrysene	EPA-8270 SIM	UT	0.0064	1	UG/L	02/12/2013	LAP
Benzo[B]Fluoranthene	EPA-8270 SIM	UT	0.010	1	UG/L	02/12/2013	LAP
Benzo[K]Fluoranthene	EPA-8270 SIM	UT	0.0070	1	UG/L	02/12/2013	LAP
Benzo[A]Pyrene	EPA-8270 SIM	UT	0.0096	1	UG/L	02/12/2013	LAP
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	UT	0.0050	1	UG/L	02/12/2013	LAP
Dibenz[A,H]Anthracene	EPA-8270 SIM	UT	0.0062	1	UG/L	02/12/2013	LAP
Benzo[G,H,I]Perylene	EPA-8270 SIM	U	0.020	1	UG/L	02/12/2013	LAP

UT - Analyte analyzed for but not detected at level above the MDL.

MB-020413S - Batch 3466 - Soil by EPA-8270

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Pyridine	EPA-8270	U	200	1	UG/KG	02/13/2013	LAP
N-Nitrosodimethylamine	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Phenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Aniline	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Bis(2-Chloroethyl)Ether	EPA-8270	U	120	1	UG/KG	02/13/2013	LAP
2-Chlorophenol	EPA-8270	UT	41	1	UG/KG	02/13/2013	LAP
1,3-Dichlorobenzene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
1,4-Dichlorobenzene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Benzyl Alcohol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Methylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
3&4-Methylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
N-Nitroso-Di-N-Propylamine	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
Nitrobenzene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Isophorone	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Nitrophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,4-Dimethylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Benzoic Acid	EPA-8270	U	1000	1	UG/KG	02/13/2013	LAP
Bis(2-Chloroethoxy)Methane	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
1,2,4-Trichlorobenzene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Chloroaniline	EPA-8270	U	1000	1	UG/KG	02/13/2013	LAP
2,6-Dichlorophenol	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
Hexachlorobutadiene	EPA-8270	U	160	1	UG/KG	02/13/2013	LAP
4-Chloro-3-Methylphenol	EPA-8270	U	500	1	UG/KG	02/13/2013	LAP

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CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101		DATE: ALS SDG#: WDOE ACCREDITATION:	3/20/2013 EV13020005 C601
CLIENT CONTACT:	Stephen Bentsen			
CLIENT PROJECT:	POB - Harris			

LABORATORY BLANK RESULTS

MB-020413S - Batch 3466 - Soil by EPA-8270

Hexachlorocyclopentadiene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,4,6-Trichlorophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,4,5-Trichlorophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Chloronaphthalene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2-Nitroaniline	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Dimethylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,6-Dinitrotoluene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
3-Nitroaniline	EPA-8270	U	1000	1	UG/KG	02/13/2013	LAP
2,4-Dinitrophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Nitrophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Dibenzofuran	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,4-Dinitrotoluene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
2,3,4,6-Tetrachlorophenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Diethylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Chlorophenyl-Phenylether	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Nitroaniline	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
4,6-Dinitro-2-Methylphenol	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
N-Nitrosodiphenylamine	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Azobenzene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
4-Bromophenyl-Phenylether	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Hexachlorobenzene	EPA-8270	U	80	1	UG/KG	02/13/2013	LAP
Pentachlorophenol	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
Carbazole	EPA-8270	U	250	1	UG/KG	02/13/2013	LAP
Di-N-Butylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Pyrene	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Butylbenzylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP
Di-N-Octylphthalate	EPA-8270	U	100	1	UG/KG	02/13/2013	LAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
Phenol-d5	EPA-8270	**GS6**	02/13/2013	LAP

GS6 - Surrogate outside of control limits. Single surrogate outlier per fraction is acceptable as per Method 8270D.
UT - Analyte analyzed for but not detected at level above the MDL.

MB-020513W - Batch 3440 - Water by EPA-8270

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Pyridine	EPA-8270	U	4.0	1	UG/L	02/12/2013	LAP
N-Nitrosodimethylamine	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Phenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS SDG#: WDOE ACCREDITATION:	3/20/2013 EV13020005 C601
CLIENT CONTACT:	Stephen Bentsen		
CLIENT PROJECT:	POB - Harris		

LABORATORY BLANK RESULTS

MB-020513W - Batch 3440 - Water by EPA-8270

Aniline	EPA-8270	U	4.0	1	UG/L	02/12/2013	LAP
Bis(2-Chloroethyl)Ether	EPA-8270	U	1.0	1	UG/L	02/12/2013	LAP
2-Chlorophenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
1,3-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
1,4-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Benzyl Alcohol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
1,2-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
3&4-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
N-Nitroso-Di-N-Propylamine	EPA-8270	UT	0.70	1	UG/L	02/12/2013	LAP
Hexachloroethane	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Nitrobenzene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Isophorone	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2-Nitrophenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2,4-Dimethylphenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Benzoic Acid	EPA-8270	U	10	1	UG/L	02/12/2013	LAP
Bis(2-Chloroethoxy)Methane	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2,4-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
1,2,4-Trichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
4-Chloroaniline	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2,6-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Hexachlorobutadiene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
4-Chloro-3-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Hexachlorocyclopentadiene	EPA-8270	U	4.0	1	UG/L	02/12/2013	LAP
2,4,6-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2,4,5-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2-Chloronaphthalene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2-Nitroaniline	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Dimethylphthalate	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2,6-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
3-Nitroaniline	EPA-8270	U	5.0	1	UG/L	02/12/2013	LAP
2,4-Dinitrophenol	EPA-8270	U	10	1	UG/L	02/12/2013	LAP
4-Nitrophenol	EPA-8270	U	5.0	1	UG/L	02/12/2013	LAP
Dibenzofuran	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2,4-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
2,3,4,6-Tetrachlorophenol	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Diethylphthalate	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
4-Chlorophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
4-Nitroaniline	EPA-8270	U	4.0	1	UG/L	02/12/2013	LAP

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CLIENT CONTACT:	Stephen Bentsen			
CLIENT PROJECT:	POB - Harris			

LABORATORY BLANK RESULTS

MB-020513W - Batch 3440 - Water by EPA-8270

4,6-Dinitro-2-Methylphenol	EPA-8270	U	4.0	1	UG/L	02/12/2013	LAP
N-Nitrosodiphenylamine	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Azobenzene	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
4-Bromophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Hexachlorobenzene	EPA-8270	U	1.0	1	UG/L	02/12/2013	LAP
Pentachlorophenol	EPA-8270	U	5.0	1	UG/L	02/12/2013	LAP
Carbazole	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Di-N-Butylphthalate	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Butylbenzylphthalate	EPA-8270	U	1.0	1	UG/L	02/12/2013	LAP
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	2.0	1	UG/L	02/12/2013	LAP
Di-N-Octylphthalate	EPA-8270	U	1.0	1	UG/L	02/12/2013	LAP

UT - Analyte analyzed for but not detected at level above the MDL.

MBLK-252013 - Batch R80067 - Soil by EPA-7471

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Mercury	EPA-7471	U	0.020	1	MG/KG	02/05/2013	RAL

MB-020413S - Batch 3433 - Soil by EPA-6020

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Antimony	EPA-6020	U	0.10	1	MG/KG	02/04/2013	RAL
Arsenic	EPA-6020	U	0.20	1	MG/KG	02/04/2013	RAL
Beryllium	EPA-6020	U	0.10	1	MG/KG	02/04/2013	RAL
Cadmium	EPA-6020	U	0.10	1	MG/KG	02/04/2013	RAL
Chromium	EPA-6020	U	0.10	1	MG/KG	02/04/2013	RAL
Copper	EPA-6020	U	0.10	1	MG/KG	02/04/2013	RAL
Lead	EPA-6020	U	0.10	1	MG/KG	02/04/2013	RAL
Nickel	EPA-6020	U	0.10	1	MG/KG	02/04/2013	RAL
Selenium	EPA-6020	U	1.0	1	MG/KG	02/04/2013	RAL
Silver	EPA-6020	U	0.10	1	MG/KG	02/04/2013	RAL
Thallium	EPA-6020	U	0.87	1	MG/KG	02/04/2013	RAL
Zinc	EPA-6020	U	0.50	1	MG/KG	02/04/2013	RAL

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE:	3/20/2013
		ALS SDG#:	EV13020005
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Stephen Bentsen		
CLIENT PROJECT:	POB - Harris		

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 3411 - Soil by NWTPH-GX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range - BS	NWTPH-GX	**70.1**			01/30/2013	DLC
TPH-Volatile Range - BSD	NWTPH-GX	**77.6**	**10**		01/30/2013	DLC

ALS Test Batch ID: 3425 - Water by NWTPH-GX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range - BS	NWTPH-GX	**62.3**			02/02/2013	DLC
TPH-Volatile Range - BSD	NWTPH-GX	**61.3**	**2**		02/02/2013	DLC

ALS Test Batch ID: 3411 - Soil by EPA-8021

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Benzene - BS	EPA-8021	**90.9**			01/30/2013	DLC
Benzene - BSD	EPA-8021	**89.9**	**1**		01/30/2013	DLC
Toluene - BS	EPA-8021	**95.2**			01/30/2013	DLC
Toluene - BSD	EPA-8021	**93.8**	**1**		01/30/2013	DLC
Ethylbenzene - BS	EPA-8021	**95.4**			01/30/2013	DLC
Ethylbenzene - BSD	EPA-8021	**94.1**	**1**		01/30/2013	DLC
Xylenes - BS	EPA-8021	**93.7**			01/30/2013	DLC
Xylenes - BSD	EPA-8021	**92.1**	**2**		01/30/2013	DLC

ALS Test Batch ID: 3425 - Water by EPA-8021

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Benzene - BS	EPA-8021	**105**			02/02/2013	DLC
Benzene - BSD	EPA-8021	**101**	**3**		02/02/2013	DLC
Toluene - BS	EPA-8021	**103**			02/02/2013	DLC
Toluene - BSD	EPA-8021	**99.0**	**4**		02/02/2013	DLC
Ethylbenzene - BS	EPA-8021	**99.6**			02/02/2013	DLC
Ethylbenzene - BSD	EPA-8021	**97.4**	**2**		02/02/2013	DLC
Xylenes - BS	EPA-8021	**102**			02/02/2013	DLC
Xylenes - BSD	EPA-8021	**101**	**1**		02/02/2013	DLC

ALS Test Batch ID: 3436 - Soil by NWTPH-DX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range - BS	NWTPH-DX	**90.0**			02/05/2013	EBS
TPH-Diesel Range - BSD	NWTPH-DX	**98.4**	**9**		02/05/2013	EBS

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE:	3/20/2013
		ALS SDG#:	EV13020005
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Stephen Bentsen		
CLIENT PROJECT:	POB - Harris		

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 3422 - Water by NWTPH-DX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range - BS	NWTPH-DX	**84.3**			02/01/2013	EBS
TPH-Diesel Range - BSD	NWTPH-DX	**86.5**	**2**		02/01/2013	EBS

ALS Test Batch ID: 3466 - Soil by EPA-8270

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Phenol - BS	EPA-8270	**51.9**			02/13/2013	LAP
Phenol - BSD	EPA-8270	**53.8**	**4**		02/14/2013	LAP
2-Chlorophenol - BS	EPA-8270	**70.1**			02/13/2013	LAP
2-Chlorophenol - BSD	EPA-8270	**74.6**	**6**		02/14/2013	LAP
1,4-Dichlorobenzene - BS	EPA-8270	**69.1**			02/13/2013	LAP
1,4-Dichlorobenzene - BSD	EPA-8270	**66.9**	**3**		02/14/2013	LAP
N-Nitroso-Di-N-Propylamine - BS	EPA-8270	**52.5**			02/13/2013	LAP
N-Nitroso-Di-N-Propylamine - BSD	EPA-8270	**55.7**	**6**		02/14/2013	LAP
1,2,4-Trichlorobenzene - BS	EPA-8270	**71.4**			02/13/2013	LAP
1,2,4-Trichlorobenzene - BSD	EPA-8270	**69.5**	**3**		02/14/2013	LAP
4-Chloro-3-Methylphenol - BS	EPA-8270	**55.8**			02/13/2013	LAP
4-Chloro-3-Methylphenol - BSD	EPA-8270	**64.4**	**14**		02/14/2013	LAP
4-Nitrophenol - BS	EPA-8270	**54.4**			02/13/2013	LAP
4-Nitrophenol - BSD	EPA-8270	**62.3**	**14**		02/14/2013	LAP
2,4-Dinitrotoluene - BS	EPA-8270	**71.3**			02/13/2013	LAP
2,4-Dinitrotoluene - BSD	EPA-8270	**70.3**	**1**		02/14/2013	LAP
Pentachlorophenol - BS	EPA-8270	**60.8**			02/13/2013	LAP
Pentachlorophenol - BSD	EPA-8270	**69.2**	**13**		02/14/2013	LAP
Pyrene - BS	EPA-8270	**85.3**			02/13/2013	LAP
Pyrene - BSD	EPA-8270	**81.9**	**4**		02/14/2013	LAP

ALS Test Batch ID: 3440 - Water by EPA-8270

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Phenol - BS	EPA-8270	**28.5**			02/12/2013	LAP
Phenol - BSD	EPA-8270	**24.5**	**15**		02/12/2013	LAP
2-Chlorophenol - BS	EPA-8270	**82.5**			02/12/2013	LAP
2-Chlorophenol - BSD	EPA-8270	**85.0**	**3**		02/12/2013	LAP
1,4-Dichlorobenzene - BS	EPA-8270	**83.3**			02/12/2013	LAP
1,4-Dichlorobenzene - BSD	EPA-8270	**87.1**	**5**		02/12/2013	LAP
N-Nitroso-Di-N-Propylamine - BS	EPA-8270	**96.6**			02/12/2013	LAP
N-Nitroso-Di-N-Propylamine - BSD	EPA-8270	**109**	**13**		02/12/2013	LAP

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ALS Laboratory Group A Campbell Brothers Limited Company

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101		DATE: ALS SDG#: WDOE ACCREDITATION:	3/20/2013 EV13020005 C601
CLIENT CONTACT:	Stephen Bentsen			
CLIENT PROJECT:	POB - Harris			

LABORATORY CONTROL SAMPLE RESULTS

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
1,2,4-Trichlorobenzene - BS	EPA-8270	**82.6**			02/12/2013	LAP
1,2,4-Trichlorobenzene - BSD	EPA-8270	**88.4**	**7**		02/12/2013	LAP
4-Chloro-3-Methylphenol - BS	EPA-8270	**85.3**			02/12/2013	LAP
4-Chloro-3-Methylphenol - BSD	EPA-8270	**84.3**	**1**		02/12/2013	LAP
4-Nitrophenol - BS	EPA-8270	**16.5**			02/12/2013	LAP
4-Nitrophenol - BSD	EPA-8270	**15.4**	**7**		02/12/2013	LAP
2,4-Dinitrotoluene - BS	EPA-8270	**70.1**			02/12/2013	LAP
2,4-Dinitrotoluene - BSD	EPA-8270	**69.7**	**1**		02/12/2013	LAP
Pentachlorophenol - BS	EPA-8270	**71.1**			02/12/2013	LAP
Pentachlorophenol - BSD	EPA-8270	**73.3**	**3**		02/12/2013	LAP

ALS Test Batch ID: R80067 - Soil by EPA-7471

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Mercury - BS	EPA-7471	**98.0**			02/05/2013	RAL
Mercury - BSD	EPA-7471	**100**	**2**		02/05/2013	RAL

ALS Test Batch ID: 3433 - Soil by EPA-6020

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Antimony - BS	EPA-6020	**91.3**			02/04/2013	RAL
Antimony - BSD	EPA-6020	**95.4**	**4**		02/04/2013	RAL
Arsenic - BS	EPA-6020	**98.4**			02/04/2013	RAL
Arsenic - BSD	EPA-6020	**100**	**2**		02/04/2013	RAL
Beryllium - BS	EPA-6020	**99.9**			02/04/2013	RAL
Beryllium - BSD	EPA-6020	**101**	**1**		02/04/2013	RAL
Cadmium - BS	EPA-6020	**99.0**			02/04/2013	RAL
Cadmium - BSD	EPA-6020	**101**	**2**		02/04/2013	RAL
Chromium - BS	EPA-6020	**98.4**			02/04/2013	RAL
Chromium - BSD	EPA-6020	**101**	**2**		02/04/2013	RAL
Copper - BS	EPA-6020	**101**			02/04/2013	RAL
Copper - BSD	EPA-6020	**102**	**1**		02/04/2013	RAL
Lead - BS	EPA-6020	**99.3**			02/04/2013	RAL
Lead - BSD	EPA-6020	**99.5**	**0**		02/04/2013	RAL
Nickel - BS	EPA-6020	**101**			02/04/2013	RAL
Nickel - BSD	EPA-6020	**103**	**2**		02/04/2013	RAL
Selenium - BS	EPA-6020	**98.2**			02/04/2013	RAL
Selenium - BSD	EPA-6020	**95.2**	**3**		02/04/2013	RAL
Silver - BS	EPA-6020	**101**			02/04/2013	RAL

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101		DATE: ALS SDG#: WDOE ACCREDITATION:	3/20/2013 EV13020005 C601
CLIENT CONTACT:	Stephen Bentsen			
CLIENT PROJECT:	POB - Harris			

LABORATORY CONTROL SAMPLE RESULTS

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Silver - BSD	EPA-6020	**102**	**1**		02/04/2013	RAL
Thallium - BS	EPA-6020	**97.6**			02/04/2013	RAL
Thallium - BSD	EPA-6020	**100**	**3**		02/04/2013	RAL
Zinc - BS	EPA-6020	**101**			02/04/2013	RAL
Zinc - BSD	EPA-6020	**97.2**	**4**		02/04/2013	RAL

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CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS SDG#: WDOE ACCREDITATION:	3/20/2013 EV13020005 C601
CLIENT CONTACT:	Stephen Bentsen		
CLIENT PROJECT:	POB - Harris		

MATRIX SPIKE RESULTS

ALS Test Batch ID: 3440 - Water
Parent Sample: BATCH QC

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Phenol - MS	EPA-8270	**23.1**			02/13/2013	LAP
Phenol - MSD	EPA-8270	**24.4**	**6**		02/12/2013	LAP
2-Chlorophenol - MS	EPA-8270	**76.3**			02/13/2013	LAP
2-Chlorophenol - MSD	EPA-8270	**81.2**	**6**		02/12/2013	LAP
1,4-Dichlorobenzene - MS	EPA-8270	**71.6**			02/13/2013	LAP
1,4-Dichlorobenzene - MSD	EPA-8270	**79.2**	**10**		02/12/2013	LAP
N-Nitroso-Di-N-Propylamine - MS	EPA-8270	**85.4**			02/13/2013	LAP
N-Nitroso-Di-N-Propylamine - MSD	EPA-8270	**102**	**18**		02/12/2013	LAP
1,2,4-Trichlorobenzene - MS	EPA-8270	**74.4**			02/13/2013	LAP
1,2,4-Trichlorobenzene - MSD	EPA-8270	**77.4**	**4**		02/12/2013	LAP
4-Chloro-3-Methylphenol - MS	EPA-8270	**66.4**			02/13/2013	LAP
4-Chloro-3-Methylphenol - MSD	EPA-8270	**76.0**	**13**		02/12/2013	LAP
4-Nitrophenol - MS	EPA-8270	**16.2**			02/13/2013	LAP
4-Nitrophenol - MSD	EPA-8270	**13.9**	**15**		02/12/2013	LAP
2,4-Dinitrotoluene - MS	EPA-8270	**68.4**			02/13/2013	LAP
2,4-Dinitrotoluene - MSD	EPA-8270	**62.4**	**6**		02/12/2013	LAP
Pentachlorophenol - MS	EPA-8270	**65.7**			02/13/2013	LAP
Pentachlorophenol - MSD	EPA-8270	**56.2**	**15**		02/12/2013	LAP
2-Fluorobiphenyl - MSD	EPA-8270	**109**		GS6	02/12/2013	LAP

GS6 - Surrogate outside of control limits. Single surrogate outlier per fraction is acceptable as per Method 8270D.

ALS Test Batch ID: 3466 - Soil
Parent Sample: BATCH QC

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Phenol - MS	EPA-8270	**30.5**		SQ2	02/15/2013	LAP
Phenol - MSD	EPA-8270	**31.5**	**3**	SQ2	02/13/2013	LAP
2-Chlorophenol - MS	EPA-8270	**31.8**		SQ2	02/15/2013	LAP
2-Chlorophenol - MSD	EPA-8270	**32.3**	**1**	SQ2	02/13/2013	LAP
1,4-Dichlorobenzene - MS	EPA-8270	**70.8**			02/15/2013	LAP
1,4-Dichlorobenzene - MSD	EPA-8270	**72.1**	**2**		02/13/2013	LAP
N-Nitroso-Di-N-Propylamine - MS	EPA-8270	**27.9**		SQ2	02/15/2013	LAP
N-Nitroso-Di-N-Propylamine - MSD	EPA-8270	**41.3**	**39**		02/13/2013	LAP
1,2,4-Trichlorobenzene - MS	EPA-8270	**91.7**			02/15/2013	LAP
1,2,4-Trichlorobenzene - MSD	EPA-8270	**84.6**	**8**		02/13/2013	LAP
4-Chloro-3-Methylphenol - MS	EPA-8270	**150**		SQ2	02/15/2013	LAP
4-Chloro-3-Methylphenol - MSD	EPA-8270	**149**	**1**	SQ2	02/13/2013	LAP
4-Nitrophenol - MS	EPA-8270	**68.4**			02/15/2013	LAP

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS SDG#: WDOE ACCREDITATION:	3/20/2013 EV13020005 C601
CLIENT CONTACT:	Stephen Bentsen		
CLIENT PROJECT:	POB - Harris		

MATRIX SPIKE RESULTS

4-Nitrophenol - MSD	EPA-8270	**64.6**	**6**		02/13/2013	LAP	ɞs
2,4-Dinitrotoluene - MS	EPA-8270	**75.5**			02/15/2013	LAP	ɞs
2,4-Dinitrotoluene - MSD	EPA-8270	**71.1**	**6**		02/13/2013	LAP	ɞs
Pentachlorophenol - MS	EPA-8270	**70.7**			02/15/2013	LAP	ɞs
Pentachlorophenol - MSD	EPA-8270	**76.5**	**8**		02/13/2013	LAP	ɞs
Pyrene - MS	EPA-8270	**23.3**		SQ2	02/15/2013	LAP	ɞs
Pyrene - MSD	EPA-8270	**26.6**	**1**	SQ2	02/13/2013	LAP	ɞs
2-Fluorophenol - MS	EPA-8270	**32.8**		DS1	02/15/2013	LAP	ɞs
2-Fluorophenol - MSD	EPA-8270	**26.4**		DS1	02/13/2013	LAP	ɞs
Phenol-d5 - MS	EPA-8270	**34.5**		DS1	02/15/2013	LAP	ɞs
Phenol-d5 - MSD	EPA-8270	**35.0**		DS1	02/13/2013	LAP	ɞs

SQ2 - Spike outside of control limits due to matrix effect. DS1 - Surrogate outside of control limits due to matrix effect.

APPROVED BY

Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

ALS ENVIRONMENTAL

Sample Receiving Checklist

Client: Floyd Snider ALS Job #: EV1302 0005

Project: PoB - Harris

Received Date: 2/1/13 Received Time: 1:30 By: S

Type of shipping container: Cooler X Box ___ Other ___

Shipped via: UPS/FedEx ___ US Postal Service ___ Courier ___ Hand Delivered X By Carl

	Yes	No	N/A
Were custody seals on outside of sample?		X	
If yes, how many? ___ Where? ___			
Custody seal date: ___ Seal name: ___			
Was Chain of Custody properly filled out (ink, signed, dated, etc.)?	X		
Did all bottles have labels?	X		
Did all bottle labels and tags agree with Chain of Custody?	X		
Were samples received within hold time?	X		
Did all bottles arrive in good condition (unbroken, etc.)?	X		
Was sufficient amount of sample sent for the tests indicated?	X		
Was correct preservation added to samples?	X		

If no, Sample Control added preservative to the following:

Sample Number	Reagent	Analyte

5 samples received per 5035 High lab.

	Yes	No	N/A
Were VOA vials checked for absence of air bubbles?	X		

Bubbles present in sample #: None

Temperature of cooler upon receipt: 4.8°c on ice Cold Cool Ambient N/A

Explain any discrepancies: ___

Was client contacted? ___ Who was called? ___ By whom? ___ Date: ___

Outcome of call: ___

ALS Environmental
8620 Holly Drive, Suite 100
Everett, WA 98208
Phone (425) 356-2600
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http://www.alsglobal.com

Chain Of Custody/ Laboratory Analysis Request

ALS Job# (Laboratory Use Only): EV13020005

Date 1/30/13 Page 1 Of 1

PROJECT ID: POB-Harris
REPORT TO COMPANY: Floyd/Snider
PROJECT MANAGER: Stephen Bentsen
ADDRESS: 601 Union St. Ste. 600
Seattle, WA 98101
PHONE: 206-292-2078 FAX: 206-682-7867
P.O. #: E-MAIL:
INVOICE TO COMPANY: Same as above
ATTENTION:
ADDRESS:

ANALYSIS REQUESTED / OTHER (Specify)

	SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA-8021	MTBE by EPA-8021 ☐ EPA-8260 ☐	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	EDB / EDC by EPA 8260 SIM (water)	EDB / EDC by EPA 8260 (soil)	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM ☑	PCB ☐ Pesticides ☐ by EPA 8081/8082	Metals-MTCA-5 ☐ RCRA-8 ☐ Pri Pol ☐ TAL ☐	Metals Other (Specify) Project Spec. List EPA 6020, EPA 7471	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	Archive	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1.	FS-23-3.0-3.5-013013	1/30/13	1150	S	1										X	X			X			1	
2.	FS-23-7.0-7.5-013013	1/30/13	1220	S	2		X	X	X						X	X			X			3	
3.	FS-23-13.0-13.5-013013	1/30/13	1250	S	3																X	3	
4.	FS-22-GW-013013	1/30/13	1556	W	4		X	X	X						X	X						6	
5.	FS-22-3.0-3.5-013013	1/30/13	1440	S	5										X	X			X			1	
6.	FS-22-7.0-8.0-013013	1/30/13	1510	S	6		X	X	X						X	X			X			3	
7.	FS-78-7.0-8.0-013013	1/30/13	1510	S	7		X	X	X						X	X			X			3	
8.	~~[illegible]~~																						
9.	FS-22-15.0-15.5-013013	1/30/13	1555	S	8																X	3	
10.	FS-23-TB-013013	1/30/12	1200	W	9			X	X													2	

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):
1. Relinquished By: (Erin Murray), Floyd/Snider, 1/30/13, 1005
Received By: ALS 2/1/13 1240
2. Relinquished By:
Received By:

TURNAROUND REQUESTED in Business Days*
Organic, Metals & Inorganic Analysis: 10 (Standard, circled) 5 3 2 1 SAME DAY
Fuels & Hydrocarbon Analysis: 5 (Standard, circled) 3 1 SAME DAY
OTHER:
Specify:

* Turnaround request less than standard may incur Rush Charges

LABORATORY COPY

ALS LABORATORY GROUP
DATA SUMMARY SHEET

PARAMETER: SEMIVOLATILES INSTR MTHD: EPH-ARO EXTRCT MTHD: EPH

QC BATCH #: EW021913 1ST ANAL SEQ. 81302191

EXT. DATES 2/19/2013 MATRIX H_2O

ASSOCIATED SAMPLES EV13020091-2,3,10,12

BLANK AND DUPLICATE RESULTS

ANALYTE:	BLANK RESULTS:	DUPLICATE:	ORIGINAL:	%RPD:
	MB			
C8-C10	<50ug/L			
>C10 - C12	<50ug/L			
>C12 - C16	<50ug/L			
>C16 - C21	<50ug/L			
>C21 - C34	<50ug/L			

SPIKE/ SPIKE DUPLICATE RESULTS

SPIKE ID	AMOUNT SPIKED	BLANK SPIKE %RECOVERY	MATRIX SPIKE %RECOVERY **	BLANK SPIKE DUP %RECOVERY	REL % DIFF
Toluene (C8-C10)	20 ppm	85%		86%	1%
Naphthalene (>C10-C12)	20 ppm	91%		92%	1%
Acenaphthene (>C12-C16)	20 ppm	96%		97%	1%
Pyrene (>C16-C21)	20 ppm	97%		98%	1%
Benzo(g,h,i)Perylene (>C21-C34)	20 ppm	90%		91%	1%
p-Terphenyl	50 ppm	102%		103%	1%

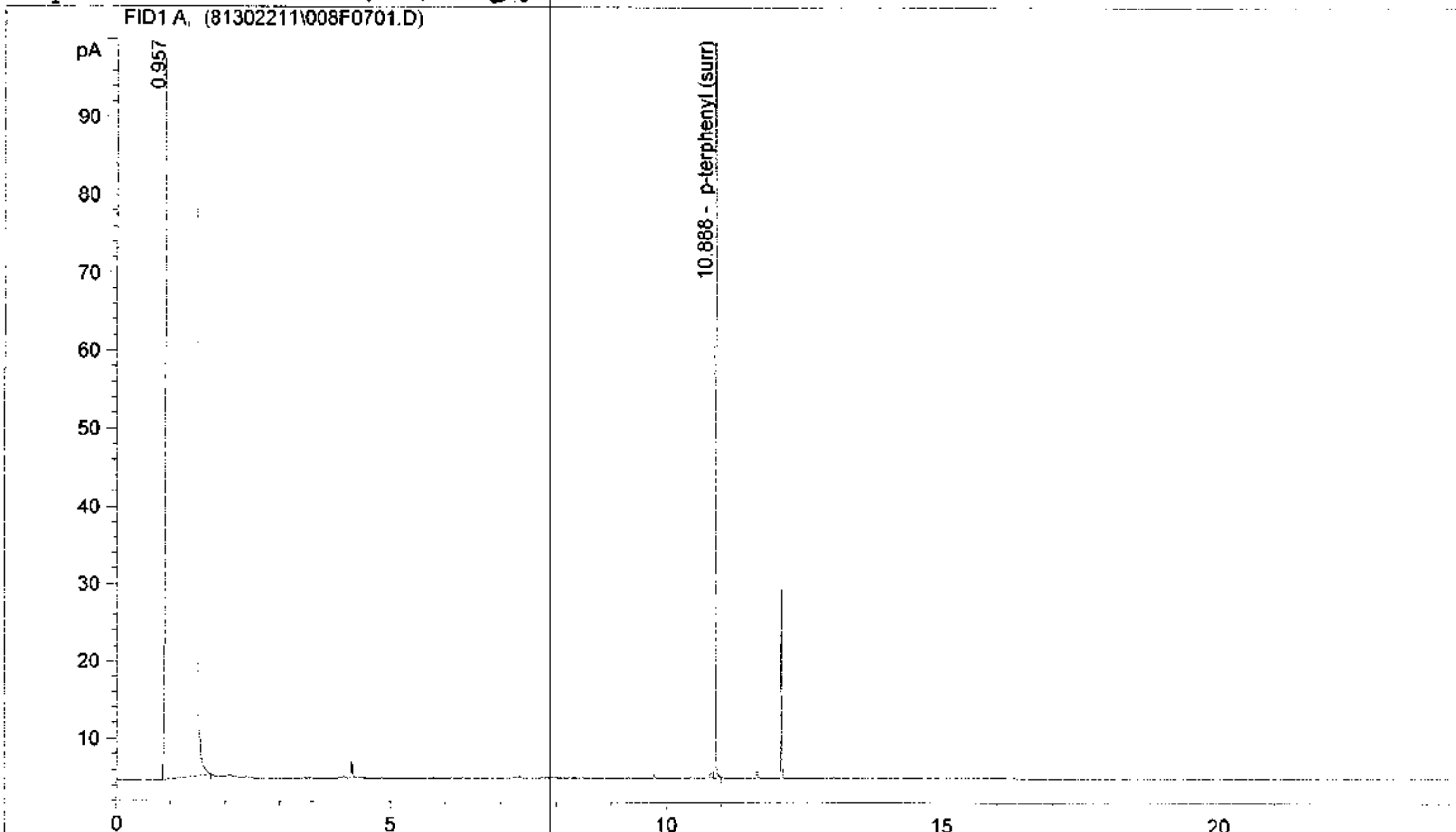
NOTES IF NUMBER OF ANALYTES DON'T ALLOW LISTING ALL COMPOUNDS, THE RAW DATA MAY BE SUBMITTED

RAW DATA FOR QC RUN ON A SPECIFIC SAMPLE SHOULD BE INCLUDED WITH ORIGINAL SAMPLE ANALYSIS RAW DATA

DATASUM.XLS

Instrument #98   Data File: C:\HPCHEM\1\DATA\81302211\008F0701.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\EPH0912.M
Injection Date & Time: 2/21/2013 12:07:32 PM   2/21/2013 12:07:32 PM
Report Creation: 2/22/2013   9:37:03 AM

Sample Name: MB-021913W ARO   ES



Ret. Time	Signal	Compound Name	Response	Amount ug/mL
0.000	FID1 A,	C8-C10 (Toluene)	0.000	0.000
0.000		>C10 - C12 (Napthale	0.000	0.000
0.000		>C12 - C16 (Acenapth	0.000	0.000
0.000		>C16 - C21 (Pyrene)	0.000	0.000
10.888		p-terphenyl (surr)	668.878	40.824 ÷50 x100 = 82%
0.000		>C21 to C34 (benzo(g	0.000	0.000

Aromatic

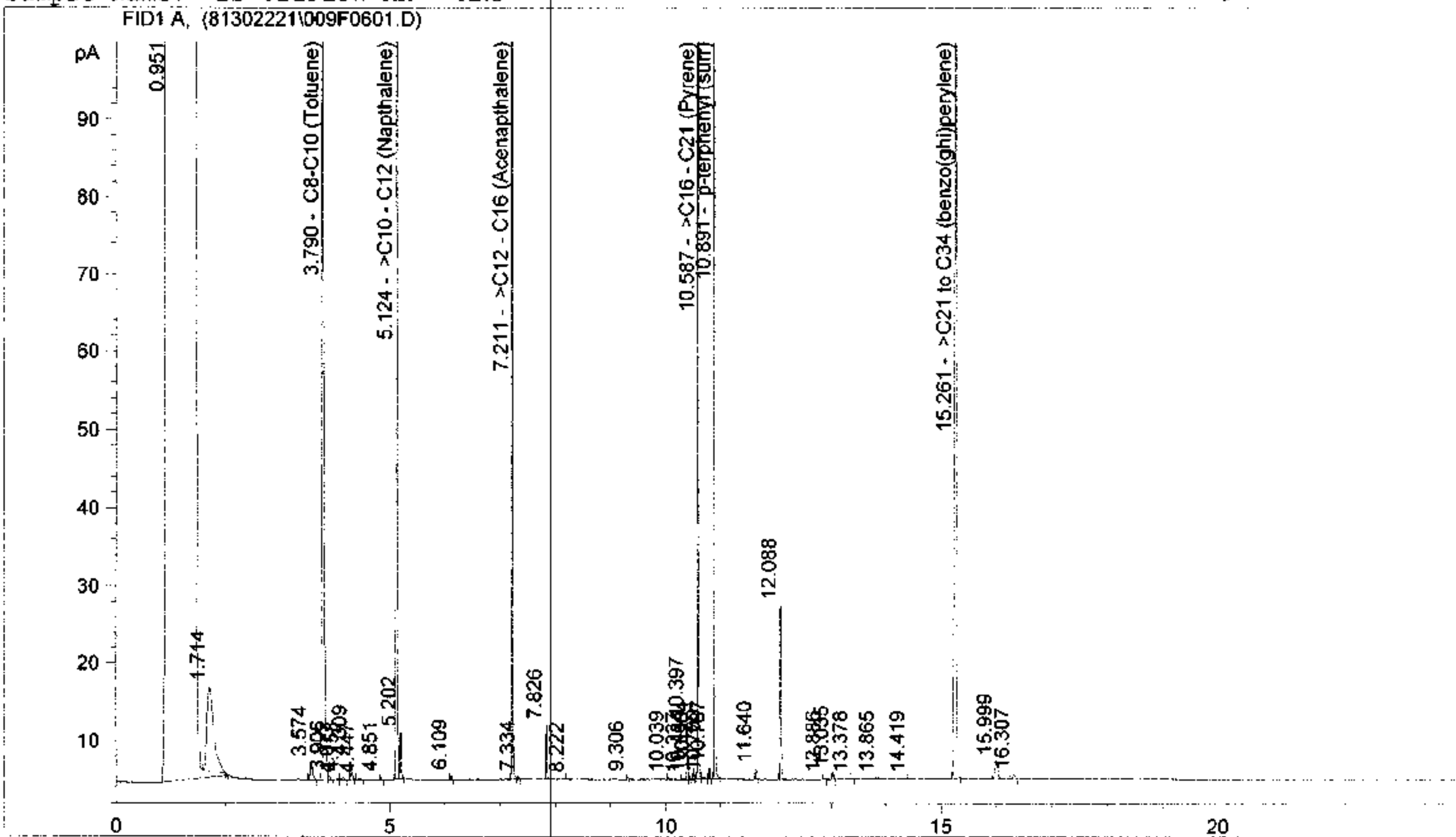
C8 - C10 < 5.0 ug/mL × $\frac{10 mL}{1000 mL}$ < 50 ug/L
>C10 - C12 < 50 ug/L
>C12 - C16 < 50 ug/L
>C16 - C21 < 50 ug/L
>C21 - C34 < 50 ug/L

REVIEWED BY & DATE NS 2/25/13

02.22.13 ES

Instrument #98   Data File: C:\HPCHEM\1\DATA\81302221\009F0601.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\EPH0912.M
Injection Date & Time: 2/22/2013 10:40:43 AM   2/22/2013 10:40:43 AM
Report Creation: 2/22/2013   11:34:20 AM

Sample Name: BS-021913W RR   ARO



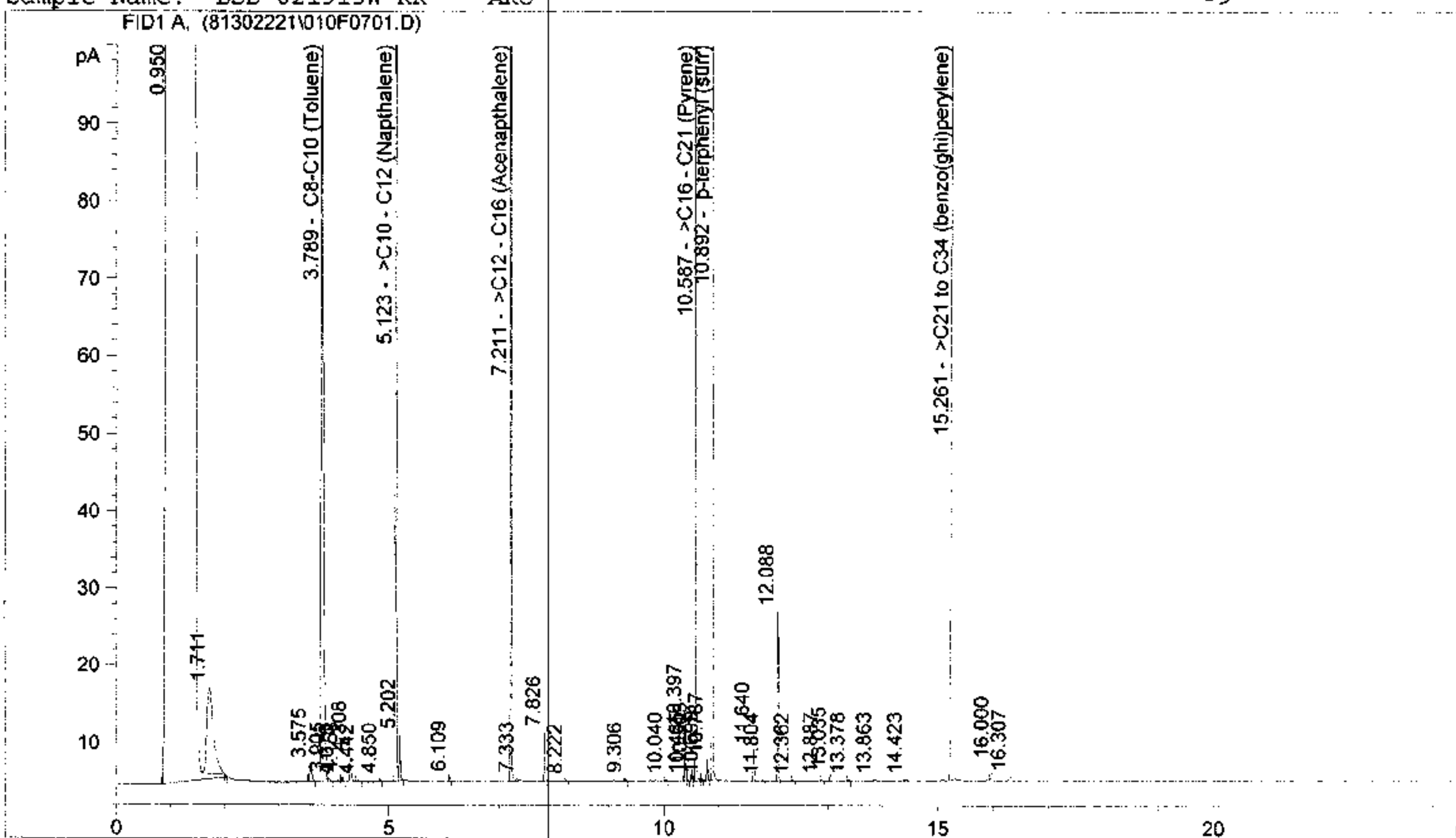
Ret. Time	Signal	Compound Name	Response	Amount ug/mL	
3.790	FID1 A,	C8-C10 (Toluene)	256.655	16.930	÷20 x100 = 85%
5.124		>C10 - C12 (Napthale	287.199	18.179	~~%~~ 91% es
7.211		>C12 - C16 (Acenapth	301.745	19.159	96%
10.587		>C16 - C21 (Pyrene)	303.512	19.359	97%
10.891		p-terphenyl (surr)	839.290	50.929	÷ 50 x100 = 102%
15.261		>C21 to C34 (benzo(g	249.983	18.016	90%

REVIEWED BY MB
& DATE 2/25/13

02-22-13 ES

Instrument #98 Data File: C:\HPCHEM\1\DATA\81302221\010F0701.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\EPH0912.M
Injection Date & Time: 2/22/2013 11:10:58 AM 2/22/2013 11:10:58 AM
Report Creation: 2/22/2013 11:36:27 AM

Sample Name: BSD-021913W RR ARO ->



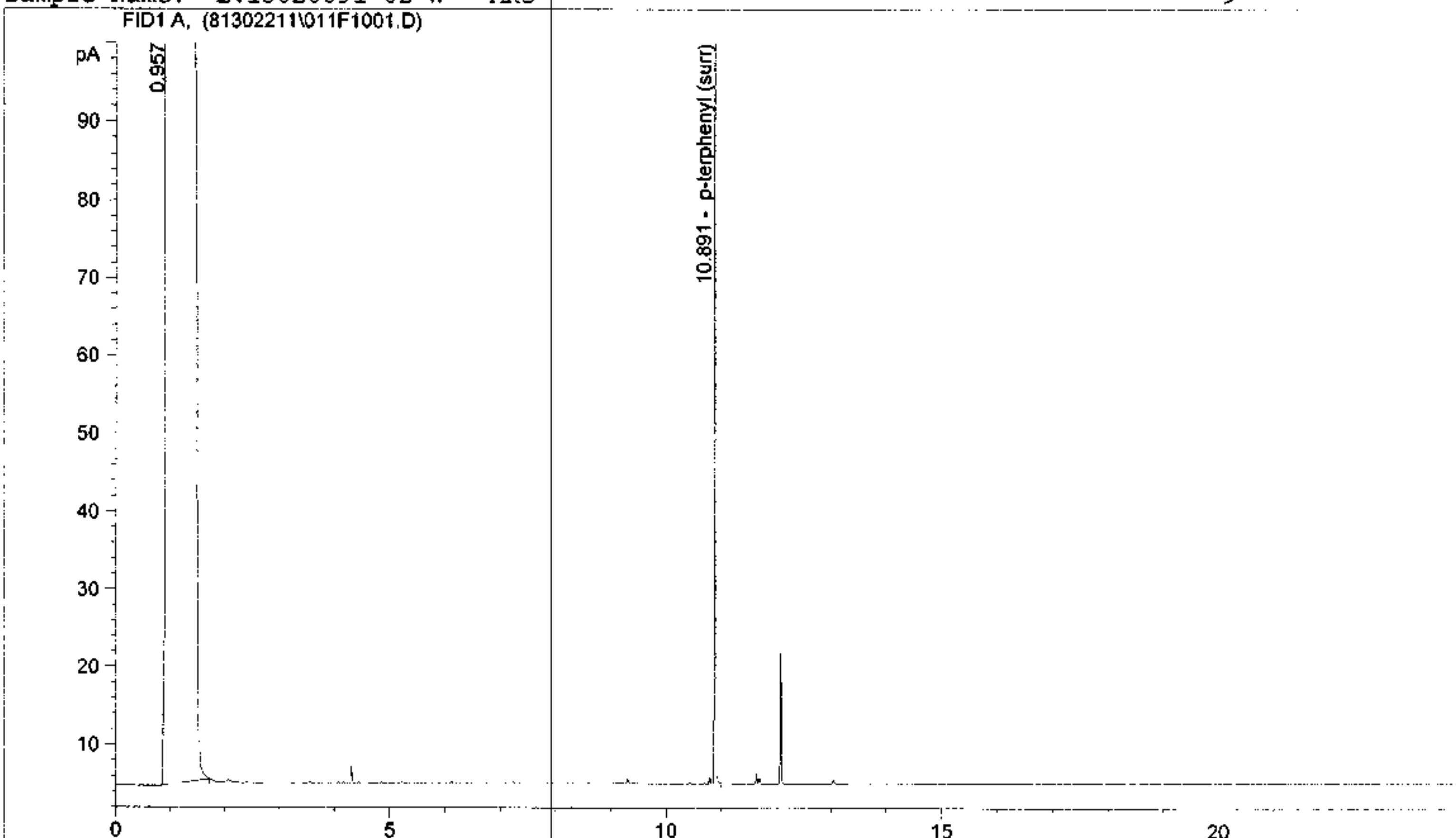
Ret. Time	Signal	Compound Name	Response	Amount ug/mL	
3.789	FID1 A,	C8-C10 (Toluene)	259.358	17.111	÷20 ×100 = 86%
5.123		>C10 - C12 (Napthale	290.754	18.405	92%
7.211		>C12 - C16 (Acenapth	305.964	19.427	97%
10.587		>C16 - C21 (Pyrene)	307.817	19.632	98%
10.892		p-terphenyl (surr)	849.417	51.529	÷50 ×100 = 103%
15.261		>C21 to C34 (benzo(g	253.868	18.275	91%

REVIEWED BY MS
& DATE 2/25/13

02.22.13e3

```
Instrument #98        Data File: C:\HPCHEM\1\DATA\81302211\011F1001.D
Operator:   EBS
Method:     C:\HPCHEM\1\METHODS\EPH0912.M
Injection Date & Time: 2/21/2013 1:38:13 PM      2/21/2013 1:38:13 PM
Report Creation:       2/22/2013                 9:23:34 AM
```

Sample Name: EV13020091-02 W ARO ->



Ret. Time	Signal	Compound Name	Response	Amount ug/mL
0.000	FID1 A,	C8-C10 (Toluene)	0.000	0.000
0.000		>C10 - C12 (Napthale	0.000	0.000
0.000		>C12 - C16 (Acenapth	0.000	0.000
0.000		>C16 - C21 (Pyrene)	0.000	0.000
10.891		p-terphenyl (surr)	902.735	54.690
0.000		>C21 to C34 (benzo(g	0.000	0.000

/50 x100 = 109%

Aromatic

C8 - C10 < 5.0 ug/mL x 1 mL / 1000 mL < 50 ug/L

>C10 - C12 < 50 ug/L

>C12 - C16 < 50 ug/L

>C16 - C21 < 50 ug/L

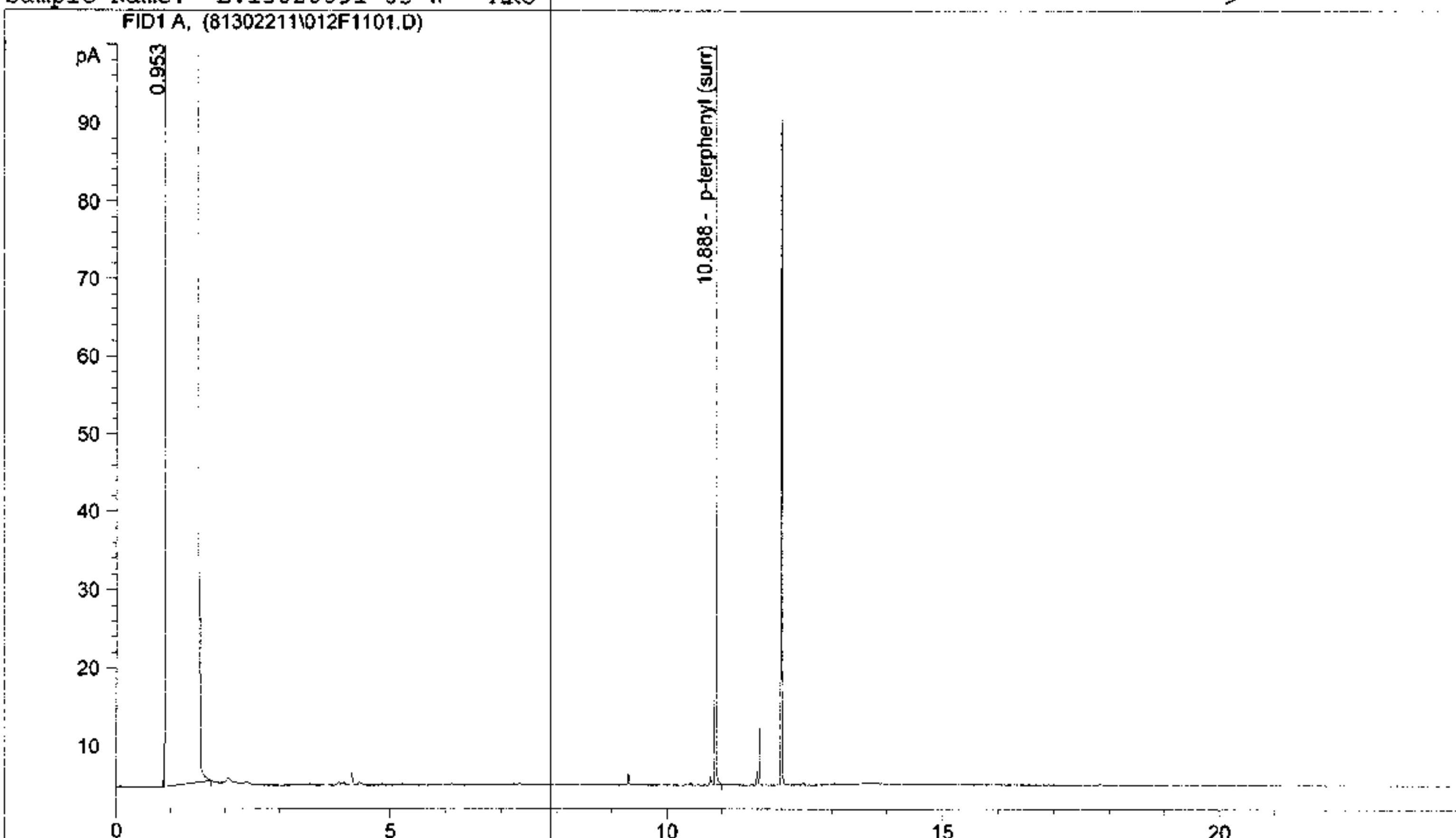
>C21 - C34 < 50 ug/L

REVIEWED BY & DATE MB 2/25/13

02.22.13 EJ

Instrument #98 Data File: C:\HPCHEM\1\DATA\81302211\012F1101.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\EPH0912.M
Injection Date & Time: 2/21/2013 2:08:23 PM 2/21/2013 2:08:23 PM
Report Creation: 2/22/2013 9:23:53 AM

Sample Name: EV13020091-03 W ARO ->



Ret. Time	Signal	Compound Name	Response	Amount ug/mL
0.000	FID1 A,	C8-C10 (Toluene)	0.000	0.000
0.000		>C10 - C12 (Napthale	0.000	0.000
0.000		>C12 - C16 (Acenapth	0.000	0.000
0.000		>C16 - C21 (Pyrene)	0.000	0.000
10.888		p-terphenyl (surr)	711.145	43.330 ÷50 x100 = 87%
0.000		>C21 to C34 (benzo(g	0.000	0.000

Aromatic

C8-C10 < 5.0 ug/mL × $\frac{10 mL}{1000 mL}$ < 50 ug/L

>C10-C12 < 50 ug/L

>C12-C16 < 50 ug/L

>C16 C21 < 50 ug/L

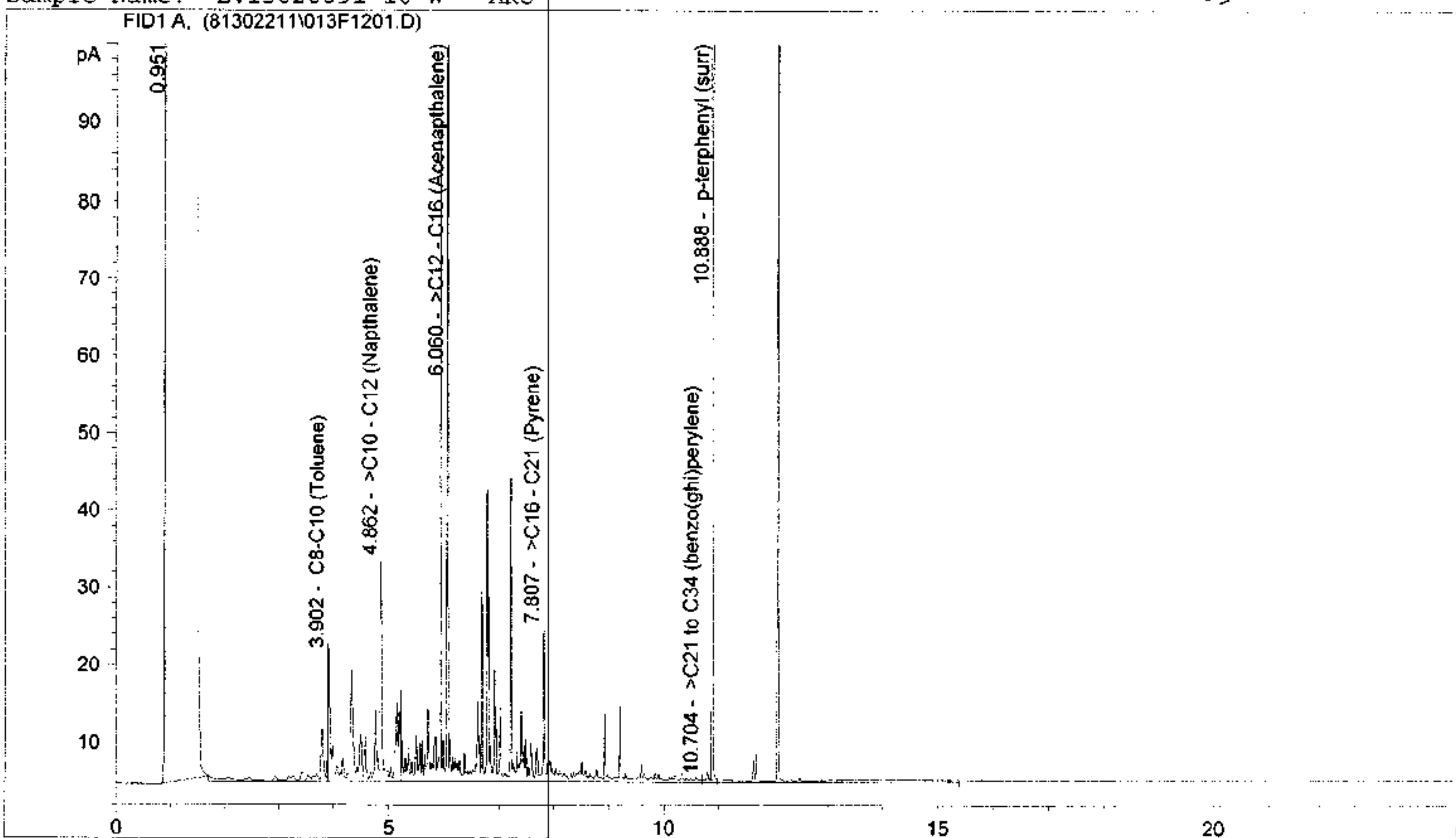
>C21-C34 < 50 ug/L

REVIEWED BY MB
& DATE 2/25/13

02-22-13 EJ

Instrument #98 Data File: C:\HPCHEM\1\DATA\81302211\013F1201.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\EPH0912.M
Injection Date & Time: 2/21/2013 2:38:36 PM 2/21/2013 2:38:36 PM
Report Creation: 2/22/2013 9:42:44 AM

Sample Name: EV13020091-10 W ARO ->



Ret. Time	Signal	Compound Name	Response	Amount ug/mL
3.902	FID1 A,	C8-C10 (Toluene)	71.760	4.576
4.862		>C10 - C12 (Napthale	298.573	18.903
6.060		>C12 - C16 (Acenapth	631.172	40.071
7.807		>C16 - C21 (Pyrene)	218.877	13.993
10.704		>C21 to C34 (benzo(g	241.555	17.455
10.888		p-terphenyl (surr)	693.779	42.301

$\frac{42.3}{50} \times 100 = \cancel{106}$ 85 %. ES

Aromatic

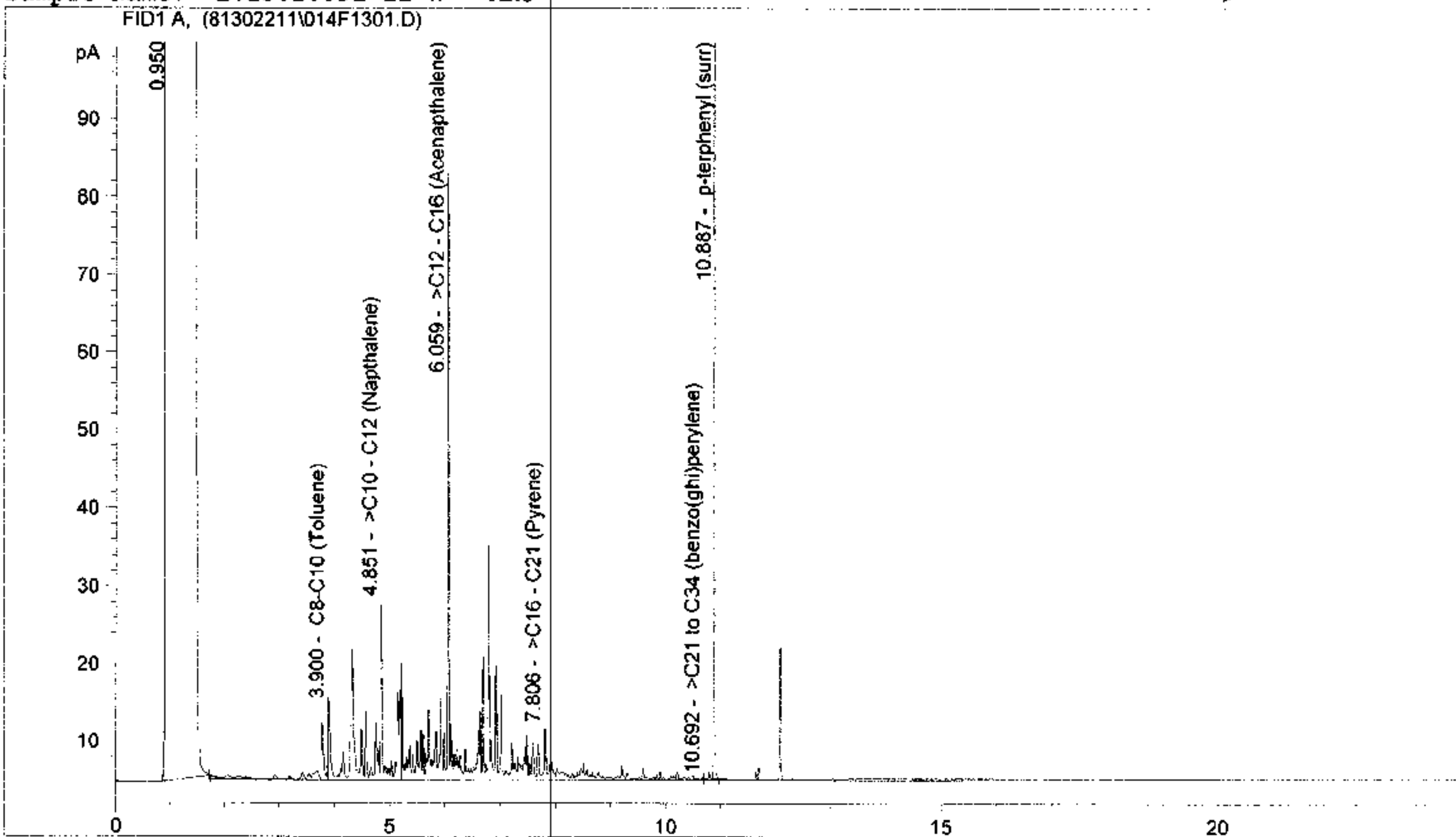
C8-C10 < 5.0 ug/mL × $\frac{10 mL}{1000 mL}$ < 52 ug/L
>C10 - C12 = 190 ug/L
>C12 - C16 = 400 ug/L
>C16 - C21 = 140 ug/L
>C21 - C34 = 170 ug/L

REVIEWED BY NB
& DATE 2/25/13

02-22-13 ES

Instrument #98 Data File: C:\HPCHEM\1\DATA\81302211\014F1301.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\EPH0912.M
Injection Date & Time: 2/21/2013 3:08:46 PM 2/21/2013 3:08:46 PM
Report Creation: 2/22/2013 9:48:44 AM

Sample Name: EV13020091-12 W ARO ->



Ret. Time	Signal	Compound Name	Response	Amount ug/mL
3.900	FID1 A,	C8-C10 (Toluene)	63.621	4.032
4.851		>C10 - C12 (Napthale	269.740	17.067
6.059		>C12 - C16 (Acenapth	466.754	29.634
7.806		>C16 - C21 (Pyrene)	155.707	9.988
10.692		>C21 to C34 (benzo(g	73.832	6.296
10.887		p-terphenyl (surr)	622.698	38.086 ÷ 50 x100 = 76%

Aromatic

C8-C10 < 5.0 ug/mL x $\frac{10 mL}{1000 mL}$ < 50 ug/L
>C10-C12 = 170 ug/L
>C12-C16 = 300 ug/L
>C16-C21 = 100 ug/L
>C21-C34 = 63 ug/L

REVIEWED BY NS
& DATE 2/25/13

02.22.13

ALS LABORATORY GROUP
DATA SUMMARY SHEET

PARAMETER: SEMIVOLATILES INSTR MTHD: EPH-ALK EXTRCT MTHD EPH

QC BATCH #: EW021913 1ST ANAL. SEQ. 81302191

EXT. DATES 2/19/2013 MATRIX H2O

ASSOCIATED SAMPLES EV13020091-2,3,10,12

BLANK AND DUPLICATE RESULTS

ANALYTE:	BLANK RESULTS:	DUPLICATE:	ORIGINAL:	%RPD:
C8 - C10	<50 ug/L			
>C10 - C12	<50 ug/L			
>C12 - C16	<50 ug/L			
>C16 - C21	<50 ug/L			
>C21 - C34	<50 ug/L			

SPIKE/ SPIKE DUPLICATE RESULTS

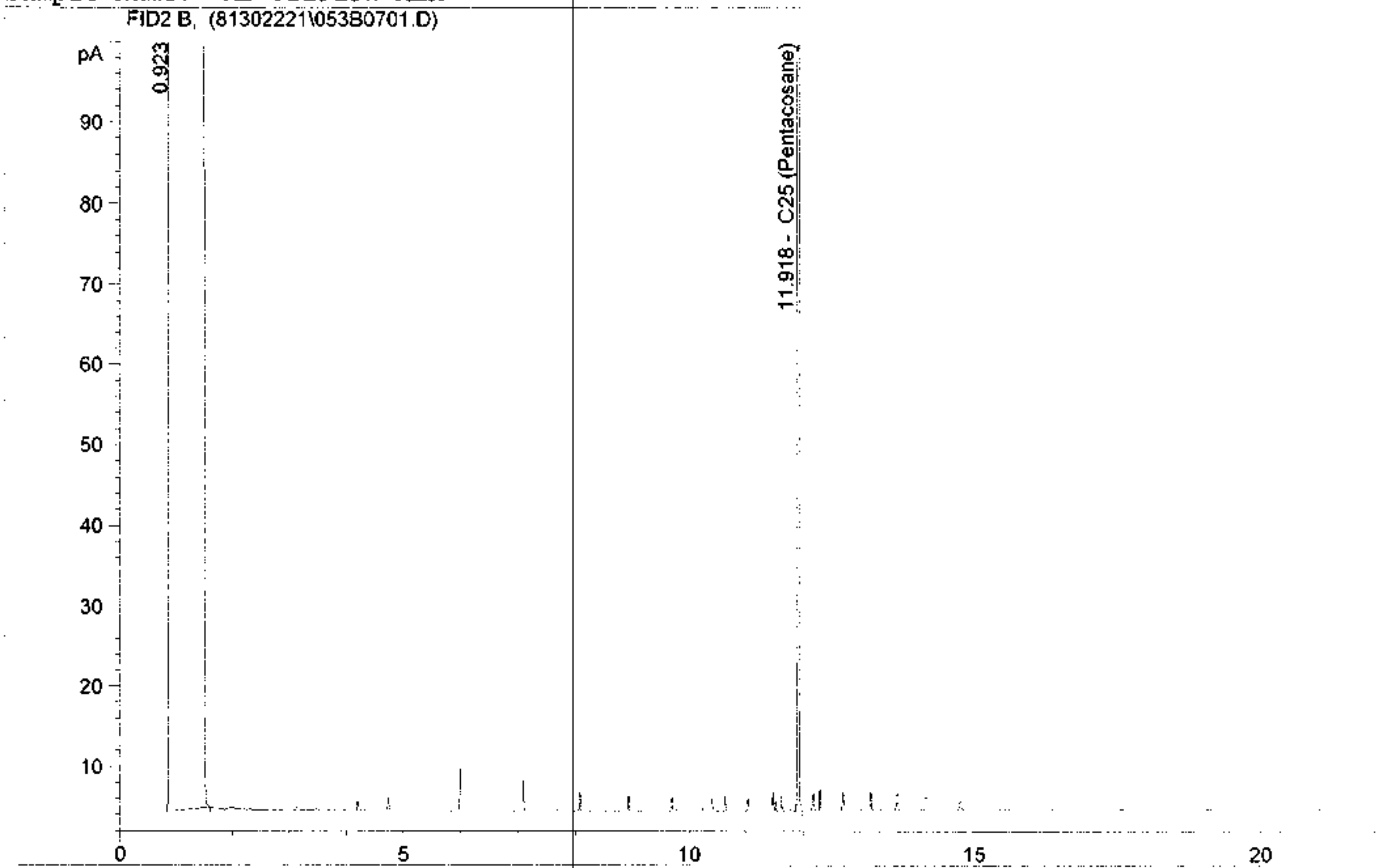
SPIKE ID	AMOUNT SPIKED	BLANK SPIKE %RECOVERY	MATRIX SPIKE %RECOVERY	BLANK SPIKE DUP %RECOVERY	REL % DIFF
Decane (C8-C12)	20 ppm	75%		72%	4%
Dodecane (>C10-C12)	20 ppm	89%		85%	5%
Hexadecane (>C12-C16)	20 ppm	96%		92%	4%
Heneicosane (>C16-C21)	20 ppm	97%		92%	5%
Tetratriacontane (>C21-C34)	20 ppm	109%		104%	5%
Pentacosane	50 ppm	95%		91%	4%

NOTES: IF NUMBER OF ANALYTES DON'T ALLOW LISTING ALL COMPOUNDS, THE RAW DATA MAY BE SUBMITTED
RAW DATA FOR QC RUN ON A SPECIFIC SAMPLE SHOULD BE INCLUDED WITH ORIGINAL SAMPLE ANALYSIS RAW DATA

DATASUM.XLS

Instrument #98 Data File: C:\HPCHEM\1\DATA\81302221\053B0701.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\BEPH0712.M
Injection Date & Time: 2/22/2013 11:10:58 AM 2/22/2013 11:10:58 AM
Report Creation: 2/22/2013 12:24:17 PM

Sample Name: MB-021913W ALK



Ret. Time	Signal	Compound Name	Response	Amount ug/mL
0.000	FID2 B,	C8-C10 (Decane)	0.000	0.000
0.000		>C10 to C12 (Dodecan	0.000	0.000
0.000		>C12 to C16 (Hexadec	0.000	0.000
0.000		>C16 to C21 (Heneico	0.000	0.000
11.918		C25 (Pentacosane)	1012.463	43.631 ÷50 x100 = 87%
0.000		>C21 to C34 (tetratr	0.000	0.000

Aliphatic

C8 - C10 < 5.0 ug/mL × $\frac{1.0\ mL}{1000\ mL}$ < 50 ug/L

>C10 - C12 < 50 ug/L

>C12 - C16 < 50 ug/L

>C16 - C21 < 50 ug/L

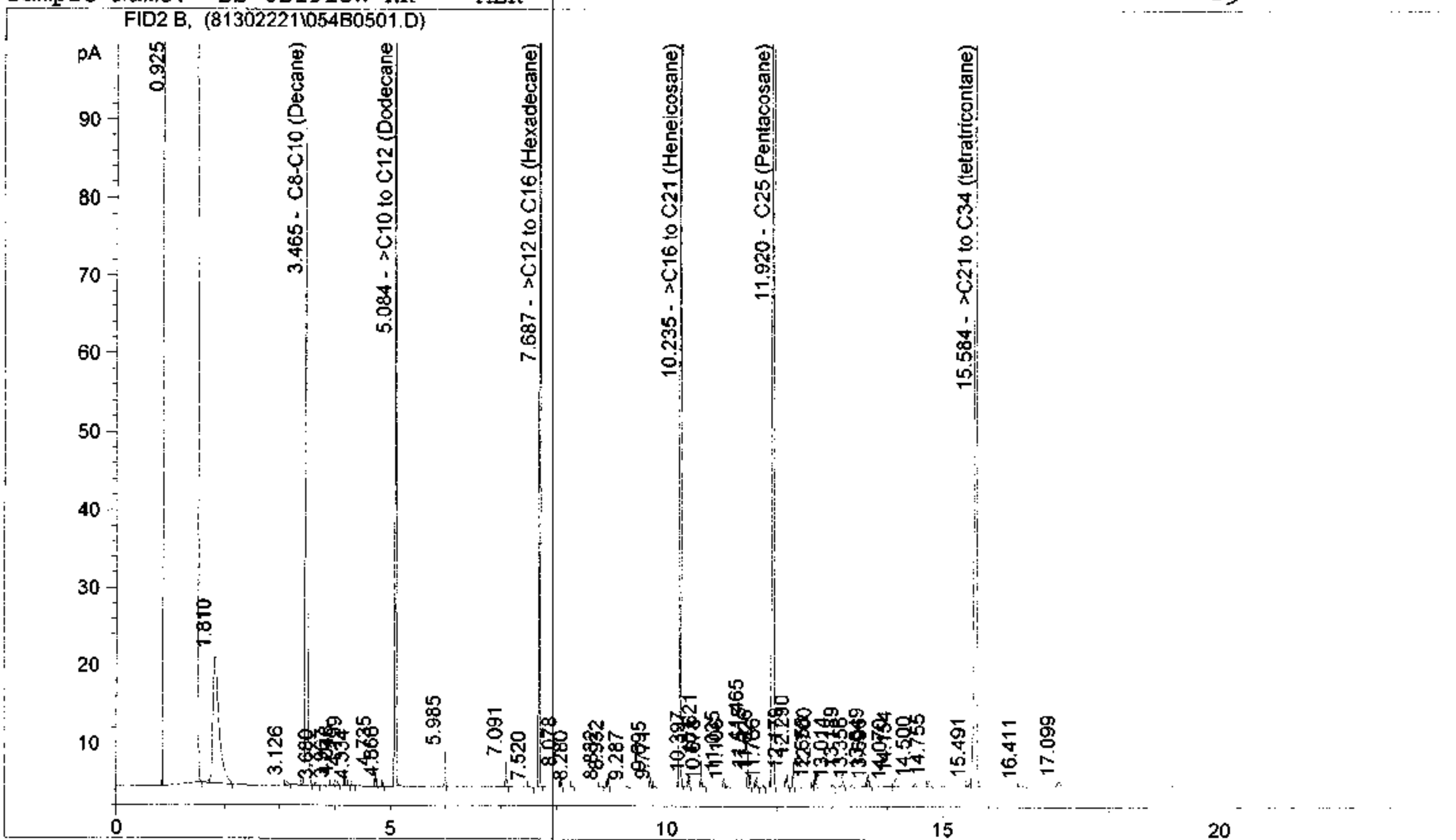
>C21 - C34 < 50 ug/L

REVIEWED BY MS
& DATE 2/25/13

00 22 13

Instrument #98 Data File: C:\HPCHEM\1\DATA\81302221\054B0501.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\BEPH0712.M
Injection Date & Time: 2/22/2013 10:10:32 AM 2/22/2013 10:10:32 AM
Report Creation: 2/22/2013 10:54:09 AM

Sample Name: BS-021913W RR ALK



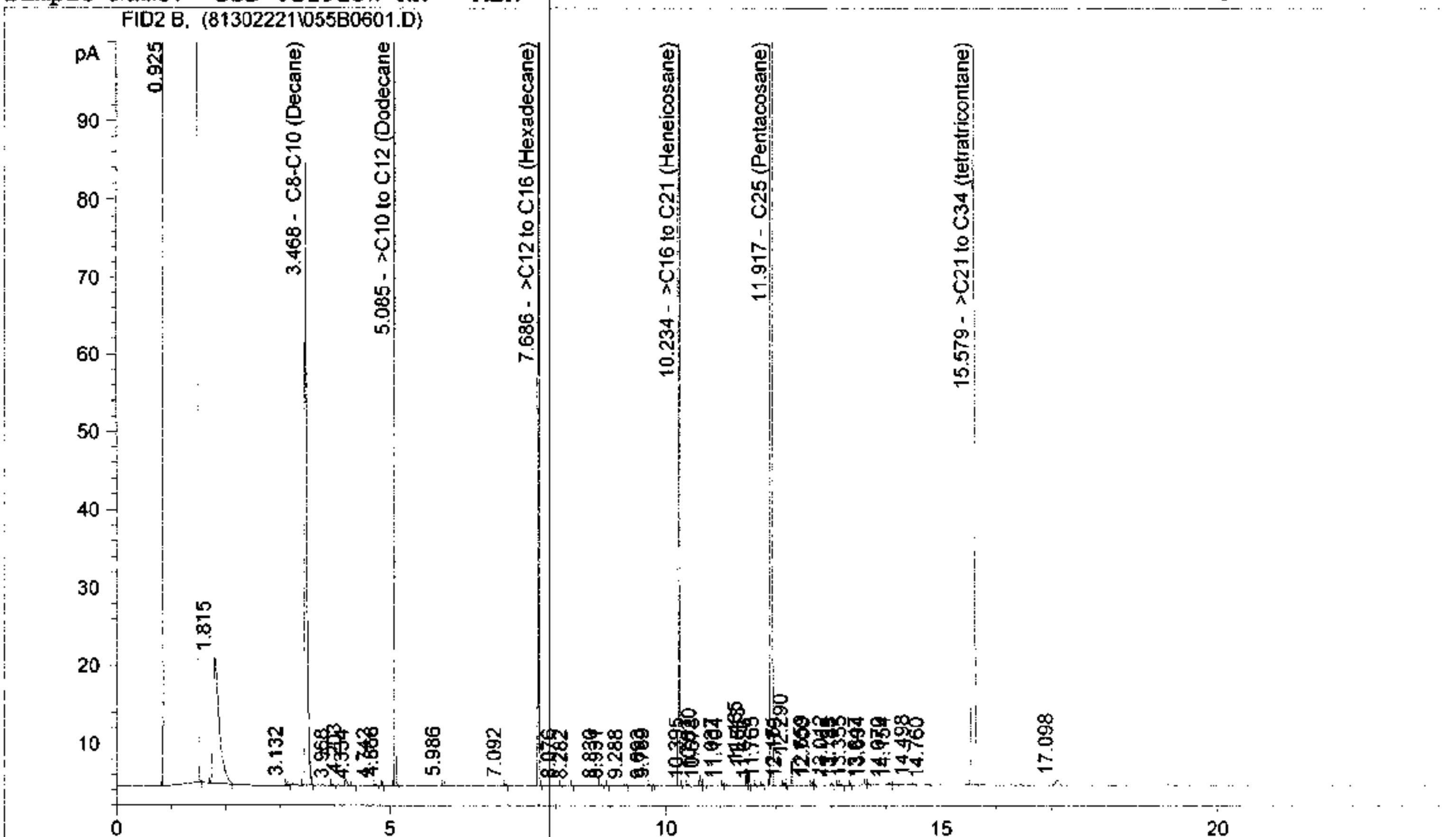
Ret. Time	Signal	Compound Name	Response	Amount ug/mL	
3.465	FID2 B,	C8-C10 (Decane)	226.391	14.978	÷20x100 = 75%
5.084		>C10 to C12 (Dodecan	270.121	17.748	89%
7.687		>C12 to C16 (Hexadec	299.652	19.228	96%
10.235		>C16 to C21 (Heneico	304.717	19.309	97%
11.920		C25 (Pentacosane)	1104.589	47.588	÷50x100 = 95%
15.584		>C21 to C34 (tetratr	288.457	21.735	109%

REVIEWED BY NS
& DATE 2/25/13

02-22-13 EB

Instrument #98 Data File: C:\HPCHEM\1\DATA\81302221\055B0601.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\BEPH0712.M
Injection Date & Time: 2/22/2013 10:40:43 AM 2/22/2013 10:40:43 AM
Report Creation: 2/22/2013 11:19:33 AM

Sample Name: BSD-021913W RR ALK ->



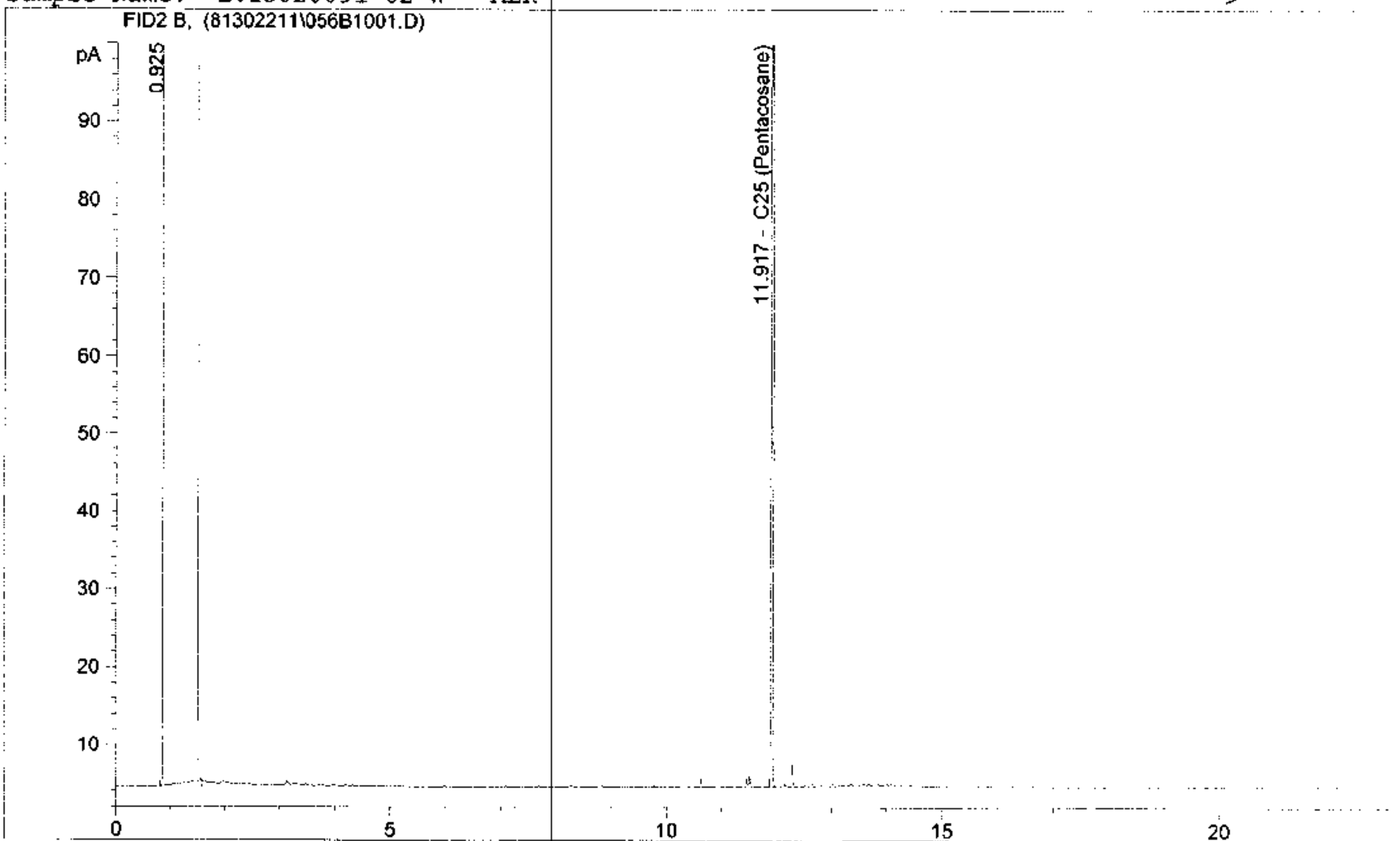
Ret. Time	Signal	Compound Name	Response	Amount ug/mL	
3.468	FID2 B,	C8-C10 (Decane)	216.318	14.341	÷20x100 = 72%
5.085		>C10 to C12 (Dodecan	258.099	16.984	85%
7.686		>C12 to C16 (Hexadec	287.147	18.445	92%
10.234		>C16 to C21 (Heneico	291.574	18.491	92%
11.917		C25 (Pentacosane)	1059.558	45.654	÷50x100 91%
15.579		>C21 to C34 (tetratr	277.071	20.869	104%

REVIEWED BY MS
& DATE 2/25/13

02.22.13 EBS

Instrument #98 Data File: C:\HPCHEM\1\DATA\81302211\056B1001.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\BEPH0712.M
Injection Date & Time: 2/21/2013 1:38:13 PM 2/21/2013 1:38:13 PM
Report Creation: 2/22/2013 9:27:52 AM

Sample Name: EV13020091-02 W ALK ->



Ret. Time	Signal	Compound Name	Response	Amount ug/mL
0.000	FID2 B,	C8-C10 (Decane)	0.000	0.000
0.000		>C10 to C12 (Dodecan	0.000	0.000
0.000		>C12 to C16 (Hexadec	0.000	0.000
0.000		>C16 to C21 (Heneico	0.000	0.000
11.917		C25 (Pentacosane)	1022.556	44.064 ÷50×100 = 88 /
0.000		>C21 to C34 (tetratr	0.000	0.000

Aliphatic

C8-C10 < 5.0 µg/mL × $\frac{10 mL}{1000 mL}$ < 50 µg/L

>C10-C12 < 50 µg/L

>C12-C16 < 50 µg/L

>C16-C21 < 50 µg/L

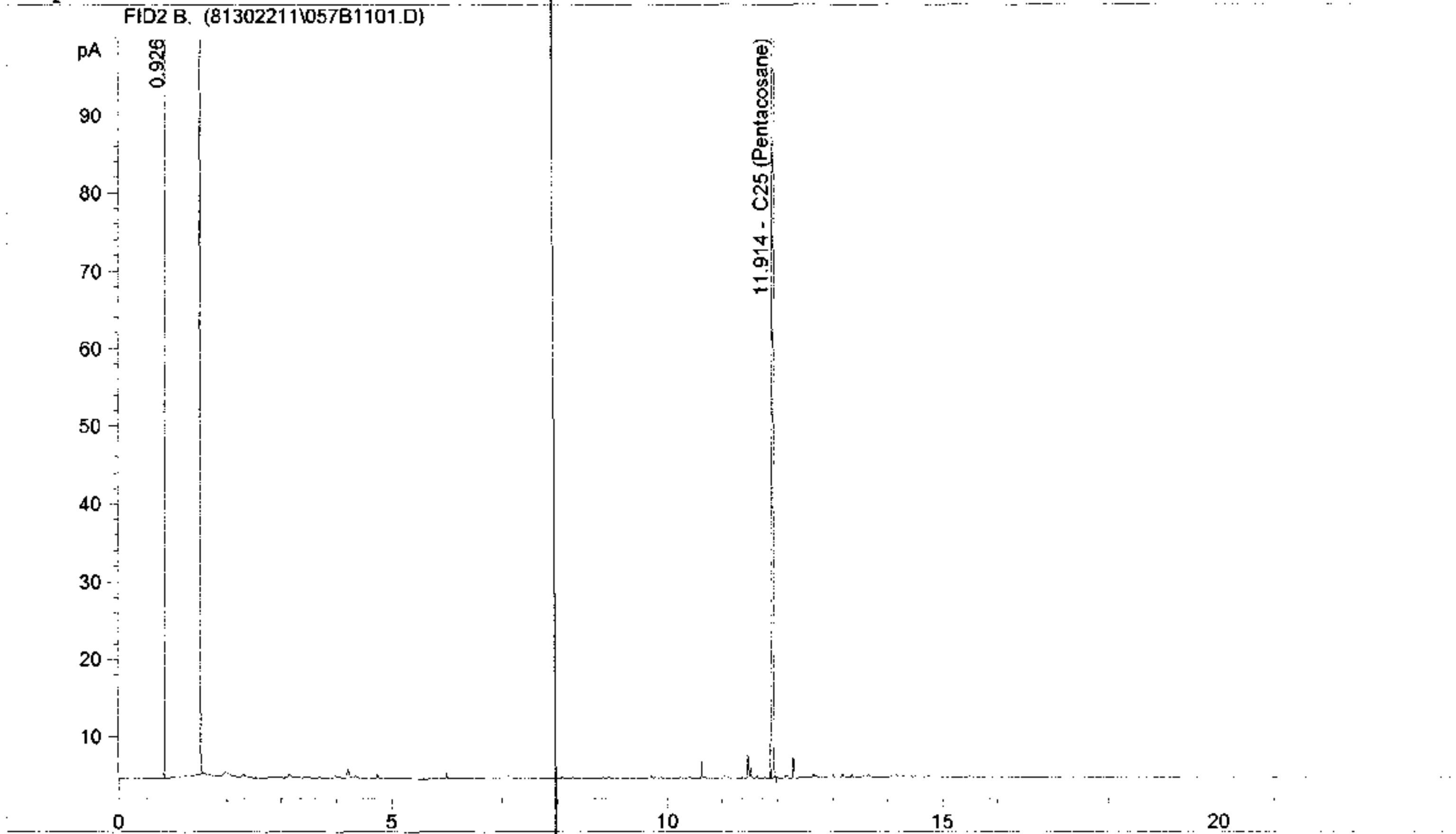
>C21-C31 < 50 µg/L

REVIEWED BY & DATE MS 2/25/13

32.22 BEJ

Instrument #98 Data File: C:\HPCHEM\1\DATA\81302211\057B1101.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\BEPH0712.M
Injection Date & Time: 2/21/2013 2:08:23 PM 2/21/2013 2:08:23 PM
Report Creation: 2/22/2013 9:28:11 AM

Sample Name: EV13020091-03 W ALK ->



Ret. Time	Signal	Compound Name	Response	Amount ug/mL
0.000	FID2 B,	C8-C10 (Decane)	0.000	0.000
0.000		>C10 to C12 (Dodecan	0.000	0.000
0.000		>C12 to C16 (Hexadec	0.000	0.000
0.000		>C16 to C21 (Heneico	0.000	0.000
11.914		C25 (Pentacosane)	841.239	36.275 ÷50 x100 = 73%
0.000		>C21 to C34 (tetratr	0.000	0.000

Aliphatic

C8-C10 < 5.0 ug/mL x $\frac{10 mL}{100 mL}$ < 50 ug/L ES

>C10-C12 < 50 ug/L

>C12-C16 < 50 ug/L

>C16-C21 < 50 ug/L

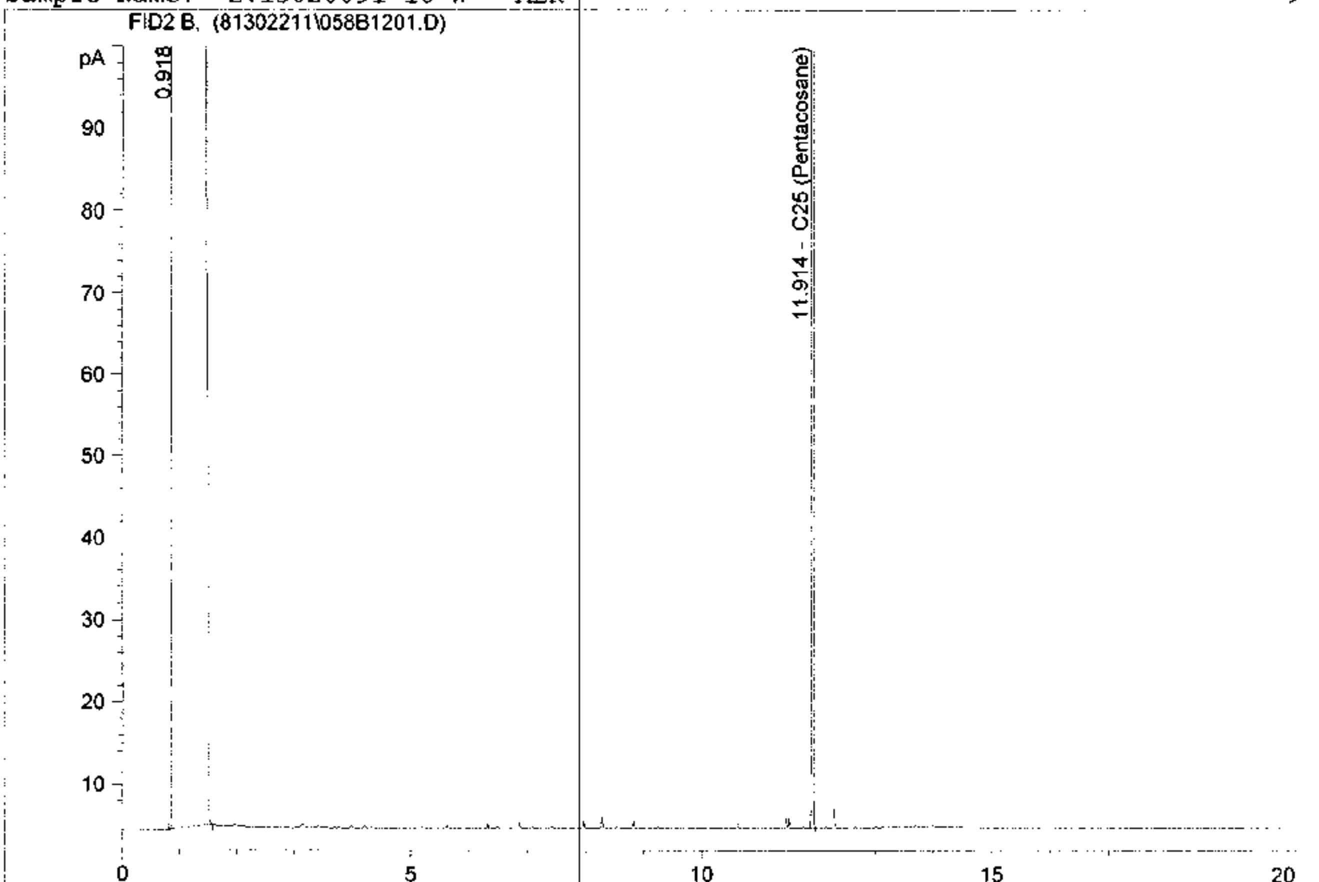
>C21-C34 < 50 ug/L

REVIEWED BY & DATE MB 2/25/13

02-22-13 ES

Instrument #98   Data File: C:\HPCHEM\1\DATA\81302211\058B1201.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\BEPH0712.M
Injection Date & Time: 2/21/2013 2:38:36 PM   2/21/2013 2:38:36 PM
Report Creation: 2/22/2013   9:28:29 AM

Sample Name: EV13020091-10 W   ALK   ->



Ret. Time	Signal	Compound Name	Response	Amount ug/mL
0.000	FID2 B,	C8-C10 (Decane)	0.000	0.000
0.000		>C10 to C12 (Dodecan	0.000	0.000
0.000		>C12 to C16 (Hexadec	0.000	0.000
0.000		>C16 to C21 (Heneico	0.000	0.000
11.914		C25 (Pentacosane)	867.464	37.402 =50 x100 = 75%
0.000		>C21 to C34 (tetratr	0.000	0.000

Aliphatic

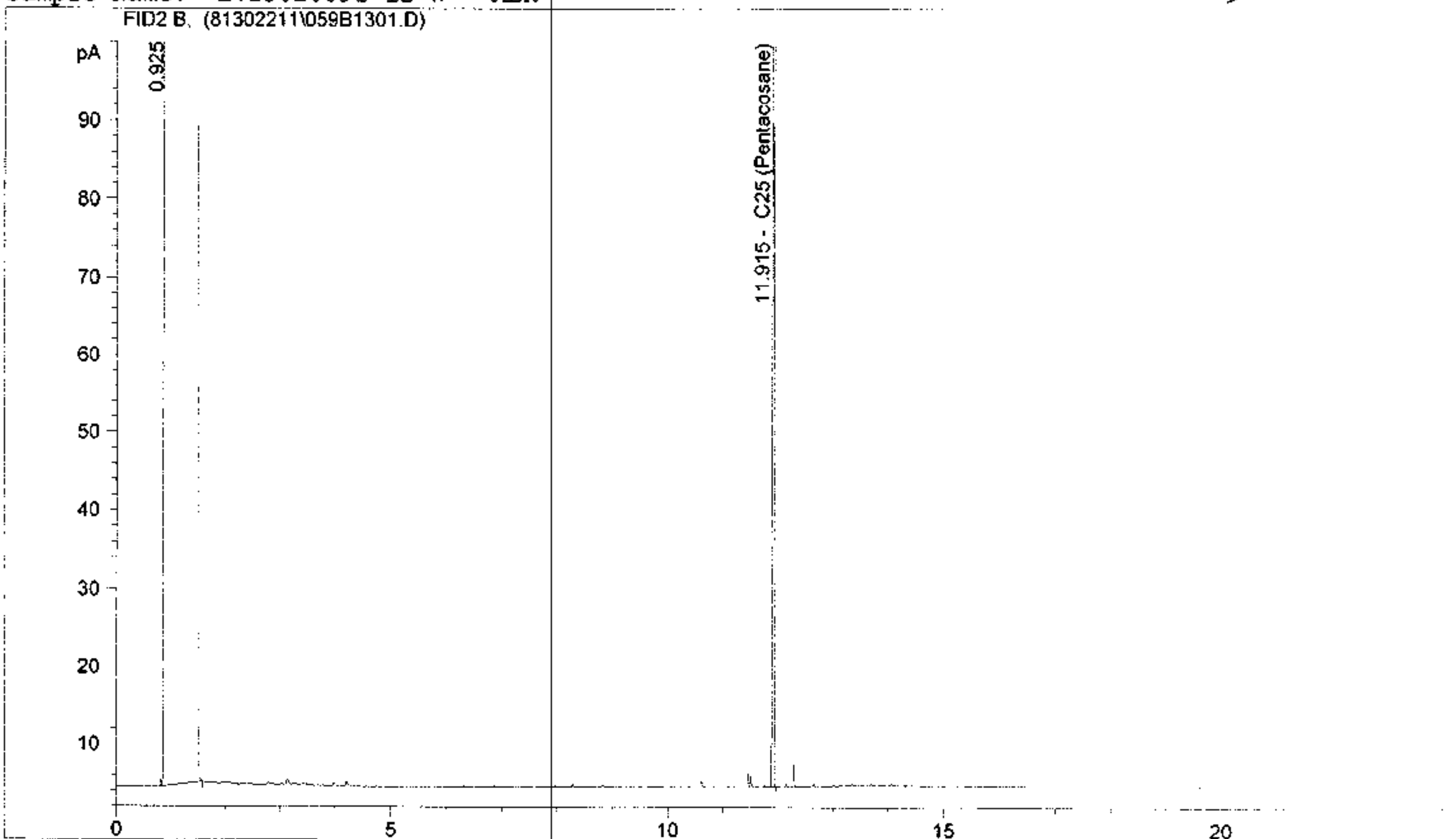
C8-C10 < 50 ug/mL × $\frac{10\,mL}{1000\,mL}$ < 50 µg/L
>C10-C12 < 50 µg/L
>C12-C16 < 50 µg/L
>C16-C21 < 50 µg/L
>C21-C34 < 50 µg/L

REVIEWED BY B
& DATE 2/25/13

02-22-13 EB

Instrument #98 Data File: C:\HPCHEM\1\DATA\81302211\059B1301.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\BEPH0712.M
Injection Date & Time: 2/21/2013 3:08:46 PM 2/21/2013 3:08:46 PM
Report Creation: 2/22/2013 9:28:49 AM

Sample Name: EV13020091-12 W ALK ->



Ret. Time	Signal	Compound Name	Response	Amount ug/mL
0.000	FID2 B,	C8-C10 (Decane)	0.000	0.000
0.000		>C10 to C12 (Dodecan	0.000	0.000
0.000		>C12 to C16 (Hexadec	0.000	0.000
0.000		>C16 to C21 (Heneico	0.000	0.000
11.915		C25 (Pentacosane)	997.080	42.970 ÷ 50 x 100 = 86%
0.000		>C21 to C34 (tetratr	0.000	0.000

Aliphatic

C8 - C10 < 5.0 µg/mL × $\frac{10\ mL}{1000\ mL}$ < 50 µg/L
>C10 - C12 < 50 µg/L
>C12 - C16 < 50 µg/L
>C16 - C21 < 50 µg/L
>C21 - C34 < 50 µg/L

REVIEWED BY & DATE NS 2/25/13

02.22.13 E

Sequence: C:\HPCHEM\1\SEQUENCE\81302211.S

Sequence Table (Front Injector):

Method and Injection Info Part:

Line	Location	SampleName	Method	Inj	SampleType	InjVolume	DataFile
1	Vial 1	BLANK	RUN0411	1	Sample		
2	Vial 2	DSL STD W316-7	RUN0411	1	Sample		
3	Vial 3	MO STD W318-5	RUN0411	1	Sample		
4	Vial 4	MB-022113S	RUN0411	1	Sample		
5	Vial 5	BS-022013S RR ✓	RUN0411	1	Sample		
6	Vial 7	50 PPM ARO ✓	EPH	1	Sample		
7	Vial 8 ES	MB-021913~~S~~ ARO W	EPH	1	Sample		
8	Vial 9 ES	BS-021913~~S~~ ARO W	EPH	1	Sample		
9	Vial 10 ES	BSD-021913~~S~~ ARO W	EPH	1	Sample		
10	Vial 11	EV13020091-02 W	EPH	1	Sample		
11	Vial 12	EV13020091-03 W	EPH	1	Sample		
12	Vial 13	EV13020091-10 W	EPH	1	Sample		
13	Vial 14	EV13020091-12 W	EPH	1	Sample		
14	Vial 6	50 PPM ARO ✓	EPH	1	Sample		
15	Vial 1	BLANK	EPH	1	Sample		
16	Vial 6	50 PPM ARO	EPH	1	Sample		
17	Vial 9	BS-021913W RR	EPH	1	Sample		
18	Vial 10	BSD-021913W RR	EPH	1	Sample		
19	Vial 15	MB-022013S ARO	EPH	1	Sample		
20	Vial 16	BS-022013S ARO	EPH	1	Sample		
21	Vial 17	BSD-022013S ARO	EPH	1	Sample		
22	Vial 18	EV13020093-18	EPH	1	Sample		
23	Vial 1	BLANK	EPH	1	Sample		
24	Vial 19	EV13020093-21	EPH	1	Sample		
25	Vial 1	BLANK	EPH	1	Sample		
26	Vial 6	50 PPM ARO	EPH	1	Sample		
27	Vial 20	EV13020093-28	EPH	1	Sample		
28	Vial 21	EV13020093-28DUP	EPH	1	Sample		
29	Vial 22	EV13020093-28MS	EPH	1	Sample		
30	Vial 8	MB-021913W RR	EPH	1	Sample		
31	Vial 6	50 PPM ARO	EPH	1	Sample		
32	Vial 1	BLANK	EPH	1	Sample		

> Re-run (change liner) - See Sequence # 81302221

Sequence Table (Back Injector):

Method and Injection Info Part:

Line	Location	SampleName	Method	Inj	SampleType	InjVolume	DataFile
1	Vial 51	BLANK	RUN0411	1	Sample		
2	Vial 3	MO STD W318-5	RUN0411	1	Sample		
3	Vial 2	DSL STD W316-7	RUN0411	1	Sample		
4	Vial 51	BLANK	RUN0411	1	Sample		
5	Vial 51	BLANK	RUN0411	1	Sample		
6	Vial 52	50 PPM ALK ✓	EPH	1	Sample		
7	Vial 53 ES	MB-021913~~S~~ ALK W	EPH	1	Sample		
8	Vial 54 ES	BS-021913~~S~~ ALK W	EPH	1	Sample		
9	Vial 55 ES	BSD-021913~~S~~ ALK W	EPH	1	Sample		
10	Vial 56	EV13020091-02 W	EPH	1	Sample		
11	Vial 57	EV13020091-03 W	EPH	1	Sample		
12	Vial 58	EV13020091-10 W	EPH	1	Sample		
13	Vial 59	EV13020091-12 W	EPH	1	Sample		
14	Vial 52	50 PPM ALK ✓	EPH	1	Sample		
15	Vial 60	MB-022013S ALK	EPH	1	Sample		
16	Vial 61	BS-021203S ALK	EPH	1	Sample		
17	Vial 62	BSD-022013S ALK	EPH	1	Sample		
18	Vial 63	EV13020093-18	EPH	1	Sample		

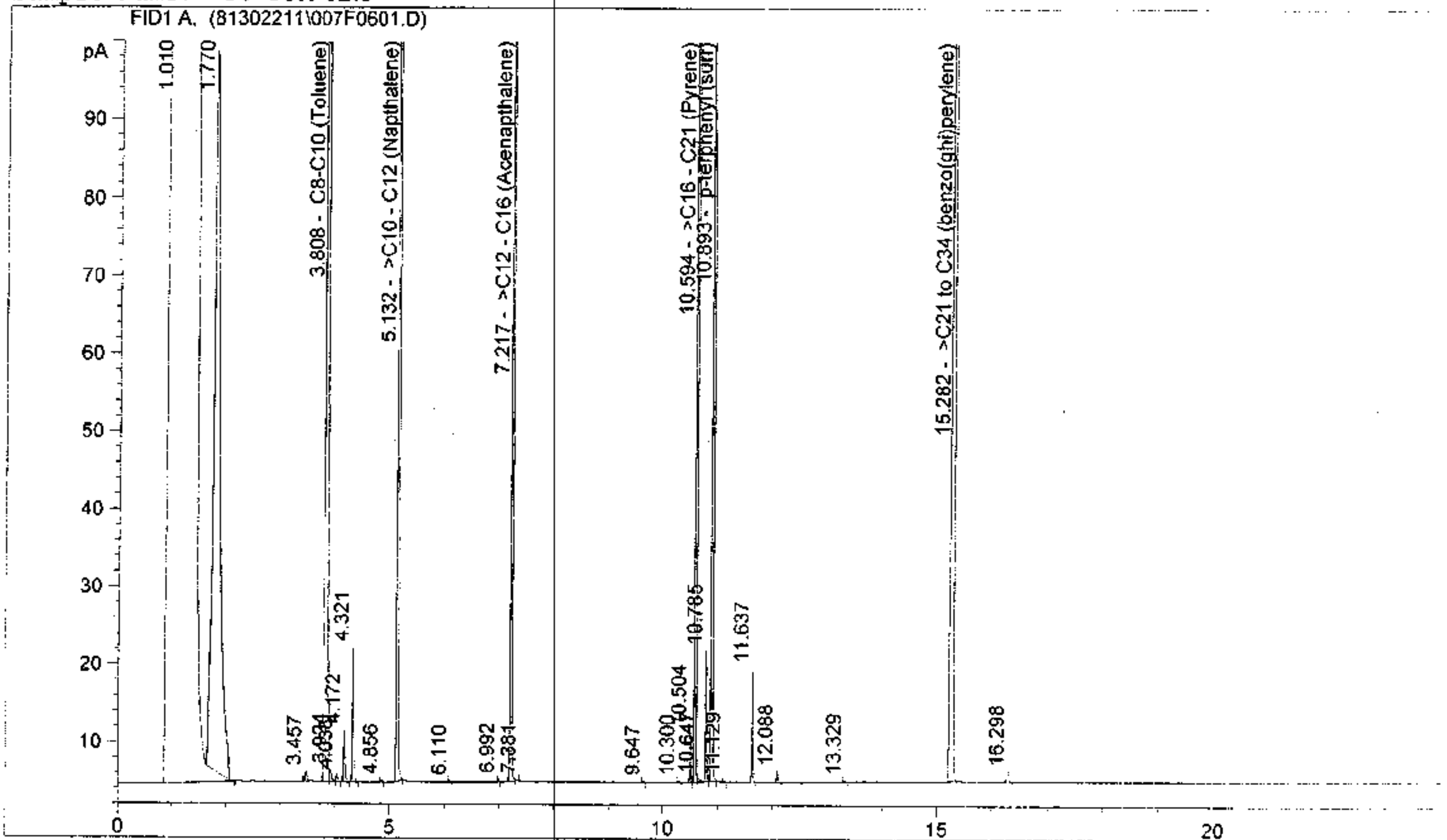
> Re-run (change liner) - See Sequence # 81302221

Sequence: C:\HPCHEM\1\SEQUENCE\81302211.S

Line	Location	SampleName	Method	Inj	SampleType	InjVolume	DataFile
19	Vial 51	BLANK	EPH	1	Sample		
20	Vial 64	EV13020093-21	EPH	1	Sample		
21	Vial 51	BLANK	EPH	1	Sample		
22	Vial 65	EV13020093-28	EPH	1	Sample		
23	Vial 66	EV13020093-28DUP	EPH	1	Sample		
24	Vial 67	EV13020093-28MS	EPH	1	Sample		
25	Vial 1	BLANK	EPH	1	Sample		
26	Vial 52	50 PPM ALK	EPH	1	Sample		
27	Vial 53	MB-021913W RR	EPH	1	Sample		
28	Vial 54	BS-021913W RR	EPH	1	Sample		
29	Vial 55	BSD-021913W RR	EPH	1	Sample		
30	Vial 52	50 PPM ALK	EPH	1	Sample		
31	Vial 1	BLANK	EPH	1	Sample		
32	Vial 1	BLANK	EPH	1	Sample		

Instrument #98 Data File: C:\HPCHEM\1\DATA\81302211\007F0601.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\EPH0912.M
Injection Date & Time: 2/21/2013 11:37:18 AM 2/21/2013 11:37:18 AM
Report Creation: 2/21/2013 4:10:04 PM

Sample Name: 50 PPM ARO



Ret. Time	Signal	Compound Name	Response	Amount ug/mL
3.808	FID1 A,	C8-C10 (Toluene)	791.918	52.697 ÷50 x100 = 106% ± 20% ck
5.132		>C10 - C12 (Napthale	820.155	52.107 104%
7.217		>C12 - C16 (Acenapth	833.759	52.931 106%
10.594		>C16 - C21 (Pyrene)	834.649	53.034 106%
10.893		p-terphenyl (surr)	1058.318	63.915 ÷50 x100 = 128%
15.282		>C21 to C34 (benzo(g	675.731	46.343 93%

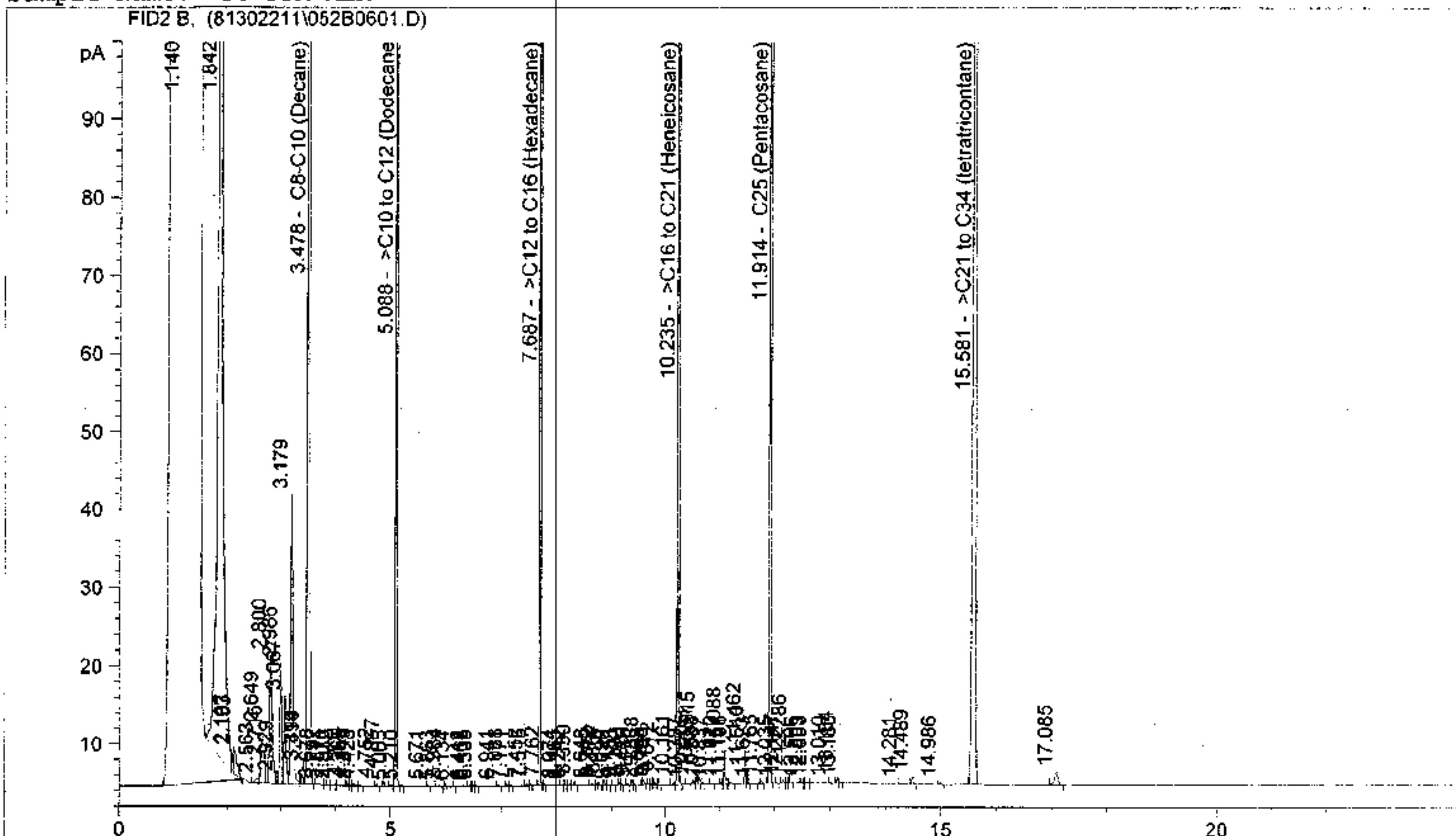
Aromatic

C8-C10 1.610 - 3.908
>C10-C12 3.908 - 5.232
>C12-C16 5.232 - 7.317
>C16-C21 7.317 - 10.694
>C21-C34 10.694 - 15.382

02.21.13 EF

Instrument #98   Data File: C:\HPCHEM\1\DATA\81302211\052B0601.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\BEPH0712.M
Injection Date & Time: 2/21/2013 11:37:18 AM   2/21/2013 11:37:18 AM
Report Creation: 2/21/2013   4:08:33 PM

Sample Name: 50 PPM ALK

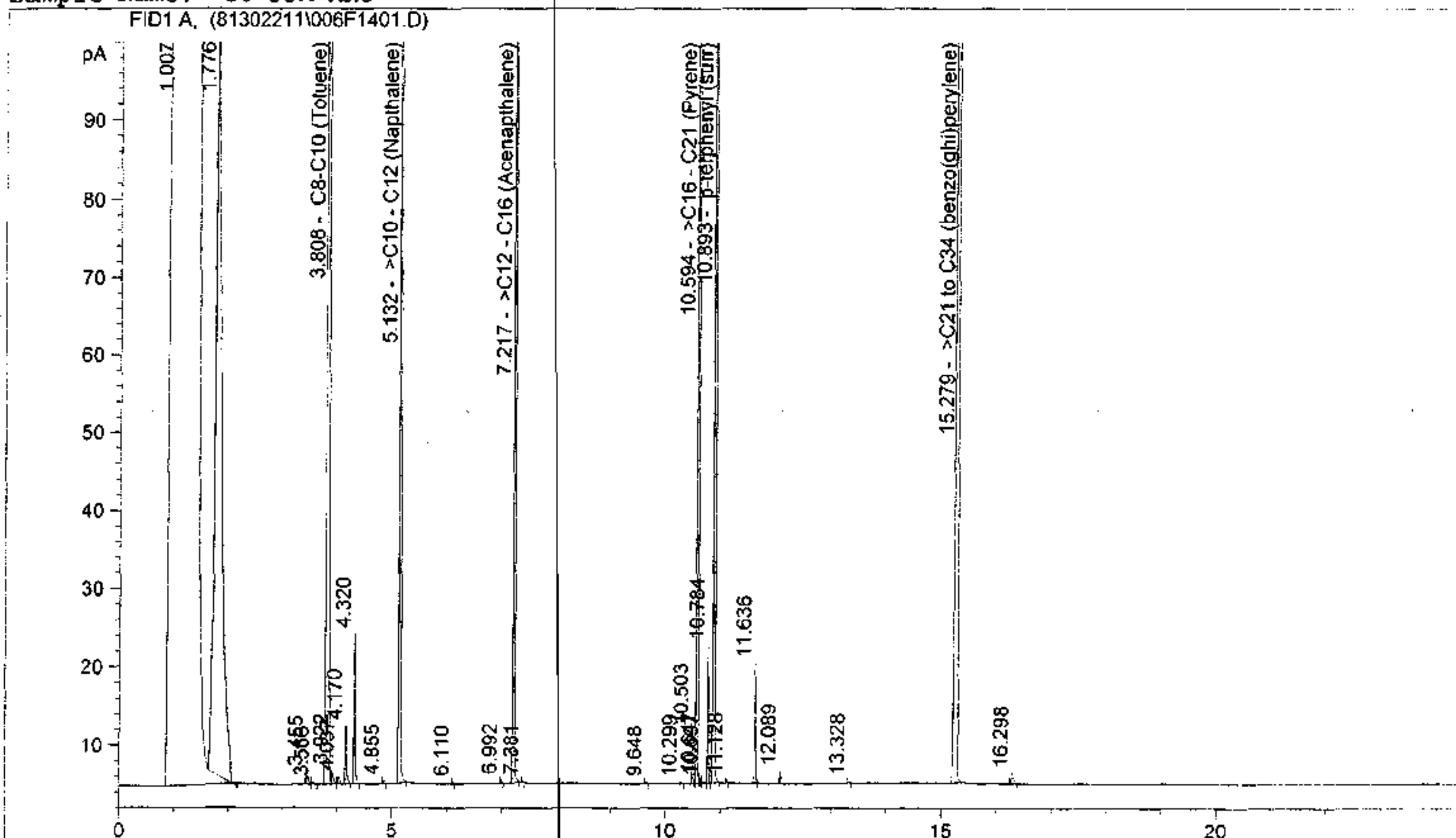


Ret. Time	Signal	Compound Name	Response	Amount ug/mL	
3.478	FID2 B,	C8-C10 (Decane)	732.264	47.015	÷50 x100 = 94% ± 20% ok
5.088		>C10 to C12 (Dodecan	724.908	46.662	93%
7.687		>C12 to C16 (Hexadec	730.251	46.190	92%
10.235		>C16 to C21 (Heneico	735.207	46.080	92%
11.914		C25 (Pentacosane)	1081.433	46.593	÷50 x100 = 93%
15.581		>C21 to C34 (tetratr	701.988	53.193	106%

02.21.13ES

Instrument #98 Data File: C:\HPCHEM\1\DATA\81302211\006F1401.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\EPH0912.M
Injection Date & Time: 2/21/2013 3:39:00 PM 2/21/2013 3:39:00 PM
Report Creation: 2/21/2013 4:09:06 PM

Sample Name: 50 PPM ARO

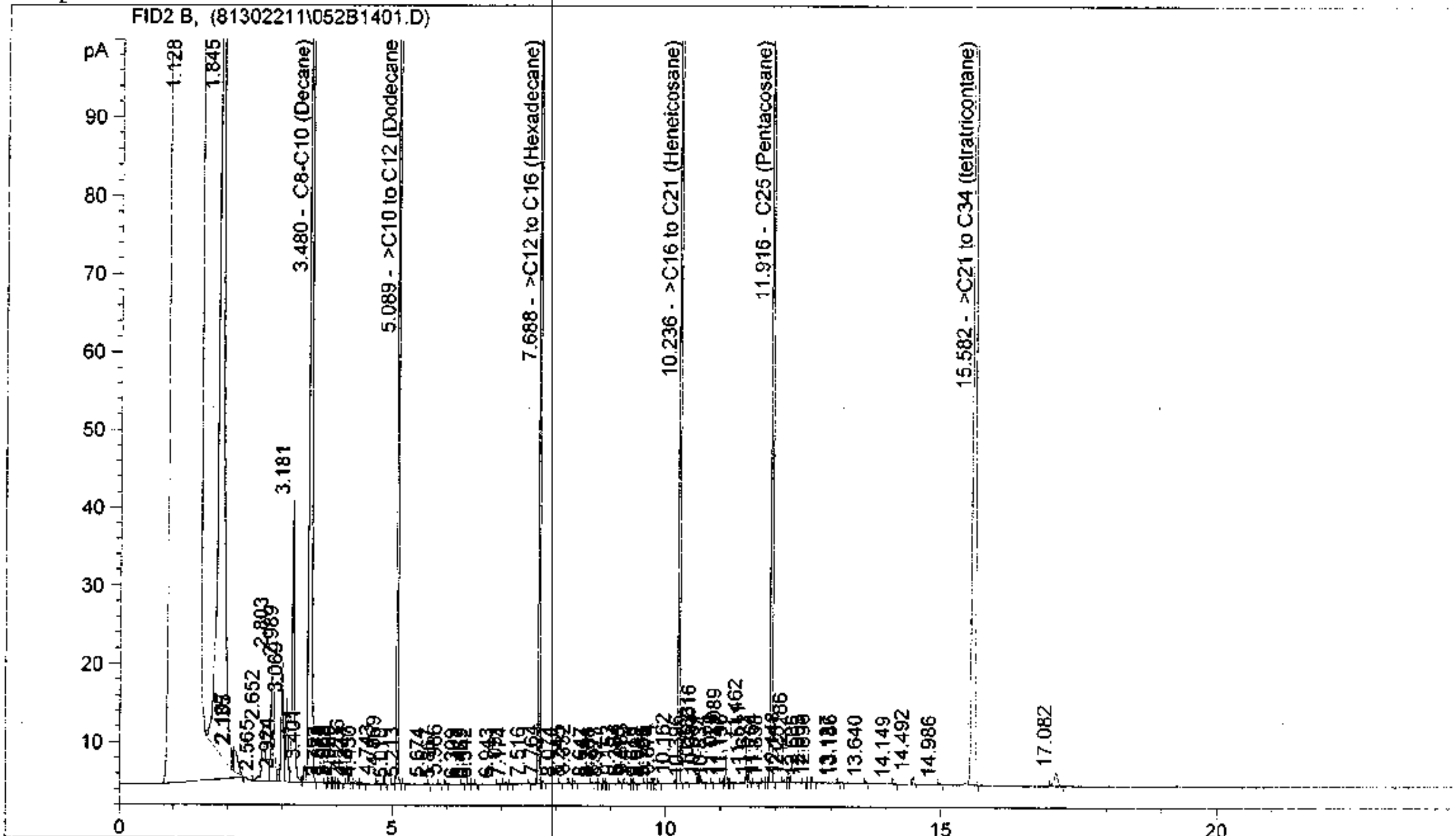


Ret. Time	Signal	Compound Name	Response	Amount ug/mL	
3.808	FID1 A,	C8-C10 (Toluene)	816.577	54.345	÷50 ×100 = 109% ± 20% ck
5.132		>C10 - C12 (Napthale	844.005	53.626	107%
7.217		>C12 - C16 (Acenapth	852.584	54.126	108%
10.594		>C16 - C21 (Pyrene)	852.772	54.183	108%
10.893		p-terphenyl (surr)	1080.431	65.227	÷50 ×100 = 130%
15.279		>C21 to C34 (benzo(g	682.898	46.820	÷50 ×100 = 94%

02-21-13 ES

Instrument #98 Data File: C:\HPCHEM\1\DATA\81302211\052B1401.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\BEPH0712.M
Injection Date & Time: 2/21/2013 3:39:00 PM 2/21/2013 3:39:00 PM
Report Creation: 2/22/2013 9:26:24 AM

Sample Name: 50 PPM ALK



Ret. Time	Signal	Compound Name	Response	Amount ug/mL	
3.480	FID2 B,	C8-C10 (Decane)	739.354	47.464	÷50 x100 = 95% ± 20% ck
5.089		>C10 to C12 (Dodecan	734.953	47.301	95%
7.688		>C12 to C16 (Hexadec	739.957	46.797	94%
10.236		>C16 to C21 (Heneico	744.769	46.674	93%
11.916		C25 (Pentacosane)	1093.963	47.132	÷50 x100 = 94%
15.582		>C21 to C34 (tetratr	702.247	53.213	÷50 x100 = 106%

02.21.13 EBS

Sequence: C:\HPCHEM\1\SEQUENCE\81302221.S

Sequence Table (Front Injector):

Method and Injection Info Part:

Line	Location	SampleName	Method	Inj	SampleType	InjVolume	DataFile
1	Vial 1	BLANK	RUN0411	1	Sample		
2	Vial 2	DSL STD W319-6	RUN0411	1	Sample		
3	Vial 3	MO STD W318-5	RUN0411	1	Sample		
4	Vial 5	50 PPM ARO	EPH	1	Sample		
5	Vial 52	50 PPM ALK	EPH	1	Sample		
6	Vial 9	BS-021913W RR	EPH	1	Sample		
7	Vial 10	BSD-021913W RR	EPH	1	Sample		
8	Vial 23	MB-022213W	RUN0411	1	Sample		
9	Vial 1	BLANK	RUN0411	1	Sample		
10	Vial 18	EV13020093-18	EPH	1	Sample		
11	Vial 19	EV13020093-21	EPH	1	Sample		
12	Vial 5	50 PPM ARO	EPH	1	Sample		
13	Vial 16	BS-022013S ARO	EPH	1	Sample		
14	Vial 17	BSD-022013S ARO	EPH	1	Sample		
15	Vial 20	EV13020093-28	EPH	1	Sample		
16	Vial 21	EV13020093-28DUP	EPH	1	Sample		
17	Vial 22	EV13020093-28MS	EPH	1	Sample		
18	Vial 15	MB-022013S ARO	EPH	1	Sample		
19	Vial 5	50 PPM ARO	EPH	1	Sample		
20	Vial 1	BLANK	RUN0411	1	Sample		
21	Vial 2	DSL STD W319-6	RUN0411	1	Sample		
22	Vial 3	MO STD W318-5	RUN0411	1	Sample		
23	Vial 35	EV13020119-01 W	RUN0411	1	Sample		
24	Vial 24	MB-022013S	RUN0411	1	Sample		
25	Vial 25	EV13020093-12	RUN0411	1	Sample		
26	Vial 26	EV13020093-16	RUN0411	1	Sample		
27	Vial 27	EV13020093-18	RUN0411	1	Sample		
28	Vial 28	EV13020093-21	RUN0411	1	Sample		
29	Vial 1	BLANK	RUN0411	1	Sample		
30	Vial 2	DSL STD W319-6	RUN0411	1	Sample		
31	Vial 3	MO STD W318-5	RUN0411	1	Sample		
32	Vial 29	EV13020093-25	RUN0411	1	Sample		
33	Vial 30	EV13020093-28	RUN0411	1	Sample		
34	Vial 31	EV13020093-09	RUN0411	1	Sample		
35	Vial 32	EV13020093-10	RUN0411	1	Sample		
36	Vial 36	EV13020122-01	RUN0411	1	Sample		
37	Vial 33	EV13020095-01 5X	RUN0411	1	Sample RR(X2)		
38	Vial 1	BLANK	RUN0411	1	Sample		
39	Vial 34	EV13020095-02 5X	RUN0411	1	Sample RR(X2)		
40	Vial 1	BLANK	RUN0411	1	Sample		
41	Vial 99	DSL STD W319-6	RUN0411	1	Sample		
42	Vial 100	MO STD W318-5	RUN0411	1	Sample		
43	Vial 1	BLANK	RUN0411	1	Sample		

Sequence Table (Back Injector):

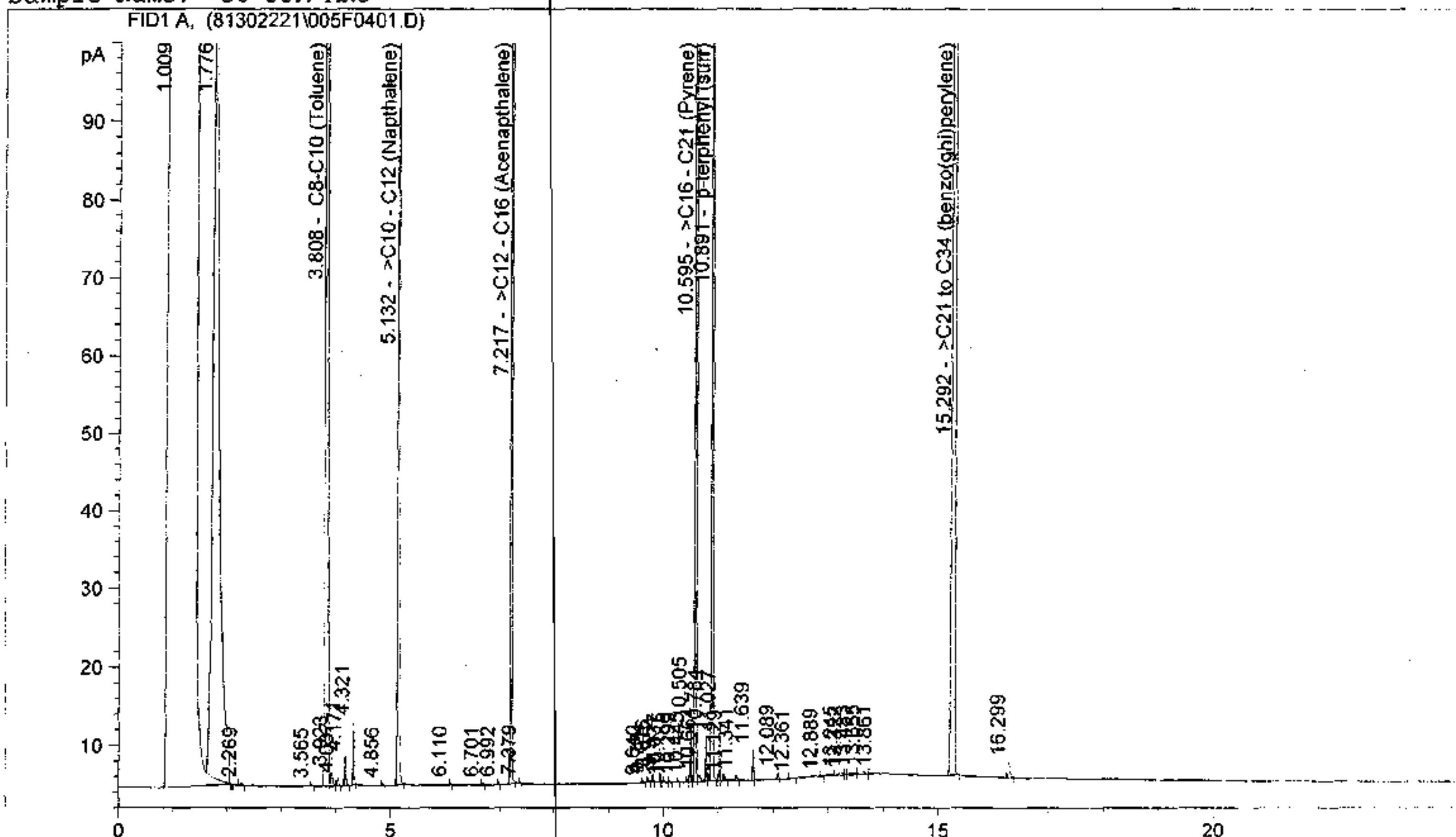
Method and Injection Info Part:

Line	Location	SampleName	Method	Inj	SampleType	InjVolume	DataFile
1	Vial 51	BLANK	RUN0411	1	Sample		
2	Vial 3	MO STD W318-5	RUN0411	1	Sample		
3	Vial 2	DSL STD W319-6	RUN0411	1	Sample		
4	Vial 52	50 PPM ALK	EPH	1	Sample		
5	Vial 54	BS-021913W RR	EPH	1	Sample		
6	Vial 55	BSD-021913W RR	EPH	1	Sample		
7	Vial 53	MB-021913W ALK	EPH	1	Sample		

Line	Location	SampleName	Method	Inj	SampleType	InjVolume	DataFile
8	Vial 68	EV13020100-02 W	RUN0411	1	Sample		
9	Vial 69	EV13020106-01 W	RUN0411	1	Sample		
10	Vial 63	EV13020093-18	EPH	1	Sample		
11	Vial 64	EV13020093-21	EPH	1	Sample		
12	Vial 52	50 PPM ALK	EPH	1	Sample		
13	Vial 61	BS-021203S ALK	EPH	1	Sample		
14	Vial 62	BSD-022013S ALK	EPH	1	Sample		
15	Vial 65	EV13020093-28	EPH	1	Sample		
16	Vial 66	EV13020093-28DUP	EPH	1	Sample		
17	Vial 67	EV13020093-28MS	EPH	1	Sample		
18	Vial 60	MB-022013S ALK	EPH	1	Sample		
19	Vial 52	50 PPM ALK	EPH	1	Sample		
20	Vial 51	BLANK	RUN0411	1	Sample		
21	Vial 3	MO STD W318-5	RUN0411	1	Sample		
22	Vial 2	DSL STD W319-6	RUN0411	1	Sample		
23	Vial 80	MB-022213S	RUN0411	1	Sample		
24	Vial 70	BS-022013S	RUN0411	1	Sample		
25	Vial 71	BSD-022013S	RUN0411	1	Sample		
26	Vial 72	EV13020093-03	RUN0411	1	Sample		
27	Vial 73	EV13020093-04	RUN0411	1	Sample		
28	Vial 74	EV13020093-05	RUN0411	1	Sample		
29	Vial 51	BLANK	RUN0411	1	Sample		
30	Vial 3	MO STD W318-5	RUN0411	1	Sample		
31	Vial 2	DSL STD W319-6	RUN0411	1	Sample		
32	Vial 75	EV13020093-11	RUN0411	1	Sample		
33	Vial 76	EV13020093-11DUP	RUN0411	1	Sample		
34	Vial 77	EV13020093-11MS	RUN0411	1	Sample		
35	Vial 81	EV13020122-02	RUN0411	1	Sample		
36	Vial 78	EV13020095-03 5X	RUN0411	1	Sample		
37	Vial 51	BLANK	RUN0411	1	Sample		
38	Vial 79	EV13020099-01 20x	RUN0411	1	Sample		
39	Vial 51	BLANK	RUN0411	1	Sample		
40	Vial 51	BLANK	RUN0411	1	Sample		
41	Vial 100	MO STD W318-5	RUN0411	1	Sample		
42	Vial 99	DSL STD W319-6	RUN0411	1	Sample		
43	Vial 51	BLANK	RUN0411	1	Sample		

Instrument #98 Data File: C:\HPCHEM\1\DATA\81302221\005F0401.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\EPH0912.M
Injection Date & Time: 2/22/2013 9:35:46 AM 2/22/2013 9:35:46 AM
Report Creation: 2/22/2013 1:18:07 PM

Sample Name: 50 PPM ARO



Ret. Time	Signal	Compound Name	Response	Amount ug/mL	
3.808	FID1 A,	C8-C10 (Toluene)	829.718	55.223	÷50 x100 = 110% ± 20% ok
5.132		>C10 - C12 (Napthale	863.723	54.881	110%
7.217		>C12 - C16 (Acenapth	878.190	55.752	112%
10.595		>C16 - C21 (Pyrene)	883.258	56.116	112%
10.891		p-terphenyl (surr)	815.580	49.523	÷50 x100 = 99%
15.292		>C21 to C34 (benzo(g	844.727	57.587	115%

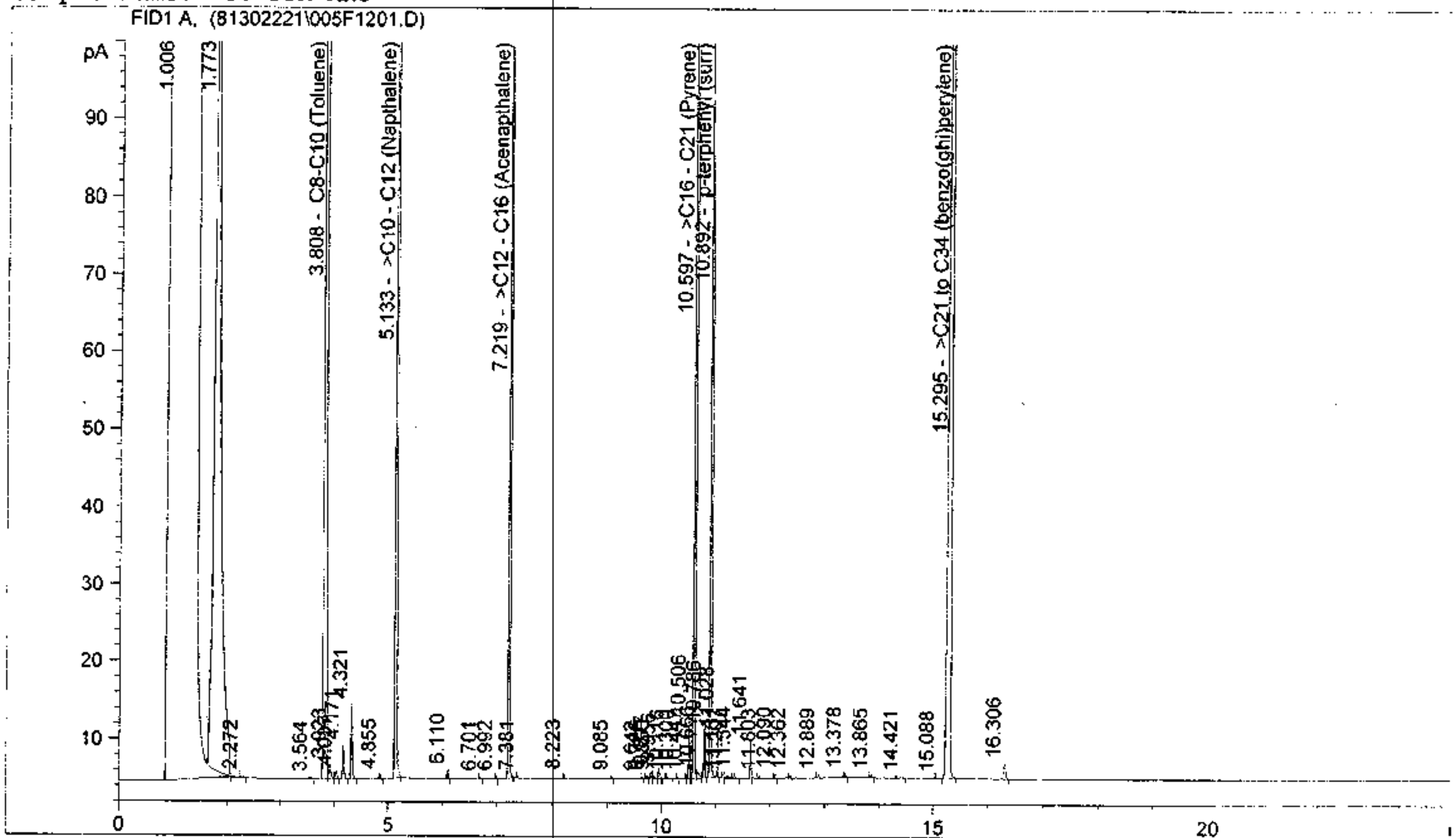
Aromatic

C8-C10 1.676 - 3.908
>C10 - C12 3.908 - 5.232
>C12 - C16 5.232 - 7.317
>C16 - C21 7.317 - 10.695
>C21 - C34 10.695 - 15.392

2.22.13 EB

Instrument #98 Data File: C:\HPCHEM\1\DATA\81302221\005F1201.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\EPH0912.M
Injection Date & Time: 2/22/2013 1:43:32 PM 2/22/2013 1:43:32 PM
Report Creation: 2/22/2013 2:34:34 PM

Sample Name: 50 PPM ARO

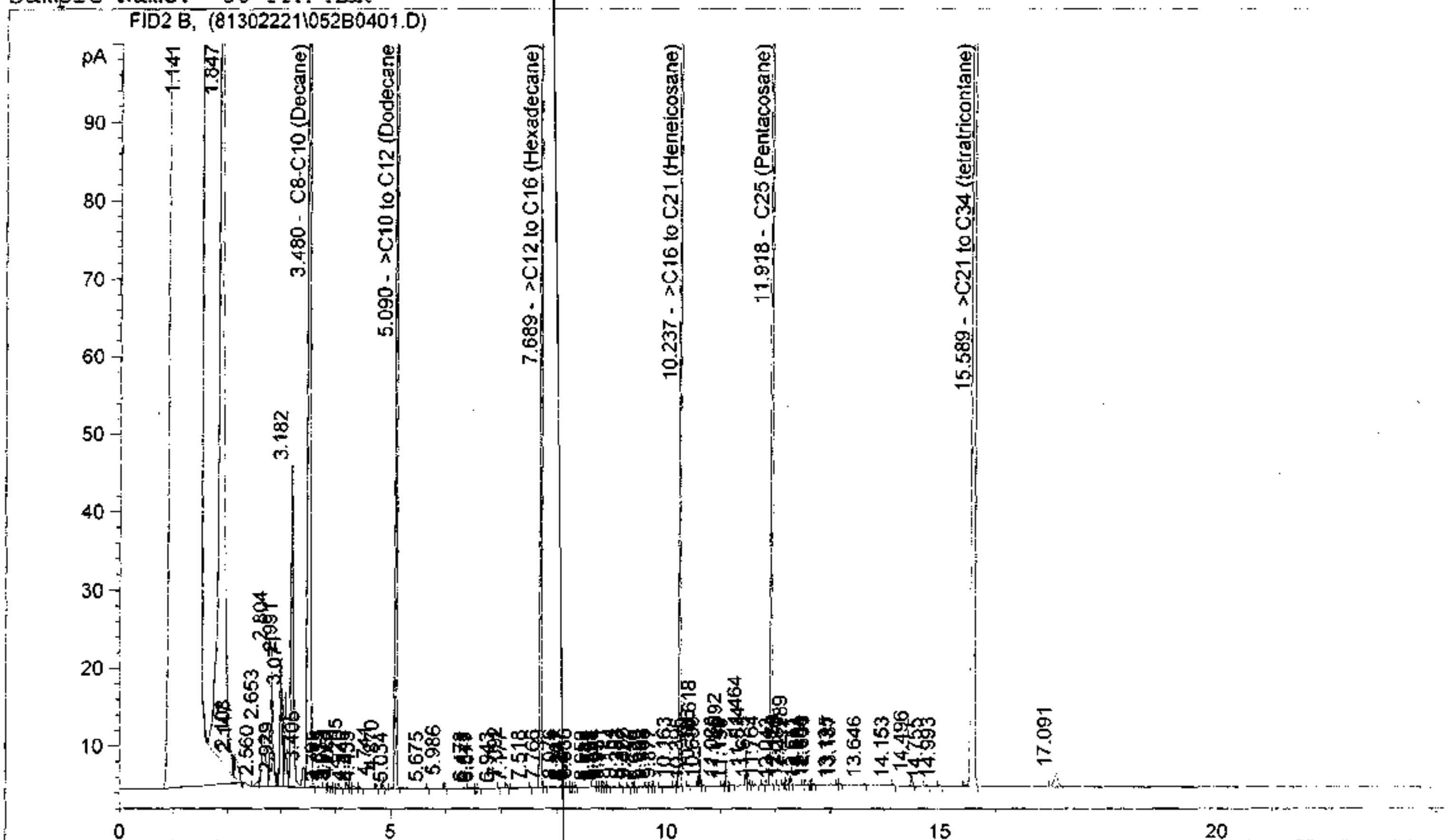


Ret. Time	Signal	Compound Name	Response	Amount ug/mL	
3.808	FID1 A,	C8-C10 (Toluene)	846.409	56.339	÷50 ×100 = 113% ± 20% ck
5.133		>C10 - C12 (Napthale	879.705	55.898	112%
7.219		>C12 - C16 (Acenapth	888.448	56.403	113%
10.597		>C16 - C21 (Pyrene)	888.046	56.420	113%
10.892		p-terphenyl (surr)	821.894	49.897	÷50 ×100 = 100%
15.295		>C21 to C34 (benzo(g	849.083	57.877	116%

02.22.13 ES

Instrument #98 Data File: C:\HPCHEM\1\DATA\81302221\052B0401.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\BEPH0712.M
Injection Date & Time: 2/22/2013 9:35:46 AM 2/22/2013 9:35:46 AM
Report Creation: 2/22/2013 1:18:53 PM

Sample Name: 50 PPM ALK



Ret. Time	Signal	Compound Name	Response	Amount ug/mL	
3.480	FID2 B,	C8-C10 (Decane)	748.681	48.055	÷50 ×100 = 96% ± 20% ok
5.090		>C10 to C12 (Dodecan	743.266	47.830	96%
7.689		>C12 to C16 (Hexadec	749.877	47.418	95%
10.237		>C16 to C21 (Heneico	757.053	47.438	95%
11.918		C25 (Pentacosane)	1113.740	47.981	÷50 ×100 = 96%
15.589		>C21 to C34 (tetratr	714.776	54.166	108%

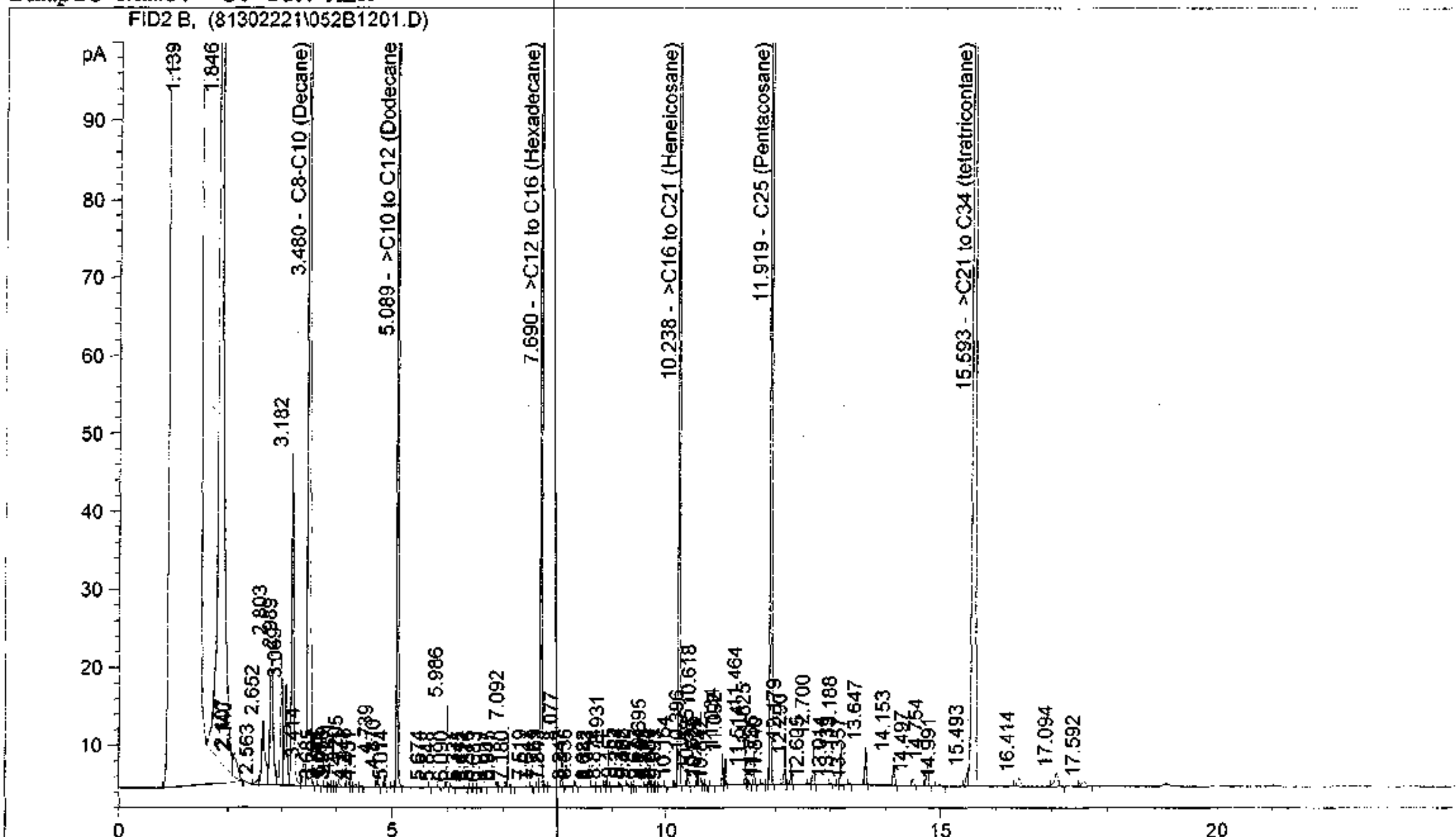
Aliphatic

C8-C10 1.747-3.580
>C10-C12 3.580-5.191
>C12-C16 5.191-7.789
>C16-C21 7.789-10.337
>C21-C34 10.337-15.689

02.22.13 EBS

Instrument #98   Data File: C:\HPCHEM\1\DATA\81302221\052B1201.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\BEPH0712.M
Injection Date & Time: 2/22/2013 1:43:32 PM   2/22/2013 1:43:32 PM
Report Creation: 2/22/2013   2:35:08 PM

Sample Name: 50 PPM ALK



Ret. Time	Signal	Compound Name	Response	Amount ug/mL	
3.480	FID2 B,	C8-C10 (Decane)	762.304	48.917	÷50 x100 = 98% ± 20% ok
5.089		>C10 to C12 (Dodecan	757.596	48.741	97%
7.690		>C12 to C16 (Hexadec	760.917	48.110	96%
10.238		>C16 to C21 (Heneico	767.129	48.065	96%
11.919		C25 (Pentacosane)	1130.714	48.710	÷50 x100 = 97%
15.593		>C21 to C34 (tetratr	727.402	55.127	110%

02.22.13 ES

Work continued from Page

Sample ID	Volume (mL)
MB 02.19.13	1000
BS	↓
BSD	↓
EV13020091 - 2	↓
3	↓
10	↓
12	↓

Work continued to Page

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SIGNATURE Surr: 200 uL W317-8 (Pentacosane); W315-5 (Terphenyl) DATE
Spk = 200 uL T119-5 (ARO); T118-4 (Alk)
DISCLOSED TO AND UNDERSTOOD BY DATE WITNESS DATE

~~1:1 DCM/Acetone Lot #~~ ES DCM Lot # L14504

Method Information

Method EPH0912 is for integrating Aromatics for front injector (Inst. #81). Calibration was run on 08/30/2012 under sequence 81208301. Method EPH runs the instrument. (Used EPH Aromatic Hydrocarbon Std T114-1, ARO 2nd source T113-5 and p-Terphenyl surr W306-2).

Injection Source and Location

Injection Source: GC Injector

Injection Location: Dual

6890 GC METHOD

OVEN
Initial temp: 60 'C (On)
Initial time: 1.50 min
Ramps:

#	Rate	Final temp	Final time
1	20.00	300	0.00
2	25.00	300	11.50
3	0.0(Off)		

Post temp: 50 'C
Post time: 0.00 min
Run time: 25.00 min

Maximum temp: 320 'C
Equilibration time: 0.01 min

FRONT INLET (SPLIT/SPLITLESS)
Mode: Splitless
Initial temp: 250 'C (On)
Pressure: 19.00 psi (On)
Purge flow: 65.0 mL/min
Purge time: 0.50 min
Total flow: 69.3 mL/min
Gas saver: Off
Gas type: Helium

BACK INLET (SPLIT/SPLITLESS)
Mode: Splitless
Initial temp: 250 'C (On)
Pressure: 19.00 psi (On)
Purge flow: 65.4 mL/min
Purge time: 0.50 min
Total flow: 70.1 mL/min
Gas saver: Off
Gas type: Helium

COLUMN 1
Capillary Column
Model Number: Agilent 19091S-433
HP-5MS 5% Phenyl Methyl Siloxane
Max temperature: 325 'C
Nominal length: 30.0 m
Nominal diameter: 250.00 um
Nominal film thickness: 0.25 um
Mode: constant flow
Initial flow: 1.7 mL/min
Nominal init pressure: 19.00 psi
Average velocity: 38 cm/sec
Inlet: Front Inlet
Outlet: Front Detector
Outlet pressure: ambient

COLUMN 2
Capillary Column
Model Number: Agilent 19091S-433
HP-5MS 5% Phenyl Methyl Siloxane
Max temperature: 325 'C
Nominal length: 30.0 m
Nominal diameter: 250.00 um
Nominal film thickness: 0.25 um
Mode: constant flow
Initial flow: 1.7 mL/min
Nominal init pressure: 19.00 psi
Average velocity: 38 cm/sec
Inlet: Back Inlet
Outlet: Back Detector
Outlet pressure: ambient

FRONT DETECTOR (FID)
Temperature: 300 'C (On)
Hydrogen flow: 40.0 mL/min (On)
Air flow: 400.0 mL/min (On)
Mode: Constant makeup flow
Makeup flow: 30.0 mL/min (On)

BACK DETECTOR (FID)
Temperature: 300 'C (On)
Hydrogen flow: 40.0 mL/min (On)
Air flow: 400.0 mL/min (On)
Mode: Constant makeup flow
Makeup flow: 30.0 mL/min (On)

Makeup Gas Type: Helium
Flame: On
Electrometer: On
Lit offset: 2.0

Makeup Gas Type: Helium
Flame: On
Electrometer: On
Lit offset: 2.0

SIGNAL 1
Data rate: 20 Hz
Type: front detector
Save Data: On
Zero: 0.0 (Off)
Range: 0
Fast Peaks: Off
Attenuation: 0

SIGNAL 2
Data rate: 20 Hz
Type: back detector
Save Data: On
Zero: 0.0 (Off)
Range: 0
Fast Peaks: Off
Attenuation: 0

COLUMN COMP 1
Derive from front detector

COLUMN COMP 2
Derive from back detector

POST RUN
Post Time: 0.00 min

TIME TABLE

Time	Specifier	Parameter & Setpoint

GC Injector

Front Injector:

Sample Washes	1
Sample Pumps	1
Injection Volume	1.0 microliters
Syringe Size	10.0 microliters
Nanoliter Adapter	Off
PostInj Solvent A Washes	1
PostInj Solvent B Washes	1
Viscosity Delay	0 seconds
Plunger Speed	Fast
PreInjection Dwell	0.00 minutes
PostInjection Dwell	0.00 minutes

Back Injector:

Sample Washes	1
Sample Pumps	1
Injection Volume	1.0 microliters
Syringe Size	10.0 microliters
Nanoliter Adapter	Off
PostInj Solvent A Washes	1
PostInj Solvent B Washes	1
Viscosity Delay	0 seconds
Plunger Speed	Fast
PreInjection Dwell	0.00 minutes
PostInjection Dwell	0.00 minutes

Integration Events

Results will be produced with the enhanced integrator.

Default Integration Event Table "Event"

Event	Value	Time
Initial Slope Sensitivity	1.000	Initial
Initial Peak Width	0.040	Initial
Initial Area Reject	1.000	Initial
Initial Height Reject	1.700	Initial
Initial Shoulders	OFF	Initial

Detector Default Integration Event Table "Event_TCD"

Event	Value	Time
Initial Slope Sensitivity	100.000	Initial
Initial Peak Width	0.040	Initial
Initial Area Reject	1.000	Initial
Initial Height Reject	1.000	Initial
Initial Shoulders	OFF	Initial

Detector Default Integration Event Table "Event_ADC"

Event	Value	Time
Initial Slope Sensitivity	20.000	Initial
Initial Peak Width	0.040	Initial
Initial Area Reject	1.000	Initial
Initial Height Reject	1.000	Initial
Initial Shoulders	OFF	Initial

Detector Default Integration Event Table "Event_FID"

Event	Value	Time
Initial Slope Sensitivity	50.000	Initial
Initial Peak Width	0.040	Initial
Initial Area Reject	1.000	Initial
Initial Height Reject	1.000	Initial
Initial Shoulders	OFF	Initial

Detector Default Integration Event Table "Event_ECD"

Event	Value	Time
Initial Slope Sensitivity	100.000	Initial
Initial Peak Width	0.080	Initial
Initial Area Reject	1.000	Initial
Initial Height Reject	1.000	Initial
Initial Shoulders	OFF	Initial

Detector Default Integration Event Table "Event_NPD"

Event	Value	Time
Initial Slope Sensitivity	500.000	Initial
Initial Peak Width	0.040	Initial
Initial Area Reject	1.000	Initial
Initial Height Reject	1.000	Initial
Initial Shoulders	OFF	Initial

Detector Default Integration Event Table "Event_FPD"

Event	Value	Time
Initial Slope Sensitivity	50.000	Initial
Initial Peak Width	0.040	Initial
Initial Area Reject	1.000	Initial
Initial Height Reject	1.000	Initial
Initial Shoulders	OFF	Initial

Detector Default Integration Event Table "Event_uECD"

Event	Value	Time
Initial Slope Sensitivity	500.000	Initial
Initial Peak Width	0.080	Initial
Initial Area Reject	1.000	Initial
Initial Height Reject	1.000	Initial
Initial Shoulders	OFF	Initial

Signal Specific Integration Event Table "Event_FID1A"

Event	Value	Time
Initial Slope Sensitivity	4.179	Initial
Initial Peak Width	0.028	Initial
Initial Area Reject	0.306	Initial
Initial Height Reject	0.091	Initial
Initial Shoulders	OFF	Initial

Signal Specific Integration Event Table "Event_FID2B"

Event	Value	Time
Initial Slope Sensitivity	4.242	Initial
Initial Peak Width	0.014	Initial
Initial Area Reject	0.135	Initial
Initial Height Reject	0.078	Initial
Initial Shoulders	OFF	Initial

Apply Manual Integration Events: No

Advanced Baseline : No

Calibration Table

Calib. Data Modified : 8/31/2012 9:25:49 AM

Calculate : External Standard
Based on : Peak Area

Rel. Reference Window : 5.000 %
Abs. Reference Window : 0.000 min
Rel. Non-ref. Window : 5.000 %
Abs. Non-ref. Window : 0.000 min
Use Multiplier & Dilution Factor with ISTDs
Uncalibrated Peaks : not reported
Partial Calibration : Yes, identified peaks are recalibrated
Correct All Ret. Times: No, only for identified peaks

Curve Type : Linear
Origin : Included
Weight : Equal

Recalibration Settings:
Average Response : Average all calibrations
Average Retention Time: Floating Average New 75%

Calibration Report Options :
Printout of recalibrations within a sequence:
Calibration Table after Recalibration
Normal Report after Recalibration
If the sequence is done with bracketing:
Results of first cycle (ending previous bracket)

Signal 1: FID1 A,

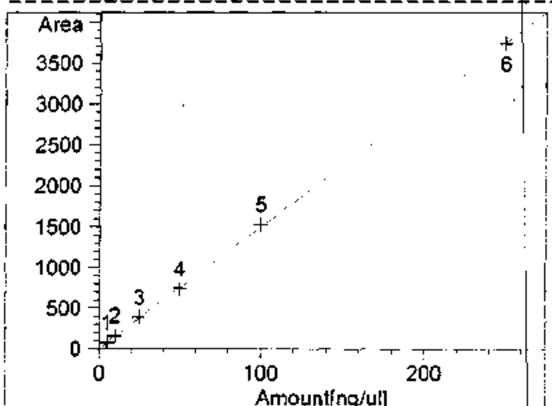
RetTime [min]	Lvl Sig		Amount [ng/ul]	Area	Amt/Area	Ref	Grp	Name
3.599	1	1	5.00000	74.17437	6.74087e-2			C8-C10 (Toluene)
		2	10.00000	153.08781	6.53220e-2			
		3	25.00000	383.02878	6.52692e-2			
		4	50.00000	737.39996	6.78058e-2			
		5	100.00000	1521.93018	6.57060e-2			
		6	250.00000	3738.09546	6.68790e-2			
5.266	1	1	5.00000	77.24554	6.47287e-2			>C10 - C12 (Napthalene)
		2	10.00000	159.98529	6.25057e-2			
		3	25.00000	399.41116	6.25921e-2			
		4	50.00000	770.45099	6.48971e-2			
		5	100.00000	1592.51428	6.27938e-2			
		6	250.00000	3923.48218	6.37189e-2			
7.900	1	1	5.00000	78.17284	6.39608e-2			>C12 - C16 (Acenapthalene)
		2	10.00000	160.25203	6.24017e-2			
		3	25.00000	397.99542	6.28148e-2			
		4	50.00000	767.56921	6.51407e-2			
		5	100.00000	1591.83789	6.28205e-2			
		6	250.00000	3935.02222	6.35320e-2			
10.420	1	1	5.00000	78.03407	6.40746e-2			>C16 - C21 (Pyrene)
		2	10.00000	159.18343	6.28206e-2			
		3	25.00000	397.73224	6.28564e-2			
		4	50.00000	766.82678	6.52038e-2			
		5	100.00000	1584.24402	6.31216e-2			
		6	250.00000	3941.02490	6.34353e-2			
12.144	1	1	5.00000	85.67103	5.83628e-2			p-terphenyl (surr)
		2	10.00000	173.43216	5.76594e-2			
		3	25.00000	418.90002	5.96801e-2			
		4	50.00000	788.36798	6.34222e-2			

RetTime [min]	Sig	Lvl	Amount [ng/ul]	Area	Amt/Area	Ref	Grp	Name
		5	100.00000	1582.49377	6.31914e-2			
		6	250.00000	4234.42480	5.90399e-2			
16.050	1	1	5.00000	58.62318	8.52905e-2			>C21 to C34 (benzo(ghi)perylene)
		2	10.00000	133.27519	7.50327e-2			
		3	25.00000	351.88718	7.10455e-2			
		4	50.00000	698.74603	7.15568e-2			
		5	100.00000	1481.70886	6.74896e-2			
		6	250.00000	3743.28394	6.67863e-2			

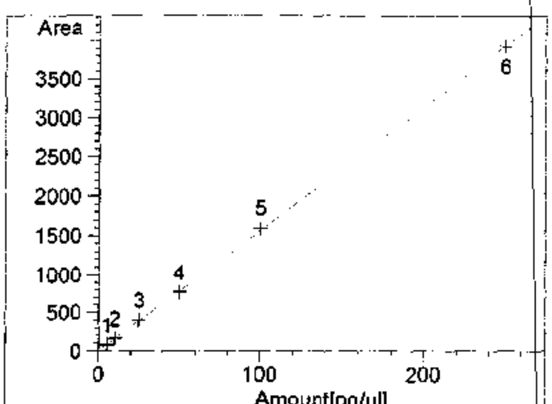
Peak Sum Table

No Entries in table

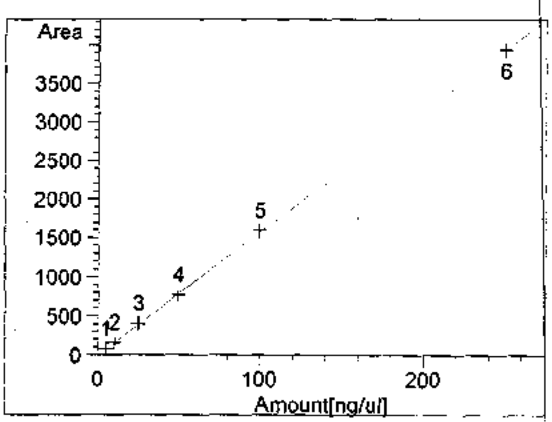
Calibration Curves



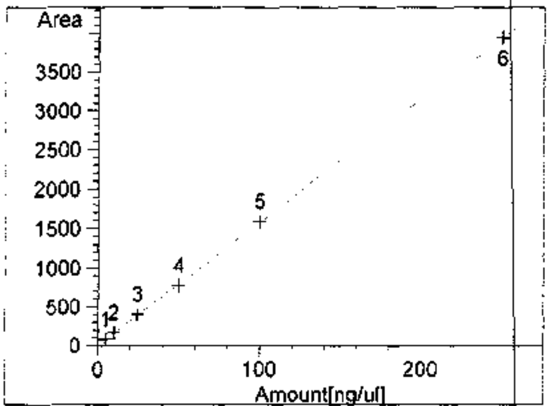
C8-C10 (Toluene) at exp. RT: 3.599
FID1 A,
Correlation: 0.99996
Residual Std. Dev.: 12.56618
Formula: y = mx + b
m: 14.96526
b: 3.28595
x: Amount [ng/ul]
y: Area



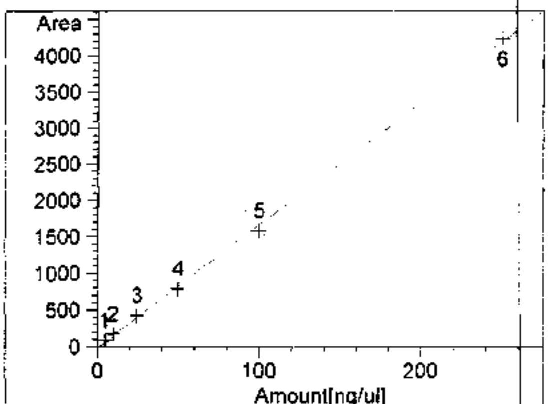
>C10 - C12 (Napthalene) at exp. RT: 5.266
FID1 A,
Correlation: 0.99997
Residual Std. Dev.: 12.19337
Formula: y = mx + b
m: 15.70816
b: 1.64277
x: Amount [ng/ul]
y: Area



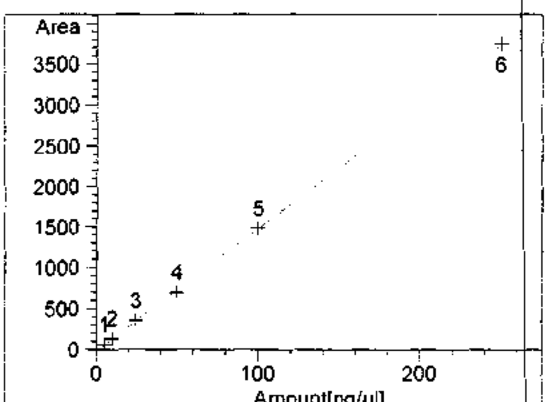
>C12 - C16 (Acenapthalene) at exp. RT: 7.900
FID1 A,
Correlation: 0.99997
Residual Std. Dev.: 11.93549
Formula: y = mx + b
m: 15.75302
b: -6.83637e-2
x: Amount [ng/ul]
y: Area



>C16 - C21 (Pyrene) at exp. RT: 10.420
FID1 A,
Correlation: 0.99998
Residual Std. Dev.: 10.19204
Formula: y = mx + b
m: 15.77226
b: -1.82121
x: Amount[ng/ul]
y: Area



p-terphenyl (surr) at exp. RT: 12.144
FID1 A,
Correlation: 0.99958
Residual Std. Dev.: 47.95480
Formula: y = mx + b
m: 16.86534
b: -19.63709
x: Amount[ng/ul]
y: Area

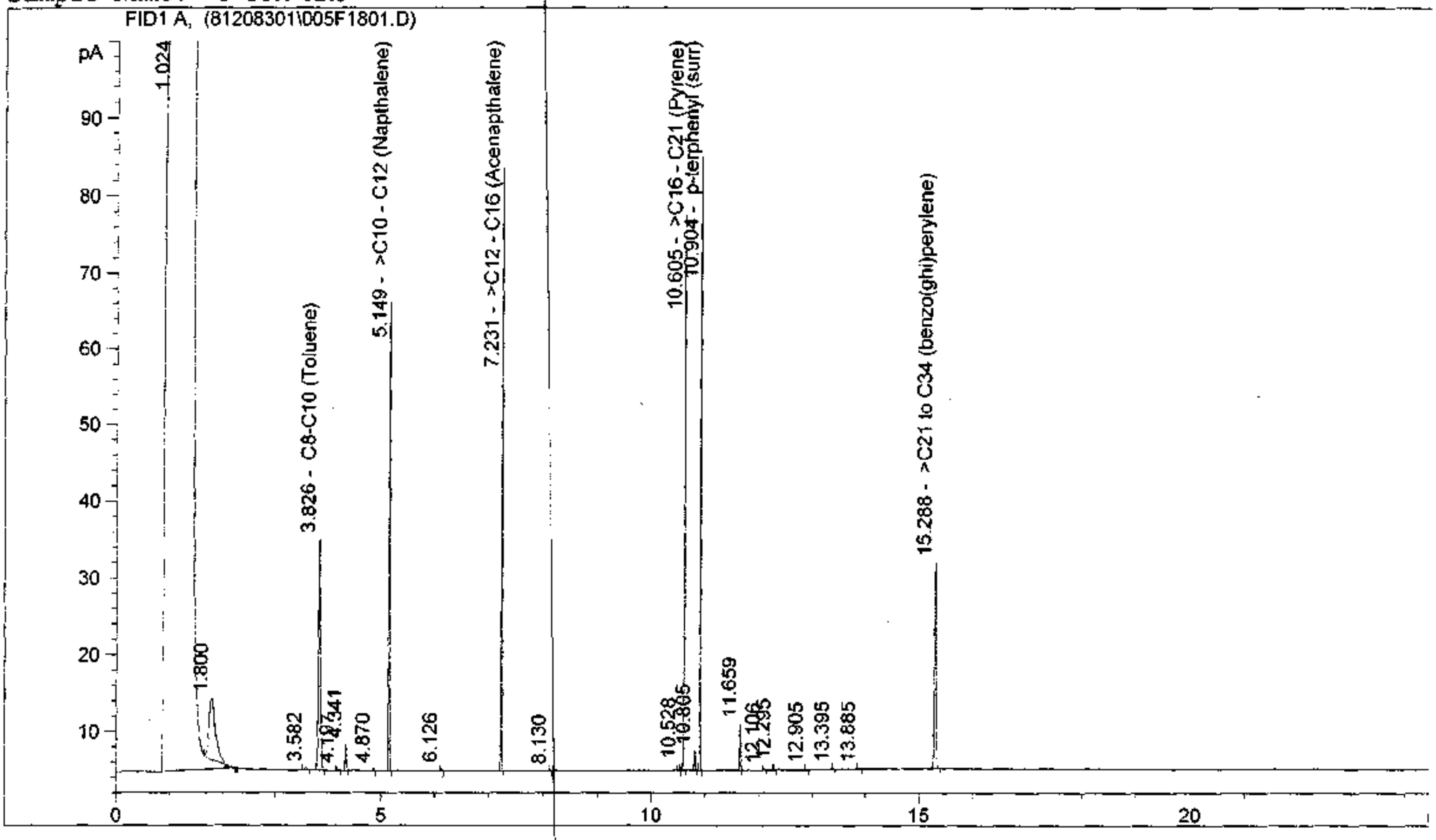


>C21 to C34 (benzo(ghi)perylene) at exp. RT: 16.050
FID1 A,
Correlation: 0.99993
Residual Std. Dev.: 17.54522
Formula: y = mx + b
m: 15.02972
b: -20.79312
x: Amount[ng/ul]
y: Area

==

Instrument #98 Data File: C:\HPCHEM\1\DATA\81208301\005F1801.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\EPH0912.M
Injection Date & Time: 8/30/2012 6:25:15 PM 8/30/2012 6:25:15 PM
Report Creation: 8/31/2012 9:21:34 AM

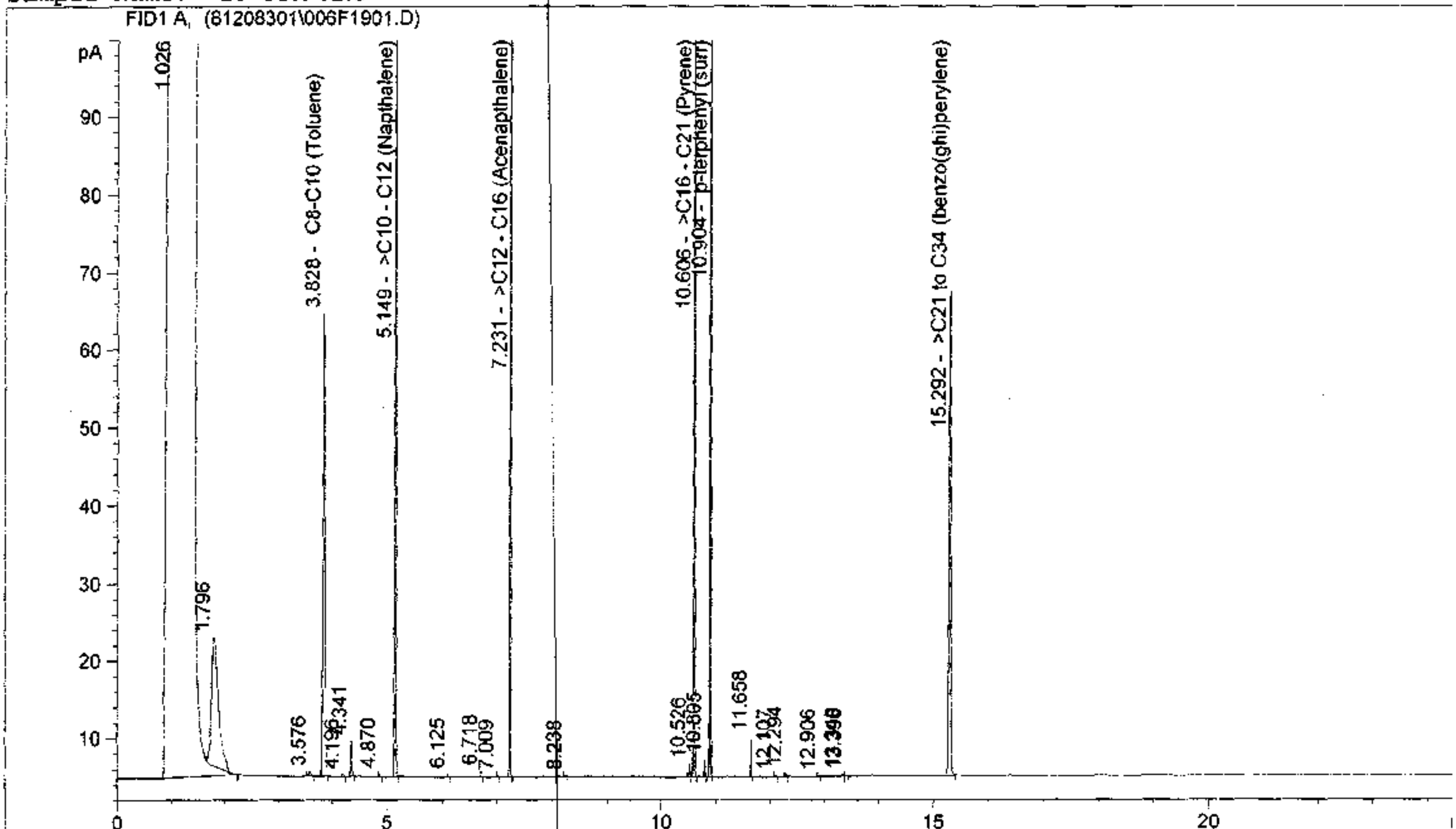
Sample Name: 5 PPM ARO



Ret. Time	Signal	Compound Name	Response	Amount ug/mL
3.826	FID1 A,	C8-C10 (Toluene)	74.174	4.737
5.149		>C10 - C12 (Napthale	77.246	4.813
7.231		>C12 - C16 (Acenapth	78.173	4.967
10.605		>C16 - C21 (Pyrene)	78.034	5.063
10.904		p-terphenyl (surr)	85.671	6.244
15.288		>C21 to C34 (benzo(g	58.623	5.284

Instrument #98 Data File: C:\HPCHEM\1\DATA\81208301\006F1901.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\EPH0912.M
Injection Date & Time: 8/30/2012 6:55:27 PM 8/30/2012 6:55:27 PM
Report Creation: 8/31/2012 9:21:50 AM

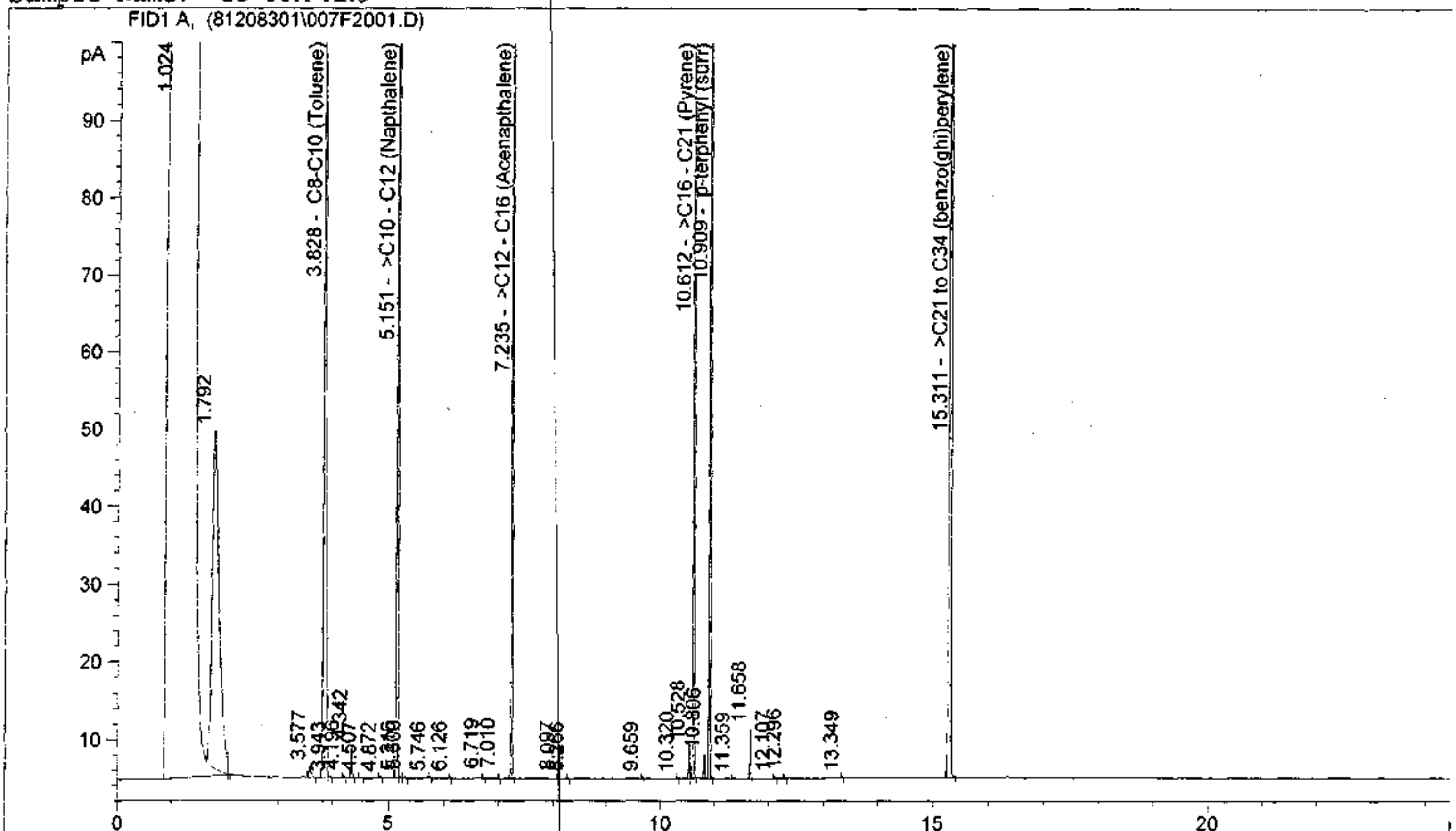
Sample Name: 10 PPM ARO



Ret. Time	Signal	Compound Name	Response	Amount ug/mL
3.828	FID1 A,	C8-C10 (Toluene)	153.088	10.010
5.149		>C10 - C12 (Napthale	159.985	10.080
7.231		>C12 - C16 (Acenapth	160.252	10.177
10.606		>C16 - C21 (Pyrene)	159.183	10.208
10.904		p-terphenyl (surr)	173.432	11.448
15.292		>C21 to C34 (benzo(g	133.275	10.251

Instrument #98   Data File: C:\HPCHEM\1\DATA\81208301\007F2001.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\EPH0912.M
Injection Date & Time: 8/30/2012 7:25:49 PM   8/30/2012 7:25:49 PM
Report Creation: 8/31/2012   9:22:03 AM

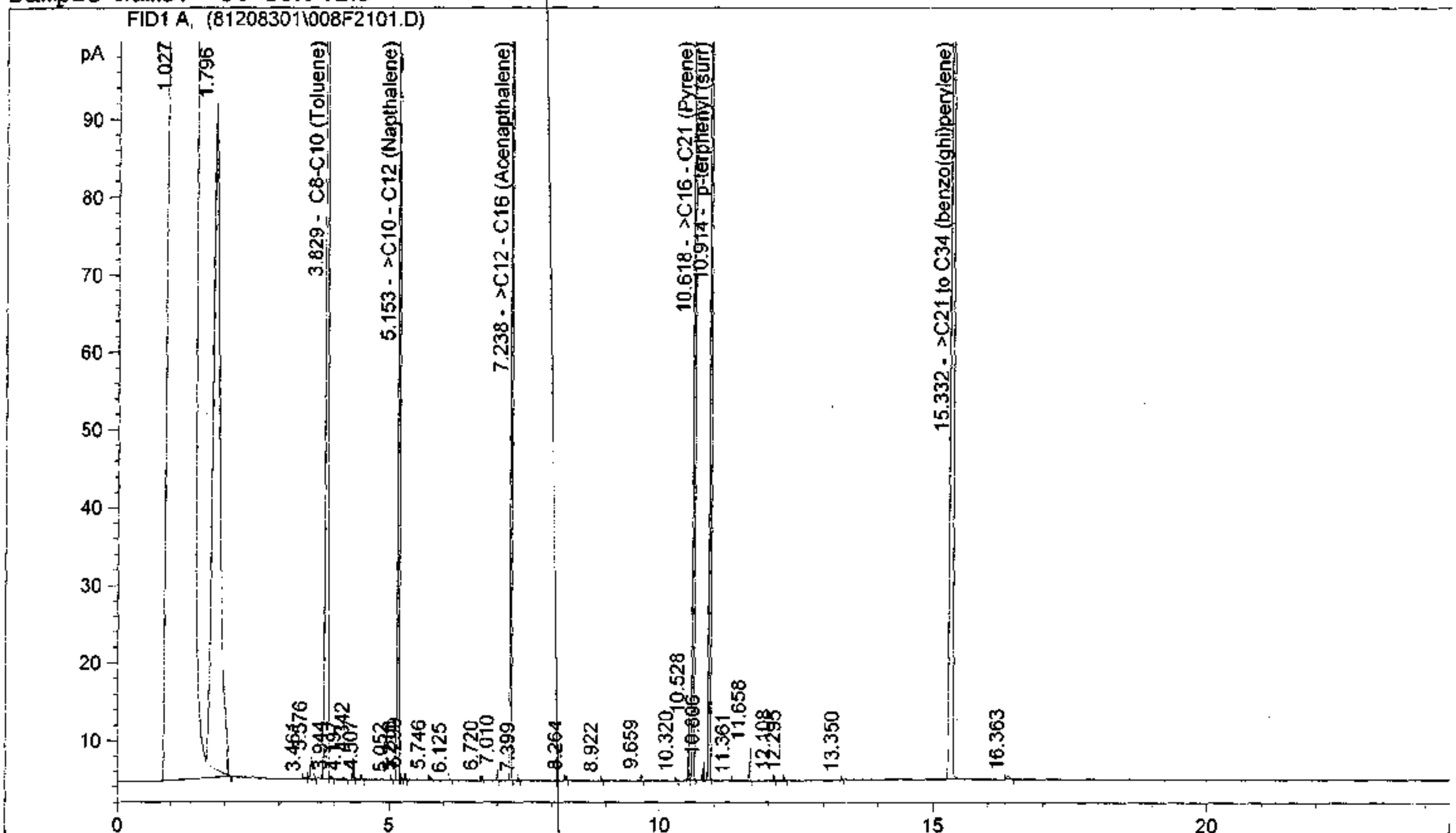
Sample Name: 25 PPM ARO



Ret. Time	Signal	Compound Name	Response	Amount ug/mL
3.828	FID1 A,	C8-C10 (Toluene)	383.029	25.375
5.151		>C10 - C12 (Napthale	399.411	25.322
7.235		>C12 - C16 (Acenapth	397.995	25.269
10.612		>C16 - C21 (Pyrene)	397.732	25.333
10.909		p-terphenyl (surr)	418.900	26.002
15.311		>C21 to C34 (benzo(g	351.887	24.796

Instrument #98   Data File: C:\HPCHEM\1\DATA\81208301\008F2101.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\EPH0912.M
Injection Date & Time: 8/30/2012 7:56:13 PM   8/30/2012 7:56:13 PM
Report Creation: 8/31/2012   9:22:17 AM

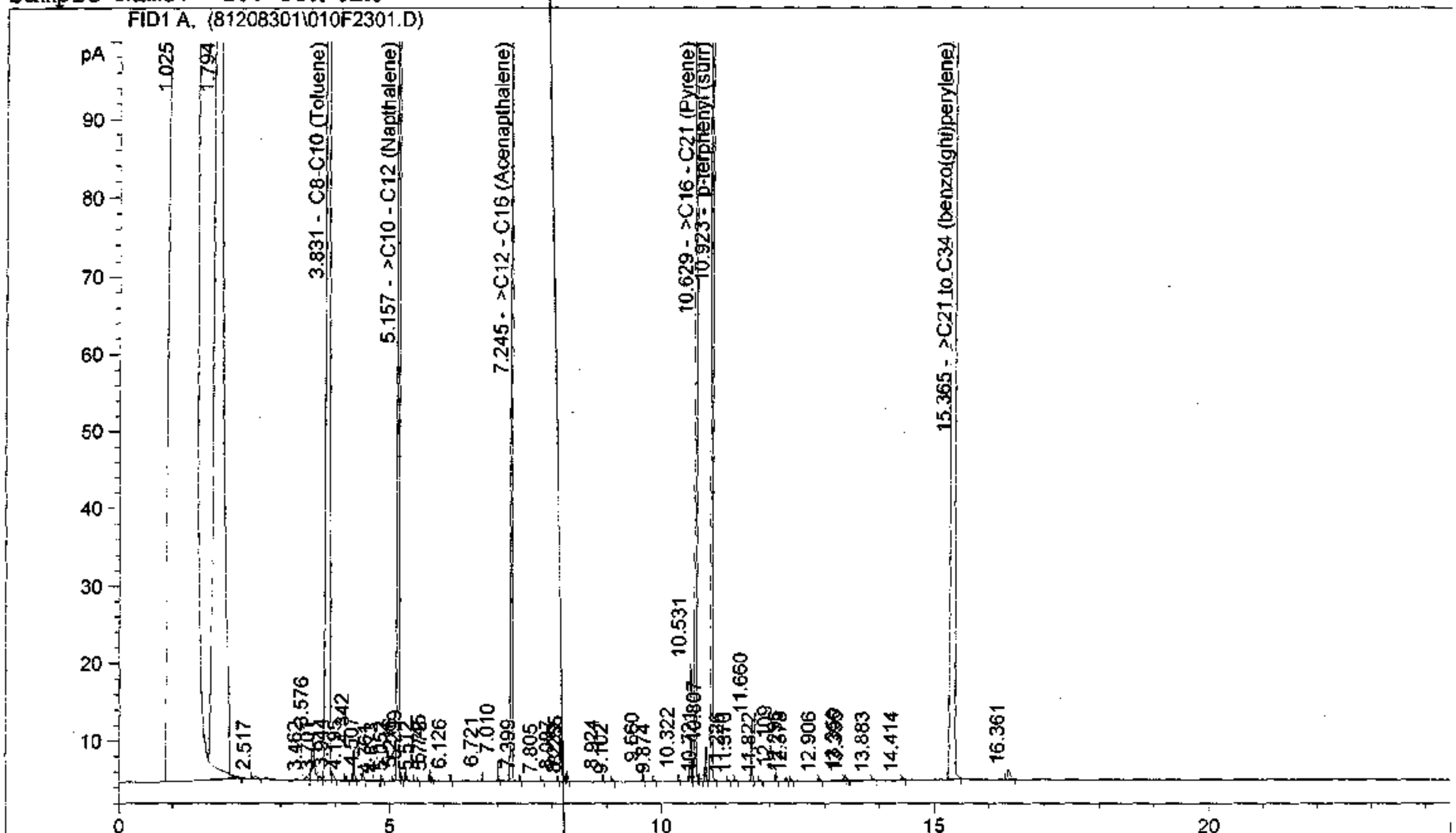
Sample Name: 50 PPM ARO



Ret. Time	Signal	Compound Name	Response	Amount ug/mL
3.829	FID1 A,	C8-C10 (Toluene)	737.400	49.055
5.153		>C10 - C12 (Napthale	770.451	48.943
7.238		>C12 - C16 (Acenapth	767.569	48.730
10.618		>C16 - C21 (Pyrene)	766.827	48.734
10.914		p-terphenyl (surr)	788.368	47.909
15.332		>C21 to C34 (benzo(g	698.746	47.874

```
Instrument #98        Data File: C:\HPCHEM\1\DATA\81208301\010F2301.D
Operator:   EBS
Method:     C:\HPCHEM\1\METHODS\EPH0912.M
Injection Date & Time: 8/30/2012 8:57:00 PM       8/30/2012 8:57:00 PM
Report Creation:       8/31/2012                9:22:30 AM
```

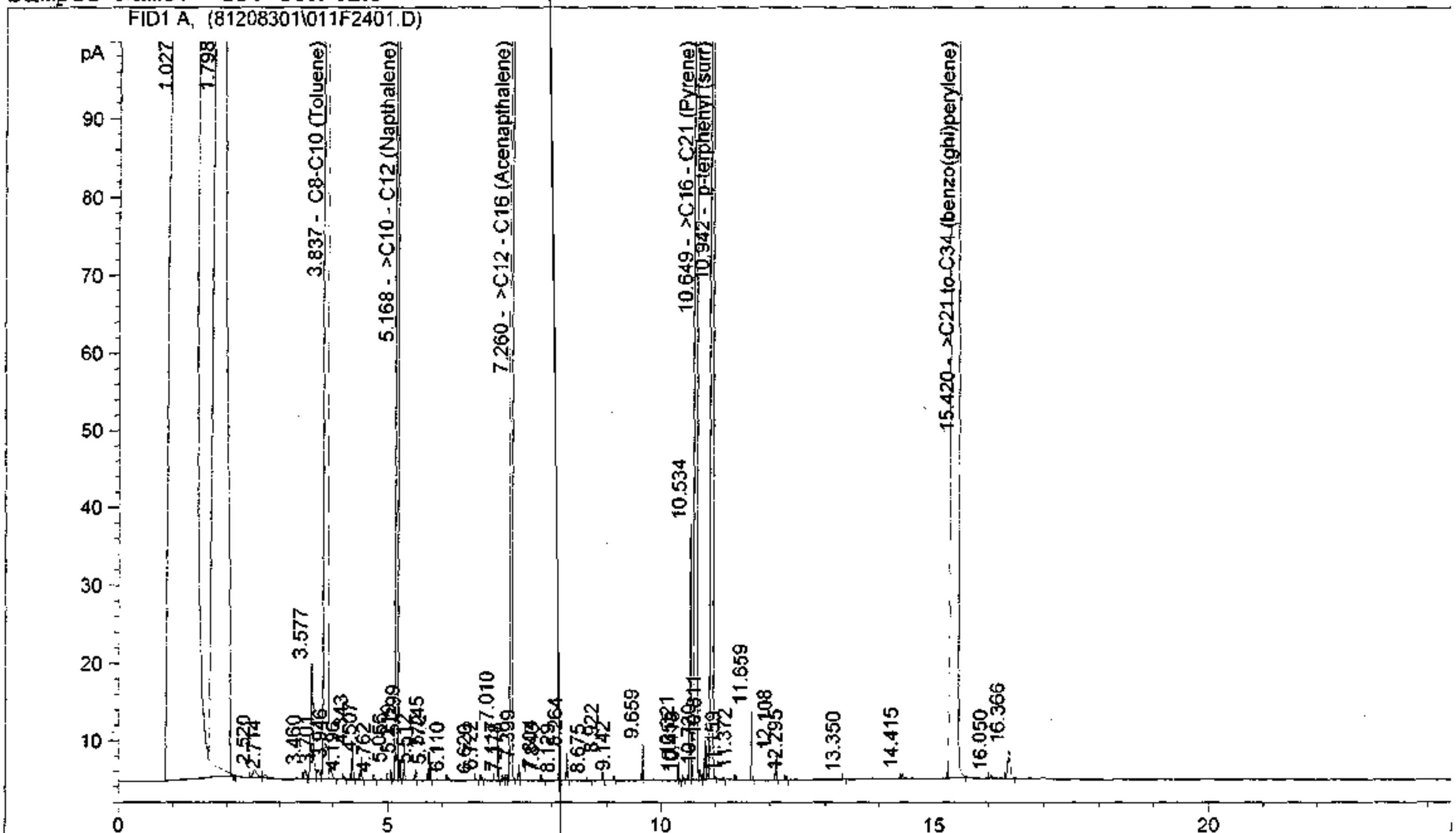
Sample Name: 100 PPM ARO



Ret. Time	Signal	Compound Name	Response	Amount ug/mL
3.831	FID1 A,	C8-C10 (Toluene)	1521.930	101.478
5.157		>C10 - C12 (Napthale	1592.514	101.277
7.245		>C12 - C16 (Acenapth	1591.838	101.054
10.629		>C16 - C21 (Pyrene)	1584.244	100.560
10.923		p-terphenyl (surr)	1582.494	94.995
15.365		>C21 to C34 (benzo(g	1481.709	99.969

Instrument #98 Data File: C:\HPCHEM\1\DATA\81208301\011F2401.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\EPH0912.M
Injection Date & Time: 8/30/2012 9:27:23 PM 8/30/2012 9:27:23 PM
Report Creation: 8/31/2012 9:22:45 AM

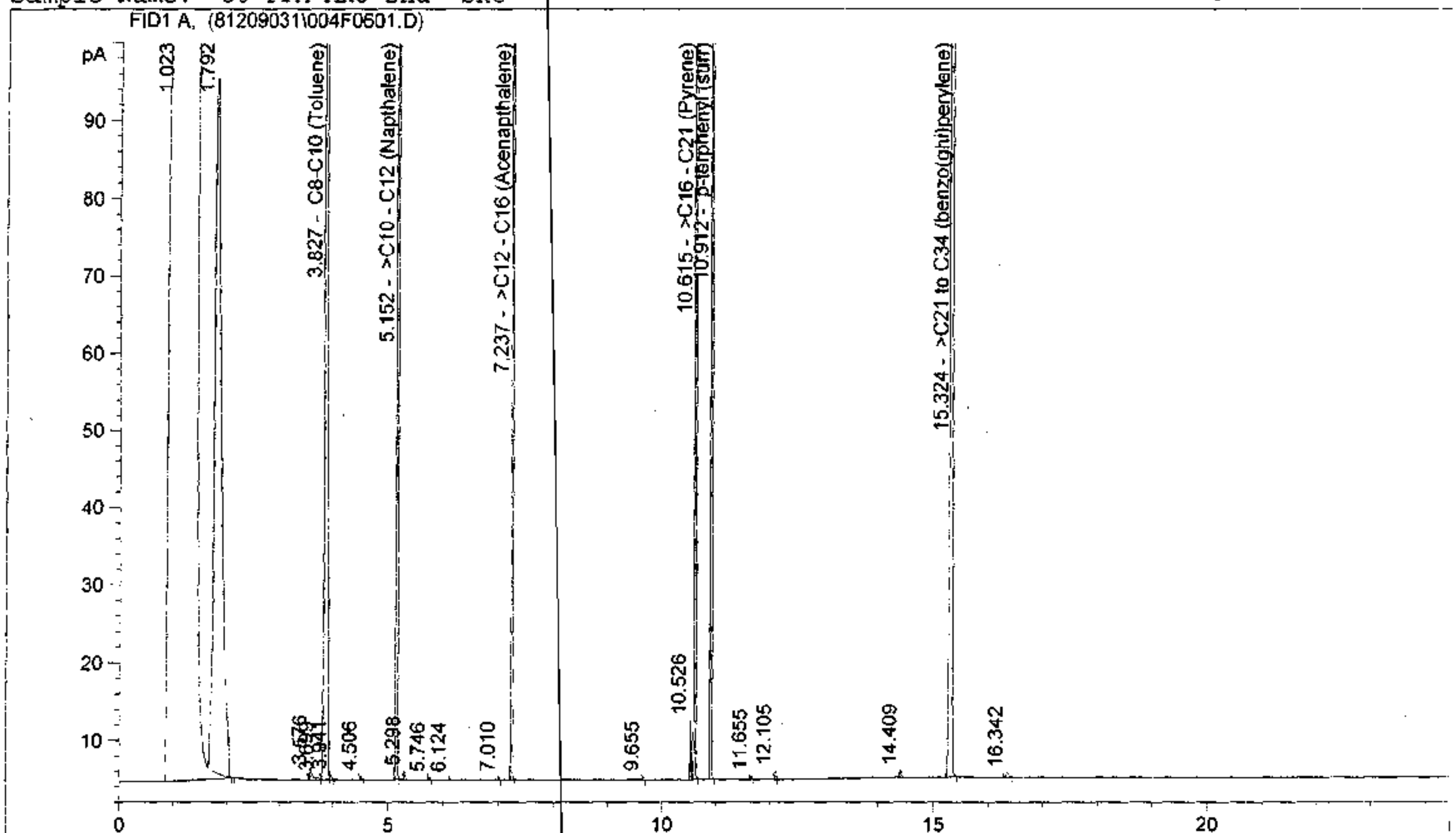
Sample Name: 250 PPM ARO



Ret. Time	Signal	Compound Name	Response	Amount ug/mL
3.837	FID1 A,	C8-C10 (Toluene)	3738.095	249.565
5.168		>C10 - C12 (Napthale	3923.482	249.669
7.260		>C12 - C16 (Acenapth	3935.022	249.799
10.649		>C16 - C21 (Pyrene)	3941.025	249.986
10.942		p-terphenyl (surr)	4234.425	252.237
15.420		>C21 to C34 (benzo(g	3743.284	250.442

Instrument #98 Data File: C:\HPCHEM\1\DATA\81209031\004F0601.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\EPH0912.M
Injection Date & Time: 9/4/2012 12:24:05 PM 9/4/2012 12:24:05 PM
Report Creation: 9/4/2012 2:23:29 PM

Sample Name: 50 PPM ARO 2nd SRC ->



Ret. Time	Signal	Compound Name	Response	Amount ug/mL
3.827	FID1 A,	C8-C10 (Toluene)	780.587	51.940
5.152		>C10 - C12 (Napthale	817.615	51.946
7.237		>C12 - C16 (Acenapth	808.678	51.339
10.615		>C16 - C21 (Pyrene)	821.822	52.221
10.912		p-terphenyl (surr)	884.565	53.613
15.324		>C21 to C34 (benzo(g	720.695	49.335

Method Information

Method BEPH0712 is for integrating Aliphatics. Calibration run on 07/25/12 under sequence 81207251. Method EPH runs the instrument. (Used EPH Aliphatic Hydrocarbon Std T113-7, ALK 2nd source T113-6 and n-Pentacosane surr W309-6).

Injection Source and Location

Injection Source: GC Injector

Injection Location: Dual

6890 GC METHOD

OVEN

Initial temp: 60 'C (On)
Initial time: 1.50 min
Ramps:

#	Rate	Final temp	Final time
1	20.00	300	0.00
2	25.00	300	11.50
3	0.0(Off)		

Post temp: 50 'C
Post time: 0.00 min
Run time: 25.00 min

Maximum temp: 360 'C
Equilibration time: 0.01 min

FRONT INLET (SPLIT/SPLITLESS)

Mode: Splitless
Initial temp: 250 'C (On)
Pressure: 19.00 psi (On)
Purge flow: 65.0 mL/min
Purge time: 0.50 min
Total flow: 69.3 mL/min
Gas saver: Off
Gas type: Helium

BACK INLET (SPLIT/SPLITLESS)

Mode: Splitless
Initial temp: 250 'C (On)
Pressure: 19.00 psi (On)
Purge flow: 65.4 mL/min
Purge time: 0.50 min
Total flow: 70.1 mL/min
Gas saver: Off
Gas type: Helium

COLUMN 1

Capillary Column
Model Number: Agilent 19091S-433
HP-5MS 5% Phenyl Methyl Siloxane
Max temperature: 325 'C
Nominal length: 30.0 m
Nominal diameter: 250.00 um
Nominal film thickness: 0.25 um
Mode: constant flow
Initial flow: 1.7 mL/min
Nominal init pressure: 19.00 psi
Average velocity: 38 cm/sec
Inlet: Front Inlet
Outlet: Front Detector
Outlet pressure: ambient

COLUMN 2

Capillary Column
Model Number: Agilent 19091S-433
HP-5MS 5% Phenyl Methyl Siloxane
Max temperature: 325 'C
Nominal length: 30.0 m
Nominal diameter: 250.00 um
Nominal film thickness: 0.25 um
Mode: constant flow
Initial flow: 1.7 mL/min
Nominal init pressure: 19.00 psi
Average velocity: 38 cm/sec
Inlet: Back Inlet
Outlet: Back Detector
Outlet pressure: ambient

FRONT DETECTOR (FID)

Temperature: 300 'C (On)
Hydrogen flow: 40.0 mL/min (On)
Air flow: 400.0 mL/min (On)
Mode: Constant makeup flow
Makeup flow: 30.0 mL/min (On)

BACK DETECTOR (FID)

Temperature: 300 'C (On)
Hydrogen flow: 40.0 mL/min (On)
Air flow: 400.0 mL/min (On)
Mode: Constant makeup flow
Makeup flow: 30.0 mL/min (On)

```
   Makeup Gas Type: Helium                Makeup Gas Type: Helium
   Flame:  On                             Flame:  On
   Electrometer:  On                      Electrometer:  On
   Lit offset:  2.0                       Lit offset:  2.0

SIGNAL 1                                SIGNAL 2
   Data rate:  20 Hz                      Data rate:  20 Hz
   Type:  front detector                  Type:  back detector
   Save Data:  On                         Save Data:  On
   Zero:  0.0 (Off)                       Zero:  0.0 (Off)
   Range:  0                              Range:  0
   Fast Peaks:  Off                       Fast Peaks:  Off
   Attenuation:  0                        Attenuation:  0

COLUMN COMP 1                           COLUMN COMP 2
   Derive from front detector             Derive from back detector

                                        POST RUN
                                          Post Time: 0.00 min

TIME TABLE
   Time       Specifier                    Parameter & Setpoint

                              GC Injector

     Front Injector:
        Sample Washes                1
        Sample Pumps                 1
        Injection Volume           1.0 microliters
        Syringe Size              10.0 microliters
        Nanoliter Adapter          Off
        PostInj Solvent A Washes     1
        PostInj Solvent B Washes     1
        Viscosity Delay              0 seconds
        Plunger Speed             Fast
        PreInjection Dwell        0.00 minutes
        PostInjection Dwell       0.00 minutes

     Back Injector:
        Sample Washes                1
        Sample Pumps                 1
        Injection Volume           1.0 microliters
        Syringe Size              10.0 microliters
        Nanoliter Adapter          Off
        PostInj Solvent A Washes     1
        PostInj Solvent B Washes     1
        Viscosity Delay              0 seconds
        Plunger Speed             Fast
        PreInjection Dwell        0.00 minutes
        PostInjection Dwell       0.00 minutes
```

Integration Events

Results will be produced with the enhanced integrator.

Default Integration Event Table "Event"

Event	Value	Time
Initial Slope Sensitivity	1.000	Initial
Initial Peak Width	0.040	Initial
Initial Area Reject	1.000	Initial
Initial Height Reject	1.700	Initial
Initial Shoulders	OFF	Initial

Detector Default Integration Event Table "Event_TCD"

Event	Value	Time
Initial Slope Sensitivity	100.000	Initial
Initial Peak Width	0.040	Initial
Initial Area Reject	1.000	Initial
Initial Height Reject	1.000	Initial
Initial Shoulders	OFF	Initial

Detector Default Integration Event Table "Event_ADC"

Event	Value	Time
Initial Slope Sensitivity	20.000	Initial
Initial Peak Width	0.040	Initial
Initial Area Reject	1.000	Initial
Initial Height Reject	1.000	Initial
Initial Shoulders	OFF	Initial

Detector Default Integration Event Table "Event_FID"

Event	Value	Time
Initial Slope Sensitivity	50.000	Initial
Initial Peak Width	0.040	Initial
Initial Area Reject	1.000	Initial
Initial Height Reject	1.000	Initial
Initial Shoulders	OFF	Initial

Detector Default Integration Event Table "Event_ECD"

Event	Value	Time
Initial Slope Sensitivity	100.000	Initial
Initial Peak Width	0.080	Initial
Initial Area Reject	1.000	Initial
Initial Height Reject	1.000	Initial
Initial Shoulders	OFF	Initial

Detector Default Integration Event Table "Event_NPD"

Event	Value	Time
Initial Slope Sensitivity	500.000	Initial
Initial Peak Width	0.040	Initial
Initial Area Reject	1.000	Initial
Initial Height Reject	1.000	Initial
Initial Shoulders	OFF	Initial

Detector Default Integration Event Table "Event_FPD"

Event	Value	Time
Initial Slope Sensitivity	50.000	Initial
Initial Peak Width	0.040	Initial
Initial Area Reject	1.000	Initial
Initial Height Reject	1.000	Initial
Initial Shoulders	OFF	Initial

Detector Default Integration Event Table "Event_uECD"

Event	Value	Time
Initial Slope Sensitivity	500.000	Initial
Initial Peak Width	0.080	Initial
Initial Area Reject	1.000	Initial
Initial Height Reject	1.000	Initial
Initial Shoulders	OFF	Initial

Signal Specific Integration Event Table "Event_FID1A"

Event	Value	Time
Initial Slope Sensitivity	4.179	Initial
Initial Peak Width	0.028	Initial
Initial Area Reject	0.306	Initial
Initial Height Reject	0.091	Initial
Initial Shoulders	OFF	Initial

Signal Specific Integration Event Table "Event_FID2B"

Event	Value	Time
Initial Slope Sensitivity	4.242	Initial
Initial Peak Width	0.014	Initial
Initial Area Reject	0.135	Initial
Initial Height Reject	0.078	Initial
Initial Shoulders	OFF	Initial

Apply Manual Integration Events: No

Advanced Baseline : No

===
Calibration Table
===

Calib. Data Modified : Wednesday, July 25, 2012 12:46:00 PM

Calculate : External Standard
Based on : Peak Area

Rel. Reference Window : 5.000 %
Abs. Reference Window : 0.000 min
Rel. Non-ref. Window : 5.000 %
Abs. Non-ref. Window : 0.000 min
Use Multiplier & Dilution Factor with ISTDs
Uncalibrated Peaks : not reported
Partial Calibration : Yes, identified peaks are recalibrated
Correct All Ret. Times: No, only for identified peaks

Curve Type : Linear
Origin : Included
Weight : Equal

Recalibration Settings:
Average Response : Average all calibrations
Average Retention Time: Floating Average New 75%

Calibration Report Options :
Printout of recalibrations within a sequence:
Calibration Table after Recalibration
Normal Report after Recalibration
If the sequence is done with bracketing:
Results of first cycle (ending previous bracket)

Signal 1: FID2 B,

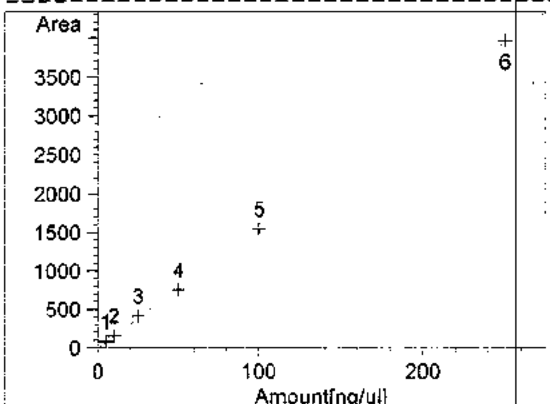
RetTime [min]	Lvl Sig		Amount [ng/ul]	Area	Amt/Area	Ref	Grp	Name
3.532	1	1	5.00000	75.72118	6.60317e-2			C8-C10 (Decane)
		2	10.00000	152.96371	6.53750e-2			
		3	25.00000	406.31305	6.15289e-2			
		4	50.00000	748.02814	6.68424e-2			
		5	100.00000	1541.80554	6.48590e-2			
		6	250.00000	3952.12354	6.32571e-2			
5.157	1	1	5.00000	75.69614	6.60536e-2			>C10 to C12 (Dodecane
		2	10.00000	152.14491	6.57268e-2			
		3	25.00000	405.44901	6.16600e-2			
		4	50.00000	749.58771	6.67033e-2			
		5	100.00000	1537.78406	6.50286e-2			
		6	250.00000	3936.75635	6.35041e-2			
7.770	1	1	5.00000	77.99952	6.41030e-2			>C12 to C16 (Hexadecane)
		2	10.00000	155.48123	6.43164e-2			
		3	25.00000	413.20175	6.05031e-2			
		4	50.00000	761.03015	6.57004e-2			
		5	100.00000	1571.01819	6.36530e-2			
		6	250.00000	3996.42700	6.25559e-2			
10.328	1	1	5.00000	79.29582	6.30550e-2			>C16 to C21 (Heneicosane)
		2	10.00000	157.68881	6.34160e-2			
		3	25.00000	416.75101	5.99879e-2			
		4	50.00000	768.79663	6.50367e-2			
		5	100.00000	1589.27686	6.29217e-2			
		6	250.00000	4023.17139	6.21400e-2			
12.019	1	1	5.00000	135.37503	3.69344e-2			C25 (Pentacosane)
		2	10.00000	234.71887	4.26042e-2			
		3	25.00000	692.62238	3.60947e-2			
		4	50.00000	1009.36121	4.95363e-2			

RetTime [min]	Sig	Lvl	Amount [ng/ul]	Area	Amt/Area	Ref	Grp	Name
		5	100.00000	2305.87939	4.33674e-2			
		6	250.00000	5842.31250	4.27913e-2			
15.793	1	1	5.00000	55.91528	8.94210e-2			>C21 to C34 (tetratricontane)
		2	10.00000	119.10243	8.39613e-2			
		3	25.00000	333.01031	7.50727e-2			
		4	50.00000	719.92847	6.94513e-2			
		5	100.00000	1284.12134	7.78743e-2			
		6	250.00000	3291.06689	7.59632e-2			

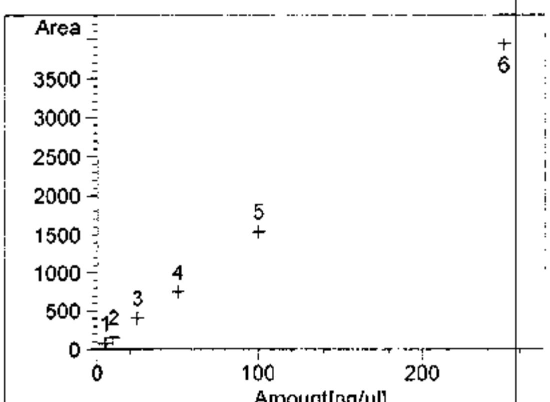
Peak Sum Table

No Entries in table

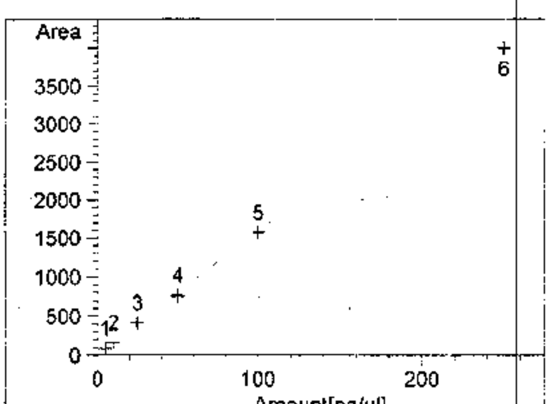
Calibration Curves



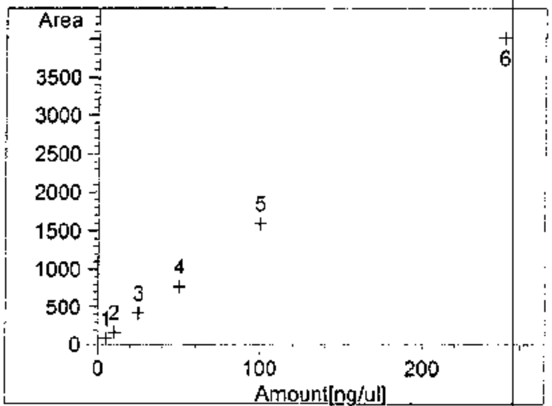
C8-C10 (Decane) at exp. RT: 3.532
FID2 B,
Correlation: 0.99989
Residual Std. Dev.: 22.71671
Formula: y = mx + b
m: 15.79056
b: -10.12734
x: Amount [ng/ul]
y: Area



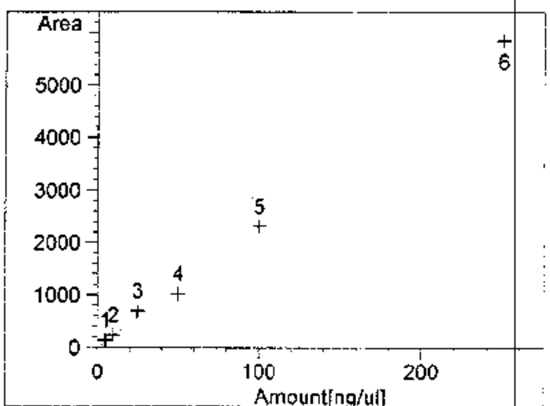
>C10 to C12 (Dodecane at exp. RT: 5.157
FID2 B,
Correlation: 0.99991
Residual Std. Dev.: 21.08881
Formula: y = mx + b
m: 15.72885
b: -9.03938
x: Amount [ng/ul]
y: Area



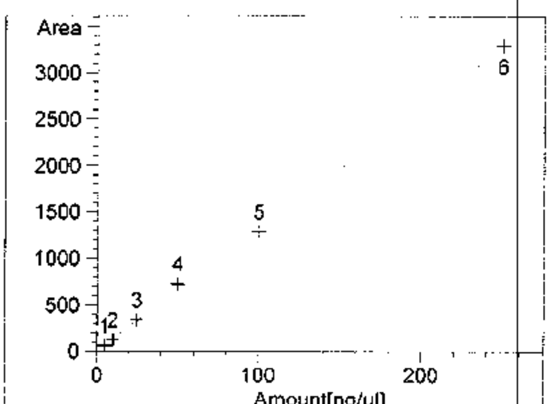
>C12 to C16 (Hexadecane) at exp. RT: 7.770
FID2 B,
Correlation: 0.99992
Residual Std. Dev.: 19.64328
Formula: y = mx + b
m: 15.97111
b: -7.44739
x: Amount [ng/ul]
y: Area



>C16 to C21 (Heneicosane) at exp. RT: 10.328
FID2 B,
Correlation: 0.99994
Residual Std. Dev.: 17.87337
Formula: y = mx + b
m: 16.08043
b: -5.77255
x: Amount[ng/ul]
y: Area



C25 (Pentacosane) at exp. RT: 12.019
FID2 B,
Correlation: 0.99928
Residual Std. Dev.: 86.51729
Formula: y = mx + b
m: 23.27907
b: -3.21712
x: Amount[ng/ul]
y: Area

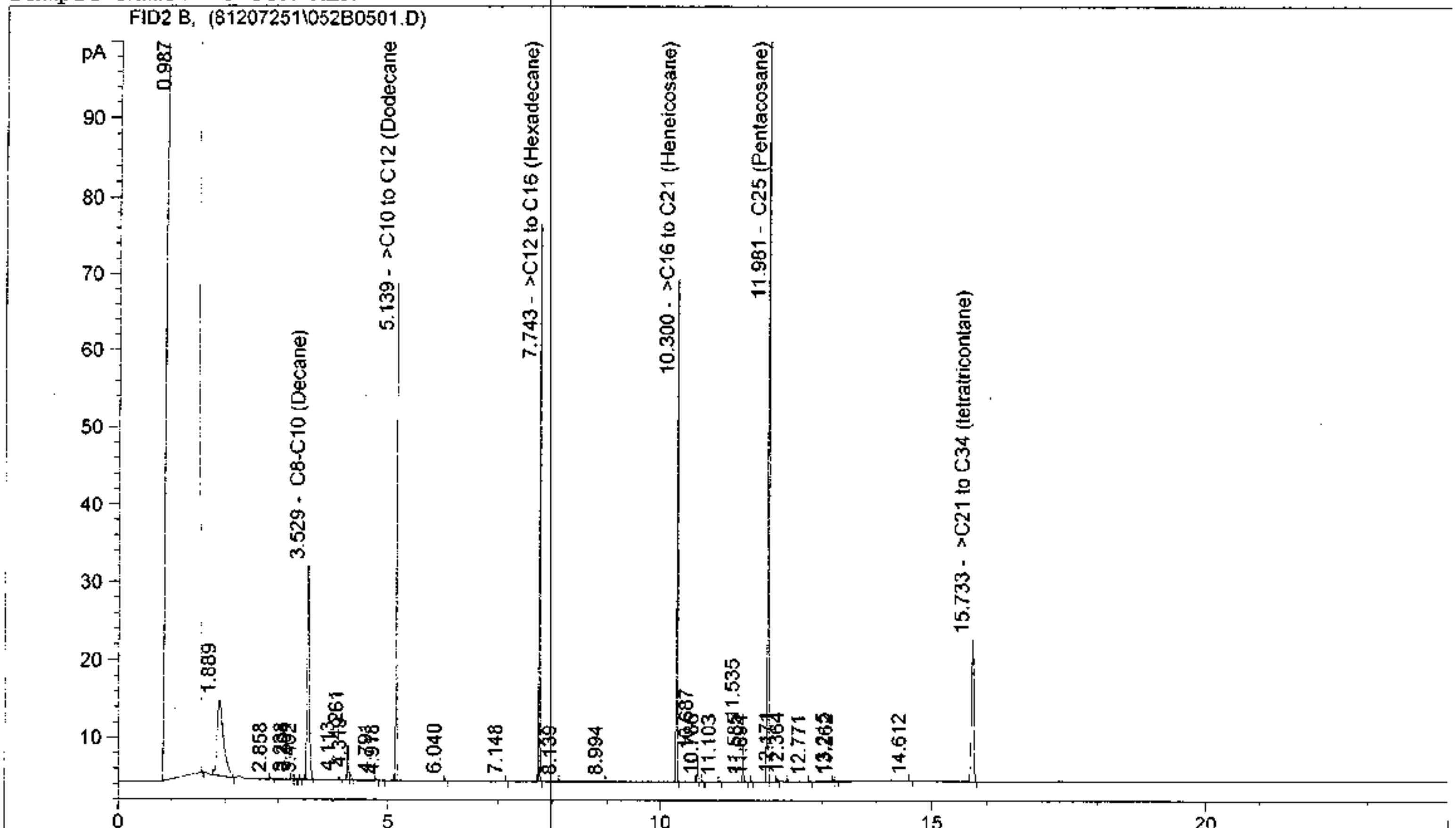


>C21 to C34 (tetratricontane) at exp. RT: 15.793
FID2 B,
Correlation: 0.99969
Residual Std. Dev.: 31.90332
Formula: y = mx + b
m: 13.14545
b: 2.73552
x: Amount[ng/ul]
y: Area

==

Instrument #98 Data File: C:\HPCHEM\1\DATA\81207251\052B0501.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\BEPH0712.M
Injection Date & Time: 7/25/2012 9:17:17 AM 7/25/2012 9:17:17 AM
Report Creation: 7/25/2012 12:50:28 PM

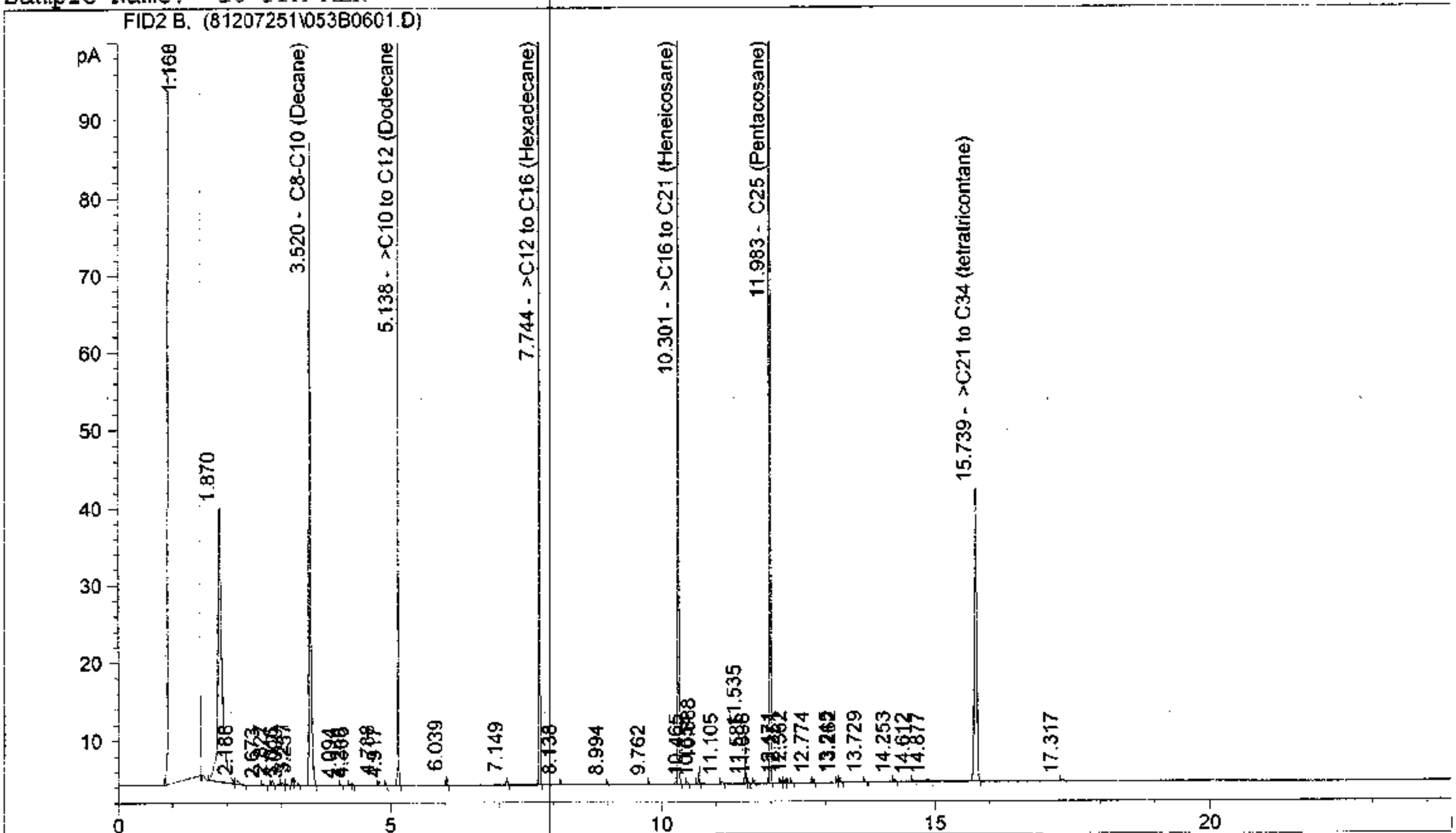
Sample Name: 5 PPM ALK



Ret. Time	Signal	Compound Name	Response	Amount ug/mL
3.529	FID2 B,	C8-C10 (Decane)	75.721	5.437
5.139		>C10 to C12 (Dodecan	75.696	5.387
7.743		>C12 to C16 (Hexadec	78.000	5.350
10.300		>C16 to C21 (Heneico	79.296	5.290
11.981		C25 (Pentacosane)	135.375	5.954
15.733		>C21 to C34 (tetratr	55.915	4.045

Instrument #98   Data File: C:\HPCHEM\1\DATA\81207251\053B0601.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\BEPH0712.M
Injection Date & Time: 7/25/2012 9:47:30 AM   7/25/2012 9:47:30 AM
Report Creation: 7/25/2012   12:49:54 PM

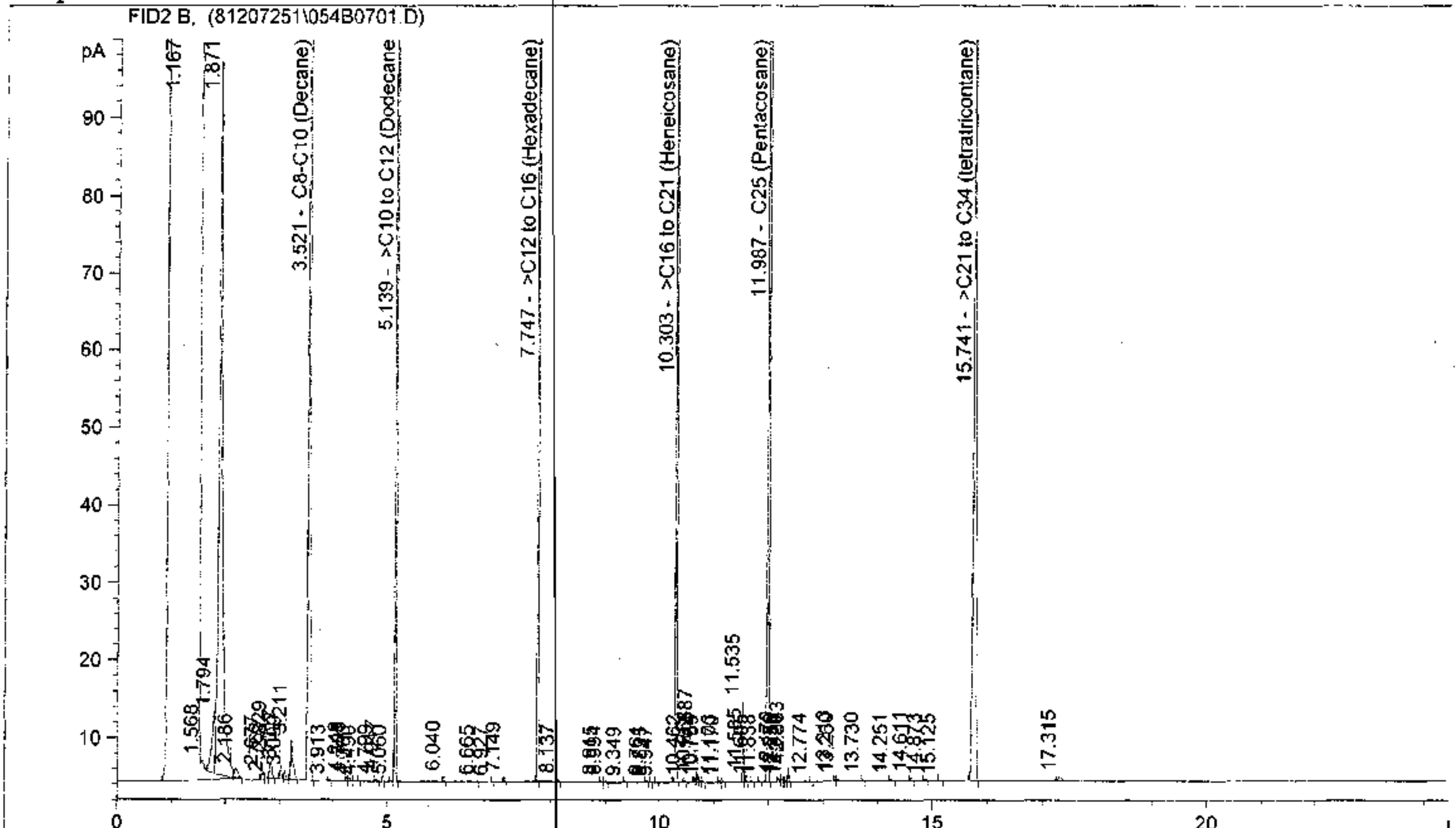
Sample Name: 10 PPM ALK



Ret. Time	Signal	Compound Name	Response	Amount ug/mL
3.520	FID2 B,	C8-C10 (Decane)	152.964	10.328
5.138		>C10 to C12 (Dodecan	152.145	10.248
7.744		>C12 to C16 (Hexadec	155.481	10.201
10.301		>C16 to C21 (Heneico	157.689	10.165
11.983		C25 (Pentacosane)	234.719	10.221
15.739		>C21 to C34 (tetratr	119.102	8.852

```
Instrument #98       Data File: C:\HPCHEM\1\DATA\81207251\054B0701.D
Operator:   EBS
Method:     C:\HPCHEM\1\METHODS\BEPH0712.M
Injection Date & Time: 7/25/2012 10:17:48 AM     7/25/2012 10:17:48 AM
Report Creation:       7/25/2012              12:54:21 PM
```

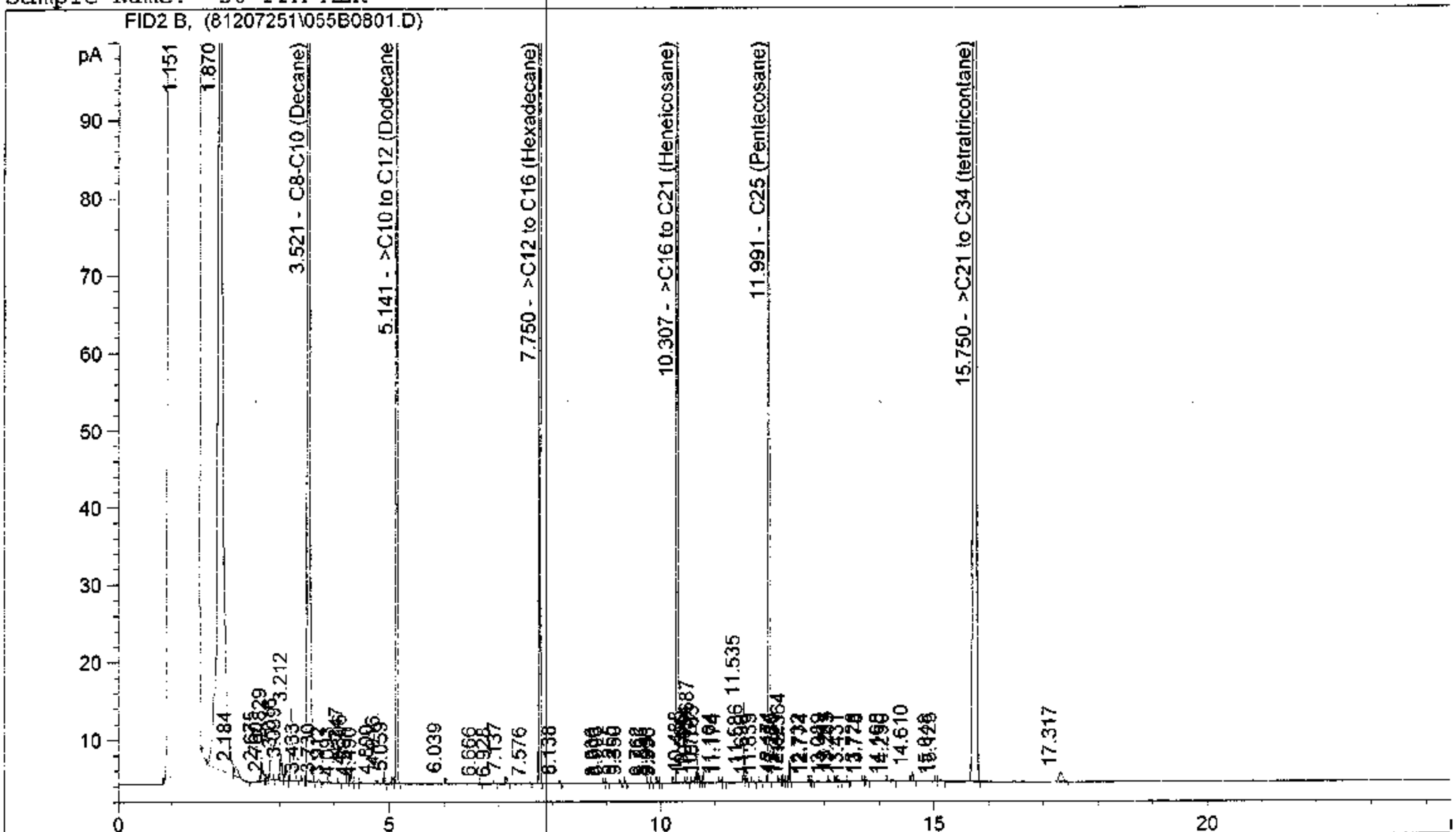
Sample Name: 25 PPM ALK



Ret. Time	Signal	Compound Name	Response	Amount ug/mL
3.521	FID2 B,	C8-C10 (Decane)	406.313	26.373
5.139		>C10 to C12 (Dodecan	405.449	26.352
7.747		>C12 to C16 (Hexadec	413.202	26.338
10.303		>C16 to C21 (Heneico	416.751	26.276
11.987		C25 (Pentacosane)	692.622	29.891
15.741		>C21 to C34 (tetratr	333.010	25.125

Instrument #98   Data File: C:\HPCHEM\1\DATA\81207251\055B0801.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\BEPH0712.M
Injection Date & Time: 7/25/2012 10:48:01 AM   7/25/2012 10:48:01 AM
Report Creation: 7/25/2012   12:50:53 PM

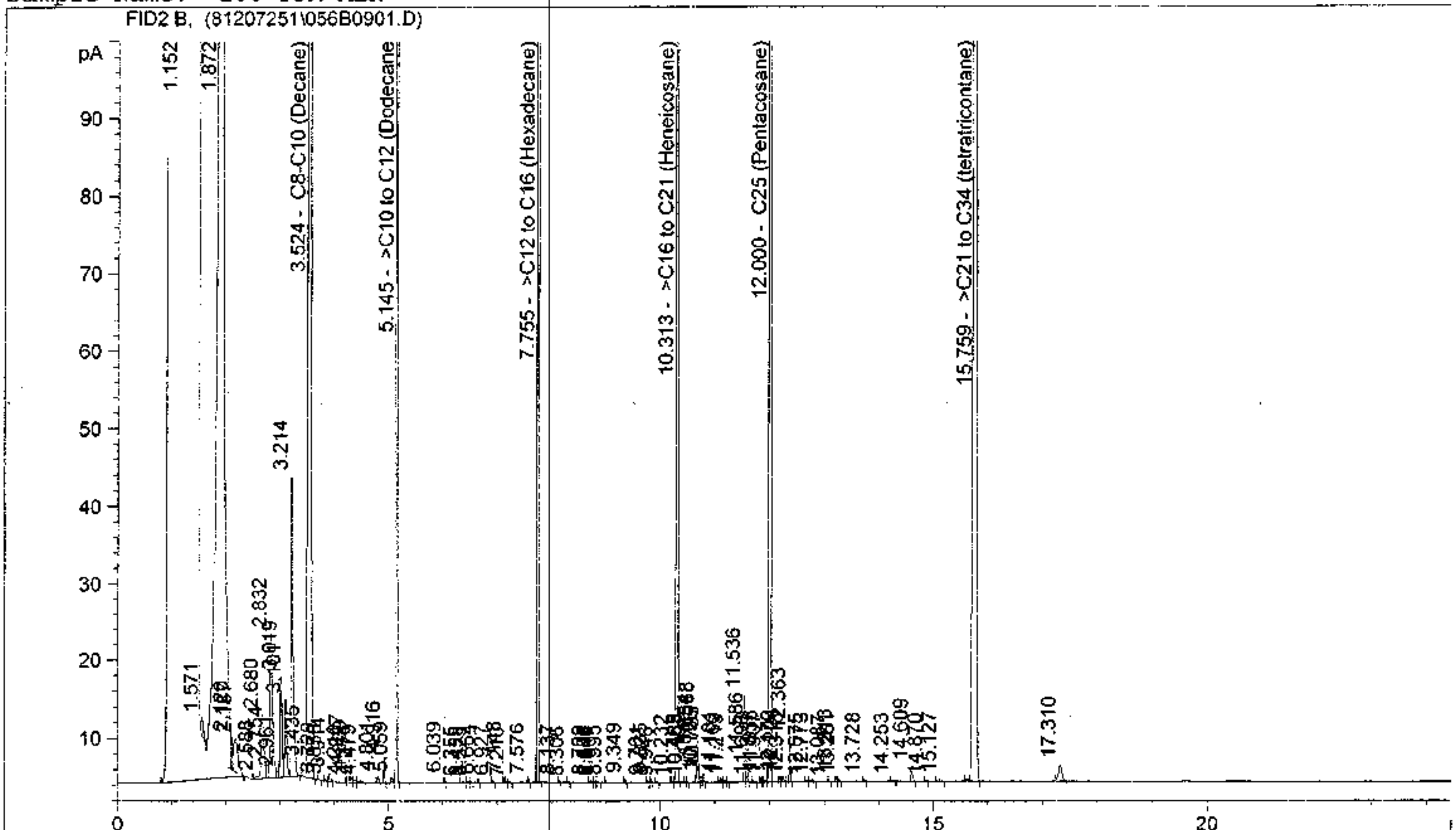
Sample Name: 50 PPM ALK



Ret. Time	Signal	Compound Name	Response	Amount ug/mL
3.521	FID2 B,	C8-C10 (Decane)	748.028	48.013
5.141		>C10 to C12 (Dodecan	749.588	48.232
7.750		>C12 to C16 (Hexadec	761.030	48.117
10.307		>C16 to C21 (Heneico	768.797	48.168
11.991		C25 (Pentacosane)	1009.361	43.497
15.750		>C21 to C34 (tetratr	719.928	54.558

Instrument #98 Data File: C:\HPCHEM\1\DATA\81207251\056B0901.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\BEPH0712.M
Injection Date & Time: 7/25/2012 11:18:23 AM 7/25/2012 11:18:23 AM
Report Creation: 7/25/2012 12:51:08 PM

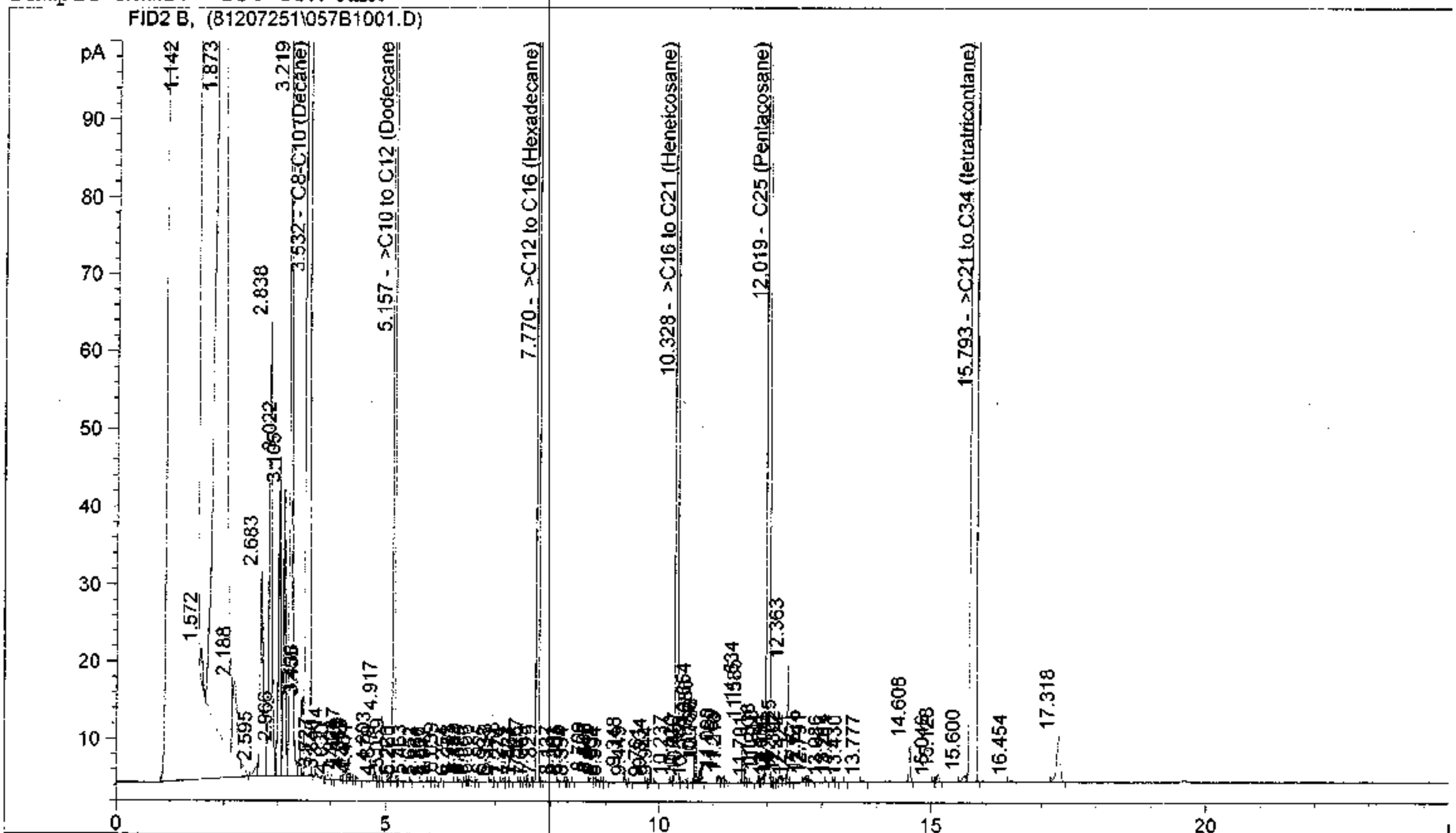
Sample Name: 100 PPM ALK



Ret. Time	Signal	Compound Name	Response	Amount ug/mL
3.524	FID2 B,	C8-C10 (Decane)	1541.806	98.282
5.145		>C10 to C12 (Dodecan	1537.784	98.343
7.755		>C12 to C16 (Hexadec	1571.018	98.833
10.313		>C16 to C21 (Heneico	1589.277	99.192
12.000		C25 (Pentacosane)	2305.879	99.192
15.759		>C21 to C34 (tetratr	1284.121	97.478

Instrument #98 Data File: C:\HPCHEM\1\DATA\81207251\057B1001.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\BEPH0712.M
Injection Date & Time: 7/25/2012 11:48:42 AM 7/25/2012 11:48:42 AM
Report Creation: 7/25/2012 12:51:22 PM

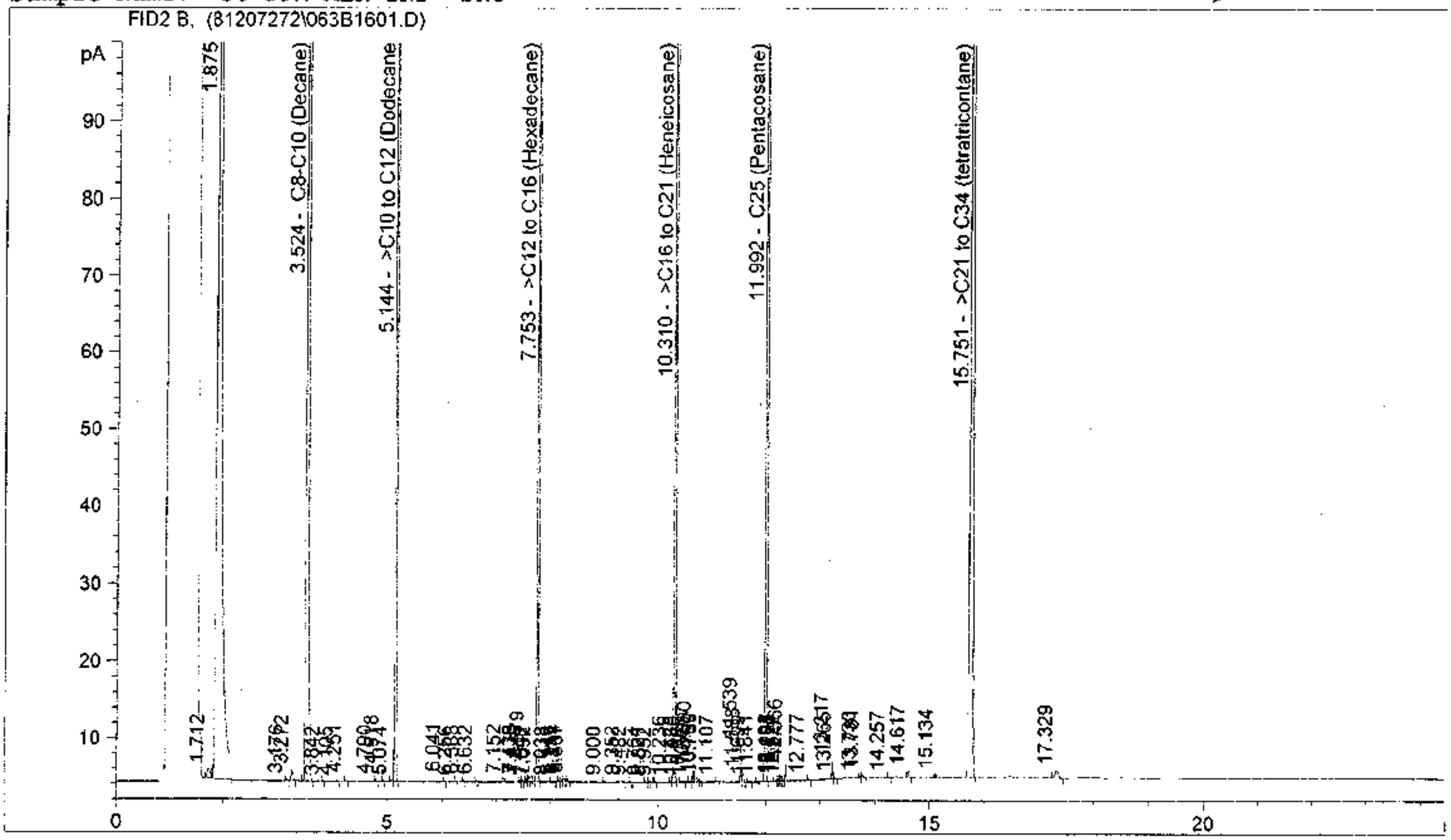
Sample Name: 250 PPM ALK



Ret. Time	Signal	Compound Name	Response	Amount ug/mL
3.532	FID2 B,	C8-C10 (Decane)	3952.124	250.925
5.157		>C10 to C12 (Dodecan	3936.756	250.864
7.770		>C12 to C16 (Hexadec	3996.427	250.695
10.328		>C16 to C21 (Heneico	4023.171	250.550
12.019		C25 (Pentacosane)	5842.312	251.107
15.793		>C21 to C34 (tetratr	3291.067	250.150

Instrument #98 Data File: C:\HPCHEM\1\DATA\81207272\063B1601.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\BEPH0712.M
Injection Date & Time: 7/27/2012 5:36:34 PM 7/27/2012 5:36:34 PM
Report Creation: 7/30/2012 10:50:46 AM

Sample Name: 50 PPM ALK 2ND SRC ->



Ret. Time	Signal	Compound Name	Response	Amount ug/mL
3.524	FID2 B,	C8-C10 (Decane)	793.521	50.894
5.144		>C10 to C12 (Dodecan	790.767	50.850
7.753		>C12 to C16 (Hexadec	808.856	51.111
10.310		>C16 to C21 (Heneico	830.156	51.984
11.992		C25 (Pentacosane)	809.638	34.918
15.751		>C21 to C34 (tetratr	562.305	42.568

ALS LABORATORY GROUP - EVERETT
DATA SUMMARY SHEET

PARAMETER: SEMIVOLATILES INSTR. MTHD: NWTPH-DX EXTRCT MTHD: NWTPH-DX

QC BATCH #: DW021913 1ST ANAL. SEQ 81302191

EXT. DATES 2/19/2013 MATRIX H20

ASSOCIATED SAMPLES EV13020091-1-7,10-12

BLANK AND DUPLICATE RESULTS

ANALYTE:	BLANK RESULTS:	DUPLICATE:	ORIGINAL:	%RPD:
DIESEL	<130ug/L			
MOTOR OIL	<250ug/L			

SPIKE/ SPIKE DUPLICATE RESULTS

SPIKE ID	AMOUNT SPIKED	BLANK SPIKE %RECOVERY	MATRIX SPIKE %RECOVERY	BLANK SPIKE DUP %RECOVERY	REL % DIFF
DIESEL	1.25 mg/L	87%		85%	2%
PENTACOSANE	0.1mg/L	86%		96%	11%

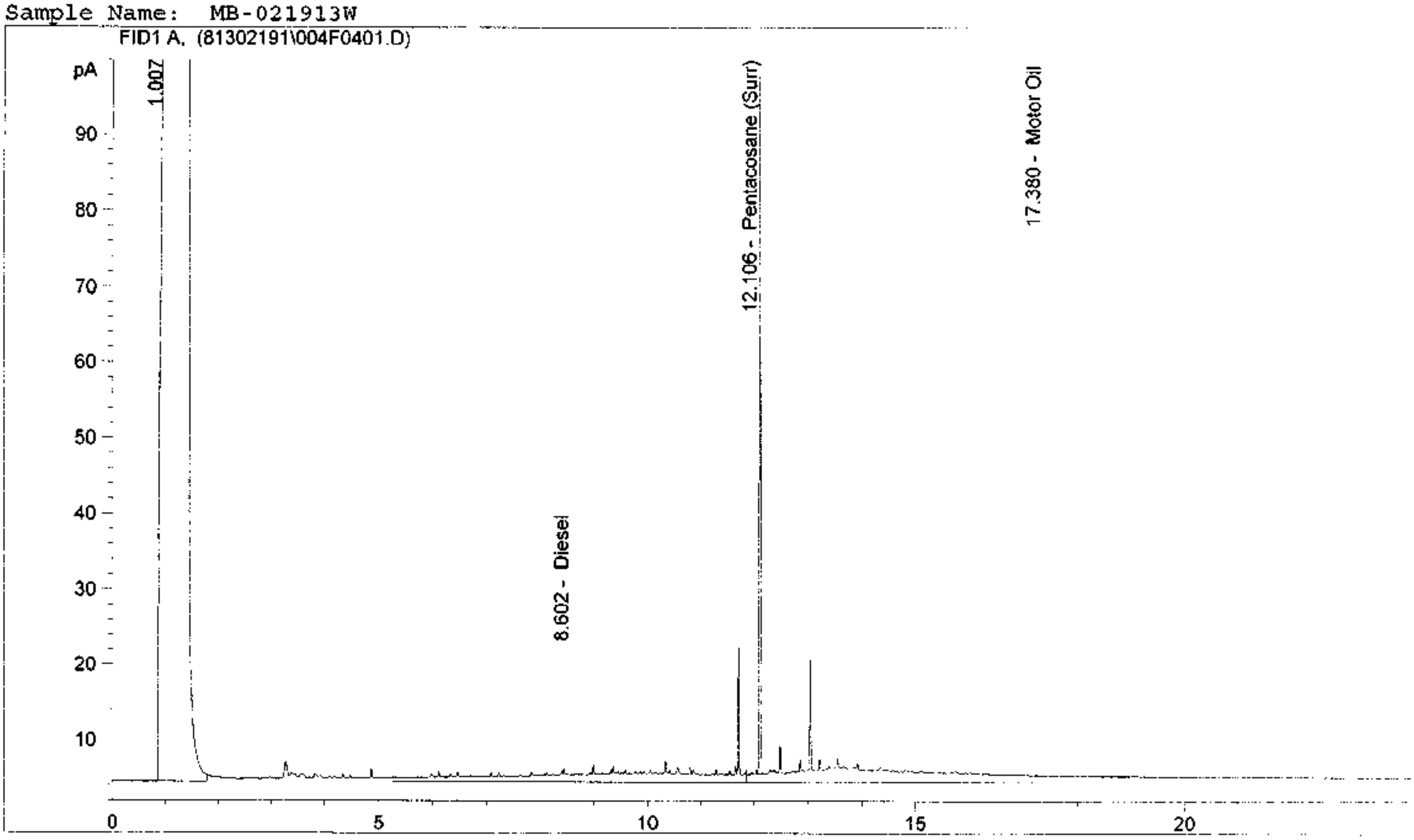
NOTES: IF NUMBER OF ANALYTES DON'T ALLOW LISTING ALL COMPOUNDS, THE RAW DATA MAY BE SUBMITTED

RAW DATA FOR QC RUN ON A SPECIFIC SAMPLE SHOULD BE INCLUDED WITH ORIGINAL SAMPLE ANALYSIS RAW DATA

DATASUM.XLS

Instrument #98   Data File: C:\HPCHEM\1\DATA\81302191\004F0401.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\FDMO0213.M
Injection Date & Time: 2/19/2013 1:35:41 PM   2/19/2013 1:35:41 PM
Report Creation: 2/20/2013   10:20:48 AM

Sample Name: MB-021913W



Ret. Time	Signal	Compound Name	Response	Amount ug/mL	
8.602	FID1 A,	Diesel	380.980	28.974	
12.106		Pentacosane (Surr)	805.340	34.644	87%
17.380		Motor Oil	721.393	62.869	

D < 50 ug/mL x $\frac{1.0 mL}{400 mL}$ < 130 ug/L

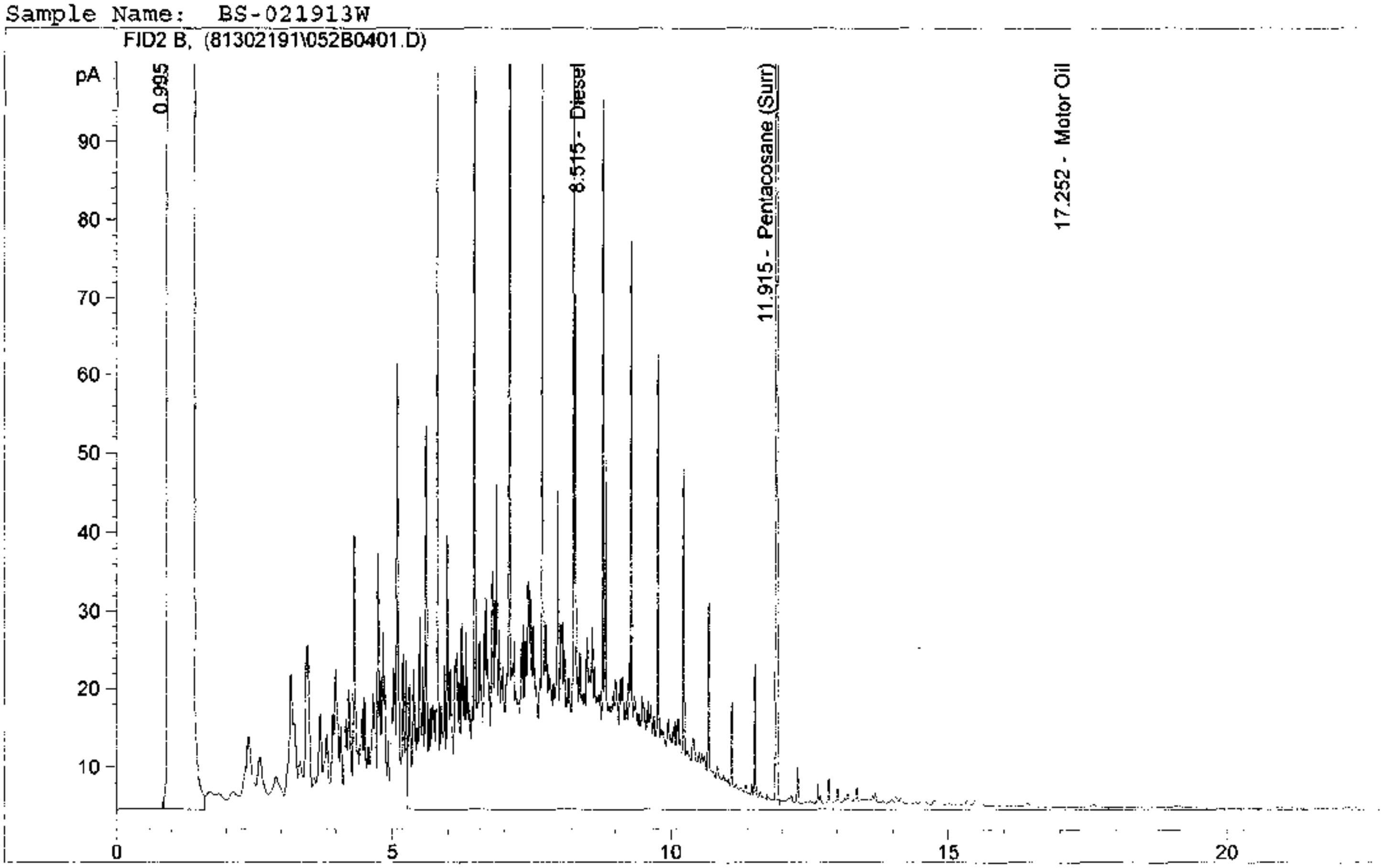
O < 100 ug/mL x $\frac{1.0 mL}{400 mL}$ < 250 ug/L

REVIEWED BY & DATE [initials] 2/25/13

02·20·13a

Instrument #98 Data File: C:\HPCHEM\1\DATA\81302191\052B0401.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\BDMO0213.M
Injection Date & Time: 2/19/2013 1:35:41 PM 2/19/2013 1:35:41 PM
Report Creation: 2/20/2013 10:12:15 AM

Sample Name: BS-021913W



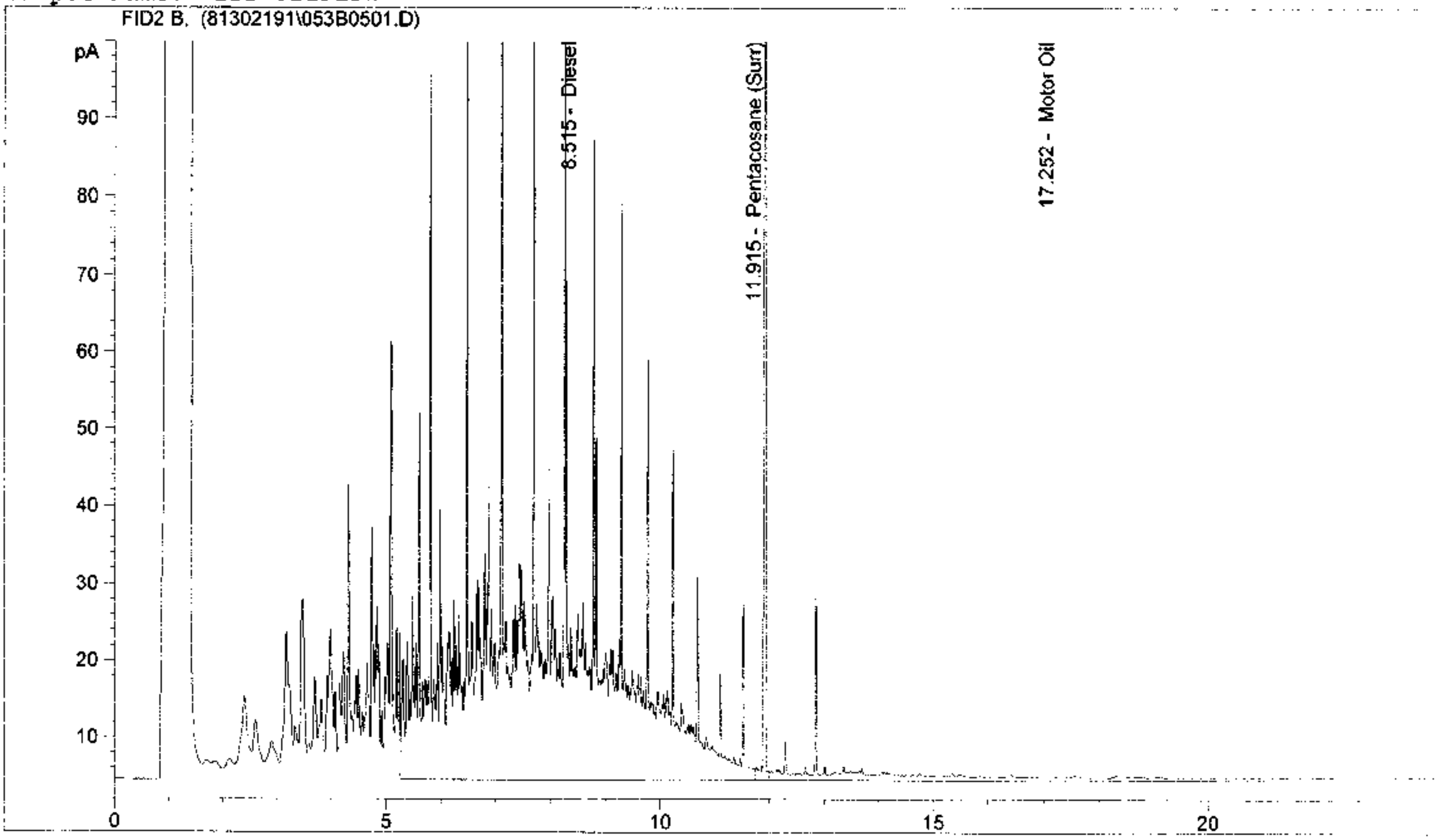
Ret. Time	Signal	Compound Name	Response	Amount ug/mL
8.515	FID2 B,	Diesel	5675.808	432.752 87
11.915		Pentacosane (Surr)	784.313	34.428 86
17.252		Motor Oil	361.421	29.351

REVIEWED BY & DATE MS 2/25/13

02.20.13EB

Instrument #98 Data File: C:\HPCHEM\1\DATA\81302191\053B0501.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\BDMO0213.M
Injection Date & Time: 2/19/2013 4:03:42 PM 2/19/2013 4:03:42 PM
Report Creation: 2/20/2013 10:12:36 AM

Sample Name: BSD-021913W



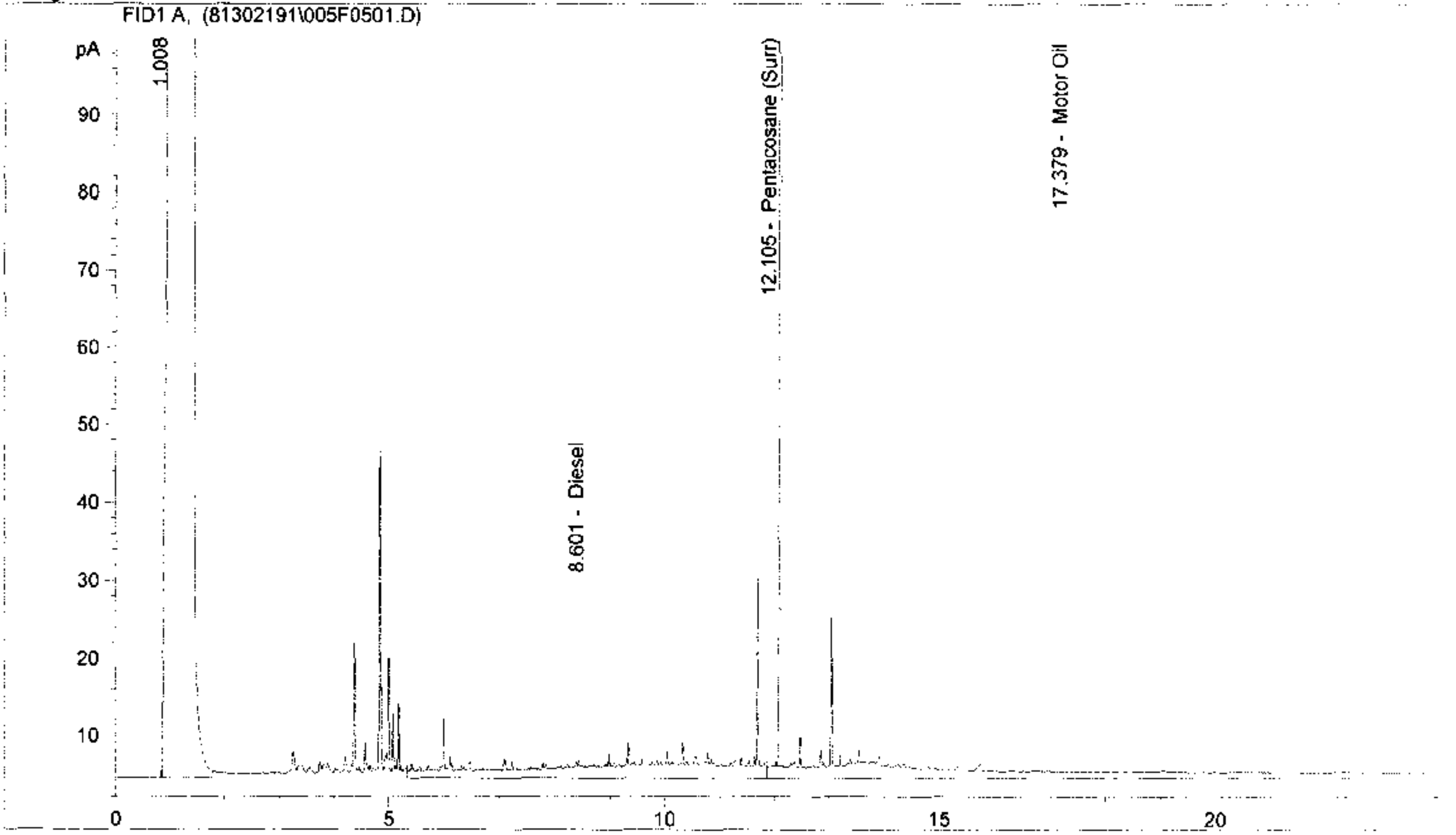
Ret. Time	Signal	Compound Name	Response	Amount ug/mL	
8.515	FID2 B,	Diesel	5578.125	425.304	85 %
11.915		Pentacosane (Surr)	876.453	38.473	96 %
17.252		Motor Oil	403.158	32.740	

REVIEWED BY NB
& DATE 2/25/13

02.20.13 E

Instrument #98 Data File: C:\HPCHEM\1\DATA\81302191\005F0501.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\FDMO0213.M
Injection Date & Time: 2/19/2013 4:03:42 PM 2/19/2013 4:03:42 PM
Report Creation: 2/20/2013 10:22:37 AM

Sample Name: EV13020091-01 W



Ret. Time	Signal	Compound Name	Response	Amount ug/mL
8.601	FID1 A,	Diesel	621.626	47.275
12.105		Pentacosane (Surr)	819.388	35.248 88%
17.379		Motor Oil	732.909	63.872

D <130 ug/L

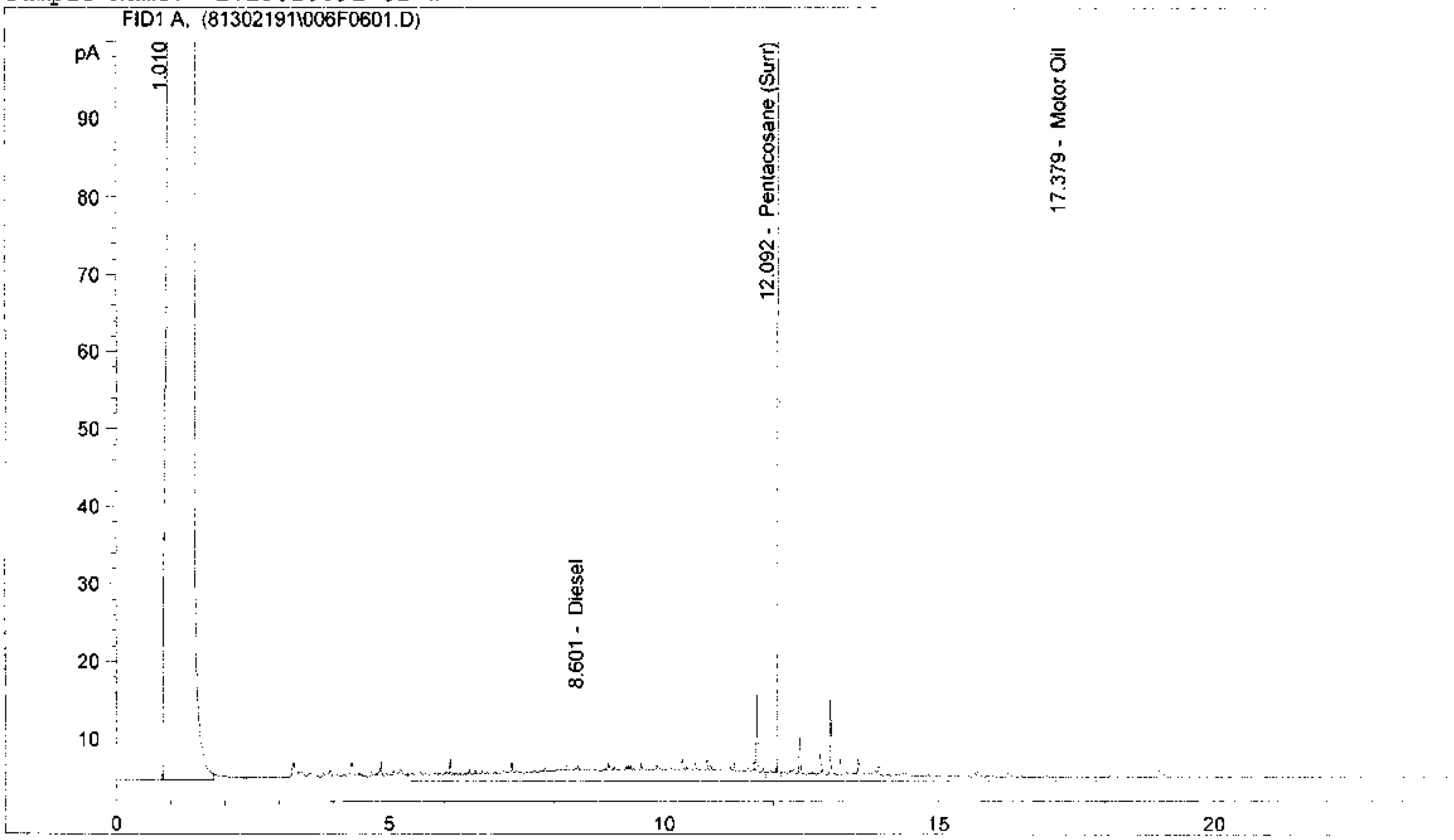
O <250 ug/L

REVIEWED BY & DATE 2/25/13

02-20-13

Instrument #98   Data File: C:\HPCHEM\1\DATA\81302191\006F0601.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\FDMO0213.M
Injection Date & Time: 2/19/2013 4:33:48 PM   2/19/2013 4:33:48 PM
Report Creation: 2/20/2013   10:22:54 AM

Sample Name: EV13020091-02 W



Ret. Time	Signal	Compound Name	Response	Amount ug/mL
8.601	FID1 A,	Diesel	502.030	38.180
12.092		Pentacosane (Surr)	766.493	32.973 82%
17.379		Motor Oil	432.693	37.709

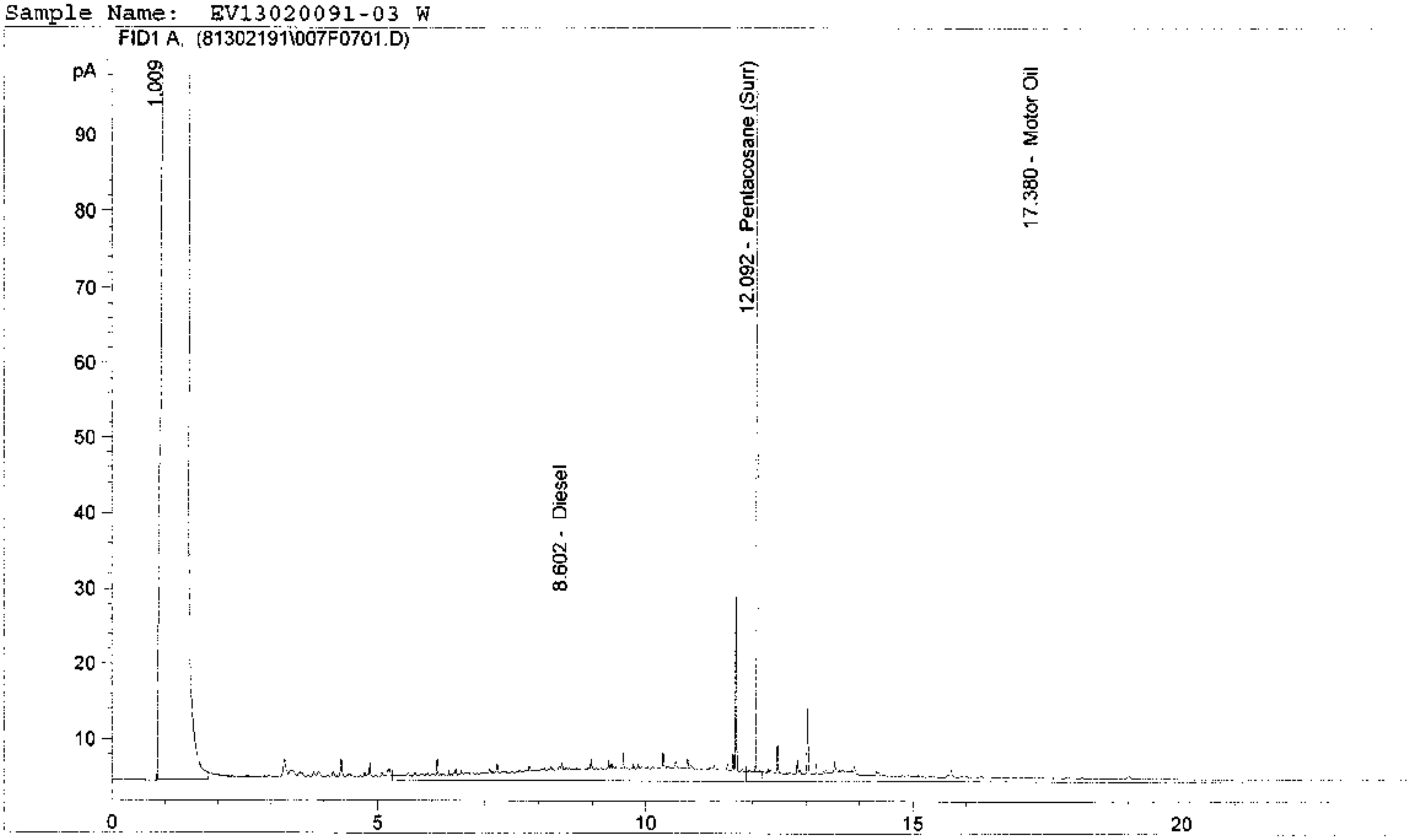
D <130 ug/L
O <250 ug/L

REVIEWED BY & DATE EB 2/25/13

02.21.13 ES

Instrument #98 Data File: C:\HPCHEM\1\DATA\81302191\007F0701.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\FDMO0213.M
Injection Date & Time: 2/19/2013 5:03:59 PM 2/19/2013 5:03:59 PM
Report Creation: 2/20/2013 10:23:12 AM

Sample Name: EV13020091-03 W



Ret. Time	Signal	Compound Name	Response	Amount ug/mL	
8.602	FID1 A,	Diesel	568.222	43.214	
12.092		Pentacosane (Surr)	784.035	33.727	84%
17.380		Motor Oil	420.221	36.622	

D <130 ug/L

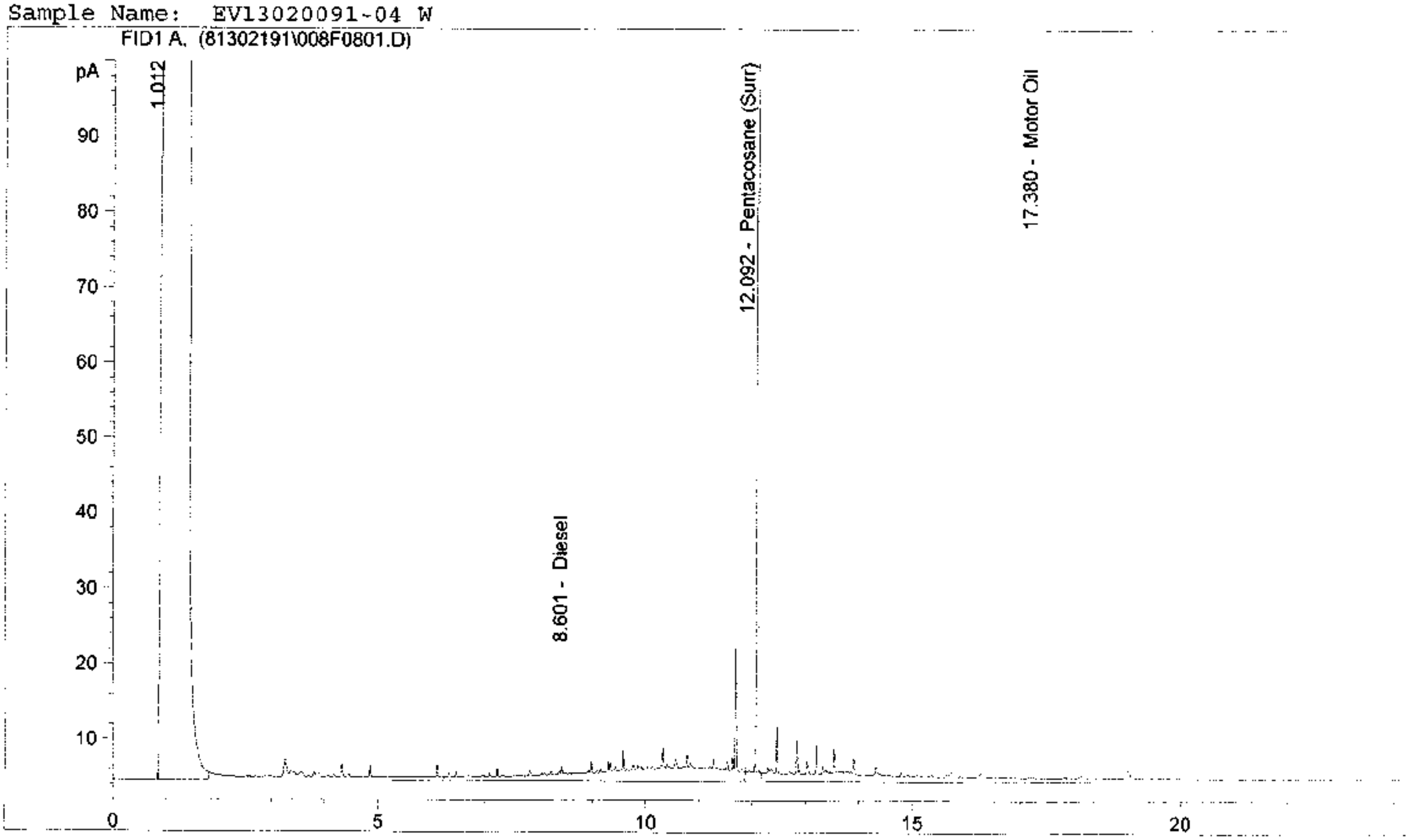
O <250 ug/L

REVIEWED BY & DATE MB 2/25/13

02-20-13 ET

Instrument #98   Data File: C:\HPCHEM\1\DATA\81302191\008F0801.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\FDMO0213.M
Injection Date & Time: 2/19/2013 5:34:03 PM   2/19/2013 5:34:03 PM
Report Creation: 2/20/2013   10:23:30 AM

Sample Name: EV13020091-04 W



Ret. Time	Signal	Compound Name	Response	Amount ug/mL	
8.601	FID1 A,	Diesel	465.850	35.428	
12.092		Pentacosane (Surr)	803.586	34.568	86%
17.380		Motor Oil	500.762	43.641	

D < 130 ug/L

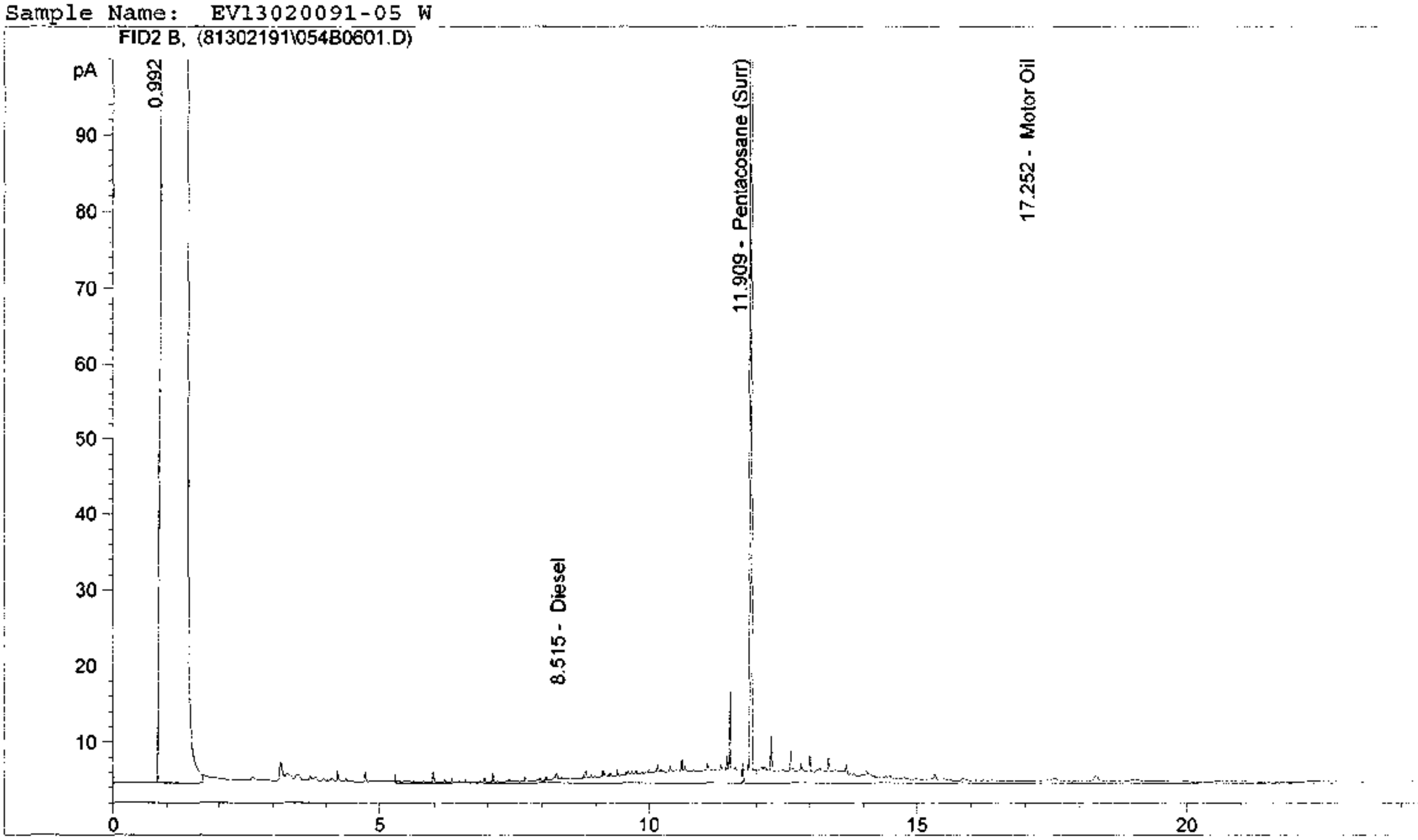
O < 250 ug/L

REVIEWED BY AB
& DATE 2/25/13

02.20.13 EJ

Instrument #98 Data File: C:\HPCHEM\1\DATA\81302191\054B0601.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\BDMO0213.M
Injection Date & Time: 2/19/2013 4:33:48 PM 2/19/2013 4:33:48 PM
Report Creation: 2/20/2013 10:12:56 AM

Sample Name: EV13020091-05 W



Ret. Time	Signal	Compound Name	Response	Amount ug/mL	
8.515	FID2 B,	Diesel	329.240	25.103	
11.909		Pentacosane (Surr)	809.819	35.548	89%
17.252		Motor Oil	405.955	32.967	

D <130 ug/L

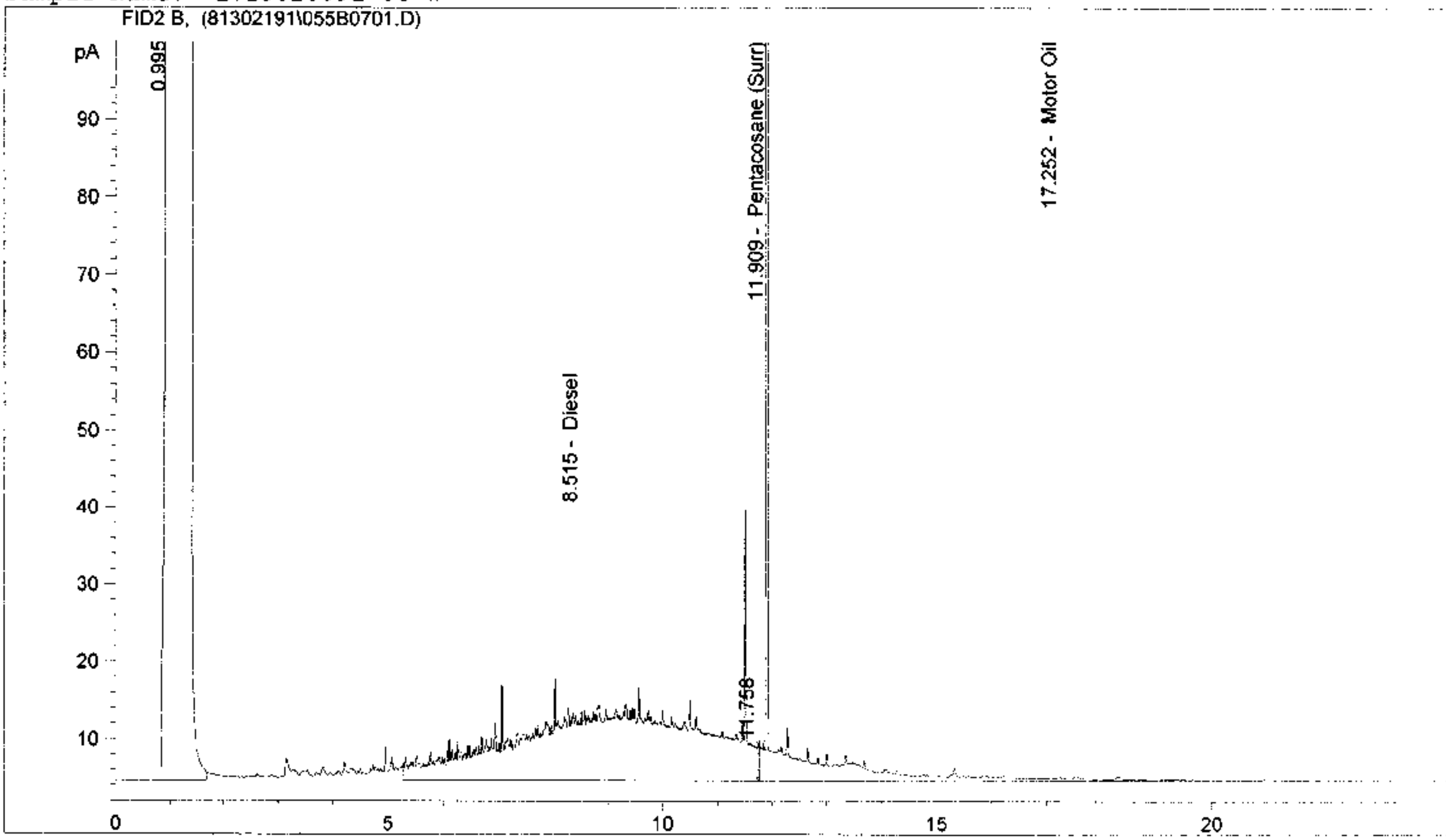
O <250 ug/L

REVIEWED BY & DATE IB 2/25/13

02.20.13 ES

Instrument #98 Data File: C:\HPCHEM\1\DATA\81302191\055B0701.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\BDMO0213.M
Injection Date & Time: 2/19/2013 5:03:59 PM 2/19/2013 5:03:59 PM
Report Creation: 2/20/2013 10:20:17 AM

Sample Name: EV13020091-06 W



Ret. Time	Signal	Compound Name	Response	Amount ug/mL
8.515	FID2 B,	Diesel	2278.585	173.731
11.909		Pentacosane (Surr)	806.242	35.391 88%
17.252		Motor Oil	525.306	42.659

D = 173.731 ug/mL × 1.0mL / 400mL = 430 ug/L Weathered Diesel Fuel

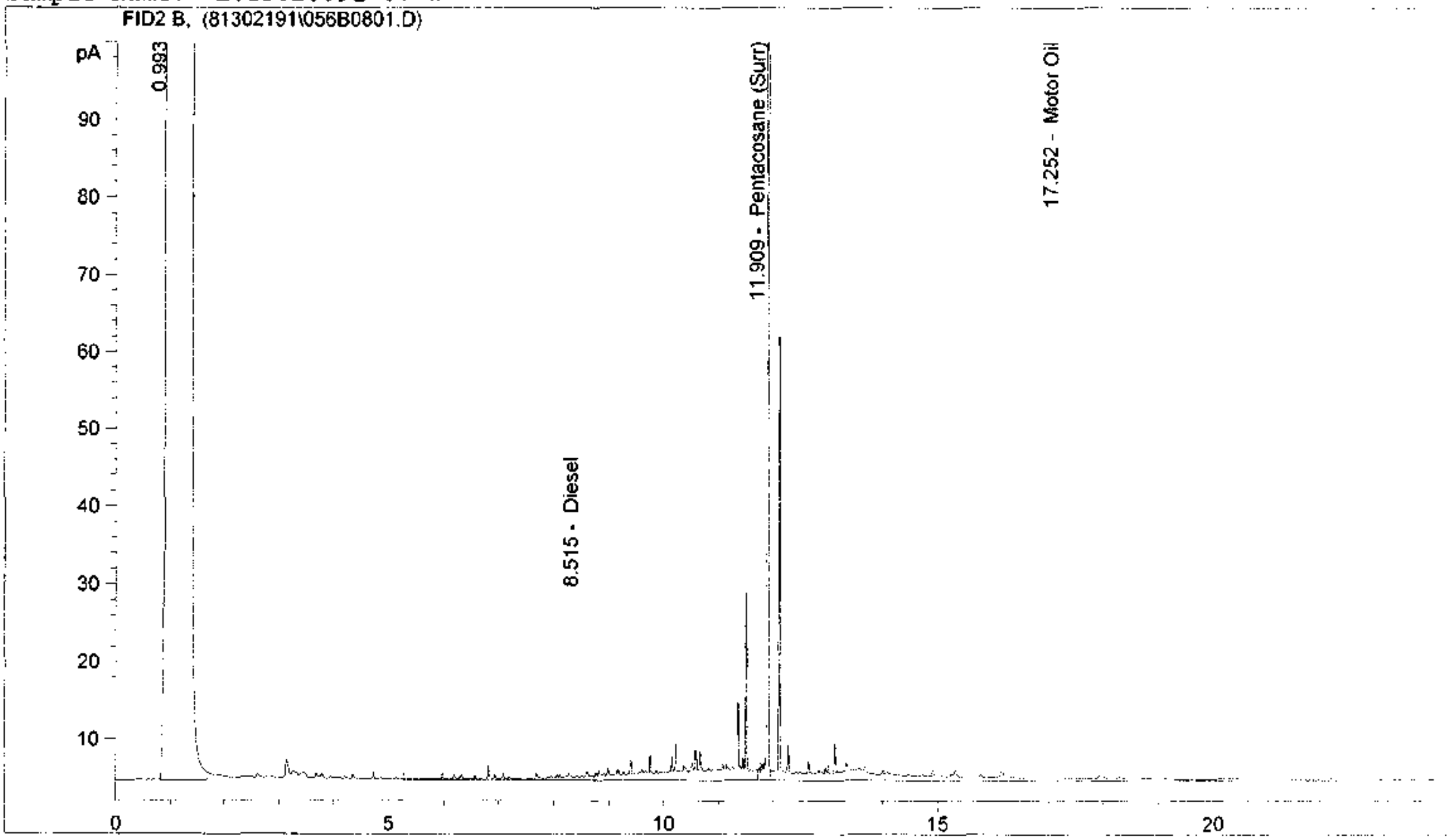
O < 252 ug/L

REVIEWED BY & DATE BB 2/25/13

02.20.13 ES

Instrument #98 Data File: C:\HPCHEM\1\DATA\81302191\056B0801.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\BDMO0213.M
Injection Date & Time: 2/19/2013 5:34:03 PM 2/19/2013 5:34:03 PM
Report Creation: 2/20/2013 10:19:29 AM

Sample Name: EV13020091-07 W



Ret. Time	Signal	Compound Name	Response	Amount ug/mL	
8.515	FID2 B,	Diesel	334.425	25.498	
11.909		Pentacosane (Surr)	809.946	35.553	89%
17.252		Motor Oil	419.018	34.028	

D <130 ug/L

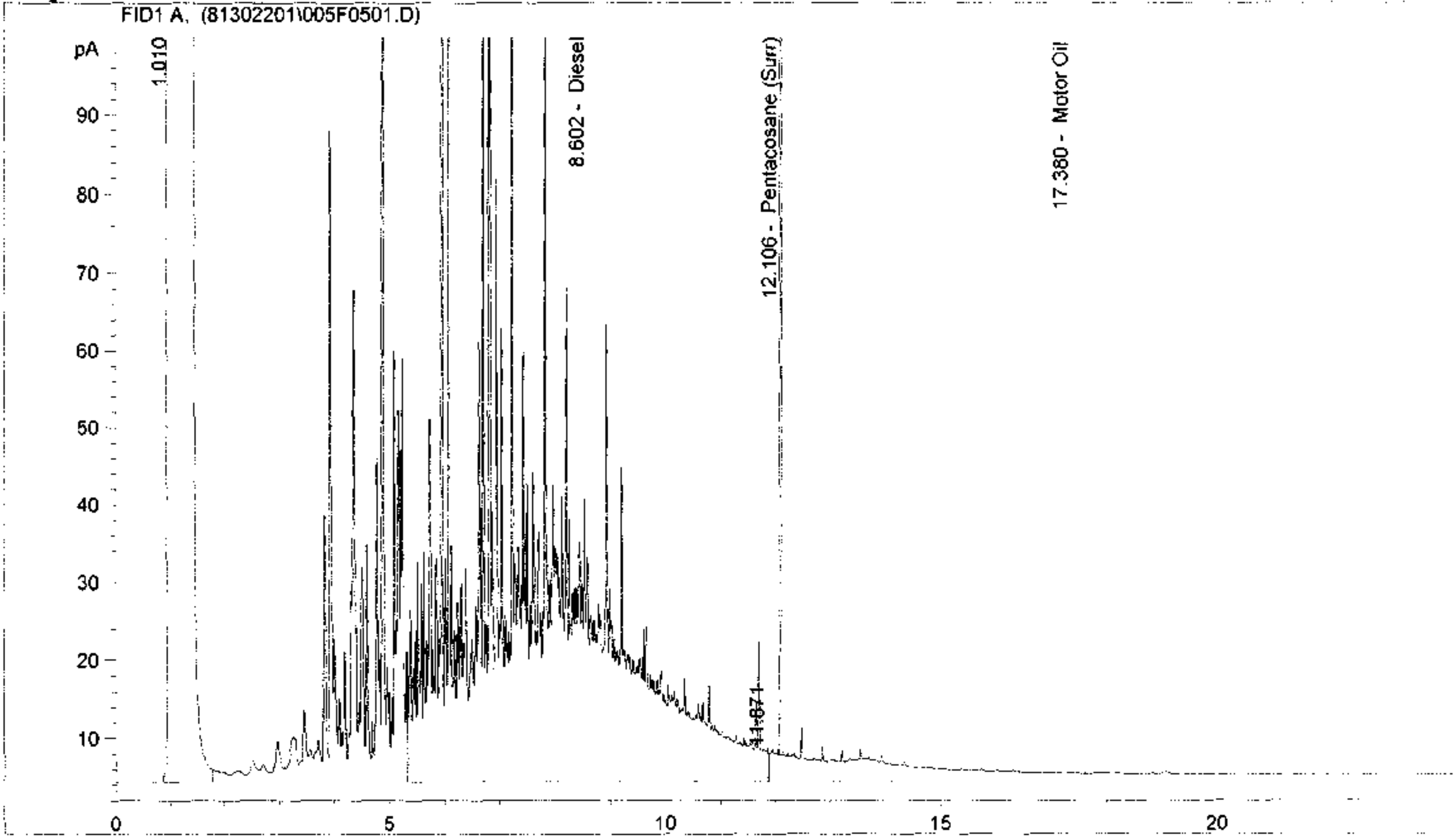
O <250 ug/L

REVIEWED BY & DATE BS 2/25/13

02.20.13 ES

Instrument #98   Data File: C:\HPCHEM\1\DATA\81302201\005F0501.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\FDMO0213.M
Injection Date & Time: 2/20/2013 11:44:10 AM   2/20/2013 11:44:10 AM
Report Creation: 2/21/2013   10:28:09 AM

Sample Name: EV13020091-10 RR SGA W



Ret. Time	Signal	Compound Name	Response	Amount ug/mL
8.602	FID1 A,	Diesel	7928.598	602.974
12.106		Pentacosane (Surr)	858.852	36.946 92%
17.380		Motor Oil	1014.660	88.426

$D = 602.974\ ug/mL \times \frac{1.0\ mL}{40.0\ mL} = 1500\ ug/L$ Weathered Diesel fuel or similar product

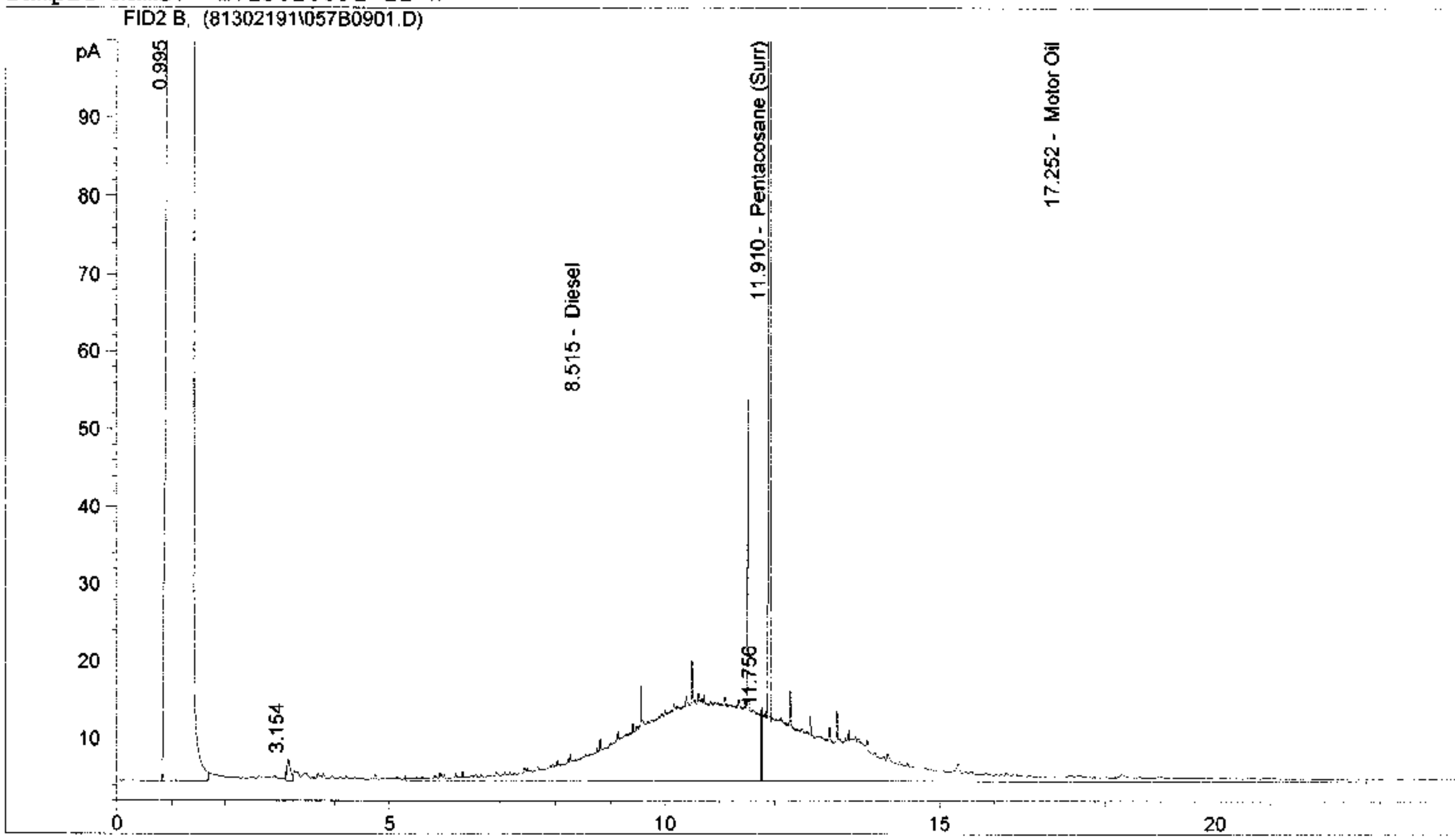
$O < 250\ ug/L$

REVIEWED BY & DATE JB 2/25/13

02.21.13 ES

Instrument #98 Data File: C:\HPCHEM\1\DATA\81302191\057B0901.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\BDMO0213.M
Injection Date & Time: 2/19/2013 6:06:32 PM 2/19/2013 6:06:32 PM
Report Creation: 2/20/2013 10:19:54 AM

Sample Name: EV13020091-11 W



Ret. Time	Signal	Compound Name	Response	Amount ug/mL	
8.515	FID2 B,	Diesel	1796.135	136.946	
11.910		Pentacosane (Surr)	841.579	36.942	92%
17.252		Motor Oil	1187.952	96.472	

$D = 136.946 \ \mu g/mL \times \frac{10 mL}{400 mL} = 340 \ \mu g/L$ Unidentified late Diesel Range Product

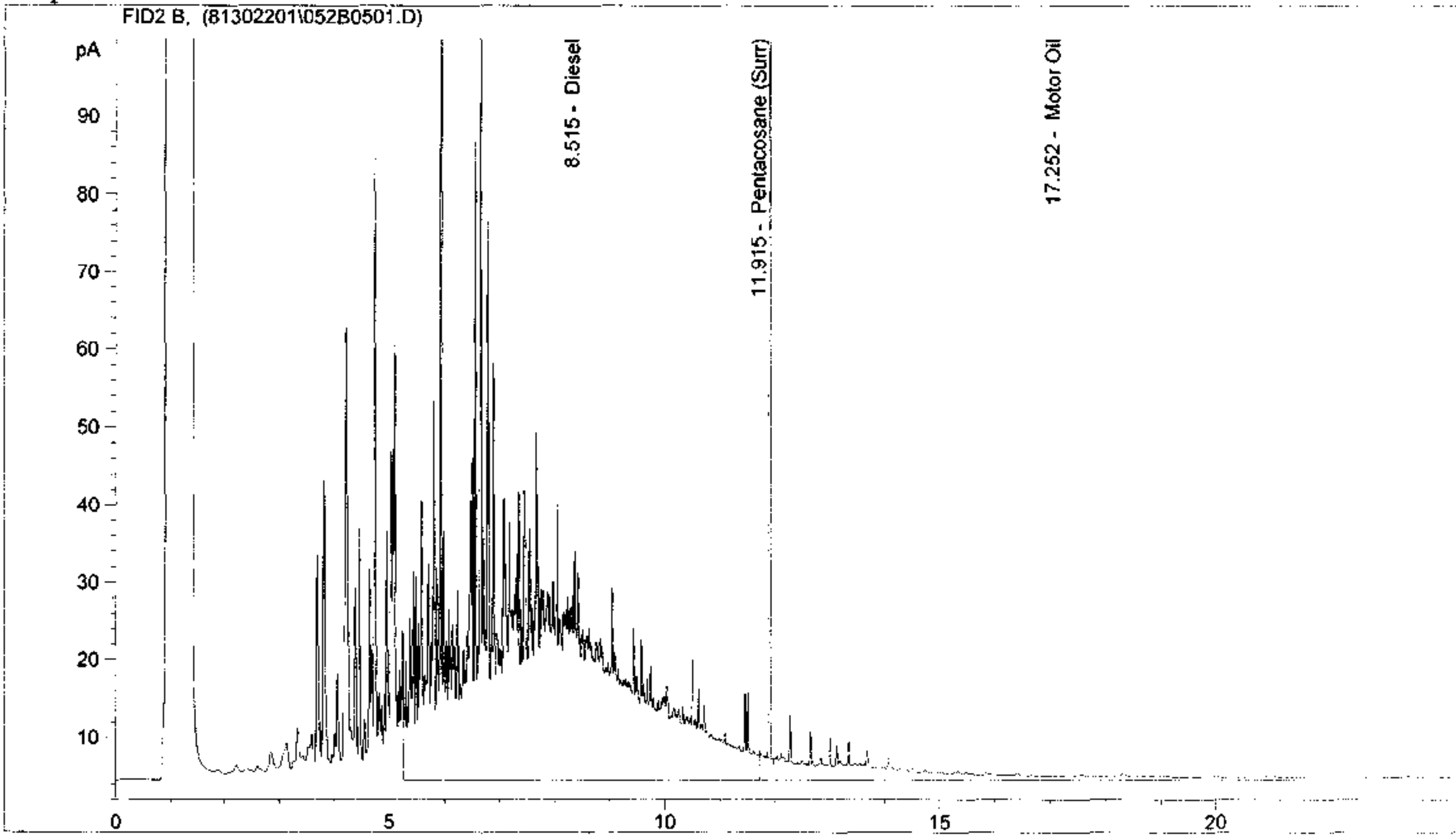
$O < 250 \ \mu g/L$

REVIEWED BY NB
DATE 2/25/13

02.20.13

Instrument #98   Data File: C:\HPCHEM\1\DATA\81302201\052B0501.D
Operator: EBS
Method: C:\HPCHEM\1\METHODS\BDMO0213.M
Injection Date & Time: 2/20/2013 11:44:11 AM   2/20/2013 11:44:11 AM
Report Creation: 2/22/2013   8:46:47 AM

Sample Name: EV13020091-12 RR   SGA W



Ret. Time	Signal	Compound Name	Response	Amount ug/mL	
8.515	FID2 B,	Diesel	6174.261	470.756	
11.915		Pentacosane (Surr)	810.415	35.574	89%
17.252		Motor Oil	648.360	52.652	

$D = 470.756\ \mu g/mL \times \frac{1.0\,mL}{400\,mL} = 1200\ \mu g/L$ Weathered Diesel Fuel or similar product

$O < 250\ \mu g/L$

REVIEWED BY & DATE RS 2/25/13

02.22.13 E

ALS LABORATORY GROUPS - EVERETT
DATA SUMMARY SHEET

PARAMETER: GAS/BTEX INSTR. MTHD: 8021 EXTRCT MTHD: 5030

QC BATCH #: GW021813 1ST ANAL. SEQ. 71302181

EXT DATES 2/18/2013 MATRIX H2O

ASSOCIATED SAMPLES EV13020091-1-8,10-12

BLANK AND DUPLICATE RESULTS

ANALYTE:	BLANK RESULTS:	DUPLICATE:	ORIGINAL:	%RPD:
Gasoline	<50 ug/L			
MTBE	<3 ug/L			
Benzene	<1 ug/L			
Toluene	<1 ug/L			
Ethylbenzene	<1 ug/L			
Xylenes	<3 ug/L			

SPIKE/ SPIKE DUPLICATE RESULTS

SPIKE ID	AMOUNT SPIKED	BLANK SPIKE %RECOVERY	MS %RECOVERY	BLANK SPIKE DUP %RECOVERY	REL % DIFF
Gasoline	500 ug/L	80		79	1.3
MTBE	40 ug/L	110		112	1.8
Benzene	20 ug/L	109		110	0.9
Toluene	20 ug/L	108		109	0.9
Ethylbenzene	20 ug/L	108		109	0.9
Xylenes	60 ug/L	107		108	0.9
Triflourotoluene	10 ug/L	109		104	4.7

NOTES: IF NUMBER OF ANALYTES DON'T ALLOW LISTING ALL COMPOUNDS, THE RAW DATA MAY BE SUBMITTED

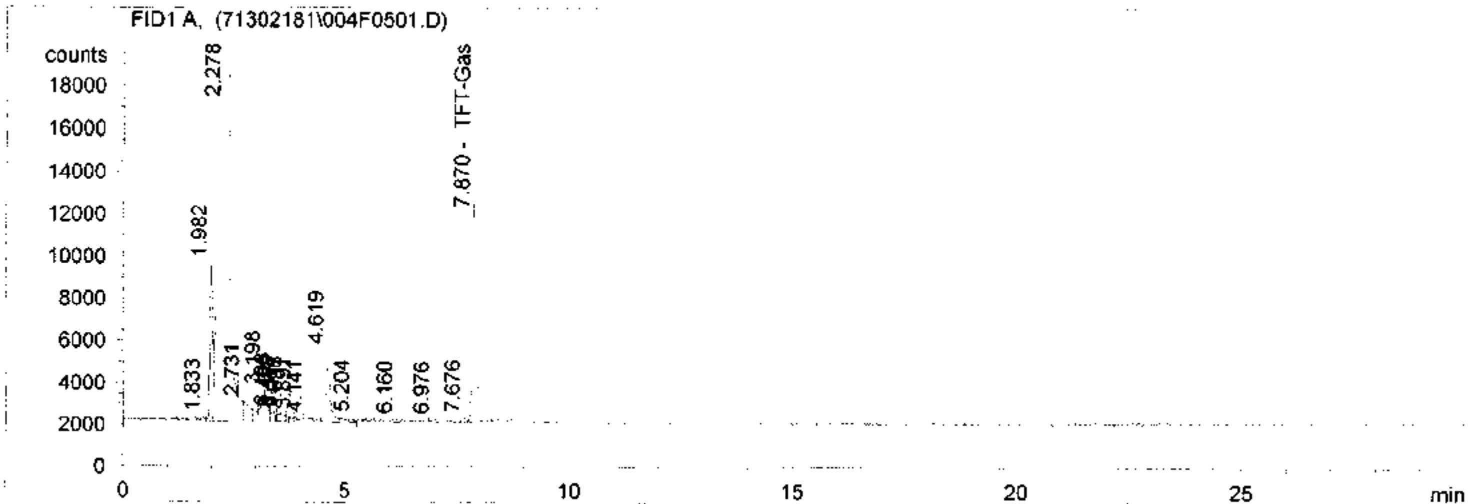
RAW DATA FOR QC RUN ON A SPECIFIC SAMPLE SHOULD BE INCLUDED WITH ORIGINAL SAMPLE ANALYSIS RAW DATA

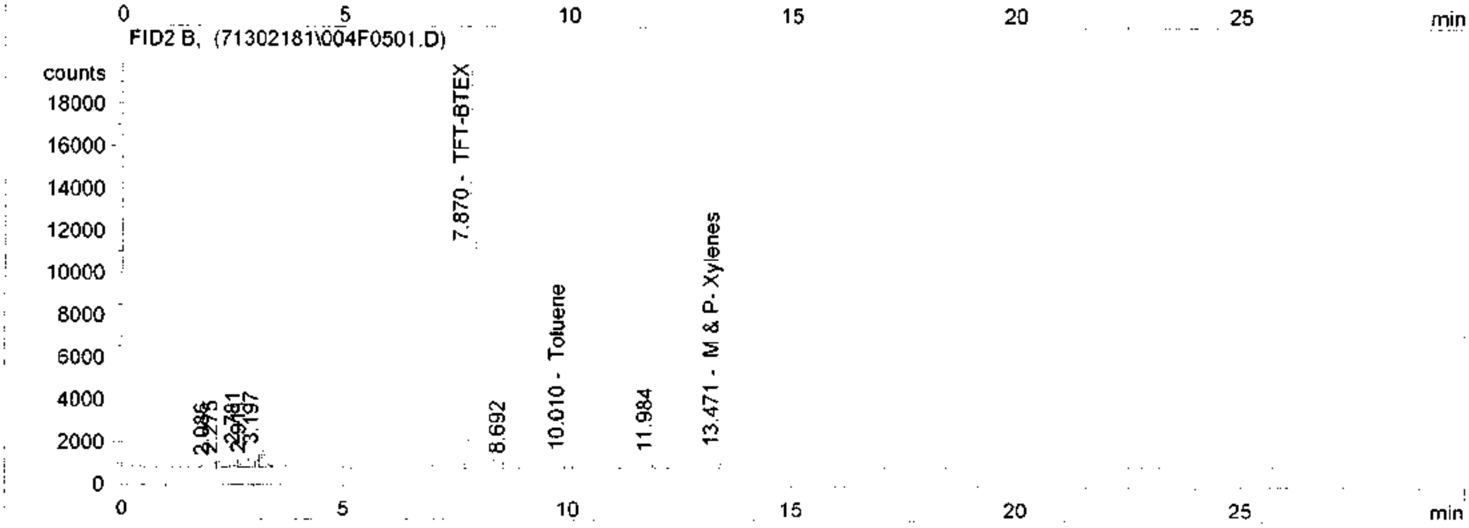
DATASUM.XLS

Gas/BTEX   Instrument 70
Data File: C:\HPCHEM\1\DATA\71302181\004F0501.D
Injection Date & Time: 2/18/2013 12:34:37 PM
Report Created on: 2/19/2013 8:14:35 AM
Operator: DLC
Aquistion Method: GX0712.M
Analysis Method: C:\HPCHEM\1\METHODS\GX0712.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:MB-021813W   Dilution: X 0.0





Ret. Time	Compound Name	Area	Amount ug/L
7.870	TFT-Gas	65015.660	7.806 78%
0.000	Gasoline Envelope	0.000	0.000

Gas < 50 µg/L

Ret. Time	Compound Name	Area	Amount ug/L
0.000	MTBE	0.000	0.000
0.000	Benzene	0.000	0.000
7.870	TFT-BTEX	295114.500	9.575 96%
10.010	Toluene	2601.825	0.537
0.000	Ethylbenzene	0.000	0.000
13.471	M & P- Xylenes	4222.266	0.698
0.000	O-Xylene	0.000	0.000

REVIEWED BY & DATE 2/25/13

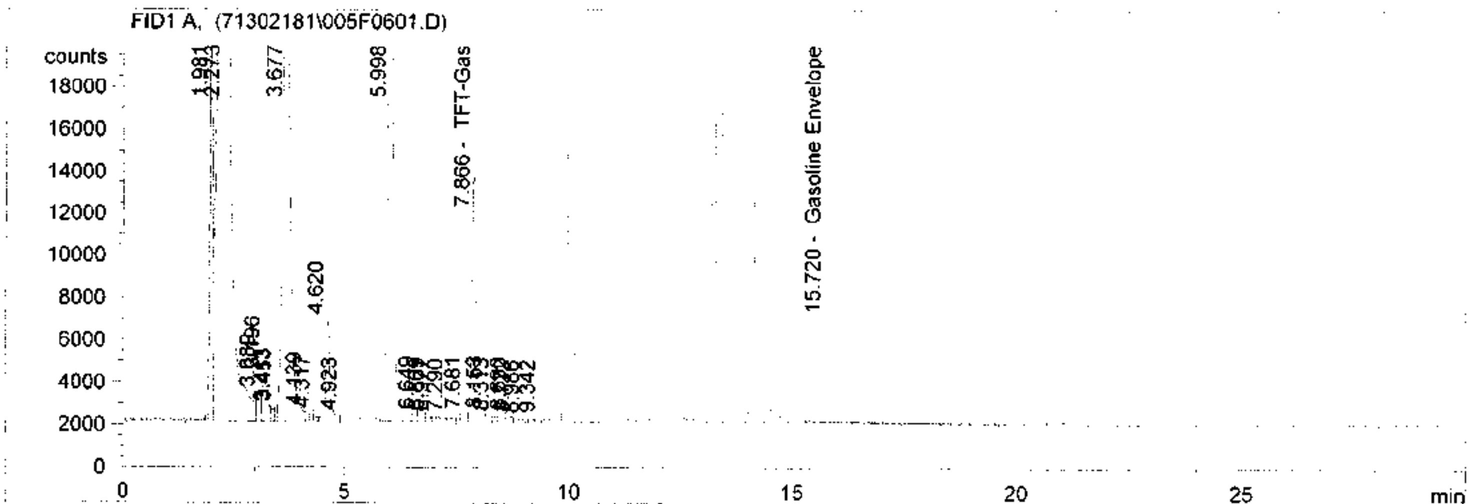
MTBE < 3 µg/L   BTEX < 1 µg/L

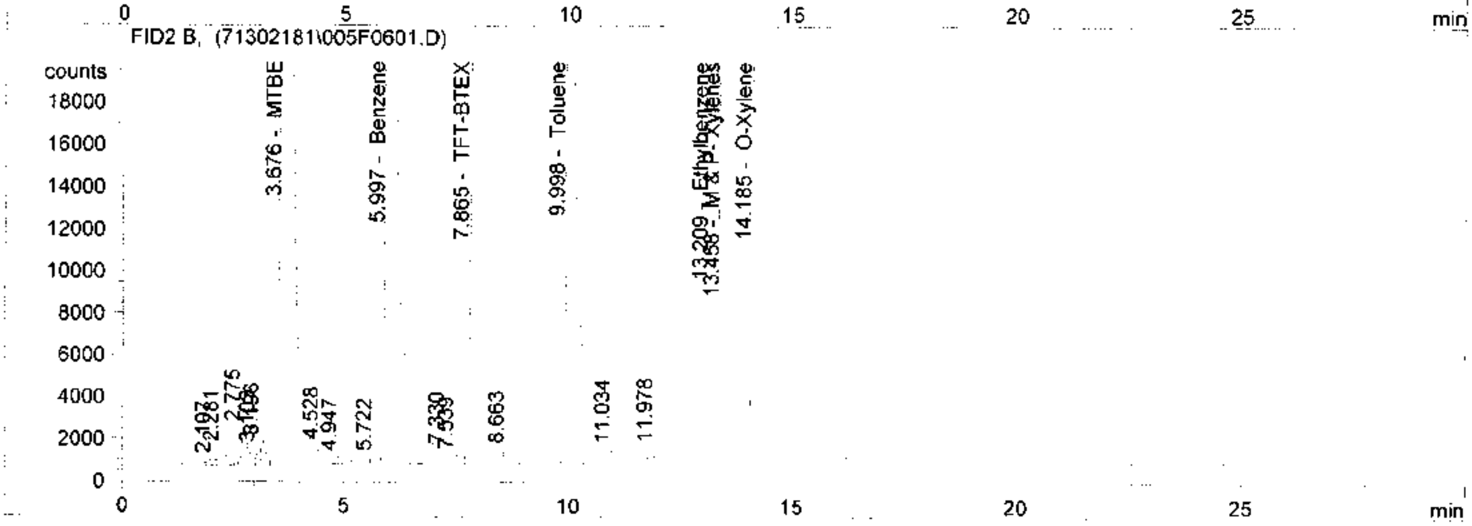
2-20-13 DC

Gas/BTEX Instrument 70
Data File: C:\HPCHEM\1\DATA\71302181\005F0601.D
Injection Date & Time: 2/18/2013 1:10:12 PM
Report Created on: 2/19/2013 8:14:47 AM
Operator: DLC
Aquistion Method: GX0712.M
Analysis Method: C:\HPCHEM\1\METHODS\GX0712.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:BS-021813W Dilution: X 0.0





Ret. Time	Compound Name	Area	Amount ug/L
7.866	TFT-Gas	73935.328	8.877
15.720	Gasoline Envelope	1.289e+006	265.321

REVIEWED BY MS
& DATE 2/25/13

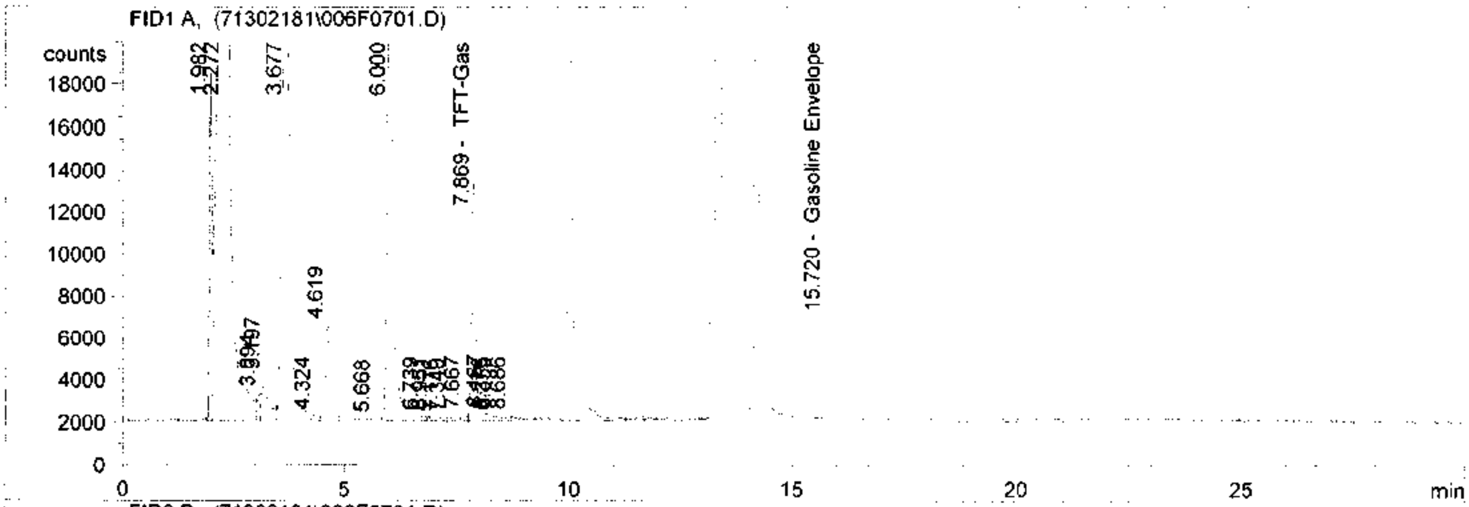
Ret. Time	Compound Name	Area	Amount ug/L	
3.676	MTBE	1.784e+006	43.847	÷40×100 = 110%
5.997	Benzene	2.355e+006	21.872	÷20×100 = 109%
7.865	TFT-BTEX	335452.437	10.872	÷10×100 = 109%
9.998	Toluene	1.828e+006	21.508	108%
13.209	Ethylbenzene	1.314e+006	21.589	108%
13.458	M & P- Xylenes	3.294e+006	42.808	} ÷ 60×100 = 107%
14.185	O-Xylene	1.451e+006	21.282	

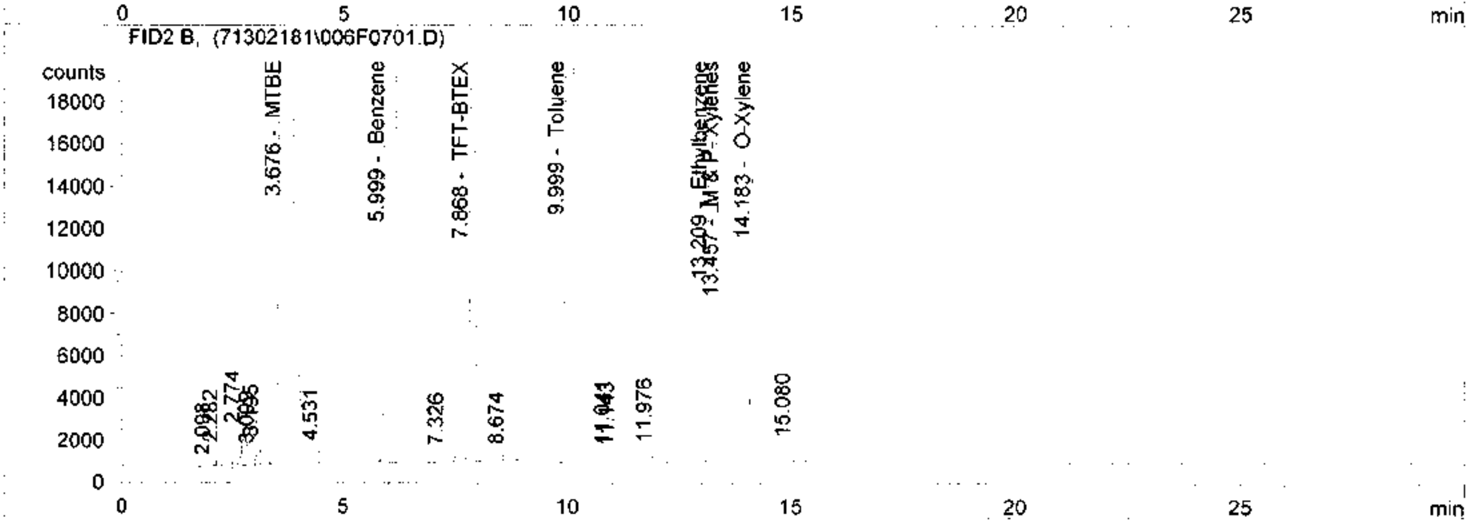
2-20-13 DC

Gas/BTEX   Instrument 70
Data File: C:\HPCHEM\1\DATA\71302181\006F0701.D
Injection Date & Time: 2/18/2013   1:45:39 PM
Report Created on: 2/19/2013   8:14:58 AM
Operator: DLC
Aquistion Method: GX0712.M
Analysis Method: C:\HPCHEM\1\METHODS\GX0712.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:BSD-021813W   Dilution: X 0.0





Ret. Time	Compound Name	Area	Amount ug/L
7.869	TFT-Gas	71693.672	8.608
15.720	Gasoline Envelope	1.375e+006	283.116

Ret. Time	Compound Name	Area	Amount ug/L	
3.676	MTBE	1.814e+006	44.605	112%
5.999	Benzene	2.376e+006	22.063	110%
7.868	TFT-BTEX	321844.969	10.435	109%
9.999	Toluene	1.845e+006	21.703	109%
13.209	Ethylbenzene	1.327e+006	21.803	109%
13.457	M & P- Xylenes	3.329e+006	43.253	>108%
14.183	O-Xylene	1.474e+006	21.620	

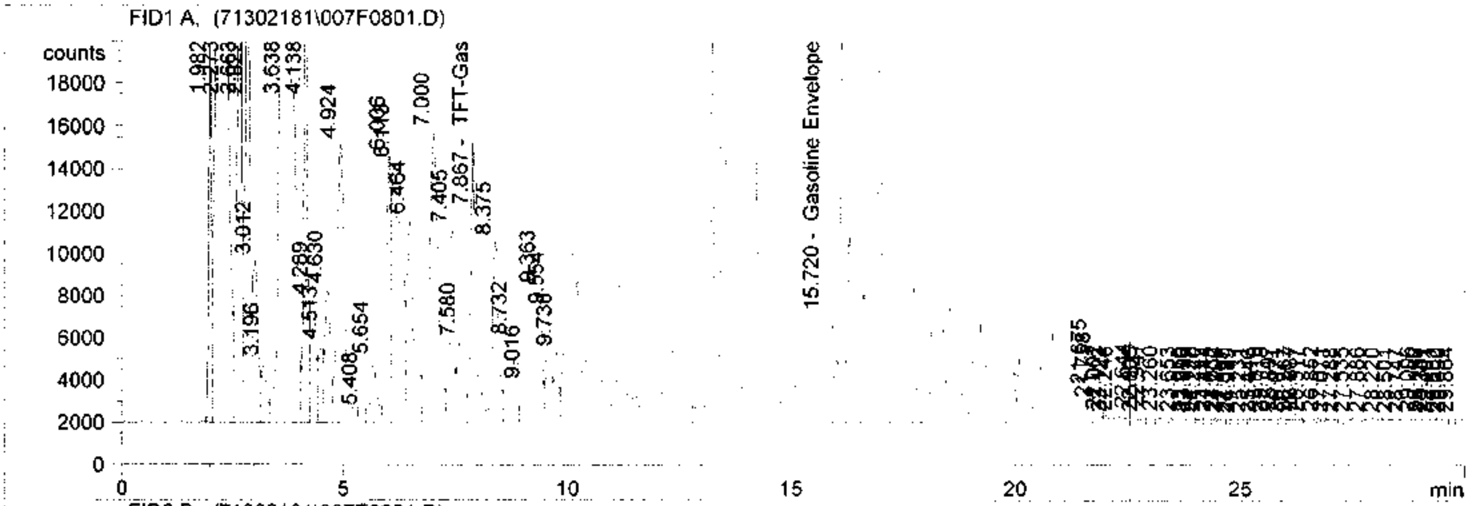
REVIEWED BY MB
& DATE 2/25/13

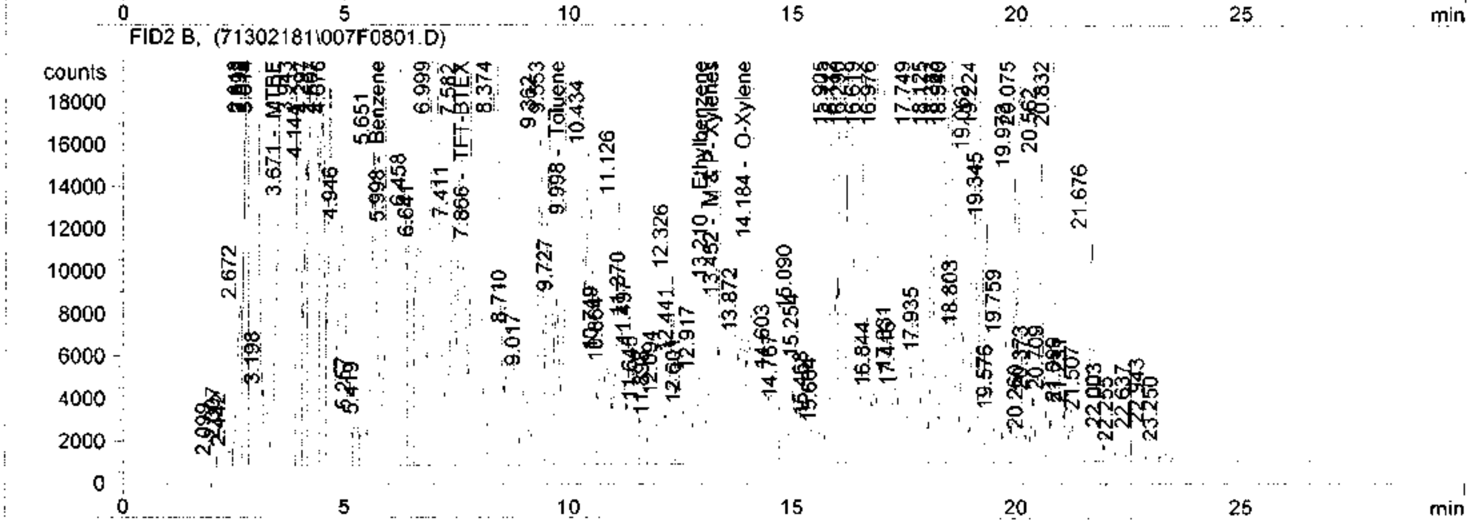
2-20-13 DC

Gas/BTEX   Instrument 70
Data File: C:\HPCHEM\1\DATA\71302181\007F0801.D
Injection Date & Time: 2/18/2013 2:21:07 PM
Report Created on: 2/19/2013 8:15:09 AM
Operator: DLC
Aquistion Method: GX0712.M
Analysis Method: C:\HPCHEM\1\METHODS\GX0712.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:BG-021813W   Dilution: X 0.0





Ret. Time	Compound Name	Area	Amount ug/L
7.867	TFT-Gas	98632.352	11.843 118/
15.720	Gasoline Envelope	1.931e+006	397.511 ÷500×100 = 80/

Ret. Time	Compound Name	Area	Amount ug/L
3.671	MTBE	3.078e+006	75.677
5.998	Benzene	943090.937	8.916
7.866	TFT-BTEX	434005.250	14.040
9.998	Toluene	2.370e+006	27.741
13.210	Ethylbenzene	441105.813	7.771
13.452	M & P- Xylenes	1.801e+006	23.698
14.184	O-Xylene	684649.875	10.042

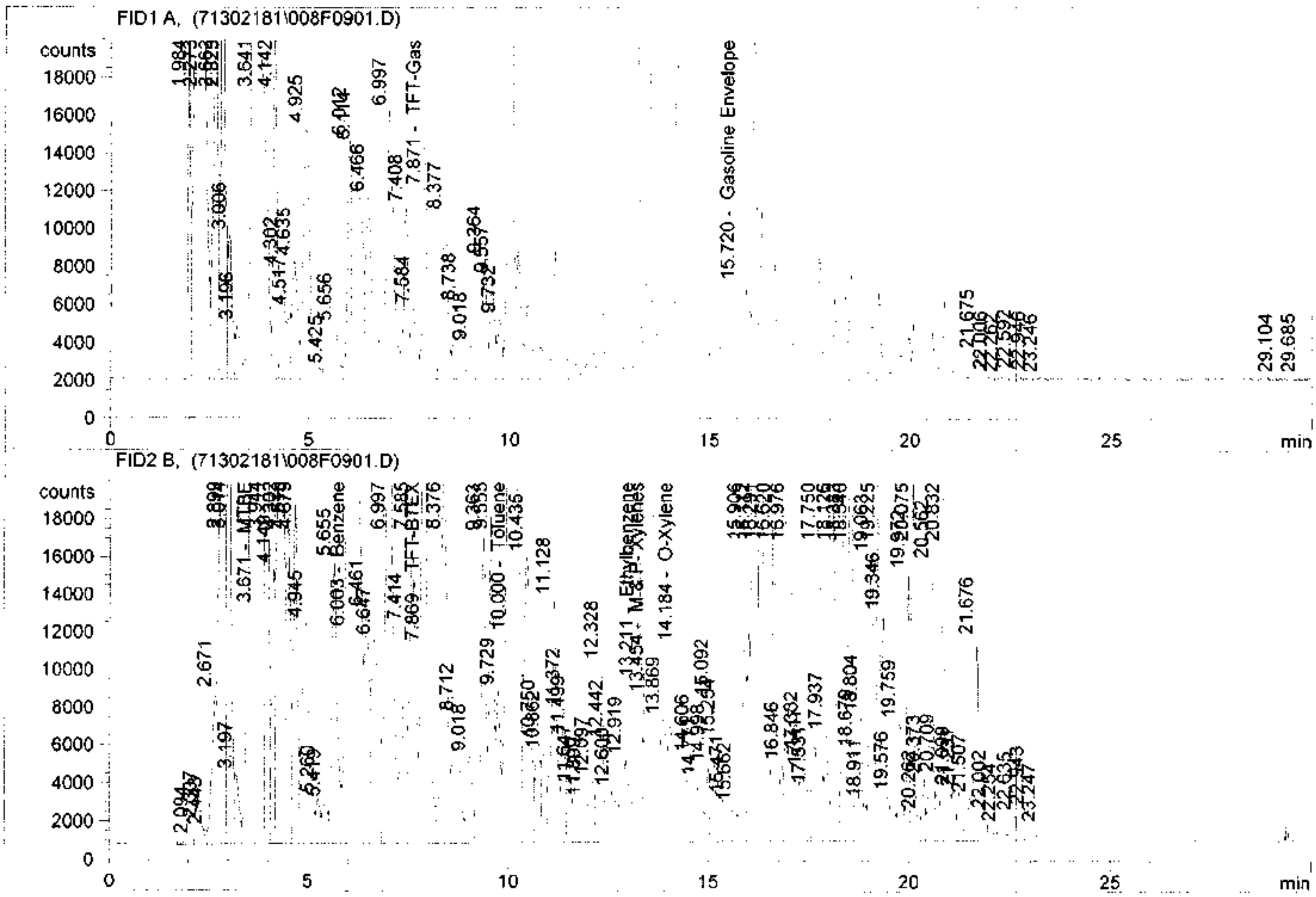
REVIEWED BY & DATE AB 2/25/13

2-20-13 DC

Gas/BTEX Instrument 70
Data File: C:\HPCHEM\1\DATA\71302181\008F0901.D
Injection Date & Time: 2/18/2013 2:56:32 PM
Report Created on: 2/19/2013 8:15:20 AM
Operator: DLC
Aquistion Method: GX0712.M
Analysis Method: C:\HPCHEM\1\METHODS\GX0712.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:BGD-021813W Dilution: X 0.0



Ret. Time	Compound Name	Area	Amount ug/L
7.871	TFT-Gas	94836.641	11.387 114/
15.720	Gasoline Envelope	1.909e+006	392.971 79/

Ret. Time	Compound Name	Area	Amount ug/L
3.671	MTBE	3.130e+006	76.944
6.003	Benzene	961686.875	9.086
7.869	TFT-BTEX	431841.937	13.970
10.000	Toluene	2.422e+006	28.343
13.211	Ethylbenzene	450591.438	7.922
13.454	M & P- Xylenes	1.839e+006	24.185
14.184	O-Xylene	702135.188	10.299

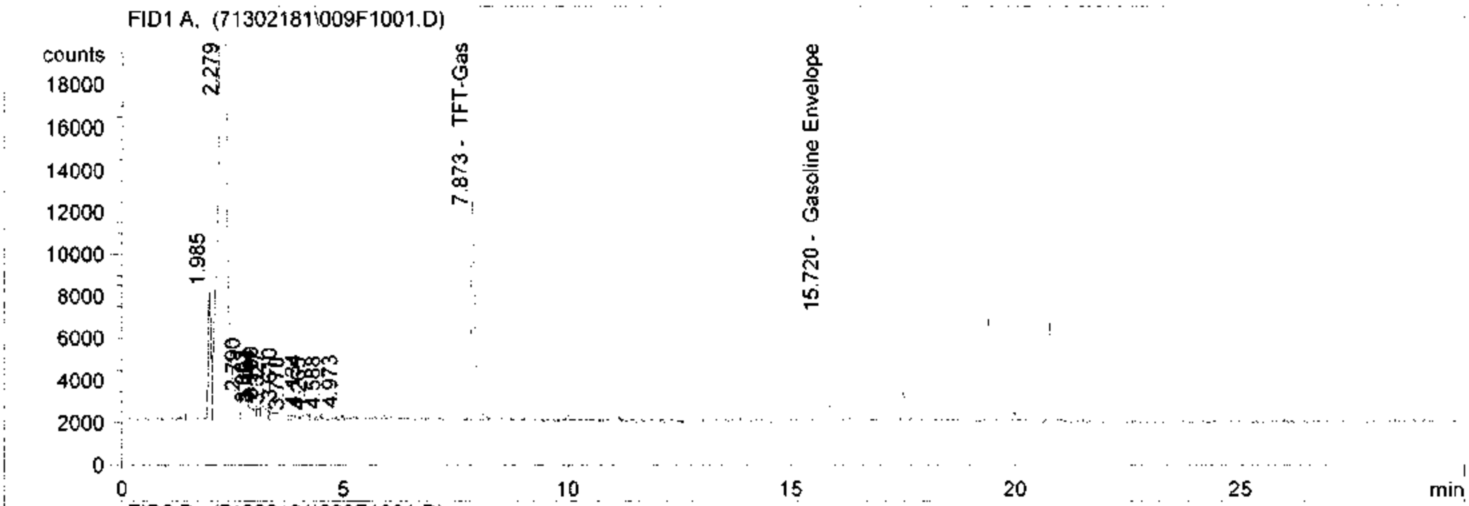
REVIEWED BY RB
& DATE 2/25/13

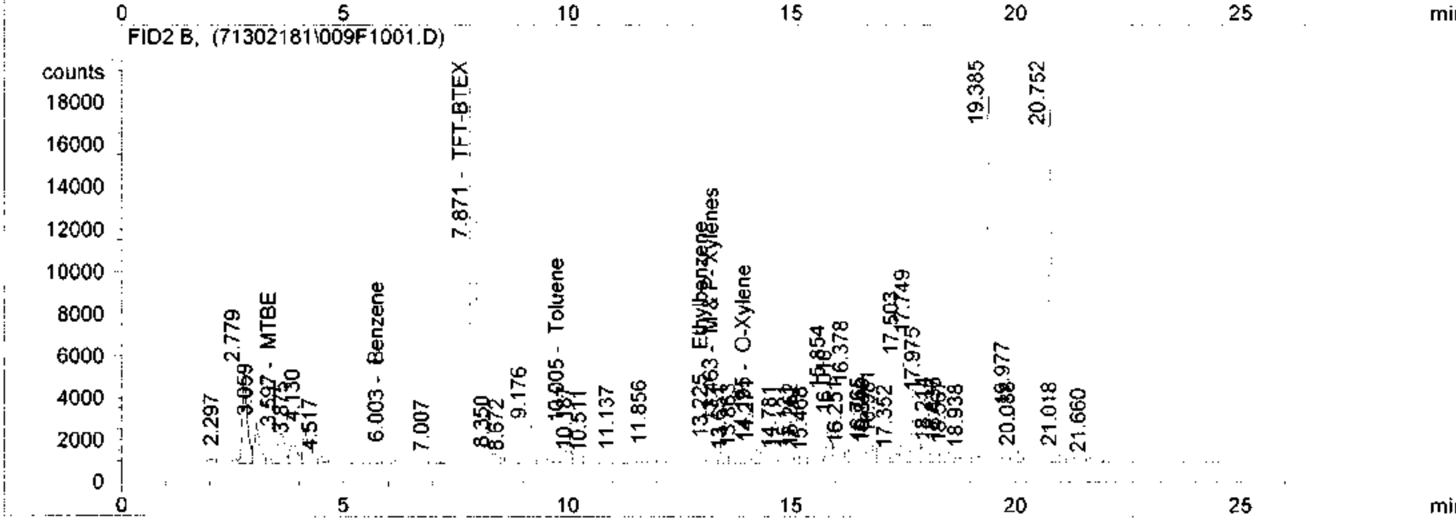
2-20-13 DC

Gas/BTEX   Instrument 70
Data File: C:\HPCHEM\1\DATA\71302181\009F1001.D
Injection Date & Time: 2/18/2013   3:32:05 PM
Report Created on: 2/19/2013   8:15:33 AM
Operator: DLC
Aquistion Method: GX0712.M
Analysis Method: C:\HPCHEM\1\METHODS\GX0712.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:EV13020091-01 5M   Dilution: X 0.0





Ret. Time	Compound Name	Area	Amount ug/L
7.873	TFT-Gas	62480.785	7.502 75%
15.720	Gasoline Envelope	24835.051	5.113

Gas < 50 μg/L

Ret. Time	Compound Name	Area	Amount ug/L
3.597	MTBE	16051.782	0.395
6.003	Benzene	6411.386	0.322
7.871	TFT-BTEX	286996.906	9.314 93%
10.005	Toluene	8823.347	0.608
13.225	Ethylbenzene	5390.686	0.871
13.463	M & P- Xylenes	9302.355	0.763
14.195	O-Xylene	3891.387	0.057

REVIEWED BY RS
& DATE 1/25/13

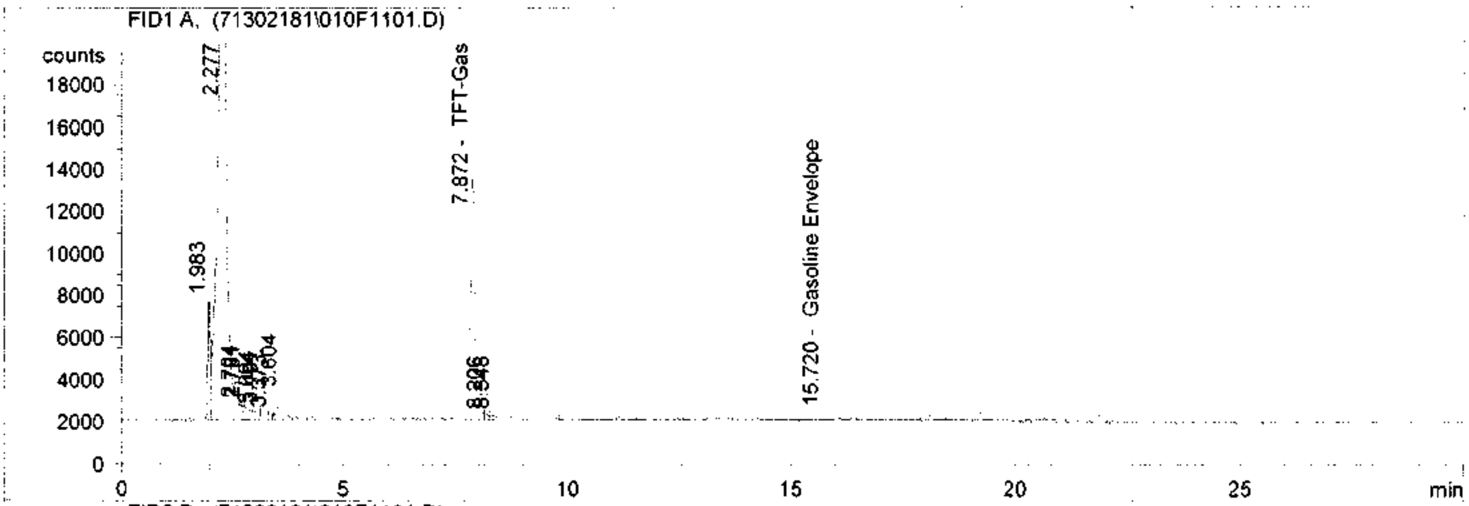
B,T,E < 1 μg/L   x < 3 μg/L

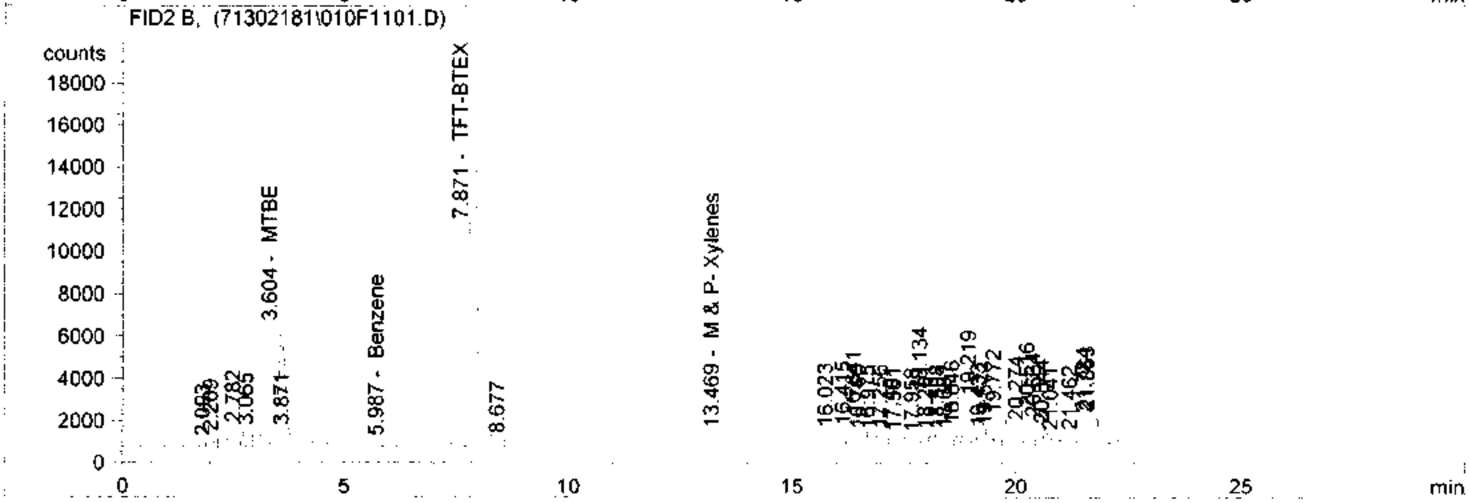
2-20-13 DC

Gas/BTEX   Instrument 70
Data File: C:\HPCHEM\1\DATA\71302181\010F1101.D
Injection Date & Time: 2/18/2013   4:07:35 PM
Report Created on: 2/19/2013   8:15:45 AM
Operator: DLC
Aquistion Method: GX0712.M
Analysis Method: C:\HPCHEM\1\METHODS\GX0712.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:EV13020091-02 5M   Dilution: X 0.0





Ret. Time	Compound Name	Area	Amount ug/L	
7.872	TFT-Gas	70444.516	8.458	85%
15.720	Gasoline Envelope	14175.386	2.918	

Gas < 50 µg/L

Ret. Time	Compound Name	Area	Amount ug/L	
3.604	MTBE	55276.223	1.359	
5.987	Benzene	2748.906	0.289	
7.871	TFT-BTEX	319461.312	10.358	104%
0.000	Toluene	0.000	0.000	
0.000	Ethylbenzene	0.000	0.000	
13.469	M & P- Xylenes	3233.080	0.686	
0.000	O-Xylene	0.000	0.000	

REVIEWED BY & DATE RB 2/25/13

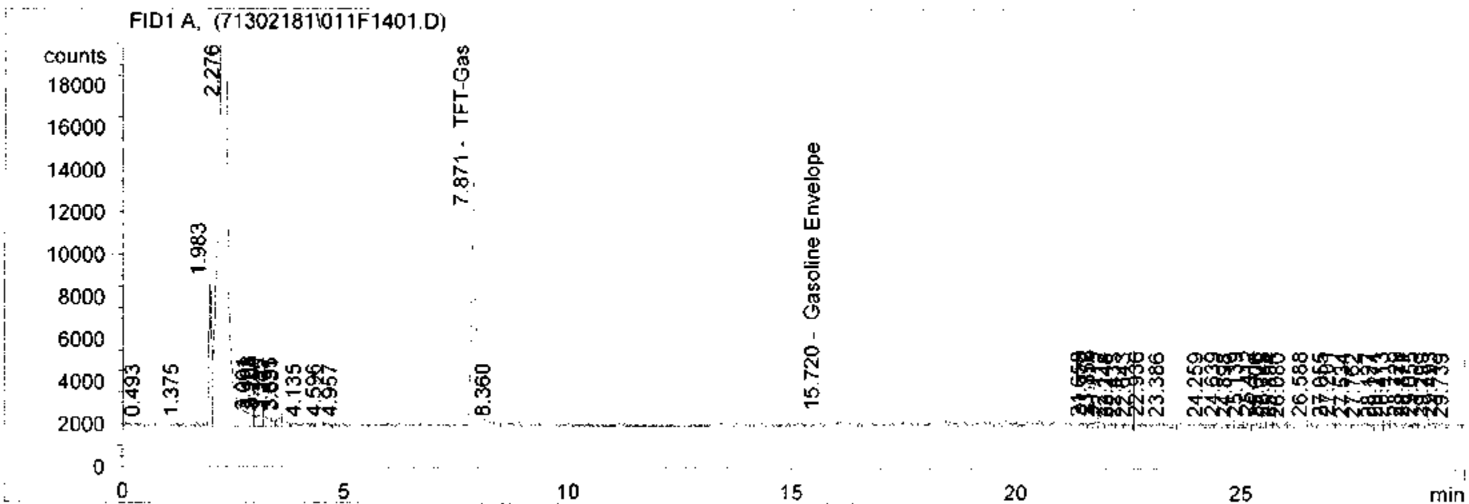
B,T,E < 1 µg/L   X < 3 µg/L

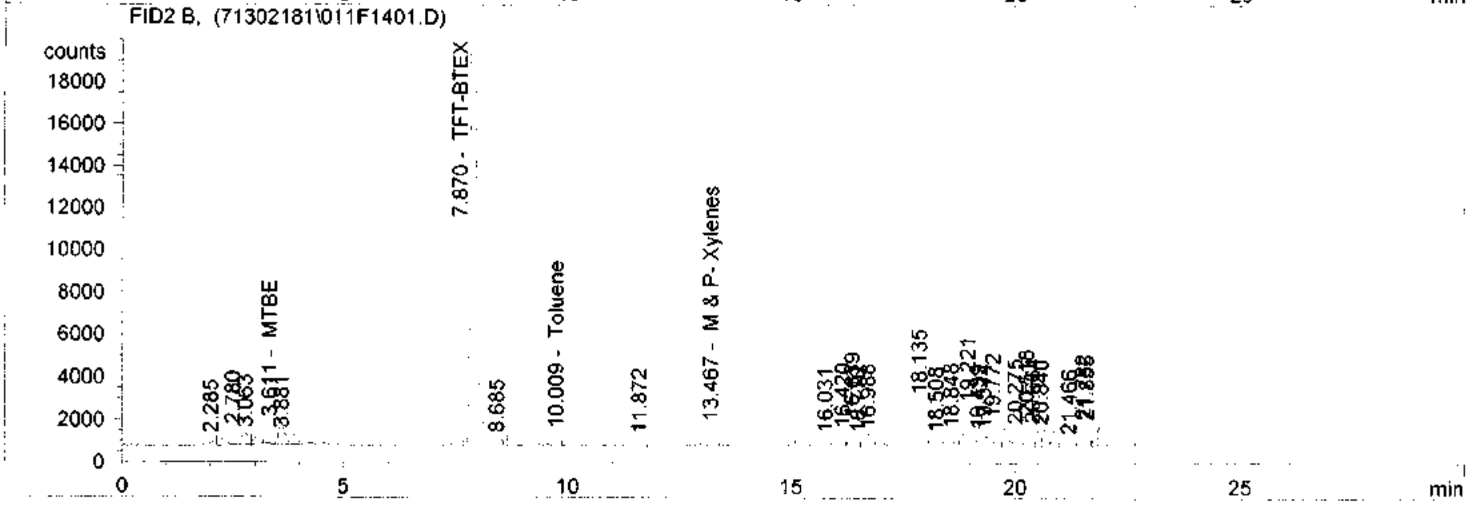
2-20-12 DC

Gas/BTEX   Instrument 70
Data File: C:\HPCHEM\1\DATA\71302181\011F1401.D
Injection Date & Time: 2/18/2013 5:54:13 PM
Report Created on: 2/19/2013 8:16:01 AM
Operator: DLC
Aquistion Method: GX0712.M
Analysis Method: C:\HPCHEM\1\METHODS\GX0712.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:EV13020091-03 5M   Dilution: X 0.0





Ret. Time	Compound Name	Area	Amount ug/L
7.871	TFT-Gas	71765.383	8.617 86%
15.720	Gasoline Envelope	71855.812	14.793

Gas < 50 μg/L

Ret. Time	Compound Name	Area	Amount ug/L
3.611	MTBE	9112.955	0.224
0.000	Benzene	0.000	0.000
7.870	TFT-BTEX	328471.375	10.648 106%
10.009	Toluene	2898.489	0.540
0.000	Ethylbenzene	0.000	0.000
13.467	M & P- Xylenes	4569.611	0.703
0.000	O-Xylene	0.000	0.000

REVIEWED BY & DATE NB 2/25/13

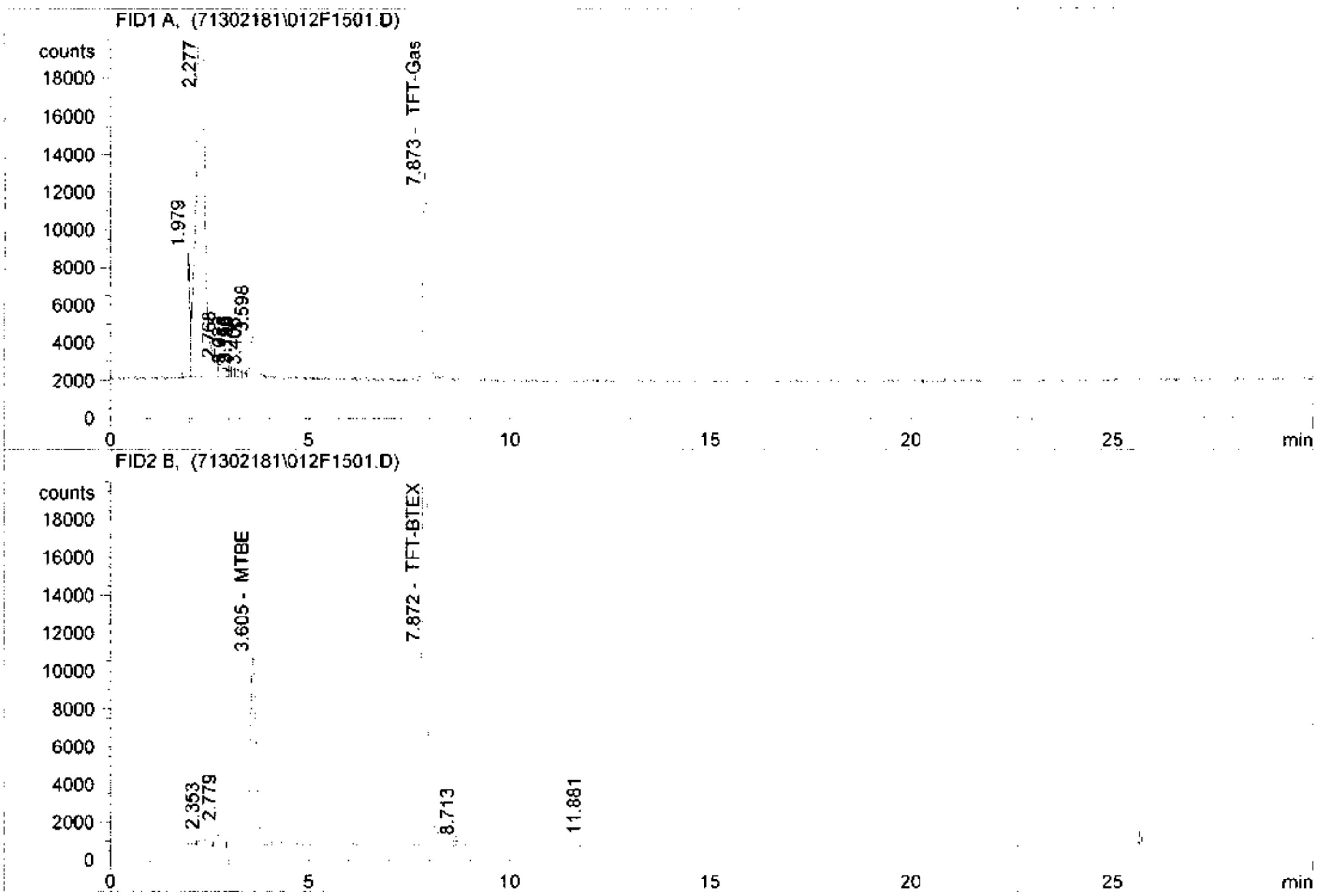
B,T,E < 1 μg/L   X < 3 μg/L

2-20-13 DC

Gas/BTEX   Instrument 70
Data File: C:\HPCHEM\1\DATA\71302181\012F1501.D
Injection Date & Time: 2/18/2013 6:29:37 PM
Report Created on: 2/19/2013 8:16:14 AM
Operator: DLC
Aquistion Method: GX0712.M
Analysis Method: C:\HPCHEM\1\METHODS\GX0712.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:EV13020091-04 5M   Dilution: X 0.0



Ret. Time	Compound Name	Area	Amount ug/L
7.873	TFT-Gas	63899.047	7.672 77%
0.000	Gasoline Envelope	0.000	0.000

Gas < 50 µg/L

Ret. Time	Compound Name	Area	Amount ug/L
3.605	MTBE	102127.430	2.511
0.000	Benzene	0.000	0.000
7.872	TFT-BTEX	319674.156	10.365 104%
0.000	Toluene	0.000	0.000
0.000	Ethylbenzene	0.000	0.000
0.000	M & P- Xylenes	0.000	0.000
0.000	O-Xylene	0.000	0.000

REVIEWED BY & DATE NB 2/25/13

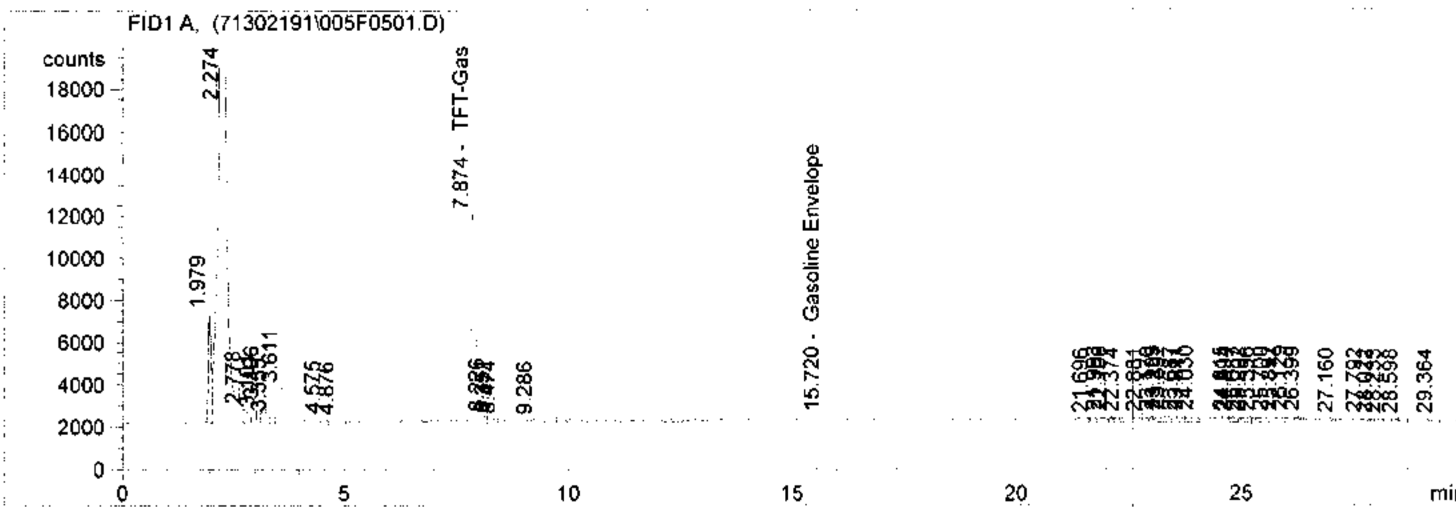
B,T,E < 1 µg/L   X < 3 µg/L

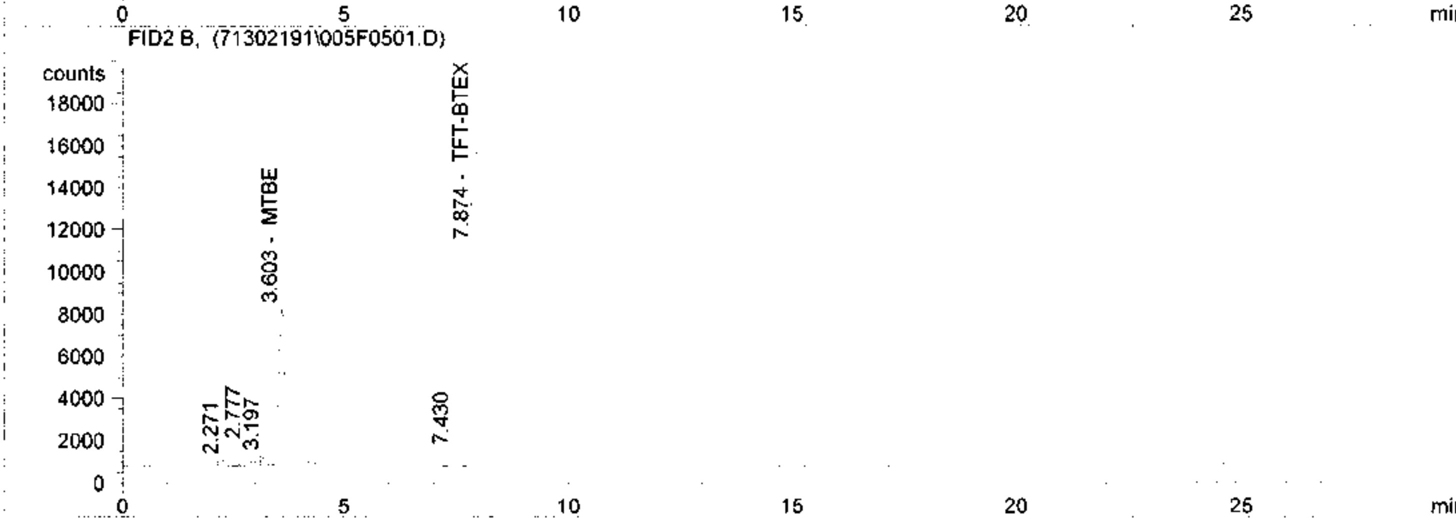
2-20-13 DC

Gas/BTEX   Instrument 70
Data File: C:\HPCHEM\1\DATA\71302191\005F0501.D
Injection Date & Time: 2/19/2013 9:55:15 AM
Report Created on: 2/19/2013 12:42:47 PM
Operator: DLC
Aquistion Method: GX0712.M
Analysis Method: C:\HPCHEM\1\METHODS\GX0712.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:EV13020091-05 5R   Dilution: X 0.0





Ret. Time	Compound Name	Area	Amount ug/L
7.874	TFT-Gas	63794.965	7.660 77%
15.720	Gasoline Envelope	86793.062	17.868

Gas < 50 µg/L

Ret. Time	Compound Name	Area	Amount ug/L
3.603	MTBE	73971.242	1.819
0.000	Benzene	0.000	0.000
7.874	TFT-BTEX	272192.406	8.838 88%
0.000	Toluene	0.000	0.000
0.000	Ethylbenzene	0.000	0.000
0.000	M & P- Xylenes	0.000	0.000
0.000	O-Xylene	0.000	0.000

REVIEWED BY & DATE MB 2/25/13

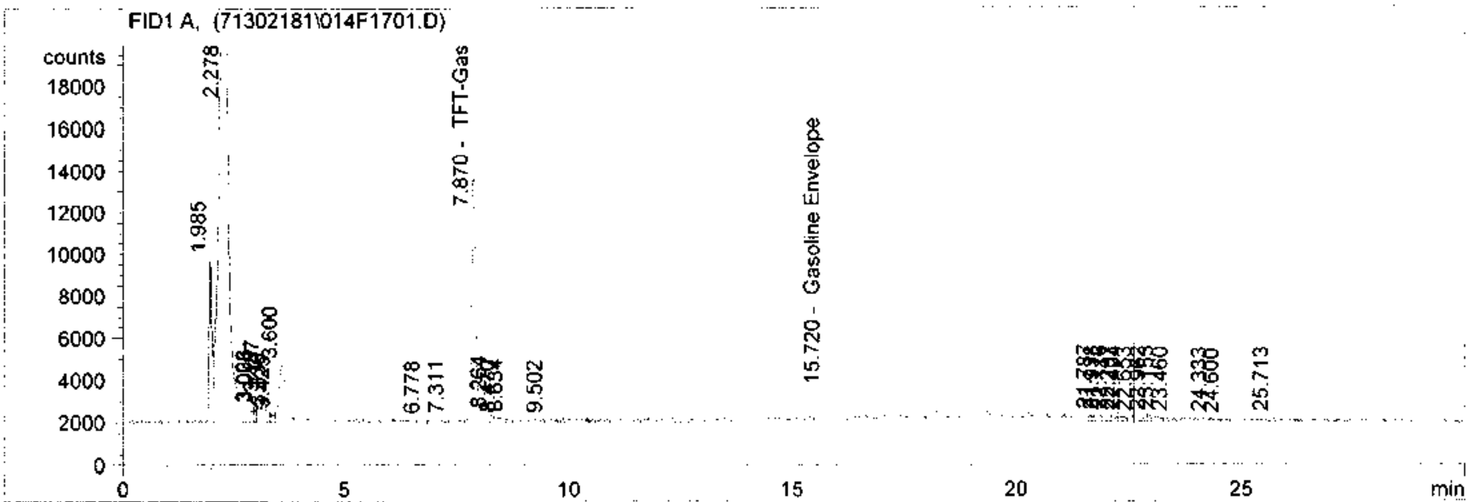
BTEX < 1 µg/L   < 3 µg/L

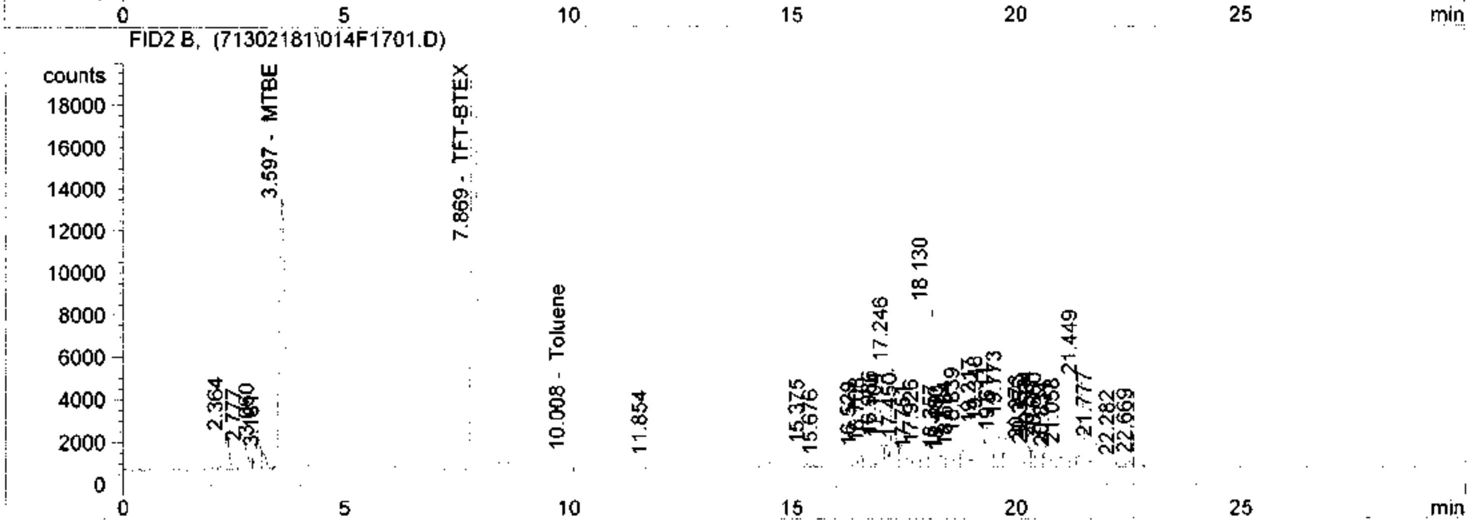
2-19-13 DC

Gas/BTEX   Instrument 70
Data File: C:\HPCHEM\1\DATA\71302181\014F1701.D
Injection Date & Time: 2/18/2013 7:40:06 PM
Report Created on: 2/19/2013 8:16:44 AM
Operator: DLC
Aquistion Method: GX0712.M
Analysis Method: C:\HPCHEM\1\METHODS\GX0712.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:EV13020091-06 5M   Dilution: X 0.0





Ret. Time	Compound Name	Area	Amount ug/L
7.870	TFT-Gas	73860.141	8.868 89%
15.720	Gasoline Envelope	134696.719	27.730

Gas <50 µg/L

Ret. Time	Compound Name	Area	Amount ug/L
3.597	MTBE	122054.195	3.001
0.000	Benzene	0.000	0.000
7.869	TFT-BTEX	324350.625	10.515 105%
10.008	Toluene	3600.332	0.548
0.000	Ethylbenzene	0.000	0.000
0.000	M & P- Xylenes	0.000	0.000
0.000	O-Xylene	0.000	0.000

REVIEWED BY & DATE RS 2/25/13

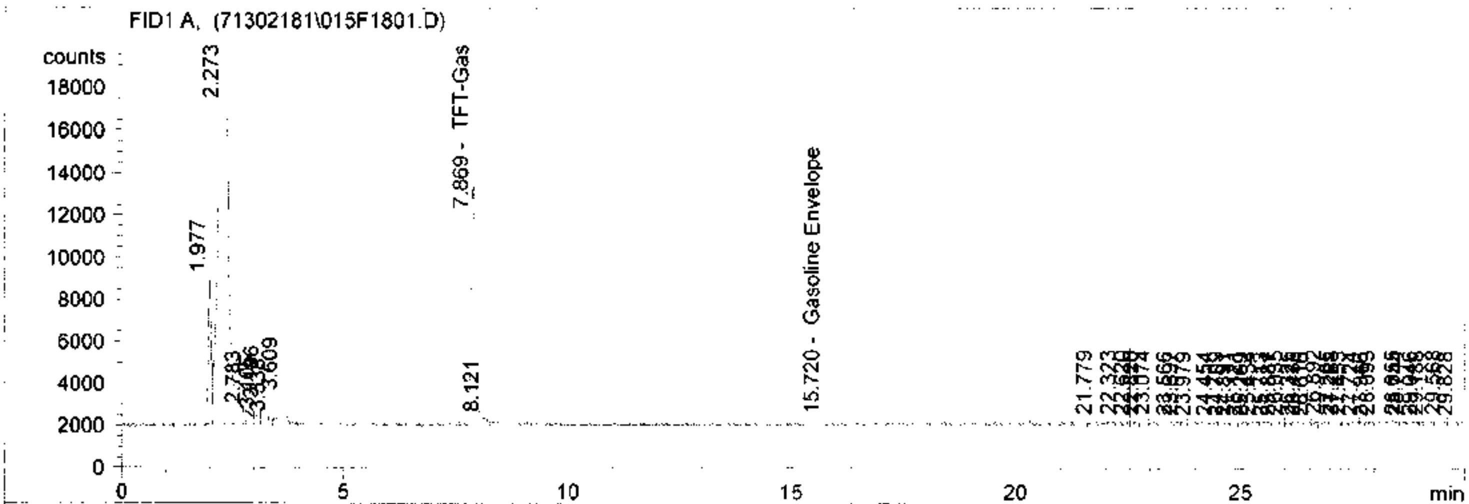
B,T,E < 1 µg/L   X < 3 µg/L

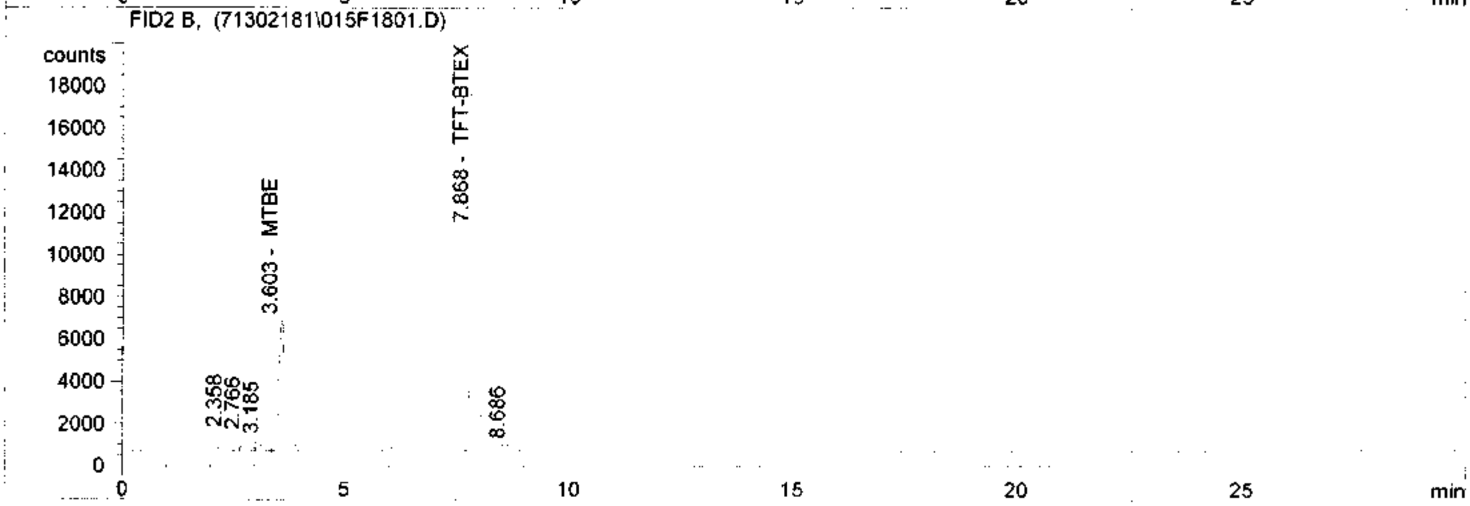
2-20-13 DC

Gas/BTEX   Instrument 70
Data File: C:\HPCHEM\1\DATA\71302181\015F1801.D
Injection Date & Time: 2/18/2013 8:15:14 PM
Report Created on: 2/19/2013 8:17:30 AM
Operator: DLC
Aquistion Method: GX0712.M
Analysis Method: C:\HPCHEM\1\METHODS\GX0712.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:EV13020091-07 5M   Dilution: X 0.0





Ret. Time	Compound Name	Area	Amount ug/L
7.869	TFT-Gas	70277.789	8.438 84%
15.720	Gasoline Envelope	49546.879	10.200

Gas < 50 µg/L

Ret. Time	Compound Name	Area	Amount ug/L
3.603	MTBE	63074.105	1.551
0.000	Benzene	0.000	0.000
7.868	TFT-BTEX	329968.625	10.696 107%
0.000	Toluene	0.000	0.000
0.000	Ethylbenzene	0.000	0.000
0.000	M & P- Xylenes	0.000	0.000
0.000	O-Xylene	0.000	0.000

REVIEWED BY & DATE MJ 2/25/13

B,T,E < 1 µg/L   X < 3 µg/L

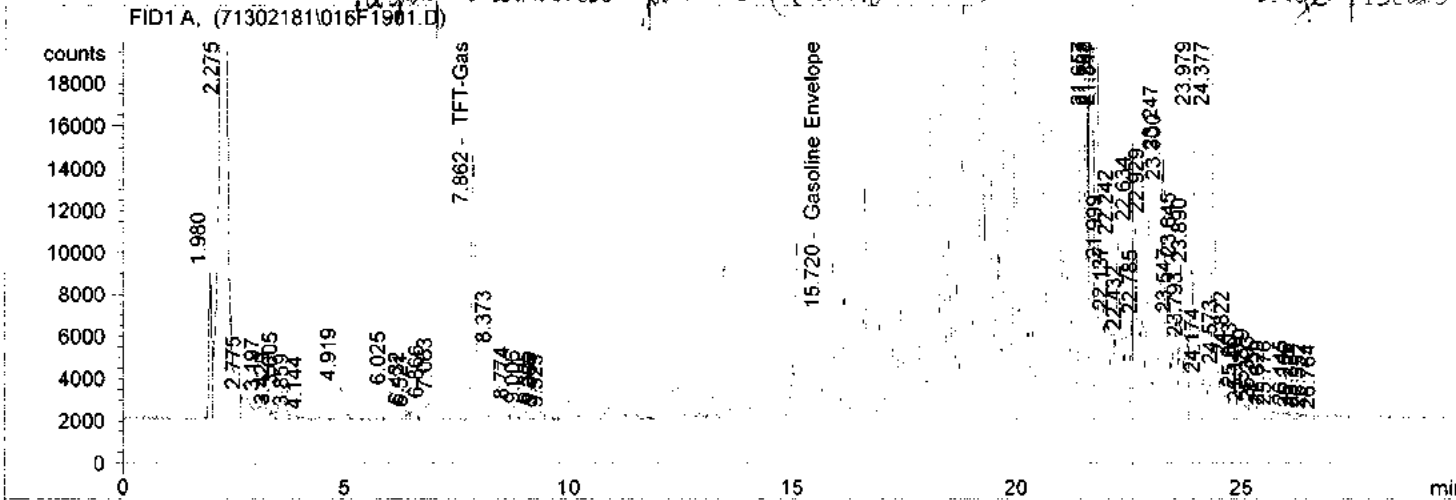
2-20-13 DC

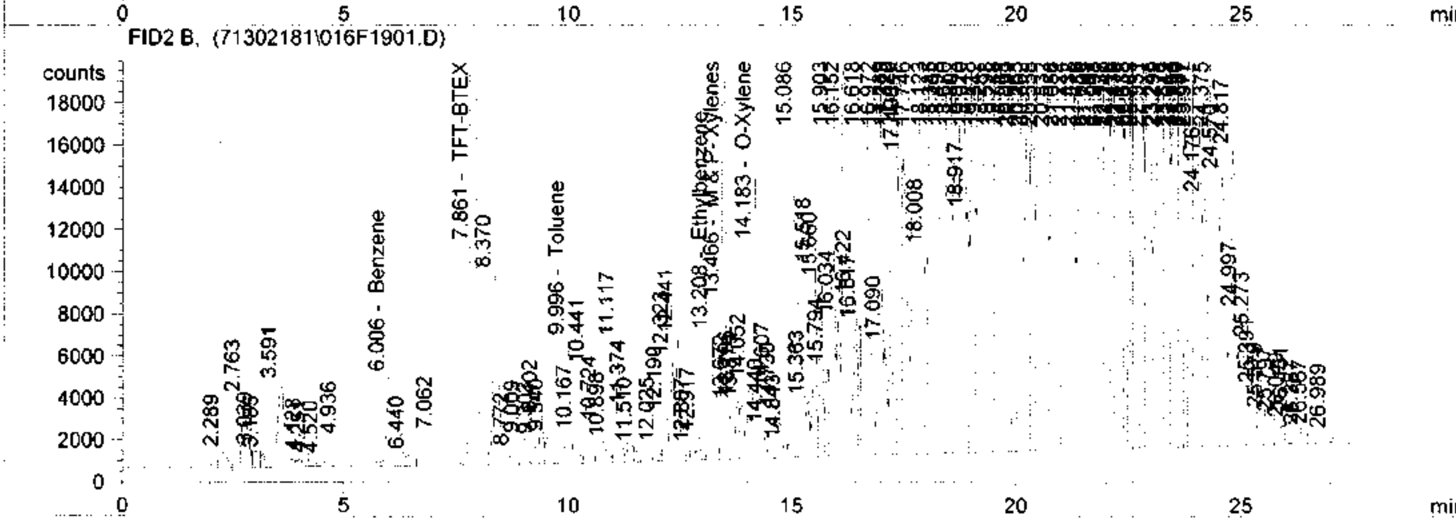
Gas/BTEX   Instrument 70
Data File: C:\HPCHEM\1\DATA\71302181\016F1901.D
Injection Date & Time: 2/18/2013 8:50:22 PM
Report Created on: 2/19/2013 8:17:41 AM
Operator: DLC
Aquistion Method: GX0712.M
Analysis Method: C:\HPCHEM\1\METHODS\GX0712.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:EV13020091-10 5M   Dilution: X 0.0

highly weathered gasoline (based mostly due to heavier-range product only





Ret. Time	Compound Name	Area	Amount ug/L
7.862	TFT-Gas	76022.148	9.128 91%
15.720	Gasoline Envelope	3.301e+006	679.526

Gas = 680 µg/L

Ret. Time	Compound Name	Area	Amount ug/L
0.000	MTBE	0.000	0.000
6.006	Benzene	60516.109	0.819
7.861	TFT-BTEX	352445.469	11.418 114%
9.996	Toluene	31276.563	0.866
13.208	Ethylbenzene	29788.871	1.258
13.466	M & P- Xylenes	173982.297	2.871
14.183	O-Xylene	67762.188	0.994

REVIEWED BY & DATE NB 2/25/13

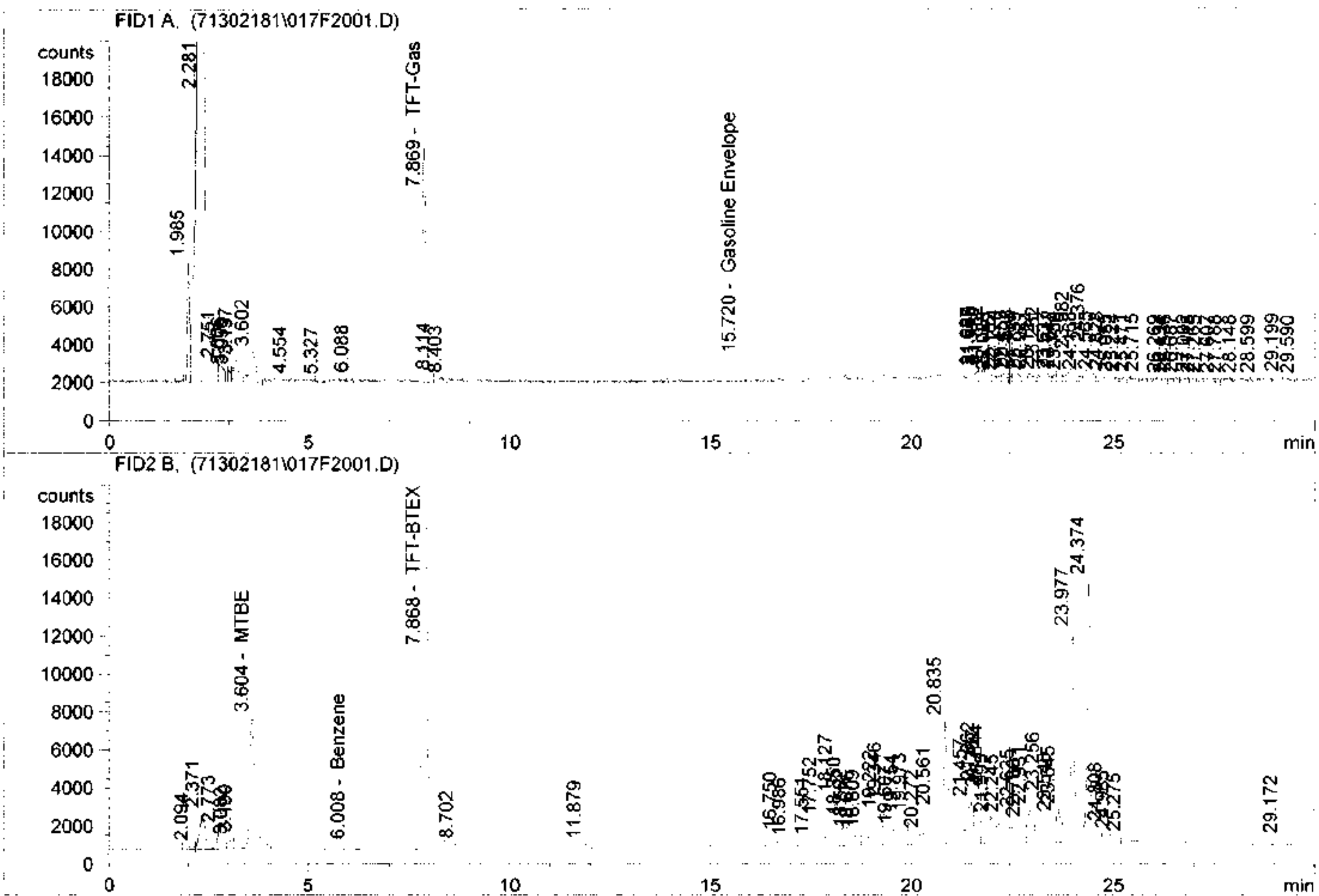
B,T < 1 µg/L   E = 1.3 µg/L   X < 3 µg/L

2-20-13 DC

Gas/BTEX   Instrument 70
Data File: C:\HPCHEM\1\DATA\71302181\017F2001.D
Injection Date & Time: 2/18/2013 9:25:30 PM
Report Created on: 2/19/2013 8:19:28 AM
Operator: DLC
Aquistion Method: GX0712.M
Analysis Method: C:\HPCHEM\1\METHODS\GX0712.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:EV13020091-11 5M   Dilution: X 0.0



Ret. Time	Compound Name	Area	Amount ug/L
7.869	TFT-Gas	75114.742	9.019 90%
15.720	Gasoline Envelope	94673.453	19.490

Gas < 50 µg/L

Ret. Time	Compound Name	Area	Amount ug/L
3.604	MTBE	68159.523	1.676
6.008	Benzene	2512.522	0.287
7.868	TFT-BTEX	350379.625	11.352 114%
0.000	Toluene	0.000	0.000
0.000	Ethylbenzene	0.000	0.000
0.000	M & P- Xylenes	0.000	0.000
0.000	O-Xylene	0.000	0.000

REVIEWED BY AB
& DATE 2/25/13

B,T,E < 1 µg/L   X < 3 µg/L

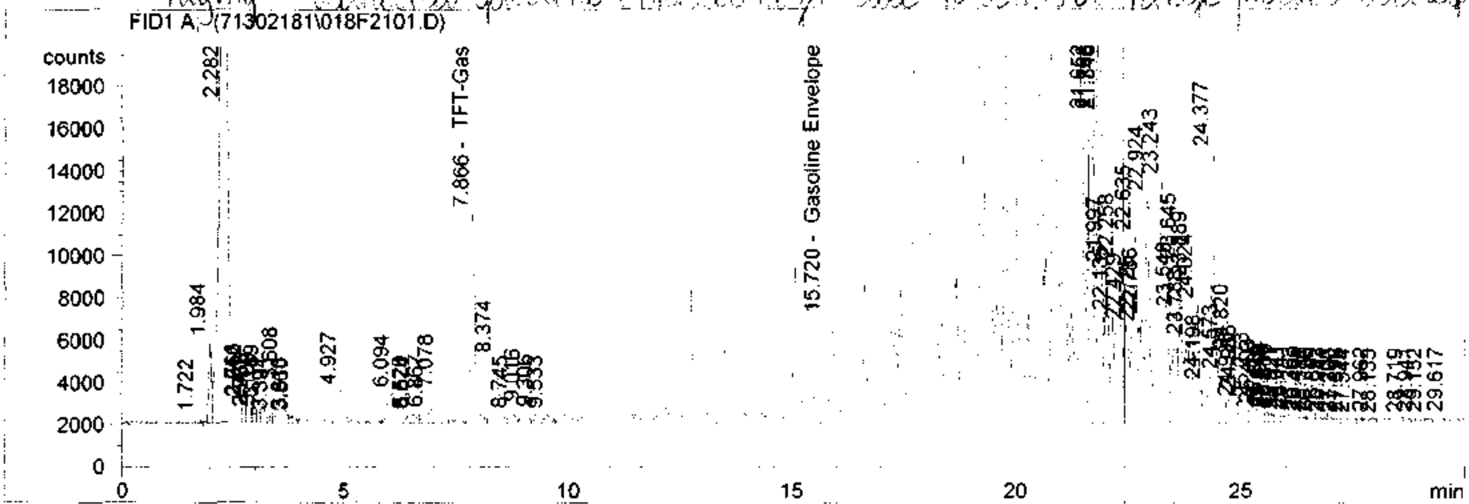
2-20-13 DC

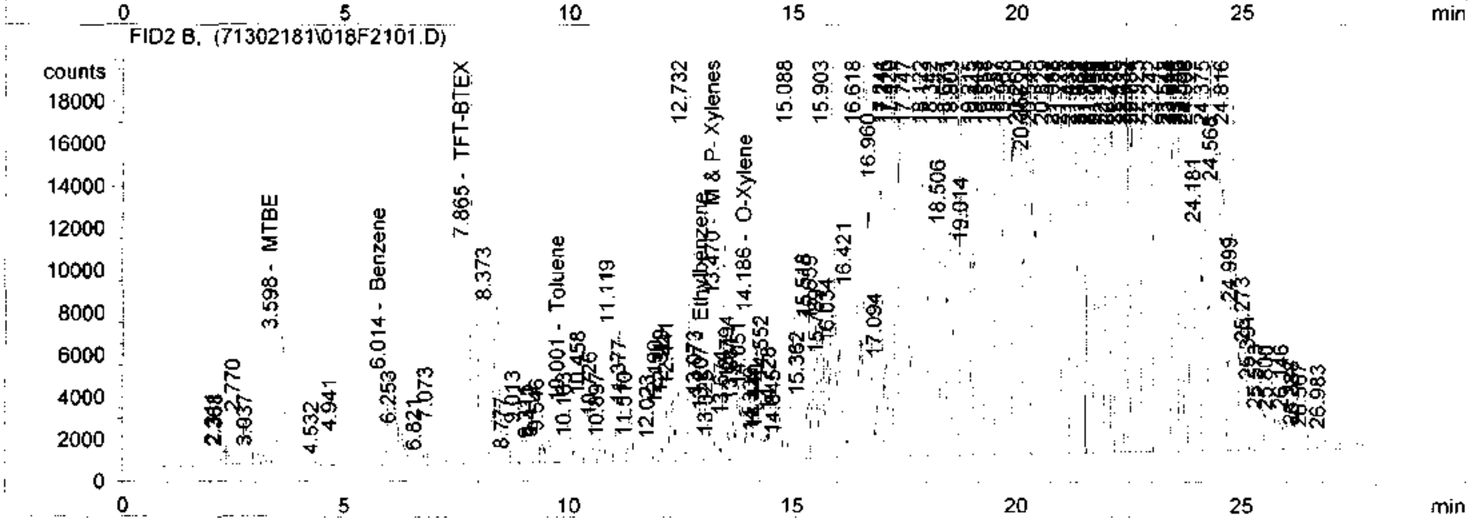
Gas/BTEX   Instrument 70
Data File: C:\HPCHEM\1\DATA\71302181\018F2101.D
Injection Date & Time: 2/18/2013 10:00:34 PM
Report Created on: 2/19/2013 8:19:40 AM
Operator: DLC
Aquistion Method: GX0712.M
Analysis Method: C:\HPCHEM\1\METHODS\GX0712.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:EV13020091-12 5M   Dilution: X 0.0

highly weathered gasoline (biased high due to semivol range peaks + overlap)





Ret. Time	Compound Name	Area	Amount ug/L
7.866	TFT-Gas	62029.512	7.448 74%
15.720	Gasoline Envelope	2.589e+006	532.954

Gas = 530 µg/L

Ret. Time	Compound Name	Area	Amount ug/L
3.598	MTBE	61550.613	1.513
6.014	Benzene	51407.156	0.735
7.865	TFT-BTEX	273041.969	8.866 89%
10.001	Toluene	16307.881	0.694
13.207	Ethylbenzene	10734.661	0.956
13.470	M & P- Xylenes	47864.926	1.257
14.186	O-Xylene	33518.449	0.492

REVIEWED BY & DATE MS 2/25/13

B,T,E < 1 µg/L   X < 3 µg/L

2-20-13 DC

CCI ANALYTICAL LABORATORIES
DATA SUMMARY SHEET

PARAMETER: VPH   INSTR. MTHD: 8021   EXTRCT MTHD: 5030

QC BATCH #: VW022113   1ST ANAL. SEQ.: 71302211

EXT. DATES: 2/21/2013   MATRIX: WATER

ASSOCIATED SMPLS: EV13020091-2,3,10,12

BLANK AND DUPLICATE RESULTS

ANALYTE:	BLANK RESULTS:	DUPLICATE:	ORIGINAL:	%RPD:
Aromatics		SMP ID: EV13020091-2	EV13020091-2	
C5-C6	<50 ug/L	<50 ug/L	<50 ug/L	
>C6-C8	<50 ug/L	<50 ug/L	<50 ug/L	
>C8-C10	<50 ug/L	<50 ug/L	<50 ug/L	
>C10-C12				
Alkanes				
C5-C6	<50 ug/L	<50 ug/L	<50 ug/L	
>C6-C8	<50 ug/L	<50 ug/L	<50 ug/L	
>C8-C10	<50 ug/L	<50 ug/L	<50 ug/L	
>C10-C12				

SPIKE ID	BS %RECOVERY	MS % RECOVERY	BSD % RECOVERY	BS/BSD REL % DIFF
Aromatics		SMP ID EV13020091-2		
TFT ARO	126	112	125	1
C8-C10	105	111	113	7
>C10-C12	99	95	107	8
>C12-C13	79	61*	86	
Alkanes				
C5-C6	92	94	100	8
>C6-C8	95	95	101	6
>C8-C10	100	98	107	7
>C10-C12				
TFT ALK	94	90	91	3

*Spike recovery outside control limits due to sample matrix.

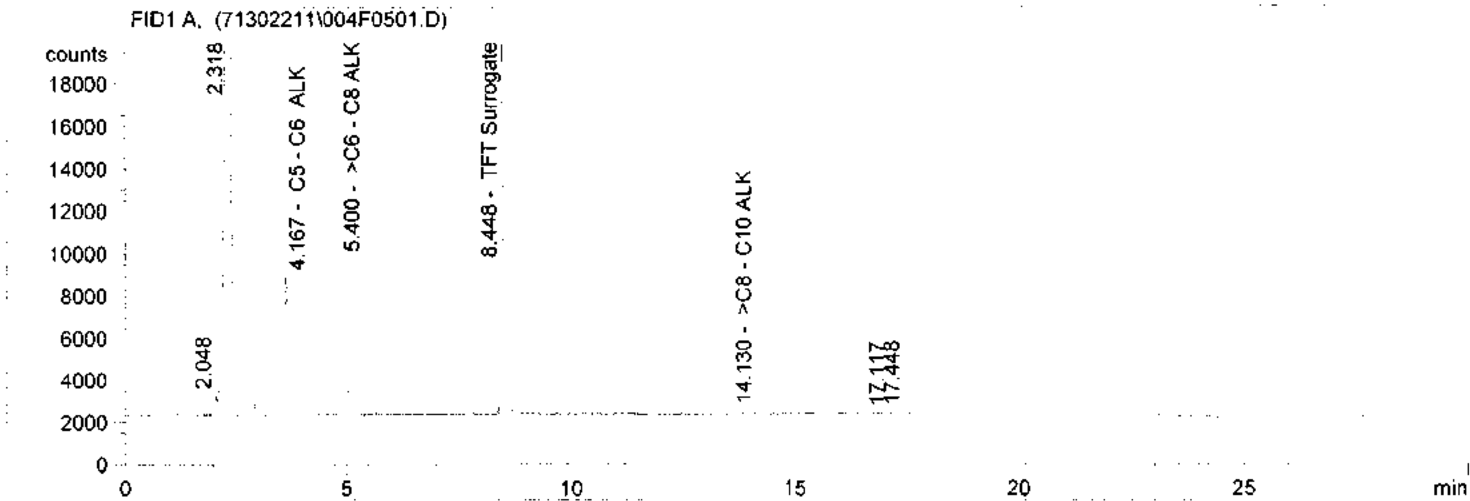
NOTES: IF NUMBER OF ANALYTES DON'T ALLOW LISTING ALL COMPOUNDS, THE RAW DATA MAY BE SUBMITTED
RAW DATA FOR QC RUN ON A SPECIFIC SAMPLE SHOULD BE INCLUDED WITH ORIGINAL SAMPLE ANALYSIS RAW DATA

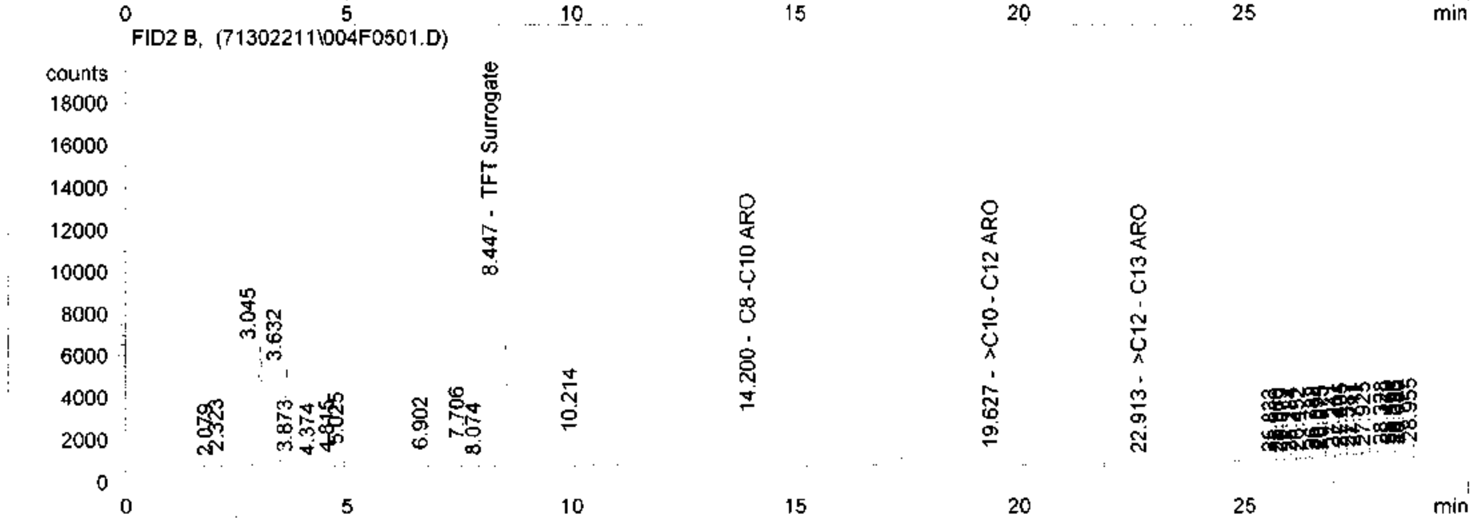
DATASUM.XLS

Gas/BTEX   Instrument 70
Data File: C:\HPCHEM\1\DATA\71302211\004F0501.D
Injection Date & Time: 2/21/2013 10:56:01 AM
Report Created on: 2/22/2013 8:24:59 AM
Operator: DLC
Aquistion Method: 70VP0113.M
Analysis Method: C:\HPCHEM\1\METHODS\70VP0213.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:MB-022113W VPH   Dilution: X 0.0





Ret. Time	Compound Name	Area	Amount ug/L
4.167	C5 - C6 ALK	78021.648	7.166
5.400	>C6 - C8 ALK	7320.587	1.197
8.448	TFT Surrogate	78541.406	9.898 ÷10×100 = 99%
14.130	>C8 - C10 ALK	13712.254	1.271
0.000	>C10 - C12 ALK	0.000	0.000 * Not reported

Ret. Time	Compound Name	Area	Amount ug/L
8.447	TFT Surrogate	351029.688	11.047 ÷10×100 = 110%
14.200	C8 -C10 ARO	76268.742	2.067
19.627	>C10 - C12 ARO	43301.098	3.833
22.913	>C12 - C13 ARO	18200.998	10.541

REVIEWED BY JB
& DATE 2/27/13

ALK
C5-C6 < 50 µg/L
>C6-C8
>C8-C10

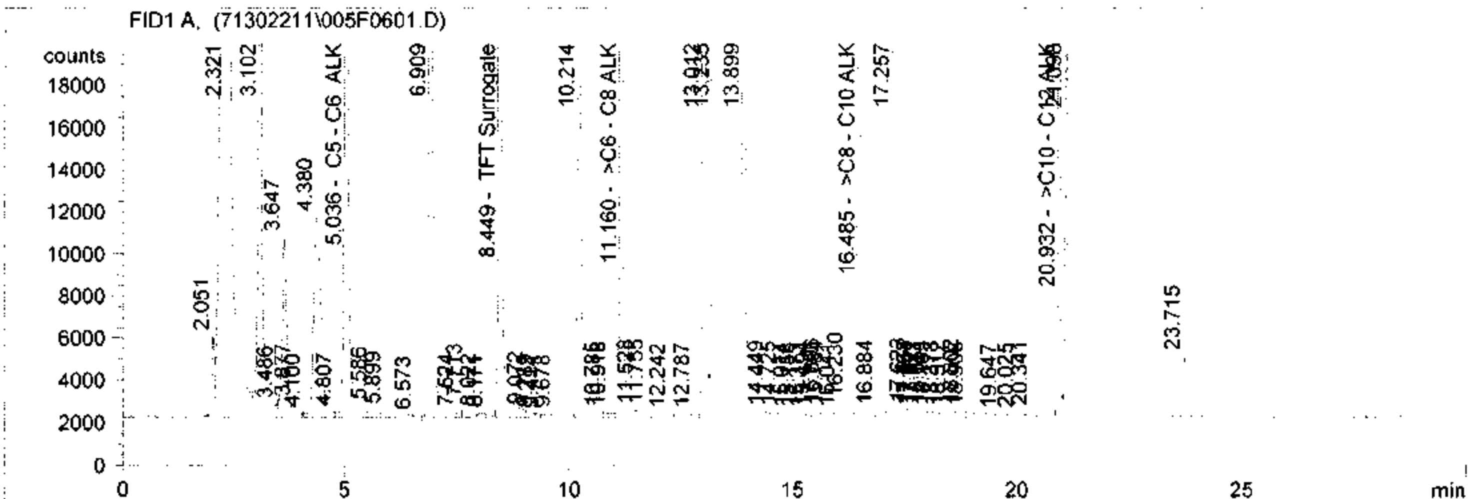
ARO
C8-C10 < 50 µg/L
>C10-C12
>C12-C13

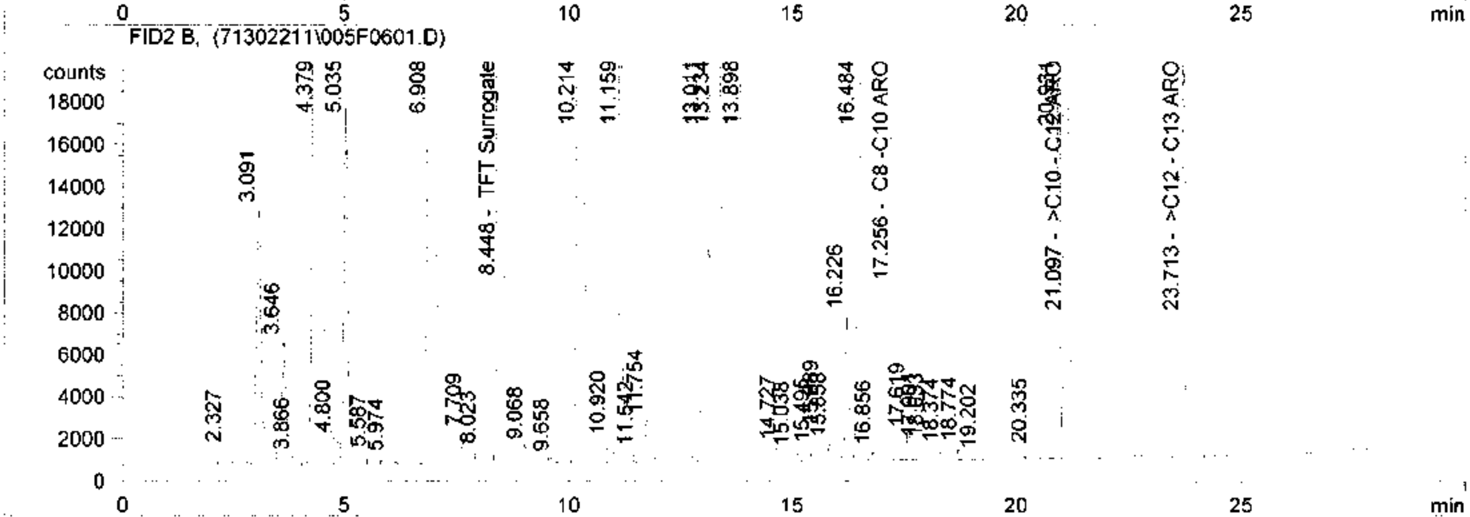
2-22-13 DC

Gas/BTEX   Instrument 70
Data File: C:\HPCHEM\1\DATA\71302211\005F0601.D
Injection Date & Time: 2/21/2013 11:36:53 AM
Report Created on: 2/21/2013 12:26:14 PM
Operator: DLC
Aquistion Method: 70VP0113.M
Analysis Method: C:\HPCHEM\1\METHODS\70VP0213.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:BS-022113W VPH   Dilution: X 0.0





Ret. Time	Compound Name	Area	Amount ug/L	
5.036	C5 - C6 ALK	191628.422	18.465	÷20x100 = 92%
8.449	TFT Surrogate	290442.000	34.466	÷30x100 = 115%
11.160	>C6 - C8 ALK	197941.141	18.996	95%
16.485	>C8 - C10 ALK	188838.422	20.071	100%
20.932	>C10 - C12 ALK	96083.500	22.187	Not reported

Ret. Time	Compound Name	Area	Amount ug/L	
8.448	TFT Surrogate	1.210e+006	37.715	÷30x100 = 126%
17.256	C8 -C10 ARO	1.014e+006	21.067	÷20x100 = 105%
21.097	>C10 - C12 ARO	628254.313	19.874	99%
23.713	>C12 - C13 ARO	79307.016	15.806	79%

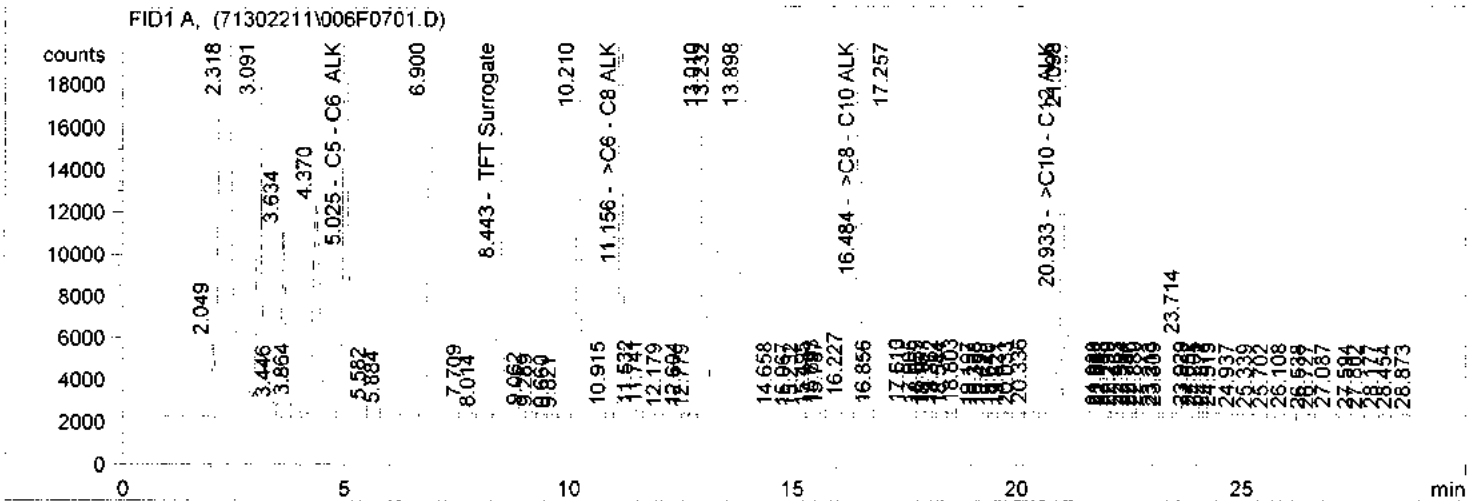
REVIEWED BY & DATE MJ 2/27/13

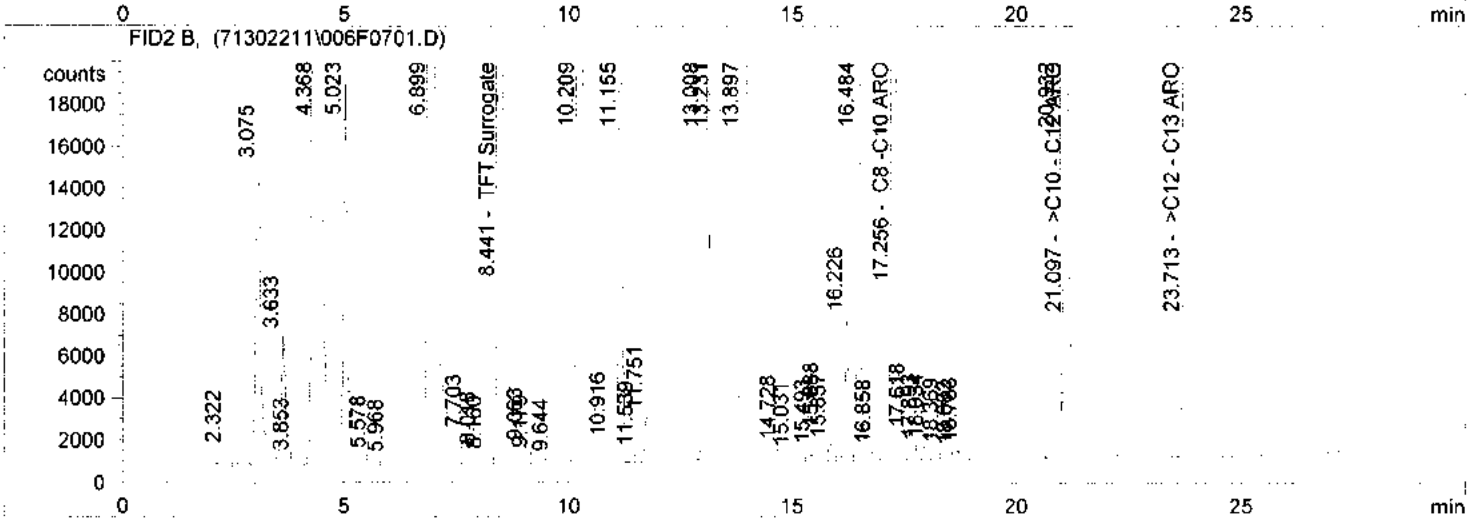
2-22-13 DC

Gas/BTEX Instrument 70
Data File: C:\HPCHEM\1\DATA\71302211\006F0701.D
Injection Date & Time: 2/21/2013 12:17:48 PM
Report Created on: 2/21/2013 3:00:16 PM
Operator: DLC
Aquistion Method: 70VP0113.M
Analysis Method: C:\HPCHEM\1\METHODS\70VP0213.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:BSD-022113W VPH Dilution: X 0.0





Ret. Time	Compound Name	Area	Amount ug/L	
5.025	C5 - C6 ALK	206297.328	19.924	100%
8.443	TFT Surrogate	288629.281	34.256	÷30x100 = 114%
11.156	>C6 - C8 ALK	211854.172	20.296	101%
16.484	>C8 - C10 ALK	200892.891	21.365	107%
20.933	>C10 - C12 ALK	109153.648	25.406	* Not reported

Ret. Time	Compound Name	Area	Amount ug/L	
8.441	TFT Surrogate	1.203e+006	37.501	÷30x100 = 125%
17.256	C8 -C10 ARO	1.089e+006	22.590	113%
21.097	>C10 - C12 ARO	680492.375	21.306	107%
23.713	>C12 - C13 ARO	95264.875	17.181	86%

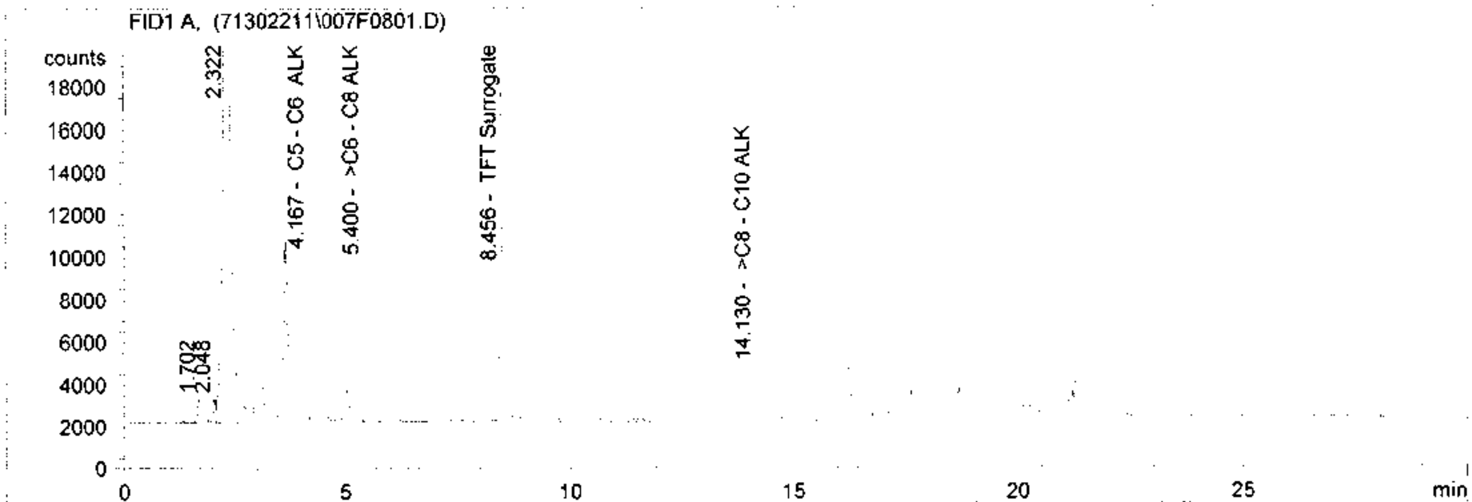
REVIEWED BY & DATE AB 2/27/13

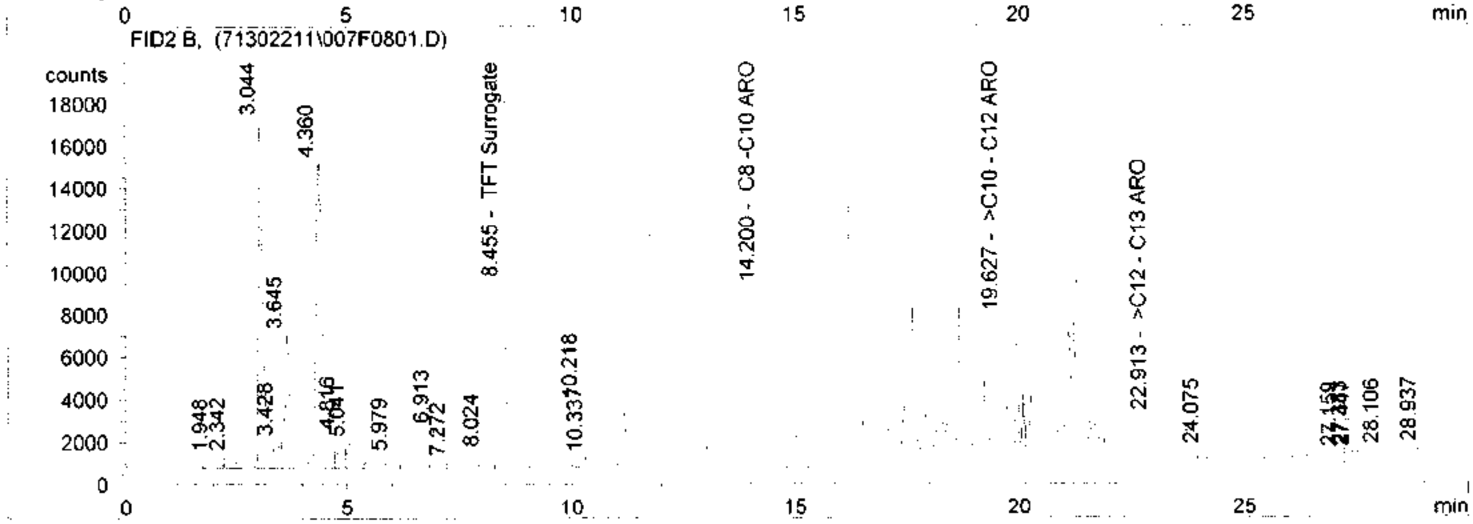
2-22-13 DC

Gas/BTEX   Instrument 70
Data File: C:\HPCHEM\1\DATA\71302211\007F0801.D
Injection Date & Time: 2/21/2013 12:58:10 PM
Report Created on: 2/22/2013 8:26:58 AM
Operator: DLC
Aquistion Method: 70VP0113.M
Analysis Method: C:\HPCHEM\1\METHODS\70VP0213.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:EV13020091-02 10   Dilution: X 0.5





Ret. Time	Compound Name	Area	Amount ug/L	
4.167	C5 - C6 ALK	126946.227	12.032	
5.400	>C6 - C8 ALK	43146.711	4.542	
8.456	TFT Surrogate	69680.812	8.871	÷10×100 = 89%
14.130	>C8 - C10 ALK	77438.766	8.112	
0.000	>C10 - C12 ALK	0.000	0.000	* Not reported

Ret. Time	Compound Name	Area	Amount ug/L	
8.455	TFT Surrogate	316896.562	9.987	÷10×100 = 100%
14.200	C8 -C10 ARO	410832.719	8.845	
19.627	>C10 - C12 ARO	516941.937	16.821	
22.913	>C12 - C13 ARO	105989.219	18.105	

REVIEWED BY & DATE MB 2/27/13

ALK
C5-C6 <50 µg/L
>C6-C8
>C8-C10

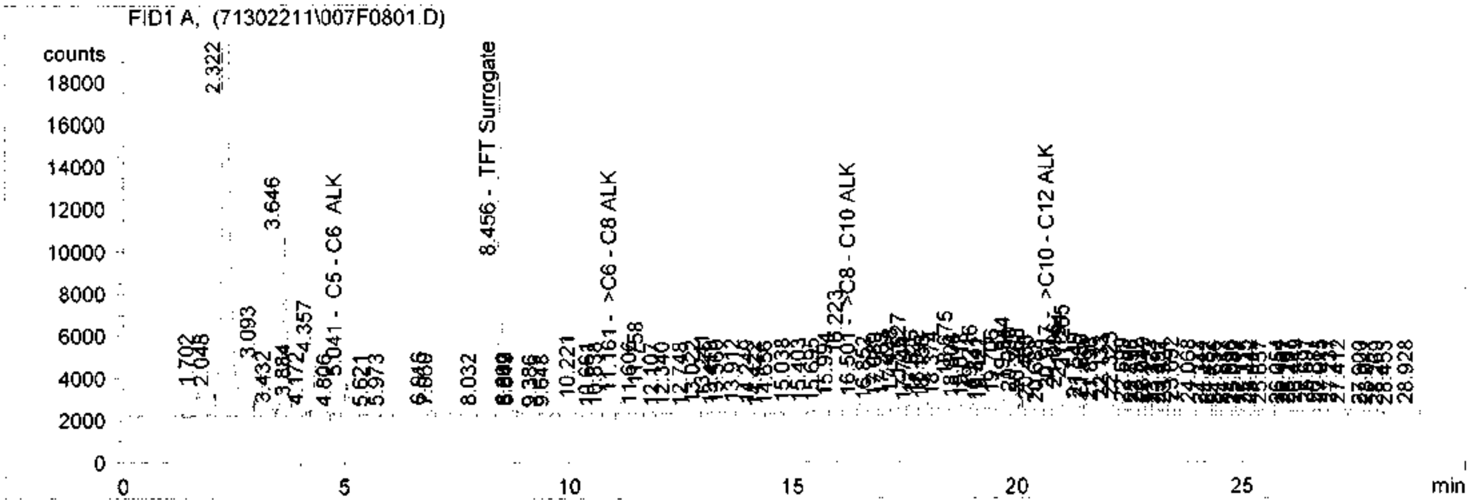
ARO
C8-C10 <50 µg/L
>C10-C12
>C12-C13

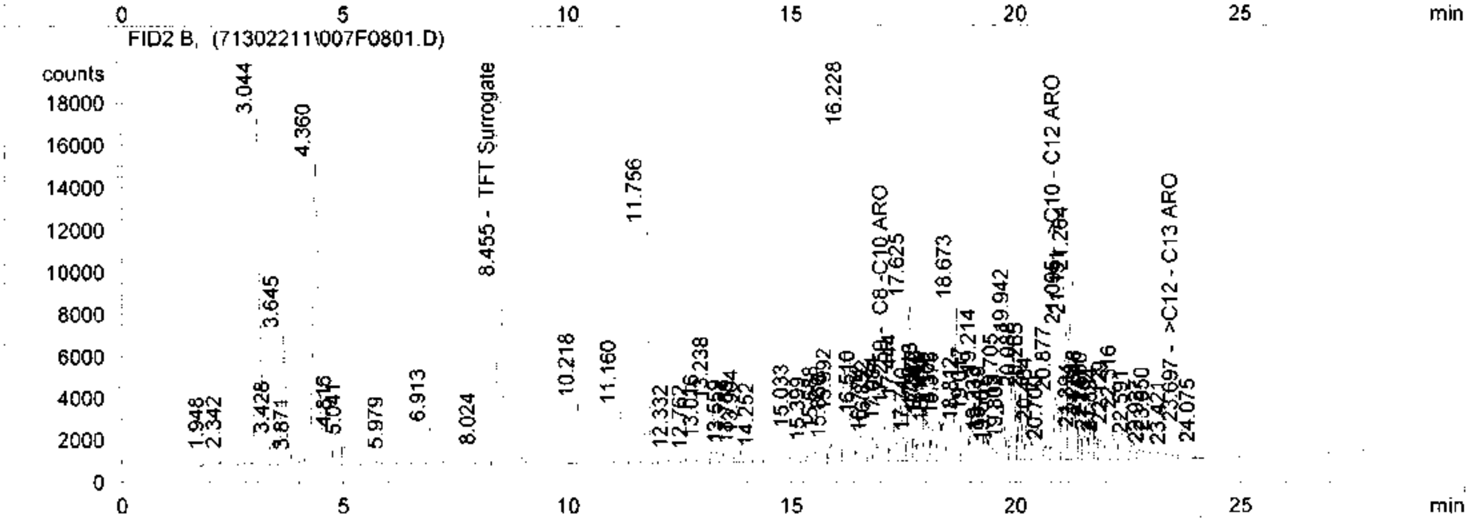
2-22-13 DC

Gas/BTEX Instrument 70
Data File: C:\HPCHEM\1\DATA\71302211\007F0801.D
Injection Date & Time: 2/21/2013 12:58:10 PM
Report Created on: 2/22/2013 8:19:16 AM
Operator: DLC
Aquistion Method: 70VP0113.M
Analysis Method: C:\HPCHEM\1\METHODS\70VP0213.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:EV13020091-02 10 Dilution: X 0.5





Ret. Time	Compound Name	Area	Amount ug/L
5.041	C5 - C6 ALK	10701.770	0.471
8.456	TFT Surrogate	74220.930	9.397
11.161	>C6 - C8 ALK	5084.601	0.988
16.501	>C8 - C10 ALK	4944.029	0.330
20.917	>C10 - C12 ALK	8974.110	0.735

Ret. Time	Compound Name	Area	Amount ug/L
8.455	TFT Surrogate	313286.625	9.875
17.259	C8 -C10 ARO	12508.923	0.775
21.095	>C10 - C12 ARO	34253.672	3.585
23.697	>C12 - C13 ARO	10536.638	9.881

REVIEWED BY & DATE RD 2/22/13

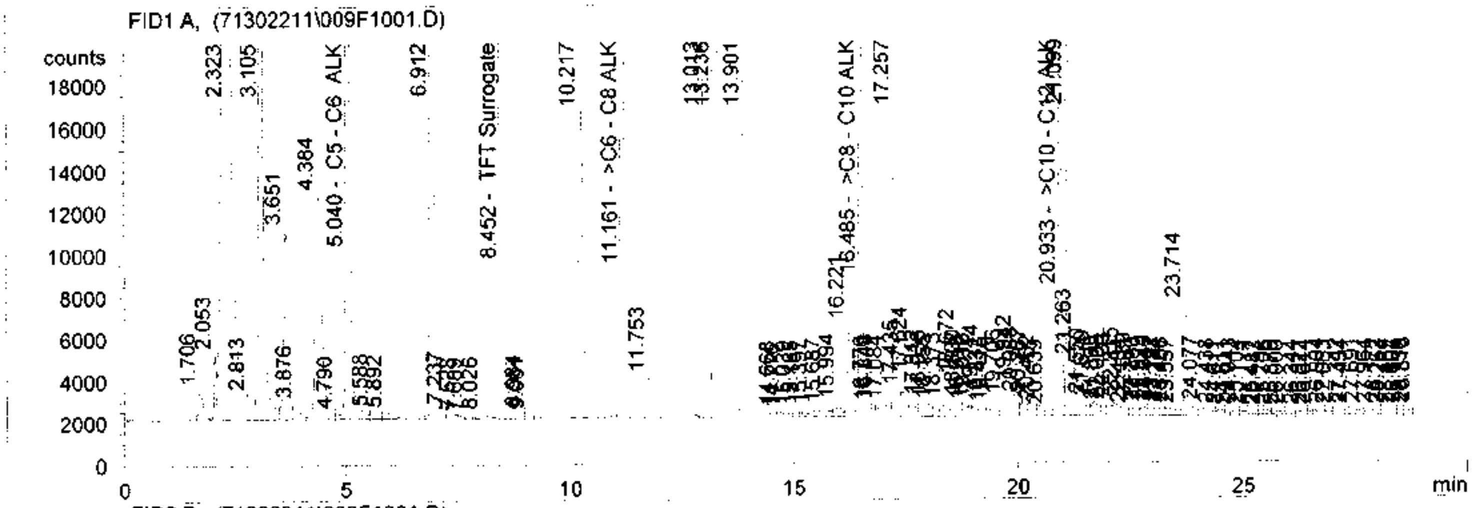
For MS

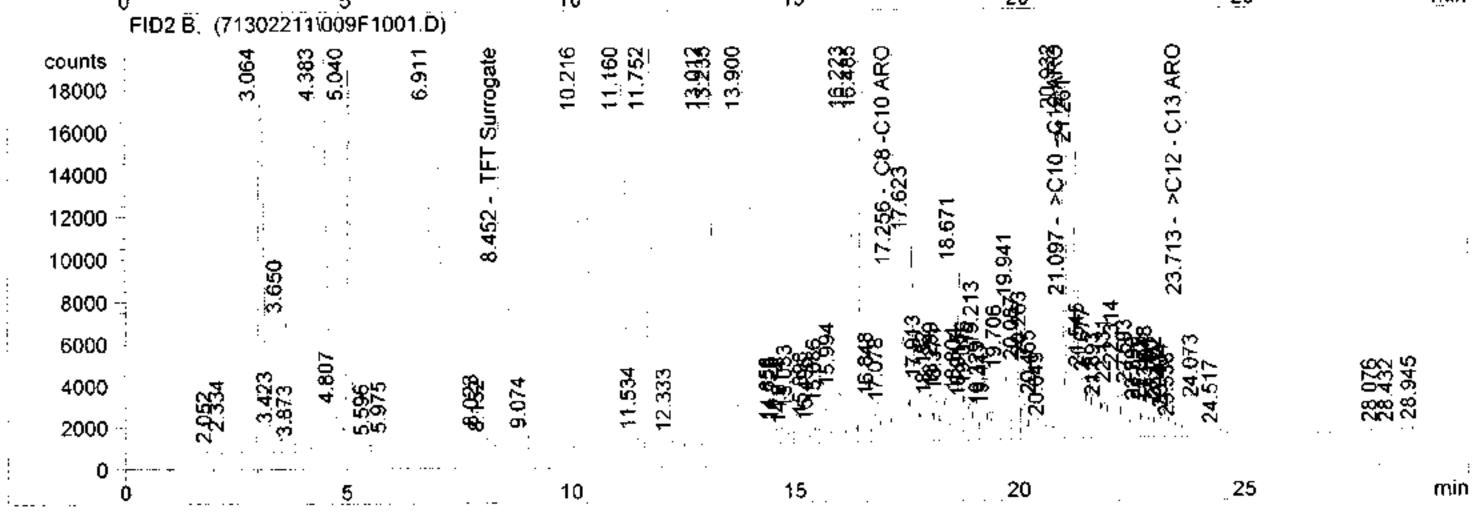
2-22-13 DC

Gas/BTEX Instrument 70
Data File: C:\HPCHEM\1\DATA\71302211\009F1001.D
Injection Date & Time: 2/21/2013 2:21:24 PM
Report Created on: 2/22/2013 8:19:30 AM
Operator: DLC
Aquistion Method: 70VP0113.M
Analysis Method: C:\HPCHEM\1\METHODS\70VP0213.M

FID1 A equivalent to PID analysis.
FID2 B equivalent to PID analysis.

Sample Name:EV13020091-02 MS Dilution: X 0.5





Ret. Time	Compound Name	Area	Amount ug/L	
5.040	C5 - C6 ALK	199781.406	19.276	− 0.471 = $\frac{18.805}{20} \times 100 = 94\%$
8.452	TFT Surrogate	253013.312	30.127	÷30×100 = 100%
11.161	>C6 - C8 ALK	209042.000	20.033	95%
16.485	>C8 - C10 ALK	186756.484	19.847	98%
20.933	>C10 - C12 ALK	98427.773	22.765	~~%~~ * Not Reported

Ret. Time	Compound Name	Area	Amount ug/L	
8.452	TFT Surrogate	1.080e+006	33.664	÷30×100 = 112%
17.256	C8 -C10 ARO	1.109e+006	22.995	111%
21.097	>C10 - C12 ARO	729907.812	22.661	95%
23.713	>C12 - C13 ARO	152573.703	22.119	61% **low due to sample matrix

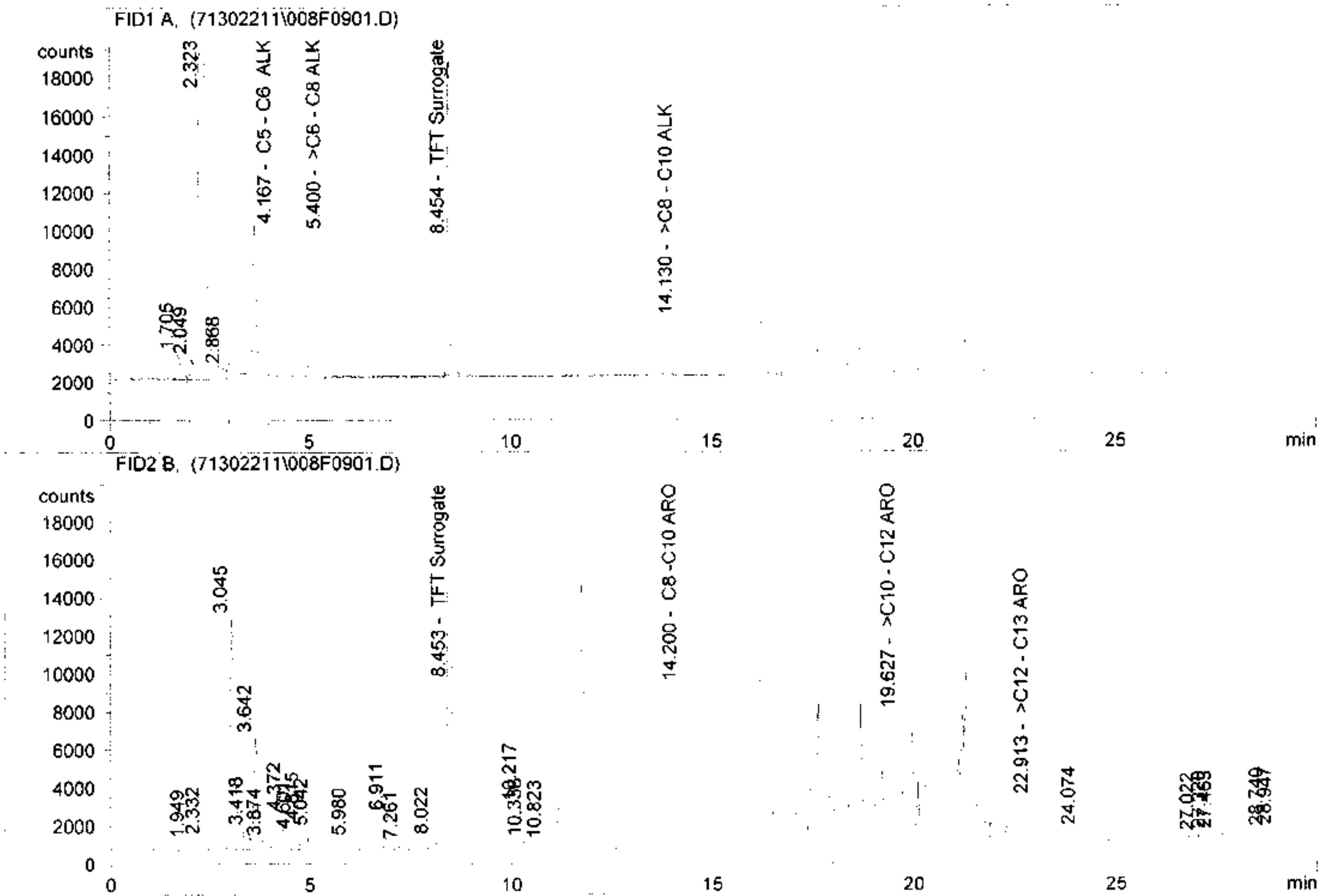
2-22-13 DC

REVIEWED BY MS
& DATE 2/27/13

Gas/BTEX Instrument 70
Data File: C:\HPCHEM\1\DATA\71302211\008F0901.D
Injection Date & Time: 2/21/2013 1:40:25 PM
Report Created on: 2/22/2013 8:27:29 AM
Operator: DLC
Aquistion Method: 70VP0113.M
Analysis Method: C:\HPCHEM\1\METHODS\70VP0213.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:EV13020091-02 DU Dilution: X 0.5



Ret. Time	Compound Name	Area	Amount ug/L
4.167	C5 - C6 ALK	103497.180	9.700
5.400	>C6 - C8 ALK	6450.865	1.116
8.454	TFT Surrogate	73348.219	9.296 ÷10×100 = 93%
14.130	>C8 - C10 ALK	47584.438	4.907
0.000	>C10 - C12 ALK	0.000	0.000

Ret. Time	Compound Name	Area	Amount ug/L
8.453	TFT Surrogate	332613.031	10.475 ÷10×100=105%
14.200	C8 -C10 ARO	436663.437	9.368
19.627	>C10 - C12 ARO	523470.406	17.000
22.913	>C12 - C13 ARO	111791.883	18.605

REVIEWED BY [initials]
DATE 2/22/13

ALK
C_5-C_6 <50 µg/L
>C_6-C_8
>C_8-C_{10}

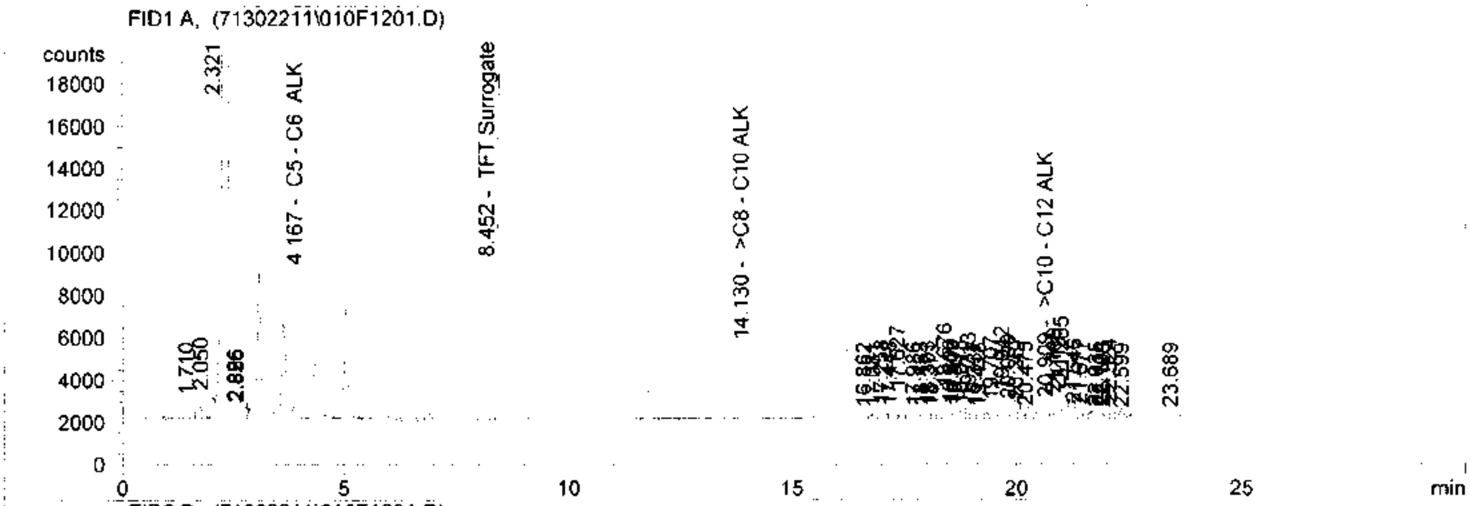
ARO
C_8-C_{10} <50 µg/L
>C_{10}-C_{12}
>C_{12}-C_{13}

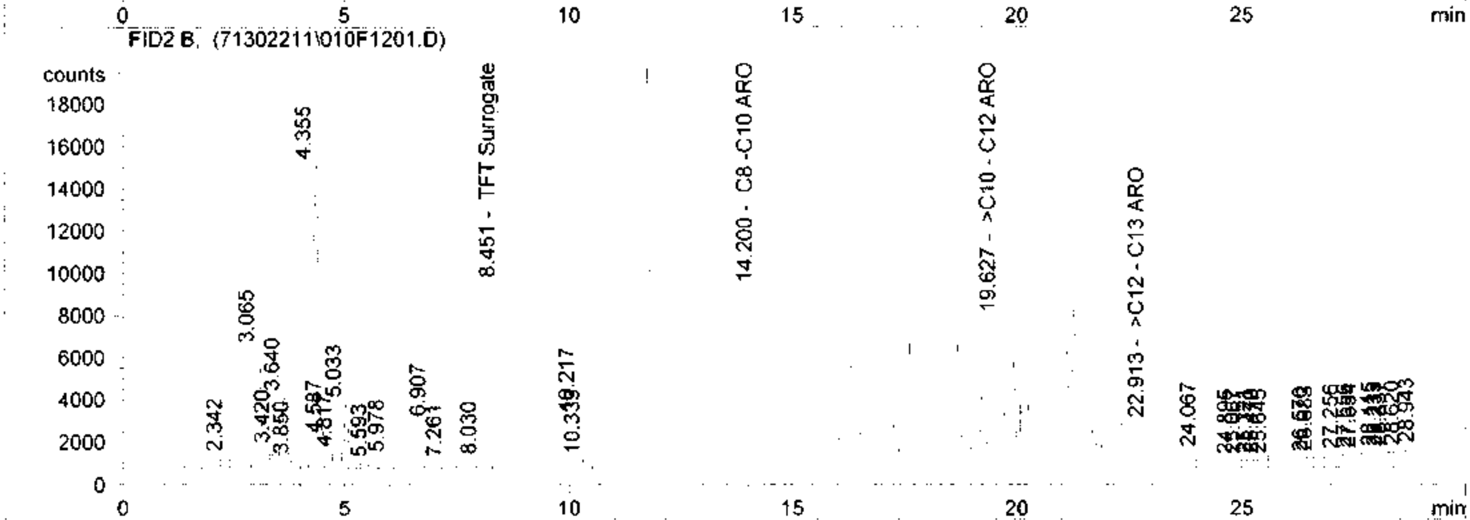
2-22-13 DC

Gas/BTEX Instrument 70
Data File: C:\HPCHEM\1\DATA\71302211\010F1201.D
Injection Date & Time: 2/21/2013 3:44:11 PM
Report Created on: 2/26/2013 2:09:38 PM
Operator: DLC
Aquistion Method: 70VP0113.M
Analysis Method: C:\HPCHEM\1\METHODS\70VP0213.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:EV13020091-03 10 Dilution: X 0.5





Ret. Time	Compound Name	Area	Amount ug/L	
4.167	C5 - C6 ALK	133633.078	12.697	
0.000	>C6 - C8 ALK	0.000	0.000	
8.452	TFT Surrogate	73180.391	9.276	93/
14.130	>C8 - C10 ALK	42940.598	4.409	
20.909	>C10 - C12 ALK	6859.378	0.214	* Not reported

Ret. Time	Compound Name	Area	Amount ug/L	
8.451	TFT Surrogate	331242.219	10.432	104 /
14.200	C8 -C10 ARO	464197.063	9.926	
19.627	>C10 - C12 ARO	429329.469	14.419	
22.913	>C12 - C13 ARO	95407.445	17.194	

REVIEWED BY RB
& DATE 2/27/13

ALK
C5-C6 < 50 µg/L
>C6-C8
>C8-C10

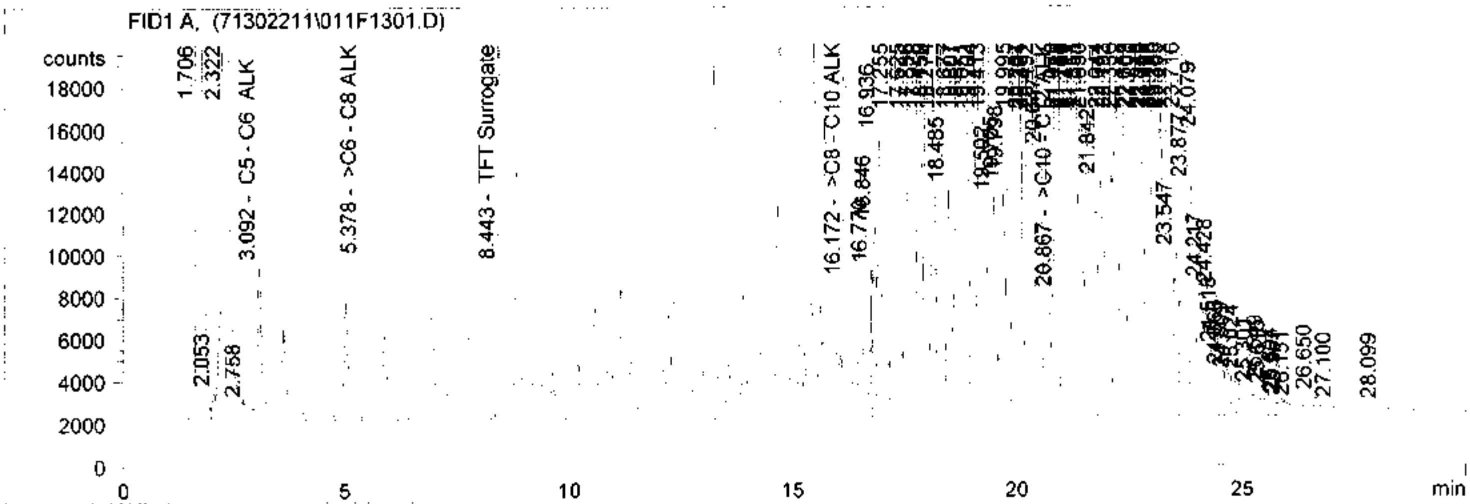
ARO
C8-C10 < 50 µg/L
>C10-C12
>C12-C13

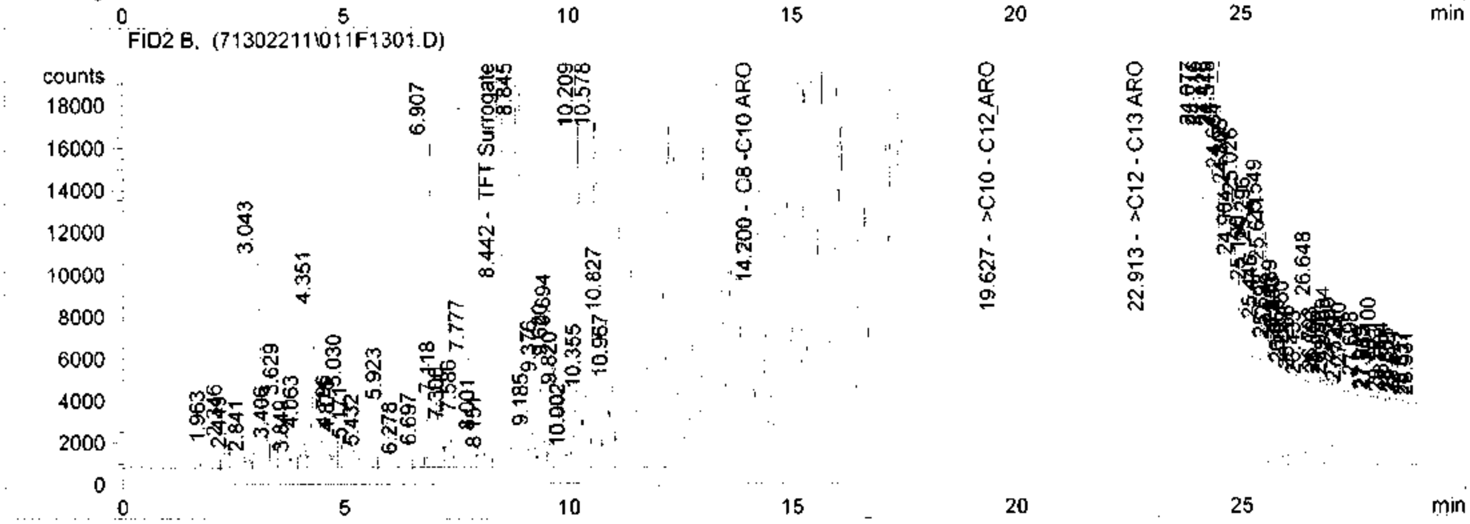
2-26-13 DC

Gas/BTEX   Instrument 70
Data File: C:\HPCHEM\1\DATA\71302211\011F1301.D
Injection Date & Time: 2/21/2013 4:24:37 PM
Report Created on: 2/26/2013 2:06:37 PM
Operator: DLC
Aquistion Method: 70VP0113.M
Analysis Method: C:\HPCHEM\1\METHODS\70VP0213.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:EV13020091-10 10   Dilution: X 0.5





Ret. Time	Compound Name	Area	Amount ug/L	
3.092	C5 - C6 ALK	155999.906	14.922	
5.378	>C6 - C8 ALK	398368.062	37.712	
8.443	TFT Surrogate	84916.695	10.637	106%
16.172	>C8 - C10 ALK	913265.125	97.838	
20.867	>C10 - C12 ALK	259406.719	62.409	* Not reported

Ret. Time	Compound Name	Area	Amount ug/L	
8.442	TFT Surrogate	387047.125	12.165	122%
14.200	C8 -C10 ARO	7.723e+006	156.990	
19.627	>C10 - C12 ARO	3.856e+007	1060.162	
22.913	>C12 - C13 ARO	1.448e+007	1256.206	

REVIEWED BY RS
& DATE 2/27/13

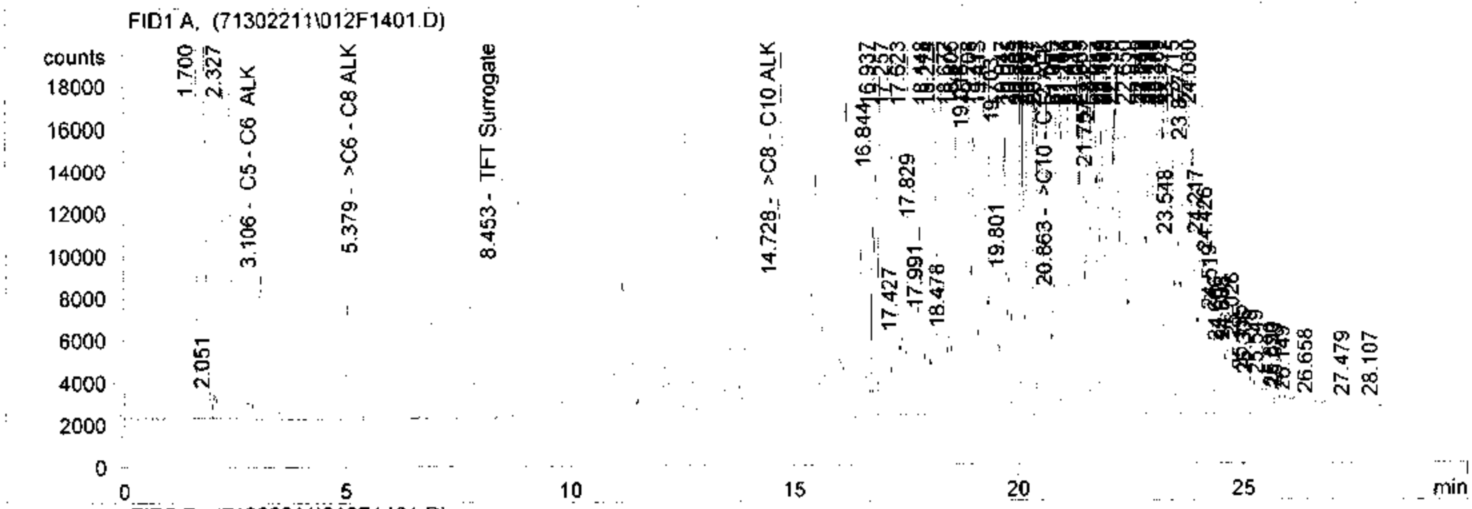
ALK
C5-C6 <50 μg/L
>C6-C8
>C8-C10

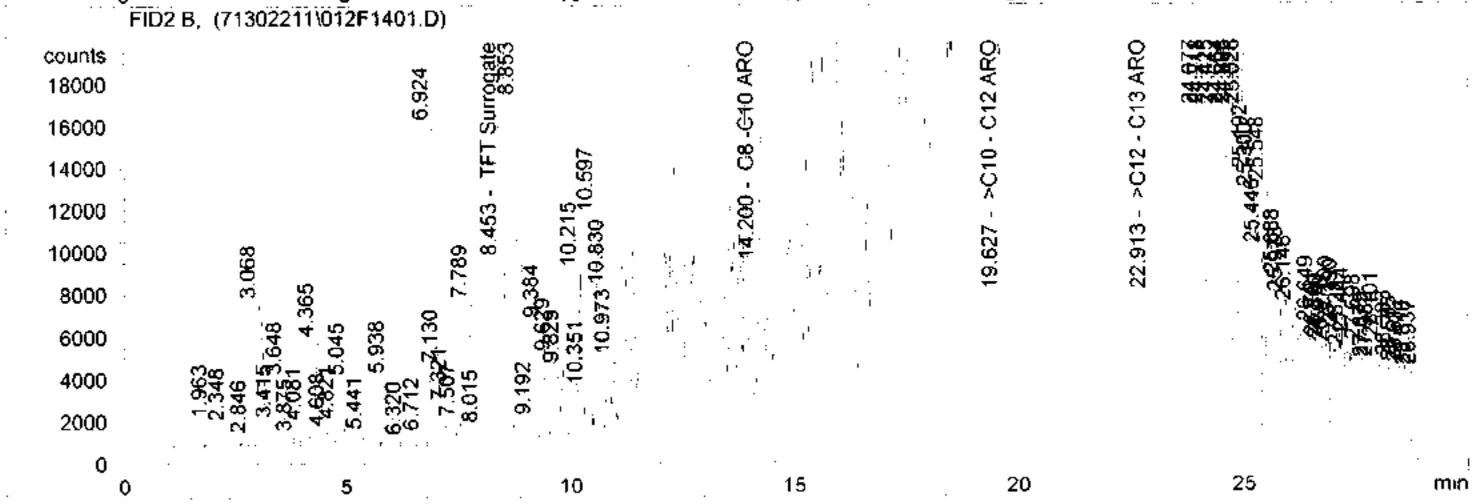
ARO
C8-C10 ~~<50 μg/L~~ 156.990 μg/L x 0.5 = 78 μg/L
>C10-C12 = ~~156.990 x 0.5 = 78 μg/L~~ DC = 530 μg/L
>C12-C13 = 630 μg/L
2-26-13 DC

Gas/BTEX Instrument 70
Data File: C:\HPCHEM\1\DATA\71302211\012F1401.D
Injection Date & Time: 2/21/2013 5:05:26 PM
Report Created on: 2/26/2013 2:08:25 PM
Operator: DLC
Aquistion Method: 70VP0113.M
Analysis Method: C:\HPCHEM\1\METHODS\70VP0213.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:EV13020091-12 10 Dilution: X 0.5





Ret. Time	Compound Name	Area	Amount ug/L	
3.106	C5 - C6 ALK	146967.344	14.024	
5.379	>C6 - C8 ALK	367781.250	34.855	
8.453	TFT Surrogate	87927.789	10.986	110%
14.728	>C8 - C10 ALK	747491.750	80.042	
20.863	>C10 - C12 ALK	184794.656	44.034	* Not reported

Ret. Time	Compound Name	Area	Amount ug/L	
8.453	TFT Surrogate	392086.187	12.321	123%
14.200	C8 -C10 ARO	6.940e+006	141.132	
19.627	>C10 - C12 ARO	3.032e+007	834.115	
22.913	>C12 - C13 ARO	1.181e+007	1026.902	

REVIEWED BY & DATE RJ 2/27/13

ALK
C5-C6 <50 µg/L
>C6-C8
>C8-C10

ARO
C8-C10 = 141.132 µg/L x 0.5 = 71 µg/L
>C10-C12 = 420 µg/L
>C12-C13 = 510 µg/L

2-26-13 DC

CCI ANALYTICAL LABORATORIES
DATA SUMMARY SHEET

PARAMETER: VPH INSTR. MTHD: 8021 EXTRCT MTHD: 5030

QC BATCH #: HX022113W 1ST ANAL SEQ: 71302211

EXT. DATES: 2/21/2013 MATRIX: WATER

ASSOCIATED SMPLS: EV13020091-2,3,10,12

BLANK AND DUPLICATE RESULTS

ANALYTE:	BLANK RESULTS:	DUPLICATE:	ORIGINAL:	%RPD:
		SMP ID EV13020091-2	EV13020091-2	
Hexane	<1 ug/L	<1 ug/L	<1 ug/L	

SPIKE ID	BLANK SPIKE %RECOVERY	MATRIX SPIKE %RECOVERY	BLANK SPIKE DUPLICATE % RECOVERY	
Aromatics		SMP ID. EV13020091-2		
Hexane	91	95	98	7
TFT	112	99	112	0

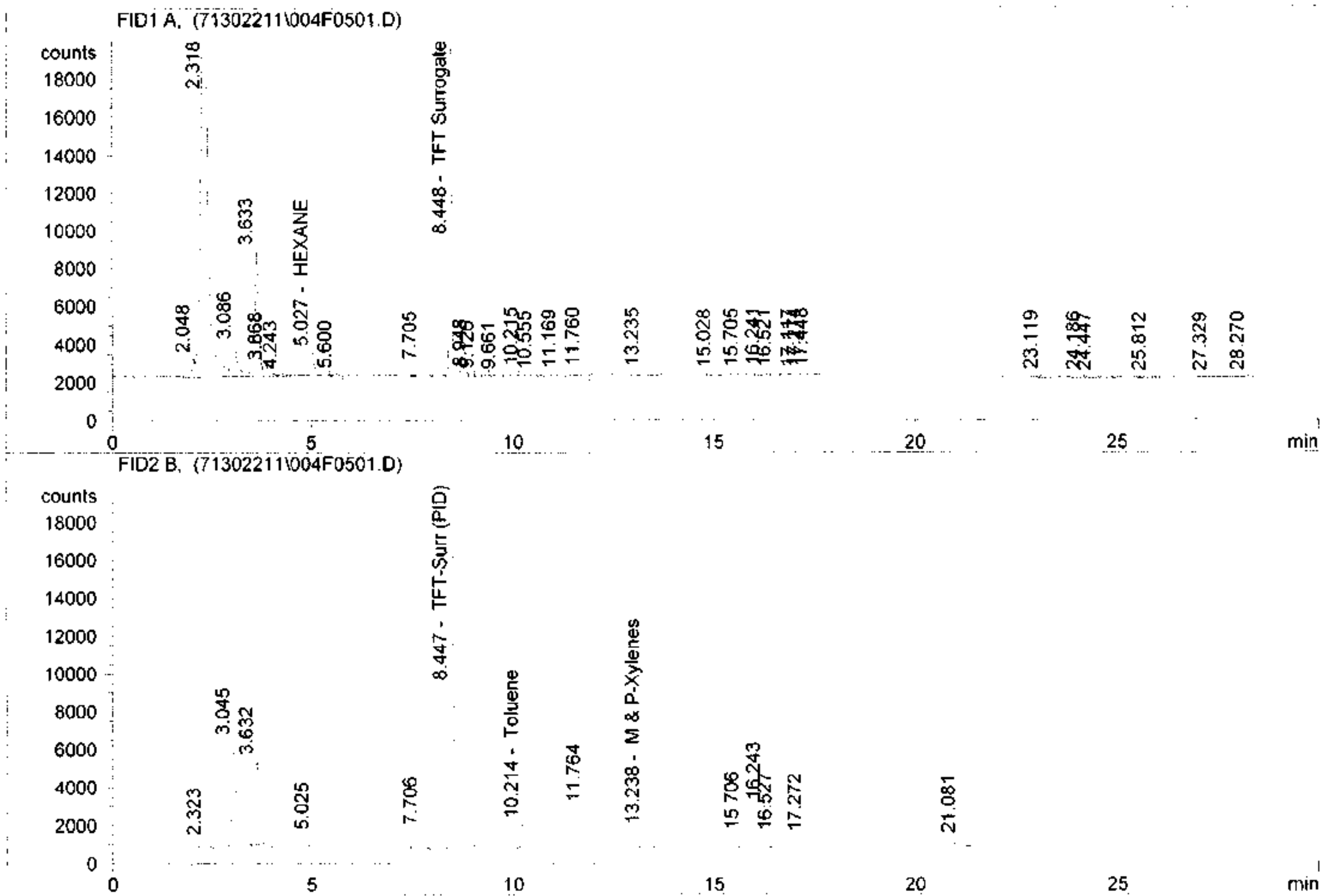
NOTES: IF NUMBER OF ANALYTES DON'T ALLOW LISTING ALL COMPOUNDS, THE RAW DATA MAY BE SUBMITTED
RAW DATA FOR QC RUN ON A SPECIFIC SAMPLE SHOULD BE INCLUDED WITH ORIGINAL SAMPLE ANALYSIS RAW DATA

DATASUM.XLS

Gas/BTEX Instrument 70
Data File: C:\HPCHEM\1\DATA\71302211\004F0501.D
Injection Date & Time: 2/21/2013 10:56:01 AM
Report Created on: 2/21/2013 2:59:05 PM
Operator: DLC
Aquistion Method: 70VP0113.M
Analysis Method: C:\HPCHEM\1\METHODS\70HX0213.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:MB-022113W VPH Dilution: X 0.0



Ret. Time	Compound Name	Area	Amount ug/L
5.027	HEXANE	7295.728	0.000
8.448	TFT Surrogate	85008.250	10.044 ÷10x100= 100%

Hexane < 1.0 µg/L

Ret. Time	Compound Name	Area	Amount ug/L
0.000	MTBE	0.000	0.000
0.000	Benzene	0.000	0.000
8.447	TFT-Surr (PID)	346078.125	10.945 ÷10x100=109%
10.214	Toluene	4201.888	0.536
0.000	Ethylbenzene	0.000	0.000
13.238	M & P-Xylenes	4738.575	0.756
0.000	O-Xylene	0.000	0.000

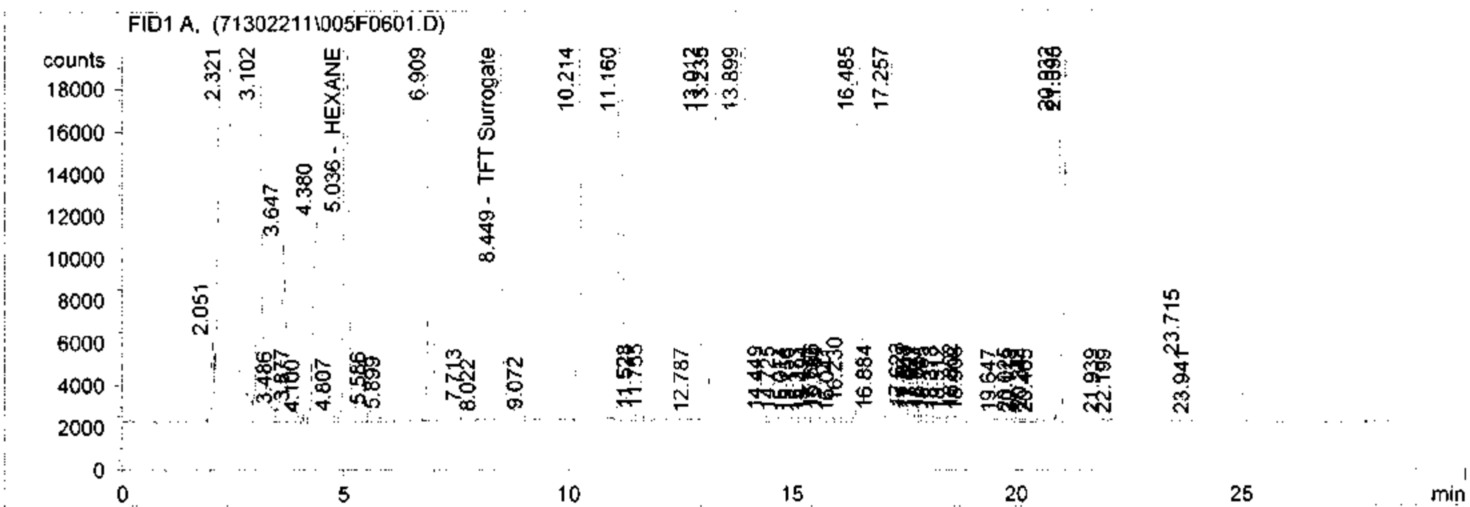
REVIEWED BY & DATE RB 2/27/13

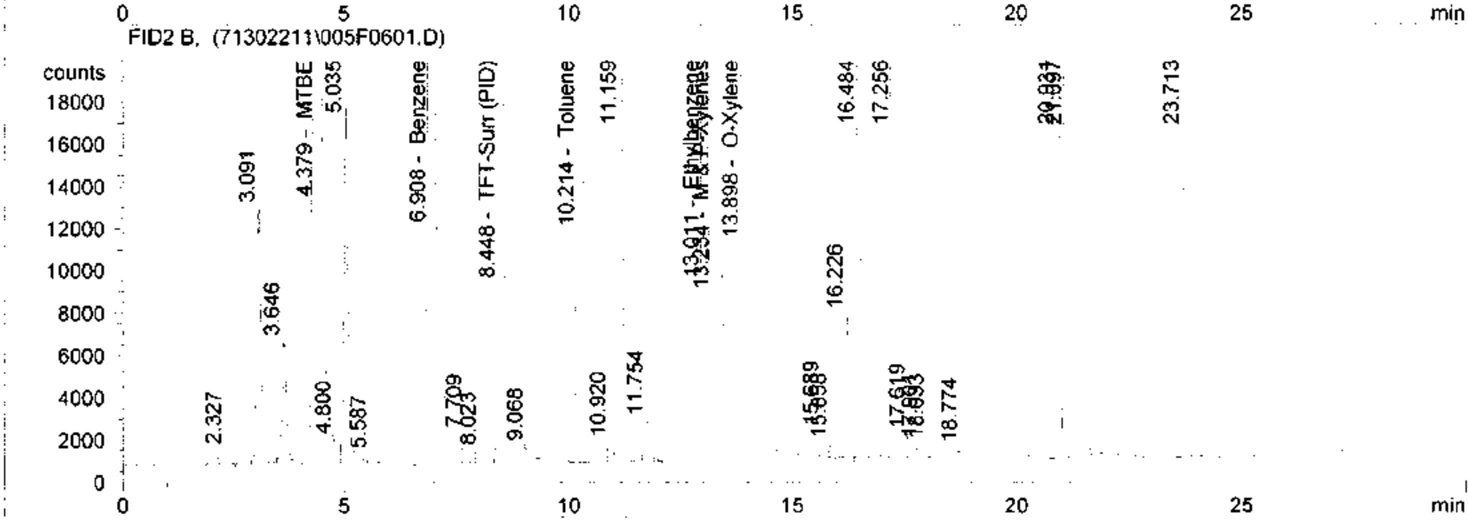
2-22-13 DC

Gas/BTEX Instrument 70
Data File: C:\HPCHEM\1\DATA\71302211\005F0601.D
Injection Date & Time: 2/21/2013 11:36:53 AM
Report Created on: 2/21/2013 2:58:54 PM
Operator: DLC
Aquistion Method: 70VP0113.M
Analysis Method: C:\HPCHEM\1\METHODS\70HX0213.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:BS-022113W VPH Dilution: X 0.0





Ret. Time	Compound Name	Area	Amount ug/L
5.036	HEXANE	191019.969	18.101 ÷20×100=91%
8.449	TFT Surrogate	288031.750	33.730 ÷30×100=112%

Ret. Time	Compound Name	Area	Amount ug/L
4.379	MTBE	746280.000	41.649
6.908	Benzene	1.821e+006	20.615
8.448	TFT-Surr (PID)	1.202e+006	37.622
10.214	Toluene	1.456e+006	20.801
13.011	Ethylbenzene	1.140e+006	20.601
13.234	M & P-Xylenes	2.771e+006	41.778
13.898	O-Xylene	1.167e+006	20.589

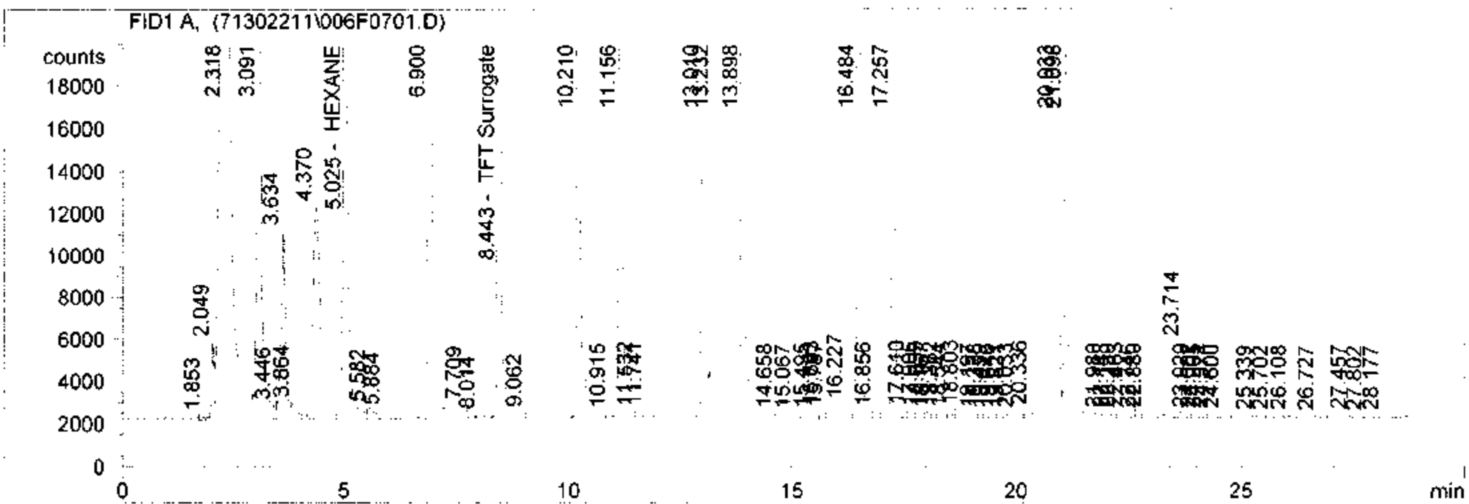
REVIEWED BY M
& DATE 2/27/13

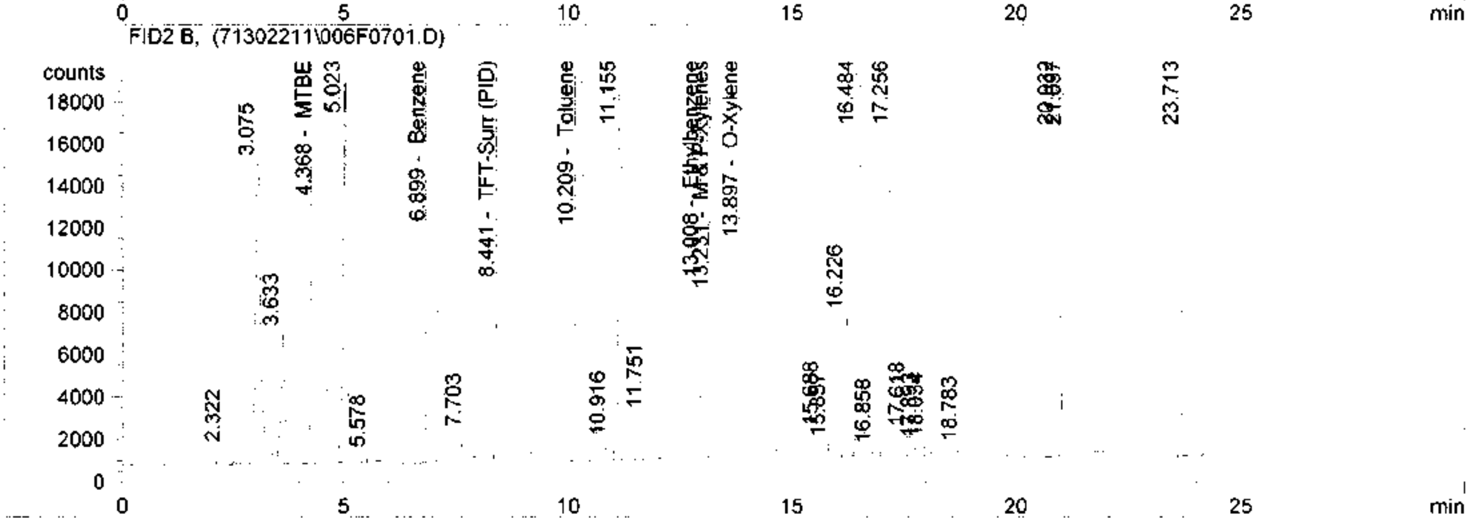
2-22-13 DC

Gas/BTEX   Instrument 70
Data File: C:\HPCHEM\1\DATA\71302211\006F0701.D
Injection Date & Time: 2/21/2013 12:17:48 PM
Report Created on: 2/21/2013 2:57:38 PM
Operator: DLC
Aquistion Method: 70VP0113.M
Analysis Method: C:\HPCHEM\1\METHODS\70HX0213.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:BSD-022113W VPH   Dilution: X 0.0





Ret. Time	Compound Name	Area	Amount ug/L	
5.025	HEXANE	206089.516	19.603	98%
8.443	TFT Surrogate	285870.844	33.478	112%

Ret. Time	Compound Name	Area	Amount ug/L
4.368	MTBE	811912.563	45.188
6.899	Benzene	1.961e+006	22.171
8.441	TFT-Surr (PID)	1.191e+006	37.273
10.209	Toluene	1.564e+006	22.314
13.008	Ethylbenzene	1.225e+006	22.092
13.231	M & P-Xylenes	2.972e+006	44.766
13.897	O-Xylene	1.251e+006	22.023

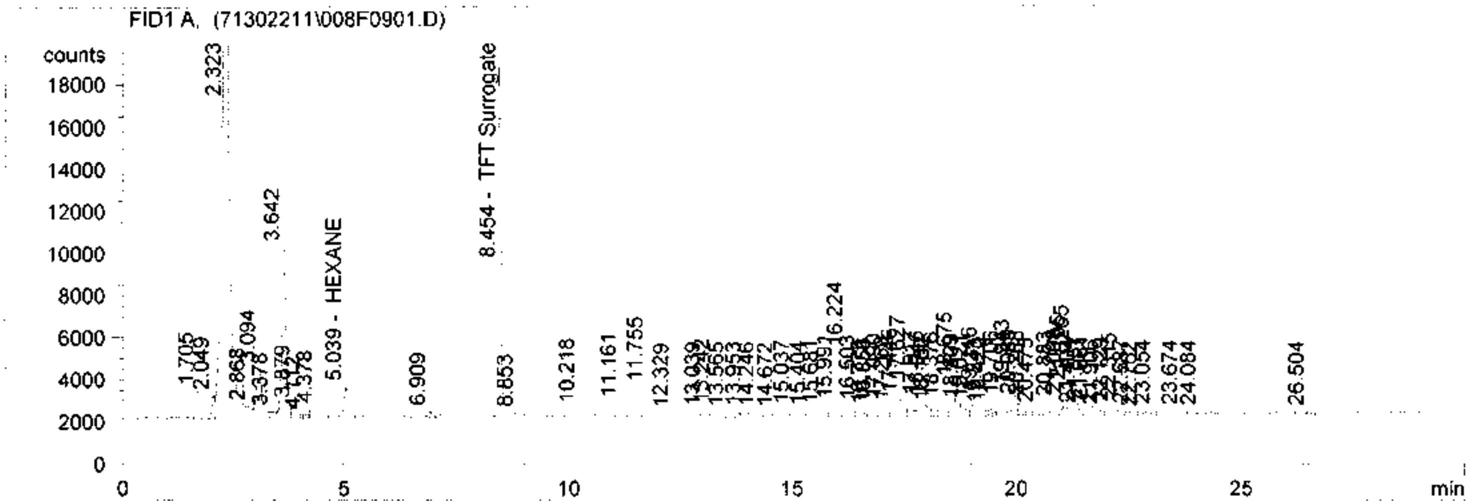
REVIEWED BY & DATE NB 2/2?/13

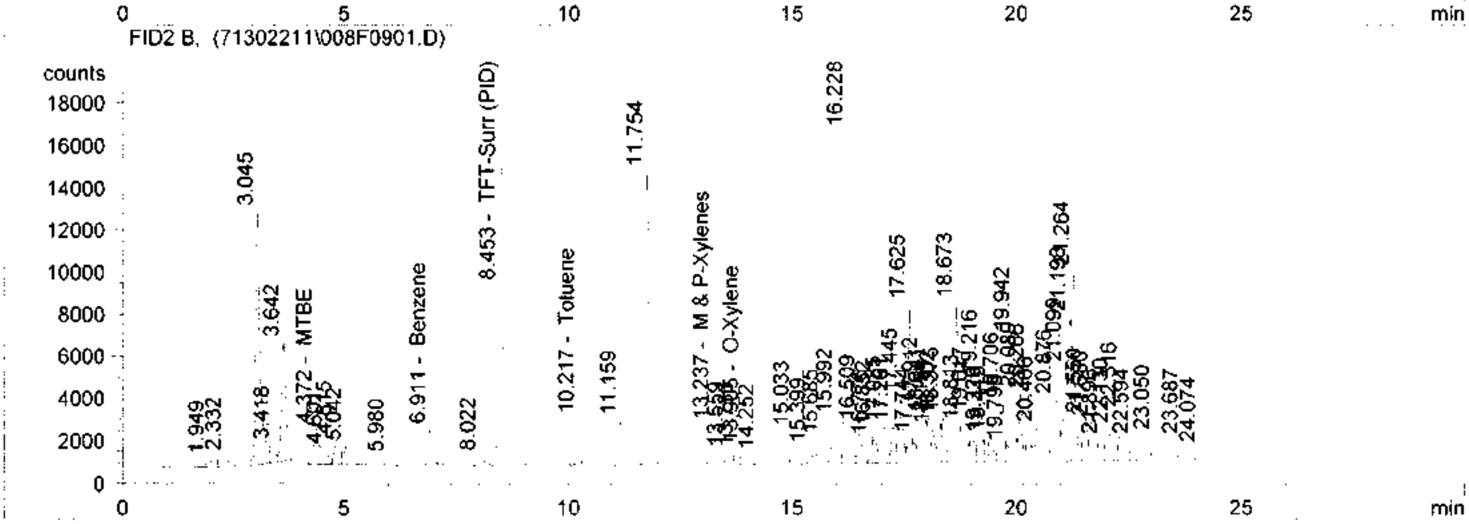
2-22-13 DC

Gas/BTEX   Instrument 70
Data File: C:\HPCHEM\1\DATA\71302211\008F0901.D
Injection Date & Time: 2/21/2013 1:40:25 PM
Report Created on: 2/22/2013 8:11:56 AM
Operator: DLC
Aquistion Method: 70VP0113.M
Analysis Method: C:\HPCHEM\1\METHODS\70HX0213.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:EV13020091-02 DU   Dilution: X 0.5





Ret. Time	Compound Name	Area	Amount ug/L
5.039	HEXANE	8890.321	0.000
8.454	TFT Surrogate	77072.578	9.118 91%

Hexane < 1.0 µg/L

Ret. Time	Compound Name	Area	Amount ug/L
4.372	MTBE	13706.071	2.155
6.911	Benzene	7892.876	0.491
8.453	TFT-Surr (PID)	325819.250	10.314
10.217	Toluene	7466.605	0.582
0.000	Ethylbenzene	0.000	0.000
13.237	M & P-Xylenes	8428.641	0.811
13.905	O-Xylene	4981.520	0.770

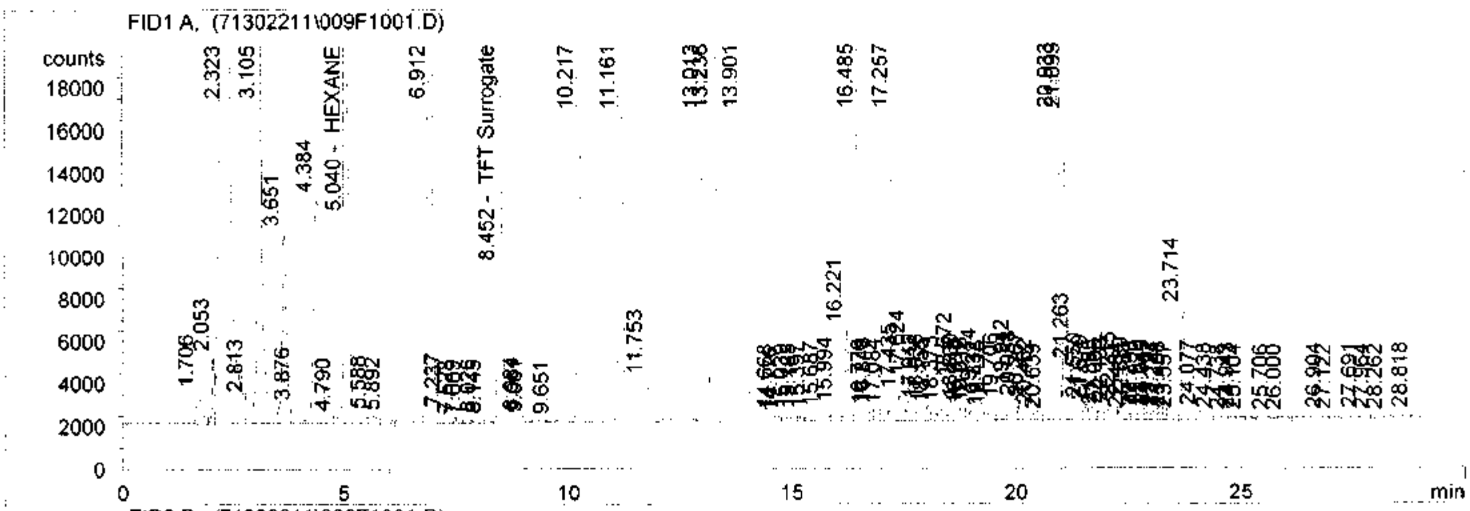
REVIEWED BY & DATE RS 2/27/13

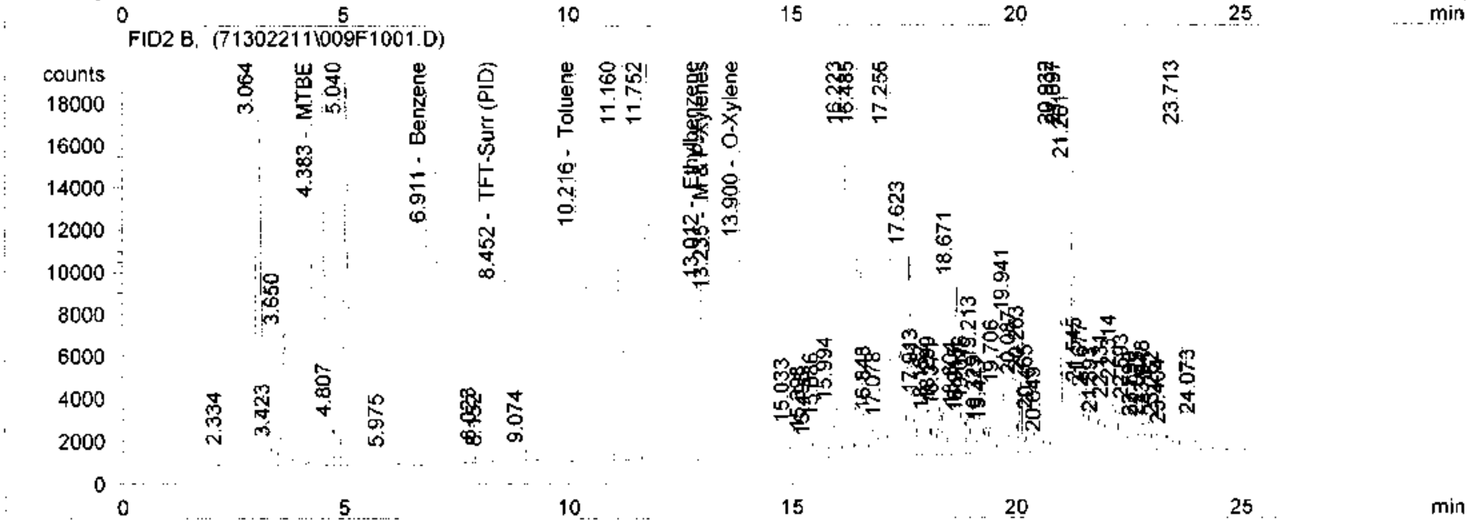
2-22-13 DC

Gas/BTEX Instrument 70
Data File: C:\HPCHEM\1\DATA\71302211\009F1001.D
Injection Date & Time: 2/21/2013 2:21:24 PM
Report Created on: 2/22/2013 8:12:11 AM
Operator: DLC
Aquistion Method: 70VP0113.M
Analysis Method: C:\HPCHEM\1\METHODS\70HX0213.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:EV13020091-02 MS   Dilution: X 0.5





Ret. Time	Compound Name	Area	Amount ug/L
5.040	HEXANE	201525.000	19.148
8.452	TFT Surrogate	253996.250	29.759

$-0.207 = \frac{18.941}{20} \times 100 = 95\%$

$\div 30 \times 100 = 99\%$

Ret. Time	Compound Name	Area	Amount ug/L
4.383	MTBE	857325.875	47.636
6.911	Benzene	1.992e+006	22.506
8.452	TFT-Surr (PID)	1.074e+006	33.622
10.216	Toluene	1.577e+006	22.494
13.012	Ethylbenzene	1.231e+006	22.194
13.235	M & P-Xylenes	2.965e+006	44.663
13.900	O-Xylene	1.290e+006	22.680

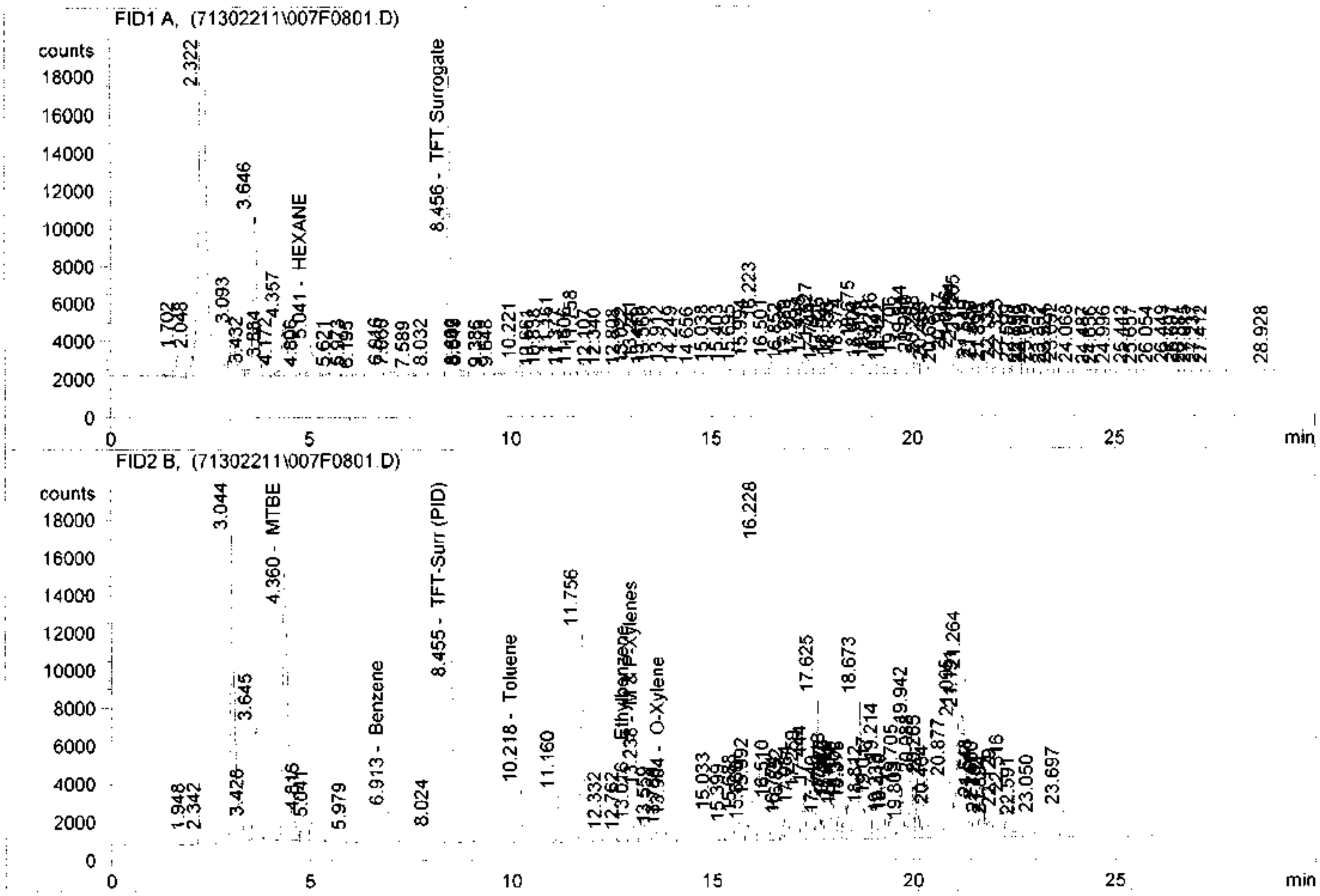
REVIEWED BY & DATE MB 2/27/13

2-22-13 DC

Gas/BTEX   Instrument 70
Data File: C:\HPCHEM\1\DATA\71302211\007F0801.D
Injection Date & Time: 2/21/2013 12:58:10 PM
Report Created on: 2/22/2013 8:11:33 AM
Operator: DLC
Aquistion Method: 70VP0113.M
Analysis Method: C:\HPCHEM\1\METHODS\70HX0213.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:EV13020091-02 10   Dilution: X 0.5



Ret. Time	Compound Name	Area	Amount ug/L
5.041	HEXANE	11513.858	0.207
8.456	TFT Surrogate	74651.266	8.836

÷10×100 = 88 /

Hexane < 1.0 µg/L

Ret. Time	Compound Name	Area	Amount ug/L
4.360	MTBE	130601.906	8.457
6.913	Benzene	11688.528	0.533
8.455	TFT-Surr (PID)	309404.687	9.802
10.218	Toluene	11710.546	0.641
13.016	Ethylbenzene	4661.532	0.604
13.238	M & P-Xylenes	12030.480	0.864
13.904	O-Xylene	6030.694	0.788

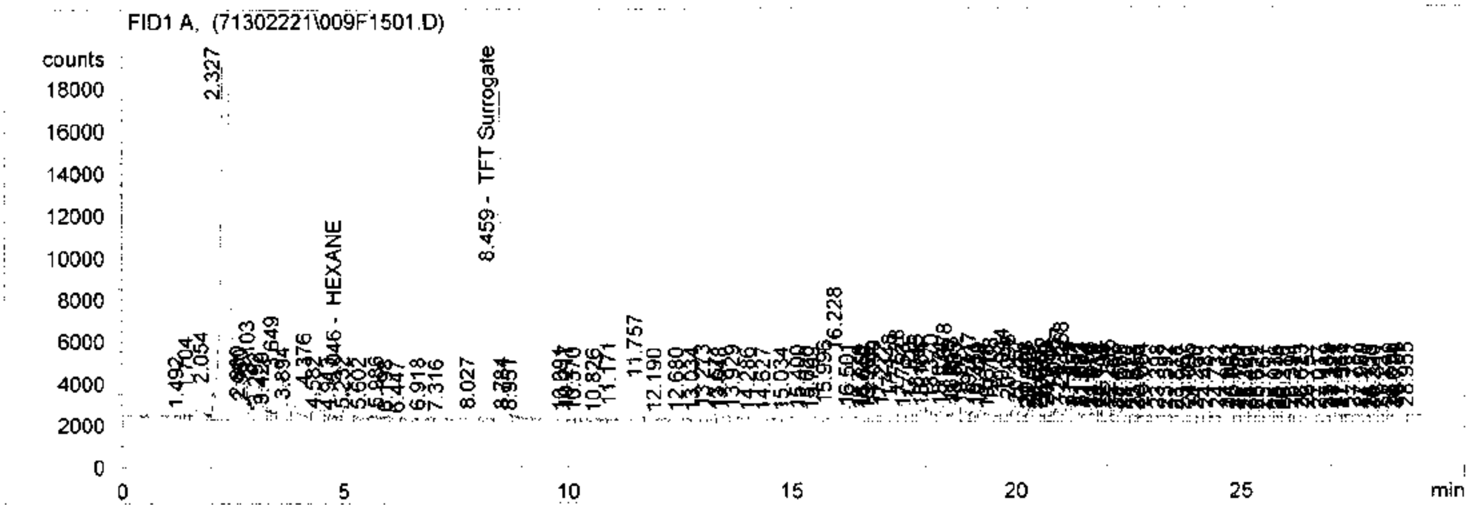
REVIEWED BY NB
& DATE 2/27/13

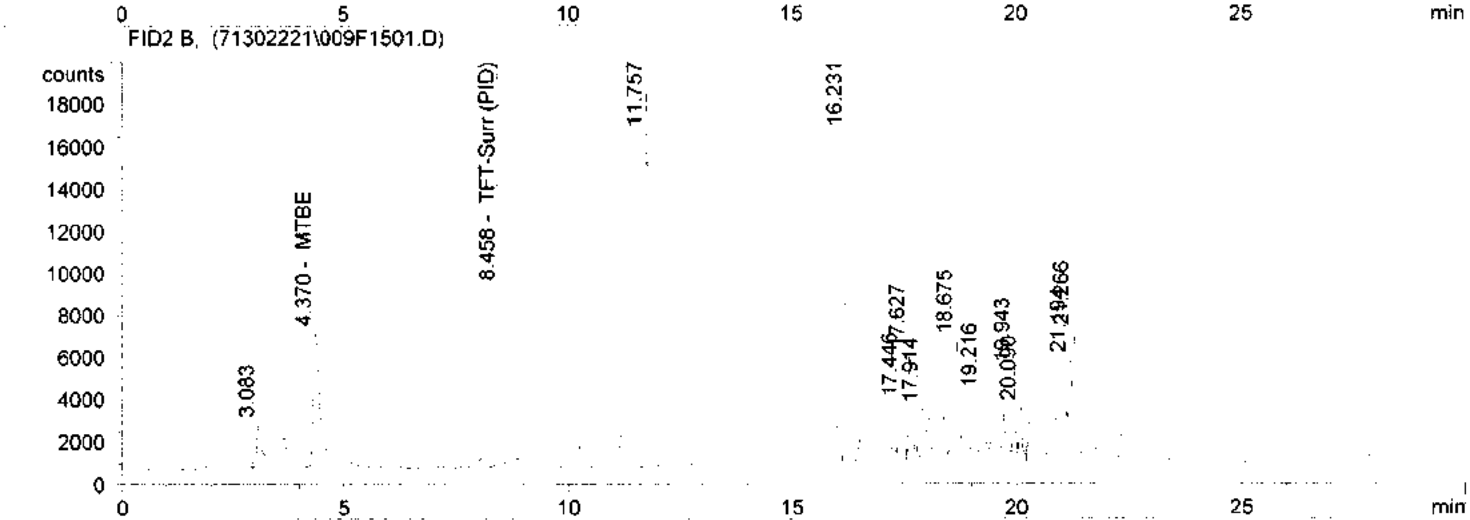
2-22-13 DC

Gas/BTEX Instrument 70
Data File: C:\HPCHEM\1\DATA\71302221\009F1501.D
Injection Date & Time: 2/22/2013 6:03:59 PM
Report Created on: 2/25/2013 7:54:31 AM
Operator: DLC
Aquistion Method: 70VP0213.M
Analysis Method: C:\HPCHEM\1\METHODS\70HX0213.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name: ~~MB 022113W VPH~~ EV13020091-03 10ML DC   Dilution: X ~~0.0~~ 0.5





Ret. Time	Compound Name	Area	Amount ug/L
5.046	HEXANE	9337.933	0.000
8.459	TFT Surrogate	75128.602	8.892 89%

Hexane < 1.0 µg/L

Ret. Time	Compound Name	Area	Amount ug/L
4.370	MTBE	47823.348	3.994
0.000	Benzene	0.000	0.000
8.458	TFT-Surr (PID)	307273.969	9.736
0.000	Toluene	0.000	0.000
0.000	Ethylbenzene	0.000	0.000
0.000	M & P-Xylenes	0.000	0.000
0.000	O-Xylene	0.000	0.000

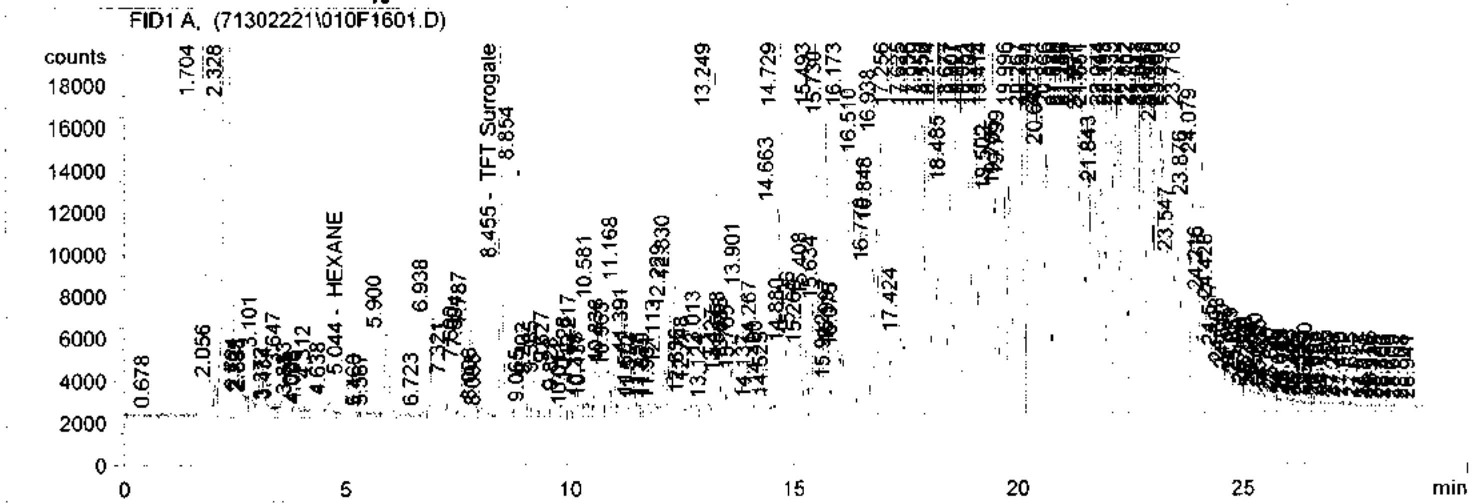
REVIEWED BY & DATE 2/27/13

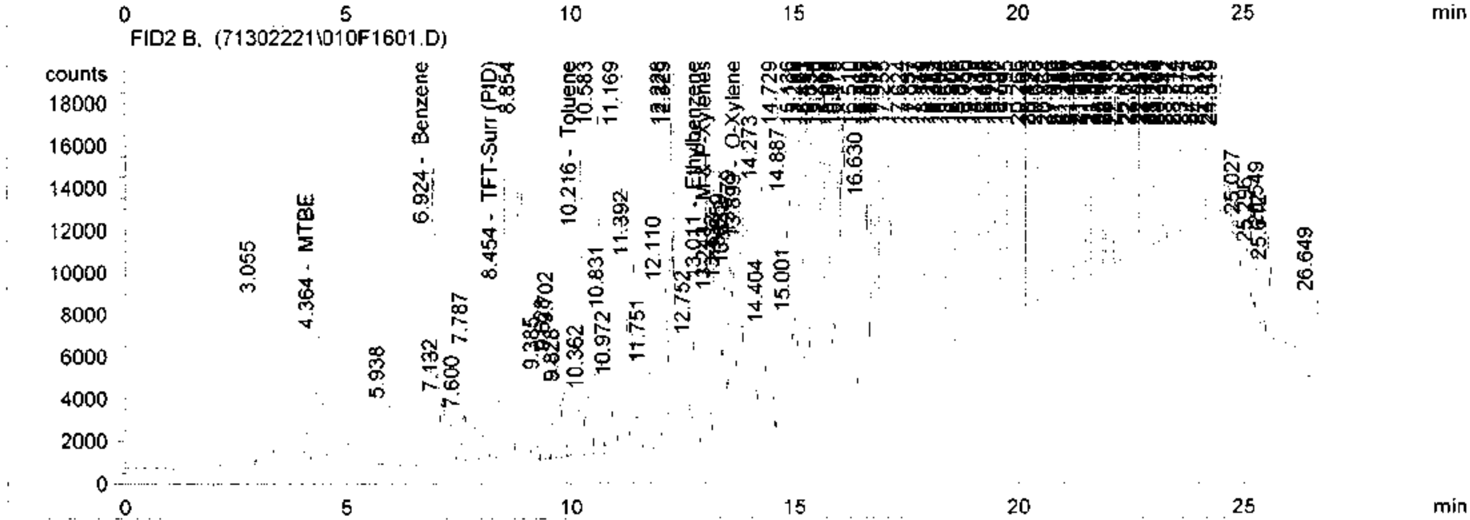
2-25-13 DC

Gas/BTEX Instrument 70
Data File: C:\HPCHEM\1\DATA\71302221\010F1601.D
Injection Date & Time: 2/22/2013 6:43:02 PM
Report Created on: 2/25/2013 7:50:16 AM
Operator: DLC
Aquistion Method: 70VP0213.M
Analysis Method: C:\HPCHEM\1\METHODS\70HX0213.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:EV13020091-~~10~~ 10 10 Dilution: X 0.5





Ret. Time	Compound Name	Area	Amount ug/L
5.044	HEXANE	12789.087	0.334
8.455	TFT Surrogate	90650.672	10.703 107%

Hexane <1.0 µg/L

Ret. Time	Compound Name	Area	Amount ug/L
4.364	MTBE	48306.184	4.020
6.924	Benzene	104923.492	1.568
8.454	TFT-Surr (PID)	388168.281	12.257
10.216	Toluene	67357.938	1.418
13.011	Ethylbenzene	60765.902	1.592
13.243	M & P-Xylenes	364174.844	6.087
13.899	O-Xylene	138241.500	3.042

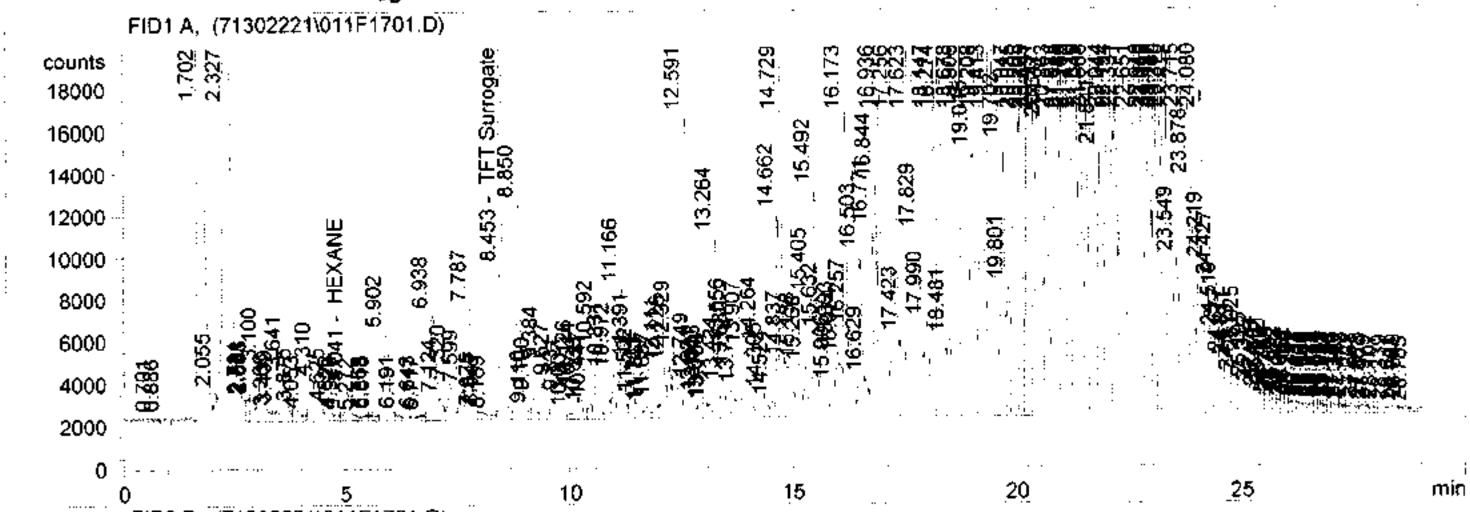
REVIEWED BY & DATE 2/27/13

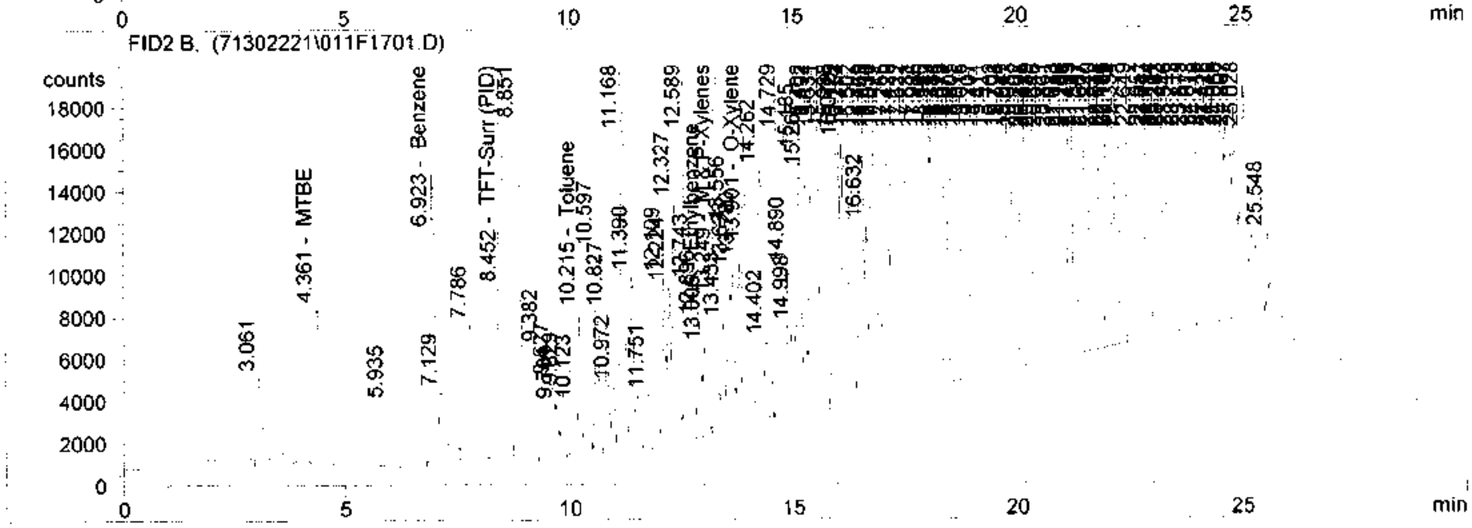
2-25-13 DC

Gas/BTEX   Instrument 70
Data File: C:\HPCHEM\1\DATA\71302221\011F1701.D
Injection Date & Time: 2/22/2013 7:21:38 PM
Report Created on: 2/25/2013 7:50:30 AM
Operator: DLC
Aquistion Method: 70VP0213.M
Analysis Method: C:\HPCHEM\1\METHODS\70HX0213.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:EV13020091-~~10~~ 12 DC 10   Dilution: X 0.5





Ret. Time	Compound Name	Area	Amount ug/L
5.041	HEXANE	11386.786	0.194
8.453	TFT Surrogate	95892.992	11.314 113%

Hexane <1.0 µg/L

Ret. Time	Compound Name	Area	Amount ug/L
4.361	MTBE	68076.547	5.086
6.923	Benzene	101584.531	1.530
8.452	TFT-Surr (PID)	394984.219	12.470
10.215	Toluene	27676.750	0.864
13.006	Ethylbenzene	19249.422	0.861
13.249	M & P-Xylenes	101400.125	2.190
13.901	O-Xylene	73828.664	1.944

REVIEWED BY & DATE MB 2/27/13

2-25-13 DC

Sequence Table (Front Injector):

Method and Injection Info Part:

Line	Location	SampleName	Method	Inj	SampleType	InjVolume	DataFile	
1	Vial 1	BLANK	70VP0113	1	Sample			
2	Vial 2	RT MARKER	70VP0113	1	Sample			
3	Vial 3	VPH 10PPB ✓	70VP0113	1	Sample			OK
4	Vial 1	BLANK	70VP0113	1	Sample			
5	Vial 4	MB-022113W VPH	70VP0113	1	Sample			
6	Vial 5	BS-022113W VPH	70VP0113	1	Sample			
7	Vial 6	BSD-022113W VPH	70VP0113	1	Sample			
8	Vial 7	EV13020091-02 10	70VP0113	1	Sample			
9	Vial 8	EV13020091-02 DU	70VP0113	1	Sample			
10	Vial 9	EV13020091-02 MS	70VP0113	1	Sample			
11	Vial 3	VPH 10PPB	70VP0113	1	Sample			✓ OK VPH
12	Vial 10	EV13020091-03 10	70VP0113	1	Sample			
13	Vial 11	EV13020091-10 10	70VP0113	1	Sample			
14	Vial 12	EV13020091-12 10	70VP0113	1	Sample			
15	Vial 99	BLANK	70VP0113	1	Sample			
16	Vial 3	VPH 10PPB	70VP0113	1	Sample			
17	Vial 3	VPH 10PPB ✓	70VP0113	1	Sample			OK for VPH
18	Vial 3	VPH 20PPB ✓	70VP0113	1	Sample			
19	Vial 99	BLANK	70VP0113	1	Sample			
20	Vial 13	MB-032113S	70VP0113	1	Sample			
21	Vial 14	BS-032113S	70VP0113	1	Sample			Positive for Hexane re-run
22	Vial 15	BSD-032113S	70VP0113	1	Sample			
23	Vial 16	EV13020093-18 1U	70VP0113	1	Sample			
24	Vial 17	EV13020093-18 2.5µL	70VP0113	1	Sample			
25	Vial 99	BLANK	70VP0113	1	Sample			
26	Vial 18	EV13020093-21 10	70VP0113	1	Sample			
27	Vial 19	EV13020093-21 20	70VP0113	1	Sample			
28	Vial 99	BLANK	70VP0113	1	Sample			
29	Vial 99	BLANK	70VP0113	1	Sample			
30	Vial 3	VPH 10PPB ✓	70VP0113	1	Sample			OK VPH
31	Vial 3	VPH 10PPB	70VP0113	1	Sample			
32	Vial 3	VPH 10PPB	70VP0113	1	Sample			
33	Vial 20	EV13020093-28 25	70VP0113	1	Sample			
34	Vial 99	BLANK	70VP0113	1	Sample			
35	Vial 21	EV13020093-28 DU	70VP0113	1	Sample			
36	Vial 99	BLANK	70VP0113	1	Sample			
37	Vial 22	EV13020093-28 MS	70VP0113	1	Sample			
38	Vial 3	VPH 10PPB	70VP0113	1	Sample			✓ OK VPH

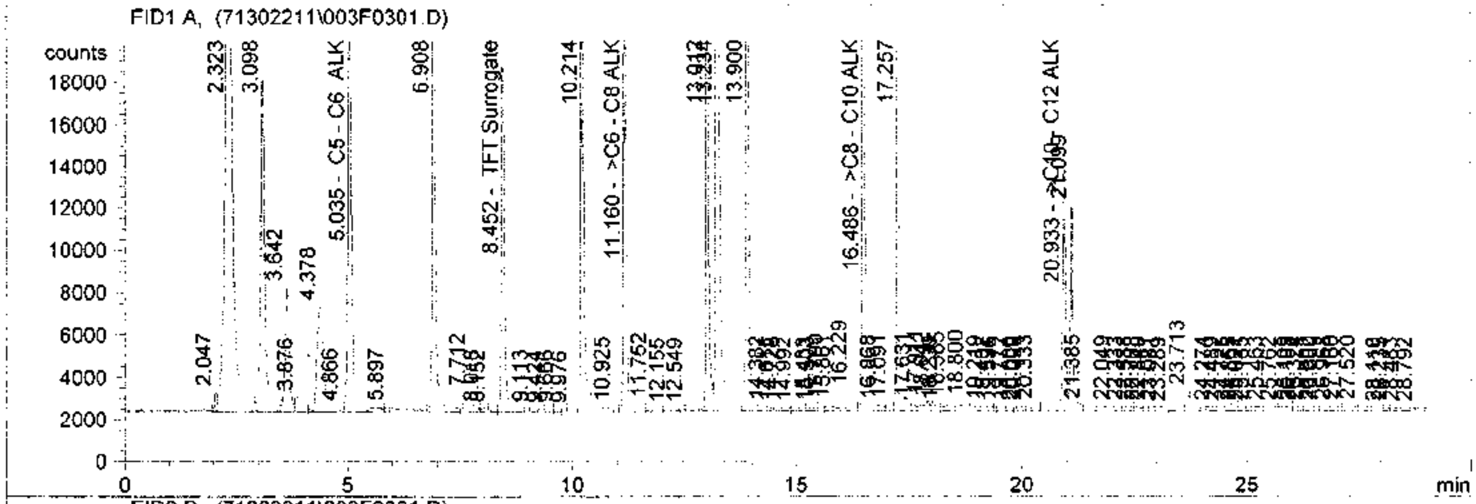
Sequence Table (Back Injector):

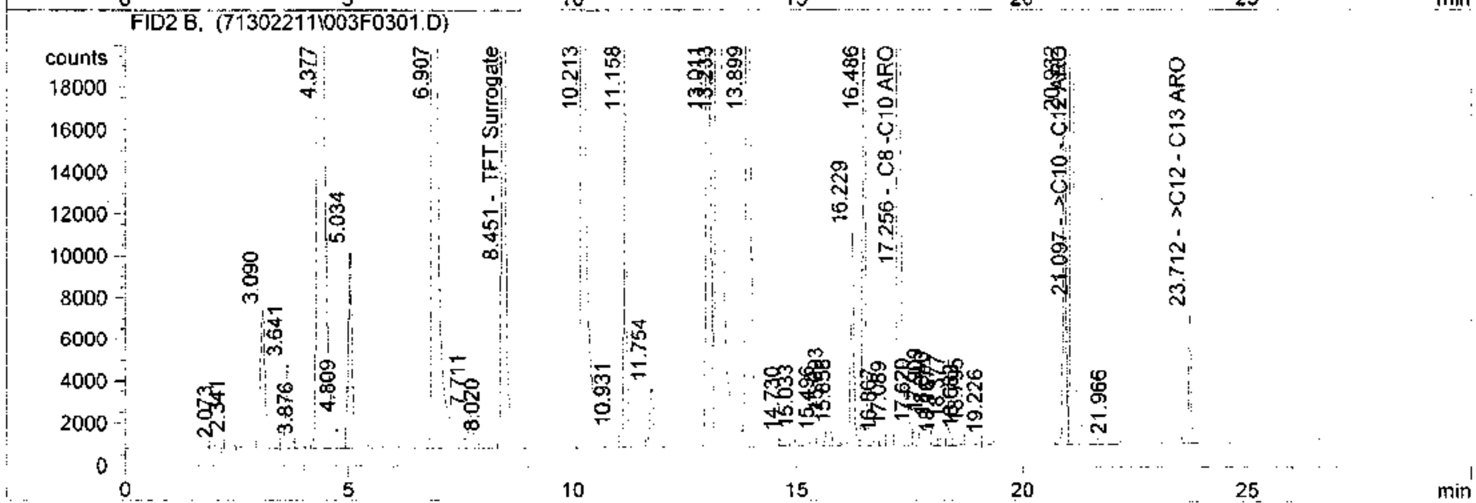
No entries - empty table!

Gas/BTEX Instrument 70
Data File: C:\HPCHEM\1\DATA\71302211\003F0301.D
Injection Date & Time: 2/21/2013 9:18:56 AM
Report Created on: 2/21/2013 3:00:04 PM
Operator: DLC
Aquistion Method: 70VP0113.M
Analysis Method: C:\HPCHEM\1\METHODS\70VP0213.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:VPH 10PPB Dilution: X 0.0





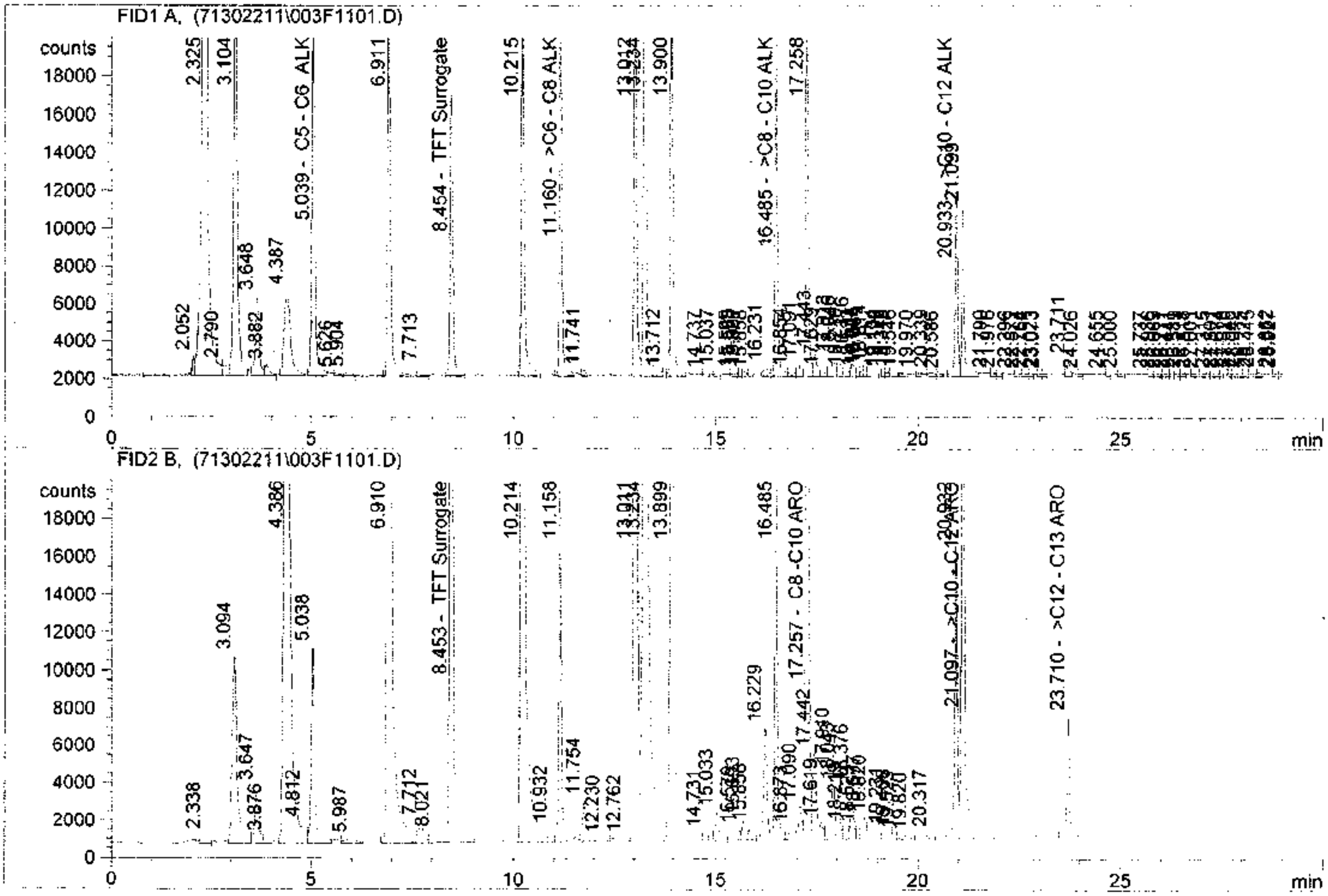
Ret. Time	Compound Name	Area	Amount ug/L
5.035	C5 - C6 ALK	105694.633	9.919
8.452	TFT Surrogate	79419.477	10.000
11.160	>C6 - C8 ALK	109848.961	10.771
16.486	>C8 - C10 ALK	104318.250	10.998
20.933	>C10 - C12 ALK	52069.441	11.348 * Not reported

Ret. Time	Compound Name	Area	Amount ug/L
8.451	TFT Surrogate	323616.094	10.196
17.256	C8 -C10 ARO	545414.313	11.571
21.097	>C10 - C12 ARO	300921.250	10.897
23.712	>C12 - C13 ARO	22579.719	10.919

Gas/BTEX   Instrument 70
Data File: C:\HPCHEM\1\DATA\71302211\003F1101.D
Injection Date & Time: 2/21/2013 3:03:08 PM
Report Created on: 2/21/2013 3:39:14 PM
Operator: DLC
Aquistion Method: 70VP0113.M
Analysis Method: C:\HPCHEM\1\METHODS\70VP0213.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:VPH 10PPB   Dilution: X 0.0



Ret. Time	Compound Name	Area	Amount ug/L
5.039	C5 - C6 ALK	110091.242	10.356
8.454	TFT Surrogate	68672.562	8.754
11.160	>C6 - C8 ALK	95118.281	9.395
16.485	>C8 - C10 ALK	91670.945	9.640
20.933	>C10 - C12 ALK	40125.707	8.407 * level not reported

Ret. Time	Compound Name	Area	Amount ug/L
8.453	TFT Surrogate	300514.906	9.478
17.257	C8 -C10 ARO	487095.281	10.390
21.097	>C10 - C12 ARO	293679.344	10.699
23.710	>C12 - C13 ARO	27544.146	11.346

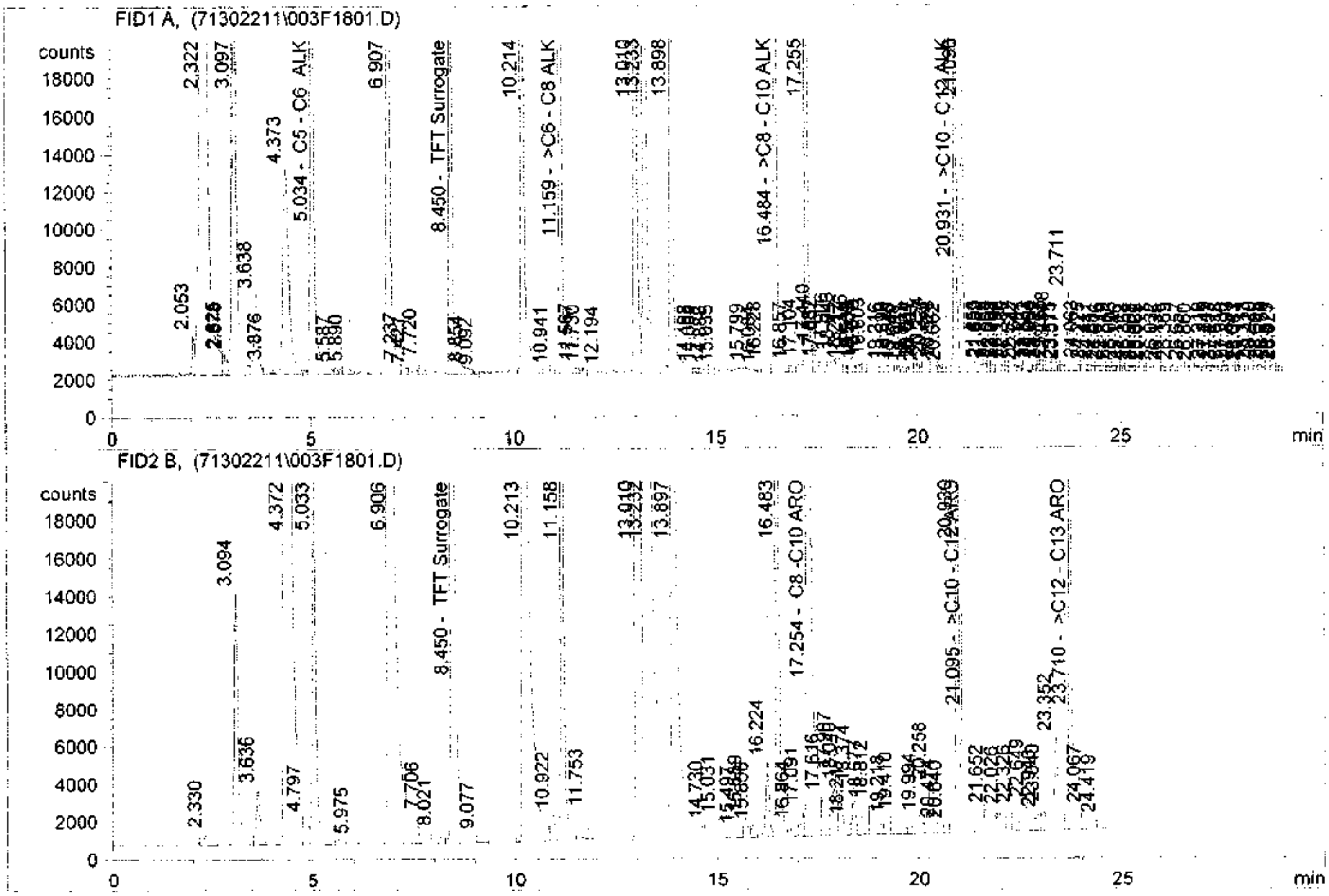
ALK
C5-C6 2.940-5.387
>C6-C8 5.388-11.490
>C8-C10 11.491-16.754

ARO
C8-C10 11.021-17.372
C10-C12 17.373-21.869
C12-C13 21.870-23.945

Gas/BTEX   Instrument 70
Data File: C:\HPCHEM\1\DATA\71302211\003F1801.D
Injection Date & Time: 2/21/2013 7:45:34 PM
Report Created on: 2/26/2013 7:35:18 AM
Operator: DLC
Aquistion Method: 70VP0113.M
Analysis Method: C:\HPCHEM\1\METHODS\70VP0213.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:VPH 20PPB   Dilution: X 0.0



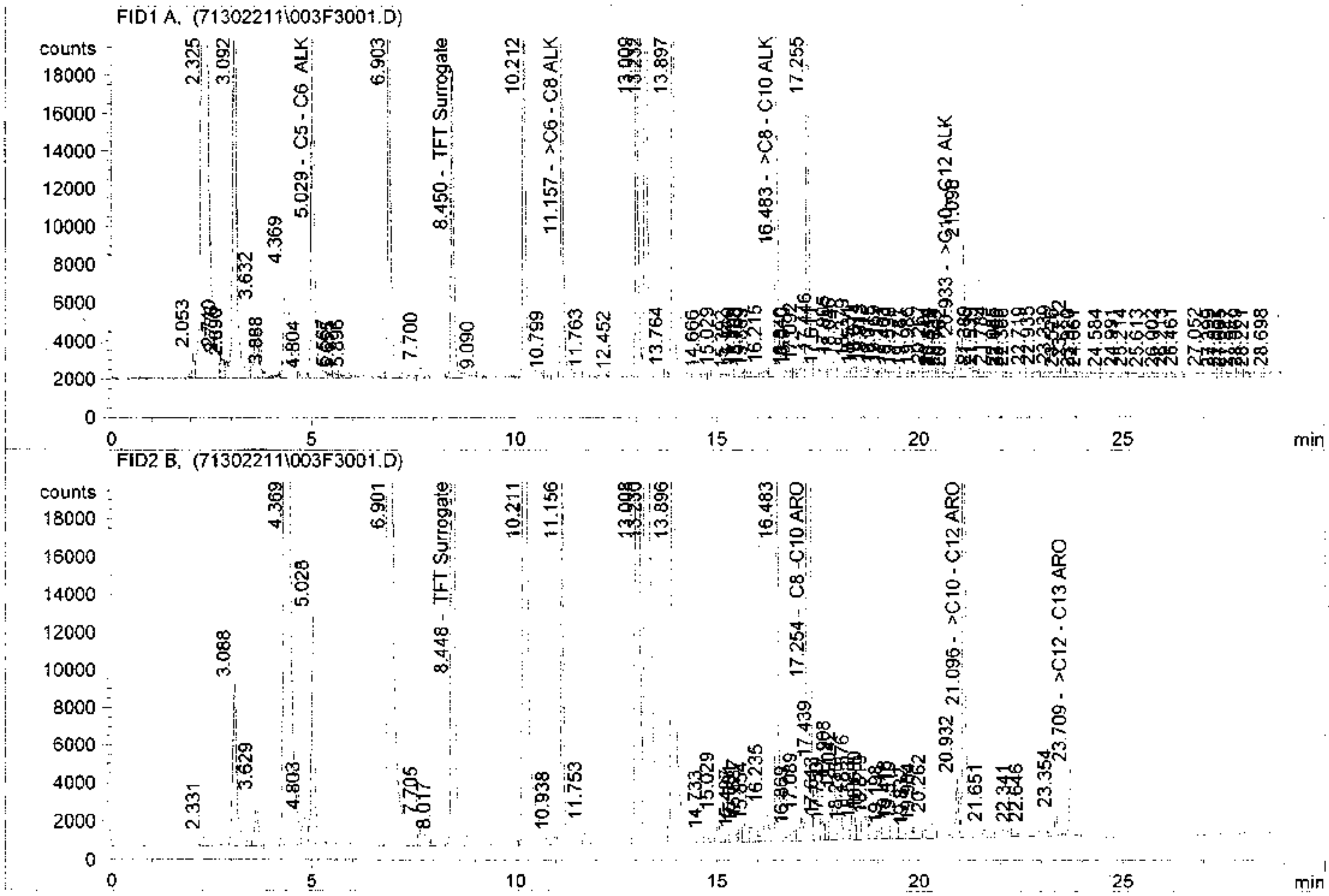
Ret. Time	Compound Name	Area	Amount ug/L
5.034	C5 - C6 ALK	219916.750	21.279
8.450	TFT Surrogate	158246.063	19.139
11.159	>C6 - C8 ALK	207892.125	19.926
16.484	>C8 - C10 ALK	191297.516	20.335
20.931	>C10 - C12 ALK	94810.461	21.874 * Not reported

Ret. Time	Compound Name	Area	Amount ug/L
8.450	TFT Surrogate	700740.375	21.902
17.254	C8 -C10 ARO	1.154e+006	23.893
21.095	>C10 - C12 ARO	726199.312	22.559
23.710	>C12 - C13 ARO	138479.578	20.905

Gas/BTEX   Instrument 70
Data File: C:\HPCHEM\1\DATA\71302211\003F3001.D
Injection Date & Time: 2/22/2013 3:17:40 AM
Report Created on: 2/26/2013 7:39:36 AM
Operator: DLC
Aquistion Method: 70VP0113.M
Analysis Method: C:\HPCHEM\1\METHODS\70VP0213.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:VPH 10PPB   Dilution: X 0.0



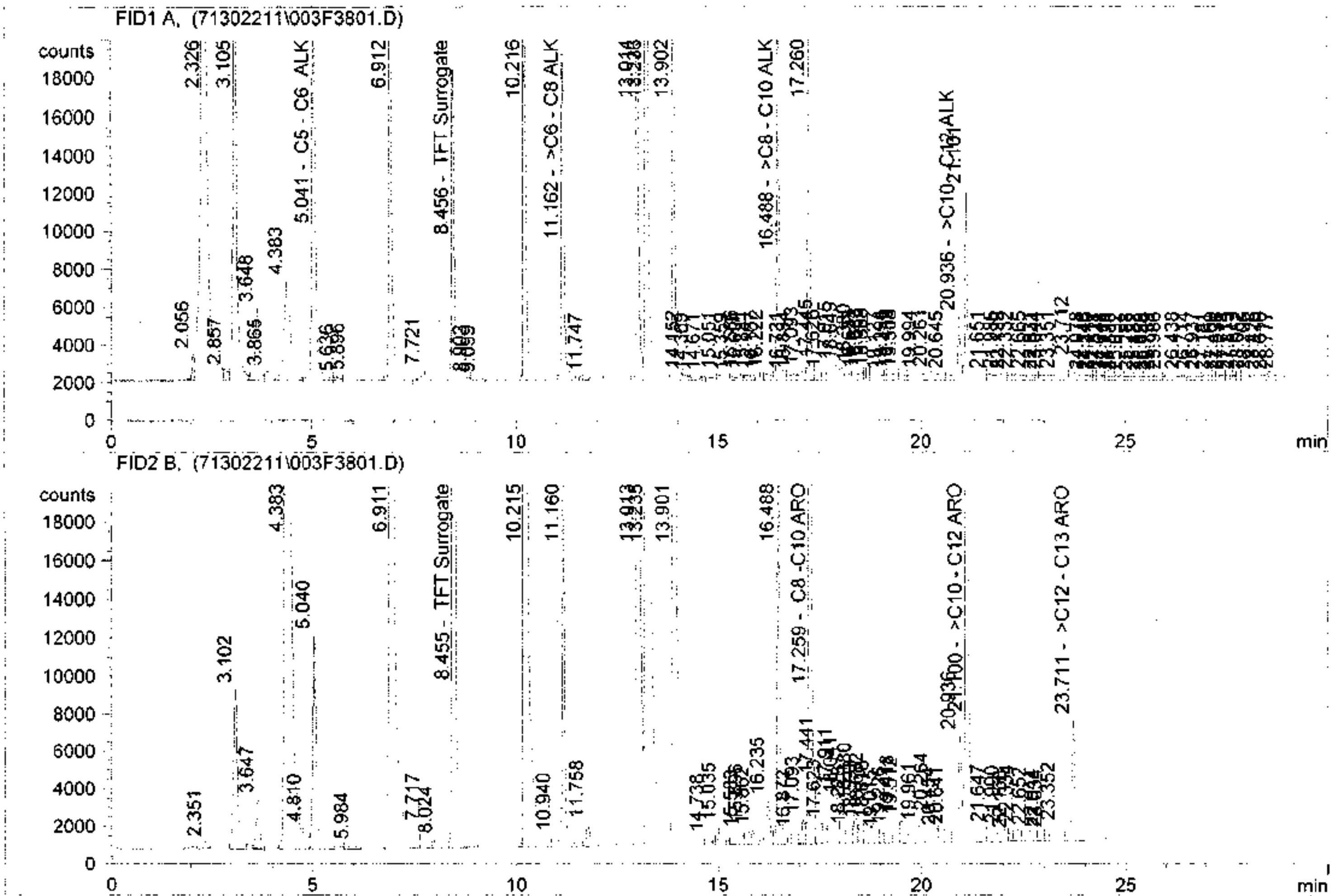
Ret. Time	Compound Name	Area	Amount ug/L
5.029	C5 - C6 ALK	115881.859	10.932
8.450	TFT Surrogate	75593.656	9.556
11.157	>C6 - C8 ALK	100790.719	9.925
16.483	>C8 - C10 ALK	86473.266	9.082
20.933	>C10 - C12 ALK	8918.345	0.721 *Not required

Ret. Time	Compound Name	Area	Amount ug/L
8.448	TFT Surrogate	329405.219	10.375
17.254	C8 -C10 ARO	533290.438	11.326
21.096	>C10 - C12 ARO	228123.187	8.901
23.709	>C12 - C13 ARO	15906.407	10.344

Gas/BTEX   Instrument 70
Data File: C:\HPCHEM\1\DATA\71302211\003F3801.D
Injection Date & Time: 2/22/2013 8:29:04 AM
Report Created on: 2/22/2013 9:00:24 AM
Operator: DLC
Aquistion Method: 70VP0113.M
Analysis Method: C:\HPCHEM\1\METHODS\70VP0213.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:VPH 10PPB   Dilution: X 0.0



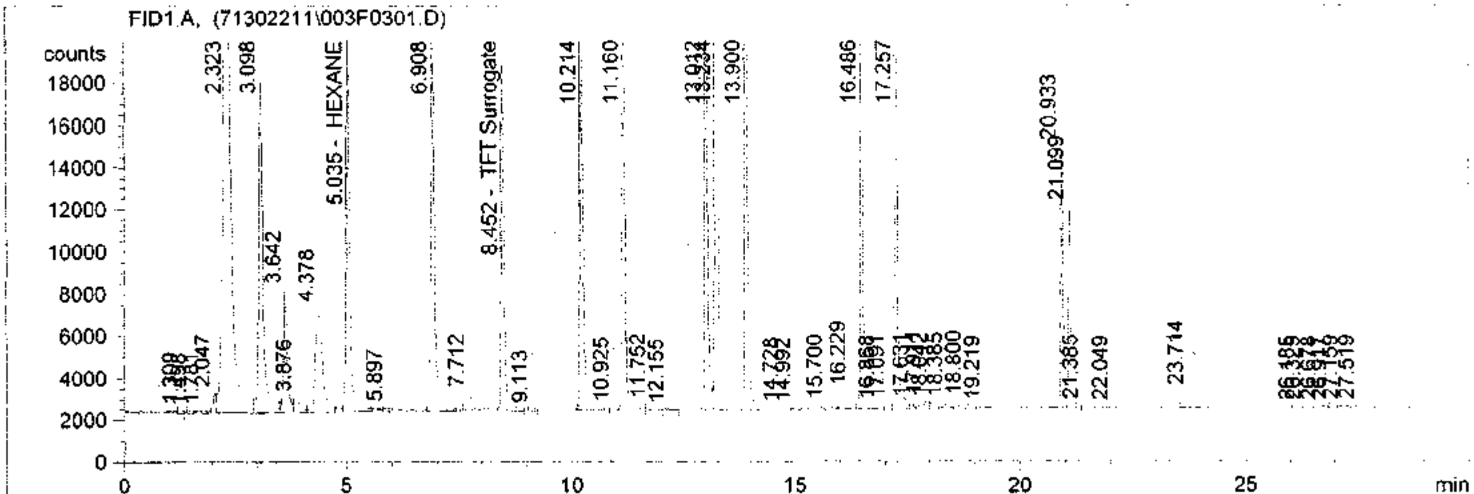
Ret. Time	Compound Name	Area	Amount ug/L
5.041	C5 - C6 ALK	122757.859	11.616
8.456	TFT Surrogate	76656.703	9.679
11.162	>C6 - C8 ALK	101964.937	10.035
16.488	>C8 - C10 ALK	79342.195	8.316
20.936	>C10 - C12 ALK	17350.742	2.798 * Not reported

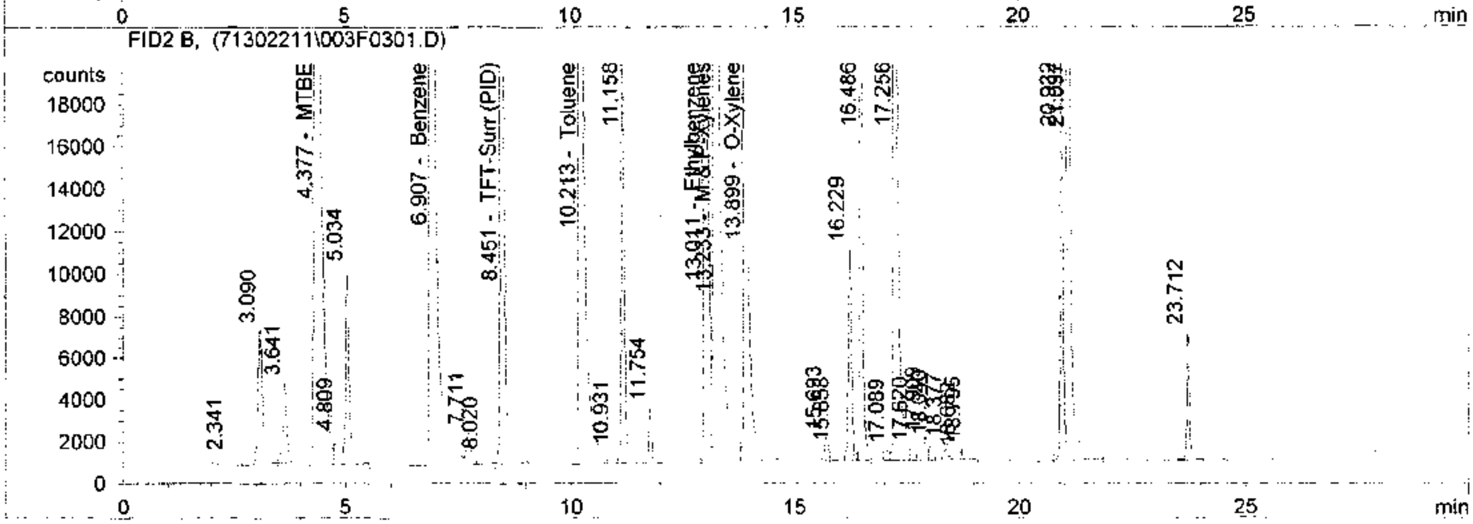
Ret. Time	Compound Name	Area	Amount ug/L
8.455	TFT Surrogate	331121.125	10.429
17.259	C8 -C10 ARO	536086.687	11.382
21.100	>C10 - C12 ARO	327288.687	11.620
23.711	>C12 - C13 ARO	31618.453	11.697

Gas/BTEX Instrument 70
Data File: C:\HPCHEM\1\DATA\71302211\003F0301.D
Injection Date & Time: 2/21/2013 9:18:56 AM
Report Created on: 2/21/2013 2:58:25 PM
Operator: DLC
Aquistion Method: 70VP0113.M
Analysis Method: C:\HPCHEM\1\METHODS\70HX0213.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:VPH 10PPB Dilution: X 0.0





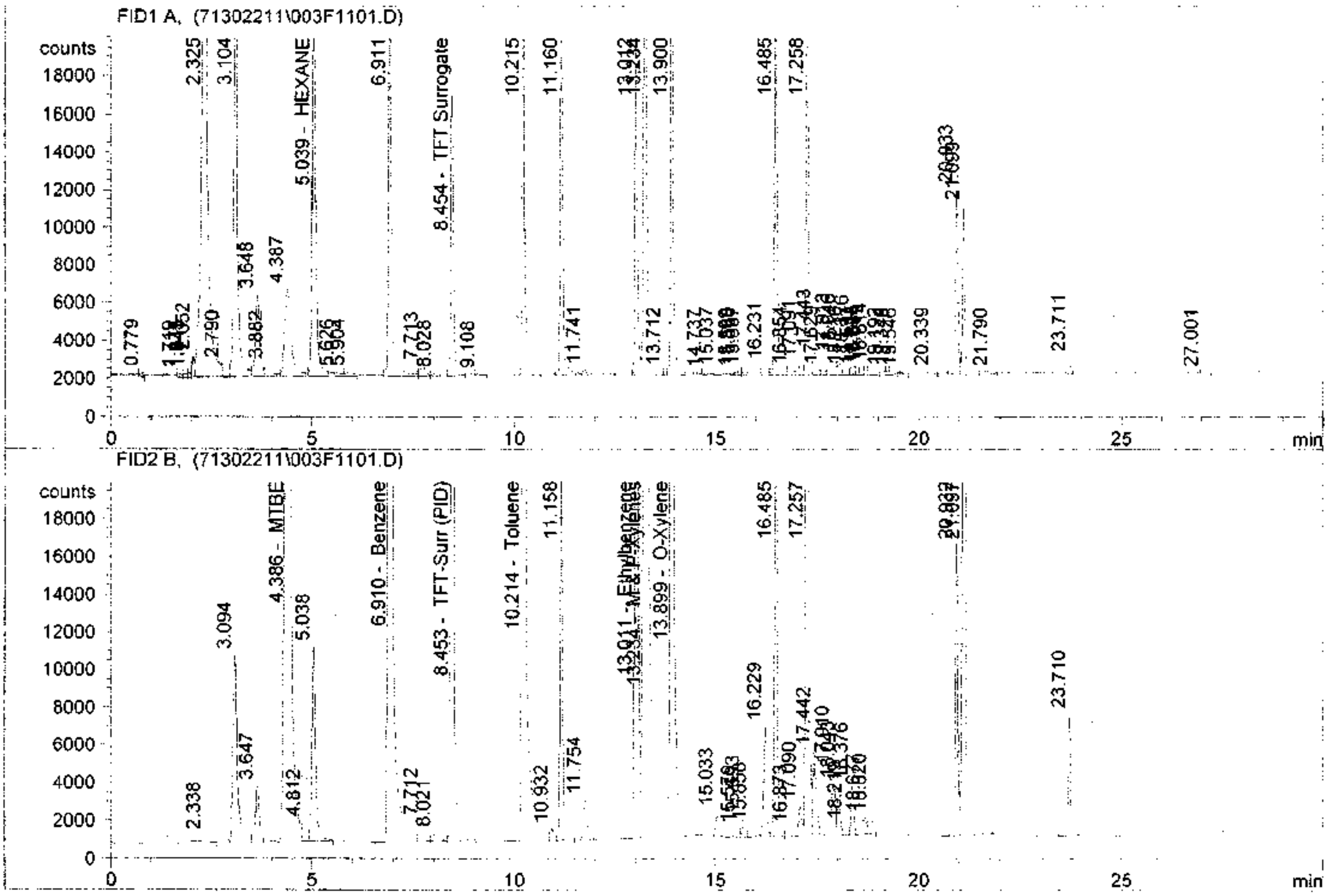
Ret. Time	Compound Name	Area	Amount ug/L
5.035	HEXANE	104996.391	9.526
8.452	TFT Surrogate	76564.117	9.059

Ret. Time	Compound Name	Area	Amount ug/L
4.377	MTBE	394067.469	22.661
6.907	Benzene	960067.250	11.058
8.451	TFT-Surr (PID)	317820.469	10.065
10.213	Toluene	762552.375	11.125
13.011	Ethylbenzene	601626.625	11.115
13.233	M & P-Xylenes	1.463e+006	22.379
13.899	O-Xylene	617323.375	11.211

Gas/BTEX Instrument 70
Data File: C:\HPCHEM\1\DATA\71302211\003F1101.D
Injection Date & Time: 2/21/2013 3:03:08 PM
Report Created on: 2/21/2013 3:39:27 PM
Operator: DLC
Aquistion Method: 70VP0113.M
Analysis Method: C:\HPCHEM\1\METHODS\70HX0213.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:VPH 10PPB Dilution: X 0.0



Ret. Time	Compound Name	Area	Amount ug/L
5.039	HEXANE	111897.172	10.214
8.454	TFT Surrogate	69362.203	8.219

Ret. Time	Compound Name	Area	Amount ug/L
4.386	MTBE	371990.312	21.471
6.910	Benzene	888199.750	10.260
8.453	TFT-Surr (PID)	295458.250	9.368
10.214	Toluene	700570.312	10.260
13.011	Ethylbenzene	547184.750	10.156
13.234	M & P-Xylenes	1.345e+006	20.629
13.899	O-Xylene	563917.875	10.301

Sequence Table (Front Injector):

Method and Injection Info Part:

Line	Location	SampleName	Method	Inj	SampleType	InjVolume	DataFile	
1	Vial 1	BLANK	GX0712	1	Sample			
2	Vial 2	BTEX 10PPB	GX0712	1	Sample			
3	Vial 3	GAS 200PPB	GX0712	1	Sample			
4	Vial 4	AVG 200PPB	GX0712	1	Sample			
5	Vial 5	MB-022213A	GX0712	1	Sample			
6	Vial 6	EV13020113-01 5M	GX0712	1	Sample			
7	Vial 7	EV13020113-02 5M	GX0712	1	Sample			
8	Vial 4	AVG 200PPB	GX0712	1	Sample			
9	Vial 2	BTEX 10PPB	GX0712	1	Sample			
10	Vial 3	GAS 200PPB	GX0712	1	Sample			
11	Vial 8	RT MARKER	70VP0213	1	Sample			CCV for BTEX not passing only Hexane reported
12	Vial 9	VPH 10PPB ✓	70VP0213	1	Sample			
13	Vial 9	VPH 20PPB	70VP0213	1	Sample			
14	Vial 99	~~BLANK~~ EV13020091-03 10ML	70VP0213	1	Sample			MB 2-22-13 VPH
15	Vial 9	~~MB-022113W VPH~~	70VP0213	1	Sample			RR
16	Vial 10	EV13020091-~~07~~ 10 10	70VP0213	1	Sample			
17	Vial 11	EV13020091-~~10~~ 12 10	70VP0213	1	Sample			
18	Vial 12	BK ~~EV13020091-12 10~~	70VP0213	1	Sample			
19	Vial 99	BLANK	70VP0213	1	Sample			
20	Vial 13	MB-032113S VPH	70VP0213	1	Sample			
21	Vial 14	BS-032113S VPH	70VP0213	1	Sample			
22	Vial 15	BSD-032113S VPH	70VP0213	1	Sample			
23	Vial 9	VPH 20PPB ✓	70VP0213	1	Sample			
24	Vial 9	VPH 20PPB	70VP0213	1	Sample			
25	Vial 16	EV13020093-18 1U	70VP0213	1	Sample			
26	Vial 17	EV13020093-18	70VP0213	1	Sample			
27	Vial 99	BLANK	70VP0213	1	Sample			
28	Vial 18	EV13020093-21 10	70VP0213	1	Sample			RR
29	Vial 19	EV13020093-21 25	70VP0213	1	Sample			
30	Vial 99	BLANK	70VP0213	1	Sample			
31	Vial 20	EV13020093-28 25	70VP0213	1	Sample			
32	Vial 21	EV13020093-28 DU	70VP0213	1	Sample			
33	Vial 22	EV13020093-28 MS	70VP0213	1	Sample			Flame went ~~off~~ out
34	Vial 99	BLANK	70VP0213	1	Sample			
35	Vial 99	BLANK	70VP0213	1	Sample			
36	Vial 9	VPH 10PPB	70VP0213	1	Sample			
37	Vial 9	VPH 10PPB	70VP0213	1	Sample			
38	Vial 99	BLANK	70VP0213	1	Sample			
39	Vial 99	BLANK	70VP0213	1	Sample			
40	Vial 99	BLANK	70VP0213	1	Sample			

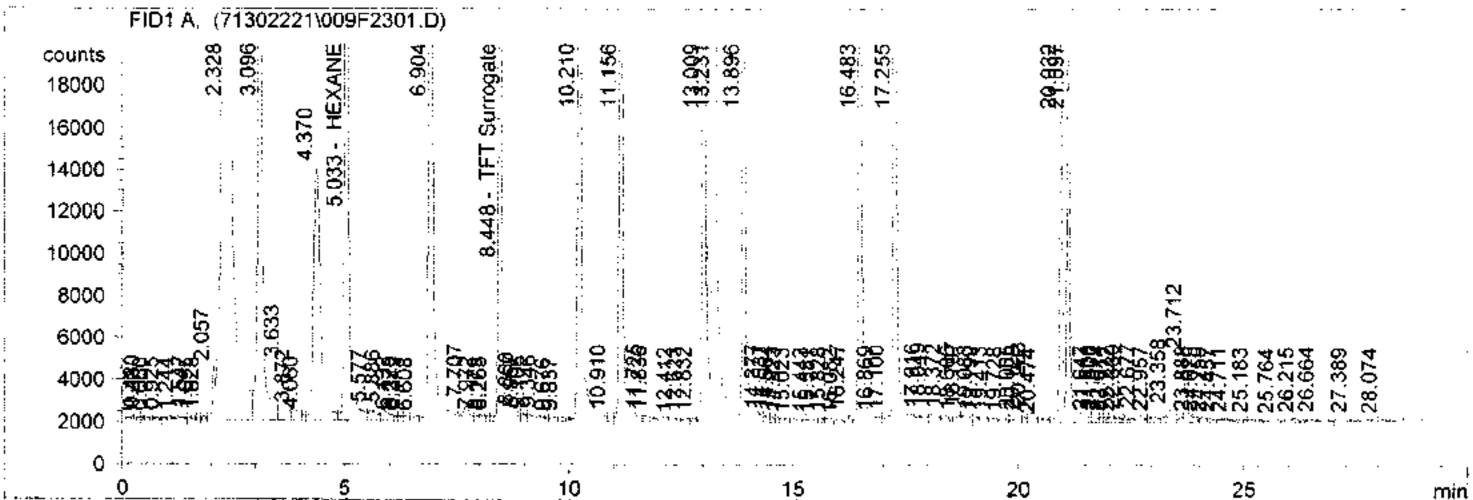
Sequence Table (Back Injector):

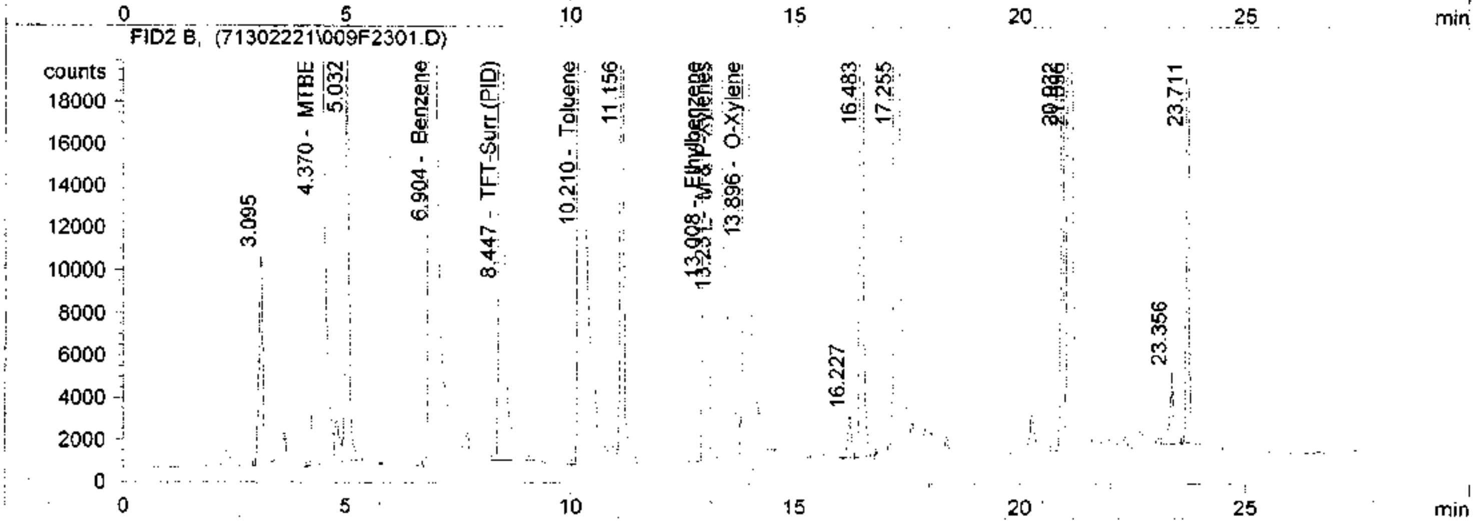
No entries - empty table!

Gas/BTEX Instrument 70
Data File: C:\HPCHEM\1\DATA\71302221\009F2301.D
Injection Date & Time: 2/22/2013 11:08:27 PM
Report Created on: 2/25/2013 7:52:20 AM
Operator: DLC
Aquistion Method: 70VP0213.M
Analysis Method: C:\HPCHEM\1\METHODS\70HX0213.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:VPH 20PPB Dilution: X 0.0





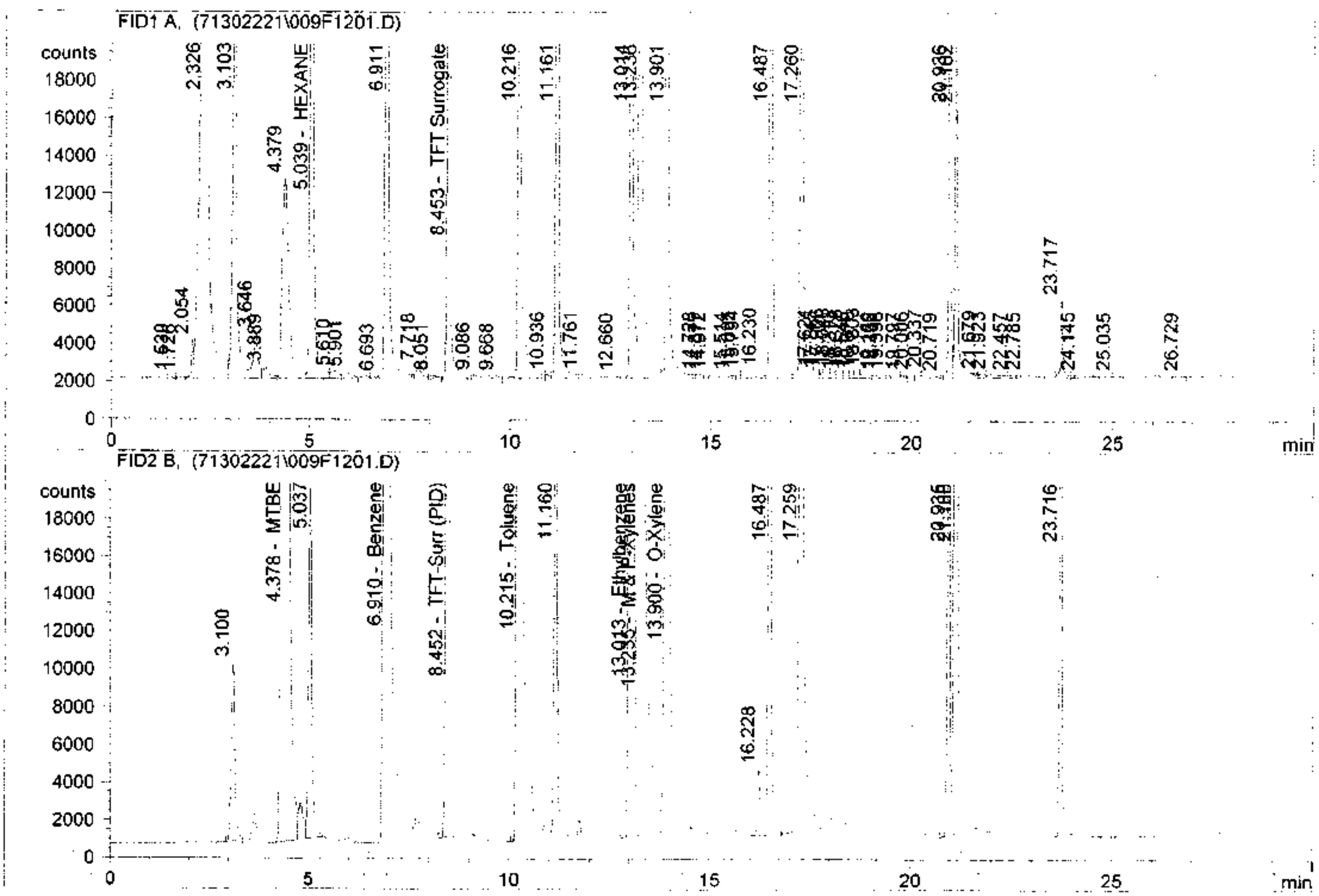
Ret. Time	Compound Name	Area	Amount ug/L
5.033	HEXANE	206115.375	19.605
8.448	TFT Surrogate	159167.672	18.696

Ret. Time	Compound Name	Area	Amount ug/L
4.370	MTBE	917120.250	50.860
6.904	Benzene	2.058e+006	23.243
8.447	TFT-Surr (PID)	664238.375	20.862
10.210	Toluene	1.618e+006	23.067
13.008	Ethylbenzene	1.252e+006	22.562
13.231	M & P-Xylenes	3.057e+006	46.022
13.896	O-Xylene	1.308e+006	22.994

Gas/BTEX Instrument 70
Data File: C:\HPCHEM\1\DATA\71302221\009F1201.D
Injection Date & Time: 2/22/2013 4:01:30 PM
Report Created on: 2/25/2013 7:46:41 AM
Operator: DLC
Aquistion Method: 70VP0213.M
Analysis Method: C:\HPCHEM\1\METHODS\70HX0213.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:VPH 10PPB Dilution: X 0.0



Ret. Time	Compound Name	Area	Amount ug/L
5.039	HEXANE	213438.891	20.336
8.453	TFT Surrogate	170187.531	19.982

Ret. Time	Compound Name	Area	Amount ug/L
4.378	MTBE	879147.750	48.813
6.910	Benzene	2.096e+006	23.664
8.452	TFT-Surr (PID)	704124.250	22.105
10.215	Toluene	1.666e+006	23.736
13.013	Ethylbenzene	1.313e+006	23.649
13.235	M & P-Xylenes	3.185e+006	47.914
13.900	O-Xylene	1.342e+006	23.576

Method Information

Calibration run on 02/08/13 under 71302071 sequence. Calibration include Hexane, MTBE, and BTEX

===
Calibration Table
===

Default Calibration

Calib. Data Modified : Friday, February 08, 2013 11:46:36 AM

Calculate : Area Percent

Rel. Reference Window : 5.000 %
Abs. Reference Window : 0.000 min
Rel. Non-ref. Window : 5.000 %
Abs. Non-ref. Window : 0.000 min
Do not use Multiplier & Dilution Factor with ISTDs
Uncalibrated Peaks : not reported
Partial Calibration : Yes, identified peaks are recalibrated
Correct All Ret. Times: No, only for identified peaks

Curve Type : Linear
Origin : Ignored
Weight : Equal

Recalibration Settings:
Average Response : Average all calibrations
Average Retention Time: Floating Average New 75%

Calibration Report Options :
Printout of recalibrations within a sequence:
Calibration Table after Recalibration
Normal Report after Recalibration
If the sequence is done with bracketing:
Results of first cycle (ending previous bracket)

Signal 1: FID1 A,
Signal 2: FID2 B,

RetTime [min]	Sig	Lvl	Amount [ng/ul]	Area	Amt/Area	Ref	Grp	Name
4.390	2	1	2.00000	3.98776e4	5.01535e-5			MTBE
		2	10.00000	1.86057e5	5.37470e-5			
		3	20.00000	3.62579e5	5.51604e-5			
		4	40.00000	6.61801e5	6.04412e-5			
		5	100.00000	1.77417e6	5.63645e-5			
		6	200.00000	3.71808e6	5.37912e-5			
5.031	1	1	1.00000	1.94559e4	5.13983e-5			HEXANE
		2	5.00000	6.11067e4	8.18240e-5			
		3	10.00000	1.06481e5	9.39131e-5			
		4	20.00000	2.09561e5	9.54375e-5			
		5	50.00000	5.14893e5	9.71075e-5			
		6	100.00000	1.01104e6	9.89082e-5			
6.905	2	1	1.00000	9.40592e4	1.06316e-5			Benzene
		2	5.00000	4.67596e5	1.06930e-5			
		3	10.00000	8.93105e5	1.11969e-5			
		4	20.00000	1.65384e6	1.20931e-5			
		5	50.00000	4.41617e6	1.13220e-5			
		6	100.00000	9.01752e6	1.10895e-5			
8.454	2	1	1.00000	3.26814e4	3.05984e-5			TFT-Surr (PID)
		2	5.00000	1.64244e5	3.04425e-5			
		3	10.00000	3.15981e5	3.16474e-5			
		4	20.00000	6.25766e5	3.19608e-5			
		5	50.00000	1.58779e6	3.14903e-5			
		6	100.00000	3.21065e6	3.11463e-5			
8.456	1	1	1.00000	9923.51074	1.00771e-4			TFT Surrogate
		2	5.00000	4.55111e4	1.09863e-4			
		3	10.00000	8.47427e4	1.18004e-4			
		4	20.00000	1.69295e5	1.18137e-4			

RetTime [min]	Sig	Lvl	Amount [ng/ul]	Area	Amt/Area	Ref	Grp	Name
		5	50.00000	4.17030e5	1.19895e-4			
		6	100.00000	8.61293e5	1.16104e-4			
10.213	2	1	1.00000	7.38930e4	1.35331e-5			Toluene
		2	5.00000	3.65047e5	1.36969e-5			
		3	10.00000	7.03539e5	1.42138e-5			
		4	20.00000	1.30914e6	1.52772e-5			
		5	50.00000	3.49990e6	1.42861e-5			
		6	100.00000	7.16431e6	1.39581e-5			
13.013	2	1	1.00000	5.69595e4	1.75563e-5			Ethylbenzene
		2	5.00000	2.84437e5	1.75786e-5			
		3	10.00000	5.52021e5	1.81152e-5			
		4	20.00000	1.03763e6	1.92747e-5			
		5	50.00000	2.77903e6	1.79919e-5			
		6	100.00000	5.67593e6	1.76183e-5			
13.236	2	1	2.00000	1.37347e5	1.45616e-5			M & P-Xylenes
		2	10.00000	6.92902e5	1.44321e-5			
		3	20.00000	1.33130e6	1.50230e-5			
		4	40.00000	2.50602e6	1.59616e-5			
		5	100.00000	6.65670e6	1.50225e-5			
		6	200.00000	1.34821e7	1.48345e-5			
13.901	2	1	1.00000	5.80160e4	1.72366e-5			O-Xylene
		2	5.00000	2.94009e5	1.70063e-5			
		3	10.00000	5.64682e5	1.77091e-5			
		4	20.00000	1.04486e6	1.91413e-5			
		5	50.00000	2.84337e6	1.75847e-5			
		6	100.00000	5.86177e6	1.70597e-5			

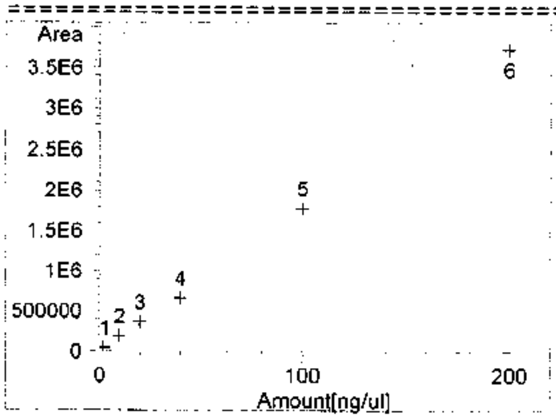
2 Warnings or Errors :

Warning : Overlapping peak time windows at 13.013 min, signal 2
Warning : Overlapping peak time windows at 13.236 min, signal 2

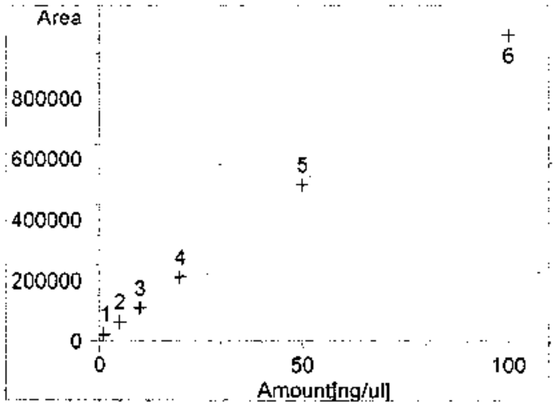
Peak Sum Table

No Entries in table

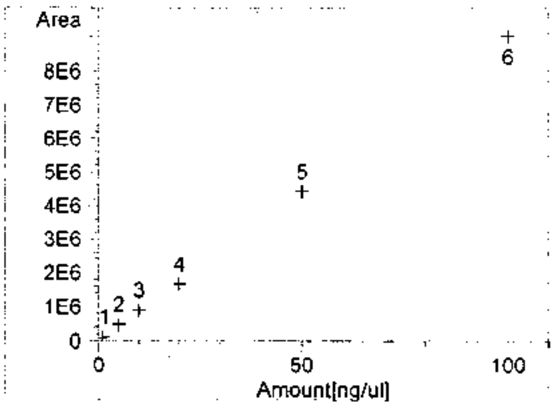
Calibration Curves



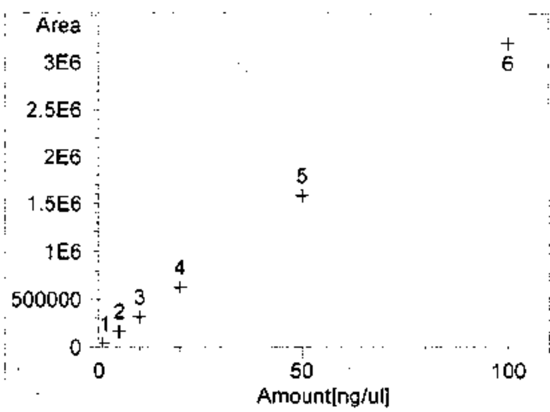
MTBE at exp. RT: 4.390
FID2 B,
Correlation: 0.99955
Residual Std. Dev.: 47295.66935
Formula: y = mx + b
m: 18548.82201
b: -26267.01352
x: Amount[ng/ul]
y: Area



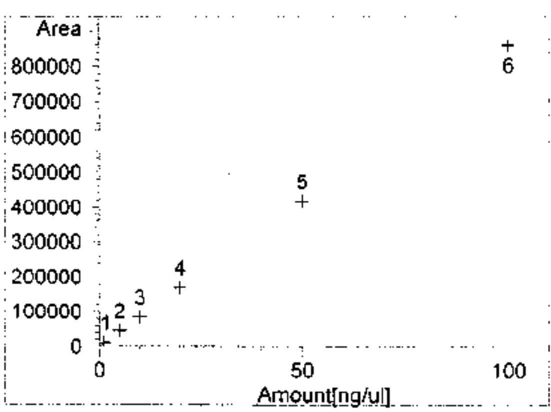
HEXANE at exp. RT: 5.031
FID1 A,
Correlation: 0.99998
Residual Std. Dev.: 2770.46506
Formula: y = mx + b
m: 10031.80203
b: 9436.96710
x: Amount[ng/ul]
y: Area



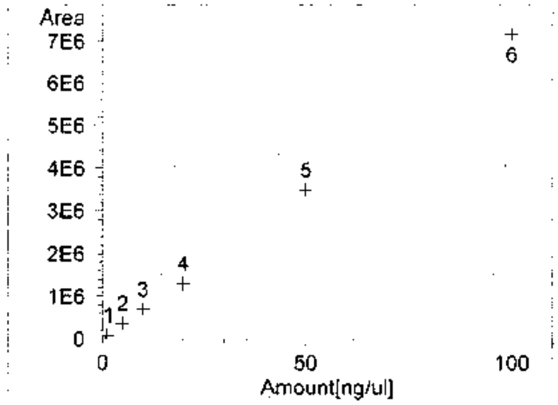
Benzene at exp. RT: 6.905
FID2 B,
Correlation: 0.99981
Residual Std. Dev.: 74949.41586
Formula: y = mx + b
m: 90108.71167
b: -36322.05791
x: Amount[ng/ul]
y: Area



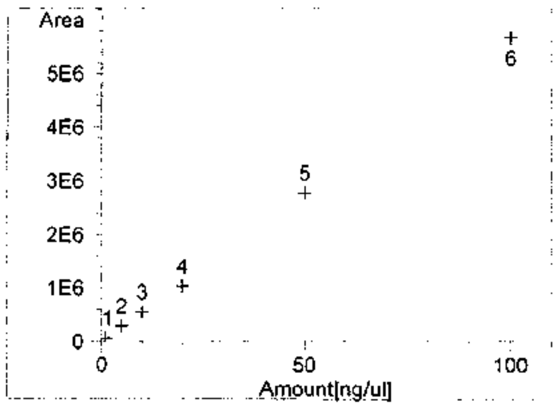
TFT-Surr (PID) at exp. RT: 8.454
FID2 B,
Correlation: 0.99997
Residual Std. Dev.: 10137.37348
Formula: y = mx + b
m: 32084.47351
b: -5099.15526
x: Amount[ng/ul]
y: Area



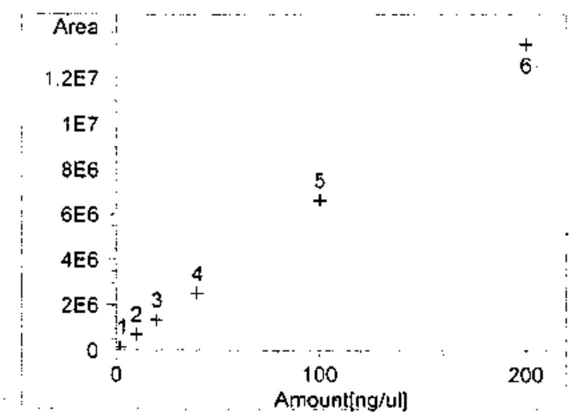
TFT Surrogate at exp. RT: 8.456
FID1 A,
Correlation: 0.99985
Residual Std. Dev.: 6280.43803
Formula: y = mx + b
m: 8571.62139
b: -1087.66870
x: Amount[ng/ul]
y: Area



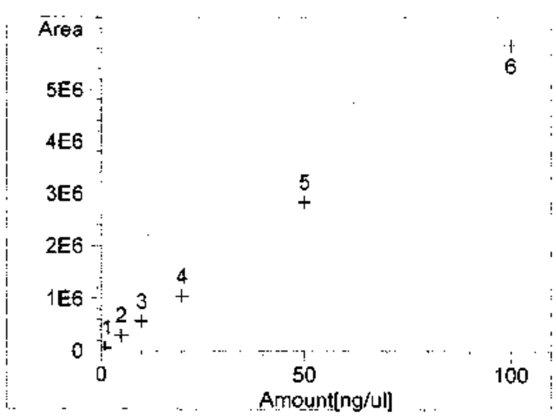
Toluene at exp. RT: 10.213
FID2 B,
Correlation: 0.99980
Residual Std. Dev.: 61139.46218
Formula: y = mx + b
m: 71618.78462
b: -34212.19960
x: Amount [ng/ul]
y: Area



Ethylbenzene at exp. RT: 13.013
FID2 B,
Correlation: 0.99982
Residual Std. Dev.: 45655.84434
Formula: y = mx + b
m: 56794.76351
b: -29636.64206
x: Amount [ng/ul]
y: Area



M & P-Xylenes at exp. RT: 13.236
FID2 B,
Correlation: 0.99988
Residual Std. Dev.: 89189.23922
Formula: y = mx + b
m: 67429.85346
b: -46259.54204
x: Amount [ng/ul]
y: Area



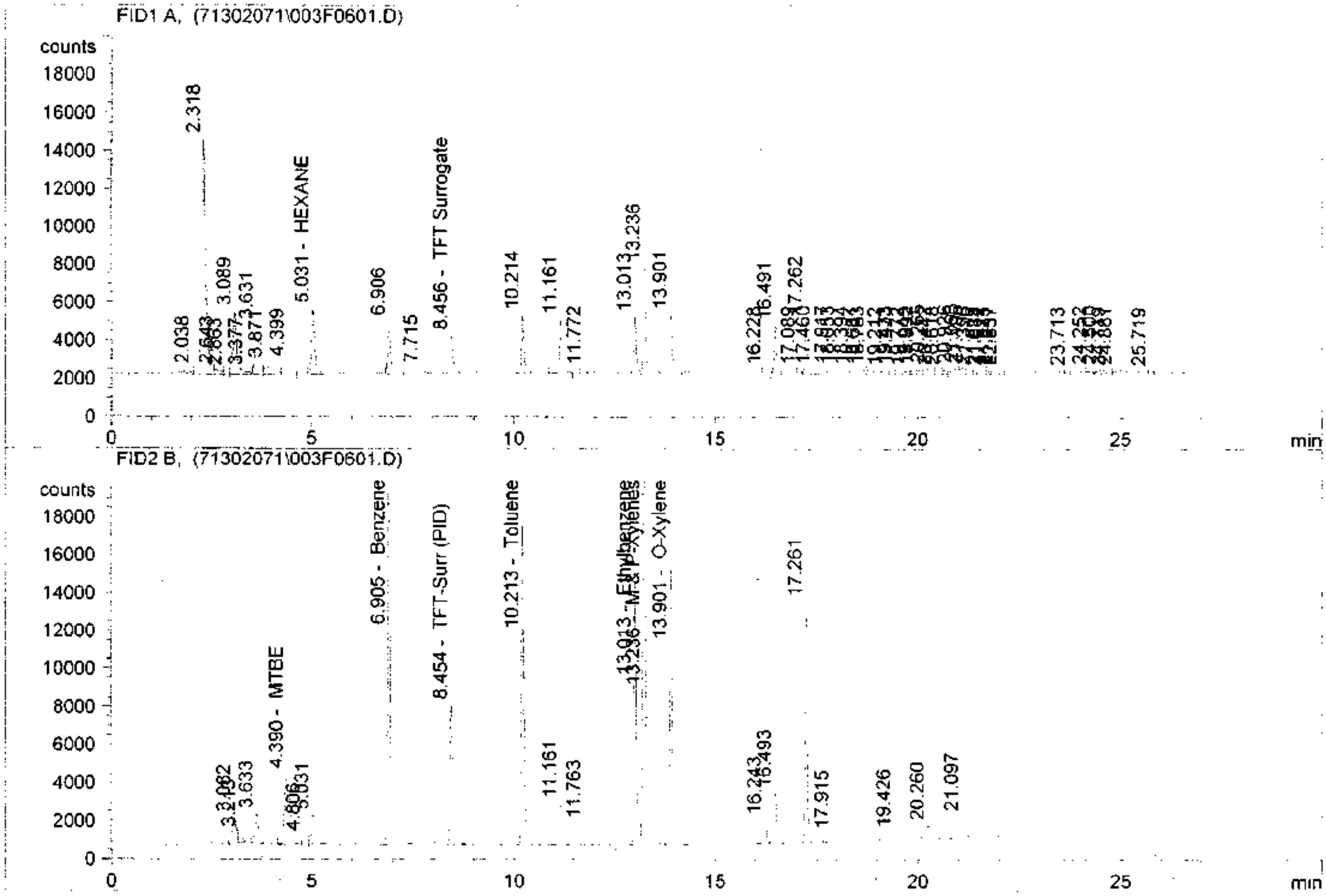
O-Xylene at exp. RT: 13.901
FID2 B,
Correlation: 0.99970
Residual Std. Dev.: 61388.72877
Formula: y = mx + b
m: 58643.23725
b: -40154.59681
x: Amount [ng/ul]
y: Area

==

Gas/BTEX Instrument 70
Data File: C:\HPCHEM\1\DATA\71302071\003F0601.D
Injection Date & Time: 2/7/2013 11:04:36 AM
Report Created on: 2/8/2013 11:50:57 AM
Operator: DLC
Aquistion Method: 70VP0113.M
Analysis Method: C:\HPCHEM\1\METHODS\70HX0213.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:1PPB VPH Dilution: X 0.0



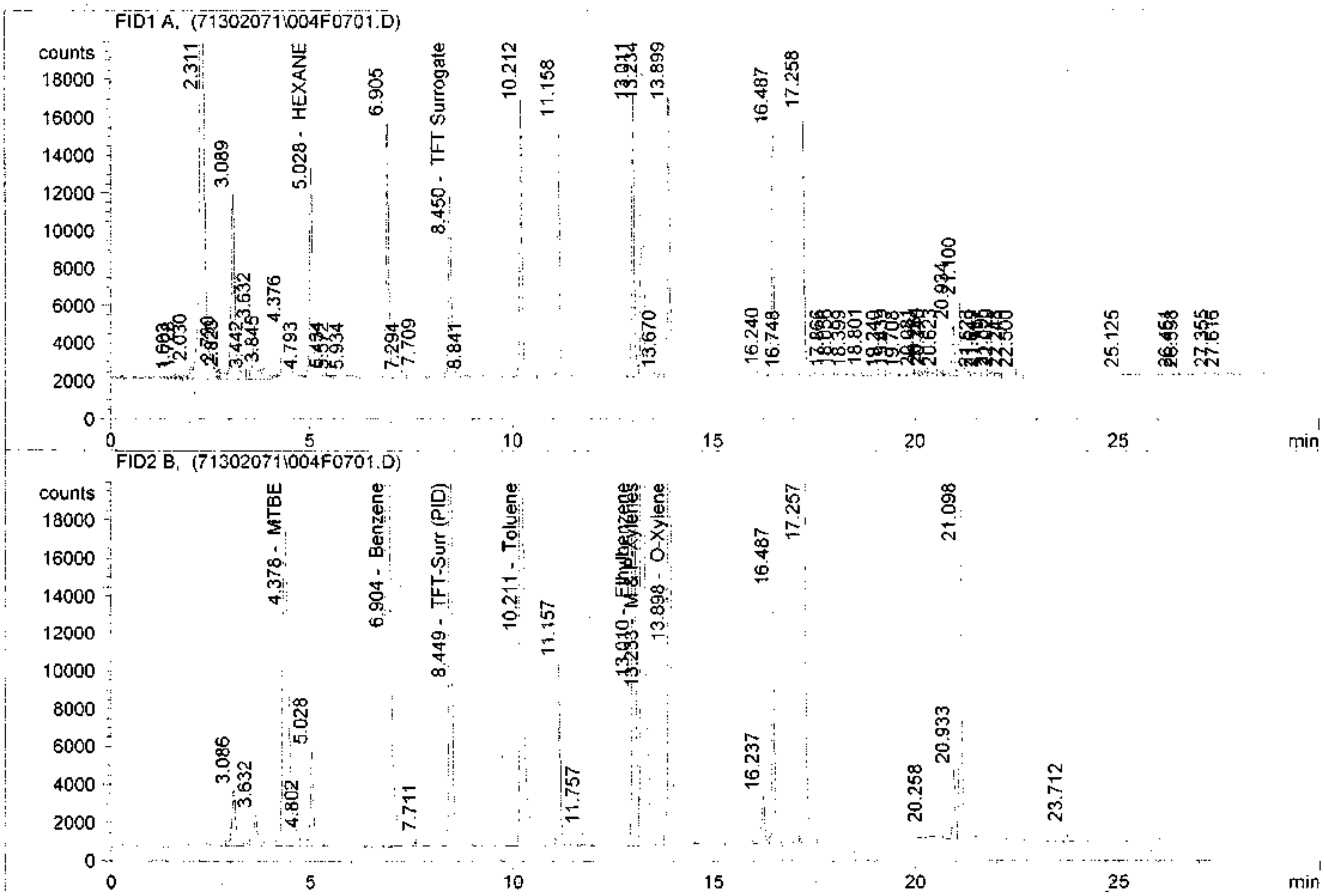
Ret. Time	Compound Name	Area	Amount ug/L
5.031	HEXANE	19455.883	0.999
8.456	TFT Surrogate	9923.511	1.285

Ret. Time	Compound Name	Area	Amount ug/L
4.390	MTBE	39877.613	3.566
6.905	Benzene	94059.211	1.447
8.454	TFT-Surr (PID)	32681.438	1.178
10.213	Toluene	73892.961	1.509
13.013	Ethylbenzene	56959.504	1.525
13.236	M & P-Xylenes	137347.484	2.723
13.901	O-Xylene	58016.016	1.674

Gas/BTEX Instrument 70
Data File: C:\HPCHEM\1\DATA\71302071\004F0701.D
Injection Date & Time: 2/7/2013 11:44:24 AM
Report Created on: 2/8/2013 11:51:10 AM
Operator: DLC
Aquistion Method: 70VP0113.M
Analysis Method: C:\HPCHEM\1\METHODS\70HX0213.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:5PPB VPH Dilution: X 0.0



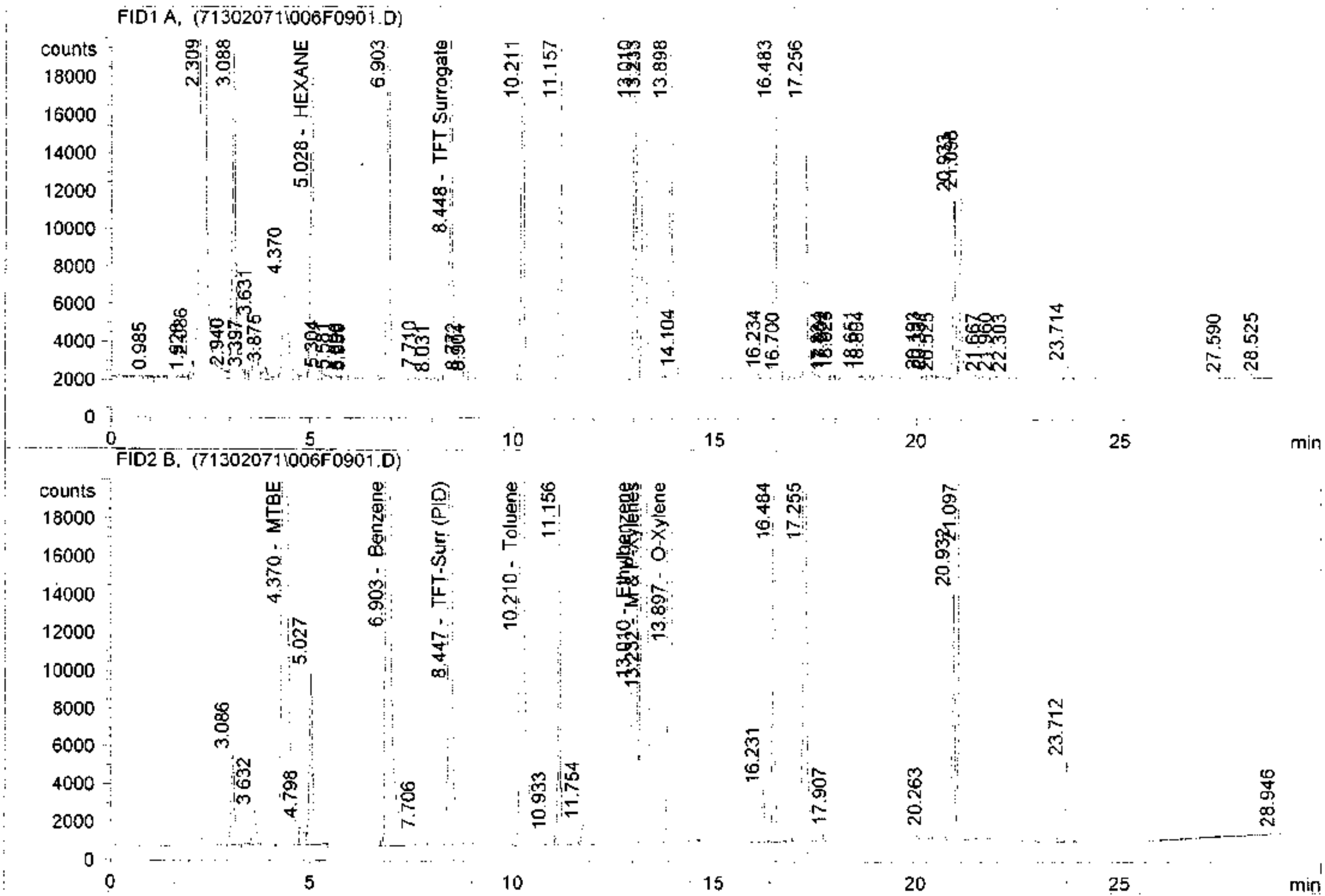
Ret. Time	Compound Name	Area	Amount ug/L
5.028	HEXANE	61106.730	5.151
8.450	TFT Surrogate	45511.086	5.436

Ret. Time	Compound Name	Area	Amount ug/L
4.378	MTBE	186056.781	11.447
6.904	Benzene	467595.625	5.592
8.449	TFT-Surr (PID)	164244.141	5.278
10.211	Toluene	365047.281	5.575
13.010	Ethylbenzene	284437.156	5.530
13.233	M & P-Xylenes	692902.000	10.962
13.898	O-Xylene	294008.594	5.698

Gas/BTEX   Instrument 70
Data File: C:\HPCHEM\1\DATA\71302071\006F0901.D
Injection Date & Time: 2/7/2013   1:05:21 PM
Report Created on: 2/8/2013   11:51:31 AM
Operator: DLC
Aquistion Method: 70VP0113.M
Analysis Method: C:\HPCHEM\1\METHODS\70HX0213.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:10PPB VPH   Dilution: X 0.0



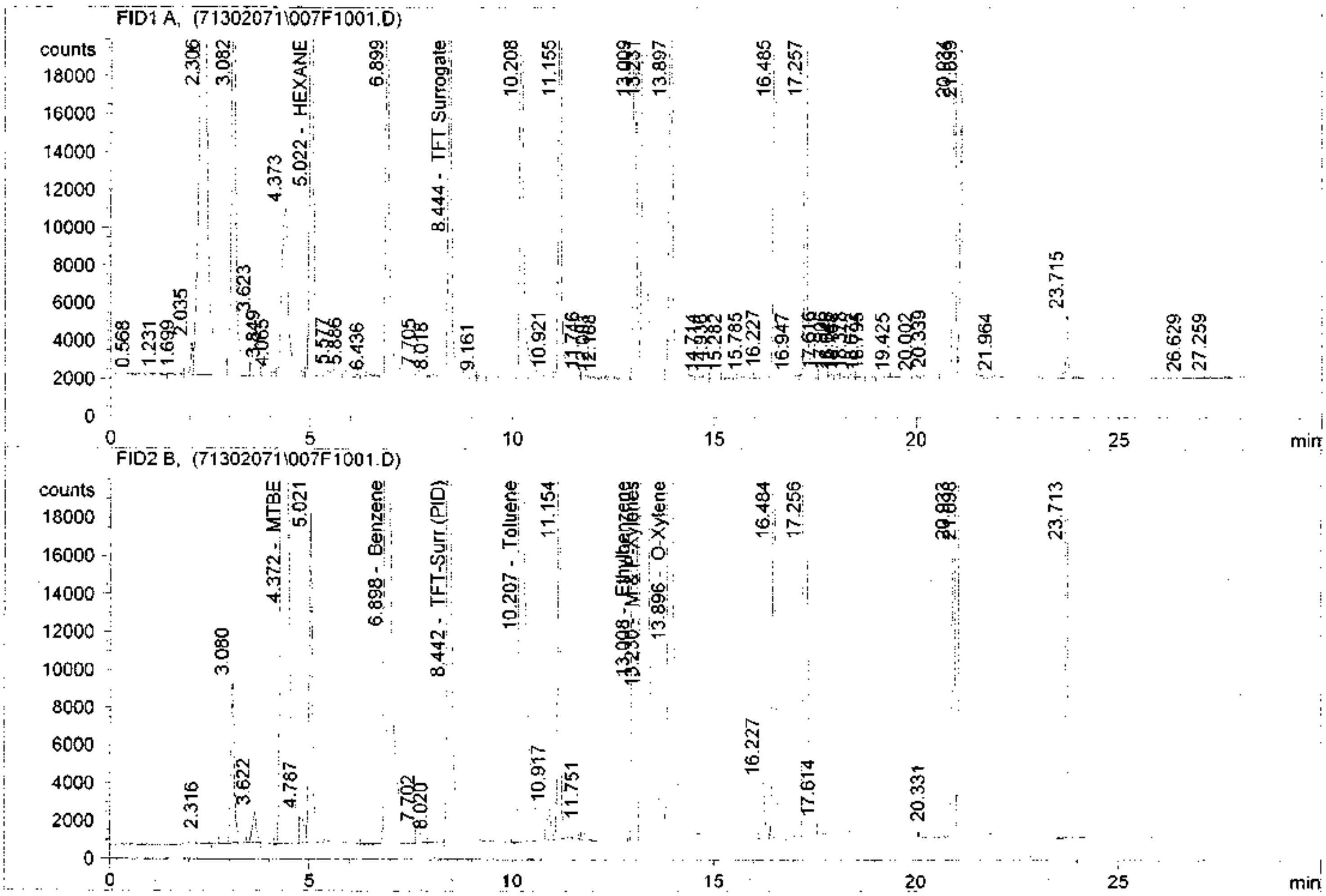
Ret. Time	Compound Name	Area	Amount ug/L
5.028	HEXANE	106481.398	9.674
8.448	TFT Surrogate	84742.734	10.013

Ret. Time	Compound Name	Area	Amount ug/L
4.370	MTBE	362579.000	20.963
6.903	Benzene	893104.562	10.315
8.447	TFT-Surr (PID)	315981.437	10.007
10.210	Toluene	703539.250	10.301
13.010	Ethylbenzene	552021.375	10.241
13.232	M & P-Xylenes	1.331e+006	20.429
13.897	O-Xylene	564681.688	10.314

Gas/BTEX   Instrument 70
Data File: C:\HPCHEM\1\DATA\71302071\007F1001.D
Injection Date & Time: 2/7/2013   1:46:14 PM
Report Created on: 2/8/2013   11:51:42 AM
Operator: DLC
Aquistion Method: 70VP0113.M
Analysis Method: C:\HPCHEM\1\METHODS\70HX0213.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:20PPB VPH   Dilution: X 0.0



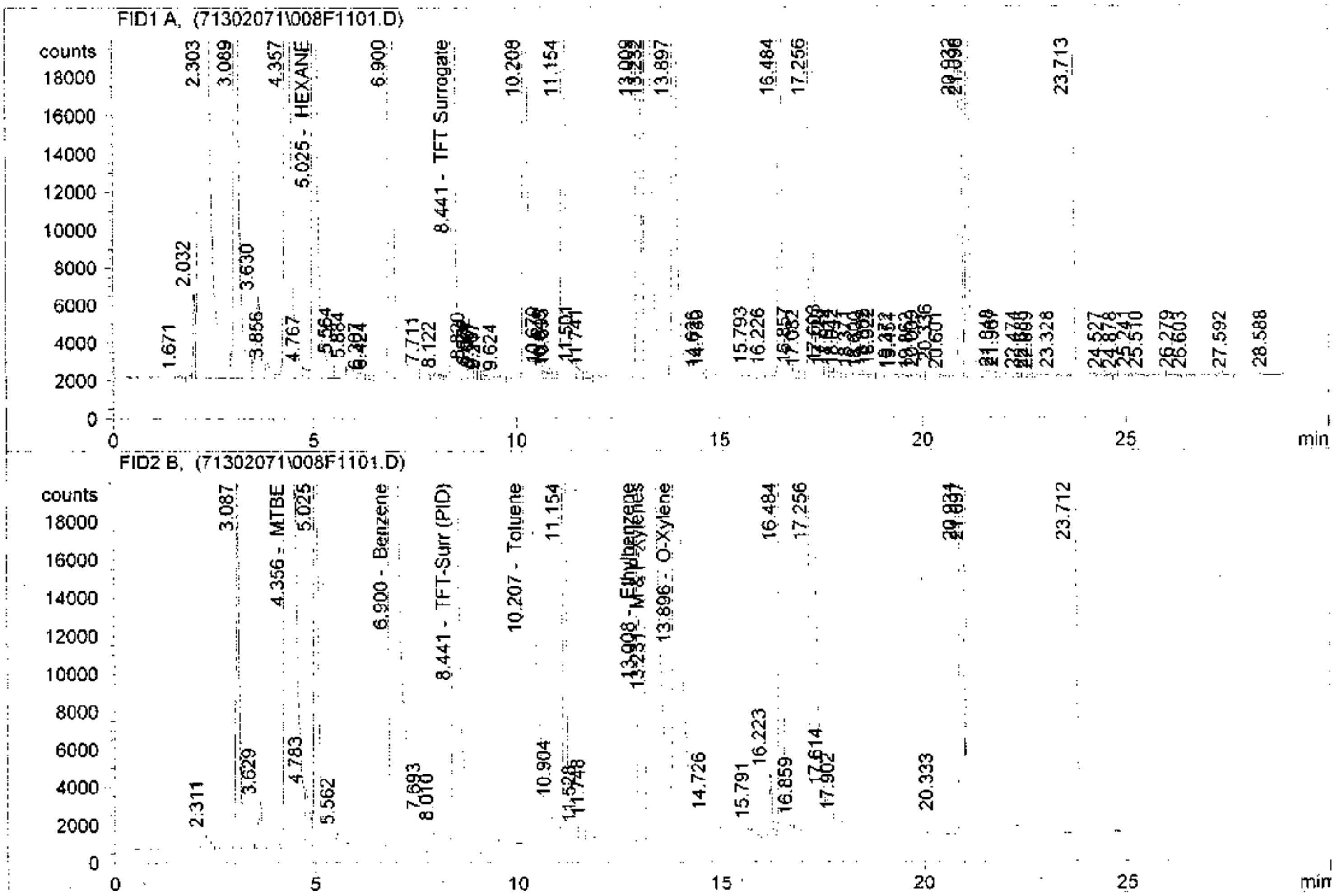
Ret. Time	Compound Name	Area	Amount ug/L
5.022	HEXANE	209561.281	19.949
8.444	TFT Surrogate	169294.891	19.878

Ret. Time	Compound Name	Area	Amount ug/L
4.372	MTBE	661800.688	37.095
6.898	Benzene	1.654e+006	18.757
8.442	TFT-Surr (PID)	625765.875	19.663
10.207	Toluene	1.309e+006	18.757
13.008	Ethylbenzene	1.038e+006	18.792
13.230	M & P-Xylenes	2.506e+006	37.851
13.896	O-Xylene	1.045e+006	18.502

Gas/BTEX Instrument 70
Data File: C:\HPCHEM\1\DATA\71302071\008F1101.D
Injection Date & Time: 2/7/2013 2:28:41 PM
Report Created on: 2/8/2013 11:51:56 AM
Operator: DLC
Aquistion Method: 70VP0113.M
Analysis Method: C:\HPCHEM\1\METHODS\70HX0213.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:50PPB VPH Dilution: X 0.0



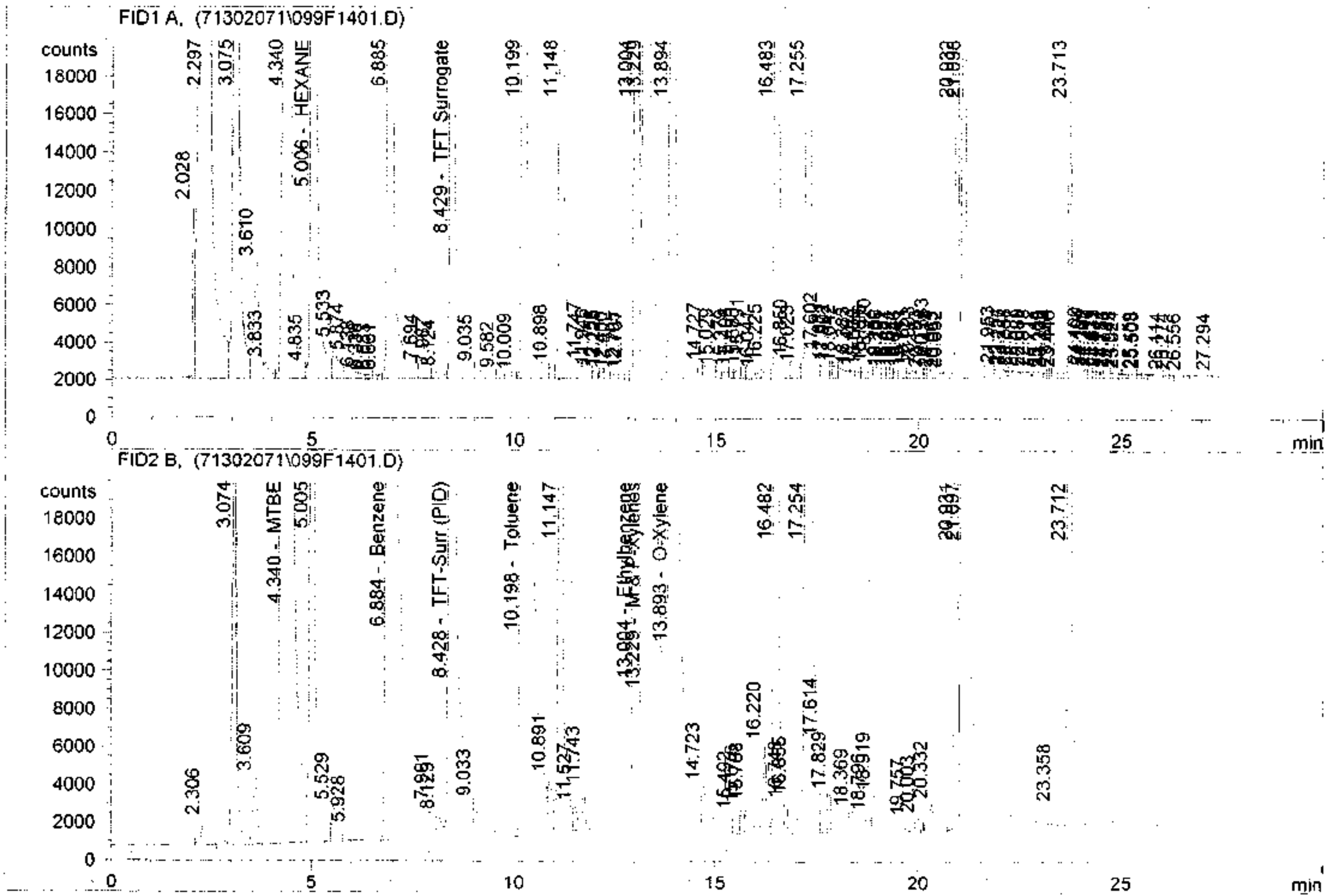
Ret. Time	Compound Name	Area	Amount ug/L
5.025	HEXANE	514893.375	50.385
8.441	TFT Surrogate	417030.094	48.779

Ret. Time	Compound Name	Area	Amount ug/L
4.356	MTBE	1.774e+006	97.065
6.900	Benzene	4.416e+006	49.412
8.441	TFT-Surr (PID)	1.588e+006	49.647
10.207	Toluene	3.500e+006	49.346
13.008	Ethylbenzene	2.779e+006	49.453
13.231	M & P-Xylenes	6.657e+006	99.406
13.896	O-Xylene	2.843e+006	49.171

Gas/BTEX Instrument 70
Data File: C:\HPCHEM\1\DATA\71302071\099F1401.D
Injection Date & Time: 2/7/2013 4:32:28 PM
Report Created on: 2/8/2013 11:52:07 AM
Operator: DLC
Aquistion Method: 70VP0113.M
Analysis Method: C:\HPCHEM\1\METHODS\70HX0213.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:BLANK Dilution: X 0.0



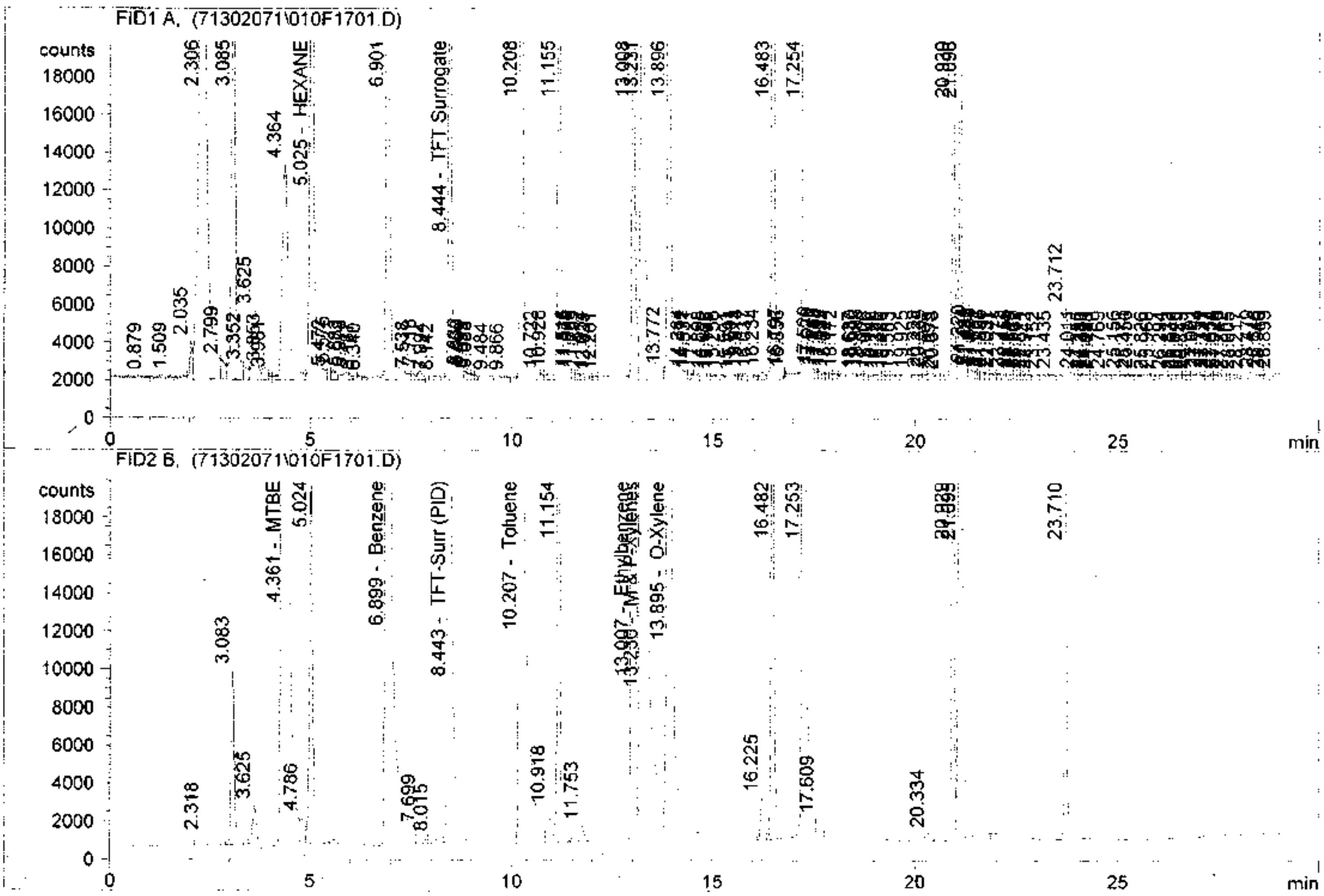
Ret. Time	Compound Name	Area	Amount ug/L
5.006	HEXANE	1.011e+006	99.843
8.429	TFT Surrogate	861293.250	100.609

Ret. Time	Compound Name	Area	Amount ug/L
4.340	MTBE	3.718e+006	201.864
6.884	Benzene	9.018e+006	100.477
8.428	TFT-Surr (PID)	3.211e+006	100.228
10.198	Toluene	7.164e+006	100.512
13.004	Ethylbenzene	5.676e+006	100.459
13.229	M & P-Xylenes	1.348e+007	200.628
13.893	O-Xylene	5.862e+006	100.641

Gas/BTEX   Instrument 70
Data File: C:\HPCHEM\1\DATA\71302071\010F1701.D
Injection Date & Time: 2/7/2013   6:32:31 PM
Report Created on: 2/8/2013   11:52:20 AM
Operator: DLC
Aquistion Method: 70VP0113.M
Analysis Method: C:\HPCHEM\1\METHODS\70HX0213.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:20PPB VPH 2NDS   Dilution: X 0.0



Ret. Time	Compound Name	Area	Amount ug/L
5.025	HEXANE	212250.500	20.217
8.444	TFT Surrogate	174025.297	20.429

Ret. Time	Compound Name	Area	Amount ug/L
4.361	MTBE	788610.437	43.931
6.899	Benzene	1.894e+006	21.421
8.443	TFT-Surr (PID)	657724.750	20.659
10.207	Toluene	1.496e+006	21.371
13.007	Ethylbenzene	1.169e+006	21.110
13.230	M & P-Xylenes	2.840e+006	42.798
13.895	O-Xylene	1.212e+006	21.355

Method Information

Calibratd for VPH 02/8/13 SEQUENCE 71302071. AROMATICS BY PID. ALPHATICS BY FID. Calibration from 5PPB TO 100PPB. For ALK ranges C10-C12 not reported.

Injection Source and Location

Injection Source: Manual

Injection Location: Front

OVEN\DET

Runtime (min): 29.0

Zone Temperatures:

	State	Setpoint
Inl. A	OFF	50 C.
Inl. B	ON	200 C.
Det. A	OFF	50 C.
Det. B	ON	235 C.
Aux.	OFF	50 C.

Oven Zone:

Oven max	300 C.
Equib Time	1.00 Min.
Oven State	ON
Cryo State	OFF
Ambient	25 C.
Cryo Blast	OFF

Oven Program:

	Setpoint
Initial Temp.:	29 C.
Initial Time:	4.00 Min.

Level	Rate (C/min.)	Final Temp.(C)	Final Time (min)
1	8.00	180	0.00
2(A)	12.0	230	2.00

Auxiliary Channel C

Comment:

Pressure Program:

	Setpoint
Initial Pres.:	22.0 psi
Initial Time:	650.00 min.

Level	Rate (psi/min.)	Final Pres.(psi)	Final Time (min)
1	0.00	0.0	0.00

Total Program Time: 650.00

Pressure-Flow Relationship:

Pres. (psi)	Flow (ml/min)

1	---	---
2	---	---

Last Aux. pressure calibration: ---

Make-up Gas Compensation:
Non-compensated
Initial Flow0.0

Purge Valve Settings

Purge A/B

	Init Value	On Time (Min.)	Off Time (Min.)
A (Valve 3)	On	0.00	0.00
B (Valve 4)	On	0.00	0.00

A - Splitless Injection: No
B - Splitless Injection: No

Valves/Relays Information

Initial Setpoints:
5890 Valves:

Valve 1:	Off
Valve 2:	Off
Valve 3 (Purge A):	On
Valve 4 (Purge B):	On

Detector Information

Detector A:
Type FID
State ON

Detector B:
Type FID
State ON

Signal Information

Save Data: Both

Signal 1:

Signal	Det. A
Data rate	2.500 Hz.
Peakwidth	0.167 min.
Start Time	0.00 min.
Stop Time	30.00 min.

Signal 2:

Signal	Det. B
Data rate	2.500 Hz.
Peakwidth	0.167 min.
Start Time	0.00 min.
Stop Time	30.00 min.

Integration Events

Results will be produced with the standard integrator.

Default Integration Event Table "Event"

Event	Value	Time
Initial Area Reject	1.000	Initial
Initial Threshold	10.000	Initial
Initial Peak Width	0.040	Initial
Initial Shoulders	OFF	Initial

Signal Specific Integration Event Table "Event_FID1B"

Event	Value	Time
Initial Area Reject	1.000	Initial
Initial Threshold	-2.000	Initial
Initial Peak Width	0.040	Initial
Initial Shoulders	OFF	Initial

Signal Specific Integration Event Table "Event_FID2B"

Event	Value	Time
Initial Area Reject	2441.382	Initial
Initial Threshold	3.000	Initial
Initial Peak Width	0.100	Initial
Initial Shoulders	OFF	Initial

Signal Specific Integration Event Table "Event_FID1A"

Event	Value	Time
Initial Area Reject	973.633	Initial
Initial Threshold	3.000	Initial
Initial Peak Width	0.100	Initial
Initial Shoulders	OFF	Initial
Baseline Hold	ON	2.891
Integrator	ON	3.000

Apply Manual Integration Events: No

===
Calibration Table
===

Default Calibration

Calib. Data Modified : Friday, February 08, 2013 7:26:48 AM

Calculate : Area Percent

Rel. Reference Window : 5.000 %
Abs. Reference Window : 0.000 min
Rel. Non-ref. Window : 5.000 %
Abs. Non-ref. Window : 0.000 min
Do not use Multiplier & Dilution Factor with ISTDs
Uncalibrated Peaks : not reported
Partial Calibration : Yes, identified peaks are recalibrated
Correct All Ret. Times: No, only for identified peaks

Curve Type : Linear
Origin : Ignored
Weight : Equal

Recalibration Settings:
Average Response : Average all calibrations
Average Retention Time: Floating Average New 75%

Calibration Report Options :
Printout of recalibrations within a sequence:
Calibration Table after Recalibration
Normal Report after Recalibration
If the sequence is done with bracketing:
Results of first cycle (ending previous bracket)

Signal 1: FID1 A,
Signal 2: FID2 B,

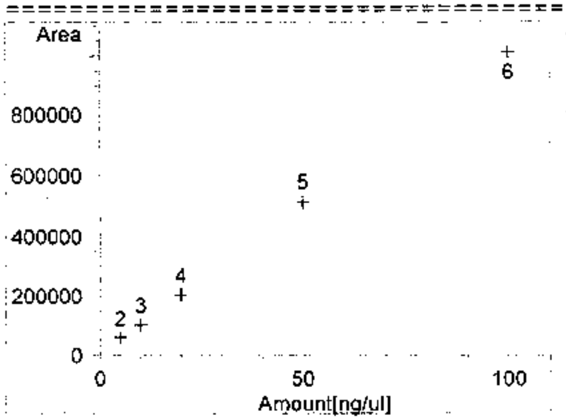
RetTime [min]	Sig	Lvl	Amount [ng/ul]	Area	Amt/Area	Ref	Grp	Name
5.006	1	2	5.00000	5.91260e4	8.45651e-5			C5 - C6 ALK
		3	10.00000	1.03506e5	9.66130e-5			
		4	20.00000	2.04632e5	9.77366e-5			
		5	50.00000	5.12504e5	9.75603e-5			
		6	100.00000	1.01017e6	9.89934e-5			
8.428	2	2	5.00000	1.63918e5	3.05030e-5			TFT Surrogate
		3	10.00000	3.20253e5	3.12253e-5			
		4	20.00000	6.30630e5	3.17143e-5			
		5	50.00000	1.60014e6	3.12472e-5			
		6	100.00000	3.22055e6	3.10506e-5			
8.429	1	2	5.00000	4.48647e4	1.11446e-4			TFT Surrogate
		3	10.00000	8.06747e4	1.23955e-4			
		4	20.00000	1.60510e5	1.24603e-4			
		5	50.00000	4.14139e5	1.20732e-4			
		6	100.00000	8.61280e5	1.16106e-4			
11.148	1	2	5.00000	5.71006e4	8.75647e-5			>C6 - C8 ALK
		3	10.00000	1.03515e5	9.66043e-5			
		4	20.00000	2.02477e5	9.87766e-5			
		5	50.00000	5.19249e5	9.62929e-5			
		6	100.00000	1.07140e6	9.33362e-5			
16.483	1	2	5.00000	5.24248e4	9.53747e-5			>C8 - C10 ALK
		3	10.00000	9.42568e4	1.06093e-4			
		4	20.00000	1.82199e5	1.09770e-4			
		5	50.00000	4.71037e5	1.06149e-4			
		6	100.00000	9.32780e5	1.07206e-4			
17.254	2	2	5.00000	2.54553e5	1.96422e-5			C8 -C10 ARO
		3	10.00000	4.89832e5	2.04151e-5			
		4	20.00000	8.94515e5	2.23585e-5			

RetTime [min]	Sig	Lvl	Amount [ng/ul]	Area	Amt/Area	Ref	Grp	Name
		5	50.00000	2.44610e6	2.04407e-5			
		6	100.00000	4.91774e6	2.03345e-5			
20.932	1	2	5.00000	1.30190e4	3.84055e-4			>C10 - C12 ALK
		3	10.00000	3.52528e4	2.83665e-4			
		4	20.00000	9.10981e4	2.19544e-4			
		5	50.00000	2.48422e5	2.01271e-4			
		6	100.00000	3.93366e5	2.54216e-4			
21.097	2	2	5.00000	1.13709e5	4.39720e-5			>C10 - C12 ARO
		3	10.00000	2.75568e5	3.62887e-5			
		4	20.00000	6.15291e5	3.25049e-5			
		5	50.00000	1.68882e6	2.96064e-5			
		6	100.00000	3.57065e6	2.80061e-5			
23.712	2	2	5.00000	2937.43628	1.70216e-3			>C12 - C13 ARO
		3	10.00000	1.46758e4	6.81394e-4			
		4	20.00000	8.30595e4	2.40791e-4			
		5	50.00000	4.49875e5	1.11142e-4			
		6	100.00000	1.07585e6	9.29501e-5			

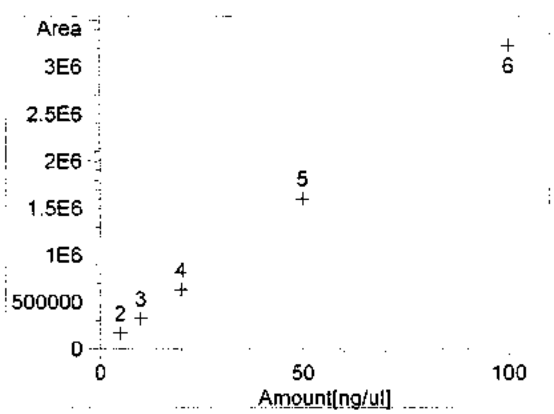
Peak Sum Table

No Entries in table

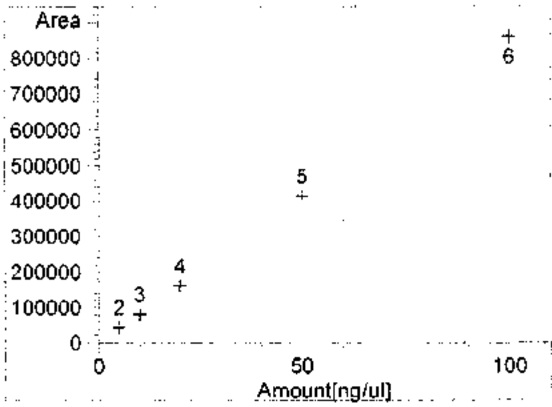
Calibration Curves



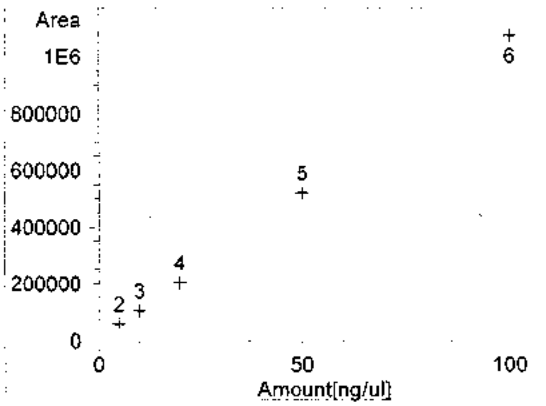
C5 - C6 ALK at exp. RT: 5.006
FID1 A,
Correlation: 0.99997
Residual Std. Dev.: 3621.26020
Formula: y = mx + b
m: 10054.64822
b: 5965.12289
x: Amount[ng/ul]
y: Area



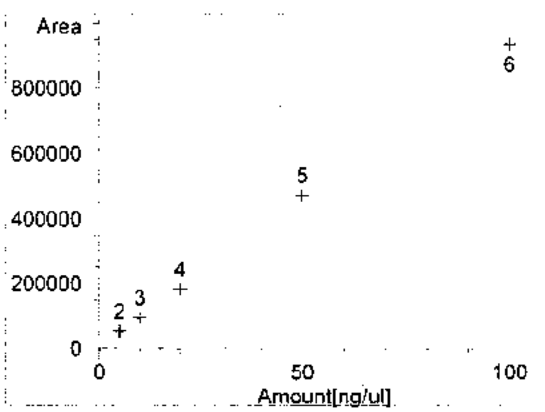
TFT Surrogate at exp. RT: 8.428
FID2 B,
Correlation: 0.99998
Residual Std. Dev.: 8043.22038
Formula: y = mx + b
m: 32214.20264
b: -4825.85723
x: Amount[ng/ul]
y: Area



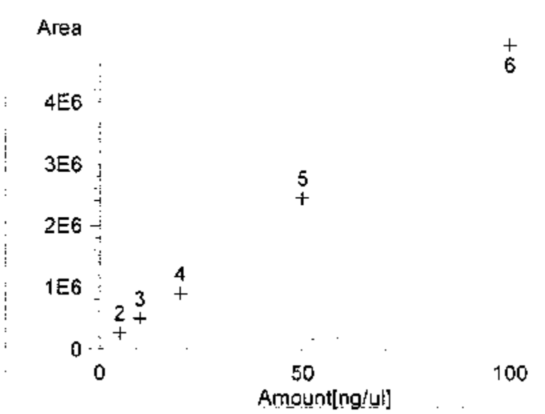
TFT Surrogate at exp. RT: 8.429
FID1 A,
Correlation: 0.99974
Residual Std. Dev.: 8922.17291
Formula: y = mx + b
m: 8624.90347
b: -6827.68782
x: Amount[ng/ul]
y: Area



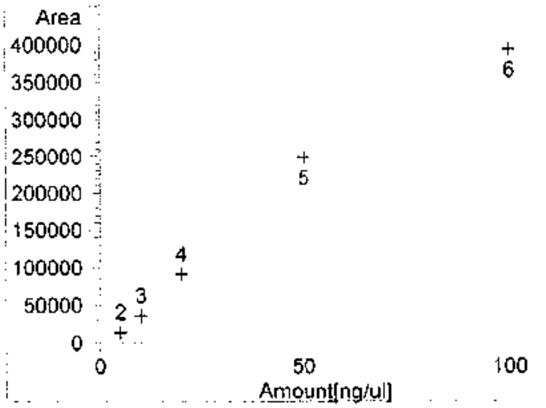
>C6 - C8 ALK at exp. RT: 11.148
FID1 A,
Correlation: 0.99981
Residual Std. Dev.: 9568.11634
Formula: y = mx + b
m: 10709.37795
b: -5499.37153
x: Amount[ng/ul]
y: Area



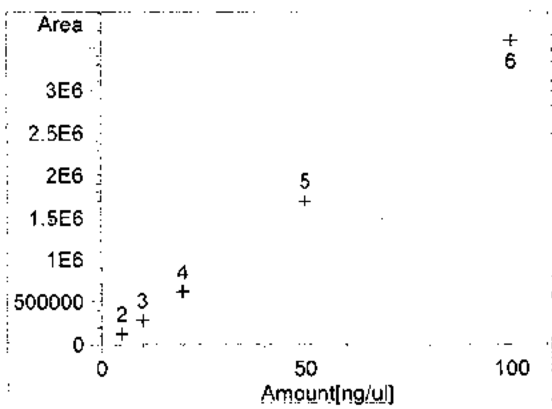
>C8 - C10 ALK at exp. RT: 16.483
FID1 A,
Correlation: 0.99994
Residual Std. Dev.: 4622.18753
Formula: y = mx + b
m: 9315.32011
b: 1872.63414
x: Amount[ng/ul]
y: Area



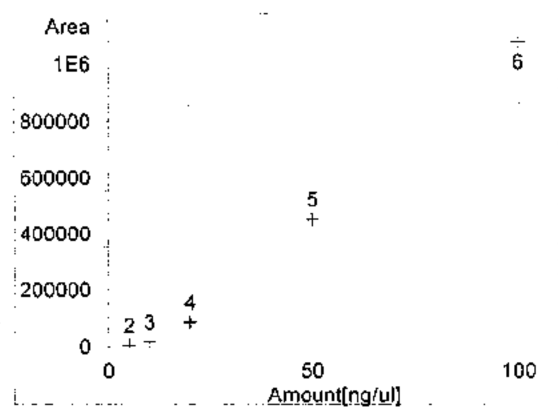
C8 -C10 ARO at exp. RT: 17.254
FID2 B,
Correlation: 0.99980
Residual Std. Dev.: 45302.53188
Formula: y = mx + b
m: 49359.05951
b: -25736.77693
x: Amount[ng/ul]
y: Area




```
>C10 - C12 ALK at exp. RT: 20.932
FID1 A,
Correlation:              0.98927
Residual Std. Dev.: 27212.96129
Formula: y = mx + b
       m:   4060.58719
       b:   5989.75305
       x: Amount[ng/ul]
       y: Area
```




```
>C10 - C12 ARO at exp. RT: 21.097
FID2 B,
Correlation:              0.99982
Residual Std. Dev.: 31643.00170
Formula: y = mx + b
       m:  36467.05508
       b: -96474.10209
       x: Amount[ng/ul]
       y: Area
```



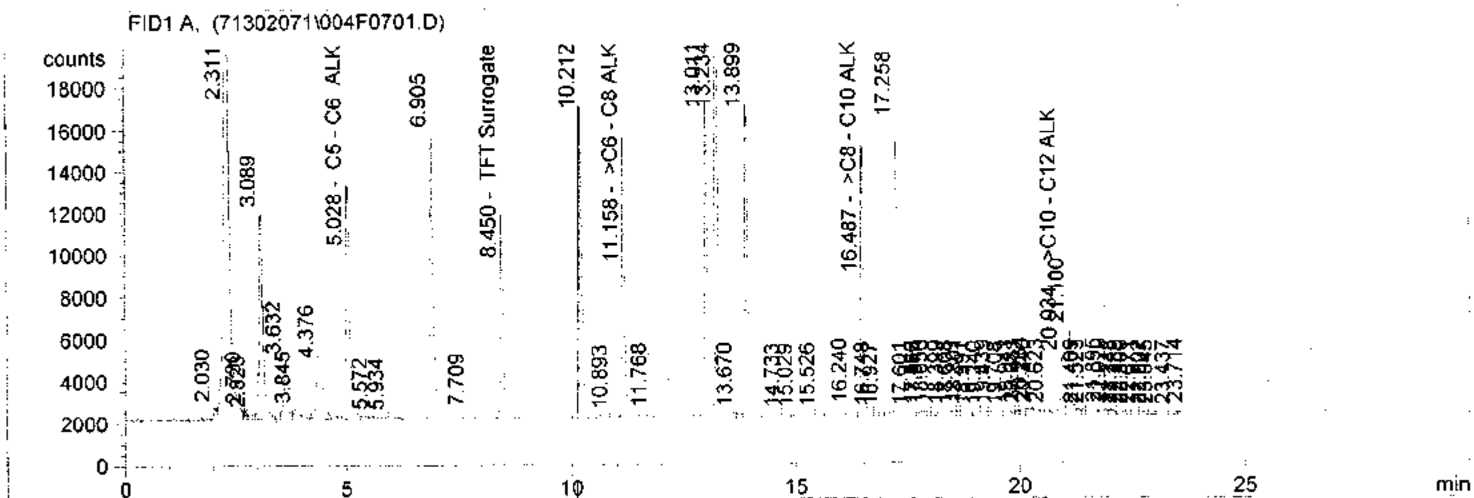

```
>C12 - C13 ARO at exp. RT: 23.712
FID2 B,
Correlation:              0.99671
Residual Std. Dev.: 42808.85312
Formula: y = mx + b
       m:  11605.88917
       b: -104139.20273
       x: Amount[ng/ul]
       y: Area
```

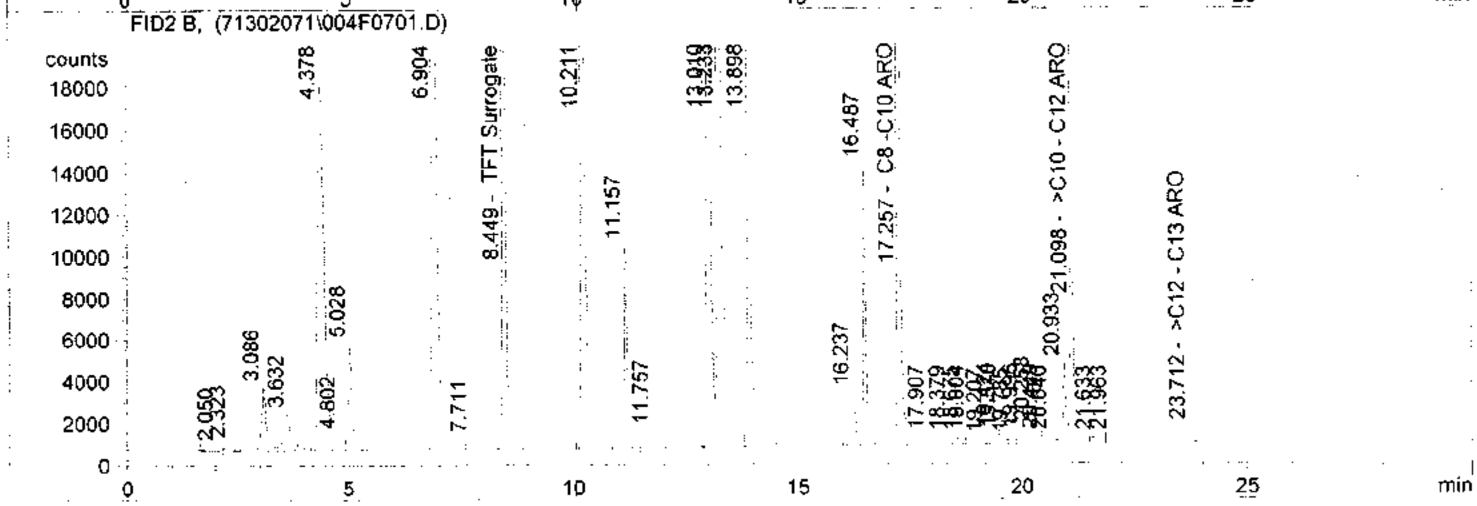
==

Gas/BTEX Instrument 70
Data File: C:\HPCHEM\1\DATA\71302071\004F0701.D
Injection Date & Time: 2/7/2013 11:44:24 AM
Report Created on: 2/8/2013 7:28:46 AM
Operator: DLC
Aquistion Method: 70VP0113.M
Analysis Method: C:\HPCHEM\1\METHODS\70VP0213.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:5PPB VPH Dilution: X 0.0





Ret. Time	Compound Name	Area	Amount ug/L
5.028	C5 - C6 ALK	59126.035	5.287
8.450	TFT Surrogate	44864.656	5.993
11.158	>C6 - C8 ALK	57100.633	5.845
16.487	>C8 - C10 ALK	52424.812	5.427
20.934	>C10 - C12 ALK	13018.980	1.731 * Not reported

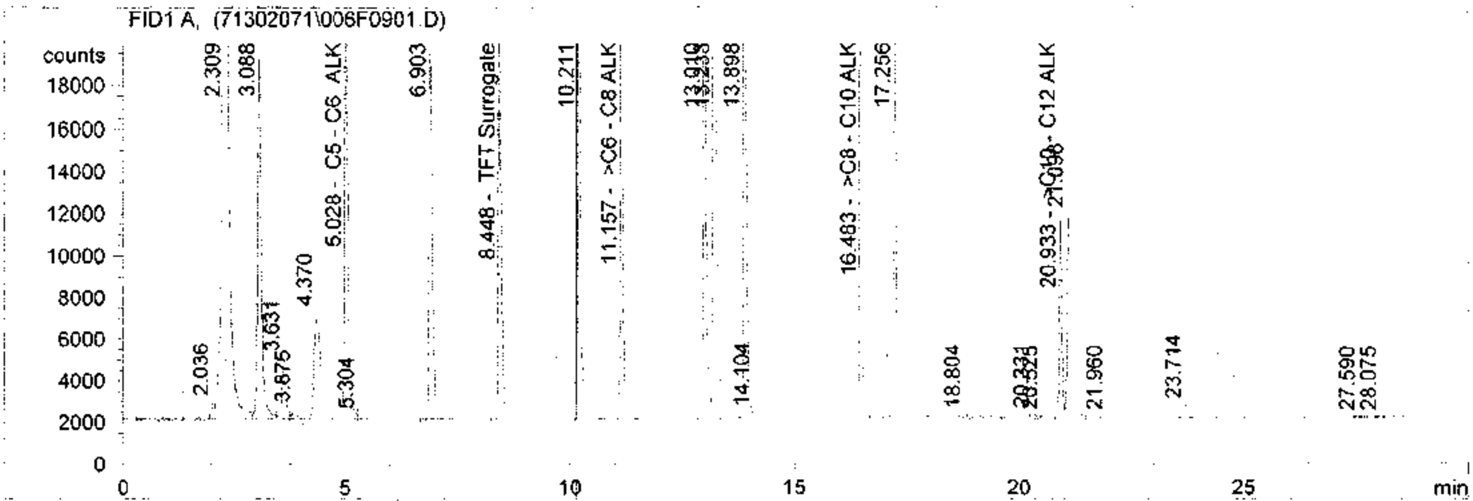
Ret. Time	Compound Name	Area	Amount ug/L
8.449	TFT Surrogate	163918.484	5.238
17.257	C8 -C10 ARO	254553.344	5.679
21.098	>C10 - C12 ARO	113708.773	5.764
23.712	>C12 - C13 ARO	2937.436	9.226 * ~~Ranges not reported~~ DC

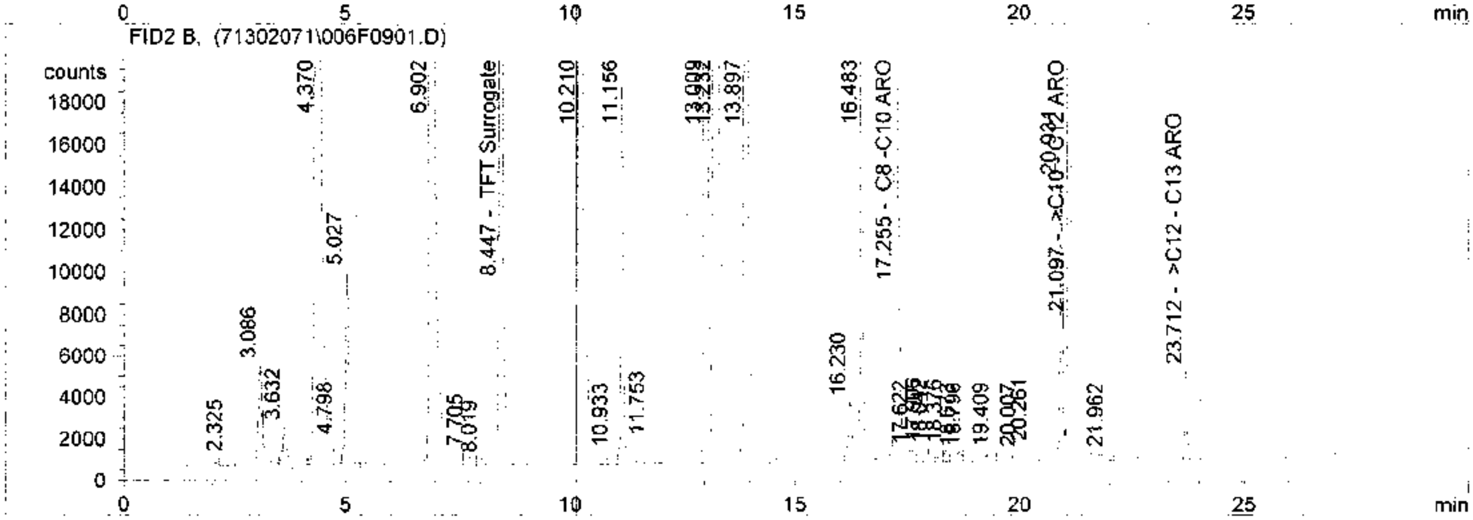
OK Below reporting level

Gas/BTEX Instrument 70
Data File: C:\HPCHEM\1\DATA\71302071\006F0901.D
Injection Date & Time: 2/7/2013 1:05:21 PM
Report Created on: 2/8/2013 7:29:08 AM
Operator: DLC
Aquistion Method: 70VP0113.M
Analysis Method: C:\HPCHEM\1\METHODS\70VP0213.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:10PPB VPH Dilution: X 0.0





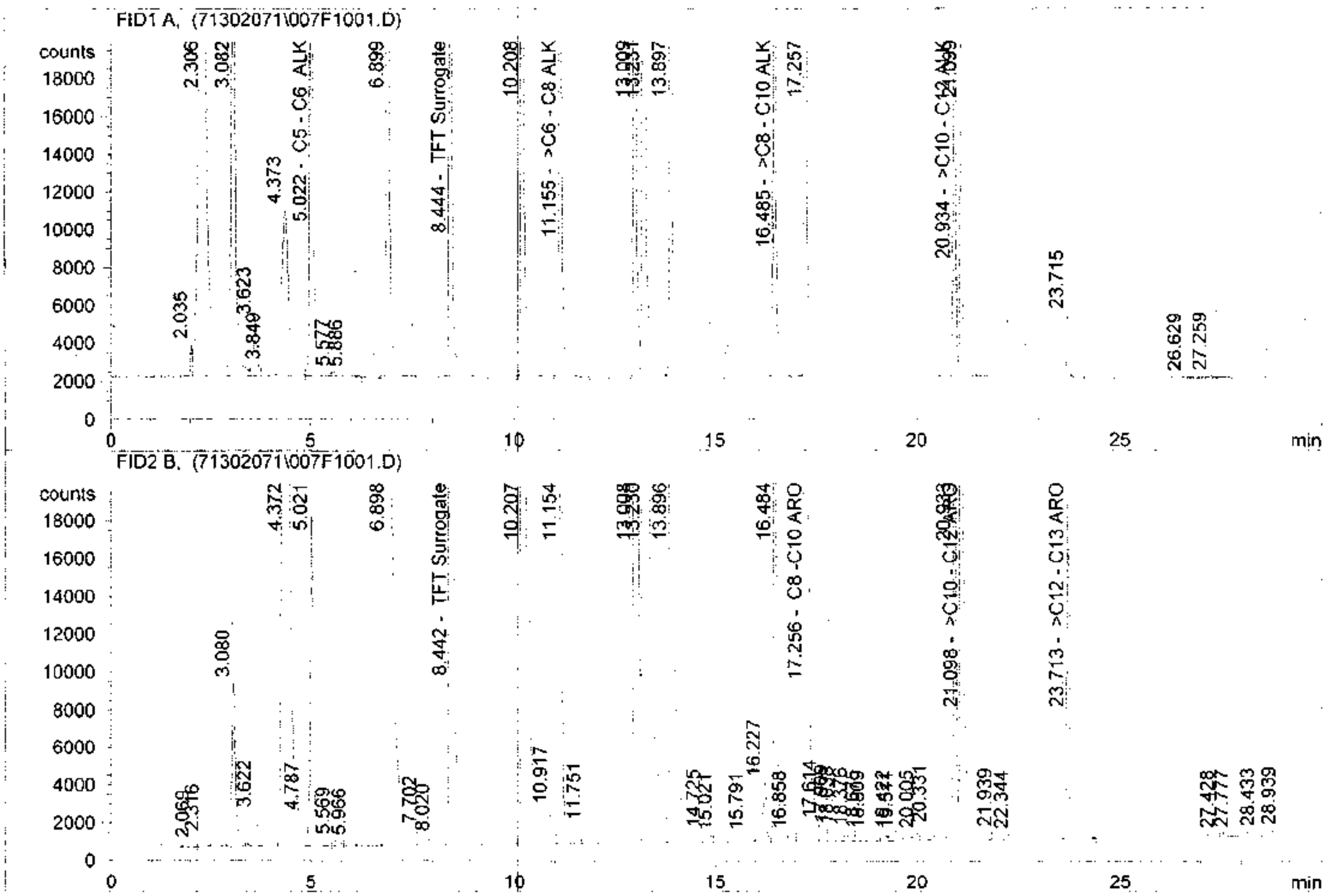
Ret. Time	Compound Name	Area	Amount ug/L
5.028	C5 - C6 ALK	103505.781	9.701
8.448	TFT Surrogate	80674.719	10.145
11.157	>C6 - C8 ALK	103515.055	10.179
16.483	>C8 - C10 ALK	94256.797	9.917
20.933	>C10 - C12 ALK	35252.797	7.207 * Not reported

Ret. Time	Compound Name	Area	Amount ug/L
8.447	TFT Surrogate	320253.469	10.091
17.255	C8 -C10 ARO	489832.344	10.445
21.097	>C10 - C12 ARO	275567.594	10.202
23.712	>C12 - C13 ARO	14675.796	10.237

Gas/BTEX Instrument 70
Data File: C:\HPCHEM\1\DATA\71302071\007F1001.D
Injection Date & Time: 2/7/2013 1:46:14 PM
Report Created on: 2/8/2013 7:29:19 AM
Operator: DLC
Aquistion Method: 70VP0113.M
Analysis Method: C:\HPCHEM\1\METHODS\70VP0213.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:20PPB VPH Dilution: X 0.0



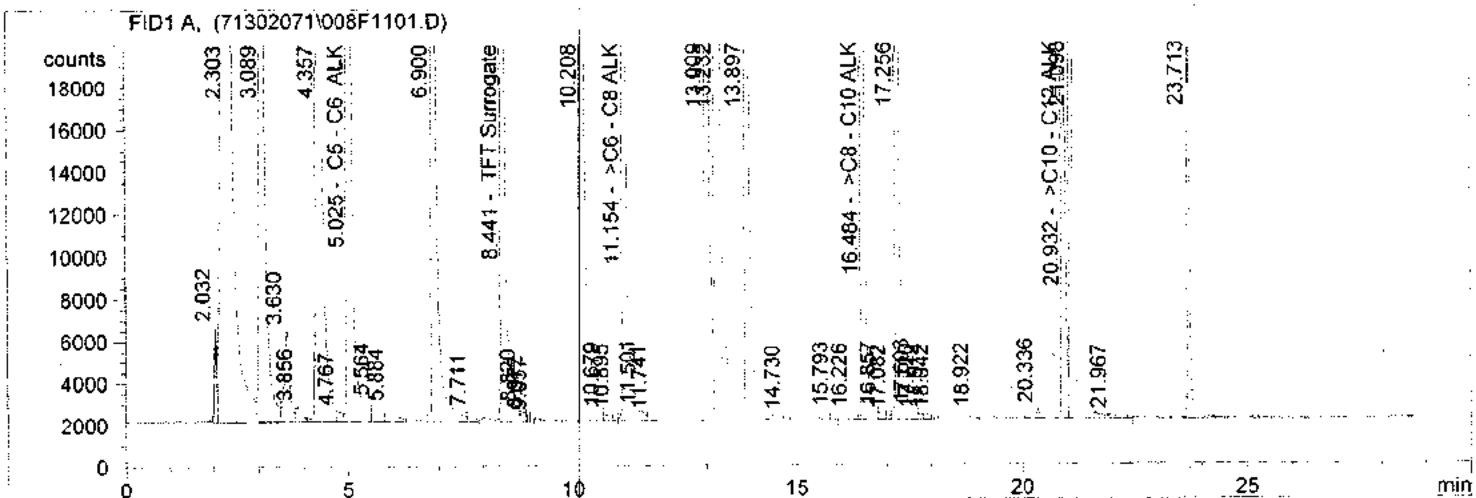
Ret. Time	Compound Name	Area	Amount ug/L
5.022	C5 - C6 ALK	204631.625	19.759
8.444	TFT Surrogate	160510.234	19.402
11.155	>C6 - C8 ALK	202477.156	19.420
16.485	>C8 - C10 ALK	182199.250	19.358
20.934	>C10 - C12 ALK	91098.117	20.960

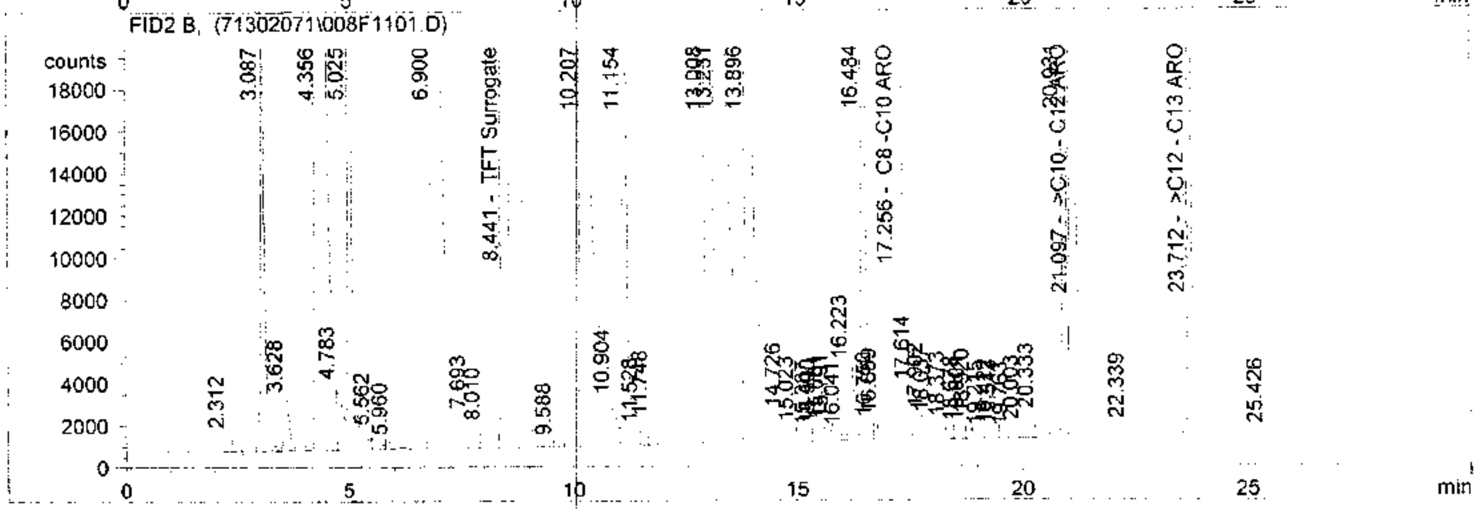
Ret. Time	Compound Name	Area	Amount ug/L
8.442	TFT Surrogate	630629.875	19.726
17.256	C8 -C10 ARO	894514.688	18.644
21.098	>C10 - C12 ARO	615291.312	19.518
23.713	>C12 - C13 ARO	83059.500	16.130

Gas/BTEX   Instrument 70
Data File: C:\HPCHEM\1\DATA\71302071\008F1101.D
Injection Date & Time: 2/7/2013   2:28:41 PM
Report Created on: 2/8/2013   7:29:32 AM
Operator: DLC
Aquistion Method: 70VP0113.M
Analysis Method: C:\HPCHEM\1\METHODS\70VP0213.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:50PPB VPH   Dilution: X 0.0





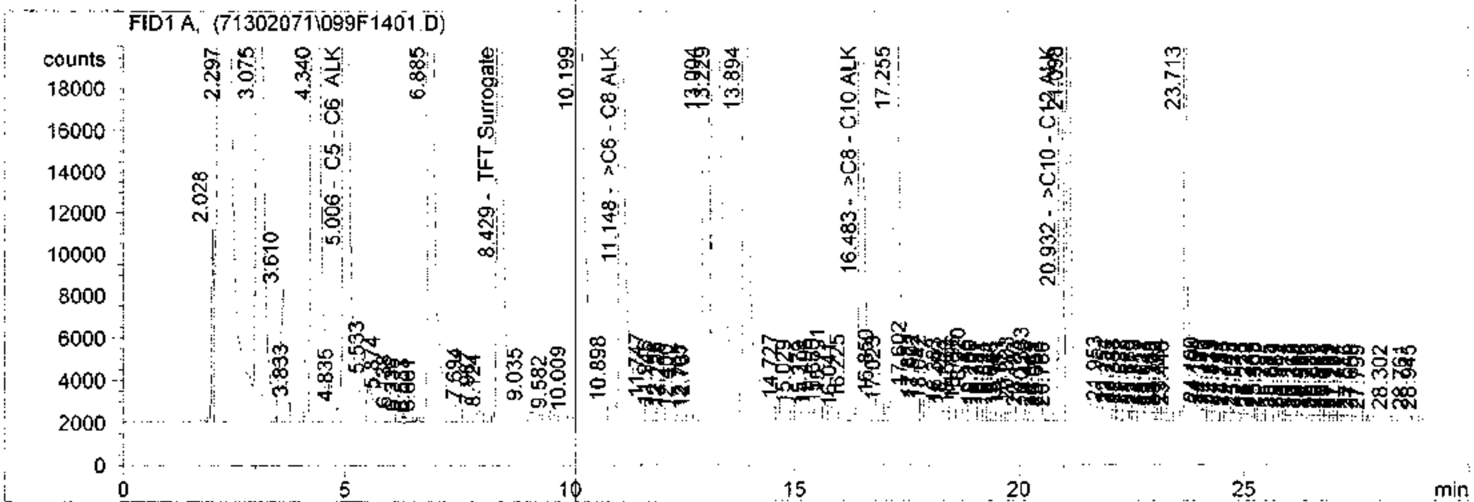
Ret. Time	Compound Name	Area	Amount ug/L
5.025	C5 - C6 ALK	512503.781	50.379
8.441	TFT Surrogate	414138.781	48.808
11.154	>C6 - C8 ALK	519249.094	48.999
16.484	>C8 - C10 ALK	471036.969	50.365
20.932	>C10 - C12 ALK	248421.656	59.704

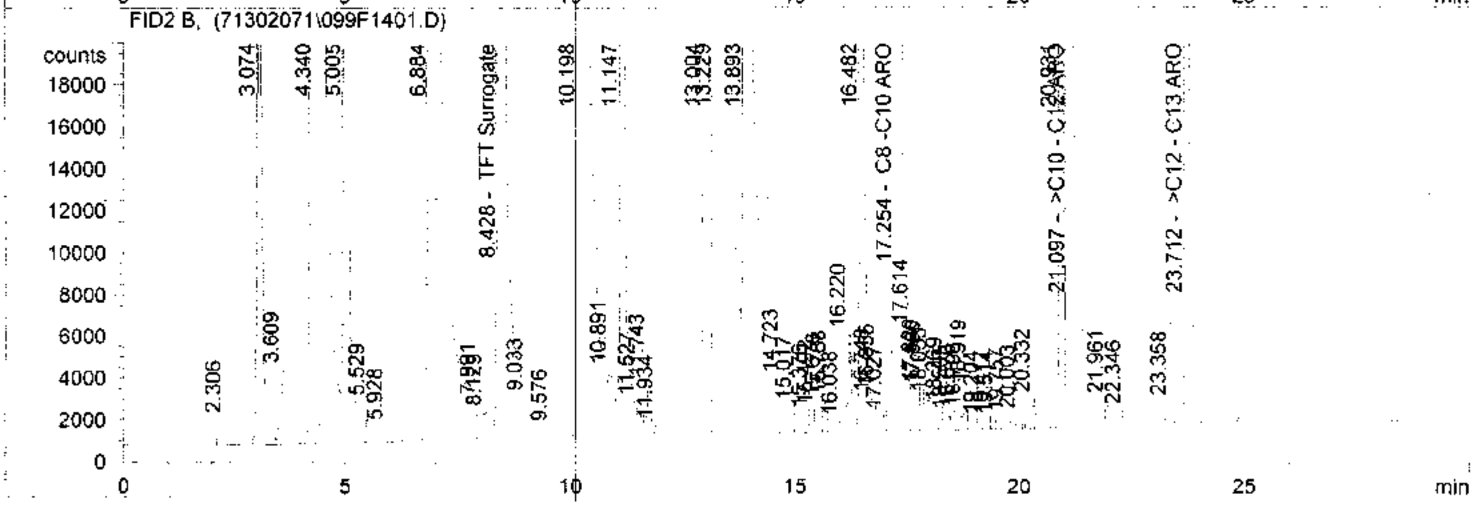
Ret. Time	Compound Name	Area	Amount ug/L
8.441	TFT Surrogate	1.600e+006	49.822
17.256	C8 -C10 ARO	2.446e+006	50.079
21.097	>C10 - C12 ARO	1.689e+006	48.956
23.712	>C12 - C13 ARO	449875.125	47.736

Gas/BTEX Instrument 70
Data File: C:\HPCHEM\1\DATA\71302071\099F1401.D
Injection Date & Time: 2/7/2013 4:32:28 PM
Report Created on: 2/8/2013 7:29:52 AM
Operator: DLC
Aquistion Method: 70VP0113.M
Analysis Method: C:\HPCHEM\1\METHODS\70VP0213.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name: ~~BLANK~~ DC 100 PPB VPH Dilution: X 0.0





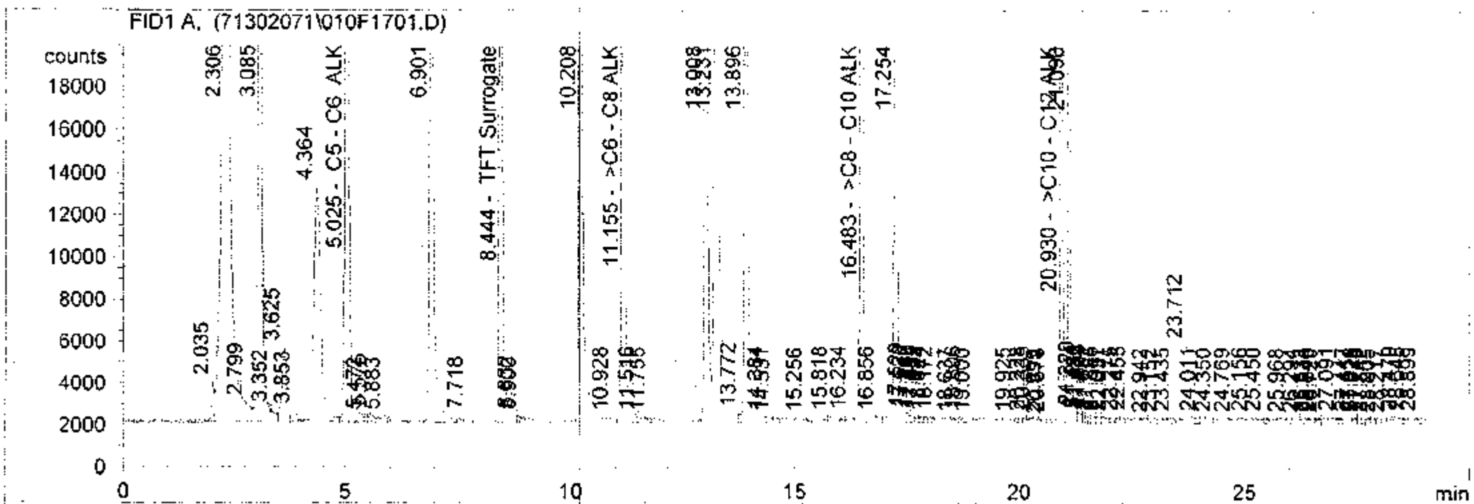
Ret. Time	Compound Name	Area	Amount ug/L
5.006	C5 - C6 ALK	1.010e+006	99.875
8.429	TFT Surrogate	861280.313	100.651
11.148	>C6 - C8 ALK	1.071e+006	100.556
16.483	>C8 - C10 ALK	932779.563	99.933
20.932	>C10 - C12 ALK	393365.844	95.399

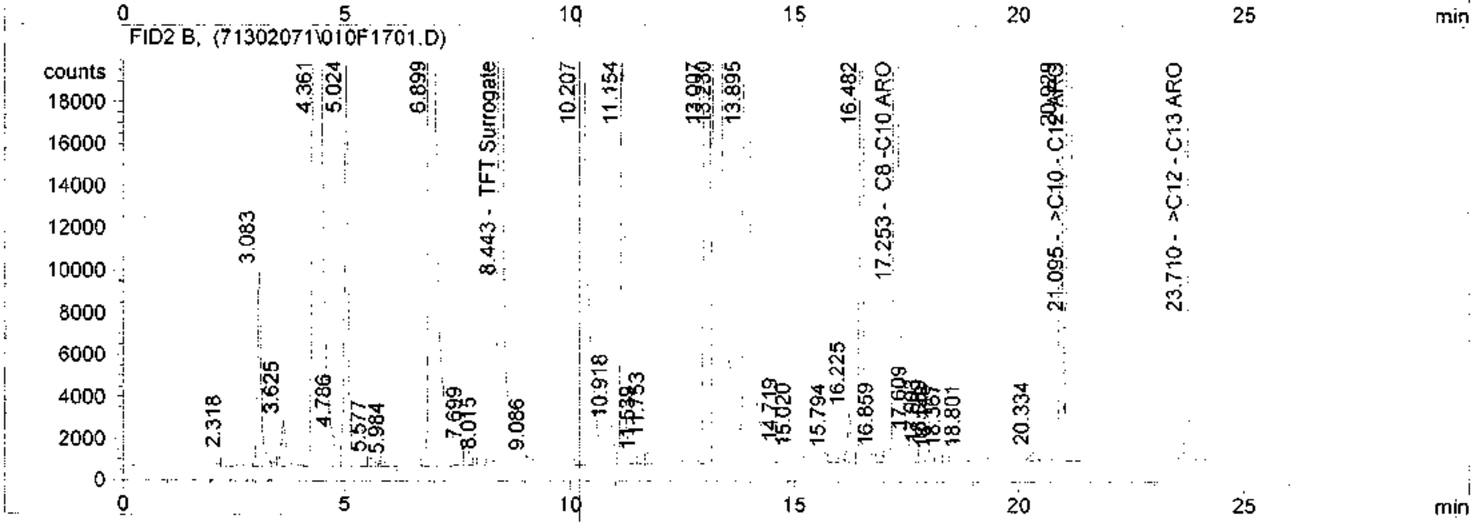
Ret. Time	Compound Name	Area	Amount ug/L
8.428	TFT Surrogate	3.221e+006	100.123
17.254	C8 -C10 ARO	4.918e+006	100.153
21.097	>C10 - C12 ARO	3.571e+006	100.560
23.712	>C12 - C13 ARO	1.076e+006	101.671

Gas/BTEX Instrument 70
Data File: C:\HPCHEM\1\DATA\71302071\010F1701.D
Injection Date & Time: 2/7/2013 6:32:31 PM
Report Created on: 2/8/2013 7:43:37 AM
Operator: DLC
Aquistion Method: 70VP0113.M
Analysis Method: C:\HPCHEM\1\METHODS\70VP0213.M

FID1 A equivalent to FID analysis.
FID2 B equivalent to PID analysis.

Sample Name:20PPB VPH 2NDS Dilution: X 0.0





Ret. Time	Compound Name	Area	Amount ug/L
5.025	C5 - C6 ALK	208383.234	20.132
8.444	TFT Surrogate	171002.188	20.618
11.155	>C6 - C8 ALK	213028.922	20.405
16.483	>C8 - C10 ALK	192034.594	20.414
20.930	>C10 - C12 ALK	90584.813	20.833

Ret. Time	Compound Name	Area	Amount ug/L
8.443	TFT Surrogate	669345.188	20.928
17.253	C8 -C10 ARO	1.055e+006	21.892
21.095	>C10 - C12 ARO	670577.500	21.034
23.710	>C12 - C13 ARO	94729.211	17.135

March 20, 2013

Mr. Stephen Bentsen
Floyd Snider Inc.
601 Union St., Suite 600
Seattle, WA 98101

Dear Mr. Bentsen,

On February 15th, 12 samples were received by our laboratory and assigned our laboratory project number EV13020091. The project was identified as your Harris Ave Shipyard. The sample identification and requested analyses are outlined on the attached chain of custody record.

Please do not hesitate to call me if you have any questions or if I can be of further assistance.

Sincerely,

ALS Laboratory Group

Rick Bagan
Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13020091 -01
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/15/2013
CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/14/2013 3:05:00 PM
CLIENT SAMPLE ID	MW-10-GW-021413	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	02/18/2013	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	02/18/2013	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	02/18/2013	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	02/18/2013	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	02/18/2013	DLC
TPH-Diesel Range	NWTPH-DX	U	130	1	UG/L	02/19/2013	EBS
TPH-Oil Range	NWTPH-DX	U	250	1	UG/L	02/19/2013	EBS
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Chloromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	02/18/2013	GAP
Bromomethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Chloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Carbon Tetrachloride	EPA-8260	U	1.6	1	UG/L	02/18/2013	GAP
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Carbon Disulfide	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Acetone	EPA-8260	U	25	1	UG/L	02/18/2013	GAP
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	02/18/2013	GAP
Acrylonitrile	EPA-8260	U	5.0	1	UG/L	02/18/2013	GAP
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
2-Butanone	EPA-8260	U	10	1	UG/L	02/18/2013	GAP
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Chloroform	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Benzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Trichloroethene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Dibromomethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Bromodichloromethane	EPA-8260	U	0.90	1	UG/L	02/18/2013	GAP
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
4-Methyl-2-Pentanone	EPA-8260	U	10	1	UG/L	02/18/2013	GAP
Toluene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13020091 -01
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/15/2013
CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/14/2013 3:05:00 PM
CLIENT SAMPLE ID	MW-10-GW-021413	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
2-Hexanone	EPA-8260	U	10	1	UG/L	02/18/2013	GAP
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	02/18/2013	GAP
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	02/18/2013	GAP
Styrene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
o-Xylene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Bromoform	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Isopropylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Bromobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
N-Propyl Benzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
T-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
S-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
P-Isopropyltoluene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,3 Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
N-Butylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	02/18/2013	GAP
1,2,4-Trichlorobenzene	EPA-8260	U	1.0	1	UG/L	02/18/2013	GAP
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Naphthalene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Naphthalene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
2-Methylnaphthalene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
1-Methylnaphthalene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP

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CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/15/2013
CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/14/2013 3:05:00 PM
CLIENT SAMPLE ID	MW-10-GW-021413	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Acenaphthylene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Acenaphthene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Fluorene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Phenanthrene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Anthracene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Fluoranthene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Pyrene	EPA-8270 SIM	U	0.036	1	UG/L	02/22/2013	LAP
Benzo[A]Anthracene	EPA-8270 SIM	U	0.019	1	UG/L	02/22/2013	LAP
Chrysene	EPA-8270 SIM	**0.018 B**	0.0070	1	UG/L	02/22/2013	LAP
Benzo[B]Fluoranthene	EPA-8270 SIM	ND- UT	0.011	1	UG/L	02/22/2013	LAP
Benzo[K]Fluoranthene	EPA-8270 SIM	ND- UT	0.0077	1	UG/L	02/22/2013	LAP
Benzo[A]Pyrene	EPA-8270 SIM	ND- UT	0.010	1	UG/L	02/22/2013	LAP
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	ND- UT	0.0054	1	UG/L	02/22/2013	LAP
Dibenz[A,H]Anthracene	EPA-8270 SIM	ND- UT	0.0067	1	UG/L	02/22/2013	LAP
Benzo[G,H,I]Perylene	EPA-8270 SIM	U	0.022	1	UG/L	02/22/2013	LAP
Pyridine	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
N-Nitrosodimethylamine	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Phenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Aniline	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
Bis(2-Chloroethyl)Ether	EPA-8270	U	1.0	1	UG/L	02/22/2013	LAP
2-Chlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
1,3-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
1,4-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Benzyl Alcohol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
1,2-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
3&4-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
N-Nitroso-Di-N-Propylamine	EPA-8270	ND- UT	0.76	1	UG/L	02/22/2013	LAP
Hexachloroethane	EPA-8270	U	2.2	1	UG/L	02/22/2013	LAP
Nitrobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Isophorone	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2-Nitrophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,4-Dimethylphenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Benzoic Acid	EPA-8270	U	10	1	UG/L	02/22/2013	LAP
Bis(2-Chloroethoxy)Methane	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,4-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
1,2,4-Trichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP

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CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/15/2013
CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/14/2013 3:05:00 PM
CLIENT SAMPLE ID	MW-10-GW-021413	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
4-Chloroaniline	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,6-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Hexachlorobutadiene	EPA-8270	U	2.1	1	UG/L	02/22/2013	LAP
4-Chloro-3-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Hexachlorocyclopentadiene	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
2,4,6-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,4,5-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2-Chloronaphthalene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2-Nitroaniline	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Dimethylphthalate	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,6-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
3-Nitroaniline	EPA-8270	U	5.0	1	UG/L	02/22/2013	LAP
2,4-Dinitrophenol	EPA-8270	U	10	1	UG/L	02/22/2013	LAP
4-Nitrophenol	EPA-8270	U	5.0	1	UG/L	02/22/2013	LAP
Dibenzofuran	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,4-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,3,4,6-Tetrachlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Diethylphthalate	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
4-Chlorophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
4-Nitroaniline	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
4,6-Dinitro-2-Methylphenol	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
N-Nitrosodiphenylamine	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Azobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
4-Bromophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Hexachlorobenzene	EPA-8270	U	1.0	1	UG/L	02/22/2013	LAP
Pentachlorophenol	EPA-8270	U	5.0	1	UG/L	02/22/2013	LAP
Carbazole	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Di-N-Butylphthalate	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Butylbenzylphthalate	EPA-8270	U	1.0	1	UG/L	02/22/2013	LAP
3,3-Dichlorobenzidine	EPA-8270	U	5.0	1	UG/L	02/22/2013	LAP
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Di-N-Octylphthalate	EPA-8270	U	1.0	1	UG/L	02/22/2013	LAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**75.0**	02/18/2013	DLC
TFT	EPA-8021	**93.1**	02/18/2013	DLC
C25	NWTPH-DX	**88.1**	02/19/2013	EBS

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CERTIFICATE OF ANALYSIS

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		ALS JOB#:	EV13020091
		ALS SAMPLE#:	-01
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CLIENT SAMPLE ID	MW-10-GW-021413	WDOE ACCREDITATION:	C601

DATA RESULTS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	**104**	02/18/2013	GAP
Toluene-d8	EPA-8260	**96.1**	02/18/2013	GAP
4-Bromofluorobenzene	EPA-8260	**100**	02/18/2013	GAP
Terphenyl-d14	EPA-8270 SIM	**102**	02/22/2013	LAP
2-Fluorophenol	EPA-8270	**68.6**	02/22/2013	LAP
Phenol-d5	EPA-8270	**32.0**	02/22/2013	LAP
Nitrobenzene-d5	EPA-8270	**111**	02/22/2013	LAP
2-Fluorobiphenyl	EPA-8270	**82.4**	02/22/2013	LAP
2,4,6-Tribromophenol	EPA-8270	**114**	02/22/2013	LAP
Terphenyl-d14	EPA-8270	**102**	02/22/2013	LAP

B - Analyte detected in sample and method blank. Reported result is sample concentration without blank correction or associated quantitation limit.
U - Analyte analyzed for but not detected at level above reporting limit.
UT - Analyte analyzed for but not detected at level above the MDL.

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CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/15/2013
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CLIENT SAMPLE ID	MW-06-GW-021413	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	02/18/2013	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	02/18/2013	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	02/18/2013	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	02/18/2013	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	02/18/2013	DLC
C5-C6 Aliphatics	NWVPH	U	50	1	UG/L	02/21/2013	DLC
>C6-C8 Aliphatics	NWVPH	U	50	1	UG/L	02/21/2013	DLC
>C8-C10 Aliphatics	NWVPH	U	50	1	UG/L	02/21/2013	DLC
>C8-C10 Aromatics	NWVPH	U	50	1	UG/L	02/21/2013	DLC
>C10-C12 Aromatics	NWVPH	U	50	1	UG/L	02/21/2013	DLC
>C12-C13 Aromatics	NWVPH	U	50	1	UG/L	02/21/2013	DLC
Hexane	NWVPH	U	2.0	1	UG/L	02/21/2013	DLC
TPH-Diesel Range	NWTPH-DX	U	130	1	UG/L	02/19/2013	EBS
TPH-Oil Range	NWTPH-DX	U	250	1	UG/L	02/19/2013	EBS
>C8-C10 Aliphatics	NWEPH	U	50	1	UG/L	02/21/2013	EBS
>C10-C12 Aliphatics	NWEPH	U	50	1	UG/L	02/21/2013	EBS
>C12-C16 Aliphatics	NWEPH	U	50	1	UG/L	02/21/2013	EBS
>C16-C21 Aliphatics	NWEPH	U	50	1	UG/L	02/21/2013	EBS
>C21-C34 Aliphatics	NWEPH	U	50	1	UG/L	02/21/2013	EBS
>C8-C10 Aromatics	NWEPH	U	50	1	UG/L	02/21/2013	EBS
>C10-C12 Aromatics	NWEPH	U	50	1	UG/L	02/21/2013	EBS
>C12-C16 Aromatics	NWEPH	U	50	1	UG/L	02/21/2013	EBS
>C16-C21 Aromatics	NWEPH	U	50	1	UG/L	02/21/2013	EBS
>C21-C34 Aromatics	NWEPH	U	50	1	UG/L	02/21/2013	EBS
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Chloromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	02/18/2013	GAP
Bromomethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Chloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Carbon Tetrachloride	EPA-8260	U	1.6	1	UG/L	02/18/2013	GAP
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Carbon Disulfide	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Acetone	EPA-8260	U	25	1	UG/L	02/18/2013	GAP
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	02/18/2013	GAP
Acrylonitrile	EPA-8260	U	5.0	1	UG/L	02/18/2013	GAP
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP

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CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/14/2013 4:30:00 PM
CLIENT SAMPLE ID	MW-06-GW-021413	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
2-Butanone	EPA-8260	U	10	1	UG/L	02/18/2013	GAP
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Chloroform	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Benzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Trichloroethene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Dibromomethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Bromodichloromethane	EPA-8260	U	0.90	1	UG/L	02/18/2013	GAP
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
4-Methyl-2-Pentanone	EPA-8260	U	10	1	UG/L	02/18/2013	GAP
Toluene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
2-Hexanone	EPA-8260	U	10	1	UG/L	02/18/2013	GAP
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	02/18/2013	GAP
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	02/18/2013	GAP
Styrene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
o-Xylene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Bromoform	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Isopropylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Bromobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
N-Propyl Benzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP

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ALS Laboratory Group A Campbell Brothers Limited Company

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13020091 -02
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/15/2013
CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/14/2013 4:30:00 PM
CLIENT SAMPLE ID	MW-06-GW-021413	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
T-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
S-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
P-Isopropyltoluene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,3 Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
N-Butylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	02/18/2013	GAP
1,2,4-Trichlorobenzene	EPA-8260	U	1.0	1	UG/L	02/18/2013	GAP
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Naphthalene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Naphthalene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
2-Methylnaphthalene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
1-Methylnaphthalene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Acenaphthylene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Acenaphthene	EPA-8270 SIM	**0.031**	0.020	1	UG/L	02/22/2013	LAP
Fluorene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Phenanthrene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Anthracene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Fluoranthene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Pyrene	EPA-8270 SIM	U	0.033	1	UG/L	02/22/2013	LAP
Benzo[A]Anthracene	EPA-8270 SIM	U	0.018	1	UG/L	02/22/2013	LAP
Chrysene	EPA-8270 SIM	ND- UT	0.0064	1	UG/L	02/22/2013	LAP
Benzo[B]Fluoranthene	EPA-8270 SIM	ND- UT	0.010	1	UG/L	02/22/2013	LAP
Benzo[K]Fluoranthene	EPA-8270 SIM	ND- UT	0.0070	1	UG/L	02/22/2013	LAP
Benzo[A]Pyrene	EPA-8270 SIM	ND- UT	0.0096	1	UG/L	02/22/2013	LAP
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	ND- UT	0.0050	1	UG/L	02/22/2013	LAP
Dibenz[A,H]Anthracene	EPA-8270 SIM	ND- UT	0.0062	1	UG/L	02/22/2013	LAP
Benzo[G,H,I]Perylene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Pyridine	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
N-Nitrosodimethylamine	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Phenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Aniline	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
Bis(2-Chloroethyl)Ether	EPA-8270	U	1.0	1	UG/L	02/22/2013	LAP
2-Chlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP

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ALS Laboratory Group A Campbell Brothers Limited Company

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE:	3/20/2013
		ALS JOB#:	EV13020091
		ALS SAMPLE#:	-02
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/15/2013
CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/14/2013 4:30:00 PM
CLIENT SAMPLE ID	MW-06-GW-021413	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,3-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
1,4-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Benzyl Alcohol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
1,2-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
3&4-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
N-Nitroso-Di-N-Propylamine	EPA-8270	ND- UT	0.70	1	UG/L	02/22/2013	LAP
Hexachloroethane	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Nitrobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Isophorone	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2-Nitrophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,4-Dimethylphenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Benzoic Acid	EPA-8270	U	10	1	UG/L	02/22/2013	LAP
Bis(2-Chloroethoxy)Methane	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,4-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
1,2,4-Trichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
4-Chloroaniline	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,6-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Hexachlorobutadiene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
4-Chloro-3-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Hexachlorocyclopentadiene	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
2,4,6-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,4,5-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2-Chloronaphthalene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2-Nitroaniline	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Dimethylphthalate	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,6-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
3-Nitroaniline	EPA-8270	U	5.0	1	UG/L	02/22/2013	LAP
2,4-Dinitrophenol	EPA-8270	U	10	1	UG/L	02/22/2013	LAP
4-Nitrophenol	EPA-8270	U	5.0	1	UG/L	02/22/2013	LAP
Dibenzofuran	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,4-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,3,4,6-Tetrachlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Diethylphthalate	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
4-Chlorophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
4-Nitroaniline	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
4,6-Dinitro-2-Methylphenol	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP

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ALS Laboratory Group A Campbell Brothers Limited Company

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13020091 -02
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/15/2013
CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/14/2013 4:30:00 PM
CLIENT SAMPLE ID	MW-06-GW-021413	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
N-Nitrosodiphenylamine	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Azobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
4-Bromophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Hexachlorobenzene	EPA-8270	U	1.0	1	UG/L	02/22/2013	LAP
Pentachlorophenol	EPA-8270	U	5.0	1	UG/L	02/22/2013	LAP
Carbazole	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Di-N-Butylphthalate	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Butylbenzylphthalate	EPA-8270	U	1.0	1	UG/L	02/22/2013	LAP
3,3-Dichlorobenzidine	EPA-8270	U	5.0	1	UG/L	02/22/2013	LAP
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Di-N-Octylphthalate	EPA-8270	U	1.0	1	UG/L	02/22/2013	LAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**84.6**	02/18/2013	DLC
TFT	EPA-8021	**104**	02/18/2013	DLC
TFT - Aliphatic	NWVPH	**93.0**	02/21/2013	DLC
TFT - Aromatic	NWVPH	**105**	02/21/2013	DLC
TFT - Hexane	NWVPH	**88.0**	02/21/2013	DLC
C25	NWTPH-DX	**82.4**	02/19/2013	EBS
C25	NWEPH	**88.0**	02/21/2013	EBS
p-Terphenyl	NWEPH	**109**	02/21/2013	EBS
1,2-Dichloroethane-d4	EPA-8260	**103**	02/18/2013	GAP
Toluene-d8	EPA-8260	**96.3**	02/18/2013	GAP
4-Bromofluorobenzene	EPA-8260	**101**	02/18/2013	GAP
Terphenyl-d14	EPA-8270 SIM	**91.5**	02/22/2013	LAP
2-Fluorophenol	EPA-8270	**62.9**	02/22/2013	LAP
Phenol-d5	EPA-8270	**29.0**	02/22/2013	LAP
Nitrobenzene-d5	EPA-8270	**107**	02/22/2013	LAP
2-Fluorobiphenyl	EPA-8270	**87.5**	02/22/2013	LAP
2,4,6-Tribromophenol	EPA-8270	**100**	02/22/2013	LAP
Terphenyl-d14	EPA-8270	**91.5**	02/22/2013	LAP

UT - Analyte analyzed for but not detected at level above the MDL.
U - Analyte analyzed for but not detected at level above reporting limit.

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13020091 -03
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/15/2013
CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/14/2013 4:40:00 PM
CLIENT SAMPLE ID	MW-94-GW-021413	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	02/18/2013	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	02/18/2013	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	02/18/2013	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	02/18/2013	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	02/18/2013	DLC
C5-C6 Aliphatics	NWVPH	U	50	1	UG/L	02/21/2013	DLC
>C6-C8 Aliphatics	NWVPH	U	50	1	UG/L	02/21/2013	DLC
>C8-C10 Aliphatics	NWVPH	U	50	1	UG/L	02/21/2013	DLC
>C8-C10 Aromatics	NWVPH	U	50	1	UG/L	02/21/2013	DLC
>C10-C12 Aromatics	NWVPH	U	50	1	UG/L	02/21/2013	DLC
>C12-C13 Aromatics	NWVPH	U	50	1	UG/L	02/21/2013	DLC
Hexane	NWVPH	U	2.0	1	UG/L	02/22/2013	DLC
TPH-Diesel Range	NWTPH-DX	U	130	1	UG/L	02/19/2013	EBS
TPH-Oil Range	NWTPH-DX	U	250	1	UG/L	02/19/2013	EBS
>C8-C10 Aliphatics	NWEPH	U	50	1	UG/L	02/21/2013	EBS
>C10-C12 Aliphatics	NWEPH	U	50	1	UG/L	02/21/2013	EBS
>C12-C16 Aliphatics	NWEPH	U	50	1	UG/L	02/21/2013	EBS
>C16-C21 Aliphatics	NWEPH	U	50	1	UG/L	02/21/2013	EBS
>C21-C34 Aliphatics	NWEPH	U	50	1	UG/L	02/21/2013	EBS
>C8-C10 Aromatics	NWEPH	U	50	1	UG/L	02/21/2013	EBS
>C10-C12 Aromatics	NWEPH	U	50	1	UG/L	02/21/2013	EBS
>C12-C16 Aromatics	NWEPH	U	50	1	UG/L	02/21/2013	EBS
>C16-C21 Aromatics	NWEPH	U	50	1	UG/L	02/21/2013	EBS
>C21-C34 Aromatics	NWEPH	U	50	1	UG/L	02/21/2013	EBS
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Chloromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	02/18/2013	GAP
Bromomethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Chloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Carbon Tetrachloride	EPA-8260	U	1.6	1	UG/L	02/18/2013	GAP
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Carbon Disulfide	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Acetone	EPA-8260	U	25	1	UG/L	02/18/2013	GAP
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	02/18/2013	GAP
Acrylonitrile	EPA-8260	U	5.0	1	UG/L	02/18/2013	GAP
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13020091 -03
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/15/2013
CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/14/2013 4:40:00 PM
CLIENT SAMPLE ID	MW-94-GW-021413	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
2-Butanone	EPA-8260	U	10	1	UG/L	02/18/2013	GAP
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Chloroform	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Benzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Trichloroethene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Dibromomethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Bromodichloromethane	EPA-8260	U	0.90	1	UG/L	02/18/2013	GAP
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
4-Methyl-2-Pentanone	EPA-8260	U	10	1	UG/L	02/18/2013	GAP
Toluene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
2-Hexanone	EPA-8260	U	10	1	UG/L	02/18/2013	GAP
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	02/18/2013	GAP
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	02/18/2013	GAP
Styrene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
o-Xylene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Bromoform	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Isopropylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Bromobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
N-Propyl Benzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP

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ALS Laboratory Group A Campbell Brothers Limited Company

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13020091 -03
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/15/2013
CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/14/2013 4:40:00 PM
CLIENT SAMPLE ID	MW-94-GW-021413	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
T-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
S-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
P-Isopropyltoluene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,3 Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
N-Butylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	02/18/2013	GAP
1,2,4-Trichlorobenzene	EPA-8260	U	1.0	1	UG/L	02/18/2013	GAP
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Naphthalene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Naphthalene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
2-Methylnaphthalene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
1-Methylnaphthalene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Acenaphthylene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Acenaphthene	EPA-8270 SIM	**0.039**	0.020	1	UG/L	02/22/2013	LAP
Fluorene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Phenanthrene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Anthracene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Fluoranthene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Pyrene	EPA-8270 SIM	U	0.033	1	UG/L	02/22/2013	LAP
Benzo[A]Anthracene	EPA-8270 SIM	U	0.018	1	UG/L	02/22/2013	LAP
Chrysene	EPA-8270 SIM	ND- UT	0.0064	1	UG/L	02/22/2013	LAP
Benzo[B]Fluoranthene	EPA-8270 SIM	ND- UT	0.010	1	UG/L	02/22/2013	LAP
Benzo[K]Fluoranthene	EPA-8270 SIM	ND- UT	0.0070	1	UG/L	02/22/2013	LAP
Benzo[A]Pyrene	EPA-8270 SIM	ND- UT	0.0096	1	UG/L	02/22/2013	LAP
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	ND- UT	0.0050	1	UG/L	02/22/2013	LAP
Dibenz[A,H]Anthracene	EPA-8270 SIM	ND- UT	0.0062	1	UG/L	02/22/2013	LAP
Benzo[G,H,I]Perylene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Pyridine	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
N-Nitrosodimethylamine	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Phenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Aniline	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
Bis(2-Chloroethyl)Ether	EPA-8270	U	1.0	1	UG/L	02/22/2013	LAP
2-Chlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13020091 -03
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/15/2013
CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/14/2013 4:40:00 PM
CLIENT SAMPLE ID	MW-94-GW-021413	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,3-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
1,4-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Benzyl Alcohol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
1,2-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
3&4-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
N-Nitroso-Di-N-Propylamine	EPA-8270	ND- UT	0.70	1	UG/L	02/22/2013	LAP
Hexachloroethane	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Nitrobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Isophorone	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2-Nitrophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,4-Dimethylphenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Benzoic Acid	EPA-8270	U	10	1	UG/L	02/22/2013	LAP
Bis(2-Chloroethoxy)Methane	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,4-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
1,2,4-Trichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
4-Chloroaniline	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,6-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Hexachlorobutadiene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
4-Chloro-3-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Hexachlorocyclopentadiene	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
2,4,6-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,4,5-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2-Chloronaphthalene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2-Nitroaniline	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Dimethylphthalate	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,6-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
3-Nitroaniline	EPA-8270	U	5.0	1	UG/L	02/22/2013	LAP
2,4-Dinitrophenol	EPA-8270	U	10	1	UG/L	02/22/2013	LAP
4-Nitrophenol	EPA-8270	U	5.0	1	UG/L	02/22/2013	LAP
Dibenzofuran	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,4-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,3,4,6-Tetrachlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Diethylphthalate	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
4-Chlorophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
4-Nitroaniline	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
4,6-Dinitro-2-Methylphenol	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP

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CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/15/2013
CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/14/2013 4:40:00 PM
CLIENT SAMPLE ID	MW-94-GW-021413	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
N-Nitrosodiphenylamine	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Azobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
4-Bromophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Hexachlorobenzene	EPA-8270	U	1.0	1	UG/L	02/22/2013	LAP
Pentachlorophenol	EPA-8270	U	5.0	1	UG/L	02/22/2013	LAP
Carbazole	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Di-N-Butylphthalate	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Butylbenzylphthalate	EPA-8270	U	1.0	1	UG/L	02/22/2013	LAP
3,3-Dichlorobenzidine	EPA-8270	U	5.0	1	UG/L	02/22/2013	LAP
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Di-N-Octylphthalate	EPA-8270	U	1.0	1	UG/L	02/22/2013	LAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**86.2**	02/18/2013	DLC
TFT	EPA-8021	**106**	02/18/2013	DLC
TFT - Aliphatic	NWVPH	**93.0**	02/21/2013	DLC
TFT - Aromatic	NWVPH	**104**	02/21/2013	DLC
TFT - Hexane	NWVPH	**89.0**	02/22/2013	DLC
C25	NWTPH-DX	**84.3**	02/19/2013	EBS
C25	NWEPH	**73.0**	02/21/2013	EBS
p-Terphenyl	NWEPH	**87.0**	02/21/2013	EBS
1,2-Dichloroethane-d4	EPA-8260	**104**	02/18/2013	GAP
Toluene-d8	EPA-8260	**95.5**	02/18/2013	GAP
4-Bromofluorobenzene	EPA-8260	**99.3**	02/18/2013	GAP
Terphenyl-d14	EPA-8270 SIM	**84.6**	02/22/2013	LAP
2-Fluorophenol	EPA-8270	**74.9**	02/22/2013	LAP
Phenol-d5	EPA-8270	**28.9**	02/22/2013	LAP
Nitrobenzene-d5	EPA-8270	**100**	02/22/2013	LAP
2-Fluorobiphenyl	EPA-8270	**96.1**	02/22/2013	LAP
2,4,6-Tribromophenol	EPA-8270	**105**	02/22/2013	LAP
Terphenyl-d14	EPA-8270	**84.6**	02/22/2013	LAP

UT - Analyte analyzed for but not detected at level above the MDL.
U - Analyte analyzed for but not detected at level above reporting limit.

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13020091 -04
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/15/2013
CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/14/2013 4:10:00 PM
CLIENT SAMPLE ID	MW-04-GW-021413	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	02/18/2013	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	02/18/2013	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	02/18/2013	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	02/18/2013	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	02/18/2013	DLC
TPH-Diesel Range	NWTPH-DX	U	130	1	UG/L	02/19/2013	EBS
TPH-Oil Range	NWTPH-DX	U	250	1	UG/L	02/19/2013	EBS
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Chloromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	02/18/2013	GAP
Bromomethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Chloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Carbon Tetrachloride	EPA-8260	U	1.6	1	UG/L	02/18/2013	GAP
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Carbon Disulfide	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Acetone	EPA-8260	U	25	1	UG/L	02/18/2013	GAP
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	02/18/2013	GAP
Acrylonitrile	EPA-8260	U	5.0	1	UG/L	02/18/2013	GAP
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
2-Butanone	EPA-8260	U	10	1	UG/L	02/18/2013	GAP
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Chloroform	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Benzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Trichloroethene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Dibromomethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Bromodichloromethane	EPA-8260	U	0.90	1	UG/L	02/18/2013	GAP
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
4-Methyl-2-Pentanone	EPA-8260	U	10	1	UG/L	02/18/2013	GAP
Toluene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP

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CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/15/2013
CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/14/2013 4:10:00 PM
CLIENT SAMPLE ID	MW-04-GW-021413	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
2-Hexanone	EPA-8260	U	10	1	UG/L	02/18/2013	GAP
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	02/18/2013	GAP
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	02/18/2013	GAP
Styrene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
o-Xylene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Bromoform	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Isopropylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Bromobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
N-Propyl Benzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
T-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
S-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
P-Isopropyltoluene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,3 Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
N-Butylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	02/18/2013	GAP
1,2,4-Trichlorobenzene	EPA-8260	U	1.0	1	UG/L	02/18/2013	GAP
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Naphthalene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Naphthalene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
2-Methylnaphthalene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
1-Methylnaphthalene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP

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CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/15/2013
CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/14/2013 4:10:00 PM
CLIENT SAMPLE ID	MW-04-GW-021413	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Acenaphthylene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Acenaphthene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Fluorene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Phenanthrene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Anthracene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Fluoranthene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Pyrene	EPA-8270 SIM	U	0.033	1	UG/L	02/22/2013	LAP
Benzo[A]Anthracene	EPA-8270 SIM	U	0.018	1	UG/L	02/22/2013	LAP
Chrysene	EPA-8270 SIM	ND- UT	0.0064	1	UG/L	02/22/2013	LAP
Benzo[B]Fluoranthene	EPA-8270 SIM	ND- UT	0.010	1	UG/L	02/22/2013	LAP
Benzo[K]Fluoranthene	EPA-8270 SIM	ND- UT	0.0070	1	UG/L	02/22/2013	LAP
Benzo[A]Pyrene	EPA-8270 SIM	ND- UT	0.0096	1	UG/L	02/22/2013	LAP
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	ND- UT	0.0050	1	UG/L	02/22/2013	LAP
Dibenz[A,H]Anthracene	EPA-8270 SIM	ND- UT	0.0062	1	UG/L	02/22/2013	LAP
Benzo[G,H,I]Perylene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Pyridine	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
N-Nitrosodimethylamine	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Phenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Aniline	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
Bis(2-Chloroethyl)Ether	EPA-8270	U	1.0	1	UG/L	02/22/2013	LAP
2-Chlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
1,3-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
1,4-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Benzyl Alcohol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
1,2-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
3&4-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
N-Nitroso-Di-N-Propylamine	EPA-8270	ND- UT	0.70	1	UG/L	02/22/2013	LAP
Hexachloroethane	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Nitrobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Isophorone	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2-Nitrophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,4-Dimethylphenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Benzoic Acid	EPA-8270	U	10	1	UG/L	02/22/2013	LAP
Bis(2-Chloroethoxy)Methane	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,4-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
1,2,4-Trichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP

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ALS Laboratory Group A Campbell Brothers Limited Company

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13020091 -04
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/15/2013
CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/14/2013 4:10:00 PM
CLIENT SAMPLE ID	MW-04-GW-021413	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
4-Chloroaniline	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,6-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Hexachlorobutadiene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
4-Chloro-3-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Hexachlorocyclopentadiene	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
2,4,6-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,4,5-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2-Chloronaphthalene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2-Nitroaniline	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Dimethylphthalate	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,6-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
3-Nitroaniline	EPA-8270	U	5.0	1	UG/L	02/22/2013	LAP
2,4-Dinitrophenol	EPA-8270	U	10	1	UG/L	02/22/2013	LAP
4-Nitrophenol	EPA-8270	U	5.0	1	UG/L	02/22/2013	LAP
Dibenzofuran	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,4-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,3,4,6-Tetrachlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Diethylphthalate	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
4-Chlorophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
4-Nitroaniline	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
4,6-Dinitro-2-Methylphenol	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
N-Nitrosodiphenylamine	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Azobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
4-Bromophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Hexachlorobenzene	EPA-8270	U	1.0	1	UG/L	02/22/2013	LAP
Pentachlorophenol	EPA-8270	U	5.0	1	UG/L	02/22/2013	LAP
Carbazole	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Di-N-Butylphthalate	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Butylbenzylphthalate	EPA-8270	U	1.0	1	UG/L	02/22/2013	LAP
3,3-Dichlorobenzidine	EPA-8270	U	5.0	1	UG/L	02/22/2013	LAP
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Di-N-Octylphthalate	EPA-8270	U	1.0	1	UG/L	02/22/2013	LAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**76.7**	02/18/2013	DLC
TFT	EPA-8021	**104**	02/18/2013	DLC
C25	NWTPH-DX	**86.4**	02/19/2013	EBS

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CERTIFICATE OF ANALYSIS

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CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/15/2013
CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/14/2013 4:10:00 PM
CLIENT SAMPLE ID	MW-04-GW-021413	WDOE ACCREDITATION:	C601

DATA RESULTS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	**103**	02/18/2013	GAP
Toluene-d8	EPA-8260	**95.4**	02/18/2013	GAP
4-Bromofluorobenzene	EPA-8260	**99.9**	02/18/2013	GAP
Terphenyl-d14	EPA-8270 SIM	**91.5**	02/22/2013	LAP
2-Fluorophenol	EPA-8270	**75.0**	02/22/2013	LAP
Phenol-d5	EPA-8270	**28.7**	02/22/2013	LAP
Nitrobenzene-d5	EPA-8270	**97.7**	02/22/2013	LAP
2-Fluorobiphenyl	EPA-8270	**87.2**	02/22/2013	LAP
2,4,6-Tribromophenol	EPA-8270	**105**	02/22/2013	LAP
Terphenyl-d14	EPA-8270	**91.5**	02/22/2013	LAP

U - Analyte analyzed for but not detected at level above reporting limit.
UT - Analyte analyzed for but not detected at level above the MDL.

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13020091 -05
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/15/2013
CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/14/2013 1:10:00 PM
CLIENT SAMPLE ID	MW-05-GW-021413	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	02/19/2013	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	02/19/2013	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	02/19/2013	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	02/19/2013	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	02/19/2013	DLC
TPH-Diesel Range	NWTPH-DX	U	130	1	UG/L	02/19/2013	EBS
TPH-Oil Range	NWTPH-DX	U	250	1	UG/L	02/19/2013	EBS
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Chloromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	02/18/2013	GAP
Bromomethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Chloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Carbon Tetrachloride	EPA-8260	U	1.6	1	UG/L	02/18/2013	GAP
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Carbon Disulfide	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Acetone	EPA-8260	U	25	1	UG/L	02/18/2013	GAP
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	02/18/2013	GAP
Acrylonitrile	EPA-8260	U	5.0	1	UG/L	02/18/2013	GAP
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
2-Butanone	EPA-8260	U	10	1	UG/L	02/18/2013	GAP
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Chloroform	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Benzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Trichloroethene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Dibromomethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Bromodichloromethane	EPA-8260	U	0.90	1	UG/L	02/18/2013	GAP
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
4-Methyl-2-Pentanone	EPA-8260	U	10	1	UG/L	02/18/2013	GAP
Toluene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13020091 -05
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/15/2013
CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/14/2013 1:10:00 PM
CLIENT SAMPLE ID	MW-05-GW-021413	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
2-Hexanone	EPA-8260	U	10	1	UG/L	02/18/2013	GAP
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	02/18/2013	GAP
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	02/18/2013	GAP
Styrene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
o-Xylene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Bromoform	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Isopropylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Bromobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
N-Propyl Benzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
T-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
S-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
P-Isopropyltoluene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,3 Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
N-Butylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	02/18/2013	GAP
1,2,4-Trichlorobenzene	EPA-8260	U	1.0	1	UG/L	02/18/2013	GAP
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Naphthalene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Naphthalene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
2-Methylnaphthalene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
1-Methylnaphthalene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP

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CERTIFICATE OF ANALYSIS

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CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/15/2013
CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/14/2013 1:10:00 PM
CLIENT SAMPLE ID	MW-05-GW-021413	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Acenaphthylene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Acenaphthene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Fluorene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Phenanthrene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Anthracene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Fluoranthene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Pyrene	EPA-8270 SIM	**0.094**	0.033	1	UG/L	02/22/2013	LAP
Benzo[A]Anthracene	EPA-8270 SIM	U	0.018	1	UG/L	02/22/2013	LAP
Chrysene	EPA-8270 SIM	ND- UT	0.0064	1	UG/L	02/22/2013	LAP
Benzo[B]Fluoranthene	EPA-8270 SIM	ND- UT	0.010	1	UG/L	02/22/2013	LAP
Benzo[K]Fluoranthene	EPA-8270 SIM	ND- UT	0.0070	1	UG/L	02/22/2013	LAP
Benzo[A]Pyrene	EPA-8270 SIM	ND- UT	0.0096	1	UG/L	02/22/2013	LAP
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	ND- UT	0.0050	1	UG/L	02/22/2013	LAP
Dibenz[A,H]Anthracene	EPA-8270 SIM	ND- UT	0.0062	1	UG/L	02/22/2013	LAP
Benzo[G,H,I]Perylene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Pyridine	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
N-Nitrosodimethylamine	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Phenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Aniline	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
Bis(2-Chloroethyl)Ether	EPA-8270	U	1.0	1	UG/L	02/22/2013	LAP
2-Chlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
1,3-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
1,4-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Benzyl Alcohol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
1,2-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
3&4-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
N-Nitroso-Di-N-Propylamine	EPA-8270	ND- UT	0.70	1	UG/L	02/22/2013	LAP
Hexachloroethane	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Nitrobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Isophorone	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2-Nitrophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,4-Dimethylphenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Benzoic Acid	EPA-8270	U	10	1	UG/L	02/22/2013	LAP
Bis(2-Chloroethoxy)Methane	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,4-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
1,2,4-Trichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13020091 -05
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/15/2013
CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/14/2013 1:10:00 PM
CLIENT SAMPLE ID	MW-05-GW-021413	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
4-Chloroaniline	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,6-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Hexachlorobutadiene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
4-Chloro-3-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Hexachlorocyclopentadiene	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
2,4,6-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,4,5-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2-Chloronaphthalene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2-Nitroaniline	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Dimethylphthalate	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,6-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
3-Nitroaniline	EPA-8270	U	5.0	1	UG/L	02/22/2013	LAP
2,4-Dinitrophenol	EPA-8270	U	10	1	UG/L	02/22/2013	LAP
4-Nitrophenol	EPA-8270	U	5.0	1	UG/L	02/22/2013	LAP
Dibenzofuran	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,4-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,3,4,6-Tetrachlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Diethylphthalate	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
4-Chlorophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
4-Nitroaniline	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
4,6-Dinitro-2-Methylphenol	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
N-Nitrosodiphenylamine	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Azobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
4-Bromophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Hexachlorobenzene	EPA-8270	U	1.0	1	UG/L	02/22/2013	LAP
Pentachlorophenol	EPA-8270	U	5.0	1	UG/L	02/22/2013	LAP
Carbazole	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Di-N-Butylphthalate	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Butylbenzylphthalate	EPA-8270	U	1.0	1	UG/L	02/22/2013	LAP
3,3-Dichlorobenzidine	EPA-8270	U	5.0	1	UG/L	02/22/2013	LAP
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Di-N-Octylphthalate	EPA-8270	U	1.0	1	UG/L	02/22/2013	LAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**76.6**	02/19/2013	DLC
TFT	EPA-8021	**88.4**	02/19/2013	DLC
C25	NWTPH-DX	**88.9**	02/19/2013	EBS

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ALS Laboratory Group A Campbell Brothers Limited Company

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE:	3/20/2013
		ALS JOB#:	EV13020091
		ALS SAMPLE#:	-05
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/15/2013
CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/14/2013 1:10:00 PM
CLIENT SAMPLE ID	MW-05-GW-021413	WDOE ACCREDITATION:	C601

DATA RESULTS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	**104**	02/18/2013	GAP
Toluene-d8	EPA-8260	**95.3**	02/18/2013	GAP
4-Bromofluorobenzene	EPA-8260	**99.7**	02/18/2013	GAP
Terphenyl-d14	EPA-8270 SIM	**91.4**	02/22/2013	LAP
2-Fluorophenol	EPA-8270	**72.8**	02/22/2013	LAP
Phenol-d5	EPA-8270	**29.2**	02/22/2013	LAP
Nitrobenzene-d5	EPA-8270	**106**	02/22/2013	LAP
2-Fluorobiphenyl	EPA-8270	**93.1**	02/22/2013	LAP
2,4,6-Tribromophenol	EPA-8270	**92.9**	02/22/2013	LAP
Terphenyl-d14	EPA-8270	**91.4**	02/22/2013	LAP

UT - Analyte analyzed for but not detected at level above the MDL.
U - Analyte analyzed for but not detected at level above reporting limit.

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ALS Laboratory Group A Campbell Brothers Limited Company

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13020091 -06
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/15/2013
CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/14/2013 5:25:00 PM
CLIENT SAMPLE ID	MW-07-GW-021413	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	02/18/2013	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	02/18/2013	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	02/18/2013	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	02/18/2013	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	02/18/2013	DLC
TPH-Diesel Range	NWTPH-DX	**430**	130	1	UG/L	02/19/2013	EBS
TPH-Oil Range	NWTPH-DX	U	250	1	UG/L	02/19/2013	EBS
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Chloromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	02/18/2013	GAP
Bromomethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Chloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Carbon Tetrachloride	EPA-8260	U	1.6	1	UG/L	02/18/2013	GAP
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Carbon Disulfide	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Acetone	EPA-8260	U	25	1	UG/L	02/18/2013	GAP
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	02/18/2013	GAP
Acrylonitrile	EPA-8260	U	5.0	1	UG/L	02/18/2013	GAP
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
2-Butanone	EPA-8260	U	10	1	UG/L	02/18/2013	GAP
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Chloroform	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Benzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Trichloroethene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Dibromomethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Bromodichloromethane	EPA-8260	U	0.90	1	UG/L	02/18/2013	GAP
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
4-Methyl-2-Pentanone	EPA-8260	U	10	1	UG/L	02/18/2013	GAP
Toluene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP

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ALS Laboratory Group A Campbell Brothers Limited Company

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13020091 -06
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/15/2013
CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/14/2013 5:25:00 PM
CLIENT SAMPLE ID	MW-07-GW-021413	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
2-Hexanone	EPA-8260	U	10	1	UG/L	02/18/2013	GAP
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	02/18/2013	GAP
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	02/18/2013	GAP
Styrene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
o-Xylene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Bromoform	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Isopropylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Bromobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
N-Propyl Benzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
T-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
S-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
P-Isopropyltoluene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,3 Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
N-Butylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	02/18/2013	GAP
1,2,4-Trichlorobenzene	EPA-8260	U	1.0	1	UG/L	02/18/2013	GAP
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Naphthalene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Naphthalene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
2-Methylnaphthalene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
1-Methylnaphthalene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP

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ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE:	3/20/2013
		ALS JOB#:	EV13020091
		ALS SAMPLE#:	-06
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/15/2013
CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/14/2013 5:25:00 PM
CLIENT SAMPLE ID	MW-07-GW-021413	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Acenaphthylene	EPA-8270 SIM	**0.026**	0.020	1	UG/L	02/22/2013	LAP
Acenaphthene	EPA-8270 SIM	**0.96**	0.020	1	UG/L	02/22/2013	LAP
Fluorene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Phenanthrene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Anthracene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Fluoranthene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Pyrene	EPA-8270 SIM	U	0.033	1	UG/L	02/22/2013	LAP
Benzo[A]Anthracene	EPA-8270 SIM	U	0.018	1	UG/L	02/22/2013	LAP
Chrysene	EPA-8270 SIM	ND- UT	0.0064	1	UG/L	02/22/2013	LAP
Benzo[B]Fluoranthene	EPA-8270 SIM	ND- UT	0.010	1	UG/L	02/22/2013	LAP
Benzo[K]Fluoranthene	EPA-8270 SIM	ND- UT	0.0070	1	UG/L	02/22/2013	LAP
Benzo[A]Pyrene	EPA-8270 SIM	ND- UT	0.0096	1	UG/L	02/22/2013	LAP
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	ND- UT	0.0050	1	UG/L	02/22/2013	LAP
Dibenz[A,H]Anthracene	EPA-8270 SIM	ND- UT	0.0062	1	UG/L	02/22/2013	LAP
Benzo[G,H,I]Perylene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Pyridine	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
N-Nitrosodimethylamine	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Phenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Aniline	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
Bis(2-Chloroethyl)Ether	EPA-8270	U	1.0	1	UG/L	02/22/2013	LAP
2-Chlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
1,3-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
1,4-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Benzyl Alcohol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
1,2-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
3&4-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
N-Nitroso-Di-N-Propylamine	EPA-8270	ND- UT	0.70	1	UG/L	02/22/2013	LAP
Hexachloroethane	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Nitrobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Isophorone	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2-Nitrophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,4-Dimethylphenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Benzoic Acid	EPA-8270	U	10	1	UG/L	02/22/2013	LAP
Bis(2-Chloroethoxy)Methane	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,4-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
1,2,4-Trichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13020091 -06
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/15/2013
CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/14/2013 5:25:00 PM
CLIENT SAMPLE ID	MW-07-GW-021413	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
4-Chloroaniline	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,6-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Hexachlorobutadiene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
4-Chloro-3-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Hexachlorocyclopentadiene	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
2,4,6-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,4,5-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2-Chloronaphthalene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2-Nitroaniline	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Dimethylphthalate	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,6-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
3-Nitroaniline	EPA-8270	U	5.0	1	UG/L	02/22/2013	LAP
2,4-Dinitrophenol	EPA-8270	U	10	1	UG/L	02/22/2013	LAP
4-Nitrophenol	EPA-8270	U	5.0	1	UG/L	02/22/2013	LAP
Dibenzofuran	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,4-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,3,4,6-Tetrachlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Diethylphthalate	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
4-Chlorophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
4-Nitroaniline	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
4,6-Dinitro-2-Methylphenol	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
N-Nitrosodiphenylamine	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Azobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
4-Bromophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Hexachlorobenzene	EPA-8270	U	1.0	1	UG/L	02/22/2013	LAP
Pentachlorophenol	EPA-8270	U	5.0	1	UG/L	02/22/2013	LAP
Carbazole	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Di-N-Butylphthalate	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Butylbenzylphthalate	EPA-8270	U	1.0	1	UG/L	02/22/2013	LAP
3,3-Dichlorobenzidine	EPA-8270	U	5.0	1	UG/L	02/22/2013	LAP
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Di-N-Octylphthalate	EPA-8270	U	1.0	1	UG/L	02/22/2013	LAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**88.7**	02/18/2013	DLC
TFT	EPA-8021	**105**	02/18/2013	DLC
C25	NWTPH-DX	**88.5**	02/19/2013	EBS

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE:	3/20/2013
		ALS JOB#:	EV13020091
		ALS SAMPLE#:	-06
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/15/2013
CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/14/2013 5:25:00 PM
CLIENT SAMPLE ID	MW-07-GW-021413	WDOE ACCREDITATION:	C601

DATA RESULTS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	**103**	02/18/2013	GAP
Toluene-d8	EPA-8260	**95.8**	02/18/2013	GAP
4-Bromofluorobenzene	EPA-8260	**101**	02/18/2013	GAP
Terphenyl-d14	EPA-8270 SIM	**88.4**	02/22/2013	LAP
2-Fluorophenol	EPA-8270	**91.9 GS6**	02/22/2013	LAP
Phenol-d5	EPA-8270	**30.7**	02/22/2013	LAP
Nitrobenzene-d5	EPA-8270	**112**	02/22/2013	LAP
2-Fluorobiphenyl	EPA-8270	**87.3**	02/22/2013	LAP
2,4,6-Tribromophenol	EPA-8270	**116**	02/22/2013	LAP
Terphenyl-d14	EPA-8270	**88.4**	02/22/2013	LAP

GS6 - Surrogate outside of control limits. Single surrogate outlier per fraction is acceptable as per Method 8270D.
U - Analyte analyzed for but not detected at level above reporting limit.
UT - Analyte analyzed for but not detected at level above the MDL.
Chromatogram indicates that it is likely that sample contains weathered diesel.

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13020091 -07
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/15/2013
CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/14/2013 2:40:00 PM
CLIENT SAMPLE ID	MW-08-GW-021413	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	02/18/2013	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	02/18/2013	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	02/18/2013	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	02/18/2013	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	02/18/2013	DLC
TPH-Diesel Range	NWTPH-DX	U	130	1	UG/L	02/19/2013	EBS
TPH-Oil Range	NWTPH-DX	U	250	1	UG/L	02/19/2013	EBS
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Chloromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	02/18/2013	GAP
Bromomethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Chloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Carbon Tetrachloride	EPA-8260	U	1.6	1	UG/L	02/18/2013	GAP
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Carbon Disulfide	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Acetone	EPA-8260	U	25	1	UG/L	02/18/2013	GAP
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	02/18/2013	GAP
Acrylonitrile	EPA-8260	U	5.0	1	UG/L	02/18/2013	GAP
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
2-Butanone	EPA-8260	U	10	1	UG/L	02/18/2013	GAP
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Chloroform	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Benzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Trichloroethene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Dibromomethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Bromodichloromethane	EPA-8260	U	0.90	1	UG/L	02/18/2013	GAP
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
4-Methyl-2-Pentanone	EPA-8260	U	10	1	UG/L	02/18/2013	GAP
Toluene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP

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ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13020091 -07
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/15/2013
CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/14/2013 2:40:00 PM
CLIENT SAMPLE ID	MW-08-GW-021413	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
2-Hexanone	EPA-8260	U	10	1	UG/L	02/18/2013	GAP
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	02/18/2013	GAP
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	02/18/2013	GAP
Styrene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
o-Xylene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Bromoform	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Isopropylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Bromobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
N-Propyl Benzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
T-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
S-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
P-Isopropyltoluene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,3 Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
N-Butylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	02/18/2013	GAP
1,2,4-Trichlorobenzene	EPA-8260	U	1.0	1	UG/L	02/18/2013	GAP
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Naphthalene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Naphthalene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
2-Methylnaphthalene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
1-Methylnaphthalene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP

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ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13020091 -07
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/15/2013
CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/14/2013 2:40:00 PM
CLIENT SAMPLE ID	MW-08-GW-021413	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Acenaphthylene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Acenaphthene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Fluorene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Phenanthrene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Anthracene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Fluoranthene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Pyrene	EPA-8270 SIM	U	0.033	1	UG/L	02/22/2013	LAP
Benzo[A]Anthracene	EPA-8270 SIM	U	0.018	1	UG/L	02/22/2013	LAP
Chrysene	EPA-8270 SIM	ND- UT	0.0064	1	UG/L	02/22/2013	LAP
Benzo[B]Fluoranthene	EPA-8270 SIM	ND- UT	0.010	1	UG/L	02/22/2013	LAP
Benzo[K]Fluoranthene	EPA-8270 SIM	ND- UT	0.0070	1	UG/L	02/22/2013	LAP
Benzo[A]Pyrene	EPA-8270 SIM	ND- UT	0.0096	1	UG/L	02/22/2013	LAP
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	ND- UT	0.0050	1	UG/L	02/22/2013	LAP
Dibenz[A,H]Anthracene	EPA-8270 SIM	ND- UT	0.0062	1	UG/L	02/22/2013	LAP
Benzo[G,H,I]Perylene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Pyridine	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
N-Nitrosodimethylamine	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Phenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Aniline	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
Bis(2-Chloroethyl)Ether	EPA-8270	U	1.0	1	UG/L	02/22/2013	LAP
2-Chlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
1,3-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
1,4-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Benzyl Alcohol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
1,2-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
3&4-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
N-Nitroso-Di-N-Propylamine	EPA-8270	ND- UT	0.70	1	UG/L	02/22/2013	LAP
Hexachloroethane	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Nitrobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Isophorone	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2-Nitrophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,4-Dimethylphenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Benzoic Acid	EPA-8270	U	10	1	UG/L	02/22/2013	LAP
Bis(2-Chloroethoxy)Methane	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,4-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
1,2,4-Trichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13020091 -07
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/15/2013
CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/14/2013 2:40:00 PM
CLIENT SAMPLE ID	MW-08-GW-021413	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
4-Chloroaniline	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,6-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Hexachlorobutadiene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
4-Chloro-3-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Hexachlorocyclopentadiene	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
2,4,6-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,4,5-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2-Chloronaphthalene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2-Nitroaniline	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Dimethylphthalate	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,6-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
3-Nitroaniline	EPA-8270	U	5.0	1	UG/L	02/22/2013	LAP
2,4-Dinitrophenol	EPA-8270	U	10	1	UG/L	02/22/2013	LAP
4-Nitrophenol	EPA-8270	U	5.0	1	UG/L	02/22/2013	LAP
Dibenzofuran	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,4-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,3,4,6-Tetrachlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Diethylphthalate	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
4-Chlorophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
4-Nitroaniline	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
4,6-Dinitro-2-Methylphenol	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
N-Nitrosodiphenylamine	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Azobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
4-Bromophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Hexachlorobenzene	EPA-8270	U	1.0	1	UG/L	02/22/2013	LAP
Pentachlorophenol	EPA-8270	U	5.0	1	UG/L	02/22/2013	LAP
Carbazole	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Di-N-Butylphthalate	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Butylbenzylphthalate	EPA-8270	U	1.0	1	UG/L	02/22/2013	LAP
3,3-Dichlorobenzidine	EPA-8270	U	5.0	1	UG/L	02/22/2013	LAP
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Di-N-Octylphthalate	EPA-8270	U	1.0	1	UG/L	02/22/2013	LAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**84.4**	02/18/2013	DLC
TFT	EPA-8021	**107**	02/18/2013	DLC
C25	NWTPH-DX	**88.9**	02/19/2013	EBS

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13020091 -07
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/15/2013
CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/14/2013 2:40:00 PM
CLIENT SAMPLE ID	MW-08-GW-021413	WDOE ACCREDITATION:	C601

DATA RESULTS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	**103**	02/18/2013	GAP
Toluene-d8	EPA-8260	**95.1**	02/18/2013	GAP
4-Bromofluorobenzene	EPA-8260	**98.6**	02/18/2013	GAP
Terphenyl-d14	EPA-8270 SIM	**86.5**	02/22/2013	LAP
2-Fluorophenol	EPA-8270	**65.7**	02/22/2013	LAP
Phenol-d5	EPA-8270	**28.9**	02/22/2013	LAP
Nitrobenzene-d5	EPA-8270	**94.3**	02/22/2013	LAP
2-Fluorobiphenyl	EPA-8270	**84.7**	02/22/2013	LAP
2,4,6-Tribromophenol	EPA-8270	**86.7**	02/22/2013	LAP
Terphenyl-d14	EPA-8270	**86.5**	02/22/2013	LAP

U - Analyte analyzed for but not detected at level above reporting limit.
UT - Analyte analyzed for but not detected at level above the MDL.

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ALS Laboratory Group A Campbell Brothers Limited Company

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13020091 -08
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/15/2013
CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/14/2013 1:00:00 PM
CLIENT SAMPLE ID	MW-06-TB-021413	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Chloromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	02/18/2013	GAP
Bromomethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Chloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Carbon Tetrachloride	EPA-8260	U	1.6	1	UG/L	02/18/2013	GAP
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Carbon Disulfide	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Acetone	EPA-8260	U	25	1	UG/L	02/18/2013	GAP
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	02/18/2013	GAP
Acrylonitrile	EPA-8260	U	5.0	1	UG/L	02/18/2013	GAP
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
2-Butanone	EPA-8260	U	10	1	UG/L	02/18/2013	GAP
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Chloroform	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Benzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Trichloroethene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Dibromomethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Bromodichloromethane	EPA-8260	U	0.90	1	UG/L	02/18/2013	GAP
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
4-Methyl-2-Pentanone	EPA-8260	U	10	1	UG/L	02/18/2013	GAP
Toluene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
2-Hexanone	EPA-8260	U	10	1	UG/L	02/18/2013	GAP
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	02/18/2013	GAP

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
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ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13020091 -08
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/15/2013
CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/14/2013 1:00:00 PM
CLIENT SAMPLE ID	MW-06-TB-021413	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	02/18/2013	GAP
Styrene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
o-Xylene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Bromoform	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Isopropylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Bromobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
N-Propyl Benzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
T-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
S-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
P-Isopropyltoluene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,3 Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
N-Butylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	02/18/2013	GAP
1,2,4-Trichlorobenzene	EPA-8260	U	1.0	1	UG/L	02/18/2013	GAP
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Naphthalene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	**102**	02/18/2013	GAP
Toluene-d8	EPA-8260	**95.8**	02/18/2013	GAP
4-Bromofluorobenzene	EPA-8260	**98.9**	02/18/2013	GAP

U - Analyte analyzed for but not detected at level above reporting limit.

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13020091 -10
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/15/2013
CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/15/2013 1:05:00 PM
CLIENT SAMPLE ID	MW-01-GW-021513	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	**680**	50	1	UG/L	02/18/2013	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	02/18/2013	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	02/18/2013	DLC
Ethylbenzene	EPA-8021	**1.3**	1.0	1	UG/L	02/18/2013	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	02/18/2013	DLC
C5-C6 Aliphatics	NWVPH	U	50	1	UG/L	02/21/2013	DLC
>C6-C8 Aliphatics	NWVPH	U	50	1	UG/L	02/21/2013	DLC
>C8-C10 Aliphatics	NWVPH	U	50	1	UG/L	02/21/2013	DLC
>C8-C10 Aromatics	NWVPH	**78**	50	1	UG/L	02/21/2013	DLC
>C10-C12 Aromatics	NWVPH	**530**	50	1	UG/L	02/21/2013	DLC
>C12-C13 Aromatics	NWVPH	**630**	50	1	UG/L	02/21/2013	DLC
Hexane	NWVPH	U	2.0	1	UG/L	02/22/2013	DLC
TPH-Diesel Range	NWTPH-DX	**1500**	130	1	UG/L	02/20/2013	EBS
TPH-Oil Range	NWTPH-DX	U	250	1	UG/L	02/20/2013	EBS
>C8-C10 Aliphatics	NWEPH	U	50	1	UG/L	02/21/2013	EBS
>C10-C12 Aliphatics	NWEPH	U	50	1	UG/L	02/21/2013	EBS
>C12-C16 Aliphatics	NWEPH	U	50	1	UG/L	02/21/2013	EBS
>C16-C21 Aliphatics	NWEPH	U	50	1	UG/L	02/21/2013	EBS
>C21-C34 Aliphatics	NWEPH	U	50	1	UG/L	02/21/2013	EBS
>C8-C10 Aromatics	NWEPH	U	50	1	UG/L	02/21/2013	EBS
>C10-C12 Aromatics	NWEPH	**190**	50	1	UG/L	02/21/2013	EBS
>C12-C16 Aromatics	NWEPH	**400**	50	1	UG/L	02/21/2013	EBS
>C16-C21 Aromatics	NWEPH	**140**	50	1	UG/L	02/21/2013	EBS
>C21-C34 Aromatics	NWEPH	**170**	50	1	UG/L	02/21/2013	EBS
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Chloromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	02/18/2013	GAP
Bromomethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Chloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Carbon Tetrachloride	EPA-8260	U	1.6	1	UG/L	02/18/2013	GAP
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Carbon Disulfide	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Acetone	EPA-8260	U	25	1	UG/L	02/18/2013	GAP
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	02/18/2013	GAP
Acrylonitrile	EPA-8260	U	5.0	1	UG/L	02/18/2013	GAP
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP

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CERTIFICATE OF ANALYSIS

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CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/15/2013
CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/15/2013 1:05:00 PM
CLIENT SAMPLE ID	MW-01-GW-021513	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
2-Butanone	EPA-8260	U	10	1	UG/L	02/18/2013	GAP
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Chloroform	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Benzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Trichloroethene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Dibromomethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Bromodichloromethane	EPA-8260	U	0.90	1	UG/L	02/18/2013	GAP
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
4-Methyl-2-Pentanone	EPA-8260	U	10	1	UG/L	02/18/2013	GAP
Toluene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
2-Hexanone	EPA-8260	U	10	1	UG/L	02/18/2013	GAP
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	02/18/2013	GAP
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	02/18/2013	GAP
Styrene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
o-Xylene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Bromoform	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Isopropylbenzene	EPA-8260	**3.1**	2.0	1	UG/L	02/18/2013	GAP
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Bromobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
N-Propyl Benzene	EPA-8260	**2.5**	2.0	1	UG/L	02/18/2013	GAP
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE:	3/20/2013
		ALS JOB#:	EV13020091
		ALS SAMPLE#:	-10
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/15/2013
CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/15/2013 1:05:00 PM
CLIENT SAMPLE ID	MW-01-GW-021513	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
T-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
S-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
P-Isopropyltoluene	EPA-8260	**3.1**	2.0	1	UG/L	02/18/2013	GAP
1,3 Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
N-Butylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	02/18/2013	GAP
1,2,4-Trichlorobenzene	EPA-8260	U	1.0	1	UG/L	02/18/2013	GAP
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Naphthalene	EPA-8260	**4.6**	2.0	1	UG/L	02/18/2013	GAP
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Naphthalene	EPA-8270 SIM	**4.0**	0.020	1	UG/L	02/22/2013	LAP
2-Methylnaphthalene	EPA-8270 SIM	**67**	0.020	1	UG/L	02/22/2013	LAP
1-Methylnaphthalene	EPA-8270 SIM	**93**	0.020	1	UG/L	02/22/2013	LAP
Acenaphthylene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Acenaphthene	EPA-8270 SIM	**25**	0.020	1	UG/L	02/22/2013	LAP
Fluorene	EPA-8270 SIM	**14**	0.020	1	UG/L	02/22/2013	LAP
Phenanthrene	EPA-8270 SIM	**6.7**	0.020	1	UG/L	02/22/2013	LAP
Anthracene	EPA-8270 SIM	**0.42**	0.020	1	UG/L	02/22/2013	LAP
Fluoranthene	EPA-8270 SIM	**0.88**	0.020	1	UG/L	02/22/2013	LAP
Pyrene	EPA-8270 SIM	**0.49**	0.033	1	UG/L	02/22/2013	LAP
Benzo[A]Anthracene	EPA-8270 SIM	U	0.018	1	UG/L	02/22/2013	LAP
Chrysene	EPA-8270 SIM	**0.049 B**	0.0064	1	UG/L	02/22/2013	LAP
Benzo[B]Fluoranthene	EPA-8270 SIM	ND- UT	0.010	1	UG/L	02/22/2013	LAP
Benzo[K]Fluoranthene	EPA-8270 SIM	ND- UT	0.0070	1	UG/L	02/22/2013	LAP
Benzo[A]Pyrene	EPA-8270 SIM	**0.028 JT**	0.0096	1	UG/L	02/22/2013	LAP
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	**0.0087 JT**	0.0050	1	UG/L	02/22/2013	LAP
Dibenz[A,H]Anthracene	EPA-8270 SIM	**0.012 JT**	0.0062	1	UG/L	02/22/2013	LAP
Benzo[G,H,I]Perylene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Pyridine	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
N-Nitrosodimethylamine	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Phenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Aniline	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
Bis(2-Chloroethyl)Ether	EPA-8270	U	1.0	1	UG/L	02/22/2013	LAP
2-Chlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP

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CERTIFICATE OF ANALYSIS

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CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/15/2013
CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/15/2013 1:05:00 PM
CLIENT SAMPLE ID	MW-01-GW-021513	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,3-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
1,4-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Benzyl Alcohol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
1,2-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
3&4-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
N-Nitroso-Di-N-Propylamine	EPA-8270	ND- UT	0.70	1	UG/L	02/22/2013	LAP
Hexachloroethane	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Nitrobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Isophorone	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2-Nitrophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,4-Dimethylphenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Benzoic Acid	EPA-8270	U	10	1	UG/L	02/22/2013	LAP
Bis(2-Chloroethoxy)Methane	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,4-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
1,2,4-Trichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
4-Chloroaniline	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,6-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Hexachlorobutadiene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
4-Chloro-3-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Hexachlorocyclopentadiene	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
2,4,6-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,4,5-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2-Chloronaphthalene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2-Nitroaniline	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Dimethylphthalate	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,6-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
3-Nitroaniline	EPA-8270	U	5.0	1	UG/L	02/22/2013	LAP
2,4-Dinitrophenol	EPA-8270	U	10	1	UG/L	02/22/2013	LAP
4-Nitrophenol	EPA-8270	U	5.0	1	UG/L	02/22/2013	LAP
Dibenzofuran	EPA-8270	**7.7**	2.0	1	UG/L	02/22/2013	LAP
2,4-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,3,4,6-Tetrachlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Diethylphthalate	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
4-Chlorophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
4-Nitroaniline	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
4,6-Dinitro-2-Methylphenol	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP

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ALS Laboratory Group A Campbell Brothers Limited Company

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13020091 -10
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/15/2013
CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/15/2013 1:05:00 PM
CLIENT SAMPLE ID	MW-01-GW-021513	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
N-Nitrosodiphenylamine	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Azobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
4-Bromophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Hexachlorobenzene	EPA-8270	U	1.0	1	UG/L	02/22/2013	LAP
Pentachlorophenol	EPA-8270	U	5.0	1	UG/L	02/22/2013	LAP
Carbazole	EPA-8270	**49**	2.0	1	UG/L	02/22/2013	LAP
Di-N-Butylphthalate	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Butylbenzylphthalate	EPA-8270	U	1.0	1	UG/L	02/22/2013	LAP
3,3-Dichlorobenzidine	EPA-8270	U	5.0	1	UG/L	02/22/2013	LAP
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Di-N-Octylphthalate	EPA-8270	U	1.0	1	UG/L	02/22/2013	LAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**91.3**	02/18/2013	DLC
TFT	EPA-8021	**114**	02/18/2013	DLC
TFT - Aliphatic	NWVPH	**106**	02/21/2013	DLC
TFT - Aromatic	NWVPH	**122**	02/21/2013	DLC
TFT - Hexane	NWVPH	**107**	02/22/2013	DLC
C25	NWTPH-DX	**92.4**	02/20/2013	EBS
C25	NWEPH	**75.0**	02/21/2013	EBS
p-Terphenyl	NWEPH	**85.0**	02/21/2013	EBS
1,2-Dichloroethane-d4	EPA-8260	**103**	02/18/2013	GAP
Toluene-d8	EPA-8260	**96.6**	02/18/2013	GAP
4-Bromofluorobenzene	EPA-8260	**99.6**	02/18/2013	GAP
Terphenyl-d14	EPA-8270 SIM	**86.3**	02/22/2013	LAP
2-Fluorophenol	EPA-8270	**84.3**	02/22/2013	LAP
Phenol-d5	EPA-8270	**28.8**	02/22/2013	LAP
Nitrobenzene-d5	EPA-8270	**107**	02/22/2013	LAP
2-Fluorobiphenyl	EPA-8270	**90.7**	02/22/2013	LAP
2,4,6-Tribromophenol	EPA-8270	**117**	02/22/2013	LAP
Terphenyl-d14	EPA-8270	**86.3**	02/22/2013	LAP

B - Analyte detected in sample and method blank. Reported result is sample concentration without blank correction or associated quantitation limit.
JT - Analyte was positively identified. Reported result is an estimate below the associated quantitation limit but above the MDL.
U - Analyte analyzed for but not detected at level above reporting limit.
UT - Analyte analyzed for but not detected at level above the MDL.
Chromatogram indicates that it is likely that sample contains highly weathered gasoline and weathered diesel.
Gasoline range product results biased high due to semivolatile range product overlap.

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CERTIFICATE OF ANALYSIS

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CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/15/2013
CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/15/2013 2:50:00 PM
CLIENT SAMPLE ID	MW-02A-GW-021513	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	02/18/2013	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	02/18/2013	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	02/18/2013	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	02/18/2013	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	02/18/2013	DLC
TPH-Diesel Range	NWTPH-DX	**340**	130	1	UG/L	02/19/2013	EBS
TPH-Oil Range	NWTPH-DX	U	250	1	UG/L	02/19/2013	EBS
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Chloromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	02/18/2013	GAP
Bromomethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Chloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Carbon Tetrachloride	EPA-8260	U	1.6	1	UG/L	02/18/2013	GAP
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Carbon Disulfide	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Acetone	EPA-8260	U	25	1	UG/L	02/18/2013	GAP
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	02/18/2013	GAP
Acrylonitrile	EPA-8260	U	5.0	1	UG/L	02/18/2013	GAP
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
2-Butanone	EPA-8260	U	10	1	UG/L	02/18/2013	GAP
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Chloroform	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Benzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Trichloroethene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Dibromomethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Bromodichloromethane	EPA-8260	U	0.90	1	UG/L	02/18/2013	GAP
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
4-Methyl-2-Pentanone	EPA-8260	U	10	1	UG/L	02/18/2013	GAP
Toluene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13020091 -11
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/15/2013
CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/15/2013 2:50:00 PM
CLIENT SAMPLE ID	MW-02A-GW-021513	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
2-Hexanone	EPA-8260	U	10	1	UG/L	02/18/2013	GAP
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	02/18/2013	GAP
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	02/18/2013	GAP
Styrene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
o-Xylene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Bromoform	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Isopropylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Bromobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
N-Propyl Benzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
T-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
S-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
P-Isopropyltoluene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,3 Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
N-Butylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	02/18/2013	GAP
1,2,4-Trichlorobenzene	EPA-8260	U	1.0	1	UG/L	02/18/2013	GAP
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Naphthalene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Naphthalene	EPA-8270 SIM	**0.063**	0.020	1	UG/L	02/22/2013	LAP
2-Methylnaphthalene	EPA-8270 SIM	**0.027**	0.020	1	UG/L	02/22/2013	LAP
1-Methylnaphthalene	EPA-8270 SIM	**0.026**	0.020	1	UG/L	02/22/2013	LAP

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CERTIFICATE OF ANALYSIS

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CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/15/2013
CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/15/2013 2:50:00 PM
CLIENT SAMPLE ID	MW-02A-GW-021513	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Acenaphthylene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Acenaphthene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Fluorene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Phenanthrene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Anthracene	EPA-8270 SIM	**0.037**	0.020	1	UG/L	02/22/2013	LAP
Fluoranthene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Pyrene	EPA-8270 SIM	U	0.034	1	UG/L	02/22/2013	LAP
Benzo[A]Anthracene	EPA-8270 SIM	U	0.018	1	UG/L	02/22/2013	LAP
Chrysene	EPA-8270 SIM	ND- UT	0.0066	1	UG/L	02/22/2013	LAP
Benzo[B]Fluoranthene	EPA-8270 SIM	ND- UT	0.010	1	UG/L	02/22/2013	LAP
Benzo[K]Fluoranthene	EPA-8270 SIM	ND- UT	0.0073	1	UG/L	02/22/2013	LAP
Benzo[A]Pyrene	EPA-8270 SIM	ND- UT	0.0099	1	UG/L	02/22/2013	LAP
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	ND- UT	0.0051	1	UG/L	02/22/2013	LAP
Dibenz[A,H]Anthracene	EPA-8270 SIM	ND- UT	0.0064	1	UG/L	02/22/2013	LAP
Benzo[G,H,I]Perylene	EPA-8270 SIM	U	0.021	1	UG/L	02/22/2013	LAP
Pyridine	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
N-Nitrosodimethylamine	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Phenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Aniline	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
Bis(2-Chloroethyl)Ether	EPA-8270	U	1.0	1	UG/L	02/22/2013	LAP
2-Chlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
1,3-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
1,4-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Benzyl Alcohol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
1,2-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
3&4-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
N-Nitroso-Di-N-Propylamine	EPA-8270	ND- UT	0.72	1	UG/L	02/22/2013	LAP
Hexachloroethane	EPA-8270	U	2.1	1	UG/L	02/22/2013	LAP
Nitrobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Isophorone	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2-Nitrophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,4-Dimethylphenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Benzoic Acid	EPA-8270	U	10	1	UG/L	02/22/2013	LAP
Bis(2-Chloroethoxy)Methane	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,4-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
1,2,4-Trichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP

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ALS Environmental

CERTIFICATE OF ANALYSIS

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CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/15/2013
CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/15/2013 2:50:00 PM
CLIENT SAMPLE ID	MW-02A-GW-021513	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
4-Chloroaniline	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,6-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Hexachlorobutadiene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
4-Chloro-3-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Hexachlorocyclopentadiene	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
2,4,6-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,4,5-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2-Chloronaphthalene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2-Nitroaniline	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Dimethylphthalate	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,6-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
3-Nitroaniline	EPA-8270	U	5.0	1	UG/L	02/22/2013	LAP
2,4-Dinitrophenol	EPA-8270	U	10	1	UG/L	02/22/2013	LAP
4-Nitrophenol	EPA-8270	U	5.0	1	UG/L	02/22/2013	LAP
Dibenzofuran	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,4-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,3,4,6-Tetrachlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Diethylphthalate	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
4-Chlorophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
4-Nitroaniline	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
4,6-Dinitro-2-Methylphenol	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
N-Nitrosodiphenylamine	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Azobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
4-Bromophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Hexachlorobenzene	EPA-8270	U	1.0	1	UG/L	02/22/2013	LAP
Pentachlorophenol	EPA-8270	U	5.0	1	UG/L	02/22/2013	LAP
Carbazole	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Di-N-Butylphthalate	EPA-8270	**3.3**	2.0	1	UG/L	02/22/2013	LAP
Butylbenzylphthalate	EPA-8270	U	1.0	1	UG/L	02/22/2013	LAP
3,3-Dichlorobenzidine	EPA-8270	U	5.0	1	UG/L	02/22/2013	LAP
Bis(2-Ethylhexyl)Phthalate	EPA-8270	**2.8**	2.0	1	UG/L	02/22/2013	LAP
Di-N-Octylphthalate	EPA-8270	U	1.0	1	UG/L	02/22/2013	LAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**90.2**	02/18/2013	DLC
TFT	EPA-8021	**114**	02/18/2013	DLC
C25	NWTPH-DX	**92.4**	02/19/2013	EBS

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
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ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13020091 -11
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/15/2013
CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/15/2013 2:50:00 PM
CLIENT SAMPLE ID	MW-02A-GW-021513	WDOE ACCREDITATION:	C601

DATA RESULTS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	**104**	02/18/2013	GAP
Toluene-d8	EPA-8260	**96.1**	02/18/2013	GAP
4-Bromofluorobenzene	EPA-8260	**101**	02/18/2013	GAP
Terphenyl-d14	EPA-8270 SIM	**92.3**	02/22/2013	LAP
2-Fluorophenol	EPA-8270	**83.0**	02/22/2013	LAP
Phenol-d5	EPA-8270	**34.1**	02/22/2013	LAP
Nitrobenzene-d5	EPA-8270	**104**	02/22/2013	LAP
2-Fluorobiphenyl	EPA-8270	**78.7**	02/22/2013	LAP
2,4,6-Tribromophenol	EPA-8270	**116**	02/22/2013	LAP
Terphenyl-d14	EPA-8270	**92.3**	02/22/2013	LAP

U - Analyte analyzed for but not detected at level above reporting limit.
UT - Analyte analyzed for but not detected at level above the MDL.
Chromatogram indicates that it is likely that sample contains an unidentified diesel range product.

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2013 EV13020091 -12
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/15/2013
CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/15/2013 4:30:00 PM
CLIENT SAMPLE ID	MW-09-GW-021513	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	**530**	50	1	UG/L	02/18/2013	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	02/18/2013	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	02/18/2013	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	02/18/2013	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	02/18/2013	DLC
C5-C6 Aliphatics	NWVPH	U	50	1	UG/L	02/21/2013	DLC
>C6-C8 Aliphatics	NWVPH	U	50	1	UG/L	02/21/2013	DLC
>C8-C10 Aliphatics	NWVPH	U	50	1	UG/L	02/21/2013	DLC
>C8-C10 Aromatics	NWVPH	**71**	50	1	UG/L	02/21/2013	DLC
>C10-C12 Aromatics	NWVPH	**420**	50	1	UG/L	02/21/2013	DLC
>C12-C13 Aromatics	NWVPH	**510**	50	1	UG/L	02/21/2013	DLC
Hexane	NWVPH	U	2.0	1	UG/L	02/22/2013	DLC
TPH-Diesel Range	NWTPH-DX	**1200**	130	1	UG/L	02/20/2013	EBS
TPH-Oil Range	NWTPH-DX	U	250	1	UG/L	02/20/2013	EBS
>C8-C10 Aliphatics	NWEPH	U	50	1	UG/L	02/21/2013	EBS
>C10-C12 Aliphatics	NWEPH	U	50	1	UG/L	02/21/2013	EBS
>C12-C16 Aliphatics	NWEPH	U	50	1	UG/L	02/21/2013	EBS
>C16-C21 Aliphatics	NWEPH	U	50	1	UG/L	02/21/2013	EBS
>C21-C34 Aliphatics	NWEPH	U	50	1	UG/L	02/21/2013	EBS
>C8-C10 Aromatics	NWEPH	U	50	1	UG/L	02/21/2013	EBS
>C10-C12 Aromatics	NWEPH	**170**	50	1	UG/L	02/21/2013	EBS
>C12-C16 Aromatics	NWEPH	**300**	50	1	UG/L	02/21/2013	EBS
>C16-C21 Aromatics	NWEPH	**100**	50	1	UG/L	02/21/2013	EBS
>C21-C34 Aromatics	NWEPH	**63**	50	1	UG/L	02/21/2013	EBS
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Chloromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	02/18/2013	GAP
Bromomethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Chloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Carbon Tetrachloride	EPA-8260	U	1.6	1	UG/L	02/18/2013	GAP
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Carbon Disulfide	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Acetone	EPA-8260	U	25	1	UG/L	02/18/2013	GAP
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	02/18/2013	GAP
Acrylonitrile	EPA-8260	U	5.0	1	UG/L	02/18/2013	GAP
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP

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ALS Laboratory Group A Campbell Brothers Limited Company

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE:	3/20/2013
		ALS JOB#:	EV13020091
		ALS SAMPLE#:	-12
CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/15/2013
CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/15/2013 4:30:00 PM
CLIENT SAMPLE ID	MW-09-GW-021513	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
2-Butanone	EPA-8260	U	10	1	UG/L	02/18/2013	GAP
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Chloroform	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Benzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Trichloroethene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Dibromomethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Bromodichloromethane	EPA-8260	U	0.90	1	UG/L	02/18/2013	GAP
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
4-Methyl-2-Pentanone	EPA-8260	U	10	1	UG/L	02/18/2013	GAP
Toluene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
2-Hexanone	EPA-8260	U	10	1	UG/L	02/18/2013	GAP
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	02/18/2013	GAP
Chlorobenzene	EPA-8260	**3.3**	2.0	1	UG/L	02/18/2013	GAP
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	02/18/2013	GAP
Styrene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
o-Xylene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Bromoform	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Isopropylbenzene	EPA-8260	**2.6**	2.0	1	UG/L	02/18/2013	GAP
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Bromobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
N-Propyl Benzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP

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CERTIFICATE OF ANALYSIS

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CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/15/2013
CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/15/2013 4:30:00 PM
CLIENT SAMPLE ID	MW-09-GW-021513	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
T-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
S-Butyl Benzene	EPA-8260	**2.1**	2.0	1	UG/L	02/18/2013	GAP
P-Isopropyltoluene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,3 Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
N-Butylbenzene	EPA-8260	**2.8**	2.0	1	UG/L	02/18/2013	GAP
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	02/18/2013	GAP
1,2,4-Trichlorobenzene	EPA-8260	U	1.0	1	UG/L	02/18/2013	GAP
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Naphthalene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Naphthalene	EPA-8270 SIM	**0.64**	0.020	1	UG/L	02/22/2013	LAP
2-Methylnaphthalene	EPA-8270 SIM	**4.3**	0.020	1	UG/L	02/22/2013	LAP
1-Methylnaphthalene	EPA-8270 SIM	**52**	0.020	1	UG/L	02/22/2013	LAP
Acenaphthylene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Acenaphthene	EPA-8270 SIM	**2.0**	0.020	1	UG/L	02/22/2013	LAP
Fluorene	EPA-8270 SIM	**3.9**	0.020	1	UG/L	02/22/2013	LAP
Phenanthrene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Anthracene	EPA-8270 SIM	**0.092**	0.020	1	UG/L	02/22/2013	LAP
Fluoranthene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Pyrene	EPA-8270 SIM	U	0.033	1	UG/L	02/22/2013	LAP
Benzo[A]Anthracene	EPA-8270 SIM	U	0.018	1	UG/L	02/22/2013	LAP
Chrysene	EPA-8270 SIM	ND- UT	0.0064	1	UG/L	02/22/2013	LAP
Benzo[B]Fluoranthene	EPA-8270 SIM	ND- UT	0.010	1	UG/L	02/22/2013	LAP
Benzo[K]Fluoranthene	EPA-8270 SIM	ND- UT	0.0070	1	UG/L	02/22/2013	LAP
Benzo[A]Pyrene	EPA-8270 SIM	ND- UT	0.0096	1	UG/L	02/22/2013	LAP
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	ND- UT	0.0050	1	UG/L	02/22/2013	LAP
Dibenz[A,H]Anthracene	EPA-8270 SIM	ND- UT	0.0062	1	UG/L	02/22/2013	LAP
Benzo[G,H,I]Perylene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Pyridine	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
N-Nitrosodimethylamine	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Phenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Aniline	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
Bis(2-Chloroethyl)Ether	EPA-8270	U	1.0	1	UG/L	02/22/2013	LAP
2-Chlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP

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CERTIFICATE OF ANALYSIS

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CLIENT CONTACT:	Stephen Bentsen	DATE RECEIVED:	2/15/2013
CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/15/2013 4:30:00 PM
CLIENT SAMPLE ID	MW-09-GW-021513	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,3-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
1,4-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Benzyl Alcohol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
1,2-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
3&4-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
N-Nitroso-Di-N-Propylamine	EPA-8270	ND- UT	0.70	1	UG/L	02/22/2013	LAP
Hexachloroethane	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Nitrobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Isophorone	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2-Nitrophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,4-Dimethylphenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Benzoic Acid	EPA-8270	U	10	1	UG/L	02/22/2013	LAP
Bis(2-Chloroethoxy)Methane	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,4-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
1,2,4-Trichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
4-Chloroaniline	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,6-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Hexachlorobutadiene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
4-Chloro-3-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Hexachlorocyclopentadiene	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
2,4,6-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,4,5-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2-Chloronaphthalene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2-Nitroaniline	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Dimethylphthalate	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,6-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
3-Nitroaniline	EPA-8270	U	5.0	1	UG/L	02/22/2013	LAP
2,4-Dinitrophenol	EPA-8270	U	10	1	UG/L	02/22/2013	LAP
4-Nitrophenol	EPA-8270	U	5.0	1	UG/L	02/22/2013	LAP
Dibenzofuran	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,4-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,3,4,6-Tetrachlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Diethylphthalate	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
4-Chlorophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
4-Nitroaniline	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
4,6-Dinitro-2-Methylphenol	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP

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CERTIFICATE OF ANALYSIS

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CLIENT PROJECT:	Harris Ave Shipyard	COLLECTION DATE:	2/15/2013 4:30:00 PM
CLIENT SAMPLE ID	MW-09-GW-021513	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
N-Nitrosodiphenylamine	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Azobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
4-Bromophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Hexachlorobenzene	EPA-8270	U	1.0	1	UG/L	02/22/2013	LAP
Pentachlorophenol	EPA-8270	U	5.0	1	UG/L	02/22/2013	LAP
Carbazole	EPA-8270	**6.8**	2.0	1	UG/L	02/22/2013	LAP
Di-N-Butylphthalate	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Butylbenzylphthalate	EPA-8270	U	1.0	1	UG/L	02/22/2013	LAP
3,3-Dichlorobenzidine	EPA-8270	U	5.0	1	UG/L	02/22/2013	LAP
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Di-N-Octylphthalate	EPA-8270	U	1.0	1	UG/L	02/22/2013	LAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**74.5**	02/18/2013	DLC
TFT	EPA-8021	**88.7**	02/18/2013	DLC
TFT - Aliphatic	NWVPH	**110**	02/21/2013	DLC
TFT - Aromatic	NWVPH	**123**	02/21/2013	DLC
TFT - Hexane	NWVPH	**113**	02/22/2013	DLC
C25	NWTPH-DX	**88.9**	02/20/2013	EBS
C25	NWEPH	**86.0**	02/21/2013	EBS
p-Terphenyl	NWEPH	**76.0**	02/21/2013	EBS
1,2-Dichloroethane-d4	EPA-8260	**104**	02/18/2013	GAP
Toluene-d8	EPA-8260	**95.7**	02/18/2013	GAP
4-Bromofluorobenzene	EPA-8260	**101**	02/18/2013	GAP
Terphenyl-d14	EPA-8270 SIM	**85.6**	02/22/2013	LAP
2-Fluorophenol	EPA-8270	**74.4**	02/22/2013	LAP
Phenol-d5	EPA-8270	**30.4**	02/22/2013	LAP
Nitrobenzene-d5	EPA-8270	**106**	02/22/2013	LAP
2-Fluorobiphenyl	EPA-8270	**77.0**	02/22/2013	LAP
2,4,6-Tribromophenol	EPA-8270	**112**	02/22/2013	LAP
Terphenyl-d14	EPA-8270	**85.6**	02/22/2013	LAP

U - Analyte analyzed for but not detected at level above reporting limit.
UT - Analyte analyzed for but not detected at level above the MDL.
Chromatogram indicates that it is likely that sample contains highly weathered gasoline and weathered diesel.
Gasoline range product results biased high due to semivolatile range product overlap.

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CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS SDG#: WDOE ACCREDITATION:	3/20/2013 EV13020091 C601
CLIENT CONTACT:	Stephen Bentsen		
CLIENT PROJECT:	Harris Ave Shipyard		

LABORATORY BLANK RESULTS

MBG-021813W - Batch 3486 - Water by NWTPH-GX

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	02/18/2013	DLC

MB-021813W - Batch 3486 - Water by EPA-8021

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	U	1.0	1	UG/L	02/18/2013	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	02/18/2013	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	02/18/2013	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	02/18/2013	DLC

MBLK-2212013 - Batch R80338 - Water by NWVPH

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
C5-C6 Aliphatics	NWVPH	U	50	1	UG/L	02/21/2013	DLC
>C6-C8 Aliphatics	NWVPH	U	50	1	UG/L	02/21/2013	DLC
>C8-C10 Aliphatics	NWVPH	U	50	1	UG/L	02/21/2013	DLC
>C8-C10 Aromatics	NWVPH	U	50	1	UG/L	02/21/2013	DLC
>C10-C12 Aromatics	NWVPH	U	50	1	UG/L	02/21/2013	DLC
>C12-C13 Aromatics	NWVPH	U	50	1	UG/L	02/21/2013	DLC
Hexane	NWVPH	U	2.0	1	UG/L	02/21/2013	DLC

MB-021913W - Batch 3491 - Water by NWTPH-DX

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range	NWTPH-DX	U	130	1	UG/L	02/19/2013	EBS
TPH-Oil Range	NWTPH-DX	U	250	1	UG/L	02/19/2013	EBS

MBLK-2222013 - Batch R80330 - Water by NWEPH

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
>C8-C10 Aliphatics	NWEPH	U	50	1	UG/L	02/22/2013	EBS
>C10-C12 Aliphatics	NWEPH	U	50	1	UG/L	02/22/2013	EBS
>C12-C16 Aliphatics	NWEPH	U	50	1	UG/L	02/22/2013	EBS
>C16-C21 Aliphatics	NWEPH	U	50	1	UG/L	02/22/2013	EBS
>C21-C34 Aliphatics	NWEPH	U	50	1	UG/L	02/22/2013	EBS
>C8-C10 Aromatics	NWEPH	U	50	1	UG/L	02/22/2013	EBS
>C10-C12 Aromatics	NWEPH	U	50	1	UG/L	02/22/2013	EBS
>C12-C16 Aromatics	NWEPH	U	50	1	UG/L	02/22/2013	EBS

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CLIENT PROJECT:	Harris Ave Shipyard		

LABORATORY BLANK RESULTS

MBLK-2222013 - Batch R80330 - Water by NWEPH

>C16-C21 Aromatics	NWEPH	U	50	1	UG/L	02/22/2013	EBS
>C21-C34 Aromatics	NWEPH	U	50	1	UG/L	02/22/2013	EBS

MB-021813W - Batch 3479 - Water by EPA-8260

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Chloromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	02/18/2013	GAP
Bromomethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Chloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Carbon Tetrachloride	EPA-8260	U	1.6	1	UG/L	02/18/2013	GAP
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Carbon Disulfide	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Acetone	EPA-8260	U	25	1	UG/L	02/18/2013	GAP
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	02/18/2013	GAP
Acrylonitrile	EPA-8260	U	5.0	1	UG/L	02/18/2013	GAP
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
2-Butanone	EPA-8260	U	10	1	UG/L	02/18/2013	GAP
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Chloroform	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Benzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Trichloroethene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Dibromomethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Bromodichloromethane	EPA-8260	U	0.90	1	UG/L	02/18/2013	GAP
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
4-Methyl-2-Pentanone	EPA-8260	U	10	1	UG/L	02/18/2013	GAP
Toluene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
2-Hexanone	EPA-8260	U	10	1	UG/L	02/18/2013	GAP

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CLIENT PROJECT:	Harris Ave Shipyard			

LABORATORY BLANK RESULTS

MB-021813W - Batch 3479 - Water by EPA-8260

1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	02/18/2013	GAP
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Ethylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
m,p-Xylene	EPA-8260	U	4.0	1	UG/L	02/18/2013	GAP
Styrene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
o-Xylene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Bromoform	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Isopropylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Bromobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
N-Propyl Benzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
T-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
S-Butyl Benzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
P-Isopropyltoluene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,3 Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
N-Butylbenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	02/18/2013	GAP
1,2,4-Trichlorobenzene	EPA-8260	U	1.0	1	UG/L	02/18/2013	GAP
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
Naphthalene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	02/18/2013	GAP

MB-021913W - Batch 3501 - Water by EPA-8270 SIM

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Naphthalene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
2-Methylnaphthalene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
1-Methylnaphthalene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Acenaphthylene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP

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CLIENT CONTACT:	Stephen Bentsen		
CLIENT PROJECT:	Harris Ave Shipyard		

LABORATORY BLANK RESULTS

MB-021913W - Batch 3501 - Water by EPA-8270 SIM

Acenaphthene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Fluorene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Phenanthrene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Anthracene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Fluoranthene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP
Pyrene	EPA-8270 SIM	U	0.033	1	UG/L	02/22/2013	LAP
Benzo[A]Anthracene	EPA-8270 SIM	U	0.018	1	UG/L	02/22/2013	LAP
Chrysene	EPA-8270 SIM	**0.019 JT**	0.0064	1	UG/L	02/22/2013	LAP
Benzo[B]Fluoranthene	EPA-8270 SIM	UT	0.010	1	UG/L	02/22/2013	LAP
Benzo[K]Fluoranthene	EPA-8270 SIM	UT	0.0070	1	UG/L	02/22/2013	LAP
Benzo[A]Pyrene	EPA-8270 SIM	UT	0.0096	1	UG/L	02/22/2013	LAP
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	UT	0.0050	1	UG/L	02/22/2013	LAP
Dibenz[A,H]Anthracene	EPA-8270 SIM	UT	0.0062	1	UG/L	02/22/2013	LAP
Benzo[G,H,I]Perylene	EPA-8270 SIM	U	0.020	1	UG/L	02/22/2013	LAP

JT - Analyte was positively identified. Reported result is an estimate below the associated quantitation limit but above the MDL.
UT - Analyte analyzed for but not detected at level above the MDL.

MB-021913W - Batch 3500 - Water by EPA-8270

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Pyridine	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
N-Nitrosodimethylamine	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Phenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Aniline	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
Bis(2-Chloroethyl)Ether	EPA-8270	U	1.0	1	UG/L	02/22/2013	LAP
2-Chlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
1,3-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
1,4-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Benzyl Alcohol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
1,2-Dichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Bis(2-Chloroisopropyl)Ether	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
3&4-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
N-Nitroso-Di-N-Propylamine	EPA-8270	UT	0.70	1	UG/L	02/22/2013	LAP
Hexachloroethane	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Nitrobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Isophorone	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2-Nitrophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,4-Dimethylphenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Benzoic Acid	EPA-8270	U	10	1	UG/L	02/22/2013	LAP

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LABORATORY BLANK RESULTS

MB-021913W - Batch 3500 - Water by EPA-8270

Bis(2-Chloroethoxy)Methane	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,4-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
1,2,4-Trichlorobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
4-Chloroaniline	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,6-Dichlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Hexachlorobutadiene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
4-Chloro-3-Methylphenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Hexachlorocyclopentadiene	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
2,4,6-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,4,5-Trichlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2-Chloronaphthalene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2-Nitroaniline	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Dimethylphthalate	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,6-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
3-Nitroaniline	EPA-8270	U	5.0	1	UG/L	02/22/2013	LAP
2,4-Dinitrophenol	EPA-8270	U	10	1	UG/L	02/22/2013	LAP
4-Nitrophenol	EPA-8270	U	5.0	1	UG/L	02/22/2013	LAP
Dibenzofuran	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,4-Dinitrotoluene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
2,3,4,6-Tetrachlorophenol	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Diethylphthalate	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
4-Chlorophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
4-Nitroaniline	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
4,6-Dinitro-2-Methylphenol	EPA-8270	U	4.0	1	UG/L	02/22/2013	LAP
N-Nitrosodiphenylamine	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Azobenzene	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
4-Bromophenyl-Phenylether	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Hexachlorobenzene	EPA-8270	U	1.0	1	UG/L	02/22/2013	LAP
Pentachlorophenol	EPA-8270	U	5.0	1	UG/L	02/22/2013	LAP
Carbazole	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Di-N-Butylphthalate	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Butylbenzylphthalate	EPA-8270	U	1.0	1	UG/L	02/22/2013	LAP
3,3-Dichlorobenzidine	EPA-8270	U	5.0	1	UG/L	02/22/2013	LAP
Bis(2-Ethylhexyl)Phthalate	EPA-8270	U	2.0	1	UG/L	02/22/2013	LAP
Di-N-Octylphthalate	EPA-8270	U	1.0	1	UG/L	02/22/2013	LAP

UT - Analyte analyzed for but not detected at level above the MDL.

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ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE: ALS SDG#: WDOE ACCREDITATION:	3/20/2013 EV13020091 C601
CLIENT CONTACT:	Stephen Bentsen		
CLIENT PROJECT:	Harris Ave Shipyard		

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 3486 - Water by NWTPH-GX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range - BS	NWTPH-GX	**79.5**			02/18/2013	DLC
TPH-Volatile Range - BSD	NWTPH-GX	**78.6**	**1**		02/18/2013	DLC

ALS Test Batch ID: 3486 - Water by EPA-8021

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Benzene - BS	EPA-8021	**109**			02/18/2013	DLC
Benzene - BSD	EPA-8021	**110**	**1**		02/18/2013	DLC
Toluene - BS	EPA-8021	**108**			02/18/2013	DLC
Toluene - BSD	EPA-8021	**109**	**1**		02/18/2013	DLC
Ethylbenzene - BS	EPA-8021	**108**			02/18/2013	DLC
Ethylbenzene - BSD	EPA-8021	**109**	**1**		02/18/2013	DLC
Xylenes - BS	EPA-8021	**107**			02/18/2013	DLC
Xylenes - BSD	EPA-8021	**108**	**1**		02/18/2013	DLC

ALS Test Batch ID: R80338 - Water by NWVPH

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
C5-C6 Aliphatics - BS	NWVPH	**92.0**			02/21/2013	DLC
C5-C6 Aliphatics - BSD	NWVPH	**100**	**8**		02/21/2013	DLC
>C6-C8 Aliphatics - BS	NWVPH	**95.0**			02/21/2013	DLC
>C6-C8 Aliphatics - BSD	NWVPH	**101**	**6**		02/21/2013	DLC
>C8-C10 Aliphatics - BS	NWVPH	**100**			02/21/2013	DLC
>C8-C10 Aliphatics - BSD	NWVPH	**107**	**7**		02/21/2013	DLC
>C8-C10 Aromatics - BS	NWVPH	**105**			02/21/2013	DLC
>C8-C10 Aromatics - BSD	NWVPH	**113**	**7**		02/21/2013	DLC
>C10-C12 Aromatics - BS	NWVPH	**99.0**			02/21/2013	DLC
>C10-C12 Aromatics - BSD	NWVPH	**107**	**8**		02/21/2013	DLC
>C12-C13 Aromatics - BS	NWVPH	**79.0**			02/21/2013	DLC
>C12-C13 Aromatics - BSD	NWVPH	**86.0**	**8**		02/21/2013	DLC
Hexane - BS	NWVPH	**91.0**			02/21/2013	DLC
Hexane - BSD	NWVPH	**98.0**	**7**		02/21/2013	DLC

ALS Test Batch ID: 3491 - Water by NWTPH-DX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range - BS	NWTPH-DX	**86.6**			02/19/2013	EBS
TPH-Diesel Range - BSD	NWTPH-DX	**85.1**	**2**		02/19/2013	EBS

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE:	3/20/2013
		ALS SDG#:	EV13020091
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Stephen Bentsen		
CLIENT PROJECT:	Harris Ave Shipyard		

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: R80330 - Water by NWEPH

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
>C8-C10 Aliphatics - BS	NWEPH	**75.0**			02/22/2013	EBS
>C8-C10 Aliphatics - BSD	NWEPH	**72.0**	**4**		02/22/2013	EBS
>C10-C12 Aliphatics - BS	NWEPH	**89.0**			02/22/2013	EBS
>C10-C12 Aliphatics - BSD	NWEPH	**85.0**	**5**		02/22/2013	EBS
>C12-C16 Aliphatics - BS	NWEPH	**96.0**			02/22/2013	EBS
>C12-C16 Aliphatics - BSD	NWEPH	**92.0**	**4**		02/22/2013	EBS
>C16-C21 Aliphatics - BS	NWEPH	**97.0**			02/22/2013	EBS
>C16-C21 Aliphatics - BSD	NWEPH	**92.0**	**5**		02/22/2013	EBS
>C21-C34 Aliphatics - BS	NWEPH	**109**			02/22/2013	EBS
>C21-C34 Aliphatics - BSD	NWEPH	**104**	**5**		02/22/2013	EBS
>C8-C10 Aromatics - BS	NWEPH	**85.0**			02/22/2013	EBS
>C8-C10 Aromatics - BSD	NWEPH	**86.0**	**1**		02/22/2013	EBS
>C10-C12 Aromatics - BS	NWEPH	**91.0**			02/22/2013	EBS
>C10-C12 Aromatics - BSD	NWEPH	**92.0**	**1**		02/22/2013	EBS
>C12-C16 Aromatics - BS	NWEPH	**96.0**			02/22/2013	EBS
>C12-C16 Aromatics - BSD	NWEPH	**97.0**	**1**		02/22/2013	EBS
>C16-C21 Aromatics - BS	NWEPH	**97.0**			02/22/2013	EBS
>C16-C21 Aromatics - BSD	NWEPH	**98.0**	**1**		02/22/2013	EBS
>C21-C34 Aromatics - BS	NWEPH	**90.0**			02/22/2013	EBS
>C21-C34 Aromatics - BSD	NWEPH	**91.0**	**1**		02/22/2013	EBS

ALS Test Batch ID: 3479 - Water by EPA-8260

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
1,1-Dichloroethene - BS	EPA-8260	**114**			02/18/2013	GAP
1,1-Dichloroethene - BSD	EPA-8260	**109**	**4**		02/18/2013	GAP
Benzene - BS	EPA-8260	**116**			02/18/2013	GAP
Benzene - BSD	EPA-8260	**104**	**10**		02/18/2013	GAP
Trichloroethene - BS	EPA-8260	**109**			02/18/2013	GAP
Trichloroethene - BSD	EPA-8260	**104**	**4**		02/18/2013	GAP
Toluene - BS	EPA-8260	**107**			02/18/2013	GAP
Toluene - BSD	EPA-8260	**103**	**4**		02/18/2013	GAP
Chlorobenzene - BS	EPA-8260	**110**			02/18/2013	GAP
Chlorobenzene - BSD	EPA-8260	**105**	**4**		02/18/2013	GAP

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Floyd Snider Inc. 601 Union St., Suite 600 Seattle, WA 98101	DATE:	3/20/2013
		ALS SDG#:	EV13020091
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Stephen Bentsen		
CLIENT PROJECT:	Harris Ave Shipyard		

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 3500 - Water by EPA-8270

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Phenol - BS	EPA-8270	**24.1**			02/22/2013	LAP
Phenol - BSD	EPA-8270	**28.8**	**18**		02/22/2013	LAP
2-Chlorophenol - BS	EPA-8270	**77.5**			02/22/2013	LAP
2-Chlorophenol - BSD	EPA-8270	**82.9**	**7**		02/22/2013	LAP
1,4-Dichlorobenzene - BS	EPA-8270	**86.4**			02/22/2013	LAP
1,4-Dichlorobenzene - BSD	EPA-8270	**71.6**	**19**		02/22/2013	LAP
N-Nitroso-Di-N-Propylamine - BS	EPA-8270	**71.3**			02/22/2013	LAP
N-Nitroso-Di-N-Propylamine - BSD	EPA-8270	**79.7**	**11**		02/22/2013	LAP
1,2,4-Trichlorobenzene - BS	EPA-8270	**91.1**			02/22/2013	LAP
1,2,4-Trichlorobenzene - BSD	EPA-8270	**79.1**	**14**		02/22/2013	LAP
4-Chloro-3-Methylphenol - BS	EPA-8270	**74.3**			02/22/2013	LAP
4-Chloro-3-Methylphenol - BSD	EPA-8270	**86.5**	**15**		02/22/2013	LAP
4-Nitrophenol - BS	EPA-8270	**18.6**			02/22/2013	LAP
4-Nitrophenol - BSD	EPA-8270	**13.3**	**34**		02/22/2013	LAP
2,4-Dinitrotoluene - BS	EPA-8270	**83.2**			02/22/2013	LAP
2,4-Dinitrotoluene - BSD	EPA-8270	**81.1**	**3**		02/22/2013	LAP
Pentachlorophenol - BS	EPA-8270	**77.9**			02/22/2013	LAP
Pentachlorophenol - BSD	EPA-8270	**75.1**	**4**		02/22/2013	LAP

APPROVED BY

Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

ALS ENVIRONMENTAL

Sample Receiving Checklist

Client: Floyd Snider ALS Job #: EV13020091

Project: Harris Ave Shipyard

Received Date: 2/15/13 Received Time: 18:55 By: RB

Type of shipping container: Cooler X=5 Box ___ Other ___

Shipped via: UPS/FedEx ___ US Postal Service ___ Courier ___ Hand Delivered X

	Yes	No	N/A
Were custody seals on outside of sample?		X	
If yes, how many? ___ Where? ___			
Custody seal date: ___ Seal name: ___			
Was Chain of Custody properly filled out (ink, signed, dated, etc.)?	X		
Did all bottles have labels?	X		
Did all bottle labels and tags agree with Chain of Custody?	X		
Were samples received within hold time?	X		
Did all bottles arrive in good condition (unbroken, etc.)?	~~X~~	X	
Was sufficient amount of sample sent for the tests indicated?	~~X~~	X	
Was correct preservation added to samples?	X		

If no, Sample Control added preservative to the following:

Sample Number	Reagent	Analyte

	Yes	No	N/A
Were VOA vials checked for absence of air bubbles?	X		

Bubbles present in sample #: None

Temperature of cooler upon receipt: 0.5° 2.6° 5.1° 5.7° 3.1° Cold Cool Ambient N/A

All on Ice

Explain any discrepancies:

Lid broken on 1 bottle. Still usable. Replaced cap & lab & Only 2 was received for #8 + requesting 6x BTEX, DX, PAH, SVOC, VOC.

Was client contacted? ~~No~~ Yes Who was called? Stephen By whom? Rick Date: 2/18/13

Outcome of call: ___

ALS Environmental
8620 Holly Drive, Suite 100
Everett, WA 98208
Phone (425) 356-2600
Fax (425) 356-2626
http://www.alsglobal.com

Chain Of Custody/ Laboratory Analysis Request

ALS Job# (Laboratory Use Only) EV13020091

Date 2/15/2013 Page 2 Of 2

PROJECT ID: Harris Ave Shipyard
REPORT TO COMPANY: Floyd|Snider Inc.
PROJECT MANAGER: Stephen Bentsen
ADDRESS: Two Union Square, 601 Union St., Ste 600 Seattle, WA 98101
PHONE: (206) 292-2078 FAX:
P.O. #: POB Harris E-MAIL: stephen.bentsen@floydsnider.com
INVOICE TO COMPANY: Floyd|Snider
ATTENTION: Stephen Bentsen
ADDRESS: 601 Union St, Ste 600 Seattle, WA 98101

ANALYSIS REQUESTED / OTHER (Specify)

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-DX (2-500ml)	NWTPH-GX (2-40ml VOA)	BTEX by EPA-8021 "	MTBE by EPA-8021 ☐ EPA-8260 ☐	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260 (3-40ml VOA)	EDB / EDC by EPA 8260 SIM (water)	EDB / EDC by EPA 8260 (soil)	Semivolatile Organic Compounds by EPA 8270 / SIM 2-1L (SVOCs)	Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM ☐	PCB ☐ Pesticides ☐ by EPA 8081/8082	Metals-MTCA-5 ☐ RCRA-8 ☐ Pri Pol ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	VPH/EPH (2-40ml VOA + 1L glass)	HOLD					NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. ~~MW-06-GW-021513~~	2/15/13	1150	GW	9		~~X~~	~~X~~	~~X~~	RER		~~X~~			~~X~~		RER				~~X~~ RER	X						
2. MW-01-GW-021513	2/15/13	1305	GW	10		X	X	X			X			X						X							
3. MW-02A-GW-021513	2/15/13	1450	GW	11		X	X	X			X			X													
4. MW-09-GW-021513	2/15/13	1630	GW	12		X	X	X			X			X						X							
5.																											
6.																											
7.																											
8.																											
9. * Note - all samples contain the requested number of samples																											
10. except MW-09-GW-021513 where the sample volume ⊕ is 50% of what was requested																											

RER

SPECIAL INSTRUCTIONS by lab, but should be adequate for analyses. Please adjust/share sample volumes to maximize analytical quality as possible.
⊕ for SVOCS, TPHdx, EPH

SIGNATURES (Name, Company, Date, Time):
1. Relinquished By: Rachel Elena Ramirez, R. Ramirez Floyd|Snider 2/15/13 1855
Received By: [signature] ALS 2/15/13 1855
2. Relinquished By:
Received By:

TURNAROUND REQUESTED in Business Days*
Organic, Metals & Inorganic Analysis
☒ 10 Standard ☐ 5 ☐ 3 ☐ 2 ☐ 1 ☐ SAME DAY
Fuels & Hydrocarbon Analysis
☒ Standard ☐ 3 ☐ 1 ☐ SAME DAY
OTHER:
Specify:

* Turnaround request less than standard may incur Rush Charges

LABORATORY COPY

ALS Environmental
8620 Holly Drive, Suite 100
Everett, WA 98208
Phone (425) 356-2600
Fax (425) 356-2626
http://www.alsglobal.com

Chain Of Custody/ Laboratory Analysis Request

ALS Job# (Laboratory Use Only) EV13020091

Date 2/14/13 Page 1 Of 2

PROJECT ID: HARRIS AVE SHIPYARD
REPORT TO COMPANY: FLOYD SNIDER
PROJECT MANAGER: Stephen Bentsen
ADDRESS: TWO UNION SQUARE
601 UNION STE 600 SEATTLE WA 98101
PHONE: 206 292-2078 FAX:
P.O. #: FDB-HARRIS E-MAIL: stephen.bentsen@floydsnider.com
INVOICE TO COMPANY:
ATTENTION: SAA
ADDRESS:

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA-8021	MTBE by EPA-8021 ☐ EPA-8260 ☐	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	EDB / EDC by EPA 8260 SIM (water)	EDB / EDC by EPA 8260 (soil)	Semivolatile Organic Compounds by EPA 8270 / SIM	Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM	PCB ☐ Pesticides ☐ by EPA 8081/8082	Metals-MTCA-5 ☐ RCRA-8 ☐ Pri Pol ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	EPH / VPH	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. MW-10-GW-021413	2/14/13	1505	GW	1		X	X	X			X			X								
2. MW-06-GW-021413	2/14/13	1630	GW	2		X	X	X			X			X						X		
3. MW-94-GW-021413	2/14/13	1640	GW	3		X	X	X			X			X						X		
4. ~~SFS-01-0.0-0.5-021413~~	~~"~~	~~1500~~	LM																			
5. ~~SFS-99-0-5-021413~~	~~"~~	~~152~~	LM																			
6. MW-04-GW-021413	2/14/13	1610	GW	4		X	X	X			X			X								
7. MW-05-GW-021413	"	1310	GW	5		X	X	X			X			X								
8. MW-07-GW-021413	"	1725	GW	6		X	X	X			X			X								
9. MW-08-GW-021413	"	1440	GW	7		X	X	X			X			X								
10. MW-06-TB-021413	"	1300	GW	8		X	X	X			X			X								

R2

LABORATORY COPY

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: Rachel Elena Ramirez, RR Floyd|Snider 2/15/13 1855

Received By: [signature] ALS 2/15/13 18:55

2. Relinquished By:

Received By:

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis: ☒ 10 (Standard) ☐ 5 ☐ 3 ☐ 2 ☐ 1 ☐ SAME DAY

Fuels & Hydrocarbon Analysis: ☒ 5 (Standard) ☐ 3 ☐ 1 ☐ SAME DAY

OTHER:
Specify: Please discuss "HELD" Samples w/ PM upon processing.

* Turnaround request less than standard may incur Rush Charges

Table of Contents: ARI Job WC32, WC33

Client: Floyd-Snider

Project: T.4030 POB-Harris

AY
Signature

February-15-2013
Date

Table of Contents: ARI Job WC32, WC33

Client: Floyd-Snider

Project: T.4030 POB-Harris

AV
Signature

February-15-2013
Date

Analytical Resources, Incorporated
Analytical Chemists and Consultants

February 21, 2013

Stephen Bentsen
Floyd-Snider Inc.
601 Union Street, Suite 600
Seattle, WA 98101-2341

RE: Client Project: POB Harris T. 4030
ARI Job No.: WC32 and WC33

Dear Stephen:

Please find enclosed the original Chain-of-Custody record (COC), sample receipt documentation, and the final data package for samples from the project referenced above.

Sample receipt and detail of these analyses are discussed in the Case Narrative.

An electronic copy of this package will remain on file with ARI. Should you have any questions or problems, please feel free to contact me at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.

Kelly Bottem
Client Services Manager
kellyb@arilabs.com
206-695-6211

Enclosures

cc: eFile WC32 and WC33

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

Chain of Custody Documentation

ARI Job ID: WC32, WC33

Chain of Custody Record & Laboratory Analysis Request

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

ARI Assigned Number:

Turn-around Requested: Standard

Page: 2 of 2

ARI Client Company: Floyd | Snider

Phone: 206-292-2078

Date: 2/1/13

Ice Present?

Client Contact: Stephen Bentsen

No. of Coolers:

Cooler Temps:

Client Project Name: POB-Harris

Client Project #: POB-Harris T. 4030

Samplers: Erin M. / Elena R.

Sample ID	Date	Time	Matrix	No Containers	Grainsize PSEP 1997	Metals (SMS) EPA 6010B Hg 7471B	TOC EPA 9060	Total Solids SM2540B/PSEP	Tot. Porosity ASTM 7263	Moisture Cont. ASTM 2216	Bulk Density ASTM 2937	Fraction Organic Carbon ASTM D-2974	Notes/Comments
HA-09-10-20-013013	1/30/13	1435	S	3									Archive
HA-10-0-10-013013	1/30/13	1645	S	2	X	X		X					
HA-11-0-10-013013	1/30/13	1620	S	2	X	X		X					
FS-22-11.5-12.0-013013	1/30/13	1540	S	1								X	
FS-22-12.0-12.5-013013	1/30/13	1540	S	1					X	X	X		
FS-78-11.5-12.0-013013	1/30/13	1540	S	1								X	
				erm									

Comments/Special Instructions	Relinquished by	Received by	Relinquished by	Received by
	(Signature)	(Signature)	(Signature)	(Signature)
	Printed Name: Erin Murray	Printed Name: A. Valgardsen	Printed Name:	Printed Name:
	Company: Floyd / Snider	Company: ARI	Company:	Company:
	Date & Time: 2/1/13 1000	Date & Time: 2/1/13 1201	Date & Time:	Date & Time:

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Chain of Custody Record & Laboratory Analysis Request

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

ARI Assigned Number: WC32	Turn-around Requested: Standard	Page: 1	of 3
ARI Client Company: Floyd/Snider	Phone: 206-292-2078	Date: 1/31/13	Ice Present?
Client Contact: Stephen Benton		No. of Coolers:	Cooler Temps:
Client Project Name: POB-Harris			
Client Project #: POB Harris T. 4030	Samplers: Erin Murray/Elena Ramirez		

Analysis Requested

Sample ID	Date	Time	Matrix	No. Containers	Grain size PSEP 1997	TOC EPA 9060	Total Solids SM2540/PSEP	Metals (SMS) EPA 6010B Hg EPA 7471B	SVOCs (SMS) EPA 8270/SIM DD/8081A	PCBs EPA 8082A	Dioxins/Furans EPA 1613B		Notes/Comments
SG-12-0-10-013113	1/31/13	0735	S	4	X	X	X		X		X		
SG-12-10-20-013113		0940		4									Archive
SG-13-0-10-013113		1010		4	X	X	X		X		X		
SG-13-10-20-013113		1020		4									Archive
SG-07~~10~~SIM-0-10-013113		1105		4	X	X	X		X		X		
SG-07-10-20-013113		1110		4									Archive
SG-06-0-10-013113		1140		4	X	X	X		X		X		
SG-06-10-20-013113		1150		4									Archive
SG-94-0-10-013113		1140		1							X		
SG-05-0-10-013113		1215		3	X	X	X	X	X	X			

Comments/Special Instructions	Relinquished by	Received by	Relinquished by	Received by
	(Signature) [signature]	(Signature) [signature]	(Signature)	(Signature)
	Printed Name: Erin Murray	Printed Name: A. Volgardsen	Printed Name:	Printed Name
	Company: Floyd/Snider	Company: ARI	Company:	Company
	Date & Time: 2/1/13 1010	Date & Time: 2/1/13 1201	Date & Time:	Date & Time

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Chain of Custody Record & Laboratory Analysis Request

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

ARI Assigned Number:

Turn-around Requested: Standard

Page: 2 of 3

ARI Client Company: Floyd|Snider

Phone: 206-292-2078

Date: 1/31/13

Ice Present?

Client Contact: Stephen Bentsen

No. of Coolers:

Cooler Temps:

Client Project Name: POB - Harris

Client Project #: POB - Harris T.4030

Samplers: Erin Murray / Elena Ramirez

Sample ID	Date	Time	Matrix	No Containers	Grainsize PSEP 1997	TOC EPA 9060	Total Solids SM 2540/PSEP	Metals (SMS) EPA 6010B Hg EPA 7471B	SVOCs (SMS) EPA 8270M/SIM DD / 8081A	PCBs EPA 8082A	Dioxins/Furans EPA 1613B		Notes/Comments
SG-05-10-20-013113	1/31/13	1235	S	3									Archive
SG-95-0-10-013113		1215	S	3	X	X	X	X	X	X			
SG-08-0-10-013113		1255	S	5	X	X	X	X	X	X			MS/MSD on SVOCs and PCBs.
SG-08-10-20-013113		1300	S	3									Archive
SG-09-0-10-013113		1325	S	3	X	X	X	X	X	X			
SG-09-10-20-013113		1330	S	3									Archive
SG-10-0-10-013113		1400	S	3	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~ EM			Archive
SG-10-10-20-013113		1410	S	3									Archive
SG-11-0-10-013113		1425	S	3									Archive
SG-11-10-20-013113	↓	1435	S	3									Archive

Comments/Special Instructions

Relinquished by	Received by	Relinquished by	Received by
(Signature) [signature]	(Signature) [signature]	(Signature)	(Signature)
Printed Name: Erin Murray	Printed Name: A. Volgardsen	Printed Name:	Printed Name:
Company: Floyd/Snider	Company: ARI	Company:	Company:
Date & Time: 2/1/13 1010	Date & Time: 2/1/13 1201	Date & Time:	Date & Time:

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Chain of Custody Record & Laboratory Analysis Request

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

ARI Assigned Number:	Turn-around Requested: Standard	Page: 3 of 3	
ARI Client Company: Floyd/Snider	Phone: 206-292-2078	Date: 1/31/13	Ice Present?
Client Contact: Stephen Bentsen		No. of Coolers:	Cooler Temps:
Client Project Name: POB-Harris			
Client Project #: POB-Harris T.4130	Samplers: Erin Murray/Glenn Ramirez		

Sample ID	Date	Time	Matrix	No Containers	SVOCs (SIMS) 8270	PCBs EPA 8082A							Notes/Comments
~~PBW~~ EM													
SG-05-ER-013113	1/31/13	1455	W	2	X	X							
					EM								

Comments/Special Instructions	Relinquished by: (Signature)	Received by: (Signature)	Relinquished by: (Signature)	Received by: (Signature)
	Printed Name: Erin Murray	Printed Name: A. Volgardsen	Printed Name:	Printed Name:
	Company: Floyd/Snider	Company: ARI	Company:	Company:
	Date & Time: 2/1/13 1010	Date & Time: 2/1/13 1201	Date & Time:	Date & Time:

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: Floyd Snider
COC No(s) ______ NA
Assigned ARI Job No: WC32

Project Name: POB-Harris
Delivered by: Fed-Ex UPS Courier Hand Delivered Other ______
Tracking No. ______ NA

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler?	YES	NO
Were custody papers included with the cooler?	YES	NO
Were custody papers properly filled out (ink, signed, etc.)	YES	NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry): 4.3 3.0 1.6 3.0
If cooler temperature is out of compliance fill out form 00070F
Temp Gun ID#: 90877952
Cooler Accepted by: AV Date: 2/1/13 Time: 1201

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		YES	NO

What kind of packing material was used? Bubble Wrap Wet Ice Gel Packs Baggies Foam Block Paper Other: ______

Was sufficient ice used (if appropriate)?	NA	YES	NO
Were all bottles sealed in individual plastic bags?		YES	NO
Did all bottles arrive in good condition (unbroken)?		YES	NO
Were all bottle labels complete and legible?		YES	NO
Did the number of containers listed on COC match with the number of containers received?		YES	NO
Did all bottle labels and tags agree with custody papers?		~~YES~~ AV	NO
Were all bottles used correct for the requested analyses?		YES	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)	NA	YES	NO
Were all VOC vials free of air bubbles?	NA	YES	NO
Was sufficient amount of sample sent in each bottle?		YES	NO
Date VOC Trip Blank was made at ARI	NA	______	

Was Sample Split by ARI: NA YES Date/Time: ______ Equipment: ______ Split by: ______

Samples Logged by: AV Date: 2/1/13 Time: 1600

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

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC
SG-09-10-20 013113	SG-09-10-20 013113		

Additional Notes, Discrepancies, & Resolutions:

By: Date:

Small Air Bubbles ~2mm	Peabubbles 2-4 mm	LARGE Air Bubbles > 4 mm

Small → "sm"
Peabubbles → "pb"
Large → "lg"
Headspace → "hs"

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: WC33	Turn-around Requested: Standard	Page: 1 of 2	
ARI Client Company: Floyd/Snider	Phone: 206-292-2078	Date: 1/29/13	Ice Present?
Client Contact: Stephen Bentsen		No. of Coolers:	Cooler Temps:
Client Project Name: POB - Harris			
Client Project #: T 4050	Samplers: Erin M / Ryan R.		

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

Analysis Requested

Sample ID	Date	Time	Matrix	No Containers	Tot. Porosity ASTM-~~2~~3	Moisture Content ASTM 2216	Bulk Density ASTM-2937	Fraction Organic Carbon ASTM-2974	Dioxin/Furan EPA 1613B	Grain Size PSEP 1997	Metals 6010B Hg 7471B	TOC EPA 9060	SVOCs EPA 8270 SIM 8081A (SMS)	PCBs EPA 8082A	Total Solids SMS 9.40/PSEP	Notes/Comments
FS-19-0-0.5-012913	1/29/13	0935	S	1				X								
FS-19-8.0-8.5-012913		0930	S	1	X	X	X									
FS-19-14.0-14.5-012913		1030	S	1				X								
FS-19-14.5-22.0-012913		1050	S	1	X	X	X									
SFS-01-012913		1555	S	1					X							Archive per call from client
SFS-99-012913		1600	S	1					X							Archive
SFS-02-012913	1/29/13	1605	S	1					X							
FS-21-0-0.5-013013	1/30/13	0820	S	1					X							
~~FS-21-0-0.5-013013~~	~~1/30/13~~															
HA-09-0-10-013013	1/30/13	1430	S	3						X	X	X	X	X	X	

Comments/Special Instructions	Relinquished by	Received by	Relinquished by	Received by
	(Signature) [signature]	(Signature) [signature]	(Signature)	(Signature)
	Printed Name: Erin Murray	Printed Name: A. Volgardsen	Printed Name	Printed Name
	Company: Floyd/Snider	Company: ARI	Company	Company
	Date & Time: 2/1/13 1000	Date & Time: 2/1/13 1201	Date & Time:	Date & Time:

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: Floyd Snider
COC No(s): NA
Assigned ARI Job No: WC33

Project Name: POB-Harris
Delivered by: Fed-Ex UPS Courier Hand Delivered Other:
Tracking No: NA

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler? YES NO

Were custody papers included with the cooler? YES NO

Were custody papers properly filled out (ink, signed, etc.) YES NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry) 4.3 3.0 1.6 3.0

If cooler temperature is out of compliance fill out form 00070F

Temp Gun ID#: 90877952

Cooler Accepted by: AV Date: 2/1/13 Time: 1201

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler? YES NO

What kind of packing material was used? Bubble Wrap Wet Ice Gel Packs Baggies Foam Block Paper Other:

Was sufficient ice used (if appropriate)? NA YES NO

Were all bottles sealed in individual plastic bags? YES NO

Did all bottles arrive in good condition (unbroken)? YES NO

Were all bottle labels complete and legible? YES NO

Did the number of containers listed on COC match with the number of containers received? YES NO

Did all bottle labels and tags agree with custody papers? YES NO

Were all bottles used correct for the requested analyses? YES NO

Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs) NA YES NO

Were all VOC vials free of air bubbles? NA YES NO

Was sufficient amount of sample sent in each bottle? YES NO

Date VOC Trip Blank was made at ARI. NA

Was Sample Split by ARI NA YES Date/Time ______ Equipment ______ Split by: ______

Samples Logged by: AV Date: 2/1/13 Time: 1620

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

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

Additional Notes, Discrepancies, & Resolutions:

By: Date:

Small Air Bubbles ~2mm	Peabubbles 2-4 mm	LARGE Air Bubbles > 4 mm

Small → "sm"
Peabubbles → "pb"
Large → "lg"
Headspace → "hs"

Case Narrative, Data Qualifiers, Control Limits

ARI Job ID: WC32, WC33

Case Narrative
Project: POB-Harris T.4030
ARI Job No.: WC32 and WC33
February 21, 2013

Sample Receipt:

Please find enclosed the original Chain-of-Custody (COC) records, sample receipt documentation, and the analytical results for the project referenced above. Analytical Resources, Inc. (ARI) accepted thirty five sediment samples and one water sample in good condition on February 1, 2013. The samples were received with cooler temperatures between 1.6 and 4.3°C. For further details regarding sample receipt, please refer to the Cooler Receipt Form. Several samples have been placed on hold pending further instructions.

Semivolatile Organics by Method 8270D:

The laboratory extracted the samples on 2/6/13 and 2/8/13 and the extracts were analyzed between 2/7/13 and 2/16/13 within the method recommended holding time.

Initial calibration (s): Are in control.

Continuing calibration (s): The sediment 2/15/13 continuing calibration (CCAL) fell outside the 20% control limit low for Pentachlorophenol. All detected results associated with this CCAL have been flagged with a "Q" qualifier. No further corrective action was taken.

The sediment 2/16/13 continuing calibration (CCAL) fell outside the 20% control limit low for Pentachlorophenol and Benzoic acid and out of control high for Diethylphthalate. All detected results associated with this CCAL have been flagged with a "Q" qualifier. No further corrective action was taken.

Samples: There were no anomalies associated with these samples.

Surrogates: All surrogate recoveries were in control.

LCS/LCSD (s): The sediment LCS is out of control low for Benzo (g,h,i)perylene. The LCSD and all percent recoveries and RPDs for the analytes of interest were within compliance and no further corrective action was taken.

Method Blank: The sediment method blank contained bis (2-Ethylhexyl)phthalate. All associated samples that contain analyte have been flagged with a "B" qualifier.

Matrix spike/ Matrix spike duplicate/RPD (s): Several matrix spike and matrix spike duplicate percent recoveries were outside advisory control limits of 30-160% with wide RPDs for sample SG-08-0-10-013113. No corrective action is required for matrix QC.

SIM Semivolatile Organics by Method 8270D:

The laboratory extracted the samples on 2/8/13 and analyzed on 2/15/13 and 2/16/13 within the method recommended holding time.

Initial calibration (s): Are in control.

Continuing calibration (s): The 2/15/13 and 2/16/13 continuing calibration (CCALs) fell outside the 20% control limit low for Pentachlorophenol and out of control high for Butylbenzylphthalate and Dibenzo(a,h)anthracene. All detected results associated with this CCAL have been flagged with a "Q" qualifier. No further corrective action was taken.

Samples: There were no anomalies associated with these samples.

Surrogates: All surrogate recoveries were in control.

LCS/LCSD (s): All percent recoveries and RPDs for the analytes of interest were within compliance.

Method Blank: The method blank was free of contamination.

Matrix spike/ Matrix spike duplicate/RPD (s): The matrix spike recoveries of Dibenzo(a,h) anthracene fell outside advisory control limits of 30-160% with several wide RPDs for samples SG-08-0-10-013113. No corrective action is required for matrix QC.

Dioxin/Furans by EPA 1613B

The sample and associated laboratory QC were prepared and analyzed within the method recommended holding times.

Analysis was performed using the application specific RTX-Dioxin 2 column, which has a unique elution order and selectivity for the target compounds, as well as a unique isomer separation for the 2378-TCDF. A resolution test mixture was designed specifically for this column, consisting of 2348-TCDF, 2378-TCDF and 3467-TCDF to evaluate the method required minimum valley between isomer of 25%. Use of the RTX-Dioxin2 column eliminates the need for second column confirmation.

Initial and continuing calibration results were within method requirements.

The method blank had hits below the RL. Associated sample results that have ten times over the concentrations found in the method blank have been flagged with a "B" qualifier. The OPR (Ongoing Precision and Accuracy or LCS) sample percent recoveries were within control limits.

The percent recoveries for all preparation and cleanup surrogates were within established QC limits.

Select results have has been flagged with an "X" on the Form I's due to indication of a co-eluting PDBE.

The TEQ was calculated with WHO2005 with both ND=0 for undetects (flagged "U") and ND= ½ EDL. The TEC includes EMPC values in the calculation.

Pesticides by Method 8081:

The laboratory extracted the samples on 2/8/13 and the extracts were analyzed between 2/14/13 within the method recommended holding time.

Initial calibration (s): Are in control.

Continuing calibration (s): Are in control.

Samples: There were no anomalies associated with these samples.

Surrogates: All surrogate recoveries were in control.

LCS/LCSD (s): All percent recoveries and RPDs for the analytes of interest were within compliance.

Method Blank: The method blank was free of contamination.

Matrix spike/ Matrix spike duplicate/RPD (s): The matrix spike duplicate percent recoveries are out of control high for Hexachlorobenzene with wide RPDs in association with sample SG-08-0-10-013113.

Aroclor PCBs by Method 8082:

The laboratory extracted the samples on 2/6/13 and 2/8/13 and analyzed between 2/9/13 and 2/10/13 within the method recommended holding time.

Initial calibration (s): Are in control.

Continuing calibration (s): Are in control.

Samples: There were no anomalies associated with these samples.

Surrogates: All surrogate recoveries were in control.

LCS/LCSD (s): All percent recoveries and RPDs for the analytes of interest were within compliance.

Method Blank: The method blank was free of contamination.

Matrix spike/ Matrix spike duplicate/RPD (s): The matrix spike percent recoveries are out of control high for aroclor 1016 and 1260 with wide RPDs in association with sample SG-08-0-10-013113.

Metals by Method 6010C and 7471A:

The samples were digested on 2/5/13 and analyzed on 2/6/13 within the recommended holding time.

Initial calibration (s): All analytes were within method acceptance criteria.

Continuing calibration (s): All analytes of interest were within method acceptance criteria.

WC32: 00013 AY 2/22/13

Samples: There were no anomalies with these samples.

Method Blank(s): All method blanks were free of contamination.

Blank Spike: All percent recoveries and RPDs were in control.

Matrix spike/Duplicate RPDs: Are in control.

General Chemistry Analysis:

The samples were analyzed between 2/4/13 and 2/13/13 within the recommended holding time.

Initial calibration (s): All analytes were within method acceptance criteria.

Continuing calibration (s): All analytes of interest were within method acceptance criteria.

Samples: There were no anomalies with these samples.

Method Blank(s): All method blanks were free of contamination.

SRM/ LCS: All percent recoveries were in control.

Matrix spike/Replicate RPD (s): Are in control.

Geotechnical Analysis:

A laboratory-specific narrative follows this page.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Client: Floyd-Snider	**ARI Job No.:** WC32
Client Project: POB-Harris	**Client Project No.:** POCB HARRIS T.4030

Case Narrative

1. Eight samples were submitted for grain size analysis according to Puget Sound Estuary Protocol (PSEP) methodology on February 1, 2013.
2. The samples were run in a single batch and one sample from this job was chosen for triplicate analysis. The triplicate data is reported on the QA summary.
3. Two samples did not contain the required 5 grams of fines for the pipette portion of the analysis. The analytical balance has a capacity of about 200 grams (by 0.0001 grams) and a sample that would yield 5 grams of fines could not be split and stay within the capacity of the balance. These samples have been qualified on the QA summary.
4. Three samples contained woody or other organic matter which may have broken down during the sieving process, affecting the grain size analysis.
5. Four samples contained shell fragments.
6. The data is provided in summary tables and plots.
7. There were no other noted anomalies in this project.

Released by: [signature] Date: February 13, 2013
Technician

Reviewed by: [signature] Date: 2/13/13
Geotechnical Division Manager

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Client: Floyd-Snider	**ARI Project No.:** WC33
Client Project: POB-Harris	**Client Project No.:** T.4030

Case Narrative

1. Ten samples were submitted for analysis on February 1, 2013.
2. Three samples were submitted for wet/bulk density, dry density determination, specific gravity, moisture content and porosity.
3. The wet/bulk density and dry density determination was run according ASTM D2937.
4. Specific gravity was run according to ASTM D854.
5. Moisture content determination was run according to ASTM D2216.
6. Porosity was determined according to EPA SW9100.
7. Four samples were submitted for loss on ignition determination according to ASTM D2974, method A and C. This data is reported in percent.
8. Three samples were submitted for grain size analysis according to Puget Sound Estuary Protocol (PSEP) methodology. The samples were run in a single batch and one sample from another job was chosen for triplicate analysis. The triplicate data is reported on the QA summary. The samples did not contain the required 5 grams of fines for the pipette portion of the analysis. The analytical balance has a capacity of about 200 grams (by 0.0001 grams) and a sample that would yield 5 grams of fines could not be split and stay within the capacity of the balance. These samples have been qualified on the QA summary. The samples contained shell fragments which may have broken down during the sieving process, affecting the grain size analysis.
9. The data is provided in summary tables and plots.
10. There were no further anomalies in the sample or test methods.

Released by: [signature]
Technician

Date: February 13, 2013

Reviewed by: [signature]
Geotechnical Division Manager

Date: 2/13/13

Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: WC32
Client: Floyd-Snider
Project Event: POCB HARRIS T.4030
Project Name: POB-Harris

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	SG-12-0-10-013113	WC32A	13-2424	Sediment	01/31/13 09:35	02/01/13 12:01
2.	SG-13-0-10-013113	WC32B	13-2425	Sediment	01/31/13 10:10	02/01/13 12:01
3.	SG-07-0-10-013113	WC32C	13-2426	Sediment	01/31/13 11:05	02/01/13 12:01
4.	SG-06-0-10-013113	WC32D	13-2427	Sediment	01/31/13 11:40	02/01/13 12:01
5.	SG-05-0-10-013113	WC32E	13-2428	Sediment	01/31/13 12:15	02/01/13 12:01
6.	SG-95-0-10-013113	WC32F	13-2429	Sediment	01/31/13 12:15	02/01/13 12:01
7.	SG-08-0-10-013113	WC32G	13-2430	Sediment	01/31/13 12:55	02/01/13 12:01
8.	SG-09-0-10-013113	WC32H	13-2431	Sediment	01/31/13 13:25	02/01/13 12:01
9.	SG-05-ER-013113	WC32I	13-2432	Water	01/31/13 14:55	02/01/13 12:01
10.	SG-12-10-20-013113	WC32J	13-2433	Sediment	01/31/13 09:40	02/01/13 12:01
11.	SG-13-10-20-013113	WC32K	13-2434	Sediment	01/31/13 10:20	02/01/13 12:01
12.	SG-07-10-20-013113	WC32L	13-2435	Sediment	01/31/13 11:10	02/01/13 12:01
13.	SG-06-10-20-013113	WC32M	13-2436	Sediment	01/31/13 11:50	02/01/13 12:01
14.	SG-94-0-10-013113	WC32N	13-2437	Sediment	01/31/13 11:40	02/01/13 12:01
15.	SG-05-10-20-013113	WC32O	13-2438	Sediment	01/31/13 12:35	02/01/13 12:01
16.	SG-08-10-20-013113	WC32P	13-2439	Sediment	01/31/13 13:00	02/01/13 12:01
17.	SG-09-10-20-013113	WC32Q	13-2440	Sediment	01/31/13 13:30	02/01/13 12:01
18.	SG-10-0-10-013113	WC32R	13-2441	Sediment	01/31/13 14:00	02/01/13 12:01
19.	SG-10-10-20-013113	WC32S	13-2442	Sediment	01/31/13 14:10	02/01/13 12:01
20.	SG-11-0-10-013113	WC32T	13-2443	Sediment	01/31/13 14:25	02/01/13 12:01
21.	SG-11-10-20-013113	WC32U	13-2444	Sediment	01/31/13 14:35	02/01/13 12:01

Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: WC33
Client: Floyd-Snider
Project Event: T.4030
Project Name: POB-Harris

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	FS-19-6.0-6.5-012913	WC33A	13-2445	Sediment	01/29/13 09:35	02/01/13 12:01
2.	FS-19-8.0-8.5-012913	WC33B	13-2446	Sediment	01/29/13 09:30	02/01/13 12:01
3.	FS-19-19.0-19.5-012913	WC33C	13-2447	Sediment	01/29/13 10:30	02/01/13 12:01
4.	FS-19-19.5-20.0-012913	WC33D	13-2448	Sediment	01/29/13 10:30	02/01/13 12:01
5.	SFS-02-012913	WC33E	13-2449	Sediment	01/29/13 16:05	02/01/13 12:01
6.	FS-21-0-0.5-013013	WC33F	13-2450	Sediment	01/30/13 08:20	02/01/13 12:01
7.	HA-09-0-10-013013	WC33G	13-2451	Sediment	01/30/13 14:30	02/01/13 12:01
8.	HA-10-0-10-013013	WC33H	13-2452	Sediment	01/30/13 16:45	02/01/13 12:01
9.	HA-11-0-10-013013	WC33I	13-2453	Sediment	01/30/13 16:20	02/01/13 12:01
10.	FS-22-11.5-12.0-013013	WC33J	13-2454	Sediment	01/30/13 15:40	02/01/13 12:01
11.	FS-22-12.0-12.5-013013	WC33K	13-2455	Sediment	01/30/13 15:40	02/01/13 12:01
12.	FS-78-11.5-12.0-013013	WC33L	13-2456	Sediment	01/30/13 15:40	02/01/13 12:01
13.	SFS-01-012913	WC33M	13-2457	Sediment	01/29/13 15:55	02/01/13 12:01
14.	SFS-99-012913	WC33N	13-2458	Sediment	01/29/13 16:00	02/01/13 12:01
15.	HA-09-10-20-013013	WC33O	13-2459	Sediment	01/30/13 14:35	02/01/13 12:01

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Data Reporting Qualifiers

Effective 2/14/2011

Inorganic Data

U	Indicates that the target analyte was not detected at the reported concentration
*	Duplicate RPD is not within established control limits
B	Reported value is less than the CRDL but ≥ the Reporting Limit
N	Matrix Spike recovery not within established control limits
NA	Not Applicable, analyte not spiked
H	The natural concentration of the spiked element is so much greater than the concentration spiked that an accurate determination of spike recovery is not possible
L	Analyte concentration is ≤5 times the Reporting Limit and the replicate control limit defaults to ±1 RL instead of the normal 20% RPD

Organic Data

U	Indicates that the target analyte was not detected at the reported concentration
*	Flagged value is not within established control limits
B	Analyte detected in an associated Method Blank at a concentration greater than one-half of ARI's Reporting Limit or 5% of the regulatory limit or 5% of the analyte concentration in the sample.
J	Estimated concentration when the value is less than ARI's established reporting limits
D	The spiked compound was not detected due to sample extract dilution
E	Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.
Q	Indicates a detected analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20%Drift or minimum RRF).

S Indicates an analyte response that has saturated the detector. The calculated concentration is not valid; a dilution is required to obtain valid quantification of the analyte

NA The flagged analyte was not analyzed for

NR Spiked compound recovery is not reported due to chromatographic interference

NS The flagged analyte was not spiked into the sample

M Estimated value for an analyte detected and confirmed by an analyst but with low spectral match parameters This flag is used only for GC-MS analyses

M2 The sample contains PCB congeners that do not match any standard Aroclor pattern. The PCBs are identified and quantified as the Aroclor whose pattern most closely matches that of the sample. The reported value is an estimate.

N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification"

Y The analyte is not detected at or above the reported concentration. The reporting limit is raised due to chromatographic interference. The Y flag is equivalent to the U flag with a raised reporting limit.

EMPC Estimated Maximum Possible Concentration (EMPC) defined in EPA Statement of Work DLM02.2 as a value "calculated for 2,3,7,8-substituted isomers for which the quantitation and /or confirmation ion(s) has signal to noise in excess of 2.5, but does not meet identification criteria" **(Dioxin/Furan analysis only)**

C The analyte was positively identified on only one of two chromatographic columns. Chromatographic interference prevented a positive identification on the second column

P The analyte was detected on both chromatographic columns but the quantified values differ by ≥40% RPD with no obvious chromatographic interference

X Analyte signal includes interference from polychlorinated diphenyl ethers. **(Dioxin/Furan analysis only)**

Z Analyte signal includes interference from the sample matrix or perfluorokerosene ions **(Dioxin/Furan analysis only)**

Geotechnical Data

A — The total of all fines fractions. This flag is used to report total fines when only sieve analysis is requested and balances total grain size with sample weight.

F — Samples were frozen prior to particle size determination

SM — Sample matrix was not appropriate for the requested analysis. This normally refers to samples contaminated with an organic product that interferes with the sieving process and/or moisture content, porosity and saturation calculations

SS — Sample did not contain the proportion of "fines" required to perform the pipette portion of the grain size analysis

W — Weight of sample in some pipette aliquots was below the level required for accurate weighting

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DL[1] LOD[1], LOQ[1] and Control Limits Summary
GC - MS – SVOA Analysis of Sediment
EPA Method 8270 Full Scan & SIM

Microwave Extraction (EPA Method 3546, Bench Sheet 3093F) - 10 g sample with extract concentrated to 1 mL final volume

LOD Spike level = LOQ (unless otherwise noted)

Analyte	Full Scan Analysis			SIM Analysis			LCS,MS Control Limits (%)	RPD[2]
	DL (µg/kg)	LOD (µg/kg)	LOQ (µg/kg)	DL (µg/kg)	LOD (µg/kg)	LOQ (µg/kg)		
Phenol	8.65	10	**20**	2.56	5	**5**	30 – 160	≤ 40
bis-(2-Chloroethyl)ether	3.35	10	**20**	--	--	--	30 – 160	≤ 40
2-Chlorophenol	2.39	10	**20**	--	--	--	30 – 160	≤ 40
1,3-Dichlorobenzene	2.63	10	**20**	1.31	2.5	**5**	30 – 160	≤ 40
1,4-Dichlorobenzene	2.86	10	**20**	1.19	2.5	**5**	30 – 160	≤ 40
1,2-Dichlorobenzene	2.50	10	**20**	1.10	2.5	**5**	30 – 160	≤ 40
Benzyl alcohol	6.09	10	**20**	7.04	10	**20[3]**	30 – 160	≤ 40
2,2'-oxy-*bis*-(1-Chloropropane)	3.76	10	**20**	--	--	--	30 – 160	≤ 40
2-Methylphenol	5.25	10	**20**	1.81	2.5	**5**	30 – 160	≤ 40
Hexachloroethane	2.94	10	**20**	--	--	--	30 – 160	≤ 40
N-Nitroso-di-n-propylamine	3.36	10	**20**	9.48	10	**12[3]**	30 – 160	≤ 40
4-Methylphenol[6]	6.63	10	**20**	2.52	5	**10**	30 – 160	≤ 40
Nitrobenzene	4.06	10	**20**	--	--	--	30 – 160	≤ 40
Isophorone	2.86	10	**20**	--	--	--	30 – 160	≤ 40
2-Nitrophenol	38.7	50	**100**	--	--	--	30 – 160	≤ 40
2,4-Dimethylphenol	3.46	20	**40**	2.89	10	**20**	30 – 160	≤ 40
bis-(2-Chloroethoxy)methane	2.00	10	**20**	--	--	--	30 – 160	≤ 40
2,4-Dichlorophenol	21.5	100	**200**	--	--	--	30 – 160	≤ 40
1,2,4-Trichlorobenzene	3.48	10	**20**	1.86	2.5	**5**	30 – 160	≤ 40
Naphthalene	2.76	10	**20**	--	--	--	30 – 160	≤ 40
Benzoic acid	101	200	**400[5]**	--	--	--	30 – 160	≤ 40
4-Chloroaniline	22.3	135	**270[4]**	--	--	--	30 – 160	≤ 40
Hexachlorobutadiene	4.57	10	**20**	0.96	2.5	**5**	30 – 160	≤ 40
4-Chloro-3-methylphenol	15.1	50	**100**	--	--	--	30 – 160	≤ 40
2-Methylnaphthalene	3.06	10	**20**	--	--	--	30 – 160	≤ 40
Hexachlorocyclopentadiene	66.4	200	**400[4]**	--	--	--	30 – 160	≤ 40
2,4,6-Trichlorophenol	22.4	50	**100**	--	--	--	30 – 160	≤ 40
2,4,5-Trichlorophenol	21.4	50	**100**	--	--	--	30 – 160	≤ 40
2-Chloronaphthalene	2.64	10	**20**	--	--	--	30 – 160	≤ 40
2-Nitroaniline	18.4	50	**100**	--	--	--	30 – 160	≤ 40
Acenaphthylene	5.71	10	**20**	--	--	--	30 – 160	≤ 40
Dimethylphthalate	2.90	10	**20**	1.34	2.5	**5**	30 – 160	≤ 40
2,6-Dinitrotoluene	30.6	50	**100**	--	--	--	30 – 160	≤ 40
Acenaphthene	3.28	10	**20**	--	--	--	30 – 160	≤ 40
3-Nitroaniline	22.5	50	**100**	--	--	--	30 – 160	≤ 40

WC02 : 00022

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DL[1] LOD[1], LOQ[1] and Control Limits Summary
GC - MS – SVOA Analysis of Sediment
EPA Method 8270 Full Scan & SIM

Microwave Extraction (EPA Method 3546, Bench Sheet 3093F) - 10 g sample with extract concentrated to 1 mL final volume

LOD Spike level = LOQ (unless otherwise noted)

Analyte	Full Scan Analysis DL (µg/kg)	Full Scan Analysis LOD (µg/kg)	Full Scan Analysis LOQ (µg/kg)	SIM Analysis DL (µg/kg)	SIM Analysis LOD (µg/kg)	SIM Analysis LOQ (µg/kg)	LCS,MS Control Limits (%)	RPD[2]
2,4-Dinitrophenol	111	425	**850[4]**	--	--	--	30 – 160	≤ 40
Dibenzofuran	4.10	10	**20**	--	--	--	30 – 160	≤ 40
4-Nitrophenol	34.7	50	**100**	--	--	--	30 – 160	≤ 40
2,4-Dinitrotoluene	19.5	50	**100**	--	--	--	30 – 160	≤ 40
Fluorene	4.35	10	**20**	--	--	--	30 – 160	≤ 40
4-Chlorophenyl-phenylether	5.29	10	**20**	--	--	--	30 – 160	≤ 40
Diethylphthalate	36.6	50	**50[3]**	3.26	5.0	**5.0**	30 – 160	≤ 40
4-Nitroaniline	37.9	50	**100**	--	--	--	30 – 160	≤ 40
4,6-Dinitro-2-methylphenol	21.2	100	**200**	--	--	--	30 – 160	≤ 40
N-Nitrosodiphenylamine	5.39	10	**20**	1.38	10	**20**	30 – 160	≤ 40
4-Bromophenyl-phenylether	5.03	10	**20**	--	--	--	30 – 160	≤ 40
Hexachlorobenzene	4.29	10	**20**	1.26	2.5	**5**	30 – 160	≤ 40
Pentachlorophenol	48.5	100	**200[4]**	14.3	25	**50**	30 – 160	≤ 40
Phenanthrene	3.64	10	**20**	--	--	--	30 – 160	≤ 40
Anthracene	4.50	10	**20**	--	--	--	30 – 160	≤ 40
Carbazole	2.69	10	**20**	--	--	--	30 – 160	≤ 40
Di-n-butylphthalate	8.16	10	**20**	--	--	--	30 – 160	≤ 40
Fluoranthene	2.91	10	**20**	--	--	--	30 – 160	≤ 40
Pyrene	1.94	10	**20**	--	--	--	30 – 160	≤ 40
Butylbenzylphthalate	6.14	10	**20**	2.89	5.0	**5**	30 – 160	≤ 40
Benzo(a)anthracene	3.29	10	**20**	--	--	--	30 – 160	≤ 40
3,3'-Dichlorobenzidine	17.8	75	**150[4]**	--	--	--	30 – 160	≤ 40
Chrysene	3.75	10	**20**	--	--	--	30 – 160	≤ 40
bis-(2-Ethylhexyl)phthalate	14.6	20	**25[3]**	--	--	--	30 – 160	≤ 40
Di-n-octylphthalate	5.84	10	**20**	--	--	--	30 – 160	≤ 40
Benzo(b)fluoranthene [7]	3.47	10	**20**	--	--	--	30 – 160	≤ 40
Benzo(k)fluoranthene [7]	4.18	10	**20**	--	--	--	30 – 160	≤ 40
Benzofluoranthene-Total [8]	6.67	20	**40**	--	--	--	30 – 160	≤ 40
Benzo(a)pyrene	5.45	10	**20**	--	--	--	30 – 160	≤ 40
Indeno(1,2,3-cd)pyrene	4.68	10	**20**	--	--	--	30 – 160	≤ 40
Dibenzo(a,h)anthracene	4.31	10	**20**	2.02	2.5	**5**	30 – 160	≤ 40
Benzo(g,h,i)perylene	4.40	10	**20**	--	--	--	30 – 160	≤ 40
N-Nitrosodimethylamine	14.1	50	**100**	3.15	13	**25**	30 – 160	≤ 40
Aniline	40.0	270	**540[4]**	--	--	--	30 – 160	≤ 40
Pyridine	32.7	75	**150[4]**	--	--	--	30 – 160	≤ 40
1-Methylnaphthalene	2.68	10	**20**	--	--	--	30 – 160	≤ 40

DL[1] LOD[1], LOQ[1] and Control Limits Summary
GC - MS – SVOA Analysis of Sediment
EPA Method 8270 Full Scan & SIM

Microwave Extraction (EPA Method 3546, Bench Sheet 3093F) - 10 g sample with extract concentrated to 1 mL final volume

LOD Spike level = LOQ (unless otherwise noted)

Analyte	**Full Scan Analysis**			**SIM Analysis**			**LCS,MS Control Limits (%)**	**RPD[2]**
	DL (µg/kg)	**LOD (µg/kg)**	**LOQ (µg/kg)**	**DL (µg/kg)**	**LOD (µg/kg)**	**LOQ (µg/kg)**		
Azobenzene (1,2-DP-Hydrazine)	2.98	10	**20**	--	--	--	30 – 160	≤ 40
Surrogate Standards						**MB / LCS**	**Samples**	**RPD**
2-Fluorophenol						30 – 160	30 – 160	≤ 40
Phenol-d_5						30 – 160	30 – 160	≤ 40
2-Chlorophenol-d_4						30 – 160	30 – 160	≤ 40
1,2-Dichlorobenzene-d_4						30 – 160	30 – 160	≤ 40
Nitrobenzene-d_5						30 – 160	30 – 160	≤ 40
2-Fluorobiphenyl						30 – 160	30 – 160	≤ 40
2,4,6-Tribromophenol						30 – 160	30 – 160	≤ 40
p-Terphenyl-d_{14}						30 – 160	30 – 160	≤ 40

(1) Detection Limit (DL), Limit of Detection (LOD), Limit of Quantitation (LOQ) are defined in ARI SOP 1018S
(2) Relative Percent Difference between analytes in replicate analyzes. If C_O and C_D are the concentrations of the original and duplicate respectively then

$$RPD = \frac{|C_O - C_D|}{\frac{C_O + C_D}{2}} x100$$

(3) Spiked at 5 ppb
(4) Spiked at 100 ppb
(5) Spiked at 200 ppb
(6) 3-Methylphenol (not calibrated) co-elutes with 4-Methylphennol (calibrated)
(7) Benzo(b)fluoranthene and Benzo(k)fluoranthene are reported as separate analytes only when the height of the valley between the isomer peaks is less than than 50% of the average of the two peak heights, otherwise total Benzofluoranthenes are reported.
(8) Benzo(b)fluoranthene + Benzo(j)fluoranthene + Benzo(k)fluoranthene (only the b & k isomers are calibrated)

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DL[1], LOD[1], LOQ[1] and Control Limits Summary Analysis of Sediment Samples for Dioxins & Furans EPA Method 1613B					
Soxhlet (EPA Method 3540C) Extraction using 10 g sample with extract concentrated to 0.02 mL final volume. ARI Bench Sheet 3083F					
LOD Spike level = LOQ = 0.1 ppt (ng/kg) = 1 pg/g					
Analyte	**DL[1] pg/g**	**LOD[1] pg/g**	**LOQ[1] pg/g**	**OPR Control Limit[2,3]**	**Sample Replicate RPD[3,4]**
2,3,7,8-TCDF	0.230	**0.5**	**1**	75 – 158	≤ 25
2,3,7,8-TCDD	0.274	**0.5**	**1**	67 – 158	≤ 25
1,2,3,7,8-PeCDF	0.832	**2.5**	**2.5**	80 – 134	≤ 25
2,3,4,7,8-PeCDF	1.076	**2.5**	**1**	68 – 160	≤ 25
1,2,3,7,8-PeCDD	0.647	**2.5**	**1**	70 – 142	≤ 25
1,2,3,4,7,8-HxCDF	0.991	**2.5**	**2.5**	72 – 134	≤ 25
1,2,3,6,7,8-HxCDF	0.769	**2.5**	**2.5**	84 – 130	≤ 25
2,3,4,6,7,8-HxCDF	0.904	**2.5**	**2.5**	70 – 156	≤ 25
1,2,3,7,8,9-HxCDF	0.857	**2.5**	**2.5**	78 – 130	≤ 25
1,2,3,4,7,8-HxCDD	0.481	**2.5**	**2.5**	70 – 164	≤ 25
1,2,3,6,7,8-HxCDD	0.561	**2.5**	**2.5**	76 – 134	≤ 25
1,2,3,7,8,9-HxCDD	0.886	**2.5**	**2.5**	64 – 162	≤ 25
1,2,3,4,6,7,8-HpCDF	1.165	**2.5**	**2.5**	82 – 122	≤ 25
1,2,3,4,7,8,9-HpCDF	0.688	**2.5**	**2.5**	78 – 138	≤ 25
1,2,3,4,6,7,8-HpCDD	0.828	**2.5**	**2.5**	70 – 140	≤ 25
OCDF	2.176	**5.0**	**5**	63 – 170	≤ 25
OCDD	7.452	**5.0**	**5**	78 – 144	≤ 25

(1) Detection Limit (DL), Limit of Detection (LOD) and Limit of Quantitation (LOQ) are defined in ARI SOP 1018S
(2) Ongoing precision and recovery (OPR) analyzes as specified in the referenced method.
(3) Method specified control limits.
(4) Relative Percent Difference between analytes in replicate analyzes. If C_O and C_D are the concentrations of the original and duplicate respectively then $RPD = \frac{|C_O - C_D|}{\frac{C_O + C_D}{2}} x100$

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4

DL[1], LOD[1], LOQ[1] and Control Limits Summary Analysis of Soil/Sediment Samples for Chlorinated Pesticides EPA Method 8081B					
Microwave (EPA Method 3546) Extraction using 12.5g (dry weight) sample with extract concentrated to 2.5 mL final volume. ARI Bench Sheet 3046F					
LOD Spike level = LOQ Concentration					
Analyte	**DL[1,2] µg/kg**	**LOD[1] µg/kg**	**LOQ[1] µg/kg**	**LCS Control Limit[3,4]**	**Replicate RPD[5]**
alpha-BHC	0.081	0.25	**0.5**	68 – 115	≤ 40
beta-BHC	0.139	0.25	**0.5**	60 – 126	≤ 40
gamma-BHC (Lindane)	0.048	0.25	**0.5**	68 – 134	≤ 40
delta-BHC	0.082	0.25	**0.5**	71 – 154	≤ 40
Heptachlor	0.132	0.25	**0.5**	66 – 115	≤ 40
Aldrin	0.055	0.25	**0.5**	66 – 115	≤ 40
Heptachlor Epoxide	0.085	0.25	**0.5**	65 – 127	≤ 40
trans-Chlordane (*beta*-Chlordane, *gamma*-Chlordane)	0.077	0.25	**0.5**	73 – 136	≤ 40
cis-Chlordane (*alpha*-chlordane)	0.051	0.25	**0.5**	77 – 124	≤ 40
Endosulfan I	0.072	0.25	**0.5**	28 – **100**	≤ 40
4,4'-DDE	0.124	0.5	**1.0**	71 – 149	≤ 40
Dieldrin	0.100	0.5	**1.0**	74 – 131	≤ 40
Endrin	0.215	0.5	**1.0**	72 – 135	≤ 40
Endosulfan II	0.116	0.5	**1.0**	37 – 110	≤ 40
4,4'-DDD	0.135	0.5	**1.0**	76 – 137	≤ 40
Endrin Aldehyde	0.218	0.5	**1.0**	38 – 109	≤ 40
4,4'-DDT	0.192	0.5	**1.0**	58 – 144	≤ 40
Endosulfan Sulfate	0.192	0.5	**1.0**	47 – 148	≤ 40
Endrin Ketone	0.119	0.5	**1.0**	29 – 165	≤ 40
Methoxychlor	0.698	2.5	**5.0**	65 – 123	≤ 40
Hexachlorobutadiene	0.138	0.5	**1.0**	43 – 104	≤ 40
Hexachlorobenzene	0.094	0.5	**1.0**	62 – 119	≤ 40
Surrogate Standard Recovery			**MB / LCS**	**Samples**	**RPD**
Tetrachloro-*m*-xylene (TCMX)			47 – 124	34 – 169	≤ 40
Decachlorobiphenyl			60 – 149	36 – 182	≤ 40

(1) Detection Limit (DL), Limit of Detection (LOD) and Limit of Quantitation as defined in ARI SOP 1018S.
(2) MDL study QZ38
(3) Highlighted control limits (**bold font**) are adjusted from the calculated values to reflect that ARI does not use control limits < 10 for the lower limit or < 100 for the upper limit.
(4) Control limits calculated using all data from 1/1/12 through 7/31/12.
(5) Relative Percent Difference between analytes in replicate analyzes. If C_O and C_D are the concentrations of the original and duplicate respectively then

$$RPD = \frac{|C_O - C_D|}{\frac{C_O + C_D}{2}} x100$$

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Quality Control Criteria for Analysis of Aqueous and Tissue Samples for Aroclors (Polychlorinated Biphenyls – PCB) EPA Method 8082B

Analysis Code	Extraction	DL[1]	LOD[1]	LOQ[1]	Analyte	Spike Recovery Control Limits (%)[2,3]			RPD[4]
						LCS	MB/LCS Surrogate	Sample Surrogate	
Aqueous Samples (Separatory Funnel Extraction – EPA Method 3510C)									
PCBWSI 01-3018F	500 to 5 mL	0.130 µg/L	0.5 µg/L	1 µg/L	Aroclor 1016	45 – 121	--	--	≤ 40
		0.147 µg/L	0.5 µg/L	1 µg/L	Aroclor 1260	54 – 129	--	--	
		--	--	--	TCMX	--	40 – 118	38 – 118	
		--	--	--	DCBP	--	41 – 111	29 – 118	
PCBWSM 02-3021F	500 to 1 mL	0.0175 µg/L	0.05 µg/L	0.1 µg/L	Aroclor 1016	36 – **100**	--	--	≤ 40
		0.0174 µg/L	0.05 µg/L	0.1 µg/L	Aroclor 1260	41 – 113	--	--	
		--	--	--	TCMX	--	29 – **100**	25 – **100**	
		--	--	--	DCBP	--	39 – 116	**10** – 128	
PCBWLS	1000 to 0.5 mL[5]	0.00248 µg/L	0.005 µg/L	0.01 µg/L	Aroclor 1016	44 – 117	--	--	≤ 40
		0.00276 µg/L	0.005 µg/L	0.01 µg/L	Aroclor 1260	46 – 131	--	--	
		--	--	--	TCMX	--	31 – **100**	21 – **100**	
		--	--	--	DCBP	--	32 – 108	19 – 111	
TCLP Extract (Separatory Funnel Extraction – EPA Method 3510C)									
PCBWST	100 to 10 mL	0.130 µg/L[8]	5 µg/L	10 µg/L	Aroclor 1016	30 – 160	--	--	≤ 40
		0.147 µg/L[8]	5 µg/L	10 µg/L	Aroclor 1260	30 – 160	--	--	
		--	--	--	TCMX	--	30 – 160	30 – 160	
		--	--	--	DCBP	--	30 – 160	30 – 160	
Tissue Samples (Tissuemizer / Blender Extraction – EPA Method 3550C Modified) – Concentrations in µg/kg as received (wet weight)									
PCBUZI 09-3029F	10 g to 5 mL	2.92 µg/kg[6]	25 µg/kg	50 µg/kg	Aroclor 1016	30 – 160			≤ 40
		3.91 µg/kg[6]	25 µg/kg	50 µg/kg	Aroclor 1260	30 – 160			
		--	--	--	TCMX		30 – 160	30 – 160	
		--	--	--	DCBP		30 – 160	30 – 160	
PCBUZM 10-3027F	25 g to 5 mL	2.37 µg/kg[7]	10 µg/kg	20 µg/kg	Aroclor 1016	30 – 160			≤ 40
		1.06 µg/kg[7]	10 µg/kg	20 µg/kg	Aroclor 1260	30 – 160			
		--	--	--	TCMX		30 – 160	30 – 160	
		--	--	--	DCBP		30 – 160	30 – 160	
PCBUZL 11-3030F	25 g to 1 mL	2.37[7] µg/kg	2 µg/kg	4 µg/kg	Aroclor 1016	30 – 160			≤ 40
		1.06[7] µg/kg	2 µg/kg	4 µg/kg	Aroclor 1260	30 – 160			
		--	--	--	TCMX		30 – 160	30 – 160	
		--	--	--	DCBP		30 – 160	30 – 160	

(1) Detection Limit (DL), Limit of Detection (LOD) & Limit of Quantitation (LOQ) are defined in ARI SOP 1018S.
(2) Highlighted control limits **(bold font)** are adjusted from the calculated values to reflect that ARI does not use control limits < 10 for the lower limit or < 100 for the upper limit.
(3) 30 – 160 are default limits used when there is insufficient data to calculate historic control limits
(4) Acceptance criteria for the relative percent difference (RPD) between analytes in replicate analyzes. If C_O and C_D are the concentrations of the original and duplicate respectively then

$$RPD = \frac{|C_O - C_D|}{\frac{C_O + C_D}{2}} x100$$

(5) Low level extraction solvent is hexane instead of Methylene Chloride.
(6) LOD Study SM10
(7) MDL Study QZ25
(8) Based on PCBWSI until sufficient TCLP data is collected to calculate LOD.

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Quality Control Criteria for Analysis of Solid Matrix Samples for Aroclors (Polychlorinated Biphenyls – PCB) EPA Method 8082B

Analysis Code	Extrac-tion	DL[1] (ppb)	LOD[1] (ppb)	LOQ[1] (ppb)	Analyte	Spike Recovery Control Limits (%)[2,3,8]			RPD[4]
						LCS	MB/LCS Surrogate	Sample Surrogate	
Soil / Sediment Samples (Microwave Extraction – EPA Method 3546)									
PCBSMI 15-3067F	12g to 4 mL	9.83	17	33	Aroclor 1016	55 – 109	–	--	≤ 40
		7.06	17	33	Aroclor 1260	50 – 125	--	--	
PCBSCI 08-3025F		--	--	--	TCMX	–	53 – 108	39 – 122	
		--	--	–	DCBP	--	49 – 126	31 – 140	
PCBDMP20 05-3017F	12.5 g to 2.5 mL[6]	9.33	10	20[6]	Aroclor 1016	46 – 110	--	--	≤ 40
		10.82	15	20[6]	Aroclor 1260	47 – 124	–	--	
PCBDCP20 06-3026F		--	--	--	TCMX	--	43 – 107	34 – 109	
		--	--	--	DCBP	--	48 – 123	24 – 127	
PCBDMP10 05-3017F	12.5 g to 2.5 mL[6]	0.759	5	10[6]	Aroclor 1016	46 – 110	–	–	≤ 40
		1.066	5	10[6]	Aroclor 1260	47 – 124	--	--	
PCBDCP10 06-3026F		--	--	--	TCMX	--	43 – 107	34 – 109	
		--	–	--	DCBP	--	48 – 123	24 – 127	
PCBDMP4 05-3017F	12.5 g to 2.5 mL[6]	0.577	2	4[6]	Aroclor 1016	46 – 110	–	--	≤ 40
		0.610	2	4[6]	Aroclor 1260	47 – 124	–	--	
PCBDCP4 06-3026F		–	--	--	TCMX	--	43 – 107	34 – 109	
		--	--	--	DCBP	--	48 – 123	24 – 127	
Soil / Sediment Samples Medium Level (Vortex Extraction – EPA Method 3546)									
PCBSVX 12-3019F	5 g to 40 mL	109[7]	400	800	Aroclor 1016	30 – 160	–	--	≤ 40
		192[7]	400	800	Aroclor 1260	30 – 160	--	--	
		–	--	--	TCMX	--	30 – 160	30 – 160	
		--	–	–	DCBP	--	30 – 160	30 – 160	

(1) Detection Limit (DL), Limit of Detection (LOD) & Limit of Quantitation (LOQ) are defined in ARI SOP 1018S.
(2) Highlighted control limits (**bold font**) are adjusted from the calculated values to reflect that ARI does not use control limits < 10 for the lower limit or < 100 for the upper limit.
(3) 30 – 160 are default limits used when there is insufficient data to calculate historic control limits
(4) Acceptance criteria for the relative percent difference (RPD) between analytes in replicate analyzes. If C_O and C_D are the concentrations of the original and duplicate respectively then

$$RPD = \frac{|C_O - C_D|}{\frac{C_O + C_D}{2}} x100$$

(6) LOQ determined by lowest concentration used to calibrate the GC-ECD instrument.
(7) MDL Study PC66 6/24/09
(8) Control Limits calculated using all data generated between 1/1/11 and 11/30/11

UC32 00020

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Quality Control Parameters for Metals Analysis-ICP-OES EPA Methods 200.7 and 6010C								
	Aqueous Samples[2]			Spike Recovery		RPD [5]	Solids[3]	Tissue[4]
Analyte	DL[1] µg/L	LOD[1] µg/L	LOQ[1] µg/L	Matrix Spike	LCS		LOQ mg/kg	LOQ mg/kg
Aluminum	7.57	25	**50**	75 – 125	80 – 120	≤ 20	**5.0**	**1.0**
Antimony	6.28	25	**50**	75 – 125	80 – 120	≤ 20	**5.0**	**1.0**
Arsenic	3.33	25	**50**	75 – 125	80 – 120	≤ 20	**5.0**	**1.0**
Barium	1.33	1.5	**3.0**	75 – 125	80 – 120	≤ 20	**0.3**	**0.06**
Beryllium	0.16	0.5	**1.0**	75 – 125	80 – 120	≤ 20	**0.1**	**0.02**
Boron	7.39	10	**20**	75 – 125	80 – 120	≤ 20	**2.0**	**0.4**
Cadmium	0.18	0.5	**2.0**	75 – 125	80 – 120	≤ 20	**0.2**	**0.04**
Calcium	11.27	25	**50**	75 – 125	80 – 120	≤ 20	**5.0**	**1.0**
Chromium	1.24	2.5	**5.0**	75 – 125	80 – 120	≤ 20	**0.5**	**0.1**
Cobalt	0.27	1.5	**3.0**	75 – 125	80 – 120	≤ 20	**0.3**	**0.06**
Copper	0.92	1.0	**2.0**	75 – 125	80 – 120	≤ 20	**0.2**	**0.04**
Iron	7.50	25	**50**	75 – 125	80 – 120	≤ 20	**5.0**	**1.0**
Lead	1.55	10	**20**	75 – 125	80 – 120	≤ 20	**2.0**	**0.4**
Magnesium	9.61	25	**50**	75 – 125	80 – 120	≤ 20	**5.0**	**1.0**
Manganese	0.28	0.5	**1.0**	75 – 125	80 – 120	≤ 20	**0.1**	**0.02**
Molybdenum	0.79	2.5	**5.0**	75 – 125	80 – 120	≤ 20	**0.5**	**0.1**
Nickel	3.86	5.0	**10**	75 – 125	80 – 120	≤ 20	**1.0**	**0.2**
Potassium	65.70	250	**500**	75 – 125	80 – 120	≤ 20	**50**	**10**
Selenium	4.99	25	**50**	75 – 125	80 – 120	≤ 20	**5.0**	**1.0**
Silicon	8.17	30	**60**	75 – 125	80 – 120	≤ 20	**(6)**	**(6)**
Silver	0.43	1.5	**3.0**	75 – 125	80 – 120	≤ 20	**0.3**	**0.06**
Sodium	11.35	250	**500**	75 – 125	80 – 120	≤ 20	**50**	**10**
Strontium	0.09	1.0	**1.0**	75 – 125	80 – 120	≤ 20	**0.1**	**0.02**
Thallium	3.10	25	**50**	75 – 125	80 – 120	≤ 20	**5.0**	**1.0**
Tin	1.41	5.0	**10**	75 – 125	80 – 120	≤ 20	**1.0**	**0.2**
Titanium	2.11	2.5	**5.0**	75 – 125	80 – 120	≤ 20	**0.5**	**0.01**
Vanadium	0.27	1.5	**3.0**	75 – 125	80 – 120	≤ 20	**0.3**	**0.06**
Zinc	1.45	5.0	**10**	75 – 125	80 – 120	≤ 20	**1.0**	**0.2**

(1) Detection Limit (DL), Limit of Detection Limit (LOD) and Limit of Quantitation (LOQ) as defined in ARI SOP 1018S
(2) 50 mL sample and 50 mL final volume
(3) Solids LOQ based on 100% solids using 1.0 g sample with 100 mL final volume.
(4) Tissue is reported on an "as received" (wet weight) basis using 2.5 g sample with 50 mL final volume.
(5) Relative Percent Difference between analytes in replicate analyzes. If C_O and C_D are the concentrations of the original and duplicate respectively then

$$RPD = \frac{|C_O - C_D|}{\frac{C_O + C_D}{2}} x100$$

(6) ARI does not analyze for Silicon in solids or tissue samples

Quality Control Parameters for Metals Analysis ICP-MS EPA Methods 200.8 or 6020A

Analyte	Mass	Aqueous Samples[2]			Spike Recovery		RPD [3]	Solids[2]
		DL[1] µg/L	LOD[1] µg/L	LOQ[1] µg/L	Matrix Spike	LCS		LOQ[1] mg/kg
Aluminum	27	1.601	10	**20.0**	75 – 125	80 – 120	≤ 20	**20.0**
Antimony	121	0.010	0.1	**0.2**	75 – 125	80 – 120	≤ 20	**0.2**
	123	0.011	0.1	**0.2**	75 – 125	80 – 120	≤ 20	**0.2**
Arsenic #1	75	0.048	0.1	**0.2**	75 – 125	80 – 120	≤ 20	**0.2**
Arsenic #2	75	0.092	0.25	**0.5**	75 – 125	80 – 120	≤ 20	**0.5**
Barium	135	0.020	0.25	**0.5**	75 – 125	80 – 120	≤ 20	**0.5**
	137	0.019	0.25	**0.5**	75 – 125	80 – 120	≤ 20	**0.5**
Beryllium	9	0.021	0.1	**0.2**	75 – 125	80 – 120	≤ 20	**0.2**
Cadmium	111	0.010	0.05	**0.1**	75 – 125	80 – 120	≤ 20	**0.1**
	114	0.005	0.05	**0.1**	75 – 125	80 – 120	≤ 20	**0.1**
Calcium	43	3.983	25	**50.0**	75 – 125	80 – 120	≤ 20	**50.0**
Chromium	52	0.045	0.25	**0.5**	75 – 125	80 – 120	≤ 20	**0.5**
	53	0.118	0.25	**0.5**	75 – 125	80 – 120	≤ 20	**0.5**
Cobalt	59	0.011	0.1	**0.2**	75 – 125	80 – 120	≤ 20	**0.2**
Copper	63	0.158	0.25	**0.5**	75 – 125	80 – 120	≤ 20	**0.5**
	65	0.236	0.25	**0.5**	75 – 125	80 – 120	≤ 20	**0.5**
Iron	54	5.753	10	**20.0**	75 – 125	80 – 120	≤ 20	**20.0**
	57	3.876	10	**20.0**	75 – 125	80 – 120	≤ 20	**20.0**
Lead	208	0.046	0.05	**0.1**	75 – 125	80 – 120	≤ 20	**0.1**
Magnesium	24	0.297	10	**20.0**	75 – 125	80 – 120	≤ 20	**20.0**
Manganese	55	0.022	0.25	**0.5**	75 – 125	80 – 120	≤ 20	**0.5**
Molybdenum	98	0.013	0.1	**0.2**	75 – 125	80 – 120	≤ 20	**0.2**
Nickel	60	0.079	0.25	**0.5**	75 – 125	80 – 120	≤ 20	**0.5**
	62	0.089	0.25	**0.5**	75 – 125	80 – 120	≤ 20	**0.5**
Potassium	39	2.944	10	**20.0**	75 – 125	80 – 120	≤ 20	**20.0**
Selenium	82	0.127	0.25	**0.5**	75 – 125	80 – 120	≤ 20	**0.5**
	78	0.324	0.25	**2.0**	75 – 125	80 – 120	≤ 20	**2.0**
Silver	107	0.008	0.1	**0.2**	75 – 125	80 – 120	≤ 20	**0.2**
Sodium	23	2.833	50	**100.0**	75 – 125	80 – 120	≤ 20	**100.0**
Thorium [4]	232	0.013	0.1	**0.2**	75 – 125	80 – 120	≤ 20	**0.2**
Thallium	205	0.004	0.1	**0.2**	75 – 125	80 – 120	≤ 20	**0.2**
Uranium [4]	238	0.003	0.1	**0.2**	75 – 125	80 – 120	≤ 20	**0.2**
Vanadium	51	0.043	0.1	**0.2**	75 – 125	80 – 120	≤ 20	**0.2**
Zinc	66	0.497	2	**4.0**	75 – 125	80 – 120	≤ 20	**4.0**
	67	0.531	2	**4.0**	75 – 125	80 – 120	≤ 20	**4.0**
	68	0.524	2	**4.0**	75 – 125	80 – 120	≤ 20	**4.0**

(1) Detection Limit (DL), Limit of Detection Limit (LOD) and Limit of Quantitation (LOQ) as defined in ARI SOP 1018S
(2) 50 mL sample and 50 mL final volume Solids LOQ based on 100% solids using 1.0 g sample 100 mL final volume.
(3) Relative Percent Difference in replicate analyzes. $RPD = \frac{|C_O - C_D|}{\frac{C_O + C_D}{2}} x100$ where C_O=Original, C_D=Duplicate

(4) ARI has no accreditation for these elements.

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Quality Control Parameters for Mercury Analysis using CVAA
EPA Methods 7470A or 245.1 for Aqueous Samples
EPA Methods 7471B or 245.5 for Solid Samples

	Aqueous Samples [2]			Spike Recovery		RPD [5]
	DL [1] µg/L	LOD [1] µg/L	LOQ [1] µg/L	Matrix Spike	LCS	
Mercury	0.0069	0.05	**0.10** [2]	75 – 125	80 – 120	≤ 20
Mercury (low level)	0.0026	0.01	**0.02** [2]	75 – 125	80 – 120	≤ 20

	Soil / Sediment Samples			Spike Recovery		RPD [5]
	DL [1] mg/kg	LOD [1] mg/kg	LOQ [1] mg/kg	Matrix Spike	LCS	
Mercury	0.0021	0.0125	0.025 [3]	75 – 125	80 – 120	≤ 20

	Tissue Samples			Spike Recovery		RPD [5]
	DL [1] mg/kg	LOD [1] mg/kg	LOQ [1] mg/kg	Matrix Spike	LCS	
Mercury	0.0021	0.0125	0.005 [4]	75 – 125	80 – 120	≤ 20

(1) Detection Limit (DL), Limit of Detection Limit (LOD) and Limit of Quantitation (LOQ) as defined in ARI SOP 1018S
(2) 20 mL sample with 20 mL final volume
(3) 0.2 g sample with 50 mL final volume assuming 100% dry weight. Soil and sediment are reported on a dry weight basis.
(4) Tissue LOQ is 0.005 mg/kg as received (wet weight) based on 1 g sample with 50 mL final volume.
(5) Relative Percent Difference between analytes in replicate analyzes. If C_O and C_D are the concentrations of the original and duplicate respectively then

$$RPD = \frac{|C_O - C_D|}{\frac{C_O + C_D}{2}} x100$$

Analytical Resources,Incorporated
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Spike Recovery Control Limits for Conventional Wet Chemistry
Effective 5/1/09

Control limits are updated periodically. Assure that you have ARI's current control limits by downloading the files at the time of use. http://www.arilabs.com/portal/downloads/ARI-CLs.zip

	ARI's Control Limits	
Sample Matrix:	Water	Soil / Sediment
Matrix Spike Recoveries	% Recovery	% Recovery
Ammonia	75 - 125	75 - 125
Bromide	75 - 125	75 - 125
Chloride	75 - 125	75 - 125
Cyanide	75 - 125	75 - 125
Ferrous Iron	75 - 125	75 - 125
Fluoride	75 - 125	75 - 125
Formaldehyde	75 - 125	75 - 125
Hexane Extractable Material	-- - --	78 - 114
Hexavalent Chromium	75 - 125	75 - 125
Nitrate/Nitrite	75 - 125	75 - 125
Oil and Grease	75 - 125	75 - 125
Phenol	75 - 125	75 - 125
Phosphorous	75 - 125	75 - 125
Sulfate	75 - 125	75 - 125
Sulfide	75 - 125	75 - 125
Total Kjeldahl Nitrogen	75 - 125	75 - 125
Total Organic Carbon	75 - 125	75 - 125
Duplicate RPDs		
Acidity	±20%	±20%
Alkalinity	±20%	±20%
BOD	±20%	±20%
Cation Exchange	±20%	±20%
COD	±20%	±20%
Conductivity	±20%	±20%
Salinity	±20%	±20%
Solids	±20%	±20%
Turbidity	±20%	±20%

Semivolatile Analysis
Report and Summary QC Forms

ARI Job ID: WC32, WC33

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Extraction Method: SW3520C
Page 1 of 2

Sample ID: SG-05-ER-013113
SAMPLE

Lab Sample ID: WC32I
LIMS ID: 13-2432
Matrix: Water
Data Release Authorized:
Reported: 02/08/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted: 02/06/13
Date Analyzed: 02/07/13 17:29
Instrument/Analyst: NT6/JZ

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

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	2.0	< 2.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
106-44-5	4-Methylphenol	2.0	< 2.0 U
67-72-1	Hexachloroethane	2.0	< 2.0 U
105-67-9	2,4-Dimethylphenol	3.0	< 3.0 U
65-85-0	Benzoic Acid	20	< 20 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
87-68-3	Hexachlorobutadiene	3.0	< 3.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
84-66-2	Diethylphthalate	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	10	< 10 U
85-01-8	Phenanthrene	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
56-55-3	Benzo(a)anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	< 1.0 U
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
90-12-0	1-Methylnaphthalene	1.0	< 1.0 U
TOTBFA	Total Benzofluoranthenes	5.0	< 5.0 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Extraction Method: SW3520C

Sample ID: SG-05-ER-013113
SAMPLE

Lab Sample ID: WC32I
LIMS ID: 13-2432
Matrix: Water
Date Analyzed: 02/07/13 17:29

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030

CAS Number	Analyte	RL	Result

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	82.4%	2-Fluorobiphenyl	79.2%
d14-p-Terphenyl	77.6%	d4-1,2-Dichlorobenzene	76.0%
d5-Phenol	74.1%	2-Fluorophenol	69.6%
2,4,6-Tribromophenol	73.6%	d4-2-Chlorophenol	73.9%

SW8270 SEMIVOLATILES WATER SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030

Client ID	NBZ	FBP	TPH	DCB	PHL	2FP	TBP	2CP	TOT OUT
MB-020613	80.4%	79.2%	77.2%	73.6%	70.1%	64.5%	80.5%	69.6%	0
LCS-020613	88.0%	92.4%	80.8%	79.6%	77.9%	72.0%	92.0%	75.2%	0
LCSD-020613	86.4%	90.8%	78.4%	74.0%	76.3%	69.9%	89.6%	73.6%	0
SG-05-ER-013113	82.4%	79.2%	77.6%	76.0%	74.1%	69.6%	73.6%	73.9%	0

	LCS/MB LIMITS	QC LIMITS
(NBZ) = d5-Nitrobenzene	(50-100)	(34-101)
(FBP) = 2-Fluorobiphenyl	(51-100)	(38-100)
(TPH) = d14-p-Terphenyl	(54-117)	(27-122)
(DCB) = d4-1,2-Dichlorobenzene	(40-100)	(27-100)
(PHL) = d5-Phenol	(15-121)	(16-106)
(2FP) = 2-Fluorophenol	(33-100)	(23-100)
(TBP) = 2,4,6-Tribromophenol	(46-125)	(31-128)
(2CP) = d4-2-Chlorophenol	(46-102)	(33-100)

Prep Method: SW3520C
Log Number Range: 13-2432 to 13-2432

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Extraction Method: SW3546

Sample ID: SG-12-0-10-013113
SAMPLE

Lab Sample ID: WC32A
LIMS ID: 13-2424
Matrix: Sediment
Data Release Authorized:
Reported: 02/18/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted: 02/08/13
Date Analyzed: 02/15/13 18:39
Instrument/Analyst: NT10/YZ
GPC Cleanup: Yes

Sample Amount: 10.10 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 59.8%

CAS Number	Analyte	RL	Result
108-95-2	**Phenol**	**20**	**69**
541-73-1	1,3-Dichlorobenzene	20	< 20 U
106-46-7	1,4-Dichlorobenzene	20	< 20 U
100-51-6	**Benzyl Alcohol**	**20**	**46**
95-50-1	1,2-Dichlorobenzene	20	< 20 U
95-48-7	2-Methylphenol	20	< 20 U
106-44-5	**4-Methylphenol**	**40**	**320**
67-72-1	Hexachloroethane	20	< 20 U
105-67-9	2,4-Dimethylphenol	40	< 40 U
65-85-0	**Benzoic Acid**	**400**	**150 J**
120-82-1	1,2,4-Trichlorobenzene	20	< 20 U
91-20-3	**Naphthalene**	**20**	**170**
87-68-3	Hexachlorobutadiene	20	< 20 U
91-57-6	**2-Methylnaphthalene**	**20**	**21**
131-11-3	Dimethylphthalate	20	< 20 U
208-96-8	Acenaphthylene	20	< 20 U
83-32-9	**Acenaphthene**	**20**	**14 J**
132-64-9	**Dibenzofuran**	**20**	**33**
84-66-2	Diethylphthalate	50	< 50 U
86-73-7	**Fluorene**	**20**	**29**
86-30-6	N-Nitrosodiphenylamine	20	< 20 U
118-74-1	Hexachlorobenzene	20	< 20 U
87-86-5	Pentachlorophenol	200	< 200 U
85-01-8	**Phenanthrene**	**20**	**210**
120-12-7	**Anthracene**	**20**	**60**
84-74-2	Di-n-Butylphthalate	20	< 20 U
206-44-0	**Fluoranthene**	**20**	**880**
129-00-0	**Pyrene**	**20**	**600**
85-68-7	Butylbenzylphthalate	20	< 20 U
56-55-3	**Benzo(a)anthracene**	**20**	**140**
117-81-7	**bis(2-Ethylhexyl)phthalate**	**25**	**31 B**
218-01-9	**Chrysene**	**20**	**270**
117-84-0	Di-n-Octyl phthalate	20	< 20 U
50-32-8	**Benzo(a)pyrene**	**20**	**100**
193-39-5	**Indeno(1,2,3-cd)pyrene**	**20**	**23**
53-70-3	Dibenz(a,h)anthracene	20	< 20 U
191-24-2	**Benzo(g,h,i)perylene**	**20**	**12 J**

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Extraction Method: SW3546

Sample ID: SG-12-0-10-013113
SAMPLE

Lab Sample ID: WC32A
LIMS ID: 13-2424
Matrix: Sediment
Date Analyzed: 02/15/13 18:39

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030

CAS Number	Analyte	RL	Result
90-12-0	1-Methylnaphthalene	20	13 J
TOTBFA	Total Benzofluoranthenes	40	280

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	76.0%	2-Fluorobiphenyl	85.8%
d14-p-Terphenyl	94.2%	d4-1,2-Dichlorobenzene	74.4%
d5-Phenol	67.3%	2-Fluorophenol	65.1%
2,4,6-Tribromophenol	92.8%	d4-2-Chlorophenol	71.1%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Extraction Method: SW3546

Sample ID: SG-13-0-10-013113
SAMPLE

Lab Sample ID: WC32B
LIMS ID: 13-2425
Matrix: Sediment
Data Release Authorized:
Reported: 02/18/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted: 02/08/13
Date Analyzed: 02/15/13 19:15
Instrument/Analyst: NT10/YZ
GPC Cleanup: Yes

Sample Amount: 10.20 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 65.2%

CAS Number	Analyte	RL	Result
108-95-2	**Phenol**	**20**	**63**
541-73-1	1,3-Dichlorobenzene	20	< 20 U
106-46-7	1,4-Dichlorobenzene	20	< 20 U
100-51-6	Benzyl Alcohol	20	< 20 U
95-50-1	1,2-Dichlorobenzene	20	< 20 U
95-48-7	2-Methylphenol	20	< 20 U
106-44-5	**4-Methylphenol**	**39**	**83**
67-72-1	Hexachloroethane	20	< 20 U
105-67-9	2,4-Dimethylphenol	39	< 39 U
65-85-0	**Benzoic Acid**	**390**	**250 J**
120-82-1	1,2,4-Trichlorobenzene	20	< 20 U
91-20-3	**Naphthalene**	**20**	**67**
87-68-3	Hexachlorobutadiene	20	< 20 U
91-57-6	2-Methylnaphthalene	20	< 20 U
131-11-3	Dimethylphthalate	20	< 20 U
208-96-8	Acenaphthylene	20	< 20 U
83-32-9	**Acenaphthene**	**20**	**17 J**
132-64-9	**Dibenzofuran**	**20**	**28**
84-66-2	Diethylphthalate	49	< 49 U
86-73-7	**Fluorene**	**20**	**32**
86-30-6	N-Nitrosodiphenylamine	20	< 20 U
118-74-1	Hexachlorobenzene	20	< 20 U
87-86-5	Pentachlorophenol	200	< 200 U
85-01-8	**Phenanthrene**	**20**	**160**
120-12-7	**Anthracene**	**20**	**63**
84-74-2	Di-n-Butylphthalate	20	< 20 U
206-44-0	**Fluoranthene**	**20**	**300**
129-00-0	**Pyrene**	**20**	**260**
85-68-7	Butylbenzylphthalate	20	< 20 U
56-55-3	**Benzo(a)anthracene**	**20**	**94**
117-81-7	**bis(2-Ethylhexyl)phthalate**	**24**	**57 B**
218-01-9	**Chrysene**	**20**	**180**
117-84-0	Di-n-Octyl phthalate	20	< 20 U
50-32-8	**Benzo(a)pyrene**	**20**	**91**
193-39-5	**Indeno(1,2,3-cd)pyrene**	**20**	**11 J**
53-70-3	Dibenz(a,h)anthracene	20	< 20 U
191-24-2	Benzo(g,h,i)perylene	20	< 20 U

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Extraction Method: SW3546

ANALYTICAL RESOURCES INCORPORATED

Sample ID: SG-13-0-10-013113
SAMPLE

Lab Sample ID: WC32B
LIMS ID: 13-2425
Matrix: Sediment
Date Analyzed: 02/15/13 19:15

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030

CAS Number	Analyte	RL	Result
90-12-0	1-Methylnaphthalene	20	< 20 U
TOTBFA	**Total Benzofluoranthenes**	**39**	**220**

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	82.4%	2-Fluorobiphenyl	87.6%
d14-p-Terphenyl	93.4%	d4-1,2-Dichlorobenzene	71.2%
d5-Phenol	75.6%	2-Fluorophenol	66.5%
2,4,6-Tribromophenol	96.5%	d4-2-Chlorophenol	85.1%

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ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Extraction Method: SW3546
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ANALYTICAL RESOURCES INCORPORATED

Sample ID: SG-07-0-10-013113
SAMPLE

Lab Sample ID: WC32C
LIMS ID: 13-2426
Matrix: Sediment
Data Release Authorized:
Reported: 02/18/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted: 02/08/13
Date Analyzed: 02/15/13 19:52
Instrument/Analyst: NT10/YZ
GPC Cleanup: Yes

Sample Amount: 10.11 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 22.8%

CAS Number	Analyte	RL	Result
108-95-2	**Phenol**	**20**	**34**
541-73-1	1,3-Dichlorobenzene	20	< 20 U
106-46-7	1,4-Dichlorobenzene	20	< 20 U
100-51-6	Benzyl Alcohol	20	< 20 U
95-50-1	1,2-Dichlorobenzene	20	< 20 U
95-48-7	**2-Methylphenol**	**20**	**17 J**
106-44-5	**4-Methylphenol**	**40**	**61**
67-72-1	Hexachloroethane	20	< 20 U
105-67-9	**2,4-Dimethylphenol**	**40**	**26 J**
65-85-0	Benzoic Acid	400	< 400 U
120-82-1	1,2,4-Trichlorobenzene	20	< 20 U
91-20-3	**Naphthalene**	**20**	**150**
87-68-3	Hexachlorobutadiene	20	< 20 U
91-57-6	**2-Methylnaphthalene**	**20**	**71**
131-11-3	Dimethylphthalate	20	< 20 U
208-96-8	**Acenaphthylene**	**20**	**44**
83-32-9	**Acenaphthene**	**20**	**39**
132-64-9	**Dibenzofuran**	**20**	**55**
84-66-2	Diethylphthalate	50	< 50 U
86-73-7	**Fluorene**	**20**	**52**
86-30-6	N-Nitrosodiphenylamine	20	< 20 U
118-74-1	Hexachlorobenzene	20	< 20 U
87-86-5	Pentachlorophenol	200	< 200 U
85-01-8	**Phenanthrene**	**20**	**250**
120-12-7	**Anthracene**	**20**	**85**
84-74-2	Di-n-Butylphthalate	20	< 20 U
206-44-0	**Fluoranthene**	**20**	**1,000**
129-00-0	**Pyrene**	**20**	**820**
85-68-7	Butylbenzylphthalate	20	< 20 U
56-55-3	**Benzo(a)anthracene**	**20**	**200**
117-81-7	**bis(2-Ethylhexyl)phthalate**	**25**	**38 B**
218-01-9	**Chrysene**	**20**	**370**
117-84-0	Di-n-Octyl phthalate	20	< 20 U
50-32-8	**Benzo(a)pyrene**	**20**	**200**
193-39-5	**Indeno(1,2,3-cd)pyrene**	**20**	**42**
53-70-3	**Dibenz(a,h)anthracene**	**20**	**17 J**
191-24-2	Benzo(g,h,i)perylene	20	< 20 U

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ANALYTICAL RESOURCES INCORPORATED

ORGÂNICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Extraction Method: SW3546

Sample ID: SG-07-0-10-013113
SAMPLE

Lab Sample ID: WC32C
LIMS ID: 13-2426
Matrix: Sediment
Date Analyzed: 02/15/13 19:52

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030

CAS Number	Analyte	RL	Result
90-12-0	**1-Methylnaphthalene**	**20**	**69**
TOTBFA	**Total Benzofluoranthenes**	**40**	**400**

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	83.8%	2-Fluorobiphenyl	91.2%
d14-p-Terphenyl	104%	d4-1,2-Dichlorobenzene	83.8%
d5-Phenol	66.0%	2-Fluorophenol	69.7%
2,4,6-Tribromophenol	94.1%	d4-2-Chlorophenol	81.1%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Extraction Method: SW3546

Sample ID: SG-06-0-10-013113
SAMPLE

Lab Sample ID: WC32D
LIMS ID: 13-2427
Matrix: Sediment
Data Release Authorized:
Reported: 02/18/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted: 02/08/13
Date Analyzed: 02/15/13 20:28
Instrument/Analyst: NT10/YZ
GPC Cleanup: Yes

Sample Amount: 10.18 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 41.0%

CAS Number	Analyte	RL	Result	
108-95-2	**Phenol**	**20**	**290**	
541-73-1	1,3-Dichlorobenzene	20	< 20	U
106-46-7	1,4-Dichlorobenzene	20	< 20	U
100-51-6	**Benzyl Alcohol**	**20**	**70**	
95-50-1	1,2-Dichlorobenzene	20	< 20	U
95-48-7	2-Methylphenol	20	< 20	U
106-44-5	**4-Methylphenol**	**39**	**44**	
67-72-1	Hexachloroethane	20	< 20	U
105-67-9	2,4-Dimethylphenol	39	< 39	U
65-85-0	Benzoic Acid	390	< 390	U
120-82-1	1,2,4-Trichlorobenzene	20	< 20	U
91-20-3	**Naphthalene**	**20**	**82**	
87-68-3	Hexachlorobutadiene	20	< 20	U
91-57-6	**2-Methylnaphthalene**	**20**	**40**	
131-11-3	Dimethylphthalate	20	< 20	U
208-96-8	Acenaphthylene	20	< 20	U
83-32-9	**Acenaphthene**	**20**	**60**	
132-64-9	**Dibenzofuran**	**20**	**74**	
84-66-2	Diethylphthalate	49	< 49	U
86-73-7	**Fluorene**	**20**	**110**	
86-30-6	N-Nitrosodiphenylamine	20	< 20	U
118-74-1	Hexachlorobenzene	20	< 20	U
87-86-5	Pentachlorophenol	200	< 200	U
85-01-8	**Phenanthrene**	**20**	**630**	
120-12-7	**Anthracene**	**20**	**230**	
84-74-2	Di-n-Butylphthalate	20	< 20	U
206-44-0	**Fluoranthene**	**20**	**1,700**	
129-00-0	**Pyrene**	**20**	**1,300**	
85-68-7	**Butylbenzylphthalate**	**20**	**22**	
56-55-3	**Benzo(a)anthracene**	**20**	**470**	
117-81-7	**bis(2-Ethylhexyl)phthalate**	**25**	**140**	**B**
218-01-9	**Chrysene**	**20**	**820**	
117-84-0	Di-n-Octyl phthalate	20	< 20	U
50-32-8	**Benzo(a)pyrene**	**20**	**470**	
193-39-5	**Indeno(1,2,3-cd)pyrene**	**20**	**81**	
53-70-3	**Dibenz(a,h)anthracene**	**20**	**43**	
191-24-2	**Benzo(g,h,i)perylene**	**20**	**68**	

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ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Extraction Method: SW3546

ANALYTICAL RESOURCES INCORPORATED

Sample ID: SG-06-0-10-013113
SAMPLE

Lab Sample ID: WC32D
LIMS ID: 13-2427
Matrix: Sediment
Date Analyzed: 02/15/13 20:28

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030

CAS Number	Analyte	RL	Result
90-12-0	1-Methylnaphthalene	20	36
TOTBFA	Total Benzofluoranthenes	39	920

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	70.6%	2-Fluorobiphenyl	76.6%
d14-p-Terphenyl	85.0%	d4-1,2-Dichlorobenzene	69.6%
d5-Phenol	62.3%	2-Fluorophenol	59.9%
2,4,6-Tribromophenol	83.3%	d4-2-Chlorophenol	74.5%

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ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Extraction Method: SW3546

Sample ID: SG-05-0-10-013113
SAMPLE

Lab Sample ID: WC32E
LIMS ID: 13-2428
Matrix: Sediment
Data Release Authorized:
Reported: 02/18/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted: 02/08/13
Date Analyzed: 02/15/13 21:04
Instrument/Analyst: NT10/YZ
GPC Cleanup: Yes

Sample Amount: 10.53 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 5.7%

CAS Number	Analyte	RL	Result
108-95-2	Phenol	19	< 19 U
541-73-1	1,3-Dichlorobenzene	19	< 19 U
106-46-7	1,4-Dichlorobenzene	19	< 19 U
100-51-6	Benzyl Alcohol	19	< 19 U
95-50-1	1,2-Dichlorobenzene	19	< 19 U
95-48-7	2-Methylphenol	19	< 19 U
106-44-5	4-Methylphenol	38	< 38 U
67-72-1	Hexachloroethane	19	< 19 U
105-67-9	2,4-Dimethylphenol	38	< 38 U
65-85-0	Benzoic Acid	380	< 380 U
120-82-1	1,2,4-Trichlorobenzene	19	< 19 U
91-20-3	Naphthalene	19	< 19 U
87-68-3	Hexachlorobutadiene	19	< 19 U
91-57-6	2-Methylnaphthalene	19	< 19 U
131-11-3	Dimethylphthalate	19	< 19 U
208-96-8	Acenaphthylene	19	< 19 U
83-32-9	Acenaphthene	19	< 19 U
132-64-9	Dibenzofuran	19	< 19 U
84-66-2	Diethylphthalate	48	< 48 U
86-73-7	Fluorene	19	< 19 U
86-30-6	N-Nitrosodiphenylamine	19	< 19 U
118-74-1	Hexachlorobenzene	19	< 19 U
87-86-5	Pentachlorophenol	190	< 190 U
85-01-8	**Phenanthrene**	**19**	**120**
120-12-7	**Anthracene**	**19**	**28**
84-74-2	Di-n-Butylphthalate	19	< 19 U
206-44-0	**Fluoranthene**	**19**	**180**
129-00-0	**Pyrene**	**19**	**130**
85-68-7	Butylbenzylphthalate	19	< 19 U
56-55-3	**Benzo(a)anthracene**	**19**	**60**
117-81-7	**bis(2-Ethylhexyl)phthalate**	**24**	**33 B**
218-01-9	**Chrysene**	**19**	**82**
117-84-0	Di-n-Octyl phthalate	19	< 19 U
50-32-8	**Benzo(a)pyrene**	**19**	**54**
193-39-5	Indeno(1,2,3-cd)pyrene	19	< 19 U
53-70-3	Dibenz(a,h)anthracene	19	< 19 U
191-24-2	Benzo(g,h,i)perylene	19	< 19 U

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ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Extraction Method: SW3546

Sample ID: SG-05-0-10-013113
SAMPLE

Lab Sample ID: WC32E
LIMS ID: 13-2428
Matrix: Sediment
Date Analyzed: 02/15/13 21:04

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030

CAS Number	Analyte	RL	Result
90-12-0	1-Methylnaphthalene	19	< 19 U
TOTBFA	**Total Benzofluoranthenes**	**38**	**110**

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	75.2%	2-Fluorobiphenyl	76.4%
d14-p-Terphenyl	90.2%	d4-1,2-Dichlorobenzene	75.2%
d5-Phenol	54.8%	2-Fluorophenol	58.9%
2,4,6-Tribromophenol	74.1%	d4-2-Chlorophenol	62.3%

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ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Extraction Method: SW3546
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ANALYTICAL RESOURCES INCORPORATED

Sample ID: SG-95-0-10-013113
SAMPLE

Lab Sample ID: WC32F
LIMS ID: 13-2429
Matrix: Sediment
Data Release Authorized:
Reported: 02/18/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted: 02/08/13
Date Analyzed: 02/15/13 21:40
Instrument/Analyst: NT10/YZ
GPC Cleanup: Yes

Sample Amount: 10.67 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 6.5%

CAS Number	Analyte	RL	Result
108-95-2	Phenol	19	< 19 U
541-73-1	1,3-Dichlorobenzene	19	< 19 U
106-46-7	1,4-Dichlorobenzene	19	< 19 U
100-51-6	Benzyl Alcohol	19	< 19 U
95-50-1	1,2-Dichlorobenzene	19	< 19 U
95-48-7	2-Methylphenol	19	< 19 U
106-44-5	4-Methylphenol	38	< 38 U
67-72-1	Hexachloroethane	19	< 19 U
105-67-9	2,4-Dimethylphenol	38	< 38 U
65-85-0	Benzoic Acid	380	< 380 U
120-82-1	1,2,4-Trichlorobenzene	19	< 19 U
91-20-3	**Naphthalene**	**19**	**180**
87-68-3	Hexachlorobutadiene	19	< 19 U
91-57-6	**2-Methylnaphthalene**	**19**	**110**
131-11-3	Dimethylphthalate	19	< 19 U
208-96-8	**Acenaphthylene**	**19**	**15 J**
83-32-9	**Acenaphthene**	**19**	**160**
132-64-9	**Dibenzofuran**	**19**	**170**
84-66-2	Diethylphthalate	47	< 47 U
86-73-7	**Fluorene**	**19**	**240**
86-30-6	N-Nitrosodiphenylamine	19	< 19 U
118-74-1	Hexachlorobenzene	19	< 19 U
87-86-5	Pentachlorophenol	190	< 190 U
85-01-8	**Phenanthrene**	**19**	**1,400**
120-12-7	**Anthracene**	**19**	**220**
84-74-2	Di-n-Butylphthalate	19	< 19 U
206-44-0	**Fluoranthene**	**19**	**1,400**
129-00-0	**Pyrene**	**19**	**1,100**
85-68-7	Butylbenzylphthalate	19	< 19 U
56-55-3	**Benzo(a)anthracene**	**19**	**440**
117-81-7	**bis(2-Ethylhexyl)phthalate**	**23**	**30 B**
218-01-9	**Chrysene**	**19**	**520**
117-84-0	Di-n-Octyl phthalate	19	< 19 U
50-32-8	**Benzo(a)pyrene**	**19**	**480**
193-39-5	**Indeno(1,2,3-cd)pyrene**	**19**	**120**
53-70-3	**Dibenz(a,h)anthracene**	**19**	**58**
191-24-2	**Benzo(g,h,i)perylene**	**19**	**65**

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ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Extraction Method: SW3546

Sample ID: SG-95-0-10-013113
SAMPLE

Lab Sample ID: WC32F
LIMS ID: 13-2429
Matrix: Sediment
Date Analyzed: 02/15/13 21:40

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030

CAS Number	Analyte	RL	Result
90-12-0	**1-Methylnaphthalene**	**19**	**91**
TOTBFA	**Total Benzofluoranthenes**	**38**	**830**

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	86.8%	2-Fluorobiphenyl	89.4%
d14-p-Terphenyl	104%	d4-1,2-Dichlorobenzene	87.4%
d5-Phenol	63.2%	2-Fluorophenol	70.0%
2,4,6-Tribromophenol	85.5%	d4-2-Chlorophenol	72.0%

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Extraction Method: SW3546

ANALYTICAL RESOURCES INCORPORATED

Sample ID: SG-08-0-10-013113
SAMPLE

Lab Sample ID: WC32G
LIMS ID: 13-2430
Matrix: Sediment
Data Release Authorized:
Reported: 02/18/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted: 02/08/13
Date Analyzed: 02/16/13 19:00
Instrument/Analyst: NT10/YZ
GPC Cleanup: Yes

Sample Amount: 10.36 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 5.00
Percent Moisture: 48.5%

CAS Number	Analyte	RL	Result
108-95-2	**Phenol**	**96**	**96**
541-73-1	1,3-Dichlorobenzene	96	< 96 U
106-46-7	1,4-Dichlorobenzene	96	< 96 U
100-51-6	Benzyl Alcohol	96	< 96 U
95-50-1	1,2-Dichlorobenzene	96	< 96 U
95-48-7	2-Methylphenol	96	< 96 U
106-44-5	**4-Methylphenol**	**190**	**170 J**
67-72-1	Hexachloroethane	96	< 96 U
105-67-9	2,4-Dimethylphenol	190	< 190 U
65-85-0	Benzoic Acid	1,900	< 1,900 U
120-82-1	1,2,4-Trichlorobenzene	96	< 96 U
91-20-3	**Naphthalene**	**96**	**280**
87-68-3	Hexachlorobutadiene	96	< 96 U
91-57-6	**2-Methylnaphthalene**	**96**	**82 J**
131-11-3	Dimethylphthalate	96	< 96 U
208-96-8	Acenaphthylene	96	< 96 U
83-32-9	**Acenaphthene**	**96**	**190**
132-64-9	**Dibenzofuran**	**96**	**110**
84-66-2	Diethylphthalate	240	< 240 U
86-73-7	**Fluorene**	**96**	**300**
86-30-6	N-Nitrosodiphenylamine	96	< 96 U
118-74-1	Hexachlorobenzene	96	< 96 U
87-86-5	Pentachlorophenol	960	< 960 U
85-01-8	**Phenanthrene**	**96**	**2,500**
120-12-7	**Anthracene**	**96**	**560**
84-74-2	Di-n-Butylphthalate	96	< 96 U
206-44-0	**Fluoranthene**	**96**	**3,500**
129-00-0	**Pyrene**	**96**	**3,700**
85-68-7	Butylbenzylphthalate	96	< 96 U
56-55-3	**Benzo(a)anthracene**	**96**	**1,700**
117-81-7	bis(2-Ethylhexyl)phthalate	120	< 120 U
218-01-9	**Chrysene**	**96**	**2,300**
117-84-0	Di-n-Octyl phthalate	96	< 96 U
50-32-8	**Benzo(a)pyrene**	**96**	**1,600**
193-39-5	**Indeno(1,2,3-cd)pyrene**	**96**	**740**
53-70-3	**Dibenz(a,h)anthracene**	**96**	**300**
191-24-2	**Benzo(g,h,i)perylene**	**96**	**790**

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Extraction Method: SW3546

Sample ID: SG-08-0-10-013113
SAMPLE

Lab Sample ID: WC32G
LIMS ID: 13-2430
Matrix: Sediment
Date Analyzed: 02/16/13 19:00

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030

CAS Number	Analyte	RL	Result
90-12-0	1-Methylnaphthalene	96	82 J
TOTBFA	Total Benzofluoranthenes	190	2,600

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	76.0%	2-Fluorobiphenyl	98.0%
d14-p-Terphenyl	90.0%	d4-1,2-Dichlorobenzene	79.0%
d5-Phenol	76.7%	2-Fluorophenol	56.7%
2,4,6-Tribromophenol	60.0%	d4-2-Chlorophenol	77.3%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Extraction Method: SW3546

Sample ID: SG-09-0-10-013113
SAMPLE

Lab Sample ID: WC32H
LIMS ID: 13-2431
Matrix: Sediment
Data Release Authorized:
Reported: 02/18/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted: 02/08/13
Date Analyzed: 02/16/13 20:12
Instrument/Analyst: NT10/YZ
GPC Cleanup: Yes

Sample Amount: 10.68 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 47.6%

CAS Number	Analyte	RL	Result
108-95-2	**Phenol**	**19**	**150**
541-73-1	1,3-Dichlorobenzene	19	< 19 U
106-46-7	1,4-Dichlorobenzene	19	< 19 U
100-51-6	**Benzyl Alcohol**	**19**	**36**
95-50-1	1,2-Dichlorobenzene	19	< 19 U
95-48-7	2-Methylphenol	19	< 19 U
106-44-5	**4-Methylphenol**	**38**	**210**
67-72-1	Hexachloroethane	19	< 19 U
105-67-9	2,4-Dimethylphenol	38	< 38 U
65-85-0	Benzoic Acid	380	< 380 U
120-82-1	1,2,4-Trichlorobenzene	19	< 19 U
91-20-3	**Naphthalene**	**19**	**160**
87-68-3	Hexachlorobutadiene	19	< 19 U
91-57-6	**2-Methylnaphthalene**	**19**	**33**
131-11-3	Dimethylphthalate	19	< 19 U
208-96-8	**Acenaphthylene**	**19**	**30**
83-32-9	**Acenaphthene**	**19**	**27**
132-64-9	**Dibenzofuran**	**19**	**38**
84-66-2	Diethylphthalate	47	< 47 U
86-73-7	**Fluorene**	**19**	**38**
86-30-6	N-Nitrosodiphenylamine	19	< 19 U
118-74-1	Hexachlorobenzene	19	< 19 U
87-86-5	Pentachlorophenol	190	< 190 U
85-01-8	**Phenanthrene**	**19**	**170**
120-12-7	**Anthracene**	**19**	**66**
84-74-2	Di-n-Butylphthalate	19	< 19 U
206-44-0	**Fluoranthene**	**19**	**490**
129-00-0	**Pyrene**	**19**	**410**
85-68-7	Butylbenzylphthalate	19	< 19 U
56-55-3	**Benzo(a)anthracene**	**19**	**110**
117-81-7	**bis(2-Ethylhexyl)phthalate**	**23**	**160 B**
218-01-9	**Chrysene**	**19**	**200**
117-84-0	Di-n-Octyl phthalate	19	< 19 U
50-32-8	**Benzo(a)pyrene**	**19**	**110**
193-39-5	**Indeno(1,2,3-cd)pyrene**	**19**	**63**
53-70-3	**Dibenz(a,h)anthracene**	**19**	**22**
191-24-2	**Benzo(g,h,i)perylene**	**19**	**65**

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Extraction Method: SW3546

Sample ID: SG-09-0-10-013113
SAMPLE

Lab Sample ID: WC32H
LIMS ID: 13-2431
Matrix: Sediment
Date Analyzed: 02/16/13 20:12

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030

CAS Number	Analyte	RL	Result
90-12-0	**1-Methylnaphthalene**	**19**	**22**
TOTBFA	**Total Benzofluoranthenes**	**38**	**230**

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	81.8%	2-Fluorobiphenyl	92.4%
d14-p-Terphenyl	92.6%	d4-1,2-Dichlorobenzene	79.0%
d5-Phenol	71.9%	2-Fluorophenol	66.5%
2,4,6-Tribromophenol	91.2%	d4-2-Chlorophenol	75.2%

FORM I

ANALYTICAL RESOURCES INCORPORATED

SW8270 SEMIVOLATILES SOIL/SEDIMENT SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030

Client ID	NBZ	FBP	TPH	DCB	PHL	2FP	TBP	2CP	TOT OUT
SG-12-0-10-013113	76.0%	85.8%	94.2%	74.4%	67.3%	65.1%	92.8%	71.1%	0
SG-13-0-10-013113	82.4%	87.6%	93.4%	71.2%	75.6%	66.5%	96.5%	85.1%	0
SG-07-0-10-013113	83.8%	91.2%	104%	83.8%	66.0%	69.7%	94.1%	81.1%	0
SG-06-0-10-013113	70.6%	76.6%	85.0%	69.6%	62.3%	59.9%	83.3%	74.5%	0
SG-05-0-10-013113	75.2%	76.4%	90.2%	75.2%	54.8%	58.9%	74.1%	62.3%	0
SG-95-0-10-013113	86.8%	89.4%	104%	87.4%	63.2%	70.0%	85.5%	72.0%	0
MB-020813	80.0%	82.2%	103%	81.8%	60.3%	63.2%	81.5%	76.4%	0
LCS-020813	90.0%	93.4%	106%	89.6%	76.7%	75.6%	90.5%	81.3%	0
LCSD-020813	82.8%	88.6%	96.2%	83.2%	71.7%	71.9%	86.7%	82.7%	0
SG-08-0-10-013113	76.0%	98.0%	90.0%	79.0%	76.7%	56.7%	60.0%	77.3%	0
SG-08-0-10-013113 MS	80.2%	91.0%	97.6%	82.2%	74.9%	69.6%	92.8%	87.7%	0
SG-08-0-10-013113 MSD	80.4%	86.4%	87.0%	73.8%	65.1%	52.5%	75.6%	62.5%	0
SG-09-0-10-013113	81.8%	92.4%	92.6%	79.0%	71.9%	66.5%	91.2%	75.2%	0

	LCS/MB LIMITS	QC LIMITS
(NBZ) = d5-Nitrobenzene	(30-160)	(30-160)
(FBP) = 2-Fluorobiphenyl	(30-160)	(30-160)
(TPH) = d14-p-Terphenyl	(30-160)	(30-160)
(DCB) = d4-1,2-Dichlorobenzene	(30-160)	(30-160)
(PHL) = d5-Phenol	(30-160)	(30-160)
(2FP) = 2-Fluorophenol	(30-160)	(30-160)
(TBP) = 2,4,6-Tribromophenol	(30-160)	(30-160)
(2CP) = d4-2-Chlorophenol	(30-160)	(30-160)

Prep Method: SW3546
Log Number Range: 13-2424 to 13-2431

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Extraction Method: SW3546

Sample ID: HA-09-0-10-013013
SAMPLE

Lab Sample ID: WC33G
LIMS ID: 13-2451
Matrix: Sediment
Data Release Authorized:
Reported: 02/19/13

QC Report No: WC33-Floyd-Snider
Project: POB-Harris
T.4030
Date Sampled: 01/30/13
Date Received: 02/01/13

Date Extracted: 02/08/13
Date Analyzed: 02/16/13 20:48
Instrument/Analyst: NT10/YZ
GPC Cleanup: Yes

Sample Amount: 10.60 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 5.8%

CAS Number	Analyte	RL	Result
108-95-2	Phenol	19	< 19 U
541-73-1	1,3-Dichlorobenzene	19	< 19 U
106-46-7	1,4-Dichlorobenzene	19	< 19 U
100-51-6	Benzyl Alcohol	19	< 19 U
95-50-1	1,2-Dichlorobenzene	19	< 19 U
95-48-7	2-Methylphenol	19	< 19 U
106-44-5	4-Methylphenol	38	< 38 U
67-72-1	Hexachloroethane	19	< 19 U
105-67-9	2,4-Dimethylphenol	38	< 38 U
65-85-0	Benzoic Acid	380	< 380 U
120-82-1	1,2,4-Trichlorobenzene	19	< 19 U
91-20-3	Naphthalene	19	< 19 U
87-68-3	Hexachlorobutadiene	19	< 19 U
91-57-6	2-Methylnaphthalene	19	< 19 U
131-11-3	Dimethylphthalate	19	< 19 U
208-96-8	Acenaphthylene	19	< 19 U
83-32-9	Acenaphthene	19	< 19 U
132-64-9	Dibenzofuran	19	< 19 U
84-66-2	Diethylphthalate	47	< 47 U
86-73-7	Fluorene	19	< 19 U
86-30-6	N-Nitrosodiphenylamine	19	< 19 U
118-74-1	Hexachlorobenzene	19	< 19 U
87-86-5	Pentachlorophenol	190	< 190 U
85-01-8	Phenanthrene	19	< 19 U
120-12-7	Anthracene	19	< 19 U
84-74-2	Di-n-Butylphthalate	19	< 19 U
206-44-0	**Fluoranthene**	**19**	**24**
129-00-0	**Pyrene**	**19**	**20**
85-68-7	Butylbenzylphthalate	19	< 19 U
56-55-3	**Benzo(a)anthracene**	**19**	**11 J**
117-81-7	**bis(2-Ethylhexyl)phthalate**	**24**	**39**
218-01-9	**Chrysene**	**19**	**15 J**
117-84-0	Di-n-Octyl phthalate	19	< 19 U
50-32-8	**Benzo(a)pyrene**	**19**	**11 J**
193-39-5	Indeno(1,2,3-cd)pyrene	19	< 19 U
53-70-3	Dibenz(a,h)anthracene	19	< 19 U
191-24-2	**Benzo(g,h,i)perylene**	**19**	**9.4 J**

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Extraction Method: SW3546

Sample ID: HA-09-0-10-013013
SAMPLE

Lab Sample ID: WC33G
LIMS ID: 13-2451
Matrix: Sediment
Date Analyzed: 02/16/13 20:48

QC Report No: WC33-Floyd-Snider
Project: POB-Harris
T.4030

CAS Number	Analyte	RL	Result
90-12-0	1-Methylnaphthalene	19	< 19 U
TOTBFA	**Total Benzofluoranthenes**	**38**	**31 J**

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	85.2%	2-Fluorobiphenyl	88.2%
d14-p-Terphenyl	103%	d4-1,2-Dichlorobenzene	86.0%
d5-Phenol	60.0%	2-Fluorophenol	66.0%
2,4,6-Tribromophenol	84.7%	d4-2-Chlorophenol	69.6%

FORM I

ANALYTICAL RESOURCES INCORPORATED

SW8270 SEMIVOLATILES SOIL/SEDIMENT SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: WC33-Floyd-Snider
Project: POB-Harris
T.4030

Client ID	NBZ	FBP	TPH	DCB	PHL	2FP	TBP	2CP	TOT OUT
MB-020813	80.0%	82.2%	103%	81.8%	60.3%	63.2%	81.5%	76.4%	0
LCS-020813	90.0%	93.4%	106%	89.6%	76.7%	75.6%	90.5%	81.3%	0
HA-09-0-10-013013	85.2%	88.2%	103%	86.0%	60.0%	66.0%	84.7%	69.6%	0

	LCS/MB LIMITS	QC LIMITS
(NBZ) = d5-Nitrobenzene	(30-160)	(30-160)
(FBP) = 2-Fluorobiphenyl	(30-160)	(30-160)
(TPH) = d14-p-Terphenyl	(30-160)	(30-160)
(DCB) = d4-1,2-Dichlorobenzene	(30-160)	(30-160)
(PHL) = d5-Phenol	(30-160)	(30-160)
(2FP) = 2-Fluorophenol	(30-160)	(30-160)
(TBP) = 2,4,6-Tribromophenol	(30-160)	(30-160)
(2CP) = d4-2-Chlorophenol	(30-160)	(30-160)

Prep Method: SW3546
Log Number Range: 13-2451 to 13-2451

FORM-II SW8270

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270 GC/MS

Sample ID: SG-08-0-10-013113
MS/MSD

Lab Sample ID: WC32G
LIMS ID: 13-2430
Matrix: Sediment
Data Release Authorized:
Reported: 02/18/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted MS/MSD: 02/08/13

Date Analyzed MS: 02/15/13 22:53
MSD: 02/16/13 19:36
Instrument/Analyst MS: NT10/YZ
MSD: NT10/YZ
GPC Cleanup: Yes

Sample Amount MS: 10.34 g-dry-wt
MSD: 10.39 g-dry-wt
Final Extract Volume MS: 1.0 mL
MSD: 1.0 mL
Dilution Factor MS: 1.00
MSD: 1.00
Percent Moisture: 48.5 %

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Phenol	96	382	484	59.1%	364	481	55.7%	4.8%
1,3-Dichlorobenzene	< 96 U	334	484	69.0%	300	481	62.4%	10.7%
1,4-Dichlorobenzene	< 96 U	375	484	77.5%	312	481	64.9%	18.3%
Benzyl Alcohol	< 96 U	421	484	87.0%	258	481	53.6%	48.0%
1,2-Dichlorobenzene	< 96 U	348	484	71.9%	308	481	64.0%	12.2%
2-Methylphenol	< 96 U	344	484	71.1%	350	481	72.8%	1.7%
4-Methylphenol	170 J	842	967	69.5%	778	962	63.2%	7.9%
Hexachloroethane	< 96 U	195	484	40.3%	94.3	481	19.6%	69.6%
2,4-Dimethylphenol	< 190 U	1140	1450	78.6%	1080	1440	75.0%	5.4%
Benzoic Acid	< 1900 U	1220	2660	45.9%	863 Q	2650	32.6%	34.3%
1,2,4-Trichlorobenzene	< 96 U	354	484	73.1%	330	481	68.6%	7.0%
Naphthalene	280	498	484	45.0%	503	481	46.4%	1.0%
Hexachlorobutadiene	< 96 U	367	484	75.8%	346	481	71.9%	5.9%
2-Methylnaphthalene	82 J	415	484	68.8%	427	481	71.7%	2.9%
Dimethylphthalate	< 96 U	464	484	95.9%	392	481	81.5%	16.8%
Acenaphthylene	< 96 U	448	484	92.6%	381	481	79.2%	16.2%
Acenaphthene	190	474	484	58.7%	455	481	55.1%	4.1%
Dibenzofuran	110	474	484	75.2%	455	481	71.7%	4.1%
Diethylphthalate	< 240 U	473	484	97.7%	450 Q	481	93.6%	5.0%
Fluorene	300	579	484	57.6%	505	481	42.6%	13.7%
N-Nitrosodiphenylamine	< 96 U	362	484	74.8%	194	481	40.3%	60.4%
Hexachlorobenzene	< 96 U	453	484	93.6%	423	481	87.9%	6.8%
Pentachlorophenol	< 960 U	876 Q	1450	60.4%	720 Q	1440	50.0%	19.5%
Phenanthrene	2500	1030	484	NA	1190	481	NA	14.4%
Anthracene	560	734	484	36.0%	633	481	15.2%	14.8%
Di-n-Butylphthalate	< 96 U	527	484	109%	502	481	104%	4.9%
Fluoranthene	3500	1890	484	NA	1700	481	NA	10.6%
Pyrene	3700	2040	484	NA	1640	481	NA	21.7%
Butylbenzylphthalate	< 96 U	531	484	110%	469	481	97.5%	12.4%
Benzo(a)anthracene	1700	1180	484	NA	995	481	NA	17.0%
bis(2-Ethylhexyl)phthalate	< 120 U	703 B	484	145%	776 B	481	161%	9.9%
Chrysene	2300	1840	484	NA	1240	481	NA	39.0%
Di-n-Octyl phthalate	< 96 U	460	484	95.0%	423	481	87.9%	8.4%
Benzo(a)pyrene	1600	1180	484	NA	906	481	NA	26.3%
Indeno(1,2,3-cd)pyrene	740	372	484	NA	611	481	NA	48.6%
Dibenz(a,h)anthracene	300	293	484	NA	532	481	48.2%	57.9%
Benzo(g,h,i)perylene	790	281	484	NA	585	481	NA	70.2%
1-Methylnaphthalene	82 J	422	484	70.2%	485	481	83.8%	13.9%
Total Benzofluoranthenes	2600	2680	967	8.3%	1770	962	NA	40.9%

Reported in µg/kg (ppb)
RPD calculated using sample concentrations per SW846.
NA-No recovery due to high concentration of analyte in original sample and/or calculated negative recovery.

FORM III

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Extraction Method: SW3546

Sample ID: SG-08-0-10-013113
MATRIX SPIKE

Lab Sample ID: WC32G
LIMS ID: 13-2430
Matrix: Sediment
Data Release Authorized:
Reported: 02/18/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted: 02/08/13
Date Analyzed: 02/15/13 22:53
Instrument/Analyst: NT10/YZ
GPC Cleanup: Yes

Sample Amount: 10.34 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 48.5%

CAS Number	Analyte	RL	Result
108-95-2	Phenol	19	---
541-73-1	1,3-Dichlorobenzene	19	---
106-46-7	1,4-Dichlorobenzene	19	---
100-51-6	Benzyl Alcohol	19	---
95-50-1	1,2-Dichlorobenzene	19	---
95-48-7	2-Methylphenol	19	---
106-44-5	4-Methylphenol	39	---
67-72-1	Hexachloroethane	19	---
105-67-9	2,4-Dimethylphenol	39	---
65-85-0	Benzoic Acid	390	---
120-82-1	1,2,4-Trichlorobenzene	19	---
91-20-3	Naphthalene	19	---
87-68-3	Hexachlorobutadiene	19	---
91-57-6	2-Methylnaphthalene	19	---
131-11-3	Dimethylphthalate	19	---
208-96-8	Acenaphthylene	19	---
83-32-9	Acenaphthene	19	---
132-64-9	Dibenzofuran	19	---
84-66-2	Diethylphthalate	48	---
86-73-7	Fluorene	19	---
86-30-6	N-Nitrosodiphenylamine	19	---
118-74-1	Hexachlorobenzene	19	---
87-86-5	Pentachlorophenol	190	---
85-01-8	Phenanthrene	19	---
120-12-7	Anthracene	19	---
84-74-2	Di-n-Butylphthalate	19	---
206-44-0	Fluoranthene	19	---
129-00-0	Pyrene	19	---
85-68-7	Butylbenzylphthalate	19	---
56-55-3	Benzo(a)anthracene	19	---
117-81-7	bis(2-Ethylhexyl)phthalate	24	---
218-01-9	Chrysene	19	---
117-84-0	Di-n-Octyl phthalate	19	---
50-32-8	Benzo(a)pyrene	19	---
193-39-5	Indeno(1,2,3-cd)pyrene	19	---
53-70-3	Dibenz(a,h)anthracene	19	---
191-24-2	Benzo(g,h,i)perylene	19	---

FORM I

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Extraction Method: SW3546

ANALYTICAL RESOURCES INCORPORATED

Sample ID: SG-08-0-10-013113
MATRIX SPIKE

Lab Sample ID: WC32G
LIMS ID: 13-2430
Matrix: Sediment
Date Analyzed: 02/15/13 22:53

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030

CAS Number	Analyte	RL	Result
90-12-0	1-Methylnaphthalene	19	---
TOTBFA	Total Benzofluoranthenes	39	---

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	80.2%	2-Fluorobiphenyl	91.0%
d14-p-Terphenyl	97.6%	d4-1,2-Dichlorobenzene	82.2%
d5-Phenol	74.9%	2-Fluorophenol	69.6%
2,4,6-Tribromophenol	92.8%	d4-2-Chlorophenol	87.7%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Extraction Method: SW3546

Sample ID: SG-08-0-10-013113
MATRIX SPIKE DUPLICATE

Lab Sample ID: WC32G
LIMS ID: 13-2430
Matrix: Sediment
Data Release Authorized:
Reported: 02/18/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted: 02/08/13
Date Analyzed: 02/16/13 19:36
Instrument/Analyst: NT10/YZ
GPC Cleanup: Yes

Sample Amount: 10.39 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 48.5%

CAS Number	Analyte	RL	Result
108-95-2	Phenol	19	---
541-73-1	1,3-Dichlorobenzene	19	---
106-46-7	1,4-Dichlorobenzene	19	---
100-51-6	Benzyl Alcohol	19	---
95-50-1	1,2-Dichlorobenzene	19	---
95-48-7	2-Methylphenol	19	---
106-44-5	4-Methylphenol	38	---
67-72-1	Hexachloroethane	19	---
105-67-9	2,4-Dimethylphenol	38	---
65-85-0	Benzoic Acid	380	---
120-82-1	1,2,4-Trichlorobenzene	19	---
91-20-3	Naphthalene	19	---
87-68-3	Hexachlorobutadiene	19	---
91-57-6	2-Methylnaphthalene	19	---
131-11-3	Dimethylphthalate	19	---
208-96-8	Acenaphthylene	19	---
83-32-9	Acenaphthene	19	---
132-64-9	Dibenzofuran	19	---
84-66-2	Diethylphthalate	48	---
86-73-7	Fluorene	19	---
86-30-6	N-Nitrosodiphenylamine	19	---
118-74-1	Hexachlorobenzene	19	---
87-86-5	Pentachlorophenol	190	---
85-01-8	Phenanthrene	19	---
120-12-7	Anthracene	19	---
84-74-2	Di-n-Butylphthalate	19	---
206-44-0	Fluoranthene	19	---
129-00-0	Pyrene	19	---
85-68-7	Butylbenzylphthalate	19	---
56-55-3	Benzo(a)anthracene	19	---
117-81-7	bis(2-Ethylhexyl)phthalate	24	---
218-01-9	Chrysene	19	---
117-84-0	Di-n-Octyl phthalate	19	---
50-32-8	Benzo(a)pyrene	19	---
193-39-5	Indeno(1,2,3-cd)pyrene	19	---
53-70-3	Dibenz(a,h)anthracene	19	---
191-24-2	Benzo(g,h,i)perylene	19	---

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Extraction Method: SW3546

Sample ID: SG-08-0-10-013113
MATRIX SPIKE DUPLICATE

Lab Sample ID: WC32G
LIMS ID: 13-2430
Matrix: Sediment
Date Analyzed: 02/16/13 19:36

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030

CAS Number	Analyte	RL	Result
90-12-0	1-Methylnaphthalene	19	---
TOTBFA	Total Benzofluoranthenes	38	---

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	80.4%	2-Fluorobiphenyl	86.4%
d14-p-Terphenyl	87.0%	d4-1,2-Dichlorobenzene	73.8%
d5-Phenol	65.1%	2-Fluorophenol	52.5%
2,4,6-Tribromophenol	75.6%	d4-2-Chlorophenol	62.5%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: LCS-020613
LCS/LCSD

Lab Sample ID: LCS-020613
LIMS ID: 13-2432
Matrix: Water
Data Release Authorized:
Reported: 02/08/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted LCS/LCSD: 02/06/13

Sample Amount LCS: 500 mL
LCSD: 500 mL

Date Analyzed LCS: 02/07/13 15:46
LCSD: 02/07/13 16:21
Instrument/Analyst LCS: NT6/JZ
LCSD: NT6/JZ
GPC Cleanup: NO

Final Extract Volume LCS: 0.50 mL
LCSD: 0.50 mL
Dilution Factor LCS: 1.00
LCSD: 1.00

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Phenol	20.2	25.0	80.8%	20.2	25.0	80.8%	0.0%
1,3-Dichlorobenzene	17.0	25.0	68.0%	16.7	25.0	66.8%	1.8%
1,4-Dichlorobenzene	17.4	25.0	69.6%	17.0	25.0	68.0%	2.3%
Benzyl Alcohol	21.8	25.0	87.2%	21.6	25.0	86.4%	0.9%
1,2-Dichlorobenzene	17.7	25.0	70.8%	17.4	25.0	69.6%	1.7%
2-Methylphenol	19.3	25.0	77.2%	19.5	25.0	78.0%	1.0%
4-Methylphenol	40.3	50.0	80.6%	40.5	50.0	81.0%	0.5%
Hexachloroethane	16.8	25.0	67.2%	16.6	25.0	66.4%	1.2%
2,4-Dimethylphenol	50.9	75.0	67.9%	51.2	75.0	68.3%	0.6%
Benzoic Acid	95.8	138	69.4%	100	138	72.5%	4.3%
1,2,4-Trichlorobenzene	18.1	25.0	72.4%	17.9	25.0	71.6%	1.1%
Naphthalene	20.5	25.0	82.0%	20.5	25.0	82.0%	0.0%
Hexachlorobutadiene	17.8	25.0	71.2%	17.5	25.0	70.0%	1.7%
2-Methylnaphthalene	21.4	25.0	85.6%	21.5	25.0	86.0%	0.5%
Dimethylphthalate	22.3	25.0	89.2%	22.0	25.0	88.0%	1.4%
Acenaphthylene	22.2	25.0	88.8%	22.4	25.0	89.6%	0.9%
Acenaphthene	21.4	25.0	85.6%	21.4	25.0	85.6%	0.0%
Dibenzofuran	22.7	25.0	90.8%	22.6	25.0	90.4%	0.4%
Diethylphthalate	22.1	25.0	88.4%	21.5	25.0	86.0%	2.8%
Fluorene	22.3	25.0	89.2%	22.0	25.0	88.0%	1.4%
N-Nitrosodiphenylamine	19.9	25.0	79.6%	20.4	25.0	81.6%	2.5%
Hexachlorobenzene	20.2	25.0	80.8%	20.4	25.0	81.6%	1.0%
Pentachlorophenol	74.3	75.0	99.1%	74.1	75.0	98.8%	0.3%
Phenanthrene	21.8	25.0	87.2%	21.8	25.0	87.2%	0.0%
Anthracene	21.0	25.0	84.0%	21.2	25.0	84.8%	0.9%
Di-n-Butylphthalate	22.8	25.0	91.2%	22.3	25.0	89.2%	2.2%
Fluoranthene	24.1	25.0	96.4%	23.0	25.0	92.0%	4.7%
Pyrene	18.1	25.0	72.4%	18.0	25.0	72.0%	0.6%
Butylbenzylphthalate	17.7	25.0	70.8%	17.7	25.0	70.8%	0.0%
Benzo(a)anthracene	22.3	25.0	89.2%	22.3	25.0	89.2%	0.0%
bis(2-Ethylhexyl)phthalate	19.0	25.0	76.0%	18.6	25.0	74.4%	2.1%
Chrysene	21.8	25.0	87.2%	21.8	25.0	87.2%	0.0%
Di-n-Octyl phthalate	20.4	25.0	81.6%	20.2	25.0	80.8%	1.0%
Benzo(a)pyrene	20.3	25.0	81.2%	20.2	25.0	80.8%	0.5%
Indeno(1,2,3-cd)pyrene	19.8	25.0	79.2%	19.7	25.0	78.8%	0.5%
Dibenz(a,h)anthracene	19.4	25.0	77.6%	19.5	25.0	78.0%	0.5%
Benzo(g,h,i)perylene	18.9	25.0	75.6%	18.9	25.0	75.6%	0.0%
1-Methylnaphthalene	21.0	25.0	84.0%	21.4	25.0	85.6%	1.9%
Total Benzofluoranthenes	41.6	50.0	83.2%	41.3	50.0	82.6%	0.7%

Semivolatile Surrogate Recovery

	LCS	LCSD
d5-Nitrobenzene	88.0%	86.4%

FORM III

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: LCS-020613
LCS/LCSD

Lab Sample ID: LCS-020613
LIMS ID: 13-2432
Matrix: Water
Date Analyzed LCS: 02/07/13 15:46
LCSD: 02/07/13 16:21

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD

	LCS	LCSD
2-Fluorobiphenyl	92.4%	90.8%
d14-p-Terphenyl	80.8%	78.4%
d4-1,2-Dichlorobenzene	79.6%	74.0%
d5-Phenol	77.9%	76.3%
2-Fluorophenol	72.0%	69.9%
2,4,6-Tribromophenol	92.0%	89.6%
d4-2-Chlorophenol	75.2%	73.6%

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

FORM III

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270 GC/MS

ANALYTICAL RESOURCES INCORPORATED

Sample ID: LCS-020813
LCS/LCSD

Lab Sample ID: LCS-020813
LIMS ID: 13-2430
Matrix: Sediment
Data Release Authorized:
Reported: 02/18/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted LCS/LCSD: 02/08/13

Date Analyzed LCS: 02/15/13 17:26
LCSD: 02/15/13 18:03
Instrument/Analyst LCS: NT10/YZ
LCSD: NT10/YZ
GPC Cleanup: Yes

Sample Amount LCS: 10.00 g
LCSD: 10.00 g
Final Extract Volume LCS: 1.0 mL
LCSD: 1.0 mL
Dilution Factor LCS: 1.00
LCSD: 1.00
Percent Moisture: NA

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Phenol	380	500	76.0%	364	500	72.8%	4.3%
1,3-Dichlorobenzene	370	500	74.0%	360	500	72.0%	2.7%
1,4-Dichlorobenzene	384	500	76.8%	363	500	72.6%	5.6%
Benzyl Alcohol	392	500	78.4%	380	500	76.0%	3.1%
1,2-Dichlorobenzene	384	500	76.8%	369	500	73.8%	4.0%
2-Methylphenol	347	500	69.4%	324	500	64.8%	6.9%
4-Methylphenol	706	1000	70.6%	688	1000	68.8%	2.6%
Hexachloroethane	290	500	58.0%	287	500	57.4%	1.0%
2,4-Dimethylphenol	915	1500	61.0%	777	1500	51.8%	16.3%
Benzoic Acid	1630	2750	59.3%	1560	2750	56.7%	4.4%
1,2,4-Trichlorobenzene	404	500	80.8%	384	500	76.8%	5.1%
Naphthalene	390	500	78.0%	366	500	73.2%	6.3%
Hexachlorobutadiene	422	500	84.4%	387	500	77.4%	8.7%
2-Methylnaphthalene	427	500	85.4%	404	500	80.8%	5.5%
Dimethylphthalate	492	500	98.4%	482	500	96.4%	2.1%
Acenaphthylene	398	500	79.6%	400	500	80.0%	0.5%
Acenaphthene	412	500	82.4%	400	500	80.0%	3.0%
Dibenzofuran	429	500	85.8%	414	500	82.8%	3.6%
Diethylphthalate	480	500	96.0%	471	500	94.2%	1.9%
Fluorene	497	500	99.4%	478	500	95.6%	3.9%
N-Nitrosodiphenylamine	423	500	84.6%	446	500	89.2%	5.3%
Hexachlorobenzene	470	500	94.0%	456	500	91.2%	3.0%
Pentachlorophenol	647 Q	1500	43.1%	650 Q	1500	43.3%	0.5%
Phenanthrene	460	500	92.0%	446	500	89.2%	3.1%
Anthracene	441	500	88.2%	425	500	85.0%	3.7%
Di-n-Butylphthalate	576	500	115%	563	500	113%	2.3%
Fluoranthene	515	500	103%	477	500	95.4%	7.7%
Pyrene	448	500	89.6%	432	500	86.4%	3.6%
Butylbenzylphthalate	577	500	115%	535	500	107%	7.6%
Benzo(a)anthracene	426	500	85.2%	414	500	82.8%	2.9%
bis(2-Ethylhexyl)phthalate	517 B	500	103%	502 B	500	100%	2.9%
Chrysene	500	500	100%	470	500	94.0%	6.2%
Di-n-Octyl phthalate	489	500	97.8%	488	500	97.6%	0.2%
Benzo(a)pyrene	395	500	79.0%	393	500	78.6%	0.5%

FORM III

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270 GC/MS

ANALYTICAL RESOURCES INCORPORATED

Sample ID: LCSD-020813
LCS/LCSD

Lab Sample ID: LCS-020813
LIMS ID: 13-2430
Matrix: Sediment
Date Analyzed LCS: 02/15/13 17:26
LCSD: 02/15/13 18:03

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Indeno(1,2,3-cd)pyrene	224	500	44.8%	250	500	50.0%	11.0%
Dibenz(a,h)anthracene	228	500	45.6%	285	500	57.0%	22.2%
Benzo(g,h,i)perylene	144	500	28.8%	180	500	36.0%	22.2%
1-Methylnaphthalene	452	500	90.4%	428	500	85.6%	5.5%
Total Benzofluoranthenes	980	1000	98.0%	929	1000	92.9%	5.3%

Semivolatile Surrogate Recovery

	LCS	LCSD
d5-Nitrobenzene	90.0%	82.8%
2-Fluorobiphenyl	93.4%	88.6%
d14-p-Terphenyl	106%	96.2%
d4-1,2-Dichlorobenzene	89.6%	83.2%
d5-Phenol	76.7%	71.7%
2-Fluorophenol	75.6%	71.9%
2,4,6-Tribromophenol	90.5%	86.7%
d4-2-Chlorophenol	81.3%	82.7%

Reported in µg/kg (ppb)
RPD calculated using sample concentrations per SW846.

4B

SEMIVOLATILE METHOD BLANK SUMMARY

BLANK NO.

WC32MBW1

Lab Name: ANALYTICAL RESOURCES INC

Client: FLOYD-SNIDER

ARI Job No: WC32

Project: POB-HARRIS

Lab File ID: 02071309

Date Extracted: 02/06/13

Instrument ID: NT6

Date Analyzed: 02/07/13

Matrix: LIQUID

Time Analyzed: 1512

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	WC32LCSW1	WC32LCSW1	02071310	02/07/13
02	WC32LCSDW1	WC32LCSDW1	02071311	02/07/13
03	SG-05-ER-013113	WC32I	02071313	02/07/13
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FORM IV SV

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Extraction Method: SW3520C

ANALYTICAL RESOURCES INCORPORATED

Sample ID: MB-020613
METHOD BLANK

Lab Sample ID: MB-020613
LIMS ID: 13-2432
Matrix: Water
Data Release Authorized:
Reported: 02/08/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: NA
Date Received: NA

Date Extracted: 02/06/13
Date Analyzed: 02/07/13 15:12
Instrument/Analyst: NT6/JZ

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

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	2.0	< 2.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
106-44-5	4-Methylphenol	2.0	< 2.0 U
67-72-1	Hexachloroethane	2.0	< 2.0 U
105-67-9	2,4-Dimethylphenol	3.0	< 3.0 U
65-85-0	Benzoic Acid	20	< 20 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
87-68-3	Hexachlorobutadiene	3.0	< 3.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
84-66-2	Diethylphthalate	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	10	< 10 U
85-01-8	Phenanthrene	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
56-55-3	Benzo(a)anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	< 1.0 U
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
90-12-0	1-Methylnaphthalene	1.0	< 1.0 U
TOTBFA	Total Benzofluoranthenes	5.0	< 5.0 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Extraction Method: SW3520C

Sample ID: MB-020613
METHOD BLANK

Lab Sample ID: MB-020613
LIMS ID: 13-2432
Matrix: Water
Date Analyzed: 02/07/13 15:12

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030

CAS Number	Analyte	RL	Result

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	80.4%	2-Fluorobiphenyl	79.2%
d14-p-Terphenyl	77.2%	d4-1,2-Dichlorobenzene	73.6%
d5-Phenol	70.1%	2-Fluorophenol	64.5%
2,4,6-Tribromophenol	80.5%	d4-2-Chlorophenol	69.6%

4B
SEMIVOLATILE METHOD BLANK SUMMARY

BLANK NO.

WC32MBS1

Lab Name: ANALYTICAL RESOURCES INC

Client: FLOYD-SNIDER

ARI Job No: WC33

Project: POB-HARRIS

Lab File ID: WC32MB

Date Extracted: 02/08/13

Instrument ID: NT10

Date Analyzed: 02/15/13

Matrix: SOLID

Time Analyzed: 1650

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	WC32LCSS1	WC32LCSS1	WC32SB	02/15/13
02	WC32LCSDS1	WC32LCSDS1	WC32SBD	02/15/13
03	SG-12-0-10-01311	WC32A	WC32A	02/15/13
04	SG-13-0-10-01311	WC32B	WC32B	02/15/13
05	SG-07-0-10-01311	WC32C	WC32C	02/15/13
06	SG-06-0-10-01311	WC32D	WC32D	02/15/13
07	SG-05-0-10-01311	WC32E	WC32E	02/15/13
08	SG-95-0-10-01311	WC32F	WC32F	02/15/13
09	SG-08-0-10-0131	WC32GMS	WC32GMS	02/15/13
10	SG-08-0-10-01311	WC32G	WC32G	02/16/13
11	SG-08-0-10-0131	WC32GMSD	WC32GMSD	02/16/13
12	SG-09-0-10-01311	WC32H	WC32H	02/16/13
13	HA-09-0-10-01301	WC33G	WC33G	02/16/13
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ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Extraction Method: SW3546

Sample ID: MB-020813
METHOD BLANK

Lab Sample ID: MB-020813
LIMS ID: 13-2430
Matrix: Sediment
Data Release Authorized:
Reported: 02/18/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: NA
Date Received: NA

Date Extracted: 02/08/13
Date Analyzed: 02/15/13 16:50
Instrument/Analyst: NT10/YZ
GPC Cleanup: Yes

Sample Amount: 10.00 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: NA

CAS Number	Analyte	RL	Result
108-95-2	Phenol	20	< 20 U
541-73-1	1,3-Dichlorobenzene	20	< 20 U
106-46-7	1,4-Dichlorobenzene	20	< 20 U
100-51-6	Benzyl Alcohol	20	< 20 U
95-50-1	1,2-Dichlorobenzene	20	< 20 U
95-48-7	2-Methylphenol	20	< 20 U
106-44-5	4-Methylphenol	40	< 40 U
67-72-1	Hexachloroethane	20	< 20 U
105-67-9	2,4-Dimethylphenol	40	< 40 U
65-85-0	Benzoic Acid	400	< 400 U
120-82-1	1,2,4-Trichlorobenzene	20	< 20 U
91-20-3	Naphthalene	20	< 20 U
87-68-3	Hexachlorobutadiene	20	< 20 U
91-57-6	2-Methylnaphthalene	20	< 20 U
131-11-3	Dimethylphthalate	20	< 20 U
208-96-8	Acenaphthylene	20	< 20 U
83-32-9	Acenaphthene	20	< 20 U
132-64-9	Dibenzofuran	20	< 20 U
84-66-2	Diethylphthalate	50	< 50 U
86-73-7	Fluorene	20	< 20 U
86-30-6	N-Nitrosodiphenylamine	20	< 20 U
118-74-1	Hexachlorobenzene	20	< 20 U
87-86-5	Pentachlorophenol	200	< 200 U
85-01-8	Phenanthrene	20	< 20 U
120-12-7	Anthracene	20	< 20 U
84-74-2	Di-n-Butylphthalate	20	< 20 U
206-44-0	Fluoranthene	20	< 20 U
129-00-0	Pyrene	20	< 20 U
85-68-7	Butylbenzylphthalate	20	< 20 U
56-55-3	Benzo(a)anthracene	20	< 20 U
117-81-7	**bis(2-Ethylhexyl)phthalate**	**25**	**45**
218-01-9	Chrysene	20	< 20 U
117-84-0	Di-n-Octyl phthalate	20	< 20 U
50-32-8	Benzo(a)pyrene	20	< 20 U
193-39-5	Indeno(1,2,3-cd)pyrene	20	< 20 U
53-70-3	Dibenz(a,h)anthracene	20	< 20 U
191-24-2	Benzo(g,h,i)perylene	20	< 20 U

FORM I

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Extraction Method: SW3546

Sample ID: MB-020813
METHOD BLANK

Lab Sample ID: MB-020813
LIMS ID: 13-2430
Matrix: Sediment
Date Analyzed: 02/15/13 16:50

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030

CAS Number	Analyte	RL	Result
90-12-0	1-Methylnaphthalene	20	< 20 U
TOTBFA	Total Benzofluoranthenes	40	< 40 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	80.0%	2-Fluorobiphenyl	82.2%
d14-p-Terphenyl	103%	d4-1,2-Dichlorobenzene	81.8%
d5-Phenol	60.3%	2-Fluorophenol	63.2%
2,4,6-Tribromophenol	81.5%	d4-2-Chlorophenol	76.4%

FORM I

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD-SNIDER

Instrument ID: NT6   Project: POB-HARRIS

DFTPP Injection Date: 01/23/13   DFTPP Injection Time: 1527

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.0 - 80.0% of mass 198	55.1	
68	Less than 2.0% of mass 69	0.9	(1.7)1
69	Mass 69 relative abundance	48.6	
70	Less than 2.0% of mass 69	0.3	(0.5)1
127	10.0 - 80.0% of mass 198	55.2	
197	Less than 2.0% of mass 198	0.2	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	6.9	
275	10.0 - 60.0% of mass 198	22.7	
365	Greater than 1.0% of mass 198	2.91	
441	0.0 - 24.0% of mass 442	9.6	(14.3)2
442	50.0 - 200.0% of mass 198	67.2	
443	15.0 - 24.0% of mass 442	12.7	(18.9)2

1-Value is % mass 69   2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	IC120123	IC250123	01231308	01/23/13	1527
02	IC919123	IC020123	01231309	01/23/13	1601
03	IC10123	IC10123	01231310	01/23/13	1637
04	IC50123	IC50123	01231311	01/23/13	1711
05	IC100123	IC100123	01231312	01/23/13	1745
06	IC400123	IC400123	01231313	01/23/13	1819
07	IC600126	IC600123	01231314	01/23/13	1852
08	IC800123	IC800123	01231315	01/23/13	1926
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22					

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD-SNIDER

Instrument ID: NT6   Project: POB-HARRIS

DFTPP Injection Date: 02/07/13   DFTPP Injection Time: 1012

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	54.4
68	Less than 2.0% of mass 69	0.6 (1.2)1
69	Mass 69 relative abundance	47.2
70	Less than 2.0% of mass 69	0.1 (0.1)1
127	10.0 - 80.0% of mass 198	53.8
197	Less than 2.0% of mass 198	0.3
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.7
275	10.0 - 60.0% of mass 198	22.3
365	Greater than 1.0% of mass 198	3.23
441	0.0 - 24.0% of mass 442	10.0 (14.3)2
442	50.0 - 200.0% of mass 198	70.1
443	15.0 - 24.0% of mass 442	13.6 (19.4)2

1-Value is % mass 69   2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CC0207	CC0207	02071301	02/07/13	1012
02	WC32MBW1	WC32MBW1	02071309	02/07/13	1512
03	WC32LCSW1	WC32LCSW1	02071310	02/07/13	1546
04	WC32LCSDW1	WC32LCSDW1	02071311	02/07/13	1621
05	SG-05-ER-013113	WC32I	02071313	02/07/13	1729
06					
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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ANALYTICAL RESOURCES INC Client: FLOYD-SNIDER

Instrument ID: NT10 Project: POB-HARRIS

DFTPP Injection Date: 01/25/13 DFTPP Injection Time: 1243

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	24.2
68	Less than 2.0% of mass 69	0.6 (1.5)1
69	Mass 69 relative abundance	39.8
70	Less than 2.0% of mass 69	0.2 (0.5)1
127	10.0 - 80.0% of mass 198	48.9
197	Less than 2.0% of mass 198	0.2
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.7
275	10.0 - 60.0% of mass 198	28.9
365	Greater than 1.0% of mass 198	4.43
441	0.0 - 24.0% of mass 442	16.5 (15.1)2
442	50.0 - 200.0% of mass 198	109.2
443	15.0 - 24.0% of mass 442	21.8 (20.0)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		IC0125A	IC0125A	01/25/13	1259
02		IC0125B	IC0125B	01/25/13	1336
03		IC0125C	IC0125C	01/25/13	1413
04		IC0125D	IC0125D	01/25/13	1450
05		IC0125E	IC0125E	01/25/13	1527
06		IC0125F	IC0125F	01/25/13	1603
07		IC0125H	IC0125H	01/25/13	1716
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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ANALYTICAL RESOURCES INC Client: FLOYD-SNIDER

Instrument ID: NT10 Project: POB-HARRIS

DFTPP Injection Date: 02/15/13 DFTPP Injection Time: 1103

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.0 - 80.0% of mass 198	21.1	
68	Less than 2.0% of mass 69	0.6	(1.6)1
69	Mass 69 relative abundance	34.3	
70	Less than 2.0% of mass 69	0.1	(0.4)1
127	10.0 - 80.0% of mass 198	47.3	
197	Less than 2.0% of mass 198	0.0	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	6.8	
275	10.0 - 60.0% of mass 198	32.1	
365	Greater than 1.0% of mass 198	5.38	
441	0.0 - 24.0% of mass 442	21.7	(14.7)2
442	50.0 - 200.0% of mass 198	148.0	
443	15.0 - 24.0% of mass 442	29.0	(19.6)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		CC0215	CC0215	02/15/13	1120
02	WC32MBS1	WC32MBS1	WC32MB	02/15/13	1650
03	WC32LCSS1	WC32LCSS1	WC32SB	02/15/13	1726
04	WC32LCSDS1	WC32LCSDS1	WC32SBD	02/15/13	1803
05	SG-12-0-10-01311	WC32A	WC32A	02/15/13	1839
06	SG-13-0-10-01311	WC32B	WC32B	02/15/13	1915
07	SG-07-0-10-01311	WC32C	WC32C	02/15/13	1952
08	SG-06-0-10-01311	WC32D	WC32D	02/15/13	2028
09	SG-05-0-10-01311	WC32E	WC32E	02/15/13	2104
10	SG-95-0-10-01311	WC32F	WC32F	02/15/13	2140
11	SG-08-0-10-0131	WC32GMS	WC32GMS	02/15/13	2253
12					
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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD-SNIDER

Instrument ID: NT10   Project: POB-HARRIS

DFTPP Injection Date: 02/16/13   DFTPP Injection Time: 1048

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.0 - 80.0% of mass 198	22.1	
68	Less than 2.0% of mass 69	0.6	(1.6)1
69	Mass 69 relative abundance	36.6	
70	Less than 2.0% of mass 69	0.1	(0.3)1
127	10.0 - 80.0% of mass 198	47.8	
197	Less than 2.0% of mass 198	0.0	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	6.8	
275	10.0 - 60.0% of mass 198	29.8	
365	Greater than 1.0% of mass 198	4.81	
441	0.0 - 24.0% of mass 442	18.2	(15.2)2
442	50.0 - 200.0% of mass 198	119.9	
443	15.0 - 24.0% of mass 442	24.1	(20.1)2

1-Value is % mass 69   2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SG-08-0-10-01311	WC32G	WC32G	02/16/13	1900
02	SG-08-0-10-0131	WC32GMSD	WC32GMSD	02/16/13	1936
03	SG-09-0-10-01311	WC32H	WC32H	02/16/13	2012
04	HA-09-0-10-01301	WC33G	WC33G	02/16/13	2048
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6B

SEMIVOLATILE 8270-D INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD-SNIDER

ARI Job No: WC32   Project: POB-HARRIS

Instrument ID: NT6   Calibration Date: 01/23/13

LAB FILE ID: RRF1 =01231310 RRF5 =01231311 RRF10 =01231312
RRF25 =01231308 RRF40 =01231313 RRF60 =01231314
RRF80 =01231315 RRF0.2=01231309

COMPOUND	RRF 1	RRF 5	RRF 10	RRF 25	RRF 40	RRF 60	RRF 80	RRF 0.2	RRF	%RSD /R^2
Phenol	1.660	1.672	1.637	1.579	1.548	1.448	1.446		1.570	6.0
Bis(2-Chloroethyl)ether	1.465	1.341	1.281	1.374	1.308	1.268	1.253		1.327	5.6
2-Chlorophenol	1.440	1.432	1.381	1.358	1.307	1.197	1.192		1.330	7.7
1,3-Dichlorobenzene	1.642	1.538	1.494	1.604	1.516	1.477	1.437		1.530	4.7
1,4-Dichlorobenzene	1.671	1.540	1.460	1.605	1.492	1.458	1.403		1.518	6.2
1,2-Dichlorobenzene	1.569	1.477	1.395	1.497	1.362	1.298	1.279		1.411	7.6
Benzyl alcohol	0.876	0.867	0.835	0.859	0.800	0.739	0.753		0.818	6.8
2,2'-oxybis(1-Chloropropane)	2.475	2.233	2.133	2.245	2.054	1.989	1.929		2.151	8.6
2-Methylphenol	1.265	1.275	1.249	1.222	1.174	1.068	1.045		1.185	7.9
Hexachloroethane	0.683	0.645	0.618	0.650	0.598	0.571	0.548		0.616	7.7
N-Nitroso-di-n-propylamine	1.029	0.964	0.941	1.026	0.966	0.916	0.898		0.963	5.2
4-Methylphenol	1.357	1.352	1.286	1.262	1.183	1.052	1.011		1.215	11.4
Nitrobenzene	0.506	0.462	0.432	0.454	0.434	0.416	0.419		0.446	7.0
Isophorone	0.660	0.618	0.608	0.639	0.628	0.603	0.604		0.623	3.4
2-Nitrophenol	0.174	0.199	0.196	0.197	0.200	0.192	0.194		0.193	4.7
2,4-Dimethylphenol	0.376	0.386	0.366	0.356	0.356	0.330	0.326		0.356	6.2
Bis(2-Chloroethoxy)methane	0.482	0.445	0.426	0.443	0.436	0.426	0.418		0.439	4.8
2,4-Dichlorophenol	0.295	0.301	0.294	0.289	0.291	0.269	0.267		0.286	4.6
1,2,4-Trichlorobenzene	0.362	0.326	0.316	0.335	0.330	0.332	0.323		0.332	4.3
Naphthalene	1.092	1.014	0.960	0.979	0.898	0.831	0.788		0.937	11.3
Benzoic acid		0.271	0.297	0.299	0.326	0.291	0.304		0.298	6.1
4-Chloroaniline	0.442	0.406	0.380	0.346	0.237				0.362	21.6 <-
Hexachlorobutadiene	0.226	0.202	0.189	0.212	0.209	0.212	0.209		0.208	5.3
4-Chloro-3-methylphenol	0.264	0.294	0.295	0.280	0.290	0.264	0.265		0.279	5.2
2-Methylnaphthalene	0.532	0.524	0.495	0.508	0.484	0.442	0.425		0.487	8.2
Hexachlorocyclopentadiene	0.337	0.361	0.371	0.441	0.452	0.477	0.473		0.416	14.0
2,4,6-Trichlorophenol	0.336	0.355	0.349	0.359	0.369	0.365	0.365		0.357	3.2
2,4,5-Trichlorophenol	0.318	0.371	0.378	0.377	0.388	0.376	0.369		0.368	6.2
2-Chloronaphthalene	1.311	1.141	1.076	1.120	1.036	1.016	0.987		1.098	9.9
2-Nitroaniline	0.345	0.365	0.359	0.362	0.361	0.356	0.351		0.357	2.0
Acenaphthylene	1.849	1.734	1.656	1.713	1.608	1.541	1.485		1.655	7.5
Dimethylphthalate	1.276	1.166	1.093	1.144	1.140	1.094	1.076		1.141	5.9
2,6-Dinitrotoluene	0.256	0.258	0.259	0.282	0.282	0.278	0.278		0.270	4.5
Acenaphthene	1.190	1.066	1.017	1.073	1.021	0.994	0.975		1.048	6.9
3-Nitroaniline	0.280	0.277	0.275	0.213	0.175				0.244	19.5
2,4-Dinitrophenol		0.054	0.102	0.175	0.212	0.218	0.225		0.164	0.996
Dibenzofuran	1.592	1.456	1.384	1.400	1.346	1.273	1.231		1.383	8.7

NTC
AB
07/07/13

<- Outside QC limits: %RSD <20% or R^2 > 0.990

FORM VI SV-1

6B

SEMIVOLATILE 8270-D INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD-SNIDER

ARI Job No: WC32   Project: POB-HARRIS

Instrument ID: NT6   Calibration Date: 01/23/13

LAB FILE ID: RRF1 =01231310 RRF5 =01231311 RRF10 =01231312
RRF25 =01231308 RRF40 =01231313 RRF60 =01231314
RRF80 =01231315 RRF0.2=01231309

COMPOUND	RRF 1	RRF 5	RRF 10	RRF 25	RRF 40	RRF 60	RRF 80	RRF 0.2	RRF	%RSD /R^2
4-Nitrophenol	0.147	0.181	0.185	0.189	0.187	0.173	0.173		0.176	8.2
2,4-Dinitrotoluene	0.316	0.341	0.327	0.353	0.347	0.340	0.341		0.338	3.7
Fluorene	1.257	1.148	1.080	1.108	1.060	1.002	0.982		1.091	8.5
4-Chlorophenyl-phenylether	0.657	0.587	0.567	0.606	0.607	0.600	0.592		0.602	4.6
Diethylphthalate	1.346	1.233	1.182	1.186	1.132	1.064	1.029		1.167	9.1
4-Nitroaniline	0.225	0.257	0.238	0.196	0.201	0.209	0.192		0.217	11.1
4,6-Dinitro-2-methylphenol		0.115	0.138	0.157	0.169	0.166	0.168		0.152	14.2
N-Nitrosodiphenylamine (1)	0.628	0.585	0.562	0.590	0.579	0.558	0.557		0.580	4.3
4-Bromophenyl-phenylether	0.235	0.210	0.215	0.233	0.233	0.231	0.238		0.228	4.7
Hexachlorobenzene	0.246	0.219	0.209	0.232	0.233	0.233	0.237		0.230	5.3
Pentachlorophenol		0.057	0.074	0.094	0.114	0.115	0.122		0.096	0.997
Phenanthrene	1.138	1.009	0.961	0.996	0.946	0.931	0.919		0.986	7.6
Anthracene	1.101	1.032	0.994	1.037	0.986	0.947	0.930		1.004	5.8
Carbazole	1.022	0.950	0.885	0.906	0.812	0.834	0.835		0.892	8.4
Di-n-butylphthalate	1.269	1.213	1.162	1.200	1.114	1.059	1.037		1.150	7.4
Fluoranthene	1.018	0.946	0.913	0.983	0.949	0.944	0.931		0.955	3.7
Pyrene	1.356	1.287	1.188	1.194	1.154	1.061	1.029		1.181	9.8
Butylbenzylphthalate	0.581	0.572	0.543	0.567	0.551	0.531	0.516		0.552	4.3
Benzo(a)anthracene	1.059	0.949	0.929	1.015	0.972	0.958	0.927		0.973	5.0
3,3'-Dichlorobenzidine	0.363	0.338	0.321	0.318	0.278	0.249	0.233		0.300	15.9
Chrysene	1.043	0.926	0.883	0.965	0.943	0.914	0.882		0.936	6.0
bis(2-Ethylhexyl)phthalate	0.647	0.596	0.577	0.605	0.602	0.577	0.580		0.598	4.2
Di-n-octylphthalate	1.171	1.019	0.990	1.028	0.988	0.945	0.926		1.010	7.9
Benzo(b)fluoranthene	0.975	0.958	0.939	1.004	0.970	0.982	1.052		0.983	3.7
Benzo(k)fluoranthene	1.122	0.984	0.968	1.069	1.071	1.014	0.953		1.026	6.1
Benzo(a)pyrene	0.926	0.873	0.853	0.944	0.929	0.913	0.921		0.908	3.6
Indeno(1,2,3-cd)pyrene	1.346	1.229	1.184	1.293	1.270	1.263	1.301		1.269	4.1
Dibenzo(a,h)anthracene	1.161	0.999	0.993	1.046	1.018	1.020	1.045		1.040	5.5
Benzo(g,h,i)perylene	1.265	1.111	1.098	1.144	1.119	1.140	1.164		1.149	4.9
N-Nitrosodimethylamine	0.953	0.924	0.860	0.949	0.933	0.961	0.966		0.935	3.9
Aniline	1.993	1.956	1.820	1.863	1.682	1.522	1.391		1.747	12.9
Benzidine		0.430	0.346	0.218	0.173	0.174	0.165		0.251	44.2 <- NJC
Pyridine	1.524	1.580	1.516	1.687	1.598	1.646	1.645		1.599	4.0
1-methylnaphthalene	0.506	0.515	0.498	0.498	0.489	0.452	0.441		0.486	5.8
Azobenzene (1,2-DP-Hydrazine	1.510	1.446	1.388	1.385	1.343	1.267	1.227		1.366	7.2
Total Benzofluoranthenes	0.964	0.924	0.895	0.975	0.959	0.934	0.941		0.942	2.9
2-Fluorophenol	1.537	1.364	1.253	1.320	1.268	1.233			1.329	8.5

(1) Cannot be seperated from Diphenylamine

<- Outside QC limits: %RSD <20% or R^2 > 0.990

6B

SEMIVOLATILE 8270-D INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES INC Client: FLOYD-SNIDER

ARI Job No: WC32 Project: POB-HARRIS

Instrument ID: NT6 Calibration Date: 01/23/13

LAB FILE ID: RRF1 =01231310 RRF5 =01231311 RRF10 =01231312
RRF25 =01231308 RRF40 =01231313 RRF60 =01231314
RRF80 =01231315 RRF0.2=01231309

COMPOUND	RRF 1	RRF 5	RRF 10	RRF 25	RRF 40	RRF 60	RRF 80	RRF 0.2	RRF	%RSD /R^2
Phenol-d5	1.768	1.694	1.562	1.650	1.568	1.510			1.625	5.9
2-Chlorophenol-d4	1.542	1.374	1.289	1.344	1.280	1.206			1.339	8.6
1,2-Dichlorobenzene-d4	1.105	0.982	0.915	0.951	0.870	0.852			0.946	9.7
Nitrobenzene-d5	0.495	0.433	0.420	0.436	0.430	0.425			0.440	6.3
2-Fluorobiphenyl	1.573	1.351	1.247	1.314	1.250	1.232			1.328	9.7
2,4,6-Tribromophenol	0.151	0.143	0.147	0.160	0.159	0.160			0.153	4.8
Terphenyl-d14	0.860	0.764	0.710	0.713	0.707	0.677			0.738	8.9

<- Outside QC limits: %RSD <20% or R^2 > 0.990

6B

SEMIVOLATILE 8270-D INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD-SNIDER

ARI Job No: WC33   Project: POB-HARRIS

Instrument ID: NT10   Calibration Date: 01/25/13

LAB FILE ID: RRF0.2=IC0125C RRF0.5=IC0125H RRF1 =IC0125E
RRF2.5=IC0125F RRF5 =IC0125A RRF10 =IC0125D
RRF20 =IC0125B

COMPOUND	RRF 0.2	RRF 0.5	RRF 1	RRF 2.5	RRF 5	RRF 10	RRF 20	RRF	%RSD /R^2
Phenol	1.852	1.689	1.647	1.637	1.690	1.617	1.561	1.670	5.5
Bis(2-Chloroethyl)ether	1.405	1.303	1.303	1.247	1.283	1.211	1.143	1.271	6.5
2-Chlorophenol	1.595	1.461	1.477	1.405	1.455	1.419	1.363	1.454	5.1
1,3-Dichlorobenzene	1.834	1.635	1.581	1.518	1.535	1.523	1.446	1.582	7.9
1,4-Dichlorobenzene	1.825	1.555	1.602	1.503	1.518	1.510	1.450	1.566	7.9
1,2-Dichlorobenzene	1.738	1.523	1.513	1.446	1.472	1.449	1.401	1.506	7.3
Benzyl alcohol	0.840	0.769	0.792	0.773	0.813	0.817	0.791	0.799	3.2
2,2'-oxybis(1-Chloropropane)	0.480	0.448	0.443	0.443	0.448	0.445	0.424	0.447	3.8
2-Methylphenol	1.350	1.220	1.246	1.223	1.300	1.267	1.221	1.261	3.9
Hexachloroethane	0.680	0.602	0.638	0.592	0.610	0.614	0.597	0.619	5.0
N-Nitroso-di-n-propylamine	0.916	0.796	0.856	0.819	0.862	0.846	0.803	0.842	4.9
4-Methylphenol	1.342	1.292	1.314	1.307	1.336	1.313	1.275	1.311	1.8
Nitrobenzene	0.387	0.340	0.348	0.341	0.348	0.344	0.342	0.350	4.8
Isophorone	0.633	0.568	0.608	0.594	0.627	0.618	0.621	0.610	3.7
2-Nitrophenol	0.193	0.184	0.205	0.208	0.219	0.217	0.213	0.206	6.2
2,4-Dimethylphenol	0.376	0.348	0.358	0.346	0.353	0.341	0.330	0.350	4.1
Bis(2-Chloroethoxy)methane	0.421	0.396	0.385	0.380	0.383	0.364	0.361	0.384	5.3
2,4-Dichlorophenol	0.318	0.294	0.308	0.307	0.314	0.306	0.297	0.306	2.8
1,2,4-Trichlorobenzene	0.403	0.363	0.355	0.335	0.339	0.329	0.317	0.349	8.2
Naphthalene	1.171	1.066	1.041	1.002	1.012	1.007	0.987	1.041	6.1
Benzoic acid		0.168	0.242	0.273	0.305	0.306	0.314	0.268	0.999
4-Chloroaniline	0.436	0.407	0.416	0.409	0.424	0.417	0.423	0.419	2.4
Hexachlorobutadiene	0.234	0.212	0.220	0.214	0.214	0.215	0.211	0.217	3.6
4-Chloro-3-methylphenol	0.265	0.271	0.296	0.292	0.313	0.319	0.317	0.296	7.3
2-Methylnaphthalene	0.738	0.668	0.674	0.657	0.702	0.683	0.688	0.687	3.9
Hexachlorocyclopentadiene	0.445	0.408	0.446	0.444	0.480	0.467	0.469	0.451	5.3
2,4,6-Trichlorophenol	0.379	0.370	0.409	0.401	0.416	0.415	0.416	0.401	4.7
2,4,5-Trichlorophenol	0.379	0.396	0.423	0.438	0.449	0.451	0.446	0.426	6.7
2-Chloronaphthalene	1.237	1.069	1.096	1.077	1.109	1.074	1.072	1.105	5.4
2-Nitroaniline	0.217	0.223	0.256	0.268	0.285	0.282	0.283	0.259	11.0
Acenaphthylene	1.864	1.821	1.856	1.806	1.824	1.741	1.701	1.802	3.3
Dimethylphthalate	1.309	1.228	1.231	1.180	1.219	1.174	1.128	1.210	4.7
2,6-Dinitrotoluene	0.257	0.256	0.280	0.285	0.294	0.284	0.280	0.276	5.2
Acenaphthene	1.185	1.134	1.118	1.082	1.094	1.069	1.050	1.104	4.1
3-Nitroaniline	0.227	0.255	0.291	0.273	0.260	0.263	0.217	0.255	10.0
2,4-Dinitrophenol		0.114	0.165	0.208	0.243	0.249	0.253	0.205	0.999
Dibenzofuran	1.690	1.549	1.565	1.497	1.527	1.480	1.448	1.536	5.1

< Outside QC limits: %RSD <20% or R^2 > 0.990

SEMIVOLATILE 8270-D INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES INC Client: FLOYD-SNIDER

ARI Job No: WC33 Project: POB-HARRIS

Instrument ID: NT10 Calibration Date: 01/25/13

LAB FILE ID: RRF0.2=IC0125C RRF0.5=IC0125H RRF1 =IC0125E
RRF2.5=IC0125F RRF5 =IC0125A RRF10 =IC0125D
RRF20 =IC0125B

COMPOUND	RRF 0.2	RRF 0.5	RRF 1	RRF 2.5	RRF 5	RRF 10	RRF 20	RRF	%RSD /R^2
4-Nitrophenol		0.100	0.130	0.161	0.180	0.176	0.179	0.154	0.999
2,4-Dinitrotoluene	0.317	0.346	0.381	0.389	0.406	0.391	0.385	0.374	8.3
Fluorene	1.403	1.351	1.321	1.303	1.297	1.245	1.216	1.305	4.8
4-Chlorophenyl-phenylether	0.649	0.643	0.631	0.592	0.600	0.579	0.564	0.608	5.4
Diethylphthalate	1.359	1.231	1.288	1.262	1.291	1.233	1.207	1.267	4.0
4-Nitroaniline	0.243	0.272	0.278	0.267	0.272	0.281	0.272	0.269	4.7
4,6-Dinitro-2-methylphenol	0.113	0.135	0.160	0.170	0.183	0.181	0.180	0.160	16.8
N-Nitrosodiphenylamine (1)	0.526	0.486	0.512	0.479	0.473	0.458	0.438	0.482	6.3
4-Bromophenyl-phenylether	0.242	0.214	0.218	0.217	0.226	0.223	0.222	0.223	4.2
Hexachlorobenzene	0.307	0.283	0.288	0.273	0.277	0.270	0.262	0.280	5.2
Pentachlorophenol	0.151	0.165	0.189	0.189	0.208	0.203	0.202	0.187	11.4
Phenanthrene	1.209	1.074	1.063	1.003	1.062	1.029	1.023	1.066	6.4
Anthracene	1.117	1.020	1.065	1.048	1.104	1.099	1.062	1.074	3.2
Carbazole		0.862	0.878	0.650	0.517	0.658	0.738	0.717	19.3
Di-n-butylphthalate	1.119	0.992	1.078	1.112	1.230	1.241	1.247	1.146	8.5
Fluoranthene	1.285	1.126	1.219	1.190	1.272	1.246	1.258	1.228	4.5
Pyrene	1.170	1.065	1.142	1.136	1.154	1.158	1.150	1.139	3.0
Butylbenzylphthalate	0.416	0.361	0.430	0.433	0.463	0.467	0.454	0.432	8.4
Benzo(a)anthracene	1.199	1.074	1.123	1.108	1.100	1.112	1.096	1.116	3.6
3,3'-Dichlorobenzidine	0.585	0.521	0.474	0.382	0.358	0.470	0.476	0.466	16.6
Chrysene	1.132	1.022	1.018	0.971	0.985	0.981	0.968	1.011	5.7
bis(2-Ethylhexyl)phthalate	0.594	0.506	0.519	0.530	0.531	0.511	0.504	0.528	5.9
Di-n-octylphthalate	1.158	1.024	0.982	0.930	0.934	0.915	0.886	0.976	9.5
Benzo(b)fluoranthene	1.206	1.106	1.092	1.149	1.141	1.204	1.217	1.159	4.3
Benzo(k)fluoranthene	1.420	1.260	1.290	1.205	1.269	1.165	1.158	1.252	7.2
Benzo(a)pyrene	1.077	0.949	0.979	0.983	1.014	1.008	1.008	1.002	4.0
Indeno(1,2,3-cd)pyrene	1.259	1.150	1.216	1.223	1.276	1.272	1.258	1.236	3.6
Dibenzo(a,h)anthracene	0.971	0.924	0.986	0.983	1.004	1.001	0.985	0.979	2.8
Benzo(g,h,i)perylene	1.081	1.010	1.046	1.045	1.083	1.080	1.081	1.061	2.6
N-Nitrosodimethylamine	0.833	0.733	0.747	0.736	0.796	0.756	0.724	0.761	5.2
Aniline	4.034	3.608	3.698	3.544	3.670	3.463	3.216	3.605	6.9
Benzidine		0.373	0.356	0.208	0.161	0.193	0.226	0.253	0.995
Retene	0.562	0.585	1.008	0.545	0.562	0.571	0.546	0.626	0.998
Perylene	1.319	1.138	1.160	1.114	1.115	1.112	1.108	1.152	6.6
Pyridine	0.666	0.652	0.657	0.637	0.680	0.638	0.613	0.649	3.4
1-methylnaphthalene	0.687	0.616	0.617	0.610	0.625	0.629	0.629	0.630	4.1
Azobenzene (1,2-DP-Hydrazine	1.198	1.135	1.184	1.156	1.172	1.126	1.076	1.150	3.6

(1) Cannot be seperated from Diphenylamine
<- Outside QC limits: %RSD <20% or R^2 > 0.990

6B
SEMIVOLATILE 8270-D INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD-SNIDER

ARI Job No: WC33   Project: POB-HARRIS

Instrument ID: NT10   Calibration Date: 01/25/13

LAB FILE ID: RRF0.2=IC0125C RRF0.5=IC0125H RRF1 =IC0125E
RRF2.5=IC0125F RRF5 =IC0125A RRF10 =IC0125D
RRF20 =IC0125B

COMPOUND	RRF 0.2	RRF 0.5	RRF 1	RRF 2.5	RRF 5	RRF 10	RRF 20	RRF (mean)	%RSD /R^2
2,3,4,6-Tetrachlorophenol	0.329	0.344	0.373	0.382	0.393	0.392	0.395	0.372	7.0
Total Benzofluoranthenes	1.238	1.131	1.130	1.111	1.140	1.118	1.120	1.141	3.8
2-Fluorophenol	1.346	1.221	1.319	1.250	1.327	1.274	1.216	1.279	4.1
Phenol-d5	1.640	1.529	1.548	1.558	1.646	1.601	1.589	1.587	2.8
2-Chlorophenol-d4	1.454	1.368	1.391	1.344	1.389	1.367	1.306	1.374	3.3
1,2-Dichlorobenzene-d4	1.188	0.999	1.001	0.957	0.978	0.992	0.953	1.010	8.0
Nitrobenzene-d5	0.395	0.354	0.368	0.361	0.372	0.367	0.368	0.369	3.5
2-Fluorobiphenyl	1.492	1.363	1.371	1.342	1.369	1.328	1.341	1.372	4.0
2,4,6-Tribromophenol	0.243	0.241	0.254	0.262	0.263	0.262	0.262	0.255	3.8
Terphenyl-d14	0.805	0.736	0.790	0.761	0.768	0.774	0.743	0.768	3.2

<- Outside QC limits: %RSD <20% or R^2 > 0.990

7B

SEMIVOLATILE 8270-D CONTINUING CALIBRATION CHECK

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD-SNIDER

ARI Job No: WC32   Project: POB-HARRIS

Instrument ID: NT6   Cont. Calib. Date: 02/07/13

Init. Calib. Date: 01/23/13   Cont. Calib. Time: 1012

COMPOUND	CalAmt or ARF	CC Amt or RF	MIN RRF	CURVE TYPE	%D or Drift
Phenol	1.570	1.599	0.800	AVRG	1.8
Bis(2-Chloroethyl)ether	1.327	1.391	0.700	AVRG	4.8
2-Chlorophenol	1.330	1.349	0.800	AVRG	1.4
1,3-Dichlorobenzene	1.530	1.620	0.010	AVRG	5.9
1,4-Dichlorobenzene	1.518	1.586	0.010	AVRG	4.5
1,2-Dichlorobenzene	1.411	1.480	0.010	AVRG	4.9
Benzyl alcohol	0.818	0.818	0.010	AVRG	0.0
2,2'-oxybis(1-Chloropropane)	2.151	2.419	0.010	AVRG	12.4
2-Methylphenol	1.185	1.204	0.700	AVRG	1.6
Hexachloroethane	0.616	0.651	0.300	AVRG	5.7
N-Nitroso-di-n-propylamine	0.963	1.073	0.500	AVRG	11.4
4-Methylphenol	1.215	1.234	0.600	AVRG	1.6
Nitrobenzene	0.446	0.456	0.200	AVRG	2.2
Isophorone	0.623	0.667	0.400	AVRG	7.1
2-Nitrophenol	0.193	0.198	0.100	AVRG	2.6
2,4-Dimethylphenol	0.356	0.362	0.200	AVRG	1.7
Bis(2-Chloroethoxy)methane	0.439	0.461	0.300	AVRG	5.0
2,4-Dichlorophenol	0.286	0.288	0.200	AVRG	0.7
1,2,4-Trichlorobenzene	0.332	0.336	0.010	AVRG	1.2
Naphthalene	0.937	0.985	0.700	AVRG	5.1
Benzoic acid	0.298	0.258	0.010	AVRG	-13.4
4-Chloroaniline	0.362	0.324	0.010	AVRG	-10.5
Hexachlorobutadiene	0.208	0.208	0.010	AVRG	0.0
4-Chloro-3-methylphenol	0.279	0.297	0.200	AVRG	6.4
2-Methylnaphthalene	0.487	0.504	0.400	AVRG	3.5
Hexachlorocyclopentadiene	0.416	0.347	0.050	AVRG	-16.6
2,4,6-Trichlorophenol	0.357	0.358	0.200	AVRG	0.3
2,4,5-Trichlorophenol	0.368	0.357	0.200	AVRG	-3.0
2-Chloronaphthalene	1.098	1.114	0.800	AVRG	1.4
2-Nitroaniline	0.357	0.378	0.010	AVRG	5.9
Acenaphthylene	1.655	1.731	0.900	AVRG	4.6
Dimethylphthalate	1.141	1.212	0.010	AVRG	6.2
2,6-Dinitrotoluene	0.270	0.289	0.200	AVRG	7.0
Acenaphthene	1.048	1.064	0.900	AVRG	1.5
3-Nitroaniline	0.244	0.222	0.010	AVRG	-9.0
2,4-Dinitrophenol	50.00	42.23	0.010	2ORDR	-15.5
Dibenzofuran	1.383	1.419	0.800	AVRG	2.6

<- Exceeds QC limit of 20% D

* RF less than minimum RF

7C

SEMIVOLATILE 8270-D CONTINUING CALIBRATION CHECK

Lab Name: ANALYTICAL RESOURCES INC Client: FLOYD-SNIDER

ARI Job No: WC32 Project: POB-HARRIS

Instrument ID: NT6 Cont. Calib. Date: 02/07/13

Init. Calib. Date: 01/23/13 Cont. Calib. Time: 1012

COMPOUND	CalAmt or ARF	CC Amt or RF	MIN RRF	CURVE TYPE	%D or Drift
4-Nitrophenol	0.176	0.178	0.010	AVRG	1.1
2,4-Dinitrotoluene	0.338	0.359	0.200	AVRG	6.2
Fluorene	1.091	1.118	0.900	AVRG	2.5
4-Chlorophenyl-phenylether	0.602	0.608	0.400	AVRG	1.0
Diethylphthalate	1.167	1.255	0.010	AVRG	7.5
4-Nitroaniline	0.217	0.195	0.010	AVRG	-10.1
4,6-Dinitro-2-methylphenol	0.152	0.142	0.010	AVRG	-6.6
N-Nitrosodiphenylamine(1)	0.580	0.606	0.010	AVRG	4.5
4-Bromophenyl-phenylether	0.228	0.229	0.100	AVRG	0.4
Hexachlorobenzene	0.230	0.222	0.100	AVRG	-3.5
Pentachlorophenol	25.00	27.92	0.050	2ORDR	11.7
Phenanthrene	0.986	0.981	0.700	AVRG	-0.5
Anthracene	1.004	1.010	0.700	AVRG	0.6
Carbazole	0.892	0.912	0.010	AVRG	2.2
Di-n-butylphthalate	1.150	1.266	0.010	AVRG	10.1
Fluoranthene	0.955	0.979	0.600	AVRG	2.5
Pyrene	1.181	1.056	0.600	AVRG	-10.6
Butylbenzylphthalate	0.552	0.542	0.010	AVRG	-1.8
Benzo(a)anthracene	0.973	1.000	0.800	AVRG	2.8
3,3'-Dichlorobenzidine	0.300	0.340	0.010	AVRG	13.3
Chrysene	0.936	0.978	0.700	AVRG	4.5
bis(2-Ethylhexyl)phthalate	0.598	0.583	0.010	AVRG	-2.5
Di-n-octylphthalate	1.010	1.026	0.010	AVRG	1.6
Benzo(b)fluoranthene	0.983	0.915	0.700	AVRG	-6.9
Benzo(k)fluoranthene	1.026	1.059	0.700	AVRG	3.2
Benzo(a)pyrene	0.908	0.941	0.700	AVRG	3.6
Indeno(1,2,3-cd)pyrene	1.269	1.312	0.500	AVRG	3.4
Dibenzo(a,h)anthracene	1.040	1.071	0.400	AVRG	3.0
Benzo(g,h,i)perylene	1.149	1.133	0.500	AVRG	-1.4
N-Nitrosodimethylamine	0.935	0.998	0.010	AVRG	6.7
Aniline	1.747	1.722	0.010	AVRG	-1.4
Benzidine	0.251		0.010	AVRG	
Pyridine	1.599	1.710	0.010	AVRG	6.9
1-methylnaphthalene	0.486	0.503	0.010	AVRG	3.5
Azobenzene (1,2-DP-Hydrazine	1.366	1.447	0.010	AVRG	5.9
Total Benzofluoranthenes	0.942	0.932	0.010	AVRG	-1.1

(1) Cannot be separated from Diphenylamine

<- Exceeds QC limit of 20% D

* RF less than minimum RF

SEMIVOLATILE 8270-D CONTINUING CALIBRATION CHECK

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD-SNIDER

ARI Job No: WC32   Project: POB-HARRIS

Instrument ID: NT6   Cont. Calib. Date: 02/07/13

Init. Calib. Date: 01/23/13   Cont. Calib. Time: 1012

COMPOUND	CalAmt or ARF	CC Amt or RF	MIN RRF	CURVE TYPE	%D or Drift
2-Fluorophenol	1.329	1.346	0.010	AVRG	1.3
Phenol-d5	1.625	1.648	0.010	AVRG	1.4
2-Chlorophenol-d4	1.339	1.363	0.010	AVRG	1.8
1,2-Dichlorobenzene-d4	0.946	0.952	0.010	AVRG	0.6
Nitrobenzene-d5	0.440	0.440	0.010	AVRG	0.0
2-Fluorobiphenyl	1.328	1.314	0.010	AVRG	-1.0
2,4,6-Tribromophenol	0.153	0.158	0.010	AVRG	3.3
Terphenyl-d14	0.738	0.664	0.010	AVRG	-10.0

<- Exceeds QC limit of 20% D
 * RF less than minimum RF

7B
SEMIVOLATILE 8270-D CONTINUING CALIBRATION CHECK

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD-SNIDER

ARI Job No: WC33   Project: POB-HARRIS

Instrument ID: NT10   Cont. Calib. Date: 02/15/13

Init. Calib. Date: 01/25/13   Cont. Calib. Time: 1120

COMPOUND	CalAmt or ARF	CC Amt or RF	MIN RRF	CURVE TYPE	%D or Drift	
Phenol	1.670	1.809	0.800	AVRG	8.3	
Bis(2-Chloroethyl)ether	1.271	1.214	0.700	AVRG	-4.5	
2-Chlorophenol	1.454	1.413	0.800	AVRG	-2.8	
1,3-Dichlorobenzene	1.582	1.502	0.010	AVRG	-5.0	
1,4-Dichlorobenzene	1.566	1.487	0.010	AVRG	-5.0	
1,2-Dichlorobenzene	1.506	1.401	0.010	AVRG	-7.0	
Benzyl alcohol	0.799	0.792	0.010	AVRG	-0.9	
2,2'-oxybis(1-Chloropropane)	0.447	0.438	0.010	AVRG	-2.0	
2-Methylphenol	1.261	1.245	0.700	AVRG	-1.3	
Hexachloroethane	0.619	0.586	0.300	AVRG	-5.3	
N-Nitroso-di-n-propylamine	0.842	0.833	0.500	AVRG	-1.1	
4-Methylphenol	1.311	1.285	0.600	AVRG	-2.0	
Nitrobenzene	0.350	0.340	0.200	AVRG	-2.8	
Isophorone	0.610	0.631	0.400	AVRG	3.4	
2-Nitrophenol	0.206	0.223	0.100	AVRG	8.2	
2,4-Dimethylphenol	0.350	0.347	0.200	AVRG	-0.8	
Bis(2-Chloroethoxy)methane	0.384	0.382	0.300	AVRG	-0.5	
2,4-Dichlorophenol	0.306	0.348	0.200	AVRG	13.7	
1,2,4-Trichlorobenzene	0.349	0.338	0.010	AVRG	-3.2	
Naphthalene	1.041	1.032	0.700	AVRG	-0.9	
Benzoic acid	20.00	16.48	0.010	2ORDR	-17.6	
4-Chloroaniline	0.419	0.402	0.010	AVRG	-4.0	
Hexachlorobutadiene	0.217	0.224	0.010	AVRG	3.2	
4-Chloro-3-methylphenol	0.296	0.316	0.200	AVRG	6.8	
2-Methylnaphthalene	0.687	0.700	0.400	AVRG	1.9	
Hexachlorocyclopentadiene	0.451	0.323	0.050	AVRG	-28.4	<-
2,4,6-Trichlorophenol	0.401	0.411	0.200	AVRG	2.5	
2,4,5-Trichlorophenol	0.426	0.433	0.200	AVRG	1.6	
2-Chloronaphthalene	1.105	1.086	0.800	AVRG	-1.7	
2-Nitroaniline	0.259	0.263	0.010	AVRG	1.5	
Acenaphthylene	1.802	1.826	0.900	AVRG	1.3	
Dimethylphthalate	1.210	1.229	0.010	AVRG	1.6	
2,6-Dinitrotoluene	0.276	0.296	0.200	AVRG	7.2	
Acenaphthene	1.104	1.065	0.900	AVRG	-3.5	
3-Nitroaniline	0.255	0.281	0.010	AVRG	10.2	
2,4-Dinitrophenol	20.00	16.68	0.010	2ORDR	-16.6	
Dibenzofuran	1.536	1.498	0.800	AVRG	-2.5	

<- Exceeds QC limit of 20% D
* RF less than minimum RF

7C

SEMIVOLATILE 8270-D CONTINUING CALIBRATION CHECK

Lab Name: ANALYTICAL RESOURCES INC Client: FLOYD-SNIDER

ARI Job No: WC33 Project: POB-HARRIS

Instrument ID: NT10 Cont. Calib. Date: 02/15/13

Init. Calib. Date: 01/25/13 Cont. Calib. Time: 1120

COMPOUND	CalAmt or ARF	CC Amt or RF	MIN RRF	CURVE TYPE	%D or Drift	
4-Nitrophenol	10.00	9.234	0.010	2ORDR	-7.7	
2,4-Dinitrotoluene	0.374	0.396	0.200	AVRG	5.9	
Fluorene	1.305	1.295	0.900	AVRG	-0.8	
4-Chlorophenyl-phenylether	0.608	0.714	0.400	AVRG	17.4	
Diethylphthalate	1.267	1.292	0.010	AVRG	2.0	
4-Nitroaniline	0.269	0.280	0.010	AVRG	4.1	
4,6-Dinitro-2-methylphenol	0.160	0.167	0.010	AVRG	4.4	
N-Nitrosodiphenylamine(1)	0.482	0.483	0.010	AVRG	0.2	
4-Bromophenyl-phenylether	0.223	0.231	0.100	AVRG	3.6	
Hexachlorobenzene	0.280	0.283	0.100	AVRG	1.1	
Pentachlorophenol	0.187	0.125	0.050	AVRG	-33.2	<-
Phenanthrene	1.066	1.034	0.700	AVRG	-3.0	
Anthracene	1.074	1.094	0.700	AVRG	1.9	
Carbazole	0.717	0.808	0.010	AVRG	12.7	
Di-n-butylphthalate	1.146	1.330	0.010	AVRG	16.0	
Fluoranthene	1.228	1.287	0.600	AVRG	4.8	
Pyrene	1.139	1.161	0.600	AVRG	1.9	
Butylbenzylphthalate	0.432	0.496	0.010	AVRG	14.8	
Benzo(a)anthracene	1.116	1.124	0.800	AVRG	0.7	
3,3'-Dichlorobenzidine	0.466	0.568	0.010	AVRG	21.9	<-
Chrysene	1.011	0.997	0.700	AVRG	-1.4	
bis(2-Ethylhexyl)phthalate	0.528	0.518	0.010	AVRG	-1.9	
Di-n-octylphthalate	0.976	0.912	0.010	AVRG	-6.6	
Benzo(b)fluoranthene	1.159	1.097	0.700	AVRG	-5.3	
Benzo(k)fluoranthene	1.252	1.097	0.700	AVRG	-12.4	
Benzo(a)pyrene	1.002	1.015	0.700	AVRG	1.3	
Indeno(1,2,3-cd)pyrene	1.236	1.313	0.500	AVRG	6.2	
Dibenzo(a,h)anthracene	0.979	1.060	0.400	AVRG	8.3	
Benzo(g,h,i)perylene	1.061	1.099	0.500	AVRG	3.6	
N-Nitrosodimethylamine	0.761	0.724	0.010	AVRG	-4.9	
Aniline	3.605	3.576	0.010	AVRG	-0.8	
Benzidine	10.00	12.09	0.010	2ORDR	20.9	<-
Retene	5.000	0.000	0.010	2ORDR		
Perylene	1.152	1.100	0.010	AVRG	-4.5	
Pyridine	0.649	0.623	0.010	AVRG	-4.0	
1-methylnaphthalene	0.630	0.649	0.010	AVRG	3.0	

(1) Cannot be separated from Diphenylamine
<- Exceeds QC limit of 20% D
* RF less than minimum RF

7C
SEMIVOLATILE 8270-D CONTINUING CALIBRATION CHECK

Lab Name: ANALYTICAL RESOURCES INC Client: FLOYD-SNIDER

ARI Job No: WC33 Project: POB-HARRIS

Instrument ID: NT10 Cont. Calib. Date: 02/15/13

Init. Calib. Date: 01/25/13 Cont. Calib. Time: 1120

COMPOUND	CalAmt or ARF	CC Amt or RF	MIN RRF	CURVE TYPE	%D or Drift
Azobenzene (1,2-DP-Hydrazine	1.150	1.077	0.010	AVRG	-6.3
2,3,4,6-Tetrachlorophenol	0.372	0.351	0.010	AVRG	-5.6
Total Benzofluoranthenes	1.141	1.106	0.010	AVRG	-3.1
2-Fluorophenol	1.279	1.271	0.010	AVRG	-0.6
Phenol-d5	1.587	1.606	0.010	AVRG	1.2
2-Chlorophenol-d4	1.374	1.355	0.010	AVRG	-1.4
1,2-Dichlorobenzene-d4	1.010	0.961	0.010	AVRG	-4.8
Nitrobenzene-d5	0.369	0.359	0.010	AVRG	-2.7
2-Fluorobiphenyl	1.372	1.355	0.010	AVRG	-1.2
2,4,6-Tribromophenol	0.255	0.258	0.010	AVRG	1.2
Terphenyl-d14	0.768	0.786	0.010	AVRG	2.3

<- Exceeds QC limit of 20% D
* RF less than minimum RF

7B

SEMIVOLATILE 8270-D CONTINUING CALIBRATION CHECK

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD-SNIDER

ARI Job No: WC33   Project: POB-HARRIS

Instrument ID: NT10   Cont. Calib. Date: 02/16/13

Init. Calib. Date: 01/25/13   Cont. Calib. Time: 1103

COMPOUND	CalAmt or ARF	CC Amt or RF	MIN RRF	CURVE TYPE	%D or Drift	
Phenol	1.670	1.837	0.800	AVRG	10.0	
Bis(2-Chloroethyl)ether	1.271	1.206	0.700	AVRG	-5.1	
2-Chlorophenol	1.454	1.447	0.800	AVRG	-0.5	
1,3-Dichlorobenzene	1.582	1.548	0.010	AVRG	-2.1	
1,4-Dichlorobenzene	1.566	1.489	0.010	AVRG	-4.9	
1,2-Dichlorobenzene	1.506	1.450	0.010	AVRG	-3.7	
Benzyl alcohol	0.799	0.820	0.010	AVRG	2.6	
2,2'-oxybis(1-Chloropropane)	0.447	0.440	0.010	AVRG	-1.6	
2-Methylphenol	1.261	1.237	0.700	AVRG	-1.9	
Hexachloroethane	0.619	0.592	0.300	AVRG	-4.4	
N-Nitroso-di-n-propylamine	0.842	0.841	0.500	AVRG	-0.1	
4-Methylphenol	1.311	1.313	0.600	AVRG	0.2	
Nitrobenzene	0.350	0.340	0.200	AVRG	-2.8	
Isophorone	0.610	0.627	0.400	AVRG	2.8	
2-Nitrophenol	0.206	0.224	0.100	AVRG	8.7	
2,4-Dimethylphenol	0.350	0.353	0.200	AVRG	0.8	
Bis(2-Chloroethoxy)methane	0.384	0.379	0.300	AVRG	-1.3	
2,4-Dichlorophenol	0.306	0.322	0.200	AVRG	5.2	
1,2,4-Trichlorobenzene	0.349	0.345	0.010	AVRG	-1.1	
Naphthalene	1.041	1.025	0.700	AVRG	-1.5	
Benzoic acid	20.00	14.89	0.010	2ORDR	-25.6	<-
4-Chloroaniline	0.419	0.411	0.010	AVRG	-1.9	
Hexachlorobutadiene	0.217	0.229	0.010	AVRG	5.5	
4-Chloro-3-methylphenol	0.296	0.322	0.200	AVRG	8.8	
2-Methylnaphthalene	0.687	0.713	0.400	AVRG	3.8	
Hexachlorocyclopentadiene	0.451	0.309	0.050	AVRG	-31.5	<-
2,4,6-Trichlorophenol	0.401	0.425	0.200	AVRG	6.0	
2,4,5-Trichlorophenol	0.426	0.452	0.200	AVRG	6.1	
2-Chloronaphthalene	1.105	1.119	0.800	AVRG	1.3	
2-Nitroaniline	0.259	0.270	0.010	AVRG	4.2	
Acenaphthylene	1.802	1.839	0.900	AVRG	2.0	
Dimethylphthalate	1.210	1.250	0.010	AVRG	3.3	
2,6-Dinitrotoluene	0.276	0.300	0.200	AVRG	8.7	
Acenaphthene	1.104	1.092	0.900	AVRG	-1.1	
3-Nitroaniline	0.255	0.287	0.010	AVRG	12.5	
2,4-Dinitrophenol	20.00	15.95	0.010	2ORDR	-20.2	<-
Dibenzofuran	1.536	1.531	0.800	AVRG	-0.3	

<- Exceeds QC limit of 20% D
* RF less than minimum RF

7C

SEMIVOLATILE 8270-D CONTINUING CALIBRATION CHECK

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD-SNIDER

ARI Job No: WC33   Project: POB-HARRIS

Instrument ID: NT10   Cont. Calib. Date: 02/16/13

Init. Calib. Date: 01/25/13   Cont. Calib. Time: 1103

COMPOUND	CalAmt or ARF	CC Amt or RF	MIN RRF	CURVE TYPE	%D or Drift	
4-Nitrophenol	10.00	9.915	0.010	2ORDR	-0.8	
2,4-Dinitrotoluene	0.374	0.404	0.200	AVRG	8.0	
Fluorene	1.305	1.276	0.900	AVRG	-2.2	
4-Chlorophenyl-phenylether	0.608	0.699	0.400	AVRG	15.0	
Diethylphthalate	1.267	1.533	0.010	AVRG	21.0	<-
4-Nitroaniline	0.269	0.264	0.010	AVRG	-1.8	
4,6-Dinitro-2-methylphenol	0.160	0.160	0.010	AVRG	0.0	
N-Nitrosodiphenylamine(1)	0.482	0.483	0.010	AVRG	0.2	
4-Bromophenyl-phenylether	0.223	0.236	0.100	AVRG	5.8	
Hexachlorobenzene	0.280	0.293	0.100	AVRG	4.6	
Pentachlorophenol	0.187	0.110	0.050	AVRG	-41.2	<-
Phenanthrene	1.066	1.044	0.700	AVRG	-2.1	
Anthracene	1.074	1.100	0.700	AVRG	2.4	
Carbazole	0.717	0.693	0.010	AVRG	-3.3	
Di-n-butylphthalate	1.146	1.325	0.010	AVRG	15.6	
Fluoranthene	1.228	1.267	0.600	AVRG	3.2	
Pyrene	1.139	1.161	0.600	AVRG	1.9	
Butylbenzylphthalate	0.432	0.484	0.010	AVRG	12.0	
Benzo(a)anthracene	1.116	1.136	0.800	AVRG	1.8	
3,3'-Dichlorobenzidine	0.466	0.550	0.010	AVRG	18.0	
Chrysene	1.011	0.994	0.700	AVRG	-1.7	
bis(2-Ethylhexyl)phthalate	0.528	0.522	0.010	AVRG	-1.1	
Di-n-octylphthalate	0.976	0.915	0.010	AVRG	-6.2	
Benzo(b)fluoranthene	1.159	1.213	0.700	AVRG	4.6	
Benzo(k)fluoranthene	1.252	1.194	0.700	AVRG	-4.6	
Benzo(a)pyrene	1.002	1.028	0.700	AVRG	2.6	
Indeno(1,2,3-cd)pyrene	1.236	1.359	0.500	AVRG	10.0	
Dibenzo(a,h)anthracene	0.979	1.088	0.400	AVRG	11.1	
Benzo(g,h,i)perylene	1.061	1.156	0.500	AVRG	9.0	
N-Nitrosodimethylamine	0.761	0.719	0.010	AVRG	-5.5	
Aniline	3.605	3.635	0.010	AVRG	0.8	
Benzidine	10.00	11.43	0.010	2ORDR	14.3	
Retene	5.000	0.000	0.010	2ORDR		
Perylene	1.152	1.091	0.010	AVRG	-5.3	
Pyridine	0.649	0.631	0.010	AVRG	-2.8	
1-methylnaphthalene	0.630	0.650	0.010	AVRG	3.2	

(1) Cannot be separated from Diphenylamine
<- Exceeds QC limit of 20% D
* RF less than minimum RF

7C

SEMIVOLATILE 8270-D CONTINUING CALIBRATION CHECK

Lab Name: ANALYTICAL RESOURCES INC Client: FLOYD-SNIDER

ARI Job No: WC33 Project: POB-HARRIS

Instrument ID: NT10 Cont. Calib. Date: 02/16/13

Init. Calib. Date: 01/25/13 Cont. Calib. Time: 1103

COMPOUND	CalAmt or ARF	CC Amt or RF	MIN RRF	CURVE TYPE	%D or Drift
Azobenzene (1,2-DP-Hydrazine	1.150	1.089	0.010	AVRG	-5.3
2,3,4,6-Tetrachlorophenol___	0.372	0.357	0.010	AVRG	-4.0
Total Benzofluoranthenes____	1.141	1.124	0.010	AVRG	-1.5
2-Fluorophenol______________	1.279	1.280	0.010	AVRG	0.1
Phenol-d5___________________	1.587	1.584	0.010	AVRG	-0.2
2-Chlorophenol-d4___________	1.374	1.391	0.010	AVRG	1.2
1,2-Dichlorobenzene-d4______	1.010	0.986	0.010	AVRG	-2.4
Nitrobenzene-d5_____________	0.369	0.366	0.010	AVRG	-0.8
2-Fluorobiphenyl____________	1.372	1.392	0.010	AVRG	1.4
2,4,6-Tribromophenol________	0.255	0.268	0.010	AVRG	5.1
Terphenyl-d14_______________	0.768	0.764	0.010	AVRG	-0.5

<- Exceeds QC limit of 20% D
* RF less than minimum RF

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD-SNIDER

ARI Job No: WC32   Project: POB-HARRIS

Ical Midpoint ID: 01231308   Ical Date: 01/23/13

Instrument ID: NT6   Cont. Cal Date: 02/07/13

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	ICAL MIDPT	605906	7.75	2147229	9.79	1142287	12.63
	UPPER LIMIT	1211812		4294458		2284574	
	LOWER LIMIT	302953		1073614		571144	
	CCAL	599870	7.66	2139298	9.70	1145077	12.54
	UPPER LIMIT		8.16		10.20		13.04
	LOWER LIMIT		7.16		9.20		12.04
01	WC32MBW1	548191	7.66	1934605	9.70	1058515	12.53
02	WC32LCSW1	591357	7.66	2052526	9.70	1072259	12.54
03	WC32LCSDW1	656630	7.66	2287829	9.70	1185428	12.54
04	SG-05-ER-013	670124	7.66	2415567	9.70	1324749	12.54
05							
06							
07							
08							
09							
10							
11							
12							
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21							
22							
23							
24							
25							

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Cont. Cal
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Cont. Cal

* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD-SNIDER

ARI Job No: WC32   Project: POB-HARRIS

Ical Midpoint ID: 01231308   Ical Date: 01/23/13

Instrument ID: NT6   Cont. Cal Date: 02/07/13

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	ICAL MIDPT	1647922	14.98	1422286	19.25	1374454	21.39
	UPPER LIMIT	3295844		2844572		2748908	
	LOWER LIMIT	823961		711143		687227	
	CCAL	1679978	14.88	1594322	19.16	2002386	21.29
	UPPER LIMIT		15.38		19.66		21.79
	LOWER LIMIT		14.38		18.66		20.79
01	WC32MBW1	1527600	14.89	1591318	19.15	2123064	21.29
02	WC32LCSW1	1608803	14.89	1754840	19.15	2178452	21.29
03	WC32LCSDW1	1714489	14.88	1805346	19.15	2313295	21.28
04	SG-05-ER-013	1945690	14.88	1803134	19.15	2262973	21.28
05							
06							
07							
08							
09							
10							
11							
12							
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15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Cont. Cal
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Cont. Cal

* Values outside of QC limits.

8B
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD-SNIDER

ARI Job No: WC32   Project: POB-HARRIS

Ical Midpoint ID: 01231308   Ical Date: 01/23/13

Instrument ID: NT6   Cont. Cal Date: 02/07/13

		IS7 AREA #	RT #	AREA #	RT #	AREA #	RT #
	ICAL MIDPT	1811653	20.44				
	UPPER LIMIT	3623306					
	LOWER LIMIT	905826					
	CCAL	2005433	20.34				
	UPPER LIMIT		20.84				
	LOWER LIMIT		19.84				
01	WC32MBW1	1959473	20.33				
02	WC32LCSW1	2055479	20.33				
03	WC32LCSDW1	2179934	20.34				
04	SG-05-ER-013	2268905	20.34				
05							
06							
07							
08							
09							
10							
11							
12							
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21							
22							
23							
24							
25							

IS7 = Di-n-octylphthalate-d4

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Cont. Cal
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Cont. Cal

* Values outside of QC limits.

8B
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD-SNIDER

ARI Job No: WC33   Project: POB-HARRIS

Ical Midpoint ID: IC0125A   Ical Date: 01/25/13

Instrument ID: NT10   Cont. Cal Date: 02/15/13

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	ICAL MIDPT	46623	9.08	176978	11.76	110872	15.66
	UPPER LIMIT	93246		353956		221744	
	LOWER LIMIT	23312		88489		55436	
	CCAL	45069	8.75	165086	11.40	105394	15.28
	UPPER LIMIT		9.25		11.90		15.78
	LOWER LIMIT		8.25		10.90		14.78
01	WC32MBS1	32527	8.76	119152	11.40	75496	15.30
02	WC32LCSS1	28265	8.76	103759	11.40	68478	15.30
03	WC32LCSDS1	31102	8.75	117102	11.40	73047	15.30
04	SG-12-0-10-0	31402	8.75	119860	11.40	72375	15.30
05	SG-13-0-10-0	28279	8.76	108945	11.41	70739	15.30
06	SG-07-0-10-0	30979	8.75	116458	11.40	72876	15.29
07	SG-06-0-10-0	30693	8.75	120015	11.40	73429	15.30
08	SG-05-0-10-0	31671	8.76	113372	11.40	70543	15.29
09	SG-95-0-10-0	30769	8.75	109136	11.40	71323	15.29
10	SG-08-0-10-0	25023	8.76	97245	11.40	61310	15.30
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IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Cont. Cal
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Cont. Cal

* Values outside of QC limits.

8B
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

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

ARI Job No: WC33 — Project: POB-HARRIS

Ical Midpoint ID: IC0125A — Ical Date: 01/25/13

Instrument ID: NT10 — Cont. Cal Date: 02/15/13

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	ICAL MIDPT	188290	18.94	213681	24.01	208584	26.51
	UPPER LIMIT	376580		427362		417168	
	LOWER LIMIT	94145		106840		104292	
	CCAL	176206	18.56	199492	23.66	207175	26.06
	UPPER LIMIT		19.06		24.16		26.56
	LOWER LIMIT		18.06		23.16		25.56
01	WC32MBS1	124668	18.58	156695	23.70	136696	26.11
02	WC32LCSS1	113232	18.57	138551	23.70	129131	26.10
03	WC32LCSDS1	123637	18.57	154259	23.69	139713	26.11
04	SG-12-0-10-0	123045	18.58	151722	23.70	133919	26.11
05	SG-13-0-10-0	121165	18.59	154840	23.70	135090	26.12
06	SG-07-0-10-0	127016	18.57	149714	23.70	133838	26.12
07	SG-06-0-10-0	122670	18.58	151940	23.70	137803	26.13
08	SG-05-0-10-0	118876	18.57	151629	23.70	136607	26.11
09	SG-95-0-10-0	121405	18.57	146908	23.70	131656	26.12
10	SG-08-0-10-0	104884	18.59	128954	23.71	114608	26.13
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IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Cont. Cal
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Cont. Cal

* Values outside of QC limits.

8B
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD-SNIDER

ARI Job No: WC33   Project: POB-HARRIS

Ical Midpoint ID: IC0125A   Ical Date: 01/25/13

Instrument ID: NT10   Cont. Cal Date: 02/15/13

		IS7 AREA #	RT #	AREA #	RT #	AREA #	RT #
	ICAL MIDPT	264159	25.10				
	UPPER LIMIT	528318					
	LOWER LIMIT	132080					
	CCAL	276520	24.77				
	UPPER LIMIT		25.27				
	LOWER LIMIT		24.27				
01	WC32MBS1	204697	24.79				
02	WC32LCSS1	187135	24.80				
03	WC32LCSDS1	203706	24.79				
04	SG-12-0-10-0	202260	24.79				
05	SG-13-0-10-0	206487	24.79				
06	SG-07-0-10-0	202055	24.79				
07	SG-06-0-10-0	207108	24.79				
08	SG-05-0-10-0	203344	24.79				
09	SG-95-0-10-0	205296	24.79				
10	SG-08-0-10-0	171616	24.80				
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IS7 = Di-n-octylphthalate-d4

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Cont. Cal
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Cont. Cal

* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD-SNIDER

ARI Job No: WC33   Project: POB-HARRIS

Ical Midpoint ID: IC0125A   Ical Date: 01/25/13

Instrument ID: NT10   Cont. Cal Date: 02/16/13

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	ICAL MIDPT	46623	9.08	176978	11.76	110872	15.66
	UPPER LIMIT	93246		353956		221744	
	LOWER LIMIT	23312		88489		55436	
	CCAL	58661	8.65	215378	11.30	135889	15.19
	UPPER LIMIT		9.15		11.80		15.69
	LOWER LIMIT		8.15		10.80		14.69
01	SG-08-0-10-0	37651	8.67	145732	11.33	89068	15.22
02	SG-08-0-10-0	40003	8.68	154698	11.34	99015	15.23
03	SG-09-0-10-0	44050	8.66	164594	11.32	100040	15.22
04	HA-09-0-10-0	41694	8.66	147300	11.32	94380	15.21
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IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Cont. Cal
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Cont. Cal

* Values outside of QC limits.

FORM VIII SV-1

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC　　Client: FLOYD-SNIDER

ARI Job No: WC33　　Project: POB-HARRIS

Ical Midpoint ID: IC0125A　　Ical Date: 01/25/13

Instrument ID: NT10　　Cont. Cal Date: 02/16/13

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	ICAL MIDPT	188290	18.94	213681	24.01	208584	26.51
	UPPER LIMIT	376580		427362		417168	
	LOWER LIMIT	94145		106840		104292	
	CCAL	230004	18.46	264796	23.58	285179	25.96
	UPPER LIMIT		18.96		24.08		26.46
	LOWER LIMIT		17.96		23.08		25.46
01	SG-08-0-10-0	148946	18.49	197224	23.62	218514	26.01
02	SG-08-0-10-0	170394	18.51	230952	23.64	234821	26.04
03	SG-09-0-10-0	151002	18.50	216184	23.63	227017	26.02
04	HA-09-0-10-0	159353	18.49	194416	23.62	205031	26.01
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IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Cont. Cal
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Cont. Cal

* Values outside of QC limits.

8B
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD-SNIDER

ARI Job No: WC33   Project: POB-HARRIS

Ical Midpoint ID: IC0125A   Ical Date: 01/25/13

Instrument ID: NT10   Cont. Cal Date: 02/16/13

		IS7 AREA #	RT #	AREA #	RT #	AREA #	RT #
	ICAL MIDPT	264159	25.10				
	UPPER LIMIT	528318					
	LOWER LIMIT	132080					
	CCAL	370433	24.69				
	UPPER LIMIT		25.19				
	LOWER LIMIT		24.19				
01	SG-08-0-10-0	258188	24.73				
02	SG-08-0-10-0	313766	24.76				
03	SG-09-0-10-0	270534	24.74				
04	HA-09-0-10-0	259159	24.74				
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IS7 = Di-n-octylphthalate-d4

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Cont. Cal
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Cont. Cal

* Values outside of QC limits.

SIM Semivolatile Analysis
Report and Summary QC Forms

ARI Job ID: WC32, WC33

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by Selected Ion Monitoring GC/MS **Sample ID: SG-12-0-10-013113**
Extraction Method: SW3546 **SAMPLE**

Lab Sample ID: WC32A
LIMS ID: 13-2424
Matrix: Sediment
Data Release Authorized:
Reported: 02/20/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
Event: POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted: 02/08/13
Date Analyzed: 02/15/13 18:39
Instrument/Analyst: NT10/YZ
GPC Cleanup: Yes
Silica Gel Cleanup: No
Alumina Cleanup: No

Sample Amount: 10.10 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 59.8%

CAS Number	Analyte	RL	Result
53-70-3	**Dibenz(a,h)anthracene**	**5.0**	**11 Q**
106-46-7	**1,4-Dichlorobenzene**	**5.0**	**2.5 J**
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0 U
118-74-1	Hexachlorobenzene	5.0	< 5.0 U
87-68-3	Hexachlorobutadiene	5.0	< 5.0 U
131-11-3	**Dimethylphthalate**	**5.0**	**13**
85-68-7	**Butylbenzylphthalate**	**5.0**	**3.6 J**
95-48-7	2-Methylphenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	20	< 20 U
86-30-6	N-Nitrosodiphenylamine	20	< 20 U
100-51-6	**Benzyl Alcohol**	**20**	**53**
87-86-5	Pentachlorophenol	50	< 50 U
95-50-1	1,2-Dichlorobenzene	5.0	< 5.0 U
541-73-1	1,3-Dichlorobenzene	5.0	< 5.0 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery	
2-Fluorophenol	67.2%
d14-p-Terphenyl	93.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by Selected Ion Monitoring GC/MS **Sample ID: SG-13-0-10-013113**
Extraction Method: SW3546 **SAMPLE**

Lab Sample ID: WC32B
LIMS ID: 13-2425
Matrix: Sediment
Data Release Authorized:
Reported: 02/20/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
Event: POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted: 02/08/13
Date Analyzed: 02/15/13 19:15
Instrument/Analyst: NT10/YZ
GPC Cleanup: Yes
Silica Gel Cleanup: No
Alumina Cleanup: No

Sample Amount: 10.20 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 65.2%

CAS Number	Analyte	RL	Result
53-70-3	**Dibenz(a,h)anthracene**	**4.9**	**10 Q**
106-46-7	**1,4-Dichlorobenzene**	**4.9**	**2.4 J**
120-82-1	1,2,4-Trichlorobenzene	4.9	< 4.9 U
118-74-1	Hexachlorobenzene	4.9	< 4.9 U
87-68-3	Hexachlorobutadiene	4.9	< 4.9 U
131-11-3	**Dimethylphthalate**	**4.9**	**13**
85-68-7	Butylbenzylphthalate	4.9	< 4.9 U
95-48-7	**2-Methylphenol**	**4.9**	**5.7**
105-67-9	2,4-Dimethylphenol	20	< 20 U
86-30-6	N-Nitrosodiphenylamine	20	< 20 U
100-51-6	Benzyl Alcohol	20	< 20 U
87-86-5	**Pentachlorophenol**	**49**	**17 J**
95-50-1	1,2-Dichlorobenzene	4.9	< 4.9 U
541-73-1	1,3-Dichlorobenzene	4.9	< 4.9 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery	
2-Fluorophenol	66.3%
d14-p-Terphenyl	94.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by Selected Ion Monitoring GC/MS
Extraction Method: SW3546

Sample ID: SG-07-0-10-013113
SAMPLE

Lab Sample ID: WC32C
LIMS ID: 13-2426
Matrix: Sediment
Data Release Authorized:
Reported: 02/20/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
Event: POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted: 02/08/13
Date Analyzed: 02/15/13 19:52
Instrument/Analyst: NT10/YZ
GPC Cleanup: Yes
Silica Gel Cleanup: No
Alumina Cleanup: No

Sample Amount: 10.11 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 22.8%

CAS Number	Analyte	RL	Result
53-70-3	**Dibenz(a,h)anthracene**	**5.0**	**17 Q**
106-46-7	1,4-Dichlorobenzene	5.0	< 5.0 U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0 U
118-74-1	Hexachlorobenzene	5.0	< 5.0 U
87-68-3	Hexachlorobutadiene	5.0	< 5.0 U
131-11-3	**Dimethylphthalate**	**5.0**	**8.2**
85-68-7	**Butylbenzylphthalate**	**5.0**	**3.7 J**
95-48-7	**2-Methylphenol**	**5.0**	**20**
105-67-9	**2,4-Dimethylphenol**	**20**	**28**
86-30-6	**N-Nitrosodiphenylamine**	**20**	**9.0 J**
100-51-6	Benzyl Alcohol	20	< 20 U
87-86-5	Pentachlorophenol	50	< 50 U
95-50-1	**1,2-Dichlorobenzene**	**5.0**	**2.9 J**
541-73-1	1,3-Dichlorobenzene	5.0	< 5.0 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

2-Fluorophenol	70.9%
d14-p-Terphenyl	99.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by Selected Ion Monitoring GC/MS
Extraction Method: SW3546

Sample ID: SG-06-0-10-013113
SAMPLE

Lab Sample ID: WC32D
LIMS ID: 13-2427
Matrix: Sediment
Data Release Authorized:
Reported: 02/20/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
Event: POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted: 02/08/13
Date Analyzed: 02/15/13 20:28
Instrument/Analyst: NT10/YZ
GPC Cleanup: Yes
Silica Gel Cleanup: No
Alumina Cleanup: No

Sample Amount: 10.18 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 41.0%

CAS Number	Analyte	RL	Result
53-70-3	**Dibenz(a,h)anthracene**	**4.9**	**43 Q**
106-46-7	**1,4-Dichlorobenzene**	**4.9**	**3.1 J**
120-82-1	1,2,4-Trichlorobenzene	4.9	< 4.9 U
118-74-1	Hexachlorobenzene	4.9	< 4.9 U
87-68-3	Hexachlorobutadiene	4.9	< 4.9 U
131-11-3	**Dimethylphthalate**	**4.9**	**16**
85-68-7	**Butylbenzylphthalate**	**4.9**	**28 Q**
95-48-7	**2-Methylphenol**	**4.9**	**3.8 J**
105-67-9	**2,4-Dimethylphenol**	**20**	**4.5 J**
86-30-6	**N-Nitrosodiphenylamine**	**20**	**6.1 J**
100-51-6	**Benzyl Alcohol**	**20**	**78**
87-86-5	**Pentachlorophenol**	**49**	**47 J**
95-50-1	**1,2-Dichlorobenzene**	**4.9**	**2.6 J**
541-73-1	1,3-Dichlorobenzene	4.9	< 4.9 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery	
2-Fluorophenol	60.3%
d14-p-Terphenyl	82.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by Selected Ion Monitoring GC/MS
Extraction Method: SW3546
Page 1 of 1

Sample ID: SG-05-0-10-013113
SAMPLE

Lab Sample ID: WC32E
LIMS ID: 13-2428
Matrix: Sediment
Data Release Authorized:
Reported: 02/20/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
Event: POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted: 02/08/13
Date Analyzed: 02/15/13 21:04
Instrument/Analyst: NT10/YZ
GPC Cleanup: Yes
Silica Gel Cleanup: No
Alumina Cleanup: No

Sample Amount: 10.53 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 5.7%

CAS Number	Analyte	RL	Result
53-70-3	**Dibenz(a,h)anthracene**	**4.8**	**7.8 Q**
106-46-7	1,4-Dichlorobenzene	4.8	< 4.8 U
120-82-1	1,2,4-Trichlorobenzene	4.8	< 4.8 U
118-74-1	Hexachlorobenzene	4.8	< 4.8 U
87-68-3	Hexachlorobutadiene	4.8	< 4.8 U
131-11-3	Dimethylphthalate	4.8	< 4.8 U
85-68-7	**Butylbenzylphthalate**	**4.8**	**9.4 Q**
95-48-7	2-Methylphenol	4.8	< 4.8 U
105-67-9	2,4-Dimethylphenol	19	< 19 U
86-30-6	N-Nitrosodiphenylamine	19	< 19 U
100-51-6	Benzyl Alcohol	19	< 19 U
87-86-5	Pentachlorophenol	48	< 48 U
95-50-1	1,2-Dichlorobenzene	4.8	< 4.8 U
541-73-1	1,3-Dichlorobenzene	4.8	< 4.8 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

2-Fluorophenol	60.3%
d14-p-Terphenyl	87.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by Selected Ion Monitoring GC/MS **Sample ID: SG-95-0-10-013113**
Extraction Method: SW3546 **SAMPLE**
Page 1 of 1

Lab Sample ID: WC32F
LIMS ID: 13-2429
Matrix: Sediment
Data Release Authorized:
Reported: 02/20/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
Event: POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted: 02/08/13
Date Analyzed: 02/15/13 21:40
Instrument/Analyst: NT10/YZ
GPC Cleanup: Yes
Silica Gel Cleanup: No
Alumina Cleanup: No

Sample Amount: 10.67 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 6.5%

CAS Number	Analyte	RL	Result
53-70-3	**Dibenz(a,h)anthracene**	**4.7**	**58 Q**
106-46-7	1,4-Dichlorobenzene	4.7	< 4.7 U
120-82-1	1,2,4-Trichlorobenzene	4.7	< 4.7 U
118-74-1	Hexachlorobenzene	4.7	< 4.7 U
87-68-3	Hexachlorobutadiene	4.7	< 4.7 U
131-11-3	Dimethylphthalate	4.7	< 4.7 U
85-68-7	Butylbenzylphthalate	4.7	< 4.7 U
95-48-7	2-Methylphenol	4.7	< 4.7 U
105-67-9	2,4-Dimethylphenol	19	< 19 U
86-30-6	**N-Nitrosodiphenylamine**	**19**	**2.5 J**
100-51-6	Benzyl Alcohol	19	< 19 U
87-86-5	Pentachlorophenol	47	< 47 U
95-50-1	1,2-Dichlorobenzene	4.7	< 4.7 U
541-73-1	1,3-Dichlorobenzene	4.7	< 4.7 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

2-Fluorophenol	69.6%
d14-p-Terphenyl	101%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by Selected Ion Monitoring GC/MS
Extraction Method: SW3546

Sample ID: SG-08-0-10-013113
SAMPLE

Lab Sample ID: WC32G
LIMS ID: 13-2430
Matrix: Sediment
Data Release Authorized:
Reported: 02/20/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
Event: POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted: 02/08/13
Date Analyzed: 02/16/13 19:00
Instrument/Analyst: NT10/YZ
GPC Cleanup: Yes
Silica Gel Cleanup: No
Alumina Cleanup: No

Sample Amount: 10.36 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 5.00
Percent Moisture: 48.5%

CAS Number	Analyte	RL	Result
53-70-3	**Dibenz(a,h)anthracene**	**24**	**260 Q**
106-46-7	**1,4-Dichlorobenzene**	**24**	**14 J**
120-82-1	1,2,4-Trichlorobenzene	24	< 24 U
118-74-1	Hexachlorobenzene	24	< 24 U
87-68-3	Hexachlorobutadiene	24	< 24 U
131-11-3	Dimethylphthalate	24	< 24 U
85-68-7	Butylbenzylphthalate	24	< 24 U
95-48-7	**2-Methylphenol**	**24**	**14 J**
105-67-9	**2,4-Dimethylphenol**	**96**	**14 J**
86-30-6	**N-Nitrosodiphenylamine**	**96**	**14 J**
100-51-6	Benzyl Alcohol	96	< 96 U
87-86-5	Pentachlorophenol	240	< 240 U
95-50-1	1,2-Dichlorobenzene	24	< 24 U
541-73-1	1,3-Dichlorobenzene	24	< 24 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

2-Fluorophenol	55.3%
d14-p-Terphenyl	93.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by Selected Ion Monitoring GC/MS **Sample ID: SG-09-0-10-013113**
Extraction Method: SW3546 **SAMPLE**

Lab Sample ID: WC32H
LIMS ID: 13-2431
Matrix: Sediment
Data Release Authorized:
Reported: 02/20/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
Event: POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted: 02/08/13
Date Analyzed: 02/16/13 20:12
Instrument/Analyst: NT10/YZ
GPC Cleanup: Yes
Silica Gel Cleanup: No
Alumina Cleanup: No

Sample Amount: 10.68 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 47.6%

CAS Number	Analyte	RL	Result
53-70-3	**Dibenz(a,h)anthracene**	**4.7**	**27 Q**
106-46-7	**1,4-Dichlorobenzene**	**4.7**	**2.7 J**
120-82-1	1,2,4-Trichlorobenzene	4.7	< 4.7 U
118-74-1	Hexachlorobenzene	4.7	< 4.7 U
87-68-3	Hexachlorobutadiene	4.7	< 4.7 U
131-11-3	Dimethylphthalate	4.7	< 4.7 U
85-68-7	Butylbenzylphthalate	4.7	< 4.7 U
95-48-7	**2-Methylphenol**	**4.7**	**24**
105-67-9	**2,4-Dimethylphenol**	**19**	**4.6 J**
86-30-6	N-Nitrosodiphenylamine	19	< 19 U
100-51-6	**Benzyl Alcohol**	**19**	**35**
87-86-5	Pentachlorophenol	47	< 47 U
95-50-1	1,2-Dichlorobenzene	4.7	< 4.7 U
541-73-1	1,3-Dichlorobenzene	4.7	< 4.7 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery	
2-Fluorophenol	69.5%
d14-p-Terphenyl	90.2%

ANALYTICAL RESOURCES INCORPORATED

SIM SW8270 SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030

Client ID	FPH	TER	TOT OUT
SG-12-0-10-013113	67.2%	93.8%	0
SG-13-0-10-013113	66.3%	94.8%	0
SG-07-0-10-013113	70.9%	99.2%	0
SG-06-0-10-013113	60.3%	82.8%	0
SG-05-0-10-013113	60.3%	87.8%	0
SG-95-0-10-013113	69.6%	101%	0
MB-020813	65.1%	105%	0
LCS-020813	77.7%	106%	0
LCSD-020813	71.2%	100%	0
SG-08-0-10-013113	55.3%	93.0%	0
SG-08-0-10-013113 MS	69.9%	93.8%	0
SG-08-0-10-013113 MSD	50.8%	85.0%	0
SG-09-0-10-013113	69.5%	90.2%	0

	LCS/MB LIMITS	QC LIMITS
(FPH) = 2-Fluorophenol	(30-160)	(30-160)
(TER) = d14-p-Terphenyl	(30-160)	(30-160)

Prep Method: SW3546
Log Number Range: 13-2424 to 13-2431

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by Selected Ion Monitoring GC/MS **Sample ID: HA-09-0-10-013013**
Extraction Method: SW3546 **SAMPLE**

Lab Sample ID: WC33G
LIMS ID: 13-2451
Matrix: Sediment
Data Release Authorized:
Reported: 02/20/13

QC Report No: WC33-Floyd-Snider
Project: POB-Harris
Event: T.4030
Date Sampled: 01/30/13
Date Received: 02/01/13

Date Extracted: 02/08/13
Date Analyzed: 02/16/13 20:48
Instrument/Analyst: NT10/YZ
GPC Cleanup: Yes
Silica Gel Cleanup: No
Alumina Cleanup: No

Sample Amount: 10.60 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 5.8%

CAS Number	Analyte	RL	Result
53-70-3	**Dibenz(a,h)anthracene**	**4.7**	**4.0 JQ**
106-46-7	1,4-Dichlorobenzene	4.7	< 4.7 U
120-82-1	1,2,4-Trichlorobenzene	4.7	< 4.7 U
118-74-1	Hexachlorobenzene	4.7	< 4.7 U
87-68-3	Hexachlorobutadiene	4.7	< 4.7 U
131-11-3	Dimethylphthalate	4.7	< 4.7 U
85-68-7	Butylbenzylphthalate	4.7	< 4.7 U
95-48-7	2-Methylphenol	4.7	< 4.7 U
105-67-9	2,4-Dimethylphenol	19	< 19 U
86-30-6	N-Nitrosodiphenylamine	19	< 19 U
100-51-6	Benzyl Alcohol	19	< 19 U
87-86-5	Pentachlorophenol	47	< 47 U
95-50-1	1,2-Dichlorobenzene	4.7	< 4.7 U
541-73-1	1,3-Dichlorobenzene	4.7	< 4.7 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery	
2-Fluorophenol	68.7%
d14-p-Terphenyl	99.4%

SIM SW8270 SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: WC33-Floyd-Snider
Project: POB-Harris
T.4030

Client ID	FPH	TER	TOT OUT
MB-020813	65.1%	105%	0
LCS-020813	77.7%	106%	0
LCSD-020813	71.2%	100%	0
HA-09-0-10-013013	68.7%	99.4%	0

	LCS/MB LIMITS	QC LIMITS
(FPH) = 2-Fluorophenol	(30-160)	(30-160)
(TER) = d14-p-Terphenyl	(30-160)	(30-160)

Prep Method: SW3546
Log Number Range: 13-2451 to 13-2451

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by Selected Ion Monitoring GC/MS

Sample ID: SG-08-0-10-013113
MATRIX SPIKE

Lab Sample ID: WC32G
LIMS ID: 13-2430
Matrix: Sediment
Data Release Authorized:
Reported: 02/20/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
Event: POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted MS/MSD: 02/08/13

Sample Amount MS: 10.34 g-dry-wt
MSD: 10.39 g-dry-wt

Date Analyzed MS: 02/15/13 22:53
MSD: 02/16/13 19:36
Instrument/Analyst MS: NT10/YZ
MSD: NT10/YZ

Final Extract Volume MS: 1.0 mL
MSD: 1.0 mL
Dilution Factor MS: 1.00
MSD: 1.00

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Dibenz(a,h)anthracene	260 Q	295 Q	484	7.2%	555 Q	481	61.3%	61.2%
1,4-Dichlorobenzene	14 J	351	484	69.6%	301	481	59.7%	15.3%
1,2,4-Trichlorobenzene	< 24 U	338	484	69.8%	318	481	66.1%	6.1%
Hexachlorobenzene	< 24 U	407	484	84.1%	387	481	80.5%	5.0%
Hexachlorobutadiene	< 24 U	341	484	70.5%	321	481	66.7%	6.0%
Dimethylphthalate	< 24 U	481	484	99.4%	467	481	97.1%	3.0%
Butylbenzylphthalate	< 24 U	579 Q	484	120%	535 Q	481	111%	7.9%
2-Methylphenol	14 J	359	484	71.3%	335	481	66.7%	6.9%
2,4-Dimethylphenol	14 J	1200	1450	81.8%	1100	1440	75.4%	8.7%
N-Nitrosodiphenylamine	14 J	371	484	73.8%	201	481	38.9%	59.4%
Benzyl Alcohol	< 96 U	432	484	89.3%	288	481	59.9%	40.0%
Pentachlorophenol	< 240 U	894 Q	1450	61.7%	725 Q	1440	50.3%	20.9%
1,2-Dichlorobenzene	< 24 U	330	484	68.2%	302	481	62.8%	8.9%
1,3-Dichlorobenzene	< 24 U	312	484	64.5%	285	481	59.3%	9.0%

Reported in µg/kg (ppb)

RPD calculated using sample concentrations per SW846.

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by Selected Ion Monitoring GC/MS **Sample ID: SG-08-0-10-013113**
Extraction Method: SW3546 **MATRIX SPIKE**

Lab Sample ID: WC32G
LIMS ID: 13-2430
Matrix: Sediment
Data Release Authorized:
Reported: 02/20/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
Event: POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted: 02/08/13
Date Analyzed: 02/15/13 22:53
Instrument/Analyst: NT10/YZ
GPC Cleanup: Yes
Silica Gel Cleanup: No
Alumina Cleanup: No

Sample Amount: 10.34 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 48.5%

CAS Number	Analyte	RL	Result
53-70-3	Dibenz(a,h)anthracene	4.8	---
106-46-7	1,4-Dichlorobenzene	4.8	---
120-82-1	1,2,4-Trichlorobenzene	4.8	---
118-74-1	Hexachlorobenzene	4.8	---
87-68-3	Hexachlorobutadiene	4.8	---
131-11-3	Dimethylphthalate	4.8	---
85-68-7	Butylbenzylphthalate	4.8	---
95-48-7	2-Methylphenol	4.8	---
105-67-9	2,4-Dimethylphenol	19	---
86-30-6	N-Nitrosodiphenylamine	19	---
100-51-6	Benzyl Alcohol	19	---
87-86-5	Pentachlorophenol	48	---
95-50-1	1,2-Dichlorobenzene	4.8	---
541-73-1	1,3-Dichlorobenzene	4.8	---

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery	
2-Fluorophenol	69.9%
d14-p-Terphenyl	93.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by Selected Ion Monitoring GC/MS
Extraction Method: SW3546

Sample ID: SG-08-0-10-013113
MATRIX SPIKE DUPLICATE

Lab Sample ID: WC32G
LIMS ID: 13-2430
Matrix: Sediment
Data Release Authorized:
Reported: 02/20/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
Event: POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted: 02/08/13
Date Analyzed: 02/16/13 19:36
Instrument/Analyst: NT10/YZ
GPC Cleanup: Yes
Silica Gel Cleanup: No
Alumina Cleanup: No

Sample Amount: 10.39 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 48.5%

CAS Number	Analyte	RL	Result
53-70-3	Dibenz(a,h)anthracene	4.8	---
106-46-7	1,4-Dichlorobenzene	4.8	---
120-82-1	1,2,4-Trichlorobenzene	4.8	---
118-74-1	Hexachlorobenzene	4.8	---
87-68-3	Hexachlorobutadiene	4.8	---
131-11-3	Dimethylphthalate	4.8	---
85-68-7	Butylbenzylphthalate	4.8	---
95-48-7	2-Methylphenol	4.8	---
105-67-9	2,4-Dimethylphenol	19	---
86-30-6	N-Nitrosodiphenylamine	19	---
100-51-6	Benzyl Alcohol	19	---
87-86-5	Pentachlorophenol	48	---
95-50-1	1,2-Dichlorobenzene	4.8	---
541-73-1	1,3-Dichlorobenzene	4.8	---

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery	
2-Fluorophenol	50.8%
d14-p-Terphenyl	85.0%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by Selected Ion Monitoring GC/MS

Sample ID: LCS-020813
LAB CONTROL SAMPLE

Lab Sample ID: LCS-020813
LIMS ID: 13-2430
Matrix: Sediment
Data Release Authorized:
Reported: 02/20/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
Event: POCB HARRIS T.4030
Date Sampled: NA
Date Received: NA

Date Extracted: 02/08/13

Sample Amount LCS: 10.00 g-dry-wt
LCSD: 10.00 g-dry-wt

Date Analyzed LCS: 02/15/13 17:26
LCSD: 02/15/13 18:03
Instrument/Analyst LCS: NT10/YZ
LCSD: NT10/YZ

Final Extract Volume LCS: 1.0 mL
LCSD: 1.0 mL
Dilution Factor LCS: 1.00
LCSD: 1.00

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Dibenz(a,h)anthracene	294 Q	500	58.8%	313 Q	500	62.6%	6.3%
1,4-Dichlorobenzene	362	500	72.4%	341	500	68.2%	6.0%
1,2,4-Trichlorobenzene	372	500	74.4%	351	500	70.2%	5.8%
Hexachlorobenzene	429	500	85.8%	426	500	85.2%	0.7%
Hexachlorobutadiene	379	500	75.8%	354	500	70.8%	6.8%
Dimethylphthalate	514	500	103%	506	500	101%	1.6%
Butylbenzylphthalate	630 Q	500	126%	626 Q	500	125%	0.6%
2-Methylphenol	370	500	74.0%	347	500	69.4%	6.4%
2,4-Dimethylphenol	920	1500	61.3%	784	1500	52.3%	16.0%
N-Nitrosodiphenylamine	415	500	83.0%	433	500	86.6%	4.2%
Benzyl Alcohol	424	500	84.8%	395	500	79.0%	7.1%
Pentachlorophenol	696 Q	1500	46.4%	704 Q	1500	46.9%	1.1%
1,2-Dichlorobenzene	367	500	73.4%	351	500	70.2%	4.5%
1,3-Dichlorobenzene	359	500	71.8%	340	500	68.0%	5.4%

Reported in µg/kg (ppb)

RPD calculated using sample concentrations per SW846.

SIM Semivolatile Surrogate Recovery

	LCS	LCSD
2-Fluorophenol	77.7%	71.2%
d14-p-Terphenyl	106%	100%

4B
SEMIVOLATILE METHOD BLANK SUMMARY

BLANK NO.

WC32MBS1

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD-SNIDER

ARI Job No: WC33   Project: POB-HARRIS

Lab File ID: WC32MB   Date Extracted: 02/08/13

Instrument ID: NT10   Date Analyzed: 02/15/13

Matrix: SOLID   Time Analyzed: 1650

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	WC32LCSS1	WC32LCSS1	WC32SB	02/15/13
02	WC32LCSDS1	WC32LCSDS1	WC32SBD	02/15/13
03	SG-12-0-10-01311	WC32A	WC32A	02/15/13
04	SG-13-0-10-01311	WC32B	WC32B	02/15/13
05	SG-07-0-10-01311	WC32C	WC32C	02/15/13
06	SG-06-0-10-01311	WC32D	WC32D	02/15/13
07	SG-05-0-10-01311	WC32E	WC32E	02/15/13
08	SG-95-0-10-01311	WC32F	WC32F	02/15/13
09	SG-08-0-10-0131	WC32GMS	WC32GMS	02/15/13
10	SG-08-0-10-01311	WC32G	WC32G	02/16/13
11	SG-08-0-10-0131	WC32GMSD	WC32GMSD	02/16/13
12	SG-09-0-10-01311	WC32H	WC32H	02/16/13
13	HA-09-0-10-01301	WC33G	WC33G	02/16/13
14				
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ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by Selected Ion Monitoring GC/MS **Sample ID: MB-020813**
Extraction Method: SW3546 **METHOD BLANK**

Lab Sample ID: MB-020813
LIMS ID: 13-2430
Matrix: Sediment
Data Release Authorized:
Reported: 02/20/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
Event: POCB HARRIS T.4030
Date Sampled: NA
Date Received: NA

Date Extracted: 02/08/13
Date Analyzed: 02/15/13 16:50
Instrument/Analyst: NT10/YZ
GPC Cleanup: Yes
Silica Gel Cleanup: No
Alumina Cleanup: No

Sample Amount: 10.00 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: NA

CAS Number	Analyte	RL	Result
53-70-3	Dibenz(a,h)anthracene	5.0	< 5.0 U
106-46-7	1,4-Dichlorobenzene	5.0	< 5.0 U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0 U
118-74-1	Hexachlorobenzene	5.0	< 5.0 U
87-68-3	Hexachlorobutadiene	5.0	< 5.0 U
131-11-3	Dimethylphthalate	5.0	< 5.0 U
85-68-7	Butylbenzylphthalate	5.0	< 5.0 U
95-48-7	2-Methylphenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	20	< 20 U
86-30-6	N-Nitrosodiphenylamine	20	< 20 U
100-51-6	Benzyl Alcohol	20	< 20 U
87-86-5	Pentachlorophenol	50	< 50 U
95-50-1	1,2-Dichlorobenzene	5.0	< 5.0 U
541-73-1	1,3-Dichlorobenzene	5.0	< 5.0 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

2-Fluorophenol	65.1%
d14-p-Terphenyl	105%

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD-SNIDER

Instrument ID: NT10   Project: POCB HARRIS

DFTPP Injection Date: 01/25/13   DFTPP Injection Time: 1243

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10.0 - 80.0% of mass 198	24.2	
68	Less than 2.0% of mass 69	0.6	(1.5)1
69	Mass 69 relative abundance	39.8	
70	Less than 2.0% of mass 69	0.2	(0.5)1
127	10.0 - 80.0% of mass 198	48.9	
197	Less than 2.0% of mass 198	0.2	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	6.7	
275	10.0 - 60.0% of mass 198	28.9	
365	Greater than 1.0% of mass 198	4.43	
441	0.0 - 24.0% of mass 442	16.5	(15.1)2
442	50.0 - 200.0% of mass 198	109.2	
443	15.0 - 24.0% of mass 442	21.8	(20.0)2

1-Value is % mass 69   2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		IC0125A	IC0125A	01/25/13	1259
02		IC0125C	IC0125C	01/25/13	1413
03		IC0125E	IC0125E	01/25/13	1527
04		IC0125F	IC0125F	01/25/13	1603
05		IC0125G	IC0125G	01/25/13	1640
06		IC0125H	IC0125H	01/25/13	1716
07		IC0125I	IC0125I	01/25/13	1753
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD-SNIDER

Instrument ID: NT10   Project: POCB HARRIS

DFTPP Injection Date: 02/15/13   DFTPP Injection Time: 1103

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	21.1
68	Less than 2.0% of mass 69	0.6 (1.6)1
69	Mass 69 relative abundance	34.3
70	Less than 2.0% of mass 69	0.1 (0.4)1
127	10.0 - 80.0% of mass 198	47.3
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.8
275	10.0 - 60.0% of mass 198	32.1
365	Greater than 1.0% of mass 198	5.38
441	0.0 - 24.0% of mass 442	21.7 (14.7)2
442	50.0 - 200.0% of mass 198	148.0
443	15.0 - 24.0% of mass 442	29.0 (19.6)2

1-Value is % mass 69   2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		CC0215A	CC0215A	02/15/13	1156
02	WC32MBS1	WC32MBS1	WC32MB	02/15/13	1650
03	WC32LCSS1	WC32LCSS1	WC32SB	02/15/13	1726
04	WC32LCSDS1	WC32LCSDS1	WC32SBD	02/15/13	1803
05	SG-12-0-10-01311	WC32A	WC32A	02/15/13	1839
06	SG-13-0-10-01311	WC32B	WC32B	02/15/13	1915
07	SG-07-0-10-01311	WC32C	WC32C	02/15/13	1952
08	SG-06-0-10-01311	WC32D	WC32D	02/15/13	2028
09	SG-05-0-10-01311	WC32E	WC32E	02/15/13	2104
10	SG-95-0-10-01311	WC32F	WC32F	02/15/13	2140
11	SG-08-0-10-0131	WC32GMS	WC32GMS	02/15/13	2253
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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD-SNIDER

Instrument ID: NT10   Project: POCB HARRIS

DFTPP Injection Date: 02/16/13   DFTPP Injection Time: 1048

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	22.1
68	Less than 2.0% of mass 69	0.6 (1.6)1
69	Mass 69 relative abundance	36.6
70	Less than 2.0% of mass 69	0.1 (0.3)1
127	10.0 - 80.0% of mass 198	47.8
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.8
275	10.0 - 60.0% of mass 198	29.8
365	Greater than 1.0% of mass 198	4.81
441	0.0 - 24.0% of mass 442	18.2 (15.2)2
442	50.0 - 200.0% of mass 198	119.9
443	15.0 - 24.0% of mass 442	24.1 (20.1)2

1-Value is % mass 69   2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		ABN 1	CC0216A	02/16/13	1140
02	SG-08-0-10-01311	WC32G	WC32G	02/16/13	1900
03	SG-08-0-10-0131	WC32GMSD	WC32GMSD	02/16/13	1936
04	SG-09-0-10-01311	WC32H	WC32H	02/16/13	2012
05	HA-09-0-10-01301	WC33G	WC33G	02/16/13	2048
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6B

SEMIVOLATILE 8270-D INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES INC Client: FLOYD-SNIDER

ARI Job No: WC33 Project: POCB HARRIS

Instrument ID: NT10 Calibration Date: 01/25/13

LAB FILE ID: RRF0.05=IC0125G RRF0.1=IC0125I RRF0.2=IC0125C
RRF0.5=IC0125H RRF1 =IC0125E RRF2.5=IC0125F
RRF5 =IC0125A

COMPOUND	RRF 0.05	RRF 0.1	RRF 0.2	RRF 0.5	RRF 1	RRF 2.5	RRF 5	RRF	%RSD /R^2
Phenol	1.601	1.526	1.748	1.603	1.643	1.579	1.613	1.616	4.2
1,3-Dichlorobenzene	1.699	1.643	1.783	1.628	1.586	1.508	1.512	1.623	6.1
1,4-Dichlorobenzene	1.693	1.663	1.780	1.620	1.578	1.502	1.505	1.620	6.2
1,2-Dichlorobenzene	1.595	1.565	1.691	1.527	1.505	1.429	1.429	1.534	6.1
Benzyl alcohol	0.900	0.896	1.033	0.938	0.976	0.957	1.003	0.958	5.3
2-Methylphenol	1.162	1.143	1.334	1.208	1.243	1.198	1.224	1.216	5.1
N-Nitroso-di-n-propylamine	0.762	0.755	0.862	0.784	0.802	0.776	0.802	0.792	4.5
4-Methylphenol	1.156	1.173	1.372	1.262	1.286	1.266	1.301	1.259	5.9
2,4-Dimethylphenol	0.317	0.316	0.382	0.343	0.358	0.346	0.351	0.345	6.7
1,2,4-Trichlorobenzene	0.375	0.423	0.400	0.373	0.357	0.338	0.340	0.372	8.4
Hexachlorobutadiene	0.236	0.226	0.246	0.222	0.222	0.214	0.215	0.226	5.1
Dimethylphthalate	1.176	1.163	1.340	1.210	1.233	1.198	1.203	1.218	4.8
Diethylphthalate	1.319	1.462	1.578	1.408	1.426	1.370	1.394	1.422	5.8
N-Nitrosodiphenylamine (1)	0.394	0.422	0.515	0.477	0.497	0.476	0.472	0.465	9.1
Hexachlorobenzene	0.314	0.306	0.329	0.308	0.296	0.280	0.284	0.302	5.6
Pentachlorophenol		0.128	0.169	0.168	0.193	0.201	0.213	0.179	17.0
Butylbenzylphthalate	0.324	0.315	0.404	0.357	0.410	0.413	0.453	0.382	13.4
Dibenzo(a,h)anthracene	0.870	0.840	1.028	0.946	1.004	0.974	1.011	0.953	7.6
N-Nitrosodimethylamine	0.751	0.750	0.815	0.754	0.748	0.729	0.768	0.759	3.6
2-Fluorophenol	1.241	1.219	1.388	1.258	1.279	1.241	1.282	1.272	4.4
Terphenyl-d14	0.496	0.580	0.577	0.517	0.529	0.500	0.520	0.531	6.5

(1) Cannot be seperated from Diphenylamine
<- Outside QC limits: %RSD <20% or R^2 > 0.990

FORM VI SV-1

7B

SEMIVOLATILE 8270-D CONTINUING CALIBRATION CHECK

Lab Name: ANALYTICAL RESOURCES INC Client: FLOYD-SNIDER

ARI Job No: WC33 Project: POCB HARRIS

Instrument ID: NT10 Cont. Calib. Date: 02/15/13

Init. Calib. Date: 01/25/13 Cont. Calib. Time: 1156

COMPOUND	CalAmt or ARF	CC Amt or RF	MIN RRF	CURVE TYPE	%D or Drift	
Phenol	1.616	1.793	0.800	AVRG	11.0	
1,3-Dichlorobenzene	1.623	1.590	0.010	AVRG	-2.0	
1,4-Dichlorobenzene	1.620	1.567	0.010	AVRG	-3.3	
1,2-Dichlorobenzene	1.534	1.494	0.010	AVRG	-2.6	
Benzyl alcohol	0.958	0.965	0.010	AVRG	0.7	
2-Methylphenol	1.216	1.285	0.700	AVRG	5.7	
N-Nitroso-di-n-propylamine	0.792	0.813	0.500	AVRG	2.6	
4-Methylphenol	1.259	1.309	0.600	AVRG	4.0	
2,4-Dimethylphenol	0.345	0.361	0.200	AVRG	4.6	
1,2,4-Trichlorobenzene	0.372	0.360	0.010	AVRG	-3.2	
Hexachlorobutadiene	0.226	0.219	0.010	AVRG	-3.1	
Dimethylphthalate	1.218	1.314	0.010	AVRG	7.9	
Diethylphthalate	1.422	1.482	0.010	AVRG	4.2	
N-Nitrosodiphenylamine(1)	0.465	0.500	0.010	AVRG	7.5	
Hexachlorobenzene	0.302	0.302	0.100	AVRG	0.0	
Pentachlorophenol	0.179	0.064	0.050	AVRG	-64.2	<-
Butylbenzylphthalate	0.382	0.485	0.010	AVRG	27.0	<-
Dibenzo(a,h)anthracene	0.953	1.149	0.400	AVRG	20.6	<-
N-Nitrosodimethylamine	0.759	0.717	0.010	AVRG	-5.5	
2-Fluorophenol	1.272	1.294	0.010	AVRG	1.7	
Terphenyl-d14	0.531	0.544	0.010	AVRG	2.4	

(1) Cannot be separated from Diphenylamine

<- Exceeds QC limit of 20% D

* RF less than minimum RF

7B

SEMIVOLATILE 8270-D CONTINUING CALIBRATION CHECK

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD-SNIDER

ARI Job No: WC33   Project: POCB HARRIS

Instrument ID: NT10   Cont. Calib. Date: 02/16/13

Init. Calib. Date: 01/25/13   Cont. Calib. Time: 1140

COMPOUND	CalAmt or ARF	CC Amt or RF	MIN RRF	CURVE TYPE	%D or Drift	
Phenol	1.616	1.790	0.800	AVRG	10.8	
1,3-Dichlorobenzene	1.623	1.542	0.010	AVRG	-5.0	
1,4-Dichlorobenzene	1.620	1.540	0.010	AVRG	-4.9	
1,2-Dichlorobenzene	1.534	1.467	0.010	AVRG	-4.4	
Benzyl alcohol	0.958	1.010	0.010	AVRG	5.4	
2-Methylphenol	1.216	1.302	0.700	AVRG	7.1	
N-Nitroso-di-n-propylamine	0.792	0.808	0.500	AVRG	2.0	
4-Methylphenol	1.259	1.346	0.600	AVRG	6.9	
2,4-Dimethylphenol	0.345	0.366	0.200	AVRG	6.1	
1,2,4-Trichlorobenzene	0.372	0.363	0.010	AVRG	-2.4	
Hexachlorobutadiene	0.226	0.224	0.010	AVRG	-0.9	
Dimethylphthalate	1.218	1.354	0.010	AVRG	11.2	
Diethylphthalate	1.422	1.714	0.010	AVRG	20.5	<-
N-Nitrosodiphenylamine(1)	0.465	0.480	0.010	AVRG	3.2	
Hexachlorobenzene	0.302	0.309	0.100	AVRG	2.3	
Pentachlorophenol	0.179	0.050	0.050	AVRG	-72.1	<-
Butylbenzylphthalate	0.382	0.504	0.010	AVRG	31.9	<-
Dibenzo(a,h)anthracene	0.953	1.191	0.400	AVRG	25.0	<-
N-Nitrosodimethylamine	0.759	0.727	0.010	AVRG	-4.2	
2-Fluorophenol	1.272	1.299	0.010	AVRG	2.1	
Terphenyl-d14	0.531	0.564	0.010	AVRG	6.2	

(1) Cannot be separated from Diphenylamine
<- Exceeds QC limit of 20% D
* RF less than minimum RF

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

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

ARI Job No: WC33 | Project: POCB HARRIS

Ical Midpoint ID: IC0125E | Ical Date: 01/25/13

Instrument ID: NT10 | Cont. Cal Date: 02/15/13

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	ICAL MIDPT	53853	9.09	200104	11.75	112392	15.66
	UPPER LIMIT	107706		400208		224784	
	LOWER LIMIT	26926		100052		56196	
	CCAL	41099	8.75	154370	11.39	84986	15.28
	UPPER LIMIT		9.25		11.89		15.78
	LOWER LIMIT		8.25		10.89		14.78
01	WC32MBS1	35677	8.76	133920	11.41	73003	15.30
02	WC32LCSS1	30534	8.76	116174	11.40	66038	15.29
03	WC32LCSDS1	34427	8.76	130152	11.41	71063	15.29
04	SG-12-0-10-0	33865	8.76	130230	11.41	70834	15.29
05	SG-13-0-10-0	30932	8.77	122845	11.42	67747	15.31
06	SG-07-0-10-0	34061	8.76	127739	11.40	72821	15.29
07	SG-06-0-10-0	33933	8.76	133338	11.40	72106	15.29
08	SG-05-0-10-0	35281	8.75	131028	11.40	71300	15.29
09	SG-95-0-10-0	33717	8.76	129115	11.40	70443	15.29
10	SG-08-0-10-0	27833	8.76	106127	11.41	60534	15.30
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IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Cont. Cal
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Cont. Cal

* Values outside of QC limits.

8B
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

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

ARI Job No: WC33 | Project: POCB HARRIS

Ical Midpoint ID: IC0125E | Ical Date: 01/25/13

Instrument ID: NT10 | Cont. Cal Date: 02/15/13

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	ICAL MIDPT	210710	18.94	240805	24.01	230834	26.51
	UPPER LIMIT	421420		481610		461668	
	LOWER LIMIT	105355		120402		115417	
	CCAL	160855	18.55	188710	23.66	188958	26.07
	UPPER LIMIT		19.05		24.16		26.57
	LOWER LIMIT		18.05		23.16		25.57
01	WC32MBS1	144090	18.59	174620	23.69	148785	26.12
02	WC32LCSS1	128820	18.58	157056	23.69	146032	26.11
03	WC32LCSDS1	137445	18.58	169021	23.69	155858	26.11
04	SG-12-0-10-0	138021	18.58	170306	23.69	154422	26.12
05	SG-13-0-10-0	132508	18.59	168973	23.70	149016	26.12
06	SG-07-0-10-0	138245	18.58	167346	23.70	152548	26.12
07	SG-06-0-10-0	139278	18.58	170533	23.70	151563	26.12
08	SG-05-0-10-0	138079	18.58	171424	23.69	150796	26.12
09	SG-95-0-10-0	137674	18.58	169428	23.69	151151	26.12
10	SG-08-0-10-0	117012	18.59	146375	23.71	127344	26.14
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IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Cont. Cal
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Cont. Cal

* Values outside of QC limits.

8B
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD-SNIDER

ARI Job No: WC33   Project: POCB HARRIS

Ical Midpoint ID: IC0125E   Ical Date: 01/25/13

Instrument ID: NT10   Cont. Cal Date: 02/16/13

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	ICAL MIDPT	53853	9.09	200104	11.75	112392	15.66
	UPPER LIMIT	107706		400208		224784	
	LOWER LIMIT	26926		100052		56196	
	CCAL	57062	8.65	211300	11.30	113596	15.19
	UPPER LIMIT		9.15		11.80		15.69
	LOWER LIMIT		8.15		10.80		14.69
01	SG-08-0-10-0	41040	8.67	159427	11.33	88068	15.22
02	SG-08-0-10-0	42965	8.68	167555	11.34	97752	15.23
03	SG-09-0-10-0	47756	8.67	181920	11.32	97854	15.22
04	HA-09-0-10-0	45519	8.67	169051	11.32	92993	15.22
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IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Cont. Cal
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Cont. Cal

* Values outside of QC limits.

FORM VIII SV-1

8B
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD-SNIDER

ARI Job No: WC33   Project: POCB HARRIS

Ical Midpoint ID: IC0125E   Ical Date: 01/25/13

Instrument ID: NT10   Cont. Cal Date: 02/16/13

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	ICAL MIDPT	210710	18.94	240805	24.01	230834	26.51
	UPPER LIMIT	421420		481610		461668	
	LOWER LIMIT	105355		120402		115417	
	CCAL	216553	18.46	244346	23.58	255939	25.96
	UPPER LIMIT		18.96		24.08		26.46
	LOWER LIMIT		17.96		23.08		25.46
01	SG-08-0-10-0	165739	18.50	217348	23.62	236659	26.01
02	SG-08-0-10-0	189898	18.52	248303	23.65	260301	26.04
03	SG-09-0-10-0	172362	18.51	233923	23.63	243901	26.02
04	HA-09-0-10-0	176299	18.49	217527	23.62	226575	26.01
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IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Cont. Cal
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Cont. Cal

* Values outside of QC limits.

Dioxin Analysis
Report and Summary QC Forms

ARI Job ID: WC32, WC33

ORGANICS ANALYSIS DATA SHEET
Dioxins/Furans by EPA 1613B
Page 1 of 1

ANALYTICAL RESOURCES INCORPORATED

Sample ID: SG-12-0-10-013113

Lab Sample ID: WC32A
LIMS ID: 13-2424
Matrix: Sediment
Data Release Authorized: MW
Reported: 02/15/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted: 02/11/13
Date Analyzed: 02/13/13 15:29
Instrument/Analyst: AS1/PK
Acid Cleanup: Yes
Silica-Carbon Cleanup: No

Sample Amount: 10.0 g-dry-wt
Final Extract Volume: 20 uL
Dilution Factor: 1.00
Silica-Florisil Cleanup: Yes

Analyte	Ion Ratio	Ratio Limits	EDL	RL	Result	
2,3,7,8-TCDF	0.78	0.65-0.89		0.200	23.5	
2,3,7,8-TCDD	0.68	0.65-0.89		0.200	1.03	
1,2,3,7,8-PeCDF	1.53	1.32-1.78		2.00	2.63	X
2,3,4,7,8-PeCDF	1.35	1.32-1.78		0.999	2.75	
1,2,3,7,8-PeCDD	1.51	1.32-1.78		0.999	6.54	
1,2,3,4,7,8-HxCDF	1.20	1.05-1.43		2.00	3.69	X
1,2,3,6,7,8-HxCDF	1.13	1.05-1.43		2.00	2.21	
2,3,4,6,7,8-HxCDF	1.23	1.05-1.43		2.00	3.40	X
1,2,3,7,8,9-HxCDF	1.11	1.05-1.43		2.00	1.68	J
1,2,3,4,7,8-HxCDD	1.23	1.05-1.43		2.00	22.6	
1,2,3,6,7,8-HxCDD	1.22	1.05-1.43		2.00	34.0	
1,2,3,7,8,9-HxCDD	1.24	1.05-1.43		2.00	24.6	
1,2,3,4,6,7,8-HpCDF	1.00	0.88-1.20		2.00	38.0	
1,2,3,4,7,8,9-HpCDF	0.92	0.88-1.20		2.00	2.66	
1,2,3,4,6,7,8-HpCDD	1.04	0.88-1.20		2.00	363	
OCDF	0.86	0.76-1.02		5.00	92.4	
OCDD	0.89	0.76-1.02		5.00	1,620	

Homologue Group	EDL	RL	Result	
Total TCDF		0.999	101	EMPC
Total TCDD		0.999	1,380	EMPC
Total PeCDF		2.00	45.9	EMPC
Total PeCDD		0.999	1,270	EMPC
Total HxCDF		2.00	71.2	EMPC
Total HxCDD		2.00	1,680	
Total HpCDF		2.00	128	
Total HpCDD		2.00	665	

Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=0, Including EMPC): 24.6

Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=1/2 EDL, Including EMPC): 24.6

Reported in pg/g

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Dioxins/Furans by EPA 1613B
Page 1 of 1

Sample ID: SG-12-0-10-013113

Lab Sample ID: WC32A
LIMS ID: 13-2424
Matrix: Sediment
Data Release Authorized: MW
Reported: 02/15/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted: 02/11/13
Date Analyzed: 02/13/13 15:29
Instrument/Analyst: AS1/PK

Sample Amount: 10.0 g-dry-wt
Final Extract Volume: 20 uL
Dilution Factor: 1.00

Analyte	Ion Ratio	Ratio Limits	Result	Limits	Exceedance
13C-2,3,7,8-TCDF	0.78	0.65-0.89	83.2	24-169	
13C-2,3,7,8-TCDD	0.78	0.65-0.89	75.3	25-164	
13C-1,2,3,7,8-PeCDF	1.56	1.32-1.78	73.0	24-185	
13C-2,3,4,7,8-PeCDF	1.59	1.32-1.78	70.7	21-178	
13C-1,2,3,7,8-PeCDD	1.58	1.32-1.78	71.1	25-181	
13C-1,2,3,4,7,8-HxCDF	0.52	0.43-0.59	80.5	26-152	
13C-1,2,3,6,7,8-HxCDF	0.52	0.43-0.59	76.6	26-123	
13C-2,3,4,6,7,8-HxCDF	0.52	0.43-0.59	74.2	28-136	
13C-1,2,3,7,8,9-HxCDF	0.52	0.43-0.59	102	29-147	
13C-1,2,3,4,7,8-HxCDD	1.27	1.05-1.43	84.1	32-141	
13C-1,2,3,6,7,8-HxCDD	1.24	1.05-1.43	80.0	28-130	
13C-1,2,3,4,6,7,8-HpCDF	0.45	0.37-0.51	74.8	28-143	
13C-1,2,3,4,7,8,9-HpCDF	0.45	0.37-0.51	79.6	26-138	
13C-1,2,3,4,6,7,8-HpCDD	1.05	0.88-1.20	84.9	23-140	
13C-OCDD	0.91	0.76-1.02	69.3	17-157	
37Cl4-2,3,7,8-TCDD			79.7	35-197	

Reported in Percent Recovery

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Dioxins/Furans by EPA 1613B

Sample ID: SG-13-0-10-013113

Lab Sample ID: WC32B
LIMS ID: 13-2425
Matrix: Sediment
Data Release Authorized: MW
Reported: 02/15/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted: 02/11/13
Date Analyzed: 02/13/13 16:22
Instrument/Analyst: AS1/PK
Acid Cleanup: Yes
Silica-Carbon Cleanup: No

Sample Amount: 10.0 g-dry-wt
Final Extract Volume: 20 uL
Dilution Factor: 1.00
Silica-Florisil Cleanup: Yes

Analyte	Ion Ratio	Ratio Limits	EDL	RL	Result	
2,3,7,8-TCDF	0.76	0.65-0.89		0.200	5.17	
2,3,7,8-TCDD	0.44	0.65-0.89		0.200	0.431	EMPC
1,2,3,7,8-PeCDF	1.43	1.32-1.78		2.00	1.37	J
2,3,4,7,8-PeCDF	1.54	1.32-1.78		0.998	1.47	
1,2,3,7,8-PeCDD	1.74	1.32-1.78		0.998	2.18	
1,2,3,4,7,8-HxCDF	1.17	1.05-1.43		2.00	3.75	X
1,2,3,6,7,8-HxCDF	1.14	1.05-1.43		2.00	1.89	J
2,3,4,6,7,8-HxCDF	0.97	1.05-1.43		2.00	1.98	JXEMPC
1,2,3,7,8,9-HxCDF	1.04	1.05-1.43		2.00	1.90	JEMPC
1,2,3,4,7,8-HxCDD	1.28	1.05-1.43		2.00	4.69	
1,2,3,6,7,8-HxCDD	1.22	1.05-1.43		2.00	18.6	
1,2,3,7,8,9-HxCDD	1.22	1.05-1.43		2.00	7.74	
1,2,3,4,6,7,8-HpCDF	1.01	0.88-1.20		2.00	43.3	
1,2,3,4,7,8,9-HpCDF	0.98	0.88-1.20		2.00	2.64	
1,2,3,4,6,7,8-HpCDD	1.06	0.88-1.20		2.00	304	
OCDF	0.86	0.76-1.02		4.99	96.1	
OCDD	0.89	0.76-1.02		4.99	2,230	

Homologue Group	EDL	RL	Result	
Total TCDF		0.998	27.6	EMPC
Total TCDD		0.998	181	EMPC
Total PeCDF		2.00	31.7	EMPC
Total PeCDD		0.998	184	
Total HxCDF		2.00	86.0	EMPC
Total HxCDD		2.00	309	
Total HpCDF		2.00	148	EMPC
Total HpCDD		2.00	710	

Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=0, Including EMPC): 11.9

Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=1/2 EDL, Including EMPC): 11.9

Reported in pg/g

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Dioxins/Furans by EPA 1613B
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Sample ID: SG-13-0-10-013113

Lab Sample ID: WC32B
LIMS ID: 13-2425
Matrix: Sediment
Data Release Authorized: MW
Reported: 02/15/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted: 02/11/13
Date Analyzed: 02/13/13 16:22
Instrument/Analyst: AS1/PK

Sample Amount: 10.0 g-dry-wt
Final Extract Volume: 20 uL
Dilution Factor: 1.00

Analyte	Ion Ratio	Ratio Limits	Result	Limits	Exceedance
13C-2,3,7,8-TCDF	0.77	0.65-0.89	78.5	24-169	
13C-2,3,7,8-TCDD	0.78	0.65-0.89	75.5	25-164	
13C-1,2,3,7,8-PeCDF	1.57	1.32-1.78	72.9	24-185	
13C-2,3,4,7,8-PeCDF	1.57	1.32-1.78	73.1	21-178	
13C-1,2,3,7,8-PeCDD	1.57	1.32-1.78	72.3	25-181	
13C-1,2,3,4,7,8-HxCDF	0.52	0.43-0.59	79.3	26-152	
13C-1,2,3,6,7,8-HxCDF	0.52	0.43-0.59	76.9	26-123	
13C-2,3,4,6,7,8-HxCDF	0.52	0.43-0.59	75.3	28-136	
13C-1,2,3,7,8,9-HxCDF	0.52	0.43-0.59	106	29-147	
13C-1,2,3,4,7,8-HxCDD	1.31	1.05-1.43	86.8	32-141	
13C-1,2,3,6,7,8-HxCDD	1.21	1.05-1.43	80.1	28-130	
13C-1,2,3,4,6,7,8-HpCDF	0.45	0.37-0.51	73.7	28-143	
13C-1,2,3,4,7,8,9-HpCDF	0.45	0.37-0.51	83.1	26-138	
13C-1,2,3,4,6,7,8-HpCDD	1.05	0.88-1.20	85.9	23-140	
13C-OCDD	0.90	0.76-1.02	71.6	17-157	
37Cl4-2,3,7,8-TCDD			77.2	35-197	

Reported in Percent Recovery

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Dioxins/Furans by EPA 1613B
Page 1 of 1

Sample ID: SG-07-0-10-013113

Lab Sample ID: WC32C
LIMS ID: 13-2426
Matrix: Sediment
Data Release Authorized: MW
Reported: 02/15/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted: 02/11/13
Date Analyzed: 02/13/13 17:15
Instrument/Analyst: AS1/PK
Acid Cleanup: Yes
Silica-Carbon Cleanup: No

Sample Amount: 10.0 g-dry-wt
Final Extract Volume: 20 uL
Dilution Factor: 1.00
Silica-Florisil Cleanup: Yes

Analyte	Ion Ratio	Ratio Limits	EDL	RL	Result	
2,3,7,8-TCDF	0.76	0.65-0.89		0.199	1.89	
2,3,7,8-TCDD	0.53	0.65-0.89		0.199	0.353	EMPC
1,2,3,7,8-PeCDF	1.54	1.32-1.78		1.99	0.893	JX
2,3,4,7,8-PeCDF	1.67	1.32-1.78		0.996	0.995	J
1,2,3,7,8-PeCDD	1.47	1.32-1.78		0.996	0.739	J
1,2,3,4,7,8-HxCDF	1.15	1.05-1.43		1.99	1.93	J
1,2,3,6,7,8-HxCDF	1.21	1.05-1.43		1.99	1.12	J
2,3,4,6,7,8-HxCDF	1.40	1.05-1.43		1.99	0.690	J
1,2,3,7,8,9-HxCDF	1.13	1.05-1.43		1.99	0.902	J
1,2,3,4,7,8-HxCDD	1.37	1.05-1.43		1.99	1.40	J
1,2,3,6,7,8-HxCDD	1.22	1.05-1.43		1.99	8.60	
1,2,3,7,8,9-HxCDD	1.14	1.05-1.43		1.99	2.17	
1,2,3,4,6,7,8-HpCDF	1.03	0.88-1.20		1.99	24.1	
1,2,3,4,7,8,9-HpCDF	1.06	0.88-1.20		1.99	1.67	J
1,2,3,4,6,7,8-HpCDD	1.03	0.88-1.20		1.99	160	
OCDF	0.87	0.76-1.02		4.98	65.4	
OCDD	0.88	0.76-1.02		4.98	1,090	

Homologue Group	EDL	RL	Result	
Total TCDF		0.996	19.4	EMPC
Total TCDD		0.996	20.7	EMPC
Total PeCDF		1.99	19.6	EMPC
Total PeCDD		0.996	23.0	EMPC
Total HxCDF		1.99	47.4	EMPC
Total HxCDD		1.99	54.4	
Total HpCDF		1.99	89.3	
Total HpCDD		1.99	284	

Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=0, Including EMPC): 5.49

Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=1/2 EDL, Including EMPC): 5.49

Reported in pg/g

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Dioxins/Furans by EPA 1613B
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Sample ID: SG-07-0-10-013113

Lab Sample ID: WC32C
LIMS ID: 13-2426
Matrix: Sediment
Data Release Authorized: MW
Reported: 02/15/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted: 02/11/13
Date Analyzed: 02/13/13 17:15
Instrument/Analyst: AS1/PK

Sample Amount: 10.0 g-dry-wt
Final Extract Volume: 20 uL
Dilution Factor: 1.00

Analyte	Ion Ratio	Ratio Limits	Result	Limits	Exceedance
13C-2,3,7,8-TCDF	0.78	0.65-0.89	84.0	24-169	
13C-2,3,7,8-TCDD	0.78	0.65-0.89	78.0	25-164	
13C-1,2,3,7,8-PeCDF	1.58	1.32-1.78	76.7	24-185	
13C-2,3,4,7,8-PeCDF	1.56	1.32-1.78	72.4	21-178	
13C-1,2,3,7,8-PeCDD	1.57	1.32-1.78	71.4	25-181	
13C-1,2,3,4,7,8-HxCDF	0.52	0.43-0.59	83.5	26-152	
13C-1,2,3,6,7,8-HxCDF	0.52	0.43-0.59	81.0	26-123	
13C-2,3,4,6,7,8-HxCDF	0.53	0.43-0.59	70.3	28-136	
13C-1,2,3,7,8,9-HxCDF	0.52	0.43-0.59	75.4	29-147	
13C-1,2,3,4,7,8-HxCDD	1.27	1.05-1.43	84.2	32-141	
13C-1,2,3,6,7,8-HxCDD	1.26	1.05-1.43	83.1	28-130	
13C-1,2,3,4,6,7,8-HpCDF	0.45	0.37-0.51	73.4	28-143	
13C-1,2,3,4,7,8,9-HpCDF	0.45	0.37-0.51	78.2	26-138	
13C-1,2,3,4,6,7,8-HpCDD	1.03	0.88-1.20	96.6	23-140	
13C-OCDD	0.90	0.76-1.02	64.9	17-157	
37Cl4-2,3,7,8-TCDD			80.0	35-197	

Reported in Percent Recovery

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Dioxins/Furans by EPA 1613B

Sample ID: SG-06-0-10-013113

Lab Sample ID: WC32D
LIMS ID: 13-2427
Matrix: Sediment
Data Release Authorized: Mw
Reported: 02/15/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted: 02/11/13
Date Analyzed: 02/13/13 18:07
Instrument/Analyst: AS1/PK
Acid Cleanup: Yes
Silica-Carbon Cleanup: No

Sample Amount: 10.2 g-dry-wt
Final Extract Volume: 20 uL
Dilution Factor: 1.00
Silica-Florisil Cleanup: Yes

Analyte	Ion Ratio	Ratio Limits	EDL	RL	Result	
2,3,7,8-TCDF	0.72	0.65-0.89		0.197	2.40	
2,3,7,8-TCDD	0.48	0.65-0.89		0.197	0.467	EMPC
1,2,3,7,8-PeCDF	1.51	1.32-1.78		1.97	3.91	
2,3,4,7,8-PeCDF	1.56	1.32-1.78		0.985	4.59	
1,2,3,7,8-PeCDD	1.56	1.32-1.78		0.985	3.47	
1,2,3,4,7,8-HxCDF	1.19	1.05-1.43		1.97	16.0	
1,2,3,6,7,8-HxCDF	1.17	1.05-1.43		1.97	6.78	
2,3,4,6,7,8-HxCDF	1.20	1.05-1.43		1.97	7.05	
1,2,3,7,8,9-HxCDF	1.18	1.05-1.43		1.97	8.45	
1,2,3,4,7,8-HxCDD	1.21	1.05-1.43		1.97	9.37	
1,2,3,6,7,8-HxCDD	1.22	1.05-1.43		1.97	68.1	
1,2,3,7,8,9-HxCDD	1.25	1.05-1.43		1.97	13.4	
1,2,3,4,6,7,8-HpCDF	1.01	0.88-1.20		1.97	155	
1,2,3,4,7,8,9-HpCDF	0.98	0.88-1.20		1.97	10.1	
1,2,3,4,6,7,8-HpCDD	1.04	0.88-1.20		1.97	1,250	
OCDF	0.86	0.76-1.02		4.93	244	
OCDD	0.89	0.76-1.02		4.93	10,000	E

Homologue Group	EDL	RL	Result	
Total TCDF		0.985	20.5	EMPC
Total TCDD		0.985	19.3	EMPC
Total PeCDF		1.97	97.9	EMPC
Total PeCDD		0.985	38.7	
Total HxCDF		1.97	416	EMPC
Total HxCDD		1.97	304	EMPC
Total HpCDF		1.97	548	EMPC
Total HpCDD		1.97	2,930	

Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=0, Including EMPC): 35.8

Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=1/2 EDL, Including EMPC): 35.8

Reported in pg/g

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Dioxins/Furans by EPA 1613B

Sample ID: SG-06-0-10-013113

Lab Sample ID: WC32D
LIMS ID: 13-2427
Matrix: Sediment
Data Release Authorized: MW
Reported: 02/15/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted: 02/11/13
Date Analyzed: 02/13/13 18:07
Instrument/Analyst: AS1/PK

Sample Amount: 10.2 g-dry-wt
Final Extract Volume: 20 uL
Dilution Factor: 1.00

Analyte	Ion Ratio	Ratio Limits	Result	Limits	Exceedance
13C-2,3,7,8-TCDF	0.77	0.65-0.89	70.2	24-169	
13C-2,3,7,8-TCDD	0.78	0.65-0.89	73.4	25-164	
13C-1,2,3,7,8-PeCDF	1.57	1.32-1.78	69.5	24-185	
13C-2,3,4,7,8-PeCDF	1.58	1.32-1.78	70.6	21-178	
13C-1,2,3,7,8-PeCDD	1.57	1.32-1.78	70.5	25-181	
13C-1,2,3,4,7,8-HxCDF	0.52	0.43-0.59	79.0	26-152	
13C-1,2,3,6,7,8-HxCDF	0.52	0.43-0.59	69.8	26-123	
13C-2,3,4,6,7,8-HxCDF	0.53	0.43-0.59	64.0	28-136	
13C-1,2,3,7,8,9-HxCDF	0.52	0.43-0.59	58.7	29-147	
13C-1,2,3,4,7,8-HxCDD	1.26	1.05-1.43	76.6	32-141	
13C-1,2,3,6,7,8-HxCDD	1.25	1.05-1.43	73.6	28-130	
13C-1,2,3,4,6,7,8-HpCDF	0.45	0.37-0.51	66.7	28-143	
13C-1,2,3,4,7,8,9-HpCDF	0.45	0.37-0.51	73.8	26-138	
13C-1,2,3,4,6,7,8-HpCDD	1.05	0.88-1.20	83.8	23-140	
13C-OCDD	0.89	0.76-1.02	65.2	17-157	
37Cl4-2,3,7,8-TCDD			73.4	35-197	

Reported in Percent Recovery

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Dioxins/Furans by EPA 1613B

Sample ID: SG-94-0-10-013113

Lab Sample ID: WC32N
LIMS ID: 13-2437
Matrix: Sediment
Data Release Authorized: MW
Reported: 02/15/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted: 02/11/13
Date Analyzed: 02/13/13 19:00
Instrument/Analyst: AS1/PK
Acid Cleanup: Yes
Silica-Carbon Cleanup: No

Sample Amount: 10.0 g-dry-wt
Final Extract Volume: 20 uL
Dilution Factor: 1.00
Silica-Florisil Cleanup: Yes

Analyte	Ion Ratio	Ratio Limits	EDL	RL	Result	
2,3,7,8-TCDF	0.75	0.65-0.89		0.200	2.41	
2,3,7,8-TCDD	0.50	0.65-0.89		0.200	0.475	EMPC
1,2,3,7,8-PeCDF	1.44	1.32-1.78		2.00	3.69	
2,3,4,7,8-PeCDF	1.56	1.32-1.78		0.998	4.55	
1,2,3,7,8-PeCDD	1.54	1.32-1.78		0.998	3.83	
1,2,3,4,7,8-HxCDF	1.18	1.05-1.43		2.00	14.3	
1,2,3,6,7,8-HxCDF	1.19	1.05-1.43		2.00	6.48	
2,3,4,6,7,8-HxCDF	1.26	1.05-1.43		2.00	6.60	
1,2,3,7,8,9-HxCDF	1.20	1.05-1.43		2.00	7.50	
1,2,3,4,7,8-HxCDD	1.24	1.05-1.43		2.00	9.32	
1,2,3,6,7,8-HxCDD	1.24	1.05-1.43		2.00	62.1	
1,2,3,7,8,9-HxCDD	1.23	1.05-1.43		2.00	16.3	
1,2,3,4,6,7,8-HpCDF	1.02	0.88-1.20		2.00	139	
1,2,3,4,7,8,9-HpCDF	0.99	0.88-1.20		2.00	9.48	
1,2,3,4,6,7,8-HpCDD	1.04	0.88-1.20		2.00	1,170	
OCDF	0.86	0.76-1.02		4.99	291	
OCDD	0.89	0.76-1.02		4.99	9,450	E

Homologue Group	EDL	RL	Result	
Total TCDF		0.998	24.7	EMPC
Total TCDD		0.998	22.9	EMPC
Total PeCDF		2.00	96.4	EMPC
Total PeCDD		0.998	39.9	EMPC
Total HxCDF		2.00	368	EMPC
Total HxCDD		2.00	308	
Total HpCDF		2.00	504	
Total HpCDD		2.00	2,830	

Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=0, Including EMPC): 34.4

Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=1/2 EDL, Including EMPC): 34.4

Reported in pg/g

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Dioxins/Furans by EPA 1613B

Sample ID: SG-94-0-10-013113

Lab Sample ID: WC32N
LIMS ID: 13-2437
Matrix: Sediment
Data Release Authorized:
Reported: 02/15/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted: 02/11/13
Date Analyzed: 02/13/13 19:00
Instrument/Analyst: AS1/PK

Sample Amount: 10.0 g-dry-wt
Final Extract Volume: 20 uL
Dilution Factor: 1.00

Analyte	Ion Ratio	Ratio Limits	Result	Limits	Exceedance
13C-2,3,7,8-TCDF	0.78	0.65-0.89	83.0	24-169	
13C-2,3,7,8-TCDD	0.79	0.65-0.89	74.0	25-164	
13C-1,2,3,7,8-PeCDF	1.57	1.32-1.78	72.6	24-185	
13C-2,3,4,7,8-PeCDF	1.57	1.32-1.78	73.3	21-178	
13C-1,2,3,7,8-PeCDD	1.58	1.32-1.78	71.5	25-181	
13C-1,2,3,4,7,8-HxCDF	0.52	0.43-0.59	77.9	26-152	
13C-1,2,3,6,7,8-HxCDF	0.53	0.43-0.59	70.8	26-123	
13C-2,3,4,6,7,8-HxCDF	0.52	0.43-0.59	65.8	28-136	
13C-1,2,3,7,8,9-HxCDF	0.52	0.43-0.59	67.6	29-147	
13C-1,2,3,4,7,8-HxCDD	1.27	1.05-1.43	77.7	32-141	
13C-1,2,3,6,7,8-HxCDD	1.25	1.05-1.43	75.4	28-130	
13C-1,2,3,4,6,7,8-HpCDF	0.45	0.37-0.51	71.7	28-143	
13C-1,2,3,4,7,8,9-HpCDF	0.45	0.37-0.51	80.5	26-138	
13C-1,2,3,4,6,7,8-HpCDD	1.06	0.88-1.20	82.1	23-140	
13C-OCDD	0.89	0.76-1.02	69.2	17-157	
37Cl4-2,3,7,8-TCDD			74.1	35-197	

Reported in Percent Recovery

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Dioxins/Furans by EPA 1613B

Sample ID: SFS-02-012913

Lab Sample ID: WC33E
LIMS ID: 13-2449
Matrix: Sediment
Data Release Authorized: MW
Reported: 02/15/13

QC Report No: WC33-Floyd-Snider
Project: POB-Harris
T.4030
Date Sampled: 01/29/13
Date Received: 02/01/13

Date Extracted: 02/11/13
Date Analyzed: 02/13/13 19:53
Instrument/Analyst: AS1/PK
Acid Cleanup: Yes
Silica-Carbon Cleanup: No

Sample Amount: 5.01 g-dry-wt
Final Extract Volume: 20 uL
Dilution Factor: 1.00
Silica-Florisil Cleanup: Yes

Analyte	Ion Ratio	Ratio Limits	EDL	RL	Result	
2,3,7,8-TCDF	0.83	0.65-0.89		0.399	1.05	
2,3,7,8-TCDD	0.55	0.65-0.89		0.399	0.770	EMPC
1,2,3,7,8-PeCDF	1.47	1.32-1.78		3.99	1.90	J
2,3,4,7,8-PeCDF	1.42	1.32-1.78		2.00	1.92	J
1,2,3,7,8-PeCDD	1.49	1.32-1.78		2.00	5.70	
1,2,3,4,7,8-HxCDF	1.18	1.05-1.43		3.99	7.97	
1,2,3,6,7,8-HxCDF	1.25	1.05-1.43		3.99	6.48	
2,3,4,6,7,8-HxCDF	1.18	1.05-1.43		3.99	4.89	
1,2,3,7,8,9-HxCDF	1.21	1.05-1.43		3.99	2.37	J
1,2,3,4,7,8-HxCDD	1.17	1.05-1.43		3.99	10.8	
1,2,3,6,7,8-HxCDD	1.27	1.05-1.43		3.99	61.4	
1,2,3,7,8,9-HxCDD	1.25	1.05-1.43		3.99	20.4	
1,2,3,4,6,7,8-HpCDF	1.02	0.88-1.20		3.99	286	
1,2,3,4,7,8,9-HpCDF	1.04	0.88-1.20		3.99	25.0	
1,2,3,4,6,7,8-HpCDD	1.04	0.88-1.20		3.99	2,590	
OCDF	0.87	0.76-1.02		9.98	1,550	
OCDD	0.89	0.76-1.02		9.98	31,900	E

Homologue Group	EDL	RL	Result	
Total TCDF		2.00	17.4	EMPC
Total TCDD		2.00	9.56	EMPC
Total PeCDF		3.99	77.2	EMPC
Total PeCDD		2.00	31.7	
Total HxCDF		3.99	329	EMPC
Total HxCDD		3.99	265	
Total HpCDF		3.99	1,240	
Total HpCDD		3.99	3,980	

Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=0, Including EMPC): 57.7

Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=1/2 EDL, Including EMPC): 57.7

Reported in pg/g

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Dioxins/Furans by EPA 1613B

Sample ID: SFS-02-012913

Lab Sample ID: WC33E
LIMS ID: 13-2449
Matrix: Sediment
Data Release Authorized: MW
Reported: 02/15/13

QC Report No: WC33-Floyd-Snider
Project: POB-Harris
T.4030
Date Sampled: 01/29/13
Date Received: 02/01/13

Date Extracted: 02/11/13
Date Analyzed: 02/13/13 19:53
Instrument/Analyst: AS1/PK

Sample Amount: 5.01 g-dry-wt
Final Extract Volume: 20 uL
Dilution Factor: 1.00

Analyte	Ion Ratio	Ratio Limits	Result	Limits	Exceedance
13C-2,3,7,8-TCDF	0.78	0.65-0.89	77.0	24-169	
13C-2,3,7,8-TCDD	0.79	0.65-0.89	75.3	25-164	
13C-1,2,3,7,8-PeCDF	1.57	1.32-1.78	76.0	24-185	
13C-2,3,4,7,8-PeCDF	1.57	1.32-1.78	73.2	21-178	
13C-1,2,3,7,8-PeCDD	1.58	1.32-1.78	73.9	25-181	
13C-1,2,3,4,7,8-HxCDF	0.52	0.43-0.59	79.6	26-152	
13C-1,2,3,6,7,8-HxCDF	0.52	0.43-0.59	73.9	26-123	
13C-2,3,4,6,7,8-HxCDF	0.53	0.43-0.59	69.0	28-136	
13C-1,2,3,7,8,9-HxCDF	0.52	0.43-0.59	65.6	29-147	
13C-1,2,3,4,7,8-HxCDD	1.22	1.05-1.43	85.7	32-141	
13C-1,2,3,6,7,8-HxCDD	1.25	1.05-1.43	81.6	28-130	
13C-1,2,3,4,6,7,8-HpCDF	0.45	0.37-0.51	70.1	28-143	
13C-1,2,3,4,7,8,9-HpCDF	0.44	0.37-0.51	75.2	26-138	
13C-1,2,3,4,6,7,8-HpCDD	1.04	0.88-1.20	88.7	23-140	
13C-OCDD	0.91	0.76-1.02	72.8	17-157	
37Cl4-2,3,7,8-TCDD			76.2	35-197	

Reported in Percent Recovery

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Dioxins/Furans by EPA 1613B

Sample ID: FS-21-0-0.5-013013

Lab Sample ID: WC33F
LIMS ID: 13-2450
Matrix: Sediment
Data Release Authorized: MW
Reported: 02/15/13

QC Report No: WC33-Floyd-Snider
Project: POB-Harris
T.4030
Date Sampled: 01/30/13
Date Received: 02/01/13

Date Extracted: 02/11/13
Date Analyzed: 02/13/13 20:45
Instrument/Analyst: AS1/PK
Acid Cleanup: Yes
Silica-Carbon Cleanup: No

Sample Amount: 5.34 g-dry-wt
Final Extract Volume: 20 uL
Dilution Factor: 1.00
Silica-Florisil Cleanup: Yes

Analyte	Ion Ratio	Ratio Limits	EDL	RL	Result	
2,3,7,8-TCDF	0.75	0.65-0.89		0.375	2.06	
2,3,7,8-TCDD	0.58	0.65-0.89		0.375	0.678	EMPC
1,2,3,7,8-PeCDF	1.45	1.32-1.78		3.75	1.52	JX
2,3,4,7,8-PeCDF	1.72	1.32-1.78		1.87	2.15	
1,2,3,7,8-PeCDD	1.55	1.32-1.78		1.87	5.32	
1,2,3,4,7,8-HxCDF	1.25	1.05-1.43		3.75	6.08	
1,2,3,6,7,8-HxCDF	1.30	1.05-1.43		3.75	5.21	
2,3,4,6,7,8-HxCDF	1.18	1.05-1.43		3.75	5.43	
1,2,3,7,8,9-HxCDF	0.99	1.05-1.43		3.75	1.64	JEMPC
1,2,3,4,7,8-HxCDD	1.14	1.05-1.43		3.75	7.10	
1,2,3,6,7,8-HxCDD	1.27	1.05-1.43		3.75	30.8	
1,2,3,7,8,9-HxCDD	1.19	1.05-1.43		3.75	15.6	
1,2,3,4,6,7,8-HpCDF	1.00	0.88-1.20		3.75	195	
1,2,3,4,7,8,9-HpCDF	1.05	0.88-1.20		3.75	11.4	
1,2,3,4,6,7,8-HpCDD	1.04	0.88-1.20		3.75	959	
OCDF	0.86	0.76-1.02		9.36	603	
OCDD	0.89	0.76-1.02		9.36	9,600	E

Homologue Group	EDL	RL	Result	
Total TCDF		1.87	26.6	EMPC
Total TCDD		1.87	16.4	EMPC
Total PeCDF		3.75	70.9	EMPC
Total PeCDD		1.87	33.9	EMPC
Total HxCDF		3.75	212	EMPC
Total HxCDD		3.75	164	
Total HpCDF		3.75	658	
Total HpCDD		3.75	1,560	

Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=0, Including EMPC): 28.8

Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=1/2 EDL, Including EMPC): 28.8

Reported in pg/g

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Dioxins/Furans by EPA 1613B

Sample ID: FS-21-0-0.5-013013

Lab Sample ID: WC33F
LIMS ID: 13-2450
Matrix: Sediment
Data Release Authorized: MW
Reported: 02/15/13

QC Report No: WC33-Floyd-Snider
Project: POB-Harris
T.4030
Date Sampled: 01/30/13
Date Received: 02/01/13

Date Extracted: 02/11/13
Date Analyzed: 02/13/13 20:45
Instrument/Analyst: AS1/PK

Sample Amount: 5.34 g-dry-wt
Final Extract Volume: 20 uL
Dilution Factor: 1.00

Analyte	Ion Ratio	Ratio Limits	Result	Limits	Exceedance
13C-2,3,7,8-TCDF	0.78	0.65-0.89	89.1	24-169	
13C-2,3,7,8-TCDD	0.78	0.65-0.89	75.3	25-164	
13C-1,2,3,7,8-PeCDF	1.56	1.32-1.78	77.6	24-185	
13C-2,3,4,7,8-PeCDF	1.57	1.32-1.78	71.4	21-178	
13C-1,2,3,7,8-PeCDD	1.57	1.32-1.78	72.5	25-181	
13C-1,2,3,4,7,8-HxCDF	0.52	0.43-0.59	69.3	26-152	
13C-1,2,3,6,7,8-HxCDF	0.52	0.43-0.59	70.4	26-123	
13C-2,3,4,6,7,8-HxCDF	0.52	0.43-0.59	67.4	28-136	
13C-1,2,3,7,8,9-HxCDF	0.52	0.43-0.59	76.3	29-147	
13C-1,2,3,4,7,8-HxCDD	1.26	1.05-1.43	80.2	32-141	
13C-1,2,3,6,7,8-HxCDD	1.26	1.05-1.43	73.2	28-130	
13C-1,2,3,4,6,7,8-HpCDF	0.45	0.37-0.51	65.5	28-143	
13C-1,2,3,4,7,8,9-HpCDF	0.45	0.37-0.51	71.3	26-138	
13C-1,2,3,4,6,7,8-HpCDD	1.05	0.88-1.20	81.4	23-140	
13C-OCDD	0.90	0.76-1.02	69.0	17-157	
37Cl4-2,3,7,8-TCDD			77.1	35-197	

Reported in Percent Recovery

ORGANICS ANALYSIS DATA SHEET
Dioxins/Furans by EPA 1613B

Sample ID: OPR-021113

ANALYTICAL RESOURCES INCORPORATED

Lab Sample ID: OPR-021113
LIMS ID: 13-2424
Matrix: Sediment
Data Release Authorized: MW
Reported: 02/15/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: NA
Date Received: NA

Date Extracted: 02/11/13
Date Analyzed: 02/13/13 14:38
Instrument/Analyst: AS1/PK
Acid Cleanup: Yes
Silica-Carbon Cleanup: No

Sample Amount: 10.0 g-dry-wt
Final Extract Volume: 20 uL
Dilution Factor: 1.00
Silica-Florisil Cleanup: Yes

Analyte	Ion Ratio	Ratio Limits	RL	Result
2,3,7,8-TCDF	0.75	0.65-0.89	0.200	22.8
2,3,7,8-TCDD	0.78	0.65-0.89	0.200	20.4
1,2,3,7,8-PeCDF	1.52	1.32-1.78	2.00	109
2,3,4,7,8-PeCDF	1.49	1.32-1.78	1.00	109
1,2,3,7,8-PeCDD	1.53	1.32-1.78	1.00	108
1,2,3,4,7,8-HxCDF	1.21	1.05-1.43	2.00	108
1,2,3,6,7,8-HxCDF	1.21	1.05-1.43	2.00	110
2,3,4,6,7,8-HxCDF	1.21	1.05-1.43	2.00	116
1,2,3,7,8,9-HxCDF	1.20	1.05-1.43	2.00	108
1,2,3,4,7,8-HxCDD	1.25	1.05-1.43	2.00	111
1,2,3,6,7,8-HxCDD	1.25	1.05-1.43	2.00	106
1,2,3,7,8,9-HxCDD	1.23	1.05-1.43	2.00	108
1,2,3,4,6,7,8-HpCDF	1.02	0.88-1.20	2.00	143
1,2,3,4,7,8,9-HpCDF	1.01	0.88-1.20	2.00	113
1,2,3,4,6,7,8-HpCDD	1.05	0.88-1.20	2.00	106
OCDF	0.88	0.76-1.02	5.00	184
OCDD	0.91	0.76-1.02	5.00	212

Homologue Group	EDL	RL	Result	
Total TCDF		1.00	28.8	EMPC
Total TCDD		1.00	21.2	EMPC
Total PeCDF		2.00	234	EMPC
Total PeCDD		1.00	109	EMPC
Total HxCDF		2.00	448	
Total HxCDD		2.00	325	EMPC
Total HpCDF		2.00	258	
Total HpCDD		2.00	109	EMPC

Reported in pg/g

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Dioxins/Furans by EPA 1613B
Page 1 of 1

Sample ID: OPR-021113

Lab Sample ID: OPR-021113
LIMS ID: 13-2424
Matrix: Sediment
Data Release Authorized: MW
Reported: 02/15/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: NA
Date Received: NA

Date Extracted: 02/11/13
Date Analyzed: 02/13/13 14:38
Instrument/Analyst: AS1/PK

Sample Amount: 10.0 g-dry-wt
Final Extract Volume: 20 uL
Dilution Factor: 1.00

Analyte	Ion Ratio	Ratio Limits	Result	Limits	Exceedance
13C-2,3,7,8-TCDF	0.77	0.65-0.89	90.0	22-152	
13C-2,3,7,8-TCDD	0.78	0.65-0.89	90.7	20-175	
13C-1,2,3,7,8-PeCDF	1.56	1.32-1.78	85.7	21-192	
13C-2,3,4,7,8-PeCDF	1.58	1.32-1.78	73.2	13-328	
13C-1,2,3,7,8-PeCDD	1.57	1.32-1.78	82.0	21-227	
13C-1,2,3,4,7,8-HxCDF	0.52	0.43-0.59	80.7	19-202	
13C-1,2,3,6,7,8-HxCDF	0.52	0.43-0.59	87.0	21-159	
13C-2,3,4,6,7,8-HxCDF	0.53	0.43-0.59	77.2	22-176	
13C-1,2,3,7,8,9-HxCDF	0.53	0.43-0.59	75.9	17-205	
13C-1,2,3,4,7,8-HxCDD	1.26	1.05-1.43	92.1	21-193	
13C-1,2,3,6,7,8-HxCDD	1.25	1.05-1.43	93.6	25-163	
13C-1,2,3,4,6,7,8-HpCDF	0.45	0.37-0.51	74.4	21-158	
13C-1,2,3,4,7,8,9-HpCDF	0.45	0.37-0.51	77.0	20-186	
13C-1,2,3,4,6,7,8-HpCDD	1.06	0.88-1.20	93.6	26-166	
13C-OCDD	0.90	0.76-1.02	79.4	13-198	
37Cl4-2,3,7,8-TCDD			93.2	31-191	

Reported in Percent Recovery

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Dioxins/Furans by EPA 1613B

Sample ID: OPR-021113

Lab Sample ID: OPR-021113
LIMS ID: 13-2424
Matrix: Sediment
Data Release Authorized: MW
Reported: 02/15/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: NA
Date Received: NA

Date Extracted: 02/11/13
Date Analyzed: 02/13/13 14:38
Instrument/Analyst: AS1/PK

Sample Amount: 10.0 g-dry-wt
Final Extract Volume: 20 uL
Dilution Factor: 1.00

Analyte	OPR	Spiked	Recovery	Limits
2,3,7,8-TCDF	22.8	20.0	114	75-158
2,3,7,8-TCDD	20.4	20.0	102	67-158
1,2,3,7,8-PeCDF	109	100	109	80-134
2,3,4,7,8-PeCDF	109	100	109	68-160
1,2,3,7,8-PeCDD	108	100	108	70-142
1,2,3,4,7,8-HxCDF	108	100	108	72-134
1,2,3,6,7,8-HxCDF	110	100	110	84-130
2,3,4,6,7,8-HxCDF	116	100	116	70-156
1,2,3,7,8,9-HxCDF	108	100	108	78-130
1,2,3,4,7,8-HxCDD	111	100	111	70-164
1,2,3,6,7,8-HxCDD	106	100	106	76-134
1,2,3,7,8,9-HxCDD	108	100	108	64-162
1,2,3,4,6,7,8-HpCDF	143	100	143	82-132
1,2,3,4,7,8,9-HpCDF	113	100	113	78-138
1,2,3,4,6,7,8-HpCDD	106	100	106	70-140
OCDF	184	200	92.0	63-170
OCDD	212	200	106	78-144

Reported in pg/g

4DF - FORM IV-HR CDD
CDD/CDF METHOD BLANK SUMMARY
HIGH RESOLUTION

Blank No.

WC32MB

Lab Name: ANALYTICAL RESOURCES, INC.
Contract: FLOYD-SNIDER
Lab Code: WC32
Project: POB-HARRIS
Matrix:(Soil/Water/Ash/Tissue/Oil) SOIL
Lab Sample ID: WC32MBS
Sample wt/vol: 10 (g/ml) g
Lab File ID: 13021305
Water Sample Prep: (sep/spe)
Date Received: 01-FEB-13
GC Column: RTX-DIOXIN2 ID: 0.25 mm
Date Extracted: 11-FEB-13
Instrument ID: AUTOSPEC1
Date Analyzed: 13-FEB-13

Client Sample No.	Lab Sample ID	Lab File ID	Date Analyzed
WC32OPR	WC32OPR	13021306	02/13/13
SG-12-0-10-013113	WC32A	13021307	02/13/13
SG-13-0-10-013113	WC32B	13021308	02/13/13
SG-07-0-10-013113	WC32C	13021309	02/13/13
SG-06-0-10-013113	WC32D	13021310	02/13/13
SG-94-0-10-013113	WC32N	13021311	02/13/13
SFS-02-012913	WC33E	13021312	02/13/13
FS-21-0-0.5-013013	WC33F	13021313	02/13/13

ORGANICS ANALYSIS DATA SHEET
Dioxins/Furans by EPA 1613B
Page 1 of 1

Sample ID: MB-021113

ANALYTICAL RESOURCES INCORPORATED

Lab Sample ID: MB-021113
LIMS ID: 13-2424
Matrix: Sediment
Data Release Authorized: MW
Reported: 02/15/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: NA
Date Received: NA

Date Extracted: 02/11/13
Date Analyzed: 02/13/13 13:45
Instrument/Analyst: AS1/PK
Acid Cleanup: Yes
Silica-Carbon Cleanup: No

Sample Amount: 10.0 g-dry-wt
Final Extract Volume: 20 uL
Dilution Factor: 1.00
Silica-Florisil Cleanup: Yes

Analyte	Ion Ratio	Ratio Limits	EDL	RL	Result	
2,3,7,8-TCDF		0.65-0.89	0.0260	0.200	< 0.0260	U
2,3,7,8-TCDD		0.65-0.89	0.0340	0.200	< 0.0340	U
1,2,3,7,8-PeCDF		1.32-1.78	0.0300	2.00	< 0.0300	U
2,3,4,7,8-PeCDF		1.32-1.78	0.0320	1.00	< 0.0320	U
1,2,3,7,8-PeCDD		1.32-1.78	0.0400	1.00	< 0.0400	U
1,2,3,4,7,8-HxCDF		1.05-1.43	0.0280	2.00	< 0.0280	U
1,2,3,6,7,8-HxCDF		1.05-1.43	0.0260	2.00	< 0.0260	U
2,3,4,6,7,8-HxCDF		1.05-1.43	0.0300	2.00	< 0.0300	U
1,2,3,7,8,9-HxCDF		1.05-1.43	0.0400	2.00	< 0.0400	U
1,2,3,4,7,8-HxCDD		1.05-1.43	0.0400	2.00	< 0.0400	U
1,2,3,6,7,8-HxCDD		1.05-1.43	0.0400	2.00	< 0.0400	U
1,2,3,7,8,9-HxCDD		1.05-1.43	0.0420	2.00	< 0.0420	U
1,2,3,4,6,7,8-HpCDF	0.98	0.88-1.20		2.00	0.0430	J
1,2,3,4,7,8,9-HpCDF		0.88-1.20	0.0500	2.00	< 0.0500	U
1,2,3,4,6,7,8-HpCDD	0.96	0.88-1.20		2.00	0.245	J
OCDF		0.76-1.02	0.102	5.00	< 0.102	U
OCDD	0.90	0.76-1.02	0.100	5.00	1.82	J

Homologue Group	EDL	RL	Result	
Total TCDF	0.0260	1.00	< 0.0260	U
Total TCDD	0.0340	1.00	0.0822	EMPC
Total PeCDF	0.0320	2.00	< 0.0320	U
Total PeCDD	0.0400	1.00	< 0.0400	U
Total HxCDF	0.0400	2.00	< 0.0400	U
Total HxCDD	0.0420	2.00	0.152	EMPC
Total HpCDF		2.00	0.102	
Total HpCDD		2.00	0.765	

Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=0, Including EMPC): 0.00

Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=1/2 EDL, Including EMPC): 0.06

Reported in pg/g

ORGANICS ANALYSIS DATA SHEET
Dioxins/Furans by EPA 1613B
Page 1 of 1

Sample ID: MB-021113

ANALYTICAL RESOURCES INCORPORATED

Lab Sample ID: MB-021113
LIMS ID: 13-2424
Matrix: Sediment
Data Release Authorized: MW
Reported: 02/15/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: NA
Date Received: NA

Date Extracted: 02/11/13
Date Analyzed: 02/13/13 13:45
Instrument/Analyst: AS1/PK

Sample Amount: 10.0 g-dry-wt
Final Extract Volume: 20 uL
Dilution Factor: 1.00

Analyte	Ion Ratio	Ratio Limits	Result	Limits	Exceedance
13C-2,3,7,8-TCDF	0.78	0.65-0.89	95.2	24-169	
13C-2,3,7,8-TCDD	0.77	0.65-0.89	94.4	25-164	
13C-1,2,3,7,8-PeCDF	1.58	1.32-1.78	87.4	24-185	
13C-2,3,4,7,8-PeCDF	1.57	1.32-1.78	78.4	21-178	
13C-1,2,3,7,8-PeCDD	1.58	1.32-1.78	85.6	25-181	
13C-1,2,3,4,7,8-HxCDF	0.52	0.43-0.59	87.9	26-152	
13C-1,2,3,6,7,8-HxCDF	0.53	0.43-0.59	93.3	26-123	
13C-2,3,4,6,7,8-HxCDF	0.51	0.43-0.59	82.9	28-136	
13C-1,2,3,7,8,9-HxCDF	0.52	0.43-0.59	79.2	29-147	
13C-1,2,3,4,7,8-HxCDD	1.26	1.05-1.43	97.8	32-141	
13C-1,2,3,6,7,8-HxCDD	1.25	1.05-1.43	98.2	28-130	
13C-1,2,3,4,6,7,8-HpCDF	0.45	0.37-0.51	76.2	28-143	
13C-1,2,3,4,7,8,9-HpCDF	0.45	0.37-0.51	78.8	26-138	
13C-1,2,3,4,6,7,8-HpCDD	1.04	0.88-1.20	94.6	23-140	
13C-OCDD	0.90	0.76-1.02	76.2	17-157	
37Cl4-2,3,7,8-TCDD			96.2	35-197	

Reported in Percent Recovery

5DFA - FORM V-HR CDD-1
CDD/CDF WINDOW DEFINING MIX (WDM) SUMMARY
HIGH RESOLUTION

Standard No.

CS3

Lab Name: ANALYTICAL RESOURCES, INC. Contract: FLOYD-SNIDER

Lab Code: WC32 Project: POB-HARRIS

GC Column: RTX-DIOXIN2 ID: 0.25 mm Lab File ID: 13021302

Instrument ID: AUTOSPEC1 Date Analyzed: 13-FEB-13

Time Analyzed: 11:03

CDD/CDF	RT First Eluting	RT Last Eluting
TCDD	23.46	26.89
TCDF	22.18	27.14
PeCDD	28.67	31.78
PeCDF	27.00	32.15
HxCDD	33.88	36.58
HxCDF	33.07	37.03
HpCDD	39.63	40.86
HpCDF	39.09	41.72

5DFB - FORM V-HR CDD-2
CDD/CDF CHROMATOGRAPHIC RESOLUTION SUMMARY
HIGH RESOLUTION

Standard No.

TETRA ISC

Lab Name: ANALYTICAL RESOURCES, INC.
Lab Code: WC32
GC Column: RTX-DIOXIN2 ID: .25 mm
Instrument: AUTOSPEC1

Contract: FLOYD-SNIDER
Project: POB-HARRIS
Lab File ID: 13021303
Date Analyzed: 13-FEB-13
Time Analyzed: 11:54

Percent Valley determination for RTX-DIOXIN2 column -
For the column performance solution beginning 12-hour period:

1278-TCDD/2378-TCDD: 14.6

Quality Control (QC) Limits:
Percent Valley between the TCDD isomers must be less than or equal to 25%

Percent Valley determination for RTX-DIOXIN2 column -
For the column performance solution beginning 12-hour period:

3467-TCDF/2378-TCDF: 16.2

QC Limits:
Percent Valley between the TCDD/TCDF isomers must be less than or equal to 25%

5DFB - FORM V-HR CDD-3
CDD/CDF ANALYTICAL SEQUENCE SUMMARY
HIGH RESOLUTION

Lab Name: ANALYTICAL RESOURCES, INC. Contract: FLOYD-SNIDER

Lab Code: WC32 Project: POB-HARRIS

GC Column: RTX-DIOXIN2 ID: 0.25 mm Instrument ID: AUTOSPEC1

Init. Calib. Date(s): 11-FEB-13

Init: Calib. Times: 14:45 to 19:08

The Analytical Sequence of standards, samples, blanks, and Laboratory Control Samples (LCS) is as follows:

Client Sample No.	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
CS3	CS3	13021302	02/13/13	1103
ISC01	ISC01	13021303	02/13/13	1154
WC32MB	WC32MBS	13021305	02/13/13	1345
WC32OPR	WC32OPR	13021306	02/13/13	1438
SG-12-0-10-013113	WC32A	13021307	02/13/13	1529
SG-13-0-10-013113	WC32B	13021308	02/13/13	1622
SG-07-0-10-013113	WC32C	13021309	02/13/13	1715
SG-06-0-10-013113	WC32D	13021310	02/13/13	1807
SG-94-0-10-013113	WC32N	13021311	02/13/13	1900
SFS-02-012913	WC33E	13021312	02/13/13	1953
FS-21-0-0.5-013013	WC33F	13021313	02/13/13	2045
CS3	CS3	13021314	02/13/13	2138

6DFA - Form VI-HR CDD-1
CDD/CDF INITIAL CALIBRATION RESPONSE FACTOR SUMMARY
HIGH RESOLUTION

Lab Name:	ARI	Contract:	FLOYD-SNIDER
Lab Code:	WC32	Case No.:	POB-HARRIS
TO No.:		SDG No.:	
GC Column:	RTX-DIOXIN2	ID (mm):	.25
Instrument ID:	AUTOSPEC1		
Init.Calib.Date CSL:	11-Feb-13	Init.Calib.Time CSL:	14:45:17
Init.Calib.Date CS1:	11-Feb-13	Init.Calib.Time CS1:	15:40:00
Init.Calib.Date CS2:	11-Feb-13	Init.Calib.Time CS2:	16:30:49
Init.Calib.Date CS3:	11-Feb-13	Init.Calib.Time CS3:	17:23:26
Init.Calib.Date CS4:	11-Feb-13	Init.Calib.Time CS4:	18:16:11
Init.Calib.Date CS5:	11-Feb-13	Init.Calib.Time CS5:	19:08:49

Target Analytes	RR/RRF						Mean RR/RRF	% RSD	Limits (% +/-)
	CSL	CS1	CS2	CS3	CS4	CS5			
2378-TCDD	1.37	1.07	1.03	1.03	1.06	1.08	1.11	11.7	20.0
2378-TCDF	1.12	0.87	0.85	0.88	0.89	0.91	0.92	10.6	20.0
12378-PeCDF	0.91	0.88	0.91	0.91	0.93	0.94	0.91	2.3	20.0
12378-PeCDD	0.99	0.99	0.98	1.00	1.01	1.02	1.00	1.5	20.0
23478-PeCDF	0.97	0.92	0.91	0.93	0.95	0.97	0.94	3.0	20.0
123478-HxCDF	1.14	1.07	1.08	1.09	1.10	1.13	1.10	2.4	20.0
123678-HxCDF	1.03	1.06	1.03	1.04	1.09	1.08	1.06	2.4	20.0
123478-HxCDD	0.92	1.02	0.95	0.97	0.99	1.02	0.98	4.1	20.0
123678-HxCDD	0.90	0.92	0.93	0.94	0.94	0.94	0.93	1.9	20.0
123789-HxCDD[2]	0.91	0.91	0.88	0.89	0.92	0.92	0.90	1.5	20.0
234678-HxCDF	1.09	1.04	1.05	1.07	1.09	1.10	1.07	2.3	20.0
123789-HxCDF	1.05	1.00	0.98	1.00	1.03	1.04	1.02	2.9	20.0
1234678-HpCDF	1.25	1.23	1.20	1.21	1.26	1.27	1.24	2.2	20.0
1234678-HpCDD	1.08	1.01	1.02	1.01	1.02	1.04	1.03	2.5	20.0
1234789-HpCDF	1.24	1.15	1.20	1.22	1.25	1.28	1.22	3.5	20.0
OCDD	1.09	0.97	0.98	1.00	1.00	1.02	1.01	4.2	20.0
OCDF[1]	1.15	1.12	1.12	1.17	1.19	1.24	1.16	4.0	20.0

(1) The Relative Response (RR) is calculated based on the labeled analogs of the other two HxCDDs.
(2) The RR is calculated based on the labeled analog of OCDD.

Labeled Compounds	RR/RRF						Mean RR/RRF	% RSD	Limits (% +/-)
	CSL	CS1	CS2	CS3	CS4	CS5			
13C-2378-TCDD	0.92	0.89	0.94	0.93	0.94	1.03	0.94	5.0	35.0
13C-12378-PeCDD	0.69	0.67	0.68	0.72	0.70	0.84	0.72	8.9	35.0
13C-123478-HxCDD	1.04	1.01	1.03	1.03	1.04	1.04	1.03	0.9	35.0
13C-123678-HxCDD	1.08	1.08	1.08	1.07	1.07	1.08	1.08	0.4	35.0
13C-1234678-HpCDD	0.84	0.89	0.80	0.83	0.83	0.83	0.84	3.4	35.0
13C-OCDD	0.65	0.70	0.62	0.68	0.69	0.71	0.68	4.7	35.0
13C-2378-TCDF	1.49	1.46	1.53	1.50	1.53	1.62	1.52	3.7	35.0
13C-12378-PeCDF	1.14	1.08	1.13	1.18	1.17	1.41	1.19	9.6	35.0
13C-23478-PeCDF	1.09	1.05	1.08	1.14	1.12	1.34	1.14	9.0	35.0
13C-123478-HxCDF	1.29	1.26	1.31	1.28	1.29	1.27	1.28	1.4	35.0
13C-123678-HxCDF	1.38	1.36	1.40	1.39	1.38	1.38	1.38	1.0	35.0
13C-234678-HxCDF	1.30	1.28	1.29	1.27	1.27	1.28	1.28	0.8	35.0
13C-123789-HxCDF	1.08	1.08	1.10	1.10	1.11	1.11	1.10	1.3	35.0
13C-1234678-HpCDF	1.07	1.10	1.04	1.07	1.07	1.07	1.07	1.8	35.0
13C-1234789-HpCDF	0.76	0.81	0.73	0.79	0.77	0.78	0.77	3.4	35.0

6DFB - Form VI-HR CDD-2
CDD/CDF INITIAL CALIBRATION ION ABUNDANCE RATIO SUMMARY
HIGH RESOLUTION

Lab Name:	ARI	Contract:	FLOYD-SNIDER
Lab Code:	WC32	Case No.:	POB-HARRIS
TO No.:		SDG No.:	
GC Column:	RTX-DIOXIN2	ID (mm):	.25
Instrument ID:	AUTOSPEC1		
Init.Calib.Date CSL:	11-Feb-13	Init.Calib.Time CSL:	14:45:17
Init.Calib.Date CS1:	11-Feb-13	Init.Calib.Time CS1:	15:40:00
Init.Calib.Date CS2:	11-Feb-13	Init.Calib.Time CS2:	16:30:49
Init.Calib.Date CS3:	11-Feb-13	Init.Calib.Time CS3:	17:23:26
Init.Calib.Date CS4:	11-Feb-13	Init.Calib.Time CS4:	18:16:11
Init.Calib.Date CS5:	11-Feb-13	Init.Calib.Time CS5:	19:08:49

Target Analytes	Selected Ions	Ion Abundance Ratio						Ratio Flag	Ratio QC Limits#
		CSL	CS1	CS2	CS3	CS4	CS5		
2378-TCDD	320/322	0.75	0.80	0.79	0.80	0.77	0.78		0.65 - 0.89
2378-TCDF	304/306	0.87	0.81	0.76	0.75	0.77	0.77		0.65 - 0.89
12378-PeCDF	340/342	1.57	1.51	1.50	1.55	1.54	1.52		1.32 - 1.78
12378-PeCDD	356/358	1.62	1.61	1.56	1.55	1.55	1.54		1.32 - 1.78
23478-PeCDF	340/342	1.48	1.44	1.48	1.51	1.52	1.53		1.32 - 1.78
123478-HxCDF	374/376	1.21	1.20	1.19	1.22	1.22	1.22		1.05 - 1.43
123678-HxCDF	374/376	1.27	1.24	1.19	1.23	1.22	1.23		1.05 - 1.43
123478-HxCDD	390/392	1.33	1.25	1.23	1.22	1.24	1.25		1.05 - 1.43
123678-HxCDD	390/392	1.23	1.23	1.27	1.21	1.24	1.24		1.05 - 1.43
123789-HxCDD	390/392	1.24	1.20	1.25	1.24	1.24	1.24		1.05 - 1.43
234678-HxCDF	374/376	1.35	1.16	1.22	1.20	1.22	1.19		1.05 - 1.43
123789-HxCDF	374/376	1.09	1.30	1.22	1.24	1.23	1.22		1.05 - 1.43
1234678-HpCDF	408/410	0.96	1.03	0.99	1.00	1.01	1.01		0.89 - 1.21
1234678-HpCDD	424/426	1.08	1.10	1.04	1.02	1.05	1.04		0.89 - 1.21
1234789-HpCDF	408/410	0.91	0.99	1.01	1.01	1.01	1.02		0.89 - 1.21
OCDD	458/460	0.93	0.84	0.91	0.90	0.89	0.89		0.76 - 1.02
OCDF	442/444	0.87	0.88	0.89	0.88	0.88	0.89		0.76 - 1.02

Labeled Compounds	Selected Ions	Ion Abundance Ratio						Ratio Flag	Ratio QC Limits
		CSL	CS1	CS2	CS3	CS4	CS5		
13C-2378-TCDD	332/334	0.78	0.78	0.78	0.78	0.78	0.78		0.65 - 0.89
13C-12378-PeCDD	368/370	1.57	1.58	1.58	1.59	1.60	1.57		1.32 - 1.78
13C-123478-HxCDD	402/404	1.26	1.25	1.26	1.27	1.27	1.27		1.05 - 1.43
13C-123678-HxCDD	402/404	1.25	1.24	1.23	1.26	1.26	1.25		1.05 - 1.43
13C-1234678-HpCDD	436/438	1.03	1.03	1.04	1.04	1.04	1.05		0.89 - 1.21
13C-OCDD	470/472	0.90	0.90	0.91	0.89	0.89	0.89		0.76 - 1.02
13C-2378-TCDF	316/318	0.78	0.78	0.78	0.77	0.79	0.79		0.65 - 0.89
13C-12378-PeCDF	352/354	1.56	1.58	1.56	1.58	1.56	1.57		1.32 - 1.78
13C-23478-PeCDF	352/354	1.57	1.58	1.57	1.56	1.57	1.57		1.32 - 1.78
13C-123478-HxCDF	384/386	0.52	0.52	0.52	0.51	0.52	0.52		0.43 - 0.59
13C-123678-HxCDF	384/386	0.52	0.52	0.52	0.51	0.52	0.53		0.43 - 0.59
13C-234678-HxCDF	384/386	0.52	0.52	0.52	0.52	0.53	0.53		0.43 - 0.59
13C-123789-HxCDF	384/386	0.53	0.52	0.50	0.53	0.52	0.53		0.43 - 0.59
13C-1234678-HpCDF	418/420	0.44	0.45	0.45	0.45	0.44	0.45		0.37 - 0.51
13C-1234789-HpCDF	418/420	0.45	0.46	0.45	0.43	0.44	0.45		0.37 - 0.51

Internal Standards	Selected Ions	Ion Abundance Ratio						Ratio Flag	Ion Ratio QC Limits
		CSL	CS1	CS2	CS3	CS4	CS5		
13C-1234-TCDD	332/334	0.79	0.79	0.79	0.79	0.79	0.79		0.65 - 0.89
13C-123789-HxCDD	402/404	1.24	1.24	1.24	1.26	1.25	1.24		1.05 - 1.43

(#) Quality Control (QC) limits represent ±15% window around the theoretical ion abundance ratio. The laboratory must flag any analyte in any calibration solution which does not meet the ion abundance ratio QC limit by placing an asterisk in the flag column.

7DFA - Form VII-HR CDD-1
CDD/CDF CONTINUING CALIBRATION SUMMARY
HIGH RESOLUTION

Lab Name:	ARI	Contract:	FLOYD-SNIDER
Lab Code:	WC32	Case No.	POB-HARRIS
TO No..		SDG No.:	
GC Column:	RTX-DIOXIN2	ID (mm):	25
Instrument ID:	AUTOSPEC1	Lab File ID:	13021302
Date Analysed	13-Feb-13	Time Analysed	11.03:27
Init.Calib.Date:	11-FEB-13	Init.Calib.Time:	

Target Analytes	Selected Ions	RRF	Mean RRF	%D	%D Flag#	Ion Ratio	Ratio Flag#	Ratio QC Limits
2378-TCDD	320/322	1 05	1.11	-5.4		0.77		0.65 - 0.89
2378-TCDF	304/306	0 86	0.92	-6.8		0.76		0.65 - 0.89
12378-PeCDF	340/342	0.91	0.91	0.0		1.50		1.32 - 1.78
12378-PeCDD	356/358	0.99	1.00	-0.9		1.57		1.32 - 1.78
23478-PeCDF	340/342	0 95	0.94	1.0		1.49		1 32 - 1.78
123478-HxCDF	374/376	1 09	1.10	-0.6		1.21		1.05 - 1.43
123678-HxCDF	374/376	1 05	1.06	-0.7		1.22		1 05 - 1.43
123478-HxCDD	390/392	1 00	0.98	2 1		1.25		1.05 - 1.43
123678-HxCDD	390/392	0.92	0.93	-1.1		1.24		1.05 - 1.43
123789-HxCDD	390/392	0.94	0.90	3.5		1.24		1 05 - 1.43
234678-HxCDF	374/376	1.05	1.07	-1.9		1 19		1.05 - 1.43
123789-HxCDF	374/376	1.01	1.02	-0.4		1.23		1 05 - 1.43
1234678-HpCDF	408/410	1.24	1.24	0 2		1.02		0.89 - 1.21
1234678-HpCDD	424/426	1.01	1.03	-1.6		1.03		0.89 - 1.21
1234789-HpCDF	408/410	1.26	1.22	3.1		1 03		0.89 - 1.21
OCDD	458/460	1.02	1 01	0.5		0 90		0.76 - 1.02
OCDF	442/444	1.15	1.16	-1.3		0 88		0.76 - 1.02

Labeled Compounds	Selected Ions	RRF	Mean RRF	%D	%D Flag#	Ion Ratio	Ratio Flag#	Ratio QC Limits
13C-2378-TCDD	332/334	0.96	0.94	1.6		0.78		0.65 - 0.89
13C-12378-PeCDD	368/370	0.78	0.72	8.7		1.56		1.32 - 1.78
13C-123478-HxCDD	402/404	0.99	1.03	-3 8		1.26		1.05 - 1.43
13C-123678-HxCDD	402/404	1.02	1.08	-4 9		1.24		1.05 - 1.43
13C-1234678-HpCDD	436/438	0.87	0.84	4.0		1.05		0.89 - 1.21
13C-OCDD	470/472	0.70	0.68	3.3		0.89		0 76 - 1.02
13C-2378-TCDF	316/318	1.54	1.52	0.9		0.78		0.65 - 0.89
13C-12378-PeCDF	352/354	1.23	1.19	3 5		1.58		1.32 - 1.78
13C-23478-PeCDF	352/354	1.20	1.14	5 7		1 56		1.32 - 1.78
13C-123478-HxCDF	384/386	1.21	1.28	-6.0		0.52		0.43 - 0.59
13C-123678-HxCDF	384/386	1.28	1.38	-7.3		0.52		0.43 - 0.59
13C-234678-HxCDF	384/386	1.24	1.28	-3.4		0.53		0.43 - 0 59
13C-123789-HxCDF	384/386	1 08	1.10	-1.4		0.53		0.43 - 0.59
13C-1234678-HpCDF	418/420	1.05	1.07	-2.3		0.45		0.37 - 0.51
13C-1234789-HpCDF	418/420	0.80	0 77	3.4		0.45		0.37 - 0.51

Clean-up	Selected Ions	RRF	Mean RRF	%D	%D Flag#	Ion Ratio	Ratio Flag#	Ratio QC Limits
37CL-2378-TCDD	328	1.07	1.05	2.0		NA	NA	NA

Internal Standards	Selected Ions	RRF	Mean RRF	%D	%D Flag#	Ion Ratio	Ion Ratio Flag#	Ion Ratio QC Limits
13C-1234-TCDD	332/334	NA	NA	NA	NA	0.78		0 65 - 0.89
13C-123789-HxCDD	402/404	NA	NA	NA	NA	1.25		1.05 - 1.43

(#) The laboratory must flag any analyte which does not meet the criteria for Percentage Difference (%D) or ion abundance ratio by placing an asterisk in the appropriate flag column.

7DFB - Form VII-HR CDD-2
CDD/CDF CONTINUING CALIBRATION RETENTION TIME SUMMARY
HIGH RESOLUTION

Lab Name:	ARI	Contract:	FLOYD-SNIDER
Lab Code:	WC32	Case No.:	POB-HARRIS
TO No.:		SDG No.:	
GC Column:	RTX-DIOXIN2	ID (mm):	.25
Instrument ID:	AUTOSPEC1	Lab File ID:	13021302
Date Analysed	13-Feb-13	Time Analysed	11:03:27
Init.Calib.Date:	11-FEB-13	Init.Calib.Time:	

Target Analytes	RRT[#]	RT
2378-TCDD	1.00	26.30
2378-TCDF	1.00	25.66
12378-PeCDF	1.00	29.79
12378-PeCDD	1.00	31.39
23478-PeCDF	1.00	31.13
123478-HxCDF	1.00	34.80
123678-HxCDF	1.00	34.95
123478-HxCDD	1.00	36.03
123678-HxCDD	1.00	36.15
123789-HxCDD	1.01	36.58
234678-HxCDF	1.00	35.89
123789-HxCDF	1.00	37.03
1234678-HpCDF	1.00	39.09
1234678-HpCDD	1.00	40.86
1234789-HpCDF	1.00	41.72
OCDD	1.00	46.60
OCDF	1.01	46.86

Labeled Compounds	RRT[#]	RT
13C-2378-TCDD	1.03	26.29
13C-12378-PeCDD	1.23	31.36
13C-123478-HxCDD	0.98	36.01
13C-123678-HxCDD	0.99	36.14
13C-1234678-HpCDD	1.12	40.85
13C-OCDD	1.27	46.58
13C-2378-TCDF	1.01	25.64
13C-12378-PeCDF	1.17	29.78
13C-23478-PeCDF	1.22	31.11
13C-123478-HxCDF	0.95	34.78
13C-123678-HxCDF	0.95	34.93
13C-234678-HxCDF	0.98	35.88
13C-123789-HxCDF	1.01	37.02
13C-1234678-HpCDF	1.07	39.07
13C-1234789-HpCDF	1.14	41.70

Clean up Standard	RRT[#]	RT
37CL-2378-TCDD	1.03	26.30

Internal Standards	RRT[#]	RT
13C-1234-TCDD	0.00	25.47
13C-123789-HxCDD	0.00	36.57

(#) RRT = (RT of Analyte)/(RT of appropriate labeled compound).

7DFA - Form VII-HR CDD-1
CDD/CDF CONTINUING CALIBRATION SUMMARY
HIGH RESOLUTION

Lab Name:	ARI	Contract:	FLOYD-SNIDER
Lab Code	WC32	Case No.:	POB-HARRIS
TO No.:		SDG No.:	
GC Column:	RTX-DIOXIN2	ID (mm).	.25
Instrument ID.	AUTOSPEC1	Lab File ID:	13021314
Date Analysed	13-Feb-13	Time Analysed	21:38:29
Init.Calib.Date:	11-FEB-13	Init.Calib.Time:	

Target Analytes	Selected Ions	RRF	Mean RRF	%D	%D Flag#	Ion Ratio	Ratio Flag#	Ratio QC Limits
2378-TCDD	320/322	1.06	1.11	-4.6		0.78		0.65 - 0.89
2378-TCDF	304/306	0.86	0.92	-6.3		0.76		0.65 - 0.89
12378-PeCDF	340/342	0.93	0.91	1.4		1.52		1.32 - 1.78
12378-PeCDD	356/358	1.00	1.00	0.1		1.56		1.32 - 1.78
23478-PeCDF	340/342	0.94	0.94	-0.3		1.51		1.32 - 1.78
123478-HxCDF	374/376	1.10	1.10	-0.1		1.22		1.05 - 1.43
123678-HxCDF	374/376	1.06	1.06	0.5		1.21		1.05 - 1.43
123478-HxCDD	390/392	1.00	0.98	2.1		1.23		1.05 - 1.43
123678-HxCDD	390/392	0.92	0.93	-1.4		1.25		1.05 - 1.43
123789-HxCDD	390/392	0.93	0.90	2.9		1.26		1.05 - 1.43
234678-HxCDF	374/376	1.06	1.07	-1.0		1.20		1.05 - 1.43
123789-HxCDF	374/376	1.02	1.02	0.2		1.20		1.05 - 1.43
1234678-HpCDF	408/410	1.24	1.24	-0.1		1.00		0.89 - 1.21
1234678-HpCDD	424/426	1.02	1.03	-1.1		1.03		0.89 - 1.21
1234789-HpCDF	408/410	1.24	1.22	1.7		1.00		0.89 - 1.21
OCDD	458/460	1.00	1.01	-1.2		0.88		0.76 - 1.02
OCDF	442/444	1.15	1.16	-0.7		0.88		0.76 - 1.02

Labeled Compounds	Selected Ions	RRF	Mean RRF	%D	%D Flag#	Ion Ratio	Ratio Flag#	Ratio QC Limits
13C-2378-TCDD	332/334	0.96	0.94	1.5		0.79		0.65 - 0.89
13C-12378-PeCDD	368/370	0.76	0.72	6.1		1.56		1.32 - 1.78
13C-123478-HxCDD	402/404	1.01	1.03	-2.0		1.27		1.05 - 1.43
13C-123678-HxCDD	402/404	1.03	1.08	-4.1		1.26		1.05 - 1.43
13C-1234678-HpCDD	436/438	0.83	0.84	-1.2		1.05		0.89 - 1.21
13C-OCDD	470/472	0.65	0.68	-3.3		0.90		0.76 - 1.02
13C-2378-TCDF	316/318	1.53	1.52	0.8		0.79		0.65 - 0.89
13C-12378-PeCDF	352/354	1.20	1.19	1.1		1.56		1.32 - 1.78
13C-23478-PeCDF	352/354	1.22	1.14	7.0		1.56		1.32 - 1.78
13C-123478-HxCDF	384/386	1.18	1.28	-8.0		0.52		0.43 - 0.59
13C-123678-HxCDF	384/386	1.25	1.38	-9.8		0.52		0.43 - 0.59
13C-234678-HxCDF	384/386	1.28	1.28	0.0		0.52		0.43 - 0.59
13C-123789-HxCDF	384/386	1.09	1.10	-0.9		0.52		0.43 - 0.59
13C-1234678-HpCDF	418/420	1.02	1.07	-4.5		0.45		0.37 - 0.51
13C-1234789-HpCDF	418/420	0.82	0.77	6.3		0.45		0.37 - 0.51

Clean-up	Selected Ions	RRF	Mean RRF	%D	%D Flag#	Ion Ratio	Ratio Flag#	Ratio QC Limits
37CL-2378-TCDD	328	1.05	1.05	-0.5		NA	NA	NA

Internal Standards	Selected Ions	RRF	Mean RRF	%D	%D Flag#	Ion Ratio	Ion Ratio Flag#	Ion Ratio QC Limits
13C-1234-TCDD	332/334	NA	NA	NA	NA	0.79		0.65 - 0.89
13C-123789-HxCDD	402/404	NA	NA	NA	NA	1.26		1.05 - 1.43

(#) The laboratory must flag any analyte which does not meet the criteria for Percentage Difference (%D) or ion abundance ratio by placing an asterisk in the appropriate flag column.

7DFB - Form VII-HR CDD-2
CDD/CDF CONTINUING CALIBRATION RETENTION TIME SUMMARY
HIGH RESOLUTION

Lab Name:	ARI	Contract:	FLOYD-SNIDER
Lab Code:	WC32	Case No.:	POB-HARRIS
TO No.:		SDG No.:	
GC Column:	RTX-DIOXIN2	ID (mm):	.25
Instrument ID:	AUTOSPEC1	Lab File ID:	13021314
Date Analysed	13-Feb-13	Time Analysed	21:38:29
Init.Calib.Date:	11-FEB-13	Init.Calib.Time:	

Target Analytes	RRT#	RT
2378-TCDD	1.00	26.26
2378-TCDF	1.00	25.62
12378-PeCDF	1.00	29.75
12378-PeCDD	1.00	31.35
23478-PeCDF	1.00	31.10
123478-HxCDF	1.00	34.76
123678-HxCDF	1.00	34.92
123478-HxCDD	1.00	36.00
123678-HxCDD	1.00	36.13
123789-HxCDD	1.01	36.55
234678-HxCDF	1.00	35.86
123789-HxCDF	1.00	37.01
1234678-HpCDF	1.00	39.07
1234678-HpCDD	1.00	40.84
1234789-HpCDF	1.00	41.69
OCDD	1.00	46.56
OCDF	1.01	46.83

Labeled Compounds	RRT#	RT
13C-2378-TCDD	1.03	26.24
13C-12378-PeCDD	1.23	31.33
13C-123478-HxCDD	0.98	35.98
13C-123678-HxCDD	0.99	36.11
13C-1234678-HpCDD	1.12	40.81
13C-OCDD	1.27	46.54
13C-2378-TCDF	1.01	25.60
13C-12378-PeCDF	1.17	29.73
13C-23478-PeCDF	1.22	31.08
13C-123478-HxCDF	0.95	34.75
13C-123678-HxCDF	0.95	34.89
13C-234678-HxCDF	0.98	35.85
13C-123789-HxCDF	1.01	36.99
13C-1234678-HpCDF	1.07	39.05
13C-1234789-HpCDF	1.14	41.68

Clean up Standard	RRT#	RT
37CL-2378-TCDD	1.03	26.26

Internal Standards	RRT#	RT
13C-1234-TCDD	0.00	25.44
13C-123789-HxCDD	0.00	36.54

(#) RRT = (RT of Analyte)/(RT of appropriate labeled compound)

Pesticide Analysis
Report and Summary QC Forms

ARI Job ID: WC32, WC33

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD
Extraction Method: SW3546

Sample ID: SG-12-0-10-013113
SAMPLE

Lab Sample ID: WC32A
LIMS ID: 13-2424
Matrix: Sediment
Data Release Authorized: MW
Reported: 02/18/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted: 02/08/13
Date Analyzed: 02/14/13 17:02
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 12.9 g-dry-wt
Final Extract Volume: 2.5 mL
Dilution Factor: 5.00
Silica Gel: Yes

Percent Moisture: 59.8%

CAS Number	Analyte	RL	Result
72-55-9	4,4'-DDE	4.8	< 4.8 U
72-54-8	4,4'-DDD	4.8	< 4.8 U
50-29-3	4,4'-DDT	4.8	< 4.8 U
118-74-1	Hexachlorobenzene	6.4	< 6.4 Y
87-68-3	Hexachlorobutadiene	4.8	< 4.8 U

Reported in µg/kg (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	96.6%
Tetrachlorometaxylene	111%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD
Extraction Method: SW3546
Page 1 of 1

Sample ID: SG-13-0-10-013113
SAMPLE

Lab Sample ID: WC32B
LIMS ID: 13-2425
Matrix: Sediment
Data Release Authorized: MW
Reported: 02/18/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted: 02/08/13
Date Analyzed: 02/14/13 17:20
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 12.6 g-dry-wt
Final Extract Volume: 2.5 mL
Dilution Factor: 5.00
Silica Gel: Yes

Percent Moisture: 65.2%

CAS Number	Analyte	RL	Result
72-55-9	4,4'-DDE	5.0	< 5.0 U
72-54-8	4,4'-DDD	5.0	< 5.0 U
50-29-3	4,4'-DDT	5.0	< 5.0 U
118-74-1	Hexachlorobenzene	5.0	< 5.0 U
87-68-3	Hexachlorobutadiene	5.0	< 5.0 U

Reported in µg/kg (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	99.0%
Tetrachlorometaxylene	86.6%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD
Extraction Method: SW3546
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Sample ID: SG-07-0-10-013113
SAMPLE

Lab Sample ID: WC32C
LIMS ID: 13-2426
Matrix: Sediment
Data Release Authorized: MW
Reported: 02/18/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted: 02/08/13
Date Analyzed: 02/14/13 17:38
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 13.3 g-dry-wt
Final Extract Volume: 2.5 mL
Dilution Factor: 5.00
Silica Gel: Yes

Percent Moisture: 22.8%

CAS Number	Analyte	RL	Result
72-55-9	4,4'-DDE	4.7	< 4.7 U
72-54-8	4,4'-DDD	4.7	< 4.7 U
50-29-3	4,4'-DDT	4.7	< 4.7 U
118-74-1	Hexachlorobenzene	4.7	< 4.7 U
87-68-3	Hexachlorobutadiene	4.7	< 4.7 U

Reported in µg/kg (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	99.4%
Tetrachlorometaxylene	84.8%

FORM I

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD
Extraction Method: SW3546
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ANALYTICAL RESOURCES INCORPORATED

Sample ID: SG-06-0-10-013113
SAMPLE

Lab Sample ID: WC32D
LIMS ID: 13-2427
Matrix: Sediment
Data Release Authorized:
Reported: 02/18/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted: 02/08/13
Date Analyzed: 02/14/13 17:55
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 13.2 g-dry-wt
Final Extract Volume: 2.5 mL
Dilution Factor: 5.00
Silica Gel: Yes

Percent Moisture: 41.0%

CAS Number	Analyte	RL	Result
72-55-9	4,4'-DDE	4.8	< 4.8 U
72-54-8	4,4'-DDD	4.8	< 4.8 U
50-29-3	**4,4'-DDT**	**4.8**	**4.6 J**
118-74-1	Hexachlorobenzene	4.8	< 4.8 U
87-68-3	Hexachlorobutadiene	4.8	< 4.8 U

Reported in µg/kg (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	95.2%
Tetrachlorometaxylene	94.6%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD
Extraction Method: SW3546

Sample ID: SG-05-0-10-013113
SAMPLE

Lab Sample ID: WC32E
LIMS ID: 13-2428
Matrix: Sediment
Data Release Authorized: MW
Reported: 02/18/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted: 02/08/13
Date Analyzed: 02/14/13 18:13
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 13.3 g-dry-wt
Final Extract Volume: 2.5 mL
Dilution Factor: 1.00
Silica Gel: Yes

Percent Moisture: 5.7%

CAS Number	Analyte	RL	Result
72-55-9	4,4'-DDE	0.94	< 0.94 U
72-54-8	4,4'-DDD	0.94	< 0.94 U
50-29-3	4,4'-DDT	0.94	< 0.94 U
118-74-1	Hexachlorobenzene	0.94	< 0.94 U
87-68-3	Hexachlorobutadiene	0.94	< 0.94 U

Reported in µg/kg (ppb)

Pest/PCB Surrogate Recovery	
Decachlorobiphenyl	90.2%
Tetrachlorometaxylene	76.2%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD
Extraction Method: SW3546

Sample ID: SG-95-0-10-013113
SAMPLE

Lab Sample ID: WC32F
LIMS ID: 13-2429
Matrix: Sediment
Data Release Authorized: MW
Reported: 02/18/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted: 02/08/13
Date Analyzed: 02/14/13 18:31
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 13.3 g-dry-wt
Final Extract Volume: 2.5 mL
Dilution Factor: 1.00
Silica Gel: Yes

Percent Moisture: 6.5%

CAS Number	Analyte	RL	Result
72-55-9	4,4'-DDE	0.94	< 0.94 U
72-54-8	4,4'-DDD	0.94	< 0.94 U
50-29-3	4,4'-DDT	0.94	< 0.94 U
118-74-1	Hexachlorobenzene	0.94	< 0.94 U
87-68-3	Hexachlorobutadiene	0.94	< 0.94 U

Reported in µg/kg (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	94.8%
Tetrachlorometaxylene	74.8%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD
Extraction Method: SW3546
Page 1 of 1

Sample ID: SG-08-0-10-013113
SAMPLE

Lab Sample ID: WC32G
LIMS ID: 13-2430
Matrix: Sediment
Data Release Authorized:
Reported: 02/18/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted: 02/08/13
Date Analyzed: 02/14/13 19:24
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 12.9 g-dry-wt
Final Extract Volume: 2.5 mL
Dilution Factor: 5.00
Silica Gel: Yes

Percent Moisture: 48.5%

CAS Number	Analyte	RL	Result
72-55-9	4,4'-DDE	4.8	< 4.8 U
72-54-8	4,4'-DDD	4.8	< 4.8 U
50-29-3	4,4'-DDT	4.8	< 4.8 U
118-74-1	Hexachlorobenzene	4.8	< 4.8 U
87-68-3	Hexachlorobutadiene	4.8	< 4.8 U

Reported in µg/kg (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	102%
Tetrachlorometaxylene	92.8%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD
Extraction Method: SW3546

Sample ID: SG-09-0-10-013113
SAMPLE

Lab Sample ID: WC32H
LIMS ID: 13-2431
Matrix: Sediment
Data Release Authorized: MW
Reported: 02/18/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted: 02/08/13
Date Analyzed: 02/14/13 20:18
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 12.6 g-dry-wt
Final Extract Volume: 2.5 mL
Dilution Factor: 5.00
Silica Gel: Yes

Percent Moisture: 47.6%

CAS Number	Analyte	RL	Result
72-55-9	4,4'-DDE	4.9	< 4.9 U
72-54-8	4,4'-DDD	4.9	< 4.9 U
50-29-3	4,4'-DDT	4.9	< 4.9 U
118-74-1	Hexachlorobenzene	4.9	< 4.9 U
87-68-3	Hexachlorobutadiene	4.9	< 4.9 U

Reported in µg/kg (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	89.9%
Tetrachlorometaxylene	93.0%

FORM I

SW8081 PESTICIDE SOIL/SEDIMENT SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030

Client ID	DCBP	TCMX	TOT OUT
SG-12-0-10-013113	96.6%	111%	0
SG-13-0-10-013113	99.0%	86.6%	0
SG-07-0-10-013113	99.4%	84.8%	0
SG-06-0-10-013113	95.2%	94.6%	0
SG-05-0-10-013113	90.2%	76.2%	0
SG-95-0-10-013113	94.8%	74.8%	0
MB-020813	98.2%	74.2%	0
LCS-020813	99.8%	79.0%	0
LCSD-020813	104%	76.8%	0
SG-08-0-10-013113	102%	92.8%	0
SG-08-0-10-013113 MS	89.9%	126%	0
SG-08-0-10-013113 MSD	95.1%	105%	0
SG-09-0-10-013113	89.9%	93.0%	0

	LCS/MB LIMITS	QC LIMITS
(DCBP) = Decachlorobiphenyl	(60-149)	(36-182)
(TCMX) = Tetrachlorometaxylene	(47-124)	(34-169)

Prep Method: SW3546
Log Number Range: 13-2424 to 13-2431

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD
Extraction Method: SW3546

Sample ID: HA-09-0-10-013013
SAMPLE

Lab Sample ID: WC33G
LIMS ID: 13-2451
Matrix: Sediment
Data Release Authorized: MW
Reported: 02/18/13

QC Report No: WC33-Floyd-Snider
Project: POB-Harris
T.4030
Date Sampled: 01/30/13
Date Received: 02/01/13

Date Extracted: 02/08/13
Date Analyzed: 02/14/13 20:36
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 13.4 g-dry-wt
Final Extract Volume: 2.5 mL
Dilution Factor: 1.00
Silica Gel: Yes

Percent Moisture: 5.8%

CAS Number	Analyte	RL	Result
72-55-9	4,4'-DDE	0.93	< 0.93 U
72-54-8	4,4'-DDD	0.93	< 0.93 U
50-29-3	4,4'-DDT	0.93	< 0.93 U
118-74-1	Hexachlorobenzene	0.93	< 0.93 U
87-68-3	Hexachlorobutadiene	0.93	< 0.93 U

Reported in µg/kg (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	93.0%
Tetrachlorometaxylene	70.5%

FORM I

ANALYTICAL RESOURCES INCORPORATED

SW8081 PESTICIDE SOIL/SEDIMENT SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: WC33-Floyd-Snider
Project: POB-Harris
T.4030

Client ID	DCBP	TCMX	TOT OUT
MB-020813	98.2%	74.2%	0
LCS-020813	99.8%	79.0%	0
LCSD-020813	104%	76.8%	0
HA-09-0-10-013013	93.0%	70.5%	0

	LCS/MB LIMITS	QC LIMITS
(DCBP) = Decachlorobiphenyl	(60-149)	(36-182)
(TCMX) = Tetrachlorometaxylene	(47-124)	(34-169)

Prep Method: SW3546
Log Number Range: 13-2451 to 13-2451

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD

Sample ID: SG-08-0-10-013113
MS/MSD

Lab Sample ID: WC32G
LIMS ID: 13-2430
Matrix: Sediment
Data Release Authorized: Mw
Reported: 02/18/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted MS/MSD: 02/08/13

Sample Amount MS: 12.9 g-dry-wt
MSD: 13.0 g-dry-wt

Date Analyzed MS: 02/14/13 19:42
MSD: 02/14/13 20:00
Instrument/Analyst MS: ECD6/YZ
MSD: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Final Extract Volume MS: 2.5 mL
MSD: 2.5 mL
Dilution Factor MS: 5.00
MSD: 5.00
Silica Gel: Yes

Percent Moisture: 48.5%

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
4,4'-DDE	< 4.84	6.64 JP	7.75	85.7%	7.20	7.72	93.3%	8.1%
4,4'-DDD	< 4.84	7.14	7.75	92.1%	7.83	7.72	101%	9.2%
4,4'-DDT	< 4.84	8.41 P	7.75	109%	7.47	7.72	96.8%	11.8%
Hexachlorobenzene	< 4.84	3.77 J	3.88	97.2%	6.78 JP	3.86	176%	57.1%
Hexachlorobutadiene	< 4.84	3.13 J	3.88	80.7%	3.44 J	3.86	89.1%	9.4%

Reported in µg/kg (ppb)
RPD calculated using sample concentrations per SW846.

FORM III

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD
Extraction Method: SW3546

Sample ID: SG-08-0-10-013113
MATRIX SPIKE

Lab Sample ID: WC32G
LIMS ID: 13-2430
Matrix: Sediment
Data Release Authorized: MW
Reported: 02/18/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted: 02/08/13
Date Analyzed: 02/14/13 19:42
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 12.9 g-dry-wt
Final Extract Volume: 2.5 mL
Dilution Factor: 5.00
Silica Gel: Yes

Percent Moisture: 48.5%

CAS Number	Analyte	RL	Result
72-55-9	4,4'-DDE	4.8	---
72-54-8	4,4'-DDD	4.8	---
50-29-3	4,4'-DDT	4.8	---
118-74-1	Hexachlorobenzene	4.8	---
87-68-3	Hexachlorobutadiene	4.8	---

Reported in µg/kg (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	89.9%
Tetrachlorometaxylene	126%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD
Extraction Method: SW3546
Page 1 of 1

Sample ID: SG-08-0-10-013113
MATRIX SPIKE DUP

Lab Sample ID: WC32G
LIMS ID: 13-2430
Matrix: Sediment
Data Release Authorized: Mw
Reported: 02/18/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted: 02/08/13
Date Analyzed: 02/14/13 20:00
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 13.0 g-dry-wt
Final Extract Volume: 2.5 mL
Dilution Factor: 5.00
Silica Gel: Yes

Percent Moisture: 48.5%

CAS Number	Analyte	RL	Result
72-55-9	4,4'-DDE	4.8	---
72-54-8	4,4'-DDD	4.8	---
50-29-3	4,4'-DDT	4.8	---
118-74-1	Hexachlorobenzene	4.8	---
87-68-3	Hexachlorobutadiene	4.8	---

Reported in µg/kg (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	95.1%
Tetrachlorometaxylene	105%

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD

ANALYTICAL RESOURCES INCORPORATED

Sample ID: LCS-020813
LCS/LCSD

Lab Sample ID: LCS-020813
LIMS ID: 13-2430
Matrix: Sediment
Data Release Authorized: MW
Reported: 02/18/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted LCS/LCSD: 02/08/13

Date Analyzed LCS: 02/14/13 12:53
LCSD: 02/14/13 13:11
Instrument/Analyst LCS: ECD6/YZ
LCSD: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount LCS: 12.5 g-dry-wt
LCSD: 12.5 g-dry-wt
Final Extract Volume LCS: 2.5 mL
LCSD: 2.5 mL
Dilution Factor LCS: 1.00
LCSD: 1.00
Silica Gel: Yes

Percent Moisture: NA

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
4,4'-DDE	8.70	8.00	109%	9.20	8.00	115%	5.6%
4,4'-DDD	7.56	8.00	94.5%	8.00	8.00	100%	5.7%
4,4'-DDT	7.92	8.00	99.0%	8.38	8.00	105%	5.6%
Hexachlorobenzene	3.52	4.00	88.0%	3.70	4.00	92.5%	5.0%
Hexachlorobutadiene	3.06	4.00	76.5%	3.16	4.00	79.0%	3.2%

Pest/PCB Surrogate Recovery

	LCS	LCSD
Decachlorobiphenyl	99.8%	104%
Tetrachlorometaxylene	79.0%	76.8%

Reported in µg/kg (ppb)
RPD calculated using sample concentrations per SW846.

FORM III

FORM 4
PESTICIDE METHOD BLANK SUMMARY

BLANK NO.

WC32MBS1

Lab Name: ANALYTICAL RESOURCES INC

Client: FLOYD-SNIDER

ARI Job No.: WC32

Project: POB-HARRIS

Lab Sample ID: WC32MBS1

Lab File ID: 0214A006

Date Extracted: 02/08/13

Matrix: SOLID

Date Analyzed: 02/14/13

Instrument ID: ECD6

Time Analyzed: 1235

GC Columns: STX-CLP1/STX-CLP2

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED
01	WC32LCSS1	WC32LCSS1	02/14/13
02	WC32LCSDS1	WC32LCSDS1	02/14/13
03	SG-12-0-10-013113	WC32A	02/14/13
04	SG-13-0-10-013113	WC32B	02/14/13
05	SG-07-0-10-013113	WC32C	02/14/13
06	SG-06-0-10-013113	WC32D	02/14/13
07	SG-05-0-10-013113	WC32E	02/14/13
08	SG-95-0-10-013113	WC32F	02/14/13
09	SG-08-0-10-013113	WC32G	02/14/13
10	SG-08-0-10-0131 MS	WC32GMS	02/14/13
11	SG-08-0-10-0131 MSD	WC32GMSD	02/14/13
12	SG-09-0-10-013113	WC32H	02/14/13
13	HA-09-0-10-013013	WC33G	02/14/13

ALL RUNS ARE DUAL COLUMN

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD
Extraction Method: SW3546

Sample ID: MB-020813
METHOD BLANK

Lab Sample ID: MB-020813
LIMS ID: 13-2430
Matrix: Sediment
Data Release Authorized: MW
Reported: 02/18/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: NA
Date Received: NA

Date Extracted: 02/08/13
Date Analyzed: 02/14/13 12:35
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 12.5 g-dry-wt
Final Extract Volume: 2.5 mL
Dilution Factor: 1.00
Silica Gel: Yes

Percent Moisture: NA

CAS Number	Analyte	RL	Result
72-55-9	4,4'-DDE	1.0	< 1.0 U
72-54-8	4,4'-DDD	1.0	< 1.0 U
50-29-3	4,4'-DDT	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-68-3	Hexachlorobutadiene	1.0	< 1.0 U

Reported in µg/kg (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	98.2%
Tetrachlorometaxylene	74.2%

6D

8081 INITIAL CALIBRATION RETENTION TIMES

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD-SNIDER

ARI Job No.: WC32   Project: POB-HARRIS

GC Column: STX-CLP1 ID: 0.53 (mm)   Instrument ID: ECD6

Calibration Date: 12/13/12

COMPOUND	RT OF STANDARDS LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	MEAN RT	RT WINDOW FROM	TO
alpha-BHC	4.14	4.14	4.14	4.13	4.13	4.13	4.13	4.13	4.08	4.18
beta-BHC	4.55	4.55	4.55	4.55	4.55	4.55	4.55	4.55	4.50	4.60
delta-BHC	4.71	4.71	4.71	4.71	4.71	4.71	4.71	4.71	4.66	4.76
gamma-BHC (Lindane)	4.41	4.41	4.41	4.41	4.41	4.41	4.41	4.41	4.36	4.46
Heptachlor	4.84	4.84	4.84	4.84	4.84	4.84	4.84	4.84	4.79	4.89
Aldrin	5.13	5.13	5.13	5.13	5.13	5.12	5.12	5.13	5.07	5.17
Heptachlor epoxide b	5.70	5.70	5.70	5.70	5.70	5.70	5.70	5.70	5.65	5.75
Endosulfan I	6.08	6.08	6.08	6.08	6.08	6.07	6.07	6.08	6.02	6.12
Dieldrin	6.30	6.30	6.30	6.30	6.30	6.30	6.29	6.30	6.24	6.34
4,4'-DDE	6.03	6.03	6.03	6.03	6.02	6.02	6.01	6.02	5.96	6.06
Endrin	6.52	6.52	6.52	6.52	6.51	6.51	6.51	6.52	6.46	6.56
Endosulfan II	6.73	6.73	6.73	6.73	6.72	6.72	6.72	6.73	6.67	6.77
4,4'-DDD	6.59	6.59	6.58	6.58	6.57	6.57	6.57	6.58	6.52	6.62
Endosulfan sulfate	7.49	7.49	7.49	7.49	7.49	7.49	7.49	7.49	7.44	7.54
4,4'-DDT	6.84	6.84	6.83	6.83	6.83	6.82	6.82	6.83	6.77	6.87
Methoxychlor	7.26	7.26	7.26	7.26	7.26	7.25	7.25	7.26	7.20	7.30
Endrin ketone	7.74	7.74	7.74	7.74	7.74	7.74	7.74	7.74	7.69	7.79
Endrin aldehyde	7.10	7.10	7.10	7.10	7.10	7.10	7.10	7.10	7.05	7.15
gamma-Chlordane	5.83	5.83	5.83	5.83	5.82	5.82	5.82	5.83	5.77	5.87
alpha-Chlordane	5.95	5.95	5.95	5.95	5.95	5.94	5.94	5.95	5.89	5.99
Hexachlorobutadiene	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.15	2.25
Hexachlorobenzene	4.02	4.02	4.01	4.01	4.01	4.00	4.00	4.01	3.95	4.05
Tetrachloro-m-xylene	3.67	3.67	3.67	3.67	3.66	3.66	3.66	3.67	3.61	3.71
Decachlorobiphenyl	8.59	8.59	8.59	8.59	8.59	8.59	8.59	8.59	8.54	8.64

6D
8081 INITIAL CALIBRATION RETENTION TIMES

Lab Name: ANALYTICAL RESOURCES INC Client: FLOYD-SNIDER

ARI Job No.: WC32 Project: POB-HARRIS

GC Column: STX-CLP2 ID: 0.53 (mm) Instrument ID: ECD6

Calibration Date: 12/13/12

	RT OF STANDARDS							MEAN	RT WINDOW	
COMPOUND	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	RT	FROM	TO
alpha-BHC	4.57	4.57	4.57	4.57	4.57	4.57	4.57	4.57	4.52	4.62
beta-BHC	5.02	5.02	5.02	5.01	5.01	5.00	5.00	5.01	4.95	5.05
delta-BHC	5.32	5.32	5.32	5.31	5.31	5.31	5.30	5.31	5.25	5.35
gamma-BHC (Lindane)	4.92	4.92	4.92	4.92	4.92	4.92	4.92	4.92	4.87	4.97
Heptachlor	5.38	5.38	5.38	5.37	5.37	5.37	5.37	5.37	5.32	5.42
Aldrin	5.71	5.71	5.71	5.71	5.71	5.71	5.71	5.71	5.66	5.76
Heptachlor epoxide b	6.27	6.27	6.27	6.27	6.27	6.27	6.27	6.27	6.22	6.32
Endosulfan I	6.66	6.66	6.66	6.66	6.66	6.66	6.66	6.66	6.61	6.71
Dieldrin	6.92	6.92	6.92	6.91	6.91	6.91	6.91	6.91	6.86	6.96
4,4'-DDE	6.74	6.74	6.73	6.73	6.73	6.73	6.73	6.73	6.68	6.78
Endrin	7.20	7.20	7.20	7.20	7.20	7.20	7.20	7.20	7.15	7.25
Endosulfan II	7.40	7.40	7.40	7.40	7.39	7.39	7.39	7.40	7.34	7.44
4,4'-DDD	7.26	7.26	7.26	7.26	7.26	7.26	7.26	7.26	7.21	7.31
Endosulfan sulfate	7.94	7.94	7.94	7.94	7.94	7.94	7.94	7.94	7.89	7.99
4,4'-DDT	7.56	7.56	7.56	7.55	7.55	7.55	7.55	7.55	7.50	7.60
Methoxychlor	8.14	8.14	8.14	8.14	8.14	8.14	8.13	8.14	8.09	8.19
Endrin ketone	8.43	8.43	8.43	8.42	8.42	8.42	8.42	8.42	8.37	8.47
Endrin aldehyde	7.70	7.69	7.69	7.69	7.69	7.69	7.69	7.69	7.64	7.74
gamma-Chlordane	6.46	6.46	6.46	6.46	6.46	6.45	6.45	6.46	6.40	6.50
alpha-Chlordane	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.54	6.64
Hexachlorobutadiene	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.31	2.41
Hexachlorobenzene	4.46	4.46	4.46	4.46	4.45	4.45	4.45	4.46	4.40	4.50
Tetrachloro-m-xylene	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	3.95	4.05
Decachlorobiphenyl	9.54	9.54	9.54	9.54	9.54	9.54	9.54	9.54	9.49	9.59

FORM VI PEST-1

6E

8081 PESTICIDE INITIAL CALIBRATION

Lab Name: ANALYTICAL RESOURCES INC Client: FLOYD-SNIDER

ARI Job No.: WC32 Project: POB-HARRIS

GC Column: STX-CLP1 ID: 0.53 (mm) Instrument ID: ECD6

Calibration Date: 12/13/12

COMPOUND	CALIBRATION FACTORS LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	MEAN	R^2 %RSD
alpha-BHC	1.4827	1.5044	1.5335	1.6158	1.6686	1.6048	1.7046	1.5878	5.3
beta-BHC	0.6556	0.6658	0.6603	0.6679	0.6671	0.6282	0.6580	0.6576	2.1
delta-BHC	1.1222	1.1501	1.1638	1.2329	1.3429	1.3086	1.4108	1.2473	8.8
gamma-BHC (Lindane)	1.1863	1.2199	1.2440	1.3181	1.3864	1.3448	1.4470	1.3066	7.2
Heptachlor	1.2661	1.2833	1.2762	1.3097	1.3283	1.2482	1.2924	1.2863	2.1
Aldrin	1.2118	1.2291	1.2358	1.2922	1.3143	1.2679	1.3196	1.2672	3.4
Heptachlor epoxide b	1.2276	1.2252	1.2000	1.2202	1.2270	1.1653	1.1952	1.2086	1.9
Endosulfan I	1.4102	1.4028	1.3650	1.3665	1.3072	1.2306	1.2270	1.3299	5.8
Dieldrin	1.1410	1.1719	1.1950	1.2350	1.2434	1.1769	1.2045	1.1954	3.0
4,4'-DDE	0.9301	0.9679	1.0006	1.0663	1.1062	1.0528	1.0877	1.0302	6.4
Endrin	1.0575	1.0756	1.0634	1.1977	1.2434	1.0751	1.1237	1.1195	6.6
Endosulfan II	1.1187	1.1310	1.1136	1.2505	1.2522	1.0954	1.1305	1.1560	5.7
4,4'-DDD	1.0592	1.0785	1.0766	1.2313	1.2385	1.0972	1.1288	1.1300	6.6
Endosulfan sulfate	1.0081	0.9769	0.9505	1.0794	1.0964	0.9490	0.9887	1.0070	5.9
4,4'-DDT	0.9205	0.9418	0.9380	1.0881	1.1644	1.0220	1.0680	1.0204	9.0
Methoxychlor	0.5388	0.5292	0.4980	0.5373	0.5136	0.4445	0.4604	0.5031	7.5
Endrin ketone	1.3875	1.3074	1.2642	1.4047	1.3878	1.2071	1.2524	1.3159	6.0
Endrin aldehyde	0.9506	0.9349	0.9054	1.0116	1.0079	0.8770	0.9054	0.9418	5.5
gamma-Chlordane	1.2160	1.2144	1.1946	1.2208	1.2445	1.1991	1.2499	1.2199	1.7
alpha-Chlordane	1.1516	1.1536	1.1326	1.1548	1.1724	1.1252	1.1710	1.1516	1.5
Hexachlorobutadiene	1.7652	1.7655	1.7761	1.7628	1.7803	1.6360	1.7380	1.7463	2.9
Hexachlorobenzene	1.4726	1.4504	1.3982	1.3968	1.3768	1.2913	1.3369	1.3890	4.5
Tetrachloro-m-xylene	1.4562	1.3905	1.3422	1.3452	1.3148	1.2233	1.2450	1.3310	6.0
Decachlorobiphenyl	1.2043	1.1844	1.1286	1.2085	1.1687	1.0181	1.0476	1.1372	6.7

FORM VI PEST-2

6E
8081 PESTICIDE INITIAL CALIBRATION

Lab Name: ANALYTICAL RESOURCES INC Client: FLOYD-SNIDER

ARI Job No.: WC32 Project: POB-HARRIS

GC Column: STX-CLP2 ID: 0.53 (mm) Instrument ID: ECD6

Calibration Date: 12/13/12

COMPOUND	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	MEAN	R^2 %RSD
	CALIBRATION FACTORS								
alpha-BHC	1.5528	1.6699	1.7255	1.8239	1.8816	1.7611	1.8638	1.7541	6.6
beta-BHC	0.6159	0.6335	0.6273	0.6468	0.7001	0.6433	0.6810	0.6497	4.6
delta-BHC	1.0209	1.1097	1.1602	1.2847	1.4543	1.3872	1.4950	1.2731	14.3
gamma-BHC (Lindane)	1.2995	1.3864	1.4206	1.5034	1.5940	1.4826	1.5723	1.4655	7.1
Heptachlor	1.4143	1.4831	1.4816	1.5196	1.5425	1.3680	1.3384	1.4496	5.3
Aldrin	1.2659	1.3515	1.3690	1.4326	1.4457	1.3510	1.3539	1.3671	4.4
Heptachlor epoxide b	1.1877	1.2230	1.2222	1.2652	1.2788	1.1759	1.1682	1.2173	3.5
Endosulfan I	1.1245	1.1490	1.1473	1.1762	1.1698	1.0835	1.0730	1.1319	3.6
Dieldrin	1.1502	1.2026	1.2163	1.2530	1.2285	1.1136	1.1036	1.1811	5.0
4,4'-DDE	1.1641	1.2215	1.2195	1.2408	1.2027	1.0959	1.0985	1.1776	5.1
Endrin	1.5188	1.5709	1.5585	1.7174	1.7272	1.4350	1.4211	1.5641	7.8
Endosulfan II	1.6542	1.7085	1.6986	1.9294	1.8618	1.5706	1.5564	1.7114	8.2
4,4'-DDD	1.5286	1.6154	1.6307	1.8087	1.7822	1.5371	1.5599	1.6375	7.0
Endosulfan sulfate	1.3723	1.3811	1.3681	1.5105	1.5218	1.3082	1.3366	1.3998	6.0
4,4'-DDT	1.2506	1.3191	1.3270	1.4981	1.5409	1.3339	1.3891	1.3798	7.6
Methoxychlor	0.6273	0.6271	0.5897	0.6166	0.5760	0.4703	0.4552	0.5660	12.9
Endrin ketone	1.5800	1.5939	1.5693	1.6949	1.6611	1.4323	1.4575	1.5698	6.2
Endrin aldehyde	1.3228	1.3338	1.3156	1.4352	1.4217	1.2159	1.2363	1.3259	6.3
gamma-Chlordane	1.1981	1.2433	1.2356	1.2784	1.2980	1.2147	1.2265	1.2421	2.8
alpha-Chlordane	1.1042	1.1305	1.1271	1.1656	1.1840	1.1130	1.1373	1.1374	2.5
Hexachlorobutadiene	1.5168	1.5764	1.5572	1.5606	1.6436	1.4091	1.4585	1.5317	5.1
Hexachlorobenzene	1.7985	1.8592	1.8579	1.9314	1.9604	1.8350	1.8866	1.8756	3.0
Tetrachloro-m-xylene	1.3965	1.4440	1.4341	1.4570	1.4218	1.2979	1.3071	1.3940	4.7
Decachlorobiphenyl	1.6671	1.6647	1.6070	1.7349	1.7165	1.4864	1.5539	1.6329	5.5

FORM VI PEST-2

7E

8081 DDT/ENDRIN BREAKDOWN VERIFICATION SUMMARY

Lab ID: DS   ARI Job No.:

Analysis Date: 14-FEB-2013 11:59   Init. Calib. Date: 13-DEC-2012

GC Column: STX-CLP1 ID: 0.53(mm)

COMPOUND	RT	AREA
4,4'-DDE	5.991	1541
Endrin	6.513	5650432
4,4'-DDD	6.589	436753
4,4'-DDT	6.835	5314587
Endrin ketone	7.740	273688
Endrin aldehyde	7.100	68103

DDT Percent Breakdown = 7.6 %
((1541+436753) * 100)/(1541+436753+5314587)

Endrin Percent Breakdown = 5.7 %
((68103+273688) * 100)/(68103+273688+5650432)

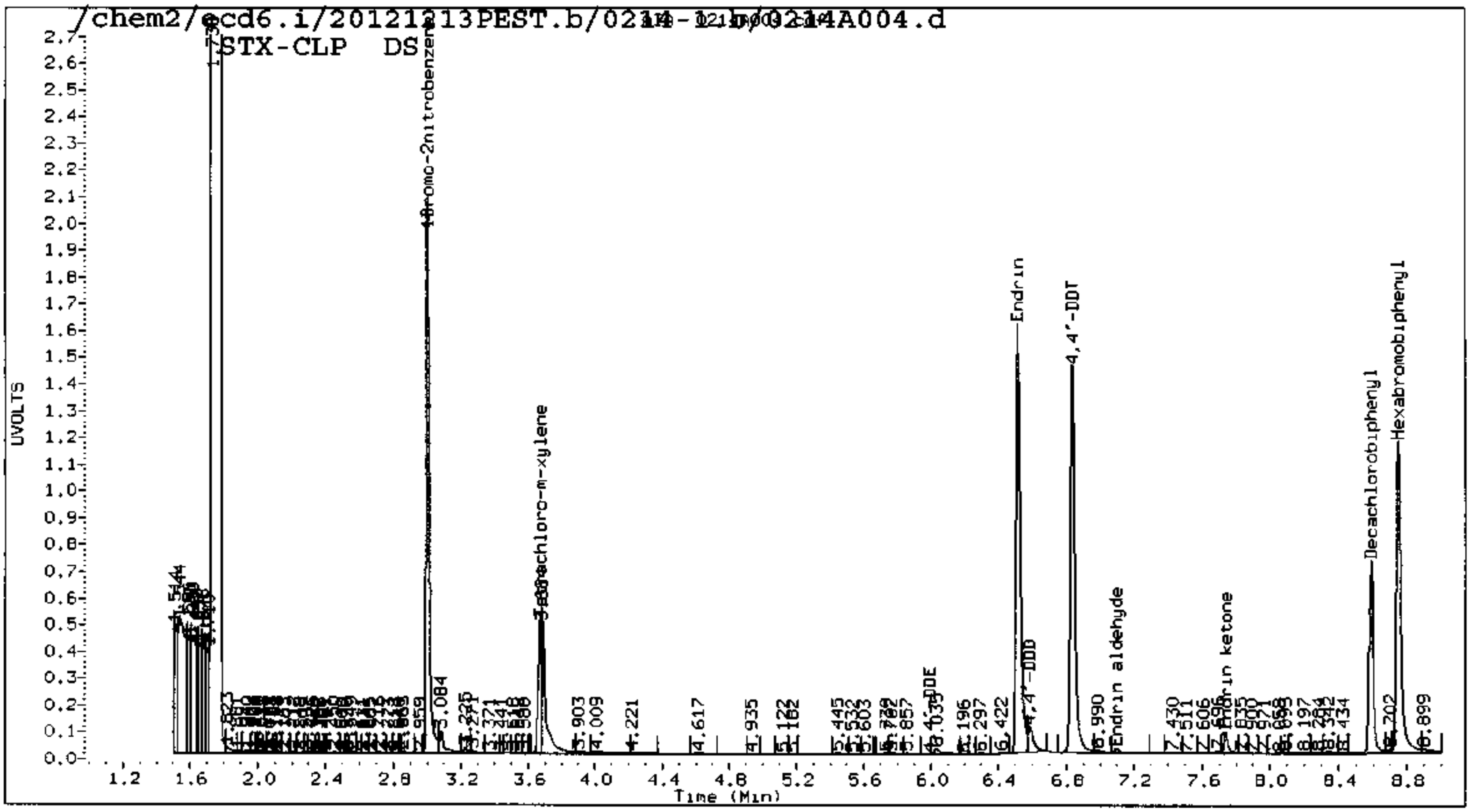
GC Column: STX-CLP2 ID: 0.53(mm)

COMPOUND	RT	AREA
4,4'-DDE	6.736	596500
Endrin	7.201	27020646
4,4'-DDD	7.274	2365761
4,4'-DDT	7.555	25310019
Endrin ketone	8.421	1171654
Endrin aldehyde	7.691	350696

DDT Percent Breakdown = 10.5 %
((596500+2365761) * 100)/(596500+2365761+25310019)

Endrin Percent Breakdown = 5.3 %
((350696+1171654) * 100)/(350696+1171654+27020646)

Form VII Pest-1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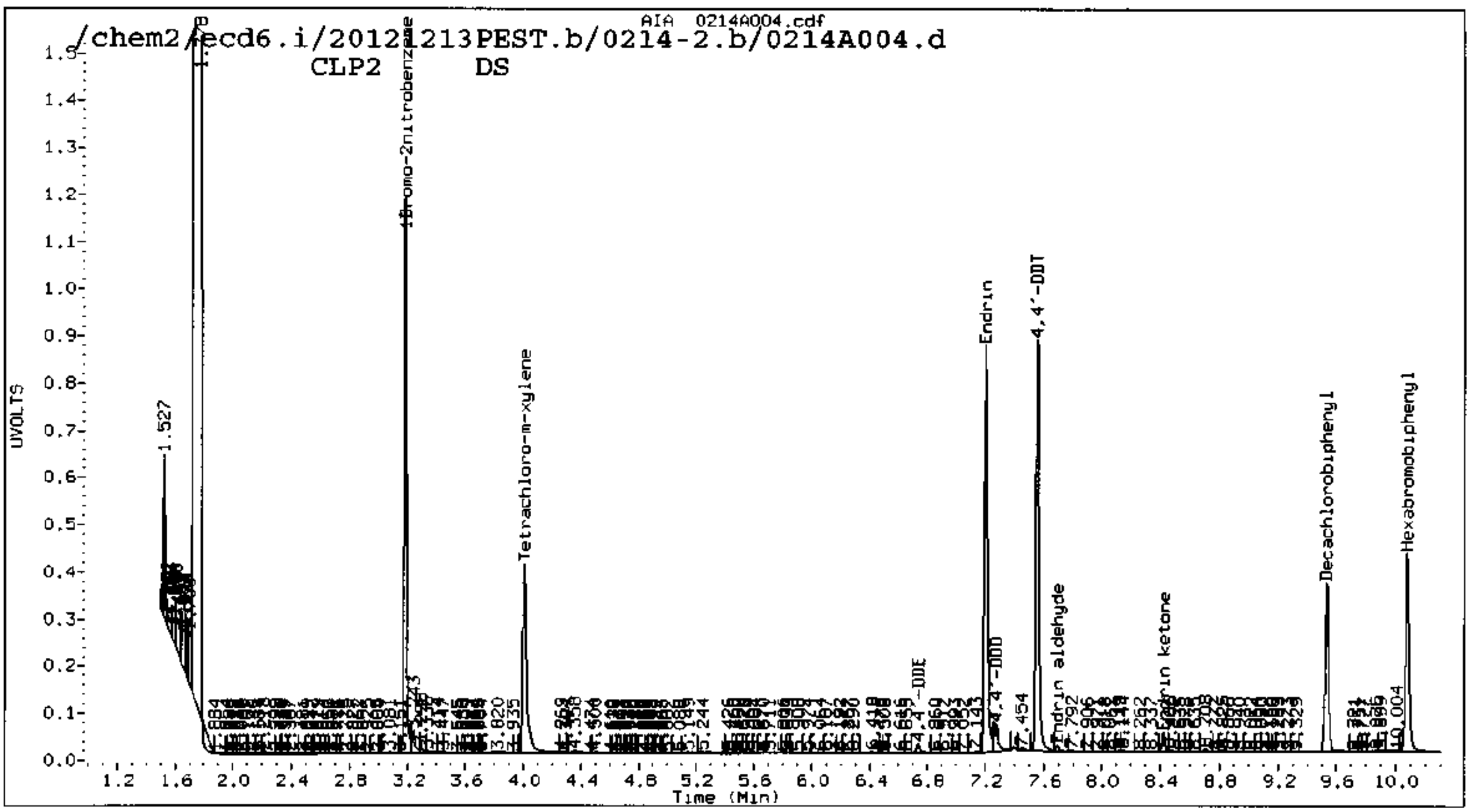
STX-CLP DS
UVOLTS
Time (Min)
1-Bromo-2nitrobenzene
Tetrachloro-m-xylene
Endrin
4,4'-DDT
4,4'-DDE
4,4'-DDD
Endrin aldehyde
Endrin ketone
Decachlorobiphenyl
Hexabromobiphenyl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CLP2 DS
UVOLTS
Time (Min)
1-Bromo-2nitrobenzene
Tetrachloro-m-xylene
Endrin
4,4'-DDT
4,4'-DDE
4,4'-DDD
Endrin aldehyde
Endrin ketone
Decachlorobiphenyl
Hexabromobiphenyl

7E

8081 PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: FLOYD-SNIDER

ARI Job No.: WC32 Project: POB-HARRIS

GC Column: STX-CLP1 ID: 0.53 (mm)

Init. Calib. Date: 12/13/12

Lab Ccal ID: INDAE Date/Time Analyzed: 02/14/13,1217

PEST MIX COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/L)	NOM AMOUNT (ug/L)	%D
alpha-BHC	4.14	4.08	4.18	20.6	20.0	3.2
beta-BHC	4.53	4.50	4.60	19.4	20.0	-3.2
delta-BHC	4.69	4.66	4.76	19.9	20.0	-0.3
gamma-BHC (Lindane)	4.41	4.36	4.46	19.9	20.0	-0.6
Heptachlor	4.84	4.79	4.89	20.4	20.0	2.2
Aldrin	5.12	5.07	5.17	19.4	20.0	-2.9
Heptachlor epoxide b	5.70	5.65	5.75	19.1	20.0	-4.6
Endosulfan I	6.07	6.02	6.12	19.9	20.0	-0.6
Dieldrin	6.29	6.24	6.34	39.1	40.0	-2.3
4,4'-DDE	6.03	5.96	6.06	38.9	40.0	-2.6
Endrin	6.51	6.46	6.56	41.6	40.0	4.0
Endosulfan II	6.72	6.67	6.77	41.1	40.0	2.8
4,4'-DDD	6.58	6.52	6.62	41.8	40.0	4.4
Endosulfan sulfate	7.48	7.44	7.54	41.0	40.0	2.6
4,4'-DDT	6.83	6.77	6.87	42.8	40.0	6.9
Methoxychlor	7.26	7.20	7.30	200.7	200.0	0.3
Endrin ketone	7.74	7.69	7.79	41.3	40.0	3.2
Endrin aldehyde	7.10	7.05	7.15	40.9	40.0	2.4
gamma-Chlordane	5.82	5.77	5.87	18.9	20.0	-5.7
alpha-Chlordane	5.94	5.89	5.99	19.0	20.0	-5.0
Hexachlorobutadiene	2.20	2.15	2.25	19.4	20.0	-2.8
Hexachlorobenzene	4.02	3.95	4.05	18.4	20.0	-8.2
Tetrachloro-m-xylene	3.67	3.61	3.71	37.6	40.0	-6.1
Decachlorobiphenyl	8.59	8.54	8.64	38.6	40.0	-3.6

7E
8081 PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: FLOYD-SNIDER

ARI Job No.: WC32 Project: POB-HARRIS

GC Column: STX-CLP2 ID: 0.53 (mm)

Init. Calib. Date: 12/13/12

Lab Ccal ID: INDAE Date/Time Analyzed: 02/14/13,1217

PEST MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ug/L)	NOM AMOUNT (ug/L)	%D
alpha-BHC	4.57	4.52	4.62	21.3	20.0	6.6
beta-BHC	5.01	4.95	5.05	21.4	20.0	7.2
delta-BHC	5.32	5.25	5.35	20.3	20.0	1.5
gamma-BHC (Lindane)	4.92	4.87	4.97	20.7	20.0	3.6
Heptachlor	5.37	5.32	5.42	22.4	20.0	11.9
Aldrin	5.71	5.66	5.76	20.2	20.0	1.0
Heptachlor epoxide b	6.27	6.22	6.32	21.0	20.0	4.9
Endosulfan I	6.65	6.61	6.71	20.9	20.0	4.5
Dieldrin	6.91	6.86	6.96	42.2	40.0	5.6
4,4'-DDE	6.73	6.68	6.78	40.9	40.0	2.3
Endrin	7.20	7.15	7.25	39.3	40.0	-1.8
Endosulfan II	7.39	7.34	7.44	38.1	40.0	-4.8
4,4'-DDD	7.27	7.21	7.31	38.7	40.0	-3.1
Endosulfan sulfate	7.93	7.89	7.99	39.7	40.0	-0.8
4,4'-DDT	7.55	7.50	7.60	40.3	40.0	0.8
Methoxychlor	8.14	8.09	8.19	180.5	200.0	-9.8
Endrin ketone	8.42	8.37	8.47	39.4	40.0	-1.4
Endrin aldehyde	7.69	7.64	7.74	39.2	40.0	-2.1
gamma-Chlordane	6.45	6.40	6.50	20.7	20.0	3.2
alpha-Chlordane	6.59	6.54	6.64	20.4	20.0	2.0
Hexachlorobutadiene	2.36	2.31	2.41	20.1	20.0	0.3
Hexachlorobenzene	4.46	4.40	4.50	19.5	20.0	-2.3
Tetrachloro-m-xylene	4.00	3.95	4.05	39.7	40.0	-0.7
Decachlorobiphenyl	9.53	9.49	9.59	38.4	40.0	-4.1

7E
8081 DDT/ENDRIN BREAKDOWN VERIFICATION SUMMARY

Lab ID: DS   ARI Job No.: WD35

Analysis Date: 14-FEB-2013 16:09   Init. Calib. Date: 13-DEC-2012

GC Column: STX-CLP1 ID: 0.53(mm)

COMPOUND	RT	AREA
4,4'-DDE	6.039	88733
Endrin	6.513	4985849
4,4'-DDD	6.590	394119
4,4'-DDT	6.835	4559358
Endrin ketone	7.740	320735
Endrin aldehyde	7.100	63407

DDT Percent Breakdown = 9.6 %
((88733+394119) * 100)/(88733+394119+4559358)

Endrin Percent Breakdown = 7.2 %
((63407+320735) * 100)/(63407+320735+4985849)

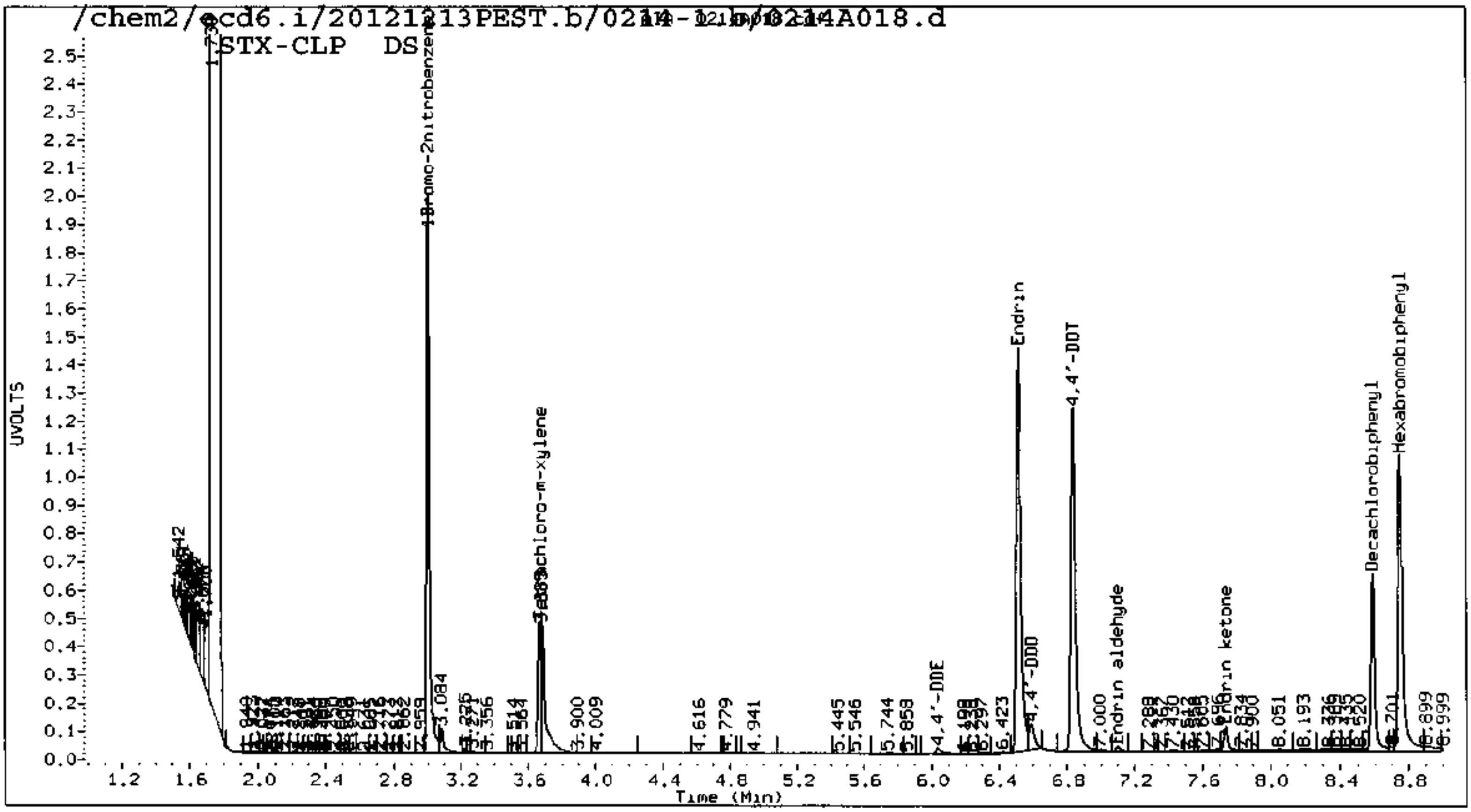
GC Column: STX-CLP2 ID: 0.53(mm)

COMPOUND	RT	AREA
4,4'-DDE	6.738	558749
Endrin	7.201	19689488
4,4'-DDD	7.275	1619124
4,4'-DDT	7.555	17571122
Endrin ketone	8.421	1258091
Endrin aldehyde	7.692	317835

DDT Percent Breakdown = 11.0 %
((558749+1619124) * 100)/(558749+1619124+17571122)

Endrin Percent Breakdown = 7.4 %
((317835+1258091) * 100)/(317835+1258091+19689488)

Form VII Pest-1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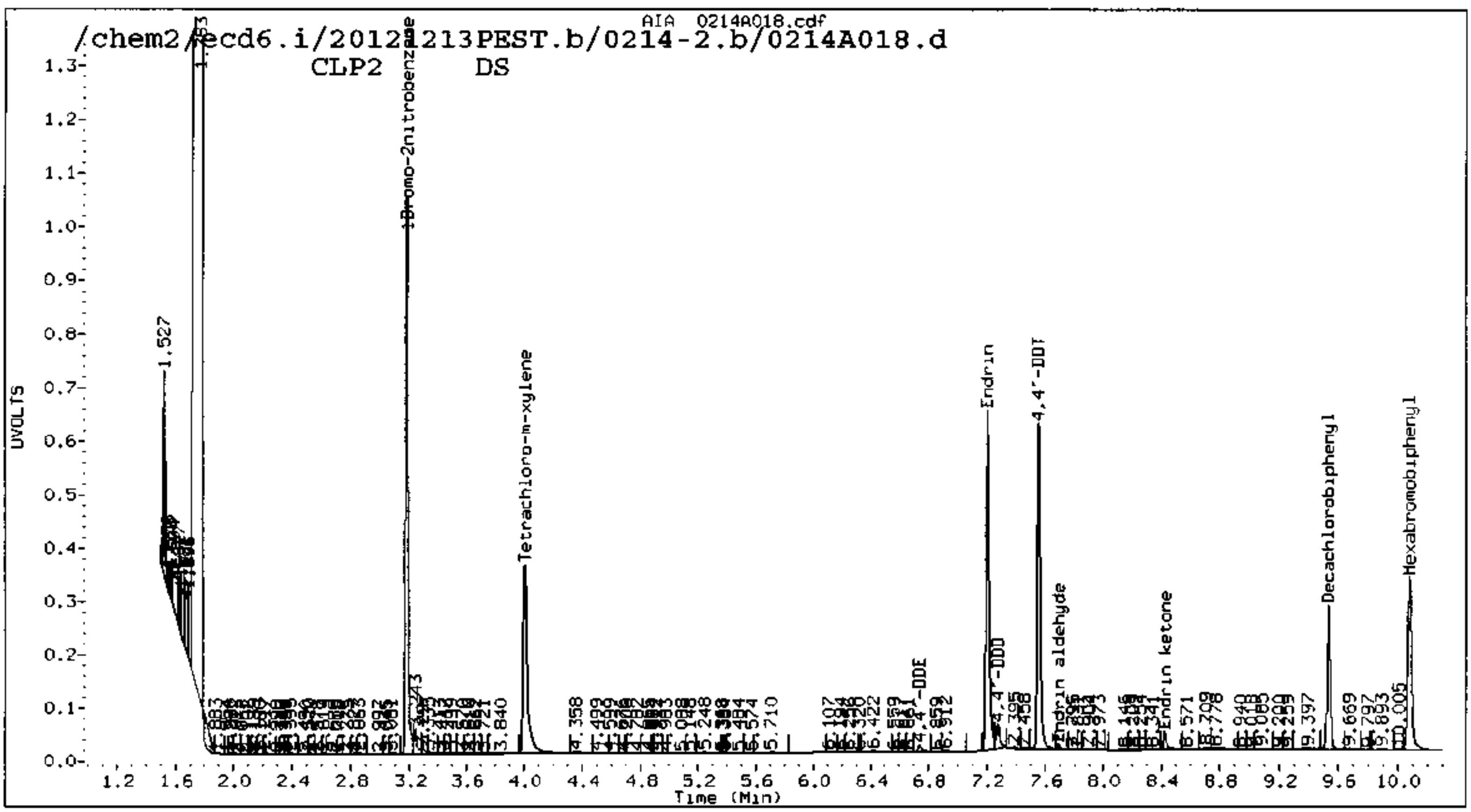
STX-CLP DS
UVOLTS
Time (Min)
1-Bromo-2nitrobenzene
Tetrachloro-m-xylene
4,4'-DDE
4,4'-DDD
Endrin
4,4'-DDT
Endrin aldehyde
Endrin ketone
Decachlorobiphenyl
Hexabromobiphenyl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CLP2 DS
UVOLTS
Time (Min)
1-Bromo-2nitrobenzene
Tetrachloro-m-xylene
4,4'-DDE
4,4'-DDD
Endrin
4,4'-DDT
Endrin aldehyde
Endrin ketone
Decachlorobiphenyl
Hexabromobiphenyl

7E

8081 PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD-SNIDER

ARI Job No.: WC32   Project: POB-HARRIS

GC Column: STX-CLP1 ID: 0.53 (mm)

Init. Calib. Date: 12/13/12

Lab Ccal ID: INDAE   Date/Time Analyzed: 02/14/13,1626

PEST MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
alpha-BHC	4.14	4.08	4.18	20.7	20.0	3.4
beta-BHC	4.53	4.50	4.60	19.3	20.0	-3.4
delta-BHC	4.69	4.66	4.76	19.6	20.0	-2.2
gamma-BHC (Lindane)	4.41	4.36	4.46	19.7	20.0	-1.7
Heptachlor	4.84	4.79	4.89	20.3	20.0	1.7
Aldrin	5.12	5.07	5.17	19.2	20.0	-4.0
Heptachlor epoxide b	5.70	5.65	5.75	18.7	20.0	-6.6
Endosulfan I	6.07	6.02	6.12	20.2	20.0	1.1
Dieldrin	6.29	6.24	6.34	38.7	40.0	-3.3
4,4'-DDE	6.03	5.96	6.06	36.9	40.0	-7.8
Endrin	6.51	6.46	6.56	37.6	40.0	-6.0
Endosulfan II	6.72	6.67	6.77	37.6	40.0	-6.1
4,4'-DDD	6.58	6.52	6.62	38.0	40.0	-4.9
Endosulfan sulfate	7.48	7.44	7.54	37.3	40.0	-6.8
4,4'-DDT	6.83	6.77	6.87	38.1	40.0	-4.8
Methoxychlor	7.26	7.20	7.30	183.3	200.0	-8.4
Endrin ketone	7.74	7.69	7.79	38.1	40.0	-4.6
Endrin aldehyde	7.10	7.05	7.15	36.7	40.0	-8.1
gamma-Chlordane	5.82	5.77	5.87	18.4	20.0	-8.0
alpha-Chlordane	5.94	5.89	5.99	18.6	20.0	-6.8
Hexachlorobutadiene	2.20	2.15	2.25	19.5	20.0	-2.4
Hexachlorobenzene	4.02	3.95	4.05	18.1	20.0	-9.5
Tetrachloro-m-xylene	3.67	3.61	3.71	37.4	40.0	-6.4
Decachlorobiphenyl	8.59	8.54	8.64	38.5	40.0	-3.9

FORM VII PEST-2

8081 PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD-SNIDER

ARI Job No.: WC32   Project: POB-HARRIS

GC Column: STX-CLP2 ID: 0.53 (mm)

Init. Calib. Date: 12/13/12

Lab Ccal ID: INDAE   Date/Time Analyzed: 02/14/13,1626

PEST MIX COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ug/L)	NOM AMOUNT (ug/L)	%D
alpha-BHC	4.57	4.52	4.62	21.0	20.0	5.2
beta-BHC	5.01	4.95	5.05	20.8	20.0	3.8
delta-BHC	5.32	5.25	5.35	18.9	20.0	-5.3
gamma-BHC (Lindane)	4.92	4.87	4.97	19.8	20.0	-1.0
Heptachlor	5.37	5.32	5.42	21.5	20.0	7.4
Aldrin	5.71	5.66	5.76	19.0	20.0	-5.1
Heptachlor epoxide b	6.27	6.22	6.32	18.7	20.0	-6.6
Endosulfan I	6.65	6.61	6.71	18.3	20.0	-8.3
Dieldrin	6.91	6.86	6.96	36.3	40.0	-9.1
4,4'-DDE	6.73	6.68	6.78	35.6	40.0	-11.0
Endrin	7.20	7.15	7.25	38.1	40.0	-4.8
Endosulfan II	7.39	7.34	7.44	36.4	40.0	-8.9
4,4'-DDD	7.27	7.21	7.31	37.6	40.0	-5.9
Endosulfan sulfate	7.93	7.89	7.99	33.4	40.0	-16.6
4,4'-DDT	7.55	7.50	7.60	36.7	40.0	-8.1
Methoxychlor	8.14	8.09	8.19	177.4	200.0	-11.3
Endrin ketone	8.42	8.37	8.47	35.7	40.0	-10.8
Endrin aldehyde	7.69	7.64	7.74	35.3	40.0	-11.7
gamma-Chlordane	6.45	6.40	6.50	18.5	20.0	-7.5
alpha-Chlordane	6.59	6.54	6.64	17.8	20.0	-11.1
Hexachlorobutadiene	2.36	2.31	2.41	19.8	20.0	-1.0
Hexachlorobenzene	4.46	4.40	4.50	18.9	20.0	-5.2
Tetrachloro-m-xylene	4.00	3.95	4.05	39.7	40.0	-0.7
Decachlorobiphenyl	9.53	9.49	9.59	36.6	40.0	-8.4

7E

8081 DDT/ENDRIN BREAKDOWN VERIFICATION SUMMARY

Lab ID: DS ARI Job No.: WD35

Analysis Date: 14-FEB-2013 18:49 Init. Calib. Date: 13-DEC-2012

GC Column: STX-CLP1 ID: 0.53(mm)

COMPOUND	RT	AREA
4,4'-DDE	6.026	50282
Endrin	6.510	4159996
4,4'-DDD	6.578	753320
4,4'-DDT	6.827	2774461
Endrin ketone	7.736	333421
Endrin aldehyde	7.095	37582

DDT Percent Breakdown = 22.5 %
((50282+753320) * 100)/(50282+753320+2774461)

Endrin Percent Breakdown = 8.2 %
((37582+333421) * 100)/(37582+333421+4159996)

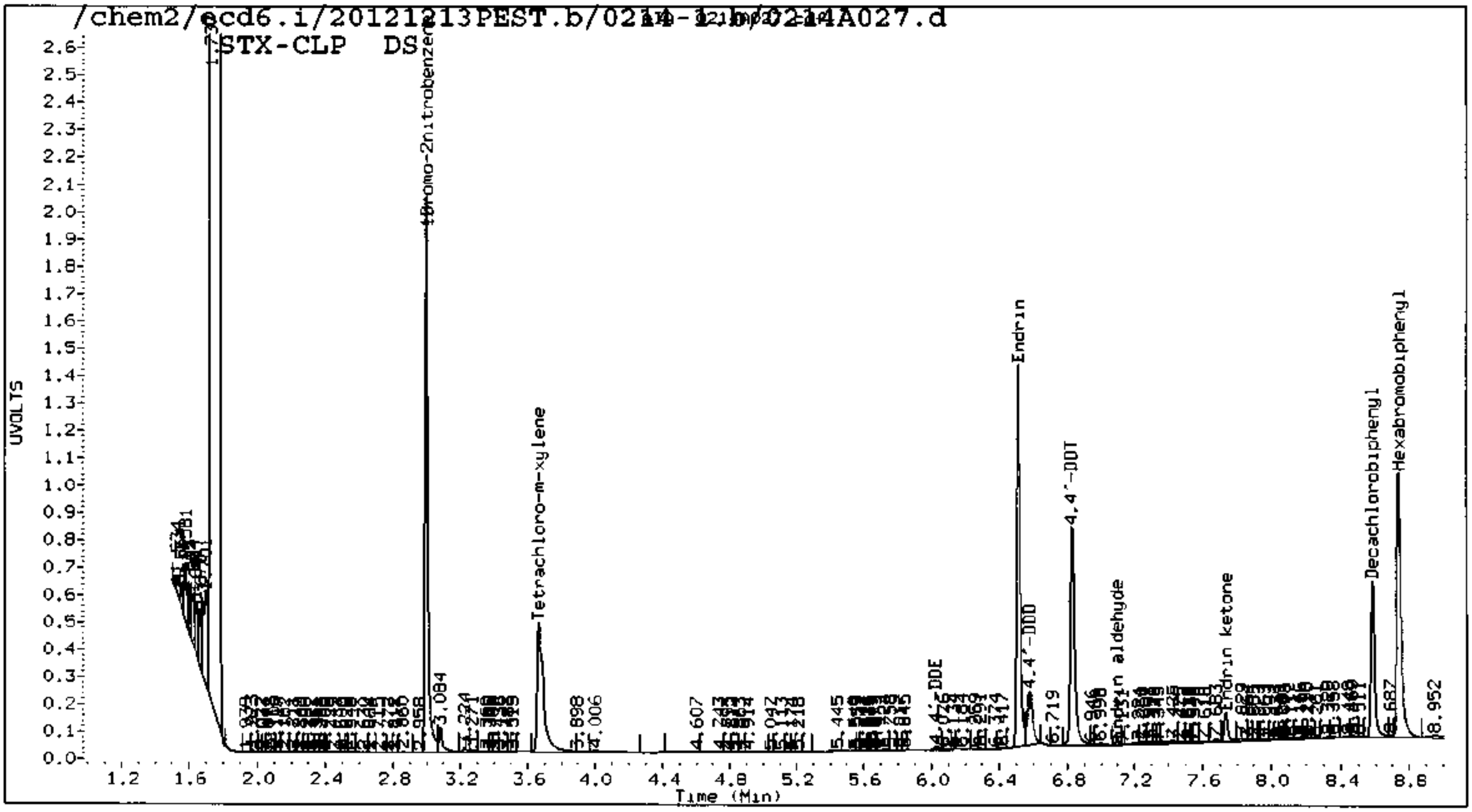
GC Column: STX-CLP2 ID: 0.53(mm)

COMPOUND	RT	AREA
4,4'-DDE	6.731	144086
Endrin	7.200	11893676
4,4'-DDD	7.269	2137549
4,4'-DDT	7.552	7823584
Endrin ketone	8.419	2392210
Endrin aldehyde	7.688	144728

DDT Percent Breakdown = 22.6 %
((144086+2137549) * 100)/(144086+2137549+7823584)

Endrin Percent Breakdown = 17.6 %
((144728+2392210) * 100)/(144728+2392210+11893676)

Form VII Pest-1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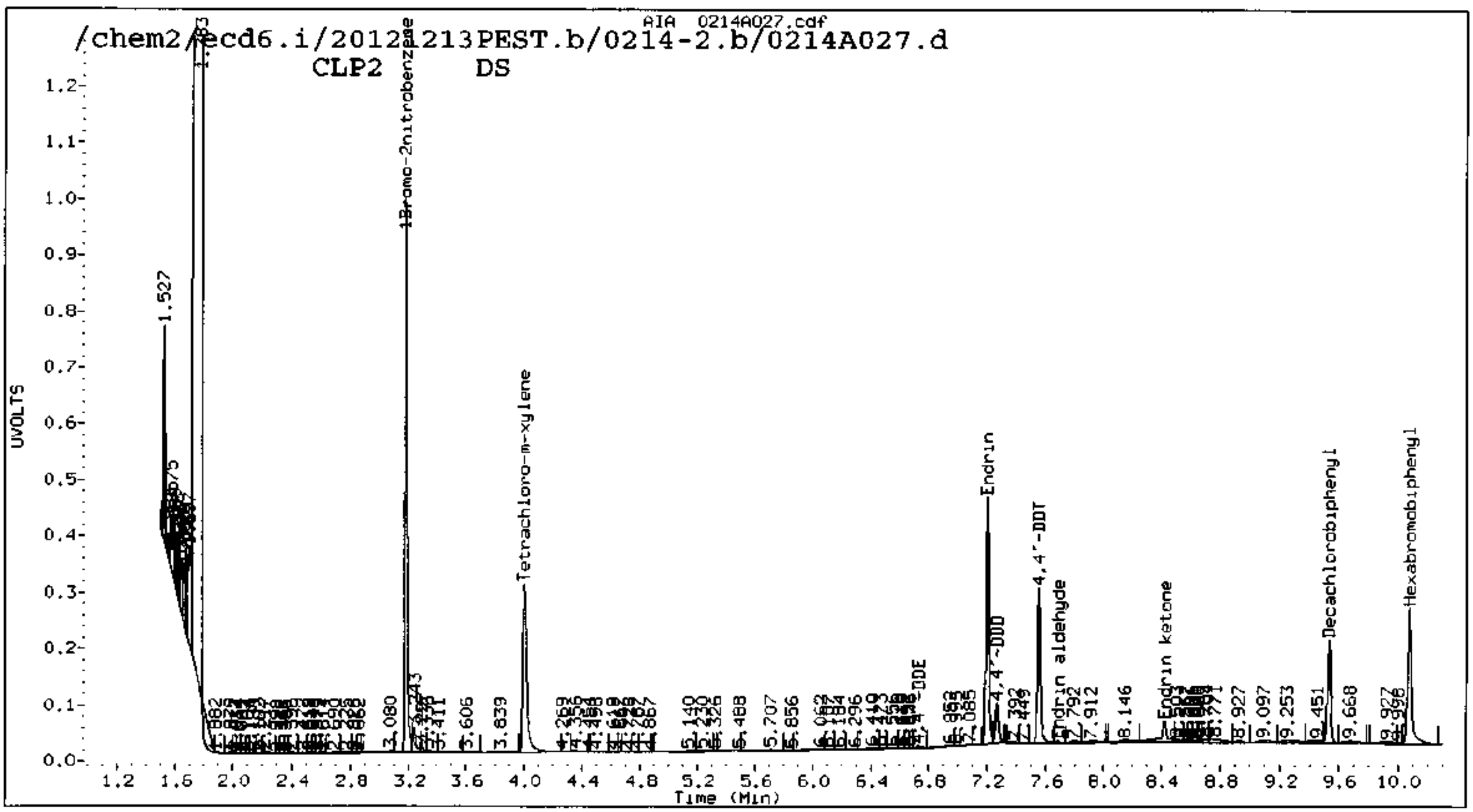
STX-CLP DS
UVOLTS
Time (Min)
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Endrin
4,4'-DDD
4,4'-DDT
Endrin aldehyde
Endrin ketone
Decachlorobiphenyl
Hexabromobiphenyl
4,4'-DDE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CLP2 DS
UVOLTS
Time (Min)
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Endrin
4,4'-DDD
4,4'-DDT
Endrin aldehyde
Endrin ketone
Decachlorobiphenyl
Hexabromobiphenyl
1.527

7E

8081 PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: FLOYD-SNIDER

ARI Job No.: WC32 Project: POB-HARRIS

GC Column: STX-CLP1 ID: 0.53 (mm)

Init. Calib. Date: 12/13/12

Lab Ccal ID: INDAE Date/Time Analyzed: 02/14/13,1907

PEST MIX COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D	
alpha-BHC	4.13	4.08	4.18	19.6	20.0	-2.0	
beta-BHC	4.51	4.50	4.60	18.5	20.0	-7.3	
delta-BHC	4.68	4.66	4.76	18.6	20.0	-6.8	
gamma-BHC (Lindane)	4.41	4.36	4.46	18.8	20.0	-5.9	
Heptachlor	4.84	4.79	4.89	18.2	20.0	-8.8	
Aldrin	5.12	5.07	5.17	18.3	20.0	-8.6	
Heptachlor epoxide b	5.69	5.65	5.75	17.8	20.0	-11.1	
Endosulfan I	6.07	6.02	6.12	18.4	20.0	-8.0	
Dieldrin	6.29	6.24	6.34	35.7	40.0	-10.7	
4,4'-DDE	6.02	5.96	6.06	35.5	40.0	-11.2	
Endrin	6.51	6.46	6.56	37.1	40.0	-7.3	
Endosulfan II	6.72	6.67	6.77	36.3	40.0	-9.2	
4,4'-DDD	6.57	6.52	6.62	41.1	40.0	2.8	
Endosulfan sulfate	7.48	7.44	7.54	35.2	40.0	-12.0	
4,4'-DDT	6.82	6.77	6.87	29.7	40.0	-25.8	<-
Methoxychlor	7.25	7.20	7.30	156.5	200.0	-21.7	<-
Endrin ketone	7.73	7.69	7.79	33.9	40.0	-15.2	
Endrin aldehyde	7.09	7.05	7.15	34.0	40.0	-15.0	
gamma-Chlordane	5.82	5.77	5.87	17.5	20.0	-12.7	
alpha-Chlordane	5.94	5.89	5.99	17.7	20.0	-11.5	
Hexachlorobutadiene	2.20	2.15	2.25	19.5	20.0	-2.6	
Hexachlorobenzene	4.01	3.95	4.05	17.9	20.0	-10.5	
Tetrachloro-m-xylene	3.67	3.61	3.71	36.3	40.0	-9.3	
Decachlorobiphenyl	8.58	8.54	8.64	36.4	40.0	-9.0	

7E

8081 PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD-SNIDER

ARI Job No.: WC32   Project: POB-HARRIS

GC Column: STX-CLP2 ID: 0.53 (mm)

Init. Calib. Date: 12/13/12

Lab Ccal ID: INDAE   Date/Time Analyzed: 02/14/13,1907

PEST MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ug/L)	NOM AMOUNT (ug/L)	%D	
alpha-BHC	4.57	4.52	4.62	18.2	20.0	-9.0	
beta-BHC	5.01	4.95	5.05	17.1	20.0	-14.3	
delta-BHC	5.31	5.25	5.35	15.7	20.0	-21.2	<-
gamma-BHC (Lindane)	4.92	4.87	4.97	16.5	20.0	-17.4	
Heptachlor	5.37	5.32	5.42	16.4	20.0	-18.2	
Aldrin	5.71	5.66	5.76	15.2	20.0	-23.9	<-
Heptachlor epoxide b	6.27	6.22	6.32	13.6	20.0	-31.8	<-
Endosulfan I	6.65	6.61	6.71	13.4	20.0	-32.8	<-
Dieldrin	6.91	6.86	6.96	25.9	40.0	-35.2	<-
4,4'-DDE	6.73	6.68	6.78	25.7	40.0	-35.6	<-
Endrin	7.20	7.15	7.25	37.6	40.0	-5.9	
Endosulfan II	7.39	7.34	7.44	36.3	40.0	-9.3	
4,4'-DDD	7.27	7.21	7.31	40.6	40.0	1.5	
Endosulfan sulfate	7.93	7.89	7.99	34.5	40.0	-13.6	
4,4'-DDT	7.55	7.50	7.60	29.4	40.0	-26.4	<-
Methoxychlor	8.13	8.09	8.19	166.8	200.0	-16.6	
Endrin ketone	8.42	8.37	8.47	34.1	40.0	-14.7	
Endrin aldehyde	7.69	7.64	7.74	32.8	40.0	-18.1	
gamma-Chlordane	6.45	6.40	6.50	13.6	20.0	-32.2	<-
alpha-Chlordane	6.59	6.54	6.64	13.1	20.0	-34.2	<-
Hexachlorobutadiene	2.36	2.31	2.41	19.7	20.0	-1.5	
Hexachlorobenzene	4.46	4.40	4.50	17.0	20.0	-14.9	
Tetrachloro-m-xylene	4.00	3.95	4.05	37.2	40.0	-6.9	
Decachlorobiphenyl	9.53	9.49	9.59	36.5	40.0	-8.7	

7E

8081 DDT/ENDRIN BREAKDOWN VERIFICATION SUMMARY

YB 02/15/13

Lab ID: DS ARI Job No.: WD35

Analysis Date: 14-FEB-2013 20:53 Init. Calib. Date: 13-DEC-2012

GC Column: STX-CLP1 ID: 0.53(mm)

COMPOUND	RT	AREA
4,4'-DDE	6.027	43606
Endrin	6.510	4566253
4,4'-DDD	6.580	859649
4,4'-DDT	6.828	3063456
Endrin ketone	7.736	420460
Endrin aldehyde	7.095	55211

DDT Percent Breakdown = 22.8 %
((43606+859649) * 100)/(43606+859649+3063456)

Endrin Percent Breakdown = 9.4 %
((55211+420460) * 100)/(55211+420460+4566253)

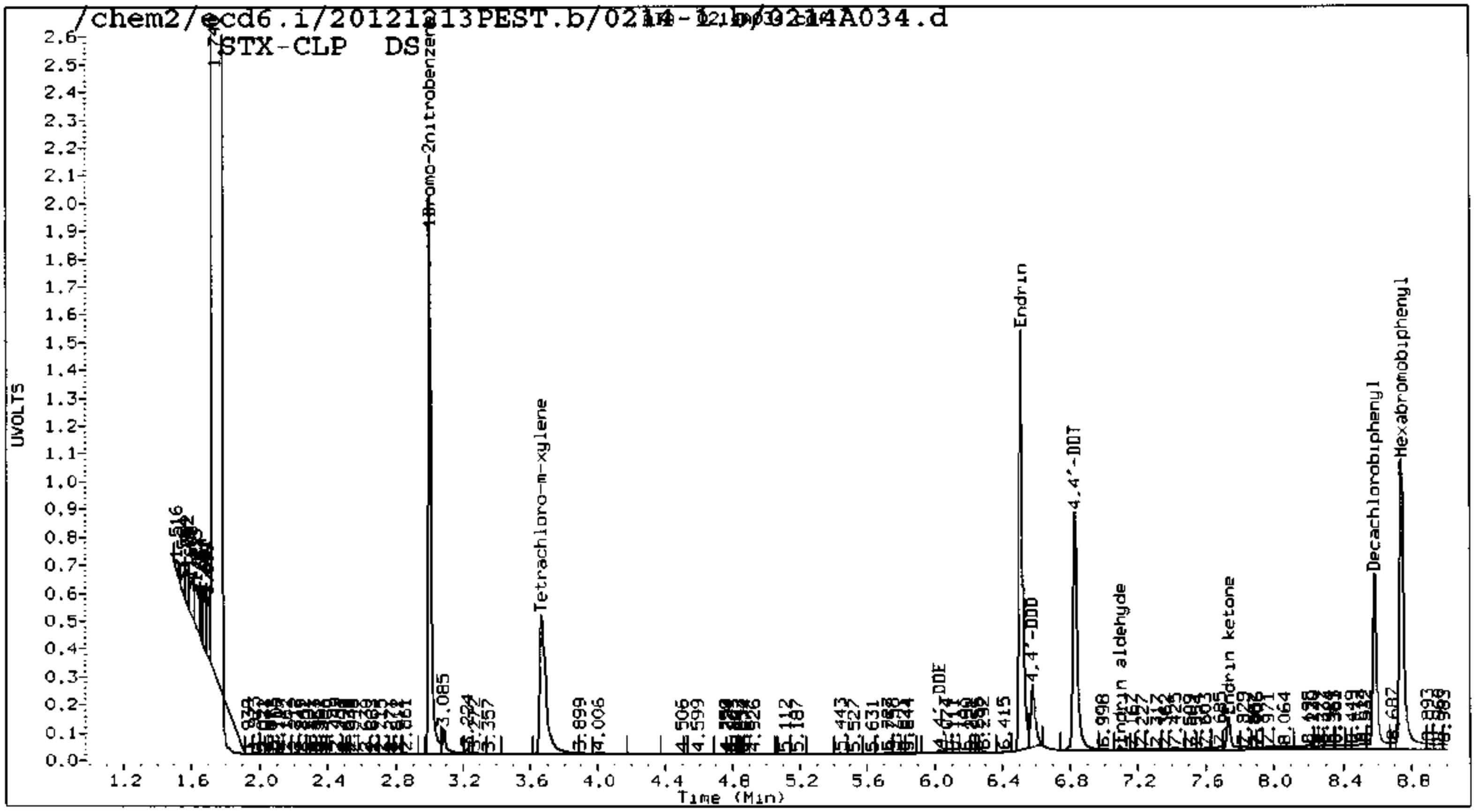
GC Column: STX-CLP2 ID: 0.53(mm)

COMPOUND	RT	AREA
4,4'-DDE	6.732	212265
Endrin	7.200	16596453
4,4'-DDD	7.270	3011262
4,4'-DDT	7.552	10496694
Endrin ketone	8.420	1302988
Endrin aldehyde	7.689	178966

DDT Percent Breakdown = 23.5 %
((212265+3011262) * 100)/(212265+3011262+10496694)

Endrin Percent Breakdown = 8.2 %
((178966+1302988) * 100)/(178966+1302988+16596453)

Form VII Pest-1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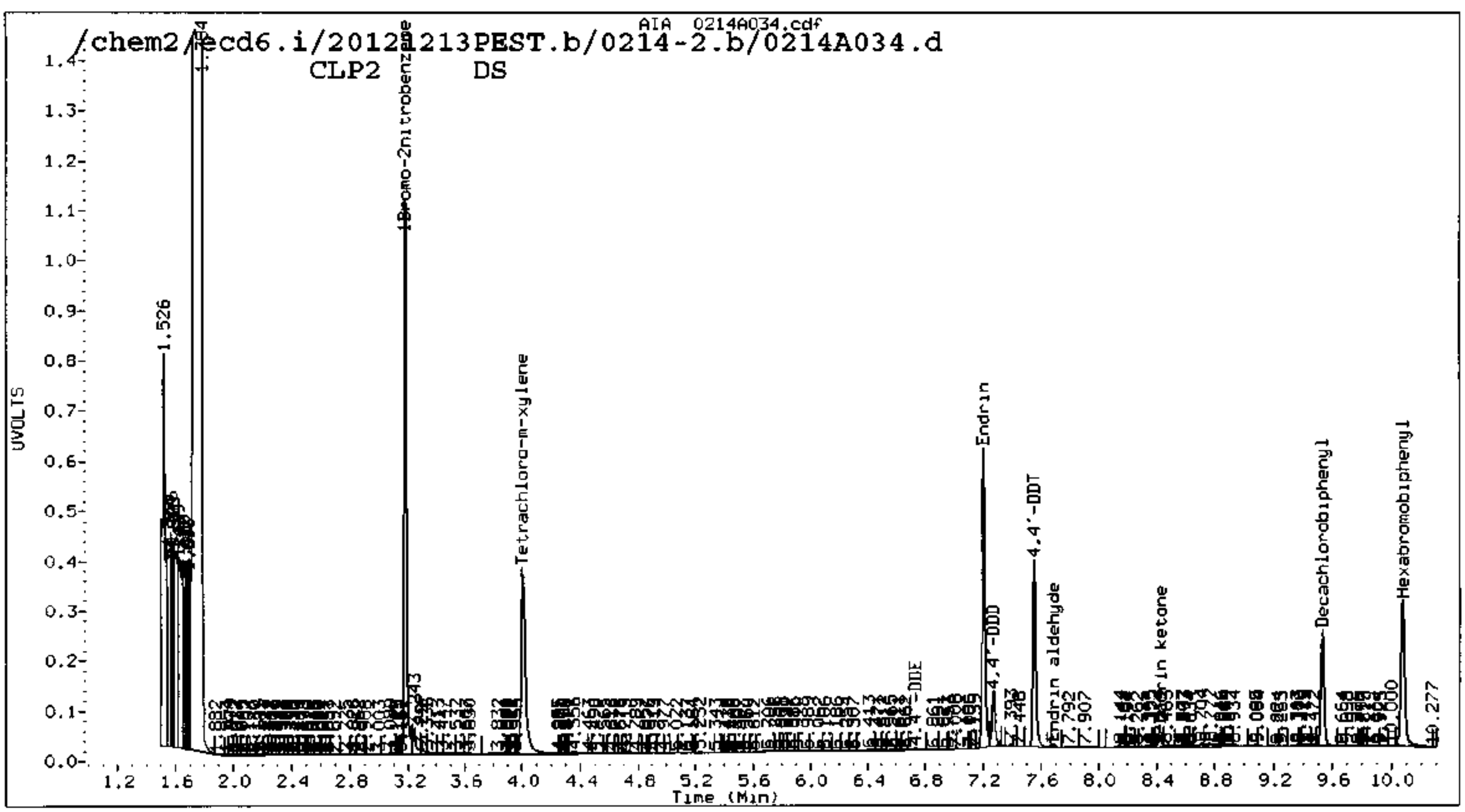
STX-CLP DS
UVOLTS
Time (Min)
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Endrin
4,4'-DDD
4,4'-DDT
Endrin aldehyde
Endrin ketone
Decachlorobiphenyl
Hexabromobiphenyl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CLP2 DS
UVOLTS
Time (Min)
1.526
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Endrin
4,4'-DDD
4,4'-DDT
Endrin aldehyde
Decachlorobiphenyl
Hexabromobiphenyl

7E

8081 PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: FLOYD-SNIDER

ARI Job No.: WC32 Project: POB-HARRIS

GC Column: STX-CLP1 ID: 0.53 (mm)

Init. Calib. Date: 12/13/12

Lab Ccal ID: INDAE Date/Time Analyzed: 02/14/13,2111

PEST MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D	
alpha-BHC	4.13	4.08	4.18	20.1	20.0	0.7	
beta-BHC	4.51	4.50	4.60	19.5	20.0	-2.5	
delta-BHC	4.68	4.66	4.76	19.6	20.0	-2.2	
gamma-BHC (Lindane)	4.41	4.36	4.46	19.3	20.0	-3.5	
Heptachlor	4.84	4.79	4.89	19.3	20.0	-3.6	
Aldrin	5.12	5.07	5.17	19.2	20.0	-4.0	
Heptachlor epoxide b	5.69	5.65	5.75	18.5	20.0	-7.5	
Endosulfan I	6.07	6.02	6.12	19.2	20.0	-4.2	
Dieldrin	6.29	6.24	6.34	37.9	40.0	-5.3	
4,4'-DDE	6.02	5.96	6.06	37.1	40.0	-7.3	
Endrin	6.51	6.46	6.56	36.5	40.0	-8.7	
Endosulfan II	6.72	6.67	6.77	35.1	40.0	-12.2	
4,4'-DDD	6.57	6.52	6.62	40.8	40.0	2.1	
Endosulfan sulfate	7.48	7.44	7.54	36.1	40.0	-9.8	
4,4'-DDT	6.82	6.77	6.87	28.1	40.0	-29.9	<-
Methoxychlor	7.25	7.20	7.30	146.5	200.0	-26.7	<-
Endrin ketone	7.73	7.69	7.79	33.8	40.0	-15.5	
Endrin aldehyde	7.09	7.05	7.15	34.9	40.0	-12.8	
gamma-Chlordane	5.82	5.77	5.87	18.3	20.0	-8.4	
alpha-Chlordane	5.94	5.89	5.99	18.5	20.0	-7.4	
Hexachlorobutadiene	2.20	2.15	2.25	19.4	20.0	-2.9	
Hexachlorobenzene	4.01	3.95	4.05	18.2	20.0	-8.9	
Tetrachloro-m-xylene	3.67	3.61	3.71	37.2	40.0	-6.9	
Decachlorobiphenyl	8.58	8.54	8.64	37.0	40.0	-7.4	

7E

8081 PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC　　Client: FLOYD-SNIDER

ARI Job No.: WC32　　Project: POB-HARRIS

GC Column: STX-CLP2 ID: 0.53 (mm)

Init. Calib. Date: 12/13/12

Lab Ccal ID: INDAE　　Date/Time Analyzed: 02/14/13,2111

PEST MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ug/L)	NOM AMOUNT (ug/L)	%D	
alpha-BHC	4.57	4.52	4.62	20.2	20.0	1.0	
beta-BHC	5.01	4.95	5.05	19.6	20.0	-1.9	
delta-BHC	5.31	5.25	5.35	18.9	20.0	-5.5	
gamma-BHC (Lindane)	4.92	4.87	4.97	19.1	20.0	-4.5	
Heptachlor	5.37	5.32	5.42	19.0	20.0	-4.8	
Aldrin	5.71	5.66	5.76	18.0	20.0	-9.8	
Heptachlor epoxide b	6.27	6.22	6.32	17.3	20.0	-13.2	
Endosulfan I	6.65	6.61	6.71	16.4	20.0	-18.0	
Dieldrin	6.91	6.86	6.96	32.9	40.0	-17.8	
4,4'-DDE	6.73	6.68	6.78	32.0	40.0	-20.1	<-
Endrin	7.20	7.15	7.25	38.8	40.0	-3.0	
Endosulfan II	7.39	7.34	7.44	38.3	40.0	-4.3	
4,4'-DDD	7.27	7.21	7.31	43.2	40.0	7.9	
Endosulfan sulfate	7.93	7.89	7.99	37.4	40.0	-6.6	
4,4'-DDT	7.55	7.50	7.60	28.9	40.0	-27.7	<-
Methoxychlor	8.13	8.09	8.19	155.8	200.0	-22.1	<-
Endrin ketone	8.42	8.37	8.47	33.8	40.0	-15.5	
Endrin aldehyde	7.69	7.64	7.74	35.5	40.0	-11.3	
gamma-Chlordane	6.45	6.40	6.50	16.8	20.0	-16.0	
alpha-Chlordane	6.59	6.54	6.64	16.3	20.0	-18.7	
Hexachlorobutadiene	2.36	2.31	2.41	19.6	20.0	-2.0	
Hexachlorobenzene	4.46	4.40	4.50	18.7	20.0	-6.3	
Tetrachloro-m-xylene	4.00	3.95	4.05	38.8	40.0	-3.0	
Decachlorobiphenyl	9.53	9.49	9.59	37.1	40.0	-7.2	

FORM 8
PESTICIDE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: FLOYD-SNIDER

ARI Job No.: WC32 Project: POB-HARRIS

GC Column: STX-CLP1 ID: 0.53(mm) Instrument ID: ECD6

Init. Calib. Date: 12/13/12

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

	IS1 AREA	RT	IS2 AREA	RT
ICAL MIDPT	4288295	3.001	3547373	8.741
UPPER LIMIT	8576590	3.051	7094746	8.791
LOWER LIMIT	2144148	2.951	1773686	8.691

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME	IS1 AREA	RT	IS2 AREA	RT
01		INDAE	12/13/12	1608	4288295	3.001	3547373	8.741
02		INDAA	12/13/12	1626	4503948	3.001	3955330	8.742
03		INDAB	12/13/12	1644	4396432	3.001	3888823	8.742
04		INDAC	12/13/12	1701	4325007	3.001	3868490	8.743
05		INDAD	12/13/12	1719	4236254	3.000	3484213	8.743
06		INDAF	12/13/12	1737	4282822	3.000	3810198	8.743
07		INDAG	12/13/12	1755	4067064	3.000	3599591	8.743
08		DS	02/14/13	1159	4932697	3.002	4373921	8.748
09		INDAE	02/14/13	1217	5009839	3.002	4171286	8.749
10	WC32MBS1	WC32MBS1	02/14/13	1235	4239631	2.998	3658933	8.726
11	WC32LCSS1	WC32LCSS1	02/14/13	1253	4381675	2.998	3765747	8.726
12	WC32LCSDS1	WC32LCSDS1	02/14/13	1311	4664363	2.998	4004051	8.726
13		DS	02/14/13	1609	4721366	3.002	3972745	8.748
14		INDAE	02/14/13	1626	4991426	3.001	4415098	8.747
15	SG-12-0-10-0	WC32A	02/14/13	1702	4821758	2.997	3805183	8.720
16	SG-13-0-10-0	WC32B	02/14/13	1720	4701565	2.997	3665842	8.719
17	SG-07-0-10-0	WC32C	02/14/13	1738	4609647	2.998	3543282	8.719
18	SG-06-0-10-0	WC32D	02/14/13	1755	4503775	2.997	3746808	8.719
19	SG-05-0-10-0	WC32E	02/14/13	1813	4191044	2.997	3350270	8.720
20	SG-95-0-10-0	WC32F	02/14/13	1831	4521256	2.997	3708503	8.721
21		DS	02/14/13	1849	4709363	3.001	3320896	8.738
22		INDAE	02/14/13	1907	4962331	3.001	4037126	8.738
23	SG-08-0-10-0	WC32G	02/14/13	1924	4326462	2.997	3441008	8.719
24	SG-08-0-10-0	WC32GMS	02/14/13	1942	4508998	2.997	3637332	8.720
25	SG-08-0-10-0	WC32GMSD	02/14/13	2000	3949629	2.997	3260059	8.719
26	SG-09-0-10-0	WC32H	02/14/13	2018	4603147	2.997	3580471	8.720
27	HA-09-0-10-0	WC33G	02/14/13	2036	4298379	2.998	3414109	8.720
28		DS	02/14/13	2053	4589735	3.001	3954933	8.739
29		INDAE	02/14/13	2111	4957307	3.001	4470062	8.738

IS1 = 1-Bromo-2-Nitrobenzene RT Window = RT +/- .05 min
IS2 = Hexabromobiphenyl

* Indicates value outside QC Limits

FORM 8
PESTICIDE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD-SNIDER

ARI Job No.: WC32   Project: POB-HARRIS

GC Column: STX-CLP2   ID: 0.53(mm)   Instrument ID: ECD6

Init. Calib. Date: 12/13/12

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

	IS1 AREA	RT	IS2 AREA	RT
ICAL MIDPT	22974785	3.182	12557398	10.078
UPPER LIMIT	45949570	3.232	25114796	10.128
LOWER LIMIT	11487392	3.132	6278699	10.028

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME	IS1 AREA	RT	IS2 AREA	RT
01		INDAE	12/13/12	1608	22974785	3.182	12557398	10.078
02		INDAA	12/13/12	1626	24566001	3.182	14419240	10.078
03		INDAB	12/13/12	1644	24120879	3.183	14174474	10.078
04		INDAC	12/13/12	1701	23944711	3.182	14172609	10.079
05		INDAD	12/13/12	1719	23244834	3.181	12955972	10.078
06		INDAF	12/13/12	1737	23556484	3.181	13971565	10.077
07		INDAG	12/13/12	1755	22370224	3.181	13224180	10.077
08		DS	02/14/13	1159	25256943	3.183	15770527	10.076
09		INDAE	02/14/13	1217	25846224	3.183	16128805	10.076
10	WC32MBS1	WC32MBS1	02/14/13	1235	22146044	3.180	13799886	10.064
11	WC32LCSS1	WC32LCSS1	02/14/13	1253	22315418	3.180	14292635	10.064
12	WC32LCSDS1	WC32LCSDS1	02/14/13	1311	23707192	3.180	14953358	10.064
13		DS	02/14/13	1609	22579618	3.183	12135295	10.076
14		INDAE	02/14/13	1626	25970339	3.182	14065316	10.075
15	SG-12-0-10-0	WC32A	02/14/13	1702	21727211	3.179	10656510	10.062
16	SG-13-0-10-0	WC32B	02/14/13	1720	21700891	3.179	8665956	10.062
17	SG-07-0-10-0	WC32C	02/14/13	1738	21079687	3.180	9496393	10.060
18	SG-06-0-10-0	WC32D	02/14/13	1755	32220773	3.180	8893181	10.061
19	SG-05-0-10-0	WC32E	02/14/13	1813	19904216	3.179	8922781	10.062
20	SG-95-0-10-0	WC32F	02/14/13	1831	21525791	3.180	8367192	10.063
21		DS	02/14/13	1849	20814330	3.182	9405230	10.071
22		INDAE	02/14/13	1907	25754655	3.182	10048493	10.072
23	SG-08-0-10-0	WC32G	02/14/13	1924	20012516	3.179	8195408	10.061
24	SG-08-0-10-0	WC32GMS	02/14/13	1942	19979364	3.179	8940116	10.062
25	SG-08-0-10-0	WC32GMSD	02/14/13	2000	18600166	3.180	8002083	10.061
26	SG-09-0-10-0	WC32H	02/14/13	2018	20446901	3.180	8805174	10.061
27	HA-09-0-10-0	WC33G	02/14/13	2036	21245385	3.180	9099603	10.062
28		DS	02/14/13	2053	23511602	3.182	10876519	10.072
29		INDAE	02/14/13	2111	26441594	3.183	12565538	10.071

IS1 = 1-Bromo-2-Nitrobenzene   RT Window = RT +/- .05 min
IS2 = Hexabromobiphenyl

* Indicates value outside QC Limits

PCB Analysis
Report and Summary QC Forms

ARI Job ID: WC32, WC33

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082A
Extraction Method: SW3510C

Sample ID: SG-05-ER-013113
SAMPLE

Lab Sample ID: WC32I
LIMS ID: 13-2432
Matrix: Water
Data Release Authorized:
Reported: 02/11/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted: 02/06/13
Date Analyzed: 02/09/13 17:40
Instrument/Analyst: ECD5/JGR
GPC Cleanup: No
Sulfur Cleanup: Yes

Sample Amount: 500 mL
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: Yes
Acid Cleanup: Yes

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	1.0	< 1.0 U
53469-21-9	Aroclor 1242	1.0	< 1.0 U
12672-29-6	Aroclor 1248	1.0	< 1.0 U
11097-69-1	Aroclor 1254	1.0	< 1.0 U
11096-82-5	Aroclor 1260	1.0	< 1.0 U
11104-28-2	Aroclor 1221	1.0	< 1.0 U
11141-16-5	Aroclor 1232	1.0	< 1.0 U
37324-23-5	Aroclor 1262	1.0	< 1.0 U
11100-14-4	Aroclor 1268	1.0	< 1.0 U

Reported in µg/L (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	55.2%
Tetrachlorometaxylene	72.8%

FORM I

SW8082/PCB WATER SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030

Client ID	DCBP % REC	DCBP LCL-UCL	TCMX % REC	TCMX LCL-UCL	TOT OUT
MB-020613	50.8%	41-111	65.0%	40-118	0
LCS-020613	62.0%	41-111	71.5%	40-118	0
LCSD-020613	52.5%	41-111	70.8%	40-118	0
SG-05-ER-013113	55.2%	29-118	72.8%	38-118	0

Prep Method: SW3510C
Log Number Range: 13-2432 to 13-2432

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082A
Page 1 of 1

Sample ID: LCS-020613
LCS/LCSD

Lab Sample ID: LCS-020613
LIMS ID: 13-2432
Matrix: Water
Data Release Authorized:
Reported: 02/11/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: NA
Date Received: NA

Date Extracted LCS/LCSD: 02/06/13

Date Analyzed LCS: 02/09/13 16:41
LCSD: 02/09/13 17:01
Instrument/Analyst LCS: ECD5/JGR
LCSD: ECD5/JGR
GPC Cleanup: No
Sulfur Cleanup: Yes

Sample Amount LCS: 500 mL
LCSD: 500 mL
Final Extract Volume LCS: 5.0 mL
LCSD: 5.0 mL
Dilution Factor LCS: 1.00
LCSD: 1.00
Silica Gel: Yes
Acid Cleanup: Yes

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Aroclor 1016	4.09	5.00	81.8%	4.07	5.00	81.4%	0.5%
Aroclor 1260	3.95	5.00	79.0%	4.00	5.00	80.0%	1.3%

PCB Surrogate Recovery

	LCS	LCSD
Decachlorobiphenyl	62.0%	52.5%
Tetrachlorometaxylene	71.5%	70.8%

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

FORM III

PCB METHOD BLANK SUMMARY

BLANK NO.

WC32MBW1

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD-SNIDER

ARI Job No.: WC32   Project: POB-HARRIS

Lab Sample ID: WC32MBW1   Lab File ID: 0209A004

Date Extracted: 02/06/13   Matrix: LIQUID

Date Analyzed: 02/09/13   Instrument ID: ECD5

Time Analyzed: 1621   GC Columns: ZB5/ZB35

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED
01	WC32LCSW1	WC32LCSW1	02/09/13
02	WC32LCSDW1	WC32LCSDW1	02/09/13
03	SG-05-ER-013113	WC32I	02/09/13

ALL RUNS ARE DUAL COLUMN

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082A
Extraction Method: SW3510C

Sample ID: MB-020613
METHOD BLANK

Lab Sample ID: MB-020613
LIMS ID: 13-2432
Matrix: Water
Data Release Authorized:
Reported: 02/11/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: NA
Date Received: NA

Date Extracted: 02/06/13
Date Analyzed: 02/09/13 16:21
Instrument/Analyst: ECD5/JGR
GPC Cleanup: No
Sulfur Cleanup: Yes

Sample Amount: 500 mL
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: Yes
Acid Cleanup: Yes

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	1.0	< 1.0 U
53469-21-9	Aroclor 1242	1.0	< 1.0 U
12672-29-6	Aroclor 1248	1.0	< 1.0 U
11097-69-1	Aroclor 1254	1.0	< 1.0 U
11096-82-5	Aroclor 1260	1.0	< 1.0 U
11104-28-2	Aroclor 1221	1.0	< 1.0 U
11141-16-5	Aroclor 1232	1.0	< 1.0 U
37324-23-5	Aroclor 1262	1.0	< 1.0 U
11100-14-4	Aroclor 1268	1.0	< 1.0 U

Reported in µg/L (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	50.8%
Tetrachlorometaxylene	65.0%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA PCB by GC/ECD
Extraction Method: SW3546
Page 1 of 1

Sample ID: SG-05-0-10-013113
SAMPLE

Lab Sample ID: WC32E
LIMS ID: 13-2428
Matrix: Sediment
Data Release Authorized:
Reported: 02/12/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted: 02/08/13
Date Analyzed: 02/10/13 07:03
Instrument/Analyst: ECD5/JGR
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 13.7 g-dry-wt
Final Extract Volume: 2.50 mL
Dilution Factor: 1.00
Silica Gel: Yes

Percent Moisture: 5.7%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	3.7	< 3.7 U
53469-21-9	Aroclor 1242	3.7	< 3.7 U
12672-29-6	Aroclor 1248	3.7	< 3.7 U
11097-69-1	**Aroclor 1254**	**3.7**	**2.6 J**
11096-82-5	**Aroclor 1260**	**3.7**	**3.0 J**
11104-28-2	Aroclor 1221	3.7	< 3.7 U
11141-16-5	Aroclor 1232	3.7	< 3.7 U
37324-23-5	Aroclor 1262	3.7	< 3.7 U
11100-14-4	Aroclor 1268	3.7	< 3.7 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	84.8%
Tetrachlorometaxylene	80.5%

FORM I

ORGANICS ANALYSIS DATA SHEET
PSDDA PCB by GC/ECD
Extraction Method: SW3546

ANALYTICAL RESOURCES INCORPORATED

Sample ID: SG-95-0-10-013113
SAMPLE

Lab Sample ID: WC32F
LIMS ID: 13-2429
Matrix: Sediment
Data Release Authorized:
Reported: 02/12/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted: 02/08/13
Date Analyzed: 02/10/13 07:24
Instrument/Analyst: ECD5/JGR
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 13.4 g-dry-wt
Final Extract Volume: 2.50 mL
Dilution Factor: 1.00
Silica Gel: Yes

Percent Moisture: 6.5%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	3.7	< 3.7 U
53469-21-9	Aroclor 1242	3.7	< 3.7 U
12672-29-6	Aroclor 1248	3.7	< 3.7 U
11097-69-1	**Aroclor 1254**	**3.7**	**9.5**
11096-82-5	**Aroclor 1260**	**3.7**	**21**
11104-28-2	Aroclor 1221	3.7	< 3.7 U
11141-16-5	Aroclor 1232	3.7	< 3.7 U
37324-23-5	Aroclor 1262	3.7	< 3.7 U
11100-14-4	Aroclor 1268	3.7	< 3.7 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	72.8%
Tetrachlorometaxylene	74.5%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA PCB by GC/ECD
Extraction Method: SW3546

Sample ID: SG-08-0-10-013113
SAMPLE

Lab Sample ID: WC32G
LIMS ID: 13-2430
Matrix: Sediment
Data Release Authorized:
Reported: 02/12/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted: 02/08/13
Date Analyzed: 02/10/13 08:24
Instrument/Analyst: ECD5/JGR
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 13.0 g-dry-wt
Final Extract Volume: 2.50 mL
Dilution Factor: 1.00
Silica Gel: Yes

Percent Moisture: 48.5%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	3.9	< 3.9 U
53469-21-9	Aroclor 1242	3.9	< 3.9 U
12672-29-6	Aroclor 1248	12	< 12 Y
11097-69-1	**Aroclor 1254**	**3.9**	**16**
11096-82-5	**Aroclor 1260**	**3.9**	**24**
11104-28-2	Aroclor 1221	3.9	< 3.9 U
11141-16-5	Aroclor 1232	3.9	< 3.9 U
37324-23-5	Aroclor 1262	3.9	< 3.9 U
11100-14-4	Aroclor 1268	3.9	< 3.9 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	68.8%
Tetrachlorometaxylene	73.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA PCB by GC/ECD
Extraction Method: SW3546

Sample ID: SG-09-0-10-013113
SAMPLE

Lab Sample ID: WC32H
LIMS ID: 13-2431
Matrix: Sediment
Data Release Authorized:
Reported: 02/12/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted: 02/08/13
Date Analyzed: 02/10/13 09:24
Instrument/Analyst: ECD5/JGR
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 13.0 g-dry-wt
Final Extract Volume: 2.50 mL
Dilution Factor: 1.00
Silica Gel: Yes

Percent Moisture: 47.6%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	3.8	< 3.8 U
53469-21-9	Aroclor 1242	3.8	< 3.8 U
12672-29-6	Aroclor 1248	19	< 19 Y
11097-69-1	Aroclor 1254	19	< 19 Y
11096-82-5	**Aroclor 1260**	**3.8**	**50**
11104-28-2	Aroclor 1221	3.8	< 3.8 U
11141-16-5	Aroclor 1232	3.8	< 3.8 U
37324-23-5	Aroclor 1262	3.8	< 3.8 U
11100-14-4	Aroclor 1268	3.8	< 3.8 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	53.2%
Tetrachlorometaxylene	70.0%

FORM I

ANALYTICAL RESOURCES INCORPORATED

SW8082/PCB SOIL/SEDIMENT SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030

Client ID	DCBP % REC	DCBP LCL-UCL	TCMX % REC	TCMX LCL-UCL	TOT OUT
SG-05-0-10-013113	84.8%	24-127	80.5%	34-109	0
SG-95-0-10-013113	72.8%	24-127	74.5%	34-109	0
MB-020813	81.8%	48-123	74.5%	43-107	0
LCS-020813	79.2%	48-123	73.2%	43-107	0
LCSD-020813	80.2%	48-123	75.0%	43-107	0
SG-08-0-10-013113	68.8%	24-127	73.8%	34-109	0
SG-08-0-10-013113 MS	116%	24-127	77.5%	34-109	0
SG-08-0-10-013113 MSD	78.2%	24-127	71.0%	34-109	0
SG-09-0-10-013113	53.2%	24-127	70.0%	34-109	0

Microwave (MARS) Control Limits PCBSMM
Prep Method: SW3546
Log Number Range: 13-2428 to 13-2431

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA PCB by GC/ECD
Extraction Method: SW3546

Sample ID: HA-09-0-10-013013
SAMPLE

Lab Sample ID: WC33G
LIMS ID: 13-2451
Matrix: Sediment
Data Release Authorized: B
Reported: 02/12/13

QC Report No: WC33-Floyd-Snider
Project: POB-Harris
T.4030
Date Sampled: 01/30/13
Date Received: 02/01/13

Date Extracted: 02/08/13
Date Analyzed: 02/10/13 09:45
Instrument/Analyst: ECD5/JGR
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 13.4 g-dry-wt
Final Extract Volume: 2.50 mL
Dilution Factor: 1.00
Silica Gel: Yes

Percent Moisture: 5.8%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	3.7	< 3.7 U
53469-21-9	Aroclor 1242	3.7	< 3.7 U
12672-29-6	Aroclor 1248	3.7	< 3.7 U
11097-69-1	**Aroclor 1254**	**3.7**	**2.6 J**
11096-82-5	**Aroclor 1260**	**3.7**	**3.2 J**
11104-28-2	Aroclor 1221	3.7	< 3.7 U
11141-16-5	Aroclor 1232	3.7	< 3.7 U
37324-23-5	Aroclor 1262	3.7	< 3.7 U
11100-14-4	Aroclor 1268	3.7	< 3.7 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery	
Decachlorobiphenyl	82.0%
Tetrachlorometaxylene	79.8%

FORM I

ANALYTICAL RESOURCES INCORPORATED

SW8082/PCB SOIL/SEDIMENT SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: WC33-Floyd-Snider
Project: POB-Harris
T.4030

Client ID	DCBP % REC	DCBP LCL-UCL	TCMX % REC	TCMX LCL-UCL	TOT OUT
MB-020813	81.8%	48-123	74.5%	43-107	0
LCS-020813	79.2%	48-123	73.2%	43-107	0
LCSD-020813	80.2%	48-123	75.0%	43-107	0
HA-09-0-10-013013	82.0%	24-127	79.8%	34-109	0

Microwave (MARS) Control Limits PCBSMM
Prep Method: SW3546
Log Number Range: 13-2451 to 13-2451

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA PCB by GC/ECD

Sample ID: SG-08-0-10-013113
MS/MSD

Lab Sample ID: WC32G
LIMS ID: 13-2430
Matrix: Sediment
Data Release Authorized:
Reported: 02/12/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted MS/MSD: 02/08/13

Date Analyzed MS: 02/10/13 08:45
MSD: 02/10/13 09:05
Instrument/Analyst MS: ECD5/JGR
MSD: ECD5/JGR
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount MS: 13.1 g-dry-wt
MSD: 13.3 g-dry-wt
Final Extract Volume MS: 2.5 mL
MSD: 2.5 mL
Dilution Factor MS: 1.00
MSD: 1.00
Silica Gel: Yes

Percent Moisture: 48.5%

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Aroclor 1016	< 3.9 U	557 EP	96.3	578%	88.6	95.0	93.3%	145%
Aroclor 1260	24	272	96.3	258%	89.9	95.0	69.4%	101%

Results reported in µg/kg (ppb)
RPD calculated using sample concentrations per SW846.

FORM III

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA PCB by GC/ECD
Extraction Method: SW3546

Sample ID: SG-08-0-10-013113
MATRIX SPIKE

Lab Sample ID: WC32G
LIMS ID: 13-2430
Matrix: Sediment
Data Release Authorized:
Reported: 02/12/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted: 02/08/13
Date Analyzed: 02/10/13 08:45
Instrument/Analyst: ECD5/JGR
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 13.1 g-dry-wt
Final Extract Volume: 2.50 mL
Dilution Factor: 1.00
Silica Gel: Yes

Percent Moisture: 48.5%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	3.8	---
53469-21-9	Aroclor 1242	3.8	< 3.8 U
12672-29-6	Aroclor 1248	120	< 120 Y
11097-69-1	**Aroclor 1254**	**3.8**	**160 P**
11096-82-5	Aroclor 1260	3.8	---
11104-28-2	Aroclor 1221	3.8	< 3.8 U
11141-16-5	Aroclor 1232	3.8	< 3.8 U
37324-23-5	Aroclor 1262	3.8	< 3.8 U
11100-14-4	Aroclor 1268	3.8	< 3.8 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	116%
Tetrachlorometaxylene	77.5%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA PCB by GC/ECD
Extraction Method: SW3546

Sample ID: SG-08-0-10-013113
MATRIX SPIKE DUP

Lab Sample ID: WC32G
LIMS ID: 13-2430
Matrix: Sediment
Data Release Authorized:
Reported: 02/12/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Date Extracted: 02/08/13
Date Analyzed: 02/10/13 09:05
Instrument/Analyst: ECD5/JGR
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 13.3 g-dry-wt
Final Extract Volume: 2.50 mL
Dilution Factor: 1.00
Silica Gel: Yes

Percent Moisture: 48.5%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	3.8	---
53469-21-9	Aroclor 1242	3.8	< 3.8 U
12672-29-6	Aroclor 1248	57	< 57 Y
11097-69-1	**Aroclor 1254**	**3.8**	**34**
11096-82-5	Aroclor 1260	3.8	---
11104-28-2	Aroclor 1221	3.8	< 3.8 U
11141-16-5	Aroclor 1232	3.8	< 3.8 U
37324-23-5	Aroclor 1262	3.8	< 3.8 U
11100-14-4	Aroclor 1268	3.8	< 3.8 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	78.2%
Tetrachlorometaxylene	71.0%

FORM I

ORGANICS ANALYSIS DATA SHEET
PSDDA PCB by GC/ECD

ANALYTICAL RESOURCES INCORPORATED

Sample ID: LCS-020813
LCS/LCSD

Lab Sample ID: LCS-020813
LIMS ID: 13-2430
Matrix: Sediment
Data Release Authorized: B
Reported: 02/12/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: NA
Date Received: NA

Date Extracted LCS/LCSD: 02/08/13

Date Analyzed LCS: 02/10/13 04:44
LCSD: 02/10/13 05:04
Instrument/Analyst LCS: ECD5/JGR
LCSD: ECD5/JGR
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount LCS: 12.5 g-dry-wt
LCSD: 12.5 g-dry-wt
Final Extract Volume LCS: 2.50 mL
LCSD: 2.50 mL
Dilution Factor LCS: 1.00
LCSD: 1.00
Silica Gel: Yes

Percent Moisture: NA

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Aroclor 1016	80.1	101	79.3%	83.6	101	82.8%	4.3%
Aroclor 1260	82.9	101	82.1%	85.6	101	84.8%	3.2%

PCB Surrogate Recovery

	LCS	LCSD
Decachlorobiphenyl	79.2%	80.2%
Tetrachlorometaxylene	73.2%	75.0%

Results reported in µg/kg (ppb)
RPD calculated using sample concentrations per SW846.

FORM III

4
PCB METHOD BLANK SUMMARY

BLANK NO.

WC32MBS1

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD-SNIDER

ARI Job No.: WC32   Project: POB-HARRIS

Lab Sample ID: WC32MBS1   Lab File ID: 0209A040

Date Extracted: 02/08/13   Matrix: SOLID

Date Analyzed: 02/10/13   Instrument ID: ECD5

Time Analyzed: 0424   GC Columns: ZB5/ZB35

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED
01	WC32LCSS1	WC32LCSS1	02/10/13
02	WC32LCSDS1	WC32LCSDS1	02/10/13
03	SG-05-0-10-013113	WC32E	02/10/13
04	SG-95-0-10-013113	WC32F	02/10/13
05	SG-08-0-10-013113	WC32G	02/10/13
06	SG-08-0-10-0131 MS	WC32GMS	02/10/13
07	SG-08-0-10-0131 MSD	WC32GMSD	02/10/13
08	SG-09-0-10-013113	WC32H	02/10/13
09	HA-09-0-10-013013	WC33G	02/10/13

ALL RUNS ARE DUAL COLUMN

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA PCB by GC/ECD
Extraction Method: SW3546

Sample ID: MB-020813
METHOD BLANK

Lab Sample ID: MB-020813
LIMS ID: 13-2430
Matrix: Sediment
Data Release Authorized:
Reported: 02/12/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: NA
Date Received: NA

Date Extracted: 02/08/13
Date Analyzed: 02/10/13 04:24
Instrument/Analyst: ECD5/JGR
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 12.5 g
Final Extract Volume: 2.50 mL
Dilution Factor: 1.00
Silica Gel: Yes

Percent Moisture: NA

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	4.0	< 4.0 U
53469-21-9	Aroclor 1242	4.0	< 4.0 U
12672-29-6	Aroclor 1248	4.0	< 4.0 U
11097-69-1	Aroclor 1254	4.0	< 4.0 U
11096-82-5	Aroclor 1260	4.0	< 4.0 U
11104-28-2	Aroclor 1221	4.0	< 4.0 U
11141-16-5	Aroclor 1232	4.0	< 4.0 U
37324-23-5	Aroclor 1262	4.0	< 4.0 U
11100-14-4	Aroclor 1268	4.0	< 4.0 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	81.8%
Tetrachlorometaxylene	74.5%

FORM I

6F
8082 INITIAL CALIBRATION OF AROCLOR 1016/1260

Lab Name: ANALYTICAL RESOURCES INC Client: FLOYD SNIDER

ARI Job No.: WC32 Project: POB HARRIS

GC Column: ZB5 Instrument ID: ECD5

Calibration Date: 01/28/13

SURROGATES

	RT WIN	LVL1	LVL2	LVL3	LVL4	LVL5	LVL6	MEAN	%RSD
TCX	4.34- 4.54	1.5376	1.5065	1.4748	1.4184	1.3281	1.2421	1.4179	8.0
DCB	12.75-12.95	1.6730	1.6886	1.4880	1.2553	1.1468	1.0654	1.3862	19.4

Aroclor-1016 Peak	RT WIN	LVL1 .02	LVL2 0.05	LVL3 0.1	LVL4 .25	LVL5 0.5	LVL6 1.0	MEAN	%RSD R^2
1	5.99- 6.19	0.0427	0.0394	0.0395	0.0368	0.0335	0.0306	0.0371	12.0
2	6.39- 6.59	0.1425	0.1300	0.1256	0.1138	0.1029	0.0927	0.1179	15.6
3	6.54- 6.74	0.0596	0.0539	0.0539	0.0492	0.0443	0.0400	0.0502	14.2
4	6.65- 6.85	0.0402	0.0366	0.0381	0.0352	0.0321	0.0290	0.0352	11.6

AROCLOR AVERAGE %RSD = 13.4

Aroclor-1260 Peak	RT WIN	LVL1 .02	LVL2 0.05	LVL3 0.1	LVL4 .25	LVL5 0.5	LVL6 1.0	MEAN	%RSD R^2
1	9.89-10.09	0.0717	0.0623	0.0608	0.0559	0.0505	0.0456	0.0578	13.1
2	10.21-10.41	0.0727	0.0641	0.0611	0.0560	0.0510	0.0461	0.0585	13.5
3	10.58-10.78	0.1692	0.1502	0.1405	0.1289	0.1178	0.1079	0.1358	14.0
4	10.98-11.18	0.0943	0.0850	0.0783	0.0717	0.0663	0.0608	0.0761	13.9
5	11.17-11.37	0.0451	0.0412	0.0391	0.0355	0.0334	0.0310	0.0376	12.0

AROCLOR AVERAGE %RSD = 13.3

6F
8082 INITIAL CALIBRATION OF AROCLOR 1016/1260

Lab Name: ANALYTICAL RESOURCES INC

Client: FLOYD SNIDER

ARI Job No.: WC32

Project: POB HARRIS

GC Column: ZB35

Instrument ID: ECD5

Calibration Date: 01/28/13

SURROGATES

RT WIN	LVL1	LVL2	LVL3	LVL4	LVL5	LVL6	MEAN	%RSD
TCX 4.35- 4.55	1.2631	1.2343	1.2126	1.1705	1.1188	1.0444	1.1740	6.9
DCB 13.14-13.34	1.6953	1.4619	1.3704	1.2465	1.1825	1.1026	1.3432	16.0

Aroclor-1016 Peak RT WIN	LVL1 .02	LVL2 0.05	LVL3 0.1	LVL4 .25	LVL5 0.5	LVL6 1.0	MEAN	%RSD R^2
1 6.10- 6.30	0.0556	0.0514	0.0488	0.0439	0.0398	0.0356	0.0458	16.4
2 6.73- 6.93	0.1149	0.1085	0.1041	0.0937	0.0861	0.0776	0.0975	14.6
3 7.12- 7.32	0.0285	0.0276	0.0270	0.0249	0.0231	0.0212	0.0254	11.1
4 7.23- 7.43	0.0341	0.0319	0.0306	0.0278	0.0255	0.0231	0.0288	14.3

AROCLOR AVERAGE %RSD = 14.1

Aroclor-1260 Peak RT WIN	LVL1 .02	LVL2 0.05	LVL3 0.1	LVL4 .25	LVL5 0.5	LVL6 1.0	MEAN	%RSD R^2
1 10.19-10.39	0.0708	0.0675	0.0620	0.0576	0.0525	0.0488	0.0599	14.2
2 10.64-10.84	0.0894	0.0830	0.0755	0.0700	0.0640	0.0596	0.0736	15.4
3 10.92-11.12	0.1728	0.1656	0.1526	0.1421	0.1304	0.1216	0.1475	13.5
4 11.44-11.64	0.0529	0.0480	0.0440	0.0414	0.0383	0.0361	0.0434	14.4

AROCLOR AVERAGE %RSD = 14.4

8082 INITIAL CALIBRATION OF SINGLE POINT PCBs

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD SNIDER

ARI Job No.: WC32   Project: POB HARRIS

GC Column: ZB5   Instrument ID: ECD5

Calibration Date: 01/28/13

Aroclor-1221			
Peak	RT	RT WIN	Cal Factor
1	5.097	5.00- 5.20	0.03314
2	6.495	6.39- 6.59	0.01044
3	7.904	7.80- 8.00	0.01396

Aroclor-1232			
Peak	RT	RT WIN	Cal Factor
1	6.090	5.99- 6.19	0.01494
2	6.494	6.39- 6.59	0.04699
3	7.468	7.37- 7.57	0.02235
4	7.897	7.80- 8.00	0.02583

Aroclor-1242			
Peak	RT	RT WIN	Cal Factor
1	6.089	5.99- 6.19	0.02792
2	6.495	6.39- 6.59	0.08717
3	6.644	6.54- 6.74	0.03768
4	7.896	7.80- 8.00	0.04513

Aroclor-1248			
Peak	RT	RT WIN	Cal Factor
1	6.489	6.39- 6.59	0.05704
2	7.466	7.37- 7.57	0.06048
3	7.896	7.80- 8.00	0.07619
4	8.132	8.03- 8.23	0.05943

6G
8082 INITIAL CALIBRATION OF SINGLE POINT PCBs

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD SNIDER

ARI Job No.: WC32   Project: POB HARRIS

GC Column: ZB5   Instrument ID: ECD5

Calibration Date: 01/28/13

Aroclor-1254 Peak	RT	RT WIN	Cal Factor
1	8.217	8.12- 8.32	0.07833
2	8.588	8.49- 8.69	0.05229
3	8.724	8.62- 8.82	0.10147
4	9.074	8.97- 9.17	0.11199
5	9.433	9.33- 9.53	0.07020

Aroclor-1262 Peak	RT	RT WIN	Cal Factor
1	10.306	10.21-10.41	0.06584
2	10.680	10.58-10.78	0.16863
3	11.080	10.98-11.18	0.05984
4	11.269	11.17-11.37	0.06784
5	11.939	11.84-12.04	0.05941

Aroclor-1268 Peak	RT	RT WIN	Cal Factor
1	11.197	11.10-11.30	0.17039
2	11.269	11.17-11.37	0.16479
3	11.654	11.55-11.75	0.14165
4	12.443	12.34-12.54	0.38504

6G

8082 INITIAL CALIBRATION OF SINGLE POINT PCBs

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD SNIDER

ARI Job No.: WC32   Project: POB HARRIS

GC Column: ZB35   Instrument ID: ECD5

Calibration Date: 01/28/13

Aroclor-1221 Peak	RT	RT WIN	Cal Factor
1	1.000	0.90- 1.10	0.00827
2	5.148	5.05- 5.25	0.01300
3	1.000	0.90- 1.10	0.00771
4	5.498	5.40- 5.60	0.02422

Aroclor-1232 Peak	RT	RT WIN	Cal Factor
1	6.200	6.10- 6.30	0.02014
2	6.829	6.73- 6.93	0.03934
3	7.043	6.94- 7.14	0.01619
4	8.268	8.17- 8.37	0.01388

Aroclor-1242 Peak	RT	RT WIN	Cal Factor
1	6.202	6.10- 6.30	0.03372
2	6.835	6.73- 6.93	0.07241
3	7.044	6.94- 7.14	0.02986
4	8.269	8.17- 8.37	0.02589

Aroclor-1248 Peak	RT	RT WIN	Cal Factor
1	6.830	6.73- 6.93	0.04717
2	7.738	7.64- 7.84	0.03952
3	8.268	8.17- 8.37	0.04108
4	8.614	8.51- 8.71	0.05087

6G
8082 INITIAL CALIBRATION OF SINGLE POINT PCBs

Lab Name: ANALYTICAL RESOURCES INC

Client: FLOYD SNIDER

ARI Job No.: WC32

Project: POB HARRIS

GC Column: ZB35

Instrument ID: ECD5

Calibration Date: 01/28/13

Aroclor-1254			
Peak	RT	RT WIN	Cal Factor
1	8.333	8.23- 8.43	0.03496
2	8.507	8.41- 8.61	0.04489
3	9.029	8.93- 9.13	0.03479
4	9.180	9.08- 9.28	0.07569
5	9.964	9.86-10.06	0.04619

Aroclor-1262			
Peak	RT	RT WIN	Cal Factor
1	10.292	10.19-10.39	0.09368
2	10.736	10.64-10.84	0.08021
3	11.016	10.92-11.12	0.18098
4	11.537	11.44-11.64	0.07335
5	12.339	12.24-12.44	0.06631

Aroclor-1268			
Peak	RT	RT WIN	Cal Factor
1	11.537	11.44-11.64	0.19050
2	11.596	11.50-11.70	0.18415
3	1.000	0.90- 1.10	0.15367
4	12.822	12.72-12.92	0.41868

7F
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD SNIDER

ARI Job No.: WC32   Project: POB HARRIS

GC Column: ZB5   Intrument: ECD5

Init. Calib. Date: 01/28/13

Date Analyzed :02/09/13

Lab Standard ID: AR1660   Time Analyzed :1540

COMPOUND/PEAK NO.	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aroclor-1016-1	6.09	5.99	6.19	241.0	250.0	-3.6
Aroclor-1016-2	6.50	6.39	6.59	234.3	250.0	-6.3
Aroclor-1016-3	6.65	6.54	6.74	239.9	250.0	-4.0
Aroclor-1016-4	6.76	6.65	6.85	244.9	250.0	-2.0

AVERAGE %D = 4.0

Date Analyzed :02/09/13

Lab Standard ID: AR1660   Time Analyzed :1540

COMPOUND/PEAK NO.	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aroclor-1260-1	9.99	9.89	10.09	212.1	250.0	-15.2
Aroclor-1260-2	10.31	10.21	10.41	211.1	250.0	-15.6
Aroclor-1260-3	10.68	10.58	10.78	209.3	250.0	-16.3
Aroclor-1260-4	11.08	10.98	11.18	210.7	250.0	-15.7
Aroclor-1260-5	11.27	11.17	11.37	215.4	250.0	-13.8

AVERAGE %D = 15.3

FORM VII PCB

7F
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD SNIDER

ARI Job No.: WC32   Project: POB HARRIS

GC Column: ZB35   Intrument: ECD5

Init. Calib. Date: 01/28/13

Date Analyzed :02/09/13

Lab Standard ID: AR1660   Time Analyzed :1540

COMPOUND/PEAK NO.	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aroclor-1016-1	6.20	6.10	6.30	233.5	250.0	-6.6
Aroclor-1016-2	6.83	6.73	6.93	235.5	250.0	-5.8
Aroclor-1016-3	7.22	7.12	7.32	239.1	250.0	-4.3
Aroclor-1016-4	7.33	7.23	7.43	234.4	250.0	-6.2

AVERAGE %D = 5.7

Date Analyzed :02/09/13

Lab Standard ID: AR1660   Time Analyzed :1540

COMPOUND/PEAK NO.	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aroclor-1260-1	10.29	10.19	10.39	218.7	250.0	-12.5
Aroclor-1260-2	10.74	10.64	10.84	220.1	250.0	-11.9
Aroclor-1260-3	11.02	10.92	11.12	220.1	250.0	-12.0
Aroclor-1260-4	11.54	11.44	11.64	220.5	250.0	-11.8

AVERAGE %D = 12.1

FORM VII PCB

7F
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: FLOYD SNIDER

ARI Job No.: WC32 Project: POB HARRIS

GC Column: ZB5 Intrument: ECD5

Init. Calib. Date: 01/28/13

Date Analyzed :02/09/13

Lab Standard ID: AR1242 Time Analyzed :1600

COMPOUND/PEAK NO.	RT	RT WINDOW FROM	TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aroclor-1242-1	6.09	5.99	6.19	250.7	250.0	0.3
Aroclor-1242-2	6.50	6.39	6.59	248.3	250.0	-0.7
Aroclor-1242-3	6.65	6.54	6.74	251.0	250.0	0.4
Aroclor-1242-4	7.90	7.80	8.00	248.3	250.0	-0.7

AVERAGE %D = 0.5

7F
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC

Client: FLOYD SNIDER

ARI Job No.: WC32

Project: POB HARRIS

GC Column: ZB35

Intrument: ECD5

Init. Calib. Date: 01/28/13

Date Analyzed :02/09/13

Lab Standard ID: AR1242

Time Analyzed :1600

COMPOUND/PEAK NO.	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aroclor-1242-1	6.20	6.10	6.30	247.2	250.0	-1.1
Aroclor-1242-2	6.83	6.73	6.93	245.9	250.0	-1.6
Aroclor-1242-3	7.04	6.94	7.14	246.2	250.0	-1.5
Aroclor-1242-4	8.27	8.17	8.37	243.6	250.0	-2.6

AVERAGE %D = 1.7

FORM VII PCB

7F
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD SNIDER

ARI Job No.: WC32   Project: POB HARRIS

GC Column: ZB5   Intrument: ECD5

Init. Calib. Date: 01/28/13

Date Analyzed :02/09/13

Lab Standard ID: AR1660   Time Analyzed :1939

COMPOUND/PEAK NO.	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aroclor-1016-1	6.09	5.99	6.19	231.0	250.0	-7.6
Aroclor-1016-2	6.49	6.39	6.59	227.6	250.0	-8.9
Aroclor-1016-3	6.64	6.54	6.74	233.3	250.0	-6.7
Aroclor-1016-4	6.75	6.65	6.85	240.4	250.0	-3.8

AVERAGE %D = 6.8

Date Analyzed :02/09/13

Lab Standard ID: AR1660   Time Analyzed :1939

COMPOUND/PEAK NO.	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aroclor-1260-1	9.99	9.89	10.09	205.2	250.0	-17.9
Aroclor-1260-2	10.31	10.21	10.41	201.1	250.0	-19.6
Aroclor-1260-3	10.68	10.58	10.78	213.3	250.0	-14.7
Aroclor-1260-4	11.08	10.98	11.18	204.7	250.0	-18.1
Aroclor-1260-5	11.27	11.17	11.37	219.8	250.0	-12.1

AVERAGE %D = 16.5

7F
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD SNIDER

ARI Job No.: WC32   Project: POB HARRIS

GC Column: ZB35   Intrument: ECD5

Init. Calib. Date: 01/28/13

Date Analyzed :02/09/13

Lab Standard ID: AR1660   Time Analyzed :1939

COMPOUND/PEAK NO.	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aroclor-1016-1	6.20	6.10	6.30	231.4	250.0	-7.4
Aroclor-1016-2	6.83	6.73	6.93	234.0	250.0	-6.4
Aroclor-1016-3	7.22	7.12	7.32	237.7	250.0	-4.9
Aroclor-1016-4	7.33	7.23	7.43	231.6	250.0	-7.4

AVERAGE %D = 6.5

Date Analyzed :02/09/13

Lab Standard ID: AR1660   Time Analyzed :1939

COMPOUND/PEAK NO.	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aroclor-1260-1	10.29	10.19	10.39	208.5	250.0	-16.6
Aroclor-1260-2	10.74	10.64	10.84	208.8	250.0	-16.5
Aroclor-1260-3	11.02	10.92	11.12	210.5	250.0	-15.8
Aroclor-1260-4	11.54	11.44	11.64	210.6	250.0	-15.8

AVERAGE %D = 16.2

7F
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD SNIDER

ARI Job No.: WC32   Project: POB HARRIS

GC Column: ZB5   Intrument: ECD5

Init. Calib. Date: 01/28/13

Date Analyzed :02/09/13

Lab Standard ID: AR1254   Time Analyzed :1958

COMPOUND/PEAK NO.	RT	RT WINDOW FROM	TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aroclor-1254-1	8.22	8.12	8.32	229.5	250.0	-8.2
Aroclor-1254-2	8.59	8.49	8.69	234.8	250.0	-6.1
Aroclor-1254-3	8.72	8.62	8.82	243.9	250.0	-2.4
Aroclor-1254-4	9.07	8.97	9.17	239.6	250.0	-4.2
Aroclor-1254-5	9.43	9.33	9.53	242.5	250.0	-3.0

AVERAGE %D = 4.8

7F

PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD SNIDER

ARI Job No.: WC32   Project: POB HARRIS

GC Column: ZB35   Intrument: ECD5

Init. Calib. Date: 01/28/13

Date Analyzed :02/09/13

Lab Standard ID: AR1254   Time Analyzed :1958

COMPOUND/PEAK NO.	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aroclor-1254-1	8.33	8.23	8.43	245.0	250.0	-2.0
Aroclor-1254-2	8.51	8.41	8.61	244.5	250.0	-2.2
Aroclor-1254-3	9.03	8.93	9.13	244.7	250.0	-2.1
Aroclor-1254-4	9.18	9.08	9.28	241.1	250.0	-3.6
Aroclor-1254-5	9.96	9.86	10.06	242.1	250.0	-3.2

AVERAGE %D = 2.6

7F
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD SNIDER

ARI Job No.: WC32   Project: POB HARRIS

GC Column: ZB5   Intrument: ECD5

Init. Calib. Date: 01/28/13

Date Analyzed :02/10/13

Lab Standard ID: AR1660   Time Analyzed :0343

COMPOUND/PEAK NO.	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aroclor-1016-1	6.09	5.99	6.19	210.7	250.0	-15.7
Aroclor-1016-2	6.49	6.39	6.59	213.6	250.0	-14.6
Aroclor-1016-3	6.64	6.54	6.74	215.1	250.0	-14.0
Aroclor-1016-4	6.75	6.65	6.85	217.9	250.0	-12.8

AVERAGE %D = 14.3

Date Analyzed :02/10/13

Lab Standard ID: AR1660   Time Analyzed :0343

COMPOUND/PEAK NO.	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aroclor-1260-1	9.99	9.89	10.09	199.0	250.0	-20.4
Aroclor-1260-2	10.31	10.21	10.41	192.8	250.0	-22.9
Aroclor-1260-3	10.68	10.58	10.78	215.4	250.0	-13.8
Aroclor-1260-4	11.08	10.98	11.18	205.5	250.0	-17.8
Aroclor-1260-5	11.27	11.17	11.37	224.8	250.0	-10.1

AVERAGE %D = 17.0

7F

PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD SNIDER

ARI Job No.: WC32   Project: POB HARRIS

GC Column: ZB35   Intrument: ECD5

Init. Calib. Date: 01/28/13

Date Analyzed :02/10/13

Lab Standard ID: AR1660   Time Analyzed :0343

COMPOUND/PEAK NO.	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aroclor-1016-1	6.20	6.10	6.30	219.4	250.0	-12.2
Aroclor-1016-2	6.83	6.73	6.93	218.9	250.0	-12.4
Aroclor-1016-3	7.22	7.12	7.32	211.7	250.0	-15.3
Aroclor-1016-4	7.33	7.23	7.43	215.6	250.0	-13.8

AVERAGE %D = 13.4

Date Analyzed :02/10/13

Lab Standard ID: AR1660   Time Analyzed :0343

COMPOUND/PEAK NO.	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D	
Aroclor-1260-1	10.29	10.19	10.39	194.8	250.0	-22.1	
Aroclor-1260-2	10.74	10.64	10.84	204.5	250.0	-18.2	
Aroclor-1260-3	11.02	10.92	11.12	203.0	250.0	-18.8	
Aroclor-1260-4	11.54	11.44	11.64	187.0	250.0	-25.2	<-

AVERAGE %D = 21.1

FORM VII PCB

7F
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD SNIDER

ARI Job No.: WC32   Project: POB HARRIS

GC Column: ZB5   Intrument: ECD5

Init. Calib. Date: 01/28/13

Date Analyzed :02/10/13

Lab Standard ID: AR1242   Time Analyzed :0404

COMPOUND/PEAK NO.	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aroclor-1242-1	6.09	5.99	6.19	235.8	250.0	-5.7
Aroclor-1242-2	6.49	6.39	6.59	238.4	250.0	-4.6
Aroclor-1242-3	6.64	6.54	6.74	237.8	250.0	-4.9
Aroclor-1242-4	7.90	7.80	8.00	232.9	250.0	-6.8

AVERAGE %D = 5.5

FORM VII PCB

7F
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC

Client: FLOYD SNIDER

ARI Job No.: WC32

Project: POB HARRIS

GC Column: ZB35

Intrument: ECD5

Init. Calib. Date: 01/28/13

Date Analyzed :02/10/13

Lab Standard ID: AR1242

Time Analyzed :0404

COMPOUND/PEAK NO.	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aroclor-1242-1	6.20	6.10	6.30	244.2	250.0	-2.3
Aroclor-1242-2	6.83	6.73	6.93	243.4	250.0	-2.6
Aroclor-1242-3	7.04	6.94	7.14	240.9	250.0	-3.6
Aroclor-1242-4	8.27	8.17	8.37	234.8	250.0	-6.1

AVERAGE %D = 3.6

7F
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD SNIDER

ARI Job No.: WC32   Project: POB HARRIS

GC Column: ZB5   Intrument: ECD5

Init. Calib. Date: 01/28/13

Date Analyzed :02/10/13

Lab Standard ID: AR1660   Time Analyzed :0744

COMPOUND/PEAK NO.	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aroclor-1016-1	6.09	5.99	6.19	226.7	250.0	-9.3
Aroclor-1016-2	6.49	6.39	6.59	223.8	250.0	-10.5
Aroclor-1016-3	6.64	6.54	6.74	226.8	250.0	-9.3
Aroclor-1016-4	6.75	6.65	6.85	233.5	250.0	-6.6

AVERAGE %D = 8.9

Date Analyzed :02/10/13

Lab Standard ID: AR1660   Time Analyzed :0744

COMPOUND/PEAK NO.	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aroclor-1260-1	9.99	9.89	10.09	224.0	250.0	-10.4
Aroclor-1260-2	10.31	10.21	10.41	219.5	250.0	-12.2
Aroclor-1260-3	10.68	10.58	10.78	221.2	250.0	-11.5
Aroclor-1260-4	11.08	10.98	11.18	236.6	250.0	-5.4
Aroclor-1260-5	11.27	11.17	11.37	263.0	250.0	5.2

AVERAGE %D = 8.9

FORM VII PCB

7F
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC	Client: FLOYD SNIDER

ARI Job No.: WC32	Project: POB HARRIS

GC Column: ZB35	Intrument: ECD5

Init. Calib. Date: 01/28/13

Date Analyzed :02/10/13

Lab Standard ID: AR1660	Time Analyzed :0744

COMPOUND/PEAK NO.	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aroclor-1016-1	6.20	6.10	6.30	228.7	250.0	-8.5
Aroclor-1016-2	6.83	6.73	6.93	229.9	250.0	-8.0
Aroclor-1016-3	7.22	7.12	7.32	227.7	250.0	-8.9
Aroclor-1016-4	7.33	7.23	7.43	231.7	250.0	-7.3

AVERAGE %D = 8.2

Date Analyzed :02/10/13

Lab Standard ID: AR1660	Time Analyzed :0744

COMPOUND/PEAK NO.	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aroclor-1260-1	10.29	10.19	10.39	227.3	250.0	-9.1
Aroclor-1260-2	10.74	10.64	10.84	232.1	250.0	-7.2
Aroclor-1260-3	11.02	10.92	11.12	227.7	250.0	-8.9
Aroclor-1260-4	11.54	11.44	11.64	219.7	250.0	-12.1

AVERAGE %D = 9.3

7F

PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC

Client: FLOYD SNIDER

ARI Job No.: WC32

Project: POB HARRIS

GC Column: ZB5

Intrument: ECD5

Init. Calib. Date: 01/28/13

Date Analyzed :02/10/13

Lab Standard ID: AR1254

Time Analyzed :0804

COMPOUND/PEAK NO.	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aroclor-1254-1	8.22	8.12	8.32	223.5	250.0	-10.6
Aroclor-1254-2	8.59	8.49	8.69	226.8	250.0	-9.3
Aroclor-1254-3	8.72	8.62	8.82	238.8	250.0	-4.5
Aroclor-1254-4	9.07	8.97	9.17	234.1	250.0	-6.4
Aroclor-1254-5	9.43	9.33	9.53	236.8	250.0	-5.3

AVERAGE %D = 7.2

FORM VII PCB

7F
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC

Client: FLOYD SNIDER

ARI Job No.: WC32

Project: POB HARRIS

GC Column: ZB35

Intrument: ECD5

Init. Calib. Date: 01/28/13

Date Analyzed :02/10/13

Lab Standard ID: AR1254

Time Analyzed :0804

COMPOUND/PEAK NO.	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aroclor-1254-1	8.33	8.23	8.43	240.6	250.0	-3.8
Aroclor-1254-2	8.51	8.41	8.61	241.1	250.0	-3.6
Aroclor-1254-3	9.03	8.93	9.13	239.7	250.0	-4.1
Aroclor-1254-4	9.18	9.08	9.28	235.7	250.0	-5.7
Aroclor-1254-5	9.96	9.86	10.06	234.4	250.0	-6.2

AVERAGE %D = 4.7

FORM VII PCB

7F
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: FLOYD SNIDER

ARI Job No.: WC32 Project: POB HARRIS

GC Column: ZB5 Intrument: ECD5

Init. Calib. Date: 01/28/13

Date Analyzed :02/10/13

Lab Standard ID: AR1660 Time Analyzed :1005

COMPOUND/PEAK NO.	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aroclor-1016-1	6.09	5.99	6.19	222.3	250.0	-11.1
Aroclor-1016-2	6.49	6.39	6.59	221.3	250.0	-11.5
Aroclor-1016-3	6.64	6.54	6.74	222.8	250.0	-10.9
Aroclor-1016-4	6.75	6.65	6.85	229.4	250.0	-8.2

AVERAGE %D = 10.4

Date Analyzed :02/10/13

Lab Standard ID: AR1660 Time Analyzed :1005

COMPOUND/PEAK NO.	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D	
Aroclor-1260-1	9.99	9.89	10.09	184.1	250.0	-26.4	<-
Aroclor-1260-2	10.31	10.21	10.41	181.0	250.0	-27.6	<-
Aroclor-1260-3	10.68	10.58	10.78	207.0	250.0	-17.2	
Aroclor-1260-4	11.08	10.98	11.18	206.1	250.0	-17.6	
Aroclor-1260-5	11.27	11.17	11.37	234.3	250.0	-6.3	

AVERAGE %D = 19.0

7F
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD SNIDER

ARI Job No.: WC32   Project: POB HARRIS

GC Column: ZB35   Intrument: ECD5

Init. Calib. Date: 01/28/13

Date Analyzed :02/10/13

Lab Standard ID: AR1660   Time Analyzed :1005

COMPOUND/PEAK NO.	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aroclor-1016-1	6.20	6.10	6.30	227.8	250.0	-8.9
Aroclor-1016-2	6.83	6.73	6.93	230.0	250.0	-8.0
Aroclor-1016-3	7.22	7.12	7.32	223.5	250.0	-10.6
Aroclor-1016-4	7.33	7.23	7.43	229.0	250.0	-8.4

AVERAGE %D = 9.0

Date Analyzed :02/10/13

Lab Standard ID: AR1660   Time Analyzed :1005

COMPOUND/PEAK NO.	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aroclor-1260-1	10.29	10.19	10.39	201.8	250.0	-19.3
Aroclor-1260-2	10.74	10.64	10.84	196.5	250.0	-21.4
Aroclor-1260-3	11.02	10.92	11.12	205.7	250.0	-17.7
Aroclor-1260-4	11.54	11.44	11.64	210.6	250.0	-15.8

AVERAGE %D = 18.6

7F
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC — Client: FLOYD SNIDER

ARI Job No.: WC32 — Project: POB HARRIS

GC Column: ZB5 — Intrument: ECD5

Init. Calib. Date: 01/28/13

Date Analyzed :02/10/13

Lab Standard ID: AR1248 — Time Analyzed :1025

COMPOUND/PEAK NO.	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aroclor-1248-1	6.49	6.39	6.59	235.5	250.0	-5.8
Aroclor-1248-2	7.47	7.37	7.57	233.1	250.0	-6.8
Aroclor-1248-3	7.90	7.80	8.00	237.3	250.0	-5.1
Aroclor-1248-4	8.13	8.03	8.23	229.0	250.0	-8.4

AVERAGE %D = 6.5

FORM VII PCB

7F
PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD SNIDER

ARI Job No.: WC32   Project: POB HARRIS

GC Column: ZB35   Intrument: ECD5

Init. Calib. Date: 01/28/13

Date Analyzed :02/10/13

Lab Standard ID: AR1248   Time Analyzed :1025

COMPOUND/PEAK NO.	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aroclor-1248-1	6.83	6.73	6.93	244.0	250.0	-2.4
Aroclor-1248-2	7.74	7.64	7.84	241.6	250.0	-3.4
Aroclor-1248-3	8.27	8.17	8.37	239.5	250.0	-4.2
Aroclor-1248-4	8.61	8.51	8.71	239.0	250.0	-4.4

AVERAGE %D = 3.6

FORM VII PCB

FORM 8
PCB INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD SNIDER

ARI Job No.: WC32   Project: POB HARRIS

GC Column: ZB5   ID: 0.53(mm)   Instrument ID: ECD5

Init. Calib. Date: 01/28/13

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

	IS1 AREA	RT
ICAL MIDPT	44738954	2.279
UPPER LIMIT	89477908	2.379
LOWER LIMIT	22369477	2.179

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME	IS1 AREA	RT		
01	ZZZZZ	ZZZZZ	01/28/13	1503	43740803	2.281		
02	ZZZZZ	ZZZZZ	01/28/13	1523	44938215	2.279		
03		IB	01/28/13	1543	45584113	2.279	60462231	13.208
04		AR1660 250	01/28/13	1603	44738954	2.279	59848867	13.207
05		AR1660 20	01/28/13	1623	46925513	2.281	60778033	13.208
06		AR1660 50	01/28/13	1643	46749066	2.280	61877391	13.208
07		AR1660 1000	01/28/13	1704	45809627	2.280	62331935	13.207
08		AR1660 100	01/28/13	1723	45893941	2.279	63500693	13.207
09		AR1660 500	01/28/13	1744	45727812	2.279	62093579	13.207
10		AR1242	01/28/13	1803	47348020	2.279	64942692	13.206
11		AR1248	01/28/13	1824	47306862	2.281	62450070	13.207
12		AR1254	01/28/13	1844	46700419	2.281	61807844	13.207
13		AR2162	01/28/13	1904	47074711	2.280	62286209	13.208
14		AR3268	01/28/13	1924	47629692	2.281	62645243	13.208
15	ZZZZZ	ZZZZZ	01/28/13	1945	46527079	2.282	64334377	13.209
16	ZZZZZ	ZZZZZ	01/28/13	2005	48159325	2.282	63842800	13.209
17	ZZZZZ	ZZZZZ	01/28/13	2025	48316847	2.281	63102237	13.209
18	ZZZZZ	ZZZZZ	01/28/13	2045	48045656	2.281	64464942	13.210
19	ZZZZZ	ZZZZZ	01/28/13	2105	47639174	2.283	63000337	13.209
20	ZZZZZ	ZZZZZ	01/28/13	2125	47621696	2.282	63625896	13.210
21		AR1660	02/09/13	1540	50790407	2.281	72061375	13.212
22		AR1242	02/09/13	1600	47881223	2.279	66907814	13.211
23	WC32MBW1	WC32MBW1	02/09/13	1621	52551510	2.277	75312216	13.210
24	WC32LCSW1	WC32LCSW1	02/09/13	1641	54849238	2.277	78360512	13.209
25	WC32LCSDW1	WC32LCSDW1	02/09/13	1701	56849652	2.279	77982854	13.210
26	ZZZZZ	ZZZZZ	02/09/13	1721	55826083	2.278	77784168	13.209
27	SG-05-ER-013	WC32I	02/09/13	1740	52160284	2.277	73866717	13.208
28		AR1660	02/09/13	1939	54341039	2.275	77236626	13.209
29		AR1254	02/09/13	1958	53676008	2.277	74313871	13.209

IS1 = 1-Bromo-2-Nitrobenzene   RT Window = RT +/- 0.1 min
IS2 = Hexabromobiphenyl

* Indicates value outside QC Limits

FORM 8
PCB INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD SNIDER

ARI Job No.: WC32   Project: POB HARRIS

GC Column: ZB35   ID: 0.53(mm)   Instrument ID: ECD5

Init. Calib. Date: 01/28/13

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

	IS1 AREA	RT
ICAL MIDPT	14899855	2.761
UPPER LIMIT	29799710	2.861
LOWER LIMIT	7449928	2.661

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME	IS1 AREA	RT		
01	ZZZZZ	ZZZZZ	01/28/13	1503	15019008	2.759		
02	ZZZZZ	ZZZZZ	01/28/13	1523	14988721	2.762		
03		IB	01/28/13	1543	15205801	2.760	12286706	14.105
04		AR1660 250	01/28/13	1603	14899855	2.761	12307480	14.105
05		AR1660 20	01/28/13	1623	15343289	2.761	12240942	14.105
06		AR1660 50	01/28/13	1643	15323608	2.760	12370613	14.106
07		AR1660 1000	01/28/13	1704	15055182	2.760	12409940	14.106
08		AR1660 100	01/28/13	1723	14962275	2.762	12616679	14.105
09		AR1660 500	01/28/13	1744	14992717	2.760	12613813	14.106
10		AR1242	01/28/13	1803	15308036	2.763	13137575	14.105
11		AR1248	01/28/13	1824	15325996	2.762	12566076	14.106
12		AR1254	01/28/13	1844	15109703	2.761	12399732	14.106
13		AR2162	01/28/13	1904	14980472	2.761	12481185	14.106
14		AR3268	01/28/13	1924	15185320	2.761	12533864	14.108
15	ZZZZZ	ZZZZZ	01/28/13	1945	15541446	2.762	12783248	14.106
16	ZZZZZ	ZZZZZ	01/28/13	2005	15290716	2.762	12644698	14.105
17	ZZZZZ	ZZZZZ	01/28/13	2025	15301069	2.764	12499631	14.106
18	ZZZZZ	ZZZZZ	01/28/13	2045	15242268	2.762	12818069	14.106
19	ZZZZZ	ZZZZZ	01/28/13	2105	14818072	2.763	12487926	14.107
20	ZZZZZ	ZZZZZ	01/28/13	2125	14912893	2.763	12687017	14.107
21		AR1660	02/09/13	1540	16740395	2.759	14431556	14.107
22		AR1242	02/09/13	1600	15583786	2.760	13347517	14.108
23	WC32MBW1	WC32MBW1	02/09/13	1621	16816369	2.759	14951984	14.107
24	WC32LCSW1	WC32LCSW1	02/09/13	1641	17041197	2.760	15589218	14.107
25	WC32LCSDW1	WC32LCSDW1	02/09/13	1701	17711934	2.760	15510868	14.107
26	ZZZZZ	ZZZZZ	02/09/13	1721	17336188	2.760	15449306	14.107
27	SG-05-ER-013	WC32I	02/09/13	1740	16466180	2.761	14677278	14.106
28		AR1660	02/09/13	1939	16780585	2.759	15135323	14.106
29		AR1254	02/09/13	1958	16587579	2.761	14616992	14.107

IS1 = 1-Bromo-2-Nitrobenzene   RT Window = RT +/- 0.1 min
IS2 = Hexabromobiphenyl

* Indicates value outside QC Limits

FORM 8
PCB INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD SNIDER

ARI Job No.: WC32   Project: POB HARRIS

GC Column: ZB5   ID: 0.53(mm)   Instrument ID: ECD5

Init. Calib. Date: 01/28/13

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

	IS1 AREA	RT
ICAL MIDPT	44738954	2.279
UPPER LIMIT	89477908	2.379
LOWER LIMIT	22369477	2.179

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME	IS1 AREA	RT		
01	ZZZZZ	ZZZZZ	01/28/13	1503	43740803	2.281		
02	ZZZZZ	ZZZZZ	01/28/13	1523	44938215	2.279		
03		IB	01/28/13	1543	45584113	2.279	60462231	13.208
04		AR1660 250	01/28/13	1603	44738954	2.279	59848867	13.207
05		AR1660 20	01/28/13	1623	46925513	2.281	60778033	13.208
06		AR1660 50	01/28/13	1643	46749066	2.280	61877391	13.208
07		AR1660 1000	01/28/13	1704	45809627	2.280	62331935	13.207
08		AR1660 100	01/28/13	1723	45893941	2.279	63500693	13.207
09		AR1660 500	01/28/13	1744	45727812	2.279	62093579	13.207
10		AR1242	01/28/13	1803	47348020	2.279	64942692	13.206
11		AR1248	01/28/13	1824	47306862	2.281	62450070	13.207
12		AR1254	01/28/13	1844	46700419	2.281	61807844	13.207
13		AR2162	01/28/13	1904	47074711	2.280	62286209	13.208
14		AR3268	01/28/13	1924	47629692	2.281	62645243	13.208
15	ZZZZZ	ZZZZZ	01/28/13	1945	46527079	2.282	64334377	13.209
16	ZZZZZ	ZZZZZ	01/28/13	2005	48159325	2.282	63842800	13.209
17	ZZZZZ	ZZZZZ	01/28/13	2025	48316847	2.281	63102237	13.209
18	ZZZZZ	ZZZZZ	01/28/13	2045	48045656	2.281	64464942	13.210
19	ZZZZZ	ZZZZZ	01/28/13	2105	47639174	2.283	63000337	13.209
20	ZZZZZ	ZZZZZ	01/28/13	2125	47621696	2.282	63625896	13.210
21		AR1660	02/10/13	0343	57643892	2.277	71523882	13.208
22		AR1242	02/10/13	0404	52257759	2.276	67171415	13.209
23	WC32MBS1	WC32MBS1	02/10/13	0424	55693485	2.278	68946657	13.208
24	WC32LCSS1	WC32LCSS1	02/10/13	0444	56518380	2.277	74060128	13.208
25	WC32LCSDS1	WC32LCSDS1	02/10/13	0504	56002614	2.278	72441949	13.208
26	ZZZZZ	ZZZZZ	02/10/13	0524	54924915	2.278	72862550	13.209
27	ZZZZZ	ZZZZZ	02/10/13	0544	57759183	2.279	65423794	13.208
28	ZZZZZ	ZZZZZ	02/10/13	0604	56212857	2.279	68936169	13.208
29	ZZZZZ	ZZZZZ	02/10/13	0624	53726423	2.276	65198663	13.208
30	ZZZZZ	ZZZZZ	02/10/13	0643	56116598	2.275	66113462	13.208
31	SG-05-0-10-0	WC32E	02/10/13	0703	55859362	2.277	67646697	13.209
32	SG-95-0-10-0	WC32F	02/10/13	0724	56555835	2.278	68178061	13.209

IS1 = 1-Bromo-2-Nitrobenzene   RT Window = RT +/- 0.1 min
IS2 = Hexabromobiphenyl

* Indicates value outside QC Limits

FORM 8
PCB INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD SNIDER

ARI Job No.: WC32   Project: POB HARRIS

GC Column: ZB5   ID: 0.53(mm)   Instrument ID: ECD5

Init. Calib. Date: 01/28/13

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

	IS1 AREA	RT	IS2 AREA	RT
ICAL MIDPT	44738954	2.279	59848867	13.207
UPPER LIMIT	89477908	2.379	119697734	13.307
LOWER LIMIT	22369477	2.179	29924434	13.107

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME	IS1 AREA	RT	IS2 AREA	RT
33		AR1660	02/10/13	0744	58451051	2.279	73834164	13.208
34		AR1254	02/10/13	0804	57357908	2.278	75108968	13.209
35	SG-08-0-10-0	WC32G	02/10/13	0824	53921243	2.277	67708948	13.208
36	SG-08-0-10-0	WC32GMS	02/10/13	0845	56669468	2.279	87326423	13.211
37	SG-08-0-10-0	WC32GMSD	02/10/13	0905	57747943	2.277	62049521	13.207
38	SG-09-0-10-0	WC32H	02/10/13	0924	56964897	2.277	67424606	13.207
39	HA-09-0-10-0	WC33G	02/10/13	0945	56816926	2.275	70708716	13.207
40		AR1660	02/10/13	1005	60197967	2.277	80395279	13.207
41		AR1248	02/10/13	1025	55997247	2.277	72355492	13.209

IS1 = 1-Bromo-2-Nitrobenzene   RT Window = RT +/- 0.1 min
IS2 = Hexabromobiphenyl

* Indicates value outside QC Limits

FORM 8
PCB INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD SNIDER

ARI Job No.: WC32   Project: POB HARRIS

GC Column: ZB35   ID: 0.53(mm)   Instrument ID: ECD5

Init. Calib. Date: 01/28/13

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

	IS1 AREA	RT
ICAL MIDPT	14899855	2.761
UPPER LIMIT	29799710	2.861
LOWER LIMIT	7449928	2.661

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME	IS1 AREA	RT		
01	ZZZZZ	ZZZZZ	01/28/13	1503	15019008	2.759		
02	ZZZZZ	ZZZZZ	01/28/13	1523	14988721	2.762		
03		IB	01/28/13	1543	15205801	2.760	12286706	14.105
04		AR1660 250	01/28/13	1603	14899855	2.761	12307480	14.105
05		AR1660 20	01/28/13	1623	15343289	2.761	12240942	14.105
06		AR1660 50	01/28/13	1643	15323608	2.760	12370613	14.106
07		AR1660 1000	01/28/13	1704	15055182	2.760	12409940	14.106
08		AR1660 100	01/28/13	1723	14962275	2.762	12616679	14.105
09		AR1660 500	01/28/13	1744	14992717	2.760	12613813	14.106
10		AR1242	01/28/13	1803	15308036	2.763	13137575	14.105
11		AR1248	01/28/13	1824	15325996	2.762	12566076	14.106
12		AR1254	01/28/13	1844	15109703	2.761	12399732	14.106
13		AR2162	01/28/13	1904	14980472	2.761	12481185	14.106
14		AR3268	01/28/13	1924	15185320	2.761	12533864	14.108
15	ZZZZZ	ZZZZZ	01/28/13	1945	15541446	2.762	12783248	14.106
16	ZZZZZ	ZZZZZ	01/28/13	2005	15290716	2.762	12644698	14.105
17	ZZZZZ	ZZZZZ	01/28/13	2025	15301069	2.764	12499631	14.106
18	ZZZZZ	ZZZZZ	01/28/13	2045	15242268	2.762	12818069	14.106
19	ZZZZZ	ZZZZZ	01/28/13	2105	14818072	2.763	12487926	14.107
20	ZZZZZ	ZZZZZ	01/28/13	2125	14912893	2.763	12687017	14.107
21		AR1660	02/10/13	0343	17204970	2.759	13844405	14.105
22		AR1242	02/10/13	0404	15600166	2.759	12683527	14.106
23	WC32MBS1	WC32MBS1	02/10/13	0424	16590652	2.759	13193136	14.105
24	WC32LCSS1	WC32LCSS1	02/10/13	0444	16931115	2.758	14160410	14.107
25	WC32LCSDS1	WC32LCSDS1	02/10/13	0504	16723012	2.760	14014127	14.105
26	ZZZZZ	ZZZZZ	02/10/13	0524	16865498	2.761	14178683	14.106
27	ZZZZZ	ZZZZZ	02/10/13	0544	16160941	2.762	13192754	14.105
28	ZZZZZ	ZZZZZ	02/10/13	0604	16497147	2.760	13806864	14.105
29	ZZZZZ	ZZZZZ	02/10/13	0624	15408628	2.760	13168708	14.106
30	ZZZZZ	ZZZZZ	02/10/13	0643	15484643	2.760	12933103	14.106
31	SG-05-0-10-0	WC32E	02/10/13	0703	16414367	2.759	13264784	14.106
32	SG-95-0-10-0	WC32F	02/10/13	0724	16794694	2.759	13850213	14.107

IS1 = 1-Bromo-2-Nitrobenzene   RT Window = RT +/- 0.1 min
IS2 = Hexabromobiphenyl

* Indicates value outside QC Limits

FORM 8
PCB INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC   Client: FLOYD SNIDER

ARI Job No.: WC32   Project: POB HARRIS

GC Column: ZB35   ID: 0.53(mm)   Instrument ID: ECD5

Init. Calib. Date: 01/28/13

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

	IS1 AREA	RT	IS2 AREA	RT
ICAL MIDPT	14899855	2.761	12307480	14.105
UPPER LIMIT	29799710	2.861	24614960	14.205
LOWER LIMIT	7449928	2.661	6153740	14.005

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME	IS1 AREA	RT	IS2 AREA	RT
33		AR1660	02/10/13	0744	17623495	2.760	14273055	14.107
34		AR1254	02/10/13	0804	17292854	2.759	14313077	14.106
35	SG-08-0-10-0	WC32G	02/10/13	0824	15734968	2.758	15002956	14.107
36	SG-08-0-10-0	WC32GMS	02/10/13	0845	16650919	2.759	13120572	14.105
37	SG-08-0-10-0	WC32GMSD	02/10/13	0905	16791864	2.758	13428551	14.105
38	SG-09-0-10-0	WC32H	02/10/13	0924	15353589	2.760	13844160	14.106
39	ZZZZZ	ZZZZZ	02/10/13	0945	16400263	2.756	13677486	14.105
40		AR1660	02/10/13	1005	17780491	2.758	15576551	14.106
41		AR1248	02/10/13	1025	16564343	2.757	13406953	14.105

IS1 = 1-Bromo-2-Nitrobenzene   RT Window = RT +/- 0.1 min
IS2 = Hexabromobiphenyl

* Indicates value outside QC Limits

Metals Analysis
Report and Summary QC Forms

ARI Job ID: WC32, WC33

Cover Page

INORGANIC ANALYSIS DATA PACKAGE

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: POB-Harris

SDG: WC32

CLIENT ID	ARI ID	ARI LIMS ID	REPREP
SG-05-0-10-013113	WC32E	13-2428	
SG-95-0-10-013113	WC32F	13-2429	
SG-08-0-10-013113	WC32G	13-2430	
SG-09-0-10-013113	WC32H	13-2431	
HA-09-0-10-013013	WC33G	13-2451	
HA-09-0-10-013013D	WC33GDUP	13-2451	
HA-09-0-10-013013S	WC33GSPK	13-2451	
HA-10-0-10-013013	WC33H	13-2452	
PBS	WC33MB1	13-2452	
LCSS	WC33MB1SPK	13-2452	
HA-11-0-10-013013	WC33I	13-2453	
LCSS	WC33REF1	13-2453	

Were ICP interelement corrections applied ?	Yes/No	YES
Were ICP background corrections applied ?	Yes/No	YES
If yes - were raw data generated before application of background corrections ?	Yes/No	NO

Comments: ______________________

THIS DATA PACKAGE HAS BEEN REVIEWED AND AUTHORIZED FOR RELEASE BY:

Signature: ______________ Name: Jay Kuhn

Date: ______________ Title: Inorganics Director

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
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Sample ID: SG-05-0-10-013113
SAMPLE

Lab Sample ID: WC32E
LIMS ID: 13-2428
Matrix: Sediment
Data Release Authorized:
Reported: 02/07/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Percent Total Solids: 93.9%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	LOQ	mg/kg-dry	Q
3050B	02/05/13	6010C	02/06/13	**7440-38-2**	**Arsenic**	10	**30**	
3050B	02/05/13	6010C	02/06/13	**7440-43-9**	**Cadmium**	0.5	**0.7**	
3050B	02/05/13	6010C	02/06/13	**7440-47-3**	**Chromium**	1	**27**	
3050B	02/05/13	6010C	02/06/13	**7440-50-8**	**Copper**	0.5	**280**	
3050B	02/05/13	6010C	02/06/13	**7439-92-1**	**Lead**	5	**42**	
CLP	02/05/13	7471A	02/06/13	**7439-97-6**	**Mercury**	0.007	**0.019**	
3050B	02/05/13	6010C	02/06/13	7440-22-4	Silver	0.8	0.8	U
3050B	02/05/13	6010C	02/06/13	**7440-66-6**	**Zinc**	3	**535**	

U-Analyte undetected at given LOQ
LOQ-Limit of Quantitation

FORM-I

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: SG-95-0-10-013113
SAMPLE

Lab Sample ID: WC32F
LIMS ID: 13-2429
Matrix: Sediment
Data Release Authorized:
Reported: 02/07/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Percent Total Solids: 93.1%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	LOQ	mg/kg-dry	Q
3050B	02/05/13	6010C	02/06/13	**7440-38-2**	**Arsenic**	10	**50**	
3050B	02/05/13	6010C	02/06/13	**7440-43-9**	**Cadmium**	0.5	**0.9**	
3050B	02/05/13	6010C	02/06/13	**7440-47-3**	**Chromium**	1	**57**	
3050B	02/05/13	6010C	02/06/13	**7440-50-8**	**Copper**	0.5	**292**	
3050B	02/05/13	6010C	02/06/13	**7439-92-1**	**Lead**	5	**58**	
CLP	02/05/13	7471A	02/06/13	**7439-97-6**	**Mercury**	0.007	**0.017**	
3050B	02/05/13	6010C	02/06/13	7440-22-4	Silver	0.7	0.7	U
3050B	02/05/13	6010C	02/06/13	**7440-66-6**	**Zinc**	2	**594**	

U-Analyte undetected at given LOQ
LOQ-Limit of Quantitation

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: SG-08-0-10-013113
SAMPLE

Lab Sample ID: WC32G
LIMS ID: 13-2430
Matrix: Sediment
Data Release Authorized:
Reported: 02/07/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Percent Total Solids: 48.1%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	LOQ	mg/kg-dry	Q
3050B	02/05/13	6010C	02/06/13	7440-38-2	Arsenic	30	30	U
3050B	02/05/13	6010C	02/06/13	**7440-43-9**	**Cadmium**	1	**1**	
3050B	02/05/13	6010C	02/06/13	**7440-47-3**	**Chromium**	3	**38**	
3050B	02/05/13	6010C	02/06/13	**7440-50-8**	**Copper**	1	**143**	
3050B	02/05/13	6010C	02/06/13	**7439-92-1**	**Lead**	10	**30**	
CLP	02/05/13	7471A	02/06/13	**7439-97-6**	**Mercury**	0.2	**12.4**	
3050B	02/05/13	6010C	02/06/13	7440-22-4	Silver	2	2	U
3050B	02/05/13	6010C	02/06/13	**7440-66-6**	**Zinc**	5	**153**	

U-Analyte undetected at given LOQ
LOQ-Limit of Quantitation

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: SG-09-0-10-013113
SAMPLE

Lab Sample ID: WC32H
LIMS ID: 13-2431
Matrix: Sediment
Data Release Authorized:
Reported: 02/07/13

QC Report No: WC32-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Percent Total Solids: 50.3%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	LOQ	mg/kg-dry	Q
3050B	02/05/13	6010C	02/06/13	**7440-38-2**	**Arsenic**	9	**13**	
3050B	02/05/13	6010C	02/06/13	**7440-43-9**	**Cadmium**	0.4	**1.6**	
3050B	02/05/13	6010C	02/06/13	**7440-47-3**	**Chromium**	0.9	**53.3**	
3050B	02/05/13	6010C	02/06/13	**7440-50-8**	**Copper**	0.4	**78.9**	
3050B	02/05/13	6010C	02/06/13	**7439-92-1**	**Lead**	4	**41**	
CLP	02/05/13	7471A	02/06/13	**7439-97-6**	**Mercury**	0.01	**0.20**	
3050B	02/05/13	6010C	02/06/13	7440-22-4	Silver	0.5	0.5	U
3050B	02/05/13	6010C	02/06/13	**7440-66-6**	**Zinc**	2	**122**	

U-Analyte undetected at given LOQ
LOQ-Limit of Quantitation

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: HA-09-0-10-013013
SAMPLE

Lab Sample ID: WC33G
LIMS ID: 13-2451
Matrix: Sediment
Data Release Authorized:
Reported: 02/07/13

QC Report No: WC33-Floyd-Snider
Project: POB-Harris
T.4030
Date Sampled: 01/30/13
Date Received: 02/01/13

Percent Total Solids: 94.1%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	LOQ	mg/kg-dry	Q
3050B	02/05/13	6010C	02/06/13	**7440-38-2**	**Arsenic**	10	**100**	
3050B	02/05/13	6010C	02/06/13	**7440-43-9**	**Cadmium**	0.5	**1.2**	
3050B	02/05/13	6010C	02/06/13	**7440-47-3**	**Chromium**	1	**27**	
3050B	02/05/13	6010C	02/06/13	**7440-50-8**	**Copper**	0.5	**682**	
3050B	02/05/13	6010C	02/06/13	**7439-92-1**	**Lead**	5	**125**	
CLP	02/05/13	7471A	02/06/13	**7439-97-6**	**Mercury**	0.007	**0.019**	
3050B	02/05/13	6010C	02/06/13	7440-22-4	Silver	0.8	0.8	U
3050B	02/05/13	6010C	02/06/13	**7440-66-6**	**Zinc**	3	**1,440**	

U-Analyte undetected at given LOQ
LOQ-Limit of Quantitation

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: HA-10-0-10-013013
SAMPLE

Lab Sample ID: WC33H
LIMS ID: 13-2452
Matrix: Sediment
Data Release Authorized:
Reported: 02/07/13

QC Report No: WC33-Floyd-Snider
Project: POB-Harris
T.4030
Date Sampled: 01/30/13
Date Received: 02/01/13

Percent Total Solids: 90.7%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	LOQ	mg/kg-dry	Q
3050B	02/05/13	6010C	02/06/13	**7440-38-2**	**Arsenic**	5	**6**	
3050B	02/05/13	6010C	02/06/13	**7440-43-9**	**Cadmium**	0.2	**0.4**	
3050B	02/05/13	6010C	02/06/13	**7440-47-3**	**Chromium**	0.5	**21.9**	
3050B	02/05/13	6010C	02/06/13	**7440-50-8**	**Copper**	0.2	**53.4**	
3050B	02/05/13	6010C	02/06/13	**7439-92-1**	**Lead**	2	**44**	
CLP	02/05/13	7471A	02/06/13	**7439-97-6**	**Mercury**	0.006	**0.016**	
3050B	02/05/13	6010C	02/06/13	7440-22-4	Silver	0.3	0.3	U
3050B	02/05/13	6010C	02/06/13	**7440-66-6**	**Zinc**	1	**129**	

U-Analyte undetected at given LOQ
LOQ-Limit of Quantitation

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: HA-11-0-10-013013
SAMPLE

Lab Sample ID: WC33I
LIMS ID: 13-2453
Matrix: Sediment
Data Release Authorized:
Reported: 02/07/13

QC Report No: WC33-Floyd-Snider
Project: POB-Harris
T.4030
Date Sampled: 01/30/13
Date Received: 02/01/13

Percent Total Solids: 84.8%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	LOQ	mg/kg-dry	Q
3050B	02/05/13	6010C	02/06/13	7440-38-2	Arsenic	10	10	U
3050B	02/05/13	6010C	02/06/13	7440-43-9	Cadmium	0.6	0.6	U
3050B	02/05/13	6010C	02/06/13	**7440-47-3**	**Chromium**	1	**19**	
3050B	02/05/13	6010C	02/06/13	**7440-50-8**	**Copper**	0.6	**24.0**	
3050B	02/05/13	6010C	02/06/13	**7439-92-1**	**Lead**	6	**8**	
CLP	02/05/13	7471A	02/06/13	**7439-97-6**	**Mercury**	0.007	**0.014**	
3050B	02/05/13	6010C	02/06/13	7440-22-4	Silver	0.8	0.8	U
3050B	02/05/13	6010C	02/06/13	**7440-66-6**	**Zinc**	3	**61**	

U-Analyte undetected at given LOQ
LOQ-Limit of Quantitation

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: HA-09-0-10-013013
MATRIX SPIKE

Lab Sample ID: WC33G
LIMS ID: 13-2451
Matrix: Sediment
Data Release Authorized:
Reported: 02/07/13

QC Report No: WC33-Floyd-Snider
Project: POB-Harris
T.4030
Date Sampled: 01/30/13
Date Received: 02/01/13

MATRIX SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Spike	Spike Added	% Recovery	Q
Arsenic	6010C	100	310	206	102%	
Cadmium	6010C	1.2	56.2	51.5	107%	
Chromium	6010C	27	81	51.5	105%	
Copper	6010C	682	711	51.5	56.3%	H
Lead	6010C	125	346	206	107%	
Mercury	7471A	0.019	0.090	0.0669	106%	
Silver	6010C	0.8 U	53.7	51.5	104%	
Zinc	6010C	1,440	1,430	51.5	-19.4%	H

Reported in mg/kg-dry

N-Control Limit Not Met
H-% Recovery Not Applicable, Sample Concentration Too High
NA-Not Applicable, Analyte Not Spiked

Percent Recovery Limits: 75-125%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: HA-09-0-10-013013
DUPLICATE

Lab Sample ID: WC33G
LIMS ID: 13-2451
Matrix: Sediment
Data Release Authorized:
Reported: 02/07/13

QC Report No: WC33-Floyd-Snider
Project: POB-Harris
T.4030
Date Sampled: 01/30/13
Date Received: 02/01/13

MATRIX DUPLICATE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Duplicate	RPD	Control Limit	Q
Arsenic	6010C	100	100	0.0%	+/- 20%	
Cadmium	6010C	1.2	1.1	8.7%	+/- 0.5	L
Chromium	6010C	27	24	11.8%	+/- 20%	
Copper	6010C	682	632	7.6%	+/- 20%	
Lead	6010C	125	177	34.4%	+/- 20%	*
Mercury	7471A	0.019	0.018	5.4%	+/- 0.007	L
Silver	6010C	0.8 U	0.8 U	0.0%	+/- 0.8	L
Zinc	6010C	1,440	1,470	2.1%	+/- 20%	

Reported in mg/kg-dry

*-Control Limit Not Met
L-RPD Invalid, Limit = Detection Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: LAB CONTROL

Lab Sample ID: WC33LCS
LIMS ID: 13-2452
Matrix: Sediment
Data Release Authorized:
Reported: 02/07/13

QC Report No: WC33-Floyd-Snider
Project: POB-Harris
T.4030
Date Sampled: NA
Date Received: NA

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Arsenic	6010C	203	200	102%	
Cadmium	6010C	52.2	50.0	104%	
Chromium	6010C	52.7	50.0	105%	
Copper	6010C	50.9	50.0	102%	
Lead	6010C	203	200	102%	
Mercury	7471A	0.50	0.50	100%	
Silver	6010C	52.5	50.0	105%	
Zinc	6010C	52	50	104%	

Reported in mg/kg-dry

N-Control limit not met
NA-Not Applicable, Analyte Not Spiked
Control Limits: 80-120%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: METHOD BLANK

Lab Sample ID: WC33MB
LIMS ID: 13-2452
Matrix: Sediment
Data Release Authorized:
Reported: 02/07/13

QC Report No: WC33-Floyd-Snider
Project: POB-Harris
T.4030
Date Sampled: NA
Date Received: NA

Percent Total Solids: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	LOQ	mg/kg-dry	Q
3050B	02/05/13	6010C	02/06/13	7440-38-2	Arsenic	5	5	U
3050B	02/05/13	6010C	02/06/13	7440-43-9	Cadmium	0.2	0.2	U
3050B	02/05/13	6010C	02/06/13	7440-47-3	Chromium	0.5	0.5	U
3050B	02/05/13	6010C	02/06/13	7440-50-8	Copper	0.2	0.2	U
3050B	02/05/13	6010C	02/06/13	7439-92-1	Lead	2	2	U
CLP	02/05/13	7471A	02/06/13	7439-97-6	Mercury	0.02	0.02	U
3050B	02/05/13	6010C	02/06/13	7440-22-4	Silver	0.3	0.3	U
3050B	02/05/13	6010C	02/06/13	7440-66-6	Zinc	1	1	U

U-Analyte undetected at given LOQ
LOQ-Limit of Quantitation

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: STD REFERENCE
ERA D053540

Lab Sample ID: WC33SRM
LIMS ID: 13-2453
Matrix: Sediment
Data Release Authorized:
Reported: 02/07/13

QC Report No: WC33-Floyd-Snider
Project: POB-Harris
T.4030
Date Sampled: NA
Date Received: NA

Analyte	Analysis Method	Analysis Date	mg/kg-dry	Certified Value	Advisory Range
Arsenic	6010C	02/06/13	134	132	106-157
Cadmium	6010C	02/06/13	74.4	66.5	54.6-78.4
Chromium	6010C	02/06/13	74.8	72.9	57.8-88.1
Copper	6010C	02/06/13	72.0	68.5	57.0-80.0
Lead	6010C	02/06/13	133	130	106-154
Mercury	7471A	02/06/13	7.9	8.3	5.5-11.0
Silver	6010C	02/06/13	111	101	66.9-135
Zinc	6010C	02/06/13	182	177	140-214

Calibration Verification

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: POB-Harris

SDG: WC32

UNITS: ug/L

ANALYTE	EL	M	RUN	ICVTV	ICV	%R	CCVTV	CCV1	%R	CCV2	%R	CCV3	%R	CCV4	%R	CCV5	%R
Arsenic	AS	ICP	IP020671	2000.0	1997.58	**99.9**	2000.0	1990.57	**99.5**	2035.05	**101.8**	1998.89	**99.9**	1978.61	**98.9**	1974.12	**98.7**
Cadmium	CD	ICP	IP020671	1000.0	1030.53	**103.1**	1000.0	1029.92	**103.0**	1040.94	**104.1**	1020.12	**102.0**	1006.93	**100.7**	1012.90	**101.3**
Chromium	CR	ICP	IP020671	1000.0	1013.50	**101.4**	1000.0	997.31	**99.7**	1017.00	**101.7**	1013.53	**101.4**	989.83	**99.0**	982.31	**98.2**
Copper	CU	ICP	IP020671	1000.0	1026.70	**102.7**	1000.0	1023.48	**102.3**	1036.69	**103.7**	1013.05	**101.3**	1001.14	**100.1**	1004.26	**100.4**
Lead	PB	ICP	IP020671	2000.0	2043.41	**102.2**	2000.0	2038.63	**101.9**	2082.18	**104.1**	2048.39	**102.4**	2024.36	**101.2**	2018.07	**100.9**
Mercury	HG	CVA	HG020601	8.0	8.13	**101.6**	4.0	4.02	**100.5**	4.00	**100.0**	4.01	**100.3**	4.02	**100.5**	4.03	**100.8**
Silver	AG	ICP	IP020671	1000.0	1039.33	**103.9**	1000.0	1039.91	**104.0**	1048.82	**104.9**	1031.65	**103.2**	1021.79	**102.2**	1021.08	**102.1**
Zinc	ZN	ICP	IP020671	1000.0	1050.22	**105.0**	1000.0	1029.94	**103.0**	1055.90	**105.6**	1053.69	**105.4**	1035.72	**103.6**	1023.85	**102.4**

Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (1)

CRDL Standard

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: POB-Harris

SDG: WC32

UNITS: ug/L

ANALYTE	EL	M	RUN	CRA/I TV	CR-1	%R	CR-2	%R	CR-3	%R	CR-4	%R	CR-5	%R	CR-6	%R
Arsenic	AS	ICP	IP020671	50.0	48.25	**96.5**	48.18	**96.4**	49.60	**99.2**	50.22	**100.4**				
Cadmium	CD	ICP	IP020671	2.0	2.07	**103.5**	1.94	**97.0**	1.84	**92.0**	2.05	**102.5**				
Chromium	CR	ICP	IP020671	5.0	5.37	**107.4**	5.71	**114.2**	5.35	**107.0**	4.94	**98.8**				
Copper	CU	ICP	IP020671	2.0	1.72	**86.0**	1.78	**89.0**	1.51	**75.5**	1.67	**83.5**				
Lead	PB	ICP	IP020671	20.0	20.64	**103.2**	20.97	**104.9**	20.92	**104.6**	21.69	**108.5**				
Mercury	HG	CVA	HG020601	0.1	0.10	**100.0**										
Silver	AG	ICP	IP020671	3.0	3.17	**105.7**	3.17	**105.7**	2.91	**97.0**	3.02	**100.7**				
Zinc	ZN	ICP	IP020671	10.0	9.34	**93.4**	9.59	**95.9**	9.90	**99.0**	9.76	**97.6**				

Control Limits: no control limits have been established by the EPA at this time.

FORM II (2)

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: POB-Harris

SDG: WC32

UNITS: ug/L

ANALYTE	EL	METH	RUN	CRDL	IDL	ICB	C	CCB1	C	CCB2	C	CCB3	C	CCB4	C	CCB5	C
Arsenic	AS	ICP	IP020671	10.0	50.0	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U
Cadmium	CD	ICP	IP020671	5.0	2.0	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chromium	CR	ICP	IP020671	10.0	5.0	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Copper	CU	ICP	IP020671	25.0	2.0	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Lead	PB	ICP	IP020671	3.0	20.0	20.0	U	20.0	U	20.0	U	20.0	U	20.0	U	20.0	U
Mercury	HG	CVA	HG020601	0.2	0.1	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Silver	AG	ICP	IP020671	10.0	3.0	3.0	U	3.0	U	3.0	U	3.0	U	3.0	U	3.0	U
Zinc	ZN	ICP	IP020671	20.0	10.0	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U

ICP Interference Check Sample

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: POB-Harris

SDG: WC32

ICS SOURCE: I.V.

RUNID: IP020671

INSTRUMENT ID: OPTIMA ICP 2

UNITS: ug/L

ANALYTE	ICSA TV	ICSAB TV	ICSA1	ICSAB1	%R	ICSA2	ICSAB2	%R	ICSA3	ICSAB3	%R
Aluminum	200000	200000	199711.2	200877.7	**100.4**	195263.0	194963.8	**97.5**			
Antimony		1000	12.3	1003.4	**100.3**	9.0	985.3	**98.5**			
Arsenic		1000	12.2	1012.1	**101.2**	15.6	995.2	**99.5**			
Barium		1000	1.3	1018.9	**101.9**	0.9	998.8	**99.9**			
Beryllium		1000	0.1	1003.0	**100.3**	0.1	977.2	**97.7**			
Boron			-5.7	-8.3		-9.5	-10.1				
Cadmium		1000	1.8	1032.9	**103.3**	1.7	1018.5	**101.9**			
Calcium	100000	100000	99205.6	99040.3	**99.0**	97861.5	96873.6	**96.9**			
Chromium		1000	-3.4	1017.8	**101.8**	-2.8	994.2	**99.4**			
Cobalt		1000	1.8	958.8	**95.9**	1.7	946.2	**94.6**			
Copper		1000	1.0	1061.1	**106.1**	0.9	1044.2	**104.4**			
Iron	200000	200000	194092.0	195416.0	**97.7**	190697.9	190350.2	**95.2**			
Lead		1000	-2.3	990.1	**99.0**	-2.6	977.1	**97.7**			
Magnesium	100000	100000	101693.7	98585.7	**98.6**	101175.2	96357.5	**96.4**			
Manganese		1000	0.4	968.1	**96.8**	0.4	941.5	**94.2**			
Molybdenum			2.8	2.6		2.4	2.5				
Nickel		1000	-0.3	986.7	**98.7**	-0.5	965.3	**96.5**			
Potassium			12.6	-18.5		-2.9	-22.6				
Selenium		1000	-13.4	981.1	**98.1**	-7.5	964.9	**96.5**			
Silicon			-5.2	-5.9		-9.8	-7.4				
Silver		1000	-0.5	1060.6	**106.1**	-0.5	1044.0	**104.4**			
Sodium			37.0	37.6		-11.0	-13.7				
Strontium			4.1	4.1		4.0	3.9				
Thallium		1000	5.4	935.8	**93.6**	4.3	919.0	**91.9**			
Tin			-10.7	-10.1		-9.9	-9.9				
Titanium			1.6	1.3		1.4	1.5				
Vanadium		1000	1.7	998.1	**99.8**	1.2	984.3	**98.4**			
Zinc		1000	-0.6	973.3	**97.3**	0.2	958.5	**95.9**			

ICP Serial Dilutions

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: POB-Harris

SDG: WC32

ANALYSIS METHOD: ICP

UNITS: ug/L

ANALYTE	CLIENT ID	ARI ID	MATRIX	RUNID	INITIAL SAMPLE RESULT (I)	C	SERIAL DILUTION RESULT (S)	C	% DIFFER-ENCE	Q
Arsenic	HA-09-0-10-013013L	WC33G-L	Sediment	IP020671	390.26		438.25		12.3	
Cadmium	HA-09-0-10-013013L	WC33G-L	Sediment	IP020671	4.80	B	10.00	U	100.0	
Chromium	HA-09-0-10-013013L	WC33G-L	Sediment	IP020671	105.59		111.80		5.9	
Copper	HA-09-0-10-013013L	WC33G-L	Sediment	IP020671	2653.99		2639.55		0.5	
Lead	HA-09-0-10-013013L	WC33G-L	Sediment	IP020671	487.50		503.65		3.3	
Silver	HA-09-0-10-013013L	WC33G-L	Sediment	IP020671	3.00	U	15.00	U		
Zinc	HA-09-0-10-013013L	WC33G-L	Sediment	IP020671	5587.67		5717.00		2.3	

IDLs and ICP Linear Ranges

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: POB-Harris

SDG: WC32

UNITS: ug/L

ANALYTE	EL	METH	INSTRUMENT	WAVELENTH (nm)	GFA BACK-GROUND	CLP CRDL	RL	RL DATE	ICP LINEAR RANGE (ug/L)	ICP LR DATE
Arsenic	AS	ICP	OPTIMA ICP 2	197.20		10	50.0	4/1/2012	30000.0	1/22/2013
Cadmium	CD	ICP	OPTIMA ICP 2	228.80		5	2.0	4/1/2012	20000.0	1/22/2013
Chromium	CR	ICP	OPTIMA ICP 2	267.72		10	5.0	4/1/2012	100000.0	1/22/2013
Copper	CU	ICP	OPTIMA ICP 2	324.75		25	2.0	4/1/2012	40000.0	1/22/2013
Lead	PB	ICP	OPTIMA ICP 2	220.35		3	20.0	4/1/2012	300000.0	1/22/2013
Mercury	HG	CVA	CETAC MERCURY	253.70		0.2	0.1	4/1/2012		
Silver	AG	ICP	OPTIMA ICP 2	328.07		10	3.0	4/1/2012	5000.0	1/22/2013
Zinc	ZN	ICP	OPTIMA ICP 2	213.86		20	10.0	4/1/2012	100000.0	1/22/2013

ICP Interelement Correction Factors

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: POB-Harris IEC DATE: 1/22/2013

SDG: WC32 INSTRUMENT ID: OPTIMA ICP 2

ANALYTE	WAVELENGTH	AL	AS	BA	BE	CA	CD	CO	CR	CU	FE
Aluminum	308.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.84	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	13.7020120	0.0000000	0.0000000
Arsenic	188.98	0.0000000	0.0000000	0.0000000	0.0000000	0.0911890	0.0000000	-1.1057220	1.4447090	0.0000000	0.0000000
Barium	233.53	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-0.1795110	0.0000000	0.0000000	0.1469350
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	228.80	0.0000000	5.5964570	0.0000000	0.0000000	0.0000000	0.0000000	0.1385480	0.0000000	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0295099	0.0000000	0.1250000	0.0000000	0.0000000	0.0000000	0.0000000	-0.0309050
Cobalt	228.62	0.0000000	0.0000000	0.1133150	0.0000000	0.0000000	0.0000000	0.0000000	-0.0333930	0.0000000	0.0000000
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-0.1698980	-0.0211960	0.0000000	-0.0491600
Iron	273.96	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-0.7025530	0.0000000	0.0000000
Lead	220.35	-0.2707930	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-1.8104440	1.2410760	0.0536970
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.1060020	0.0000000	-1.4277330	-1.1381670	0.0000000	0.5549620
Manganese	257.61	0.0049690	0.0000000	0.0000000	0.0000000	0.0038740	0.0000000	0.0125790	0.0000000	0.0000000	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0117860	0.0000000	0.0000000	0.0509920	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.1149780	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.4775670	0.0000000	0.0000000	0.0000000
Silicon	288.16	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-3.2795240	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-0.0054570	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	589.59	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.80	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	5.9747620	0.3985520	0.0000000	-0.1326730
Tin	189.93	0.0000000	0.0000000	0.0000000	0.0000000	-0.0837380	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	334.90	0.0000000	0.0000000	0.0000000	0.0000000	0.0594390	0.0000000	0.0000000	0.1892210	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-4.3335490	0.0000000	0.0501910
Zinc	206.20	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-0.1801790	0.0000000	0.0000000

ICP Interelement Correction Factors

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: POB-Harris

IEC DATE: 1/22/2013

SDG: WC32

INSTRUMENT ID: OPTIMA ICP 2

ANALYTE	WAVELENGTH	MG	MN	MO	NI	PB	SB	TI	TL	V	ZN
Aluminum	308.22	0.0000000	0.0000000	17.5877940	0.0000000	0.0000000	0.0000000	2.0603180	0.0000000	14.5677200	0.0000000
Antimony	206.84	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-0.7545320	0.0000000	-3.8306350	0.0000000
Arsenic	188.98	0.0000000	0.0000000	3.3991370	0.0000000	0.0000000	0.0000000	-34.6204750	0.0000000	0.0000000	0.0000000
Barium	233.53	0.0000000	0.0000000	0.0000000	0.1174000	0.0000000	0.0000000	0.0000000	0.0000000	0.2171460	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0100680	0.0000000	0.2372710	0.0000000
Cadmium	228.80	0.0000000	0.0000000	0.0000000	-0.9200350	0.0000000	0.0000000	0.0000000	0.0000000	0.0629730	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0938730	0.0834700	0.0738780	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.3293430	0.0000000
Cobalt	228.62	0.0000000	0.0000000	-0.1425980	0.1557020	0.0000000	0.0000000	1.7571760	0.0000000	0.0000000	0.0000000
Copper	324.75	0.0053240	0.0000000	0.3083290	0.0000000	0.0000000	0.0000000	0.1931400	0.0000000	0.0000000	0.0000000
Iron	273.96	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	6.3157650	0.0000000
Lead	220.35	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.08	0.0000000	0.0000000	-4.9970650	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000000	-0.1877320	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-0.4494500	0.0000000	0.4360770	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.5722860	0.0000000
Silicon	288.16	-0.1122540	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-0.3208460	0.0000000
Sodium	589.59	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.80	0.0000000	0.0000000	-1.6204090	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	3.6226430	0.0000000
Tin	189.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-0.5136310	-0.1873890	0.0000000	0.0000000	0.0000000
Titanium	334.90	0.0000000	0.0000000	1.0549050	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	-0.1522160	-0.5618640	0.0000000	0.0000000	0.0000000	0.5717940	0.0000000	0.0000000	0.0000000
Zinc	206.20	0.0000000	0.0000000	0.2590480	0.0000000	-0.0606610	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

Preparation Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: POB-Harris

SDG: WC32

ANALYSIS METHOD: CVA

ARI PREP CODE: SMM

PREPDATE: 2/5/2013

CLIENT ID	ARI ID	MASS (g)	INITIAL VOLUME (mL)	FINAL VOLUME (mL)
SG-05-0-10-013113	WC32E	0.802	0.0	50.0
SG-95-0-10-013113	WC32F	0.796	0.0	50.0
SG-08-0-10-013113	WC32G	0.918	0.0	50.0
SG-09-0-10-013113	WC32H	0.805	0.0	50.0
HA-09-0-10-013013	WC33G	0.796	0.0	50.0
HA-09-0-10-013013D	WC33GDUP	0.796	0.0	50.0
HA-09-0-10-013013S	WC33GSPK	0.795	0.0	50.0
HA-10-0-10-013013	WC33H	0.991	0.0	50.0
HA-11-0-10-013013	WC33I	0.848	0.0	50.0
PBS	WC33MB1	0.200	0.0	50.0
LCSW	WC33MB1SPK	0.200	0.0	50.0
LCSW-CVA	WC33REF1	0.204	0.0	50.0

Preparation Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: POB-Harris

SDG: WC32

ANALYSIS METHOD: ICP

ARI PREP CODE: SWC

PREPDATE: 2/5/2013

CLIENT ID	ARI ID	MASS (g)	INITIAL VOLUME (mL)	FINAL VOLUME (mL)
SG-05-0-10-013113	WC32E	1.056	0.0	50.0
SG-95-0-10-013113	WC32F	1.080	0.0	50.0
SG-08-0-10-013113	WC32G	1.001	0.0	50.0
SG-09-0-10-013113	WC32H	1.093	0.0	50.0
HA-09-0-10-013013	WC33G	1.034	0.0	50.0
HA-09-0-10-013013D	WC33GDUP	1.032	0.0	50.0
HA-09-0-10-013013S	WC33GSPK	1.032	0.0	50.0
HA-10-0-10-013013	WC33H	1.039	0.0	50.0
HA-11-0-10-013013	WC33I	1.056	0.0	50.0
PBS	WC33MB1	1.000	0.0	50.0
LCSS	WC33MB1SPK	1.000	0.0	50.0
LCSS	WC33REF1	1.003	0.0	50.0

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: POB-Harris INSTRUMENT ID: OPTIMA ICP 2 START DATE: 2/6/2013

SDG: WC32 RUNID: IP020671 METHOD: ICP END DATE: 2/6/2013

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
S0	S0	1.00	08271		X		X					X		X	X									X									X
S2	S2	1.00	08312									X		X	X																		
S3	S3	1.00	08331		X		X																	X									X
S4	S4	1.00	08355																														
S5	S5	1.00	08380																														
ICV	ICV	1.00	08410		X		X					X		X	X									X									X
ICB	ICB	1.00	08441		X		X					X		X	X									X									X
CRI	CRII	1.00	08483		X		X					X		X	X									X									X
ICSA	ICSAI	1.00	08525		X		X					X		X	X									X									X
ICSAB	ICSABI	1.00	08565		X		X					X		X	X									X									X
CCV	CCV1	1.00	09005		X		X					X		X	X									X									X
CCB	CCB1	1.00	09041		X		X					X		X	X									X									X
PBS	WC33MB1	2.00	09083		X		X					X		X	X									X									X
HA-10-0-10-013013	WC33H	2.00	09124		X		X					X		X	X									X									X
HA-11-0-10-013013	WC33I	2.00	09170																														
ZZZZZZ	ZZZZZZ	10.00	09212																														
HA-09-0-10-013013	WC33G	2.00	09254																														
HA-09-0-10-013013D	WC33GDUP	2.00	09300																														
HA-09-0-10-013013S	WC33GSPK	5.00	09423		X		X					X		X	X									X									X
HA-09-0-10-013013A	WC33GPOST	5.00	09465												X																		
LCSS	WC33REF1	2.00	09510		X		X					X		X	X									X									X
LCSS	WC33MB1SPK	2.00	09542		X		X					X		X	X									X									X
CCV	CCV2	1.00	09582		X		X					X		X	X									X									X
CCB	CCB2	1.00	10014		X		X					X		X	X									X									X
ZZZZZZ	WC43MB1	2.00	10060																														
HA-11-0-10-013013	WC33I	5.00	10101		X		X					X		X	X									X									X
HA-09-0-10-013013L	WC33G-L	25.00	10143		X		X					X		X	X									X									X
HA-09-0-10-013013	WC33G	5.00	10183		X		X					X		X	X									X									X
HA-09-0-10-013013D	WC33GDUP	5.00	10224		X		X					X		X	X									X									X
SG-05-0-10-013113	WC32E	2.00	10264																														
SG-95-0-10-013113	WC32F	2.00	10310																														
SG-08-0-10-013113	WC32G	2.00	10353																														
SG-09-0-10-013113	WC32H	2.00	10395		X		X					X		X	X									X									X
ZZZZZZ	WC43REF1	2.00	10441																														
CCV	CCV3	1.00	10473		X		X					X		X	X									X									X

FORM XIV

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: POB-Harris

SDG: WC32

INSTRUMENT ID: OPTIMA ICP 2

RUNID: IP020671 METHOD: ICP

START DATE: 2/6/2013

END DATE: 2/6/2013

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
CCB	CCB3	1.00	10505		X		X					X		X	X									X									X
SG-05-0-10-013113	WC32E	5.00	10550		X		X					X		X	X									X									X
SG-95-0-10-013113	WC32F	5.00	10592		X		X					X		X	X									X									X
SG-08-0-10-013113	WC32G	5.00	11034		X		X					X		X	X									X									X
CCV	CCV4	1.00	11080		X		X					X		X	X									X									X
CCB	CCB4	1.00	11111		X		X					X		X	X									X									X
CRI	CRIF	1.00	11153		X		X					X		X	X									X									X
ICSA	ICSAF	1.00	11195		X		X					X		X	X									X									X
ICSAB	ICSABF	1.00	11235		X		X					X		X	X									X									X
CCV	CCV5	1.00	11275		X		X					X		X	X									X									X
CCB	CCB5	1.00	11311		X		X					X		X	X									X									X

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: POB-Harris

SDG: WC32

INSTRUMENT ID: CETAC MERCURY

RUNID: HG020601 METHOD: CVA

START DATE: 2/6/2013

END DATE: 2/6/2013

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
S0	S0	1.00	09512														X																
S0.1	S0.1	1.00	09530														X																
S0.5	S0.5	1.00	09544														X																
S1	S1	1.00	09561														X																
S2	S2	1.00	09575														X																
S5	S5	1.00	09593														X																
S10	S10	1.00	10011														X																
ICV	AICV	1.00	10040														X																
ICB	ICB	1.00	10054														X																
CCV	ACCV1	1.00	10071														X																
CCB	CCB1	1.00	10090														X																
CRA	CRA	1.00	10103														X																
PBW	WC33MB1	1.00	10121														X																
LCSW	WC33MB1SPK	1.00	10134														X																
LCSW-CVA	WC33REF1	5.00	10152														X																
SG-05-0-10-013113	WC32E	1.00	10170														X																
SG-95-0-10-013113	WC32F	1.00	10183														X																
SG-08-0-10-013113	WC32G	1.00	10201																														
SG-09-0-10-013113	WC32H	1.00	10234														X																
HA-09-0-10-013013	WC33G	1.00	10251														X																
HA-09-0-10-013013D	WC33GDUP	1.00	10265														X																
CCV	ACCV2	1.00	10283														X																
CCB	CCB2	1.00	10301														X																
HA-09-0-10-013013S	WC33GSPK	1.00	10315														X																
HA-10-0-10-013013	WC33H	1.00	10333														X																
HA-11-0-10-013013	WC33I	1.00	10350														X																
ZZZZZZ	WC26MB1	1.00	10364																														
ZZZZZZ	WC26MB1SPK	1.00	10381																														
ZZZZZZ	WC26REF1	5.00	10395																														
ZZZZZZ	WC26A	1.00	10413																														
ZZZZZZ	WC26ADUP	1.00	10430																														
ZZZZZZ	WC26ASPK	1.00	10444																														
ZZZZZZ	WC26B	1.00	10462																														
CCV	ACCV3	1.00	10480														X																
CCB	CCB3	1.00	10494														X																

FORM XIV

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: POB-Harris　　INSTRUMENT ID: CETAC MERCURY　　START DATE: 2/6/2013

SDG: WC32　　RUNID: HG020601　　METHOD: CVA　　END DATE: 2/6/2013

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
ZZZZZZ	WC26C	1.00	10512																														
ZZZZZZ	WC26D	1.00	10530																														
ZZZZZZ	WC26E	1.00	10543																														
ZZZZZZ	WC26F	1.00	10561																														
ZZZZZZ	WC26G	1.00	10574																														
ZZZZZZ	WC26H	1.00	10592																														
ZZZZZZ	WC26I	1.00	11010																														
CCV	ACCV4	1.00	11024														X																
CCB	CCB4	1.00	11042														X																
SG-08-0-10-013113	WC32G	10.00	11070																														
SG-08-0-10-013113	WC32G	20.00	11083														X																
ZZZZZZ	WC26A	1.00	11101																														
ZZZZZZ	WC26ADUP	1.00	11114																														
ZZZZZZ	WC26ASPK	1.00	11132																														
CCV	ACCV5	1.00	11150														X																
CCB	CCB5	1.00	11164														X																

FORM XIV

General Chemistry Analysis
Report and Summary QC Forms

ARI Job ID: WC32, WC33

SAMPLE RESULTS-CONVENTIONALS
WC32-Floyd-Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 02/15/13

Project: POB-Harris
Event: POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Client ID: SG-12-0-10-013113
ARI ID: 13-2424 WC32A

Analyte	Date	Method	Units	RL	Sample
Total Solids	02/04/13 020413#1	SM2540B	Percent	0.01	40.00
Total Organic Carbon	02/13/13 021313#1	EPA 9060M	Percent	0.020	2.82

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
WC32-Floyd-Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 02/15/13

Project: POB-Harris
Event: POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Client ID: SG-13-0-10-013113
ARI ID: 13-2425 WC32B

Analyte	Date	Method	Units	RL	Sample
Total Solids	02/04/13 020413#1	SM2540B	Percent	0.01	34.00
Total Organic Carbon	02/13/13 021313#1	EPA 9060M	Percent	0.020	1.96

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
WC32-Floyd-Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 02/15/13

Project: POB-Harris
Event: POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Client ID: SG-07-0-10-013113
ARI ID: 13-2426 WC32C

Analyte	Date	Method	Units	RL	Sample
Total Solids	02/04/13 020413#1	SM2540B	Percent	0.01	76.50
Total Organic Carbon	02/13/13 021313#1	EPA 9060M	Percent	0.020	3.44

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
WC32-Floyd-Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 02/15/13

Project: POB-Harris
Event: POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Client ID: SG-06-0-10-013113
ARI ID: 13-2427 WC32D

Analyte	Date	Method	Units	RL	Sample
Total Solids	02/04/13 020413#1	SM2540B	Percent	0.01	57.80
Total Organic Carbon	02/13/13 021313#1	EPA 9060M	Percent	0.020	3.20

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
WC32-Floyd-Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 02/15/13

Project: POB-Harris
Event: POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Client ID: SG-05-0-10-013113
ARI ID: 13-2428 WC32E

Analyte	Date	Method	Units	RL	Sample
Total Solids	02/04/13 020413#1	SM2540B	Percent	0.01	94.80
Total Organic Carbon	02/13/13 021313#1	EPA 9060M	Percent	0.020	1.20

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
WC32-Floyd-Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 02/15/13

Project: POB-Harris
Event: POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Client ID: SG-95-0-10-013113
ARI ID: 13-2429 WC32F

Analyte	Date	Method	Units	RL	Sample
Total Solids	02/04/13 020413#1	SM2540B	Percent	0.01	92.50
Total Organic Carbon	02/13/13 021313#1	EPA 9060M	Percent	0.020	1.64

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
WC32-Floyd-Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 02/15/13

Project: POB-Harris
Event: POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Client ID: SG-08-0-10-013113
ARI ID: 13-2430 WC32G

Analyte	Date	Method	Units	RL	Sample
Total Solids	02/04/13 020413#1	SM2540B	Percent	0.01	52.50
Total Organic Carbon	02/13/13 021313#1	EPA 9060M	Percent	0.020	5.44

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
WC32-Floyd-Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 02/15/13

Project: POB-Harris
Event: POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Client ID: SG-09-0-10-013113
ARI ID: 13-2431 WC32H

Analyte	Date	Method	Units	RL	Sample
Total Solids	02/04/13 020413#1	SM2540B	Percent	0.01	50.50
Total Organic Carbon	02/13/13 021313#1	EPA 9060M	Percent	0.020	2.94

RL Analytical reporting limit
U Undetected at reported detection limit

MS/MSD RESULTS-CONVENTIONALS
WC32-Floyd-Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 02/15/13

Project: POB-Harris
Event: POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Analyte	Date	Units	Sample	Spike	Spike Added	Recovery
ARI ID: WC32B Client ID: SG-13-0-10-013113						
Total Organic Carbon	02/13/13	Percent	1.96	6.19	5.20	81.3%

REPLICATE RESULTS-CONVENTIONALS
WC32-Floyd-Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 02/15/13

Project: POB-Harris
Event: POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Analyte	Date	Units	Sample	Replicate(s)	RPD/RSD
ARI ID: WC32B Client ID: SG-13-0-10-013113					
Total Organic Carbon	02/13/13	Percent	1.96	2.03 2.46	12.6%
ARI ID: WC32G Client ID: SG-08-0-10-013113					
Total Solids	02/04/13	Percent	52.50	54.40 52.00	2.4%

LAB CONTROL RESULTS-CONVENTIONALS
WC32-Floyd-Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 02/15/13

Project: POB-Harris
Event: POCB HARRIS T.4030
Date Sampled: NA
Date Received: NA

Analyte/Method	QC ID	Date	Units	LCS	Spike Added	Recovery
Total Organic Carbon EPA 9060M	ICVL	02/13/13	Percent	0.096	0.100	96.0%

METHOD BLANK RESULTS-CONVENTIONALS
WC32-Floyd-Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 02/15/13

Project: POB-Harris
Event: POCB HARRIS T.4030
Date Sampled: NA
Date Received: NA

Analyte	Date	Units	Blank
Total Solids	02/04/13	Percent	< 0.01 U
Total Organic Carbon	02/13/13	Percent	< 0.020 U

STANDARD REFERENCE RESULTS-CONVENTIONALS
WC32-Floyd-Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 02/15/13

Project: POB-Harris
Event: POCB HARRIS T.4030
Date Sampled: NA
Date Received: NA

Analyte/SRM ID	Date	Units	SRM	True Value	Recovery
Total Organic Carbon NIST 1941B	02/13/13	Percent	3.17	2.99	106.0%

SAMPLE RESULTS-CONVENTIONALS
WC33-Floyd-Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 02/15/13

Project: POB-Harris
Event: T.4030
Date Sampled: 01/30/13
Date Received: 02/01/13

Client ID: HA-09-0-10-013013
ARI ID: 13-2451 WC33G

Analyte	Date	Method	Units	RL	Sample
Total Solids	02/04/13 020413#1	SM2540B	Percent	0.01	94.30
Total Organic Carbon	02/13/13 021313#1	EPA 9060M	Percent	0.020	1.82

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
WC33-Floyd-Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 02/15/13

Project: POB-Harris
Event: T.4030
Date Sampled: 01/30/13
Date Received: 02/01/13

Client ID: HA-10-0-10-013013
ARI ID: 13-2452 WC33H

Analyte	Date	Method	Units	RL	Sample
Total Solids	02/04/13 020413#1	SM2540B	Percent	0.01	90.70

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
WC33-Floyd-Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 02/15/13

Project: POB-Harris
Event: T.4030
Date Sampled: 01/30/13
Date Received: 02/01/13

Client ID: HA-11-0-10-013013
ARI ID: 13-2453 WC33I

Analyte	Date	Method	Units	RL	Sample
Total Solids	02/04/13 020413#1	SM2540B	Percent	0.01	86.60

RL Analytical reporting limit
U Undetected at reported detection limit

LAB CONTROL RESULTS-CONVENTIONALS
WC33-Floyd-Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 02/15/13

Project: POB-Harris
Event: T.4030
Date Sampled: NA
Date Received: NA

Analyte/Method	QC ID	Date	Units	LCS	Spike Added	Recovery
Total Organic Carbon EPA 9060M	ICVL	02/13/13	Percent	0.096	0.100	96.0%

METHOD BLANK RESULTS-CONVENTIONALS
WC33-Floyd-Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 02/15/13

Project: POB-Harris
Event: T.4030
Date Sampled: NA
Date Received: NA

Analyte	Date	Units	Blank
Total Solids	02/04/13	Percent	< 0.01 U
Total Organic Carbon	02/13/13	Percent	< 0.020 U

STANDARD REFERENCE RESULTS-CONVENTIONALS
WC33-Floyd-Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 02/15/13

Project: POB-Harris
Event: T.4030
Date Sampled: NA
Date Received: NA

Analyte/SRM ID	Date	Units	SRM	True Value	Recovery
Total Organic Carbon NIST 1941B	02/13/13	Percent	3.17	2.99	106.0%

Geotechnical Analysis
Report and Summary QC Forms

ARI Job ID: WC32, WC33

Floyd-Snider
POB-Harris
POCB HARRIS T.4030

Apparent Grain Size Distribution Summary
Percent Finer Than Indicated Size

Sample No.	Gravel			Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt				Clay	
Phi Size	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
Sieve Size (microns)	3/8"	#4 (4750)	#10 (2000)	#18 (1000)	#35 (500)	#60 (250)	#120 (125)	#230 (63)	31.00	15.60	7.80	3.90	2.00	1.00
SG-12-0-10-013113	100.0	100.0	99.8	98.9	96.4	92.9	86.5	83.3	80.6	72.3	58.7	43.5	30.3	18.9
	100.0	99.6	99.0	96.1	92.9	89.5	82.8	79.7	77.0	69.3	55.9	42.0	29.2	18.0
	100.0	100.0	99.8	98.4	96.1	92.7	86.4	83.4	81.1	72.7	58.9	43.9	30.6	18.6
SG-13-0-10-013113	100.0	100.0	99.9	96.8	94.5	91.3	69.9	52.9	51.2	42.8	30.2	23.6	17.5	11.0
SG-07-0-10-013113	100.0	87.0	59.9	43.1	31.7	22.4	12.5	8.9	7.6	7.1	6.1	4.8	3.4	1.7
SG-06-0-10-013113	100.0	93.8	89.2	84.1	78.2	60.3	28.5	18.6	13.7	12.5	9.8	8.2	6.2	3.7
SG-05-0-10-013113	100.0	47.5	24.5	14.6	8.1	2.7	0.4	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
SG-95-0-10-013113	100.0	53.7	28.0	17.5	9.7	3.4	0.9	0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
SG-08-0-10-013113	100.0	82.7	60.0	49.1	43.8	39.3	34.9	32.8	27.8	11.3	8.2	6.9	5.8	4.0
SG-09-0-10-013113	100.0	97.3	95.0	91.8	86.9	76.4	63.7	59.1	55.5	48.9	40.1	30.8	21.9	13.8

Notes to the Testing:

1. Organic matter was not removed prior to testing, thus the reported values are the "apparent" grain size distribution. See narrative for discussion of the testing.

Floyd-Snider
POB-Harris
POCB HARRIS T.4030

Apparent Grain Size Distribution Summary
Percent Retained in Each Size Fraction

Sample No.	Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Coarse Silt	Medium Silt	Fine Silt	Very Fine Silt	Clay			Total Fines
Phi Size	< -1	-1 to 0	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	> 10	> 4
Sieve Size (microns)	> #10 (2000)	10 to 18 (2000-1000)	18-35 (1000-500)	35-60 (500-250)	60-120 (250-125)	120-230 (125-62)	62 5-31 0	31 0-15.6	15.6-7.8	7 8-3 9	3.9-2 0	2.0-1.0	<1.0	<230 (<62)
SG-12-0-10-013113	0.2	1.0	2.5	3.4	6.5	3.2	2.8	8.2	13.6	15.2	13.3	11.3	18.9	83.3
	1.0	2.9	3.3	3.4	6.6	3.1	2.7	7.7	13.4	13.9	12.8	11.2	18.0	79.7
	0.2	1.3	2.3	3.4	6.3	3.0	2.2	8.4	13.9	15.0	13.3	12.0	18.6	83.4
SG-13-0-10-013113	0.1	3.0	2.4	3.1	21.4	17.1	1.7	8.4	12.6	6.6	6.0	6.6	11.0	52.9
SG-07-0-10-013113	40.1	16.8	11.4	9.3	9.9	3.6	1.3	0.5	1.0	1.3	1.4	1.7	1.7	8.9
SG-06-0-10-013113	10.8	5.2	5.9	17.8	31.9	9.9	4.9	1.2	2.7	1 6	1.9	2.6	3.7	18.6
SG-05-0-10-013113	75.5	9.9	6.5	5.4	2.3	0.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1
SG-95-0-10-013113	72.0	10.5	7.9	6.2	2.6	0.3	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	0.6
SG-08-0-10-013113	40.0	10.9	5.3	4.5	4.4	2.1	5.0	16.5	3.0	1.3	1.1	1.8	4.0	32.8
SG-09-0-10-013113	5.0	3.2	4.9	10.5	12.6	4.7	3.6	6.6	8.8	9.3	8.9	8.1	13.8	59.1

Notes to the Testing:

1. Organic matter was not removed prior to testing, thus the reported values are the "apparent" grain size distribution. See narrative for discussion of the testing.

QA SUMMARY

Client:	Floyd-Snider	Client Project:	POB-Harris
ARI Trip. Sample ID.	WC32A	Client Project No :	POCB HARRIS T.4030
Client Trip. Sample ID:	SG-12-0-10-013113	Batch No.:	WC32-1

Relative Standard Deviation, By Phi Size

Sample ID	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
	100.0	100.0	99.8	98 9	96.4	92.9	86.5	83.3	80.6	72.3	58.7	43.5	30.3	18.9
SG-12-0-10-013113	100.0	99.6	99.0	96.1	92 9	89.5	82.8	79.7	77.0	69.3	55.9	42.0	29.2	18.0
	100 0	100.0	99.8	98.4	96.1	92.7	86 4	83.4	81.1	72.7	58.9	43.9	30.6	18.6
AVE	NA	99 87	99.53	97.80	95.10	91.68	85 23	82.12	79.57	71.47	57.85	43.16	30.01	18.51
STDEV	NA	0.23	0.48	1 49	1 95	1.91	2.08	2.10	2 24	1.86	1.67	0.98	0.70	0.47
%RSD	NA	0.23	0.48	1.52	2.05	2 08	2.44	2.56	2.81	2.61	2.89	2.28	2.35	2.57

The Triplicate Applies To The Following Samples

Client ID	Date Sampled	Date Extracted	Date Complete	QA Ratio (95-105)	Data Qualifiers	Pipette Portion (5.0-25.0g)
SG-12-0-10-013113	1/31/2013	2/6/2013	2/12/2013	99 1		10 5
	1/31/2013	2/6/2013	2/12/2013	99 3		9.4
	1/31/2013	2/6/2013	2/12/2013	99.1		10.2
SG-13-0-10-013113	1/31/2013	2/6/2013	2/12/2013	99.3		7.6
SG-07-0-10-013113	1/31/2013	2/6/2013	2/12/2013	100.9		6.8
SG-06-0-10-013113	1/31/2013	2/6/2013	2/12/2013	104.8		8.5
SG-05-0-10-013113	1/31/2013	2/6/2013	2/12/2013	99.8	SS	0 1
SG-95-0-10-013113	1/31/2013	2/6/2013	2/12/2013	100 2	SS	0 8
SG-08-0-10-013113	1/31/2013	2/6/2013	2/12/2013	104.1		16.0
SG-09-0-10-013113	1/31/2013	2/6/2013	2/12/2013	102.4		10.3

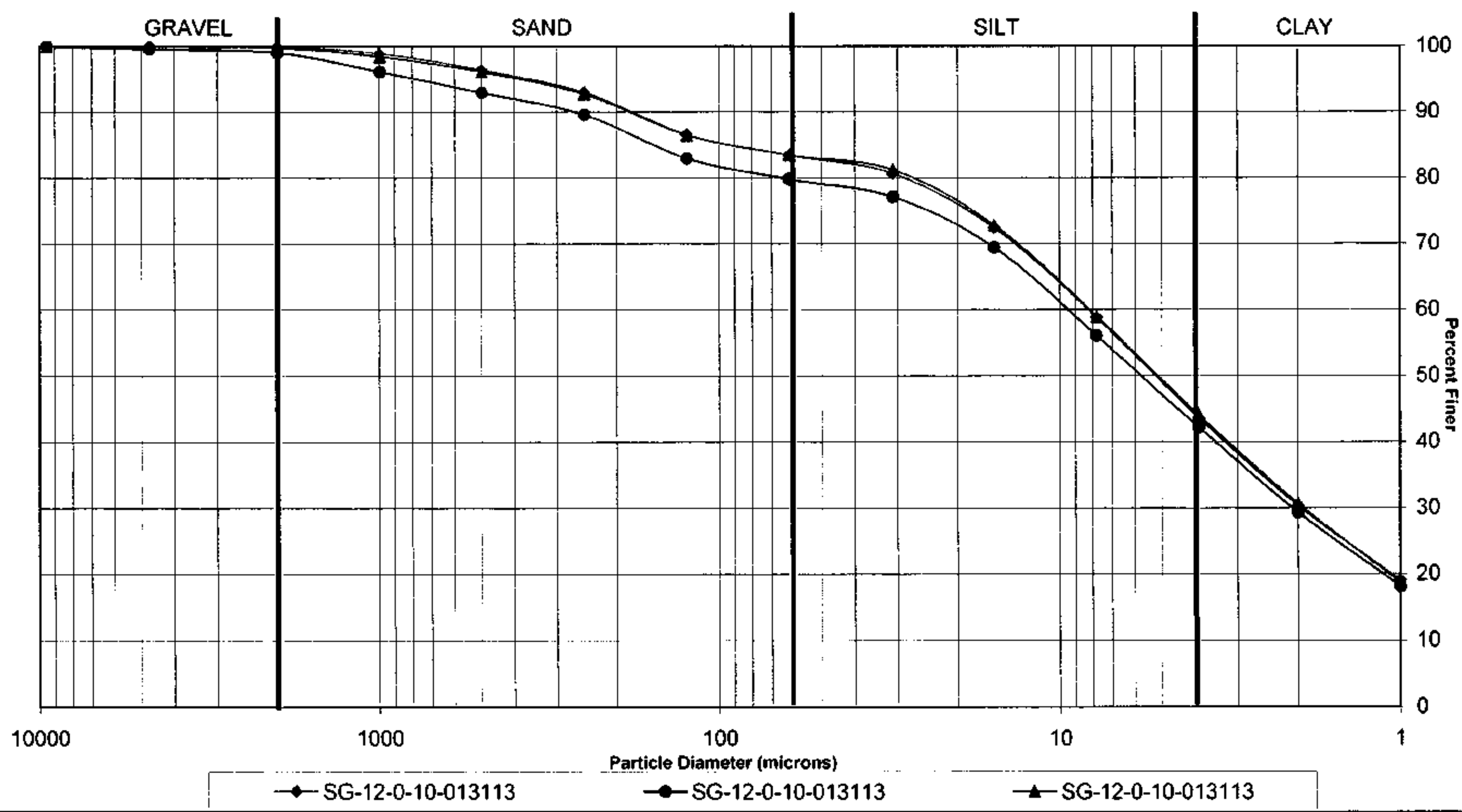
* ARI Internal QA limits = 95-105%

Notes to the Testing:

1 Organic matter was not removed prior to testing, thus the reported values are the "apparent" grain size distribution. See narrative for discussion of the testing

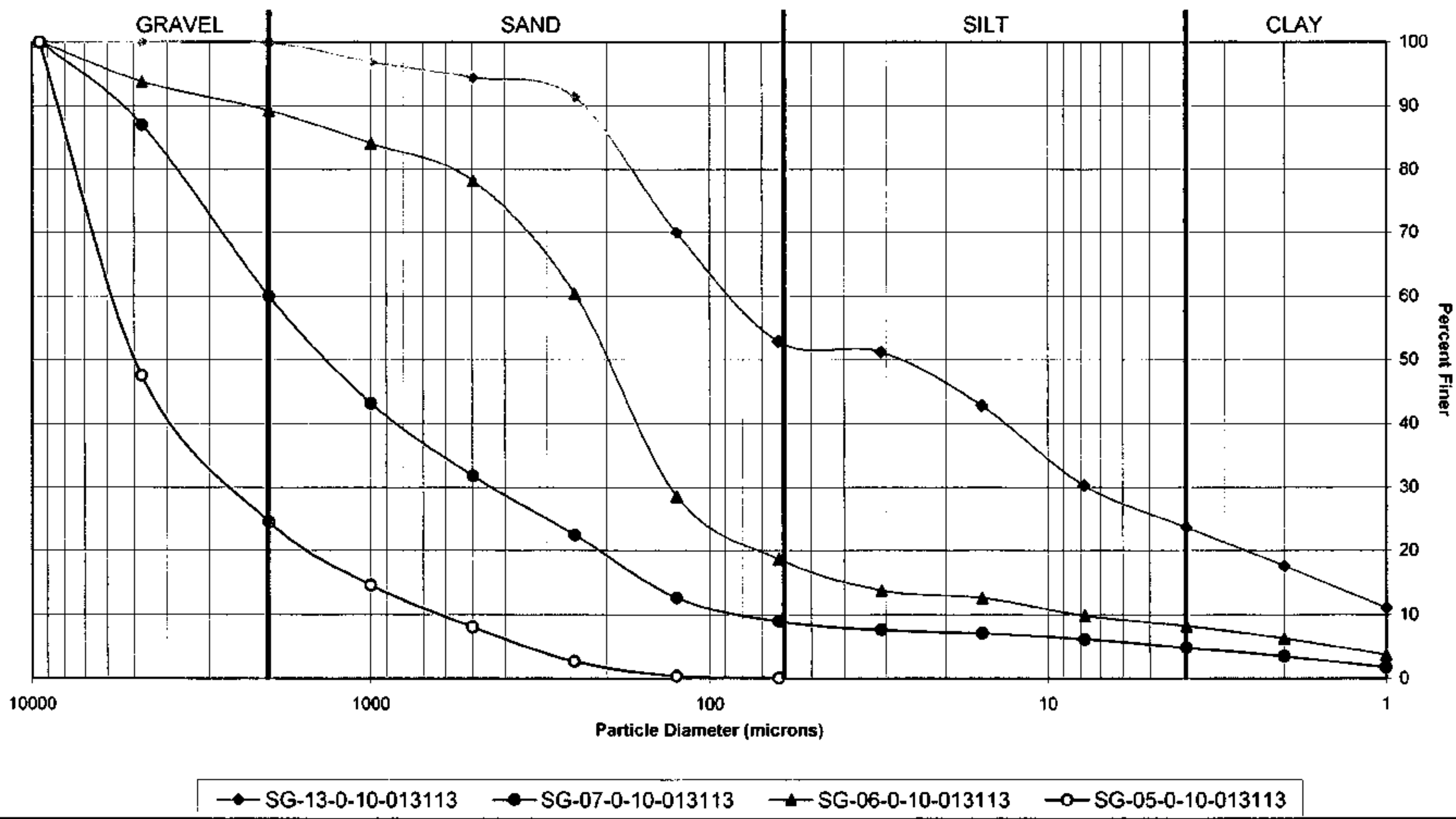
PSEP Grain Size Distribution

Triplicate Sample Plot

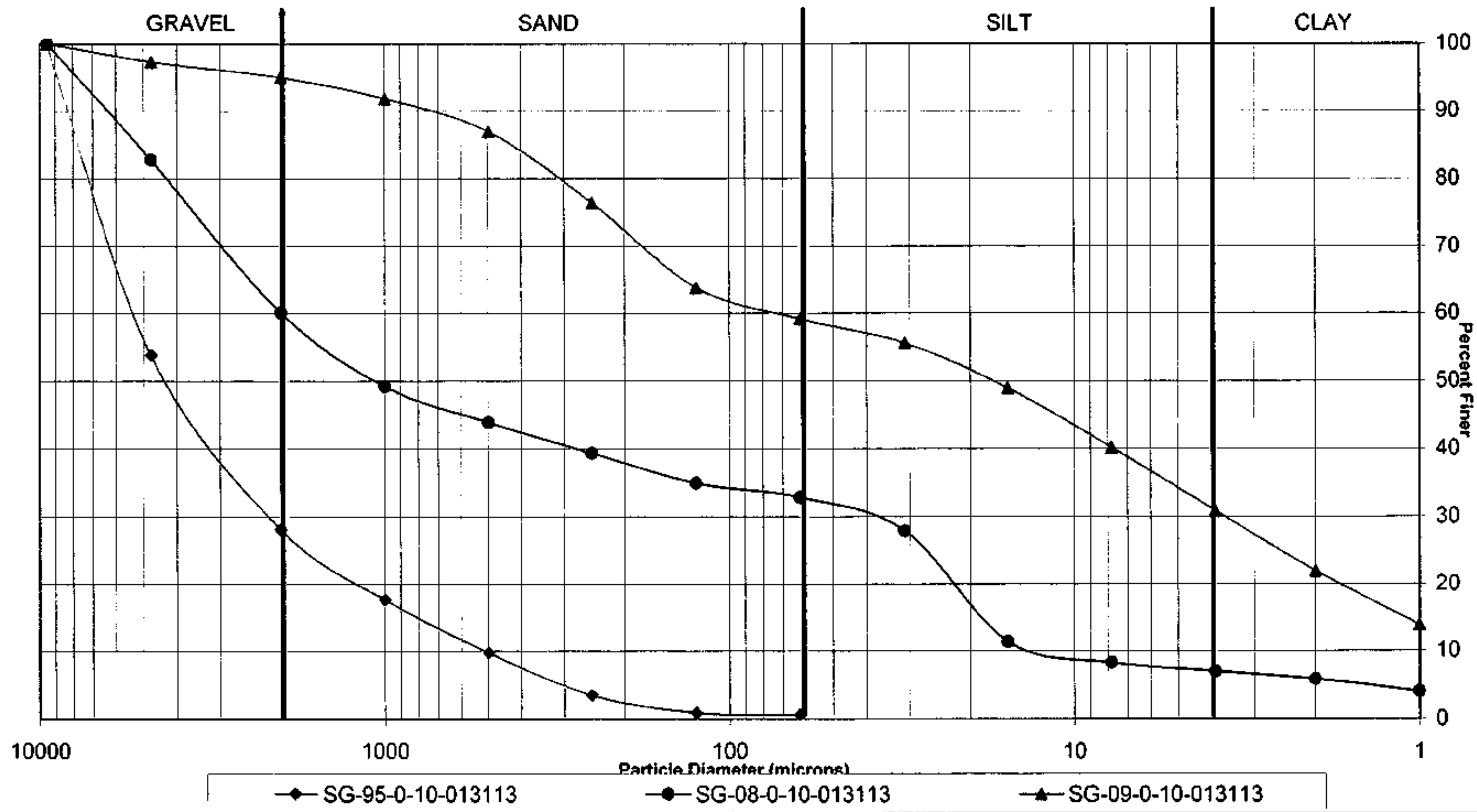


WC32 : 00002

PSEP Grain Size Distribution



PSEP Grain Size Distribution



GEOTECHNICAL ANALYSIS DATA SHEET
Specific Gravity by Method ASTM D854

ANALYTICAL RESOURCES INCORPORATED

Data Release Authorized: JC
Reported: 02/12/13
Date Received: 02/01/13
Page 1 of 1

QC Report No: WC33-Floyd-Snider
Project: POB-Harris
T.4030

Client/ ARI ID	Date Sampled	Matrix	Analysis Date	Result
FS-19-8.0-8.5-012913 WC33B 13-2446	01/29/13	Sediment	02/04/13 11:15	2.747
FS-19-19.5-20.0-012913 WC33D 13-2448	01/29/13	Sediment	02/04/13 11:15	2.726
FS-22-12.0-12.5-013013 WC33K 13-2455	01/30/13	Sediment	02/04/13 11:15	2.767

Reported in Std Units

ANALYTICAL RESOURCES INCORPORATED

GEOTECHNICAL ANALYSIS DATA SHEET
Wet Density by Method ASTM D7263

Data Release Authorized:
Reported: 02/12/13
Date Received: 02/01/13
Page 1 of 1

QC Report No: WC33-Floyd-Snider
Project: POB-Harris
T.4030

Client/ ARI ID	Date Sampled	Matrix	Analysis Date	Result
FS-19-8.0-8.5-012913 WC33B 13-2446	01/29/13	Sediment	02/04/13 11:15	130.1
FS-19-19.5-20.0-012913 WC33D 13-2448	01/29/13	Sediment	02/04/13 11:15	123.7
FS-22-12.0-12.5-013013 WC33K 13-2455	01/30/13	Sediment	02/04/13 11:15	138.8

Reported in lb/ft3

GEOTECHNICAL ANALYSIS DATA SHEET
Moisture Content by Method ASTM D2216

ANALYTICAL RESOURCES INCORPORATED

Data Release Authorized:
Reported: 02/12/13
Date Received: 02/01/13
Page 1 of 1

QC Report No: WC33-Floyd-Snider
Project: POB-Harris
T.4030

Client/ ARI ID	Date Sampled	Matrix	Analysis Date	Result
FS-19-8.0-8.5-012913 WC33B 13-2446	01/29/13	Sediment	02/04/13 11:15	13.74
FS-19-19.5-20.0-012913 WC33D 13-2448	01/29/13	Sediment	02/04/13 11:15	12.32
FS-22-12.0-12.5-013013 WC33K 13-2455	01/30/13	Sediment	02/04/13 11:15	13.90

Reported in Percent

GEOTECHNICAL ANALYSIS DATA SHEET
Dry Density by Method ASTM D7263

ANALYTICAL RESOURCES INCORPORATED

Data Release Authorized: gl
Reported: 02/12/13
Date Received: 02/01/13
Page 1 of 1

QC Report No: WC33-Floyd-Snider
Project: POB-Harris
T.4030

Client/ ARI ID	Date Sampled	Matrix	Analysis Date	Result
FS-19-8.0-8.5-012913 WC33B 13-2446	01/29/13	Sediment	02/04/13 11:15	114.4
FS-19-19.5-20.0-012913 WC33D 13-2448	01/29/13	Sediment	02/04/13 11:15	110.1
FS-22-12.0-12.5-013013 WC33K 13-2455	01/30/13	Sediment	02/04/13 11:15	121.9

Reported in lb/ft3

GEOTECHNICAL ANALYSIS DATA SHEET
Porosity by Method SW9100

ANALYTICAL RESOURCES INCORPORATED

Data Release Authorized:
Reported: 02/12/13
Date Received: 02/01/13
Page 1 of 1

QC Report No: WC33-Floyd-Snider
Project: POB-Harris
T.4030

Client/ ARI ID	Date Sampled	Matrix	Analysis Date	Result
FS-19-8.0-8.5-012913 WC33B 13-2446	01/29/13	Sediment	02/04/13 11:15	0.33
FS-19-19.5-20.0-012913 WC33D 13-2448	01/29/13	Sediment	02/04/13 11:15	0.35
FS-22-12.0-12.5-013013 WC33K 13-2455	01/30/13	Sediment	02/04/13 11:15	0.29

Reported in Std Units

GEOTECHNICAL ANALYSIS DATA SHEET
Organic Matter by Method ASTM D2974

ANALYTICAL RESOURCES INCORPORATED

Data Release Authorized: ql
Reported: 02/12/13
Date Received: 02/01/13
Page 1 of 1

QC Report No: WC33-Floyd-Snider
Project: POB-Harris
T.4030

Client/ ARI ID	Date Sampled	Matrix	Analysis Date	Result
FS-19-6.0-6.5-012913 WC33A 13-2445	01/29/13	Sediment	02/04/13 11:15	1.12
FS-19-19.0-19.5-012913 WC33C 13-2447	01/29/13	Sediment	02/04/13 11:15	0.67
FS-22-11.5-12.0-013013 WC33J 13-2454	01/30/13	Sediment	02/04/13 11:15	0.60
FS-78-11.5-12.0-013013 WC33L 13-2456	01/30/13	Sediment	02/04/13 11:15	0.39

Organic/Ash Content Burn Temperature 440 C Per ASTM D2974

GEOTECHNICAL ANALYSIS DATA SHEET
Total Solids by Method ASTM D2974

ANALYTICAL RESOURCES INCORPORATED

Data Release Authorized: gl
Reported: 02/12/13
Date Received: 02/01/13
Page 1 of 1

QC Report No: WC33-Floyd-Snider
Project: POB-Harris
T.4030

Client/ ARI ID	Date Sampled	Matrix	Analysis Date	Result
FS-19-6.0-6.5-012913 WC33A 13-2445	01/29/13	Sediment	02/04/13 11:15	88.91
FS-19-19.0-19.5-012913 WC33C 13-2447	01/29/13	Sediment	02/04/13 11:15	87.23
FS-22-11.5-12.0-013013 WC33J 13-2454	01/30/13	Sediment	02/04/13 11:15	88.50
FS-78-11.5-12.0-013013 WC33L 13-2456	01/30/13	Sediment	02/04/13 11:15	89.78

GEOTECHNICAL ANALYSIS DATA SHEET
Ash Content by Method ASTM D2974

ANALYTICAL RESOURCES INCORPORATED

Data Release Authorized: JL
Reported: 02/12/13
Date Received: 02/01/13
Page 1 of 1

QC Report No: WC33-Floyd-Snider
Project: POB-Harris
T.4030

Client/ ARI ID	Date Sampled	Matrix	Analysis Date	Result
FS-19-6.0-6.5-012913 WC33A 13-2445	01/29/13	Sediment	02/04/13 11:15	98.88
FS-19-19.0-19.5-012913 WC33C 13-2447	01/29/13	Sediment	02/04/13 11:15	99.33
FS-22-11.5-12.0-013013 WC33J 13-2454	01/30/13	Sediment	02/04/13 11:15	99.40
FS-78-11.5-12.0-013013 WC33L 13-2456	01/30/13	Sediment	02/04/13 11:15	99.61

Organic/Ash Content Burn Temperature 440 C Per ASTM D2974

Floyd-Snider
POB-Harris
T.4030

Apparent Grain Size Distribution Summary
Percent Finer Than Indicated Size

Sample No.	Gravel			Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt				Clay	
Phi Size	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
Sieve Size (microns)	3/8"	#4 (4750)	#10 (2000)	#18 (1000)	#35 (500)	#60 (250)	#120 (125)	#230 (63)	31.00	15.60	7.80	3.90	2.00	1.00
SG-12-0-10-013113	100.0	100.0	99.8	98.9	96.4	92.9	86.5	83.3	80.6	72.3	58.7	43.5	30.3	18.9
	100.0	99.6	99.0	96.1	92.9	89.5	82.8	79.7	77.0	69.3	55.9	42.0	29.2	18.0
	100.0	100.0	99.8	98.4	96.1	92.7	86.4	83.4	81.1	72.7	58.9	43.9	30.6	18.6
HA-09-0-10-013013	100.0	98.8	92.6	90.0	78.6	17.5	0.4	0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
HA-10-0-10-013013	100.0	32.1	17.9	9.7	5.0	3.1	2.4	2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1
HA-11-0-10-013013	100.0	45.6	39.0	31.0	14.1	5.4	3.5	2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8

Notes to the Testing:

1. Organic matter was not removed prior to testing, thus the reported values are the "apparent" grain size distribution. See narrative for discussion of the testing.

WC33

Floyd-Snider
POB-Harris
T.4030

Apparent Grain Size Distribution Summary
Percent Retained in Each Size Fraction

Sample No.	Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Coarse Silt	Medium Silt	Fine Silt	Very Fine Silt	Clay			Total Fines
Phi Size	< -1	-1 to 0	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	> 10	> 4
Sieve Size (microns)	> #10 (2000)	10 to 18 (2000-1000)	18-35 (1000-500)	35-60 (500-250)	60-120 (250-125)	120-230 (125-62)	62.5-31.0	31.0-15.6	15.6-7.8	7.8-3.9	3.9-2.0	2.0-1.0	<1.0	<230 (<62)
SG-12-0-10-013113	0.2	1.0	2.5	3.4	6.5	3.2	2.8	8.2	13.6	15.2	13.3	11.3	18.9	83.3
	1.0	2.9	3.3	3.4	6.6	3.1	2.7	7.7	13.4	13.9	12.8	11.2	18.0	79.7
	0.2	1.3	2.3	3.4	6.3	3.0	2.2	8.4	13.9	15.0	13.3	12.0	18.6	83.4
HA-09-0-10-013013	7.4	2.6	11.5	61.1	17.1	0.1	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.3
HA-10-0-10-013013	82.1	8.2	4.7	1.9	0.8	0.3	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	2.1
HA-11-0-10-013013	61.0	8.0	16.9	8.7	1.9	0.7	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	2.8

Notes to the Testing:

1. Organic matter was not removed prior to testing, thus the reported values are the "apparent" grain size distribution. See narrative for discussion of the testing.

QA SUMMARY

Client:	Floyd-Snider	Client Project:	POB-Harris
ARI Trip. Sample ID:	WC32A	Client Project No.:	T.4030
Client Trip. Sample ID:	SG-12-0-10-013113	Batch No.:	WC33-1

Relative Standard Deviation, By Phi Size

Sample ID	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
SG-12-0-10-013113	100.0	100.0	99.8	98.9	96.4	92.9	86.5	83.3	80.6	72.3	58.7	43.5	30.3	18.9
	100.0	99.6	99.0	96.1	92.9	89.5	82.8	79.7	77.0	69.3	55.9	42.0	29.2	18.0
	100.0	100.0	99.8	98.4	96.1	92.7	86.4	83.4	81.1	72.7	58.9	43.9	30.6	18.6
AVE	NA	99.87	99.53	97.80	95.10	91.68	85.23	82.12	79.57	71.47	57.85	43.16	30.01	18.51
STDEV	NA	0.23	0.48	1.49	1.95	1.91	2.08	2.10	2.24	1.86	1.67	0.98	0.70	0.47
%RSD	NA	0.23	0.48	1.52	2.05	2.08	2.44	2.56	2.81	2.61	2.89	2.28	2.35	2.57

The Triplicate Applies To The Following Samples

Client ID	Date Sampled	Date Extracted	Date Complete	QA Ratio (95-105)	Data Qualifiers	Pipette Portion (5.0-25.0g)
SG-12-0-10-013113	1/31/2013	2/6/2013	2/12/2013	99.1		10.5
	1/31/2013	2/6/2013	2/12/2013	99.3		9.4
	1/31/2013	2/6/2013	2/12/2013	99.1		10.2
HA-09-0-10-013013	1/30/2013	2/6/2013	2/12/2013	100.3	SS	0.4
HA-10-0-10-013013	1/30/2013	2/6/2013	2/12/2013	100.9	SS	2.9
HA-11-0-10-013013	1/30/2013	2/6/2013	2/12/2013	101.0	SS	3.9

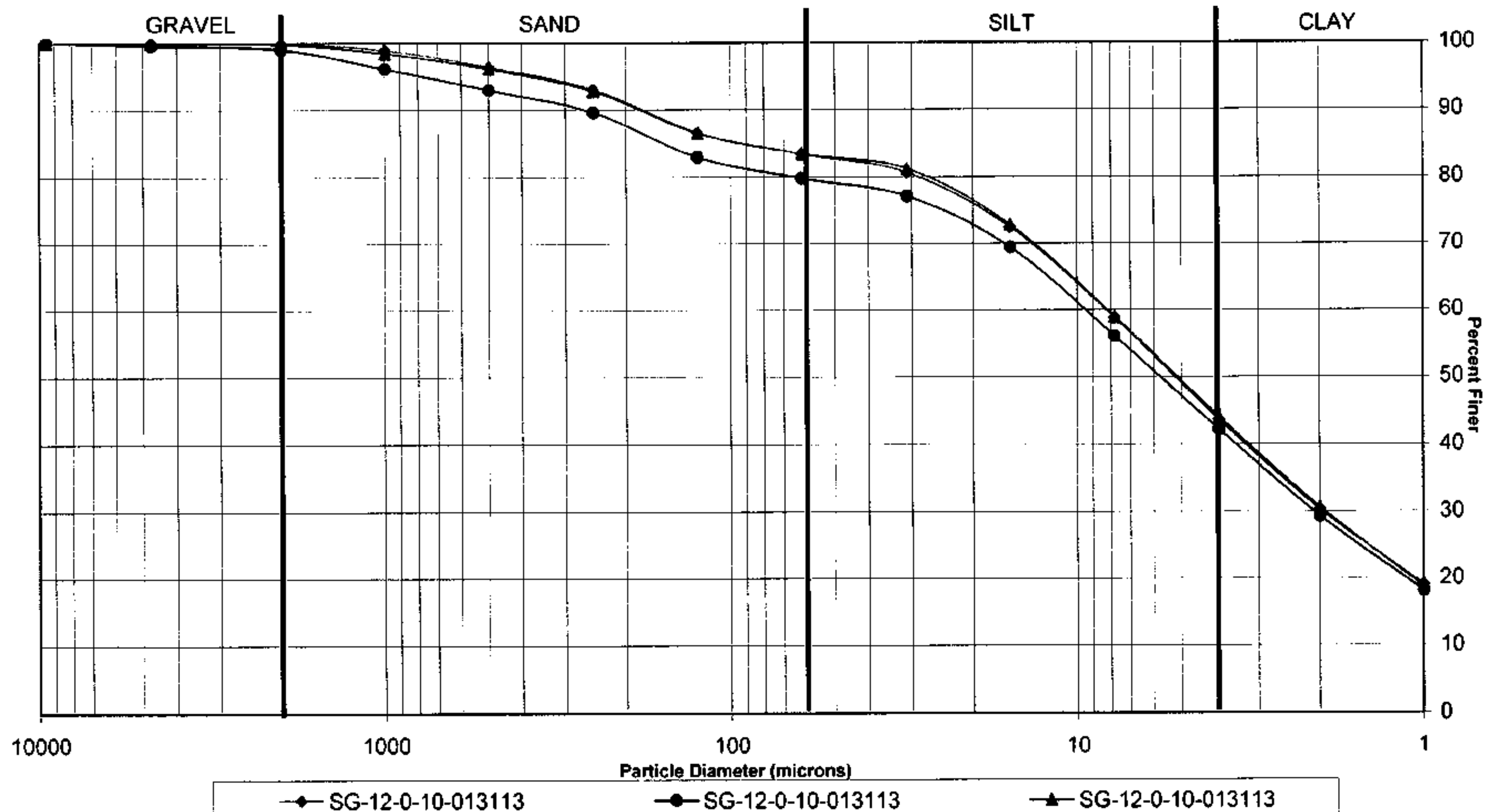
* ARI Internal QA limits = 95-105%

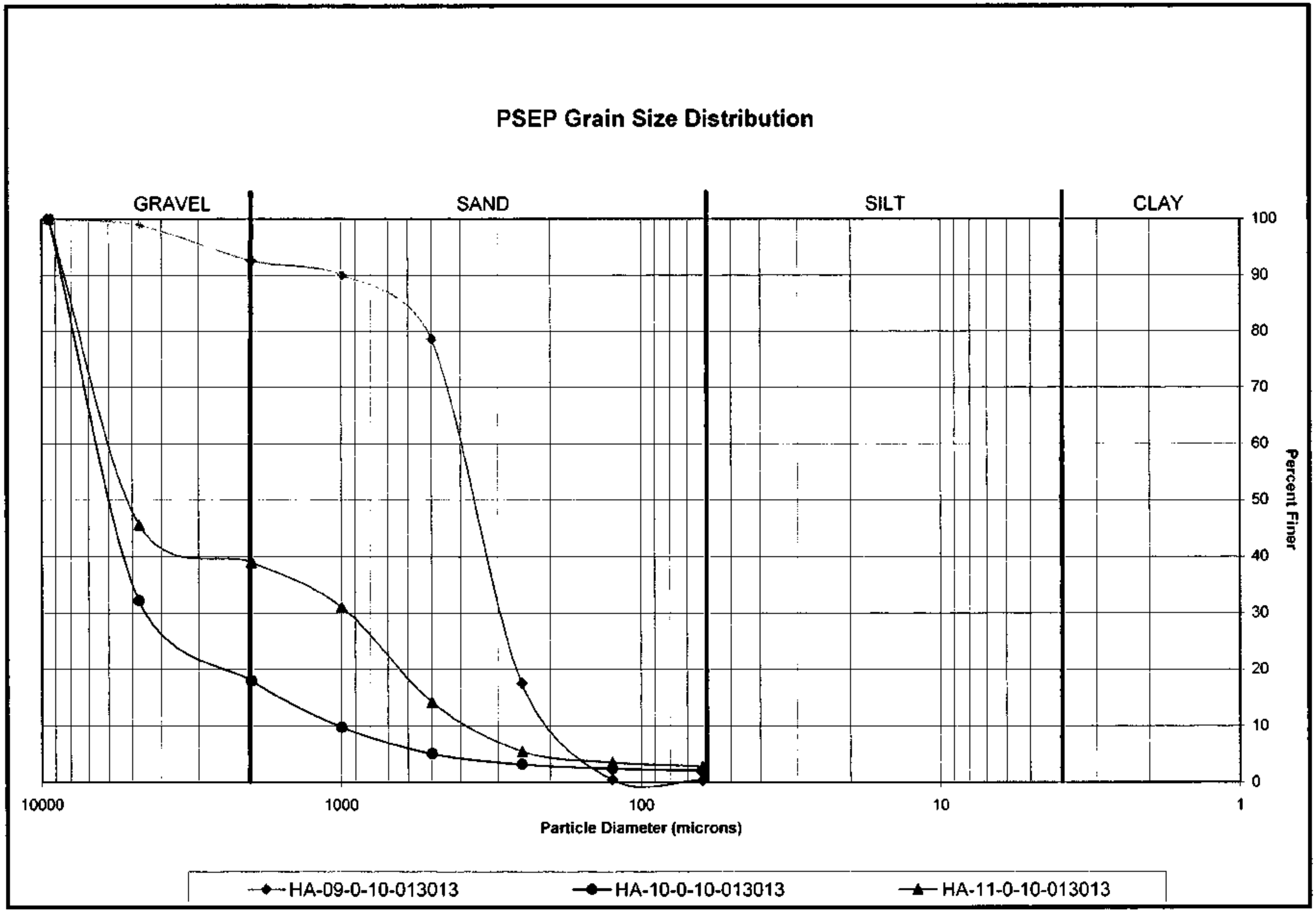
Notes to the Testing:

1. Organic matter was not removed prior to testing, thus the reported values are the "apparent" grain size distribution. See narrative for discussion of the testing

PSEP Grain Size Distribution

Triplicate Sample Plot




PSEP Grain Size Distribution
GRAVEL
SAND
SILT
CLAY
100
90
80
70
60
50
40
30
20
10
0
Percent Finer
10000
1000
100
10
1
Particle Diameter (microns)
HA-09-0-10-013013
HA-10-0-10-013013
HA-11-0-10-013013

WC02 : 00017

Total Solids

ARI Job ID: WC32, WC33

Total Solids Targets-Extractions
Data By: Jim Hawk
Created: 2/ 5/13

Worklist: 6026
Analyst: JBH
Comments:

	ARI ID	Target Dry Wt (g)	Total Solids	Min Wet Wt (g)
1.	WC32A	10.00	40.2	24.88
2.	WC32B	10.00	34.8	28.74
3.	WC32C	10.00	77.2	12.95
4.	WC32D	10.00	59.0	16.95
5.	WC32N	10.00	60.3	16.58

Total Solids Targets-Extractions
Data By: Jim Hawk
Created: 2/ 5/13

Worklist: 6046
Analyst: JBH
Comments:

ARI ID	Target Dry Wt (g)	Total Solids	Min Wet Wt (g)
1. WC33E	10.00	85.8	11.66
2. WC33F	10.00	91.9	10.88

Extractions Total Solids-extts
Data By: Yen Luu
Created: 2/ 4/13

Worklist: 5454
Analyst: RVR
Comments:

Oven ID:________________ Balance ID:____________________

Samples In: Date:_______ Time:_______ Temp:_______ Analyst:_______

Samples Out: Date:_______ Time:_______ Temp:_______ Analyst:_______

	ARI ID / CLIENT ID	Tare Wt (g)	Wet Wt (g)	Dry Wt (g)	% Solids	pH
1.	WC32A 13-2424 SG-12-0-10-013113	1.11	13.59	6.13	40.2	NR
2.	WC32B 13-2425 SG-13-0-10-013113	1.13	11.95	4.89	34.8	NR
3.	WC32C 13-2426 SG-07-0-10-013113	1.13	12.43	9.85	77.2	NR
4.	WC32D 13-2427 SG-06-0-10-013113	1.14	12.58	7.89	59.0	NR
5.	WC32E 13-2428 SG-05-0-10-013113	1.14	12.70	12.04	94.3	NR
6.	WC32F 13-2429 SG-95-0-10-013113	1.14	12.78	12.02	93.5	NR
7.	WC32G 13-2430 SG-08-0-10-013113	1.18	12.68	7.10	51.5	NR
8.	WC32H 13-2431 SG-09-0-10-013113	1.15	12.02	6.85	52.4	NR
9.	WC32N 13-2437 SG-94-0-10-013113	1.14	12.11	7.75	60.3	NR

Extractions Total Solids-extts
Data By: Yen Luu
Created: 2/ 4/13

Worklist: 5454
Analyst: YL
Comments:

Oven ID: ϕ15

Balance ID: B139298ϕϕ2

Samples In: Date: 2/4/13 Time: 12:ϕϕ Temp: 1ϕ1 Analyst: YL

Samples Out: Date: 02/05/13 Time: ϕ6:40 Temp: 101° Analyst: RR

ARI ID / CLIENT ID	Tare Wt (g)	Wet Wt (g)	Dry Wt (g)	% Solids	pH
1. WC32A 13-2424 SG-12-0-10-013113	1.~~07~~ 11 2/4/13	13.59	6.13		NR
2. WC32B 13-2425 SG-13-0-10-013113	1.13	11.95	4.89		NR
3. WC32C 13-2426 SG-07-0-10-013113	1.13	12.43	9.85		NR
4. WC32D 13-2427 SG-06-0-10-013113	1.14	12.58	7.89		NR
5. WC32E 13-2428 SG-05-0-10-013113	1.14	12.7ϕ	12.ϕ4		NR
6. WC32F 13-2429 SG-95-0-10-013113	1.14	12.78	12.ϕ2		NR
7. WC32G 13-2430 SG-08-0-10-013113	1.1~~5~~8 YL 2/4/13	12.68	7.1ϕ		NR
8. WC32H 13-2431 SG-09-0-10-013113	1.15	12.ϕ2	6.85		NR
9. WC32N 13-2437 SG-94-0-10-013113	1.14	12.11	7.75		NR

Extractions Total Solids-extts
Data By: Yen Luu
Created: 2/ 4/13

Worklist: 5455
Analyst: RVR
Comments:

Oven ID:________________

Balance ID:____________________

Samples In: Date:________ Time:________ Temp:________ Analyst:________

Samples Out: Date:________ Time:________ Temp:________ Analyst:________

	ARI ID CLIENT ID	Tare Wt (g)	Wet Wt (g)	Dry Wt (g)	% Solids	pH
1.	WC33E 13-2449 SFS-02-012913	1.15	13.25	11.53	85.8	NR
2.	WC33F 13-2450 FS-21-0-0.5-013013	1.20	11.57	10.73	91.9	NR
3.	WC33G 13-2451 HA-09-0-10-013013	1.17	12.44	11.79	94.2	NR

Extractions Total Solids-extts
Data By: Yen Luu
Created: 2/ 4/13

Worklist: 5455
Analyst: YL
Comments:

Oven ID: Ø15

Balance ID: B139298ØØ2

Samples In: Date: 2/4/13 Time: 12:26 Temp: 98 Analyst: YL

Samples Out: Date: 02/05/13 Time: 06:40 Temp: 101° Analyst: RR

ARI ID / CLIENT ID	Tare Wt (g)	Wet Wt (g)	Dry Wt (g)	% Solids	pH
1. WC33E 13-2449 SFS-02-012913	1.15	13.25	11.53		NR
2. WC33F 13-2450 FS-21-0-0.5-013013	1.20	11.57	10.73		NR
3. WC33G 13-2451 HA-09-0-10-013013	1.17	12.44	11.79		NR

Solids Data Entry Report
Date: 02/06/13

Checked by: CB Date: 2/6/13
Data Analyst: DM

Solids Determination performed on 02/05/13 by DM

JOB	SAMPLE	CLIENTID	TAREWEIGHT	SAMPDISH	DRYWEIGHT	SOLIDS
WC32	E	SG-05-0-10-013113	0.973	10.540	9.959	93.93
WC32	F	SG-95-0-10-013113	0.955	10.134	9.503	93.13
WC32	G	SG-08-0-10-013113	1.001	10.324	5.487	48.12
WC32	H	SG-09-0-10-013113	1.028	10.366	5.723	50.28

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Total Solids Bench Sheet

Laboratory Section Metals

Oven Identification: 07 Balance ID: 0487155

Samples In Oven: Date: 02-05-13 Time: 0815 Temp: 103°c Analyst: DM

Removed from Oven: Date: 2-06-13 Time: 0710 Temp: 101°c Analyst: DM

ARI Sample ID	Tare Weight (g)	Tare + Sample Wet (g)	Tare + Sample Dry (g)	Date & Time Last Weight	Final Weighting >12 hrs[1]
WC32 E	0.973	10.540	9.959	–	✓
" F	0.965	10.184	9.503	–	✓
" G	1.001	10.324	5.487	–	✓
" H	1.028	10.366	5.723	–	✓
WC33 G	1.027	10.352	9.798	–	✓
" H	1.026	10.596	9.703	–	✓
" I	1.027	10.262	8.861	–	✓
		02-05-13 DM			

1) Place a check mark in this column if samples have dried > 12 but < 24 hours. When samples have been at 104°C < 12 hours, constant weight must be verified as described in SOP 10023S. Use a 2nd bench sheet for additional weightings.

Solids Data Entry Report   Checked by: LO   Date: 2/6/13
Date: 02/06/13   Data Analyst: DM

Solids Determination performed on 02/05/13 by DM

JOB	SAMPLE	CLIENTID	TAREWEIGHT	SAMPDISH	DRYWEIGHT	SOLIDS
WC33	G	HA-09-0-10-013013	1.027	10.352	9.798	94.06
WC33	H	HA-10-0-10-013013	1.026	10.596	9.703	90.67
WC33	I	HA-11-0-10-013013	1.027	10.262	8.861	84.83

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Total Solids Bench Sheet

Laboratory Section Metals

Oven Identification: 07 Balance ID: 0487155

Samples in Oven: Date: 02-05-13 Time: 0815 Temp: 103°c Analyst: DM

Removed from Oven: Date: 2-06-13 Time: 0710 Temp: 101°c Analyst: DM

ARI Sample ID	Tare Weight (g)	Tare + Sample Wet (g)	Tare + Sample Dry (g)	Date & Time Last Weight	Final Weighting >12 hrs[1]
WC32 E	0.973	10.540	9.959	–	✓
" F	0.955	10.134	9.503	–	✓
" G	1.001	10.524	5.487	–	✓
" H	1.028	10.366	5.723	–	✓
WC53 G	1.027	10.352	9.798	–	✓
" H	1.026	10.596	9.703	–	✓
" I	1.027	10.262	8.861	–	✓
		02-05-13 DM			

1) Place a check mark in this column if samples have dried > 12 but < 24 hours. When samples have been at 104°C < 12 hours, constant weight must be verified as described in SOP 10023S. Use a 2nd bench sheet for additional weightings.

Semivolatile Raw Data
Extraction Bench Sheets and Notes

ARI Job ID: WC32, WC33

Incorporated
Analytical Chemists and
Consultants

(8270D) BAN –Water
Liquid/Liquid (3520C) (SOP # 3311S)

Preparation Test BAN # 2 (BANWLI)
ARI Job No(s) WC32

In-House (1.0-10.0ppb)
Batch set up by: WW

Bottle #	Extraction Requirements	Volume Extracted	Disassemble Liq/Liq (Mantle #)	DryVap Module # Y / N	Final Effective Volume	Volume to Lab	Comments	Verifty Client ID
	WC32 MBW	500mL	1	# Y / N	0.5mL	0.5mL		AR 02/06/13
	SBW	500mL	2	# Y / N	0.5mL	0.5mL		
	SBW Dup	500mL	3	# Y / N	0.5mL	0.5mL		
	QLS	500mL	4	# Y / N	0.5mL	0.5mL		
1	WC32 I	500mL	5	# Y / N	0.5mL	0.5mL		
		500mL		# Y / N	0.5mL	0.5mL		Analyst/Date
		500mL		# Y / N	0.5mL	0.5mL		KD 80-85°C 1 2 3 4 5 6
		500mL		# Y / N	0.5mL	0.5mL		
		500mL		# Y / N	0.5mL	0.5mL		Y / N
		500mL		# Y / N	0.5mL	0.5mL		RR
		500mL		# Y / N	0.5mL	0.5mL		02/07/13
		500mL		# Y / N	0.5mL	0.5mL		
		500mL		# Y / N	0.5mL	0.5mL		
		500mL		# Y / N	0.5mL	0.5mL		Analyst/Date
		500mL		# Y / N	0.5mL	0.5mL		TurboVap 1 2 3
		500mL		# Y / N	0.5mL	0.5mL		RR
		500mL		# Y / N	0.5mL	0.5mL		
		500mL		# Y / N	0.5mL	0.5mL	RR 02/07/13	02/07/13
		500mL		# Y / N	0.5mL	0.5mL		
Analyst/Date	AR 02/06/13 →		AR 02/07/13		RR 02/07/13	RR 02/07/13		Analyst/Date

Standard	Standard ID	Concentration	Volume	Expiration Date	Analyst	Witness
Surrogate	A (2044T-2)	100/150µg/mL	125µL	7/02/13	AR	AC
Full List Spike (Freezer)	7 (2017-2)	100µg/mL	125µL	3/14/13	AR	AC
Base Spike	56(2065-2)	200µg/mL	125µL	7/31/13	AR	AC
Acid Spike	38(2024-3)	100/200µg/mL	125µL	4/11/13	AR	AC
QLS Spike (Freezer)	14(2031-2)	10-100µg/mL	50µL	4/24/13	AR	AC
Extraction Time: 12:44		Liq/Liq Start: 13:00			Liq/Liq Stop: 0638	

SPECIAL INSTRUCTIONS: 1. Add ~200mL DCM to Liq/Liq. 2. Add 500mL sample. 3. Add surr/spk. 4. Adjust Acid (pH <2) using 1:1 Sulfuric Acid. (1/4 pipet for blanks & 1/2 pipet for samples). Stir to mix. Verify pH! Let sit 10 minutes. Verify pH again. 5. Extract minimum 8 hrs. 6. DryVap to 0.5mL or KD (NO drying column) to 5mL at 80°. 7. (If KD)=TurboVap to 0.5mL. 8. Vial in DCM.

A. Archive Y / N

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

ARI Job No.: WC32

Client ID: Floyd-Snider

Parameter: SVOA

Client Project: POB-Harris

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☐ No Anomalies (standard soil/wet sediment/sand/gravel)=	
☐ Standing Water Decanted (Not shared)=	
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay/Clumps (Difficult to homogenize)=	
☐ Rocks (%+size)?	
☐ Organics (Leaves/sticks/grass)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
Aqueous:	
☑ No Anomalies WC32 Sample I	AR 02/06/13
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Other (Details)=	
☐ Other Notes/Comments= (Note problems, concerns, corrective actions).	
(Centrifuge#1 used for all Centrifugations)	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Benchsheet

(8270D) BAN/SIM SVOA PSDDA–Soil/ Sediment Microwave (3546) (SOP # 3304S)

Preparation Test BAN/SIM SVOA PSDDA # 9 (BANSBANSDMP)

PSDDA (6.7-20ppb)

ARI Job No(s) WC32, WC33 Page 1 of 1 ~~2~~ 2/8/13 Batch set up by: SP

Bottle #	Extraction Requirements	Weight Extracted (eq. to 10g dry wt)	(REQ) GPC (1:1) 1 or 2	Final Effective Volume	Volume to Lab	Comments	Verify Client ID
	WC32 MBS	10.00g	(1:1) Y/N TH 2/9/13	1mL	1mL	(Use 5g Pre-Deactivated Sodium Sulfate for Blanks)	M 2/8/13 Analyst/Date; Microwave 1 2 3
	SBS	10.00g	(1:1) Y/N TH 2/10/13	1mL	1mL	(Use 5g Pre-Deactivated Sodium Sulfate for Blanks)	M 2/8/13 Analyst/Date
	SBS Dup.	10.00g	(1:1) Y/N TH 2/10/13	1mL	1mL	(Use 5g Pre-Deactivated Sodium Sulfate for Blanks)	KD 80-85°C 1 2 3 4 5 6
	QLS	10.00g	(1:1) Y/N TH 2/10/13	1mL	1mL	(Use 5g Pre-Deactivated Sodium Sulfate for Blanks)	YY/CT Analyst/Date 2/9/13
	QLS (SIM)	10.00g	(1:1) Y/N TH 2/10/13	1mL	1mL	(Use 5g Pre-Deactivated Sodium Sulfate for Blanks)	TurboVap 1 2 3
2	A	25.12	(1:1) Y/N TH 2/9/13	1mL	1mL		TH 2/9/13 Analyst/Date
2	B	29.32	(1:1) Y/N TH 2/9/13	1mL	1mL		GPC Prep Filter (1:1)
2	C	13.09	(1:1) Y/N TH 2/9/13	1mL	1mL		TH 2/9/13
2	D	17.26	(1:1) Y/N TH 2/9/13	1mL	1mL		Analyst/Date
2	E ~~E~~ SP 2/8	11.17	(1:1) Y/N TH 2/9/13	1mL	1mL		Post GPC KD 80-85°C
2	F	11.41	(1:1) Y/N TH 2/9/13	1mL	1mL		1 2 3 4 5 6
2	G	20.12	(1:1) Y/N TH 2/9/13	1mL	1mL		2/11/13 Analyst/Date
2	GMS	20.08	(1:1) Y/N	1mL	1mL		TurboVap 1 2 3
Analyst/Date		AC/M 2/8/13	TH 2/10/13	CSZ 2/11/13	CSZ 2/11/13		CSZ 2/11/13 Analyst/Date

2-8-13

Standard	Standard ID	Concentration	Volume	Expiration Date	Analyst	Witness
Surrogate	A (2047-2)	100/150µg/mL	50µL	7/2/13	M	AC
Full List Spike (Freezer)	7 (2017-2)	100µg/mL	50µL	3/14/13	M	AC
Base Spike	56(2065-2)	200µg/mL	50µL	7/31/13	M	AC
Acid Spike	38(2024-3)	100/150µg/mL	50µL	4/11/13	M	AC
QLS Spike (14 in Freezer)	14(2032-2)	100/200µg/mL	20µL	4/24/13	M	AC
SIM QLS Spike (Freezer)	25(2042-5)	1µg/mL	50µL	4/24/13	M	AC

Extraction Time: 13:45 Balance ID: 38040092

SPECIAL INSTRUCTIONS: 1. Weigh into beakers-lightly dry with Sodium Sulfate. 2. Transfer to microwave vessel. Note: do not fill vessel more than 2/3rd full. Some samples may require two vessels). 3. Add 1:1 DCM/ACE to the vessels (until solvent is 3" above soil layer after homogenization). 4. Add surr/spike. 5. Microwave on appropriate power setting determined by # of samples. 6. After microwave-rehomogenize while hot then let cool 15 min in cold water. Re-homogenize while cool. 7. Decant 1:1 DCM/ACE into Erlenmeyer flask with sodium sulfate in the bottom and funnel containing pre-deactivated glasswool. 8. Rinse with DCM 9. Microwave a 2nd time using DCM only (until solvent is 3" above soil layer after homogenization). 10. Let cool and decant the solvent then empty the soil into the funnel and rinse with DCM. 11. KD (small or large drying column with pre-deactivated glasswool-Blanks=5g sulfate)) to 5mL at 80- 85°C. 12. GPC Req. 13. (After GPC): KD at 80-85°. 14. TurboVap. 15. Vial in DCM.

A. Need Total Solids Y/N ~~B. Archive/Freeze Y/N~~

3093F
Page 1 of 2

13-2430
2451

Revision 5
01/02/13

both jobs
WC32 SP 2/8 :00032

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Benchsheet

(8270D) BAN/SIM SVOA PSDDA–Soil/ Sediment Microwave (3546) (SOP # 3304S)

Preparation Test BAN/SIM SVOA PSDDA # 9 (BANSBANSDMP)

PSDDA (6.7-20ppb)

ARI Job No(s) WC32, WC33 Page 2 of 2 Batch set up by: SO

Bottle #	Extraction Requirements	Weight Extracted (eq. to 10g dry wt)	(REQ) GPC (1:1) 1 or 2	Final Effective Volume	Volume to Lab	Comments	Verify Client ID
	~~MBS~~	~~10.00g~~	(1:1) Y / N	~~1mL~~	~~1mL~~	(Use 5g Pre-Deactivated Sodium Sulfate for Blanks)	AL 2/8/13 Analyst/Date
	~~SBS~~	~~10.00g~~	~~(1:1) Y / N~~	~~1mL~~	~~1mL~~	~~(Use 5g Pre-Deactivated Sodium Sulfate for Blanks)~~	Microwave 1 2 3 AL 2/8/13 Analyst/Date
	~~SBS Dup.~~	~~10.00g~~	~~(1:1) Y / N~~	~~1mL~~	~~1mL~~	~~(Use 5g Pre-Deactivated Sodium Sulfate for Blanks)~~	KD 80-85°C 1 2 3 4 5 6 YL/CT
	~~QLS~~	~~10.00g~~	~~(1:1) Y / N~~	~~1mL~~	~~1mL~~	~~(Use 5g Pre-Deactivated Sodium Sulfate for Blanks)~~	Analyst/Date 2/9/13
	~~QLS (SIM)~~	~~10.00g~~	~~(1:1) Y / N~~	~~1mL~~	~~1mL~~	~~(Use 5g Pre-Deactivated Sodium Sulfate for Blanks)~~	~~TurboVap~~ 1 2 3
2	WC32 G MSD	20.17	(1:1) Y / N TH 2/10/13	1mL	1mL		TH 2/9/13 Analyst/Date
2	↓ H	20.39	(1:1) Y / N TH 2/9/13	1mL	1mL		GPC Prep Filter (1:1)
2	WC33 G	11.25	(1:1) Y / N TH 2/9/13	1mL	1mL		TH 2/9/13 Analyst/Date
			(1:1) Y / N	1mL	1mL		
			(1:1) Y / N	1mL	1mL		Post GPC KD 80-85°C 1 2 3 4 5 6
			(1:1) Y / N	1mL	1mL		RR 02/11/13 Analyst/Date
			(1:1) Y / N	1mL	1mL	CSZ 2/11/13	
			(1:1) Y / N	1mL	1mL		TurboVap 1 2 3
Analyst/Date	AC / AL 2/8/13 2-8-13		TH 2/10/13	CSZ 2/11/13	CSZ 2/11/13		CSZ 2/11/13 Analyst/Date

Standard	Standard ID	Concentration	Volume	Expiration Date	Analyst	Witness
Surrogate	A (2047-2)	100/150µg/mL	50µL	7/2/13	AL	AC
Full List Spike (Freezer)	7 (2017-2)	100µg/mL	50µL	3/14/13	AL	AC
Base Spike	56(2065-2)	200µg/mL	50µL	7/31/13	AL	AC
Acid Spike	38(2024-3)	100/150µg/mL	50µL	4/11/13	AL	AC
~~QLS Spike (14 in Freezer)~~	~~14( )~~	~~100/200µg/mL~~	~~20µL~~			
~~SIM QLS Spike (Freezer)~~	~~25( )~~	~~1µg/mL~~	~~50µL~~			

Extraction Time: 13:45 Balance ID: 38040092

SPECIAL INSTRUCTIONS: 1. Weigh into beakers-lightly dry with Sodium Sulfate. 2. Transfer to microwave vessel. Note: do not fill vessel more than 2/3rd full. Some samples may require two vessels). 3. Add 1:1 DCM/ACE to the vessels (until solvent is 3" above soil layer after homogenization). 4. Add surr/spike. 5. Microwave on appropriate power setting determined by # of samples. 6. After microwave-rehomogenize while hot then let cool 15 min in cold water. Re-homogenize while cool. 7. Decant 1:1 DCM/ACE into Erlenmeyer flask with sodium sulfate in the bottom and funnel containing pre-deactivated glasswool. 8. Rinse with DCM 9. Microwave a 2nd time using DCM only (until solvent is 3" above soil layer after homogenization). 10. Let cool and decant the solvent then empty the soil into the funnel and rinse with DCM. 11. KD (small or large drying column with pre-deactivated glasswool-Blanks=5g sulfate)) to 5mL at 80- 85°C. 12. GPC Req. 13. (After GPC): KD at 80-85°. 14. TurboVap. 15. Vial in DCM.

A. Need Total Solids Y / N **B. Archive/Freeze Y / N**

Organic Extractions
Reagent and Solutions Identification

(8270D) BAN/SIM SVOA PSDDA–Soil/ Sediment
Microwave (3546) (SOP # 3304S)

ARI Job No(s)________________

(8270D) BAN/SIM SVOA PSDDA Soil/Sediment/Solid/Other:	Analyst/Date
Microwave Station: Pre-Deactivated Sodium Sulfate: (H#) Anhydrous Sodium Sulfate: (I# + jar date) 1:1 Methylene Chloride/Acetone: (H# 125) Methylene Chloride: (I# 5519) Pre-Deactivated Glasswool: (H#)	Microwave
Pre-GPC KD Station: Pre-Deactivated Glasswool: (H#) Anhydrous Sodium Sulfate: (I# + jar date) Methylene Chloride: (I#)	Pre-GPC KD
GPC Filter Prep: Methylene Chloride: (I#)	GPC Filter Prep
GPC Station: Acetone: (I#) Methylene Chloride: (I#)	GPC
Post GPC KD Station: Methylene Chloride: (I#)	Post GPC KD
Vialing Station: Methylene Chloride: (I#) Hexane: (I#)	Vialing

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

ARI Job No.: WC32   Client ID: Floyd-Snider

Parameter: B+N/SIM SVOA   Client Project: POB-Harris

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☒ No Anomalies (standard soil/wet sediment/sand/gravel)= A, B, ~~C~~ C, D, E, F, G, H, N	YL 2/4/13
☒ Standing Water Decanted (Not shared)= A, B, C, D, G, N.	YL 2/4/13
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay/Clumps (Difficult to homogenize)=	
☒ Rocks (%+size)? 25.% Small rocks C, 40.% Small E, 5.% F, 2% Small rocks G,	YL 2/4/13
☒ Organics (Leaves/sticks/grass)= C, D, N	YL 2/4/13
☒ Oily, obvious fuel/sulfur odors= C, D, H, N	YL 2/4/13
☒ Other (Details)= 10.% shell fragments ~~segments~~ YL 2/4/13 C, E, F, G	YL 2/4/13
WC32 - G has darker color than the GMS, GMSD.	NL 2/8/13
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Other (Details)=	
☐ Other Notes/Comments= (Note problems, concerns, corrective actions).	
(Centrifuge#1 used for all Centrifugations)	

3056F

Revision 009
08/14/12

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

ARI Job No.: WC33 Client ID: Floyd-Snider

Parameter: BAN/SIM SVOA Client Project: POB-Harris

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☒ No Anomalies (standard soil/wet sediment/sand/gravel)= E, F, G	YL 2/4/13
☐ Standing Water Decanted (Not shared)=	
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay/Clumps (Difficult to homogenize)=	
☒ Rocks (%+size)? 10% small & medium F, ~~E~~ YL 2/4/13.	YL 2/4/13
☐ Organics (Leaves/sticks/grass)=	
☒ Oily, obvious fuel/sulfur odors= F,	YL 2/4/13
☒ Other (Details)= 10% ~~[illegible]~~ YL 2/4/13 shell fragment ~~[illegible]~~ YL 2/4/13, G,	YL 2/4/13
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Other (Details)=	
☐ Other Notes/Comments= (Note problems, concerns, corrective actions). (Centrifuge#1 used for all Centrifugations)	

3056F

Revision 009
08/14/12

Semivolatile Raw Data
Initial Calibration

ARI Job ID: WC32, WC33

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC/MS,SVOA Initial Calibration Notes

ARI SOP: **801S**(SIM-PNA) **802S**(Butyl Tins) **804S**(SVOA-8270D) **805S**(op-Pest)

Instrument: NT-4 NT-6 NT-8 NT-10 NT11 NT12

Curve Date(s): 1/23/13 Internal Standard ID 1998-2 Expiration 7/3/13

DFTPP Tune Meets Criteria?	YES / NO	Minimum Response Factors Met/	YES / NO
DDT Breakdown <20%?	YES / NO	ICV Exceeding ±20%?	YES / NO
Peak Tailing Factor ≤2?	YES / NO	ICV Exceeding ±30%?	YES / NO
ICal Meets %RSD & r^2 Criteria?	YES / NO	Linear Fits Used?	YES / NO
Q flag applied?	YES / NO / NA	Quadratic Fits Used?	YES / NO
Manual Integrations for ICal?	YES / NO	Calibration Points Dropped?	YES / NO
Spectral Library Updated?	YES / NO		

Primary Source	Standard #	Expiration	Secondary Source	Standard #	Expiration
ultra	2053-2	8/1/13	Supelco	2056-1	8/12/13
↓	2054-1	12/31/13	↓	2057-1	12/31/13
↓	2055-1	12/4/13	↓	2058-1	12/15/13
in house stock	2061-1	12/6/13	in house stock	2061-1	12/6/13
Cambridge	18031	1/23/14	Aldrich	2058-2	7/2/13
~~ Restec	2027-2	10/16/13			
Aldrich	2058-2	7/2/13			

Detail problems, corrective actions and/or other pertinent information below:

"1ppm" point dropped: Benzoic Acid, 2,4-Dinitrophenol, 4,6-Dinitro-2-Methylphenol, PCP & Benzidine
"80ppm" point dropped: 3,4-Dichloroguaiacol, 4-Chloroaniline & 3-Nitroaniline
Quadratic curve fit used: 2,4-Dinitrophenol & PCP.
out of QC limits: 4-Chloroaniline & Benzidine (% RSD > 20%, no linear & Quadratic can be used)
(21.6%) (49.2%)

Analyst: [signature] Date: 01/24/13

Reviewer: [signature] Date: 1/24/13

Form 7050F Version 002 3/23/12

UC02 : 00330

Report Date : 24-Jan-2013 11:36

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/nt6.i/20130123A.b/SW846012313.m
Batch File: /chem2/nt6.i/20130123A.b
Inst ID: nt6.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08
FILENAME:	01231308	01231309	01231310	01231311	01231312	01231313	01231314	01231315
INJ.DATE:	23-JAN-2013	23-JAN-2013	23-JAN-2013	23-JAN-2013	23-JAN-2013	23-JAN-2013	23-JAN-2013	23-JAN-2013
INJ.TIME:	15:27	16:01	16:37	17:11	17:45	18:19	18:52	19:26

ℬ 01/24/13

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
$ 1 2-Fluorophenol	5.787	+++++	5.785	5.786	5.782	5.787	5.793	+++++	5.787	2.787-8.787	5.787	0.004
186 Carbaryl	15.798	+++++	15.791	15.786	15.793	15.804	15.804	15.808	15.798	12.798-18.798	15.798	0.008
179 n-Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.225	5.225-11.225	+++++	+++++
180 n-Octadecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.363	11.363-17.363	+++++	+++++
169 4-tert-Butylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.531	15.531-21.531	+++++	+++++
170 N,N-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.634	13.634-19.634	+++++	+++++
171 2,3-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.609	14.609-20.609	+++++	+++++
172 2,4-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.863	13.863-19.863	+++++	+++++
173 2,5-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.605	17.605-23.605	+++++	+++++
174 2,6-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.015	14.015-20.015	+++++	+++++
175 3,4-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.609	14.609-20.609	+++++	+++++
176 3,5-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.562	14.562-20.562	+++++	+++++
177 p-Benzoquinone	6.423	+++++	6.431	6.421	6.423	6.423	6.428	6.433	6.423	3.423-9.423	6.426	0.005
168 Pentachlorobenzene	12.983	+++++	12.975	12.976	12.978	12.983	12.983	12.988	12.983	9.983-15.983	12.981	0.005
145 4,4'-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	47.212	44.212-50.212	+++++	+++++
146 4,4'-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	47.746	44.746-50.746	+++++	+++++
147 4,4'-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	48.216	45.216-51.216	+++++	+++++

Reviewer 1 ________________ Date: ________
Reviewer 2 ________ℬ______ Date: 1/24/13

Report Date : 24-Jan-2013 11:36

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/nt6.i/20130123A.b/SW846012313.m
Batch File: /chem2/nt6.i/20130123A.b
Inst ID: nt6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
148 Dieldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	47.281	44.281-50.281	+++++	+++++
149 TCMX	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	43.387	40.387-46.387	+++++	+++++
150 DCBP	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	50.989	47.989-53.989	+++++	+++++
138 Chlorobenzilate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	67.733	64.733-70.733	+++++	+++++
139 Isodrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	65.067	62.067-68.067	+++++	+++++
140 Diallate A	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	65.487	62.487-68.487	+++++	+++++
141 Diallate B	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	65.487	62.487-68.487	+++++	+++++
142 1,2-Dibromo-3-Chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	49.917	46.917-52.917	+++++	+++++
135 2,3,5,6-Tetrachlorophe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.871	10.871-16.871	+++++	+++++
136 2,3,4,5-tetrachlorophe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	39.317	36.317-42.317	+++++	+++++
$ 137 d8-1,4-Dioxane	2.293	+++++	2.296	2.292	2.294	2.299	2.315	2.325	2.293	0.000-5.293	2.302	0.013
* 134 Di-n-octylphthalate-d4	20.435	20.428	20.428	20.428	20.430	20.430	20.430	20.435	20.435	17.435-23.435	20.431	0.003
133 Butylatedhydroxytoluen	12.823	+++++	12.820	12.816	12.818	12.823	12.823	12.827	12.823	9.823-15.823	12.821	0.004
132 3,6-Dimethylphenanthre	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	65.450	62.450-68.450	+++++	+++++
131 1-Methylphenanthrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	64.400	61.400-67.400	+++++	+++++
130 Dibenzothiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	62.100	59.100-65.100	+++++	+++++
129 1-Methylfluorene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	54.912	51.912-57.912	+++++	+++++
128 N-Hexadecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	54.212	51.212-57.212	+++++	+++++
127 2-Isopropylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	57.650	54.650-60.650	+++++	+++++
126 N-Tetradecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	56.750	53.750-59.750	+++++	+++++
144 alpha-Terpineol	9.858	+++++	9.850	9.851	9.853	9.858	9.863	9.868	9.858	6.858-12.858	9.857	0.007
125 Safrole	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	52.166	49.166-55.166	+++++	+++++

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Method File: /chem2/nt6.i/20130123A.b/SW846012313.m
Batch File: /chem2/nt6.i/20130123A.b
Inst ID: nt6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
124 3,4-Dimethylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	50.617	47.617-53.617	+++++	+++++
123 Acetophenone	8.453	+++++	8.445	8.446	8.443	8.453	8.458	8.458	8.453	5.453-11.453	8.451	0.006
122 Furfuraldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	43.467	40.467-46.467	+++++	+++++
143 1,4-Dioxane	2.336	2.356	2.344	2.340	2.336	2.347	2.358	2.368	2.336	0.000-5.336	2.348	0.011
121 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	54.500	51.500-57.500	+++++	+++++
120 2,3,4,6-Tetrachlorophe	13.229	+++++	13.226	13.222	13.224	13.229	13.229	13.233	13.229	10.229-16.229	13.227	0.004
178 2-Benzyl-4-Chloropheno	15.761	+++++	15.758	15.754	15.751	15.766	15.766	15.771	15.761	12.761-18.761	15.761	0.007
119 7,12-Dimethylbenz(a)an	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	47.069	44.069-50.069	+++++	+++++
118 Triphenyl Phosphate	18.811	+++++	18.809	18.810	18.806	18.811	18.817	18.816	18.811	15.811-21.811	18.811	0.004
117 Butyl Diphenyl Phospha	17.230	+++++	17.228	17.223	17.225	17.225	17.230	17.229	17.230	14.230-20.230	17.227	0.003
116 Dibutyl Phenyl Phospha	15.569	+++++	15.561	15.556	15.558	15.569	15.569	15.573	15.569	12.569-18.569	15.565	0.006
115 Tributyl Phosphate	13.854	+++++	13.841	13.841	13.843	13.859	13.865	13.869	13.854	10.854-16.854	13.853	0.012
114 Beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	48.950	45.950-51.950	+++++	+++++
113 Diphenyl Oxide	11.904	+++++	11.901	11.902	11.904	11.909	11.909	11.909	11.904	8.904-14.904	11.906	0.003
112 Biphenyl	11.712	+++++	11.704	11.710	11.707	11.712	11.712	11.716	11.712	8.712-14.712	11.710	0.004
111 Azobenzene (1,2-DP-Hyd	13.774	+++++	13.766	13.767	13.769	13.774	13.779	13.784	13.774	10.774-16.774	13.773	0.007
110 Tetrachloroguaiacol	14.944	+++++	14.936	14.937	14.933	14.944	14.949	14.948	14.944	11.944-17.944	14.941	0.006
109 3,4,5-Trichloroguaiaco	13.330	+++++	13.328	13.323	13.325	13.330	13.330	13.335	13.330	10.330-16.330	13.329	0.004
181 3,4,6-Trichloroguaiaco	13.443	+++++	13.440	13.441	13.437	13.448	13.448	13.452	13.443	10.443-16.443	13.444	0.005
108 4,5,6-Trichloroguaiaco	14.356	+++++	14.348	14.349	14.351	14.356	14.356	14.361	14.356	11.356-17.356	14.354	0.005
184 3,4-Dichloroguaiacol	11.802	+++++	11.795	11.795	11.797	11.797	11.803	12.592	11.802	8.802-14.802	11.912	0.300
107 4,5-Dichloroguaiacol	12.582	+++++	12.575	12.575	12.577	12.588	12.588	12.592	12.582	9.582-15.582	12.583	0.007
182 4,6-Dichloroguaiacol	12.582	+++++	12.575	12.575	12.577	12.588	12.588	12.592	12.582	9.582-15.582	12.583	0.007
185 4-Chloroguaiacol	10.723	+++++	10.721	10.722	10.718	10.723	10.723	10.728	10.723	7.723-13.723	10.723	0.003

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Method File: /chem2/nt6.i/20130123A.b/SW846012313.m
Batch File: /chem2/nt6.i/20130123A.b
Inst ID: nt6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
106 Guaiacol	8.720	+++++	8.718	8.713	8.715	8.725	8.726	8.730	8.720	5.720-11.720	8.721	0.006
105 1-methylnaphthalene	11.103	+++++	11.100	11.101	11.098	11.103	11.103	11.107	11.103	8.103-14.103	11.102	0.003
151 1,2,4,5-Tetrachloroben	11.274	+++++	11.266	11.267	11.269	11.274	11.274	11.273	11.274	8.274-14.274	11.271	0.004
152 Benzo(e)pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	30.943	27.943-33.943	+++++	+++++
153 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.442	20.442-26.442	+++++	+++++
154 Diazinon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.968	18.968-24.968	+++++	+++++
155 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.466	20.466-26.466	+++++	+++++
156 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.866	19.866-25.866	+++++	+++++
157 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.413	20.413-26.413	+++++	+++++
158 Ethion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	24.952	21.952-27.952	+++++	+++++
159 4-Nonylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.721	18.721-24.721	+++++	+++++
160 Tetraethyl Tin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.159	15.159-21.159	+++++	+++++
161 1,2,3-Trichloronaphtha	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	36.246	33.246-39.246	+++++	+++++
162 1,2,3,4-Tetrachloronap	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	37.506	34.506-40.506	+++++	+++++
163 1,2,3,5,8-Pentachloron	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	38.893	35.893-41.893	+++++	+++++
164 1,2,3,4,6,7-Hexachloro	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	39.681	36.681-42.681	+++++	+++++
165 1,2,3,4,5,6,7-Heptachl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	41.123	38.123-44.123	+++++	+++++
166 Octachloronaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	42.253	39.253-45.253	+++++	+++++
167 2,2',4,4',5-Pentabromo	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	42.033	39.033-45.033	+++++	+++++
$ 2 Phenol-d5	7.358	+++++	7.350	7.351	7.353	7.363	7.369	+++++	7.358	4.358-10.358	7.357	0.007
3 Phenol	7.379	+++++	7.371	7.367	7.369	7.379	7.385	7.384	7.379	4.379-10.379	7.376	0.007
4 Bis(2-Chloroethyl)ethe	7.433	+++++	7.425	7.426	7.428	7.433	7.438	7.437	7.433	4.433-10.433	7.431	0.005
5 2-Chlorophenol-d4	7.454	+++++	7.451	7.447	7.449	7.454	7.459	+++++	7.454	4.454-10.454	7.452	0.004

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Method File: /chem2/nt6.i/20130123A.b/SW846012313.m
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Inst ID: nt6.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	6 2-Chlorophenol	7.481	+++++	7.473	7.474	7.470	7.481	7.481	7.485	7.481	4.481-10.481	7.478	0.005
	7 1,3-Dichlorobenzene	7.684	+++++	7.681	7.677	7.679	7.684	7.684	7.688	7.684	4.684-10.684	7.682	0.004
*	8 1,4-Dichlorobenzene-d4	7.748	7.740	7.745	7.741	7.743	7.748	7.748	7.747	7.748	4.748-10.748	7.745	0.003
	9 1,4-Dichlorobenzene	7.769	+++++	7.767	7.767	7.769	7.769	7.775	7.774	7.769	4.769-10.769	7.770	0.003
$	10 1,2-Dichlorobenzene-d4	8.047	+++++	8.044	8.040	8.042	8.042	8.047	+++++	8.047	5.047-11.047	8.044	0.003
	11 Benzyl alcohol	8.047	+++++	8.039	8.040	8.037	8.052	8.058	8.057	8.047	5.047-11.047	8.047	0.009
	12 1,2-Dichlorobenzene	8.068	+++++	8.060	8.061	8.063	8.068	8.068	8.068	8.068	5.068-11.068	8.065	0.004
	13 2-Methylphenol	8.298	+++++	8.296	8.291	8.293	8.303	8.309	8.308	8.298	5.298-11.298	8.300	0.007
	14 2,2'-oxybis(1-Chloropr	8.303	+++++	8.301	8.296	8.298	8.303	8.303	8.303	8.303	5.303-11.303	8.301	0.003
	15 4-Methylphenol	8.533	+++++	8.525	8.526	8.528	8.538	8.544	8.543	8.533	5.533-11.533	8.534	0.008
	16 N-Nitroso-di-n-propyla	8.522	+++++	8.509	8.510	8.512	8.528	8.533	8.532	8.522	5.522-11.522	8.521	0.011
	17 Hexachloroethane	8.554	+++++	8.547	8.547	8.549	8.554	8.555	8.554	8.554	5.554-11.554	8.552	0.004
$	18 Nitrobenzene-d5	8.683	+++++	8.675	8.676	8.672	8.683	8.688	+++++	8.683	5.683-11.683	8.679	0.006
	19 Nitrobenzene	8.709	+++++	8.702	8.702	8.704	8.709	8.715	8.714	8.709	5.709-11.709	8.708	0.005
	20 Isophorone	9.094	+++++	9.086	9.082	9.084	9.099	9.099	9.104	9.094	6.094-12.094	9.093	0.009
	21 2-Nitrophenol	9.222	+++++	9.220	9.221	9.223	9.227	9.228	9.227	9.222	6.222-12.222	9.224	0.003
	22 2,4-Dimethylphenol	9.361	+++++	9.359	9.354	9.356	9.361	9.367	9.366	9.361	6.361-12.361	9.360	0.005
	23 Bis(2-Chloroethoxy)met	9.500	+++++	9.492	9.488	9.490	9.500	9.500	9.505	9.500	6.500-12.500	9.496	0.006
	24 Benzoic acid	9.623	+++++	9.551	9.525	9.554	9.676	9.703	9.724	9.623	6.623-12.623	9.622	0.081
	25 2,4-Dichlorophenol	9.618	+++++	9.610	9.610	9.612	9.617	9.623	9.622	9.618	6.618-12.618	9.616	0.005
	26 1,2,4-Trichlorobenzene	9.730	+++++	9.727	9.728	9.730	9.730	9.735	9.734	9.730	6.730-12.730	9.731	0.003
#	27 Naphthalene-d8	9.789	9.781	9.781	9.781	9.783	9.788	9.789	9.788	9.789	6.788-12.789	9.785	0.004
	28 Naphthalene	9.815	+++++	9.813	9.813	9.810	9.815	9.821	9.820	9.815	6.815-12.815	9.815	0.004
	29 4-Chloroaniline	9.975	+++++	9.968	9.968	9.970	9.975	9.981	9.980	9.975	6.975-12.975	9.974	0.005

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Batch File: /chem2/nt6.i/20130123A.b
Inst ID: nt6.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	30 Hexachlorobutadiene	10.146	+++++	10.144	10.139	10.141	10.141	10.141	10.146	10.146	7.146-13.146	10.143	0.003
	31 4-Chloro-3-methylpheno	10.803	+++++	10.801	10.796	10.798	10.803	10.809	10.808	10.803	7.803-13.803	10.803	0.005
	32 2-Methylnaphthalene	10.932	+++++	10.929	10.930	10.932	10.932	10.937	10.936	10.932	7.932-13.932	10.933	0.003
	33 Hexachlorocyclopentadi	11.316	+++++	11.314	11.315	11.311	11.316	11.316	11.316	11.316	8.316-14.316	11.315	0.002
	34 2,4,6-Trichlorophenol	11.455	+++++	11.447	11.454	11.450	11.455	11.461	11.460	11.455	8.455-14.455	11.455	0.005
	35 2,4,5-Trichlorophenol	11.519	+++++	11.517	11.512	11.509	11.514	11.519	11.519	11.519	8.519-14.519	11.516	0.004
$	36 2-Fluorobiphenyl	11.583	+++++	11.576	11.576	11.578	11.583	11.584	+++++	11.583	8.583-14.583	11.580	0.004
	37 2-Chloronaphthalene	11.706	+++++	11.698	11.699	11.701	11.706	11.706	11.711	11.706	8.706-14.706	11.704	0.005
	38 2-Nitroaniline	11.952	+++++	11.944	11.940	11.942	11.952	11.952	11.957	11.952	8.952-14.952	11.948	0.006
	39 Dimethylphthalate	12.331	+++++	12.318	12.319	12.321	12.331	12.337	12.341	12.331	9.331-15.331	12.328	0.009
	40 Acenaphthylene	12.379	+++++	12.372	12.372	12.369	12.374	12.380	12.379	12.379	9.379-15.379	12.375	0.004
	41 2,6-Dinitrotoluene	12.417	+++++	12.409	12.410	12.406	12.417	12.417	12.427	12.417	9.417-15.417	12.415	0.007
*	42 Acenaphthene-d10	12.631	12.623	12.623	12.623	12.625	12.630	12.631	12.630	12.631	9.631-15.631	12.627	0.004
	43 3-Nitroaniline	12.631	+++++	12.617	12.618	12.615	12.630	12.631	12.635	12.631	9.631-15.631	12.625	0.008
	44 Acenaphthene	12.679	+++++	12.671	12.672	12.674	12.678	12.684	12.683	12.679	9.679-15.679	12.677	0.005
	45 2,4-Dinitrophenol	12.785	+++++	12.783	12.778	12.780	12.791	12.796	12.806	12.785	9.785-15.785	12.789	0.010
	46 Dibenzofuran	12.940	+++++	12.932	12.933	12.935	12.940	12.946	12.945	12.940	9.940-15.940	12.939	0.005
	47 4-Nitrophenol	12.962	+++++	12.965	12.955	12.951	12.962	12.967	12.972	12.962	9.962-15.962	12.962	0.007
	48 2,4-Dinitrotoluene	13.037	+++++	13.029	13.024	13.026	13.036	13.042	13.046	13.037	10.037-16.037	13.034	0.008
	49 Fluorene	13.491	+++++	13.483	13.484	13.486	13.496	13.496	13.501	13.491	10.491-16.491	13.491	0.007
	50 Diethylphthalate	13.480	+++++	13.467	13.468	13.470	13.480	13.485	13.485	13.480	10.480-16.480	13.476	0.008
	51 4-Chlorophenyl-phenyle	13.528	+++++	13.525	13.521	13.523	13.528	13.528	13.533	13.528	10.528-16.528	13.527	0.004
	52 4-Nitroaniline	13.613	+++++	13.600	13.601	13.598	13.619	13.624	13.629	13.613	10.613-16.613	13.612	0.013
	53 4,6-Dinitro-2-methylph	13.683	+++++	13.670	13.671	13.672	13.688	13.694	13.698	13.683	10.683-16.683	13.682	0.012

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/nt6.i/20130123A.b/SW846012313.m
Batch File: /chem2/nt6.i/20130123A.b
Inst ID: nt6.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	54 N-Nitrosodiphenylamine	13.736	+++++	13.723	13.724	13.726	13.736	13.742	13.741	13.736	10.736-16.736	13.733	0.008
$	55 2,4,6-Tribromophenol	13.913	+++++	13.905	13.906	13.908	13.913	13.918	+++++	13.913	10.913-16.913	13.910	0.005
	56 4-Bromophenyl-phenylet	14.303	+++++	14.295	14.296	14.298	14.303	14.303	14.302	14.303	11.303-17.303	14.300	0.004
	57 Hexachlorobenzene	14.511	+++++	14.503	14.504	14.501	14.505	14.511	14.510	14.511	11.511-17.511	14.506	0.004
	58 Pentachlorophenol	14.810	+++++	14.813	14.808	14.810	14.810	14.816	14.815	14.810	11.810-17.810	14.812	0.003
*	59 Phenanthrene-d10	14.981	14.979	14.979	14.974	14.976	14.981	14.981	14.986	14.981	11.981-17.981	14.980	0.004
	60 Phenanthrene	15.018	+++++	15.011	15.011	15.008	15.018	15.024	15.023	15.018	12.018-18.018	15.016	0.006
	61 Anthracene	15.088	+++++	15.080	15.081	15.083	15.088	15.093	15.098	15.088	12.088-18.088	15.087	0.007
	62 Carbazole	15.382	+++++	15.374	15.375	15.377	15.382	15.382	15.386	15.382	12.382-18.382	15.380	0.005
	63 Di-n-butylphthalate	16.114	+++++	16.106	16.107	16.109	16.113	16.114	16.113	16.114	13.114-19.114	16.111	0.004
	64 Fluoranthene	16.936	+++++	16.928	16.929	16.931	16.936	16.936	16.936	16.936	13.936-19.936	16.933	0.004
	65 Pyrene	17.284	+++++	17.281	17.276	17.278	17.283	17.289	17.288	17.284	14.284-20.284	17.283	0.005
$	66 Terphenyl-d14	17.615	+++++	17.612	17.608	17.610	17.615	17.620	+++++	17.615	14.615-20.615	17.613	0.004
	67 Butylbenzylphthalate	18.507	+++++	18.504	18.500	18.502	18.507	18.507	18.506	18.507	15.507-21.507	18.505	0.003
	68 Benzo(a)anthracene	19.228	+++++	19.226	19.221	19.223	19.233	19.233	19.238	19.228	16.228-22.228	19.229	0.006
*	69 Chrysene-d12	19.255	19.247	19.247	19.248	19.250	19.255	19.255	19.259	19.255	16.255-22.255	19.252	0.005
	70 3,3'-Dichlorobenzidine	19.255	+++++	19.252	19.248	19.250	19.255	19.255	19.254	19.255	16.255-22.255	19.253	0.003
	71 Chrysene	19.292	+++++	19.290	19.285	19.287	19.292	19.298	19.302	19.292	16.292-22.292	19.292	0.006
	72 bis(2-Ethylhexyl)phtha	19.506	+++++	19.503	19.504	19.501	19.500	19.506	19.505	19.506	16.506-22.506	19.504	0.002
	73 Di-n-octylphthalate	20.441	+++++	20.438	20.439	20.436	20.441	20.441	20.440	20.441	17.441-23.441	20.439	0.002
	74 Benzo(b)fluoranthene	20.868	+++++	20.860	20.861	20.863	20.868	20.874	20.878	20.868	17.868-23.868	20.867	0.007
	75 Benzo(k)fluoranthene	20.900	+++++	20.892	20.893	20.895	20.905	20.906	20.915	20.900	17.900-23.900	20.901	0.008
	76 Benzo(a)pyrene	21.306	+++++	21.298	21.299	21.301	21.311	21.312	21.316	21.306	18.306-24.306	21.306	0.007
	77 Perylene-d12	21.392	21.384	21.378	21.385	21.387	21.386	21.392	21.391	21.392	18.392-24.392	21.387	0.005

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/nt6.i/20130123A.b/SW846012313.m
Batch File: /chem2/nt6.i/20130123A.b
Inst ID: nt6.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	78 Indeno(1,2,3-cd)pyrene	22.781	+++++	22.773	22.768	22.776	22.786	22.791	22.796	22.781	19.781-25.781	22.781	0.010
	79 Dibenzo(a,h)anthracene	22.807	+++++	22.794	22.800	22.797	22.813	22.818	22.823	22.807	19.807-25.807	22.807	0.011
	80 Benzo(g,h,i)perylene	23.144	+++++	23.125	23.126	23.128	23.149	23.160	23.164	23.144	20.144-26.144	23.142	0.016
$	85 p-Cresol-d4	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	51.633	48.633-54.633	+++++	+++++
$	86 Anthracene-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	63.533	60.533-66.533	+++++	+++++
$	87 Fluoranthene-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	60.273	57.273-63.273	+++++	+++++
$	88 Dibenz(a,h)anthracene-	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	78.600	75.600-81.600	+++++	+++++
$	89 Diphenyl-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	50.841	47.841-53.841	+++++	+++++
	90 N-Nitrosodimethylamine	2.956	+++++	2.959	2.944	2.951	2.972	2.988	3.009	2.956	0.000-5.956	2.968	0.023
	91 Aniline	7.310	+++++	7.302	7.303	7.305	7.310	7.310	7.314	7.310	4.310-10.310	7.308	0.005
	92 1,2-Diphenylhydrazine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	56.160	53.160-59.160	+++++	+++++
	93 Benzidine	17.203	+++++	17.201	17.196	17.198	17.198	17.203	17.203	17.203	14.203-20.203	17.200	0.003
$	95 D10-1-methylnaphthalen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	52.075	49.075-55.075	+++++	+++++
	96 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	49.250	46.250-52.250	+++++	+++++
	97 Caffeine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	61.202	58.202-64.202	+++++	+++++
	98 Retene	17.855	+++++	17.853	17.848	17.850	17.855	17.856	17.854	17.855	14.855-20.855	17.853	0.003
	99 Perylene	21.424	+++++	21.416	21.417	21.419	21.424	21.429	21.428	21.424	18.424-24.424	21.422	0.005
	100 3-beta-Coprostanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.074	19.074-25.074	+++++	+++++
	101 Cholesterol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.255	19.255-25.255	+++++	+++++
	102 beta-Sitosterol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.369	18.369-24.369	+++++	+++++
	103 Pyridine	2.929	+++++	2.953	2.933	2.929	2.934	2.951	2.966	2.929	0.000-5.929	2.942	0.014
	187 Total Benzofluoranthen	20.900	+++++	20.892	20.861	20.895	20.905	20.906	20.915	20.900	17.900-23.900	20.896	0.017
	188 2,6-Dichlorophenol	9.981	+++++	9.978	9.974	9.976	9.981	9.986	9.985	9.981	6.981-12.981	9.980	0.005
	189 N-Nitrosomethylethylam	4.884	+++++	4.893	4.888	4.885	4.884	4.890	4.900	4.884	1.884-7.884	4.889	0.006

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 23-JAN-2013 15:27
End Cal Date : 23-JAN-2013 19:26
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem2/nt6.i/20130123A.b/SW846012313.m
Cal Date : 24-Jan-2013 11:47 jianqing
Curve Type : Average

Calibration File Names:
Level 1: /chem2/nt6.i/20130123A.b/01231310.D
Level 2: /chem2/nt6.i/20130123A.b/01231311.D
Level 3: /chem2/nt6.i/20130123A.b/01231312.D
Level 4: /chem2/nt6.i/20130123A.b/01231308.D
Level 5: /chem2/nt6.i/20130123A.b/01231313.D
Level 6: /chem2/nt6.i/20130123A.b/01231314.D
Level 7: /chem2/nt6.i/20130123A.b/01231315.D
Level 8: /chem2/nt6.i/20130123A.b/01231309.D

AZ 01/24/13

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD
	80.000 Level 7	0.20000 Level 8						
186 Carbaryl	0.43417	0.49017	0.49243	0.49143	0.49288	0.47727		
	0.48899	+++++					0.48105	4.439
179 n-Decane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
180 n-Octadecane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
169 4-tert-Butylphenol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
170 N,N-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
171 2,3-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

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Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD
	80.000 Level 7	0.20000 Level 8						
172 2,4-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
173 2,5-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
174 2,6-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
175 3,4-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
176 3,5-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
177 p-Benzoquinone	0.05143	0.07127	0.07676	0.08801	0.09402	0.09367		
	0.09358	+++++					0.08125	19.613
168 Pentachlorobenzene	0.46655	0.42378	0.40574	0.44235	0.43694	0.44299		
	0.43640	+++++					0.43639	4.274
145 4,4'-DDE	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
146 4,4'-DDD	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

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Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	80.000 Level 7	0.20000 Level 8	RRF	% RSD
135 2,3,5,6-Tetrachlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
136 2,3,4,5-tetrachlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
133 Butylatedhydroxytoluene	1.08079	1.01255	0.98312	1.01383	0.97885	0.93613	0.89602	+++++	0.98590	6.016
132 3,6-Dimethylphenanthrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
131 1-Methylphenanthrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
130 Dibenzothiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
129 1-Methylfluorene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
128 N-Hexadecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
127 2-Isopropylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Compound	1.000 Level 1 / 80.000 Level 7	5.000 Level 2 / 0.20000 Level 8	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD
126 N-Tetradecane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
144 alpha-Terpineol	0.29894	0.28493	0.27628	0.28526	0.27877	0.27033		
	0.26535	+++++					0.27998	3.951
125 Safrole	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
124 3,4-Dimethylphenol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
123 Acetophenone	1.89171	1.80802	1.70483	1.83866	1.74870	1.69774		
	1.66903	+++++					1.76553	4.679
122 Furfuraldehyde	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
143 1,4-Dioxane	0.69797	0.62687	0.59877	0.67829	0.65455	0.68296		
	0.69022	0.92275					0.69405	14.186
121 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
120 2,3,4,6-Tetrachlorophenol	0.25306	0.28277	0.28839	0.29038	0.31175	0.28848		
	0.28837	+++++					0.28617	6.045

Analytical Resources, Inc.

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Cal Date : 24-Jan-2013 11:47 jianqing
Curve Type : Average

Compound	1.000 Level 1 / 80.000 Level 7	5.000 Level 2 / 0.20000 Level 8	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD
178 2-Benzyl-4-Chlorophenol	0.14545	0.15801	0.15676	0.16815	0.16798	0.16344		
	0.16864	+++++					0.16120	5.268
119 7,12-Dimethylbenz(a)anthracen	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
118 Triphenyl Phosphate	0.14758	0.15592	0.15446	0.16143	0.16297	0.16196		
	0.15796	+++++					0.15747	3.434
117 Butyl Diphenyl Phosphate	0.24810	0.23343	0.21665	0.20916	0.21374	0.19704		
	0.19044	+++++					0.21551	9.276
116 Dibutyl Phenyl Phosphate	0.53766	0.52241	0.51801	0.53431	0.53798	0.51954		
	0.51461	+++++					0.52636	1.893
115 Tributyl Phosphate	0.94353	0.93495	0.90121	0.89097	0.86812	0.80608		
	0.79865	+++++					0.87765	6.547
114 Beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
113 Diphenyl Oxide	0.94050	0.83415	0.81411	0.83880	0.81814	0.79113		
	0.76468	+++++					0.82879	6.694
112 Biphenyl	1.48888	1.37009	1.32516	1.27315	1.16630	1.10125		
	1.03673	+++++					1.25165	12.728

Analytical Resources, Inc.

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Compound	1.000 Level 1 / 80.000 Level 7	5.000 Level 2 / 0.20000 Level 8	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD
111 Azobenzene (1,2-DP-Hydrazine)	1.51021	1.44586	1.38822	1.38525	1.34342	1.26733		
	1.22735	+++++					1.36681	7.162
110 Tetrachloroguaiacol	0.10531	0.10409	0.10824	0.11787	0.11771	0.11637		
	0.11761	+++++					0.11246	5.596
109 3,4,5-Trichloroguaiacol	0.11990	0.11665	0.12414	0.12857	0.13236	0.12860		
	0.12912	+++++					0.12562	4.486
181 3,4,6-Trichloroguaiacol	0.38004	0.39064	0.41522	0.42507	0.43384	0.39773		
	0.40266	+++++					0.40646	4.723
108 4,5,6-Trichloroguaiacol	0.17613	0.16508	0.17736	0.18261	0.19091	0.18189		
	0.18371	+++++					0.17967	4.471
184 3,4-Dichloroguaiacol	0.39981	0.37007	0.37220	0.40266	0.39735	0.37050		
	+++++	+++++					0.38543	4.150
107 4,5-Dichloroguaiacol	0.24321	0.24291	0.24896	0.25324	0.25754	0.25205		
	0.24662	+++++					0.24922	2.174
182 4,6-Dichloroguaiacol	0.42834	0.44625	0.46404	0.47743	0.47953	0.44095		
	0.43449	+++++					0.45300	4.564
185 4-Chloroguaiacol	0.57800	0.56688	0.57886	0.58447	0.58813	0.54621		
	0.55261	+++++					0.57074	2.821

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 23-JAN-2013 15:27
End Cal Date : 23-JAN-2013 19:26
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem2/nt6.i/20130123A.b/SW846012313.m
Cal Date : 24-Jan-2013 11:47 jianqing
Curve Type : Average

Compound	1.000 Level 1 / 80.000 Level 7	5.000 Level 2 / 0.20000 Level 8	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD
106 Guaiacol	1.18444	1.16357	1.10788	1.15440	1.08605	1.00738		
	0.97150	+++++					1.09646	7.390
105 1-methylnaphthalene	0.50598	0.51519	0.49857	0.49759	0.48919	0.45175		
	0.44148	+++++					0.48568	5.768
151 1,2,4,5-Tetrachlorobenzene	0.53906	0.49673	0.47895	0.52310	0.51416	0.53555		
	0.52113	+++++					0.51552	4.142
152 Benzo(e)pyrene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
153 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
154 Diazinon	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
155 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
156 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
157 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

Analytical Resources, Inc.

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Integrator : HP RTE
Method file : /chem2/nt6.i/20130123A.b/SW846012313.m
Cal Date : 24-Jan-2013 11:47 jianqing
Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	80.000 Level 7	0.20000 Level 8	RRF	% RSD
167 2,2',4,4',5-Pentabromobipheny	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
3 Phenol	1.65981	1.67196	1.63730	1.57877	1.54783	1.44855	1.44574	+++++	1.56999	6.028
4 Bis(2-Chloroethyl)ether	1.46489	1.34092	1.28096	1.37453	1.30810	1.26770	1.25263	+++++	1.32711	5.588
6 2-Chlorophenol	1.44011	1.43189	1.38086	1.35826	1.30685	1.19711	1.19150	+++++	1.32951	7.724
7 1,3-Dichlorobenzene	1.64182	1.53793	1.49438	1.60363	1.51559	1.47682	1.43730	+++++	1.52964	4.690
9 1,4-Dichlorobenzene	1.67099	1.54000	1.46041	1.60503	1.49249	1.45778	1.40260	+++++	1.51847	6.153
11 Benzyl alcohol	0.87568	0.86728	0.83488	0.85918	0.79978	0.73925	0.75335	+++++	0.81849	6.775
12 1,2-Dichlorobenzene	1.56941	1.47717	1.39537	1.49665	1.36256	1.29858	1.27904	+++++	1.41125	7.624
13 2-Methylphenol	1.26482	1.27523	1.24935	1.22219	1.17428	1.06854	1.04526	+++++	1.18567	7.945

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

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Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem2/nt6.i/20130123A.b/SW846012313.m
Cal Date : 24-Jan-2013 11:47 jianqing
Curve Type : Average

Compound	1.000 Level 1 / 60.000 Level 7	5.000 Level 2 / 0.20000 Level 8	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD
14 2,2'-oxybis(1-Chloropropane)	2.47525	2.23275	2.13322	2.24548	2.05432	1.98898		
	1.92890	+++++					2.15127	8.613
15 4-Methylphenol	1.35734	1.35244	1.28651	1.26235	1.18319	1.05233		
	1.01148	+++++					1.21509	11.414
16 N-Nitroso-di-n-propylamine	1.02909	0.96357	0.94076	1.02581	0.96632	0.91588		
	0.89826	+++++					0.96281	5.233
17 Hexachloroethane	0.68323	0.64527	0.61823	0.65035	0.59834	0.57067		
	0.54803	+++++					0.61630	7.710
19 Nitrobenzene	0.50588	0.46163	0.43159	0.45433	0.43432	0.41598		
	0.41935	+++++					0.44616	7.001
20 Isophorone	0.66004	0.61836	0.60761	0.63866	0.62791	0.60326		
	0.60371	+++++					0.62279	3.382
21 2-Nitrophenol	0.17372	0.19926	0.19615	0.19666	0.20040	0.19252		
	0.19360	+++++					0.19319	4.674
22 2,4-Dimethylphenol	0.37561	0.38648	0.36556	0.35649	0.35659	0.32970		
	0.32636	+++++					0.35668	6.241
23 Bis(2-Chloroethoxy)methane	0.48168	0.44468	0.42576	0.44300	0.43644	0.42560		
	0.41836	+++++					0.43936	4.789

Analytical Resources, Inc.

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Integrator : HP RTE
Method file : /chem2/nt6.i/20130123A.b/SW846012313.m
Cal Date : 24-Jan-2013 11:47 jianqing
Curve Type : Average

Compound	1.000 Level 1 / 80.000 Level 7	5.000 Level 2 / 0.20000 Level 8	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD
24 Benzoic acid	+++++	0.27094	0.29694	0.29901	0.32652	0.29065		
	0.30360	+++++					0.29794	6.066
25 2,4-Dichlorophenol	0.29489	0.30146	0.29352	0.28919	0.29100	0.26927		
	0.26730	+++++					0.28666	4.585
26 1,2,4-Trichlorobenzene	0.36159	0.32588	0.31653	0.33525	0.32960	0.33175		
	0.32342	+++++					0.33200	4.334
28 Naphthalene	1.09157	1.01432	0.95952	0.97888	0.89782	0.83065		
	0.78776	+++++					0.93722	11.296
29 4-Chloroaniline	0.44250	0.40617	0.38047	0.34614	0.23743	+++++		
	+++++	+++++					0.36254	21.605 <-
30 Hexachlorobutadiene	0.22586	0.20176	0.18944	0.21235	0.20904	0.21235		
	0.20945	+++++					0.20861	5.328
31 4-Chloro-3-methylphenol	0.26426	0.29454	0.29502	0.27992	0.29045	0.26430		
	0.26526	+++++					0.27911	5.176
32 2-Methylnaphthalene	0.53173	0.52376	0.49508	0.50766	0.48395	0.44234		
	0.42541	+++++					0.48713	8.229
33 Hexachlorocyclopentadiene	0.33665	0.36137	0.37096	0.44142	0.45174	0.47741		
	0.47267	+++++					0.41603	13.953

Analytical Resources, Inc.

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Integrator : HP RTE
Method file : /chem2/nt6.i/20130123A.b/SW846012313.m
Cal Date : 24-Jan-2013 11:47 jianqing
Curve Type : Average

Compound	1.000 Level 1 / 80.000 Level 7	5.000 Level 2 / 0.20000 Level 8	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD
34 2,4,6-Trichlorophenol	0.33618	0.35512	0.34945	0.35912	0.36920	0.36540		
	0.36534	+++++					0.35711	3.207
35 2,4,5-Trichlorophenol	0.31795	0.37099	0.37784	0.37696	0.38827	0.37568		
	0.36863	+++++					0.36805	6.236
37 2-Chloronaphthalene	1.31073	1.14081	1.07588	1.12020	1.03590	1.01570		
	0.98682	+++++					1.09801	9.912
38 2-Nitroaniline	0.34529	0.36538	0.35913	0.36231	0.36106	0.35564		
	0.35069	+++++					0.35707	1.974
39 Dimethylphthalate	1.27608	1.16622	1.09293	1.14378	1.14046	1.09377		
	1.07660	+++++					1.14141	5.940
40 Acenaphthylene	1.84942	1.73353	1.65606	1.71299	1.60834	1.54078		
	1.48503	+++++					1.65517	7.459
41 2,6-Dinitrotoluene	0.25618	0.25790	0.25889	0.28201	0.28176	0.27758		
	0.27846	+++++					0.27040	4.456
43 3-Nitroaniline	0.28027	0.27682	0.27507	0.21334	0.17494	+++++		
	+++++	+++++					0.24409	19.506
44 Acenaphthene	1.19038	1.06580	1.01742	1.07278	1.02075	0.99434		
	0.97510	+++++					1.04808	6.866

Analytical Resources, Inc.

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Target Version : 3.50
Integrator : HP RTE
Method file : /chem2/nt6.i/20130123A.b/SW846012313.m
Cal Date : 24-Jan-2013 11:47 jianqing
Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD
	80.000 Level 7	0.20000 Level 8						
45 2,4-Dinitrophenol	+++++	0.05382	0.10228	0.17535	0.21223	0.21804		
	0.22505	+++++					0.16446	43.039 <-
46 Dibenzofuran	1.59254	1.45611	1.38433	1.40020	1.34573	1.27303		
	1.23107	+++++					1.38329	8.661
47 4-Nitrophenol	0.14713	0.18113	0.18500	0.18922	0.18712	0.17263		
	0.17292	+++++					0.17645	8.210
48 2,4-Dinitrotoluene	0.31564	0.34064	0.32743	0.35336	0.34679	0.34017		
	0.34081	+++++					0.33783	3.713
49 Fluorene	1.25673	1.14758	1.08008	1.10774	1.05980	1.00207		
	0.98155	+++++					1.09079	8.529
50 Diethylphthalate	1.34581	1.23276	1.18234	1.18605	1.13174	1.06420		
	1.02933	+++++					1.16746	9.096
51 4-Chlorophenyl-phenylether	0.65724	0.58722	0.56685	0.60559	0.60701	0.59953		
	0.59249	+++++					0.60227	4.617
52 4-Nitroaniline	0.22472	0.25687	0.23822	0.19560	0.20091	0.20946		
	0.19233	+++++					0.21687	11.107
53 4,6-Dinitro-2-methylphenol	+++++	0.11477	0.13793	0.15734	0.16898	0.16590		
	0.16795	+++++					0.15214	14.243

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

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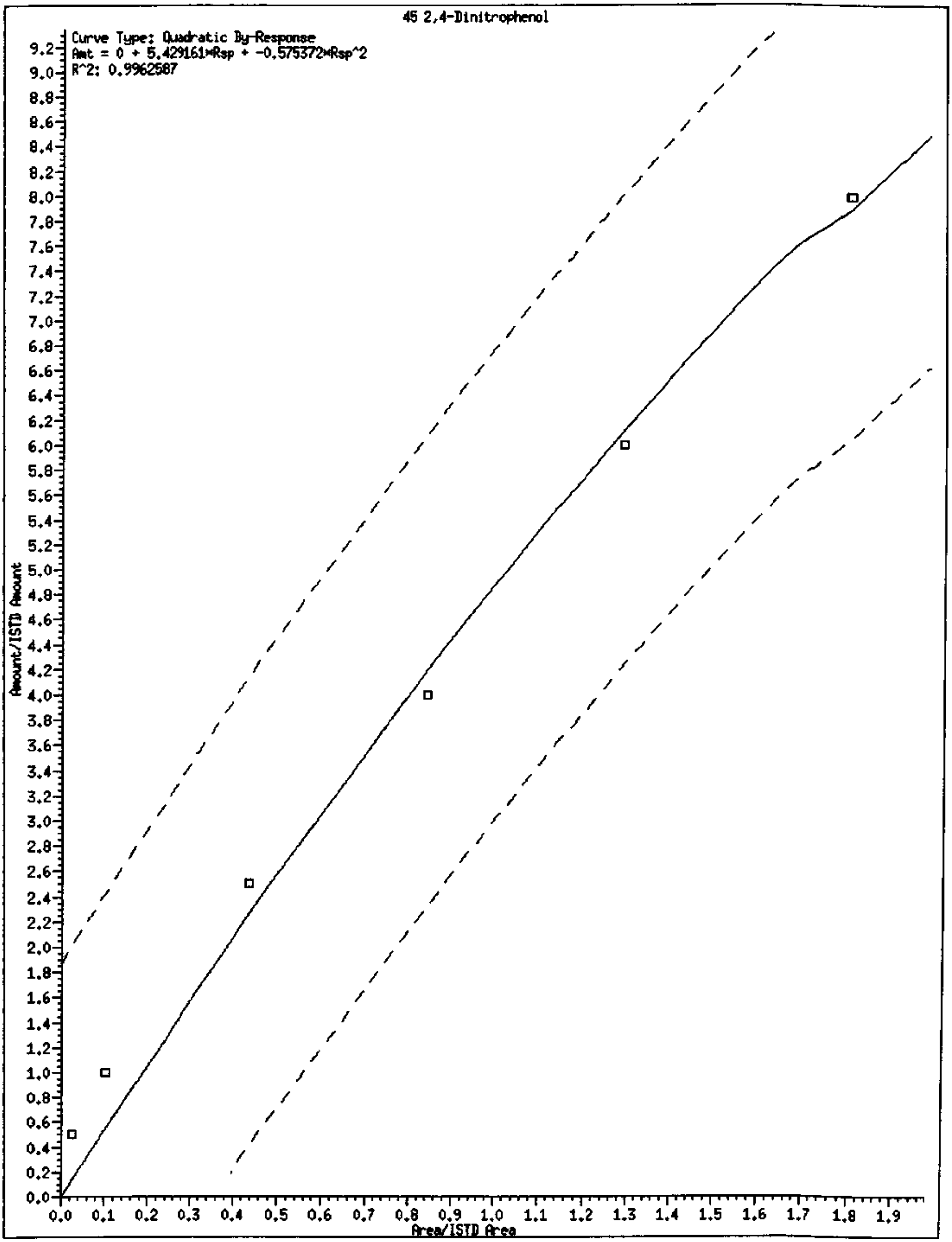
Quant Method : ISTD
Origin : Force
Target Version : 3.50
Integrator : HP RTE
Method file : /chem2/nt6.i/20130123A.b/SW846012313.m
Cal Date : 24-Jan-2013 12:05 jianqing

01/24/13

Compound	1 Level 1 / 80 Level 7	5 Level 2 / 0.2000 Level 8	10 Level 3	25 Level 4	40 Level 5	60 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
38 2-Nitroaniline	0.34529 0.35069	0.36538 +++++	0.35913	0.36231	0.36106	0.35564	AVRG		0.35707		1.97439
39 Dimethylphthalate	1.27608 1.07660	1.16622 +++++	1.09293	1.14378	1.14046	1.09377	AVRG		1.14141		5.93984
40 Acenaphthylene	1.84942 1.48503	1.73353 +++++	1.65606	1.71299	1.60834	1.54078	AVRG		1.65517		7.45857
41 2,6-Dinitrotoluene	0.25618 0.27846	0.25790 +++++	0.25889	0.28201	0.28176	0.27758	AVRG		0.27040		4.45636
43 3-Nitroaniline	0.28027 +++++	0.27682 +++++	0.27507	0.21334	0.17494	+++++	AVRG		0.24409		19.50634
44 Acenaphthene	1.19038 0.97510	1.06580 +++++	1.01742	1.07278	1.02075	0.99434	AVRG		1.04808		6.86638
45 2,4-Dinitrophenol	+++++ 1763145	30938 +++++	112215	500739	1068206	1443610	QUAD	0.000e+00	5.42916	-0.57537	0.99626



45 2,4-Dinitrophenol
Curve Type: Quadratic By-Response
Amt = 0 + 5.429161*Rsp + -0.575372*Rsp^2
R^2: 0.9962587
Amount/ISTD Amount
Area/ISTD Area

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

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Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem2/nt6.i/20130123A.b/SW846012313.m
Cal Date : 24-Jan-2013 11:47 jianqing
Curve Type : Average

Compound	1.000 Level 1 / 80.000 Level 7	5.000 Level 2 / 0.20000 Level 8	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD
54 N-Nitrosodiphenylamine	0.62821	0.58532	0.56229	0.58984	0.57905	0.55847		
	0.55732	+++++					0.58007	4.305
56 4-Bromophenyl-phenylether	0.23476	0.21025	0.21472	0.23317	0.23328	0.23125		
	0.23764	+++++					0.22787	4.724
57 Hexachlorobenzene	0.24582	0.21890	0.20930	0.23254	0.23335	0.23318		
	0.23721	+++++					0.23004	5.269
58 Pentachlorophenol	+++++	0.05684	0.07397	0.09434	0.11405	0.11483		
	0.12215	+++++					0.09603	27.096 <-
60 Phenanthrene	1.13833	1.00881	0.96120	0.99609	0.94562	0.93116		
	0.91865	+++++					0.98569	7.594
61 Anthracene	1.10084	1.03201	0.99458	1.03730	0.98621	0.94729		
	0.92979	+++++					1.00400	5.808
62 Carbazole	1.02249	0.95004	0.88477	0.90629	0.81157	0.83403		
	0.83528	+++++					0.89207	8.401
63 Di-n-butylphthalate	1.26885	1.21341	1.16150	1.20017	1.11378	1.05883		
	1.03695	+++++					1.15050	7.375
64 Fluoranthene	1.01806	0.94651	0.91267	0.98302	0.94934	0.94453		
	0.93077	+++++					0.95499	3.666

UC32 : 00062

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

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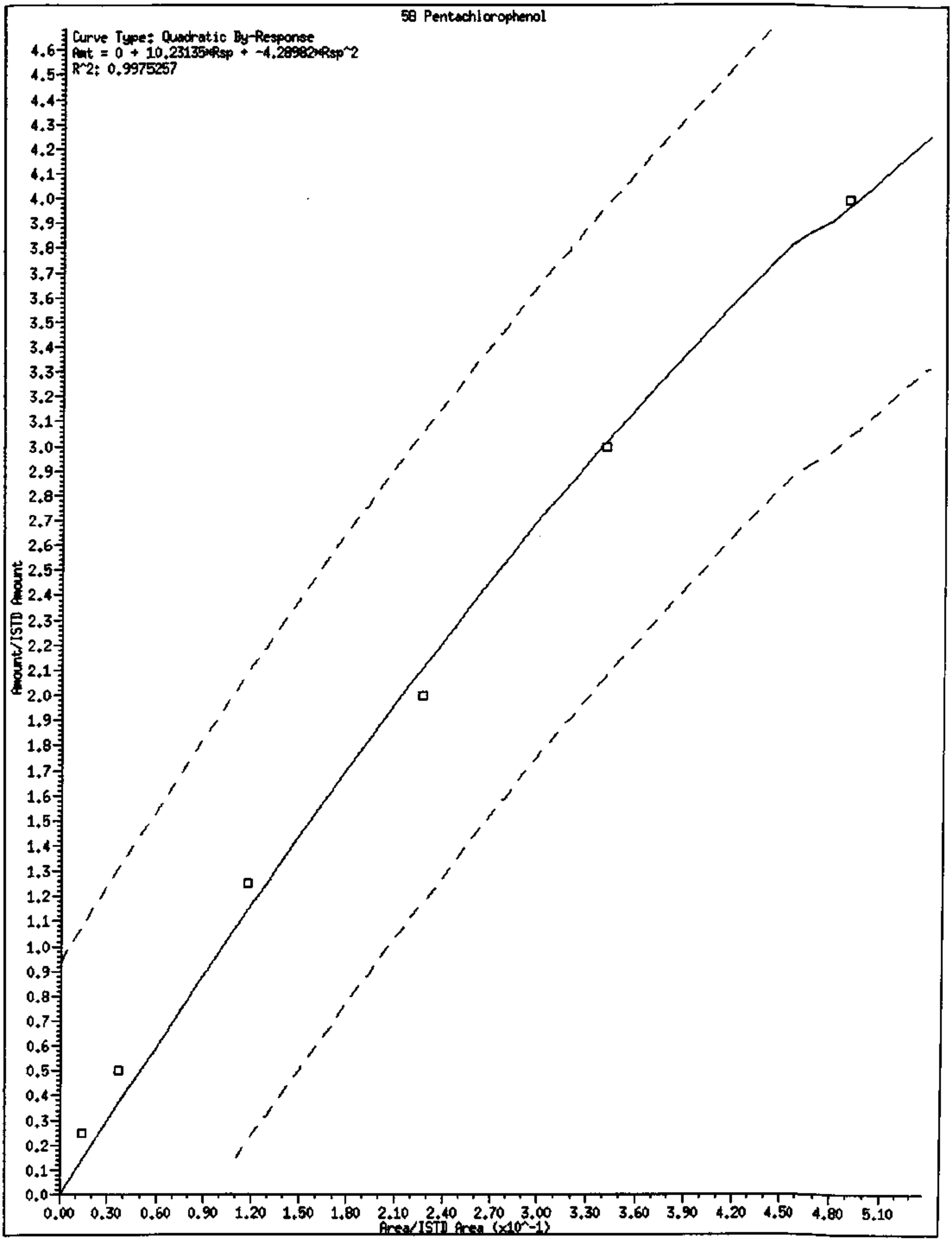
Quant Method : ISTD
Origin : Force
Target Version : 3.50
Integrator : HP RTE
Method file : /chem2/nt6.i/20130123A.b/SW846012313.m
Cal Date : 24-Jan-2013 12:05 jianqing

01/24/13

Compound	1 Level 1 / 80 Level 7	5 Level 2 / 0.2000 Level 8	10 Level 3	25 Level 4	40 Level 5	60 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
53 4,6-Dinitro-2-methylphenol	+++++	0.11477	0.13793	0.15734	0.16898	0.16590					
	0.16795	+++++					AVRG		0.15214		14.24294
54 N-Nitrosodiphenylamine	0.62821	0.58532	0.56229	0.58984	0.57905	0.55847					
	0.55732	+++++					AVRG		0.58007		4.30489
56 4-Bromophenyl-phenylether	0.23476	0.21025	0.21472	0.23317	0.23328	0.23125					
	0.23764	+++++					AVRG		0.22787		4.72352
57 Hexachlorobenzene	0.24582	0.21890	0.20930	0.23254	0.23335	0.23318					
	0.23721	+++++					AVRG		0.23004		5.26912
58 Pentachlorophenol	+++++	24141	59431	194327	419203	549424					
	679342	+++++					QUAD	0.000e+00	10.23135	-4.28982	0.99753
60 Phenanthrene	1.13833	1.00881	0.96120	0.99609	0.94562	0.93116					
	0.91865	+++++					AVRG		0.98569		7.59378
61 Anthracene	1.10084	1.03201	0.99458	1.03730	0.98621	0.94729					
	0.92979	+++++					AVRG		1.00400		5.80750



58 Pentachlorophenol
Curve Type: Quadratic By-Response
Amt = 0 + 10.23135*Rsp + -4.28982*Rsp^2
R^2: 0.9975257
Amount/ISTD Amount
Area/ISTD Area (x10^-1)

WC02:00003

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

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Integrator : HP RTE
Method file : /chem2/nt6.i/20130123A.b/SW846012313.m
Cal Date : 24-Jan-2013 11:47 jianqing
Curve Type : Average

Compound	1.000 Level 1 / 80.000 Level 7	5.000 Level 2 / 0.20000 Level 8	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD
65 Pyrene	1.35577	1.28733	1.18810	1.19381	1.15398	1.06145		
	1.02936	+++++					1.18140	9.779
67 Butylbenzylphthalate	0.58077	0.57193	0.54300	0.56693	0.55120	0.53073		
	0.51552	+++++					0.55144	4.260
68 Benzo(a)anthracene	1.05892	0.94916	0.92871	1.01479	0.97186	0.95810		
	0.92661	+++++					0.97259	4.972
70 3,3'-Dichlorobenzidine	0.36289	0.33816	0.32096	0.31775	0.27839	0.24947		
	0.23346	+++++					0.30015	15.869
71 Chrysene	1.04330	0.92629	0.88295	0.96542	0.94343	0.91456		
	0.88165	+++++					0.93680	5.968
72 bis(2-Ethylhexyl)phthalate	0.64745	0.59617	0.57744	0.60475	0.60252	0.57725		
	0.57977	+++++					0.59791	4.154
73 Di-n-octylphthalate	1.17068	1.01921	0.99060	1.02820	0.98821	0.94470		
	0.92641	+++++					1.00972	7.916
74 Benzo(b)fluoranthene	0.97463	0.95848	0.93924	1.00449	0.96953	0.98186		
	1.05256	+++++					0.98297	3.731
75 Benzo(k)fluoranthene	1.12246	0.98408	0.96770	1.06915	1.07112	1.01455		
	0.95303	+++++					1.02601	6.141

Analytical Resources, Inc.

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Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	$\overline{RRF}$	% RSD
	80.000 Level 7	0.20000 Level 8						
76 Benzo(a)pyrene	0.92563	0.87277	0.85262	0.94365	0.92949	0.91291		
	0.92091	+++++					0.90828	3.635
78 Indeno(1,2,3-cd)pyrene	1.34622	1.22894	1.18451	1.29328	1.27000	1.26318		
	1.30098	+++++					1.26959	4.112
79 Dibenzo(a,h)anthracene	1.16078	0.99909	0.99283	1.04588	1.01797	1.02017		
	1.04464	+++++					1.04019	5.470
80 Benzo(g,h,i)perylene	1.26489	1.11126	1.09804	1.14454	1.11910	1.13988		
	1.16382	+++++					1.14879	4.856
90 N-Nitrosodimethylamine	0.95298	0.92360	0.86028	0.94900	0.93339	0.96140		
	0.96599	+++++					0.93523	3.878
91 Aniline	1.99335	1.95576	1.81973	1.86326	1.68170	1.52182		
	1.39145	+++++					1.74672	12.896
92 1,2-Diphenylhydrazine	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
93 Benzidine	+++++	0.43031	0.34645	0.21831	0.17325	0.17420		
	0.16499	+++++					0.25125	44.202 <-
96 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 23-JAN-2013 15:27
End Cal Date : 23-JAN-2013 19:26
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem2/nt6.i/20130123A.b/SW846012313.m
Cal Date : 24-Jan-2013 11:47 jianqing
Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD
	80.000 Level 7	0.20000 Level 8						
97 Caffeine	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
98 Retene	0.55089	0.52044	0.49871	0.49726	0.50962	0.46737		
	0.46374	+++++					0.50115	6.030
99 Perylene	0.89003	0.79691	0.77366	0.80113	0.78182	0.77399		
	0.76942	+++++					0.79814	5.298
100 3-beta-Coprostanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
101 Cholesterol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
102 beta-Sitosterol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
103 Pyridine	1.52397	1.58056	1.51590	1.68671	1.59785	1.64555		
	1.64495	+++++					1.59936	4.024
187 Total Benzofluoranthenes	0.96364	0.92413	0.89486	0.97507	0.95930	0.93428		
	0.94109	+++++					0.94177	2.896
188 2,6-Dichlorophenol	0.95425	0.98359	0.87241	0.95349	0.89669	0.86783		
	0.83663	+++++					0.90927	6.026

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 23-JAN-2013 15:27
End Cal Date : 23-JAN-2013 19:26
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem2/nt6.i/20130123A.b/SW846012313.m
Cal Date : 24-Jan-2013 11:47 jianqing
Curve Type : Average

Compound	1.000 Level 1 / 80.000 Level 7	5.000 Level 2 / 0.20000 Level 8	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD
189 N-Nitrosomethylethylamine	0.63916	0.63331	0.57169	0.63147	0.60155	0.61307		
	0.60153	+++++					0.61311	3.887
$ 1 2-Fluorophenol	1.53683	1.36404	1.25335	1.32038	1.26832	1.23282		
	+++++	+++++					1.32929	8.454
$ 137 d8-1,4-Dioxane	0.67783	0.62586	0.60216	0.66928	0.63816	0.65911		
	0.65673	+++++					0.64702	4.101
$ 2 Phenol-d5	1.76774	1.69416	1.56164	1.65019	1.56787	1.51037		
	+++++	+++++					1.62533	5.915
$ 5 2-Chlorophenol-d4	1.54209	1.37355	1.28928	1.34423	1.27974	1.20589		
	+++++	+++++					1.33913	8.591
$ 10 1,2-Dichlorobenzene-d4	1.10502	0.98190	0.91523	0.95107	0.86955	0.85255		
	+++++	+++++					0.94589	9.704
$ 18 Nitrobenzene-d5	0.49514	0.43272	0.42035	0.43570	0.43043	0.42472		
	+++++	+++++					0.43984	6.286
$ 36 2-Fluorobiphenyl	1.57274	1.35130	1.24703	1.31431	1.24996	1.23160		
	+++++	+++++					1.32782	9.678
$ 55 2,4,6-Tribromophenol	0.15101	0.14296	0.14719	0.15964	0.15887	0.16001		
	+++++	+++++					0.15328	4.756

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 23-JAN-2013 15:27
End Cal Date : 23-JAN-2013 19:26
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem2/nt6.i/20130123A.b/SW846012313.m
Cal Date : 24-Jan-2013 11:47 jianqing
Curve Type : Average

Compound	1.000 Level 1 / 80.000 Level 7	5.000 Level 2 / 0.20000 Level 8	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD
$ 66 Terphenyl-d14	0.86012	0.76377	0.70980	0.71306	0.70710	0.67694		
	+++++	+++++					0.73846	8.916
$ 85 p-Cresol-d4	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
$ 86 Anthracene-d10	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
$ 87 Fluoranthene-d10	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
$ 88 Dibenz(a,h)anthracene-d14	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
$ 89 Diphenyl-d10	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
$ 95 D10-1-methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 23-JAN-2013 15:27
End Cal Date : 23-JAN-2013 19:26
Quant Method : ISTD
Origin : Force
Target Version : 3.50
Integrator : HP RTE
Method file : /chem2/nt6.i/20130123A.b/SW846012313.m
Cal Date : 24-Jan-2013 12:05 jianqing

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Quad	Amt = b + m1*Rsp + m2*Rsp^2	Response

Analytical Resources Inc.: Organics Instrument Log
NT-6 Serial No.:GC=US00036167, MS=US81221575

Date: 1/23/13 Analysis: 8270D Analyst: [illegible]

GC Program: [illegible] Column No: 234162 Column Type: ZB-5MSi

Instrument Tune (.U or .CT.): 12-1019 EM Voltage: 1871

Calibration File: 01231308 Curve Date: 1/23/13 Injection Vol.: 1µl

IS/SS	Ical/Ccal	LCS/ICV
1998-2	2063-2, 2064-1	2066-1, 2067-1
	2055-1, 2061-1	2068-1, 2061-1
	1803-1, 2027-2	2058-2
	2019-2	

Document All Maintenance Tasks in StarLIMS

INTERNAL STANDARD SUMMARY FOR DATABATCH - /chem2/nt6.i/20130123A.b

	Time	Filename	LabID	ClientId	DF														
1	1527	01231308.D	IC250123	IC120123	1	7.75	608906	9.79	2147229	12.63	1142267	14.98	1647923	19.25	1422286	21.39	1374454	20.44	1811653
2	1601	01231309.D	IC020123	IC019123	1	7.74	716447	9.78	2481763	12.62	1316490	14.98	1973322	19.25	1514263	20.43	2009816	21.38	1348691
3	1637	01231310.D	IC10123	IC10123	1	7.75	584984	9.79	1995571	12.62	1030279	14.98	1549399	19.25	1178329	21.38	1136697	20.43	1508392
4	1711	01231311.D	IC50123	IC50123	1	7.74	625810	9.78	2166911	12.63	1149677	14.97	1698741	19.25	1304950	21.38	1217577	20.43	1684731
5	1745	01231312.D	IC100123	IC100123	1	7.74	588636	9.78	2046842	12.63	1097178	14.98	1606787	19.25	1302221	21.39	1237002	20.43	1640440
6	1819	01231313.D	IC400123	IC400123	1	7.75	675785	9.79	2346841	12.63	1258311	14.98	1837726	19.25	1561270	21.39	1517196	20.43	1902169
7	1852	01231314.D	IC600123	IC600126	1	7.75	630732	9.79	2164179	12.63	1103459	14.98	1594848	19.26	1461591	21.39	1421009	20.43	1782744
8	1926	01231315.D	IC800123	IC800123	1	7.75	555869	9.79	1894972	12.63	979292	14.99	1390368	19.26	1295515	21.39	1231789	20.43	1540996
9	1959	01231316.D	ICV0123	ICV0123	1	7.74	584238	9.78	2022036	12.62	1087177	14.98	1576912	19.25	1394914	21.39	1356075	20.43	1568805
10	2033	01231317.D	VZ07A	OUTFALL #001	1	7.74	762940	9.78	2617210	12.62	1453328	14.98	2184075	19.25	1759775	20.43	2313262	21.39	1666900

[illegible] 01/24/13

Every line must contain information or be lined out. Make all entries legible.
Start a new page for each QC period. Document All Maintenance Tasks in StarLIMS

MANUAL INTEGRATION SUMMARY FOR DATABATCH - /chem2/nt6.i/20130123A.b

ARI Job No.: IC25 Method: SW846012313.m Instrument: nt6.i Date: 23-JAN-2013

AB 01/24/13

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1527	01231308.D	IC250123	IC120123	1	Total Benzofluoranthenes,
1601	01231309.D	IC020123	IC919123	1	NO MANUAL INTEGRATION
1637	01231310.D	IC10123	IC10123	1	p-Benzoquinone, Total Benzofluoranthenes,
1711	01231311.D	IC50123	IC50123	1	Total Benzofluoranthenes,
1745	01231312.D	IC100123	IC100123	1	Total Benzofluoranthenes,
1819	01231313.D	IC400123	IC400123	1	Total Benzofluoranthenes,
1852	01231314.D	IC600123	IC600126	1	Total Benzofluoranthenes,
1926	01231315.D	IC800123	IC800123	1	Total Benzofluoranthenes,
1959	01231316.D	ICV0123	ICV0123	1	Total Benzofluoranthenes,

Data File: /chem2/nt6.i/20130123A.b/tune.b/01231308.D

Date : 23-JAN-2013 15:27

Client ID: DFTPP0123A

Instrument: nt6.i

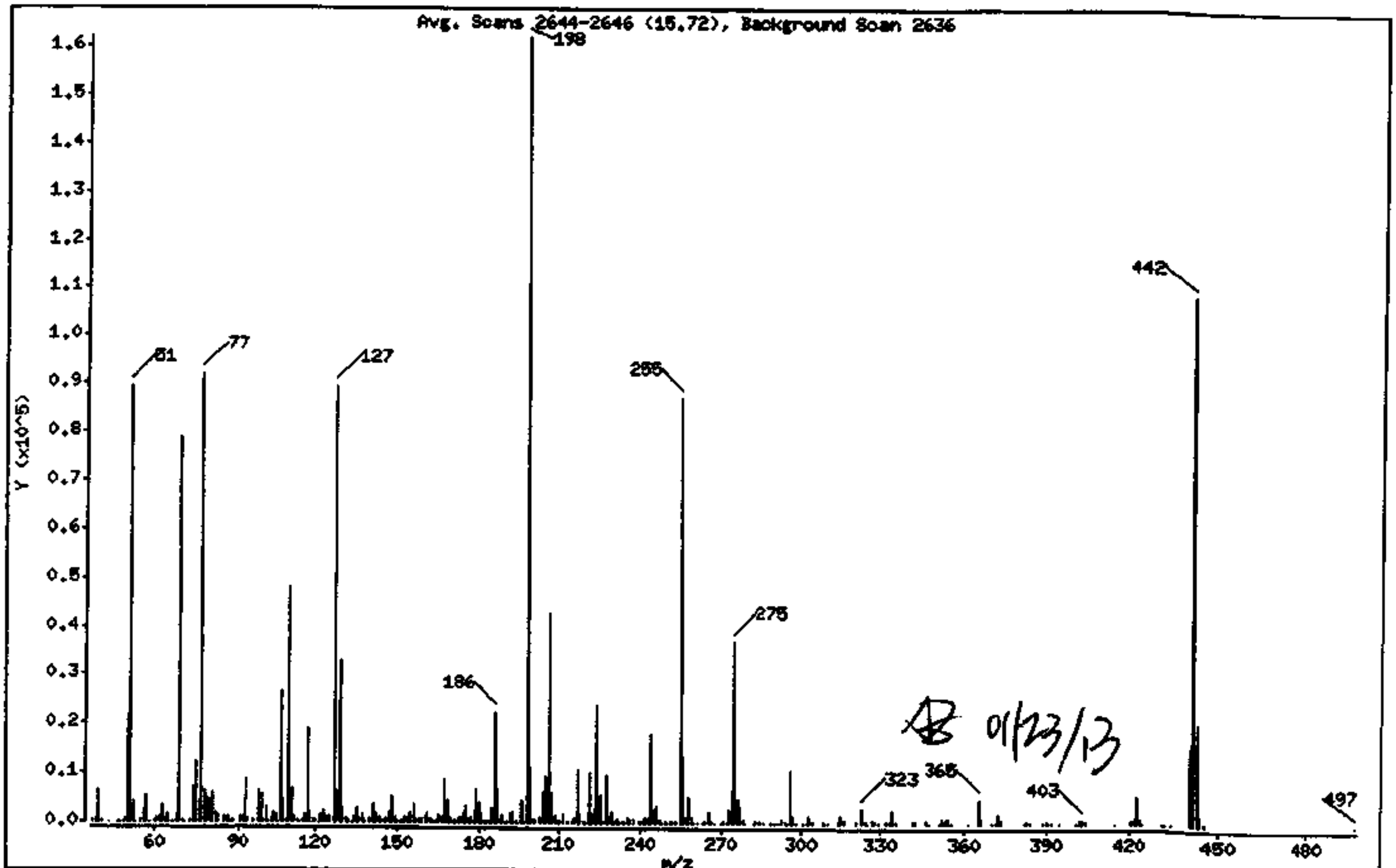
Sample Info: DFTPP0123A

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.32

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	55.08
68	Less than 2.00% of mass 69	0.85 (1.75)
69	Mass 69 relative abundance	48.65
70	Less than 2.00% of mass 69	0.27 (0.55)
127	10.00 - 80.00% of mass 198	55.23
197	Less than 2.00% of mass 198	0.18
199	5.00 - 9.00% of mass 198	6.85
275	10.00 - 60.00% of mass 198	22.69
365	Greater than 1.00% of mass 198	2.91
441	0.01 - 24.00% of mass 442	9.59 (14.28)
442	50.00 - 200.00% of mass 198	67.16
443	15.00 - 24.00% of mass 442	12.70 (18.91)

Data File: /chem2/nt6.i/20130123A.b/tune.b/01231308.D

Date : 23-JAN-2013 15:27

Client ID: DFTPP0123A

Instrument: nt6.i

Sample Info: DFTPP0123A

Operator: JZ

Column phase: ZB-5ms:

Column diameter: 0.32

Data File: 01231308.D

Spectrum: Avg. Scans 2644-2646 (15.72), Background Scan 2636

Location of Maximum: 198.00

Number of points: 300

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	230	125.00	1114	204.00	6370	291.00	76
38.00	908	127.00	89424	205.00	9488	292.00	56
39.00	6149	128.00	6391	206.00	42776	293.00	807
40.00	323	129.00	32688	207.00	6011	294.00	340
43.00	169	130.00	2890	208.00	1328	295.00	55
46.00	69	131.00	597	209.00	551	296.00	10630
47.00	53	132.00	261	210.00	287	297.00	1503
48.00	73	133.00	9	211.00	1825	298.00	168
49.00	583	134.00	1012	213.00	191	301.00	128
50.00	21624	135.00	2871	215.00	462	302.00	123
51.00	89192	136.00	603	216.00	1133	303.00	1422
52.00	4048	137.00	1610	217.00	10733	304.00	372
53.00	51	138.00	385	218.00	1869	305.00	322
55.00	307	140.00	589	219.00	254	309.00	52
56.00	2236	141.00	3585	220.00	106	310.00	137
57.00	5102	142.00	1686	221.00	9866	314.00	531
58.00	98	143.00	1103	222.00	1922	315.00	1320
60.00	195	144.00	410	223.00	2827	316.00	680
61.00	685	145.00	222	224.00	23808	321.00	392
62.00	1229	146.00	772	225.00	5585	323.00	3081
63.00	3241	147.00	2124	226.00	440	324.00	550
64.00	586	148.00	5180	227.00	9847	325.00	51
65.00	1433	149.00	948	228.00	1404	327.00	673
66.00	75	150.00	447	229.00	2303	328.00	344
67.00	117	151.00	555	230.00	423	329.00	178
68.00	1377	152.00	222	231.00	714	332.00	371
69.00	78768	153.00	1098	232.00	268	333.00	387
70.00	433	154.00	1110	233.00	193	334.00	2534
71.00	75	155.00	1985	234.00	461	335.00	465
73.00	430	156.00	3777	235.00	1081	341.00	421
74.00	7033	157.00	771	236.00	669	342.00	193
75.00	12119	158.00	672	237.00	878	346.00	896
76.00	4147	159.00	713	239.00	285	347.00	102
77.00	92040	160.00	1243	240.00	348	351.00	87
78.00	6348	161.00	2043	241.00	925	352.00	985

Date : 23-JAN-2013 15:27

Client ID: DFTPP0123A

Instrument: nt6.i

Sample Info: DFTPP0123A

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.32

Data File: 01231308.D

Spectrum: Avg. Scans 2644-2646 (15.72), Background Scan 2636

Location of Maximum: 198.00

Number of points: 300

m/z	Y	m/z	Y	m/z	Y	m/z	Y
79.00	4880	162.00	785	242.00	1102	353.00	914
80.00	4455	163.00	326	243.00	1121	354.00	1052
81.00	5893	164.00	245	244.00	18008	355.00	70
82.00	1866	165.00	1573	245.00	2464	361.00	65
83.00	1509	166.00	1101	246.00	3388	365.00	4715
85.00	1085	167.00	8649	247.00	780	366.00	1186
86.00	1294	168.00	4497	248.00	75	370.00	104
87.00	519	169.00	1010	249.00	417	371.00	65
88.00	358	170.00	222	250.00	57	372.00	1764
91.00	1269	171.00	401	251.00	205	373.00	626
92.00	1203	172.00	696	252.00	269	382.00	56
93.00	8421	173.00	986	253.00	536	383.00	325
94.00	763	174.00	1974	255.00	87216	384.00	51
96.00	426	175.00	3465	256.00	13466	389.00	52
98.00	6414	176.00	782	257.00	1013	390.00	340
99.00	5633	177.00	1104	258.00	5226	391.00	123
100.00	470	178.00	337	259.00	1004	392.00	134
101.00	2973	179.00	6884	260.00	157	395.00	64
102.00	171	180.00	4014	261.00	62	401.00	171
103.00	710	181.00	1750	263.00	66	402.00	738
104.00	2045	182.00	334	264.00	319	403.00	884
105.00	1427	183.00	222	265.00	2131	404.00	319
106.00	93	184.00	480	266.00	248	415.00	71
107.00	26272	185.00	3022	267.00	61	421.00	678
108.00	4295	186.00	22400	270.00	80	422.00	1133
109.00	379	187.00	6810	271.00	265	423.00	5688
110.00	48160	188.00	590	272.00	151	424.00	1233
111.00	6771	189.00	1468	273.00	2709	425.00	150
112.00	1117	190.00	58	274.00	6805	432.00	60
113.00	435	191.00	337	275.00	36736	433.00	54
114.00	63	192.00	2008	276.00	4838	435.00	57
115.00	648	193.00	2112	277.00	3175	441.00	15532
116.00	1364	194.00	487	278.00	670	442.00	108752
117.00	18928	195.00	160	279.00	75	443.00	20560
118.00	1678	196.00	4606	282.00	70	444.00	1892

Date : 23-JAN-2013 15:27

Client ID: DFTPP0123A

Instrument: nt6.i

Sample Info: DFTPP0123A

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.32

Data File: 01231308.D

Spectrum: Avg. Scans 2644-2646 (15.72), Background Scan 2636

Location of Maximum: 198.00

Number of points: 300

m/z	Y	m/z	Y	m/z	Y	m/z	Y
119.00	297	197.00	291	283.00	364	445.00	205
120.00	507	198.00	161920	284.00	260	497.00	51
121.00	68	199.00	11093	285.00	529		
122.00	1513	200.00	860	286.00	165		
123.00	2211	201.00	709	289.00	71		
124.00	987	203.00	1183	290.00	53		

Data File: /chem2/nt6.i/20130123A.b/tune.b/01231308.D

Date : 23-JAN-2013 15:27

Client ID: DFTPP0123A

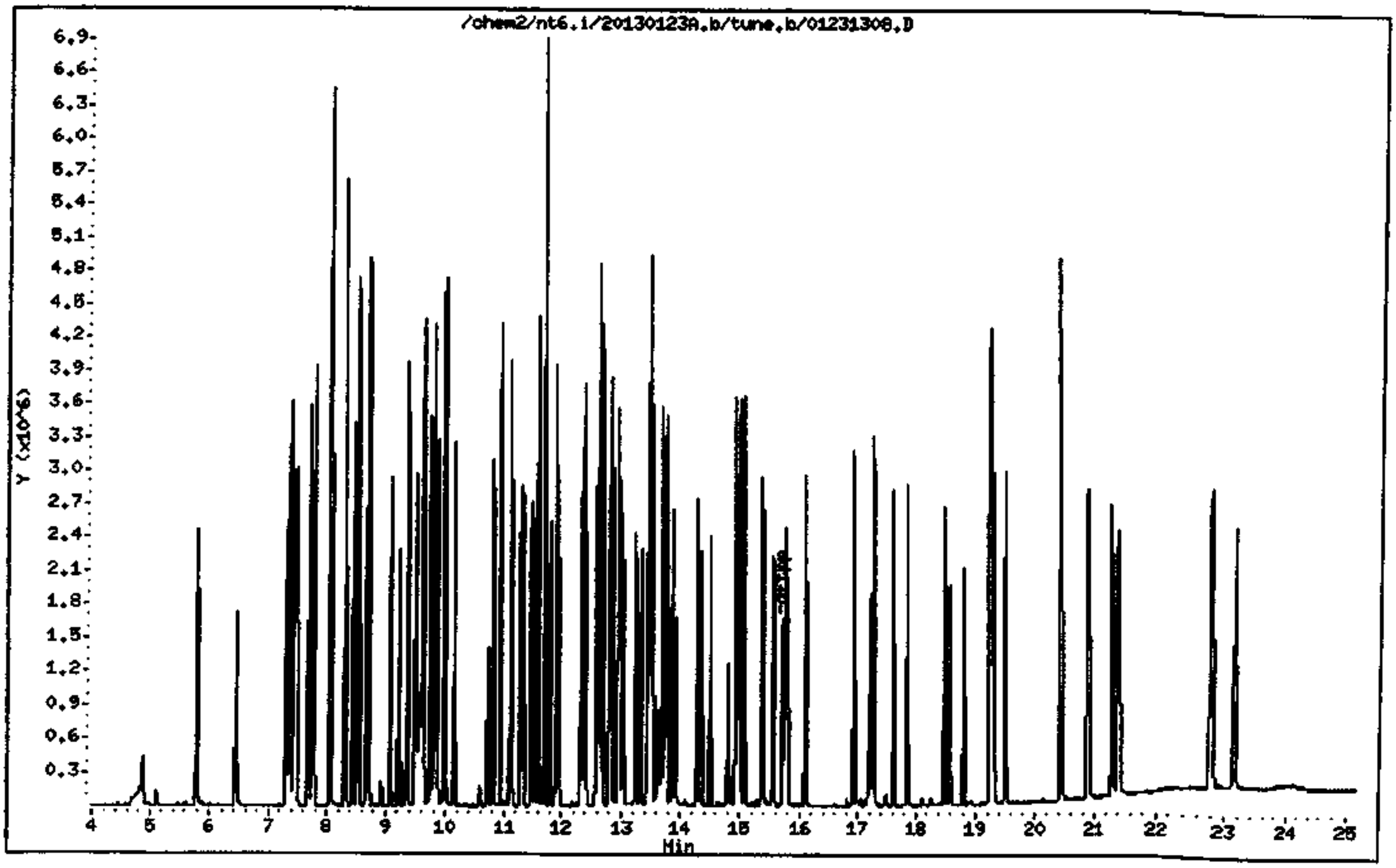
Instrument: nt6.i

Sample Info: DFTPP0123A

Operator: JZ

Column phase: ZB-5ms1

Column diameter: 0.32



Analytical Resources Inc.
ABN by sw846 8270C
DDT Breakdown Report

Data file: /chem2/nt6.i/20130123A.b/ddt.b/01231308.D ARI ID: DDT0123A
Method: /chem2/nt6.i/20130123A.b/ddt.b/sw846ddt.m Misc: 13-
Analysis Date: 23-JAN-2013 15:27 Instrument: nt6.i

COMPOUND	RT	AREA
Pentachlorophenol	14.810	196104
Benzidine	17.203	388124
4,4'-DDE	----	----
4,4'-DDD	18.128	14564
4,4'-DDT	18.592	590508

$$\text{DDT Percent Breakdown} = \frac{(\text{DDE Area} + \text{DDD Area}) * 100}{(\text{DDE Area} + \text{DDD Area} + \text{DDT Area})}$$

$$\text{DDT Percent Breakdown} = \frac{(0 + 14564) * 100}{(0 + 14564 + 590508)}$$

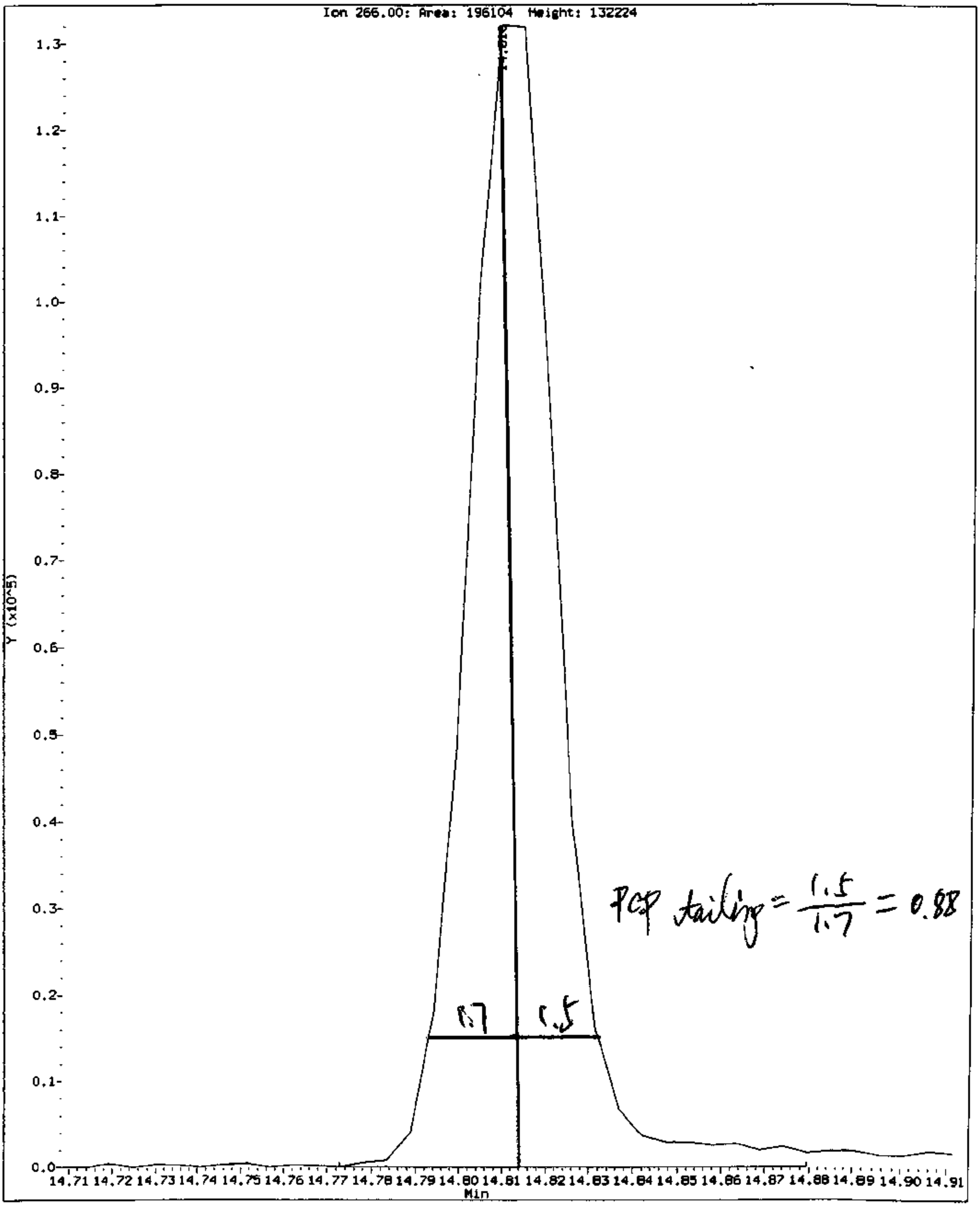
DDT Percent Breakdown = 2.4 %

OR

DG 01/23/13

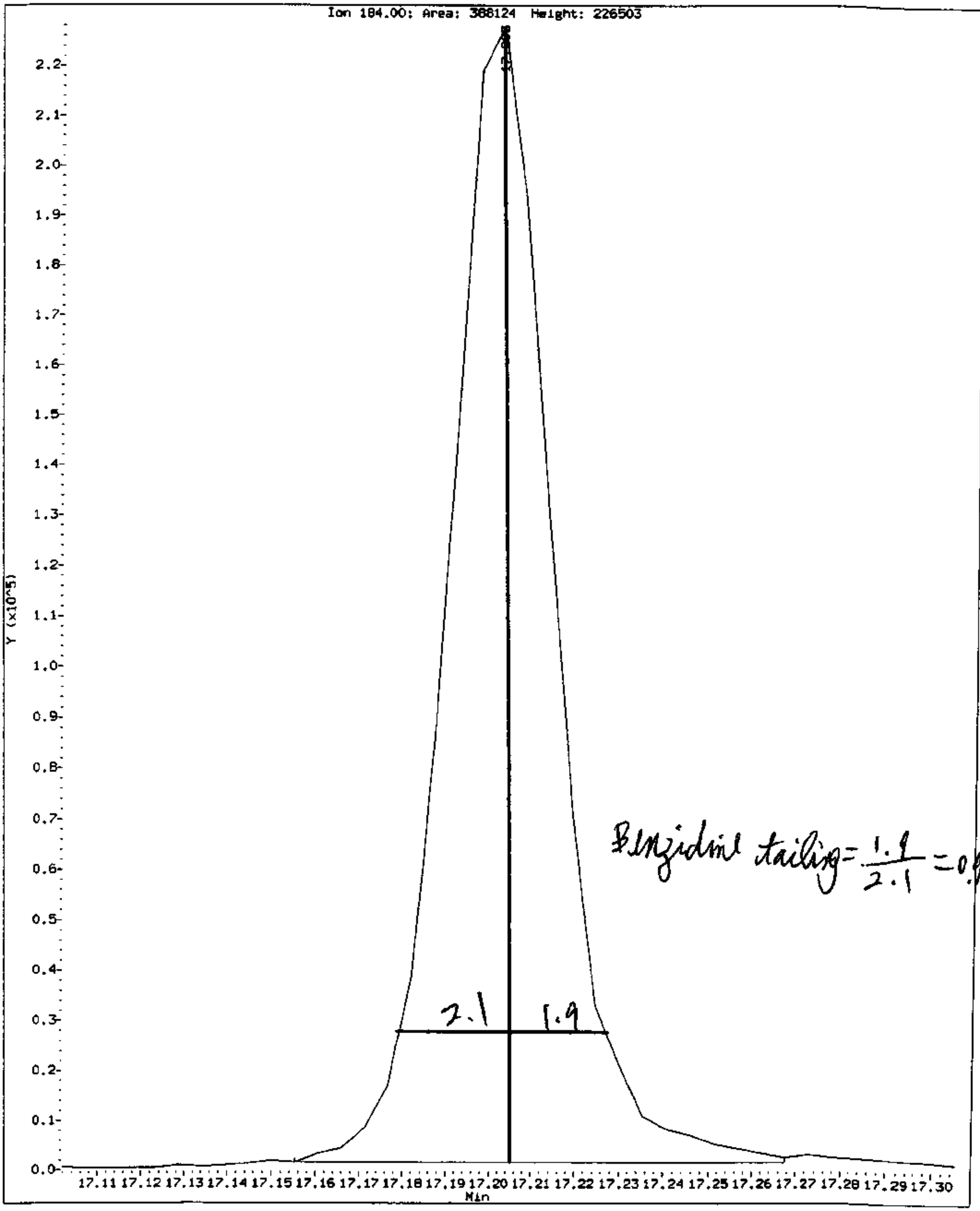
Data File: /chem2/nt6.i/20130123A.b/ddt.b/01231308.D
Injection Date: 23-JAN-2013 15:27
Instrument: nt6.i
Client Sample ID: DDT0123A

Compound: Pentachlorophenol
CAS Number: 87-86-5



Data File: /chem2/nt6.i/20130123A.b/ddt.b/01231308.D
Injection Date: 23-JAN-2013 15:27
Instrument: nt6.i
Client Sample ID: DDT0123A

Compound: Benzidine
CAS Number:



Benzidine tailing = $\frac{1.9}{2.1}$ = 0.94

WC02 : 00079

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem2/nt6.i/20130123A.b/01231310.D
Lab Smp Id: IC10123 Client Smp ID: IC10123
Inj Date : 23-JAN-2013 16:37
Operator : JZ Inst ID: nt6.i
Smp Info : IC10123,
Misc Info : 13-
Comment : 1ul Injection
Method : /chem2/nt6.i/20130123A.b/SW846012313.m
Meth Date : 24-Jan-2013 12:19 jianqing Quant Type: ISTD
Cal Date : 23-JAN-2013 16:37 Cal File: 01231310.D
Als bottle: 3 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALS.sub
Target Version: 3.50

JZ 01/24/13

			QUANT SIG					AMOUNTS CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
$	1	2-Fluorophenol	112	5.785	5.785	(0.747)	44951	1.00000	1.156
$	2	Phenol-d5	99	7.350	7.350	(0.949)	51705	1.00000	1.088
	3	Phenol	94	7.371	7.371	(0.952)	48548	1.00000	1.057
$	5	2-Chlorophenol-d4	132	7.451	7.451	(0.962)	45105	1.00000	1.152
	4	Bis(2-Chloroethyl)ether	93	7.425	7.425	(0.959)	42847	1.00000	1.104
	6	2-Chlorophenol	128	7.473	7.473	(0.965)	42122	1.00000	1.083
	7	1,3-Dichlorobenzene	146	7.681	7.681	(0.992)	48022	1.00000	1.073
*	8	1,4-Dichlorobenzene-d4	152	7.745	7.745	(1.000)	584984	20.0000	
	9	1,4-Dichlorobenzene	146	7.767	7.767	(1.003)	48875	1.00000	1.100
$	10	1,2-Dichlorobenzene-d4	152	8.044	8.044	(1.039)	32321	1.00000	1.168
	12	1,2-Dichlorobenzene	146	8.060	8.060	(1.041)	45904	1.00000	1.112
	11	Benzyl alcohol	108	8.039	8.039	(1.038)	25613	1.00000	1.070
	14	2,2'-oxybis(1-Chloropropane)	45	8.301	8.301	(1.072)	72399	1.00000	1.151
	13	2-Methylphenol	108	8.296	8.296	(1.071)	36995	1.00000	1.067
	17	Hexachloroethane	117	8.547	8.547	(1.103)	19984	1.00000	1.109
	16	N-Nitroso-di-n-propylamine	70	8.509	8.509	(1.099)	30100	1.00000	1.069
	15	4-Methylphenol	108	8.525	8.525	(1.101)	39701	1.00000	1.117
$	18	Nitrobenzene-d5	82	8.675	8.675	(0.887)	49404	1.00000	1.126
	19	Nitrobenzene	77	8.702	8.702	(0.890)	50476	1.00000	1.134
	20	Isophorone	82	9.086	9.086	(0.929)	65858	1.00000	1.060
	21	2-Nitrophenol	139	9.220	9.220	(0.943)	17334	1.00000	0.8992
	22	2,4-Dimethylphenol	107	9.359	9.359	(0.957)	37478	1.00000	1.053
	23	Bis(2-Chloroethoxy)methane	93	9.492	9.492	(0.970)	48061	1.00000	1.096
	24	Benzoic acid	105	9.551	9.551	(0.976)	2581	2.00000	0.1006
	25	2,4-Dichlorophenol	162	9.610	9.610	(0.983)	29424	1.00000	1.029
	26	1,2,4-Trichlorobenzene	180	9.727	9.727	(0.995)	36079	1.00000	1.089
*	27	Naphthalene-d8	136	9.781	9.781	(1.000)	1995571	20.0000	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
==========================	====	==	======	======	========	=======	=======
28 Naphthalene	128	9.813	9.813	(1.003)	108915	1.00000	1.165
29 4-Chloroaniline	127	9.968	9.968	(1.019)	44152	1.00000	1.457
30 Hexachlorobutadiene	225	10.144	10.144	(1.037)	22536	1.00000	1.083
31 4-Chloro-3-methylphenol	107	10.801	10.801	(1.104)	26367	1.00000	0.9468
32 2-Methylnaphthalene	141	10.929	10.929	(1.117)	53055	1.00000	1.092
33 Hexachlorocyclopentadiene	237	11.314	11.314	(0.896)	17342	1.00000	0.8092
34 2,4,6-Trichlorophenol	196	11.447	11.447	(0.907)	17318	1.00000	0.9414
35 2,4,5-Trichlorophenol	196	11.517	11.517	(0.912)	16379	1.00000	0.8639
$ 36 2-Fluorobiphenyl	172	11.576	11.576	(0.917)	81018	1.00000	1.184
37 2-Chloronaphthalene	162	11.698	11.698	(0.927)	67521	1.00000	1.194
38 2-Nitroaniline	65	11.944	11.944	(0.946)	17787	1.00000	0.9670
39 Dimethylphthalate	163	12.318	12.318	(0.976)	65736	1.00000	1.118
40 Acenaphthylene	152	12.372	12.372	(0.980)	95271	1.00000	1.117
41 2,6-Dinitrotoluene	165	12.409	12.409	(0.983)	13197	1.00000	0.9474
* 42 Acenaphthene-d10	164	12.623	12.623	(1.000)	1030279	20.0000	
43 3-Nitroaniline	138	12.617	12.617	(1.000)	14438	1.00000	1.350
44 Acenaphthene	153	12.671	12.671	(1.004)	61321	1.00000	1.136
45 2,4-Dinitrophenol	184	12.783	12.783	(1.013)	163	2.00000	0.01924
46 Dibenzofuran	168	12.932	12.932	(1.025)	82038	1.00000	1.151
47 4-Nitrophenol	109	12.965	12.965	(1.027)	7579	1.00000	0.8338
48 2,4-Dinitrotoluene	165	13.029	13.029	(1.032)	16260	1.00000	0.9343
50 Diethylphthalate	149	13.467	13.467	(1.067)	69328	1.00000	1.153
49 Fluorene	166	13.483	13.483	(1.068)	64739	1.00000	1.152
51 4-Chlorophenyl-phenylether	204	13.525	13.525	(1.072)	33857	1.00000	1.091
52 4-Nitroaniline	138	13.600	13.600	(1.077)	11576	1.00000	1.036
53 4,6-Dinitro-2-methylphenol	198	13.670	13.670	(0.913)	7165	2.00000	0.6920
54 N-Nitrosodiphenylamine	169	13.723	13.723	(0.916)	47411	1.00000	1.083
$ 55 2,4,6-Tribromophenol	330	13.905	13.905	(1.102)	7779	1.00000	0.9852
56 4-Bromophenyl-phenylether	248	14.295	14.295	(0.954)	17717	1.00000	1.030
57 Hexachlorobenzene	284	14.503	14.503	(0.968)	18552	1.00000	1.069
58 Pentachlorophenol	266	14.813	14.813	(0.989)	2541	1.00000	0.3865
* 59 Phenanthrene-d10	188	14.979	14.979	(1.000)	1509399	20.0000	
60 Phenanthrene	178	15.011	15.011	(1.002)	85910	1.00000	1.155
61 Anthracene	178	15.080	15.080	(1.007)	83080	1.00000	1.096
62 Carbazole	167	15.374	15.374	(1.026)	77167	1.00000	1.146
63 Di-n-butylphthalate	149	16.106	16.106	(1.075)	95760	1.00000	1.103
64 Fluoranthene	202	16.928	16.928	(1.130)	76833	1.00000	1.066
65 Pyrene	202	17.281	17.281	(0.898)	79674	1.00000	1.148
$ 66 Terphenyl-d14	244	17.612	17.612	(0.915)	50546	1.00000	1.165
67 Butylbenzylphthalate	149	18.504	18.504	(0.961)	34130	1.00000	1.053
68 Benzo(a)anthracene	228	19.226	19.226	(0.999)	62229	1.00000	1.089
* 69 Chrysene-d12	240	19.247	19.247	(1.000)	1175329	20.0000	
70 3,3'-Dichlorobenzidine	252	19.252	19.252	(1.000)	21326	1.00000	1.209
71 Chrysene	228	19.290	19.290	(1.002)	61311	1.00000	1.114
72 bis(2-Ethylhexyl)phthalate	149	19.503	19.503	(0.955)	48766	1.00000	1.083
* 134 Di-n-octylphthalate-d4	153	20.428	20.428	(1.000)	1506392	20.0000	
73 Di-n-octylphthalate	149	20.438	20.438	(1.001)	88175	1.00000	1.159

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
	74 Benzo(b)fluoranthene	252	20.860	20.860	(0.976)	55393	1.00000	0.9915
	75 Benzo(k)fluoranthene	252	20.892	20.892	(0.977)	63795	1.00000	1.094
	187 Total Benzofluoranthenes	252	20.892	20.892	(0.977)	109537	2.00000	2.046 (M)
	76 Benzo(a)pyrene	252	21.298	21.298	(0.996)	52608	1.00000	1.019
*	77 Perylene-d12	264	21.378	21.378	(1.000)	1136697	20.0000	
	78 Indeno(1,2,3-cd)pyrene	276	22.773	22.773	(1.065)	76512	1.00000	1.060
	79 Dibenzo(a,h)anthracene	278	22.794	22.794	(1.066)	65973	1.00000	1.116
	80 Benzo(g,h,i)perylene	276	23.125	23.125	(1.082)	71890	1.00000	1.101
	90 N-Nitrosodimethylamine	74	2.959	2.959	(0.382)	27874	1.00000	1.019
	103 Pyridine	79	2.953	2.953	(0.381)	44575	1.00000	0.9529
	91 Aniline	93	7.302	7.302	(0.943)	58304	1.00000	1.141
	105 1-methylnaphthalene	141	11.100	11.100	(1.135)	50486	1.00000	1.042
	93 Benzidine	184	17.201	17.201	(0.894)	32448	1.00000	1.877
	111 Azobenzene (1,2-DP-Hydrazine)	77	13.766	13.766	(1.091)	77797	1.00000	1.105
	143 1,4-Dioxane	88	2.344	2.344	(0.303)	20415	1.00000	1.006
$	137 d8-1,4-Dioxane	96	2.296	2.296	(0.296)	19826	1.00000	1.048
	144 alpha-Terpineol	59	9.850	9.850	(1.007)	29828	1.00000	1.068
	177 p-Benzoquinone	82	6.431	6.431	(0.658)	5132	1.00000	0.6331 (M)
	98 Retene	219	17.853	17.853	(0.928)	32374	1.00000	1.099
	99 Perylene	252	21.416	21.416	(1.002)	50585	1.00000	1.115
	133 Butylatedhydroxytoluene	205	12.820	12.820	(1.016)	55676	1.00000	1.096
	115 Tributyl Phosphate	99	13.841	13.841	(0.924)	71208	1.00000	1.075
	116 Dibutyl Phenyl Phosphate	175	15.561	15.561	(1.039)	40577	1.00000	1.021
	117 Butyl Diphenyl Phosphate	94	17.228	17.228	(0.895)	14580	1.00000	1.151
	118 Triphenyl Phosphate	326	18.809	18.809	(0.977)	8673	1.00000	0.9372
	123 Acetophenone	105	8.445	8.445	(1.090)	55331	1.00000	1.071
	168 Pentachlorobenzene	250	12.975	12.975	(1.028)	24034	1.00000	1.069
	113 Diphenyl Oxide	170	11.901	11.901	(0.943)	48449	1.00000	1.135
	112 Biphenyl	154	11.704	11.704	(0.927)	76698	1.00000	1.190
	120 2,3,4,6-Tetrachlorophenol	232	13.226	13.226	(1.048)	13036	1.00000	0.8843
	151 1,2,4,5-Tetrachlorobenzene	216	11.266	11.266	(0.892)	27769	1.00000	1.046
	110 Tetrachloroguaiacol	247	14.936	14.936	(0.997)	15895	2.00000	1.873
	109 3,4,5-Trichloroguaiacol	213	13.328	13.328	(0.890)	9049	1.00000	0.9545
	181 3,4,6-Trichloroguaiacol	211	13.440	13.440	(1.735)	11116	1.00000	0.9350
	108 4,5,6-Trichloroguaiacol	213	14.348	14.348	(1.137)	9073	1.00000	0.9803
	184 3,4-Dichloroguaiacol	192	11.795	11.795	(1.523)	11694	1.00000	0.8805
	107 4,5-Dichloroguaiacol	192	12.575	12.575	(0.996)	25057	2.00000	1.952
	182 4,6-Dichloroguaiacol	192	12.575	12.575	(1.624)	25057	2.00000	1.891
	185 4-Chloroguaiacol	115	10.721	10.721	(1.384)	8453	0.50000	0.5064
	186 Carbaryl	144	15.791	15.791	(1.054)	32767	1.00000	0.9026
	178 2-Benzyl-4-Chlorophenol	218	15.758	15.758	(1.052)	10977	1.00000	0.9023
	106 Guaiacol	124	8.718	8.718	(1.126)	34644	1.00000	1.080
	188 2,6-Dichlorophenol	162	9.978	9.978	(1.288)	55822	2.00000	2.099
	189 N-Nitrosomethylethylamine	88	4.893	4.893	(0.632)	37390	2.00000	2.085

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 01231310.D
Lab Smp Id: IC10123
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem2/nt6.i/20130123A.b/SW846012313.m
Misc Info: 13-

Calibration Date: 23-JAN-2013
Calibration Time: 15:27
Client Smp ID: IC10123
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	605906	302953	1211812	584984	-3.45
27 Naphthalene-d8	2147229	1073614	4294458	1995571	-7.06
42 Acenaphthene-d10	1142287	571144	2284574	1030279	-9.81
59 Phenanthrene-d10	1647922	823961	3295844	1509399	-8.41
69 Chrysene-d12	1422286	711143	2844572	1175329	-17.36
134 Di-n-octylphthala	1811653	905826	3623306	1506392	-16.85
77 Perylene-d12	1374454	687227	2748908	1136697	-17.30

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	7.75	7.25	8.25	7.75	-0.03
27 Naphthalene-d8	9.79	9.29	10.29	9.78	-0.08
42 Acenaphthene-d10	12.63	12.13	13.13	12.62	-0.06
59 Phenanthrene-d10	14.98	14.48	15.48	14.98	-0.02
69 Chrysene-d12	19.25	18.75	19.75	19.25	-0.04
134 Di-n-octylphthala	20.44	19.94	20.94	20.43	-0.04
77 Perylene-d12	21.39	20.89	21.89	21.38	-0.06

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

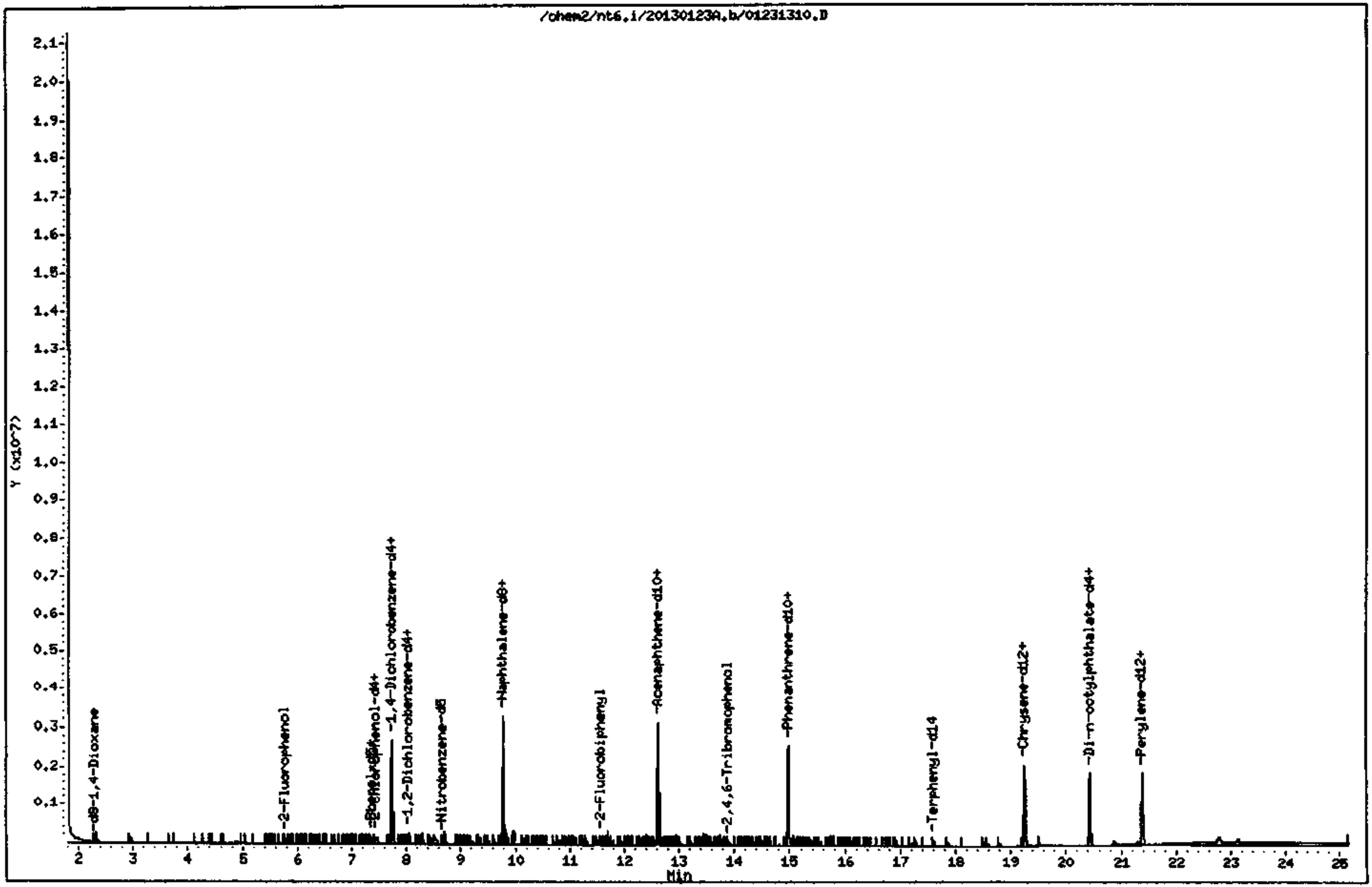
Data File: /chem2/nt6.i/20130123A.b/01231310.D
Date : 23-JAN-2013 16:37
Client ID: IC10123
Sample Info: IC10123,

Instrument: nt6.i

Operator: JZ

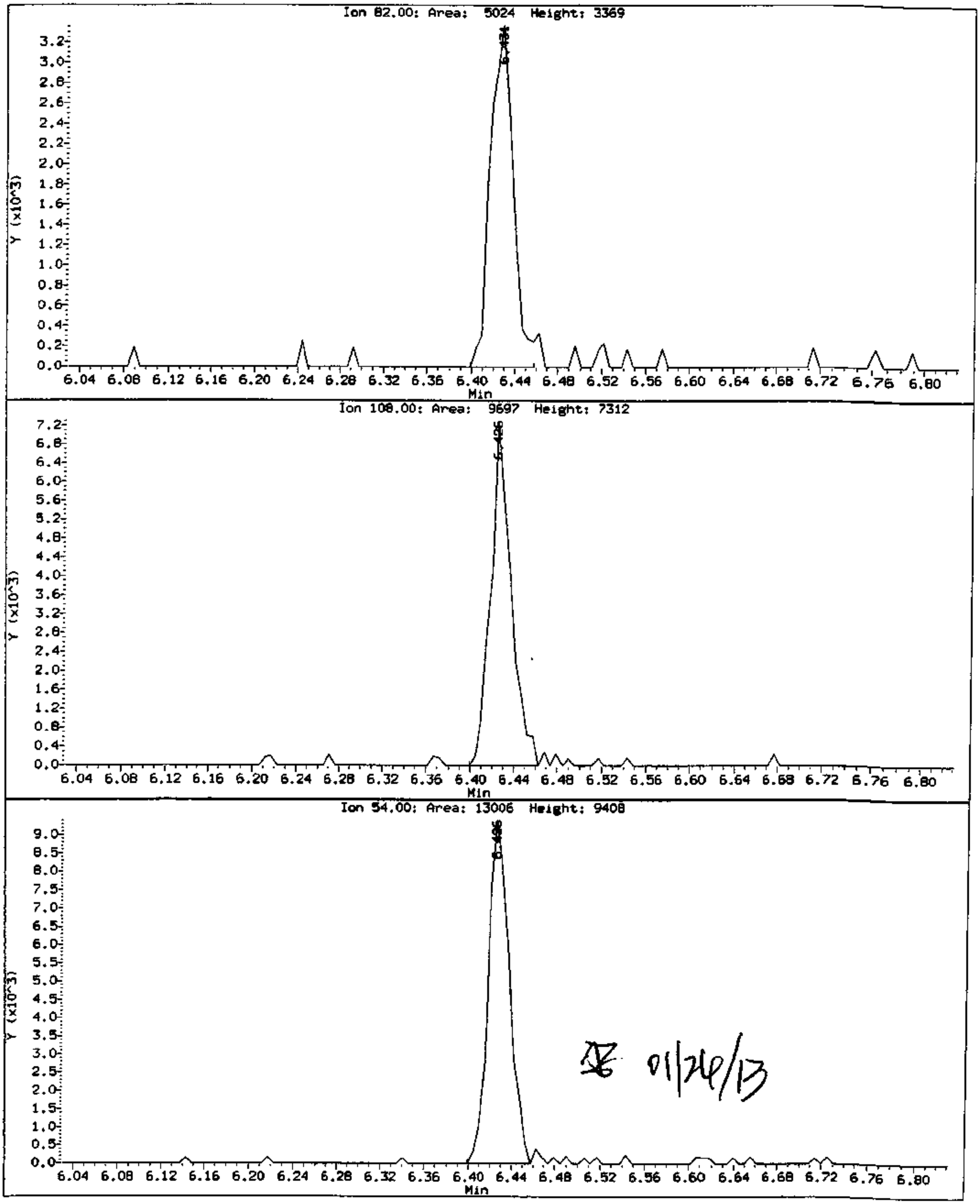
Column phase: ZB-5msi

Column diameter: 0.32



Data File: /chem2/nt6.i/20130123A.b/01231310.D
Injection Date: 23-JAN-2013 16:37
Instrument: nt6.i
Client Sample ID: IC10123

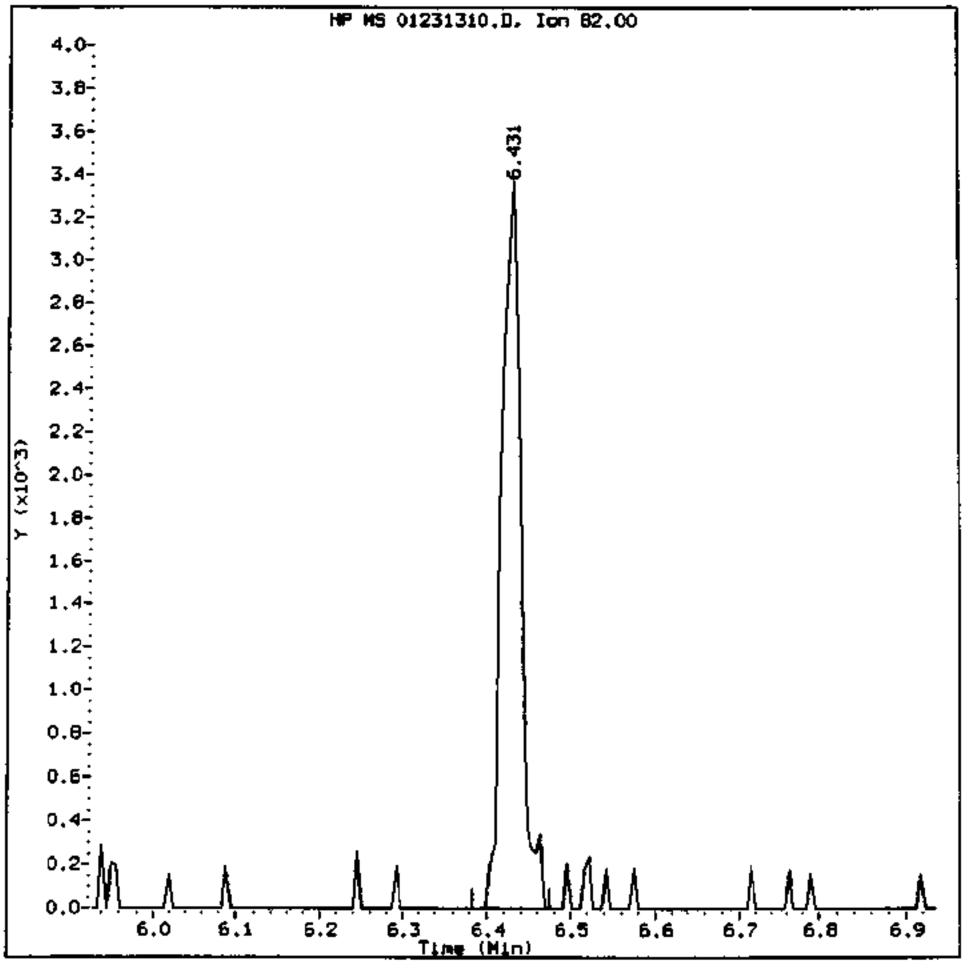
Compound: p-Benzoquinone
CAS Number:



AS 01/24/13

IC10123, /chem2/nt6.i/20130123A.b/01231310.D

p-Benzoquinone   Amount: 0.63   Area: 5132



MANUAL INTEGRATION for p-Benzoquinone

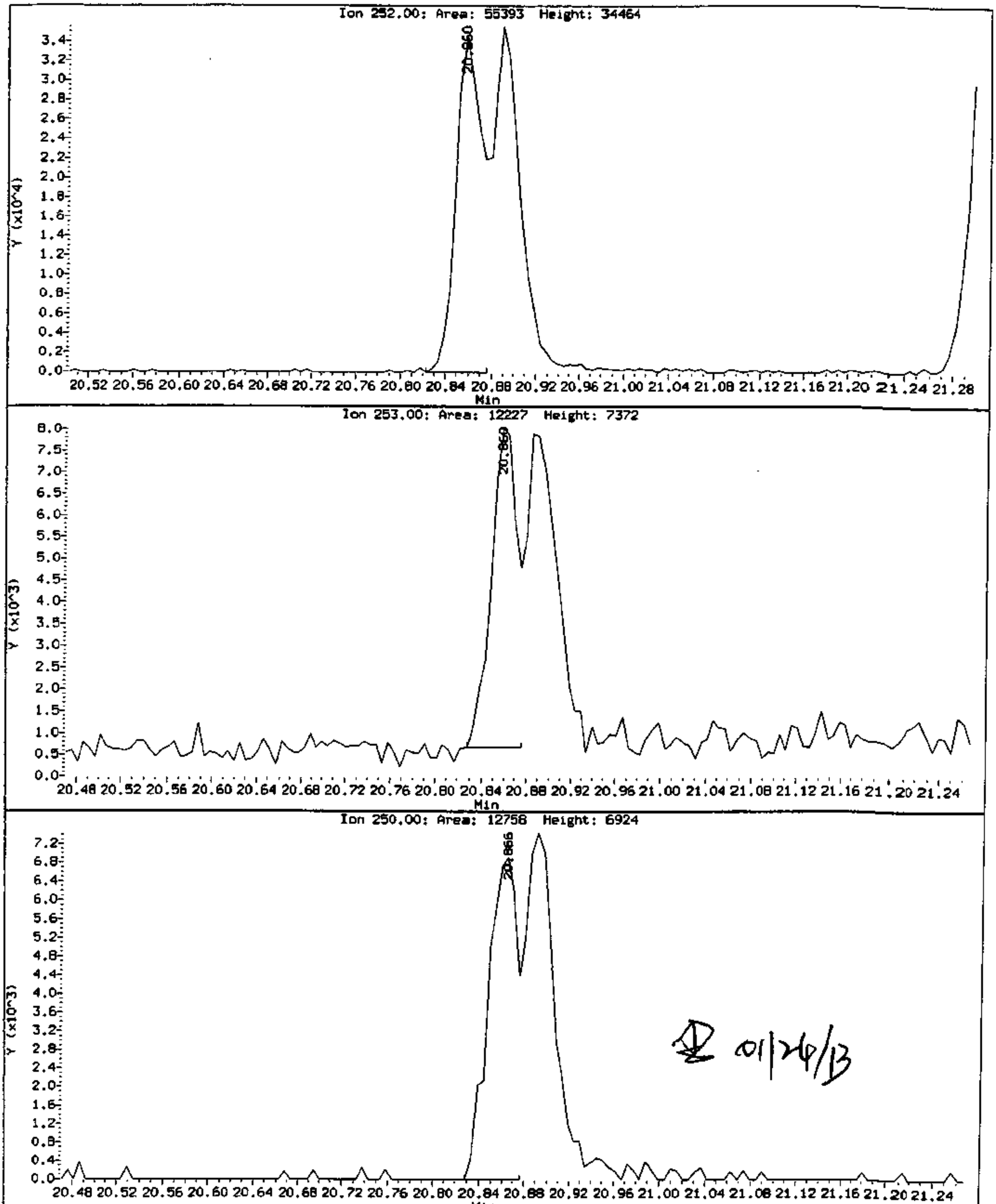
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other ______________________

Analyst: ______   Date: 01/24/13

Data File: /chem2/nt6.i/20130123A.b/01231310.D
Injection Date: 23-JAN-2013 16:37
Instrument: nt6.i
Client Sample ID: IC10123

Compound: Total Benzofluoranthenes
CAS Number:

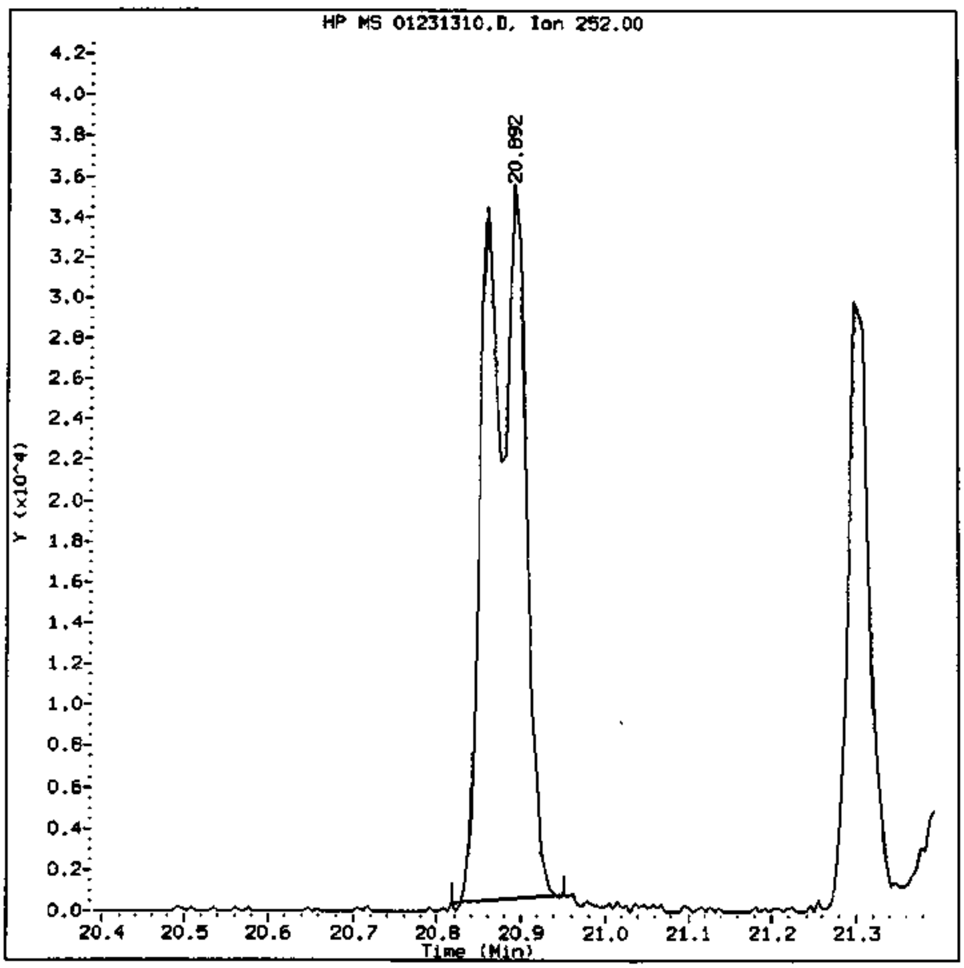


01/24/13

WC32:00080

IC10123, /chem2/nt6.i/20130123A.b/01231310.D

Total Benzofluoranthenes Amount: 2.05 Area: 109537



MANUAL INTEGRATION for Total Benzofluoranthenes

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other ______________________________

Analyst: AB Date: 01/24/13

CO-ELUTION SUMMARY FOR FILE - 01231310.D

Lab ID: IC10123, Method: SW846012313.m, Instrument: nt6.i, Date: 23-JAN-2013

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem2/nt6.i/20130123A.b/01231311.D
Lab Smp Id: IC50123 Client Smp ID: IC50123
Inj Date : 23-JAN-2013 17:11
Operator : JZ Inst ID: nt6.i
Smp Info : IC50123,
Misc Info : 13-
Comment : 1ul Injection
Method : /chem2/nt6.i/20130123A.b/SW846012313.m
Meth Date : 24-Jan-2013 12:19 jianqing Quant Type: ISTD
Cal Date : 23-JAN-2013 17:11 Cal File: 01231311.D
Als bottle: 4 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALS.sub
Target Version: 3.50

JZ 01/24/13

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$ 1 2-Fluorophenol	112	5.786	5.785	(0.747)	213407	5.00000	4.847
$ 2 Phenol-d5	99	7.351	7.350	(0.950)	265055	5.00000	4.971
3 Phenol	94	7.367	7.371	(0.952)	261582	5.00000	5.107
$ 5 2-Chlorophenol-d4	132	7.447	7.451	(0.962)	214896	5.00000	4.837
4 Bis(2-Chloroethyl)ether	93	7.426	7.425	(0.959)	209791	5.00000	4.812
6 2-Chlorophenol	128	7.474	7.473	(0.965)	224022	5.00000	5.077
7 1,3-Dichlorobenzene	146	7.677	7.681	(0.992)	240613	5.00000	4.823
* 8 1,4-Dichlorobenzene-d4	152	7.741	7.745	(1.000)	625810	20.0000	
9 1,4-Dichlorobenzene	146	7.767	7.767	(1.003)	240937	5.00000	4.797
$ 10 1,2-Dichlorobenzene-d4	152	8.040	8.044	(1.039)	153620	5.00000	4.848
12 1,2-Dichlorobenzene	146	8.061	8.060	(1.041)	231107	5.00000	4.877
11 Benzyl alcohol	108	8.040	8.039	(1.039)	135688	5.00000	4.999
14 2,2'-oxybis(1-Chloropropane)	45	8.296	8.301	(1.072)	349320	5.00000	4.816
13 2-Methylphenol	108	8.291	8.296	(1.071)	199513	5.00000	5.084
17 Hexachloroethane	117	8.547	8.547	(1.104)	100954	5.00000	4.891
16 N-Nitroso-di-n-propylamine	70	8.510	8.509	(1.099)	150753	5.00000	4.788
15 4-Methylphenol	108	8.526	8.525	(1.101)	211593	5.00000	5.107
$ 18 Nitrobenzene-d5	82	8.676	8.675	(0.887)	234418	5.00000	4.760
19 Nitrobenzene	77	8.702	8.702	(0.890)	250079	5.00000	4.870
20 Isophorone	82	9.082	9.086	(0.928)	334985	5.00000	4.838
21 2-Nitrophenol	139	9.221	9.220	(0.943)	107946	5.00000	5.247
22 2,4-Dimethylphenol	107	9.354	9.359	(0.956)	209369	5.00000	5.183
23 Bis(2-Chloroethoxy)methane	93	9.488	9.492	(0.970)	240897	5.00000	4.871
24 Benzoic acid	105	9.525	9.551	(0.974)	293547	10.0000	13.94
25 2,4-Dichlorophenol	162	9.610	9.610	(0.983)	163310	5.00000	5.106
26 1,2,4-Trichlorobenzene	180	9.728	9.727	(0.995)	176537	5.00000	4.780
* 27 Naphthalene-d8	136	9.781	9.781	(1.000)	2166911	20.0000	

						AMOUNTS	
	QUANT SIG					CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
==========================	====	==	======	======	========	=======	=======
28 Naphthalene	128	9.813	9.813	(1.003)	549483	5.00000	4.932
29 4-Chloroaniline	127	9.968	9.968	(1.019)	220035	5.00000	5.099
30 Hexachlorobutadiene	225	10.139	10.144	(1.037)	109298	5.00000	4.729
31 4-Chloro-3-methylphenol	107	10.796	10.801	(1.104)	159560	5.00000	5.268
32 2-Methylnaphthalene	141	10.930	10.929	(1.117)	283737	5.00000	5.026
33 Hexachlorocyclopentadiene	237	11.315	11.314	(0.896)	103864	5.00000	4.757
34 2,4,6-Trichlorophenol	196	11.454	11.447	(0.907)	102069	5.00000	5.071
35 2,4,5-Trichlorophenol	196	11.512	11.517	(0.912)	106630	5.00000	5.221
$ 36 2-Fluorobiphenyl	172	11.576	11.576	(0.917)	388389	5.00000	4.782
37 2-Chloronaphthalene	162	11.699	11.698	(0.927)	327891	5.00000	4.791
38 2-Nitroaniline	65	11.940	11.944	(0.946)	105016	5.00000	5.108
39 Dimethylphthalate	163	12.319	12.318	(0.976)	335194	5.00000	4.878
40 Acenaphthylene	152	12.372	12.372	(0.980)	498251	5.00000	4.910
41 2,6-Dinitrotoluene	165	12.410	12.409	(0.983)	74124	5.00000	4.859
* 42 Acenaphthene-d10	164	12.623	12.623	(1.000)	1149677	20.0000	
43 3-Nitroaniline	138	12.618	12.617	(1.000)	79562	5.00000	5.390
44 Acenaphthene	153	12.672	12.671	(1.004)	306330	5.00000	4.802
45 2,4-Dinitrophenol	184	12.778	12.783	(1.012)	30938	10.0000	4.697
46 Dibenzofuran	168	12.933	12.932	(1.025)	418515	5.00000	4.910
47 4-Nitrophenol	109	12.955	12.965	(1.026)	52061	5.00000	5.250
48 2,4-Dinitrotoluene	165	13.024	13.029	(1.032)	97906	5.00000	5.061
50 Diethylphthalate	149	13.468	13.467	(1.067)	354320	5.00000	4.912
49 Fluorene	166	13.484	13.483	(1.068)	329837	5.00000	4.901
51 4-Chlorophenyl-phenylether	204	13.521	13.525	(1.071)	168779	5.00000	4.761
52 4-Nitroaniline	138	13.601	13.600	(1.077)	73829	5.00000	5.690
53 4,6-Dinitro-2-methylphenol	198	13.671	13.670	(0.913)	97484	10.0000	10.77
54 N-Nitrosodiphenylamine	169	13.724	13.723	(0.917)	248575	5.00000	4.869
$ 55 2,4,6-Tribromophenol	330	13.906	13.905	(1.102)	41089	5.00000	4.727
56 4-Bromophenyl-phenylether	248	14.296	14.295	(0.955)	89291	5.00000	4.650
57 Hexachlorobenzene	284	14.504	14.503	(0.969)	92964	5.00000	4.709
58 Pentachlorophenol	266	14.808	14.813	(0.989)	24141	5.00000	4.613
* 59 Phenanthrene-d10	188	14.974	14.979	(1.000)	1698741	20.0000	
60 Phenanthrene	178	15.011	15.011	(1.002)	428426	5.00000	4.814
61 Anthracene	178	15.081	15.080	(1.007)	438279	5.00000	4.883
62 Carbazole	167	15.375	15.374	(1.027)	403469	5.00000	4.950
63 Di-n-butylphthalate	149	16.107	16.106	(1.076)	515316	5.00000	4.943
64 Fluoranthene	202	16.929	16.928	(1.131)	401970	5.00000	4.817
65 Pyrene	202	17.276	17.281	(0.898)	419975	5.00000	5.033
$ 66 Terphenyl-d14	244	17.608	17.612	(0.915)	249172	5.00000	4.902
67 Butylbenzylphthalate	149	18.500	18.504	(0.961)	186585	5.00000	4.989
68 Benzo(a)anthracene	228	19.221	19.226	(0.999)	309652	5.00000	4.710
* 69 Chrysene-d12	240	19.248	19.247	(1.000)	1304950	20.0000	
70 3,3'-Dichlorobenzidine	252	19.248	19.252	(1.000)	110320	5.00000	4.979
71 Chrysene	228	19.285	19.290	(1.002)	302191	5.00000	4.734
72 bis(2-Ethylhexyl)phthalate	149	19.504	19.503	(0.955)	251095	5.00000	4.838
* 134 Di-n-octylphthalate-d4	153	20.428	20.428	(1.000)	1684731	20.0000	
73 Di-n-octylphthalate	149	20.439	20.438	(1.001)	429275	5.00000	4.751

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
74 Benzo(b)fluoranthene	252	20.861	20.860	(0.976)	291755	5.00000	4.894
75 Benzo(k)fluoranthene	252	20.893	20.892	(0.977)	299547	5.00000	4.648
187 Total Benzofluoranthenes	252	20.861	20.892	(0.976)	562599	10.0000	9.684 (M)
76 Benzo(a)pyrene	252	21.299	21.298	(0.996)	265665	5.00000	4.774
* 77 Perylene-d12	264	21.385	21.378	(1.000)	1217577	20.0000	
78 Indeno(1,2,3-cd)pyrene	276	22.768	22.773	(1.065)	374082	5.00000	4.765
79 Dibenzo(a,h)anthracene	278	22.800	22.794	(1.066)	304117	5.00000	4.675
80 Benzo(g,h,i)perylene	276	23.126	23.125	(1.081)	338260	5.00000	4.735
90 N-Nitrosodimethylamine	74	2.944	2.959	(0.380)	144500	5.00000	4.903
103 Pyridine	79	2.933	2.953	(0.379)	247283	5.00000	4.948
91 Aniline	93	7.303	7.302	(0.943)	305983	5.00000	5.047
105 1-methylnaphthalene	141	11.101	11.100	(1.135)	279093	5.00000	5.088
93 Benzidine	184	17.196	17.201	(0.893)	140384	5.00000	5.375
111 Azobenzene (1,2-DP-Hydrazine)	77	13.767	13.766	(1.091)	415567	5.00000	4.996
143 1,4-Dioxane	88	2.340	2.344	(0.302)	98075	5.00000	4.285
$ 137 d8-1,4-Dioxane	96	2.292	2.296	(0.296)	97917	5.00000	4.758
144 alpha-Terpineol	59	9.851	9.850	(1.007)	154355	5.00000	4.918
177 p-Benzoquinone	82	6.421	6.431	(0.656)	38609	5.00000	5.100
98 Retene	219	17.848	17.853	(0.927)	169786	5.00000	4.977
99 Perylene	252	21.417	21.416	(1.001)	242574	5.00000	4.804
133 Butylatedhydroxytoluene	205	12.816	12.820	(1.015)	291025	5.00000	4.888
115 Tributyl Phosphate	99	13.841	13.841	(0.924)	397061	5.00000	5.064
116 Dibutyl Phenyl Phosphate	175	15.556	15.561	(1.039)	221860	5.00000	4.915
117 Butyl Diphenyl Phosphate	94	17.223	17.228	(0.895)	76154	5.00000	5.069
118 Triphenyl Phosphate	326	18.810	18.809	(0.977)	50867	5.00000	5.030
123 Acetophenone	105	8.446	8.445	(1.091)	282870	5.00000	4.897
168 Pentachlorobenzene	250	12.976	12.975	(1.028)	121802	5.00000	4.770
113 Diphenyl Oxide	170	11.902	11.901	(0.943)	239750	5.00000	4.788
112 Biphenyl	154	11.710	11.704	(0.928)	393789	5.00000	4.974
120 2,3,4,6-Tetrachlorophenol	232	13.222	13.226	(1.047)	81274	5.00000	5.134
151 1,2,4,5-Tetrachlorobenzene	216	11.267	11.266	(0.892)	142770	5.00000	4.780
110 Tetrachloroguaiacol	247	14.937	14.936	(0.998)	88414	10.0000	9.542
109 3,4,5-Trichloroguaiacol	213	13.323	13.328	(0.890)	49541	5.00000	4.792
181 3,4,6-Trichloroguaiacol	211	13.441	13.440	(1.736)	61116	5.00000	4.900
108 4,5,6-Trichloroguaiacol	213	14.349	14.348	(1.137)	47447	5.00000	4.727
184 3,4-Dichloroguaiacol	192	11.795	11.795	(1.524)	57899	5.00000	4.734
107 4,5-Dichloroguaiacol	192	12.575	12.575	(0.996)	139634	10.0000	9.856
182 4,6-Dichloroguaiacol	192	12.575	12.575	(1.625)	139634	10.0000	9.902
185 4-Chloroguaiacol	115	10.722	10.721	(1.385)	44345	2.50000	2.459
186 Carbaryl	144	15.786	15.791	(1.054)	208170	5.00000	5.193
178 2-Benzyl-4-Chlorophenol	218	15.754	15.758	(1.052)	67103	5.00000	5.026
106 Guaiacol	124	8.713	8.718	(1.126)	182043	5.00000	4.983
188 2,6-Dichlorophenol	162	9.974	9.978	(1.288)	153885	5.00000	5.103
189 N-Nitrosomethylethylamine	88	4.888	4.893	(0.631)	99083	5.00000	4.989

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 01231311.D
Lab Smp Id: IC50123
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem2/nt6.i/20130123A.b/SW846012313.m
Misc Info: 13-

Calibration Date: 23-JAN-2013
Calibration Time: 15:27
Client Smp ID: IC50123
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	605906	302953	1211812	625810	3.28
27 Naphthalene-d8	2147229	1073614	4294458	2166911	0.92
42 Acenaphthene-d10	1142287	571144	2284574	1149677	0.65
59 Phenanthrene-d10	1647922	823961	3295844	1698741	3.08
69 Chrysene-d12	1422286	711143	2844572	1304950	-8.25
134 Di-n-octylphthala	1811653	905826	3623306	1684731	-7.01
77 Perylene-d12	1374454	687227	2748908	1217577	-11.41

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	7.75	7.25	8.25	7.74	-0.09
27 Naphthalene-d8	9.79	9.29	10.29	9.78	-0.07
42 Acenaphthene-d10	12.63	12.13	13.13	12.62	-0.06
59 Phenanthrene-d10	14.98	14.48	15.48	14.97	-0.05
69 Chrysene-d12	19.25	18.75	19.75	19.25	-0.04
134 Di-n-octylphthala	20.44	19.94	20.94	20.43	-0.03
77 Perylene-d12	21.39	20.89	21.89	21.38	-0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

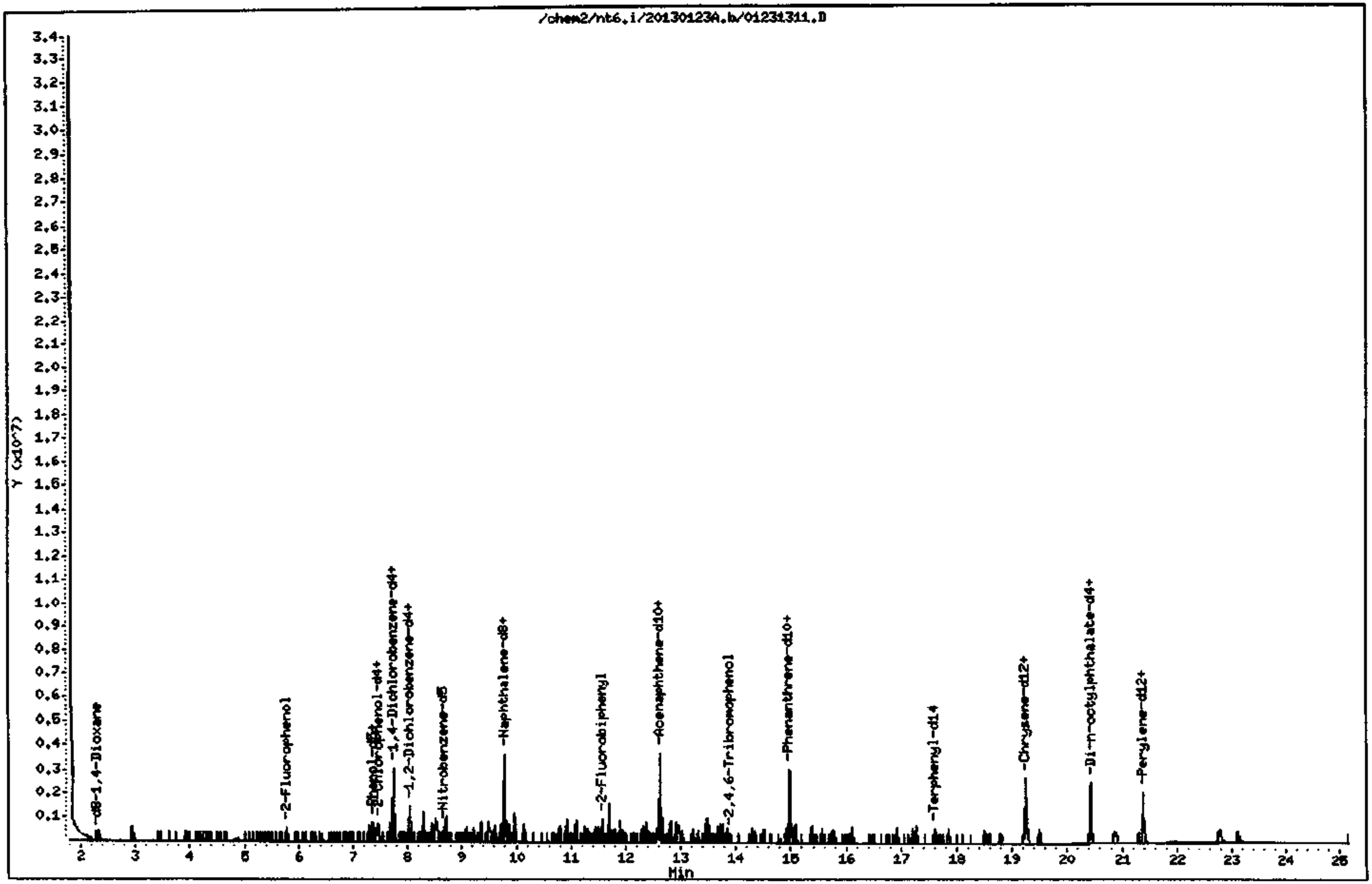
Data File: /chem2/nt6.i/20130123A.b/01231311.D
Date : 23-JAN-2013 17:11
Client ID: IC50123
Sample Info: IC50123,

Instrument: nt6.i

Operator: JZ

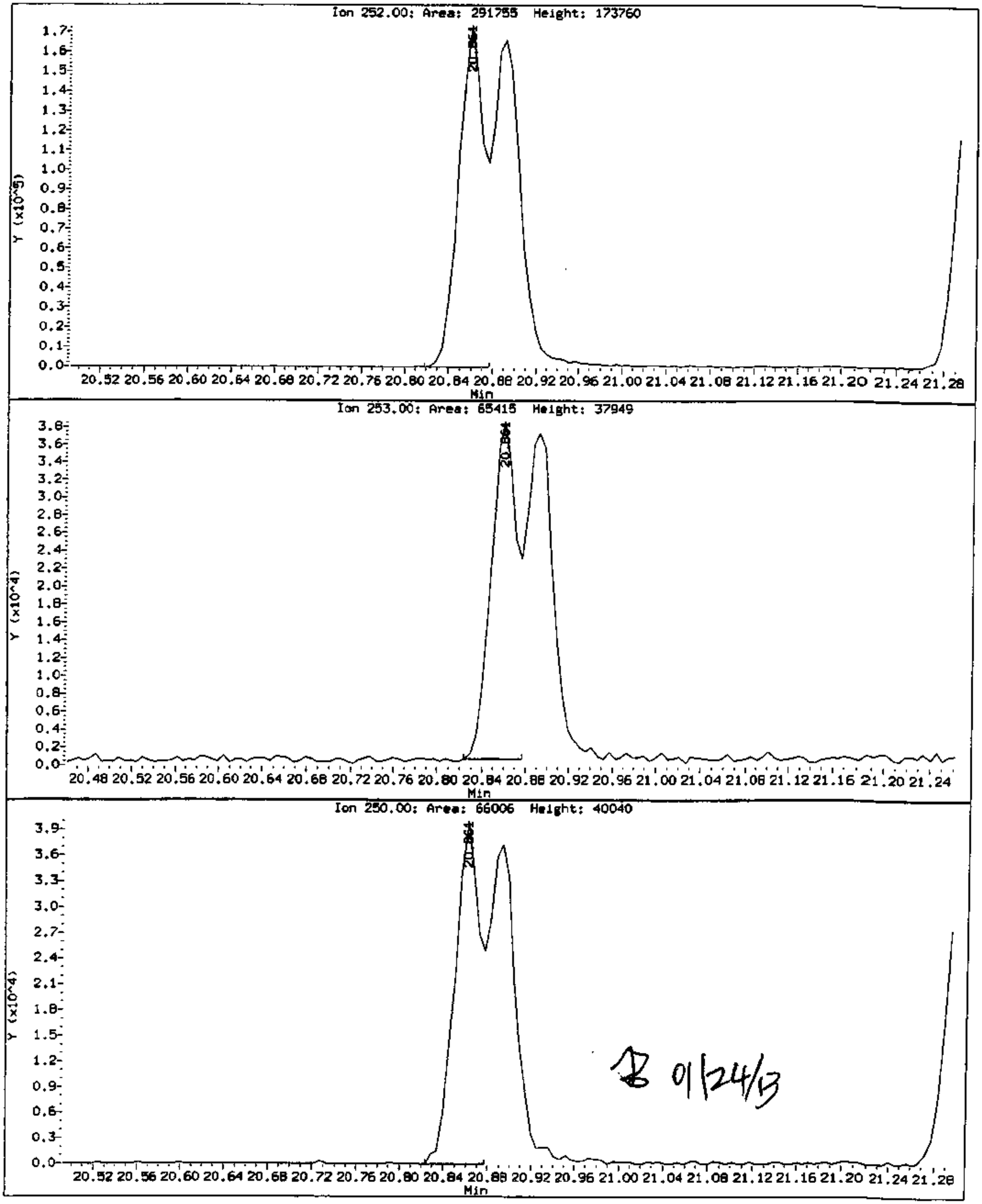
Column phase: ZB-5msi

Column diameter: 0.32



Data File: /chem2/nt6.i/20130123A.b/01231311.D
Injection Date: 23-JAN-2013 17:11
Instrument: nt6.i
Client Sample ID: IC50123

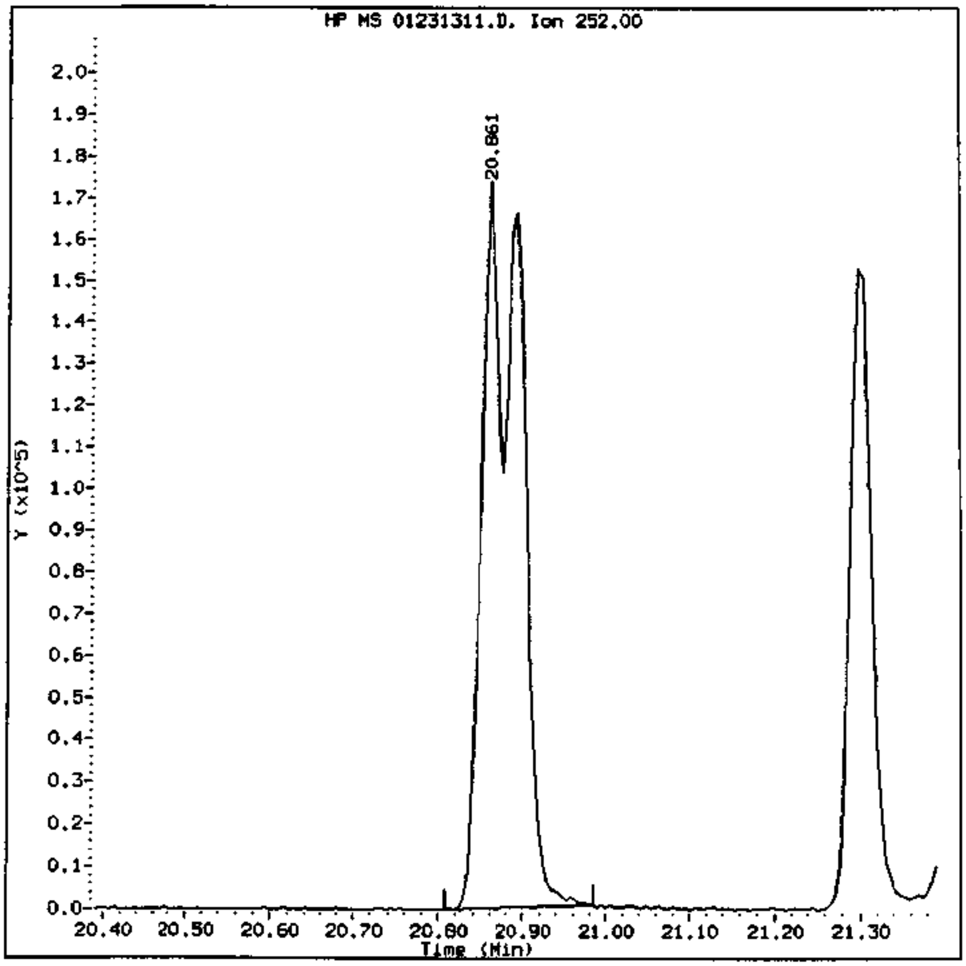
Compound: Total Benzofluoranthenes
CAS Number:



[initials] 01/24/13

IC50123, /chem2/nt6.i/20130123A.b/01231311.D

Total Benzofluoranthenes   Amount: 9.68   Area: 562599



MANUAL INTEGRATION for Total Benzofluoranthenes

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other ____________________

Analyst: [signature]   Date: 01/24/13

CO-ELUTION SUMMARY FOR FILE - 01231311.D

Lab ID: IC50123, Method: SW846012313.m, Instrument: nt6.i, Date: 23-JAN-2013

RT	CO-ELUTION COMPOUNDS
8.040	1,2-Dichlorobenzene-d4 and Benzyl alcohol

checked ok

01/24/13

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem2/nt6.i/20130123A.b/01231312.D
Lab Smp Id: IC100123 Client Smp ID: IC100123
Inj Date : 23-JAN-2013 17:45
Operator : JZ Inst ID: nt6.i
Smp Info : IC100123,
Misc Info : 13-
Comment : 1ul Injection
Method : /chem2/nt6.i/20130123A.b/SW846012313.m
Meth Date : 24-Jan-2013 12:19 jianqing Quant Type: ISTD
Cal Date : 23-JAN-2013 17:45 Cal File: 01231312.D
Als bottle: 5 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALS.sub
Target Version: 3.50

AB 01/24/13

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	1 2-Fluorophenol	112	5.782	5.785	(0.747)	368882	10.0000	9.158
$	2 Phenol-d5	99	7.353	7.350	(0.950)	459619	10.0000	9.360
	3 Phenol	94	7.369	7.371	(0.952)	481886	10.0000	10.00
$	5 2-Chlorophenol-d4	132	7.449	7.451	(0.962)	379459	10.0000	9.294
	4 Bis(2-Chloroethyl)ether	93	7.428	7.425	(0.959)	377009	10.0000	9.382
	6 2-Chlorophenol	128	7.470	7.473	(0.965)	406412	10.0000	9.844
	7 1,3-Dichlorobenzene	146	7.679	7.681	(0.992)	439823	10.0000	9.522
*	8 1,4-Dichlorobenzene-d4	152	7.743	7.745	(1.000)	588636	20.0000	
	9 1,4-Dichlorobenzene	146	7.769	7.767	(1.003)	429826	10.0000	9.307
$	10 1,2-Dichlorobenzene-d4	152	8.042	8.044	(1.039)	269370	10.0000	9.261
	12 1,2-Dichlorobenzene	146	8.063	8.060	(1.041)	410683	10.0000	9.399
	11 Benzyl alcohol	108	8.037	8.039	(1.038)	245720	10.0000	9.716
	14 2,2'-oxybis(1-Chloropropane)	45	8.298	8.301	(1.072)	627845	10.0000	9.391
	13 2-Methylphenol	108	8.293	8.296	(1.071)	367706	10.0000	9.972
	17 Hexachloroethane	117	8.549	8.547	(1.104)	181956	10.0000	9.522
	16 N-Nitroso-di-n-propylamine	70	8.512	8.509	(1.099)	276883	10.0000	9.504
	15 4-Methylphenol	108	8.528	8.525	(1.101)	378644	10.0000	9.786
$	18 Nitrobenzene-d5	82	8.672	8.675	(0.886)	430190	10.0000	9.425
	19 Nitrobenzene	77	8.704	8.702	(0.890)	441702	10.0000	9.314
	20 Isophorone	82	9.084	9.086	(0.928)	621843	10.0000	9.627
	21 2-Nitrophenol	139	9.223	9.220	(0.943)	200739	10.0000	10.25
	22 2,4-Dimethylphenol	107	9.356	9.359	(0.956)	374122	10.0000	9.852
	23 Bis(2-Chloroethoxy)methane	93	9.490	9.492	(0.970)	435736	10.0000	9.487
	24 Benzoic acid	105	9.554	9.551	(0.977)	607791	20.0000	27.00
	25 2,4-Dichlorophenol	162	9.612	9.610	(0.983)	300395	10.0000	9.958
	26 1,2,4-Trichlorobenzene	180	9.730	9.727	(0.995)	323947	10.0000	9.454
*	27 Naphthalene-d8	136	9.783	9.781	(1.000)	2046842	20.0000	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
28 Naphthalene	128	9.810	9.813	(1.003)	981989	10.0000	9.490
29 4-Chloroaniline	127	9.970	9.968	(1.019)	389382	10.0000	9.661
30 Hexachlorobutadiene	225	10.141	10.144	(1.037)	193872	10.0000	9.136
31 4-Chloro-3-methylphenol	107	10.798	10.801	(1.104)	301929	10.0000	10.41
32 2-Methylnaphthalene	141	10.932	10.929	(1.117)	506671	10.0000	9.621
33 Hexachlorocyclopentadiene	237	11.311	11.314	(0.896)	203507	10.0000	9.824
34 2,4,6-Trichlorophenol	196	11.450	11.447	(0.907)	191703	10.0000	9.985
35 2,4,5-Trichlorophenol	196	11.509	11.517	(0.912)	207280	10.0000	10.47
$ 36 2-Fluorobiphenyl	172	11.578	11.576	(0.917)	684109	10.0000	9.094
37 2-Chloronaphthalene	162	11.701	11.698	(0.927)	590214	10.0000	9.260
38 2-Nitroaniline	65	11.942	11.944	(0.946)	197013	10.0000	10.03
39 Dimethylphthalate	163	12.321	12.318	(0.976)	599572	10.0000	9.343
40 Acenaphthylene	152	12.369	12.372	(0.980)	908496	10.0000	9.529
41 2,6-Dinitrotoluene	165	12.406	12.409	(0.983)	142023	10.0000	9.816
* 42 Acenaphthene-d10	164	12.625	12.623	(1.000)	1097178	20.0000	
43 3-Nitroaniline	138	12.615	12.617	(0.999)	150901	10.0000	10.52
44 Acenaphthene	153	12.674	12.671	(1.004)	558145	10.0000	9.363
45 2,4-Dinitrophenol	184	12.780	12.783	(1.012)	112215	20.0000	18.51
46 Dibenzofuran	168	12.935	12.932	(1.025)	759428	10.0000	9.493
47 4-Nitrophenol	109	12.951	12.965	(1.026)	101491	10.0000	10.53
48 2,4-Dinitrotoluene	165	13.026	13.029	(1.032)	179622	10.0000	9.795
50 Diethylphthalate	149	13.470	13.467	(1.067)	648617	10.0000	9.560
49 Fluorene	166	13.486	13.483	(1.068)	592518	10.0000	9.408
51 4-Chlorophenyl-phenylether	204	13.523	13.525	(1.071)	310969	10.0000	9.381
52 4-Nitroaniline	138	13.598	13.600	(1.077)	130685	10.0000	10.41
53 4,6-Dinitro-2-methylphenol	198	13.672	13.670	(0.913)	221630	20.0000	24.12
54 N-Nitrosodiphenylamine	169	13.726	13.723	(0.917)	451738	10.0000	9.508
$ 55 2,4,6-Tribromophenol	330	13.908	13.905	(1.102)	80749	10.0000	9.800
56 4-Bromophenyl-phenylether	248	14.298	14.295	(0.955)	172501	10.0000	9.619
57 Hexachlorobenzene	284	14.501	14.503	(0.968)	168153	10.0000	9.235
58 Pentachlorophenol	266	14.810	14.813	(0.989)	59431	10.0000	11.43
* 59 Phenanthrene-d10	188	14.976	14.979	(1.000)	1606787	20.0000	
60 Phenanthrene	178	15.008	15.011	(1.002)	772219	10.0000	9.367
61 Anthracene	178	15.083	15.080	(1.007)	799042	10.0000	9.552
62 Carbazole	167	15.377	15.374	(1.027)	710818	10.0000	9.403
63 Di-n-butylphthalate	149	16.109	16.106	(1.076)	933145	10.0000	9.591
64 Fluoranthene	202	16.931	16.928	(1.131)	733234	10.0000	9.457
65 Pyrene	202	17.278	17.281	(0.898)	773582	10.0000	9.457
$ 66 Terphenyl-d14	244	17.610	17.612	(0.915)	462156	10.0000	9.319
67 Butylbenzylphthalate	149	18.502	18.504	(0.961)	353553	10.0000	9.599
68 Benzo(a)anthracene	228	19.223	19.226	(0.999)	604691	10.0000	9.401
* 69 Chrysene-d12	240	19.250	19.247	(1.000)	1302221	20.0000	
70 3,3'-Dichlorobenzidine	252	19.250	19.252	(1.000)	208979	10.0000	9.583
71 Chrysene	228	19.287	19.290	(1.002)	574900	10.0000	9.251
72 bis(2-Ethylhexyl)phthalate	149	19.501	19.503	(0.954)	473628	10.0000	9.522
* 134 Di-n-octylphthalate-d4	153	20.430	20.428	(1.000)	1640440	20.0000	
73 Di-n-octylphthalate	149	20.436	20.438	(1.000)	812509	10.0000	9.415

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
74 Benzo(b)fluoranthene	252	20.863	20.860	(0.976)	580922	10.0000	9.691
75 Benzo(k)fluoranthene	252	20.895	20.892	(0.977)	598521	10.0000	9.342
187 Total Benzofluoranthenes	252	20.895	20.892	(0.977)	1106939	20.0000	19.05 (M)
76 Benzo(a)pyrene	252	21.301	21.298	(0.996)	527348	10.0000	9.488
* 77 Perylene-d12	264	21.387	21.378	(1.000)	1237002	20.0000	
78 Indeno(1,2,3-cd)pyrene	276	22.776	22.773	(1.065)	732621	10.0000	9.377
79 Dibenzo(a,h)anthracene	278	22.797	22.794	(1.066)	614069	10.0000	9.459
80 Benzo(g,h,i)perylene	276	23.128	23.125	(1.081)	679141	10.0000	9.509
90 N-Nitrosodimethylamine	74	2.951	2.959	(0.381)	253196	10.0000	9.336
103 Pyridine	79	2.929	2.953	(0.378)	446156	10.0000	9.614
91 Aniline	93	7.305	7.302	(0.943)	535580	10.0000	9.537
105 1-methylnaphthalene	141	11.098	11.100	(1.134)	510245	10.0000	9.886
93 Benzidine	184	17.198	17.201	(0.893)	225575	10.0000	8.957
111 Azobenzene (1,2-DP-Hydrazine)	77	13.769	13.766	(1.091)	761564	10.0000	9.692
143 1,4-Dioxane	88	2.336	2.344	(0.302)	176230	10.0000	8.494
$ 137 d8-1,4-Dioxane	96	2.294	2.296	(0.296)	177226	10.0000	9.353
144 alpha-Terpineol	59	9.853	9.850	(1.007)	282751	10.0000	9.648
177 p-Benzoquinone	82	6.423	6.431	(0.657)	78560	10.0000	10.72
98 Retene	219	17.850	17.853	(0.927)	324717	10.0000	9.650
99 Perylene	252	21.419	21.416	(1.001)	478509	10.0000	9.488
133 Butylatedhydroxytoluene	205	12.818	12.820	(1.015)	539327	10.0000	9.614
115 Tributyl Phosphate	99	13.843	13.841	(0.924)	724030	10.0000	9.821
116 Dibutyl Phenyl Phosphate	175	15.558	15.561	(1.039)	416168	10.0000	9.809
117 Butyl Diphenyl Phosphate	94	17.225	17.228	(0.895)	141064	10.0000	9.551
118 Triphenyl Phosphate	326	18.806	18.809	(0.977)	100573	10.0000	9.975
123 Acetophenone	105	8.443	8.445	(1.090)	501763	10.0000	9.415
168 Pentachlorobenzene	250	12.978	12.975	(1.028)	222585	10.0000	9.336
113 Diphenyl Oxide	170	11.904	11.901	(0.943)	446611	10.0000	9.501
112 Biphenyl	154	11.707	11.704	(0.927)	726968	10.0000	9.713
120 2,3,4,6-Tetrachlorophenol	232	13.224	13.226	(1.047)	158207	10.0000	10.35
151 1,2,4,5-Tetrachlorobenzene	216	11.269	11.266	(0.893)	262747	10.0000	9.401
110 Tetrachloroguaiacol	247	14.933	14.936	(0.997)	173919	20.0000	19.88
109 3,4,5-Trichloroguaiacol	213	13.325	13.328	(0.890)	99732	10.0000	10.15
181 3,4,6-Trichloroguaiacol	211	13.437	13.440	(1.735)	122206	10.0000	10.31
108 4,5,6-Trichloroguaiacol	213	14.351	14.348	(1.137)	97296	10.0000	10.12
184 3,4-Dichloroguaiacol	192	11.797	11.795	(1.524)	109546	10.0000	9.638
107 4,5-Dichloroguaiacol	192	12.577	12.575	(0.996)	273148	20.0000	20.15
182 4,6-Dichloroguaiacol	192	12.577	12.575	(1.624)	273148	20.0000	20.44
185 4-Chloroguaiacol	115	10.718	10.721	(1.384)	85185	5.00000	5.016
186 Carbaryl	144	15.793	15.791	(1.055)	395614	10.0000	10.32
178 2-Benzyl-4-Chlorophenol	218	15.751	15.758	(1.052)	125938	10.0000	9.979
106 Guaiacol	124	8.715	8.718	(1.126)	326070	10.0000	9.612
188 2,6-Dichlorophenol	162	9.976	9.978	(1.288)	256765	10.0000	9.272
189 N-Nitrosomethylethylamine	88	4.885	4.893	(0.631)	168258	10.0000	9.237

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 01231312.D
Lab Smp Id: IC100123
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem2/nt6.i/20130123A.b/SW846012313.m
Misc Info: 13-

Calibration Date: 23-JAN-2013
Calibration Time: 15:27
Client Smp ID: IC100123
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	605906	302953	1211812	588636	-2.85
27 Naphthalene-d8	2147229	1073614	4294458	2046842	-4.68
42 Acenaphthene-d10	1142287	571144	2284574	1097178	-3.95
59 Phenanthrene-d10	1647922	823961	3295844	1606787	-2.50
69 Chrysene-d12	1422286	711143	2844572	1302221	-8.44
134 Di-n-octylphthala	1811653	905826	3623306	1640440	-9.45
77 Perylene-d12	1374454	687227	2748908	1237002	-10.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	7.75	7.25	8.25	7.74	-0.07
27 Naphthalene-d8	9.79	9.29	10.29	9.78	-0.05
42 Acenaphthene-d10	12.63	12.13	13.13	12.63	-0.04
59 Phenanthrene-d10	14.98	14.48	15.48	14.98	-0.03
69 Chrysene-d12	19.25	18.75	19.75	19.25	-0.03
134 Di-n-octylphthala	20.44	19.94	20.94	20.43	-0.02
77 Perylene-d12	21.39	20.89	21.89	21.39	-0.02

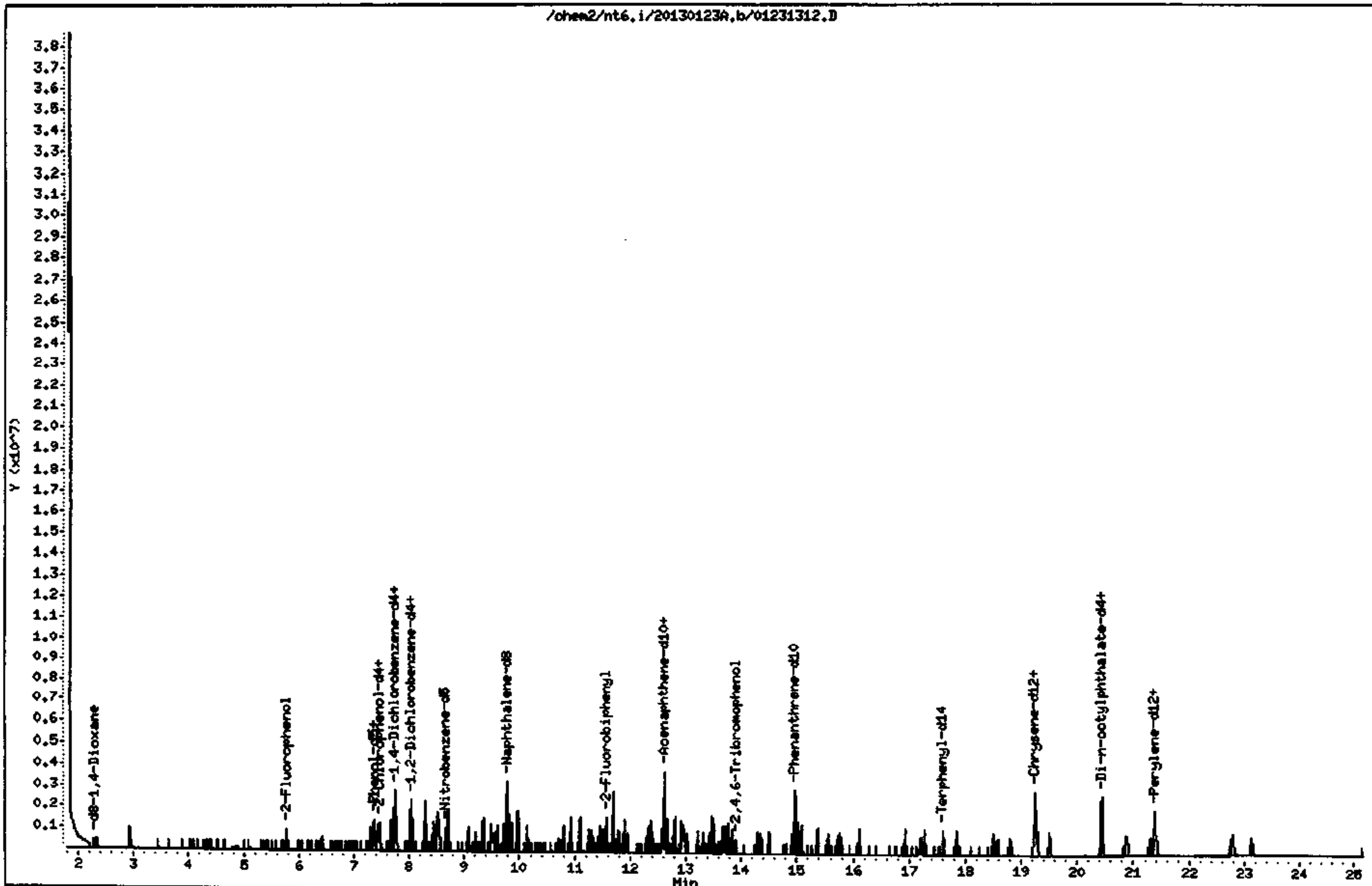
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem2/nt6.i/20130123A.b/01231312.D
Date : 23-JAN-2013 17:45
Client ID: IC100123
Sample Info: IC100123,

Column phase: ZB-5msi

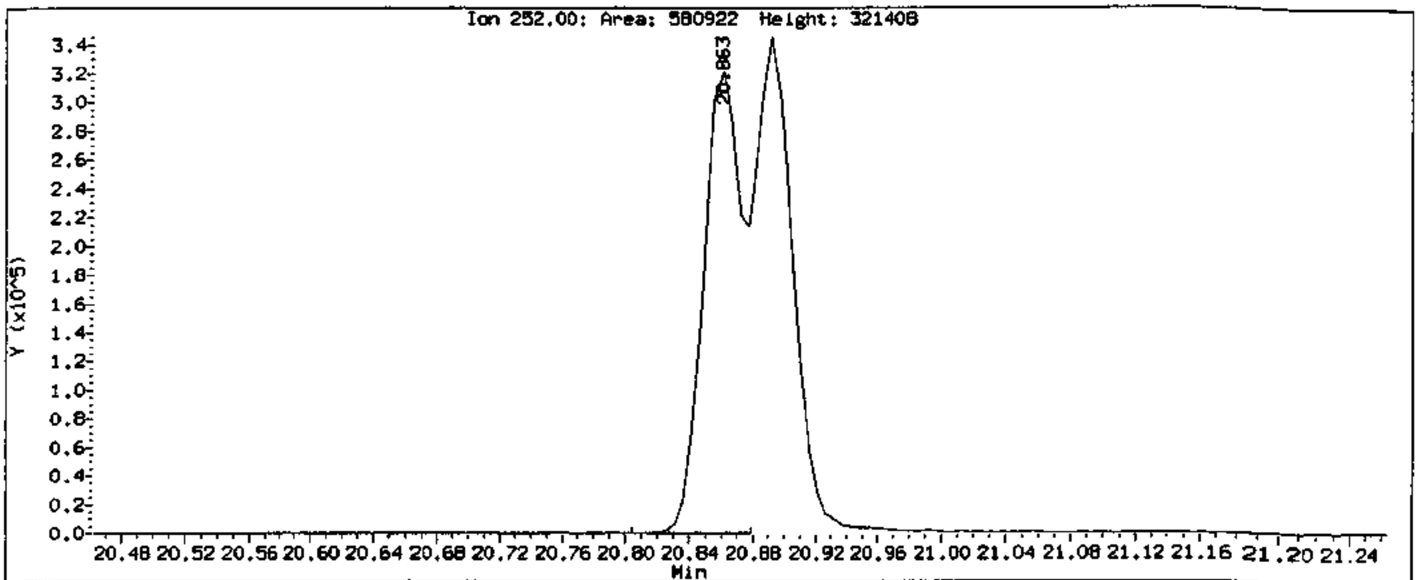
Instrument: nt6.i

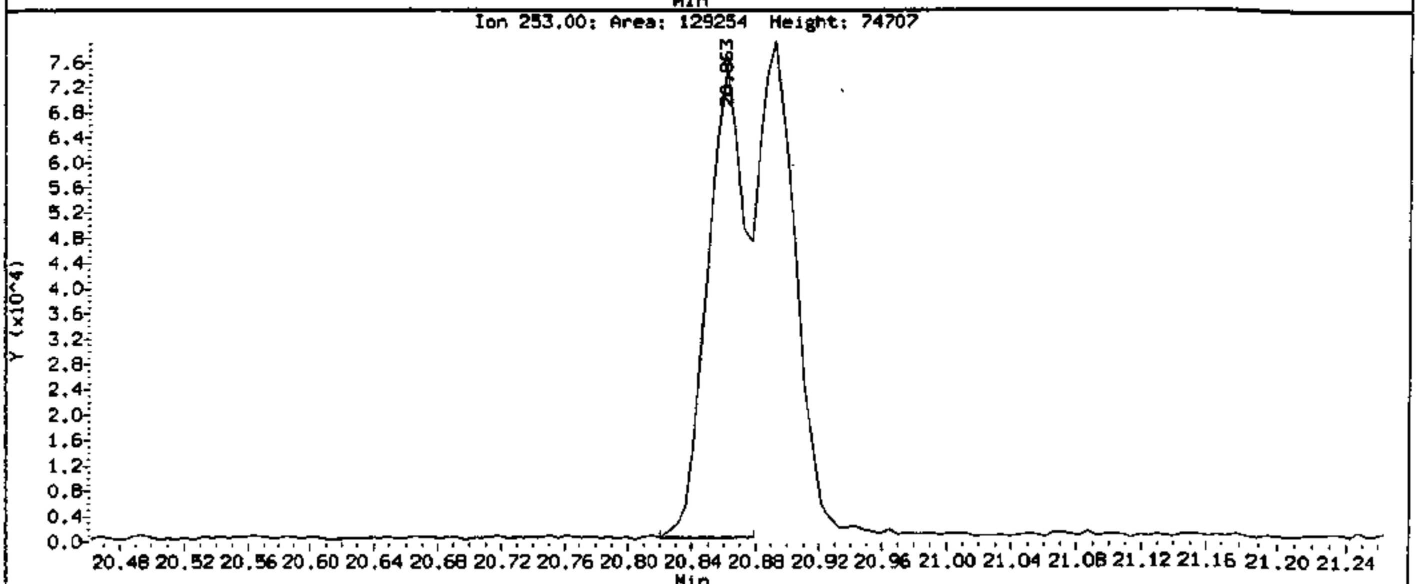
Operator: JZ
Column diameter: 0.32

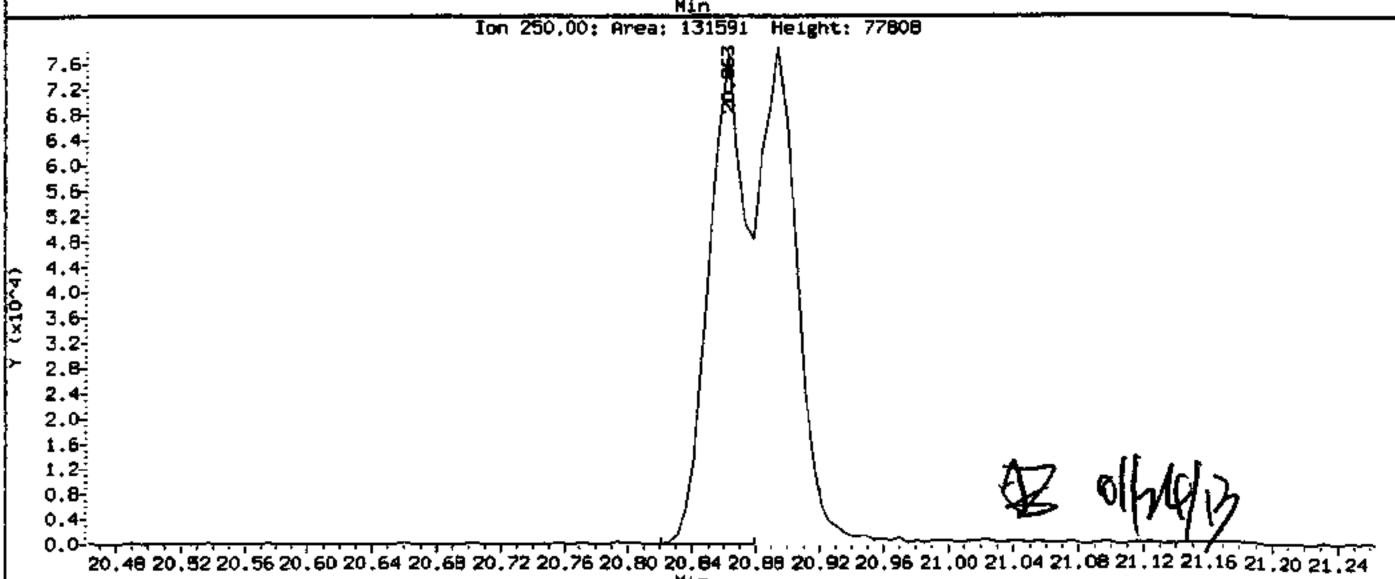


Data File: /chem2/nt6.i/20130123A.b/01231312.D
Injection Date: 23-JAN-2013 17:45
Instrument: nt6.i
Client Sample ID: IC100123

Compound: Total Benzofluoranthenes
CAS Number:



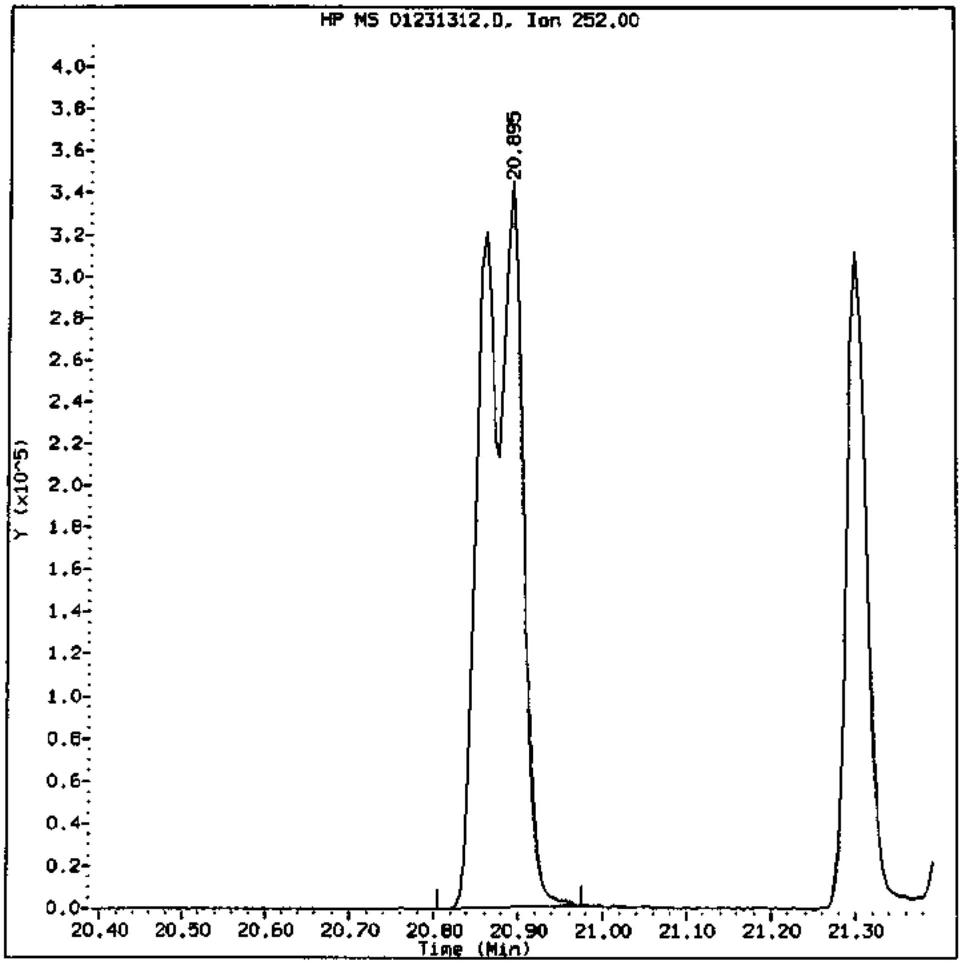




01/24/13

IC100123, /chem2/nt6.i/20130123A.b/01231312.D

Total Benzofluoranthenes   Amount: 19.05   Area: 1106939



MANUAL INTEGRATION for Total Benzofluoranthenes

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other ______________________________

Analyst: AZ   Date: 01/24/13

CO-ELUTION SUMMARY FOR FILE - 01231312.D

Lab ID: IC100123, Method: SW846012313.m, Instrument: nt6.i, Date: 23-JAN-2013

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem2/nt6.i/20130123A.b/01231308.D
Lab Smp Id: IC250123 Client Smp ID: IC120123
Inj Date : 23-JAN-2013 15:27
Operator : JZ Inst ID: nt6.i
Smp Info : IC250123,
Misc Info : 13-
Comment : 1ul Injection
Method : /chem2/nt6.i/20130123A.b/SW846012313.m
Meth Date : 24-Jan-2013 12:19 jianqing Quant Type: ISTD
Cal Date : 23-JAN-2013 15:27 Cal File: 01231308.D
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALS.sub
Target Version: 3.50

JZ 01/24/13

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	5.787	5.785	(0.747)	1000033	25.0000	25.00
$	2 Phenol-d5	99	7.358	7.350	(0.950)	1249828	25.0000	25.00
	3 Phenol	94	7.379	7.371	(0.952)	1195736	25.0000	25.00
$	5 2-Chlorophenol-d4	132	7.454	7.451	(0.962)	1018099	25.0000	25.00
	4 Bis(2-Chloroethyl)ether	93	7.433	7.425	(0.959)	1041044	25.0000	25.00
	6 2-Chlorophenol	128	7.481	7.473	(0.966)	1028719	25.0000	25.00
	7 1,3-Dichlorobenzene	146	7.684	7.681	(0.992)	1214564	25.0000	25.00
*	8 1,4-Dichlorobenzene-d4	152	7.748	7.745	(1.000)	605906	20.0000	
	9 1,4-Dichlorobenzene	146	7.769	7.767	(1.003)	1215618	25.0000	25.00
$	10 1,2-Dichlorobenzene-d4	152	8.047	8.044	(1.039)	720324	25.0000	25.00
	12 1,2-Dichlorobenzene	146	8.068	8.060	(1.041)	1133534	25.0000	25.00
	11 Benzyl alcohol	108	8.047	8.039	(1.039)	650731	25.0000	25.00
	14 2,2'-oxybis(1-Chloropropane)	45	8.303	8.301	(1.072)	1700689	25.0000	25.00
	13 2-Methylphenol	108	8.298	8.296	(1.071)	925666	25.0000	25.00
	17 Hexachloroethane	117	8.554	8.547	(1.104)	492563	25.0000	25.00
	16 N-Nitroso-di-n-propylamine	70	8.522	8.509	(1.100)	776930	25.0000	25.00
	15 4-Methylphenol	108	8.533	8.525	(1.101)	956083	25.0000	25.00
$	18 Nitrobenzene-d5	82	8.683	8.675	(0.887)	1169446	25.0000	25.00
	19 Nitrobenzene	77	8.709	8.702	(0.890)	1219443	25.0000	25.00
	20 Isophorone	82	9.094	9.086	(0.929)	1714200	25.0000	25.00
	21 2-Nitrophenol	139	9.222	9.220	(0.942)	527852	25.0000	25.00
	22 2,4-Dimethylphenol	107	9.361	9.359	(0.956)	956827	25.0000	25.00
	23 Bis(2-Chloroethoxy)methane	93	9.500	9.492	(0.971)	1189021	25.0000	25.00
	24 Benzoic acid	105	9.623	9.551	(0.983)	1605111	50.0000	50.00
	25 2,4-Dichlorophenol	162	9.618	9.610	(0.983)	776202	25.0000	25.00
	26 1,2,4-Trichlorobenzene	180	9.730	9.727	(0.994)	899813	25.0000	25.00
*	27 Naphthalene-d8	136	9.789	9.781	(1.000)	2147229	20.0000	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
28 Naphthalene	128	9.815	9.813	(1.003)	2627343	25.0000	25.00
29 4-Chloroaniline	127	9.975	9.968	(1.019)	929062	25.0000	25.00
30 Hexachlorobutadiene	225	10.146	10.144	(1.037)	569951	25.0000	25.00
31 4-Chloro-3-methylphenol	107	10.803	10.801	(1.104)	751311	25.0000	25.00
32 2-Methylnaphthalene	141	10.932	10.929	(1.117)	1362589	25.0000	25.00
33 Hexachlorocyclopentadiene	237	11.316	11.314	(0.896)	630292	25.0000	25.00
34 2,4,6-Trichlorophenol	196	11.455	11.447	(0.907)	512767	25.0000	25.00
35 2,4,5-Trichlorophenol	196	11.519	11.517	(0.912)	538248	25.0000	25.00
$ 36 2-Fluorobiphenyl	172	11.583	11.576	(0.917)	1876652	25.0000	25.00
37 2-Chloronaphthalene	162	11.706	11.698	(0.927)	1599494	25.0000	25.00
38 2-Nitroaniline	65	11.952	11.944	(0.946)	517331	25.0000	25.00
39 Dimethylphthalate	163	12.331	12.318	(0.976)	1633158	25.0000	25.00
40 Acenaphthylene	152	12.379	12.372	(0.980)	2445914	25.0000	25.00
41 2,6-Dinitrotoluene	165	12.417	12.409	(0.983)	402667	25.0000	25.00
* 42 Acenaphthene-d10	164	12.631	12.623	(1.000)	1142287	20.0000	
43 3-Nitroaniline	138	12.631	12.617	(1.000)	304617	25.0000	25.00
44 Acenaphthene	153	12.679	12.671	(1.004)	1531781	25.0000	25.00
45 2,4-Dinitrophenol	184	12.785	12.783	(1.012)	500739	50.0000	50.00
46 Dibenzofuran	168	12.940	12.932	(1.025)	1999292	25.0000	25.00
47 4-Nitrophenol	109	12.962	12.965	(1.026)	270181	25.0000	25.00
48 2,4-Dinitrotoluene	165	13.037	13.029	(1.032)	504548	25.0000	25.00
50 Diethylphthalate	149	13.480	13.467	(1.067)	1693512	25.0000	25.00
49 Fluorene	166	13.491	13.483	(1.068)	1581693	25.0000	25.00
51 4-Chlorophenyl-phenylether	204	13.528	13.525	(1.071)	864695	25.0000	25.00
52 4-Nitroaniline	138	13.613	13.600	(1.078)	279289	25.0000	25.00
53 4,6-Dinitro-2-methylphenol	198	13.683	13.670	(0.913)	648209	50.0000	50.00
54 N-Nitrosodiphenylamine	169	13.736	13.723	(0.917)	1215015	25.0000	25.00
$ 55 2,4,6-Tribromophenol	330	13.913	13.905	(1.101)	227941	25.0000	25.00
56 4-Bromophenyl-phenylether	248	14.303	14.295	(0.955)	480308	25.0000	25.00
57 Hexachlorobenzene	284	14.511	14.503	(0.969)	479008	25.0000	25.00
58 Pentachlorophenol	266	14.810	14.813	(0.989)	194327	25.0000	25.00
* 59 Phenanthrene-d10	188	14.981	14.979	(1.000)	1647922	20.0000	
60 Phenanthrene	178	15.018	15.011	(1.002)	2051850	25.0000	25.00
61 Anthracene	178	15.088	15.080	(1.007)	2136744	25.0000	25.00
62 Carbazole	167	15.382	15.374	(1.027)	1866868	25.0000	25.00
63 Di-n-butylphthalate	149	16.114	16.106	(1.076)	2472235	25.0000	25.00
64 Fluoranthene	202	16.936	16.928	(1.131)	2024921	25.0000	25.00
65 Pyrene	202	17.284	17.281	(0.898)	2122424	25.0000	25.00
$ 66 Terphenyl-d14	244	17.615	17.612	(0.915)	1267725	25.0000	25.00
67 Butylbenzylphthalate	149	18.507	18.504	(0.961)	1007927	25.0000	25.00
68 Benzo(a)anthracene	228	19.228	19.226	(0.999)	1804146	25.0000	25.00
* 69 Chrysene-d12	240	19.255	19.247	(1.000)	1422286	20.0000	
70 3,3'-Dichlorobenzidine	252	19.255	19.252	(1.000)	564906	25.0000	25.00
71 Chrysene	228	19.292	19.290	(1.002)	1716374	25.0000	25.00
72 bis(2-Ethylhexyl)phthalate	149	19.506	19.503	(0.954)	1369497	25.0000	25.00
* 134 Di-n-octylphthalate-d4	153	20.435	20.428	(1.000)	1811653	20.0000	
73 Di-n-octylphthalate	149	20.441	20.438	(1.000)	2328416	25.0000	25.00

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
	74 Benzo(b)fluoranthene	252	20.868	20.860	(0.976)	1725785	25.0000	25.00
	75 Benzo(k)fluoranthene	252	20.900	20.892	(0.977)	1836878	25.0000	25.00
	187 Total Benzofluoranthenes	252	20.900	20.892	(0.977)	3350459	50.0000	50.00 (M)
	76 Benzo(a)pyrene	252	21.306	21.298	(0.996)	1621251	25.0000	25.00
*	77 Perylene-d12	264	21.392	21.378	(1.000)	1374454	20.0000	
	78 Indeno(1,2,3-cd)pyrene	276	22.781	22.773	(1.065)	2221934	25.0000	25.00
	79 Dibenzo(a,h)anthracene	278	22.807	22.794	(1.066)	1796885	25.0000	25.00
	80 Benzo(g,h,i)perylene	276	23.144	23.125	(1.082)	1966392	25.0000	25.00
	90 N-Nitrosodimethylamine	74	2.956	2.959	(0.382)	718758	25.0000	25.00
	103 Pyridine	79	2.929	2.953	(0.378)	1277481	25.0000	25.00
	91 Aniline	93	7.310	7.302	(0.943)	1411197	25.0000	25.00
	105 1-methylnaphthalene	141	11.103	11.100	(1.134)	1335556	25.0000	25.00
	93 Benzidine	184	17.203	17.201	(0.893)	388124	25.0000	25.00
	111 Azobenzene (1,2-DP-Hydrazine)	77	13.774	13.766	(1.091)	1977936	25.0000	25.00
	143 1,4-Dioxane	88	2.336	2.344	(0.302)	513726	25.0000	25.00
$	137 d8-1,4-Dioxane	96	2.293	2.296	(0.296)	506899	25.0000	25.00
	144 alpha-Terpineol	59	9.858	9.850	(1.007)	765641	25.0000	25.00
	177 p-Benzoquinone	82	6.423	6.431	(0.656)	236234	25.0000	25.00
	98 Retene	219	17.855	17.853	(0.927)	884061	25.0000	25.00
	99 Perylene	252	21.424	21.416	(1.001)	1376401	25.0000	25.00
	133 Butylatedhydroxytoluene	205	12.823	12.820	(1.015)	1447599	25.0000	25.00
	115 Tributyl Phosphate	99	13.854	13.841	(0.925)	1835314	25.0000	25.00
	116 Dibutyl Phenyl Phosphate	175	15.569	15.561	(1.039)	1100635	25.0000	25.00
	117 Butyl Diphenyl Phosphate	94	17.230	17.228	(0.895)	371864	25.0000	25.00
	118 Triphenyl Phosphate	326	18.811	18.809	(0.977)	286992	25.0000	25.00
	123 Acetophenone	105	8.453	8.445	(1.091)	1392568	25.0000	25.00
	168 Pentachlorobenzene	250	12.983	12.975	(1.028)	631616	25.0000	25.00
	113 Diphenyl Oxide	170	11.904	11.901	(0.942)	1197687	25.0000	25.00
	112 Biphenyl	154	11.712	11.704	(0.927)	1817878	25.0000	25.00
	120 2,3,4,6-Tetrachlorophenol	232	13.229	13.226	(1.047)	414620	25.0000	25.00
	151 1,2,4,5-Tetrachlorobenzene	216	11.274	11.266	(0.893)	746911	25.0000	25.00
	110 Tetrachloroguaiacol	247	14.944	14.936	(0.998)	485622	50.0000	50.00
	109 3,4,5-Trichloroguaiacol	213	13.330	13.328	(0.890)	264846	25.0000	25.00
	181 3,4,6-Trichloroguaiacol	211	13.443	13.440	(1.735)	321938	25.0000	25.00
	108 4,5,6-Trichloroguaiacol	213	14.356	14.348	(1.137)	260740	25.0000	25.00
	184 3,4-Dichloroguaiacol	192	11.802	11.795	(1.523)	304965	25.0000	25.00
	107 4,5-Dichloroguaiacol	192	12.582	12.575	(0.996)	723193	50.0000	50.00
	182 4,6-Dichloroguaiacol	192	12.582	12.575	(1.624)	723193	50.0000	50.00
	185 4-Chloroguaiacol	115	10.723	10.721	(1.384)	221333	12.5000	12.50
	186 Carbaryl	144	15.798	15.791	(1.055)	1012299	25.0000	25.00
	178 2-Benzyl-4-Chlorophenol	218	15.761	15.758	(1.052)	346370	25.0000	25.00
	106 Guaiacol	124	8.720	8.718	(1.125)	874320	25.0000	25.00
	188 2,6-Dichlorophenol	162	9.981	9.978	(1.288)	722155	25.0000	25.00
	189 N-Nitrosomethylethylamine	88	4.884	4.893	(0.630)	478267	25.0000	25.00

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 01231308.D
Lab Smp Id: IC250123
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem2/nt6.i/20130123A.b/SW846012313.m
Misc Info: 13-

Calibration Date: 23-JAN-2013
Calibration Time: 15:27
Client Smp ID: IC120123
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	605906	302953	1211812	605906	0.00
27 Naphthalene-d8	2147229	1073614	4294458	2147229	0.00
42 Acenaphthene-d10	1142287	571144	2284574	1142287	0.00
59 Phenanthrene-d10	1647922	823961	3295844	1647922	0.00
69 Chrysene-d12	1422286	711143	2844572	1422286	0.00
134 Di-n-octylphthala	1811653	905826	3623306	1811653	0.00
77 Perylene-d12	1374454	687227	2748908	1374454	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	7.75	7.25	8.25	7.75	0.00
27 Naphthalene-d8	9.79	9.29	10.29	9.79	0.00
42 Acenaphthene-d10	12.63	12.13	13.13	12.63	0.00
59 Phenanthrene-d10	14.98	14.48	15.48	14.98	0.00
69 Chrysene-d12	19.25	18.75	19.75	19.25	0.00
134 Di-n-octylphthala	20.44	19.94	20.94	20.44	0.00
77 Perylene-d12	21.39	20.89	21.89	21.39	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

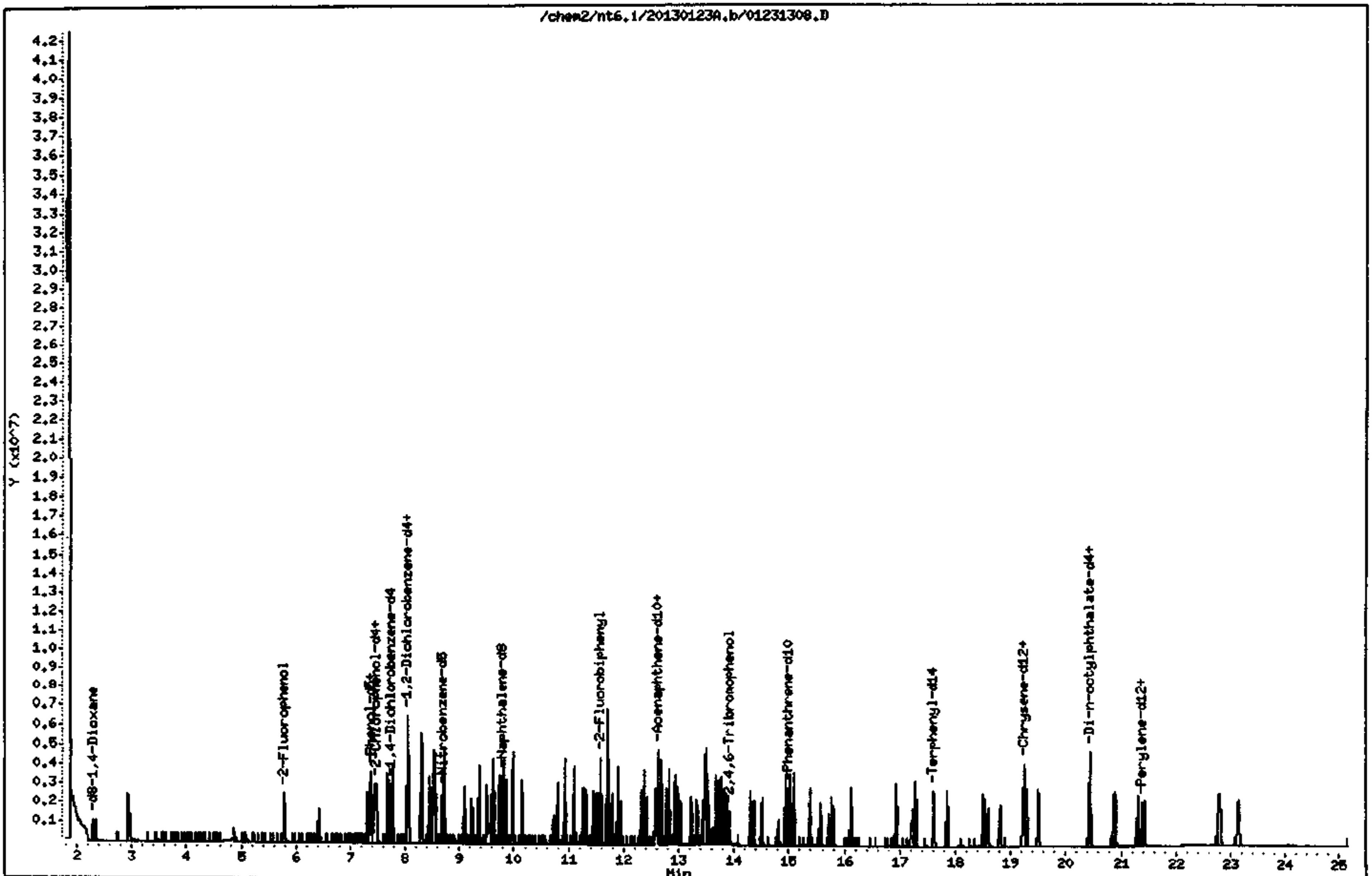
Data File: /chem2/nt6.i/20130123A.b/01231308.D
Date : 23-JAN-2013 15:27
Client ID: IC120123
Sample Info: IC250123,

Instrument: nt6.i

Operator: JZ

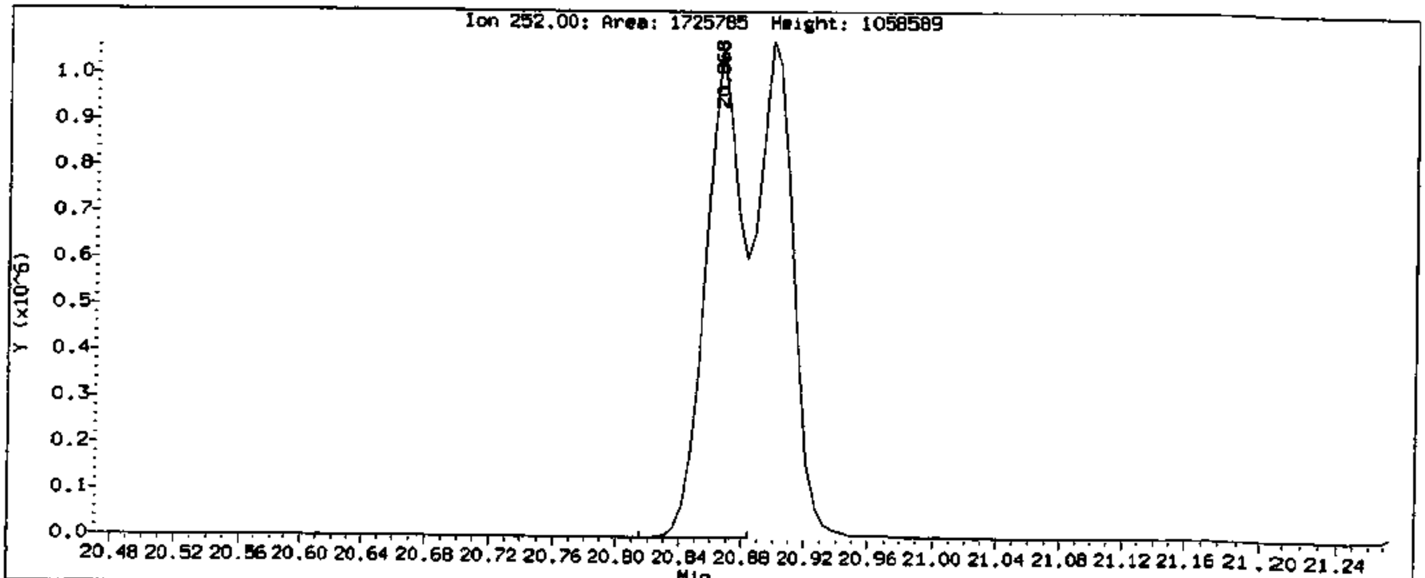
Column phase: ZB-5msi

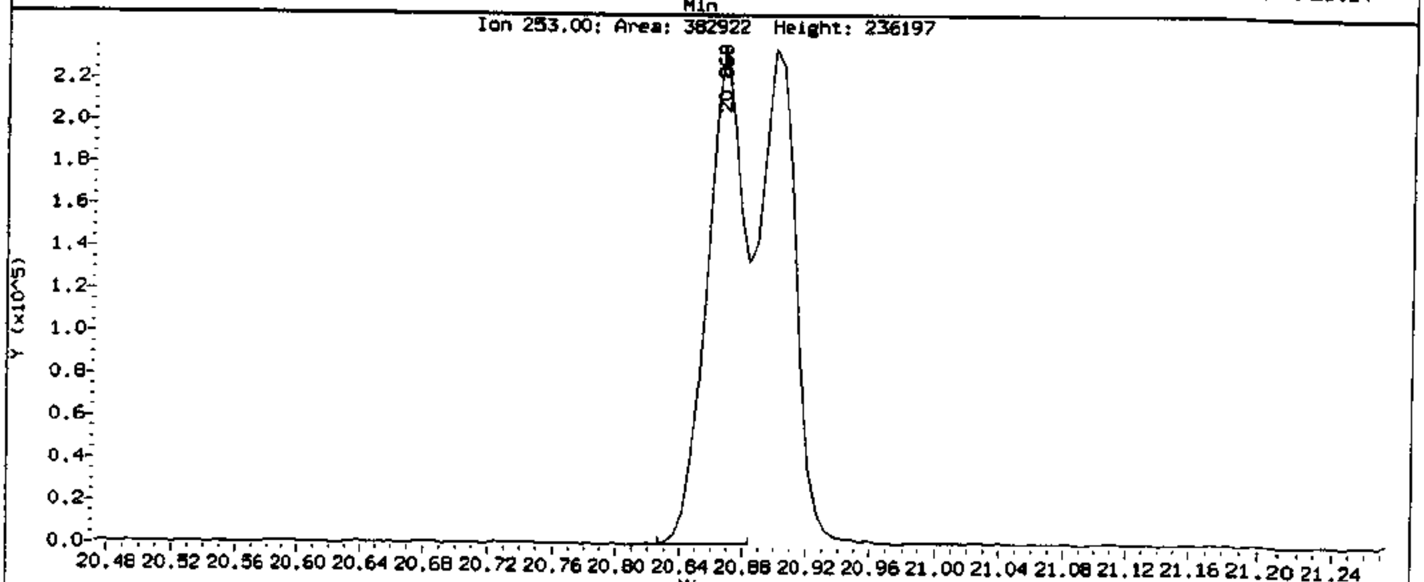
Column diameter: 0.32

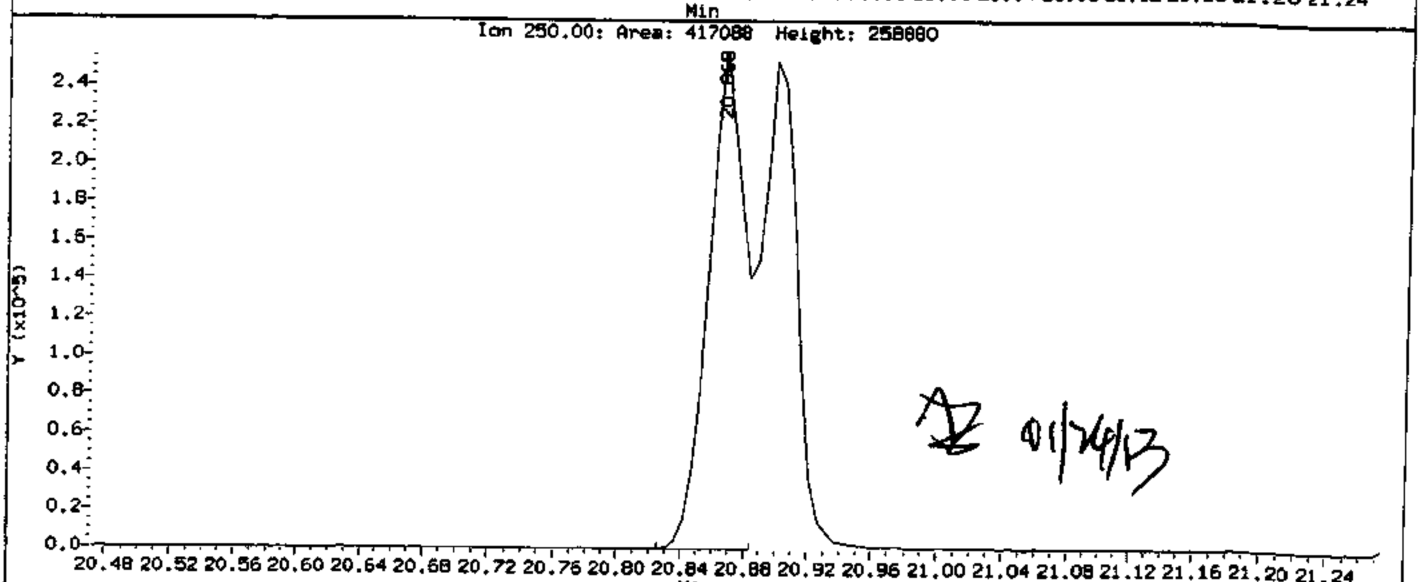


Data File: /chem2/nt6.i/20130123A.b/01231308.D
Injection Date: 23-JAN-2013 15:27
Instrument: nt6.i
Client Sample ID: IC120123

Compound: Total Benzofluoranthenes
CAS Number:

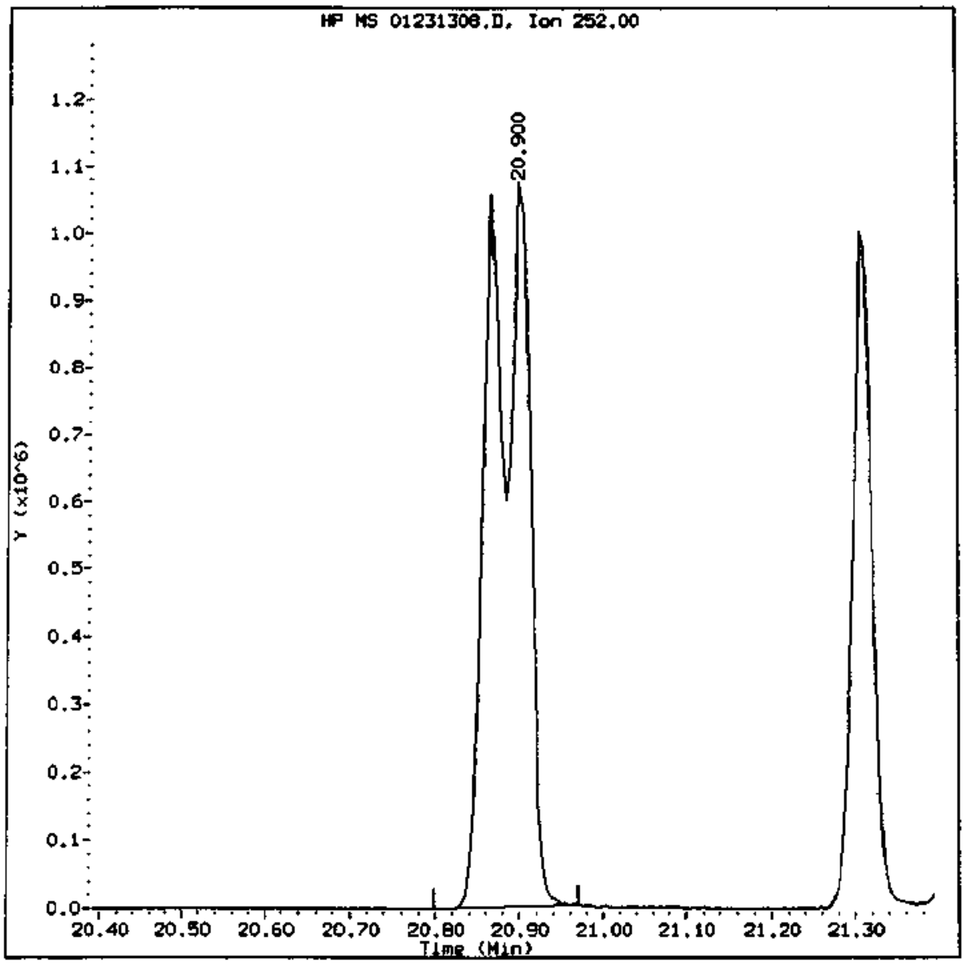






IC250123, /chem2/nt6.i/20130123A.b/01231308.D

Total Benzofluoranthenes   Amount: 50.00   Area: 3350459



MANUAL INTEGRATION for Total Benzofluoranthenes

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other ______________________

Analyst: ____ Date: 01/24/13

CO-ELUTION SUMMARY FOR FILE - 01231308.D

Lab ID: IC250123, Method: SW846012313.m, Instrument: nt6.i, Date: 23-JAN-2013

RT	CO-ELUTION COMPOUNDS
12.631	Acenaphthene-d10 and 3-Nitroaniline
8.047	1,2-Dichlorobenzene-d4 and Benzyl alcohol

checked

01/24/13

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem2/nt6.i/20130123A.b/01231313.D
Lab Smp Id: IC400123 Client Smp ID: IC400123
Inj Date : 23-JAN-2013 18:19
Operator : JZ Inst ID: nt6.i
Smp Info : IC400123,
Misc Info : 13-
Comment : 1ul Injection
Method : /chem2/nt6.i/20130123A.b/SW846012313.m
Meth Date : 24-Jan-2013 12:19 jianqing Quant Type: ISTD
Cal Date : 23-JAN-2013 18:19 Cal File: 01231313.D
Als bottle: 6 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALS.sub
Target Version: 3.50

JZ 01/24/13

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	5.787	5.785	(0.747)	1714218	40.0000	37.62
$	2 Phenol-d5	99	7.363	7.350	(0.950)	2119091	40.0000	38.05
	3 Phenol	94	7.379	7.371	(0.952)	2092002	40.0000	38.24
$	5 2-Chlorophenol-d4	132	7.454	7.451	(0.962)	1729662	40.0000	37.48
	4 Bis(2-Chloroethyl)ether	93	7.433	7.425	(0.959)	1767988	40.0000	38.65
	6 2-Chlorophenol	128	7.481	7.473	(0.966)	1766305	40.0000	37.78
	7 1,3-Dichlorobenzene	146	7.684	7.681	(0.992)	2048427	40.0000	38.89
*	8 1,4-Dichlorobenzene-d4	152	7.748	7.745	(1.000)	675785	20.0000	
	9 1,4-Dichlorobenzene	146	7.769	7.767	(1.003)	2017210	40.0000	38.42
$	10 1,2-Dichlorobenzene-d4	152	8.042	8.044	(1.038)	1175254	40.0000	36.06
	12 1,2-Dichlorobenzene	146	8.068	8.060	(1.041)	1841593	40.0000	37.32
	11 Benzyl alcohol	108	8.052	8.039	(1.039)	1080963	40.0000	37.75
	14 2,2'-oxybis(1-Chloropropane)	45	8.303	8.301	(1.072)	2776556	40.0000	36.88
	13 2-Methylphenol	108	8.303	8.296	(1.072)	1587119	40.0000	37.97
	17 Hexachloroethane	117	8.554	8.547	(1.104)	808700	40.0000	37.45
	16 N-Nitroso-di-n-propylamine	70	8.528	8.509	(1.101)	1306045	40.0000	39.24
	15 4-Methylphenol	108	8.538	8.525	(1.102)	1599162	40.0000	36.73
$	18 Nitrobenzene-d5	82	8.683	8.675	(0.887)	2020306	40.0000	38.88
	19 Nitrobenzene	77	8.709	8.702	(0.890)	2038560	40.0000	37.97
	20 Isophorone	82	9.099	9.086	(0.930)	2947191	40.0000	39.83
	21 2-Nitrophenol	139	9.227	9.220	(0.943)	940604	40.0000	41.48
	22 2,4-Dimethylphenol	107	9.361	9.359	(0.956)	1673703	40.0000	38.74
	23 Bis(2-Chloroethoxy)methane	93	9.500	9.492	(0.971)	2048510	40.0000	39.12
	24 Benzoic acid	105	9.676	9.551	(0.989)	3065134	80.0000	108.3
	25 2,4-Dichlorophenol	162	9.617	9.610	(0.983)	1365864	40.0000	39.59
	26 1,2,4-Trichlorobenzene	180	9.730	9.727	(0.994)	1547020	40.0000	39.50
*	27 Naphthalene-d8	136	9.788	9.781	(1.000)	2346841	20.0000	

						AMOUNTS	
	QUANT SIG					CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
28 Naphthalene	128	9.815	9.813	(1.003)	4214094	40.0000	36.33
29 4-Chloroaniline	127	9.975	9.968	(1.019)	1114406	40.0000	26.20
30 Hexachlorobutadiene	225	10.141	10.144	(1.036)	981156	40.0000	40.26
31 4-Chloro-3-methylphenol	107	10.803	10.801	(1.104)	1363297	40.0000	40.79
32 2-Methylnaphthalene	141	10.932	10.929	(1.117)	2271517	40.0000	38.07
33 Hexachlorocyclopentadiene	237	11.316	11.314	(0.896)	1136861	40.0000	46.05
34 2,4,6-Trichlorophenol	196	11.455	11.447	(0.907)	929136	40.0000	41.74
35 2,4,5-Trichlorophenol	196	11.514	11.517	(0.912)	977119	40.0000	42.39
$ 36 2-Fluorobiphenyl	172	11.583	11.576	(0.917)	3145665	40.0000	37.12
37 2-Chloronaphthalene	162	11.706	11.698	(0.927)	2606964	40.0000	36.45
38 2-Nitroaniline	65	11.952	11.944	(0.946)	908639	40.0000	40.27
39 Dimethylphthalate	163	12.331	12.318	(0.976)	2870114	40.0000	39.19
40 Acenaphthylene	152	12.374	12.372	(0.980)	4047591	40.0000	37.58
41 2,6-Dinitrotoluene	165	12.417	12.409	(0.983)	709071	40.0000	42.16
* 42 Acenaphthene-d10	164	12.630	12.623	(1.000)	1258311	20.0000	
43 3-Nitroaniline	138	12.630	12.617	(1.000)	440251	40.0000	28.67
44 Acenaphthene	153	12.678	12.671	(1.004)	2568847	40.0000	38.04
45 2,4-Dinitrophenol	184	12.791	12.783	(1.013)	1068206	80.0000	124.9
46 Dibenzofuran	168	12.940	12.932	(1.025)	3386686	40.0000	37.49
47 4-Nitrophenol	109	12.962	12.965	(1.026)	470915	40.0000	42.07
48 2,4-Dinitrotoluene	165	13.036	13.029	(1.032)	872751	40.0000	41.19
50 Diethylphthalate	149	13.480	13.467	(1.067)	2848169	40.0000	37.24
49 Fluorene	166	13.496	13.483	(1.069)	2667126	40.0000	37.50
51 4-Chlorophenyl-phenylether	204	13.528	13.525	(1.071)	1527608	40.0000	40.15
52 4-Nitroaniline	138	13.619	13.600	(1.078)	505603	40.0000	35.99
53 4,6-Dinitro-2-methylphenol	198	13.688	13.670	(0.914)	1242141	80.0000	107.9
54 N-Nitrosodiphenylamine	169	13.736	13.723	(0.917)	2128280	40.0000	39.33
$ 55 2,4,6-Tribromophenol	330	13.913	13.905	(1.101)	399822	40.0000	41.83
56 4-Bromophenyl-phenylether	248	14.303	14.295	(0.955)	857409	40.0000	41.43
57 Hexachlorobenzene	284	14.505	14.503	(0.968)	857667	40.0000	40.94
58 Pentachlorophenol	266	14.810	14.813	(0.989)	419203	40.0000	61.17
* 59 Phenanthrene-d10	188	14.981	14.979	(1.000)	1837728	20.0000	
60 Phenanthrene	178	15.018	15.011	(1.002)	3475572	40.0000	37.45
61 Anthracene	178	15.088	15.080	(1.007)	3624764	40.0000	38.29
62 Carbazole	167	15.382	15.374	(1.027)	2982889	40.0000	35.48
63 Di-n-butylphthalate	149	16.113	16.106	(1.076)	4093636	40.0000	37.39
64 Fluoranthene	202	16.936	16.928	(1.131)	3489261	40.0000	39.48
65 Pyrene	202	17.283	17.281	(0.898)	3603363	40.0000	37.35
$ 66 Terphenyl-d14	244	17.615	17.612	(0.915)	2207934	40.0000	37.67
67 Butylbenzylphthalate	149	18.507	18.504	(0.961)	1721148	40.0000	39.18
68 Benzo(a)anthracene	228	19.233	19.226	(0.999)	3034664	40.0000	39.48
* 69 Chrysene-d12	240	19.255	19.247	(1.000)	1561270	20.0000	
70 3,3'-Dichlorobenzidine	252	19.255	19.252	(1.000)	869292	40.0000	34.41
71 Chrysene	228	19.292	19.290	(1.002)	2945884	40.0000	39.63
72 bis(2-Ethylhexyl)phthalate	149	19.500	19.503	(0.954)	2292174	40.0000	39.79
* 134 Di-n-octylphthalate-d4	153	20.430	20.428	(1.000)	1902169	20.0000	
73 Di-n-octylphthalate	149	20.441	20.438	(1.001)	3759472	40.0000	38.03

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
	74 Benzo(b)fluoranthene	252	20.868	20.860	(0.976)	2941943	40.0000	40.01
	75 Benzo(k)fluoranthene	252	20.905	20.892	(0.978)	3250208	40.0000	41.08
	187 Total Benzofluoranthenes	252	20.905	20.892	(0.978)	5821803	80.0000	81.35 (M)
	76 Benzo(a)pyrene	252	21.311	21.298	(0.996)	2820422	40.0000	41.09
*	77 Perylene-d12	264	21.386	21.378	(1.000)	1517196	20.0000	
	78 Indeno(1,2,3-cd)pyrene	276	22.786	22.773	(1.065)	3853687	40.0000	40.17
	79 Dibenzo(a,h)anthracene	278	22.813	22.794	(1.067)	3088912	40.0000	39.03
	80 Benzo(g,h,i)perylene	276	23.149	23.125	(1.082)	3395785	40.0000	39.01
	90 N-Nitrosodimethylamine	74	2.972	2.959	(0.384)	1261538	40.0000	40.41
	103 Pyridine	79	2.934	2.953	(0.379)	2159603	40.0000	40.43
	91 Aniline	93	7.310	7.302	(0.943)	2272935	40.0000	36.11
	105 1-methylnaphthalene	141	11.103	11.100	(1.134)	2296117	40.0000	39.03
	93 Benzidine	184	17.198	17.201	(0.893)	540982	40.0000	20.14
	111 Azobenzene (1,2-DP-Hydrazine)	77	13.774	13.766	(1.091)	3380875	40.0000	37.99
	143 1,4-Dioxane	88	2.347	2.344	(0.303)	884664	40.0000	37.59
$	137 d8-1,4-Dioxane	96	2.299	2.296	(0.297)	862512	40.0000	39.72
	144 alpha-Terpineol	59	9.858	9.850	(1.007)	1308467	40.0000	39.15
	177 p-Benzoquinone	82	6.423	6.431	(0.656)	441289	40.0000	49.43
	98 Retene	219	17.855	17.853	(0.927)	1591311	40.0000	39.55
	99 Perylene	252	21.424	21.416	(1.002)	2372350	40.0000	38.67
	133 Butylatedhydroxytoluene	205	12.823	12.820	(1.015)	2463392	40.0000	38.62
	115 Tributyl Phosphate	99	13.859	13.841	(0.925)	3190730	40.0000	38.25
	116 Dibutyl Phenyl Phosphate	175	15.569	15.561	(1.039)	1977334	40.0000	40.60
	117 Butyl Diphenyl Phosphate	94	17.225	17.228	(0.895)	667408	40.0000	38.13
	118 Triphenyl Phosphate	326	18.811	18.809	(0.977)	508874	40.0000	41.66
	123 Acetophenone	105	8.453	8.445	(1.091)	2363485	40.0000	38.89
	168 Pentachlorobenzene	250	12.983	12.975	(1.028)	1099608	40.0000	40.17
	113 Diphenyl Oxide	170	11.909	11.901	(0.943)	2058947	40.0000	38.54
	112 Biphenyl	154	11.712	11.704	(0.927)	2935132	40.0000	35.22
	120 2,3,4,6-Tetrachlorophenol	232	13.229	13.226	(1.047)	784568	40.0000	43.71
	151 1,2,4,5-Tetrachlorobenzene	216	11.274	11.266	(0.893)	1293942	40.0000	40.29
	110 Tetrachloroguaiacol	247	14.944	14.936	(0.998)	865255	80.0000	85.11
	109 3,4,5-Trichloroguaiacol	213	13.330	13.328	(0.890)	486480	40.0000	42.58
	181 3,4,6-Trichloroguaiacol	211	13.448	13.440	(1.736)	586364	40.0000	42.43
	108 4,5,6-Trichloroguaiacol	213	14.356	14.348	(1.137)	480459	40.0000	42.80
	184 3,4-Dichloroguaiacol	192	11.797	11.795	(1.523)	537043	40.0000	40.92
	107 4,5-Dichloroguaiacol	192	12.588	12.575	(0.997)	1296250	80.0000	82.69
	182 4,6-Dichloroguaiacol	192	12.588	12.575	(1.625)	1296250	80.0000	83.56
	185 4-Chloroguaiacol	115	10.723	10.721	(1.384)	397449	20.0000	20.31
	186 Carbaryl	144	15.804	15.791	(1.055)	1811576	40.0000	41.06
	178 2-Benzyl-4-Chlorophenol	218	15.766	15.758	(1.052)	617391	40.0000	42.19
	106 Guaiacol	124	8.725	8.718	(1.126)	1467872	40.0000	38.13
	188 2,6-Dichlorophenol	162	9.981	9.978	(1.288)	1211944	40.0000	38.48
	189 N-Nitrosomethylethylamine	88	4.884	4.893	(0.630)	813043	40.0000	39.10

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 01231313.D
Lab Smp Id: IC400123
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem2/nt6.i/20130123A.b/SW846012313.m
Misc Info: 13-

Calibration Date: 23-JAN-2013
Calibration Time: 15:27
Client Smp ID: IC400123
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	605906	302953	1211812	675785	11.53
27 Naphthalene-d8	2147229	1073614	4294458	2346841	9.30
42 Acenaphthene-d10	1142287	571144	2284574	1258311	10.16
59 Phenanthrene-d10	1647922	823961	3295844	1837728	11.52
69 Chrysene-d12	1422286	711143	2844572	1561270	9.77
134 Di-n-octylphthala	1811653	905826	3623306	1902169	5.00
77 Perylene-d12	1374454	687227	2748908	1517196	10.39

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	7.75	7.25	8.25	7.75	0.00
27 Naphthalene-d8	9.79	9.29	10.29	9.79	0.00
42 Acenaphthene-d10	12.63	12.13	13.13	12.63	0.00
59 Phenanthrene-d10	14.98	14.48	15.48	14.98	0.00
69 Chrysene-d12	19.25	18.75	19.75	19.25	0.00
134 Di-n-octylphthala	20.44	19.94	20.94	20.43	-0.03
77 Perylene-d12	21.39	20.89	21.89	21.39	-0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

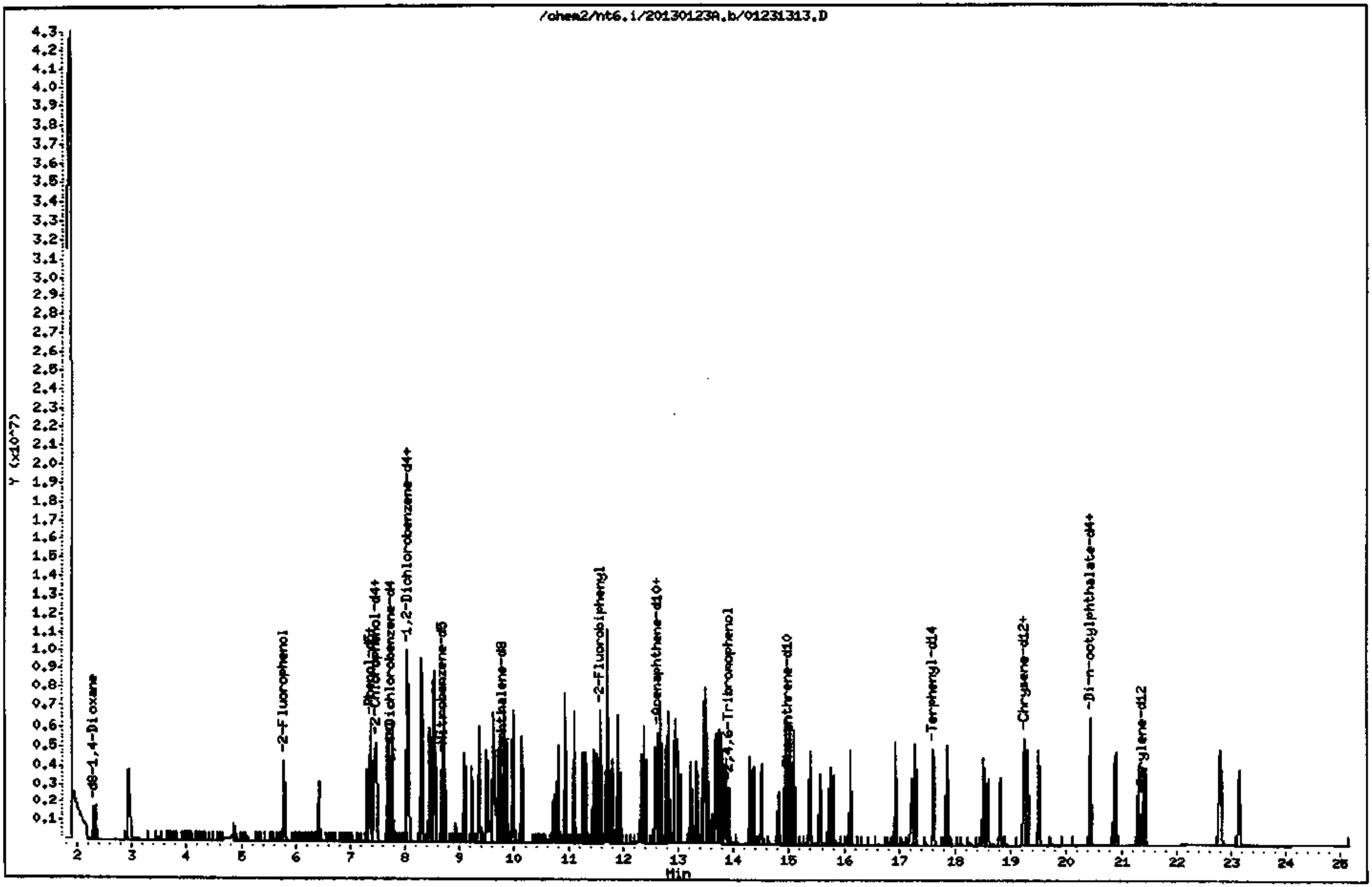
Data File: /chem2/nt6.i/20130123A.b/01231313.D
Date : 23-JAN-2013 18:19
Client ID: IC400123
Sample Info: IC400123,

Instrument: nt6.i

Operator: JZ

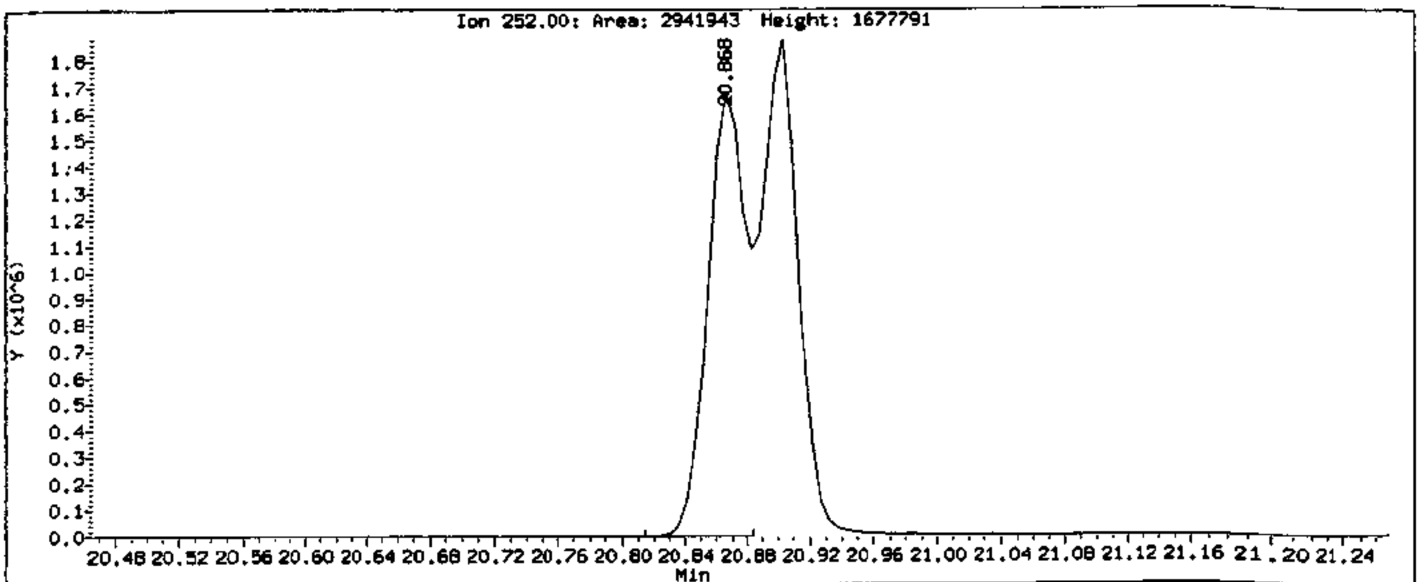
Column phase: ZB-5msi

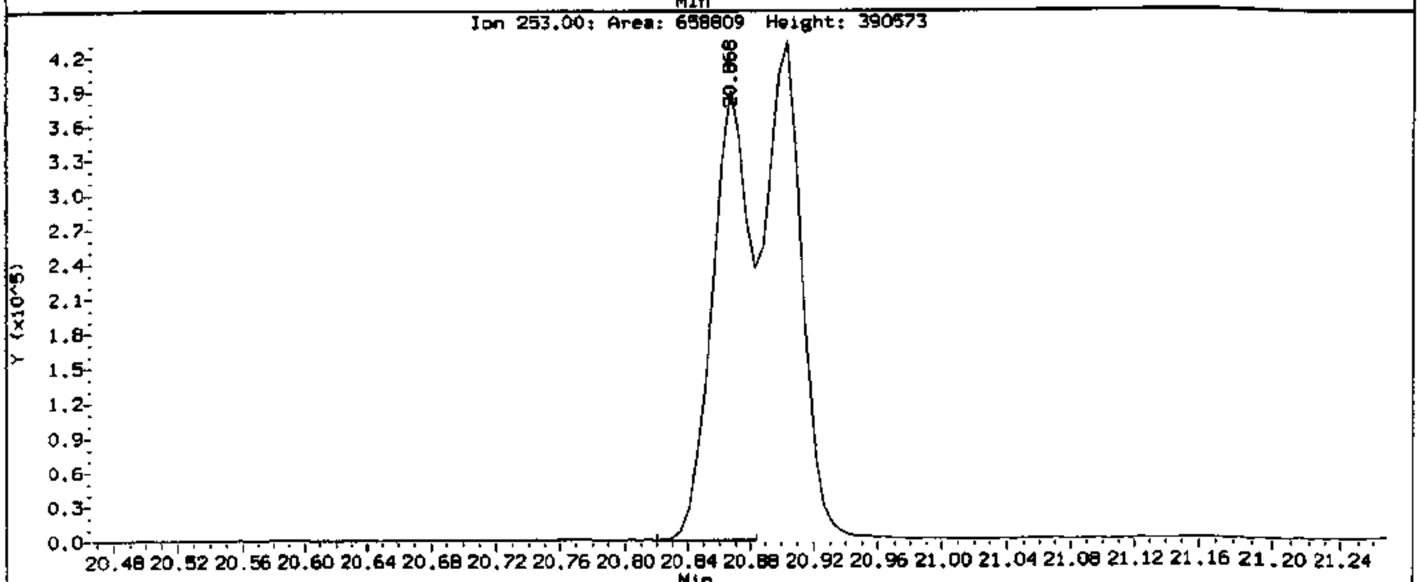
Column diameter: 0.32

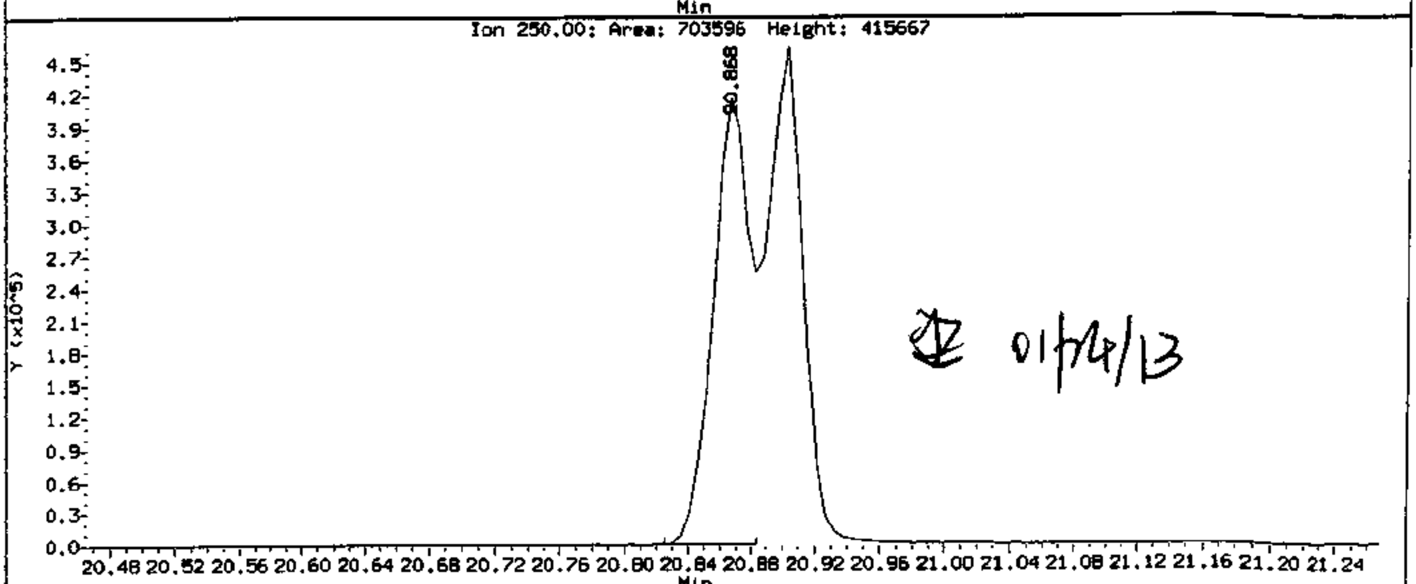


Data File: /chem2/nt6.i/20130123A.b/01231313.D
Injection Date: 23-JAN-2013 18:19
Instrument: nt6.i
Client Sample ID: IC400123

Compound: Total Benzofluoranthenes
CAS Number:

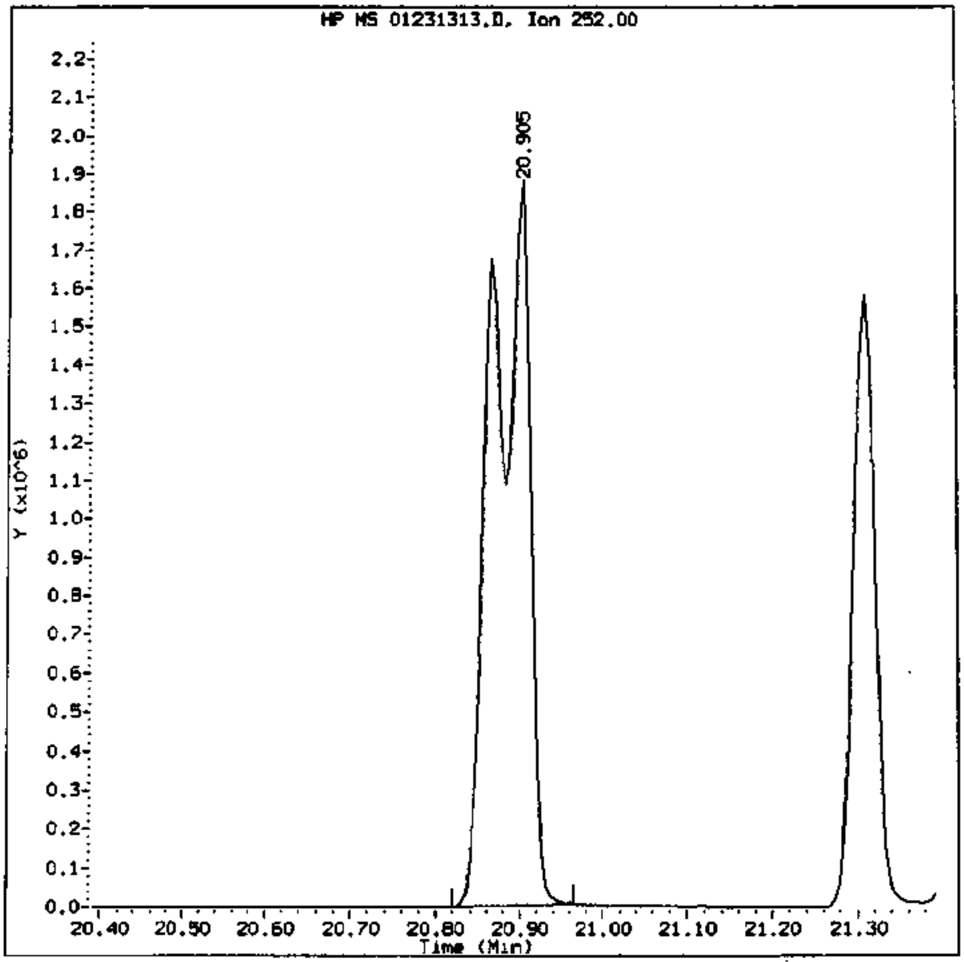






IC400123, /chem2/nt6.i/20130123A.b/01231313.D

Total Benzofluoranthenes Amount: 81.35 Area: 5821803



MANUAL INTEGRATION for Total Benzofluoranthenes

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other ____________________

Analyst: [signature] Date: 01/24/13

WC02:00425

CO-ELUTION SUMMARY FOR FILE - 01231313.D

Lab ID: IC400123, Method: SW846012313.m, Instrument: nt6.i, Date: 23-JAN-2013

RT	CO-ELUTION COMPOUNDS
8.303	2,2'-oxybis(1-Chloropropane) and 2-Methylphenol
12.630	Acenaphthene-d10 and 3-Nitroaniline

checked ok

01/24/13

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem2/nt6.i/20130123A.b/01231314.D
Lab Smp Id: IC600123 Client Smp ID: IC600126
Inj Date : 23-JAN-2013 18:52
Operator : JZ Inst ID: nt6.i
Smp Info : IC600123,
Misc Info : 13-
Comment : 1ul Injection
Method : /chem2/nt6.i/20130123A.b/SW846012313.m
Meth Date : 24-Jan-2013 12:19 jianqing Quant Type: ISTD
Cal Date : 23-JAN-2013 18:52 Cal File: 01231314.D
Als bottle: 7 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALS.sub
Target Version: 3.50

JZ 01/24/13

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$ 1 2-Fluorophenol	112	5.793	5.785	(0.748)	2332737	60.0000	55.65
$ 2 Phenol-d5	99	7.369	7.350	(0.951)	2857908	60.0000	55.76
3 Phenol	94	7.385	7.371	(0.953)	2740942	60.0000	54.64
$ 5 2-Chlorophenol-d4	132	7.459	7.451	(0.963)	2281773	60.0000	54.03
4 Bis(2-Chloroethyl)ether	93	7.438	7.425	(0.960)	2398746	60.0000	56.78
6 2-Chlorophenol	128	7.481	7.473	(0.966)	2265168	60.0000	53.11
7 1,3-Dichlorobenzene	146	7.684	7.681	(0.992)	2794438	60.0000	57.35
* 8 1,4-Dichlorobenzene-d4	152	7.748	7.745	(1.000)	630732	20.0000	
9 1,4-Dichlorobenzene	146	7.775	7.767	(1.003)	2758414	60.0000	56.88
$ 10 1,2-Dichlorobenzene-d4	152	8.047	8.044	(1.039)	1613190	60.0000	54.08
12 1,2-Dichlorobenzene	146	8.068	8.060	(1.041)	2457174	60.0000	54.36
11 Benzyl alcohol	108	8.058	8.039	(1.040)	1398806	60.0000	53.48
14 2,2'-oxybis(1-Chloropropane)	45	8.303	8.301	(1.072)	3763533	60.0000	54.53
13 2-Methylphenol	108	8.309	8.296	(1.072)	2021885	60.0000	53.03
17 Hexachloroethane	117	8.555	8.547	(1.104)	1079823	60.0000	54.55
16 N-Nitroso-di-n-propylamine	70	8.533	8.509	(1.101)	1733032	60.0000	56.44
15 4-Methylphenol	108	8.544	8.525	(1.103)	1991212	60.0000	50.55
$ 18 Nitrobenzene-d5	82	8.688	8.675	(0.888)	2757478	60.0000	57.94
19 Nitrobenzene	77	8.715	8.702	(0.890)	2700770	60.0000	55.39
20 Isophorone	82	9.099	9.086	(0.930)	3916677	60.0000	57.82
21 2-Nitrophenol	139	9.228	9.220	(0.943)	1249974	60.0000	59.82
22 2,4-Dimethylphenol	107	9.367	9.359	(0.957)	2140620	60.0000	54.69
23 Bis(2-Chloroethoxy)methane	93	9.500	9.492	(0.971)	2763228	60.0000	57.66
24 Benzoic acid	105	9.703	9.551	(0.991)	3774154	120.000	139.8
25 2,4-Dichlorophenol	162	9.623	9.610	(0.983)	1748251	60.0000	55.73
26 1,2,4-Trichlorobenzene	180	9.735	9.727	(0.995)	2153877	60.0000	59.70
* 27 Naphthalene-d8	136	9.789	9.781	(1.000)	2164179	20.0000	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
28 Naphthalene	128	9.821	9.813	(1.003)	5393058	60.0000	51.80
29 4-Chloroaniline	127	9.981	9.968	(1.020)	1089066	60.0000	30.49
30 Hexachlorobutadiene	225	10.141	10.144	(1.036)	1378707	60.0000	61.12
31 4-Chloro-3-methylphenol	107	10.809	10.801	(1.104)	1715957	60.0000	56.35
32 2-Methylnaphthalene	141	10.937	10.929	(1.117)	2871903	60.0000	53.36
33 Hexachlorocyclopentadiene	237	11.316	11.314	(0.896)	1580414	60.0000	70.45
34 2,4,6-Trichlorophenol	196	11.461	11.447	(0.907)	1209597	60.0000	61.63
35 2,4,5-Trichlorophenol	196	11.519	11.517	(0.912)	1243642	60.0000	61.26
$ 36 2-Fluorobiphenyl	172	11.584	11.576	(0.917)	4077060	60.0000	55.65
37 2-Chloronaphthalene	162	11.706	11.698	(0.927)	3362340	60.0000	54.58
38 2-Nitroaniline	65	11.952	11.944	(0.946)	1177313	60.0000	59.58
39 Dimethylphthalate	163	12.337	12.318	(0.977)	3620781	60.0000	56.96
40 Acenaphthylene	152	12.380	12.372	(0.980)	5100571	60.0000	54.91
41 2,6-Dinitrotoluene	165	12.417	12.409	(0.983)	918898	60.0000	61.90
* 42 Acenaphthene-d10	164	12.631	12.623	(1.000)	1103459	20.0000	
43 3-Nitroaniline	138	12.631	12.617	(1.000)	423663	60.0000	34.17
44 Acenaphthene	153	12.684	12.671	(1.004)	3291629	60.0000	56.27
45 2,4-Dinitrophenol	184	12.796	12.783	(1.013)	1443610	120.000	171.8
46 Dibenzofuran	168	12.946	12.932	(1.025)	4214209	60.0000	54.22
47 4-Nitrophenol	109	12.967	12.965	(1.027)	571468	60.0000	58.51
48 2,4-Dinitrotoluene	165	13.042	13.029	(1.033)	1126086	60.0000	60.50
50 Diethylphthalate	149	13.485	13.467	(1.068)	3522907	60.0000	53.64
49 Fluorene	166	13.496	13.483	(1.069)	3317242	60.0000	54.21
51 4-Chlorophenyl-phenylether	204	13.528	13.525	(1.071)	1984660	60.0000	59.56
52 4-Nitroaniline	138	13.624	13.600	(1.079)	693407	60.0000	56.88
53 4,6-Dinitro-2-methylphenol	198	13.694	13.670	(0.914)	1587464	120.000	150.7
54 N-Nitrosodiphenylamine	169	13.742	13.723	(0.917)	2672046	60.0000	57.39
$ 55 2,4,6-Tribromophenol	330	13.918	13.905	(1.102)	529691	60.0000	62.63
56 4-Bromophenyl-phenylether	248	14.303	14.295	(0.955)	1106425	60.0000	61.33
57 Hexachlorobenzene	284	14.511	14.503	(0.969)	1115657	60.0000	61.14
58 Pentachlorophenol	266	14.816	14.813	(0.989)	549424	60.0000	84.76
* 59 Phenanthrene-d10	188	14.981	14.979	(1.000)	1594848	20.0000	
60 Phenanthrene	178	15.024	15.011	(1.003)	4455158	60.0000	56.04
61 Anthracene	178	15.093	15.080	(1.007)	4532342	60.0000	55.92
62 Carbazole	167	15.382	15.374	(1.027)	3990466	60.0000	55.51
63 Di-n-butylphthalate	149	16.114	16.106	(1.076)	5066014	60.0000	54.33
64 Fluoranthene	202	16.936	16.928	(1.131)	4519139	60.0000	59.09
65 Pyrene	202	17.289	17.281	(0.898)	4654233	60.0000	52.78
$ 66 Terphenyl-d14	244	17.620	17.612	(0.915)	2968217	60.0000	55.00
67 Butylbenzylphthalate	149	18.507	18.504	(0.961)	2327137	60.0000	57.13
68 Benzo(a)anthracene	228	19.233	19.226	(0.999)	4201035	60.0000	58.64
* 69 Chrysene-d12	240	19.255	19.247	(1.000)	1461591	20.0000	
70 3,3'-Dichlorobenzidine	252	19.255	19.252	(1.000)	1093081	60.0000	48.09
71 Chrysene	228	19.298	19.290	(1.002)	4010128	60.0000	58.01
72 bis(2-Ethylhexyl)phthalate	149	19.506	19.503	(0.955)	3087262	60.0000	57.64
* 134 Di-n-octylphthalate-d4	153	20.430	20.428	(1.000)	1782744	20.0000	
73 Di-n-octylphthalate	149	20.441	20.438	(1.001)	5052476	60.0000	55.38

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
==========================	====	==	======	======	========	=======	=======
74 Benzo(b)fluoranthene	252	20.874	20.860	(0.976)	4185685	60.0000	60.65
75 Benzo(k)fluoranthene	252	20.906	20.892	(0.977)	4325036	60.0000	58.63
187 Total Benzofluoranthenes	252	20.906	20.892	(0.977)	7965727	120.000	119.0 (M)
76 Benzo(a)pyrene	252	21.312	21.298	(0.996)	3891766	60.0000	60.45
* 77 Perylene-d12	264	21.392	21.378	(1.000)	1421009	20.0000	
78 Indeno(1,2,3-cd)pyrene	276	22.791	22.773	(1.065)	5384969	60.0000	59.94
79 Dibenzo(a,h)anthracene	278	22.818	22.794	(1.067)	4348999	60.0000	58.89
80 Benzo(g,h,i)perylene	276	23.160	23.125	(1.083)	4859355	60.0000	59.66
90 N-Nitrosodimethylamine	74	2.988	2.959	(0.386)	1819151	60.0000	62.02
103 Pyridine	79	2.951	2.953	(0.381)	3113698	60.0000	62.03
91 Aniline	93	7.310	7.302	(0.943)	2879589	60.0000	50.56
105 1-methylnaphthalene	141	11.103	11.100	(1.134)	2932994	60.0000	54.97
93 Benzidine	184	17.203	17.201	(0.893)	763849	60.0000	33.10
111 Azobenzene (1,2-DP-Hydrazine)	77	13.779	13.766	(1.091)	4195350	60.0000	54.70
143 1,4-Dioxane	88	2.358	2.344	(0.304)	1292299	60.0000	59.00
$ 137 d8-1,4-Dioxane	96	2.315	2.296	(0.299)	1247169	60.0000	61.27
144 alpha-Terpineol	59	9.863	9.850	(1.008)	1755119	60.0000	57.43
177 p-Benzoquinone	82	6.428	6.431	(0.657)	608179	60.0000	71.13
98 Retene	219	17.855	17.853	(0.927)	2049309	60.0000	55.27
99 Perylene	252	21.429	21.416	(1.002)	3299547	60.0000	57.84
133 Butylatedhydroxytoluene	205	12.823	12.820	(1.015)	3098954	60.0000	56.12
115 Tributyl Phosphate	99	13.865	13.841	(0.925)	3856734	60.0000	54.29
116 Dibutyl Phenyl Phosphate	175	15.569	15.561	(1.039)	2485765	60.0000	59.00
117 Butyl Diphenyl Phosphate	94	17.230	17.228	(0.895)	863974	60.0000	53.81
118 Triphenyl Phosphate	326	18.817	18.809	(0.977)	710153	60.0000	61.74
123 Acetophenone	105	8.458	8.445	(1.092)	3212464	60.0000	57.18
168 Pentachlorobenzene	250	12.983	12.975	(1.028)	1466452	60.0000	60.91
113 Diphenyl Oxide	170	11.909	11.901	(0.943)	2618953	60.0000	56.55
112 Biphenyl	154	11.712	11.704	(0.927)	3645541	60.0000	51.32
120 2,3,4,6-Tetrachlorophenol	232	13.229	13.226	(1.047)	954977	60.0000	60.56
151 1,2,4,5-Tetrachlorobenzene	216	11.274	11.266	(0.893)	1772867	60.0000	62.44
110 Tetrachloroguaiacol	247	14.949	14.936	(0.998)	1113528	120.000	125.1
109 3,4,5-Trichloroguaiacol	213	13.330	13.328	(0.890)	615297	60.0000	61.71
181 3,4,6-Trichloroguaiacol	211	13.448	13.440	(1.736)	752590	60.0000	58.62
108 4,5,6-Trichloroguaiacol	213	14.356	14.348	(1.137)	602122	60.0000	60.97
184 3,4-Dichloroguaiacol	192	11.803	11.795	(1.523)	701060	60.0000	57.68
107 4,5-Dichloroguaiacol	192	12.588	12.575	(0.997)	1668733	120.000	121.2
182 4,6-Dichloroguaiacol	192	12.588	12.575	(1.625)	1668733	120.000	116.0
185 4-Chloroguaiacol	115	10.723	10.721	(1.384)	516765	30.0000	28.56
186 Carbaryl	144	15.804	15.791	(1.055)	2283518	60.0000	59.69
178 2-Benzyl-4-Chlorophenol	218	15.766	15.758	(1.052)	781982	60.0000	61.30
106 Guaiacol	124	8.726	8.718	(1.126)	1906158	60.0000	54.10
188 2,6-Dichlorophenol	162	9.986	9.978	(1.289)	1642099	60.0000	56.51
189 N-Nitrosomethylethylamine	88	4.890	4.893	(0.631)	1160045	60.0000	59.81

QC Flag Legend

M - Compound response manually integrated.

Report Date: 24-Jan-2013 12:22

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 01231314.D
Lab Smp Id: IC600123
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem2/nt6.i/20130123A.b/SW846012313.m
Misc Info: 13-

Calibration Date: 23-JAN-2013
Calibration Time: 15:27
Client Smp ID: IC600126
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	605906	302953	1211812	630732	4.10
27 Naphthalene-d8	2147229	1073614	4294458	2164179	0.79
42 Acenaphthene-d10	1142287	571144	2284574	1103459	-3.40
59 Phenanthrene-d10	1647922	823961	3295844	1594848	-3.22
69 Chrysene-d12	1422286	711143	2844572	1461591	2.76
134 Di-n-octylphthala	1811653	905826	3623306	1782744	-1.60
77 Perylene-d12	1374454	687227	2748908	1421009	3.39

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	7.75	7.25	8.25	7.75	0.00
27 Naphthalene-d8	9.79	9.29	10.29	9.79	0.00
42 Acenaphthene-d10	12.63	12.13	13.13	12.63	0.00
59 Phenanthrene-d10	14.98	14.48	15.48	14.98	0.00
69 Chrysene-d12	19.25	18.75	19.75	19.25	0.00
134 Di-n-octylphthala	20.44	19.94	20.94	20.43	-0.03
77 Perylene-d12	21.39	20.89	21.89	21.39	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem2/nt6.i/20130123A.b/01231314.D
Date : 23-JAN-2013 18:52
Client ID: IC600126
Sample Info: IC600123,

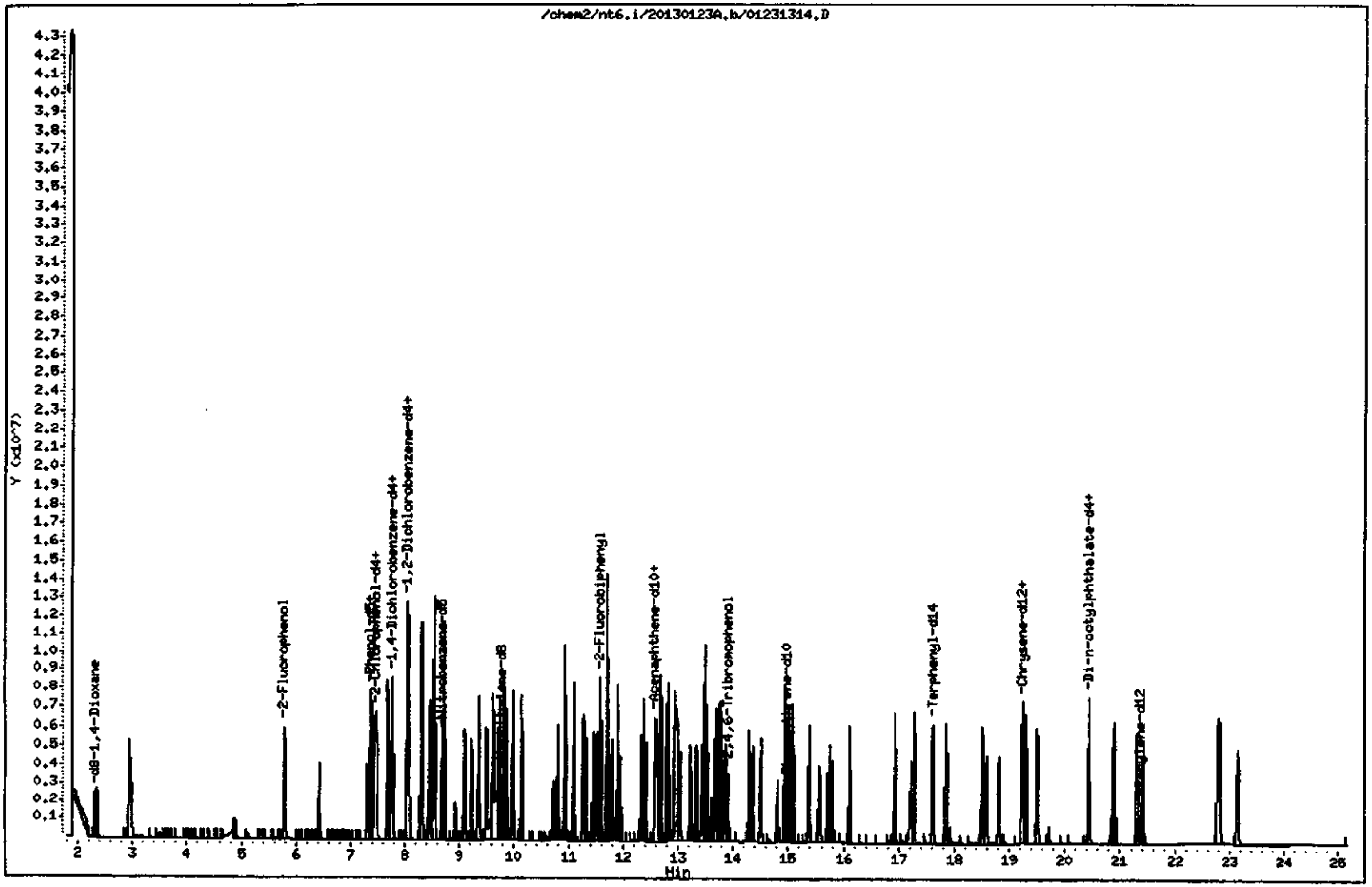
Page 6

Instrument: nt6.i

Operator: JZ

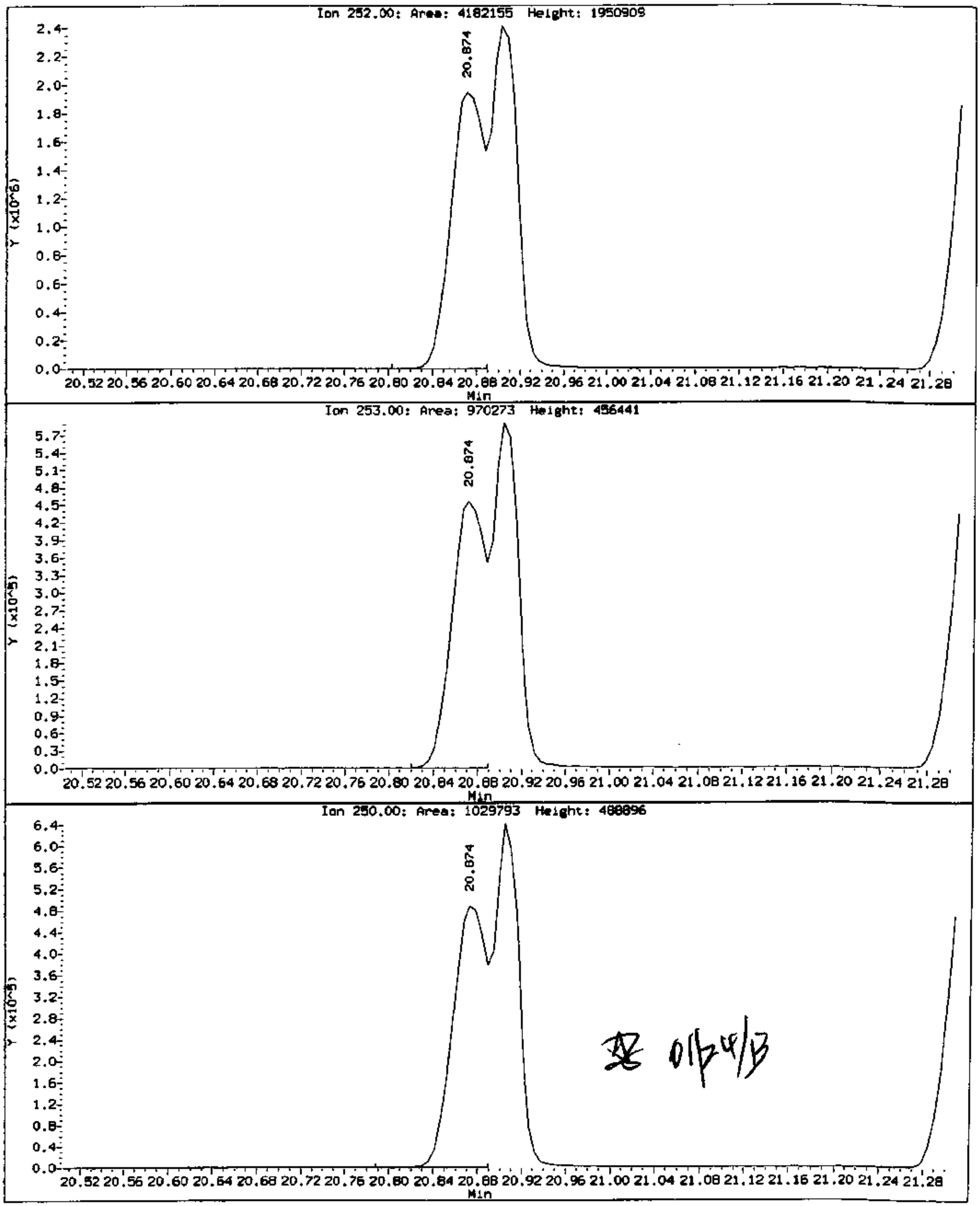
Column phase: ZB-5msi

Column diameter: 0.32



Data File: /chem2/nt6.i/20130123A.b/01231314.D
Injection Date: 23-JAN-2013 18:52
Instrument: nt6.i
Client Sample ID: IC600126

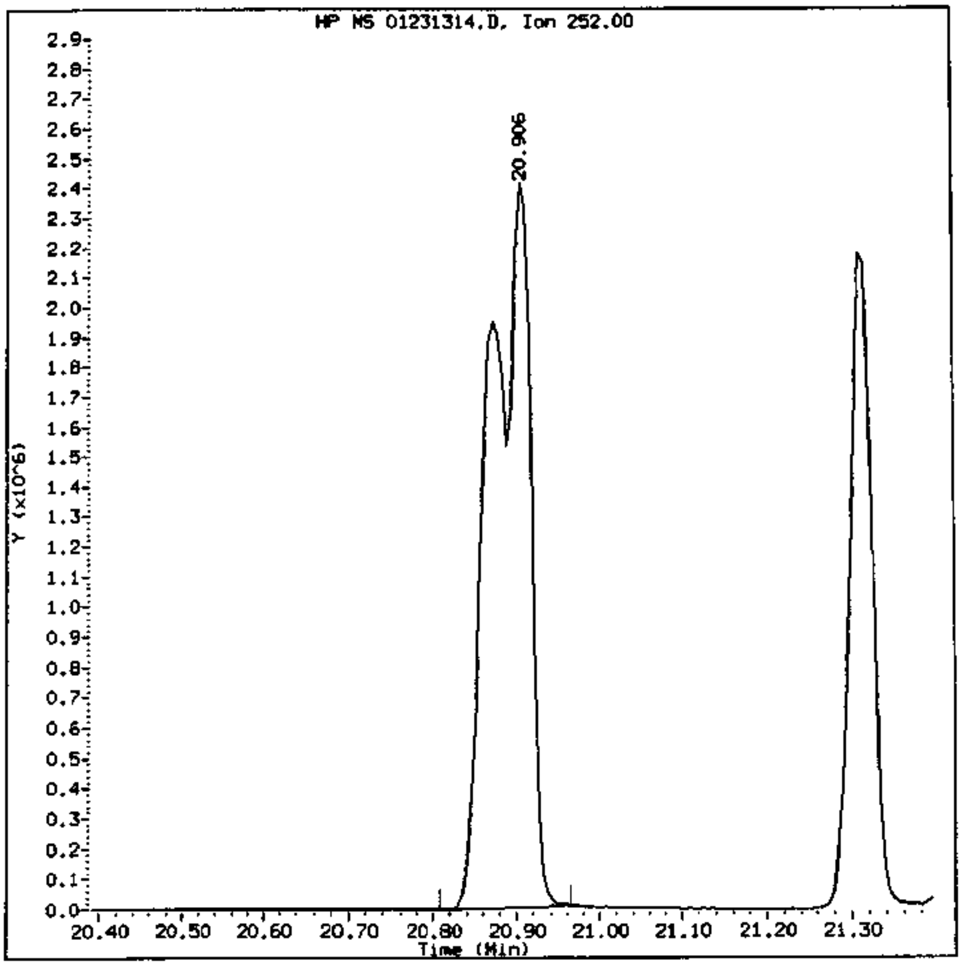
Compound: Total Benzofluoranthenes
CAS Number:



SB 01/24/13

IC600123, /chem2/nt6.i/20130123A.b/01231314.D

Total Benzofluoranthenes   Amount: 119.03   Area: 7965727



MANUAL INTEGRATION for Total Benzofluoranthenes

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other ______________________

Analyst: ________   Date: 01/24/13

CO-ELUTION SUMMARY FOR FILE - 01231314.D

Lab ID: IC600123, Method: SW846012313.m, Instrument: nt6.i, Date: 23-JAN-2013

RT	CO-ELUTION COMPOUNDS
12.631	Acenaphthene-d10 and 3-Nitroaniline

Checked ok

01/24/13

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem2/nt6.i/20130123A.b/01231315.D
Lab Smp Id: IC800123 Client Smp ID: IC800123
Inj Date : 23-JAN-2013 19:26
Operator : JZ Inst ID: nt6.i
Smp Info : IC800123,
Misc Info : 13-
Comment : 1ul Injection
Method : /chem2/nt6.i/20130123A.b/SW846012313.m
Meth Date : 24-Jan-2013 12:19 jianqing Quant Type: ISTD
Cal Date : 23-JAN-2013 19:26 Cal File: 01231315.D
Als bottle: 8 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALS.sub
Target Version: 3.50

JZ 01/24/13

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	Compound Not Detected.					
$	2 Phenol-d5	99	Compound Not Detected.					
	3 Phenol	94	7.384	7.371	(0.953)	3214568	80.0000	73.67
$	5 2-Chlorophenol-d4	132	Compound Not Detected.					
	4 Bis(2-Chloroethyl)ether	93	7.437	7.425	(0.960)	2785192	80.0000	75.51
	6 2-Chlorophenol	128	7.485	7.473	(0.966)	2649274	80.0000	71.70
	7 1,3-Dichlorobenzene	146	7.688	7.681	(0.992)	3195811	80.0000	75.17
*	8 1,4-Dichlorobenzene-d4	152	7.747	7.745	(1.000)	555869	20.0000	
	9 1,4-Dichlorobenzene	146	7.774	7.767	(1.003)	3118657	80.0000	73.90
$	10 1,2-Dichlorobenzene-d4	152	Compound Not Detected.					
	12 1,2-Dichlorobenzene	146	8.068	8.060	(1.041)	2843906	80.0000	72.50
	11 Benzyl alcohol	108	8.057	8.039	(1.040)	1675064	80.0000	73.63
	14 2,2'-oxybis(1-Chloropropane)	45	8.303	8.301	(1.072)	4288867	80.0000	71.73
	13 2-Methylphenol	108	8.308	8.296	(1.072)	2324114	80.0000	70.53
	17 Hexachloroethane	117	8.554	8.547	(1.104)	1218538	80.0000	71.14
	16 N-Nitroso-di-n-propylamine	70	8.532	8.509	(1.101)	1997249	80.0000	74.64
	15 4-Methylphenol	108	8.543	8.525	(1.103)	2249002	80.0000	66.59
$	18 Nitrobenzene-d5	82	Compound Not Detected.					
	19 Nitrobenzene	77	8.714	8.702	(0.890)	3178663	80.0000	75.19
	20 Isophorone	82	9.104	9.086	(0.930)	4576044	80.0000	77.55
	21 2-Nitrophenol	139	9.227	9.220	(0.943)	1467485	80.0000	80.17
	22 2,4-Dimethylphenol	107	9.366	9.359	(0.957)	2473746	80.0000	73.20
	23 Bis(2-Chloroethoxy)methane	93	9.505	9.492	(0.971)	3171116	80.0000	76.18
	24 Benzoic acid	105	9.724	9.551	(0.993)	4602535	160.000	188.8
	25 2,4-Dichlorophenol	162	9.622	9.610	(0.983)	2026090	80.0000	74.60
	26 1,2,4-Trichlorobenzene	180	9.734	9.727	(0.995)	2451479	80.0000	77.93
*	27 Naphthalene-d8	136	9.788	9.781	(1.000)	1894972	20.0000	

		QUANT SIG					AMOUNTS	
							CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
	28 Naphthalene	128	9.820	9.813	(1.003)	5971130	80.0000	67.24
	29 4-Chloroaniline	127	9.980	9.968	(1.020)	1100038	80.0000	38.23
	30 Hexachlorobutadiene	225	10.146	10.144	(1.037)	1587598	80.0000	80.32
	31 4-Chloro-3-methylphenol	107	10.808	10.801	(1.104)	2010639	80.0000	76.03
	32 2-Methylnaphthalene	141	10.936	10.929	(1.117)	3224551	80.0000	69.86
	33 Hexachlorocyclopentadiene	237	11.316	11.314	(0.896)	1851543	80.0000	90.89
	34 2,4,6-Trichlorophenol	196	11.460	11.447	(0.907)	1431081	80.0000	81.84
	35 2,4,5-Trichlorophenol	196	11.519	11.517	(0.912)	1443982	80.0000	80.13
$	36 2-Fluorobiphenyl	172	Compound Not Detected.					
	37 2-Chloronaphthalene	162	11.711	11.698	(0.927)	3865525	80.0000	71.90
	38 2-Nitroaniline	65	11.957	11.944	(0.947)	1373709	80.0000	78.57
	39 Dimethylphthalate	163	12.341	12.318	(0.977)	4217204	80.0000	75.46
	40 Acenaphthylene	152	12.379	12.372	(0.980)	5817131	80.0000	71.78
	41 2,6-Dinitrotoluene	165	12.427	12.409	(0.984)	1090763	80.0000	82.39
*	42 Acenaphthene-d10	164	12.630	12.623	(1.000)	979292	20.0000	
	43 3-Nitroaniline	138	12.635	12.617	(1.000)	410366	80.0000	40.37
	44 Acenaphthene	153	12.683	12.671	(1.004)	3819625	80.0000	74.43
	45 2,4-Dinitrophenol	184	12.806	12.783	(1.014)	1763145	160.000	218.9
	46 Dibenzofuran	168	12.945	12.932	(1.025)	4822292	80.0000	71.20
	47 4-Nitrophenol	109	12.972	12.965	(1.027)	677351	80.0000	78.40
	48 2,4-Dinitrotoluene	165	13.046	13.029	(1.033)	1335022	80.0000	80.71
	50 Diethylphthalate	149	13.485	13.467	(1.068)	4032067	80.0000	70.53
	49 Fluorene	166	13.501	13.483	(1.069)	3844884	80.0000	71.99
	51 4-Chlorophenyl-phenylether	204	13.533	13.525	(1.071)	2320869	80.0000	78.70
	52 4-Nitroaniline	138	13.629	13.600	(1.079)	753388	80.0000	70.95
	53 4,6-Dinitro-2-methylphenol	198	13.698	13.670	(0.914)	1868111	160.000	195.9
	54 N-Nitrosodiphenylamine	169	13.741	13.723	(0.917)	3099547	80.0000	76.86
$	55 2,4,6-Tribromophenol	330	Compound Not Detected.					
	56 4-Bromophenyl-phenylether	248	14.302	14.295	(0.954)	1321633	80.0000	83.43
	57 Hexachlorobenzene	284	14.510	14.503	(0.968)	1319236	80.0000	82.49
	58 Pentachlorophenol	266	14.815	14.813	(0.989)	679342	80.0000	112.2
*	59 Phenanthrene-d10	188	14.986	14.979	(1.000)	1390368	20.0000	
	60 Phenanthrene	178	15.023	15.011	(1.002)	5109068	80.0000	74.56
	61 Anthracene	178	15.098	15.080	(1.007)	5171028	80.0000	74.09
	62 Carbazole	167	15.386	15.374	(1.027)	4645407	80.0000	74.91
	63 Di-n-butylphthalate	149	16.113	16.106	(1.075)	5766990	80.0000	72.10
	64 Fluoranthene	202	16.936	16.928	(1.130)	5176476	80.0000	77.97
	65 Pyrene	202	17.288	17.281	(0.898)	5338344	80.0000	69.70
$	66 Terphenyl-d14	244	Compound Not Detected.					
	67 Butylbenzylphthalate	149	18.506	18.504	(0.961)	2673528	80.0000	74.79
	68 Benzo(a)anthracene	228	19.238	19.226	(0.999)	4805469	80.0000	76.22
*	69 Chrysene-d12	240	19.259	19.247	(1.000)	1296515	20.0000	
	70 3,3'-Dichlorobenzidine	252	19.254	19.252	(1.000)	1210744	80.0000	62.22
	71 Chrysene	228	19.302	19.290	(1.002)	4572277	80.0000	75.29
	72 bis(2-Ethylhexyl)phthalate	149	19.505	19.503	(0.954)	3573701	80.0000	77.57
*	134 Di-n-octylphthalate-d4	153	20.435	20.428	(1.000)	1540996	20.0000	
	73 Di-n-octylphthalate	149	20.440	20.438	(1.000)	5710395	80.0000	73.40

						AMOUNTS	
	QUANT SIG					CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
==========================	====	==	======	======	========	=======	=======
74 Benzo(b)fluoranthene	252	20.878	20.860	(0.976)	5185995	80.0000	85.66
75 Benzo(k)fluoranthene	252	20.915	20.892	(0.978)	4695621	80.0000	74.31
187 Total Benzofluoranthenes	252	20.915	20.892	(0.978)	9273614	160.000	159.9(M)
76 Benzo(a)pyrene	252	21.316	21.298	(0.996)	4537348	80.0000	81.11
* 77 Perylene-d12	264	21.391	21.378	(1.000)	1231759	20.0000	
78 Indeno(1,2,3-cd)pyrene	276	22.796	22.773	(1.066)	6409957	80.0000	81.98
79 Dibenzo(a,h)anthracene	278	22.823	22.794	(1.067)	5146966	80.0000	80.34
80 Benzo(g,h,i)perylene	276	23.164	23.125	(1.083)	5734193	80.0000	81.05
90 N-Nitrosodimethylamine	74	3.009	2.959	(0.388)	2147847	80.0000	82.63
103 Pyridine	79	2.966	2.953	(0.383)	3657513	80.0000	82.28
91 Aniline	93	7.314	7.302	(0.944)	3093861	80.0000	63.73
105 1-methylnaphthalene	141	11.107	11.100	(1.135)	3346337	80.0000	72.72
93 Benzidine	184	17.203	17.201	(0.893)	855659	80.0000	44.86
111 Azobenzene (1,2-DP-Hydrazine)	77	13.784	13.766	(1.091)	4807739	80.0000	71.84
143 1,4-Dioxane	88	2.368	2.344	(0.306)	1534689	80.0000	79.56
$ 137 d8-1,4-Dioxane	96	2.325	2.296	(0.300)	1460233	80.0000	81.20
144 alpha-Terpineol	59	9.868	9.850	(1.008)	2011310	80.0000	75.82
177 p-Benzoquinone	82	6.433	6.431	(0.657)	709296	80.0000	92.31
98 Retene	219	17.854	17.853	(0.927)	2404988	80.0000	74.03
99 Perylene	252	21.428	21.416	(1.002)	3790941	80.0000	77.12
133 Butylatedhydroxytoluene	205	12.827	12.820	(1.016)	3509876	80.0000	72.71
115 Tributyl Phosphate	99	13.869	13.841	(0.925)	4441670	80.0000	72.80
116 Dibutyl Phenyl Phosphate	175	15.573	15.561	(1.039)	2861973	80.0000	78.21
117 Butyl Diphenyl Phosphate	94	17.229	17.228	(0.895)	987626	80.0000	70.69
118 Triphenyl Phosphate	326	18.816	18.809	(0.977)	819192	80.0000	80.25
123 Acetophenone	105	8.458	8.445	(1.092)	3711056	80.0000	75.63
168 Pentachlorobenzene	250	12.988	12.975	(1.028)	1709468	80.0000	80.00
113 Diphenyl Oxide	170	11.909	11.901	(0.943)	2995363	80.0000	73.81
112 Biphenyl	154	11.716	11.704	(0.928)	4061032	80.0000	66.26
120 2,3,4,6-Tetrachlorophenol	232	13.233	13.226	(1.048)	1129604	80.0000	80.62
151 1,2,4,5-Tetrachlorobenzene	216	11.273	11.266	(0.893)	2041341	80.0000	80.87
110 Tetrachloroguaiacol	247	14.948	14.936	(0.998)	1308188	160.000	167.3
109 3,4,5-Trichloroguaiacol	213	13.335	13.328	(0.890)	718085	80.0000	82.23
181 3,4,6-Trichloroguaiacol	211	13.452	13.440	(1.736)	895315	80.0000	79.25
108 4,5,6-Trichloroguaiacol	213	14.361	14.348	(1.137)	719621	80.0000	81.80
184 3,4-Dichloroguaiacol	192	12.592	11.795	(1.625)	1925415	80.0000	152.6
107 4,5-Dichloroguaiacol	192	12.592	12.575	(0.997)	1932137	160.000	158.3
182 4,6-Dichloroguaiacol	192	12.592	12.575	(1.625)	1932137	160.000	153.5
185 4-Chloroguaiacol	115	10.728	10.721	(1.385)	614357	40.0000	38.73
186 Carbaryl	144	15.808	15.791	(1.055)	2719517	80.0000	81.32
178 2-Benzyl-4-Chlorophenol	218	15.771	15.758	(1.052)	937906	80.0000	83.69
106 Guaiacol	124	8.730	8.718	(1.127)	2160102	80.0000	70.88
188 2,6-Dichlorophenol	162	9.985	9.978	(1.289)	1860225	80.0000	73.61
189 N-Nitrosomethylethylamine	88	4.900	4.893	(0.632)	1337479	80.0000	78.49

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem2/nt6.i/20130123A.b/01231315.D
Report Date: 24-Jan-2013 12:22

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 01231315.D
Lab Smp Id: IC800123
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem2/nt6.i/20130123A.b/SW846012313.m
Misc Info: 13-

Calibration Date: 23-JAN-2013
Calibration Time: 15:27
Client Smp ID: IC800123
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	605906	302953	1211812	555869	-8.26
27 Naphthalene-d8	2147229	1073614	4294458	1894972	-11.75
42 Acenaphthene-d10	1142287	571144	2284574	979292	-14.27
59 Phenanthrene-d10	1647922	823961	3295844	1390368	-15.63
69 Chrysene-d12	1422286	711143	2844572	1296515	-8.84
134 Di-n-octylphthala	1811653	905826	3623306	1540996	-14.94
77 Perylene-d12	1374454	687227	2748908	1231759	-10.38

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	7.75	7.25	8.25	7.75	-0.01
27 Naphthalene-d8	9.79	9.29	10.29	9.79	-0.01
42 Acenaphthene-d10	12.63	12.13	13.13	12.63	-0.01
59 Phenanthrene-d10	14.98	14.48	15.48	14.99	0.03
69 Chrysene-d12	19.25	18.75	19.75	19.26	0.02
134 Di-n-octylphthala	20.44	19.94	20.94	20.43	0.00
77 Perylene-d12	21.39	20.89	21.89	21.39	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem2/nt6.i/20130123A.b/01231315.D

Date : 23-JAN-2013 19:26

Client ID: IC800123

Sample Info: IC800123,

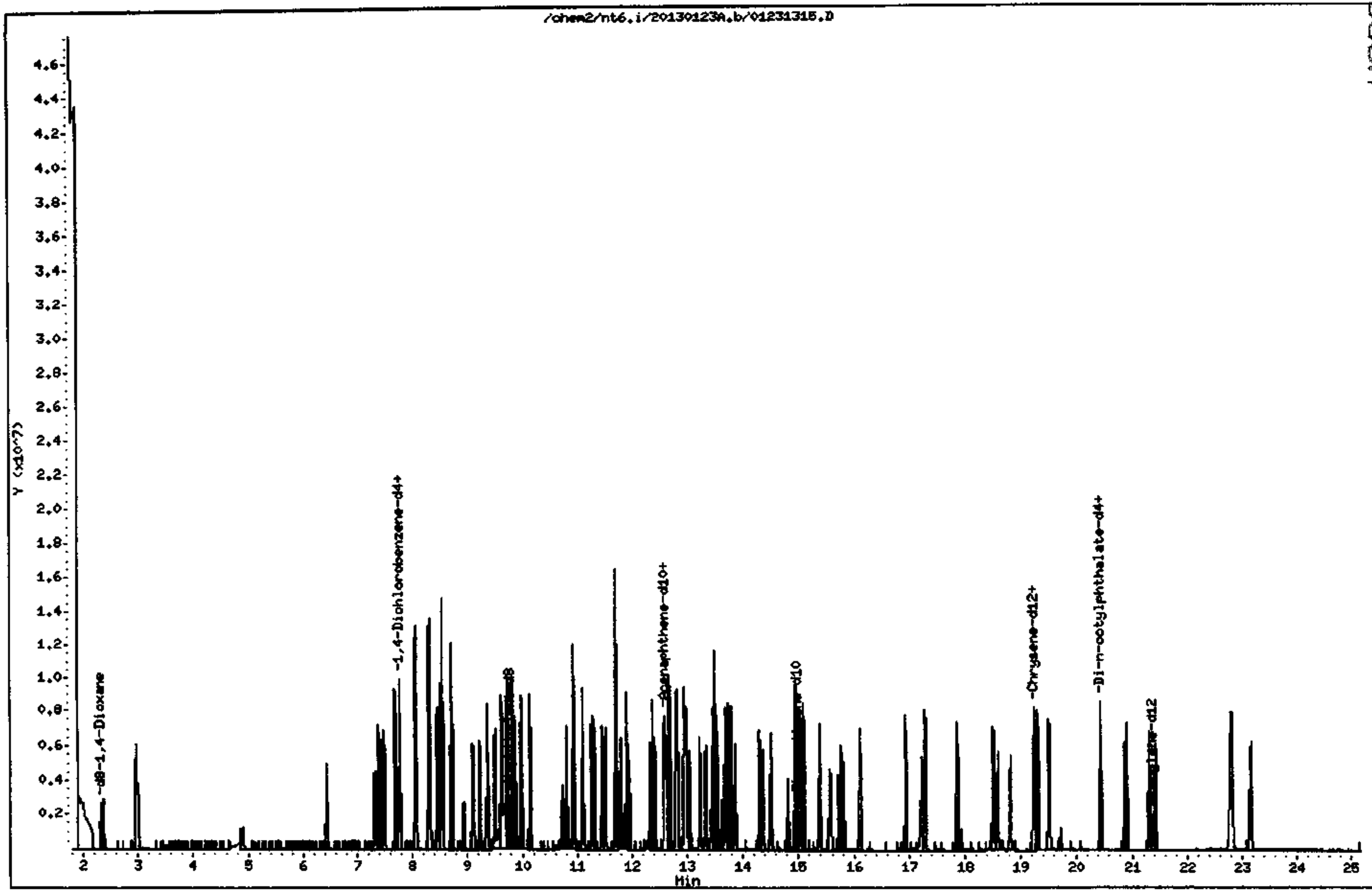
Column phase: ZB-5msi

Page 6

Instrument: nt6.i

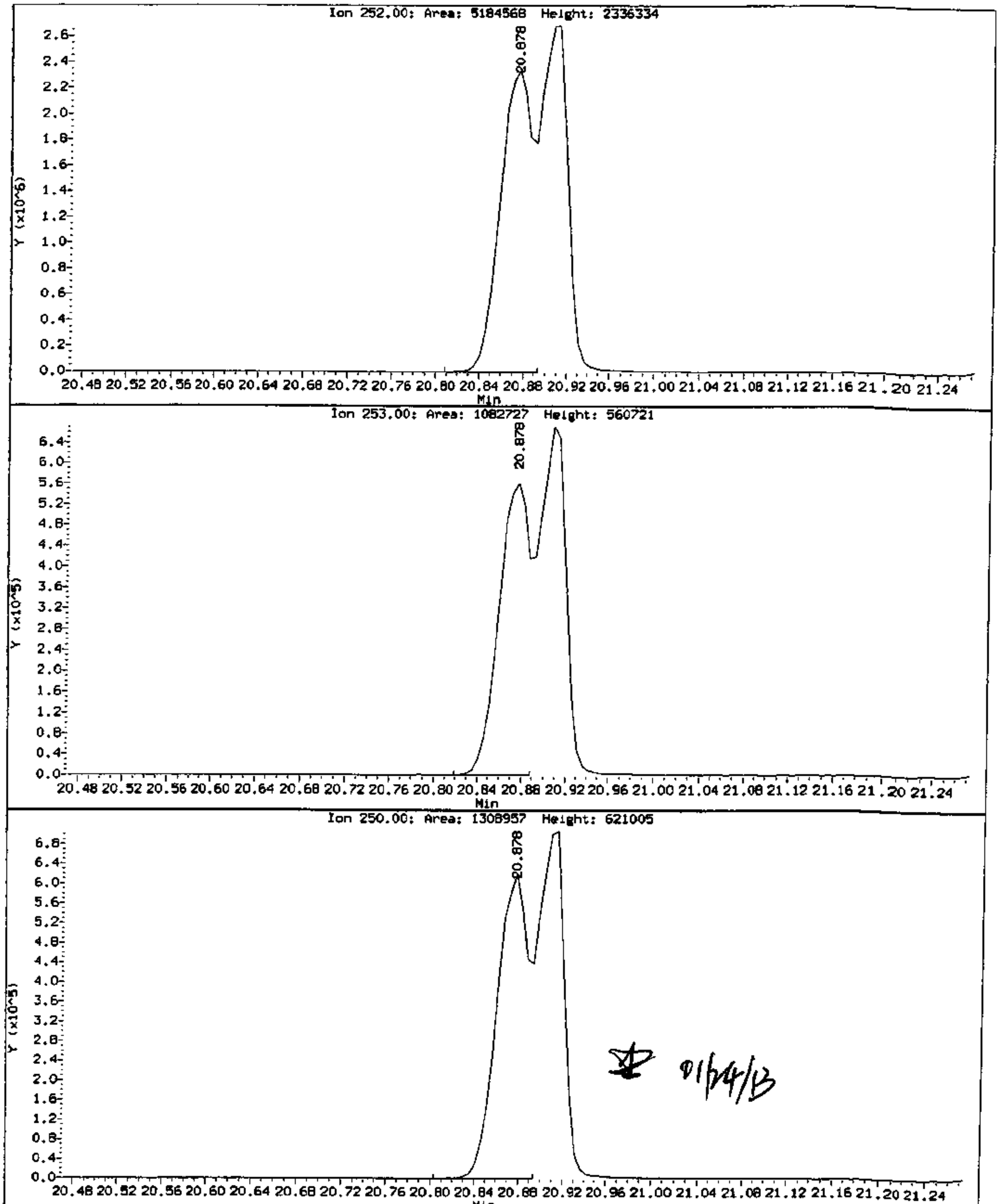
Operator: JZ

Column diameter: 0.32



Data File: /chem2/nt6.i/20130123A.b/01231315.D
Injection Date: 23-JAN-2013 19:26
Instrument: nt6.i
Client Sample ID: IC800123

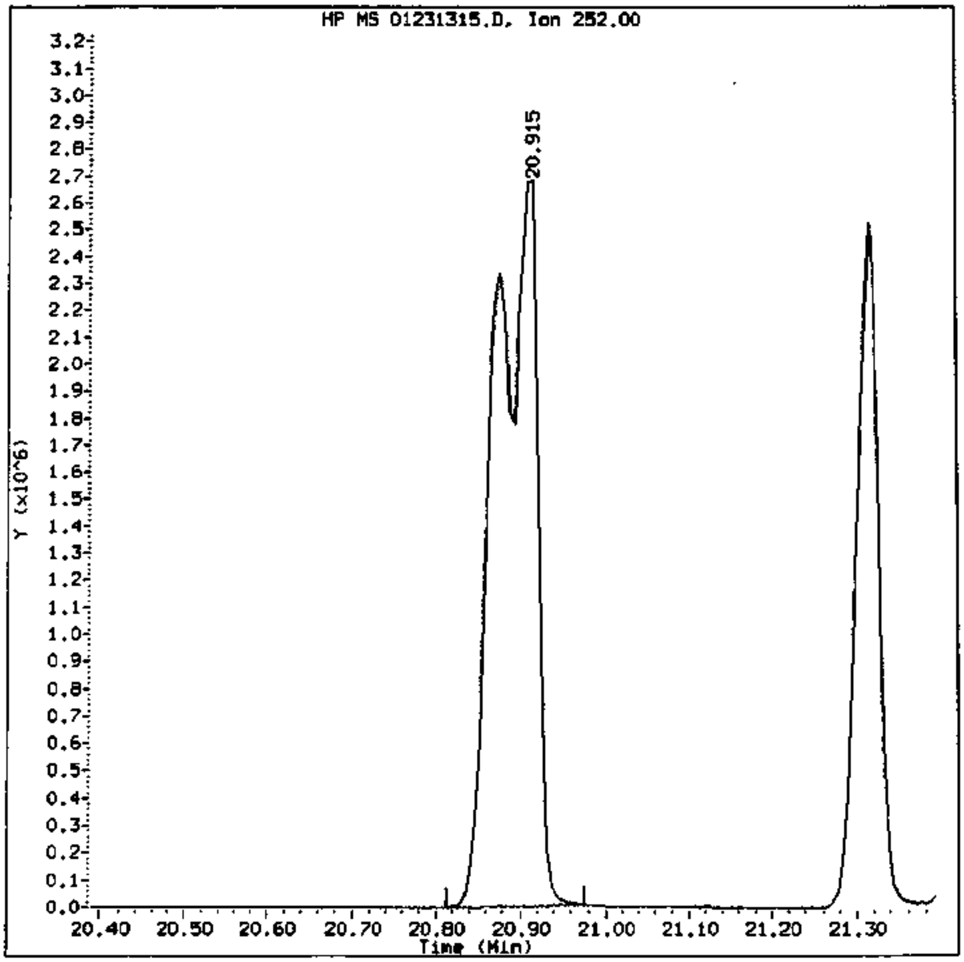
Compound: Total Benzofluoranthenes
CAS Number:



01/24/13

IC800123, /chem2/nt6.i/20130123A.b/01231315.D

Total Benzofluoranthenes   Amount: 159.89   Area: 9273614



MANUAL INTEGRATION for Total Benzofluoranthenes

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other ______________________

Analyst: ________   Date: 01/24/13

WC02 : 00443

CO-ELUTION SUMMARY FOR FILE - 01231315.D

Lab ID: IC800123, Method: SW846012313.m, Instrument: nt6.i, Date : 23-JAN-2013

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem2/nt6.i/20130123A.b/01231309.D
Lab Smp Id: IC020123 Client Smp ID: IC919123
Inj Date : 23-JAN-2013 16:01
Operator : JZ Inst ID: nt6.i
Smp Info : IC020123,
Misc Info : 13-
Comment : 1ul Injection
Method : /chem2/nt6.i/20130123A.b/SW846012313.m
Meth Date : 24-Jan-2013 12:19 jianqing Quant Type: ISTD
Cal Date : 23-JAN-2013 16:01 Cal File: 01231309.D
Als bottle: 2 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: DIOX.sub
Target Version: 3.50

JZ 01/24/13

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
* 8 1,4-Dichlorobenzene-d4	152	7.740	7.745	(1.000)	716447	20.0000	
* 27 Naphthalene-d8	136	9.781	9.781	(1.000)	2481763	20.0000	
* 42 Acenaphthene-d10	164	12.623	12.623	(1.000)	1316690	20.0000	
* 59 Phenanthrene-d10	188	14.979	14.979	(1.000)	1973322	20.0000	
* 69 Chrysene-d12	240	19.247	19.247	(1.000)	1514263	20.0000	
* 134 Di-n-octylphthalate-d4	153	20.428	20.428	(1.000)	2009516	20.0000	
* 77 Perylene-d12	264	21.384	21.378	(1.000)	1348691	20.0000	
$ 137 d8-1,4-Dioxane	96	Compound Not Detected.					
143 1,4-Dioxane	88	2.356	2.344	(0.304)	6611	0.20000	0.2305

Data File: /chem2/nt6.i/20130123A.b/01231309.D
Report Date: 24-Jan-2013 12:22

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 01231309.D
Lab Smp Id: IC020123
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem2/nt6.i/20130123A.b/SW846012313.m
Misc Info: 13-

Calibration Date: 23-JAN-2013
Calibration Time: 15:27
Client Smp ID: IC919123
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	605906	302953	1211812	716447	18.24
27 Naphthalene-d8	2147229	1073614	4294458	2481763	15.58
42 Acenaphthene-d10	1142287	571144	2284574	1316690	15.27
59 Phenanthrene-d10	1647922	823961	3295844	1973322	19.75
69 Chrysene-d12	1422286	711143	2844572	1514263	6.47
134 Di-n-octylphthala	1811653	905826	3623306	2009516	10.92
77 Perylene-d12	1374454	687227	2748908	1348691	-1.87

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	7.75	7.25	8.25	7.74	-0.09
27 Naphthalene-d8	9.79	9.29	10.29	9.78	-0.08
42 Acenaphthene-d10	12.63	12.13	13.13	12.62	-0.06
59 Phenanthrene-d10	14.98	14.48	15.48	14.98	-0.01
69 Chrysene-d12	19.25	18.75	19.75	19.25	-0.04
134 Di-n-octylphthala	20.44	19.94	20.94	20.43	-0.04
77 Perylene-d12	21.39	20.89	21.89	21.38	-0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

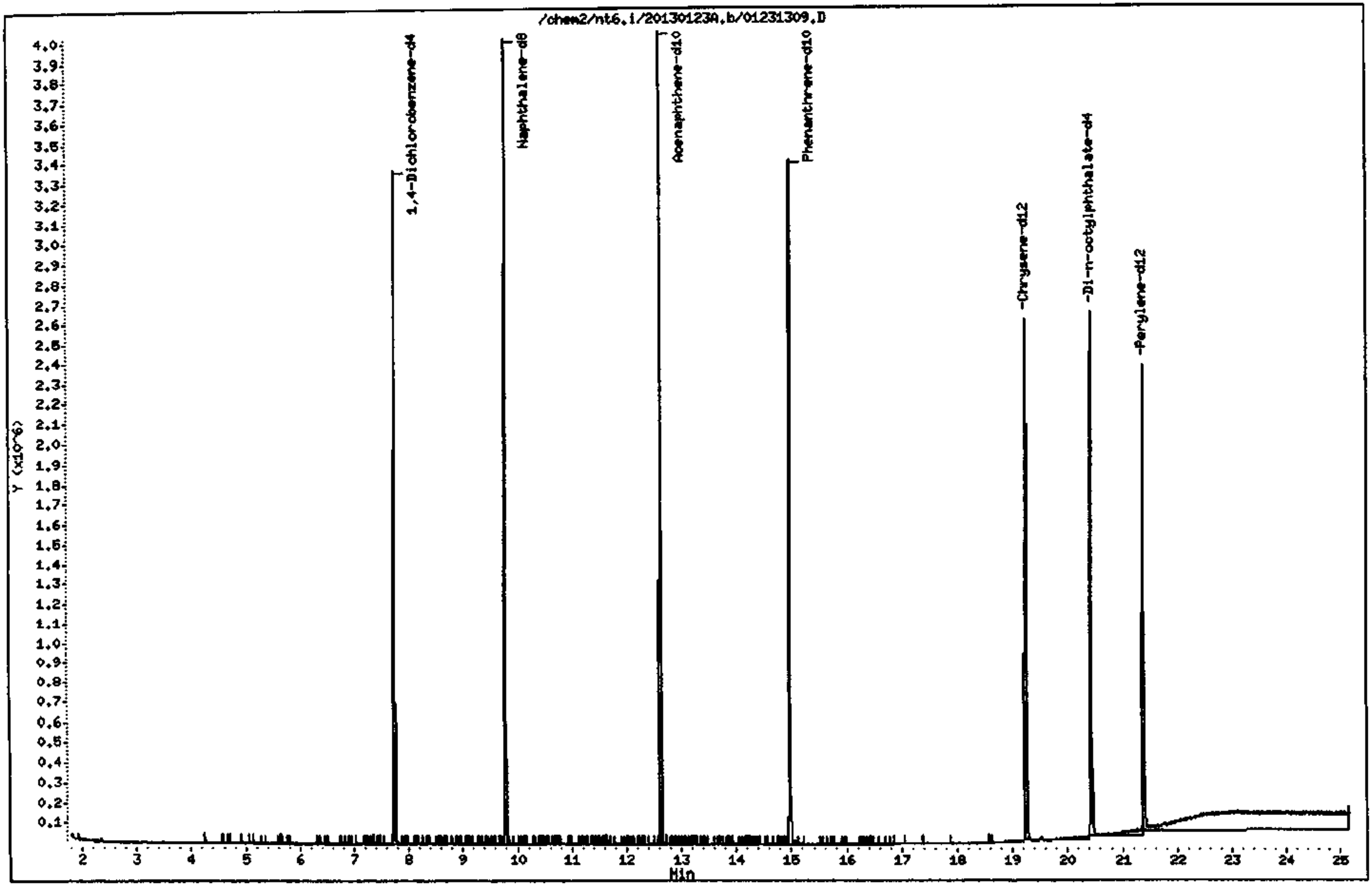
Data File: /chem2/nt6.i/20130123A.b/01231309.D
Date : 23-JAN-2013 16:01
Client ID: IC919123
Sample Info: IC020123,

Instrument: nt6.i

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.32



CO-ELUTION SUMMARY FOR FILE - 01231309.D

Lab ID: IC020123, Method: SW846012313.m, Instrument: nt6.i, Date: 23-JAN-2013

RT	CO-ELUTION COMPOUNDS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem2/nt6.i/20130123A.b/01231316.D
Lab Smp Id: ICV0123 Client Smp ID: ICV0123
Inj Date : 23-JAN-2013 19:59
Operator : JZ Inst ID: nt6.i
Smp Info : ICV0123,
Misc Info : 13-
Comment : 1ul Injection
Method : /chem2/nt6.i/20130123A.b/SW846012313.m
Meth Date : 24-Jan-2013 12:42 jianqing Quant Type: ISTD
Cal Date : 23-JAN-2013 16:37 Cal File: 01231310.D
Als bottle: 9 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALS.sub
Target Version: 3.50

JZ 01/24/13

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Vo	500.00000	Volume of sample extracted (mL)

Cpnd Variable Local Compound Variable

							CONCENTRATIONS	
		QUANT SIG					ON-COLUMN	FINAL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/L)
$	1 2-Fluorophenol	112	5.781	5.785	(0.747)	935085	24.0786	24.08
$	2 Phenol-d5	99	7.352	7.350	(0.950)	1134986	23.9028	23.90
	3 Phenol	94	7.373	7.371	(0.952)	1195855	26.0723	26.07
$	5 2-Chlorophenol-d4	132	7.448	7.451	(0.962)	915172	23.3926	23.39
	4 Bis(2-Chloroethyl)ether	93	7.427	7.425	(0.959)	942298	24.3042	24.30
	6 2-Chlorophenol	128	7.475	7.473	(0.965)	986105	25.3881	25.39
	7 1,3-Dichlorobenzene	146	7.678	7.681	(0.992)	1081470	24.2005	24.20
*	8 1,4-Dichlorobenzene-d4	152	7.742	7.745	(1.000)	584294	20.0000	
	9 1,4-Dichlorobenzene	146	7.769	7.767	(1.003)	1090874	24.5904	24.59
$	10 1,2-Dichlorobenzene-d4	152	8.041	8.044	(1.039)	640267	23.1697	23.17
	12 1,2-Dichlorobenzene	146	8.063	8.060	(1.041)	1013891	24.5915	24.59
	11 Benzyl alcohol	108	8.041	8.039	(1.039)	582145	24.3454	24.35
	14 2,2'-oxybis(1-Chloropropane)	45	8.303	8.301	(1.072)	1557662	24.7843	24.78
	13 2-Methylphenol	108	8.298	8.296	(1.072)	929654	26.8384	26.84
	17 Hexachloroethane	117	8.549	8.547	(1.104)	450409	25.0156	25.02
	16 N-Nitroso-di-n-propylamine	70	8.517	8.509	(1.100)	680441	24.1906	24.19

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
15 4-Methylphenol	108	8.533	8.525	(1.102)	955386	26.9134	26.91
$ 18 Nitrobenzene-d5	82	8.677	8.675	(0.887)	1032101	23.2095	23.21
19 Nitrobenzene	77	8.709	8.702	(0.890)	1080416	23.9522	23.95
20 Isophorone	82	9.088	9.086	(0.929)	1727355	27.4333	27.43
21 2-Nitrophenol	139	9.222	9.220	(0.943)	502535	25.7292	25.73
22 2,4-Dimethylphenol	107	9.355	9.359	(0.956)	924108	25.6259	25.63
23 Bis(2-Chloroethoxy)methane	93	9.494	9.492	(0.970)	1022334	23.0151	23.02
24 Benzoic acid	105	9.617	9.551	(0.983)	1561466	51.8370	51.84
25 2,4-Dichlorophenol	162	9.612	9.610	(0.983)	724895	25.0118	25.01
26 1,2,4-Trichlorobenzene	180	9.729	9.727	(0.995)	803277	23.9313	23.93
* 27 Naphthalene-d8	136	9.783	9.781	(1.000)	2022036	20.0000	
28 Naphthalene	128	9.815	9.813	(1.003)	2569893	27.1217	27.12
29 4-Chloroaniline	127	9.970	9.968	(1.019)	921839	25.1499	25.15
30 Hexachlorobutadiene	225	10.141	10.144	(1.037)	505506	23.9685	23.97
31 4-Chloro-3-methylphenol	107	10.798	10.801	(1.104)	719739	25.5063	25.51
32 2-Methylnaphthalene	141	10.931	10.929	(1.117)	1183735	24.0352	24.04
33 Hexachlorocyclopentadiene	237	11.316	11.314	(0.896)	561099	24.8108	24.81
34 2,4,6-Trichlorophenol	196	11.449	11.447	(0.907)	499579	25.7352	25.74
35 2,4,5-Trichlorophenol	196	11.514	11.517	(0.912)	538110	26.8967	26.90
$ 36 2-Fluorobiphenyl	172	11.578	11.576	(0.917)	1651498	22.8806	22.88
37 2-Chloronaphthalene	162	11.701	11.698	(0.927)	1407688	23.5848	23.58
38 2-Nitroaniline	65	11.946	11.944	(0.946)	459903	23.6943	23.69
39 Dimethylphthalate	163	12.326	12.318	(0.976)	1450595	23.3795	23.38
40 Acenaphthylene	152	12.374	12.372	(0.980)	2426070	26.9644	26.96
41 2,6-Dinitrotoluene	165	12.411	12.409	(0.983)	347594	23.6485	23.65
* 42 Acenaphthene-d10	164	12.625	12.623	(1.000)	1087177	20.0000	
43 3-Nitroaniline	138	12.619	12.617	(1.000)	345055	26.0060	26.01
44 Acenaphthene	153	12.673	12.671	(1.004)	1443792	25.3419	25.34
45 2,4-Dinitrophenol	184	12.785	12.783	(1.013)	466182	44.4447	44.44
46 Dibenzofuran	168	12.935	12.932	(1.025)	1805595	24.0125	24.01
47 4-Nitrophenol	109	12.956	12.965	(1.026)	244903	25.5330	25.53
48 2,4-Dinitrotoluene	165	13.031	13.029	(1.032)	440434	23.9832	23.98
50 Diethylphthalate	149	13.474	13.467	(1.067)	1425416	22.4610	22.46
49 Fluorene	166	13.485	13.483	(1.068)	1571100	26.4967	26.50
51 4-Chlorophenyl-phenylether	204	13.522	13.525	(1.071)	749839	22.9036	22.90
52 4-Nitroaniline	138	13.608	13.600	(1.078)	283164	24.0195	24.02
53 4,6-Dinitro-2-methylphenol	198	13.677	13.670	(0.913)	593203	49.4502	49.45
54 N-Nitrosodiphenylamine	169	13.731	13.723	(0.917)	1045158	22.8519	22.85
$ 55 2,4,6-Tribromophenol	330	13.907	13.905	(1.102)	199331	23.9232	23.92
56 4-Bromophenyl-phenylether	248	14.297	14.295	(0.955)	416521	23.1835	23.18
57 Hexachlorobenzene	284	14.505	14.503	(0.969)	423917	23.3719	23.37
58 Pentachlorophenol	266	14.804	14.813	(0.989)	196707	24.1905	24.19
* 59 Phenanthrene-d10	188	14.975	14.979	(1.000)	1576912	20.0000	
60 Phenanthrene	178	15.013	15.011	(1.002)	1963502	25.2646	25.26
61 Anthracene	178	15.082	15.080	(1.007)	2069190	26.1389	26.14
62 Carbazole	167	15.376	15.374	(1.027)	1675285	23.8184	23.82
63 Di-n-butylphthalate	149	16.108	16.106	(1.076)	2171257	23.9358	23.94

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
========================	====	==	======	======	========	=======	=======
64 Fluoranthene	202	16.930	16.928	(1.131)	2049755	27.2224	27.22
65 Pyrene	202	17.278	17.281	(0.897)	2111940	25.6311	25.63
$ 66 Terphenyl-d14	244	17.609	17.612	(0.915)	1141436	22.1618	22.16
67 Butylbenzylphthalate	149	18.501	18.504	(0.961)	864045	22.4657	22.47
68 Benzo(a)anthracene	228	19.228	19.226	(0.999)	1783931	26.2984	26.30
* 69 Chrysene-d12	240	19.254	19.247	(1.000)	1394914	20.0000	
70 3,3'-Dichlorobenzidine	252	19.254	19.252	(1.000)	552306	26.3826	26.38
71 Chrysene	228	19.292	19.290	(1.002)	1706339	26.1157	26.12
72 bis(2-Ethylhexyl)phthalate	149	19.500	19.503	(0.954)	1171815	23.4882	23.49
* 134 Di-n-octylphthalate-d4	153	20.430	20.428	(1.000)	1668805	20.0000	
73 Di-n-octylphthalate	149	20.440	20.438	(1.001)	1899710	22.5483	22.55
74 Benzo(b)fluoranthene	252	20.868	20.860	(0.976)	1655176	24.8342	24.83
75 Benzo(k)fluoranthene	252	20.900	20.892	(0.977)	1968401	28.2948	28.29
187 Total Benzofluoranthenes	252	20.900	20.892	(0.977)	3418834	53.5403	53.54(M)
76 Benzo(a)pyrene	252	21.306	21.298	(0.996)	1648749	26.7720	26.77
* 77 Perylene-d12	264	21.386	21.378	(1.000)	1356075	20.0000	
78 Indeno(1,2,3-cd)pyrene	276	22.780	22.773	(1.065)	2356038	27.3695	27.37
79 Dibenzo(a,h)anthracene	278	22.801	22.794	(1.066)	1891734	26.8221	26.82
80 Benzo(g,h,i)perylene	276	23.138	23.125	(1.082)	2077568	26.6723	26.67
90 N-Nitrosodimethylamine	74	2.955	2.959	(0.382)	631339	23.1069	23.11
103 Pyridine	79	2.923	2.953	(0.378)	972066	20.8041	20.80
91 Aniline	93	7.304	7.302	(0.943)	1289650	25.2724	25.27
105 1-methylnaphthalene	141	11.102	11.100	(1.135)	1212062	24.6841	24.68
93 Benzidine	184	17.198	17.201	(0.893)	383496	21.8843	21.88
111 Azobenzene (1,2-DP-Hydrazine)	77	13.768	13.766	(1.091)	1780143	23.9595	23.96
143 1,4-Dioxane	88	2.336	2.344	(0.302)	505554	24.9331	24.93
$ 137 d8-1,4-Dioxane	96	2.293	2.296	(0.296)	463366	24.5136	24.51
144 alpha-Terpineol	59	9.857	9.850	(1.008)	735361	25.9785	25.98
177 p-Benzoquinone	82	6.423	6.431	(0.656)	251588	30.6272	30.63
98 Retene	219	17.849	17.853	(0.927)	953559	27.2812	27.28
99 Perylene	252	21.418	21.416	(1.001)	1424833	26.3289	26.33
133 Butylatedhydroxytoluene	205	12.817	12.820	(1.015)	1203273	22.4524	22.45
115 Tributyl Phosphate	99	13.848	13.841	(0.925)	1854900	26.8055	26.81
116 Dibutyl Phenyl Phosphate	175	15.558	15.561	(1.039)	1143216	27.5466	27.55
117 Butyl Diphenyl Phosphate	94	17.224	17.228	(0.895)	378442	25.1777	25.18
118 Triphenyl Phosphate	326	18.811	18.809	(0.977)	287074	26.1386	26.14
123 Acetophenone	105	8.447	8.445	(1.091)	1302714	25.2565	25.26
168 Pentachlorobenzene	250	12.977	12.975	(1.028)	643237	27.1158	27.12
113 Diphenyl Oxide	170	11.904	11.901	(0.943)	1195091	26.5270	26.53
112 Biphenyl	154	11.711	11.704	(0.928)	1622053	23.8403	23.84
120 2,3,4,6-Tetrachlorophenol	232	13.223	13.226	(1.047)	395242	25.4077	25.41
151 1,2,4,5-Tetrachlorobenzene	216	11.268	11.266	(0.893)	761430	27.1713	27.17
110 Tetrachloroguaiacol	247	14.505	14.936	(0.969)	84970	9.58297	9.583
109 3,4,5-Trichloroguaiacol	213	12.977	13.328	(0.867)	118721	11.9864	11.99
181 3,4,6-Trichloroguaiacol	211	13.848	13.440	(1.789)	155169	13.0674	13.07
108 4,5,6-Trichloroguaiacol	213	14.505	14.348	(1.149)	6230	0.63789	0.6379(a)
184 3,4-Dichloroguaiacol	192	11.503	11.795	(1.486)	273	0.02424	0.02424(a)
107 4,5-Dichloroguaiacol	192	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
==========================	====	==	======	======	========	=======	=======
182 4,6-Dichloroguaiacol	192	Compound Not Detected.					
185 4-Chloroguaiacol	115	10.931	10.721	(1.412)	512477	30.7353	30.74
186 Carbaryl	144	15.793	15.791	(1.055)	952237	25.1060	25.11
178 2-Benzyl-4-Chlorophenol	218	15.755	15.758	(1.052)	358750	28.2255	28.23
106 Guaiacol	124	8.720	8.718	(1.126)	881560	27.5206	27.52
168 2,6-Dichlorophenol	162	9.612	9.978	(1.242)	724895	27.2886	27.29
189 N-Nitrosomethylethylamine	88	5.226	4.893	(0.675)	400	0.02233	0.02233(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 01231316.D
Lab Smp Id: ICV0123
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem2/nt6.i/20130123A.b/SW846012313.m
Misc Info: 13-

Calibration Date: 23-JAN-2013
Calibration Time: 15:27
Client Smp ID: ICV0123
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	605906	302953	1211812	584294	-3.57
27 Naphthalene-d8	2147229	1073614	4294458	2022036	-5.83
42 Acenaphthene-d10	1142287	571144	2284574	1087177	-4.82
59 Phenanthrene-d10	1647922	823961	3295844	1576912	-4.31
69 Chrysene-d12	1422286	711143	2844572	1394914	-1.92
134 Di-n-octylphthala	1811653	905826	3623306	1668805	-7.88
77 Perylene-d12	1374454	687227	2748908	1356075	-1.34

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	7.75	7.25	8.25	7.74	-0.07
27 Naphthalene-d8	9.79	9.29	10.29	9.78	-0.06
42 Acenaphthene-d10	12.63	12.13	13.13	12.62	-0.05
59 Phenanthrene-d10	14.98	14.48	15.48	14.98	-0.04
69 Chrysene-d12	19.25	18.75	19.75	19.25	0.00
134 Di-n-octylphthala	20.44	19.94	20.94	20.43	-0.03
77 Perylene-d12	21.39	20.89	21.89	21.39	-0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: ICV0123
Level: LOW
Data Type: MS DATA
SpikeList File: ICV.spk
Sublist File: ICALS.sub
Method File: /chem2/nt6.i/20130123A.b/SW846012313.m
Misc Info: 13-

Client SDG: 20130123A
Fraction: SV
Client Smp ID: ICV0123
Operator: JZ
SampleType: LCS
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
3 Phenol	25.00	26.07	104.29	70-130
4 Bis(2-Chloroethyl)	25.00	24.30	97.22	70-130
6 2-Chlorophenol	25.00	25.39	101.55	70-130
7 1,3-Dichlorobenzen	25.00	24.20	96.80	70-130
9 1,4-Dichlorobenzen	25.00	24.59	98.36	70-130
11 Benzyl alcohol	25.00	24.35	97.38	70-130
12 1,2-Dichlorobenzen	25.00	24.59	98.37	70-130
13 2-Methylphenol	25.00	26.84	107.35	70-130
14 2,2'-oxybis(1-Chlo	25.00	24.78	99.14	70-130
15 4-Methylphenol	25.00	26.91	107.65	70-130
16 N-Nitroso-di-n-pro	25.00	24.19	96.76	70-130
17 Hexachloroethane	25.00	25.02	100.06	70-130
19 Nitrobenzene	25.00	23.95	95.81	70-130
20 Isophorone	25.00	27.43	109.73	70-130
21 2-Nitrophenol	25.00	25.73	102.92	70-130
22 2,4-Dimethylphenol	25.00	25.63	102.50	70-130
23 Bis(2-Chloroethoxy	25.00	23.02	92.06	70-130
24 Benzoic acid	50.00	51.84	103.67	70-130
25 2,4-Dichlorophenol	25.00	25.01	100.05	70-130
26 1,2,4-Trichloroben	25.00	23.93	95.73	70-130
28 Naphthalene	25.00	27.12	108.49	70-130
29 4-Chloroaniline	25.00	25.15	100.60	70-130
30 Hexachlorobutadien	25.00	23.97	95.87	70-130
31 4-Chloro-3-methylp	25.00	25.51	102.03	70-130
32 2-Methylnaphthalen	25.00	24.04	96.14	70-130
33 Hexachlorocyclopen	25.00	24.81	99.24	70-130
34 2,4,6-Trichlorophe	25.00	25.74	102.94	70-130
35 2,4,5-Trichlorophe	25.00	26.90	107.59	70-130
37 2-Chloronaphthalen	25.00	23.58	94.34	70-130
38 2-Nitroaniline	25.00	23.69	94.78	70-130
39 Dimethylphthalate	25.00	23.38	93.52	70-130
40 Acenaphthylene	25.00	26.96	107.86	70-130
41 2,6-Dinitrotoluene	25.00	23.65	94.59	70-130

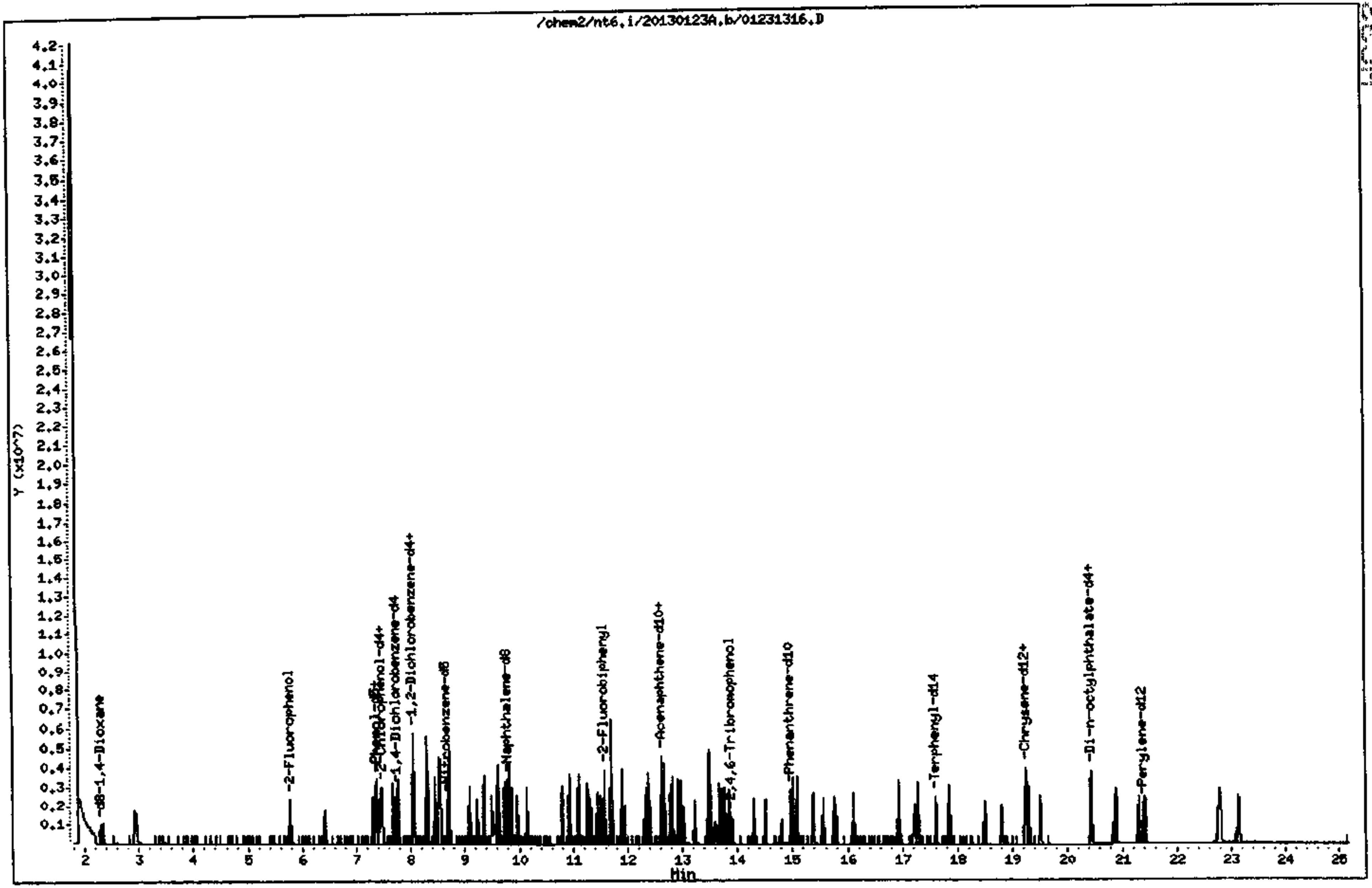
SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
43 3-Nitroaniline	25.00	26.01	104.02	70-130
44 Acenaphthene	25.00	25.34	101.37	70-130
45 2,4-Dinitrophenol	50.00	44.44	88.89	70-130
46 Dibenzofuran	25.00	24.01	96.05	70-130
47 4-Nitrophenol	25.00	25.53	102.13	70-130
48 2,4-Dinitrotoluene	25.00	23.98	95.93	70-130
49 Fluorene	25.00	26.50	105.99	70-130
50 Diethylphthalate	25.00	22.46	89.84	70-130
51 4-Chlorophenyl-phe	25.00	22.90	91.61	70-130
52 4-Nitroaniline	25.00	24.02	96.08	70-130
53 4,6-Dinitro-2-meth	50.00	49.45	98.90	70-130
54 N-Nitrosodiphenyla	25.00	22.85	91.41	70-130
56 4-Bromophenyl-phen	25.00	23.18	92.73	70-130
57 Hexachlorobenzene	25.00	23.37	93.49	70-130
58 Pentachlorophenol	25.00	24.19	96.76	70-130
60 Phenanthrene	25.00	25.26	101.06	70-130
61 Anthracene	25.00	26.14	104.56	70-130
62 Carbazole	25.00	23.82	95.27	70-130
63 Di-n-butylphthalat	25.00	23.94	95.74	70-130
64 Fluoranthene	25.00	27.22	108.89	70-130
65 Pyrene	25.00	25.63	102.52	70-130
67 Butylbenzylphthala	25.00	22.47	89.86	70-130
68 Benzo(a)anthracene	25.00	26.30	105.19	70-130
70 3,3'-Dichlorobenzi	25.00	26.38	105.53	70-130
71 Chrysene	25.00	26.12	104.46	70-130
72 bis(2-Ethylhexyl)p	25.00	23.49	93.95	70-130
73 Di-n-octylphthalat	25.00	22.55	90.19	70-130
74 Benzo(b)fluoranthe	25.00	24.83	99.34	70-130
75 Benzo(k)fluoranthe	25.00	28.29	113.18	70-130
187 Total Benzofluoran	50.00	53.54	107.08	70-130
76 Benzo(a)pyrene	25.00	26.77	107.09	70-130
78 Indeno(1,2,3-cd)py	25.00	27.37	109.48	70-130
79 Dibenzo(a,h)anthra	25.00	26.82	107.29	70-130
80 Benzo(g,h,i)peryle	25.00	26.67	106.69	70-130
90 N-Nitrosodimethyla	25.00	23.11	92.43	70-130
103 Pyridine	25.00	20.80	83.22	70-130
91 Aniline	25.00	25.27	101.09	70-130
105 1-methylnaphthalen	25.00	24.68	98.74	70-130
93 Benzidine	25.00	21.88	87.54	70-130
111 Azobenzene (1,2-DP	25.00	23.96	95.84	70-130
143 1,4-Dioxane	25.00	24.93	99.73	70-130
144 alpha-Terpineol	25.00	25.98	103.91	70-130
177 p-Benzoquinone	25.00	30.63	122.51	70-130
98 Retene	25.00	27.28	109.12	70-130
99 Perylene	25.00	26.33	105.32	70-130
133 Butylatedhydroxyto	25.00	22.45	89.81	70-130
115 Tributyl Phosphate	25.00	26.81	107.22	70-130

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
116 Dibutyl Phenyl Pho	25.00	27.55	110.19	70-130
117 Butyl Diphenyl Pho	25.00	25.18	100.71	70-130
118 Triphenyl Phosphat	25.00	26.14	104.55	70-130
123 Acetophenone	25.00	25.26	101.03	70-130
168 Pentachlorobenzene	25.00	27.12	108.46	70-130
113 Diphenyl Oxide	25.00	26.53	106.11	70-130
112 Biphenyl	25.00	23.84	95.36	70-130
120 2,3,4,6-Tetrachlor	25.00	25.41	101.63	70-130
151 1,2,4,5-Tetrachlor	25.00	27.17	108.69	70-130
106 Guaiacol	25.00	27.52	110.08	70-130
186 Carbaryl	25.00	25.11	100.42	70-130
178 2-Benzyl-4-Chlorop	25.00	28.23	112.90	70-130

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 1 2-Fluorophenol	25.00	24.08	96.31	75-125
$ 2 Phenol-d5	25.00	23.90	95.61	75-125
$ 5 2-Chlorophenol-d4	25.00	23.39	93.57	75-125
$ 10 1,2-Dichlorobenzen	25.00	23.17	92.68	75-125
$ 18 Nitrobenzene-d5	25.00	23.21	92.84	75-125
$ 36 2-Fluorobiphenyl	25.00	22.88	91.52	75-125
$ 55 2,4,6-Tribromophen	25.00	23.92	95.69	75-125
$ 66 Terphenyl-d14	25.00	22.16	88.65	75-125
$ 137 d8-1,4-Dioxane	25.00	24.51	98.05	75-125

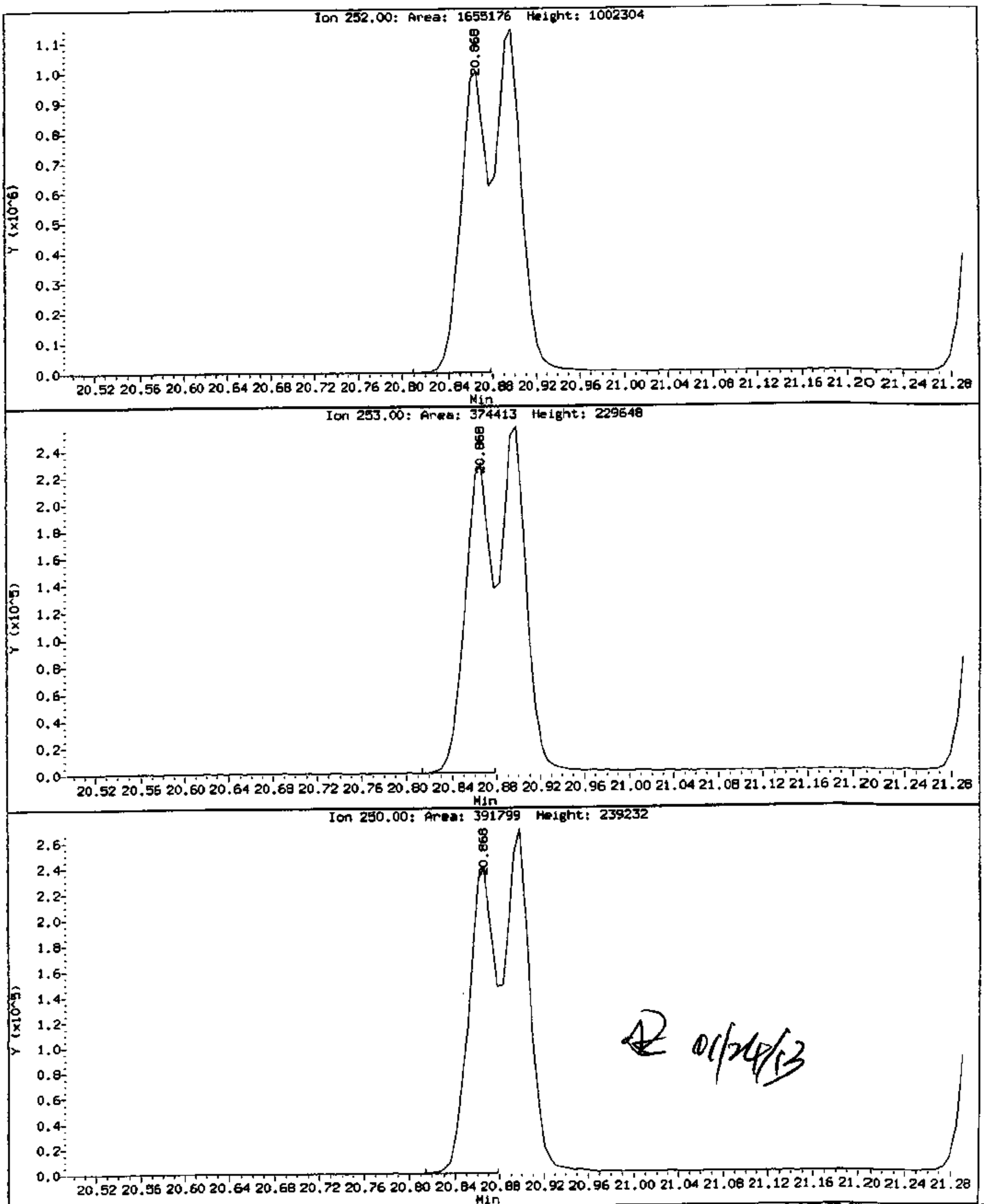
Data File: /chem2/nt6.i/20130123A.b/01231316.D
Date : 23-JAN-2013 19:59
Client ID: ICV0123
Sample Info: ICV0123,
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt6.i
Operator: JZ
Column diameter: 0.32



Data File: /chem2/nt6.i/20130123A.b/01231316.D
Injection Date: 23-JAN-2013 19:59
Instrument: nt6.i
Client Sample ID: ICV0123

Compound: Total Benzofluoranthenes
CAS Number:

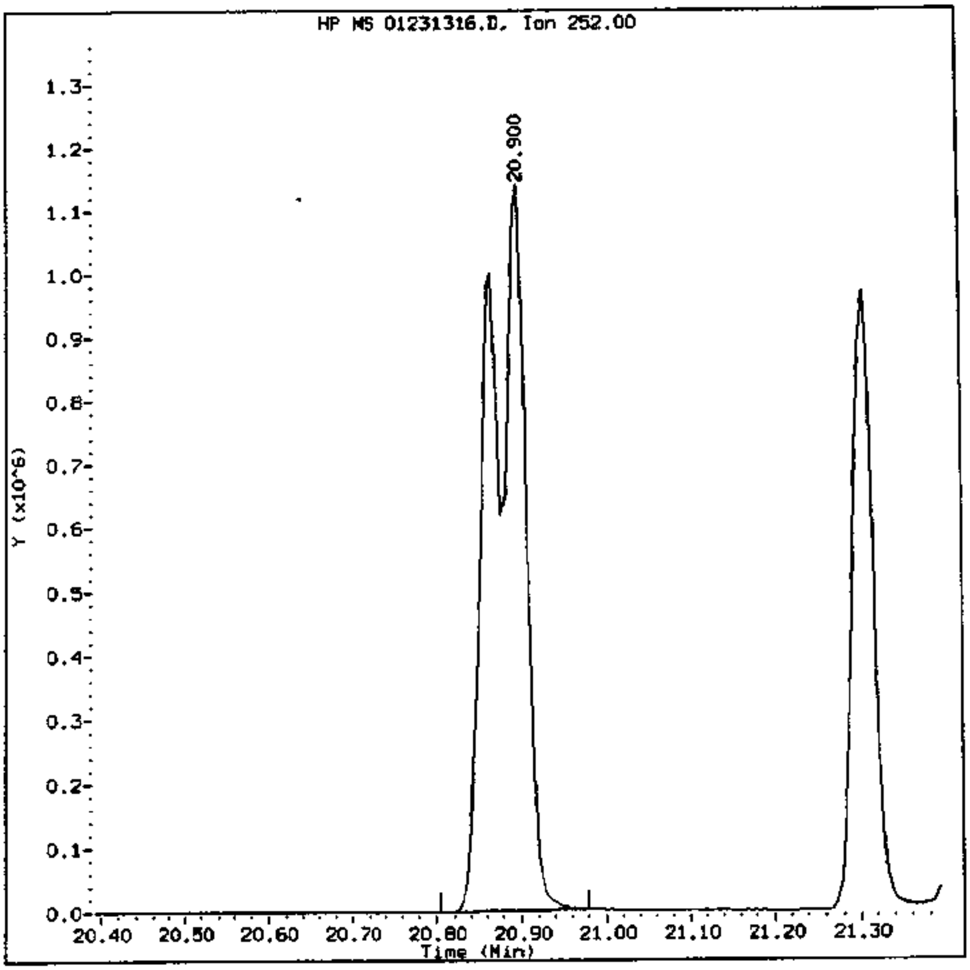


01/24/13

WC02 00456

ICV0123, /chem2/nt6.i/20130123A.b/01231316.D

Total Benzofluoranthenes Amount: 53.54 Area: 3418834



MANUAL INTEGRATION for Total Benzofluoranthenes

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other ______________________

Analyst: AR Date: 01/24/13

CO-ELUTION SUMMARY FOR FILE - 01231316.D

Lab ID: ICV0123, Method: SW846012313.m, Instrument: nt6.i, Date: 23-JAN-2013

RT	CO-ELUTION COMPOUNDS
10.931	4-Chloroguaiacol and 2-Methylnaphthalene
8.041	1,2-Dichlorobenzene-d4 and Benzyl alcohol

checked ok

01/24/13

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC/MS,SVOA Initial Calibration Notes

ARI SOP: 801S(SIM-PNA) 802S(Butyl Tins) 804S(SVOA-8270D) 805S(op-Pest)

Instrument: NT-4 NT-6 NT-8 NT-10 NT11 NT12

Curve Date(s): 01/25/13 Internal Standard ID 1898-2 Expiration 07/02/13

DFTPP Tune Meets Criteria?	YES / NO	Minimum Response Factors Met/	YES / NO
DDT Breakdown <20%?	YES / NO	ICV Exceeding ±20%?	YES / NO
Peak Tailing Factor ≤2?	YES / NO	ICV Exceeding ±30%?	YES / NO
ICal Meets %RSD & r^2 Criteria?	YES / NO	Linear Fits Used?	YES / NO
Q flag applied?	YES / NO	Quadratic Fits Used?	YES / NO
Manual Integrations for ICal?	YES / NO	Calibration Points Dropped?	YES / NO
Spectral Library Updated?	YES / NO		

Primary Source	Standard #	Expiration	Secondary Source	Standard #	Expiration
Supelco	~~2036~~-2	02/07/13	ultra	2055-1	12/05/13
	2050-1	02/07/13		2054-1	12/31/13
	2050-2	3/10/13	~~[illegible]~~	2053-2	03/13/13
	2064-2	~~[illegible]~~ 01/25/14			
	1998-4	07/02/13			

Detail problems, corrective actions and/or other pertinent information below:

- Benzoic acid, 2.4 Dinitrophenol, 4 nitrophenol, Benzidine — - quadratic fit used
- Low point of the curve dropped for Benzoic acid, 2.4 Dinitrophenol 4 nitrophenol, Benzidine, Carbazole.
- 4.6 - Dinitro-2-methylephenol ICV >30%

Analyst: YZ **Date:** 01/28/13

Reviewer: VD **Date:** 1/29/13

ø8117

Analytical Resources Inc.: Organics Instrument Log

NT-10 Serial No.:GC=CN10837018, MS= US83131105

Date: 2013/01/25 Analysis: ABN/SIM ABN Analyst: YZ

GC Program: ABN2 Column No: 247358 Column Type: ZB5msi

Instrument Tune (.U or .CT.): 1213044 EM Voltage: 1500

Calibration File: DF0125 DF0125A Curve Date: 01/25/13 Injection Vol.: 1ul

IS/SS	Ical/Ccal	LCS/ICV
1999-2	2036-2	~~2062-1~~
	2050-1	2055-1
	2050-2	2054-1
	2064-2	2053-2
	1998-4	

Document All Maintenance Tasks In StarLIMS

INTERNAL STANDARD SUMMARY FOR DATABATCH - /chem1/nt10.i/20130125.b

	Time	Filename	LabID	ClientId	DF								
1	1243	df0125.d	DFTPP	DFTPP	1	NO ISTDS FOUND							
2	1259	ic0125a.d	IC0125A		1	9.08	45623||11.76	176970||15.66	110072||18.94	188190||24.01	213461||26.51	208564||25.10	264159
3	1336	ic0125b.d	IC0125B		1	9.09	42531||11.76	165339||15.66	108731||18.95	188535||24.02	200669||26.52	189037||25.10	261190
4	1413	ic0125c.d	IC0125C		1	9.08	46358||11.75	169256||15.66	101036||18.93	170953||24.01	193229||26.51	179450||25.10	216658
5	1450	ic0125d.d	IC0125D		1	9.08	43972||11.76	158067||15.66	107461||18.94	182620||24.01	203223||26.52	202904||25.10	260852
6	1527	ic0125e.d	IC0125E		1	9.08	48848||11.75	183361||15.66	111653||18.94	191397||24.00	212807||26.51	206736||25.10	246669
7	1603	ic0125f.d	IC0125F		1	9.08	46627||11.75	174830||15.66	108034||18.94	188394||24.01	208655||26.51	204198||25.10	249953
8	1716	ic0125h.d	IC0125H		1	9.09	45029||11.75	169345||15.66	103177||18.94	178643||24.00	202095||26.50	191016||25.09	228395
9	1830	icv0125.d	ICV0125		1	9.09	40184||11.75	150675||15.66	93376||18.94	157911||24.01	188248||26.51	179036||25.10	217031
10	1902	df0125a.d	DFTPP	DFTPP	1	NO ISTDS FOUND							
11	1917	cc0125.d	CC0125		1	9.08	46321||11.75	170588||15.66	106773||18.94	184013||24.01	206971||26.51	204634||25.10	251016
12	1954	wa01mb.d	WA01MBB1		1	9.08	40065||11.75	151584||15.66	91793||18.94	159313||24.00	174429||26.50	159639||25.10	196633
13	2030	wa01sb.d	WA01LCSB1		1	9.08	42127||11.75	159650||15.66	98633||18.94	171977||24.01	196875||26.51	185431||25.10	237586
14	2106	wa01qle.d	WA01QLE		1	9.08	43091||11.75	167213||15.66	100580||18.94	176603||24.01	190339||26.50	173299||25.10	215779
15	2242	wa01a.d	WA01A		1	9.08	43275||11.75	164208||15.66	97953||18.94	166607||24.01	188349||26.52	188632||25.11	242520
16	2319	wa01b.d	WA01B		1	9.08	43784||11.75	170747||15.66	105605||18.94	179683||24.01	196568||26.52	190190||25.10	259392
17	2355	wa01c.d	WA01C		1	9.09	44751||11.75	171530||15.66	102653||18.94	175182||24.01	197186||26.52	187564||25.11	260873
18	2331	wa01d.d	WA01D		1	9.08	40012||11.76	155975||15.66	93741||18.95	162795||24.02	184994||26.55	137219||25.12	243290
19	0008	wa01e.d	WA01E		1	9.09	42943||11.76	164882||15.66	96689||18.95	166756||24.02	185290||26.52	159850||25.11	242382
20	0044	wa01f.d	WA01F		1	9.08	45587||11.76	175719||15.66	106499||18.95	185346||24.02	203487||26.53	169521||25.11	268784
21	0121	wa01g.d	WA01G		1	9.08	45396||11.76	172840||15.66	103775||18.95	176189||24.02	197633||26.52	164139||25.11	263119
22	0157	wa01gms.d	WA01GMS		1	9.09	43139||11.76	161406||15.67	99880||18.95	169688||24.02	199335||26.52	167266||25.11	266365
23	0233	wa01gmsd.d	WA01GMSD		1	9.08	42081||11.76	153485||15.67	93679||18.95	161566||24.02	186526||26.53	180512||25.11	246361

Every line must contain information or be lined out. Make all entries legible.
Start a new page for each QC period. Document All Maintenance Tasks In StarLIMS

YZ 01/28/13

W002 : 00402

Report Date : 28-Jan-2013 12:46

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem1/nt10.i/20130125.b/ABN.m
Batch File: /chem1/nt10.i/20130125.b
Inst ID: nt10.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	ic0125a	ic0125b	ic0125c	ic0125d	ic0125e	ic0125f	ic0125h
INJ.DATE:	25-JAN-2013	25-JAN-2013	25-JAN-2013	25-JAN-2013	25-JAN-2013	25-JAN-2013	25-JAN-2013
INJ.TIME:	12:59	13:36	14:13	14:50	15:27	16:03	17:16

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
$ 1 2-Fluorophenol	6.719	6.728	6.720	6.728	6.720	6.719	6.720	6.719	3.719-9.719	6.722	0.004
186 Carbaryl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.785	15.785-21.785	+++++	+++++
179 n-Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.645	5.645-11.645	+++++	+++++
180 n-Octadecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.455	14.455-20.455	+++++	+++++
169 4-tert-Butylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.696	17.696-23.696	+++++	+++++
170 N,N-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.219	16.219-22.219	+++++	+++++
171 2,3-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.559	16.559-22.559	+++++	+++++
172 2,4-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.559	16.559-22.559	+++++	+++++
173 2,5-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.949	19.949-25.949	+++++	+++++
174 2,6-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.195	16.195-22.195	+++++	+++++
175 3,4-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.559	16.559-22.559	+++++	+++++
176 3,5-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.503	17.503-23.503	+++++	+++++
177 p-Benzoquinone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.827	4.827-10.827	+++++	+++++
168 Pentachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.842	12.842-18.842	+++++	+++++
145 4,4'-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	47.212	44.212-50.212	+++++	+++++
146 4,4'-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	47.746	44.746-50.746	+++++	+++++
147 4,4'-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	48.216	45.216-51.216	+++++	+++++

Reviewer 1 ______ YZ ______ Date: 01/28/13

Reviewer 2 ______ VB ______ Date: 1/29/13

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem1/nt10.i/20130125.b/ABN.m
Batch File: /chem1/nt10.i/20130125.b
Inst ID: nt10.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
148 Dieldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	47.281	44.281-50.281	+++++	+++++
149 TCMX	+++++	+++++	+++++	+++++	+++++	+++++	+++++	43.387	40.387-46.387	+++++	+++++
150 DCBP	+++++	+++++	+++++	+++++	+++++	+++++	+++++	50.989	47.989-53.989	+++++	+++++
138 Chlorobenzilate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	67.733	64.733-70.733	+++++	+++++
139 Isodrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	65.067	62.067-68.067	+++++	+++++
140 Diallate A	+++++	+++++	+++++	+++++	+++++	+++++	+++++	65.487	62.487-68.487	+++++	+++++
141 Diallate B	+++++	+++++	+++++	+++++	+++++	+++++	+++++	65.487	62.487-68.487	+++++	+++++
142 1,2-Dibromo-3-Chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	49.917	46.917-52.917	+++++	+++++
135 2,3,5,6-Tetrachlorophe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.383	13.383-19.383	+++++	+++++
136 2,3,4,5-tetrachlorophe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	39.317	36.317-42.317	+++++	+++++
$ 137 d8-1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.445	0.000-5.445	+++++	+++++
* 134 Di-n-octylphthalate-d4	25.100	25.100	25.100	25.100	25.100	25.100	25.093	25.100	22.100-28.100	25.099	0.003
133 Butylatedhydroxytoluen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.571	12.571-18.571	+++++	+++++
132 3,6-Dimethylphenanthre	+++++	+++++	+++++	+++++	+++++	+++++	+++++	65.450	62.450-68.450	+++++	+++++
131 1-Methylphenanthrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	64.400	61.400-67.400	+++++	+++++
130 Dibenzothiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	62.100	59.100-65.100	+++++	+++++
129 1-Methylfluorene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	54.912	51.912-57.912	+++++	+++++
128 N-Hexadecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	54.212	51.212-57.212	+++++	+++++
127 2-Isopropylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	57.650	54.650-60.650	+++++	+++++
126 N-Tetradecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	56.750	53.750-59.750	+++++	+++++
144 alpha-Terpineol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.447	8.447-14.447	+++++	+++++
125 Safrole	+++++	+++++	+++++	+++++	+++++	+++++	+++++	52.166	49.166-55.166	+++++	+++++

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem1/nt10.i/20130125.b/ABN.m
Batch File: /chem1/nt10.i/20130125.b
Inst ID: nt10.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
124 3,4-Dimethylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	50.617	47.617-53.617	+++++	+++++
123 Acetophenone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.252	7.252-13.252	+++++	+++++
122 Furfuraldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	43.467	40.467-46.467	+++++	+++++
143 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.697	0.000-5.697	+++++	+++++
121 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	54.500	51.500-57.500	+++++	+++++
120 2,3,4,6-Tetrachlorophe	16.467	16.476	16.460	16.468	16.460	16.467	16.460	16.467	13.467-19.467	16.466	0.006
178 2-Benzyl-4-Chloropheno	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.963	15.963-21.963	+++++	+++++
119 7,12-Dimethylbenz(a)an	+++++	+++++	+++++	+++++	+++++	+++++	+++++	47.069	44.069-50.069	+++++	+++++
118 Triphenyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.215	18.215-24.215	+++++	+++++
127 Butyl Diphenyl Phospha	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.761	13.761-19.761	+++++	+++++
116 Dibutyl Phenyl Phospha	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.747	15.747-21.747	+++++	+++++
115 Tributyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.923	13.923-19.923	+++++	+++++
114 Beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	48.950	45.950-51.950	+++++	+++++
113 Diphenyl Oxide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.341	11.341-17.341	+++++	+++++
112 Biphenyl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.085	11.085-17.085	+++++	+++++
111 Azobenzene (1,2-DP-Hyd	17.224	17.240	17.217	17.233	17.217	17.224	17.217	17.224	14.224-20.224	17.225	0.009
110 Tetrachloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.324	14.324-20.324	+++++	+++++
109 3,4,5-Trichloroguaiaco	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.115	12.115-18.115	+++++	+++++
181 3,4,6-Trichloroguaiaco	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.270	12.270-18.270	+++++	+++++
108 4,5,6-Trichloroguaiaco	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.519	13.519-19.519	+++++	+++++
184 3,4-Dichloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.019	10.019-16.019	+++++	+++++
107 4,5-Dichloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.095	11.095-17.095	+++++	+++++
182 4,6-Dichloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.118	11.118-17.118	+++++	+++++
185 4-Chloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.572	8.572-14.572	+++++	+++++

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem1/nt10.i/20130125.b/ABN.m
Batch File: /chem1/nt10.i/20130125.b
Inst ID: nt10.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	106 Guaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.243	6.243-12.243	+++++	+++++
	105 1-methylnaphthalene	13.551	13.551	13.543	13.551	13.543	13.551	13.544	13.551	10.551-16.551	13.548	0.004
	151 1,2,4,5-Tetrachloroben	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.499	8.499-14.499	+++++	+++++
	152 Benzo(e)pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	30.943	27.943-33.943	+++++	+++++
	153 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	27.642	24.642-30.642	+++++	+++++
	154 Diazinon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	25.953	22.953-28.953	+++++	+++++
	155 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	27.750	24.750-30.750	+++++	+++++
	156 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	26.464	23.464-29.464	+++++	+++++
	157 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	27.099	24.099-30.099	+++++	+++++
	158 Ethion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	24.513	21.513-27.513	+++++	+++++
	159 4-Nonylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	25.132	22.132-28.132	+++++	+++++
	160 Tetraethyl Tin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.528	16.528-22.528	+++++	+++++
	161 1,2,3-Trichloronaphtha	+++++	+++++	+++++	+++++	+++++	+++++	+++++	36.246	33.246-39.246	+++++	+++++
	162 1,2,3,4-Tetrachloronap	+++++	+++++	+++++	+++++	+++++	+++++	+++++	37.506	34.506-40.506	+++++	+++++
	163 1,2,3,5,8-Pentachloron	+++++	+++++	+++++	+++++	+++++	+++++	+++++	38.893	35.893-41.893	+++++	+++++
	164 1,2,3,4,6,7-Hexachloro	+++++	+++++	+++++	+++++	+++++	+++++	+++++	39.681	36.681-42.681	+++++	+++++
	165 1,2,3,4,5,6,7-Heptachl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	41.123	38.123-44.123	+++++	+++++
	166 Octachloronaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	42.253	39.253-45.253	+++++	+++++
	167 2,2',4,4',5-Pentabromo	+++++	+++++	+++++	+++++	+++++	+++++	+++++	42.033	39.033-45.033	+++++	+++++
$	2 Phenol-d5	8.435	8.451	8.428	8.435	8.428	8.427	8.428	8.435	5.435-11.435	8.433	0.009
	3 Phenol	8.458	8.474	8.451	8.459	8.451	8.451	8.451	8.458	5.458-11.458	8.456	0.009
	4 Bis(2-Chloroethyl)ethe	8.620	8.629	8.621	8.621	8.621	8.620	8.621	8.620	5.620-11.620	8.622	0.003
$	5 2-Chlorophenol-d4	8.698	8.706	8.698	8.698	8.698	8.698	8.698	8.698	5.698-11.698	8.699	0.003

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem1/nt10.i/20130125.b/ABN.m
Batch File: /chem1/nt10.i/20130125.b
Inst ID: nt10.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	6 2-Chlorophenol	8.729	8.737	8.729	8.729	8.729	8.729	8.729	8.729	5.729-11.729	8.730	0.003
	7 1,3-Dichlorobenzene	9.015	9.015	9.015	9.015	9.015	9.015	9.015	9.015	6.015-12.015	9.015	0.000
*	8 1,4-Dichlorobenzene-d4	9.085	9.085	9.085	9.085	9.085	9.085	9.085	9.085	6.085-12.085	9.085	0.000
	9 1,4-Dichlorobenzene	9.116	9.124	9.116	9.116	9.116	9.116	9.116	9.116	6.116-12.116	9.117	0.003
$	10 1,2-Dichlorobenzene-d4	9.465	9.473	9.465	9.473	9.465	9.465	9.465	9.465	6.465-12.465	9.467	0.004
	11 Benzyl alcohol	9.387	9.403	9.387	9.395	9.387	9.387	9.388	9.387	6.387-12.387	9.391	0.006
	12 1,2-Dichlorobenzene	9.496	9.504	9.496	9.496	9.496	9.496	9.496	9.496	6.496-12.496	9.497	0.003
	13 2-Methylphenol	9.651	9.659	9.644	9.652	9.644	9.643	9.644	9.651	6.651-12.651	9.648	0.006
	14 2,2'-oxybis(1-Chloropr	9.721	9.729	9.714	9.721	9.721	9.721	9.722	9.721	6.721-12.721	9.721	0.005
	15 4-Methylphenol	9.938	9.954	9.939	9.947	9.939	9.938	9.939	9.938	6.938-12.938	9.942	0.006
	16 N-Nitroso-di-n-propyla	10.000	10.016	10.001	10.001	10.001	9.993	9.993	10.000	7.000-13.000	10.001	0.008
	17 Hexachloroethane	10.132	10.133	10.125	10.133	10.133	10.132	10.133	10.132	7.132-13.132	10.132	0.003
$	18 Nitrobenzene-d5	10.264	10.273	10.257	10.265	10.265	10.264	10.257	10.264	7.264-13.264	10.263	0.005
	19 Nitrobenzene	10.303	10.311	10.296	10.303	10.296	10.295	10.296	10.303	7.303-13.303	10.300	0.006
	20 Isophorone	10.792	10.816	10.785	10.800	10.785	10.784	10.785	10.792	7.792-13.792	10.792	0.012
	21 2-Nitrophenol	10.978	10.986	10.978	10.978	10.978	10.978	10.978	10.978	7.978-13.978	10.979	0.003
	22 2,4-Dimethylphenol	11.070	11.078	11.063	11.071	11.063	11.063	11.063	11.070	8.070-14.070	11.067	0.006
	23 Bis(2-Chloroethoxy)met	11.278	11.286	11.279	11.279	11.279	11.278	11.271	11.278	8.278-14.278	11.279	0.004
	24 Benzoic acid	11.325	11.487	11.163	11.402	11.217	11.271	11.186	11.325	8.325-14.325	11.293	0.119
	25 2,4-Dichlorophenol	11.471	11.487	11.471	11.479	11.471	11.471	11.464	11.471	8.471-14.471	11.473	0.007
	26 1,2,4-Trichlorobenzene	11.671	11.672	11.664	11.672	11.664	11.671	11.664	11.671	8.671-14.671	11.668	0.004
*	27 Naphthalene-d8	11.756	11.757	11.749	11.757	11.749	11.749	11.749	11.756	8.756-14.756	11.752	0.004
	28 Naphthalene	11.795	11.803	11.795	11.795	11.795	11.795	11.795	11.795	8.795-14.795	11.796	0.003
	29 4-Chloroaniline	11.965	11.981	11.957	11.965	11.957	11.957	11.957	11.965	8.965-14.965	11.963	0.009

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem1/nt10.i/20130125.b/ABN.m
Batch File: /chem1/nt10.i/20130125.b
Inst ID: nt10.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	30 Hexachlorobutadiene	12.212	12.212	12.205	12.212	12.212	12.212	12.205	12.212	9.212-15.212	12.210	0.004
	31 4-Chloro-3-methylpheno	13.025	13.033	13.017	13.025	13.017	13.017	13.017	13.025	10.025-16.025	13.022	0.006
	32 2-Methylnaphthalene	13.311	13.311	13.303	13.311	13.311	13.311	13.311	13.311	10.311-16.311	13.310	0.003
	33 Hexachlorocyclopentadi	13.822	13.830	13.822	13.830	13.822	13.822	13.822	13.822	10.822-16.822	13.824	0.004
	34 2,4,6-Trichlorophenol	13.992	14.000	13.992	14.000	13.992	13.992	13.992	13.992	10.992-16.992	13.994	0.004
	35 2,4,5-Trichlorophenol	14.069	14.078	14.070	14.070	14.062	14.069	14.070	14.069	11.069-17.069	14.070	0.005
$	36 2-Fluorobiphenyl	14.178	14.178	14.170	14.178	14.170	14.170	14.170	14.178	11.178-17.178	14.174	0.004
	37 2-Chloronaphthalene	14.379	14.387	14.371	14.379	14.379	14.379	14.379	14.379	11.379-17.379	14.379	0.005
	38 2-Nitroaniline	14.681	14.697	14.673	14.681	14.673	14.673	14.674	14.681	11.681-17.681	14.679	0.009
	39 Dimethylphthalate	15.176	15.192	15.169	15.176	15.169	15.168	15.169	15.176	12.176-18.176	15.174	0.009
	40 Acenaphthylene	15.315	15.324	15.316	15.316	15.316	15.316	15.316	15.315	12.315-18.315	15.317	0.003
	41 2,6-Dinitrotoluene	15.308	15.324	15.300	15.316	15.300	15.308	15.300	15.308	12.308-18.308	15.308	0.009
*	42 Acenaphthene-d10	15.664	15.664	15.656	15.664	15.656	15.664	15.656	15.664	12.664-18.664	15.660	0.004
	43 3-Nitroaniline	15.609	15.625	15.594	15.618	15.594	15.602	15.594	15.609	12.609-18.609	15.605	0.013
	44 Acenaphthene	15.733	15.741	15.726	15.733	15.726	15.733	15.726	15.733	12.733-18.733	15.731	0.006
	45 2,4-Dinitrophenol	15.834	15.865	15.826	15.842	15.826	15.826	15.826	15.834	12.834-18.834	15.835	0.014
	46 Dibenzofuran	16.089	16.105	16.081	16.097	16.081	16.089	16.089	16.089	13.089-19.089	16.090	0.008
	47 4-Nitrophenol	15.980	16.012	15.973	15.989	15.973	15.973	15.973	15.980	12.980-18.980	15.982	0.014
	48 2,4-Dinitrotoluene	16.181	16.197	16.174	16.190	16.174	16.174	16.174	16.181	13.181-19.181	16.181	0.009
	49 Fluorene	16.862	16.870	16.854	16.870	16.854	16.862	16.855	16.862	13.862-19.862	16.861	0.007
	50 Diethylphthalate	16.761	16.785	16.754	16.769	16.754	16.761	16.754	16.761	13.761-19.761	16.763	0.011
	51 4-Chlorophenyl-phenyle	16.877	16.885	16.870	16.878	16.870	16.877	16.870	16.877	13.877-19.877	16.875	0.006
	52 4-Nitroaniline	16.985	17.024	16.963	16.994	16.970	16.978	16.963	16.985	13.985-19.985	16.982	0.022
	53 4,6-Dinitro-2-methylph	17.086	17.117	17.070	17.101	17.078	17.078	17.071	17.086	14.086-20.086	17.086	0.017

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem1/nt10.i/20130125.b/ABN.m
Batch File: /chem1/nt10.i/20130125.b
Inst ID: nt10.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	54 N-Nitrosodiphenylamine	17.155	17.163	17.148	17.155	17.148	17.147	17.148	17.155	14.155-20.155	17.152	0.006
$	55 2,4,6-Tribromophenol	17.440	17.448	17.433	17.441	17.433	17.440	17.433	17.440	14.440-20.440	17.438	0.006
	56 4-Bromophenyl-phenylet	17.965	17.965	17.957	17.965	17.957	17.957	17.957	17.965	14.965-20.965	17.961	0.004
	57 Hexachlorobenzene	18.289	18.289	18.281	18.282	18.281	18.281	18.274	18.289	15.289-21.289	18.283	0.005
	58 Pentachlorophenol	18.676	18.684	18.669	18.676	18.669	18.676	18.669	18.676	15.676-21.676	18.674	0.006
*	59 Phenanthrene-d10	18.939	18.947	18.932	18.939	18.939	18.939	18.940	18.939	15.939-21.939	18.939	0.005
	60 Phenanthrene	18.986	19.001	18.986	18.994	18.986	18.986	18.986	18.986	15.986-21.986	18.989	0.006
	61 Anthracene	19.086	19.094	19.079	19.086	19.079	19.086	19.079	19.086	16.086-22.086	19.084	0.006
	62 Carbazole	19.434	19.442	19.435	19.442	19.435	19.434	19.435	19.434	16.434-22.434	19.437	0.004
	63 Di-n-butylphthalate	20.293	20.301	20.293	20.293	20.293	20.293	20.294	20.293	17.293-23.293	20.294	0.003
	64 Fluoranthene	21.399	21.400	21.392	21.400	21.392	21.392	21.392	21.399	18.399-24.399	21.395	0.004
	65 Pyrene	21.817	21.825	21.810	21.818	21.810	21.810	21.810	21.817	18.817-24.817	21.814	0.006
$	66 Terphenyl-d14	22.135	22.135	22.127	22.135	22.127	22.135	22.127	22.135	19.135-25.135	22.131	0.004
	67 Butylbenzylphthalate	23.079	23.080	23.079	23.080	23.072	23.079	23.072	23.079	20.079-26.079	23.077	0.004
	68 Benzo(a)anthracene	23.977	23.986	23.978	23.985	23.978	23.977	23.970	23.977	20.977-26.977	23.979	0.005
*	69 Chrysene-d12	24.008	24.017	24.009	24.009	24.001	24.008	24.001	24.008	21.008-27.008	24.007	0.005
	70 3,3'-Dichlorobenzidine	23.954	23.970	23.954	23.962	23.947	23.954	23.947	23.954	20.954-26.954	23.955	0.008
	71 Chrysene	24.055	24.063	24.047	24.055	24.047	24.047	24.048	24.055	21.055-27.055	24.052	0.006
	72 bis(2-Ethylhexyl)phtha	24.117	24.125	24.117	24.117	24.117	24.117	24.117	24.117	21.117-27.117	24.118	0.003
	73 Di-n-octylphthalate	25.108	25.116	25.108	25.108	25.108	25.108	25.108	25.108	22.108-28.108	25.109	0.003
	74 Benzo(b)fluoranthene	25.804	25.813	25.797	25.805	25.797	25.797	25.789	25.804	22.804-28.804	25.800	0.008
	75 Benzo(k)fluoranthene	25.843	25.859	25.836	25.843	25.836	25.835	25.836	25.843	22.843-28.843	25.841	0.009
	187 Total Benzofluoranthen	25.843	25.859	25.797	25.843	25.836	25.835	25.836	25.843	22.843-28.843	25.836	0.019
	76 Benzo(a)pyrene	26.401	26.416	26.393	26.401	26.393	26.393	26.393	26.401	23.401-29.401	26.399	0.009

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem1/nt10.i/20130125.b/ABN.m
Batch File: /chem1/nt10.i/20130125.b
Inst ID: nt10.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
*	77 Perylene-d12	26.509	26.517	26.509	26.517	26.509	26.509	26.502	26.509	23.509-29.509	26.510	0.005
	78 Indeno(1,2,3-cd)pyrene	28.942	28.958	28.926	28.942	28.926	28.934	28.919	28.942	25.942-31.942	28.935	0.013
	79 Dibenzo(a,h)anthracene	28.957	28.989	28.950	28.973	28.950	28.957	28.942	28.957	25.957-31.957	28.960	0.016
	80 Benzo(g,h,i)perylene	29.648	29.680	29.633	29.657	29.625	29.641	29.633	29.648	26.648-32.648	29.645	0.018
$	85 p-Cresol-d4	+++++	+++++	+++++	+++++	+++++	+++++	+++++	51.633	48.633-54.633	+++++	+++++
$	86 Anthracene-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	63.533	60.533-66.533	+++++	+++++
$	87 Fluoranthene-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	60.273	57.273-63.273	+++++	+++++
$	88 Dibenz(a,h)anthracene-	+++++	+++++	+++++	+++++	+++++	+++++	+++++	78.600	75.600-81.600	+++++	+++++
$	89 Diphenyl-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	50.841	47.841-53.841	+++++	+++++
	90 N-Nitrosodimethylamine	4.442	4.457	4.450	4.450	4.442	4.434	4.442	4.442	1.442-7.442	4.445	0.008
	91 Aniline	8.512	8.521	8.505	8.513	8.505	8.512	8.505	8.512	5.512-11.512	8.510	0.006
	92 1,2-Diphenylhydrazine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	56.160	53.160-59.160	+++++	+++++
	93 Benzidine	21.655	21.655	21.647	21.655	21.647	21.655	21.648	21.655	18.655-24.655	21.652	0.004
$	95 D10-1-methylnaphthalen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	52.075	49.075-55.075	+++++	+++++
	96 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	49.250	46.250-52.250	+++++	+++++
	97 Caffeine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	61.202	58.202-64.202	+++++	+++++
	98 Retene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.429	18.429-24.429	+++++	+++++
	99 Perylene	26.563	26.579	26.556	26.564	26.556	26.556	26.548	26.563	23.563-29.563	26.560	0.010
	100 3-beta-Coprostanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	25.411	22.411-28.411	+++++	+++++
	101 Cholesterol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	26.023	23.023-29.023	+++++	+++++
	102 beta-Sitosterol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	79.550	76.550-82.550	+++++	+++++
	103 Pyridine	4.457	4.450	4.496	4.457	4.473	4.457	4.481	4.457	1.457-7.457	4.467	0.017
	188 2,6-Dichlorophenol	11.980	11.988	11.973	11.988	11.973	11.980	11.973	11.980	8.980-14.980	11.979	0.007
	189 N-Nitrosomethylethylam	5.901	5.917	5.909	5.909	5.909	5.909	5.909	5.901	2.901-8.901	5.909	0.005

Analytical Resources, Inc.

Averaged.

INITIAL CALIBRATION DATA

Start Cal Date : 25-JAN-2013 12:59
End Cal Date : 25-JAN-2013 17:16
Quant Method : ISTD
Origin : Force
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/nt10.i/20130125.b/ABN.m
Cal Date : 28-Jan-2013 12:34 yev

Calibration File Names:
Level 1: /chem1/nt10.i/20130125.b/ic0125c.d
Level 2: /chem1/nt10.i/20130125.b/ic0125h.d
Level 3: /chem1/nt10.i/20130125.b/ic0125e.d
Level 4: /chem1/nt10.i/20130125.b/ic0125f.d
Level 5: /chem1/nt10.i/20130125.b/ic0125a.d
Level 6: /chem1/nt10.i/20130125.b/ic0125d.d
Level 7: /chem1/nt10.i/20130125.b/ic0125b.d

Compound	0.2000 Level 1 / 20 Level 7	0.5000 Level 2	1 Level 3	2 Level 4	5 Level 5	10 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
186 Carbaryl	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
179 n-Decane	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
180 n-Octadecane	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
169 4-tert-Butylphenol	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

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Integrator : HP RTE
Method file : /chem1/nt10.i/20130125.b/ABN.m
Cal Date : 28-Jan-2013 12:34 yev

Compound	0.2000 Level 1	0.5000 Level 2	1 Level 3	2 Level 4	5 Level 5	10 Level 6	20 Level 7	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2	
143 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
121 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	
120 2,3,4,6-Tetrachlorophenol	0.32876	0.34403	0.37326	0.38202	0.39296	0.39166	0.39526	AVRG		0.37257		7.03242	
178 2-Benzyl-4-Chlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
119 7,12-Dimethylbenz(a)anthracen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	
118 Triphenyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
117 Butyl Diphenyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 25-JAN-2013 12:59
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Quant Method : ISTD
Origin : Force
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/nt10.i/20130125.b/ABN.m
Cal Date : 28-Jan-2013 12:34 yev

Compound	0.2000 Level 1 / 20 Level 7	0.5000 Level 2	1 Level 3	2 Level 4	5 Level 5	10 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
106 Guaiacol	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
105 1-methylnaphthalene	0.68712 / 0.62899	0.61568	0.61713	0.60970	0.62479	0.62906	AVRG		0.63035		4.13400	
151 1,2,4,5-Tetrachlorobenzene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
152 Benzo(e)pyrene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	
153 Chlorpyrifos	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	
154 Diazinon	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	
155 Kelthane	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 25-JAN-2013 12:59
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Integrator : HP RTE
Method file : /chem1/nt10.i/20130125.b/ABN.m
Cal Date : 28-Jan-2013 12:34 yev

Compound	0.2000 Level 1	0.5000 Level 2	1 Level 3	2 Level 4	5 Level 5	10 Level 6	20 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
163 1,2,3,5,8-Pentachloronaphthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
164 1,2,3,4,6,7-Hexachloronaphtha	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
165 1,2,3,4,5,6,7-Heptachloronaph	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
166 Octachloronaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
167 2,2',4,4',5-Pentabromobipheny	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
3 Phenol	1.85175	1.68940	1.64707	1.63733	1.68988	1.61673	1.56109	AVRG		1.67046		5.47002
4 Bis(2-Chloroethyl)ether	1.40493	1.30334	1.30347	1.24707	1.28325	1.21128	1.14349	AVRG		1.27098		6.47097

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 25-JAN-2013 12:59
End Cal Date : 25-JAN-2013 17:16
Quant Method : ISTD
Origin : Force
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/nt10.i/20130125.b/ABN.m
Cal Date : 28-Jan-2013 12:34 yev

Compound	0.2000 Level 1 / 20 Level 7	0.5000 Level 2	1 Level 3	2 Level 4	5 Level 5	10 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
6 2-Chlorophenol	1.59520	1.46146	1.47707	1.40489	1.45513	1.41902					
	1.36285						AVRG		1.45366		5.06063
7 1,3-Dichlorobenzene	1.83372	1.63504	1.58082	1.51847	1.53497	1.52312					
	1.44646						AVRG		1.58180		7.92392
9 1,4-Dichlorobenzene	1.82470	1.55544	1.60187	1.50303	1.51800	1.51039					
	1.45049						AVRG		1.56627		7.86403
11 Benzyl alcohol	0.84043	0.76875	0.79217	0.77311	0.81313	0.81712					
	0.79116						AVRG		0.79941		3.20420
12 1,2-Dichlorobenzene	1.73768	1.52346	1.51327	1.44648	1.47158	1.44915					
	1.40064						AVRG		1.50604		7.32876
13 2-Methylphenol	1.34993	1.22001	1.24558	1.22322	1.30059	1.26671					
	1.22080						AVRG		1.26098		3.89432
14 2,2'-oxybis(1-Chloropropane)	0.48018	0.44753	0.44284	0.44270	0.44800	0.44534					
	0.42355						AVRG		0.44716		3.75395

Analytical Resources, Inc.

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15 4-Methylphenol	1.34226	1.29197	1.31371	1.30699	1.33604	1.31349					
	1.27512						AVRG		1.31137		1.78362
16 N-Nitroso-di-n-propylamine	0.91573	0.79575	0.85580	0.81875	0.86236	0.84584					
	0.80313						AVRG		0.84248		4.90461
17 Hexachloroethane	0.67992	0.60175	0.63806	0.59248	0.60974	0.61412					
	0.59743						AVRG		0.61907		4.95719
19 Nitrobenzene	0.38734	0.34048	0.34857	0.34062	0.34785	0.34389					
	0.34151						AVRG		0.35004		4.79352
20 Isophorone	0.63301	0.56793	0.60847	0.59443	0.62728	0.61846					
	0.62125						AVRG		0.61012		3.68947
21 2-Nitrophenol	0.19332	0.18421	0.20543	0.20796	0.21920	0.21663					
	0.21298						AVRG		0.20568		6.19855
22 2,4-Dimethylphenol	0.37623	0.34842	0.35856	0.34561	0.35338	0.34129					
	0.33058						AVRG		0.35058		4.10928

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Compound	0.2000 Level 1 / 20 Level 7	0.5000 Level 2	1 Level 3	2 Level 4	5 Level 5	10 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
23 Bis(2-Chloroethoxy)methane	0.42114 0.36096	0.39616	0.38461	0.37952	0.38304	0.36431	AVRG		0.38425		5.27643
24 Benzoic acid	+++++ 0.31370	0.16802	0.24258	0.27289	0.30536	0.30569	AVRG		0.26804		20.82037 <-
25 2,4-Dichlorophenol	0.31804 0.29711	0.29394	0.30839	0.30694	0.31451	0.30586	AVRG		0.30640		2.81805
26 1,2,4-Trichlorobenzene	0.40294 0.31675	0.36312	0.35495	0.33490	0.33893	0.32931	AVRG		0.34870		8.17173
28 Naphthalene	1.17113 0.98667	1.06629	1.04085	1.00184	1.01216	1.00690	AVRG		1.04083		6.08299
29 4-Chloroaniline	0.43597 0.42308	0.40727	0.41596	0.40868	0.42429	0.41696	AVRG		0.41889		2.36753
30 Hexachlorobutadiene	0.23385 0.21128	0.21233	0.22032	0.21378	0.21418	0.21548	AVRG		0.21732		3.61019

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Compound	0.2000 Level 1 / 20 Level 7	0.5000 Level 2	1 Level 3	2 Level 4	5 Level 5	10 Level 6	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
31 4-Chloro-3-methylphenol	0.26481	0.27149	0.29550	0.29260	0.31285	0.31892					
	0.31685						AVRG		0.29615		7.33327
32 2-Methylnaphthalene	0.73829	0.66758	0.67440	0.65675	0.70171	0.68317					
	0.68851						AVRG		0.68720		3.90226
33 Hexachlorocyclopentadiene	0.44473	0.40757	0.44583	0.44429	0.47974	0.46666					
	0.46906						AVRG		0.45113		5.27242
34 2,4,6-Trichlorophenol	0.37875	0.37012	0.40921	0.40113	0.41623	0.41485					
	0.41565						AVRG		0.40085		4.72757
35 2,4,5-Trichlorophenol	0.37884	0.39598	0.42331	0.43767	0.44881	0.45127					
	0.44592						AVRG		0.42597		6.65640
37 2-Chloronaphthalene	1.23689	1.06915	1.09647	1.07749	1.10903	1.07360					
	1.07168						AVRG		1.10490		5.43307
38 2-Nitroaniline	0.21672	0.22323	0.25658	0.26793	0.28461	0.28174					
	0.28315						AVRG		0.25914		11.03790

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Compound	0.2000 Level 1 / 20 Level 7	0.5000 Level 2	1 Level 3	2 Level 4	5 Level 5	10 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
39 Dimethylphthalate	1.30877 / 1.12753	1.22841	1.23078	1.18054	1.21915	1.17353	AVRG		1.20981		4.72547	
40 Acenaphthylene	1.86378 / 1.70079	1.82126	1.85629	1.80591	1.82377	1.74121	AVRG		1.80186		3.32697	
41 2,6-Dinitrotoluene	0.25669 / 0.27957	0.25630	0.27994	0.28469	0.29374	0.28380	AVRG		0.27639		5.20021	
43 3-Nitroaniline	0.22713 / 0.21716	0.25471	0.29079	0.27321	0.26059	0.26304	AVRG		0.25523		10.01066	
44 Acenaphthene	1.18524 / 1.05036	1.13444	1.11843	1.08189	1.09441	1.06919	AVRG		1.10485		4.11445	
45 2,4-Dinitrophenol	+++++ / 0.25284	0.11441	0.16472	0.20765	0.24305	0.24872	AVRG		0.20523		27.11606	<-
46 Dibenzofuran	1.68997 / 1.44776	1.54872	1.56513	1.49747	1.52707	1.47995	AVRG		1.53658		5.12483	

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Compound	0.2000 Level 1 / 20 Level 7	0.5000 Level 2	1 Level 3	2 Level 4	5 Level 5	10 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
47 4-Nitrophenol	+++++	0.09998	0.13026	0.16110	0.17953	0.17551					
	0.17902						AVRG		0.15424		21.05350 <-
48 2,4-Dinitrotoluene	0.31718	0.34651	0.38077	0.38891	0.40653	0.39149					
	0.38462						AVRG		0.37372		8.26839
49 Fluorene	1.40265	1.35139	1.32070	1.30322	1.29668	1.24547					
	1.21601						AVRG		1.30516		4.79174
50 Diethylphthalate	1.35866	1.23097	1.28760	1.26224	1.29138	1.23346					
	1.20698						AVRG		1.26733		4.00618
51 4-Chlorophenyl-phenylether	0.64889	0.64348	0.63067	0.59203	0.60007	0.57862					
	0.56392						AVRG		0.60824		5.43948
52 4-Nitroaniline	0.24294	0.27239	0.27818	0.26676	0.27205	0.28138					
	0.27241						AVRG		0.26944		4.67658
53 4,6-Dinitro-2-methylphenol	0.11263	0.13500	0.16003	0.16959	0.18328	0.18067					
	0.18008						AVRG		0.16018		16.77594

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54 N-Nitrosodiphenylamine	0.52611	0.48647	0.51232	0.47864	0.47347	0.45779					
	0.43800						AVRG		0.48183		6.27832
56 4-Bromophenyl-phenylether	0.24194	0.21358	0.21802	0.21684	0.22551	0.22344					
	0.22256						AVRG		0.22313		4.15933
57 Hexachlorobenzene	0.30710	0.28329	0.28763	0.27321	0.27683	0.27013					
	0.26191						AVRG		0.28001		5.22545
58 Pentachlorophenol	0.15074	0.16509	0.18887	0.18922	0.20807	0.20324					
	0.20185						AVRG		0.18673		11.42453
60 Phenanthrene	1.20922	1.07453	1.06296	1.00313	1.06202	1.02943					
	1.02293						AVRG		1.06632		6.37828
61 Anthracene	1.11703	1.02015	1.06543	1.04831	1.10358	1.09925					
	1.06181						AVRG		1.07365		3.21436
62 Carbazole	0.94108	0.86167	0.87784	0.65476	0.51676	0.65824					
	0.74419						AVRG		0.75065		20.14812 <-

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Compound	0.2000 Level 1	0.5000 Level 2	1 Level 3	2 Level 4	5 Level 5	10 Level 6	20 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
63 Di-n-butylphthalate	1.11890	0.99204	1.07832	1.11232	1.23021	1.24150	1.24670	AVRG		1.14571		8.47014
64 Fluoranthene	1.28527	1.12599	1.21902	1.18994	1.27165	1.24630	1.25777	AVRG		1.22799		4.50231
65 Pyrene	1.17011	1.06492	1.14258	1.13631	1.15430	1.15777	1.14963	AVRG		1.13936		3.03479
67 Butylbenzylphthalate	0.41650	0.36082	0.43017	0.43330	0.46321	0.46708	0.45389	AVRG		0.43214		8.44745
68 Benzo(a)anthracene	1.19920	1.07431	1.12286	1.10780	1.09980	1.11248	1.09644	AVRG		1.11613		3.55235
70 3,3'-Dichlorobenzidine	0.58480	0.52082	0.47361	0.38174	0.35778	0.46977	0.47574	AVRG		0.46632		16.63286
71 Chrysene	1.13171	1.02241	1.01786	0.97103	0.98519	0.98069	0.96753	AVRG		1.01092		5.68546

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Compound	0.2000 Level 1 / 20 Level 7	0.5000 Level 2	1 Level 3	2 Level 4	5 Level 5	10 Level 6	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
72 bis(2-Ethylhexyl)phthalate	0.59458	0.50606	0.51947	0.53003	0.53141	0.51142					
	0.50438						AVRG		0.52819		5.90419
73 Di-n-octylphthalate	1.15851	1.02427	0.98247	0.92974	0.93393	0.91460					
	0.88657						AVRG		0.97573		9.48185
74 Benzo(b)fluoranthene	1.20608	1.10628	1.09252	1.14920	1.14101	1.20366					
	1.21674						AVRG		1.15936		4.33609
75 Benzo(k)fluoranthene	1.42017	1.25965	1.28978	1.20526	1.26889	1.16546					
	1.15821						AVRG		1.25249		7.17965
187 Total Benzofluoranthenes	1.23756	1.13080	1.13020	1.11091	1.13997	1.11859					
	1.12045						AVRG		1.14121		3.81526
76 Benzo(a)pyrene	1.07669	0.94944	0.97894	0.98320	1.01372	1.00840					
	1.00814						AVRG		1.00265		3.95585
78 Indeno(1,2,3-cd)pyrene	1.25868	1.15059	1.21659	1.22284	1.27651	1.27173					
	1.25832						AVRG		1.23647		3.58261

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Compound	0.2000 Level 1 / 20 Level 7	0.5000 Level 2	1 Level 3	2 Level 4	5 Level 5	10 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
79 Dibenzo(a,h)anthracene	0.97137 / 0.98469	0.92360	0.98583	0.98269	1.00428	1.00142	AVRG		0.97912		2.75358
80 Benzo(g,h,i)perylene	1.08126 / 1.08065	1.00992	1.04627	1.04488	1.08346	1.07955	AVRG		1.06086		2.64699
90 N-Nitrosodimethylamine	0.83322 / 0.72459	0.73286	0.74717	0.73648	0.79641	0.75614	AVRG		0.76098		5.20213
91 Aniline	4.03355 / 3.21579	3.60799	3.69841	3.54445	3.67007	3.46281	AVRG		3.60472		6.90741
92 1,2-Diphenylhydrazine	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
93 Benzidine	+++++ / 0.22575	0.37327	0.35642	0.20770	0.16127	0.19301	AVRG		0.25290		35.35224 <-
96 p-Cymene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00

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Compound	0.2000 Level 1 / 20 Level 7	0.5000 Level 2	1 Level 3	2 Level 4	5 Level 5	10 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
97 Caffeine	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+00		0.000e+00	
98 Retene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+00		0.000e+00	<-
99 Perylene	1.31908	1.13841	1.15956	1.11360	1.11501	1.11215						
	1.10824						AVRG		1.15229		6.58107	
100 3-beta-Coprostanol	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+00		0.000e+00	<-
101 Cholesterol	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+00		0.000e+00	<-
102 beta-Sitosterol	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+00		0.000e+00	
103 Pyridine	0.66617	0.65238	0.65710	0.63694	0.68053	0.63792						
	0.61262						AVRG		0.64909		3.42053	

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Analytical Resources, Inc.

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Compound	0.2000 Level 1 / 20 Level 7	0.5000 Level 2	1 Level 3	2 Level 4	5 Level 5	10 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
188 2,6-Dichlorophenol	0.30451	0.28895	0.29558	0.29116	0.30141	0.30051					
	0.30173						AVRG		0.29769		1.97814
189 N-Nitrosomethylethylamine	0.56360	0.54392	0.55233	0.53833	0.57892	0.55478					
	0.53912						AVRG		0.55300		2.63905
$ 1 2-Fluorophenol	1.34632	1.22090	1.31944	1.24951	1.32743	1.27358					
	1.21571						AVRG		1.27898		4.13634
$ 137 d8-1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00 <-
$ 2 Phenol-d5	1.63984	1.52897	1.54799	1.55779	1.64552	1.60078					
	1.58876						AVRG		1.58709		2.83567
$ 5 2-Chlorophenol-d4	1.45363	1.36836	1.39076	1.34459	1.38932	1.36694					
	1.30596						AVRG		1.37422		3.31230
$ 10 1,2-Dichlorobenzene-d4	1.18806	0.99936	1.00074	0.95728	0.97859	0.99252					
	0.95272						AVRG		1.00989		8.00955

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Compound	0.2000 Level 1 / 20 Level 7	0.5000 Level 2	1 Level 3	2 Level 4	5 Level 5	10 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
$ 18 Nitrobenzene-d5	0.39550 / 0.36760	0.35376	0.36820	0.36061	0.37202	0.36662	AVRG		0.36919		3.53490
$ 36 2-Fluorobiphenyl	1.49260 / 1.34117	1.36294	1.37060	1.34186	1.36884	1.32778	AVRG		1.37225		4.04118
$ 55 2,4,6-Tribromophenol	0.24314 / 0.26253	0.24083	0.25407	0.26157	0.26265	0.26204	AVRG		0.25526		3.75063
$ 66 Terphenyl-d14	0.80516 / 0.74332	0.73645	0.78962	0.76124	0.76780	0.77440	AVRG		0.76828		3.16113
$ 85 p-Cresol-d4	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
$ 86 Anthracene-d10	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
$ 87 Fluoranthene-d10	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00

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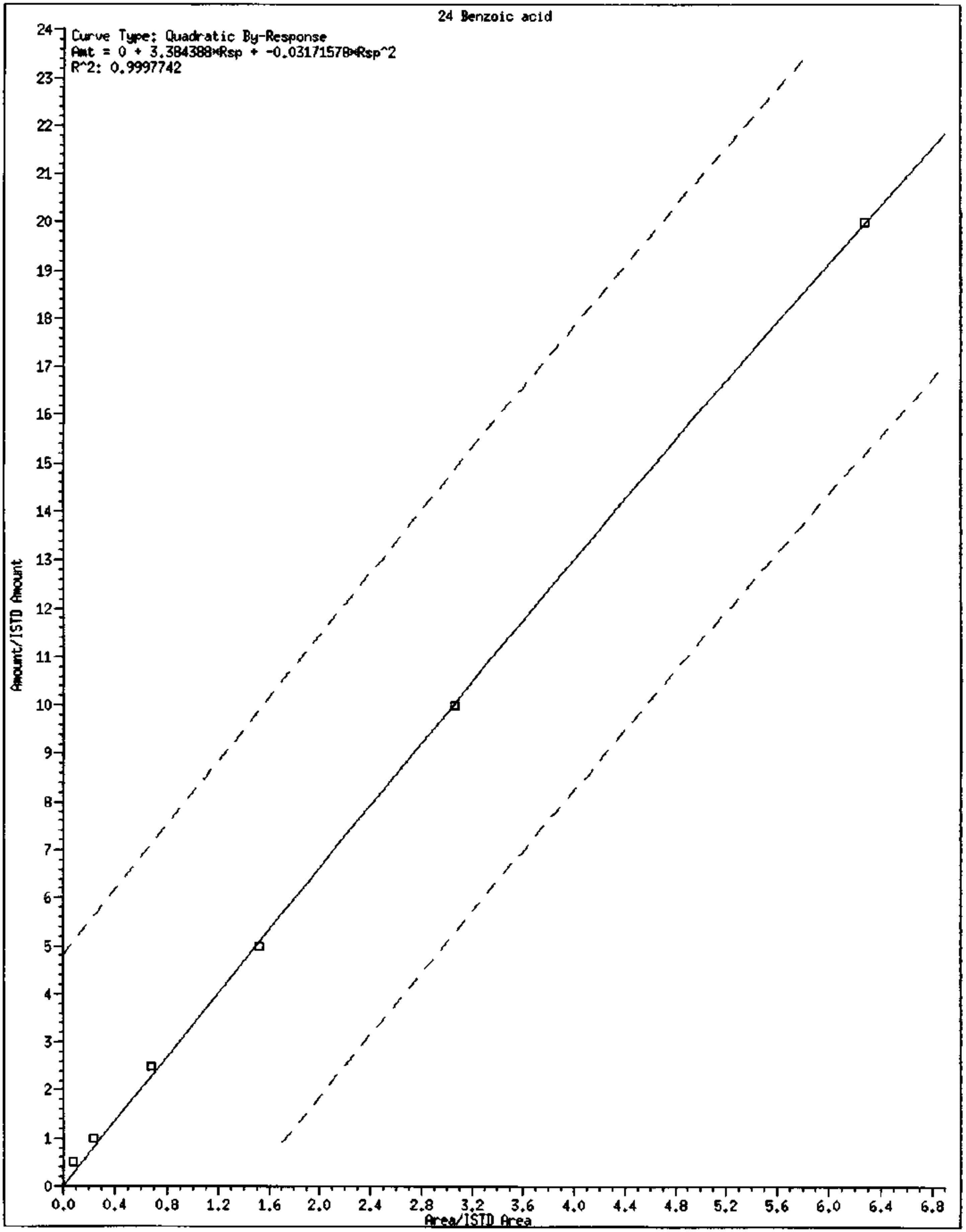
Compound	0.2000 Level 1 / 20 Level 7	0.5000 Level 2	1 Level 3	2 Level 4	5 Level 5	10 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
$ 88 Dibenz(a,h)anthracene-d14	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
$ 89 Diphenyl-d10	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
$ 95 D10-1-methylnaphthalene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00

Analytical Resources, Inc.

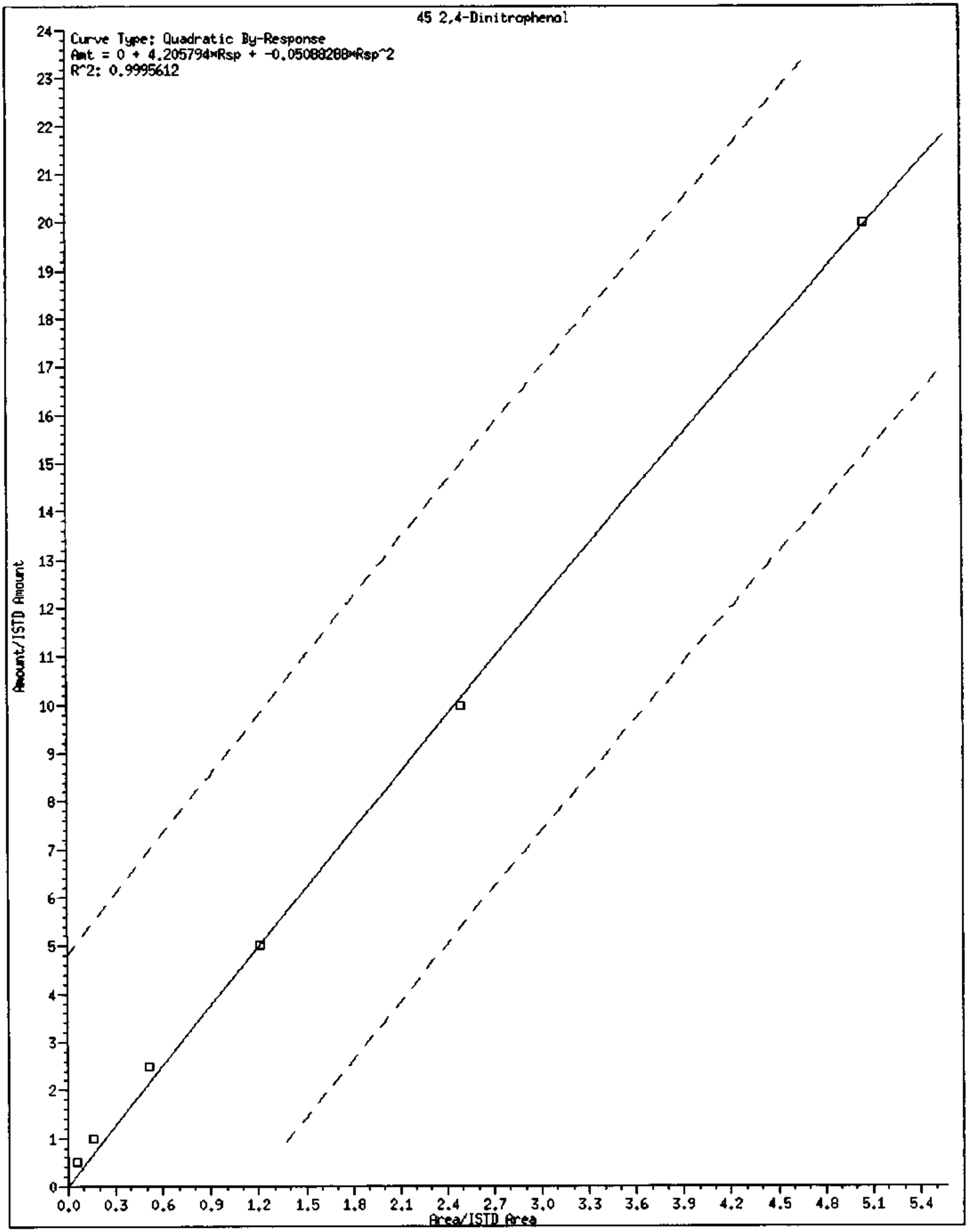
INITIAL CALIBRATION DATA

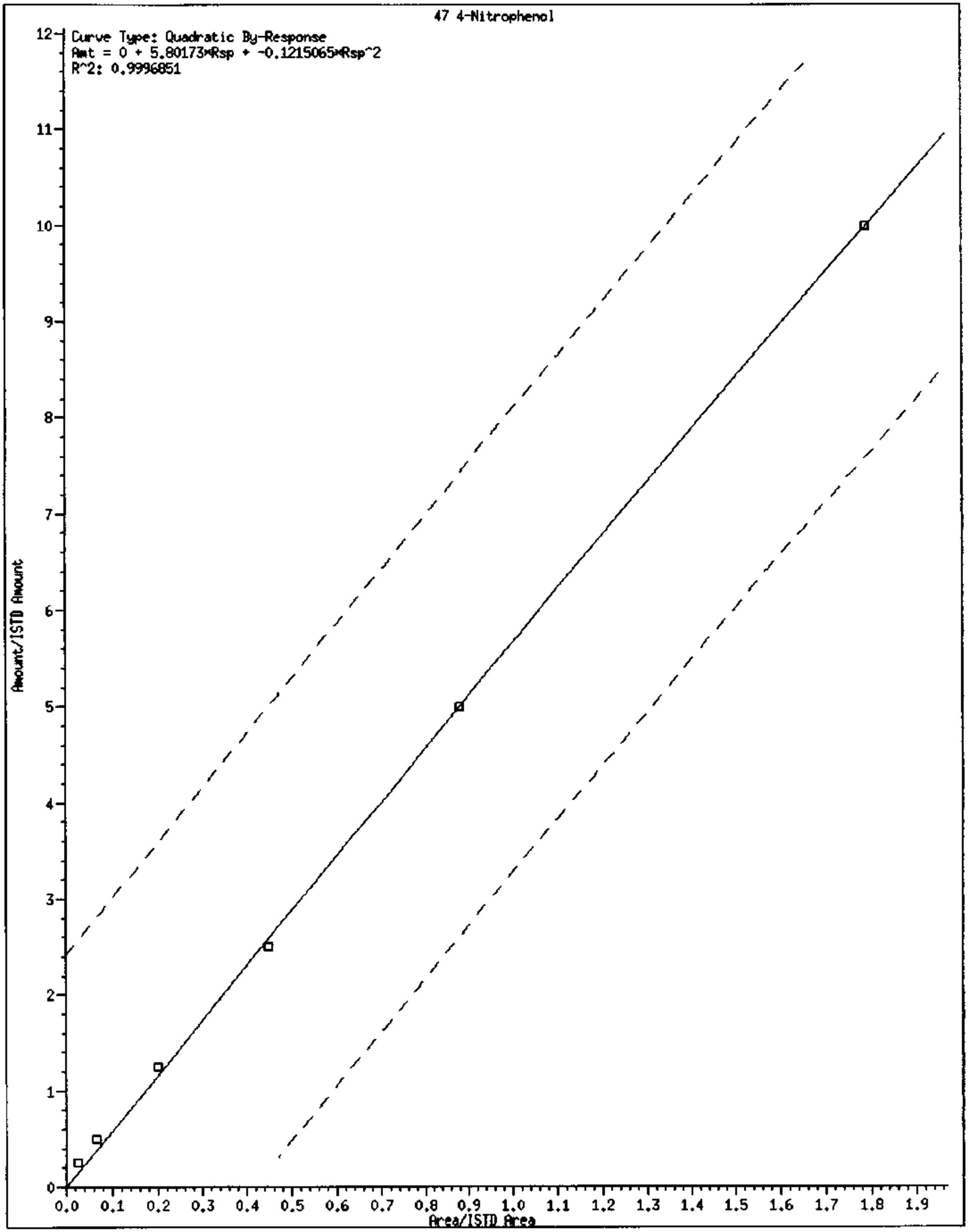
Start Cal Date : 25-JAN-2013 12:59
End Cal Date : 25-JAN-2013 17:16
Quant Method : ISTD
Origin : Force
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/nt10.i/20130125.b/ABN.m
Cal Date : 28-Jan-2013 12:34 yev

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Quad	Amt = b + m1*Rsp + m2*Rsp^2	Response


24 Benzoic acid
Curve Type: Quadratic By-Response
Amt = 0 + 3.384388*Rsp + -0.03171578*Rsp^2
R^2: 0.9997742
Amount/ISTD Amount
Area/ISTD Area
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
0.0
0.4
0.8
1.2
1.6
2.0
2.4
2.8
3.2
3.6
4.0
4.4
4.8
5.2
5.6
6.0
6.4
6.8

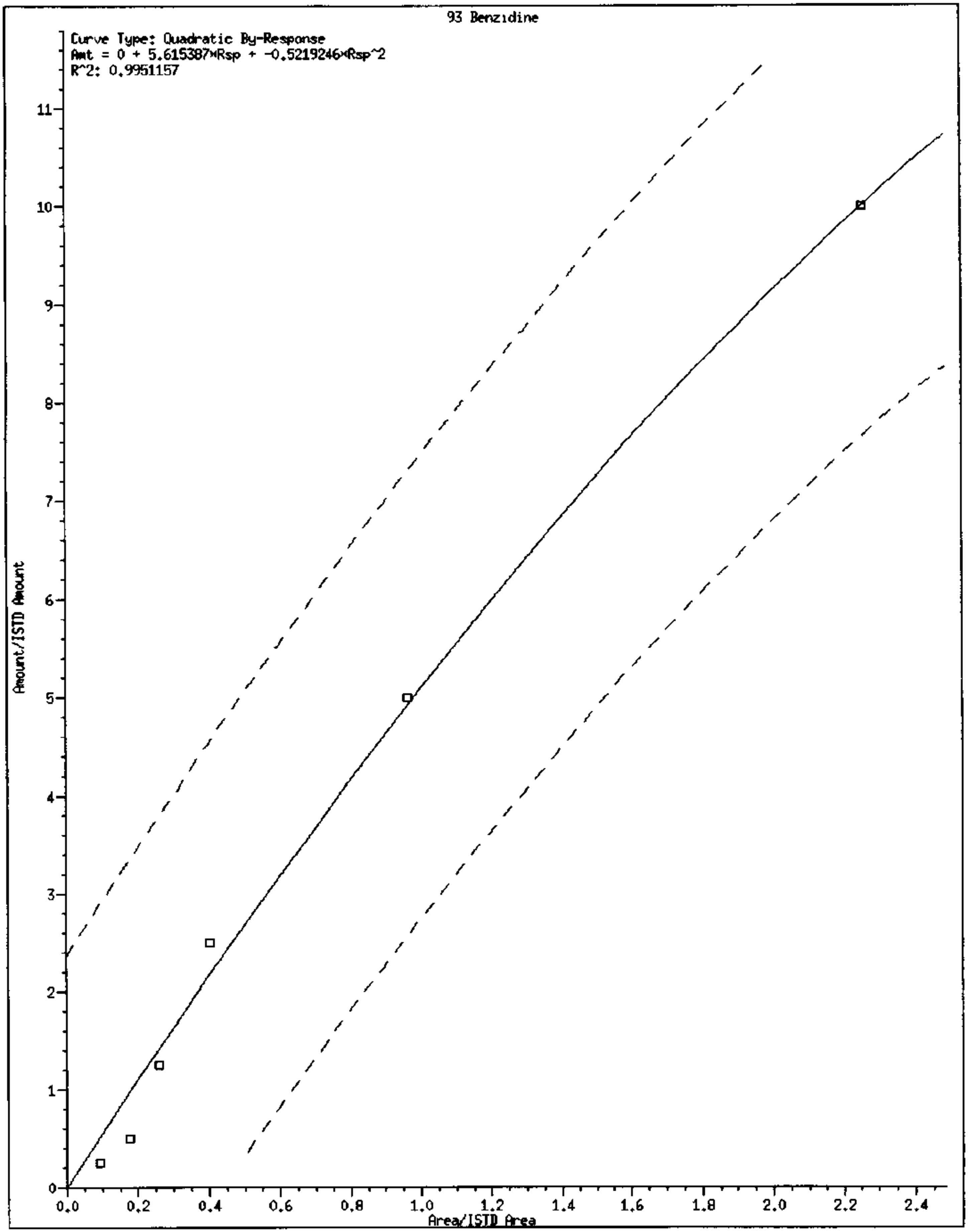
WC02 : 00498


45 2,4-Dinitrophenol
Curve Type: Quadratic By-Response
Amt = 0 + 4.205794*Rsp + -0.05088288*Rsp^2
R^2: 0.9995612
Amount/ISTD Amount
Area/ISTD Area
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
0.0 0.3 0.6 0.9 1.2 1.5 1.8 2.1 2.4 2.7 3.0 3.3 3.6 3.9 4.2 4.5 4.8 5.1 5.4



47 4-Nitrophenol
Curve Type: Quadratic By-Response
Amt = 0 + 5.80173*Rsp + -0.1215065*Rsp^2
R^2: 0.9996851
Amount/ISTD Amount
Area/ISTD Area
0
1
2
3
4
5
6
7
8
9
10
11
12
0.0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9

WC32:00402


93 Benzidine
Curve Type: Quadratic By-Response
Amt = 0 + 5.615387*Rsp + -0.5219246*Rsp^2
R^2: 0.9951157
Amount/ISTD Amount
Area/ISTD Area
0
1
2
3
4
5
6
7
8
9
10
11
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
2.0
2.2
2.4

VCG2 : 00430

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

quadratic

Start Cal Date : 25-JAN-2013 12:59
End Cal Date : 25-JAN-2013 17:16
Quant Method : ISTD
Origin : Force
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/nt10.i/20130125.b/ABN.m
Cal Date : 28-Jan-2013 13:10 yev

Calibration File Names:
Level 1: /chem1/nt10.i/20130125.b/ic0125c.d
Level 2: /chem1/nt10.i/20130125.b/ic0125h.d
Level 3: /chem1/nt10.i/20130125.b/ic0125e.d
Level 4: /chem1/nt10.i/20130125.b/ic0125f.d
Level 5: /chem1/nt10.i/20130125.b/ic0125a.d
Level 6: /chem1/nt10.i/20130125.b/ic0125d.d
Level 7: /chem1/nt10.i/20130125.b/ic0125b.d

Compound	0.2000 Level 1 / 20 Level 7	0.5000 Level 2	1 Level 3	2 Level 4	5 Level 5	10 Level 6	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2	
186 Carbaryl	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
179 n-Decane	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
180 n-Octadecane	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
169 4-tert-Butylphenol	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 25-JAN-2013 12:59
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Quant Method : ISTD
Origin : Force
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/nt10.i/20130125.b/ABN.m
Cal Date : 28-Jan-2013 13:10 yev

Compound	0.2000 Level 1 / 20 Level 7	0.5000 Level 2	1 Level 3	2 Level 4	5 Level 5	10 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
143 1,4-Dioxane	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
121 Quinoline	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	
120 2,3,4,6-Tetrachlorophenol	0.32876 / 0.39526	0.34403	0.37326	0.38202	0.39296	0.39166	AVRG		0.37257		7.03242	
178 2-Benzyl-4-Chlorophenol	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
119 7,12-Dimethylbenz(a)anthracen	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	
118 Triphenyl Phosphate	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
117 Butyl Diphenyl Phosphate	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-

Analytical Resources, Inc.

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Target Version : 3.50
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Method file : /chem1/nt10.i/20130125.b/ABN.m
Cal Date : 28-Jan-2013 13:10 yev

Compound	0.2000 Level 1	0.5000 Level 2	1 Level 3	2 Level 4	5 Level 5	10 Level 6	20 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2	
116 Dibutyl Phenyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
115 Tributyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
114 Beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	
113 Diphenyl Oxide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
112 Biphenyl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
111 Azobenzene (1,2-DP-Hydrazine)	1.19800	1.13498	1.18460	1.15565	1.17192	1.12589	1.07570	AVRG		1.14954		3.61126	
110 Tetrachloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	QUAD	0.000e+00	0.000e+00	0.000e+00	0.000e+00	<-

Analytical Resources, Inc.

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Method file : /chem1/nt10.i/20130125.b/ABN.m
Cal Date : 28-Jan-2013 13:10 yev

Compound	0.2000 Level 1	0.5000 Level 2	1 Level 3	2 Level 4	5 Level 5	10 Level 6	20 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2	
106 Guaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
105 1-methylnaphthalene	0.68712	0.61568	0.61713	0.60970	0.62479	0.62906	0.62899	AVRG		0.63035		4.13400	
151 1,2,4,5-Tetrachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
152 Benzo(e)pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	
153 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	
154 Diazinon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	
155 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	

Analytical Resources, Inc.

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Method file : /chem1/nt10.i/20130125.b/ABN.m
Cal Date : 28-Jan-2013 13:10 yev

Compound	0.2000 Level 1	0.5000 Level 2	1 Level 3	2 Level 4	5 Level 5	10 Level 6	20 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
163 1,2,3,5,8-Pentachloronaphthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
164 1,2,3,4,6,7-Hexachloronaphtha	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
165 1,2,3,4,5,6,7-Heptachloronaph	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
166 Octachloronaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
167 2,2',4,4',5-Pentabromobipheny	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
3 Phenol	1.85175	1.68940	1.64707	1.63733	1.68988	1.61673	1.56109	AVRG		1.67046		5.47002
4 Bis(2-Chloroethyl)ether	1.40493	1.30334	1.30347	1.24707	1.28325	1.21128	1.14349	AVRG		1.27098		6.47097

Analytical Resources, Inc.

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Origin : Force
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/nt10.i/20130125.b/ABN.m
Cal Date : 28-Jan-2013 13:10 yev

Compound	0.2000 Level 1 / 20 Level 7	0.5000 Level 2	1 Level 3	2 Level 4	5 Level 5	10 Level 6	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
6 2-Chlorophenol	1.59520 1.36285	1.46146	1.47707	1.40489	1.45513	1.41902	AVRG		1.45366		5.06063
7 1,3-Dichlorobenzene	1.83372 1.44646	1.63504	1.58082	1.51847	1.53497	1.52312	AVRG		1.58180		7.92392
9 1,4-Dichlorobenzene	1.82470 1.45049	1.55544	1.60187	1.50303	1.51800	1.51039	AVRG		1.56627		7.86403
11 Benzyl alcohol	0.84043 0.79116	0.76875	0.79217	0.77311	0.81313	0.81712	AVRG		0.79941		3.20420
12 1,2-Dichlorobenzene	1.73768 1.40064	1.52346	1.51327	1.44648	1.47158	1.44915	AVRG		1.50604		7.32876
13 2-Methylphenol	1.34993 1.22080	1.22001	1.24558	1.22322	1.30059	1.26671	AVRG		1.26098		3.89432
14 2,2'-oxybis(1-Chloropropane)	0.48018 0.42355	0.44753	0.44284	0.44270	0.44800	0.44534	AVRG		0.44716		3.75395

Analytical Resources, Inc.

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End Cal Date : 25-JAN-2013 17:16
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Origin : Force
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/nt10.i/20130125.b/ABN.m
Cal Date : 28-Jan-2013 13:10 yev

Compound	0.2000 Level 1 / 20 Level 7	0.5000 Level 2	1 Level 3	2 Level 4	5 Level 5	10 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
15 4-Methylphenol	1.34226 1.27512	1.29197	1.31371	1.30699	1.33604	1.31349	AVRG		1.31137		1.78362
16 N-Nitroso-di-n-propylamine	0.91573 0.80313	0.79575	0.85580	0.81875	0.86236	0.84584	AVRG		0.84248		4.90461
17 Hexachloroethane	0.67992 0.59743	0.60175	0.63806	0.59248	0.60974	0.61412	AVRG		0.61907		4.95719
19 Nitrobenzene	0.38734 0.34151	0.34048	0.34857	0.34062	0.34785	0.34389	AVRG		0.35004		4.79352
20 Isophorone	0.63301 0.62125	0.56793	0.60847	0.59443	0.62728	0.61846	AVRG		0.61012		3.68947
21 2-Nitrophenol	0.19332 0.21298	0.18421	0.20543	0.20796	0.21920	0.21663	AVRG		0.20568		6.19855
22 2,4-Dimethylphenol	0.37623 0.33058	0.34842	0.35856	0.34561	0.35338	0.34129	AVRG		0.35058		4.10928

Analytical Resources, Inc.

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Origin : Force
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/nt10.i/20130125.b/ABN.m
Cal Date : 28-Jan-2013 13:10 yev

Compound	0.2000 Level 1 / 20 Level 7	0.5000 Level 2	1 Level 3	2 Level 4	5 Level 5	10 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
23 Bis(2-Chloroethoxy)methane	0.42114 0.36096	0.39616	0.38461	0.37952	0.38304	0.36431	AVRG		0.38425		5.27643
24 Benzoic acid	+++++ 1036662	14218	44455	119275	270210	507039	QUAD	0.000e+00	3.38439	-0.03172	0.99977
25 2,4-Dichlorophenol	0.31804 0.29711	0.29394	0.30839	0.30694	0.31451	0.30586	AVRG		0.30640		2.81805
26 1,2,4-Trichlorobenzene	0.40294 0.31675	0.36312	0.35495	0.33490	0.33893	0.32931	AVRG		0.34870		8.17173
28 Naphthalene	1.17113 0.98667	1.06629	1.04085	1.00184	1.01216	1.00690	AVRG		1.04083		6.08299
29 4-Chloroaniline	0.43597 0.42308	0.40727	0.41596	0.40868	0.42429	0.41696	AVRG		0.41889		2.36753
30 Hexachlorobutadiene	0.23385 0.21128	0.21233	0.22032	0.21378	0.21418	0.21548	AVRG		0.21732		3.61019

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 25-JAN-2013 12:59
End Cal Date : 25-JAN-2013 17:16
Quant Method : ISTD
Origin : Force
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/nt10.i/20130125.b/ABN.m
Cal Date : 28-Jan-2013 13:10 yev

Compound	0.2000 Level 1	0.5000 Level 2	1 Level 3	2 Level 4	5 Level 5	10 Level 6	20 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
31 4-Chloro-3-methylphenol	0.26481	0.27149	0.29550	0.29260	0.31285	0.31892	0.31685	AVRG		0.29615		7.33327
32 2-Methylnaphthalene	0.73829	0.66758	0.67440	0.65675	0.70171	0.68317	0.68851	AVRG		0.68720		3.90226
33 Hexachlorocyclopentadiene	0.44473	0.40757	0.44583	0.44429	0.47974	0.46666	0.46906	AVRG		0.45113		5.27242
34 2,4,6-Trichlorophenol	0.37875	0.37012	0.40921	0.40113	0.41623	0.41485	0.41565	AVRG		0.40085		4.72757
35 2,4,5-Trichlorophenol	0.37884	0.39598	0.42331	0.43767	0.44881	0.45127	0.44592	AVRG		0.42597		6.65640
37 2-Chloronaphthalene	1.23689	1.06915	1.09647	1.07749	1.10903	1.07360	1.07168	AVRG		1.10490		5.43307
38 2-Nitroaniline	0.21672	0.22323	0.25658	0.26793	0.28461	0.28174	0.28315	AVRG		0.25914		11.03790

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

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Method file : /chem1/nt10.i/20130125.b/ABN.m
Cal Date : 28-Jan-2013 13:10 yev

Compound	0.2000 Level 1	0.5000 Level 2	1 Level 3	2 Level 4	5 Level 5	10 Level 6	20 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
39 Dimethylphthalate	1.30877	1.22841	1.23078	1.18054	1.21915	1.17353	1.12753	AVRG		1.20981		4.72547
40 Acenaphthylene	1.86378	1.82126	1.85629	1.80591	1.82377	1.74121	1.70079	AVRG		1.80186		3.32697
41 2,6-Dinitrotoluene	0.25669	0.25630	0.27994	0.28469	0.29374	0.28380	0.27957	AVRG		0.27639		5.20021
43 3-Nitroaniline	0.22713	0.25471	0.29079	0.27321	0.26059	0.26304	0.21716	AVRG		0.25523		10.01066
44 Acenaphthene	1.18524	1.13444	1.11843	1.08189	1.09441	1.06919	1.05036	AVRG		1.10485		4.11445
45 2,4-Dinitrophenol	+++++	5902	18391	56078	134737	267779	539709	QUAD	0.000e+00	4.20579	-0.05088	0.99956
46 Dibenzofuran	1.68997	1.54872	1.56513	1.49747	1.52707	1.47995	1.44776	AVRG		1.53658		5.12483

Analytical Resources, Inc.

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Method file : /chem1/nt10.i/20130125.b/ABN.m
Cal Date : 28-Jan-2013 13:10 yev

Compound	0.2000 Level 1	0.5000 Level 2	1 Level 3	2 Level 4	5 Level 5	10 Level 6	20 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
47 4-Nitrophenol	+++++	2579	7272	21754	49763	94479	191069	QUAD	0.000e+00	5.80173	-0.12151	0.99969
48 2,4-Dinitrotoluene	0.31718	0.34651	0.38077	0.38891	0.40653	0.39149	0.38462	AVRG		0.37372		8.26839
49 Fluorene	1.40265	1.35139	1.32070	1.30322	1.29668	1.24547	1.21601	AVRG		1.30516		4.79174
50 Diethylphthalate	1.35866	1.23097	1.28760	1.26224	1.29138	1.23346	1.20698	AVRG		1.26733		4.00618
51 4-Chlorophenyl-phenylether	0.64889	0.64348	0.63067	0.59203	0.60007	0.57862	0.56392	AVRG		0.60824		5.43948
52 4-Nitroaniline	0.24294	0.27239	0.27818	0.26676	0.27205	0.28138	0.27241	AVRG		0.26944		4.67658
53 4,6-Dinitro-2-methylphenol	0.11263	0.13500	0.16003	0.16959	0.18328	0.18067	0.18008	AVRG		0.16018		16.77594

WC02 : 00504

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

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Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/nt10.i/20130125.b/ABN.m
Cal Date : 28-Jan-2013 13:10 yev

Compound	0.2000 Level 1 / 20 Level 7	0.5000 Level 2	1 Level 3	2 Level 4	5 Level 5	10 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
54 N-Nitrosodiphenylamine	0.52611	0.48647	0.51232	0.47864	0.47347	0.45779					
	0.43800						AVRG		0.48183		6.27832
56 4-Bromophenyl-phenylether	0.24194	0.21358	0.21802	0.21684	0.22551	0.22344					
	0.22256						AVRG		0.22313		4.15933
57 Hexachlorobenzene	0.30710	0.28329	0.28763	0.27321	0.27683	0.27013					
	0.26191						AVRG		0.28001		5.22545
58 Pentachlorophenol	0.15074	0.16509	0.18887	0.18922	0.20807	0.20324					
	0.20185						AVRG		0.18673		11.42453
60 Phenanthrene	1.20922	1.07453	1.06296	1.00313	1.06202	1.02943					
	1.02293						AVRG		1.06632		6.37828
61 Anthracene	1.11703	1.02015	1.06543	1.04831	1.10358	1.09925					
	1.06181						AVRG		1.07365		3.21436
62 Carbazole	+++++	0.86167	0.87784	0.64971	0.51676	0.65824					
	0.73841						AVRG		0.71710		19.25543

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 25-JAN-2013 12:59
End Cal Date : 25-JAN-2013 17:16
Quant Method : ISTD
Origin : Force
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/nt10.i/20130125.b/ABN.m
Cal Date : 28-Jan-2013 13:10 yev

Compound	0.2000 Level 1 / 20 Level 7	0.5000 Level 2	1 Level 3	2 Level 4	5 Level 5	10 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
63 Di-n-butylphthalate	1.11890	0.99204	1.07832	1.11232	1.23021	1.24150					
	1.24670						AVRG		1.14571		8.47014
64 Fluoranthene	1.28527	1.12599	1.21902	1.18994	1.27165	1.24630					
	1.25777						AVRG		1.22799		4.50231
65 Pyrene	1.17011	1.06492	1.14258	1.13631	1.15430	1.15777					
	1.14963						AVRG		1.13938		3.03479
67 Butylbenzylphthalate	0.41650	0.36082	0.43017	0.43330	0.46321	0.46708					
	0.45389						AVRG		0.43214		8.44745
68 Benzo(a)anthracene	1.19920	1.07431	1.12286	1.10780	1.09980	1.11248					
	1.09644						AVRG		1.11613		3.55235
70 3,3'-Dichlorobenzidine	0.58480	0.52082	0.47361	0.38174	0.35778	0.46977					
	0.47574						AVRG		0.46632		16.63286
71 Chrysene	1.13171	1.02241	1.01786	0.97103	0.98519	0.98069					
	0.96753						AVRG		1.01092		5.68546

VC02 : 00505

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 25-JAN-2013 12:59
End Cal Date : 25-JAN-2013 17:16
Quant Method : ISTD
Origin : Force
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/nt10.i/20130125.b/ABN.m
Cal Date : 28-Jan-2013 13:10 yev

Compound	0.2000 Level 1	0.5000 Level 2	1 Level 3	2 Level 4	5 Level 5	10 Level 6	20 Level 7	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
72 bis(2-Ethylhexyl)phthalate	0.59458	0.50606	0.51947	0.53003	0.53141	0.51142	0.50438	AVRG		0.52819		5.90419
73 Di-n-octylphthalate	1.15851	1.02427	0.98247	0.92974	0.93393	0.91460	0.88657	AVRG		0.97573		9.48185
74 Benzo(b)fluoranthene	1.20608	1.10628	1.09252	1.14920	1.14101	1.20366	1.21674	AVRG		1.15936		4.33609
75 Benzo(k)fluoranthene	1.42017	1.25965	1.28978	1.20526	1.26889	1.16546	1.15821	AVRG		1.25249		7.17965
187 Total Benzofluoranthenes	1.23756	1.13080	1.13020	1.11091	1.13997	1.11859	1.12045	AVRG		1.14121		3.81526
76 Benzo(a)pyrene	1.07669	0.94944	0.97894	0.98320	1.01372	1.00840	1.00814	AVRG		1.00265		3.95585
78 Indeno(1,2,3-cd)pyrene	1.25868	1.15059	1.21659	1.22284	1.27651	1.27173	1.25832	AVRG		1.23647		3.58261

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 25-JAN-2013 12:59
End Cal Date : 25-JAN-2013 17:16
Quant Method : ISTD
Origin : Force
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/nt10.i/20130125.b/ABN.m
Cal Date : 28-Jan-2013 13:10 yev

Compound	0.2000 Level 1 / 20 Level 7	0.5000 Level 2	1 Level 3	2 Level 4	5 Level 5	10 Level 6	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
79 Dibenzo(a,h)anthracene	0.97137	0.92360	0.98583	0.98269	1.00428	1.00142					
	0.98469						AVRG		0.97912		2.75358
80 Benzo(g,h,i)perylene	1.08126	1.00992	1.04627	1.04488	1.08346	1.07955					
	1.08065						AVRG		1.06086		2.64699
90 N-Nitrosodimethylamine	0.83322	0.73286	0.74717	0.73648	0.79641	0.75614					
	0.72459						AVRG		0.76098		5.20213
91 Aniline	4.03355	3.60799	3.69841	3.54445	3.67007	3.46281					
	3.21579						AVRG		3.60472		6.90741
92 1,2-Diphenylhydrazine	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00
93 Benzidine	+++++	18859	37924	54172	86152	196119					
	451512						QUAD	0.000e+00	5.61539	-0.52192	0.99512
96 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00

HC02 00508

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 25-JAN-2013 12:59
End Cal Date : 25-JAN-2013 17:16
Quant Method : ISTD
Origin : Force
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/nt10.i/20130125.b/ABN.m
Cal Date : 28-Jan-2013 13:10 yev

Compound	0.2000 Level 1 / 20 Level 7	0.5000 Level 2	1 Level 3	2 Level 4	5 Level 5	10 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
97 Caffeine	+++++ +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	
98 Retene	+++++ +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
99 Perylene	1.31908 1.10824	1.13841	1.15956	1.11360	1.11501	1.11215	AVRG		1.15229		6.58107	
100 3-beta-Coprostanol	+++++ +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
101 Cholesterol	+++++ +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
102 beta-Sitosterol	+++++ +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	
103 Pyridine	0.66617 0.61262	0.65238	0.65710	0.63694	0.68053	0.63792	AVRG		0.64909		3.42053	

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 25-JAN-2013 12:59
End Cal Date : 25-JAN-2013 17:16
Quant Method : ISTD
Origin : Force
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/nt10.i/20130125.b/ABN.m
Cal Date : 28-Jan-2013 13:10 yev

Compound	0.2000 Level 1 / 20 Level 7	0.5000 Level 2	1 Level 3	2 Level 4	5 Level 5	10 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
188 2,6-Dichlorophenol	0.30451 / 0.30173	0.28895	0.29558	0.29116	0.30141	0.30051	AVRG		0.29769		1.97814	
189 N-Nitrosomethylethylamine	0.56360 / 0.53912	0.54392	0.55233	0.53833	0.57892	0.55478	AVRG		0.55300		2.63905	
$ 1 2-Fluorophenol	1.34632 / 1.21571	1.22090	1.31944	1.24951	1.32743	1.27358	AVRG		1.27898		4.13634	
$ 137 d8-1,4-Dioxane	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
$ 2 Phenol-d5	1.63984 / 1.58876	1.52897	1.54799	1.55779	1.64552	1.60078	AVRG		1.58709		2.83567	
$ 5 2-Chlorophenol-d4	1.45363 / 1.30596	1.36836	1.39076	1.34459	1.38932	1.36694	AVRG		1.37422		3.31230	
$ 10 1,2-Dichlorobenzene-d4	1.18806 / 0.95272	0.99936	1.00074	0.95728	0.97859	0.99252	AVRG		1.00989		8.00955	

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 25-JAN-2013 12:59
End Cal Date : 25-JAN-2013 17:16
Quant Method : ISTD
Origin : Force
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/nt10.i/20130125.b/ABN.m
Cal Date : 28-Jan-2013 13:10 yev

Compound	0.2000 Level 1 / 20 Level 7	0.5000 Level 2	1 Level 3	2 Level 4	5 Level 5	10 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
$ 18 Nitrobenzene-d5	0.39550	0.35376	0.36820	0.36061	0.37202	0.36662					
	0.36760						AVRG		0.36919		3.53490
$ 36 2-Fluorobiphenyl	1.49260	1.36294	1.37060	1.34186	1.36884	1.32778					
	1.34117						AVRG		1.37225		4.04118
$ 55 2,4,6-Tribromophenol	0.24314	0.24083	0.25407	0.26157	0.26265	0.26204					
	0.26253						AVRG		0.25526		3.75063
$ 66 Terphenyl-d14	0.80516	0.73645	0.78962	0.76124	0.76780	0.77440					
	0.74332						AVRG		0.76828		3.16113
$ 85 p-Cresol-d4	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00
$ 86 Anthracene-d10	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00
$ 87 Fluoranthene-d10	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 25-JAN-2013 12:59
End Cal Date : 25-JAN-2013 17:16
Quant Method : ISTD
Origin : Force
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/nt10.i/20130125.b/ABN.m
Cal Date : 28-Jan-2013 13:10 yev

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Quad	Amt = b + m1*Rsp + m2*Rsp^2	Response

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

YZ 01/28/13

Data file : /chem1/nt10.i/20130125.b/ic0125a.d
Lab Smp Id: IC0125A
Inj Date : 25-JAN-2013 12:59
Operator : VTS/YZ Inst ID: nt10.i
Smp Info : IC0125A
Misc Info :
Comment : 1ul Injection
Method : /chem1/nt10.i/20130125.b/ABN.m
Meth Date : 28-Jan-2013 12:45 yev Quant Type: ISTD
Cal Date : 25-JAN-2013 12:59 Cal File: ic0125a.d
Als bottle: 2 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDAHDR.sub
Target Version: 3.50

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.719	6.720	(0.740)	77361	5.00000	5.189
$	2 Phenol-d5	99	8.435	8.428	(0.928)	95899	5.00000	5.184
	3 Phenol	94	8.458	8.451	(0.931)	98484	5.00000	5.058
$	5 2-Chlorophenol-d4	132	8.698	8.698	(0.957)	80968	5.00000	5.055
	4 Bis(2-Chloroethyl)ether	93	8.620	8.621	(0.949)	74786	5.00000	5.048
	6 2-Chlorophenol	128	8.729	8.729	(0.961)	84803	5.00000	5.005
	7 1,3-Dichlorobenzene	146	9.015	9.015	(0.992)	89456	5.00000	4.852
*	8 1,4-Dichlorobenzene-d4	152	9.085	9.085	(1.000)	46623	4.00000	
	9 1,4-Dichlorobenzene	146	9.116	9.116	(1.003)	88467	5.00000	4.846
$	10 1,2-Dichlorobenzene-d4	152	9.465	9.465	(1.042)	57031	5.00000	4.845
	12 1,2-Dichlorobenzene	146	9.496	9.496	(1.045)	85762	5.00000	4.886
	11 Benzyl alcohol	108	9.387	9.388	(1.033)	47388	5.00000	5.086
	14 2,2'-oxybis(1-Chloropropane)	121	9.721	9.722	(1.070)	26109	5.00000	5.009
	13 2-Methylphenol	108	9.651	9.644	(1.062)	75797	5.00000	5.157
	17 Hexachloroethane	117	10.132	10.133	(1.115)	35535	5.00000	4.925
	16 N-Nitroso-di-n-propylamine	70	10.000	9.993	(1.101)	50257	5.00000	5.118
	15 4-Methylphenol	108	9.938	9.939	(1.094)	77863	5.00000	5.094
$	18 Nitrobenzene-d5	82	10.264	10.257	(0.873)	82299	5.00000	5.038
	19 Nitrobenzene	77	10.303	10.296	(0.876)	76953	5.00000	4.969
	20 Isophorone	82	10.792	10.785	(0.918)	138769	5.00000	5.141
	21 2-Nitrophenol	139	10.978	10.978	(0.934)	48492	5.00000	5.329
	22 2,4-Dimethylphenol	107	11.070	11.063	(0.942)	156350	10.0000	10.08
	23 Bis(2-Chloroethoxy)methane	93	11.278	11.271	(0.959)	84737	5.00000	4.984
	24 Benzoic acid	105	11.325	11.186	(0.963)	270210	20.0000	20.37
	25 2,4-Dichlorophenol	162	11.471	11.464	(0.976)	139155	10.0000	10.26
	26 1,2,4-Trichlorobenzene	180	11.671	11.664	(0.993)	74980	5.00000	4.860
*	27 Naphthalene-d8	136	11.756	11.749	(1.000)	176978	4.00000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
	28 Naphthalene	128	11.795	11.795	(1.003)	223912	5.00000	4.862
	29 4-Chloroaniline	127	11.965	11.957	(1.018)	187727	10.0000	10.13
	30 Hexachlorobutadiene	225	12.212	12.205	(1.039)	47381	5.00000	4.928
	31 4-Chloro-3-methylphenol	107	13.025	13.017	(1.108)	138421	10.0000	10.56
	32 2-Methylnaphthalene	142	13.311	13.311	(1.132)	155233	5.00000	5.106
	33 Hexachlorocyclopentadiene	237	13.822	13.822	(0.882)	132975	10.0000	10.63
	34 2,4,6-Trichlorophenol	196	13.992	13.992	(0.893)	115372	10.0000	10.38
	35 2,4,5-Trichlorophenol	196	14.069	14.070	(0.898)	124402	10.0000	10.54
$	36 2-Fluorobiphenyl	172	14.178	14.170	(0.905)	169707	5.00000	4.988
	37 2-Chloronaphthalene	162	14.379	14.379	(0.918)	153701	5.00000	5.019
	38 2-Nitroaniline	65	14.681	14.674	(0.937)	78889	10.0000	10.98
	39 Dimethylphthalate	163	15.176	15.169	(0.969)	168962	5.00000	5.039
	40 Acenaphthylene	152	15.315	15.316	(0.978)	252756	5.00000	5.061
	41 2,6-Dinitrotoluene	165	15.308	15.300	(0.977)	81419	10.0000	10.63
*	42 Acenaphthene-d10	164	15.664	15.656	(1.000)	110872	4.00000	
	43 3-Nitroaniline	138	15.609	15.594	(0.997)	72229	10.0000	10.21
	44 Acenaphthene	153	15.733	15.726	(1.004)	151674	5.00000	4.953
	45 2,4-Dinitrophenol	184	15.834	15.826	(1.011)	134737	20.0000	20.14
	46 Dibenzofuran	168	16.089	16.089	(1.027)	211637	5.00000	4.969
	47 4-Nitrophenol	109	15.980	15.973	(1.020)	49763	10.0000	10.32
	48 2,4-Dinitrotoluene	165	16.181	16.174	(1.033)	112681	10.0000	10.88
	50 Diethylphthalate	149	16.761	16.754	(1.070)	178972	5.00000	5.095
	49 Fluorene	166	16.862	16.855	(1.077)	179707	5.00000	4.968
	51 4-Chlorophenyl-phenylether	204	16.877	16.870	(1.077)	83164	5.00000	4.933
	52 4-Nitroaniline	138	16.985	16.963	(1.084)	75406	10.0000	10.10
	53 4,6-Dinitro-2-methylphenol	198	17.086	17.071	(0.902)	172550	20.0000	22.88
	54 N-Nitrosodiphenylamine	169	17.155	17.148	(0.906)	111436	5.00000	4.913
$	55 2,4,6-Tribromophenol	330	17.440	17.433	(1.113)	36401	5.00000	5.145
	56 4-Bromophenyl-phenylether	248	17.965	17.957	(0.949)	53077	5.00000	5.053
	57 Hexachlorobenzene	284	18.289	18.274	(0.966)	65155	5.00000	4.943
	58 Pentachlorophenol	266	18.676	18.669	(0.986)	97943	10.0000	11.14
*	59 Phenanthrene-d10	188	18.939	18.940	(1.000)	188290	4.00000	
	60 Phenanthrene	178	18.986	18.986	(1.002)	249959	5.00000	4.980
	61 Anthracene	178	19.086	19.079	(1.008)	259741	5.00000	5.139
	62 Carbazole	167	19.434	19.435	(1.026)	121626	5.00000	3.449
	63 Di-n-butylphthalate	149	20.293	20.294	(1.071)	289545	5.00000	5.369
	64 Fluoranthene	202	21.399	21.392	(1.130)	299299	5.00000	5.178
	65 Pyrene	202	21.817	21.810	(0.909)	308315	5.00000	5.065
$	66 Terphenyl-d14	244	22.135	22.127	(0.922)	205081	5.00000	4.997
	67 Butylbenzylphthalate	149	23.079	23.072	(0.961)	123724	5.00000	5.360
	68 Benzo(a)anthracene	228	23.977	23.970	(0.999)	293758	5.00000	4.927
*	69 Chrysene-d12	240	24.008	24.001	(1.000)	213681	4.00000	
	70 3,3'-Dichlorobenzidine	252	23.954	23.947	(0.998)	191126	10.0000	7.672
	71 Chrysene	228	24.055	24.048	(1.002)	263146	5.00000	4.873
	72 bis(2-Ethylhexyl)phthalate	149	24.117	24.117	(0.961)	175471	5.00000	5.030
*	134 Di-n-octylphthalate-d4	153	25.100	25.093	(1.000)	264159	4.00000	
	73 Di-n-octylphthalate	149	25.108	25.108	(1.000)	308384	5.00000	4.786

							AMOUNTS	
	QUANT SIG						CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE		(ug/mL)	(ug/mL)
==========================	====	==	======	======	========		=======	=======
74 Benzo(b)fluoranthene	252	25.804	25.789	(0.973)	297496		5.00000	4.921
75 Benzo(k)fluoranthene	252	25.843	25.836	(0.975)	330837		5.00000	5.065
76 Benzo(a)pyrene	252	26.401	26.393	(0.996)	264308		5.00000	5.055
* 77 Perylene-d12	264	26.509	26.502	(1.000)	208584		4.00000	
78 Indeno(1,2,3-cd)pyrene	276	28.942	28.919	(1.092)	332825		5.00000	5.162
79 Dibenzo(a,h)anthracene	278	28.957	28.942	(1.092)	261845		5.00000	5.128
80 Benzo(g,h,i)perylene	276	29.648	29.633	(1.118)	282491		5.00000	5.107
90 N-Nitrosodimethylamine	74	4.442	4.442	(0.489)	92827		10.0000	10.47
91 Aniline	93	8.512	8.505	(0.937)	213887		5.00000	5.091
93 Benzidine	184	21.655	21.648	(0.902)	86152		10.0000	8.717
103 Pyridine	79	4.457	4.481	(0.491)	79321		10.0000	10.48
105 1-methylnaphthalene	142	13.551	13.544	(1.153)	138218		5.00000	4.956
111 Azobenzene (1,2-DP-Hydrazine)	77	17.224	17.217	(1.100)	162417		5.00000	5.097
187 Total Benzofluoranthenes	252	25.843	25.836	(0.975)	594451		10.0000	9.989
99 Perylene	252	26.563	26.548	(1.002)	290716		5.00000	4.838
98 Retene	219	Compound Not Detected.						
120 2,3,4,6-Tetrachlorophenol	232	16.467	16.460	(1.051)	54461		5.00000	5.274
188 2,6-Dichlorophenol	162	11.980	11.973	(1.019)	133358		10.0000	10.12
189 N-Nitrosomethylethylamine	88	5.901	5.909	(0.650)	67477		10.0000	10.47

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: ic0125a.d
Lab Smp Id: IC0125A
Analysis Type: SV
Quant Type: ISTD
Operator: VTS/YZ
Method File: /chem1/nt10.i/20130125.b/ABN.m
Misc Info:

Calibration Date: 25-JAN-2013
Calibration Time: 12:59

Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	46623	23312	93246	46623	0.00
27 Naphthalene-d8	176978	88489	353956	176978	0.00
42 Acenaphthene-d10	110872	55436	221744	110872	0.00
59 Phenanthrene-d10	188290	94145	376580	188290	0.00
69 Chrysene-d12	213681	106840	427362	213681	0.00
134 Di-n-octylphthala	264159	132080	528318	264159	0.00
77 Perylene-d12	208584	104292	417168	208584	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.08	8.58	9.58	9.08	0.00
27 Naphthalene-d8	11.76	11.26	12.26	11.76	0.00
42 Acenaphthene-d10	15.66	15.16	16.16	15.66	0.00
59 Phenanthrene-d10	18.94	18.44	19.44	18.94	0.00
69 Chrysene-d12	24.01	23.51	24.51	24.01	0.00
134 Di-n-octylphthala	25.10	24.60	25.60	25.10	0.00
77 Perylene-d12	26.51	26.01	27.01	26.51	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/nt10.i/20130125.b/ic0125a.d

Date : 25-JAN-2013 12:59

Client ID:

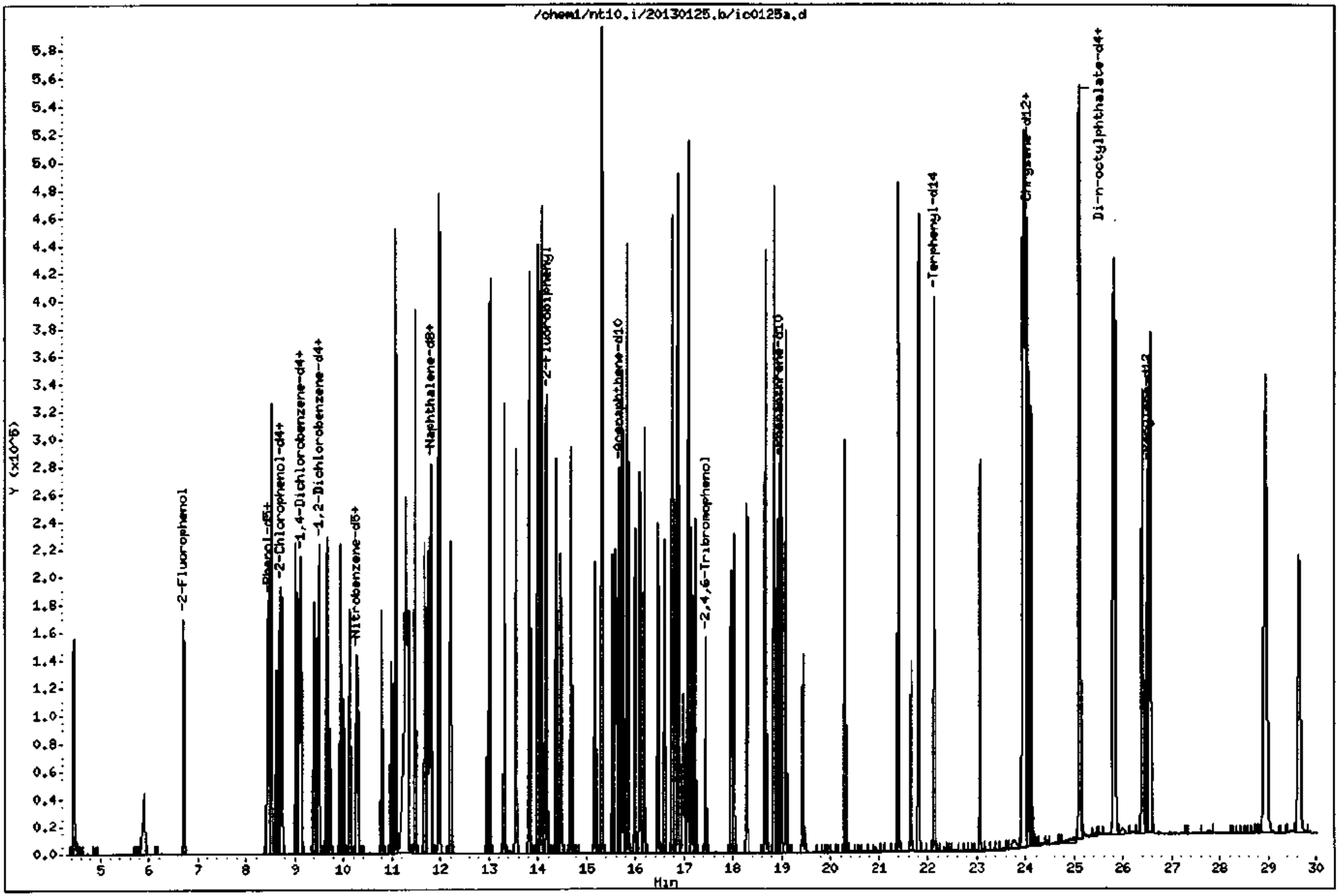
Sample Info: IC0125A

Column phase: ZB-5msi

Instrument: nt10.i

Operator: VTS/YZ

Column diameter: 0.25



CO-ELUTION SUMMARY FOR FILE - ic0125a.d

Lab ID: IC0125A, Method: ABN.m, Instrument: nt10.i, Date: 25-JAN-2013

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Analytical Resources, Inc.

YZ 01/28/13

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt10.i/20130125.b/ic0125b.d
Lab Smp Id: IC0125B
Inj Date : 25-JAN-2013 13:36
Operator : VTS/YZ Inst ID: nt10.i
Smp Info : IC0125B
Misc Info :
Comment : 1ul Injection
Method : /chem1/nt10.i/20130125.b/ABN.m
Meth Date : 28-Jan-2013 12:45 yev Quant Type: ISTD
Cal Date : 25-JAN-2013 13:36 Cal File: ic0125b.d
Als bottle: 3 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDAHDR.sub
Target Version: 3.50

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$ 1 2-Fluorophenol	112	6.728	6.720	(0.741)	264606	20.0000	19.01
$ 2 Phenol-d5	99	8.451	8.428	(0.930)	345802	20.0000	20.02
3 Phenol	94	8.474	8.451	(0.933)	339779	20.0000	18.69
$ 5 2-Chlorophenol-d4	132	8.706	8.698	(0.958)	284249	20.0000	19.01
4 Bis(2-Chloroethyl)ether	93	8.629	8.621	(0.950)	248887	20.0000	17.99
6 2-Chlorophenol	128	8.737	8.729	(0.962)	296632	20.0000	18.75
7 1,3-Dichlorobenzene	146	9.015	9.015	(0.992)	314829	20.0000	18.29
* 8 1,4-Dichlorobenzene-d4	152	9.085	9.085	(1.000)	43531	4.00000	
9 1,4-Dichlorobenzene	146	9.124	9.116	(1.004)	315706	20.0000	18.52
$ 10 1,2-Dichlorobenzene-d4	152	9.473	9.465	(1.043)	207364	20.0000	18.87
12 1,2-Dichlorobenzene	146	9.504	9.496	(1.046)	304856	20.0000	18.60
11 Benzyl alcohol	108	9.403	9.388	(1.035)	172201	20.0000	19.79
14 2,2'-oxybis(1-Chloropropane)	121	9.729	9.722	(1.071)	92188	20.0000	18.94
13 2-Methylphenol	108	9.659	9.644	(1.063)	265714	20.0000	19.36
17 Hexachloroethane	117	10.133	10.133	(1.115)	130033	20.0000	19.30
16 N-Nitroso-di-n-propylamine	70	10.016	9.993	(1.103)	174805	20.0000	19.07
15 4-Methylphenol	108	9.954	9.939	(1.096)	277537	20.0000	19.45
$ 18 Nitrobenzene-d5	82	10.273	10.257	(0.874)	303692	20.0000	19.91
19 Nitrobenzene	77	10.311	10.296	(0.877)	282133	20.0000	19.51
20 Isophorone	82	10.816	10.785	(0.920)	513246	20.0000	20.37
21 2-Nitrophenol	139	10.986	10.978	(0.934)	175952	20.0000	20.71
22 2,4-Dimethylphenol	107	11.078	11.063	(0.942)	546216	40.0000	37.72
23 Bis(2-Chloroethoxy)methane	93	11.286	11.271	(0.960)	298208	20.0000	18.79
24 Benzoic acid	105	11.487	11.186	(0.977)	1036662	80.0000	79.94(M)
25 2,4-Dichlorophenol	162	11.487	11.464	(0.977)	490916	40.0000	38.79
26 1,2,4-Trichlorobenzene	180	11.672	11.664	(0.993)	261680	20.0000	18.17
* 27 Naphthalene-d8	136	11.757	11.749	(1.000)	165229	4.00000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
	28 Naphthalene	128	11.803	11.795	(1.004)	815133	20.0000	18.96
	29 4-Chloroaniline	127	11.981	11.967	(1.019)	699058	40.0000	40.40
	30 Hexachlorobutadiene	225	12.212	12.205	(1.039)	174544	20.0000	19.44
	31 4-Chloro-3-methylphenol	107	13.033	13.017	(1.109)	523532	40.0000	42.80
	32 2-Methylnaphthalene	142	13.311	13.311	(1.132)	568813	20.0000	20.04
	33 Hexachlorocyclopentadiene	237	13.830	13.822	(0.883)	500637	40.0000	41.59
	34 2,4,6-Trichlorophenol	196	14.000	13.992	(0.894)	443629	40.0000	41.48
	35 2,4,5-Trichlorophenol	196	14.078	14.070	(0.899)	475930	40.0000	41.87
$	36 2-Fluorobiphenyl	172	14.178	14.170	(0.905)	715720	20.0000	19.55
	37 2-Chloronaphthalene	162	14.387	14.379	(0.918)	571909	20.0000	19.40
	38 2-Nitroaniline	65	14.697	14.674	(0.938)	302207	40.0000	43.71
	39 Dimethylphthalate	163	15.192	15.169	(0.970)	601710	20.0000	18.64
	40 Acenaphthylene	152	15.324	15.316	(0.978)	907637	20.0000	18.88
	41 2,6-Dinitrotoluene	165	15.324	15.300	(0.978)	298383	40.0000	40.46
*	42 Acenaphthene-d10	164	15.664	15.656	(1.000)	106731	4.00000	
	43 3-Nitroaniline	138	15.625	15.594	(0.998)	231778	40.0000	34.03
	44 Acenaphthene	153	15.741	15.726	(1.005)	560530	20.0000	19.01
	45 2,4-Dinitrophenol	184	15.865	15.826	(1.013)	539709	80.0000	79.87
	46 Dibenzofuran	168	16.105	16.089	(1.028)	772605	20.0000	18.84
	47 4-Nitrophenol	109	16.012	15.973	(1.022)	191069	40.0000	39.99
	48 2,4-Dinitrotoluene	165	16.197	16.174	(1.034)	410508	40.0000	41.17
	50 Diethylphthalate	149	16.785	16.754	(1.072)	644112	20.0000	19.05
	49 Fluorene	166	16.870	16.855	(1.077)	648932	20.0000	18.63
	51 4-Chlorophenyl-phenylether	204	16.885	16.870	(1.078)	300938	20.0000	18.54
	52 4-Nitroaniline	138	17.024	16.963	(1.087)	290742	40.0000	40.44
	53 4,6-Dinitro-2-methylphenol	198	17.117	17.071	(0.903)	650220	80.0000	89.94
	54 N-Nitrosodiphenylamine	169	17.163	17.148	(0.906)	395375	20.0000	18.18
$	55 2,4,6-Tribromophenol	330	17.448	17.433	(1.114)	140098	20.0000	20.57
	56 4-Bromophenyl-phenylether	248	17.965	17.957	(0.948)	200896	20.0000	19.95
	57 Hexachlorobenzene	284	18.289	18.274	(0.965)	236417	20.0000	18.71
	58 Pentachlorophenol	266	18.684	18.669	(0.986)	364411	40.0000	43.24
*	59 Phenanthrene-d10	188	18.947	18.940	(1.000)	180535	4.00000	
	60 Phenanthrene	178	19.001	18.986	(1.003)	923370	20.0000	19.19
	61 Anthracene	178	19.094	19.079	(1.008)	958468	20.0000	19.78
	62 Carbazole	167	19.442	19.435	(1.026)	666542	20.0000	19.71(M)
	63 Di-n-butylphthalate	149	20.301	20.294	(1.071)	1125365	20.0000	21.76
	64 Fluoranthene	202	21.400	21.392	(1.129)	1135359	20.0000	20.49
	65 Pyrene	202	21.825	21.810	(0.909)	1149677	20.0000	20.18
$	66 Terphenyl-d14	244	22.135	22.127	(0.922)	743352	20.0000	19.35
	67 Butylbenzylphthalate	149	23.080	23.072	(0.961)	453914	20.0000	21.01
	68 Benzo(a)anthracene	228	23.986	23.970	(0.999)	1096487	20.0000	19.65
*	69 Chrysene-d12	240	24.017	24.001	(1.000)	200009	4.00000	
	70 3,3'-Dichlorobenzidine	252	23.970	23.947	(0.998)	951529	40.0000	40.81
	71 Chrysene	228	24.063	24.048	(1.002)	967573	20.0000	19.14
	72 bis(2-Ethylhexyl)phthalate	149	24.125	24.117	(0.961)	668708	20.0000	19.10
*	134 Di-n-octylphthalate-d4	153	25.100	25.093	(1.000)	265158	4.00000	
	73 Di-n-octylphthalate	149	25.116	25.108	(1.001)	1175410	20.0000	18.17

							AMOUNTS	
	QUANT SIG						CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE		(ug/mL)	(ug/mL)
=========================	====	==	======	======	========		=======	=======
74 Benzo(b)fluoranthene	252	25.813	25.789	(0.973)	1215752		20.0000	20.99
75 Benzo(k)fluoranthene	252	25.859	25.836	(0.975)	1157269		20.0000	18.49
76 Benzo(a)pyrene	252	26.416	26.393	(0.996)	1007316		20.0000	20.11
* 77 Perylene-d12	264	26.517	26.502	(1.000)	199837		4.00000	
78 Indeno(1,2,3-cd)pyrene	276	28.958	28.919	(1.092)	1257296		20.0000	20.35
79 Dibenzo(a,h)anthracene	278	28.989	28.942	(1.093)	983890		20.0000	20.11
80 Benzo(g,h,i)perylene	276	29.680	29.633	(1.119)	1079771		20.0000	20.37
90 N-Nitrosodimethylamine	74	4.457	4.442	(0.491)	315420		40.0000	38.09
91 Aniline	93	8.521	8.505	(0.938)	699933		20.0000	17.84
93 Benzidine	184	21.655	21.648	(0.902)	451512		40.0000	40.07
103 Pyridine	79	4.450	4.481	(0.490)	266680		40.0000	37.75
105 1-methylnaphthalene	142	13.551	13.544	(1.153)	519637		20.0000	19.96
111 Azobenzene (1,2-DP-Hydrazine)	77	17.240	17.217	(1.101)	574054		20.0000	18.72
187 Total Benzofluoranthenes	252	25.859	25.836	(0.975)	2239076		40.0000	39.27
99 Perylene	252	26.579	26.548	(1.002)	1107338		20.0000	19.24
98 Retene	219	Compound Not Detected.						
120 2,3,4,6-Tetrachlorophenol	232	16.476	16.460	(1.052)	210935		20.0000	21.22
188 2,6-Dichlorophenol	162	11.988	11.973	(1.020)	498549		40.0000	40.54
189 N-Nitrosomethylethylamine	88	5.917	5.909	(0.651)	234684		40.0000	39.00

QC Flag Legend

M - Compound response manually integrated.

Report Date: 28-Jan-2013 12:50

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: ic0125b.d
Lab Smp Id: IC0125B
Analysis Type: SV
Quant Type: ISTD
Operator: VTS/YZ
Method File: /chem1/nt10.i/20130125.b/ABN.m
Misc Info:

Calibration Date: 25-JAN-2013
Calibration Time: 12:59

Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 5.

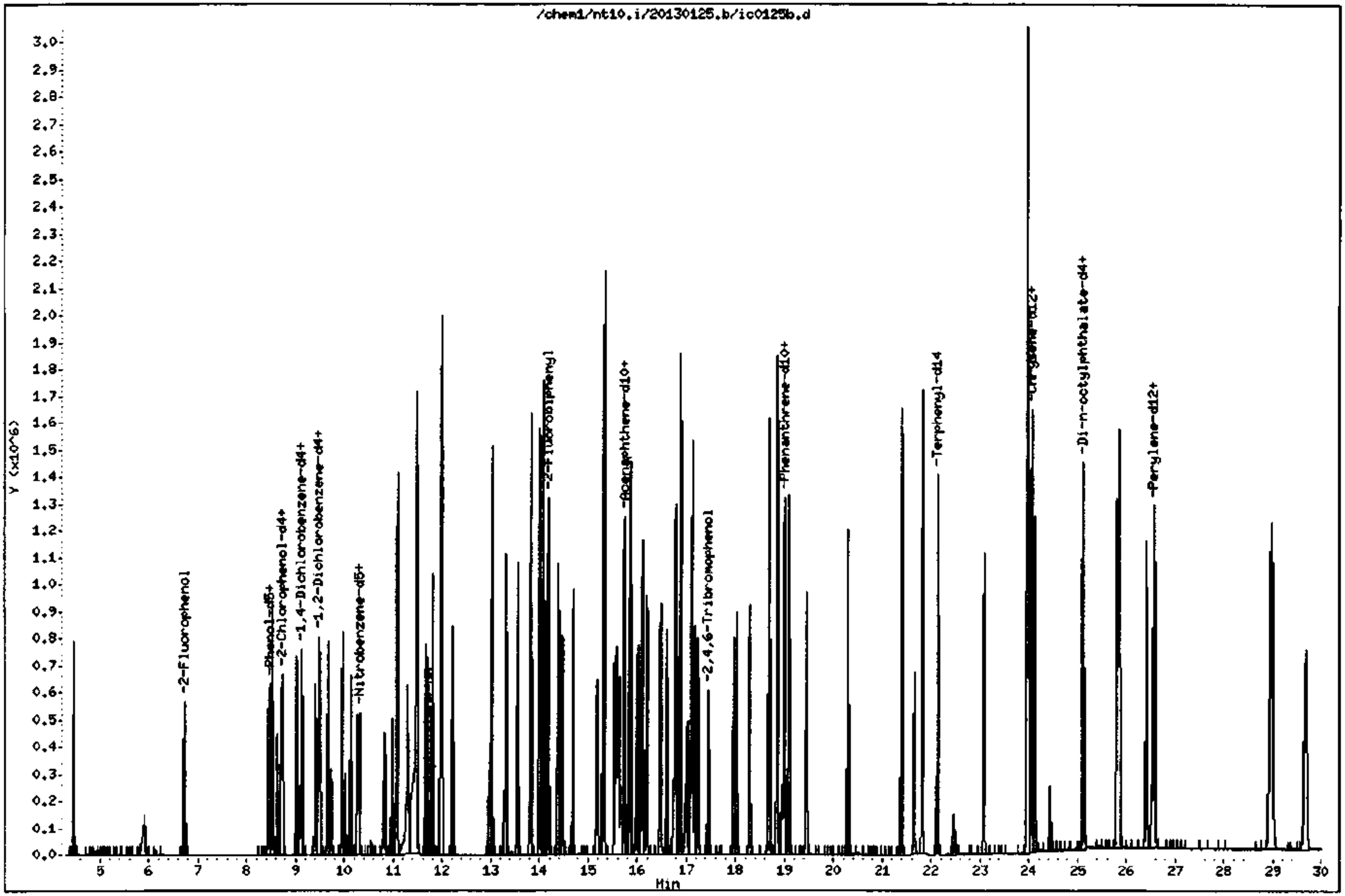
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	46623	23312	93246	43531	-6.63
27 Naphthalene-d8	176978	88489	353956	165229	-6.64
42 Acenaphthene-d10	110872	55436	221744	106731	-3.73
59 Phenanthrene-d10	188290	94145	376580	180535	-4.12
69 Chrysene-d12	213681	106840	427362	200009	-6.40
134 Di-n-octylphthala	264159	132080	528318	265158	0.38
77 Perylene-d12	208584	104292	417168	199837	-4.19

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.08	8.58	9.58	9.09	0.01
27 Naphthalene-d8	11.76	11.26	12.26	11.76	0.00
42 Acenaphthene-d10	15.66	15.16	16.16	15.66	0.00
59 Phenanthrene-d10	18.94	18.44	19.44	18.95	0.04
69 Chrysene-d12	24.01	23.51	24.51	24.02	0.03
134 Di-n-octylphthala	25.10	24.60	25.60	25.10	0.00
77 Perylene-d12	26.51	26.01	27.01	26.52	0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/nt10.i/20130125.b/ic0125b.d
Date : 25-JAN-2013 13:36
Client ID:
Sample Info: IC0125B
Column phase: ZB-5msi

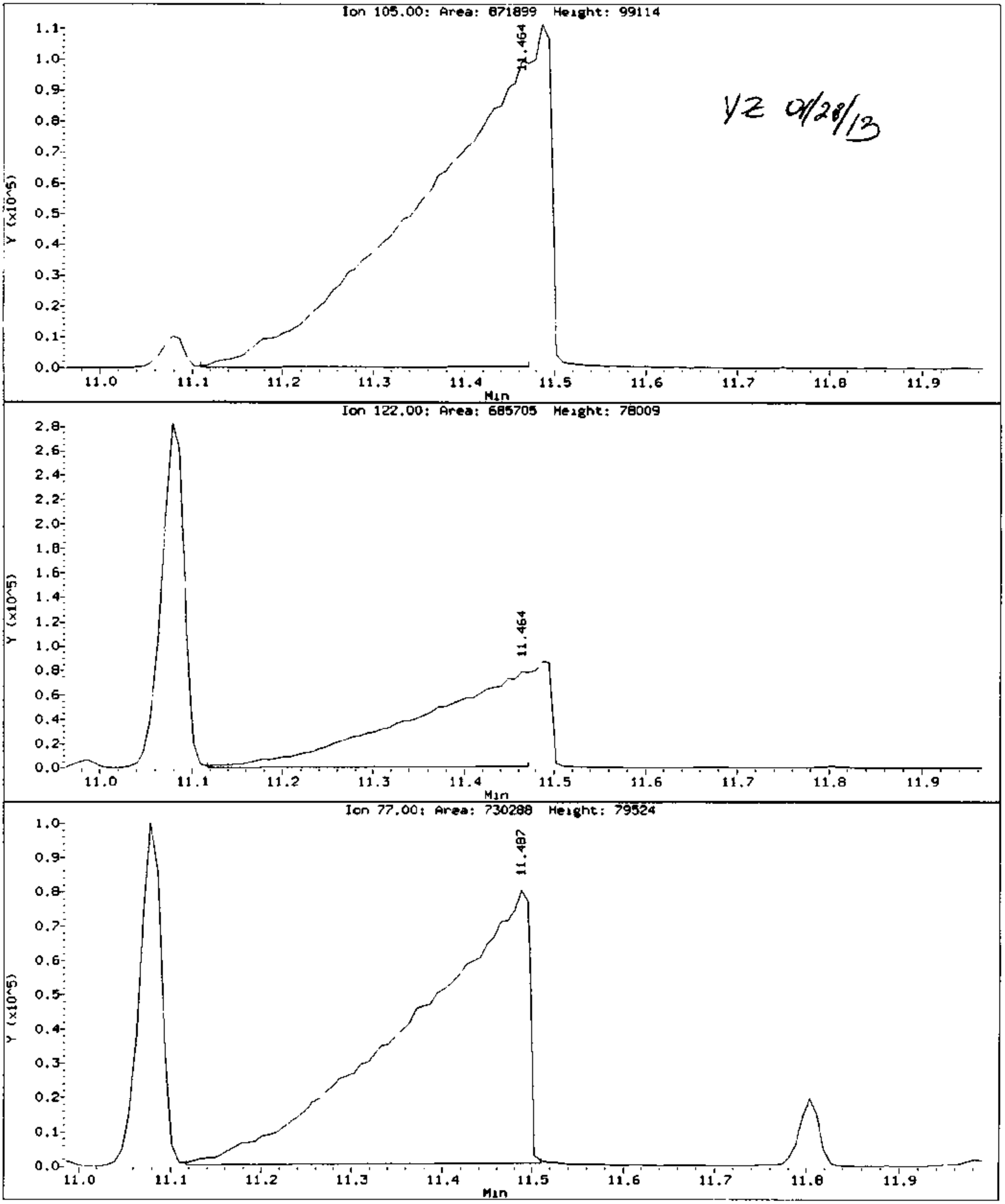
Instrument: nt10.i
Operator: VTS/YZ
Column diameter: 0.25



W032 : 00520

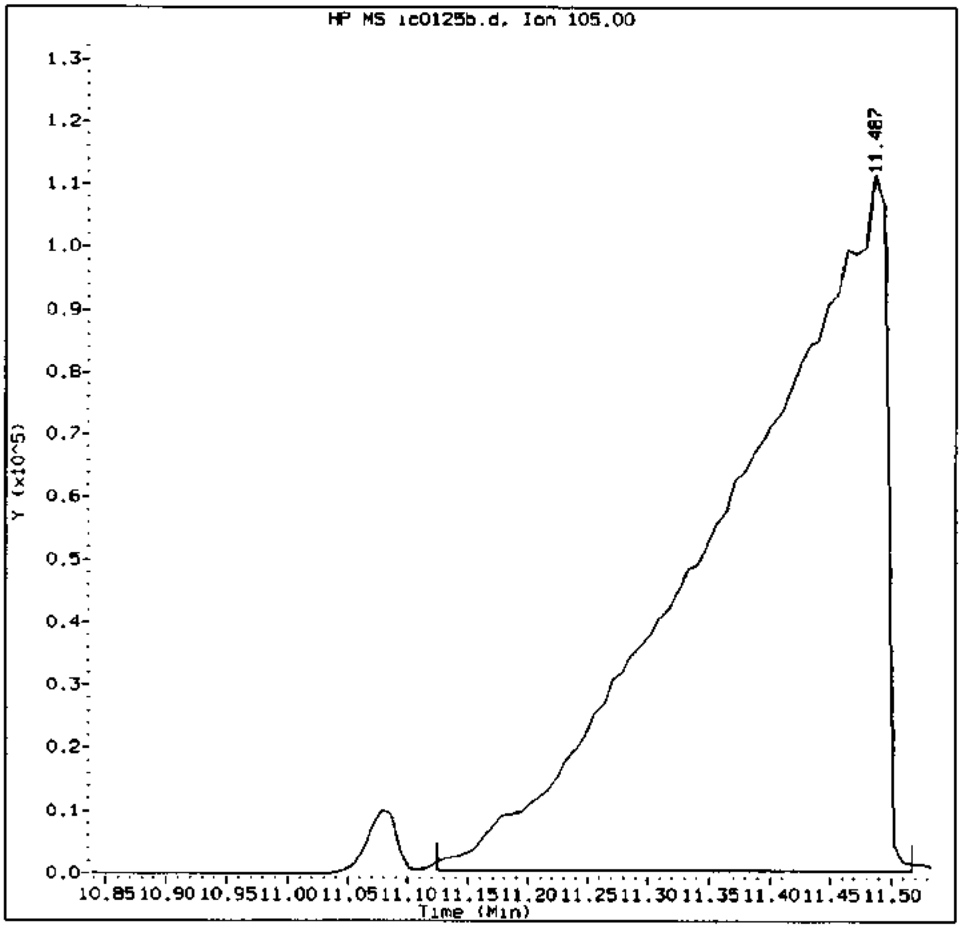
Data File: /chem1/nt10.i/20130125.b/ic0125b.d
Injection Date: 25-JAN-2013 13:36
Instrument: nt10.i
Client Sample ID:

Compound: Benzoic acid
CAS Number: 65-85-0



IC0125B, /chem1/nt10.i/20130125.b/ic0125b.d

Benzoic acid   Amount: 79.94   Area: 1036662



MANUAL INTEGRATION for Benzoic acid

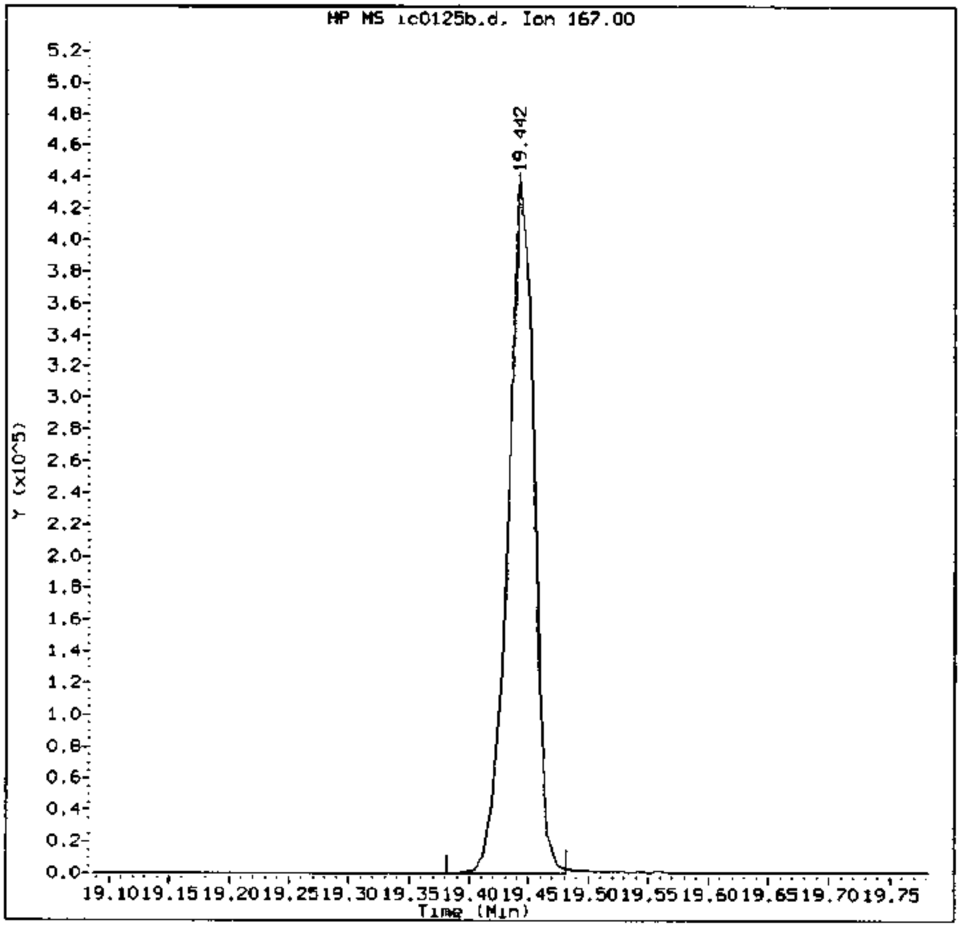
1. Baseline correction ✓
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other ____________________________

Analyst: YZ   Date: 01/28/13

IC0125B, /chem1/nt10.i/20130125.b/ic0125b.d

Carbazole Amount: 19.71 Area: 666542



MANUAL INTEGRATION for Carbazole

1. Baseline correction ✓
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other ______________________________

Analyst: YZ Date: 01/28/13

CO-ELUTION SUMMARY FOR FILE - ic0125b.d

Lab ID: IC0125B, Method: ABN.m, Instrument: nt10.i, Date: 25-JAN-2013

RT	CO-ELUTION COMPOUNDS
15.324	Acenaphthylene and 2,6-Dinitrotoluene

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D YZ 01/28/13

Data file : /chem1/nt10.i/20130125.b/ic0125c.d
Lab Smp Id: IC0125C
Inj Date : 25-JAN-2013 14:13
Operator : VTS/YZ Inst ID: nt10.i
Smp Info : IC0125C
Misc Info :
Comment : 1ul Injection
Method : /chem1/nt10.i/20130125.b/ABN.m
Meth Date : 28-Jan-2013 12:45 yev Quant Type: ISTD
Cal Date : 25-JAN-2013 14:13 Cal File: ic0125c.d
Als bottle: 4 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDAHDR.sub
Target Version: 3.50

								AMOUNTS	
			QUANT SIG					CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
$	1	2-Fluorophenol	112	6.720	6.720	(0.740)	2986	0.20000	0.2105
$	2	Phenol-d5	99	8.428	8.428	(0.928)	3637	0.20000	0.2066
	3	Phenol	94	8.451	8.451	(0.930)	4107	0.20000	0.2217
$	5	2-Chlorophenol-d4	132	8.698	8.698	(0.957)	3224	0.20000	0.2116
	4	Bis(2-Chloroethyl)ether	93	8.621	8.621	(0.949)	3116	0.20000	0.2211
	6	2-Chlorophenol	128	8.729	8.729	(0.961)	3538	0.20000	0.2195
	7	1,3-Dichlorobenzene	146	9.015	9.015	(0.992)	4067	0.20000	0.2319
*	8	1,4-Dichlorobenzene-d4	152	9.085	9.085	(1.000)	44358	4.00000	
	9	1,4-Dichlorobenzene	146	9.116	9.116	(1.003)	4047	0.20000	0.2330
$	10	1,2-Dichlorobenzene-d4	152	9.465	9.465	(1.042)	2635	0.20000	0.2353
	12	1,2-Dichlorobenzene	146	9.496	9.496	(1.045)	3854	0.20000	0.2308
	11	Benzyl alcohol	108	9.387	9.388	(1.033)	1864	0.20000	0.2103
	14	2,2'-oxybis(1-Chloropropane)	121	9.714	9.722	(1.069)	1065	0.20000	0.2148
	13	2-Methylphenol	108	9.644	9.644	(1.062)	2994	0.20000	0.2141
	17	Hexachloroethane	117	10.125	10.133	(1.114)	1508	0.20000	0.2197
	16	N-Nitroso-di-n-propylamine	70	10.001	9.993	(1.101)	2031	0.20000	0.2174
	15	4-Methylphenol	108	9.939	9.939	(1.094)	2977	0.20000	0.2047
$	18	Nitrobenzene-d5	82	10.257	10.257	(0.873)	3347	0.20000	0.2143
	19	Nitrobenzene	77	10.296	10.296	(0.876)	3278	0.20000	0.2213
	20	Isophorone	82	10.785	10.785	(0.918)	5357	0.20000	0.2075
	21	2-Nitrophenol	139	10.978	10.978	(0.934)	1636	0.20000	0.1880
	22	2,4-Dimethylphenol	107	11.063	11.063	(0.942)	6368	0.40000	0.4293
	23	Bis(2-Chloroethoxy)methane	93	11.279	11.271	(0.960)	3564	0.20000	0.2192
	24	Benzoic acid	105	11.163	11.186	(0.950)	4260	0.80000	0.3406(M)
	25	2,4-Dichlorophenol	162	11.471	11.464	(0.976)	5383	0.40000	0.4152
	26	1,2,4-Trichlorobenzene	180	11.664	11.664	(0.993)	3410	0.20000	0.2311
*	27	Naphthalene-d8	136	11.749	11.749	(1.000)	169256	4.00000	

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
	=========================	====	==	======	======	========	=======	=======
	28 Naphthalene	128	11.795	11.795	(1.004)	9911	0.20000	0.2250
	29 4-Chloroaniline	127	11.957	11.957	(1.018)	7379	0.40000	0.4163
	30 Hexachlorobutadiene	225	12.205	12.205	(1.039)	1979	0.20000	0.2152
	31 4-Chloro-3-methylphenol	107	13.017	13.017	(1.108)	4482	0.40000	0.3577
	32 2-Methylnaphthalene	142	13.303	13.311	(1.132)	6248	0.20000	0.2149
	33 Hexachlorocyclopentadiene	237	13.822	13.822	(0.883)	4529	0.40000	0.3943
	34 2,4,6-Trichlorophenol	196	13.992	13.992	(0.894)	3857	0.40000	0.3779
	35 2,4,5-Trichlorophenol	196	14.070	14.070	(0.899)	3858	0.40000	0.3557
$	36 2-Fluorobiphenyl	172	14.170	14.170	(0.905)	7600	0.20000	0.2175
	37 2-Chloronaphthalene	162	14.371	14.379	(0.918)	6298	0.20000	0.2239
	38 2-Nitroaniline	65	14.673	14.674	(0.937)	2207	0.40000	0.3345
	39 Dimethylphthalate	163	15.169	15.169	(0.969)	6664	0.20000	0.2164
	40 Acenaphthylene	152	15.316	15.316	(0.978)	9490	0.20000	0.2069
	41 2,6-Dinitrotoluene	165	15.300	15.300	(0.977)	2614	0.40000	0.3715
*	42 Acenaphthene-d10	164	15.656	15.656	(1.000)	101836	4.00000	
	43 3-Nitroaniline	138	15.594	15.594	(0.996)	2313	0.40000	0.3560(M)
	44 Acenaphthene	153	15.726	15.726	(1.004)	6035	0.20000	0.2146
	45 2,4-Dinitrophenol	184	15.826	15.826	(1.011)	1345	0.80000	0.2222
	46 Dibenzofuran	168	16.081	16.089	(1.027)	8605	0.20000	0.2200
	47 4-Nitrophenol	109	15.973	15.973	(1.020)	692	0.40000	0.1577
	48 2,4-Dinitrotoluene	165	16.174	16.174	(1.033)	3230	0.40000	0.3395
	50 Diethylphthalate	149	16.754	16.754	(1.070)	6918	0.20000	0.2144
	49 Fluorene	166	16.854	16.855	(1.077)	7142	0.20000	0.2149
	51 4-Chlorophenyl-phenylether	204	16.870	16.870	(1.078)	3304	0.20000	0.2134
	52 4-Nitroaniline	138	16.963	16.963	(1.083)	2474	0.40000	0.3607
	53 4,6-Dinitro-2-methylphenol	198	17.070	17.071	(0.902)	3851	0.80000	0.5625
	54 N-Nitrosodiphenylamine	169	17.148	17.148	(0.906)	4497	0.20000	0.2184
$	55 2,4,6-Tribromophenol	330	17.433	17.433	(1.113)	1238	0.20000	0.1905
	56 4-Bromophenyl-phenylether	248	17.957	17.957	(0.949)	2068	0.20000	0.2169
	57 Hexachlorobenzene	284	18.281	18.274	(0.966)	2625	0.20000	0.2193
	58 Pentachlorophenol	266	18.669	18.669	(0.986)	2577	0.40000	0.3229
*	59 Phenanthrene-d10	188	18.932	18.940	(1.000)	170953	4.00000	
	60 Phenanthrene	178	18.986	18.986	(1.003)	10336	0.20000	0.2268
	61 Anthracene	178	19.079	19.079	(1.008)	9548	0.20000	0.2081
	62 Carbazole	167	19.435	19.435	(1.027)	8044	0.20000	0.2513
	63 Di-n-butylphthalate	149	20.293	20.294	(1.072)	9564	0.20000	0.1953
	64 Fluoranthene	202	21.392	21.392	(1.130)	10986	0.20000	0.2093
	65 Pyrene	202	21.810	21.810	(0.908)	11305	0.20000	0.2054
$	66 Terphenyl-d14	244	22.127	22.127	(0.922)	7779	0.20000	0.2096
	67 Butylbenzylphthalate	149	23.079	23.072	(0.961)	4024	0.20000	0.1928
	68 Benzo(a)anthracene	228	23.978	23.970	(0.999)	11586	0.20000	0.2149
*	69 Chrysene-d12	240	24.009	24.001	(1.000)	193229	4.00000	
	70 3,3'-Dichlorobenzidine	252	23.954	23.947	(0.998)	11300	0.40000	0.5016
	71 Chrysene	228	24.047	24.048	(1.002)	10934	0.20000	0.2239
	72 bis(2-Ethylhexyl)phthalate	149	24.117	24.117	(0.961)	6441	0.20000	0.2251
*	134 Di-n-octylphthalate-d4	153	25.100	25.093	(1.000)	216658	4.00000	
	73 Di-n-octylphthalate	149	25.108	25.108	(1.000)	12550	0.20000	0.2375

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
74 Benzo(b)fluoranthene	252	25.797	25.789	(0.973)	10822	0.20000	0.2081
75 Benzo(k)fluoranthene	252	25.836	25.836	(0.975)	12743	0.20000	0.2268
76 Benzo(a)pyrene	252	26.393	26.393	(0.996)	9661	0.20000	0.2148
* 77 Perylene-d12	264	26.509	26.502	(1.000)	179458	4.00000	
78 Indeno(1,2,3-cd)pyrene	276	28.926	28.919	(1.091)	11294	0.20000	0.2036
79 Dibenzo(a,h)anthracene	278	28.950	28.942	(1.092)	8716	0.20000	0.1984
80 Benzo(g,h,i)perylene	276	29.633	29.633	(1.118)	9702	0.20000	0.2038
90 N-Nitrosodimethylamine	74	4.450	4.442	(0.490)	3696	0.40000	0.4380
91 Aniline	93	8.505	8.505	(0.936)	8946	0.20000	0.2238
93 Benzidine	184	21.647	21.648	(0.902)	8735	0.40000	1.011
103 Pyridine	79	4.496	4.481	(0.495)	2955	0.40000	0.4105
105 1-methylnaphthalene	142	13.543	13.544	(1.153)	5815	0.20000	0.2180
111 Azobenzene (1,2-DP-Hydrazine)	77	17.217	17.217	(1.100)	6100	0.20000	0.2084
187 Total Benzofluoranthenes	252	25.797	25.836	(0.973)	22209	0.40000	0.4338
99 Perylene	252	26.556	26.548	(1.002)	11836	0.20000	0.2289
98 Retene	219	Compound Not Detected.					
120 2,3,4,6-Tetrachlorophenol	232	16.460	16.460	(1.051)	1674	0.20000	0.1765
188 2,6-Dichlorophenol	162	11.973	11.973	(1.019)	5154	0.40000	0.4092
189 N-Nitrosomethylethylamine	88	5.909	5.909	(0.650)	2500	0.40000	0.4077

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem1/nt10.i/20130125.b/ic0125c.d
Report Date: 28-Jan-2013 12:50

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: ic0125c.d
Lab Smp Id: IC0125C
Analysis Type: SV
Quant Type: ISTD
Operator: VTS/YZ
Method File: /chem1/nt10.i/20130125.b/ABN.m
Misc Info:

Calibration Date: 25-JAN-2013
Calibration Time: 12:59

Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	46623	23312	93246	44358	-4.86
27 Naphthalene-d8	176978	88489	353956	169256	-4.36
42 Acenaphthene-d10	110872	55436	221744	101836	-8.15
59 Phenanthrene-d10	188290	94145	376580	170953	-9.21
69 Chrysene-d12	213681	106840	427362	193229	-9.57
134 Di-n-octylphthala	264159	132080	528318	216658	-17.98
77 Perylene-d12	208584	104292	417168	179458	-13.96

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.08	8.58	9.58	9.08	0.00
27 Naphthalene-d8	11.76	11.26	12.26	11.75	-0.06
42 Acenaphthene-d10	15.66	15.16	16.16	15.66	-0.05
59 Phenanthrene-d10	18.94	18.44	19.44	18.93	-0.04
69 Chrysene-d12	24.01	23.51	24.51	24.01	0.00
134 Di-n-octylphthala	25.10	24.60	25.60	25.10	0.00
77 Perylene-d12	26.51	26.01	27.01	26.51	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/nt10.i/20130125.b/ic0125c.d

Date : 25-JAN-2013 14:13

Client ID:

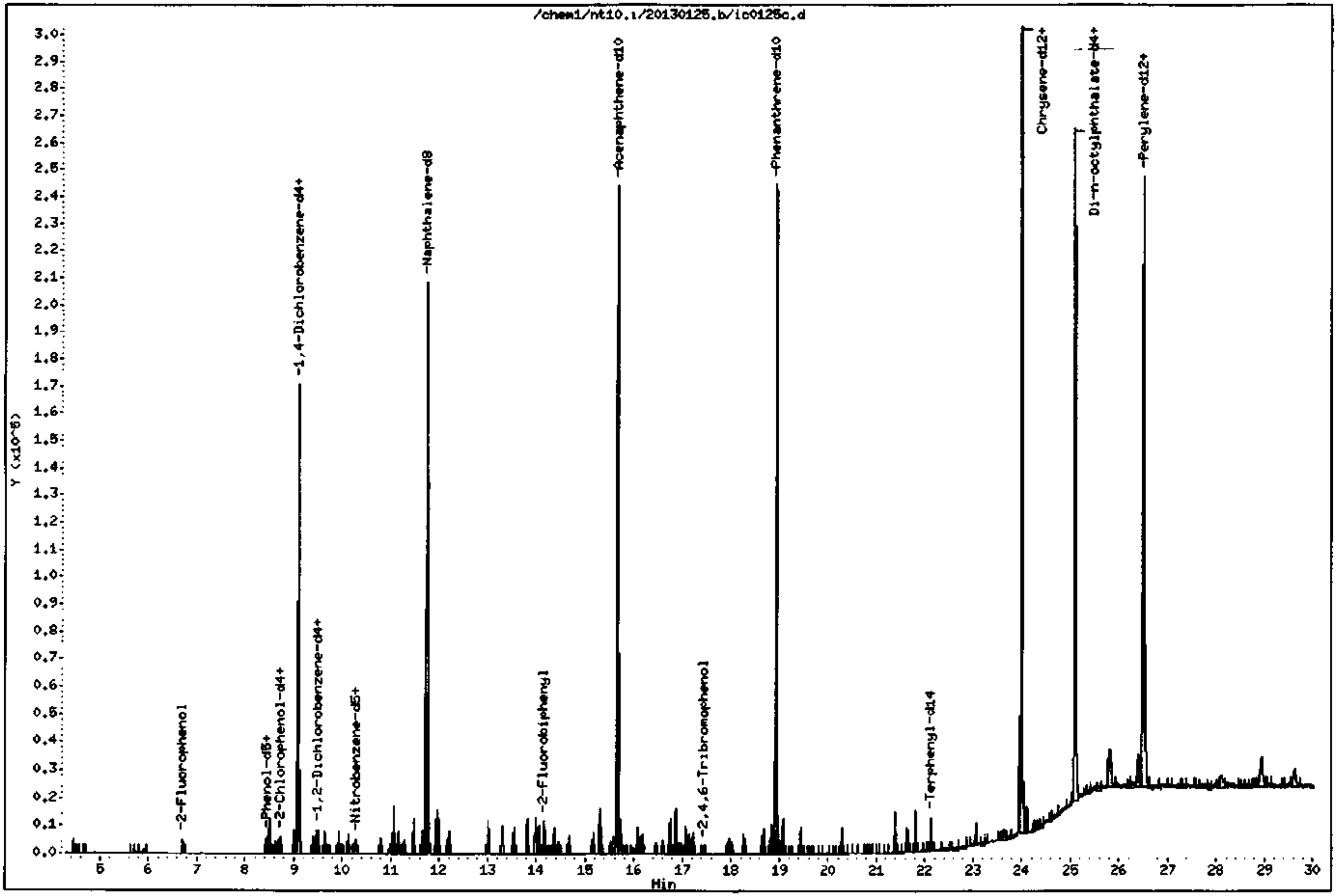
Instrument: nt10.i

Sample Info: IC0125C

Operator: VTS/YZ

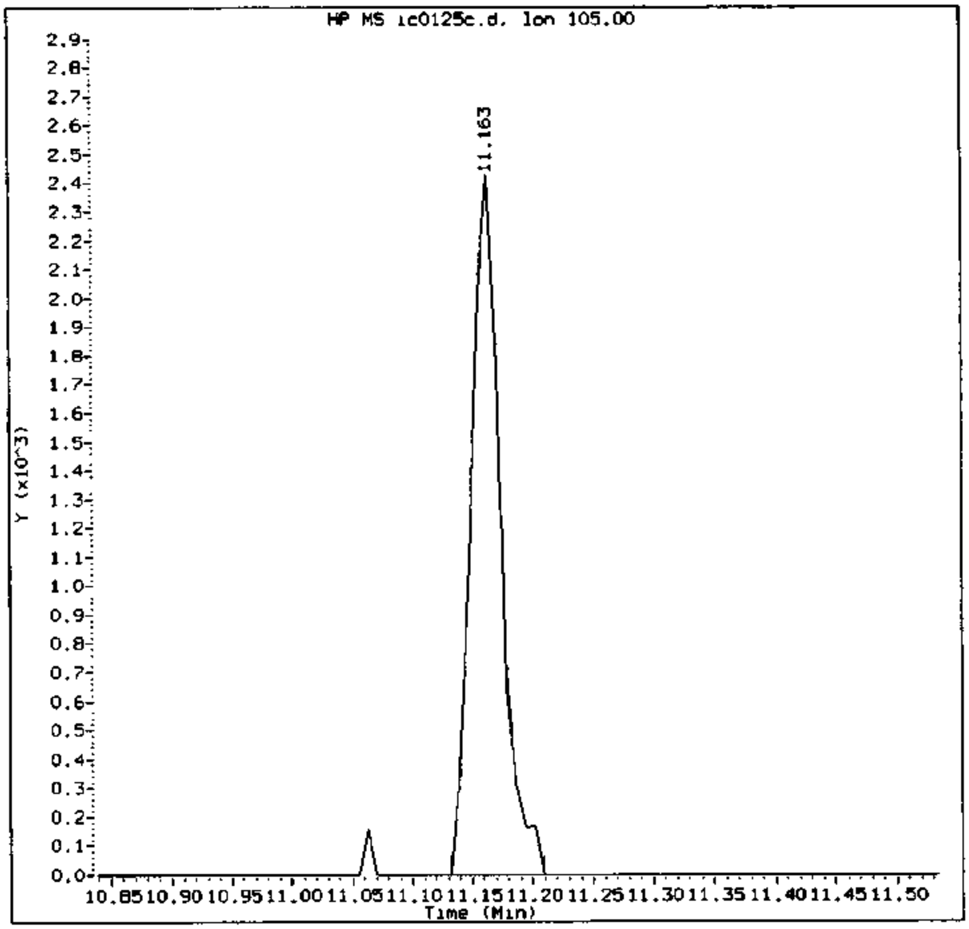
Column phase: ZB-5msi

Column diameter: 0.25



IC0125C, /chem1/nt10.i/20130125.b/ic0125c.d

Benzoic acid   Amount: 0.34   Area: 4260



MANUAL INTEGRATION for Benzoic acid

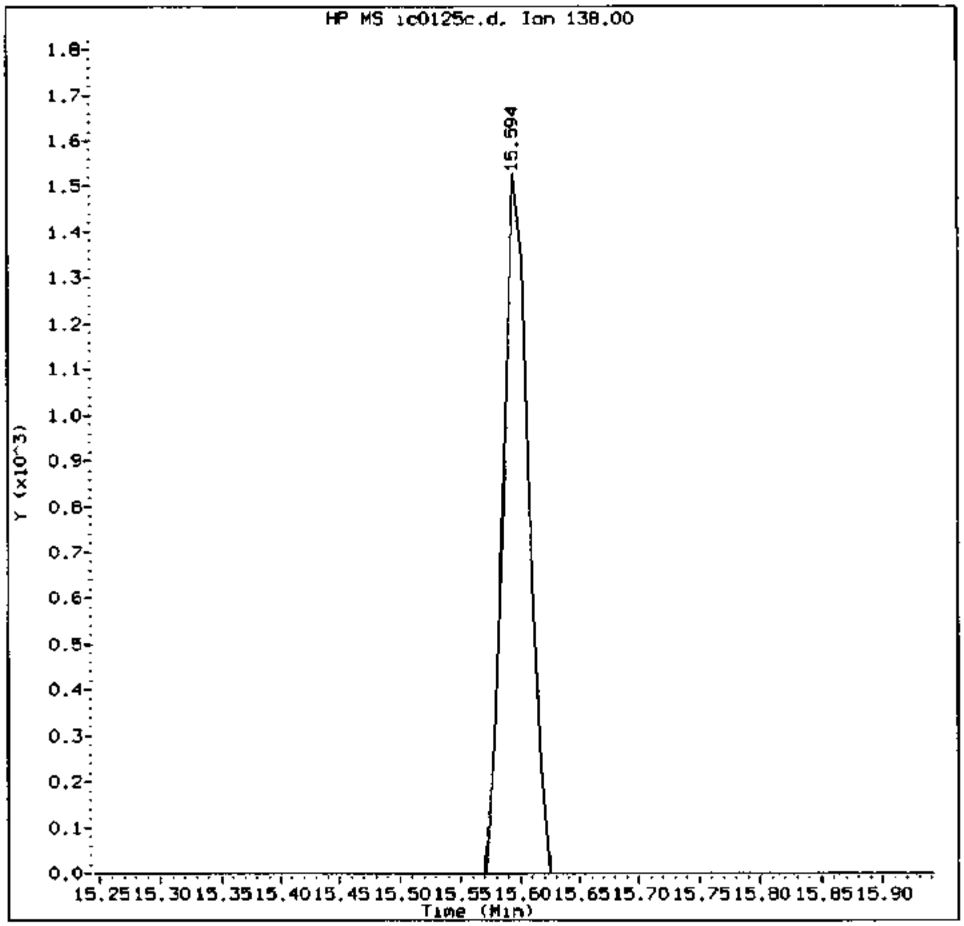
1. Baseline correction ✓
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other ________________

Analyst: YZ   Date: 02/28/13

IC0125C, /chem1/nt10.i/20130125.b/ic0125c.d

3-Nitroaniline Amount: 0.36 Area: 2313



MANUAL INTEGRATION for 3-Nitroaniline

1. Baseline correction ✓
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other ______________________

Analyst: YZ Date: 01/28/13

CO-ELUTION SUMMARY FOR FILE - ic0125c.d

Lab ID: IC0125C, Method: ABN.m, Instrument: nt10.i, Date: 25-JAN-2013

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D   YZ 01/28/13

Data file : /chem1/nt10.i/20130125.b/ic0125d.d
Lab Smp Id: IC0125D
Inj Date : 25-JAN-2013 14:50
Operator : VTS/YZ   Inst ID: nt10.i
Smp Info : IC0125D
Misc Info :
Comment : 1ul Injection
Method : /chem1/nt10.i/20130125.b/ABN.m
Meth Date : 28-Jan-2013 12:45 yev   Quant Type: ISTD
Cal Date : 25-JAN-2013 14:50   Cal File: ic0125d.d
Als bottle: 5   Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: PSDDAHDR.sub
Target Version: 3.50

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.728	6.720	(0.740)	136821	10.0000	9.958
$	2 Phenol-d5	99	8.435	8.428	(0.928)	171972	10.0000	10.09
	3 Phenol	94	8.459	8.451	(0.931)	173685	10.0000	9.678
$	5 2-Chlorophenol-d4	132	8.698	8.698	(0.957)	146850	10.0000	9.947
	4 Bis(2-Chloroethyl)ether	93	8.621	8.621	(0.949)	130128	10.0000	9.530
	6 2-Chlorophenol	128	8.729	8.729	(0.961)	152445	10.0000	9.762
	7 1,3-Dichlorobenzene	146	9.015	9.015	(0.992)	163629	10.0000	9.629
*	8 1,4-Dichlorobenzene-d4	152	9.085	9.085	(1.000)	42972	4.00000	
	9 1,4-Dichlorobenzene	146	9.116	9.116	(1.003)	162261	10.0000	9.643
$	10 1,2-Dichlorobenzene-d4	152	9.473	9.465	(1.043)	106626	10.0000	9.828
	12 1,2-Dichlorobenzene	146	9.496	9.496	(1.045)	155682	10.0000	9.622
	11 Benzyl alcohol	108	9.395	9.388	(1.034)	87783	10.0000	10.22
	14 2,2'-oxybis(1-Chloropropane)	121	9.721	9.722	(1.070)	47843	10.0000	9.959
	13 2-Methylphenol	108	9.652	9.644	(1.062)	136083	10.0000	10.05
	17 Hexachloroethane	117	10.133	10.133	(1.115)	65975	10.0000	9.920
	16 N-Nitroso-di-n-propylamine	70	10.001	9.993	(1.101)	90869	10.0000	10.04
	15 4-Methylphenol	108	9.947	9.939	(1.095)	141108	10.0000	10.02
$	18 Nitrobenzene-d5	82	10.265	10.257	(0.873)	152027	10.0000	9.931
	19 Nitrobenzene	77	10.303	10.296	(0.876)	142601	10.0000	9.824
	20 Isophorone	82	10.800	10.785	(0.919)	256454	10.0000	10.14
	21 2-Nitrophenol	139	10.978	10.978	(0.934)	89829	10.0000	10.53
	22 2,4-Dimethylphenol	107	11.071	11.063	(0.942)	283047	20.0000	19.47
	23 Bis(2-Chloroethoxy)methane	93	11.279	11.271	(0.959)	151067	10.0000	9.481
	24 Benzoic acid	105	11.402	11.186	(0.970)	507039	40.0000	40.20
	25 2,4-Dichlorophenol	162	11.479	11.464	(0.976)	253663	20.0000	19.96
	26 1,2,4-Trichlorobenzene	180	11.672	11.664	(0.993)	136553	10.0000	9.444
*	27 Naphthalene-d8	136	11.757	11.749	(1.000)	165867	4.00000	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
28 Naphthalene	128	11.795	11.795	(1.003)	417528	10.0000	9.674
29 4-Chloroaniline	127	11.965	11.957	(1.018)	345799	20.0000	19.91
30 Hexachlorobutadiene	225	12.212	12.205	(1.039)	89353	10.0000	9.916
31 4-Chloro-3-methylphenol	107	13.025	13.017	(1.108)	264492	20.0000	21.54
32 2-Methylnaphthalene	142	13.311	13.311	(1.132)	283288	10.0000	9.941
33 Hexachlorocyclopentadiene	237	13.830	13.822	(0.883)	251203	20.0000	20.69
34 2,4,6-Trichlorophenol	196	14.000	13.992	(0.894)	223317	20.0000	20.70
35 2,4,5-Trichlorophenol	196	14.070	14.070	(0.898)	242921	20.0000	21.19
$ 36 2-Fluorobiphenyl	172	14.178	14.170	(0.905)	357374	10.0000	9.676
37 2-Chloronaphthalene	162	14.379	14.379	(0.918)	288962	10.0000	9.717
38 2-Nitroaniline	65	14.681	14.674	(0.937)	151663	20.0000	21.74
39 Dimethylphthalate	163	15.176	15.169	(0.969)	315858	10.0000	9.700
40 Acenaphthylene	152	15.316	15.316	(0.978)	468651	10.0000	9.663
41 2,6-Dinitrotoluene	165	15.316	15.300	(0.978)	152771	20.0000	20.54
* 42 Acenaphthene-d10	164	15.664	15.656	(1.000)	107661	4.00000	
43 3-Nitroaniline	138	15.618	15.594	(0.997)	141594	20.0000	20.61
44 Acenaphthene	153	15.733	15.726	(1.004)	287776	10.0000	9.677
45 2,4-Dinitrophenol	184	15.842	15.826	(1.011)	267779	40.0000	40.58
46 Dibenzofuran	168	16.097	16.089	(1.028)	398333	10.0000	9.631
47 4-Nitrophenol	109	15.989	15.973	(1.021)	94479	20.0000	19.99
48 2,4-Dinitrotoluene	165	16.190	16.174	(1.034)	210743	20.0000	20.95
50 Diethylphthalate	149	16.769	16.754	(1.071)	331988	10.0000	9.733
49 Fluorene	166	16.870	16.855	(1.077)	335222	10.0000	9.543
51 4-Chlorophenyl-phenylether	204	16.878	16.870	(1.077)	155738	10.0000	9.513
52 4-Nitroaniline	138	16.994	16.963	(1.085)	151466	20.0000	20.89
53 4,6-Dinitro-2-methylphenol	198	17.101	17.071	(0.903)	329949	40.0000	45.12
54 N-Nitrosodiphenylamine	169	17.155	17.148	(0.906)	209012	10.0000	9.501
$ 55 2,4,6-Tribromophenol	330	17.441	17.433	(1.113)	70530	10.0000	10.27
56 4-Bromophenyl-phenylether	248	17.965	17.957	(0.949)	102014	10.0000	10.01
57 Hexachlorobenzene	284	18.282	18.274	(0.965)	123331	10.0000	9.647
58 Pentachlorophenol	266	18.676	18.669	(0.986)	185585	20.0000	21.77
* 59 Phenanthrene-d10	188	18.939	18.940	(1.000)	182628	4.00000	
60 Phenanthrene	178	18.994	18.986	(1.003)	470008	10.0000	9.654
61 Anthracene	178	19.086	19.079	(1.008)	501886	10.0000	10.24
62 Carbazole	167	19.442	19.435	(1.027)	300533	10.0000	8.787
63 Di-n-butylphthalate	149	20.293	20.294	(1.071)	566831	10.0000	10.84
64 Fluoranthene	202	21.400	21.392	(1.130)	569024	10.0000	10.15
65 Pyrene	202	21.818	21.810	(0.909)	588216	10.0000	10.16
$ 66 Terphenyl-d14	244	22.135	22.127	(0.922)	393438	10.0000	10.08
67 Butylbenzylphthalate	149	23.080	23.072	(0.961)	237303	10.0000	10.81
68 Benzo(a)anthracene	228	23.985	23.970	(0.999)	565205	10.0000	9.967
* 69 Chrysene-d12	240	24.009	24.001	(1.000)	203223	4.00000	
70 3,3'-Dichlorobenzidine	252	23.962	23.947	(0.998)	477339	20.0000	20.15
71 Chrysene	228	24.055	24.048	(1.002)	498249	10.0000	9.701
72 bis(2-Ethylhexyl)phthalate	149	24.117	24.117	(0.961)	333510	10.0000	9.682
* 134 Di-n-octylphthalate-d4	153	25.100	25.093	(1.000)	260852	4.00000	
73 Di-n-octylphthalate	149	25.108	25.108	(1.000)	596440	10.0000	9.374

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
	==========================	====	==	======	======	========	=======	=======
	74 Benzo(b)fluoranthene	252	25.805	25.789	(0.973)	610570	10.0000	10.38
	75 Benzo(k)fluoranthene	252	25.843	25.836	(0.975)	591193	10.0000	9.305
	76 Benzo(a)pyrene	252	26.401	26.393	(0.996)	511521	10.0000	10.06
*	77 Perylene-d12	264	26.517	26.502	(1.000)	202904	4.00000	
	78 Indeno(1,2,3-cd)pyrene	276	28.942	28.919	(1.091)	645100	10.0000	10.29
	79 Dibenzo(a,h)anthracene	278	28.973	28.942	(1.093)	507978	10.0000	10.23
	80 Benzo(g,h,i)perylene	276	29.657	29.633	(1.118)	547612	10.0000	10.18
	90 N-Nitrosodimethylamine	74	4.450	4.442	(0.490)	162464	20.0000	19.87
	91 Aniline	93	8.513	8.505	(0.937)	372010	10.0000	9.606
	93 Benzidine	184	21.655	21.648	(0.902)	196119	20.0000	19.73
	103 Pyridine	79	4.457	4.481	(0.491)	137064	20.0000	19.66
	105 1-methylnaphthalene	142	13.551	13.544	(1.153)	260850	10.0000	9.979
	111 Azobenzene (1,2-DP-Hydrazine)	77	17.233	17.217	(1.100)	303035	10.0000	9.794
	187 Total Benzofluoranthenes	252	25.843	25.836	(0.975)	1134836	20.0000	19.60
	99 Perylene	252	26.564	26.548	(1.002)	564148	10.0000	9.652
	98 Retene	219	Compound Not Detected.					
	120 2,3,4,6-Tetrachlorophenol	232	16.468	16.460	(1.051)	105417	10.0000	10.51
	188 2,6-Dichlorophenol	162	11.988	11.973	(1.020)	249221	20.0000	20.19
	189 N-Nitrosomethylethylamine	88	5.909	5.909	(0.650)	119200	20.0000	20.06

Report Date: 28-Jan-2013 12:50

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: ic0125d.d
Lab Smp Id: IC0125D
Analysis Type: SV
Quant Type: ISTD
Operator: VTS/YZ
Method File: /chem1/nt10.i/20130125.b/ABN.m
Misc Info:

Calibration Date: 25-JAN-2013
Calibration Time: 12:59

Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	46623	23312	93246	42972	-7.83
27 Naphthalene-d8	176978	88489	353956	165867	-6.28
42 Acenaphthene-d10	110872	55436	221744	107661	-2.90
59 Phenanthrene-d10	188290	94145	376580	182628	-3.01
69 Chrysene-d12	213681	106840	427362	203223	-4.89
134 Di-n-octylphthala	264159	132080	528318	260852	-1.25
77 Perylene-d12	208584	104292	417168	202904	-2.72

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.08	8.58	9.58	9.08	0.00
27 Naphthalene-d8	11.76	11.26	12.26	11.76	0.00
42 Acenaphthene-d10	15.66	15.16	16.16	15.66	0.00
59 Phenanthrene-d10	18.94	18.44	19.44	18.94	0.00
69 Chrysene-d12	24.01	23.51	24.51	24.01	0.00
134 Di-n-octylphthala	25.10	24.60	25.60	25.10	0.00
77 Perylene-d12	26.51	26.01	27.01	26.52	0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/nt10.i/20130125.b/ic0125d.d

Date : 25-JAN-2013 14:50

Client ID:

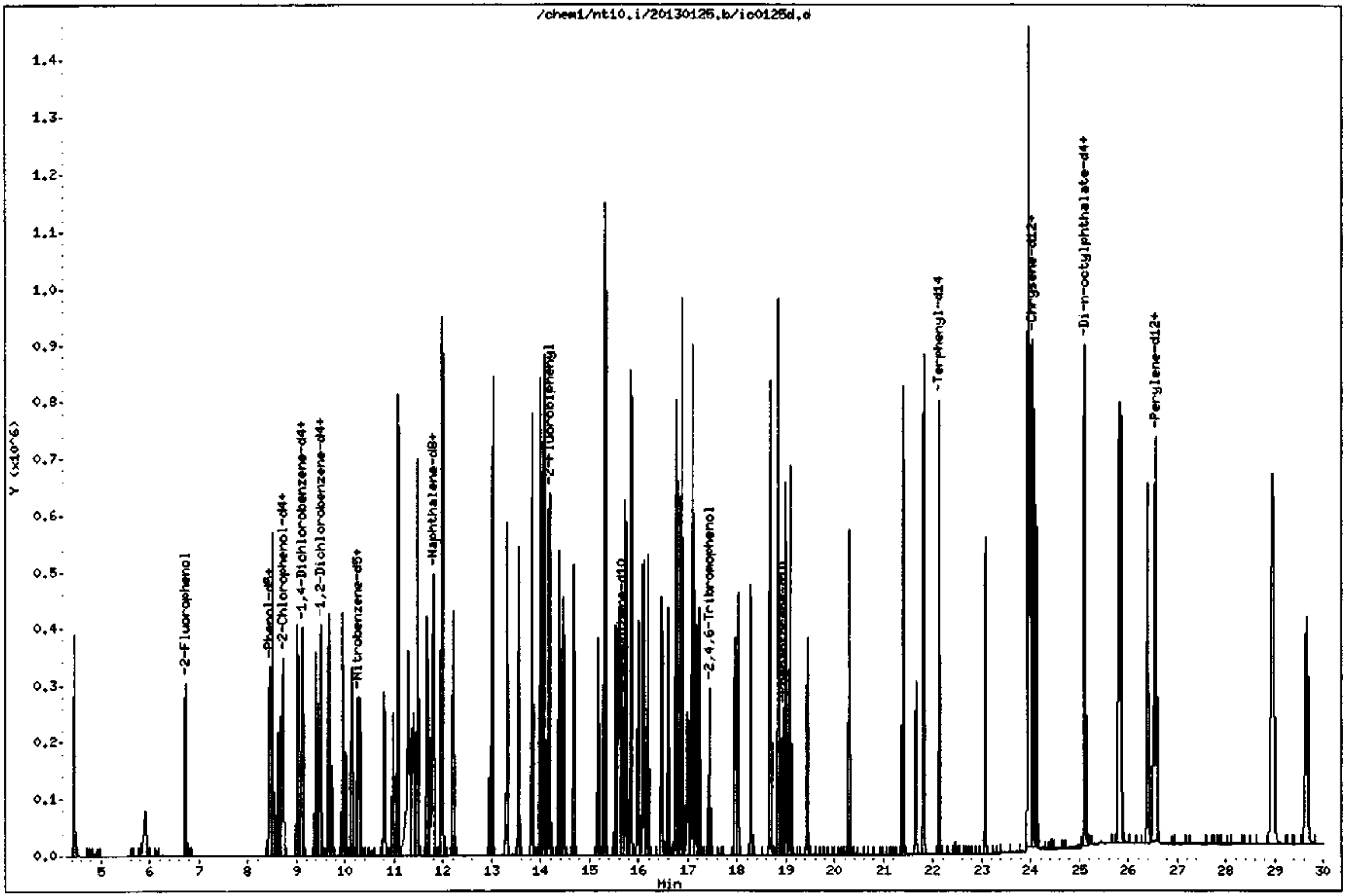
Sample Info: IC0125D

Column phase: ZB-5msi

Instrument: nt10.i

Operator: VTS/YZ

Column diameter: 0.25



CO-ELUTION SUMMARY FOR FILE - ic0125d.d

Lab ID: IC0125D, Method: ABN.m, Instrument: nt10.i, Date: 25-JAN-2013

RT	CO-ELUTION COMPOUNDS
15.316	Acenaphthylene and 2,6-Dinitrotoluene

Data File: /chem1/nt10.i/20130125.b/ic0125e.d
Report Date: 28-Jan-2013 12:50

Analytical Resources, Inc. YZ 01/28/13

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt10.i/20130125.b/ic0125e.d
Lab Smp Id: IC0125E
Inj Date : 25-JAN-2013 15:27
Operator : VTS/YZ Inst ID: nt10.i
Smp Info : IC0125E
Misc Info :
Comment : 1ul Injection
Method : /chem1/nt10.i/20130125.b/ABN.m
Meth Date : 28-Jan-2013 12:45 yev Quant Type: ISTD
Cal Date : 25-JAN-2013 15:27 Cal File: ic0125e.d
Als bottle: 6 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDAHDR.sub
Target Version: 3.50

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
$	1 2-Fluorophenol	112	6.720	6.720	(0.740)	16113	1.00000	1.032
$	2 Phenol-d5	99	8.428	8.428	(0.928)	18904	1.00000	0.9754
	3 Phenol	94	8.451	8.451	(0.930)	20114	1.00000	0.9860
$	5 2-Chlorophenol-d4	132	8.698	8.698	(0.957)	16984	1.00000	1.012
	4 Bis(2-Chloroethyl)ether	93	8.621	8.621	(0.949)	15918	1.00000	1.026
	6 2-Chlorophenol	128	8.729	8.729	(0.961)	18038	1.00000	1.016
	7 1,3-Dichlorobenzene	146	9.015	9.015	(0.992)	19305	1.00000	0.9994
*	8 1,4-Dichlorobenzene-d4	152	9.085	9.085	(1.000)	48848	4.00000	
	9 1,4-Dichlorobenzene	146	9.116	9.116	(1.003)	19562	1.00000	1.023
$	10 1,2-Dichlorobenzene-d4	152	9.465	9.465	(1.042)	12221	1.00000	0.9909
	12 1,2-Dichlorobenzene	146	9.496	9.496	(1.045)	18480	1.00000	1.005
	11 Benzyl alcohol	108	9.387	9.388	(1.033)	9674	1.00000	0.9909
	14 2,2'-oxybis(1-Chloropropane)	121	9.721	9.722	(1.070)	5408	1.00000	0.9903
	13 2-Methylphenol	108	9.644	9.644	(1.062)	15211	1.00000	0.9878
	17 Hexachloroethane	117	10.133	10.133	(1.115)	7792	1.00000	1.031
	16 N-Nitroso-di-n-propylamine	70	10.001	9.993	(1.101)	10451	1.00000	1.016
	15 4-Methylphenol	108	9.939	9.939	(1.094)	16043	1.00000	1.002
$	18 Nitrobenzene-d5	82	10.265	10.257	(0.874)	16869	1.00000	0.9973
	19 Nitrobenzene	77	10.296	10.296	(0.876)	15970	1.00000	0.9958
	20 Isophorone	82	10.785	10.785	(0.918)	27877	1.00000	0.9973
	21 2-Nitrophenol	139	10.978	10.978	(0.934)	9412	1.00000	0.9988
	22 2,4-Dimethylphenol	107	11.063	11.063	(0.942)	32855	2.00000	2.046
	23 Bis(2-Chloroethoxy)methane	93	11.279	11.271	(0.960)	17621	1.00000	1.001
	24 Benzoic acid	105	11.217	11.186	(0.955)	44455	4.00000	3.276
	25 2,4-Dichlorophenol	162	11.471	11.464	(0.976)	28258	2.00000	2.013
	26 1,2,4-Trichlorobenzene	180	11.664	11.664	(0.993)	16262	1.00000	1.018
*	27 Naphthalene-d8	136	11.749	11.749	(1.000)	183261	4.00000	

		QUANT SIG					AMOUNTS	
							CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
	==========================	====	==	======	======	========	=======	=======
	28 Naphthalene	128	11.795	11.795	(1.004)	47687	1.00000	1.000
	29 4-Chloroaniline	127	11.957	11.957	(1.018)	38115	2.00000	1.986
	30 Hexachlorobutadiene	225	12.212	12.205	(1.039)	10094	1.00000	1.014
	31 4-Chloro-3-methylphenol	107	13.017	13.017	(1.108)	27077	2.00000	1.996
	32 2-Methylnaphthalene	142	13.311	13.311	(1.133)	30898	1.00000	0.9814
	33 Hexachlorocyclopentadiene	237	13.822	13.822	(0.883)	24889	2.00000	1.977
	34 2,4,6-Trichlorophenol	196	13.992	13.992	(0.894)	22845	2.00000	2.042
	35 2,4,5-Trichlorophenol	196	14.062	14.070	(0.898)	23632	2.00000	1.988
$	36 2-Fluorobiphenyl	172	14.170	14.170	(0.905)	38258	1.00000	0.9988
	37 2-Chloronaphthalene	162	14.379	14.379	(0.918)	30606	1.00000	0.9924
	38 2-Nitroaniline	65	14.673	14.674	(0.937)	14324	2.00000	1.980
	39 Dimethylphthalate	163	15.169	15.169	(0.969)	34355	1.00000	1.017
	40 Acenaphthylene	152	15.316	15.316	(0.978)	51815	1.00000	1.030
	41 2,6-Dinitrotoluene	165	15.300	15.300	(0.977)	15628	2.00000	2.026
*	42 Acenaphthene-d10	164	15.656	15.656	(1.000)	111653	4.00000	
	43 3-Nitroaniline	138	15.594	15.594	(0.996)	16234	2.00000	2.279
	44 Acenaphthene	153	15.726	15.726	(1.004)	31219	1.00000	1.012
	45 2,4-Dinitrophenol	184	15.826	15.826	(1.011)	18391	4.00000	2.766
	46 Dibenzofuran	168	16.081	16.089	(1.027)	43688	1.00000	1.019
	47 4-Nitrophenol	109	15.973	15.973	(1.020)	7272	2.00000	1.509
	48 2,4-Dinitrotoluene	165	16.174	16.174	(1.033)	21257	2.00000	2.038
	50 Diethylphthalate	149	16.754	16.754	(1.070)	35941	1.00000	1.016
	49 Fluorene	166	16.854	16.855	(1.077)	36865	1.00000	1.012
	51 4-Chlorophenyl-phenylether	204	16.870	16.870	(1.078)	17604	1.00000	1.037
	52 4-Nitroaniline	138	16.970	16.963	(1.084)	15530	2.00000	2.065
	53 4,6-Dinitro-2-methylphenol	198	17.078	17.071	(0.902)	30630	4.00000	3.996
	54 N-Nitrosodiphenylamine	169	17.148	17.148	(0.905)	24514	1.00000	1.063
$	55 2,4,6-Tribromophenol	330	17.433	17.433	(1.113)	7092	1.00000	0.9953
	56 4-Bromophenyl-phenylether	248	17.957	17.957	(0.948)	10432	1.00000	0.9771
	57 Hexachlorobenzene	284	18.281	18.274	(0.965)	13763	1.00000	1.027
	58 Pentachlorophenol	266	18.669	18.669	(0.986)	18075	2.00000	2.023
*	59 Phenanthrene-d10	188	18.939	18.940	(1.000)	191397	4.00000	
	60 Phenanthrene	178	18.986	18.986	(1.002)	50862	1.00000	0.9969
	61 Anthracene	178	19.079	19.079	(1.007)	50980	1.00000	0.9923
	62 Carbazole	167	19.435	19.435	(1.026)	42004	1.00000	1.172
	63 Di-n-butylphthalate	149	20.293	20.294	(1.071)	51597	1.00000	0.9412
	64 Fluoranthene	202	21.392	21.392	(1.129)	58329	1.00000	0.9927
	65 Pyrene	202	21.810	21.810	(0.909)	60787	1.00000	1.003
$	66 Terphenyl-d14	244	22.127	22.127	(0.922)	42009	1.00000	1.028
	67 Butylbenzylphthalate	149	23.072	23.072	(0.961)	22886	1.00000	0.9955
	68 Benzo(a)anthracene	228	23.978	23.970	(0.999)	59738	1.00000	1.006
*	69 Chrysene-d12	240	24.001	24.001	(1.000)	212807	4.00000	
	70 3,3'-Dichlorobenzidine	252	23.947	23.947	(0.998)	50394	2.00000	2.031
	71 Chrysene	228	24.047	24.048	(1.002)	54152	1.00000	1.007
	72 bis(2-Ethylhexyl)phthalate	149	24.117	24.117	(0.961)	32034	1.00000	0.9835
*	134 Di-n-octylphthalate-d4	153	25.100	25.093	(1.000)	246669	4.00000	
	73 Di-n-octylphthalate	149	25.108	25.108	(1.000)	60586	1.00000	1.007

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
74 Benzo(b)fluoranthene	252	25.797	25.789	(0.973)	56463	1.00000	0.9423
75 Benzo(k)fluoranthene	252	25.836	25.836	(0.975)	66658	1.00000	1.030
76 Benzo(a)pyrene	252	26.393	26.393	(0.996)	50593	1.00000	0.9764
* 77 Perylene-d12	264	26.509	26.502	(1.000)	206726	4.00000	
78 Indeno(1,2,3-cd)pyrene	276	28.926	28.919	(1.091)	62875	1.00000	0.9839
79 Dibenzo(a,h)anthracene	278	28.950	28.942	(1.092)	50949	1.00000	1.007
80 Benzo(g,h,i)perylene	276	29.625	29.633	(1.118)	54073	1.00000	0.9863
90 N-Nitrosodimethylamine	74	4.442	4.442	(0.489)	18249	2.00000	1.964
91 Aniline	93	8.505	8.505	(0.936)	45165	1.00000	1.026
93 Benzidine	184	21.647	21.648	(0.902)	37924	2.00000	3.937
103 Pyridine	79	4.473	4.481	(0.492)	16049	2.00000	2.025
105 1-methylnaphthalene	142	13.543	13.544	(1.153)	28274	1.00000	0.9790
111 Azobenzene (1,2-DP-Hydrazine)	77	17.217	17.217	(1.100)	33066	1.00000	1.031
187 Total Benzofluoranthenes	252	25.836	25.836	(0.975)	116821	2.00000	1.981
99 Perylene	252	26.556	26.548	(1.002)	59928	1.00000	1.006
98 Retene	219	Compound Not Detected.					
120 2,3,4,6-Tetrachlorophenol	232	16.460	16.460	(1.051)	10419	1.00000	1.002
188 2,6-Dichlorophenol	162	11.973	11.973	(1.019)	27084	2.00000	1.986
189 N-Nitrosomethylethylamine	88	5.909	5.909	(0.650)	13490	2.00000	1.998

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: ic0125e.d
Lab Smp Id: IC0125E
Analysis Type: SV
Quant Type: ISTD
Operator: VTS/YZ
Method File: /chem1/nt10.i/20130125.b/ABN.m
Misc Info:

Calibration Date: 25-JAN-2013
Calibration Time: 12:59

Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	46623	23312	93246	48848	4.77
27 Naphthalene-d8	176978	88489	353956	183261	3.55
42 Acenaphthene-d10	110872	55436	221744	111653	0.70
59 Phenanthrene-d10	188290	94145	376580	191397	1.65
69 Chrysene-d12	213681	106840	427362	212807	-0.41
134 Di-n-octylphthala	264159	132080	528318	246669	-6.62
77 Perylene-d12	208584	104292	417168	206726	-0.89

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.08	8.58	9.58	9.08	0.00
27 Naphthalene-d8	11.76	11.26	12.26	11.75	-0.06
42 Acenaphthene-d10	15.66	15.16	16.16	15.66	-0.05
59 Phenanthrene-d10	18.94	18.44	19.44	18.94	0.00
69 Chrysene-d12	24.01	23.51	24.51	24.00	-0.03
134 Di-n-octylphthala	25.10	24.60	25.60	25.10	0.00
77 Perylene-d12	26.51	26.01	27.01	26.51	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/nt10.i/20130125.b/ic0125e.d

Date : 25-JAN-2013 15:27

Client ID:

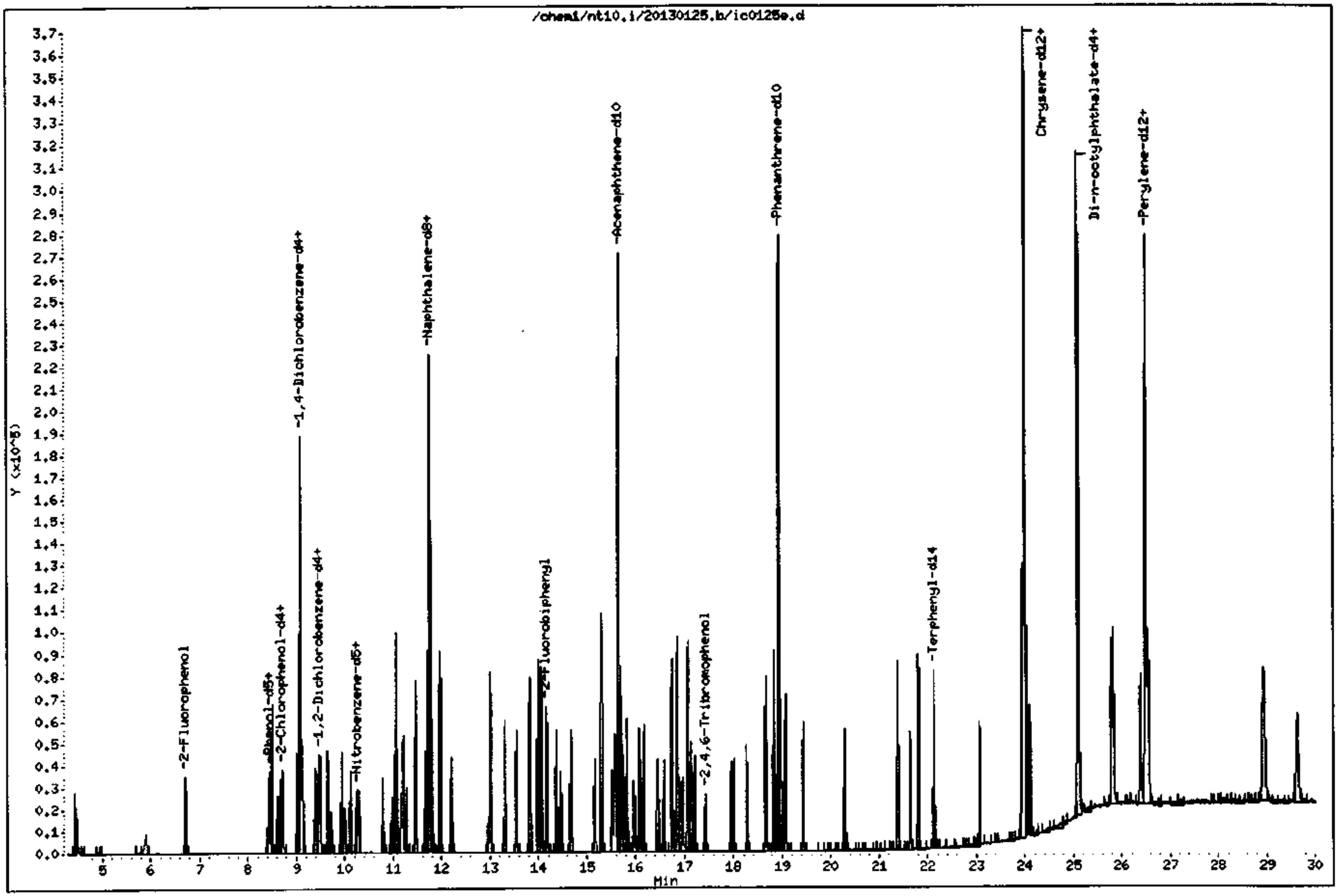
Sample Info: IC0125E

Column phase: ZB-5msi

Instrument: nt10.i

Operator: VTS/YZ

Column diameter: 0.25



CO-ELUTION SUMMARY FOR FILE - ic0125e.d

Lab ID: IC0125E, Method: ABN.m, Instrument: nt10.i, Date: 25-JAN-2013

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Analytical Resources, Inc.

YZ 01/28/13

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt10.i/20130125.b/ic0125f.d
Lab Smp Id: IC0125F
Inj Date : 25-JAN-2013 16:03
Operator : VTS/YZ Inst ID: nt10.i
Smp Info : IC0125F
Misc Info :
Comment : 1ul Injection
Method : /chem1/nt10.i/20130125.b/ABN.m
Meth Date : 28-Jan-2013 12:45 yev Quant Type: ISTD
Cal Date : 25-JAN-2013 16:03 Cal File: ic0125f.d
Als bottle: 7 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDAHDR.sub
Target Version: 3.50

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.719	6.720	(0.740)	36413	2.50000	2.442
$	2 Phenol-d5	99	8.427	8.428	(0.928)	45397	2.50000	2.454
	3 Phenol	94	8.451	8.451	(0.930)	47715	2.50000	2.450
$	5 2-Chlorophenol-d4	132	8.698	8.698	(0.957)	39184	2.50000	2.446
	4 Bis(2-Chloroethyl)ether	93	8.620	8.621	(0.949)	36342	2.50000	2.453
	6 2-Chlorophenol	128	8.729	8.729	(0.961)	40941	2.50000	2.416
	7 1,3-Dichlorobenzene	146	9.015	9.015	(0.992)	44251	2.50000	2.400
*	8 1,4-Dichlorobenzene-d4	152	9.085	9.085	(1.000)	46627	4.00000	
	9 1,4-Dichlorobenzene	146	9.116	9.116	(1.003)	43601	2.50000	2.399
$	10 1,2-Dichlorobenzene-d4	152	9.465	9.465	(1.042)	27897	2.50000	2.370
	12 1,2-Dichlorobenzene	146	9.496	9.496	(1.045)	42153	2.50000	2.401
	11 Benzyl alcohol	108	9.387	9.388	(1.033)	22530	2.50000	2.418
	14 2,2'-oxybis(1-Chloropropane)	121	9.721	9.722	(1.070)	12901	2.50000	2.475
	13 2-Methylphenol	108	9.643	9.644	(1.062)	35647	2.50000	2.425
	17 Hexachloroethane	117	10.132	10.133	(1.115)	17266	2.50000	2.393
	16 N-Nitroso-di-n-propylamine	70	9.993	9.993	(1.100)	23860	2.50000	2.430
	15 4-Methylphenol	108	9.938	9.939	(1.094)	38088	2.50000	2.492
$	18 Nitrobenzene-d5	82	10.264	10.257	(0.874)	39403	2.50000	2.442
	19 Nitrobenzene	77	10.295	10.296	(0.876)	37219	2.50000	2.433
	20 Isophorone	82	10.784	10.785	(0.918)	64953	2.50000	2.436
	21 2-Nitrophenol	139	10.978	10.978	(0.934)	22724	2.50000	2.528
	22 2,4-Dimethylphenol	107	11.063	11.063	(0.942)	75528	5.00000	4.929
	23 Bis(2-Chloroethoxy)methane	93	11.278	11.271	(0.960)	41470	2.50000	2.469
	24 Benzoic acid	105	11.271	11.186	(0.959)	119275	10.0000	9.177
	25 2,4-Dichlorophenol	162	11.471	11.464	(0.976)	67077	5.00000	5.009
	26 1,2,4-Trichlorobenzene	180	11.671	11.664	(0.993)	36594	2.50000	2.401
*	27 Naphthalene-d8	136	11.749	11.749	(1.000)	174830	4.00000	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
28 Naphthalene	128	11.795	11.795	(1.004)	109470	2.50000	2.406
29 4-Chloroaniline	127	11.957	11.957	(1.018)	89311	5.00000	4.878
30 Hexachlorobutadiene	225	12.212	12.205	(1.039)	23360	2.50000	2.459
31 4-Chloro-3-methylphenol	107	13.017	13.017	(1.108)	63944	5.00000	4.940
32 2-Methylnaphthalene	142	13.311	13.311	(1.133)	71762	2.50000	2.389
33 Hexachlorocyclopentadiene	237	13.822	13.822	(0.882)	59993	5.00000	4.924
34 2,4,6-Trichlorophenol	196	13.992	13.992	(0.893)	54164	5.00000	5.003
35 2,4,5-Trichlorophenol	196	14.069	14.070	(0.898)	59098	5.00000	5.137
$ 36 2-Fluorobiphenyl	172	14.170	14.170	(0.905)	90596	2.50000	2.445
37 2-Chloronaphthalene	162	14.379	14.379	(0.918)	72747	2.50000	2.438
38 2-Nitroaniline	65	14.673	14.674	(0.937)	36178	5.00000	5.170
39 Dimethylphthalate	163	15.168	15.169	(0.968)	79704	2.50000	2.440
40 Acenaphthylene	152	15.316	15.316	(0.978)	121926	2.50000	2.506
41 2,6-Dinitrotoluene	165	15.308	15.300	(0.977)	38442	5.00000	5.150
* 42 Acenaphthene-d10	164	15.664	15.656	(1.000)	108024	4.00000	
43 3-Nitroaniline	138	15.602	15.594	(0.996)	36892	5.00000	5.352
44 Acenaphthene	153	15.733	15.726	(1.004)	73044	2.50000	2.448
45 2,4-Dinitrophenol	184	15.826	15.826	(1.010)	56078	10.0000	8.678
46 Dibenzofuran	168	16.089	16.089	(1.027)	101102	2.50000	2.436
47 4-Nitrophenol	109	15.973	15.973	(1.020)	21754	5.00000	4.654
48 2,4-Dinitrotoluene	165	16.174	16.174	(1.033)	52515	5.00000	5.203
50 Diethylphthalate	149	16.761	16.754	(1.070)	85220	2.50000	2.490
49 Fluorene	166	16.862	16.855	(1.076)	87987	2.50000	2.496
51 4-Chlorophenyl-phenylether	204	16.877	16.870	(1.077)	39971	2.50000	2.433
52 4-Nitroaniline	138	16.978	16.963	(1.084)	36020	5.00000	4.950
53 4,6-Dinitro-2-methylphenol	198	17.078	17.071	(0.902)	79873	10.0000	10.59
54 N-Nitrosodiphenylamine	169	17.147	17.148	(0.905)	56358	2.50000	2.483
$ 55 2,4,6-Tribromophenol	330	17.440	17.433	(1.113)	17660	2.50000	2.562
56 4-Bromophenyl-phenylether	248	17.957	17.957	(0.948)	25532	2.50000	2.430
57 Hexachlorobenzene	284	18.281	18.274	(0.965)	32170	2.50000	2.439
58 Pentachlorophenol	266	18.676	18.669	(0.986)	44559	5.00000	5.067
* 59 Phenanthrene-d10	188	18.939	18.940	(1.000)	188394	4.00000	
60 Phenanthrene	178	18.986	18.986	(1.002)	118115	2.50000	2.352
61 Anthracene	178	19.086	19.079	(1.008)	123434	2.50000	2.441
62 Carbazole	167	19.434	19.435	(1.026)	76501	2.50000	2.168(M)
63 Di-n-butylphthalate	149	20.293	20.294	(1.071)	130971	2.50000	2.427
64 Fluoranthene	202	21.392	21.392	(1.129)	140111	2.50000	2.423
65 Pyrene	202	21.810	21.810	(0.908)	148186	2.50000	2.493
$ 66 Terphenyl-d14	244	22.135	22.127	(0.922)	99273	2.50000	2.477
67 Butylbenzylphthalate	149	23.079	23.072	(0.961)	56506	2.50000	2.507
68 Benzo(a)anthracene	228	23.977	23.970	(0.999)	144467	2.50000	2.481
* 69 Chrysene-d12	240	24.008	24.001	(1.000)	208655	4.00000	
70 3,3'-Dichlorobenzidine	252	23.954	23.947	(0.998)	99566	5.00000	4.093
71 Chrysene	228	24.047	24.048	(1.002)	126632	2.50000	2.401
72 bis(2-Ethylhexyl)phthalate	149	24.117	24.117	(0.961)	82805	2.50000	2.509
* 134 Di-n-octylphthalate-d4	153	25.100	25.093	(1.000)	249963	4.00000	
73 Di-n-octylphthalate	149	25.108	25.108	(1.000)	145251	2.50000	2.382

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
74 Benzo(b)fluoranthene	252	25.797	25.789	(0.973)	146665	2.50000	2.478
75 Benzo(k)fluoranthene	252	25.835	25.836	(0.975)	153820	2.50000	2.406
76 Benzo(a)pyrene	252	26.393	26.393	(0.996)	125480	2.50000	2.452
* 77 Perylene-d12	264	26.509	26.502	(1.000)	204198	4.00000	
78 Indeno(1,2,3-cd)pyrene	276	28.934	28.919	(1.091)	156063	2.50000	2.472
79 Dibenzo(a,h)anthracene	278	28.957	28.942	(1.092)	125414	2.50000	2.509
80 Benzo(g,h,i)perylene	276	29.641	29.633	(1.118)	133352	2.50000	2.462
90 N-Nitrosodimethylamine	74	4.434	4.442	(0.488)	42925	5.00000	4.839
91 Aniline	93	8.512	8.505	(0.937)	103292	2.50000	2.458
93 Benzidine	184	21.655	21.648	(0.902)	54172	5.00000	5.691
103 Pyridine	79	4.457	4.481	(0.491)	37123	5.00000	4.906
105 1-methylnaphthalene	142	13.551	13.544	(1.153)	66621	2.50000	2.418
111 Azobenzene (1,2-DP-Hydrazine)	77	17.224	17.217	(1.100)	78024	2.50000	2.513
187 Total Benzofluoranthenes	252	25.835	25.836	(0.975)	283558	5.00000	4.867
99 Perylene	252	26.556	26.548	(1.002)	142122	2.50000	2.416
98 Retene	219	Compound Not Detected.					
120 2,3,4,6-Tetrachlorophenol	232	16.467	16.460	(1.051)	25792	2.50000	2.563
188 2,6-Dichlorophenol	162	11.980	11.973	(1.020)	63629	5.00000	4.890
189 N-Nitrosomethylethylamine	88	5.909	5.909	(0.650)	31376	5.00000	4.867

QC Flag Legend

M - Compound response manually integrated.

Report Date: 28-Jan-2013 12:50

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: ic0125f.d
Lab Smp Id: IC0125F
Analysis Type: SV
Quant Type: ISTD
Operator: VTS/YZ
Method File: /chem1/nt10.i/20130125.b/ABN.m
Misc Info:

Calibration Date: 25-JAN-2013
Calibration Time: 12:59

Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	46623	23312	93246	46627	0.01
27 Naphthalene-d8	176978	88489	353956	174830	-1.21
42 Acenaphthene-d10	110872	55436	221744	108024	-2.57
59 Phenanthrene-d10	188290	94145	376580	188394	0.06
69 Chrysene-d12	213681	106840	427362	208655	-2.35
134 Di-n-octylphthala	264159	132080	528318	249963	-5.37
77 Perylene-d12	208584	104292	417168	204198	-2.10

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.08	8.58	9.58	9.08	0.00
27 Naphthalene-d8	11.76	11.26	12.26	11.75	-0.07
42 Acenaphthene-d10	15.66	15.16	16.16	15.66	0.00
59 Phenanthrene-d10	18.94	18.44	19.44	18.94	0.00
69 Chrysene-d12	24.01	23.51	24.51	24.01	0.00
134 Di-n-octylphthala	25.10	24.60	25.60	25.10	0.00
77 Perylene-d12	26.51	26.01	27.01	26.51	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/nt10.i/20130125.b/ic0125f.d

Date : 25-JAN-2013 16:03

Client ID:

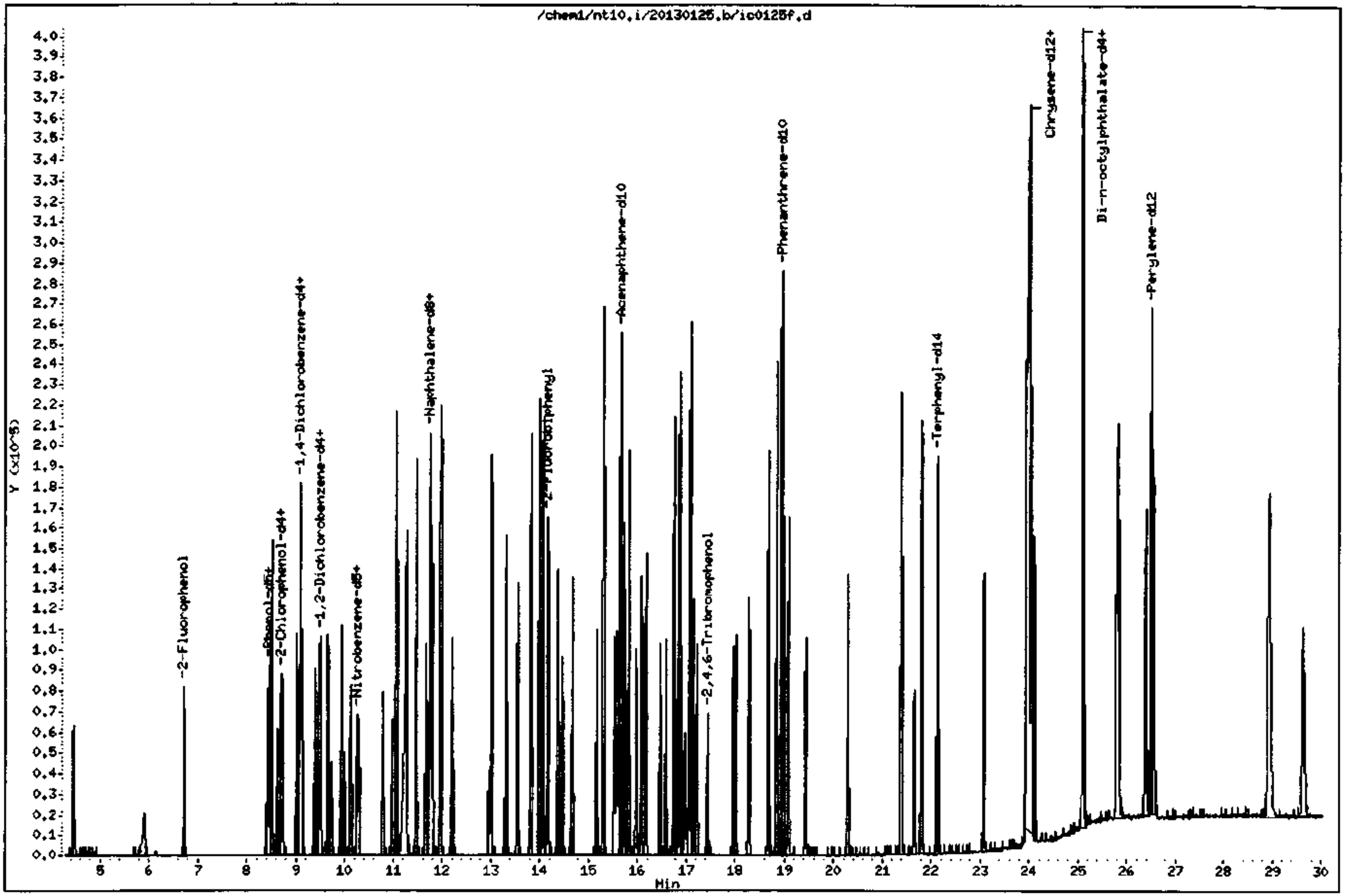
Sample Info: IC0125F

Column phase: ZB-5msi

Instrument: nt10.i

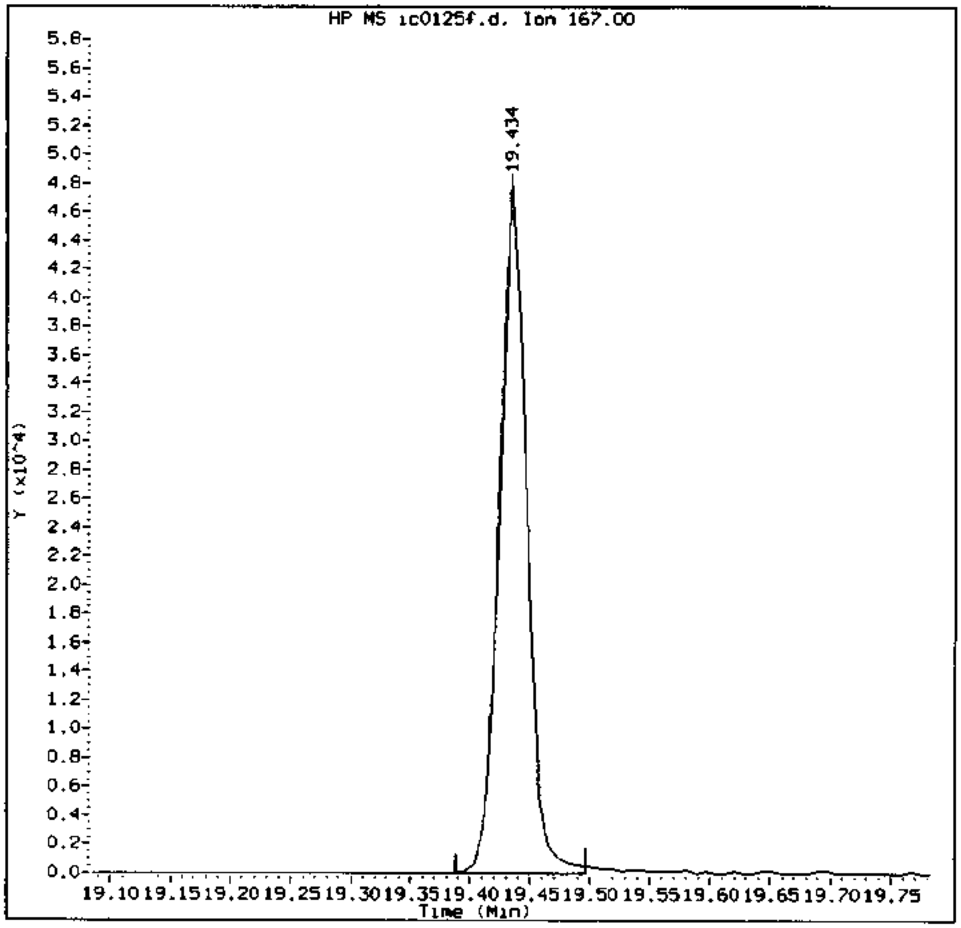
Operator: VTS/YZ

Column diameter: 0.25



IC0125F, /chem1/nt10.i/20130125.b/ic0125f.d

Carbazole   Amount: 2.17   Area: 76501



MANUAL INTEGRATION for Carbazole

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other ____________________

Analyst: YZ   Date: 01/28/13

CO-ELUTION SUMMARY FOR FILE - ic0125f.d

Lab ID: IC0125F, Method: ABN.m, Instrument: nt10.i, Date: 25-JAN-2013

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Analytical Resources, Inc. YZ 01/28/13

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt10.i/20130125.b/ic0125h.d
Lab Smp Id: IC0125H
Inj Date : 25-JAN-2013 17:16
Operator : VTS/YZ Inst ID: nt10.i
Smp Info : IC0125H
Misc Info :
Comment : 1ul Injection
Method : /chem1/nt10.i/20130125.b/ABN.m
Meth Date : 28-Jan-2013 12:45 yev Quant Type: ISTD
Cal Date : 25-JAN-2013 17:16 Cal File: ic0125h.d
Als bottle: 9 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDAHDR.sub
Target Version: 3.50

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.720	6.720	(0.740)	6872	0.50000	0.4773
$	2 Phenol-d5	99	8.428	8.428	(0.928)	8606	0.50000	0.4817
	3 Phenol	94	8.451	8.451	(0.930)	9509	0.50000	0.5057
$	5 2-Chlorophenol-d4	132	8.698	8.698	(0.957)	7702	0.50000	0.4979
	4 Bis(2-Chloroethyl)ether	93	8.621	8.621	(0.949)	7336	0.50000	0.5127
	6 2-Chlorophenol	128	8.729	8.729	(0.961)	8226	0.50000	0.5027
	7 1,3-Dichlorobenzene	146	9.015	9.015	(0.992)	9203	0.50000	0.5168
*	8 1,4-Dichlorobenzene-d4	152	9.085	9.085	(1.000)	45029	4.00000	
	9 1,4-Dichlorobenzene	146	9.116	9.116	(1.003)	8755	0.50000	0.4965
$	10 1,2-Dichlorobenzene-d4	152	9.465	9.465	(1.042)	5625	0.50000	0.4948
	12 1,2-Dichlorobenzene	146	9.496	9.496	(1.045)	8575	0.50000	0.5058
	11 Benzyl alcohol	108	9.388	9.388	(1.033)	4327	0.50000	0.4808
	14 2,2'-oxybis(1-Chloropropane)	121	9.722	9.722	(1.070)	2519	0.50000	0.5004
	13 2-Methylphenol	108	9.644	9.644	(1.062)	6867	0.50000	0.4838
	17 Hexachloroethane	117	10.133	10.133	(1.115)	3387	0.50000	0.4860
	16 N-Nitroso-di-n-propylamine	70	9.993	9.993	(1.100)	4479	0.50000	0.4723
	15 4-Methylphenol	108	9.939	9.939	(1.094)	7272	0.50000	0.4926
$	18 Nitrobenzene-d5	82	10.257	10.257	(0.873)	7484	0.50000	0.4791
	19 Nitrobenzene	77	10.296	10.296	(0.876)	7203	0.50000	0.4863
	20 Isophorone	82	10.785	10.785	(0.918)	12015	0.50000	0.4654
	21 2-Nitrophenol	139	10.978	10.978	(0.934)	3897	0.50000	0.4478
	22 2,4-Dimethylphenol	107	11.063	11.063	(0.942)	14742	1.00000	0.9938
	23 Bis(2-Chloroethoxy)methane	93	11.271	11.271	(0.959)	8381	0.50000	0.5155
	24 Benzoic acid	105	11.186	11.186	(0.952)	14218	2.00000	1.136
	25 2,4-Dichlorophenol	162	11.464	11.464	(0.976)	12437	1.00000	0.9593
	26 1,2,4-Trichlorobenzene	180	11.664	11.664	(0.993)	7682	0.50000	0.5207
*	27 Naphthalene-d8	136	11.749	11.749	(1.000)	169245	4.00000	

						AMOUNTS	
	QUANT SIG					CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
28 Naphthalene	128	11.795	11.795	(1.004)	22558	0.50000	0.5122
29 4-Chloroaniline	127	11.957	11.957	(1.018)	17232	1.00000	0.9723
30 Hexachlorobutadiene	225	12.205	12.205	(1.039)	4492	0.50000	0.4885
31 4-Chloro-3-methylphenol	107	13.017	13.017	(1.108)	11487	1.00000	0.9167
32 2-Methylnaphthalene	142	13.311	13.311	(1.133)	14123	0.50000	0.4857
33 Hexachlorocyclopentadiene	237	13.822	13.822	(0.883)	10513	1.00000	0.9035
34 2,4,6-Trichlorophenol	196	13.992	13.992	(0.894)	9547	1.00000	0.9233
35 2,4,5-Trichlorophenol	196	14.070	14.070	(0.899)	10214	1.00000	0.9296
$ 36 2-Fluorobiphenyl	172	14.170	14.170	(0.905)	17578	0.50000	0.4966
37 2-Chloronaphthalene	162	14.379	14.379	(0.918)	13789	0.50000	0.4838
38 2-Nitroaniline	65	14.674	14.674	(0.937)	5758	1.00000	0.8614
39 Dimethylphthalate	163	15.169	15.169	(0.969)	15843	0.50000	0.5077
40 Acenaphthylene	152	15.316	15.316	(0.978)	23489	0.50000	0.5054
41 2,6-Dinitrotoluene	165	15.300	15.300	(0.977)	6611	1.00000	0.9273
* 42 Acenaphthene-d10	164	15.656	15.656	(1.000)	103177	4.00000	
43 3-Nitroaniline	138	15.594	15.594	(0.996)	6570	1.00000	0.9979
44 Acenaphthene	153	15.726	15.726	(1.004)	14631	0.50000	0.5134
45 2,4-Dinitrophenol	184	15.826	15.826	(1.011)	5902	2.00000	0.9617
46 Dibenzofuran	168	16.089	16.089	(1.028)	19974	0.50000	0.5039
47 4-Nitrophenol	109	15.973	15.973	(1.020)	2579	1.00000	0.5798
48 2,4-Dinitrotoluene	165	16.174	16.174	(1.033)	8938	1.00000	0.9272
50 Diethylphthalate	149	16.754	16.754	(1.070)	15876	0.50000	0.4857
49 Fluorene	166	16.855	16.855	(1.077)	17429	0.50000	0.5177
51 4-Chlorophenyl-phenylether	204	16.870	16.870	(1.078)	8299	0.50000	0.5290
52 4-Nitroaniline	138	16.963	16.963	(1.083)	7026	1.00000	1.011
53 4,6-Dinitro-2-methylphenol	198	17.071	17.071	(0.901)	12045	2.00000	1.686
54 N-Nitrosodiphenylamine	169	17.148	17.148	(0.905)	10851	0.50000	0.5048
$ 55 2,4,6-Tribromophenol	330	17.433	17.433	(1.113)	3106	0.50000	0.4717
56 4-Bromophenyl-phenylether	248	17.957	17.957	(0.948)	4764	0.50000	0.4786
57 Hexachlorobenzene	284	18.274	18.274	(0.965)	6319	0.50000	0.5059
58 Pentachlorophenol	266	18.669	18.669	(0.986)	7365	1.00000	0.6841
* 59 Phenanthrene-d10	188	18.940	18.940	(1.000)	178445	4.00000	
60 Phenanthrene	178	18.986	18.986	(1.002)	23968	0.50000	0.5038
61 Anthracene	178	19.079	19.079	(1.007)	22755	0.50000	0.4751
62 Carbazole	167	19.435	19.435	(1.026)	19220	0.50000	0.5751
63 Di-n-butylphthalate	149	20.294	20.294	(1.071)	22128	0.50000	0.4329
64 Fluoranthene	202	21.392	21.392	(1.129)	25116	0.50000	0.4585
65 Pyrene	202	21.810	21.810	(0.909)	26902	0.50000	0.4673
$ 66 Terphenyl-d14	244	22.127	22.127	(0.922)	18604	0.50000	0.4793
67 Butylbenzylphthalate	149	23.072	23.072	(0.961)	9115	0.50000	0.4175
68 Benzo(a)anthracene	228	23.970	23.970	(0.999)	27139	0.50000	0.4813
* 69 Chrysene-d12	240	24.001	24.001	(1.000)	202095	4.00000	
70 3,3'-Dichlorobenzidine	252	23.947	23.947	(0.998)	26314	1.00000	1.117
71 Chrysene	228	24.048	24.048	(1.002)	25828	0.50000	0.5057
72 bis(2-Ethylhexyl)phthalate	149	24.117	24.117	(0.961)	13815	0.50000	0.4790
* 134 Di-n-octylphthalate-d4	153	25.093	25.093	(1.000)	218395	4.00000	
73 Di-n-octylphthalate	149	25.108	25.108	(1.001)	27962	0.50000	0.5249

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
=========================	====	==	======	======	========	=======	=======
74 Benzo(b)fluoranthene	252	25.789	25.789	(0.973)	26415	0.50000	0.4771
75 Benzo(k)fluoranthene	252	25.836	25.836	(0.975)	30077	0.50000	0.5029
76 Benzo(a)pyrene	252	26.393	26.393	(0.996)	22670	0.50000	0.4735
* 77 Perylene-d12	264	26.502	26.502	(1.000)	191018	4.00000	
78 Indeno(1,2,3-cd)pyrene	276	28.919	28.919	(1.091)	27473	0.50000	0.4653
79 Dibenzo(a,h)anthracene	278	28.942	28.942	(1.092)	22053	0.50000	0.4716
80 Benzo(g,h,i)perylene	276	29.633	29.633	(1.118)	24114	0.50000	0.4760
90 N-Nitrosodimethylamine	74	4.442	4.442	(0.489)	8250	1.00000	0.9630
91 Aniline	93	8.505	8.505	(0.936)	20308	0.50000	0.5005
93 Benzidine	184	21.648	21.648	(0.902)	18859	1.00000	2.078
103 Pyridine	79	4.481	4.481	(0.493)	7344	1.00000	1.005
105 1-methylnaphthalene	142	13.544	13.544	(1.153)	13025	0.50000	0.4884
111 Azobenzene (1,2-DP-Hydrazine)	77	17.217	17.217	(1.100)	14638	0.50000	0.4937
187 Total Benzofluoranthenes	252	25.836	25.836	(0.975)	54001	1.00000	0.9909
99 Perylene	252	26.548	26.548	(1.002)	27182	0.50000	0.4940
98 Retene	219	Compound Not Detected.					
120 2,3,4,6-Tetrachlorophenol	232	16.460	16.460	(1.051)	4437	0.50000	0.4617
188 2,6-Dichlorophenol	162	11.973	11.973	(1.019)	12226	1.00000	0.9706
189 N-Nitrosomethylethylamine	88	5.909	5.909	(0.650)	6123	1.00000	0.9836

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: ic0125h.d
Lab Smp Id: IC0125H
Analysis Type: SV
Quant Type: ISTD
Operator: VTS/YZ
Method File: /chem1/nt10.i/20130125.b/ABN.m
Misc Info:

Calibration Date: 25-JAN-2013
Calibration Time: 12:59

Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	46623	23312	93246	45029	-3.42
27 Naphthalene-d8	176978	88489	353956	169245	-4.37
42 Acenaphthene-d10	110872	55436	221744	103177	-6.94
59 Phenanthrene-d10	188290	94145	376580	178445	-5.23
69 Chrysene-d12	213681	106840	427362	202095	-5.42
134 Di-n-octylphthala	264159	132080	528318	218395	-17.32
77 Perylene-d12	208584	104292	417168	191018	-8.42

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.08	8.58	9.58	9.09	0.01
27 Naphthalene-d8	11.76	11.26	12.26	11.75	-0.06
42 Acenaphthene-d10	15.66	15.16	16.16	15.66	-0.05
59 Phenanthrene-d10	18.94	18.44	19.44	18.94	0.00
69 Chrysene-d12	24.01	23.51	24.51	24.00	-0.03
134 Di-n-octylphthala	25.10	24.60	25.60	25.09	-0.03
77 Perylene-d12	26.51	26.01	27.01	26.50	-0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/nt10.i/20130125.b/ic0125h.d

Page 5

Date : 25-JAN-2013 17:16

Client ID:

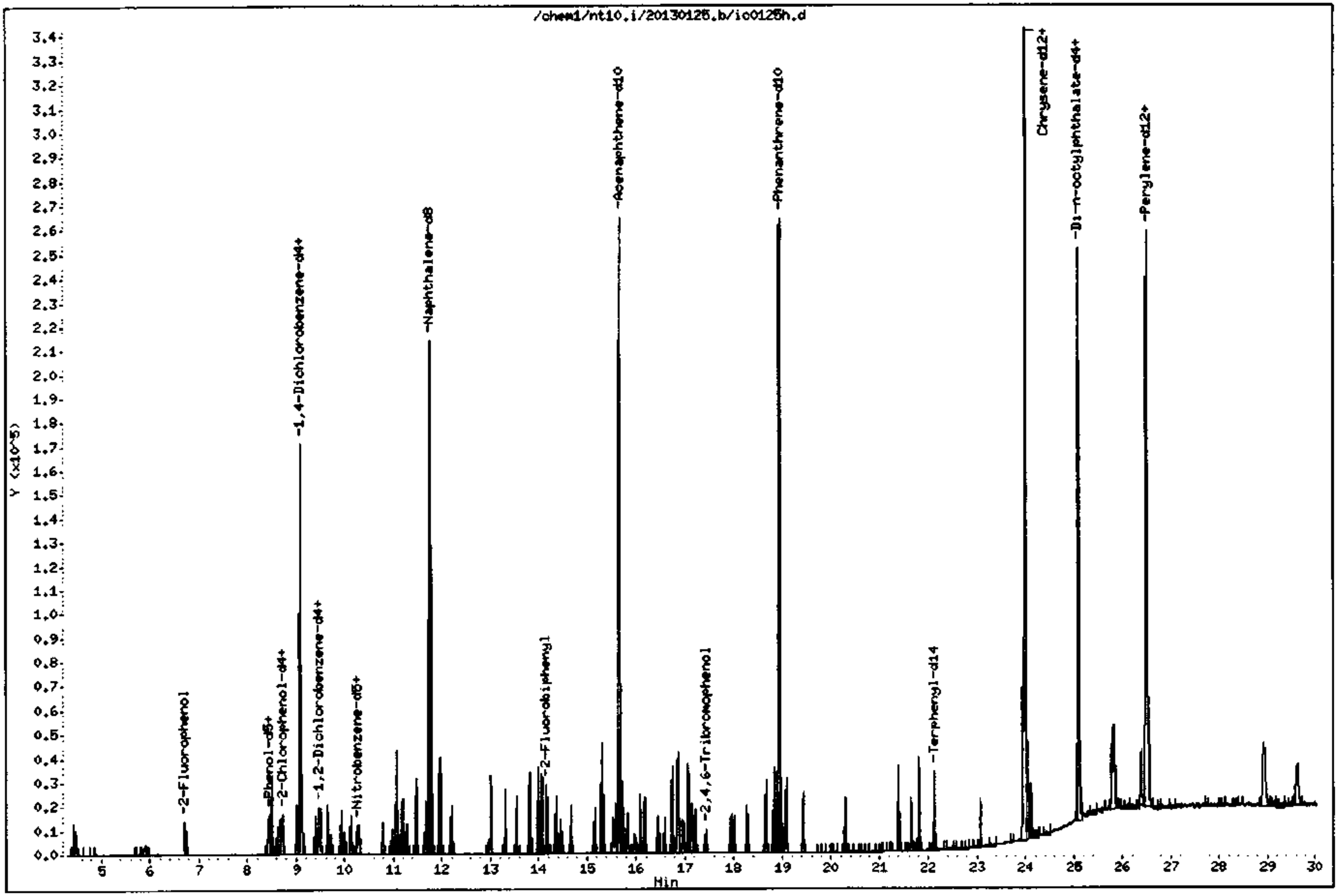
Instrument: nt10.i

Sample Info: IC0125H

Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25



CO-ELUTION SUMMARY FOR FILE - ic0125h.d

Lab ID: IC0125H, Method: ABN.m, Instrument: nt10.i, Date: 25-JAN-2013

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Analytical Resources, Inc. YZ 01/28/13

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt10.i/20130125.b/icv0125.d
Lab Smp Id: ICV0125
Inj Date : 25-JAN-2013 18:30
Operator : VTS/YZ Inst ID: nt10.i
Smp Info : ICV0125
Misc Info :
Comment : 1ul Injection
Method : /chem1/nt10.i/20130125.b/ABN.m
Meth Date : 28-Jan-2013 14:27 yev Quant Type: ISTD
Cal Date : 25-JAN-2013 17:16 Cal File: ic0125h.d
Als bottle: 11 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDAICAL.sub
Target Version: 3.50

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	Compound Not Detected.					
$	2 Phenol-d5	99	Compound Not Detected.					
	3 Phenol	94	8.451	8.451	(0.930)	90240	5.37736	5.377
$	5 2-Chlorophenol-d4	132	Compound Not Detected.					
	4 Bis(2-Chloroethyl)ether	93	8.621	8.621	(0.949)	67005	5.24779	5.248
	6 2-Chlorophenol	128	8.729	8.729	(0.961)	76426	5.23342	5.233
	7 1,3-Dichlorobenzene	146	9.015	9.015	(0.992)	81987	5.15942	5.159
*	8 1,4-Dichlorobenzene-d4	152	9.085	9.085	(1.000)	40184	4.00000	
	9 1,4-Dichlorobenzene	146	9.116	9.116	(1.003)	80089	5.08994	5.090
$	10 1,2-Dichlorobenzene-d4	152	Compound Not Detected.					
	12 1,2-Dichlorobenzene	146	9.496	9.496	(1.045)	78072	5.16020	5.160
	11 Benzyl alcohol	108	9.388	9.387	(1.033)	37478	4.66673	4.667
	14 2,2'-oxybis(1-Chloropropane)	121	9.721	9.721	(1.070)	23386	5.20590	5.206
	13 2-Methylphenol	108	9.644	9.644	(1.062)	72173	5.69736	5.697
	17 Hexachloroethane	117	10.125	10.125	(1.114)	32416	5.21225	5.212
	16 N-Nitroso-di-n-propylamine	70	10.001	10.001	(1.101)	44778	5.29068	5.291
	15 4-Methylphenol	108	9.939	9.939	(1.094)	75643	5.74184	5.742
$	18 Nitrobenzene-d5	82	Compound Not Detected.					
	19 Nitrobenzene	77	10.296	10.296	(0.876)	68075	5.16288	5.163
	20 Isophorone	82	10.792	10.792	(0.919)	123290	5.36454	5.365
	21 2-Nitrophenol	139	10.978	10.978	(0.934)	43581	5.62514	5.625
	22 2,4-Dimethylphenol	107	11.071	11.070	(0.942)	149122	11.2920	11.29
	23 Bis(2-Chloroethoxy)methane	93	11.279	11.279	(0.960)	75953	5.24749	5.247
	24 Benzoic acid	105	11.333	11.332	(0.965)	260337	23.0115	23.01
	25 2,4-Dichlorophenol	162	11.471	11.471	(0.976)	132923	11.5168	11.52
	26 1,2,4-Trichlorobenzene	180	11.664	11.664	(0.993)	67351	5.12757	5.128
*	27 Naphthalene-d8	136	11.749	11.749	(1.000)	150675	4.00000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
	28 Naphthalene	128	11.795	11.795	(1.004)	187621	4.78541	4.785
	29 4-Chloroaniline	127	11.957	11.957	(1.018)	153482	9.72700	9.727
	30 Hexachlorobutadiene	225	12.212	12.212	(1.039)	43061	5.26029	5.260
	31 4-Chloro-3-methylphenol	107	13.017	13.017	(1.108)	133464	11.9640	11.96
	32 2-Methylnaphthalene	142	13.311	13.311	(1.133)	125970	4.86634	4.866
	33 Hexachlorocyclopentadiene	237	13.822	13.822	(0.882)	112957	10.7260	10.73
	34 2,4,6-Trichlorophenol	196	13.992	13.992	(0.893)	112602	12.0334	12.03
	35 2,4,5-Trichlorophenol	196	14.070	14.070	(0.898)	126526	12.7240	12.72
$	36 2-Fluorobiphenyl	172	Compound Not Detected.					
	37 2-Chloronaphthalene	162	14.379	14.379	(0.918)	140953	5.46481	5.465
	38 2-Nitroaniline	65	14.673	14.673	(0.937)	65450	10.8194	10.82
	39 Dimethylphthalate	163	15.169	15.169	(0.968)	152463	5.39846	5.398
	40 Acenaphthylene	152	15.316	15.316	(0.978)	205925	4.89568	4.896
	41 2,6-Dinitrotoluene	165	15.308	15.308	(0.977)	74654	11.5706	11.57
*	42 Acenaphthene-d10	164	15.664	15.664	(1.000)	93376	4.00000	
	43 3-Nitroaniline	138	15.602	15.610	(0.996)	70409	11.8173	11.82
	44 Acenaphthene	153	15.734	15.733	(1.004)	127159	4.93024	4.930
	45 2,4-Dinitrophenol	184	15.834	15.834	(1.011)	130506	23.1152	23.12
	46 Dibenzofuran	168	16.089	16.089	(1.027)	176205	4.91232	4.912
	47 4-Nitrophenol	109	15.981	15.981	(1.020)	46091	11.3367	11.34
	48 2,4-Dinitrotoluene	165	16.182	16.182	(1.033)	100886	11.5642	11.56
	50 Diethylphthalate	149	16.762	16.761	(1.070)	149613	5.05725	5.057
	49 Fluorene	166	16.862	16.862	(1.076)	149065	4.89256	4.893
	51 4-Chlorophenyl-phenylether	204	16.870	16.878	(1.077)	76545	5.39097	5.391
	52 4-Nitroaniline	138	16.978	16.986	(1.084)	68248	10.8505	10.85
	53 4,6-Dinitro-2-methylphenol	198	17.086	17.086	(0.902)	170570	26.9732	26.97(R)
	54 N-Nitrosodiphenylamine	169	17.148	17.148	(0.905)	103308	5.43113	5.431
$	55 2,4,6-Tribromophenol	330	Compound Not Detected.					
	56 4-Bromophenyl-phenylether	248	17.957	17.957	(0.948)	48685	5.52706	5.527
	57 Hexachlorobenzene	284	18.282	18.281	(0.965)	60692	5.49033	5.490
	58 Pentachlorophenol	266	18.677	18.676	(0.986)	93039	12.6214	12.62
*	59 Phenanthrene-d10	188	18.940	18.939	(1.000)	157911	4.00000	
	60 Phenanthrene	178	18.986	18.986	(1.002)	207268	4.92372	4.924
	61 Anthracene	178	19.079	19.086	(1.007)	213272	5.03174	5.032
	62 Carbazole	167	19.435	19.435	(1.026)	140507	4.96322	4.963
	63 Di-n-butylphthalate	149	20.294	20.293	(1.071)	261975	5.79204	5.792
	64 Fluoranthene	202	21.392	21.392	(1.129)	251144	5.18054	5.181
	65 Pyrene	202	21.810	21.817	(0.908)	256428	4.83356	4.834
$	66 Terphenyl-d14	244	Compound Not Detected.					
	67 Butylbenzylphthalate	149	23.072	23.079	(0.961)	114331	5.68210	5.682
	68 Benzo(a)anthracene	228	23.978	23.978	(0.999)	251589	4.84113	4.841
*	69 Chrysene-d12	240	24.009	24.009	(1.000)	186248	4.00000	
	70 3,3'-Dichlorobenzidine	252	23.955	23.954	(0.998)	167305	7.70530	7.705
	71 Chrysene	228	24.047	24.055	(1.002)	226455	4.81098	4.811
	72 bis(2-Ethylhexyl)phthalate	149	24.117	24.117	(0.961)	162652	5.67579	5.676
*	134 Di-n-octylphthalate-d4	153	25.100	25.100	(1.000)	217021	4.00000	
	73 Di-n-octylphthalate	149	25.108	25.108	(1.000)	278132	5.25388	5.254

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
74 Benzo(b)fluoranthene	252	25.797	25.797	(0.973)	260552	5.02102	5.021
75 Benzo(k)fluoranthene	252	25.844	25.843	(0.975)	269345	4.80452	4.805
76 Benzo(a)pyrene	252	26.401	26.401	(0.996)	216125	4.81584	4.816
* 77 Perylene-d12	264	26.509	26.509	(1.000)	179038	4.00000	
78 Indeno(1,2,3-cd)pyrene	276	28.934	28.942	(1.091)	278396	5.03032	5.030
79 Dibenzo(a,h)anthracene	278	28.958	28.965	(1.092)	222187	5.06986	5.070
80 Benzo(g,h,i)perylene	276	29.657	29.641	(1.119)	235666	4.96313	4.963
90 N-Nitrosodimethylamine	74	4.442	4.442	(0.489)	79113	10.3486	10.35
91 Aniline	93	8.505	8.505	(0.936)	165967	4.58307	4.583
93 Benzidine	184	21.655	21.655	(0.902)	99836	11.4404	11.44
103 Pyridine	79	4.457	4.457	(0.491)	67216	10.3079	10.31
105 1-methylnaphthalene	142	13.544	13.543	(1.153)	117579	4.95182	4.952
111 Azobenzene (1,2-DP-Hydrazine)	77	17.225	17.225	(1.100)	149907	5.58630	5.586
187 Total Benzofluoranthenes	252	25.844	25.843	(0.975)	501763	9.82305	9.823
99 Perylene	252	26.556	26.563	(1.002)	228097	4.42254	4.423
98 Retene	219	Compound Not Detected.					
120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /chem1/nt10.i/20130125.b/icv0125.d
Report Date: 28-Jan-2013 14:27

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: icv0125.d
Lab Smp Id: ICV0125
Analysis Type: SV
Quant Type: ISTD
Operator: VTS/YZ
Method File: /chem1/nt10.i/20130125.b/ABN.m
Misc Info:

Calibration Date: 25-JAN-2013
Calibration Time: 19:17

Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	46623	23312	93246	40184	-13.81
27 Naphthalene-d8	176978	88489	353956	150675	-14.86
42 Acenaphthene-d10	110872	55436	221744	93376	-15.78
59 Phenanthrene-d10	188290	94145	376580	157911	-16.13
69 Chrysene-d12	213681	106840	427362	186248	-12.84
134 Di-n-octylphthala	264159	132080	528318	217021	-17.84
77 Perylene-d12	208584	104292	417168	179038	-14.17

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.08	8.58	9.58	9.09	0.00
27 Naphthalene-d8	11.75	11.25	12.25	11.75	0.00
42 Acenaphthene-d10	15.66	15.16	16.16	15.66	0.00
59 Phenanthrene-d10	18.94	18.44	19.44	18.94	0.00
69 Chrysene-d12	24.01	23.51	24.51	24.01	0.00
134 Di-n-octylphthala	25.10	24.60	25.60	25.10	0.00
77 Perylene-d12	26.51	26.01	27.01	26.51	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name:
Sample Matrix: NONE
Lab Smp Id: ICV0125
Level:
Data Type: MS DATA
SpikeList File: ICVS.spk
Sublist File: PSDDAICAL.sub
Method File: /chem1/nt10.i/20130125.b/ABN.m
Misc Info:

Client SDG:
Fraction: SV
Operator: VTS/YZ
SampleType: LCS
Quant Type: ISTD

SPIKE COMPOUND	AMOUNT ADDED ug/mL	AMOUNT RECOVERED ug/mL	% RECOVERED	LIMITS
3 Phenol	5.000	5.377	107.55	
4 Bis(2-Chloroethyl)	5.000	5.248	104.96	
6 2-Chlorophenol	5.000	5.233	104.67	
7 1,3-Dichlorobenzen	5.000	5.159	103.19	
9 1,4-Dichlorobenzen	5.000	5.090	101.80	
11 Benzyl alcohol	5.000	4.667	93.33	
12 1,2-Dichlorobenzen	5.000	5.160	103.20	
13 2-Methylphenol	5.000	5.697	113.95	
14 2,2'-oxybis(1-Chlo	5.000	5.206	104.12	
15 4-Methylphenol	5.000	5.742	114.84	
16 N-Nitroso-di-n-pro	5.000	5.291	105.81	
17 Hexachloroethane	5.000	5.212	104.25	
19 Nitrobenzene	5.000	5.163	103.26	
20 Isophorone	5.000	5.365	107.29	
21 2-Nitrophenol	5.000	5.625	112.50	
22 2,4-Dimethylphenol	10.00	11.29	112.92	
23 Bis(2-Chloroethoxy	5.000	5.247	104.95	
24 Benzoic acid	20.00	23.01	115.06	
25 2,4-Dichlorophenol	10.00	11.52	115.17	
26 1,2,4-Trichloroben	5.000	5.128	102.55	
28 Naphthalene	5.000	4.785	95.71	
29 4-Chloroaniline	10.00	9.727	97.27	
30 Hexachlorobutadien	5.000	5.260	105.21	
31 4-Chloro-3-methylp	10.00	11.96	119.64	
32 2-Methylnaphthalen	5.000	4.866	97.33	
33 Hexachlorocyclopen	10.00	10.73	107.26	
34 2,4,6-Trichlorophe	10.00	12.03	120.33	
35 2,4,5-Trichlorophe	10.00	12.72	127.24	
37 2-Chloronaphthalen	5.000	5.465	109.30	
38 2-Nitroaniline	10.00	10.82	108.19	
39 Dimethylphthalate	5.000	5.398	107.97	
40 Acenaphthylene	5.000	4.896	97.91	
41 2,6-Dinitrotoluene	10.00	11.57	115.71	

SPIKE COMPOUND	AMOUNT ADDED ug/mL	AMOUNT RECOVERED ug/mL	% RECOVERED	LIMITS
43 3-Nitroaniline	10.00	11.82	118.17	
44 Acenaphthene	5.000	4.930	98.60	
45 2,4-Dinitrophenol	20.00	23.12	115.58	
46 Dibenzofuran	5.000	4.912	98.25	
47 4-Nitrophenol	10.00	11.34	113.37	
48 2,4-Dinitrotoluene	10.00	11.56	115.64	
49 Fluorene	5.000	4.893	97.85	
50 Diethylphthalate	5.000	5.057	101.14	
51 4-Chlorophenyl-phe	5.000	5.391	107.82	
52 4-Nitroaniline	10.00	10.85	108.50	
53 4,6-Dinitro-2-meth	20.00	26.97	134.87*	
54 N-Nitrosodiphenyla	5.000	5.431	108.62	
56 4-Bromophenyl-phen	5.000	5.527	110.54	
57 Hexachlorobenzene	5.000	5.490	109.81	
58 Pentachlorophenol	10.00	12.62	126.21	
60 Phenanthrene	5.000	4.924	98.47	
61 Anthracene	5.000	5.032	100.63	
63 Di-n-butylphthalat	5.000	5.792	115.84	
64 Fluoranthene	5.000	5.181	103.61	
65 Pyrene	5.000	4.834	96.67	
67 Butylbenzylphthala	5.000	5.682	113.64	
68 Benzo(a)anthracene	5.000	4.841	96.82	
70 3,3'-Dichlorobenzi	10.00	7.705	77.05	
71 Chrysene	5.000	4.811	96.22	
72 bis(2-Ethylhexyl)p	5.000	5.676	113.52	
73 Di-n-octylphthalat	5.000	5.254	105.08	
74 Benzo(b)fluoranthe	5.000	5.021	100.42	
75 Benzo(k)fluoranthe	5.000	4.805	96.09	
76 Benzo(a)pyrene	5.000	4.816	96.32	
78 Indeno(1,2,3-cd)py	5.000	5.030	100.61	
79 Dibenzo(a,h)anthra	5.000	5.070	101.40	
80 Benzo(g,h,i)peryle	5.000	4.963	99.26	
90 N-Nitrosodimethyla	10.00	10.35	103.49	
91 Aniline	5.000	4.583	91.66	
93 Benzidine	10.00	11.44	114.40	
105 1-methylnaphthalen	5.000	4.952	99.04	
120 2,3,4,6-Tetrachlo	5.000	0.000	*	
151 1,2,4,5-Tetrachlo	5.000	0.000	*	
110 Tetrachloroguaiac	10.00	0.000	*	
109 3,4,5-Trichlorogu	5.000	0.000	*	
181 3,4,6-Trichlorogu	5.000	0.000	*	
108 4,5,6-Trichlorogu	5.000	0.000	*	
184 3,4-Dichloroguaia	5.000	0.000	*	
107 4,5-Dichloroguaia	10.00	0.000	*	
182 4,6-Dichloroguaia	10.00	0.000	*	
185 4-Chloroguaiacol	2.500	0.000	*	
106 Guaiacol	5.000	0.000	*	

Analytical Resources, Inc.

RECOVERY REPORT

Client Name:
Sample Matrix: NONE
Lab Smp Id: ICV0125
Level:
Data Type: MS DATA
SpikeList File: ICVS.spk
Sublist File: PSDDAICAL.sub
Method File: /chem1/nt10.i/20130125.b/ABN.m
Misc Info:

Client SDG:
Fraction: SV
Operator: VTS/YZ
SampleType: LCS
Quant Type: ISTD

SURROGATE COMPOUND	AMOUNT ADDED ug/mL	AMOUNT RECOVERED ug/mL	% RECOVERED	LIMITS
$ 1 2-Fluorophenol	7.500	0.000	*	
$ 2 Phenol-d5	7.500	0.000	*	
$ 5 2-Chlorophenol-d4	7.500	0.000	*	
$ 10 1,2-Dichlorobenze	5.000	0.000	*	
$ 18 Nitrobenzene-d5	5.000	0.000	*	
$ 36 2-Fluorobiphenyl	5.000	0.000	*	
$ 55 2,4,6-Tribromophe	7.500	0.000	*	
$ 66 Terphenyl-d14	5.000	0.000	*	

Data File: /chem1/nt10.i/20130125.b/icv0125.d

Date : 25-JAN-2013 18:30

Client ID:

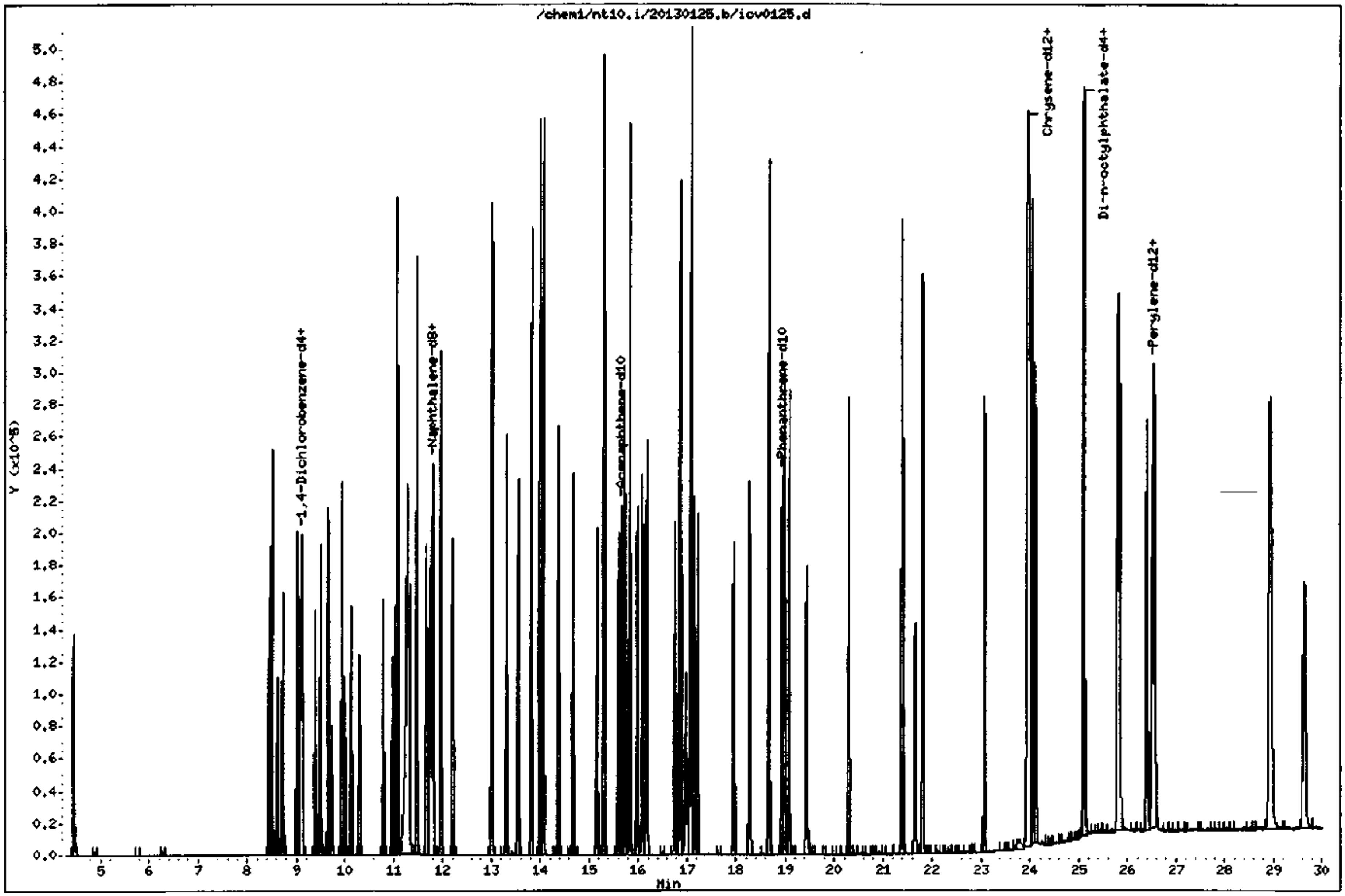
Sample Info: ICV0125

Column phase: ZB-5msi

Instrument: nt10.i

Operator: VTS/YZ

Column diameter: 0.25



CO-ELUTION SUMMARY FOR FILE - icv0125.d

Lab ID: ICV0125, Method: ABN.m, Instrument: nt10.i, Date: 25-JAN-2013

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Data File: /chem1/nt10.i/20130125.b/df0125.d

Date : 25-JAN-2013 12:43

Client ID: DFTPP

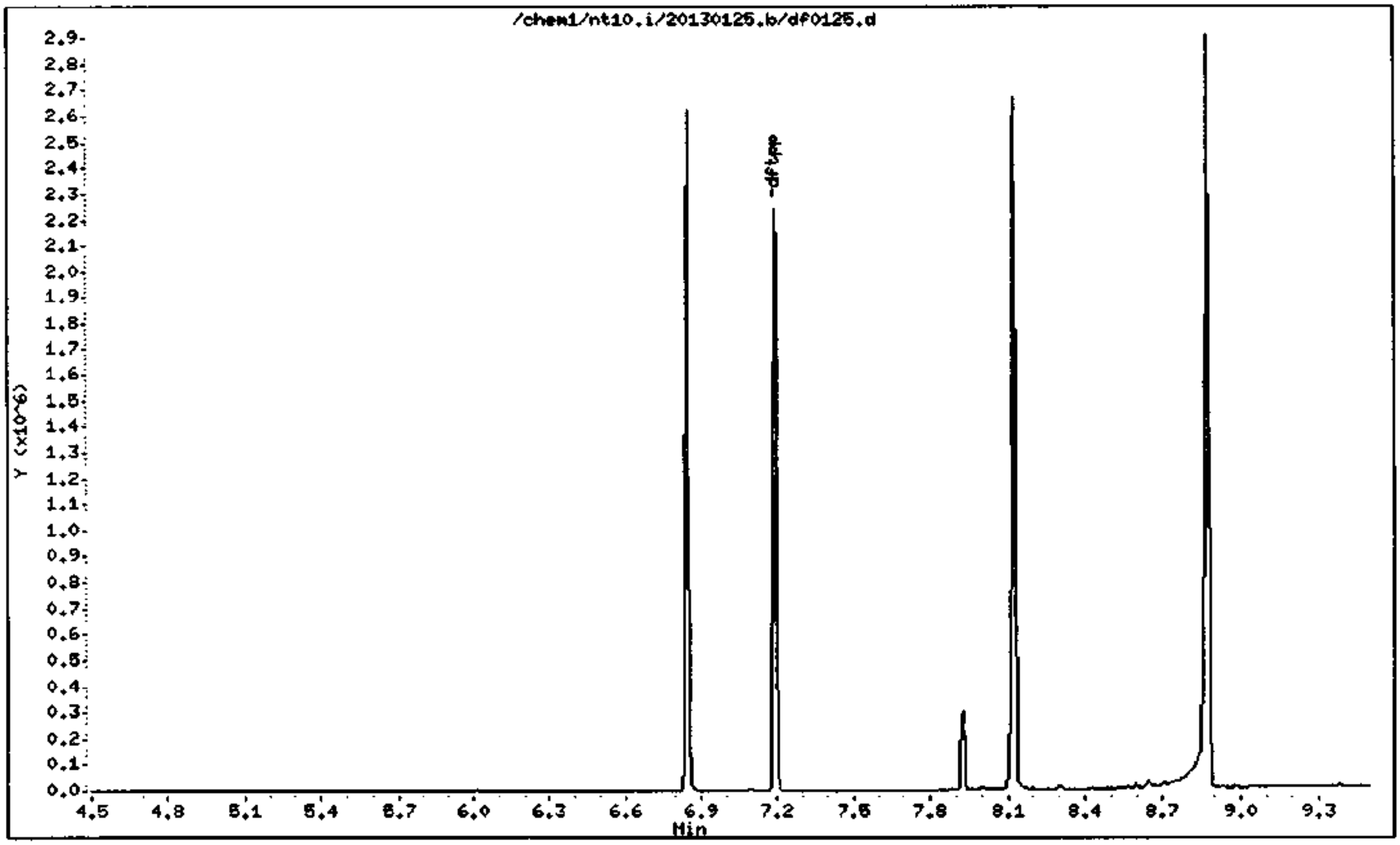
Instrument: nt10.i

Sample Info: DFTPP

Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25



Data File: /chem1/nt10.i/20130125.b/df0125.d

Date : 25-JAN-2013 12:43

Client ID: DFTPP

Instrument: nt10.i

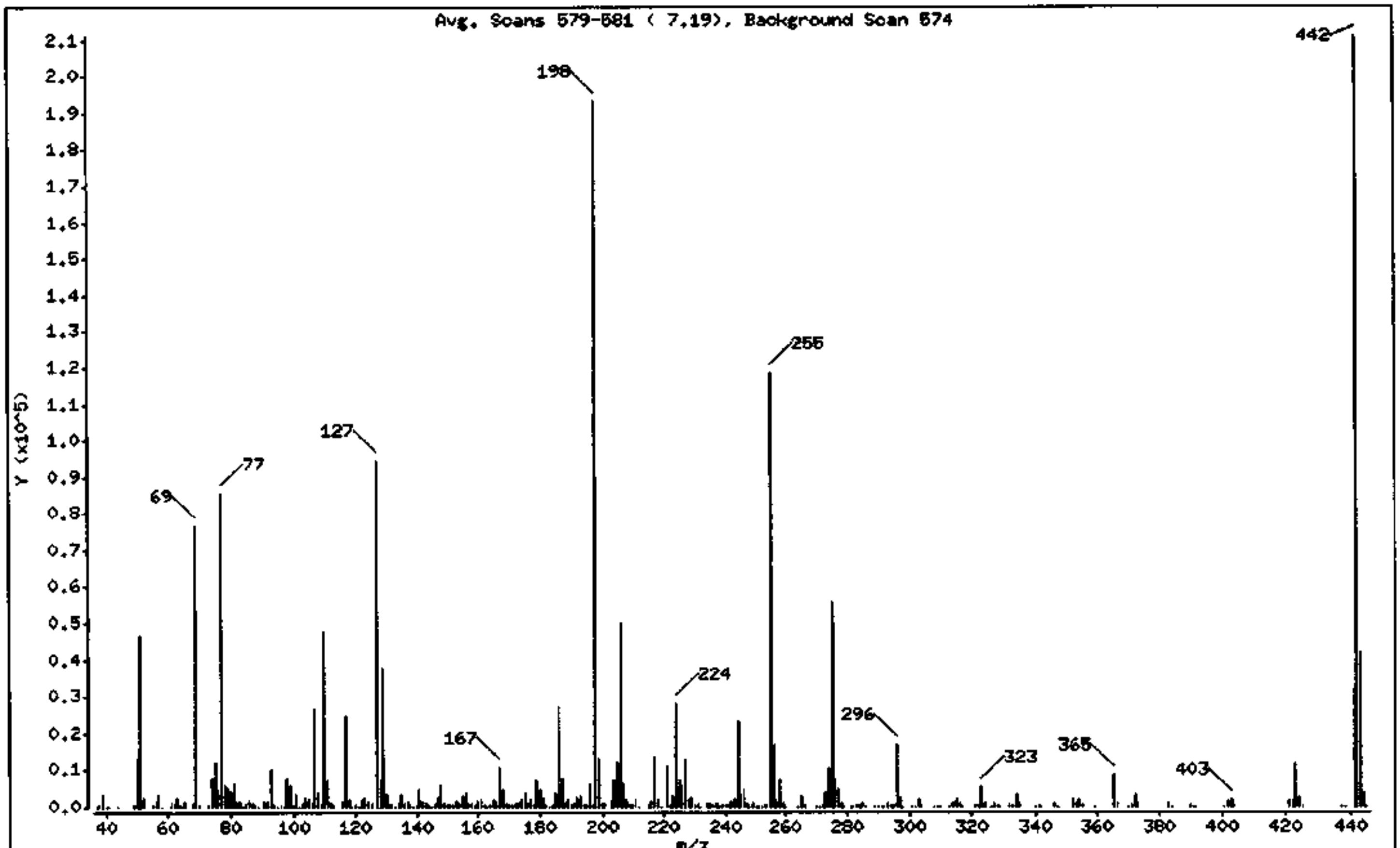
Sample Info: DFTPP

Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	24.19
68	Less than 2.00% of mass 69	0.61 (1.54)
69	Mass 69 relative abundance	39.80
70	Less than 2.00% of mass 69	0.19 (0.49)
127	10.00 - 80.00% of mass 198	48.91
197	Less than 2.00% of mass 198	0.21
199	5.00 - 9.00% of mass 198	6.67
275	10.00 - 60.00% of mass 198	28.93
365	Greater than 1.00% of mass 198	4.43
441	0.01 - 24.00% of mass 442	16.45 (15.06)
442	50.00 - 200.00% of mass 198	109.23
443	15.00 - 24.00% of mass 442	21.82 (19.98)

Date : 25-JAN-2013 12:43

Client ID: DFTPP Instrument: nt10.i

Sample Info: DFTPP

Operator: YZ

Column phase: ZB-5msi Column diameter: 0.25

Data File: df0125.d
Spectrum: Avg. Scans 579-581 (7.19), Background Scan 574
Location of Maximum: 442.00
Number of points: 292

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	197	129.00	37936	204.00	7247	290.00	134
38.00	705	130.00	3252	205.00	12071	291.00	73
39.00	3533	131.00	616	206.00	50152	292.00	193
40.00	113	132.00	309	207.00	6355	293.00	1040
41.00	57	133.00	201	208.00	1855	294.00	300
44.00	41	134.00	1063	209.00	685	295.00	432
49.00	407	135.00	3189	210.00	390	296.00	17168
50.00	12941	136.00	1177	211.00	2076	297.00	2409
51.00	46792	137.00	1570	212.00	126	298.00	117
52.00	2479	138.00	318	215.00	691	301.00	186
55.00	299	139.00	141	216.00	1249	302.00	228
56.00	1601	140.00	439	217.00	13670	303.00	1845
57.00	3595	141.00	5058	218.00	1710	304.00	531
58.00	186	142.00	1565	219.00	125	308.00	197
61.00	736	143.00	1108	221.00	10937	309.00	121
62.00	914	144.00	315	222.00	480	310.00	187
63.00	2618	145.00	214	223.00	3072	313.00	163
64.00	316	146.00	882	224.00	28320	314.00	792
65.00	1300	147.00	2615	225.00	7216	315.00	2023
68.00	1189	148.00	6026	226.00	852	316.00	1067
69.00	76976	149.00	1129	227.00	12743	317.00	159
70.00	375	150.00	301	228.00	1719	321.00	638
73.00	705	151.00	726	229.00	2389	322.00	299
74.00	7863	152.00	293	230.00	329	323.00	5388
75.00	12207	153.00	1577	231.00	1021	324.00	1013
76.00	4289	154.00	1181	232.00	167	326.00	50
77.00	85576	155.00	2767	233.00	188	327.00	1029
78.00	5655	156.00	4011	234.00	771	328.00	558
79.00	5556	157.00	812	235.00	861	329.00	60
80.00	4359	158.00	873	236.00	627	332.00	351
81.00	6233	159.00	710	237.00	1022	333.00	548
82.00	1534	160.00	1489	238.00	110	334.00	3620
83.00	1401	161.00	2161	239.00	541	335.00	964
84.00	112	162.00	649	240.00	417	340.00	51
85.00	1085	163.00	146	241.00	730	341.00	679

Date : 25-JAN-2013 12:43

Client ID: DFTPP Instrument: nt10.i

Sample Info: DFTPP

Operator: YZ

Column phase: ZB-5msi Column diameter: 0.25

Data File: df0125.d
Spectrum: Avg. Scans 579-581 (7.19), Background Scan 574
Location of Maximum: 442.00
Number of points: 292

m/z	Y	m/z	Y	m/z	Y	m/z	Y
86.00	1703	164.00	290	242.00	1687	342.00	153
87.00	795	165.00	1882	243.00	1735	346.00	1164
88.00	279	166.00	1494	244.00	23312	347.00	162
89.00	81	167.00	10689	245.00	3158	352.00	1760
91.00	1338	168.00	4694	246.00	4620	353.00	1209
92.00	1519	169.00	848	247.00	978	354.00	1709
93.00	9994	170.00	329	248.00	181	355.00	309
94.00	645	171.00	378	249.00	862	359.00	64
95.00	134	172.00	865	250.00	149	365.00	8559
96.00	471	173.00	1141	251.00	169	366.00	1203
97.00	212	174.00	2025	252.00	221	370.00	156
98.00	7840	175.00	3911	253.00	585	371.00	436
99.00	5867	176.00	1174	255.00	118624	372.00	3166
100.00	531	177.00	1772	256.00	17216	373.00	730
101.00	3503	178.00	645	257.00	1329	383.00	830
102.00	180	179.00	7329	258.00	7275	384.00	228
103.00	1140	180.00	4831	259.00	1188	390.00	433
104.00	2300	181.00	2296	260.00	200	391.00	237
105.00	2067	182.00	354	261.00	142	392.00	163
106.00	732	183.00	241	264.00	186	401.00	177
107.00	26848	184.00	572	265.00	2938	402.00	1244
108.00	4043	185.00	3662	266.00	493	403.00	1787
109.00	744	186.00	27072	270.00	126	404.00	646
110.00	47768	187.00	7673	271.00	234	421.00	1637
111.00	7142	188.00	763	272.00	384	422.00	1574
112.00	909	189.00	1730	273.00	3889	423.00	11637
113.00	338	190.00	325	274.00	10079	424.00	2495
116.00	1403	191.00	859	275.00	65952	425.00	200
117.00	24664	192.00	2439	276.00	7415	437.00	50
118.00	1723	193.00	2782	277.00	4869	438.00	71
119.00	207	194.00	548	278.00	775	441.00	31824
120.00	344	195.00	439	279.00	140	442.00	211264
121.00	108	196.00	6210	281.00	108	443.00	42208
122.00	1841	197.00	402	282.00	139	444.00	4074
123.00	2656	198.00	193408	283.00	558	445.00	209

Date : 25-JAN-2013 12:43

Client ID: DFTPP

Instrument: nt10.i

Sample Info: DFTPP

Operator: YZ

Column phase: ZB-5msi

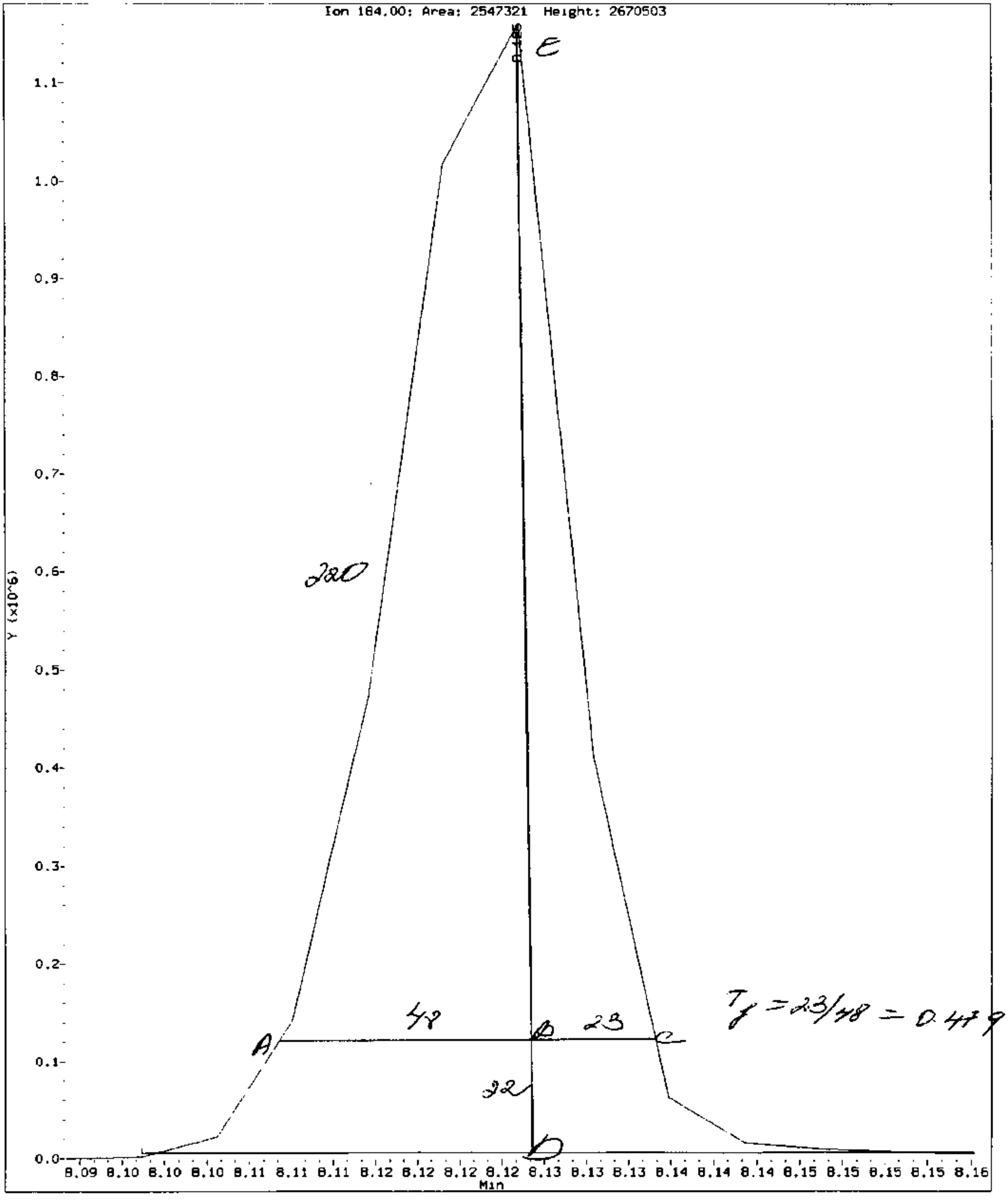
Column diameter: 0.25

Data File: df0125.d
Spectrum: Avg. Scans 579-581 (7.19), Background Scan 574
Location of Maximum: 442.00
Number of points: 292

m/z	Y	m/z	Y	m/z	Y	m/z	Y
124.00	1219	199.00	12893	284.00	387		
125.00	1090	200.00	1075	285.00	813		
127.00	94600	201.00	925	286.00	126		
128.00	7116	203.00	1424	289.00	147		

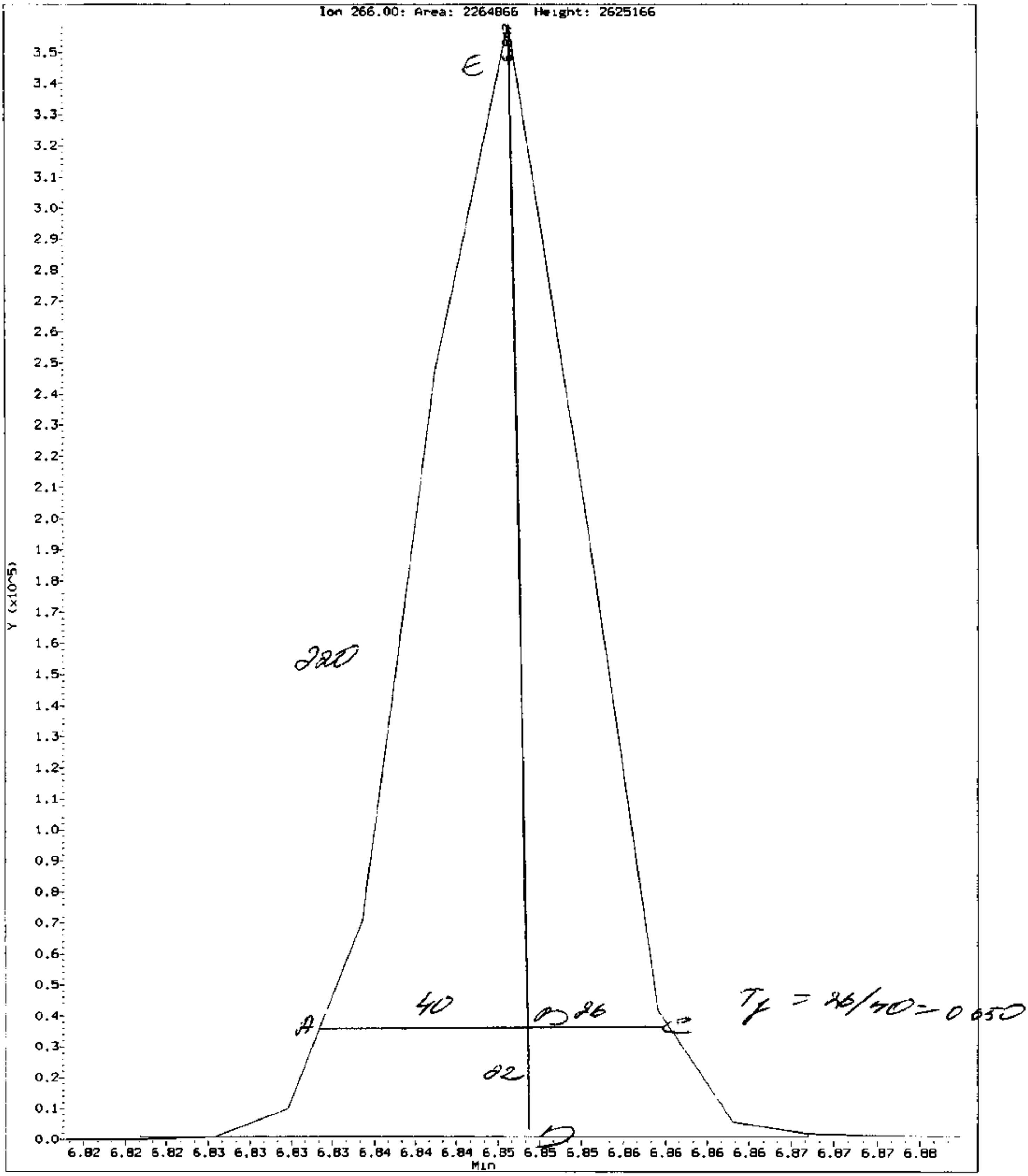
Data File: /chem1/nt10.i/20130125.b/ddt.b/df0125.d
Injection Date: 25-JAN-2013 12:43
Instrument: nt10.i
Client Sample ID: DFTPP

Compound: Benzidine
CAS Number:



Data File: /chem1/nt10.i/20130125.b/ddt.b/df0125.d
Injection Date: 25-JAN-2013 12:43
Instrument: nt10.i
Client Sample ID: DFTPP

Compound: Pentachlorophenol
CAS Number: 87-86-5



Analytical Resources Inc.
ABN by sw846 8270C
DDT Breakdown Report

Data file: /chem1/nt10.i/20130125.b/ddt.b/df0125.d   ARI ID: DFTPP
Method: /chem1/nt10.i/20130125.b/ddt.b/sw846ddt.m   Misc: 11-
Analysis Date: 25-JAN-2013 12:43   Instrument: nt10.i

COMPOUND	RT	AREA
Pentachlorophenol	6.847	2264865
Benzidine	8.125	2547321
4,4'-DDE	8.307	1813
4,4'-DDD	8.644	5130
4,4'-DDT	8.874	537797

$$\text{DDT Percent Breakdown} = \frac{(\text{DDE Area} + \text{DDD Area}) * 100}{(\text{DDE Area} + \text{DDD Area} + \text{DDT Area})}$$

$$\text{DDT Percent Breakdown} = \frac{(1813 + 5130) * 100}{(1813 + 5130 + 537797)}$$

DDT Percent Breakdown = 1.3 %

Semivolatile Raw Data
Run Logs, Continuing Calibrations, and Raw Data

ARI Job ID: WC32, WC33

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC/MS SVOA Analyst Notes / Corrective Action Log

ARI Project ID: WC32 Client ID: Floyd - Snider

ARI SOP: **801S**(SIM-PNA) **802S**(Butyl Tins) **804S**(SVOA-8270D) **805S**(op-Pest)

Parameter(s): 8270D

Instrument: NT-4 NT-6 NT-8 NT-10 NT11 NT12

Curve Date: 1/23/13 Analysis Start Date: 2/7/13

DFTPP Tune Meets Criteria? YES / NO Internal Standard Meets Criteria? YES / NO

DDT Breakdown <20%? YES / NO / NA Method Blank In Control? YES / NO

Peak Tailing Factor ≤2? YES / NO / NA LCS / LCSD Recovery In Control? YES / NO

ICal acceptable? YES / NO CCal acceptable? YES / NO
Q flag applied? YES / NO Q flag applied? YES / NO

Surrogate Recovery in Control? YES / NO Special Analysis Criteria Met? YES / NO / NA

Manual Integrations for ICal? YES / NO Manual Integrations for Samples? Yes / NO

Detail problems, corrective actions and/or other pertinent information below (use reverse side when necessary):

Sample I + MB/LCS/LCSD + QLs
Forms included

Additional Details on Reverse: Yes / No

Analyst: [signature] **Date:** 02/07/13

Reviewer: [initials] **Date:** 2/7/13

Analytical Resources Inc.: Organics Instrument Log

NT-6 Serial No.:GC=US00036167, MS=US81221575

Date: 2/7/13 Analysis: 8270D Analyst: [illegible]

GC Program: [illegible] Column No: 2341F2 Column Type: ZB-5MSi

Instrument Tune (.U or .CT.): 121019 EM Voltage: 1847

Calibration File: 0207301 Curve Date: 1/23/13 Injection Vol.: 1ul

IS/SS	Ical/Ccal	LCS/ICV
1998-2	2062-2, 2054-1	
	2055-1, 2061-1	
	1803-1, 2027-2	
	2058-2	

Document All Maintenance Tasks In StarLIMS

INTERNAL STANDARD SUMMARY FOR DATABATCH - /chem2/nt6.i/20130207.b

	Time	Filename	LabID	ClientId	DF														
1	1012	02071301.D	CC0207	CC0207	1	7.66	599870	9.70	2139298	12.54	1145077	14.88	1679978	19.16	1594322	21.29	2002386	20.34	2005433
2	1113	02071302.D	WC55MBS1	WC55MBS1	1	9.70	2262979	12.54	1263760	14.88	1862090	19.15	1739770	21.28	2047550				
3	1147	02071303.D	WC55LCSS1	WC55LCSS1	1	9.69	2512364	12.54	1483805	14.88	2334260	19.15	2097155	21.29	2364233				
4	1221	02071304 D	WC55LCSDS1	WC55LCSDS1	1	9.69	2376342	12.54	1419484	14.89	2295158	19.16	2113983	21.29	2363451				
5	1255	02071305.D	WC55A	B101-S-1-0	1	9 70	2025581	12.55	1036086	14.92	1620311	19.20	2712995	21.38	2943330				
6	1330	02071306.D	WC55B	B101-S-2-5	1	9.70	2237358	12.54	1235125	14.89	1772784	19.15	1917039	21.29	2399000				
7	1404	02071307.D	WC55C	B101-S-3-10	1	9.70	2270121	12.53	1343600	14.88	2011026	19.15	1974462	21.28	2364825				
8	1438	02071308.D	WC55A	B101-S-1-0	1	9.70	2007763	12.54	1033401	14.90	1482567	19.17	2099128	21.32	2725417				
9	1512	02071309.D	WC32MBW1	WC32MBW1	1	7.66	548191	9.70	1934605	12.53	1058515	14.89	1527600	19.15	1591318	20.33	1959473	21.29	2123064
10	1546	02071310.D	WC32LCSW1	WC32LCSW1	1	7.66	591357	9.70	2052526	12.54	1072259	14.89	1608803	19.15	1754840	20.33	2055479	21.29	2178452
11	1621	02071311.D	WC32LCSDW1	WC32LCSDW1	1	7.66	656630	9.70	2267829	12.54	1185428	14.88	1714489	19 15	1805346	20.34	2179934	21.28	2313295
12	1655	02071312.D	WC32QLS	WC32QLS	1	7.66	626513	9.70	2165699	12.53	1159064	14.88	1664903	19.15	1749145	20.33	2117033	21.28	2183405
13	1729	02071313.D	WC32I	SG-05-ER-013	1	7.66	670124	9.70	2415567	12.54	1324749	14.88	1945690	19.15	1803134	20.34	2268905	21.28	2262973

E 2/5 oct AK

[illegible] 02/07/13

Every line must contain information or be lined out. Make all entries legible.
Start a new page for each QC period. Document All Maintenance Tasks In StarLIMS

MANUAL INTEGRATION SUMMARY FOR DATABATCH - /chem2/nt6.i/20130207.b

ARI Job No.: CC02 Method: SW846012313.m Instrument: nt6.i Date: 07-FEB-2013

JZ 02/07/13

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1012	02071301.D	CC0207	CC0207	1	Total Benzofluoranthenes,
1512	02071309.D	WC32MBW1	WC32MBW1	1	NO MANUAL INTEGRATION
1546	02071310.D	WC32LCSW1	WC32LCSW1	1	Total Benzofluoranthenes,
1621	02071311.D	WC32LCSDW1	WC32LCSDW1	1	Total Benzofluoranthenes,
1655	02071312.D	WC32QLS	WC32QLS	1	Isophorone, Aniline, Total Benzofluoranthenes,
1729	02071313.D	WC32I	SG-05-ER-0	1	NO MANUAL INTEGRATION

Q-FLAG SUMMARY FOR DATABATCH - /chem2/nt6.i/20130207.b

Instrument: nt6.i   Date: 07-FEB-2013   Method: SW846012313.m

INITIAL CAL: 23-JAN-2013

Compound	%RSD or R^2	
4-Chloroaniline	21.6	NSC

CONTINUING CAL: 07-FEB-2013

Compound	%D
NO Q-FLAGS	

垒 02/07/13

Data File: /chem2/nt6.i/20130207.b/02071301.D
Report Date: 07-Feb-2013 12:04

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt6.i
Lab File ID: 02071301.D
Analysis Type:
Lab Sample ID: CC0207
Method: /chem2/nt6.i/20130207.b/SW846012313.m

Injection Date: 07-FEB-2013 10:12
Init. Cal. Date(s): 23-JAN-2013 23-JAN-2013
Init. Cal. Times: 15:27 19:26
Quant Type: ISTD

AZ 02/07/13

COMPOUND	RRF / AMOUNT	RF25	CCAL RRF25	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 1 2-Fluorophenol	1.32929	1.34581	1.34581	0.010	1.24306	20.00000	Averaged
$ 2 Phenol-d5	1.62533	1.64829	1.64829	0.010	1.41284	20.00000	Averaged
3 Phenol	1.56999	1.59908	1.59908	0.010	1.85278	20.00000	Averaged
$ 5 2-Chlorophenol-d4	1.33913	1.36268	1.36268	0.010	1.75809	20.00000	Averaged
4 Bis(2-Chloroethyl)ether	1.32711	1.39064	1.39064	0.010	4.78773	20.00000	Averaged
6 2-Chlorophenol	1.32951	1.34866	1.34866	0.010	1.44045	20.00000	Averaged
7 1,3-Dichlorobenzene	1.52964	1.62001	1.62001	0.010	5.90786	20.00000	Averaged
9 1,4-Dichlorobenzene	1.51847	1.58622	1.58622	0.010	4.46126	20.00000	Averaged
$ 10 1,2-Dichlorobenzene-d4	0.94589	0.95185	0.95185	0.010	0.63036	20.00000	Averaged
12 1,2-Dichlorobenzene	1.41125	1.48012	1.48012	0.010	4.87984	20.00000	Averaged
11 Benzyl alcohol	0.81849	0.81784	0.81784	0.010	-0.07927	20.00000	Averaged
14 2,2'-oxybis(1-Chloropropane	2.15127	2.41899	2.41899	0.010	12.44463	20.00000	Averaged
13 2-Methylphenol	1.18567	1.20422	1.20422	0.010	1.56506	20.00000	Averaged
17 Hexachloroethane	0.61630	0.65119	0.65119	0.010	5.66020	20.00000	Averaged
16 N-Nitroso-di-n-propylamine	0.96281	1.07273	1.07273	0.005	11.41658	20.00000	Averaged
15 4-Methylphenol	1.21509	1.23373	1.23373	0.010	1.53402	20.00000	Averaged
$ 18 Nitrobenzene-d5	0.43984	0.43979	0.43979	0.010	-0.01272	20.00000	Averaged
19 Nitrobenzene	0.44616	0.45622	0.45622	0.010	2.25481	20.00000	Averaged
20 Isophorone	0.62279	0.66728	0.66728	0.010	7.14228	20.00000	Averaged
21 2-Nitrophenol	0.19319	0.19787	0.19787	0.010	2.42422	20.00000	Averaged
22 2,4-Dimethylphenol	0.35668	0.36216	0.36216	0.010	1.53467	20.00000	Averaged
23 Bis(2-Chloroethoxy)methane	0.43936	0.46117	0.46117	0.010	4.96435	20.00000	Averaged
24 Benzoic acid	0.29794	0.25786	0.25786	0.010	-13.45328	20.00000	Averaged
25 2,4-Dichlorophenol	0.28666	0.28819	0.28819	0.010	0.53403	20.00000	Averaged
26 1,2,4-Trichlorobenzene	0.33200	0.33637	0.33637	0.010	1.31532	20.00000	Averaged
28 Naphthalene	0.93722	0.98476	0.98476	0.010	5.07339	20.00000	Averaged
29 4-Chloroaniline	0.36254	0.32447	0.32447	0.010	-10.50124	20.00000	Averaged
30 Hexachlorobutadiene	0.20861	0.20814	0.20814	0.010	-0.22275	20.00000	Averaged
31 4-Chloro-3-methylphenol	0.27911	0.29712	0.29712	0.010	6.45252	20.00000	Averaged
32 2-Methylnaphthalene	0.48713	0.50405	0.50405	0.010	3.47344	20.00000	Averaged
33 Hexachlorocyclopentadiene	0.41603	0.34743	0.34743	0.010	-16.48971	20.00000	Averaged
34 2,4,6-Trichlorophenol	0.35711	0.35842	0.35842	0.010	0.36434	20.00000	Averaged
35 2,4,5-Trichlorophenol	0.36805	0.35742	0.35742	0.010	-2.88655	20.00000	Averaged
$ 36 2-Fluorobiphenyl	1.32782	1.31454	1.31454	0.010	-1.00067	20.00000	Averaged
37 2-Chloronaphthalene	1.09801	1.11387	1.11387	0.010	1.44491	20.00000	Averaged

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt6.i Injection Date: 07-FEB-2013 10:12
Lab File ID: 02071301.D Init. Cal. Date(s): 23-JAN-2013 23-JAN-2013
Analysis Type: Init. Cal. Times: 15:27 19:26
Lab Sample ID: CC0207 Quant Type: ISTD
Method: /chem2/nt6.i/20130207.b/SW846012313.m

COMPOUND	RRF / AMOUNT	RF25	CCAL RRF25	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
38 2-Nitroaniline	0.35707	0.37781	0.37781	0.010	5.80811	20.00000	Averaged
39 Dimethylphthalate	1.14141	1.21156	1.21156	0.010	6.14628	20.00000	Averaged
40 Acenaphthylene	1.65517	1.73100	1.73100	0.010	4.58153	20.00000	Averaged
41 2,6-Dinitrotoluene	0.27040	0.28946	0.28946	0.010	7.05161	20.00000	Averaged
43 3-Nitroaniline	0.24409	0.22237	0.22237	0.010	-8.89569	20.00000	Averaged
44 Acenaphthene	1.04808	1.06454	1.06454	0.010	1.57020	20.00000	Averaged
45 2,4-Dinitrophenol	42.22597	50.00000	0.16255	0.010	-15.54807	20.00000	Quadratic
46 Dibenzofuran	1.38329	1.41864	1.41864	0.010	2.55543	20.00000	Averaged
47 4-Nitrophenol	0.17645	0.17761	0.17761	0.010	0.65468	20.00000	Averaged
48 2,4-Dinitrotoluene	0.33783	0.35879	0.35879	0.010	6.20373	20.00000	Averaged
50 Diethylphthalate	1.16746	1.25544	1.25544	0.010	7.53548	20.00000	Averaged
49 Fluorene	1.09079	1.11819	1.11819	0.010	2.51189	20.00000	Averaged
51 4-Chlorophenyl-phenylether	0.60227	0.60771	0.60771	0.010	0.90240	20.00000	Averaged
52 4-Nitroaniline	0.21687	0.19474	0.19474	0.010	-10.20685	20.00000	Averaged
53 4,6-Dinitro-2-methylphenol	0.15214	0.14201	0.14201	0.010	-6.66357	20.00000	Averaged
54 N-Nitrosodiphenylamine	0.58007	0.60633	0.60633	0.010	4.52652	20.00000	Averaged
$ 55 2,4,6-Tribromophenol	0.15328	0.15794	0.15794	0.010	3.03752	20.00000	Averaged
56 4-Bromophenyl-phenylether	0.22787	0.22946	0.22946	0.010	0.70052	20.00000	Averaged
57 Hexachlorobenzene	0.23004	0.22152	0.22152	0.010	-3.70605	20.00000	Averaged
58 Pentachlorophenol	27.92217	25.00000	0.11625	0.010	11.68867	20.00000	Quadratic
60 Phenanthrene	0.98569	0.98066	0.98066	0.010	-0.51049	20.00000	Averaged
61 Anthracene	1.00400	1.00997	1.00997	0.010	0.59400	20.00000	Averaged
62 Carbazole	0.89207	0.91222	0.91222	0.010	2.25858	20.00000	Averaged
63 Di-n-butylphthalate	1.15050	1.26626	1.26626	0.010	10.06167	20.00000	Averaged
64 Fluoranthene	0.95499	0.97895	0.97895	0.010	2.50898	20.00000	Averaged
65 Pyrene	1.18140	1.05591	1.05591	0.010	-10.62212	20.00000	Averaged
$ 66 Terphenyl-d14	0.73846	0.66382	0.66382	0.010	-10.10758	20.00000	Averaged
67 Butylbenzylphthalate	0.55144	0.54230	0.54230	0.010	-1.65769	20.00000	Averaged
68 Benzo(a)anthracene	0.97259	0.99955	0.99955	0.010	2.77150	20.00000	Averaged
70 3,3'-Dichlorobenzidine	0.30015	0.33996	0.33996	0.010	13.26177	20.00000	Averaged
71 Chrysene	0.93680	0.97820	0.97820	0.010	4.41899	20.00000	Averaged
72 bis(2-Ethylhexyl)phthalate	0.59791	0.58282	0.58282	0.010	-2.52320	20.00000	Averaged
73 Di-n-octylphthalate	1.00972	1.02598	1.02598	0.010	1.61090	20.00000	Averaged
74 Benzo(b)fluoranthene	0.98297	0.91546	0.91546	0.010	-6.86840	20.00000	Averaged
75 Benzo(k)fluoranthene	1.02601	1.05870	1.05870	0.010	3.18607	20.00000	Averaged

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt6.i
Injection Date: 07-FEB-2013 10:12
Lab File ID: 02071301.D
Init. Cal. Date(s): 23-JAN-2013 23-JAN-2013
Analysis Type:
Init. Cal. Times: 15:27 19:26
Lab Sample ID: CC0207
Quant Type: ISTD
Method: /chem2/nt6.i/20130207.b/SW846012313.m

COMPOUND	RRF / AMOUNT	RF25	CCAL RRF25	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
187 Total Benzofluoranthenes	0.94177	0.93247	0.93247	0.010	-0.98753	20.00000	Averaged
76 Benzo(a)pyrene	0.90828	0.94116	0.94116	0.010	3.62012	20.00000	Averaged
78 Indeno(1,2,3-cd)pyrene	1.26959	1.31184	1.31184	0.010	3.32858	20.00000	Averaged
79 Dibenzo(a,h)anthracene	1.04019	1.07136	1.07136	0.010	2.99624	20.00000	Averaged
80 Benzo(g,h,i)perylene	1.14879	1.13286	1.13286	0.010	-1.38644	20.00000	Averaged
90 N-Nitrosodimethylamine	0.93523	0.99765	0.99765	0.010	6.67348	20.00000	Averaged
103 Pyridine	1.59936	1.70965	1.70965	0.010	6.89606	20.00000	Averaged
91 Aniline	1.74672	1.72245	1.72245	0.010	-1.39001	20.00000	Averaged
105 1-methylnaphthalene	0.48568	0.50270	0.50270	0.010	3.50414	20.00000	Averaged
111 Azobenzene (1,2-DP-Hydrazin	1.36681	1.44714	1.44714	0.010	5.87786	20.00000	Averaged
143 1,4-Dioxane	0.69405	0.69857	0.69857	0.010	0.65147	20.00000	Averaged
$ 137 d8-1,4-Dioxane	0.64702	0.66879	0.66879	0.010	3.36461	20.00000	Averaged
144 alpha-Terpineol	0.27998	0.29826	0.29826	0.010	6.52910	20.00000	Averaged
98 Retene	0.50115	0.45603	0.45603	0.010	-9.00344	20.00000	Averaged
99 Perylene	0.79814	0.80624	0.80624	0.010	1.01554	20.00000	Averaged
120 2,3,4,6-Tetrachlorophenol	0.28617	0.28860	0.28860	0.010	0.84954	20.00000	Averaged
188 2,6-Dichlorophenol	0.90927	0.95163	0.95163	0.010	4.65913	20.00000	Averaged
189 N-Nitrosomethylethylamine	0.61311	0.58938	0.58938	0.010	-3.87056	20.00000	Averaged

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem2/nt6.i/20130207.b/02071301.D
Lab Smp Id: CC0207 Client Smp ID: CC0207
Inj Date : 07-FEB-2013 10:12
Operator : JZ Inst ID: nt6.i
Smp Info : CC0207
Misc Info : 13-
Comment : 1ul Injection
Method : /chem2/nt6.i/20130207.b/SW846012313.m
Meth Date : 07-Feb-2013 12:03 jianqing Quant Type: ISTD
Cal Date : 23-JAN-2013 16:37 Cal File: 01231310.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALA.sub
Target Version: 3.50

JZ 02/07/13

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	5.705	5.705	(0.745)	1009140	25.0000	25.31
$	2 Phenol-d5	99	7.286	7.286	(0.951)	1235951	25.0000	25.35
	3 Phenol	94	7.307	7.307	(0.954)	1199052	25.0000	25.46
$	5 2-Chlorophenol-d4	132	7.371	7.371	(0.962)	1021785	25.0000	25.44
	4 Bis(2-Chloroethyl)ether	93	7.350	7.350	(0.960)	1042757	25.0000	26.20
	6 2-Chlorophenol	128	7.398	7.398	(0.966)	1011277	25.0000	25.36
	7 1,3-Dichlorobenzene	146	7.596	7.596	(0.992)	1214744	25.0000	26.48
*	8 1,4-Dichlorobenzene-d4	152	7.660	7.660	(1.000)	599870	20.0000	
	9 1,4-Dichlorobenzene	146	7.687	7.687	(1.003)	1189404	25.0000	26.12
$	10 1,2-Dichlorobenzene-d4	152	7.959	7.959	(1.039)	713732	25.0000	25.16
	12 1,2-Dichlorobenzene	146	7.981	7.981	(1.042)	1109850	25.0000	26.22
	11 Benzyl alcohol	108	7.964	7.964	(1.040)	613246	25.0000	24.98
	14 2,2'-oxybis(1-Chloropropane)	45	8.221	8.221	(1.073)	1813849	25.0000	28.11
	13 2-Methylphenol	108	8.226	8.226	(1.074)	902972	25.0000	25.39
	17 Hexachloroethane	117	8.467	8.467	(1.105)	488285	25.0000	26.42
	16 N-Nitroso-di-n-propylamine	70	8.440	8.440	(1.102)	804375	25.0000	27.85
	15 4-Methylphenol	108	8.461	8.461	(1.105)	925098	25.0000	25.38
$	18 Nitrobenzene-d5	82	8.595	8.595	(0.886)	1176043	25.0000	25.00
	19 Nitrobenzene	77	8.627	8.627	(0.889)	1219978	25.0000	25.56
	20 Isophorone	82	9.006	9.006	(0.928)	1784376	25.0000	26.79
	21 2-Nitrophenol	139	9.140	9.140	(0.942)	529134	25.0000	25.61
	22 2,4-Dimethylphenol	107	9.284	9.284	(0.957)	968456	25.0000	25.38
	23 Bis(2-Chloroethoxy)methane	93	9.418	9.418	(0.971)	1233229	25.0000	26.24
	24 Benzoic acid	105	9.540	9.540	(0.983)	1379099	50.0000	43.27
	25 2,4-Dichlorophenol	162	9.540	9.540	(0.983)	770664	25.0000	25.13
	26 1,2,4-Trichlorobenzene	180	9.647	9.647	(0.994)	899490	25.0000	25.33
*	27 Naphthalene-d8	136	9.701	9.701	(1.000)	2139298	20.0000	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
28 Naphthalene	128	9.733	9.733	(1.003)	2633382	25.0000	26.27
29 4-Chloroaniline	127	9.893	9.893	(1.020)	867676	25.0000	22.37
30 Hexachlorobutadiene	225	10.059	10.059	(1.037)	556595	25.0000	24.94
31 4-Chloro-3-methylphenol	107	10.726	10.726	(1.106)	794523	25.0000	26.61
32 2-Methylnaphthalene	141	10.849	10.849	(1.118)	1347900	25.0000	25.87
33 Hexachlorocyclopentadiene	237	11.229	11.229	(0.896)	497293	25.0000	20.88
34 2,4,6-Trichlorophenol	196	11.373	11.373	(0.907)	513016	25.0000	25.09
35 2,4,5-Trichlorophenol	196	11.432	11.432	(0.912)	511595	25.0000	24.28
$ 36 2-Fluorobiphenyl	172	11.496	11.496	(0.917)	1881556	25.0000	24.75
37 2-Chloronaphthalene	162	11.618	11.618	(0.927)	1594334	25.0000	25.36
38 2-Nitroaniline	65	11.864	11.864	(0.946)	540775	25.0000	26.45
39 Dimethylphthalate	163	12.244	12.244	(0.977)	1734162	25.0000	26.54
40 Acenaphthylene	152	12.286	12.286	(0.980)	2477659	25.0000	26.15
41 2,6-Dinitrotoluene	165	12.329	12.329	(0.983)	414321	25.0000	26.76
* 42 Acenaphthene-d10	164	12.537	12.537	(1.000)	1145077	20.0000	
43 3-Nitroaniline	138	12.543	12.543	(1.000)	318294	25.0000	22.78
44 Acenaphthene	153	12.591	12.591	(1.004)	1523721	25.0000	25.39
45 2,4-Dinitrophenol	184	12.703	12.703	(1.013)	465340	50.0000	42.23
46 Dibenzofuran	168	12.853	12.853	(1.025)	2030559	25.0000	25.64
47 4-Nitrophenol	109	12.890	12.890	(1.028)	254215	25.0000	25.16
48 2,4-Dinitrotoluene	165	12.949	12.949	(1.033)	513557	25.0000	26.55
50 Diethylphthalate	149	13.387	13.387	(1.068)	1796964	25.0000	26.88
49 Fluorene	166	13.397	13.397	(1.069)	1600520	25.0000	25.63
51 4-Chlorophenyl-phenylether	204	13.435	13.435	(1.072)	869843	25.0000	25.23
52 4-Nitroaniline	138	13.520	13.520	(1.078)	278735	25.0000	22.45
53 4,6-Dinitro-2-methylphenol	198	13.595	13.595	(0.913)	596420	50.0000	46.67
54 N-Nitrosodiphenylamine	169	13.643	13.643	(0.917)	1273275	25.0000	26.13
$ 55 2,4,6-Tribromophenol	330	13.819	13.819	(1.102)	226061	25.0000	25.76
56 4-Bromophenyl-phenylether	248	14.209	14.209	(0.955)	481865	25.0000	25.18
57 Hexachlorobenzene	284	14.412	14.412	(0.968)	465181	25.0000	24.07
58 Pentachlorophenol	266	14.722	14.722	(0.989)	244112	25.0000	27.92
* 59 Phenanthrene-d10	188	14.883	14.883	(1.000)	1679978	20.0000	
60 Phenanthrene	178	14.920	14.920	(1.002)	2059363	25.0000	24.87
61 Anthracene	178	14.989	14.989	(1.007)	2120903	25.0000	25.15
62 Carbazole	167	15.289	15.289	(1.027)	1915628	25.0000	25.56
63 Di-n-butylphthalate	149	16.020	16.020	(1.076)	2659107	25.0000	27.52
64 Fluoranthene	202	16.838	16.838	(1.131)	2055762	25.0000	25.63
65 Pyrene	202	17.185	17.185	(0.897)	2104329	25.0000	22.34
$ 66 Terphenyl-d14	244	17.516	17.516	(0.914)	1322935	25.0000	22.47
67 Butylbenzylphthalate	149	18.408	18.408	(0.961)	1080752	25.0000	24.59
68 Benzo(a)anthracene	228	19.130	19.130	(0.999)	1992000	25.0000	25.69
* 69 Chrysene-d12	240	19.156	19.156	(1.000)	1594322	20.0000	
70 3,3'-Dichlorobenzidine	252	19.156	19.156	(1.000)	677508	25.0000	28.32
71 Chrysene	228	19.194	19.194	(1.002)	1949449	25.0000	26.10
72 bis(2-Ethylhexyl)phthalate	149	19.413	19.413	(0.955)	1461009	25.0000	24.37
* 134 Di-n-octylphthalate-d4	153	20.337	20.337	(1.000)	2005433	20.0000	
73 Di-n-octylphthalate	149	20.348	20.348	(1.001)	2571919	25.0000	25.40

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
74 Benzo(b)fluoranthene	252	20.764	20.764	(0.975)	2291370	25.0000	23.28
75 Benzo(k)fluoranthene	252	20.796	20.796	(0.977)	2649913	25.0000	25.80
187 Total Benzofluoranthenes	252	20.796	20.796	(0.977)	4667898	50.0000	49.51(M)
76 Benzo(a)pyrene	252	21.208	21.208	(0.996)	2355713	25.0000	25.91
* 77 Perylene-d12	264	21.288	21.288	(1.000)	2002386	20.0000	
78 Indeno(1,2,3-cd)pyrene	276	22.661	22.661	(1.064)	3283525	25.0000	25.83
79 Dibenzo(a,h)anthracene	278	22.687	22.687	(1.066)	2681596	25.0000	25.75
80 Benzo(g,h,i)perylene	276	23.013	23.013	(1.081)	2835537	25.0000	24.65
90 N-Nitrosodimethylamine	74	2.841	2.841	(0.371)	748073	25.0000	26.67
103 Pyridine	79	2.815	2.815	(0.367)	1281958	25.0000	26.72
91 Aniline	93	7.222	7.222	(0.943)	1291554	25.0000	24.65
105 1-methylnaphthalene	141	11.015	11.015	(1.135)	1344274	25.0000	25.88
111 Azobenzene (1,2-DP-Hydrazine)	77	13.681	13.681	(1.091)	2071365	25.0000	26.47
143 1,4-Dioxane	88	2.248	2.248	(0.294)	523813	25.0000	25.16
$ 137 d8-1,4-Dioxane	96	2.206	2.206	(0.288)	501482	25.0000	25.84
144 alpha-Terpineol	59	9.775	9.775	(1.008)	797584	25.0000	26.63
98 Retene	219	17.757	17.757	(0.927)	908818	25.0000	22.75
99 Perylene	252	21.320	21.320	(1.002)	2018012	25.0000	25.25
120 2,3,4,6-Tetrachlorophenol	232	13.141	13.141	(1.048)	413091	25.0000	25.21
188 2,6-Dichlorophenol	162	9.898	9.898	(1.292)	713570	25.0000	26.16
189 N-Nitrosomethylethylamine	88	4.781	4.781	(0.624)	441940	25.0000	24.03

QC Flag Legend

M - Compound response manually integrated.

Report Date: 07-Feb-2013 12:04

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 02071301.D
Lab Smp Id: CC0207
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem2/nt6.i/20130207.b/SW846012313.m
Misc Info: 13-

Calibration Date: 07-FEB-2013
Calibration Time: 10:12
Client Smp ID: CC0207
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	605906	302953	1211812	599870	-1.00
27 Naphthalene-d8	2147229	1073614	4294458	2139298	-0.37
42 Acenaphthene-d10	1142287	571144	2284574	1145077	0.24
59 Phenanthrene-d10	1647922	823961	3295844	1679978	1.95
69 Chrysene-d12	1422286	711143	2844572	1594322	12.10
134 Di-n-octylphthala	1811653	905826	3623306	2005433	10.70
77 Perylene-d12	1374454	687227	2748908	2002386	45.69

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	7.66	7.16	8.16	7.66	0.00
27 Naphthalene-d8	9.70	9.20	10.20	9.70	0.00
42 Acenaphthene-d10	12.54	12.04	13.04	12.54	0.00
59 Phenanthrene-d10	14.88	14.38	15.38	14.88	0.00
69 Chrysene-d12	19.16	18.66	19.66	19.16	0.00
134 Di-n-octylphthala	20.34	19.84	20.84	20.34	0.00
77 Perylene-d12	21.29	20.79	21.79	21.29	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem2/nt6.i/20130207.b/02071301.D

Date : 07-FEB-2013 10:12

Client ID: CC0207

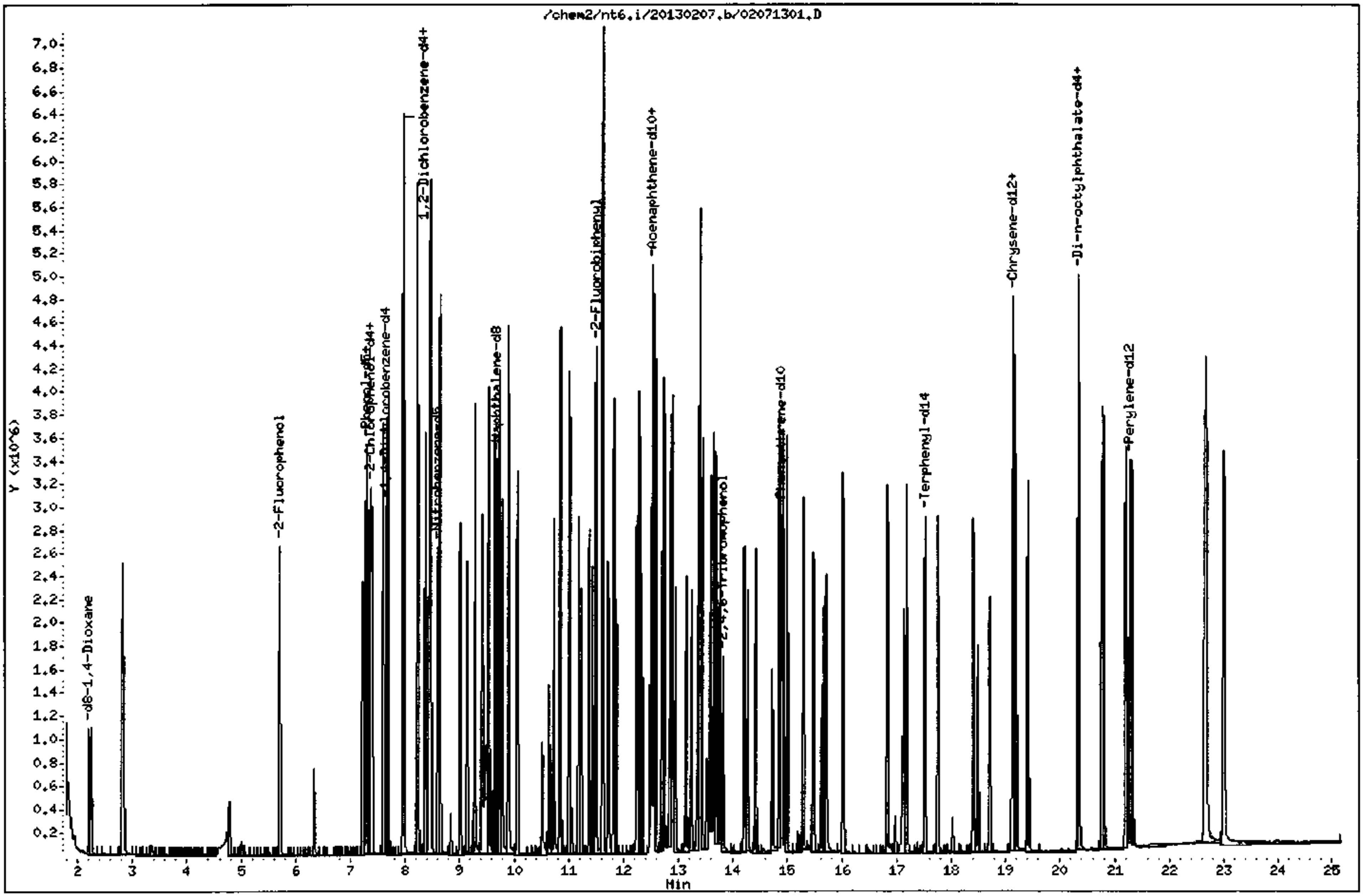
Instrument: nt6.i

Sample Info: CC0207

Operator: JZ

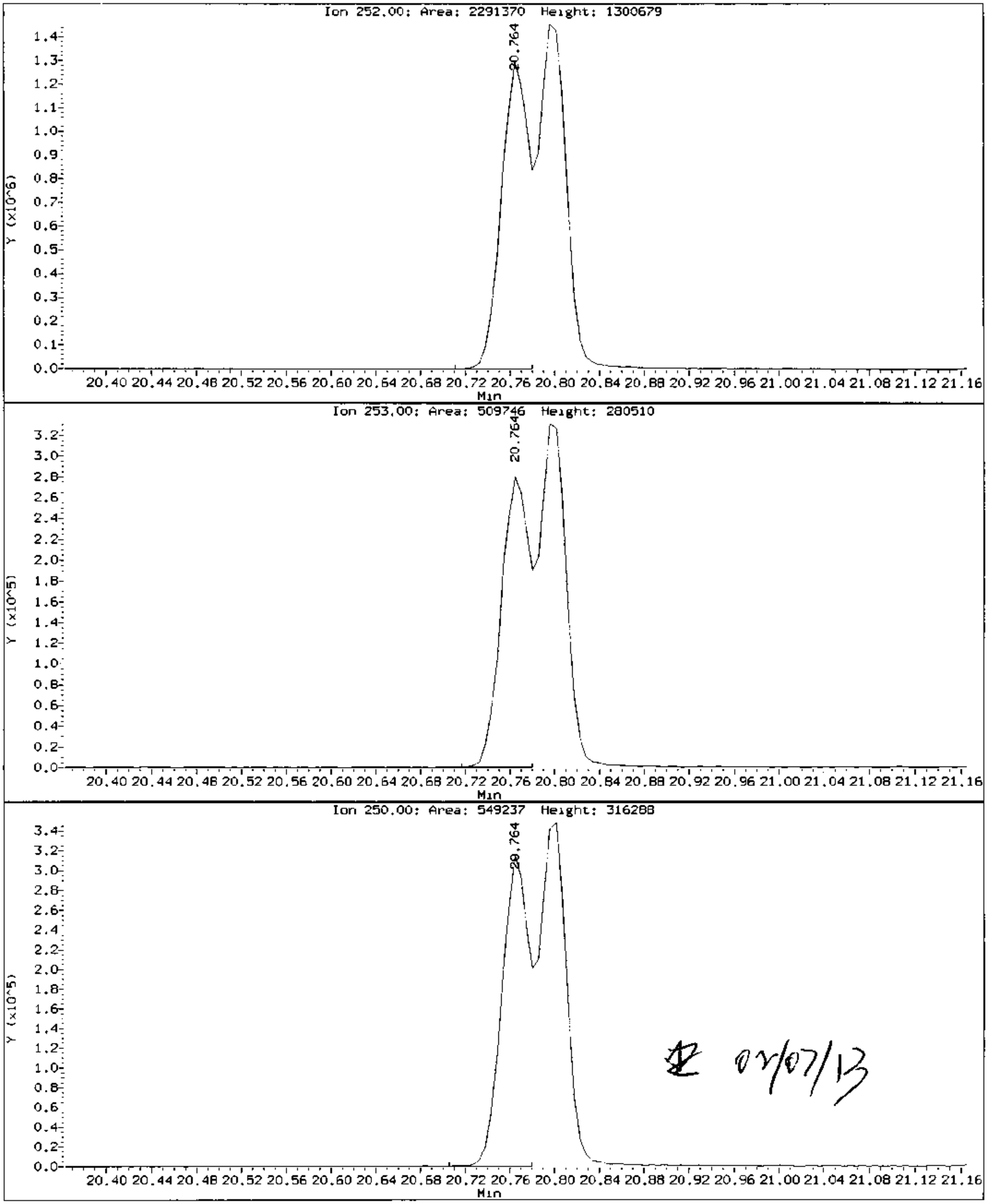
Column phase: ZB-5msi

Column diameter: 0.32



Data File: /chem2/nt6.i/20130207.b/02071301.D
Injection Date: 07-FEB-2013 10:12
Instrument: nt6.i
Client Sample ID: CC0207

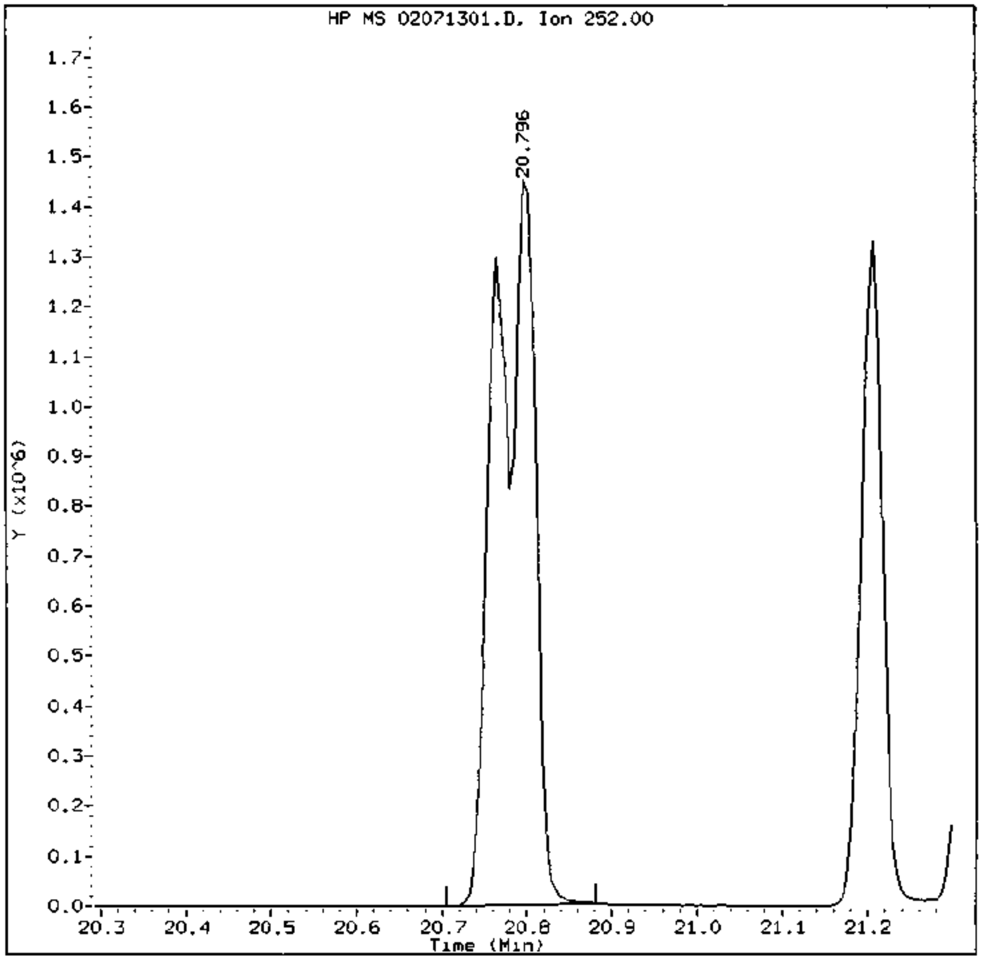
Compound: Total Benzofluoranthenes
CAS Number:



02/07/13

CC0207, /chem2/nt6.i/20130207.b/02071301.D

Total Benzofluoranthenes Amount: 49.51 Area: 4667898



MANUAL INTEGRATION for Total Benzofluoranthenes

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other ______________________

Analyst: AB

Date: 02/07/13

CO-ELUTION SUMMARY FOR FILE - 02071301.D

Lab ID: CC0207, Method: SW846012313.m, Instrument: nt6.i, Date: 07-FEB-2013

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Data File: /chem2/nt6.i/20130207.b/tune.b/02071301.D

Date : 07-FEB-2013 10:12

Client ID: DFTPP0207

Instrument: nt6.i

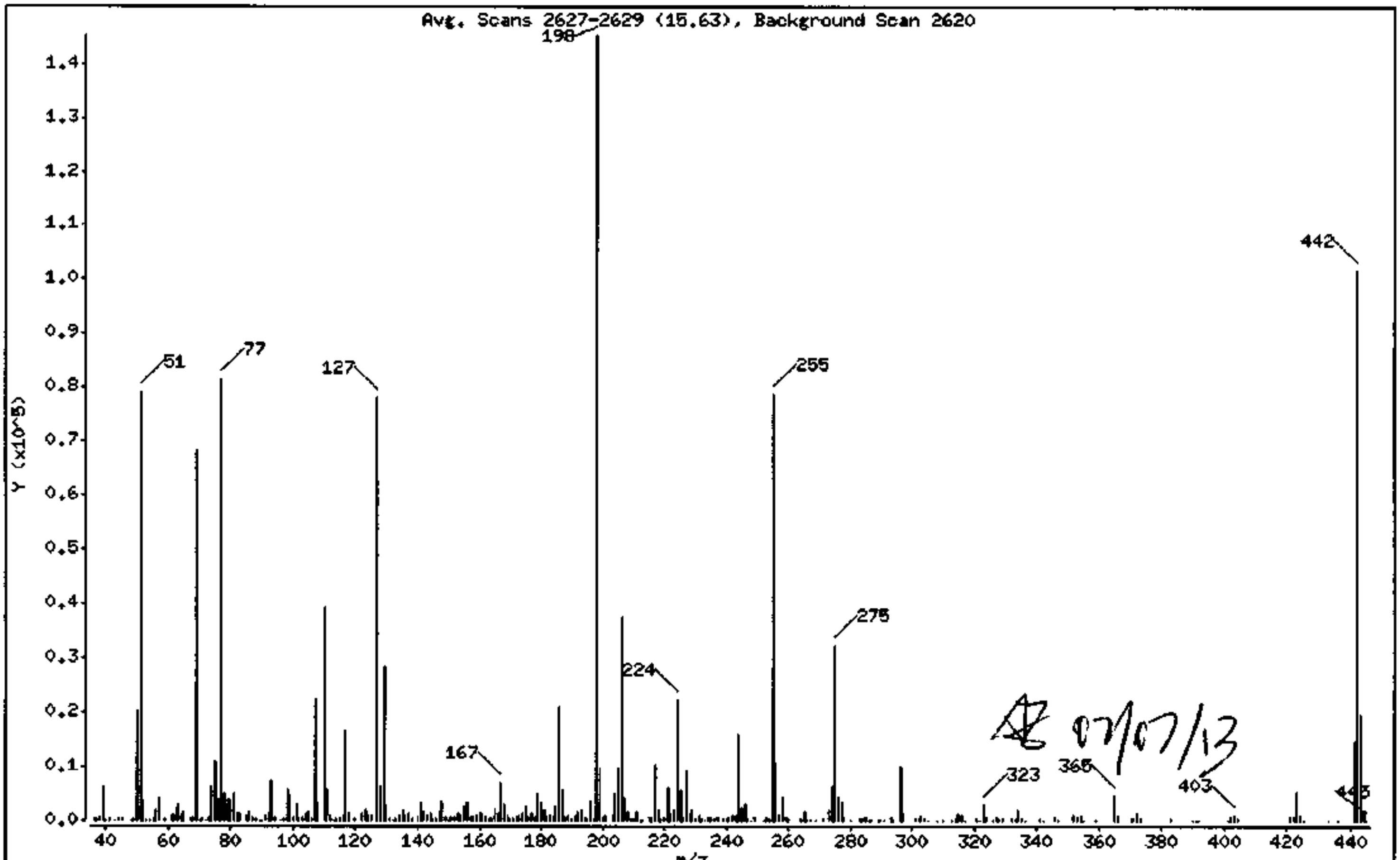
Sample Info: DFTPP0207

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.32

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	54.41
68	Less than 2.00% of mass 69	0.56 (1.19)
69	Mass 69 relative abundance	47.23
70	Less than 2.00% of mass 69	0.06 (0.14)
127	10.00 - 80.00% of mass 198	53.79
197	Less than 2.00% of mass 198	0.30
199	5.00 - 9.00% of mass 198	6.72
275	10.00 - 60.00% of mass 198	22.31
365	Greater than 1.00% of mass 198	3.23
441	0.01 - 24.00% of mass 442	10.00 (14.27)
442	50.00 - 200.00% of mass 198	70.11
443	15.00 - 24.00% of mass 442	13.62 (19.42)

Date : 07-FEB-2013 10:12

Client ID: DFTPP0207 Instrument: nt6.i

Sample Info: DFTPP0207

Operator: JZ

Column phase: ZB-5msi Column diameter: 0.32

Data File: 02071301.D
Spectrum: Avg. Scans 2627-2629 (15.63), Background Scan 2620
Location of Maximum: 198.00
Number of points: 295

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	298	118.00	1271	196.00	3809	283.00	258
37.00	356	120.00	441	197.00	440	284.00	223
38.00	808	122.00	1232	198.00	145216	285.00	560
39.00	6232	123.00	1976	199.00	9757	286.00	80
40.00	150	124.00	1119	200.00	781	287.00	63
41.00	172	125.00	936	201.00	1145	289.00	107
43.00	26	127.00	78112	203.00	1030	290.00	58
44.00	281	128.00	6184	204.00	4892	291.00	70
45.00	214	129.00	28424	205.00	9523	293.00	685
48.00	58	130.00	2619	206.00	37664	294.00	165
49.00	422	131.00	409	207.00	4174	296.00	9971
50.00	20384	132.00	136	208.00	1512	297.00	1409
51.00	79016	133.00	239	209.00	468	301.00	170
52.00	3674	134.00	1000	210.00	409	302.00	198
53.00	48	135.00	2105	211.00	1804	303.00	1014
54.00	72	136.00	927	212.00	38	304.00	381
55.00	424	137.00	1467	213.00	132	305.00	79
56.00	1974	138.00	460	215.00	627	308.00	158
57.00	4448	140.00	716	216.00	832	310.00	112
59.00	209	141.00	3382	217.00	10404	313.00	99
61.00	965	142.00	1658	218.00	2043	314.00	481
62.00	1056	143.00	839	219.00	341	315.00	1266
63.00	2959	144.00	1435	220.00	737	316.00	881
64.00	870	145.00	387	221.00	5942	317.00	82
65.00	1528	146.00	397	222.00	1208	321.00	437
67.00	324	147.00	1640	223.00	2132	322.00	129
68.00	818	148.00	3812	224.00	22248	323.00	3097
69.00	68584	149.00	755	225.00	5653	324.00	604
70.00	94	150.00	159	226.00	632	326.00	115
71.00	295	151.00	554	227.00	9210	327.00	626
72.00	64	152.00	627	228.00	1363	328.00	374
73.00	742	153.00	1473	229.00	2112	329.00	249
74.00	6374	154.00	968	230.00	356	332.00	201
75.00	11061	155.00	2512	231.00	940	333.00	313
76.00	3894	156.00	3262	232.00	294	334.00	2083

Data File: /chem2/nt6.i/20130207.b/tune.b/02071301.D

Date : 07-FEB-2013 10:12

Client ID: DFTPP0207 Instrument: nt6.i

Sample Info: DFTPP0207

Operator: JZ

Column phase: ZB-5msi Column diameter: 0.32

Data File: 02071301.D
Spectrum: Avg. Scans 2627-2629 (15.63), Background Scan 2620
Location of Maximum: 198.00
Number of points: 295

m/z	Y	m/z	Y	m/z	Y	m/z	Y
77.00	81296	157.00	674	233.00	132	335.00	489
78.00	5158	158.00	507	234.00	689	336.00	55
79.00	4029	159.00	900	235.00	578	341.00	418
80.00	3792	160.00	1294	236.00	440	342.00	147
81.00	4930	161.00	1229	237.00	678	346.00	709
82.00	1436	162.00	556	239.00	177	347.00	139
83.00	1304	163.00	276	240.00	364	352.00	1079
85.00	1062	164.00	171	241.00	804	353.00	622
86.00	1510	165.00	2082	242.00	1167	354.00	1086
87.00	768	166.00	1376	243.00	1037	355.00	72
88.00	386	167.00	7003	244.00	16174	359.00	75
89.00	136	168.00	3027	245.00	2391	365.00	4695
90.00	100	169.00	860	246.00	2948	366.00	854
91.00	927	170.00	235	247.00	462	370.00	169
92.00	1357	171.00	223	248.00	142	371.00	308
93.00	7336	172.00	587	249.00	702	372.00	1343
94.00	665	173.00	1094	251.00	129	373.00	392
96.00	135	174.00	1363	252.00	119	383.00	484
97.00	414	175.00	2548	253.00	538	386.00	50
98.00	5545	176.00	792	254.00	308	390.00	147
99.00	4743	177.00	1246	255.00	78656	391.00	60
100.00	532	178.00	548	256.00	10805	392.00	118
101.00	3135	179.00	5127	257.00	857	401.00	106
102.00	319	180.00	3325	258.00	4250	402.00	681
103.00	647	181.00	2077	259.00	742	403.00	1077
104.00	1379	182.00	509	260.00	180	404.00	332
105.00	1761	183.00	910	264.00	185	421.00	793
106.00	394	184.00	529	265.00	1514	422.00	522
107.00	22456	185.00	2604	266.00	158	423.00	5426
108.00	3310	186.00	21080	267.00	69	424.00	1147
109.00	145	187.00	5823	269.00	69	425.00	57
110.00	39520	188.00	552	271.00	214	433.00	55
111.00	5729	189.00	1118	273.00	2163	436.00	57
112.00	993	190.00	204	274.00	6338	441.00	14524
113.00	70	191.00	960	275.00	32392	442.00	101808

Date : 07-FEB-2013 10:12

Client ID: DFTPP0207

Instrument: nt6.i

Sample Info: DFTPP0207

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.32

Data File: 02071301.D
Spectrum: Avg. Scans 2627-2629 (15.63), Background Scan 2620
Location of Maximum: 198.00
Number of points: 295

m/z	Y	m/z	Y	m/z	Y	m/z	Y
114.00	322	192.00	1678	276.00	4491	443.00	19776
115.00	326	193.00	2080	277.00	3419	444.00	1716
116.00	929	194.00	587	278.00	588	445.00	56
117.00	16584	195.00	254	280.00	63		

Data File: /chem2/nt6.i/20130207.b/tune.b/02071301.D

Date : 07-FEB-2013 10:12

Client ID: DFTPP0207

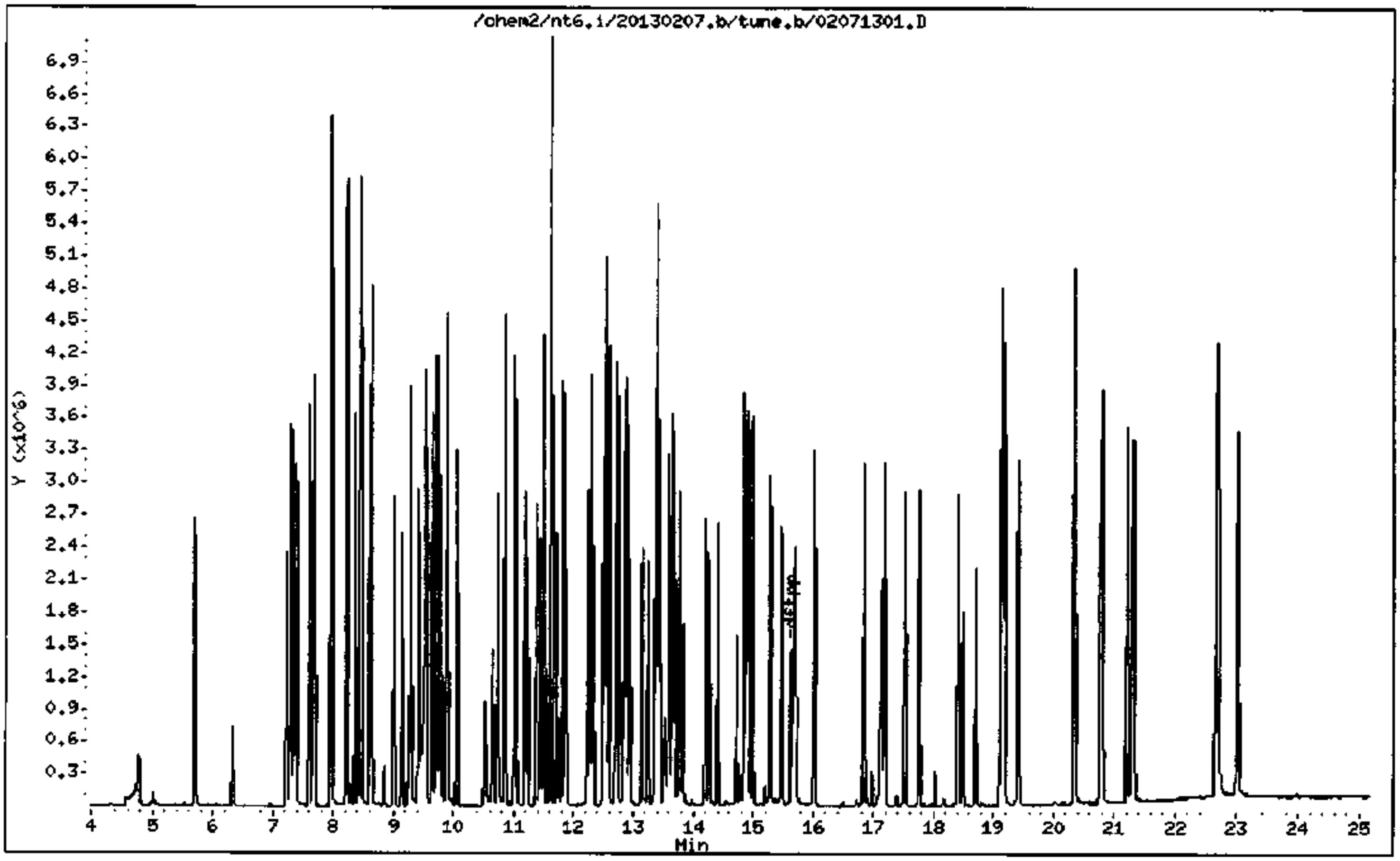
Instrument: nt6.i

Sample Info: DFTPP0207

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.32



Analytical Resources Inc.
ABN by sw846 8270C
DDT Breakdown Report

Data file: /chem2/nt6.i/20130207.b/ddt.b/02071301.D ARI ID: DDT
Method: /chem2/nt6.i/20130207.b/ddt.b/sw846ddt.m Misc: 13-
Analysis Date: 07-FEB-2013 10:12 Instrument: nt6.i

COMPOUND	RT	AREA
Pentachlorophenol	14.722	244196
Benzidine	17.105	494176
4,4'-DDE	----	----
4,4'-DDD	18.024	85208
4,4'-DDT	18.494	505802

$$\text{DDT Percent Breakdown} = \frac{(\text{DDE Area} + \text{DDD Area}) * 100}{(\text{DDE Area} + \text{DDD Area} + \text{DDT Area})}$$

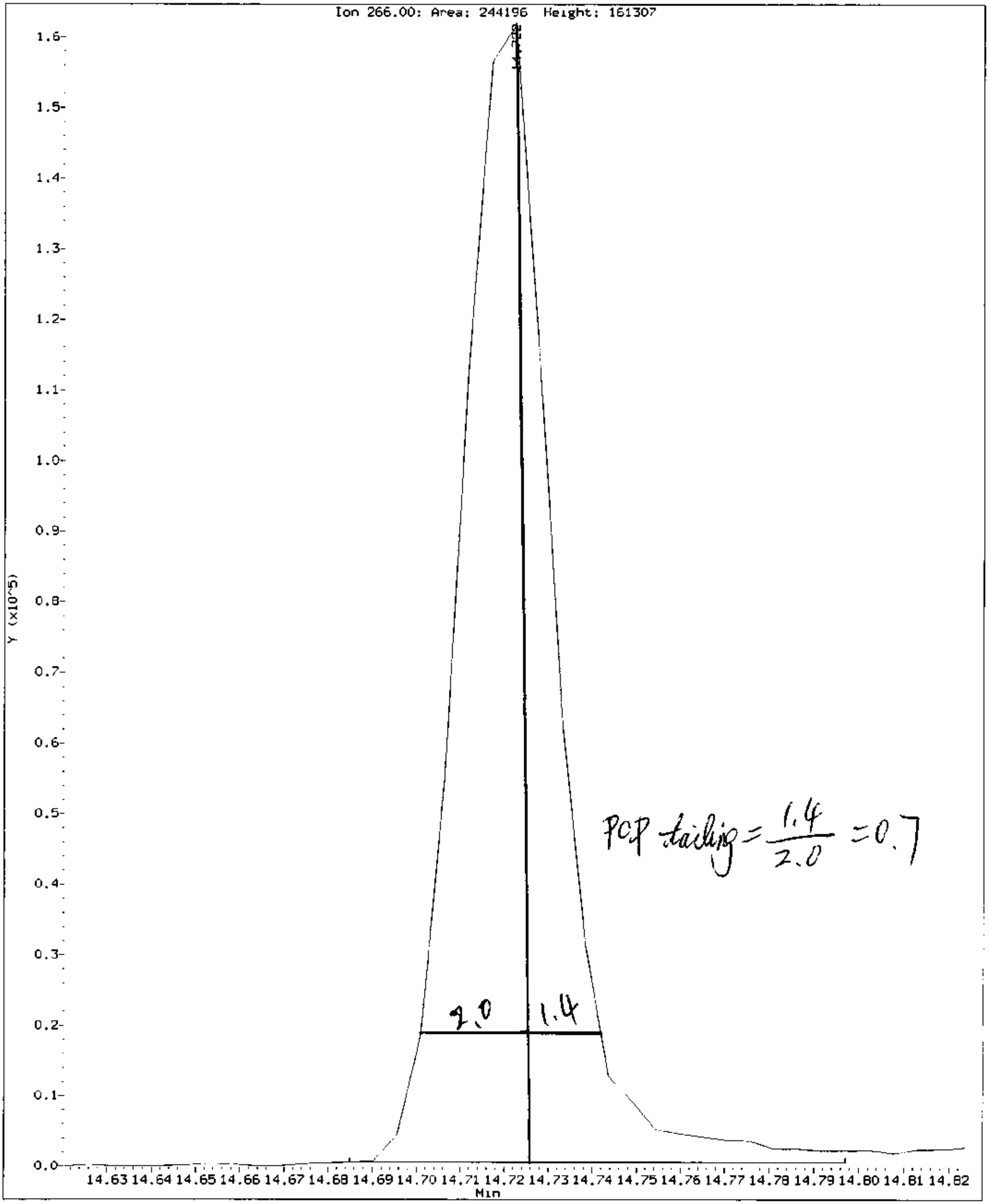
$$\text{DDT Percent Breakdown} = \frac{(0 + 85208) * 100}{(0 + 85208 + 505802)}$$

DDT Percent Breakdown = 14.4 %

OK 02/07/13

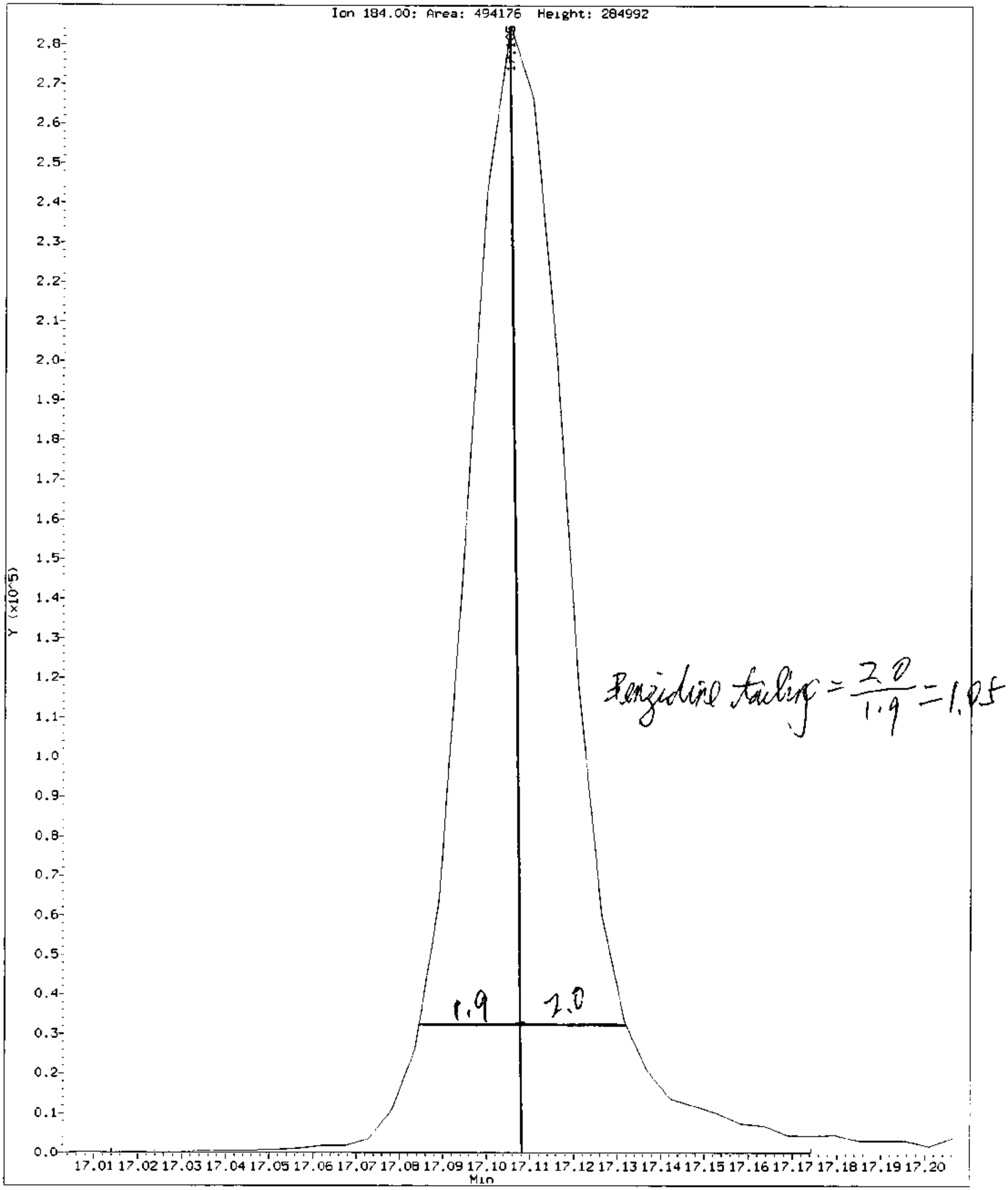
Data File: /chem2/nt6.i/20130207.b/ddt.b/02071301.D
Injection Date: 07-FEB-2013 10:12
Instrument: nt6.i
Client Sample ID: DDT0207

Compound: Pentachlorophenol
CAS Number: 87-86-5



Data File: /chem2/nt6.i/20130207.b/ddt.b/02071301.D
Injection Date: 07-FEB-2013 10:12
Instrument: nt6.i
Client Sample ID: DDT0207

Compound: Benzidine
CAS Number:



Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem2/nt6.i/20130207.b/02071309.D
Lab Smp Id: WC32MBW1 Client Smp ID: WC32MBW1
Inj Date : 07-FEB-2013 15:12
Operator : JZ Inst ID: nt6.i
Smp Info : WC32MBW1,
Misc Info : 13-2432
Comment : 1ul Injection
Method : /chem2/nt6.i/20130207.b/SW846012313.m
Meth Date : 07-Feb-2013 15:09 jianqing Quant Type: ISTD
Cal Date : 23-JAN-2013 16:37 Cal File: 01231310.D
Als bottle: 9 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: LLMBLCS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

JZ 02/07/13

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Vo	500.00000	Volume of sample extracted (mL)

Cpnd Variable Local Compound Variable

		QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/L)
$	1 2-Fluorophenol	112	5.702	5.705	(0.744)	882016	24.2078	24.21
$	2 Phenol-d5	99	7.283	7.286	(0.950)	1172512	26.3193	26.32
	3 Phenol	94	Compound Not Detected.					
$	5 2-Chlorophenol-d4	132	7.369	7.371	(0.962)	956889	26.0697	26.07
	4 Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
	6 2-Chlorophenol	128	Compound Not Detected.					
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	7.663	7.660	(1.000)	548191	20.0000	
	9 1,4-Dichlorobenzene	146	Compound Not Detected.					
$	10 1,2-Dichlorobenzene-d4	152	7.962	7.959	(1.039)	478336	18.4498	18.45
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	108	Compound Not Detected.					
	14 2,2'-oxybis(1-Chloropropane)	45	Compound Not Detected.					
	13 2-Methylphenol	108	Compound Not Detected.					
	17 Hexachloroethane	117	Compound Not Detected.					
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
	15 4-Methylphenol	108	Compound Not Detected.					
$	18 Nitrobenzene-d5	82	8.592	8.595	(0.886)	853938	20.0709	20.07
	19 Nitrobenzene	77	Compound Not Detected.					
	20 Isophorone	82	Compound Not Detected.					
	21 2-Nitrophenol	139	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	Compound Not Detected.					
	23 Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
	24 Benzoic acid	105	Compound Not Detected.					
	25 2,4-Dichlorophenol	162	Compound Not Detected.					
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	9.698	9.701	(1.000)	1934605	20.0000	
	28 Naphthalene	128	Compound Not Detected.					
	29 4-Chloroaniline	127	Compound Not Detected.					
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	31 4-Chloro-3-methylphenol	107	Compound Not Detected.					
	32 2-Methylnaphthalene	141	Compound Not Detected.					
	33 Hexachlorocyclopentadiene	237	Compound Not Detected.					
	34 2,4,6-Trichlorophenol	196	Compound Not Detected.					
	35 2,4,5-Trichlorophenol	196	Compound Not Detected.					
$	36 2-Fluorobiphenyl	172	11.493	11.496	(0.917)	1392153	19.8098	19.81
	37 2-Chloronaphthalene	162	Compound Not Detected.					
	38 2-Nitroaniline	65	Compound Not Detected.					
	39 Dimethylphthalate	163	Compound Not Detected.					
	40 Acenaphthylene	152	Compound Not Detected.					
	41 2,6-Dinitrotoluene	165	Compound Not Detected.					
*	42 Acenaphthene-d10	164	12.535	12.537	(1.000)	1058515	20.0000	
	43 3-Nitroaniline	138	Compound Not Detected.					
	44 Acenaphthene	153	Compound Not Detected.					
	45 2,4-Dinitrophenol	184	Compound Not Detected.					
	46 Dibenzofuran	168	Compound Not Detected.					
	47 4-Nitrophenol	109	Compound Not Detected.					
	48 2,4-Dinitrotoluene	165	Compound Not Detected.					
	50 Diethylphthalate	149	Compound Not Detected.					
	49 Fluorene	166	Compound Not Detected.					
	51 4-Chlorophenyl-phenylether	204	Compound Not Detected.					
	52 4-Nitroaniline	138	Compound Not Detected.					
	53 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
	54 N-Nitrosodiphenylamine	169	Compound Not Detected.					
$	55 2,4,6-Tribromophenol	330	13.822	13.819	(1.103)	245102	30.2130	30.21
	56 4-Bromophenyl-phenylether	248	Compound Not Detected.					
	57 Hexachlorobenzene	284	Compound Not Detected.					
	58 Pentachlorophenol	266	Compound Not Detected.					
*	59 Phenanthrene-d10	188	14.885	14.883	(1.000)	1527600	20.0000	
	60 Phenanthrene	178	Compound Not Detected.					
	61 Anthracene	178	Compound Not Detected.					
	62 Carbazole	167	Compound Not Detected.					
	63 Di-n-butylphthalate	149	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
========================	====	==	======	======	========	=======	=======
64 Fluoranthene	202	Compound Not Detected.					
65 Pyrene	202	Compound Not Detected.					
$ 66 Terphenyl-d14	244	17.519	17.516	(0.915)	1134259	19.3044	19.30
67 Butylbenzylphthalate	149	Compound Not Detected.					
68 Benzo(a)anthracene	228	Compound Not Detected.					
* 69 Chrysene-d12	240	19.154	19.156	(1.000)	1591318	20.0000	
70 3,3'-Dichlorobenzidine	252	Compound Not Detected.					
71 Chrysene	228	Compound Not Detected.					
72 bis(2-Ethylhexyl)phthalate	149	Compound Not Detected.					
* 134 Di-n-octylphthalate-d4	153	20.334	20.337	(1.000)	1959473	20.0000	
73 Di-n-octylphthalate	149	Compound Not Detected.					
74 Benzo(b)fluoranthene	252	Compound Not Detected.					
75 Benzo(k)fluoranthene	252	Compound Not Detected.					
76 Benzo(a)pyrene	252	Compound Not Detected.					
* 77 Perylene-d12	264	21.285	21.288	(1.000)	2123064	20.0000	
78 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
79 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
80 Benzo(g,h,i)perylene	276	Compound Not Detected.					
90 N-Nitrosodimethylamine	74	Compound Not Detected.					
91 Aniline	93	Compound Not Detected.					
93 Benzidine	184	Compound Not Detected.					
103 Pyridine	79	Compound Not Detected.					
105 1-methylnaphthalene	141	Compound Not Detected.					
111 Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					
187 Total Benzofluoranthenes	252	Compound Not Detected.					

Data File: /chem2/nt6.i/20130207.b/02071309.D
Report Date: 07-Feb-2013 15:48

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 02071309.D
Lab Smp Id: WC32MBW1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem2/nt6.i/20130207.b/SW846012313.m
Misc Info: 13-2432

Calibration Date: 07-FEB-2013
Calibration Time: 10:12
Client Smp ID: WC32MBW1
Level: LOW
Sample Type: Liquid

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	605906	302953	1211812	548191	-9.53
27 Naphthalene-d8	2147229	1073614	4294458	1934605	-9.90
42 Acenaphthene-d10	1142287	571144	2284574	1058515	-7.33
59 Phenanthrene-d10	1647922	823961	3295844	1527600	-7.30
69 Chrysene-d12	1422286	711143	2844572	1591318	11.88
134 Di-n-octylphthala	1811653	905826	3623306	1959473	8.16
77 Perylene-d12	1374454	687227	2748908	2123064	54.47

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	7.66	7.16	8.16	7.66	0.03
27 Naphthalene-d8	9.70	9.20	10.20	9.70	-0.03
42 Acenaphthene-d10	12.54	12.04	13.04	12.53	-0.02
59 Phenanthrene-d10	14.88	14.38	15.38	14.89	0.02
69 Chrysene-d12	19.16	18.66	19.66	19.15	-0.01
134 Di-n-octylphthala	20.34	19.84	20.84	20.33	-0.01
77 Perylene-d12	21.29	20.79	21.79	21.29	-0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd-Snider
Sample Matrix: LIQUID
Lab Smp Id: WC32MBW1
Level: LOW
Data Type: MS DATA
SpikeList File: LLLCS.spk
Sublist File: LLMBLCS.sub
Method File: /chem2/nt6.i/20130207.b/SW846012313.m
Misc Info: 13-2432

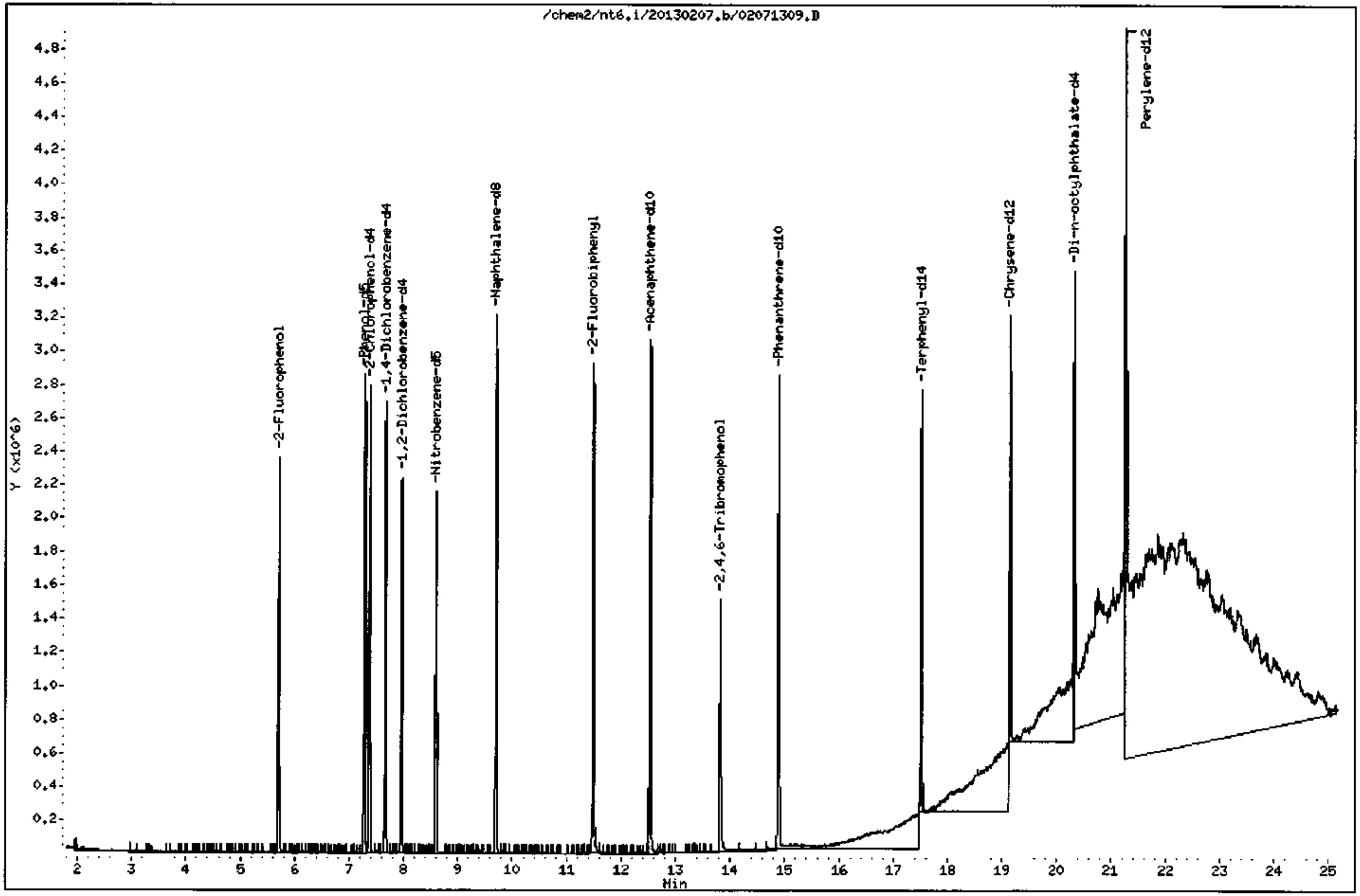
Client SDG: WC32
Fraction: SV
Client Smp ID: WC32MBW1
Operator: JZ
SampleType: BLANK
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 1 2-Fluorophenol	37.50	24.21	64.55	33-100
$ 2 Phenol-d5	37.50	26.32	70.18	15-121
$ 5 2-Chlorophenol-d4	37.50	26.07	69.52	46-102
$ 10 1,2-Dichlorobenzen	25.00	18.45	73.80	40-100
$ 18 Nitrobenzene-d5	25.00	20.07	80.28	50-100
$ 36 2-Fluorobiphenyl	25.00	19.81	79.24	51-100
$ 55 2,4,6-Tribromophen	37.50	30.21	80.57	46-125
$ 66 Terphenyl-d14	25.00	19.30	77.22	54-117

Data File: /chem2/nt6.i/20130207.b/02071309.D
Date : 07-FEB-2013 16:12
Client ID: WC32MBW1
Sample Info: WC32MBW1,
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt6.i

Operator: JZ
Column diameter: 0.32



CO-ELUTION SUMMARY FOR FILE - 02071309.D

Lab ID: WC32MBW1, Method: SW846012313.m, Instrument: nt6.i, Date: 07-FEB-2013

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem2/nt6.i/20130207.b/02071310.D
Lab Smp Id: WC32LCSW1 Client Smp ID: WC32LCSW1
Inj Date : 07-FEB-2013 15:46
Operator : JZ Inst ID: nt6.i
Smp Info : WC32LCSW1,
Misc Info : 13-2432
Comment : 1ul Injection
Method : /chem2/nt6.i/20130207.b/SW846012313.m
Meth Date : 07-Feb-2013 15:09 jianqing Quant Type: ISTD
Cal Date : 23-JAN-2013 16:37 Cal File: 01231310.D
Als bottle: 10 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: LLMBLCS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

AB 02/07/13

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Vo	500.00000	Volume of sample extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
$	1 2-Fluorophenol	112	5.702	5.705	(0.744)	1059253	26.9501	26.95
$	2 Phenol-d5	99	7.289	7.286	(0.951)	1401770	29.1686	29.17
	3 Phenol	94	7.305	7.307	(0.953)	938279	20.2122	20.21
$	5 2-Chlorophenol-d4	132	7.374	7.371	(0.962)	1116805	28.2055	28.21
	4 Bis(2-Chloroethyl)ether	93	7.353	7.350	(0.960)	719741	18.3422	18.34
	6 2-Chlorophenol	128	7.395	7.398	(0.965)	756420	19.2421	19.24
	7 1,3-Dichlorobenzene	146	7.598	7.596	(0.992)	769340	17.0102	17.01
*	8 1,4-Dichlorobenzene-d4	152	7.663	7.660	(1.000)	591357	20.0000	
	9 1,4-Dichlorobenzene	146	7.689	7.687	(1.003)	782167	17.4210	17.42
$	10 1,2-Dichlorobenzene-d4	152	7.962	7.959	(1.039)	555352	19.8568	19.86
	12 1,2-Dichlorobenzene	146	7.983	7.981	(1.042)	738805	17.7054	17.71
	11 Benzyl alcohol	108	7.967	7.964	(1.040)	526271	21.7459	21.75
	14 2,2'-oxybis(1-Chloropropane)	45	8.223	8.221	(1.073)	1228388	19.3117	19.31
	13 2-Methylphenol	108	8.223	8.226	(1.073)	677540	19.3265	19.33
	17 Hexachloroethane	117	8.469	8.467	(1.105)	306981	16.8460	16.85
	16 N-Nitroso-di-n-propylamine	70	8.437	8.440	(1.101)	580496	20.3910	20.39

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
15 4-Methylphenol	108	8.469	8.461	(1.105)	1447655	40.2936	40.29
$ 18 Nitrobenzene-d5	82	8.597	8.595	(0.886)	991241	21.9596	21.96
19 Nitrobenzene	77	8.624	8.627	(0.889)	832848	18.1895	18.19
20 Isophorone	82	9.014	9.006	(0.929)	1458054	22.8124	22.81
21 2-Nitrophenol	139	9.142	9.140	(0.942)	390185	19.6802	19.68
22 2,4-Dimethylphenol	107	9.287	9.284	(0.957)	1861865	50.8634	50.86
23 Bis(2-Chloroethoxy)methane	93	9.420	9.418	(0.971)	885974	19.6491	19.65
24 Benzoic acid	105	9.607	9.540	(0.990)	2930518	95.8412	95.84
25 2,4-Dichlorophenol	162	9.538	9.540	(0.983)	1691062	57.4818	57.48
26 1,2,4-Trichlorobenzene	180	9.650	9.647	(0.994)	616730	18.1007	18.10
* 27 Naphthalene-d8	136	9.703	9.701	(1.000)	2052526	20.0000	
28 Naphthalene	128	9.730	9.733	(1.003)	1967612	20.4570	20.46
29 4-Chloroaniline	127	9.896	9.893	(1.020)	2245696	60.3577	60.36 Q(NTC)
30 Hexachlorobutadiene	225	10.061	10.059	(1.037)	381120	17.8023	17.80
31 4-Chloro-3-methylphenol	107	10.729	10.726	(1.106)	1788917	62.4543	62.45
32 2-Methylnaphthalene	141	10.846	10.849	(1.118)	1071809	21.4393	21.44
33 Hexachlorocyclopentadiene	237	11.231	11.229	(0.896)	675893	30.3026	30.30
34 2,4,6-Trichlorophenol	196	11.375	11.373	(0.907)	1253080	65.4489	65.45
35 2,4,5-Trichlorophenol	196	11.434	11.432	(0.912)	1288533	65.3016	65.30
$ 36 2-Fluorobiphenyl	172	11.498	11.496	(0.917)	1647454	23.1421	23.14
37 2-Chloronaphthalene	162	11.616	11.618	(0.926)	1196623	20.3275	20.33
38 2-Nitroaniline	65	11.872	11.864	(0.947)	1248801	65.2335	65.23
39 Dimethylphthalate	163	12.246	12.244	(0.977)	1364776	22.3024	22.30
40 Acenaphthylene	152	12.289	12.286	(0.980)	1968967	22.1884	22.19
41 2,6-Dinitrotoluene	165	12.332	12.329	(0.983)	886183	61.1300	61.13
* 42 Acenaphthene-d10	164	12.540	12.537	(1.000)	1072259	20.0000	
43 3-Nitroaniline	138	12.545	12.543	(1.000)	963150	73.6003	73.60
44 Acenaphthene	153	12.588	12.591	(1.004)	1203252	21.4137	21.41
45 2,4-Dinitrophenol	184	12.706	12.703	(1.013)	833598	77.4601	77.46
46 Dibenzofuran	168	12.850	12.853	(1.025)	1685085	22.7216	22.72
47 4-Nitrophenol	109	12.887	12.890	(1.028)	618771	65.4090	65.41
48 2,4-Dinitrotoluene	165	12.951	12.949	(1.033)	1119223	61.7935	61.79
50 Diethylphthalate	149	13.395	13.387	(1.068)	1382890	22.0940	22.09
49 Fluorene	166	13.400	13.397	(1.069)	1306166	22.3350	22.34
51 4-Chlorophenyl-phenylether	204	13.437	13.435	(1.072)	661829	20.4966	20.50
52 4-Nitroaniline	138	13.534	13.520	(1.079)	908297	78.1186	78.12
53 4,6-Dinitro-2-methylphenol	198	13.603	13.595	(0.914)	1149756	93.9454	93.95
54 N-Nitrosodiphenylamine	169	13.646	13.643	(0.917)	929792	19.9265	19.93
$ 55 2,4,6-Tribromophenol	330	13.822	13.819	(1.102)	283802	34.5351	34.54
56 4-Bromophenyl-phenylether	248	14.207	14.209	(0.954)	380140	20.7391	20.74
57 Hexachlorobenzene	284	14.415	14.412	(0.968)	373101	20.1625	20.16
58 Pentachlorophenol	266	14.720	14.722	(0.989)	718694	74.2903	74.29
* 59 Phenanthrene-d10	188	14.885	14.883	(1.000)	1608803	20.0000	
60 Phenanthrene	178	14.923	14.920	(1.002)	1728726	21.8028	21.80
61 Anthracene	178	14.992	14.989	(1.007)	1699484	21.0431	21.04
62 Carbazole	167	15.291	15.289	(1.027)	1555154	21.6722	21.67
63 Di-n-butylphthalate	149	16.018	16.020	(1.076)	2108418	22.7823	22.78

& 02/07/13

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
64 Fluoranthene	202	16.835	16.838	(1.131)	1848729	24.0660	24.07
65 Pyrene	202	17.182	17.185	(0.897)	1875921	18.0971	18.10
$ 66 Terphenyl-d14	244	17.519	17.516	(0.915)	1307563	20.1802	20.18
67 Butylbenzylphthalate	149	18.406	18.408	(0.961)	857429	17.7211	17.72
68 Benzo(a)anthracene	228	19.127	19.130	(0.999)	1903633	22.3072	22.31
* 69 Chrysene-d12	240	19.154	19.156	(1.000)	1754840	20.0000	
70 3,3'-Dichlorobenzidine	252	19.159	19.156	(1.000)	1694824	64.3535	64.35
71 Chrysene	228	19.191	19.194	(1.002)	1790312	21.7809	21.78
72 bis(2-Ethylhexyl)phthalate	149	19.410	19.413	(0.955)	1168071	19.0087	19.01
* 134 Di-n-octylphthalate-d4	153	20.334	20.337	(1.000)	2055479	20.0000	
73 Di-n-octylphthalate	149	20.345	20.348	(1.001)	2117088	20.4013	20.40
74 Benzo(b)fluoranthene	252	20.761	20.764	(0.975)	2297778	21.4610	21.46
75 Benzo(k)fluoranthene	252	20.799	20.796	(0.977)	2235709	20.0053	20.01
76 Benzo(a)pyrene	252	21.205	21.208	(0.996)	2004187	20.2581	20.26
* 77 Perylene-d12	264	21.285	21.288	(1.000)	2178452	20.0000	
78 Indeno(1,2,3-cd)pyrene	276	22.658	22.661	(1.064)	2730589	19.7459	19.75
79 Dibenzo(a,h)anthracene	278	22.685	22.687	(1.066)	2192267	19.3491	19.35
80 Benzo(g,h,i)perylene	276	23.011	23.013	(1.081)	2370366	18.9433	18.94
90 N-Nitrosodimethylamine	74	2.849	2.841	(0.372)	1352167	48.8979	48.90
91 Aniline	93	7.224	7.222	(0.943)	1686702	32.6583	32.66
93 Benzidine	184	Compound Not Detected.					
103 Pyridine	79	Compound Not Detected.			> NTC		
105 1-methylnaphthalene	141	11.017	11.015	(1.135)	1045867	20.9831	20.98
111 Azobenzene (1,2-DP-Hydrazine)	77	13.683	13.681	(1.091)	1521820	20.7676	20.77
187 Total Benzofluoranthenes	252	20.799	20.796	(0.977)	4272593	41.6514	41.65(M)

QC Flag Legend

M - Compound response manually integrated.

02/07/13

Report Date: 07-Feb-2013 16:24

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 02071310.D
Lab Smp Id: WC32LCSW1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem2/nt6.i/20130207.b/SW846012313.m
Misc Info: 13-2432

Calibration Date: 07-FEB-2013
Calibration Time: 10:12
Client Smp ID: WC32LCSW1
Level: LOW
Sample Type: Liquid

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	605906	302953	1211812	591357	-2.40
27 Naphthalene-d8	2147229	1073614	4294458	2052526	-4.41
42 Acenaphthene-d10	1142287	571144	2284574	1072259	-6.13
59 Phenanthrene-d10	1647922	823961	3295844	1608803	-2.37
69 Chrysene-d12	1422286	711143	2844572	1754840	23.38
134 Di-n-octylphthala	1811653	905826	3623306	2055479	13.46
77 Perylene-d12	1374454	687227	2748908	2178452	58.50

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	7.66	7.16	8.16	7.66	0.03
27 Naphthalene-d8	9.70	9.20	10.20	9.70	0.03
42 Acenaphthene-d10	12.54	12.04	13.04	12.54	0.02
59 Phenanthrene-d10	14.88	14.38	15.38	14.89	0.02
69 Chrysene-d12	19.16	18.66	19.66	19.15	-0.01
134 Di-n-octylphthala	20.34	19.84	20.84	20.33	-0.01
77 Perylene-d12	21.29	20.79	21.79	21.29	-0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 07-Feb-2013 16:24

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd-Snider
Sample Matrix: LIQUID
Lab Smp Id: WC32LCSW1
Level: LOW
Data Type: MS DATA
SpikeList File: LLLCS.spk
Sublist File: LLMBLCS.sub
Method File: /chem2/nt6.i/20130207.b/SW846012313.m
Misc Info: 13-2432

Client SDG: WC32
Fraction: SV
Client Smp ID: WC32LCSW1
Operator: JZ
SampleType: LCS
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
3 Phenol	25.00	20.21	80.85	50-100
4 Bis(2-Chloroethyl)	25.00	18.34	73.37	52-100
6 2-Chlorophenol	25.00	19.24	76.97	56-100
7 1,3-Dichlorobenzen	25.00	17.01	68.04	23-100
9 1,4-Dichlorobenzen	25.00	17.42	69.68	25-100
11 Benzyl alcohol	25.00	21.75	86.98	19-100
12 1,2-Dichlorobenzen	25.00	17.71	70.82	30-100
13 2-Methylphenol	25.00	19.33	77.31	52-100
14 2,2'-oxybis(1-Chlo	25.00	19.31	77.25	32-111
15 4-Methylphenol	50.00	40.29	80.59	53-102
16 N-Nitroso-di-n-pro	25.00	20.39	81.56	43-104
17 Hexachloroethane	25.00	16.85	67.38	12-100
19 Nitrobenzene	25.00	18.19	72.76	33-125
20 Isophorone	25.00	22.81	91.25	57-115
21 2-Nitrophenol	25.00	19.68	78.72	56-102
22 2,4-Dimethylphenol	75.00	50.86	67.82	29-100
23 Bis(2-Chloroethoxy	25.00	19.65	78.60	54-101
24 Benzoic acid	137.5	95.84	69.70	10-131
25 2,4-Dichlorophenol	75.00	57.48	76.64	56-104
26 1,2,4-Trichloroben	25.00	18.10	72.40	27-100
28 Naphthalene	25.00	20.46	81.83	45-100
29 4-Chloroaniline	75.00	60.36	80.48	10-139
30 Hexachlorobutadien	25.00	17.80	71.21	10-100
31 4-Chloro-3-methylp	75.00	62.45	83.27	53-109
32 2-Methylnaphthalen	25.00	21.44	85.76	46-100
33 Hexachlorocyclopen	75.00	30.30	40.40	10-100
34 2,4,6-Trichlorophe	75.00	65.45	87.27	58-108
35 2,4,5-Trichlorophe	75.00	65.30	87.07	58-107
37 2-Chloronaphthalen	25.00	20.33	81.31	56-104
38 2-Nitroaniline	75.00	65.23	86.98	50-107
39 Dimethylphthalate	25.00	22.30	89.21	58-107
40 Acenaphthylene	25.00	22.19	88.75	57-100
41 2,6-Dinitrotoluene	75.00	61.13	81.51	58-112

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
43 3-Nitroaniline	75.00	73.60	98.13	21-150
44 Acenaphthene	25.00	21.41	85.65	51-100
45 2,4-Dinitrophenol	137.5	77.46	56.33	12-169
46 Dibenzofuran	25.00	22.72	90.89	57-100
47 4-Nitrophenol	75.00	65.41	87.21	35-119
48 2,4-Dinitrotoluene	75.00	61.79	82.39	58-117
49 Fluorene	25.00	22.34	89.34	56-104
50 Diethylphthalate	25.00	22.09	88.38	52-111
51 4-Chlorophenyl-phe	25.00	20.50	81.99	55-104
52 4-Nitroaniline	75.00	78.12	104.16	49-112
53 4,6-Dinitro-2-meth	137.5	93.95	68.32	13-139
54 N-Nitrosodiphenyla	25.00	19.93	79.71	60-136
56 4-Bromophenyl-phen	25.00	20.74	82.96	50-103
57 Hexachlorobenzene	25.00	20.16	80.65	54-106
58 Pentachlorophenol	75.00	74.29	99.05	46-114
60 Phenanthrene	25.00	21.80	87.21	56-102
61 Anthracene	25.00	21.04	84.17	56-101
62 Carbazole	25.00	21.67	86.69	60-108
63 Di-n-butylphthalat	25.00	22.78	91.13	56-112
64 Fluoranthene	25.00	24.07	96.26	57-110
65 Pyrene	25.00	18.10	72.39	48-119
67 Butylbenzylphthala	25.00	17.72	70.88	51-114
68 Benzo(a)anthracene	25.00	22.31	89.23	55-105
70 3,3'-Dichlorobenzi	75.00	64.35	85.80	10-128
71 Chrysene	25.00	21.78	87.12	55-104
72 bis(2-Ethylhexyl)p	25.00	19.01	76.03	28-164
73 Di-n-octylphthalat	25.00	20.40	81.61	57-107
74 Benzo(b)fluoranthe	25.00	21.46	85.84	53-112
75 Benzo(k)fluoranthe	25.00	20.01	80.02	50-116
76 Benzo(a)pyrene	25.00	20.26	81.03	45-103
78 Indeno(1,2,3-cd)py	25.00	19.75	78.98	35-118
79 Dibenzo(a,h)anthra	25.00	19.35	77.40	42-119
80 Benzo(g,h,i)peryle	25.00	18.94	75.77	39-123
91 Aniline	75.00	32.66	43.54	10-100
111 Azobenzene (1,2-DP	25.00	20.77	83.07	57-109
90 N-Nitrosodimethyla	75.00	48.90	65.20	49-100
105 1-methylnaphthalen	25.00	20.98	83.93	46-100
144 alpha-Terpineol	25.00	0.000	NR *	30-160
187 Total Benzofluoran	50.00	41.65	83.30	30-160

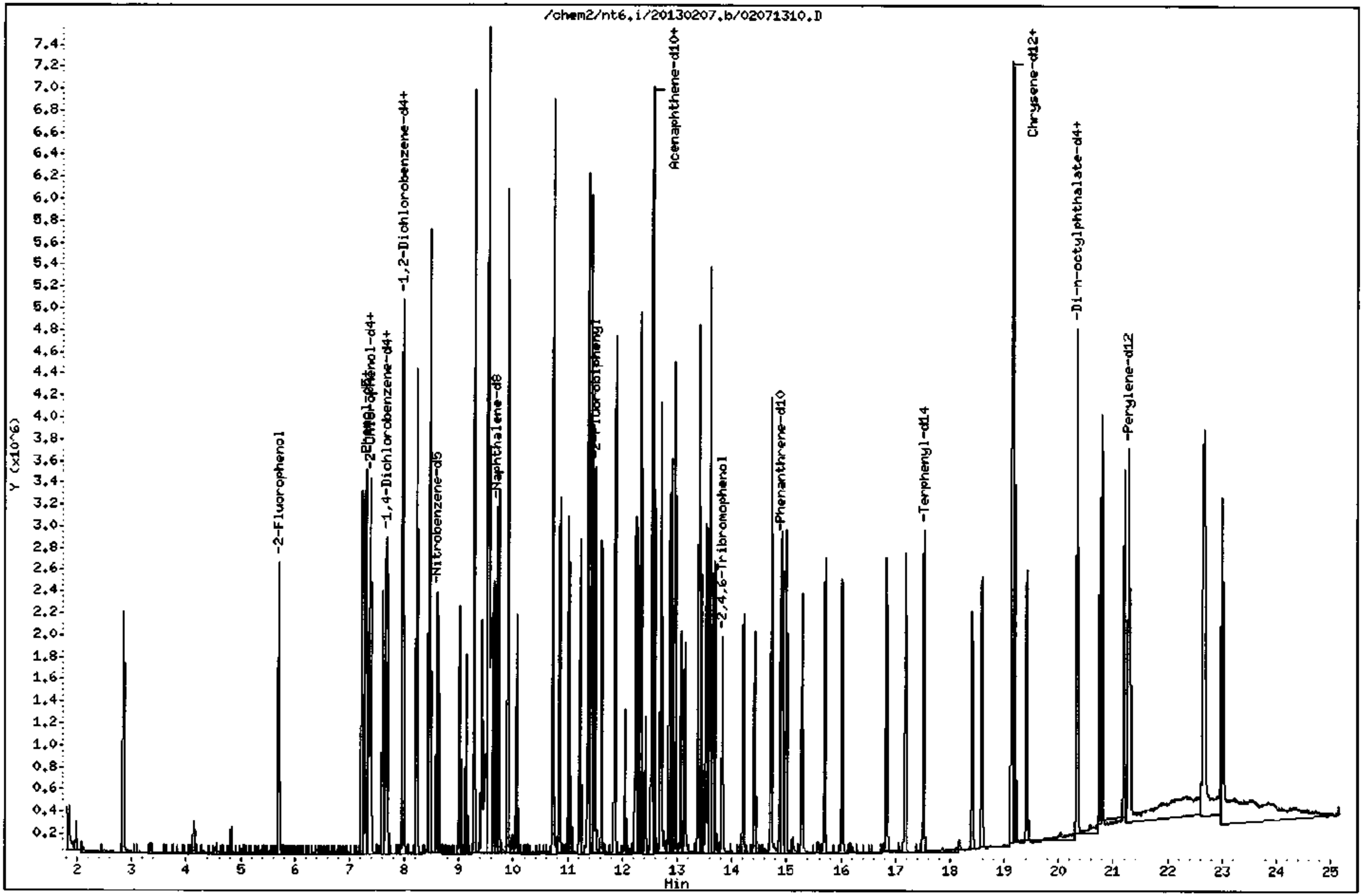
SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 1 2-Fluorophenol	37.50	26.95	71.87	33-100

AZ 02/07/13

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 2 Phenol-d5	37.50	29.17	77.78	15-121
$ 5 2-Chlorophenol-d4	37.50	28.21	75.21	46-102
$ 10 1,2-Dichlorobenzen	25.00	19.86	79.43	40-100
$ 18 Nitrobenzene-d5	25.00	21.96	87.84	50-100
$ 36 2-Fluorobiphenyl	25.00	23.14	92.57	51-100
$ 55 2,4,6-Tribromophen	37.50	34.54	92.09	46-125
$ 66 Terphenyl-d14	25.00	20.18	80.72	54-117

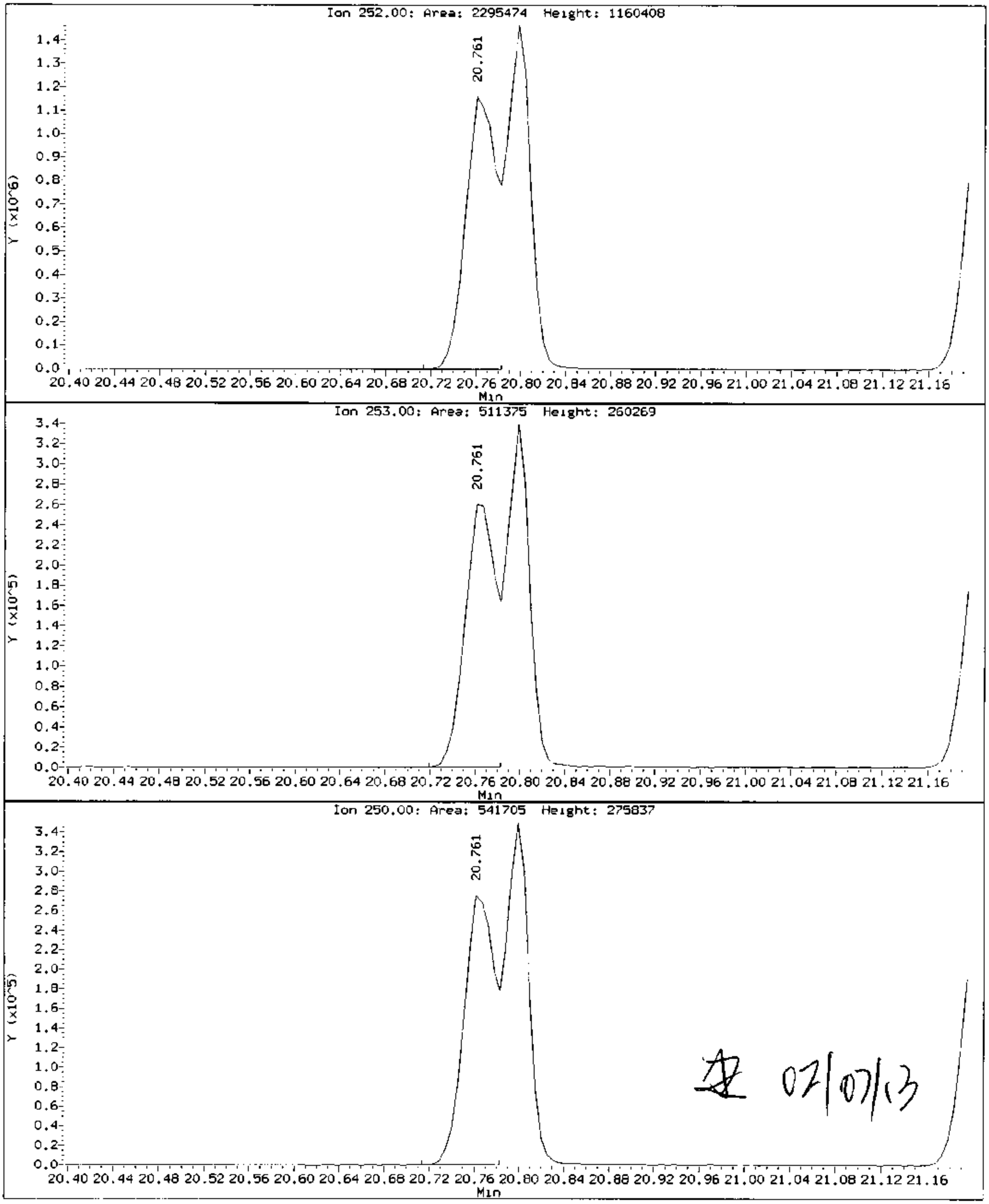
Data File: /chem2/nt6.i/20130207.b/02071310.D
Date : 07-FEB-2013 15:46
Client ID: WC32LCSW1
Sample Info: WC32LCSW1,
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt6.i
Operator: JZ
Column diameter: 0.32



Data File: /chem2/nt6.i/20130207.b/02071310.D
Injection Date: 07-FEB-2013 15:46
Instrument: nt6.i
Client Sample ID: WC32LCSW1

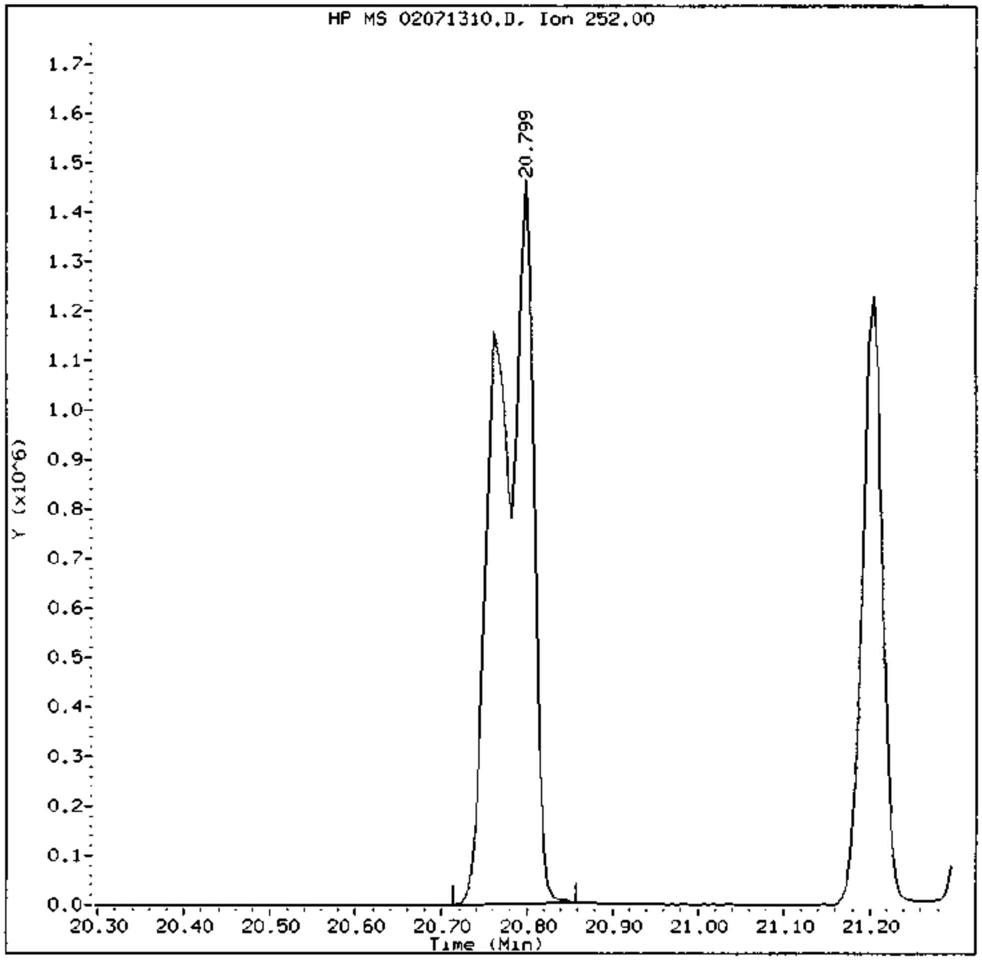
Compound: Total Benzofluoranthenes
CAS Number:



02/07/13

WC32LCSW1, /chem2/nt6.i/20130207.b/02071310.D

Total Benzofluoranthenes   Amount: 41.65   Area: 4272593



MANUAL INTEGRATION for Total Benzofluoranthenes

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other ______________________

Analyst: AZ   Date: 02/07/13

CO-ELUTION SUMMARY FOR FILE - 02071310.D

Lab ID: WC32LCSW1, Method: SW846012313.m, Instrument: nt6.i, Date: 07-FEB-201

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem2/nt6.i/20130207.b/02071311.D
Lab Smp Id: WC32LCSDW1 Client Smp ID: WC32LCSDW1
Inj Date : 07-FEB-2013 16:21
Operator : JZ Inst ID: nt6.i
Smp Info : WC32LCSDW1,
Misc Info : 13-2432
Comment : 1ul Injection
Method : /chem2/nt6.i/20130207.b/SW846012313.m
Meth Date : 07-Feb-2013 15:09 jianqing Quant Type: ISTD
Cal Date : 23-JAN-2013 16:37 Cal File: 01231310.D
Als bottle: 11 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: LLMBLCS.sub
Target Version: 3.50

JZ 02/07/13

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Vo	500.00000	Volume of sample extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
$	1 2-Fluorophenol	112	5.701	5.705	(0.744)	1141473	26.1551	26.16
$	2 Phenol-d5	99	7.288	7.286	(0.951)	1527130	28.6183	28.62
	3 Phenol	94	7.304	7.307	(0.953)	1041597	20.2074	20.21
$	5 2-Chlorophenol-d4	132	7.373	7.371	(0.962)	1214529	27.6245	27.62
	4 Bis(2-Chloroethyl)ether	93	7.352	7.350	(0.960)	791364	18.1627	18.16
	6 2-Chlorophenol	128	7.400	7.398	(0.966)	832467	19.0715	19.07
	7 1,3-Dichlorobenzene	146	7.598	7.596	(0.992)	837323	16.6730	16.67
*	8 1,4-Dichlorobenzene-d4	152	7.662	7.660	(1.000)	656630	20.0000	
	9 1,4-Dichlorobenzene	146	7.688	7.687	(1.003)	846320	16.9761	16.98
$	10 1,2-Dichlorobenzene-d4	152	7.961	7.959	(1.039)	573366	18.4630	18.46
	12 1,2-Dichlorobenzene	146	7.982	7.981	(1.042)	803815	17.3484	17.35
	11 Benzyl alcohol	108	7.966	7.964	(1.040)	580816	21.6140	21.61
	14 2,2'-oxybis(1-Chloropropane)	45	8.223	8.221	(1.073)	1333657	18.8824	18.88
	13 2-Methylphenol	108	8.223	8.226	(1.073)	757353	19.4556	19.46
	17 Hexachloroethane	117	8.463	8.467	(1.105)	334909	16.5517	16.55
	16 N-Nitroso-di-n-propylamine	70	8.442	8.440	(1.102)	643454	20.3557	20.36

							CONCENTRATIONS	
	QUANT SIG						ON-COLUMN	FINAL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE		(ug/mL)	(ug/L)
=========================	====	==	======	======	========		=======	=======
15 4-Methylphenol	108	8.468	8.461	(1.105)	1616711		40.5259	40.53
$ 18 Nitrobenzene-d5	82	8.597	8.595	(0.886)	1088193		21.6279	21.63
19 Nitrobenzene	77	8.629	8.627	(0.889)	926420		18.1521	18.15
20 Isophorone	82	9.013	9.006	(0.929)	1637975		22.9916	22.99
21 2-Nitrophenol	139	9.141	9.140	(0.942)	445429		20.1559	20.16
22 2,4-Dimethylphenol	107	9.291	9.284	(0.958)	2089937		51.2219	51.22
23 Bis(2-Chloroethoxy)methane	93	9.419	9.418	(0.971)	981858		19.5359	19.54
24 Benzoic acid	105	9.622	9.540	(0.992)	3419309		100.325	100.3
25 2,4-Dichlorophenol	162	9.542	9.540	(0.983)	1888489		57.5904	57.59
26 1,2,4-Trichlorobenzene	180	9.649	9.647	(0.994)	680451		17.9169	17.92
* 27 Naphthalene-d8	136	9.702	9.701	(1.000)	2287829		20.0000	
28 Naphthalene	128	9.734	9.733	(1.003)	2196990		20.4925	20.49
29 4-Chloroaniline	127	9.895	9.893	(1.020)	2567875		61.9186	61.92 Q(14C)
30 Hexachlorobutadiene	225	10.060	10.059	(1.037)	416894		17.4705	17.47
31 4-Chloro-3-methylphenol	107	10.728	10.726	(1.106)	1991449		62.3744	62.37
32 2-Methylnaphthalene	141	10.846	10.849	(1.118)	1198747		21.5123	21.51
33 Hexachlorocyclopentadiene	237	11.230	11.229	(0.896)	823418		33.3924	33.39
34 2,4,6-Trichlorophenol	196	11.374	11.373	(0.907)	1379562		65.1762	65.18
35 2,4,5-Trichlorophenol	196	11.433	11.432	(0.912)	1426592		65.3962	65.40
$ 36 2-Fluorobiphenyl	172	11.497	11.496	(0.917)	1788128		22.7203	22.72
37 2-Chloronaphthalene	162	11.620	11.618	(0.927)	1338254		20.5631	20.56
38 2-Nitroaniline	65	11.871	11.864	(0.947)	1382756		65.3352	65.34
39 Dimethylphthalate	163	12.251	12.244	(0.977)	1490633		22.0336	22.03
40 Acenaphthylene	152	12.288	12.286	(0.980)	2202502		22.4507	22.45
41 2,6-Dinitrotoluene	165	12.336	12.329	(0.984)	976341		60.9196	60.92
* 42 Acenaphthene-d10	164	12.539	12.537	(1.000)	1185428		20.0000	
43 3-Nitroaniline	138	12.544	12.543	(1.000)	1067499		73.7866	73.79
44 Acenaphthene	153	12.592	12.591	(1.004)	1332804		21.4549	21.45
45 2,4-Dinitrophenol	184	12.705	12.703	(1.013)	969182		81.0834	81.08
46 Dibenzofuran	168	12.849	12.853	(1.025)	1852751		22.5975	22.60
47 4-Nitrophenol	109	12.892	12.890	(1.028)	645170		61.6888	61.69
48 2,4-Dinitrotoluene	165	12.956	12.949	(1.033)	1220755		60.9648	60.96
50 Diethylphthalate	149	13.399	13.387	(1.069)	1489950		21.5320	21.53
49 Fluorene	166	13.399	13.397	(1.069)	1424677		22.0358	22.04
51 4-Chlorophenyl-phenylether	204	13.437	13.435	(1.072)	743631		20.8314	20.83
52 4-Nitroaniline	138	13.538	13.520	(1.080)	953893		74.2080	74.21
53 4,6-Dinitro-2-methylphenol	198	13.602	13.595	(0.914)	1269360		97.3246	97.32
54 N-Nitrosodiphenylamine	169	13.645	13.643	(0.917)	1015211		20.4159	20.42
$ 55 2,4,6-Tribromophenol	330	13.827	13.819	(1.103)	304838		33.5535	33.55
56 4-Bromophenyl-phenylether	248	14.206	14.209	(0.954)	407502		20.8615	20.86
57 Hexachlorobenzene	284	14.414	14.412	(0.968)	402126		20.3914	20.39
58 Pentachlorophenol	266	14.719	14.722	(0.989)	762836		74.0609	74.06
* 59 Phenanthrene-d10	188	14.884	14.883	(1.000)	1714489		20.0000	
60 Phenanthrene	178	14.922	14.920	(1.002)	1838763		21.7610	21.76
61 Anthracene	178	14.991	14.989	(1.007)	1822353		21.1735	21.17
62 Carbazole	167	15.285	15.289	(1.027)	1588868		20.7771	20.78
63 Di-n-butylphthalate	149	16.022	16.020	(1.076)	2197535		22.2815	22.28

ZR 02/07/13

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
64 Fluoranthene	202	16.834	16.838	(1.131)	1881535	22.9832	22.98
65 Pyrene	202	17.181	17.185	(0.897)	1915206	17.9592	17.96
$ 66 Terphenyl-d14	244	17.518	17.516	(0.915)	1307104	19.6088	19.61
67 Butylbenzylphthalate	149	18.410	18.408	(0.961)	880441	17.6877	17.69
68 Benzo(a)anthracene	228	19.131	19.130	(0.999)	1961372	22.3408	22.34
* 69 Chrysene-d12	240	19.153	19.156	(1.000)	1805346	20.0000	
70 3,3'-Dichlorobenzidine	252	19.158	19.156	(1.000)	1778317	65.6347	65.63
71 Chrysene	228	19.195	19.194	(1.002)	1845282	21.8216	21.82
72 bis(2-Ethylhexyl)phthalate	149	19.409	19.413	(0.954)	1210931	18.5811	18.58
* 134 Di-n-octylphthalate-d4	153	20.339	20.337	(1.000)	2179934	20.0000	
73 Di-n-octylphthalate	149	20.344	20.348	(1.000)	2219205	20.1644	20.16
74 Benzo(b)fluoranthene	252	20.766	20.764	(0.976)	2392075	21.0394	21.04
75 Benzo(k)fluoranthene	252	20.798	20.796	(0.977)	2401384	20.2352	20.24
76 Benzo(a)pyrene	252	21.204	21.208	(0.996)	2125588	20.2329	20.23
* 77 Perylene-d12	264	21.284	21.288	(1.000)	2313295	20.0000	
78 Indeno(1,2,3-cd)pyrene	276	22.657	22.661	(1.064)	2893030	19.7011	19.70
79 Dibenzo(a,h)anthracene	278	22.684	22.687	(1.066)	2350552	19.5369	19.54
80 Benzo(g,h,i)perylene	276	23.010	23.013	(1.081)	2515009	18.9277	18.93
90 N-Nitrosodimethylamine	74	2.854	2.841	(0.372)	1483433	48.3122	48.31
91 Aniline	93	7.229	7.222	(0.944)	1766728	30.8074	30.81
93 Benzidine	184	Compound Not Detected.					
103 Pyridine	79	Compound Not Detected.			NTC		
105 1-methylnaphthalene	141	11.017	11.015	(1.135)	1186077	21.3487	21.35
111 Azobenzene (1,2-DP-Hydrazine)	77	13.688	13.681	(1.092)	1659322	20.4823	20.48
187 Total Benzofluoranthenes	252	20.798	20.796	(0.977)	4494758	41.2631	41.26(M)

QC Flag Legend

M - Compound response manually integrated.

AB 02/07/13

Report Date: 07-Feb-2013 16:56

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 02071311.D
Lab Smp Id: WC32LCSDW1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem2/nt6.i/20130207.b/SW846012313.m
Misc Info: 13-2432

Calibration Date: 07-FEB-2013
Calibration Time: 10:12
Client Smp ID: WC32LCSDW1
Level: LOW
Sample Type: Liquid

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	605906	302953	1211812	656630	8.37
27 Naphthalene-d8	2147229	1073614	4294458	2287829	6.55
42 Acenaphthene-d10	1142287	571144	2284574	1185428	3.78
59 Phenanthrene-d10	1647922	823961	3295844	1714489	4.04
69 Chrysene-d12	1422286	711143	2844572	1805346	26.93
134 Di-n-octylphthala	1811653	905826	3623306	2179934	20.33
77 Perylene-d12	1374454	687227	2748908	2313295	68.31

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	7.66	7.16	8.16	7.66	0.02
27 Naphthalene-d8	9.70	9.20	10.20	9.70	0.02
42 Acenaphthene-d10	12.54	12.04	13.04	12.54	0.01
59 Phenanthrene-d10	14.88	14.38	15.38	14.88	0.01
69 Chrysene-d12	19.16	18.66	19.66	19.15	-0.02
134 Di-n-octylphthala	20.34	19.84	20.84	20.34	0.01
77 Perylene-d12	21.29	20.79	21.79	21.28	-0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd-Snider
Sample Matrix: LIQUID
Lab Smp Id: WC32LCSDW1
Level: LOW
Data Type: MS DATA
SpikeList File: LLLCS.spk
Sublist File: LLMBLCS.sub
Method File: /chem2/nt6.i/20130207.b/SW846012313.m
Misc Info: 13-2432

Client SDG: WC32
Fraction: SV
Client Smp ID: WC32LCSDW1
Operator: JZ
SampleType: LCSD
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
3 Phenol	25.00	20.21	80.83	50-100
4 Bis(2-Chloroethyl)	25.00	18.16	72.65	52-100
6 2-Chlorophenol	25.00	19.07	76.29	56-100
7 1,3-Dichlorobenzen	25.00	16.67	66.69	23-100
9 1,4-Dichlorobenzen	25.00	16.98	67.90	25-100
11 Benzyl alcohol	25.00	21.61	86.46	19-100
12 1,2-Dichlorobenzen	25.00	17.35	69.39	30-100
13 2-Methylphenol	25.00	19.46	77.82	52-100
14 2,2'-oxybis(1-Chlo	25.00	18.88	75.53	32-111
15 4-Methylphenol	50.00	40.53	81.05	53-102
16 N-Nitroso-di-n-pro	25.00	20.36	81.42	43-104
17 Hexachloroethane	25.00	16.55	66.21	12-100
19 Nitrobenzene	25.00	18.15	72.61	33-125
20 Isophorone	25.00	22.99	91.97	57-115
21 2-Nitrophenol	25.00	20.16	80.62	56-102
22 2,4-Dimethylphenol	75.00	51.22	68.30	29-100
23 Bis(2-Chloroethoxy	25.00	19.54	78.14	54-101
24 Benzoic acid	137.5	100.3	72.96	10-131
25 2,4-Dichlorophenol	75.00	57.59	76.79	56-104
26 1,2,4-Trichloroben	25.00	17.92	71.67	27-100
28 Naphthalene	25.00	20.49	81.97	45-100
29 4-Chloroaniline	75.00	61.92	82.56	10-139
30 Hexachlorobutadien	25.00	17.47	69.88	10-100
31 4-Chloro-3-methylp	75.00	62.37	83.17	53-109
32 2-Methylnaphthalen	25.00	21.51	86.05	46-100
33 Hexachlorocyclopen	75.00	33.39	44.52	10-100
34 2,4,6-Trichlorophe	75.00	65.18	86.90	58-108
35 2,4,5-Trichlorophe	75.00	65.40	87.19	58-107
37 2-Chloronaphthalen	25.00	20.56	82.25	56-104
38 2-Nitroaniline	75.00	65.34	87.11	50-107
39 Dimethylphthalate	25.00	22.03	88.13	58-107
40 Acenaphthylene	25.00	22.45	89.80	57-100
41 2,6-Dinitrotoluene	75.00	60.92	81.23	58-112

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
43 3-Nitroaniline	75.00	73.79	98.38	21-150
44 Acenaphthene	25.00	21.45	85.82	51-100
45 2,4-Dinitrophenol	137.5	81.08	58.97	12-169
46 Dibenzofuran	25.00	22.60	90.39	57-100
47 4-Nitrophenol	75.00	61.69	82.25	35-119
48 2,4-Dinitrotoluene	75.00	60.96	81.29	58-117
49 Fluorene	25.00	22.04	88.14	56-104
50 Diethylphthalate	25.00	21.53	86.13	52-111
51 4-Chlorophenyl-phe	25.00	20.83	83.33	55-104
52 4-Nitroaniline	75.00	74.21	98.94	49-112
53 4,6-Dinitro-2-meth	137.5	97.32	70.78	13-139
54 N-Nitrosodiphenyla	25.00	20.42	81.66	60-136
56 4-Bromophenyl-phen	25.00	20.86	83.45	50-103
57 Hexachlorobenzene	25.00	20.39	81.57	54-106
58 Pentachlorophenol	75.00	74.06	98.75	46-114
60 Phenanthrene	25.00	21.76	87.04	56-102
61 Anthracene	25.00	21.17	84.69	56-101
62 Carbazole	25.00	20.78	83.11	60-108
63 Di-n-butylphthalat	25.00	22.28	89.13	56-112
64 Fluoranthene	25.00	22.98	91.93	57-110
65 Pyrene	25.00	17.96	71.84	48-119
67 Butylbenzylphthala	25.00	17.69	70.75	51-114
68 Benzo(a)anthracene	25.00	22.34	89.36	55-105
70 3,3'-Dichlorobenzi	75.00	65.63	87.51	10-128
71 Chrysene	25.00	21.82	87.29	55-104
72 bis(2-Ethylhexyl)p	25.00	18.58	74.32	28-164
73 Di-n-octylphthalat	25.00	20.16	80.66	57-107
74 Benzo(b)fluoranthe	25.00	21.04	84.16	53-112
75 Benzo(k)fluoranthe	25.00	20.24	80.94	50-116
76 Benzo(a)pyrene	25.00	20.23	80.93	45-103
78 Indeno(1,2,3-cd)py	25.00	19.70	78.80	35-118
79 Dibenzo(a,h)anthra	25.00	19.54	78.15	42-119
80 Benzo(g,h,i)peryle	25.00	18.93	75.71	39-123
91 Aniline	75.00	30.81	41.08	10-100
111 Azobenzene (1,2-DP	25.00	20.48	81.93	57-109
90 N-Nitrosodimethyla	75.00	48.31	64.42	49-100
105 1-methylnaphthalen	25.00	21.35	85.39	46-100
144 alpha-Terpineol	25.00	0.000	NC *	30-160
187 Total Benzofluoran	50.00	41.26	82.53	30-160

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 1 2-Fluorophenol	37.50	26.16	69.75	33-100

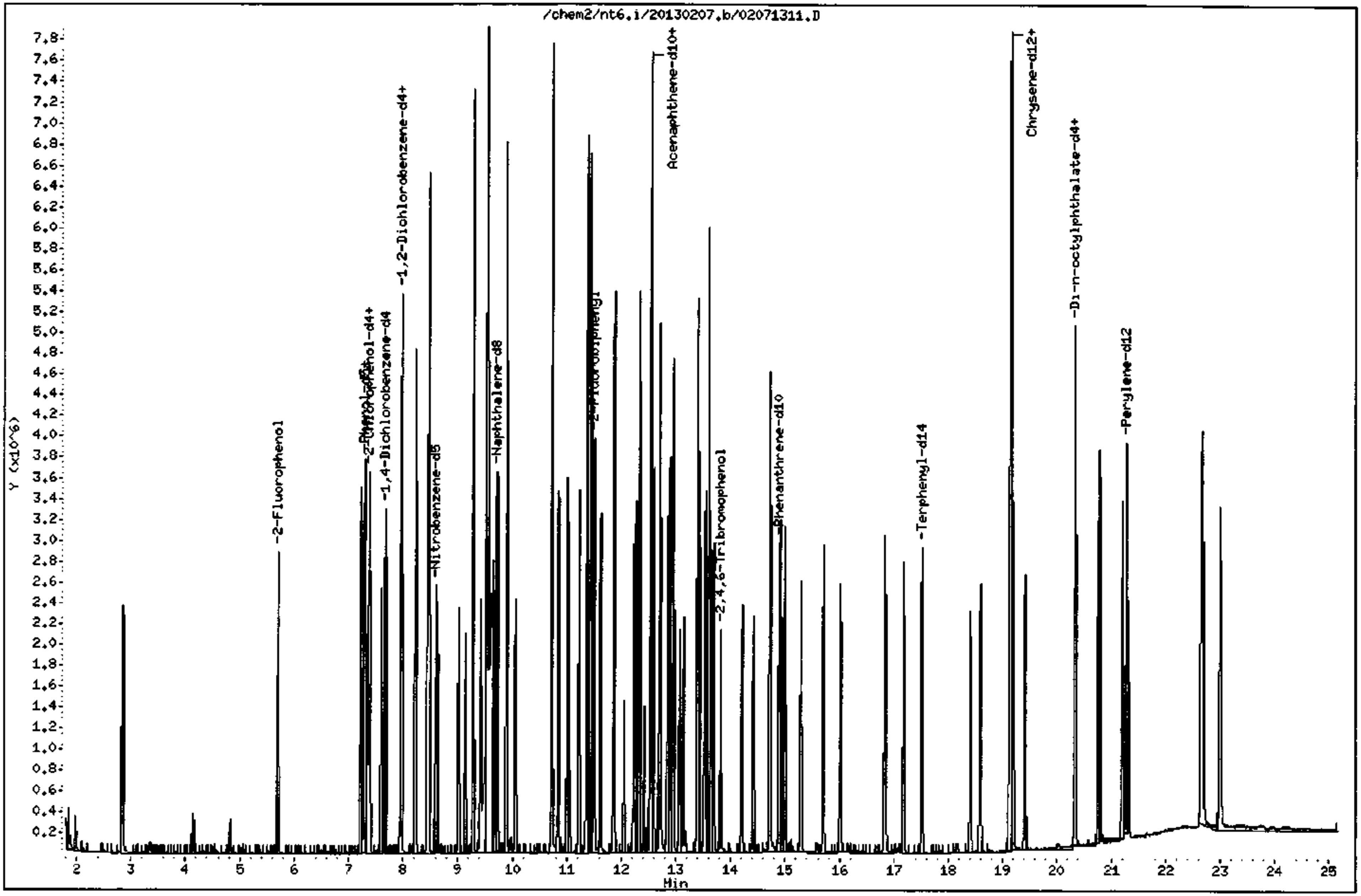
AZ 02/07/13

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 2 Phenol-d5	37.50	28.62	76.32	15-121
$ 5 2-Chlorophenol-d4	37.50	27.62	73.67	46-102
$ 10 1,2-Dichlorobenzen	25.00	18.46	73.85	40-100
$ 18 Nitrobenzene-d5	25.00	21.63	86.51	50-100
$ 36 2-Fluorobiphenyl	25.00	22.72	90.88	51-100
$ 55 2,4,6-Tribromophen	37.50	33.55	89.48	46-125
$ 66 Terphenyl-d14	25.00	19.61	78.44	54-117

Data File: /chem2/nt6.i/20130207.b/02071311.D
Date : 07-FEB-2013 16:21
Client ID: WC32LCSDW1
Sample Info: WC32LCSDW1,
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt6.i

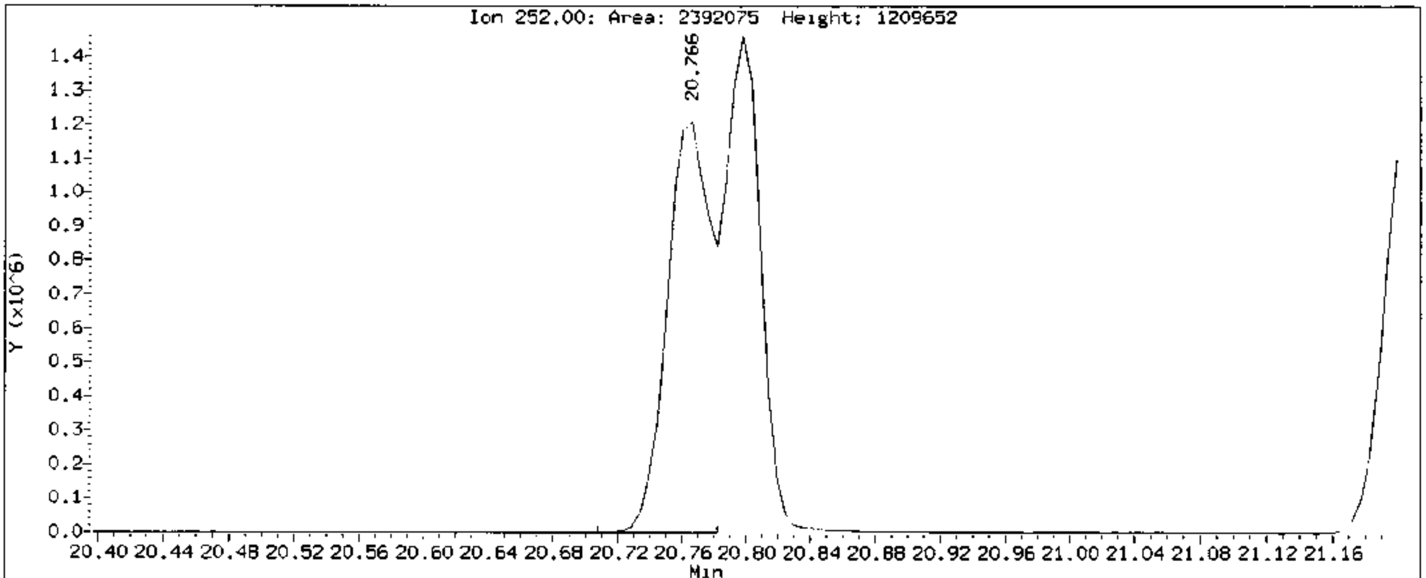
Operator: JZ
Column diameter: 0.32

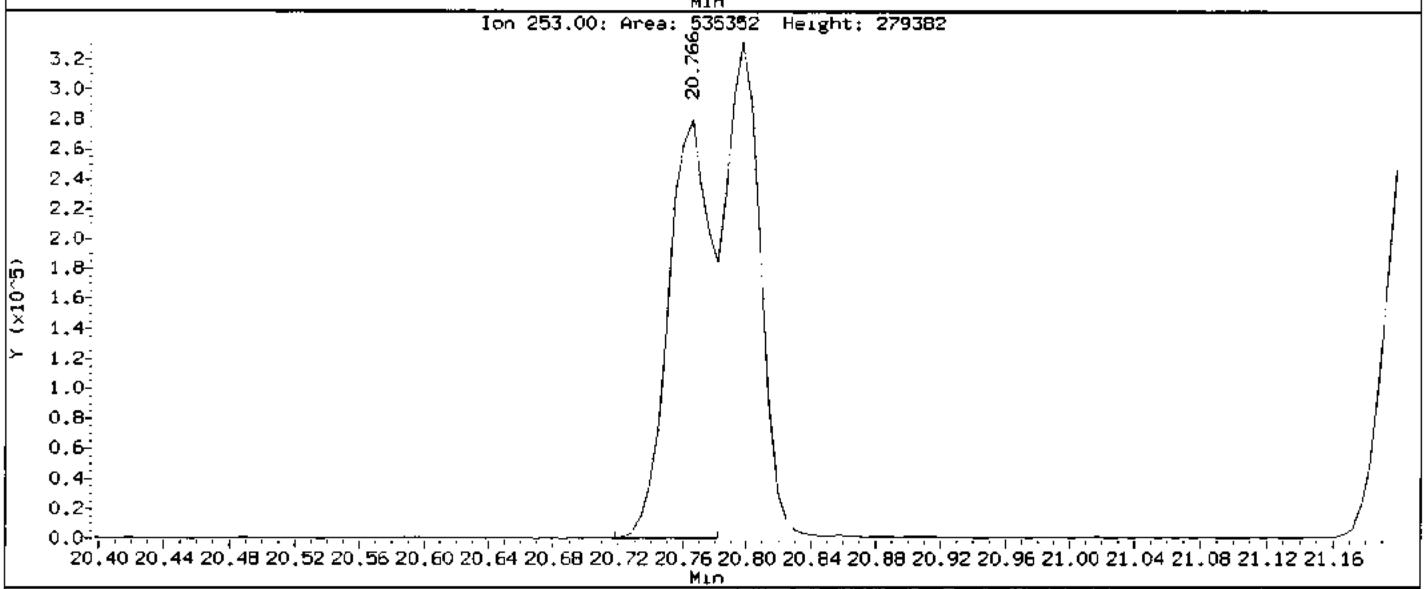


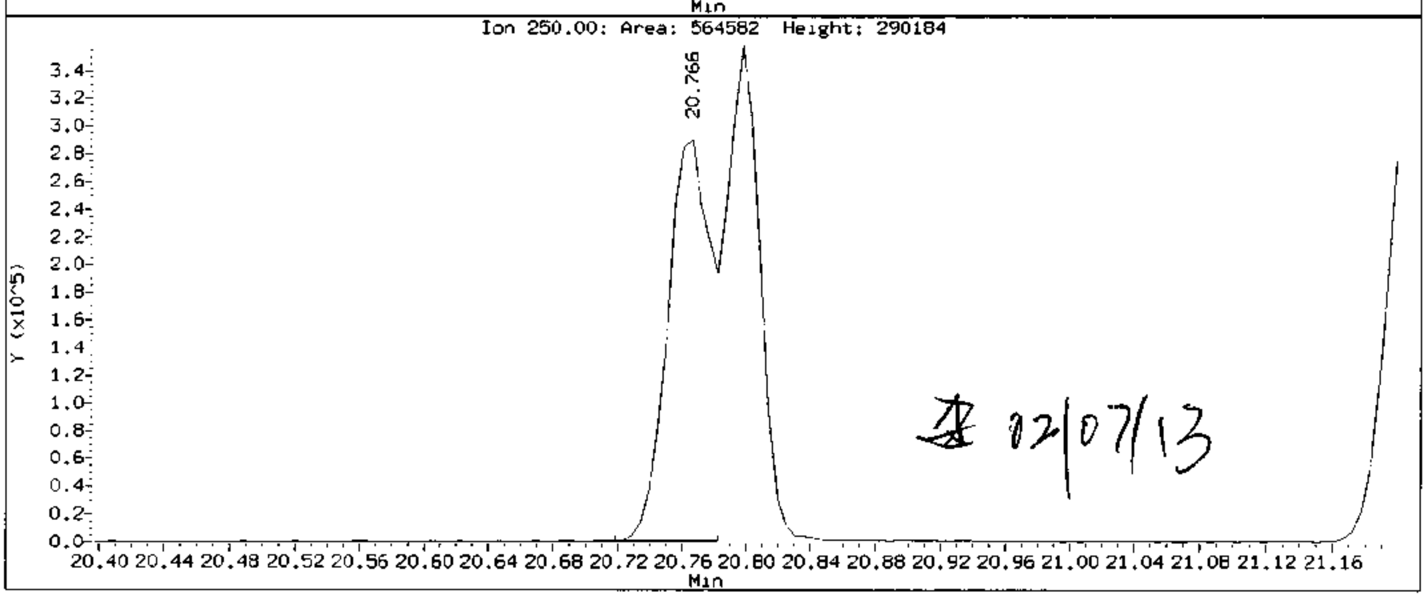
WC32 : 00027

Data File: /chem2/nt6.i/20130207.b/02071311.D
Injection Date: 07-FEB-2013 16:21
Instrument: nt6.i
Client Sample ID: WC32LCSDW1

Compound: Total Benzofluoranthenes
CAS Number:



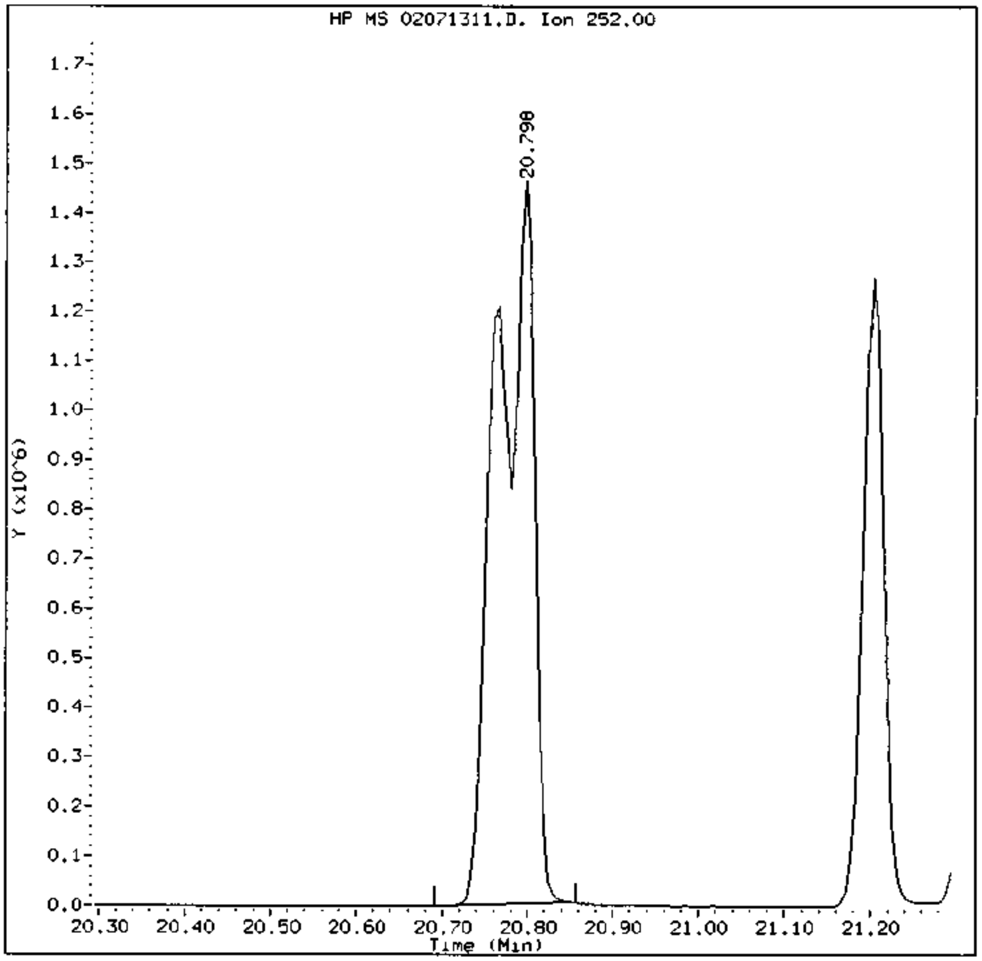




02/07/13

WC32LCSDW1, /chem2/nt6.i/20130207.b/02071311.D

Total Benzofluoranthenes   Amount: 41.26   Area: 4494758



MANUAL INTEGRATION for Total Benzofluoranthenes

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other ________________________________

Analyst: [signature]   Date: 02/07/13

CO-ELUTION SUMMARY FOR FILE - 02071311.D

Lab ID: WC32LCSDW1, Method: SW846012313.m, Instrument: nt6.i, Date: 07-FEB-20

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem2/nt6.i/20130207.b/02071313.D
Lab Smp Id: WC32I Client Smp ID: SG-05-ER-013113
Inj Date : 07-FEB-2013 17:29
Operator : JZ Inst ID: nt6.i
Smp Info : WC32I
Misc Info : 13-2432
Comment : 1ul Injection
Method : /chem2/nt6.i/20130207.b/SW846012313.m
Meth Date : 07-Feb-2013 17:56 jianqing Quant Type: ISTD
Cal Date : 23-JAN-2013 16:37 Cal File: 01231310.D
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: LL.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Vo	500.00000	Volume of sample extracted (mL)

Cpnd Variable Local Compound Variable

		QUANT SIG					CONCENTRATIONS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/L)
$	1 2-Fluorophenol	112	5.704	5.705	(0.745)	1164382	26.1428	26.14
$	2 Phenol-d5	99	7.285	7.286	(0.951)	1513544	27.7926	27.79
	3 Phenol	94	Compound Not Detected.					
$	5 2-Chlorophenol-d4	132	7.370	7.371	(0.962)	1240959	27.6572	27.66
	4 Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
	6 2-Chlorophenol	128	Compound Not Detected.					
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	7.659	7.660	(1.000)	670124	20.0000	
	9 1,4-Dichlorobenzene	146	Compound Not Detected.					
$	10 1,2-Dichlorobenzene-d4	152	7.958	7.959	(1.039)	602092	18.9976	19.00
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	108	Compound Not Detected.					
	14 2,2'-oxybis(1-Chloropropane)	45	Compound Not Detected.					
	13 2-Methylphenol	108	Compound Not Detected.					
	17 Hexachloroethane	117	Compound Not Detected.					
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
	=========================	====	==	======	======	========	=======	=======
	15 4-Methylphenol	108	Compound Not Detected.					
$	18 Nitrobenzene-d5	82	8.594	8.595	(0.886)	1096750	20.6453	20.65
	19 Nitrobenzene	77	Compound Not Detected.					
	20 Isophorone	82	Compound Not Detected.					
	21 2-Nitrophenol	139	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	Compound Not Detected.					
	23 Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
	24 Benzoic acid	105	Compound Not Detected.					
	25 2,4-Dichlorophenol	162	Compound Not Detected.					
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	9.700	9.701	(1.000)	2415567	20.0000	
	28 Naphthalene	128	Compound Not Detected.					
	29 4-Chloroaniline	127	Compound Not Detected.					
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	31 4-Chloro-3-methylphenol	107	Compound Not Detected.					
	32 2-Methylnaphthalene	141	Compound Not Detected.					
	33 Hexachlorocyclopentadiene	237	Compound Not Detected.					
	34 2,4,6-Trichlorophenol	196	Compound Not Detected.					
	35 2,4,5-Trichlorophenol	196	Compound Not Detected.					
$	36 2-Fluorobiphenyl	172	11.495	11.496	(0.917)	1745223	19.8430	19.84
	37 2-Chloronaphthalene	162	Compound Not Detected.					
	38 2-Nitroaniline	65	Compound Not Detected.					
	39 Dimethylphthalate	163	Compound Not Detected.					
	40 Acenaphthylene	152	Compound Not Detected.					
	41 2,6-Dinitrotoluene	165	Compound Not Detected.					
*	42 Acenaphthene-d10	164	12.536	12.537	(1.000)	1324749	20.0000	
	43 3-Nitroaniline	138	Compound Not Detected.					
	44 Acenaphthene	153	Compound Not Detected.					
	45 2,4-Dinitrophenol	184	Compound Not Detected.					
	46 Dibenzofuran	168	Compound Not Detected.					
	47 4-Nitrophenol	109	Compound Not Detected.					
	48 2,4-Dinitrotoluene	165	Compound Not Detected.					
	50 Diethylphthalate	149	Compound Not Detected.					
	49 Fluorene	166	Compound Not Detected.					
	51 4-Chlorophenyl-phenylether	204	Compound Not Detected.					
	52 4-Nitroaniline	138	Compound Not Detected.					
	53 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
	54 N-Nitrosodiphenylamine	169	Compound Not Detected.					
$	55 2,4,6-Tribromophenol	330	13.818	13.819	(1.102)	280195	27.5976	27.60
	56 4-Bromophenyl-phenylether	248	Compound Not Detected.					
	57 Hexachlorobenzene	284	Compound Not Detected.					
	58 Pentachlorophenol	266	Compound Not Detected.					
*	59 Phenanthrene-d10	188	14.881	14.883	(1.000)	1945690	20.0000	
	60 Phenanthrene	178	Compound Not Detected.					
	61 Anthracene	178	Compound Not Detected.					
	62 Carbazole	167	Compound Not Detected.					
	63 Di-n-butylphthalate	149	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
64 Fluoranthene	202	Compound Not Detected.					
65 Pyrene	202	Compound Not Detected.					
$ 66 Terphenyl-d14	244	17.515	17.516	(0.915)	1292519	19.4138	19.41
67 Butylbenzylphthalate	149	Compound Not Detected.					
68 Benzo(a)anthracene	228	Compound Not Detected.					
* 69 Chrysene-d12	240	19.150	19.156	(1.000)	1803134	20.0000	
70 3,3'-Dichlorobenzidine	252	Compound Not Detected.					
71 Chrysene	228	Compound Not Detected.					
72 bis(2-Ethylhexyl)phthalate	149	Compound Not Detected.					
* 134 Di-n-octylphthalate-d4	153	20.336	20.337	(1.000)	2268905	20.0000	
73 Di-n-octylphthalate	149	Compound Not Detected.					
74 Benzo(b)fluoranthene	252	Compound Not Detected.					
75 Benzo(k)fluoranthene	252	Compound Not Detected.					
76 Benzo(a)pyrene	252	Compound Not Detected.					
* 77 Perylene-d12	264	21.281	21.288	(1.000)	2262973	20.0000	
78 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
79 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
80 Benzo(g,h,i)perylene	276	Compound Not Detected.					
90 N-Nitrosodimethylamine	74	Compound Not Detected.					
91 Aniline	93	Compound Not Detected.					
93 Benzidine	184	Compound Not Detected.					
103 Pyridine	79	Compound Not Detected.					
105 1-methylnaphthalene	141	Compound Not Detected.					
111 Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					
187 Total Benzofluoranthenes	252	Compound Not Detected.					

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 02071313.D
Lab Smp Id: WC32I
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem2/nt6.i/20130207.b/SW846012313.m
Misc Info: 13-2432

Calibration Date: 07-FEB-2013
Calibration Time: 10:12
Client Smp ID: SG-05-ER-013113
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	605906	302953	1211812	670124	10.60
27 Naphthalene-d8	2147229	1073614	4294458	2415567	12.50
42 Acenaphthene-d10	1142287	571144	2284574	1324749	15.97
59 Phenanthrene-d10	1647922	823961	3295844	1945690	18.07
69 Chrysene-d12	1422286	711143	2844572	1803134	26.78
134 Di-n-octylphthala	1811653	905826	3623306	2268905	25.24
77 Perylene-d12	1374454	687227	2748908	2262973	64.65

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	7.66	7.16	8.16	7.66	-0.01
27 Naphthalene-d8	9.70	9.20	10.20	9.70	-0.01
42 Acenaphthene-d10	12.54	12.04	13.04	12.54	-0.01
59 Phenanthrene-d10	14.88	14.38	15.38	14.88	-0.01
69 Chrysene-d12	19.16	18.66	19.66	19.15	-0.03
134 Di-n-octylphthala	20.34	19.84	20.84	20.34	-0.01
77 Perylene-d12	21.29	20.79	21.79	21.28	-0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd-Snider
Sample Matrix: LIQUID
Lab Smp Id: WC32I
Level: LOW
Data Type: MS DATA
SpikeList File: LLLCS.spk
Sublist File: LL.sub
Method File: /chem2/nt6.i/20130207.b/SW846012313.m
Misc Info: 13-2432

Client SDG: WC32
Fraction: SV
Client Smp ID: SG-05-ER-013113
Operator: JZ
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 1 2-Fluorophenol	37.50	26.14	69.71	23-100
$ 2 Phenol-d5	37.50	27.79	74.11	16-100
$ 5 2-Chlorophenol-d4	37.50	27.66	73.75	33-100
$ 10 1,2-Dichlorobenzen	25.00	19.00	75.99	27-100
$ 18 Nitrobenzene-d5	25.00	20.65	82.58	34-101
$ 36 2-Fluorobiphenyl	25.00	19.84	79.37	38-100
$ 55 2,4,6-Tribromophen	37.50	27.60	73.59	31-128
$ 66 Terphenyl-d14	25.00	19.41	77.66	27-122

Data File: /chem2/nt6.i/20130207.b/02071313.D

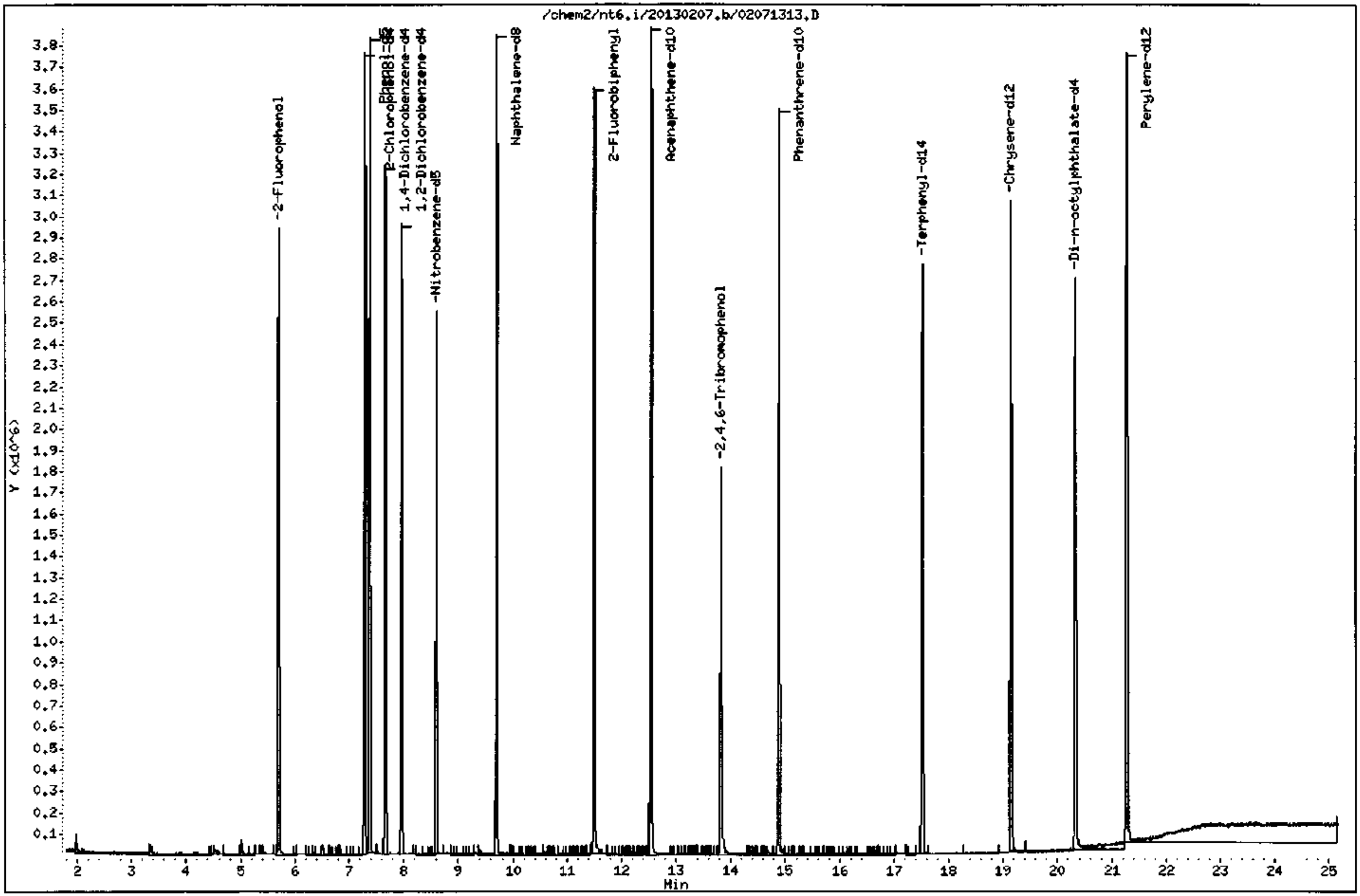
Date : 07-FEB-2013 17:29

Client ID: SG-05-ER-013113 | Instrument: nt6.i

Sample Info: WC32I

Volume Injected (uL): 1.0 | Operator: JZ

Column phase: ZB-5msi | Column diameter: 0.32



CO-ELUTION SUMMARY FOR FILE - 02071313.D

Lab ID: WC32I, Method: SW846012313.m, Instrument: nt6.i, Date: 07-FEB-2013

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC/MS SVOA Analyst Notes / Corrective Action Log

ARI Project ID: WC32 Client ID: Floyd-Snider

ARI SOP: **801S**(SIM-PNA) **802S**(Butyl Tins) **804S**(SVOA-8270D) **805S**(op-Pest)

Parameter(s): SVOA Peddl

Instrument: NT-4 NT-6 NT-8 NT-10 NT11 NT12

Curve Date: 02/25/13 Analysis Start Date: 02/15/13

DFTPP Tune Meets Criteria? YES / NO

DDT Breakdown <20%? YES / NO / NA

Peak Tailing Factor ≤2? YES / NO / NA

ICal acceptable? YES / NO

Q flag applied? YES / NO

Surrogate Recovery in Control? YES / NO

Manual Integrations for ICal? YES / NO

Internal Standard Meets Criteria? YES / NO

Method Blank In Control? YES / NO

LCS / LCSD Recovery In Control? YES / NO

CCal acceptable? YES / NO

Q flag applied? YES / NO

Special Analysis Criteria Met? YES / NO / NA

Manual Integrations for Samples? Yes / NO

Detail problems, corrective actions and/or other pertinent information below (use reverse side when necessary):

- sample 6 was re-run @ 5x dilution on 02/16/13.

Additional Details on Reverse: Yes / No

Analyst: YZ **Date:** 2/18/13

Reviewer: [signature] **Date:** 2/18/13

Form 7015F Version 014 6/18/10

WC32 : 00608

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC/MS SVOA Analyst Notes / Corrective Action Log

ARI Project ID: WC32 Client ID: Floyd-Snider

ARI SOP: **801S**(SIM-PNA) **802S**(Butyl Tins) **804S**(SVOA-8270D) **805S**(op-Pest)

Parameter(s): SVOA Reddie

Instrument: NT-4 NT-6 NT-8 NT-10 NT11 NT12

Curve Date: 01/25/13 Analysis Start Date: 02/15/13

DFTPP Tune Meets Criteria?	YES / NO	Internal Standard Meets Criteria?	YES / NO
DDT Breakdown <20%?	YES / NO / NA	Method Blank In Control?	YES / NO
Peak Tailing Factor ≤2?	YES / NO / NA	LCS / LCSD Recovery In Control?	YES / NO
ICal acceptable?	YES / NO	CCal acceptable?	YES / NO
Q flag applied?	YES / NO	Q flag applied?	YES / NO
Surrogate Recovery in Control?	YES / NO	Special Analysis Criteria Met?	YES / NO / NA
Manual Integrations for ICal?	YES / NO	Manual Integrations for Samples?	Yes / NO

Detail problems, corrective actions and/or other pertinent information below (use reverse side when necessary):

Additional Details on Reverse: Yes / No

Analyst: YZ **Date:** 2/18/13

Reviewer: [signature] **Date:** 2/18/13

Analytical Resources Inc.: Organics Instrument Log

NT-10 Serial No.:GC=CN10837018, MS= US83131105

Date: 2.15.13
GC Program: ABN
Analysis: psddA ABN/Sim
Analyst: YZ/VD
Column No: 247358
Instrument Tune (.U or .CT.): 121204.U
Column Type: ZB-5ms
Calibration File: df0215
Curve Date: 1.25.13
EM Voltage: 1500
Injection Vol.: 1 ul

IS/SS	Ical/Ccal	LCS/ICV
1998-2	2036-2 2050-1,2	
	2064-2 1998-4	
	2068-3	

INTERNAL STANDARD SUMMARY FOR DATABATCH - /chem1/nt10.i/20130215.b

	Time	Filename	LabID	ClientId	DF														
1	1103	df0215.d	DFTPP	DFTPP	1	NO ISTDS FOUND													
2	1120	cc0215.d	CC0215		1	8.75	45069	11.40	165086	15.28	205394	18.56	176206	23.66	199492	26.06	207175	24.77	276520
3	1233	wc03e.d	WC03B	EBW-111-SC-1	100	8.75	38884	11.40	145404	25.28	88050	18.56	150628	23.66	170969	26.06	170389	24.77	229219
4	1310	cc0215b.d	RETENE 5		1	8.76	44479	11.40	166206	15.28	97371	18.56	166046	23.66	199049	24.77	258786	26.06	200764
	1346	wd46b.d	WD46B	SS01-B	1	8.75	32486	21.40	121936	15.29	78024	18.56	133346	23.69	162527	26.14	158932	24.82	220135
	1423	wd46c.d	WD46C	SS01-C	1	8.76	32669	11.40	125607	15.29	75922	18.57	135334	23.70	165422	26.15	163545	24.82	216531
	1500	wd46d.d	WD46D	SS02-A	1	8.76	33319	11.40	125932	15.29	77505	18.57	138035	23.70	162532	26.17	146458	24.83	212508
	1536	wd46e.d	WD46E	SS02-B	1	8.75	32500	11.40	127841	15.30	76882	18.59	136285	23.73	162102	26.24	98530	24.86	213840
	1613	wd46f.d	WD46F	SS02-C	1	8.75	31046	21.40	216834	15.30	70106	18.58	125476	23.73	146375	26.23	100750	24.84	149219
	1650	wc32mb.d	WC32MBS1	WC32MBS1	1	8.76	32527	11.40	119152	15.30	75496	18.58	124668	23.70	156695	26.11	136696	24.79	204697
	1726	wc32sb.d	WC32LCSS1	WC32LCSS1	1	8.76	28265	11.40	103759	15.30	68478	18.57	113232	23.70	138551	26.10	129131	24.80	187135
	1803	wc32sbd.d	WC32LCSDS1	WC32LCSDS1	1	8.75	31102	11.40	117102	15.30	73047	18.57	123637	23.69	154259	26.11	139713	24.79	203706
	1839	wc32a.d	WC32A	SG-12-0-10-0	1	8.75	31402	11.40	119860	15.30	72375	18.58	123045	23.70	151722	26.11	133919	24.79	202260
	915	wc32b.d	WC32B	SG-13-0-10-0	1	8.76	28279	11.41	108945	15.30	70739	18.59	121165	23.70	154840	26.12	135090	24.79	206487
	952	wc32c.d	WC32C	SG-07-0-10-0	1	8.75	30979	11.40	116458	15.29	72876	18.57	127016	23.70	149714	26.12	233838	24.79	202055
	028	wc32d.d	WC32D	SG-06-0-10-0	1	8.75	30693	11.40	120015	15.30	73429	18.58	122670	23.70	151940	26.13	137803	24.79	207108
	04	wc32e.d	WC32E	SG-05-0-10-0	1	8.76	31671	11.40	113372	15.29	70543	18.57	118876	23.70	251629	26.11	136607	24.79	203344
	40	wc32f.d	WC32F	SG-95-0-10-0	1	8.75	30769	11.40	209136	15.29	71323	18.57	121405	23.70	146908	26.12	131656	24.79	205296
	17	wc32g.d	WC32G	SG-08-0-10-0	1	8.78	26548	11.45	108561	15.32	78215	18.60	122886	23.73	162088	26.17	236271	24.81	200788
	3	wc32gms.d	WC32GMS	SG-08-0-10-0	1	8.76	25023	11.40	97245	15.30	61310	18.59	104884	23.71	128954	26.13	114608	24.80	171626
	9	wc32gmsd.d	WC32GMSD	SG-08-0-10-0	1	8.76	27837	11.42	107239	15.30	70631	18.59	123188	23.72	159617	26.16	120611	24.82	209378

☐ = out of 12 hr QC

Every line must contain information or be lined out. Make all entries legible.
Start a new page for each QC period. Document All Maintenance Tasks in StarLIMS

VD 2.16.13

MANUAL INTEGRATION SUMMARY FOR DATABATCH - /chem1/nt10.i/20130215.b

ARI Job No.: WC32 Method: ABN.m Instrument: nt10.i Date: 15-FEB-2013

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1650	wc32mb.d	WC32MBS1	WC32MBS1	1	NO MANUAL INTEGRATION
1726	wc32sb.d	WC32LCSS1	WC32LCSS1	1	4-Nitrophenol, Total Benzofluoranthenes,
1803	wc32sbd.d	WC32LCSDS1	WC32LCSDS1	1	Total Benzofluoranthenes,
1839	wc32a.d	WC32A	SG-12-0-10	1	Benzo(k)fluoranthene,
1915	wc32b.d	WC32B	SG-13-0-10	1	Benzoic acid,
1952	wc32c.d	WC32C	SG-07-0-10	1	Indeno(1,2,3-cd)pyrene, Dibenzo(a,h)anthracene,
2028	wc32d.d	WC32D	SG-06-0-10	1	Benzo(k)fluoranthene, Dibenzo(a,h)anthracene, Benzo(g,h,i)perylene,
2104	wc32e.d	WC32E	SG-05-0-10	1	NO MANUAL INTEGRATION
2140	wc32f.d	WC32F	SG-95-0-10	1	Dibenzo(a,h)anthracene,
2253	wc32gms.d	WC32GMS	SG-08-0-10	1	Indeno(1,2,3-cd)pyrene, Dibenzo(a,h)anthracene, Benzo(g,h,i)perylene,
1900	wc32g.d	WC32G	SG-08-0-10	5	NO MANUAL INTEGRATION
1936	wc32gmsd.d	WC32GMSD	SG-08-0-10	1	Nitrobenzene, 2-Fluorophenol,
2012	wc32h.d	WC32H	SG-09-0-10	1	Benzo(k)fluoranthene,
2048	wc33g.d	WC33G	HA-09-0-10	1	Benzo(k)fluoranthene,

Q-FLAG SUMMARY FOR DATABATCH - /chem1/nt10.i/20130215.b

Instrument: nt10.i Date: 15-FEB-2013 Method: ABN.m

INITIAL CAL: 25-JAN-2013

Compound	%RSD or R^2
NO Q-FLAGS	

CONTINUING CAL: 15-FEB-2013

Compound	%D
~~Hexachlorocyclopentadiene~~	~~-28.4~~
Pentachlorophenol	-33.1
~~3,3'-Dichlorobenzidine~~	~~-21.8~~
~~Benzidine~~	~~20.9~~
~~Retene~~	~~-100.0~~

Data File: /chem1/nt10.i/20130215.b/df0215.d

Date : 15-FEB-2013 11:03

Client ID: DFTPP

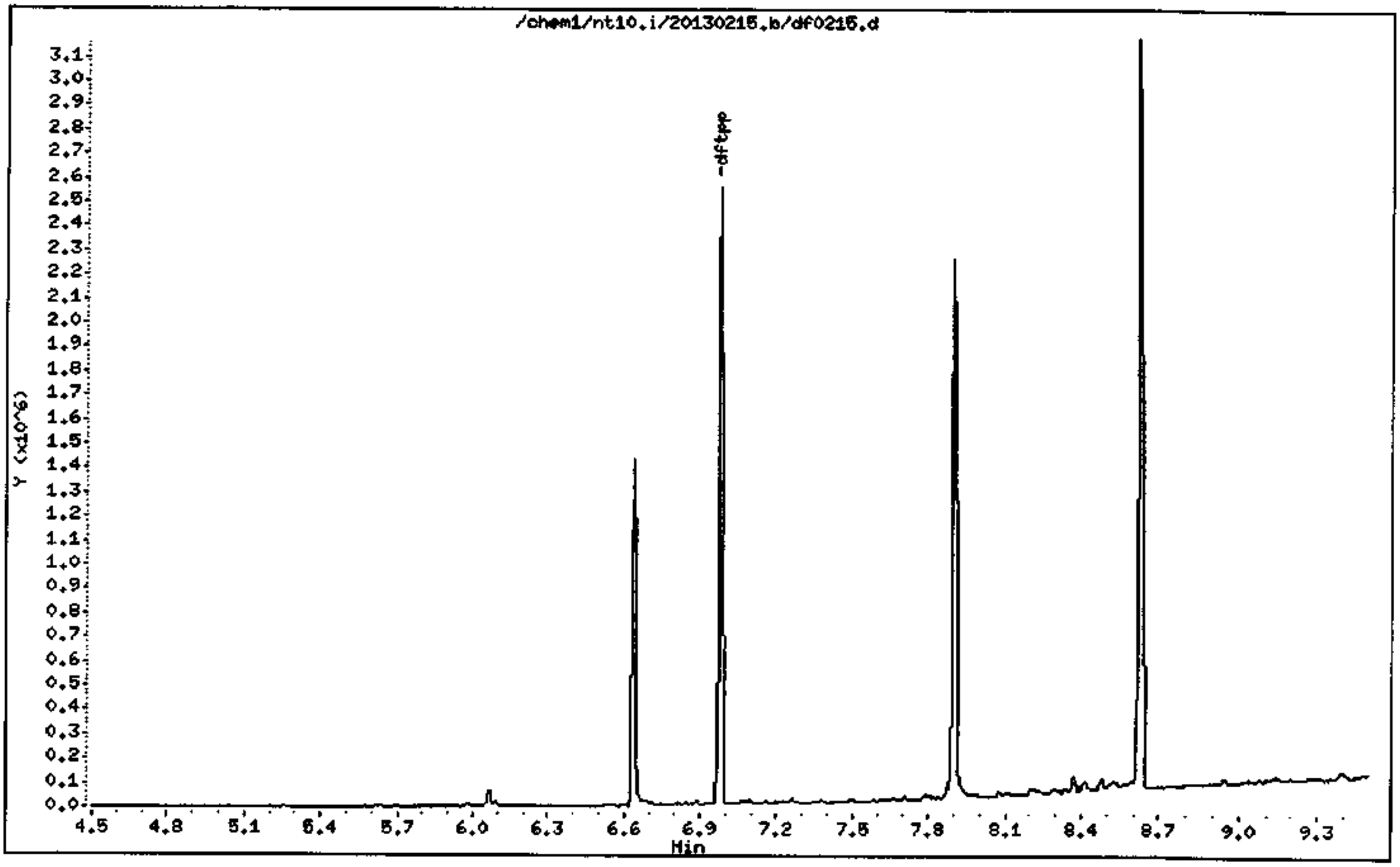
Instrument: nt10.i

Sample Info: DFTPP

Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25



Data File: /chem1/nt10.i/20130215.b/df0215.d

Date : 15-FEB-2013 11:03

Client ID: DFTPP

Instrument: nt10.i

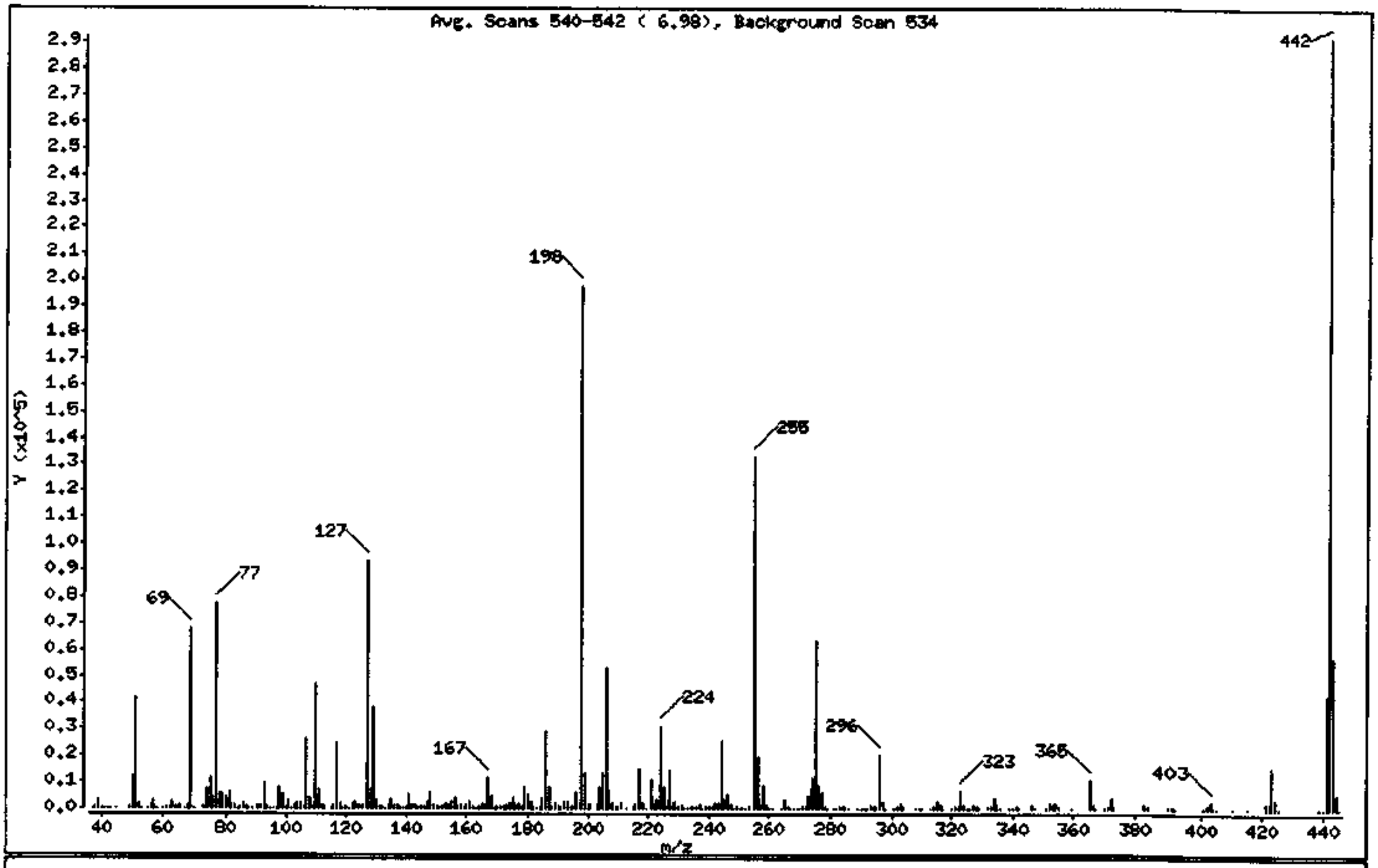
Sample Info: DFTPP

Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	21.15
68	Less than 2.00% of mass 69	0.55 (1.62)
69	Mass 69 relative abundance	34.27
70	Less than 2.00% of mass 69	0.14 (0.40)
127	10.00 - 80.00% of mass 198	47.32
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.82
275	10.00 - 60.00% of mass 198	32.13
365	Greater than 1.00% of mass 198	5.38
441	0.01 - 24.00% of mass 442	21.71 (14.67)
442	50.00 - 200.00% of mass 198	148.02
443	15.00 - 24.00% of mass 442	29.04 (19.62)

Data File: /chem1/nt10.i/20130215.b/df0215.d

Date : 15-FEB-2013 11:03

Client ID: DFTPP

Instrument: nt10.i

Sample Info: DFTPP

Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

Data File: df0215.d
Spectrum: Avg. Scans 540-542 (6.98), Background Scan 534
Location of Maximum: 442.00
Number of points: 310

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	156	127.00	93392	207.00	7005	294.00	347
38.00	609	128.00	7302	208.00	1875	295.00	495
39.00	3135	129.00	38096	209.00	729	296.00	20352
40.00	147	130.00	3178	210.00	933	297.00	2814
41.00	98	131.00	642	211.00	2314	298.00	226
42.00	122	132.00	370	213.00	258	301.00	280
43.00	4	133.00	141	215.00	683	302.00	347
45.00	140	134.00	1204	216.00	1271	303.00	2299
49.00	402	135.00	3073	217.00	14874	304.00	621
50.00	11826	136.00	1339	218.00	2009	308.00	283
51.00	41744	137.00	1499	219.00	191	309.00	138
52.00	2175	138.00	357	221.00	10983	310.00	287
53.00	119	139.00	318	222.00	1531	313.00	225
55.00	212	140.00	478	223.00	3392	314.00	1007
56.00	1460	141.00	5081	224.00	31008	315.00	2415
57.00	3249	142.00	1664	225.00	7943	316.00	1308
58.00	166	143.00	1138	226.00	885	317.00	223
60.00	53	144.00	358	227.00	14254	320.00	53
61.00	767	145.00	408	228.00	2026	321.00	640
62.00	851	146.00	950	229.00	2769	322.00	355
63.00	2416	147.00	2604	230.00	449	323.00	6385
64.00	350	148.00	6278	231.00	1264	324.00	1182
65.00	1255	149.00	1496	232.00	157	325.00	141
67.00	64	150.00	388	233.00	256	326.00	128
68.00	1093	151.00	744	234.00	862	327.00	1462
69.00	67640	152.00	446	235.00	1005	328.00	636
70.00	269	153.00	1772	236.00	727	329.00	173
73.00	515	154.00	1255	237.00	1205	332.00	529
74.00	7268	155.00	3004	238.00	154	333.00	694
75.00	11237	156.00	4266	239.00	520	334.00	4359
76.00	4030	157.00	884	240.00	470	335.00	1104
77.00	77536	158.00	1048	241.00	887	336.00	71
78.00	5458	159.00	837	242.00	1769	339.00	57
79.00	5179	160.00	1635	243.00	1906	340.00	69
80.00	4134	161.00	2423	244.00	25472	341.00	945

Date : 15-FEB-2013 11:03

Client ID: DFTPP Instrument: nt10.i

Sample Info: DFTPP

Operator: YZ

Column phase: ZB-5msi Column diameter: 0.25

Data File: df0215.d
Spectrum: Avg. Scans 540-542 (6.98), Background Scan 534
Location of Maximum: 442.00
Number of points: 310

m/z	Y	m/z	Y	m/z	Y	m/z	Y
81.00	5822	162.00	669	245.00	3455	342.00	233
82.00	1310	163.00	208	246.00	5360	346.00	1455
83.00	1237	164.00	346	247.00	1104	347.00	272
84.00	49	165.00	1915	248.00	220	351.00	63
85.00	927	166.00	1479	249.00	922	352.00	2119
86.00	1770	167.00	11125	250.00	176	353.00	1393
87.00	664	168.00	4660	251.00	322	354.00	2181
88.00	311	169.00	899	252.00	302	355.00	530
89.00	155	170.00	385	253.00	659	359.00	79
91.00	1252	171.00	591	255.00	132992	365.00	10610
92.00	1538	172.00	975	256.00	19544	366.00	1366
93.00	9669	173.00	1277	257.00	1526	367.00	56
94.00	696	174.00	2262	258.00	8478	370.00	232
95.00	89	175.00	4040	259.00	1435	371.00	589
96.00	252	176.00	1225	260.00	195	372.00	3819
97.00	217	177.00	1953	261.00	261	373.00	913
98.00	7894	178.00	746	264.00	193	383.00	1016
99.00	5546	179.00	7942	265.00	3517	384.00	343
100.00	526	180.00	5333	266.00	471	390.00	552
101.00	3383	181.00	2565	267.00	140	391.00	393
102.00	179	182.00	423	268.00	74	392.00	259
103.00	1146	183.00	323	269.00	109	401.00	293
104.00	2181	184.00	770	270.00	236	402.00	1631
105.00	1986	185.00	3953	271.00	343	403.00	2452
106.00	707	186.00	28560	272.00	426	404.00	864
107.00	26392	187.00	8181	273.00	4573	405.00	62
108.00	4156	188.00	793	274.00	11378	410.00	50
109.00	810	189.00	1988	275.00	63416	415.00	62
110.00	47144	190.00	341	276.00	8446	421.00	2155
111.00	7116	191.00	843	277.00	5821	422.00	1996
112.00	1014	192.00	2594	278.00	975	423.00	15721
113.00	378	193.00	2851	279.00	233	424.00	3062
115.00	95	194.00	589	281.00	110	425.00	320
116.00	1652	195.00	572	282.00	269	438.00	203
117.00	25088	196.00	6256	283.00	743	439.00	261

Data File: /chem1/nt10.i/20130215.b/df0215.d
Date : 15-FEB-2013 11:03
Client ID: DFTPP
Sample Info: DFTPP

Instrument: nt10.i

Operator: YZ

Column phase: ZB-5msi

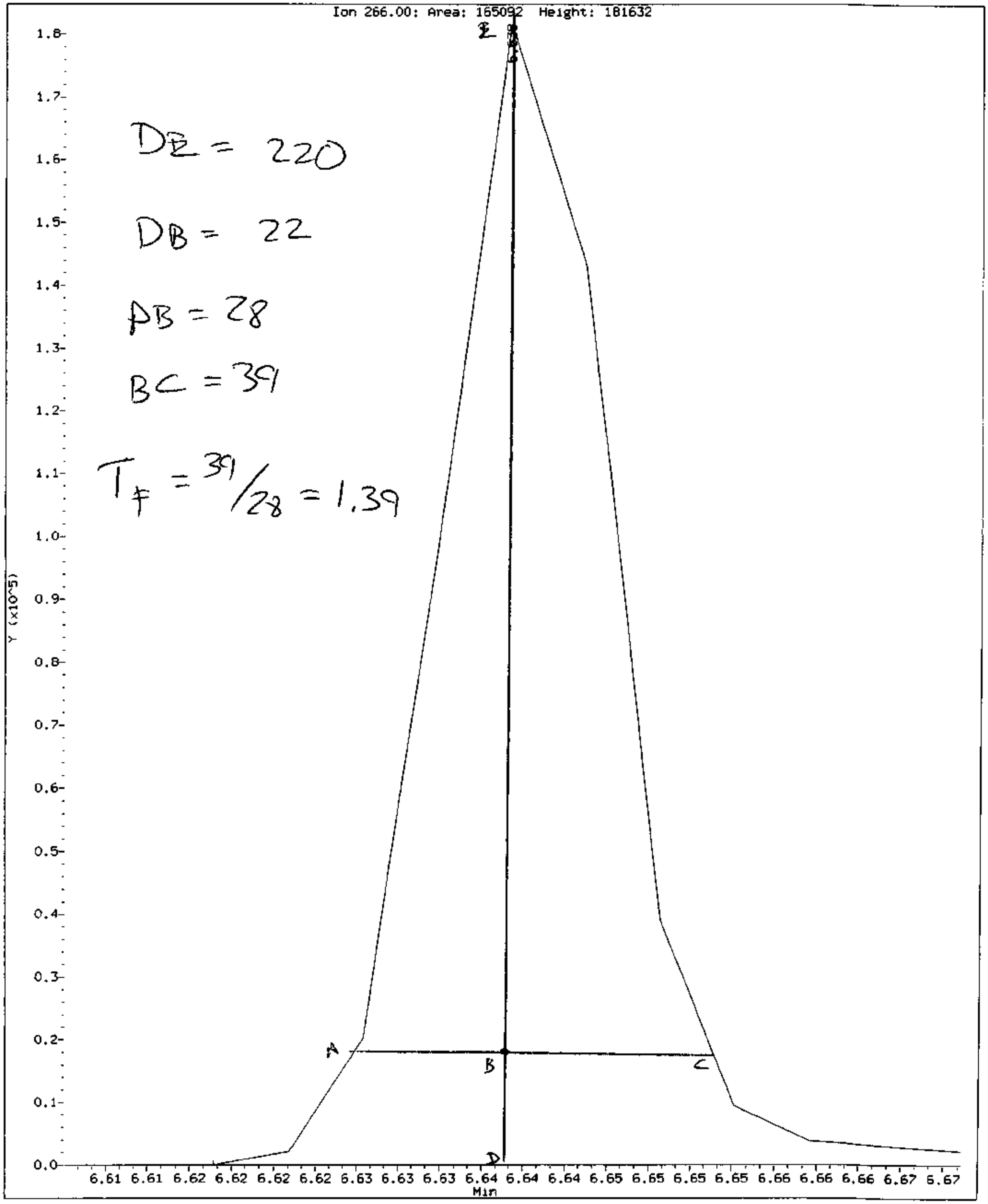
Column diameter: 0.25

Data File: df0215.d
Spectrum: Avg. Scans 540-542 (6.98), Background Scan 534
Location of Maximum: 442.00
Number of points: 310

m/z	Y	m/z	Y	m/z	Y	m/z	Y
118.00	1682	198.00	197376	284.00	463	440.00	85
119.00	154	199.00	13462	285.00	972	441.00	42856
120.00	413	200.00	1188	286.00	177	442.00	292160
121.00	157	201.00	1012	289.00	214	443.00	57320
122.00	1943	203.00	1592	290.00	153	444.00	5396
123.00	2649	204.00	7747	291.00	58	445.00	308
124.00	1142	205.00	13363	292.00	218		
125.00	1341	206.00	52792	293.00	1269		

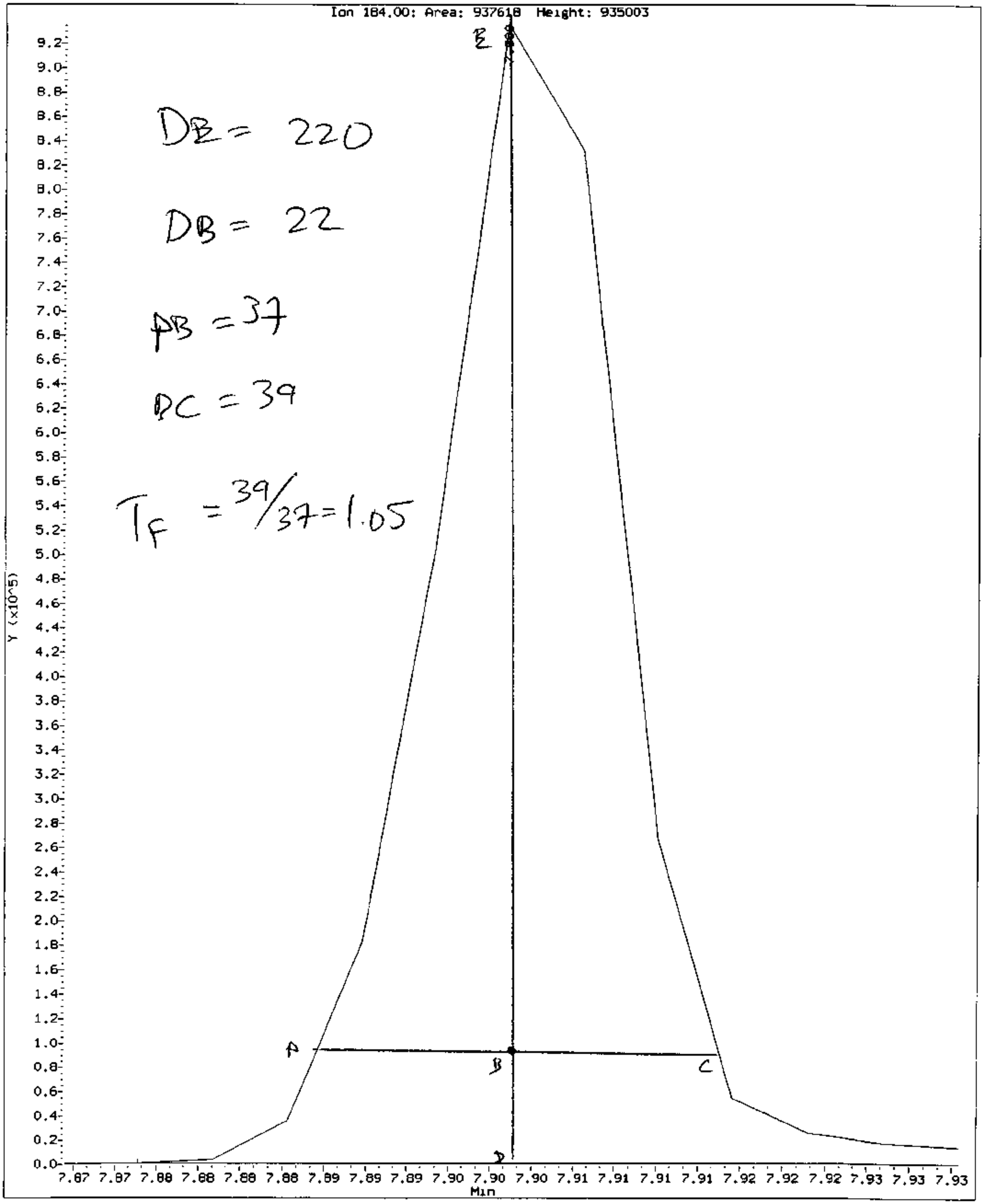
Data File: /chem1/nt10.i/20130215.b/BDT.b/df0215.d
Injection Date: 15-FEB-2013 11:03
Instrument: nt10.i
Client Sample ID: DFTPP

Compound: Pentachlorophenol
CAS Number: 87-86-5



Data File: /chem1/nt10.i/20130215.b/DDT.b/df0215.d
Injection Date: 15-FEB-2013 11:03
Instrument: nt10.i
Client Sample ID: DFTPP

Compound: Benzidine
CAS Number:



Analytical Resources Inc.
ABN by sw846 8270C
DDT Breakdown Report

Data file: /chem1/nt10.i/20130215.b/DDT.b/df0215.d
Method: /chem1/nt10.i/20130215.b/DDT.b/sw846ddt.m
Analysis Date: 15-FEB-2013 11:03

ARI ID: DFTPP
Misc: 11-
Instrument: nt10.i

COMPOUND	RT	AREA
Pentachlorophenol	6.638	165091
Benzidine	7.900	937618
4,4'-DDE	8.077	2089
4,4'-DDD	8.371	12846
4,4'-DDT	8.628	598975

$$\text{DDT Percent Breakdown} = \frac{(\text{DDE Area} + \text{DDD Area}) * 100}{(\text{DDE Area} + \text{DDD Area} + \text{DDT Area})}$$

$$\text{DDT Percent Breakdown} = \frac{(\ 2089 + 12846) * 100}{(\ 2089 + 12846 + 598975)}$$

DDT Percent Breakdown = 2.4 %

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt10.i/20130215.b/cc0215.d
Lab Smp Id: CC0215
Inj Date : 15-FEB-2013 11:20
Operator : VTS/YZ Inst ID: nt10.i
Smp Info : CC0215
Misc Info :
Comment : 1ul Injection
Method : /chem1/nt10.i/20130215.b/ABN.m
Meth Date : 15-Feb-2013 14:06 van Quant Type: ISTD
Cal Date : 25-JAN-2013 17:16 Cal File: ic0125h.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDAICAL.sub
Target Version: 3.50
Processing Host: cserv3

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.459	6.459	(0.738)	71608	5.00000	4.969
$	2 Phenol-d5	99	8.183	8.183	(0.935)	90472	5.00000	5.059
	3 Phenol	94	8.206	8.206	(0.938)	101892	5.00000	5.414
$	5 2-Chlorophenol-d4	132	8.391	8.391	(0.959)	76363	5.00000	4.932
	4 Bis(2-Chloroethyl)ether	93	8.298	8.298	(0.949)	68402	5.00000	4.777
	6 2-Chlorophenol	128	8.414	8.414	(0.962)	79606	5.00000	4.860
	7 1,3-Dichlorobenzene	146	8.678	8.678	(0.992)	84625	5.00000	4.748
*	8 1,4-Dichlorobenzene-d4	152	8.747	8.755	(1.000)	45069	4.00000	
	9 1,4-Dichlorobenzene	146	8.778	8.778	(1.004)	83764	5.00000	4.746
$	10 1,2-Dichlorobenzene-d4	152	9.128	9.128	(1.043)	54129	5.00000	4.757
	12 1,2-Dichlorobenzene	146	9.151	9.151	(1.046)	78935	5.00000	4.652
	11 Benzyl alcohol	108	9.081	9.081	(1.038)	44629	5.00000	4.955
	14 2,2'-oxybis(1-Chloropropane)	121	9.384	9.384	(1.073)	24698	5.00000	4.902
	13 2-Methylphenol	108	9.368	9.368	(1.071)	70127	5.00000	4.936
	17 Hexachloroethane	117	9.772	9.772	(1.117)	33016	5.00000	4.733
	16 N-Nitroso-di-n-propylamine	70	9.663	9.663	(1.105)	46950	5.00000	4.946
	15 4-Methylphenol	108	9.663	9.663	(1.105)	72401	5.00000	4.900
$	18 Nitrobenzene-d5	82	9.919	9.919	(0.870)	74178	5.00000	4.868
	19 Nitrobenzene	77	9.958	9.958	(0.874)	70128	5.00000	4.854
	20 Isophorone	82	10.447	10.447	(0.917)	130132	5.00000	5.168
	21 2-Nitrophenol	139	10.633	10.633	(0.933)	45979	5.00000	5.417
	22 2,4-Dimethylphenol	107	10.757	10.757	(0.944)	143235	10.0000	9.899
	23 Bis(2-Chloroethoxy)methane	93	10.934	10.934	(0.959)	78847	5.00000	4.972
	24 Benzoic acid	105	11.057	11.057	(0.970)	203346	20.0000	16.48(M)
	25 2,4-Dichlorophenol	162	11.150	11.150	(0.978)	143650	10.0000	11.36
	26 1,2,4-Trichlorobenzene	180	11.312	11.312	(0.993)	69807	5.00000	4.851

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
*	27 Naphthalene-d8	136	11.397	11.397	(1.000)	165086	4.00000	
	28 Naphthalene	128	11.435	11.435	(1.003)	212925	5.00000	4.957
	29 4-Chloroaniline	127	11.621	11.621	(1.020)	166027	10.0000	9.604
	30 Hexachlorobutadiene	225	11.837	11.837	(1.039)	46140	5.00000	5.144
	31 4-Chloro-3-methylphenol	107	12.719	12.719	(1.116)	130259	10.0000	10.66
	32 2-Methylnaphthalene	142	12.944	12.944	(1.136)	144371	5.00000	5.090
	33 Hexachlorocyclopentadiene	237	13.447	13.447	(0.880)	85093	10.0000	7.159
	34 2,4,6-Trichlorophenol	196	13.648	13.648	(0.893)	108382	10.0000	10.26
	35 2,4,5-Trichlorophenol	196	13.741	13.741	(0.899)	114039	10.0000	10.16
$	36 2-Fluorobiphenyl	172	13.803	13.803	(0.903)	178555	5.00000	4.938
	37 2-Chloronaphthalene	162	14.004	14.004	(0.916)	143029	5.00000	4.913
	38 2-Nitroaniline	65	14.321	14.321	(0.937)	69351	10.0000	10.16
	39 Dimethylphthalate	163	14.801	14.801	(0.969)	161932	5.00000	5.080
	40 Acenaphthylene	152	14.941	14.941	(0.978)	240551	5.00000	5.067
	41 2,6-Dinitrotoluene	165	14.941	14.941	(0.978)	77924	10.0000	10.70
*	42 Acenaphthene-d10	164	15.281	15.281	(1.000)	105394	4.00000	
	43 3-Nitroaniline	138	15.250	15.250	(0.998)	74094	10.0000	11.02
	44 Acenaphthene	153	15.350	15.350	(1.005)	140294	5.00000	4.819
	45 2,4-Dinitrophenol	184	15.482	15.482	(1.013)	105790	20.0000	16.68
	46 Dibenzofuran	168	15.706	15.706	(1.028)	197385	5.00000	4.875
	47 4-Nitrophenol	109	15.714	15.714	(1.028)	42292	10.0000	9.234
	48 2,4-Dinitrotoluene	165	15.814	15.814	(1.035)	104255	10.0000	10.59
	50 Diethylphthalate	149	16.386	16.386	(1.072)	170183	5.00000	5.097
	49 Fluorene	166	16.479	16.479	(1.078)	170650	5.00000	4.962
	51 4-Chlorophenyl-phenylether	204	16.487	16.487	(1.079)	94126	5.00000	5.873
	52 4-Nitroaniline	138	16.626	16.626	(1.088)	73710	10.0000	10.38
	53 4,6-Dinitro-2-methylphenol	198	16.726	16.726	(0.901)	147013	20.0000	20.83
	54 N-Nitrosodiphenylamine	169	16.780	16.780	(0.904)	106319	5.00000	5.009
$	55 2,4,6-Tribromophenol	330	17.065	17.065	(1.117)	34018	5.00000	5.058
	56 4-Bromophenyl-phenylether	248	17.567	17.567	(0.947)	50821	5.00000	5.171
	57 Hexachlorobenzene	284	17.883	17.883	(0.964)	62349	5.00000	5.055
	58 Pentachlorophenol	266	18.309	18.309	(0.987)	55050	10.0000	6.693
*	59 Phenanthrene-d10	188	18.557	18.557	(1.000)	176206	4.00000	
	60 Phenanthrene	178	18.603	18.603	(1.002)	227787	5.00000	4.849
	61 Anthracene	178	18.704	18.704	(1.008)	241065	5.00000	5.097
	62 Carbazole	167	19.083	19.083	(1.028)	177940	5.00000	5.633
	63 Di-n-butylphthalate	149	19.942	19.942	(1.075)	293068	5.00000	5.807
	64 Fluoranthene	202	21.040	21.040	(1.134)	283551	5.00000	5.242
	65 Pyrene	202	21.466	21.466	(0.907)	289586	5.00000	5.096
$	66 Terphenyl-d14	244	21.791	21.791	(0.921)	196062	5.00000	5.117
	67 Butylbenzylphthalate	149	22.735	22.735	(0.961)	123670	5.00000	5.738
	68 Benzo(a)anthracene	228	23.634	23.634	(0.999)	280382	5.00000	5.037
*	69 Chrysene-d12	240	23.665	23.665	(1.000)	199492	4.00000	
	70 3,3'-Dichlorobenzidine	252	23.618	23.618	(0.998)	283348	10.0000	12.18
	71 Chrysene	228	23.711	23.711	(1.002)	248532	5.00000	4.929
	72 bis(2-Ethylhexyl)phthalate	149	23.789	23.789	(0.960)	178959	5.00000	4.901
*	134 Di-n-octylphthalate-d4	153	24.772	24.772	(1.000)	276520	4.00000	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
73 Di-n-octylphthalate	149	24.779	24.779	(1.000)	315337	5.00000	4.675
74 Benzo(b)fluoranthene	252	25.414	25.414	(0.975)	283992	5.00000	4.729
75 Benzo(k)fluoranthene	252	25.414	25.414	(0.975)	283992	5.00000	4.378
76 Benzo(a)pyrene	252	25.964	25.964	(0.996)	262952	5.00000	5.064
* 77 Perylene-d12	264	26.065	26.065	(1.000)	207175	4.00000	
78 Indeno(1,2,3-cd)pyrene	276	28.282	28.282	(1.085)	340030	5.00000	5.310
79 Dibenzo(a,h)anthracene	278	28.290	28.290	(1.085)	274549	5.00000	5.414
80 Benzo(g,h,i)perylene	276	28.927	28.927	(1.110)	284530	5.00000	5.178
90 N-Nitrosodimethylamine	74	4.158	4.158	(0.475)	81548	10.0000	9.511
91 Aniline	93	8.190	8.190	(0.936)	201438	5.00000	4.960
93 Benzidine	184	21.319	21.319	(0.901)	113396	10.0000	12.09
103 Pyridine	79	4.166	4.166	(0.476)	70159	10.0000	9.593
105 1-methylnaphthalene	142	13.176	13.176	(1.156)	133924	5.00000	5.148
111 Azobenzene (1,2-DP-Hydrazine)	77	16.842	16.842	(1.102)	141941	5.00000	4.686
187 Total Benzofluoranthenes	252	25.453	25.453	(0.977)	572590	10.0000	9.687
99 Perylene	252	26.111	26.111	(1.002)	284929	5.00000	4.774
98 Retene	219	Compound Not Detected.					
120 2,3,4,6-Tetrachlorophenol	232	16.108	16.108	(1.054)	46263	5.00000	4.713

QC Flag Legend

M - Compound response manually integrated.

SD
2.15.13

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: cc0215.d
Lab Smp Id: CC0215
Analysis Type: SV
Quant Type: ISTD
Operator: VTS/YZ
Method File: /chem1/nt10.i/20130215.b/ABN.m
Misc Info:

Calibration Date: 15-FEB-2013
Calibration Time: 10:06

Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	46623	23312	93246	45069	-3.33
27 Naphthalene-d8	176978	88489	353956	165086	-6.72
42 Acenaphthene-d10	110872	55436	221744	105394	-4.94
59 Phenanthrene-d10	188290	94145	376580	176206	-6.42
69 Chrysene-d12	213681	106840	427362	199492	-6.64
134 Di-n-octylphthala	264159	132080	528318	276520	4.68
77 Perylene-d12	208584	104292	417168	207175	-0.68

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.76	8.26	9.26	8.75	-0.09
27 Naphthalene-d8	11.40	10.90	11.90	11.40	0.00
42 Acenaphthene-d10	15.28	14.78	15.78	15.28	0.00
59 Phenanthrene-d10	18.56	18.06	19.06	18.56	0.00
69 Chrysene-d12	23.66	23.16	24.16	23.66	0.00
134 Di-n-octylphthala	24.77	24.27	25.27	24.77	0.00
77 Perylene-d12	26.06	25.56	26.56	26.06	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt10.i Injection Date: 15-FEB-2013 11:20
Lab File ID: cc0215.d Init. Cal. Date(s): 25-JAN-2013 25-JAN-2013
Analysis Type: Init. Cal. Times: 12:59 17:16
Lab Sample ID: CC0215 Quant Type: ISTD
Method: /chem1/nt10.i/20130215.b/ABN.m

COMPOUND	RRF / AMOUNT	RF5	CCAL RRF5	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 1 2-Fluorophenol	1.27898	1.27108	1.27108	0.010	-0.61790	20.00000	Averaged
$ 2 Phenol-d5	1.58709	1.60593	1.60593	0.010	1.18677	20.00000	Averaged
3 Phenol	1.67046	1.80864	1.80864	0.100	8.27170	20.00000	Averaged
$ 5 2-Chlorophenol-d4	1.37422	1.35549	1.35549	0.010	-1.36353	20.00000	Averaged
4 Bis(2-Chloroethyl)ether	1.27098	1.21417	1.21417	0.700	-4.46921	20.00000	Averaged
6 2-Chlorophenol	1.45366	1.41305	1.41305	0.800	-2.79353	20.00000	Averaged
7 1,3-Dichlorobenzene	1.58180	1.50214	1.50214	0.010	-5.03588	20.00000	Averaged
9 1,4-Dichlorobenzene	1.56627	1.48686	1.48686	0.010	-5.07030	20.00000	Averaged
$ 10 1,2-Dichlorobenzene-d4	1.00989	0.96082	0.96082	0.010	-4.85935	20.00000	Averaged
12 1,2-Dichlorobenzene	1.50604	1.40114	1.40114	0.010	-6.96502	20.00000	Averaged
11 Benzyl alcohol	0.79941	0.79219	0.79219	0.010	-0.90336	20.00000	Averaged
14 2,2'-oxybis(1-Chloropropane	0.44716	0.43840	0.43840	0.010	-1.95927	20.00000	Averaged
13 2-Methylphenol	1.26098	1.24479	1.24479	0.700	-1.28354	20.00000	Averaged
17 Hexachloroethane	0.61907	0.58605	0.58605	0.300	-5.33361	20.00000	Averaged
16 N-Nitroso-di-n-propylamine	0.84248	0.83339	0.83339	0.500	-1.07916	20.00000	Averaged
15 4-Methylphenol	1.31137	1.28516	1.28516	0.600	-1.99866	20.00000	Averaged
$ 18 Nitrobenzene-d5	0.36919	0.35946	0.35946	0.010	-2.63347	20.00000	Averaged
19 Nitrobenzene	0.35004	0.33984	0.33984	0.200	-2.91402	20.00000	Averaged
20 Isophorone	0.61012	0.63061	0.63061	0.300	3.35926	20.00000	Averaged
21 2-Nitrophenol	0.20568	0.22281	0.22281	0.100	8.33189	20.00000	Averaged
22 2,4-Dimethylphenol	0.35058	0.34706	0.34706	0.200	-1.00580	20.00000	Averaged
23 Bis(2-Chloroethoxy)methane	0.38425	0.38209	0.38209	0.050	-0.56198	20.00000	Averaged
24 Benzoic acid	16.48251	20.00000	0.24635	0.010	-17.58746	20.00000	Quadratic
25 2,4-Dichlorophenol	0.30640	0.34806	0.34806	0.100	13.59717	20.00000	Averaged
26 1,2,4-Trichlorobenzene	0.34870	0.33828	0.33828	0.010	-2.98751	20.00000	Averaged
28 Naphthalene	1.04083	1.03183	1.03183	0.100	-0.86545	20.00000	Averaged
29 4-Chloroaniline	0.41889	0.40228	0.40228	0.010	-3.96467	20.00000	Averaged
30 Hexachlorobutadiene	0.21732	0.22359	0.22359	0.010	2.88787	20.00000	Averaged
31 4-Chloro-3-methylphenol	0.29615	0.31561	0.31561	0.200	6.57401	20.00000	Averaged
32 2-Methylnaphthalene	0.68720	0.69962	0.69962	0.300	1.80659	20.00000	Averaged
33 Hexachlorocyclopentadiene	0.45113	0.32295	0.32295	0.001	-28.41220	20.00000	Averaged <-
34 2,4,6-Trichlorophenol	0.40085	0.41134	0.41134	0.200	2.61716	20.00000	Averaged
35 2,4,5-Trichlorophenol	0.42597	0.43281	0.43281	0.200	1.60546	20.00000	Averaged
$ 36 2-Fluorobiphenyl	1.37225	1.35533	1.35533	0.010	-1.23309	20.00000	Averaged
37 2-Chloronaphthalene	1.10490	1.08567	1.08567	0.700	-1.74063	20.00000	Averaged

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt10.i Injection Date: 15-FEB-2013 11:20
Lab File ID: cc0215.d Init. Cal. Date(s): 25-JAN-2013 25-JAN-2013
Analysis Type: Init. Cal. Times: 12:59 17:16
Lab Sample ID: CC0215 Quant Type: ISTD
Method: /chem1/nt10.i/20130215.b/ABN.m

COMPOUND	RRF / AMOUNT	RF5	CCAL RRF5	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
38 2-Nitroaniline	0.25914	0.26321	0.26321	0.010	1.57050	20.00000	Averaged	
39 Dimethylphthalate	1.20981	1.22916	1.22916	0.010	1.59864	20.00000	Averaged	
40 Acenaphthylene	1.80186	1.82592	1.82592	0.900	1.33527	20.00000	Averaged	
41 2,6-Dinitrotoluene	0.27639	0.29574	0.29574	0.100	7.00273	20.00000	Averaged	
43 3-Nitroaniline	0.25523	0.28121	0.28121	0.010	10.17704	20.00000	Averaged	
44 Acenaphthene	1.10485	1.06491	1.06491	0.100	-3.61505	20.00000	Averaged	
45 2,4-Dinitrophenol	16.68132	20.00000	0.20075	0.030	-16.59339	20.00000	Quadratic	
46 Dibenzofuran	1.53658	1.49826	1.49826	0.800	-2.49384	20.00000	Averaged	
47 4-Nitrophenol	9.23410	10.00000	0.16051	0.010	-7.65899	20.00000	Quadratic	
48 2,4-Dinitrotoluene	0.37372	0.39568	0.39568	0.200	5.87652	20.00000	Averaged	
50 Diethylphthalate	1.26733	1.29179	1.29179	0.010	1.93003	20.00000	Averaged	
49 Fluorene	1.30516	1.29533	1.29533	0.100	-0.75319	20.00000	Averaged	
51 4-Chlorophenyl-phenylether	0.60824	0.71447	0.71447	0.100	17.46514	20.00000	Averaged	
52 4-Nitroaniline	0.26944	0.27975	0.27975	0.010	3.82579	20.00000	Averaged	
53 4,6-Dinitro-2-methylphenol	0.16018	0.16686	0.16686	0.001	4.17118	20.00000	Averaged	
54 N-Nitrosodiphenylamine	0.48183	0.48270	0.48270	0.010	0.18176	20.00000	Averaged	
$ 55 2,4,6-Tribromophenol	0.25526	0.25822	0.25822	0.010	1.15730	20.00000	Averaged	
56 4-Bromophenyl-phenylether	0.22313	0.23073	0.23073	0.100	3.41027	20.00000	Averaged	
57 Hexachlorobenzene	0.28001	0.28307	0.28307	0.100	1.09235	20.00000	Averaged	
58 Pentachlorophenol	0.18673	0.12497	0.12497	0.010	-33.07457	20.00000	Averaged	<-
60 Phenanthrene	1.06632	1.03418	1.03418	0.700	-3.01337	20.00000	Averaged	
61 Anthracene	1.07365	1.09447	1.09447	0.700	1.93904	20.00000	Averaged	
62 Carbazole	0.71710	0.80787	0.80787	0.010	12.65762	20.00000	Averaged	
63 Di-n-butylphthalate	1.14571	1.33057	1.33057	0.010	16.13470	20.00000	Averaged	
64 Fluoranthene	1.22799	1.28736	1.28736	0.600	4.83472	20.00000	Averaged	
65 Pyrene	1.13938	1.16129	1.16129	0.600	1.92371	20.00000	Averaged	
$ 66 Terphenyl-d14	0.76828	0.78625	0.78625	0.010	2.33796	20.00000	Averaged	
67 Butylbenzylphthalate	0.43214	0.49594	0.49594	0.010	14.76387	20.00000	Averaged	
68 Benzo(a)anthracene	1.11613	1.12438	1.12438	0.700	0.73991	20.00000	Averaged	
70 3,3'-Dichlorobenzidine	0.46632	0.56814	0.56814	0.010	21.83351	20.00000	Averaged	<-
71 Chrysene	1.01092	0.99666	0.99666	0.700	-1.41058	20.00000	Averaged	
72 bis(2-Ethylhexyl)phthalate	0.52819	0.51775	0.51775	0.010	-1.97754	20.00000	Averaged	
73 Di-n-octylphthalate	0.97573	0.91230	0.91230	0.010	-6.50051	20.00000	Averaged	
74 Benzo(b)fluoranthene	1.15936	1.09663	1.09663	0.700	-5.41075	20.00000	Averaged	
75 Benzo(k)fluoranthene	1.25249	1.09663	1.09663	0.700	-12.44425	20.00000	Averaged	

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt10.i
Lab File ID: cc0215.d
Analysis Type:
Lab Sample ID: CC0215
Method: /chem1/nt10.i/20130215.b/ABN.m

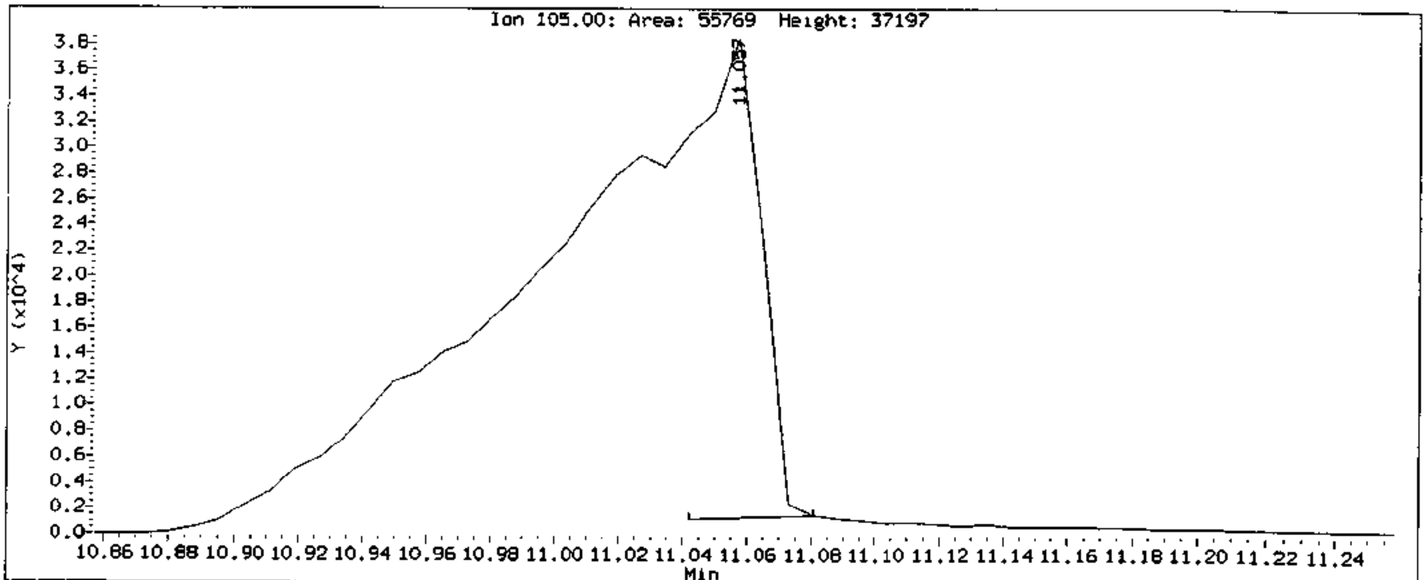
Injection Date: 15-FEB-2013 11:20
Init. Cal. Date(s): 25-JAN-2013 25-JAN-2013
Init. Cal. Times: 12:59 17:16
Quant Type: ISTD

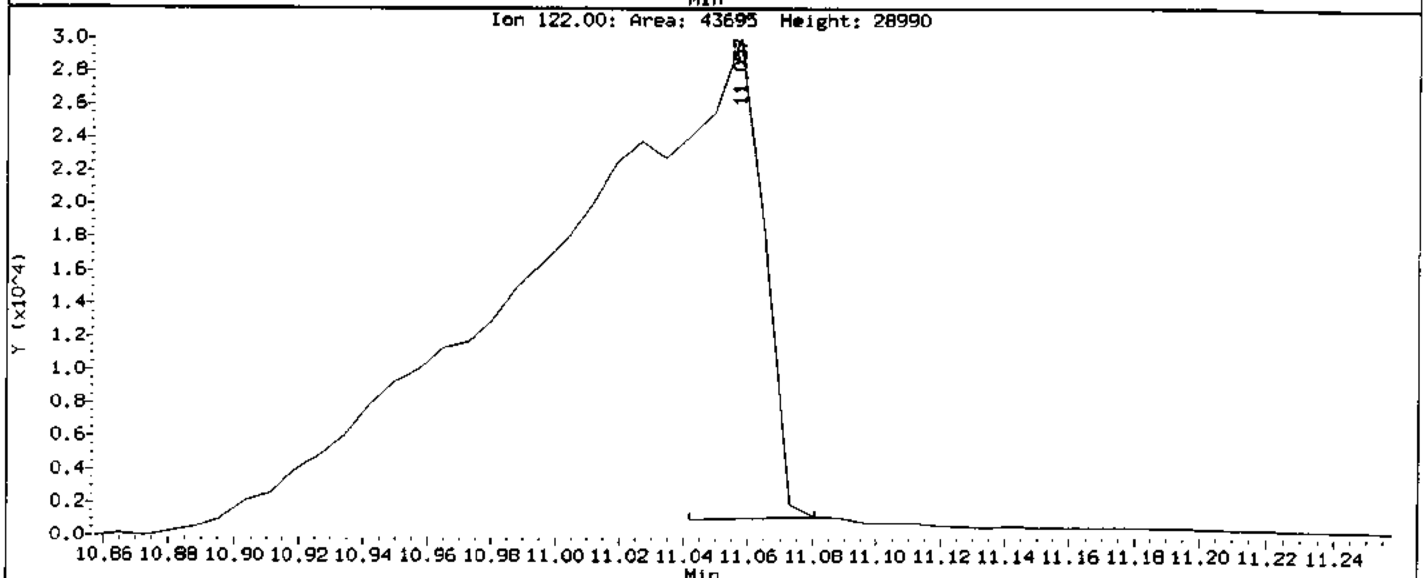
COMPOUND	RRF / AMOUNT	RF5	CCAL RRF5	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
76 Benzo(a)pyrene	1.00265	1.01538	1.01538	0.700	1.27008	20.00000	Averaged	
78 Indeno(1,2,3-cd)pyrene	1.23647	1.31302	1.31302	0.500	6.19098	20.00000	Averaged	
79 Dibenzo(a,h)anthracene	0.97912	1.06016	1.06016	0.400	8.27670	20.00000	Averaged	
80 Benzo(g,h,i)perylene	1.06086	1.09870	1.09870	0.500	3.56769	20.00000	Averaged	
90 N-Nitrosodimethylamine	0.76098	0.72376	0.72376	0.010	-4.89108	20.00000	Averaged	
91 Aniline	3.60472	3.57564	3.57564	0.010	-0.80690	20.00000	Averaged	
93 Benzidine	12.09313	10.00000	0.22737	0.010	20.93131	20.00000	Quadratic	<-
103 Pyridine	0.64909	0.62268	0.62268	0.010	-4.06928	20.00000	Averaged	
105 1-methylnaphthalene	0.63035	0.64899	0.64899	0.010	2.95666	20.00000	Averaged	
111 Azobenzene (1,2-DP-Hydrazin	1.14954	1.07741	1.07741	0.010	-6.27415	20.00000	Averaged	
187 Total Benzofluoranthenes	1.14121	1.10552	1.10552	0.010	-3.12778	20.00000	Averaged	
99 Perylene	1.15229	1.10024	1.10024	0.010	-4.51693	20.00000	Averaged	
98 Retene	++++	++++	++++	0.010	++++	20.00000	Quadratic	<-
120 2,3,4,6-Tetrachlorophenol	0.37257	0.35116	0.35116	0.010	-5.74519	20.00000	Averaged	

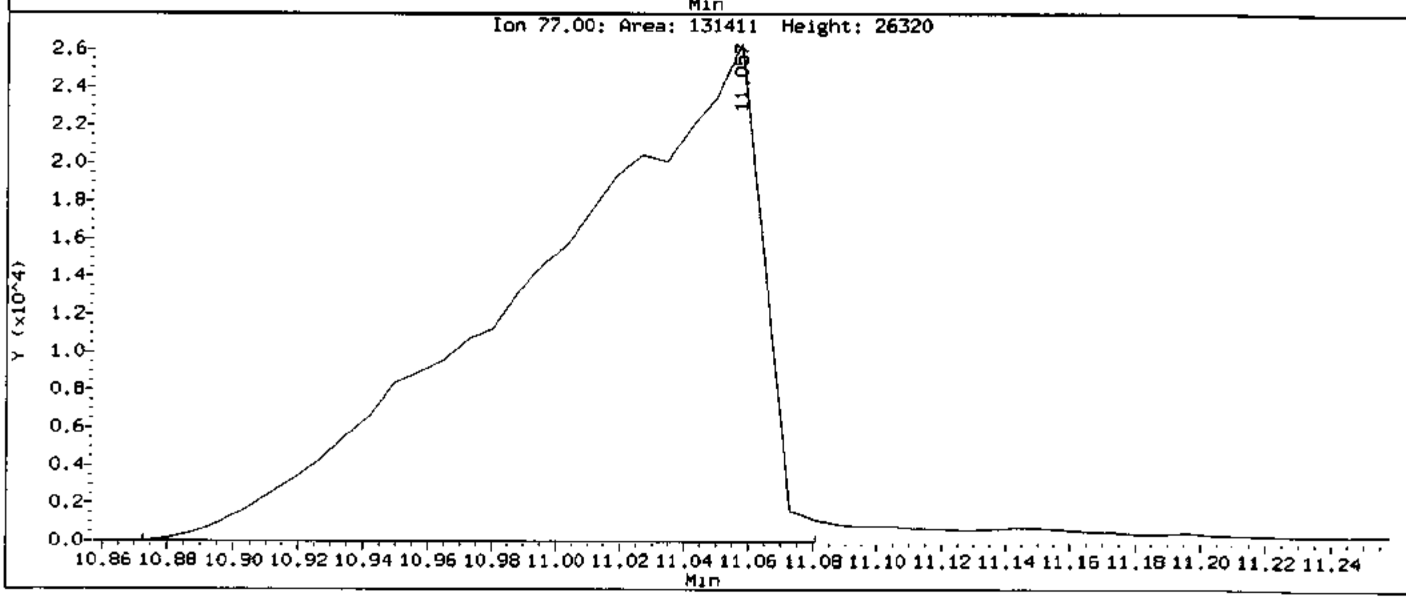
Data File: /chem1/nt10.i/20130215.b/cc0215.d
Injection Date: 15-FEB-2013 11:20
Instrument: nt10.i
Client Sample ID:

SD
2-15-13

Compound: Benzoic acid
CAS Number: 65-85-0

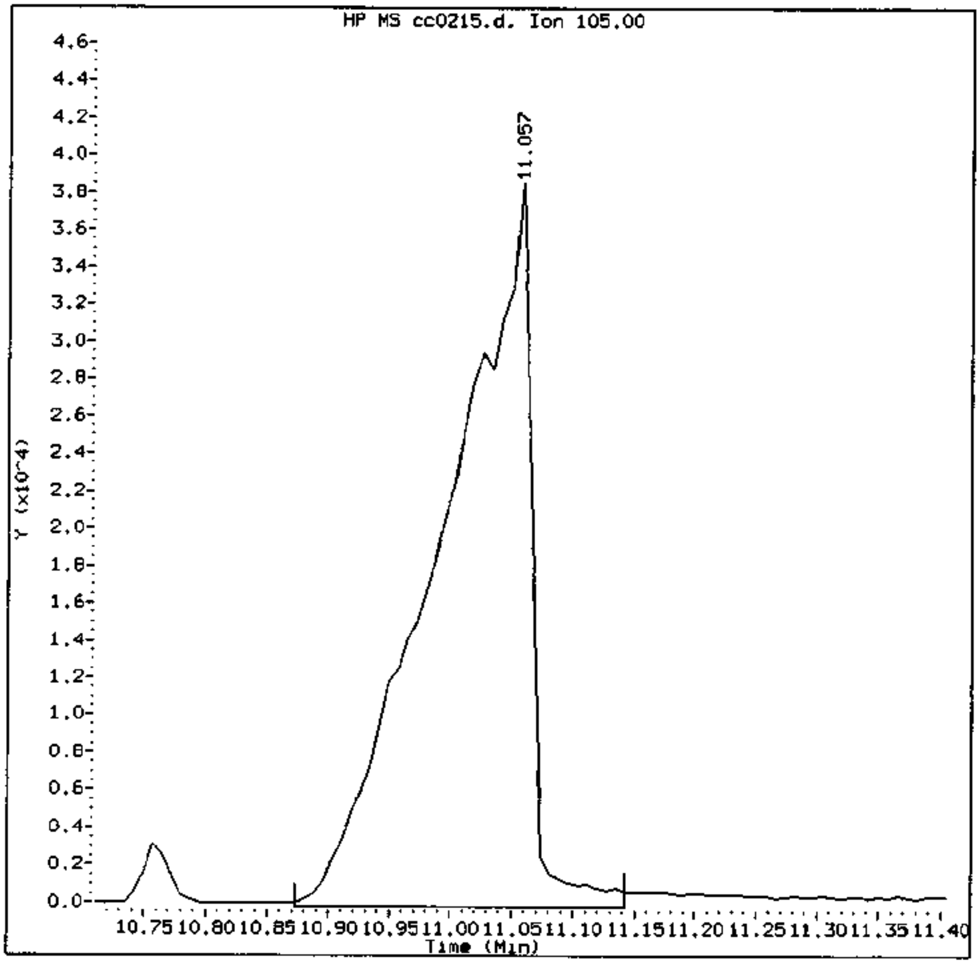






CC0215, /chem1/nt10.i/20130215.b/cc0215.d

Benzoic acid   Amount: 16.48   Area: 203346



MANUAL INTEGRATION for Benzoic acid

1) Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other ____________________

Analyst: VD   Date: 2·15·13

WC02:00059

Data File: /chem1/nt10.i/20130215.b/cc0215.d

Date : 15-FEB-2013 11:20

Client ID:

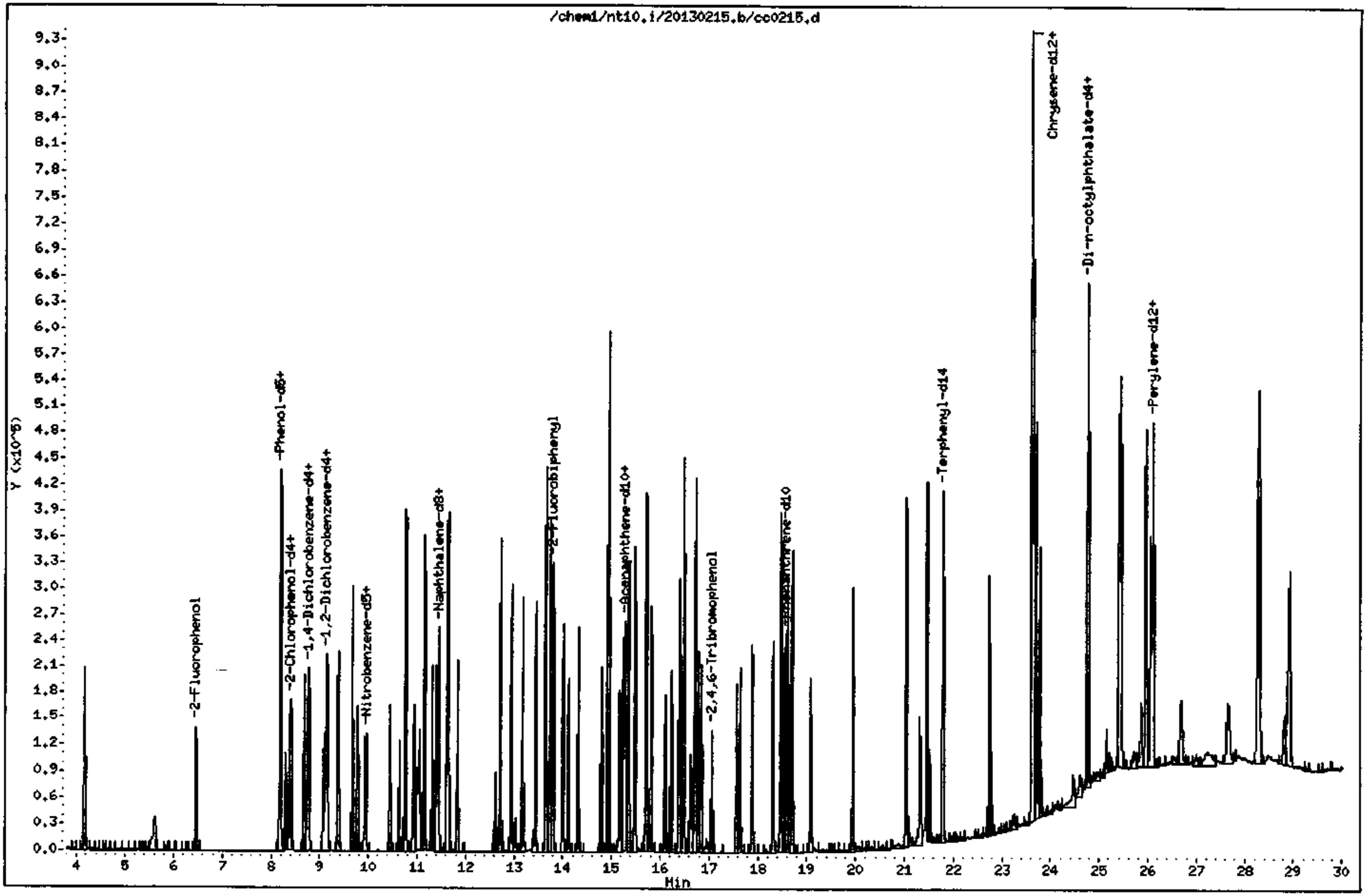
Sample Info: CC0215

Instrument: nt10.i

Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25



CO-ELUTION SUMMARY FOR FILE - cc0215.d

Lab ID: CC0215, Method: ABN.m, Instrument: nt10.i, Date: 15-FEB-2013

RT	CO-ELUTION COMPOUNDS
14.941	Acenaphthylene and 2,6-Dinitrotoluene
25.414	Benzo(k)fluoranthene and Benzo(b)fluoranthene

Q-FLAG SUMMARY FOR DATABATCH - /chem1/nt10.i/20130215.b

Instrument: nt10.i Date: 15-FEB-2013 Method: ABN.m

INITIAL CAL: 25-JAN-2013

Compound	%RSD or R^2
NO Q-FLAGS	

CONTINUING CAL: 15-FEB-2013

Compound	%D
NO Q-FLAGS	

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt10.i/20130215.b/cc0215b.d
Lab Smp Id: RETENE 5
Inj Date : 15-FEB-2013 13:10
Operator : VTS/YZ Inst ID: nt10.i
Smp Info : RETENE 5
Misc Info :
Comment : 1ul Injection
Method : /chem1/nt10.i/20130215.b/ABN.m
Meth Date : 15-Feb-2013 14:06 van Quant Type: ISTD
Cal Date : 25-JAN-2013 17:16 Cal File: ic0125h.d
Als bottle: 24 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Retene.sub
Target Version: 3.50
Processing Host: cserv3

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
* 8 1,4-Dichlorobenzene-d4	152	8.755	8.755	(1.000)	44479	4.00000	
* 27 Naphthalene-d8	136	11.397	11.397	(1.000)	166206	4.00000	
* 42 Acenaphthene-d10	164	15.281	15.281	(1.000)	97371	4.00000	
* 59 Phenanthrene-d10	188	18.557	18.557	(1.000)	164046	4.00000	
* 69 Chrysene-d12	240	23.665	23.665	(1.000)	199049	4.00000	
* 134 Di-n-octylphthalate-d4	153	24.772	24.772	(1.000)	258786	4.00000	
* 77 Perylene-d12	264	26.065	26.065	(1.000)	200764	4.00000	
98 Retene	219	22.077	22.077	(0.933)	138067	5.00000	4.738

VT
2.15.13

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: cc0215b.d
Lab Smp Id: RETENE 5
Analysis Type: SV
Quant Type: ISTD
Operator: VTS/YZ
Method File: /chem1/nt10.i/20130215.b/ABN.m
Misc Info:

Calibration Date: 15-FEB-2013
Calibration Time: 11:20

Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	46623	23312	93246	44479	-4.60
27 Naphthalene-d8	176978	88489	353956	166206	-6.09
42 Acenaphthene-d10	110872	55436	221744	97371	-12.18
59 Phenanthrene-d10	188290	94145	376580	164046	-12.88
69 Chrysene-d12	213681	106840	427362	199049	-6.85
134 Di-n-octylphthala	264159	132080	528318	258786	-2.03
77 Perylene-d12	208584	104292	417168	200764	-3.75

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.76	8.26	9.26	8.76	0.00
27 Naphthalene-d8	11.40	10.90	11.90	11.40	0.00
42 Acenaphthene-d10	15.28	14.78	15.78	15.28	0.00
59 Phenanthrene-d10	18.56	18.06	19.06	18.56	0.00
69 Chrysene-d12	23.66	23.16	24.16	23.66	0.00
134 Di-n-octylphthala	24.77	24.27	25.27	24.77	0.00
77 Perylene-d12	26.06	25.56	26.56	26.06	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt10.i Injection Date: 15-FEB-2013 13:10
Lab File ID: cc0215b.d Init. Cal. Date(s): 25-JAN-2013 25-JAN-2013
Analysis Type: Init. Cal. Times: 12:59 17:16
Lab Sample ID: RETENE 5 Quant Type: ISTD
Method: /chem1/nt10.i/20130215.b/ABN.m

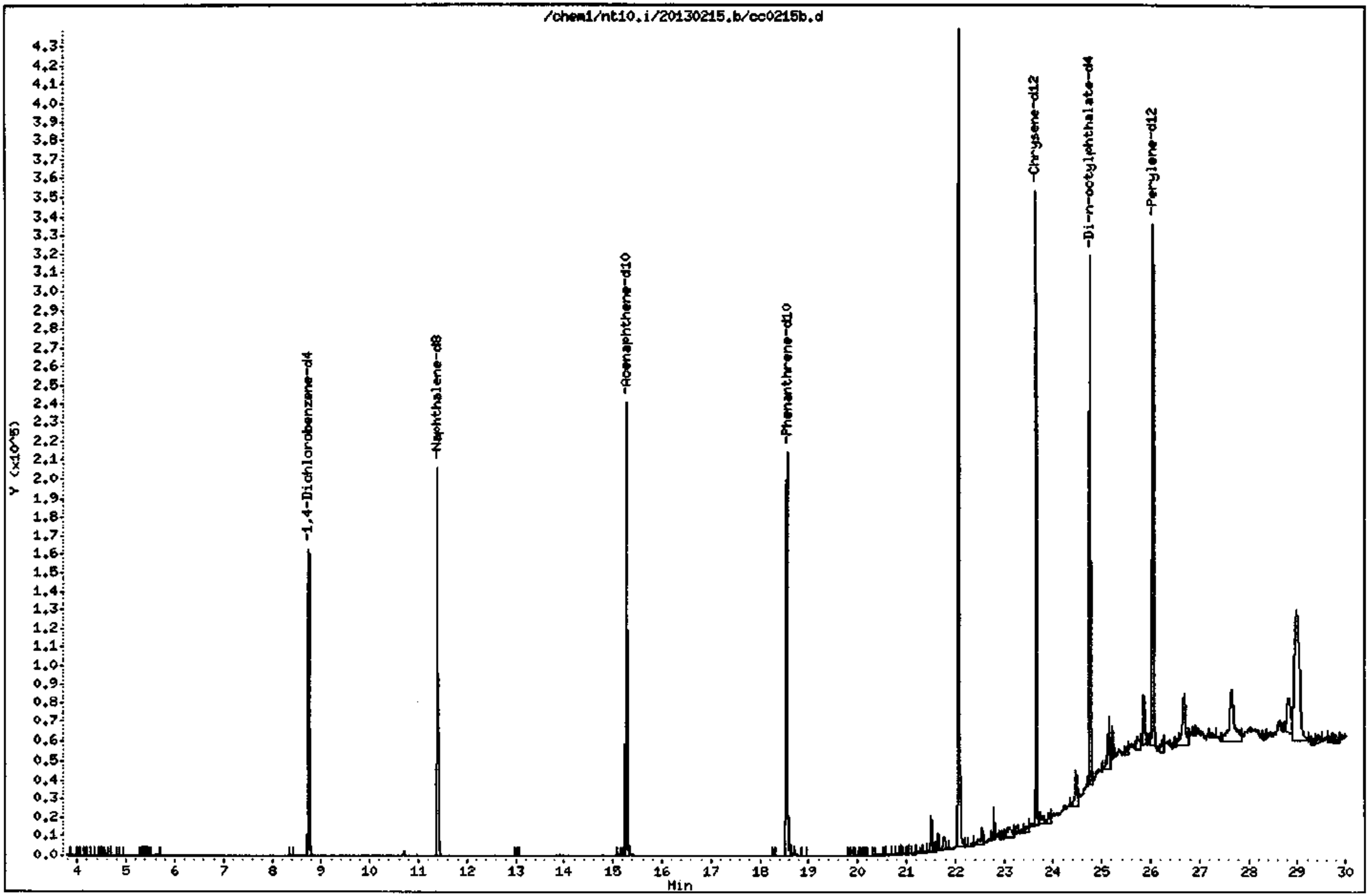
COMPOUND	RRF / AMOUNT	RF5	CCAL RRF5	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
98 Retene	4.73798	5.00000	0.55491	0.010	-5.24035	20.00000	Quadratic

Data File: /chem1/nt10.i/20130215.b/cc0215b.d
Date : 15-FEB-2013 13:10
Client ID:
Sample Info: RETENE 5

Column phase: ZB-5msi

Instrument: nt10.i

Operator: VTS/YZ
Column diameter: 0.25



CO-ELUTION SUMMARY FOR FILE - cc0215b.d

Lab ID: RETENE 5, Method: ABN.m, Instrument: nt10.i, Date: 15-FEB-2013

RT	CO-ELUTION COMPOUNDS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D YZ 2/18/13

Data file : /chem1/nt10.i/20130215.b/wc32mb.d
Lab Smp Id: WC32MBS1 Client Smp ID: WC32MBS1
Inj Date : 15-FEB-2013 16:50
Operator : VTS/YZ Inst ID: nt10.i
Smp Info : WC32MBS1
Misc Info : 13-2430
Comment : 1ul Injection
Method : /chem1/nt10.i/20130215.b/ABN.m
Meth Date : 15-Feb-2013 14:06 van Quant Type: ISTD
Cal Date : 25-JAN-2013 17:16 Cal File: ic0125h.d
Als bottle: 9 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDAICAL.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Ws	10.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
$	1 2-Fluorophenol	112	6.482	6.459	(0.740)	49308	4.74098	474.1
$	2 Phenol-d5	99	8.198	8.183	(0.936)	58329	4.51958	452.0
	3 Phenol	94	Compound Not Detected.					
$	5 2-Chlorophenol-d4	132	8.399	8.391	(0.959)	64044	5.73109	573.1
	4 Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
	6 2-Chlorophenol	128	Compound Not Detected.					
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	8.755	8.747	(1.000)	32527	4.00000	
	9 1,4-Dichlorobenzene	146	Compound Not Detected.					
$	10 1,2-Dichlorobenzene-d4	152	9.135	9.128	(1.043)	33560	4.08660	408.7
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	108	Compound Not Detected.					
	14 2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.					
	13 2-Methylphenol	108	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
17 Hexachloroethane	117	Compound Not Detected.					
16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
15 4-Methylphenol	108	Compound Not Detected.					
$ 18 Nitrobenzene-d5	82	9.927	9.919	(0.870)	44011	4.00198	400.2
19 Nitrobenzene	77	Compound Not Detected.					
20 Isophorone	82	Compound Not Detected.					
21 2-Nitrophenol	139	Compound Not Detected.					
22 2,4-Dimethylphenol	107	Compound Not Detected.					
23 Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
24 Benzoic acid	105	Compound Not Detected.					
25 2,4-Dichlorophenol	162	Compound Not Detected.					
26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
* 27 Naphthalene-d8	136	11.405	11.397	(1.000)	119152	4.00000	
28 Naphthalene	128	Compound Not Detected.					
29 4-Chloroaniline	127	Compound Not Detected.					
30 Hexachlorobutadiene	225	Compound Not Detected.					
31 4-Chloro-3-methylphenol	107	Compound Not Detected.					
32 2-Methylnaphthalene	142	Compound Not Detected.					
33 Hexachlorocyclopentadiene	237	Compound Not Detected.					
34 2,4,6-Trichlorophenol	196	Compound Not Detected.					
35 2,4,5-Trichlorophenol	196	Compound Not Detected.					
$ 36 2-Fluorobiphenyl	172	13.818	13.803	(0.903)	106501	4.11202	411.2
37 2-Chloronaphthalene	162	Compound Not Detected.					
38 2-Nitroaniline	65	Compound Not Detected.					
39 Dimethylphthalate	163	Compound Not Detected.					
40 Acenaphthylene	152	Compound Not Detected.					
41 2,6-Dinitrotoluene	165	Compound Not Detected.					
* 42 Acenaphthene-d10	164	15.296	15.281	(1.000)	75496	4.00000	
43 3-Nitroaniline	138	Compound Not Detected.					
44 Acenaphthene	153	Compound Not Detected.					
45 2,4-Dinitrophenol	184	Compound Not Detected.					
46 Dibenzofuran	168	Compound Not Detected.					
47 4-Nitrophenol	109	Compound Not Detected.					
48 2,4-Dinitrotoluene	165	Compound Not Detected.					
50 Diethylphthalate	149	Compound Not Detected.					
49 Fluorene	166	Compound Not Detected.					
51 4-Chlorophenyl-phenylether	204	Compound Not Detected.					
52 4-Nitroaniline	138	Compound Not Detected.					
53 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
54 N-Nitrosodiphenylamine	169	Compound Not Detected.					
$ 55 2,4,6-Tribromophenol	330	17.088	17.065	(1.117)	29438	6.11025	611.0
56 4-Bromophenyl-phenylether	248	Compound Not Detected.					
57 Hexachlorobenzene	284	Compound Not Detected.					
58 Pentachlorophenol	266	Compound Not Detected.					
* 59 Phenanthrene-d10	188	18.580	18.557	(1.000)	124668	4.00000	
60 Phenanthrene	178	Compound Not Detected.					
61 Anthracene	178	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
62 Carbazole	167	Compound Not Detected.					
63 Di-n-butylphthalate	149	Compound Not Detected.					
64 Fluoranthene	202	Compound Not Detected.					
65 Pyrene	202	Compound Not Detected.					
$ 66 Terphenyl-d14	244	21.814	21.791	(0.921)	154898	5.14671	514.7
67 Butylbenzylphthalate	149	Compound Not Detected.					
68 Benzo(a)anthracene	228	Compound Not Detected.					
* 69 Chrysene-d12	240	23.696	23.665	(1.000)	156695	4.00000	
70 3,3'-Dichlorobenzidine	252	Compound Not Detected.					
71 Chrysene	228	Compound Not Detected.					
72 bis(2-Ethylhexyl)phthalate	149	23.812	23.789	(0.960)	12059	0.44614	44.61
* 134 Di-n-octylphthalate-d4	153	24.795	24.772	(1.000)	204697	4.00000	
73 Di-n-octylphthalate	149	Compound Not Detected.					
74 Benzo(b)fluoranthene	252	Compound Not Detected.					
75 Benzo(k)fluoranthene	252	Compound Not Detected.					
76 Benzo(a)pyrene	252	Compound Not Detected.					
* 77 Perylene-d12	264	26.111	26.065	(1.000)	136696	4.00000	
78 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
79 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
80 Benzo(g,h,i)perylene	276	Compound Not Detected.					
90 N-Nitrosodimethylamine	74	Compound Not Detected.					
91 Aniline	93	Compound Not Detected.					
93 Benzidine	184	Compound Not Detected.					
103 Pyridine	79	Compound Not Detected.					
105 1-methylnaphthalene	142	Compound Not Detected.					
111 Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					
187 Total Benzofluoranthenes	252	Compound Not Detected.					
99 Perylene	252	Compound Not Detected.					
98 Retene	219	Compound Not Detected.					
120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

Report Date: 18-Feb-2013 11:08

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: wc32mb.d
Lab Smp Id: WC32MBS1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS/YZ
Method File: /chem1/nt10.i/20130215.b/ABN.m
Misc Info: 13-2430

Calibration Date: 15-FEB-2013
Calibration Time: 11:20
Client Smp ID: WC32MBS1
Level: LOW
Sample Type: Solid

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	46623	23312	93246	32527	-30.23
27 Naphthalene-d8	176978	88489	353956	119152	-32.67
42 Acenaphthene-d10	110872	55436	221744	75496	-31.91
59 Phenanthrene-d10	188290	94145	376580	124668	-33.79
69 Chrysene-d12	213681	106840	427362	156695	-26.67
134 Di-n-octylphthala	264159	132080	528318	204697	-22.51
77 Perylene-d12	208584	104292	417168	136696	-34.46

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.75	8.25	9.25	8.76	0.09
27 Naphthalene-d8	11.40	10.90	11.90	11.40	0.07
42 Acenaphthene-d10	15.28	14.78	15.78	15.30	0.10
59 Phenanthrene-d10	18.56	18.06	19.06	18.58	0.13
69 Chrysene-d12	23.66	23.16	24.16	23.70	0.13
134 Di-n-octylphthala	24.77	24.27	25.27	24.79	0.09
77 Perylene-d12	26.06	25.56	26.56	26.11	0.18

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd-Snider
Client SDG: WC32
Sample Matrix: SOLID
Fraction: SV
Lab Smp Id: WC32MBS1
Client Smp ID: WC32MBS1
Level: LOW
Operator: VTS/YZ
Data Type: MS DATA
SampleType: BLANK
SpikeList File: SHORTPSDDA.spk
Quant Type: ISTD
Sublist File: PSDDAICAL.sub
Method File: /chem1/nt10.i/20130215.b/ABN.m
Misc Info: 13-2430

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 1 2-Fluorophenol	750.0	474.1	63.21	30-160
$ 2 Phenol-d5	750.0	452.0	60.26	30-160
$ 5 2-Chlorophenol-d4	750.0	573.1	76.41	30-160
$ 10 1,2-Dichlorobenzen	500.0	408.7	81.73	30-160
$ 18 Nitrobenzene-d5	500.0	400.2	80.04	30-160
$ 36 2-Fluorobiphenyl	500.0	411.2	82.24	30-160
$ 55 2,4,6-Tribromophen	750.0	611.0	81.47	30-160
$ 66 Terphenyl-d14	500.0	514.7	102.93	30-160

Data File: /chem1/nt10.i/20130215.b/wc32mb.d

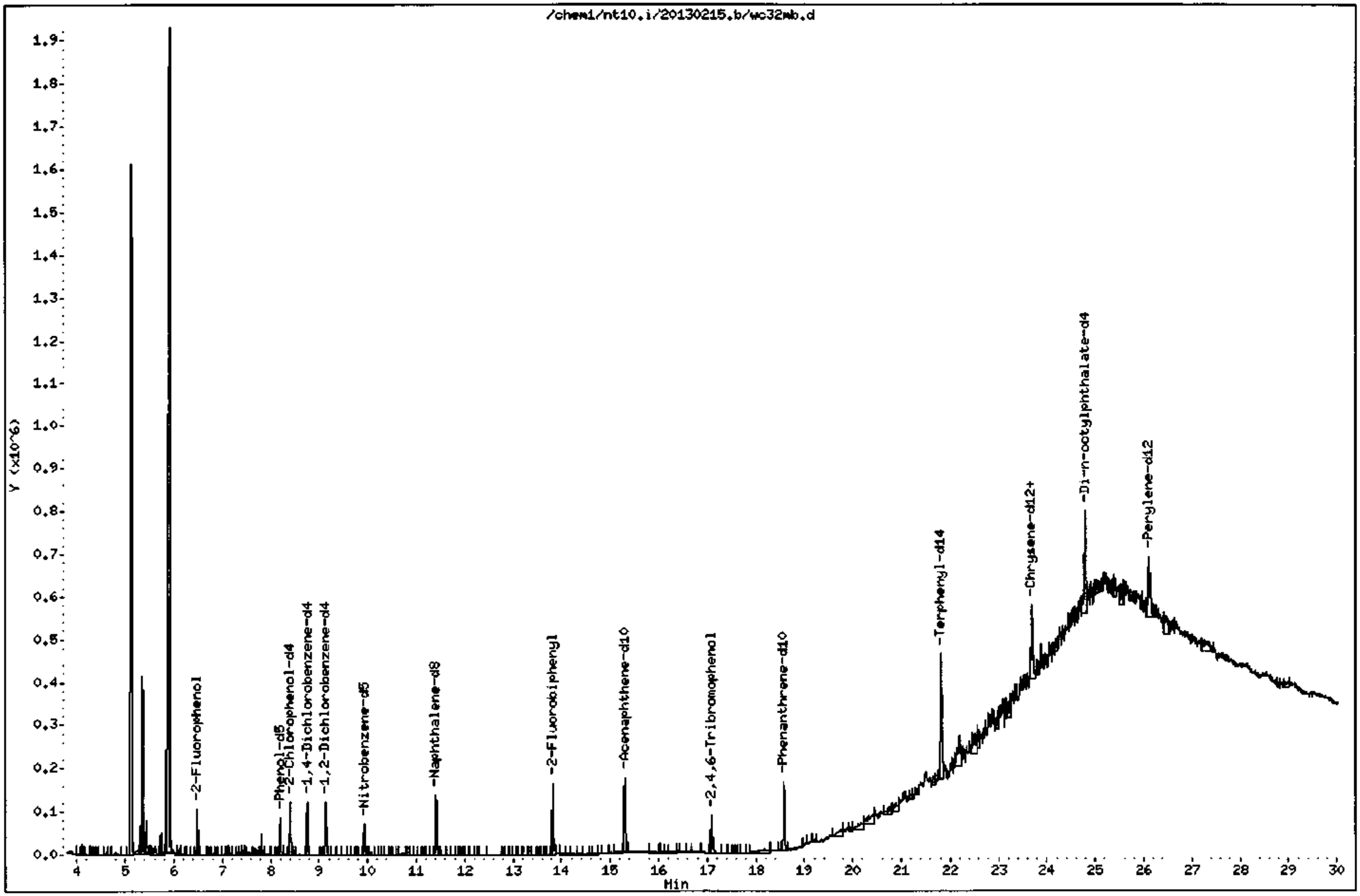
Date : 15-FEB-2013 16:50

Client ID: WC32MBS1 | Instrument: nt10.i

Sample Info: WC32MBS1

Volume Injected (uL): 1.0 | Operator: VTS/YZ

Column phase: ZB-5msi | Column diameter: 0.25



Data File: /chem1/nt10.i/20130215.b/wc32mb.d

Date : 15-FEB-2013 16:50

Client ID: WC32MBS1

Instrument: nt10.i

Sample Info: WC32MBS1

Volume Injected (uL): 1.0

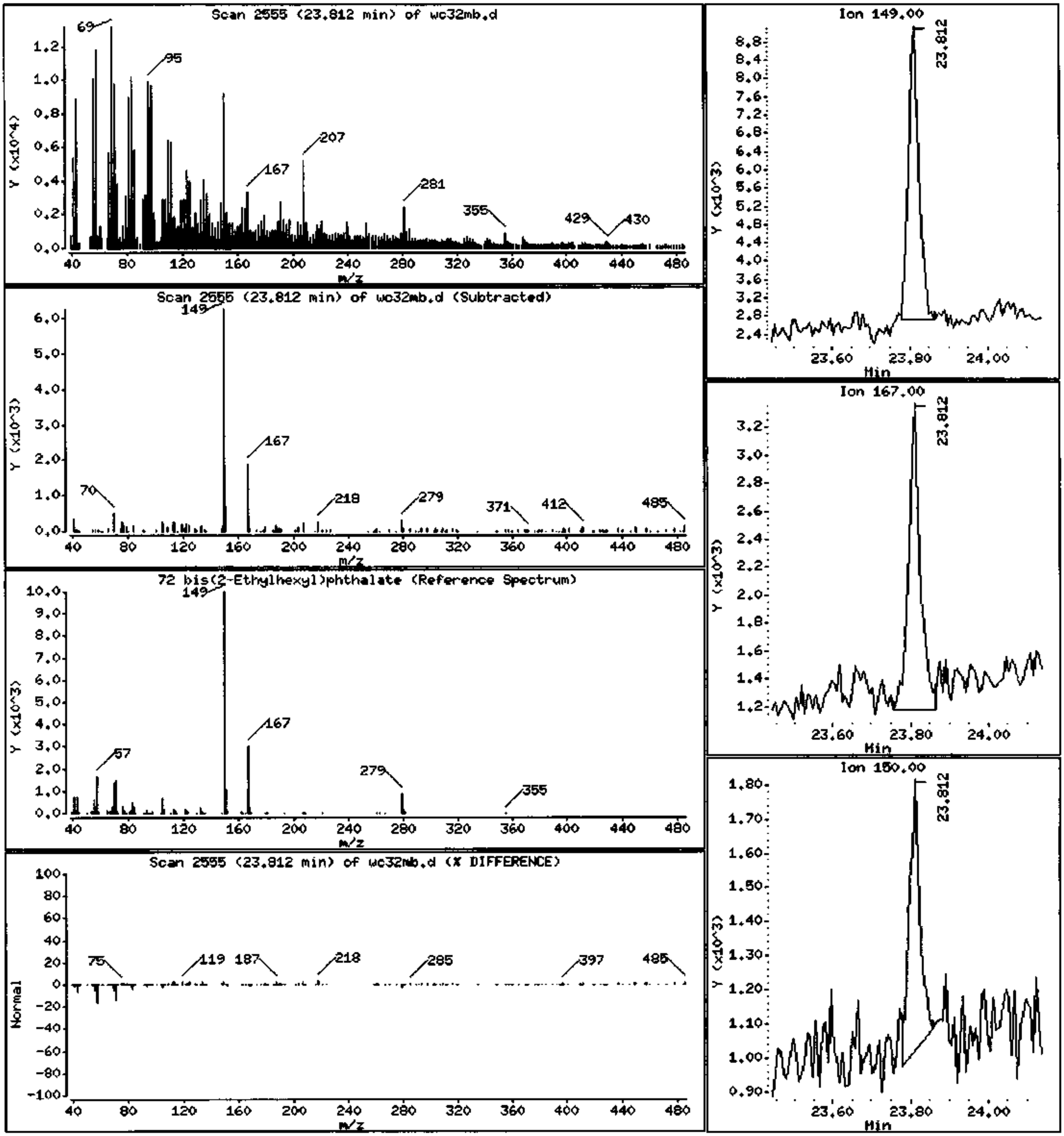
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

72 bis(2-Ethylhexyl)phthalate

Concentration: 44.61 ug/kg



CO-ELUTION SUMMARY FOR FILE - wc32mb.d

Lab ID: WC32MBS1, Method: ABN.m, Instrument: nt10.i, Date: 15-FEB-2013

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Analytical Resources, Inc.

YZ 02/18/13

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt10.i/20130215.b/wc32sb.d
Lab Smp Id: WC32LCSS1 Client Smp ID: WC32LCSS1
Inj Date : 15-FEB-2013 17:26
Operator : VTS/YZ Inst ID: nt10.i
Smp Info : WC32LCSS1
Misc Info : 13-2430
Comment : 1ul Injection
Method : /chem1/nt10.i/20130215.b/ABN.m
Meth Date : 18-Feb-2013 12:09 yev Quant Type: ISTD
Cal Date : 25-JAN-2013 17:16 Cal File: ic0125h.d
Als bottle: 10 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDAICAL.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Ws	10.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
$	1 2-Fluorophenol	112	6.482	6.459	(0.740)	51285	5.67461	567.5
$	2 Phenol-d5	99	8.198	8.183	(0.936)	64506	5.75186	575.2
	3 Phenol	94	8.221	8.206	(0.939)	44808	3.79603	379.6
$	5 2-Chlorophenol-d4	132	8.399	8.391	(0.959)	59233	6.09982	610.0
	4 Bis(2-Chloroethyl)ether	93	8.298	8.298	(0.948)	36065	4.01568	401.6
	6 2-Chlorophenol	128	8.430	8.414	(0.963)	42524	4.13983	414.0
	7 1,3-Dichlorobenzene	146	8.685	8.678	(0.992)	41329	3.69756	369.8
*	8 1,4-Dichlorobenzene-d4	152	8.755	8.747	(1.000)	28265	4.00000	
	9 1,4-Dichlorobenzene	146	8.786	8.778	(1.004)	42474	3.83766	383.8
$	10 1,2-Dichlorobenzene-d4	152	9.135	9.128	(1.043)	31936	4.47523	447.5
	12 1,2-Dichlorobenzene	146	9.159	9.151	(1.046)	40911	3.84429	384.4
	11 Benzyl alcohol	108	9.089	9.081	(1.038)	22140	3.91939	391.9
	14 2,2'-oxybis(1-Chloropropane)	121	9.392	9.384	(1.073)	12285	3.88793	388.8
	13 2-Methylphenol	108	9.384	9.368	(1.072)	30934	3.47168	347.2
	17 Hexachloroethane	117	9.780	9.772	(1.117)	12678	2.89815	289.8

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
	=========================	====	==	======	======	========	=======	=======
	16 N-Nitroso-di-n-propylamine	70	9.671	9.663	(1.105)	23140	3.88700	388.7
	15 4-Methylphenol	108	9.687	9.663	(1.106)	65450	7.06311	706.3
$	18 Nitrobenzene-d5	82	9.927	9.919	(0.870)	43052	4.49555	449.6
	19 Nitrobenzene	77	9.966	9.958	(0.874)	34869	3.84025	384.0
	20 Isophorone	82	10.455	10.447	(0.917)	65843	4.16035	416.0
	21 2-Nitrophenol	139	10.641	10.633	(0.933)	25697	4.81652	481.7
	22 2,4-Dimethylphenol	107	10.772	10.757	(0.945)	83166	9.14515	914.5
	23 Bis(2-Chloroethoxy)methane	93	10.942	10.934	(0.959)	42157	4.22952	423.0
	24 Benzoic acid	105	11.058	11.057	(0.970)	126427	16.3067	1631
	25 2,4-Dichlorophenol	162	11.165	11.150	(0.979)	103377	13.0068	1301
	26 1,2,4-Trichlorobenzene	180	11.320	11.312	(0.993)	36532	4.03884	403.9
*	27 Naphthalene-d8	136	11.405	11.397	(1.000)	103759	4.00000	
	28 Naphthalene	128	11.443	11.435	(1.003)	105229	3.89752	389.8
	29 4-Chloroaniline	127	11.628	11.621	(1.020)	35780	3.29289	329.3
	30 Hexachlorobutadiene	225	11.845	11.837	(1.039)	23775	4.21756	421.8
	31 4-Chloro-3-methylphenol	107	12.743	12.719	(1.117)	102447	13.3361	1334
	32 2-Methylnaphthalene	142	12.951	12.944	(1.136)	76164	4.27268	427.3
	33 Hexachlorocyclopentadiene	237	13.447	13.447	(0.879)	9808	1.26996	127.0
	34 2,4,6-Trichlorophenol	196	13.664	13.648	(0.893)	83649	12.1896	1219
	35 2,4,5-Trichlorophenol	196	13.764	13.741	(0.900)	86326	11.8378	1184
$	36 2-Fluorobiphenyl	172	13.811	13.803	(0.903)	109788	4.67336	467.3
	37 2-Chloronaphthalene	162	14.019	14.004	(0.917)	78848	4.16846	416.8
	38 2-Nitroaniline	65	14.337	14.321	(0.937)	56108	12.6475	1265
	39 Dimethylphthalate	163	14.817	14.801	(0.969)	101798	4.91507	491.5
	40 Acenaphthylene	152	14.956	14.941	(0.978)	122864	3.98302	398.3
	41 2,6-Dinitrotoluene	165	14.956	14.941	(0.978)	66284	14.0087	1401
*	42 Acenaphthene-d10	164	15.296	15.281	(1.000)	68478	4.00000	
	43 3-Nitroaniline	138	15.265	15.250	(0.998)	30231	6.91871	691.9
	44 Acenaphthene	153	15.366	15.350	(1.005)	77833	4.11499	411.5
	45 2,4-Dinitrophenol	184	15.497	15.482	(1.013)	57052	13.8748	1387
	46 Dibenzofuran	168	15.721	15.706	(1.028)	112831	4.28925	428.9
	47 4-Nitrophenol	109	15.752	15.714	(1.030)	34817	11.6737	1167(M)
	48 2,4-Dinitrotoluene	165	15.837	15.814	(1.035)	91448	14.2936	1429
	50 Diethylphthalate	149	16.394	16.386	(1.072)	104143	4.80011	480.0
	49 Fluorene	166	16.495	16.479	(1.078)	111033	4.96932	496.9
	51 4-Chlorophenyl-phenylether	204	16.502	16.487	(1.079)	56357	5.41230	541.2
	52 4-Nitroaniline	138	16.641	16.626	(1.088)	54006	11.7081	1171
	53 4,6-Dinitro-2-methylphenol	198	16.741	16.726	(0.901)	88633	19.5465	1955
	54 N-Nitrosodiphenylamine	169	16.795	16.780	(0.904)	57661	4.22748	422.7
$	55 2,4,6-Tribromophenol	330	17.081	17.065	(1.117)	29671	6.78978	679.0
	56 4-Bromophenyl-phenylether	248	17.590	17.567	(0.947)	31395	4.97053	497.1
	57 Hexachlorobenzene	284	17.907	17.883	(0.964)	37222	4.69580	469.6
	58 Pentachlorophenol	266	18.332	18.309	(0.987)	34225	6.47484	647.5
*	59 Phenanthrene-d10	188	18.572	18.557	(1.000)	113232	4.00000	
	60 Phenanthrene	178	18.626	18.603	(1.003)	138774	4.59740	459.7
	61 Anthracene	178	18.719	18.704	(1.008)	134162	4.41426	441.4
	62 Carbazole	167	19.106	19.083	(1.029)	127701	6.29076	629.1

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
	63 Di-n-butylphthalate	149	19.965	19.942	(1.075)	186836	5.76071	576.1
	64 Fluoranthene	202	21.071	21.040	(1.135)	179050	5.15074	515.1
	65 Pyrene	202	21.489	21.466	(0.907)	176969	4.48416	448.4
$	66 Terphenyl-d14	244	21.814	21.791	(0.921)	140454	5.27793	527.8
	67 Butylbenzylphthalate	149	22.759	22.735	(0.960)	86358	5.76938	576.9
	68 Benzo(a)anthracene	228	23.665	23.634	(0.999)	164518	4.25550	425.6
*	69 Chrysene-d12	240	23.696	23.665	(1.000)	138551	4.00000	
	70 3,3'-Dichlorobenzidine	252	23.649	23.618	(0.998)	22025	1.36357	136.4
	71 Chrysene	228	23.734	23.711	(1.002)	174970	4.99686	499.7
	72 bis(2-Ethylhexyl)phthalate	149	23.812	23.789	(0.960)	127728	5.16892	516.9
*	134 Di-n-octylphthalate-d4	153	24.795	24.772	(1.000)	187135	4.00000	
	73 Di-n-octylphthalate	149	24.803	24.779	(1.000)	223287	4.89147	489.1
	74 Benzo(b)fluoranthene	252	25.453	25.414	(0.975)	102932	2.75019	275.0
	75 Benzo(k)fluoranthene	252	25.484	25.414	(0.976)	271836	6.72299	672.3(H)
	76 Benzo(a)pyrene	252	26.003	25.964	(0.996)	127763	3.94718	394.7
*	77 Perylene-d12	264	26.104	26.065	(1.000)	129131	4.00000	
	78 Indeno(1,2,3-cd)pyrene	276	28.360	28.282	(1.086)	89454	2.24103	224.1
	79 Dibenzo(a,h)anthracene	278	28.368	28.290	(1.087)	72133	2.28205	228.2
	80 Benzo(g,h,i)perylene	276	29.005	28.927	(1.111)	49278	1.43889	143.9(R)
	90 N-Nitrosodimethylamine	74	4.181	4.158	(0.478)	51779	9.62921	962.9
	91 Aniline	93	8.198	8.190	(0.936)	30203	1.18574	118.6
	93 Benzidine	184	Compound Not Detected.					
	103 Pyridine	79	4.205	4.166	(0.480)	24020	5.23692	523.7
	105 1-methylnaphthalene	142	13.191	13.176	(1.157)	73854	4.51673	451.7
	111 Azobenzene (1,2-DP-Hydrazine)	77	16.857	16.842	(1.102)	81143	4.12323	412.3
	187 Total Benzofluoranthenes	252	25.484	25.453	(0.976)	361124	9.80209	980.2(M)
	99 Perylene	252	26.150	26.111	(1.002)	76207	2.04862	204.9
	98 Retene	219	Compound Not Detected.					
	120 2,3,4,6-Tetrachlorophenol	232	16.123	16.108	(1.054)	24055	3.77146	377.1

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: wc32sb.d
Lab Smp Id: WC32LCSS1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS/YZ
Method File: /chem1/nt10.i/20130215.b/ABN.m
Misc Info: 13-2430

Calibration Date: 15-FEB-2013
Calibration Time: 11:20
Client Smp ID: WC32LCSS1
Level: LOW
Sample Type: Solid

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	46623	23312	93246	28265	-39.38
27 Naphthalene-d8	176978	88489	353956	103759	-41.37
42 Acenaphthene-d10	110872	55436	221744	68478	-38.24
59 Phenanthrene-d10	188290	94145	376580	113232	-39.86
69 Chrysene-d12	213681	106840	427362	138551	-35.16
134 Di-n-octylphthala	264159	132080	528318	187135	-29.16
77 Perylene-d12	208584	104292	417168	129131	-38.09

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.75	8.25	9.25	8.76	0.09
27 Naphthalene-d8	11.40	10.90	11.90	11.40	0.07
42 Acenaphthene-d10	15.28	14.78	15.78	15.30	0.10
59 Phenanthrene-d10	18.56	18.06	19.06	18.57	0.08
69 Chrysene-d12	23.66	23.16	24.16	23.70	0.13
134 Di-n-octylphthala	24.77	24.27	25.27	24.80	0.09
77 Perylene-d12	26.06	25.56	26.56	26.10	0.15

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd-Snider
Sample Matrix: SOLID
Lab Smp Id: WC32LCSS1
Level: LOW
Data Type: MS DATA
SpikeList File: SHORTPSDDA.spk
Sublist File: PSDDAICAL.sub
Method File: /chem1/nt10.i/20130215.b/ABN.m
Misc Info: 13-2430

Client SDG: WC32
Fraction: SV
Client Smp ID: WC32LCSS1
Operator: VTS/YZ
SampleType: LCS
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
3 Phenol	500.0	379.6	75.92	30-160
7 1,3-Dichlorobenzen	500.0	369.8	73.95	30-160
9 1,4-Dichlorobenzen	500.0	383.8	76.75	30-160
11 Benzyl alcohol	500.0	391.9	78.39	30-160
12 1,2-Dichlorobenzen	500.0	384.4	76.89	30-160
13 2-Methylphenol	500.0	347.2	69.43	30-160
15 4-Methylphenol	1000	706.3	70.63	30-160
17 Hexachloroethane	500.0	289.8	57.96	30-160
22 2,4-Dimethylphenol	1500	914.5	60.97	30-160
24 Benzoic acid	2750	1631	59.30	30-160
26 1,2,4-Trichloroben	500.0	403.9	80.78	30-160
28 Naphthalene	500.0	389.8	77.95	30-160
30 Hexachlorobutadien	500.0	421.8	84.35	30-160
32 2-Methylnaphthalen	500.0	427.3	85.45	30-160
39 Dimethylphthalate	500.0	491.5	98.30	30-160
40 Acenaphthylene	500.0	398.3	79.66	30-160
44 Acenaphthene	500.0	411.5	82.30	30-160
46 Dibenzofuran	500.0	428.9	85.78	30-160
49 Fluorene	500.0	496.9	99.39	30-160
50 Diethylphthalate	500.0	480.0	96.00	30-160
54 N-Nitrosodiphenyla	500.0	422.7	84.55	30-160
57 Hexachlorobenzene	500.0	469.6	93.92	30-160
58 Pentachlorophenol	1500	647.5	43.17	30-160
60 Phenanthrene	500.0	459.7	91.95	30-160
61 Anthracene	500.0	441.4	88.29	30-160
63 Di-n-butylphthalat	500.0	576.1	115.21	30-160
64 Fluoranthene	500.0	515.1	103.01	30-160
65 Pyrene	500.0	448.4	89.68	30-160
67 Butylbenzylphthala	500.0	576.9	115.39	30-160
68 Benzo(a)anthracene	500.0	425.6	85.11	30-160
71 Chrysene	500.0	499.7	99.94	30-160
72 bis(2-Ethylhexyl)p	500.0	516.9	103.38	30-160
73 Di-n-octylphthalat	500.0	489.1	97.83	30-160

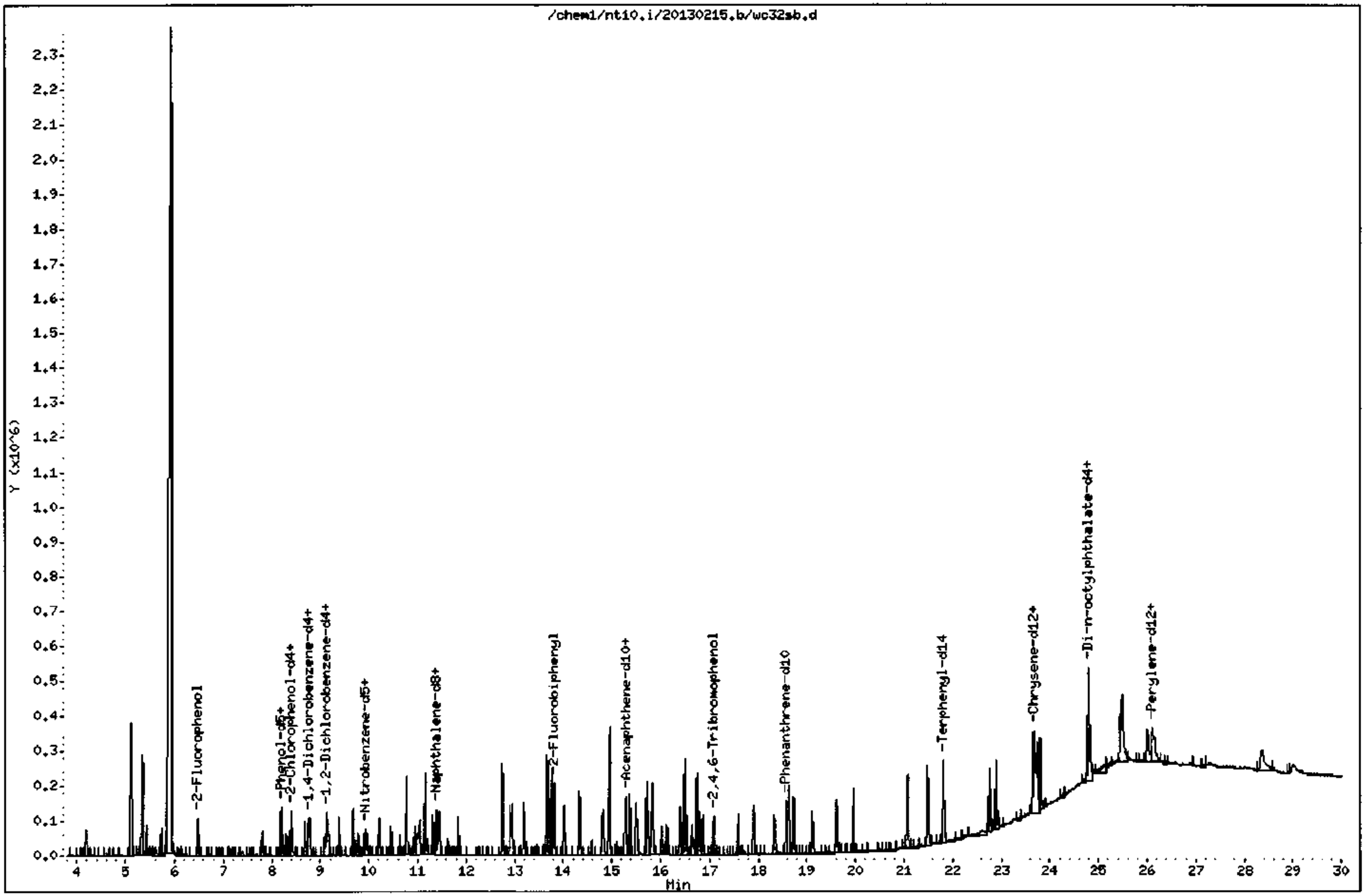
SPIKE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
76 Benzo(a)pyrene	500.0	394.7	78.94	30-160
78 Indeno(1,2,3-cd)py	500.0	224.1	44.82	30-160
79 Dibenzo(a,h)anthra	500.0	228.2	45.64	30-160
80 Benzo(g,h,i)peryle	500.0	143.9	28.78*	30-160
105 1-methylnaphthalen	500.0	451.7	90.33	30-160
187 Total Benzofluoran	1000	980.2	98.02	30-160

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 1 2-Fluorophenol	750.0	567.5	75.66	30-160
$ 2 Phenol-d5	750.0	575.2	76.69	30-160
$ 5 2-Chlorophenol-d4	750.0	610.0	81.33	30-160
$ 10 1,2-Dichlorobenzen	500.0	447.5	89.50	30-160
$ 18 Nitrobenzene-d5	500.0	449.6	89.91	30-160
$ 36 2-Fluorobiphenyl	500.0	467.3	93.47	30-160
$ 55 2,4,6-Tribromophen	750.0	679.0	90.53	30-160
$ 66 Terphenyl-d14	500.0	527.8	105.56	30-160

Data File: /chem1/nt10.i/20130215.b/wc32sb.d
Date : 15-FEB-2013 17:26
Client ID: WC32LCSS1
Sample Info: WC32LCSS1
Volume Injected (uL): 1.0
Column phase: ZB-5msi

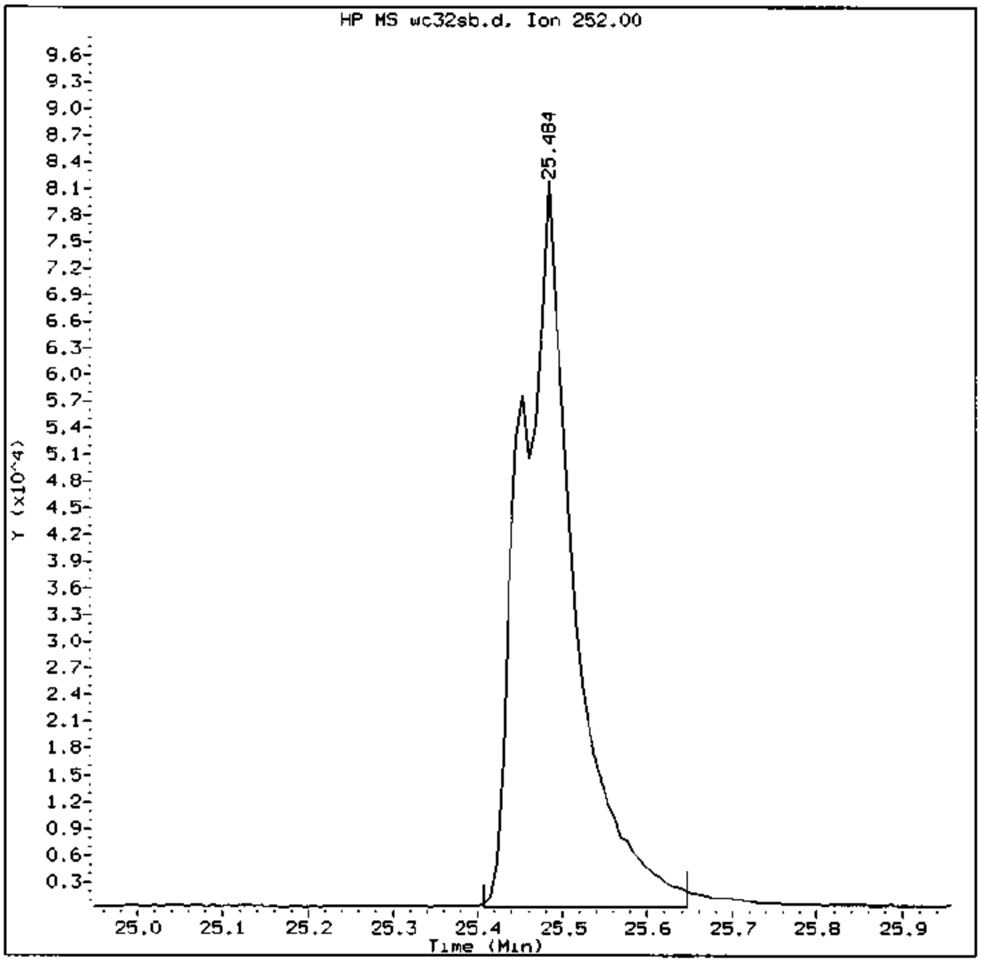
Instrument: nt10.i

Operator: VTS/YZ
Column diameter: 0.25



WC32LCSS1, /chem1/nt10.i/20130215.b/wc32sb.d

Total Benzofluoranthenes Amount: 9.80 Area: 361124



MANUAL INTEGRATION for Total Benzofluoranthenes

1. Baseline correction
2. Poor chromatography
3. Peak not found ✓
4. Totals calculation

5. Other ____________________

Analyst: YZ Date: 2/18/13

CO-ELUTION SUMMARY FOR FILE - wc32sb.d

Lab ID: WC32LCSS1, Method: ABN.m, Instrument: nt10.i, Date: 15-FEB-2013

RT	CO-ELUTION COMPOUNDS
14.956	Acenaphthylene and 2,6-Dinitrotoluene

Analytical Resources, Inc.

YZ 2/18/13

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt10.i/20130215.b/wc32sbd.d
Lab Smp Id: WC32LCSDS1 Client Smp ID: WC32LCSDS1
Inj Date : 15-FEB-2013 18:03
Operator : VTS/YZ Inst ID: nt10.i
Smp Info : WC32LCSDS1
Misc Info : 13-2430
Comment : 1ul Injection
Method : /chem1/nt10.i/20130215.b/ABN.m
Meth Date : 18-Feb-2013 12:09 yev Quant Type: ISTD
Cal Date : 25-JAN-2013 17:16 Cal File: ic0125h.d
Als bottle: 11 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDAICAL.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Ws	10.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
$	1 2-Fluorophenol	112	6.482	6.459	(0.740)	53562	5.38596	538.6
$	2 Phenol-d5	99	8.190	8.183	(0.935)	66363	5.37768	537.8
	3 Phenol	94	8.213	8.206	(0.938)	47237	3.63678	363.7
$	5 2-Chlorophenol-d4	132	8.398	8.391	(0.959)	66198	6.19525	619.5
	4 Bis(2-Chloroethyl)ether	93	8.298	8.298	(0.948)	37966	3.84175	384.2
	6 2-Chlorophenol	128	8.429	8.414	(0.963)	45900	4.06089	406.1
	7 1,3-Dichlorobenzene	146	8.685	8.678	(0.992)	44250	3.59777	359.8
*	8 1,4-Dichlorobenzene-d4	152	8.755	8.747	(1.000)	31102	4.00000	
	9 1,4-Dichlorobenzene	146	8.786	8.778	(1.004)	44237	3.63237	363.2
$	10 1,2-Dichlorobenzene-d4	152	9.135	9.128	(1.043)	32704	4.16482	416.5
	12 1,2-Dichlorobenzene	146	9.158	9.151	(1.046)	43231	3.69174	369.2
	11 Benzyl alcohol	108	9.088	9.081	(1.038)	23594	3.79580	379.6
	14 2,2'-oxybis(1-Chloropropane)	121	9.391	9.384	(1.073)	13001	3.73922	373.9
	13 2-Methylphenol	108	9.383	9.368	(1.072)	31739	3.23711	323.7
	17 Hexachloroethane	117	9.779	9.772	(1.117)	13799	2.86668	286.7

								CONCENTRATIONS	
		QUANT SIG						ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE		(ug/mL)	(ug/kg)
	16 N-Nitroso-di-n-propylamine	70	9.671	9.663	(1.105)	24868		3.79623	379.6
	15 4-Methylphenol	108	9.686	9.663	(1.106)	70121		6.87694	687.7
$	18 Nitrobenzene-d5	82	9.927	9.919	(0.870)	44738		4.13930	413.9
	19 Nitrobenzene	77	9.965	9.958	(0.874)	36827		3.59375	359.4
	20 Isophorone	82	10.454	10.447	(0.917)	68998		3.86294	386.3
	21 2-Nitrophenol	139	10.641	10.633	(0.933)	26288		4.36586	436.6
	22 2,4-Dimethylphenol	107	10.772	10.757	(0.945)	79716		7.76698	776.7
	23 Bis(2-Chloroethoxy)methane	93	10.941	10.934	(0.959)	44975		3.99811	399.8
	24 Benzoic acid	105	11.057	11.057	(0.970)	136299		15.5850	1558
	25 2,4-Dichlorophenol	162	11.165	11.150	(0.979)	112461		12.5375	1254
	26 1,2,4-Trichlorobenzene	180	11.319	11.312	(0.993)	39172		3.83725	383.7
*	27 Naphthalene-d8	136	11.404	11.397	(1.000)	117102		4.00000	
	28 Naphthalene	128	11.443	11.435	(1.003)	111464		3.65804	365.8
	29 4-Chloroaniline	127	11.628	11.621	(1.020)	47131		3.84331	384.3
	30 Hexachlorobutadiene	225	11.844	11.837	(1.039)	24606		3.86762	386.8
	31 4-Chloro-3-methylphenol	107	12.742	12.719	(1.117)	111923		12.9095	1291
	32 2-Methylnaphthalene	142	12.951	12.944	(1.136)	81224		4.03735	403.7
	33 Hexachlorocyclopentadiene	237	13.454	13.447	(0.880)	14735		1.78858	178.9
	34 2,4,6-Trichlorophenol	196	13.663	13.648	(0.893)	88453		12.0834	1208
	35 2,4,5-Trichlorophenol	196	13.764	13.741	(0.900)	93428		12.0103	1201
$	36 2-Fluorobiphenyl	172	13.810	13.803	(0.903)	110969		4.42817	442.8
	37 2-Chloronaphthalene	162	14.019	14.004	(0.917)	82495		4.08847	408.8
	38 2-Nitroaniline	65	14.336	14.321	(0.937)	59531		12.5797	1258
	39 Dimethylphthalate	163	14.816	14.801	(0.969)	106487		4.81987	482.0
	40 Acenaphthylene	152	14.956	14.941	(0.978)	131590		3.99908	399.9
	41 2,6-Dinitrotoluene	165	14.956	14.941	(0.978)	69638		13.7970	1380
*	42 Acenaphthene-d10	164	15.296	15.281	(1.000)	73047		4.00000	
	43 3-Nitroaniline	138	15.265	15.250	(0.998)	41184		8.83589	883.6
	44 Acenaphthene	153	15.365	15.350	(1.005)	80662		3.99781	399.8
	45 2,4-Dinitrophenol	184	15.497	15.482	(1.013)	64801		14.7639	1476
	46 Dibenzofuran	168	15.721	15.706	(1.028)	116232		4.14216	414.2
	47 4-Nitrophenol	109	15.744	15.714	(1.029)	32935		10.3646	1036
	48 2,4-Dinitrotoluene	165	15.829	15.814	(1.035)	95013		13.9219	1392
	50 Diethylphthalate	149	16.394	16.386	(1.072)	108904		4.70558	470.6
	49 Fluorene	166	16.486	16.479	(1.078)	114045		4.78487	478.5
	51 4-Chlorophenyl-phenylether	204	16.502	16.487	(1.079)	60361		5.43425	543.4
	52 4-Nitroaniline	138	16.641	16.626	(1.088)	60075		12.2092	1221
	53 4,6-Dinitro-2-methylphenol	198	16.741	16.726	(0.901)	97358		19.6637	1966
	54 N-Nitrosodiphenylamine	169	16.787	16.780	(0.904)	66451		4.46192	446.2
$	55 2,4,6-Tribromophenol	330	17.080	17.065	(1.117)	30289		6.49766	649.8
	56 4-Bromophenyl-phenylether	248	17.589	17.567	(0.947)	32675		4.73782	473.8
	57 Hexachlorobenzene	284	17.906	17.883	(0.964)	39508		4.56474	456.5
	58 Pentachlorophenol	266	18.332	18.309	(0.987)	37509		6.49893	649.9
*	59 Phenanthrene-d10	188	18.572	18.557	(1.000)	123637		4.00000	
	60 Phenanthrene	178	18.618	18.603	(1.002)	146988		4.45971	446.0
	61 Anthracene	178	18.719	18.704	(1.008)	141069		4.25089	425.1
	62 Carbazole	167	19.106	19.083	(1.029)	133710		6.03244	603.2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
63 Di-n-butylphthalate	149	19.964	19.942	(1.075)	199303	5.62794	562.8
64 Fluoranthene	202	21.063	21.040	(1.134)	181080	4.77075	477.1
65 Pyrene	202	21.489	21.466	(0.907)	189842	4.32051	432.1
$ 66 Terphenyl-d14	244	21.806	21.791	(0.921)	142456	4.80805	480.8
67 Butylbenzylphthalate	149	22.758	22.735	(0.961)	89114	5.34727	534.7
68 Benzo(a)anthracene	228	23.664	23.634	(0.999)	178240	4.14097	414.1
* 69 Chrysene-d12	240	23.687	23.665	(1.000)	154259	4.00000	
70 3,3'-Dichlorobenzidine	252	23.649	23.618	(0.998)	69167	3.84610	384.6
71 Chrysene	228	23.734	23.711	(1.002)	183127	4.69727	469.7
72 bis(2-Ethylhexyl)phthalate	149	23.804	23.789	(0.960)	135001	5.01882	501.9
* 134 Di-n-octylphthalate-d4	153	24.787	24.772	(1.000)	203706	4.00000	
73 Di-n-octylphthalate	149	24.802	24.779	(1.001)	242339	4.87697	487.7
74 Benzo(b)fluoranthene	252	25.453	25.414	(0.975)	112831	2.78634	278.6(H)
75 Benzo(k)fluoranthene	252	25.484	25.414	(0.976)	276875	6.32897	632.9(H)
76 Benzo(a)pyrene	252	26.002	25.964	(0.996)	137633	3.93005	393.0
* 77 Perylene-d12	264	26.111	26.065	(1.000)	139713	4.00000	
78 Indeno(1,2,3-cd)pyrene	276	28.352	28.282	(1.086)	107857	2.49741	249.7
79 Dibenzo(a,h)anthracene	278	28.367	28.290	(1.086)	97567	2.85291	285.3
80 Benzo(g,h,i)perylene	276	28.996	28.927	(1.111)	66675	1.79941	179.9
90 N-Nitrosodimethylamine	74	4.181	4.158	(0.478)	54655	9.23693	923.7
91 Aniline	93	8.198	8.190	(0.936)	46017	1.64179	164.2
93 Benzidine	184	Compound Not Detected.					
103 Pyridine	79	4.196	4.166	(0.479)	41399	8.20264	820.3
105 1-methylnaphthalene	142	13.191	13.176	(1.157)	78996	4.28072	428.1
111 Azobenzene (1,2-DP-Hydrazine)	77	16.857	16.842	(1.102)	84477	4.02414	402.4
187 Total Benzofluoranthenes	252	25.484	25.453	(0.976)	370127	9.28553	928.6(M)
99 Perylene	252	26.150	26.111	(1.001)	80687	2.00477	200.5
98 Retene	219	Compound Not Detected.					
120 2,3,4,6-Tetrachlorophenol	232	16.131	16.108	(1.055)	24098	3.54188	354.2

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Report Date: 18-Feb-2013 12:18

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: wc32sbd.d
Lab Smp Id: WC32LCSDS1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS/YZ
Method File: /chem1/nt10.i/20130215.b/ABN.m
Misc Info: 13-2430

Calibration Date: 15-FEB-2013
Calibration Time: 11:20
Client Smp ID: WC32LCSDS1
Level: LOW
Sample Type: Solid

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	46623	23312	93246	31102	-33.29
27 Naphthalene-d8	176978	88489	353956	117102	-33.83
42 Acenaphthene-d10	110872	55436	221744	73047	-34.12
59 Phenanthrene-d10	188290	94145	376580	123637	-34.34
69 Chrysene-d12	213681	106840	427362	154259	-27.81
134 Di-n-octylphthala	264159	132080	528318	203706	-22.89
77 Perylene-d12	208584	104292	417168	139713	-33.02

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.75	8.25	9.25	8.75	0.08
27 Naphthalene-d8	11.40	10.90	11.90	11.40	0.06
42 Acenaphthene-d10	15.28	14.78	15.78	15.30	0.10
59 Phenanthrene-d10	18.56	18.06	19.06	18.57	0.08
69 Chrysene-d12	23.66	23.16	24.16	23.69	0.10
134 Di-n-octylphthala	24.77	24.27	25.27	24.79	0.06
77 Perylene-d12	26.06	25.56	26.56	26.11	0.18

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd-Snider
Sample Matrix: SOLID
Lab Smp Id: WC32LCSDS1
Level: LOW
Data Type: MS DATA
SpikeList File: SHORTPSDDA.spk
Sublist File: PSDDAICAL.sub
Method File: /chem1/nt10.i/20130215.b/ABN.m
Misc Info: 13-2430

Client SDG: WC32
Fraction: SV
Client Smp ID: WC32LCSDS1
Operator: VTS/YZ
SampleType: LCSD
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
3 Phenol	500.0	363.7	72.74	30-160
7 1,3-Dichlorobenzen	500.0	359.8	71.96	30-160
9 1,4-Dichlorobenzen	500.0	363.2	72.65	30-160
11 Benzyl alcohol	500.0	379.6	75.92	30-160
12 1,2-Dichlorobenzen	500.0	369.2	73.83	30-160
13 2-Methylphenol	500.0	323.7	64.74	30-160
15 4-Methylphenol	1000	687.7	68.77	30-160
17 Hexachloroethane	500.0	286.7	57.33	30-160
22 2,4-Dimethylphenol	1500	776.7	51.78	30-160
24 Benzoic acid	2750	1558	56.67	30-160
26 1,2,4-Trichloroben	500.0	383.7	76.75	30-160
28 Naphthalene	500.0	365.8	73.16	30-160
30 Hexachlorobutadien	500.0	386.8	77.35	30-160
32 2-Methylnaphthalen	500.0	403.7	80.75	30-160
39 Dimethylphthalate	500.0	482.0	96.40	30-160
40 Acenaphthylene	500.0	399.9	79.98	30-160
44 Acenaphthene	500.0	399.8	79.96	30-160
46 Dibenzofuran	500.0	414.2	82.84	30-160
49 Fluorene	500.0	478.5	95.70	30-160
50 Diethylphthalate	500.0	470.6	94.11	30-160
54 N-Nitrosodiphenyla	500.0	446.2	89.24	30-160
57 Hexachlorobenzene	500.0	456.5	91.29	30-160
58 Pentachlorophenol	1500	649.9	43.33	30-160
60 Phenanthrene	500.0	446.0	89.19	30-160
61 Anthracene	500.0	425.1	85.02	30-160
63 Di-n-butylphthalat	500.0	562.8	112.56	30-160
64 Fluoranthene	500.0	477.1	95.42	30-160
65 Pyrene	500.0	432.1	86.41	30-160
67 Butylbenzylphthala	500.0	534.7	106.95	30-160
68 Benzo(a)anthracene	500.0	414.1	82.82	30-160
71 Chrysene	500.0	469.7	93.95	30-160
72 bis(2-Ethylhexyl)p	500.0	501.9	100.38	30-160
73 Di-n-octylphthalat	500.0	487.7	97.54	30-160

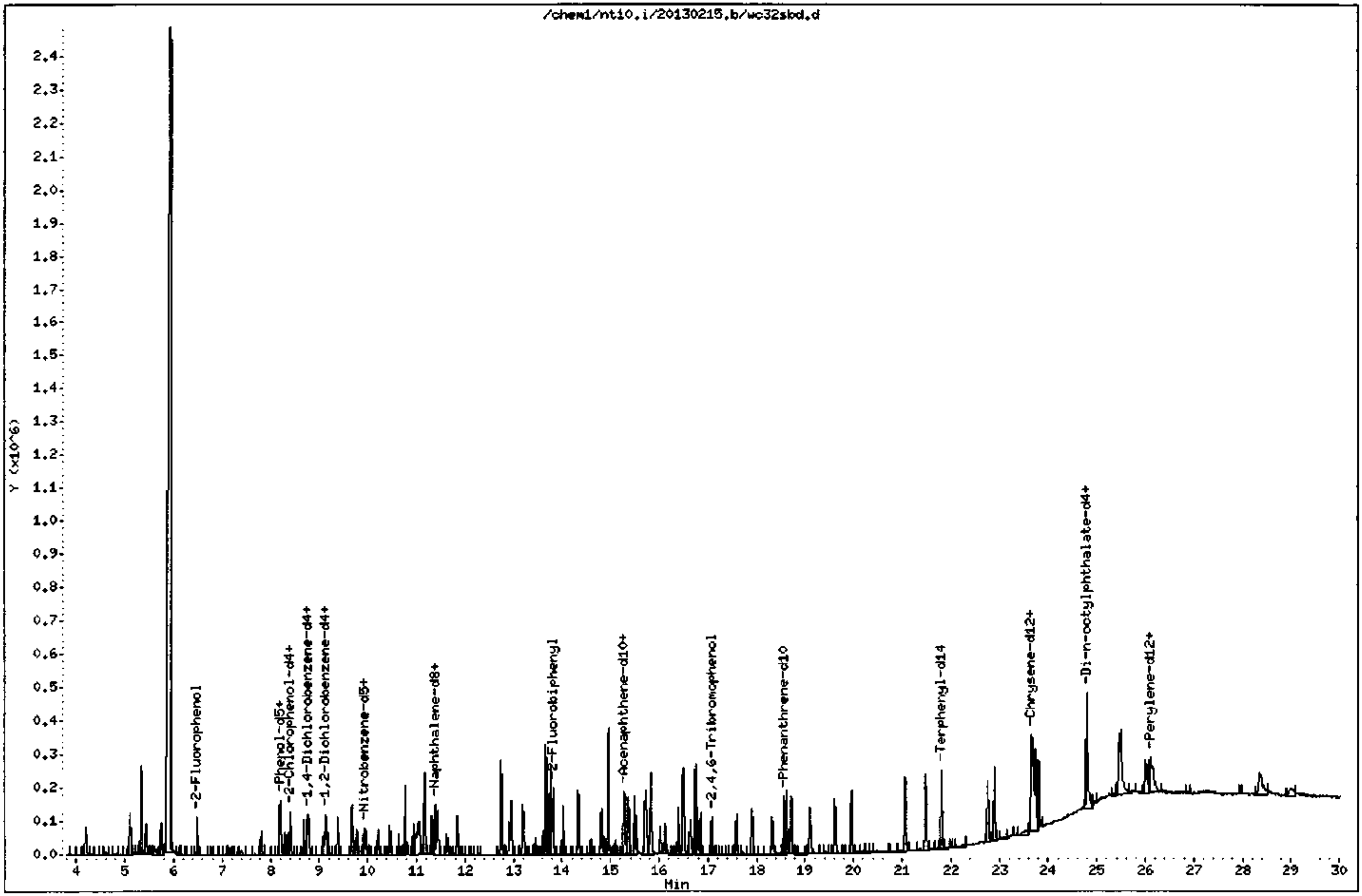
SPIKE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
76 Benzo(a)pyrene	500.0	393.0	78.60	30-160
78 Indeno(1,2,3-cd)py	500.0	249.7	49.95	30-160
79 Dibenzo(a,h)anthra	500.0	285.3	57.06	30-160
80 Benzo(g,h,i)peryle	500.0	179.9	35.99	30-160
105 1-methylnaphthalen	500.0	428.1	85.61	30-160
187 Total Benzofluoran	1000	928.6	92.86	30-160

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 1 2-Fluorophenol	750.0	538.6	71.81	30-160
$ 2 Phenol-d5	750.0	537.8	71.70	30-160
$ 5 2-Chlorophenol-d4	750.0	619.5	82.60	30-160
$ 10 1,2-Dichlorobenzen	500.0	416.5	83.30	30-160
$ 18 Nitrobenzene-d5	500.0	413.9	82.79	30-160
$ 36 2-Fluorobiphenyl	500.0	442.8	88.56	30-160
$ 55 2,4,6-Tribromophen	750.0	649.8	86.64	30-160
$ 66 Terphenyl-d14	500.0	480.8	96.16	30-160

Data File: /chem1/nt10.i/20130215.b/wc32sbd.d
Date : 15-FEB-2013 18:03
Client ID: WC32LCSDS1
Sample Info: WC32LCSDS1
Volume Injected (uL): 1.0
Column phase: ZB-5msi

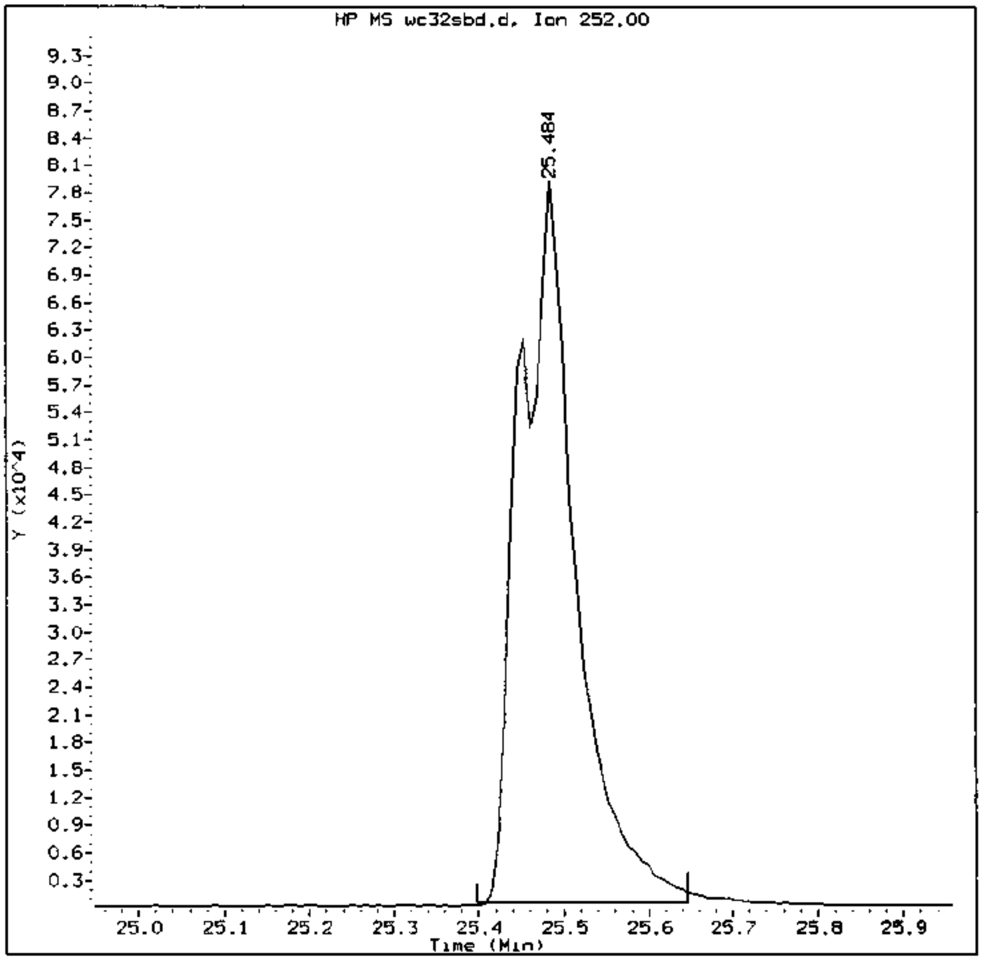
Instrument: nt10.i

Operator: VTS/YZ
Column diameter: 0.25



WC32LCSDS1, /chem1/nt10.i/20130215.b/wc32sbd.d

Total Benzofluoranthenes Amount: 9.29 Area: 370127



MANUAL INTEGRATION for Total Benzofluoranthenes

1. Baseline correction
2. Poor chromatography
3. Peak not found ✓
4. Totals calculation

5. Other ______________________

Analyst: VZ Date: 2/18/13

CO-ELUTION SUMMARY FOR FILE - wc32sbd.d

Lab ID: WC32LCSDS1, Method: ABN.m, Instrument: nt10.i, Date: 15-FEB-2013

RT	CO-ELUTION COMPOUNDS
14.956	Acenaphthylene and 2,6-Dinitrotoluene

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D YZ 02/18/13

Data file : /chem1/nt10.i/20130215.b/wc32a.d
Lab Smp Id: WC32A Client Smp ID: SG-12-0-10-013113
Inj Date : 15-FEB-2013 18:39
Operator : VTS/YZ Inst ID: nt10.i
Smp Info : WC32A
Misc Info : 13-2424
Comment : 1ul Injection
Method : /chem1/nt10.i/20130215.b/ABN.m
Meth Date : 15-Feb-2013 14:06 van Quant Type: ISTD
Cal Date : 25-JAN-2013 17:16 Cal File: ic0125h.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDAICAL.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Ws	25.10000	Weight of sample extracted (g)
M	59.80000	% Moisture

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
$	1 2-Fluorophenol	112	6.490	6.459	(0.741)	49035	4.88364	484.0
$	2 Phenol-d5	99	8.206	8.183	(0.937)	62898	5.04821	500.3
	3 Phenol	94	8.229	8.206	(0.940)	9138	0.69681	69.06
$	5 2-Chlorophenol-d4	132	8.406	8.391	(0.960)	57458	5.32593	527.8
	4 Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
	6 2-Chlorophenol	128	Compound Not Detected.					
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	8.755	8.747	(1.000)	31402	4.00000	
	9 1,4-Dichlorobenzene	146	Compound Not Detected.					
$	10 1,2-Dichlorobenzene-d4	152	9.135	9.128	(1.043)	29492	3.71990	368.7
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	108	9.096	9.081	(1.039)	2909	0.46353	45.94
	~~14 2,2'-oxybis(1-Chloropropane)~~	~~121~~	~~9.275~~	~~9.304~~	~~(1.059)~~	~~1749~~	~~0.49832~~	~~49.38~~
	13 2-Methylphenol	108	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
	17 Hexachloroethane	117	Compound Not Detected.					
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	15 4-Methylphenol	108	9.686	9.663	(1.106)	33198	3.22470	319.6
$	18 Nitrobenzene-d5	82	9.935	9.919	(0.871)	42076	3.80343	376.9
	19 Nitrobenzene	77	Compound Not Detected.					
	20 Isophorone	82	Compound Not Detected.					
	21 2-Nitrophenol	139	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	Compound Not Detected.					
	23 Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
	24 Benzoic acid	105	10.988	11.057	(0.963)	13714	1.54726	153.3
	25 2,4-Dichlorophenol	162	Compound Not Detected.					
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	11.404	11.397	(1.000)	119860	4.00000	
	28 Naphthalene	128	11.451	11.435	(1.004)	54960	1.76218	174.6
	29 4-Chloroaniline	127	Compound Not Detected.					
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	31 4-Chloro-3-methylphenol	107	Compound Not Detected.					
	32 2-Methylnaphthalene	142	12.951	12.944	(1.136)	4426	0.21494	21.30
	33 Hexachlorocyclopentadiene	237	Compound Not Detected.					
	34 2,4,6-Trichlorophenol	196	Compound Not Detected.					
	35 2,4,5-Trichlorophenol	196	Compound Not Detected.					
$	36 2-Fluorobiphenyl	172	13.818	13.803	(0.903)	106492	4.28898	425.1
	37 2-Chloronaphthalene	162	Compound Not Detected.					
	38 2-Nitroaniline	65	Compound Not Detected.					
	39 Dimethylphthalate	163	Compound Not Detected.					
	40 Acenaphthylene	152	Compound Not Detected.					
	41 2,6-Dinitrotoluene	165	Compound Not Detected.					
*	42 Acenaphthene-d10	164	15.296	15.281	(1.000)	72375	4.00000	
	43 3-Nitroaniline	138	Compound Not Detected.					
	44 Acenaphthene	153	15.366	15.350	(1.005)	2799	0.14001	13.88
	45 2,4-Dinitrophenol	184	Compound Not Detected.					
	46 Dibenzofuran	168	15.729	15.706	(1.028)	9263	0.33317	33.02
	47 4-Nitrophenol	109	Compound Not Detected.					
	48 2,4-Dinitrotoluene	165	Compound Not Detected.					
	50 Diethylphthalate	149	Compound Not Detected.					
	49 Fluorene	166	16.494	16.479	(1.078)	6858	0.29041	28.78
	51 4-Chlorophenyl-phenylether	204	Compound Not Detected.					
	52 4-Nitroaniline	138	Compound Not Detected.					
	53 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
	54 N-Nitrosodiphenylamine	169	Compound Not Detected.					
$	55 2,4,6-Tribromophenol	330	17.088	17.065	(1.117)	32152	6.96135	689.9
	56 4-Bromophenyl-phenylether	248	Compound Not Detected.					
	57 Hexachlorobenzene	284	Compound Not Detected.					
	58 Pentachlorophenol	266	Compound Not Detected.					
*	59 Phenanthrene-d10	188	18.580	18.557	(1.000)	123045	4.00000	
	60 Phenanthrene	178	18.626	18.603	(1.002)	68965	2.10251	208.4
	61 Anthracene	178	18.727	18.704	(1.008)	20059	0.60735	60.19

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
62 Carbazole	167	19.114	19.083	(1.029)	9938	0.45052	44.65
63 Di-n-butylphthalate	149	Compound Not Detected.					
64 Fluoranthene	202	21.087	21.040	(1.135)	334810	8.86337	878.4
65 Pyrene	202	21.497	21.466	(0.907)	262037	6.06327	600.9
$ 66 Terphenyl-d14	244	21.814	21.791	(0.921)	137311	4.71190	467.0
67 Butylbenzylphthalate	149	Compound Not Detected.					
68 Benzo(a)anthracene	228	23.665	23.634	(0.999)	57761	1.36437	135.2
* 69 Chrysene-d12	240	23.695	23.665	(1.000)	151722	4.00000	
70 3,3'-Dichlorobenzidine	252	Compound Not Detected.					
71 Chrysene	228	23.734	23.711	(1.002)	104463	2.72432	270.0
72 bis(2-Ethylhexyl)phthalate	149	23.812	23.789	(0.960)	8246	0.30875	30.60
* 134 Di-n-octylphthalate-d4	153	24.795	24.772	(1.000)	202260	4.00000	
73 Di-n-octylphthalate	149	Compound Not Detected.					
74 Benzo(b)fluoranthene	252	25.461	25.414	(0.975)	41531	1.06997	106.0
75 Benzo(k)fluoranthene	252	25.476	25.414	(0.976)	74439	1.77519	175.9(M)
76 Benzo(a)pyrene	252	26.010	25.964	(0.996)	35275	1.05084	104.1
* 77 Perylene-d12	264	26.111	26.065	(1.000)	133919	4.00000	
78 Indeno(1,2,3-cd)pyrene	276	28.360	28.282	(1.086)	9557	0.23086	22.88
79 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
80 Benzo(g,h,i)perylene	276	29.020	28.927	(1.111)	4348	0.12242	12.13
90 N-Nitrosodimethylamine	74	Compound Not Detected.					
91 Aniline	93	Compound Not Detected.					
93 Benzidine	184	Compound Not Detected.					
103 Pyridine	79	Compound Not Detected.					
105 1-methylnaphthalene	142	13.191	13.176	(1.157)	2421	0.12817	12.70
~~111 Azobenzene (1,2-DP-Hydrazine)~~	~~77~~	~~17.135~~	~~16.842~~	~~(1.120)~~	~~33592~~	~~1.61505~~	~~160.1~~
187 Total Benzofluoranthenes	252	25.476	25.453	(0.976)	107298	2.80829	278.3
99 Perylene	252	26.158	26.111	(1.002)	10458	0.27108	26.87
98 Retene	219	22.108	22.077	(0.933)	8813	0.38767	38.42
120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

Report Date: 18-Feb-2013 11:08

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: wc32a.d
Lab Smp Id: WC32A
Analysis Type: SV
Quant Type: ISTD
Operator: VTS/YZ
Method File: /chem1/nt10.i/20130215.b/ABN.m
Misc Info: 13-2424

Calibration Date: 15-FEB-2013
Calibration Time: 11:20
Client Smp ID: SG-12-0-10-01311
Level: LOW
Sample Type: Sediment

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	46623	23312	93246	31402	-32.65
27 Naphthalene-d8	176978	88489	353956	119860	-32.27
42 Acenaphthene-d10	110872	55436	221744	72375	-34.72
59 Phenanthrene-d10	188290	94145	376580	123045	-34.65
69 Chrysene-d12	213681	106840	427362	151722	-29.00
134 Di-n-octylphthala	264159	132080	528318	202260	-23.43
77 Perylene-d12	208584	104292	417168	133919	-35.80

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.75	8.25	9.25	8.75	0.09
27 Naphthalene-d8	11.40	10.90	11.90	11.40	0.07
42 Acenaphthene-d10	15.28	14.78	15.78	15.30	0.10
59 Phenanthrene-d10	18.56	18.06	19.06	18.58	0.12
69 Chrysene-d12	23.66	23.16	24.16	23.70	0.13
134 Di-n-octylphthala	24.77	24.27	25.27	24.79	0.09
77 Perylene-d12	26.06	25.56	26.56	26.11	0.18

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd-Snider
Sample Matrix: SOLID
Lab Smp Id: WC32A
Level: LOW
Data Type: MS DATA
SpikeList File: SHORTPSDDA.spk
Sublist File: PSDDAICAL.sub
Method File: /chem1/nt10.i/20130215.b/ABN.m
Misc Info: 13-2424

Client SDG: WC32
Fraction: SV
Client Smp ID: SG-12-0-10-013113
Operator: VTS/YZ
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 1 2-Fluorophenol	743.3	484.0	65.12	30-160
$ 2 Phenol-d5	743.3	500.3	67.31	30-160
$ 5 2-Chlorophenol-d4	743.3	527.8	71.01	30-160
$ 10 1,2-Dichlorobenzen	495.5	368.7	74.40	30-160
$ 18 Nitrobenzene-d5	495.5	376.9	76.07	30-160
$ 36 2-Fluorobiphenyl	495.5	425.1	85.78	30-160
$ 55 2,4,6-Tribromophen	743.3	689.9	92.82	30-160
$ 66 Terphenyl-d14	495.5	467.0	94.24	30-160

Data File: /chem1/nt10.i/20130215.b/wc32a.d

Date : 15-FEB-2013 18:39

Client ID: SG-12-0-10-013113

Instrument: nt10.i

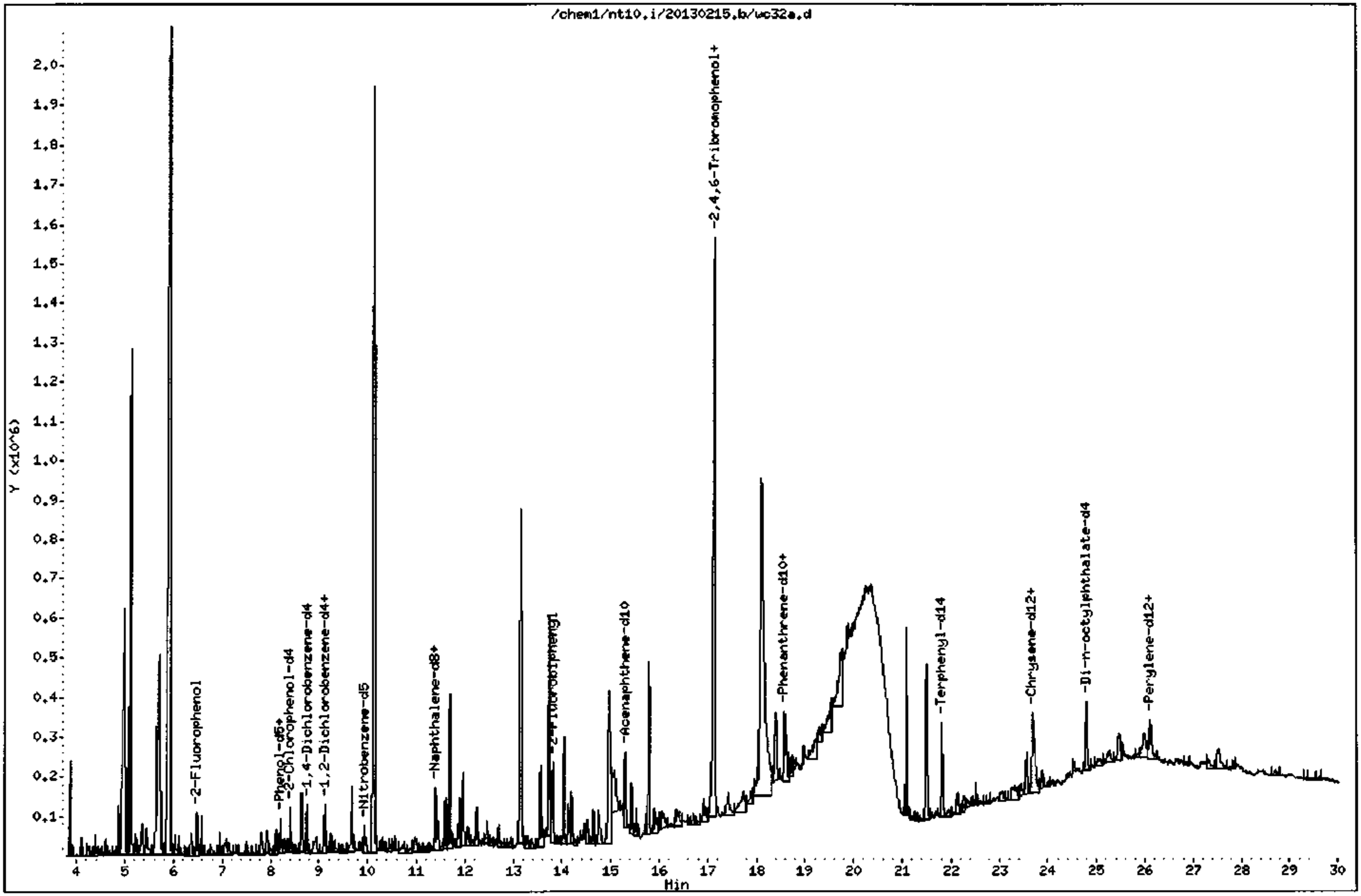
Sample Info: WC32A

Volume Injected (uL): 1.0

Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25



WC32 : 00650

Data File: /chemi/nt10.i/20130215.b/wc32a.d

Date : 15-FEB-2013 18:39

Client ID: SG-12-0-10-013113

Instrument: nt10.i

Sample Info: WC32A

Volume Injected (uL): 1.0

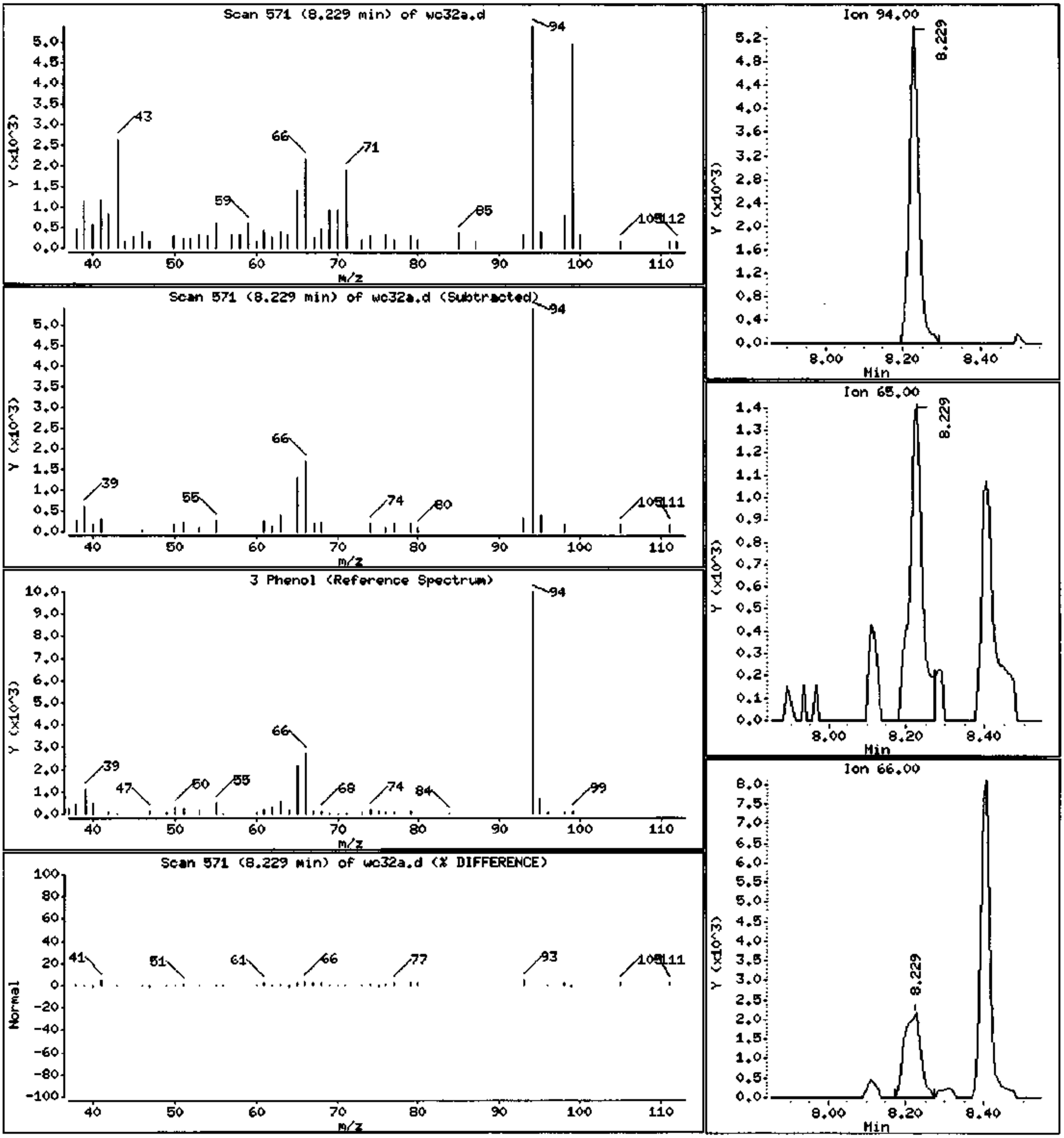
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

3 Phenol

Concentration: 69.06 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32a.d

Date : 15-FEB-2013 18:39

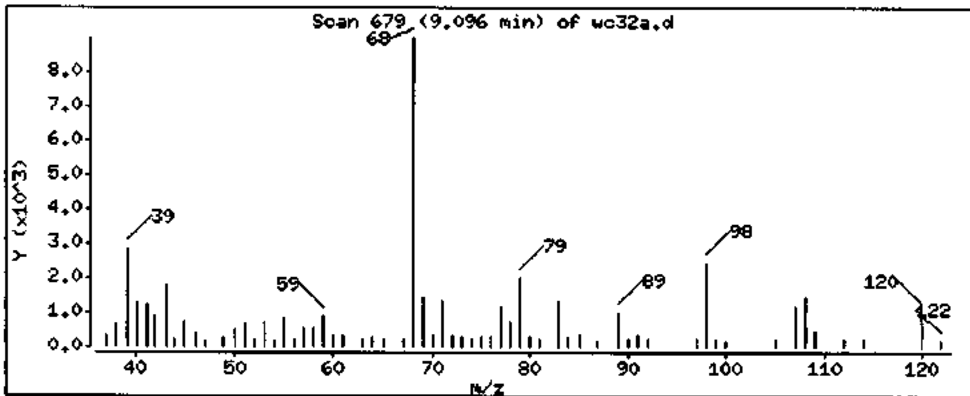
Client ID: SG-12-0-10-013113 Instrument: nt10.i

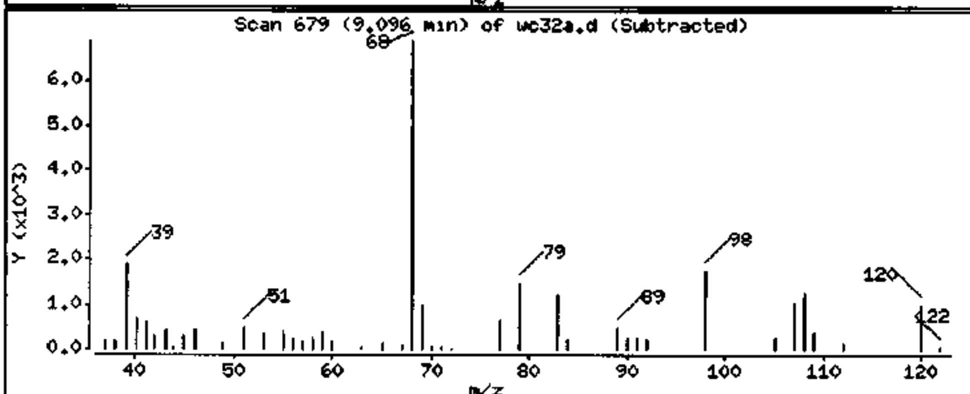
Sample Info: WC32A

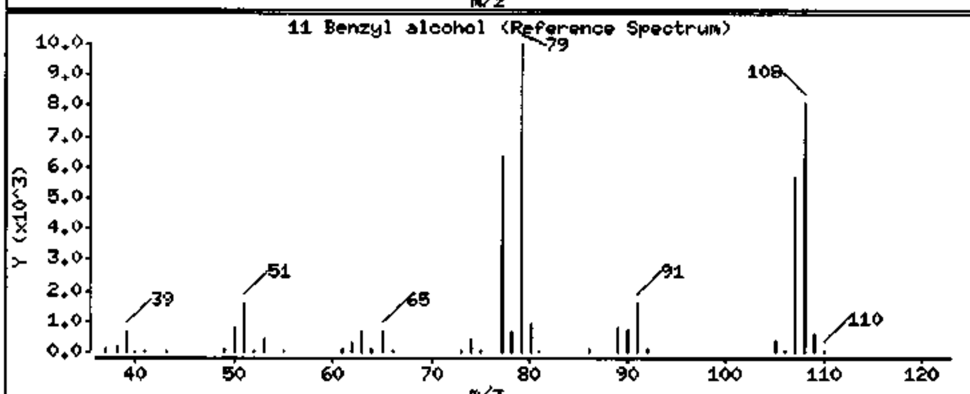
Volume Injected (uL): 1.0 Operator: VTS/YZ

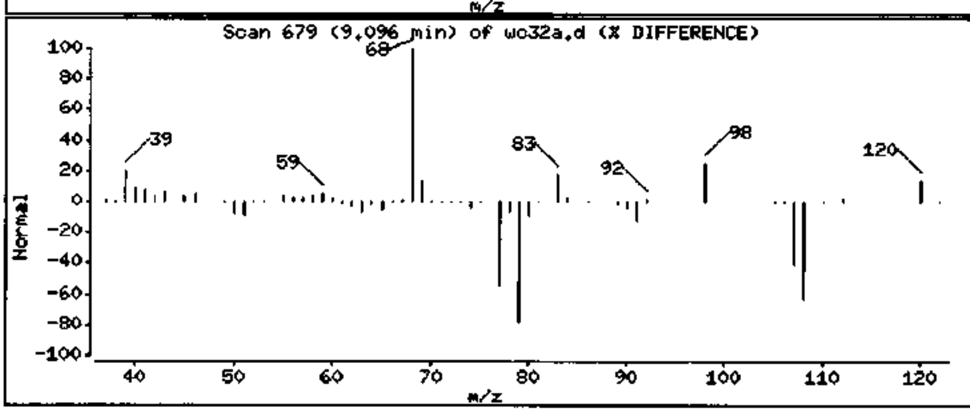
Column phase: ZB-5msi Column diameter: 0.25

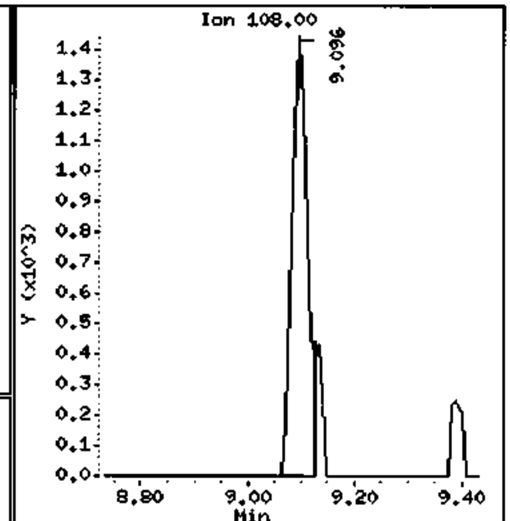
11 Benzyl alcohol Concentration: 45.94 ug/kg

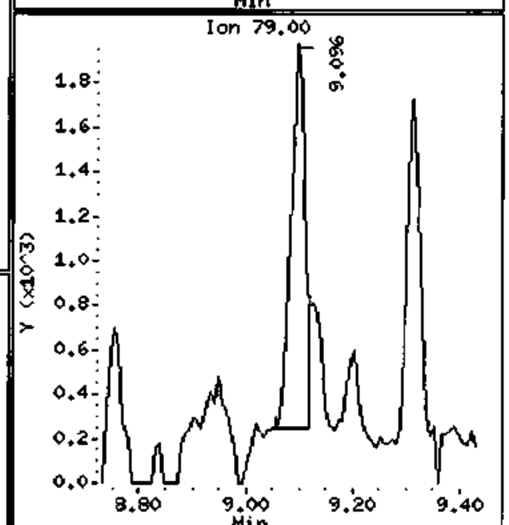


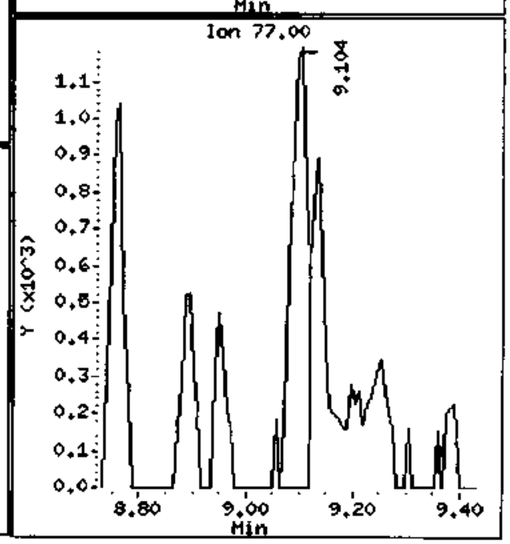












Data File: /chem1/nt10.i/20130215.b/wc32a.d

Date : 15-FEB-2013 18:39

Client ID: SG-12-0-10-013113

Sample Info: WC32A

Volume Injected (uL): 1.0

Column phase: ZB-5msi

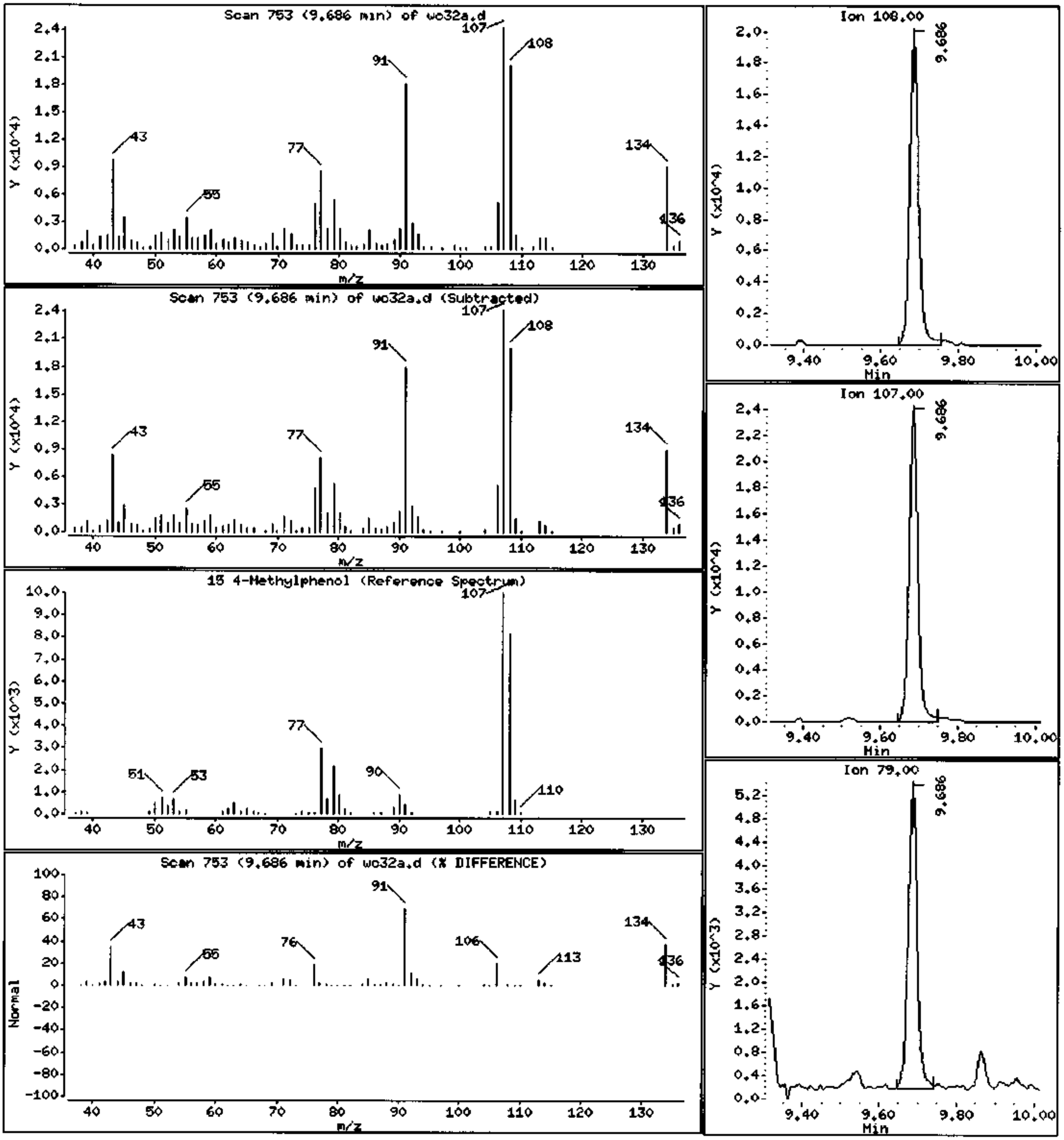
15 4-Methylphenol

Instrument: nt10.i

Operator: VTS/YZ

Column diameter: 0.25

Concentration: 319.6 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32a.d

Date : 15-FEB-2013 18:39

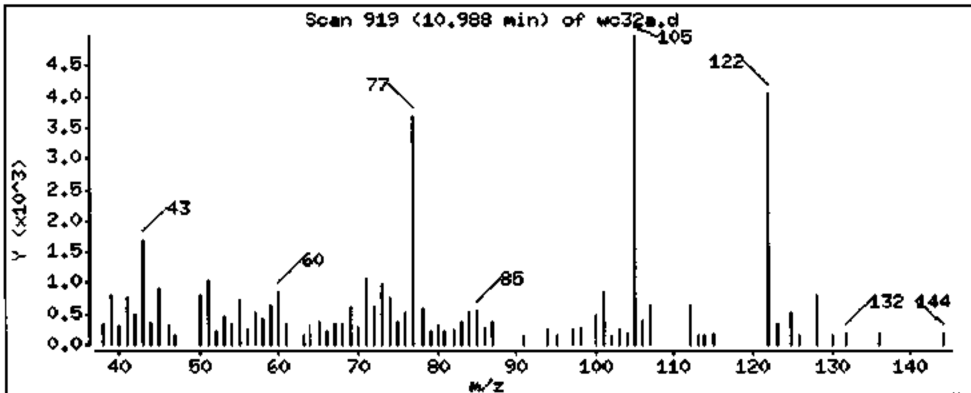
Client ID: SG-12-0-10-013113 | Instrument: nt10.i

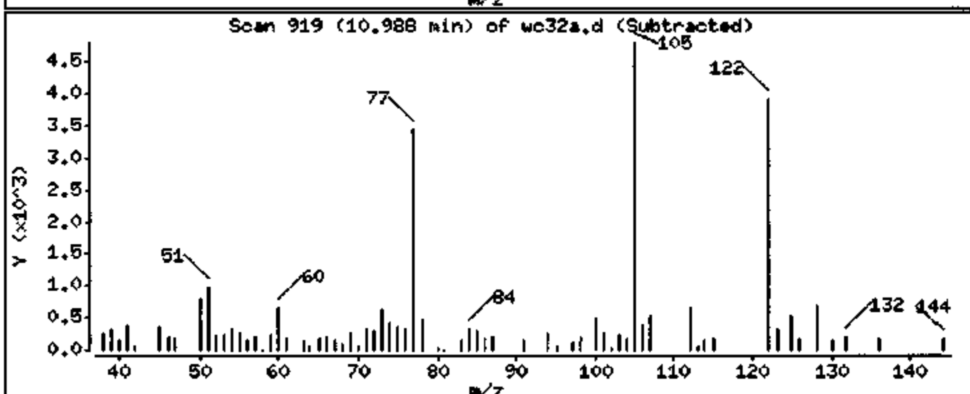
Sample Info: WC32A

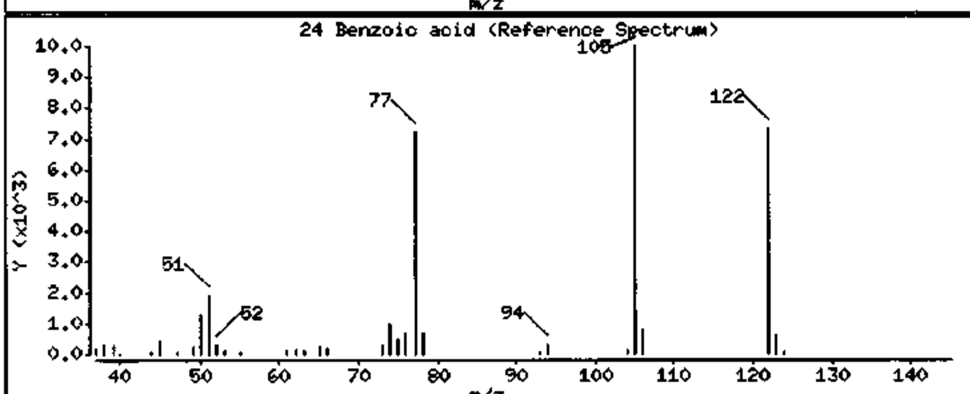
Volume Injected (uL): 1.0 | Operator: VTS/YZ

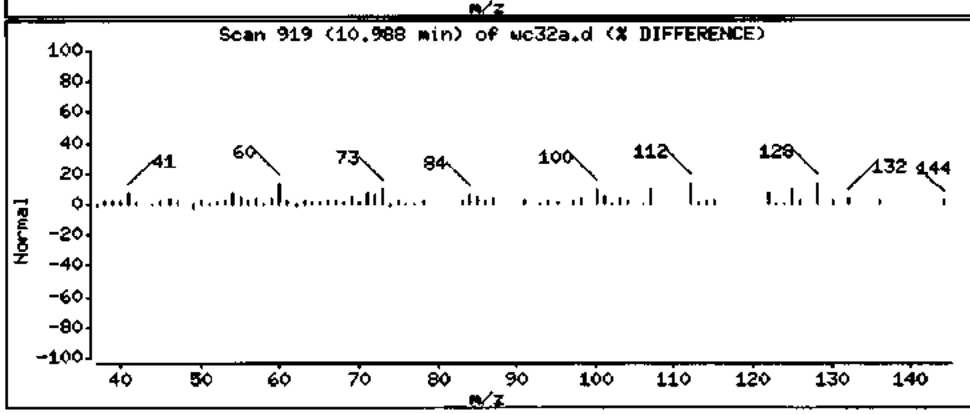
Column phase: ZB-5msi | Column diameter: 0.25

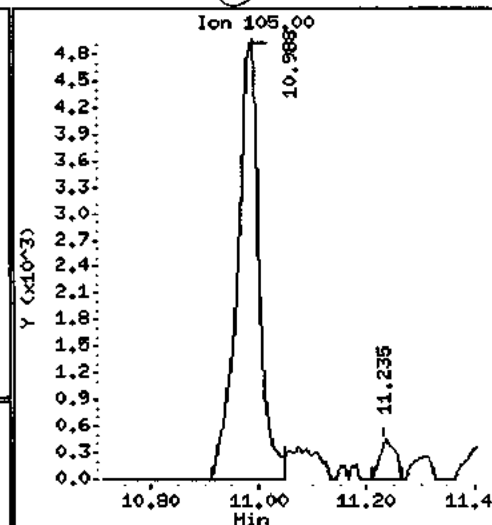
24 Benzoic acid | Concentration: 153.3 ug/kg

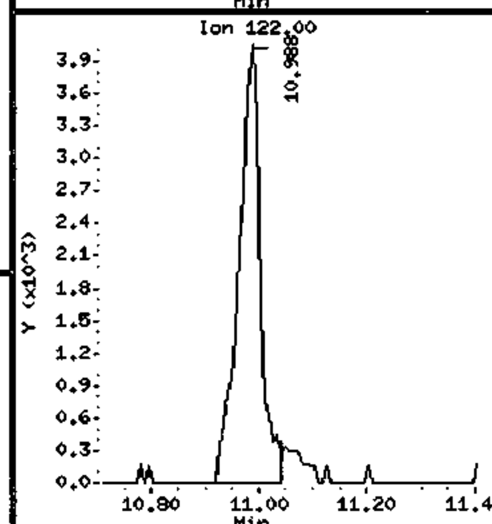


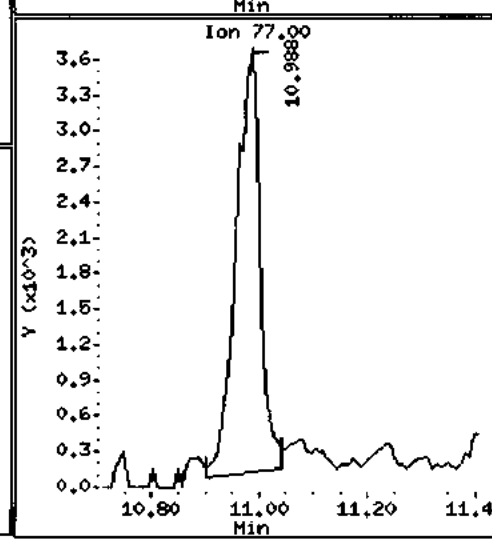












Data File: /chem1/nt10.i/20130215.b/wc32a.d

Date : 15-FEB-2013 18:39

Client ID: SC-12-0-10-013113

Instrument: nt10.i

Sample Info: WC32A

Volume Injected (uL): 1.0

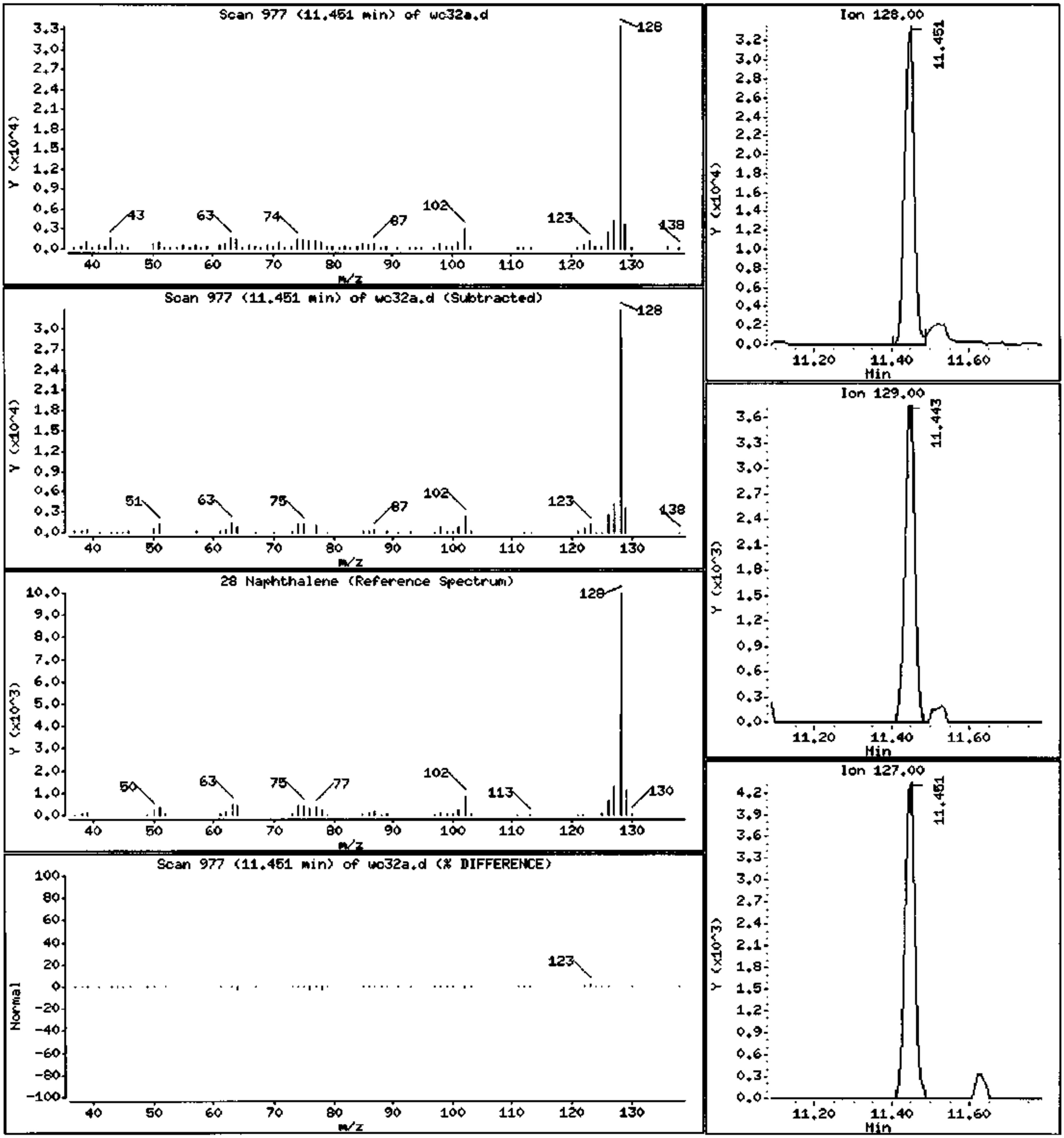
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

28 Naphthalene

Concentration: 174.6 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32a.d

Date : 15-FEB-2013 18:39

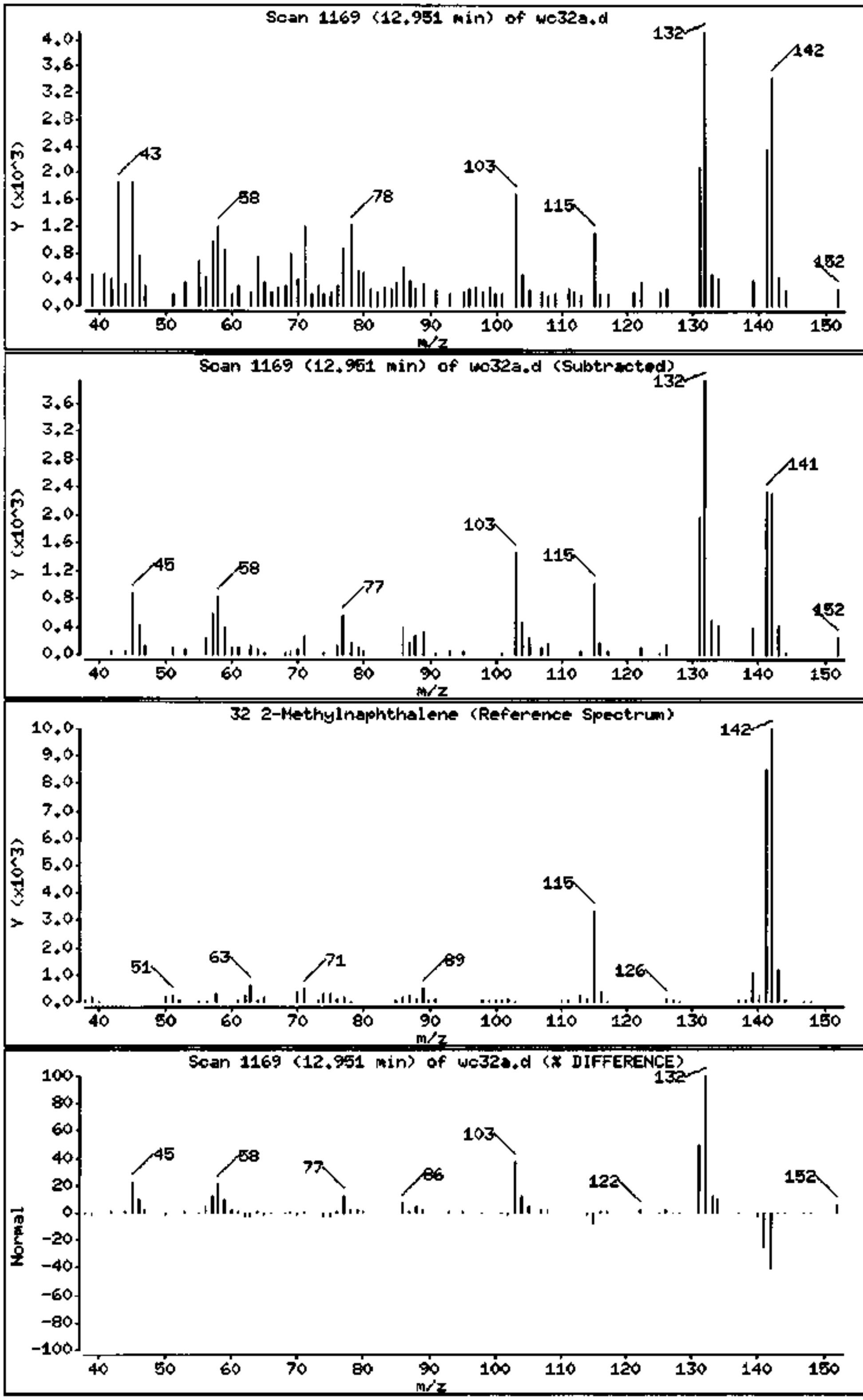
Client ID: SG-12-0-10-013113 Instrument: nt10.i

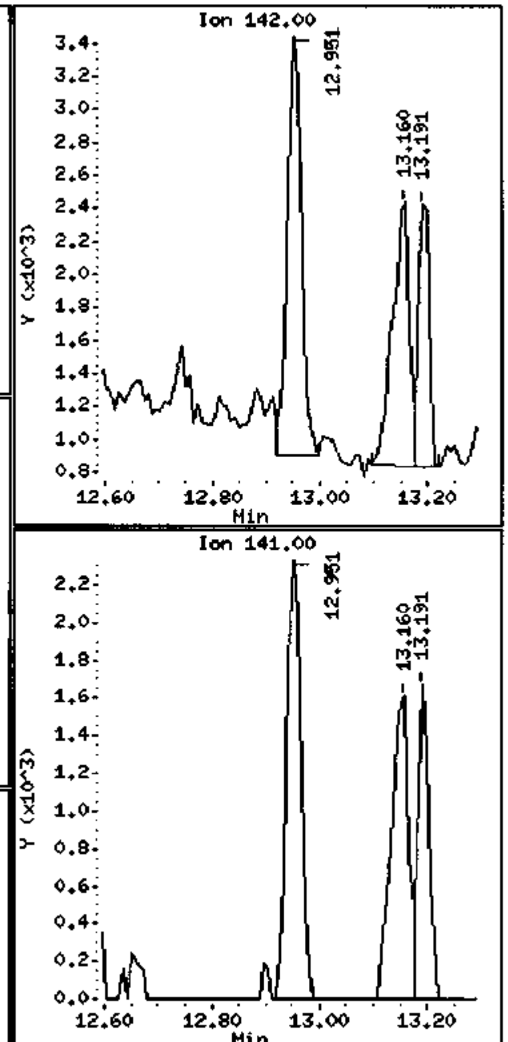
Sample Info: WC32A

Volume Injected (uL): 1.0 Operator: VTS/YZ

Column phase: ZB-5msi Column diameter: 0.25

32 2-Methylnaphthalene Concentration: 21.30 ug/kg





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Date : 15-FEB-2013 18:39

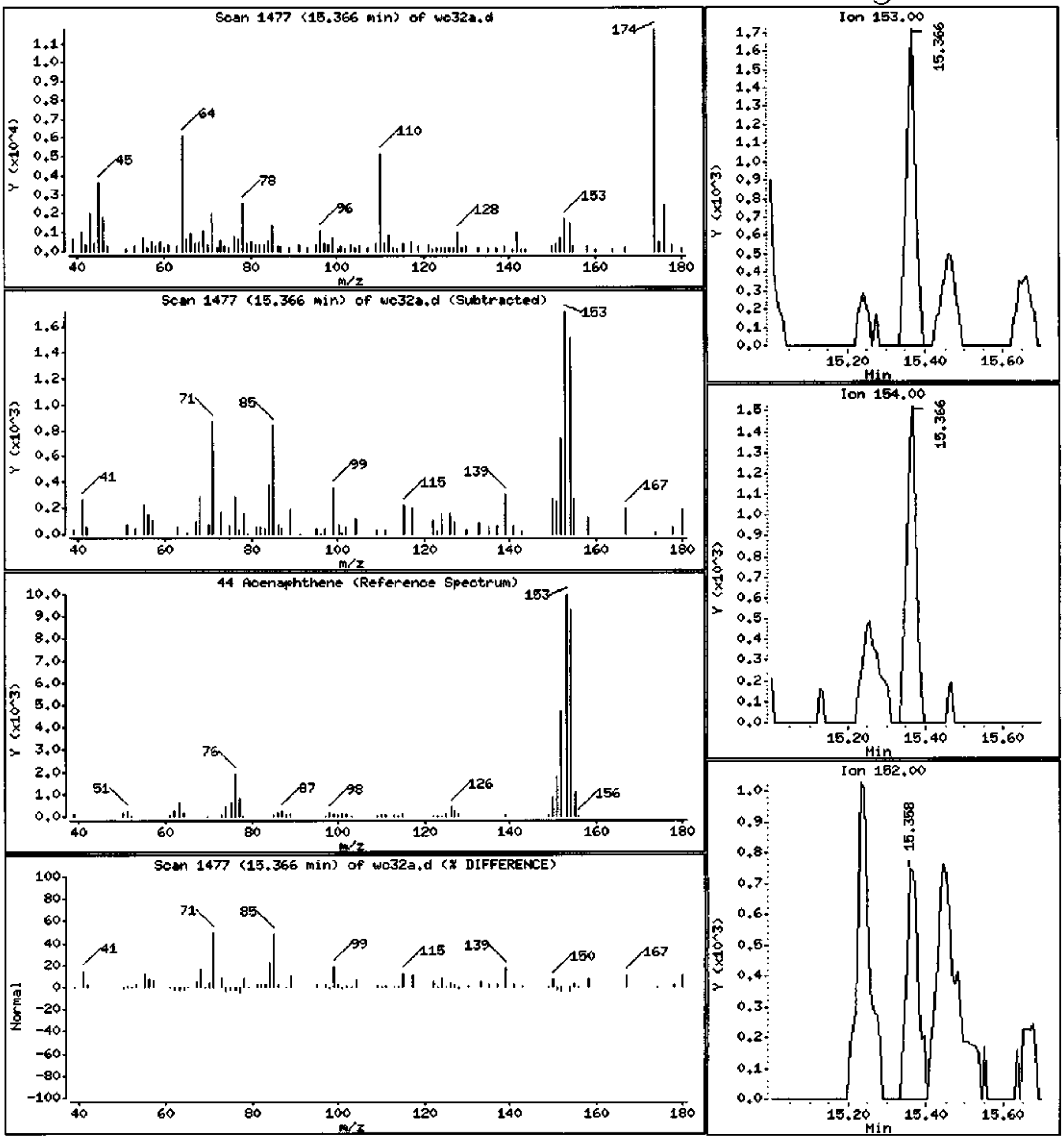
Client ID: SG-12-0-10-013113 Instrument: nt10.i

Sample Info: WC32A

Volume Injected (uL): 1.0 Operator: VTS/YZ

Column phase: ZB-5msi Column diameter: 0.25

44 Acenaphthene Concentration: 13.88 ug/kg



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Date : 15-FEB-2013 18:39

Client ID: SG-12-0-10-013113

Instrument: nt10.i

Sample Info: WC32A

Volume Injected (uL): 1.0

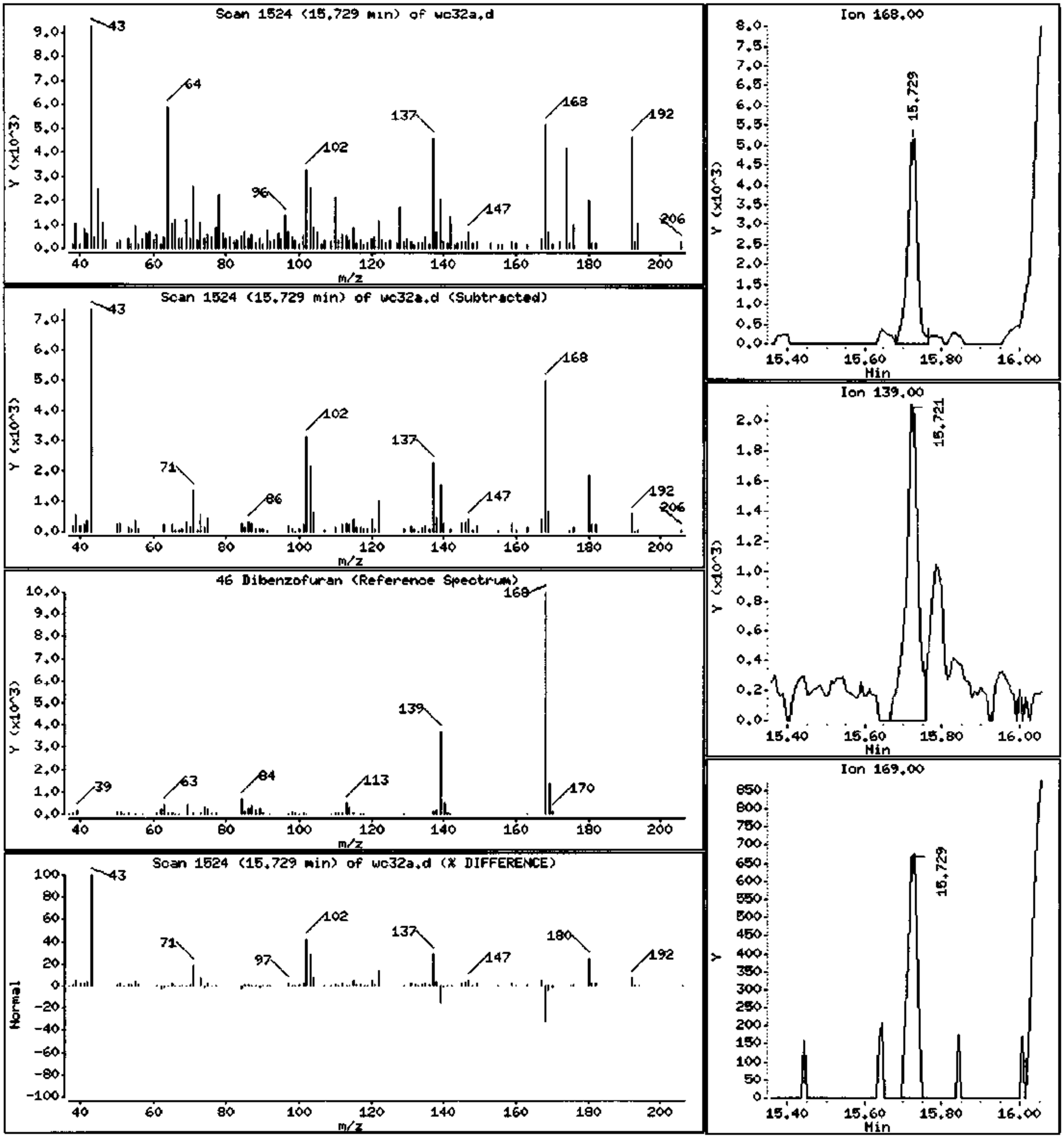
Operator: WTS/YZ

Column phase: ZB-5ms

Column diameter: 0.25

46 Dibenzofuran

Concentration: 33.02 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32a.d

Date : 15-FEB-2013 18:39

Client ID: SG-12-0-10-013113

Instrument: nt10.i

Sample Info: WC32A

Volume Injected (uL): 1.0

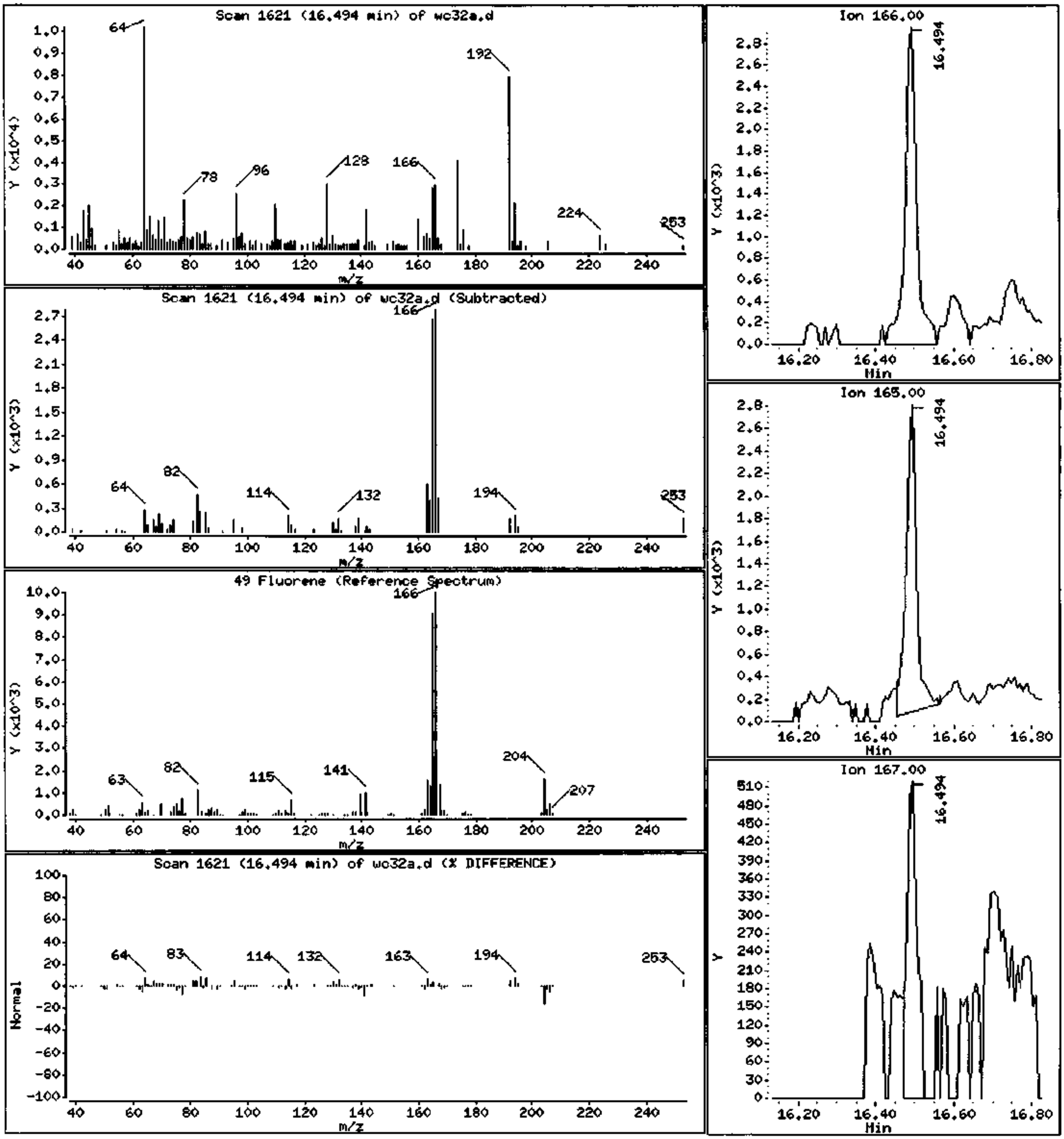
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

49 Fluorene

Concentration: 28.78 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32a.d

Date : 15-FEB-2013 18:39

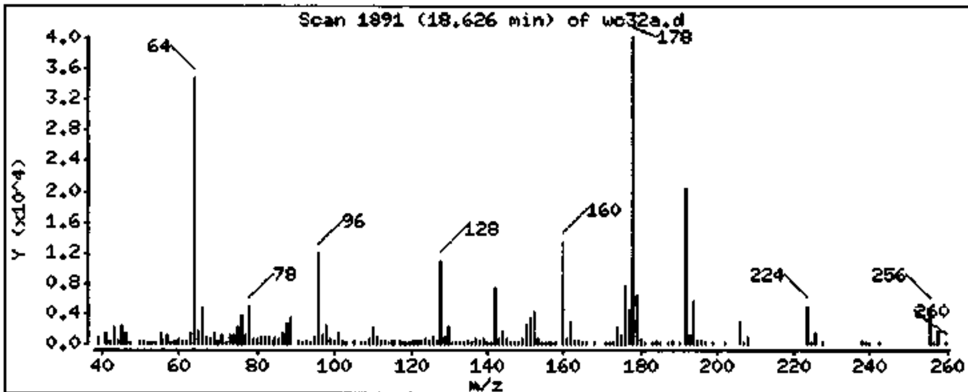
Client ID: SG-12-0-10-013113 Instrument: nt10.i

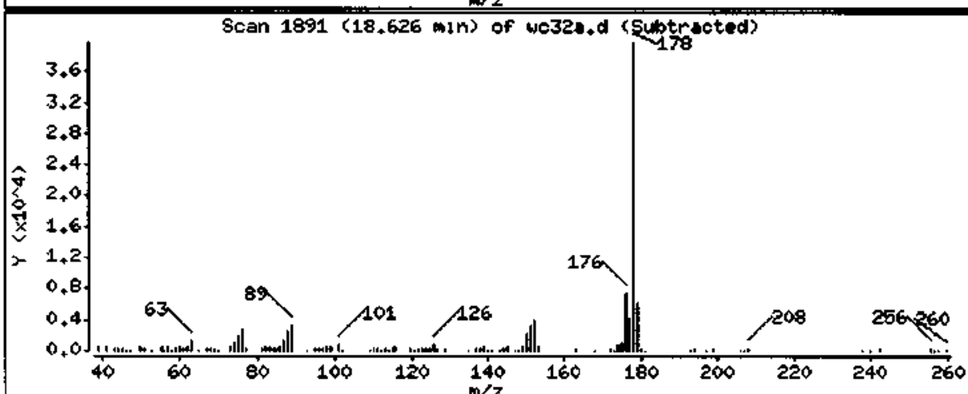
Sample Info: WC32A

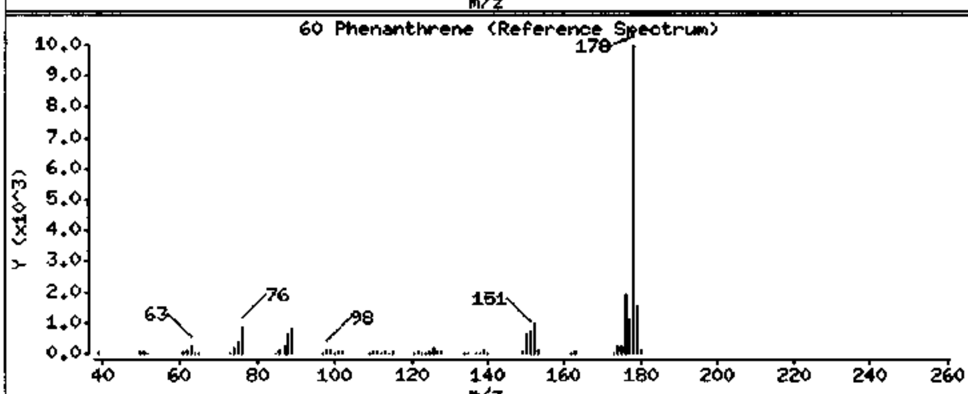
Volume Injected (uL): 1.0 Operator: VTS/YZ

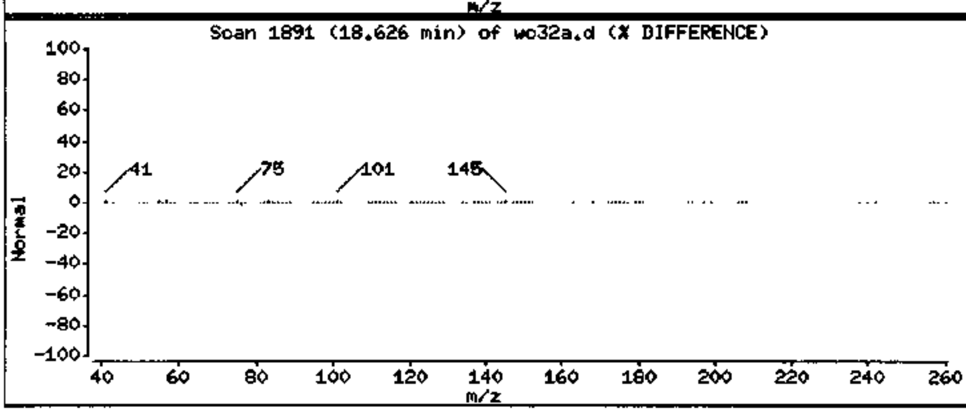
Column phase: ZB-5msi Column diameter: 0.25

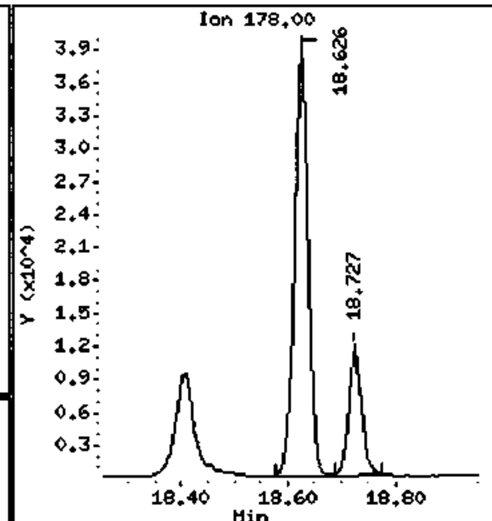
60 Phenanthrene Concentration: 208.4 ug/kg

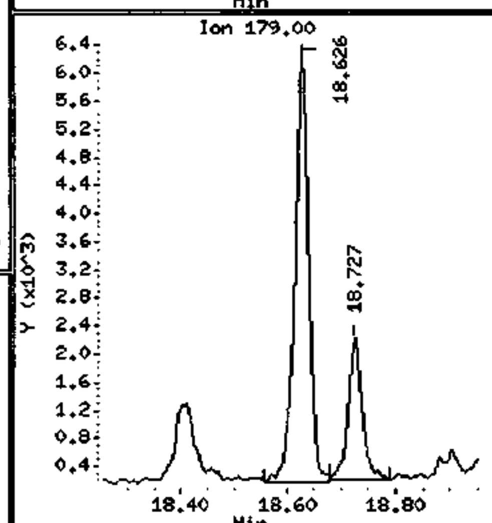


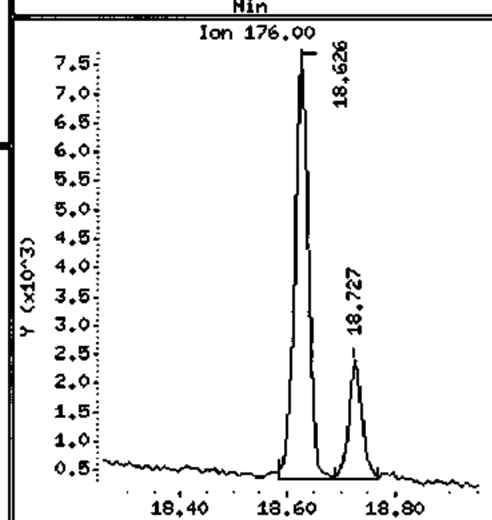












Data File: /chem1/nt10.i/20130215.b/wc32a.d

Date : 15-FEB-2013 18:39

Client ID: SG-12-0-10-013113

Instrument: nt10.i

Sample Info: WC32A

Volume Injected (uL): 1.0

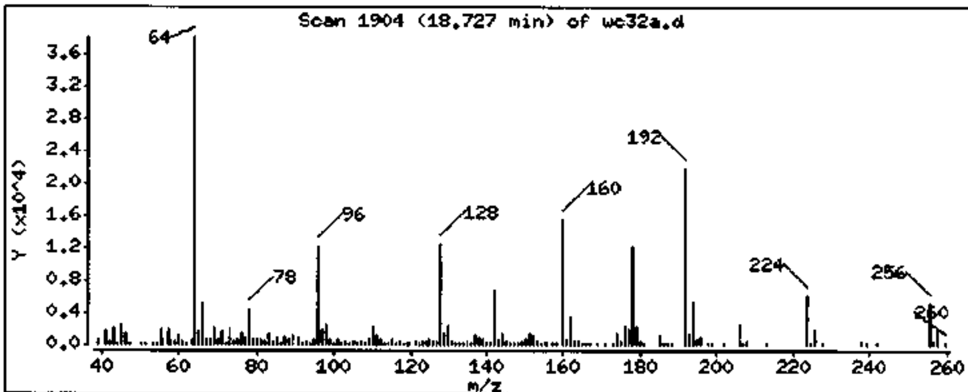
Operator: VTS/YZ

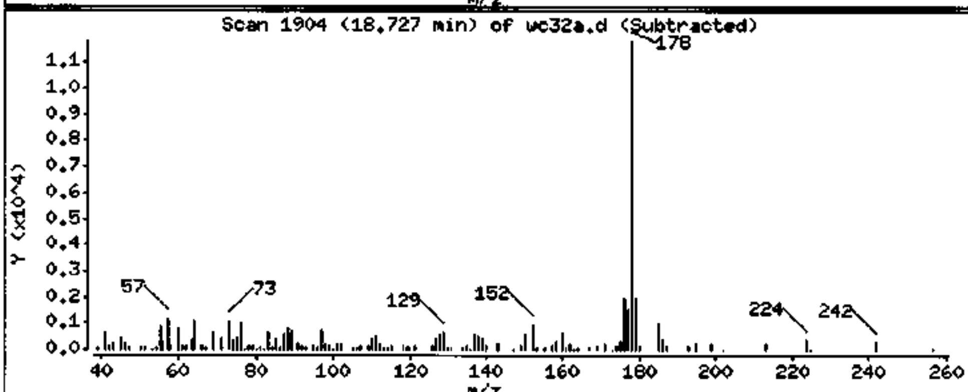
Column phase: ZB-5ms

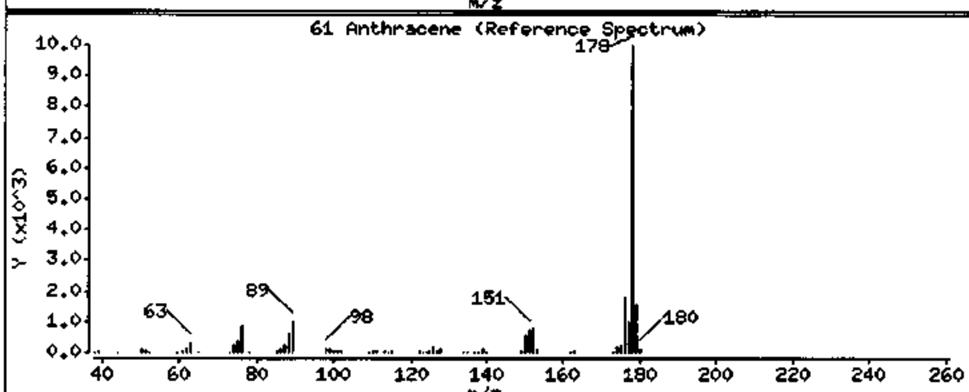
Column diameter: 0.25

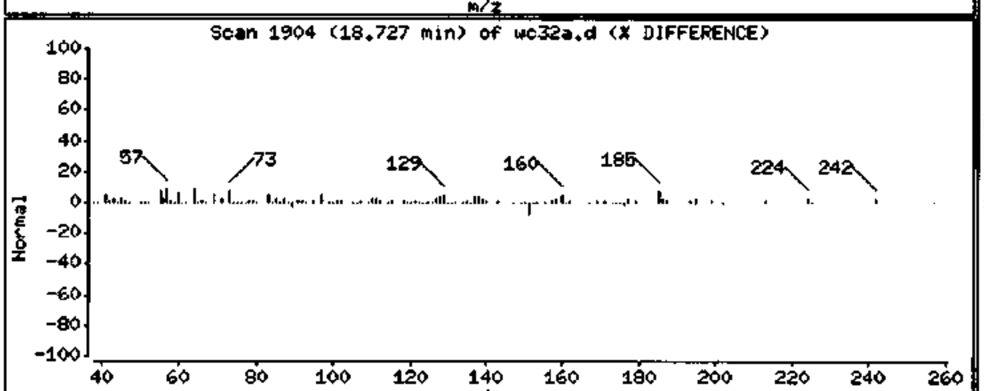
61 Anthracene

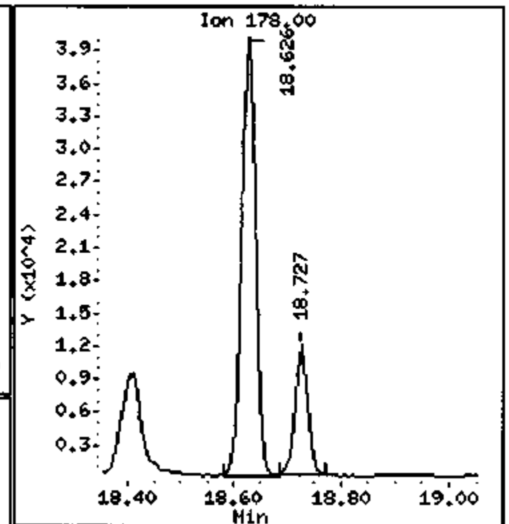
Concentration: 60.19 ug/kg

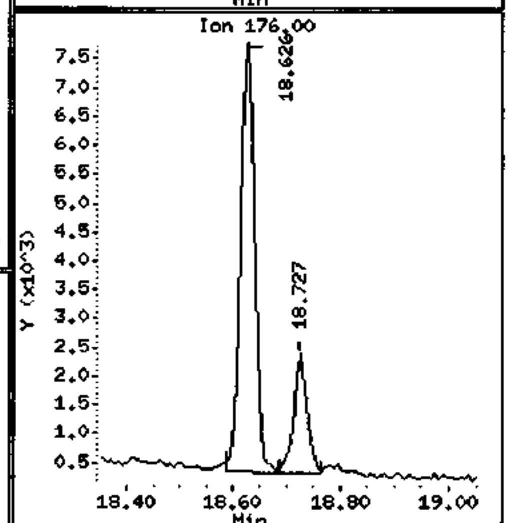


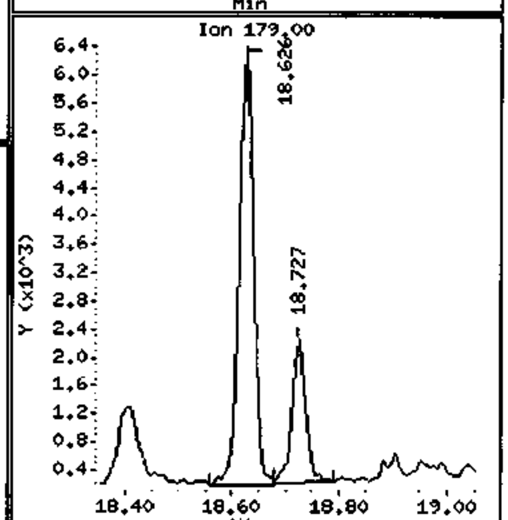












Data File: /chem1/nt10.i/20130215.b/wc32a.d

Date : 15-FEB-2013 18:39

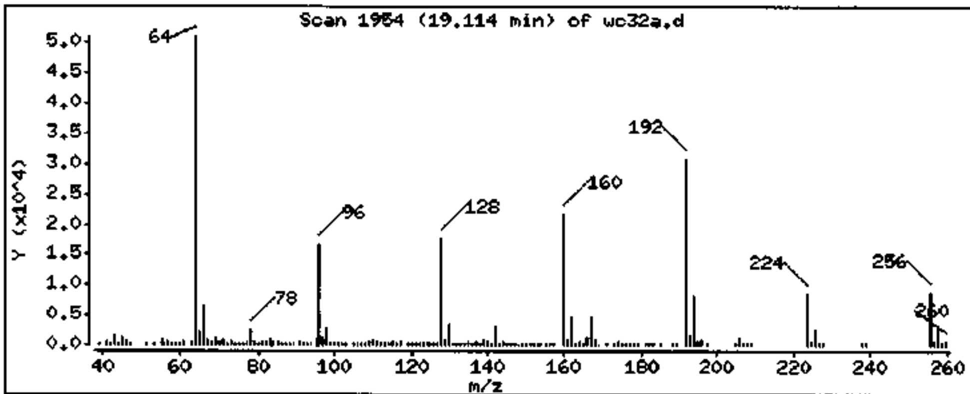
Client ID: SG-12-0-10-013113 Instrument: nt10.i

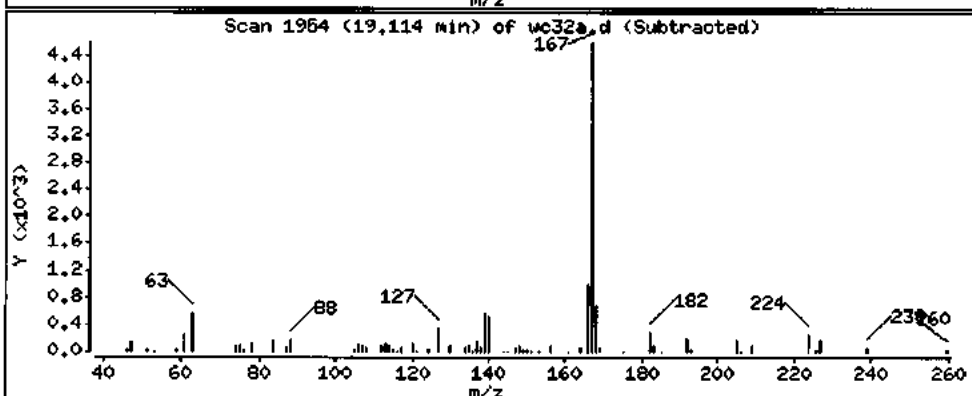
Sample Info: WC32A

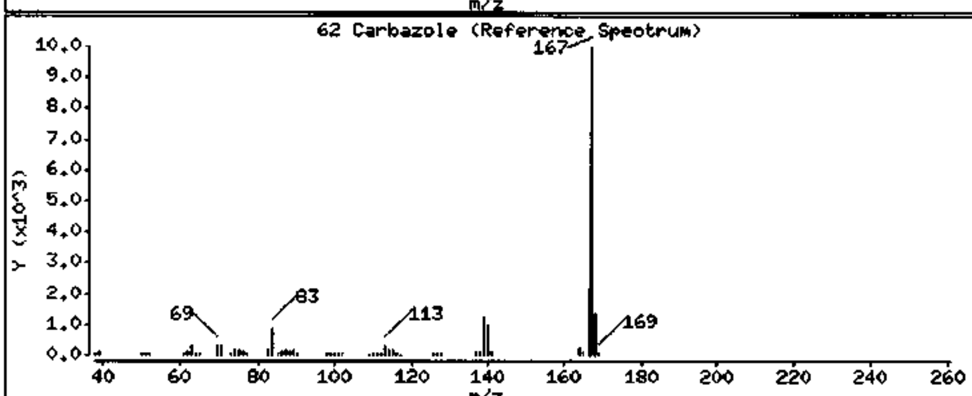
Volume Injected (uL): 1.0 Operator: VTS/YZ

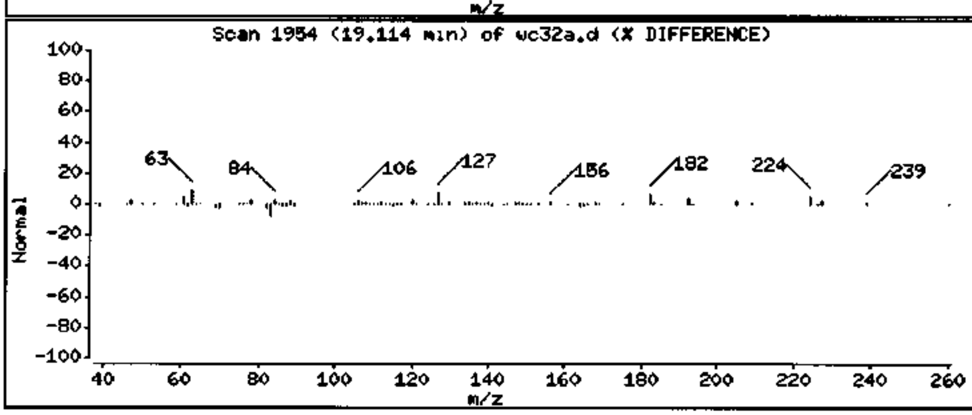
Column phase: ZB-5ms: Column diameter: 0.25

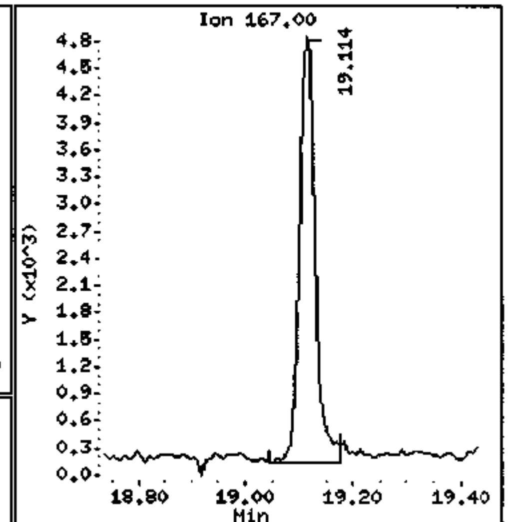
62 Carbazole Concentration: 44.65 ug/kg

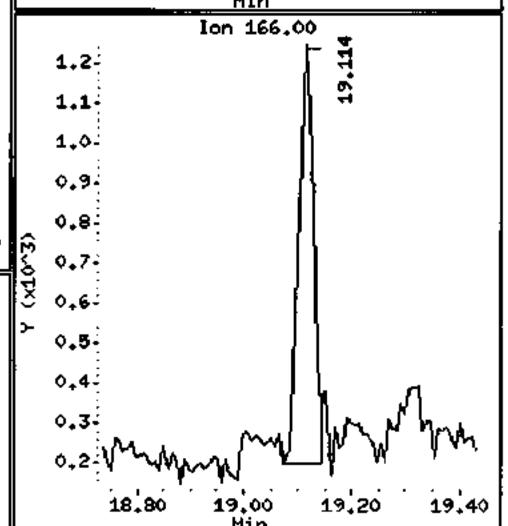


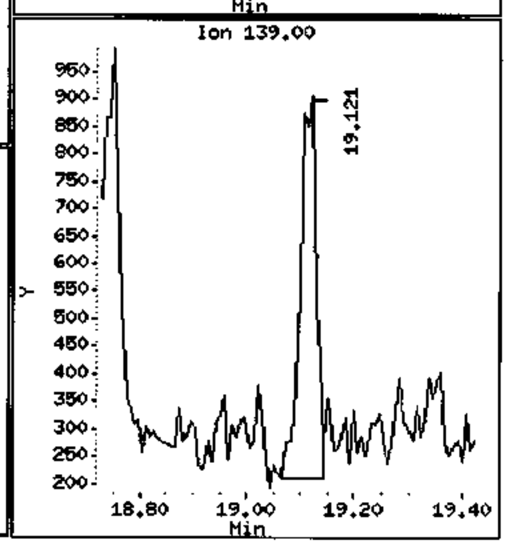












Data File: /chem1/nt10.i/20130215.b/wc32a.d

Date : 15-FEB-2013 18:39

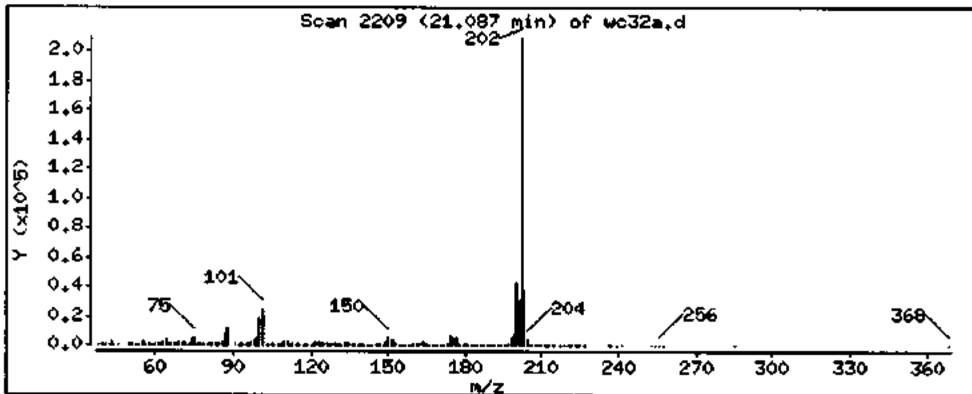
Client ID: SG-12-0-10-013113 Instrument: nt10.i

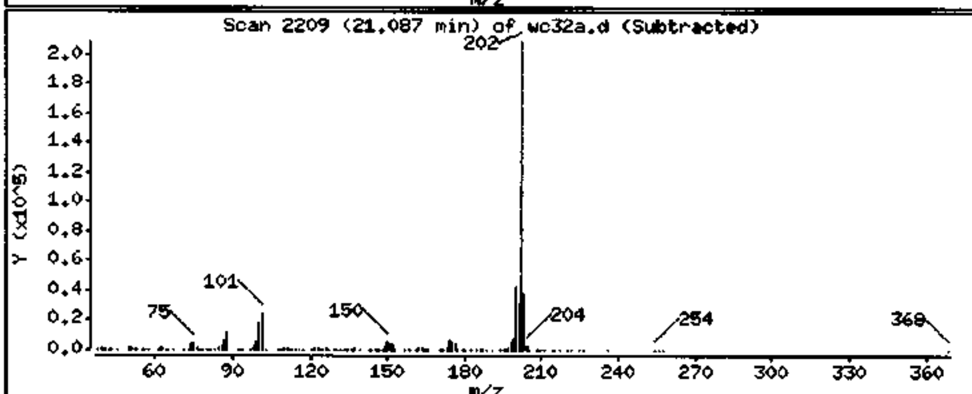
Sample Info: WC32A

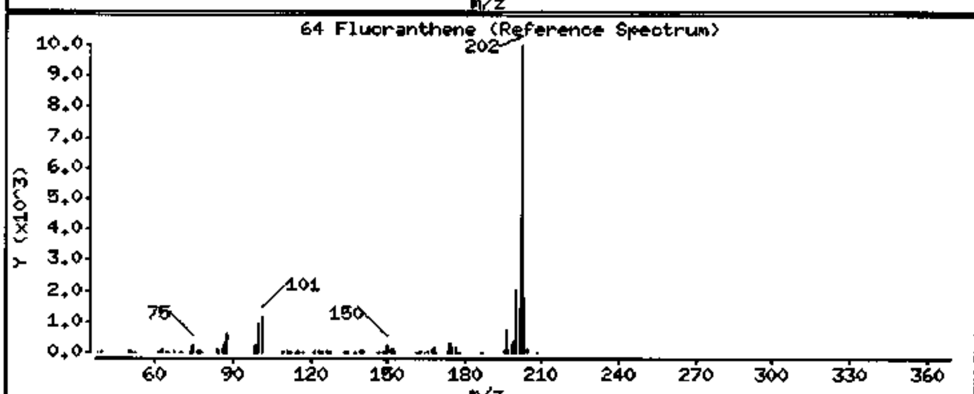
Volume Injected (uL): 1.0 Operator: VTS/YZ

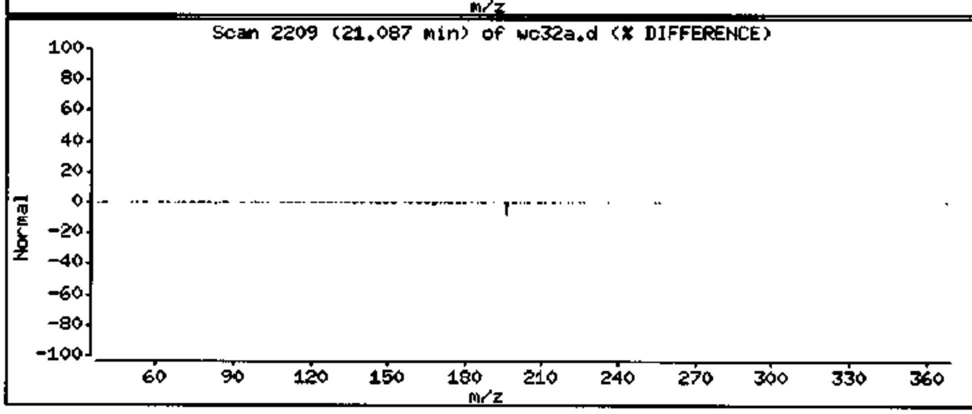
Column phase: ZB-5msi Column diameter: 0.25

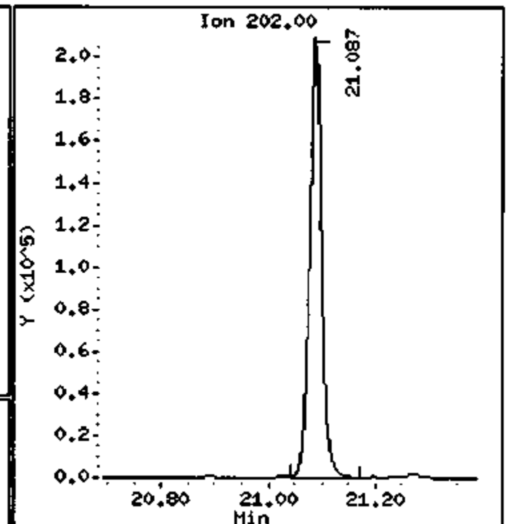
64 Fluoranthene Concentration: 878.4 ug/kg

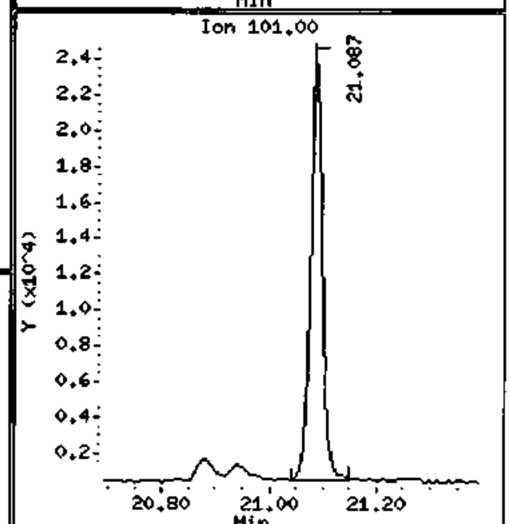


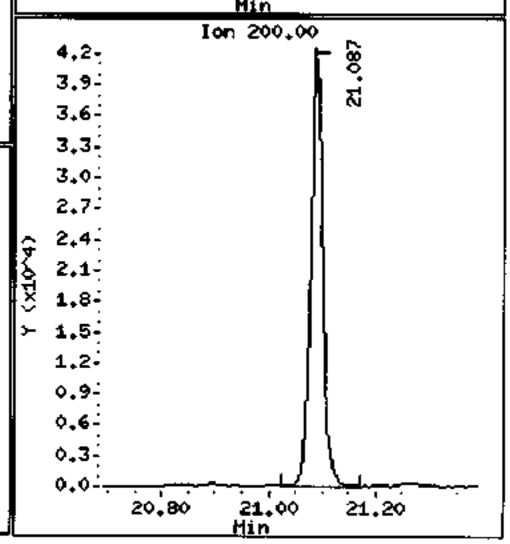












Data File: /chem1/nt10.i/20130215.b/wc32a.d

Date : 15-FEB-2013 18:39

Client ID: SG-12-0-10-013113

Sample Info: WC32A

Volume Injected (uL): 1.0

Column phase: ZB-5msi

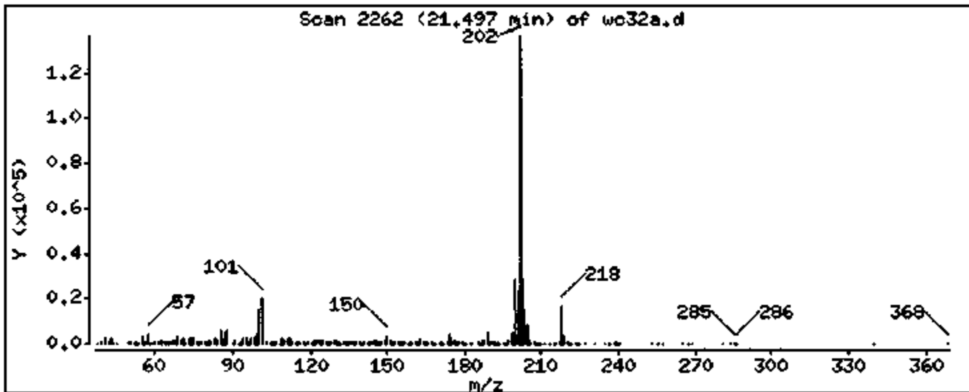
Instrument: nt10.i

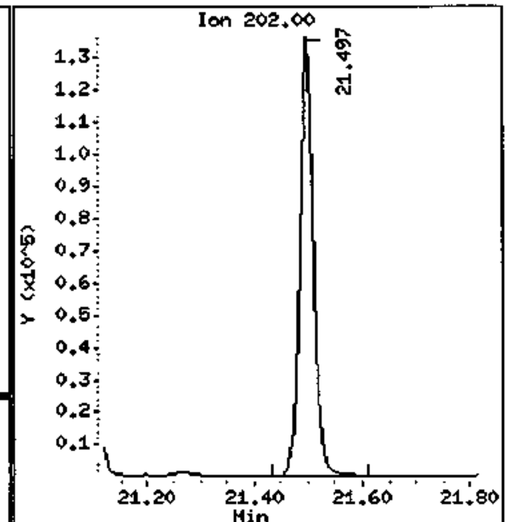
Operator: VTS/YZ

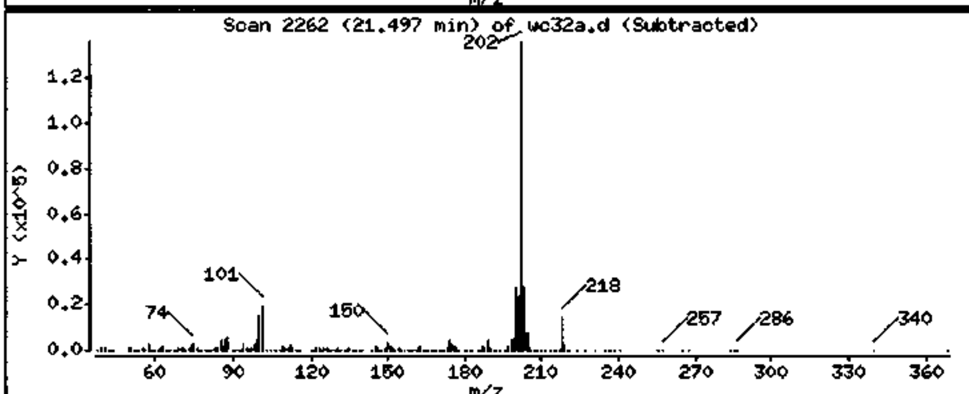
Column diameter: 0.25

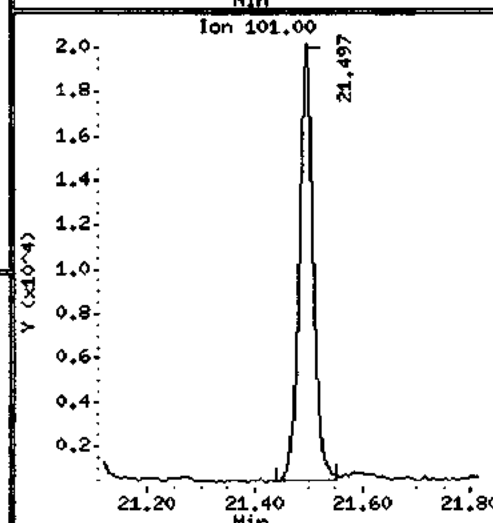
65 Pyrene

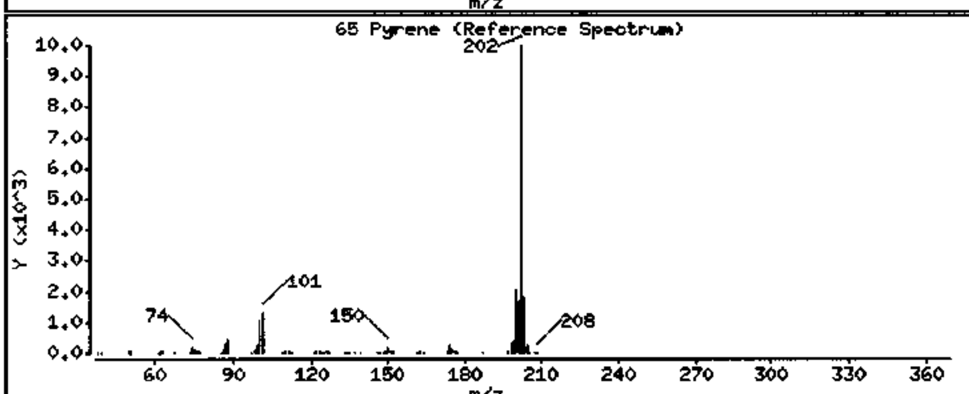
Concentration: 600.9 ug/kg

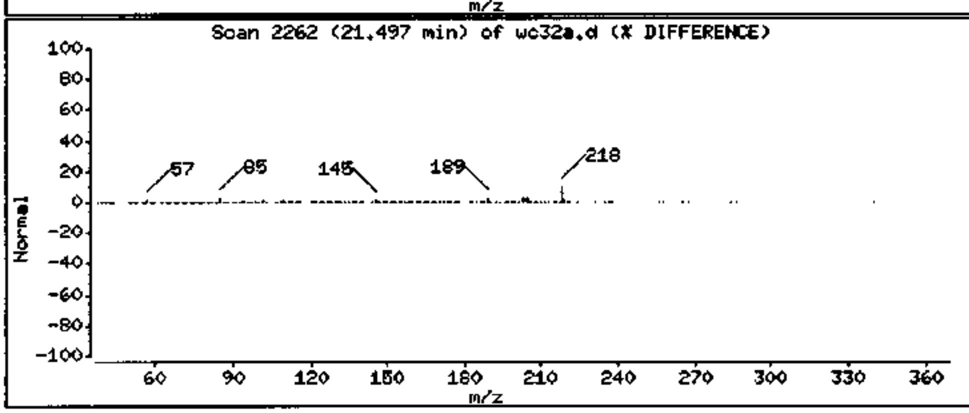


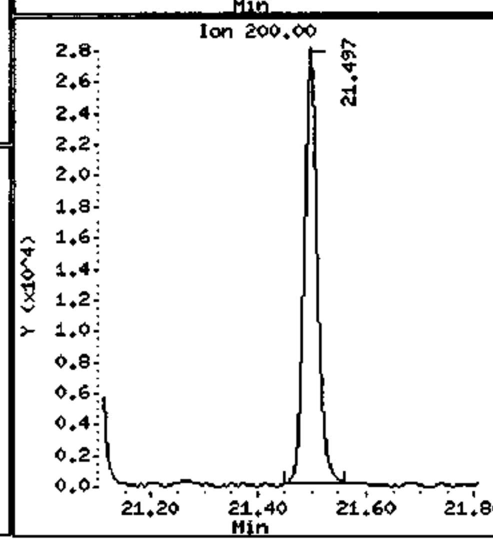












Data File: /chem1/nt10.i/20130215.b/wc32a.d

Date : 15-FEB-2013 18:39

Client ID: SG-12-0-10-013113

Instrument: nt10.i

Sample Info: WC32A

Volume Injected (uL): 1.0

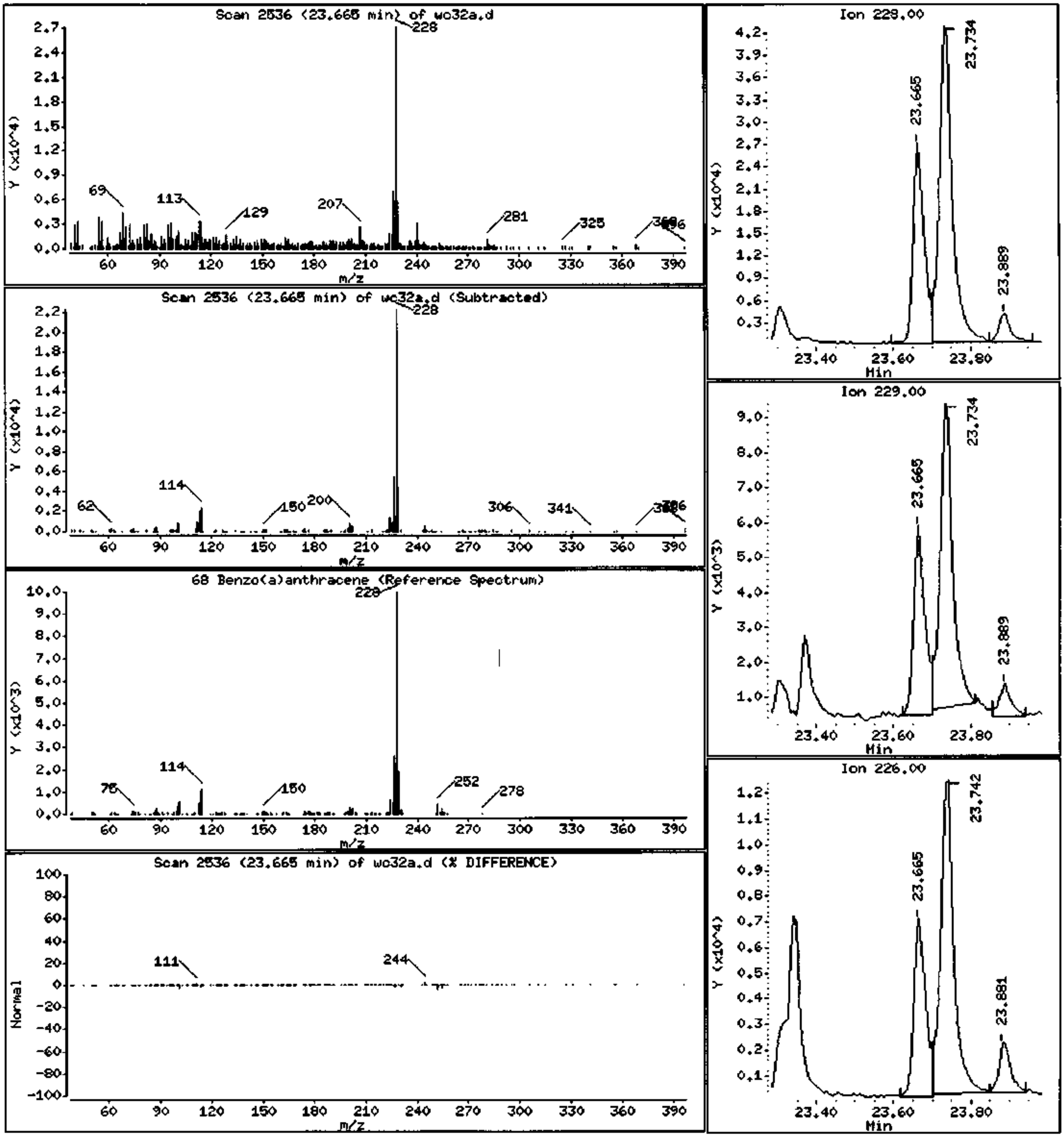
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

68 Benzo(a)anthracene

Concentration: 135.2 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32a.d

Date : 15-FEB-2013 18:39

Client ID: SG-12-0-10-013113

Instrument: nt10.i

Sample Info: WC32A

Volume Injected (uL): 1.0

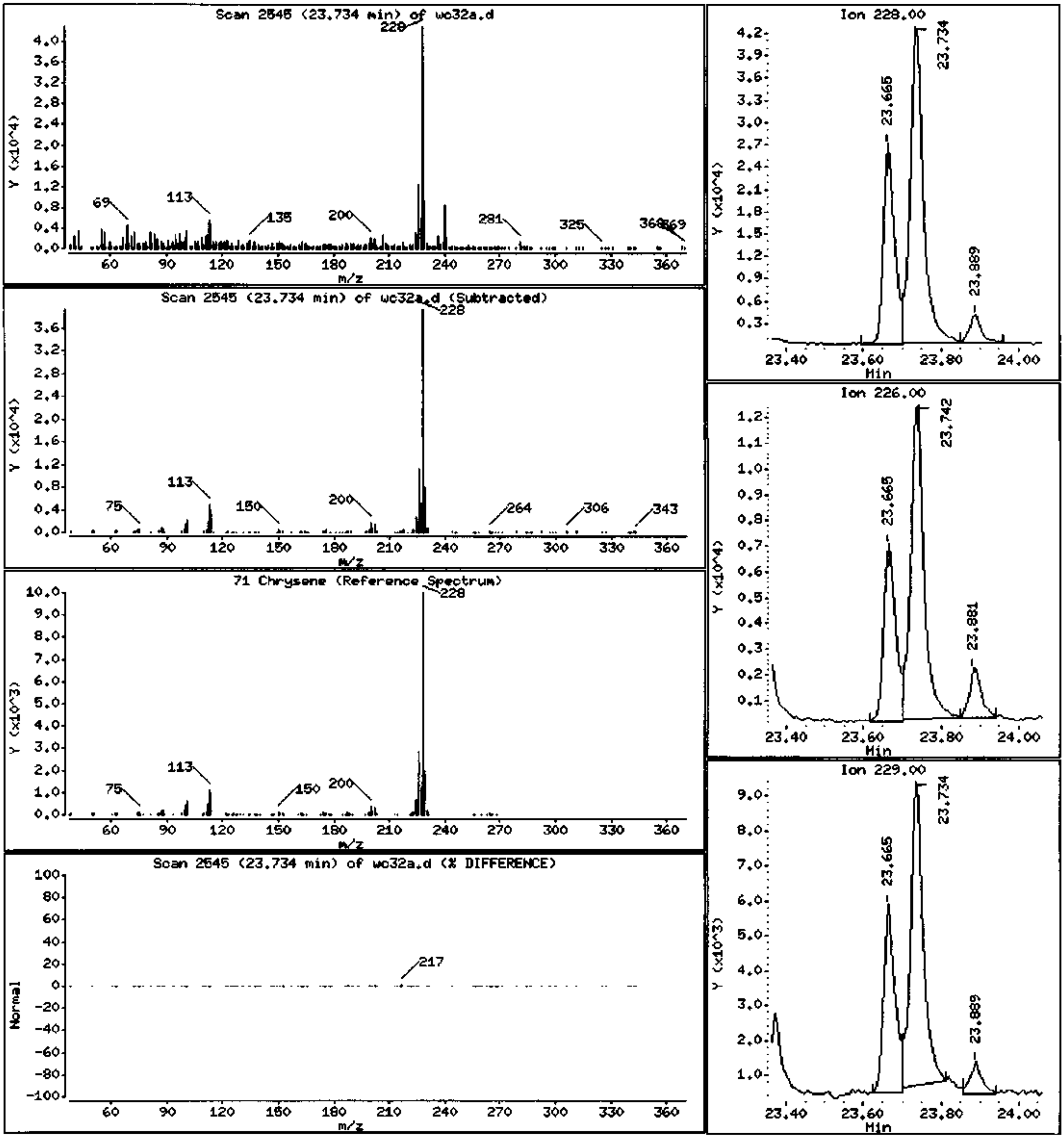
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

71 Chrysene

Concentration: 270.0 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32a.d

Date : 15-FEB-2013 18:39

Client ID: SG-12-0-10-013113

Instrument: nt10.i

Sample Info: WC32A

Volume Injected (uL): 1.0

Operator: VTS/YZ

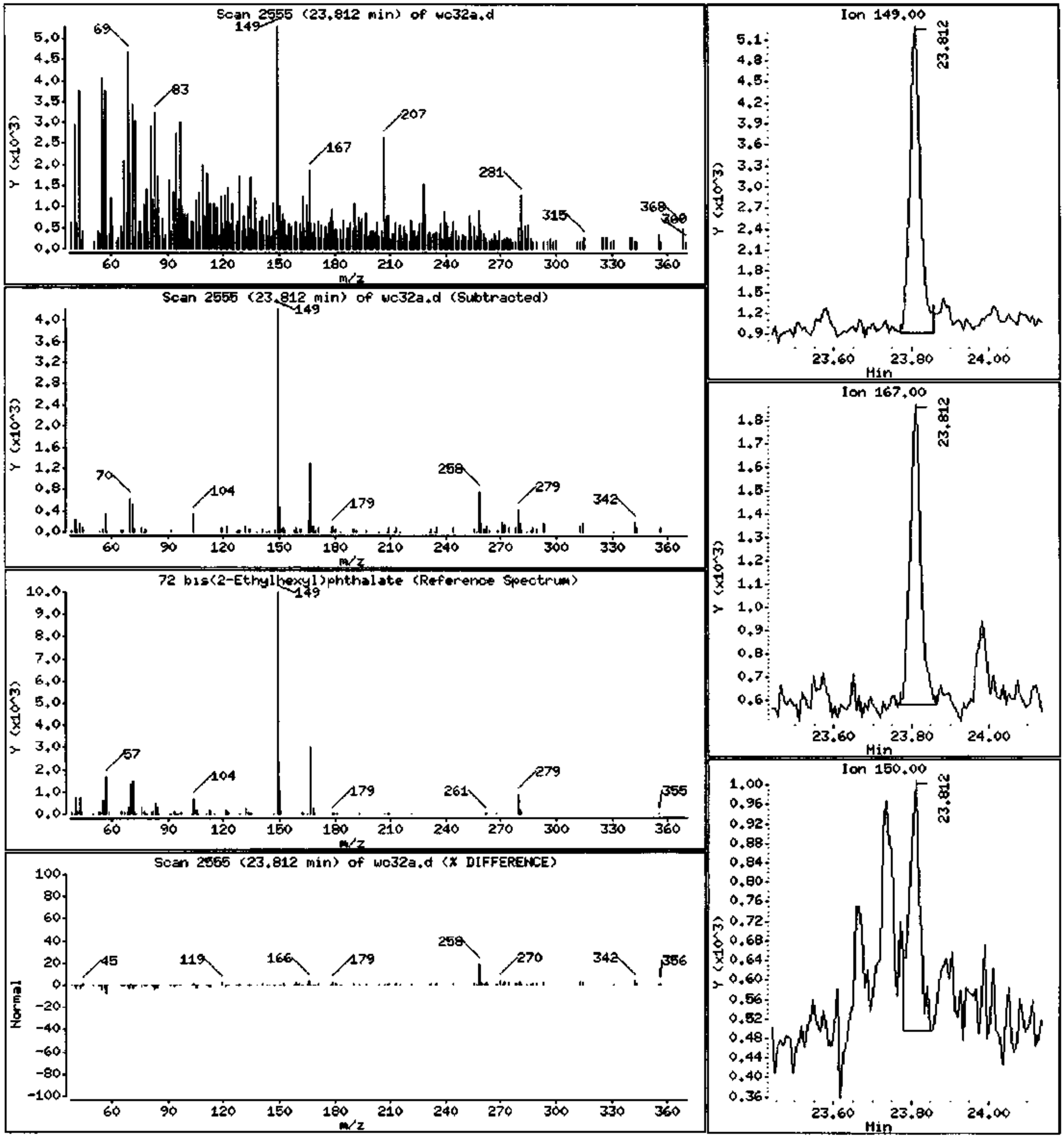
Column phase: ZB-5msi

Column diameter: 0.25

(B)

72 bis(2-Ethylhexyl)phthalate

Concentration: 30.60 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32a.d

Date : 15-FEB-2013 18:39

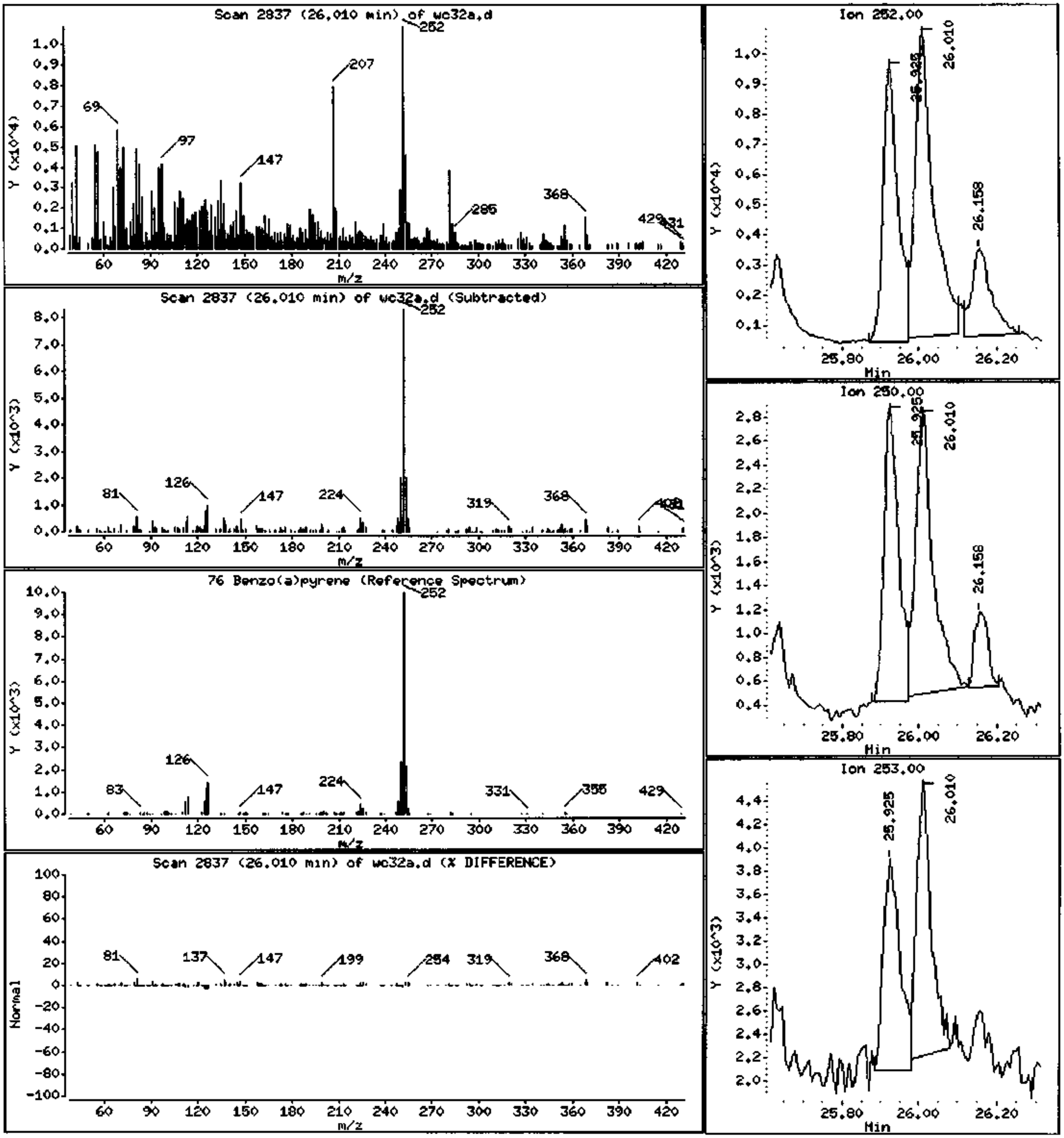
Client ID: SG-12-0-10-013113 Instrument: nt10.i

Sample Info: WC32A

Volume Injected (uL): 1.0 Operator: VTS/YZ

Column phase: ZB-5ms1 Column diameter: 0.25

76 Benzo(a)pyrene Concentration: 104.1 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32a.d

Date : 15-FEB-2013 18:39

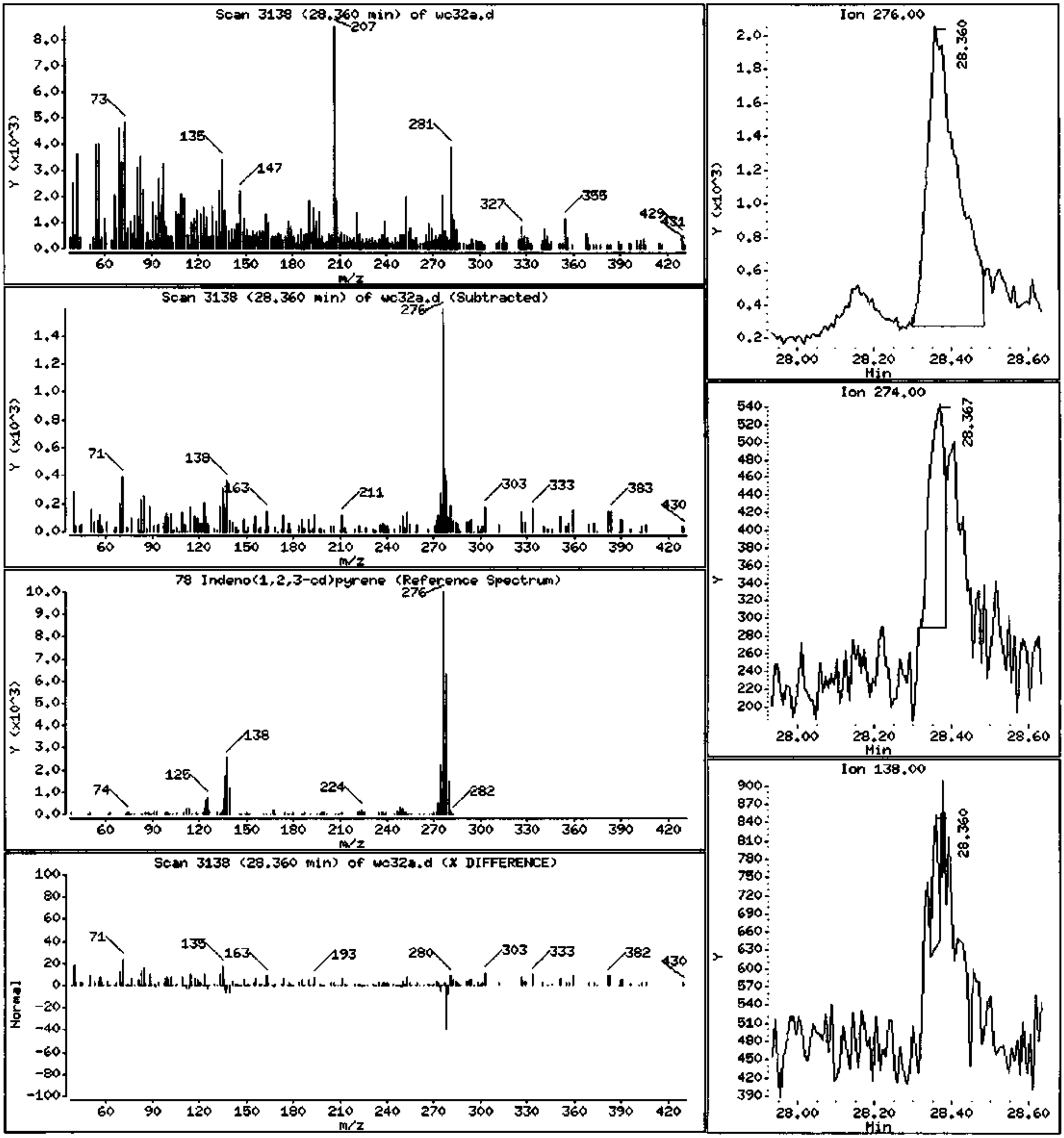
Client ID: SG-12-0-10-013113 | Instrument: nt10.i

Sample Info: WC32A

Volume Injected (uL): 1.0 | Operator: VTS/YZ

Column phase: ZB-5msi | Column diameter: 0.25

78 Indeno(1,2,3-cd)pyrene | Concentration: 22.88 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32a.d

Date : 15-FEB-2013 18:39

Client ID: SG-12-0-10-013113

Instrument: nt10.i

Sample Info: WC32A

Volume Injected (uL): 1.0

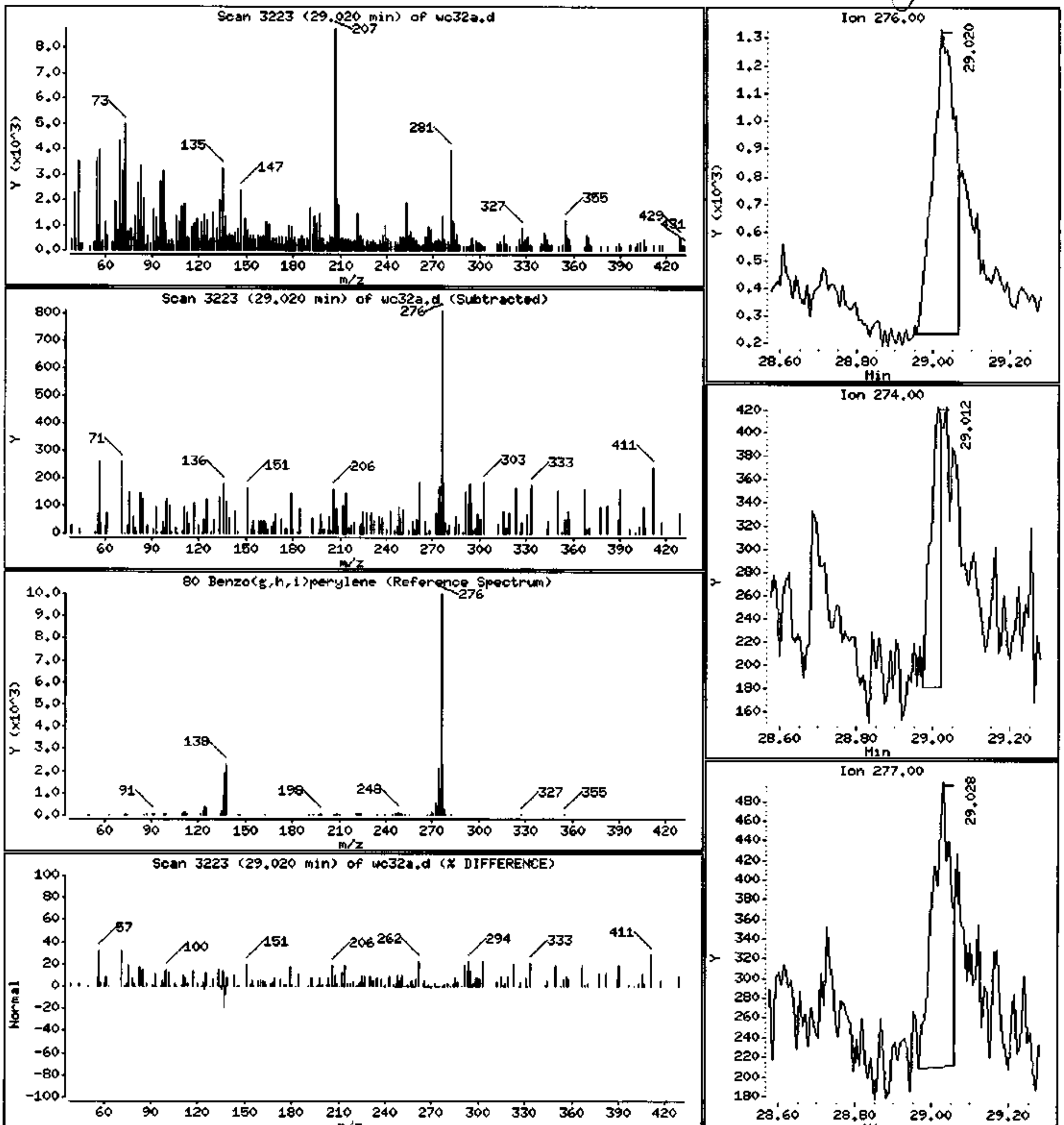
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

80 Benzo(g,h,i)perylene

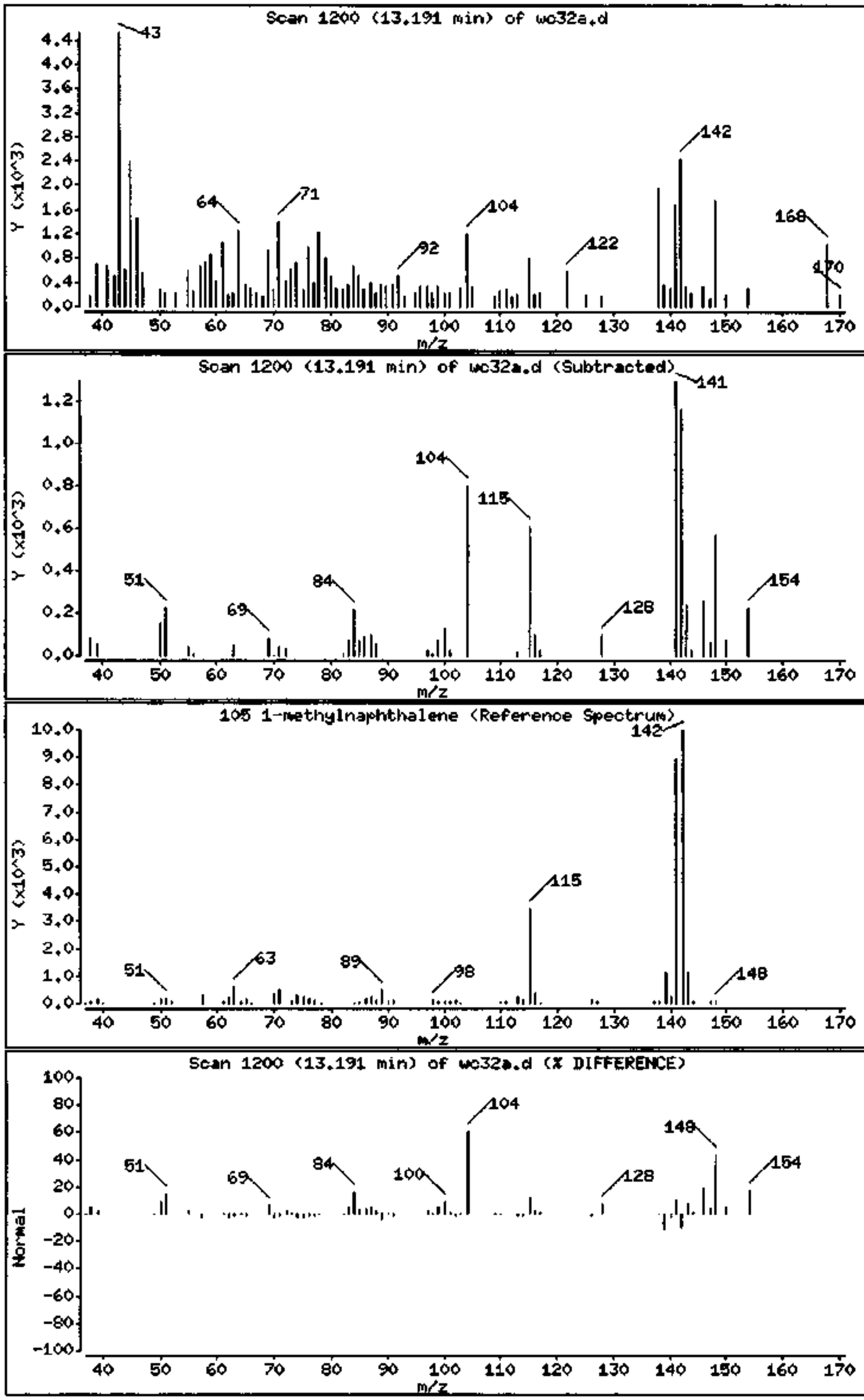
Concentration: 12.13 ug/kg

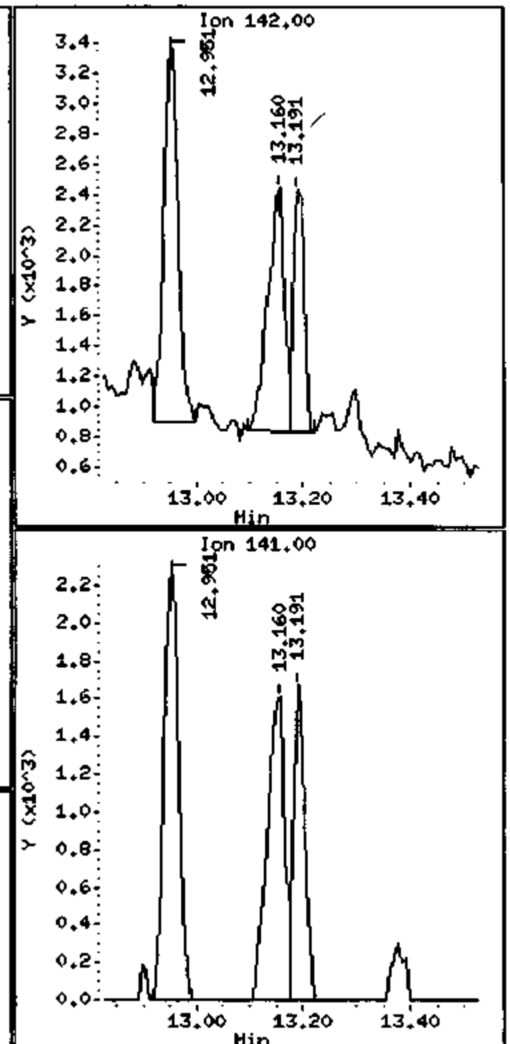


Data File: /chem1/nt10.i/20130215.b/wc32a.d
Date : 15-FEB-2013 18:39
Client ID: SG-12-0-10-013113
Instrument: nt10.i
Sample Info: WC32A
Volume Injected (uL): 1.0
Operator: VTS/YZ
Column phase: ZB-5msi
Column diameter: 0.25

JQA1

105 1-methylnaphthalene
Concentration: 12.70 ug/kg





Data File: /chem1/nt10.i/20130215.b/wc32a.d

Date : 15-FEB-2013 18:39

Client ID: SG-12-0-10-013113

Instrument: nt10.i

Sample Info: WC32A

Volume Injected (uL): 1.0

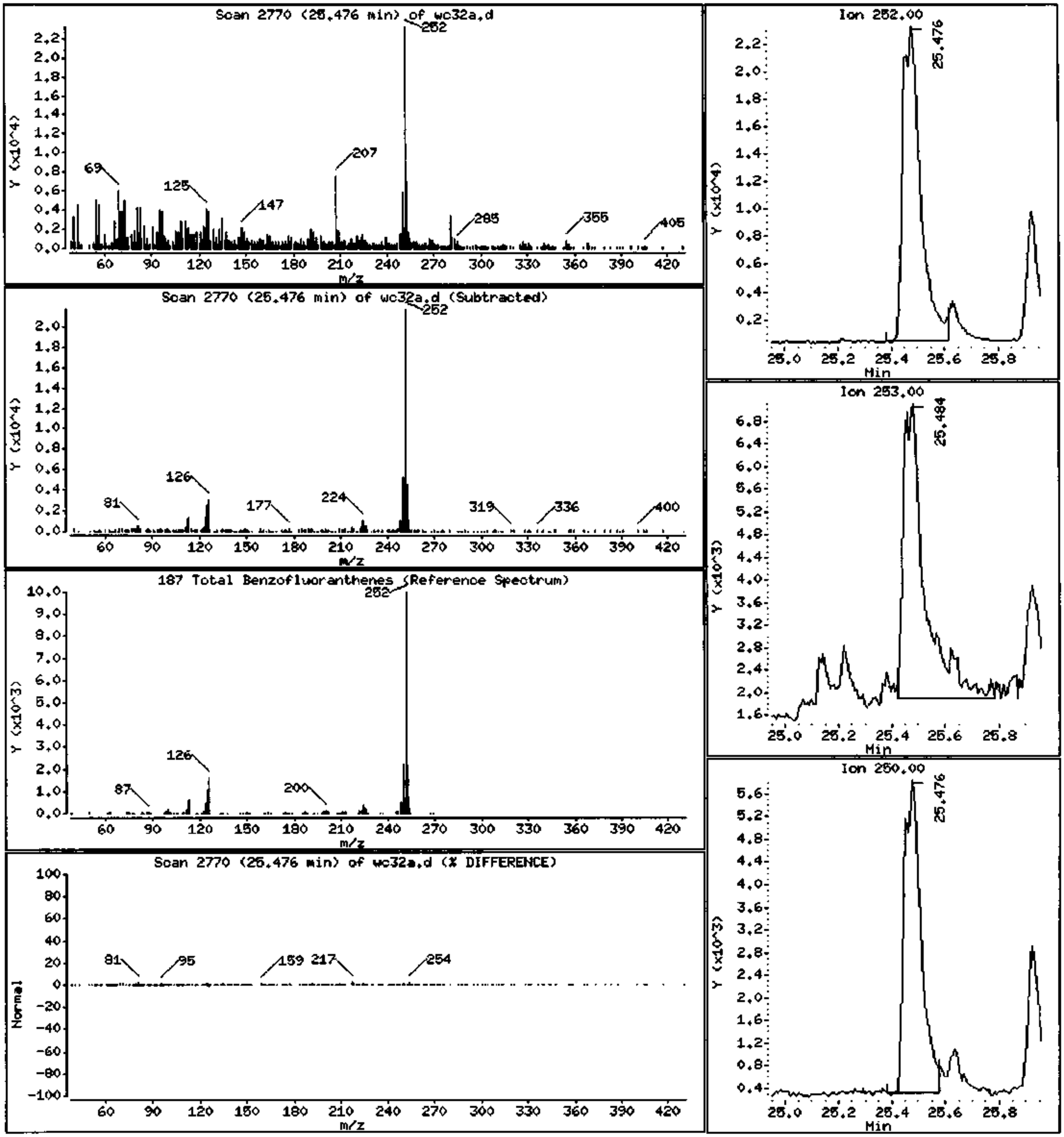
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

187 Total Benzofluoranthenes

Concentration: 278.3 ug/kg



CO-ELUTION SUMMARY FOR FILE - wc32a.d

Lab ID: WC32A, Method: ABN.m, Instrument: nt10.i, Date: 15-FEB-2013

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

YZ 2/18/13

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt10.i/20130215.b/wc32b.d
Lab Smp Id: WC32B Client Smp ID: SG-13-0-10-013113
Inj Date : 15-FEB-2013 19:15
Operator : VTS/YZ Inst ID: nt10.i
Smp Info : WC32B
Misc Info : 13-2425
Comment : 1ul Injection
Method : /chem1/nt10.i/20130215.b/ABN.m
Meth Date : 15-Feb-2013 14:06 van Quant Type: ISTD
Cal Date : 25-JAN-2013 17:16 Cal File: ic0125h.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDAICAL.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Ws	29.30000	Weight of sample extracted (g)
M	65.20000	% Moisture

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
$	1 2-Fluorophenol	112	6.606	6.459	(0.754)	45129	4.99098	489.5
$	2 Phenol-d5	99	8.283	8.183	(0.945)	63657	5.67335	556.4
	3 Phenol	94	8.306	8.206	(0.948)	7617	0.64497	63.26
$	5 2-Chlorophenol-d4	132	8.460	8.391	(0.966)	62027	6.38439	626.1
	4 Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
	6 2-Chlorophenol	128	Compound Not Detected.					
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	8.763	8.747	(1.000)	28279	4.00000	
	9 1,4-Dichlorobenzene	146	Compound Not Detected.					
$	10 1,2-Dichlorobenzene-d4	152	9.143	9.128	(1.043)	25415	3.55967	349.1
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	108	Compound Not Detected.					
	14 2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.					
	13 2-Methylphenol	108	Compound Not Detected.					
	17 Hexachloroethane	117	Compound Not Detected.					

							CONCENTRATIONS	
		QUANT SIG					ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/kg)
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	15 4-Methylphenol	108	9.733	9.663	(1.111)	7924	0.85470	83.82
$	18 Nitrobenzene-d5	82	9.973	9.919	(0.874)	41405	4.11775	403.8
	19 Nitrobenzene	77	Compound Not Detected.					
	20 Isophorone	82	Compound Not Detected.					
	21 2-Nitrophenol	139	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	Compound Not Detected.					
	23 Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
	24 Benzoic acid	105	11.042	11.057	(0.968)	20369	2.52663	247.8(M)
	25 2,4-Dichlorophenol	162	Compound Not Detected.					
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	11.412	11.397	(1.000)	108945	4.00000	
	28 Naphthalene	128	11.451	11.435	(1.003)	19197	0.67718	66.41
	29 4-Chloroaniline	127	Compound Not Detected.					
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	31 4-Chloro-3-methylphenol	107	Compound Not Detected.					
	32 2-Methylnaphthalene	142	Compound Not Detected.					
	33 Hexachlorocyclopentadiene	237	Compound Not Detected.					
	34 2,4,6-Trichlorophenol	196	Compound Not Detected.					
	35 2,4,5-Trichlorophenol	196	Compound Not Detected.					
$	36 2-Fluorobiphenyl	172	13.826	13.803	(0.903)	106204	4.37630	429.2
	37 2-Chloronaphthalene	162	Compound Not Detected.					
	38 2-Nitroaniline	65	Compound Not Detected.					
	39 Dimethylphthalate	163	Compound Not Detected.					
	40 Acenaphthylene	152	Compound Not Detected.					
	41 2,6-Dinitrotoluene	165	Compound Not Detected.					
*	42 Acenaphthene-d10	164	15.304	15.281	(1.000)	70739	4.00000	
	43 3-Nitroaniline	138	Compound Not Detected.					
	44 Acenaphthene	153	15.373	15.350	(1.005)	3273	0.16751	16.43
	45 2,4-Dinitrophenol	184	Compound Not Detected.					
	46 Dibenzofuran	168	15.737	15.706	(1.028)	7868	0.28954	28.40
	47 4-Nitrophenol	109	Compound Not Detected.					
	48 2,4-Dinitrotoluene	165	Compound Not Detected.					
	50 Diethylphthalate	149	16.417	16.386	(1.073)	3356	0.14974	14.69
	49 Fluorene	166	16.502	16.479	(1.078)	7723	0.33460	32.82
	51 4-Chlorophenyl-phenylether	204	Compound Not Detected.					
	52 4-Nitroaniline	138	Compound Not Detected.					
	53 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
	54 N-Nitrosodiphenylamine	169	Compound Not Detected.					
$	55 2,4,6-Tribromophenol	330	17.189	17.065	(1.123)	32701	7.24397	710.4(H)
	56 4-Bromophenyl-phenylether	248	Compound Not Detected.					
	57 Hexachlorobenzene	284	Compound Not Detected.					
	58 Pentachlorophenol	266	Compound Not Detected.					
*	59 Phenanthrene-d10	188	18.588	18.557	(1.000)	121165	4.00000	
	60 Phenanthrene	178	18.642	18.603	(1.003)	51391	1.59105	156.0
	61 Anthracene	178	18.735	18.704	(1.008)	20859	0.64138	62.90
	62 Carbazole	167	19.129	19.083	(1.029)	6007	0.27654	27.12
	63 Di-n-butylphthalate	149	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
	64 Fluoranthene	202	21.079	21.040	(1.134)	111966	3.01005	295.2
	65 Pyrene	202	21.497	21.466	(0.907)	115011	2.60765	255.7
$	66 Terphenyl-d14	244	21.822	21.791	(0.921)	138871	4.66947	458.0
	67 Butylbenzylphthalate	149	Compound Not Detected.					
	68 Benzo(a)anthracene	228	23.672	23.634	(0.999)	41532	0.96127	94.28
*	69 Chrysene-d12	240	23.703	23.665	(1.000)	154840	4.00000	
	70 3,3'-Dichlorobenzidine	252	Compound Not Detected.					
	71 Chrysene	228	23.742	23.711	(1.002)	70828	1.80994	177.5
	72 bis(2-Ethylhexyl)phthalate	149	23.812	23.789	(0.960)	15717	0.57643	56.53
*	134 Di-n-octylphthalate-d4	153	24.795	24.772	(1.000)	206487	4.00000	
	73 Di-n-octylphthalate	149	Compound Not Detected.					
	74 Benzo(b)fluoranthene	252	25.484	25.414	(0.976)	85167	2.17516	213.3
	75 Benzo(k)fluoranthene	252	25.484	25.414	(0.976)	85167	2.01342 MAG	197.5
	76 Benzo(a)pyrene	252	26.018	25.964	(0.996)	31557	0.93193	91.40
*	77 Perylene-d12	264	26.119	26.065	(1.000)	135090	4.00000	
	78 Indeno(1,2,3-cd)pyrene	276	28.391	28.282	(1.087)	4530	0.10848	10.64
	79 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	80 Benzo(g,h,i)perylene	276	Compound Not Detected.					
	~~90 N-Nitrosodimethylamine~~	~~74~~	~~4.173~~	~~4.158~~	~~(0.476)~~	~~780~~	~~0.14498~~	~~14.22~~
	91 Aniline	93	Compound Not Detected.					
	93 Benzidine	184	Compound Not Detected.					
	103 Pyridine	79	Compound Not Detected.					
	105 1-methylnaphthalene	142	Compound Not Detected.					
	111 Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					
	187 Total Benzofluoranthenes	252	25.484	25.453	(0.976)	85199	2.21057	216.8
	99 Perylene	252	26.165	26.111	(1.002)	9901	0.25442	24.95
	98 Retene	219	22.108	22.077	(0.933)	4836	0.20824	20.42
	120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: wc32b.d
Lab Smp Id: WC32B
Analysis Type: SV
Quant Type: ISTD
Operator: VTS/YZ
Method File: /chem1/nt10.i/20130215.b/ABN.m
Misc Info: 13-2425

Calibration Date: 15-FEB-2013
Calibration Time: 11:20
Client Smp ID: SG-13-0-10-01311
Level: LOW
Sample Type: Sediment

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	46623	23312	93246	28279	-39.35
27 Naphthalene-d8	176978	88489	353956	108945	-38.44
42 Acenaphthene-d10	110872	55436	221744	70739	-36.20
59 Phenanthrene-d10	188290	94145	376580	121165	-35.65
69 Chrysene-d12	213681	106840	427362	154840	-27.54
134 Di-n-octylphthala	264159	132080	528318	206487	-21.83
77 Perylene-d12	208584	104292	417168	135090	-35.23

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.75	8.25	9.25	8.76	0.18
27 Naphthalene-d8	11.40	10.90	11.90	11.41	0.13
42 Acenaphthene-d10	15.28	14.78	15.78	15.30	0.15
59 Phenanthrene-d10	18.56	18.06	19.06	18.59	0.17
69 Chrysene-d12	23.66	23.16	24.16	23.70	0.16
134 Di-n-octylphthala	24.77	24.27	25.27	24.79	0.09
77 Perylene-d12	26.06	25.56	26.56	26.12	0.21

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 18-Feb-2013 11:49

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd-Snider
Sample Matrix: SOLID
Lab Smp Id: WC32B
Level: LOW
Data Type: MS DATA
SpikeList File: SHORTPSDDA.spk
Sublist File: PSDDAICAL.sub
Method File: /chem1/nt10.i/20130215.b/ABN.m
Misc Info: 13-2425

Client SDG: WC32
Fraction: SV
Client Smp ID: SG-13-0-10-013113
Operator: VTS/YZ
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 1 2-Fluorophenol	735.6	489.5	66.55	30-160
$ 2 Phenol-d5	735.6	556.4	75.64	30-160
$ 5 2-Chlorophenol-d4	735.6	626.1	85.13	30-160
$ 10 1,2-Dichlorobenzen	490.4	349.1	71.19	30-160
$ 18 Nitrobenzene-d5	490.4	403.8	82.36	30-160
$ 36 2-Fluorobiphenyl	490.4	429.2	87.53	30-160
$ 55 2,4,6-Tribromophen	735.6	710.4	96.59	30-160
$ 66 Terphenyl-d14	490.4	458.0	93.39	30-160

Data File: /chem1/nt10.i/20130215.b/wc32b.d

Date : 15-FEB-2013 19:15

Client ID: SG-13-0-10-013113

Sample Info: WC32B

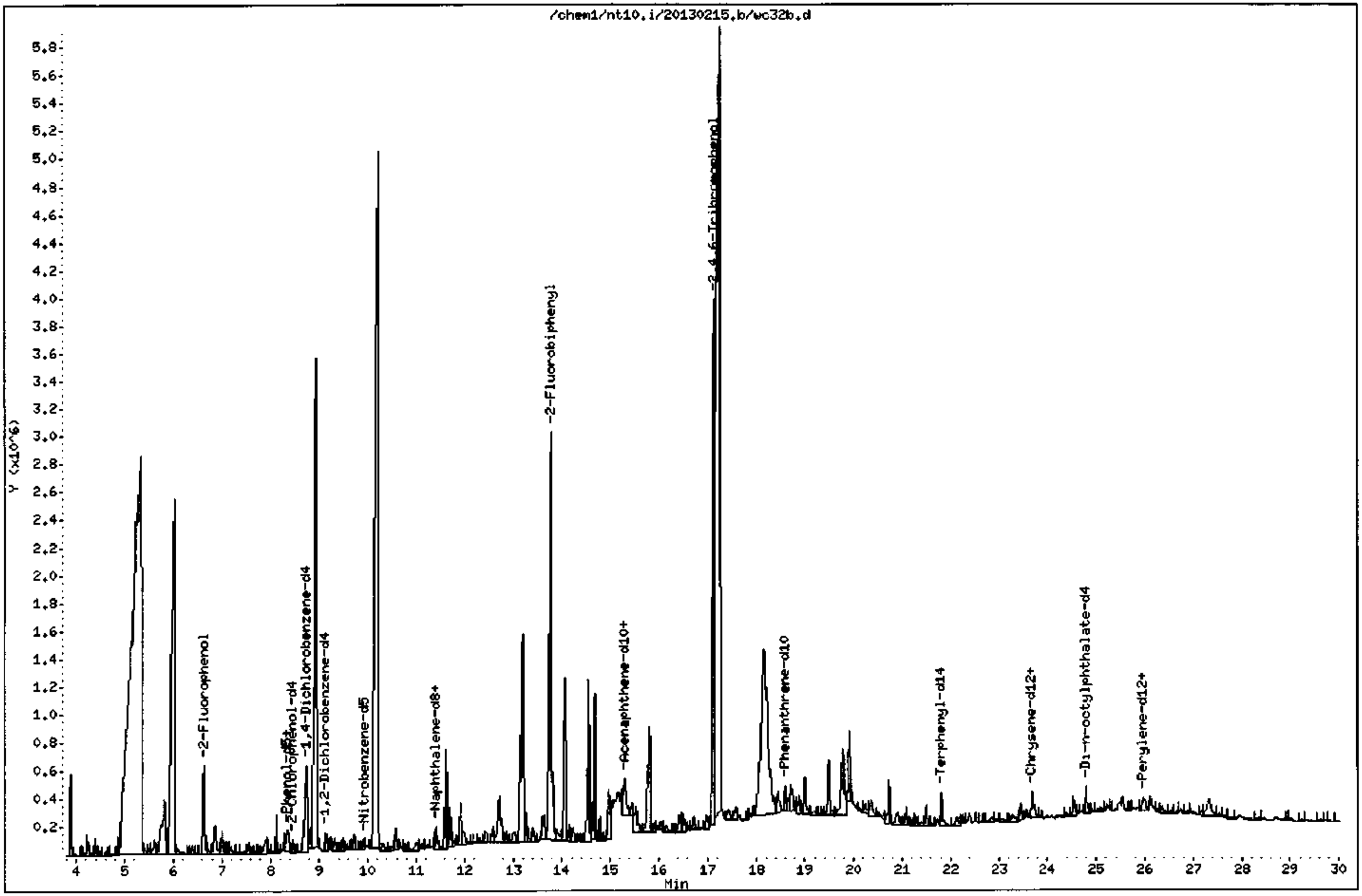
Volume Injected (uL): 1.0

Column phase: ZB-5msi

Instrument: nt10.i

Operator: VTS/YZ

Column diameter: 0.25



Data File: /chem1/nt10.i/20130215.b/wc32b.d

Date : 15-FEB-2013 19:15

Client ID: SG-13-0-10-013113

Instrument: nt10.i

Sample Info: WC32B

Volume Injected (uL): 1.0

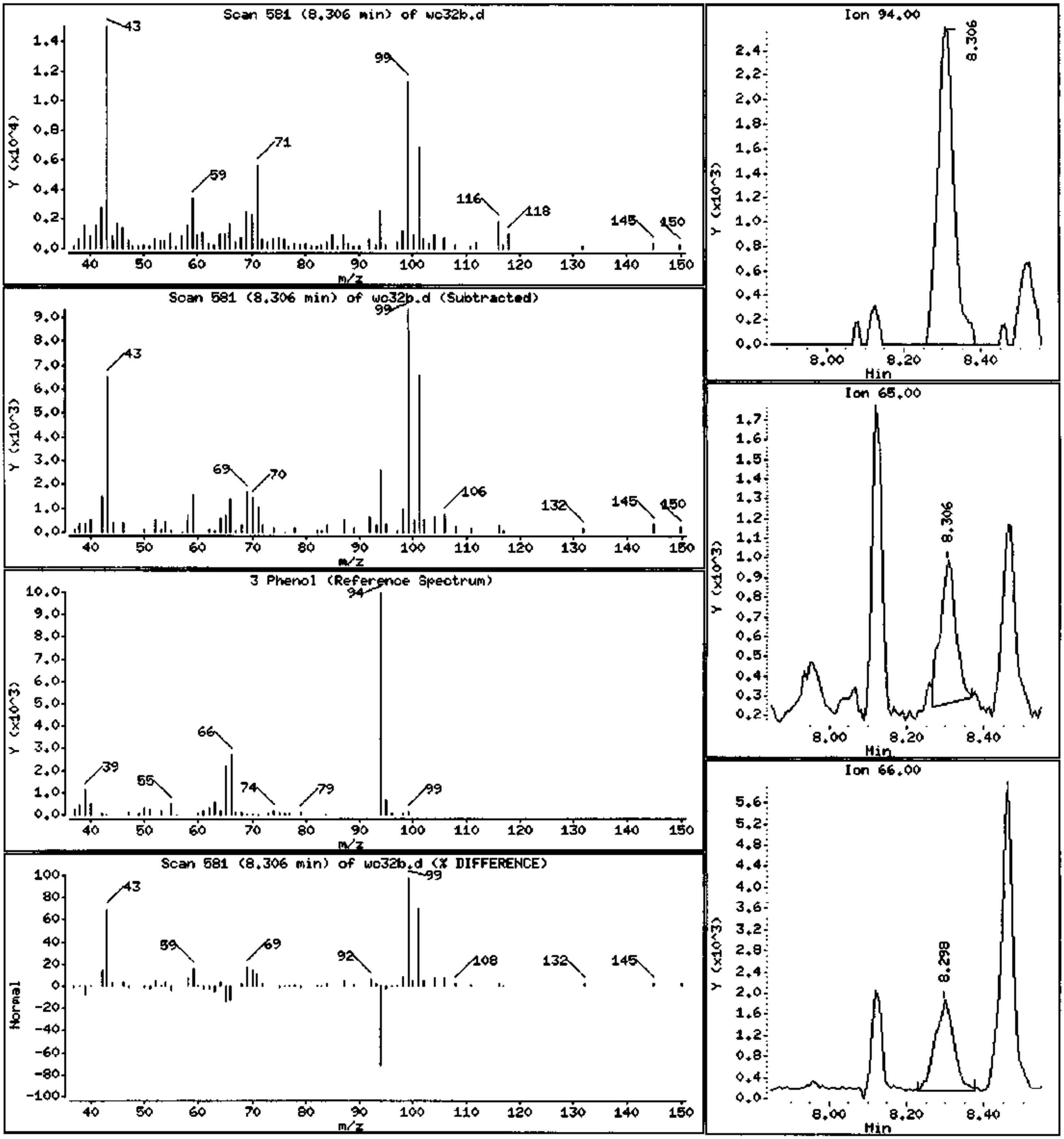
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

3 Phenol

Concentration: 63.26 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32b.d

Date : 15-FEB-2013 19:15

Client ID: SG-13-0-10-013113

Instrument: nt10.i

Sample Info: WC32B

Volume Injected (uL): 1.0

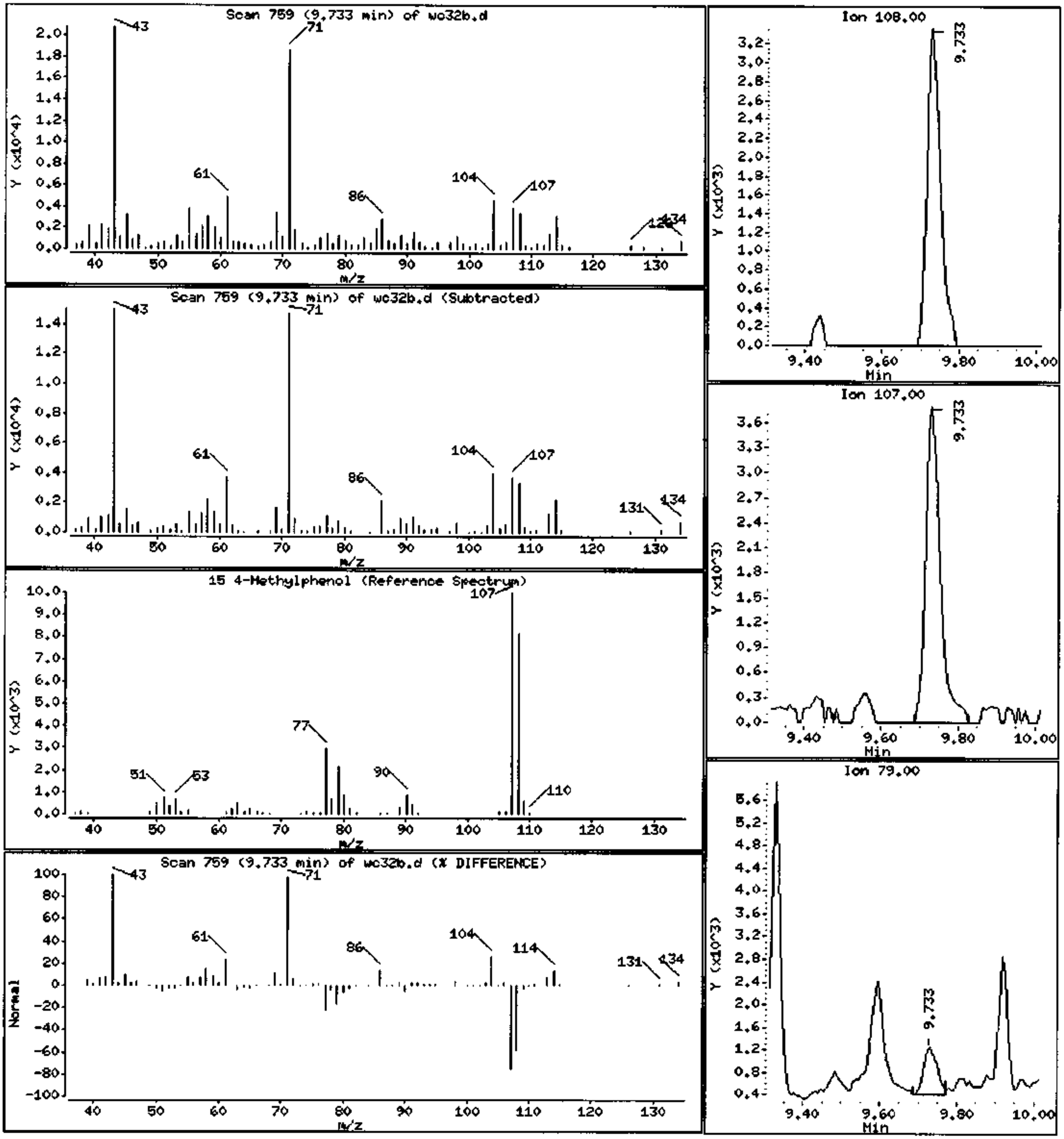
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 83.82 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32b.d

Date : 15-FEB-2013 19:15

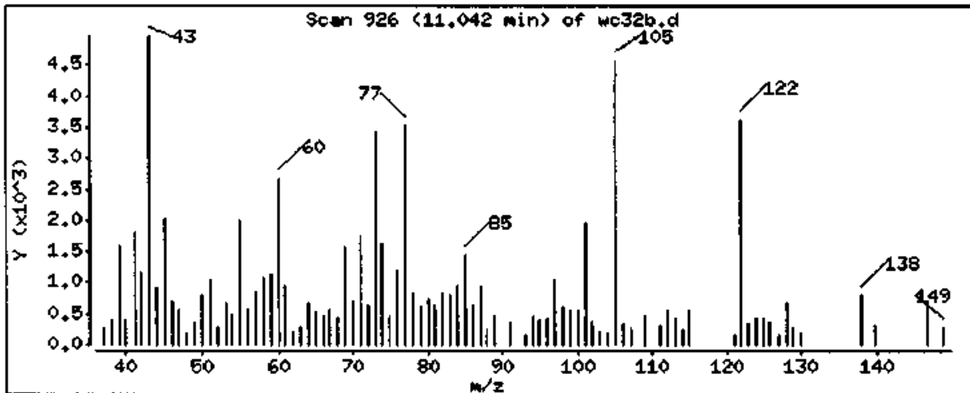
Client ID: SG-13-0-10-013113 | Instrument: nt10.i

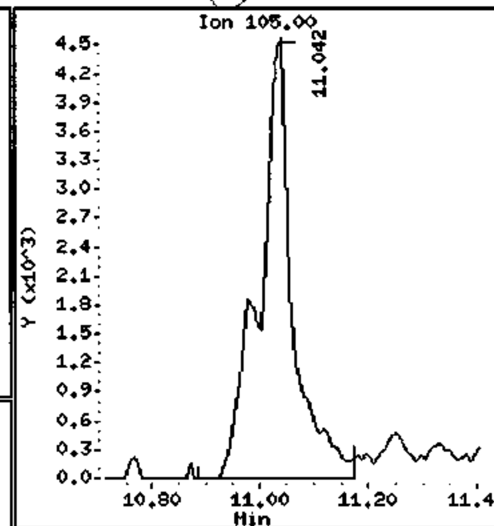
Sample Info: WC32B

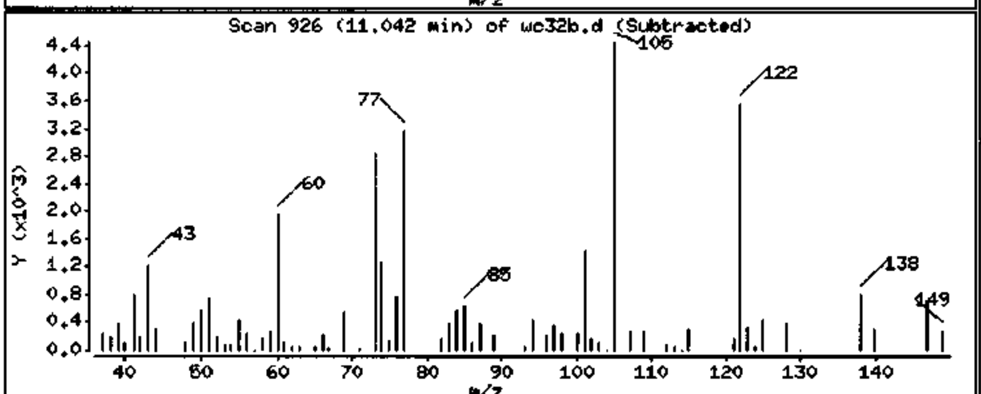
Volume Injected (uL): 1.0 | Operator: VTS/YZ

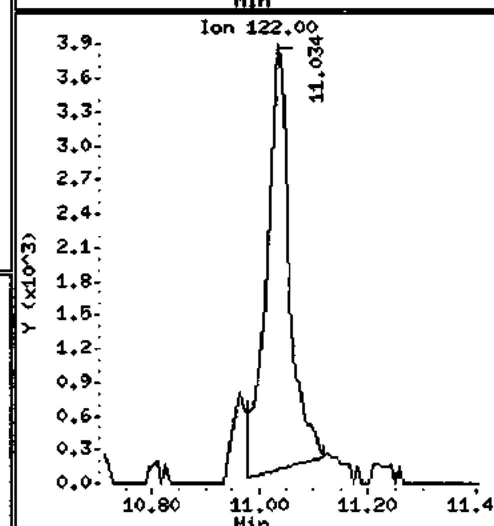
Column phase: ZB-5msi | Column diameter: 0.25

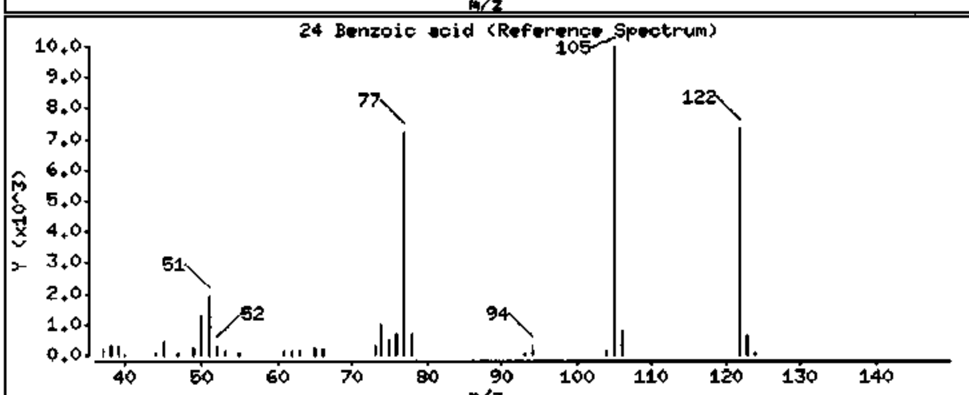
24 Benzoic acid | Concentration: 247.8 ug/kg

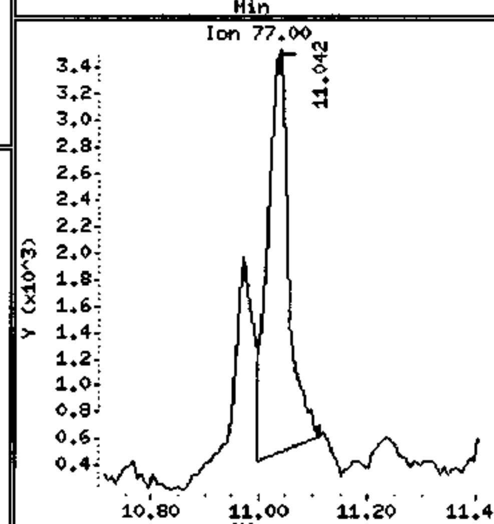


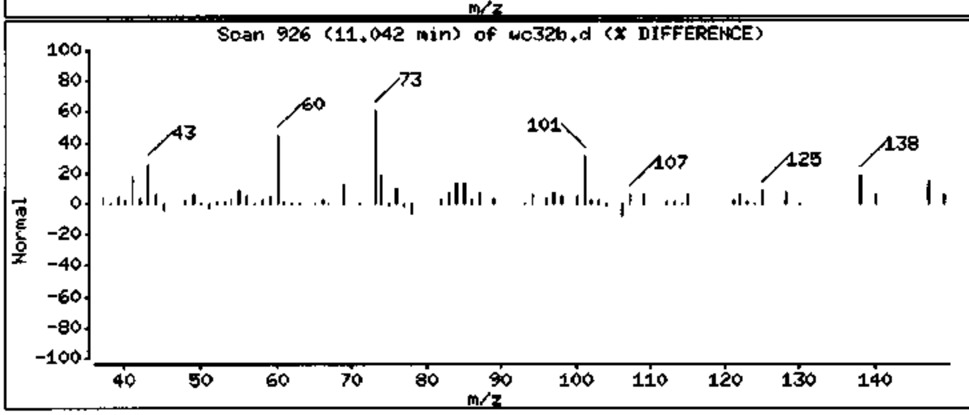












Data File: /chem1/nt10.i/20130215.b/wc32b.d

Date : 15-FEB-2013 19:15

Client ID: SG-13-0-10-013113

Instrument: nt10.i

Sample Info: WC32B

Volume Injected (uL): 1.0

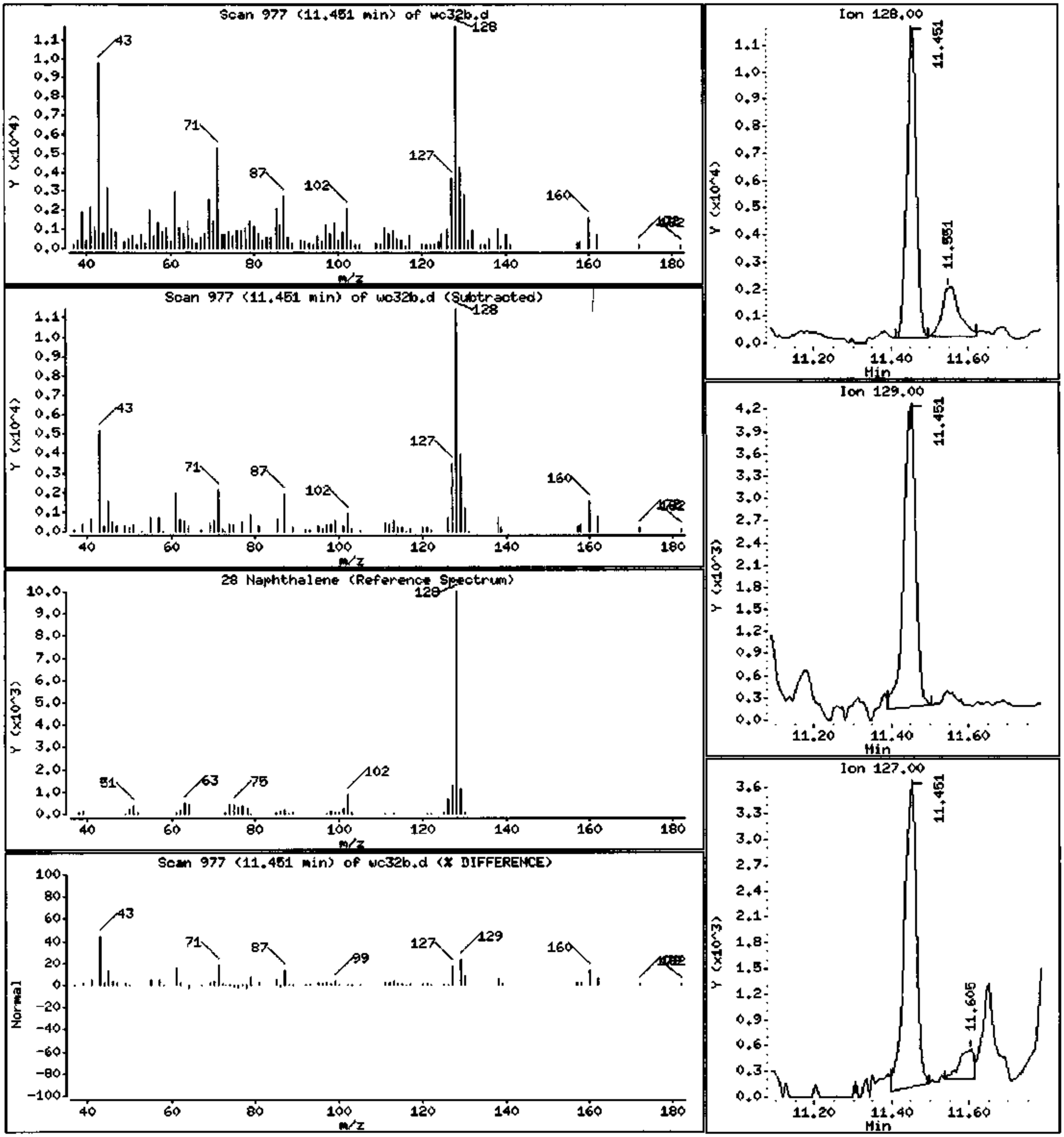
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

28 Naphthalene

Concentration: 66.41 ug/kg



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Date : 15-FEB-2013 19:15

Client ID: SG-13-0-10-013113

Instrument: nt10.i

Sample Info: WC32B

Volume Injected (uL): 1.0

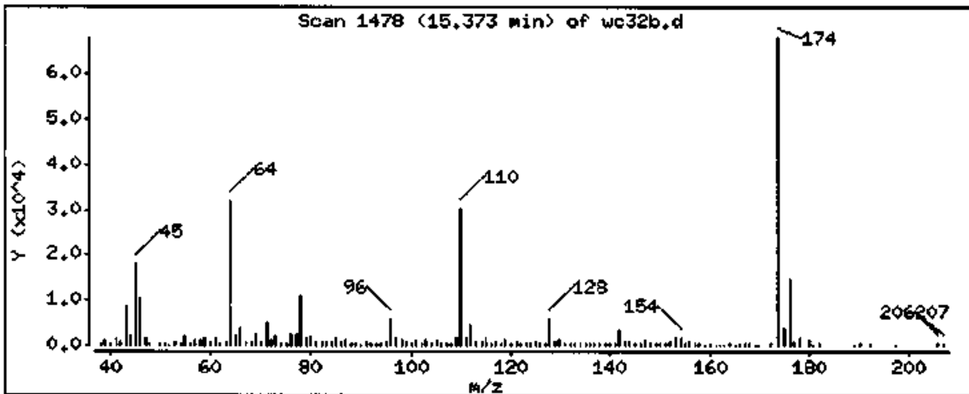
Operator: VTS/YZ

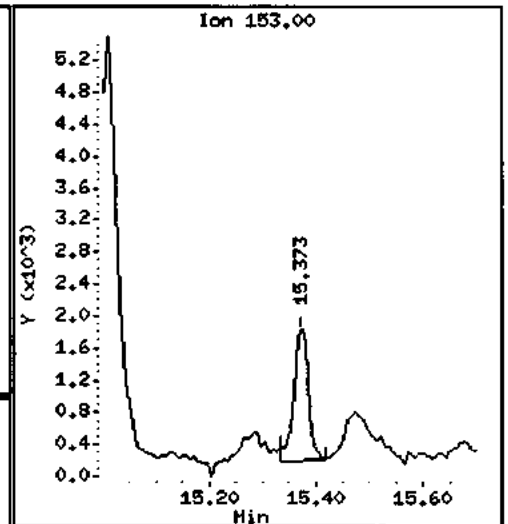
Column phase: ZB-5msi

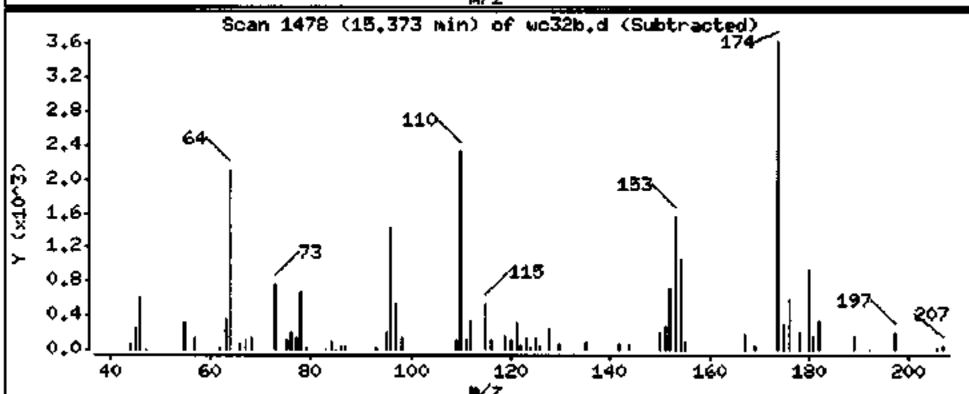
Column diameter: 0.25

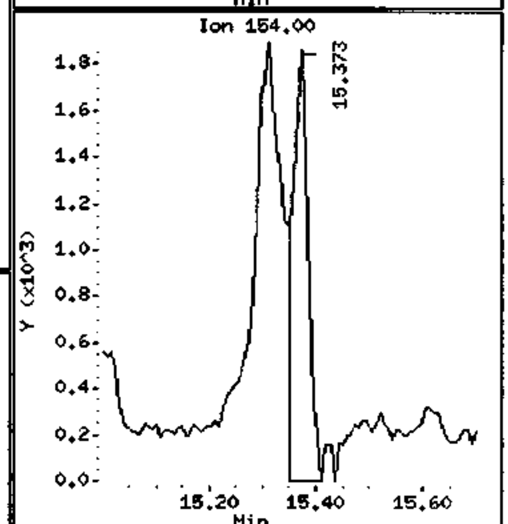
44 Acenaphthene

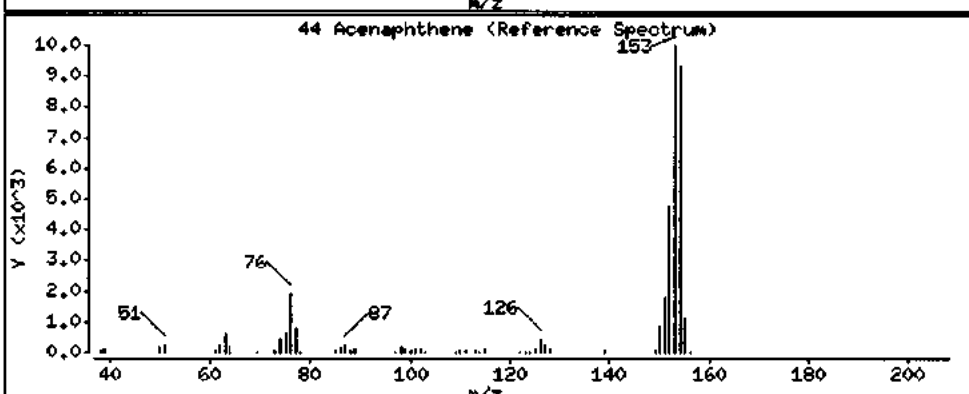
Concentration: 16.43 ug/kg

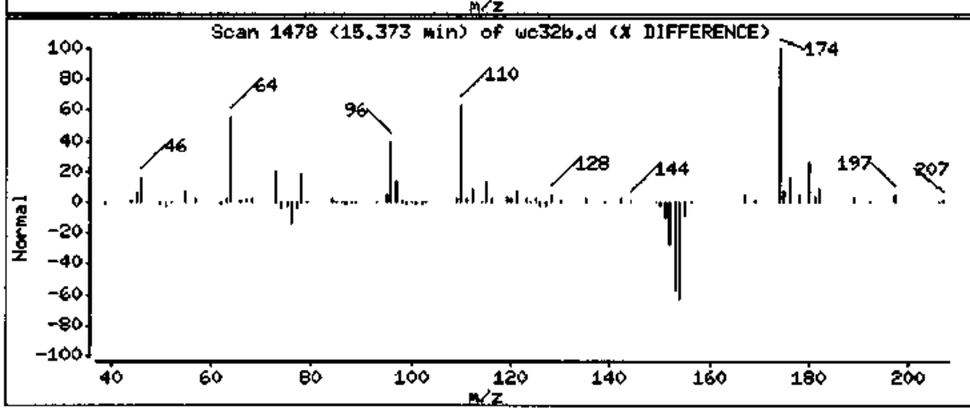


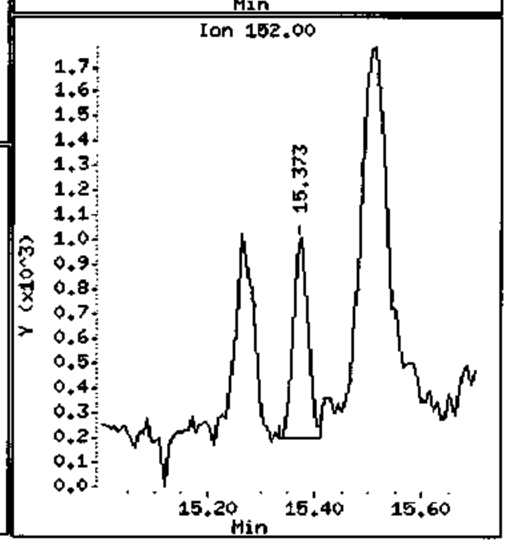












Data File: /chem1/nt10.i/20130215.b/wc32b.d

Page 12

Date : 15-FEB-2013 19:15

Client ID: SG-13-0-10-013113

Instrument: nt10.i

Sample Info: WC32B

Volume Injected (uL): 1.0

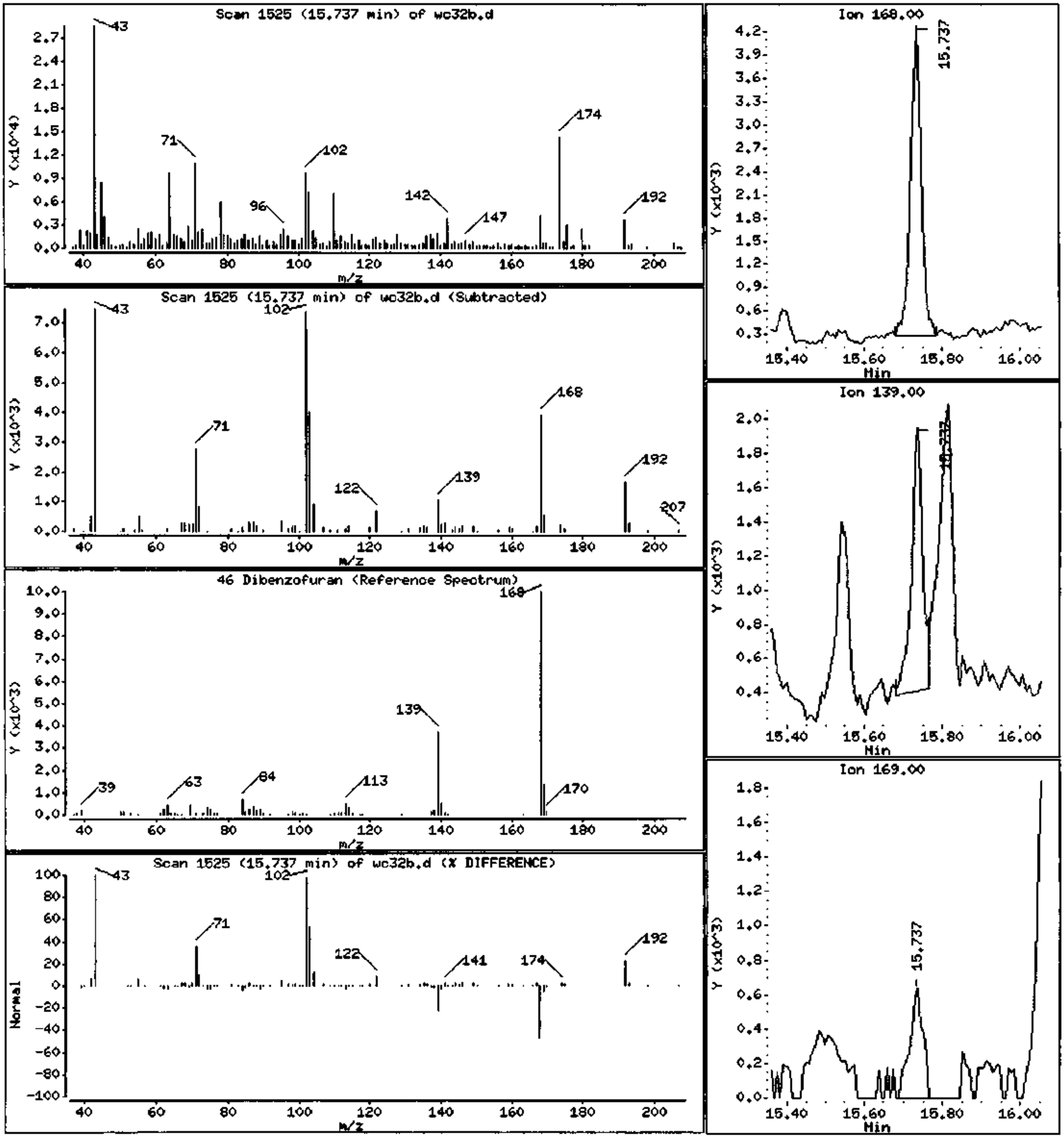
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

46 Dibenzofuran

Concentration: 28.40 ug/kg



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Date : 15-FEB-2013 19:15

Client ID: SC-13-0-10-013113

Instrument: nt10.i

Sample Info: WC32B

Volume Injected (uL): 1.0

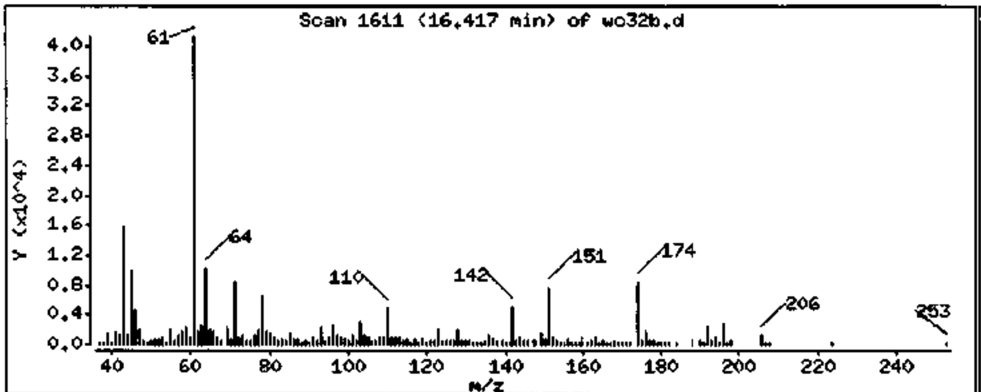
Operator: VTS/YZ

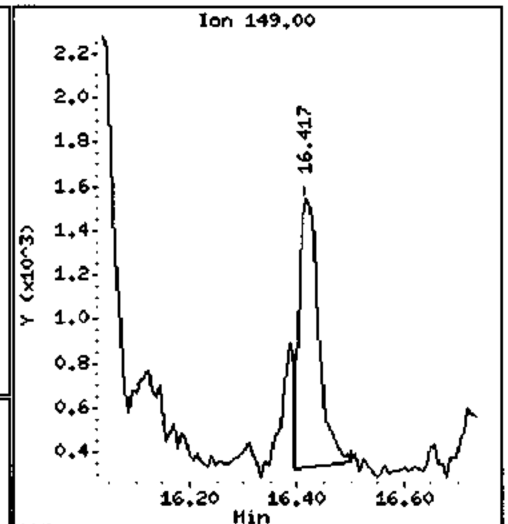
Column phase: ZB-5msi

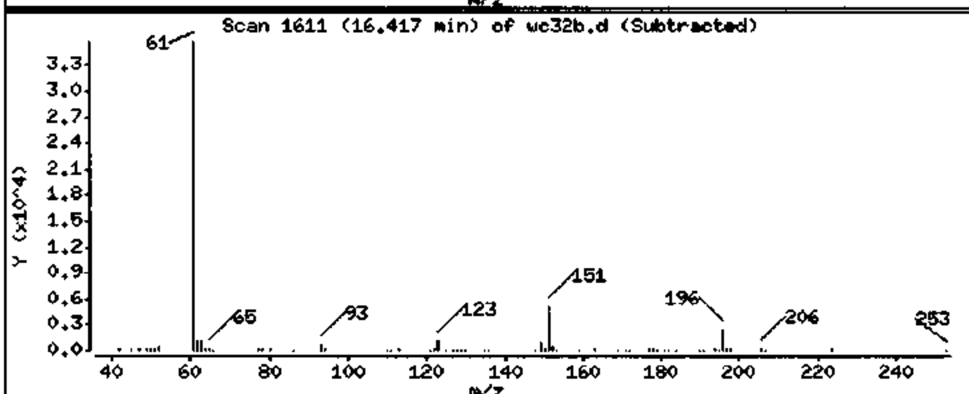
Column diameter: 0.25

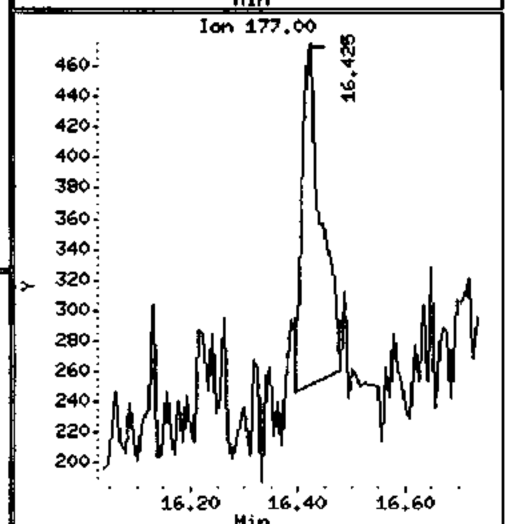
50 Diethylphthalate

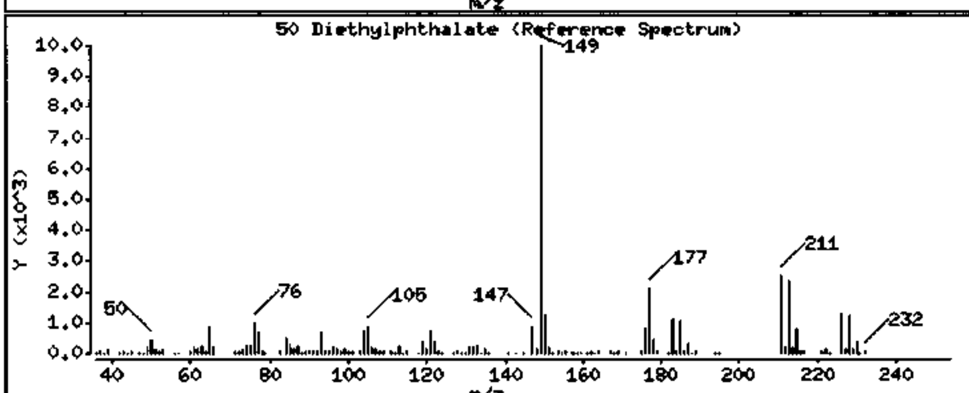
Concentration: 14.69 ug/kg

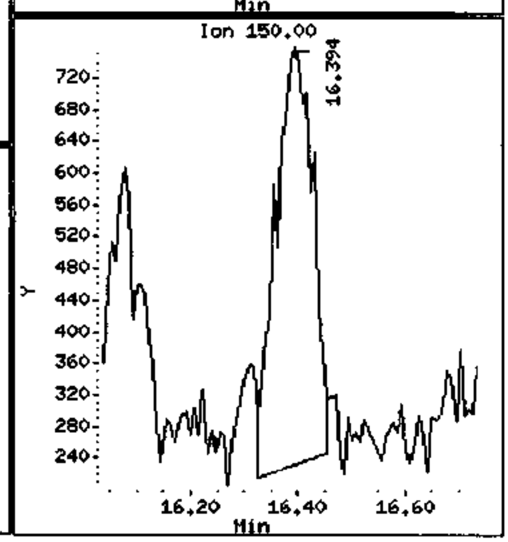


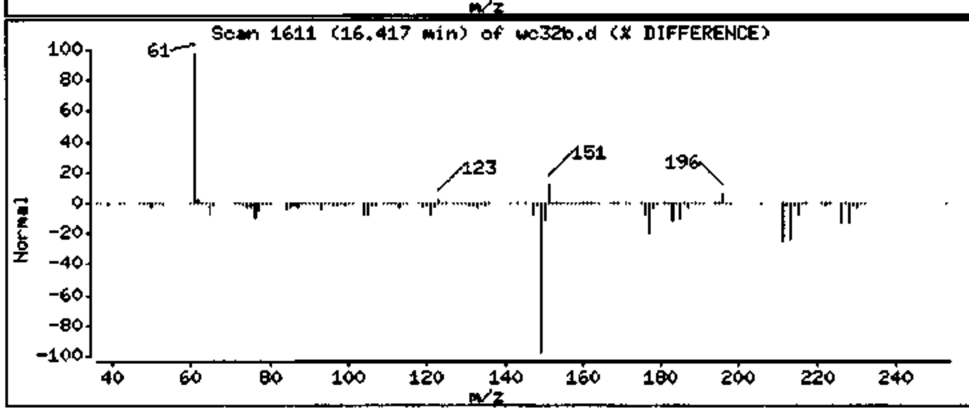












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Date : 15-FEB-2013 19:15

Client ID: SG-13-0-10-013113

Instrument: nt10.i

Sample Info: WC32B

Volume Injected (uL): 1.0

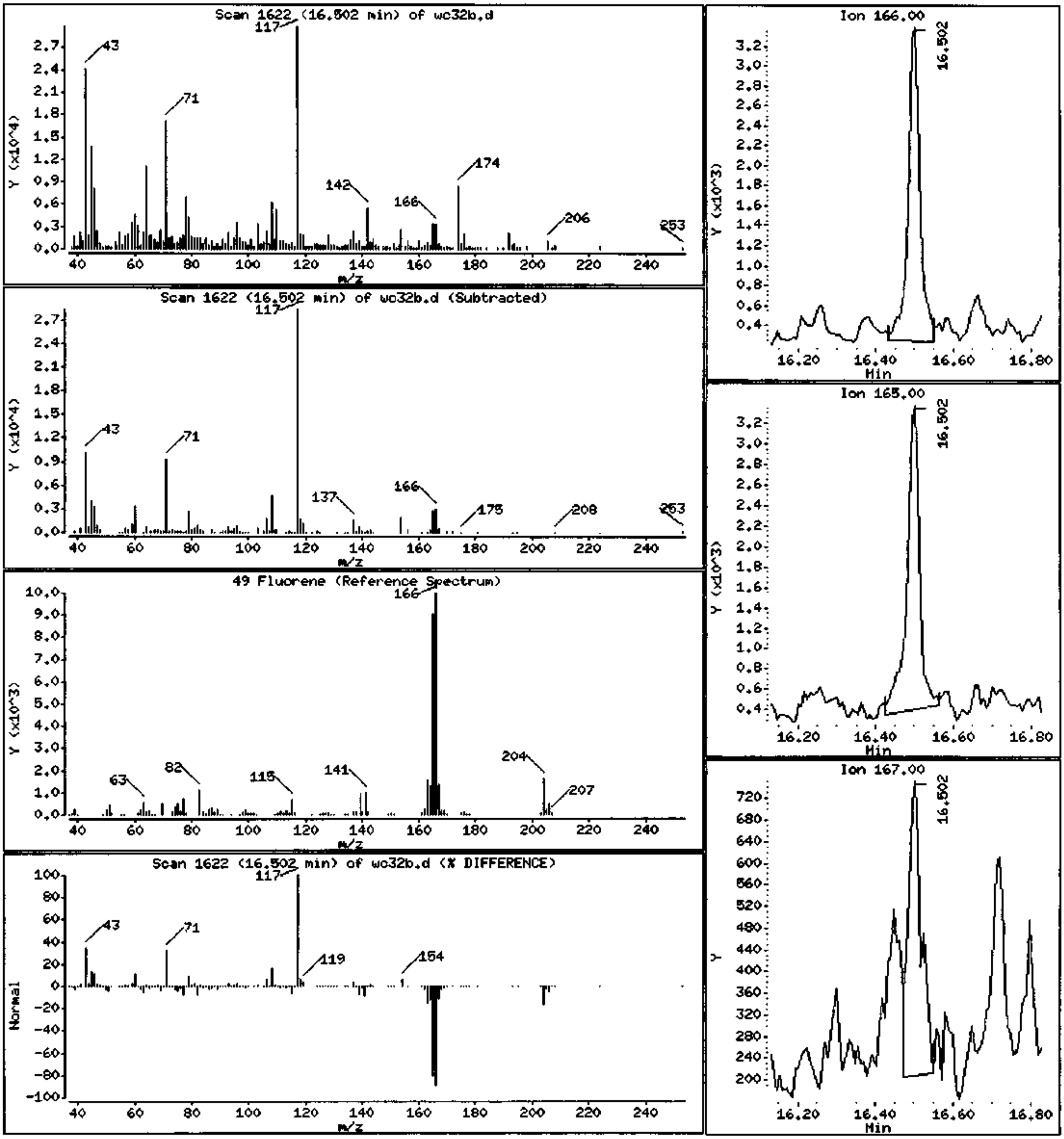
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

49 Fluorene

Concentration: 32.82 ug/kg



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Date : 15-FEB-2013 19:15

Client ID: SG-13-0-10-013113

Instrument: nt10.i

Sample Info: WC32B

Volume Injected (uL): 1.0

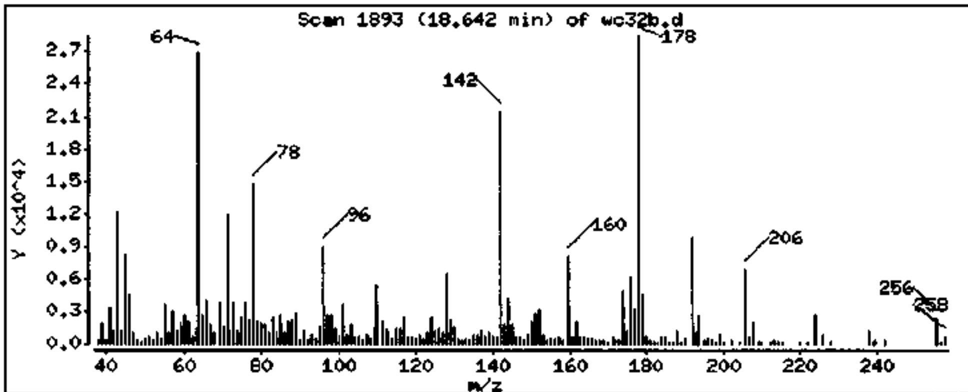
Operator: VTS/YZ

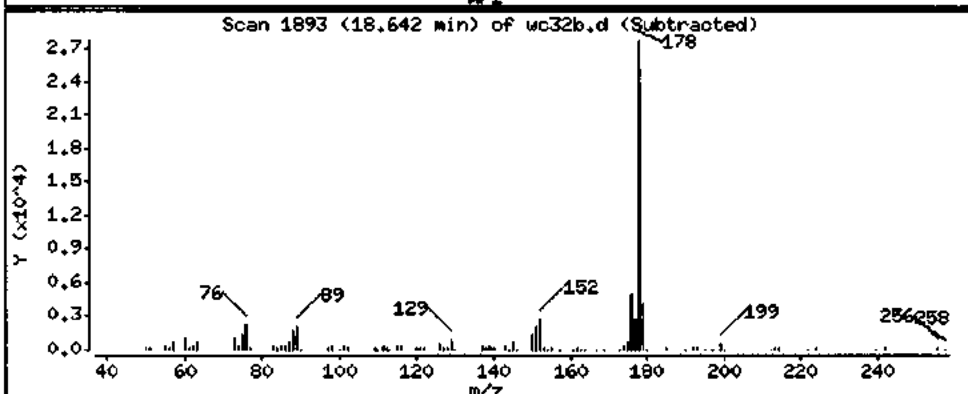
Column phase: ZB-5msi

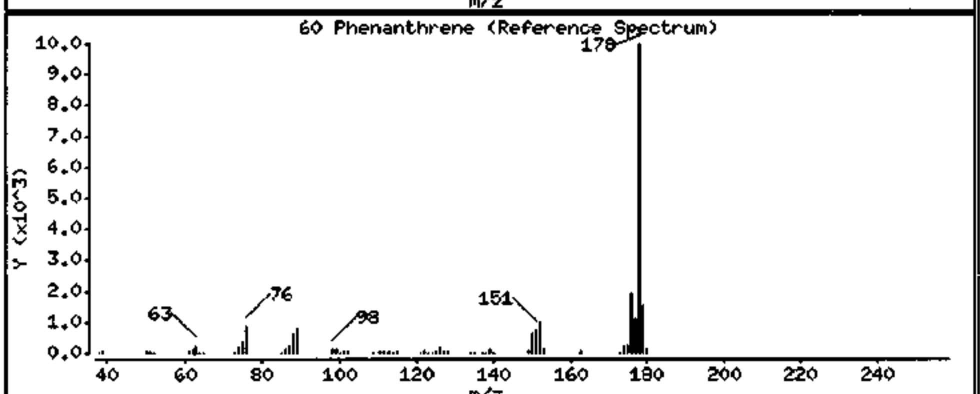
Column diameter: 0.25

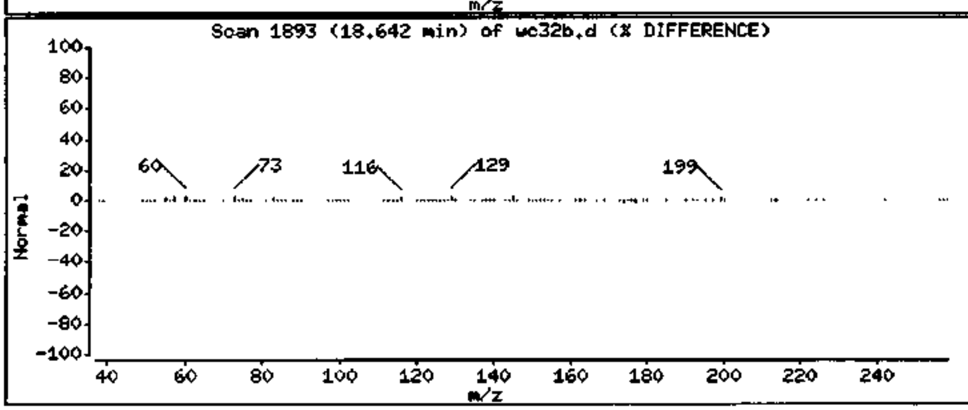
60 Phenanthrene

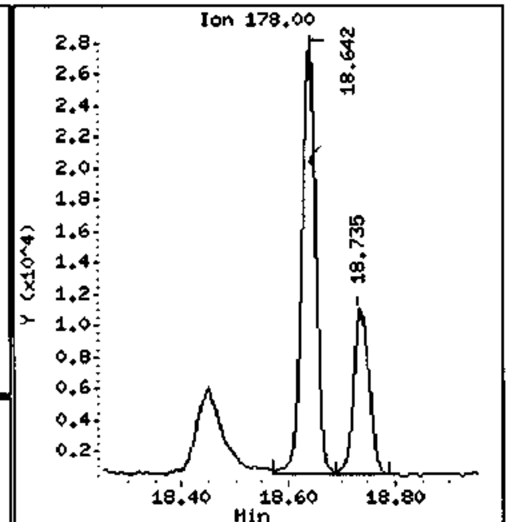
Concentration: 156.0 ug/kg

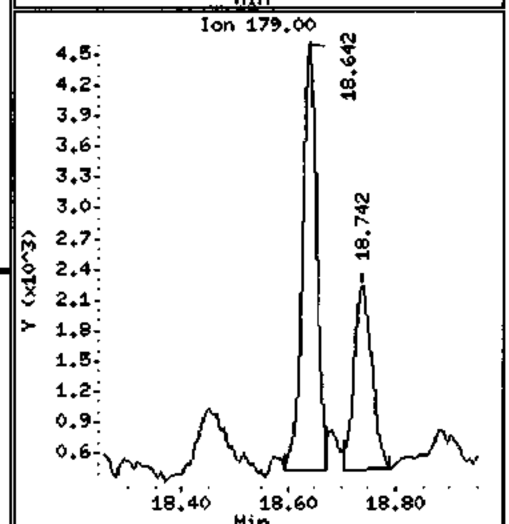


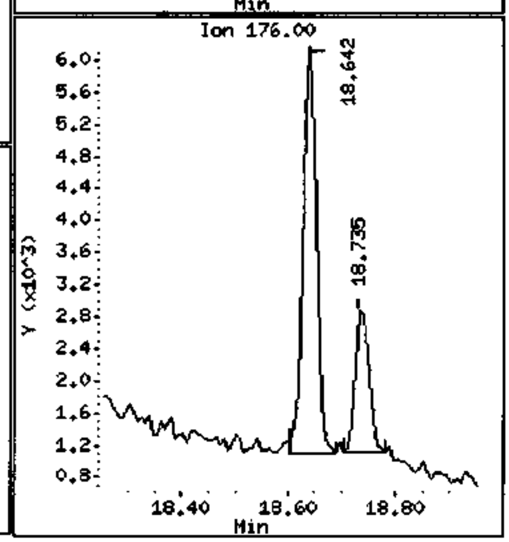












Data File: /chem1/nt10.i/20130215.b/wc32b.d

Date : 15-FEB-2013 19:15

Client ID: SG-13-0-10-013113

Instrument: nt10.i

Sample Info: WC32B

Volume Injected (uL): 1.0

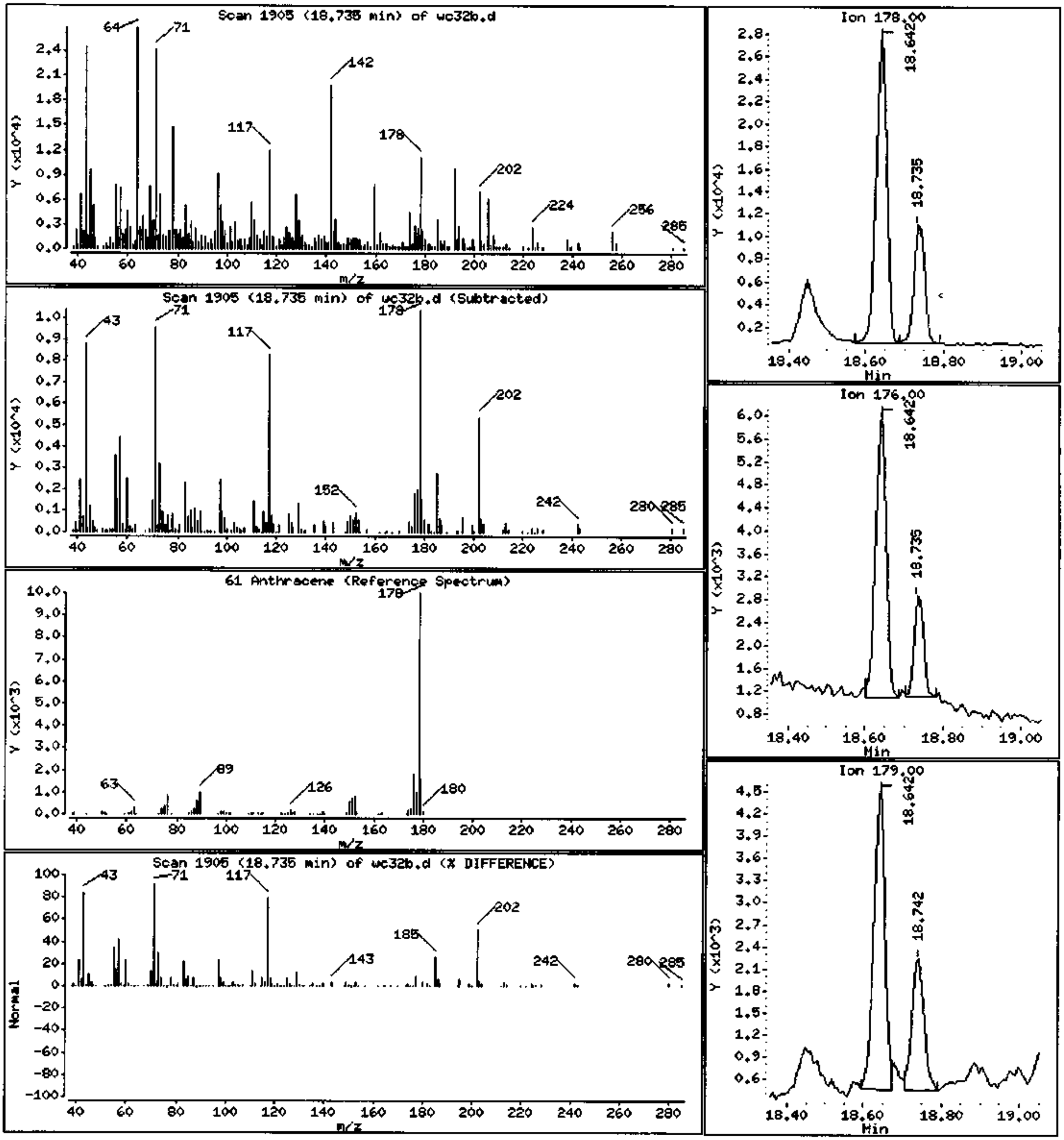
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

61 Anthracene

Concentration: 62.90 ug/kg



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Date : 15-FEB-2013 19:15

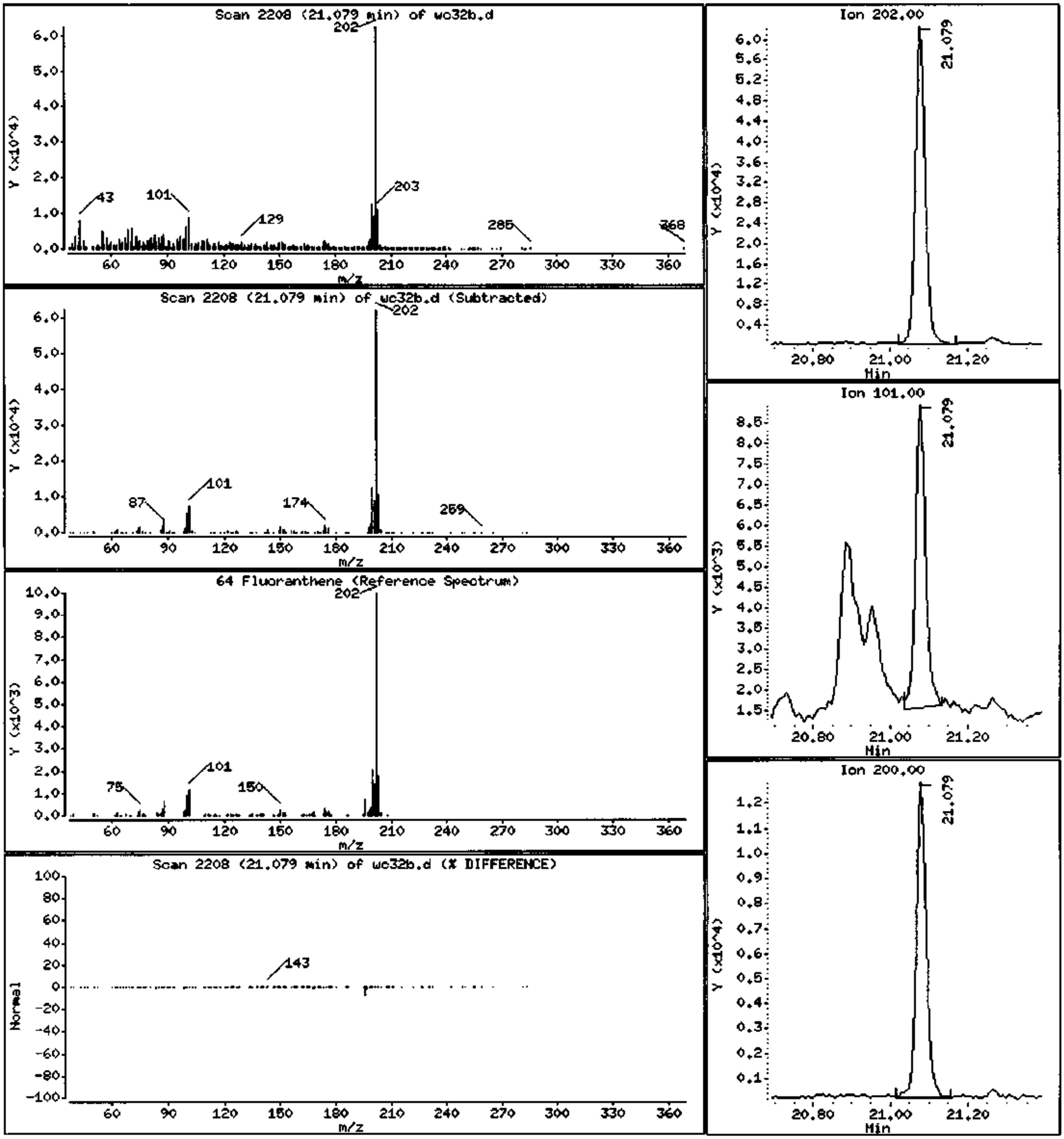
Client ID: SG-13-0-10-013113 Instrument: nt10.i

Sample Info: WC32B

Volume Injected (uL): 1.0 Operator: VTS/YZ

Column phase: ZB-5ms1 Column diameter: 0.25

64 Fluoranthene Concentration: 295.2 ug/kg



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Date : 15-FEB-2013 19:15

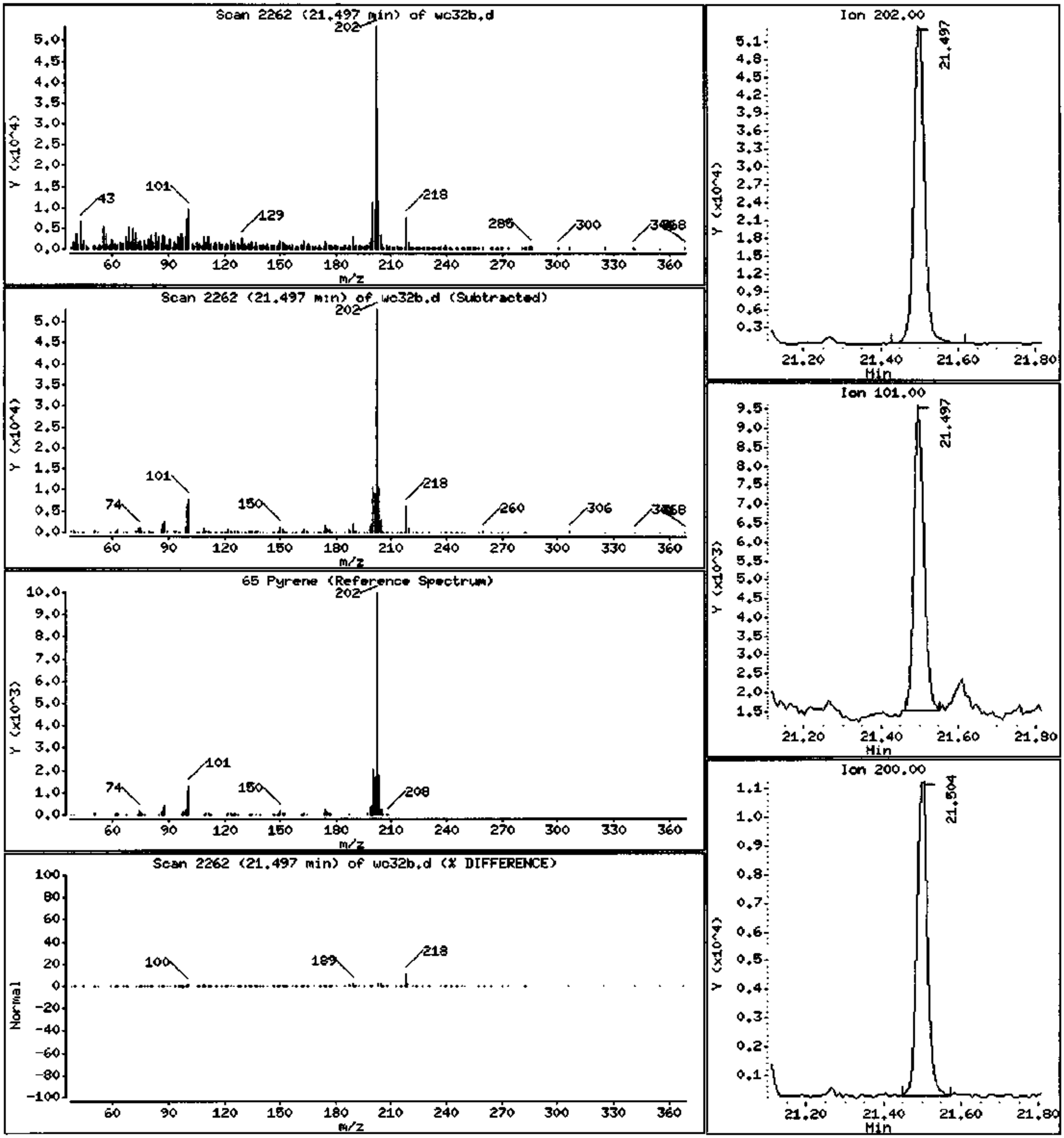
Client ID: SG-13-0-10-013113 Instrument: nt10.i

Sample Info: WC32B

Volume Injected (uL): 1.0 Operator: VTS/YZ

Column phase: ZB-5msi Column diameter: 0.25

65 Pyrene Concentration: 255.7 ug/kg



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Date : 15-FEB-2013 19:15

Client ID: SG-13-0-10-013113

Instrument: nt10.i

Sample Info: WC32B

Volume Injected (uL): 1.0

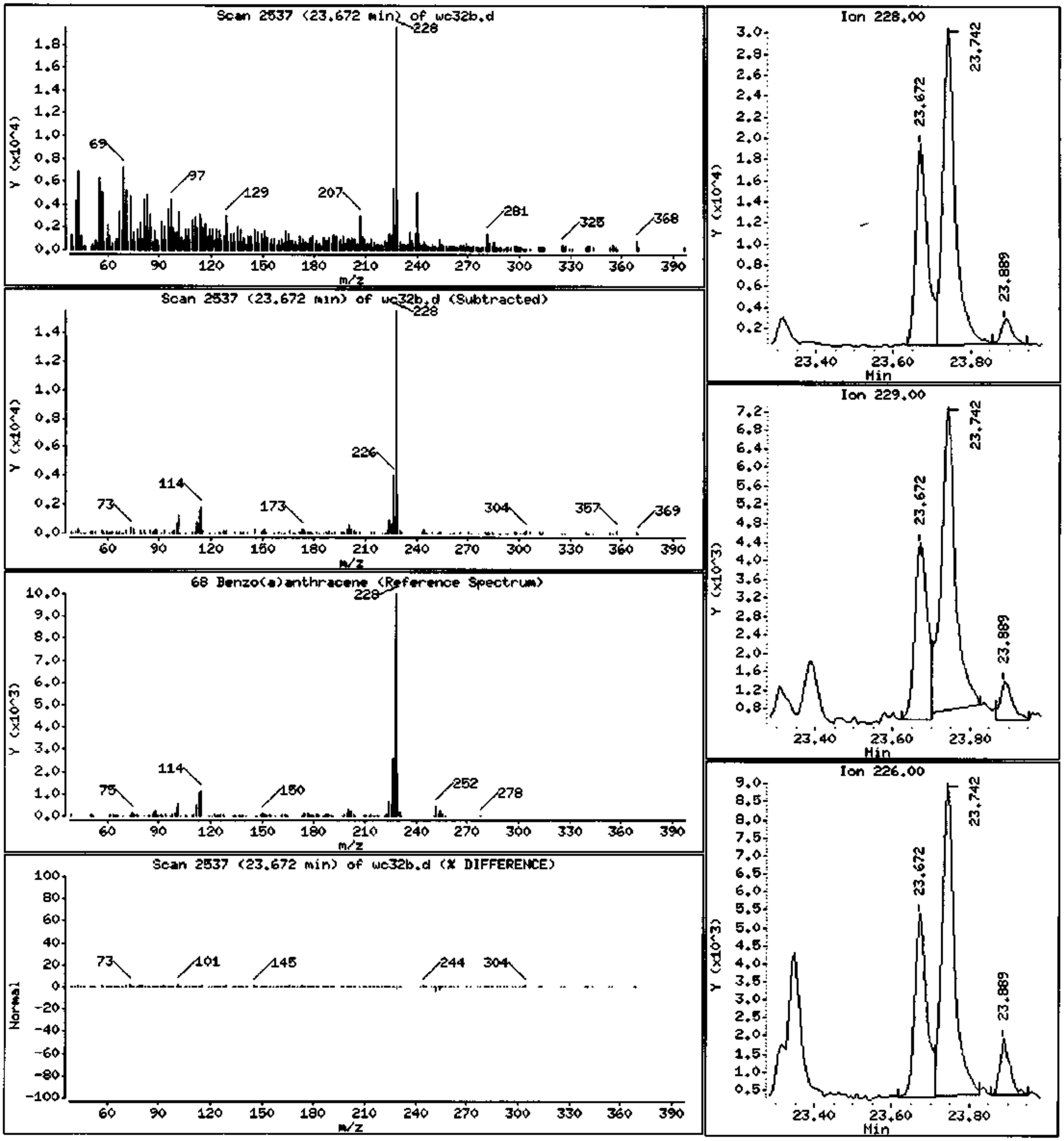
Operator: VTS/YZ

Column phase: ZB-5ms1

Column diameter: 0.25

68 Benzo(a)anthracene

Concentration: 94.28 ug/kg



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Date : 15-FEB-2013 19:15

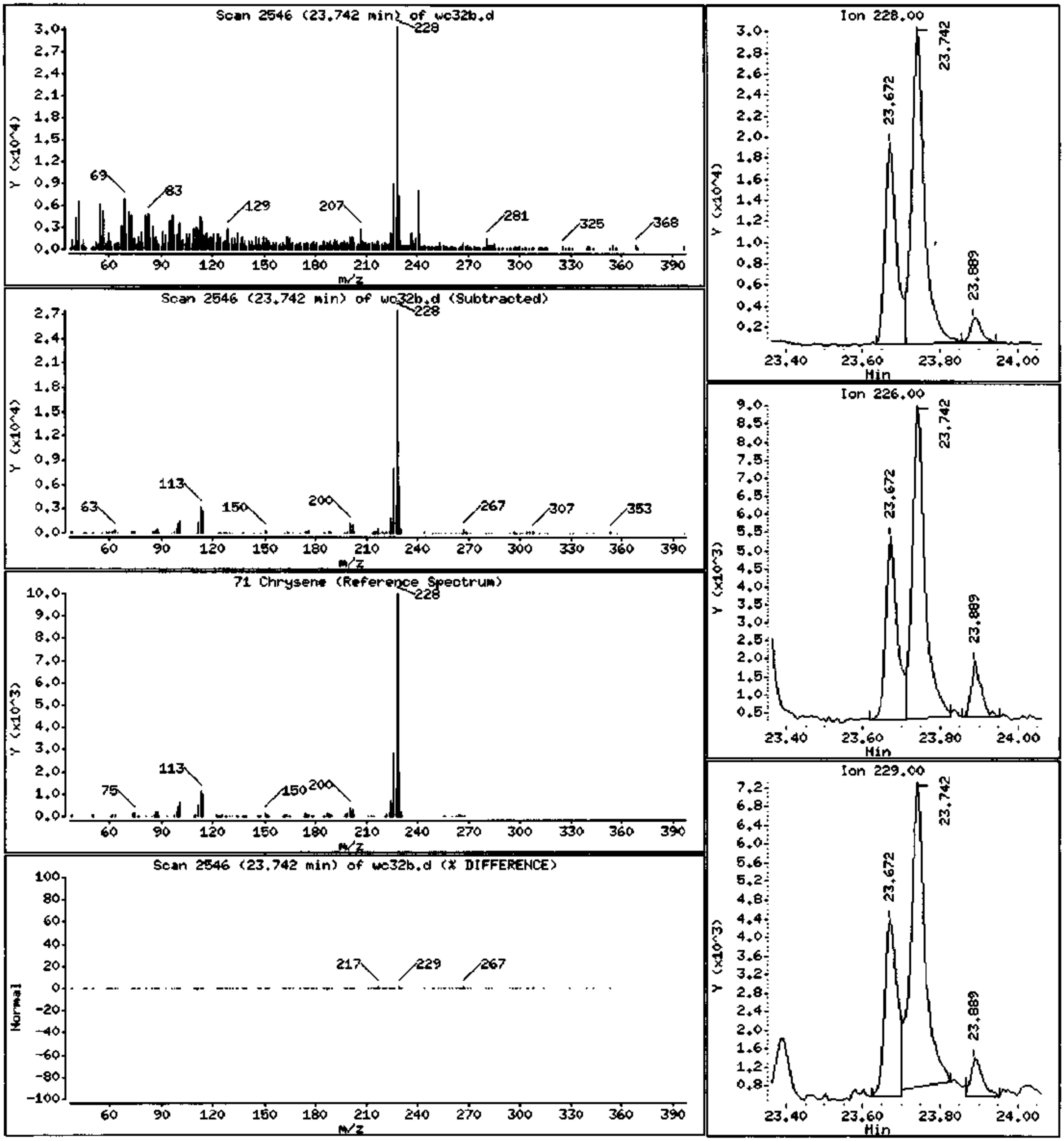
Client ID: SC-13-0-10-013113 Instrument: nt10.i

Sample Info: WC32B

Volume Injected (uL): 1.0 Operator: VTS/YZ

Column phase: ZB-5msi Column diameter: 0.25

71 Chrysene Concentration: 177.5 ug/kg



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Date : 15-FEB-2013 19:15

Client ID: SG-13-0-10-013113 Instrument: nt10.i

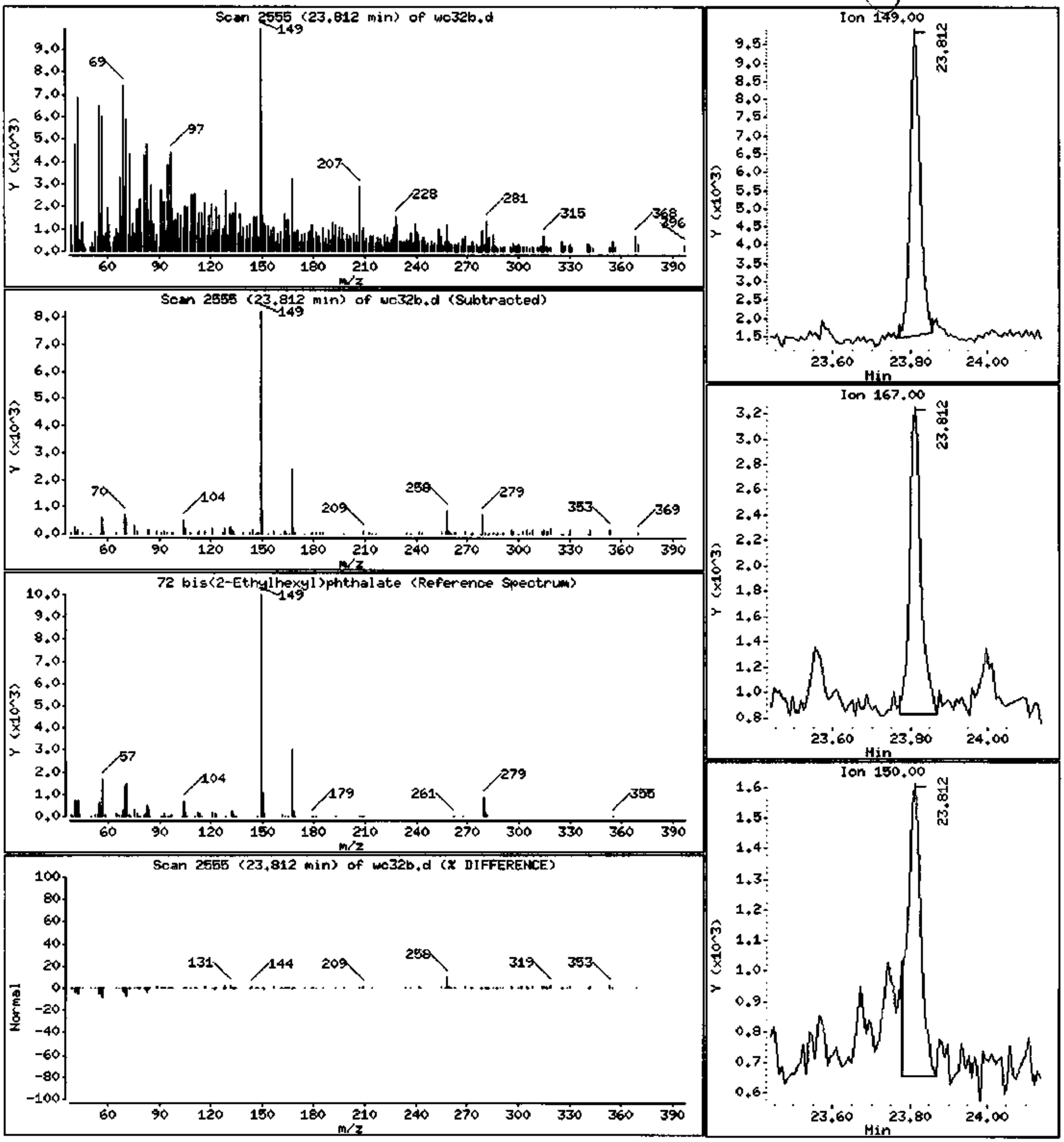
Sample Info: WC32B

Volume Injected (uL): 1.0 Operator: VTS/YZ

Column phase: ZB-5ms: Column diameter: 0.25

72 bis(2-Ethylhexyl)phthalate Concentration: 56.53 ug/kg

B



Data File: /chem1/nt10.i/20130215.b/wc32b.d

Date : 15-FEB-2013 19:15

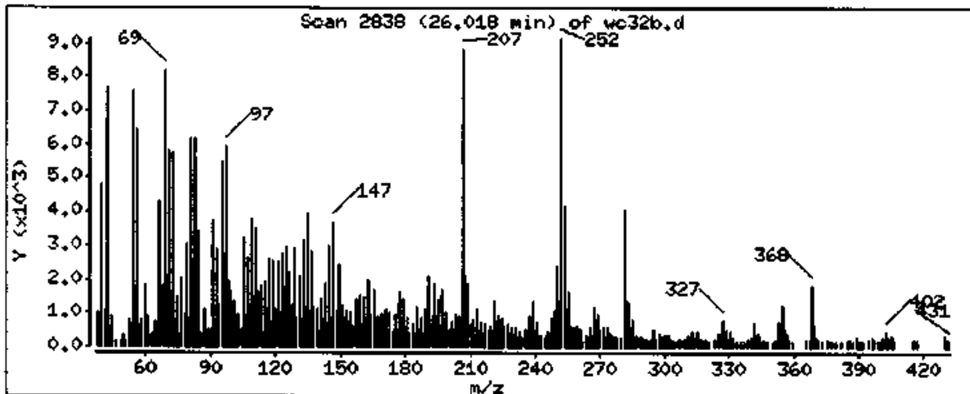
Client ID: SG-13-0-10-013113 Instrument: nt10.i

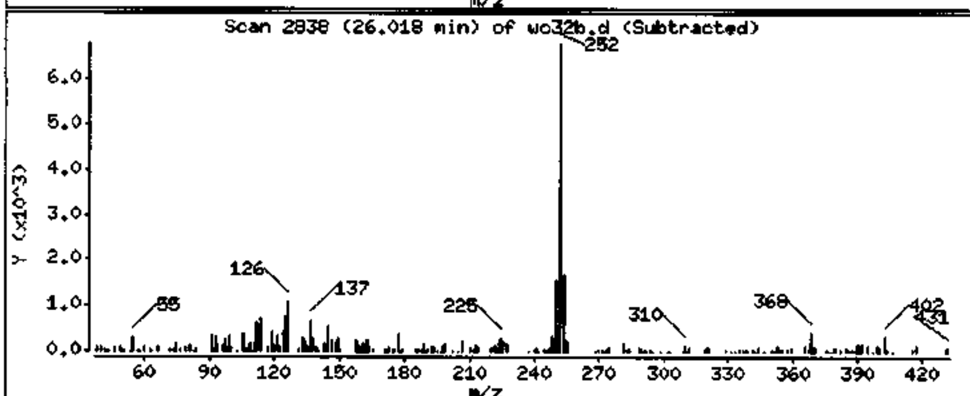
Sample Info: WC32B

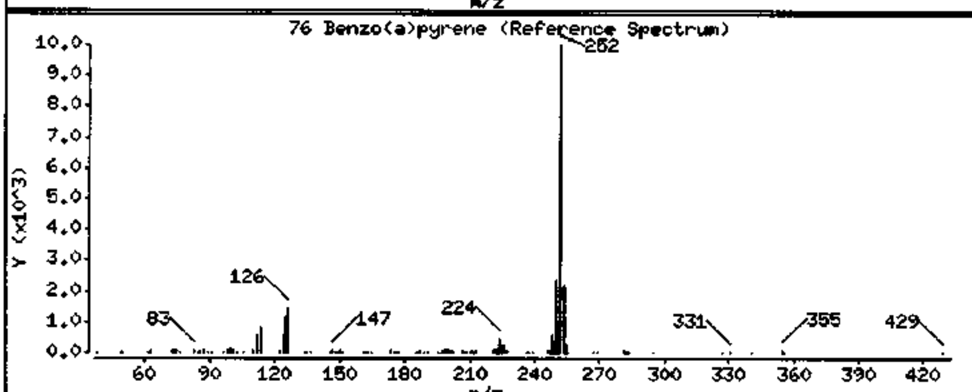
Volume Injected (uL): 1.0 Operator: VTS/YZ

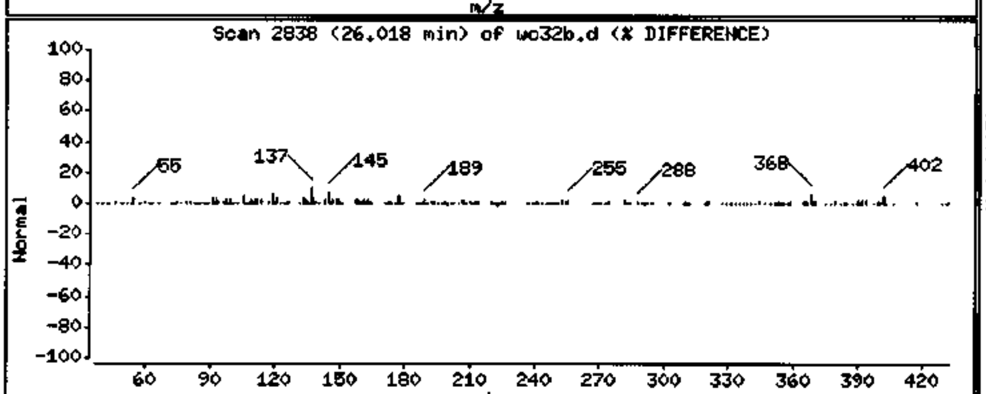
Column phase: ZB-5msi Column diameter: 0.25

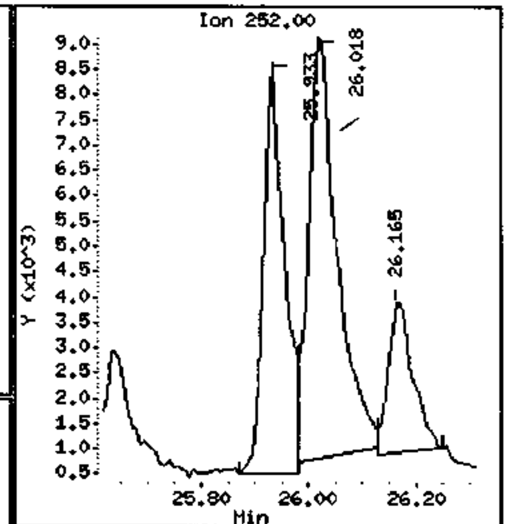
76 Benzo(a)pyrene Concentration: 91.40 ug/kg

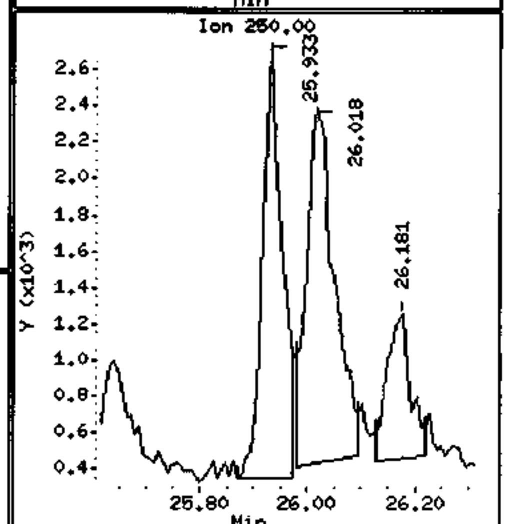


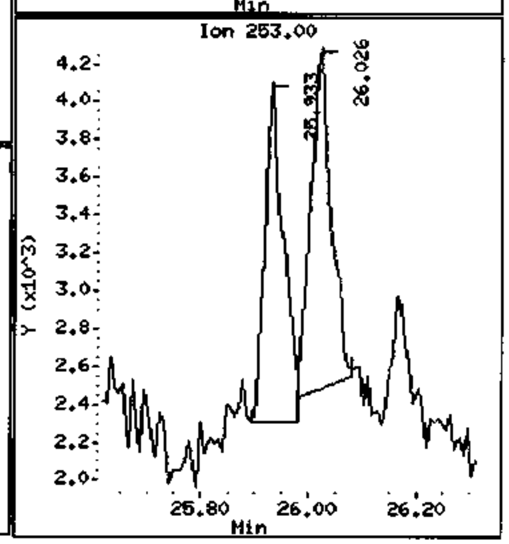












Data File: /chem1/nt10.i/20130215.b/wc32b.d

Date : 15-FEB-2013 19:15

Client ID: SG-13-0-10-013113

Instrument: nt10.i

Sample Info: WC32B

Volume Injected (uL): 1.0

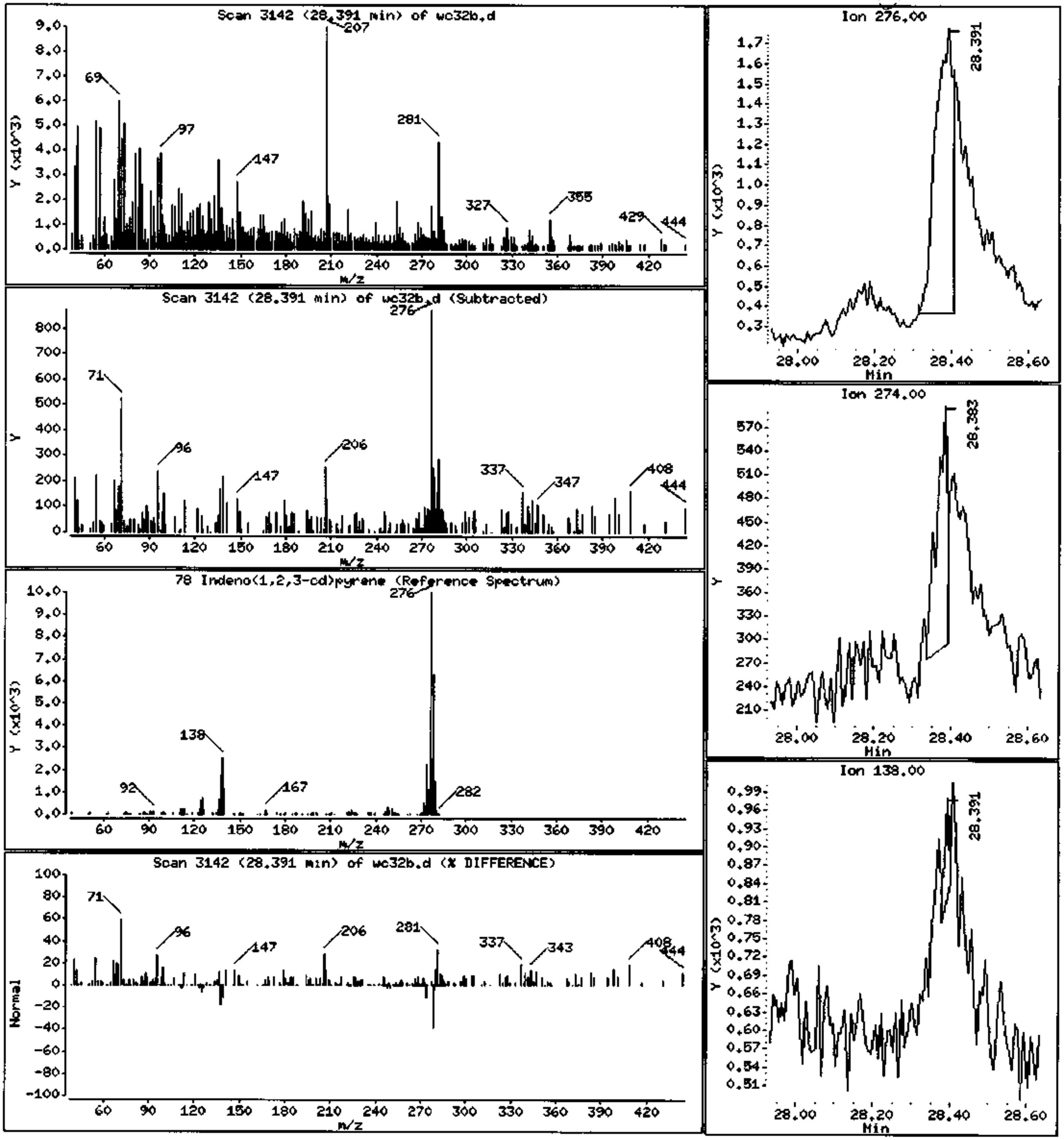
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

78 Indeno(1,2,3-cd)pyrene

Concentration: 10.64 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32b.d

Date : 15-FEB-2013 19:15

Client ID: SG-13-0-10-013113

Instrument: nt10.i

Sample Info: WC32B

Volume Injected (uL): 1.0

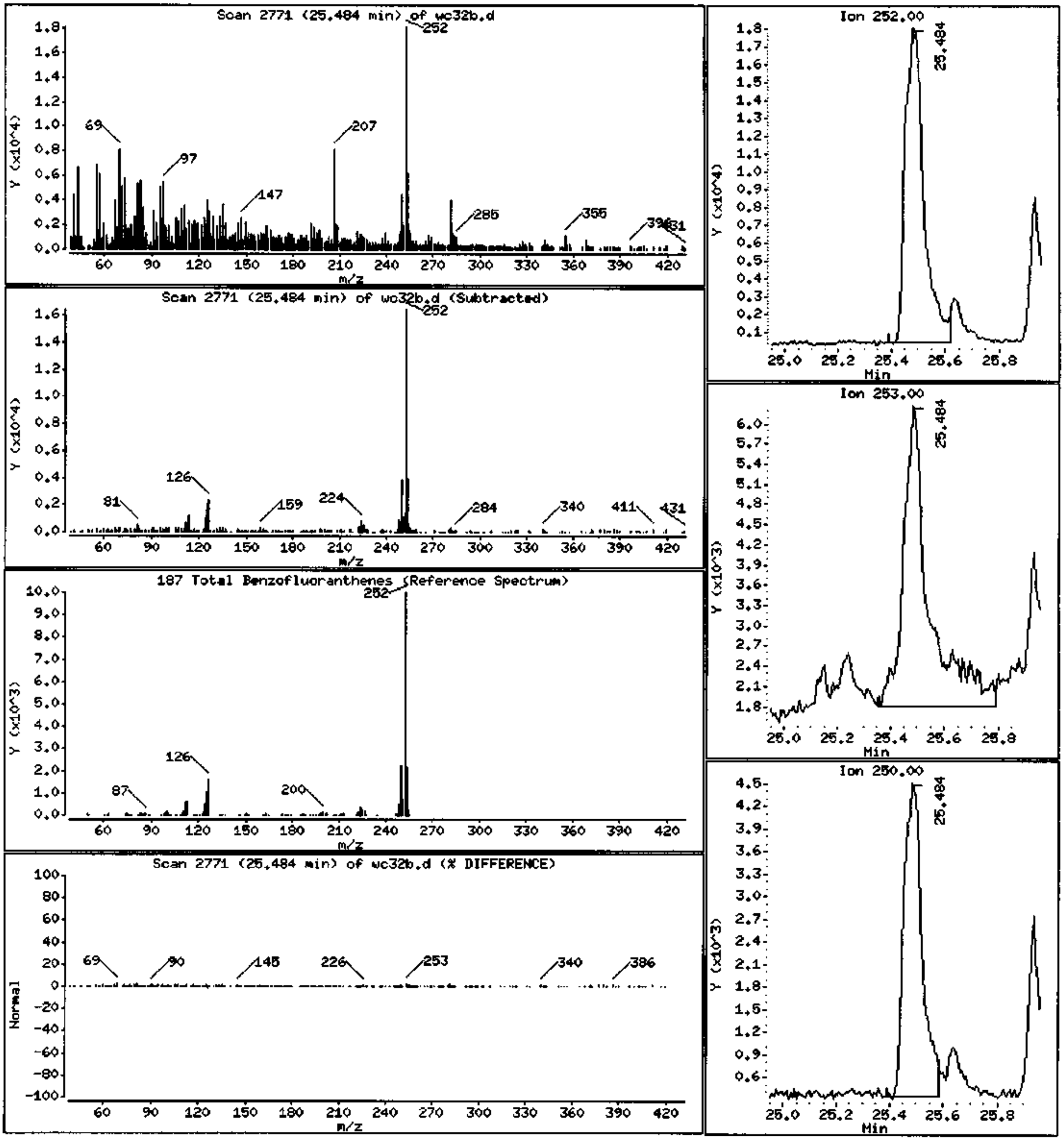
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

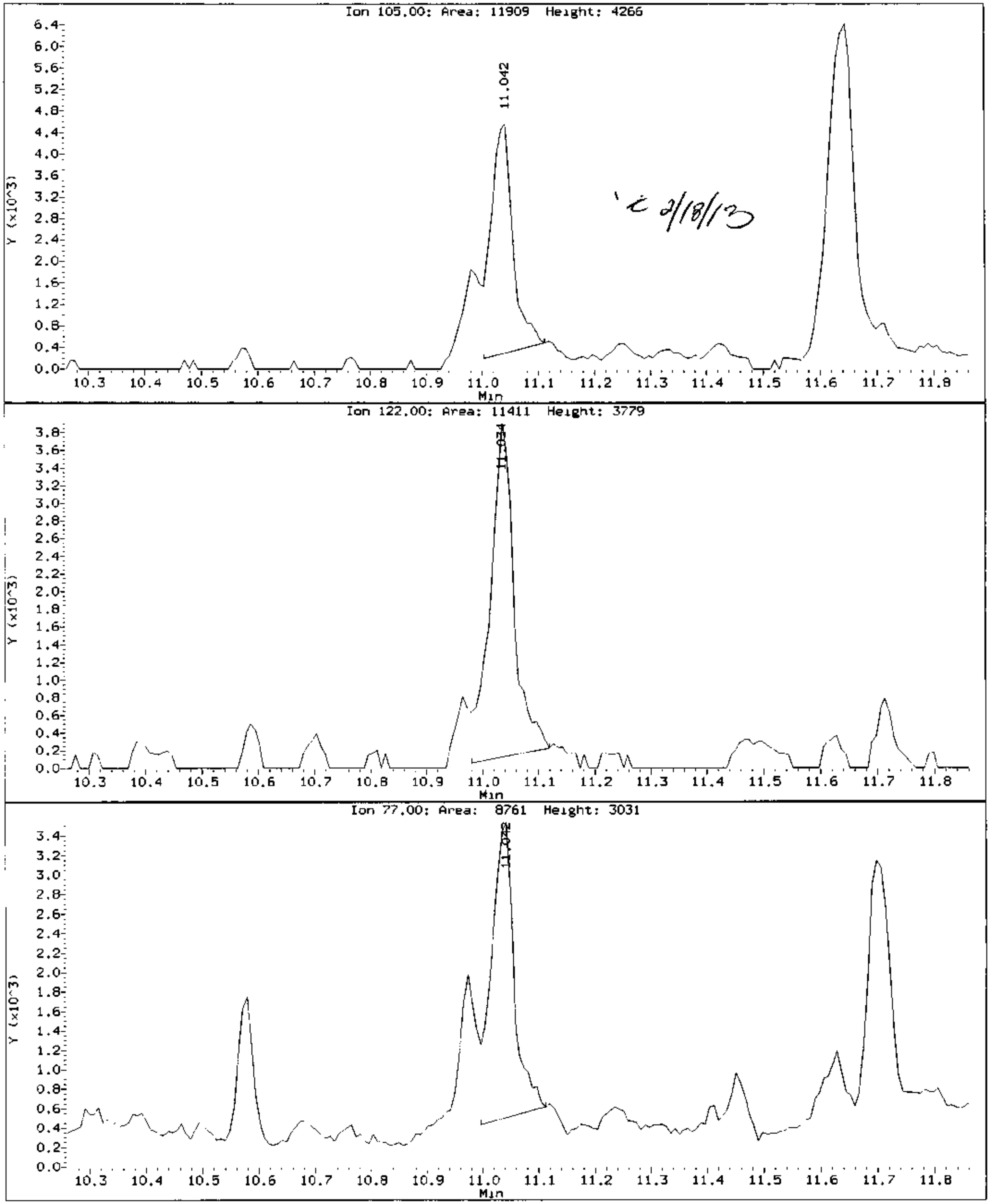
187 Total Benzofluoranthenes

Concentration: 216.8 ug/kg



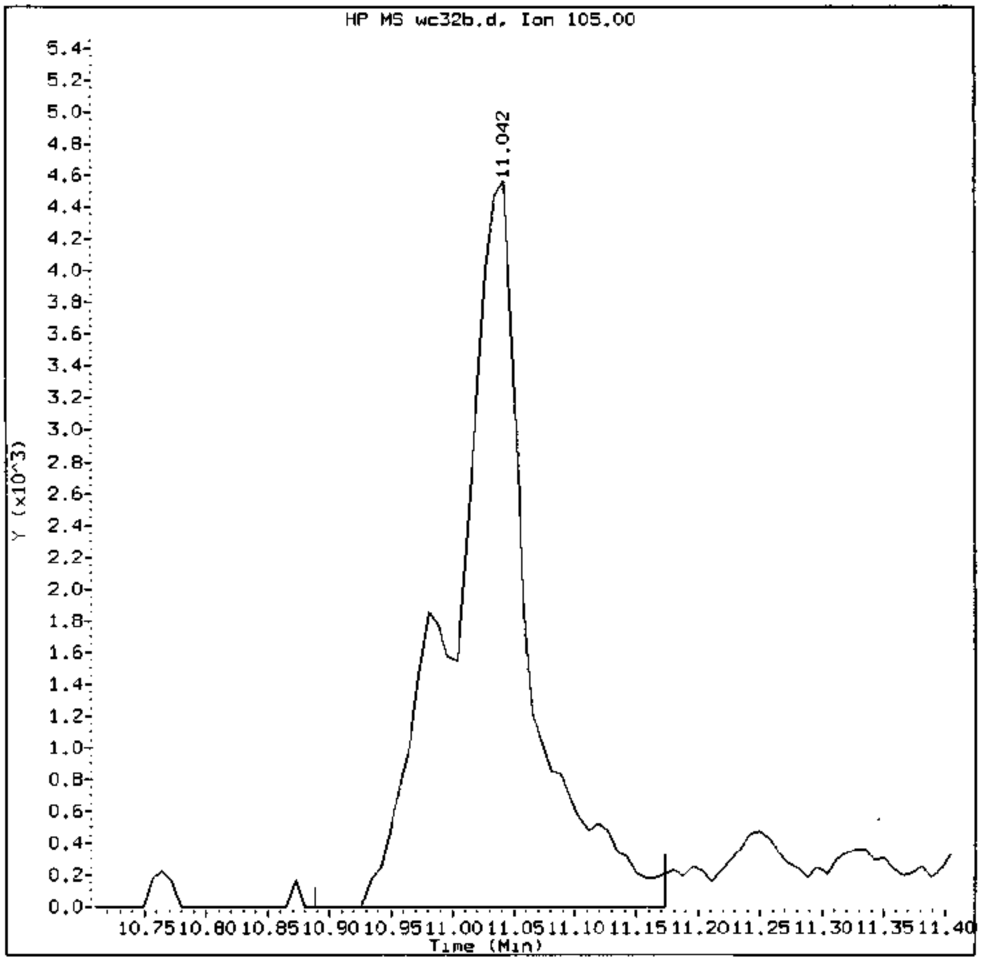
Data File: /chem1/nt10.i/20130215.b/wc32b.d
Injection Date: 15-FEB-2013 19:15
Instrument: nt10.i
Client Sample ID: SG-13-0-10-013113

Compound: Benzoic acid
CAS Number: 65-85-0



WC32B, /chem1/nt10.i/20130215.b/wc32b.d

Benzoic acid   Amount: 2.53   Area: 20369



MANUAL INTEGRATION for Benzoic acid

1. Baseline correction ✓
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other ______________________

Analyst: YZ   Date: 2/19/13

CO-ELUTION SUMMARY FOR FILE - wc32b.d

Lab ID: WC32B, Method: ABN.m, Instrument: nt10.i, Date: 15-FEB-2013

RT	CO-ELUTION COMPOUNDS
25.484	Benzo(k)fluoranthene and Benzo(b)fluoranthene

Data File: /chem1/nt10.i/20130215.b/wc32c.d
Report Date: 18-Feb-2013 11:08

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

02/18/13

Data file : /chem1/nt10.i/20130215.b/wc32c.d
Lab Smp Id: WC32C   Client Smp ID: SG-07-0-10-013113
Inj Date : 15-FEB-2013 19:52
Operator : VTS/YZ   Inst ID: nt10.i
Smp Info : WC32C
Misc Info : 13-2426
Comment : 1ul Injection
Method : /chem1/nt10.i/20130215.b/ABN.m
Meth Date : 15-Feb-2013 14:06 van   Quant Type: ISTD
Cal Date : 25-JAN-2013 17:16   Cal File: ic0125h.d
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: PSDDAICAL.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Ws	13.10000	Weight of sample extracted (g)
M	22.80000	% Moisture

Cpnd Variable   Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
$	1 2-Fluorophenol	112	6.490	6.459	(0.741)	51824	5.23188	517.3
$	2 Phenol-d5	99	8.198	8.183	(0.936)	60864	4.95166	489.6
	3 Phenol	94	8.221	8.206	(0.939)	4343	0.33570	33.19
$	5 2-Chlorophenol-d4	132	8.399	8.391	(0.959)	64749	6.08370	601.6
	4 Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
	6 2-Chlorophenol	128	Compound Not Detected.					
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	8.755	8.747	(1.000)	30979	4.00000	
	9 1,4-Dichlorobenzene	146	Compound Not Detected.					
$	10 1,2-Dichlorobenzene-d4	152	9.135	9.128	(1.043)	32759	4.18839	414.2
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	108	Compound Not Detected.					
	14 2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.					
	13 2-Methylphenol	108	9.384	9.368	(1.072)	1664	0.17039	16.85
	17 Hexachloroethane	117	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	15 4-Methylphenol	108	9.686	9.663	(1.106)	6253	0.61568	60.88
$	18 Nitrobenzene-d5	82	9.927	9.919	(0.870)	45010	4.18750	414.1
	19 Nitrobenzene	77	Compound Not Detected.					
	20 Isophorone	82	Compound Not Detected.					
	21 2-Nitrophenol	139	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	10.780	10.757	(0.945)	2691	0.26364	26.07
	23 Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
	24 Benzoic acid	105	Compound Not Detected.					
	25 2,4-Dichlorophenol	162	Compound Not Detected.					
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	11.404	11.397	(1.000)	116458	4.00000	
	28 Naphthalene	128	11.443	11.435	(1.003)	47124	1.55508	153.8
	29 4-Chloroaniline	127	Compound Not Detected.					
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	31 4-Chloro-3-methylphenol	107	Compound Not Detected.					
	32 2-Methylnaphthalene	142	12.951	12.944	(1.136)	14332	0.71633	70.83
	33 Hexachlorocyclopentadiene	237	Compound Not Detected.					
	34 2,4,6-Trichlorophenol	196	Compound Not Detected.					
	35 2,4,5-Trichlorophenol	196	Compound Not Detected.					
$	36 2-Fluorobiphenyl	172	13.810	13.803	(0.903)	113920	4.55660	450.6
	37 2-Chloronaphthalene	162	Compound Not Detected.					
	38 2-Nitroaniline	65	Compound Not Detected.					
	39 Dimethylphthalate	163	Compound Not Detected.					
	40 Acenaphthylene	152	14.948	14.941	(0.978)	14760	0.44962	44.46
	41 2,6-Dinitrotoluene	165	Compound Not Detected.					
*	42 Acenaphthene-d10	164	15.288	15.281	(1.000)	72876	4.00000	
	43 3-Nitroaniline	138	Compound Not Detected.					
	44 Acenaphthene	153	15.366	15.350	(1.005)	7912	0.39306	38.87
	45 2,4-Dinitrophenol	184	Compound Not Detected.					
	46 Dibenzofuran	168	15.721	15.706	(1.028)	15600	0.55724	55.10
	47 4-Nitrophenol	109	Compound Not Detected.					
	48 2,4-Dinitrotoluene	165	Compound Not Detected.					
	50 Diethylphthalate	149	16.394	16.386	(1.072)	7656	0.33158	32.79
	49 Fluorene	166	16.487	16.479	(1.078)	12588	0.52938	52.35
	51 4-Chlorophenyl-phenylether	204	Compound Not Detected.					
	52 4-Nitroaniline	138	Compound Not Detected.					
	53 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
	54 N-Nitrosodiphenylamine	169	Compound Not Detected.					
$	55 2,4,6-Tribromophenol	330	17.088	17.065	(1.118)	32819	7.05692	697.8
	56 4-Bromophenyl-phenylether	248	Compound Not Detected.					
	57 Hexachlorobenzene	284	Compound Not Detected.					
	58 Pentachlorophenol	266	Compound Not Detected.					
*	59 Phenanthrene-d10	188	18.572	18.557	(1.000)	127016	4.00000	
	60 Phenanthrene	178	18.626	18.603	(1.003)	84954	2.50899	248.1
	61 Anthracene	178	18.727	18.704	(1.008)	29235	0.85752	84.79
	62 Carbazole	167	19.114	19.083	(1.029)	8944	0.39278	38.84
	63 Di-n-butylphthalate	149	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
	64 Fluoranthene	202	21.079	21.040	(1.135)	415379	10.6525	1053
	65 Pyrene	202	21.497	21.466	(0.907)	353925	8.29931	820.6
$	66 Terphenyl-d14	244	21.814	21.791	(0.921)	149500	5.19897	514.1
	67 Butylbenzylphthalate	149	Compound Not Detected.					
	68 Benzo(a)anthracene	228	23.665	23.634	(0.999)	84027	2.01142	198.9
*	69 Chrysene-d12	240	23.695	23.665	(1.000)	149714	4.00000	
	70 3,3'-Dichlorobenzidine	252	Compound Not Detected.					
	71 Chrysene	228	23.742	23.711	(1.002)	142618	3.76925	372.7
	72 bis(2-Ethylhexyl)phthalate	149	23.812	23.789	(0.960)	10049	0.37664	37.24
*	134 Di-n-octylphthalate-d4	153	24.795	24.772	(1.000)	202055	4.00000	
	73 Di-n-octylphthalate	149	Compound Not Detected.					
	74 Benzo(b)fluoranthene	252	25.484	25.414	(0.976)	155835	4.01725	397.2
	75 Benzo(k)fluoranthene	252	25.484	25.414	(0.976)	155835	3.71853 NFA	367.7
	76 Benzo(a)pyrene	252	26.010	25.964	(0.996)	65933	1.96533	194.3
*	77 Perylene-d12	264	26.119	26.065	(1.000)	133838	4.00000	
	78 Indeno(1,2,3-cd)pyrene	276	28.375	28.282	(1.086)	17236	0.41661	41.20(M)
	79 Dibenzo(a,h)anthracene	278	28.391	28.290	(1.087)	5561	0.16974	16.78(M)
	80 Benzo(g,h,i)perylene	276	Compound Not Detected.					
	90 N-Nitrosodimethylamine	74	Compound Not Detected.					
	91 Aniline	93	Compound Not Detected.					
	93 Benzidine	184	Compound Not Detected.					
	103 Pyridine	79	Compound Not Detected.					
	105 1-methylnaphthalene	142	13.191	13.176	(1.157)	12831	0.69915	69.13
	111 Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					
	187 Total Benzofluoranthenes	252	25.484	25.453	(0.976)	152824	4.00226	395.7
	99 Perylene	252	26.157	26.111	(1.001)	14910	0.38672	38.24
	98 Retene	219	22.100	22.077	(0.933)	23970	1.07257	106.1
	120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: wc32c.d
Lab Smp Id: WC32C
Analysis Type: SV
Quant Type: ISTD
Operator: VTS/YZ
Method File: /chem1/nt10.i/20130215.b/ABN.m
Misc Info: 13-2426

Calibration Date: 15-FEB-2013
Calibration Time: 11:20
Client Smp ID: SG-07-0-10-01311
Level: LOW
Sample Type: Sediment

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	46623	23312	93246	30979	-33.55
27 Naphthalene-d8	176978	88489	353956	116458	-34.20
42 Acenaphthene-d10	110872	55436	221744	72876	-34.27
59 Phenanthrene-d10	188290	94145	376580	127016	-32.54
69 Chrysene-d12	213681	106840	427362	149714	-29.94
134 Di-n-octylphthala	264159	132080	528318	202055	-23.51
77 Perylene-d12	208584	104292	417168	133838	-35.83

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.75	8.25	9.25	8.75	0.09
27 Naphthalene-d8	11.40	10.90	11.90	11.40	0.07
42 Acenaphthene-d10	15.28	14.78	15.78	15.29	0.05
59 Phenanthrene-d10	18.56	18.06	19.06	18.57	0.08
69 Chrysene-d12	23.66	23.16	24.16	23.70	0.13
134 Di-n-octylphthala	24.77	24.27	25.27	24.79	0.09
77 Perylene-d12	26.06	25.56	26.56	26.12	0.21

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

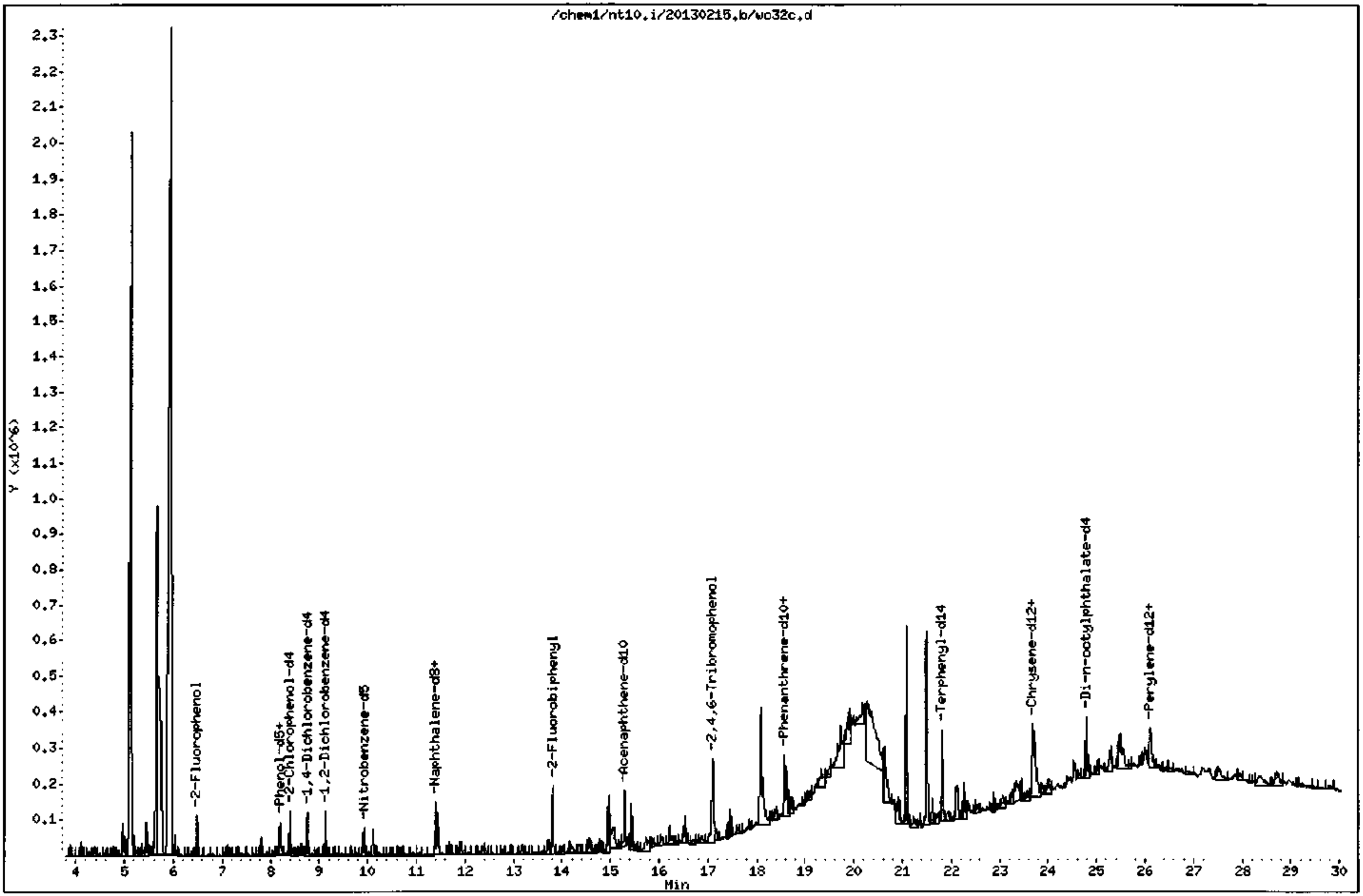
RECOVERY REPORT

Client Name: Floyd-Snider
Sample Matrix: SOLID
Lab Smp Id: WC32C
Level: LOW
Data Type: MS DATA
SpikeList File: SHORTPSDDA.spk
Sublist File: PSDDAICAL.sub
Method File: /chem1/nt10.i/20130215.b/ABN.m
Misc Info: 13-2426

Client SDG: WC32
Fraction: SV
Client Smp ID: SG-07-0-10-013113
Operator: VTS/YZ
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 1 2-Fluorophenol	741.6	517.3	69.76	30-160
$ 2 Phenol-d5	741.6	489.6	66.02	30-160
$ 5 2-Chlorophenol-d4	741.6	601.6	81.12	30-160
$ 10 1,2-Dichlorobenzen	494.4	414.2	83.77	30-160
$ 18 Nitrobenzene-d5	494.4	414.1	83.75	30-160
$ 36 2-Fluorobiphenyl	494.4	450.6	91.13	30-160
$ 55 2,4,6-Tribromophen	741.6	697.8	94.09	30-160
$ 66 Terphenyl-d14	494.4	514.1	103.98	30-160

Data File: /chem1/nt10.i/20130215.b/wc32c.d
Date : 15-FEB-2013 19:52
Client ID: SG-07-0-10-013113
Instrument: nt10.i
Sample Info: WC32C
Volume Injected (uL): 1.0
Operator: VTS/YZ
Column phase: ZB-5ms:
Column diameter: 0.25



Data File: /chem1/nt10.i/20130215.b/wc32c.d

Date : 15-FEB-2013 19:52

Client ID: SG-07-0-10-013113

Instrument: nt10.i

Sample Info: WC32C

Volume Injected (uL): 1.0

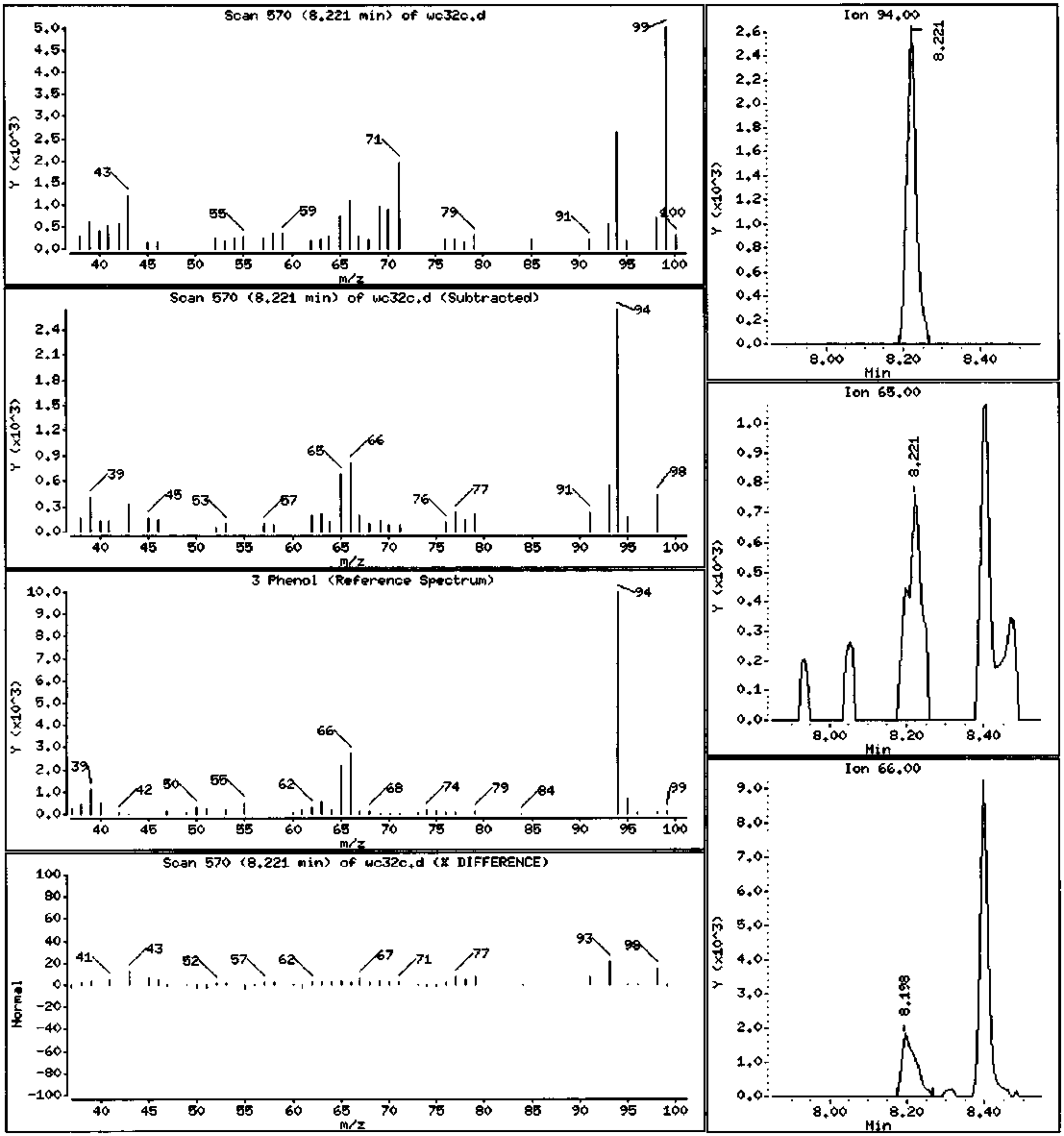
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

3 Phenol

Concentration: 33.19 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32c.d

Date : 15-FEB-2013 19:52

Client ID: SC-07-0-10-013113

Instrument: nt10.i

Sample Info: WC32C

Volume Injected (uL): 1.0

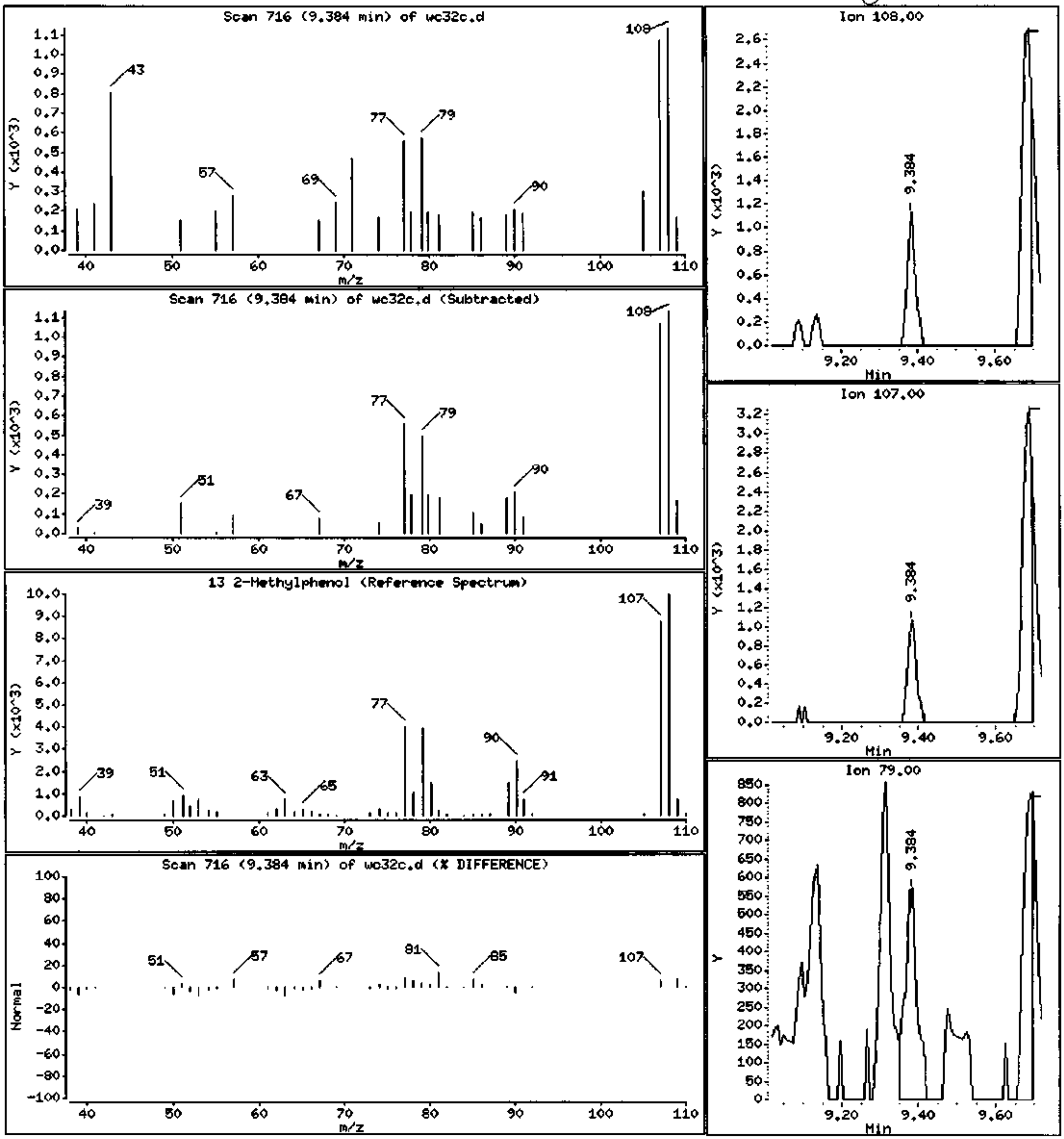
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 16.85 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32c.d

Date : 15-FEB-2013 19:52

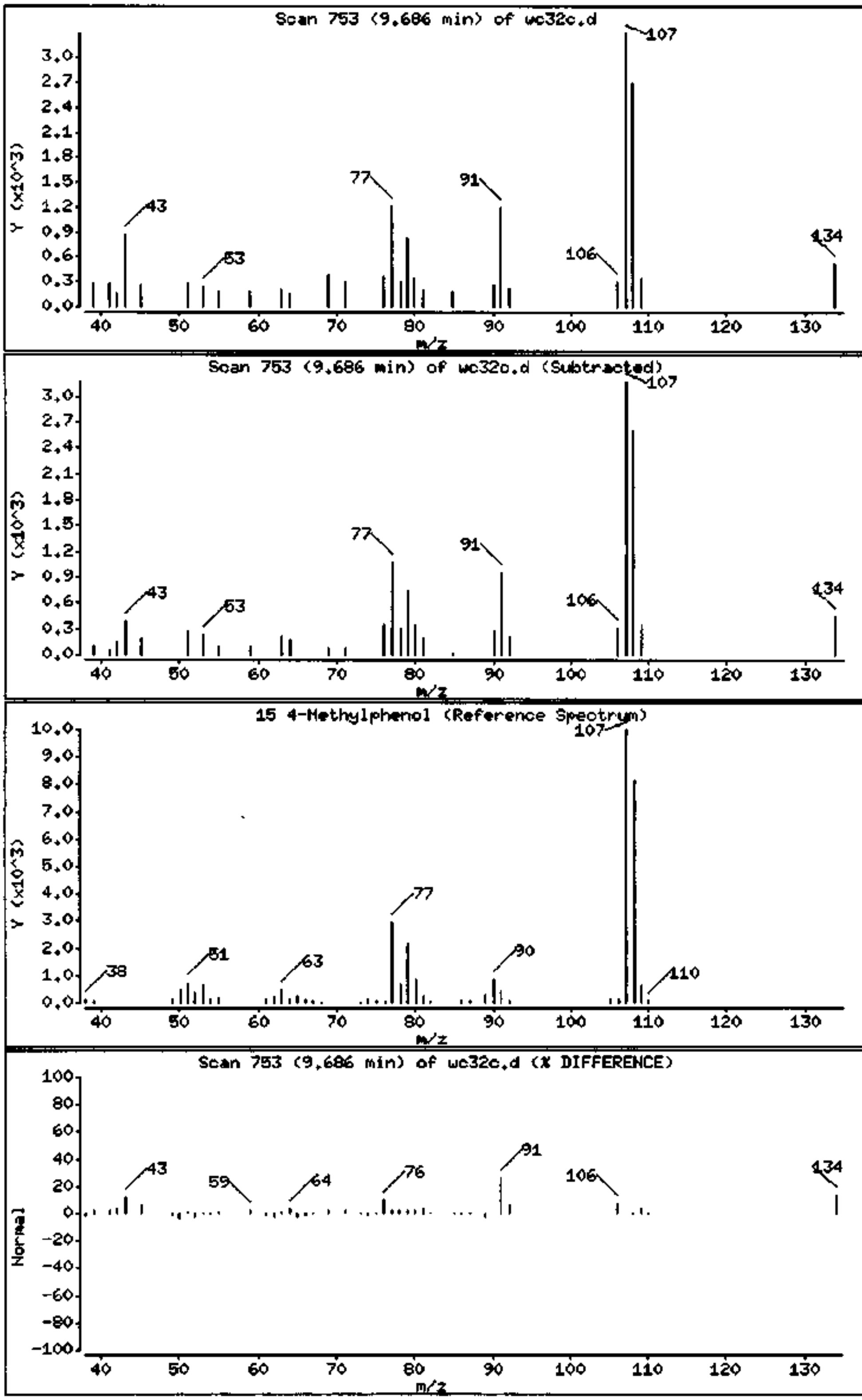
Client ID: SG-07-0-10-013113 | Instrument: nt10.i

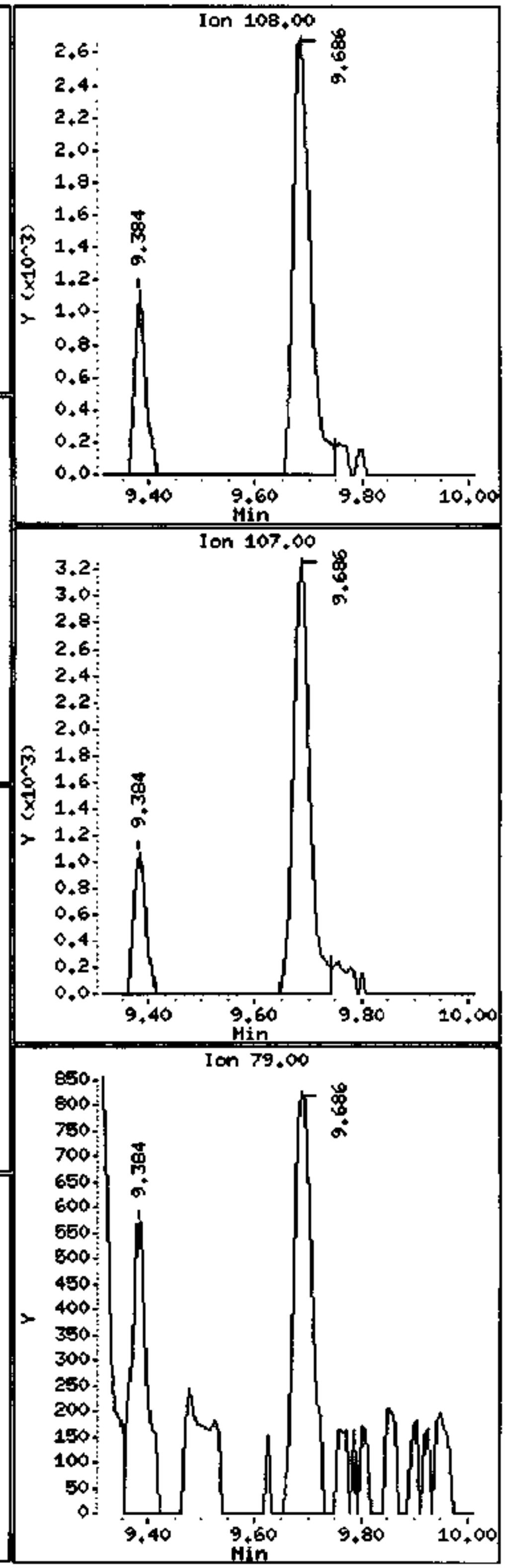
Sample Info: WC32C

Volume Injected (uL): 1.0 | Operator: VTS/YZ

Column phase: ZB-5msi | Column diameter: 0.25

15 4-Methylphenol | Concentration: 60.88 ug/kg





Data File: /chem1/nt10.i/20130215.b/wc32c.d

Date : 15-FEB-2013 19:52

Client ID: SG-07-0-10-013113

Instrument: nt10.i

Sample Info: WC32C

Volume Injected (uL): 1.0

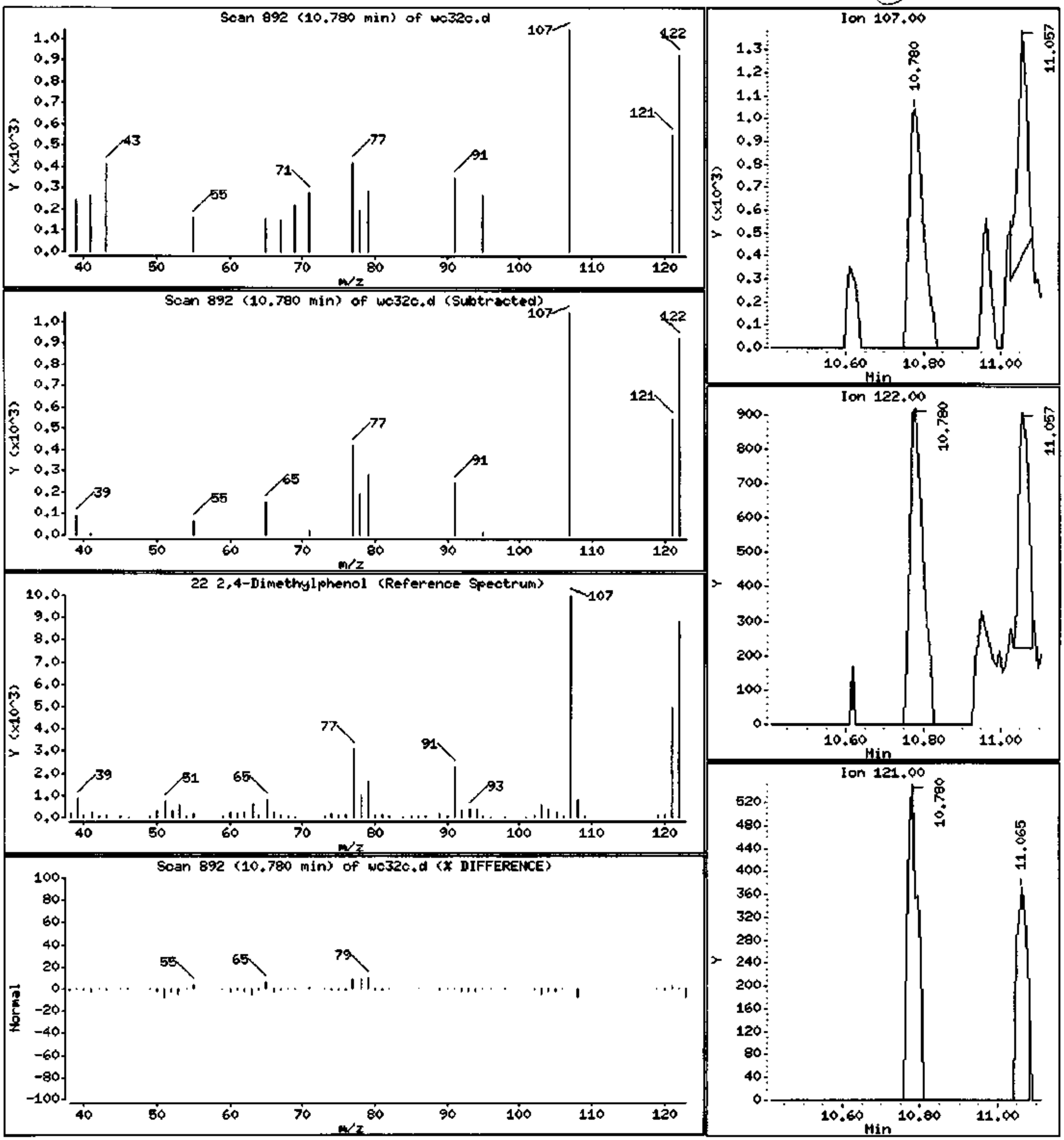
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

22 2,4-Dimethylphenol

Concentration: 26.07 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32c.d

Date : 15-FEB-2013 19:52

Client ID: SG-07-0-10-013113

Instrument: nt10.i

Sample Info: WC32C

Volume Injected (uL): 1.0

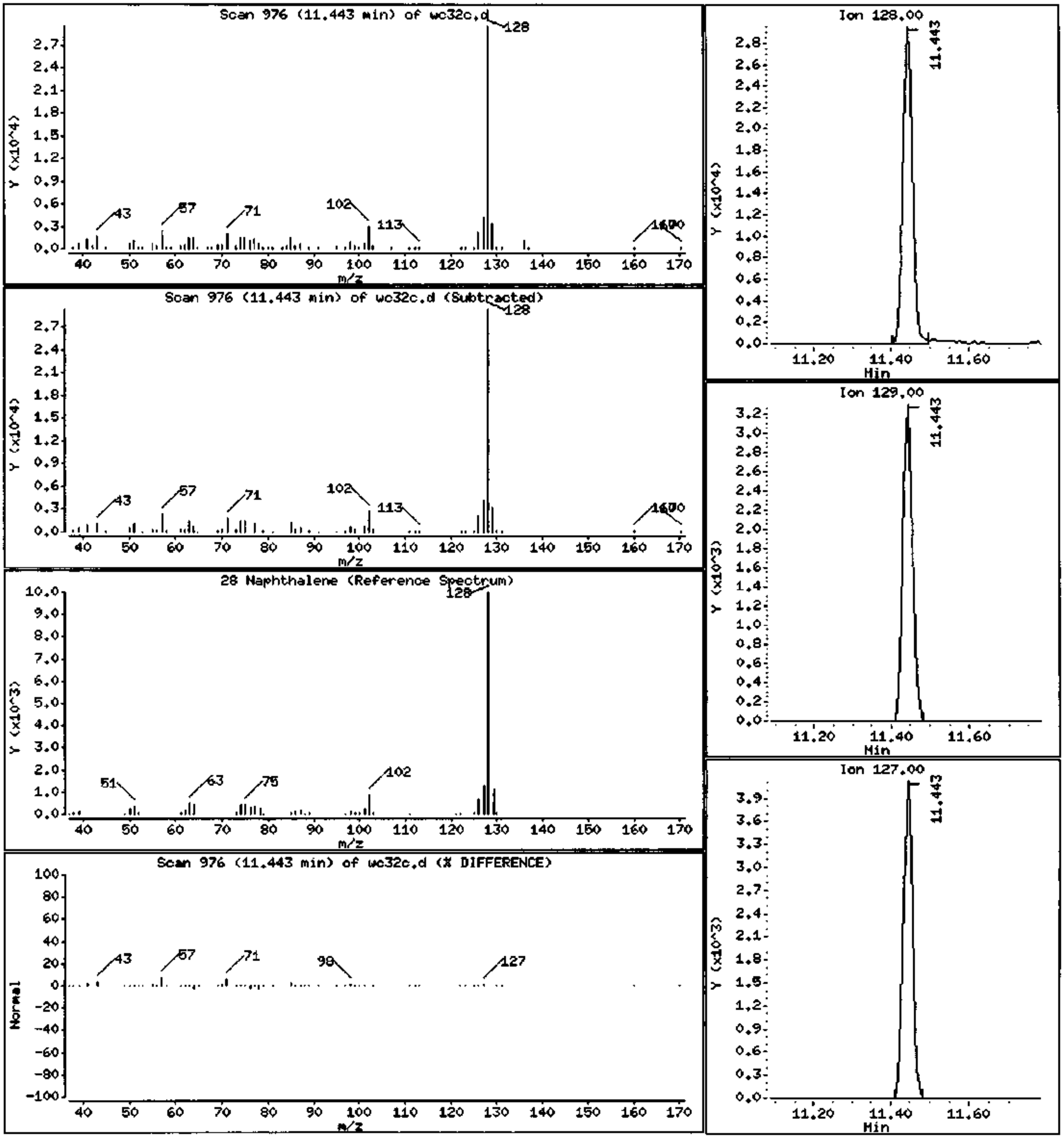
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

28 Naphthalene

Concentration: 153.8 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32c.d

Date : 15-FEB-2013 19:52

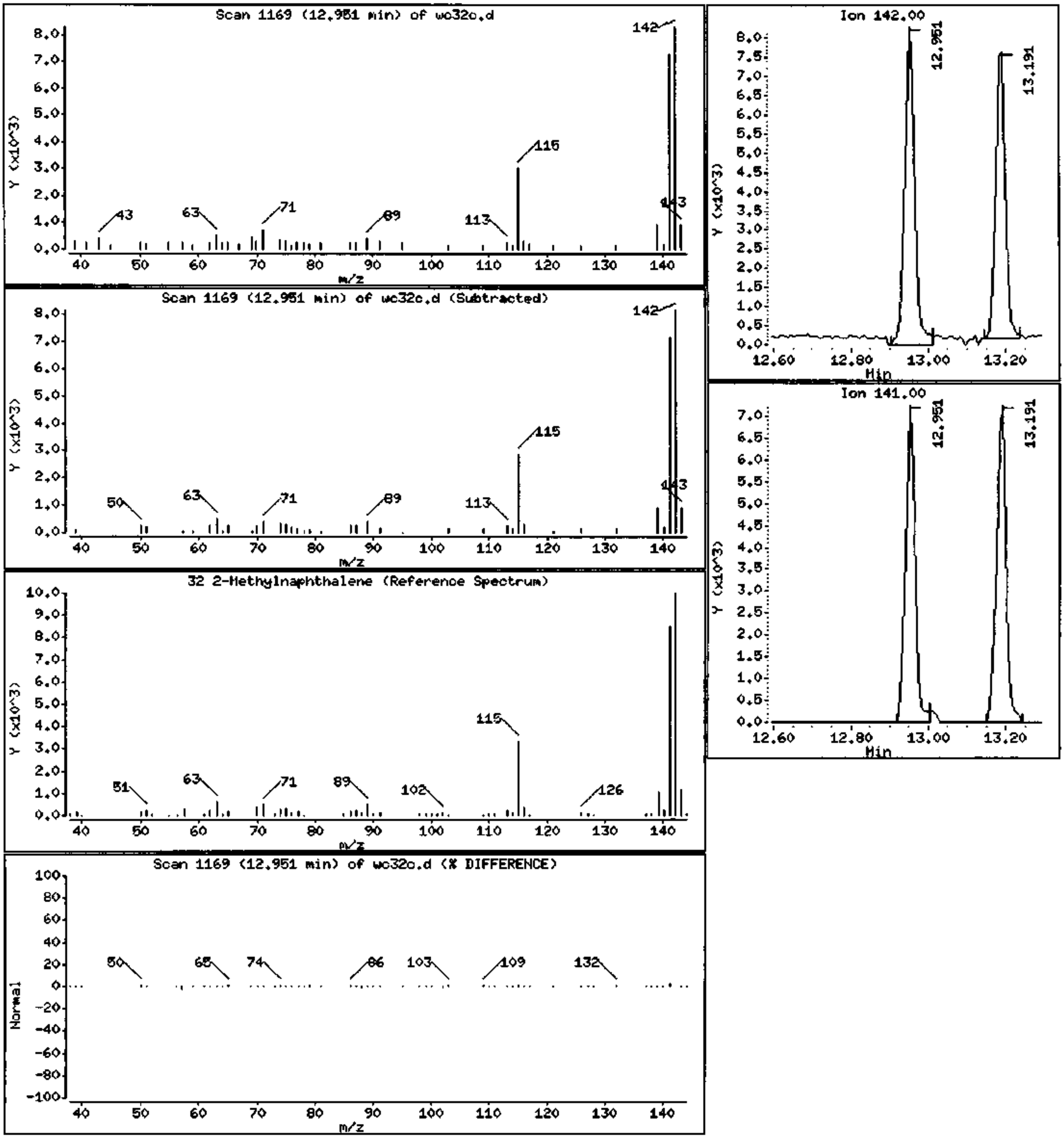
Client ID: SG-07-0-10-013113 Instrument: nt10.i

Sample Info: WC32C

Volume Injected (uL): 1.0 Operator: VTS/YZ

Column phase: ZB-5msi Column diameter: 0.25

32 2-Methylnaphthalene Concentration: 70.83 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32c.d

Date : 15-FEB-2013 19:52

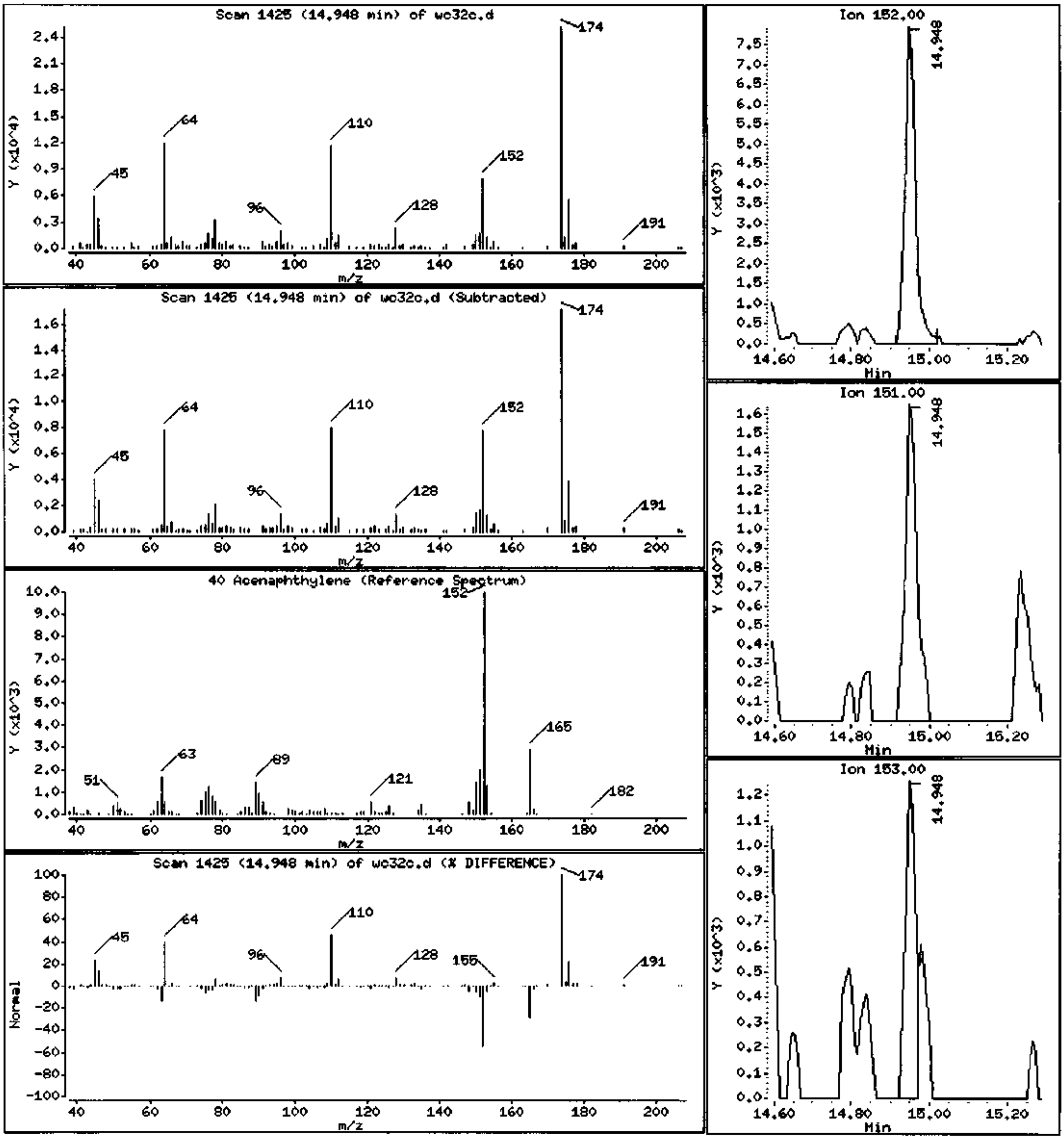
Client ID: SG-07-0-10-013113 Instrument: nt10.i

Sample Info: WC32C

Volume Injected (uL): 1.0 Operator: VTS/YZ

Column phase: ZB-5msi Column diameter: 0.25

40 Acenaphthylene Concentration: 44.46 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32c.d

Page 14

Date : 15-FEB-2013 19:52

Client ID: SG-07-0-10-013113

Instrument: nt10.i

Sample Info: WC32C

Volume Injected (uL): 1.0

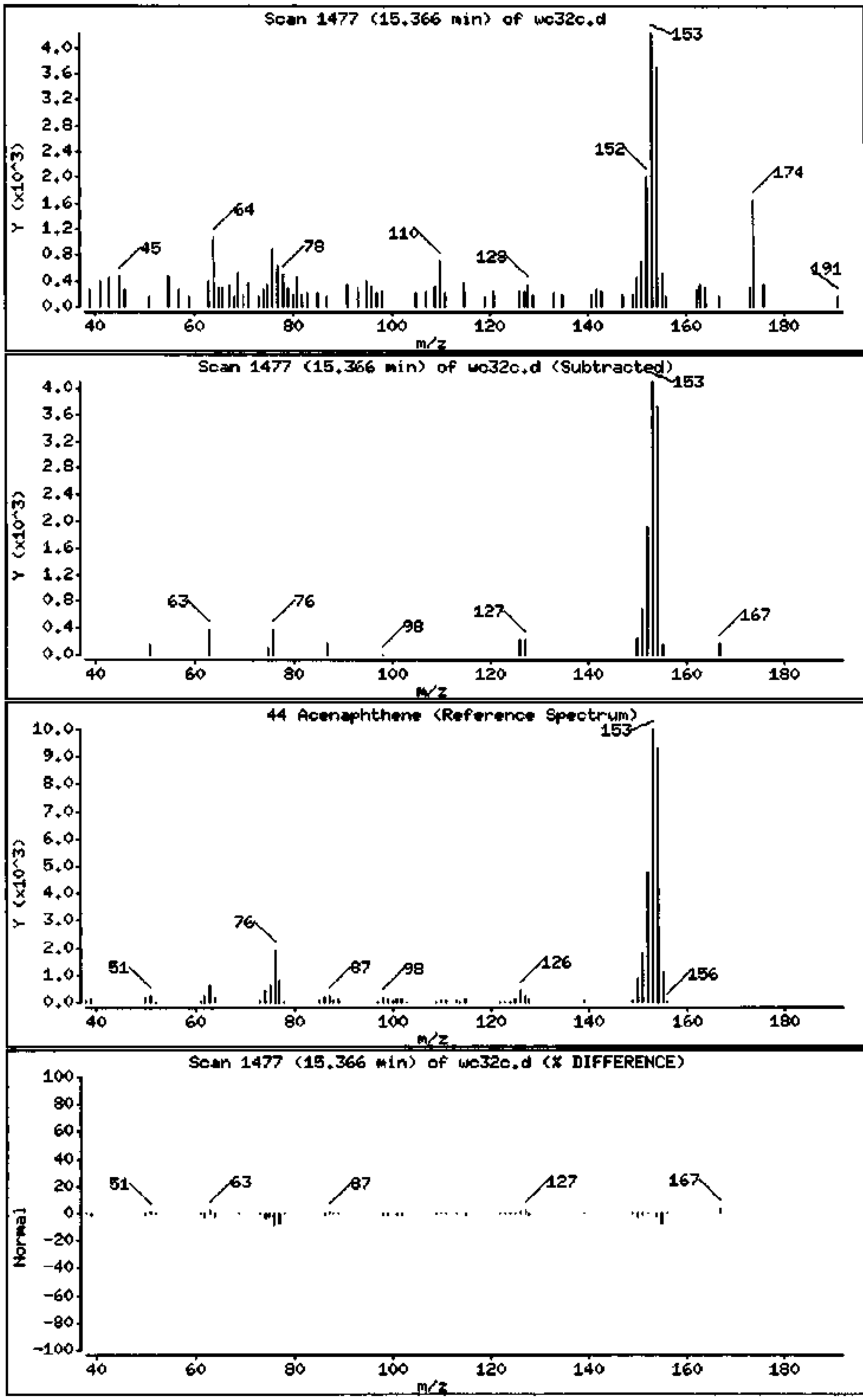
Operator: VTS/YZ

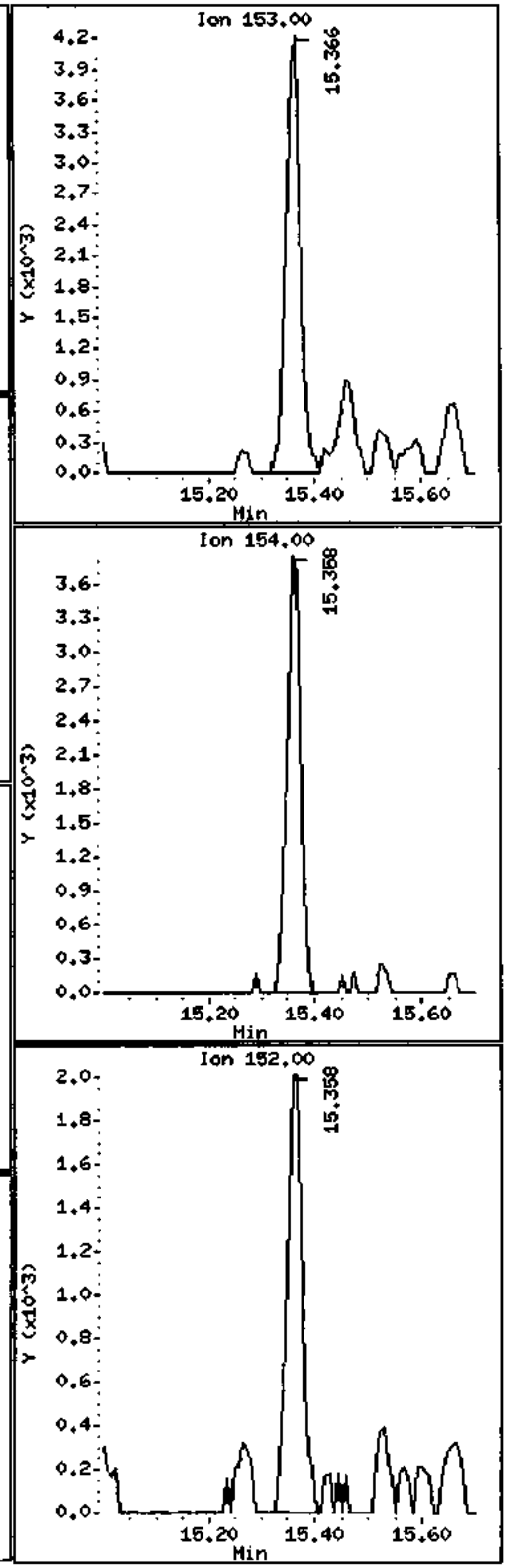
Column phase: ZB-5msi

Column diameter: 0.25

44 Acenaphthene

Concentration: 38.87 ug/kg





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Date : 15-FEB-2013 19:52

Client ID: SG-07-0-10-013113

Instrument: nt10.i

Sample Info: WC32C

Volume Injected (uL): 1.0

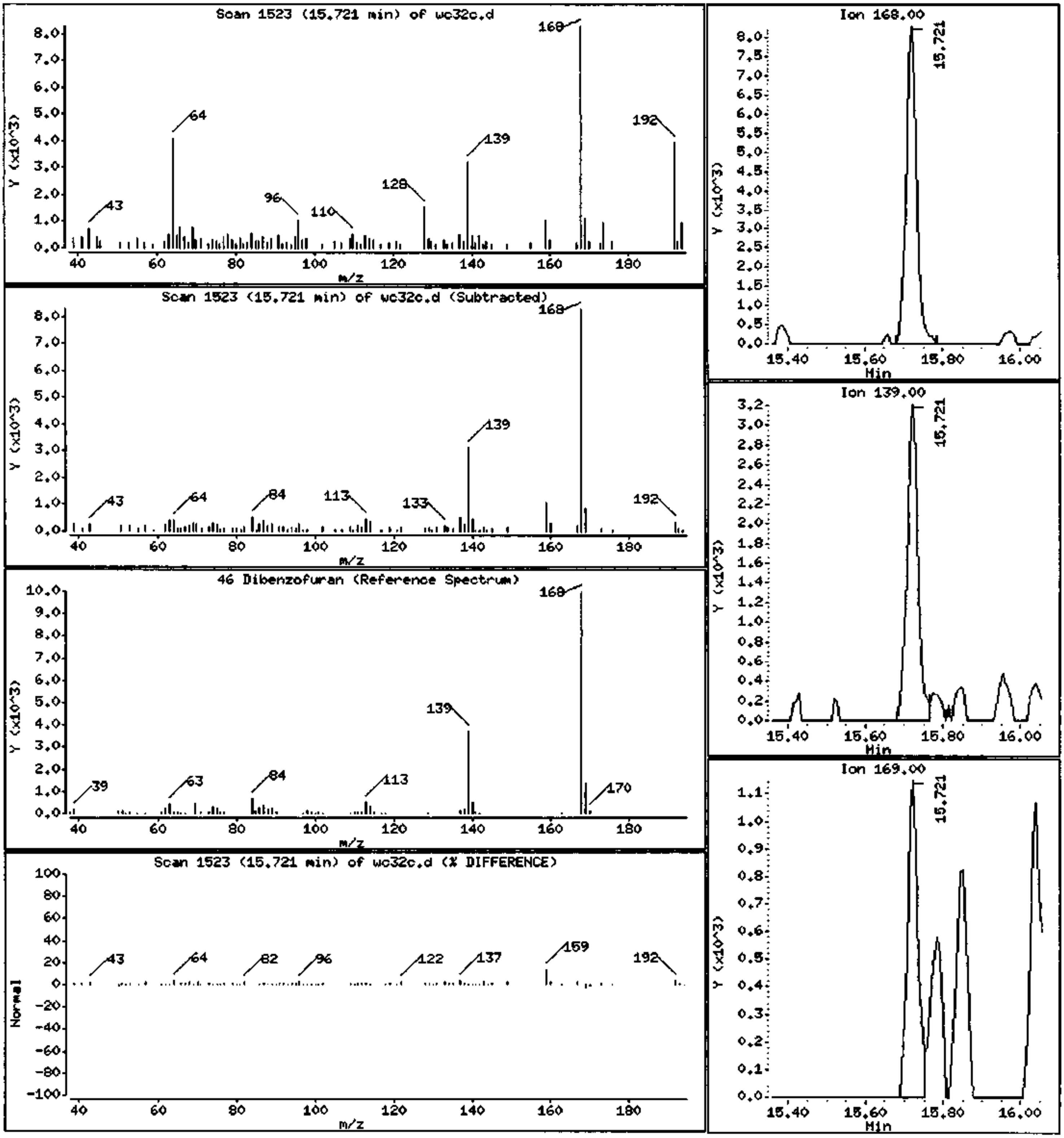
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

46 Dibenzofuran

Concentration: 55.10 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32c.d

Date : 15-FEB-2013 19:52

Client ID: SG-07-0-10-013113

Instrument: nt10.i

Sample Info: WC32C

Volume Injected (uL): 1.0

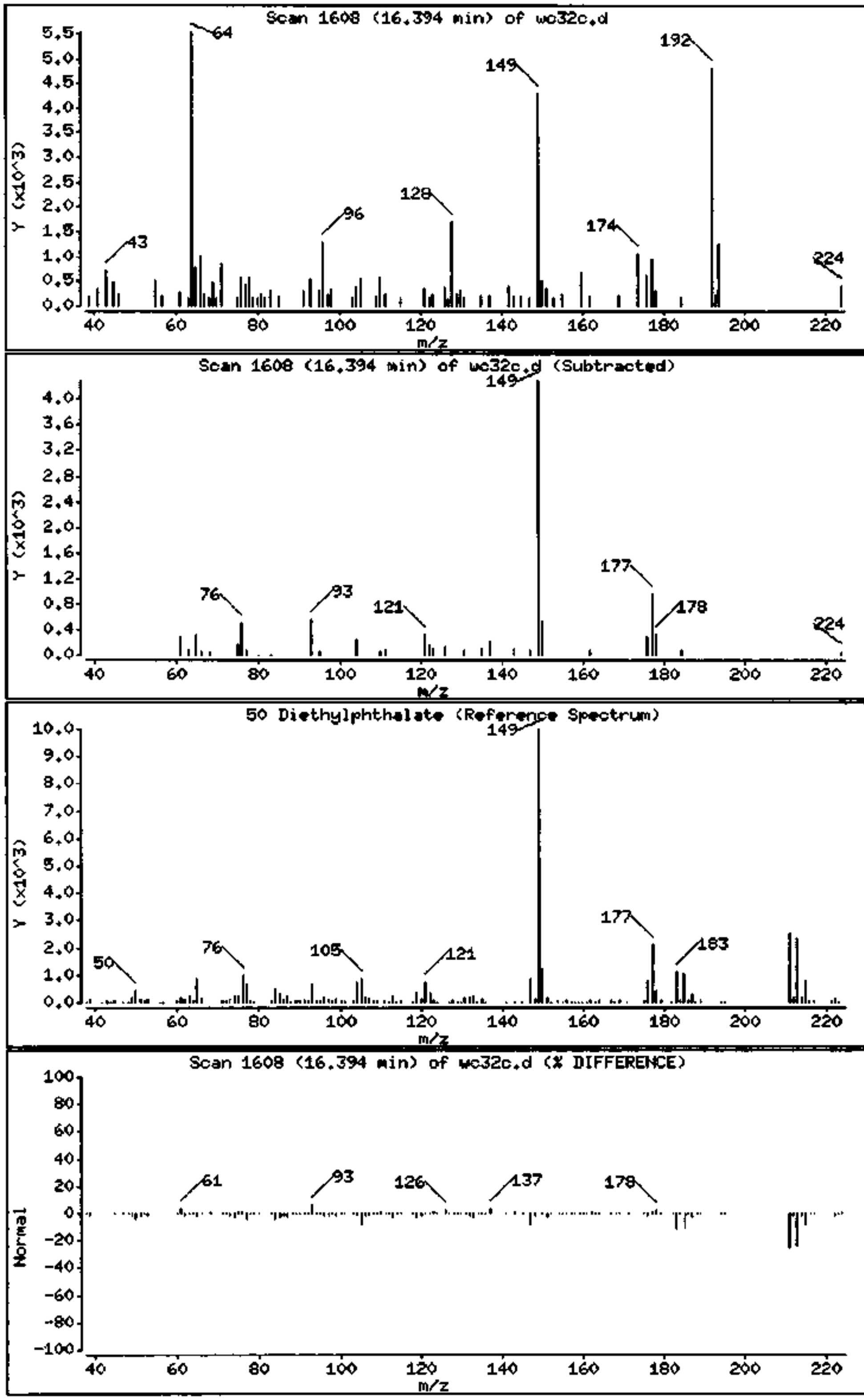
Operator: VTS/YZ

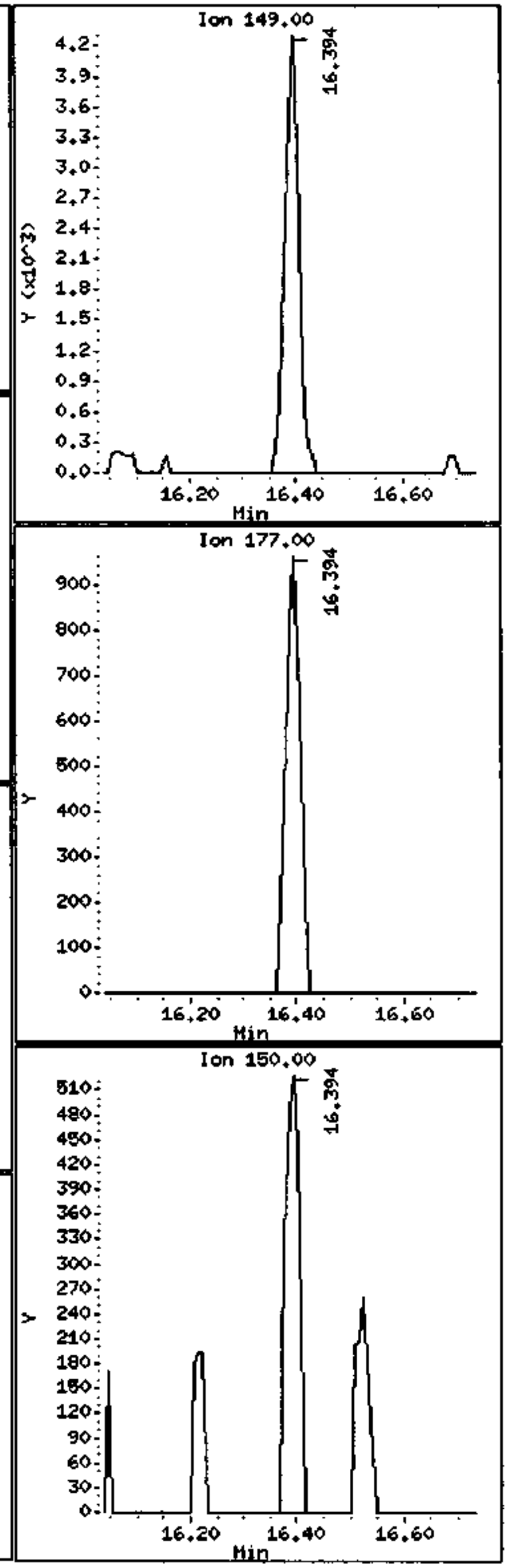
Column phase: ZB-5msi

Column diameter: 0.25

50 Diethylphthalate

Concentration: 32.79 ug/kg





Data File: /chem1/nt10.i/20130215.b/wc32c.d

Date : 15-FEB-2013 19:52

Client ID: SG-07-0-10-013113

Instrument: nt10.i

Sample Info: WC32C

Volume Injected (uL): 1.0

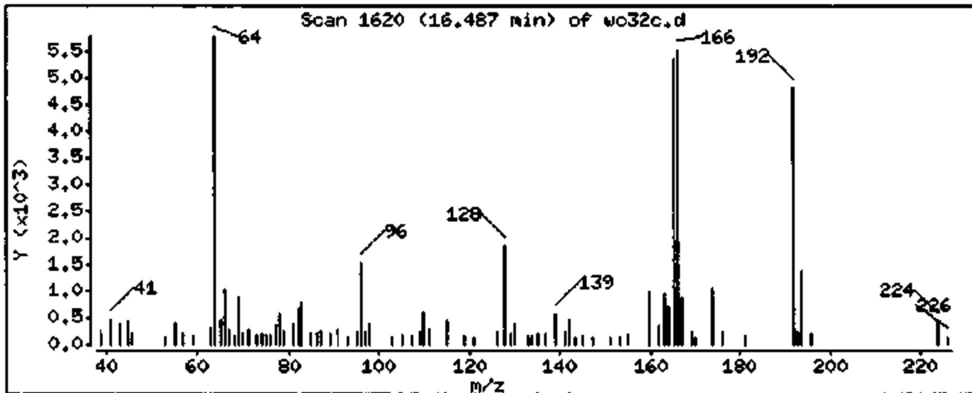
Operator: VTS/YZ

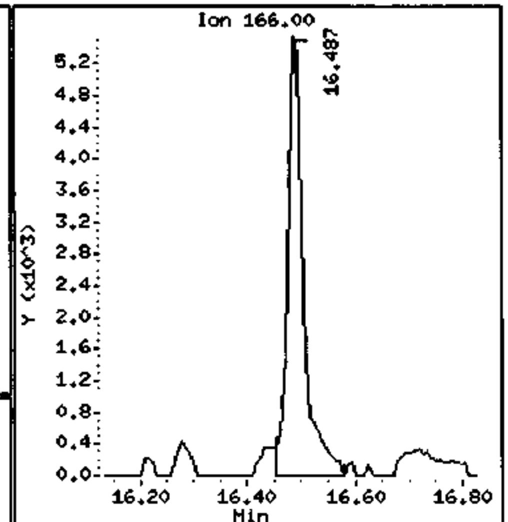
Column phase: ZB-5msi

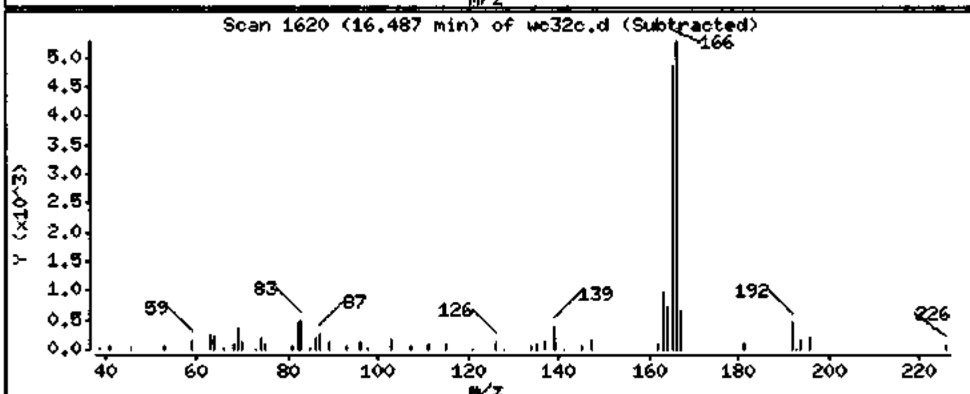
Column diameter: 0.25

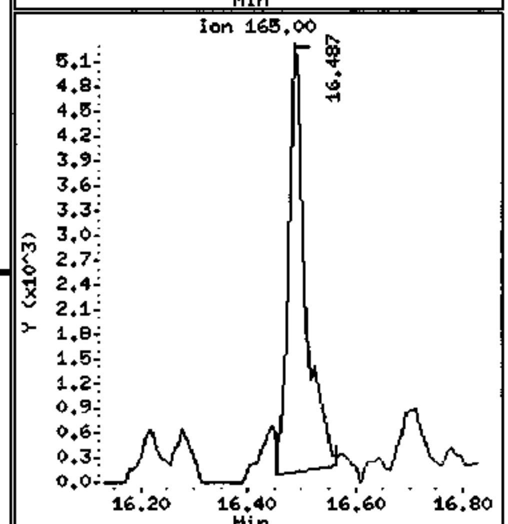
49 Fluorene

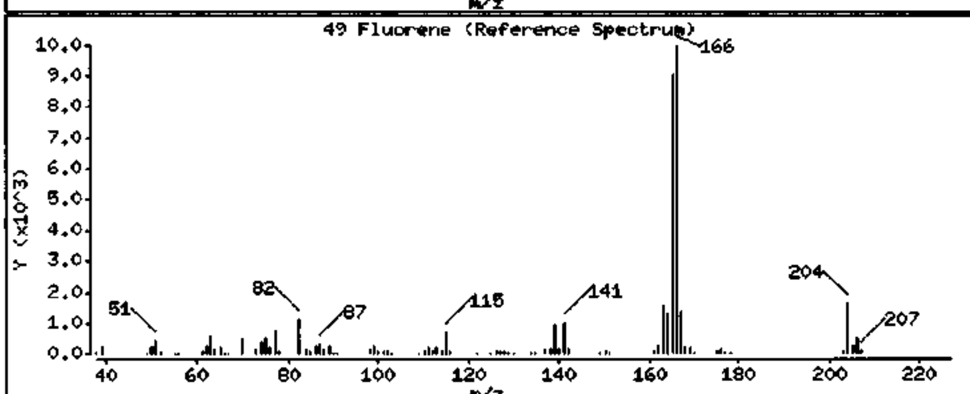
Concentration: 52.35 ug/kg

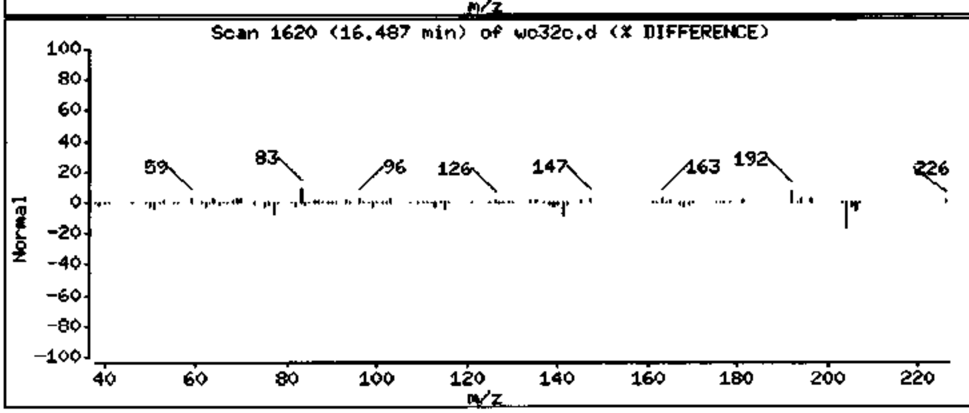


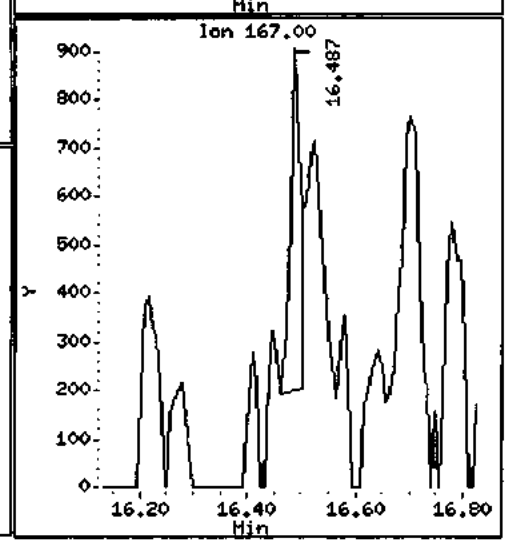












Data File: /chem1/nt10.i/20130215.b/wc32c.d

Date : 15-FEB-2013 19:52

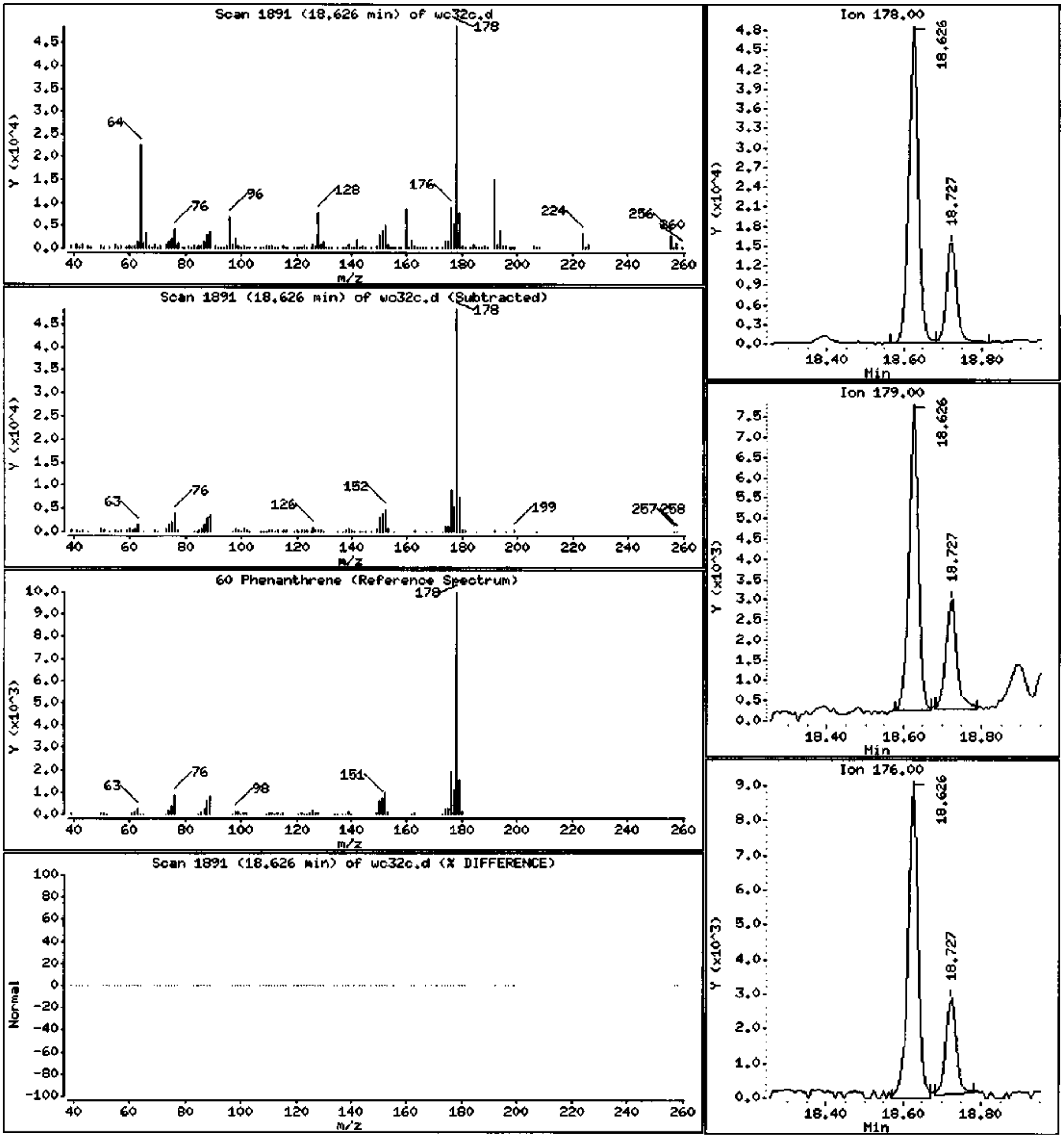
Client ID: SG-07-0-10-013113 Instrument: nt10.i

Sample Info: WC32C

Volume Injected (uL): 1.0 Operator: VTS/YZ

Column phase: ZB-5msi Column diameter: 0.25

60 Phenanthrene Concentration: 248.1 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32c.d

Date : 15-FEB-2013 19:52

Client ID: SG-07-0-10-013113

Instrument: nt10.i

Sample Info: WC32C

Volume Injected (uL): 1.0

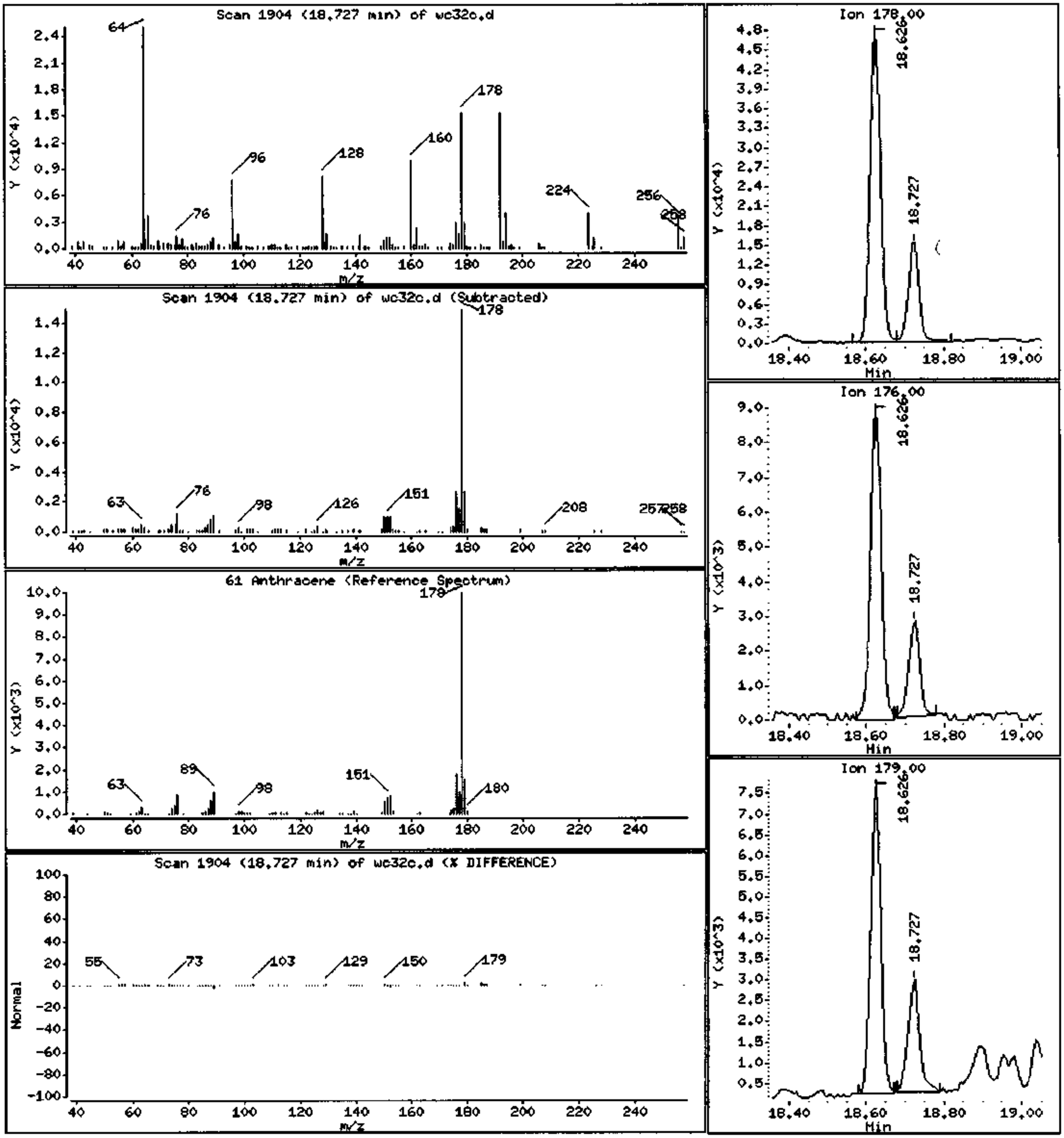
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

61 Anthracene

Concentration: 84.79 ug/kg



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Date : 15-FEB-2013 19:52

Client ID: SG-07-0-10-013113

Instrument: nt10.i

Sample Info: WC32C

Volume Injected (uL): 1.0

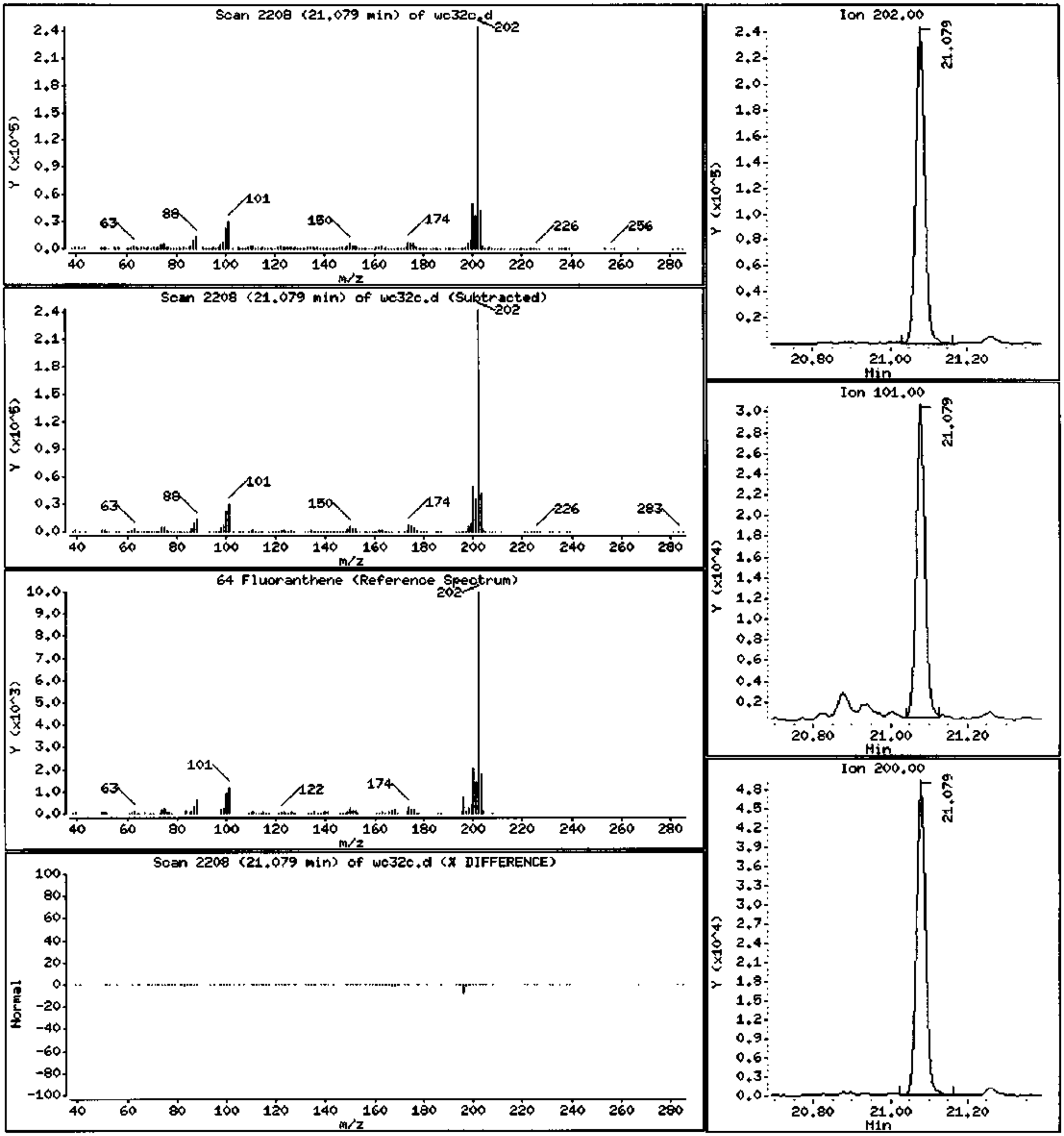
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

64 Fluoranthene

Concentration: 1053 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32c.d

Date : 15-FEB-2013 19:52

Client ID: SG-07-0-10-013113

Instrument: nt10.i

Sample Info: WC32C

Volume Injected (uL): 1.0

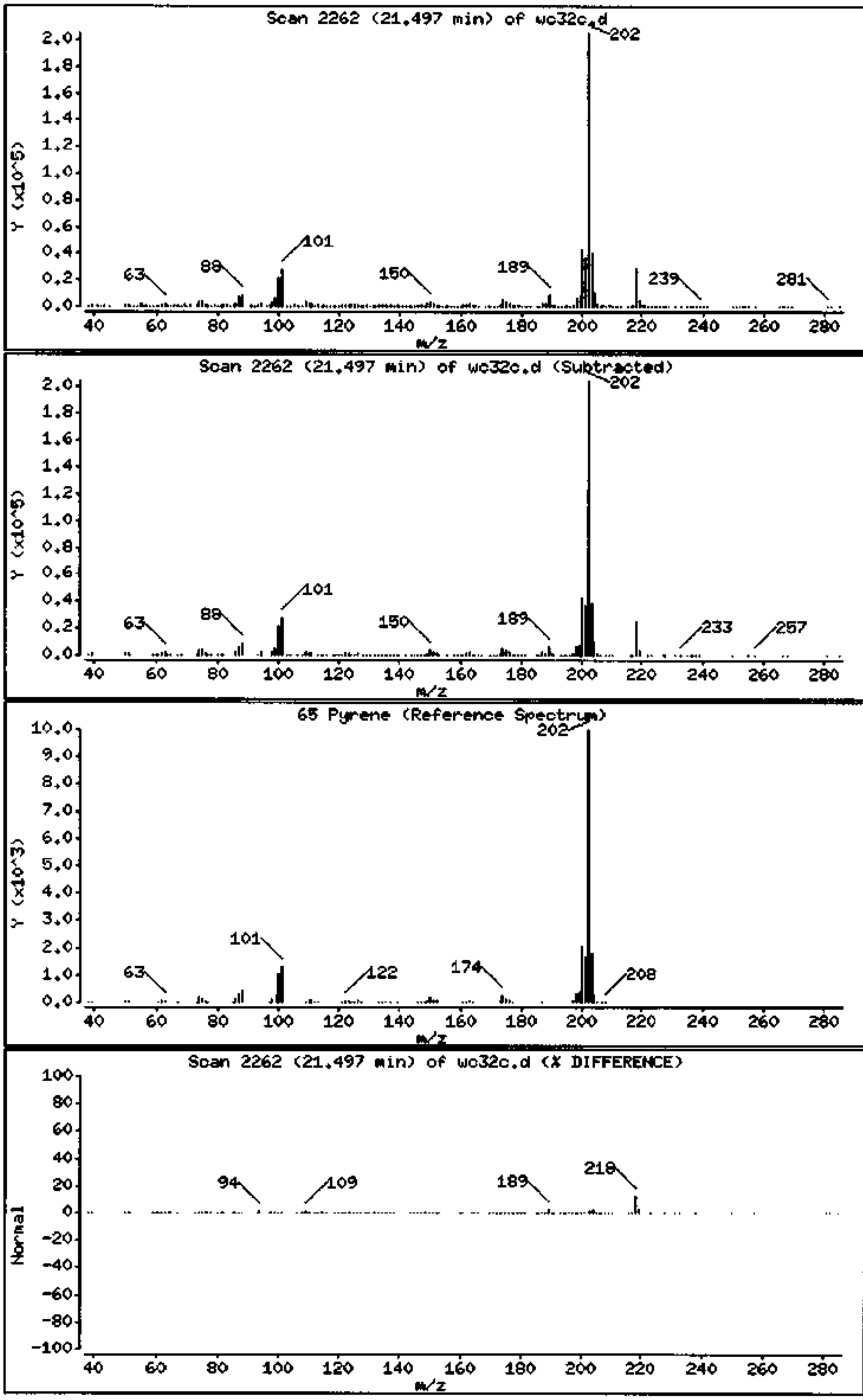
Operator: VTS/YZ

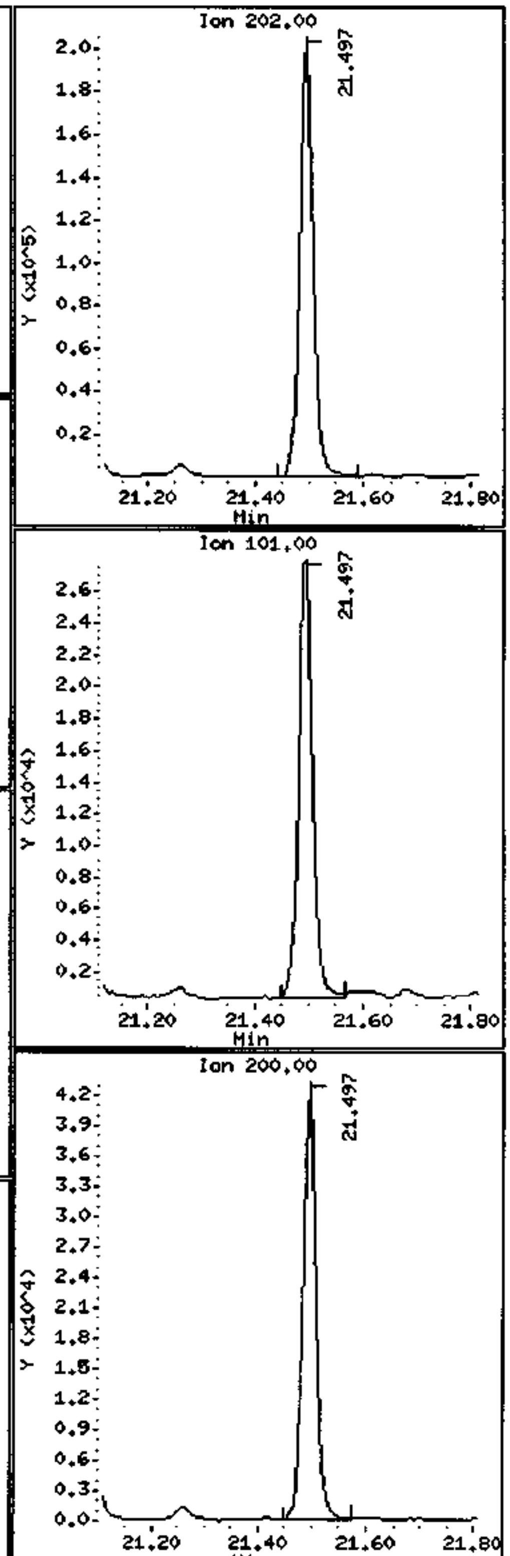
Column phase: ZB-5msi

Column diameter: 0.25

65 Pyrene

Concentration: 820.6 ug/kg





Data File: /chem1/nt10.i/20130215.b/wc32c.d

Date : 15-FEB-2013 19:52

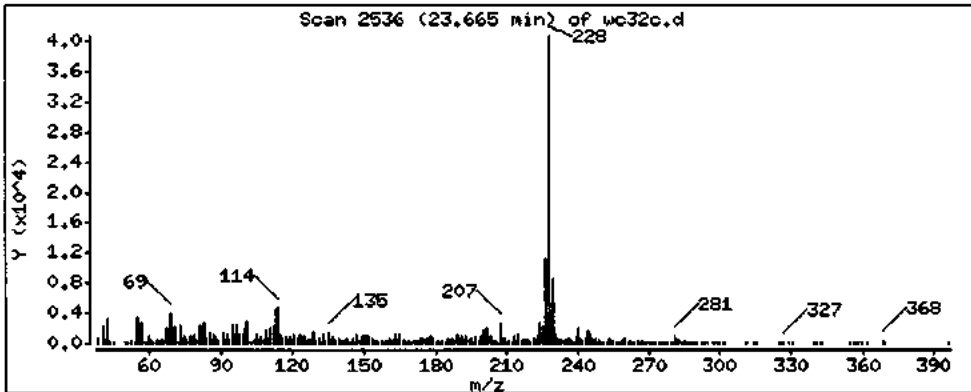
Client ID: SG-07-0-10-013113 Instrument: nt10.i

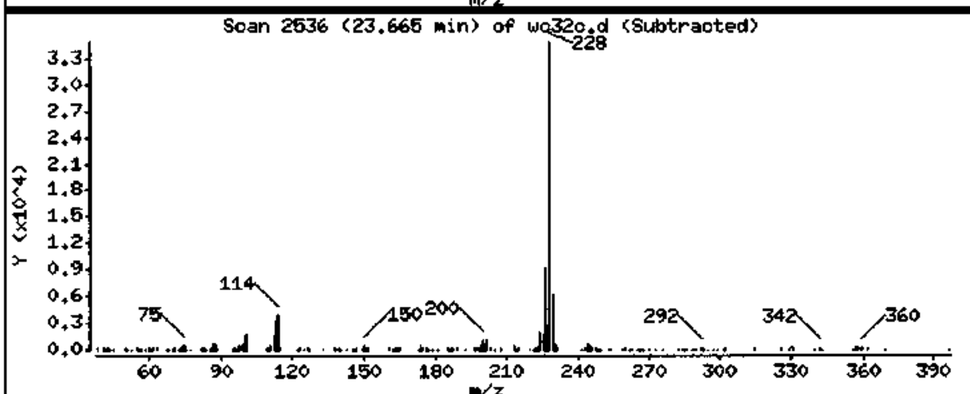
Sample Info: WC32C

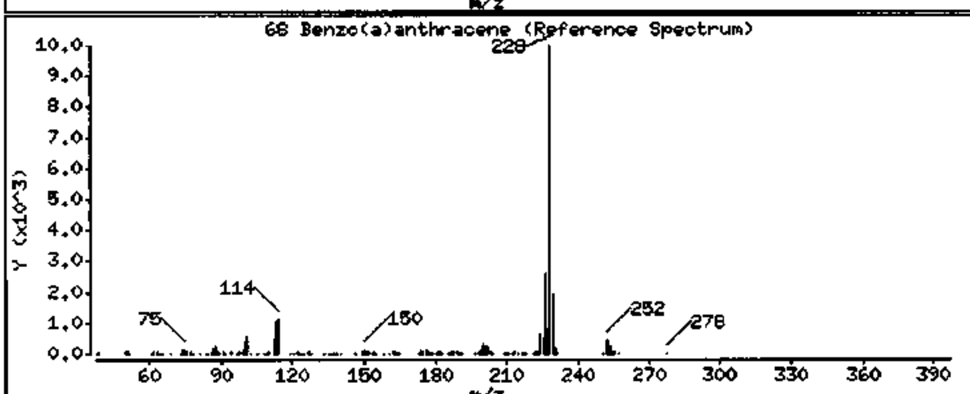
Volume Injected (uL): 1.0 Operator: VTS/YZ

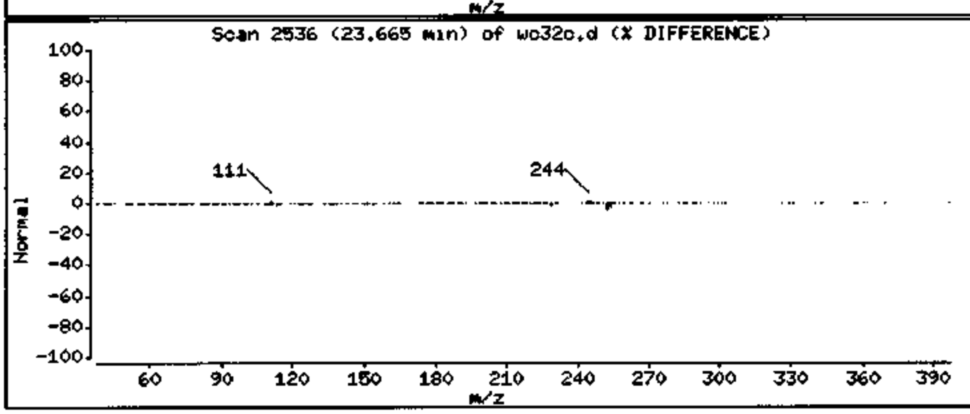
Column phase: ZB-5msi Column diameter: 0.25

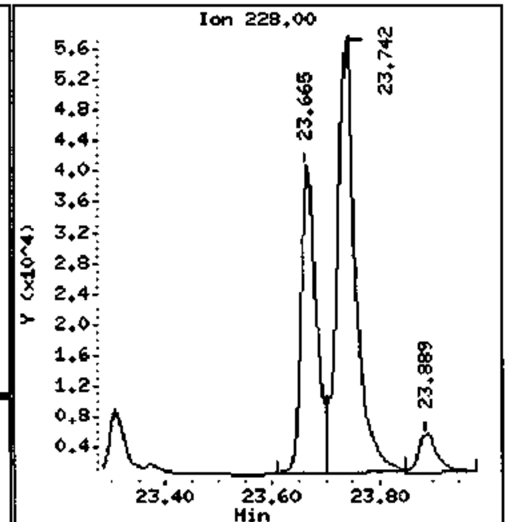
68 Benzo(a)anthracene Concentration: 198.9 ug/kg

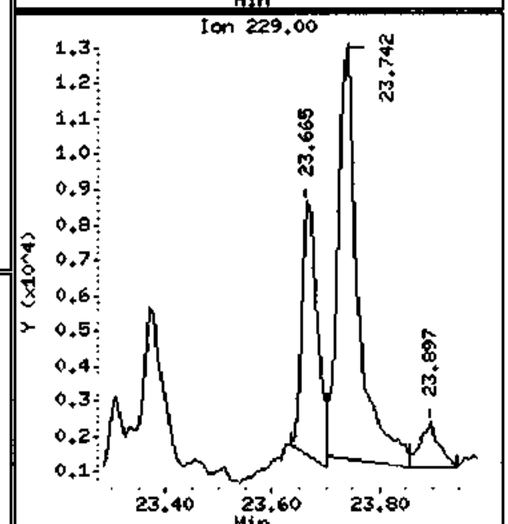


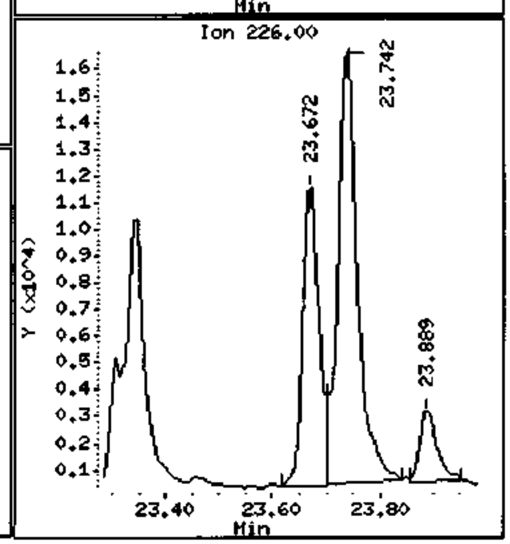












Data File: /chem1/nt10.i/20130215.b/wc32c.d

Date : 15-FEB-2013 19:52

Client ID: SG-07-0-10-013113

Instrument: nt10.i

Sample Info: WC32C

Volume Injected (uL): 1.0

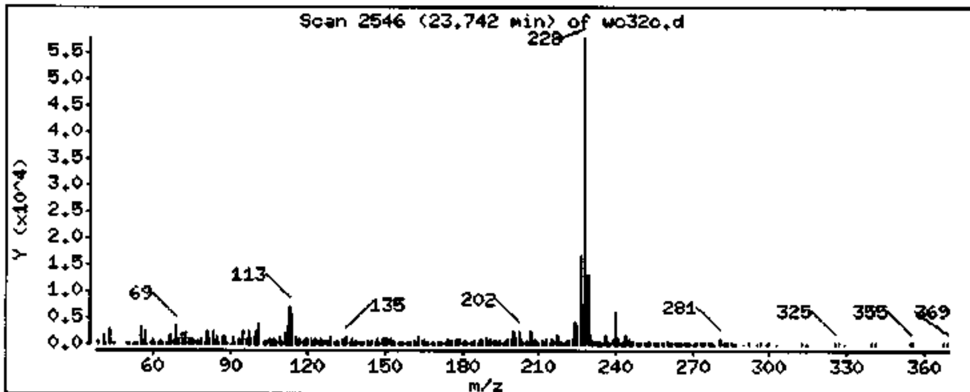
Operator: VTS/YZ

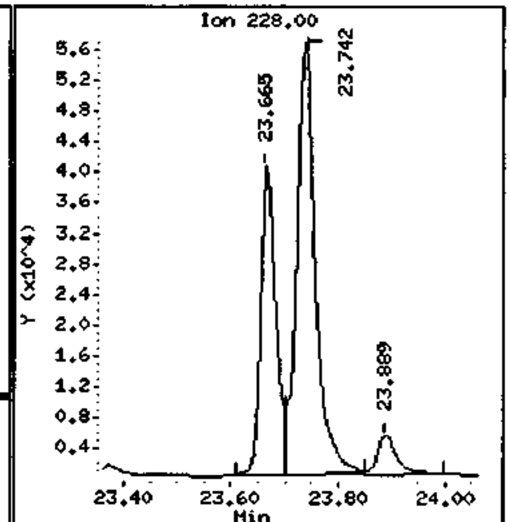
Column phase: ZB-5msi

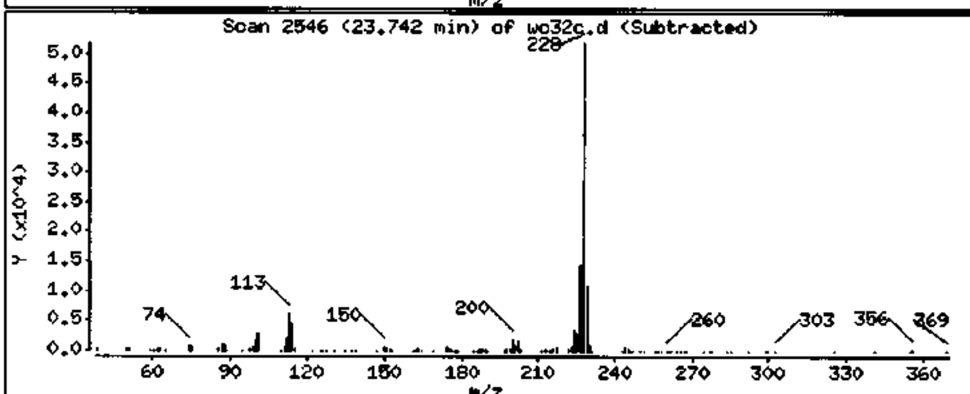
Column diameter: 0.25

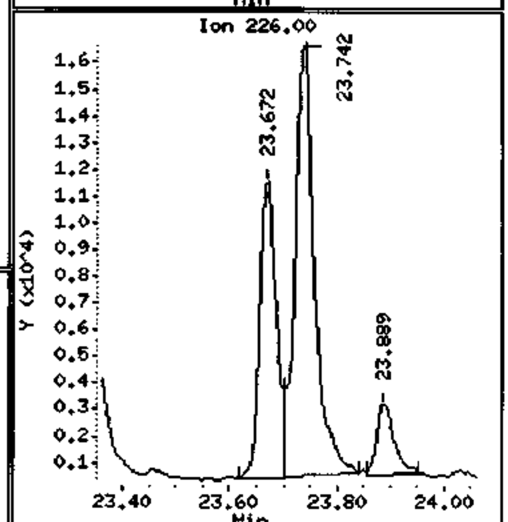
71 Chrysene

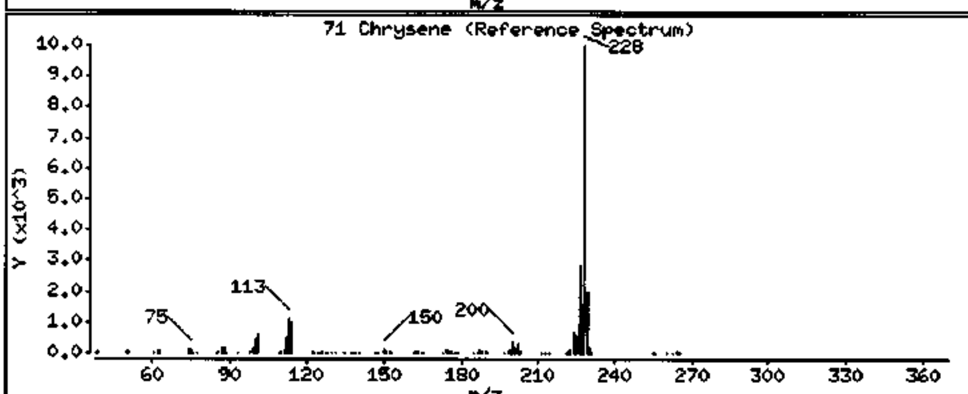
Concentration: 372.7 ug/kg

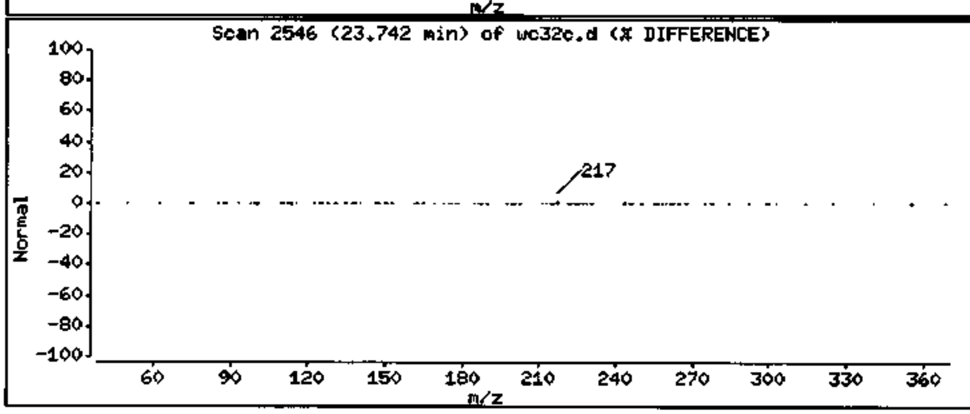


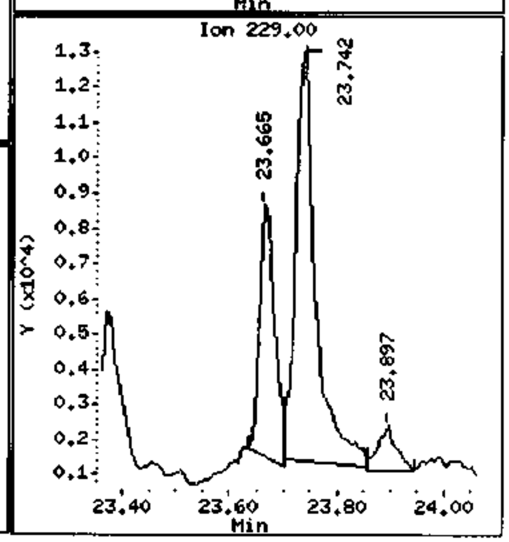












Data File: /chem1/nt10.i/20130215.b/wc32c.d

Date : 15-FEB-2013 19:52

Client ID: SG-07-0-10-013113 | Instrument: nt10.i

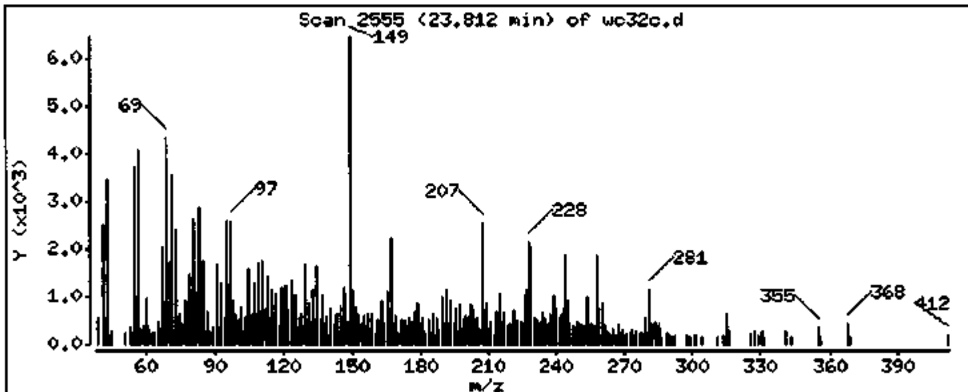
Sample Info: WC32C

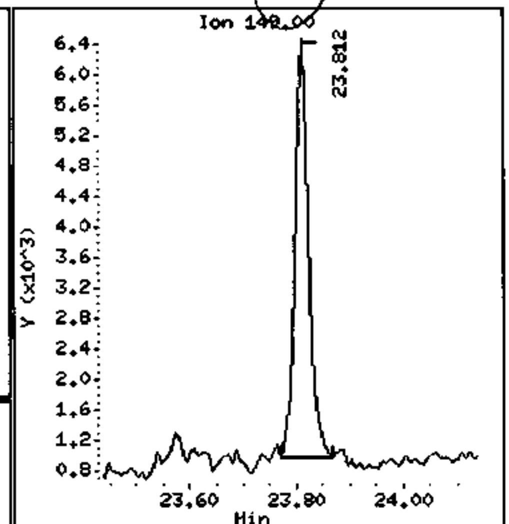
Volume Injected (uL): 1.0 | Operator: VTS/YZ

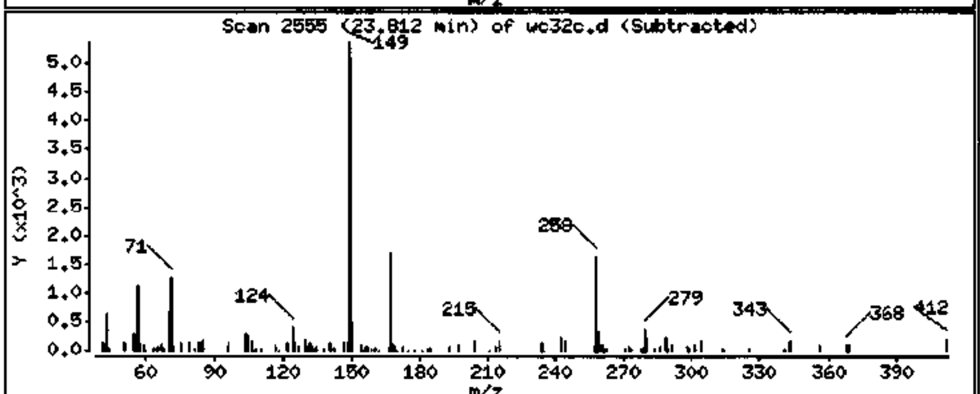
Column phase: ZB-5msi | Column diameter: 0.25

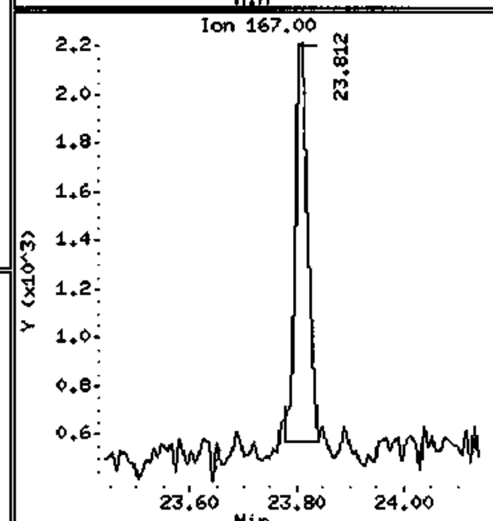
72 bis(2-Ethylhexyl)phthalate | Concentration: 37.24 ug/kg

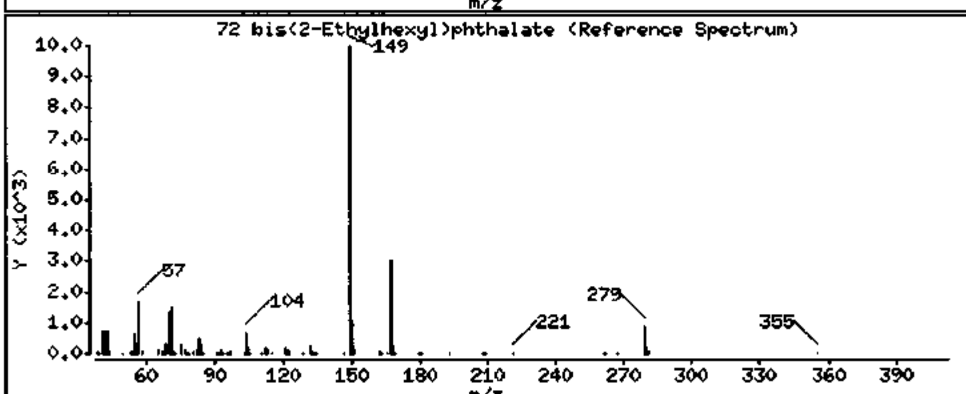
B

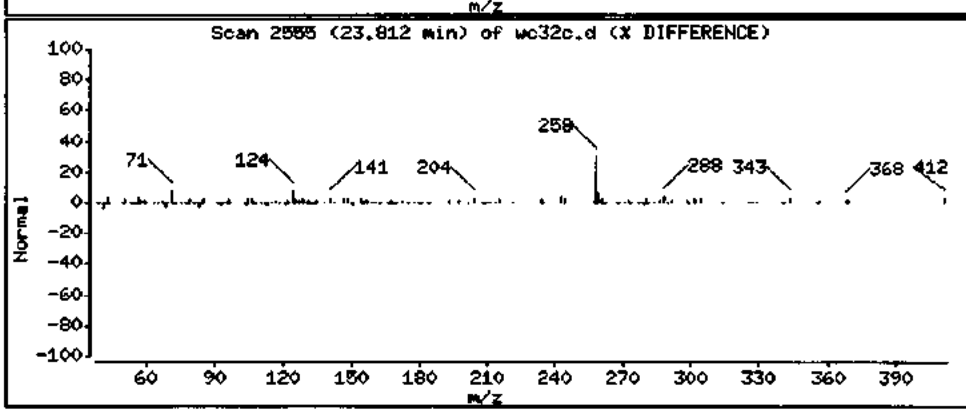


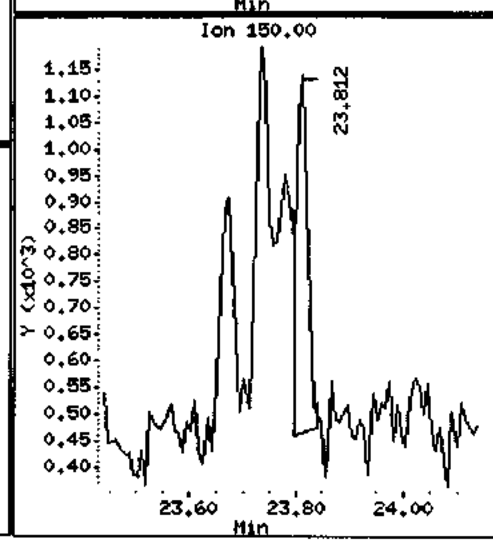












Data File: /chem1/nt10.i/20130215.b/wc32c.d

Date : 15-FEB-2013 19:52

Client ID: SG-07-0-10-013113

Instrument: nt10.i

Sample Info: WC32C

Volume Injected (uL): 1.0

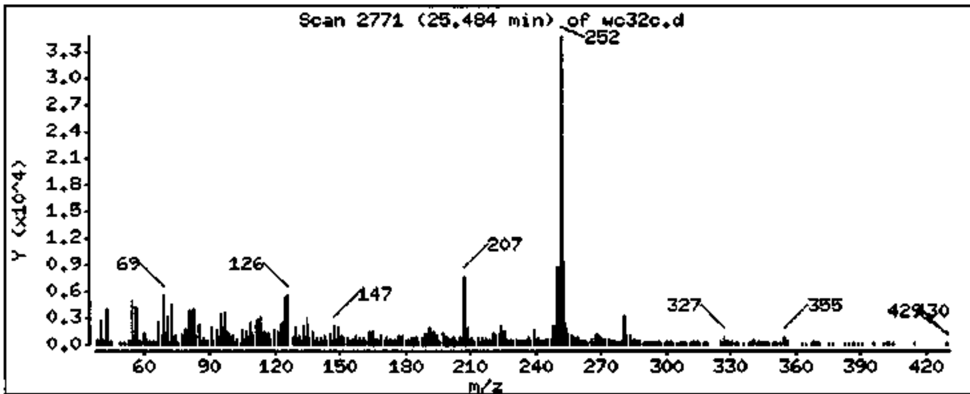
Operator: VTS/YZ

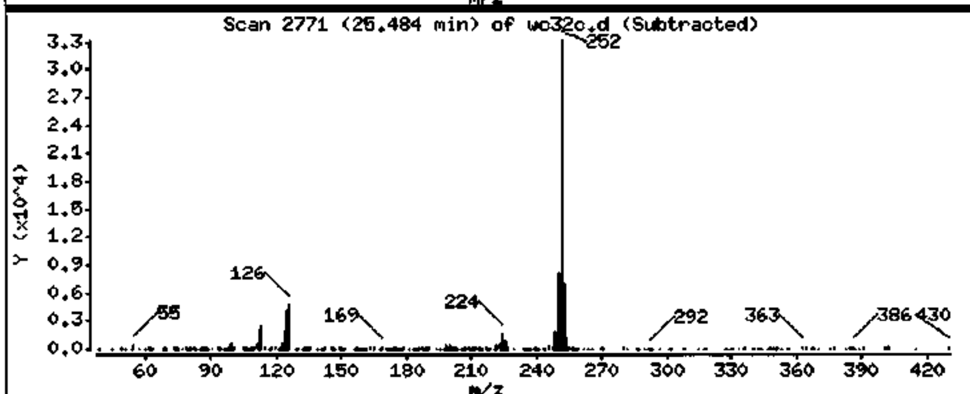
Column phase: ZB-5msi

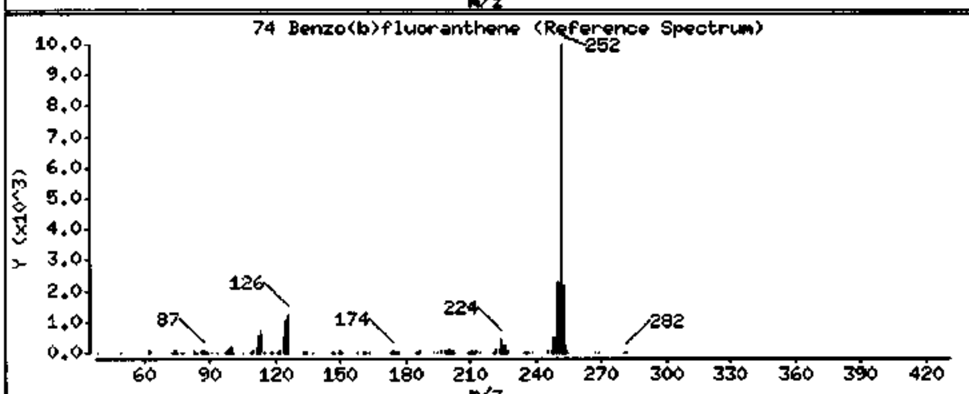
Column diameter: 0.25

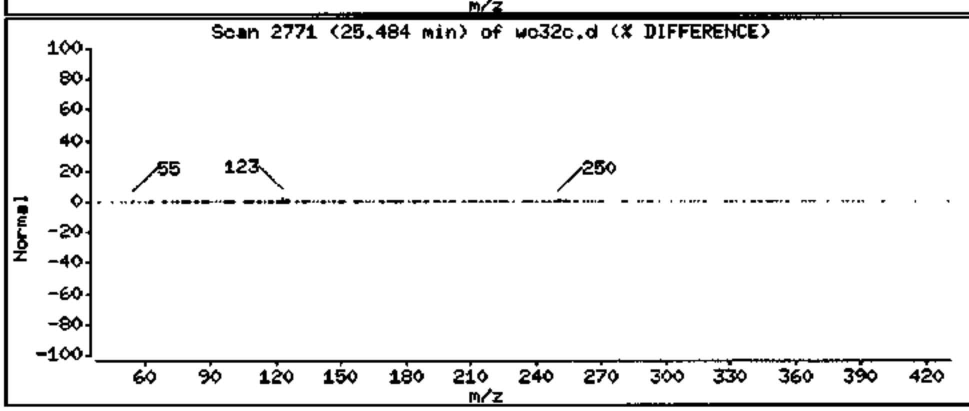
74 Benzo(b)fluoranthene

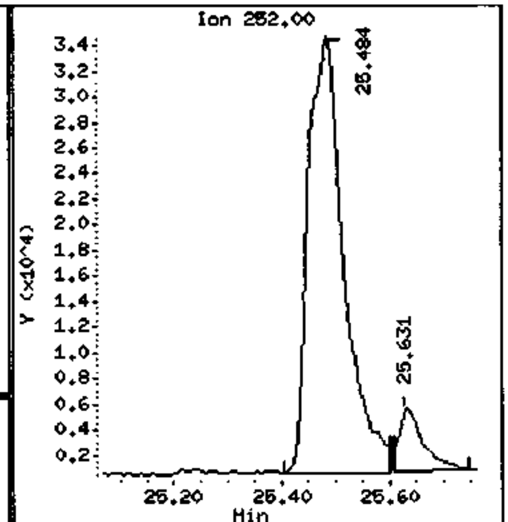
Concentration: 397.2 ug/kg

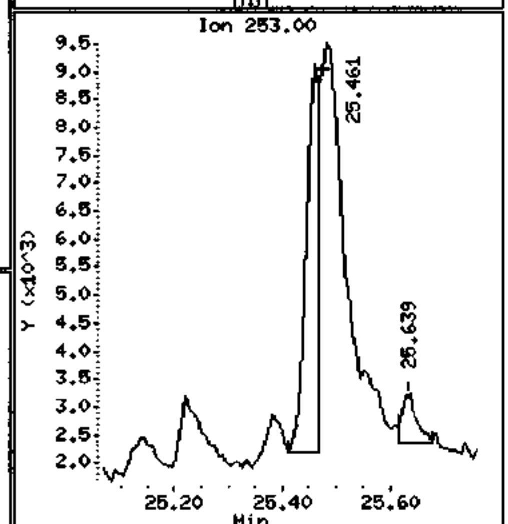


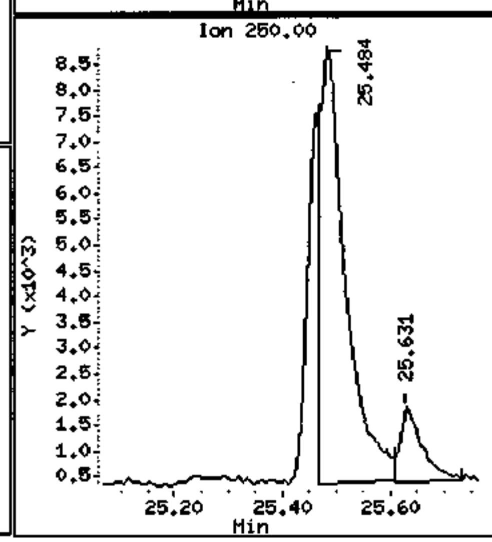












Data File: /chem1/nt10.i/20130215.b/wc32c.d

Date : 15-FEB-2013 19:52

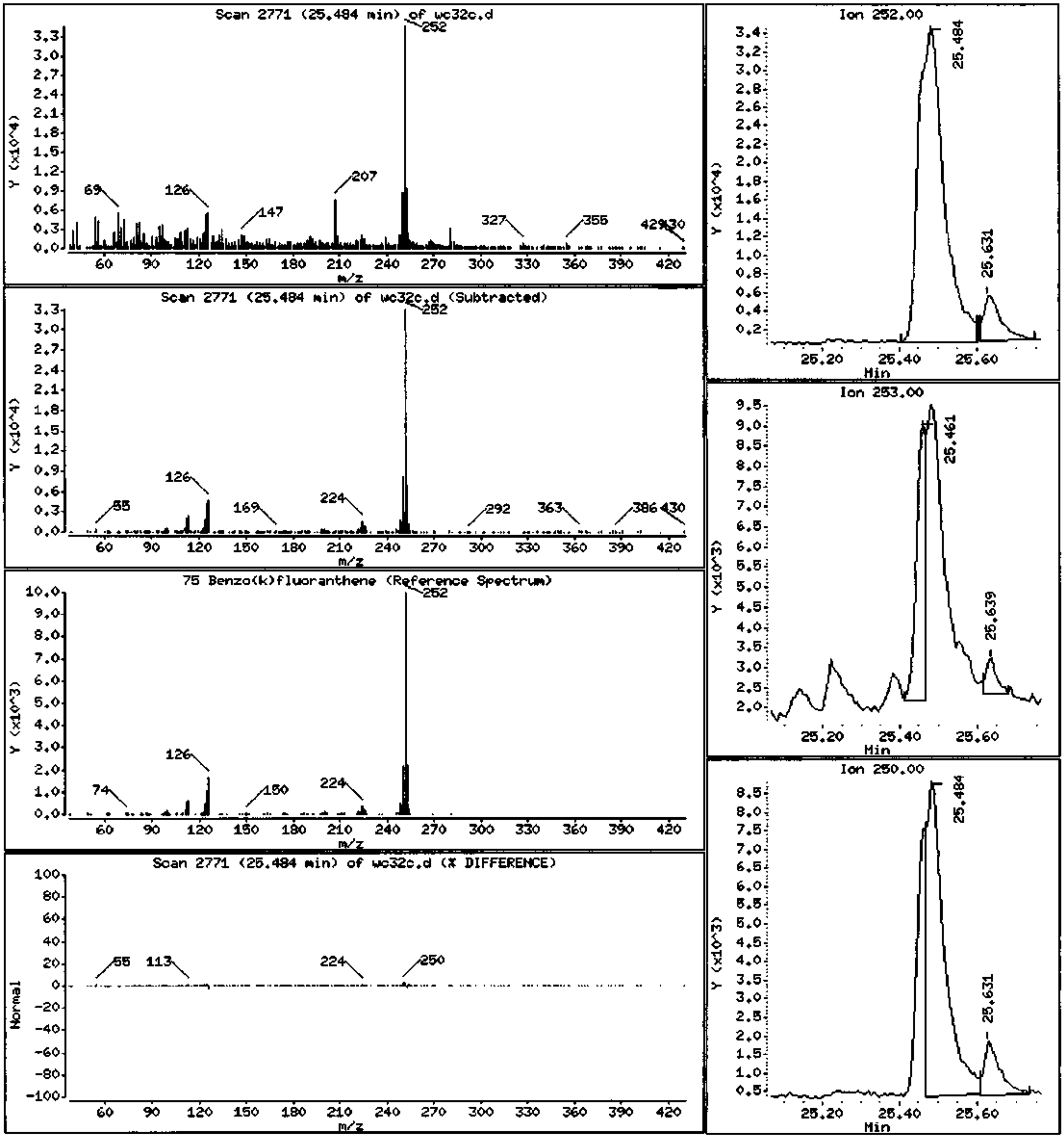
Client ID: SG-07-0-10-013113 Instrument: nt10.i

Sample Info: WC32C

Volume Injected (uL): 1.0 Operator: VTS/YZ

Column phase: ZB-5msi Column diameter: 0.25

75 Benzo(k)fluoranthene Concentration: 367.7 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32c.d

Date : 15-FEB-2013 19:52

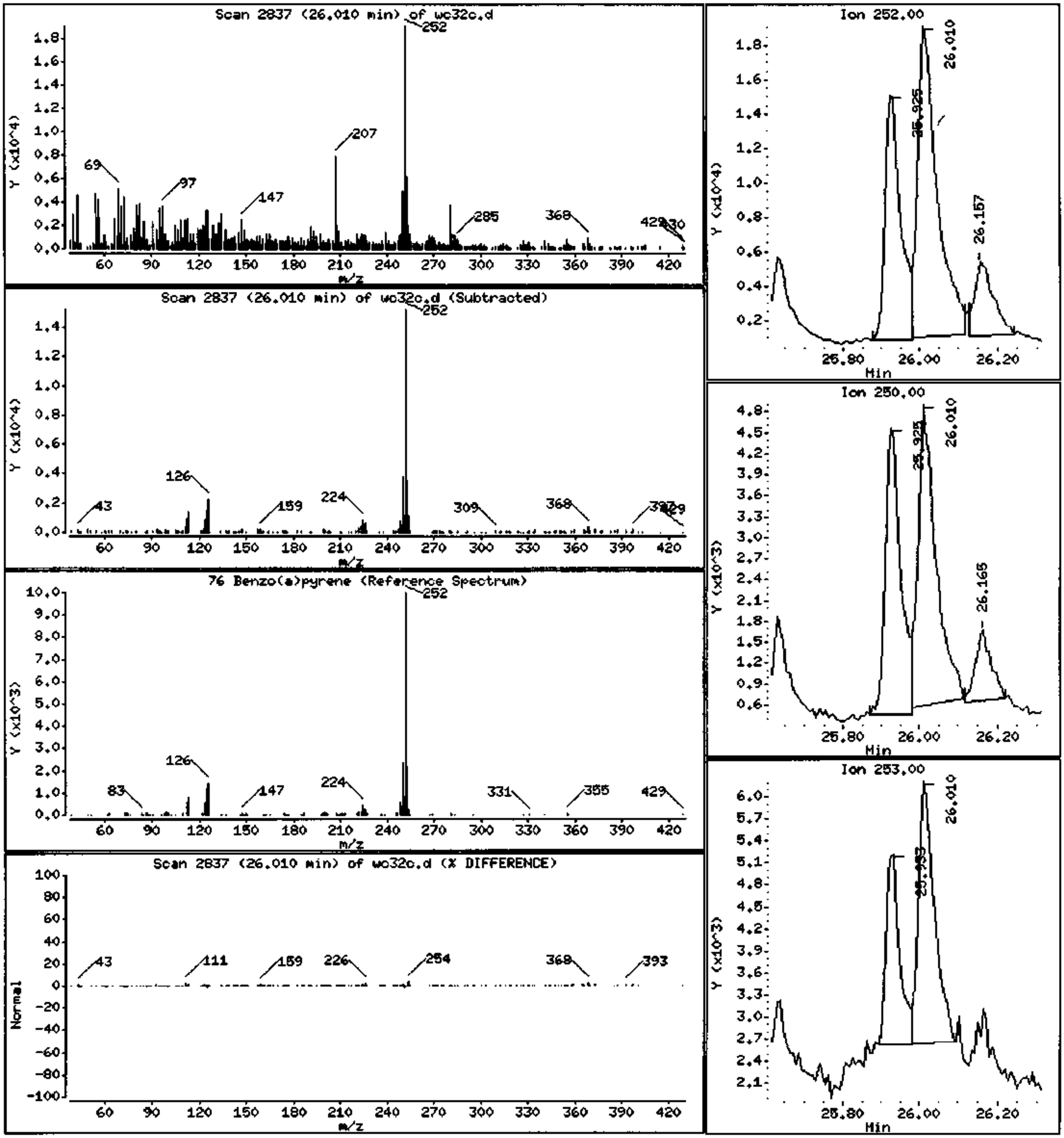
Client ID: SG-07-0-10-013113 Instrument: nt10.i

Sample Info: WC32C

Volume Injected (uL): 1.0 Operator: VTS/YZ

Column phase: ZB-5msi Column diameter: 0.25

76 Benzo(a)pyrene Concentration: 194.3 ug/kg



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Date : 15-FEB-2013 19:52

Client ID: SG-07-0-10-013113

Instrument: nt10.i

Sample Info: WC32C

Volume Injected (uL): 1.0

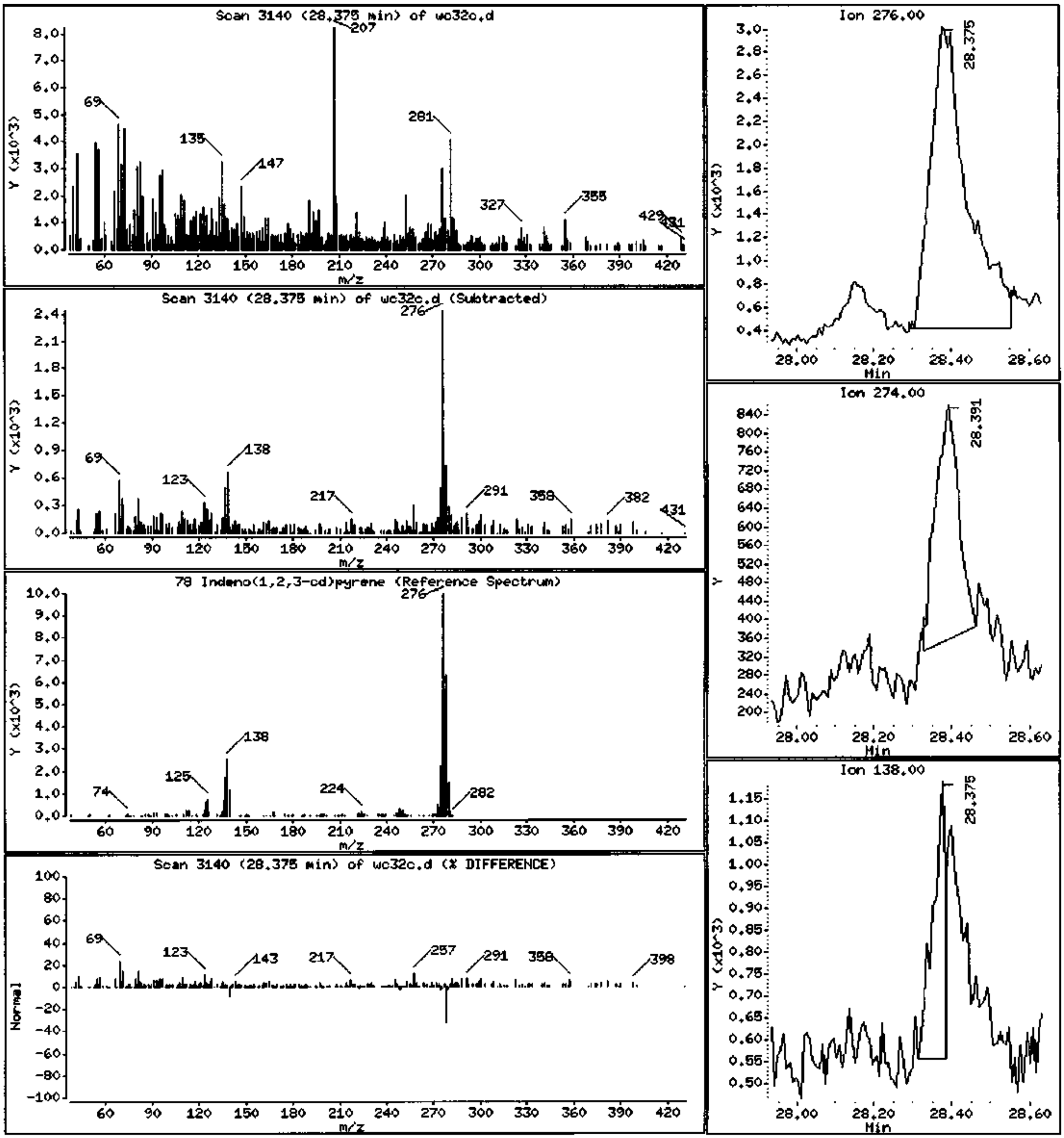
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

78 Indeno(1,2,3-cd)pyrene

Concentration: 41.20 ug/kg



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Date : 15-FEB-2013 19:52

Client ID: SG-07-0-10-013113

Sample Info: WC32C

Volume Injected (uL): 1.0

Column phase: ZB-5msi

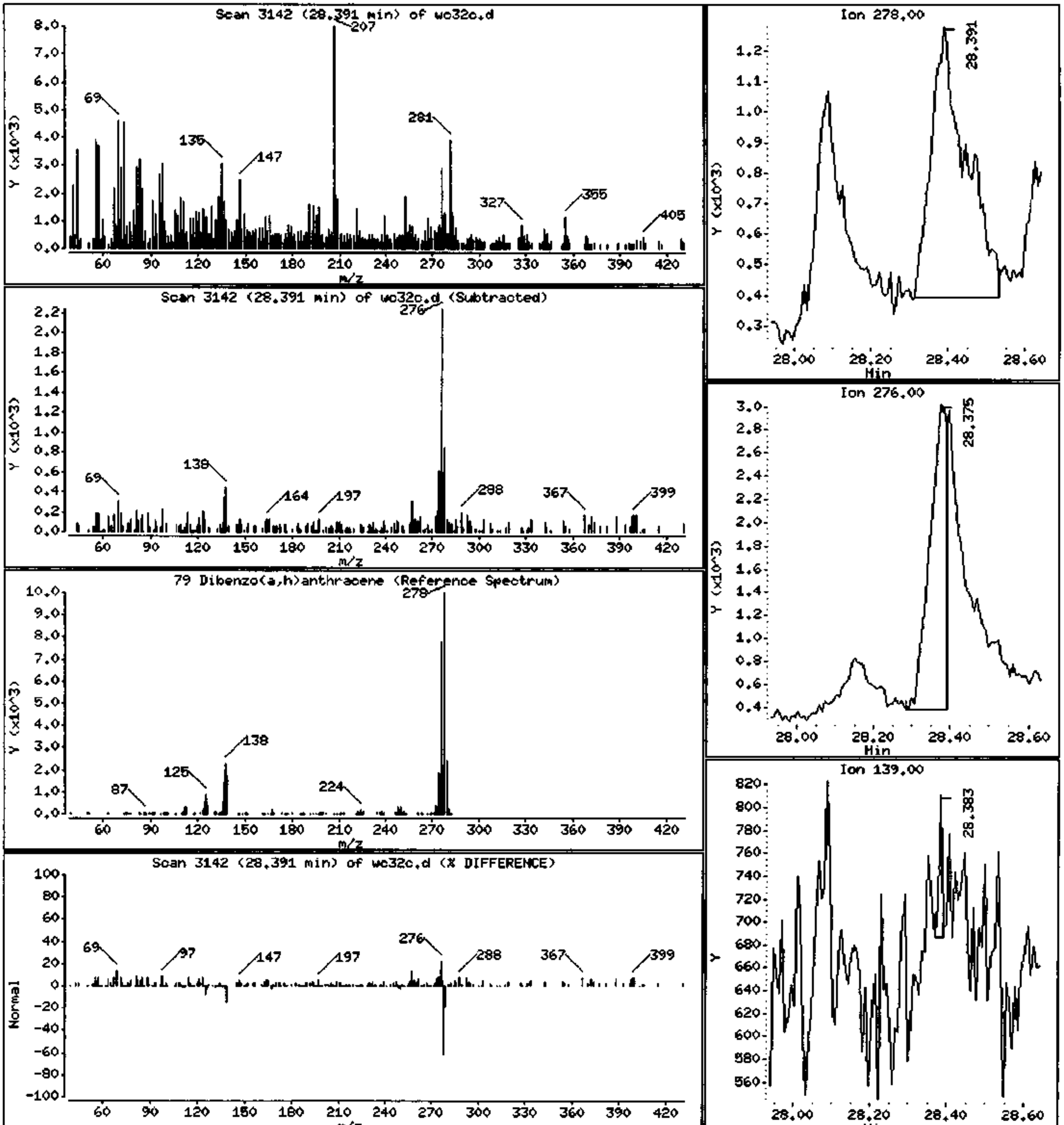
79 Dibenzo(a,h)anthracene

Instrument: nt10.i

Operator: VTS/YZ

Column diameter: 0.25

Concentration: 16.78 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32c.d

Date : 15-FEB-2013 19:52

Client ID: SG-07-0-10-013113

Instrument: nt10.i

Sample Info: WC32C

Volume Injected (uL): 1.0

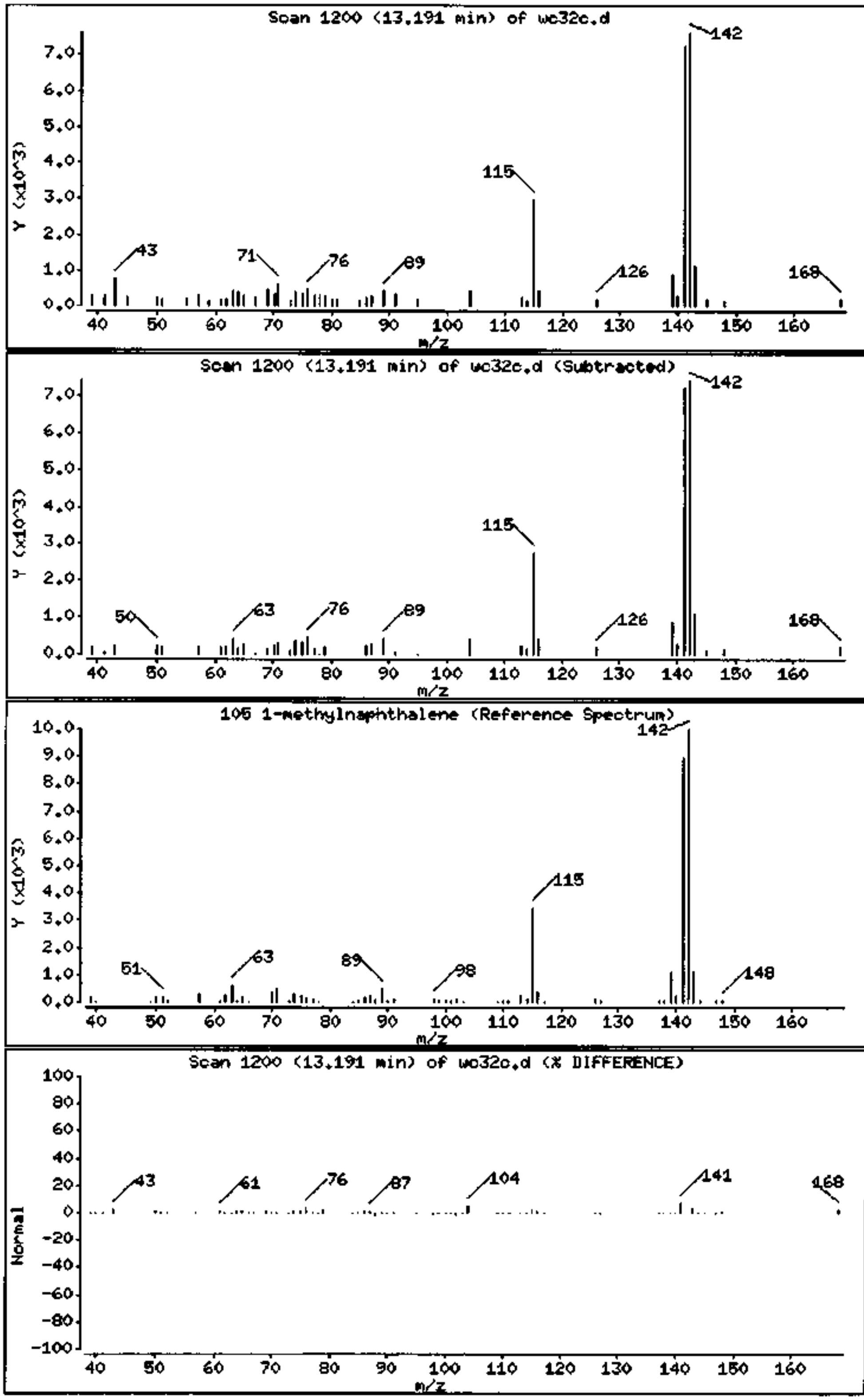
Operator: VTS/YZ

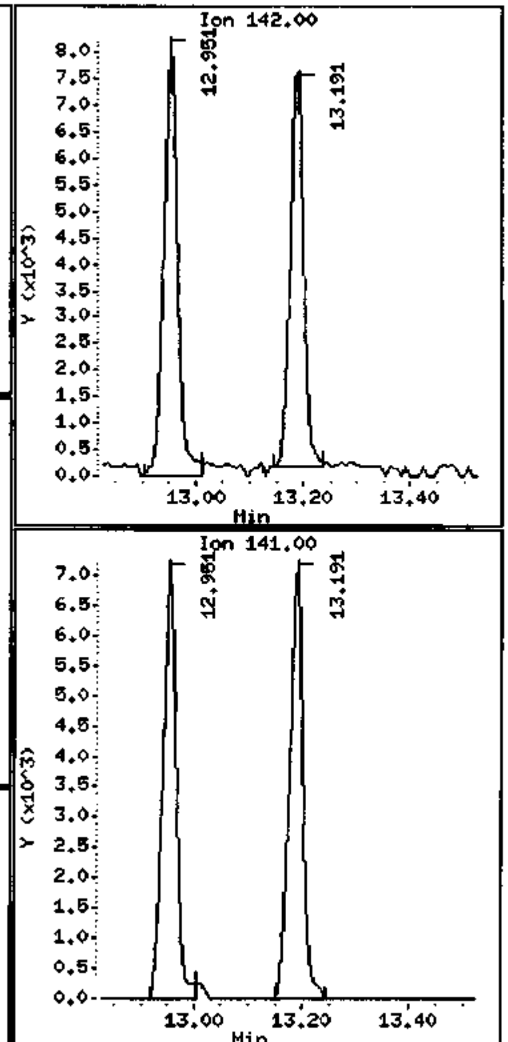
Column phase: ZB-5msi

Column diameter: 0.25

105 1-methylnaphthalene

Concentration: 69.13 ug/kg





Data File: /chem1/nt10.i/20130215.b/wc32c.d

Date : 15-FEB-2013 19:52

Client ID: SG-07-0-10-013113

Instrument: nt10.i

Sample Info: WC32C

Volume Injected (uL): 1.0

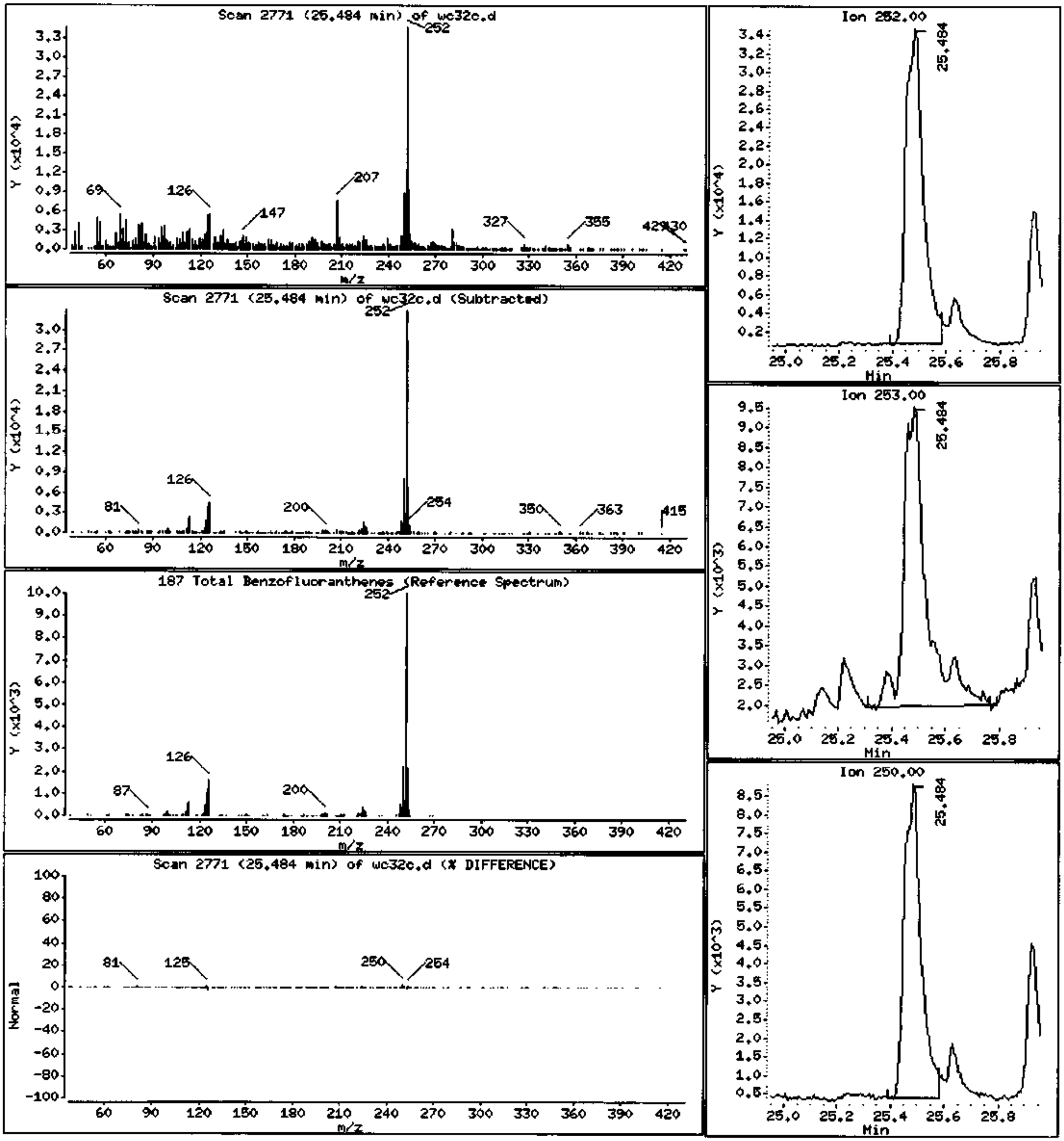
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

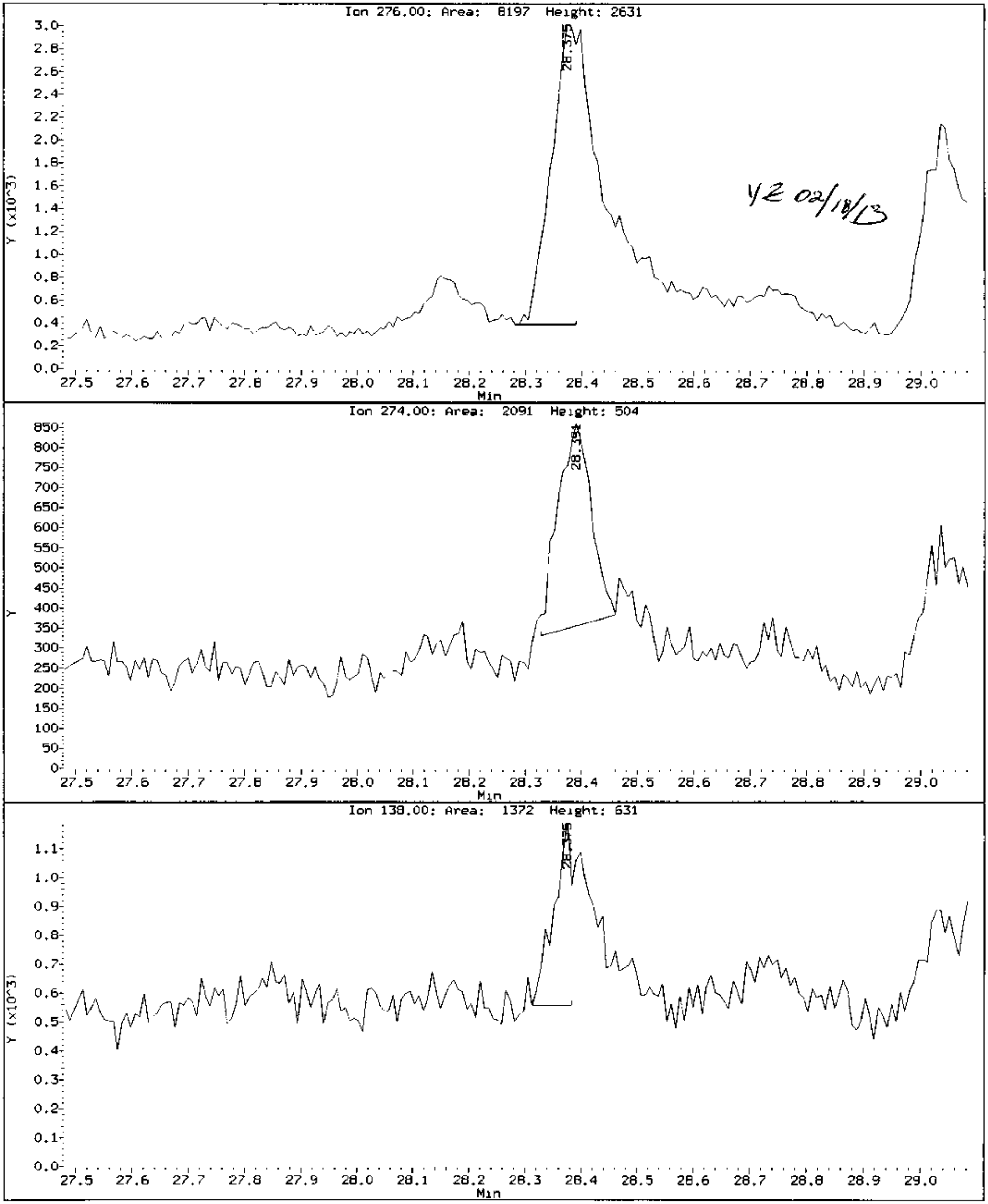
187 Total Benzofluoranthenes

Concentration: 395.7 ug/kg



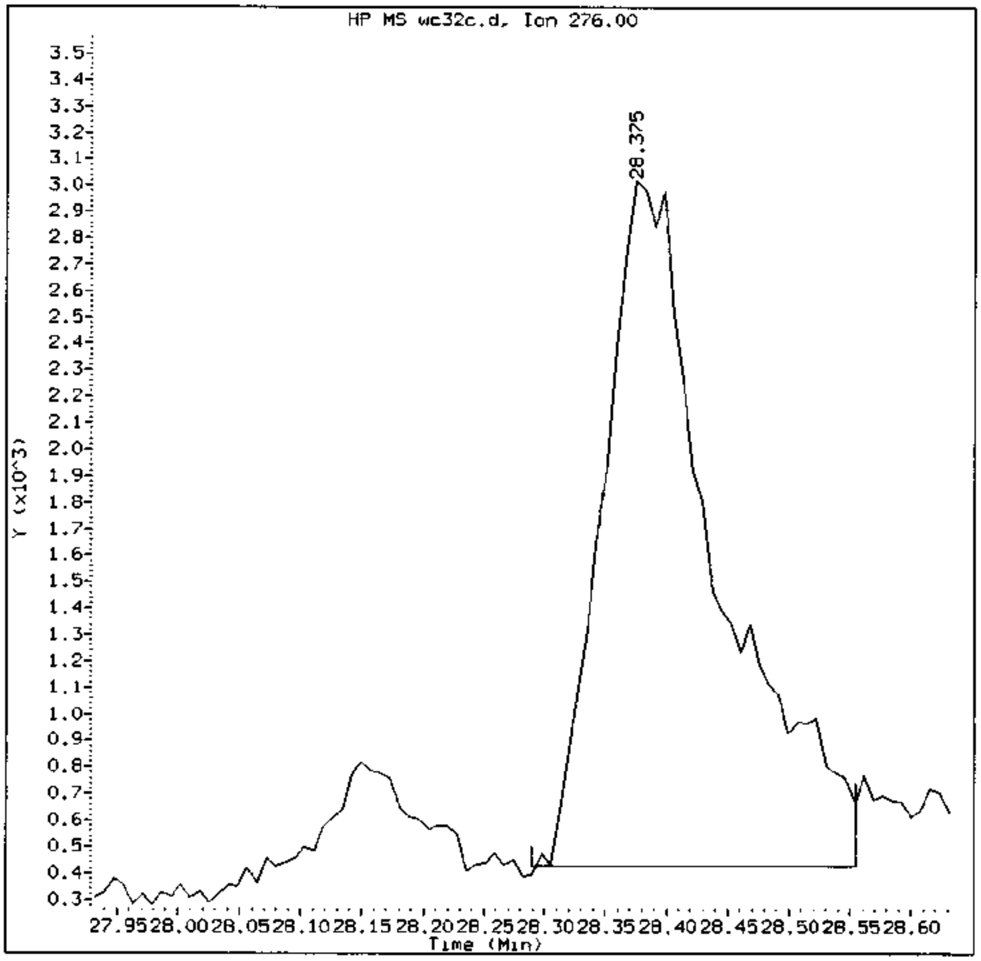
Data File: /chem1/nt10.i/20130215.b/wc32c.d
Injection Date: 15-FEB-2013 19:52
Instrument: nt10.i
Client Sample ID: SG-07-0-10-013113

Compound: Indeno(1,2,3-cd)pyrene
CAS Number: 193-39-5



WC32C, /chem1/nt10.i/20130215.b/wc32c.d

Indeno(1,2,3-cd)pyrene Amount: 0.42 Area: 17236



MANUAL INTEGRATION for Indeno(1,2,3-cd)pyrene

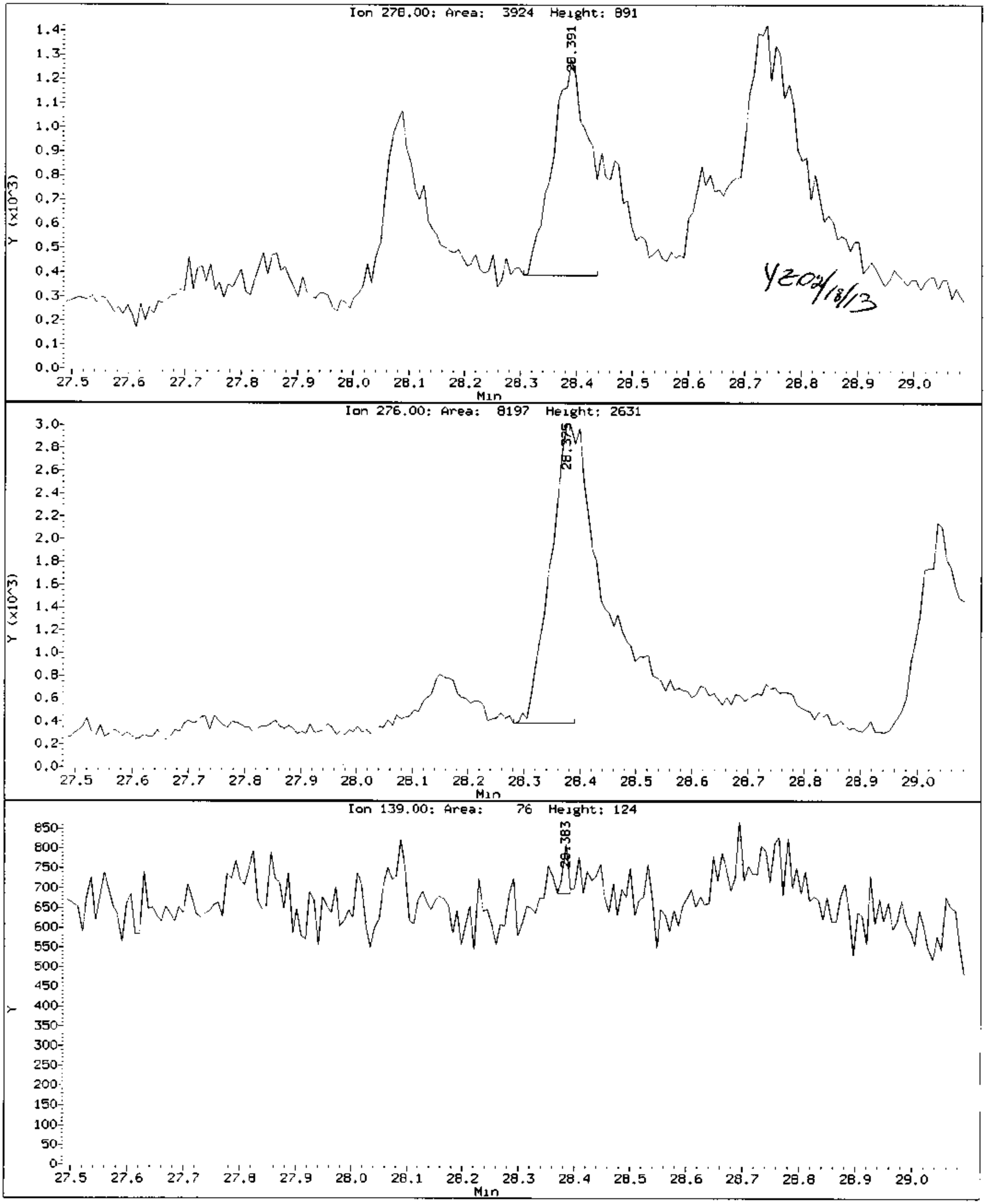
1. Baseline correction ✓
2. Poor chromatography
3. Peak not found D
4. Totals calculation

5. Other ______________________

Analyst: \2 Date: 02/18/13

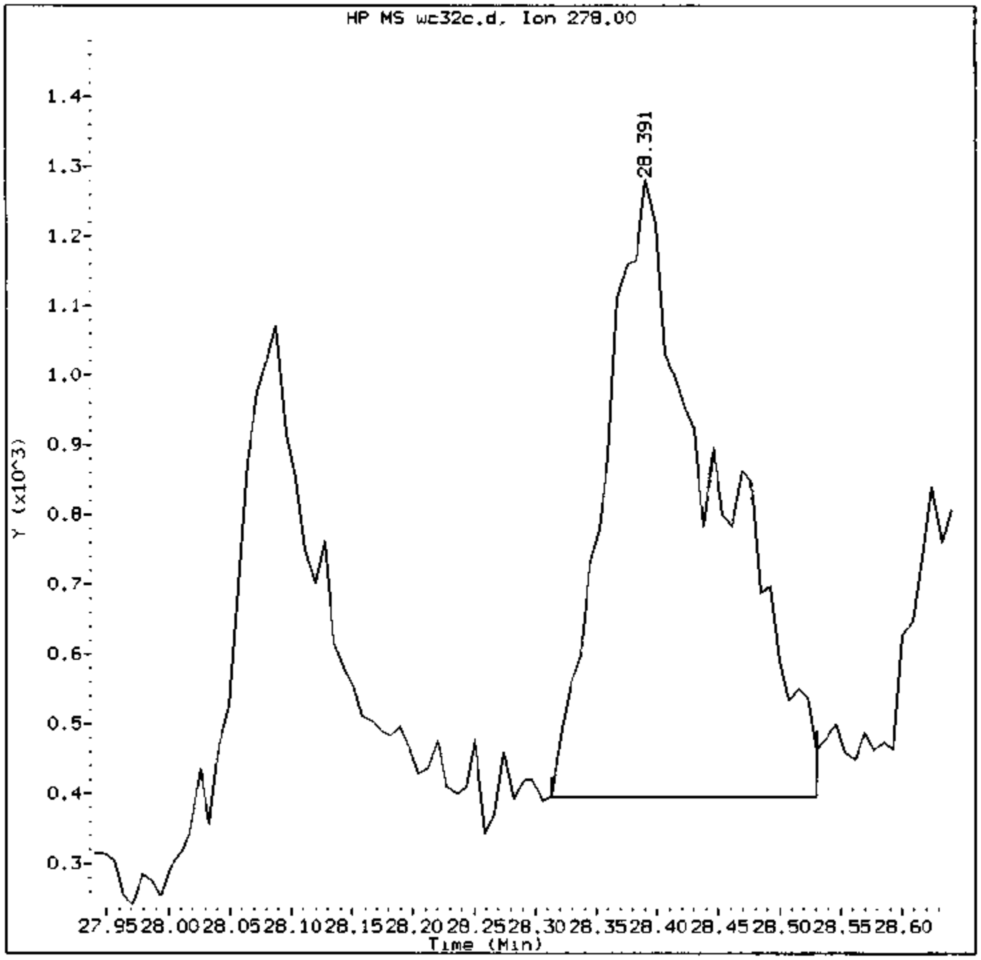
Data File: /chem1/nt10.i/20130215.b/wc32c.d
Injection Date: 15-FEB-2013 19:52
Instrument: nt10.i
Client Sample ID: SG-07-0-10-013113

Compound: Dibenzo(a,h)anthracene
CAS Number: 53-70-3



WC32C, /chem1/nt10.i/20130215.b/wc32c.d

Dibenzo(a,h)anthracene   Amount: 0.17   Area: 5561



MANUAL INTEGRATION for Dibenzo(a,h)anthracene

1. Baseline correction ✓
2. Poor chromatography
3. Peak not found ✓
4. Totals calculation

5. Other ________________________________

Analyst: VZ   Date: 02/18/13

CO-ELUTION SUMMARY FOR FILE - wc32c.d

Lab ID: WC32C, Method: ABN.m, Instrument: nt10.i, Date: 15-FEB-2013

RT	CO-ELUTION COMPOUNDS
25.484	Benzo(k)fluoranthene and Benzo(b)fluoranthene

Data File: /chem1/nt10.i/20130215.b/wc32d.d
Report Date: 18-Feb-2013 11:08

Analytical Resources, Inc.

YZ 02/18/13

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt10.i/20130215.b/wc32d.d
Lab Smp Id: WC32D   Client Smp ID: SG-06-0-10-013113
Inj Date : 15-FEB-2013 20:28
Operator : VTS/YZ   Inst ID: nt10.i
Smp Info : WC32D
Misc Info : 13-2427
Comment   : 1ul Injection
Method   : /chem1/nt10.i/20130215.b/ABN.m
Meth Date : 15-Feb-2013 14:06 van   Quant Type: ISTD
Cal Date : 25-JAN-2013 17:16   Cal File: ic0125h.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: PSDDAICAL.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Ws	17.30000	Weight of sample extracted (g)
M	41.00000	% Moisture

Cpnd Variable   Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
$	1 2-Fluorophenol	112	6.498	6.459	(0.742)	44044	4.48789	439.7
$	2 Phenol-d5	99	8.206	8.183	(0.937)	56904	4.67263	457.8
	3 Phenol	94	8.229	8.206	(0.940)	37778	2.94729	288.8
$	5 2-Chlorophenol-d4	132	8.406	8.391	(0.960)	58972	5.59254	547.9
	4 Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
	6 2-Chlorophenol	128	Compound Not Detected.					
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	8.755	8.747	(1.000)	30693	4.00000	
	9 1,4-Dichlorobenzene	146	Compound Not Detected.					
$	10 1,2-Dichlorobenzene-d4	152	9.135	9.128	(1.043)	26994	3.48347	341.3
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	108	9.096	9.081	(1.039)	4360	0.71078	69.64
	14 2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.					
	13 2-Methylphenol	108	Compound Not Detected.					

							CONCENTRATIONS	
		QUANT SIG					ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/kg)
	==========================	====	==	======	======	========	=======	=======
	17 Hexachloroethane	117	Compound Not Detected.					
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	15 4-Methylphenol	108	9.694	9.663	(1.107)	4577	0.45486	44.56
$	18 Nitrobenzene-d5	82	9.935	9.919	(0.871)	39114	3.53111	346.0
	19 Nitrobenzene	77	Compound Not Detected.					
	20 Isophorone	82	Compound Not Detected.					
	21 2-Nitrophenol	139	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	Compound Not Detected.					
	23 Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
	24 Benzoic acid	105	Compound Not Detected.					
	25 2,4-Dichlorophenol	162	Compound Not Detected.					
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	11.404	11.397	(1.000)	120015	4.00000	
	28 Naphthalene	128	11.443	11.435	(1.003)	26103	0.83586	81.89
	29 4-Chloroaniline	127	Compound Not Detected.					
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	31 4-Chloro-3-methylphenol	107	Compound Not Detected.					
	32 2-Methylnaphthalene	142	12.951	12.944	(1.136)	8543	0.41433	40.59
	33 Hexachlorocyclopentadiene	237	Compound Not Detected.					
	34 2,4,6-Trichlorophenol	196	Compound Not Detected.					
	35 2,4,5-Trichlorophenol	196	Compound Not Detected.					
$	36 2-Fluorobiphenyl	172	13.818	13.803	(0.903)	96564	3.83330	375.6
	37 2-Chloronaphthalene	162	Compound Not Detected.					
	38 2-Nitroaniline	65	Compound Not Detected.					
	39 Dimethylphthalate	163	Compound Not Detected.					
	40 Acenaphthylene	152	Compound Not Detected.					
	41 2,6-Dinitrotoluene	165	Compound Not Detected.					
*	42 Acenaphthene-d10	164	15.296	15.281	(1.000)	73429	4.00000	
	43 3-Nitroaniline	138	Compound Not Detected.					
	44 Acenaphthene	153	15.366	15.350	(1.005)	12450	0.61384	60.14
	45 2,4-Dinitrophenol	184	Compound Not Detected.					
	46 Dibenzofuran	168	15.721	15.706	(1.028)	21173	0.75062	73.54
	47 4-Nitrophenol	109	Compound Not Detected.					
	48 2,4-Dinitrotoluene	165	Compound Not Detected.					
	50 Diethylphthalate	149	16.409	16.386	(1.073)	4565	0.19622	19.22
	49 Fluorene	166	16.494	16.479	(1.078)	27432	1.14495	112.2
	51 4-Chlorophenyl-phenylether	204	Compound Not Detected.					
	52 4-Nitroaniline	138	Compound Not Detected.					
	53 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
	54 N-Nitrosodiphenylamine	169	Compound Not Detected.					
$	55 2,4,6-Tribromophenol	330	17.111	17.065	(1.119)	29304	6.25365	612.7
	56 4-Bromophenyl-phenylether	248	Compound Not Detected.					
	57 Hexachlorobenzene	284	Compound Not Detected.					
	58 Pentachlorophenol	266	18.340	18.309	(0.987)	2599	0.45386	44.47
*	59 Phenanthrene-d10	188	18.580	18.557	(1.000)	122670	4.00000	
	60 Phenanthrene	178	18.626	18.603	(1.002)	210031	6.42272	629.2
	61 Anthracene	178	18.727	18.704	(1.008)	76433	2.32134	227.4

							CONCENTRATIONS	
		QUANT SIG					ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/kg)
	62 Carbazole	167	19.114	19.083	(1.029)	19192	0.87269	85.50
	63 Di-n-butylphthalate	149	Compound Not Detected.					
	64 Fluoranthene	202	21.087	21.040	(1.135)	658380	17.4825	1713
	65 Pyrene	202	21.497	21.466	(0.907)	588727	13.6030	1333
$	66 Terphenyl-d14	244	21.814	21.791	(0.921)	123911	4.24597	416.0
	67 Butylbenzylphthalate	149	22.766	22.735	(0.961)	3670	0.22358	21.90
	68 Benzo(a)anthracene	228	23.672	23.634	(0.999)	204883	4.83260	473.5
*	69 Chrysene-d12	240	23.695	23.665	(1.000)	151940	4.00000	
	70 3,3'-Dichlorobenzidine	252	Compound Not Detected.					
	71 Chrysene	228	23.742	23.711	(1.002)	319911	8.33106	816.2
	72 bis(2-Ethylhexyl)phthalate	149	23.812	23.789	(0.960)	37347	1.36561	133.8
*	134 Di-n-octylphthalate-d4	153	24.795	24.772	(1.000)	207108	4.00000	
	73 Di-n-octylphthalate	149	Compound Not Detected.					
	74 Benzo(b)fluoranthene	252	25.461	25.414	(0.974)	115900	2.90180	284.3
	75 Benzo(k)fluoranthene	252	25.492	25.414	(0.976)	282864	6.55549	642.3(M)
	76 Benzo(a)pyrene	252	26.018	25.964	(0.996)	165935	4.80387	470.6
*	77 Perylene-d12	264	26.127	26.065	(1.000)	137803	4.00000	
	78 Indeno(1,2,3-cd)pyrene	276	28.391	28.282	(1.087)	35074	0.82339	80.67
	79 Dibenzo(a,h)anthracene	278	28.391	28.290	(1.087)	14950	0.44321	43.42(M)
	80 Benzo(g,h,i)perylene	276	29.066	28.927	(1.113)	25089	0.68648	67.26(M)
	90 N-Nitrosodimethylamine	74	Compound Not Detected.					
	91 Aniline	93	Compound Not Detected.					
	93 Benzidine	184	Compound Not Detected.					
	~~103 Pyridine~~	~~79~~	~~4.235~~	~~4.166~~	~~(0.484)~~	~~5063~~	~~1.01653~~	~~99.59~~
	105 1-methylnaphthalene	142	13.191	13.176	(1.157)	7086	0.37466	36.71
	~~111 Azobenzene (1,2-DP-Hydrazine)~~	~~77~~	~~17.173~~	~~16.842~~	~~(1.123)~~	~~136654~~	~~6.47578~~	~~634.4~~
	187 Total Benzofluoranthenes	252	25.492	25.453	(0.976)	366990	9.33444	914.5
	99 Perylene	252	26.165	26.111	(1.001)	46553	1.17270	114.9
	98 Retene	219	22.100	22.077	(0.933)	17382	0.76510	74.96
	120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: wc32d.d
Lab Smp Id: WC32D
Analysis Type: SV
Quant Type: ISTD
Operator: VTS/YZ
Method File: /chem1/nt10.i/20130215.b/ABN.m
Misc Info: 13-2427

Calibration Date: 15-FEB-2013
Calibration Time: 11:20
Client Smp ID: SG-06-0-10-01311
Level: LOW
Sample Type: Sediment

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	46623	23312	93246	30693	-34.17
27 Naphthalene-d8	176978	88489	353956	120015	-32.19
42 Acenaphthene-d10	110872	55436	221744	73429	-33.77
59 Phenanthrene-d10	188290	94145	376580	122670	-34.85
69 Chrysene-d12	213681	106840	427362	151940	-28.89
134 Di-n-octylphthala	264159	132080	528318	207108	-21.60
77 Perylene-d12	208584	104292	417168	137803	-33.93

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.75	8.25	9.25	8.75	0.09
27 Naphthalene-d8	11.40	10.90	11.90	11.40	0.07
42 Acenaphthene-d10	15.28	14.78	15.78	15.30	0.10
59 Phenanthrene-d10	18.56	18.06	19.06	18.58	0.12
69 Chrysene-d12	23.66	23.16	24.16	23.70	0.13
134 Di-n-octylphthala	24.77	24.27	25.27	24.79	0.09
77 Perylene-d12	26.06	25.56	26.56	26.13	0.24

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd-Snider
Sample Matrix: SOLID
Lab Smp Id: WC32D
Level: LOW
Data Type: MS DATA
SpikeList File: SHORTPSDDA.spk
Sublist File: PSDDAICAL.sub
Method File: /chem1/nt10.i/20130215.b/ABN.m
Misc Info: 13-2427
Client SDG: WC32
Fraction: SV
Client Smp ID: SG-06-0-10-013113
Operator: VTS/YZ
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 1 2-Fluorophenol	734.8	439.7	59.84	30-160
$ 2 Phenol-d5	734.8	457.8	62.30	30-160
$ 5 2-Chlorophenol-d4	734.8	547.9	74.57	30-160
$ 10 1,2-Dichlorobenzen	489.9	341.3	69.67	30-160
$ 18 Nitrobenzene-d5	489.9	346.0	70.62	30-160
$ 36 2-Fluorobiphenyl	489.9	375.6	76.67	30-160
$ 55 2,4,6-Tribromophen	734.8	612.7	83.38	30-160
$ 66 Terphenyl-d14	489.9	416.0	84.92	30-160

Data File: /chem1/nt10.i/20130215.b/wc32d.d

Date : 15-FEB-2013 20:28

Client ID: SG-06-0-10-013113

Sample Info: WC32D

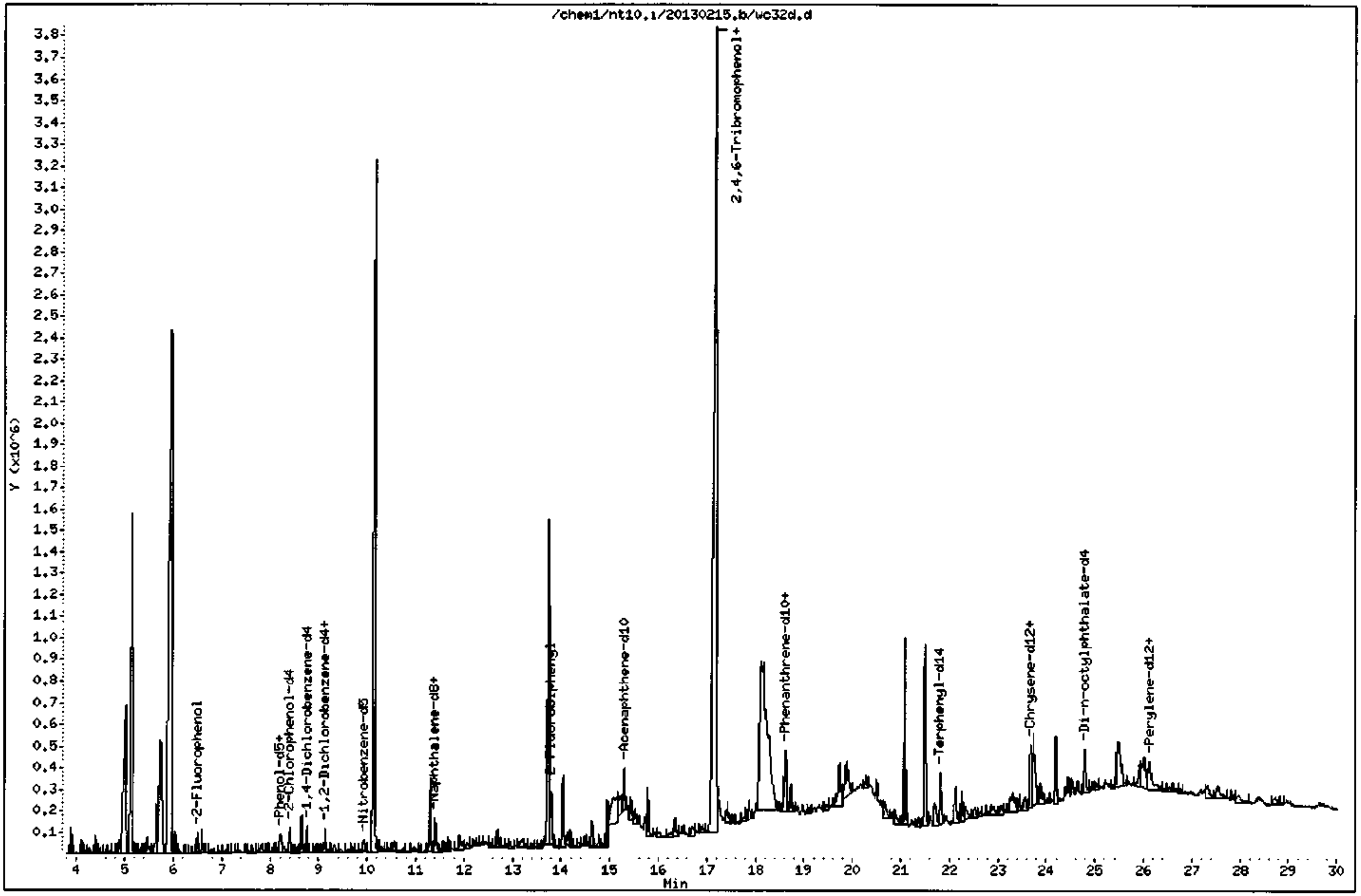
Volume Injected (uL): 1.0

Column phase: ZB-5ms

Instrument: nt10.i

Operator: VTS/YZ

Column diameter: 0.25



WC32 : 00791

Data File: /chem1/nt10.i/20130215.b/wc32d.d

Date : 15-FEB-2013 20:28

Client ID: SC-06-0-10-013113

Instrument: nt10.i

Sample Info: WC32D

Volume Injected (uL): 1.0

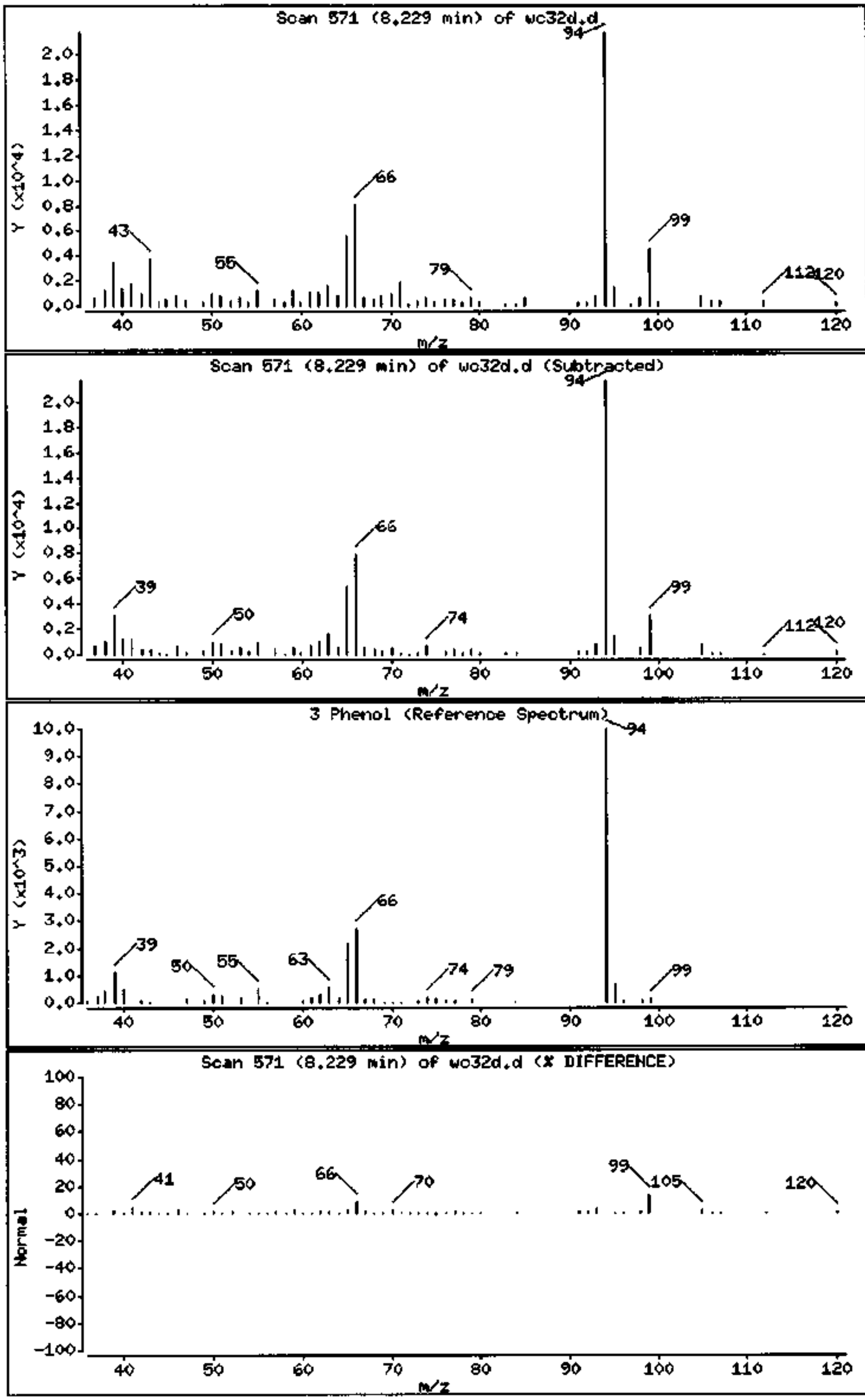
Operator: VTS/YZ

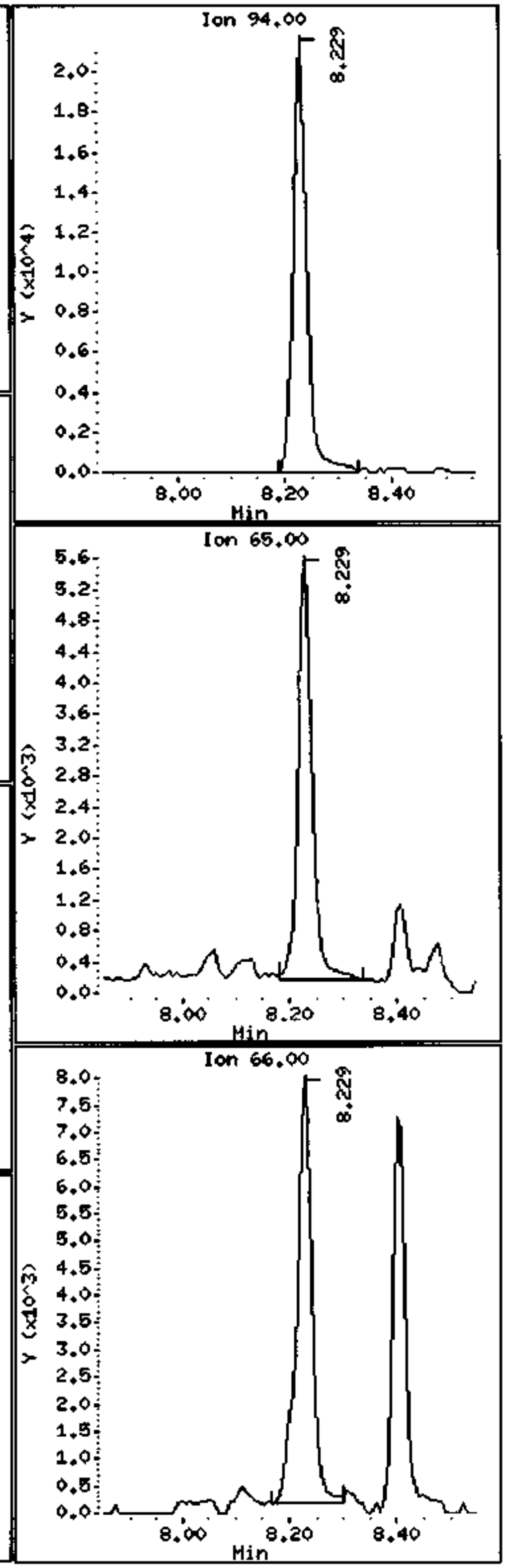
Column phase: ZB-5msi

Column diameter: 0.25

3 Phenol

Concentration: 288.8 ug/kg





Data File: /chem1/nt10.i/20130215.b/wc32d.d

Date : 15-FEB-2013 20:28

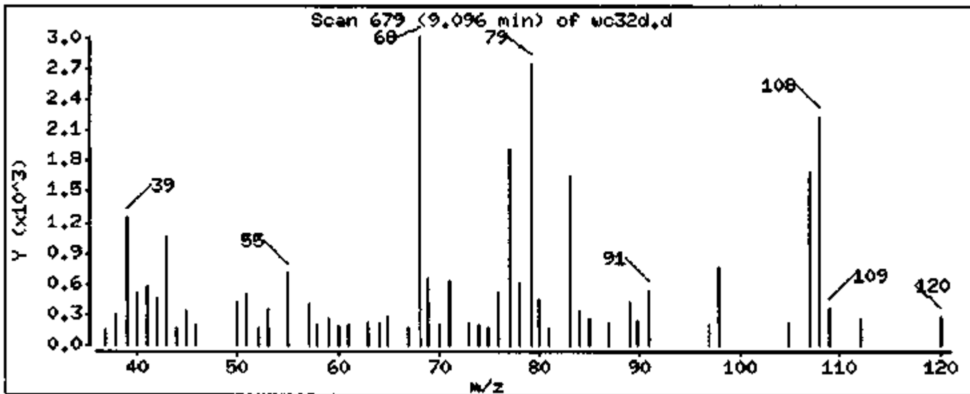
Client ID: SG-06-0-10-013113 Instrument: nt10.i

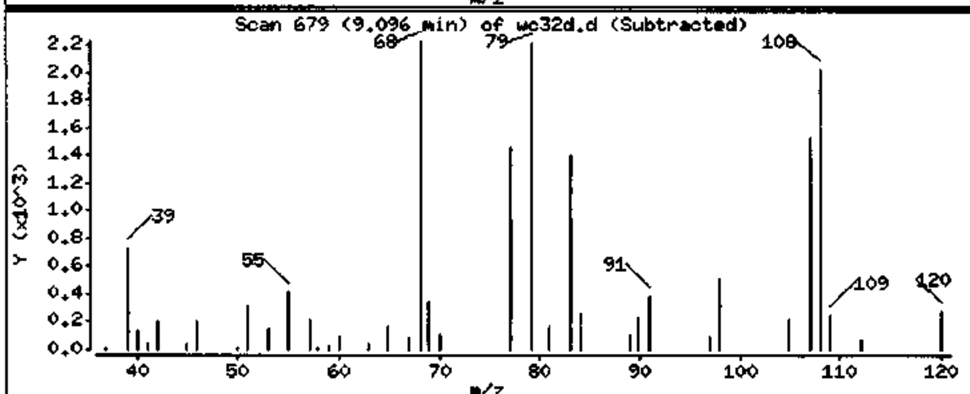
Sample Info: WC32D

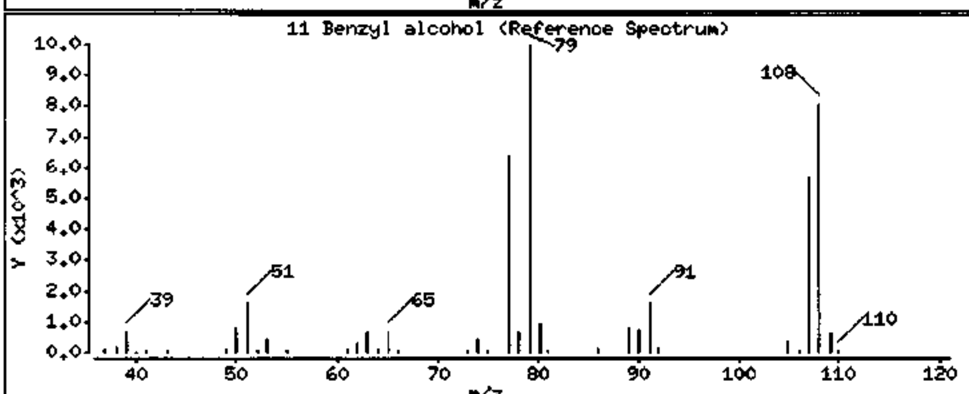
Volume Injected (uL): 1.0 Operator: VTS/YZ

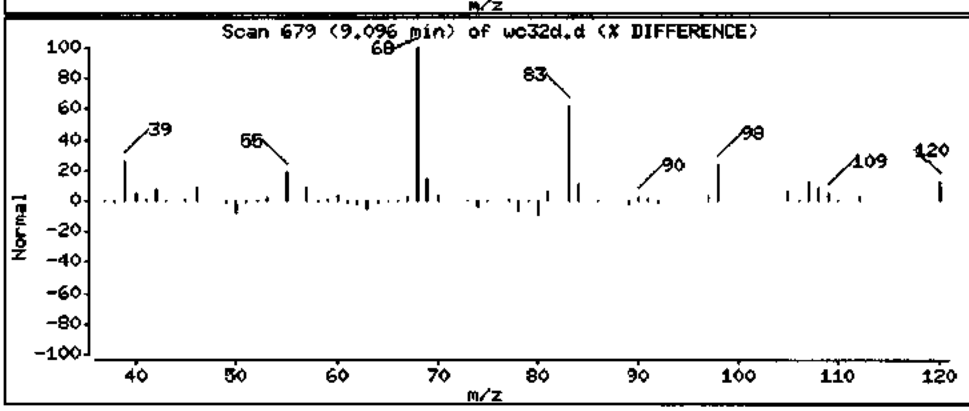
Column phase: ZB-5msi Column diameter: 0.25

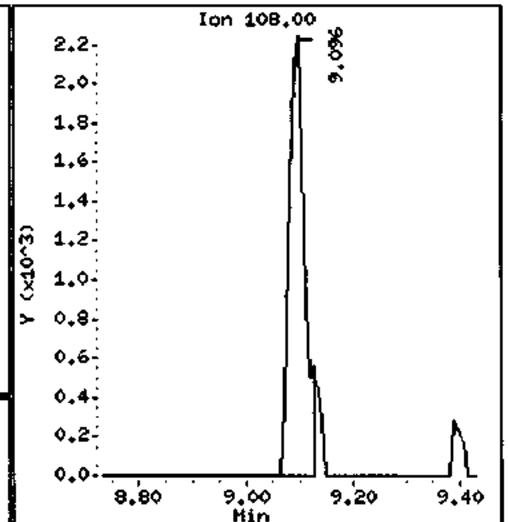
11 Benzyl alcohol Concentration: 69.64 ug/kg

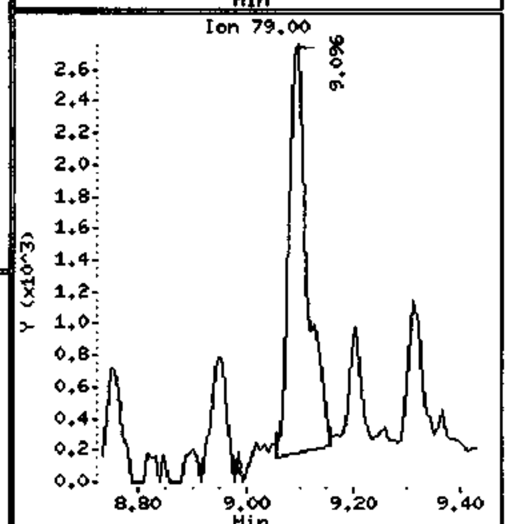


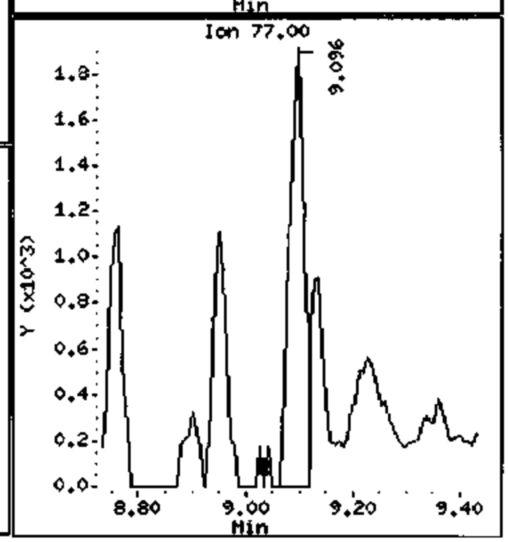












Data File: /chem1/nt10.i/20130215.b/wc32d.d

Date : 15-FEB-2013 20:28

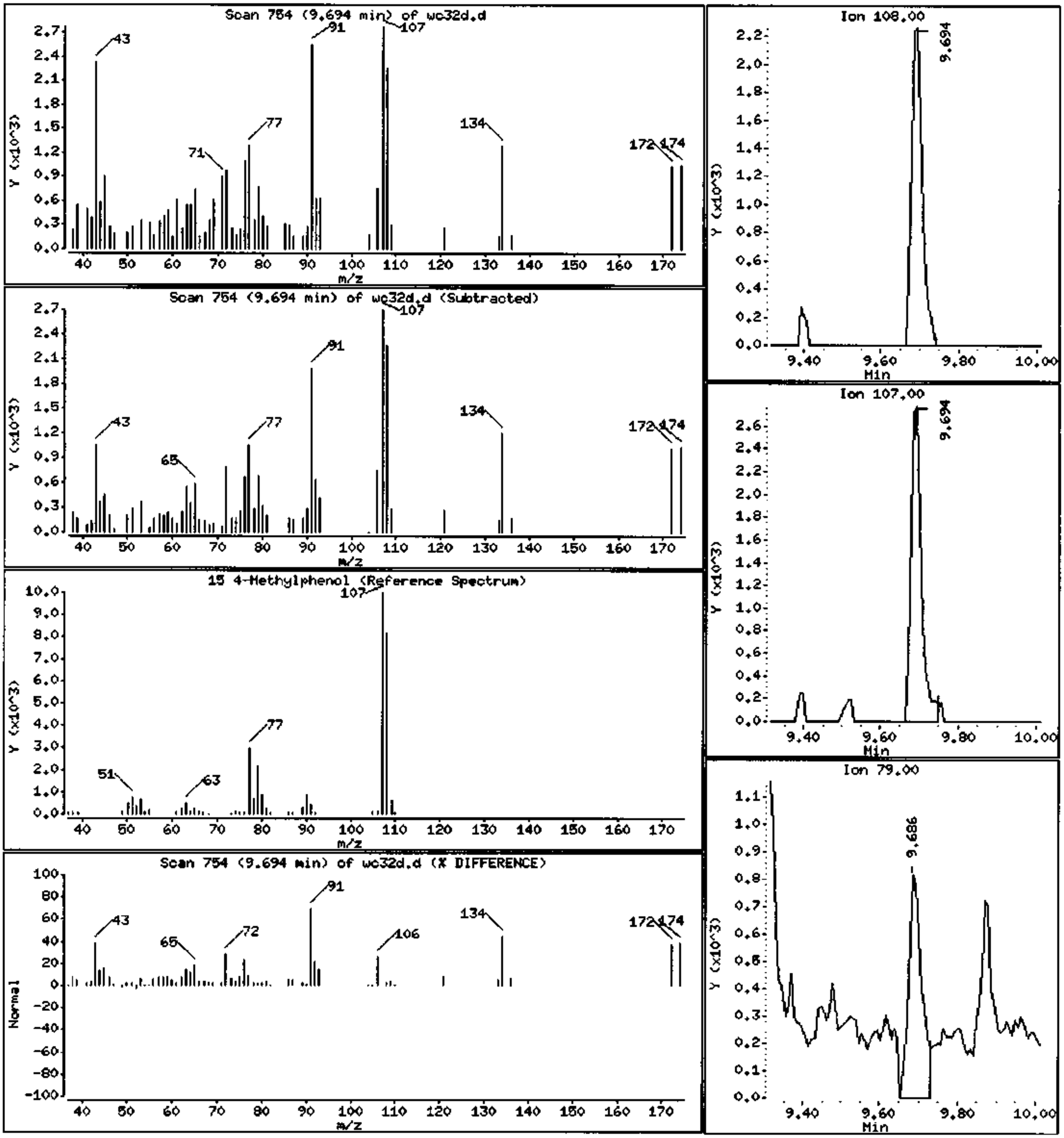
Client ID: SG-06-0-10-013113 Instrument: nt10.i

Sample Info: WC32D

Volume Injected (uL): 1.0 Operator: VTS/YZ

Column phase: ZB-5msi Column diameter: 0.25

15 4-Methylphenol Concentration: 44.56 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32d.d

Date : 15-FEB-2013 20:28

Client ID: SG-06-0-10-013113

Instrument: nt10.i

Sample Info: WC32D

Volume Injected (uL): 1.0

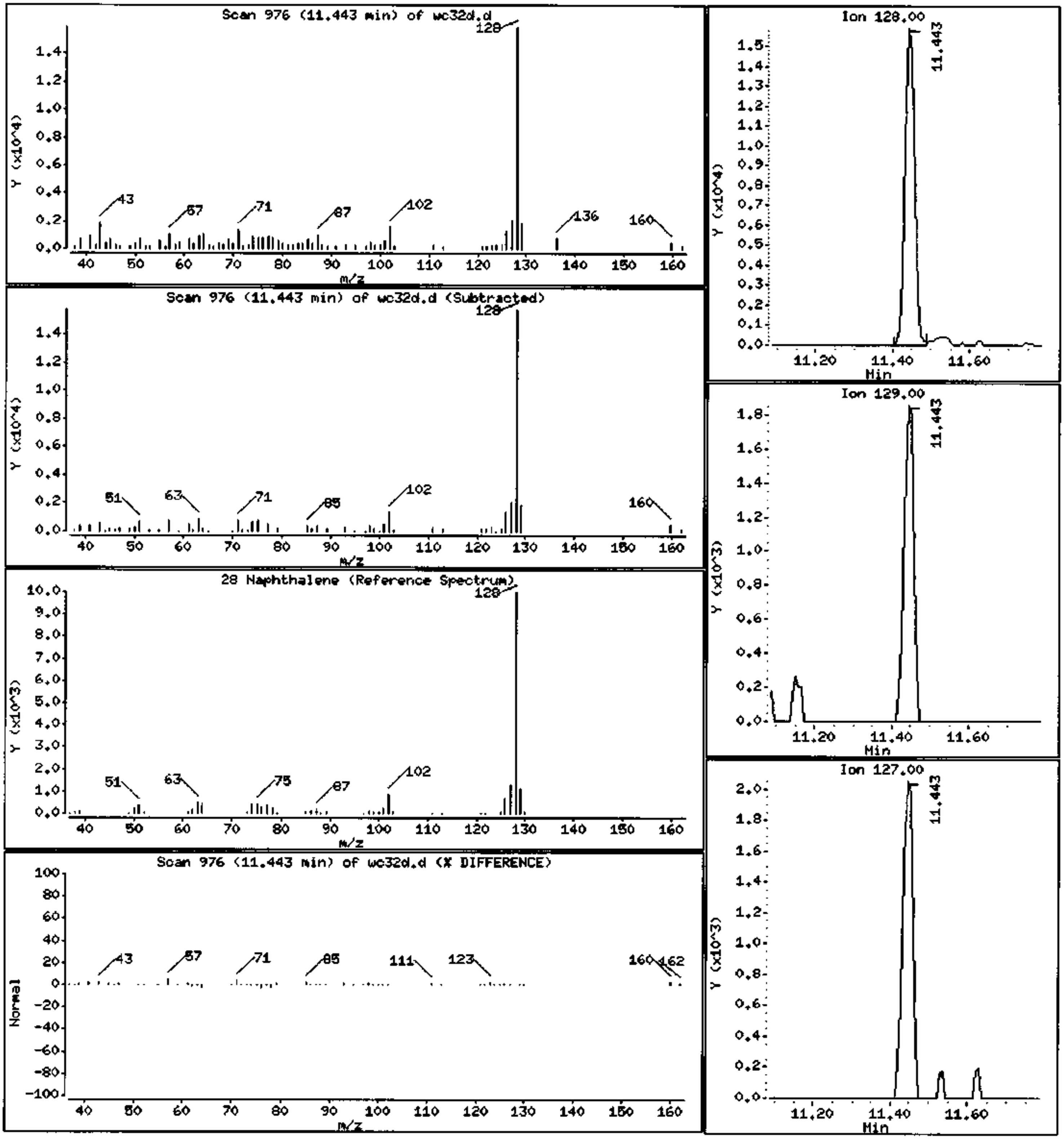
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

28 Naphthalene

Concentration: 81.89 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32d.d

Date : 15-FEB-2013 20:28

Client ID: SG-06-0-10-013113

Instrument: nt10.i

Sample Info: WC32D

Volume Injected (uL): 1.0

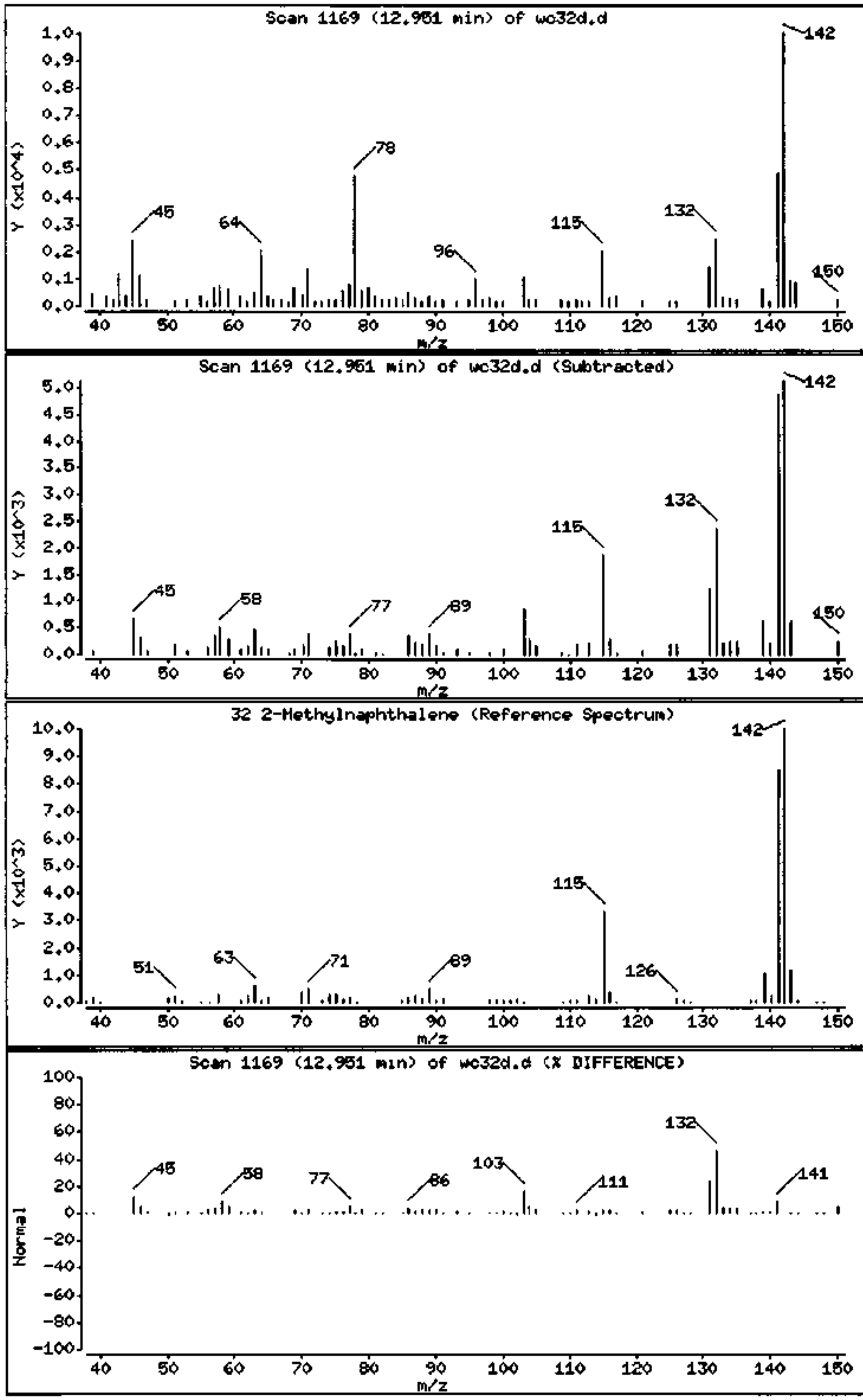
Operator: VTS/YZ

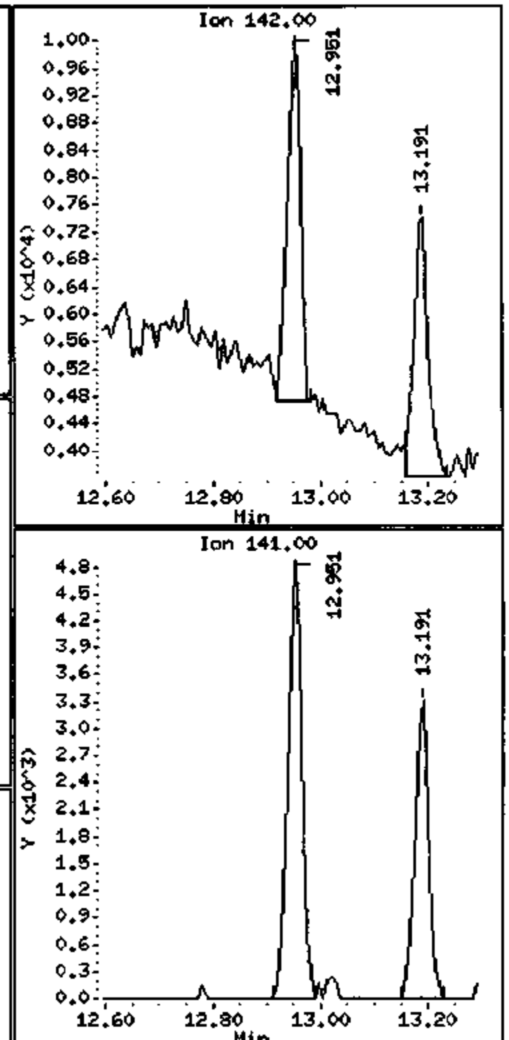
Column phase: ZB-5msi

Column diameter: 0.25

32 2-Methylnaphthalene

Concentration: 40.59 ug/kg





Data File: /chem1/nt10.i/20130215.b/wc32d.d

Date : 15-FEB-2013 20:28

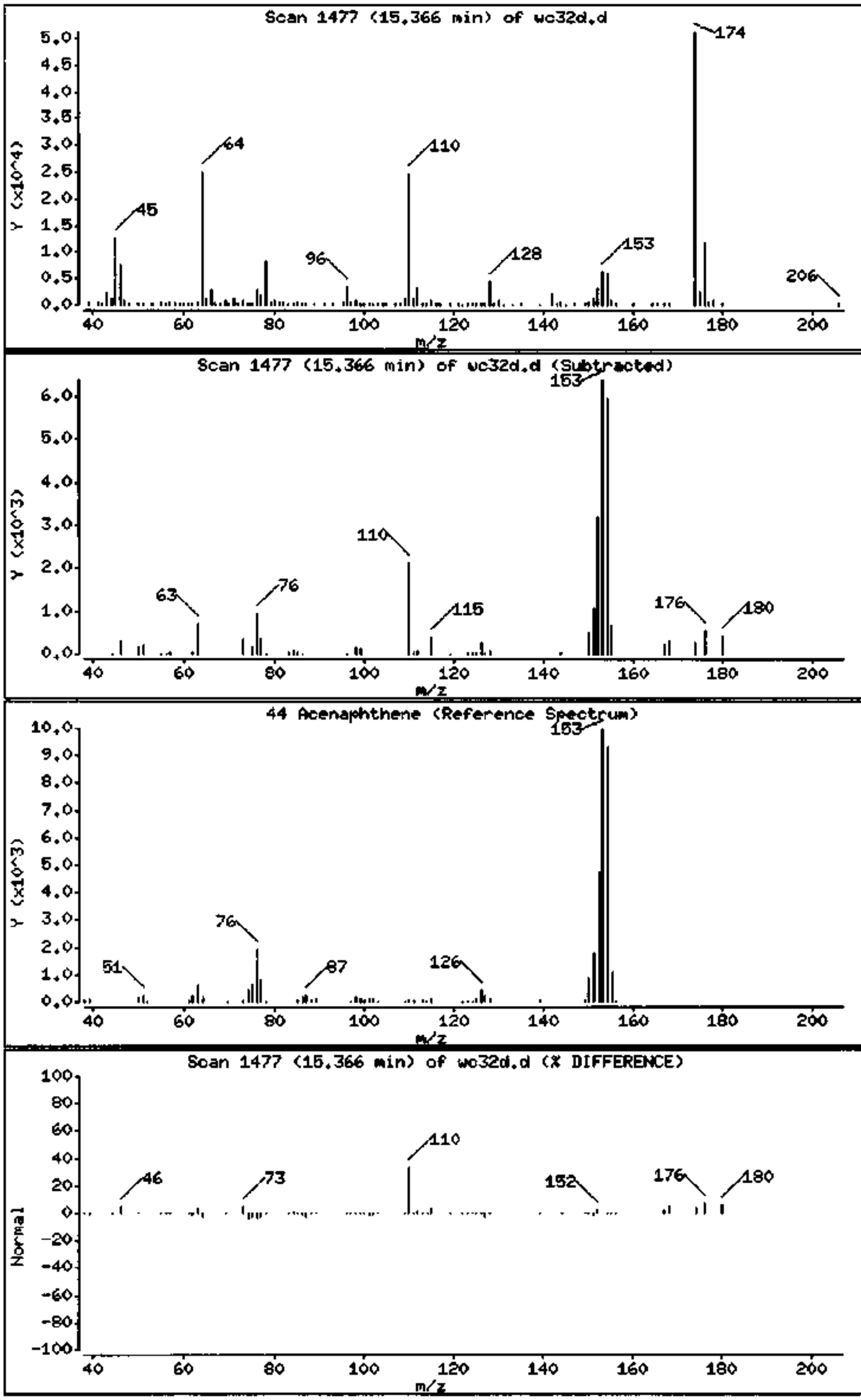
Client ID: SG-06-0-10-013113 Instrument: nt10.i

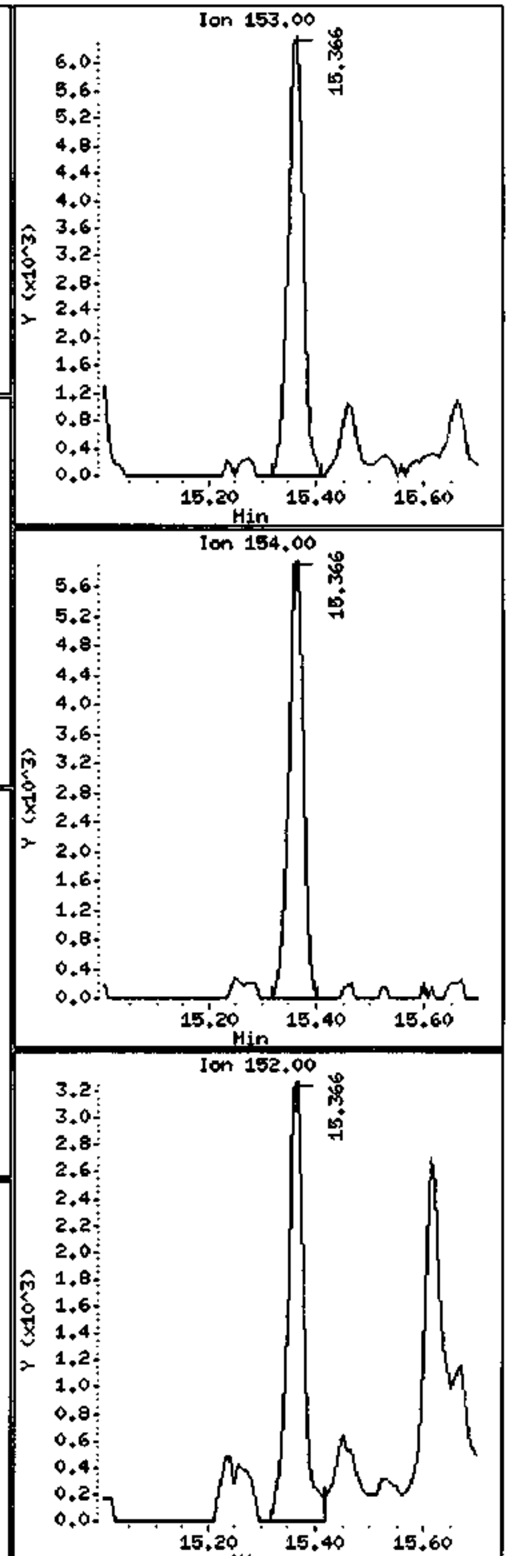
Sample Info: WC32D

Volume Injected (uL): 1.0 Operator: VTS/YZ

Column phase: ZB-5msi Column diameter: 0.25

44 Acenaphthene Concentration: 60.14 ug/kg





Data File: /chem1/nt10.i/20130215.b/wc32d.d

Date : 15-FEB-2013 20:28

Client ID: SG-06-0-10-013113

Instrument: nt10.i

Sample Info: WC32D

Volume Injected (uL): 1.0

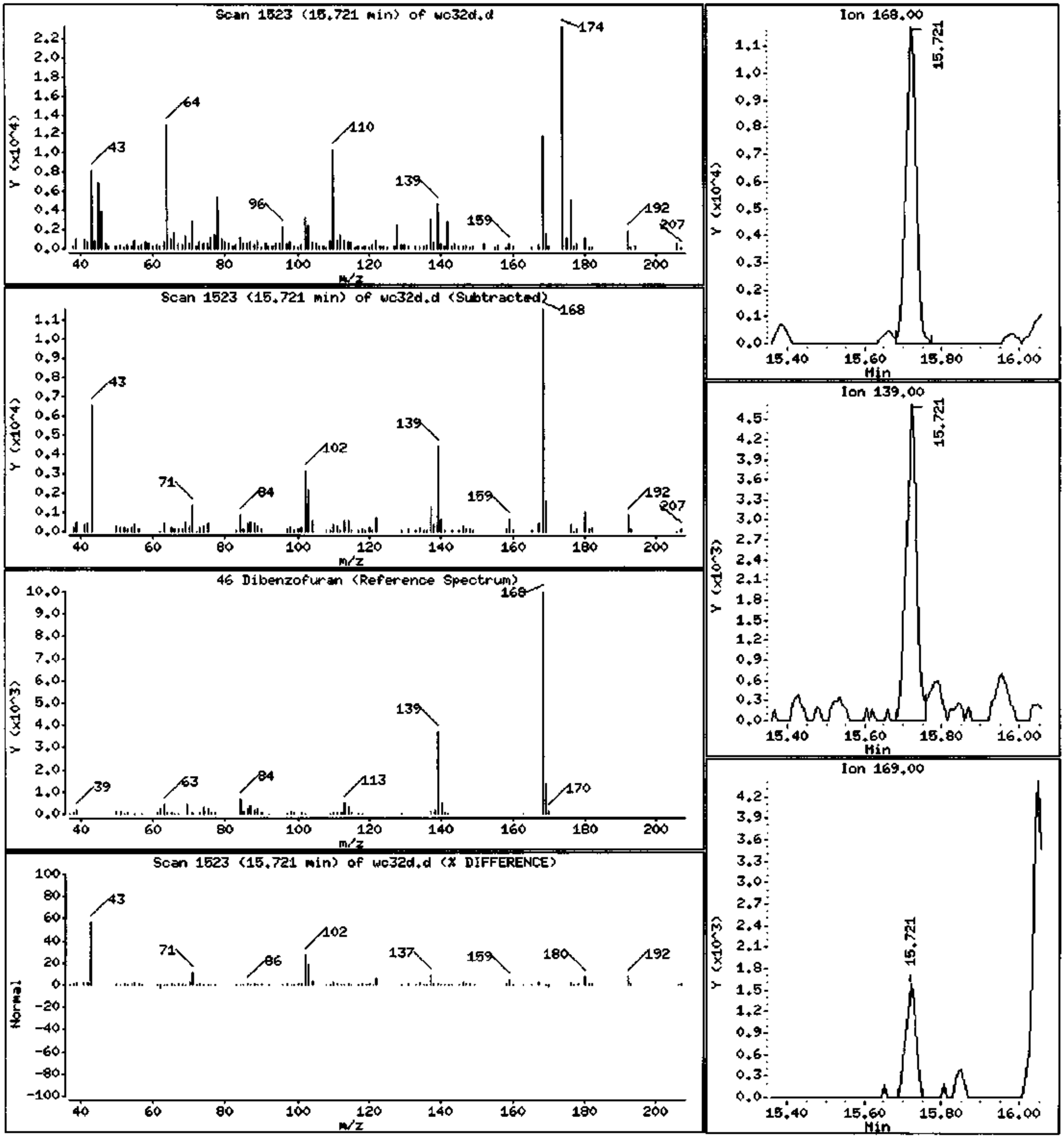
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

46 Dibenzofuran

Concentration: 73.54 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32d.d

Date : 15-FEB-2013 20:28

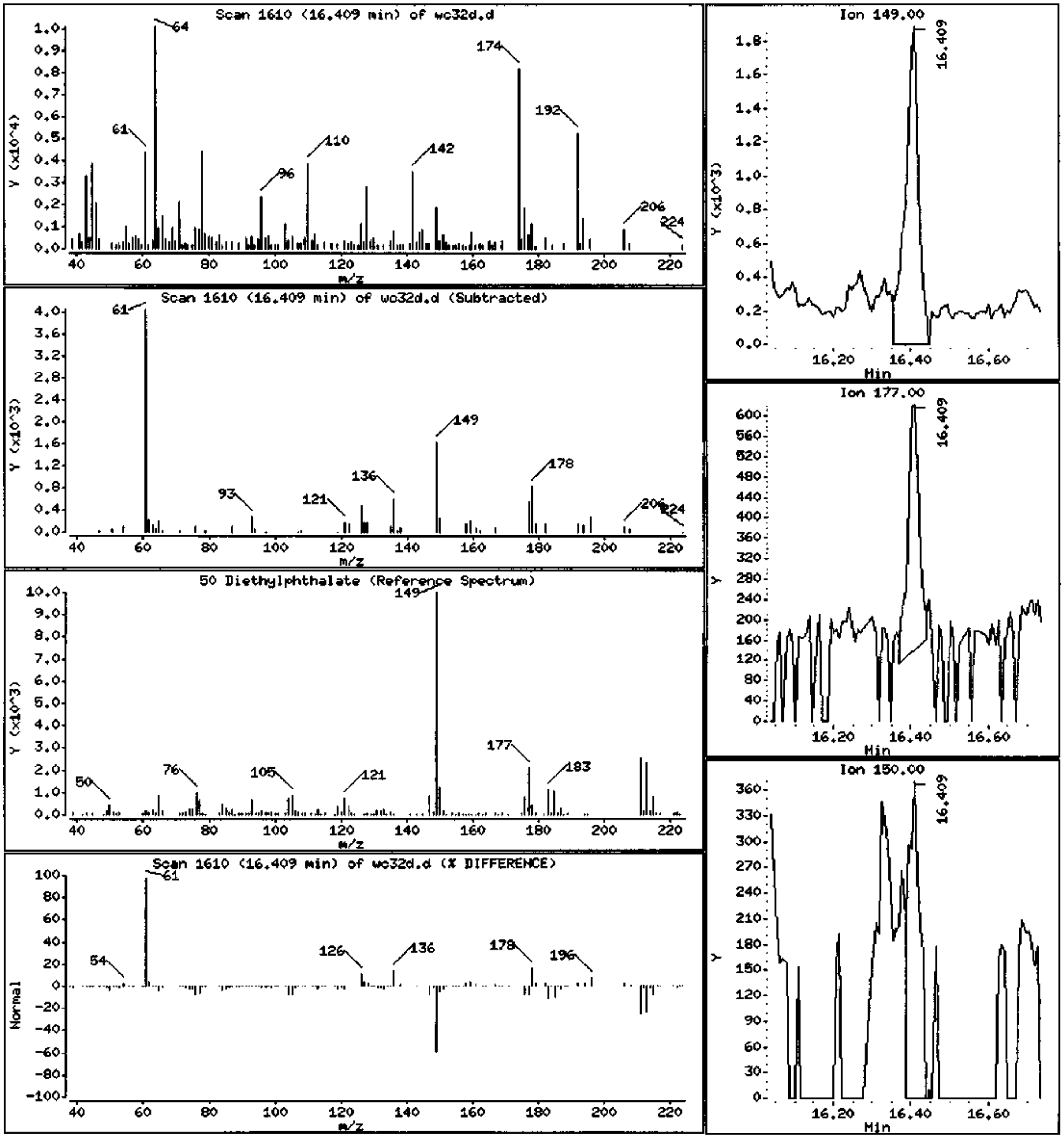
Client ID: SG-06-0-10-013113 Instrument: nt10.i

Sample Info: WC32D

Volume Injected (uL): 1.0 Operator: VTS/YZ

Column phase: ZB-5msi Column diameter: 0.25

50 Diethylphthalate Concentration: 19.22 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32d.d

Date : 15-FEB-2013 20:28

Client ID: SG-06-0-10-013113

Instrument: nt10.i

Sample Info: WC32D

Volume Injected (uL): 1.0

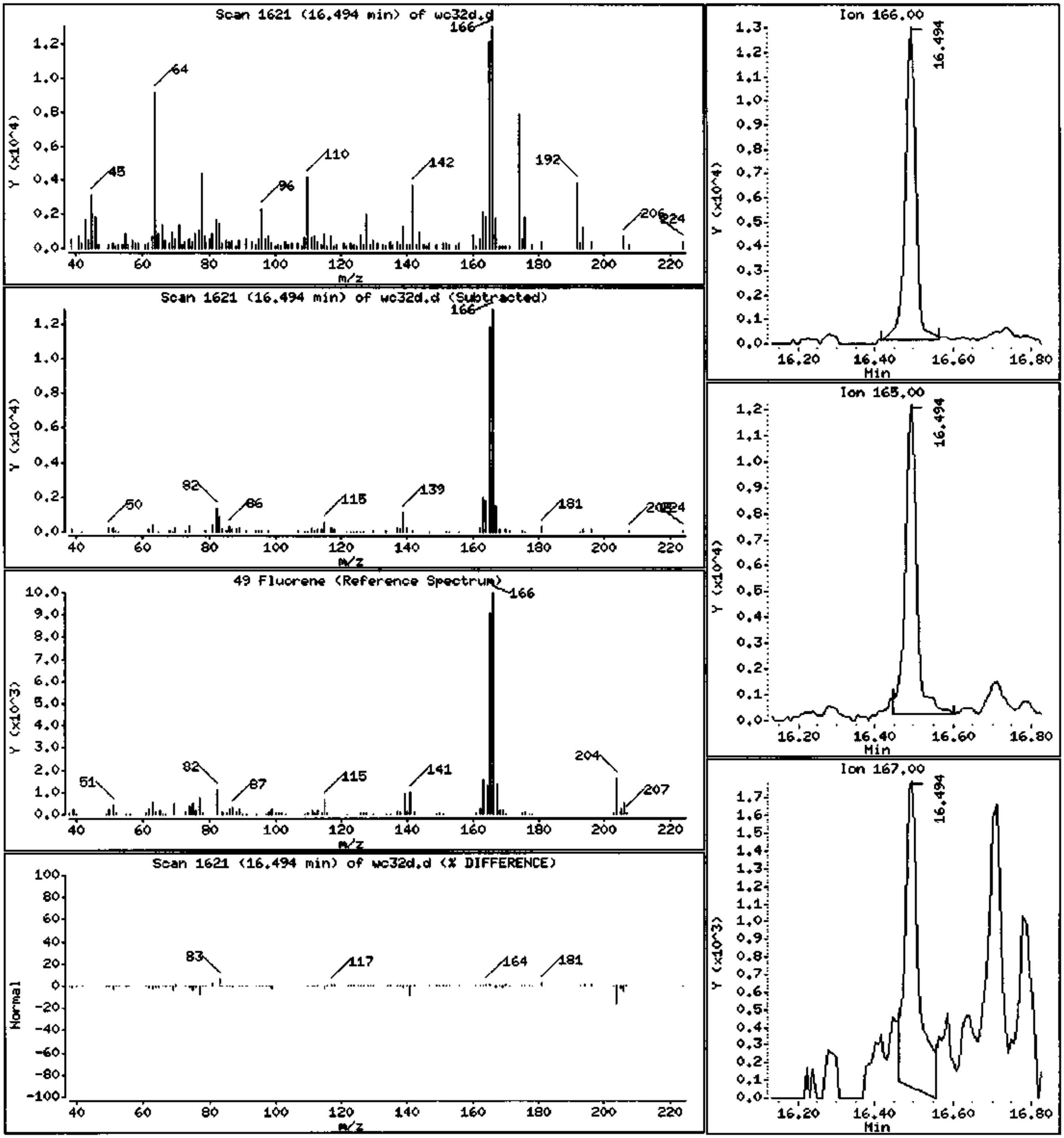
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

49 Fluorene

Concentration: 112.2 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32d.d

Date : 15-FEB-2013 20:28

Client ID: SG-06-0-10-013113

Instrument: nt10.i

Sample Info: WC32D

Volume Injected (uL): 1.0

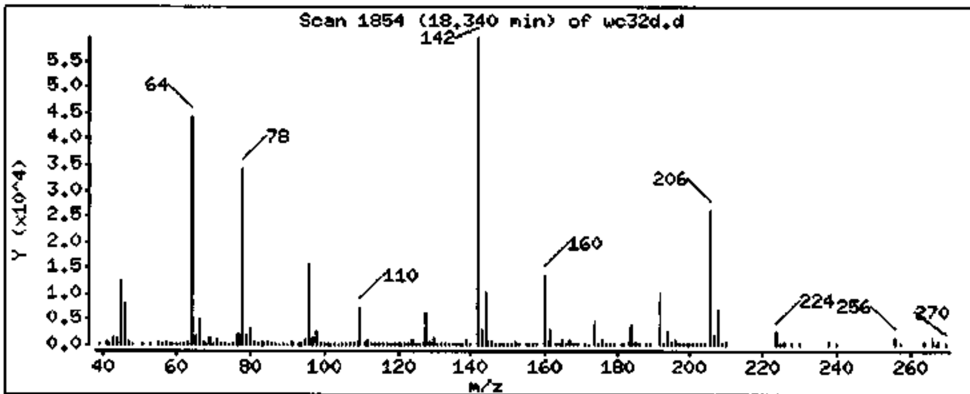
Operator: VTS/YZ

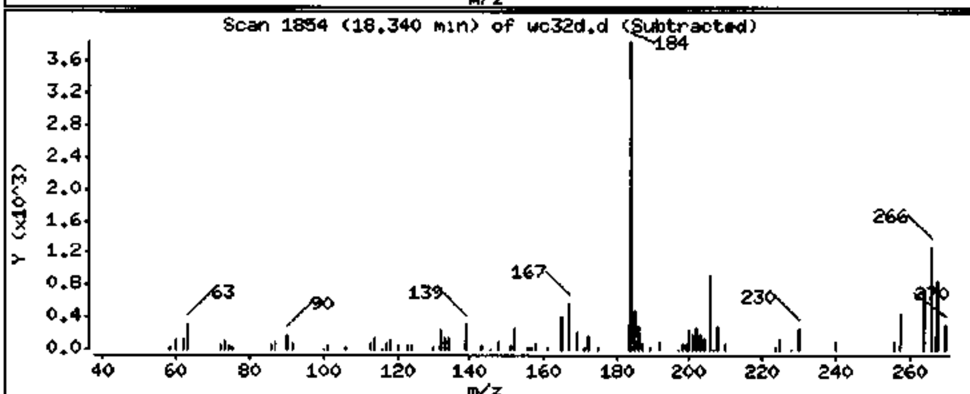
Column phase: ZB-5msi

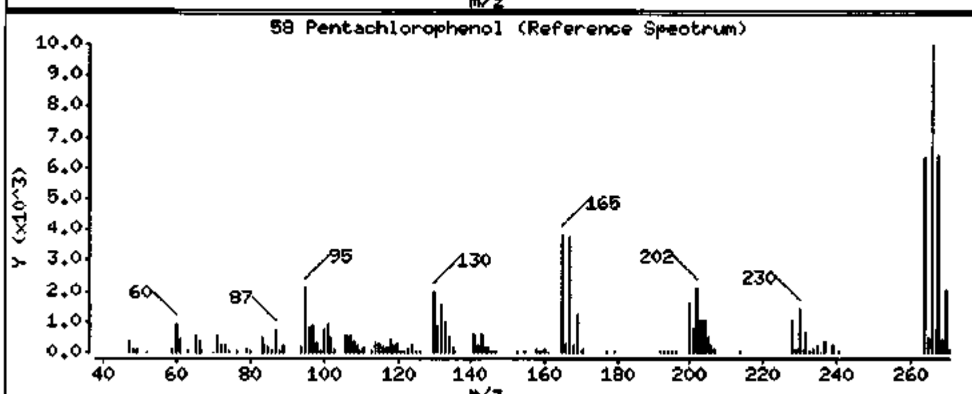
Column diameter: 0.25

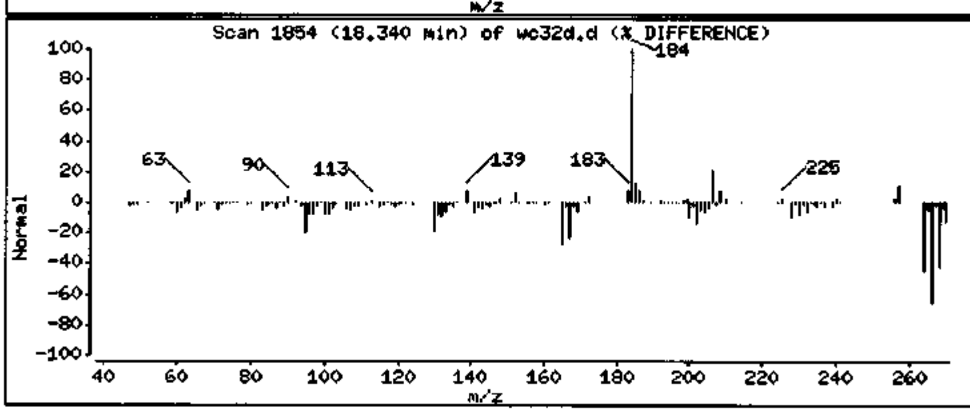
58 Pentachlorophenol

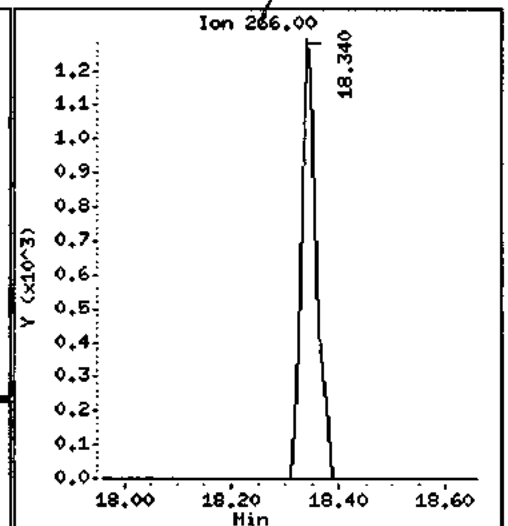
Concentration: 44.47 ug/kg

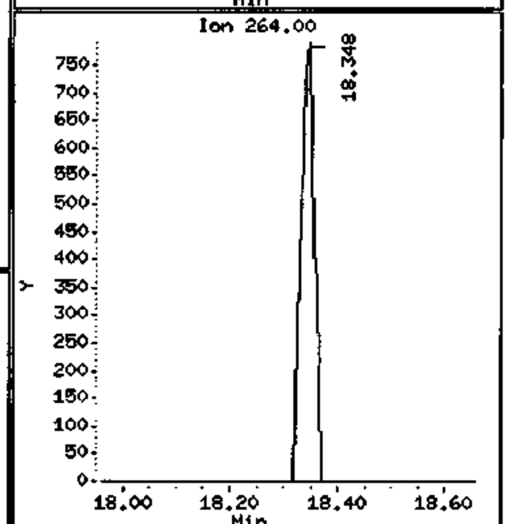


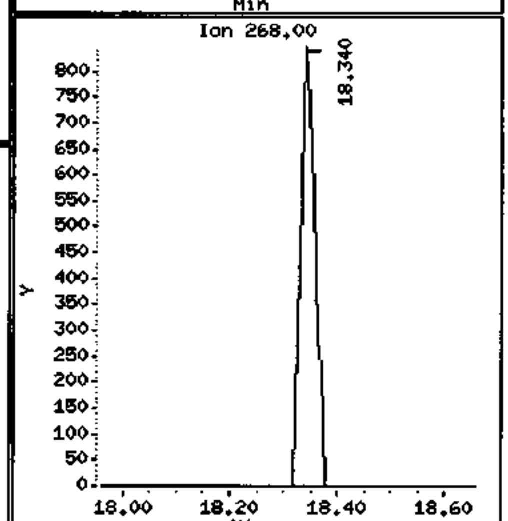












Data File: /chem1/nt10.i/20130215.b/wc32d.d

Date : 15-FEB-2013 20:28

Client ID: SG-06-0-10-013113

Instrument: nt10.i

Sample Info: WC32D

Volume Injected (uL): 1.0

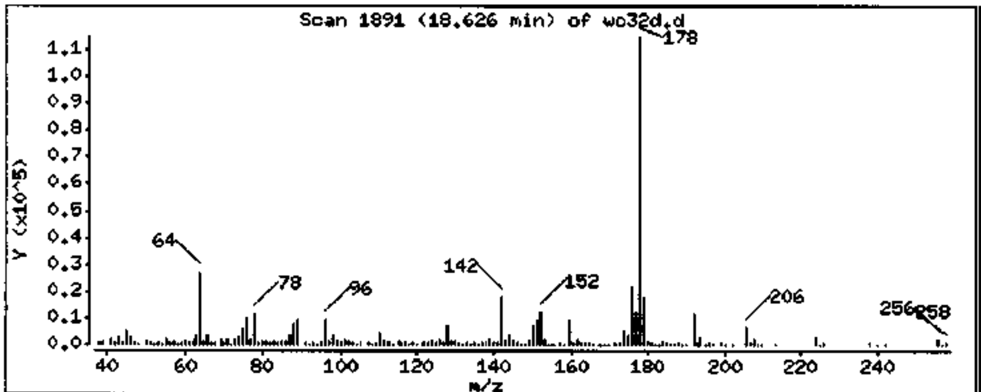
Operator: VTS/YZ

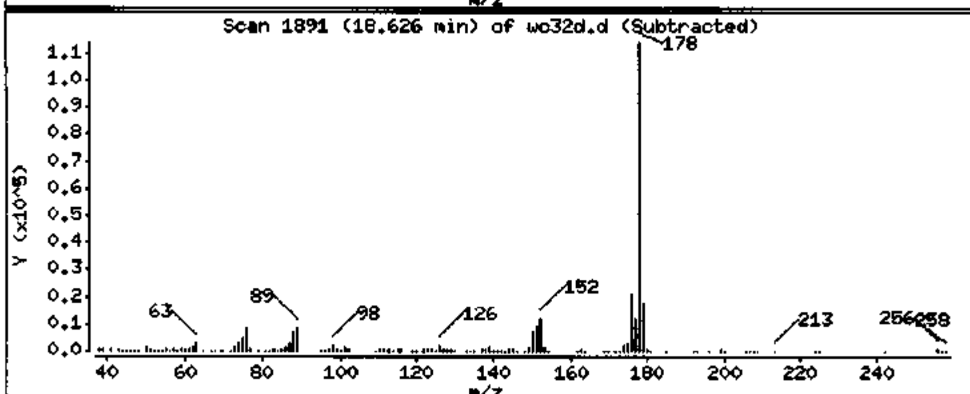
Column phase: ZB-5msi

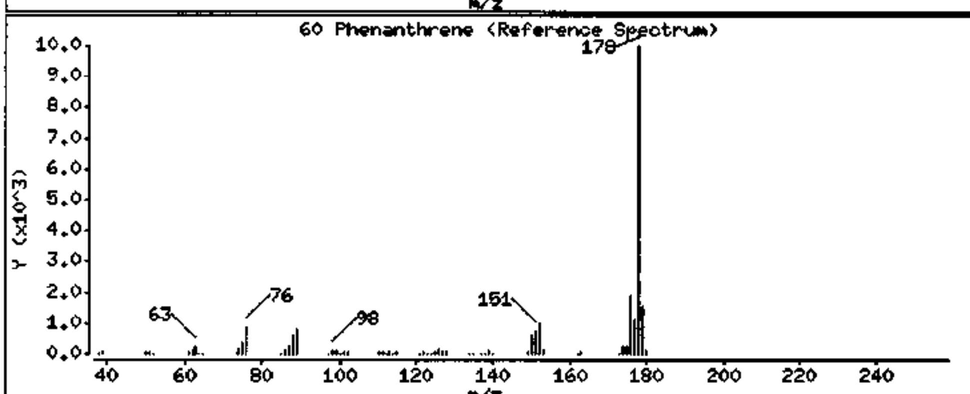
Column diameter: 0.25

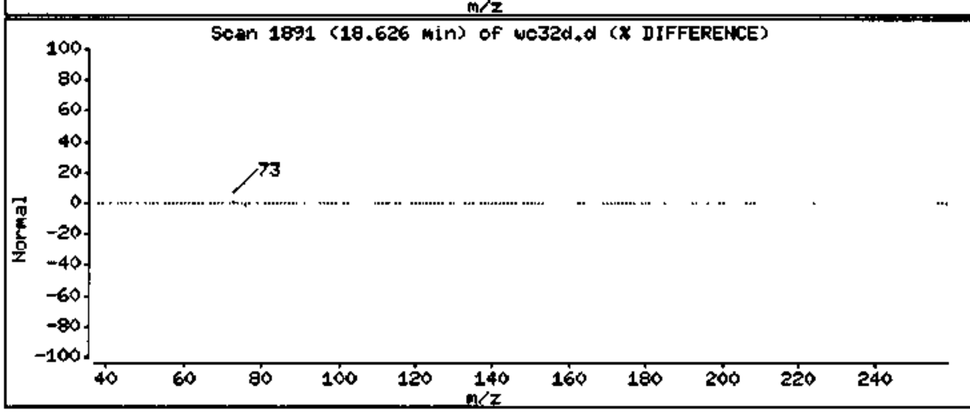
60 Phenanthrene

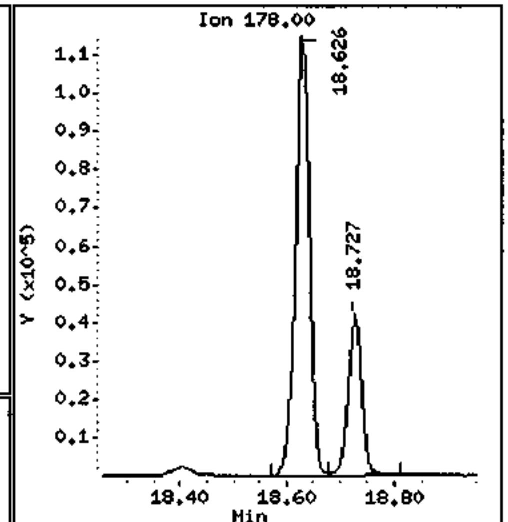
Concentration: 629.2 ug/kg

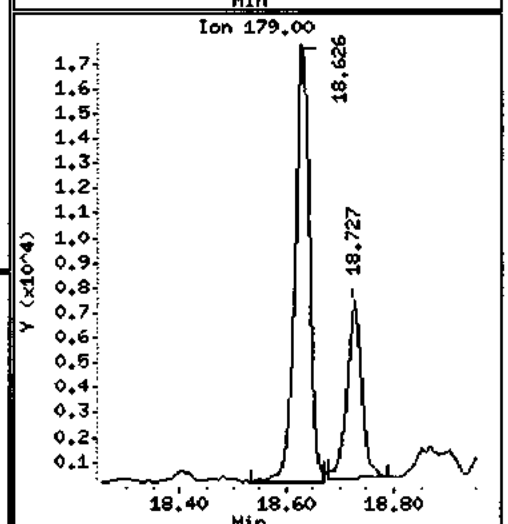


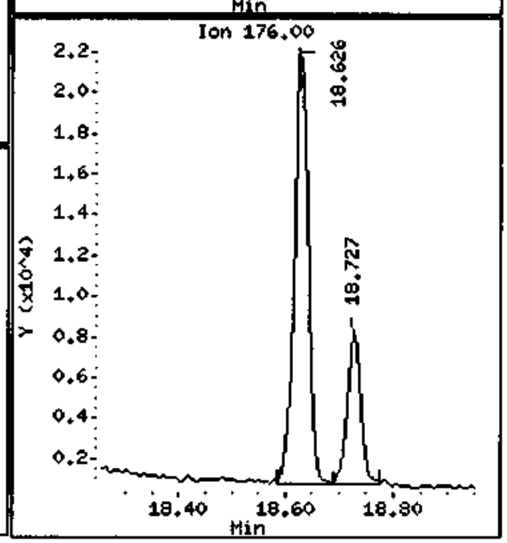












Data File: /chem1/nt10.i/20130215.b/wc32d.d

Date : 15-FEB-2013 20:28

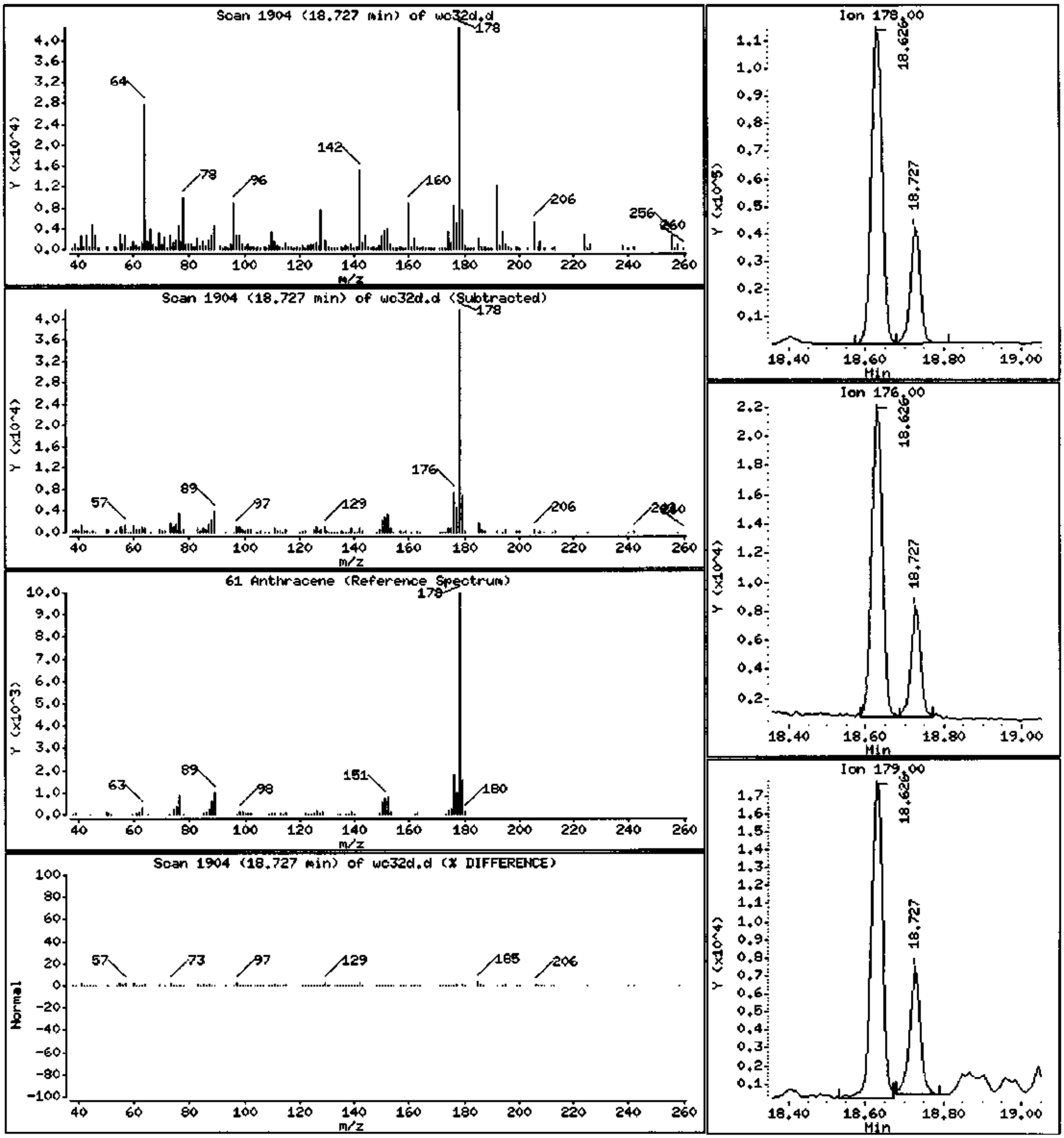
Client ID: SG-06-0-10-013113 Instrument: nt10.i

Sample Info: WC32D

Volume Injected (uL): 1.0 Operator: VTS/YZ

Column phase: ZB-5msi Column diameter: 0.25

61 Anthracene Concentration: 227.4 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32d.d

Date : 15-FEB-2013 20:28

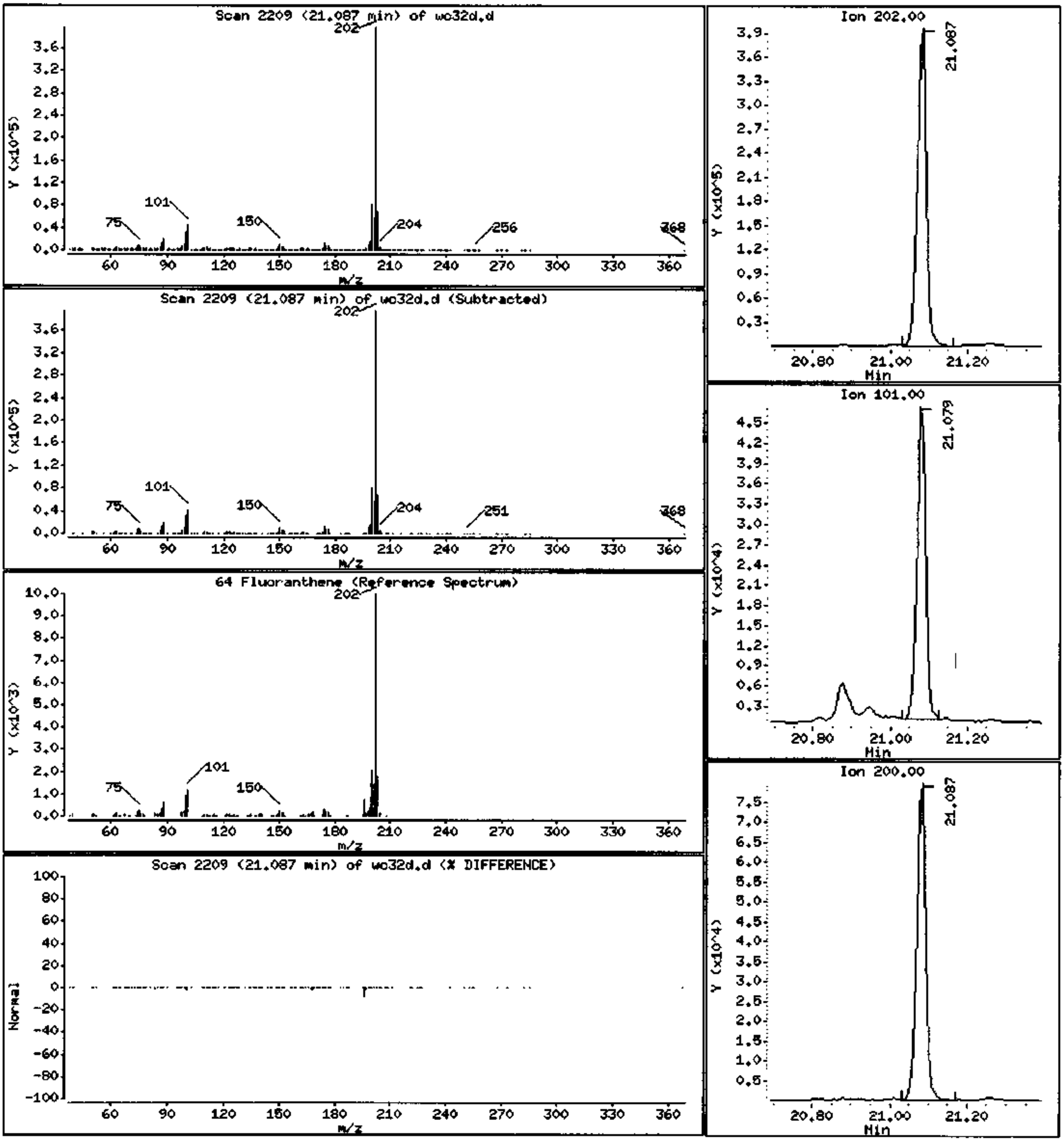
Client ID: SG-06-0-10-013113 | Instrument: nt10.i

Sample Info: WC32D

Volume Injected (uL): 1.0 | Operator: VTS/YZ

Column phase: ZB-5ms: | Column diameter: 0.25

64 Fluoranthene | Concentration: 1713 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32d.d

Date : 15-FEB-2013 20:28

Client ID: SG-06-0-10-013113

Instrument: nt10.i

Sample Info: WC32D

Volume Injected (uL): 1.0

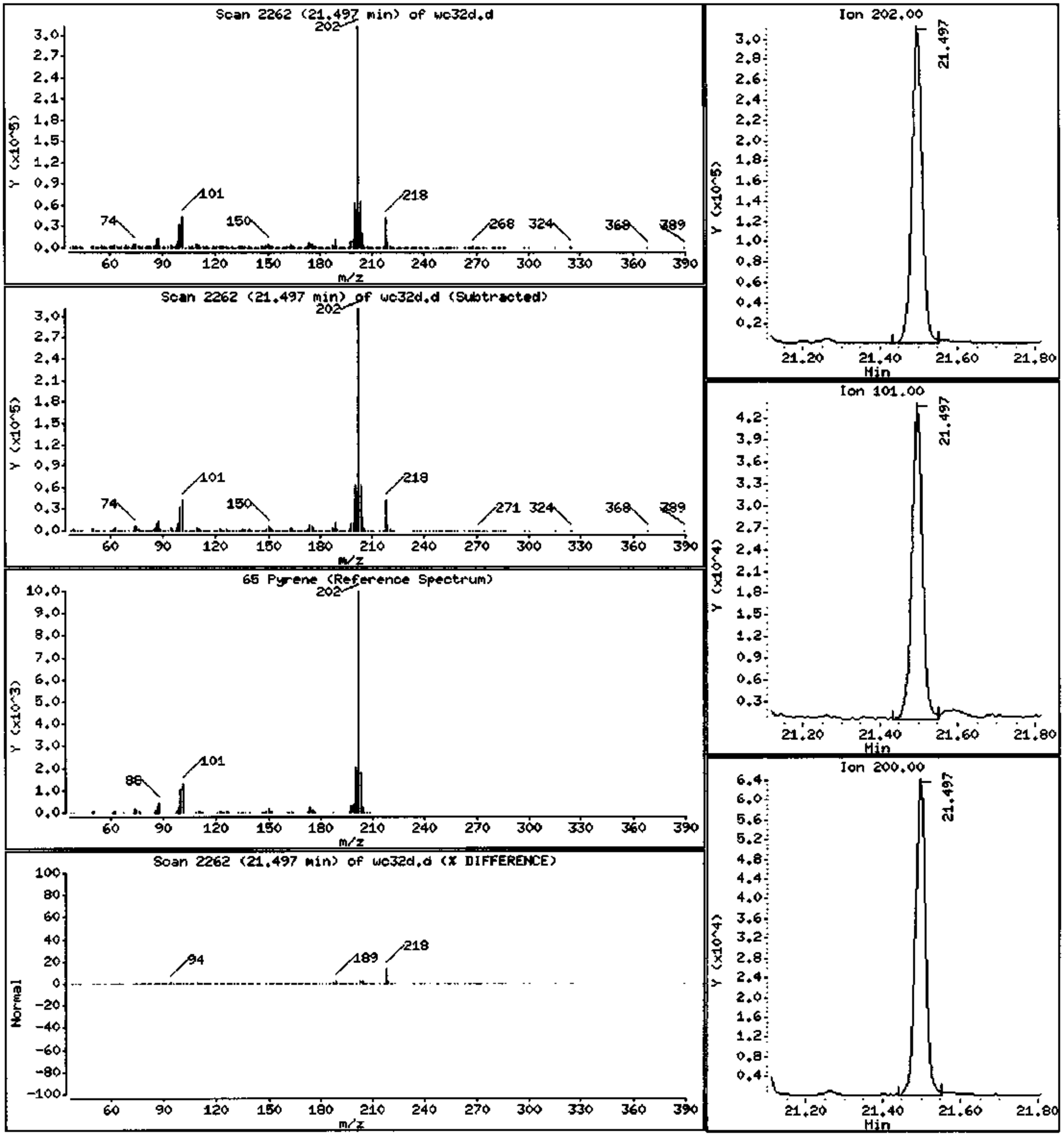
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

65 Pyrene

Concentration: 1333 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32d.d

Date : 15-FEB-2013 20:28

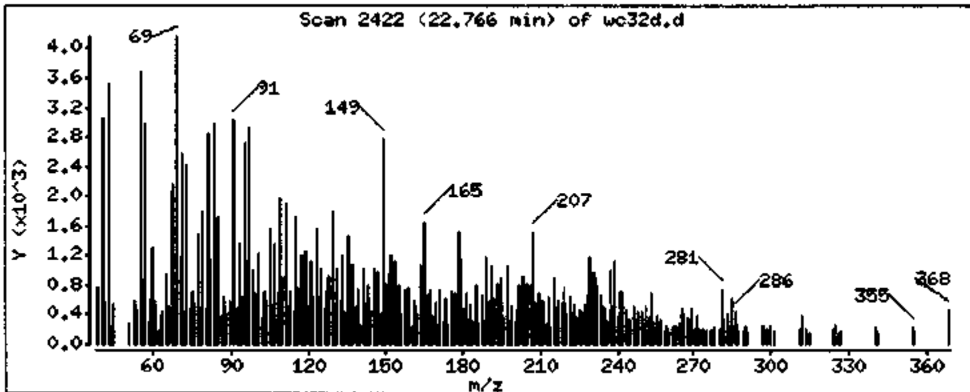
Client ID: SG-06-0-10-013113 Instrument: nt10.i

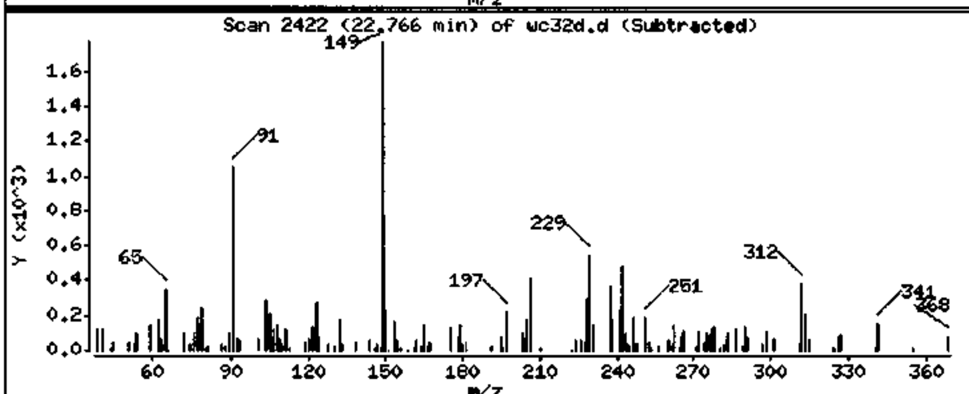
Sample Info: WC32D

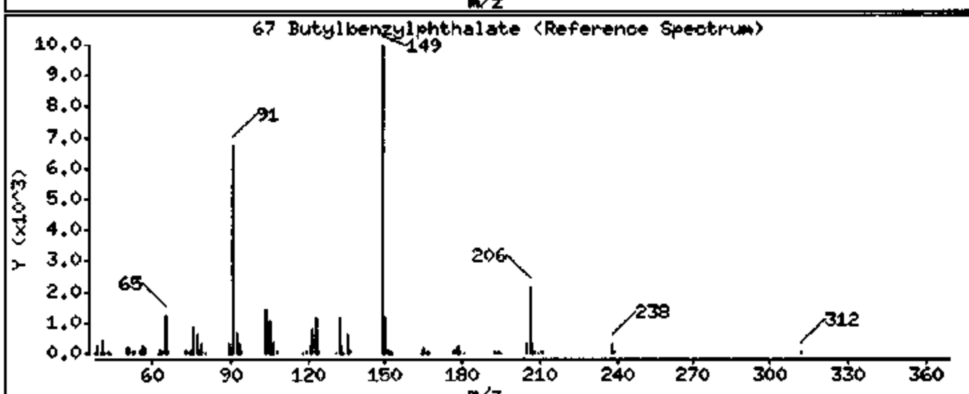
Volume Injected (uL): 1.0 Operator: VTS/YZ

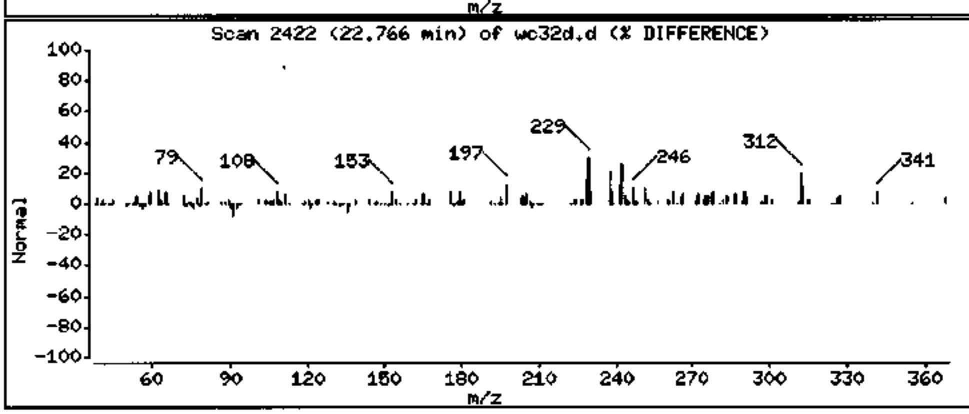
Column phase: ZB-5msi Column diameter: 0.25

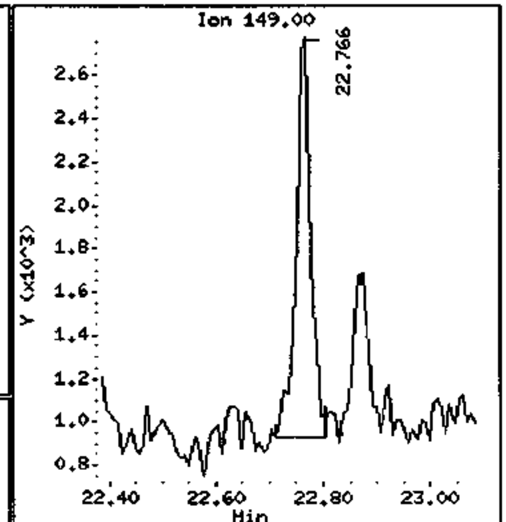
67 Butylbenzylphthalate Concentration: 21.90 ug/kg

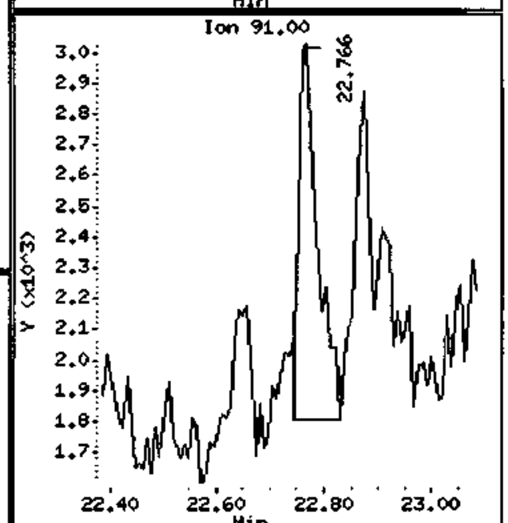


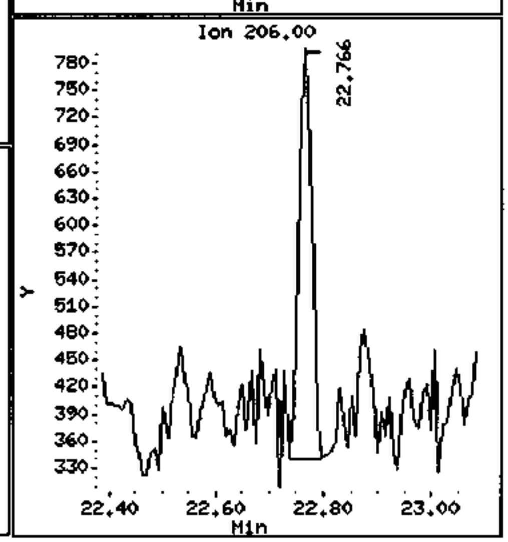












Data File: /chem1/nt10.i/20130215.b/wc32d.d

Date : 15-FEB-2013 20:28

Client ID: SG-06-0-10-013113

Instrument: nt10.i

Sample Info: WC32D

Volume Injected (uL): 1.0

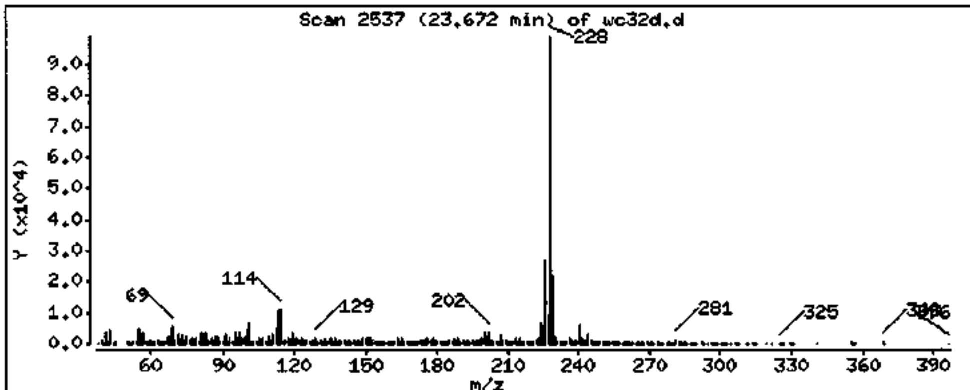
Operator: VTS/YZ

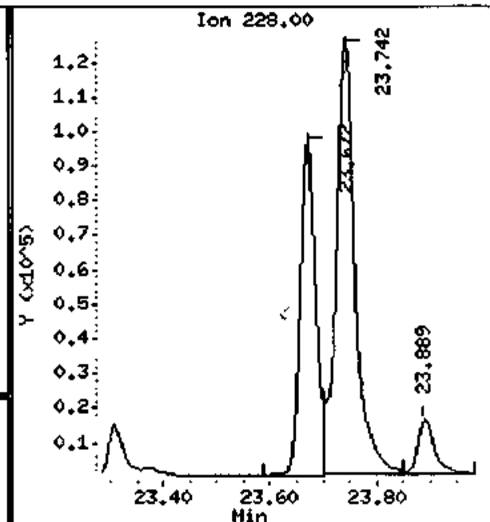
Column phase: ZB-5msi

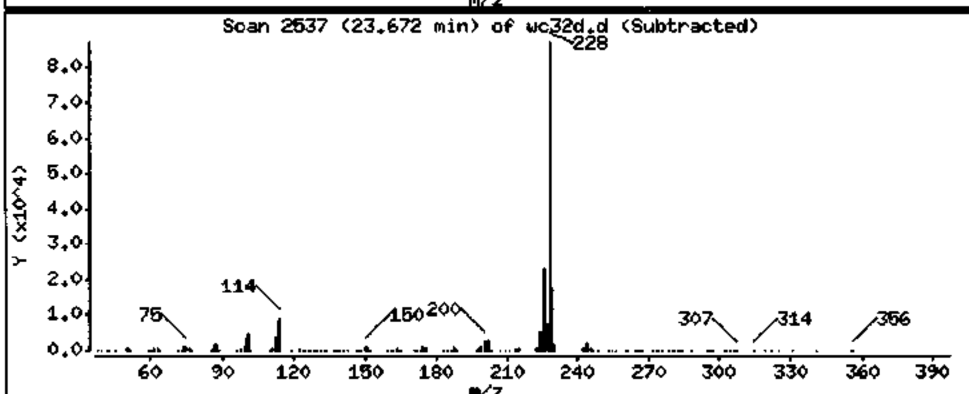
Column diameter: 0.25

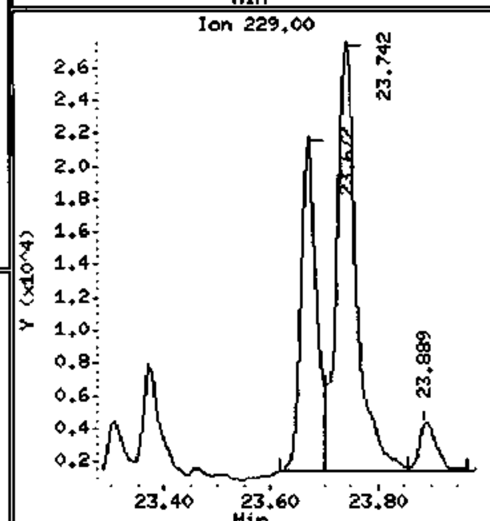
68 Benzo(a)anthracene

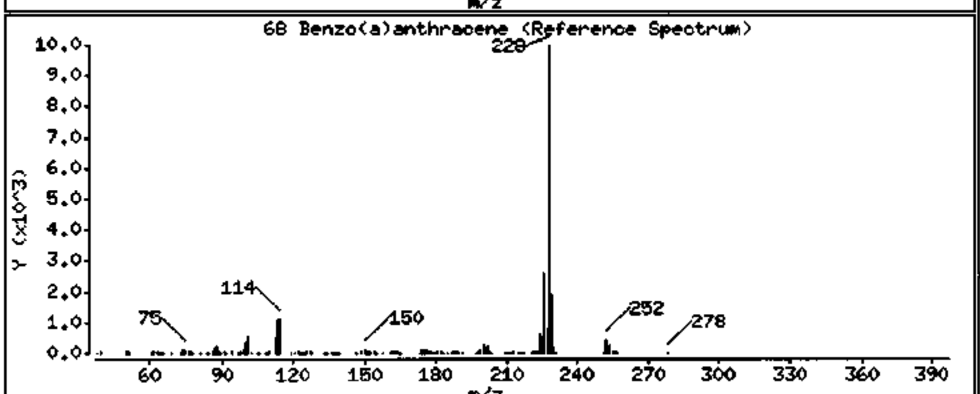
Concentration: 473.5 ug/kg

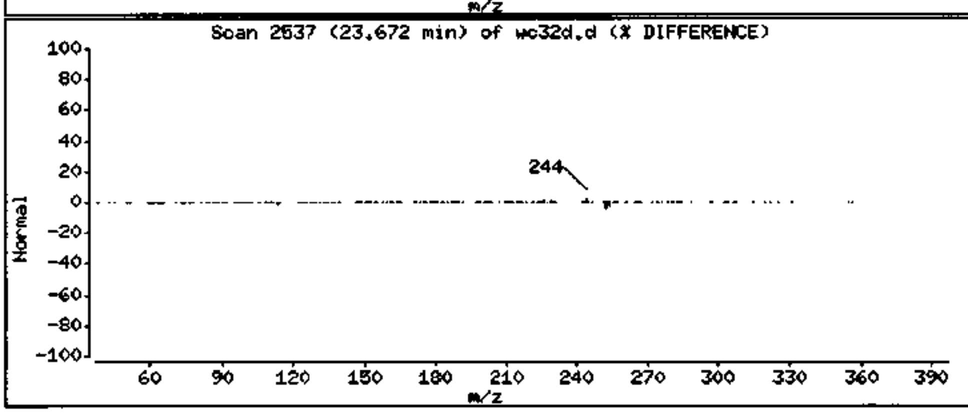


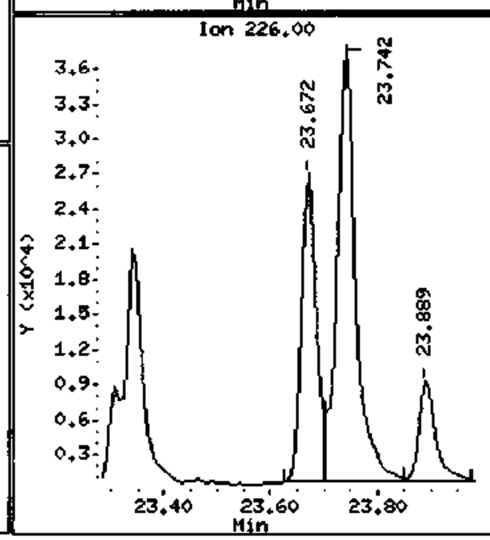












Data File: /chem1/nt10.i/20130215.b/wc32d.d

Date : 15-FEB-2013 20:28

Client ID: SG-06-0-10-013113

Instrument: nt10.i

Sample Info: WC32D

Volume Injected (uL): 1.0

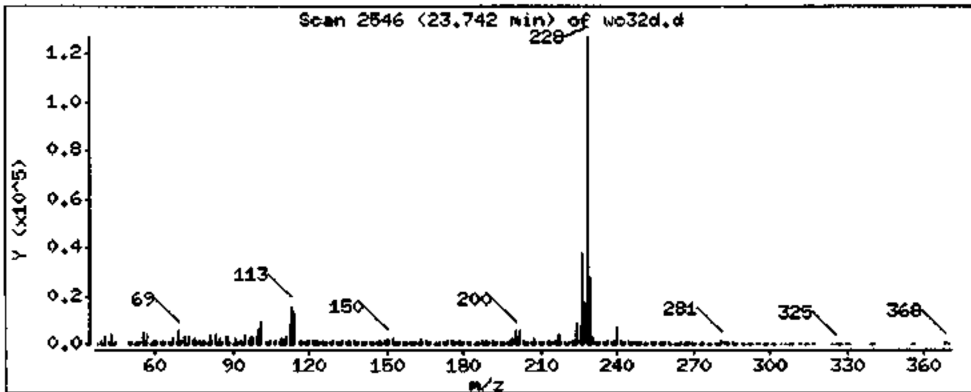
Operator: VTS/YZ

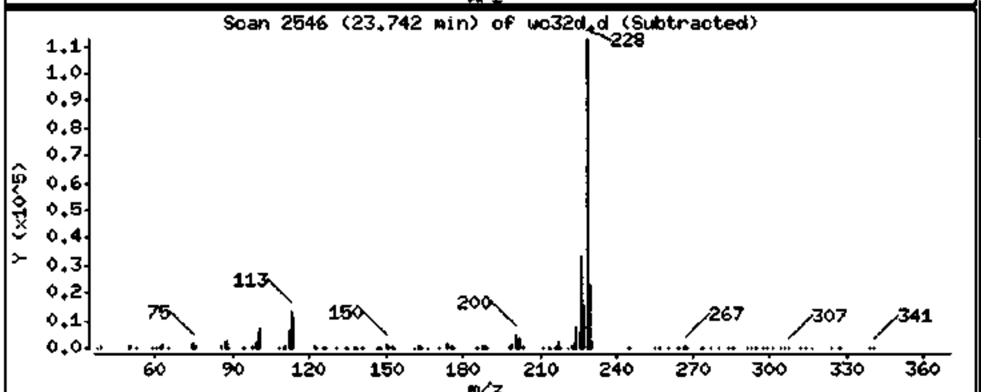
Column phase: ZB-5msi

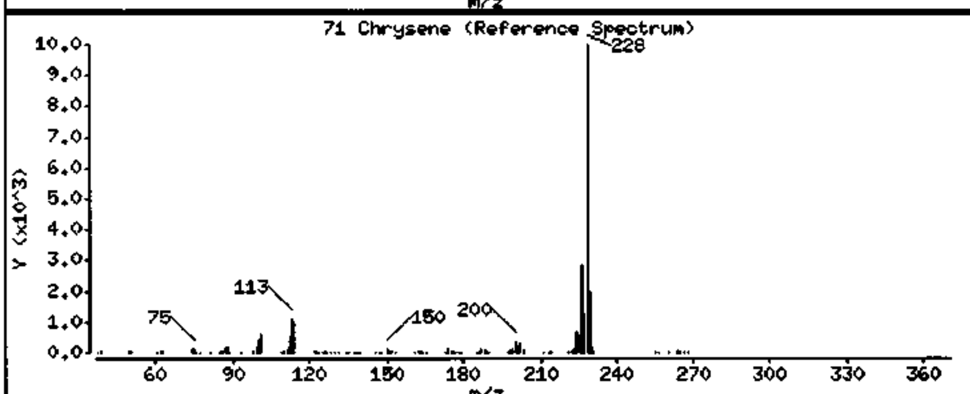
Column diameter: 0.25

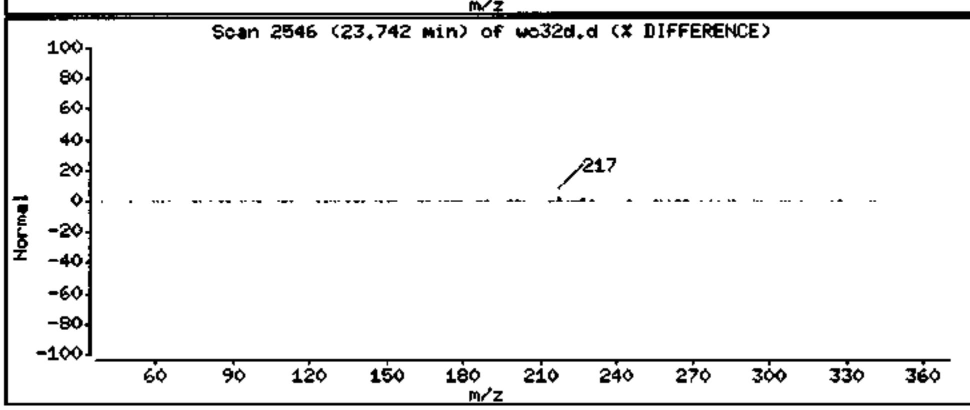
71 Chrysene

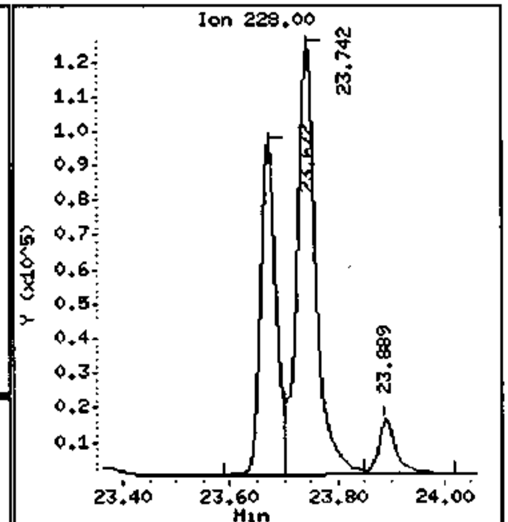
Concentration: 816.2 ug/kg

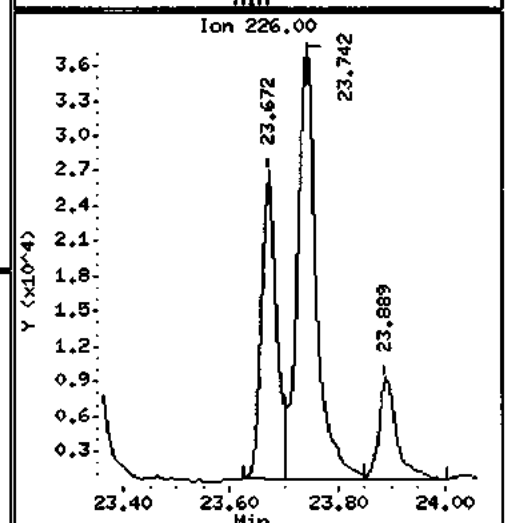


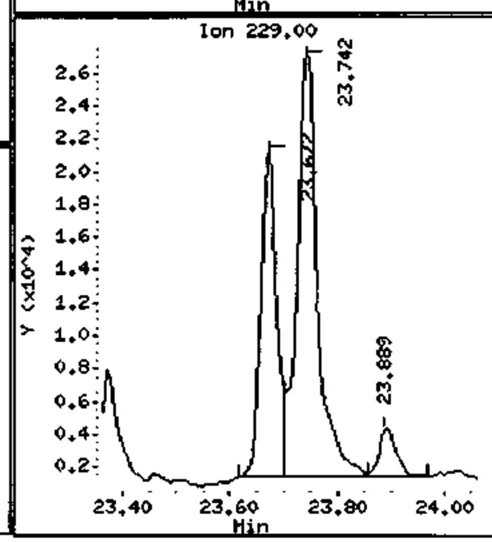












Data File: /chem1/nt10.i/20130215.b/wc32d.d

Date : 15-FEB-2013 20:28

Client ID: SG-06-0-10-013113

Instrument: nt10.i

Sample Info: WC32D

Volume Injected (uL): 1.0

Operator: VTS/YZ

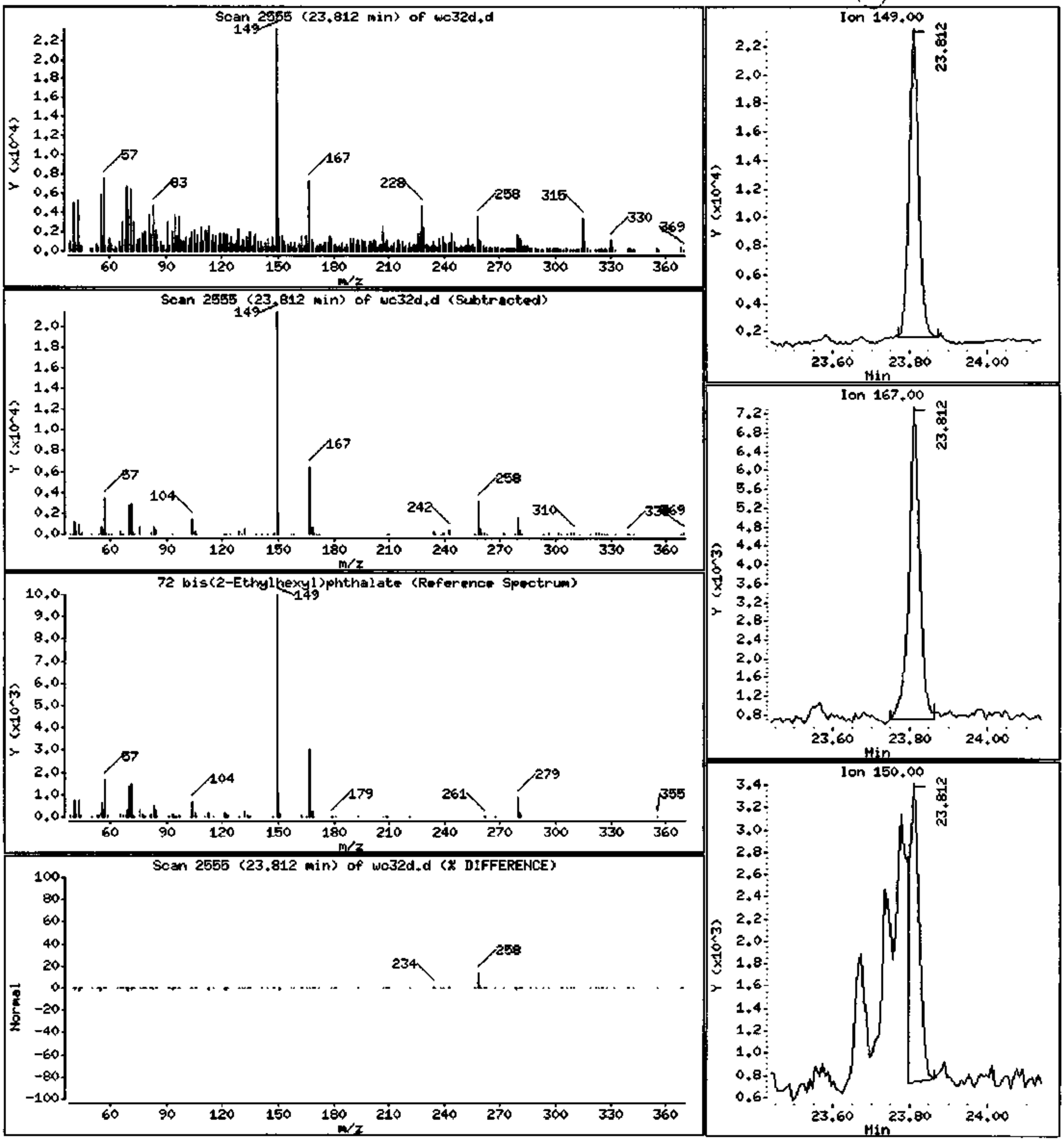
Column phase: ZB-5msi

Column diameter: 0.25

(B)

72 bis(2-Ethylhexyl)phthalate

Concentration: 133.8 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32d.d

Date : 15-FEB-2013 20:28

Client ID: SG-06-0-10-013113

Instrument: nt10.i

Sample Info: WC32D

Volume Injected (uL): 1.0

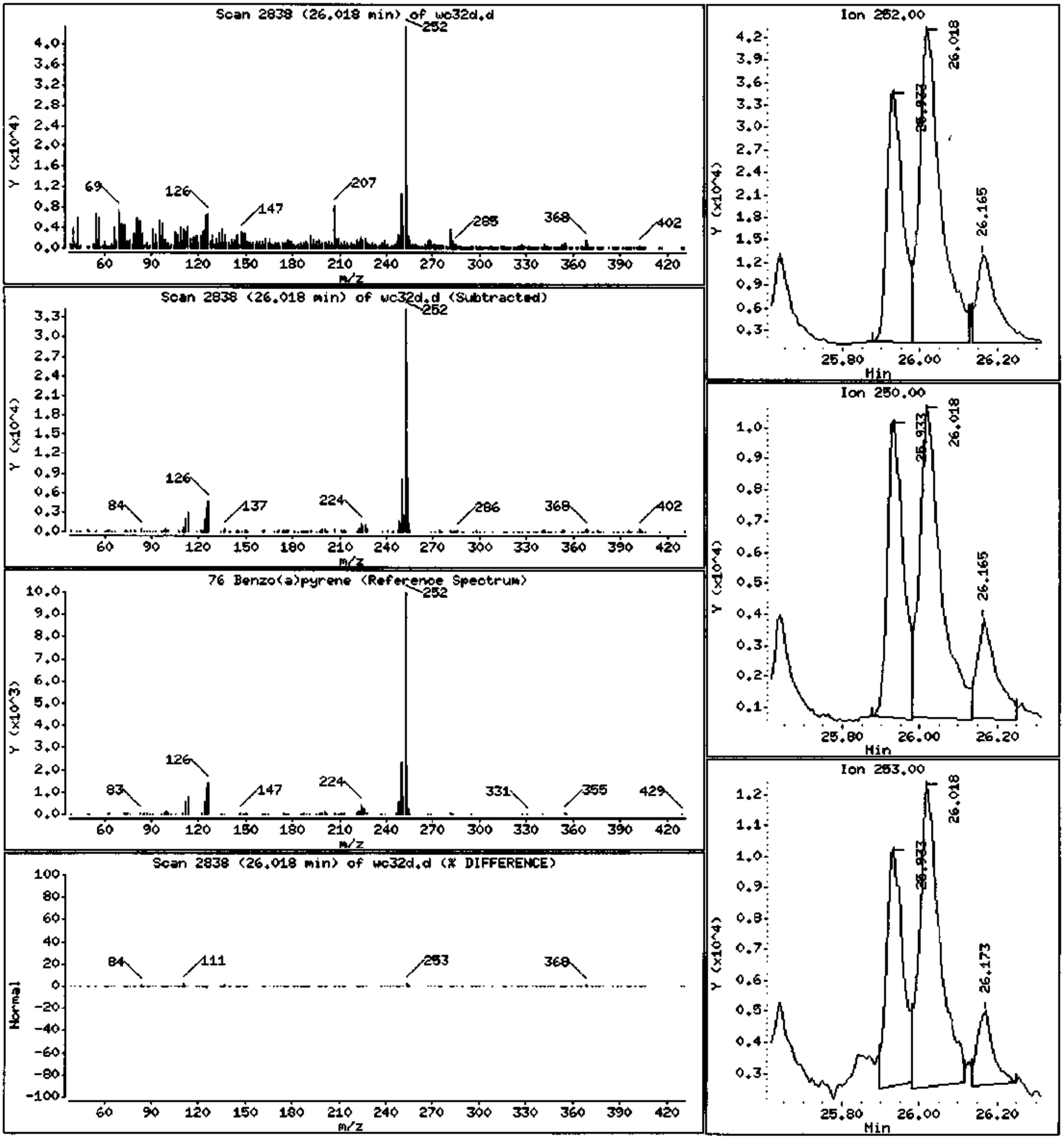
Operator: VTS/YZ

Column phase: ZB-5ms:

Column diameter: 0.25

76 Benzo(a)pyrene

Concentration: 470.6 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32d.d

Date : 15-FEB-2013 20:28

Client ID: SG-06-0-10-013113

Instrument: nt10.i

Sample Info: WC32D

Volume Injected (uL): 1.0

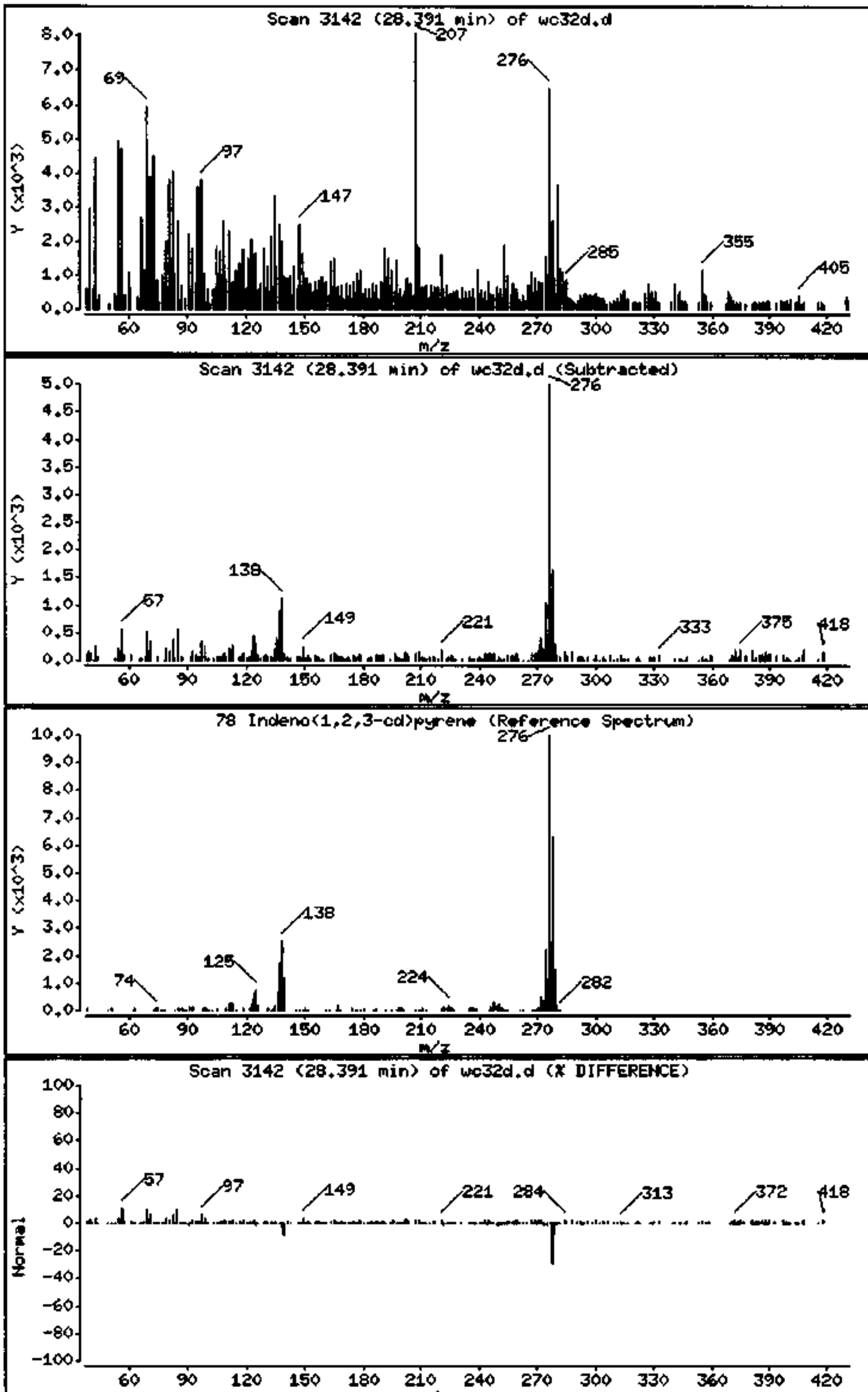
Operator: VTS/YZ

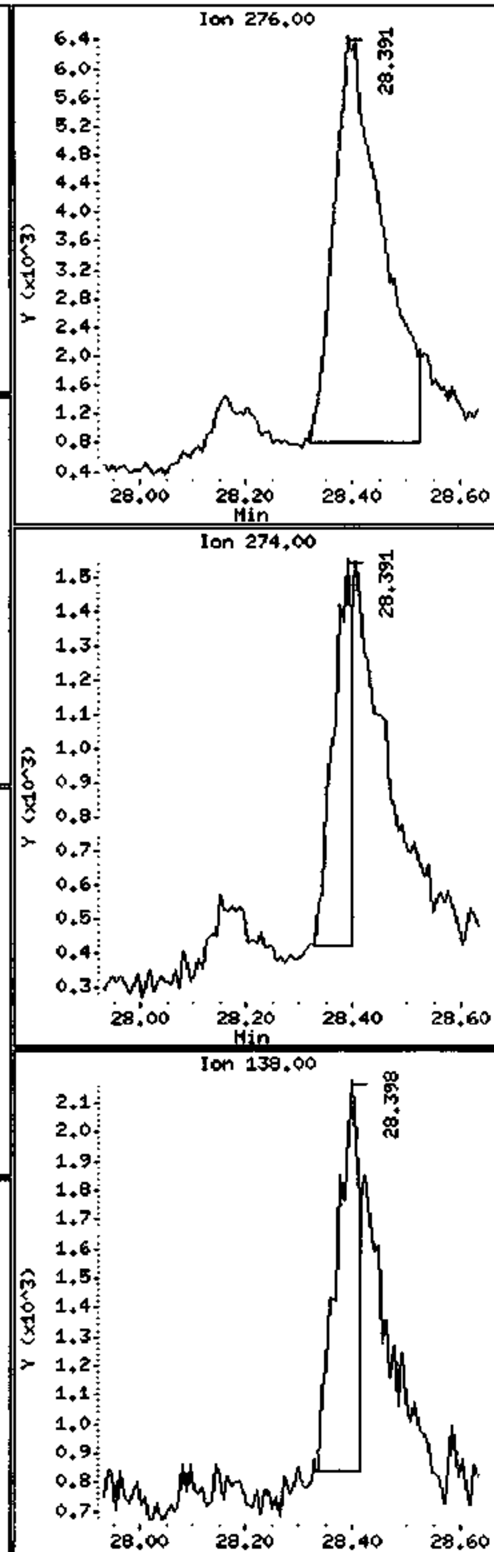
Column phase: ZB-5msi

Column diameter: 0.25

78 Indeno(1,2,3-cd)pyrene

Concentration: 80.67 ug/kg





Data File: /chem1/nt10.i/20130215.b/wc32d.d

Date : 15-FEB-2013 20:28

Client ID: SG-06-0-10-013113

Instrument: nt10.i

Sample Info: WC32D

Volume Injected (uL): 1.0

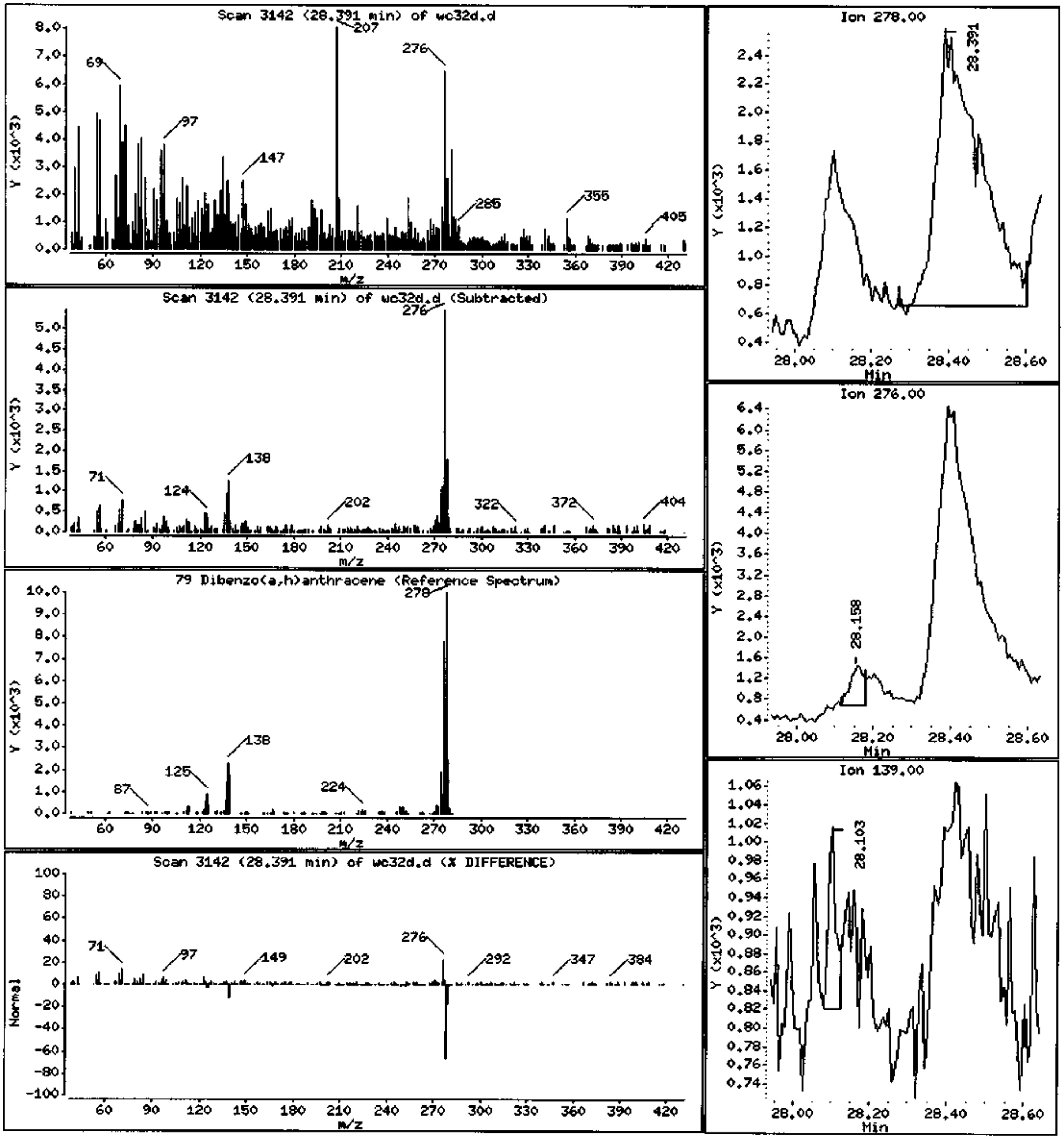
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

79 Dibenzo(a,h)anthracene

Concentration: 43.42 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32d.d

Date : 15-FEB-2013 20:28

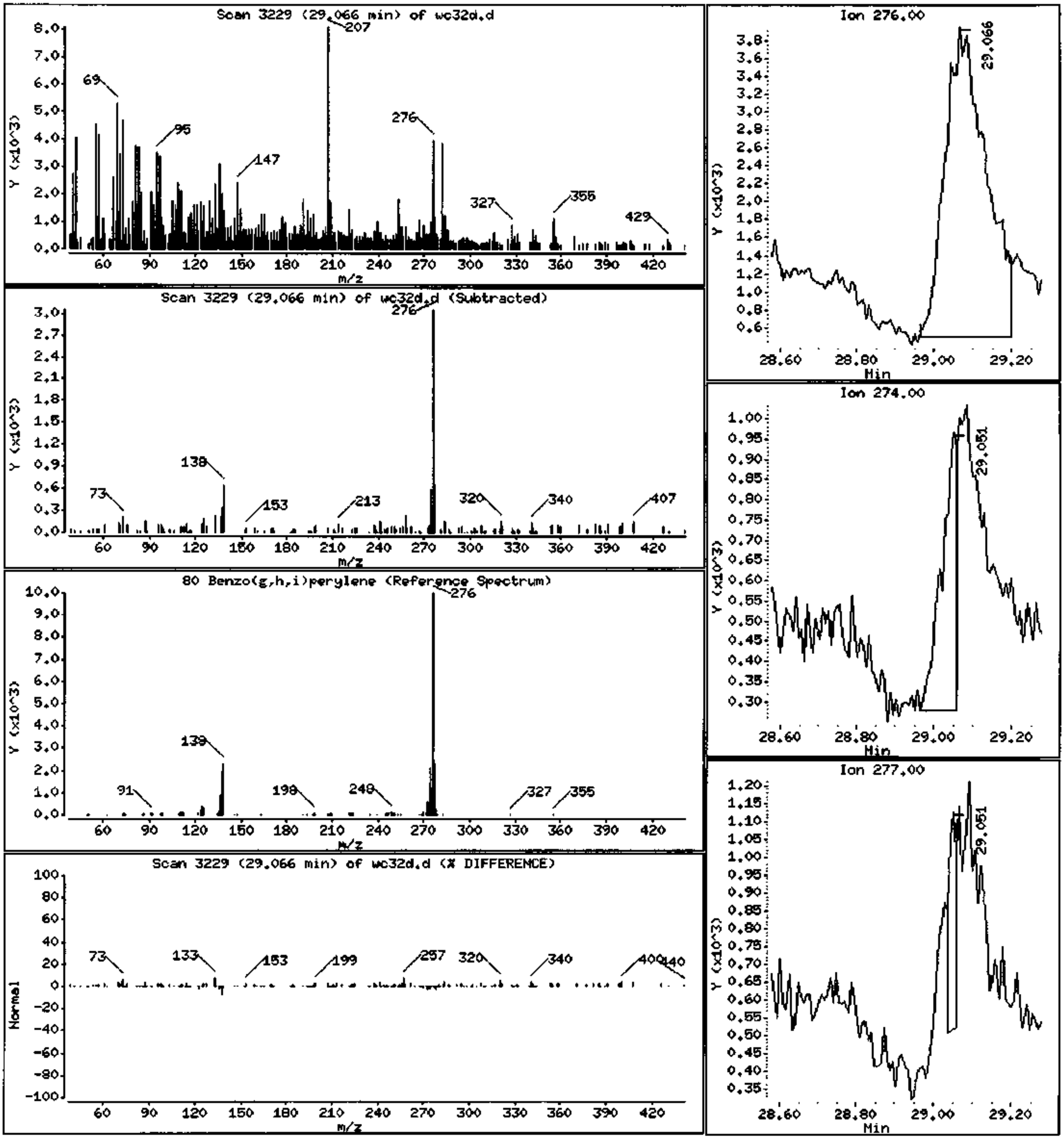
Client ID: SG-06-0-10-013113 | Instrument: nt10.i

Sample Info: WC32D

Volume Injected (uL): 1.0 | Operator: VTS/YZ

Column phase: ZB-5msi | Column diameter: 0.25

80 Benzo(g,h,i)perylene | Concentration: 67.26 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32d.d

Date : 15-FEB-2013 20:28

Client ID: SG-06-0-10-013113

Instrument: nt10.i

Sample Info: WC32D

Volume Injected (uL): 1.0

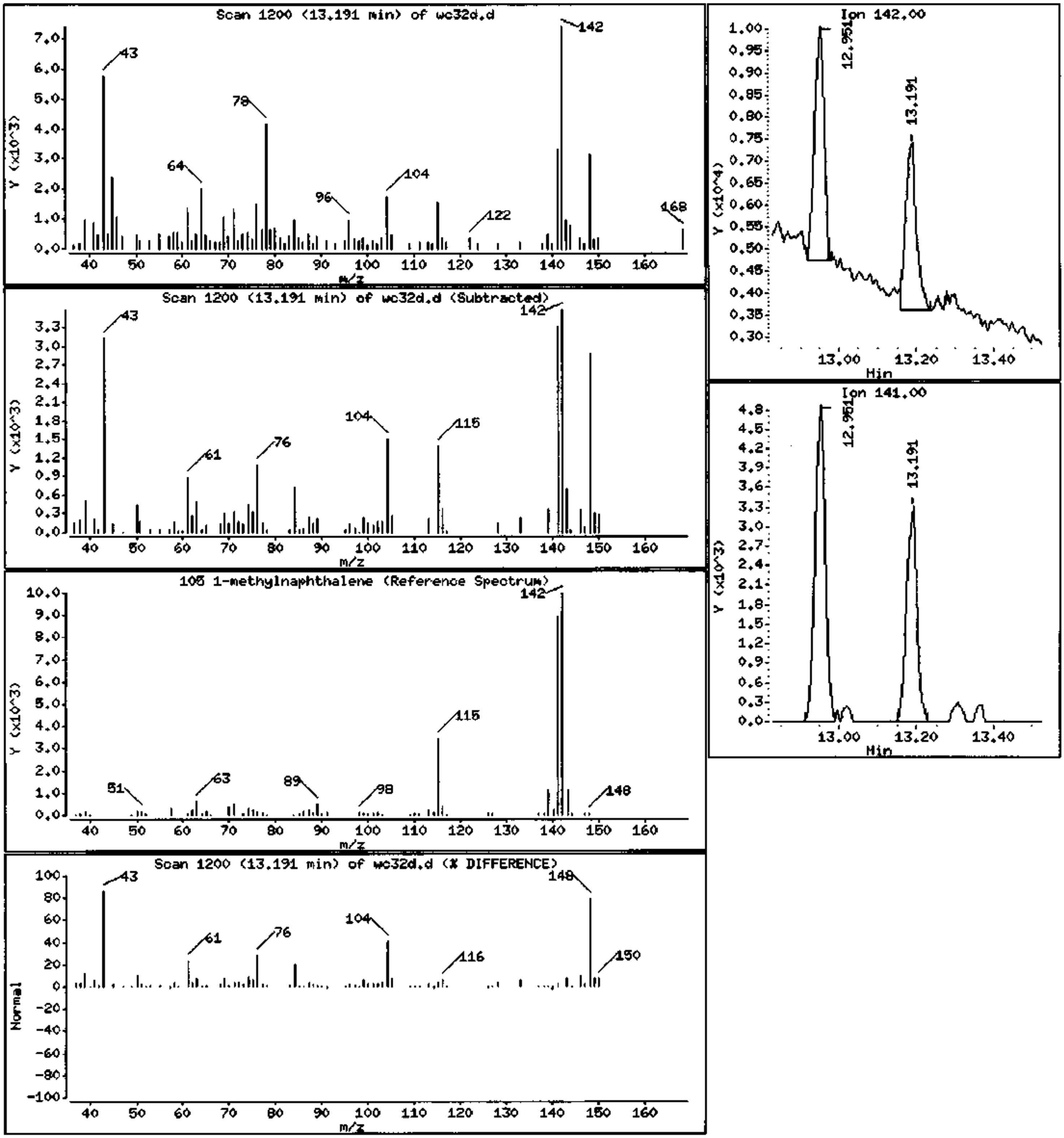
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

105 1-methylnaphthalene

Concentration: 36.71 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32d.d

Date : 15-FEB-2013 20:28

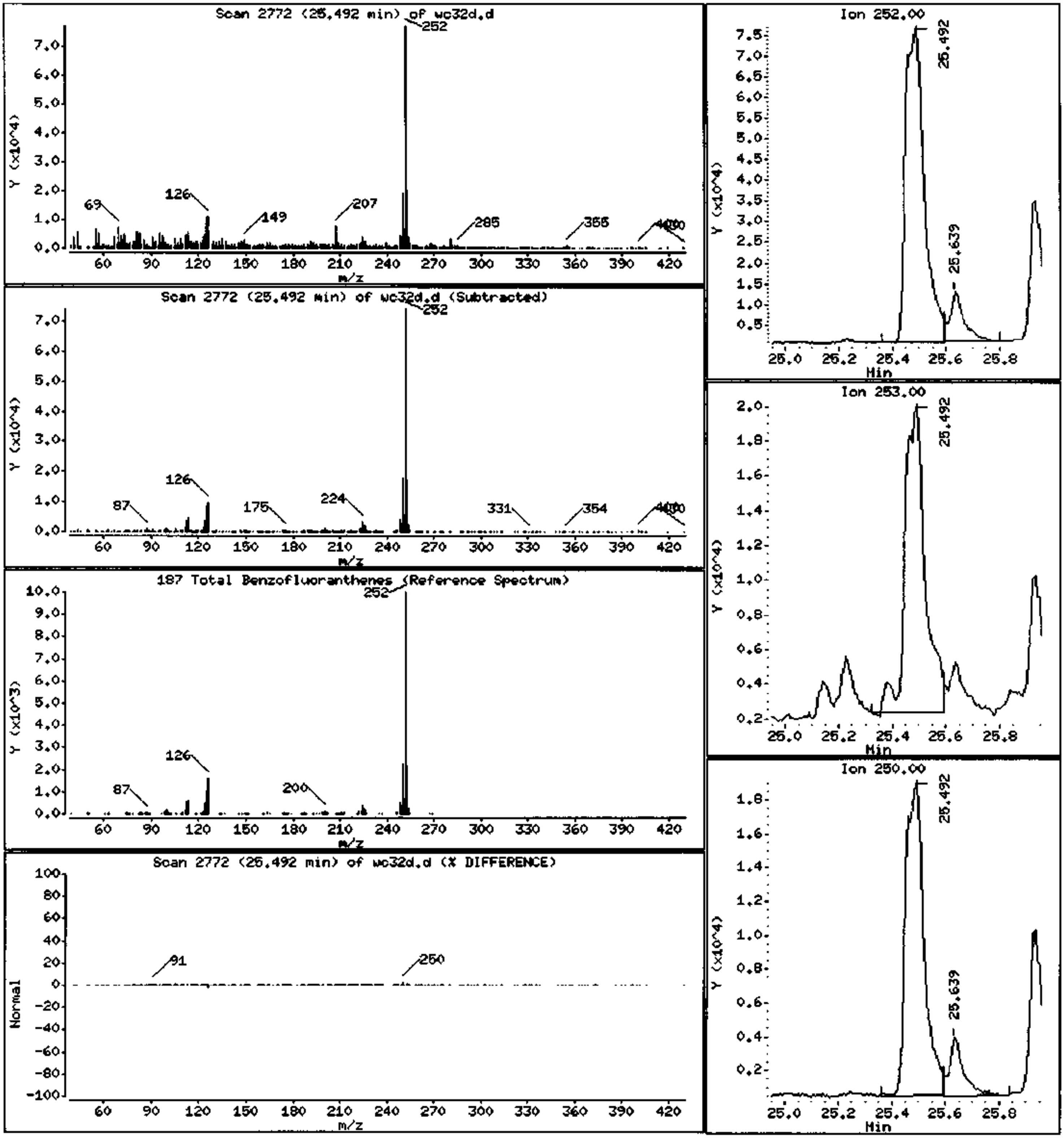
Client ID: SG-06-0-10-013113 Instrument: nt10.i

Sample Info: WC32D

Volume Injected (uL): 1.0 Operator: VTS/YZ

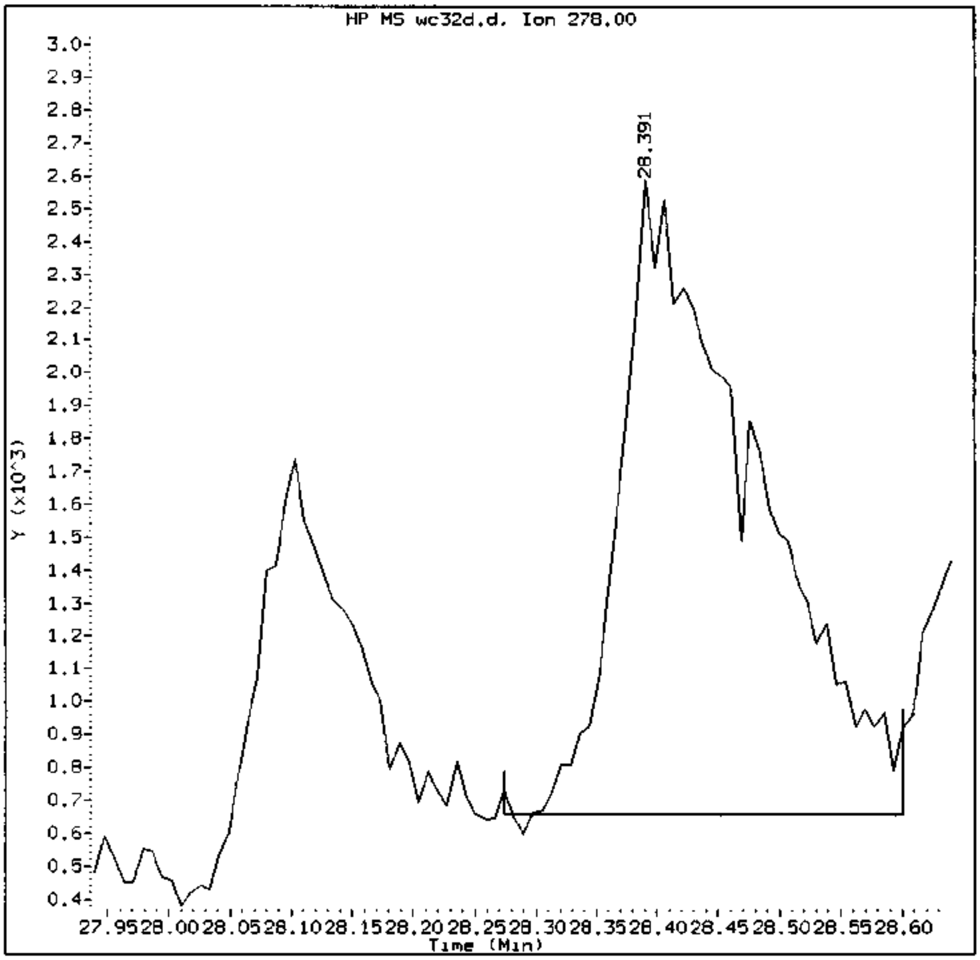
Column phase: ZB-5msi Column diameter: 0.25

187 Total Benzofluoranthenes Concentration: 914.5 ug/kg



WC32D, /chem1/nt10.i/20130215.b/wc32d.d

Dibenzo(a,h)anthracene   Amount: 0.44   Area: 14950



MANUAL INTEGRATION for Dibenzo(a,h)anthracene

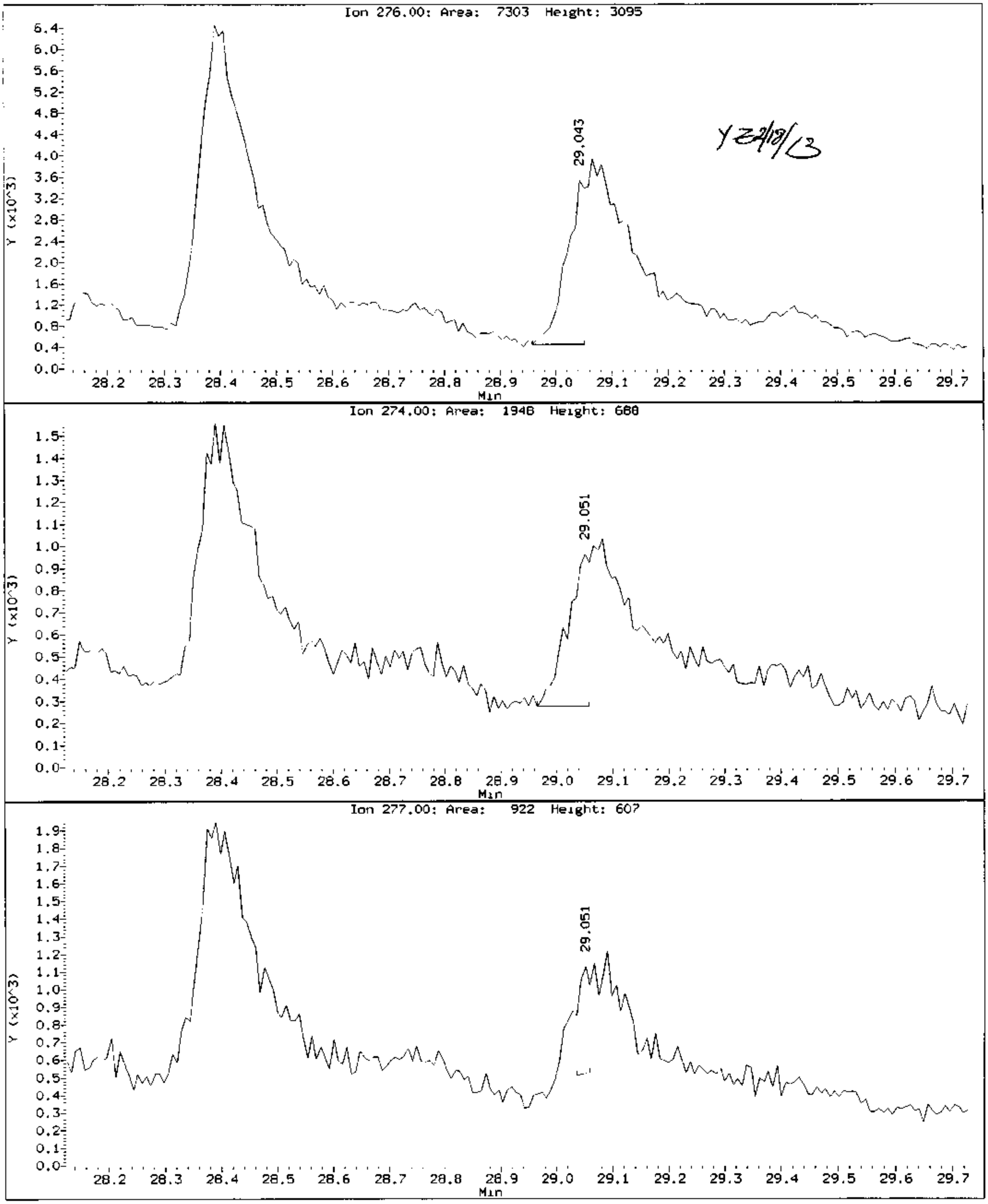
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other ________________________

Analyst: ____V.C____   Date: ____02/18/13____

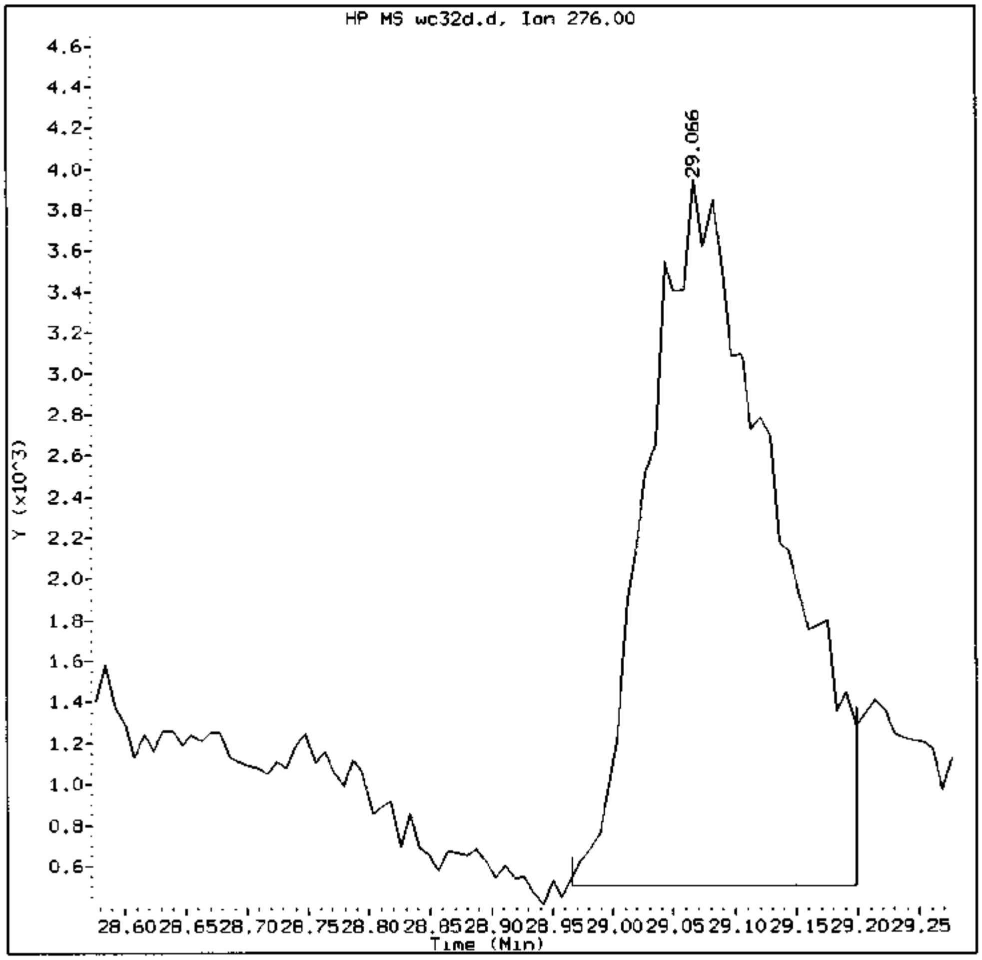
Data File: /chem1/nt10.i/20130215.b/wc32d.d
Injection Date: 15-FEB-2013 20:28
Instrument: nt10.i
Client Sample ID: SG-06-0-10-013113

Compound: Benzo(g,h,i)perylene
CAS Number: 191-24-2



WC32D, /chem1/nt10.i/20130215.b/wc32d.d

Benzo(g,h,i)perylene Amount: 0.69 Area: 25089



MANUAL INTEGRATION for Benzo(g,h,i)perylene

1. Baseline correction ✓
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other ______________________

Analyst: YZ Date: 2/18/13

CO-ELUTION SUMMARY FOR FILE - wc32d.d

Lab ID: WC32D, Method: ABN.m, Instrument: nt10.i, Date: 15-FEB-2013

RT	CO-ELUTION COMPOUNDS
28.391	Indeno(1,2,3-cd)pyrene and Dibenzo(a,h)anthracene
28.391	Dibenzo(a,h)anthracene and Indeno(1,2,3-cd)pyrene

Analytical Resources, Inc.

YZ 2/18/13

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt10.i/20130215.b/wc32e.d
Lab Smp Id: WC32E   Client Smp ID: SG-05-0-10-013113
Inj Date : 15-FEB-2013 21:04
Operator : VTS/YZ   Inst ID: nt10.i
Smp Info : WC32E
Misc Info : 13-2428
Comment : 1ul Injection
Method : /chem1/nt10.i/20130215.b/ABN.m
Meth Date : 15-Feb-2013 14:06 van   Quant Type: ISTD
Cal Date : 25-JAN-2013 17:16   Cal File: ic0125h.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: PSDDAICAL.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Ws	11.20000	Weight of sample extracted (g)
M	5.70000	% Moisture

Cpnd Variable   Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
$	1 2-Fluorophenol	112	6.490	6.459	(0.741)	44748	4.41882	418.4
$	2 Phenol-d5	99	8.198	8.183	(0.936)	51646	4.10991	389.1
	3 Phenol	94	Compound Not Detected.					
$	5 2-Chlorophenol-d4	132	8.399	8.391	(0.959)	50769	4.66594	441.8
	4 Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
	6 2-Chlorophenol	128	Compound Not Detected.					
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	8.755	8.747	(1.000)	31671	4.00000	
	9 1,4-Dichlorobenzene	146	Compound Not Detected.					
$	10 1,2-Dichlorobenzene-d4	152	9.135	9.128	(1.043)	30025	3.75496	355.5
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	108	Compound Not Detected.					
	14 2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.					
	13 2-Methylphenol	108	Compound Not Detected.					

		QUANT SIG						CONCENTRATIONS	
								ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE		(ug/mL)	(ug/kg)
	=========================	====	==	======	======	========		=======	=======
	17 Hexachloroethane	117	Compound Not Detected.						
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.						
	15 4-Methylphenol	108	Compound Not Detected.						
$	18 Nitrobenzene-d5	82	9.927	9.919	(0.870)	39365		3.76200	356.2
	19 Nitrobenzene	77	Compound Not Detected.						
	20 Isophorone	82	Compound Not Detected.						
	21 2-Nitrophenol	139	Compound Not Detected.						
	22 2,4-Dimethylphenol	107	Compound Not Detected.						
	23 Bis(2-Chloroethoxy)methane	93	Compound Not Detected.						
	24 Benzoic acid	105	Compound Not Detected.						
	25 2,4-Dichlorophenol	162	Compound Not Detected.						
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.						
*	27 Naphthalene-d8	136	11.405	11.397	(1.000)	113372		4.00000	
	28 Naphthalene	128	Compound Not Detected.						
	29 4-Chloroaniline	127	Compound Not Detected.						
	30 Hexachlorobutadiene	225	Compound Not Detected.						
	31 4-Chloro-3-methylphenol	107	Compound Not Detected.						
	32 2-Methylnaphthalene	142	Compound Not Detected.						
	33 Hexachlorocyclopentadiene	237	Compound Not Detected.						
	34 2,4,6-Trichlorophenol	196	Compound Not Detected.						
	35 2,4,5-Trichlorophenol	196	Compound Not Detected.						
$	36 2-Fluorobiphenyl	172	13.810	13.803	(0.903)	92440		3.81972	361.7
	37 2-Chloronaphthalene	162	Compound Not Detected.						
	38 2-Nitroaniline	65	Compound Not Detected.						
	39 Dimethylphthalate	163	Compound Not Detected.						
	40 Acenaphthylene	152	Compound Not Detected.						
	41 2,6-Dinitrotoluene	165	Compound Not Detected.						
*	42 Acenaphthene-d10	164	15.289	15.281	(1.000)	70543		4.00000	
	43 3-Nitroaniline	138	Compound Not Detected.						
	44 Acenaphthene	153	Compound Not Detected.						
	45 2,4-Dinitrophenol	184	Compound Not Detected.						
	46 Dibenzofuran	168	Compound Not Detected.						
	47 4-Nitrophenol	109	Compound Not Detected.						
	48 2,4-Dinitrotoluene	165	Compound Not Detected.						
	50 Diethylphthalate	149	16.394	16.386	(1.072)	3284		0.14693	13.91
	49 Fluorene	166	Compound Not Detected.						
	51 4-Chlorophenyl-phenylether	204	Compound Not Detected.						
	52 4-Nitroaniline	138	Compound Not Detected.						
	53 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.						
	54 N-Nitrosodiphenylamine	169	Compound Not Detected.						
$	55 2,4,6-Tribromophenol	330	17.081	17.065	(1.117)	25016		5.55697	526.1
	56 4-Bromophenyl-phenylether	248	Compound Not Detected.						
	57 Hexachlorobenzene	284	Compound Not Detected.						
	58 Pentachlorophenol	266	Compound Not Detected.						
*	59 Phenanthrene-d10	188	18.572	18.557	(1.000)	118876		4.00000	
	60 Phenanthrene	178	18.619	18.603	(1.002)	41217		1.30064	123.1
	61 Anthracene	178	18.719	18.704	(1.008)	9719		0.30460	28.84

							CONCENTRATIONS	
		QUANT SIG					ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/kg)
	========================	====	==	======	======	========	=======	=======
	62 Carbazole	167	19.114	19.083	(1.029)	3084	0.14471	13.70
	63 Di-n-butylphthalate	149	Compound Not Detected.					
	64 Fluoranthene	202	21.063	21.040	(1.134)	68387	1.87389	177.4
	65 Pyrene	202	21.489	21.466	(0.907)	58454	1.35340	128.1
$	66 Terphenyl-d14	244	21.806	21.791	(0.920)	131483	4.51467	427.5
	67 Butylbenzylphthalate	149	Compound Not Detected.					
	68 Benzo(a)anthracene	228	23.665	23.634	(0.999)	26734	0.63187	59.83
*	69 Chrysene-d12	240	23.696	23.665	(1.000)	151629	4.00000	
	70 3,3'-Dichlorobenzidine	252	Compound Not Detected.					
	71 Chrysene	228	23.734	23.711	(1.002)	32862	0.85754	81.19
	72 bis(2-Ethylhexyl)phthalate	149	23.812	23.789	(0.960)	9404	0.35023	33.16
*	134 Di-n-octylphthalate-d4	153	24.795	24.772	(1.000)	203344	4.00000	
	73 Di-n-octylphthalate	149	Compound Not Detected.					
	74 Benzo(b)fluoranthene	252	25.484	25.414	(0.976)	47595	1.20207	113.8
	75 Benzo(k)fluoranthene	252	25.484	25.414	(0.976)	47595	1.11269	105.4
	76 Benzo(a)pyrene	252	26.011	25.964	(0.996)	19676	0.57461	54.41(H)
*	77 Perylene-d12	264	26.111	26.065	(1.000)	136607	4.00000	
	78 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
	79 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	80 Benzo(g,h,i)perylene	276	Compound Not Detected.					
	90 N-Nitrosodimethylamine	74	Compound Not Detected.					
	91 Aniline	93	Compound Not Detected.					
	93 Benzidine	184	Compound Not Detected.					
	103 Pyridine	79	Compound Not Detected.					
	105 1-methylnaphthalene	142	Compound Not Detected.					
	111 Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					
	187 Total Benzofluoranthenes	252	25.484	25.453	(0.976)	46284	1.18755	112.4
	99 Perylene	252	Compound Not Detected.					
	98 Retene	219	Compound Not Detected.					
	120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

QC Flag Legend

H - Operator selected an alternate compound hit.

Report Date: 18-Feb-2013 11:08

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: wc32e.d
Lab Smp Id: WC32E
Analysis Type: SV
Quant Type: ISTD
Operator: VTS/YZ
Method File: /chem1/nt10.i/20130215.b/ABN.m
Misc Info: 13-2428

Calibration Date: 15-FEB-2013
Calibration Time: 11:20
Client Smp ID: SG-05-0-10-01311
Level: LOW
Sample Type: Sediment

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	46623	23312	93246	31671	-32.07
27 Naphthalene-d8	176978	88489	353956	113372	-35.94
42 Acenaphthene-d10	110872	55436	221744	70543	-36.37
59 Phenanthrene-d10	188290	94145	376580	118876	-36.87
69 Chrysene-d12	213681	106840	427362	151629	-29.04
134 Di-n-octylphthala	264159	132080	528318	203344	-23.02
77 Perylene-d12	208584	104292	417168	136607	-34.51

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.75	8.25	9.25	8.76	0.09
27 Naphthalene-d8	11.40	10.90	11.90	11.40	0.07
42 Acenaphthene-d10	15.28	14.78	15.78	15.29	0.05
59 Phenanthrene-d10	18.56	18.06	19.06	18.57	0.08
69 Chrysene-d12	23.66	23.16	24.16	23.70	0.13
134 Di-n-octylphthala	24.77	24.27	25.27	24.79	0.09
77 Perylene-d12	26.06	25.56	26.56	26.11	0.18

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 18-Feb-2013 11:08

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd-Snider
Sample Matrix: SOLID
Lab Smp Id: WC32E
Level: LOW
Data Type: MS DATA
SpikeList File: SHORTPSDDA.spk
Sublist File: PSDDAICAL.sub
Method File: /chem1/nt10.i/20130215.b/ABN.m
Misc Info: 13-2428

Client SDG: WC32
Fraction: SV
Client Smp ID: SG-05-0-10-013113
Operator: VTS/YZ
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 1 2-Fluorophenol	710.1	418.4	58.92	30-160
$ 2 Phenol-d5	710.1	389.1	54.80	30-160
$ 5 2-Chlorophenol-d4	710.1	441.8	62.21	30-160
$ 10 1,2-Dichlorobenzen	473.4	355.5	75.10	30-160
$ 18 Nitrobenzene-d5	473.4	356.2	75.24	30-160
$ 36 2-Fluorobiphenyl	473.4	361.7	76.39	30-160
$ 55 2,4,6-Tribromophen	710.1	526.1	74.09	30-160
$ 66 Terphenyl-d14	473.4	427.5	90.29	30-160

Data File: /chem1/nt10.i/20130215.b/wc32e.d

Date : 15-FEB-2013 21:04

Client ID: SG-05-0-10-013113

Sample Info: WC32E

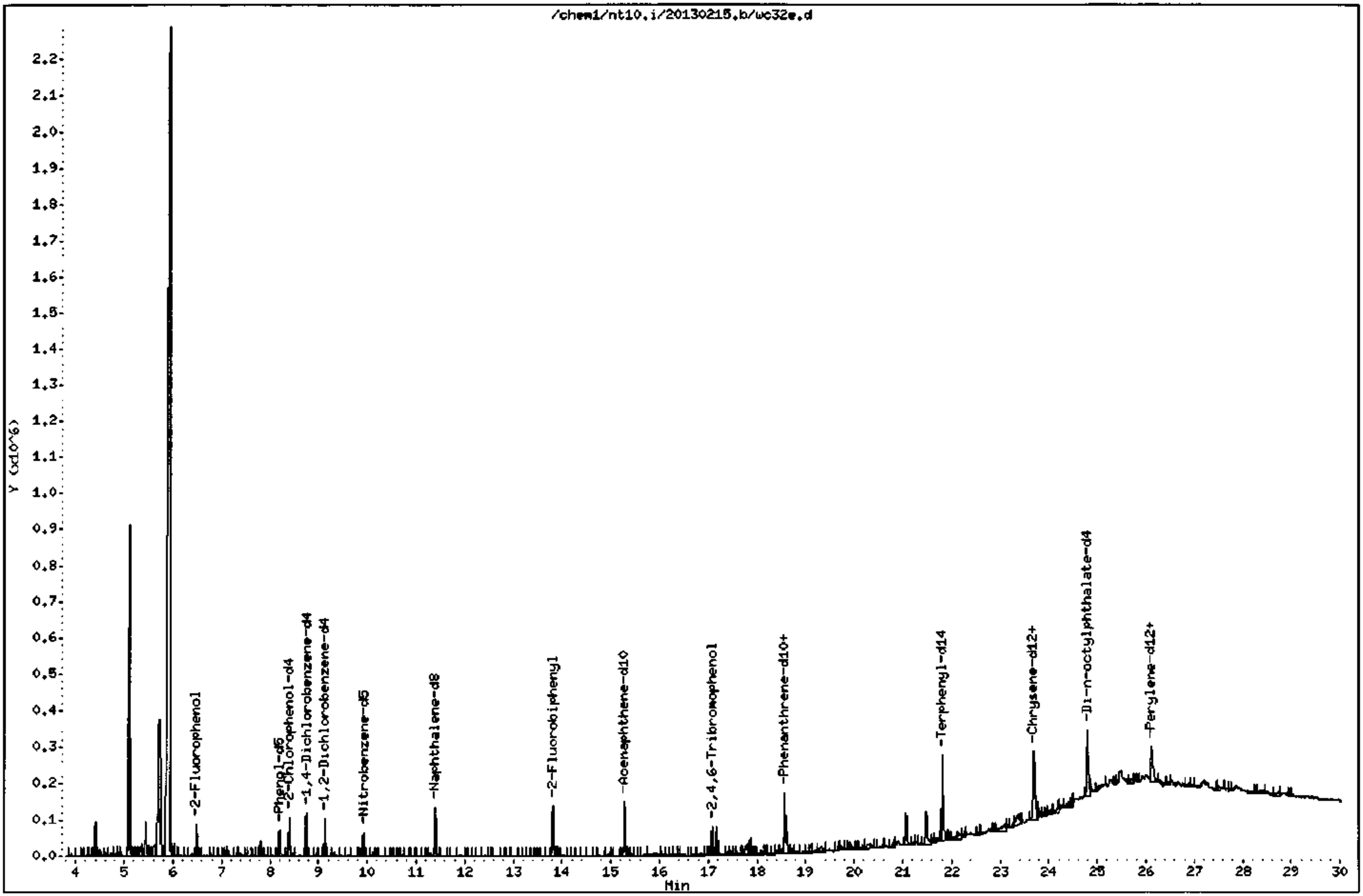
Volume Injected (uL): 1.0

Column phase: ZB-5msi

Instrument: nt10.i

Operator: VTS/YZ

Column diameter: 0.25



Data File: /chem1/nt10.i/20130215.b/wc32e.d

Date : 15-FEB-2013 21:04

Client ID: SG-05-0-10-013113

Instrument: nt10.i

Sample Info: WC32E

Volume Injected (uL): 1.0

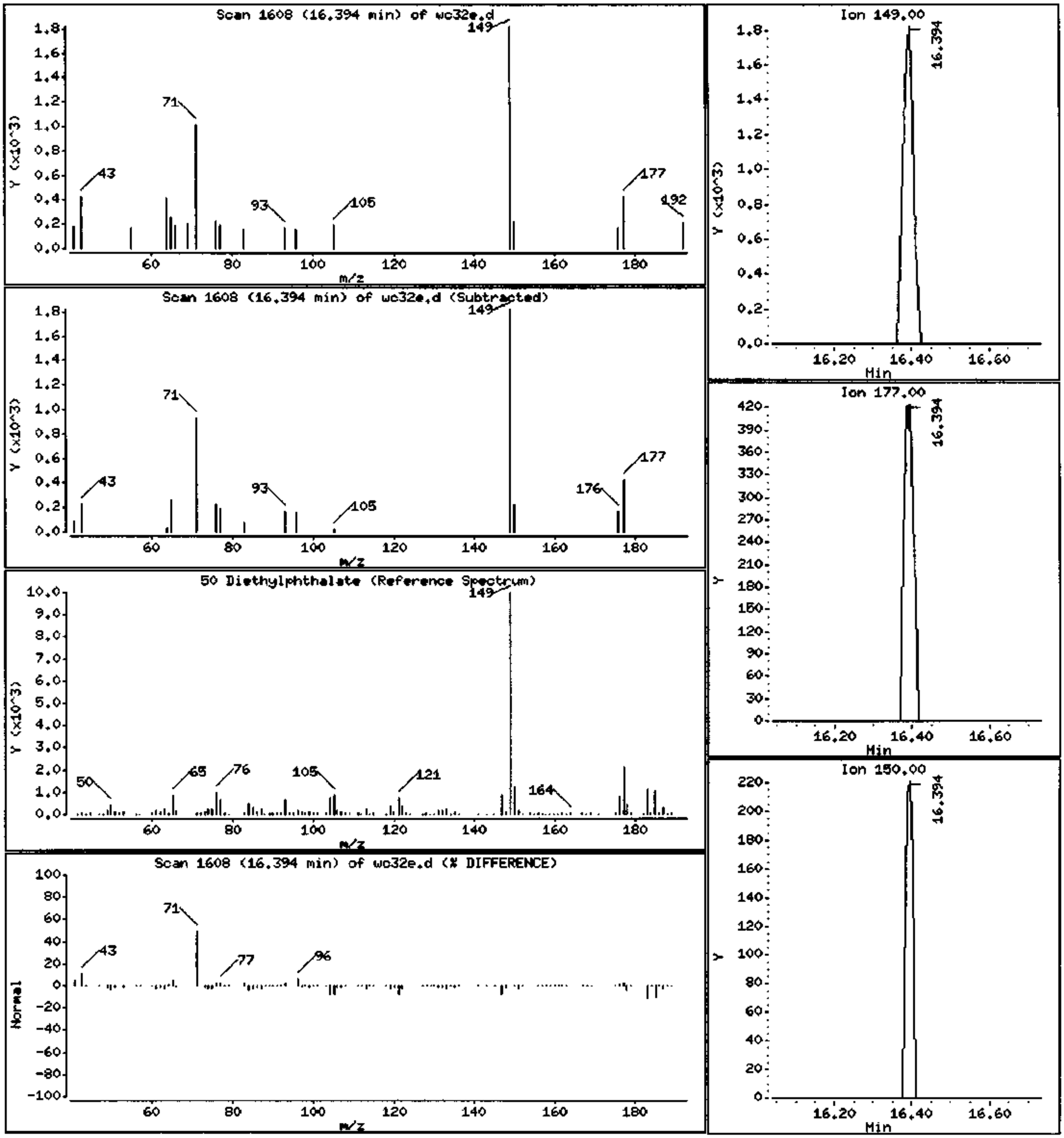
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

50 Diethylphthalate

Concentration: 13.91 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32e.d

Date : 15-FEB-2013 21:04

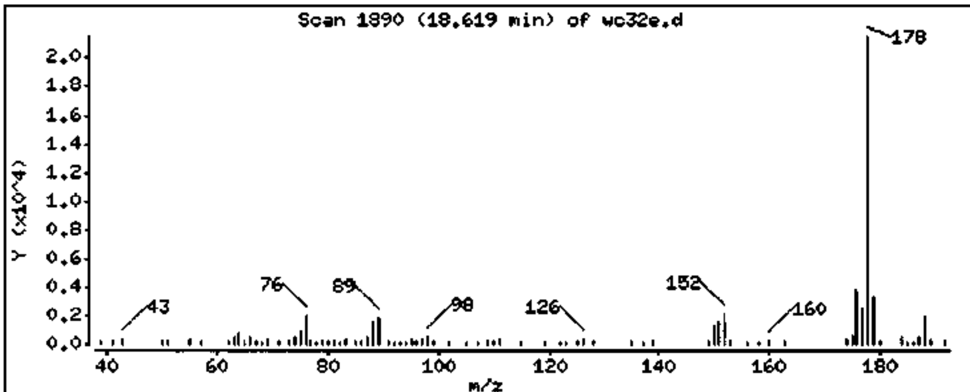
Client ID: SG-05-0-10-013113 | Instrument: nt10.i

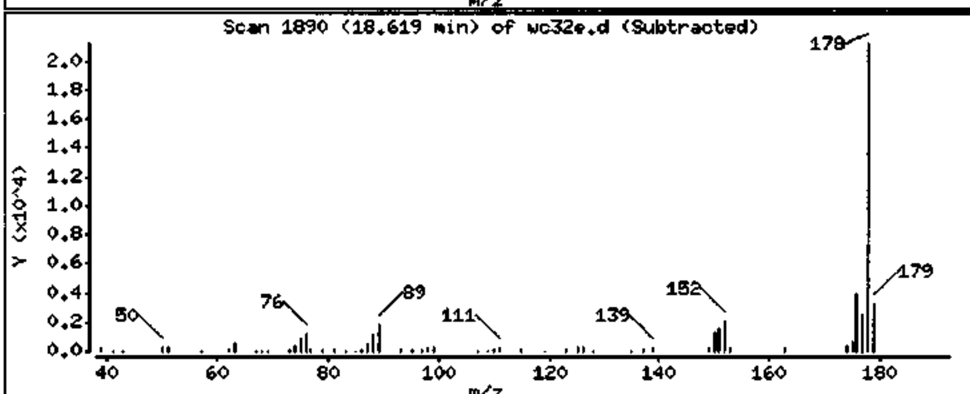
Sample Info: WC32E

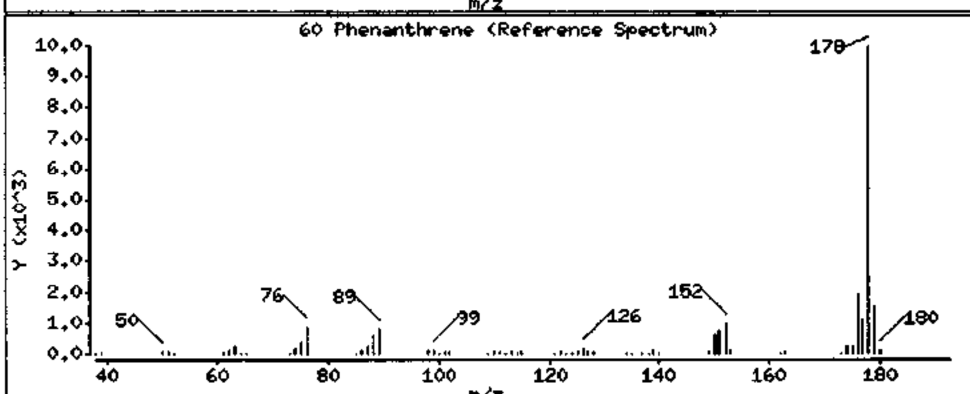
Volume Injected (uL): 1.0 | Operator: VTS/YZ

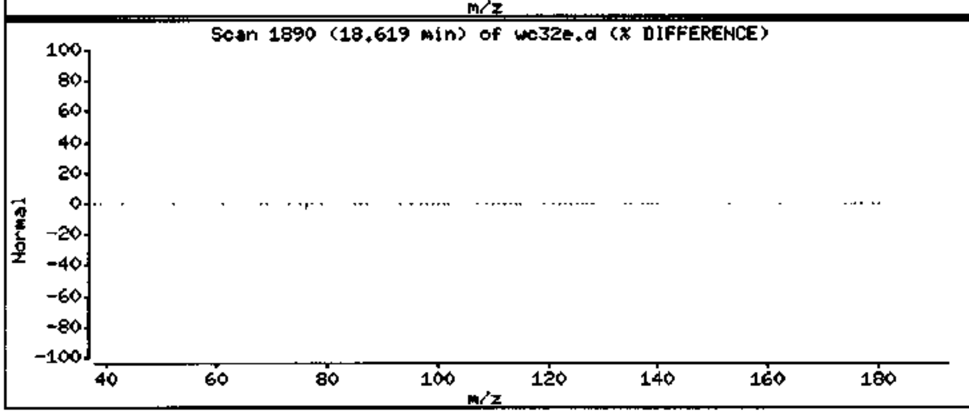
Column phase: ZB-5msi | Column diameter: 0.25

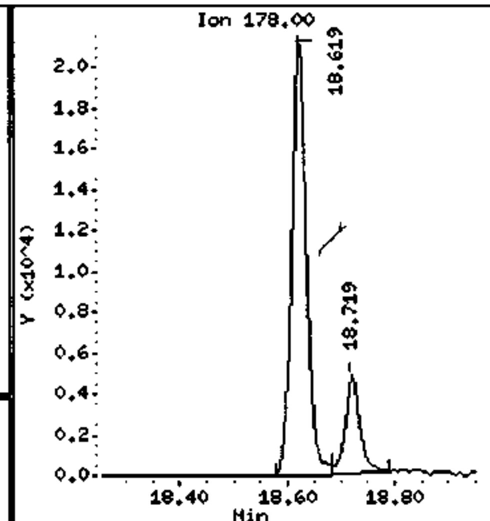
60 Phenanthrene | Concentration: 123.1 ug/kg

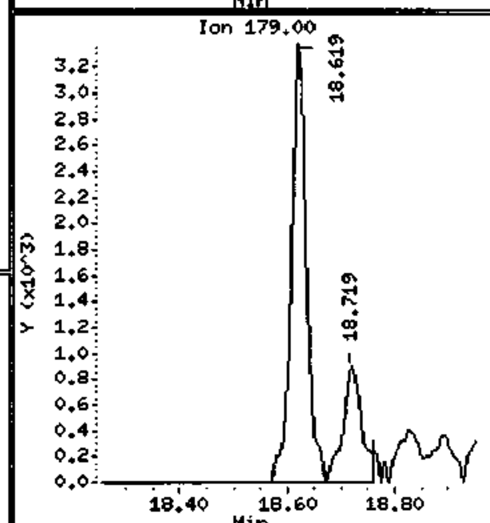


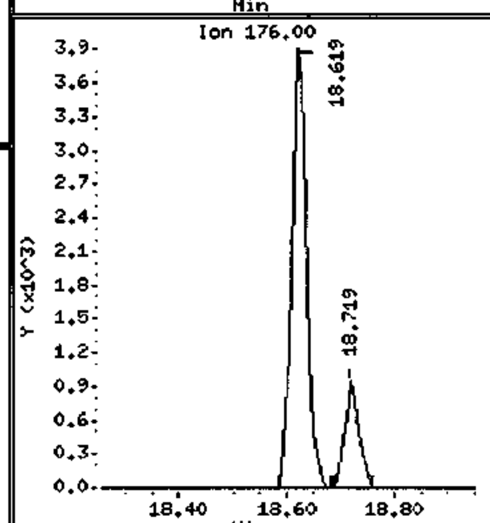












Data File: /chem1/nt10.i/20130215.b/wc32e.d

Date : 15-FEB-2013 21:04

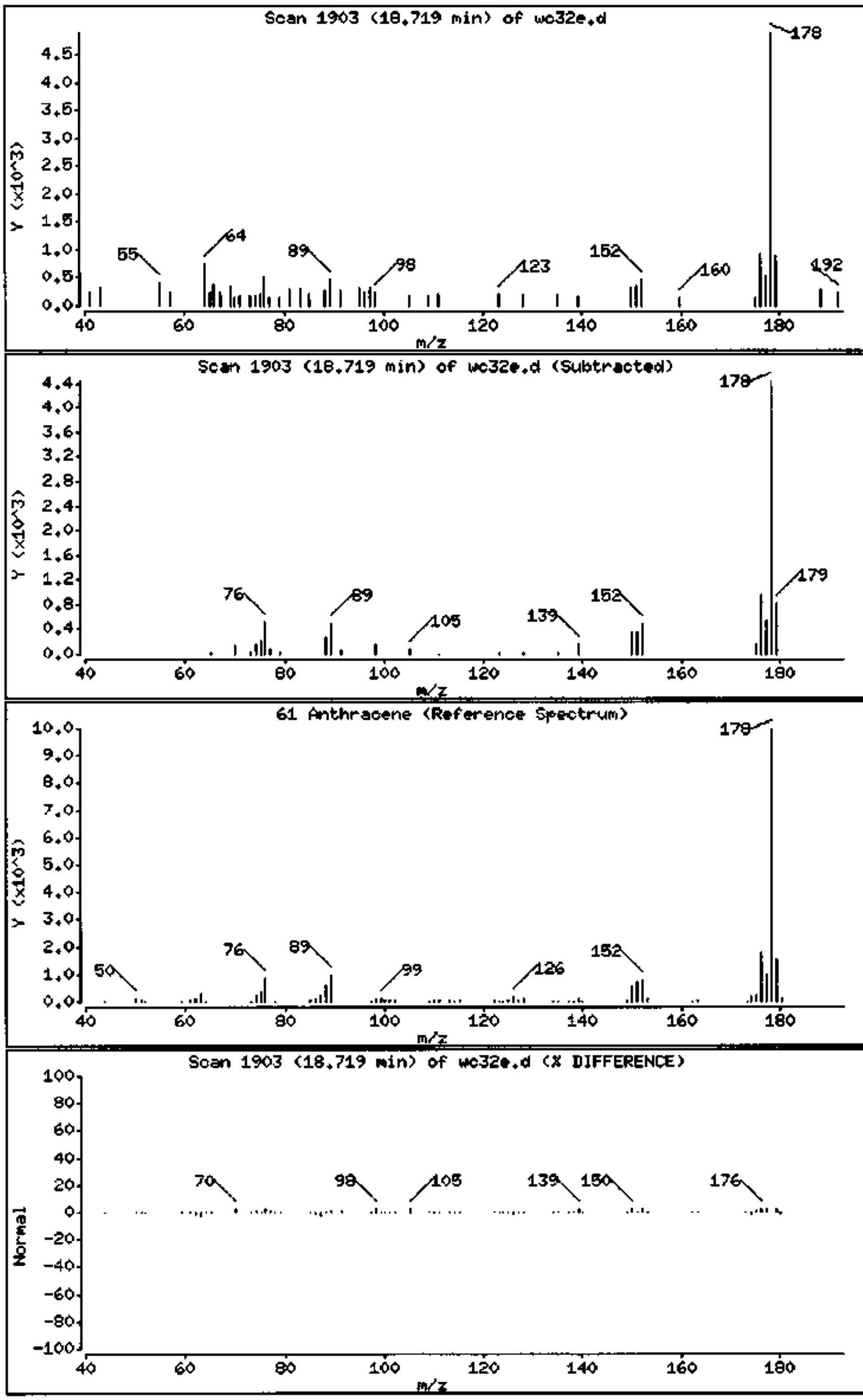
Client ID: SG-05-0-10-013113 Instrument: nt10.i

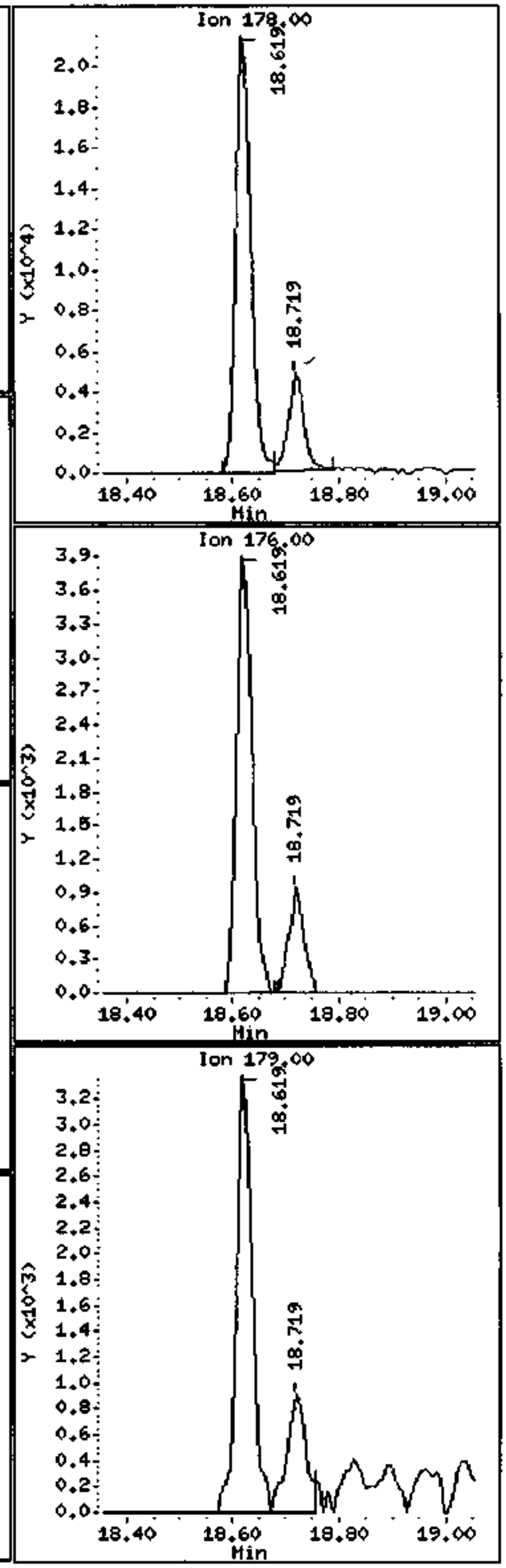
Sample Info: WC32E

Volume Injected (uL): 1.0 Operator: VTS/YZ

Column phase: ZB-5msi Column diameter: 0.25

61 Anthracene Concentration: 28.84 ug/kg





Data File: /chem1/nt10.i/20130215.b/wc32e.d

Date : 15-FEB-2013 21:04

Client ID: SG-05-0-10-013113

Instrument: nt10.i

Sample Info: WC32E

Volume Injected (uL): 1.0

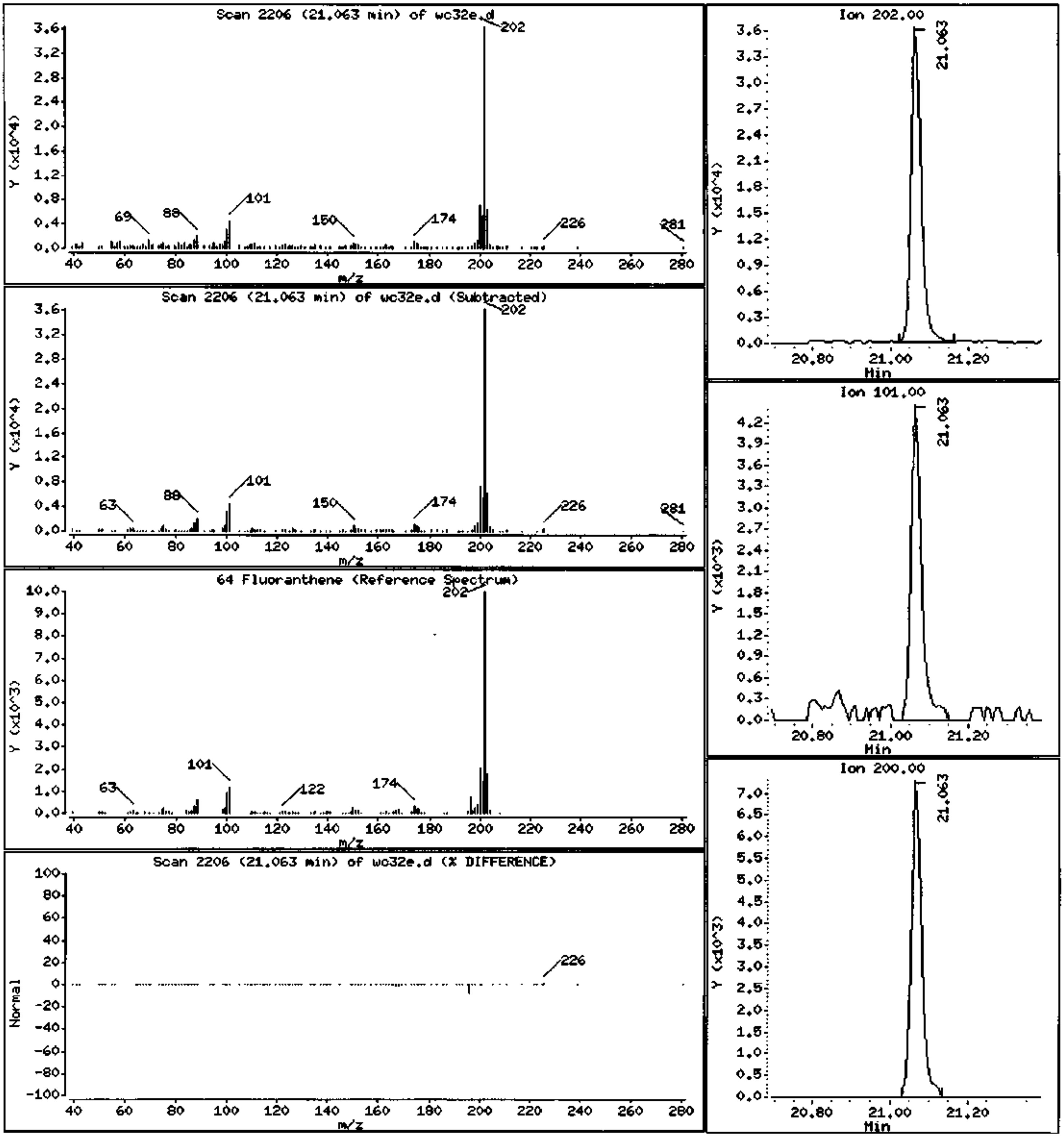
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

64 Fluoranthene

Concentration: 177.4 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32e.d

Date : 15-FEB-2013 21:04

Client ID: SG-05-0-10-013113

Instrument: nt10.i

Sample Info: WC32E

Volume Injected (uL): 1.0

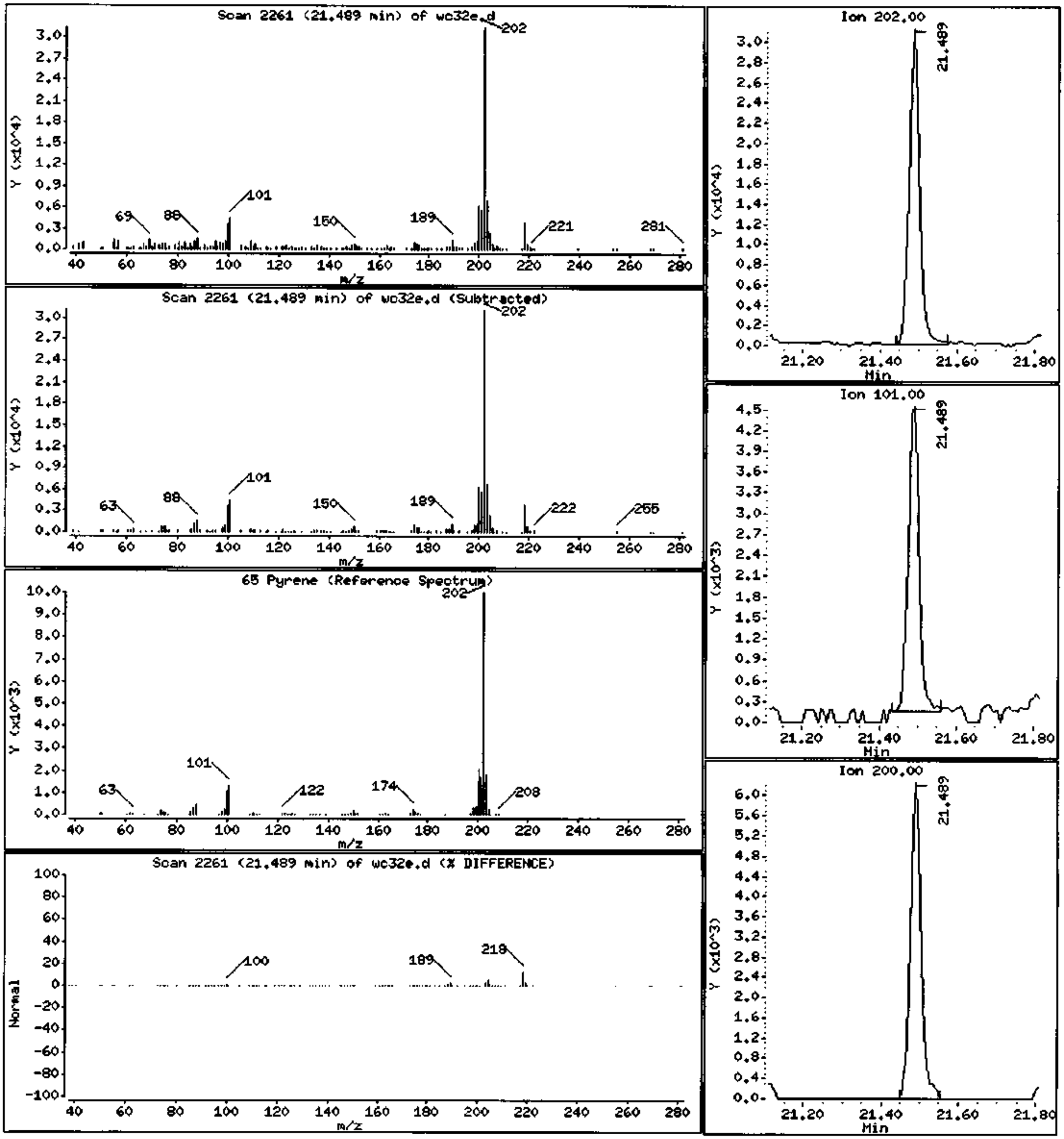
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

65 Pyrene

Concentration: 128.1 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32e.d

Date : 15-FEB-2013 21:04

Client ID: SG-05-0-10-013113

Instrument: nt10.i

Sample Info: WC32E

Volume Injected (uL): 1.0

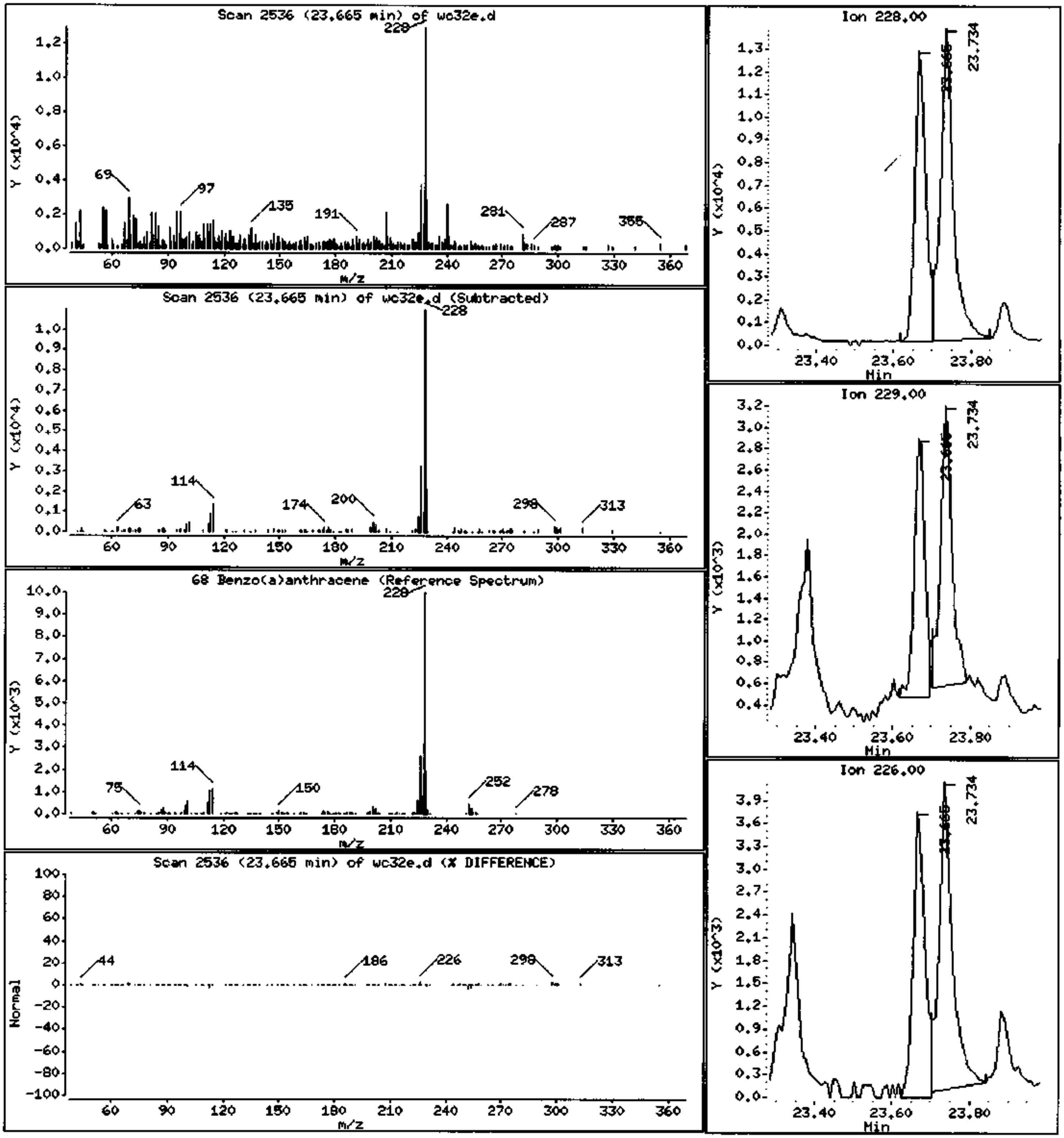
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

68 Benzo(a)anthracene

Concentration: 59.83 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32e.d

Date : 15-FEB-2013 21:04

Client ID: SG-05-0-10-013113

Instrument: nt10.i

Sample Info: WC32E

Volume Injected (uL): 1.0

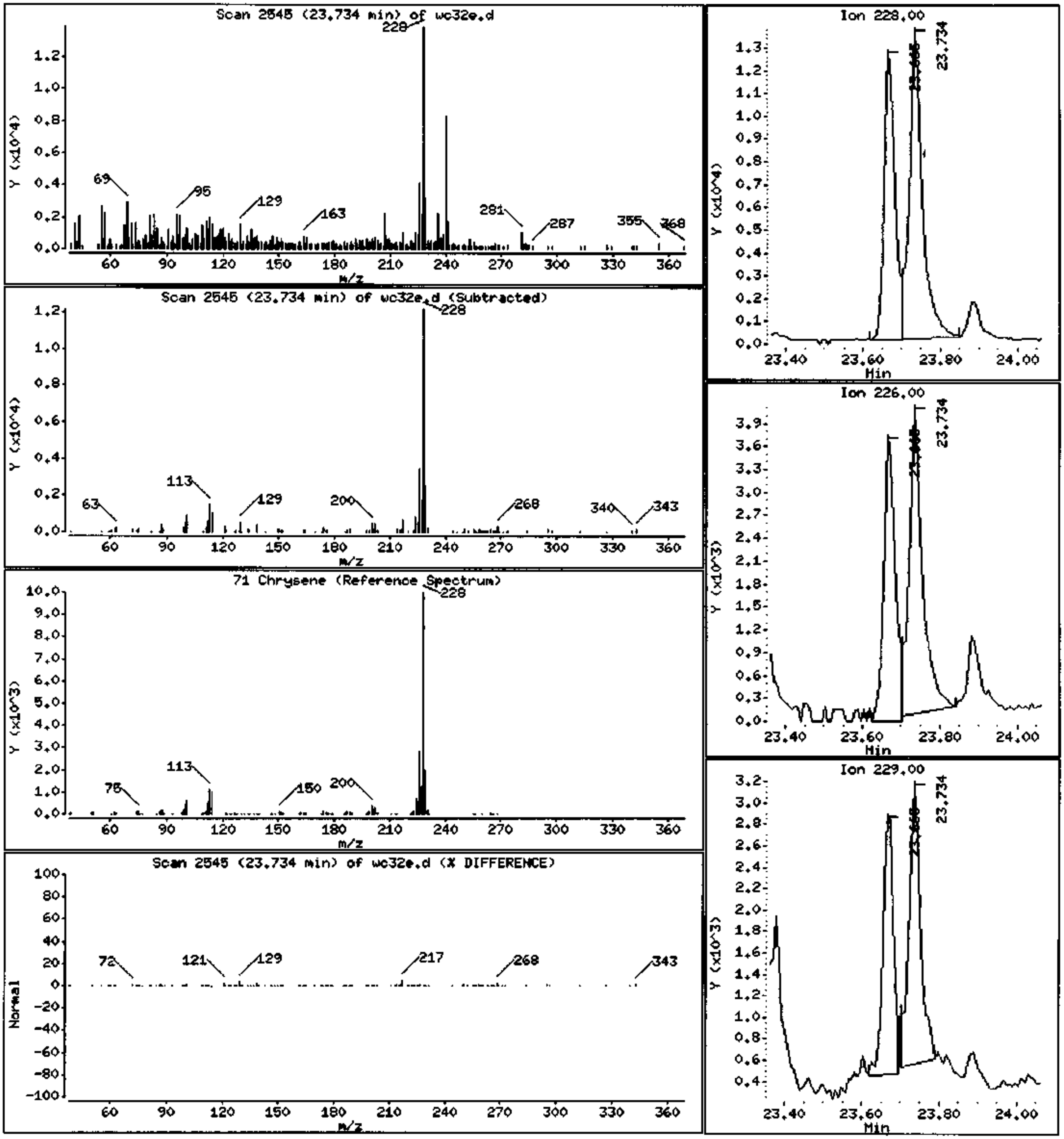
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

71 Chrysene

Concentration: 81.19 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32e.d

Date : 15-FEB-2013 21:04

Client ID: SG-05-0-10-013113

Instrument: nt10.i

Sample Info: WC32E

Volume Injected (uL): 1.0

Operator: VTS/YZ

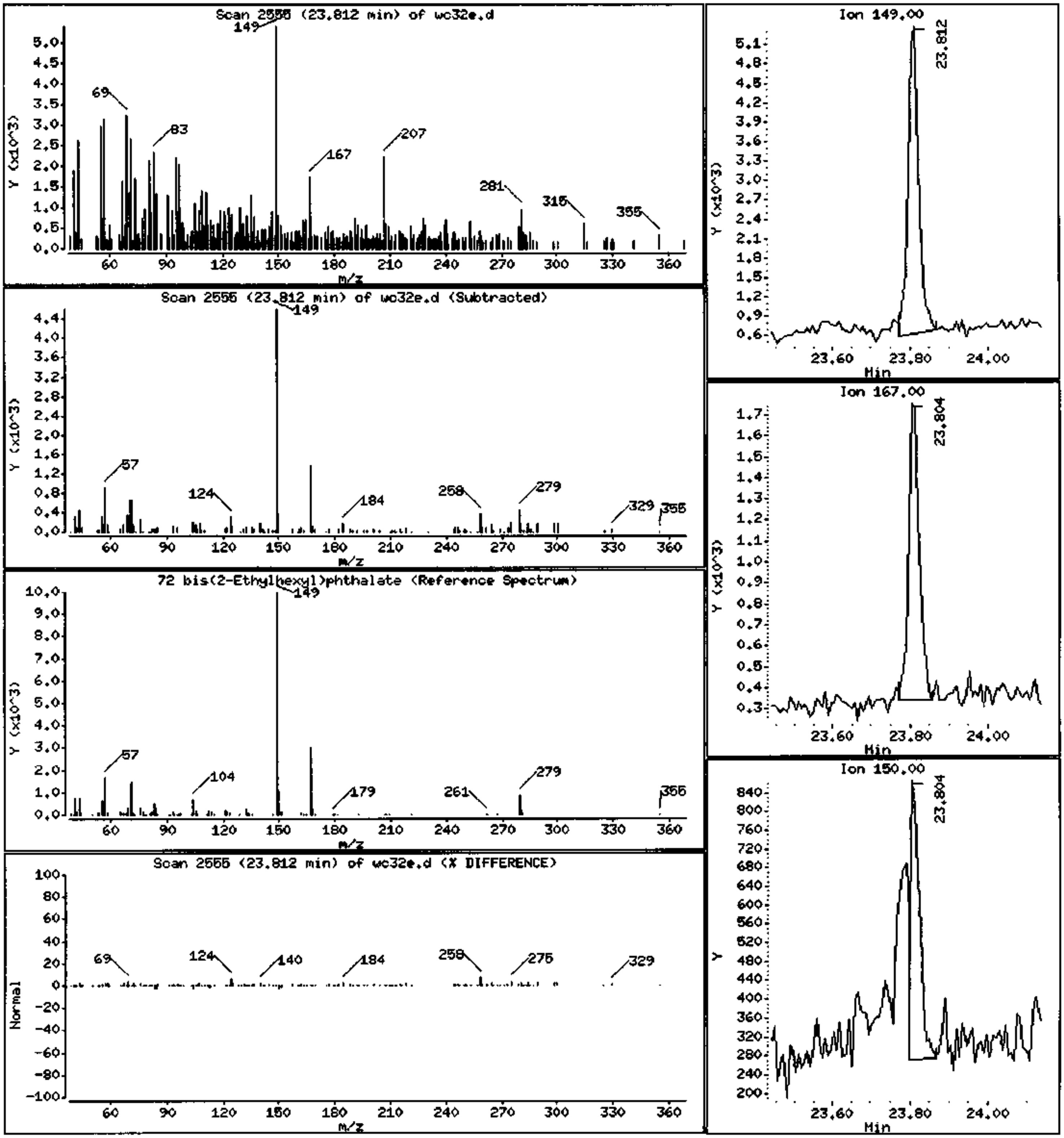
Column phase: ZB-5ms1

Column diameter: 0.25

(B)

72 bis(2-Ethylhexyl)phthalate

Concentration: 33.16 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32e.d

Date : 15-FEB-2013 21:04

Client ID: SG-05-0-10-013113

Instrument: nt10.i

Sample Info: WC32E

Volume Injected (uL): 1.0

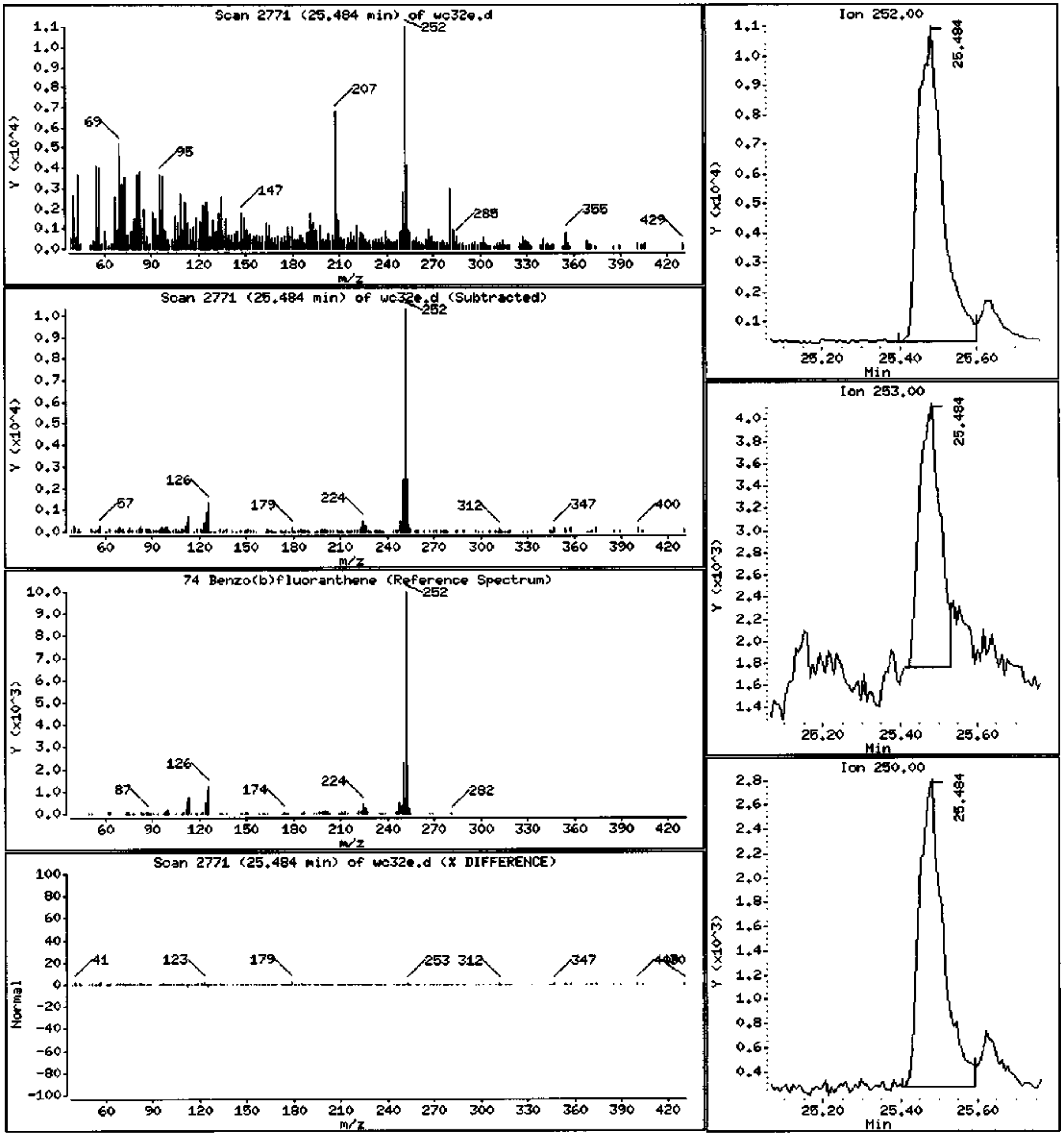
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

74 Benzo(b)fluoranthene

Concentration: 113.8 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32e.d

Page 17

Date : 15-FEB-2013 21:04

Client ID: SG-05-0-10-013113

Instrument: nt10.i

Sample Info: WC32E

Volume Injected (uL): 1.0

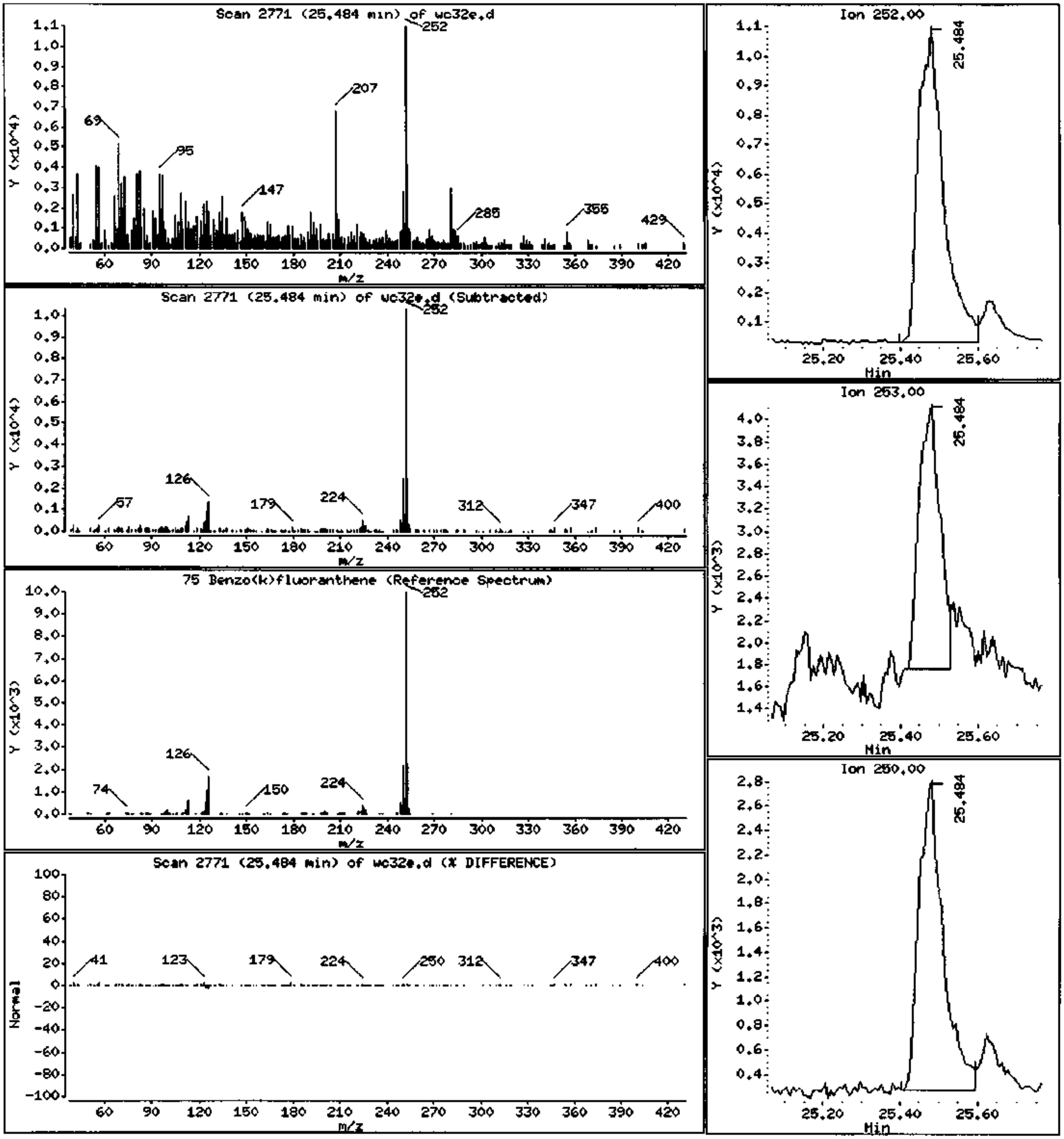
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

75 Benzo(k)fluoranthene

Concentration: 105.4 ug/kg



WC32 : 00835

Data File: /chem1/nt10.i/20130215.b/wc32e.d

Date : 15-FEB-2013 21:04

Client ID: SG-05-0-10-013113

Instrument: nt10.i

Sample Info: WC32E

Volume Injected (uL): 1.0

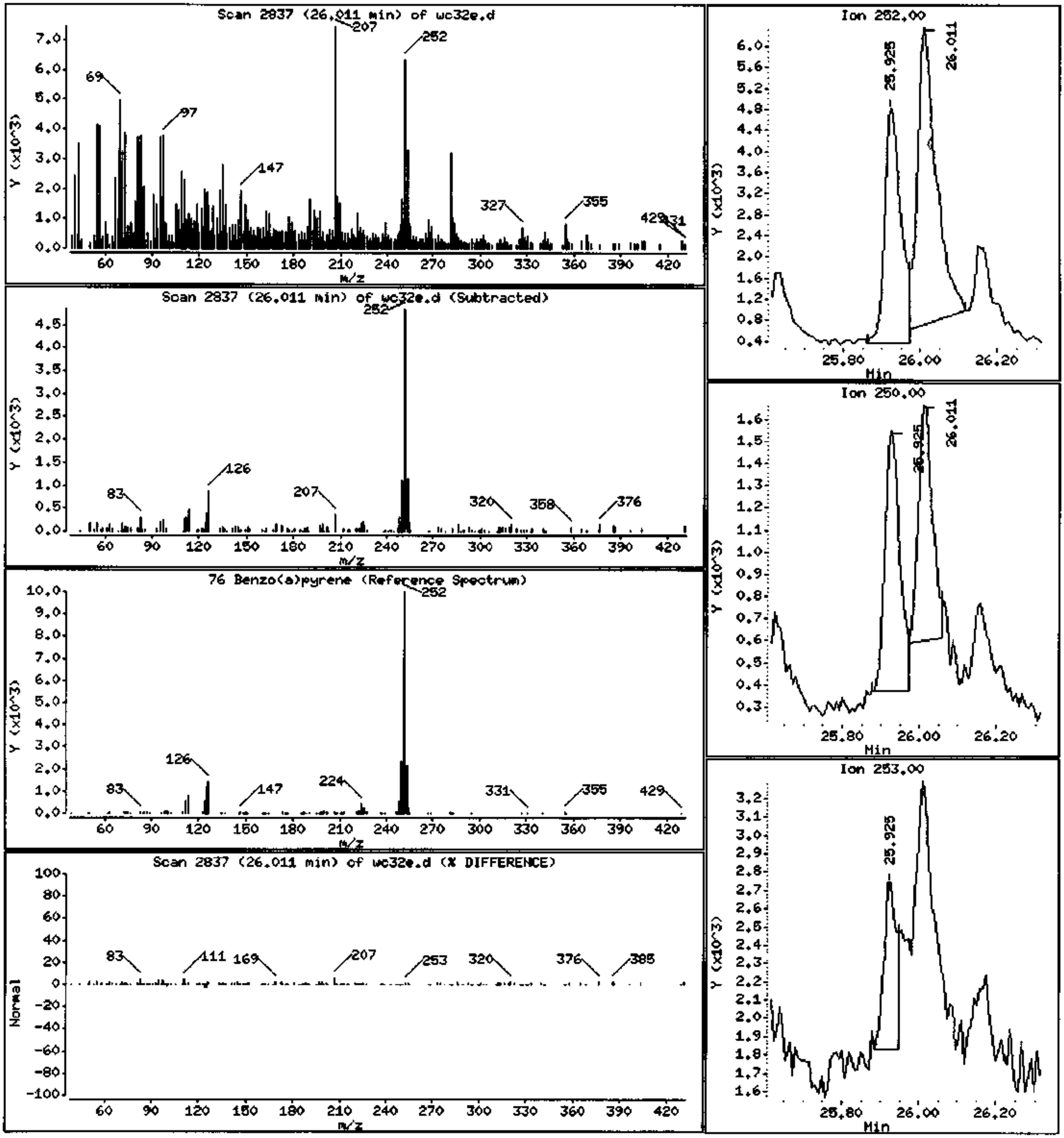
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

76 Benzo(a)pyrene

Concentration: 54.41 ug/kg



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Date : 15-FEB-2013 21:04

Client ID: SG-05-0-10-013113

Instrument: nt10.i

Sample Info: WC32E

Volume Injected (uL): 1.0

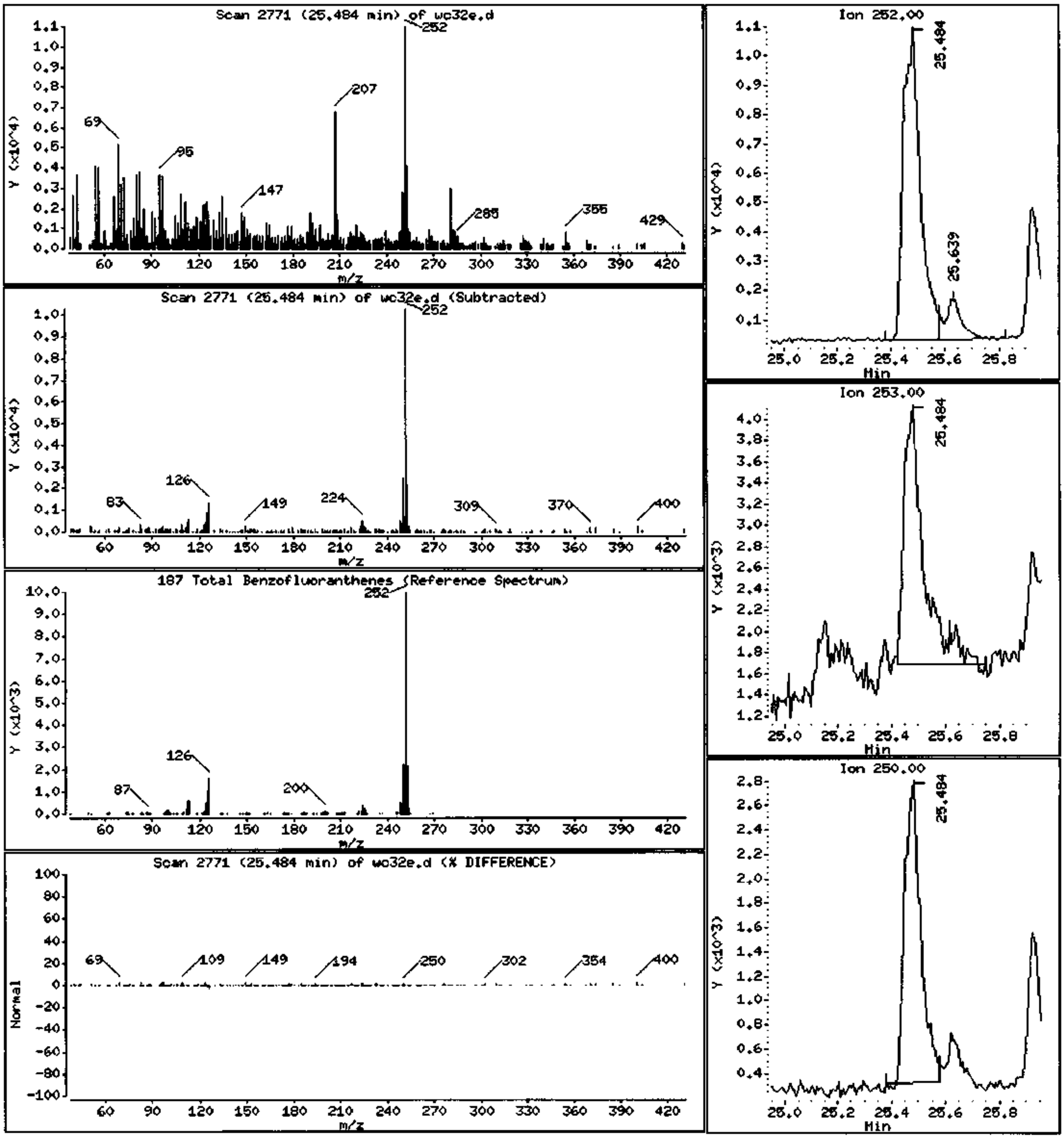
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

187 Total Benzofluoranthenes

Concentration: 112.4 ug/kg



CO-ELUTION SUMMARY FOR FILE - wc32e.d

Lab ID: WC32E, Method: ABN.m, Instrument: nt10.i, Date: 15-FEB-2013

RT	CO-ELUTION COMPOUNDS
25.484	Benzo(k)fluoranthene and Benzo(b)fluoranthene

YZ 2/19/13

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt10.i/20130215.b/wc32f.d
Lab Smp Id: WC32F Client Smp ID: SG-95-0-10-013113
Inj Date : 15-FEB-2013 21:40
Operator : VTS/YZ Inst ID: nt10.i
Smp Info : WC32F
Misc Info : 13-2429
Comment : 1ul Injection
Method : /chem1/nt10.i/20130215.b/ABN.m
Meth Date : 15-Feb-2013 14:06 van Quant Type: ISTD
Cal Date : 25-JAN-2013 17:16 Cal File: ic0125h.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDAICAL.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Ws	11.40000	Weight of sample extracted (g)
M	6.50000	% Moisture

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
$	1 2-Fluorophenol	112	6.482	6.459	(0.740)	51611	5.24594	492.2
$	2 Phenol-d5	99	8.190	8.183	(0.935)	57920	4.74431	445.1
	3 Phenol	94	Compound Not Detected.					
$	5 2-Chlorophenol-d4	132	8.399	8.391	(0.959)	57113	5.40286	506.9
	4 Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
	6 2-Chlorophenol	128	Compound Not Detected.					
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	8.755	8.747	(1.000)	30769	4.00000	
	9 1,4-Dichlorobenzene	146	Compound Not Detected.					
$	10 1,2-Dichlorobenzene-d4	152	9.135	9.128	(1.043)	33910	4.36514	409.5
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	108	Compound Not Detected.					
	14 2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.					
	13 2-Methylphenol	108	Compound Not Detected.					

							CONCENTRATIONS	
		QUANT SIG					ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/kg)
	17 Hexachloroethane	117	Compound Not Detected.					
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	15 4-Methylphenol	108	Compound Not Detected.					
$	18 Nitrobenzene-d5	82	9.927	9.919	(0.871)	43685	4.33690	406.9
	19 Nitrobenzene	77	Compound Not Detected.					
	20 Isophorone	82	Compound Not Detected.					
	21 2-Nitrophenol	139	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	Compound Not Detected.					
	23 Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
	24 Benzoic acid	105	Compound Not Detected.					
	25 2,4-Dichlorophenol	162	Compound Not Detected.					
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	11.397	11.397	(1.000)	109136	4.00000	
	28 Naphthalene	128	11.443	11.435	(1.004)	53677	1.89016	177.3
	29 4-Chloroaniline	127	Compound Not Detected.					
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	31 4-Chloro-3-methylphenol	107	Compound Not Detected.					
	32 2-Methylnaphthalene	142	12.951	12.944	(1.136)	21679	1.15624	108.5
	33 Hexachlorocyclopentadiene	237	Compound Not Detected.					
	34 2,4,6-Trichlorophenol	196	Compound Not Detected.					
	35 2,4,5-Trichlorophenol	196	Compound Not Detected.					
$	36 2-Fluorobiphenyl	172	13.810	13.803	(0.903)	109398	4.47100	419.5
	37 2-Chloronaphthalene	162	Compound Not Detected.					
	38 2-Nitroaniline	65	Compound Not Detected.					
	39 Dimethylphthalate	163	Compound Not Detected.					
	40 Acenaphthylene	152	14.948	14.941	(0.978)	5218	0.16241	15.24
	41 2,6-Dinitrotoluene	165	Compound Not Detected.					
*	42 Acenaphthene-d10	164	15.288	15.281	(1.000)	71323	4.00000	
	43 3-Nitroaniline	138	Compound Not Detected.					
	44 Acenaphthene	153	15.358	15.350	(1.005)	32800	1.66495	156.2
	45 2,4-Dinitrophenol	184	Compound Not Detected.					
	46 Dibenzofuran	168	15.721	15.706	(1.028)	49804	1.81777	170.5
	47 4-Nitrophenol	109	Compound Not Detected.					
	48 2,4-Dinitrotoluene	165	Compound Not Detected.					
	50 Diethylphthalate	149	Compound Not Detected.					
	49 Fluorene	166	16.487	16.479	(1.078)	58305	2.50537	235.0
	51 4-Chlorophenyl-phenylether	204	Compound Not Detected.					
	52 4-Nitroaniline	138	Compound Not Detected.					
	53 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
	54 N-Nitrosodiphenylamine	169	Compound Not Detected.					
$	55 2,4,6-Tribromophenol	330	17.081	17.065	(1.117)	29189	6.41304	601.7
	56 4-Bromophenyl-phenylether	248	Compound Not Detected.					
	57 Hexachlorobenzene	284	Compound Not Detected.					
	58 Pentachlorophenol	266	Compound Not Detected.					
*	59 Phenanthrene-d10	188	18.572	18.557	(1.000)	121405	4.00000	
	60 Phenanthrene	178	18.626	18.603	(1.003)	472803	14.6089	1371
	61 Anthracene	178	18.719	18.704	(1.008)	75140	2.30585	216.3

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
========================	====	==	======	======	========	=======	=======
62 Carbazole	167	19.106	19.083	(1.029)	40200	1.84700	173.3
63 Di-n-butylphthalate	149	Compound Not Detected.					
64 Fluoranthene	202	21.071	21.040	(1.135)	576714	15.4735	1452
65 Pyrene	202	21.489	21.466	(0.907)	472737	11.2971	1060
$ 66 Terphenyl-d14	244	21.814	21.791	(0.921)	146944	5.20769	488.6
67 Butylbenzylphthalate	149	Compound Not Detected.					
68 Benzo(a)anthracene	228	23.672	23.634	(0.999)	191854	4.68029	439.1
* 69 Chrysene-d12	240	23.695	23.665	(1.000)	146908	4.00000	
70 3,3'-Dichlorobenzidine	252	Compound Not Detected.					
71 Chrysene	228	23.734	23.711	(1.002)	206925	5.57328	522.9
72 bis(2-Ethylhexyl)phthalate	149	23.812	23.789	(0.960)	8639	0.31868	29.90
* 134 Di-n-octylphthalate-d4	153	24.795	24.772	(1.000)	205296	4.00000	
73 Di-n-octylphthalate	149	Compound Not Detected.					
74 Benzo(b)fluoranthene	252	25.484	25.414	(0.976)	336751	8.82493	827.9
75 Benzo(k)fluoranthene	252	25.484	25.414	(0.976)	336751	8.16872 NFA	766.4
76 Benzo(a)pyrene	252	26.018	25.964	(0.996)	170963	5.18052	486.0
* 77 Perylene-d12	264	26.119	26.065	(1.000)	131656	4.00000	
78 Indeno(1,2,3-cd)pyrene	276	28.383	28.282	(1.087)	52632	1.29326	121.3
79 Dibenzo(a,h)anthracene	278	28.383	28.290	(1.087)	19886	0.61706	57.89(M)
80 Benzo(g,h,i)perylene	276	29.020	28.927	(1.111)	24177	0.69241	64.96
90 N-Nitrosodimethylamine	74	Compound Not Detected.					
91 Aniline	93	Compound Not Detected.					
93 Benzidine	184	Compound Not Detected.					
103 Pyridine	79	Compound Not Detected.					
105 1-methylnaphthalene	142	13.183	13.176	(1.157)	16727	0.97258	91.25
111 Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					
187 Total Benzofluoranthenes	252	25.484	25.453	(0.976)	334025	8.89265	834.3
99 Perylene	252	26.158	26.111	(1.001)	55874	1.47322	138.2
98 Retene	219	Compound Not Detected.					
120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

Report Date: 18-Feb-2013 11:08

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: wc32f.d
Lab Smp Id: WC32F
Analysis Type: SV
Quant Type: ISTD
Operator: VTS/YZ
Method File: /chem1/nt10.i/20130215.b/ABN.m
Misc Info: 13-2429

Calibration Date: 15-FEB-2013
Calibration Time: 11:20
Client Smp ID: SG-95-0-10-01311
Level: LOW
Sample Type: Sediment

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	46623	23312	93246	30769	-34.00
27 Naphthalene-d8	176978	88489	353956	109136	-38.33
42 Acenaphthene-d10	110872	55436	221744	71323	-35.67
59 Phenanthrene-d10	188290	94145	376580	121405	-35.52
69 Chrysene-d12	213681	106840	427362	146908	-31.25
134 Di-n-octylphthala	264159	132080	528318	205296	-22.28
77 Perylene-d12	208584	104292	417168	131656	-36.88

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.75	8.25	9.25	8.75	0.09
27 Naphthalene-d8	11.40	10.90	11.90	11.40	0.00
42 Acenaphthene-d10	15.28	14.78	15.78	15.29	0.05
59 Phenanthrene-d10	18.56	18.06	19.06	18.57	0.08
69 Chrysene-d12	23.66	23.16	24.16	23.70	0.13
134 Di-n-octylphthala	24.77	24.27	25.27	24.79	0.09
77 Perylene-d12	26.06	25.56	26.56	26.12	0.21

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 18-Feb-2013 11:08

Analytical Resources, Inc.

RECOVERY REPORT

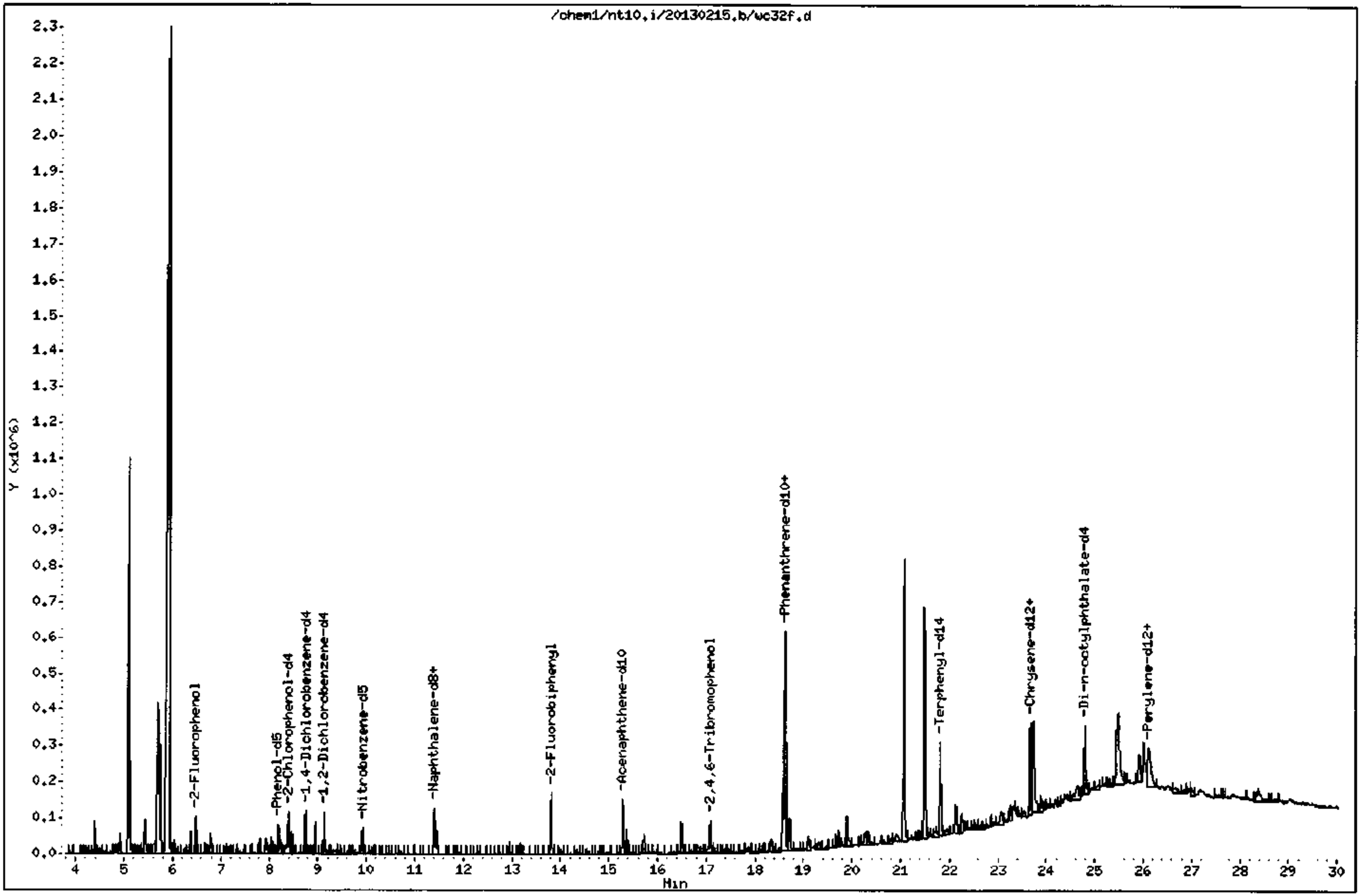
Client Name: Floyd-Snider
Sample Matrix: SOLID
Lab Smp Id: WC32F
Level: LOW
Data Type: MS DATA
SpikeList File: SHORTPSDDA.spk
Sublist File: PSDDAICAL.sub
Method File: /chem1/nt10.i/20130215.b/ABN.m
Misc Info: 13-2429

Client SDG: WC32
Fraction: SV
Client Smp ID: SG-95-0-10-013113
Operator: VTS/YZ
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 1 2-Fluorophenol	703.6	492.2	69.95	30-160
$ 2 Phenol-d5	703.6	445.1	63.26	30-160
$ 5 2-Chlorophenol-d4	703.6	506.9	72.04	30-160
$ 10 1,2-Dichlorobenzen	469.1	409.5	87.30	30-160
$ 18 Nitrobenzene-d5	469.1	406.9	86.74	30-160
$ 36 2-Fluorobiphenyl	469.1	419.5	89.42	30-160
$ 55 2,4,6-Tribromophen	703.6	601.7	85.51	30-160
$ 66 Terphenyl-d14	469.1	488.6	104.15	30-160

Data File: /chem1/nt10.i/20130215.b/wc32f.d
Date : 15-FEB-2013 21:40
Client ID: SG-95-0-10-013113
Sample Info: WC32F
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt10.i
Operator: VTS/YZ
Column diameter: 0.25



Data File: /chem1/nt10.i/20130215.b/wc32f.d

Date : 15-FEB-2013 21:40

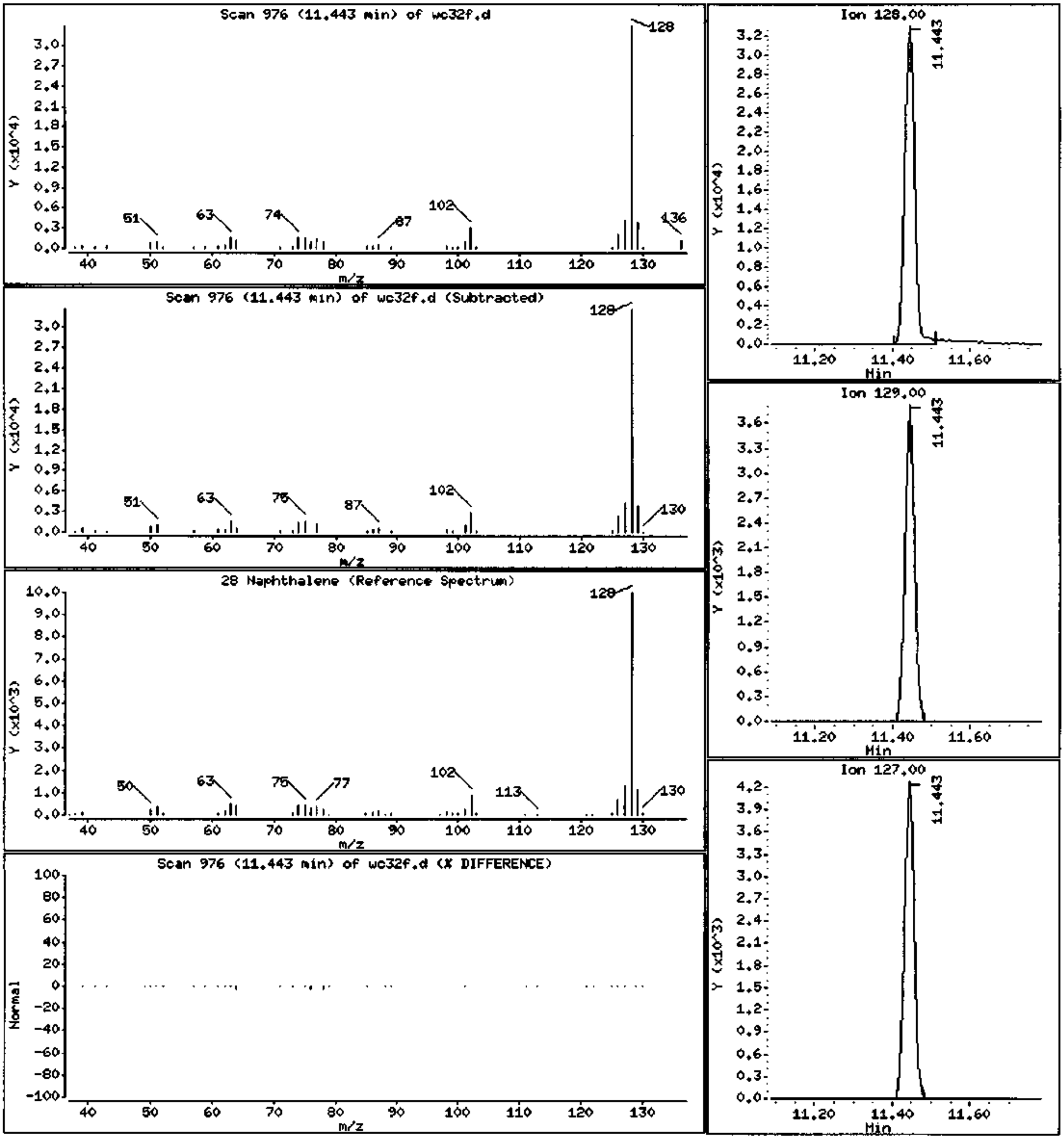
Client ID: SG-95-0-10-013113 | Instrument: nt10.i

Sample Info: WC32F

Volume Injected (uL): 1.0 | Operator: VTS/YZ

Column phase: ZB-5ms | Column diameter: 0.25

28 Naphthalene | Concentration: 177.3 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32f.d

Date : 15-FEB-2013 21:40

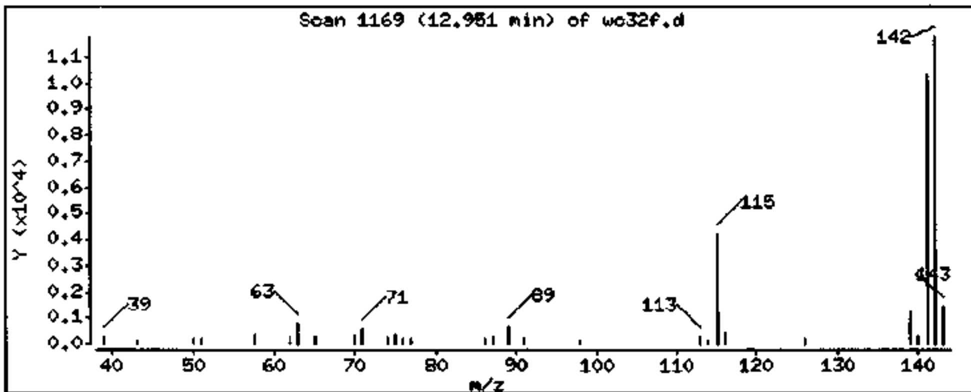
Client ID: SG-95-0-10-013113 | Instrument: nt10.i

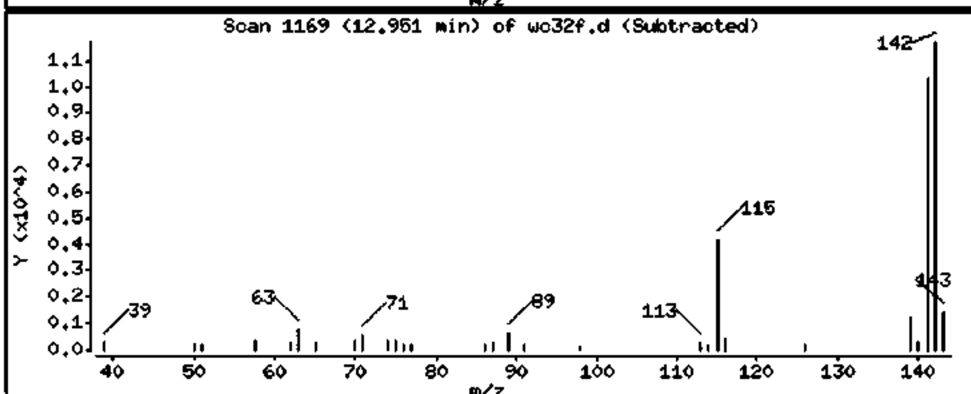
Sample Info: WC32F

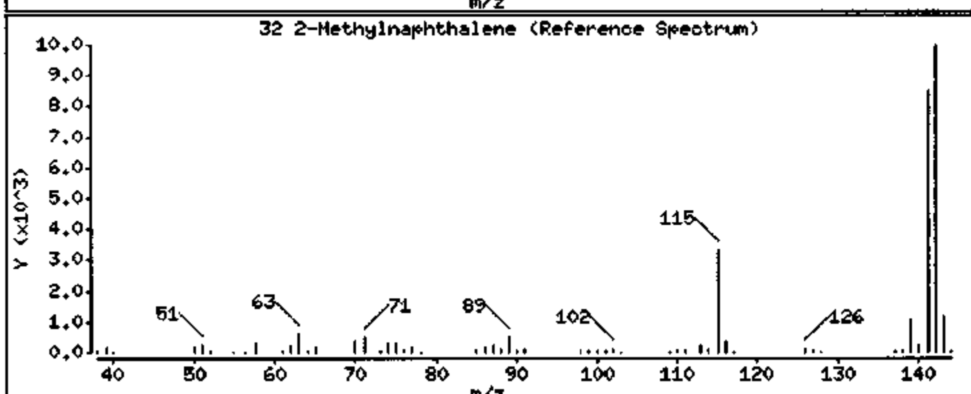
Volume Injected (uL): 1.0 | Operator: VTS/YZ

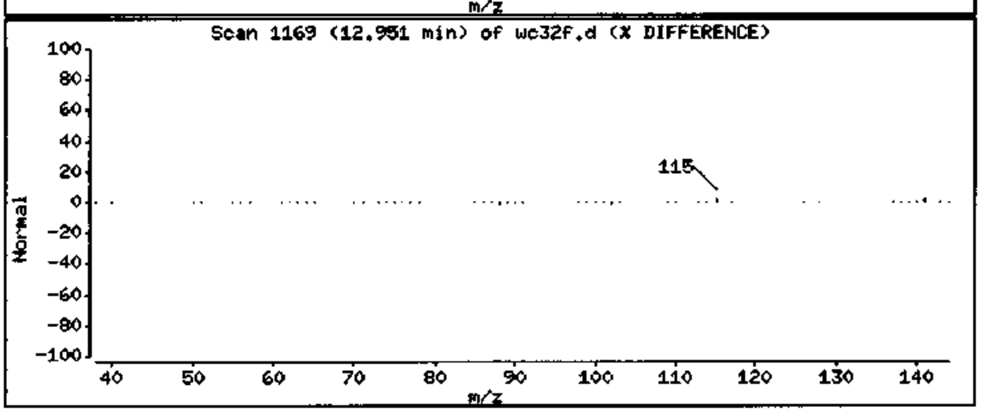
Column phase: ZB-5msi | Column diameter: 0.25

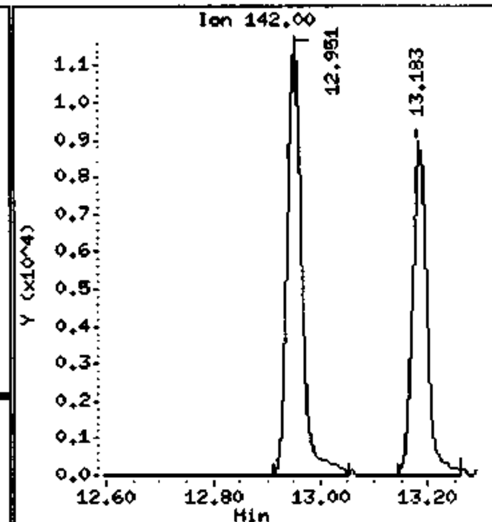
32 2-Methylnaphthalene | Concentration: 108.5 ug/kg

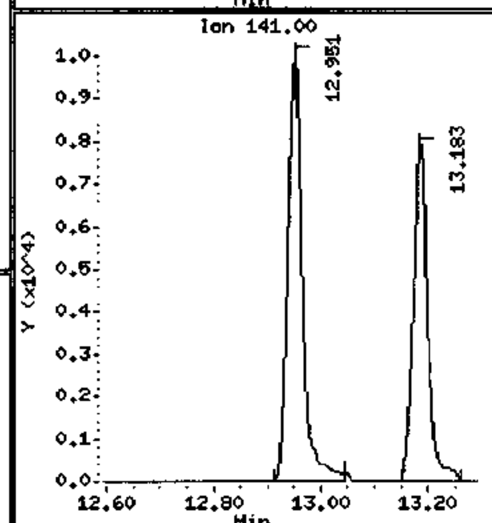












Data File: /chem1/nt10.i/20130215.b/wc32f.d

Date : 15-FEB-2013 21:40

Client ID: SG-95-0-10-013113

Instrument: nt10.i

Sample Info: WC32F

Volume Injected (uL): 1.0

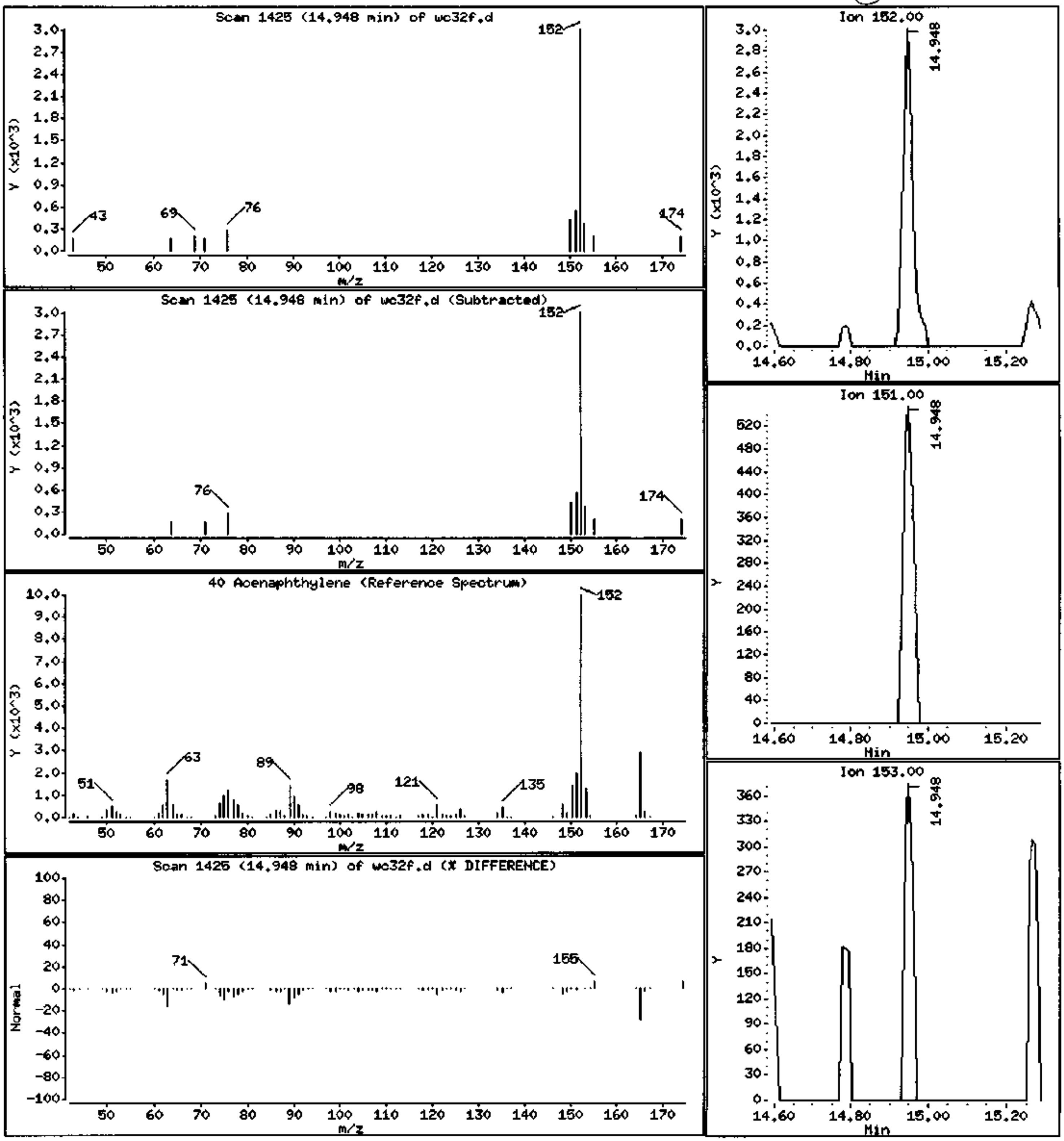
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

40 Acenaphthylene

Concentration: 15.24 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32f.d

Date : 15-FEB-2013 21:40

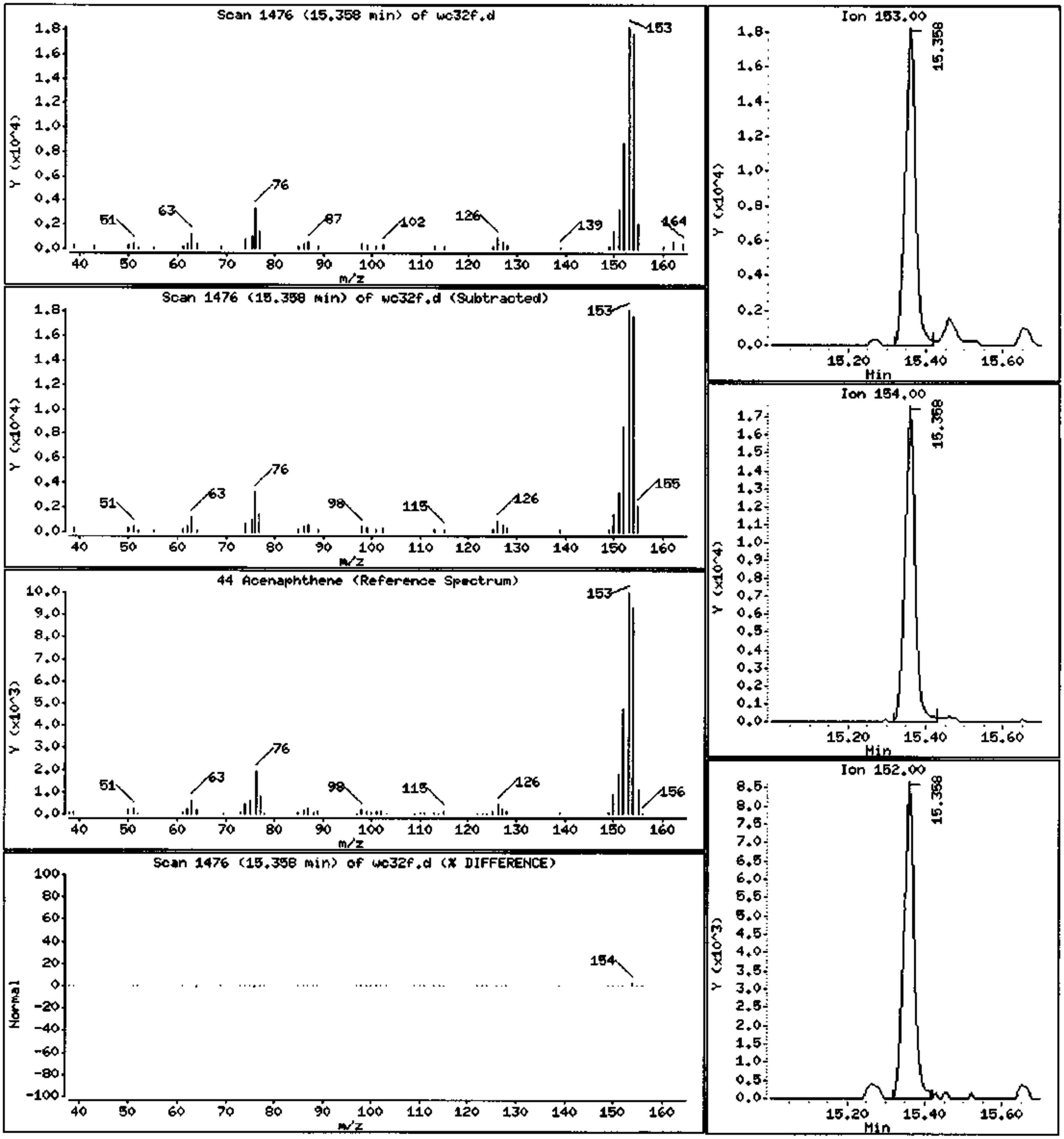
Client ID: SC-95-0-10-013113 Instrument: nt10.i

Sample Info: WC32F

Volume Injected (uL): 1.0 Operator: VTS/YZ

Column phase: ZB-5msi Column diameter: 0.25

44 Acenaphthene Concentration: 156.2 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32f.d

Date : 15-FEB-2013 21:40

Client ID: SG-95-0-10-013113

Instrument: nt10.i

Sample Info: WC32F

Volume Injected (uL): 1.0

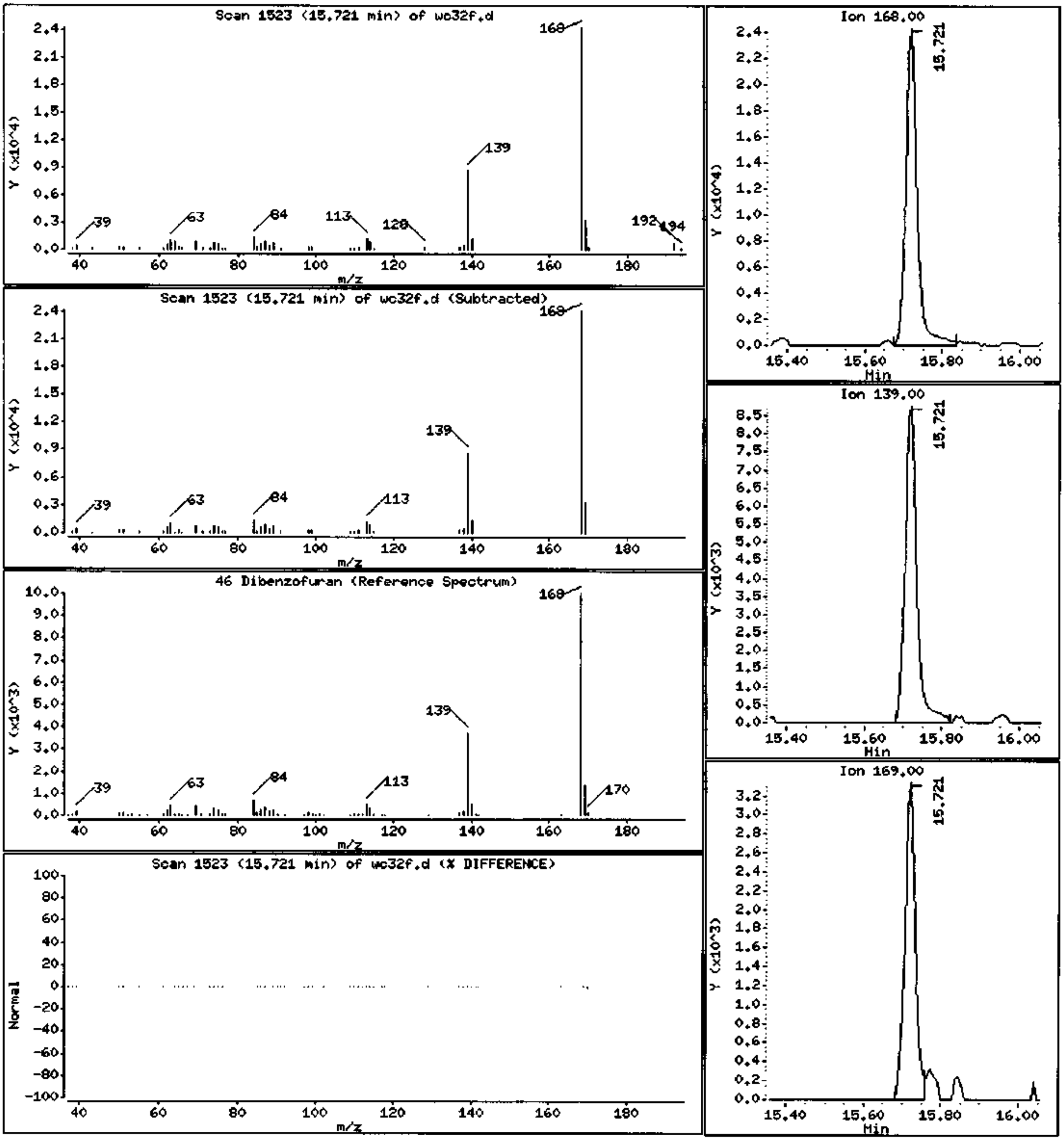
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

46 Dibenzofuran

Concentration: 170.5 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32f.d

Date : 15-FEB-2013 21:40

Client ID: SG-95-0-10-013113

Instrument: nt10.i

Sample Info: WC32F

Volume Injected (uL): 1.0

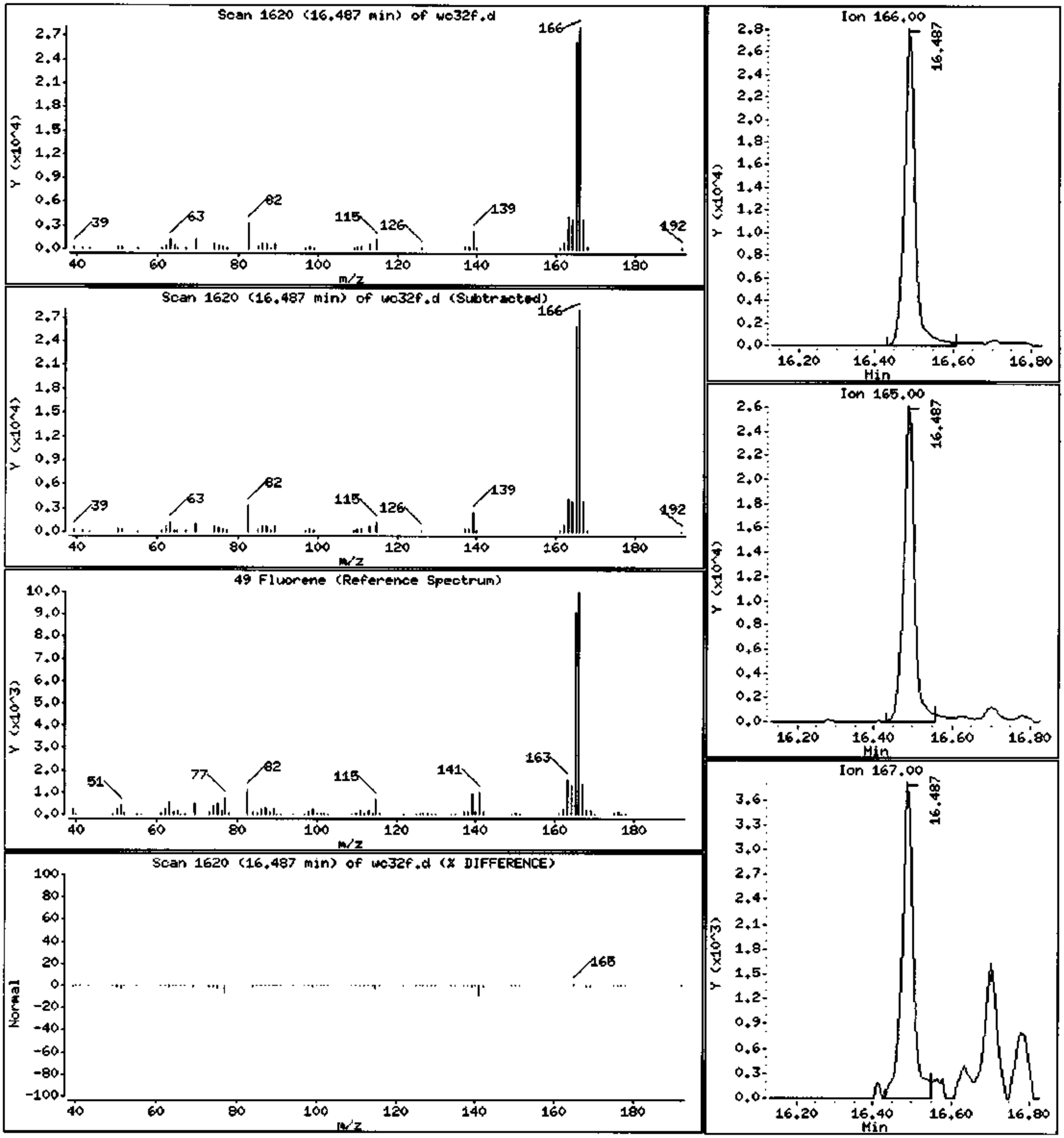
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

49 Fluorene

Concentration: 235.0 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32f.d

Date : 15-FEB-2013 21:40

Client ID: SG-95-0-10-013113

Sample Info: WC32F

Volume Injected (uL): 1.0

Column phase: ZB-5msi

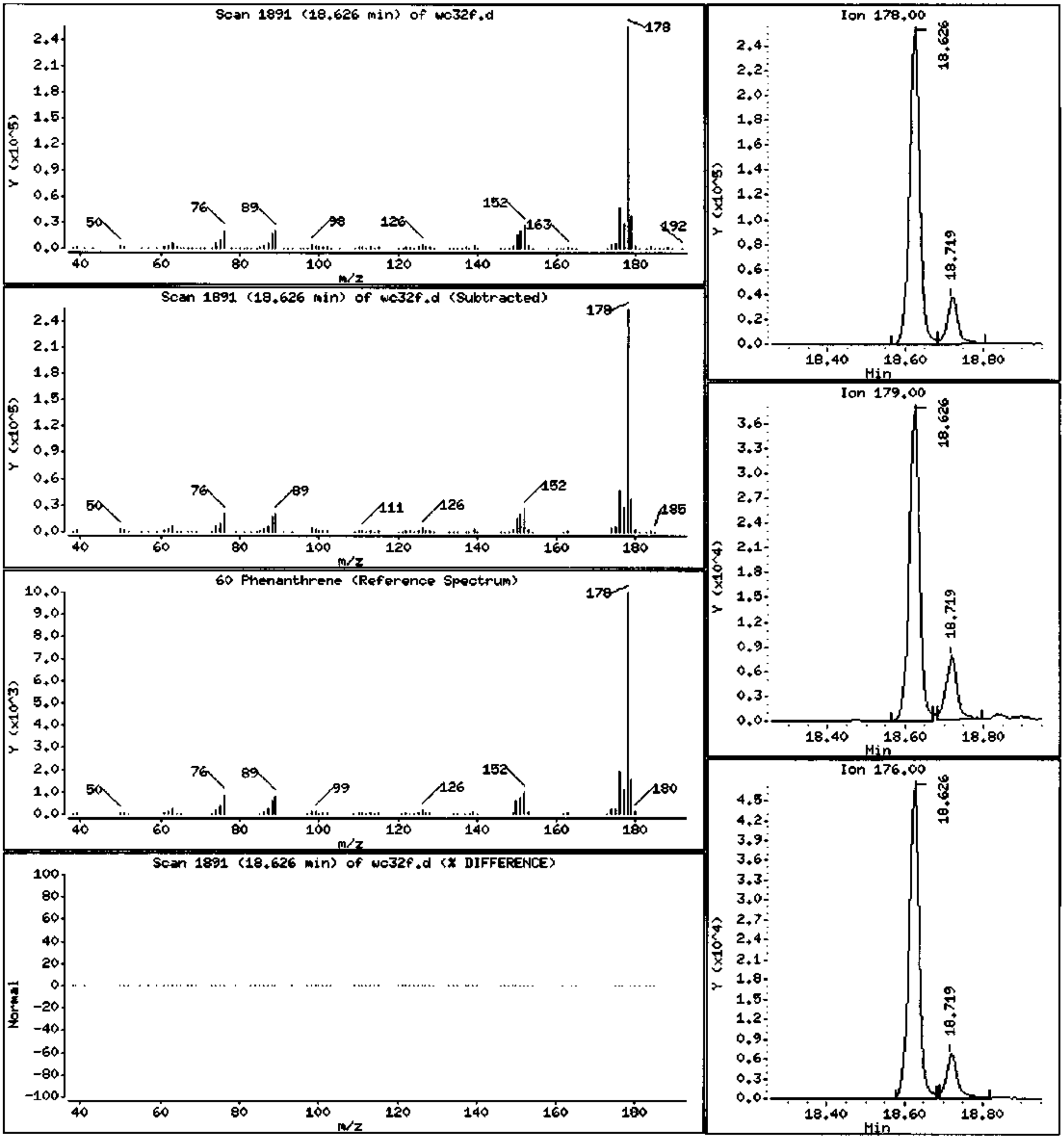
60 Phenanthrene

Instrument: nt10.i

Operator: VTS/YZ

Column diameter: 0.25

Concentration: 1371 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32f.d

Date : 15-FEB-2013 21:40

Client ID: SG-95-0-10-013113

Instrument: nt10.i

Sample Info: WC32F

Volume Injected (uL): 1.0

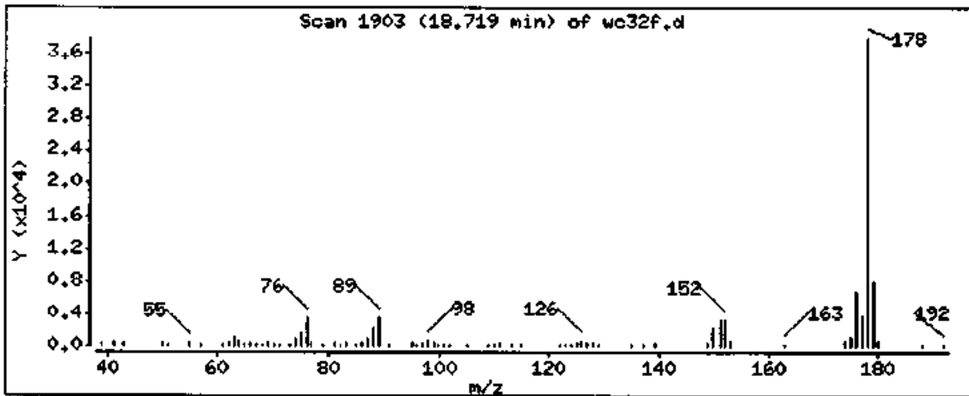
Operator: VTS/YZ

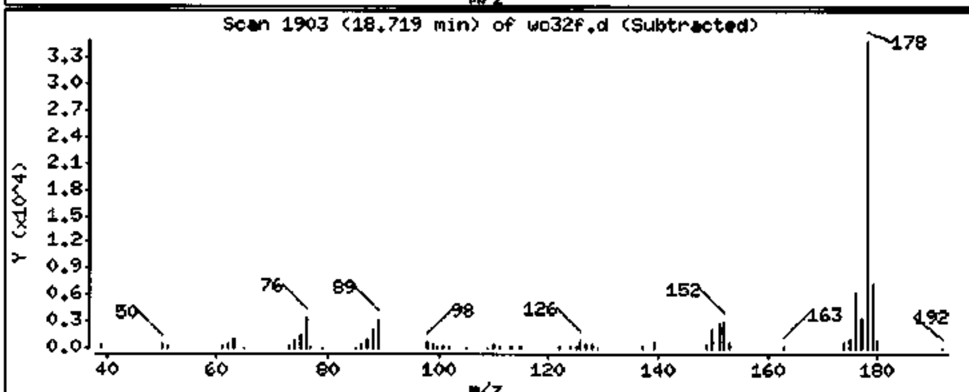
Column phase: ZB-5msi

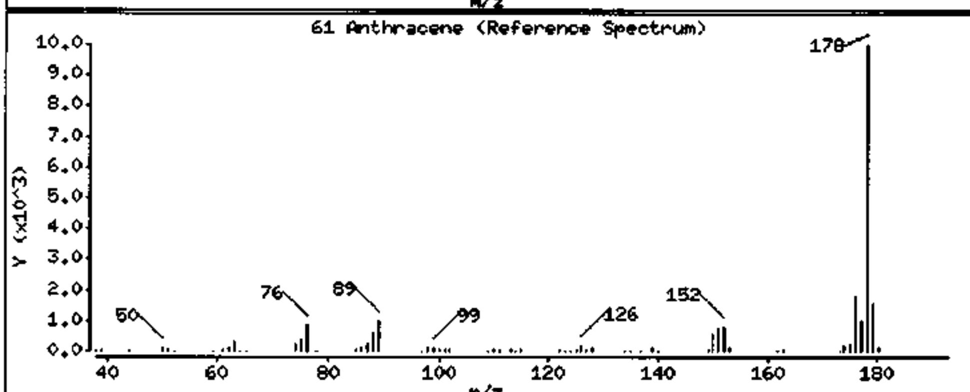
Column diameter: 0.25

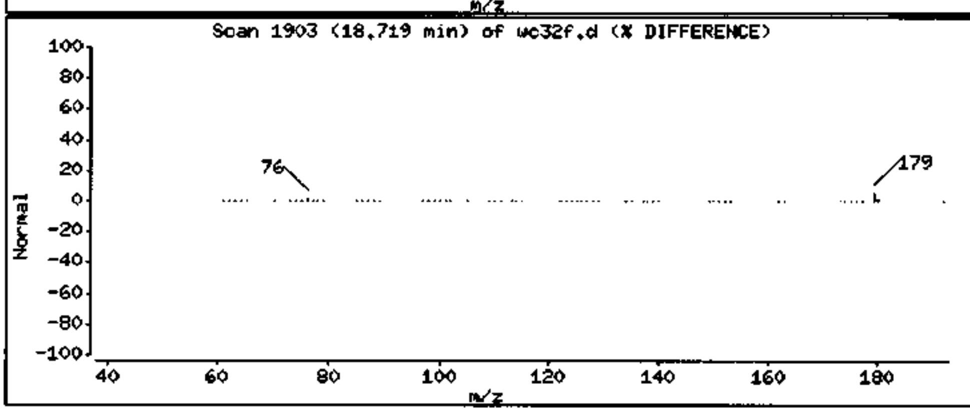
61 Anthracene

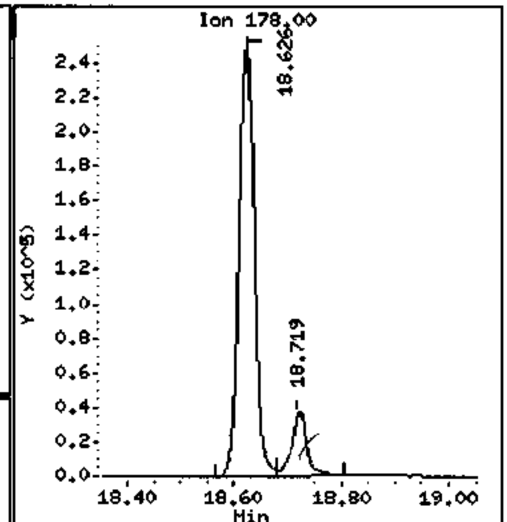
Concentration: 216.3 ug/kg

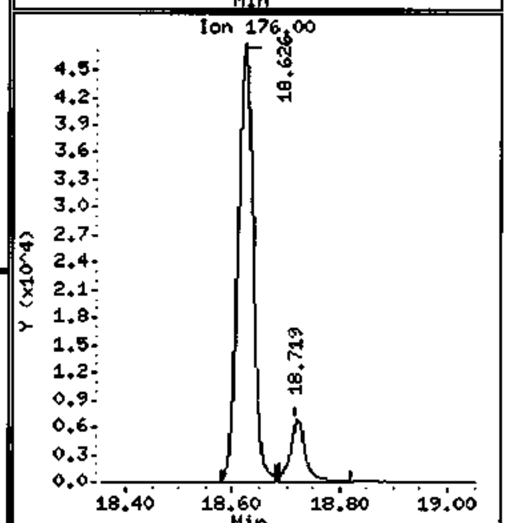


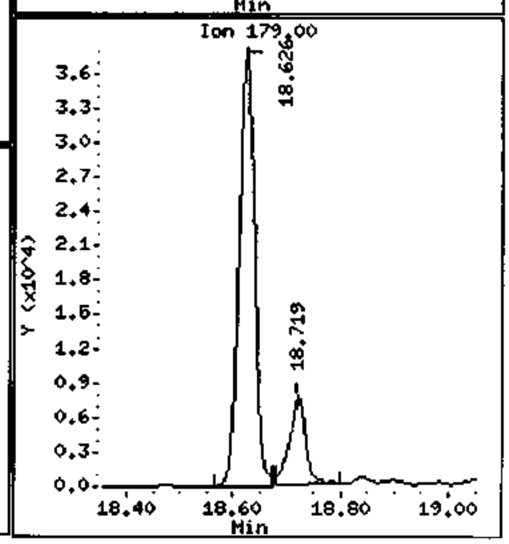












Data File: /chem1/nt10.i/20130215.b/wc32f.d

Date : 15-FEB-2013 21:40

Client ID: SG-95-0-10-013113

Instrument: nt10.i

Sample Info: WC32F

Volume Injected (uL): 1.0

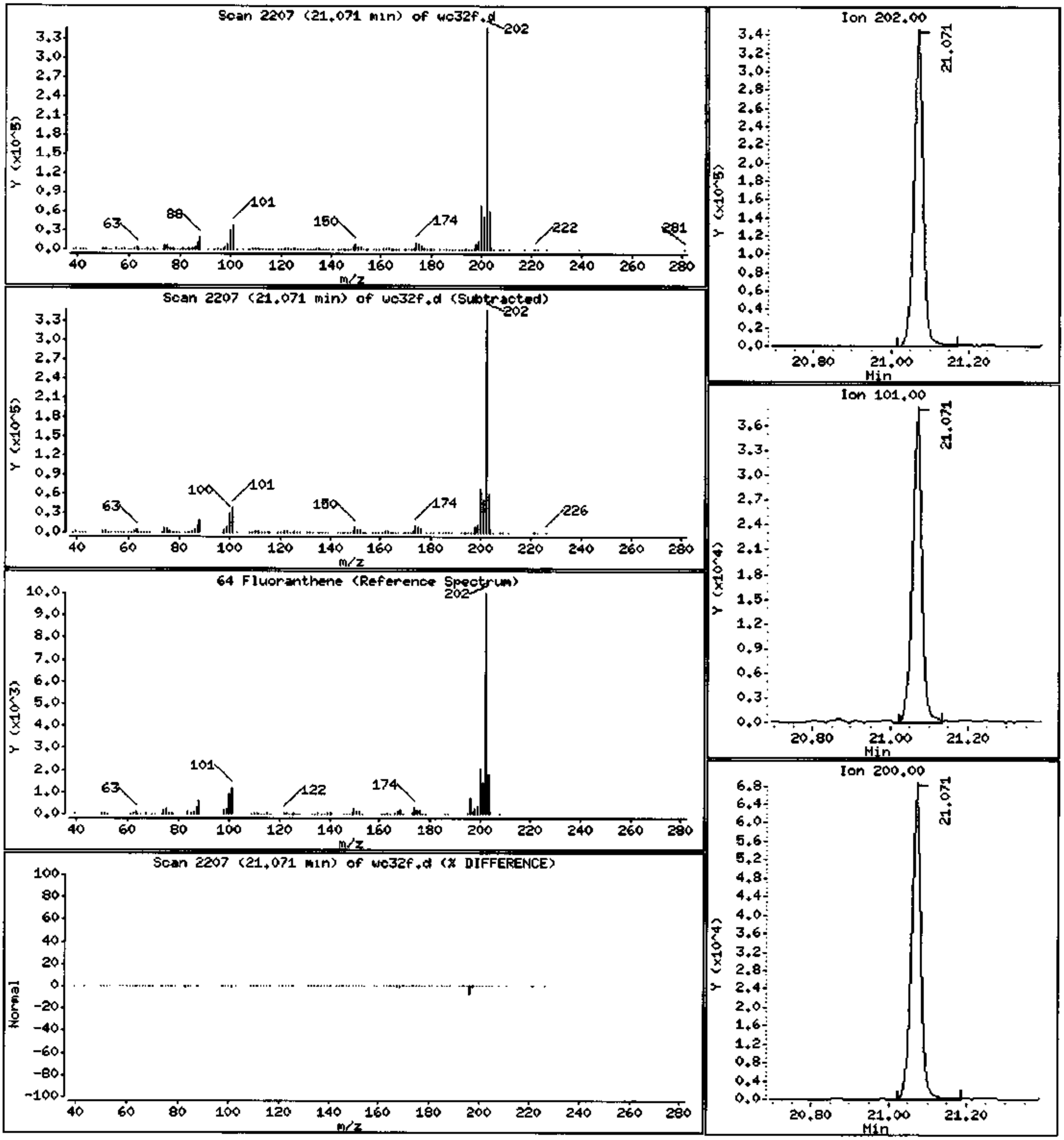
Operator: VTS/YZ

Column phase: ZB-5ms:

Column diameter: 0.25

64 Fluoranthene

Concentration: 1462 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32f.d

Date : 15-FEB-2013 21:40

Client ID: SG-95-0-10-013113

Instrument: nt10.i

Sample Info: WC32F

Volume Injected (uL): 1.0

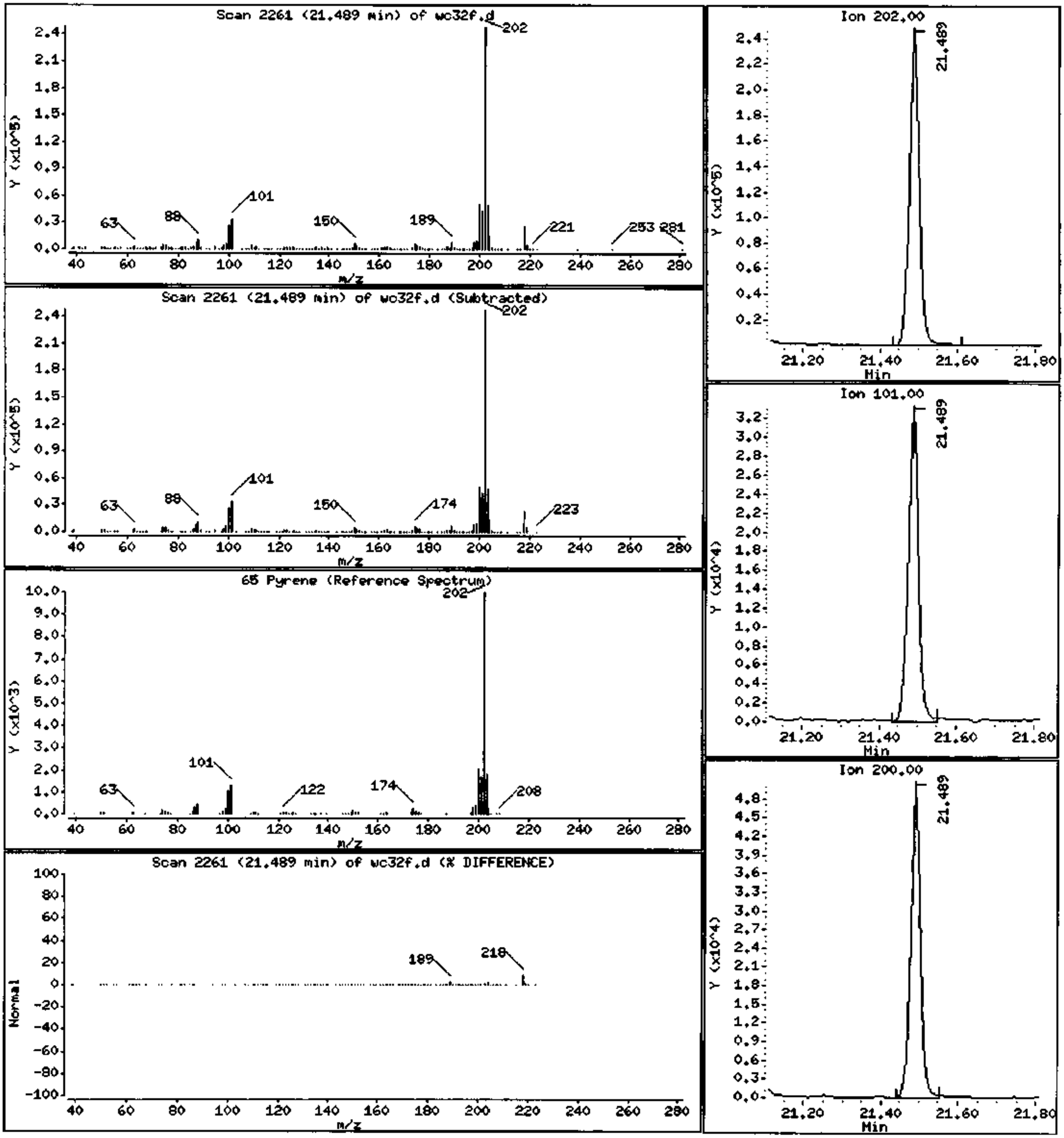
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

65 Pyrene

Concentration: 1060 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32f.d

Date : 15-FEB-2013 21:40

Client ID: SG-95-0-10-013113

Instrument: nt10.i

Sample Info: WC32F

Volume Injected (uL): 1.0

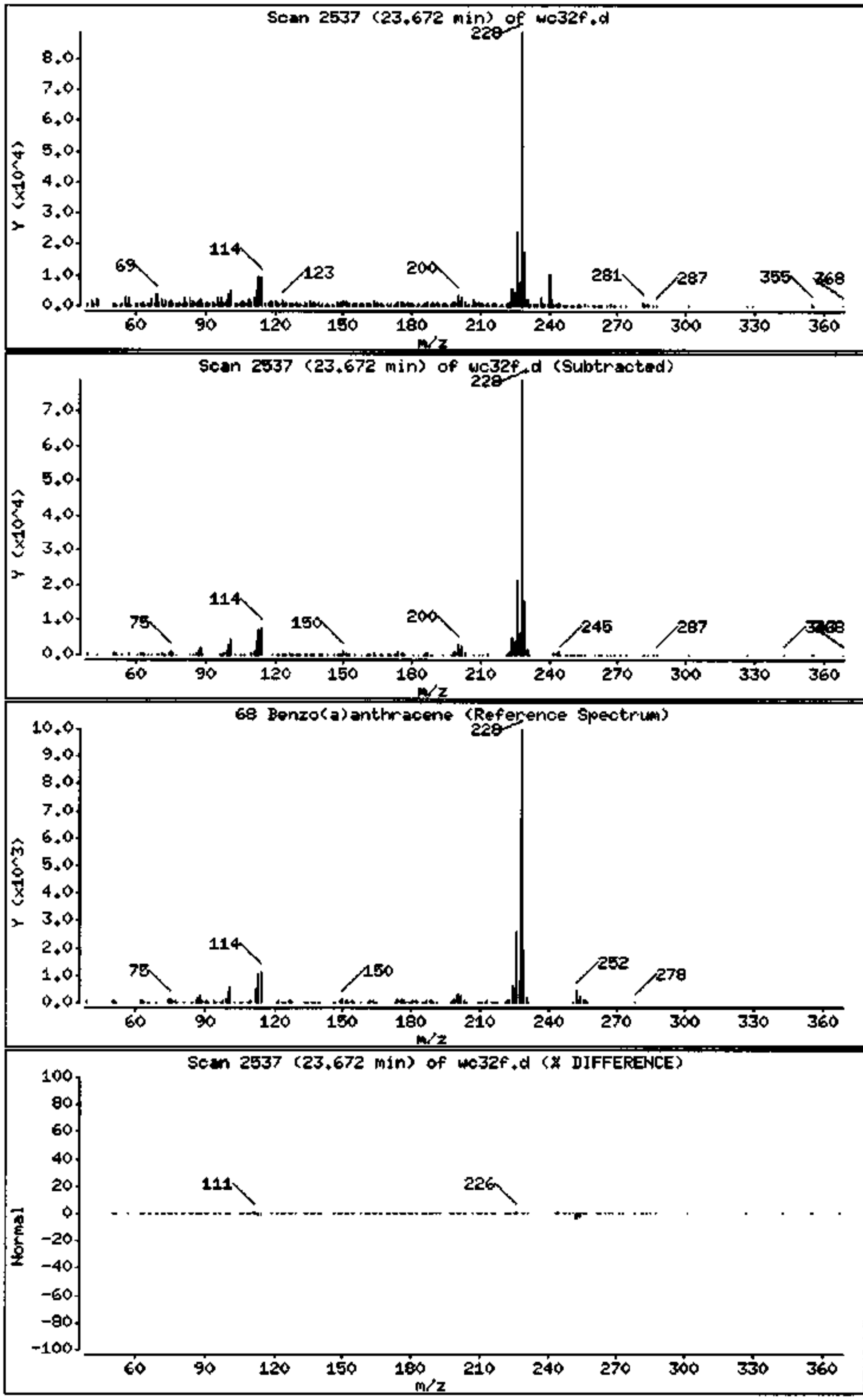
Operator: VTS/YZ

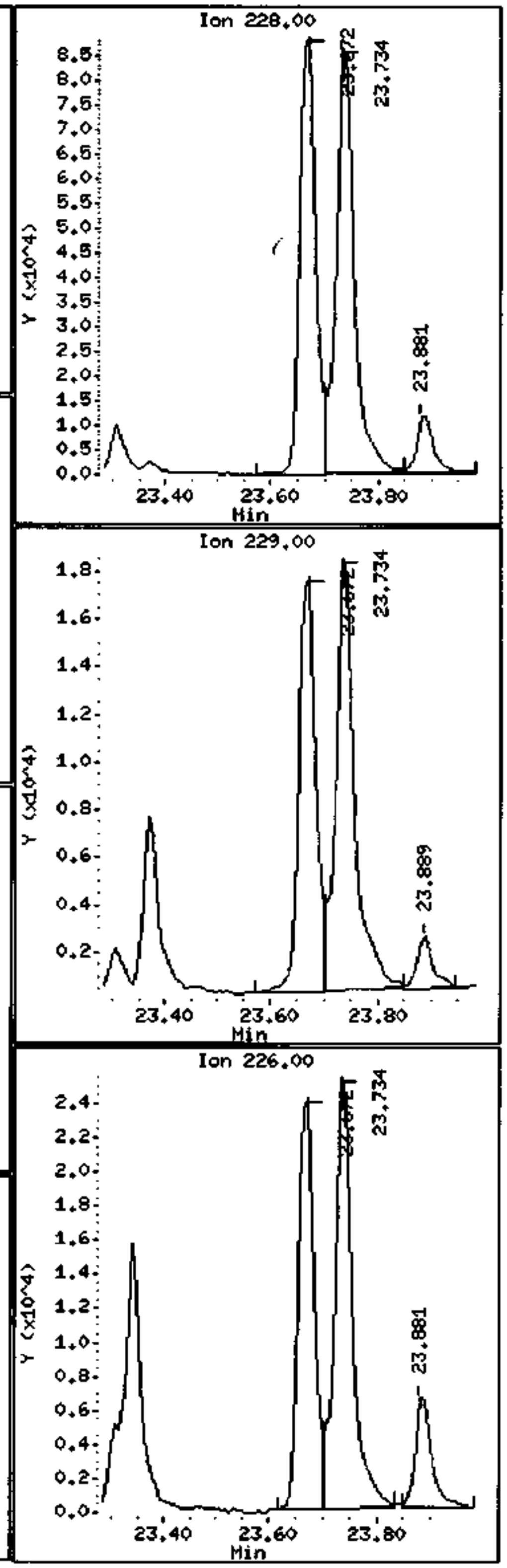
Column phase: ZB-5msi

Column diameter: 0.25

68 Benzo(a)anthracene

Concentration: 439.1 ug/kg





Data File: /chem1/nt10.i/20130215.b/wc32f.d

Date : 15-FEB-2013 21:40

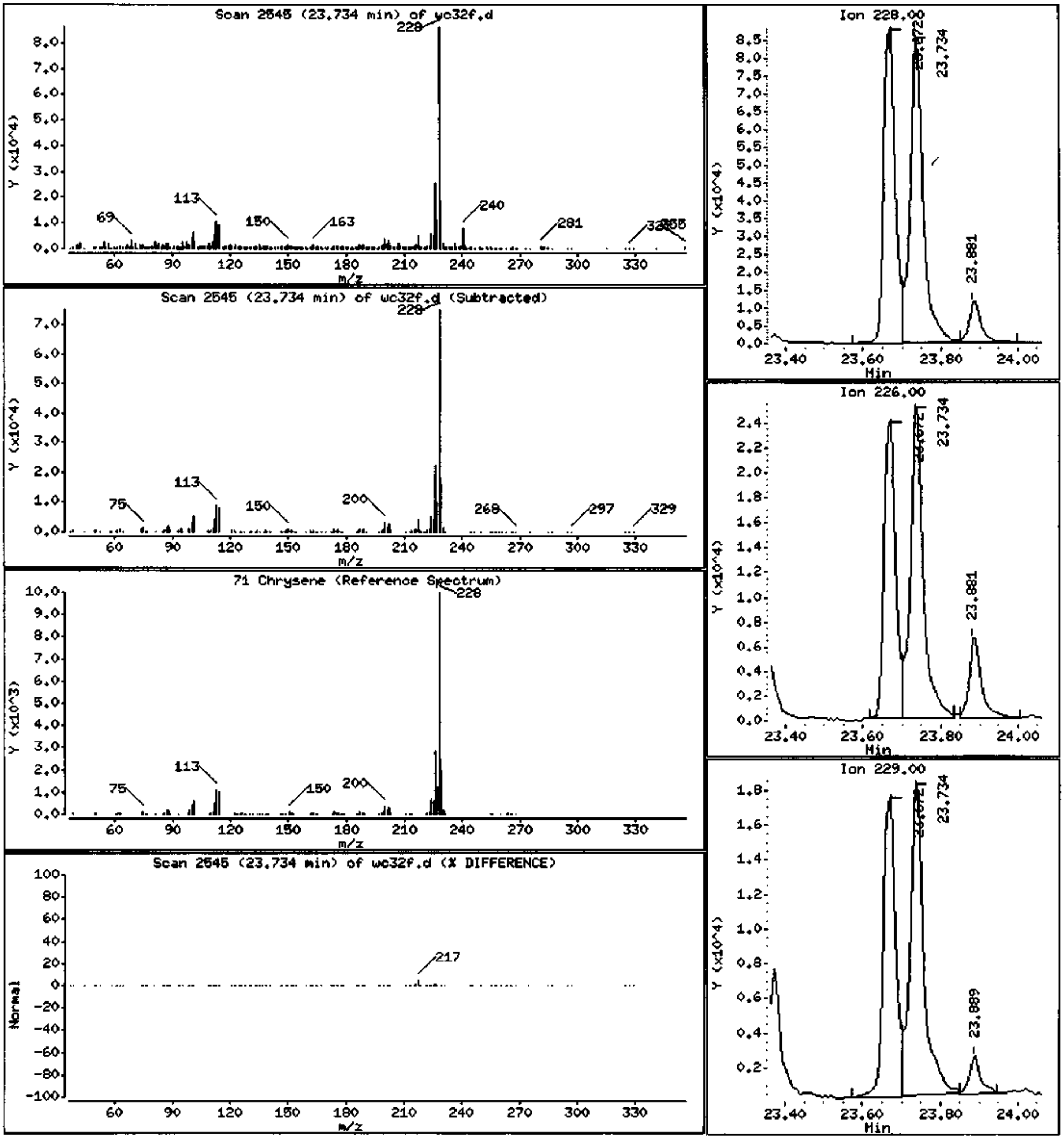
Client ID: SG-95-0-10-013113 Instrument: nt10.i

Sample Info: WC32F

Volume Injected (uL): 1.0 Operator: VTS/YZ

Column phase: ZB-5msi Column diameter: 0.25

71 Chrysene Concentration: 522.9 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32f.d

Date : 15-FEB-2013 21:40

Client ID: SG-95-0-10-013113 Instrument: nt10.i

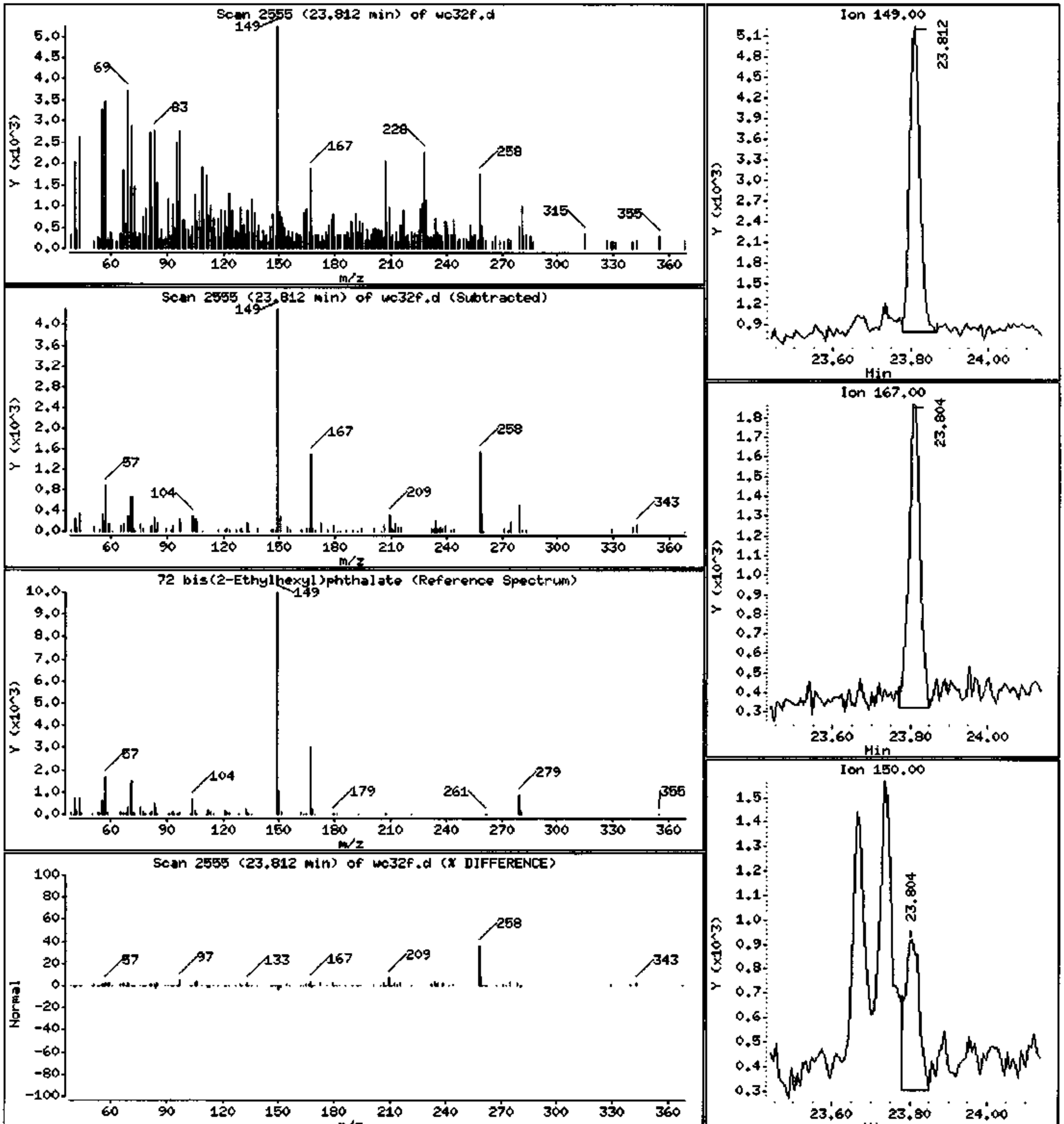
Sample Info: WC32F

Volume Injected (uL): 1.0 Operator: VTS/YZ

Column phase: ZB-5ms; Column diameter: 0.25

72 bis(2-Ethylhexyl)phthalate Concentration: 29.90 ug/kg

B



Data File: /chem1/nt10.i/20130215.b/wc32f.d

Date : 15-FEB-2013 21:40

Client ID: SG-95-0-10-013113

Instrument: nt10.i

Sample Info: WC32F

Volume Injected (uL): 1.0

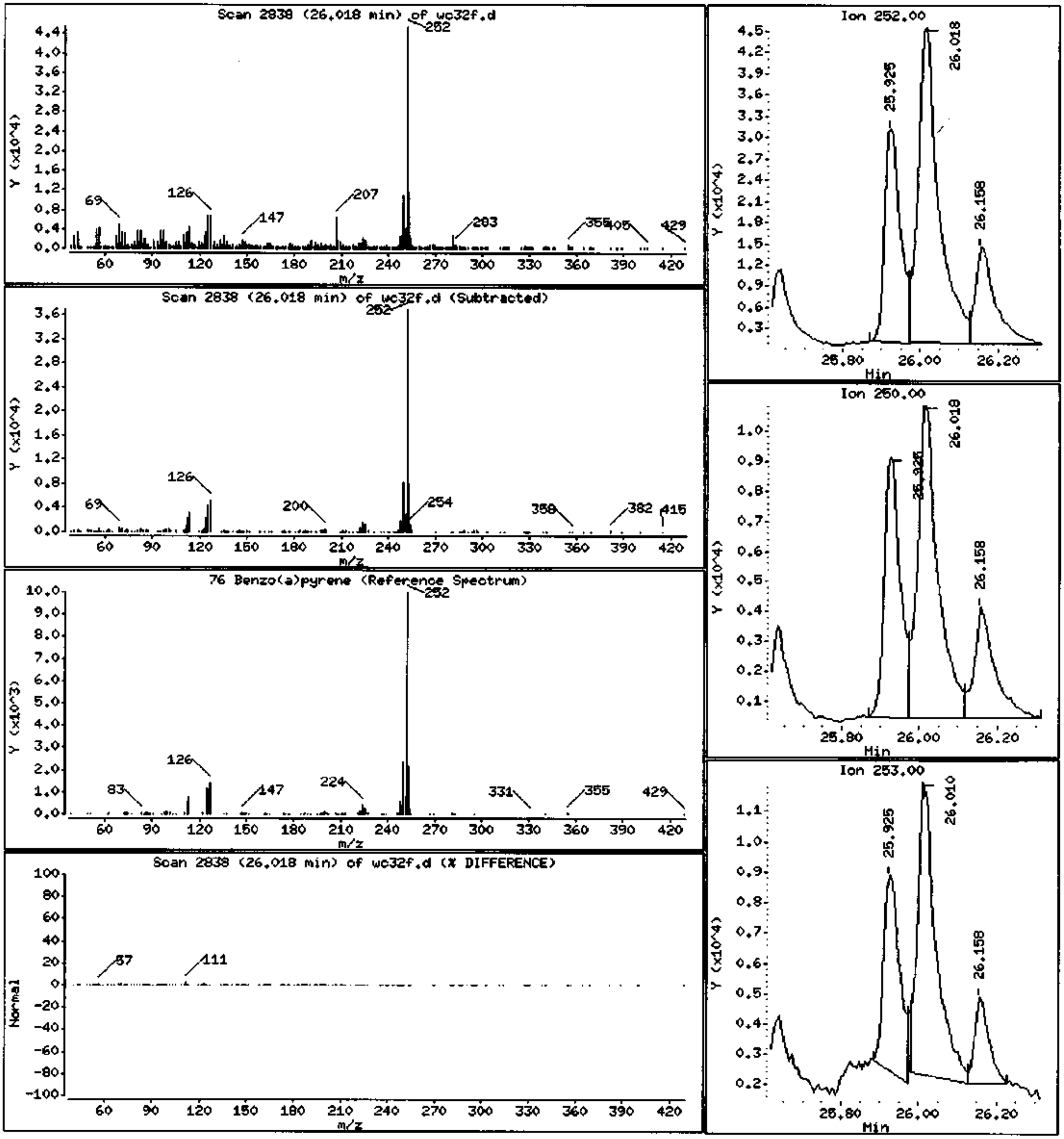
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

76 Benzo(a)pyrene

Concentration: 486.0 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32f.d

Date : 15-FEB-2013 21:40

Client ID: SC-95-0-10-013113

Instrument: nt10.i

Sample Info: WC32F

Volume Injected (uL): 1.0

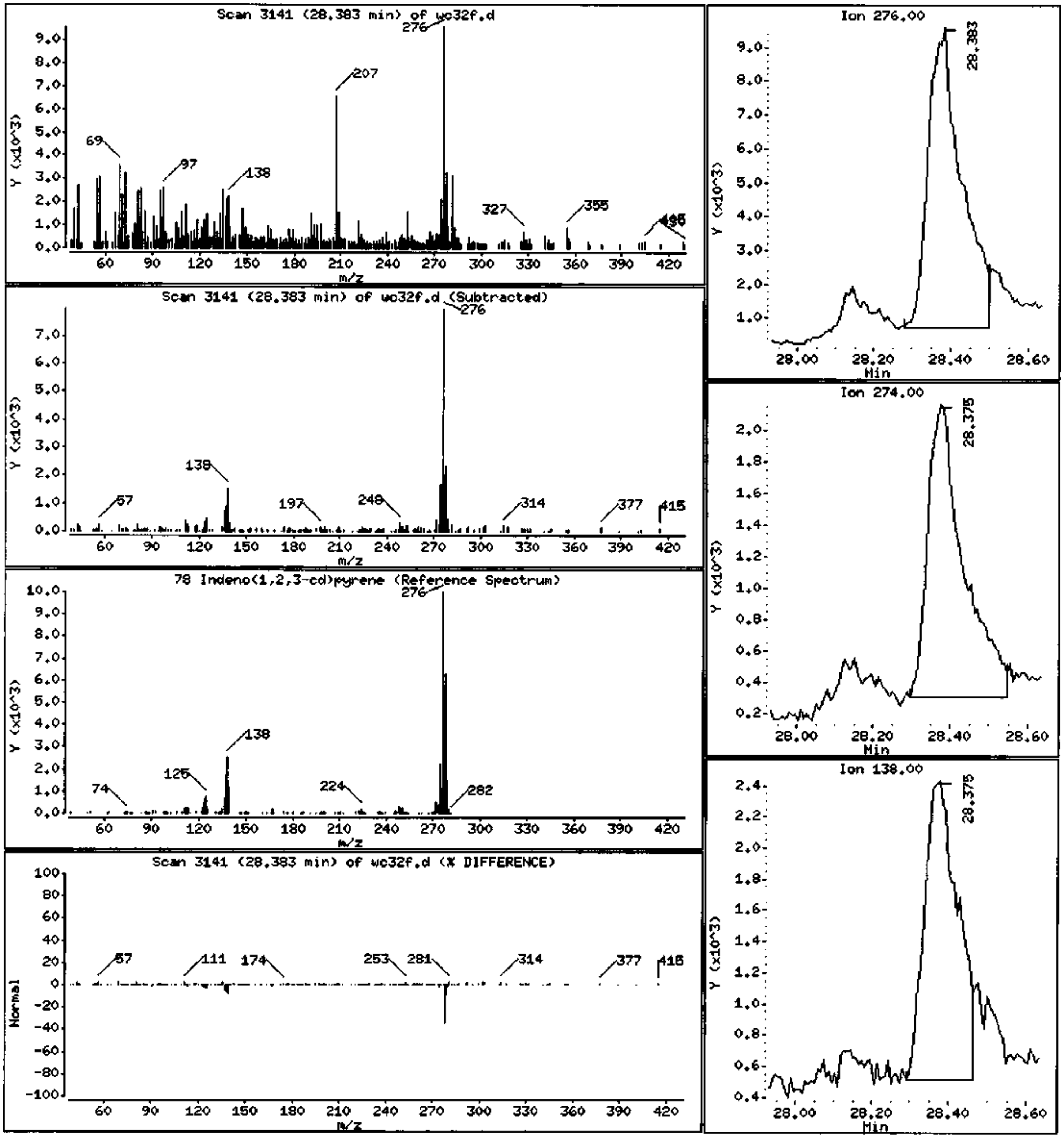
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

78 Indeno(1,2,3-cd)pyrene

Concentration: 121.3 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32f.d

Date : 15-FEB-2013 21:40

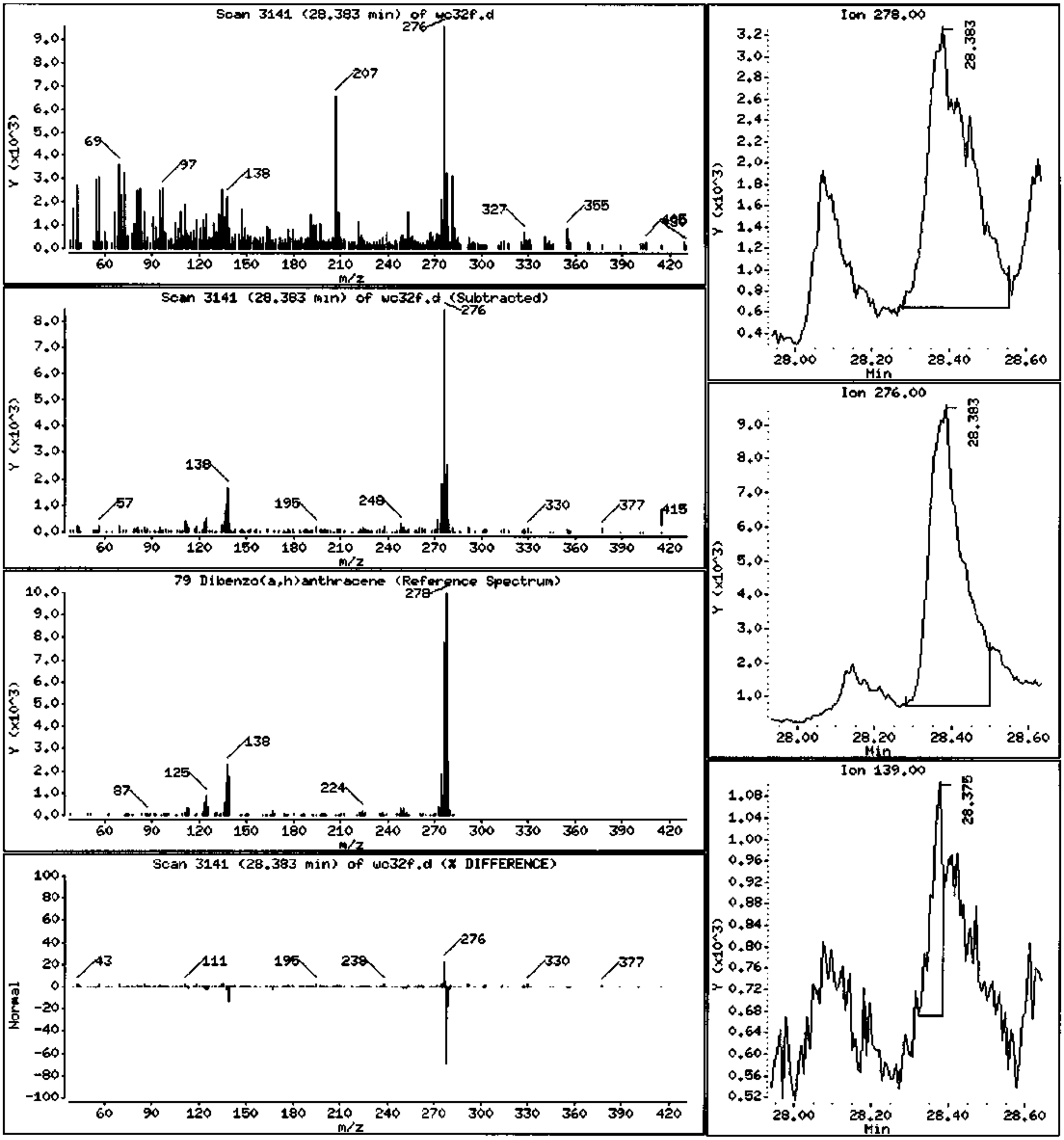
Client ID: SG-95-0-10-013113 Instrument: nt10.i

Sample Info: WC32F

Volume Injected (uL): 1.0 Operator: VTS/YZ

Column phase: ZB-5msi Column diameter: 0.25

79 Dibenzo(a,h)anthracene Concentration: 57.89 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32f.d

Date : 15-FEB-2013 21:40

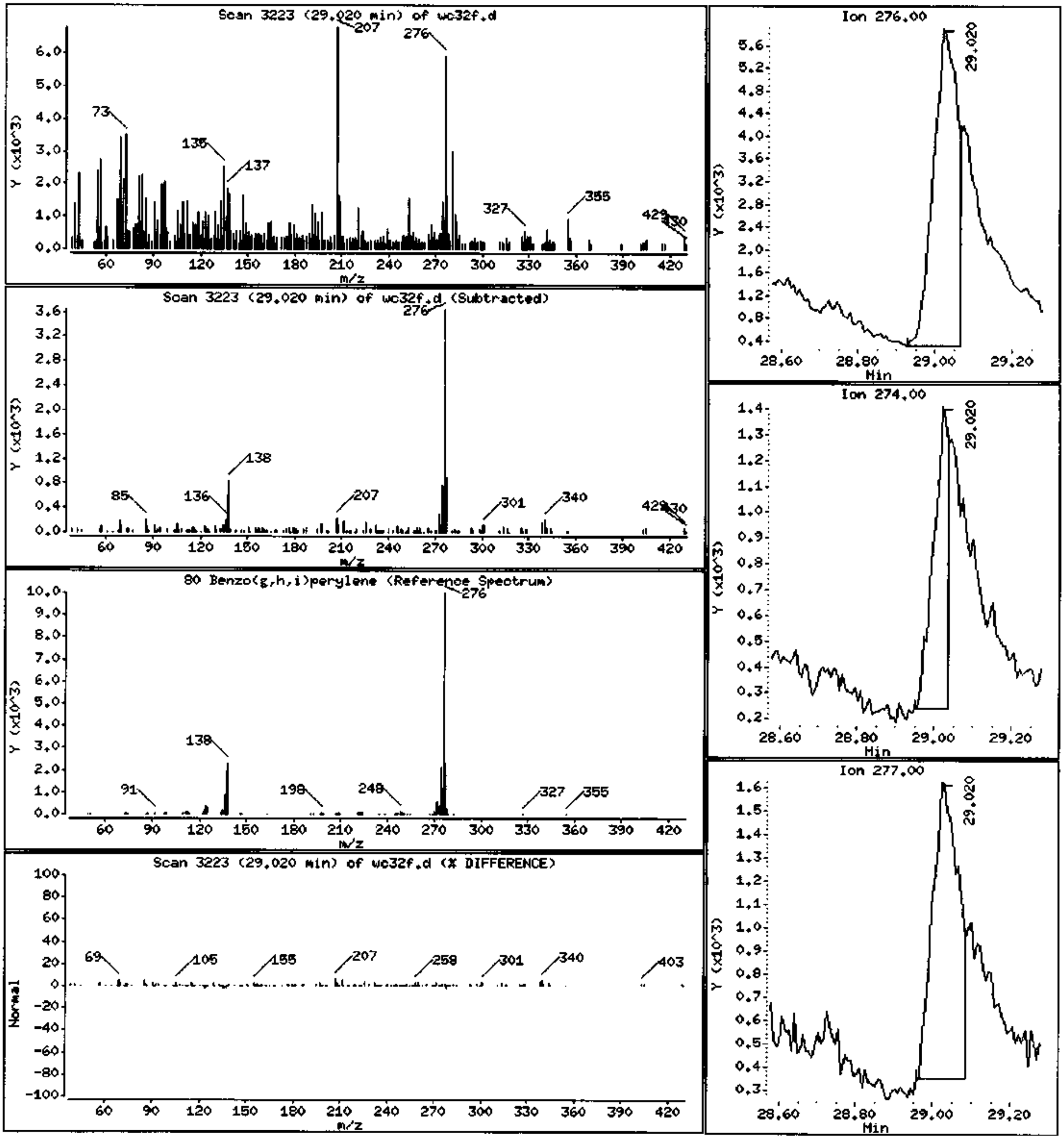
Client ID: SG-95-0-10-013113 Instrument: nt10.i

Sample Info: WC32F

Volume Injected (uL): 1.0 Operator: VTS/YZ

Column phase: ZB-5msi Column diameter: 0.25

80 Benzo(g,h,i)perylene Concentration: 64.96 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32f.d

Date : 15-FEB-2013 21:40

Client ID: SG-95-0-10-013113

Instrument: nt10.i

Sample Info: WC32F

Volume Injected (uL): 1.0

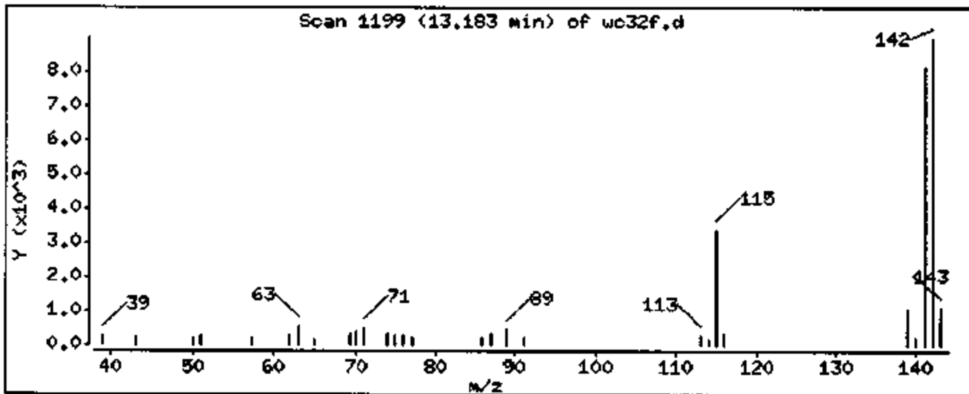
Operator: VTS/YZ

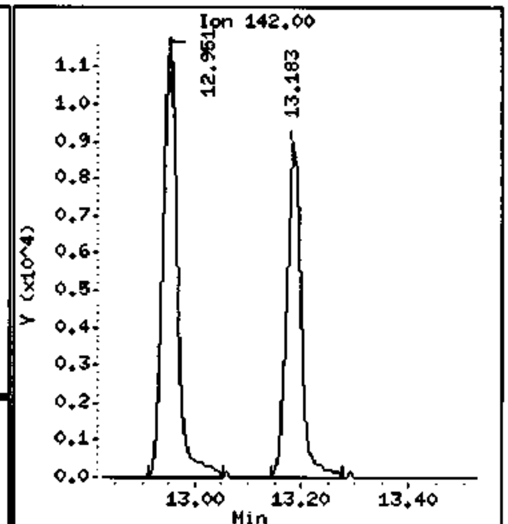
Column phase: ZB-5msi

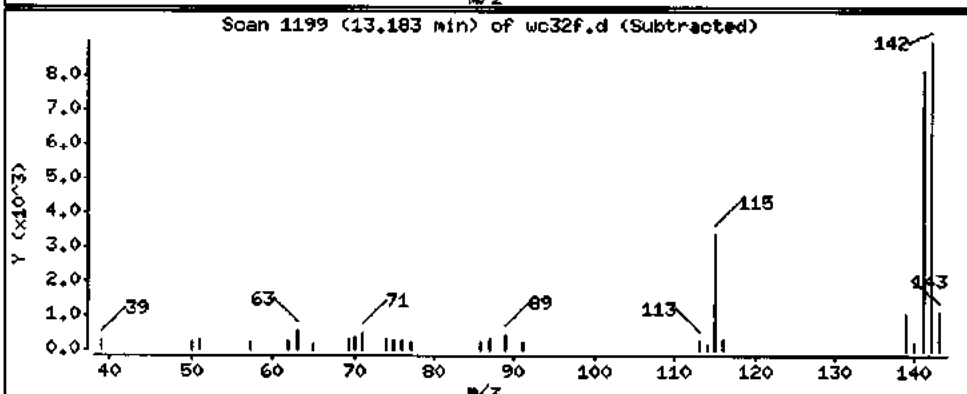
Column diameter: 0.25

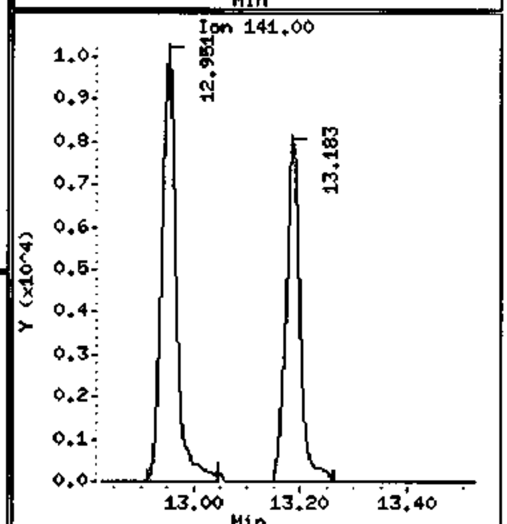
105 1-methylnaphthalene

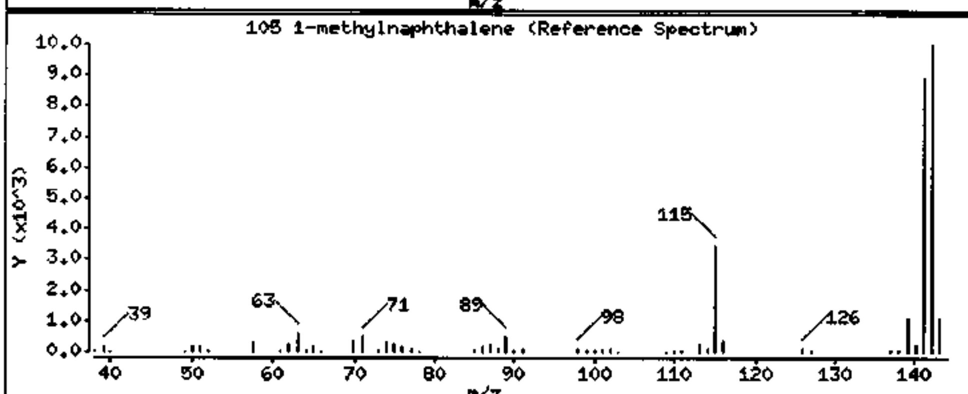
Concentration: 91.25 ug/kg

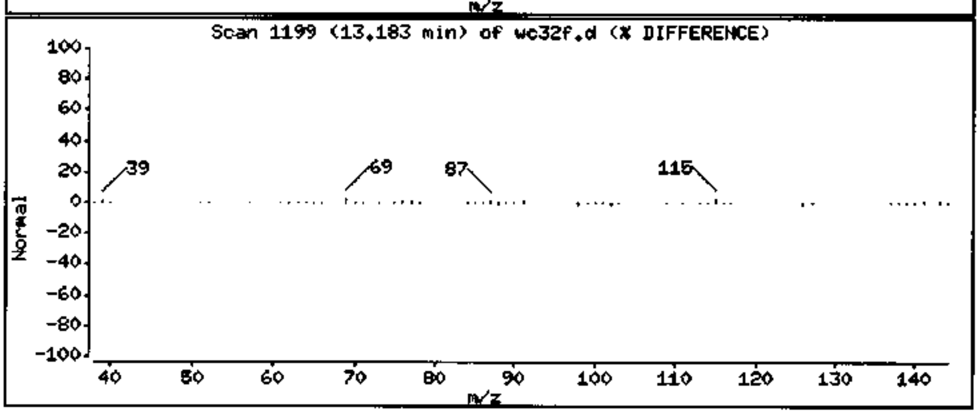












Data File: /chem1/nt10.i/20130215.b/wc32f.d

Date : 15-FEB-2013 21:40

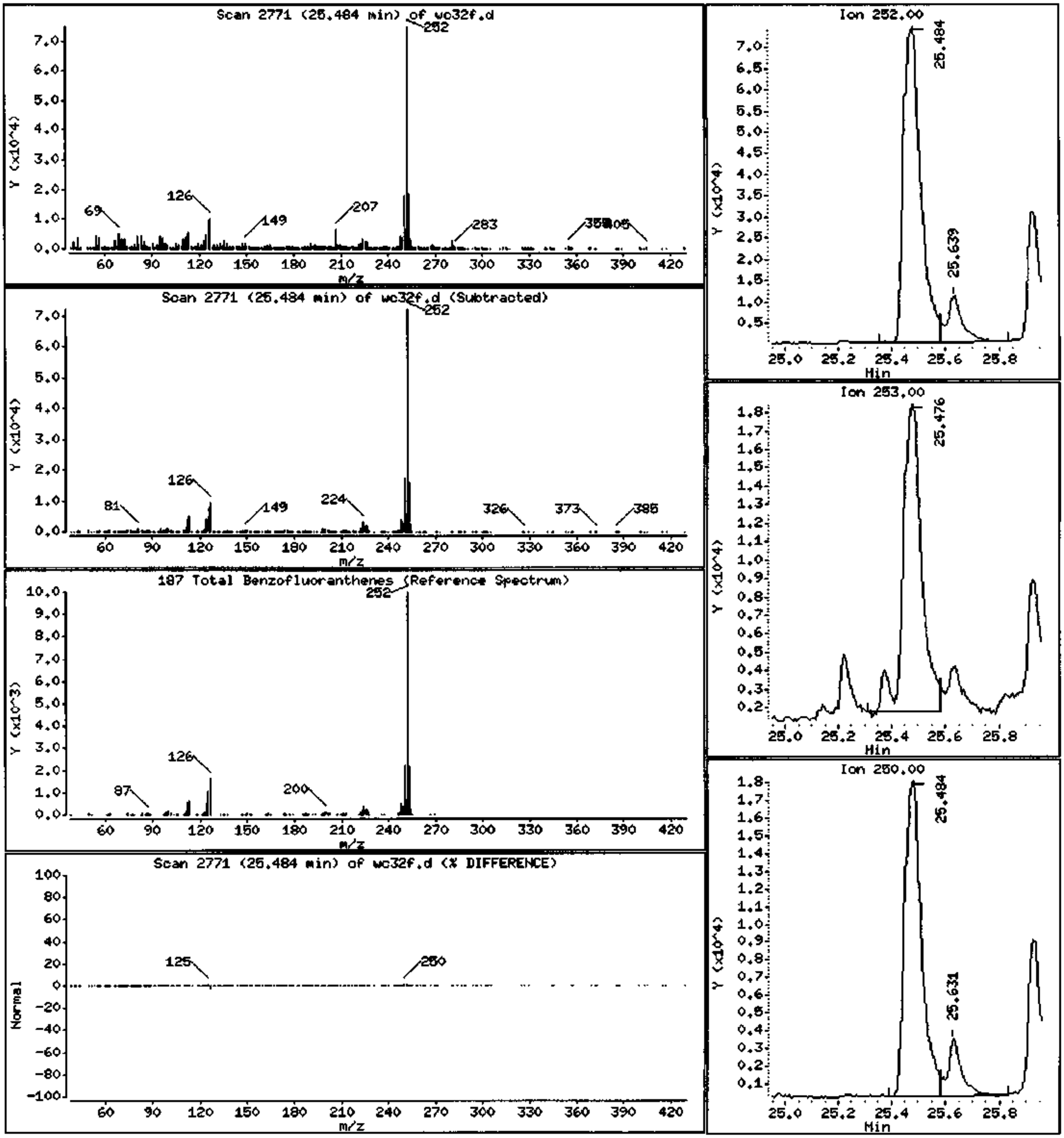
Client ID: SG-95-0-10-013113 | Instrument: nt10.i

Sample Info: WC32F

Volume Injected (uL): 1.0 | Operator: VTS/YZ

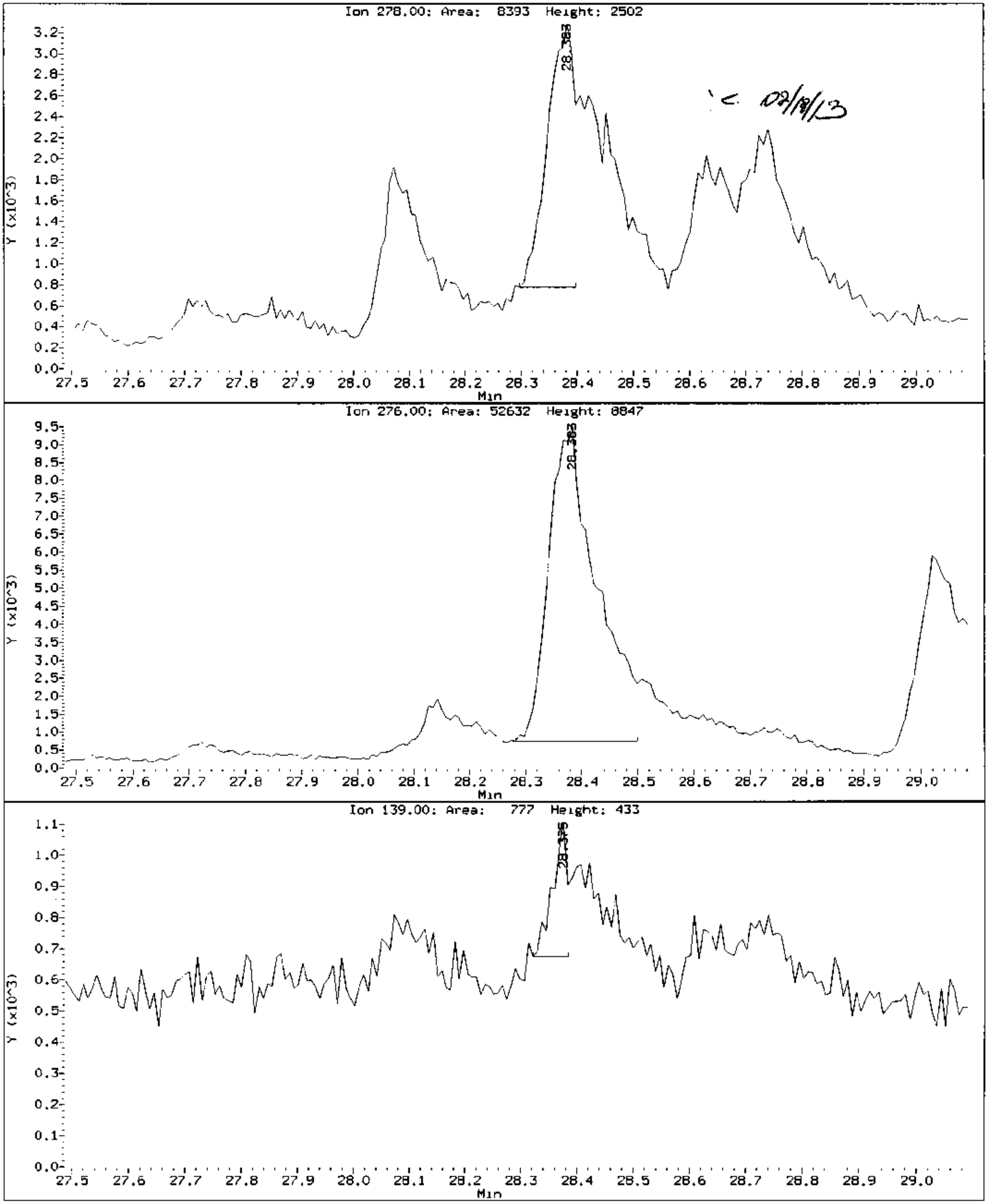
Column phase: ZB-5msi | Column diameter: 0.25

187 Total Benzofluoranthenes | Concentration: 834.3 ug/kg



Data File: /chem1/nt10.i/20130215.b/wc32f.d
Injection Date: 15-FEB-2013 21:40
Instrument: nt10.i
Client Sample ID: SG-95-0-10-013113

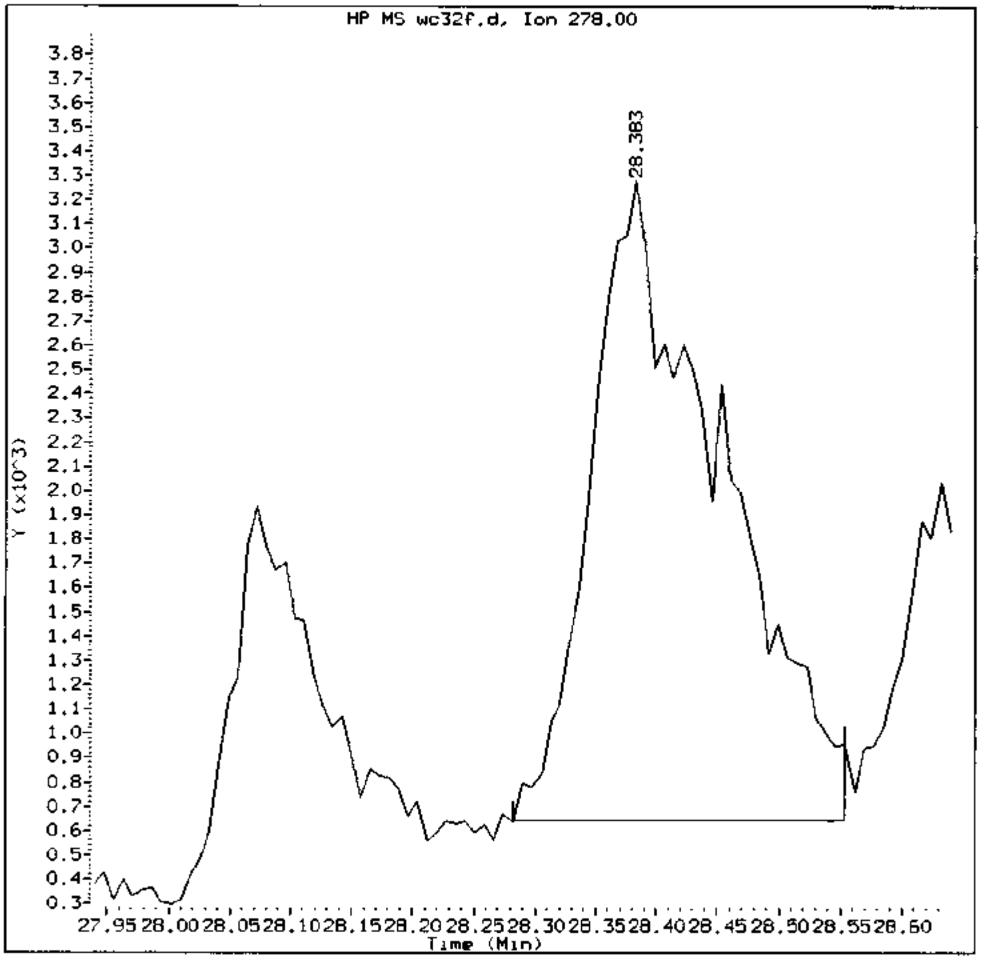
Compound: Dibenzo(a,h)anthracene
CAS Number: 53-70-3



WC32 00064

WC32F, /chem1/nt10.i/20130215.b/wc32f.d

Dibenzo(a,h)anthracene Amount: 0.62 Area: 19886



MANUAL INTEGRATION for Dibenzo(a,h)anthracene

1. Baseline correction ✓
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other ______________________

Analyst: YR Date: 02/18/13

Data File: /chem1/nt10.i/20130215.b/wc32gms.d
Report Date: 18-Feb-2013 12:09

Analytical Resources, Inc.

YZ 02/18/13

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt10.i/20130215.b/wc32gms.d
Lab Smp Id: WC32GMS
Client Smp ID: SG-08-0-10-0131 MS
Inj Date : 15-FEB-2013 22:53
Operator : VTS/YZ
Inst ID: nt10.i
Smp Info : WC32GMS
Misc Info : 13-2430
Comment : 1ul Injection
Method : /chem1/nt10.i/20130215.b/ABN.m
Meth Date : 18-Feb-2013 12:09 yev
Quant Type: ISTD
Cal Date : 25-JAN-2013 17:16
Cal File: ic0125h.d
Als bottle: 19
QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: PSDDAICAL.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Ws	20.10000	Weight of sample extracted (g)
M	48.50000	% Moisture

Cpnd Variable　　Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
$	1 2-Fluorophenol	112	6.536	6.459	(0.746)	41744	5.21734	504.0
$	2 Phenol-d5	99	8.229	8.183	(0.939)	55769	5.61708	542.6
	3 Phenol	94	8.252	8.206	(0.942)	41321	3.95416	382.0
$	5 2-Chlorophenol-d4	132	8.422	8.391	(0.961)	56589	6.58256	635.9
	4 Bis(2-Chloroethyl)ether	93	8.314	8.298	(0.949)	30013	3.77479	364.7
	6 2-Chlorophenol	128	8.453	8.414	(0.965)	38078	4.18728	404.5
	7 1,3-Dichlorobenzene	146	8.685	8.678	(0.991)	34117	3.44779	333.1
*	8 1,4-Dichlorobenzene-d4	152	8.763	8.747	(1.000)	25023	4.00000	
	9 1,4-Dichlorobenzene	146	8.794	8.778	(1.004)	38020	3.88030	374.9
$	10 1,2-Dichlorobenzene-d4	152	9.135	9.128	(1.042)	25979	4.11213	397.2
	12 1,2-Dichlorobenzene	146	9.166	9.151	(1.046)	33902	3.59841	347.6
	11 Benzyl alcohol	108	9.112	9.081	(1.040)	21757	4.35060	420.3
	14 2,2'-oxybis(1-Chloropropane)	121	9.399	9.384	(1.073)	10167	3.63451	351.1
	13 2-Methylphenol	108	9.407	9.368	(1.073)	28043	3.55496	343.4

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
	17 Hexachloroethane	117	9.779	9.772	(1.116)	7842	2.02491	195.6
	16 N-Nitroso-di-n-propylamine	70	9.694	9.663	(1.106)	21566	4.09195	395.3
	15 4-Methylphenol	108	9.710	9.663	(1.108)	71428	8.70692	841.1
$	18 Nitrobenzene-d5	82	9.950	9.919	(0.872)	36018	4.01298	387.7
	19 Nitrobenzene	77	9.997	9.958	(0.877)	31113	3.65612	353.2
	20 Isophorone	82	10.462	10.447	(0.917)	56570	3.81386	368.4
	21 2-Nitrophenol	139	10.649	10.633	(0.934)	17103	3.42044	330.4
	22 2,4-Dimethylphenol	107	10.788	10.757	(0.946)	100270	11.7645	1137
	23 Bis(2-Chloroethoxy)methane	93	10.942	10.934	(0.959)	37918	4.05906	392.1
	24 Benzoic acid	105	11.065	11.057	(0.970)	91627	12.6428	1221
	25 2,4-Dichlorophenol	162	11.181	11.150	(0.980)	92324	12.3942	1197
	26 1,2,4-Trichlorobenzene	180	11.319	11.312	(0.993)	31041	3.66165	353.7
*	27 Naphthalene-d8	136	11.404	11.397	(1.000)	97245	4.00000	
	28 Naphthalene	128	11.451	11.435	(1.004)	130393	5.15306	497.8
	29 4-Chloroaniline	127	11.451	11.621	(1.004)	16985	1.66786	161.1
	30 Hexachlorobutadiene	225	11.845	11.837	(1.039)	20025	3.79029	366.2
	31 4-Chloro-3-methylphenol	107	12.766	12.719	(1.119)	92227	12.8099	1237(H)
	32 2-Methylnaphthalene	142	12.959	12.944	(1.136)	71652	4.28881	414.3
	33 Hexachlorocyclopentadiene	237	Compound Not Detected.					
	34 2,4,6-Trichlorophenol	196	13.679	13.648	(0.894)	74432	12.1145	1170
	35 2,4,5-Trichlorophenol	196	13.787	13.741	(0.901)	80557	12.3382	1192
$	36 2-Fluorobiphenyl	172	13.818	13.803	(0.903)	95792	4.55432	440.0
	37 2-Chloronaphthalene	162	14.027	14.004	(0.917)	69938	4.12969	398.9
	38 2-Nitroaniline	65	14.352	14.321	(0.938)	37727	9.49843	917.6
	39 Dimethylphthalate	163	14.824	14.801	(0.969)	88986	4.79879	463.6
	40 Acenaphthylene	152	14.956	14.941	(0.978)	127808	4.62771	447.1
	41 2,6-Dinitrotoluene	165	14.964	14.941	(0.978)	55476	13.0952	1265
*	42 Acenaphthene-d10	164	15.296	15.281	(1.000)	61310	4.00000	
	43 3-Nitroaniline	138	15.443	15.250	(1.010)	575	0.14698	14.20
	44 Acenaphthene	153	15.366	15.350	(1.005)	82991	4.90067	473.4
	45 2,4-Dinitrophenol	184	15.513	15.482	(1.014)	8485	2.32435	224.5
	46 Dibenzofuran	168	15.729	15.706	(1.028)	115468	4.90269	473.6
	47 4-Nitrophenol	109	15.814	15.714	(1.034)	13354	5.03167	486.1(H)
	48 2,4-Dinitrotoluene	165	15.845	15.814	(1.036)	77371	13.5072	1305
	50 Diethylphthalate	149	16.409	16.386	(1.073)	94988	4.89000	472.4
	49 Fluorene	166	16.494	16.479	(1.078)	119905	5.99380	579.0
	51 4-Chlorophenyl-phenylether	204	16.510	16.487	(1.079)	50378	5.40375	522.0
	52 4-Nitroaniline	138	Compound Not Detected.					
	53 4,6-Dinitro-2-methylphenol	198	16.772	16.726	(0.902)	35332	8.41204	812.6
	54 N-Nitrosodiphenylamine	169	16.834	16.780	(0.906)	47273	3.74173	361.5
$	55 2,4,6-Tribromophenol	330	17.142	17.065	(1.121)	27250	6.96481	672.8
	56 4-Bromophenyl-phenylether	248	17.597	17.567	(0.947)	27624	4.72159	456.1
	57 Hexachlorobenzene	284	17.914	17.883	(0.964)	34347	4.67799	451.9
	58 Pentachlorophenol	266	18.348	18.309	(0.987)	44370	9.06222	875.5
*	59 Phenanthrene-d10	188	18.587	18.557	(1.000)	104884	4.00000	
	60 Phenanthrene	178	18.642	18.603	(1.003)	298453	10.6743	1031(R)
	61 Anthracene	178	18.735	18.704	(1.008)	213738	7.59223	733.4

		QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/kg)
	62 Carbazole	167	19.121	19.083	(1.029)	127240	6.76694	653.7
	63 Di-n-butylphthalate	149	19.972	19.942	(1.075)	163643	5.44719	526.2
	64 Fluoranthene	202	21.087	21.040	(1.134)	629311	19.5443	1888(R)
	65 Pyrene	202	21.504	21.466	(0.907)	775853	21.1221	2040(R)
$	66 Terphenyl-d14	244	21.822	21.791	(0.920)	120947	4.88314	471.7
	67 Butylbenzylphthalate	149	22.774	22.735	(0.960)	76501	5.49122	530.5
	68 Benzo(a)anthracene	228	23.680	23.634	(0.999)	439814	12.2231	1181(R)
*	69 Chrysene-d12	240	23.711	23.665	(1.000)	128954	4.00000	
	70 3,3'-Dichlorobenzidine	252	23.858	23.618	(1.006)	1857	0.12352	11.93
	71 Chrysene	228	23.750	23.711	(1.002)	620817	19.0490	1840(R)
	72 bis(2-Ethylhexyl)phthalate	149	23.819	23.789	(0.960)	164728	7.26906	702.2
*	134 Di-n-octylphthalate-d4	153	24.803	24.772	(1.000)	171616	4.00000	
	73 Di-n-octylphthalate	149	24.810	24.779	(1.000)	199357	4.76217	460.0
	74 Benzo(b)fluoranthene	252	25.507	25.414	(0.976)	810839	24.4097	2358
	75 Benzo(k)fluoranthene	252	25.507	25.414	(0.976)	810839	22.5947	2183
	76 Benzo(a)pyrene	252	26.034	25.964	(0.996)	350315	12.1943	1178(R)
*	77 Perylene-d12	264	26.134	26.065	(1.000)	114608	4.00000	
	78 Indeno(1,2,3-cd)pyrene	276	28.406	28.282	(1.087)	136320	3.84789	371.7(M)
	79 Dibenzo(a,h)anthracene	278	28.422	28.290	(1.088)	84906	3.02654	292.4(M)
	80 Benzo(g,h,i)perylene	276	29.090	28.927	(1.113)	88443	2.90973	281.1(M)
	90 N-Nitrosodimethylamine	74	4.181	4.158	(0.477)	50044	10.5123	1016
	91 Aniline	93	Compound Not Detected.					
	93 Benzidine	184	Compound Not Detected.					
	103 Pyridine	79	4.197	4.166	(0.479)	68781	16.9387	1636
	105 1-methylnaphthalene	142	13.191	13.176	(1.157)	66816	4.36003	421.2
	111 Azobenzene (1,2-DP-Hydrazine)	77	16.880	16.842	(1.104)	73042	4.14552	400.5
	187 Total Benzofluoranthenes	252	25.507	25.453	(0.976)	906574	27.7256	2678(R)
	99 Perylene	252	26.181	26.111	(1.002)	129613	3.92582	379.3
	98 Retene	219	22.108	22.077	(0.932)	38614	2.01628	194.8
	120 2,3,4,6-Tetrachlorophenol	232	16.139	16.108	(1.055)	21367	3.74169	361.5

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: wc32gms.d
Lab Smp Id: WC32GMS
Analysis Type: SV
Quant Type: ISTD
Operator: VTS/YZ
Method File: /chem1/nt10.i/20130215.b/ABN.m
Misc Info: 13-2430

Calibration Date: 15-FEB-2013
Calibration Time: 11:20
Client Smp ID: SG-08-0-10-0131
Level: LOW
Sample Type: Sediment

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	46623	23312	93246	25023	-46.33
27 Naphthalene-d8	176978	88489	353956	97245	-45.05
42 Acenaphthene-d10	110872	55436	221744	61310	-44.70
59 Phenanthrene-d10	188290	94145	376580	104884	-44.30
69 Chrysene-d12	213681	106840	427362	128954	-39.65
134 Di-n-octylphthala	264159	132080	528318	171616	-35.03
77 Perylene-d12	208584	104292	417168	114608	-45.05

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.75	8.25	9.25	8.76	0.18
27 Naphthalene-d8	11.40	10.90	11.90	11.40	0.07
42 Acenaphthene-d10	15.28	14.78	15.78	15.30	0.10
59 Phenanthrene-d10	18.56	18.06	19.06	18.59	0.17
69 Chrysene-d12	23.66	23.16	24.16	23.71	0.20
134 Di-n-octylphthala	24.77	24.27	25.27	24.80	0.12
77 Perylene-d12	26.06	25.56	26.56	26.13	0.27

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 18-Feb-2013 12:09

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: FSI
Sample Matrix: SOLID
Lab Smp Id: WC32GMS
Level: LOW
Data Type: MS DATA
SpikeList File: SHORTPSDDA.spk
Sublist File: PSDDAICAL.sub
Method File: /chem1/nt10.i/20130215.b/ABN.m
Misc Info: 13-2430

Client SDG: WC32
Fraction: SV
Client Smp ID: SG-08-0-10-0131 MS
Operator: VTS/YZ
SampleType: MS
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
3 Phenol	483.0	382.0	79.08	30-160
7 1,3-Dichlorobenzen	483.0	333.1	68.96	30-160
9 1,4-Dichlorobenzen	483.0	374.9	77.61	30-160
11 Benzyl alcohol	483.0	420.3	87.01	30-160
12 1,2-Dichlorobenzen	483.0	347.6	71.97	30-160
13 2-Methylphenol	483.0	343.4	71.10	30-160
15 4-Methylphenol	966.0	841.1	87.07	30-160
17 Hexachloroethane	483.0	195.6	40.50	30-160
22 2,4-Dimethylphenol	1449	1137	78.43	30-160
24 Benzoic acid	2657	1221	45.97	30-160
26 1,2,4-Trichloroben	483.0	353.7	73.23	30-160
28 Naphthalene	483.0	497.8	103.06	30-160
30 Hexachlorobutadien	483.0	366.2	75.81	30-160
32 2-Methylnaphthalen	483.0	414.3	85.78	30-160
39 Dimethylphthalate	483.0	463.6	95.98	30-160
40 Acenaphthylene	483.0	447.1	92.55	30-160
44 Acenaphthene	483.0	473.4	98.01	30-160
46 Dibenzofuran	483.0	473.6	98.05	30-160
49 Fluorene	483.0	579.0	119.88	30-160
50 Diethylphthalate	483.0	472.4	97.80	30-160
54 N-Nitrosodiphenyla	483.0	361.5	74.83	30-160
57 Hexachlorobenzene	483.0	451.9	93.56	30-160
58 Pentachlorophenol	1449	875.5	60.41	30-160
60 Phenanthrene	483.0	1031	213.49*	30-160
61 Anthracene	483.0	733.4	151.84	30-160
63 Di-n-butylphthalat	483.0	526.2	108.94	30-160
64 Fluoranthene	483.0	1888	390.89*	30-160
65 Pyrene	483.0	2040	422.44*	30-160
67 Butylbenzylphthala	483.0	530.5	109.82	30-160
68 Benzo(a)anthracene	483.0	1181	244.46*	30-160
71 Chrysene	483.0	1840	380.98*	30-160
72 bis(2-Ethylhexyl)p	483.0	702.2	145.38	30-160
73 Di-n-octylphthalat	483.0	460.0	95.24	30-160

SPIKE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
76 Benzo(a)pyrene	483.0	1178	243.89*	30-160
78 Indeno(1,2,3-cd)py	483.0	371.7	76.96	30-160
79 Dibenzo(a,h)anthra	483.0	292.4	60.53	30-160
80 Benzo(g,h,i)peryle	483.0	281.1	58.19	30-160
105 1-methylnaphthalen	483.0	421.2	87.20	30-160
187 Total Benzofluoran	966.0	2678	277.26*	30-160

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 1 2-Fluorophenol	724.5	504.0	69.56	30-160
$ 2 Phenol-d5	724.5	542.6	74.89	30-160
$ 5 2-Chlorophenol-d4	724.5	635.9	87.77	30-160
$ 10 1,2-Dichlorobenzen	483.0	397.2	82.24	30-160
$ 18 Nitrobenzene-d5	483.0	387.7	80.26	30-160
$ 36 2-Fluorobiphenyl	483.0	440.0	91.09	30-160
$ 55 2,4,6-Tribromophen	724.5	672.8	92.86	30-160
$ 66 Terphenyl-d14	483.0	471.7	97.66	30-160

Data File: /chem1/nt10.i/20130215.b/wc32gms.d

Date : 15-FEB-2013 22:53

Client ID: SG-08-0-10-0131 HS

Instrument: nt10.i

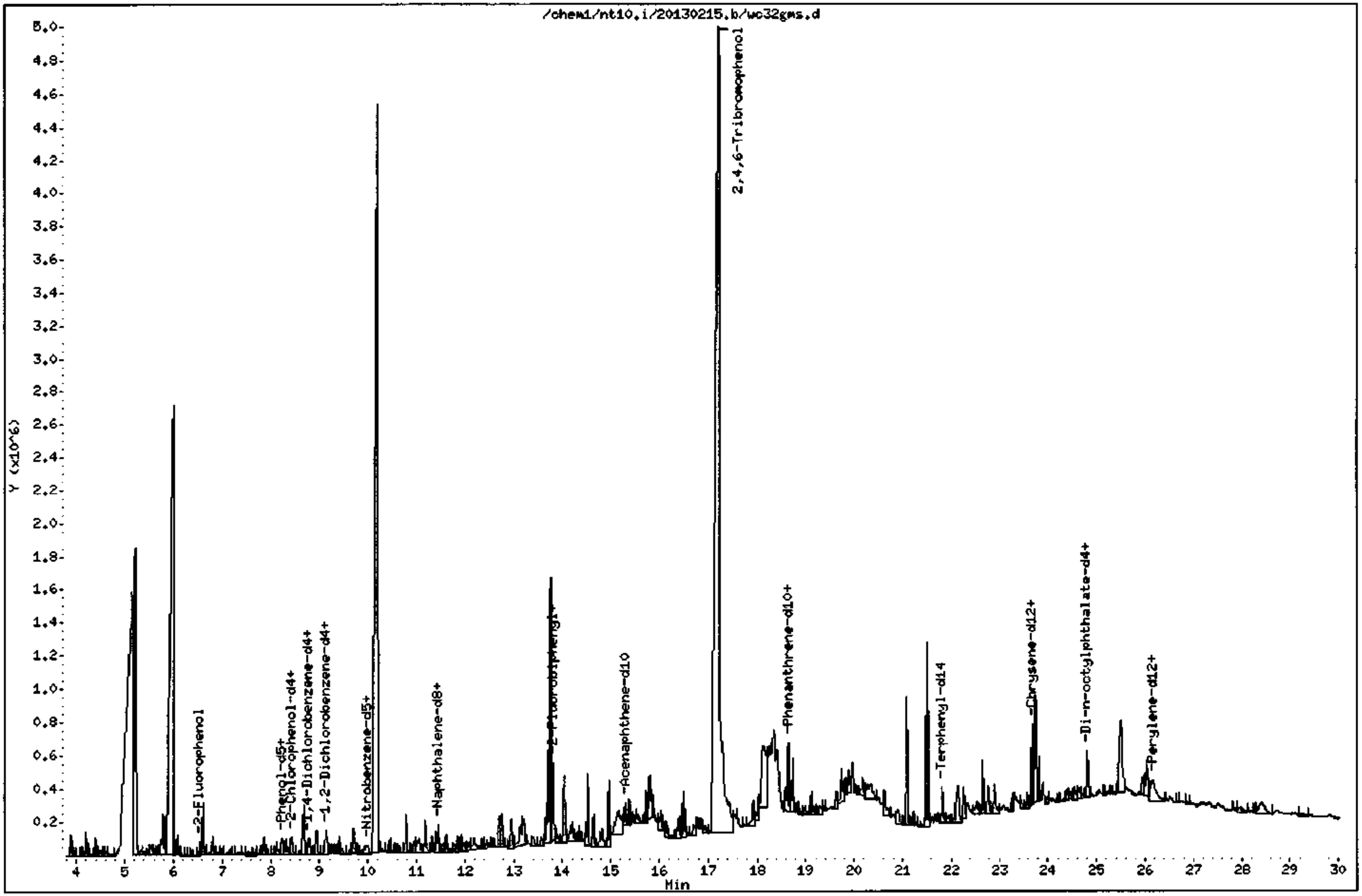
Sample Info: WC32CHS

Volume Injected (uL): 1.0

Operator: VTS/YZ

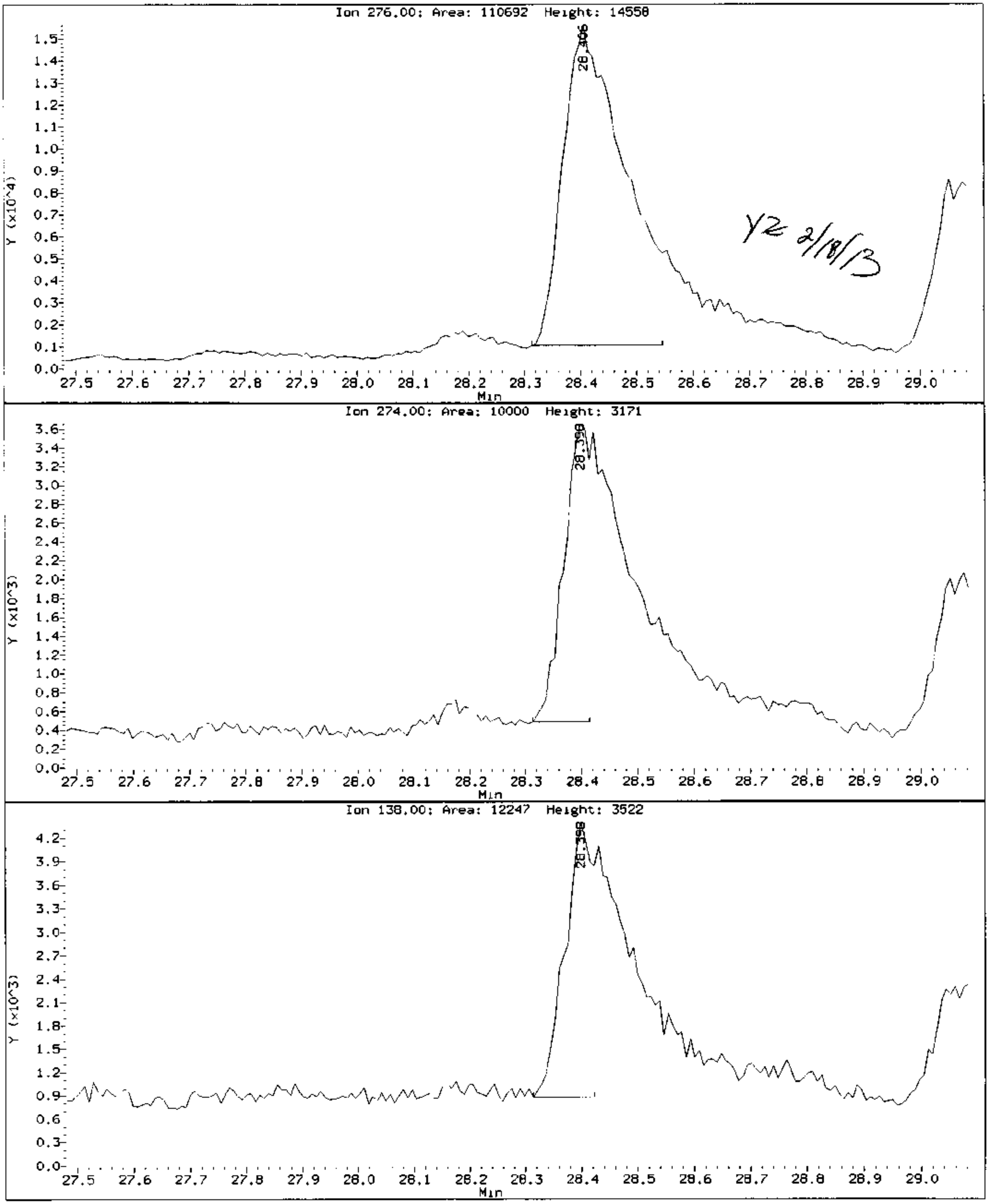
Column phase: ZB-5ms1

Column diameter: 0.25



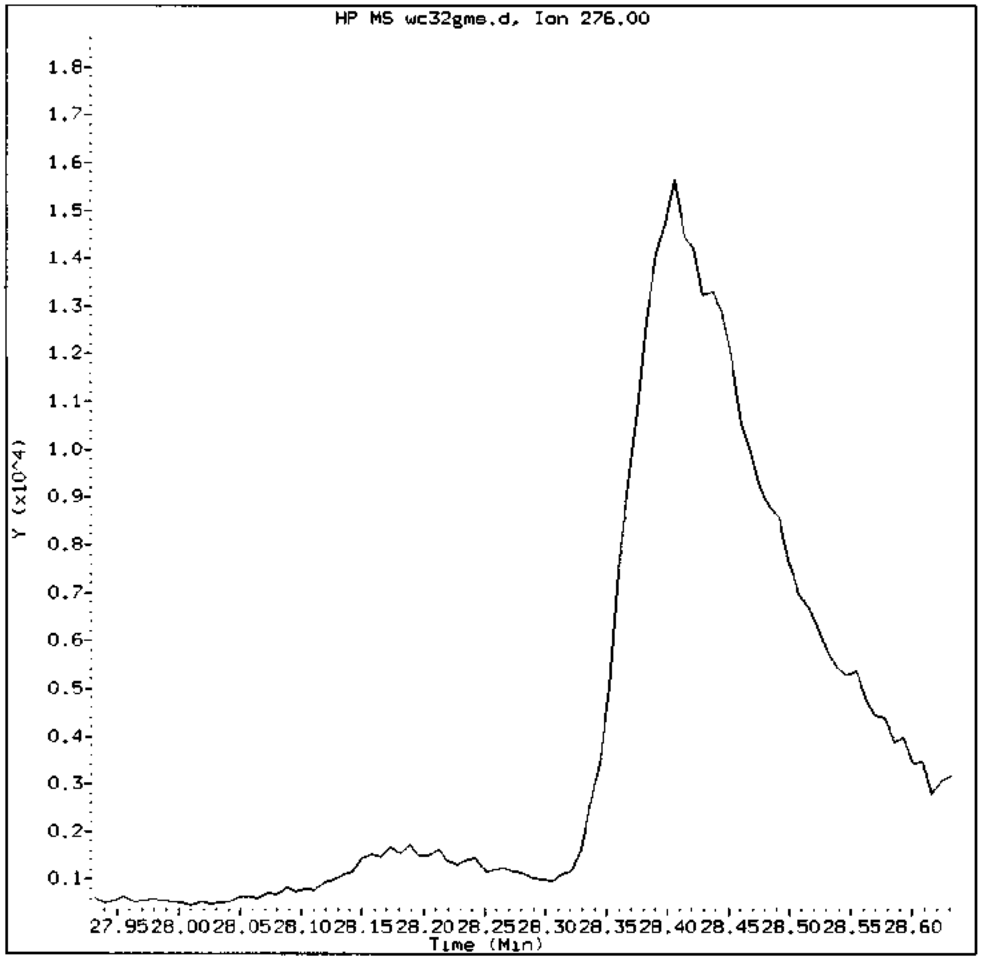
Data File: /chem1/nt10.i/20130215.b/wc32gms.d
Injection Date: 15-FEB-2013 22:53
Instrument: nt10.i
Client Sample ID: SG-08-0-10-0131 MS

Compound: Indeno(1,2,3-cd)pyrene
CAS Number: 193-39-5



WC32GMS, /chem1/nt10.i/20130215.b/wc32gms.d

Indeno(1,2,3-cd)pyrene   Amount: 3.85   Area: 136320



MANUAL INTEGRATION for Indeno(1,2,3-cd)pyrene

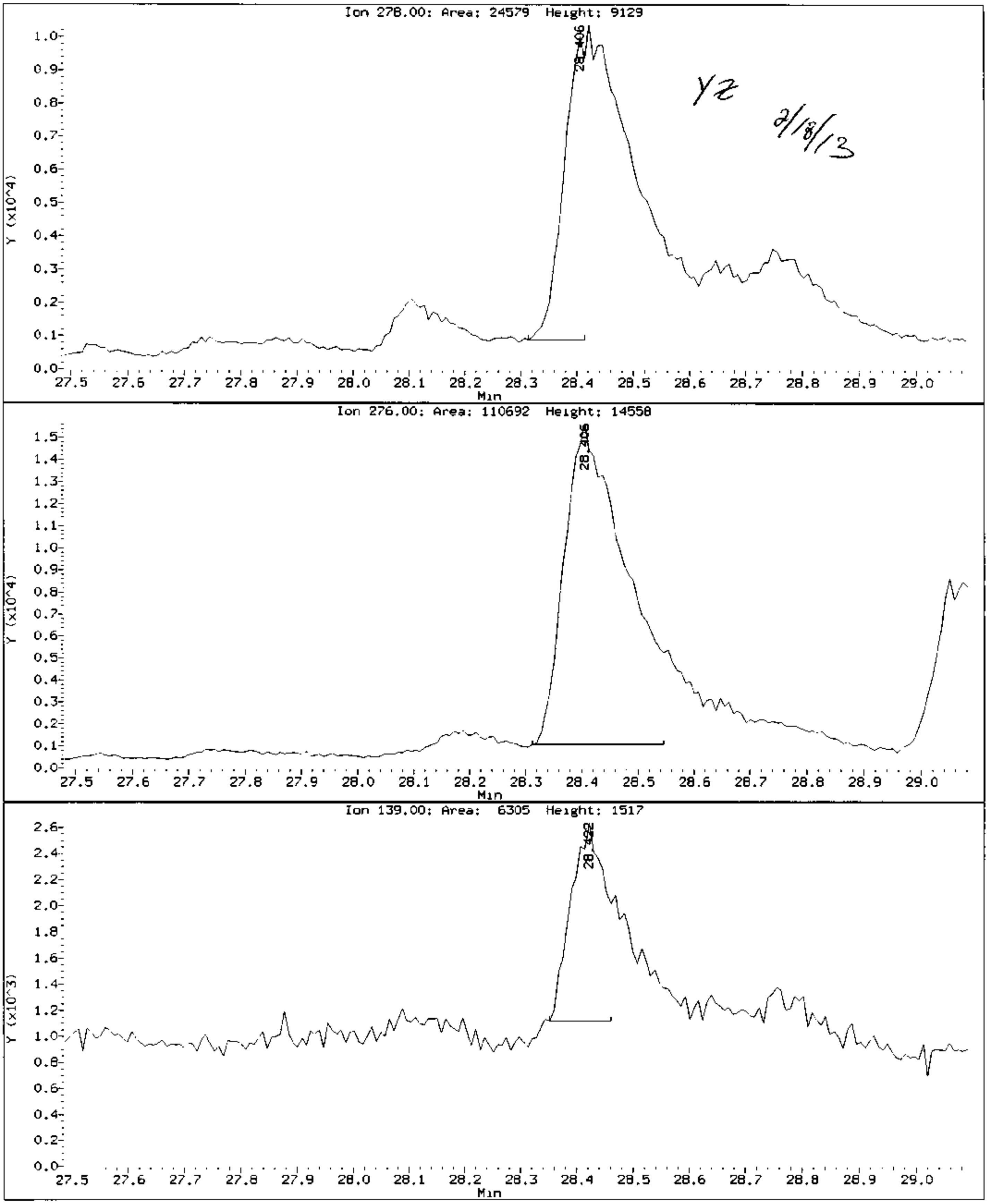
1. Baseline correction ✓
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other ____________________

Analyst: VZ   Date: 2/18/13

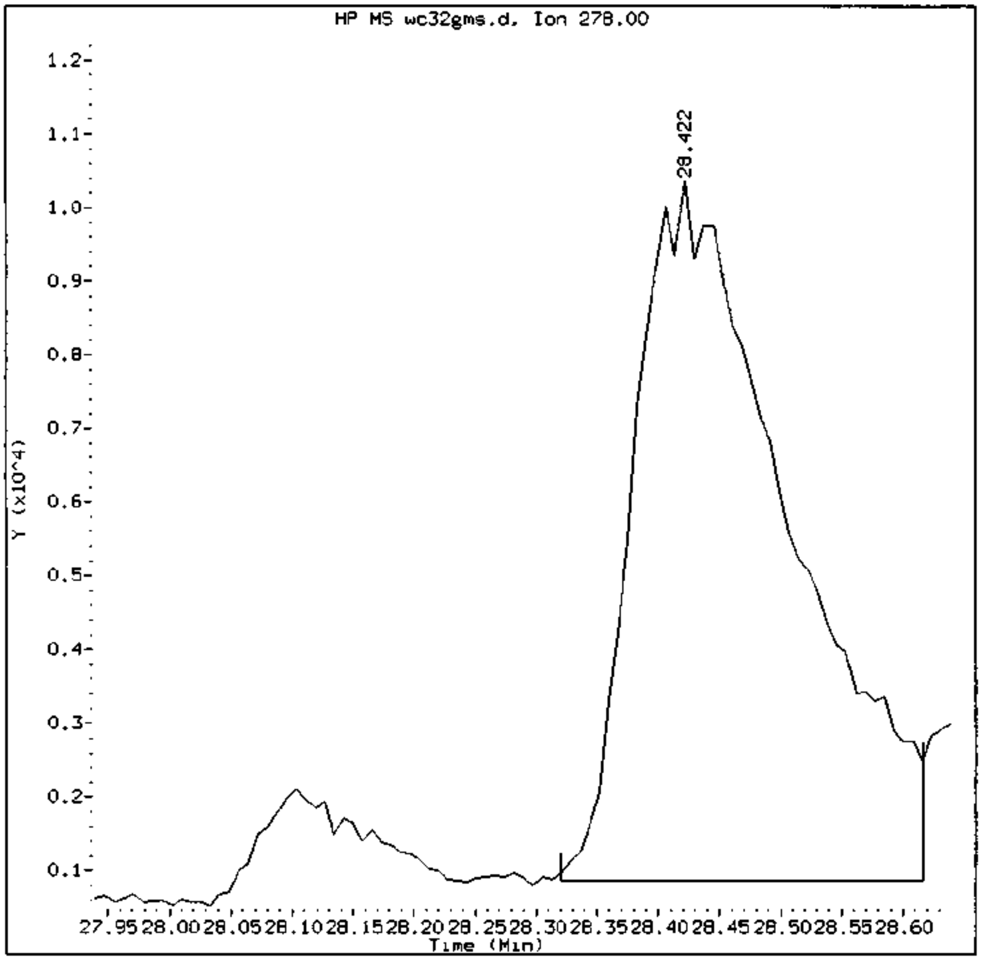
Data File: /chem1/nt10.i/20130215.b/wc32gms.d
Injection Date: 15-FEB-2013 22:53
Instrument: nt10.i
Client Sample ID: SG-08-0-10-0131 MS

Compound: Dibenzo(a,h)anthracene
CAS Number: 53-70-3



WC32GMS, /chem1/nt10.i/20130215.b/wc32gms.d

Dibenzo(a,h)anthracene   Amount: 3.03   Area: 84906



MANUAL INTEGRATION for Dibenzo(a,h)anthracene

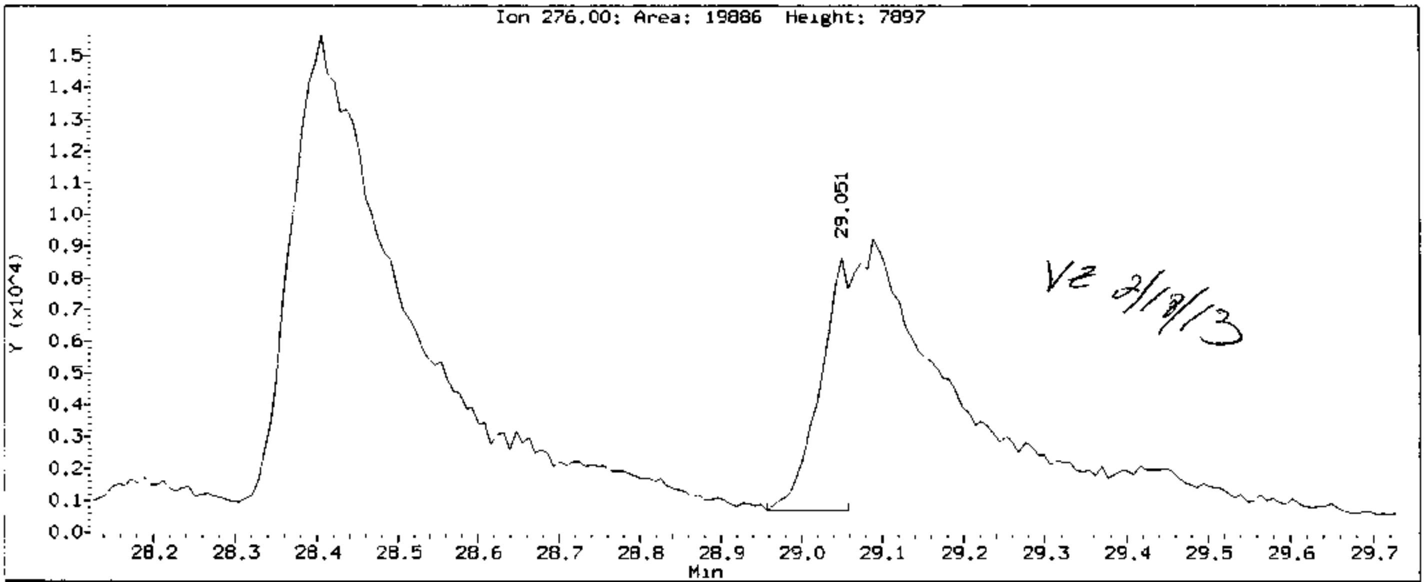
1. Baseline correction ✓
2. Poor chromatography
3. Peak not found
4. Totals calculation

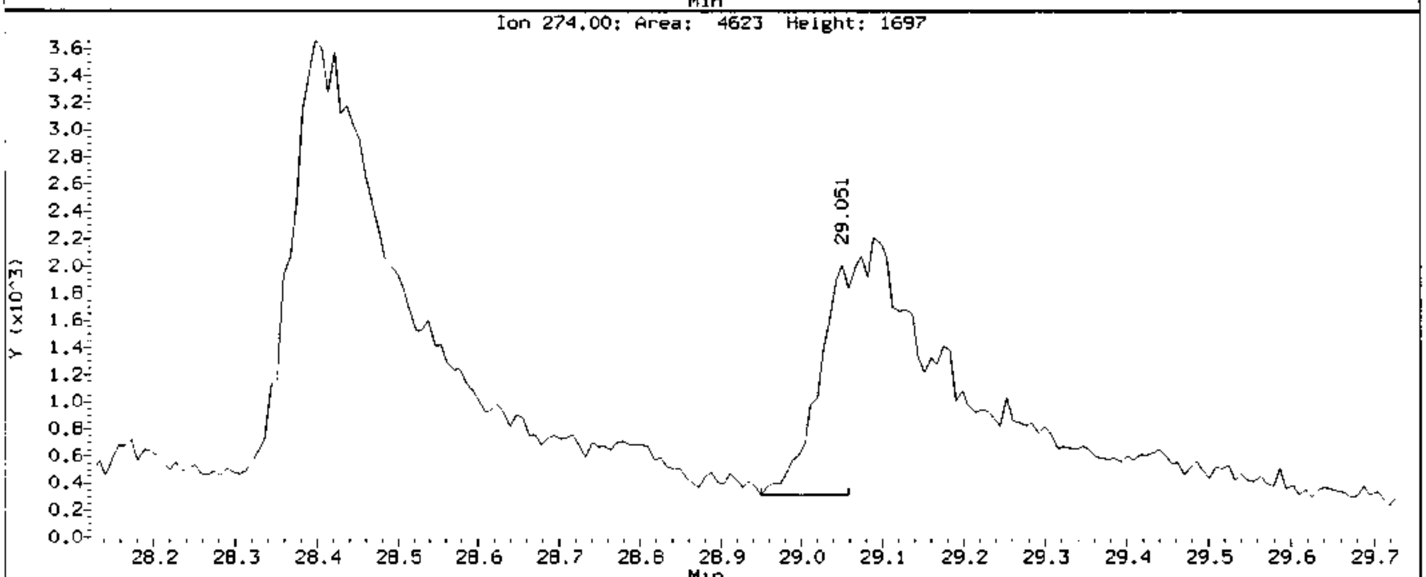
5. Other ______________________________

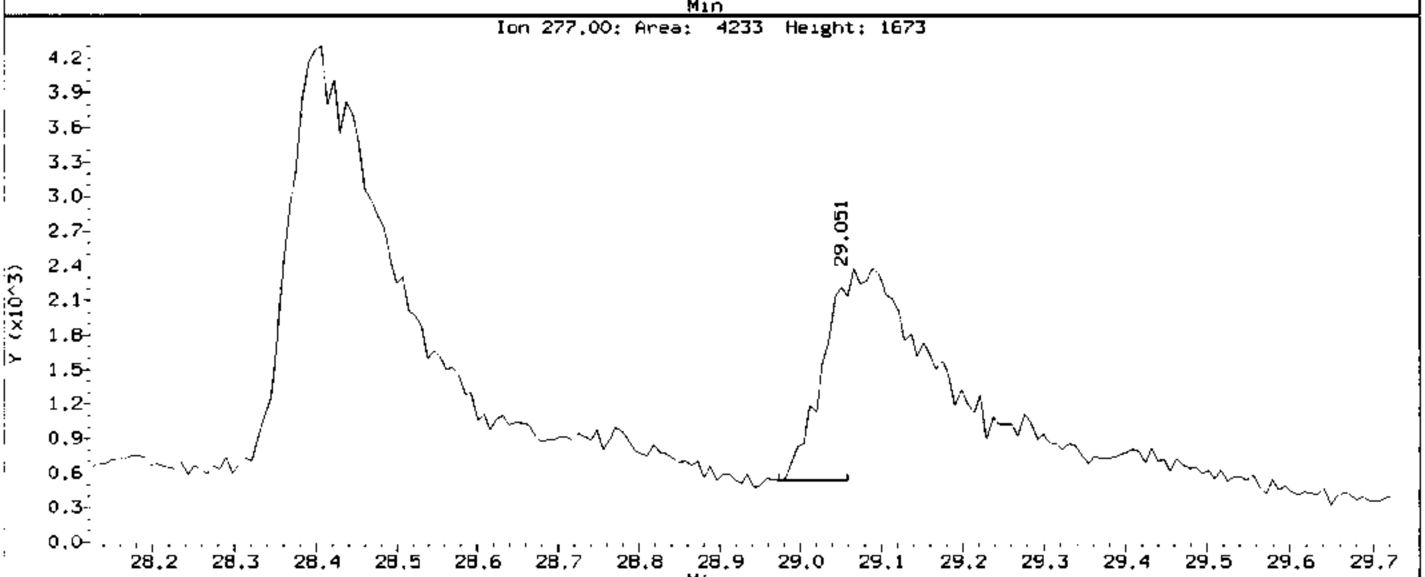
Analyst: YZ   Date: 3/18/13

Data File: /chem1/nt10.i/20130215.b/wc32gms.d
Injection Date: 15-FEB-2013 22:53
Instrument: nt10.i
Client Sample ID: SG-08-0-10-0131 MS

Compound: Benzo(g,h,i)perylene
CAS Number: 191-24-2

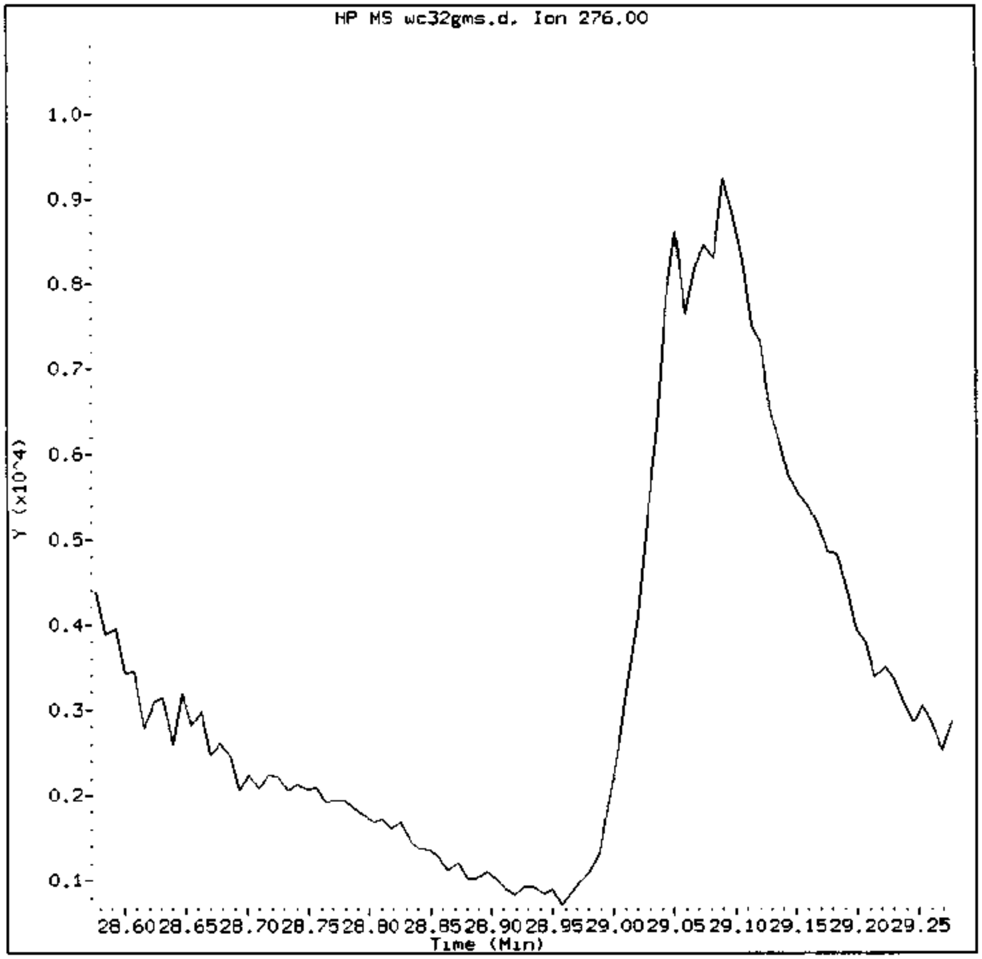






WC32GMS, /chem1/nt10.i/20130215.b/wc32gms.d

Benzo(g,h,i)perylene   Amount: 2.91   Area: 88443



MANUAL INTEGRATION for Benzo(g,h,i)perylene

1. Baseline correction ✓
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other ______________________

Analyst: ____YB____   Date: ____2/19/13____

CO-ELUTION SUMMARY FOR FILE - wc32gms.d

Lab ID: WC32GMS, Method: ABN.m, Instrument: nt10.i, Date: 15-FEB-2013

RT	CO-ELUTION COMPOUNDS
25.507	Benzo(k)fluoranthene and Benzo(b)fluoranthene

Analytical Resources Inc.: Organics Instrument Log

NT-10 Serial No.:GC=CN10837018, MS= US83131105

Date: 2/16/13 Analysis: ABN/SIM ABN Analyst: YZ

GC Program: ABN2 Column No: 247358 Column Type: ZB5 msi

Instrument Tune (.U or .CT.): 1212044 EM Voltage: 1500

Calibration File: DF0216 Curve Date: 1/25/13 Injection Vol.: 1 ul

IS/SS	Ical/Ccal	LCS/ICV
1978-2	2036-2	
	2064-2	
	2068-3	
	2050-42	
	1998-4	

Document All Maintenance Tasks In StarLIMS

INTERNAL STANDARD SUMMARY FOR DATABATCH - /chem1/nt10.i/20130216.b

	Time	Filename	LabID	ClientId	DF								
1	1046	df0216.d	DFTPP	DFTPP	1	NO ISTDS FOUND							
2	1103	cc0216.d	ABN 5		1	8.65	58641||11.30	215378||15.19	135889||18.46	230004||23.58	264796||25.96	285179||24.69	370433|
3	1219	wd46mb.d	WD46MBS1	WD46MBS1	1	8.65	45617||11.30	170168||15.20	101501||18.47	172192||23.59	194509||25.97	191649||24.71	257130|
4	1256	wd46sb.d	WD46LCSS1	WD46LCSS1	1	8.65	44504||11.30	163187||15.20	99881||18.47	168762||23.59	196546||25.98	205271||24.71	262596
5	1332	wd46sbd.d	WD46LCSDS1	WD46LCSDS1	1	8.65	43880||11.30	162147||15.20	100188||18.48	168293||23.59	188713||25.97	201908||24.71	255109|
6	1409	wd46a.d	WD46A	SS01-A	2	8.65	44666||11.31	170439||15.20	99617||18.48	172588||23.60	217711||26.01	232002||24.73	295403|
7	1445	wd46d.d	WD46D	SS02-A	5	8.65	46049||11.31	172296||15.20	102794||18.48	167800||23.60	203867||26.00	227965||24.72	287451|
8	1522	wd46e.d	WD46E	SS02-B	5	8.65	46213||11.31	172532||15.20	102004||18.49	172184||23.61	214389||26.01	226847||24.73	291093|
9	1558	wd46f.d	WD46F	SS02-C	10	8.65	48070||11.31	177400||15.20	105469||18.49	175726||23.60	214677||26.00	224849||24.72	287422|
10	1635	wd73mb.d	WD73MBS1	WD73MBS1	1	8.65	44446||11.31	166287||15.21	97384||18.49	164084||23.60	204928||25.99	216049||24.72	267508|
11	1711	wd73sb.d	WD73LCSS1	WD73LCSS1	1	8.66	42687||11.32	158135||15.21	96400||18.49	159925||23.62	200054||26.01	212094||24.73	265712|
12	1747	wd73sbd.d	WD73LCSDS1	WD73LCSDS1	1	8.64	42267||11.30	157019||15.19	95766||18.46	160961||23.57	193778||25.97	208701||24.69	267668|
13	1823	wd73a.d	WD73A	EBW-1109SS-13	1	8.66	42356||11.32	160930||15.21	95289||18.49	160288||23.63	198016||26.03	207490||24.74	252320|
14	1900	wc32g.d	WC32G	SG-08-0-10-0	5	8.67	37651||11.33	145732||15.22	89068||18.49	148946||23.62	197324||26.01	210514||24.73	258188|
15	1936	wc32gmsd.d	WC32GMSD	SG-08-0-10-0	1	8.68	40003||11.34	154698||15.23	99015||18.51	170394||23.64	230952||26.04	234821||24.76	313766|
16	2012	wc32h.d	WC32H	SG-09-0-10-0	1	8.66	44050||11.32	164594||15.22	100040||18.50	151002||23.63	216184||26.02	227017||24.74	270514|
17	2048	wc33g.d	WC33G	HA-09-0-10-0	1	8.66	41694||11.32	147300||15.21	94380||18.49	159353||23.62	194416||26.01	205031||24.74	259159|
18	2124	wd82mb.d	WD82MBS1	WD82MBS1	1	8.66	42776||11.32	142285||15.21	86404||18.49	145287||23.62	190242||26.01	201904||24.73	251204|
19	2200	wd82sb.d	WD82LCSS1	WD82LCSS1	1	8.66	39873||11.31	148617||15.21	92432||18.49	152335||23.62	192125||26.00	198499||24.73	250533|
20	2236	wd82sbd.d	WD82LCSDS1	WD82LCSDS1	1	8.65	40431||11.31	147423||15.21	94163||18.49	151995||23.61	198370||26.00	198292||24.73	250406|
21	2312	wd82a.d	WD82A	RCB-8TH/EENY	3	8.65	41660||11.31	154442||15.20	91026||18.48	157619||23.63	201110||26.04	199366||24.75	266198|

Every line must contain information or be lined out. Make all entries legible.
Start a new page for each QC period. Document All Maintenance Tasks In StarLIMS

YZ 2/18/13

Q-FLAG SUMMARY FOR DATABATCH - /chem1/nt10.i/20130216.b

Instrument: nt10.i Date: 16-FEB-2013 Method: ABN.m

INITIAL CAL: 25-JAN-2013

Compound	%RSD or R^2
NO Q-FLAGS	

CONTINUING CAL: 16-FEB-2013

Compound	%D
Benzoic acid	-25.6
~~Hexachlorocyclopentadiene~~	~~-31.5~~
~~2,4-Dinitrophenol~~	~~-20.2~~
Diethylphthalate	20.9
Pentachlorophenol	-41.1
~~Retene~~	~~100.0~~

Data File: /chem1/nt10.i/20130216.b/df0216.d

Date : 16-FEB-2013 10:48

Client ID: DFTPP

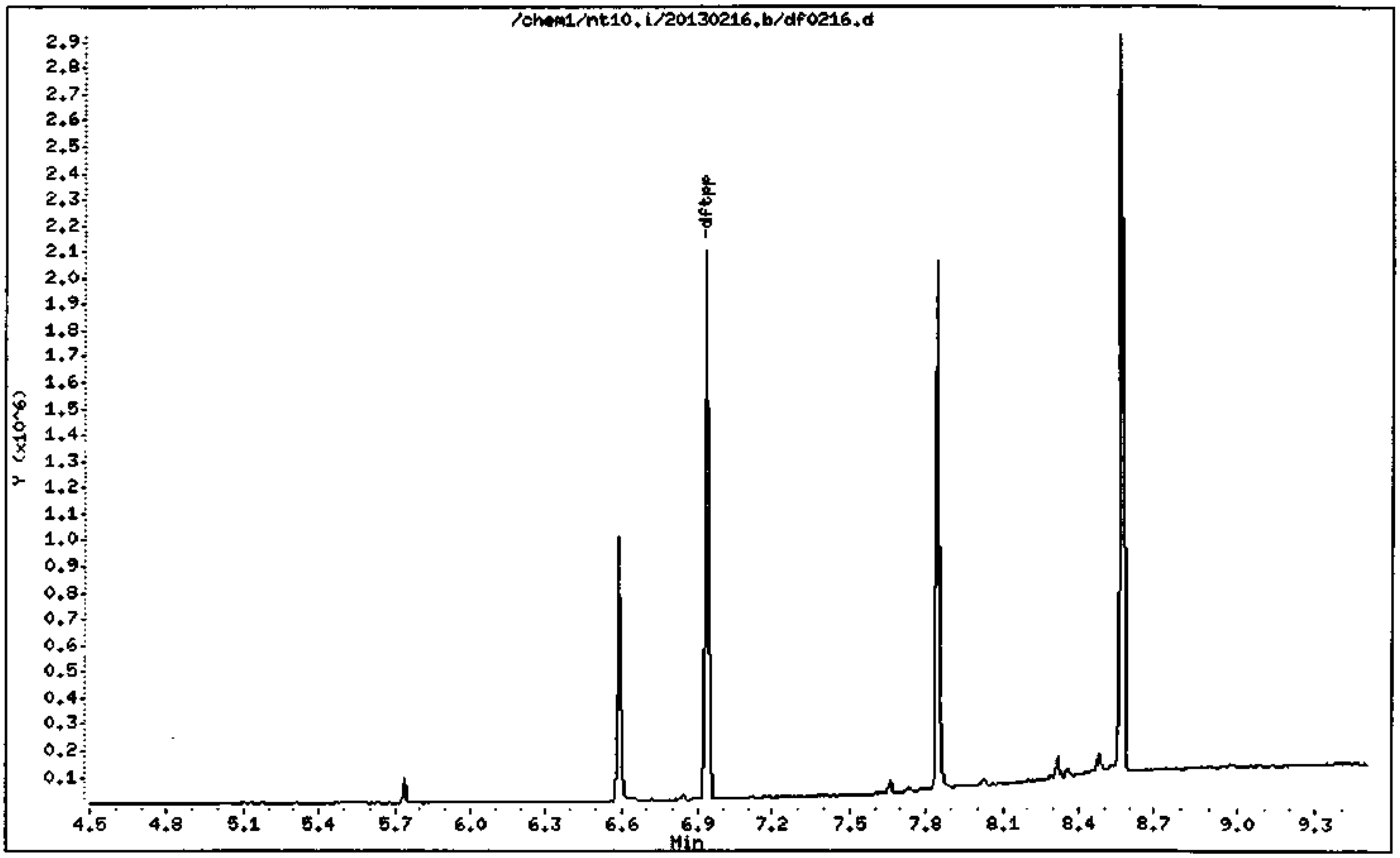
Instrument: nt10.i

Sample Info: DFTPP

Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25



Data File: /chem1/nt10.i/20130216.b/df0216.d

Date : 16-FEB-2013 10:48

Client ID: DFTPP

Instrument: nt10.i

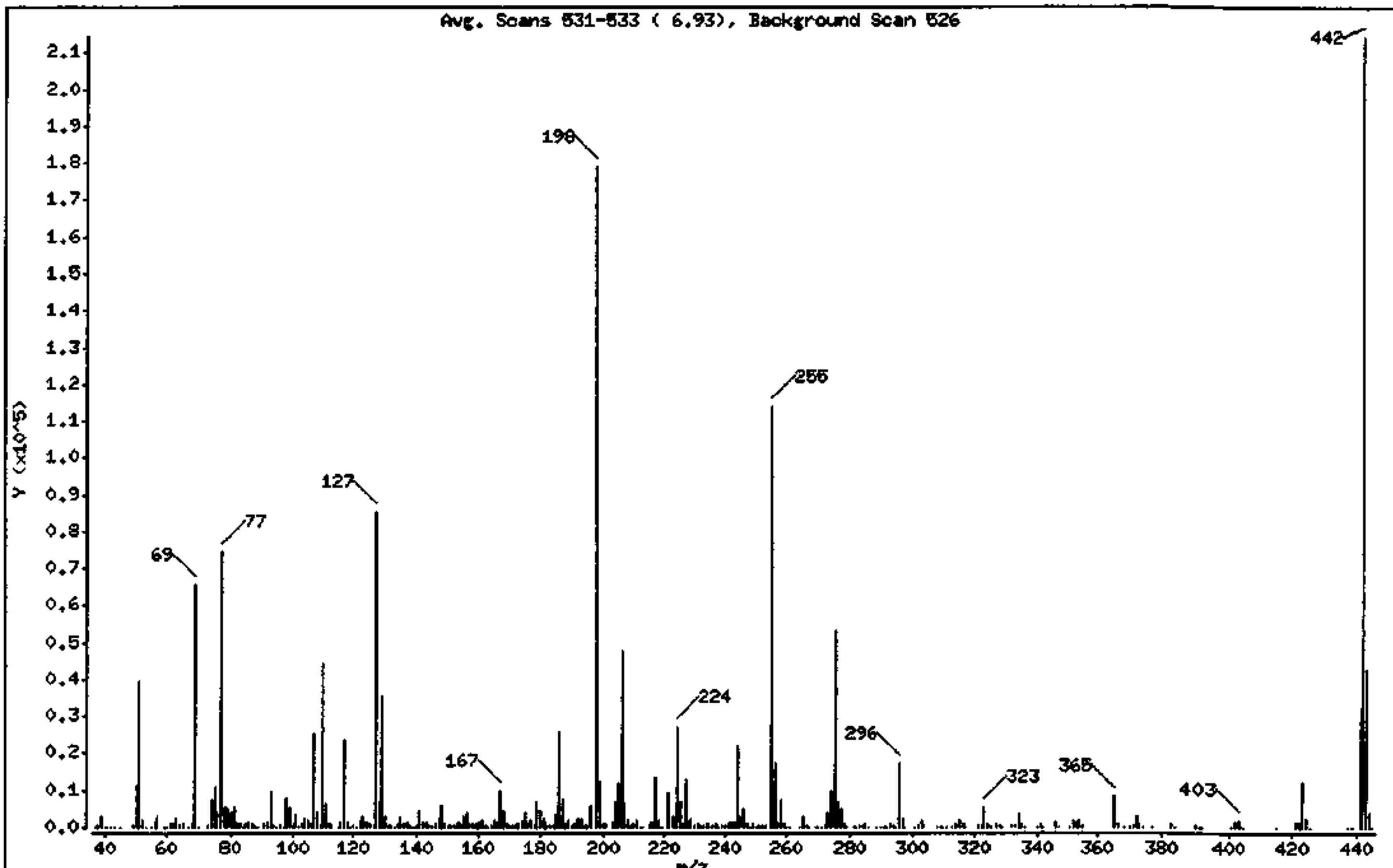
Sample Info: DFTPP

Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	22.12
68	Less than 2.00% of mass 69	0.58 (1.57)
69	Mass 69 relative abundance	36.62
70	Less than 2.00% of mass 69	0.13 (0.35)
127	10.00 - 80.00% of mass 198	47.82
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.78
275	10.00 - 60.00% of mass 198	29.83
365	Greater than 1.00% of mass 198	4.81
441	0.01 - 24.00% of mass 442	18.17 (15.15)
442	50.00 - 200.00% of mass 198	119.92
443	15.00 - 24.00% of mass 442	24.07 (20.07)

Date : 16-FEB-2013 10:48

Client ID: DFTPP Instrument: nt10.i

Sample Info: DFTPP

Operator: YZ

Column phase: ZB-5msi Column diameter: 0.25

Data File: df0216.d

Spectrum: Avg. Scans 531-533 (6.93), Background Scan 526

Location of Maximum: 442.00

Number of points: 307

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	185	125.00	1140	205.00	11950	292.00	215
38.00	579	127.00	85600	206.00	47688	293.00	1094
39.00	2882	128.00	6688	207.00	6211	294.00	285
40.00	123	129.00	35536	208.00	1831	295.00	234
41.00	135	130.00	3084	209.00	441	296.00	17280
42.00	169	131.00	582	210.00	850	297.00	2357
43.00	59	132.00	392	211.00	2086	298.00	152
45.00	121	133.00	191	212.00	202	301.00	192
49.00	353	134.00	1135	213.00	216	302.00	279
50.00	11288	135.00	2781	215.00	735	303.00	1993
51.00	39592	136.00	1195	216.00	1279	304.00	562
52.00	2071	137.00	1361	217.00	13461	308.00	217
53.00	119	138.00	395	218.00	1828	309.00	147
55.00	230	139.00	98	219.00	217	310.00	193
56.00	1405	140.00	506	221.00	9554	311.00	56
57.00	3000	141.00	4595	223.00	2960	313.00	166
59.00	52	142.00	1468	224.00	27352	314.00	869
60.00	59	143.00	1244	225.00	7056	315.00	2020
61.00	776	144.00	310	226.00	829	316.00	1107
62.00	844	145.00	362	227.00	12729	317.00	178
63.00	2256	146.00	913	228.00	1900	321.00	575
64.00	330	147.00	2436	229.00	2486	322.00	274
65.00	1172	148.00	5850	230.00	325	323.00	5349
67.00	120	149.00	992	231.00	1027	324.00	1063
68.00	1030	150.00	325	232.00	250	325.00	58
69.00	65552	151.00	669	233.00	248	327.00	1149
70.00	227	152.00	486	234.00	766	328.00	536
73.00	589	153.00	1618	235.00	950	329.00	145
74.00	7175	154.00	1132	236.00	689	332.00	415
75.00	10790	155.00	2774	237.00	1026	333.00	549
76.00	3744	156.00	3792	238.00	149	334.00	3622
77.00	74552	157.00	816	239.00	469	335.00	961
78.00	5226	158.00	886	240.00	506	336.00	109
79.00	5098	159.00	821	241.00	808	340.00	50
80.00	3986	160.00	1566	242.00	1526	341.00	750

Date : 16-FEB-2013 10:48

Client ID: DFTPP Instrument: nt10.i

Sample Info: DFTPP

Operator: YZ

Column phase: ZB-5msi Column diameter: 0.25

Data File: df0216.d
Spectrum: Avg. Scans 531-533 (6.93), Background Scan 526
Location of Maximum: 442.00
Number of points: 307

m/z	Y	m/z	Y	m/z	Y	m/z	Y
81.00	5478	161.00	2156	243.00	1651	342.00	176
82.00	1215	162.00	670	244.00	21968	346.00	1264
83.00	1146	163.00	127	245.00	3005	347.00	205
84.00	88	164.00	288	246.00	4810	351.00	54
85.00	834	165.00	1900	247.00	1014	352.00	1737
86.00	1550	166.00	1535	248.00	210	353.00	1250
87.00	874	167.00	9747	249.00	826	354.00	1770
88.00	266	168.00	4401	250.00	130	355.00	503
89.00	194	169.00	873	251.00	276	365.00	8615
91.00	1205	170.00	351	252.00	350	366.00	1143
92.00	1474	171.00	346	253.00	638	368.00	79
93.00	9408	172.00	905	255.00	113928	370.00	152
94.00	696	173.00	1173	256.00	17088	371.00	492
95.00	47	174.00	2067	257.00	1268	372.00	3063
96.00	374	175.00	3735	258.00	7345	373.00	782
97.00	73	176.00	1091	259.00	1177	374.00	69
98.00	7875	177.00	1851	260.00	157	377.00	50
99.00	5362	178.00	677	261.00	178	383.00	850
100.00	534	179.00	7073	264.00	187	384.00	211
101.00	3235	180.00	4669	265.00	3068	390.00	404
102.00	138	181.00	2297	266.00	425	391.00	244
103.00	1191	182.00	383	267.00	143	392.00	173
104.00	2248	183.00	272	269.00	54	401.00	203
105.00	1865	184.00	693	270.00	239	402.00	1383
106.00	743	185.00	3324	271.00	239	403.00	1889
107.00	25192	186.00	25792	272.00	412	404.00	637
108.00	3807	187.00	7481	273.00	3746	405.00	61
109.00	681	188.00	796	274.00	9905	415.00	51
110.00	44632	189.00	1797	275.00	53392	421.00	1637
111.00	6653	190.00	357	276.00	7028	422.00	1497
112.00	1021	191.00	1058	277.00	4860	423.00	12129
113.00	326	192.00	2370	278.00	787	424.00	2390
115.00	152	193.00	2425	279.00	146	425.00	198
116.00	1612	194.00	639	281.00	46	437.00	60
117.00	23856	195.00	327	282.00	214	438.00	155

Date : 16-FEB-2013 10:48

Client ID: DFTPP

Instrument: nt10.i

Sample Info: DFTPP

Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

Data File: df0216.d

Spectrum: Avg. Scans 531-533 (6.93), Background Scan 526

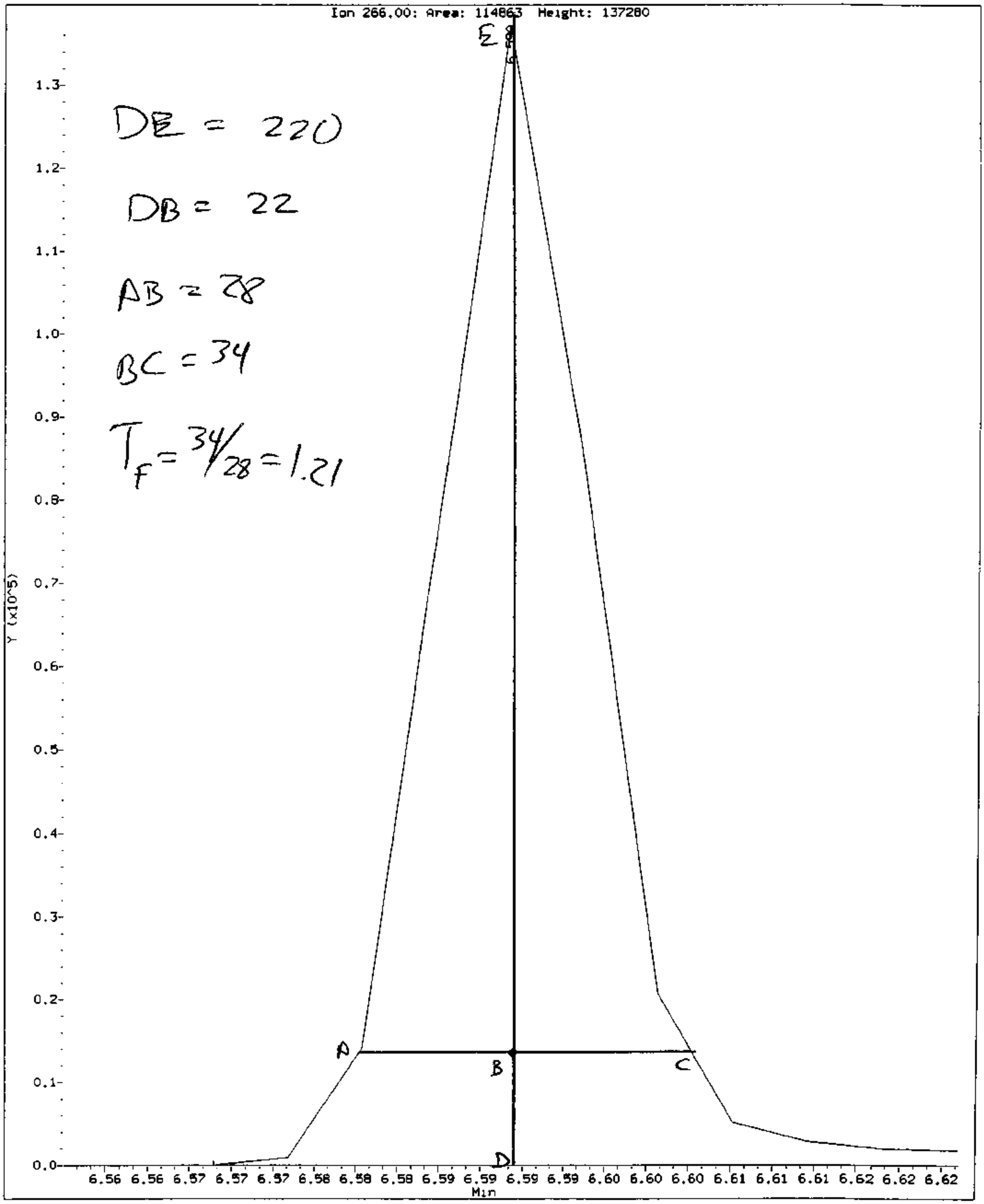
Location of Maximum: 442.00

Number of points: 307

m/z	Y	m/z	Y	m/z	Y	m/z	Y
118.00	1688	196.00	5897	283.00	672	439.00	138
119.00	118	198.00	178944	284.00	408	441.00	32520
120.00	377	199.00	12133	285.00	784	442.00	214656
121.00	166	200.00	984	286.00	180	443.00	43080
122.00	1812	201.00	984	289.00	203	444.00	4044
123.00	2928	203.00	1649	290.00	135	445.00	177
124.00	1292	204.00	7095	291.00	50		

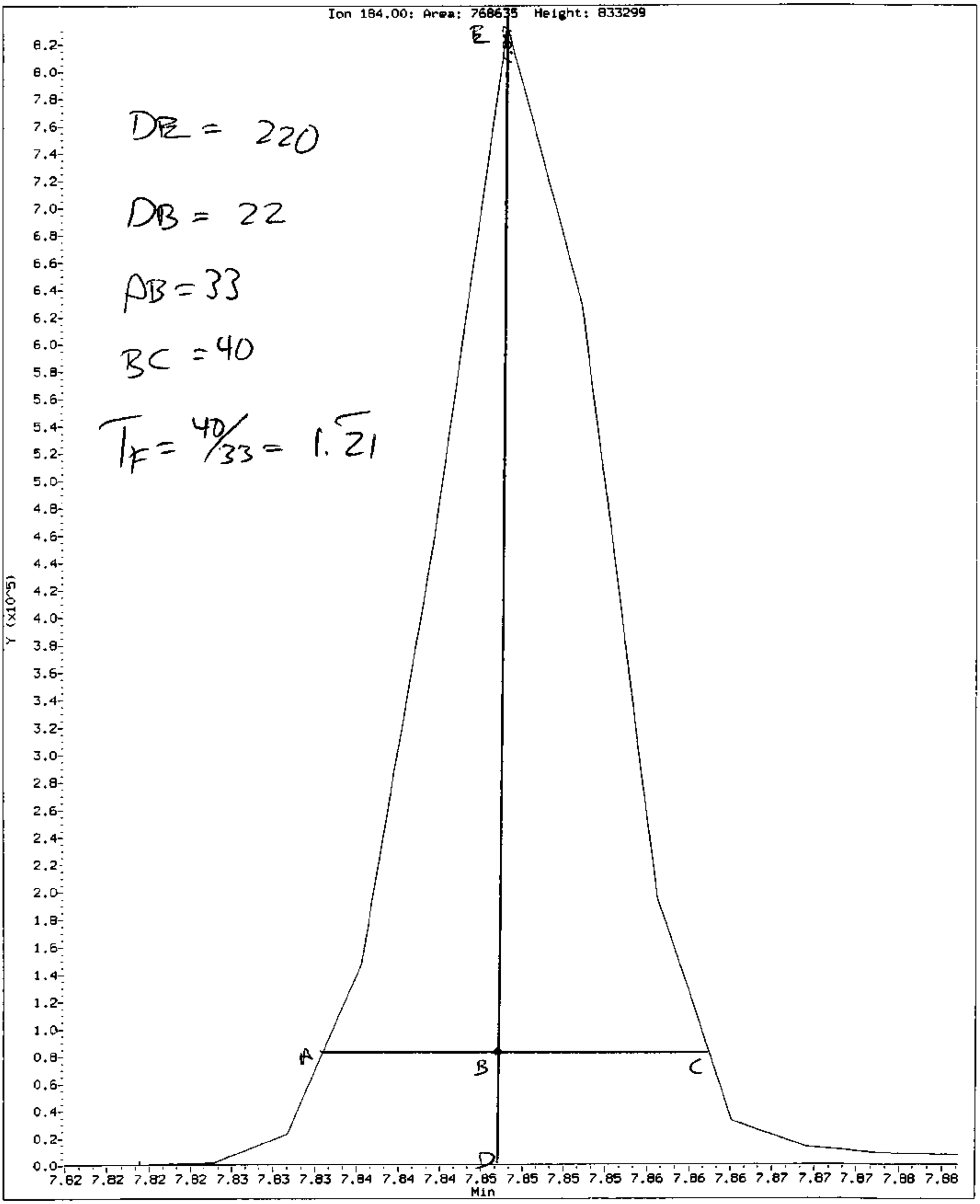
Data File: /chem1/nt10.i/20130216.b/DDT.b/df0216.d
Injection Date: 16-FEB-2013 10:48
Instrument: nt10.i
Client Sample ID: DFTPP

Compound: Pentachlorophenol
CAS Number: 87-86-5



Data File: /chem1/nt10.i/20130216.b/DDT.b/df0216.d
Injection Date: 16-FEB-2013 10:48
Instrument: nt10.i
Client Sample ID: DFTPP

Compound: Benzidine
CAS Number:



Analytical Resources Inc.
ABN by sw846 8270C
DDT Breakdown Report

Data file: /chem1/nt10.i/20130216.b/DDT.b/df0216.d   ARI ID: DFTPP
Method: /chem1/nt10.i/20130216.b/DDT.b/sw846ddt.m   Misc: 11-
Analysis Date: 16-FEB-2013 10:48   Instrument: nt10.i

COMPOUND	RT	AREA
Pentachlorophenol	6.590	114863
Benzidine	7.847	768635
4,4'-DDE	8.029	2273
4,4'-DDD	8.318	14663
4,4'-DDT	8.574	526932

$$\text{DDT Percent Breakdown} = \frac{(\text{DDE Area} + \text{DDD Area}) * 100}{(\text{DDE Area} + \text{DDD Area} + \text{DDT Area})}$$

$$\text{DDT Percent Breakdown} = \frac{(2273 + 14663) * 100}{(2273 + 14663 + 526932)}$$

DDT Percent Breakdown = 3.1 %

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt10.i/20130216.b/cc0216.d
Lab Smp Id: ABN 5
Inj Date : 16-FEB-2013 11:03
Operator : VTS/YZ Inst ID: nt10.i
Smp Info : ABN 5
Misc Info :
Comment : 1ul Injection
Method : /chem1/nt10.i/20130216.b/ABN.m
Meth Date : 16-Feb-2013 11:48 van Quant Type: ISTD
Cal Date : 25-JAN-2013 17:16 Cal File: ic0125h.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDAICAL.sub
Target Version: 3.50

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.351	6.351	(0.735)	93860	5.00000	5.004
$	2 Phenol-d5	99	8.082	8.082	(0.935)	116124	5.00000	4.989
	3 Phenol	94	8.105	8.105	(0.937)	134723	5.00000	5.499
$	5 2-Chlorophenol-d4	132	8.283	8.283	(0.958)	102028	5.00000	5.063
	4 Bis(2-Chloroethyl)ether	93	8.198	8.198	(0.948)	88397	5.00000	4.743
	6 2-Chlorophenol	128	8.314	8.314	(0.962)	106077	5.00000	4.976
	7 1,3-Dichlorobenzene	146	8.569	8.569	(0.991)	113483	5.00000	4.892
*	8 1,4-Dichlorobenzene-d4	152	8.647	8.647	(1.000)	58661	4.00000	
	9 1,4-Dichlorobenzene	146	8.678	8.678	(1.004)	109188	5.00000	4.754
$	10 1,2-Dichlorobenzene-d4	152	9.027	9.027	(1.044)	72283	5.00000	4.881
	12 1,2-Dichlorobenzene	146	9.050	9.050	(1.047)	106328	5.00000	4.814
	11 Benzyl alcohol	108	8.980	8.980	(1.039)	60102	5.00000	5.127
	14 2,2'-oxybis(1-Chloropropane)	121	9.291	9.291	(1.074)	32295	5.00000	4.925
	13 2-Methylphenol	108	9.275	9.275	(1.073)	90727	5.00000	4.906
	17 Hexachloroethane	117	9.671	9.671	(1.118)	43392	5.00000	4.779
	16 N-Nitroso-di-n-propylamine	70	9.570	9.570	(1.107)	61679	5.00000	4.992
	15 4-Methylphenol	108	9.570	9.570	(1.107)	96296	5.00000	5.007
$	18 Nitrobenzene-d5	82	9.826	9.826	(0.870)	98456	5.00000	4.953
	19 Nitrobenzene	77	9.857	9.857	(0.873)	91697	5.00000	4.865
	20 Isophorone	82	10.354	10.354	(0.917)	168900	5.00000	5.141
	21 2-Nitrophenol	139	10.540	10.540	(0.933)	60308	5.00000	5.446
	22 2,4-Dimethylphenol	107	10.672	10.672	(0.945)	190146	10.0000	10.07
	23 Bis(2-Chloroethoxy)methane	93	10.841	10.841	(0.960)	101940	5.00000	4.927
	24 Benzoic acid	105	10.988	10.988	(0.973)	239378	20.0000	14.89
	25 2,4-Dichlorophenol	162	11.057	11.057	(0.979)	173594	10.0000	10.52
	26 1,2,4-Trichlorobenzene	180	11.219	11.219	(0.993)	92893	5.00000	4.948
*	27 Naphthalene-d8	136	11.296	11.296	(1.000)	215378	4.00000	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
========================	****	**	======	======	========	=======	=======
28 Naphthalene	128	11.343	11.343	(1.004)	275895	5.00000	4.923
29 4-Chloroaniline	127	11.528	11.528	(1.020)	221181	10.0000	9.806
30 Hexachlorobutadiene	225	11.744	11.744	(1.040)	61742	5.00000	5.277
31 4-Chloro-3-methylphenol	107	12.642	12.642	(1.119)	173431	10.0000	10.88
32 2-Methylnaphthalene	142	12.851	12.851	(1.138)	192041	5.00000	5.190
33 Hexachlorocyclopentadiene	237	13.362	13.362	(0.880)	105016	10.0000	6.852
34 2,4,6-Trichlorophenol	196	13.563	13.563	(0.893)	144507	10.0000	10.61
35 2,4,5-Trichlorophenol	196	13.656	13.656	(0.899)	153729	10.0000	10.62
$ 36 2-Fluorobiphenyl	172	13.718	13.718	(0.903)	236395	5.00000	5.071
37 2-Chloronaphthalene	162	13.919	13.919	(0.916)	190097	5.00000	5.064
38 2-Nitroaniline	65	14.236	14.236	(0.937)	91573	10.0000	10.40
39 Dimethylphthalate	163	14.716	14.716	(0.969)	212252	5.00000	5.164
40 Acenaphthylene	152	14.848	14.848	(0.978)	312329	5.00000	5.102
41 2,6-Dinitrotoluene	165	14.855	14.855	(0.978)	102013	10.0000	10.86
* 42 Acenaphthene-d10	164	15.188	15.188	(1.000)	135889	4.00000	
43 3-Nitroaniline	138	15.165	15.165	(0.998)	97380	10.0000	11.23
44 Acenaphthene	153	15.258	15.258	(1.005)	185534	5.00000	4.943
45 2,4-Dinitrophenol	184	15.397	15.397	(1.014)	130367	20.0000	15.95
46 Dibenzofuran	168	15.621	15.621	(1.028)	260041	5.00000	4.982
47 4-Nitrophenol	109	15.629	15.629	(1.029)	58586	10.0000	9.915
48 2,4-Dinitrotoluene	165	15.729	15.729	(1.036)	137171	10.0000	10.80
50 Diethylphthalate	149	16.309	16.309	(1.074)	260336	5.00000	6.047
49 Fluorene	166	16.386	16.386	(1.079)	216806	5.00000	4.890
51 4-Chlorophenyl-phenylether	204	16.402	16.402	(1.080)	118812	5.00000	5.750
52 4-Nitroaniline	138	16.533	16.533	(1.089)	89568	10.0000	9.785
53 4,6-Dinitro-2-methylphenol	198	16.641	16.641	(0.901)	183594	20.0000	19.93
54 N-Nitrosodiphenylamine	169	16.687	16.687	(0.904)	138814	5.00000	5.010
$ 55 2,4,6-Tribromophenol	330	16.972	16.972	(1.117)	45510	5.00000	5.248
56 4-Bromophenyl-phenylether	248	17.481	17.481	(0.947)	67811	5.00000	5.285
57 Hexachlorobenzene	284	17.798	17.798	(0.964)	84299	5.00000	5.236
58 Pentachlorophenol	266	18.216	18.216	(0.987)	63191	10.0000	5.885
* 59 Phenanthrene-d10	188	18.464	18.464	(1.000)	230004	4.00000	
60 Phenanthrene	178	18.518	18.518	(1.003)	300244	5.00000	4.897
61 Anthracene	178	18.611	18.611	(1.008)	316379	5.00000	5.125
62 Carbazole	167	18.997	18.997	(1.029)	199229	5.00000	4.832
63 Di-n-butylphthalate	149	19.872	19.872	(1.076)	381008	5.00000	5.783
64 Fluoranthene	202	20.963	20.963	(1.135)	364155	5.00000	5.157
65 Pyrene	202	21.380	21.380	(0.907)	384316	5.00000	5.095
$ 66 Terphenyl-d14	244	21.713	21.713	(0.921)	252852	5.00000	4.972
67 Butylbenzylphthalate	149	22.666	22.666	(0.961)	160183	5.00000	5.599
68 Benzo(a)anthracene	228	23.556	23.556	(0.999)	376130	5.00000	5.091
* 69 Chrysene-d12	240	23.579	23.579	(1.000)	264796	4.00000	
70 3,3'-Dichlorobenzidine	252	23.541	23.541	(0.998)	364336	10.0000	11.80
71 Chrysene	228	23.626	23.626	(1.002)	328934	5.00000	4.915
72 bis(2-Ethylhexyl)phthalate	149	23.719	23.719	(0.960)	241542	5.00000	4.938
* 134 Di-n-octylphthalate-d4	153	24.694	24.694	(1.000)	370433	4.00000	
73 Di-n-octylphthalate	149	24.710	24.710	(1.001)	423831	5.00000	4.690

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
========================	====	==	======	======	========	=======	=======
74 Benzo(b)fluoranthene	252	25.329	25.329	(0.976)	432332	5.00000	5.230
75 Benzo(k)fluoranthene	252	25.360	25.360	(0.977)	425588	5.00000	4.766
76 Benzo(a)pyrene	252	25.863	25.863	(0.996)	366350	5.00000	5.125
* 77 Perylene-d12	264	25.964	25.964	(1.000)	285179	4.00000	
78 Indeno(1,2,3-cd)pyrene	276	28.134	28.134	(1.084)	484517	5.00000	5.496
79 Dibenzo(a,h)anthracene	278	28.150	28.150	(1.084)	387942	5.00000	5.557
80 Benzo(g,h,i)perylene	276	28.763	28.763	(1.108)	411996	5.00000	5.447
90 N-Nitrosodimethylamine	74	4.042	4.042	(0.468)	105431	10.0000	9.447
91 Aniline	93	8.090	8.090	(0.936)	266513	5.00000	5.041
93 Benzidine	184	21.241	21.241	(0.901)	141861	10.0000	11.43
103 Pyridine	79	4.050	4.050	(0.468)	92547	10.0000	9.722
105 1-methylnaphthalene	142	13.091	13.091	(1.159)	174877	5.00000	5.152
111 Azobenzene (1,2-DP-Hydrazine)	77	16.757	16.757	(1.103)	185041	5.00000	4.738
187 Total Benzofluoranthenes	252	25.360	25.360	(0.977)	801676	10.0000	9.853
99 Perylene	252	26.003	26.003	(1.001)	389041	5.00000	4.736
98 Retene	219	Compound Not Detected.					
120 2,3,4,6-Tetrachlorophenol	232	16.015	16.015	(1.054)	60707	5.00000	4.796

WD
2.16.13

Report Date: 16-Feb-2013 13:28

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: cc0216.d
Lab Smp Id: ABN 5
Analysis Type: SV
Quant Type: ISTD
Operator: VTS/YZ
Method File: /chem1/nt10.i/20130216.b/ABN.m
Misc Info:

Calibration Date: 16-FEB-2013
Calibration Time: 09:57

Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	46623	23312	93246	58661	25.82
27 Naphthalene-d8	176978	88489	353956	215378	21.70
42 Acenaphthene-d10	110872	55436	221744	135889	22.56
59 Phenanthrene-d10	188290	94145	376580	230004	22.15
69 Chrysene-d12	213681	106840	427362	264796	23.92
134 Di-n-octylphthala	264159	132080	528318	370433	40.23
77 Perylene-d12	208584	104292	417168	285179	36.72

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.65	8.15	9.15	8.65	0.00
27 Naphthalene-d8	11.30	10.80	11.80	11.30	0.00
42 Acenaphthene-d10	15.19	14.69	15.69	15.19	0.00
59 Phenanthrene-d10	18.46	17.96	18.96	18.46	0.00
69 Chrysene-d12	23.58	23.08	24.08	23.58	0.00
134 Di-n-octylphthala	24.69	24.19	25.19	24.69	0.00
77 Perylene-d12	25.96	25.46	26.46	25.96	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 16-Feb-2013 13:28

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt10.i Injection Date: 16-FEB-2013 11:03
Lab File ID: cc0216.d Init. Cal. Date(s): 25-JAN-2013 25-JAN-2013
Analysis Type: Init. Cal. Times: 12:59 17:16
Lab Sample ID: ABN 5 Quant Type: ISTD
Method: /chem1/nt10.i/20130216.b/ABN.m

COMPOUND	RRF / AMOUNT	RF5	CCAL RRF5	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 1 2-Fluorophenol	1.27898	1.28003	1.28003	0.010	0.08192	20.00000	Averaged	
$ 2 Phenol-d5	1.58709	1.58366	1.58366	0.010	-0.21621	20.00000	Averaged	
3 Phenol	1.67046	1.83731	1.83731	0.100	9.98794	20.00000	Averaged	
$ 5 2-Chlorophenol-d4	1.37422	1.39143	1.39143	0.010	1.25171	20.00000	Averaged	
4 Bis(2-Chloroethyl)ether	1.27098	1.20553	1.20553	0.700	-5.14930	20.00000	Averaged	
6 2-Chlorophenol	1.45366	1.44664	1.44664	0.800	-0.48259	20.00000	Averaged	
7 1,3-Dichlorobenzene	1.58180	1.54764	1.54764	0.010	-2.15917	20.00000	Averaged	
9 1,4-Dichlorobenzene	1.56627	1.48907	1.48907	0.010	-4.92899	20.00000	Averaged	
$ 10 1,2-Dichlorobenzene-d4	1.00989	0.98577	0.98577	0.010	-2.38856	20.00000	Averaged	
12 1,2-Dichlorobenzene	1.50604	1.45007	1.45007	0.010	-3.71630	20.00000	Averaged	
11 Benzyl alcohol	0.79941	0.81965	0.81965	0.010	2.53194	20.00000	Averaged	
14 2,2'-oxybis(1-Chloropropane	0.44716	0.44043	0.44043	0.010	-1.50629	20.00000	Averaged	
13 2-Methylphenol	1.26098	1.23731	1.23731	0.700	-1.87734	20.00000	Averaged	
17 Hexachloroethane	0.61907	0.59177	0.59177	0.300	-4.41066	20.00000	Averaged	
16 N-Nitroso-di-n-propylamine	0.84248	0.84116	0.84116	0.500	-0.15692	20.00000	Averaged	
15 4-Methylphenol	1.31137	1.31325	1.31325	0.600	0.14382	20.00000	Averaged	
$ 18 Nitrobenzene-d5	0.36919	0.36570	0.36570	0.010	-0.94289	20.00000	Averaged	
19 Nitrobenzene	0.35004	0.34060	0.34060	0.200	-2.69636	20.00000	Averaged	
20 Isophorone	0.61012	0.62736	0.62736	0.300	2.82621	20.00000	Averaged	
21 2-Nitrophenol	0.20568	0.22401	0.22401	0.100	8.91323	20.00000	Averaged	
22 2,4-Dimethylphenol	0.35058	0.35314	0.35314	0.200	0.72950	20.00000	Averaged	
23 Bis(2-Chloroethoxy)methane	0.38425	0.37865	0.37865	0.050	-1.45813	20.00000	Averaged	
24 Benzoic acid	14.88936	20.00000	0.22229	0.010	-25.55322	20.00000	Quadratic	<-
25 2,4-Dichlorophenol	0.30640	0.32240	0.32240	0.100	5.22174	20.00000	Averaged	
26 1,2,4-Trichlorobenzene	0.34870	0.34504	0.34504	0.010	-1.04892	20.00000	Averaged	
28 Naphthalene	1.04083	1.02478	1.02478	0.100	-1.54198	20.00000	Averaged	
29 4-Chloroaniline	0.41889	0.41078	0.41078	0.010	-1.93612	20.00000	Averaged	
30 Hexachlorobutadiene	0.21732	0.22933	0.22933	0.010	5.53006	20.00000	Averaged	
31 4-Chloro-3-methylphenol	0.29615	0.32210	0.32210	0.200	8.76251	20.00000	Averaged	
32 2-Methylnaphthalene	0.68720	0.71332	0.71332	0.300	3.80034	20.00000	Averaged	
33 Hexachlorocyclopentadiene	0.45113	0.30912	0.30912	0.001	-31.47765	20.00000	Averaged	<-
34 2,4,6-Trichlorophenol	0.40085	0.42537	0.42537	0.200	6.11659	20.00000	Averaged	
35 2,4,5-Trichlorophenol	0.42597	0.45251	0.45251	0.200	6.23094	20.00000	Averaged	
$ 36 2-Fluorobiphenyl	1.37225	1.39169	1.39169	0.010	1.41667	20.00000	Averaged	
37 2-Chloronaphthalene	1.10490	1.11913	1.11913	0.700	1.28770	20.00000	Averaged	

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt10.i Injection Date: 16-FEB-2013 11:03
Lab File ID: cc0216.d Init. Cal. Date(s): 25-JAN-2013 25-JAN-2013
Analysis Type: Init. Cal. Times: 12:59 17:16
Lab Sample ID: ABN 5 Quant Type: ISTD
Method: /chem1/nt10.i/20130216.b/ABN.m

COMPOUND	RRF / AMOUNT	RF5	CCAL RRF5	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
38 2-Nitroaniline	0.25914	0.26955	0.26955	0.010	4.01929	20.00000	Averaged	
39 Dimethylphthalate	1.20981	1.24956	1.24956	0.010	3.28532	20.00000	Averaged	
40 Acenaphthylene	1.80186	1.83873	1.83873	0.900	2.04633	20.00000	Averaged	
41 2,6-Dinitrotoluene	0.27639	0.30028	0.30028	0.100	8.64525	20.00000	Averaged	
43 3-Nitroaniline	0.25523	0.28665	0.28665	0.010	12.30767	20.00000	Averaged	
44 Acenaphthene	1.10485	1.09227	1.09227	0.100	-1.13895	20.00000	Averaged	
45 2,4-Dinitrophenol	15.95222	20.00000	0.19187	0.030	-20.23890	20.00000	Quadratic	<-
46 Dibenzofuran	1.53658	1.53090	1.53090	0.800	-0.36973	20.00000	Averaged	
47 4-Nitrophenol	9.91489	10.00000	0.17245	0.010	-0.85110	20.00000	Quadratic	
48 2,4-Dinitrotoluene	0.37372	0.40377	0.40377	0.200	8.04300	20.00000	Averaged	
50 Diethylphthalate	1.26733	1.53264	1.53264	0.010	20.93493	20.00000	Averaged	<-
49 Fluorene	1.30516	1.27637	1.27637	0.100	-2.20579	20.00000	Averaged	
51 4-Chlorophenyl-phenylether	0.60824	0.69947	0.69947	0.100	14.99827	20.00000	Averaged	
52 4-Nitroaniline	0.26944	0.26365	0.26365	0.010	-2.14945	20.00000	Averaged	
53 4,6-Dinitro-2-methylphenol	0.16018	0.15964	0.15964	0.001	-0.33661	20.00000	Averaged	
54 N-Nitrosodiphenylamine	0.48183	0.48282	0.48282	0.010	0.20660	20.00000	Averaged	
$ 55 2,4,6-Tribromophenol	0.25526	0.26792	0.26792	0.010	4.96074	20.00000	Averaged	
56 4-Bromophenyl-phenylether	0.22313	0.23586	0.23586	0.100	5.70753	20.00000	Averaged	
57 Hexachlorobenzene	0.28001	0.29321	0.29321	0.100	4.71202	20.00000	Averaged	
58 Pentachlorophenol	0.18673	0.10990	0.10990	0.010	-41.14622	20.00000	Averaged	<-
60 Phenanthrene	1.06632	1.04431	1.04431	0.700	-2.06395	20.00000	Averaged	
61 Anthracene	1.07365	1.10043	1.10043	0.700	2.49421	20.00000	Averaged	
62 Carbazole	0.71710	0.69296	0.69296	0.010	-3.36714	20.00000	Averaged	
63 Di-n-butylphthalate	1.14571	1.32522	1.32522	0.010	15.66794	20.00000	Averaged	
64 Fluoranthene	1.22799	1.26660	1.26660	0.600	3.14437	20.00000	Averaged	
65 Pyrene	1.13938	1.16109	1.16109	0.600	1.90610	20.00000	Averaged	
$ 66 Terphenyl-d14	0.76828	0.76391	0.76391	0.010	-0.56854	20.00000	Averaged	
67 Butylbenzylphthalate	0.43214	0.48394	0.48394	0.010	11.98795	20.00000	Averaged	
68 Benzo(a)anthracene	1.11613	1.13636	1.13636	0.700	1.81305	20.00000	Averaged	
70 3,3'-Dichlorobenzidine	0.46632	0.55036	0.55036	0.010	18.02194	20.00000	Averaged	
71 Chrysene	1.01092	0.99377	0.99377	0.700	-1.69609	20.00000	Averaged	
72 bis(2-Ethylhexyl)phthalate	0.52819	0.52164	0.52164	0.010	-1.23988	20.00000	Averaged	
73 Di-n-octylphthalate	0.97573	0.91532	0.91532	0.010	-6.19113	20.00000	Averaged	
74 Benzo(b)fluoranthene	1.15936	1.21280	1.21280	0.700	4.60992	20.00000	Averaged	
75 Benzo(k)fluoranthene	1.25249	1.19388	1.19388	0.700	-4.67918	20.00000	Averaged	

Data File: /chem1/nt10.i/20130216.b/cc0216.d
Report Date: 16-Feb-2013 13:28

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt10.i
Lab File ID: cc0216.d
Analysis Type:
Lab Sample ID: ABN 5
Method: /chem1/nt10.i/20130216.b/ABN.m

Injection Date: 16-FEB-2013 11:03
Init. Cal. Date(s): 25-JAN-2013 25-JAN-2013
Init. Cal. Times: 12:59 17:16
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF5	CCAL RRF5	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
76 Benzo(a)pyrene	1.00265	1.02771	1.02771	0.700	2.49925	20.00000	Averaged	
78 Indeno(1,2,3-cd)pyrene	1.23647	1.35919	1.35919	0.500	9.92570	20.00000	Averaged	
79 Dibenzo(a,h)anthracene	0.97912	1.08828	1.08828	0.400	11.14803	20.00000	Averaged	
80 Benzo(g,h,i)perylene	1.06086	1.15575	1.15575	0.500	8.94544	20.00000	Averaged	
90 N-Nitrosodimethylamine	0.76098	0.71892	0.71892	0.010	-5.52765	20.00000	Averaged	
91 Aniline	3.60472	3.63462	3.63462	0.010	0.82934	20.00000	Averaged	
93 Benzidine	11.43428	10.00000	0.21429	0.010	14.34282	20.00000	Quadratic	
103 Pyridine	0.64909	0.63106	0.63106	0.010	-2.77788	20.00000	Averaged	
105 1-methylnaphthalene	0.63035	0.64956	0.64956	0.010	3.04754	20.00000	Averaged	
111 Azobenzene (1,2-DP-Hydrazin	1.14954	1.08937	1.08937	0.010	-5.23432	20.00000	Averaged	
187 Total Benzofluoranthenes	1.14121	1.12445	1.12445	0.010	-1.46870	20.00000	Averaged	
99 Perylene	1.15229	1.09136	1.09136	0.010	-5.28802	20.00000	Averaged	
98 Retene	++++	++++	++++	0.010	++++	20.00000	Quadratic	<-
120 2,3,4,6-Tetrachlorophenol	0.37257	0.35739	0.35739	0.010	-4.07317	20.00000	Averaged	

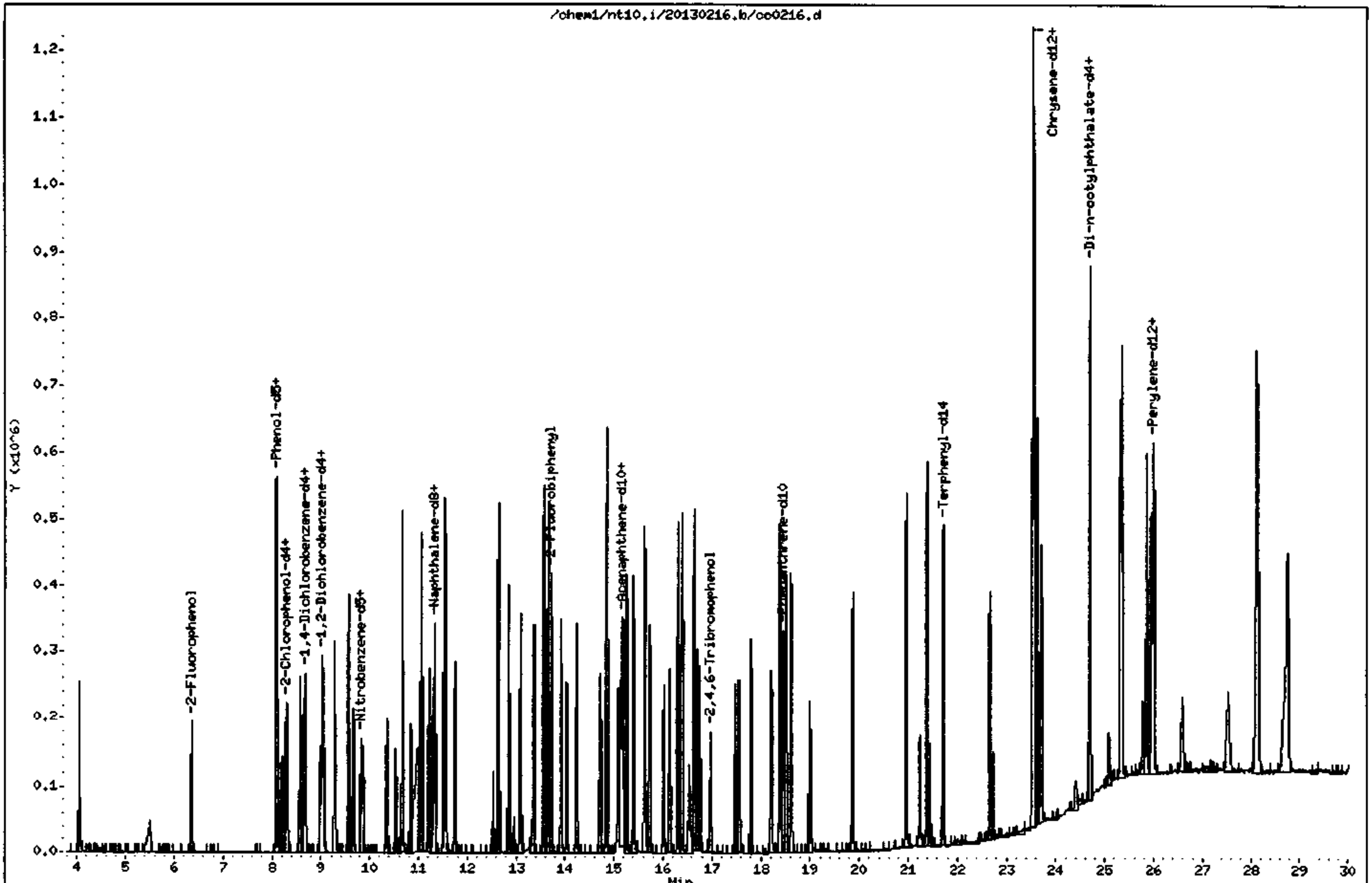
Data File: /chem1/nt10.i/20130216.b/cc0216.d
Date : 16-FEB-2013 11:03
Client ID:
Sample Info: ABN 5

Column phase: ZB-5msi

Instrument: nt10.i

Operator: VTS/YZ
Column diameter: 0.25

Page 5



CO-ELUTION SUMMARY FOR FILE - cc0216.d

Lab ID: ABN 5, Method: ABN.m, Instrument: nt10.i, Date: 16-FEB-2013

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

YZ 02/18/13

Data file : /chem1/nt10.i/20130216.b/wc32g.d
Lab Smp Id: WC32G Client Smp ID: SG-08-0-10-013113
Inj Date : 16-FEB-2013 19:00
Operator : VTS/YZ Inst ID: nt10.i
Smp Info : WC32G,5
Misc Info : 13-2430
Comment : 1ul Injection
Method : /chem1/nt10.i/20130216.b/ABN.m
Meth Date : 18-Feb-2013 10:14 yev Quant Type: ISTD
Cal Date : 25-JAN-2013 17:16 Cal File: ic0125h.d
Als bottle: 16
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: PSDDAICAL.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	5.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Ws	20.10000	Weight of sample extracted (g)
M	48.50000	% Moisture

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
$	1 2-Fluorophenol	112	6.559	6.351	(0.757)	10196	0.84693	409.1(H)
$	2 Phenol-d5	99	8.190	8.082	(0.945)	17187	1.15049	555.7
	3 Phenol	94	8.213	8.105	(0.947)	3188	0.20275	97.93
$	5 2-Chlorophenol-d4	132	8.383	8.283	(0.967)	15036	1.16241	561.5
	4 Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
	6 2-Chlorophenol	128	Compound Not Detected.					
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	8.669	8.647	(1.000)	37651	4.00000	
	9 1,4-Dichlorobenzene	146	Compound Not Detected.					
$	10 1,2-Dichlorobenzene-d4	152	9.050	9.027	(1.044)	7464	0.78520	379.3
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	108	Compound Not Detected.					
	14 2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.					
	13 2-Methylphenol	108	Compound Not Detected.					

							CONCENTRATIONS	
		QUANT SIG					ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/kg)
	17 Hexachloroethane	117	Compound Not Detected.					
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	15 4-Methylphenol	108	9.640	9.570	(1.112)	4269	0.34585	167.1
$	18 Nitrobenzene-d5	82	9.880	9.826	(0.872)	10167	0.75588	365.1
	19 Nitrobenzene	77	Compound Not Detected.					
	20 Isophorone	82	Compound Not Detected.					
	21 2-Nitrophenol	139	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	Compound Not Detected.					
	23 Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
	24 Benzoic acid	105	Compound Not Detected.					
	25 2,4-Dichlorophenol	162	Compound Not Detected.					
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	11.327	11.296	(1.000)	145732	4.00000	
	28 Naphthalene	128	11.373	11.343	(1.004)	21600	0.56961	275.1
	29 4-Chloroaniline	127	Compound Not Detected.					
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	31 4-Chloro-3-methylphenol	107	Compound Not Detected.					
	32 2-Methylnaphthalene	142	12.881	12.851	(1.137)	4224	0.16871	81.49
	33 Hexachlorocyclopentadiene	237	Compound Not Detected.					
	34 2,4,6-Trichlorophenol	196	Compound Not Detected.					
	35 2,4,5-Trichlorophenol	196	Compound Not Detected.					
$	36 2-Fluorobiphenyl	172	13.748	13.718	(0.903)	29894	0.97834	472.6
	37 2-Chloronaphthalene	162	Compound Not Detected.					
	38 2-Nitroaniline	65	Compound Not Detected.					
	39 Dimethylphthalate	163	Compound Not Detected.					
	40 Acenaphthylene	152	Compound Not Detected.					
	41 2,6-Dinitrotoluene	165	Compound Not Detected.					
*	42 Acenaphthene-d10	164	15.218	15.188	(1.000)	89068	4.00000	
	43 3-Nitroaniline	138	Compound Not Detected.					
	44 Acenaphthene	153	15.288	15.258	(1.005)	9705	0.39448	190.5
	45 2,4-Dinitrophenol	184	Compound Not Detected.					
	46 Dibenzofuran	168	15.651	15.621	(1.028)	7693	0.22484	108.6
	47 4-Nitrophenol	109	Compound Not Detected.					
	48 2,4-Dinitrotoluene	165	Compound Not Detected.					
	50 Diethylphthalate	149	16.332	16.309	(1.073)	3539	0.12541	60.58
	49 Fluorene	166	16.417	16.386	(1.079)	18115	0.62332	301.1
	51 4-Chlorophenyl-phenylether	204	Compound Not Detected.					
	52 4-Nitroaniline	138	Compound Not Detected.					
	53 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
	54 N-Nitrosodiphenylamine	169	Compound Not Detected.					
$	55 2,4,6-Tribromophenol	330	17.018	16.972	(1.118)	5124	0.90149	435.4
	56 4-Bromophenyl-phenylether	248	Compound Not Detected.					
	57 Hexachlorobenzene	284	Compound Not Detected.					
	58 Pentachlorophenol	266	Compound Not Detected.					
*	59 Phenanthrene-d10	188	18.494	18.464	(1.000)	148946	4.00000	
	60 Phenanthrene	178	18.548	18.518	(1.003)	205556	5.17696	2501
	61 Anthracene	178	18.641	18.611	(1.008)	46709	1.16834	564.3

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
62 Carbazole	167	19.036	18.997	(1.029)	9964	0.37315	180.2
63 Di-n-butylphthalate	149	Compound Not Detected.					
64 Fluoranthene	202	21.001	20.963	(1.136)	327293	7.15768	3457
65 Pyrene	202	21.419	21.380	(0.907)	434538	7.73501	3736
$ 66 Terphenyl-d14	244	21.744	21.713	(0.921)	34063	0.89921	434.3
67 Butylbenzylphthalate	149	Compound Not Detected.					
68 Benzo(a)anthracene	228	23.594	23.556	(0.999)	189038	3.43508	1659
* 69 Chrysene-d12	240	23.618	23.579	(1.000)	197224	4.00000	
70 3,3'-Dichlorobenzidine	252	Compound Not Detected.					
71 Chrysene	228	23.664	23.626	(1.002)	240399	4.82299	2330
72 bis(2-Ethylhexyl)phthalate	149	23.757	23.719	(0.961)	4918	0.14425	69.68
* 134 Di-n-octylphthalate-d4	153	24.732	24.694	(1.000)	258188	4.00000	
73 Di-n-octylphthalate	149	Compound Not Detected.					
74 Benzo(b)fluoranthene	252	25.367	25.329	(0.975)	166271	2.62531 NFA	1268
75 Benzo(k)fluoranthene	252	25.398	25.360	(0.976)	204007	2.98162	1440
76 Benzo(a)pyrene	252	25.917	25.863	(0.996)	179339	3.27422	1582
* 77 Perylene-d12	264	26.010	25.964	(1.000)	218514	4.00000	
78 Indeno(1,2,3-cd)pyrene	276	28.196	28.134	(1.084)	103413	1.53099	739.5
79 Dibenzo(a,h)anthracene	278	28.211	28.150	(1.085)	33848	0.63281	305.7
80 Benzo(g,h,i)perylene	276	28.833	28.763	(1.109)	95086	1.64074	792.5
90 N-Nitrosodimethylamine	74	Compound Not Detected.					
91 Aniline	93	Compound Not Detected.					
93 Benzidine	184	Compound Not Detected.					
103 Pyridine	79	Compound Not Detected.					
105 1-methylnaphthalene	142	13.114	13.091	(1.158)	3960	0.17243	83.29
111 Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					
187 Total Benzofluoranthenes	252	25.398	25.360	(0.976)	332912	5.34002	2579
99 Perylene	252	26.056	26.003	(1.002)	43096	0.68463	330.7
98 Retene	219	Compound Not Detected.					
120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

QC Flag Legend

H - Operator selected an alternate compound hit.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: wc32g.d
Lab Smp Id: WC32G
Analysis Type: SV
Quant Type: ISTD
Operator: VTS/YZ
Method File: /chem1/nt10.i/20130216.b/ABN.m
Misc Info: 13-2430

Calibration Date: 16-FEB-2013
Calibration Time: 11:03
Client Smp ID: SG-08-0-10-01311
Level: LOW
Sample Type: Sediment

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	46623	23312	93246	37651	-19.24
27 Naphthalene-d8	176978	88489	353956	145732	-17.66
42 Acenaphthene-d10	110872	55436	221744	89068	-19.67
59 Phenanthrene-d10	188290	94145	376580	148946	-20.90
69 Chrysene-d12	213681	106840	427362	197224	-7.70
134 Di-n-octylphthala	264159	132080	528318	258188	-2.26
77 Perylene-d12	208584	104292	417168	218514	4.76

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.65	8.15	9.15	8.67	0.26
27 Naphthalene-d8	11.30	10.80	11.80	11.33	0.27
42 Acenaphthene-d10	15.19	14.69	15.69	15.22	0.20
59 Phenanthrene-d10	18.46	17.96	18.96	18.49	0.17
69 Chrysene-d12	23.58	23.08	24.08	23.62	0.16
134 Di-n-octylphthala	24.69	24.19	25.19	24.73	0.15
77 Perylene-d12	25.96	25.46	26.46	26.01	0.18

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

RECOVERY REPORT

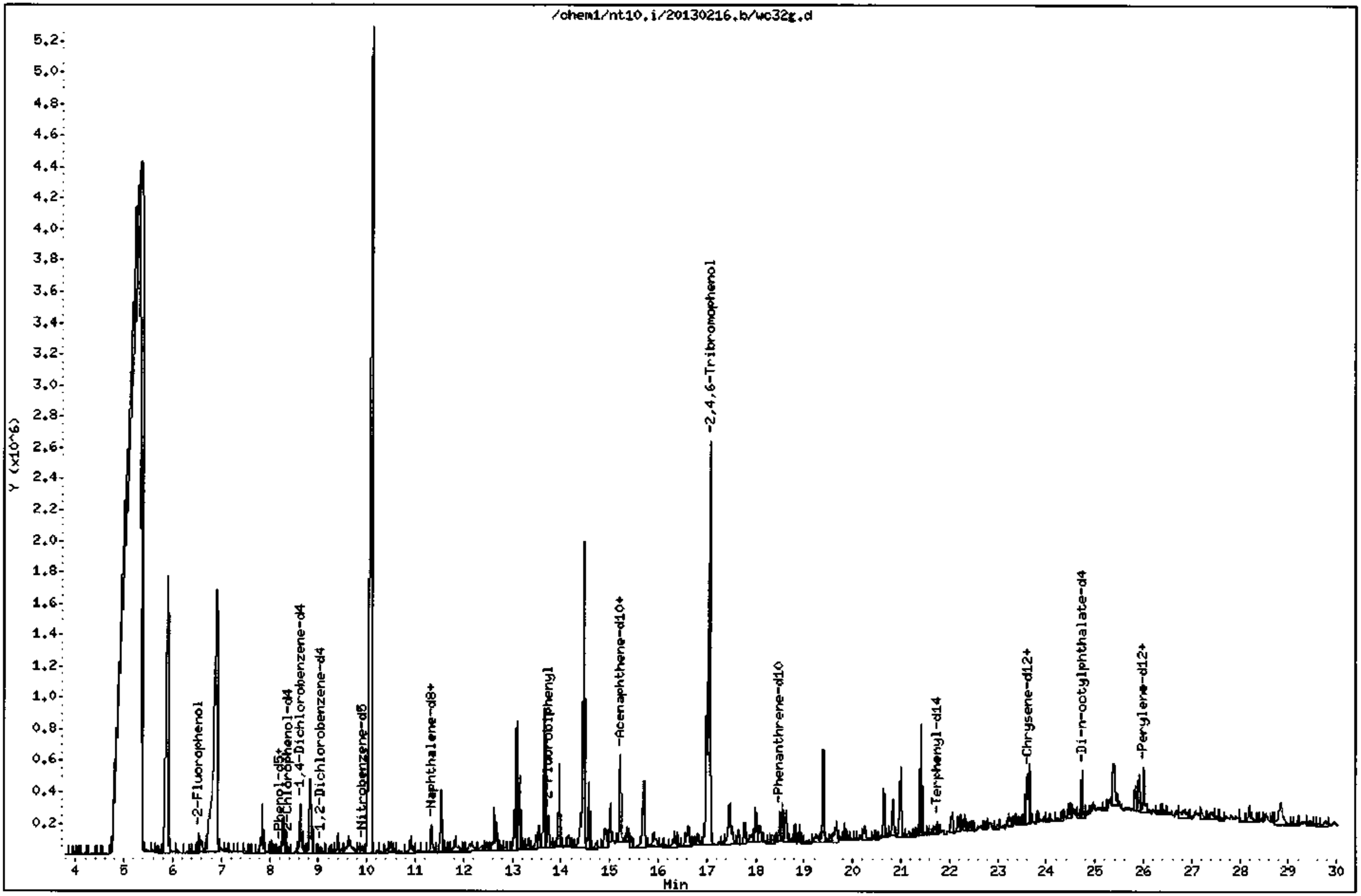
Client Name: Floyd-Snider
Sample Matrix: SOLID
Lab Smp Id: WC32G
Level: LOW
Data Type: MS DATA
SpikeList File: SHORTPSDDA.spk
Sublist File: PSDDAICAL.sub
Method File: /chem1/nt10.i/20130216.b/ABN.m
Misc Info: 13-2430

Client SDG: WC32
Fraction: SV
Client Smp ID: SG-08-0-10-013113
Operator: VTS/YZ
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 1 2-Fluorophenol	724.5	409.1	56.46	30-160
$ 2 Phenol-d5	724.5	555.7	76.70	30-160
$ 5 2-Chlorophenol-d4	724.5	561.5	77.49	30-160
$ 10 1,2-Dichlorobenzen	483.0	379.3	78.52	30-160
$ 18 Nitrobenzene-d5	483.0	365.1	75.59	30-160
$ 36 2-Fluorobiphenyl	483.0	472.6	97.83	30-160
$ 55 2,4,6-Tribromophen	724.5	435.4	60.10	30-160
$ 66 Terphenyl-d14	483.0	434.3	89.92	30-160

Data File: /chem1/nt10.i/20130216.b/wc32g.d
Date : 16-FEB-2013 19:00
Client ID: SG-08-0-10-013113
Sample Info: WC32G,5
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt10.i
Operator: VTS/YZ
Column diameter: 0.25



Data File: /chem1/nt10.i/20130216.b/wc32g.d

Date : 16-FEB-2013 19:00

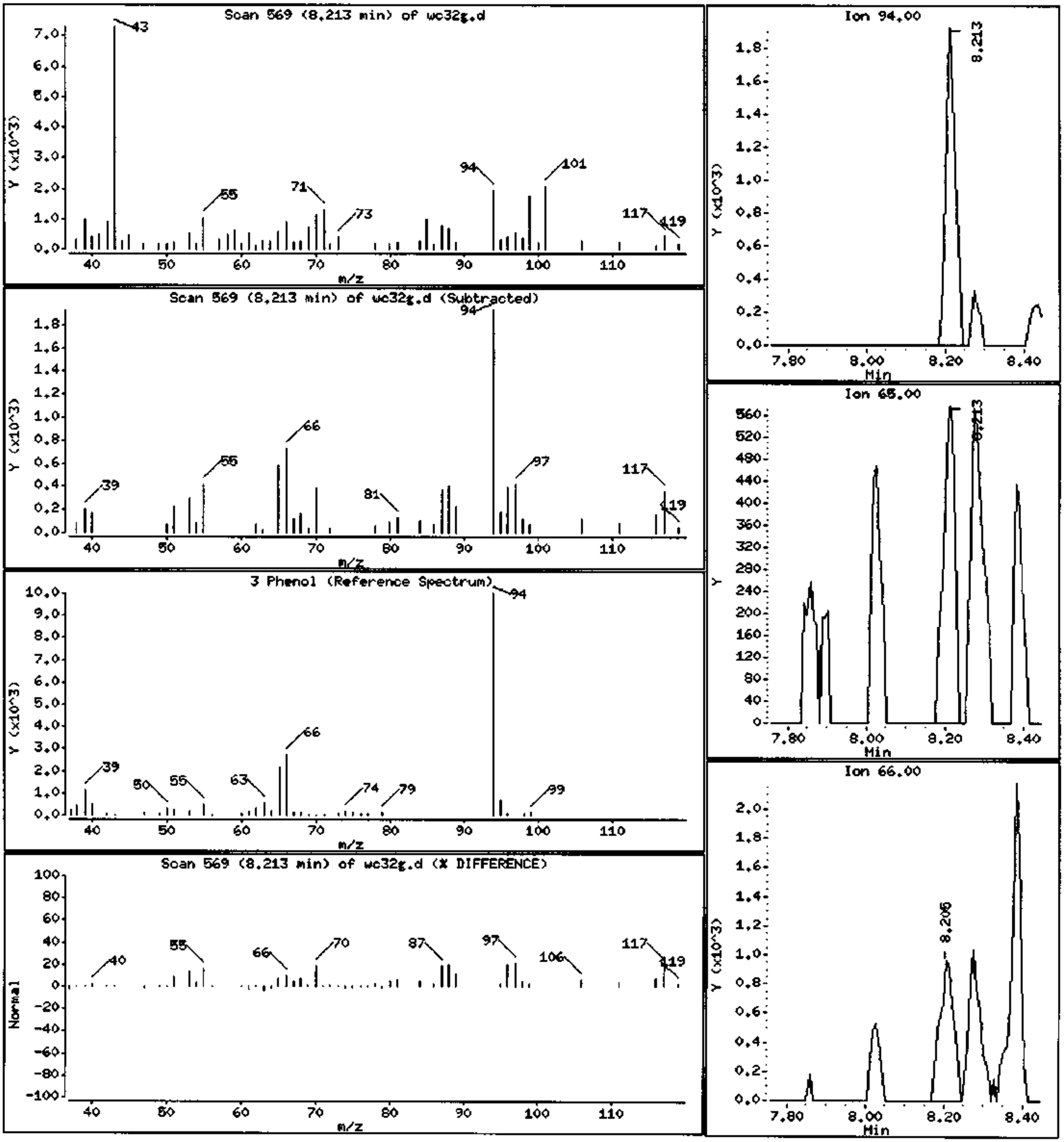
Client ID: SG-08-0-10-013113 Instrument: nt10.i

Sample Info: WC32G,5

Volume Injected (uL): 1.0 Operator: VTS/YZ

Column phase: ZB-5msi Column diameter: 0.25

3 Phenol Concentration: 97.93 ug/kg



Data File: /chem1/nt10.i/20130216.b/wc32g.d

Date : 16-FEB-2013 19:00

Client ID: SG-08-0-10-013113

Instrument: nt10.i

Sample Info: WC32G,5

Volume Injected (uL): 1.0

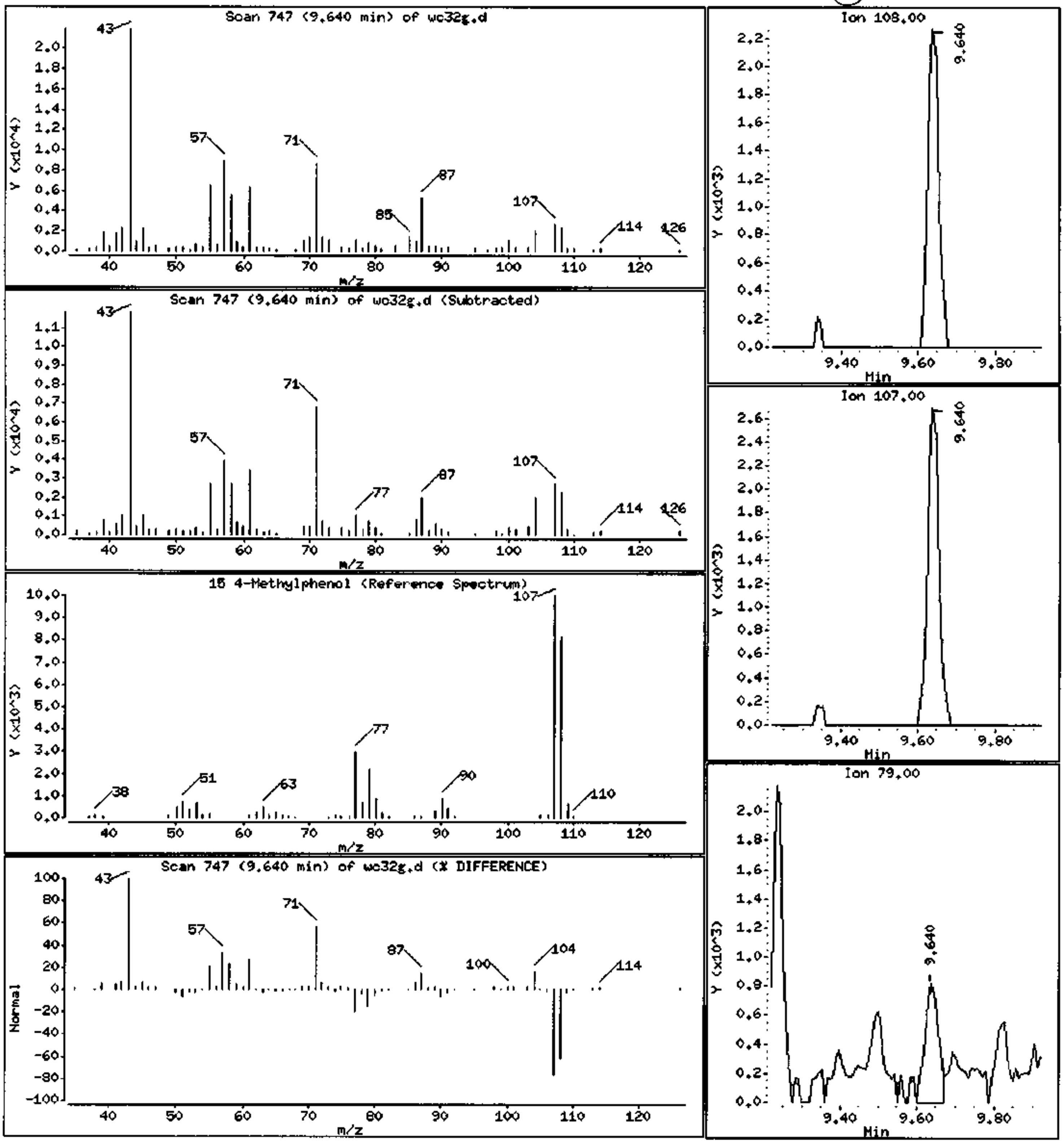
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 167.1 ug/kg



Data File: /chem1/nt10.i/20130216.b/wc32g.d

Date : 16-FEB-2013 19:00

Client ID: SG-08-0-10-013113

Instrument: nt10.i

Sample Info: WC32G,5

Volume Injected (uL): 1.0

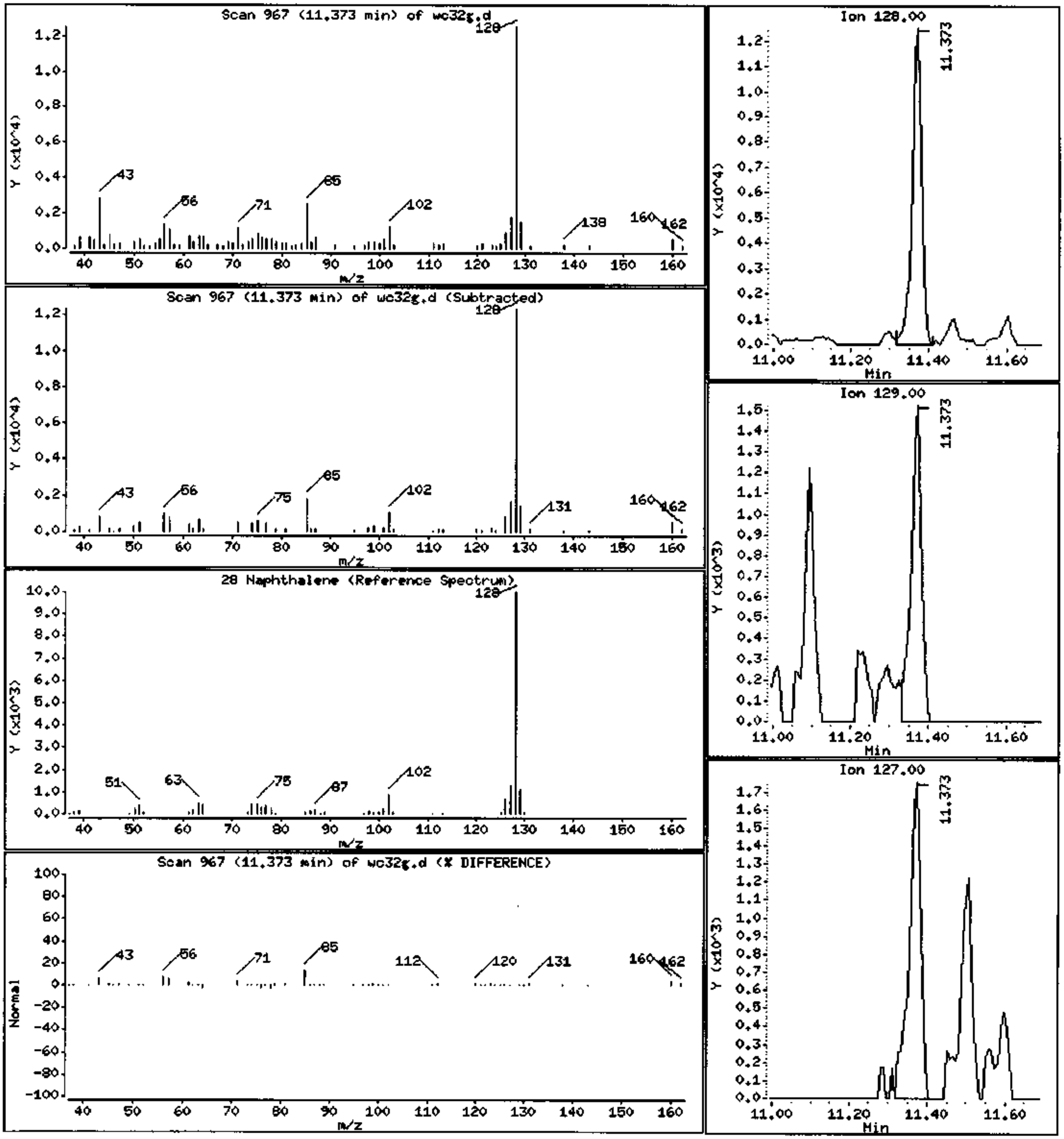
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

28 Naphthalene

Concentration: 275.1 ug/kg



Data File: /chem1/nt10.i/20130216.b/wc32g.d

Date : 16-FEB-2013 19:00

Client ID: SG-08-0-10-013113

Instrument: nt10.i

Sample Info: WC32G,5

Volume Injected (uL): 1.0

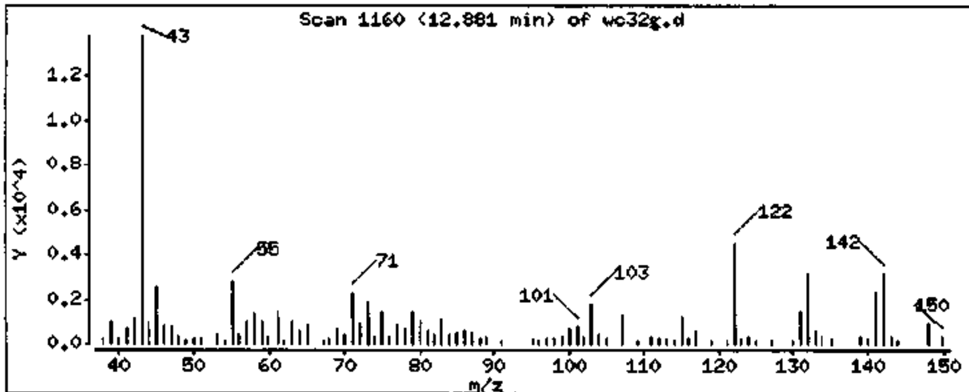
Operator: VTS/YZ

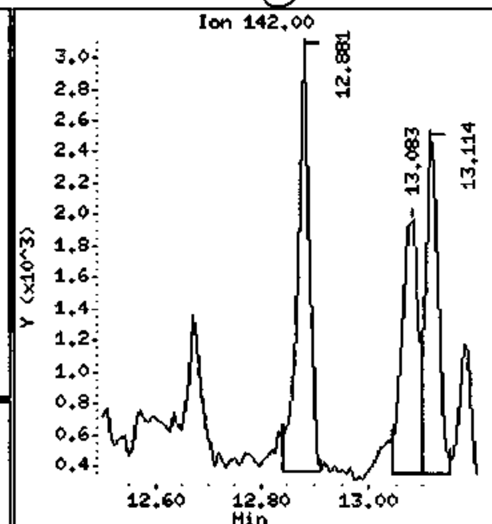
Column phase: ZB-5ms:

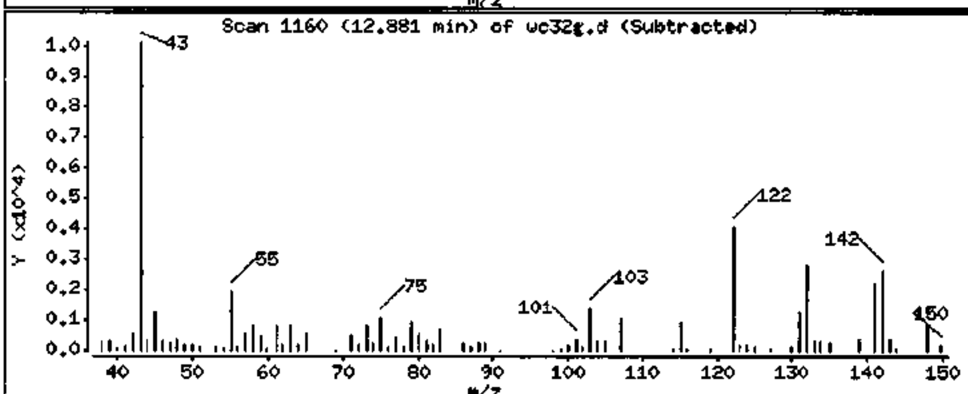
Column diameter: 0.25

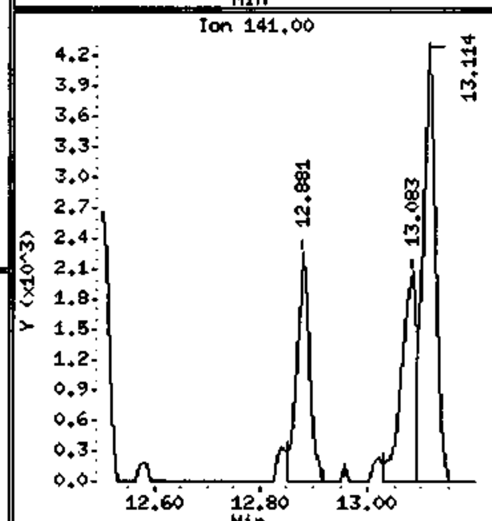
32 2-Methylnaphthalene

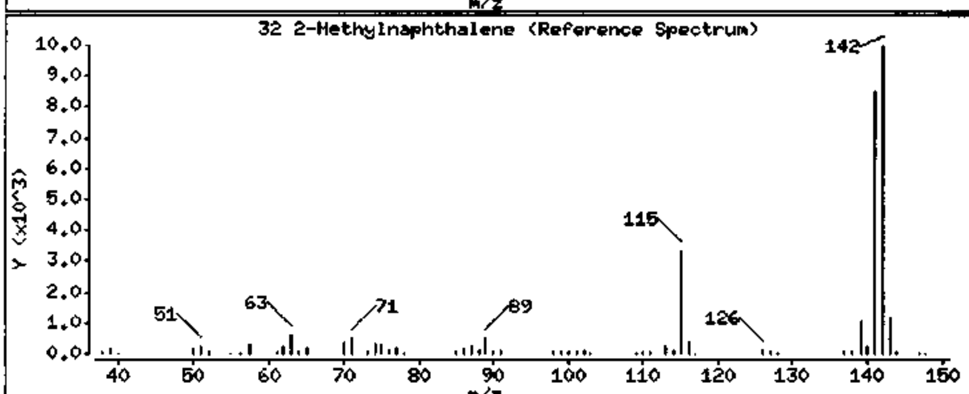
Concentration: 81.49 ug/kg

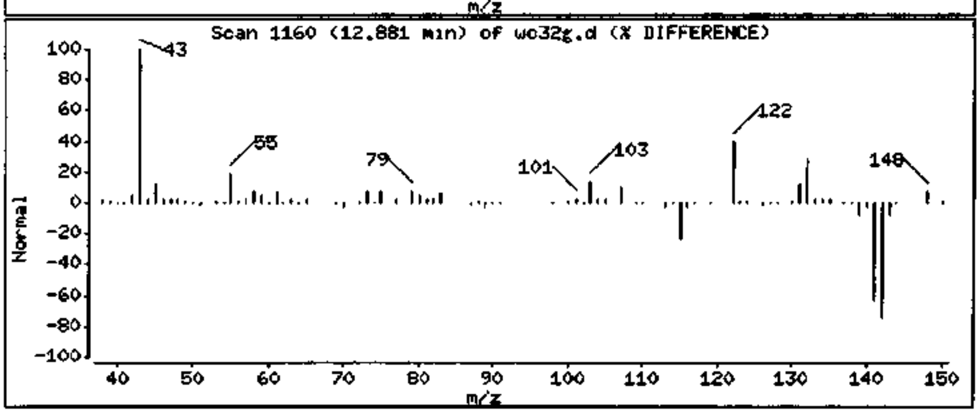












Data File: /chem1/nt10.i/20130216.b/wc32g.d

Date : 16-FEB-2013 19:00

Client ID: SG-08-0-10-013113

Instrument: nt10.i

Sample Info: WC32G,5

Volume Injected (uL): 1.0

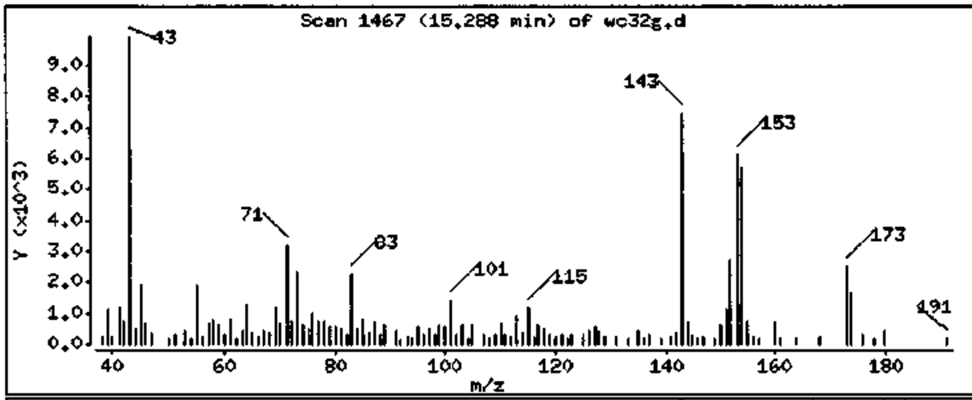
Operator: VTS/YZ

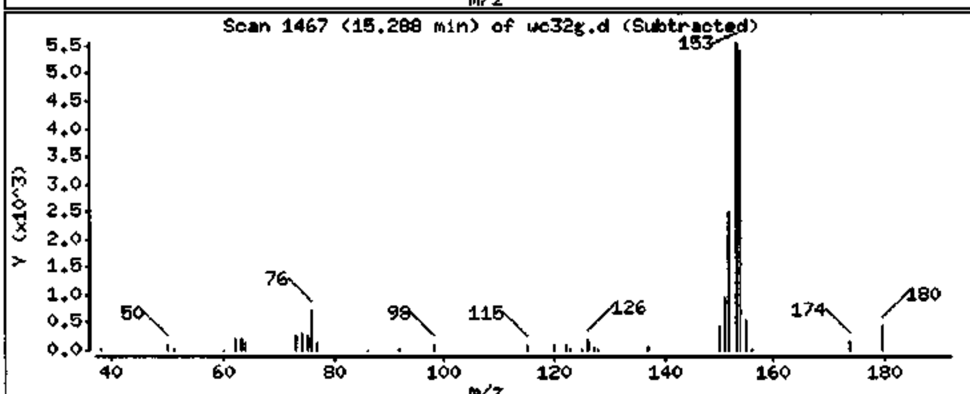
Column phase: ZB-5msi

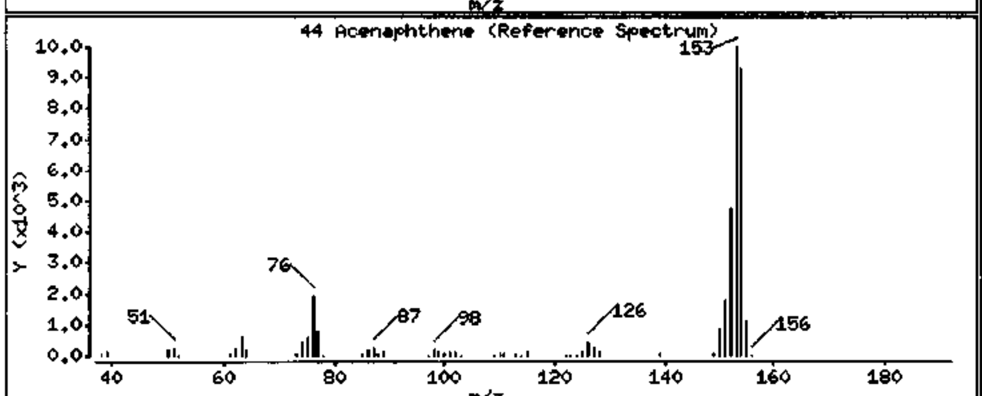
Column diameter: 0.25

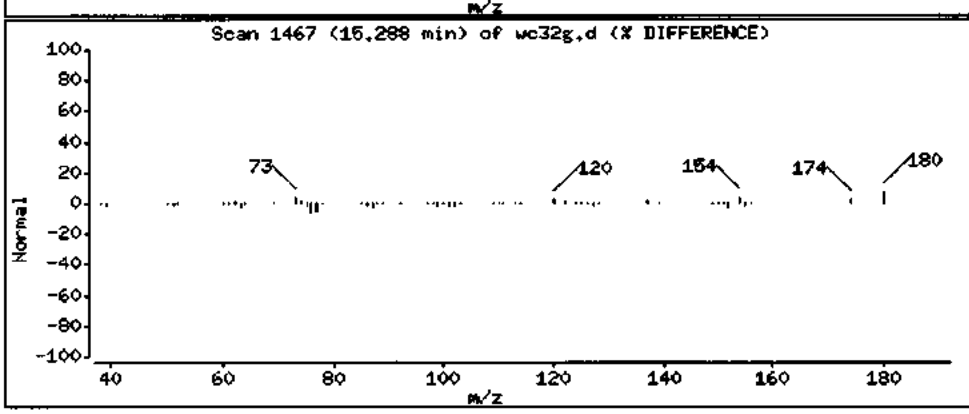
44 Acenaphthene

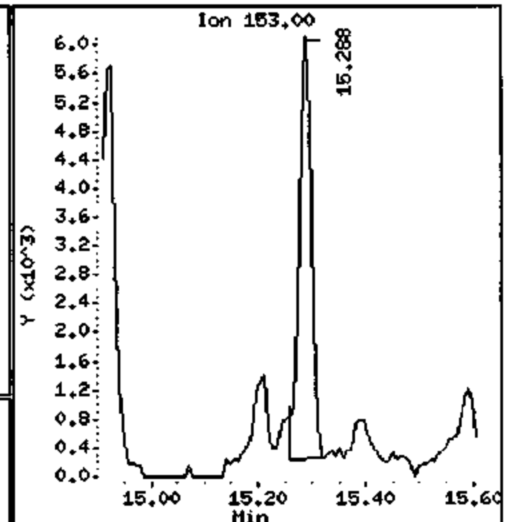
Concentration: 190.5 ug/kg

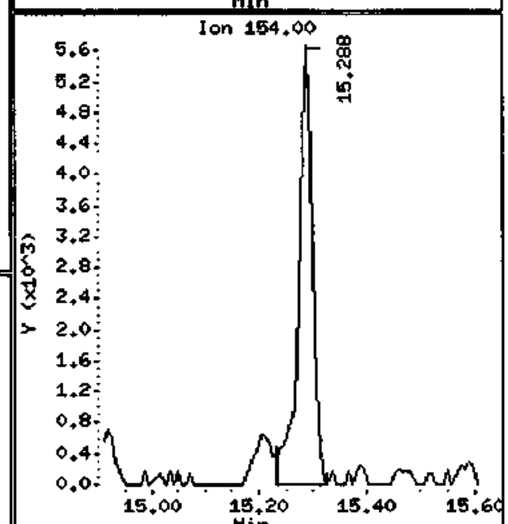


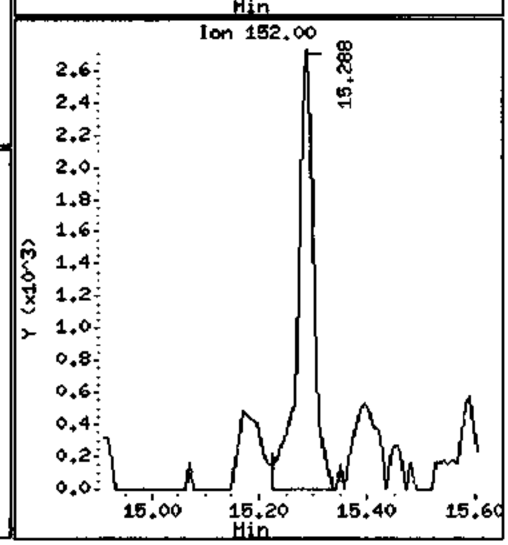












Data File: /chem1/nt10.i/20130216.b/wc32g.d

Date : 16-FEB-2013 19:00

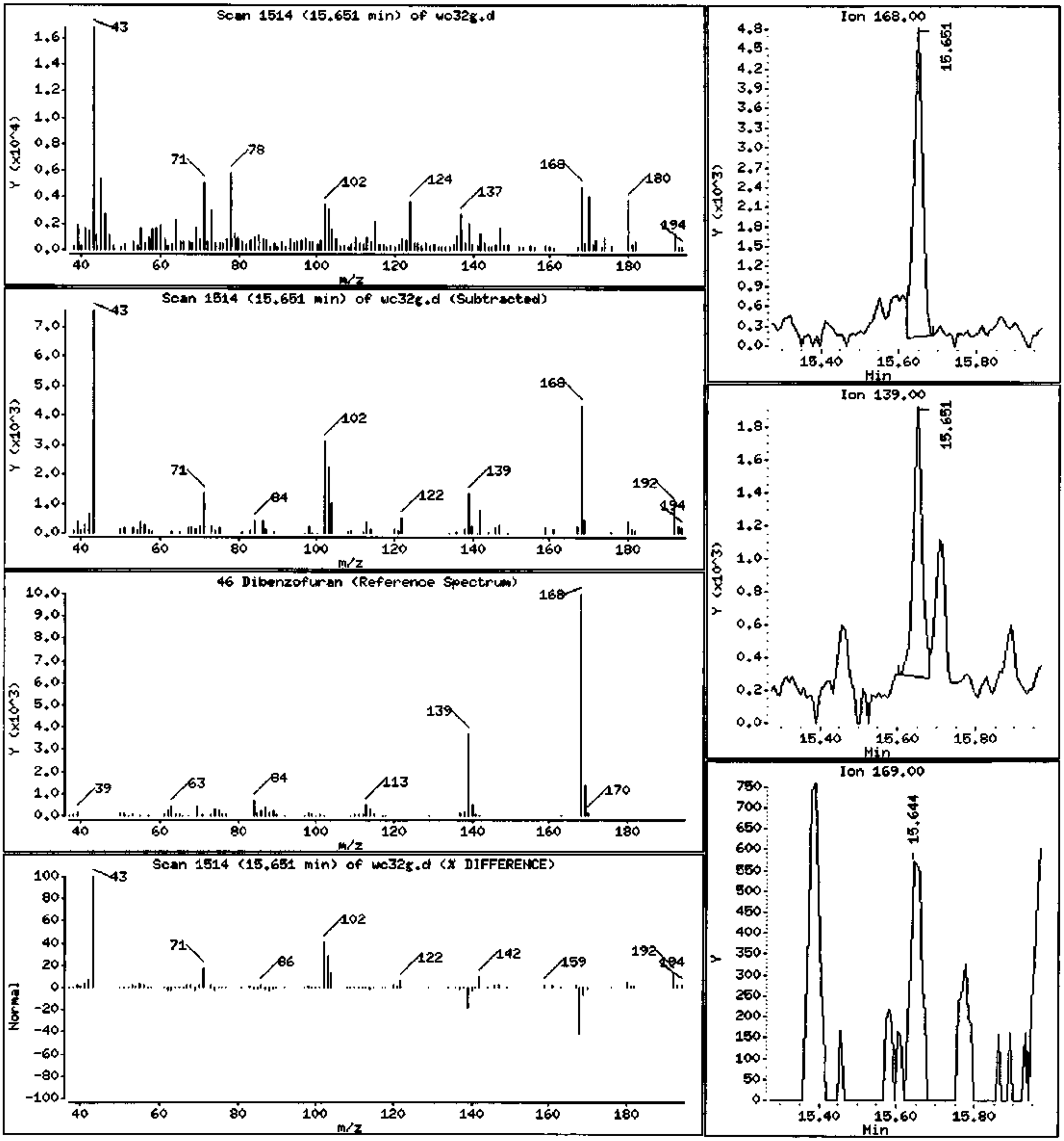
Client ID: SG-08-0-10-013113 Instrument: nt10.i

Sample Info: WC32G,5

Volume Injected (uL): 1.0 Operator: VTS/YZ

Column phase: ZB-5msi Column diameter: 0.25

46 Dibenzofuran Concentration: 108.6 ug/kg



Data File: /chem1/nt10.i/20130216.b/wc32g.d

Date : 16-FEB-2013 19:00

Client ID: SG-08-0-10-013113

Instrument: nt10.i

Sample Info: WC32G,5

Volume Injected (uL): 1.0

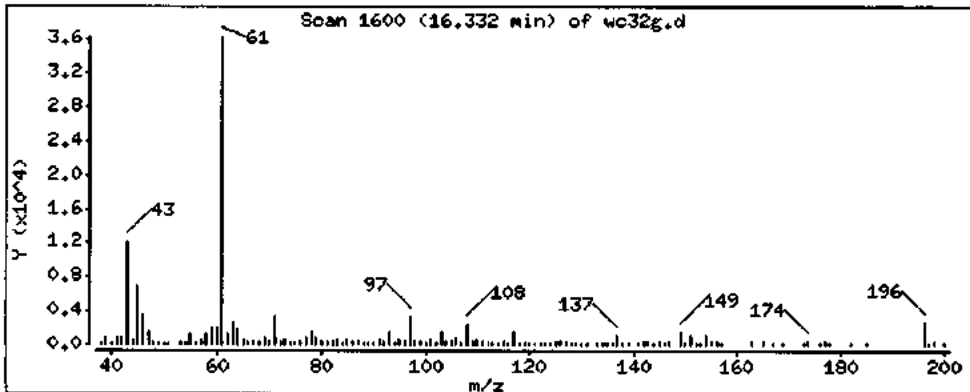
Operator: VTS/YZ

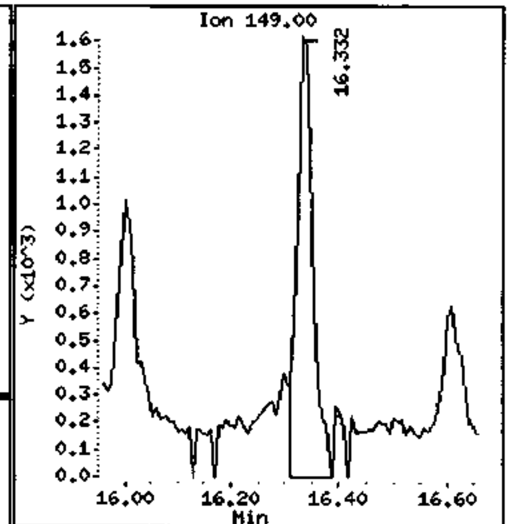
Column phase: ZB-5msi

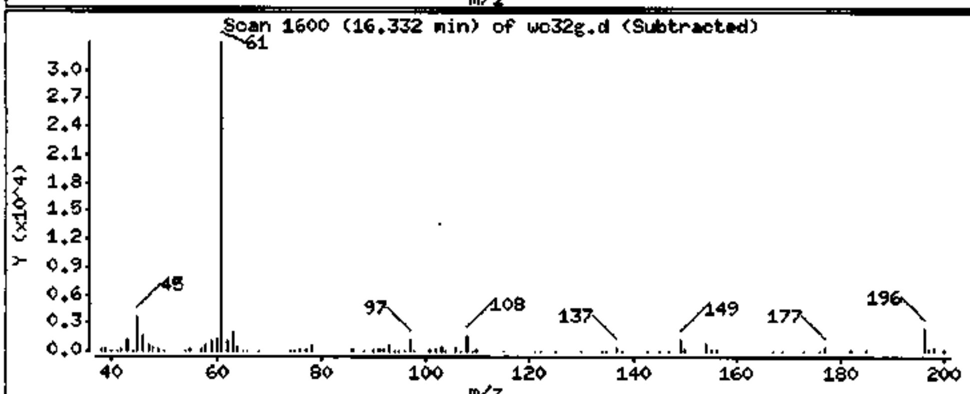
Column diameter: 0.25

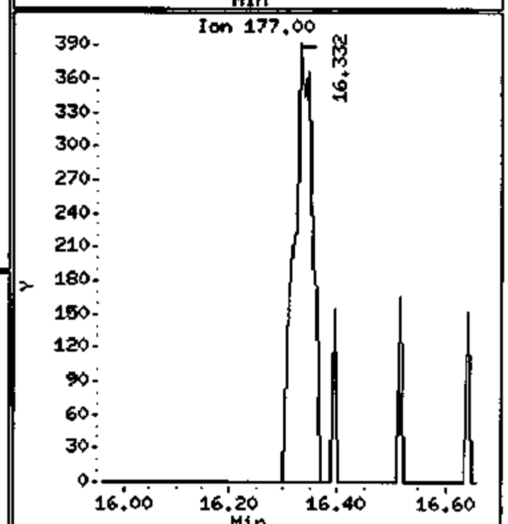
50 Diethylphthalate

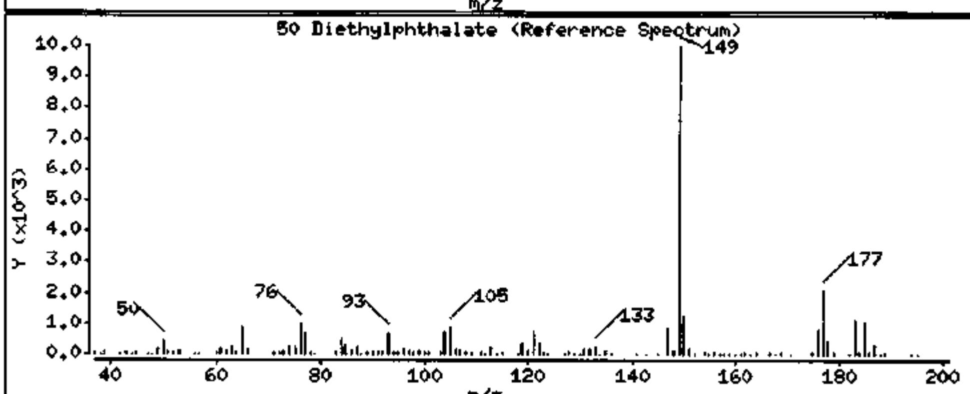
Concentration: 60.58 ug/kg

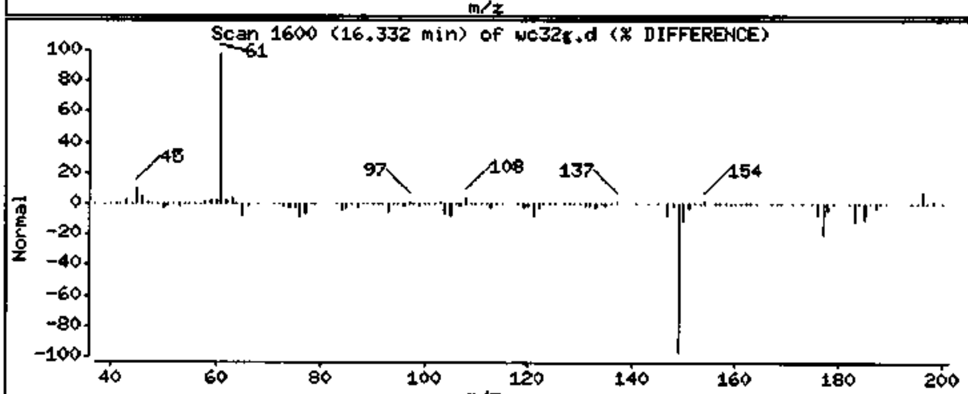


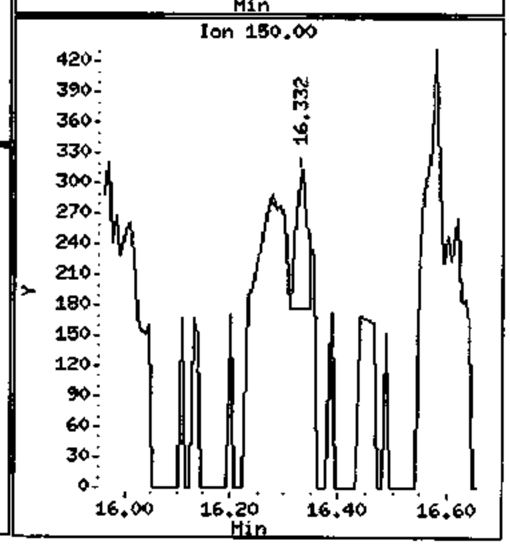












Data File: /chem1/nt10.i/20130216.b/wc32g.d

Date : 16-FEB-2013 19:00

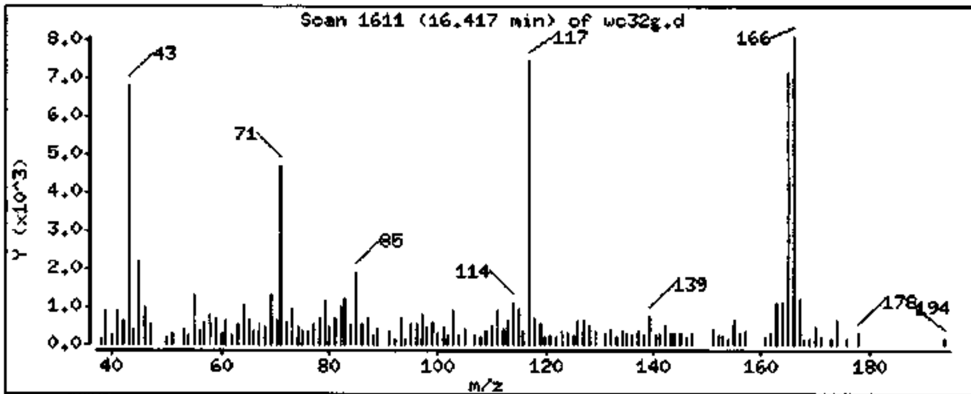
Client ID: SG-08-0-10-013113 Instrument: nt10.i

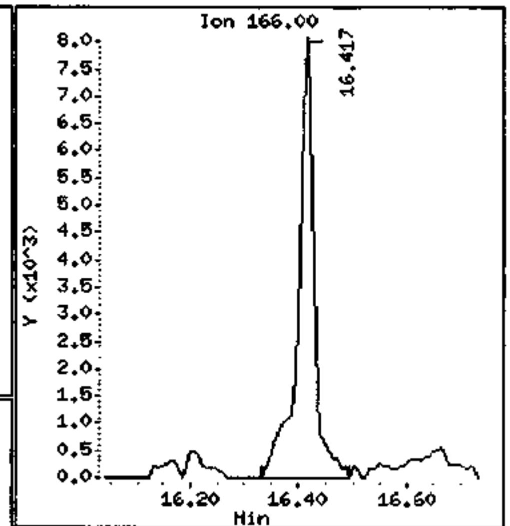
Sample Info: WC32G,5

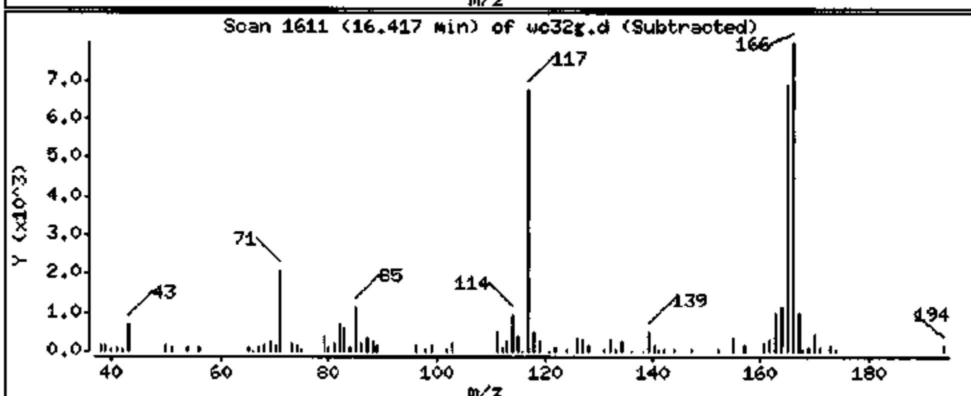
Volume Injected (uL): 1.0 Operator: VTS/YZ

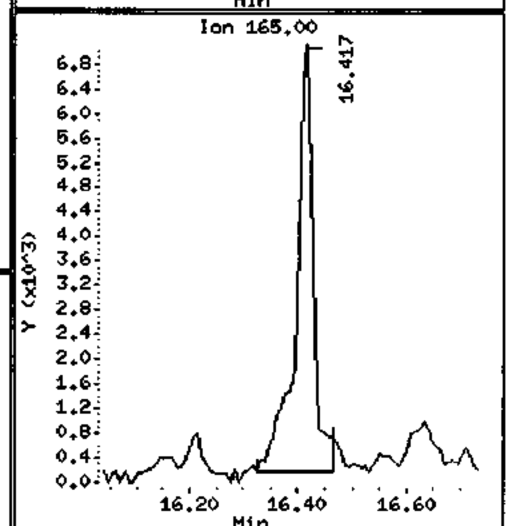
Column phase: ZB-5msi Column diameter: 0.25

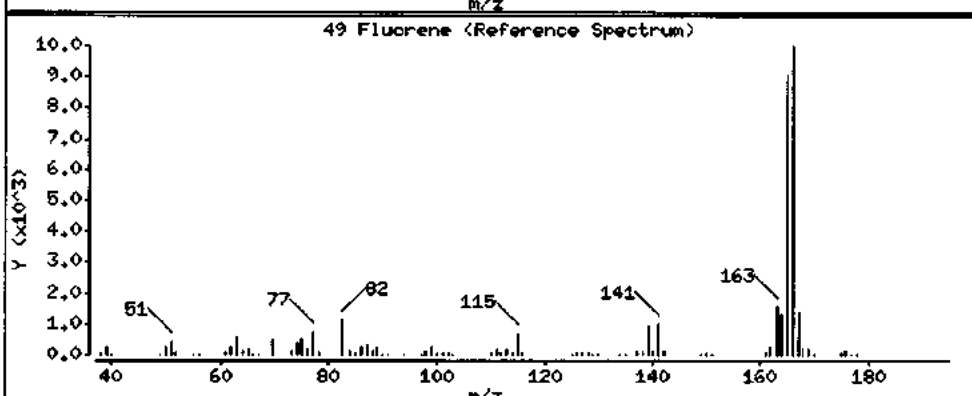
49 Fluorene Concentration: 301.1 ug/kg

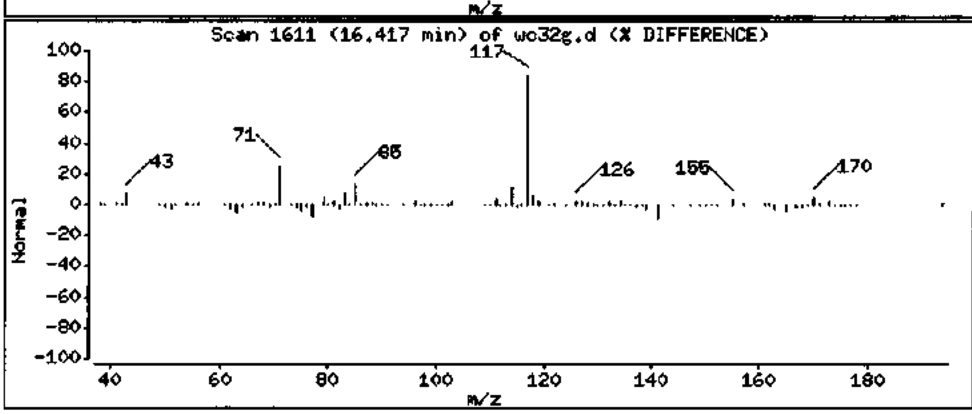


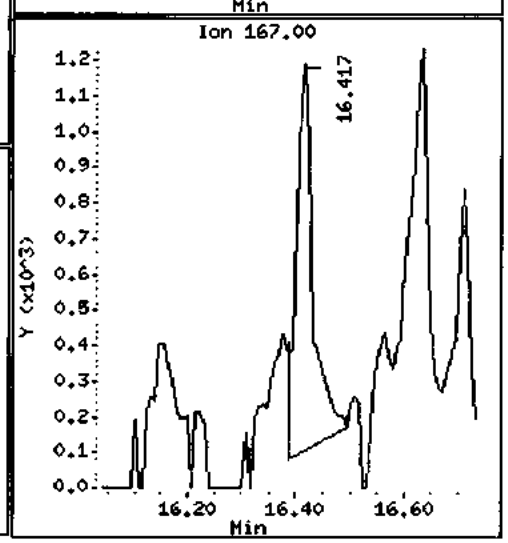












Data File: /chem1/nt10.i/20130216.b/wc32g.d

Date : 16-FEB-2013 19:00

Client ID: SG-08-0-10-013113

Instrument: nt10.i

Sample Info: WC32G,5

Volume Injected (uL): 1.0

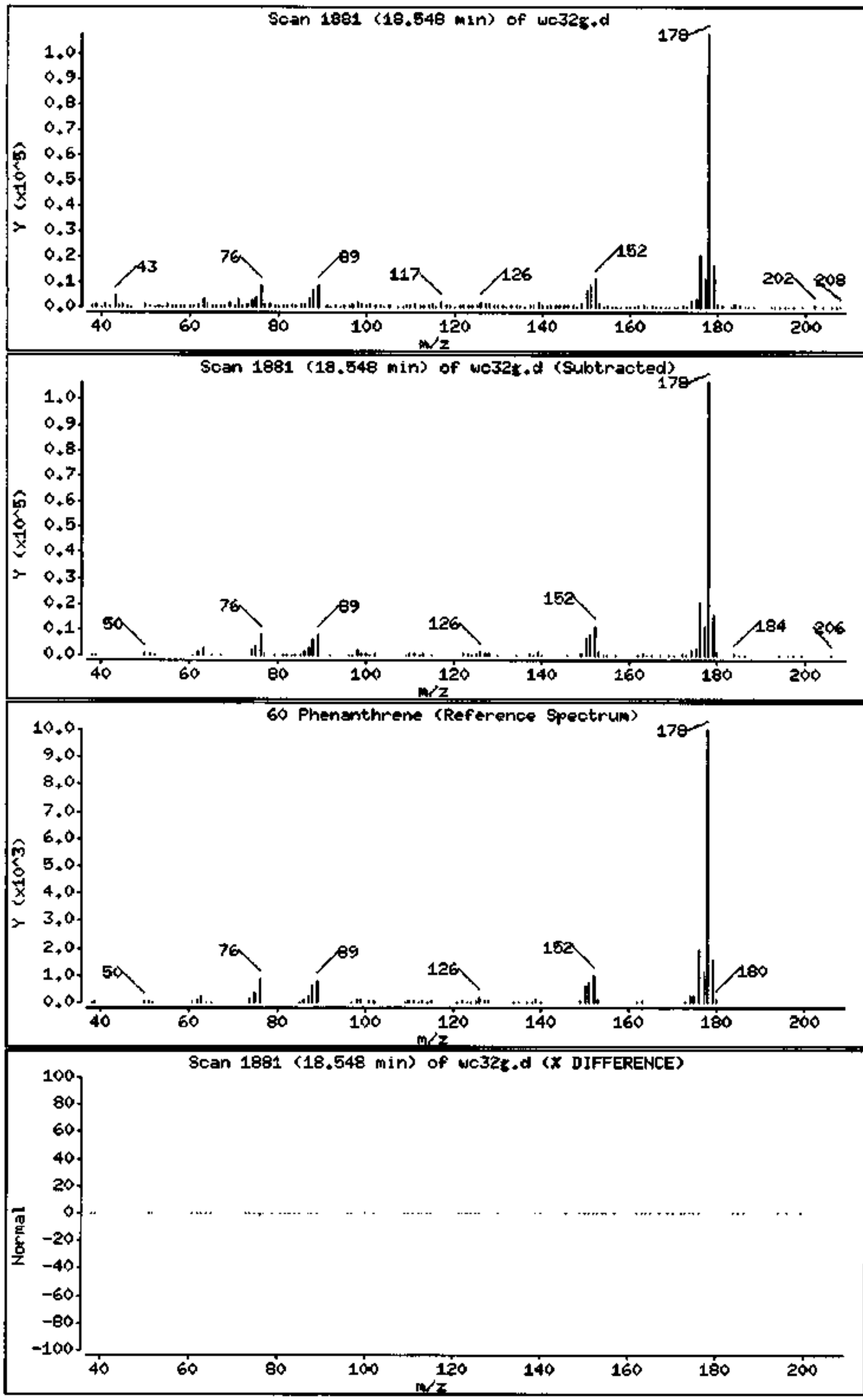
Operator: VTS/YZ

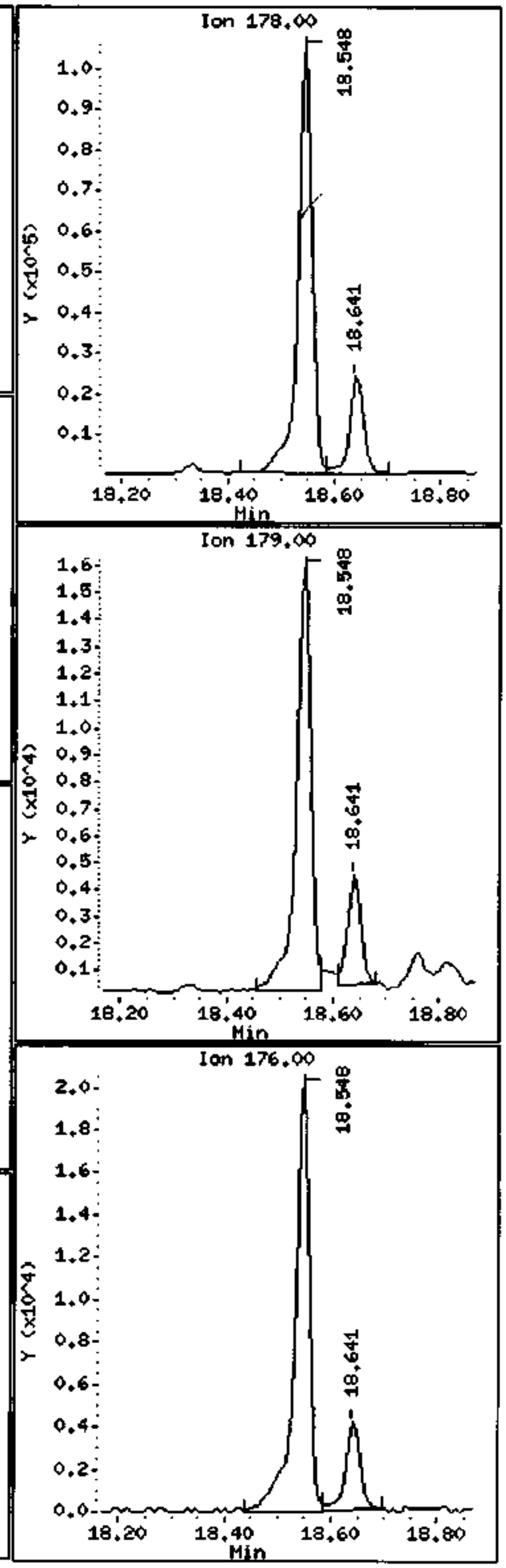
Column phase: ZB-5msi

Column diameter: 0.25

60 Phenanthrene

Concentration: 2501 ug/kg





Data File: /chem1/nt10.i/20130216.b/wc32g.d

Date : 16-FEB-2013 19:00

Client ID: SG-08-0-10-013113

Instrument: nt10.i

Sample Info: WC32G,5

Volume Injected (uL): 1.0

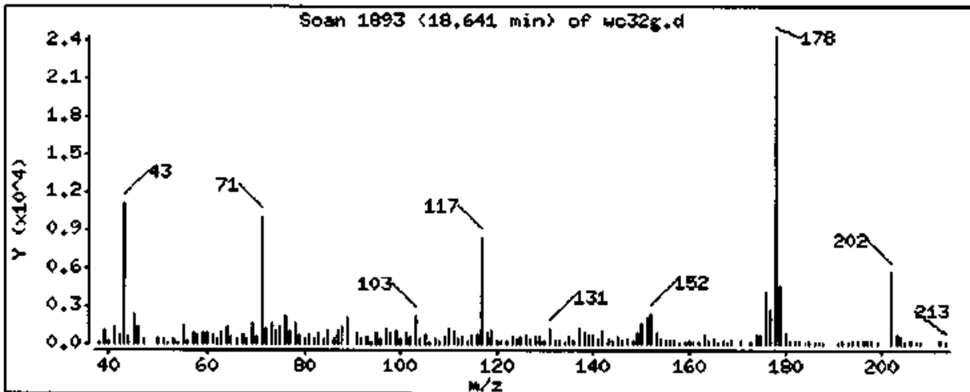
Operator: VTS/YZ

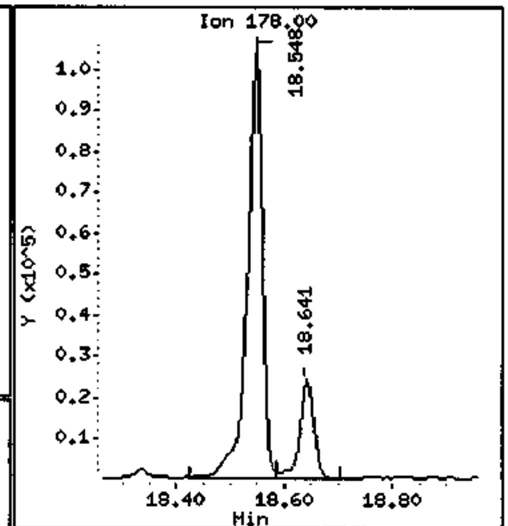
Column phase: ZB-5msi

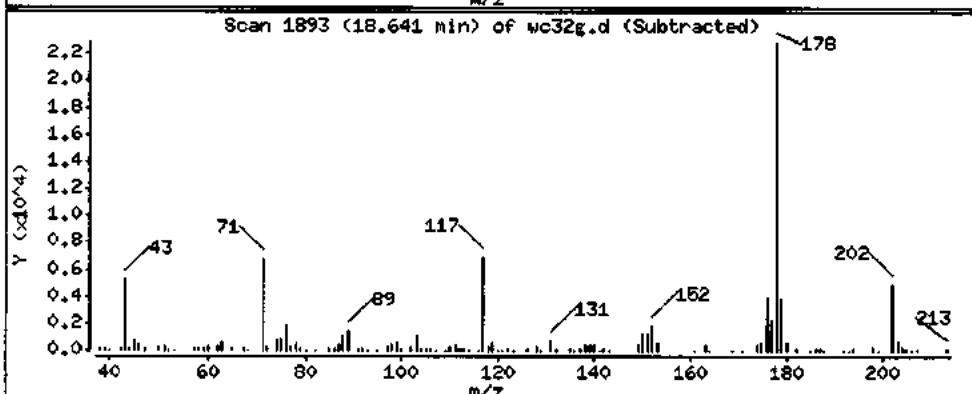
Column diameter: 0.25

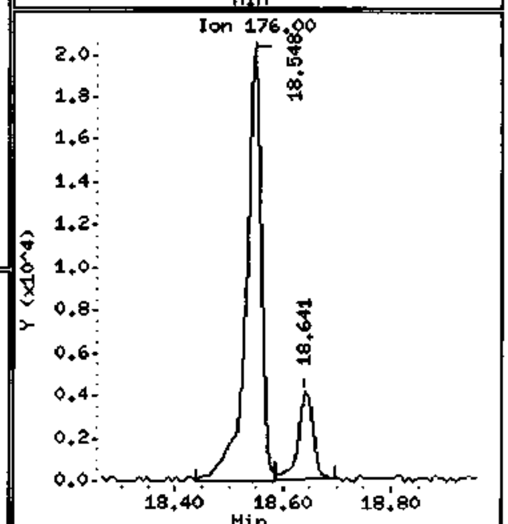
61 Anthracene

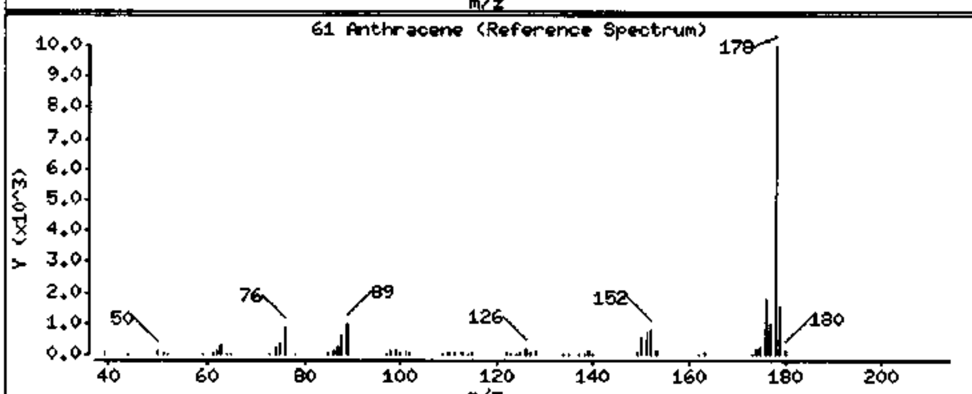
Concentration: 564.3 ug/kg

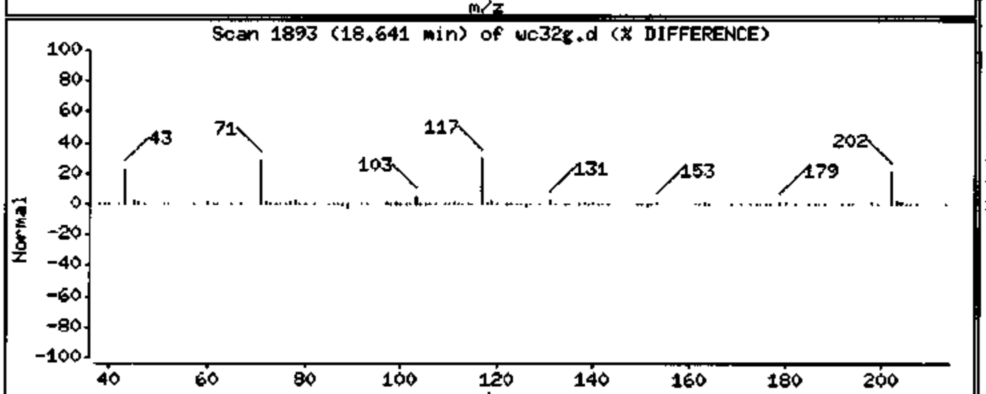


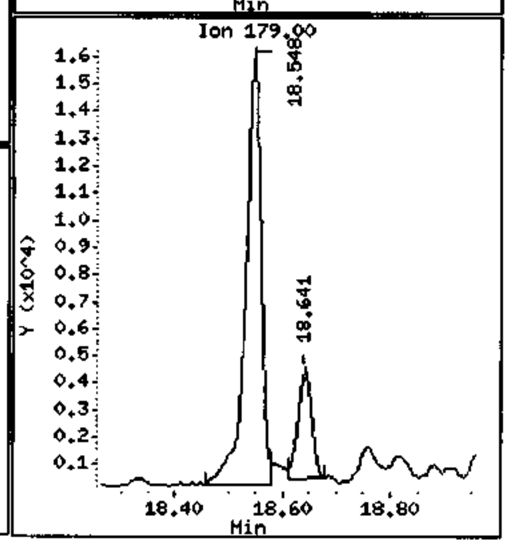












Data File: /chem1/nt10.i/20130216.b/wc32g.d

Date : 16-FEB-2013 19:00

Client ID: SG-08-0-10-013113

Instrument: nt10.i

Sample Info: WC32G,5

Volume Injected (uL): 1.0

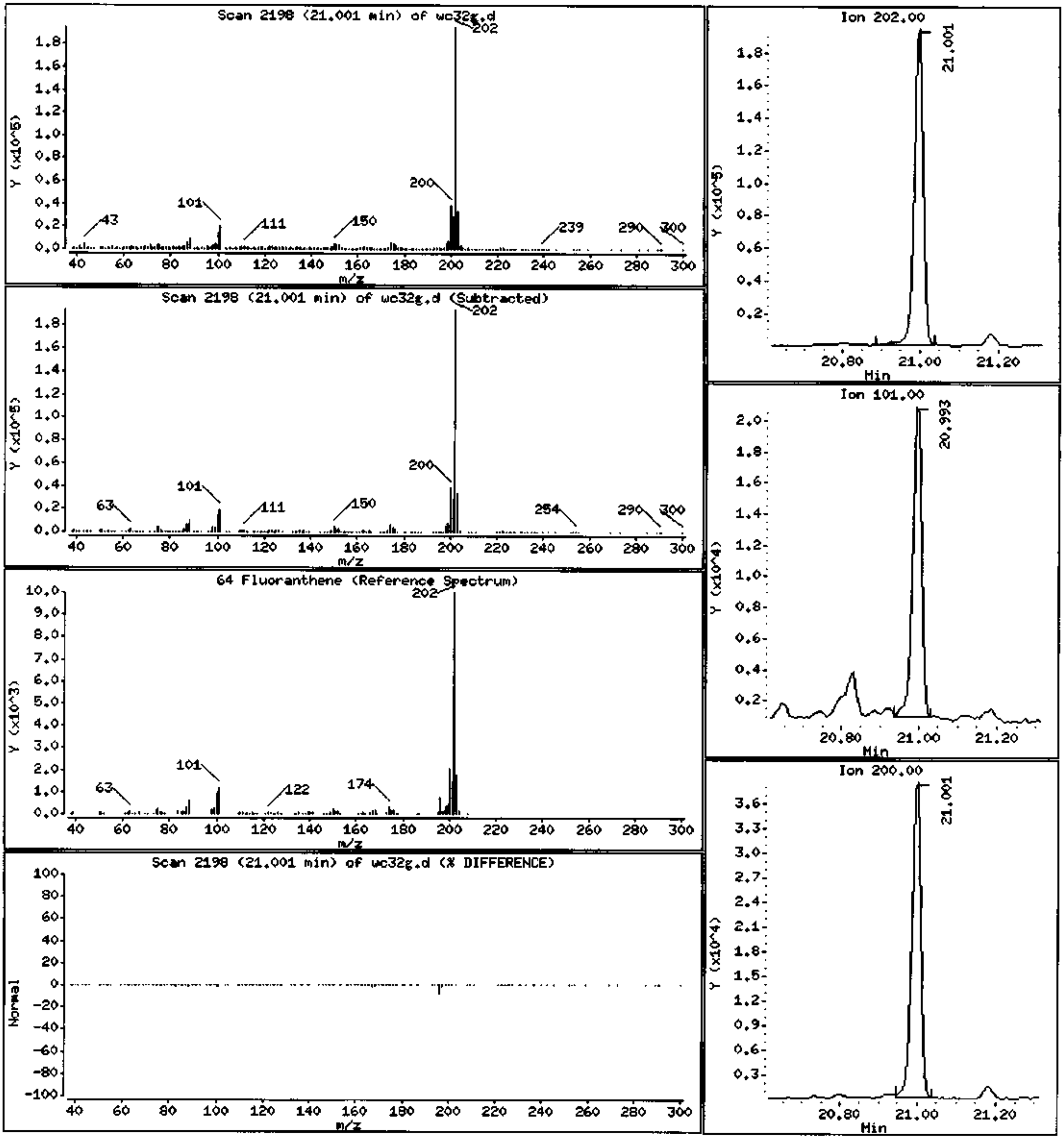
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

64 Fluoranthene

Concentration: 3457 ug/kg



Data File: /chem1/nt10.i/20130216.b/wc32g.d

Date : 16-FEB-2013 19:00

Client ID: SG-08-0-10-013113

Sample Info: WC32G,5

Volume Injected (uL): 1.0

Column phase: ZB-5msi

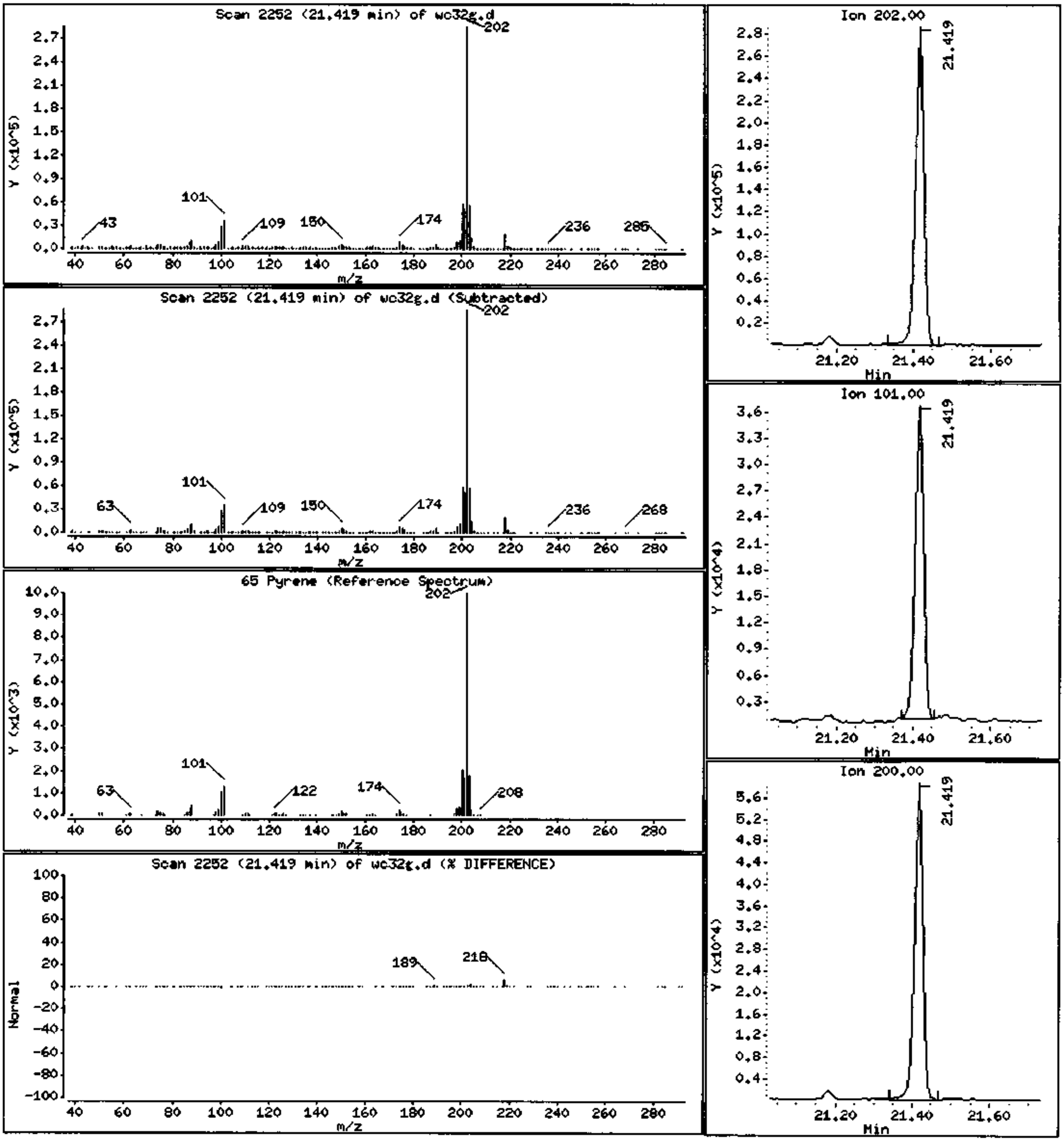
65 Pyrene

Instrument: nt10.i

Operator: VTS/YZ

Column diameter: 0.25

Concentration: 3736 ug/kg



Data File: /chem1/nt10.i/20130216.b/wc32g.d

Date : 16-FEB-2013 19:00

Client ID: SG-08-0-10-013113

Instrument: nt10.i

Sample Info: WC32G,5

Volume Injected (uL): 1.0

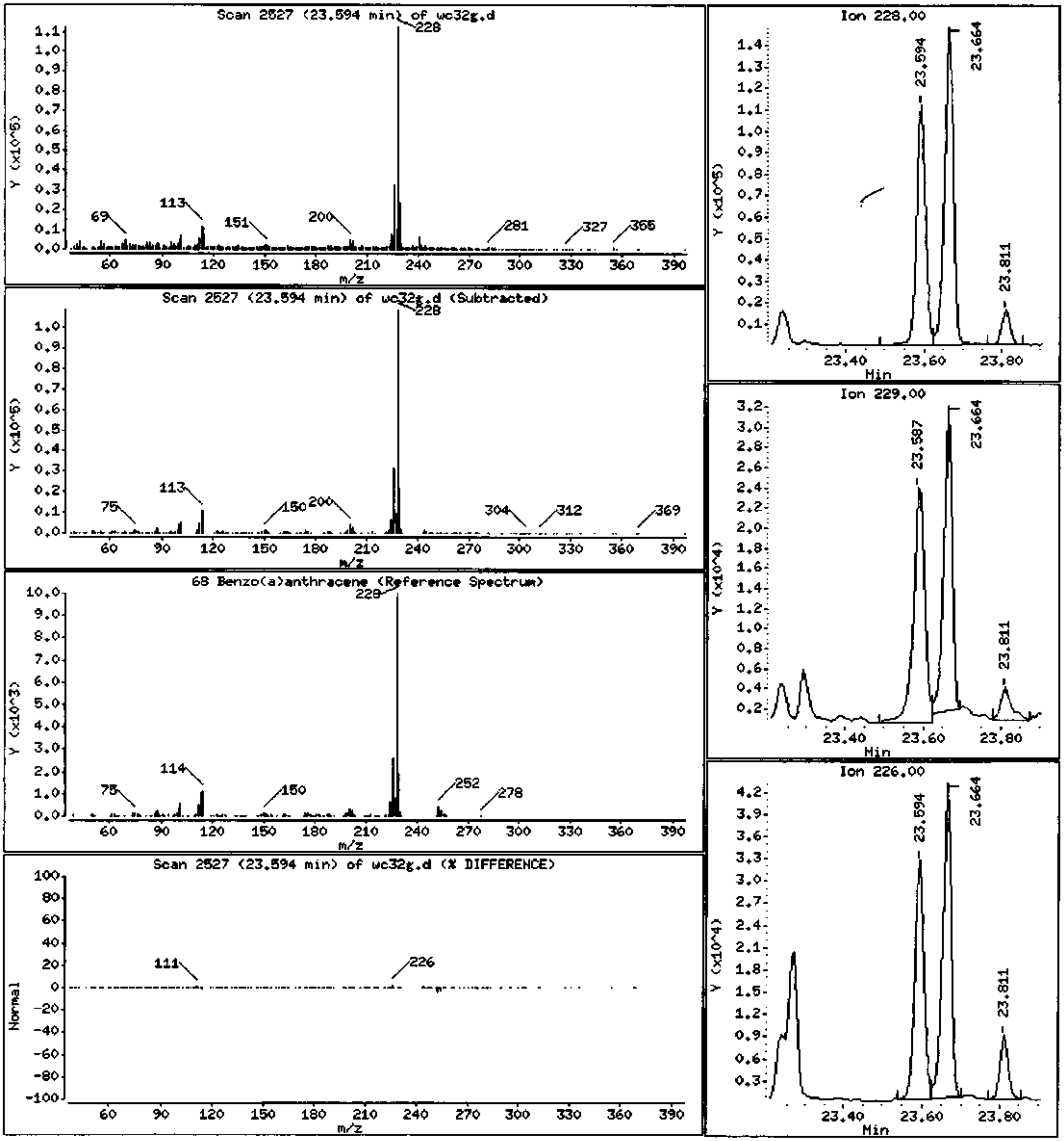
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

68 Benzo(a)anthracene

Concentration: 1659 ug/kg



Data File: /chem1/nt10.i/20130216.b/wc32g.d

Date : 16-FEB-2013 19:00

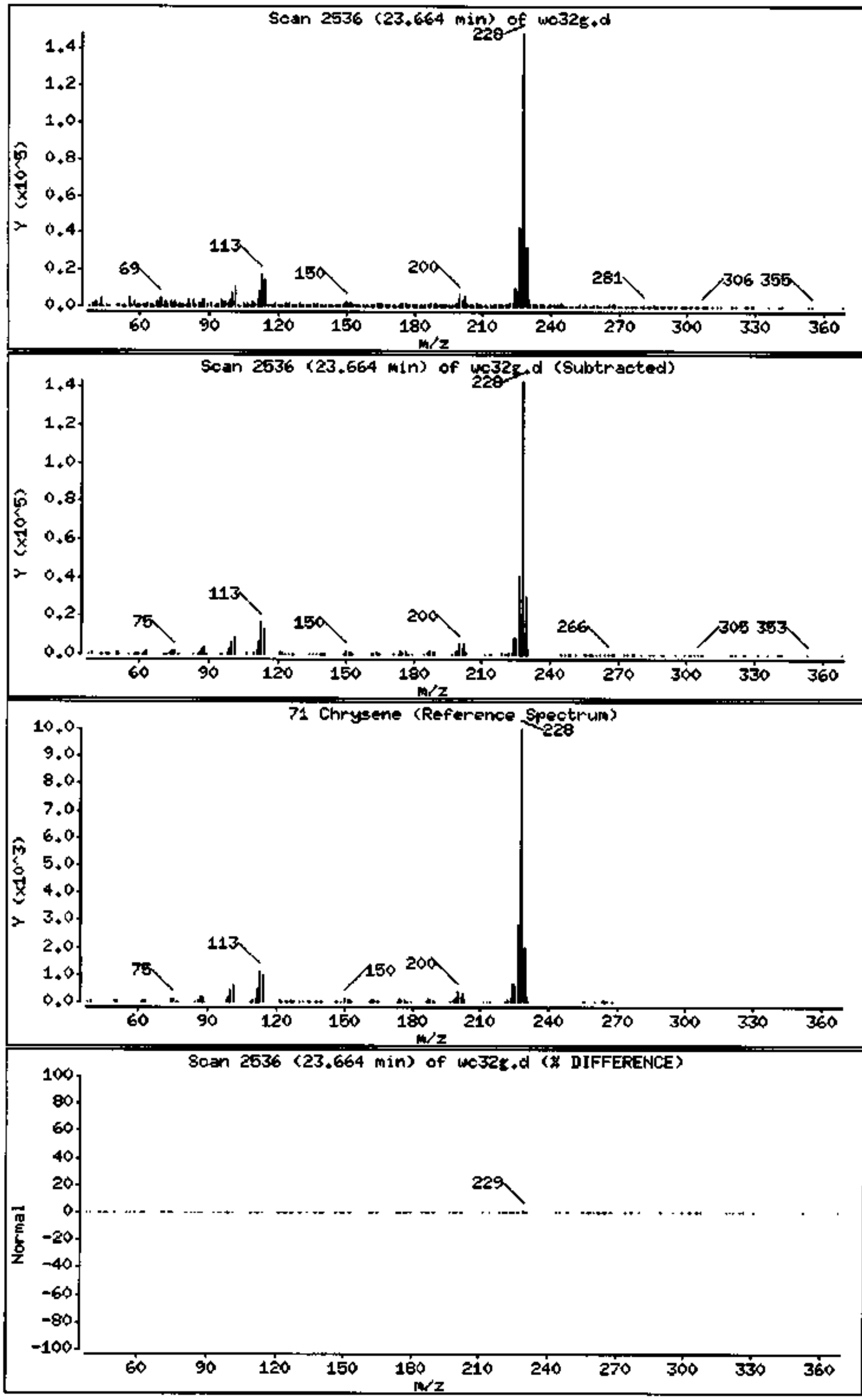
Client ID: SG-08-0-10-013113 | Instrument: nt10.i

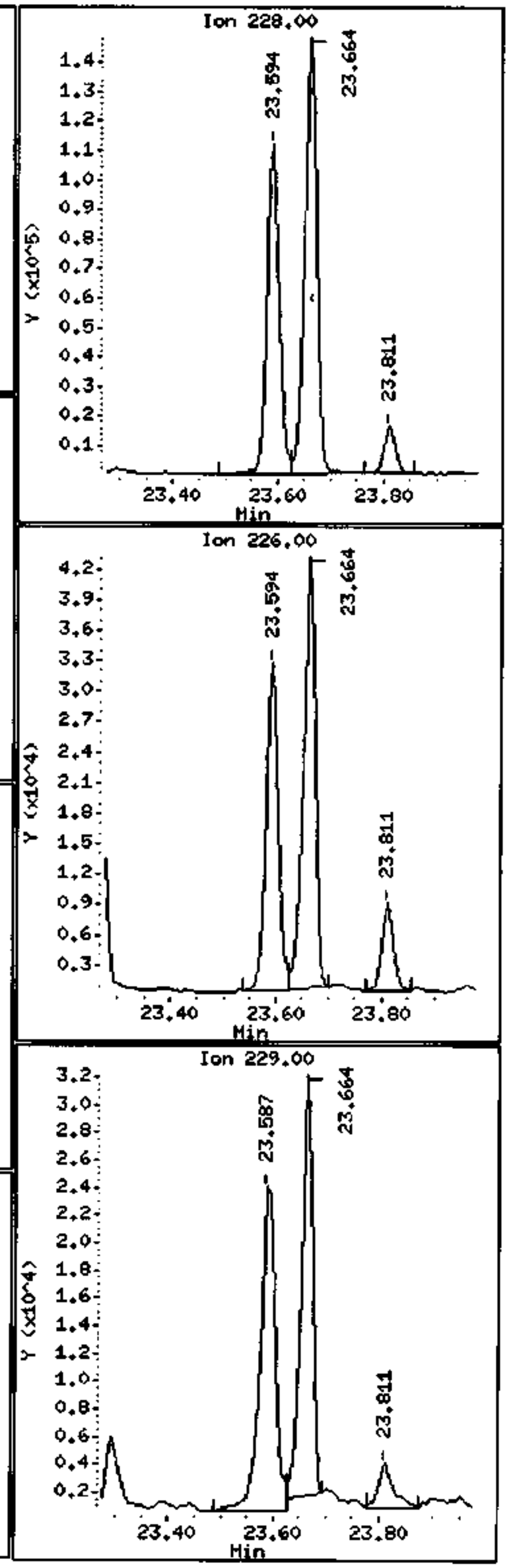
Sample Info: WC32G,5

Volume Injected (uL): 1.0 | Operator: VTS/YZ

Column phase: ZB-5msi | Column diameter: 0.25

71 Chrysene | Concentration: 2330 ug/kg





Data File: /chem1/nt10.i/20130216.b/wc32g.d

Date : 16-FEB-2013 19:00

Client ID: SG-08-0-10-013113

Sample Info: WC32G,5

Volume Injected (uL): 1.0

Column phase: ZB-5msi

72 bis(2-Ethylhexyl)phthalate

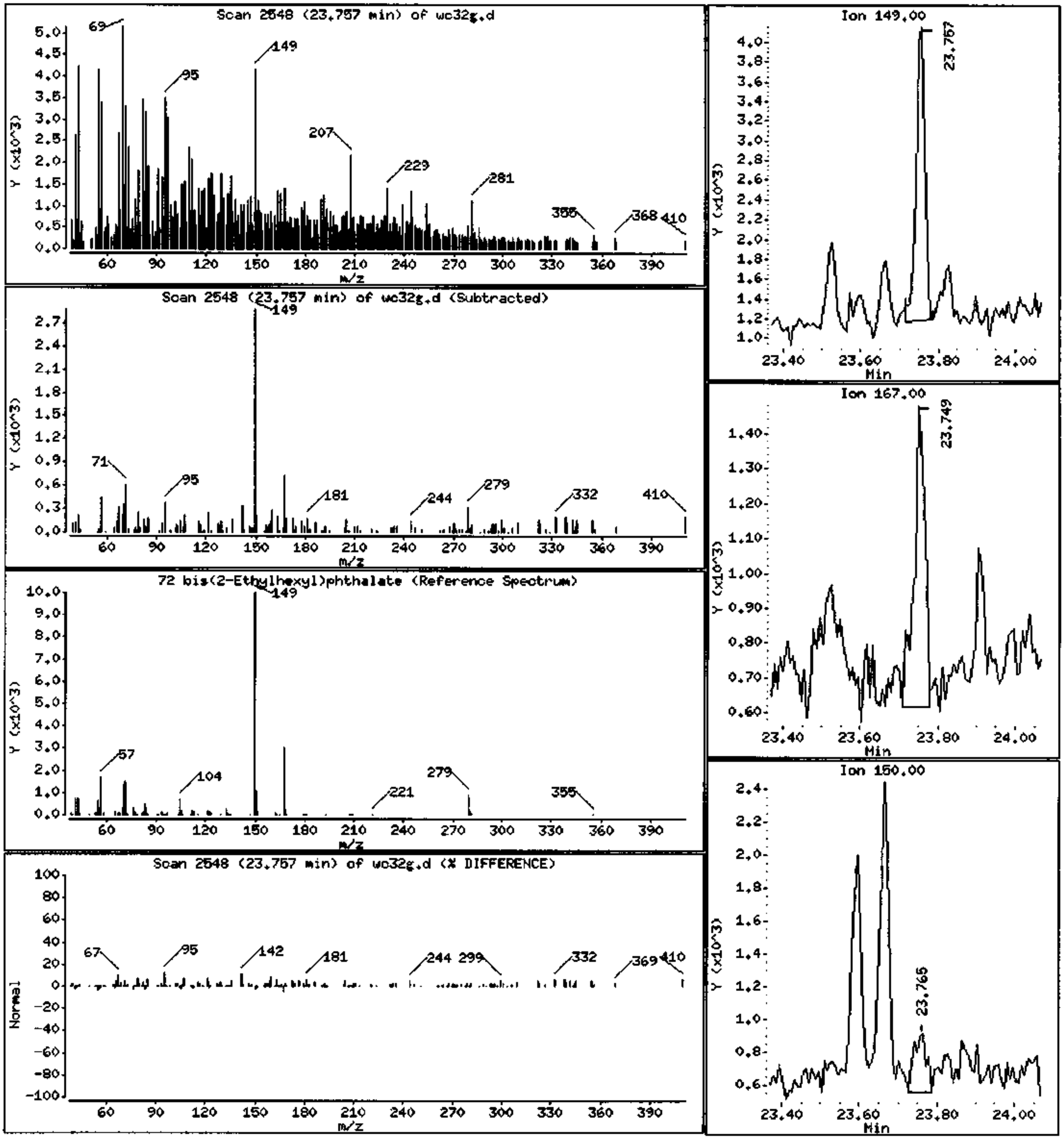
Instrument: nt10.i

Operator: VTS/YZ

Column diameter: 0.25

Concentration: 69.68 ug/kg

(3) LMDL



Data File: /chem1/nt10.i/20130216.b/wc32g.d

Date : 16-FEB-2013 19:00

Client ID: SG-08-0-10-013113

Instrument: nt10.i

Sample Info: WC32G,5

Volume Injected (uL): 1.0

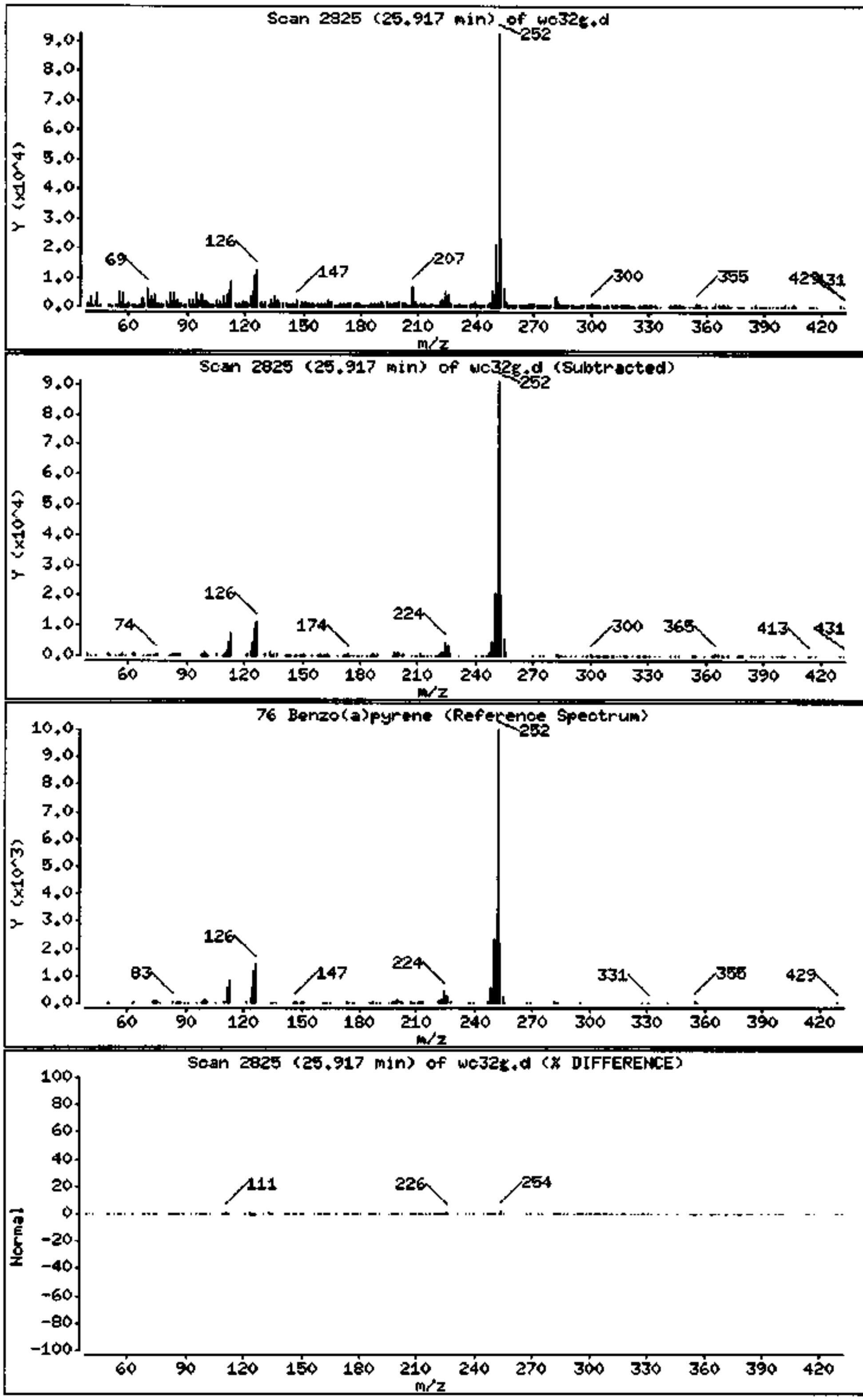
Operator: VTS/YZ

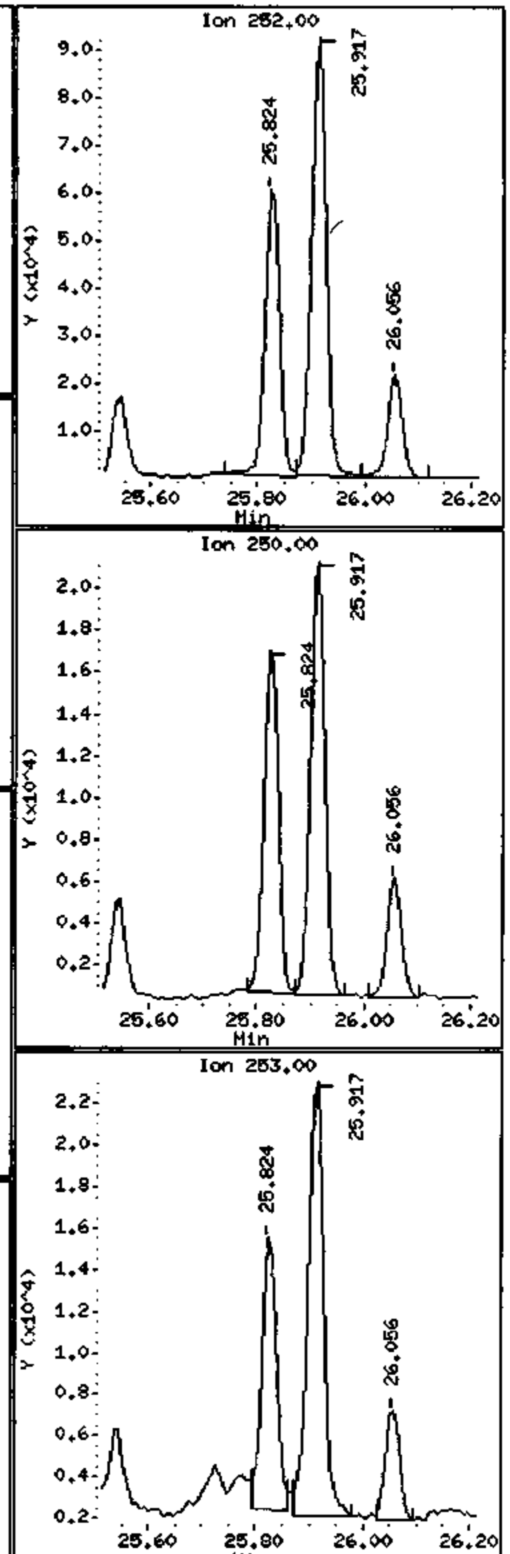
Column phase: ZB-5msi

Column diameter: 0.25

76 Benzo(a)pyrene

Concentration: 1582 ug/kg





Data File: /chem1/nt10.i/20130216.b/wc32g.d

Date : 16-FEB-2013 19:00

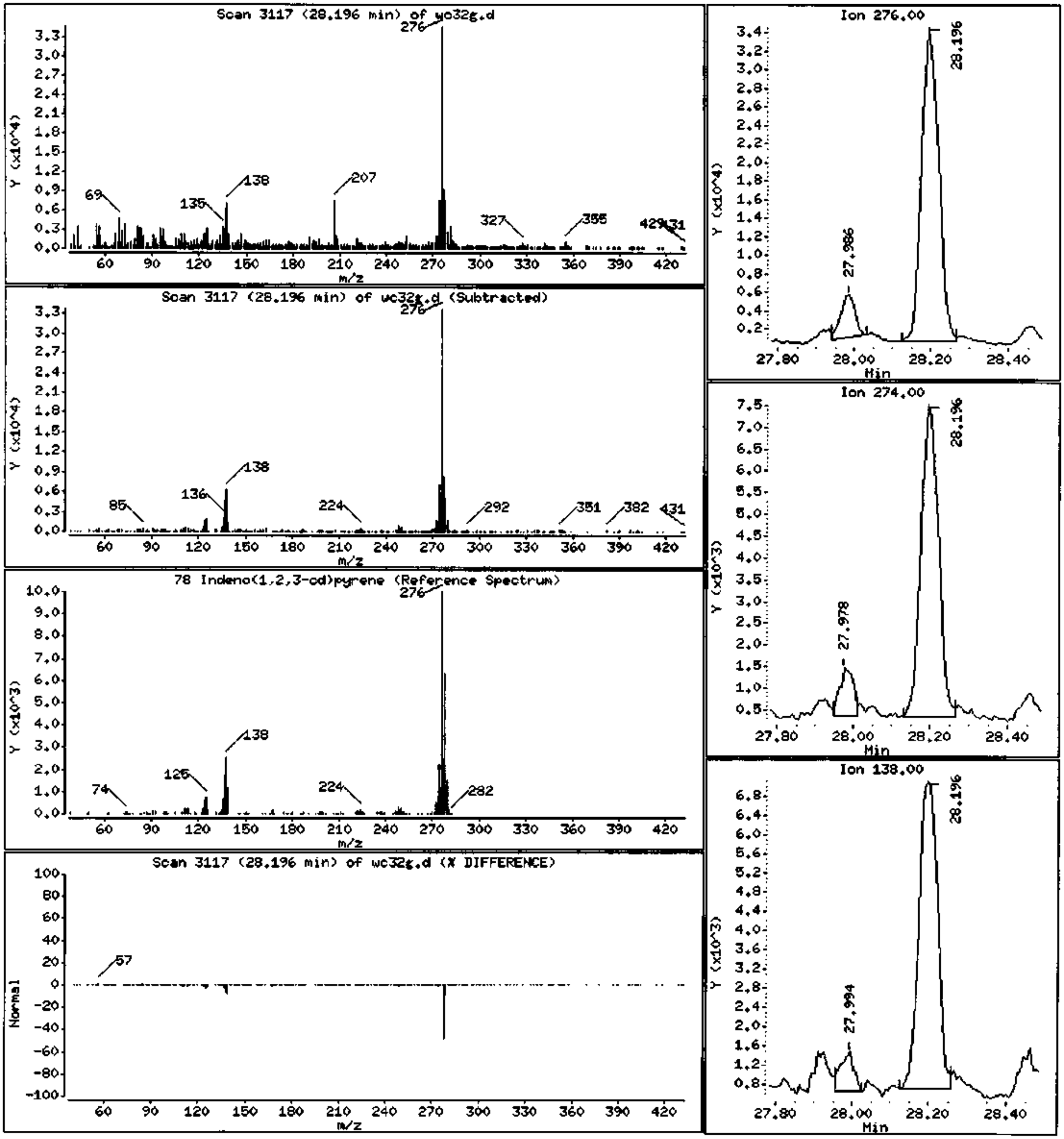
Client ID: SG-08-0-10-013113 | Instrument: nt10.i

Sample Info: WC32G,5

Volume Injected (uL): 1.0 | Operator: VTS/YZ

Column phase: ZB-5ms: | Column diameter: 0.25

78 Indeno(1,2,3-cd)pyrene | Concentration: 739.5 ug/kg



Data File: /chem1/nt10.i/20130216.b/wc32g.d

Date : 16-FEB-2013 19:00

Client ID: SG-08-0-10-013113

Instrument: nt10.i

Sample Info: WC32G,5

Volume Injected (uL): 1.0

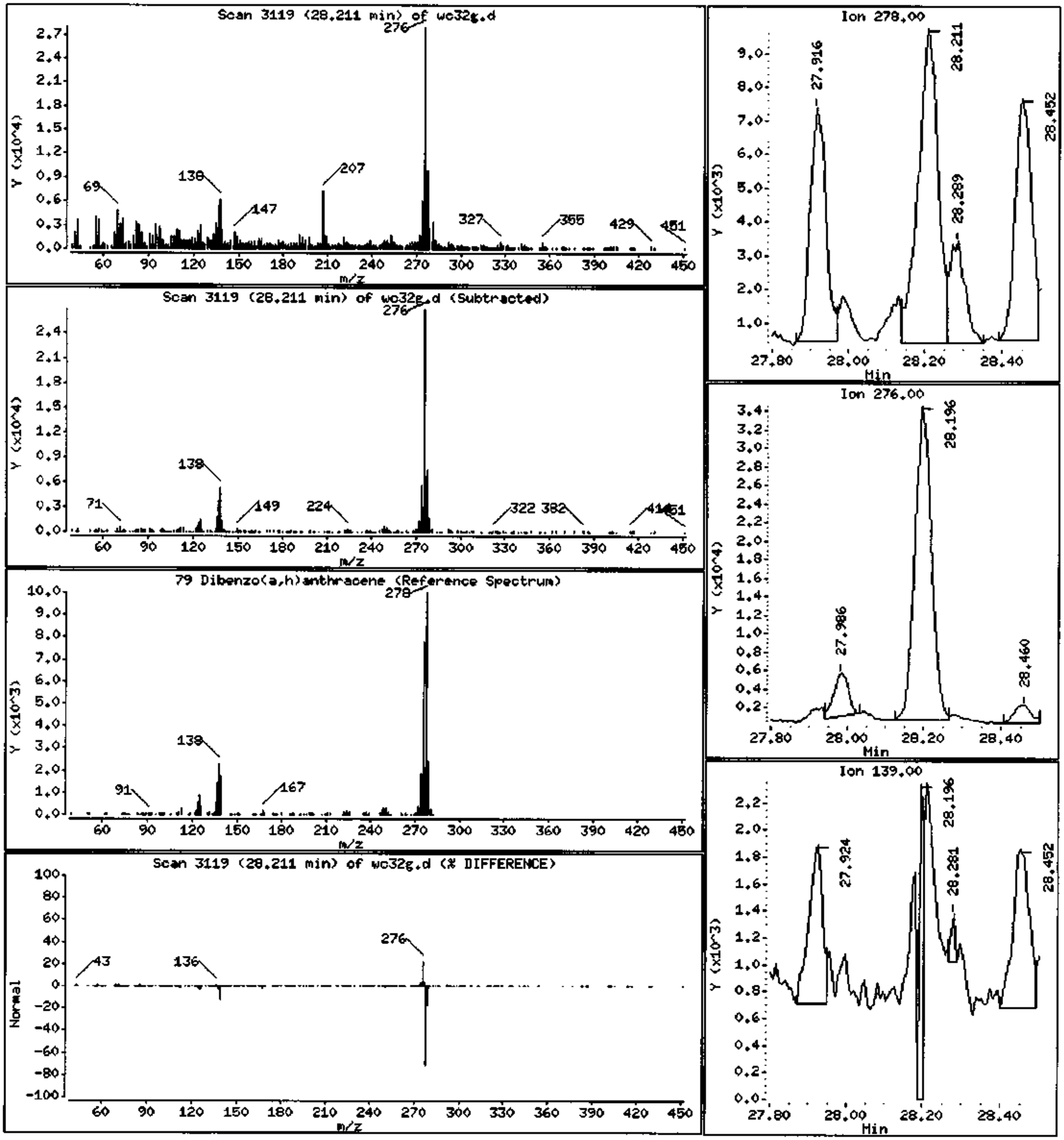
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

79 Dibenzo(a,h)anthracene

Concentration: 305.7 ug/kg



Data File: /chem1/nt10.i/20130216.b/wc32g.d

Date : 16-FEB-2013 19:00

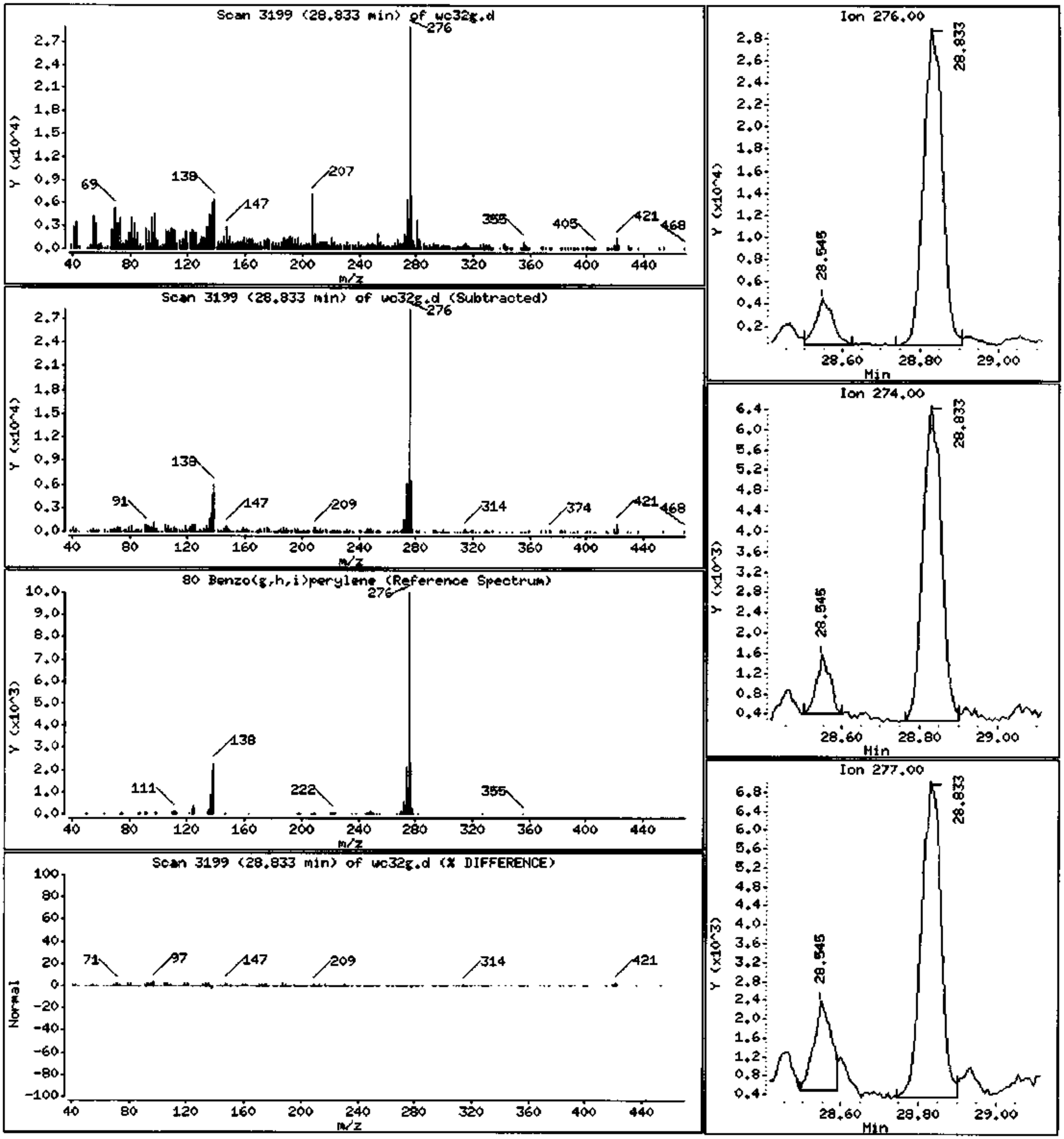
Client ID: SG-08-0-10-013113 Instrument: nt10.i

Sample Info: WC32G,5

Volume Injected (uL): 1.0 Operator: VTS/YZ

Column phase: ZB-5msi Column diameter: 0.25

80 Benzo(g,h,i)perylene Concentration: 792.5 ug/kg



Data File: /chem1/nt10.i/20130216.b/wc32g.d

Date : 16-FEB-2013 19:00

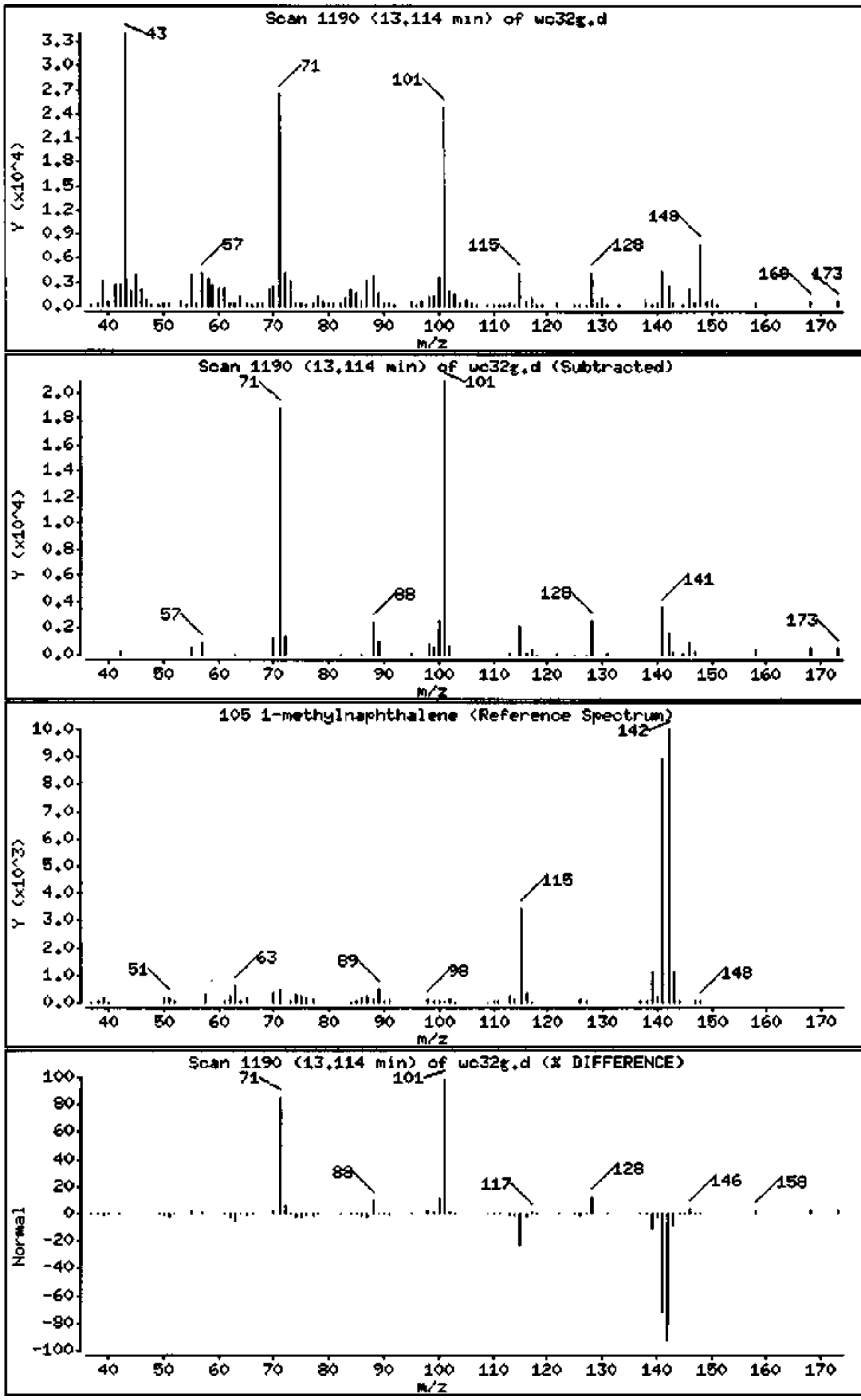
Client ID: SG-08-0-10-013113 Instrument: nt10.i

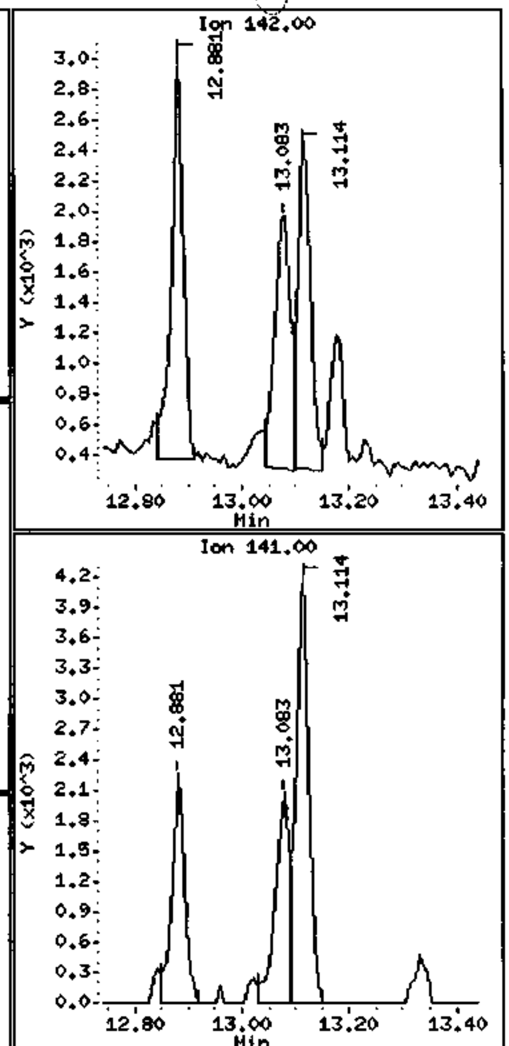
Sample Info: WC32G,5

Volume Injected (uL): 1.0 Operator: VTS/YZ

Column phase: ZB-5msi Column diameter: 0.25

105 1-methylnaphthalene Concentration: 83.29 ug/kg





Data File: /chem1/nt10.i/20130216.b/wc32g.d

Date : 16-FEB-2013 19:00

Client ID: SC-08-0-10-013113

Instrument: nt10.i

Sample Info: WC32G,5

Volume Injected (uL): 1.0

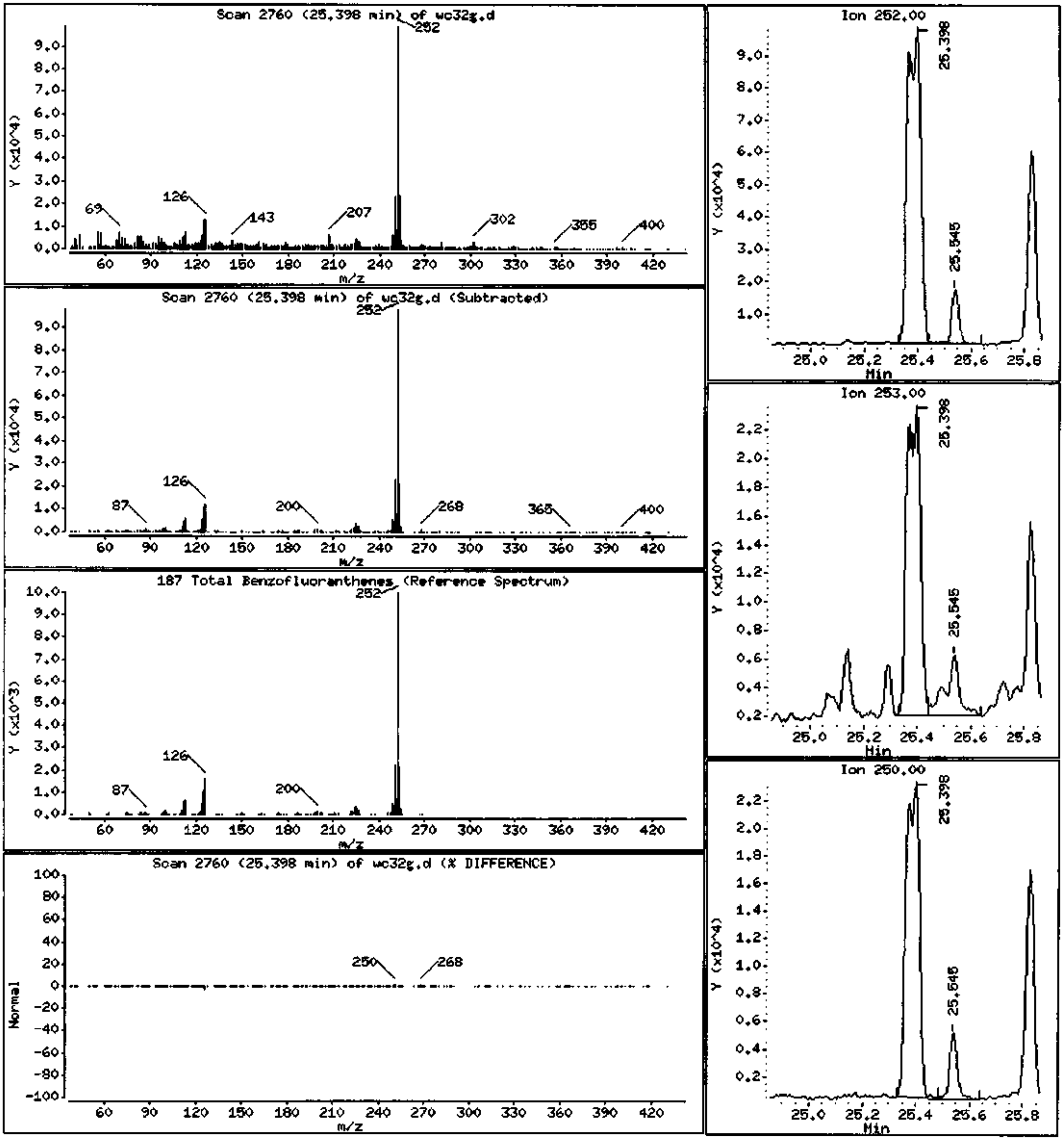
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

187 Total Benzofluoranthenes

Concentration: 2579 ug/kg



CO-ELUTION SUMMARY FOR FILE - wc32g.d

Lab ID: WC32G, Method: ABN.m, Instrument: nt10.i, Date: 16-FEB-2013

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

2 02/18/13

Data file : /chem1/nt10.i/20130216.b/wc32gmsd.d
Lab Smp Id: WC32GMSD Client Smp ID: SG-08-0-10-0131 MSD
Inj Date : 16-FEB-2013 19:36
Operator : VTS/YZ Inst ID: nt10.i
Smp Info : WC32GMSD
Misc Info : 13-2430
Comment : 1ul Injection
Method : /chem1/nt10.i/20130216.b/ABN.m
Meth Date : 18-Feb-2013 12:35 yev Quant Type: ISTD
Cal Date : 25-JAN-2013 17:16 Cal File: ic0125h.d
Als bottle: 17 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDAICAL.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Ws	20.20000	Weight of sample extracted (g)
M	48.50000	% Moisture

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
$	1 2-Fluorophenol	112	6.683	6.351	(0.770)	50345	3.93603	378.4(MH)
$	2 Phenol-d5	99	8.244	8.082	(0.950)	77452	4.87975	469.1
	3 Phenol	94	8.267	8.105	(0.953)	63186	3.78226	363.6(H)
$	5 2-Chlorophenol-d4	132	8.437	8.283	(0.972)	64473	4.69124	451.0
	4 Bis(2-Chloroethyl)ether	93	8.252	8.198	(0.951)	43718	3.43946	330.6
	6 2-Chlorophenol	128	8.468	8.314	(0.976)	34058	2.34274	225.2(H)
	7 1,3-Dichlorobenzene	146	8.608	8.569	(0.992)	49374	3.12115	300.0
*	8 1,4-Dichlorobenzene-d4	152	8.678	8.647	(1.000)	40003	4.00000	
	9 1,4-Dichlorobenzene	146	8.709	8.678	(1.004)	50783	3.24204	311.6
$	10 1,2-Dichlorobenzene-d4	152	9.058	9.027	(1.044)	37303	3.69348	355.0
	12 1,2-Dichlorobenzene	146	9.089	9.050	(1.047)	48232	3.20234	307.8
	11 Benzyl alcohol	108	9.104	8.980	(1.049)	21417	2.67890	257.5
	14 2,2'-oxybis(1-Chloropropane)	121	9.337	9.291	(1.076)	15732	3.51790	338.2
	13 2-Methylphenol	108	9.384	9.275	(1.081)	45908	3.64039	349.9

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
	17 Hexachloroethane	117	9.702	9.671	(1.118)	6053	0.97768	93.98(R)
	16 N-Nitroso-di-n-propylamine	70	9.671	9.570	(1.114)	26990	3.20339	307.9(H)
	15 4-Methylphenol	108	9.687	9.570	(1.116)	105943	8.07821	776.5
$	18 Nitrobenzene-d5	82	9.927	9.826	(0.875)	57455	4.02400	386.8
	19 Nitrobenzene	77	10.175	9.857	(0.897)	774501	57.2114	5500(M)
	20 Isophorone	82	10.408	10.354	(0.918)	83061	3.52012	338.4
	21 2-Nitrophenol	139	10.587	10.540	(0.933)	12755	1.60351	154.1
	22 2,4-Dimethylphenol	107	10.741	10.672	(0.947)	151879	11.2017	1077
	23 Bis(2-Chloroethoxy)methane	93	10.887	10.841	(0.960)	53472	3.59823	345.9
	24 Benzoic acid	105	11.042	10.988	(0.973)	103162	8.97124	862.4
	25 2,4-Dichlorophenol	162	11.126	11.057	(0.981)	126059	10.6380	1023
	26 1,2,4-Trichlorobenzene	180	11.250	11.219	(0.992)	46211	3.42665	329.4
*	27 Naphthalene-d8	136	11.342	11.296	(1.000)	154698	4.00000	
	28 Naphthalene	128	11.381	11.343	(1.003)	210600	5.23181	502.9
	29 4-Chloroaniline	127	Compound Not Detected.					
	30 Hexachlorobutadiene	225	11.775	11.744	(1.038)	30163	3.58886	345.0
	31 4-Chloro-3-methylphenol	107	12.719	12.642	(1.121)	123933	10.8207	1040
	32 2-Methylnaphthalene	142	12.889	12.851	(1.136)	118030	4.44103	426.9
	33 Hexachlorocyclopentadiene	237	Compound Not Detected.					
	34 2,4,6-Trichlorophenol	196	13.617	13.563	(0.894)	105913	10.6740	1026
	35 2,4,5-Trichlorophenol	196	13.733	13.656	(0.902)	103641	9.82902	944.8(H)
$	36 2-Fluorobiphenyl	172	13.756	13.718	(0.903)	146737	4.31980	415.2
	37 2-Chloronaphthalene	162	13.957	13.919	(0.917)	95027	3.47442	334.0
	38 2-Nitroaniline	65	14.298	14.236	(0.939)	26951	4.20150	403.9
	39 Dimethylphthalate	163	14.762	14.716	(0.970)	121863	4.06923	391.2
	40 Acenaphthylene	152	14.886	14.848	(0.978)	176455	3.95615	380.3
	41 2,6-Dinitrotoluene	165	14.902	14.855	(0.979)	73973	10.8121	1039
*	42 Acenaphthene-d10	164	15.227	15.188	(1.000)	99015	4.00000	
	43 3-Nitroaniline	138	Compound Not Detected.					
	44 Acenaphthene	153	15.296	15.258	(1.005)	129229	4.72514	454.2
	45 2,4-Dinitrophenol	184	15.451	15.397	(1.015)	2762	0.46912	45.09
	46 Dibenzofuran	168	15.659	15.621	(1.028)	180063	4.73399	455.1
	47 4-Nitrophenol	109	Compound Not Detected.					
	48 2,4-Dinitrotoluene	165	15.775	15.729	(1.036)	98264	10.6221	1021
	50 Diethylphthalate	149	16.355	16.309	(1.074)	146744	4.67769	449.6
	49 Fluorene	166	16.425	16.386	(1.079)	169548	5.24793	504.5
	51 4-Chlorophenyl-phenylether	204	16.440	16.402	(1.080)	48048	3.19124	306.8
	52 4-Nitroaniline	138	Compound Not Detected.					
	53 4,6-Dinitro-2-methylphenol	198	16.702	16.641	(0.902)	18814	2.75721	265.0
	54 N-Nitrosodiphenylamine	169	16.772	16.687	(0.906)	41434	2.01870	194.0(H)
$	55 2,4,6-Tribromophenol	330	17.080	16.972	(1.122)	35797	5.66526	544.6(H)
	56 4-Bromophenyl-phenylether	248	17.528	17.481	(0.947)	41951	4.41366	424.3
	57 Hexachlorobenzene	284	17.844	17.798	(0.964)	52330	4.38708	421.7
	58 Pentachlorophenol	266	18.278	18.216	(0.987)	59525	7.48341	719.4
*	59 Phenanthrene-d10	188	18.510	18.464	(1.000)	170394	4.00000	
	60 Phenanthrene	178	18.564	18.518	(1.003)	561142	12.3536	1187(R)
	61 Anthracene	178	18.657	18.611	(1.008)	301108	6.58362	632.9

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
	========================	====	==	======	======	========	=======	=======
	62 Carbazole	167	19.059	18.997	(1.030)	178569	5.84560	561.9
	63 Di-n-butylphthalate	149	19.918	19.872	(1.076)	254548	5.21555	501.4
	64 Fluoranthene	202	21.009	20.963	(1.135)	925471	17.6918	1701(R)
	65 Pyrene	202	21.434	21.380	(0.907)	1122270	17.0596	1640(R)
$	66 Terphenyl-d14	244	21.752	21.713	(0.920)	192975	4.35029	418.2
	67 Butylbenzylphthalate	149	22.720	22.666	(0.961)	121582	4.87286	468.4
	68 Benzo(a)anthracene	228	23.618	23.556	(0.999)	666461	10.3419	994.1(R)
*	69 Chrysene-d12	240	23.641	23.579	(1.000)	230952	4.00000	
	70 3,3'-Dichlorobenzidine	252	Compound Not Detected.					
	71 Chrysene	228	23.688	23.626	(1.002)	750376	12.8558	1236(R)
	72 bis(2-Ethylhexyl)phthalate	149	23.773	23.719	(0.960)	333813	8.05686	774.5(R)
*	134 Di-n-octylphthalate-d4	153	24.756	24.694	(1.000)	313766	4.00000	
	73 Di-n-octylphthalate	149	24.764	24.710	(1.000)	336128	4.39167	422.2
	74 Benzo(b)fluoranthene	252	25.398	25.329	(0.975)	665202	9.77371	939.5
	75 Benzo(k)fluoranthene	252	25.437	25.360	(0.977)	686922	9.34236	898.0
	76 Benzo(a)pyrene	252	25.948	25.863	(0.996)	553935	9.41096	904.6(R)
*	77 Perylene-d12	264	26.041	25.964	(1.000)	234821	4.00000	
	78 Indeno(1,2,3-cd)pyrene	276	28.243	28.134	(1.085)	460842	6.34882	610.3
	79 Dibenzo(a,h)anthracene	278	28.258	28.150	(1.085)	317957	5.53164	531.7
	80 Benzo(g,h,i)perylene	276	28.880	28.763	(1.109)	378573	6.07878	584.3
	90 N-Nitrosodimethylamine	74	4.073	4.042	(0.469)	73872	9.70673	933.1
	91 Aniline	93	8.252	8.090	(0.951)	43718	1.21271	116.6
	93 Benzidine	184	Compound Not Detected.					
	103 Pyridine	79	4.096	4.050	(0.472)	26700	4.11312	395.4
	105 1-methylnaphthalene	142	13.129	13.091	(1.158)	122748	5.03508	484.0
	111 Azobenzene (1,2-DP-Hydrazine)	77	16.810	16.757	(1.104)	90691	3.18714	306.4
	187 Total Benzofluoranthenes	252	25.437	25.360	(0.977)	1232921	18.4031	1769(R)
	99 Perylene	252	26.088	26.003	(1.002)	203304	3.00543	288.9
	98 Retene	219	22.046	21.992	(0.933)	220984	6.59794	634.2
	120 2,3,4,6-Tetrachlorophenol	232	16.077	16.015	(1.056)	25078	2.71924	261.4

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: wc32gmsd.d
Lab Smp Id: WC32GMSD
Analysis Type: SV
Quant Type: ISTD
Operator: VTS/YZ
Method File: /chem1/nt10.i/20130216.b/ABN.m
Misc Info: 13-2430

Calibration Date: 16-FEB-2013
Calibration Time: 11:03
Client Smp ID: SG-08-0-10-0131
Level: LOW
Sample Type: Sediment

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	46623	23312	93246	40003	-14.20
27 Naphthalene-d8	176978	88489	353956	154698	-12.59
42 Acenaphthene-d10	110872	55436	221744	99015	-10.69
59 Phenanthrene-d10	188290	94145	376580	170394	-9.50
69 Chrysene-d12	213681	106840	427362	230952	8.08
134 Di-n-octylphthala	264159	132080	528318	313766	18.78
77 Perylene-d12	208584	104292	417168	234821	12.58

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.65	8.15	9.15	8.68	0.36
27 Naphthalene-d8	11.30	10.80	11.80	11.34	0.41
42 Acenaphthene-d10	15.19	14.69	15.69	15.23	0.25
59 Phenanthrene-d10	18.46	17.96	18.96	18.51	0.25
69 Chrysene-d12	23.58	23.08	24.08	23.64	0.26
134 Di-n-octylphthala	24.69	24.19	25.19	24.76	0.25
77 Perylene-d12	25.96	25.46	26.46	26.04	0.30

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 18-Feb-2013 12:36

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: FSI
Sample Matrix: SOLID
Lab Smp Id: WC32GMSD
Level: LOW
Data Type: MS DATA
SpikeList File: SHORTPSDDA.spk
Sublist File: PSDDAICAL.sub
Method File: /chem1/nt10.i/20130216.b/ABN.m
Misc Info: 13-2430

Client SDG: WC32
Fraction: SV
Client Smp ID: SG-08-0-10-0131 MSD
Operator: VTS/YZ
SampleType: MSD
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
3 Phenol	480.6	363.6	75.65	30-160
7 1,3-Dichlorobenzen	480.6	300.0	62.42	30-160
9 1,4-Dichlorobenzen	480.6	311.6	64.84	30-160
11 Benzyl alcohol	480.6	257.5	53.58	30-160
12 1,2-Dichlorobenzen	480.6	307.8	64.05	30-160
13 2-Methylphenol	480.6	349.9	72.81	30-160
15 4-Methylphenol	961.3	776.5	80.78	30-160
17 Hexachloroethane	480.6	93.98	19.55*	30-160
22 2,4-Dimethylphenol	1442	1077	74.68	30-160
24 Benzoic acid	2643	862.4	32.62	30-160
26 1,2,4-Trichloroben	480.6	329.4	68.53	30-160
28 Naphthalene	480.6	502.9	104.64	30-160
30 Hexachlorobutadien	480.6	345.0	71.78	30-160
32 2-Methylnaphthalen	480.6	426.9	88.82	30-160
39 Dimethylphthalate	480.6	391.2	81.38	30-160
40 Acenaphthylene	480.6	380.3	79.12	30-160
44 Acenaphthene	480.6	454.2	94.50	30-160
46 Dibenzofuran	480.6	455.1	94.68	30-160
49 Fluorene	480.6	504.5	104.96	30-160
50 Diethylphthalate	480.6	449.6	93.55	30-160
54 N-Nitrosodiphenyla	480.6	194.0	40.37	30-160
57 Hexachlorobenzene	480.6	421.7	87.74	30-160
58 Pentachlorophenol	1442	719.4	49.89	30-160
60 Phenanthrene	480.6	1187	247.07*	30-160
61 Anthracene	480.6	632.9	131.67	30-160
63 Di-n-butylphthalat	480.6	501.4	104.31	30-160
64 Fluoranthene	480.6	1701	353.84*	30-160
65 Pyrene	480.6	1640	341.19*	30-160
67 Butylbenzylphthala	480.6	468.4	97.46	30-160
68 Benzo(a)anthracene	480.6	994.1	206.84*	30-160
71 Chrysene	480.6	1236	257.12*	30-160
72 bis(2-Ethylhexyl)p	480.6	774.5	161.14*	30-160
73 Di-n-octylphthalat	480.6	422.2	87.83	30-160

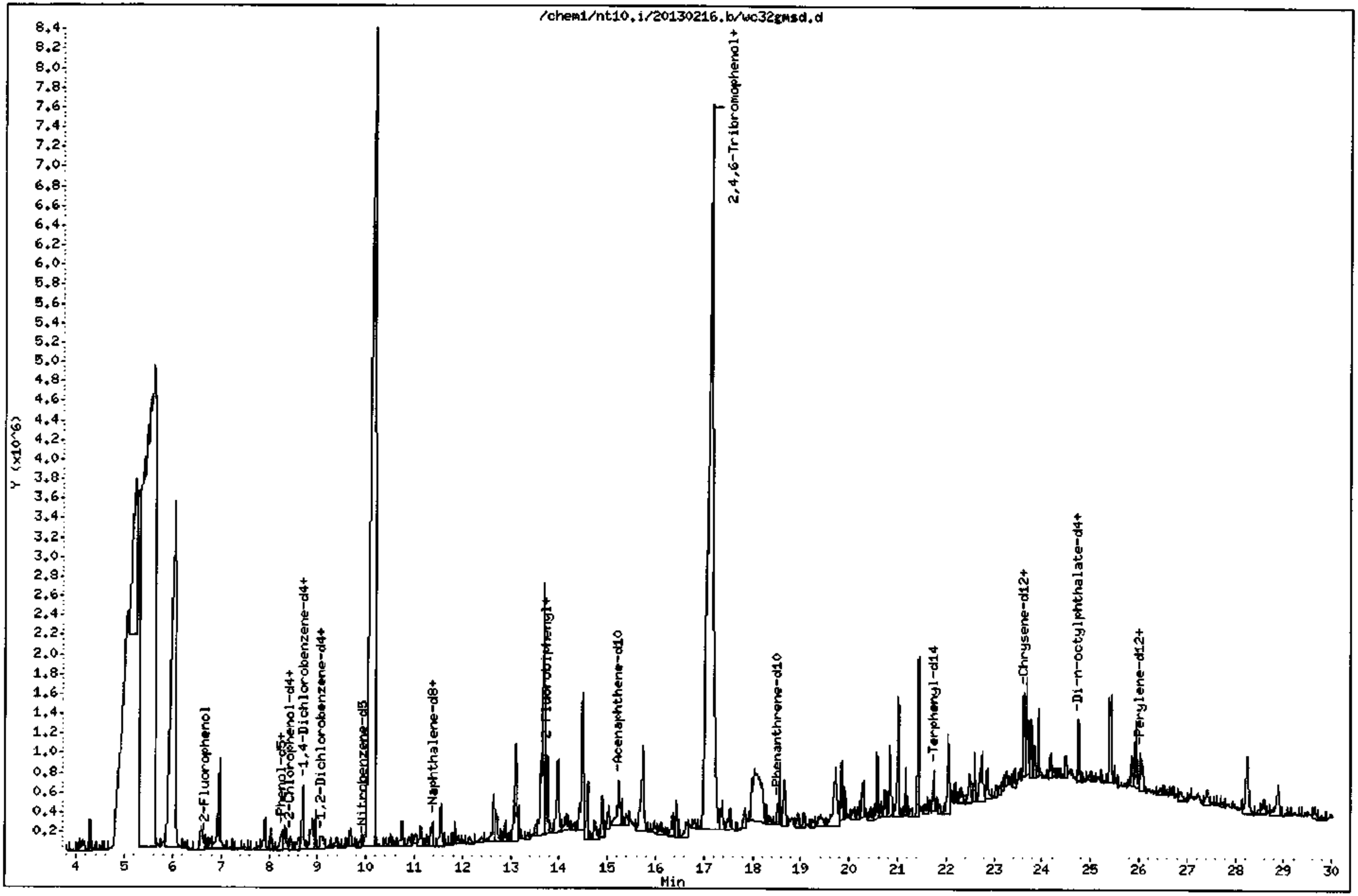
SPIKE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
76 Benzo(a)pyrene	480.6	904.6	188.22*	30-160
78 Indeno(1,2,3-cd)py	480.6	610.3	126.98	30-160
79 Dibenzo(a,h)anthra	480.6	531.7	110.63	30-160
80 Benzo(g,h,i)peryle	480.6	584.3	121.58	30-160
105 1-methylnaphthalen	480.6	484.0	100.70	30-160
187 Total Benzofluoran	961.3	1769	184.03*	30-160

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 1 2-Fluorophenol	720.9	378.4	52.48	30-160
$ 2 Phenol-d5	720.9	469.1	65.06	30-160
$ 5 2-Chlorophenol-d4	720.9	451.0	62.55	30-160
$ 10 1,2-Dichlorobenzen	480.6	355.0	73.87	30-160
$ 18 Nitrobenzene-d5	480.6	386.8	80.48	30-160
$ 36 2-Fluorobiphenyl	480.6	415.2	86.40	30-160
$ 55 2,4,6-Tribromophen	720.9	544.6	75.54	30-160
$ 66 Terphenyl-d14	480.6	418.2	87.01	30-160

Data File: /chem1/nt10.i/20130216.b/wc32gmsd.d
Date : 16-FEB-2013 19:36
Client ID: SG-08-0-10-0131 MSD
Sample Info: WC32GMSD
Volume Injected (uL): 1.0
Column phase: ZB-5msi

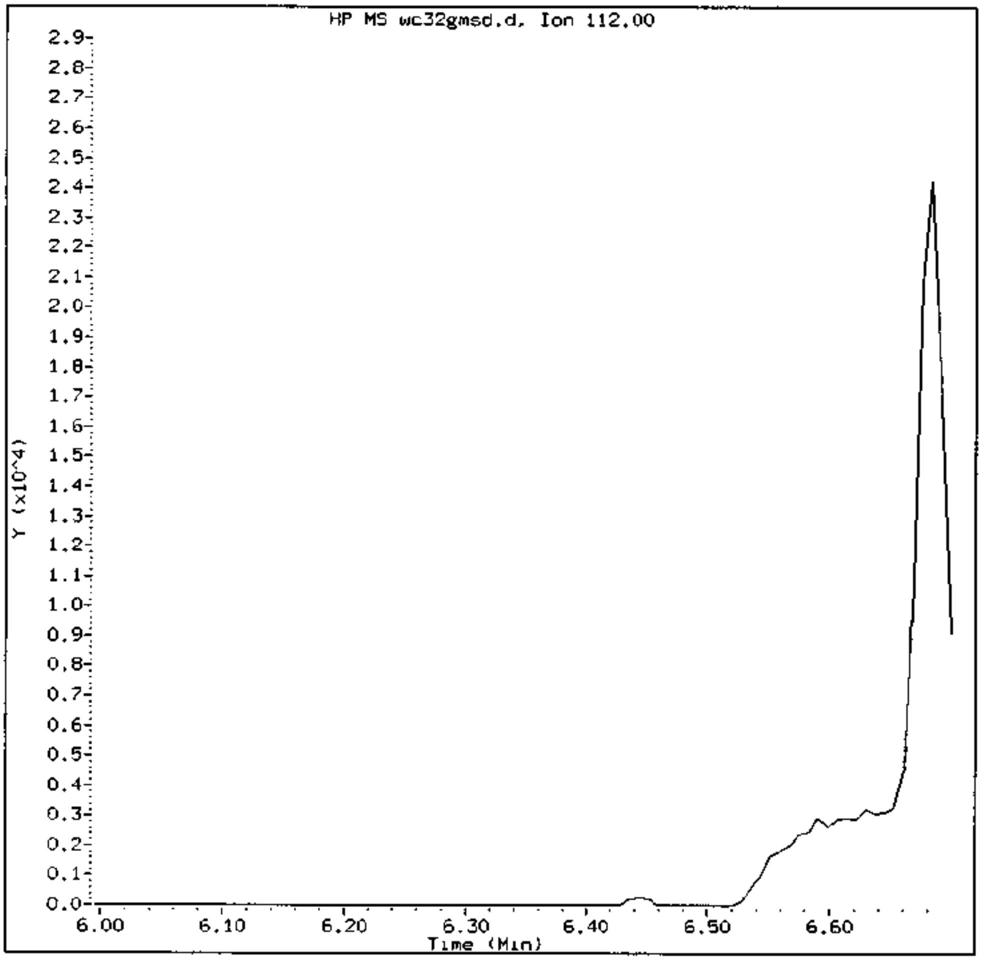
Instrument: nt10.i

Operator: VTS/YZ
Column diameter: 0.25



WC32GMSD, /chem1/nt10.i/20130216.b/wc32gmsd.d

2-Fluorophenol   Amount: 3.94   Area: 50345



MANUAL INTEGRATION for 2-Fluorophenol

1. Baseline correction
2. Poor chromatography
3. Peak not found ✓
4. Totals calculation

5. Other ______________________________

Analyst: VL   Date: 2/18/13

CO-ELUTION SUMMARY FOR FILE - wc32gmsd.d

Lab ID: WC32GMSD, Method: ABN.m, Instrument: nt10.i, Date: 16-FEB-2013

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Data File: /chem1/nt10.i/20130216.b/wc32h.d
Report Date: 18-Feb-2013 12:35

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

YZ 02/18/13

Data file : /chem1/nt10.i/20130216.b/wc32h.d
Lab Smp Id: WC32H   Client Smp ID: SG-09-0-10-013113
Inj Date : 16-FEB-2013 20:12
Operator : VTS/YZ   Inst ID: nt10.i
Smp Info : WC32H
Misc Info : 13-2431
Comment : 1ul Injection
Method : /chem1/nt10.i/20130216.b/ABN.m
Meth Date : 18-Feb-2013 10:14 yev   Quant Type: ISTD
Cal Date : 25-JAN-2013 17:16   Cal File: ic0125h.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: PSDDAICAL.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Ws	20.40000	Weight of sample extracted (g)
M	47.60000	% Moisture

Cpnd Variable   Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
$	1 2-Fluorophenol	112	6.397	6.351	(0.739)	70291	4.99055	466.9
$	2 Phenol-d5	99	8.120	8.082	(0.937)	94277	5.39408	504.6
	3 Phenol	94	8.144	8.105	(0.940)	29256	1.59035	148.8
$	5 2-Chlorophenol-d4	132	8.313	8.283	(0.960)	85283	5.63533	527.2
	4 Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
	6 2-Chlorophenol	128	Compound Not Detected.					
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	8.662	8.647	(1.000)	44050	4.00000	
	9 1,4-Dichlorobenzene	146	Compound Not Detected.					
$	10 1,2-Dichlorobenzene-d4	152	9.042	9.027	(1.044)	43967	3.95335	369.8
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	108	9.011	8.980	(1.040)	3391	0.38519	36.03
	14 2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.					
	13 2-Methylphenol	108	Compound Not Detected.					

		QUANT SIG					CONCENTRATIONS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/kg)
	17 Hexachloroethane	117	Compound Not Detected.					
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	15 4-Methylphenol	108	9.609	9.570	(1.109)	32014	2.21681	207.4
$	18 Nitrobenzene-d5	82	9.849	9.826	(0.870)	62195	4.09408	383.0
	19 Nitrobenzene	77	Compound Not Detected.					
	20 Isophorone	82	Compound Not Detected.					
	21 2-Nitrophenol	139	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	Compound Not Detected.					
	23 Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
	24 Benzoic acid	105	Compound Not Detected.					
	25 2,4-Dichlorophenol	162	Compound Not Detected.					
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	11.319	11.296	(1.000)	164594	4.00000	
	28 Naphthalene	128	11.365	11.343	(1.004)	74854	1.74775	163.5
	29 4-Chloroaniline	127	Compound Not Detected.					
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	31 4-Chloro-3-methylphenol	107	Compound Not Detected.					
	32 2-Methylnaphthalene	142	12.874	12.851	(1.137)	10014	0.35414	33.13
	33 Hexachlorocyclopentadiene	237	Compound Not Detected.					
	34 2,4,6-Trichlorophenol	196	Compound Not Detected.					
	35 2,4,5-Trichlorophenol	196	Compound Not Detected.					
$	36 2-Fluorobiphenyl	172	13.740	13.718	(0.903)	158725	4.62484	432.6
	37 2-Chloronaphthalene	162	Compound Not Detected.					
	38 2-Nitroaniline	65	Compound Not Detected.					
	39 Dimethylphthalate	163	Compound Not Detected.					
	40 Acenaphthylene	152	14.878	14.848	(0.978)	14446	0.32056	29.99
	41 2,6-Dinitrotoluene	165	Compound Not Detected.					
*	42 Acenaphthene-d10	164	15.219	15.188	(1.000)	100040	4.00000	
	43 3-Nitroaniline	138	Compound Not Detected.					
	44 Acenaphthene	153	15.288	15.258	(1.005)	7924	0.28677	26.83
	45 2,4-Dinitrophenol	184	Compound Not Detected.					
	46 Dibenzofuran	168	15.644	15.621	(1.028)	15332	0.39896	37.32
	47 4-Nitrophenol	109	Compound Not Detected.					
	48 2,4-Dinitrotoluene	165	Compound Not Detected.					
	50 Diethylphthalate	149	16.339	16.309	(1.074)	8805	0.27780	25.99
	49 Fluorene	166	16.417	16.386	(1.079)	13134	0.40236	37.64
	51 4-Chlorophenyl-phenylether	204	Compound Not Detected.					
	52 4-Nitroaniline	138	Compound Not Detected.					
	53 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
	54 N-Nitrosodiphenylamine	169	Compound Not Detected.					
$	55 2,4,6-Tribromophenol	330	17.018	16.972	(1.118)	43637	6.83527	639.4
	56 4-Bromophenyl-phenylether	248	Compound Not Detected.					
	57 Hexachlorobenzene	284	Compound Not Detected.					
	58 Pentachlorophenol	266	18.262	18.216	(0.990)	953	0.13520	12.65
*	59 Phenanthrene-d10	188	18.502	18.464	(1.000)	151002	4.00000	(H)
	60 Phenanthrene	178	18.556	18.518	(1.006)	72612	1.80385	168.7
	61 Anthracene	178	18.649	18.611	(1.011)	28757	0.70951	66.37(H)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
==========================	====	==	======	======	========	=======	=======
62 Carbazole	167	19.044	18.997	(1.032)	10171	0.37572	35.15
63 Di-n-butylphthalate	149	Compound Not Detected.					
64 Fluoranthene	202	21.017	20.963	(1.139)	244867	5.28217	494.1
65 Pyrene	202	21.427	21.380	(0.907)	271727	4.41268	412.8
$ 66 Terphenyl-d14	244	21.752	21.713	(0.921)	192347	4.63234	433.4
67 Butylbenzylphthalate	149	Compound Not Detected.					
68 Benzo(a)anthracene	228	23.594	23.556	(0.999)	69990	1.16027	108.5
* 69 Chrysene-d12	240	23.625	23.579	(1.000)	216184	4.00000	
70 3,3'-Dichlorobenzidine	252	Compound Not Detected.					
71 Chrysene	228	23.672	23.626	(1.002)	119554	2.18818	204.7
72 bis(2-Ethylhexyl)phthalate	149	23.757	23.719	(0.960)	60793	1.70177	159.2
* 134 Di-n-octylphthalate-d4	153	24.740	24.694	(1.000)	270534	4.00000	
73 Di-n-octylphthalate	149	Compound Not Detected.					
74 Benzo(b)fluoranthene	252	25.375	25.329	(0.975)	107788	1.63816	153.2
75 Benzo(k)fluoranthene	252	25.406	25.360	(0.976)	65713	0.92444	86.48(M)
76 Benzo(a)pyrene	252	25.925	25.863	(0.996)	65738	1.15523	108.1
* 77 Perylene-d12	264	26.018	25.964	(1.000)	227017	4.00000	
78 Indeno(1,2,3-cd)pyrene	276	28.227	28.134	(1.085)	46759	0.66632	62.33
79 Dibenzo(a,h)anthracene	278	28.235	28.150	(1.085)	12817	0.23065	21.58
80 Benzo(g,h,i)perylene	276	28.856	28.763	(1.109)	41702	0.69263	64.79
90 N-Nitrosodimethylamine	74	Compound Not Detected.					
91 Aniline	93	Compound Not Detected.					
93 Benzidine	184	Compound Not Detected.					
103 Pyridine	79	4.119	4.050	(0.476)	10226	1.43058	133.8
105 1-methylnaphthalene	142	13.114	13.091	(1.159)	5941	0.22905	21.43
111 Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					
187 Total Benzofluoranthenes	252	25.375	25.360	(0.975)	156460	2.41567	226.0
99 Perylene	252	26.064	26.003	(1.002)	21137	0.32321	30.24
98 Retene	219	22.046	21.992	(0.933)	57813	1.79860	168.3
120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Report Date: 18-Feb-2013 12:35

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: wc32h.d
Lab Smp Id: WC32H
Analysis Type: SV
Quant Type: ISTD
Operator: VTS/YZ
Method File: /chem1/nt10.i/20130216.b/ABN.m
Misc Info: 13-2431

Calibration Date: 16-FEB-2013
Calibration Time: 11:03
Client Smp ID: SG-09-0-10-01311
Level: LOW
Sample Type: Sediment

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	46623	23312	93246	44050	-5.52
27 Naphthalene-d8	176978	88489	353956	164594	-7.00
42 Acenaphthene-d10	110872	55436	221744	100040	-9.77
59 Phenanthrene-d10	188290	94145	376580	151002	-19.80
69 Chrysene-d12	213681	106840	427362	216184	1.17
134 Di-n-octylphthala	264159	132080	528318	270534	2.41
77 Perylene-d12	208584	104292	417168	227017	8.84

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.65	8.15	9.15	8.66	0.18
27 Naphthalene-d8	11.30	10.80	11.80	11.32	0.20
42 Acenaphthene-d10	15.19	14.69	15.69	15.22	0.20
59 Phenanthrene-d10	18.46	17.96	18.96	18.50	0.21
69 Chrysene-d12	23.58	23.08	24.08	23.63	0.20
134 Di-n-octylphthala	24.69	24.19	25.19	24.74	0.19
77 Perylene-d12	25.96	25.46	26.46	26.02	0.21

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd-Snider
Sample Matrix: SOLID
Lab Smp Id: WC32H
Level: LOW
Data Type: MS DATA
SpikeList File: SHORTPSDDA.spk
Sublist File: PSDDAICAL.sub
Method File: /chem1/nt10.i/20130216.b/ABN.m
Misc Info: 13-2431

Client SDG: WC32
Fraction: SV
Client Smp ID: SG-09-0-10-013113
Operator: VTS/YZ
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 1 2-Fluorophenol	701.6	466.9	66.54	30-160
$ 2 Phenol-d5	701.6	504.6	71.92	30-160
$ 5 2-Chlorophenol-d4	701.6	527.2	75.14	30-160
$ 10 1,2-Dichlorobenzen	467.7	369.8	79.07	30-160
$ 18 Nitrobenzene-d5	467.7	383.0	81.88	30-160
$ 36 2-Fluorobiphenyl	467.7	432.6	92.50	30-160
$ 55 2,4,6-Tribromophen	701.6	639.4	91.14	30-160
$ 66 Terphenyl-d14	467.7	433.4	92.65	30-160

Data File: /chem1/nt10.i/20130216.b/wc32h.d

Date : 16-FEB-2013 20:12

Client ID: SG-09-0-10-013113

Instrument: nt10.i

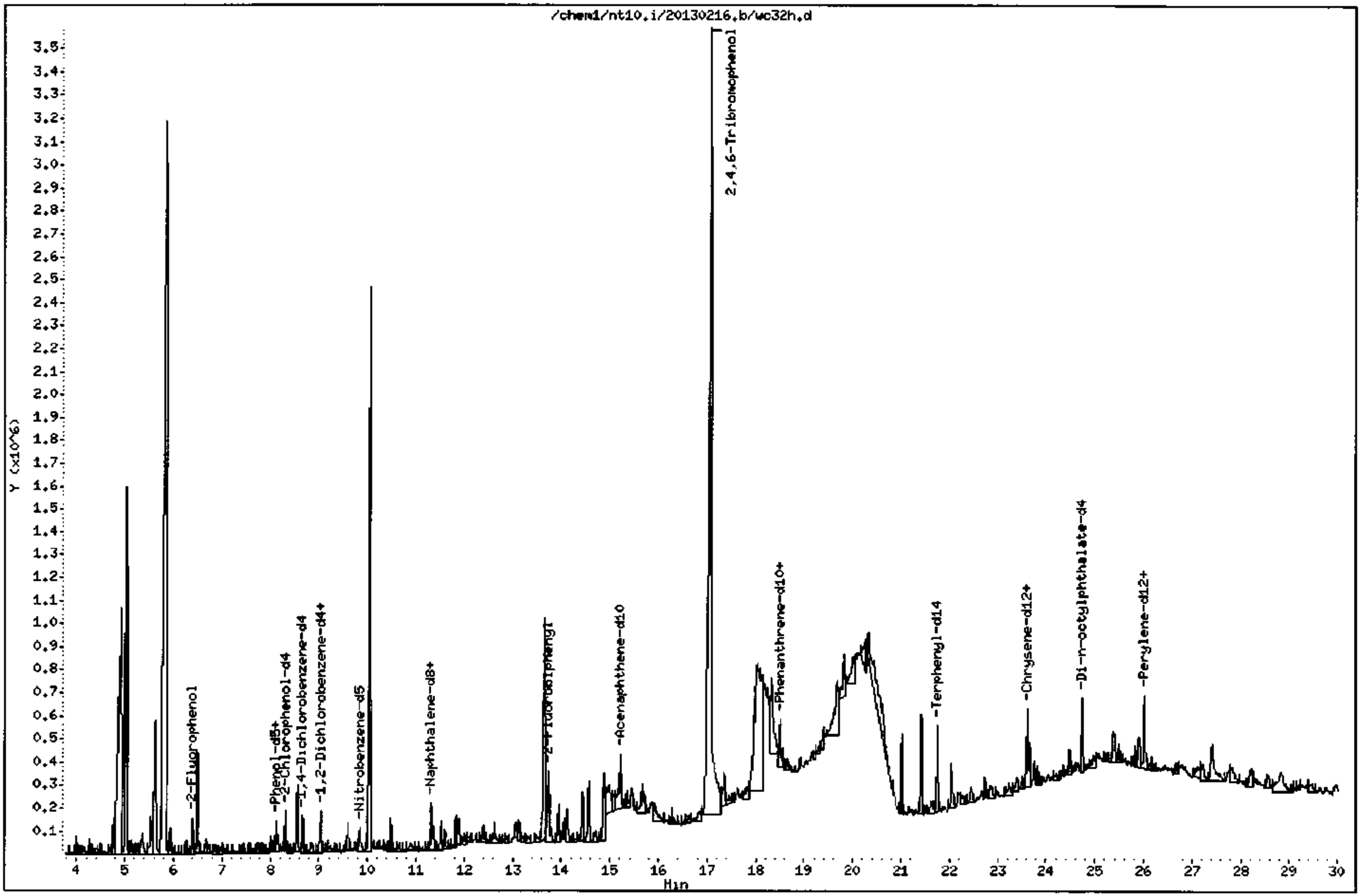
Sample Info: WC32H

Volume Injected (uL): 1.0

Operator: VTS/YZ

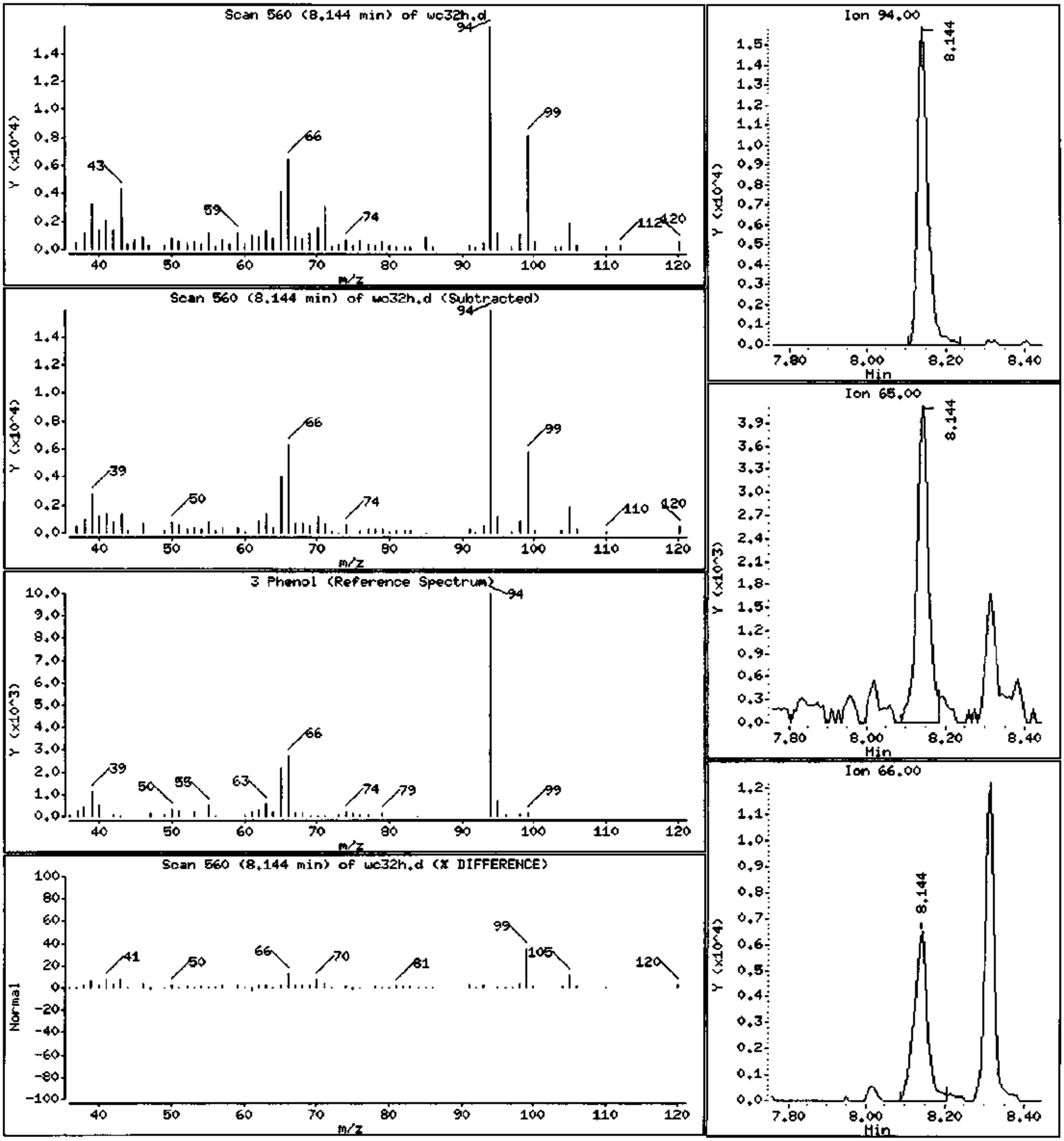
Column phase: ZB-5msi

Column diameter: 0.25



Data File: /chem1/nt10.i/20130216.b/wc32h.d
Date : 16-FEB-2013 20:12
Client ID: SG-09-0-10-013113 Instrument: nt10.i
Sample Info: WC32H
Volume Injected (uL): 1.0 Operator: VTS/YZ
Column phase: ZB-5msi Column diameter: 0.25

3 Phenol Concentration: 148.8 ug/kg



Data File: /chem1/nt10.i/20130216.b/wc32h.d

Date : 16-FEB-2013 20:12

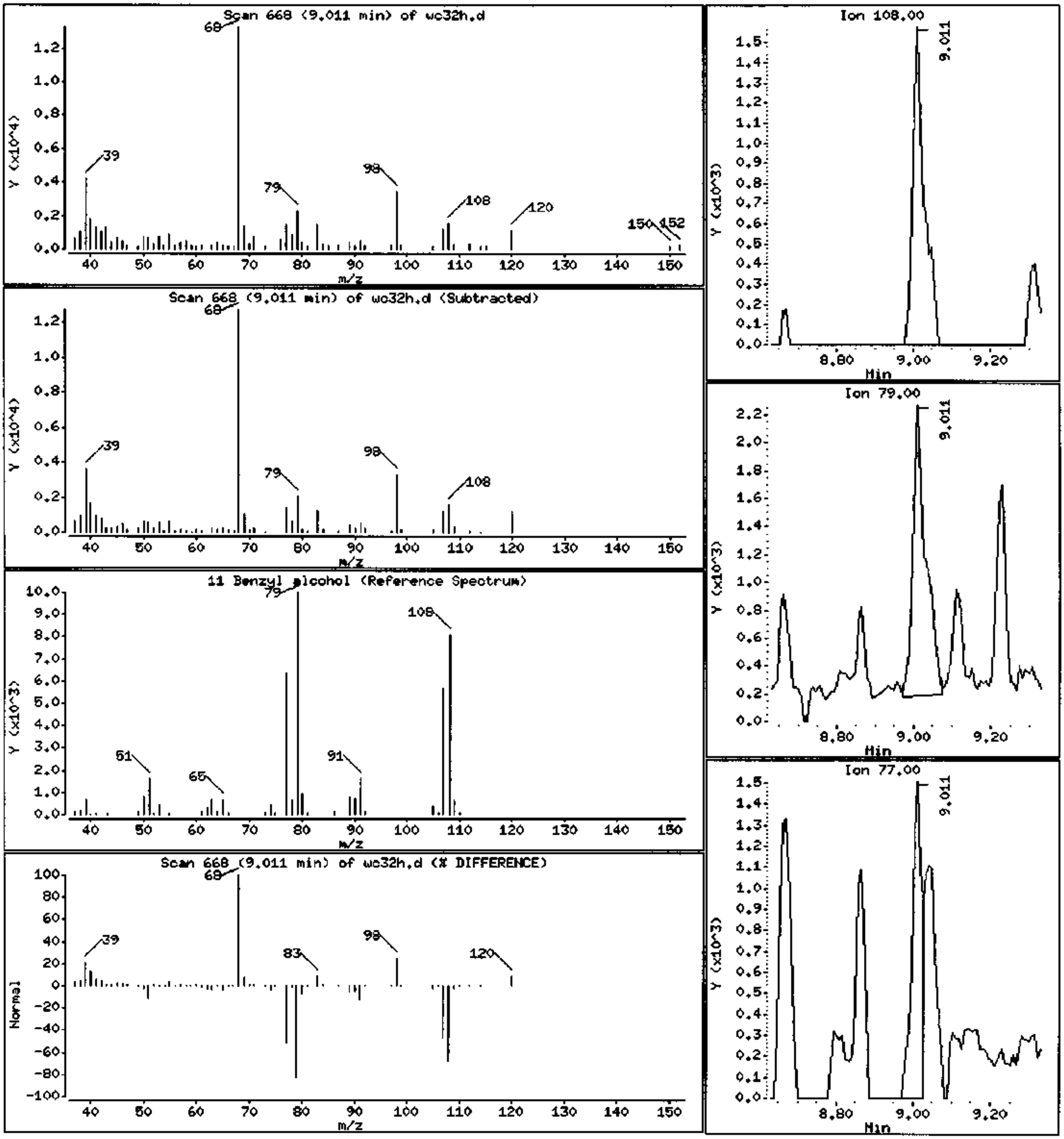
Client ID: SG-09-0-10-013113 Instrument: nt10.i

Sample Info: WC32H

Volume Injected (uL): 1.0 Operator: VTS/YZ

Column phase: ZB-5ms: Column diameter: 0.25

11 Benzyl alcohol Concentration: 36.03 ug/kg



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Date : 16-FEB-2013 20:12

Client ID: SG-09-0-10-013113

Instrument: nt10.i

Sample Info: WC32H

Volume Injected (uL): 1.0

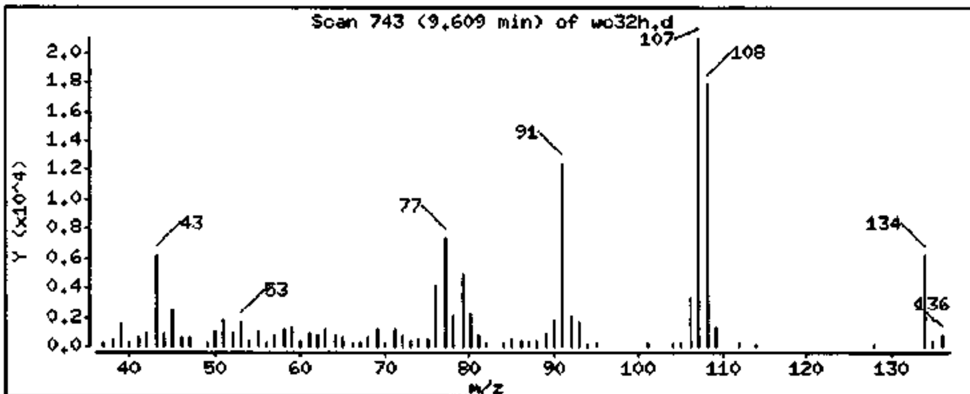
Operator: VTS/YZ

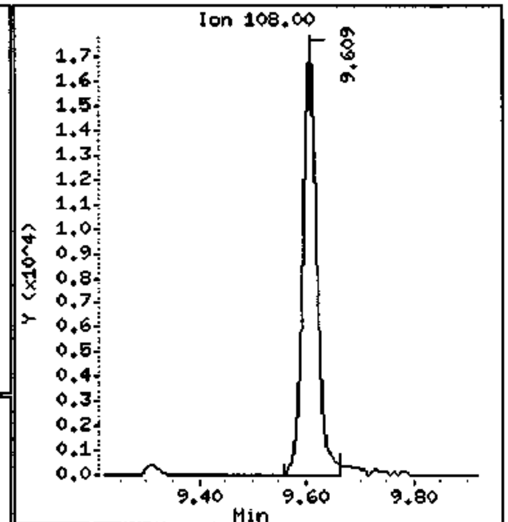
Column phase: ZB-5msi

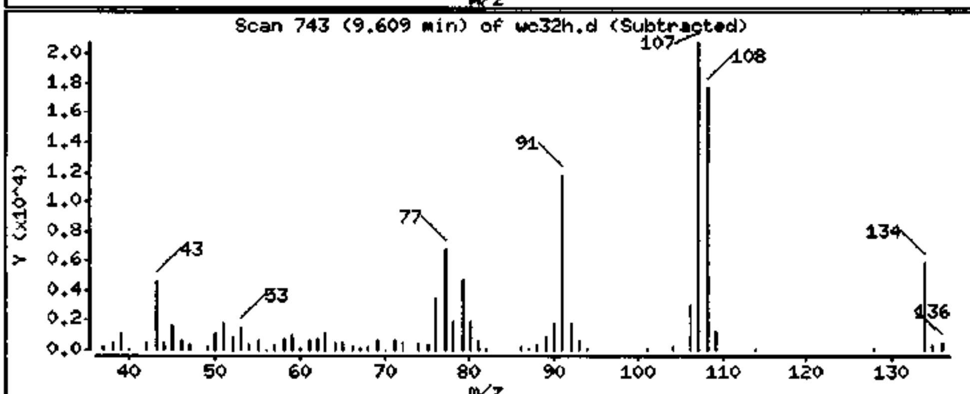
Column diameter: 0.25

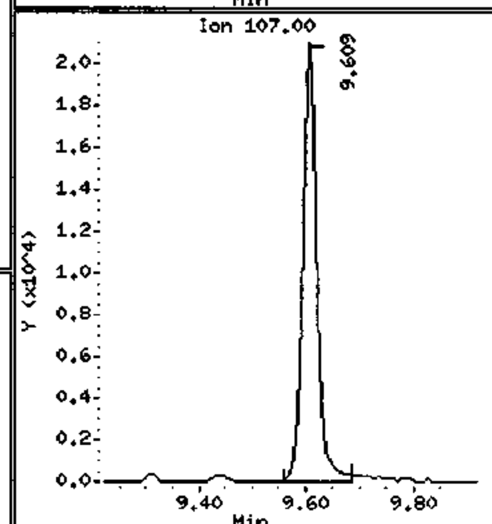
15 4-Methylphenol

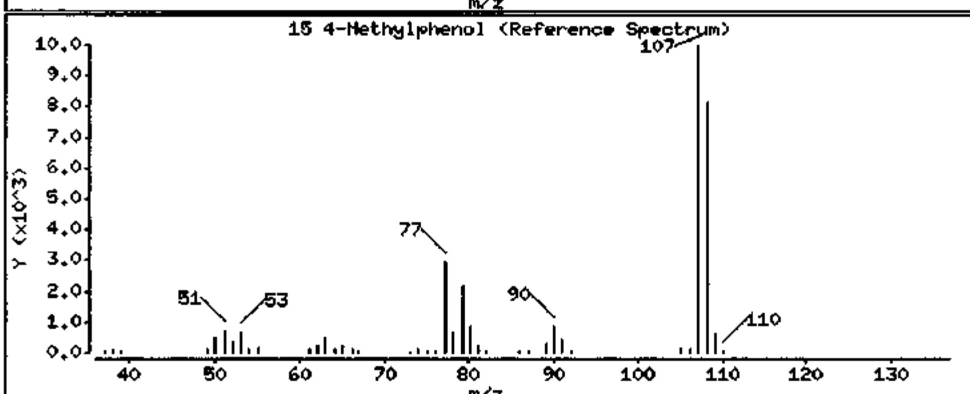
Concentration: 207.4 ug/kg

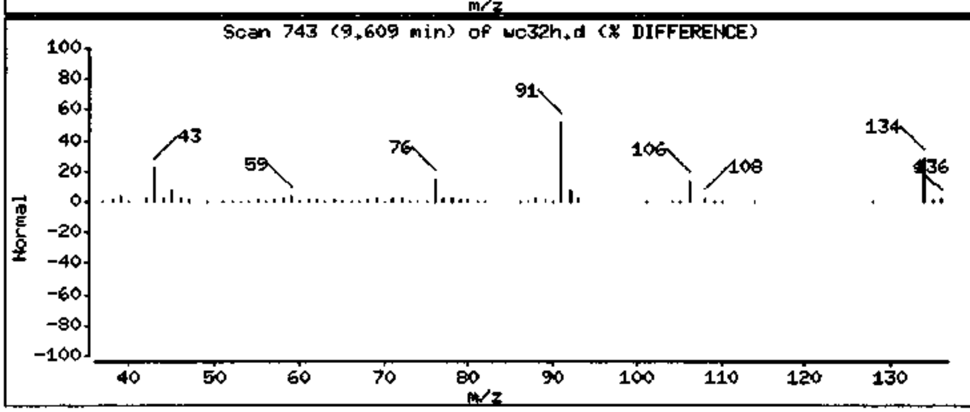


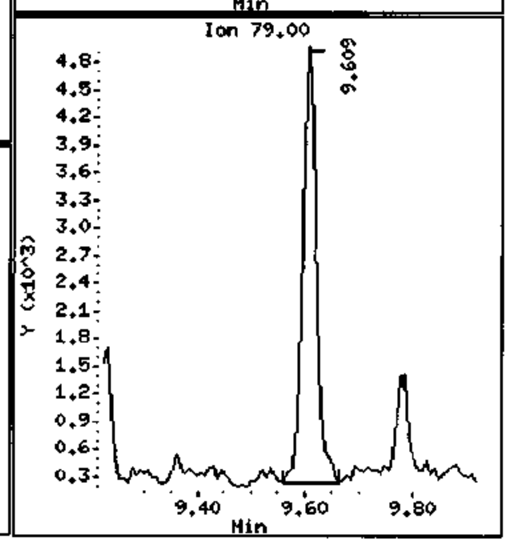












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Date : 16-FEB-2013 20:12

Client ID: SG-09-0-10-013113

Instrument: nt10.i

Sample Info: WC32H

Volume Injected (uL): 1.0

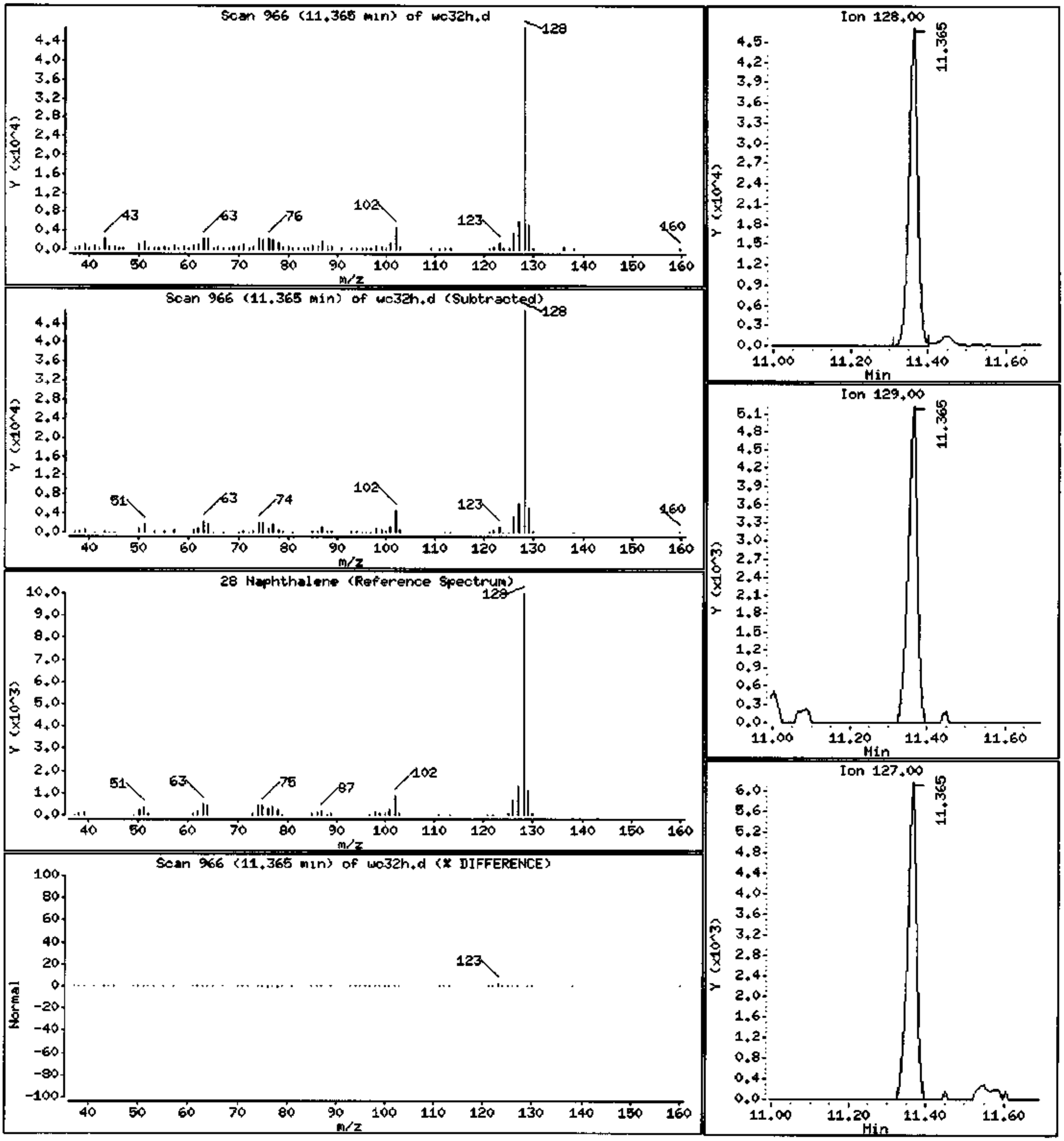
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

28 Naphthalene

Concentration: 163.5 ug/kg



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Date : 16-FEB-2013 20:12

Client ID: SG-09-0-10-013113

Instrument: nt10.i

Sample Info: WC32H

Volume Injected (uL): 1.0

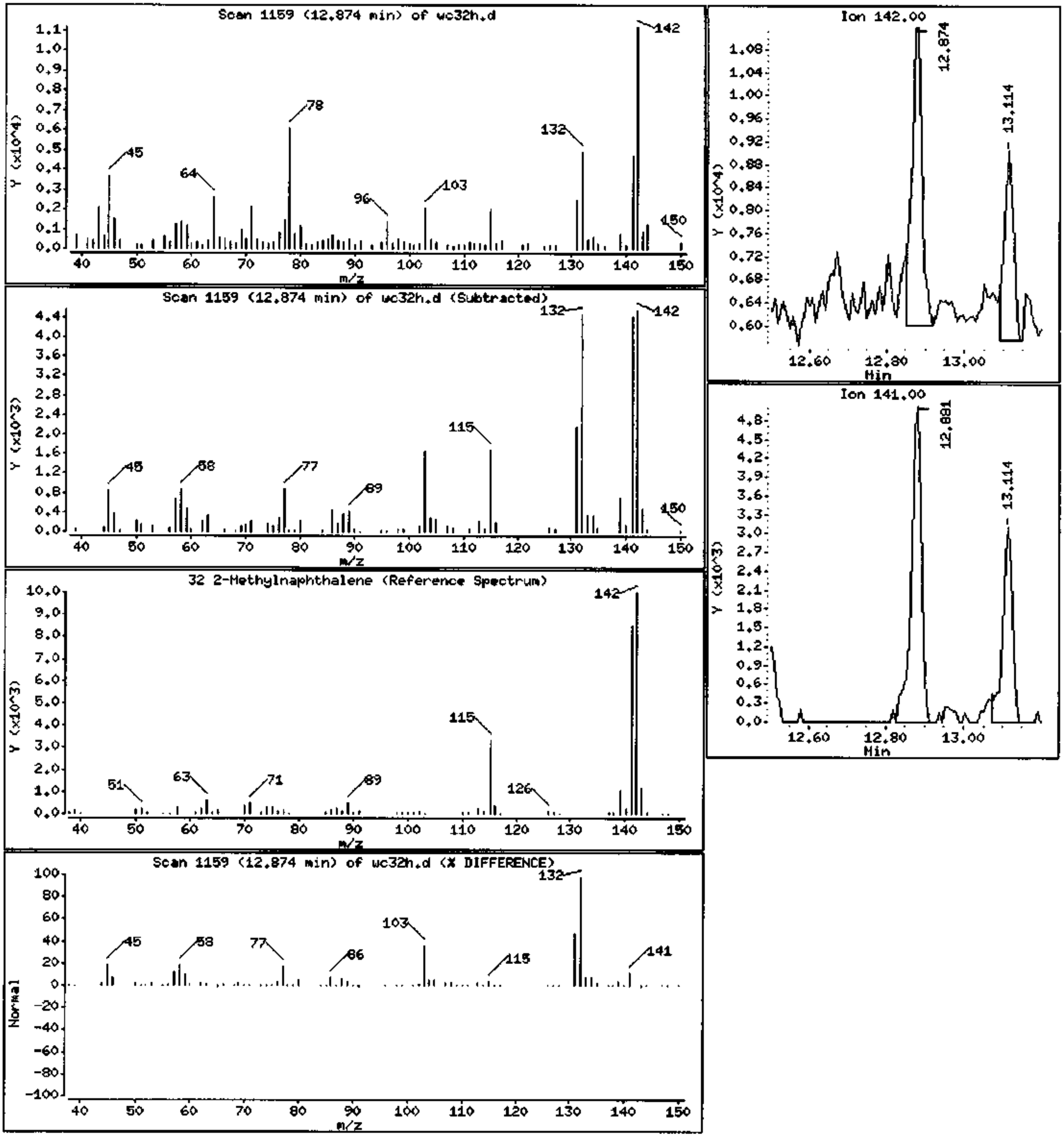
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

32 2-Methylnaphthalene

Concentration: 33.13 ug/kg



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Date : 16-FEB-2013 20:12

Client ID: SC-09-0-10-013113

Instrument: nt10.i

Sample Info: WC32H

Volume Injected (uL): 1.0

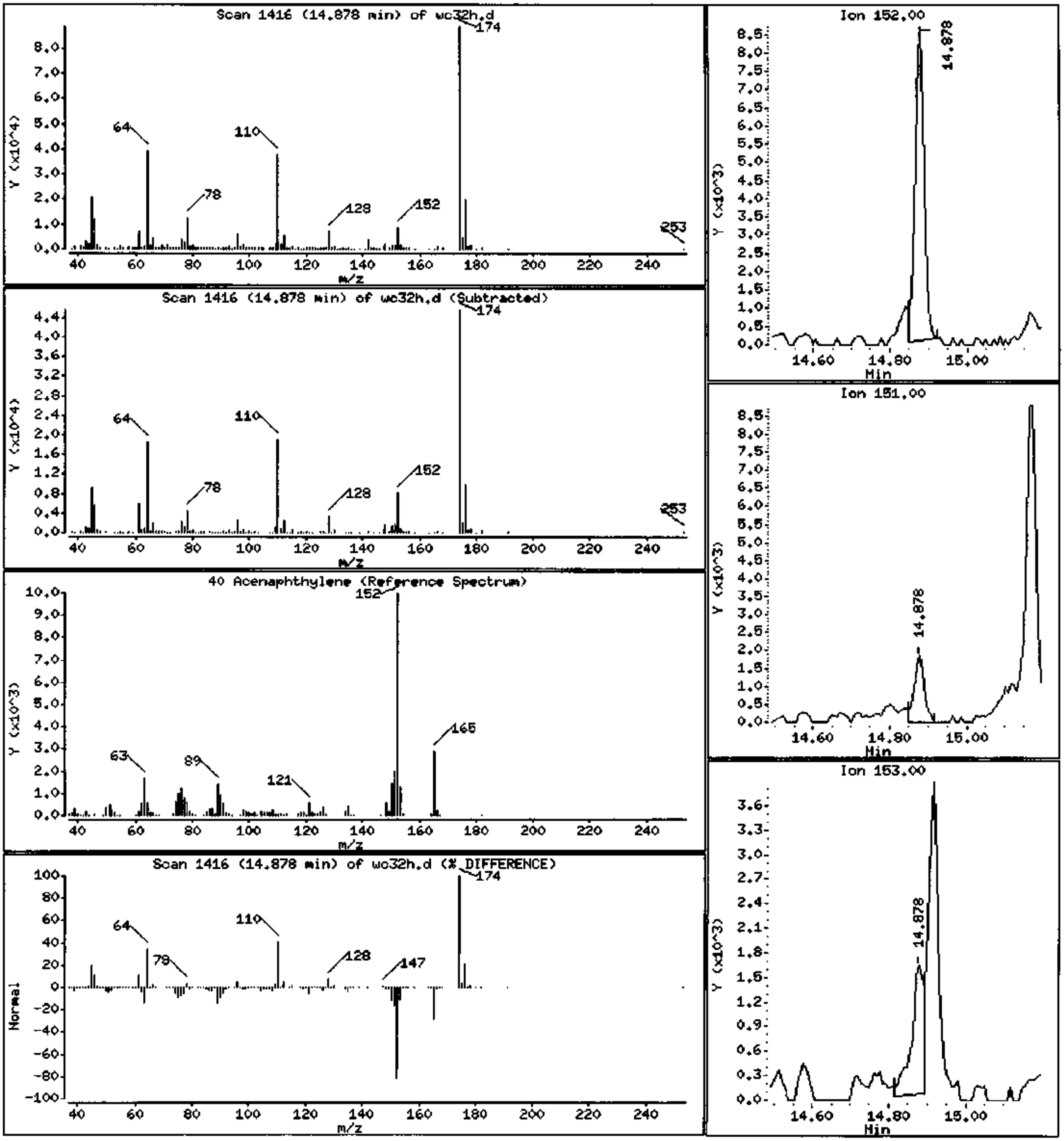
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

40 Acenaphthylene

Concentration: 29.99 ug/kg



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Date : 16-FEB-2013 20:12

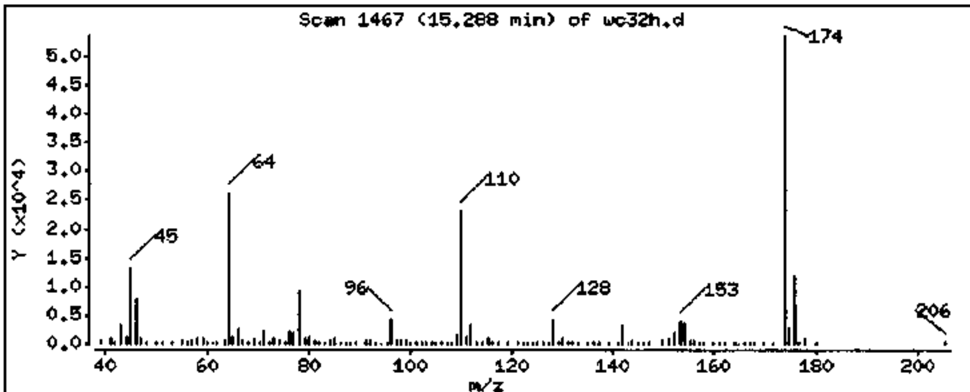
Client ID: SC-09-0-10-013113 Instrument: nt10.i

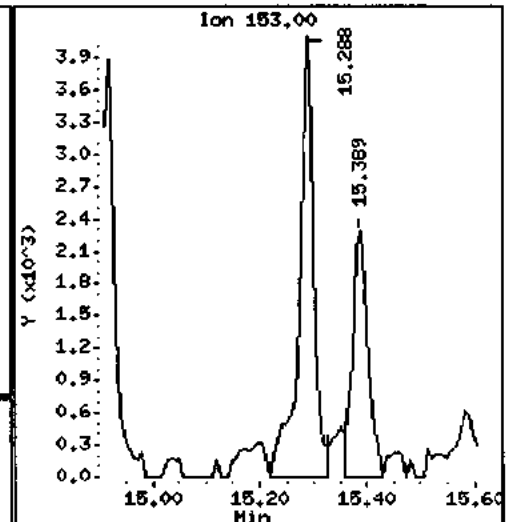
Sample Info: WC32H

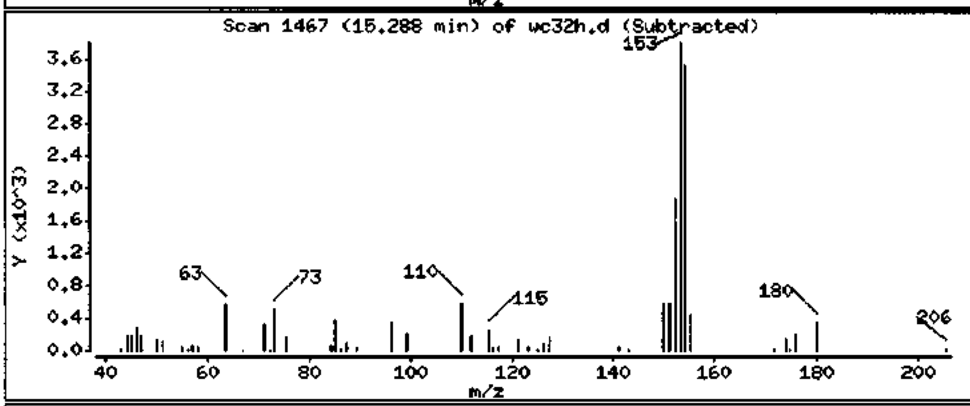
Volume Injected (uL): 1.0 Operator: VTS/YZ

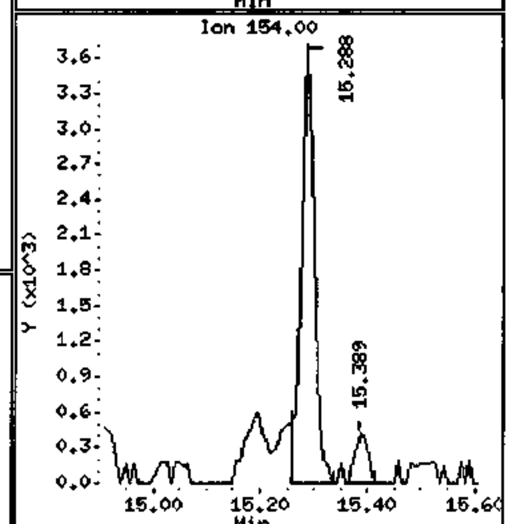
Column phase: ZB-5msi Column diameter: 0.25

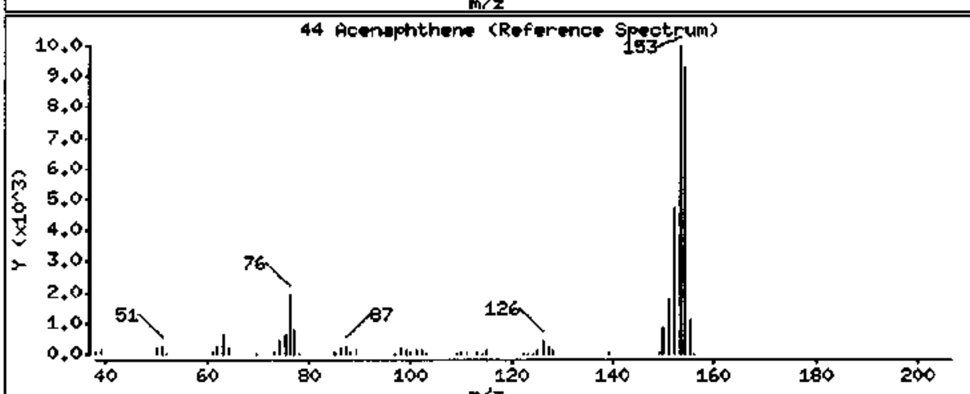
44 Acenaphthene Concentration: 26.83 ug/kg

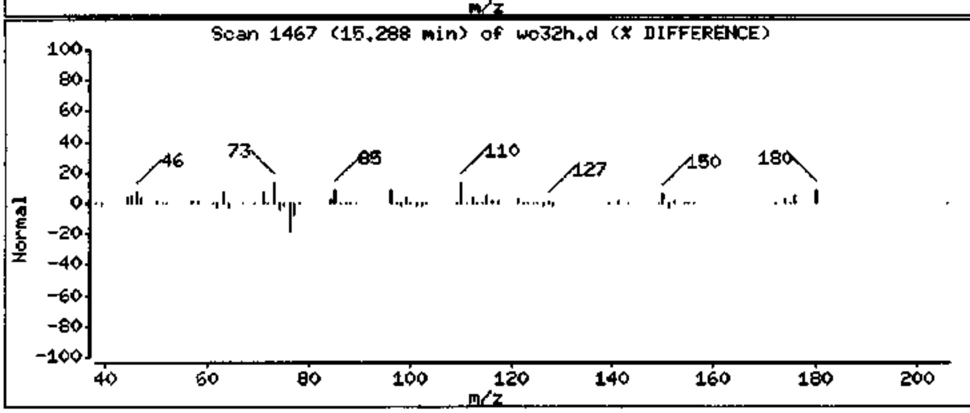


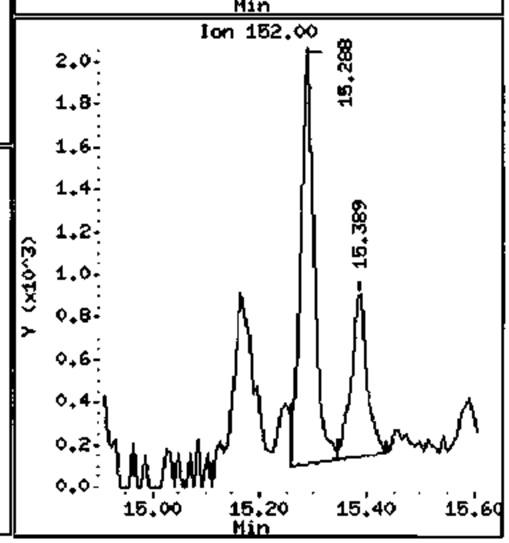












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Date : 16-FEB-2013 20:12

Client ID: SG-09-0-10-013113

Instrument: nt10.i

Sample Info: WC32H

Volume Injected (uL): 1.0

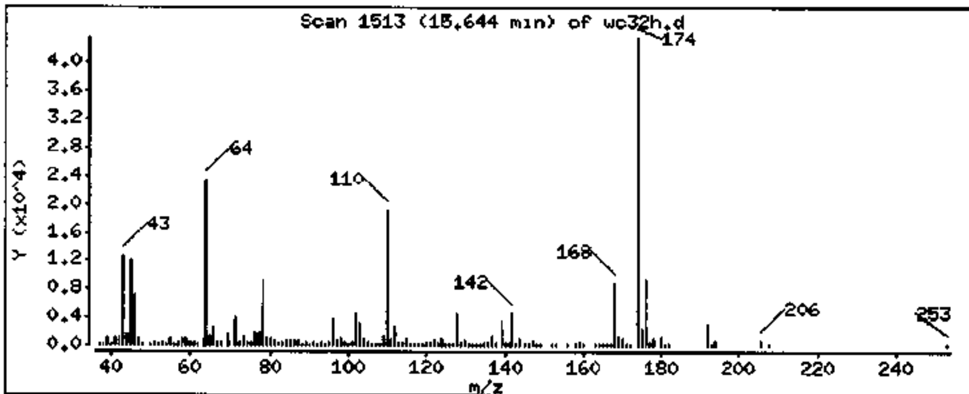
Operator: VTS/YZ

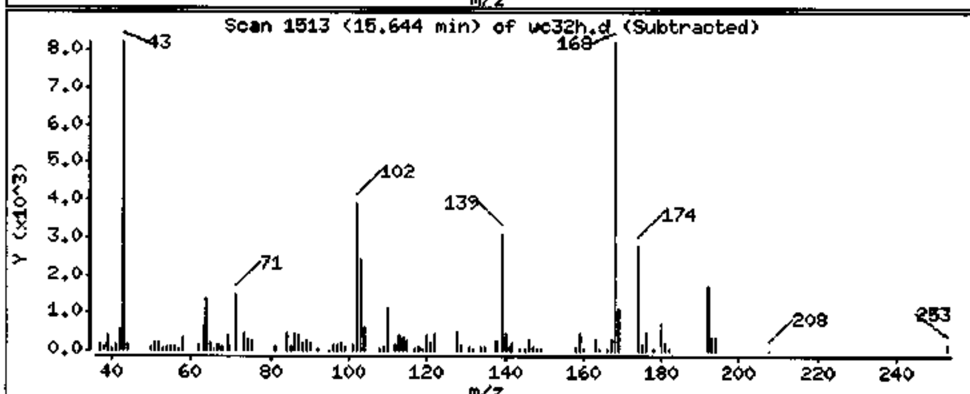
Column phase: ZB-5msi

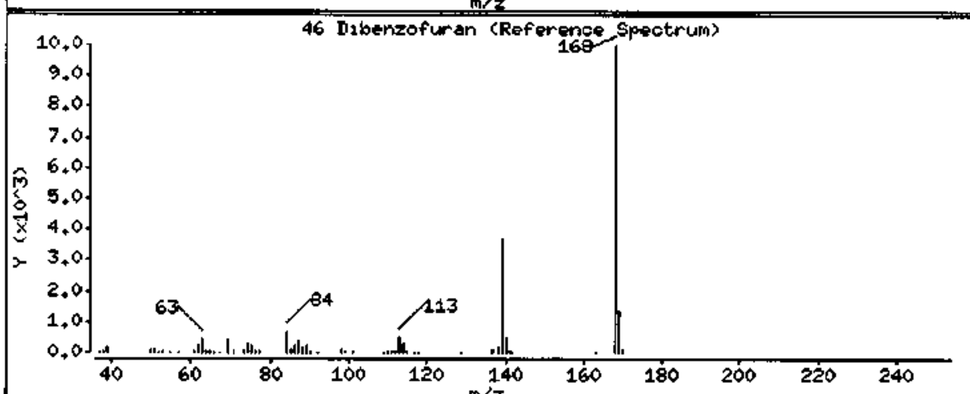
Column diameter: 0.25

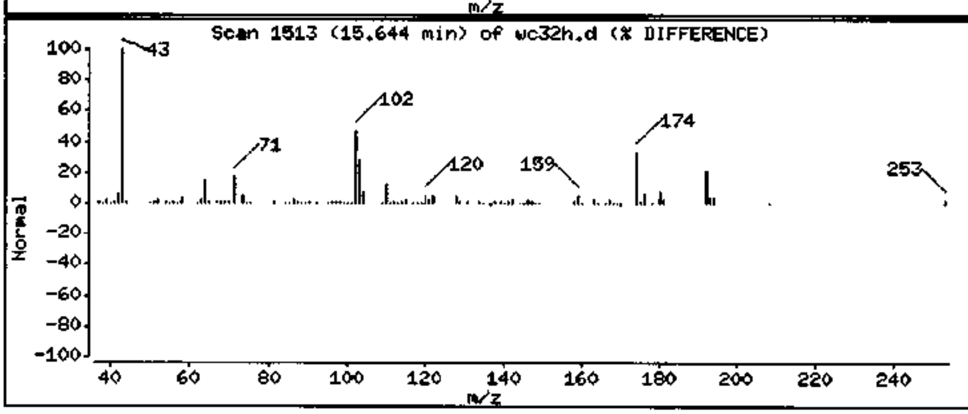
46 Dibenzofuran

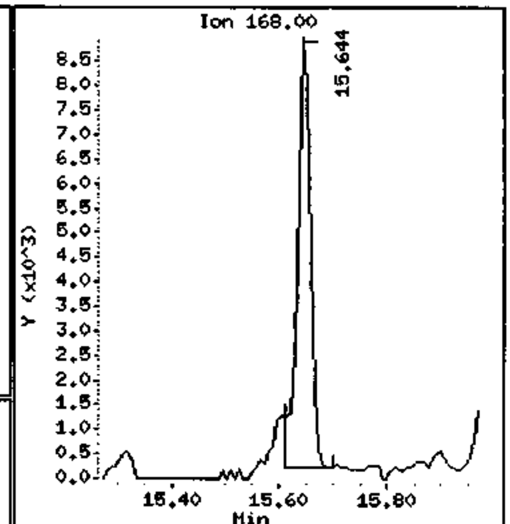
Concentration: 37.32 ug/kg

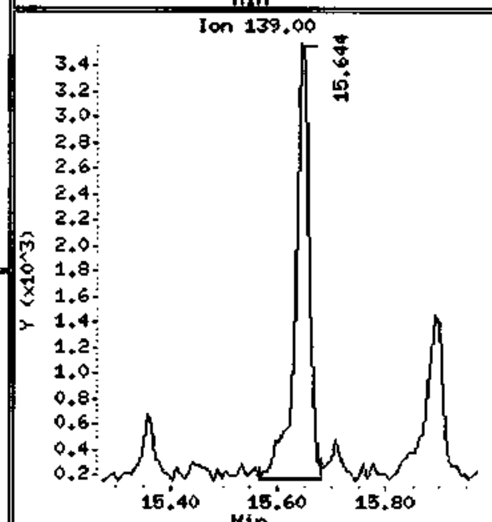


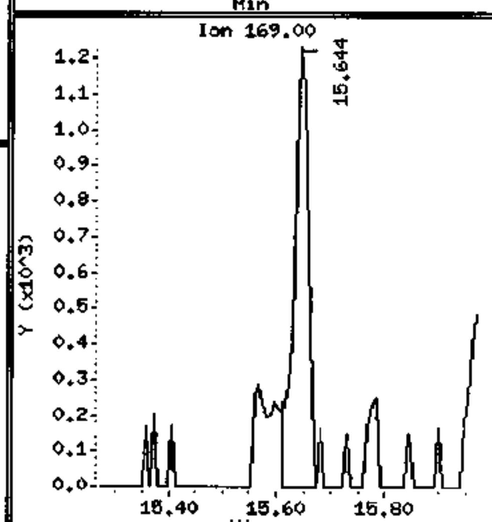












Data File: /chem1/nt10.i/20130216.b/wc32h.d

Date : 16-FEB-2013 20:12

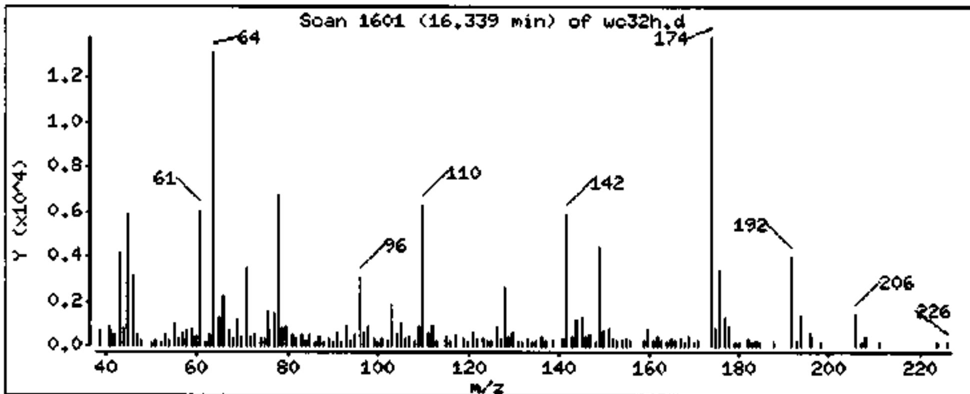
Client ID: SG-09-0-10-013113 Instrument: nt10.i

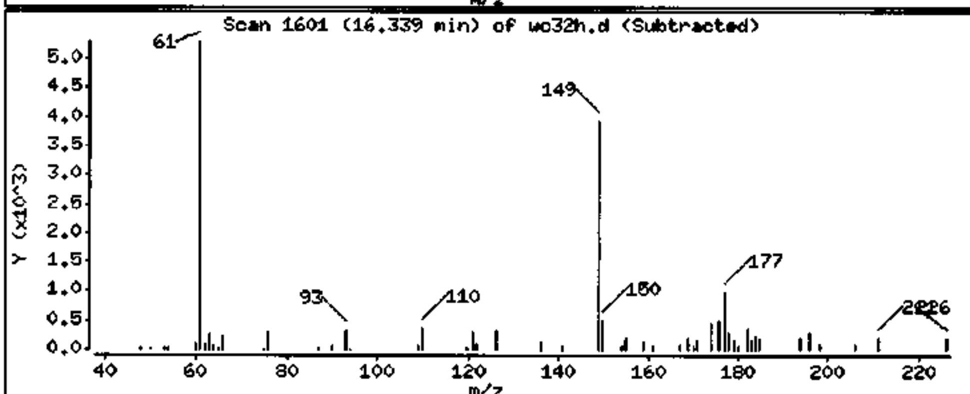
Sample Info: WC32H

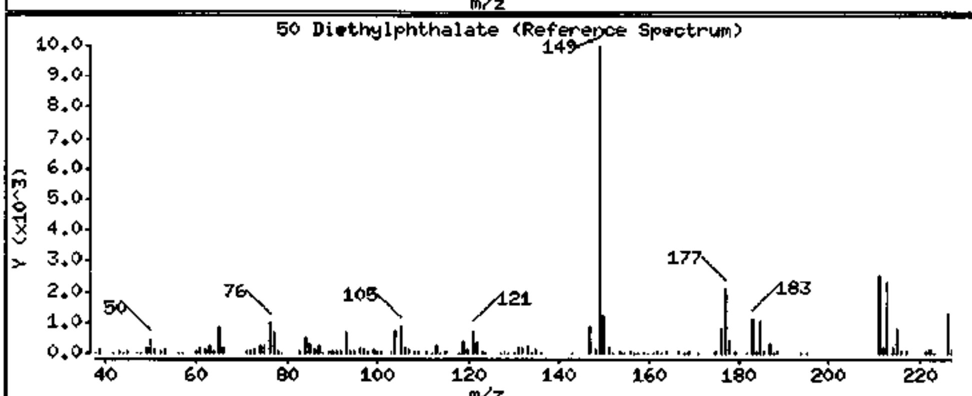
Volume Injected (uL): 1.0 Operator: VTS/YZ

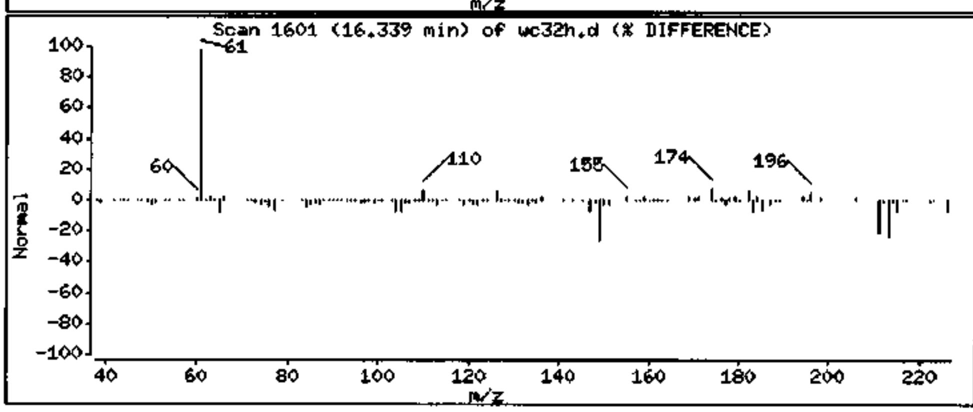
Column phase: ZB-5msi Column diameter: 0.25

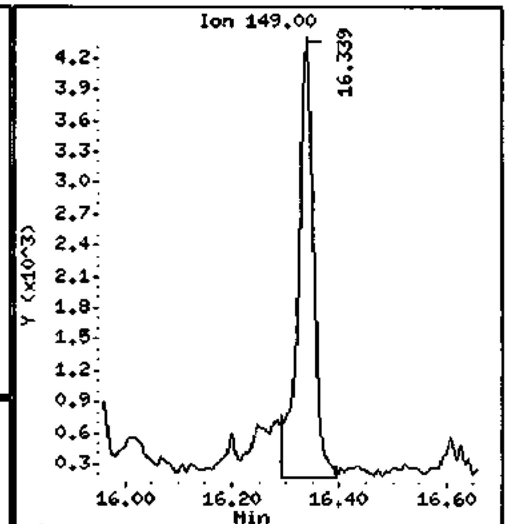
50 Diethylphthalate Concentration: 25.99 ug/kg

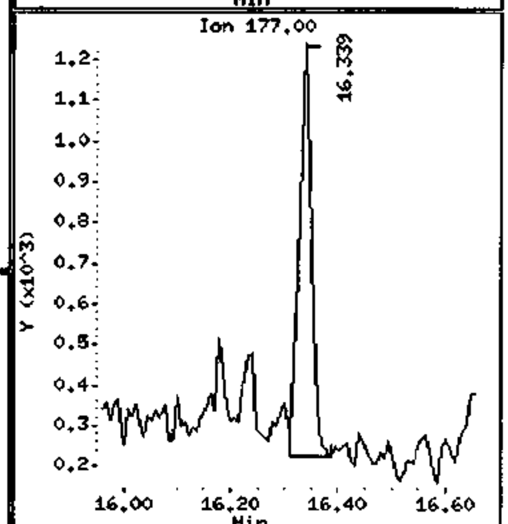


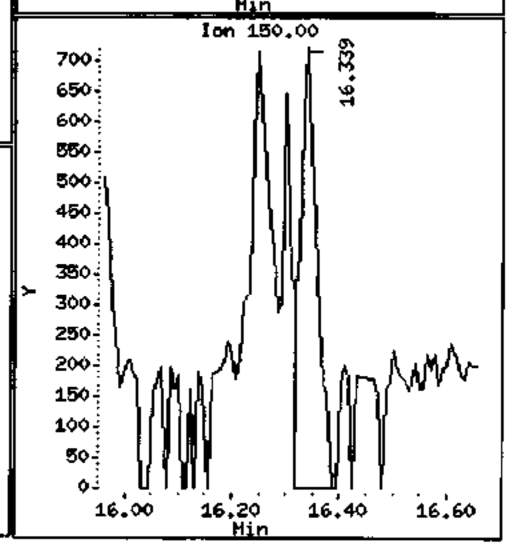












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Date : 16-FEB-2013 20:12

Client ID: SG-09-0-10-013113

Instrument: nt10.i

Sample Info: WC32H

Volume Injected (uL): 1.0

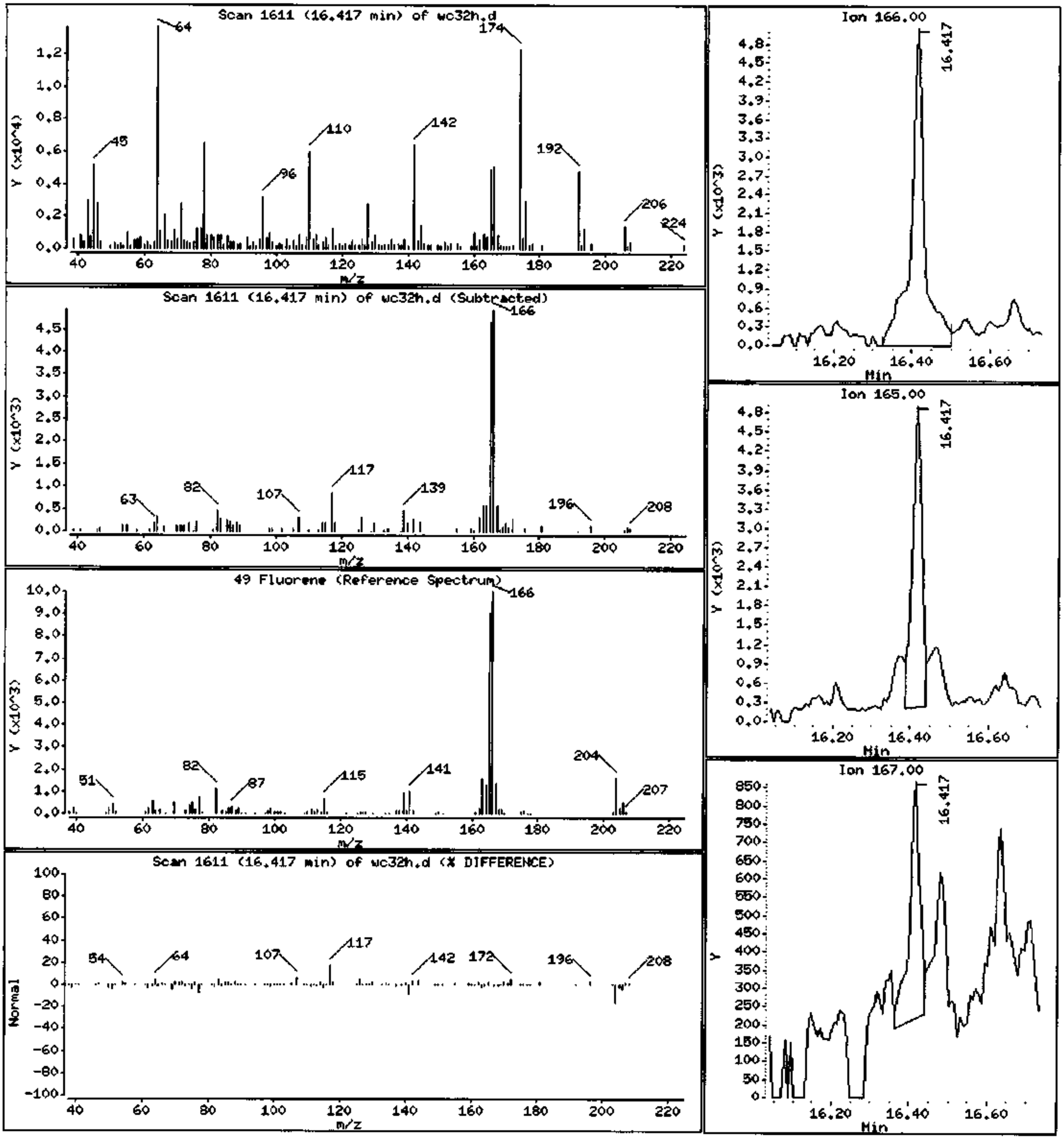
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

49 Fluorene

Concentration: 37.64 ug/kg



Data File: /chem1/nt10.i/20130216.b/wc32h.d

Date : 16-FEB-2013 20:12

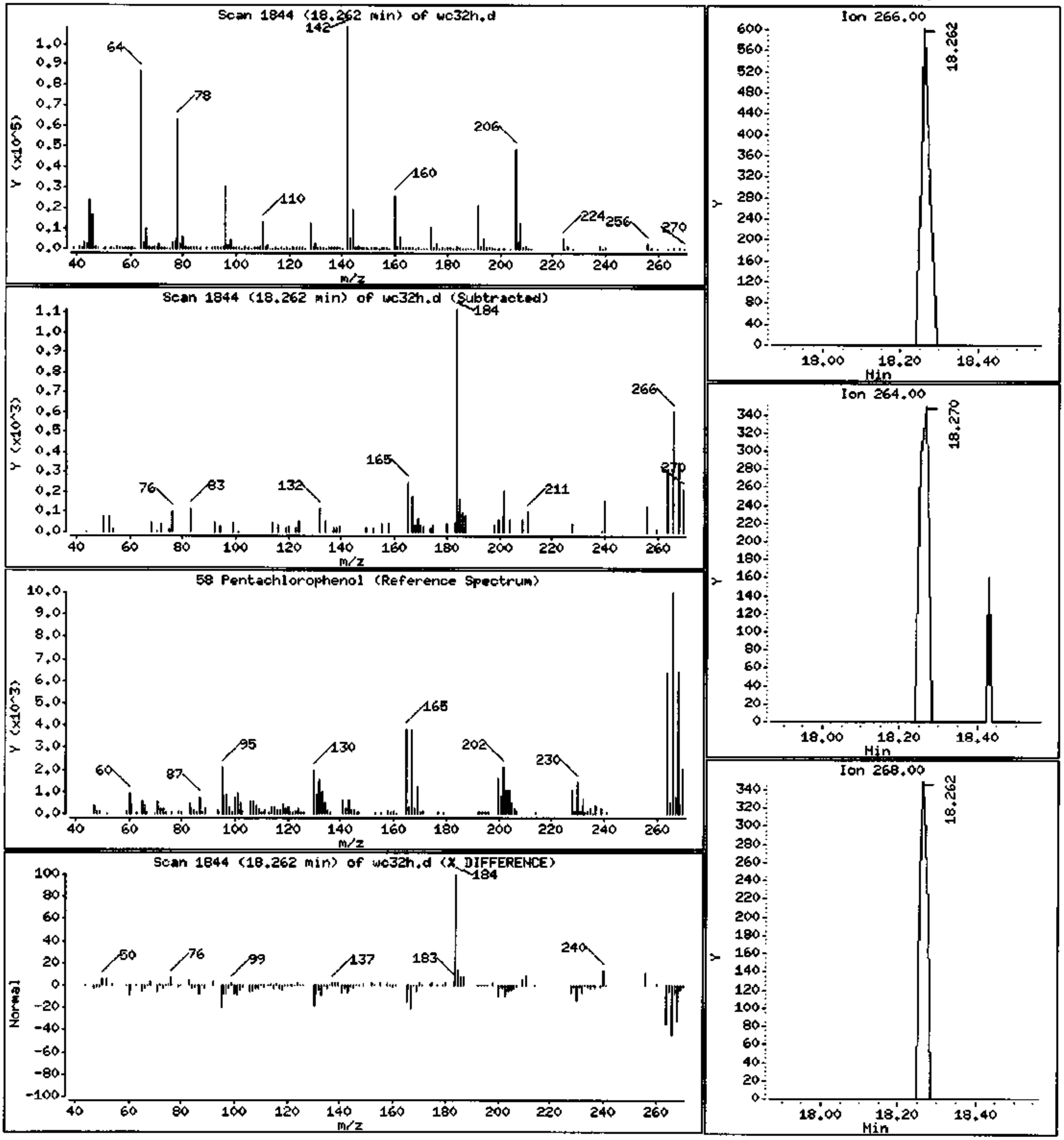
Client ID: SG-09-0-10-013113 Instrument: nt10.i

Sample Info: WC32H

Volume Injected (uL): 1.0 Operator: VTS/YZ

Column phase: ZB-5msi Column diameter: 0.25

58 Pentachlorophenol Concentration: 12.65 ug/kg



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Date : 16-FEB-2013 20:12

Client ID: SG-09-0-10-013113

Instrument: nt10.i

Sample Info: WC32H

Volume Injected (uL): 1.0

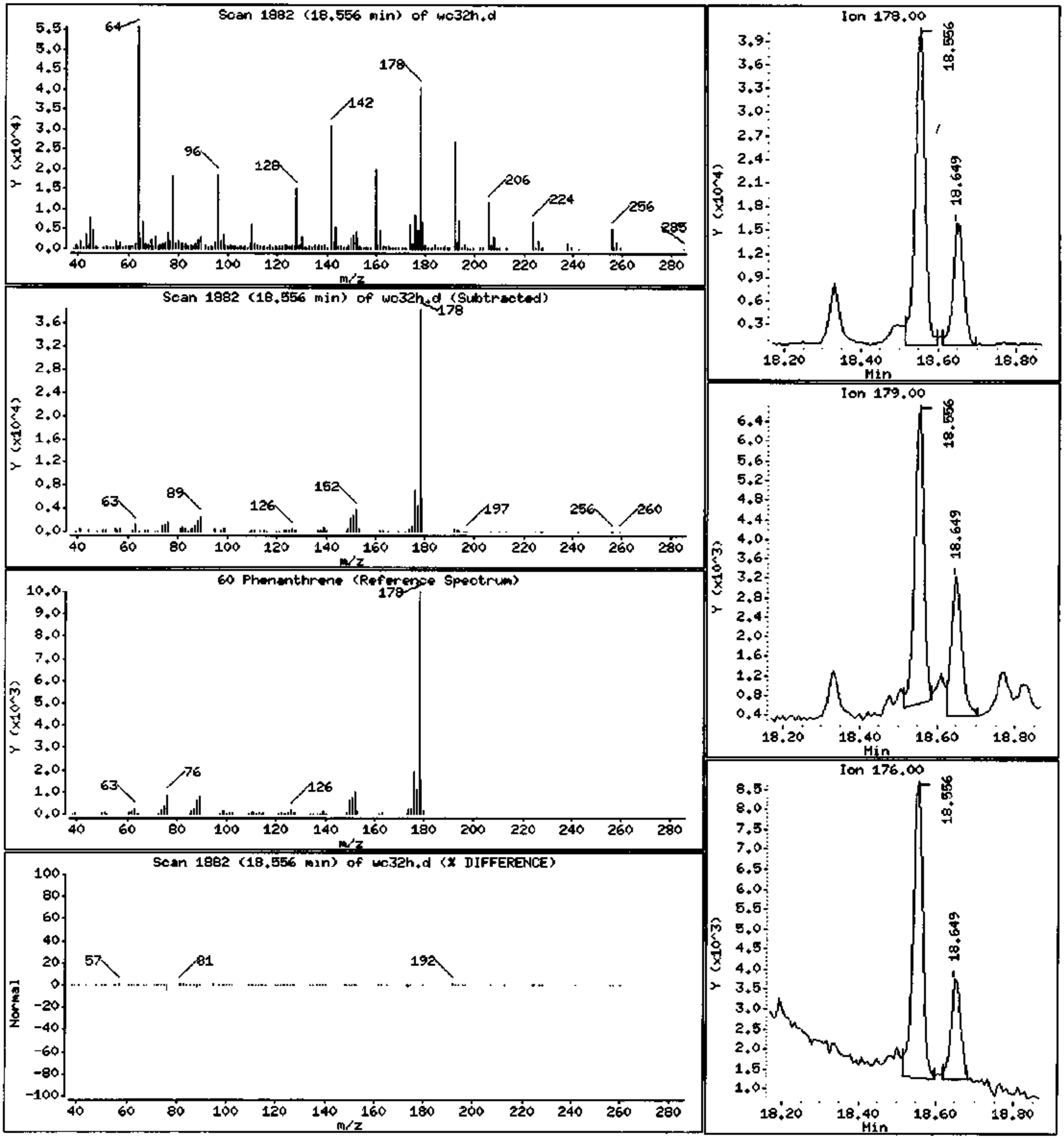
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

60 Phenanthrene

Concentration: 168.7 ug/kg



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Date : 16-FEB-2013 20:12

Client ID: SG-09-0-10-013113

Instrument: nt10.i

Sample Info: WC32H

Volume Injected (uL): 1.0

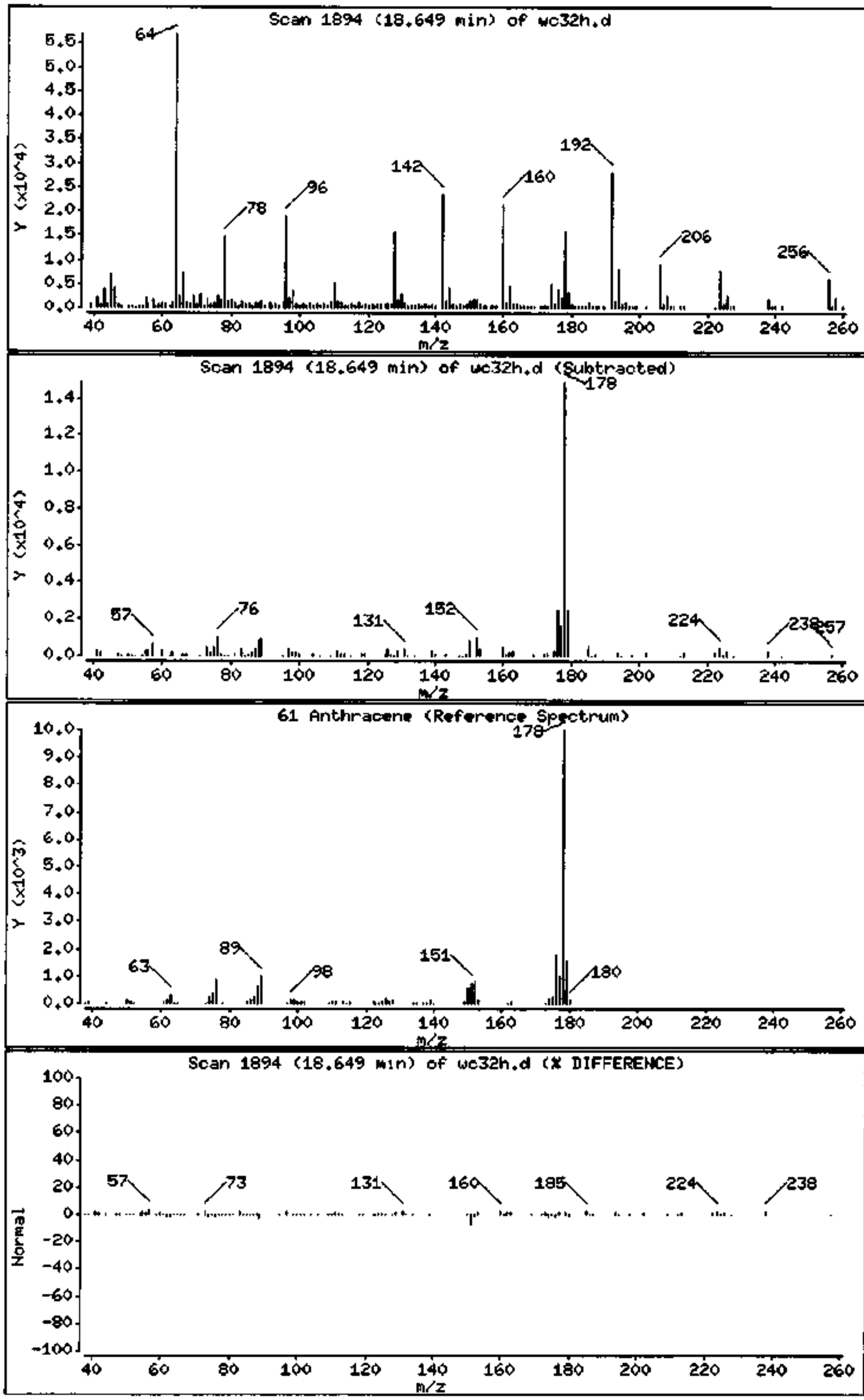
Operator: VTS/YZ

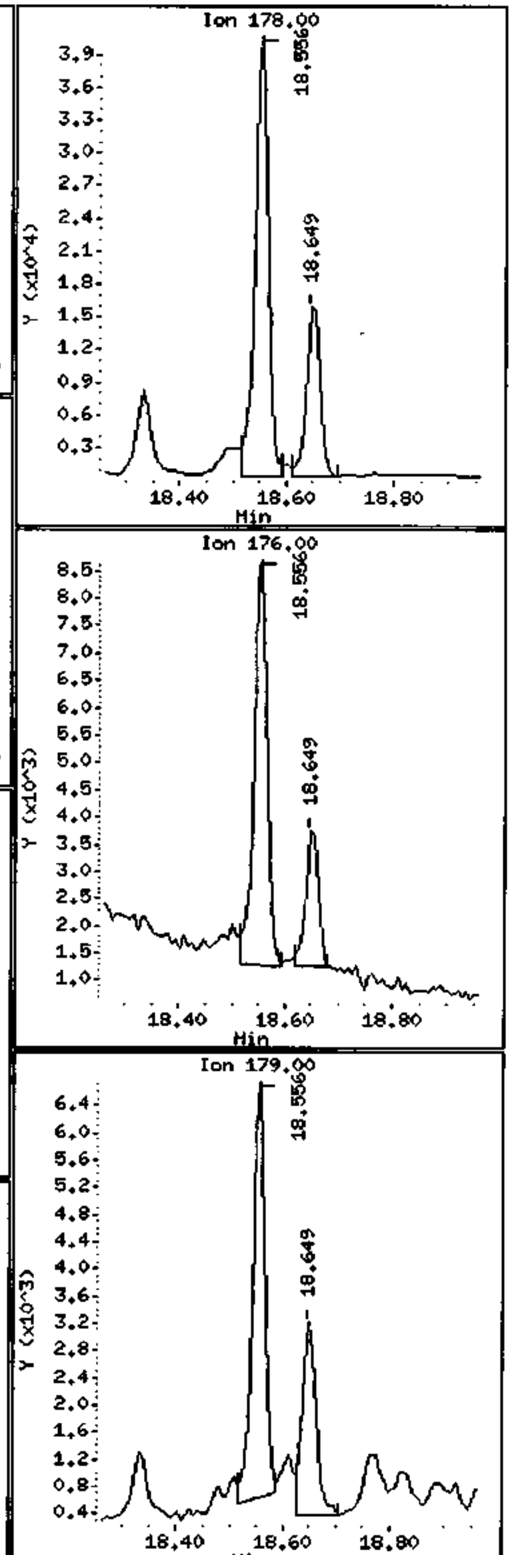
Column phase: ZB-5msi

Column diameter: 0.25

61 Anthracene

Concentration: 66.37 ug/kg





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Date : 16-FEB-2013 20:12

Client ID: SG-09-0-10-013113

Instrument: nt10.i

Sample Info: WC32H

Volume Injected (uL): 1.0

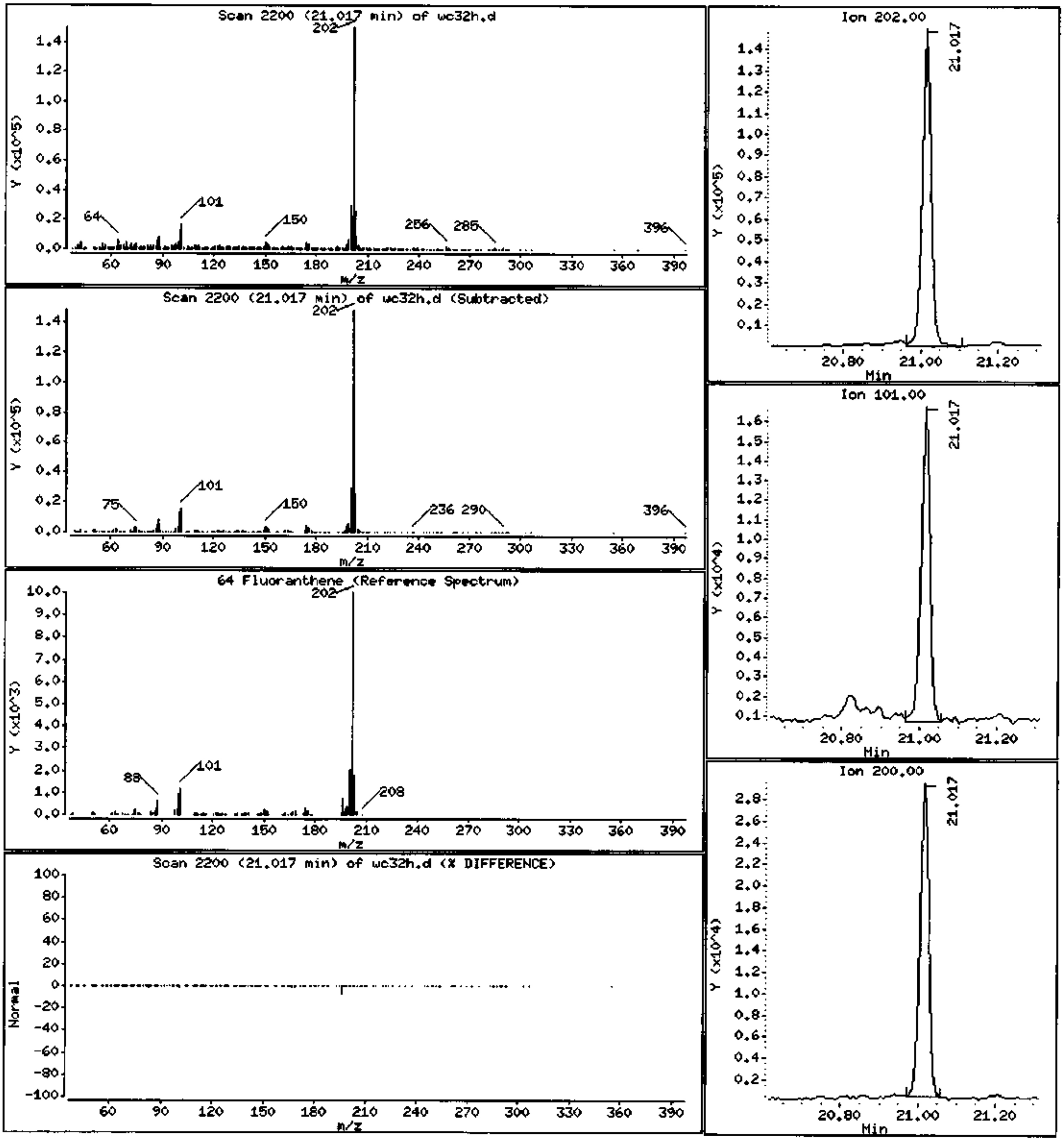
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

64 Fluoranthene

Concentration: 494.1 ug/kg



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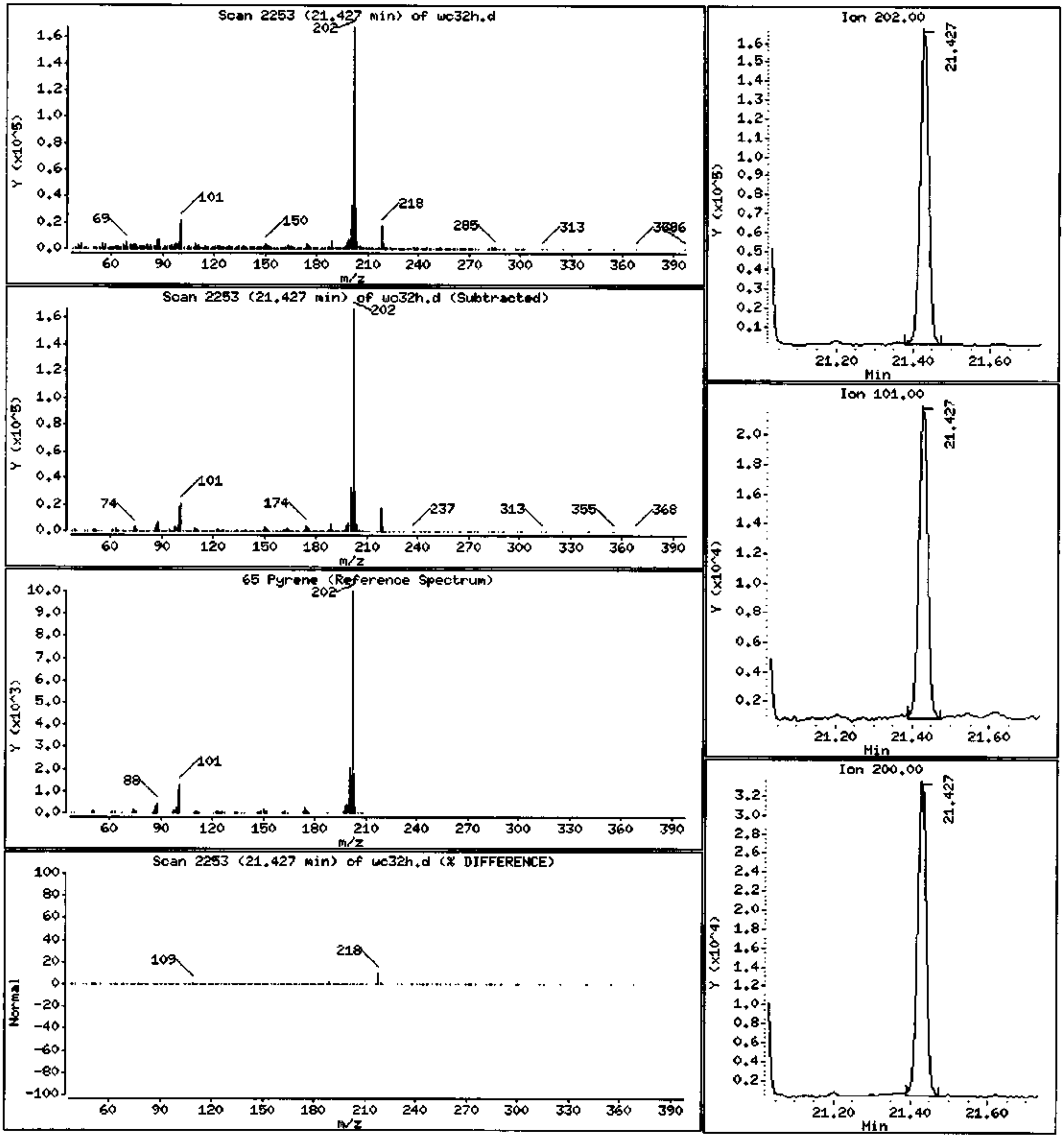
Date : 16-FEB-2013 20:12
Client ID: SG-09-0-10-013113
Sample Info: WC32H
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt10.i
Operator: VTS/YZ
Column diameter: 0.25

65 Pyrene

Concentration: 412.8 ug/kg



Data File: /chem1/nt10.i/20130216.b/wc32h.d

Date : 16-FEB-2013 20:12

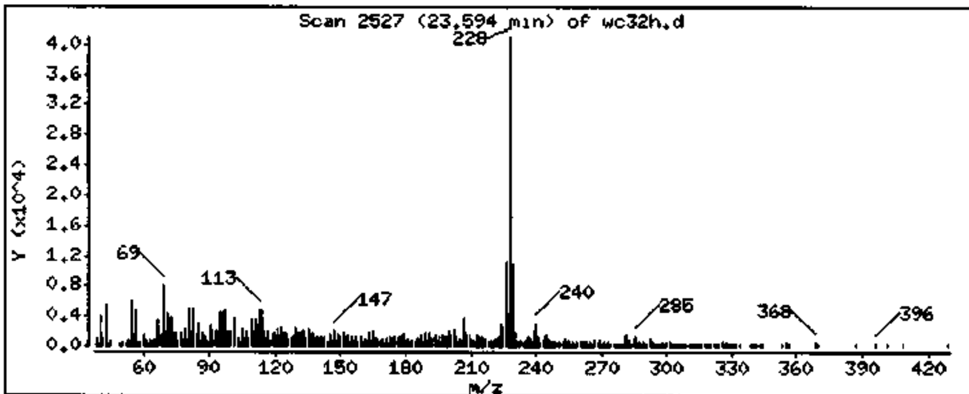
Client ID: SG-09-0-10-013113 Instrument: nt10.i

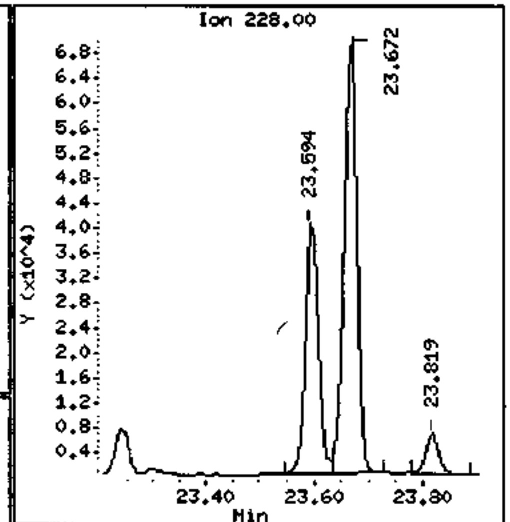
Sample Info: WC32H

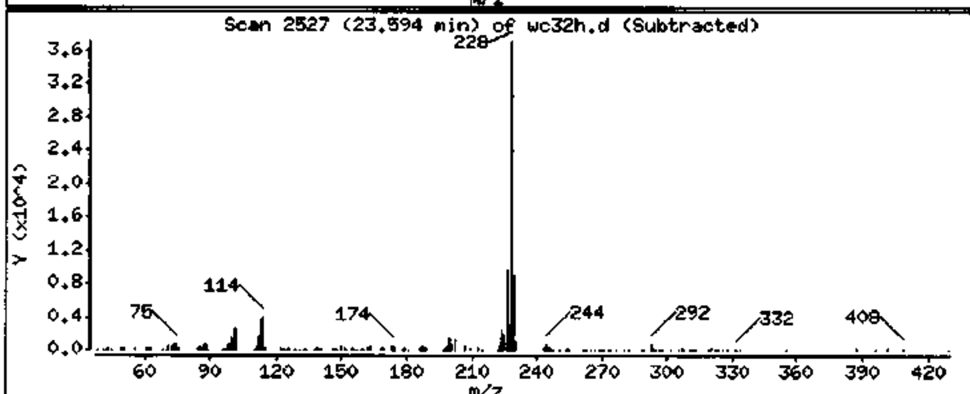
Volume Injected (uL): 1.0 Operator: VTS/YZ

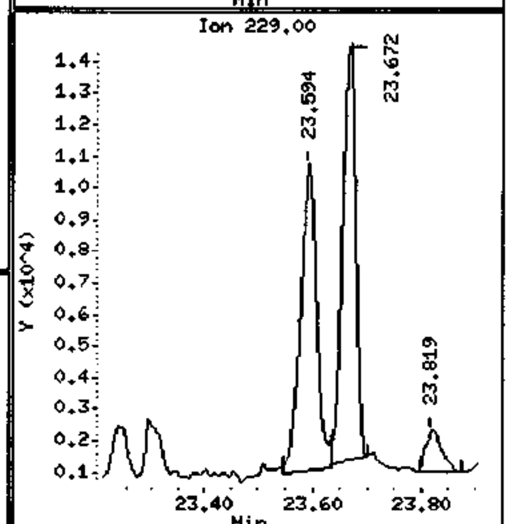
Column phase: ZB-5msi Column diameter: 0.25

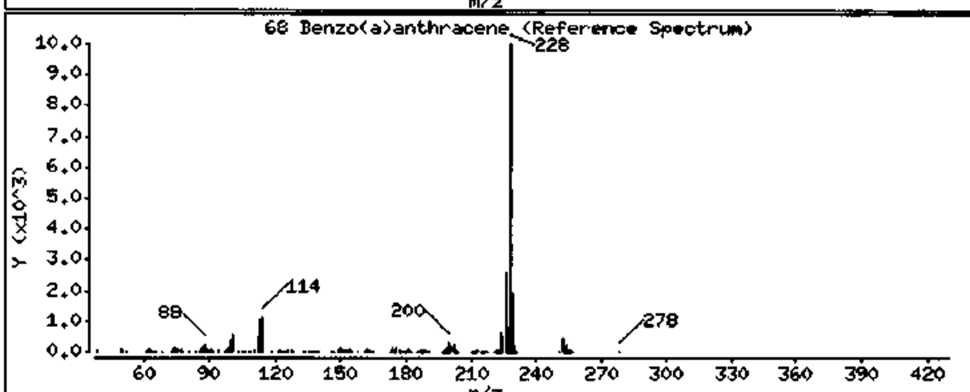
68 Benzo(a)anthracene Concentration: 108.5 ug/kg

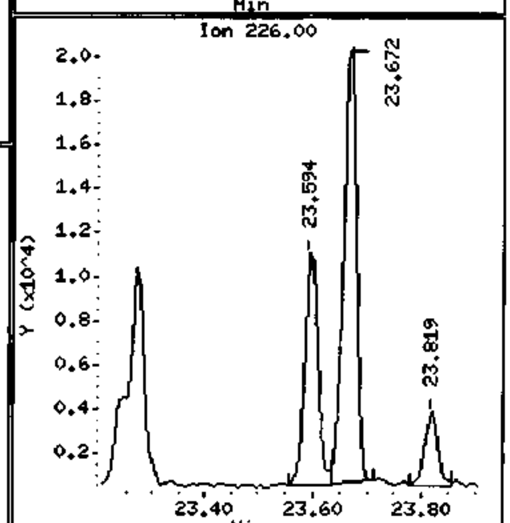


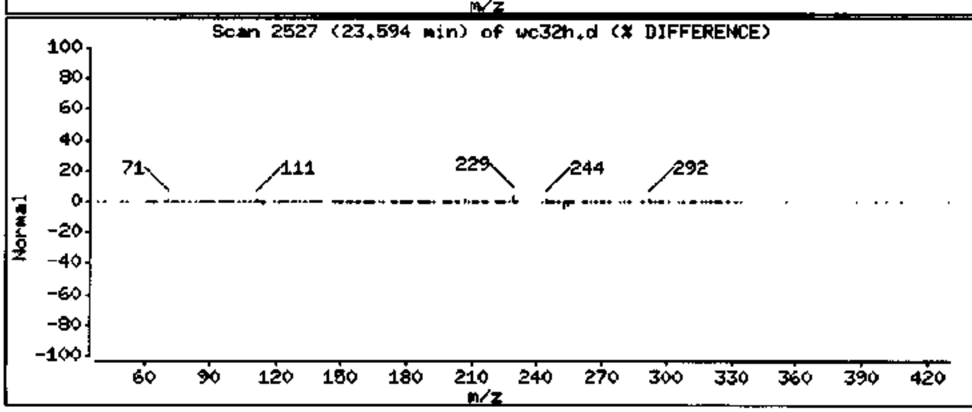












Data File: /chem1/nt10.i/20130216.b/wc32h.d

Date : 16-FEB-2013 20:12

Client ID: SG-09-0-10-013113

Instrument: nt10.i

Sample Info: WC32H

Volume Injected (uL): 1.0

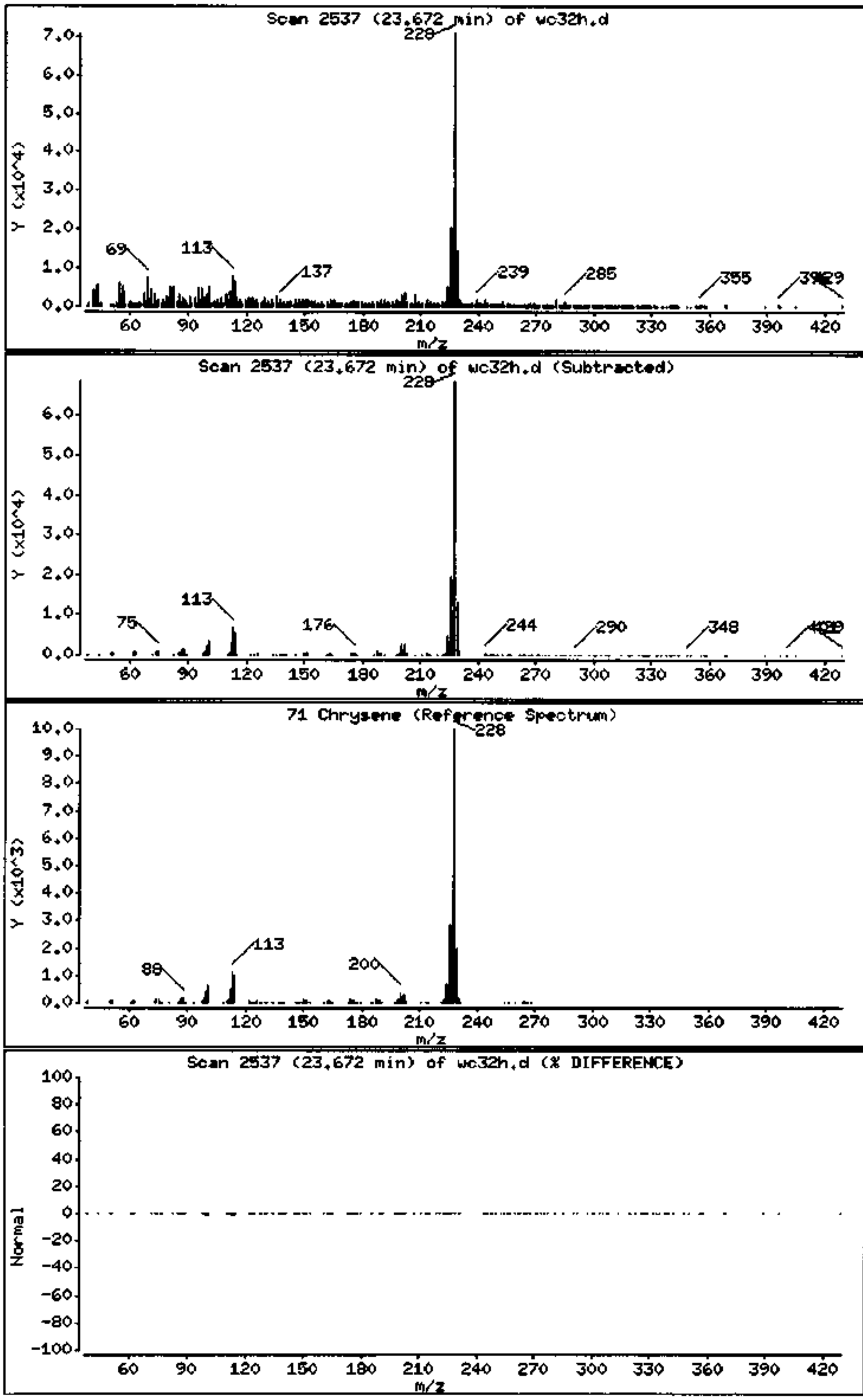
Operator: VTS/YZ

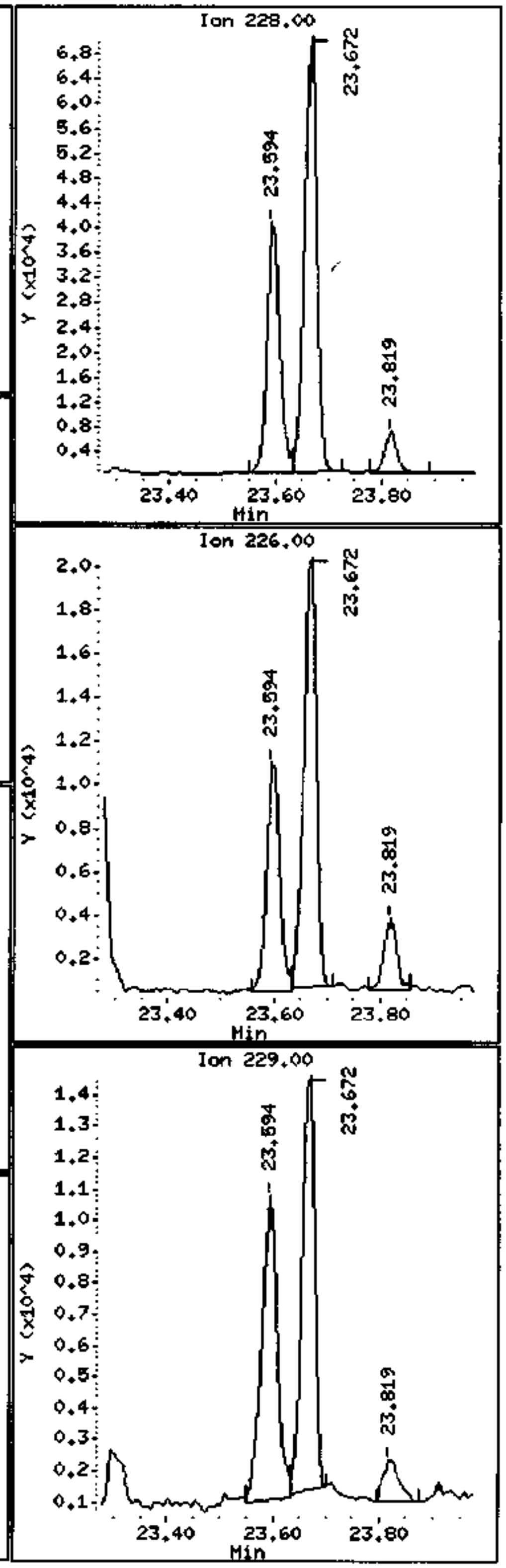
Column phase: ZB-5msi

Column diameter: 0.25

71 Chrysene

Concentration: 204.7 ug/kg





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Date : 16-FEB-2013 20:12

Client ID: SG-09-0-10-013113

Instrument: nt10.i

Sample Info: WC32H

Volume Injected (uL): 1.0

Operator: VTS/YZ

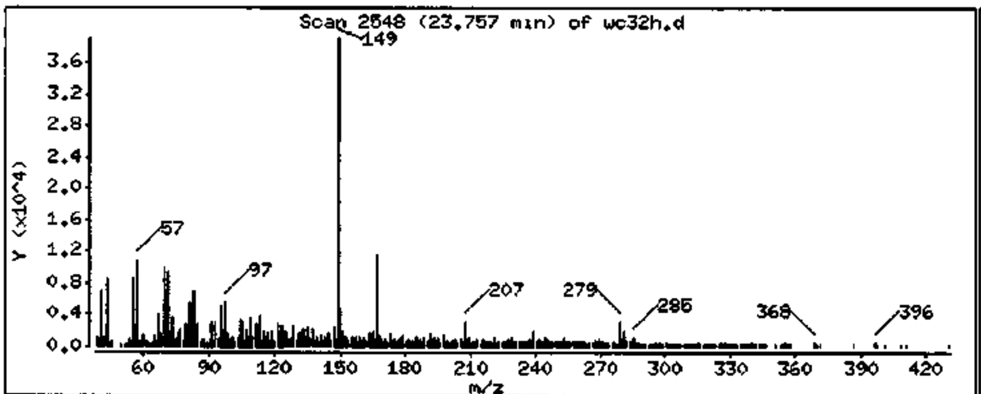
Column phase: ZB-5msi

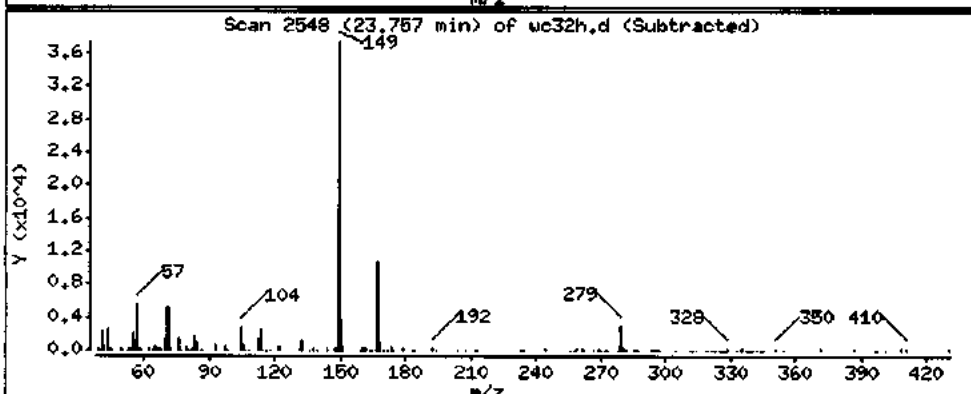
Column diameter: 0.25

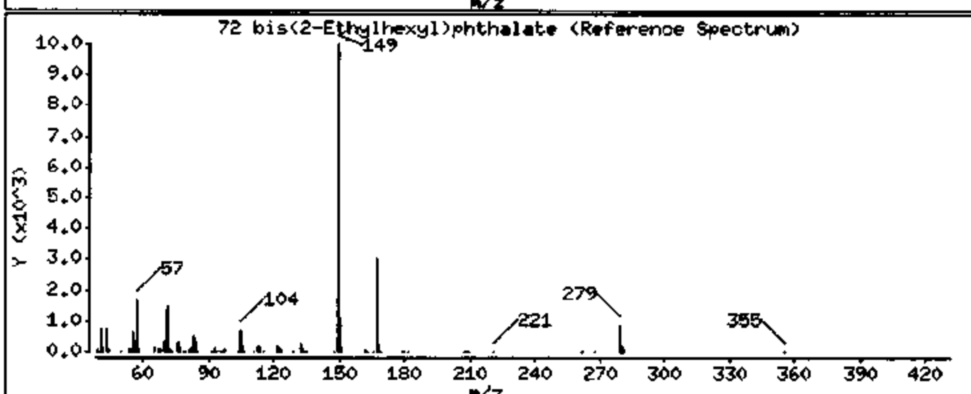
B

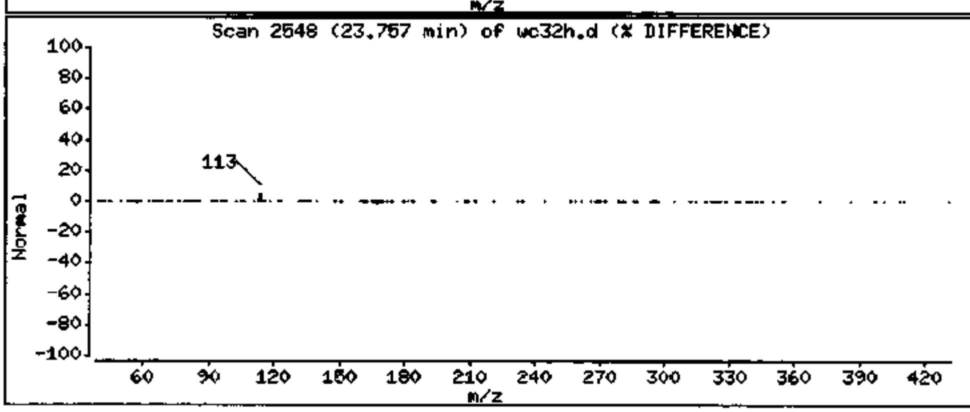
72 bis(2-Ethylhexyl)phthalate

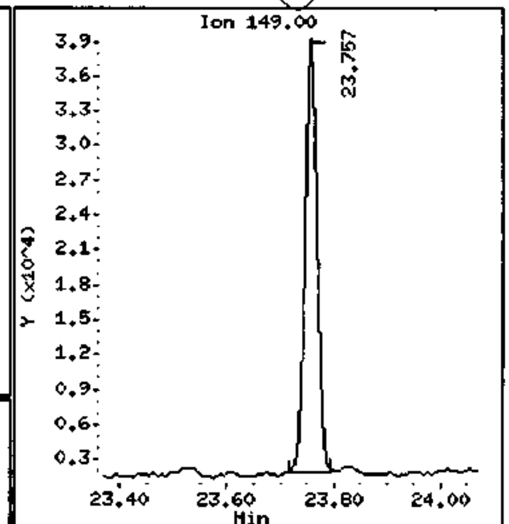
Concentration: 159.2 ug/kg

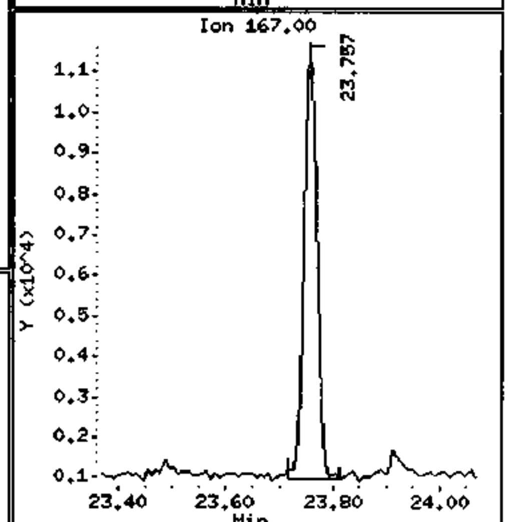


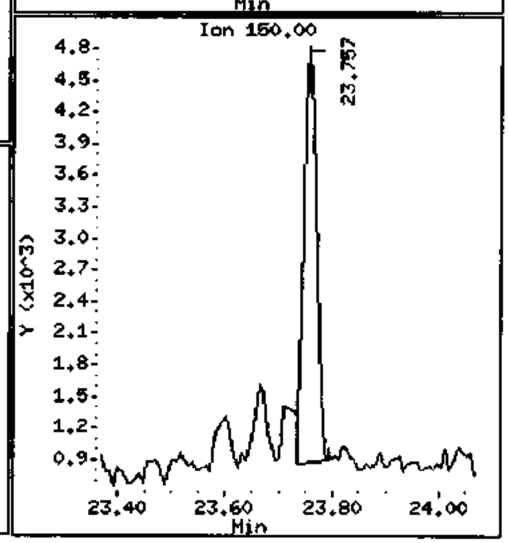












Data File: /chem1/nt10.i/20130216.b/wc32h.d

Date : 16-FEB-2013 20:12

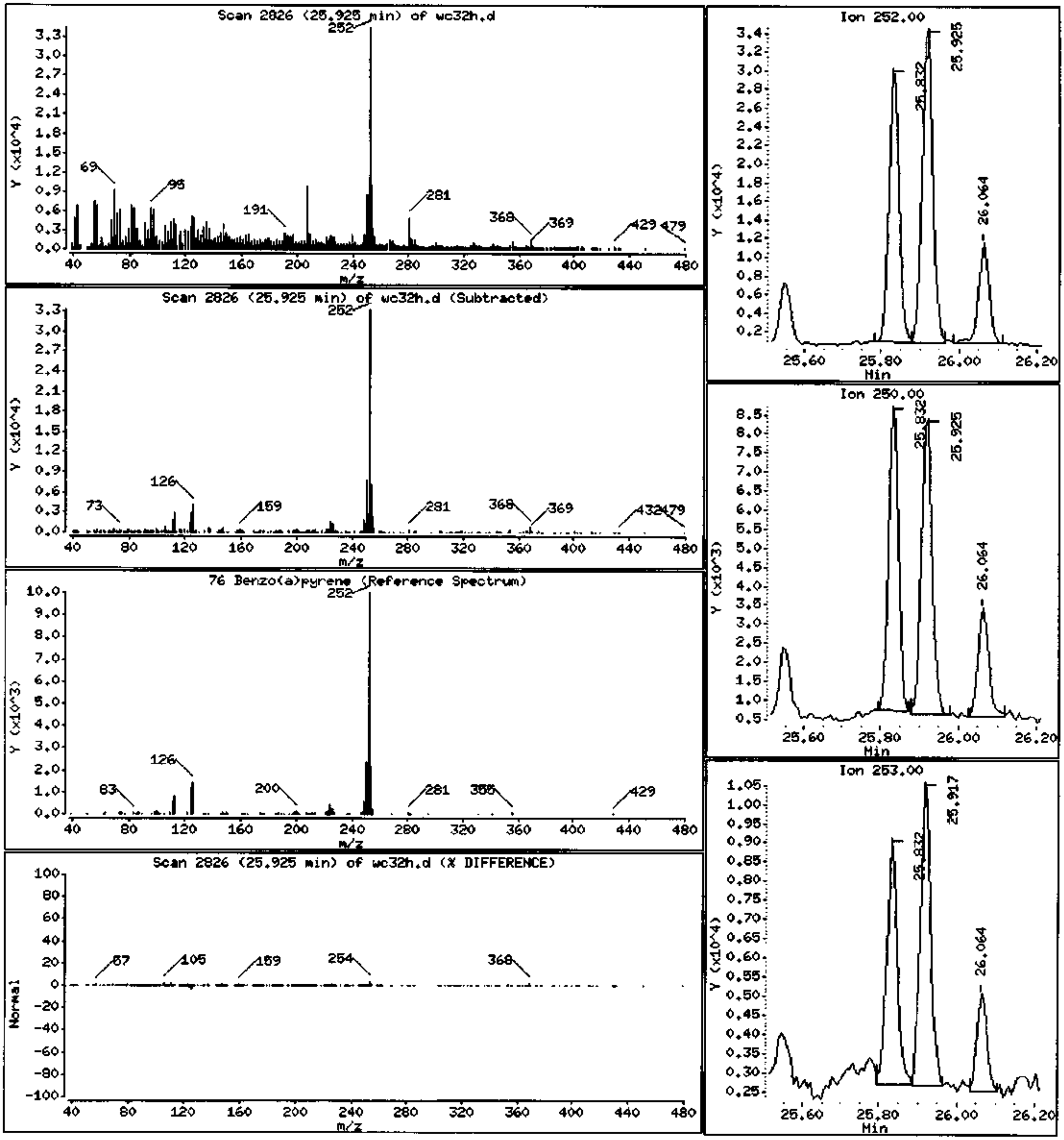
Client ID: SG-09-0-10-013113 Instrument: nt10.i

Sample Info: WC32H

Volume Injected (uL): 1.0 Operator: VTS/YZ

Column phase: ZB-5msi Column diameter: 0.25

76 Benzo(a)pyrene Concentration: 108.1 ug/kg



Data File: /chem1/nt10.i/20130216.b/wc32h.d

Date : 16-FEB-2013 20:12

Client ID: SG-09-0-10-013113

Instrument: nt10.i

Sample Info: WC32H

Volume Injected (uL): 1.0

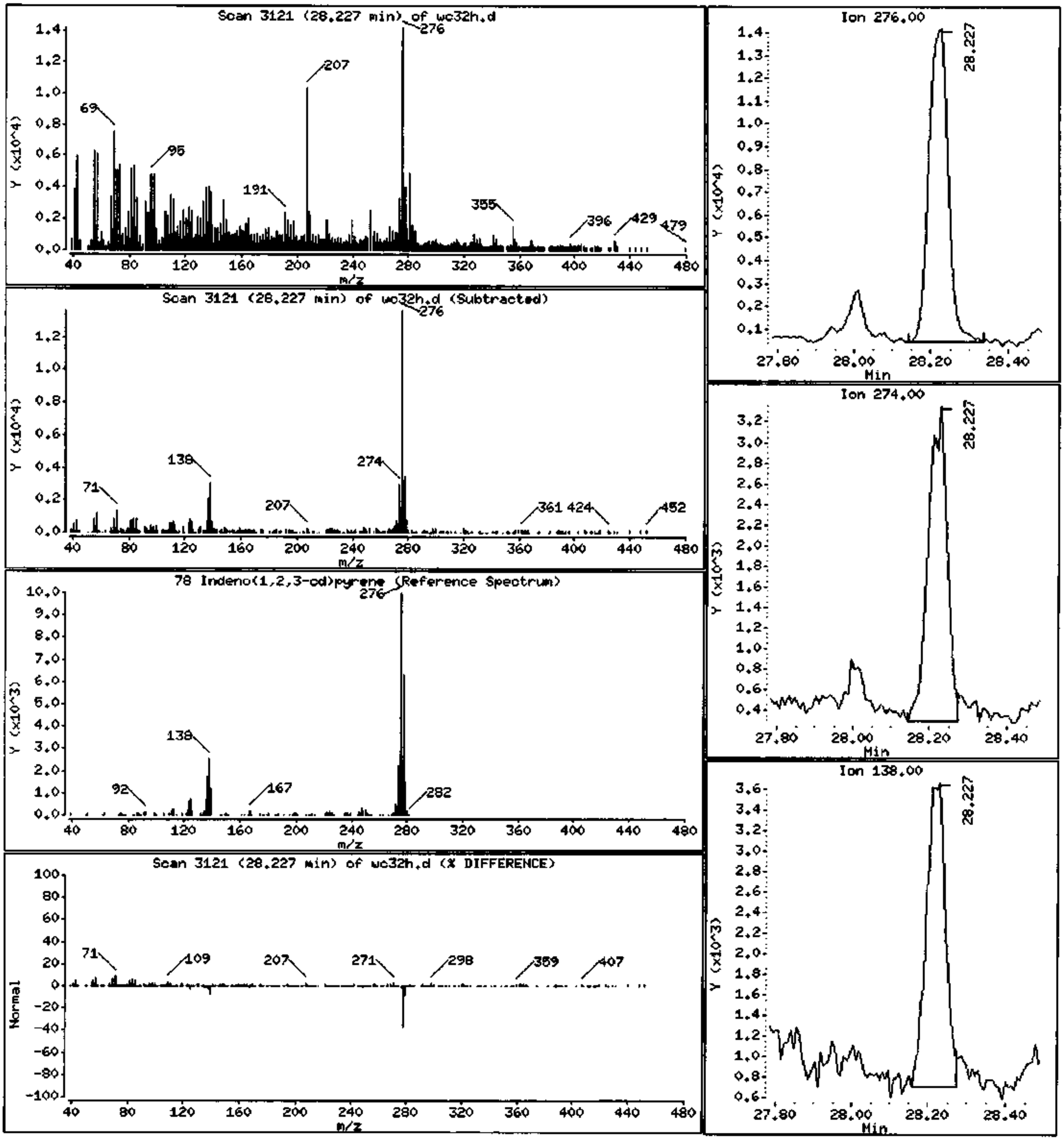
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

78 Indeno(1,2,3-cd)pyrene

Concentration: 62.33 ug/kg



Data File: /chem1/nt10.i/20130216.b/wc32h.d

Date : 16-FEB-2013 20:12

Client ID: SG-09-0-10-013113

Instrument: nt10.i

Sample Info: WC32H

Volume Injected (uL): 1.0

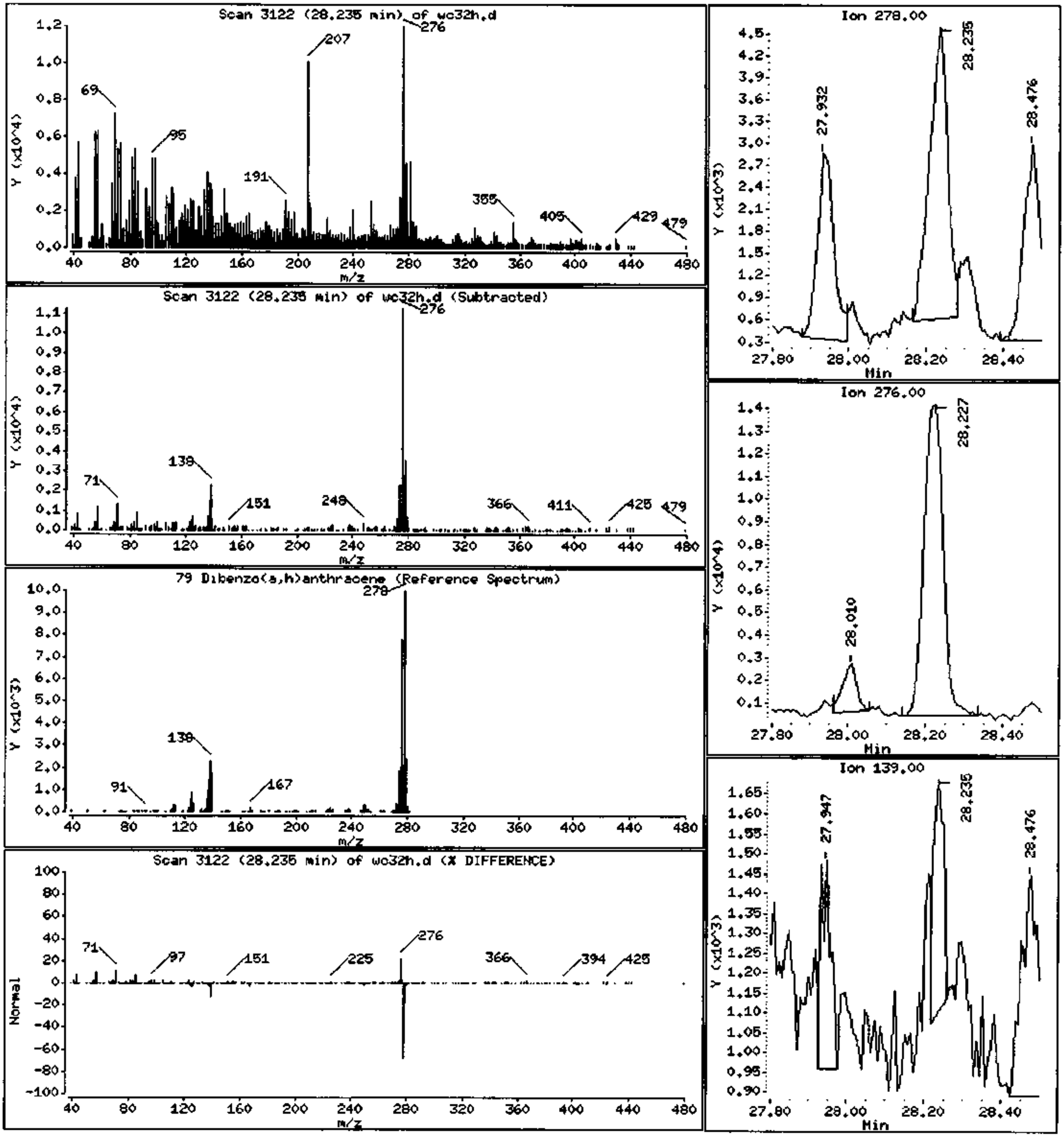
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

79 Dibenzo(a,h)anthracene

Concentration: 21.58 ug/kg



Data File: /chem1/nt10.i/20130216.b/wc32h.d

Date : 16-FEB-2013 20:12

Client ID: SG-09-0-10-013113

Instrument: nt10.i

Sample Info: WC32H

Volume Injected (uL): 1.0

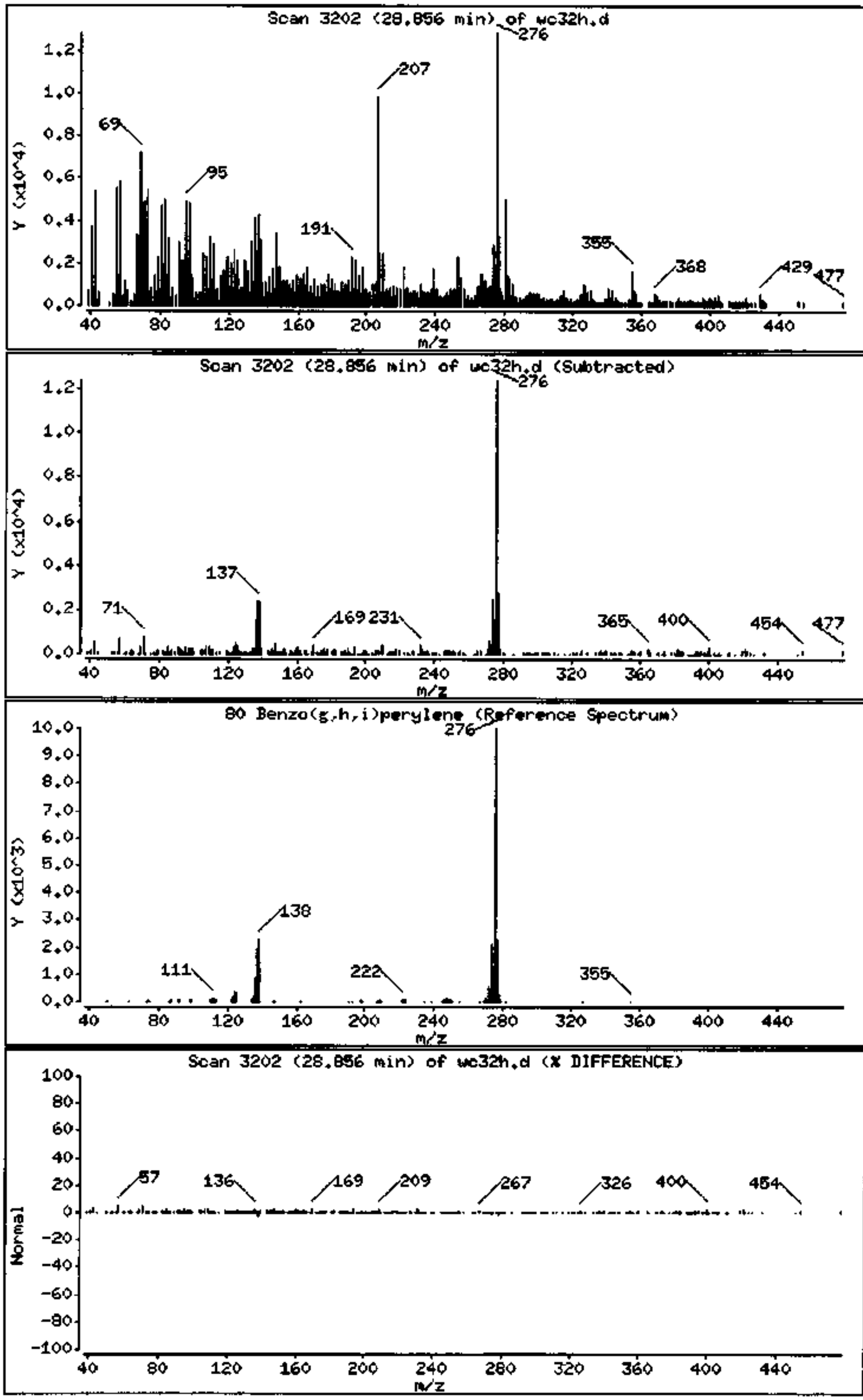
Operator: VTS/YZ

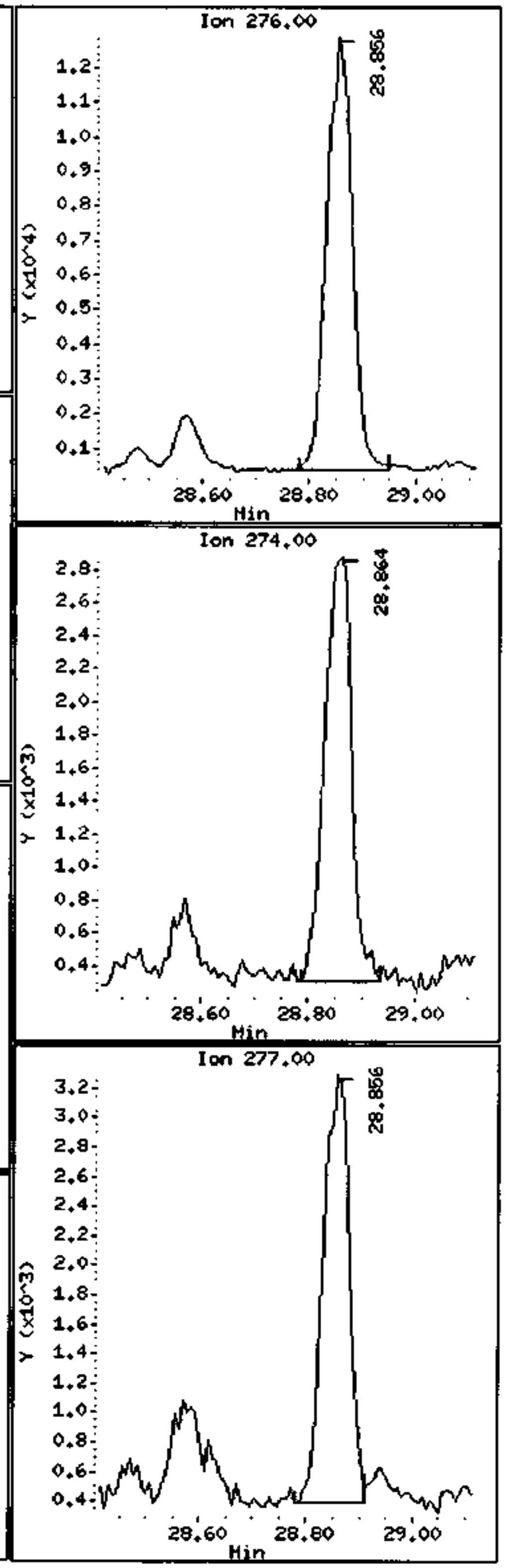
Column phase: ZB-5ms:

Column diameter: 0.25

80 Benzo(g,h,i)perylene

Concentration: 64.79 ug/kg





Data File: /chem1/nt10.i/20130216.b/wc32h.d

Date : 16-FEB-2013 20:12

Client ID: SG-09-0-10-013113

Instrument: nt10.i

Sample Info: WC32H

Volume Injected (uL): 1.0

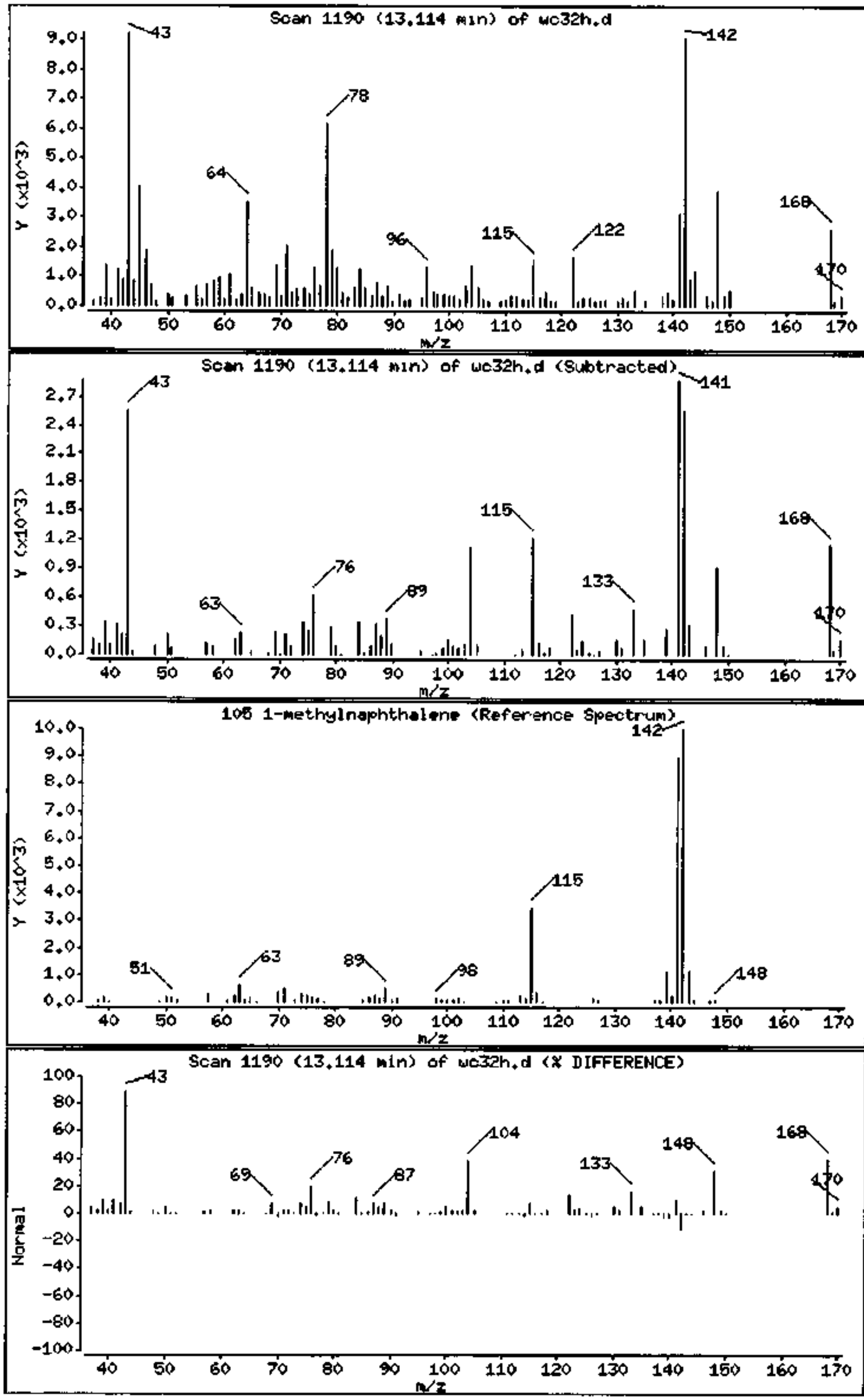
Operator: VTS/YZ

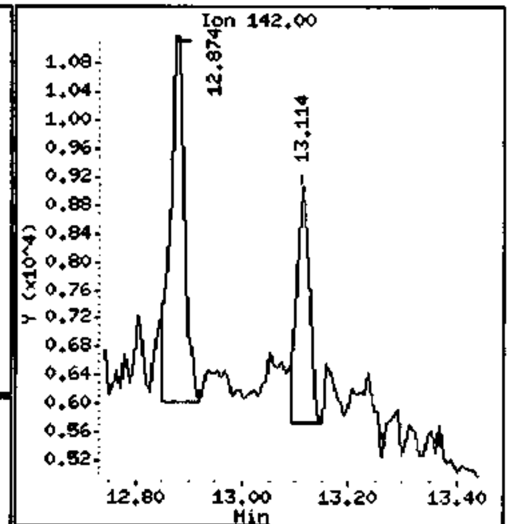
Column phase: ZB-5msi

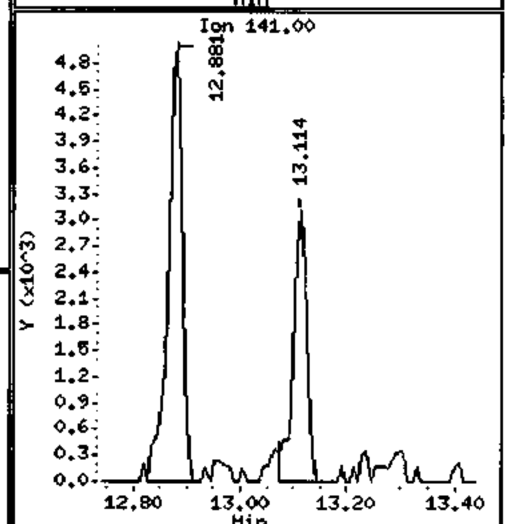
Column diameter: 0.25

105 1-methylnaphthalene

Concentration: 21.43 ug/kg







Data File: /chem1/nt10.i/20130216.b/wc32h.d

Date : 16-FEB-2013 20:12

Client ID: SG-09-0-10-013113

Instrument: nt10.i

Sample Info: WC32H

Volume Injected (uL): 1.0

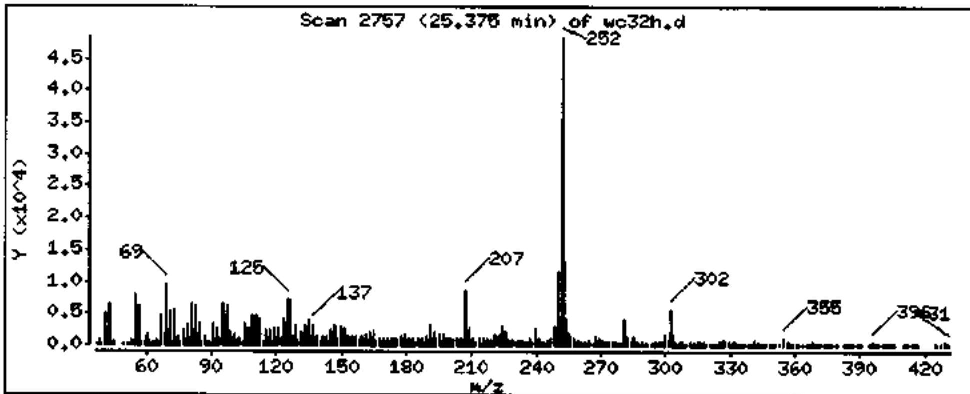
Operator: VTS/YZ

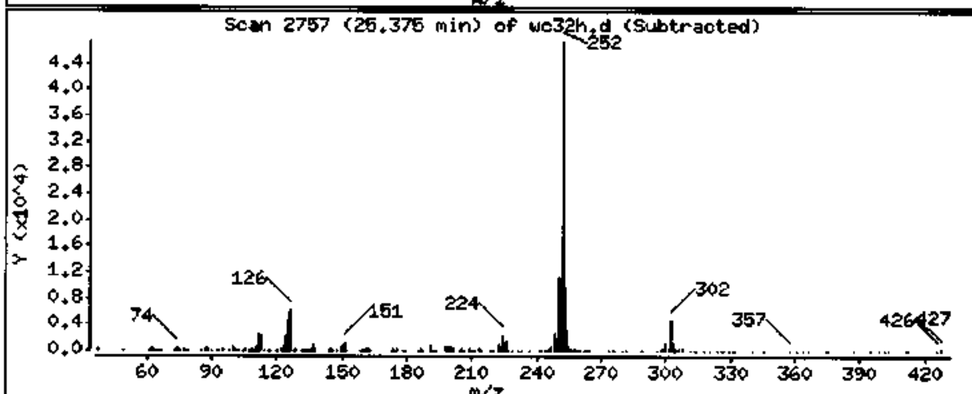
Column phase: ZB-5msi

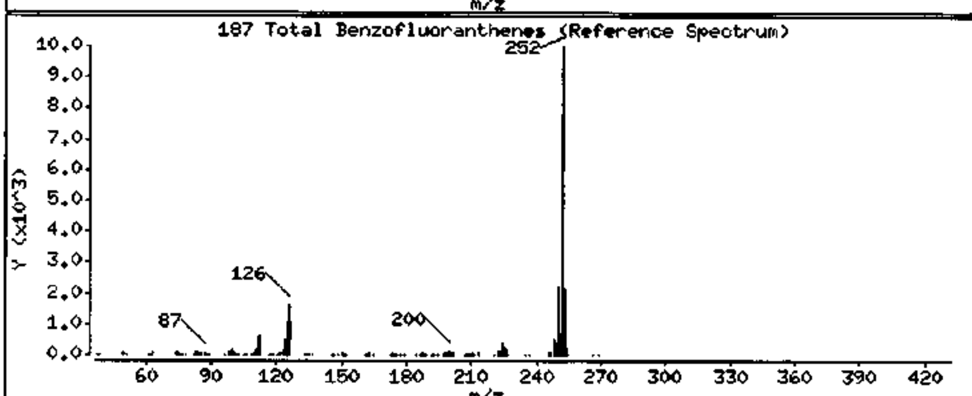
Column diameter: 0.25

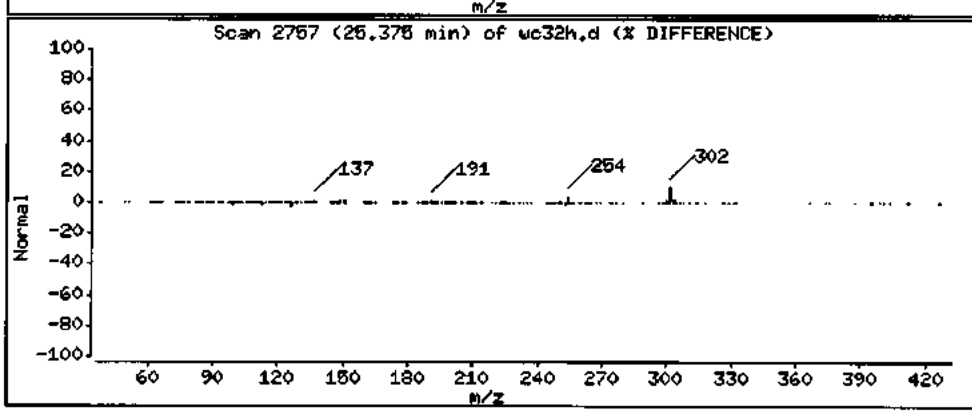
187 Total Benzofluoranthenes

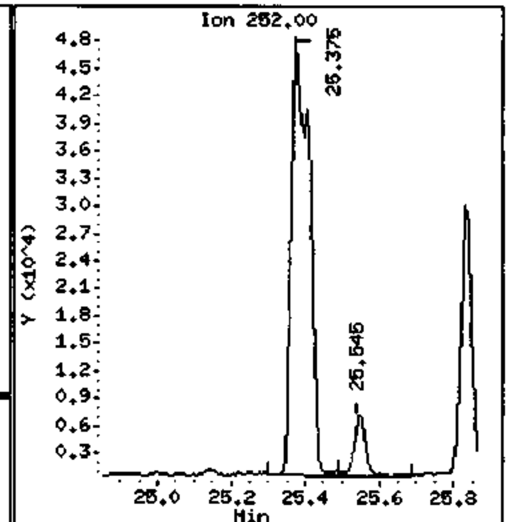
Concentration: 226.0 ug/kg

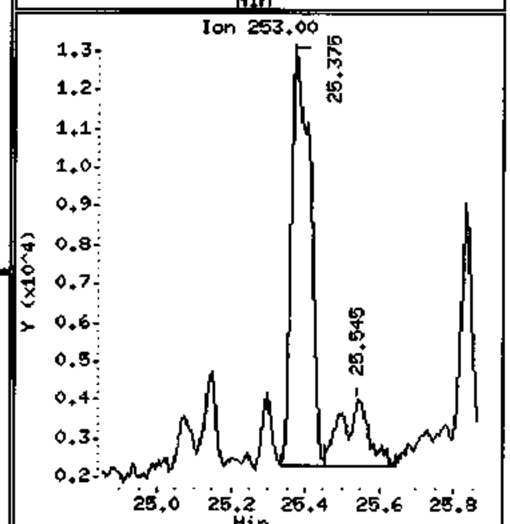


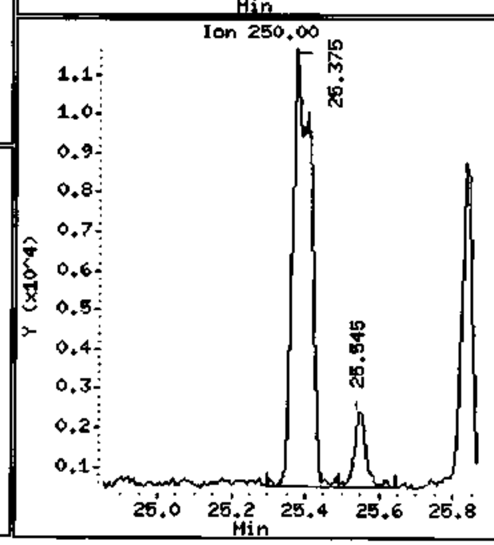












CO-ELUTION SUMMARY FOR FILE - wc32h.d

Lab ID: WC32H, Method: ABN.m, Instrument: nt10.i, Date: 16-FEB-2013

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Analytical Resources, Inc.

2 02/19/13

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt10.i/20130216.b/wc33g.d
Lab Smp Id: WC33G Client Smp ID: HA-09-0-10-013013
Inj Date : 16-FEB-2013 20:48
Operator : VTS/YZ Inst ID: nt10.i
Smp Info : WC33G
Misc Info : 13-2451
Comment : 1ul Injection
Method : /chem1/nt10.i/20130216.b/ABN.m
Meth Date : 19-Feb-2013 09:11 yev Quant Type: ISTD
Cal Date : 25-JAN-2013 17:16 Cal File: ic0125h.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDAICAL.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Ws	11.30000	Weight of sample extracted (g)
M	5.80000	% Moisture

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
$	1 2-Fluorophenol	112	6.389	6.351	(0.738)	65994	4.95023	465.0
$	2 Phenol-d5	99	8.112	8.082	(0.937)	74372	4.49566	422.3
	3 Phenol	94	Compound Not Detected.					
$	5 2-Chlorophenol-d4	132	8.306	8.283	(0.959)	74752	5.21857	490.3
	4 Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
	6 2-Chlorophenol	128	Compound Not Detected.					
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	8.662	8.647	(1.000)	41694	4.00000	
	9 1,4-Dichlorobenzene	146	Compound Not Detected.					
$	10 1,2-Dichlorobenzene-d4	152	9.042	9.027	(1.044)	45268	4.30033	404.0
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	108	Compound Not Detected.					
	14 2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.					
	13 2-Methylphenol	108	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
	========================	====	==	======	======	========	=======	=======
	17 Hexachloroethane	117	Compound Not Detected.					
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	15 4-Methylphenol	108	Compound Not Detected.					
$	18 Nitrobenzene-d5	82	9.841	9.826	(0.869)	57933	4.26126	400.3
	19 Nitrobenzene	77	Compound Not Detected.					
	20 Isophorone	82	Compound Not Detected.					
	21 2-Nitrophenol	139	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	Compound Not Detected.					
	23 Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
	24 Benzoic acid	105	Compound Not Detected.					
	25 2,4-Dichlorophenol	162	Compound Not Detected.					
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	11.319	11.296	(1.000)	147300	4.00000	
	28 Naphthalene	128	Compound Not Detected.					
	29 4-Chloroaniline	127	Compound Not Detected.					
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	31 4-Chloro-3-methylphenol	107	Compound Not Detected.					
	32 2-Methylnaphthalene	142	Compound Not Detected.					
	33 Hexachlorocyclopentadiene	237	Compound Not Detected.					
	34 2,4,6-Trichlorophenol	196	Compound Not Detected.					
	35 2,4,5-Trichlorophenol	196	Compound Not Detected.					
$	36 2-Fluorobiphenyl	172	13.740	13.718	(0.903)	142881	4.41286	414.6
	37 2-Chloronaphthalene	162	Compound Not Detected.					
	38 2-Nitroaniline	65	Compound Not Detected.					
	39 Dimethylphthalate	163	Compound Not Detected.					
	40 Acenaphthylene	152	Compound Not Detected.					
	41 2,6-Dinitrotoluene	165	Compound Not Detected.					
*	42 Acenaphthene-d10	164	15.211	15.188	(1.000)	94380	4.00000	
	43 3-Nitroaniline	138	Compound Not Detected.					
	44 Acenaphthene	153	Compound Not Detected.					
	45 2,4-Dinitrophenol	184	Compound Not Detected.					
	46 Dibenzofuran	168	Compound Not Detected.					
	47 4-Nitrophenol	109	Compound Not Detected.					
	48 2,4-Dinitrotoluene	165	Compound Not Detected.					
	50 Diethylphthalate	149	16.324	16.309	(1.073)	7614	0.25463	23.92
	49 Fluorene	166	Compound Not Detected.					
	51 4-Chlorophenyl-phenylether	204	Compound Not Detected.					
	52 4-Nitroaniline	138	Compound Not Detected.					
	53 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
	54 N-Nitrosodiphenylamine	169	Compound Not Detected.					
$	55 2,4,6-Tribromophenol	330	17.003	16.972	(1.118)	38268	6.35375	596.9
	56 4-Bromophenyl-phenylether	248	Compound Not Detected.					
	57 Hexachlorobenzene	284	Compound Not Detected.					
	58 Pentachlorophenol	266	Compound Not Detected.					
*	59 Phenanthrene-d10	188	18.494	18.464	(1.000)	159353	4.00000	
	60 Phenanthrene	178	Compound Not Detected.					
	61 Anthracene	178	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
	62 Carbazole	167	Compound Not Detected.					
	63 Di-n-butylphthalate	149	Compound Not Detected.					
	64 Fluoranthene	202	20.993	20.963	(1.135)	12543	0.25639	24.09
	65 Pyrene	202	21.411	21.380	(0.907)	11738	0.21196	19.91
$	66 Terphenyl-d14	244	21.744	21.713	(0.921)	192709	5.16070	484.8
	67 Butylbenzylphthalate	149	Compound Not Detected.					
	68 Benzo(a)anthracene	228	23.586	23.556	(0.999)	6766	0.12472	11.72
*	69 Chrysene-d12	240	23.617	23.579	(1.000)	194416	4.00000	
	70 3,3'-Dichlorobenzidine	252	Compound Not Detected.					
	71 Chrysene	228	23.664	23.626	(1.002)	7708	0.15687	14.74
	72 bis(2-Ethylhexyl)phthalate	149	23.749	23.719	(0.960)	13936	0.40723	38.26
*	134 Di-n-octylphthalate-d4	153	24.740	24.694	(1.000)	259159	4.00000	
	73 Di-n-octylphthalate	149	Compound Not Detected.					
	74 Benzo(b)fluoranthene	252	25.367	25.329	(0.975)	10550	0.17753	16.68
	75 Benzo(k)fluoranthene	252	25.398	25.360	(0.976)	11219	0.17475	16.42(M)
	76 Benzo(a)pyrene	252	25.909	25.863	(0.996)	5946	0.11570	10.87(H)
*	77 Perylene-d12	264	26.010	25.964	(1.000)	205031	4.00000	
	78 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
	79 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	80 Benzo(g,h,i)perylene	276	28.825	28.763	(1.108)	5514	0.10140	9.526
	90 N-Nitrosodimethylamine	74	Compound Not Detected.					
	91 Aniline	93	Compound Not Detected.					
	93 Benzidine	184	Compound Not Detected.					
	103 Pyridine	79	Compound Not Detected.					
	105 1-methylnaphthalene	142	Compound Not Detected.					
	111 Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					
	187 Total Benzofluoranthenes	252	25.367	25.360	(0.975)	19522	0.33373	31.35
	99 Perylene	252	Compound Not Detected.					
	98 Retene	219	Compound Not Detected.					
	120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Report Date: 19-Feb-2013 09:11

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: wc33g.d
Lab Smp Id: WC33G
Analysis Type: SV
Quant Type: ISTD
Operator: VTS/YZ
Method File: /chem1/nt10.i/20130216.b/ABN.m
Misc Info: 13-2451

Calibration Date: 16-FEB-2013
Calibration Time: 11:03
Client Smp ID: HA-09-0-10-01301
Level: LOW
Sample Type: Sediment

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	46623	23312	93246	41694	-10.57
27 Naphthalene-d8	176978	88489	353956	147300	-16.77
42 Acenaphthene-d10	110872	55436	221744	94380	-14.87
59 Phenanthrene-d10	188290	94145	376580	159353	-15.37
69 Chrysene-d12	213681	106840	427362	194416	-9.02
134 Di-n-octylphthala	264159	132080	528318	259159	-1.89
77 Perylene-d12	208584	104292	417168	205031	-1.70

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.65	8.15	9.15	8.66	0.17
27 Naphthalene-d8	11.30	10.80	11.80	11.32	0.20
42 Acenaphthene-d10	15.19	14.69	15.69	15.21	0.15
59 Phenanthrene-d10	18.46	17.96	18.96	18.49	0.16
69 Chrysene-d12	23.58	23.08	24.08	23.62	0.16
134 Di-n-octylphthala	24.69	24.19	25.19	24.74	0.19
77 Perylene-d12	25.96	25.46	26.46	26.01	0.18

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 19-Feb-2013 09:11

Analytical Resources, Inc.

RECOVERY REPORT

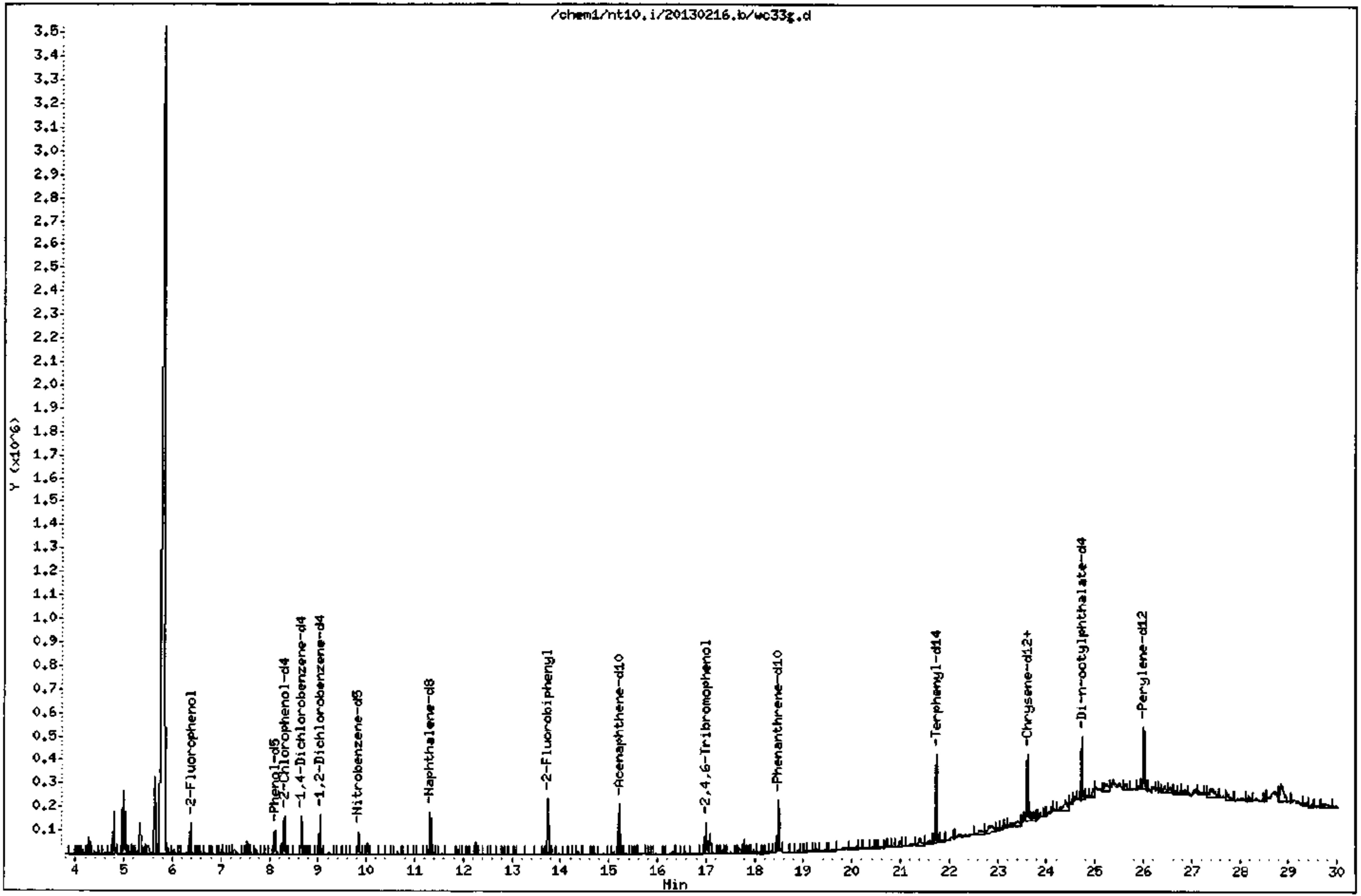
Client Name: Floyd-Snider
Sample Matrix: SOLID
Lab Smp Id: WC33G
Level: LOW
Data Type: MS DATA
SpikeList File: SHORTPSDDA.spk
Sublist File: PSDDAICAL.sub
Method File: /chem1/nt10.i/20130216.b/ABN.m
Misc Info: 13-2451

Client SDG: WC33
Fraction: SV
Client Smp ID: HA-09-0-10-013013
Operator: VTS/YZ
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 1 2-Fluorophenol	704.6	465.0	66.00	30-160
$ 2 Phenol-d5	704.6	422.3	59.94	30-160
$ 5 2-Chlorophenol-d4	704.6	490.3	69.58	30-160
$ 10 1,2-Dichlorobenzen	469.7	404.0	86.01	30-160
$ 18 Nitrobenzene-d5	469.7	400.3	85.23	30-160
$ 36 2-Fluorobiphenyl	469.7	414.6	88.26	30-160
$ 55 2,4,6-Tribromophen	704.6	596.9	84.72	30-160
$ 66 Terphenyl-d14	469.7	484.8	103.21	30-160

Data File: /chem1/nt10.i/20130216.b/wc33g.d
Date : 16-FEB-2013 20:48
Client ID: HA-09-0-10-013013
Sample Info: WC33G
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt10.i
Operator: VTS/YZ
Column diameter: 0.25



Data File: /chem1/nt10.i/20130216.b/wc33g.d

Page 7

Date : 16-FEB-2013 20:48

Client ID: HA-09-0-10-013013

Instrument: nt10.i

Sample Info: WC33G

Volume Injected (uL): 1.0

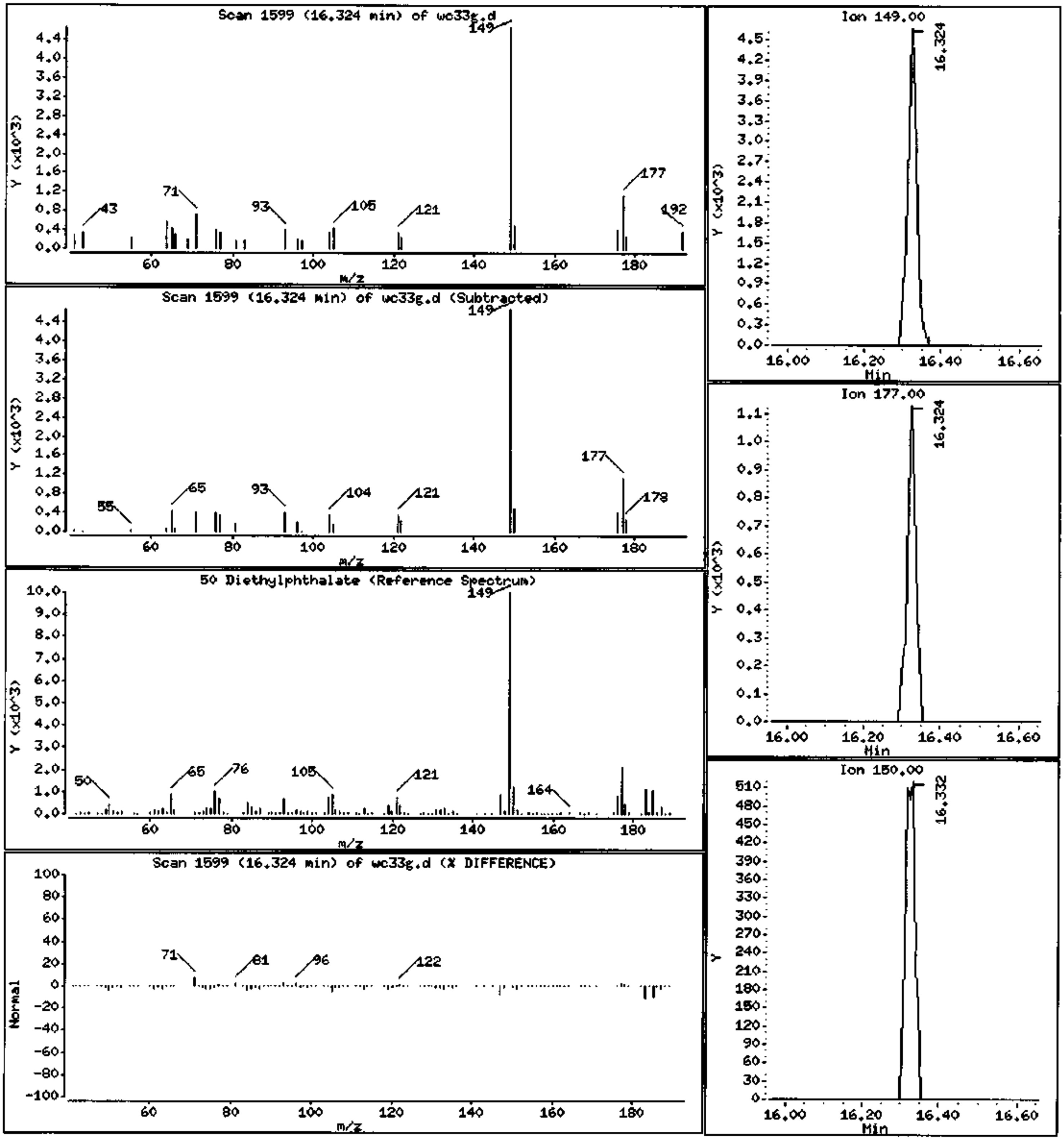
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

50 Diethylphthalate

Concentration: 23.92 ug/kg



Data File: /chem1/nt10.i/20130216.b/wc33g.d

Date : 16-FEB-2013 20:48

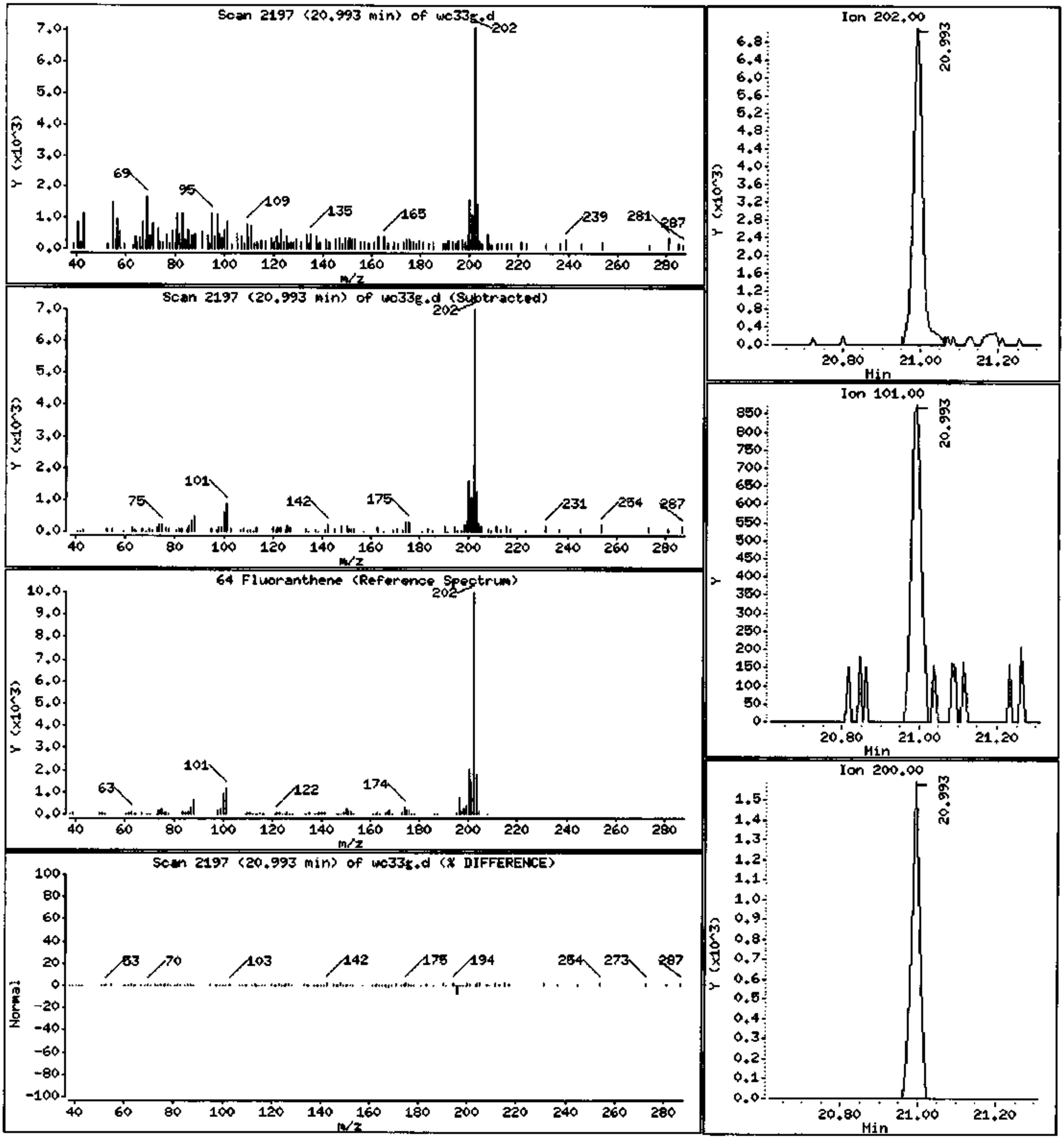
Client ID: HA-09-0-10-013013 Instrument: nt10.i

Sample Info: WC33G

Volume Injected (uL): 1.0 Operator: VTS/YZ

Column phase: ZB-5msi Column diameter: 0.25

64 Fluoranthene Concentration: 24.09 ug/kg



Data File: /chem1/nt10.i/20130216.b/wc33g.d

Date : 16-FEB-2013 20:48

Client ID: HA-09-0-10-013013

Instrument: nt10.i

Sample Info: WC33G

Volume Injected (uL): 1.0

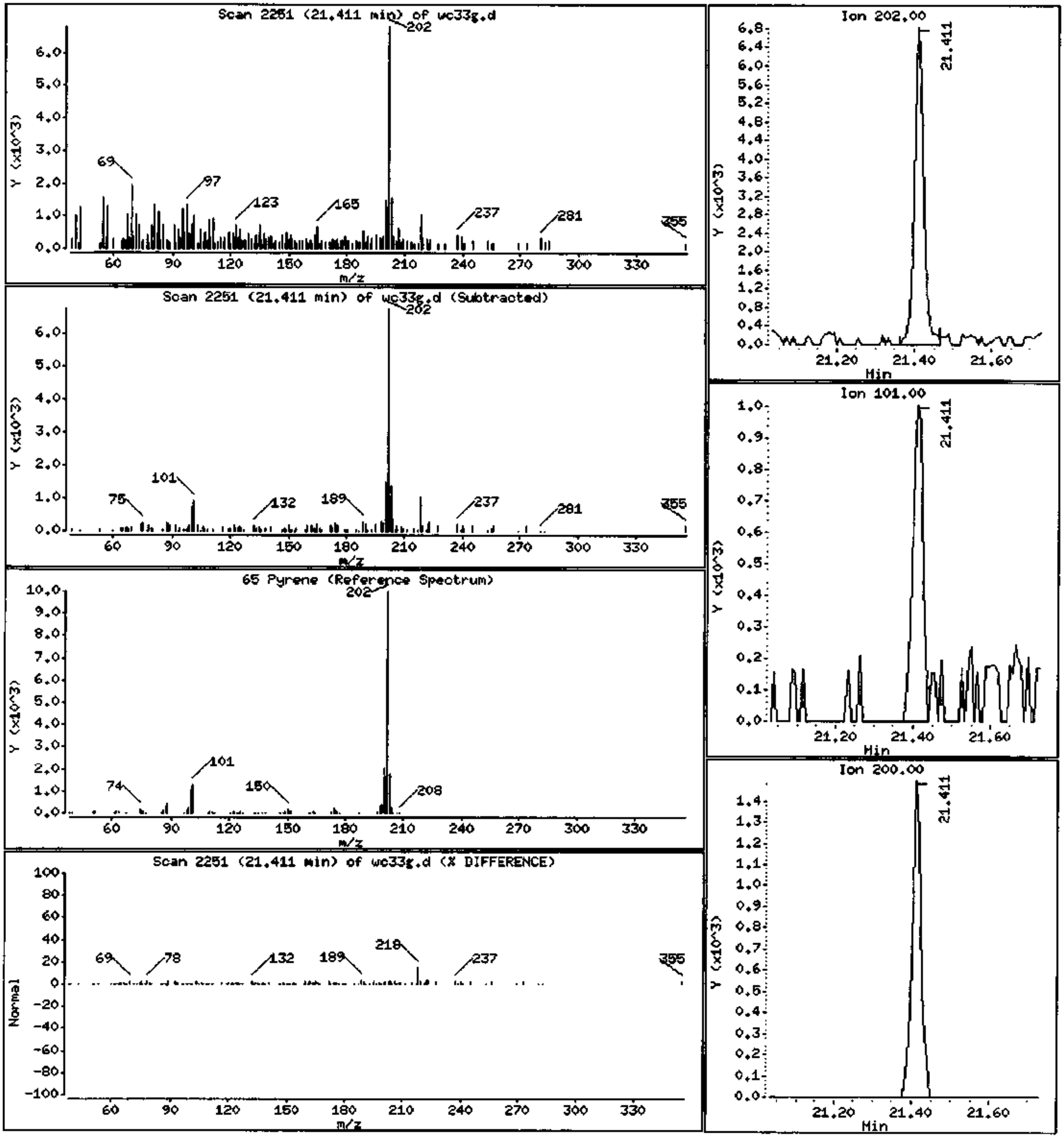
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

65 Pyrene

Concentration: 19.91 ug/kg



Data File: /chem1/nt10.i/20130216.b/wc33g.d

Date : 16-FEB-2013 20:48

Client ID: HA-09-0-10-013013

Instrument: nt10.i

Sample Info: WC33G

Volume Injected (uL): 1.0

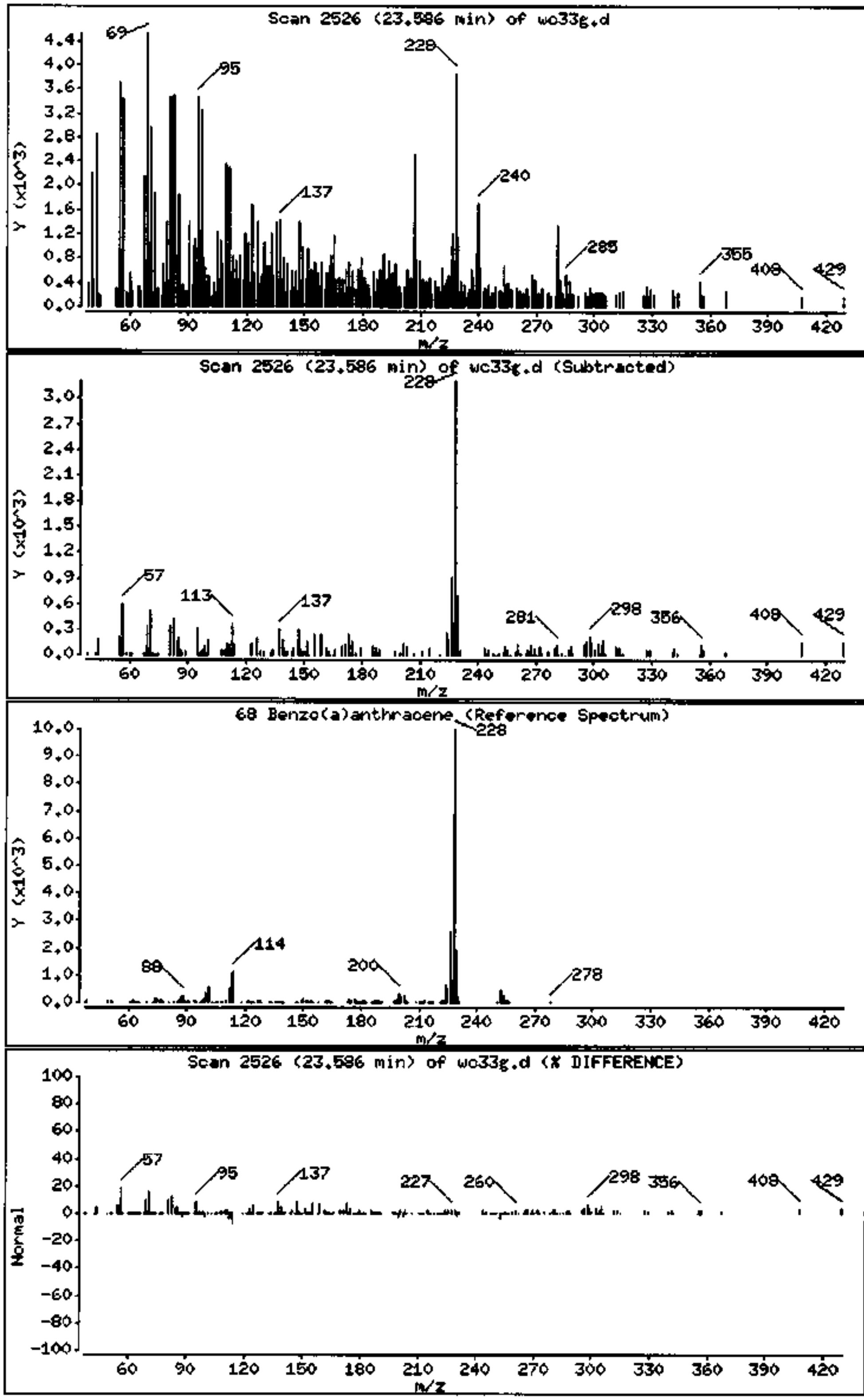
Operator: VTS/YZ

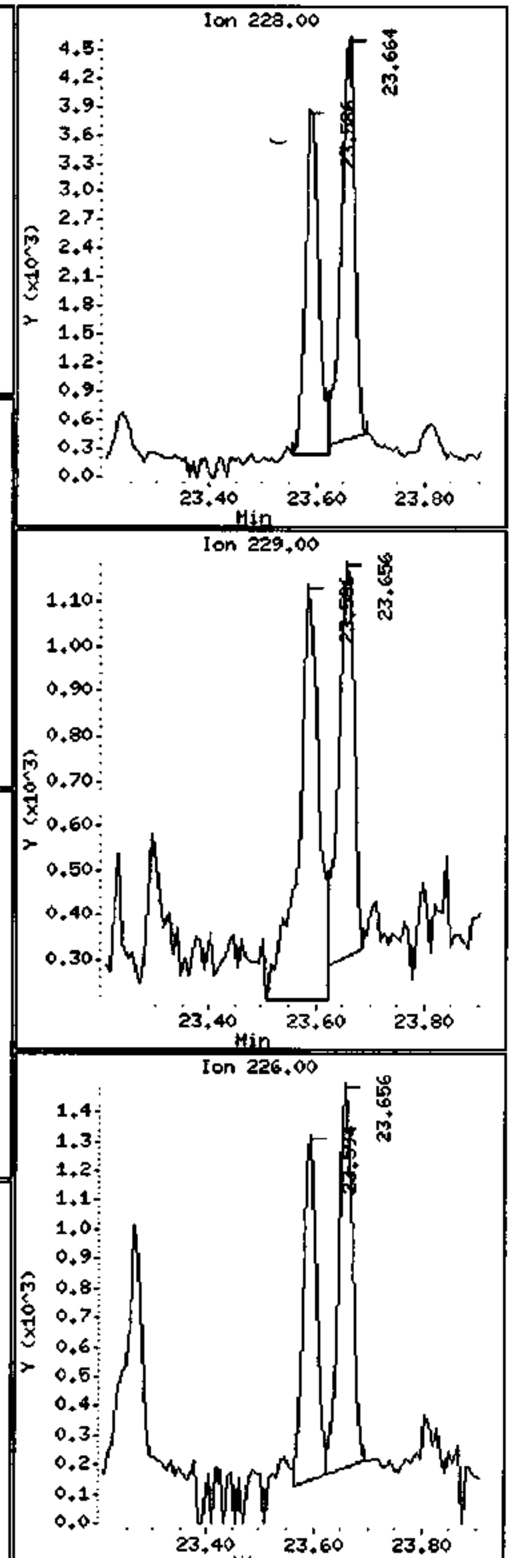
Column phase: ZB-5msi

Column diameter: 0.25

68 Benzo(a)anthracene

Concentration: 11.72 ug/kg





Data File: /chem1/nt10.i/20130216.b/wc33g.d

Date : 16-FEB-2013 20:48

Client ID: HA-09-0-10-013013

Instrument: nt10.i

Sample Info: WC33G

Volume Injected (uL): 1.0

Operator: VTS/YZ

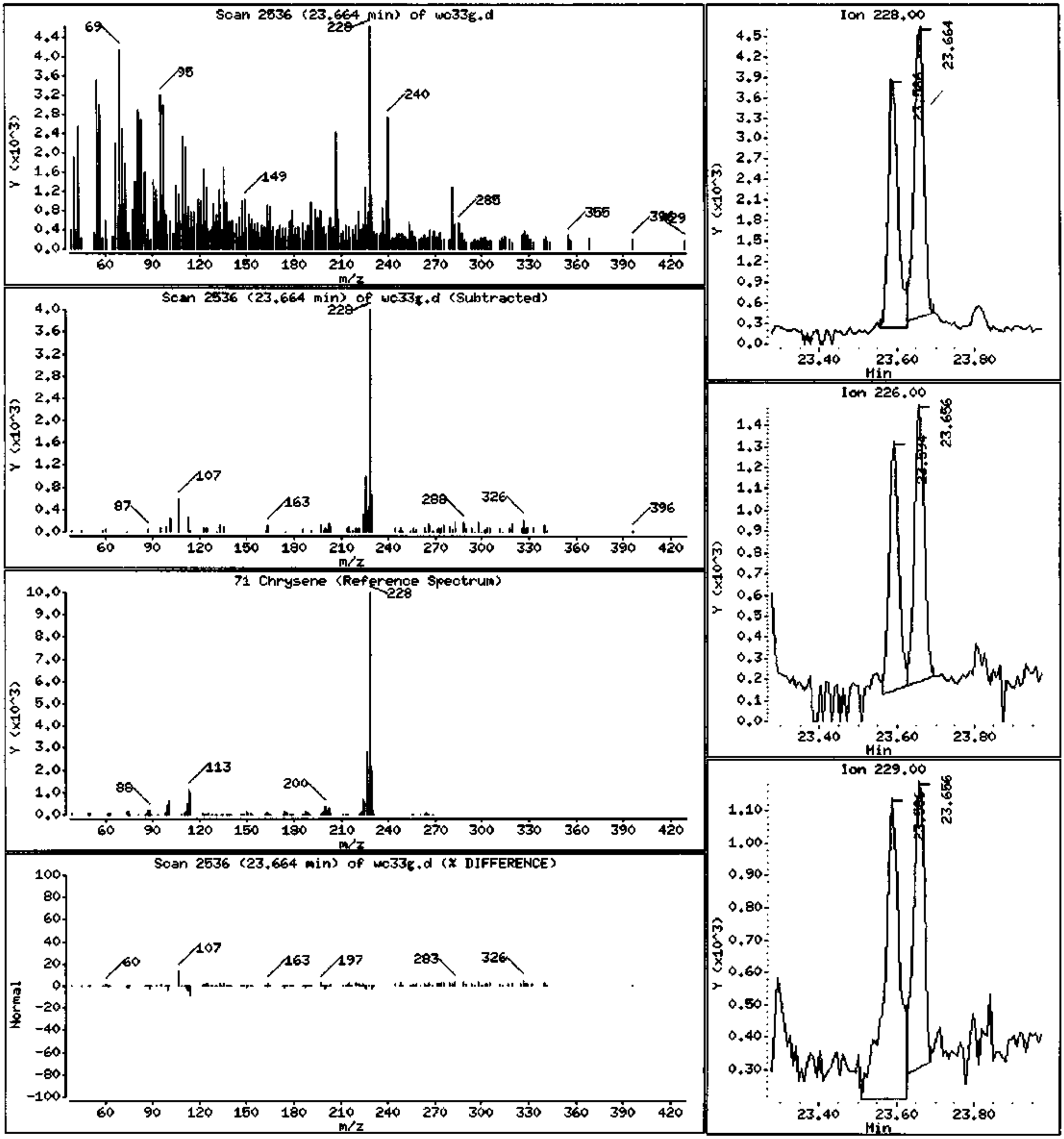
Column phase: ZB-5msi

Column diameter: 0.25

JLRC

71 Chrysene

Concentration: 14.74 ug/kg



Data File: /chem1/nt10.i/20130216.b/wc33g.d

Date : 16-FEB-2013 20:48

Client ID: HA-09-0-10-013013

Instrument: nt10.i

Sample Info: WC33G

Volume Injected (uL): 1.0

Operator: VTS/YZ

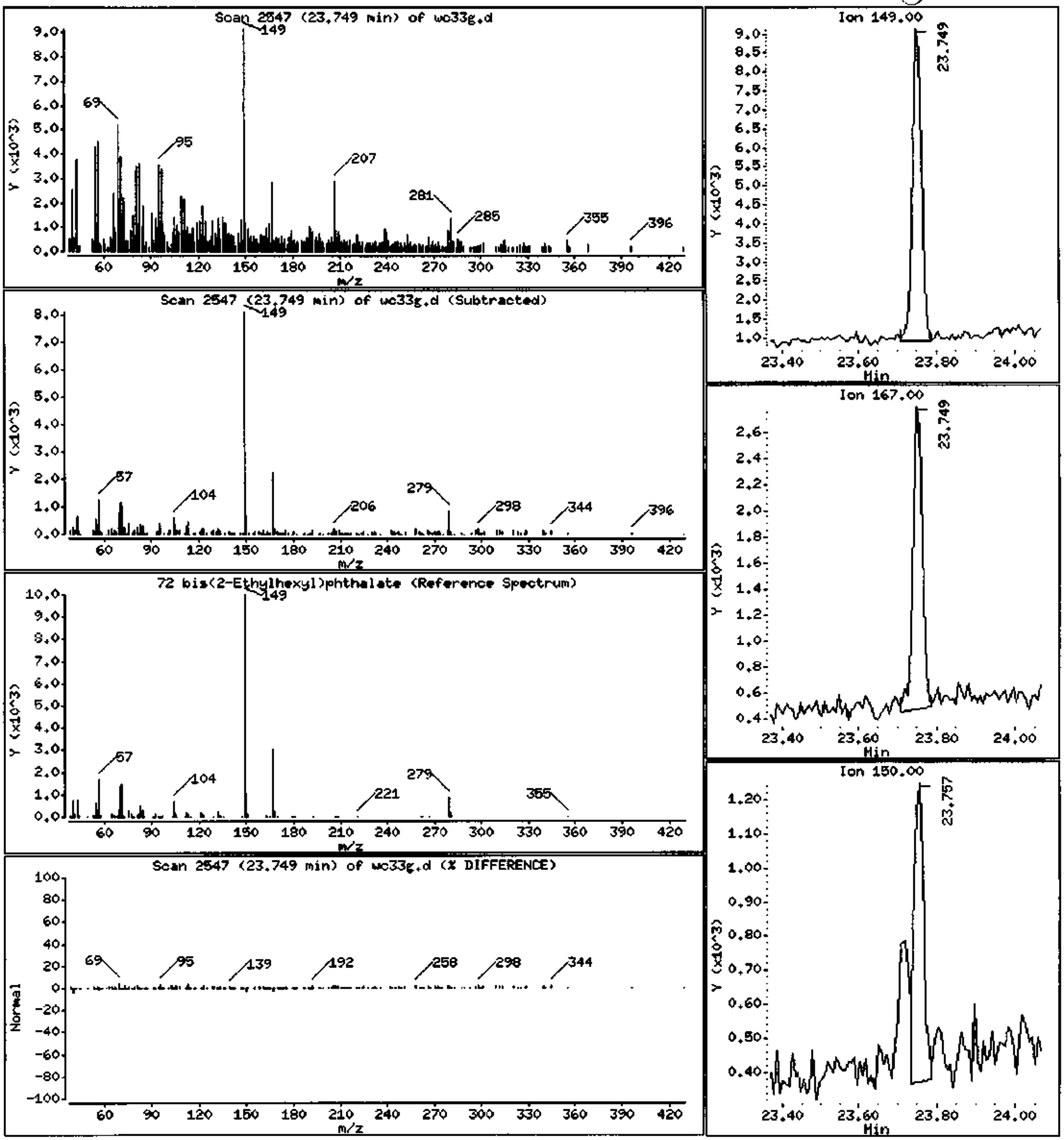
Column phase: ZB-5msi

Column diameter: 0.25

72 bis(2-Ethylhexyl)phthalate

Concentration: 38.26 ug/kg

(B)



Data File: /chem1/nt10.i/20130216.b/wc33g.d

Date : 16-FEB-2013 20:48

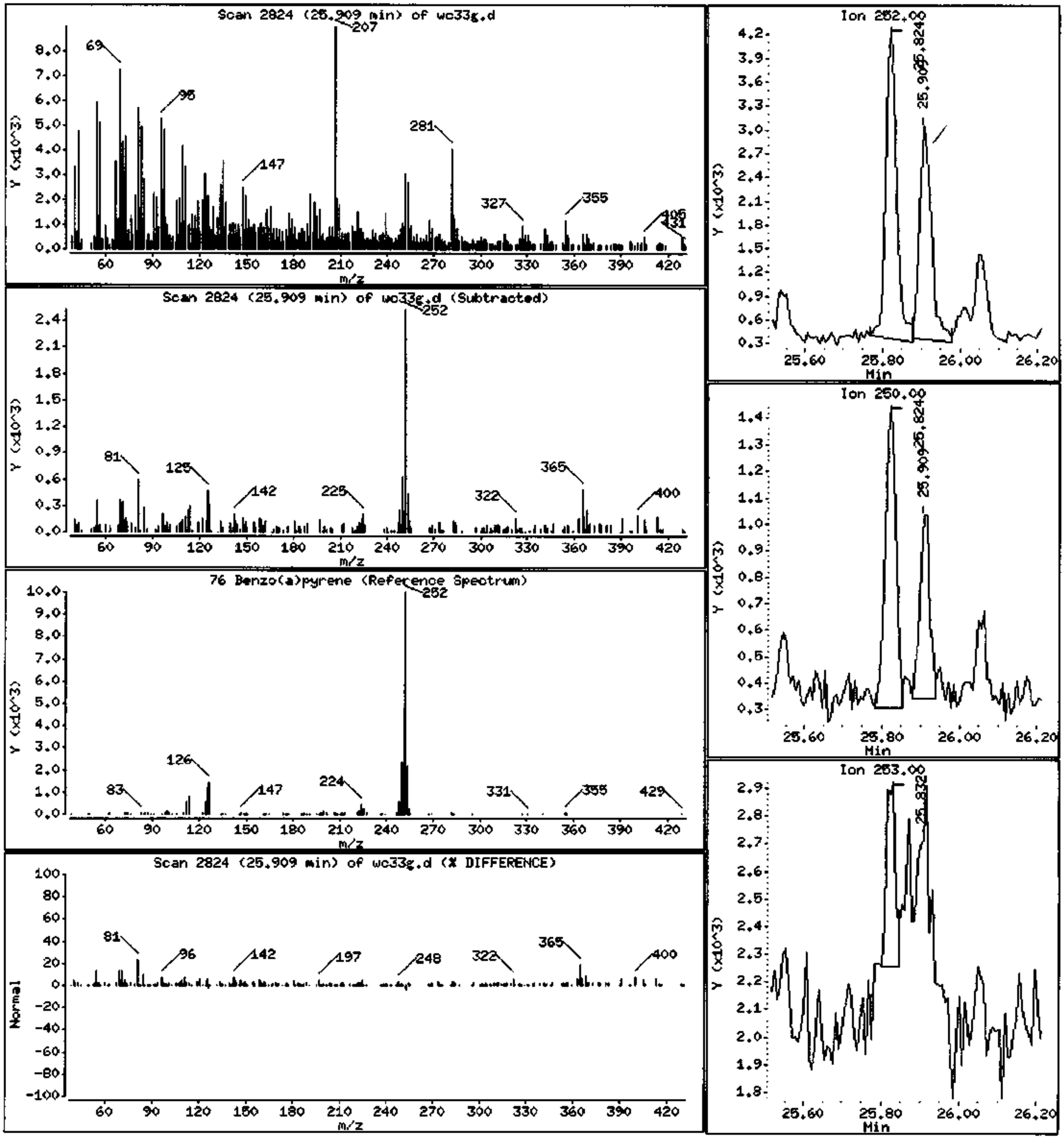
Client ID: HA-09-0-10-013013 Instrument: nt10.i

Sample Info: WC33G

Volume Injected (uL): 1.0 Operator: VTS/YZ

Column phase: ZB-5msi Column diameter: 0.25

76 Benzo(a)pyrene Concentration: 10.87 ug/kg



Data File: /chem1/nt10.i/20130216.b/wc33g.d

Date : 16-FEB-2013 20:48

Client ID: HA-09-0-10-013013

Instrument: nt10.i

Sample Info: WC33G

Volume Injected (uL): 1.0

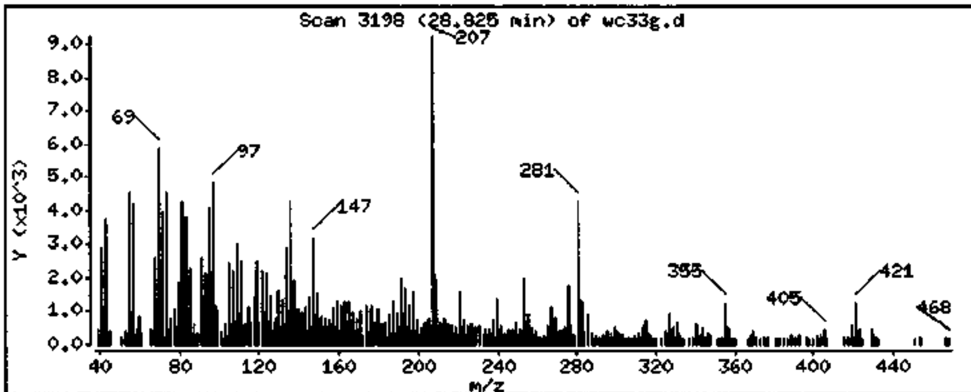
Operator: VTS/YZ

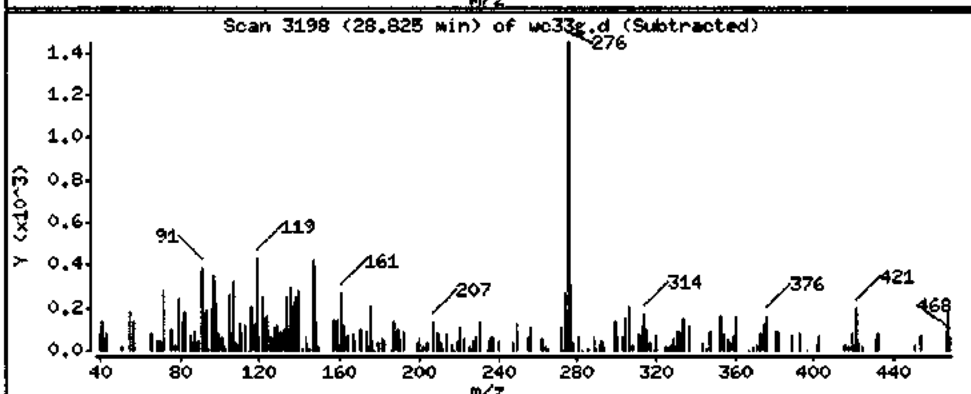
Column phase: ZB-5msi

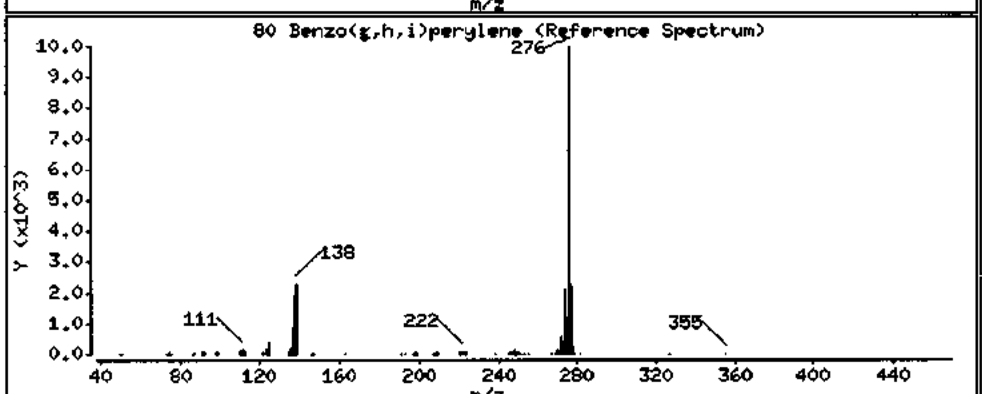
Column diameter: 0.25

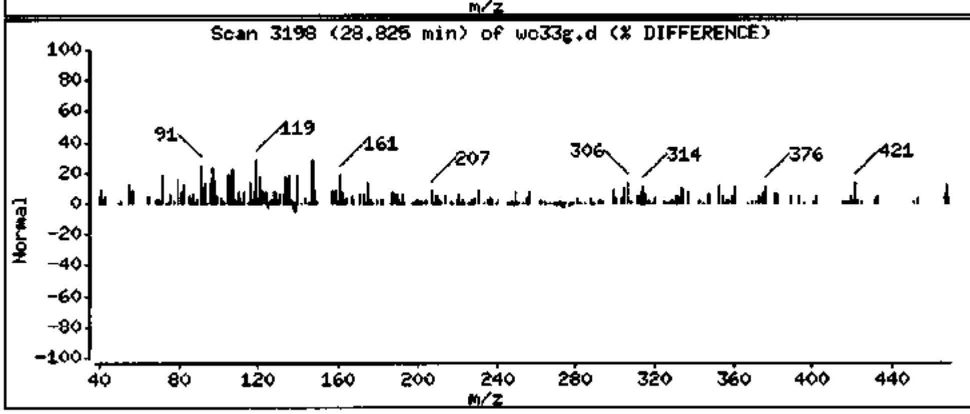
80 Benzo(g,h,i)perylene

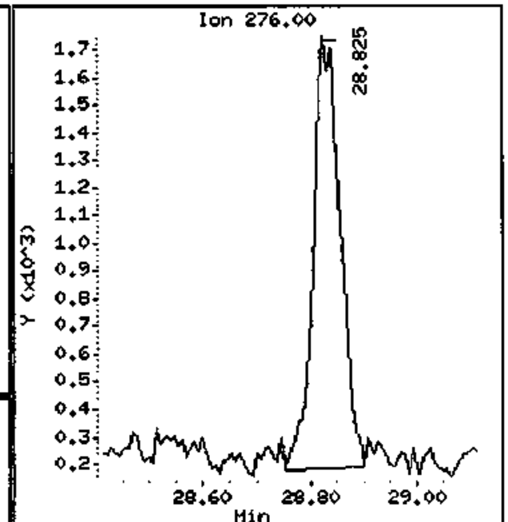
Concentration: 9.526 ug/kg

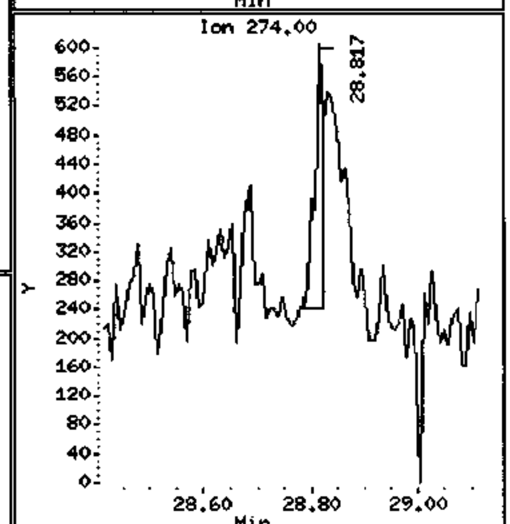


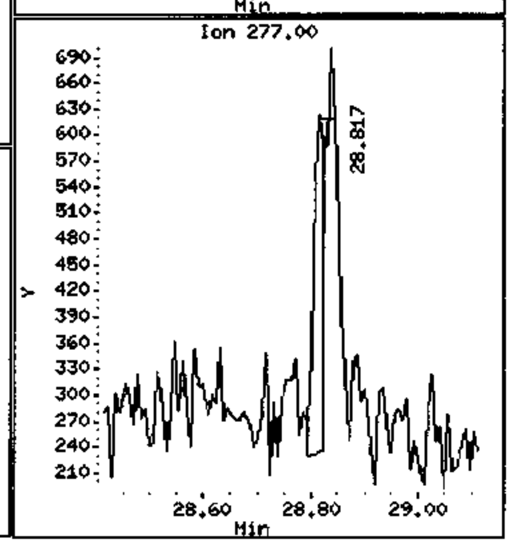












Data File: /chem1/nt10.i/20130216.b/wc33g.d

Date : 16-FEB-2013 20:48

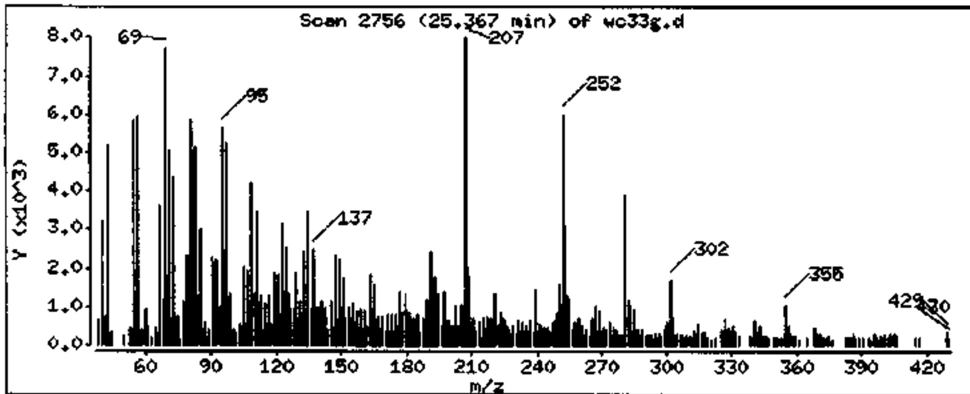
Client ID: HA-09-0-10-013013 Instrument: nt10.i

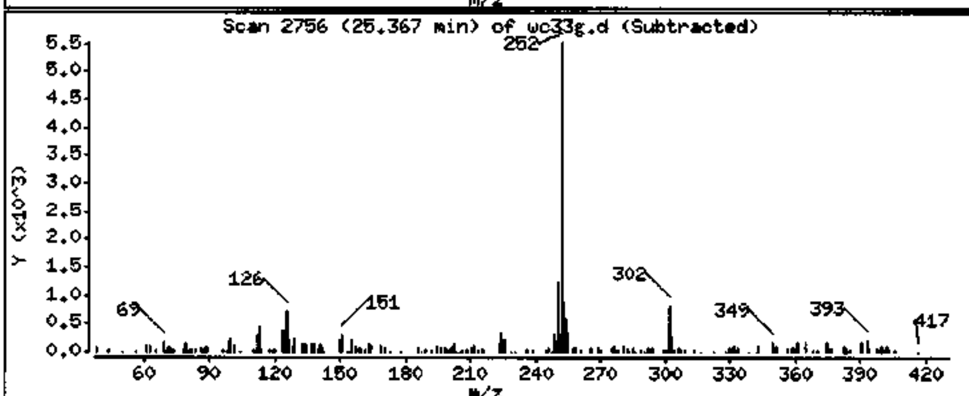
Sample Info: WC33G

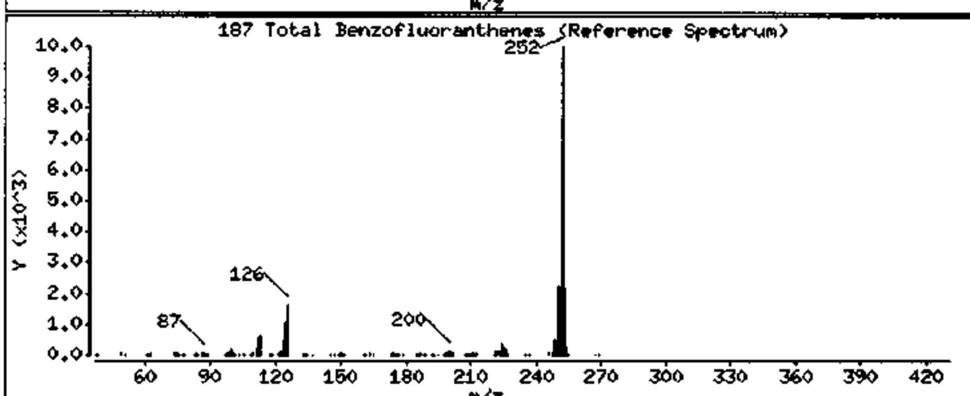
Volume Injected (uL): 1.0 Operator: VTS/YZ

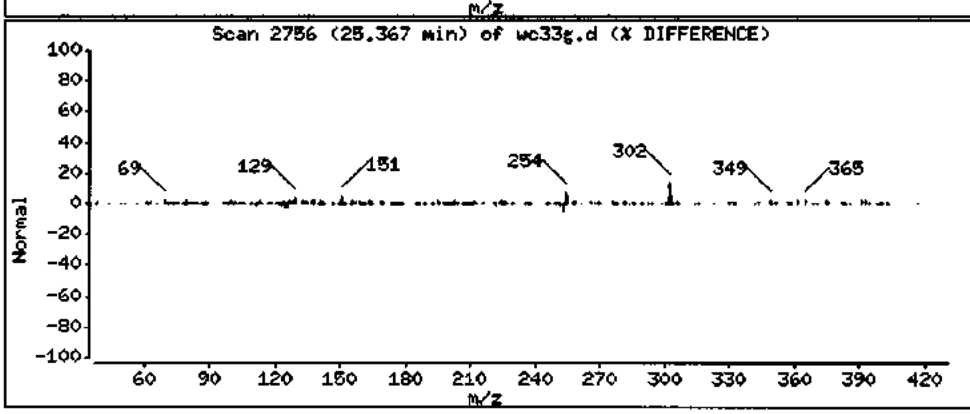
Column phase: ZB-5msi Column diameter: 0.25

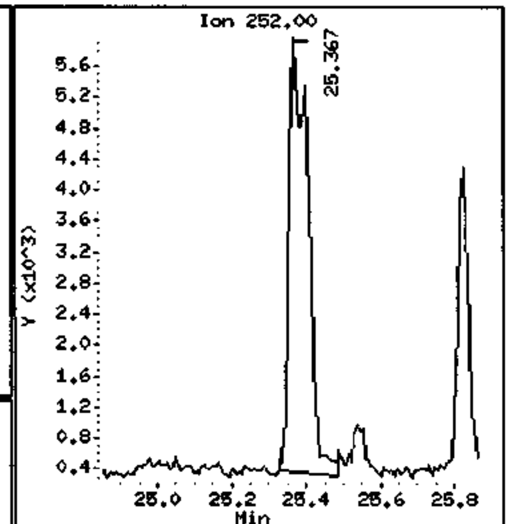
187 Total Benzofluoranthenes Concentration: 31.35 ug/kg

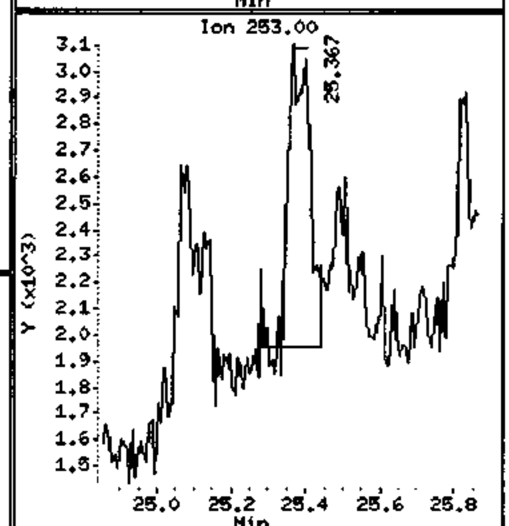


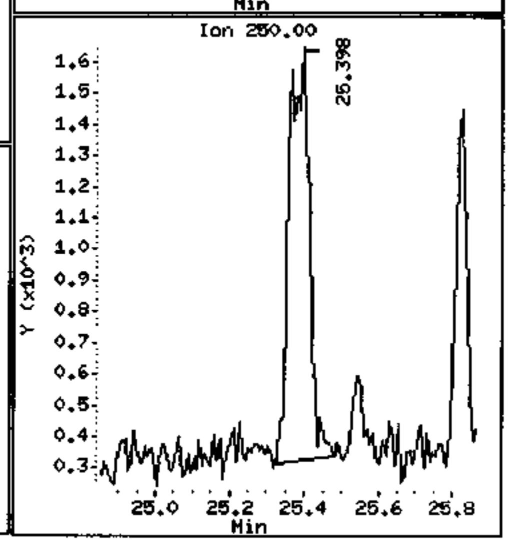












CO-ELUTION SUMMARY FOR FILE - wc33g.d

Lab ID: WC33G, Method: ABN.m, Instrument: nt10.i, Date: 16-FEB-2013

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

SIM Semivolatile Raw Data
Extraction Bench Sheets and Notes

ARI Job ID: WC32, WC33

Incorporated Analytical Chemists and Consultants

(8270D) BAN/SIM SVOA PSDDA–Soil/ Sediment Microwave (3546) (SOP # 3304S)

Preparation Test BAN/SIM SVOA PSDDA # 9 (BANSBANSDMP)

PSDDA (6.7-20ppb)

ARI Job No(s) WC32, WC33   Page 1 of 12   Batch set up by: SP

Bottle #	Extraction Requirements	Weight Extracted (eq. to 10g dry wt)	(REQ) GPC (1:1) 1 or 2	Final Effective Volume	Volume to Lab	Comments	Verify Client ID
	WC32 MBS	10.00g	(1:1) Y/N TH 2/9/13	1mL	1mL	(Use 5g Pre-Deactivated Sodium Sulfate for Blanks)	ML 2/8/13 Analyst/Date; Microwave 1 2 3
	SBS	10.00g	(1:1) Y/N TH 2/10/13	1mL	1mL	(Use 5g Pre-Deactivated Sodium Sulfate for Blanks)	ML 2/8/13 Analyst/Date
	SBS Dup.	10.00g	(1:1) Y/N TH 2/10/13	1mL	1mL	(Use 5g Pre-Deactivated Sodium Sulfate for Blanks)	KD 80-85°C 1 2 3 4 5 6 YH CT
	QLS	10.00g	(1:1) Y/N TH 2/10/13	1mL	1mL	(Use 5g Pre-Deactivated Sodium Sulfate for Blanks)	Analyst/Date 2/9/13
	QLS (SIM)	10.00g	(1:1) Y/N TH 2/10/13	1mL	1mL	(Use 5g Pre-Deactivated Sodium Sulfate for Blanks)	TurboVap 1 2 3
2	A	25.12	(1:1) Y/N TH 2/9/13	1mL	1mL		TH 2/9/13 Analyst/Date
2	B	29.32	(1:1) Y/N TH 2/9/13	1mL	1mL		GPC Prep Filter (1:1)
2	C	13.09	(1:1) Y/N TH 2/9/13	1mL	1mL		TH 2/9/13
2	D	17.26	(1:1) Y/N TH 2/9/13	1mL	1mL		Analyst/Date
2	E ~~E~~ SP 2/8	11.17	(1:1) Y/N TH 2/9/13	1mL	1mL		Post GPC KD 80-85°C 1 2 3 4 5 6
2	F	11.41	(1:1) Y/N TH 2/9/13	1mL	1mL		RP 02/11/13
2	G	20.12	(1:1) Y/N TH 2/9/13	1mL	1mL		Analyst/Date
2	GMS	20.08	(1:1) Y/N	1mL	1mL		TurboVap 1 2 3
Analyst/Date		AC/ML 2/8/13 2-8-13	TH 2/10/13	CJZ 2/11/13	CJZ 2/11/13		CJZ 2/11/13 Analyst/Date

Standard	Standard ID	Concentration	Volume	Expiration Date	Analyst	Witness
Surrogate	A (2047-2)	100/150µg/mL	50µL	7/2/13	ML	AC
Full List Spike (Freezer)	7 (2017-2)	100µg/mL	50µL	3/14/13	ML	AC
Base Spike	56(2065-2)	200µg/mL	50µL	7/31/13	ML	AC
Acid Spike	38(2024-3)	100/150µg/mL	50µL	4/11/13	ML	AC
QLS Spike (14 in Freezer)	14(2032-2)	100/200µg/mL	20µL	4/24/13	ML	AC
SIM QLS Spike (Freezer)	25(2042-5)	1µg/mL	50µL	4/24/13	ML	AC

Extraction Time: 13:45   Balance ID: 38040092

SPECIAL INSTRUCTIONS: 1. Weigh into beakers-lightly dry with Sodium Sulfate. 2. Transfer to microwave vessel. Note: do not fill vessel more than 2/3rd full. Some samples may require two vessels). 3. Add 1:1 DCM/ACE to the vessels (until solvent is 3" above soil layer after homogenization). 4. Add surr/spike. 5. Microwave on appropriate power setting determined by # of samples. 6. After microwave-rehomogenize while hot then let cool 15 min in cold water. Re-homogenize while cool. 7. Decant 1:1 DCM/ACE into Erlenmeyer flask with sodium sulfate in the bottom and funnel containing pre-deactivated glasswool. 8. Rinse with DCM 9. Microwave a 2nd time using DCM only (until solvent is 3" above soil layer after homogenization). 10. Let cool and decant the solvent then empty the soil into the funnel and rinse with DCM. 11. KD (~~small~~ or large drying column with pre-deactivated glasswool-Blanks=5g sulfate)) to 5mL at 80- 85°C. 12. GPC Req. 13. (After GPC): KD at 80-85°. 14. TurboVap. 15. Vial in DCM.

A. Need Total Solids Y/N **~~B. Archive/Freeze Y/N~~**

3093F
Page 1 of 2

13-2430
2451

both jobs SP 2/8

Revision 5
01/02/13

WC32 00004

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Benchsheet

(8270D) BAN/SIM SVOA PSDDA--Soil/ Sediment Microwave (3546) (SOP # 3304S)

Preparation Test BAN/SIM SVOA PSDDA # 9 (BANSBANSDMP)

PSDDA (6.7-20ppb)

ARI Job No(s) WC32, WC33 Page 2 of 2 Batch set up by: SO

Bottle #	Extraction Requirements	Weight Extracted (eq. to 10g dry wt)	(REQ) GPC (1:1) 1 or 2	Final Effective Volume	Volume to Lab	Comments	Verify Client ID
	~~MBS~~	~~10.00g~~	~~(1:1) Y / N~~	~~1mL~~	~~1mL~~	~~(Use 5g Pre-Deactivated Sodium Sulfate for Blanks)~~	M 2/8/13 Analyst/Date
	~~SBS~~	~~10.00g~~	~~(1:1) Y / N~~	~~1mL~~	~~1mL~~	~~(Use 5g Pre-Deactivated Sodium Sulfate for Blanks)~~	Microwave 1 2 3 M 2/8/13 Analyst/Date
	~~SBS Dup.~~	~~10.00g~~	~~(1:1) Y / N~~	~~1mL~~	~~1mL~~	~~(Use 5g Pre-Deactivated Sodium Sulfate for Blanks)~~	KD 80-85°C 1 2 3 4 5 6 YKT
	~~QLS~~	~~10.00g~~	~~(1:1) Y / N~~	~~1mL~~	~~1mL~~	~~(Use 5g Pre-Deactivated Sodium Sulfate for Blanks)~~	Analyst/Date 2/9/13
	~~QLS (SIM)~~	~~10.00g~~	~~(1:1) Y / N~~	~~1mL~~	~~1mL~~	~~(Use 5g Pre-Deactivated Sodium Sulfate for Blanks)~~	TurboVap 1 2 3
2	WC32 G MSD	20.17	(1:1) Y / N TH 2/10/13	1mL	1mL		TH 2/9/13 Analyst/Date
2	↓ H	20.39	(1:1) Y / N TH 2/9/13	1mL	1mL		GPC Prep Filter (1:1)
2	WC33 G	11.25	(1:1) Y / N TH 2/9/13	1mL	1mL		TH 2/9/13
			(1:1) Y / N	1mL	1mL		Analyst/Date
			(1:1) Y / N	1mL	1mL		Post GPC KD 80-85°C 1 2 3 4 5 6
			(1:1) Y / N	1mL	1mL		RR 02/11/13
			(1:1) Y / N	1mL	1mL	CSZ 2/11/13	Analyst/Date
			(1:1) Y / N	1mL	1mL		TurboVap 1 2 3
Analyst/Date		AC 2-8-13 / M 2/8/13	TH 2/10/13	CSZ 2/11/13	CSZ 2/11/13		CSZ 2/11/13 Analyst/Date

Standard	Standard ID	Concentration	Volume	Expiration Date	Analyst	Witness
Surrogate	A (2042-2)	100/150µg/mL	50µL	7/2/13	M	AC
Full List Spike (Freezer)	7 (2017-2)	100µg/mL	50µL	3/14/13	M	AC
Base Spike	56 (2065-2)	200µg/mL	50µL	7/31/13	M	AC
Acid Spike	38 (2024-3)	100/150µg/mL	50µL	4/11/13	M	AC
~~QLS Spike (14 in Freezer)~~	~~14( )~~	~~100/200µg/mL~~	~~20µL~~			
~~SIM-QLS Spike (Freezer)~~	~~25( )~~	~~1µg/mL~~	~~50µL~~			

Extraction Time: 12:45 Balance ID: 38040092

SPECIAL INSTRUCTIONS: 1 . Weigh into beakers-lightly dry with Sodium Sulfate. 2. Transfer to microwave vessel. Note: do not fill vessel more than 2/3rd full. Some samples may require two vessels). 3. Add 1:1 DCM/ACE to the vessels (until solvent is 3" above soil layer after homogenization). 4. Add surr/spike. 5. Microwave on appropriate power setting determined by # of samples. 6. After microwave-rehomogenize while hot then let cool 15 min in cold water. Re-homogenize while cool. 7. Decant 1:1 DCM/ACE into Erlenmeyer flask with sodium sulfate in the bottom and funnel containing pre-deactivated glasswool. 8. Rinse with DCM 9. Microwave a 2nd time using DCM only (until solvent is 3" above soil layer after homogenization). 10. Let cool and decant the solvent then empty the soil into the funnel and rinse with DCM. 11. KD (small or large drying column with pre-deactivated glasswool-Blanks=5g sulfate)) to 5mL at 80- 85°C. 12. GPC Req. 13. (After GPC): KD at 80-85°. 14. TurboVap. 15. Vial in DCM.

A. Need Total Solids Y / N **B. Archive/Freeze Y / N**

SIM Semivolatile Raw Data
Initial Calibration

ARI Job ID: WC32, WC33

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC/MS,SVOA Initial Calibration Notes

SIM ABN

ARI SOP: 801S(SIM-PNA) 802S(Butyl Tins) 804S(SVOA-8270D) 805S(op-Pest)

Instrument: NT-4 NT-6 NT-8 NT-10 NT11 NT12

Curve Date(s): 01/25/13 Internal Standard ID 1998-2 Expiration 07/03/13

DFTPP Tune Meets Criteria? YES / NO

DDT Breakdown <20%? YES / NO

Peak Tailing Factor ≤2? YES / NO

ICal Meets %RSD & r^2 Criteria? YES / NO

Q flag applied? YES / NO

Manual Integrations for ICal? YES / NO

Spectral Library Updated? YES / NO

Minimum Response Factors Met/ YES / NO

ICV Exceeding ±20%? See full scan YES / NO

ICV Exceeding ±30%? YES / NO

Linear Fits Used? YES / NO

Quadratic Fits Used? YES / NO

Calibration Points Dropped? YES / NO

Primary Source	Standard #	Expiration	Secondary Source	Standard #	Expiration
Supelco	2036-2	02/07/13	Ultra	see full scan curve.	
	2050-1	02/07/13			
	2050-2	8/10/13			
	2064-2	09/25/14			
	1998-4	07/03/13			

Detail problems, corrective actions and/or other pertinent information below:

- low point dropped for PCP.

Analyst: YZ Date: 02/06/13

Reviewer: VD Date: 2.6.13

Analytical Resources Inc.: Organics Instrument Log

NT-10 Serial No.:GC=CN10837018, ~~MS=~~ US83131105

Date: 2013/01/25 Analysis: ABN/SIM ABN Analyst: YZ

GC Program: ABN Column No: 247358 Column Type: ZB5msi

Instrument Tune (.U or .CT.): 121204U EM Voltage: 1000

Calibration File: DF0125 Curve Date: 01/25/13 Injection Vol.: 1ul

IS/SS	Ical/Ccal	LCS/ICV
1997-2	2036-2	
	2050-1	
	2060-2	
	2064-2	

Document All Maintenance Tasks In StarLIMS

INTERNAL STANDARD SUMMARY FOR DATABATCH - /chem1/nt10.i/20130125.b

	Time	Filename	LabID	ClientId	DF							
1	1343	df0125.d	DFTPP	DFTPP	1	|NO ISTDS FOUND||						
2	1359	ic0125a.d	IC0125A		1	| 9.09	52229||11.75	195391||15.66	113611||18.94	208917||24.01	237704||26.51	236168|
3	1419	ic0125c.d	IC0125C		1	| 9.09	49909||11.75	188289||15.66	102172||18.94	190705||24.01	214940||26.51	207010|
4	1537	ic0125e.d	IC0125E		1	| 9.09	53653||11.75	200104||15.66	112392||18.94	210710||24.01	240805||26.51	230834|
5	1603	ic0125f.d	IC0125F		1	| 9.09	51792||11.75	191986||15.66	110215||18.94	205875||24.01	242032||26.51	234305|
6	1640	ic0125g.d	IC0125G		1	| 9.09	51364||11.75	189071||15.66	102169||18.94	186737||24.01	216735||26.51	211470|
7	1716	ic0125h.d	IC0125H		1	| 9.09	50086||11.75	188224||15.66	104410||18.94	198157||24.01	227319||26.51	219891|
8	1753	ic0125i.d	IC0125I		1	| 9.09	52436||11.75	194910||15.66	105806||18.94	194974||24.01	224584||26.51	218050|

YZ 02/01/13

Every line must contain information or be lined out. Make all entries legible.
Start a new page for each QC period. Document All Maintenance Tasks In StarLIMS

Report Date : 06-Feb-2013 11:08

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem1/nt10.i/20130125.b/SIM.b/SIMABN2.m
Batch File: /chem1/nt10.i/20130125.b/SIM.b
Inst ID: nt10.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	ic0125a	ic0125c	ic0125e	ic0125f	ic0125g	ic0125h	ic0125i
INJ.DATE:	25-JAN-2013	25-JAN-2013	25-JAN-2013	25-JAN-2013	25-JAN-2013	25-JAN-2013	25-JAN-2013
INJ.TIME:	12:59	14:13	15:27	16:03	16:40	17:16	17:53

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
$ 1 2-Fluorophenol	6.724	6.725	6.725	6.725	6.725	6.725	6.725	6.724	6.224-7.224	6.725	0.000
138 Chlorobenzilate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	33.580	33.080-34.080	+++++	+++++
139 Isodrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	30.873	30.373-31.373	+++++	+++++
140 Diallate A	+++++	+++++	+++++	+++++	+++++	+++++	+++++	31.300	30.800-31.800	+++++	+++++
141 Diallate B	+++++	+++++	+++++	+++++	+++++	+++++	+++++	31.300	30.800-31.800	+++++	+++++
142 1,2-Dibromo-3-Chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.496	14.996-15.996	+++++	+++++
135 2,3,5,6-Tetrachlorophe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.428	19.928-20.928	+++++	+++++
136 2,3,4,5-tetrachlorophe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.471	19.971-20.971	+++++	+++++
137 NewCpnd_131	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.612	7.112-8.112	+++++	+++++
* 134 Di-n-octylphthalate-d4	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.900	16.400-17.400	+++++	+++++
133 Butylatedhydroxytoluen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.190	13.690-14.690	+++++	+++++
132 3,6-Dimethylphenanthre	+++++	+++++	+++++	+++++	+++++	+++++	+++++	31.262	30.762-31.762	+++++	+++++
131 1-Methylphenanthrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	30.196	29.696-30.696	+++++	+++++
146 Benzo(j)fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.852	23.352-24.352	+++++	+++++
130 Dibenzothiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	27.862	27.362-28.362	+++++	+++++
129 1-Methylfluorene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.566	20.066-21.066	+++++	+++++
128 N-Hexadecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.855	19.355-20.355	+++++	+++++

Reviewer 1 YZ Date: 02/06/13
Reviewer 2 VD Date: 2.6.13

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem1/nt10.i/20130125.b/SIM.b/SIMABN2.m
Batch File: /chem1/nt10.i/20130125.b/SIM.b
Inst ID: nt10.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	108 4,5,6-Trichloroguaiaco	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.517	16.017-17.017	+++++	+++++
	107 4,5-Dichloro-2-Methoxy	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.934	14.434-15.434	+++++	+++++
	106 Guaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.843	11.343-12.343	+++++	+++++
	105 1-methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.826	10.326-11.326	+++++	+++++
$	2 Phenol-d5	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.886	6.386-7.386	+++++	+++++
	3 Phenol	8.463	8.456	8.456	8.456	8.456	8.456	8.456	8.463	7.963-8.963	8.457	0.003
	4 Bis(2-Chloroethyl)ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.268	7.768-8.768	+++++	+++++
$	5 2-Chlorophenol-d4	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.087	6.587-7.587	+++++	+++++
	6 2-Chlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.592	8.092-9.092	+++++	+++++
	7 1,3-Dichlorobenzene	9.020	9.012	9.012	9.020	9.012	9.013	9.012	9.020	8.520-9.520	9.015	0.004
*	8 1,4-Dichlorobenzene-d4	9.090	9.090	9.090	9.090	9.090	9.090	9.082	9.090	8.590-9.590	9.089	0.003
	9 1,4-Dichlorobenzene	9.121	9.121	9.121	9.121	9.121	9.121	9.113	9.121	8.621-9.621	9.120	0.003
$	10 1,2-Dichlorobenzene-d4	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.656	7.156-8.156	+++++	+++++
	11 Benzyl alcohol	9.392	9.392	9.392	9.392	9.392	9.393	9.392	9.392	8.892-9.892	9.392	0.000
	12 1,2-Dichlorobenzene	9.501	9.501	9.501	9.501	9.501	9.494	9.493	9.501	9.001-10.001	9.499	0.004
	13 2-Methylphenol	9.648	9.649	9.649	9.648	9.649	9.649	9.649	9.648	9.148-10.148	9.649	0.000
	14 2,2'-oxybis(1-Chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.966	8.466-9.466	+++++	+++++
	15 4-Methylphenol	9.943	9.944	9.944	9.943	9.944	9.936	9.936	9.943	9.443-10.443	9.941	0.004
	16 N-Nitroso-di-n-propyla	10.005	9.998	9.998	9.998	9.998	9.998	9.998	10.005	9.505-10.505	9.999	0.003
	17 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.274	8.774-9.774	+++++	+++++
$	18 Nitrobenzene-d5	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.237	7.737-8.737	+++++	+++++
	19 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.618	8.118-9.118	+++++	+++++
	20 Isophorone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.987	8.487-9.487	+++++	+++++
	21 2-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.356	8.856-9.856	+++++	+++++

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem1/nt10.i/20130125.b/SIM.b/SIMABN2.m
Batch File: /chem1/nt10.i/20130125.b/SIM.b
Inst ID: nt10.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
22 2,4-Dimethylphenol	11.068	11.068	11.068	11.068	11.068	11.068	11.068	11.068	10.568-11.568	11.068	0.000
23 Bis(2-Chloroethoxy)met	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.356	8.856-9.856	+++++	+++++
24 Benzoic acid	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.248	9.748-10.748	+++++	+++++
25 2,4-Dichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.500	9.000-10.000	+++++	+++++
26 1,2,4-Trichlorobenzene	11.669	11.669	11.669	11.669	11.669	11.669	11.669	11.669	11.169-12.169	11.669	0.000
* 27 Naphthalene-d8	11.754	11.754	11.754	11.754	11.754	11.754	11.754	11.754	11.254-12.254	11.754	0.000
28 Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.480	8.980-9.980	+++++	+++++
29 4-Chloroaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.911	9.411-10.411	+++++	+++++
30 Hexachlorobutadiene	12.209	12.210	12.210	12.209	12.210	12.210	12.210	12.209	11.709-12.709	12.210	0.000
31 4-Chloro-3-methylpheno	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.301	9.801-10.801	+++++	+++++
32 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.826	10.326-11.326	+++++	+++++
33 Hexachlorocyclopentadi	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.194	10.694-11.694	+++++	+++++
34 2,4,6-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.019	10.519-11.519	+++++	+++++
35 2,4,5-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.386	10.886-11.886	+++++	+++++
$ 36 2-Fluorobiphenyl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.091	10.591-11.591	+++++	+++++
37 2-Chloronaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.600	11.100-12.100	+++++	+++++
38 2-Nitroaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.805	11.305-12.305	+++++	+++++
39 Dimethylphthalate	15.173	15.166	15.166	15.173	15.166	15.166	15.166	15.173	14.673-15.673	15.168	0.004
40 Acenaphthylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.232	11.732-12.732	+++++	+++++
41 2,6-Dinitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.177	11.677-12.677	+++++	+++++
* 42 Acenaphthene-d10	15.661	15.661	15.661	15.661	15.661	15.661	15.661	15.661	15.161-16.161	15.661	0.000
43 3-Nitroaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.508	12.008-13.008	+++++	+++++
44 Acenaphthene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.578	12.078-13.078	+++++	+++++

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem1/nt10.i/20130125.b/SIM.b/SIMABN2.m
Batch File: /chem1/nt10.i/20130125.b/SIM.b
Inst ID: nt10.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	45 2,4-Dinitrophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.660	12.160-13.160	+++++	+++++
	46 Dibenzofuran	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.756	12.256-13.256	+++++	+++++
	47 4-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.867	12.367-13.367	+++++	+++++
	48 2,4-Dinitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.055	12.555-13.555	+++++	+++++
	49 Fluorene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.248	12.748-13.748	+++++	+++++
	50 Diethylphthalate	16.766	16.751	16.759	16.759	16.751	16.759	16.751	16.766	16.266-17.266	16.757	0.006
	51 4-Chlorophenyl-phenyle	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.368	13.868-14.868	+++++	+++++
	52 4-Nitroaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.466	12.966-13.966	+++++	+++++
	53 4,6-Dinitro-2-methylph	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.587	13.087-14.087	+++++	+++++
	54 N-Nitrosodiphenylamine	17.152	17.145	17.153	17.152	17.153	17.145	17.153	17.152	16.652-17.652	17.150	0.004
$	55 2,4,6-Tribromophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.476	12.976-13.976	+++++	+++++
	56 4-Bromophenyl-phenylet	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.191	13.691-14.691	+++++	+++++
	57 Hexachlorobenzene	18.286	18.279	18.279	18.286	18.279	18.279	18.279	18.286	17.786-18.786	18.281	0.004
	58 Pentachlorophenol	18.681	18.674	18.674	18.673	18.674	18.674	18.674	18.681	18.181-19.181	18.675	0.003
*	59 Phenanthrene-d10	18.944	18.937	18.937	18.936	18.937	18.937	18.937	18.944	18.444-19.444	18.938	0.003
	60 Phenanthrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.008	14.508-15.508	+++++	+++++
	61 Anthracene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.008	14.508-15.508	+++++	+++++
	62 Carbazole	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.286	14.786-15.786	+++++	+++++
	63 Di-n-butylphthalate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.761	15.261-16.261	+++++	+++++
	64 Fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.867	16.367-17.367	+++++	+++++
	65 Pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.445	16.945-17.945	+++++	+++++
$	66 Terphenyl-d14	22.132	22.132	22.132	22.132	22.132	22.132	22.132	22.132	21.632-22.632	22.132	0.000
	67 Butylbenzylphthalate	23.076	23.077	23.077	23.077	23.077	23.077	23.077	23.076	22.576-23.576	23.077	0.000
	68 Benzo(a)anthracene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.250	18.750-19.750	+++++	+++++

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem1/nt10.i/20130125.b/SIM.b/SIMABN2.m
Batch File: /chem1/nt10.i/20130125.b/SIM.b
Inst ID: nt10.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
*	69 Chrysene-d12	24.013	24.006	24.006	24.006	24.006	24.006	24.006	24.013	23.513-24.513	24.007	0.003
	70 3,3'-Dichlorobenzidine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.185	19.685-20.685	+++++	+++++
	71 Chrysene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.339	19.839-20.839	+++++	+++++
	72 bis(2-Ethylhexyl)phtha	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.411	18.911-19.911	+++++	+++++
	73 Di-n-octylphthalate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.324	19.824-20.824	+++++	+++++
	74 Benzo(b)fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.144	20.644-21.644	+++++	+++++
	75 Benzo(k)fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.144	20.644-21.644	+++++	+++++
	76 Benzo(a)pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.382	21.882-22.882	+++++	+++++
*	77 Perylene-d12	26.514	26.507	26.507	26.506	26.507	26.507	26.507	26.514	26.014-27.014	26.508	0.003
	78 Indeno(1,2,3-cd)pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	24.378	23.878-24.878	+++++	+++++
	79 Dibenzo(a,h)anthracene	28.962	28.947	28.947	28.955	28.955	28.947	28.947	28.962	28.462-29.462	28.951	0.006
	80 Benzo(g,h,i)perylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	25.162	24.662-25.662	+++++	+++++
$	85 p-Cresol-d4	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.238	16.738-17.738	+++++	+++++
$	86 Anthracene-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	29.316	28.816-29.816	+++++	+++++
$	87 Fluoranthene-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	26.007	25.507-26.507	+++++	+++++
$	88 Dibenz(a,h)anthracene-	+++++	+++++	+++++	+++++	+++++	+++++	+++++	44.609	44.109-45.109	+++++	+++++
$	89 Diphenyl-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.597	16.097-17.097	+++++	+++++
	90 N-Nitrosodimethylamine	4.447	4.455	4.447	4.439	4.462	4.447	4.455	4.447	3.947-4.947	4.450	0.008
	91 Aniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.897	7.397-8.397	+++++	+++++
	92 1,2-Diphenylhydrazine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.833	21.333-22.333	+++++	+++++
	93 Benzidine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.896	14.396-15.396	+++++	+++++
$	95 D10-1-methylnaphthalen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.686	17.186-18.186	+++++	+++++
	96 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.819	14.319-15.319	+++++	+++++
	97 Caffeine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	26.950	26.450-27.450	+++++	+++++

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 25-JAN-2013 12:59
End Cal Date : 25-JAN-2013 17:53
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/nt10.i/20130125.b/SIM.b/SIMABN2.m
Cal Date : 06-Feb-2013 10:56 yev
Curve Type : Average

Calibration File Names:
Level 1: /chem1/nt10.i/20130125.b/SIM.b/ic0125g.d
Level 2: /chem1/nt10.i/20130125.b/SIM.b/ic0125i.d
Level 3: /chem1/nt10.i/20130125.b/SIM.b/ic0125c.d
Level 4: /chem1/nt10.i/20130125.b/SIM.b/ic0125h.d
Level 5: /chem1/nt10.i/20130125.b/SIM.b/ic0125e.d
Level 6: /chem1/nt10.i/20130125.b/SIM.b/ic0125f.d
Level 7: /chem1/nt10.i/20130125.b/SIM.b/ic0125a.d

Compound	0.05000 Level 1 / 5.000 Level 7	0.10000 Level 2	0.20000 Level 3	0.50000 Level 4	1.000 Level 5	2.500 Level 6	RRF	% RSD
138 Chlorobenzilate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
139 Isodrin	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
140 Diallate A	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
141 Diallate B	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
142 1,2-Dibromo-3-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
135 2,3,5,6-Tetrachlorophenol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

Analytical Resources, Inc.

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Cal Date : 06-Feb-2013 10:56 yev
Curve Type : Average

Compound	0.05000 Level 1	0.10000 Level 2	0.20000 Level 3	0.50000 Level 4	1.000 Level 5	2.500 Level 6	5.000 Level 7	RRF	% RSD
111 Azobenzene (1,2-DP-Hydrazine)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
110 Tetrachloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
109 3,4,5-Trichloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
108 4,5,6-Trichloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
107 4,5-Dichloro-2-Methoxyphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
106 Guaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
105 1-methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
3 Phenol	1.60112	1.52637	1.74838	1.60284	1.64321	1.57901	1.61268	1.61623	4.232
4 Bis(2-Chloroethyl)ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 25-JAN-2013 12:59
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Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/nt10.i/20130125.b/SIM.b/SIMABN2.m
Cal Date : 06-Feb-2013 10:56 yev
Curve Type : Average

Compound	0.05000 Level 1	0.10000 Level 2	0.20000 Level 3	0.50000 Level 4	1.000 Level 5	2.500 Level 6	5.000 Level 7	RRF	% RSD
6 2-Chlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
7 1,3-Dichlorobenzene	1.69924	1.64308	1.78325	1.62856	1.58654	1.50818	1.51223	1.62301	6.095
9 1,4-Dichlorobenzene	1.69301	1.66292	1.78004	1.62057	1.57859	1.50230	1.50526	1.62039	6.249
11 Benzyl alcohol	0.90024	0.89553	1.03348	0.93839	0.97606	0.95672	1.00311	0.95765	5.338
12 1,2-Dichlorobenzene	1.59489	1.56528	1.69108	1.52681	1.50484	1.42878	1.42882	1.53436	6.090
13 2-Methylphenol	1.16190	1.14268	1.33403	1.20848	1.24301	1.19836	1.22450	1.21614	5.135
14 2,2'-oxybis(1-Chloropropane)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
15 4-Methylphenol	1.15567	1.17320	1.37170	1.26247	1.28580	1.26635	1.30063	1.25940	5.911
16 N-Nitroso-di-n-propylamine	0.76162	0.75518	0.86197	0.78377	0.80174	0.77595	0.80155	0.79168	4.521

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

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Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/nt10.i/20130125.b/SIM.b/SIMABN2.m
Cal Date : 06-Feb-2013 10:56 yev
Curve Type : Average

Compound	0.05000 Level 1 / 5.000 Level 7	0.10000 Level 2	0.20000 Level 3	0.50000 Level 4	1.000 Level 5	2.500 Level 6	RRF	% RSD
17 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
19 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
20 Isophorone	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
21 2-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
22 2,4-Dimethylphenol	0.31692	0.31658	0.38216	0.34344	0.35756	0.34627		
	0.35080						0.34482	6.669
23 Bis(2-Chloroethoxy)methane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
24 Benzoic acid	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
25 2,4-Dichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
26 1,2,4-Trichlorobenzene	0.37531	0.42340	0.40002	0.37262	0.35731	0.33826		
	0.33970						0.37237	8.375

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 25-JAN-2013 12:59
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Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/nt10.i/20130125.b/SIM.b/SIMABN2.m
Cal Date : 06-Feb-2013 10:56 yev
Curve Type : Average

Compound	0.05000 Level 1 / 5.000 Level 7	0.10000 Level 2	0.20000 Level 3	0.50000 Level 4	1.000 Level 5	2.500 Level 6	RRF	% RSD
28 Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
29 4-Chloroaniline	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
30 Hexachlorobutadiene	0.23652	0.22579	0.24621	0.22237	0.22210	0.21458		
	0.21490						0.22607	5.111
31 4-Chloro-3-methylphenol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
32 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
33 Hexachlorocyclopentadiene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
34 2,4,6-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
35 2,4,5-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
37 2-Chloronaphthalene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 25-JAN-2013 12:59
End Cal Date : 25-JAN-2013 17:53
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/nt10.i/20130125.b/SIM.b/SIMABN2.m
Cal Date : 06-Feb-2013 10:56 yev
Curve Type : Average

Compound	0.05000 Level 1 / 5.000 Level 7	0.10000 Level 2	0.20000 Level 3	0.50000 Level 4	1.000 Level 5	2.500 Level 6	RRF	% RSD
38 2-Nitroaniline	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
39 Dimethylphthalate	1.17609	1.16303	1.33970	1.21060	1.23293	1.19830		
	1.20338						1.21772	4.796
40 Acenaphthylene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
41 2,6-Dinitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
43 3-Nitroaniline	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
44 Acenaphthene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
45 2,4-Dinitrophenol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
46 Dibenzofuran	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
47 4-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 25-JAN-2013 12:59
End Cal Date : 25-JAN-2013 17:53
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/nt10.i/20130125.b/SIM.b/SIMABN2.m
Cal Date : 06-Feb-2013 10:56 yev
Curve Type : Average

Compound	0.05000 Level 1	0.10000 Level 2	0.20000 Level 3	0.50000 Level 4	1.000 Level 5	2.500 Level 6	5.000 Level 7	RRF	% RSD
48 2,4-Dinitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
49 Fluorene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
50 Diethylphthalate	1.31938	1.46232	1.57851	1.40819	1.42654	1.36955	1.39419	1.42267	5.767
51 4-Chlorophenyl-phenylether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
52 4-Nitroaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
53 4,6-Dinitro-2-methylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
54 N-Nitrosodiphenylamine	0.39457	0.42221	0.51525	0.47679	0.49727	0.47639	0.47257	0.46501	9.075
56 4-Bromophenyl-phenylether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
57 Hexachlorobenzene	0.31360	0.30650	0.32868	0.30824	0.29576	0.28022	0.28438	0.30248	5.609

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 25-JAN-2013 12:59
End Cal Date : 25-JAN-2013 17:53
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/nt10.i/20130125.b/SIM.b/SIMABN2.m
Cal Date : 06-Feb-2013 10:56 yev
Curve Type : Average

Compound	0.05000 Level 1	0.10000 Level 2	0.20000 Level 3	0.50000 Level 4	1.000 Level 5	2.500 Level 6	RRF	% RSD
	5.000 Level 7							
58 Pentachlorophenol	+++++	0.12822	0.16890	0.16825	0.19297	0.20079		
	0.21278						0.17865	16.990
60 Phenanthrene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
61 Anthracene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
62 Carbazole	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
63 Di-n-butylphthalate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
64 Fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
65 Pyrene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
67 Butylbenzylphthalate	0.32371	0.31511	0.40430	0.35715	0.40988	0.41311		
	0.45304						0.38233	13.412
68 Benzo(a)anthracene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 25-JAN-2013 12:59
End Cal Date : 25-JAN-2013 17:53
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/nt10.i/20130125.b/SIM.b/SIMABN2.m
Cal Date : 06-Feb-2013 10:56 yev
Curve Type : Average

Compound	0.05000 Level 1	0.10000 Level 2	0.20000 Level 3	0.50000 Level 4	1.000 Level 5	2.500 Level 6	RRF	% RSD
	5.000 Level 7							
70 3,3'-Dichlorobenzidine	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
71 Chrysene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
72 bis(2-Ethylhexyl)phthalate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
73 Di-n-octylphthalate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
74 Benzo(b)fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
75 Benzo(k)fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
76 Benzo(a)pyrene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
78 Indeno(1,2,3-cd)pyrene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
79 Dibenzo(a,h)anthracene	0.87048	0.83963	1.02783	0.94620	1.00403	0.97443		
	1.01114						0.95339	7.630

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 25-JAN-2013 12:59
End Cal Date : 25-JAN-2013 17:53
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/nt10.i/20130125.b/SIM.b/SIMABN2.m
Cal Date : 06-Feb-2013 10:56 yev
Curve Type : Average

Compound	0.05000 Level 1	0.10000 Level 2	0.20000 Level 3	0.50000 Level 4	1.000 Level 5	2.500 Level 6	RRF	% RSD
	5.000 Level 7							
80 Benzo(g,h,i)perylene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
90 N-Nitrosodimethylamine	0.75150	0.74984	0.81528	0.75422	0.74778	0.72923		
	0.76758						0.75935	3.573
91 Aniline	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
92 1,2-Diphenylhydrazine	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
93 Benzidine	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
96 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
97 Caffeine	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
98 Retene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
99 Perylene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 25-JAN-2013 12:59
End Cal Date : 25-JAN-2013 17:53
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/nt10.i/20130125.b/SIM.b/SIMABN2.m
Cal Date : 06-Feb-2013 10:56 yev
Curve Type : Average

Compound	0.05000 Level 1 / 5.000 Level 7	0.10000 Level 2	0.20000 Level 3	0.50000 Level 4	1.000 Level 5	2.500 Level 6	RRF	% RSD
100 3-beta-Coprostanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
101 Cholesterol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
102 beta-Sitosterol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
103 Pyridine	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
$ 1 2-Fluorophenol	1.24134	1.21896	1.38853	1.25752	1.27874	1.24084		
	1.28235						1.27261	4.382
$ 145 d8-1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
$ 2 Phenol-d5	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
$ 5 2-Chlorophenol-d4	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
$ 10 1,2-Dichlorobenzene-d4	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 25-JAN-2013 12:59
End Cal Date : 25-JAN-2013 17:53
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/nt10.i/20130125.b/SIM.b/SIMABN2.m
Cal Date : 06-Feb-2013 10:56 yev
Curve Type : Average

Compound	0.05000 Level 1 / 5.000 Level 7	0.10000 Level 2	0.20000 Level 3	0.50000 Level 4	1.000 Level 5	2.500 Level 6	RRF	% RSD
$ 18 Nitrobenzene-d5	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
$ 36 2-Fluorobiphenyl	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
$ 55 2,4,6-Tribromophenol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
$ 66 Terphenyl-d14	0.49609	0.58017	0.57746	0.51719	0.52937	0.50011		
	0.52003						0.53149	6.455
$ 85 p-Cresol-d4	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
$ 86 Anthracene-d10	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
$ 87 Fluoranthene-d10	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
$ 88 Dibenz(a,h)anthracene-d14	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
$ 89 Diphenyl-d10	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

Analytical Resources, Inc.

METHOD 8270D-SIM

YZ 02/06/13

Data file : /chem1/nt10.i/20130125.b/SIM.b/ic0125a.d
Lab Smp Id: IC0125A
Inj Date : 25-JAN-2013 12:59
Operator : VTS/YZ Inst ID: nt10.i
Smp Info : IC0125A
Misc Info :
Comment :
Method : /chem1/nt10.i/20130125.b/SIM.b/SIMABN2.m
Meth Date : 06-Feb-2013 11:08 yev Quant Type: ISTD
Cal Date : 25-JAN-2013 12:59 Cal File: ic0125a.d
Als bottle: 2 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 3.50

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.724	6.725	(0.740)	83720	5.00000	5.038
	3 Phenol	94	8.463	8.456	(0.931)	105286	5.00000	4.989
	7 1,3-Dichlorobenzene	146	9.020	9.012	(0.992)	98728	5.00000	4.659
*	8 1,4-Dichlorobenzene-d4	152	9.090	9.082	(1.000)	52229	4.00000	
	9 1,4-Dichlorobenzene	146	9.121	9.113	(1.003)	98273	5.00000	4.645
	11 Benzyl alcohol	79	9.392	9.392	(1.033)	65489	5.00000	5.237
	12 1,2-Dichlorobenzene	146	9.501	9.493	(1.045)	93282	5.00000	4.656
	13 2-Methylphenol	108	9.648	9.649	(1.061)	79943	5.00000	5.034
	15 4-Methylphenol	108	9.943	9.936	(1.094)	84913	5.00000	5.164
	16 N-Nitroso-di-n-propylamine	70	10.005	9.998	(1.101)	52330	5.00000	5.062
	22 2,4-Dimethylphenol	107	11.068	11.068	(0.942)	171357	10.0000	10.17
	26 1,2,4-Trichlorobenzene	180	11.669	11.669	(0.993)	82967	5.00000	4.561
*	27 Naphthalene-d8	136	11.754	11.754	(1.000)	195391	4.00000	
	30 Hexachlorobutadiene	225	12.209	12.210	(1.039)	52488	5.00000	4.753
	39 Dimethylphthalate	163	15.173	15.166	(0.969)	169092	5.00000	4.941
*	42 Acenaphthene-d10	162	15.661	15.661	(1.000)	112411	4.00000	
	50 Diethylphthalate	149	16.766	16.751	(1.071)	195903	5.00000	4.900
	54 N-Nitrosodiphenylamine	169	17.152	17.153	(0.905)	123410	5.00000	5.081
	57 Hexachlorobenzene	284	18.286	18.279	(0.965)	74264	5.00000	4.701
	58 Pentachlorophenol	266	18.681	18.674	(0.986)	111136	10.0000	9.992
*	59 Phenanthrene-d10	188	18.944	18.937	(1.000)	208917	4.00000	
$	66 Terphenyl-d14	244	22.132	22.132	(0.922)	154517	5.00000	4.892
	67 Butylbenzylphthalate	149	23.076	23.077	(0.961)	134613	5.00000	5.925
*	69 Chrysene-d12	240	24.013	24.006	(1.000)	237704	4.00000	
*	77 Perylene-d12	264	26.514	26.507	(1.000)	236168	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.962	28.947	(1.092)	298499	5.00000	5.303
	90 N-Nitrosodimethylamine	74	4.447	4.455	(0.489)	100225	10.0000	10.11

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: ic0125a.d
Lab Smp Id: IC0125A
Analysis Type: SV
Quant Type: ISTD
Operator: VTS/YZ
Method File: /chem1/nt10.i/20130125.b/SIM.b/SIMABN2.m
Misc Info:

Calibration Date: 25-JAN-2013
Calibration Time: 15:27

Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	53853	26926	107706	52229	-3.02
27 Naphthalene-d8	200104	100052	400208	195391	-2.36
42 Acenaphthene-d10	112392	56196	224784	112411	0.02
59 Phenanthrene-d10	210710	105355	421420	208917	-0.85
69 Chrysene-d12	240805	120402	481610	237704	-1.29
77 Perylene-d12	230834	115417	461668	236168	2.31

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.09	8.59	9.59	9.09	0.00
27 Naphthalene-d8	11.75	11.25	12.25	11.75	0.00
42 Acenaphthene-d10	15.66	15.16	16.16	15.66	0.00
59 Phenanthrene-d10	18.94	18.44	19.44	18.94	0.04
69 Chrysene-d12	24.01	23.51	24.51	24.01	0.03
77 Perylene-d12	26.51	26.01	27.01	26.51	0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/nt10.i/20130125.b/SIM.b/ic0125a.d

Date : 25-JAN-2013 12:59

Client ID:

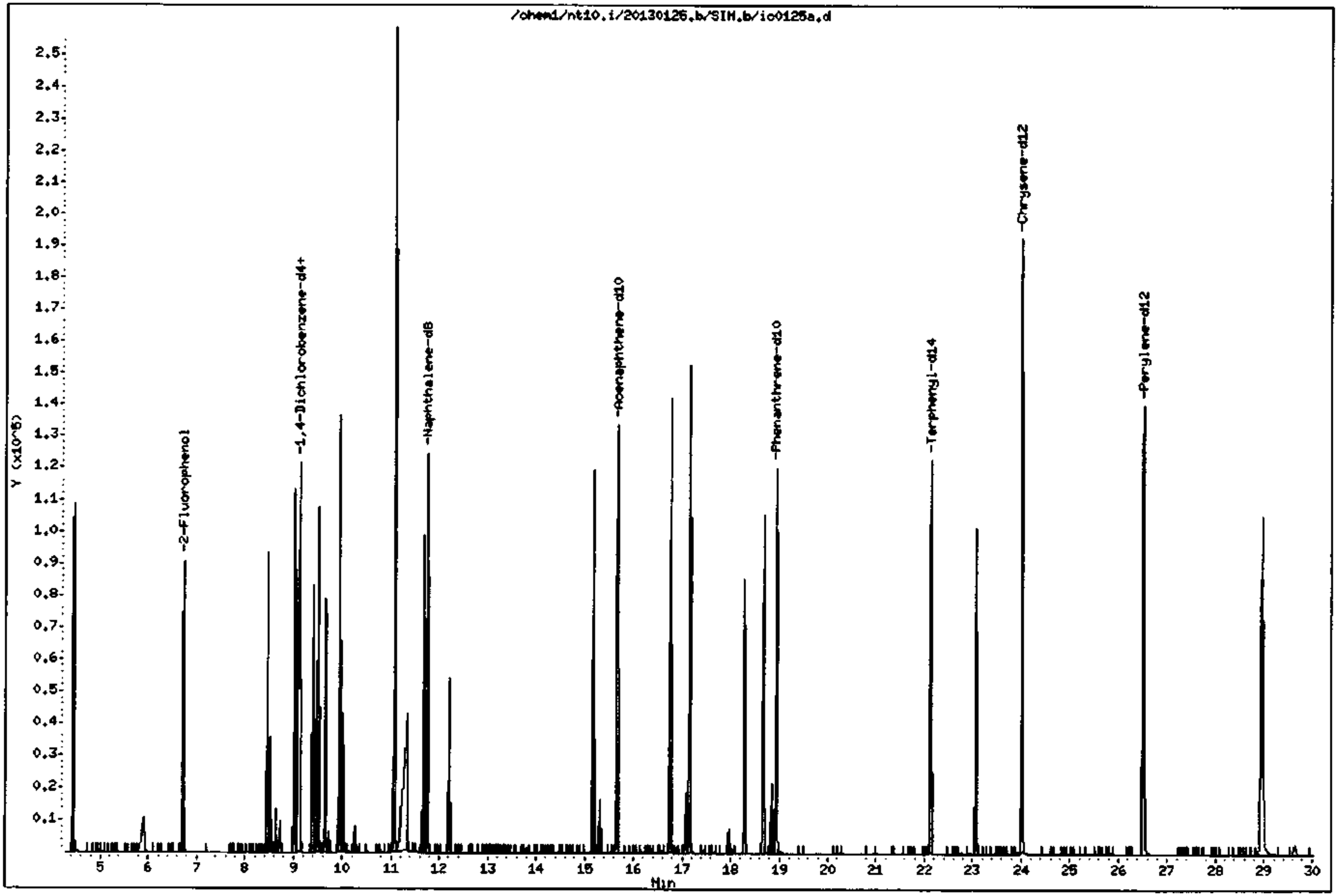
Sample Info: IC0125A

Column phase: ZB-5msi

Instrument: nt10.i

Operator: VTS/YZ

Column diameter: 0.25



CO-ELUTION SUMMARY FOR FILE - ic0125a.d

Lab ID: IC0125A, Method: SIM.b/SIMABN2.m, Instrument: nt10.i, Date: 25-JAN-20

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Analytical Resources, Inc.

METHOD 8270D-SIM

YZ 02/06/13

Data file : /chem1/nt10.i/20130125.b/SIM.b/ic0125c.d
Lab Smp Id: IC0125C
Inj Date : 25-JAN-2013 14:13
Operator : VTS/YZ Inst ID: nt10.i
Smp Info : IC0125C
Misc Info :
Comment :
Method : /chem1/nt10.i/20130125.b/SIM.b/SIMABN2.m
Meth Date : 06-Feb-2013 11:08 yev Quant Type: ISTD
Cal Date : 25-JAN-2013 14:13 Cal File: ic0125c.d
Als bottle: 4 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 3.50

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.725	6.725	(0.740)	3465	0.20000	0.2182
	3 Phenol	94	8.456	8.456	(0.930)	4363	0.20000	0.2164
	7 1,3-Dichlorobenzene	146	9.012	9.012	(0.991)	4450	0.20000	0.2197
*	8 1,4-Dichlorobenzene-d4	152	9.090	9.082	(1.000)	49909	4.00000	
	9 1,4-Dichlorobenzene	146	9.121	9.113	(1.003)	4442	0.20000	0.2197
	11 Benzyl alcohol	79	9.392	9.392	(1.033)	2579	0.20000	0.2158
	12 1,2-Dichlorobenzene	146	9.501	9.493	(1.045)	4220	0.20000	0.2204
	13 2-Methylphenol	108	9.649	9.649	(1.061)	3329	0.20000	0.2194
	15 4-Methylphenol	108	9.944	9.936	(1.094)	3423	0.20000	0.2178
	16 N-Nitroso-di-n-propylamine	70	9.998	9.998	(1.100)	2151	0.20000	0.2178(M)
	22 2,4-Dimethylphenol	107	11.068	11.068	(0.942)	7081	0.40000	0.4433
	26 1,2,4-Trichlorobenzene	180	11.669	11.669	(0.993)	3706	0.20000	0.2149
*	27 Naphthalene-d8	136	11.754	11.754	(1.000)	185289	4.00000	
	30 Hexachlorobutadiene	225	12.210	12.210	(1.039)	2281	0.20000	0.2178
	39 Dimethylphthalate	163	15.166	15.166	(0.968)	6844	0.20000	0.2200
*	42 Acenaphthene-d10	162	15.661	15.661	(1.000)	102172	4.00000	
	50 Diethylphthalate	149	16.751	16.751	(1.070)	8064	0.20000	0.2219
	54 N-Nitrosodiphenylamine	169	17.145	17.153	(0.905)	4913	0.20000	0.2216
	57 Hexachlorobenzene	284	18.279	18.279	(0.965)	3134	0.20000	0.2173
	58 Pentachlorophenol	266	18.674	18.674	(0.986)	3221	0.40000	0.3573
*	59 Phenanthrene-d10	188	18.937	18.937	(1.000)	190705	4.00000	
$	66 Terphenyl-d14	244	22.132	22.132	(0.922)	6206	0.20000	0.2173
	67 Butylbenzylphthalate	149	23.077	23.077	(0.961)	4345	0.20000	0.2115
*	69 Chrysene-d12	240	24.006	24.006	(1.000)	214940	4.00000	
*	77 Perylene-d12	264	26.507	26.507	(1.000)	207018	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.947	28.947	(1.092)	10639	0.20000	0.2156
	90 N-Nitrosodimethylamine	74	4.455	4.455	(0.490)	4069	0.40000	0.4295

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: ic0125c.d
Lab Smp Id: IC0125C
Analysis Type: SV
Quant Type: ISTD
Operator: VTS/YZ
Method File: /chem1/nt10.i/20130125.b/SIM.b/SIMABN2.m
Misc Info:

Calibration Date: 25-JAN-2013
Calibration Time: 15:27

Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 5.

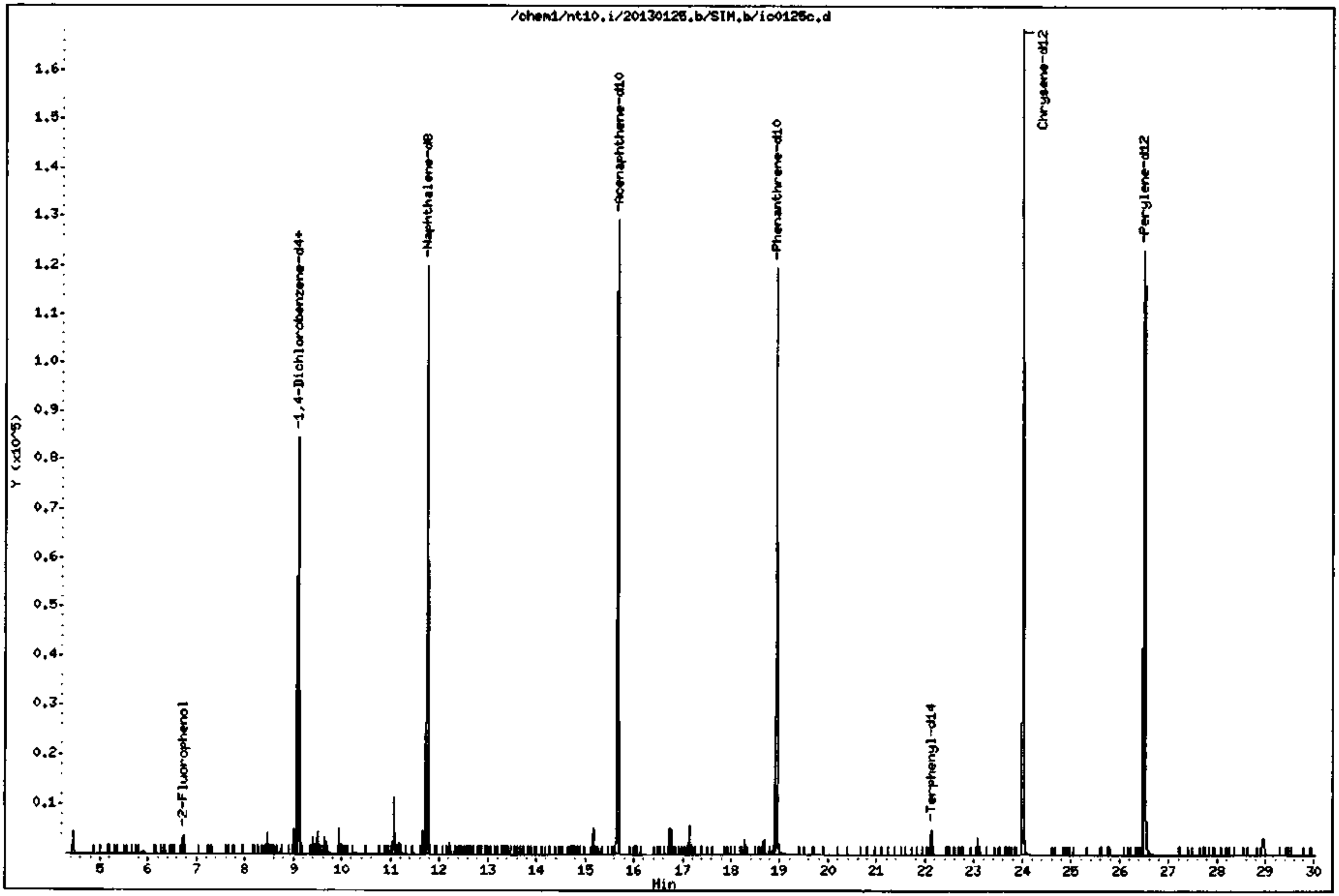
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	53853	26926	107706	49909	-7.32
27 Naphthalene-d8	200104	100052	400208	185289	-7.40
42 Acenaphthene-d10	112392	56196	224784	102172	-9.09
59 Phenanthrene-d10	210710	105355	421420	190705	-9.49
69 Chrysene-d12	240805	120402	481610	214940	-10.74
77 Perylene-d12	230834	115417	461668	207018	-10.32

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.09	8.59	9.59	9.09	0.00
27 Naphthalene-d8	11.75	11.25	12.25	11.75	0.00
42 Acenaphthene-d10	15.66	15.16	16.16	15.66	0.00
59 Phenanthrene-d10	18.94	18.44	19.44	18.94	0.00
69 Chrysene-d12	24.01	23.51	24.51	24.01	0.00
77 Perylene-d12	26.51	26.01	27.01	26.51	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

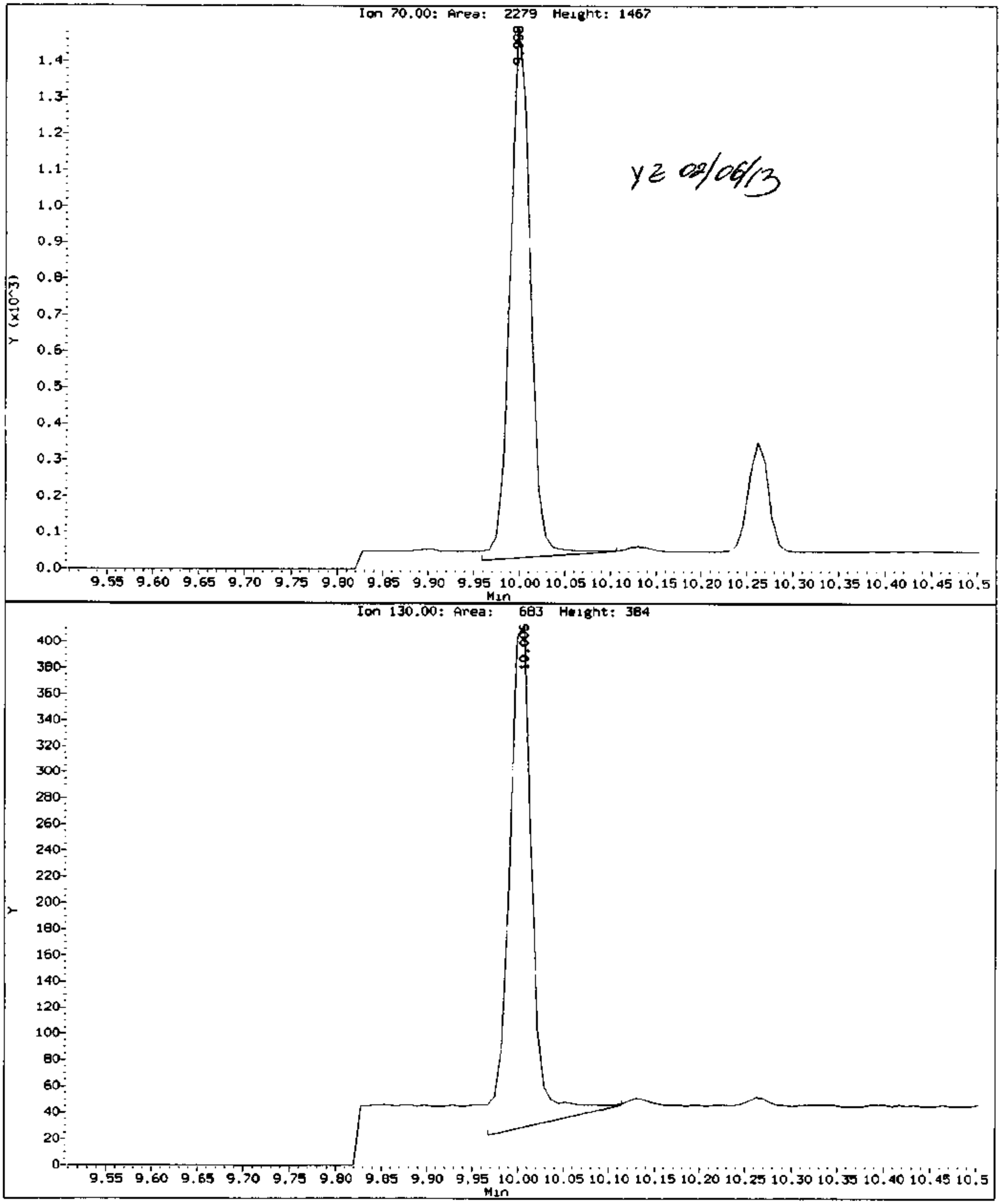
Data File: /chem1/nt10.i/20130125.b/SIM.b/ic0125c.d
Date : 25-JAN-2013 14:13
Client ID:
Sample Info: IC0125C
Column phase: ZB-5msi

Instrument: nt10.i
Operator: VTS/YZ
Column diameter: 0.25



Data File: /chem1/nt10.i/20130125.b/SIM.b/ic0125c.d
Injection Date: 25-JAN-2013 14:13
Instrument: nt10.i
Client Sample ID:

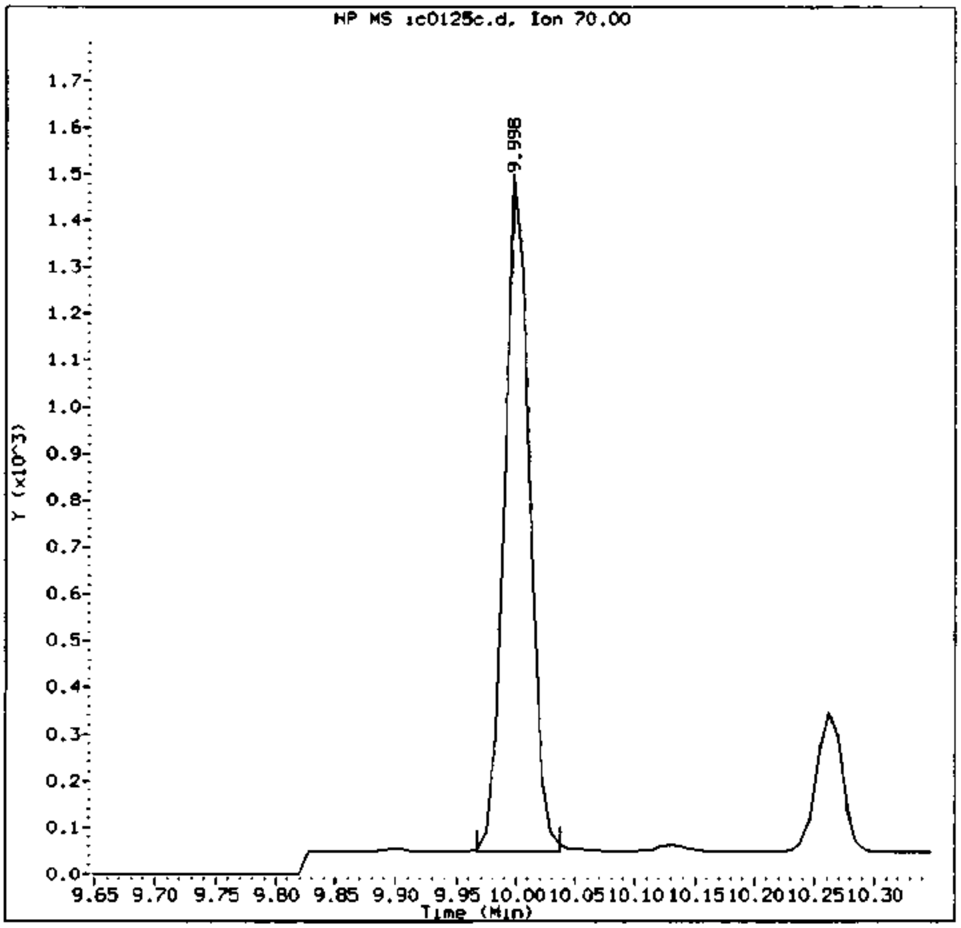
Compound: N-Nitroso-di-n-propylamine
CAS Number: 621-64-7



yz 02/06/13

IC0125C, /chem1/nt10.i/20130125.b/SIM.b/ic0125c.d

N-Nitroso-di-n-propylamine Amount: 0.22 Area: 2151



MANUAL INTEGRATION for N-Nitroso-di-n-propylamine

1. Baseline correction ✓
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other ______________________

Analyst: YZ Date: 02/06/13

CO-ELUTION SUMMARY FOR FILE - ic0125c.d

Lab ID: IC0125C, Method: SIM.b/SIMABN2.m, Instrument: nt10.i, Date: 25-JAN-20

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Analytical Resources, Inc.

METHOD 8270D-SIM

Data file : /chem1/nt10.i/20130125.b/SIM.b/ic0125e.d YZ 02/06/13
Lab Smp Id: IC0125E
Inj Date : 25-JAN-2013 15:27
Operator : VTS/YZ Inst ID: nt10.i
Smp Info : IC0125E
Misc Info :
Comment :
Method : /chem1/nt10.i/20130125.b/SIM.b/SIMABN2.m
Meth Date : 06-Feb-2013 11:08 yev Quant Type: ISTD
Cal Date : 25-JAN-2013 15:27 Cal File: ic0125e.d
Als bottle: 6 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 3.50

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.725	6.725	(0.740)	17216	1.00000	1.005
	3 Phenol	94	8.456	8.456	(0.930)	22123	1.00000	1.017
	7 1,3-Dichlorobenzene	146	9.012	9.012	(0.991)	21360	1.00000	0.9775
*	8 1,4-Dichlorobenzene-d4	152	9.090	9.082	(1.000)	53853	4.00000	
	9 1,4-Dichlorobenzene	146	9.121	9.113	(1.003)	21253	1.00000	0.9742
	11 Benzyl alcohol	79	9.392	9.392	(1.033)	13141	1.00000	1.019
	12 1,2-Dichlorobenzene	146	9.501	9.493	(1.045)	20260	1.00000	0.9808
	13 2-Methylphenol	108	9.649	9.649	(1.061)	16735	1.00000	1.022
	15 4-Methylphenol	108	9.944	9.936	(1.094)	17311	1.00000	1.021
	16 N-Nitroso-di-n-propylamine	70	9.998	9.998	(1.100)	10794	1.00000	1.013
	22 2,4-Dimethylphenol	107	11.068	11.068	(0.942)	35775	2.00000	2.074
	26 1,2,4-Trichlorobenzene	180	11.669	11.669	(0.993)	17875	1.00000	0.9596
*	27 Naphthalene-d8	136	11.754	11.754	(1.000)	200104	4.00000	
	30 Hexachlorobutadiene	225	12.210	12.210	(1.039)	11111	1.00000	0.9825
	39 Dimethylphthalate	163	15.166	15.166	(0.968)	34643	1.00000	1.012
*	42 Acenaphthene-d10	162	15.661	15.661	(1.000)	112392	4.00000	
	50 Diethylphthalate	149	16.759	16.751	(1.070)	40083	1.00000	1.003
	54 N-Nitrosodiphenylamine	169	17.153	17.153	(0.906)	26195	1.00000	1.069
	57 Hexachlorobenzene	284	18.279	18.279	(0.965)	15580	1.00000	0.9778
	58 Pentachlorophenol	266	18.674	18.674	(0.986)	20330	2.00000	2.006
*	59 Phenanthrene-d10	188	18.937	18.937	(1.000)	210710	4.00000	
$	66 Terphenyl-d14	244	22.132	22.132	(0.922)	31869	1.00000	0.9960
	67 Butylbenzylphthalate	149	23.077	23.077	(0.961)	24675	1.00000	1.072
*	69 Chrysene-d12	240	24.006	24.006	(1.000)	240805	4.00000	
*	77 Perylene-d12	264	26.507	26.507	(1.000)	230834	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.947	28.947	(1.092)	57941	1.00000	1.053
	90 N-Nitrosodimethylamine	74	4.447	4.455	(0.489)	20135	2.00000	1.970

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: ic0125e.d
Lab Smp Id: IC0125E
Analysis Type: SV
Quant Type: ISTD
Operator: VTS/YZ
Method File: /chem1/nt10.i/20130125.b/SIM.b/SIMABN2.m
Misc Info:

Calibration Date: 25-JAN-2013
Calibration Time: 15:27
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	53853	26926	107706	53853	0.00
27 Naphthalene-d8	200104	100052	400208	200104	0.00
42 Acenaphthene-d10	112392	56196	224784	112392	0.00
59 Phenanthrene-d10	210710	105355	421420	210710	0.00
69 Chrysene-d12	240805	120402	481610	240805	0.00
77 Perylene-d12	230834	115417	461668	230834	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.09	8.59	9.59	9.09	0.00
27 Naphthalene-d8	11.75	11.25	12.25	11.75	0.00
42 Acenaphthene-d10	15.66	15.16	16.16	15.66	0.00
59 Phenanthrene-d10	18.94	18.44	19.44	18.94	0.00
69 Chrysene-d12	24.01	23.51	24.51	24.01	0.00
77 Perylene-d12	26.51	26.01	27.01	26.51	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

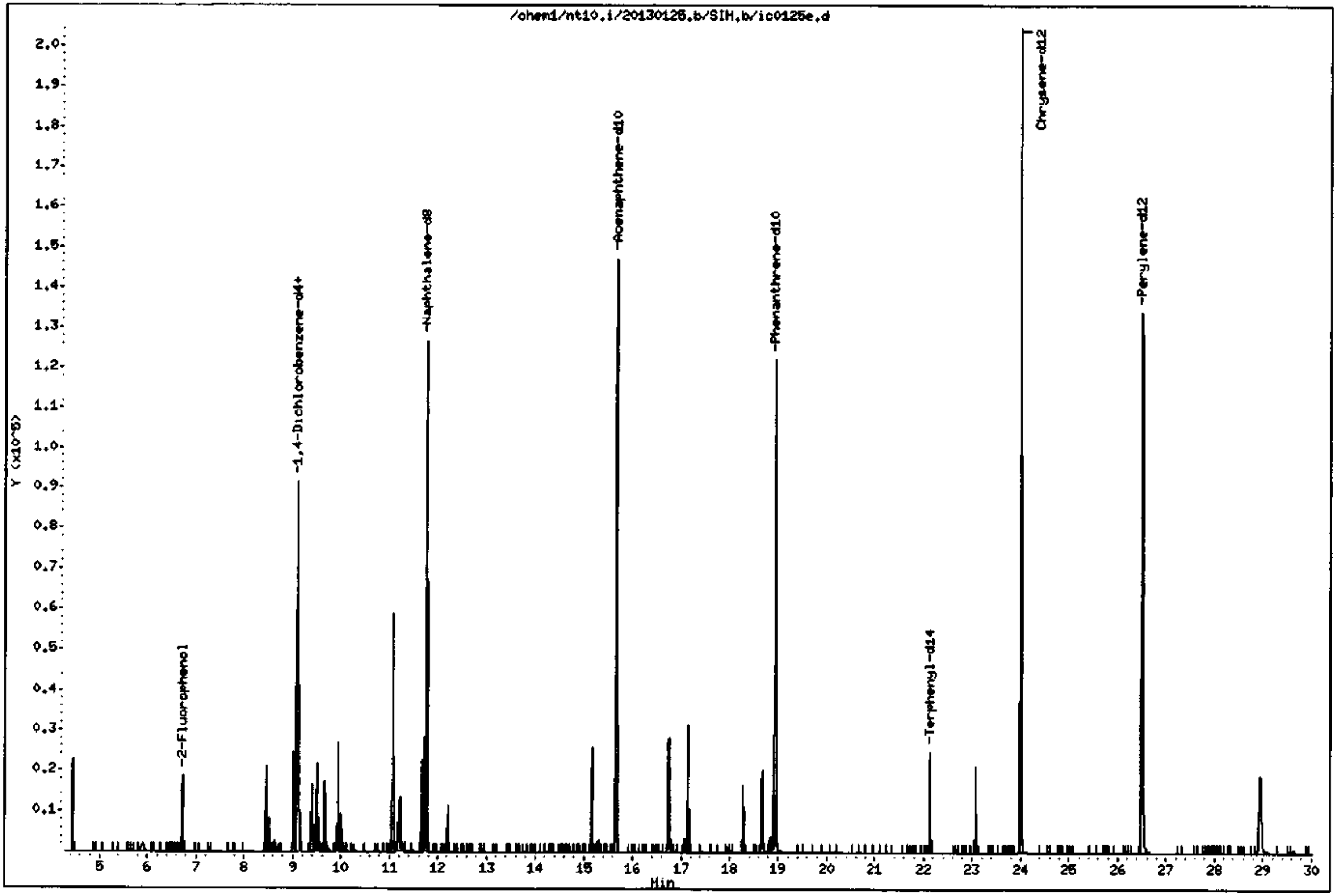
Data File: /chem1/nt10.i/20130125.b/SIM.b/ic0125e.d
Date : 25-JAN-2013 15:27
Client ID:
Sample Info: IC0125E

Column phase: ZB-5msi

Page 3

Instrument: nt10.i

Operator: VTS/YZ
Column diameter: 0.25



CO-ELUTION SUMMARY FOR FILE - ic0125e.d

Lab ID: IC0125E, Method: SIM.b/SIMABN2.m, Instrument: nt10.i, Date: 25-JAN-20

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Data File: /chem1/nt10.i/20130125.b/SIM.b/ic0125f.d
Report Date: 06-Feb-2013 11:08

Analytical Resources, Inc.

YZ 02/06/13

METHOD 8270D-SIM

Data file : /chem1/nt10.i/20130125.b/SIM.b/ic0125f.d
Lab Smp Id: IC0125F
Inj Date : 25-JAN-2013 16:03
Operator : VTS/YZ
Inst ID: nt10.i
Smp Info : IC0125F
Misc Info :
Comment :
Method : /chem1/nt10.i/20130125.b/SIM.b/SIMABN2.m
Meth Date : 06-Feb-2013 11:08 yev
Quant Type: ISTD
Cal Date : 25-JAN-2013 16:03
Cal File: ic0125f.d
Als bottle: 7
Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: PSDDA.sub
Target Version: 3.50

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.725	6.725	(0.740)	40135	2.50000	2.438
	3 Phenol	94	8.456	8.456	(0.930)	51073	2.50000	2.442
	7 1,3-Dichlorobenzene	146	9.020	9.012	(0.992)	48782	2.50000	2.323
*	8 1,4-Dichlorobenzene-d4	152	9.090	9.082	(1.000)	51752	4.00000	
	9 1,4-Dichlorobenzene	146	9.121	9.113	(1.003)	48592	2.50000	2.318
	11 Benzyl alcohol	79	9.392	9.392	(1.033)	30945	2.50000	2.498
	12 1,2-Dichlorobenzene	146	9.501	9.493	(1.045)	46214	2.50000	2.328
	13 2-Methylphenol	108	9.648	9.649	(1.061)	38761	2.50000	2.463
	15 4-Methylphenol	108	9.943	9.936	(1.094)	40960	2.50000	2.514
	16 N-Nitroso-di-n-propylamine	70	9.998	9.998	(1.100)	25098	2.50000	2.450
	22 2,4-Dimethylphenol	107	11.068	11.068	(0.942)	83099	5.00000	5.021
	26 1,2,4-Trichlorobenzene	180	11.669	11.669	(0.993)	40588	2.50000	2.271
*	27 Naphthalene-d8	136	11.754	11.754	(1.000)	191986	4.00000	
	30 Hexachlorobutadiene	225	12.209	12.210	(1.039)	25748	2.50000	2.373
	39 Dimethylphthalate	163	15.173	15.166	(0.969)	82619	2.50000	2.460
*	42 Acenaphthene-d10	162	15.661	15.661	(1.000)	110315	4.00000	
	50 Diethylphthalate	149	16.759	16.751	(1.070)	94426	2.50000	2.407
	54 N-Nitrosodiphenylamine	169	17.152	17.153	(0.906)	61298	2.50000	2.561
	57 Hexachlorobenzene	284	18.286	18.279	(0.966)	36057	2.50000	2.316
	58 Pentachlorophenol	266	18.673	18.674	(0.986)	51671	5.00000	5.039
*	59 Phenanthrene-d10	188	18.936	18.937	(1.000)	205875	4.00000	
$	66 Terphenyl-d14	244	22.132	22.132	(0.922)	75902	2.50000	2.352
	67 Butylbenzylphthalate	149	23.077	23.077	(0.961)	62698	2.50000	2.701
*	69 Chrysene-d12	240	24.006	24.006	(1.000)	242832	4.00000	
*	77 Perylene-d12	264	26.506	26.507	(1.000)	234305	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.955	28.947	(1.092)	142696	2.50000	2.555
	90 N-Nitrosodimethylamine	74	4.439	4.455	(0.488)	47174	5.00000	4.802

Report Date: 06-Feb-2013 11:08

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: ic0125f.d
Lab Smp Id: IC0125F
Analysis Type: SV
Quant Type: ISTD
Operator: VTS/YZ
Method File: /chem1/nt10.i/20130125.b/SIM.b/SIMABN2.m
Misc Info:

Calibration Date: 25-JAN-2013
Calibration Time: 15:27

Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 5.

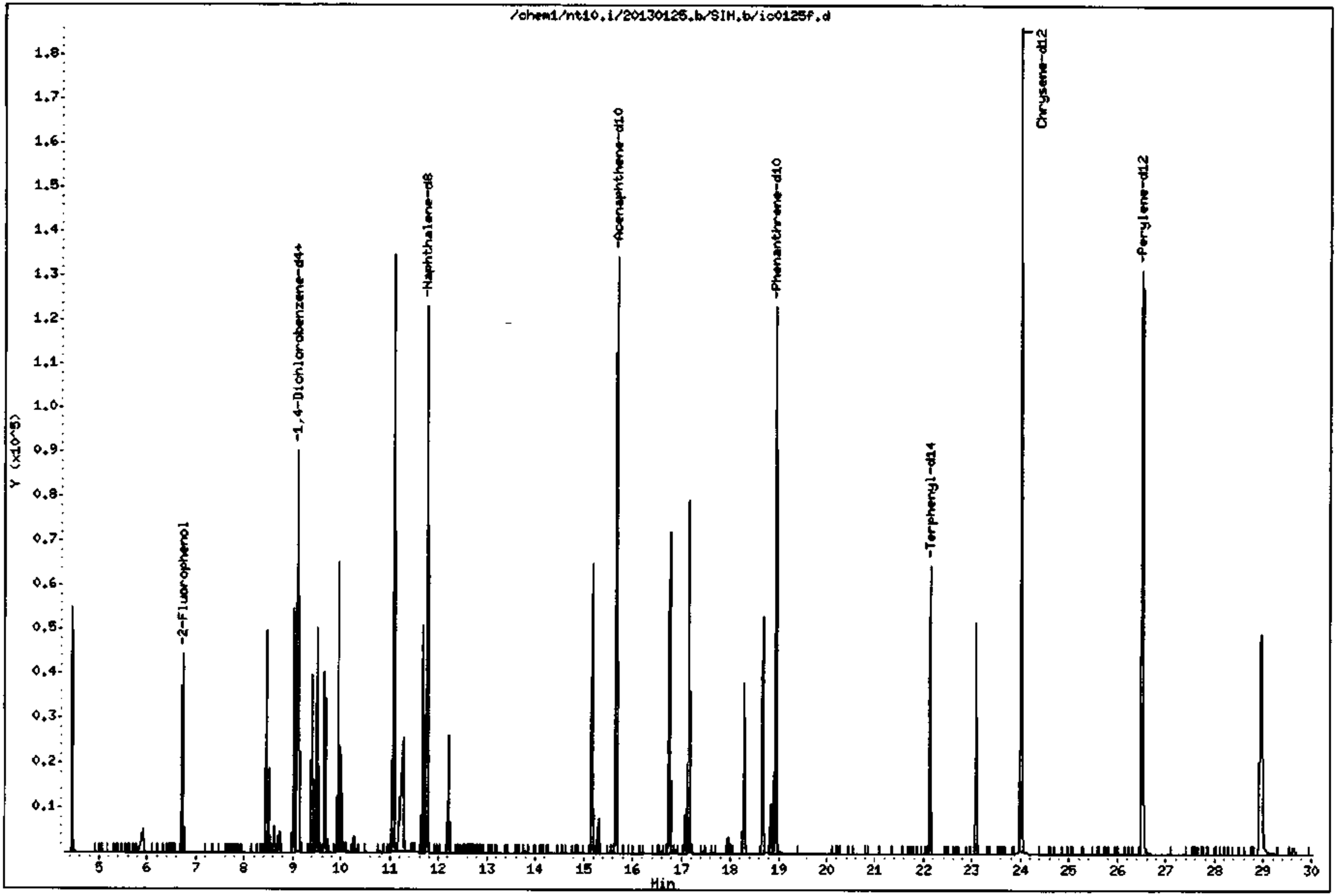
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	53853	26926	107706	51752	-3.90
27 Naphthalene-d8	200104	100052	400208	191986	-4.06
42 Acenaphthene-d10	112392	56196	224784	110315	-1.85
59 Phenanthrene-d10	210710	105355	421420	205875	-2.29
69 Chrysene-d12	240805	120402	481610	242832	0.84
77 Perylene-d12	230834	115417	461668	234305	1.50

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.09	8.59	9.59	9.09	0.00
27 Naphthalene-d8	11.75	11.25	12.25	11.75	0.00
42 Acenaphthene-d10	15.66	15.16	16.16	15.66	0.00
59 Phenanthrene-d10	18.94	18.44	19.44	18.94	0.00
69 Chrysene-d12	24.01	23.51	24.51	24.01	0.00
77 Perylene-d12	26.51	26.01	27.01	26.51	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/nt10.i/20130125.b/SIM.b/ic0125f.d
Date : 25-JAN-2013 16:03
Client ID:
Sample Info: IC0125F
Column phase: ZB-5msi

Instrument: nt10.i
Operator: VTS/YZ
Column diameter: 0.25



CO-ELUTION SUMMARY FOR FILE - ic0125f.d

Lab ID: IC0125F, Method: SIM.b/SIMABN2.m, Instrument: nt10.i, Date: 25-JAN-20

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Analytical Resources, Inc.

METHOD 8270D-SIM

Data file : /chem1/nt10.i/20130125.b/SIM.b/ic0125g.d
YZ 02/06/13
Lab Smp Id: IC0125G
Inj Date : 25-JAN-2013 16:40
Operator : YZ Inst ID: nt10.i
Smp Info : IC0125G
Misc Info :
Comment :
Method : /chem1/nt10.i/20130125.b/SIM.b/SIMABN2.m
Meth Date : 06-Feb-2013 11:08 yev Quant Type: ISTD
Cal Date : 25-JAN-2013 16:40 Cal File: ic0125g.d
Als bottle: 8 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 3.50

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.725	6.725	(0.740)	797	0.05000	0.04877(M)
	3 Phenol	94	8.456	8.456	(0.930)	1028	0.05000	0.04953
	7 1,3-Dichlorobenzene	146	9.012	9.012	(0.991)	1091	0.05000	0.05235(M)
*	8 1,4-Dichlorobenzene-d4	152	9.090	9.082	(1.000)	51364	4.00000	
	9 1,4-Dichlorobenzene	146	9.121	9.113	(1.003)	1087	0.05000	0.05224(M)
	11 Benzyl alcohol	79	9.392	9.392	(1.033)	578	0.05000	0.04700(M)
	12 1,2-Dichlorobenzene	146	9.501	9.493	(1.045)	1024	0.05000	0.05197
	13 2-Methylphenol	108	9.649	9.649	(1.061)	746	0.05000	0.04777
	15 4-Methylphenol	108	9.944	9.936	(1.094)	742	0.05000	0.04588
	16 N-Nitroso-di-n-propylamine	70	9.998	9.998	(1.100)	489	0.05000	0.04810(M)
	22 2,4-Dimethylphenol	107	11.068	11.068	(0.942)	1498	0.10000	0.09191
	26 1,2,4-Trichlorobenzene	180	11.669	11.669	(0.993)	887	0.05000	0.05039(M)
*	27 Naphthalene-d8	136	11.754	11.754	(1.000)	189071	4.00000	
	30 Hexachlorobutadiene	225	12.210	12.210	(1.039)	559	0.05000	0.05231
	39 Dimethylphthalate	163	15.166	15.166	(0.968)	1502	0.05000	0.04829
*	42 Acenaphthene-d10	162	15.661	15.661	(1.000)	102169	4.00000	
	50 Diethylphthalate	149	16.751	16.751	(1.070)	1685	0.05000	0.04637
	54 N-Nitrosodiphenylamine	169	17.153	17.153	(0.906)	921	0.05000	0.04243(M)
	57 Hexachlorobenzene	284	18.279	18.279	(0.965)	732	0.05000	0.05184
	58 Pentachlorophenol	266	18.674	18.674	(0.986)	524	0.10000	0.05954(M)
*	59 Phenanthrene-d10	188	18.937	18.937	(1.000)	186737	4.00000	
$	66 Terphenyl-d14	244	22.132	22.132	(0.922)	1344	0.05000	0.04667(M)
	67 Butylbenzylphthalate	149	23.077	23.077	(0.961)	877	0.05000	0.04233
*	69 Chrysene-d12	240	24.006	24.006	(1.000)	216735	4.00000	
*	77 Perylene-d12	264	26.507	26.507	(1.000)	211470	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.955	28.947	(1.092)	2301	0.05000	0.04565(M)
	90 N-Nitrosodimethylamine	74	4.462	4.455	(0.491)	965	0.10000	0.09897

QC Flag Legend

M - Compound response manually integrated.

Report Date: 06-Feb-2013 11:08

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: ic0125g.d
Lab Smp Id: IC0125G
Analysis Type: SV
Quant Type: ISTD
Operator: YZ
Method File: /chem1/nt10.i/20130125.b/SIM.b/SIMABN2.m
Misc Info:

Calibration Date: 25-JAN-2013
Calibration Time: 15:27

Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	53853	26926	107706	51364	-4.62
27 Naphthalene-d8	200104	100052	400208	189071	-5.51
42 Acenaphthene-d10	112392	56196	224784	102169	-9.10
59 Phenanthrene-d10	210710	105355	421420	186737	-11.38
69 Chrysene-d12	240805	120402	481610	216735	-10.00
77 Perylene-d12	230834	115417	461668	211470	-8.39

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.09	8.59	9.59	9.09	0.00
27 Naphthalene-d8	11.75	11.25	12.25	11.75	0.00
42 Acenaphthene-d10	15.66	15.16	16.16	15.66	0.00
59 Phenanthrene-d10	18.94	18.44	19.44	18.94	0.00
69 Chrysene-d12	24.01	23.51	24.51	24.01	0.00
77 Perylene-d12	26.51	26.01	27.01	26.51	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/nt10.i/20130125.b/SIM.b/ic0125g.d

Date : 25-JAN-2013 16:40

Client ID:

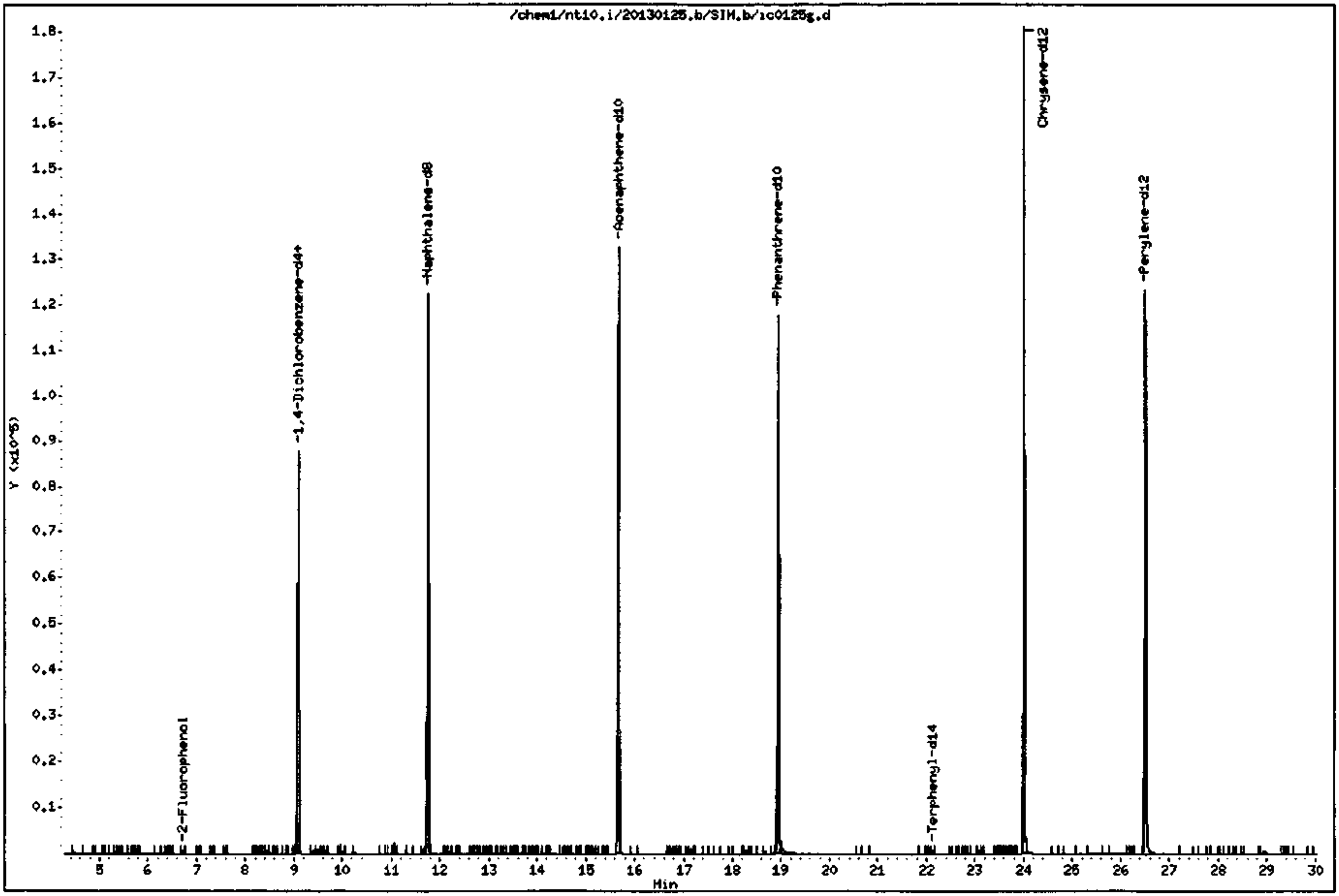
Instrument: nt10.i

Sample Info: IC0125G

Operator: YZ

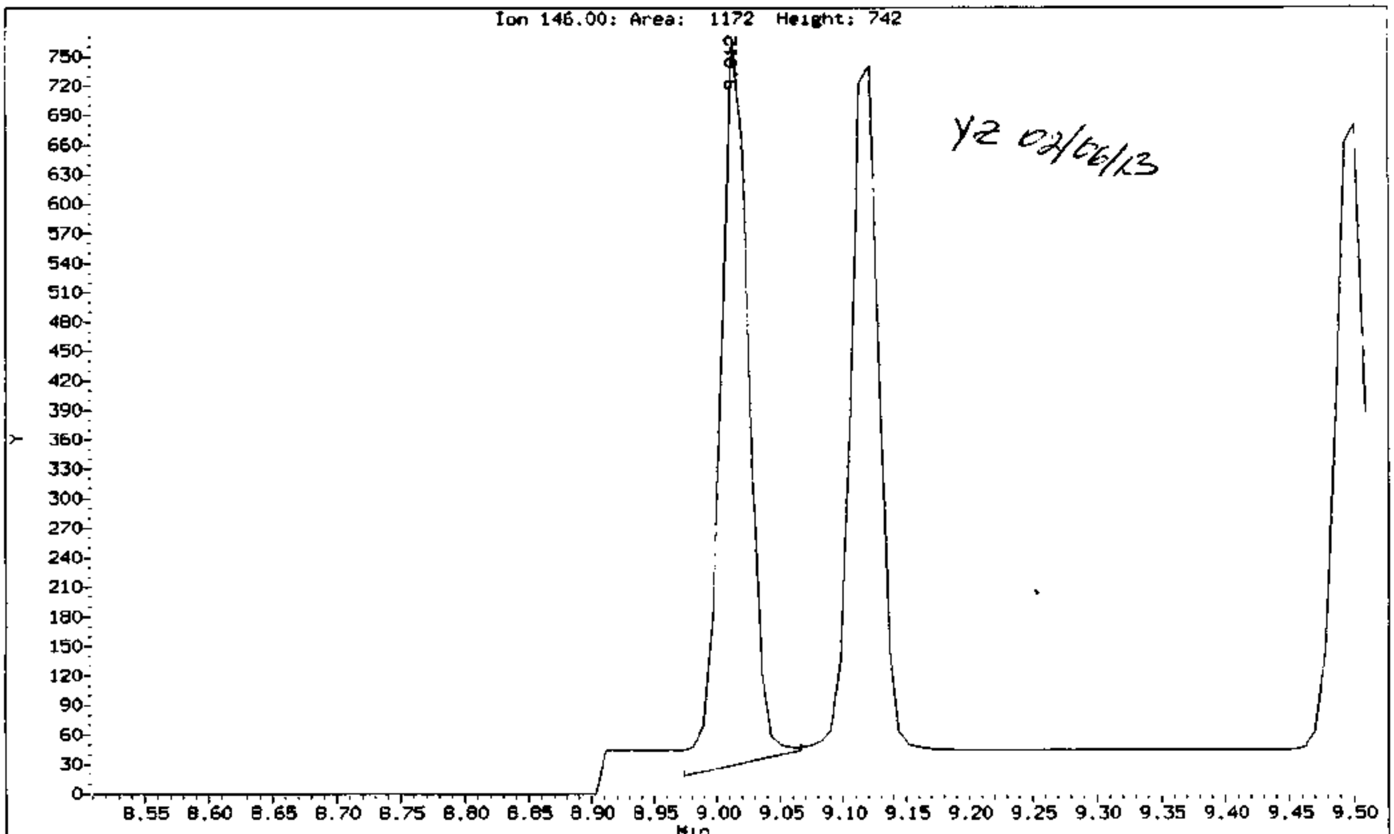
Column phase: ZB-5msi

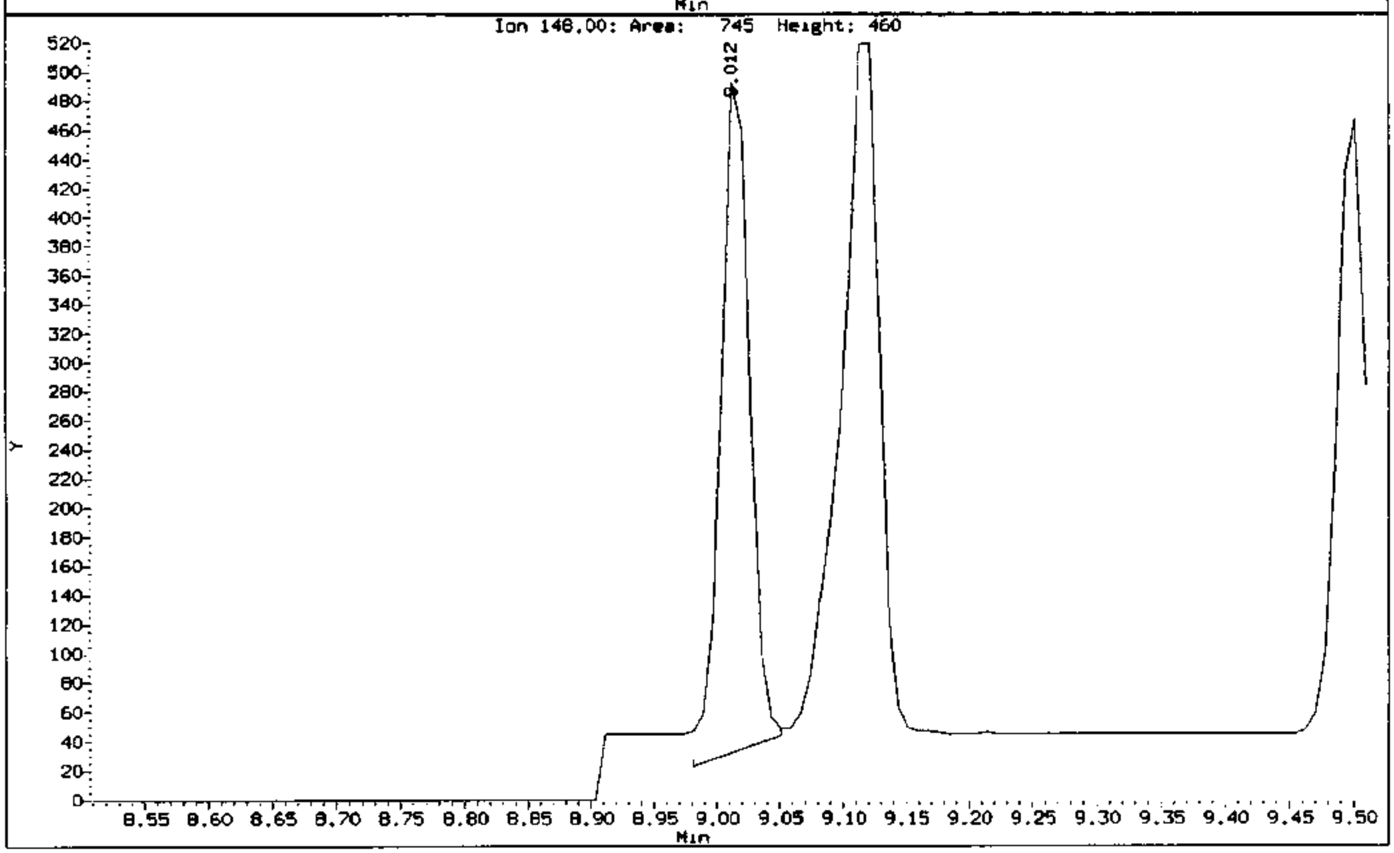
Column diameter: 0.25



Data File: /chem1/nt10.i/20130125.b/SIM.b/ic0125g.d
Injection Date: 25-JAN-2013 16:40
Instrument: nt10.i
Client Sample ID:

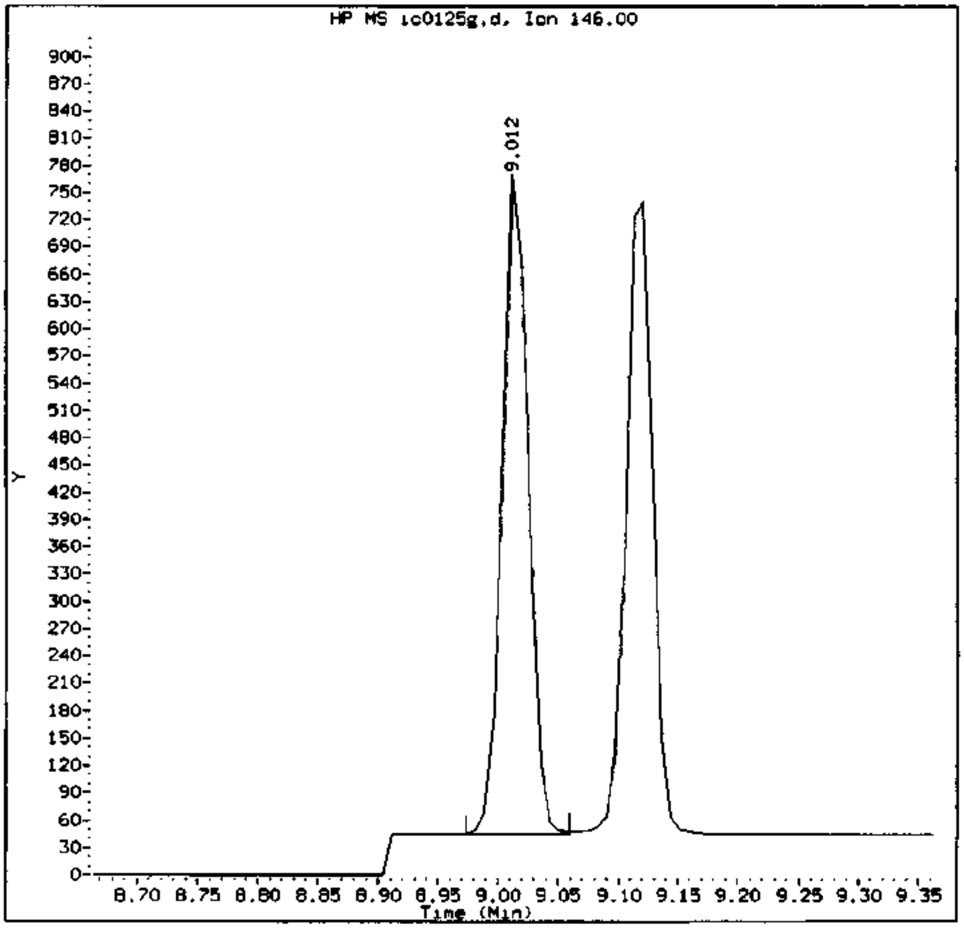
Compound: 1,3-Dichlorobenzene
CAS Number: 541-73-1





IC0125G, /chem1/nt10.i/20130125.b/SIM.b/ic0125g.d

1,3-Dichlorobenzene Amount: 0.05 Area: 1091



MANUAL INTEGRATION for 1,3-Dichlorobenzene

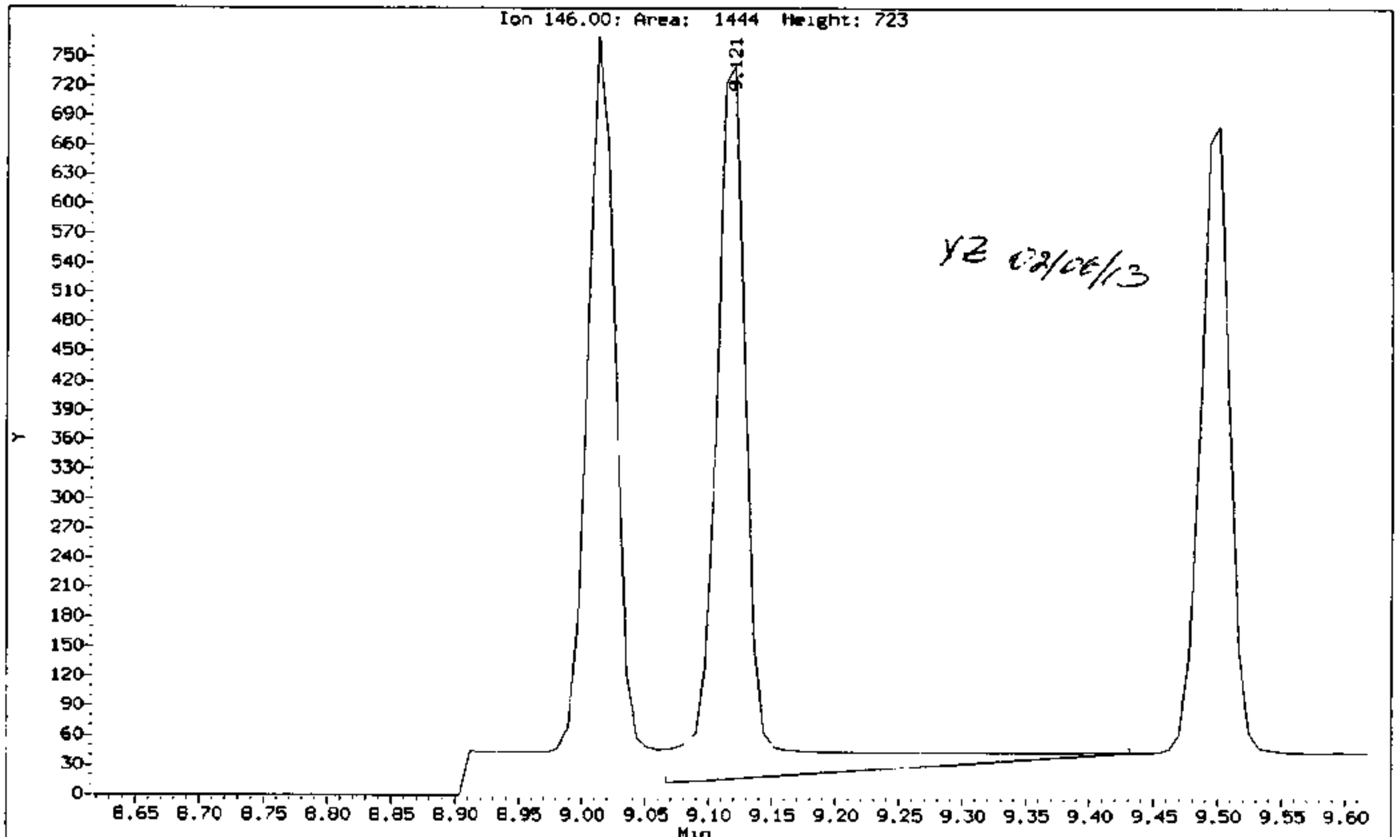
1. Baseline correction ✓
2. Poor chromatography
3. Peak not found
4. Totals calculation

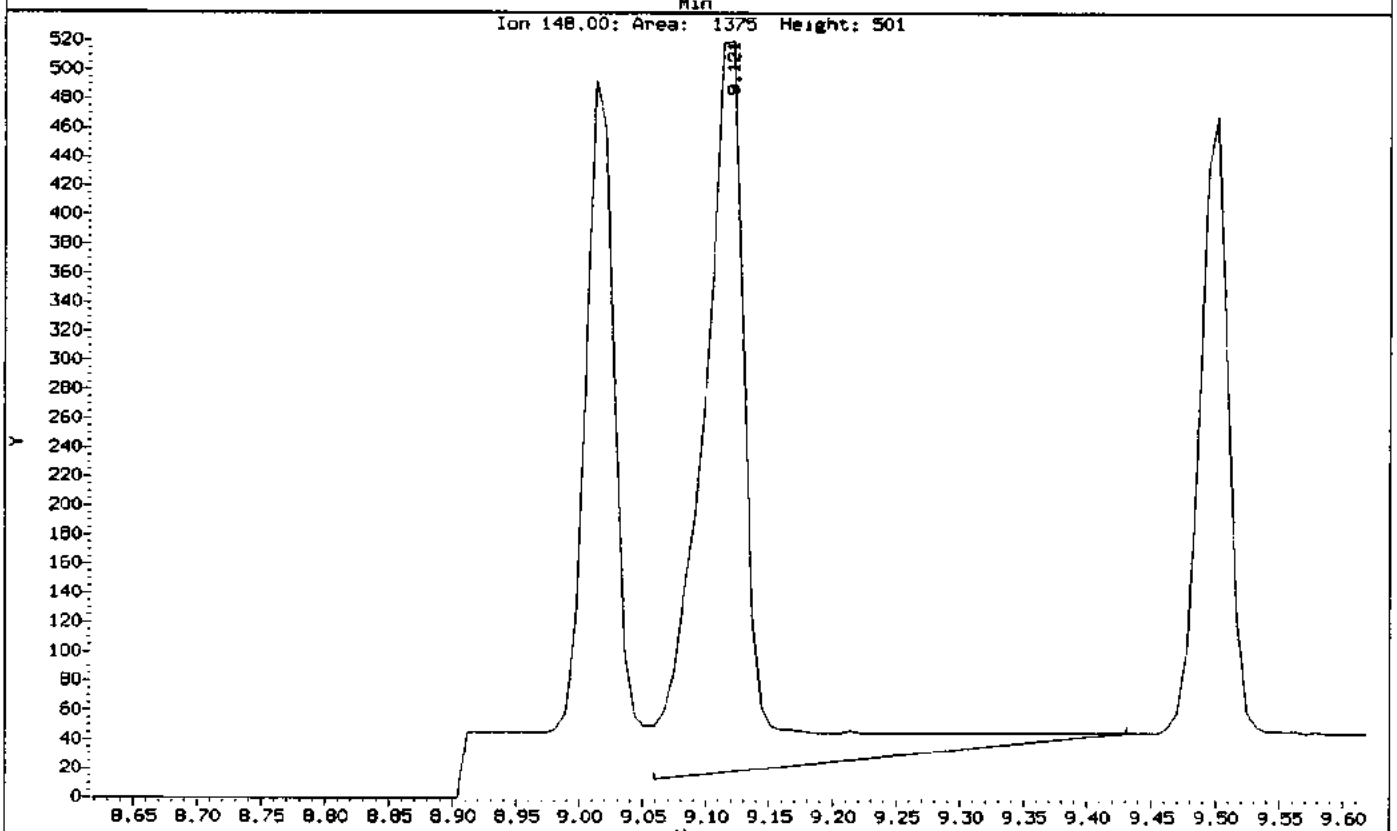
5. Other ______________________

Analyst: YZ Date: 02/06/13

Data File: /chem1/nt10.i/20130125.b/SIM.b/ic0125g.d
Injection Date: 25-JAN-2013 16:40
Instrument: nt10.i
Client Sample ID:

Compound: 1,4-Dichlorobenzene
CAS Number: 106-46-7

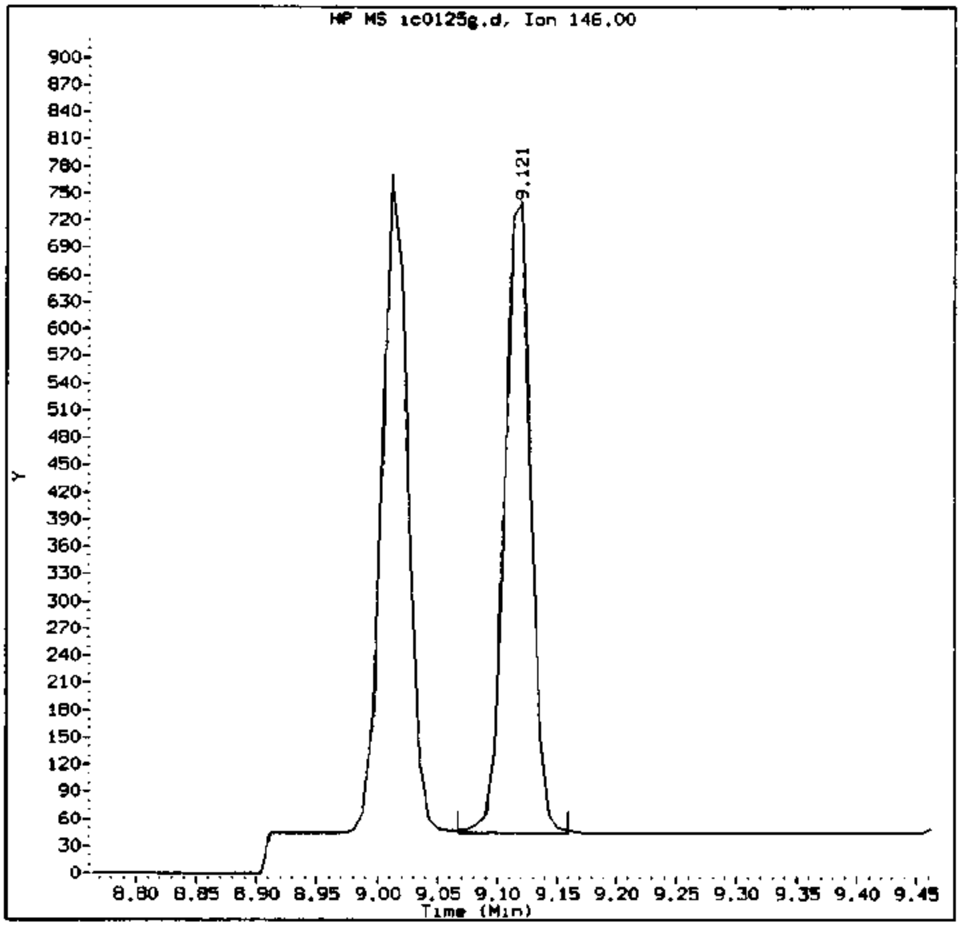




WC32 01001

IC0125G, /chem1/nt10.i/20130125.b/SIM.b/ic0125g.d

1,4-Dichlorobenzene   Amount: 0.05   Area: 1087



MANUAL INTEGRATION for 1,4-Dichlorobenzene

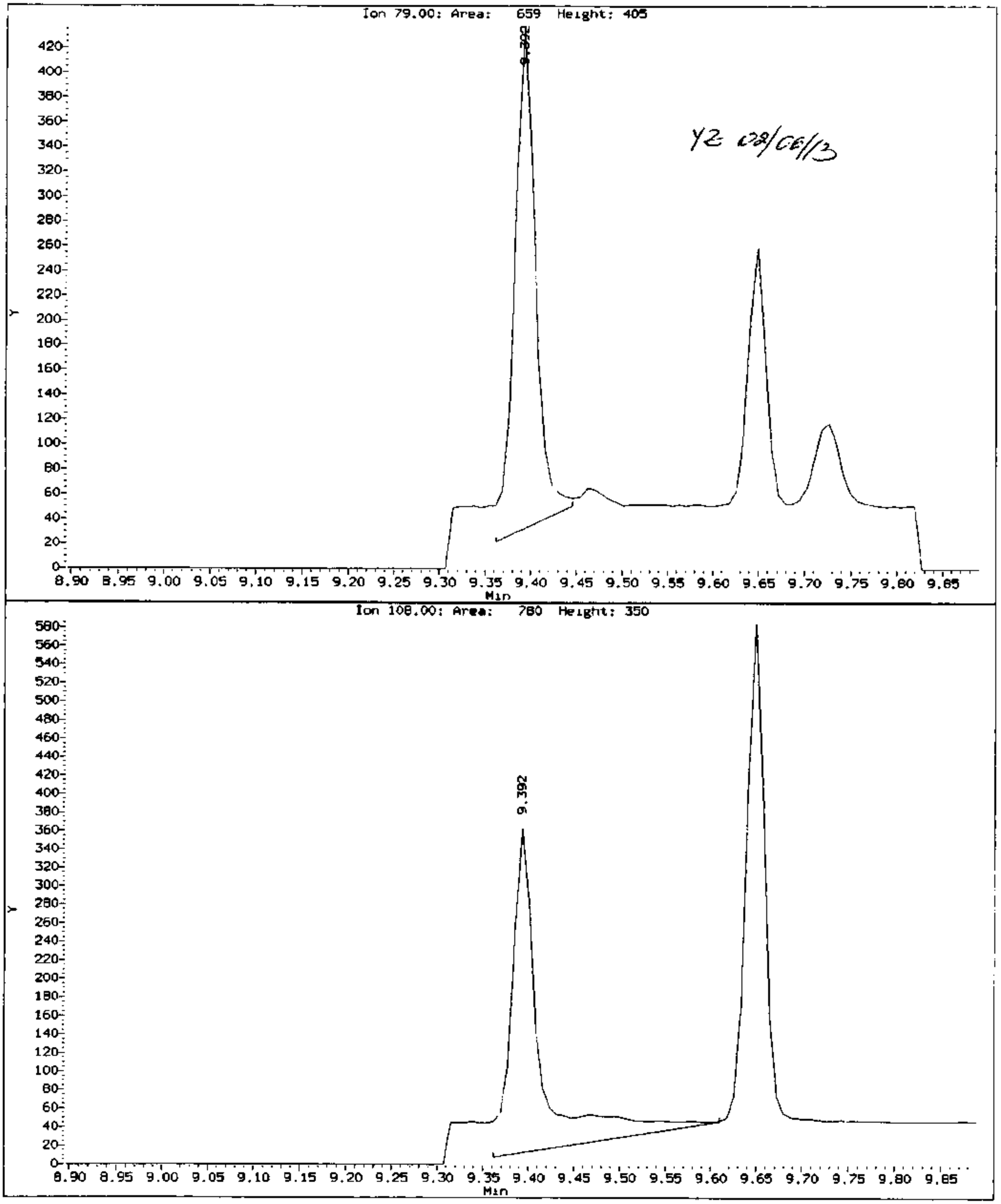
1. Baseline correction ✓
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other ______________________________

Analyst: VZ   Date: 03/06/13

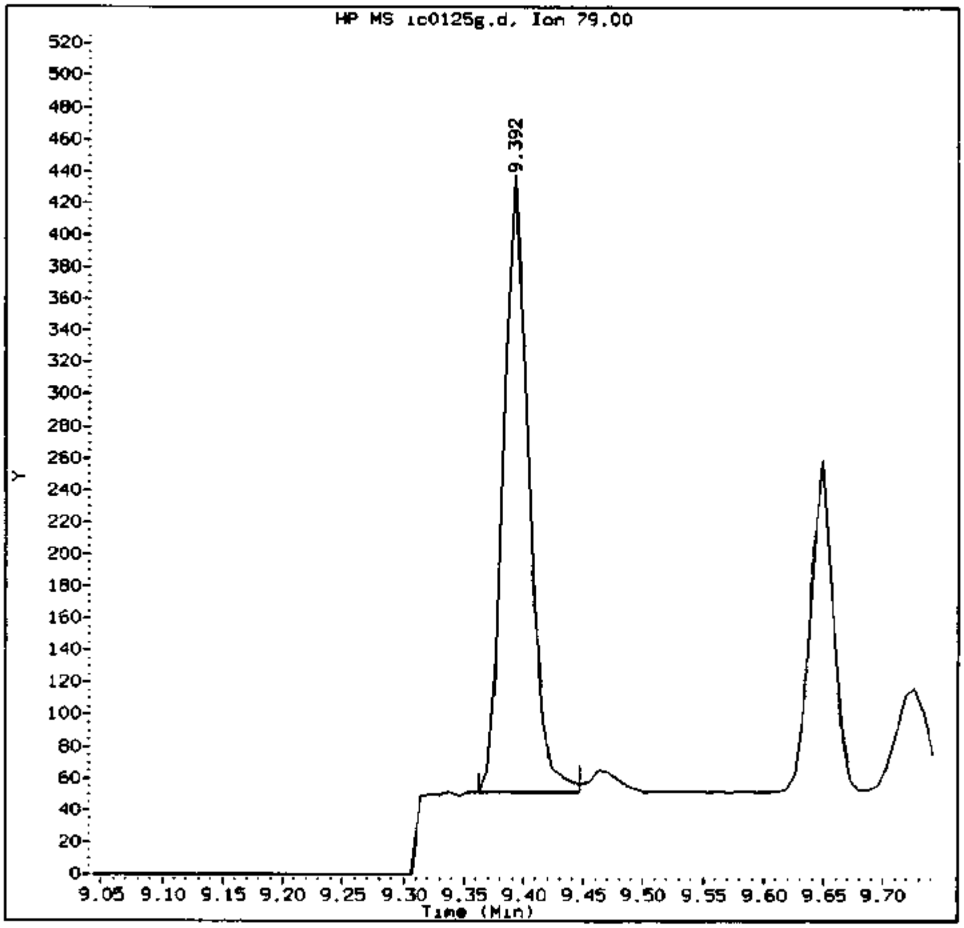
Data File: /chem1/nt10.i/20130125.b/SIM.b/ic0125g.d
Injection Date: 25-JAN-2013 16:40
Instrument: nt10.i
Client Sample ID:

Compound: Benzyl alcohol
CAS Number: 100-51-6



IC0125G, /chem1/nt10.i/20130125.b/SIM.b/ic0125g.d

Benzyl alcohol   Amount: 0.05   Area: 578



MANUAL INTEGRATION for Benzyl alcohol

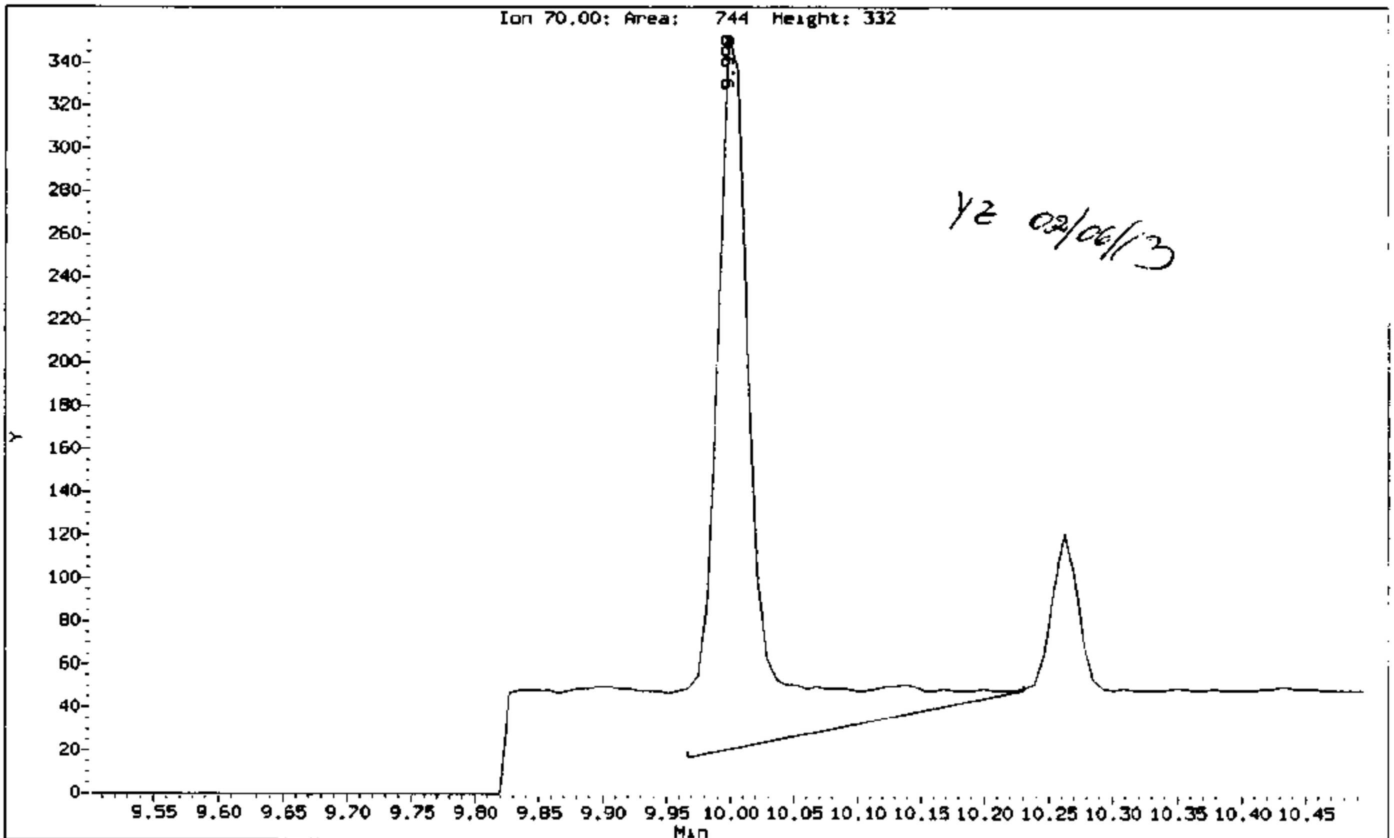
1. Baseline correction ✓
2. Poor chromatography
3. Peak not found
4. Totals calculation

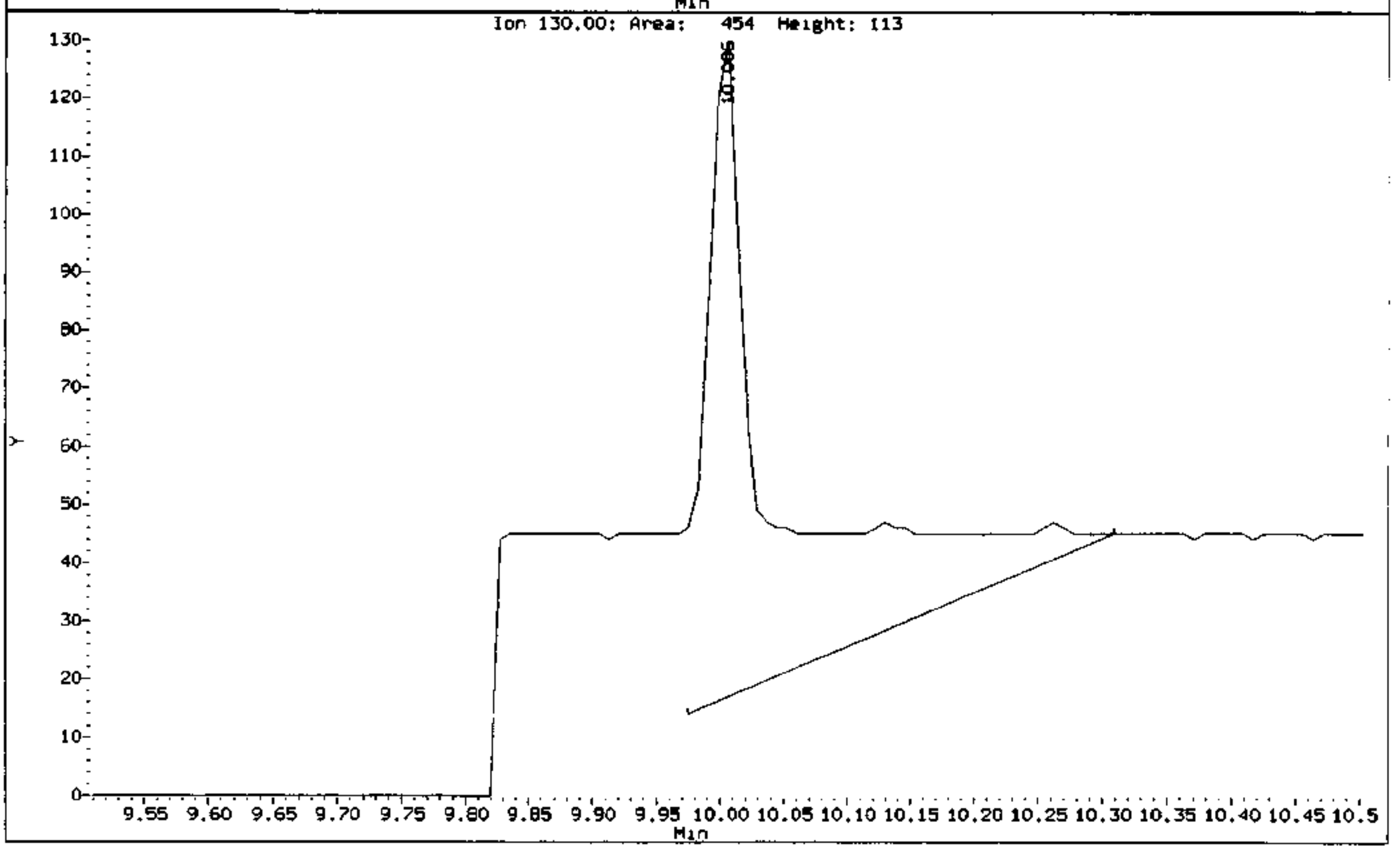
5. Other ____________________

Analyst: VZ   Date: 02/06/13

Data File: /chem1/nt10.i/20130125.b/SIM.b/ic0125g.d
Injection Date: 25-JAN-2013 16:40
Instrument: nt10.i
Client Sample ID:

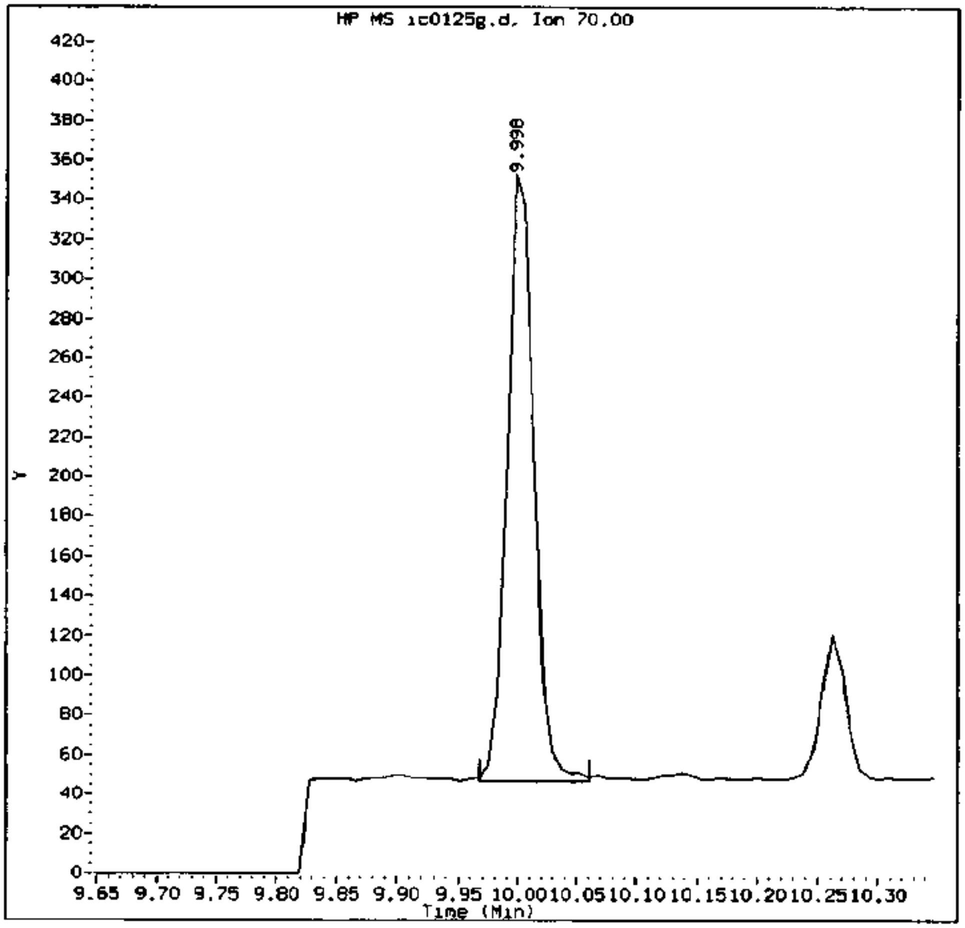
Compound: N-Nitroso-di-n-propylamine
CAS Number: 621-64-7





IC0125G, /chem1/nt10.i/20130125.b/SIM.b/ic0125g.d

N-Nitroso-di-n-propylamine   Amount: 0.05   Area: 489



MANUAL INTEGRATION for N-Nitroso-di-n-propylamine

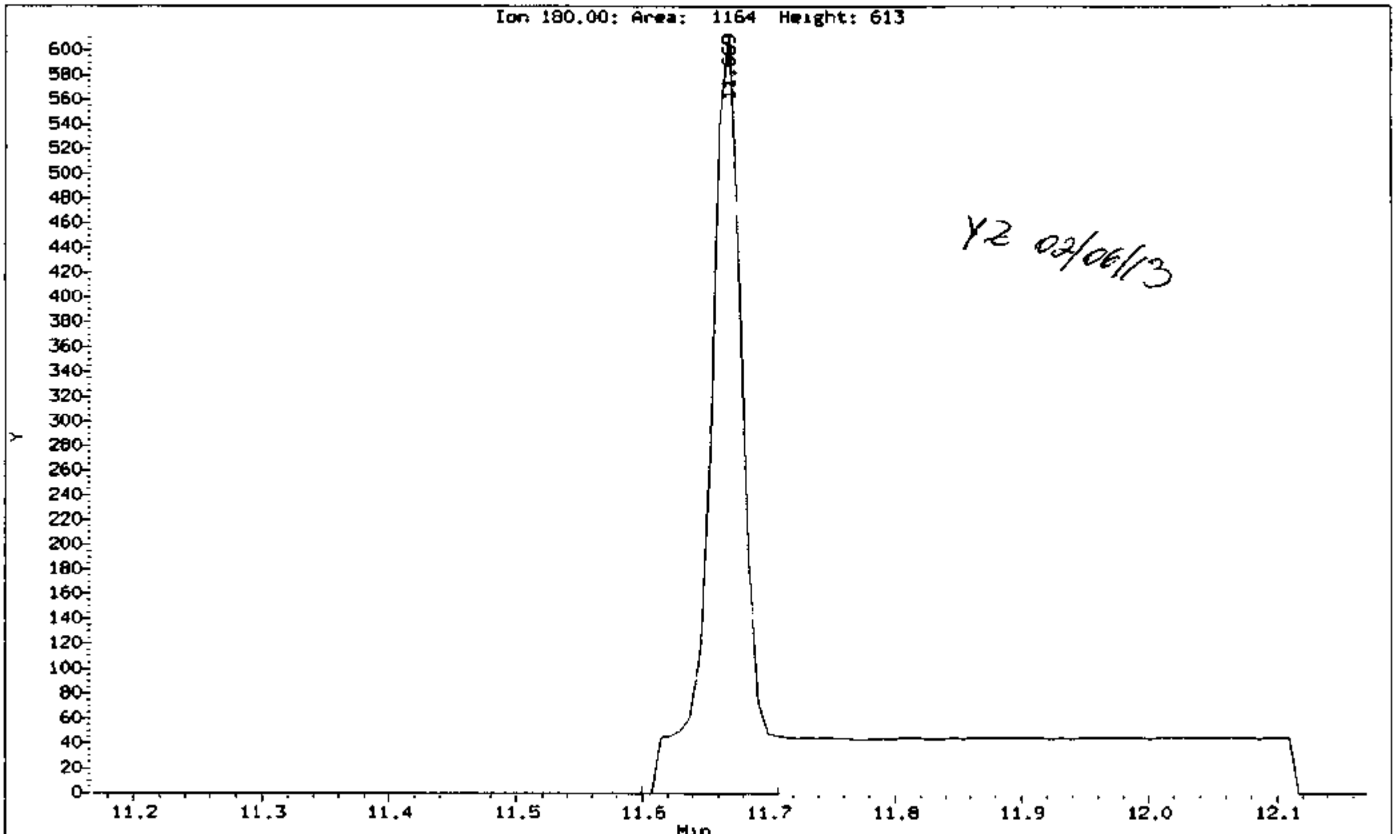
1. Baseline correction ✓
2. Poor chromatography
3. Peak not found
4. Totals calculation

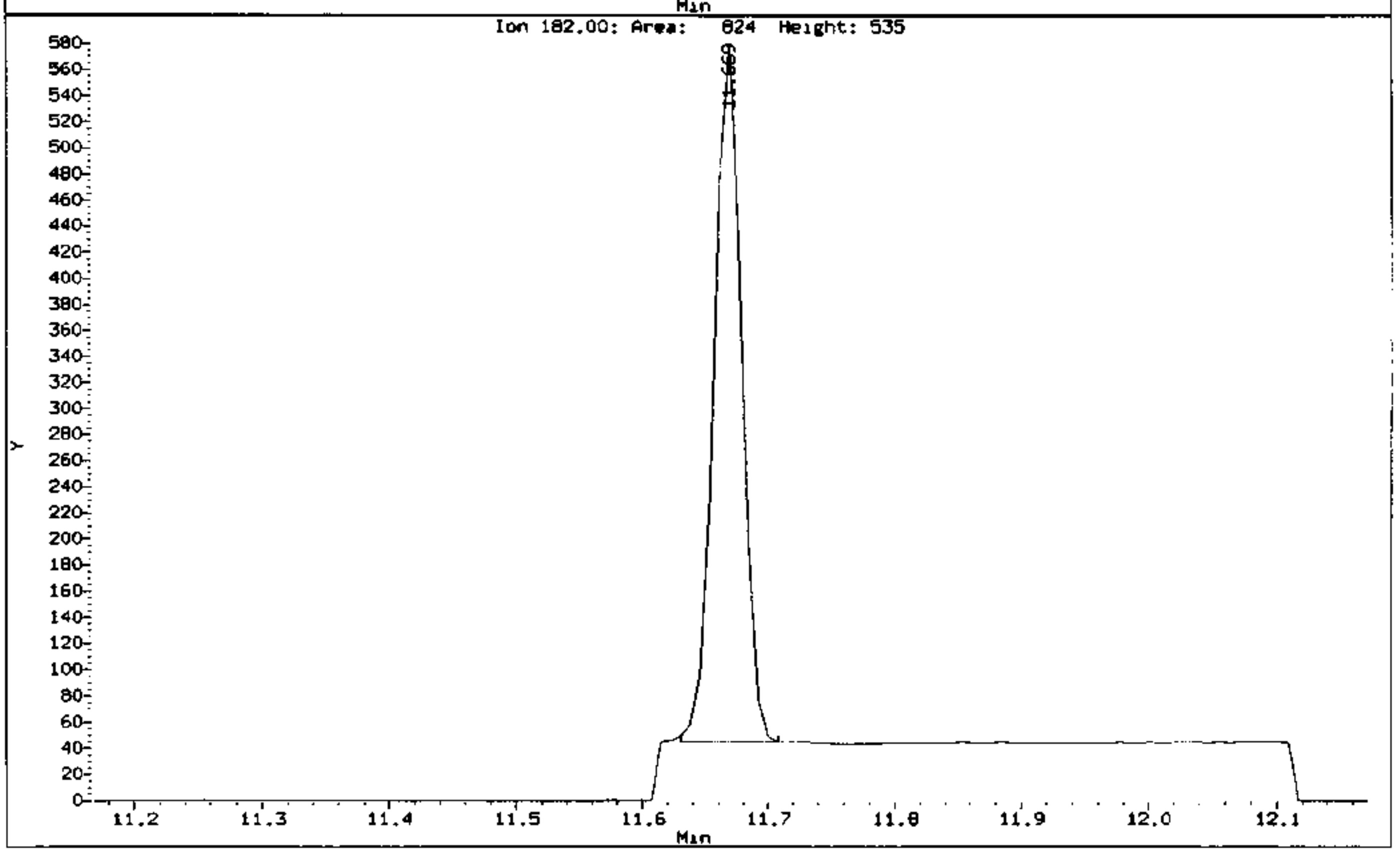
5. Other ____________________

Analyst: YZ   Date: 02/06/13

Data File: /chem1/nt10.i/20130125.b/SIM.b/ic0125g.d
Injection Date: 25-JAN-2013 16:40
Instrument: nt10.i
Client Sample ID:

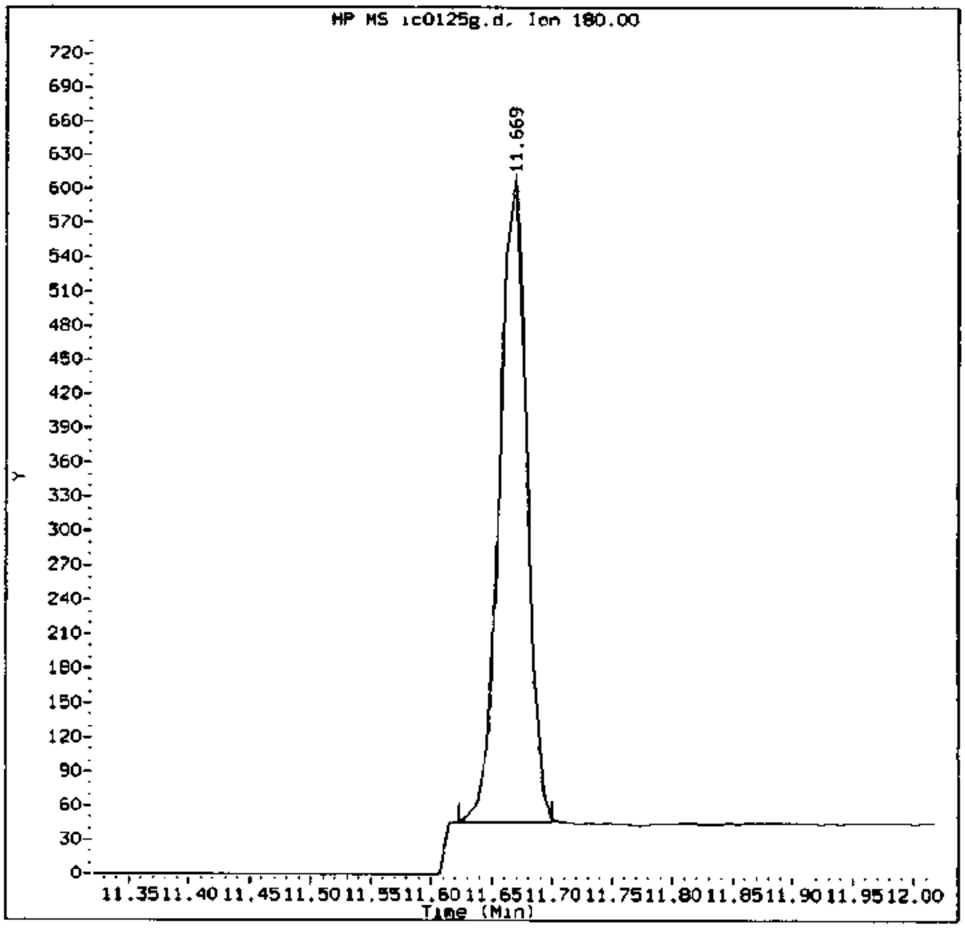
Compound: 1,2,4-Trichlorobenzene
CAS Number: 120-82-1





IC0125G, /chem1/nt10.i/20130125.b/SIM.b/ic0125g.d

1,2,4-Trichlorobenzene Amount: 0.05 Area: 887



MANUAL INTEGRATION for 1,2,4-Trichlorobenzene

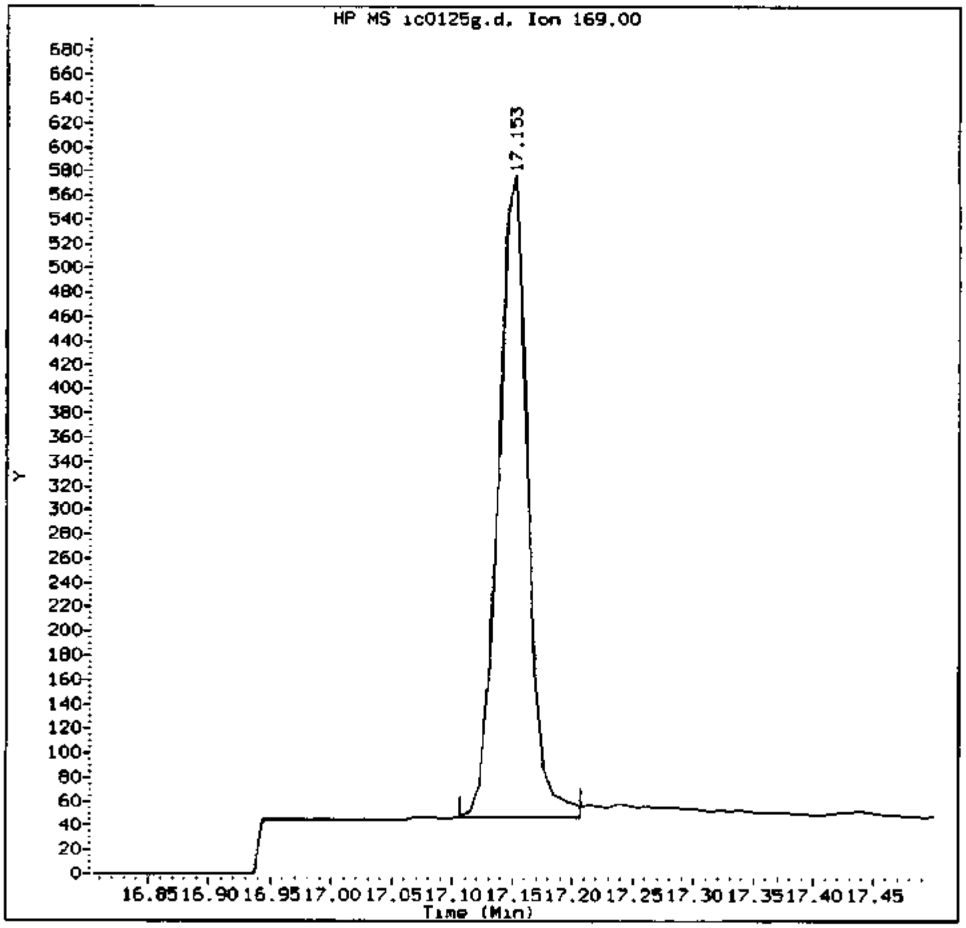
1. Baseline correction ✓
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other ______________________

Analyst: YZ Date: 02/06/13

IC0125G, /chem1/nt10.i/20130125.b/SIM.b/ic0125g.d

N-Nitrosodiphenylamine Amount: 0.04 Area: 921



MANUAL INTEGRATION for N-Nitrosodiphenylamine

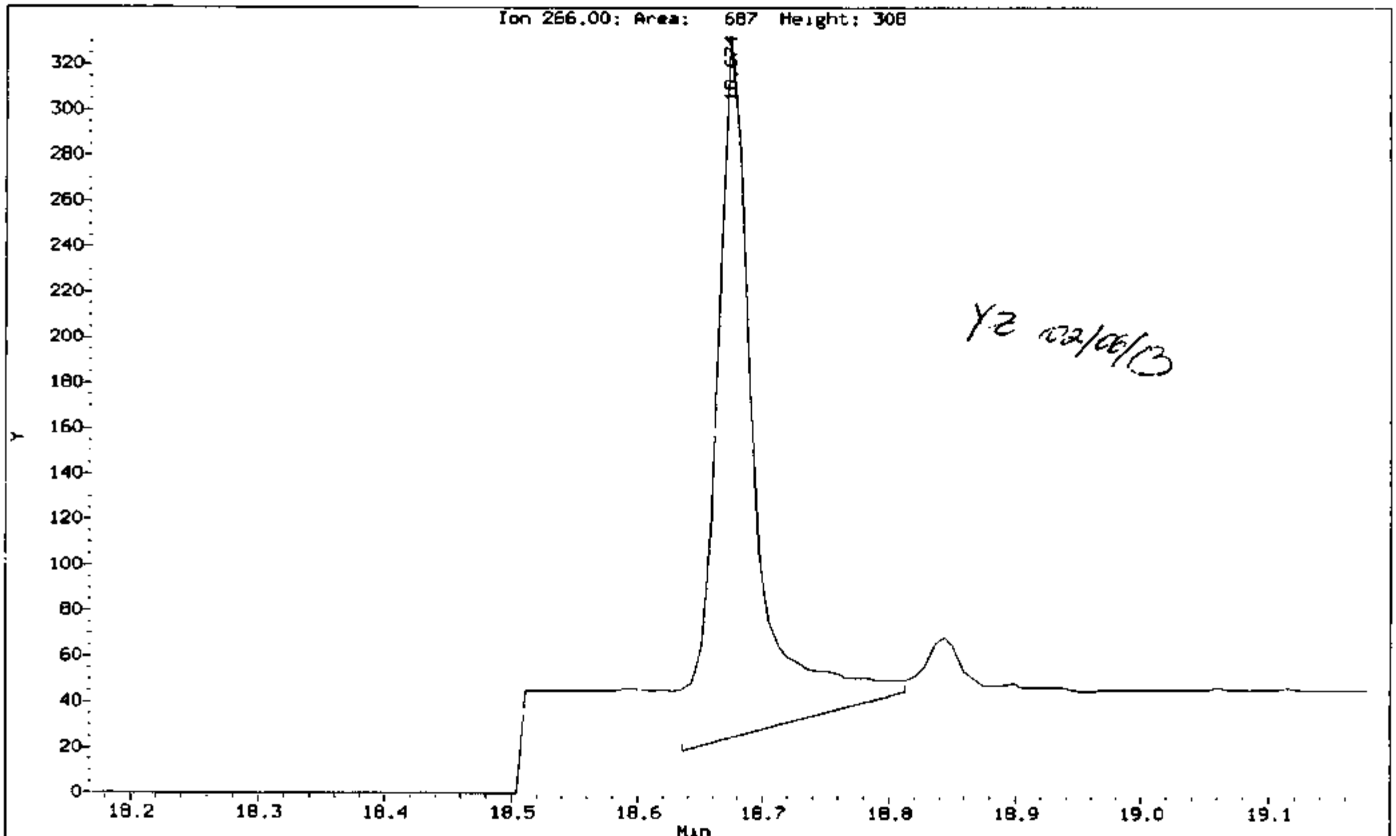
1. Baseline correction
2. Poor chromatography
3. Peak not found ✓
4. Totals calculation

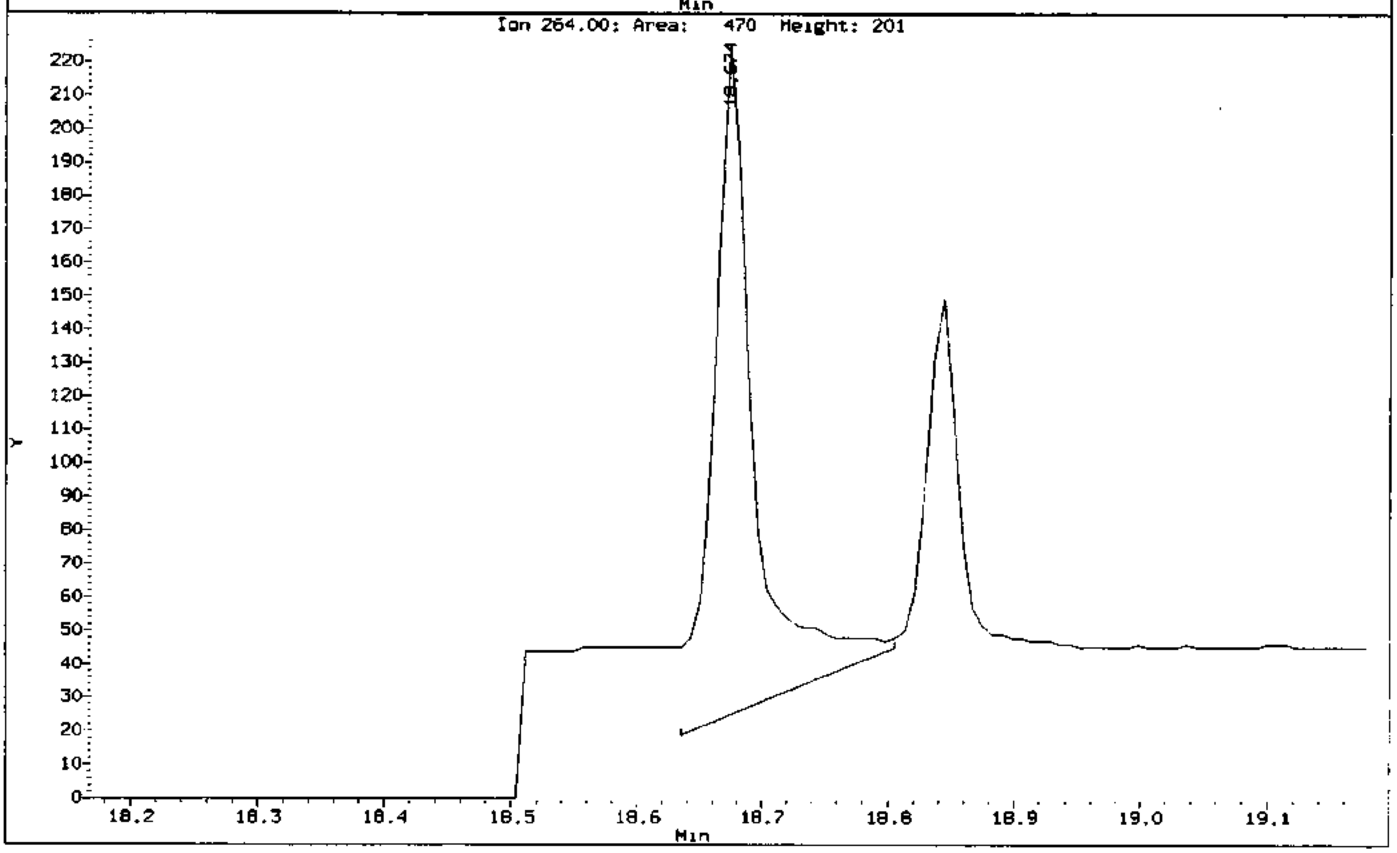
5. Other ______________________

Analyst: YZ Date: 02/06/13

Data File: /chem1/nt10.i/20130125.b/SIM.b/ic0125g.d
Injection Date: 25-JAN-2013 16:40
Instrument: nt10.i
Client Sample ID:

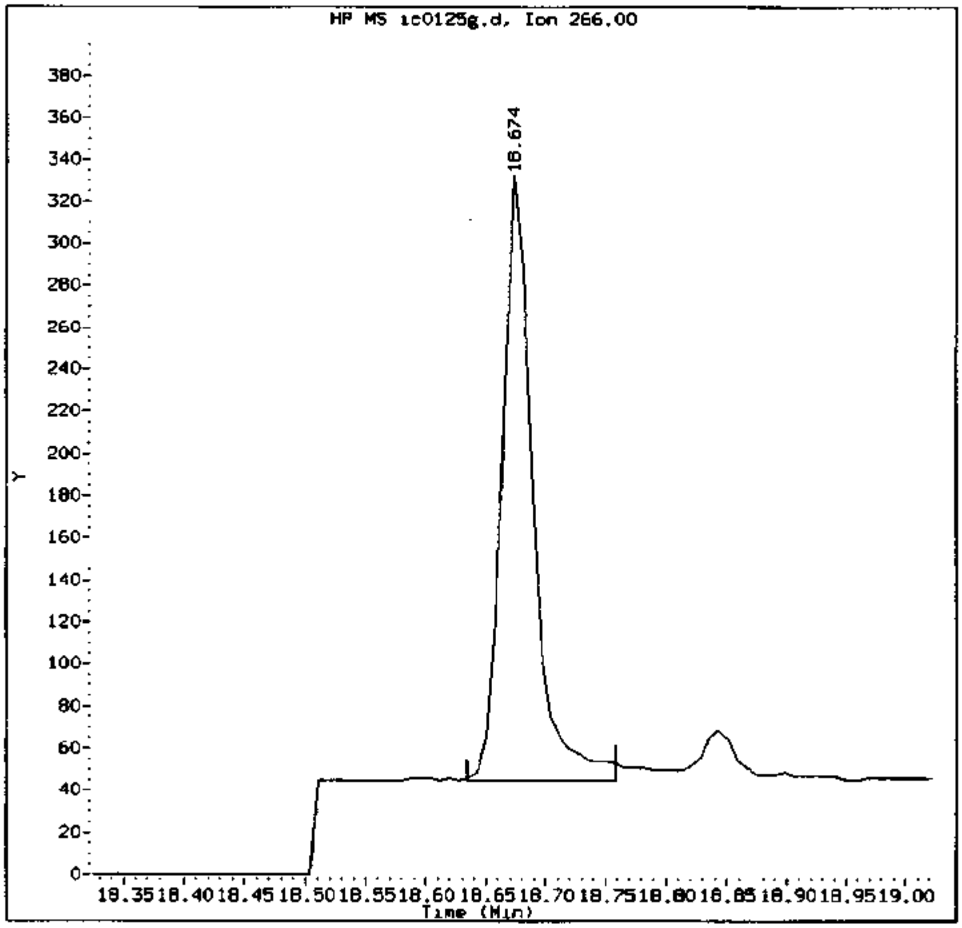
Compound: Pentachlorophenol
CAS Number: 87-86-5





IC0125G, /chem1/nt10.i/20130125.b/SIM.b/ic0125g.d

Pentachlorophenol   Amount: 0.06   Area: 524



MANUAL INTEGRATION for Pentachlorophenol

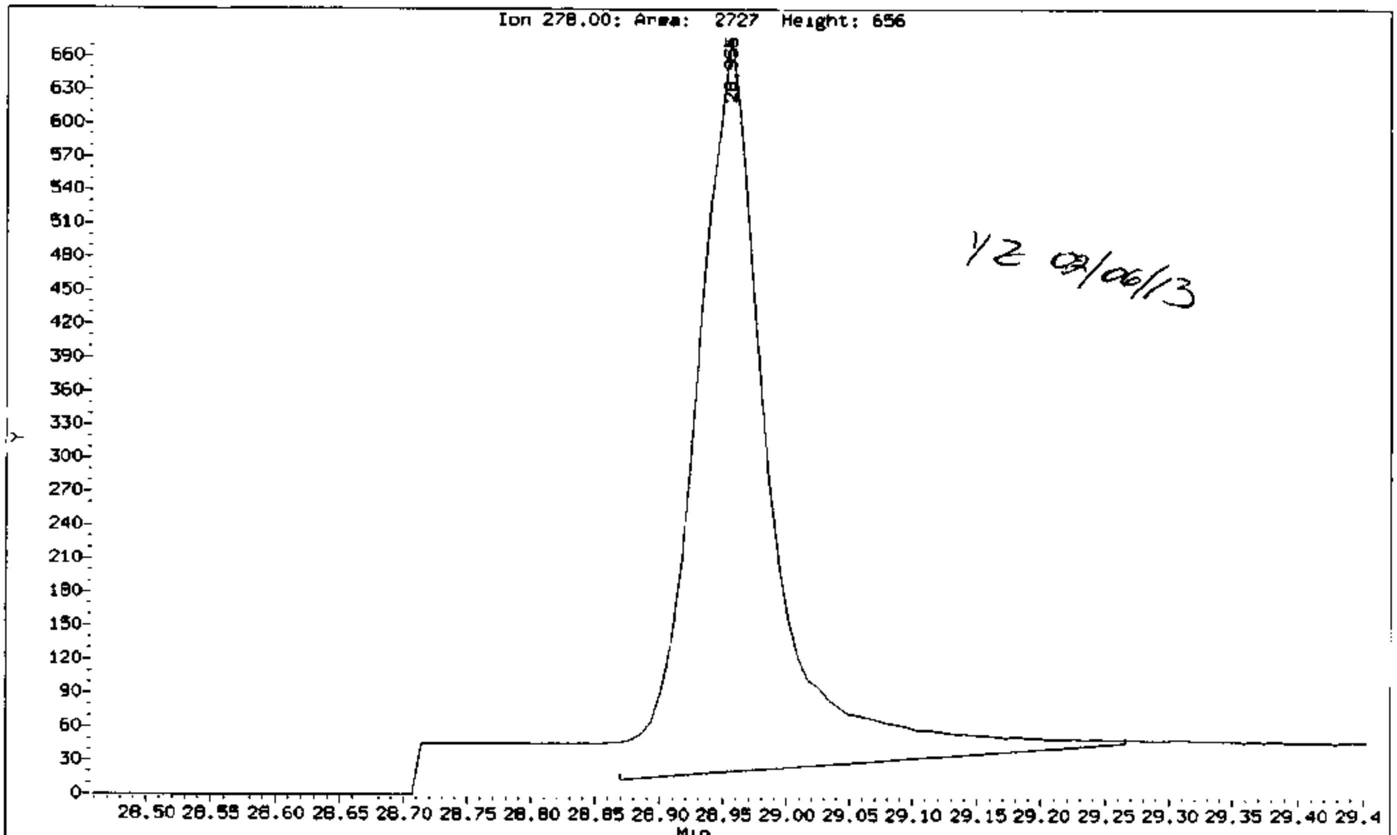
1. Baseline correction ✓
2. Poor chromatography
3. Peak not found
4. Totals calculation

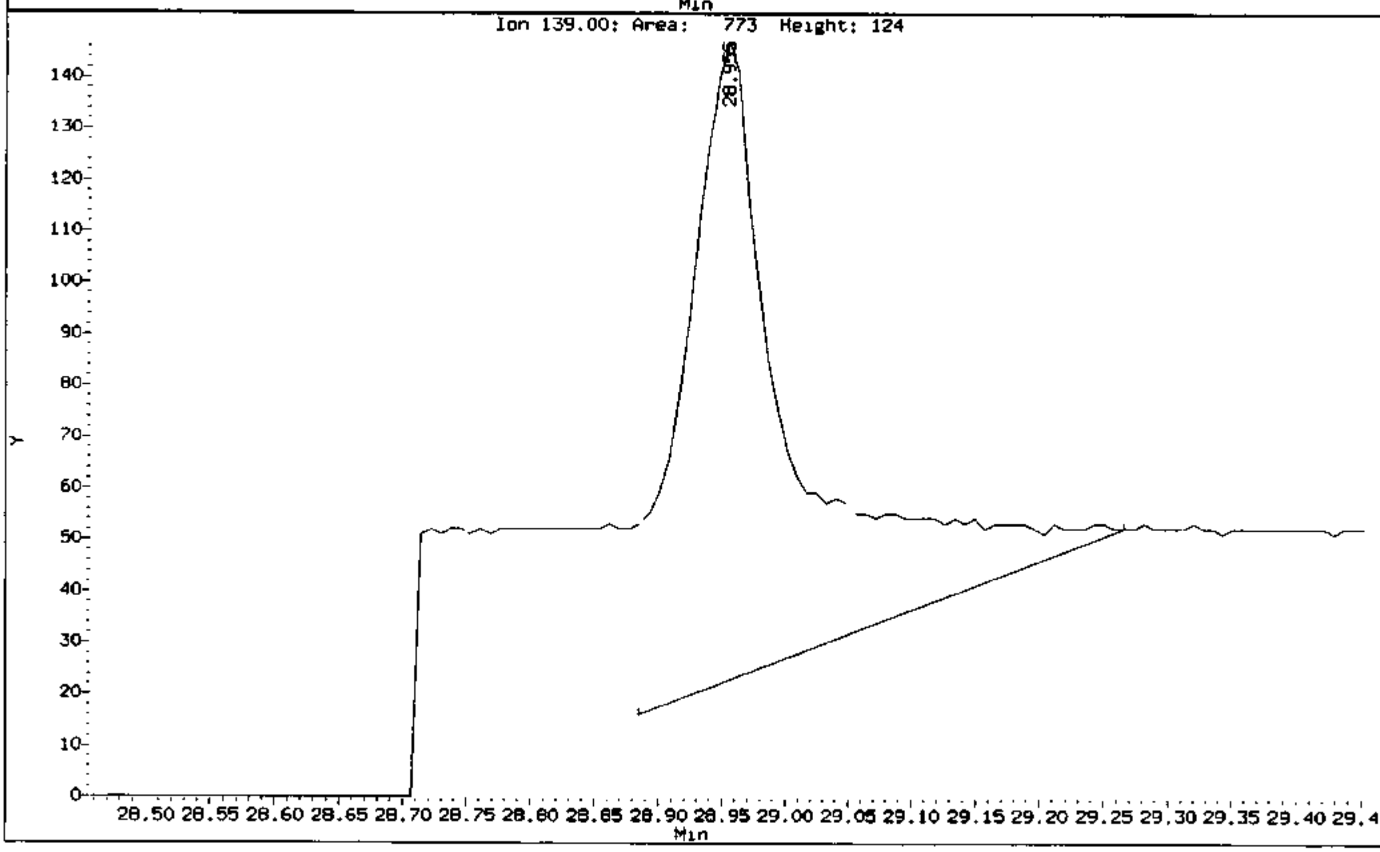
5. Other ____________________

Analyst: YZ   Date: 02/06/13

Data File: /chem1/nt10.i/20130125.b/SIM.b/ic0125g.d
Injection Date: 25-JAN-2013 16:40
Instrument: nt10.i
Client Sample ID:

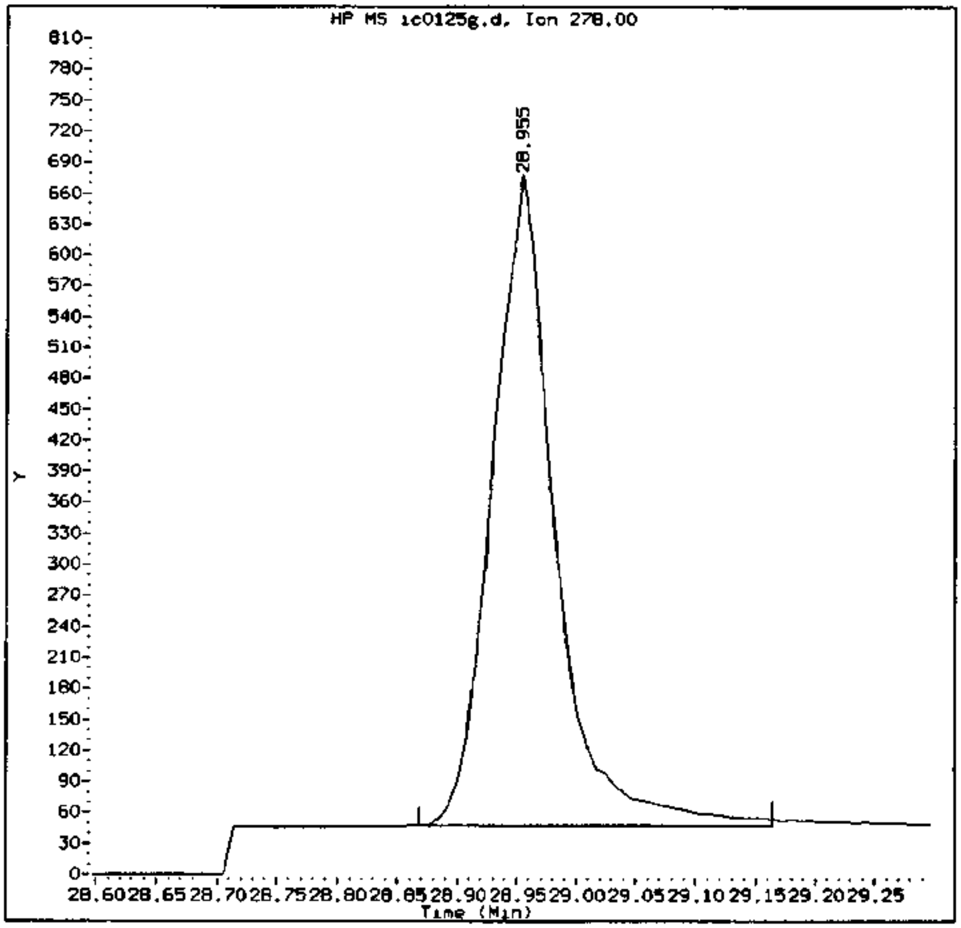
Compound: Dibenzo(a,h)anthracene
CAS Number: 53-70-3





IC0125G, /chem1/nt10.i/20130125.b/SIM.b/ic0125g.d

Dibenzo(a,h)anthracene Amount: 0.05 Area: 2301



MANUAL INTEGRATION for Dibenzo(a,h)anthracene

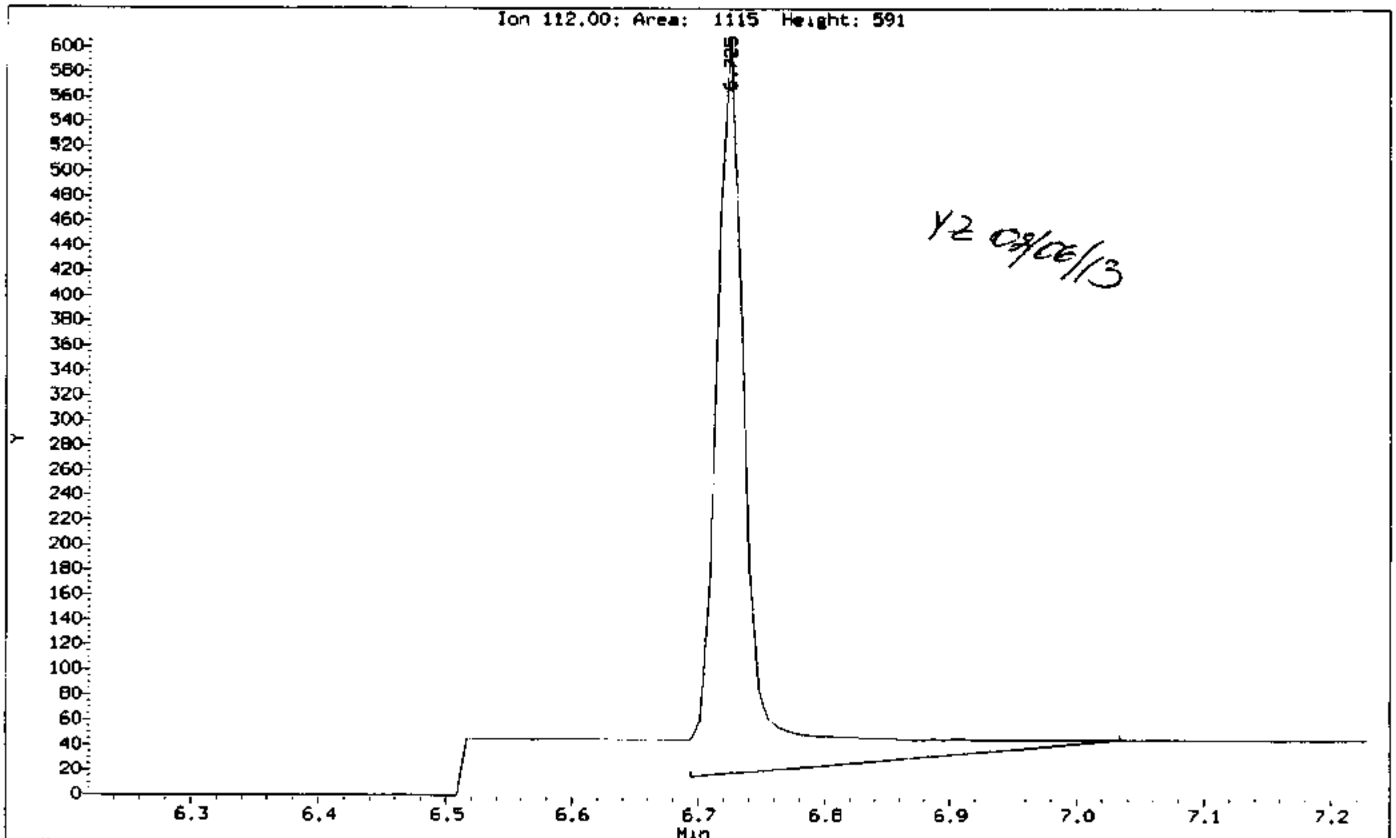
1. Baseline correction ✓
2. Poor chromatography
3. Peak not found
4. Totals calculation

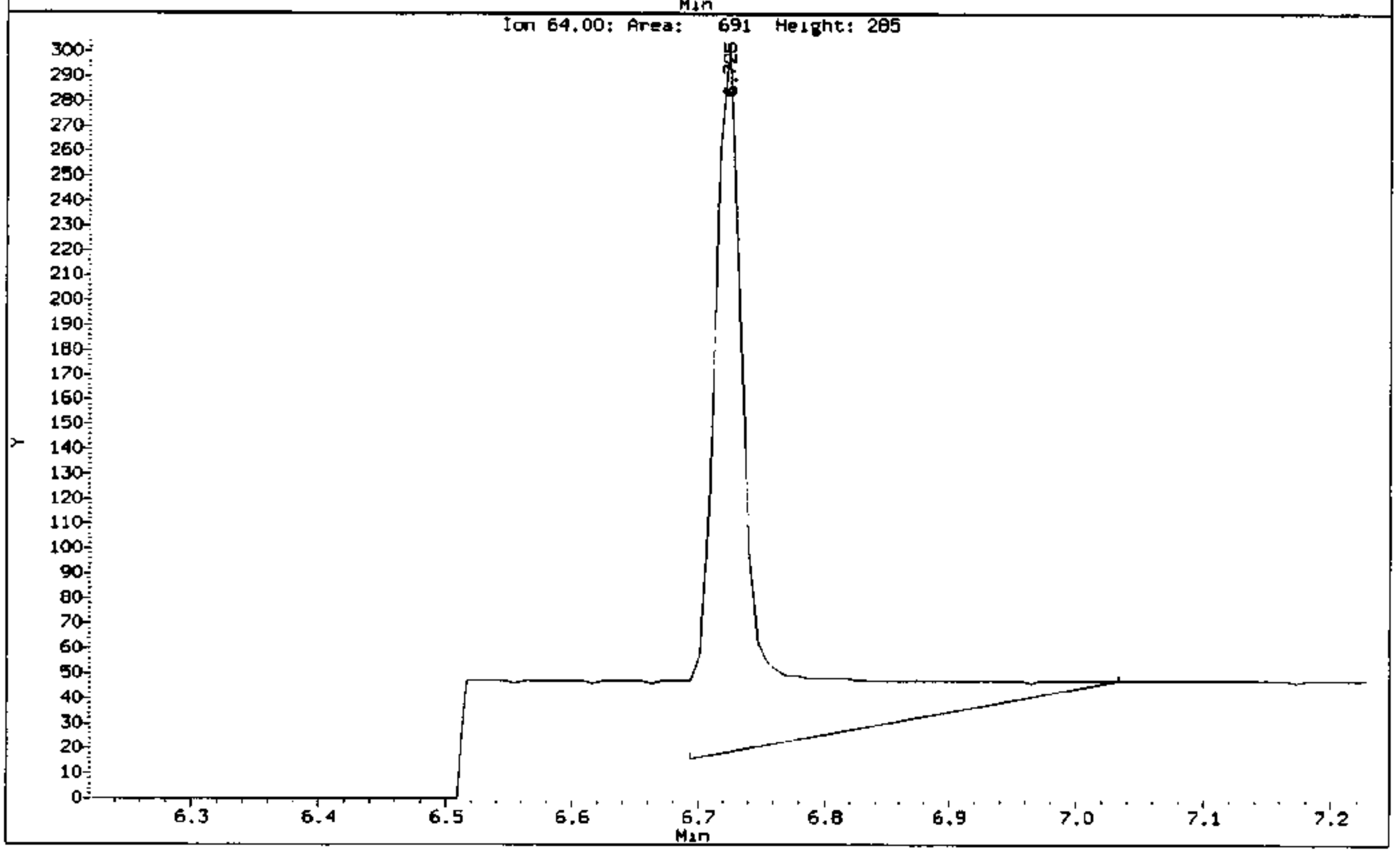
5. Other ______________________

Analyst: YZ Date: 02/06/13

Data File: /chem1/nt10.i/20130125.b/SIM.b/ic0125g.d
Injection Date: 25-JAN-2013 16:40
Instrument: nt10.i
Client Sample ID:

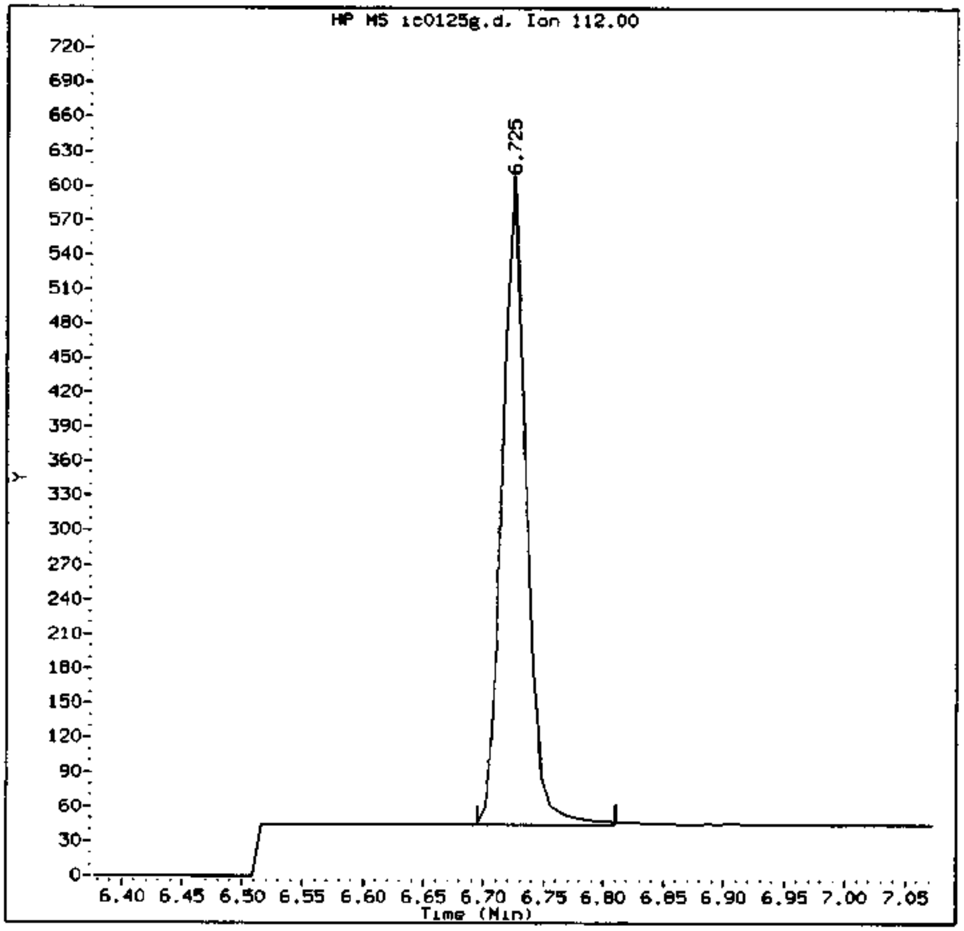
Compound: 2-Fluorophenol
CAS Number: 367-12-4





IC0125G, /chem1/nt10.i/20130125.b/SIM.b/ic0125g.d

2-Fluorophenol Amount: 0.05 Area: 797



MANUAL INTEGRATION for 2-Fluorophenol

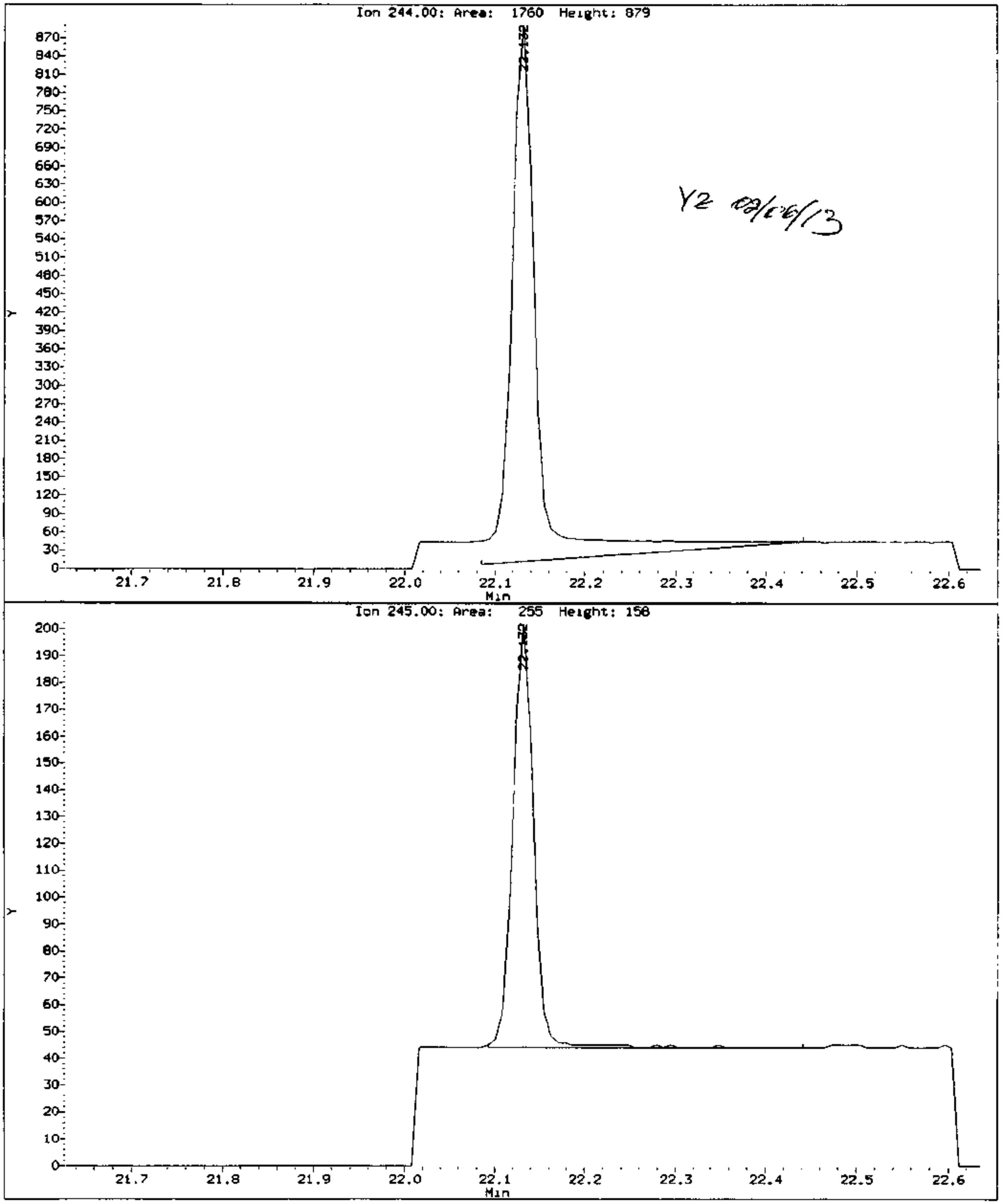
1. Baseline correction ✓
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other ______________________

Analyst: YZ Date: 02/06/13

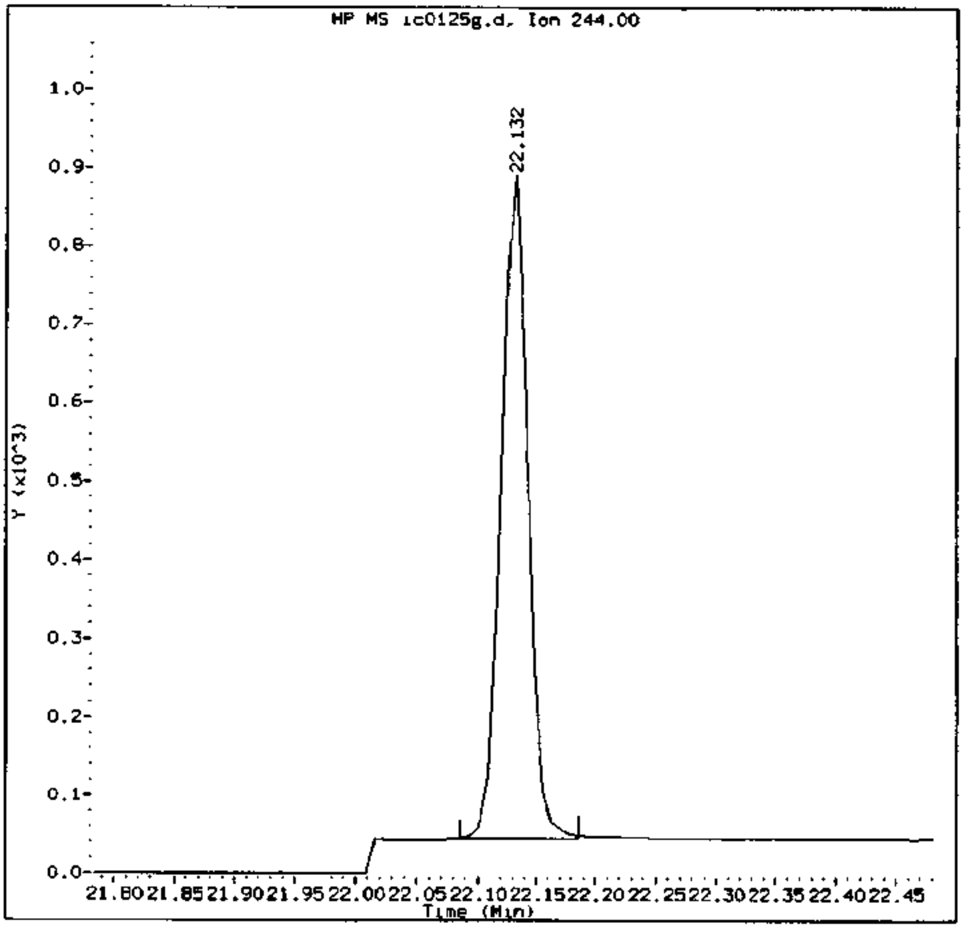
Data File: /chem1/nt10.i/20130125.b/SIM.b/ic0125g.d
Injection Date: 25-JAN-2013 16:40
Instrument: nt10.i
Client Sample ID:

Compound: Terphenyl-d14
CAS Number:



IC0125G, /chem1/nt10.i/20130125.b/SIM.b/ic0125g.d

Terphenyl-d14   Amount: 0.05   Area: 1344



MANUAL INTEGRATION for Terphenyl-d14

1. Baseline correction ✓
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other ____________________

Analyst: YZ   Date: 02/06/13

CO-ELUTION SUMMARY FOR FILE - ic0125g.d

Lab ID: IC0125G, Method: SIM.b/SIMABN2.m, Instrument: nt10.i, Date: 25-JAN-20

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Data File: /chem1/nt10.i/20130125.b/SIM.b/ic0125h.d
Report Date: 06-Feb-2013 11:08

Analytical Resources, Inc.

METHOD 8270D-SIM

YZ 02/06/13

Data file : /chem1/nt10.i/20130125.b/SIM.b/ic0125h.d
Lab Smp Id: IC0125H
Inj Date : 25-JAN-2013 17:16
Operator : VTS/YZ Inst ID: nt10.i
Smp Info : IC0125H
Misc Info :
Comment :
Method : /chem1/nt10.i/20130125.b/SIM.b/SIMABN2.m
Meth Date : 06-Feb-2013 11:08 yev Quant Type: ISTD
Cal Date : 25-JAN-2013 17:16 Cal File: ic0125h.d
Als bottle: 9 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 3.50

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.725	6.725	(0.740)	7873	0.50000	0.4941
	3 Phenol	94	8.456	8.456	(0.930)	10035	0.50000	0.4959
	7 1,3-Dichlorobenzene	146	9.013	9.012	(0.991)	10196	0.50000	0.5017
*	8 1,4-Dichlorobenzene-d4	152	9.090	9.082	(1.000)	50086	4.00000	
	9 1,4-Dichlorobenzene	146	9.121	9.113	(1.003)	10146	0.50000	0.5001
	11 Benzyl alcohol	79	9.393	9.392	(1.033)	5875	0.50000	0.4899
	12 1,2-Dichlorobenzene	146	9.494	9.493	(1.044)	9559	0.50000	0.4975
	13 2-Methylphenol	108	9.649	9.649	(1.061)	7566	0.50000	0.4969
	15 4-Methylphenol	108	9.936	9.936	(1.093)	7904	0.50000	0.5012
	16 N-Nitroso-di-n-propylamine	70	9.998	9.998	(1.100)	4907	0.50000	0.4950
	22 2,4-Dimethylphenol	107	11.068	11.068	(0.942)	16161	1.00000	0.9960
	26 1,2,4-Trichlorobenzene	180	11.669	11.669	(0.993)	8767	0.50000	0.5003
*	27 Naphthalene-d8	136	11.754	11.754	(1.000)	188224	4.00000	
	30 Hexachlorobutadiene	225	12.210	12.210	(1.039)	5232	0.50000	0.4918
	39 Dimethylphthalate	163	15.166	15.166	(0.968)	15601	0.50000	0.4971
*	42 Acenaphthene-d10	162	15.661	15.661	(1.000)	104418	4.00000	
	50 Diethylphthalate	149	16.759	16.751	(1.070)	18380	0.50000	0.4949
	54 N-Nitrosodiphenylamine	169	17.145	17.153	(0.905)	11610	0.50000	0.5127
	57 Hexachlorobenzene	284	18.279	18.279	(0.965)	7635	0.50000	0.5095
	58 Pentachlorophenol	266	18.674	18.674	(0.986)	8335	1.00000	0.8849
*	59 Phenanthrene-d10	188	18.937	18.937	(1.000)	198157	4.00000	
$	66 Terphenyl-d14	244	22.132	22.132	(0.922)	14697	0.50000	0.4865
	67 Butylbenzylphthalate	149	23.077	23.077	(0.961)	10149	0.50000	0.4671
*	69 Chrysene-d12	240	24.006	24.006	(1.000)	227335	4.00000	
*	77 Perylene-d12	264	26.507	26.507	(1.000)	219691	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.947	28.947	(1.092)	25984	0.50000	0.4962
	90 N-Nitrosodimethylamine	74	4.447	4.455	(0.489)	9444	1.00000	0.9933

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: ic0125h.d
Lab Smp Id: IC0125H
Analysis Type: SV
Quant Type: ISTD
Operator: VTS/YZ
Method File: /chem1/nt10.i/20130125.b/SIM.b/SIMABN2.m
Misc Info:

Calibration Date: 25-JAN-2013
Calibration Time: 15:27

Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	53853	26926	107706	50086	-6.99
27 Naphthalene-d8	200104	100052	400208	188224	-5.94
42 Acenaphthene-d10	112392	56196	224784	104418	-7.09
59 Phenanthrene-d10	210710	105355	421420	198157	-5.96
69 Chrysene-d12	240805	120402	481610	227335	-5.59
77 Perylene-d12	230834	115417	461668	219691	-4.83

COMPOUND	STANDARD	RT LIMIT LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.09	8.59	9.59	9.09	0.00
27 Naphthalene-d8	11.75	11.25	12.25	11.75	0.00
42 Acenaphthene-d10	15.66	15.16	16.16	15.66	0.00
59 Phenanthrene-d10	18.94	18.44	19.44	18.94	0.00
69 Chrysene-d12	24.01	23.51	24.51	24.01	0.00
77 Perylene-d12	26.51	26.01	27.01	26.51	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/nt10.i/20130125.b/SIM.b/ic0125h.d

Date : 25-JAN-2013 17:16

Client ID:

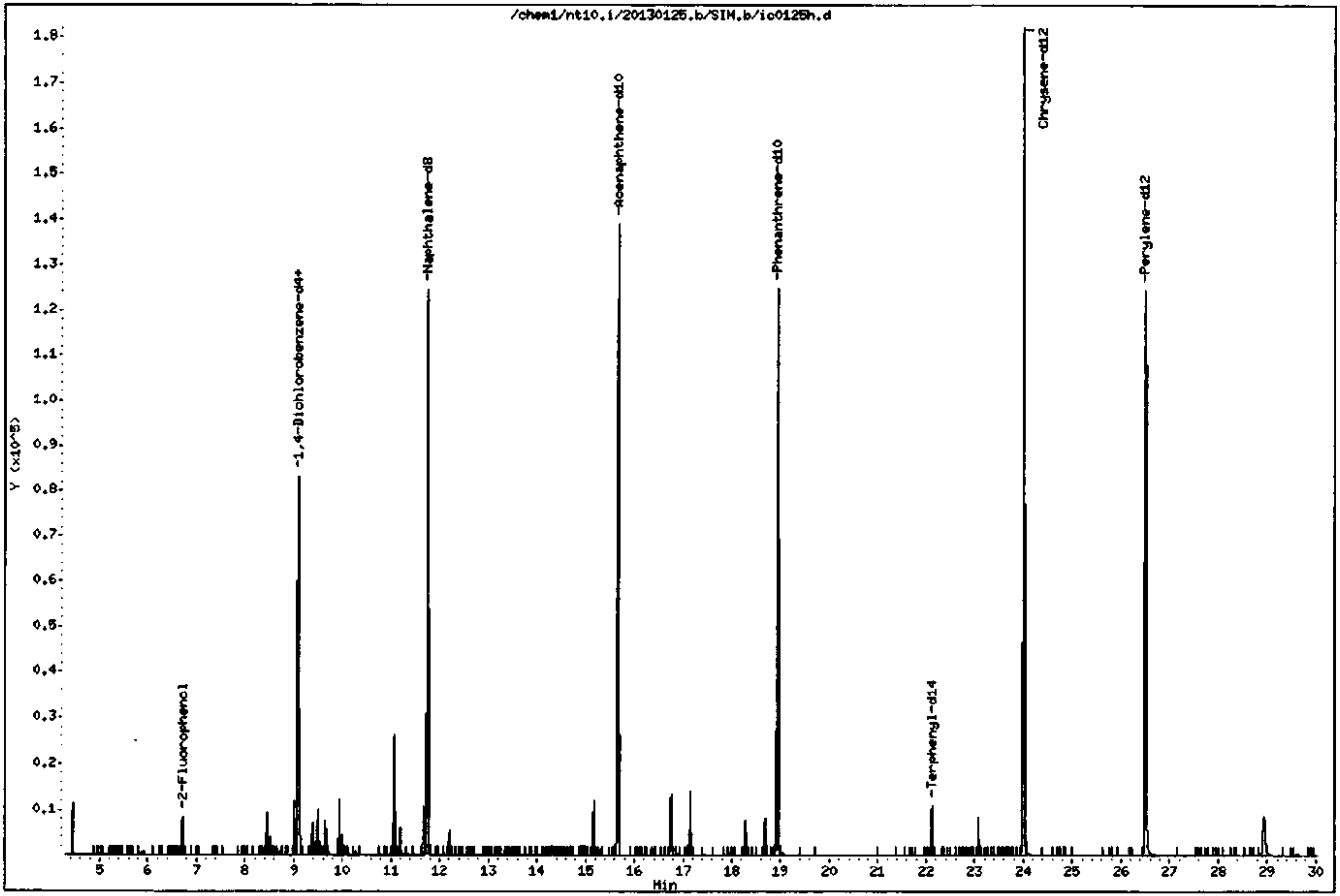
Sample Info: IC0125H

Column phase: ZB-5msi

Instrument: nt10.i

Operator: VTS/YZ

Column diameter: 0.25



CO-ELUTION SUMMARY FOR FILE - ic0125h.d

Lab ID: IC0125H, Method: SIM.b/SIMABN2.m, Instrument: nt10.i, Date: 25-JAN-20

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Data File: /chem1/nt10.i/20130125.b/SIM.b/ic0125i.d
Report Date: 06-Feb-2013 11:08

Analytical Resources, Inc.

YZ 02/06/13

METHOD 8270D-SIM

Data file : /chem1/nt10.i/20130125.b/SIM.b/ic0125i.d
Lab Smp Id: IC0125I
Inj Date : 25-JAN-2013 17:53
Operator : YZ   Inst ID: nt10.i
Smp Info : IC0125I
Misc Info :
Comment :
Method : /chem1/nt10.i/20130125.b/SIM.b/SIMABN2.m
Meth Date : 06-Feb-2013 11:08 yev   Quant Type: ISTD
Cal Date : 25-JAN-2013 17:53   Cal File: ic0125i.d
Als bottle: 10   Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: PSDDA.sub
Target Version: 3.50

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.725	6.725	(0.740)	1598	0.10000	0.09578
	3 Phenol	94	8.456	8.456	(0.931)	2001	0.10000	0.09444
	7 1,3-Dichlorobenzene	146	9.012	9.012	(0.992)	2154	0.10000	0.1012
*	8 1,4-Dichlorobenzene-d4	152	9.082	9.082	(1.000)	52438	4.00000	
	9 1,4-Dichlorobenzene	146	9.113	9.113	(1.003)	2180	0.10000	0.1026
	11 Benzyl alcohol	79	9.392	9.392	(1.034)	1174	0.10000	0.09351(M)
	12 1,2-Dichlorobenzene	146	9.493	9.493	(1.045)	2052	0.10000	0.1020
	13 2-Methylphenol	108	9.649	9.649	(1.062)	1498	0.10000	0.09396
	15 4-Methylphenol	108	9.936	9.936	(1.094)	1536	0.10000	0.09316
	16 N-Nitroso-di-n-propylamine	70	9.998	9.998	(1.101)	990	0.10000	0.09539(M)
	22 2,4-Dimethylphenol	107	11.068	11.068	(0.942)	3079	0.20000	0.1836
	26 1,2,4-Trichlorobenzene	180	11.669	11.669	(0.993)	2059	0.10000	0.1137
*	27 Naphthalene-d8	136	11.754	11.754	(1.000)	194519	4.00000	
	30 Hexachlorobutadiene	225	12.210	12.210	(1.039)	1098	0.10000	0.09988
	39 Dimethylphthalate	163	15.166	15.166	(0.968)	3070	0.10000	0.09551(M)
*	42 Acenaphthene-d10	162	15.661	15.661	(1.000)	105586	4.00000	
	50 Diethylphthalate	149	16.751	16.751	(1.070)	3860	0.10000	0.1028
	54 N-Nitrosodiphenylamine	169	17.153	17.153	(0.906)	2058	0.10000	0.09080
	57 Hexachlorobenzene	284	18.279	18.279	(0.965)	1494	0.10000	0.1013(M)
	58 Pentachlorophenol	266	18.674	18.674	(0.986)	1250	0.20000	0.1359
*	59 Phenanthrene-d10	188	18.937	18.937	(1.000)	194974	4.00000	
$	66 Terphenyl-d14	244	22.132	22.132	(0.922)	3257	0.10000	0.1092
	67 Butylbenzylphthalate	149	23.077	23.077	(0.961)	1769	0.10000	0.08242
*	69 Chrysene-d12	240	24.006	24.006	(1.000)	224554	4.00000	
*	77 Perylene-d12	264	26.507	26.507	(1.000)	218858	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.947	28.947	(1.092)	4594	0.10000	0.08807(M)
	90 N-Nitrosodimethylamine	74	4.455	4.455	(0.490)	1966	0.20000	0.1975

QC Flag Legend

M - Compound response manually integrated.

Report Date: 06-Feb-2013 11:08

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: ic0125i.d
Lab Smp Id: IC0125I
Analysis Type: SV
Quant Type: ISTD
Operator: YZ
Method File: /chem1/nt10.i/20130125.b/SIM.b/SIMABN2.m
Misc Info:

Calibration Date: 25-JAN-2013
Calibration Time: 15:27

Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	53853	26926	107706	52438	-2.63
27 Naphthalene-d8	200104	100052	400208	194519	-2.79
42 Acenaphthene-d10	112392	56196	224784	105586	-6.06
59 Phenanthrene-d10	210710	105355	421420	194974	-7.47
69 Chrysene-d12	240805	120402	481610	224554	-6.75
77 Perylene-d12	230834	115417	461668	218858	-5.19

COMPOUND	STANDARD	RT LIMIT LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.09	8.59	9.59	9.08	-0.09
27 Naphthalene-d8	11.75	11.25	12.25	11.75	0.00
42 Acenaphthene-d10	15.66	15.16	16.16	15.66	0.00
59 Phenanthrene-d10	18.94	18.44	19.44	18.94	0.00
69 Chrysene-d12	24.01	23.51	24.51	24.01	0.00
77 Perylene-d12	26.51	26.01	27.01	26.51	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/nt10.i/20130125.b/SIM.b/ic0125i.d

Date : 25-JAN-2013 17:53

Client ID:

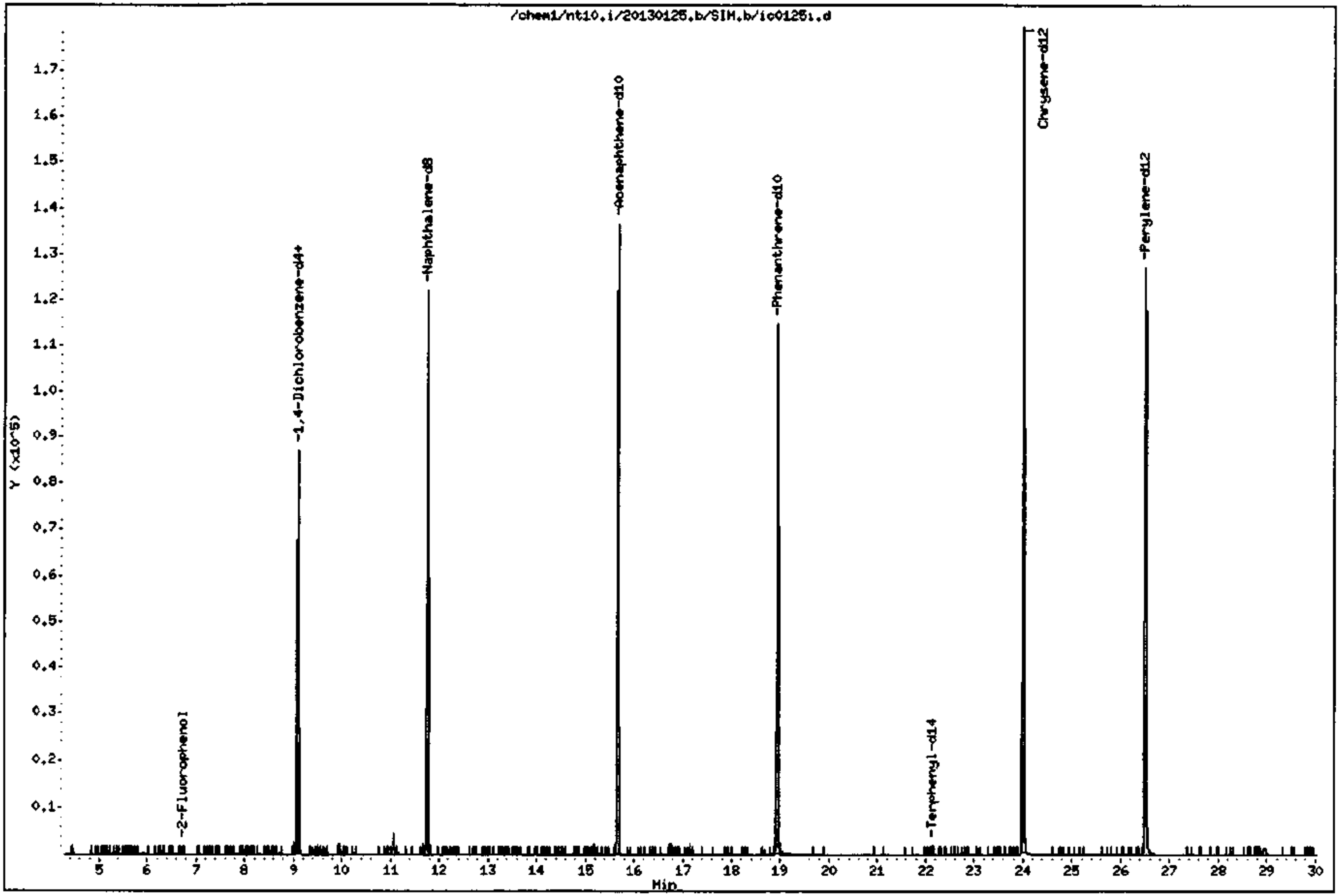
Instrument: nt10.i

Sample Info: IC0125I

Operator: YZ

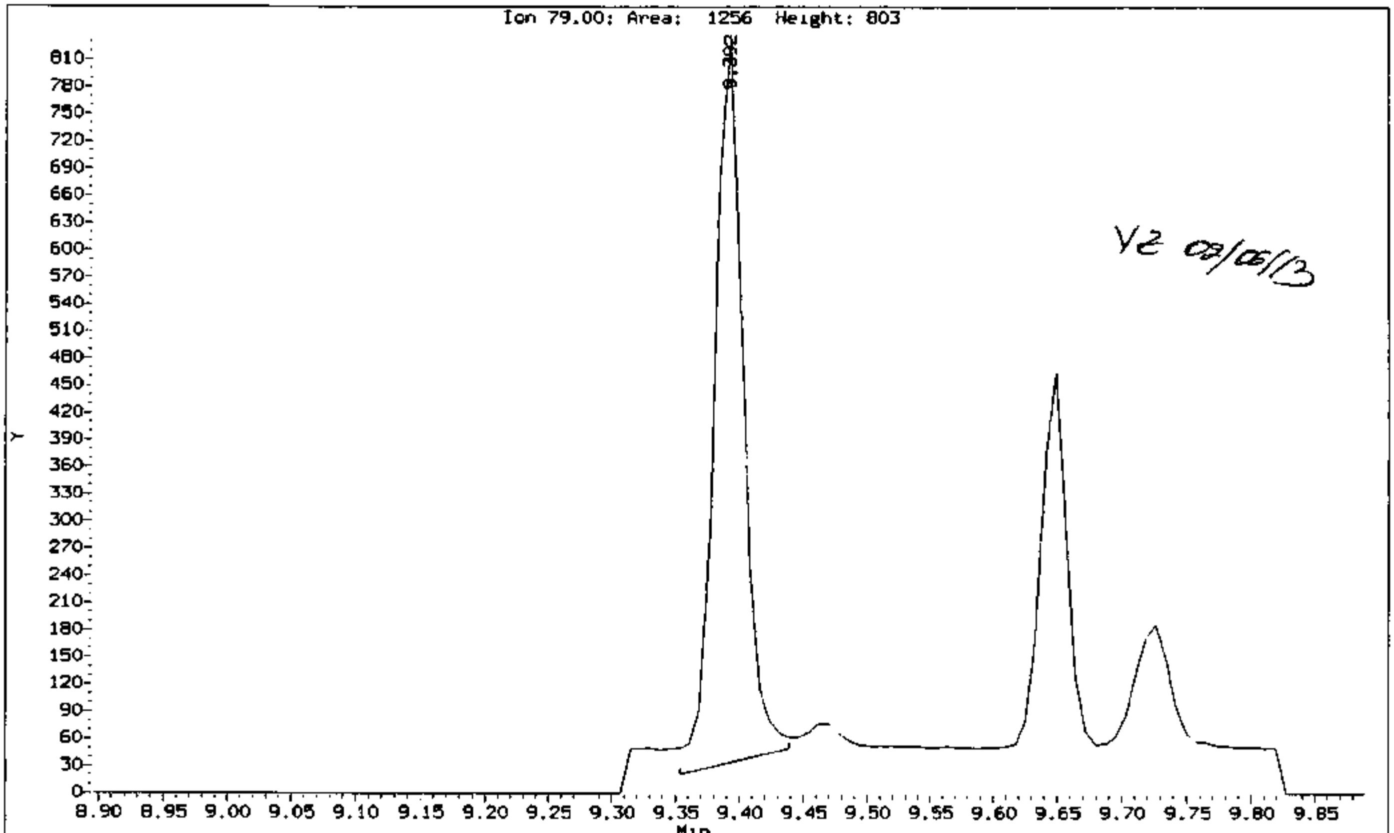
Column phase: ZB-5msi

Column diameter: 0.25

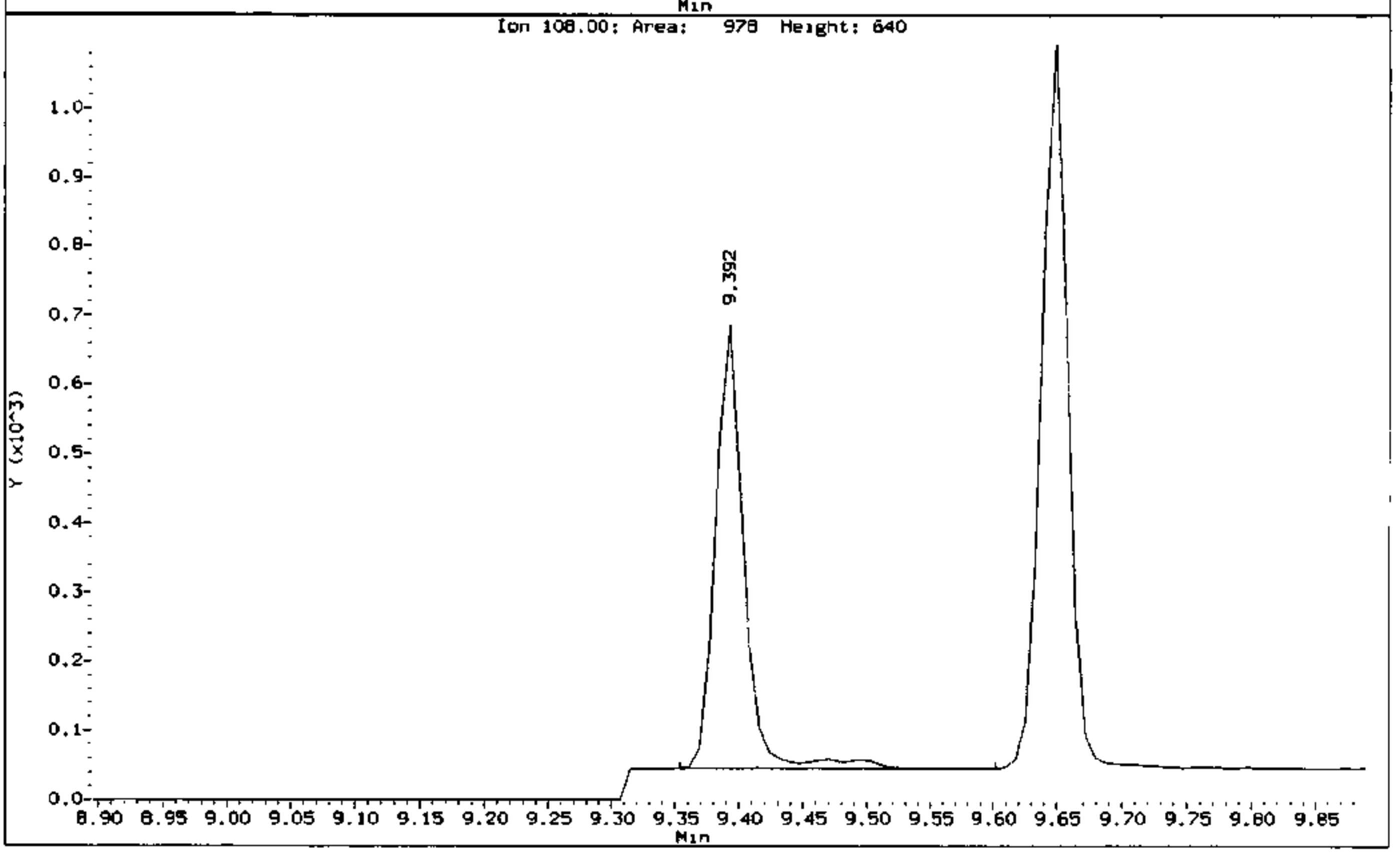


Data File: /chem1/nt10.i/20130125.b/SIM.b/ic0125i.d
Injection Date: 25-JAN-2013 17:53
Instrument: nt10.i
Client Sample ID:

Compound: Benzyl alcohol
CAS Number: 100-51-6



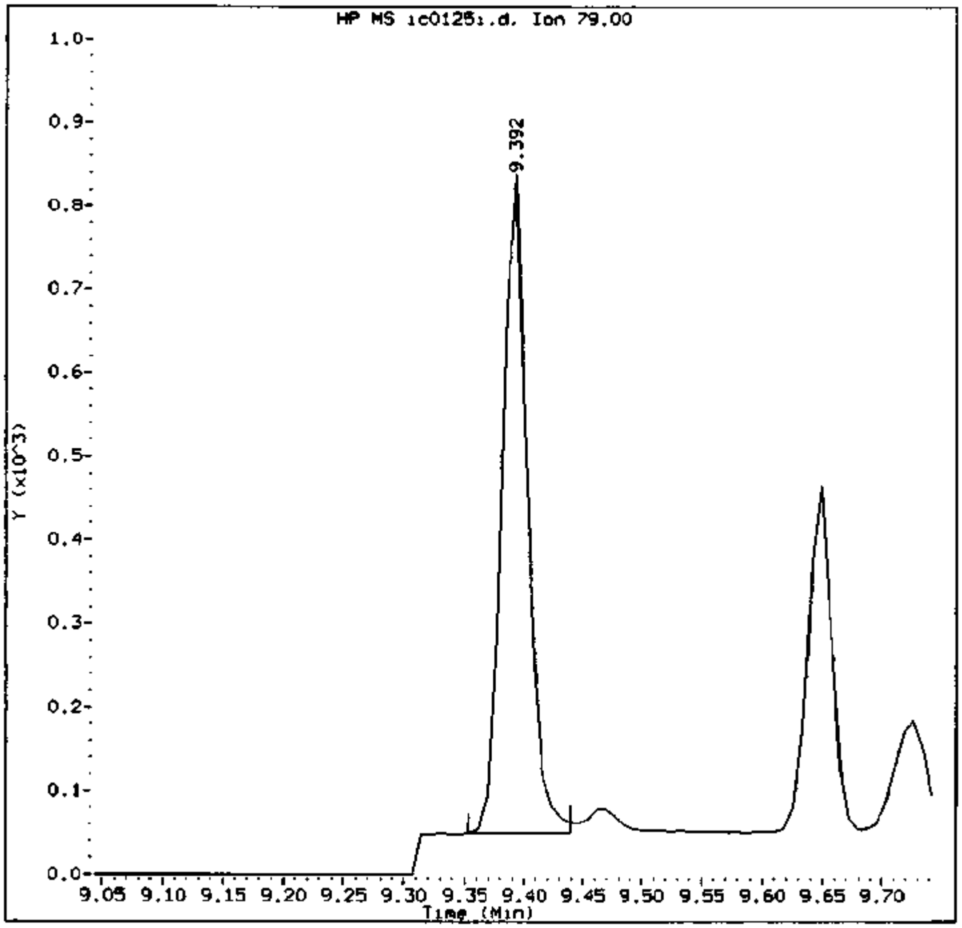
YZ 03/05/13



WC02 01057

IC0125I, /chem1/nt10.i/20130125.b/SIM.b/ic0125i.d

Benzyl alcohol   Amount: 0.09   Area: 1174



MANUAL INTEGRATION for Benzyl alcohol

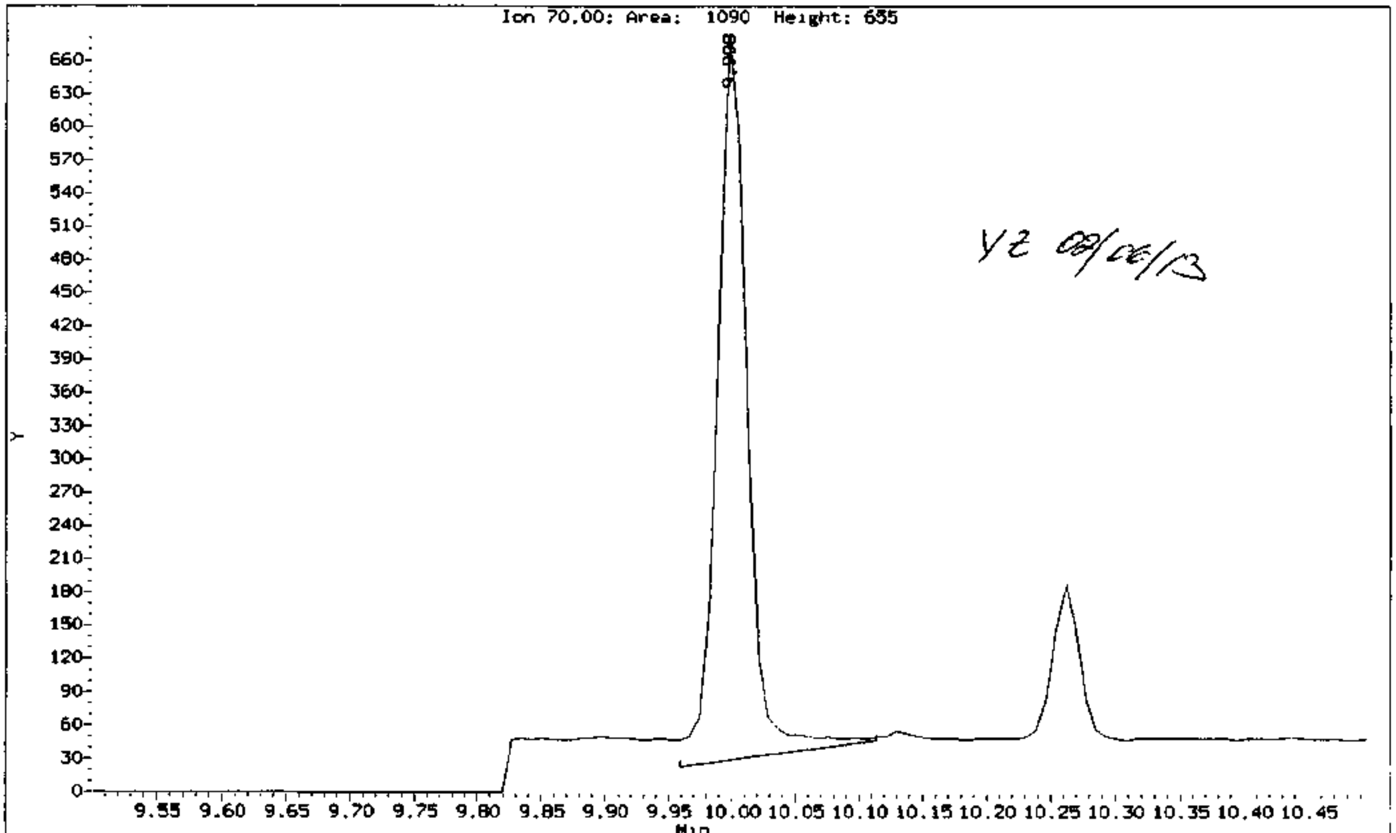
1. Baseline correction ✓
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other ______________________

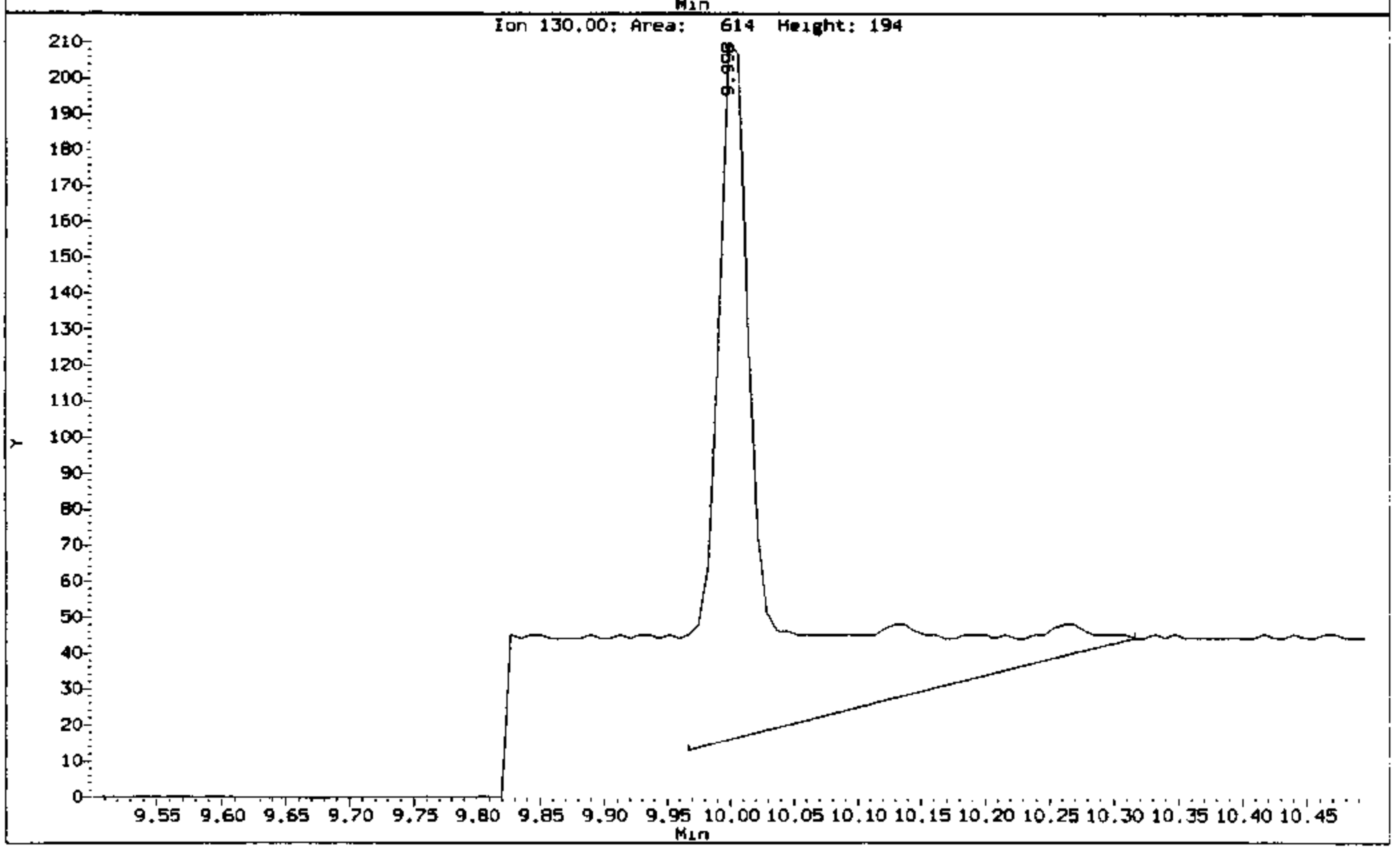
Analyst: YZ   Date: 02/06/13

Data File: /chem1/nt10.i/20130125.b/SIM.b/ic0125i.d
Injection Date: 25-JAN-2013 17:53
Instrument: nt10.i
Client Sample ID:

Compound: N-Nitroso-di-n-propylamine
CAS Number: 621-64-7

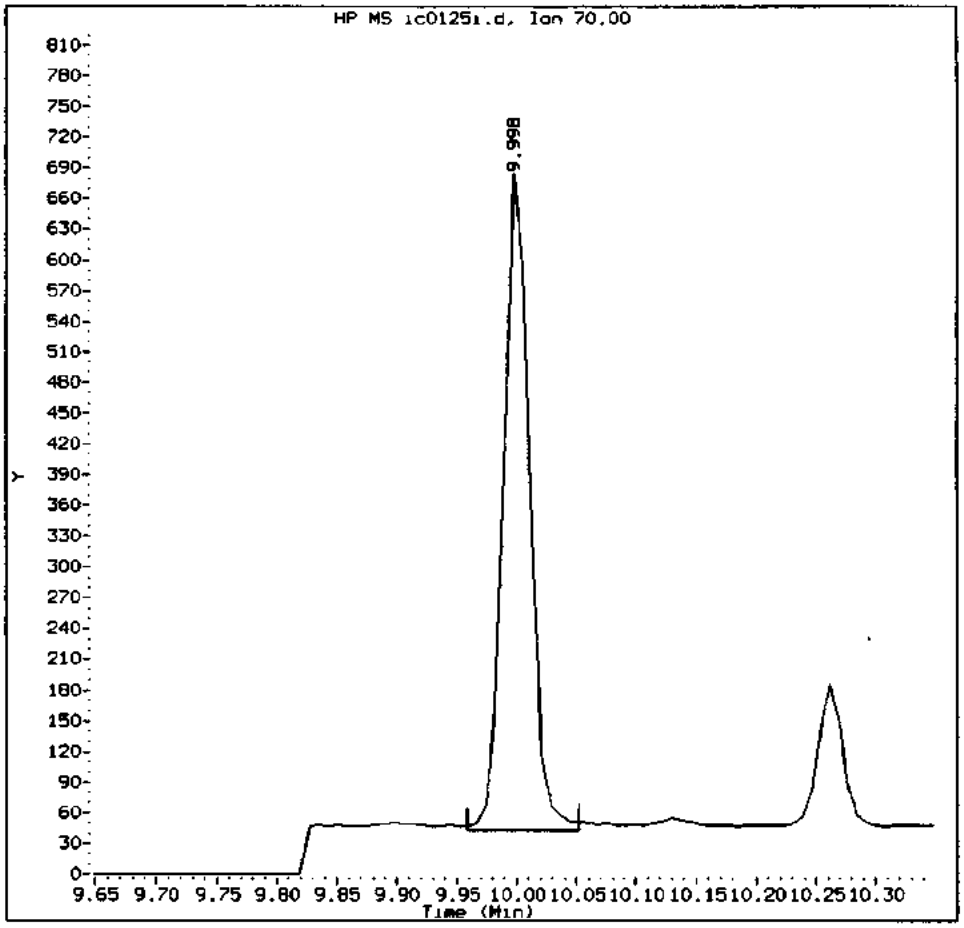


YZ 08/06/13



IC0125I, /chem1/nt10.i/20130125.b/SIM.b/ic0125i.d

N-Nitroso-di-n-propylamine   Amount: 0.10   Area: 990



MANUAL INTEGRATION for N-Nitroso-di-n-propylamine

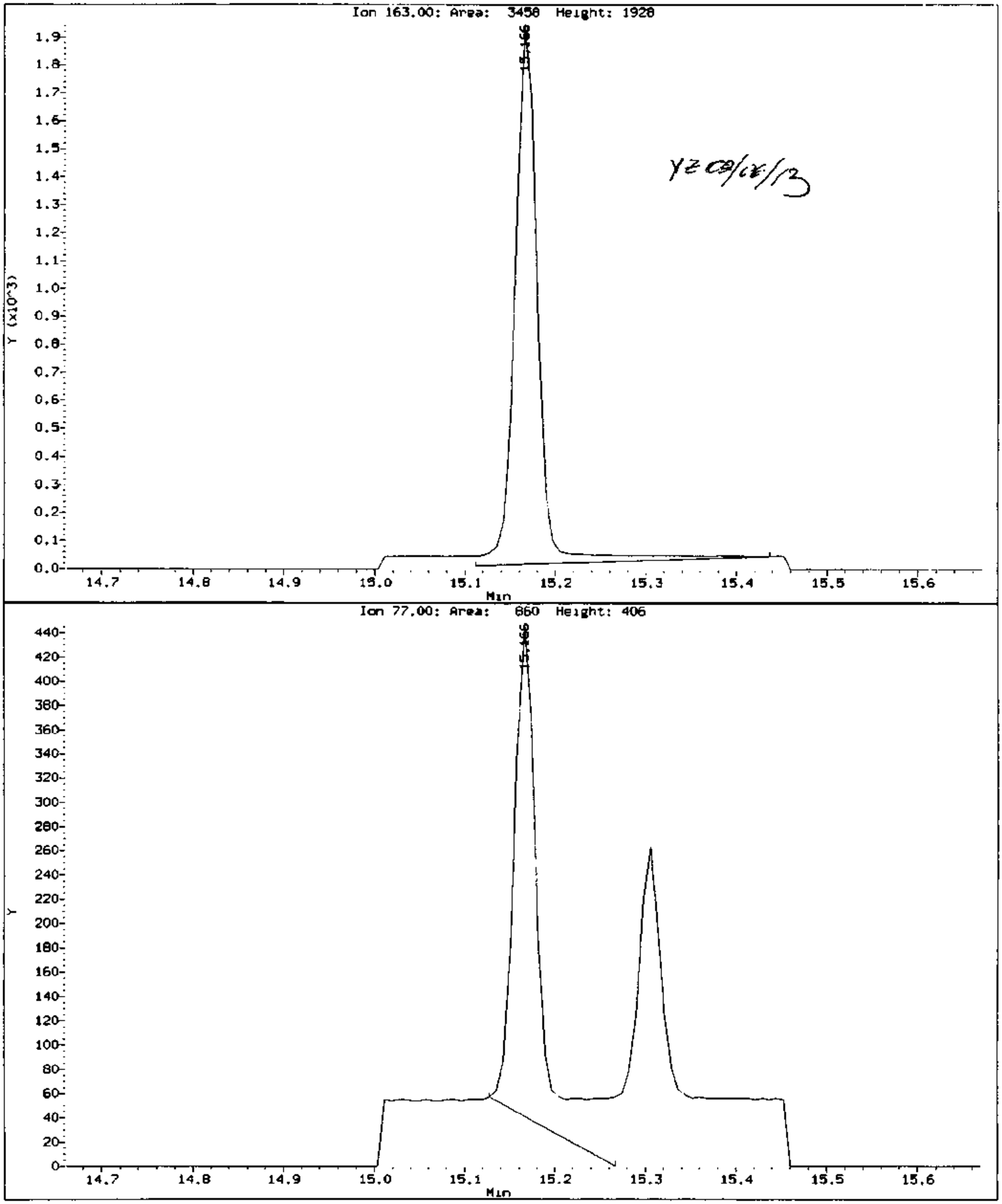
1. Baseline correction ✓
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other ______________________

Analyst: YZ   Date: 02/06/13

Data File: /chem1/nt10.i/20130125.b/SIM.b/ic0125i.d
Injection Date: 25-JAN-2013 17:53
Instrument: nt10.i
Client Sample ID:

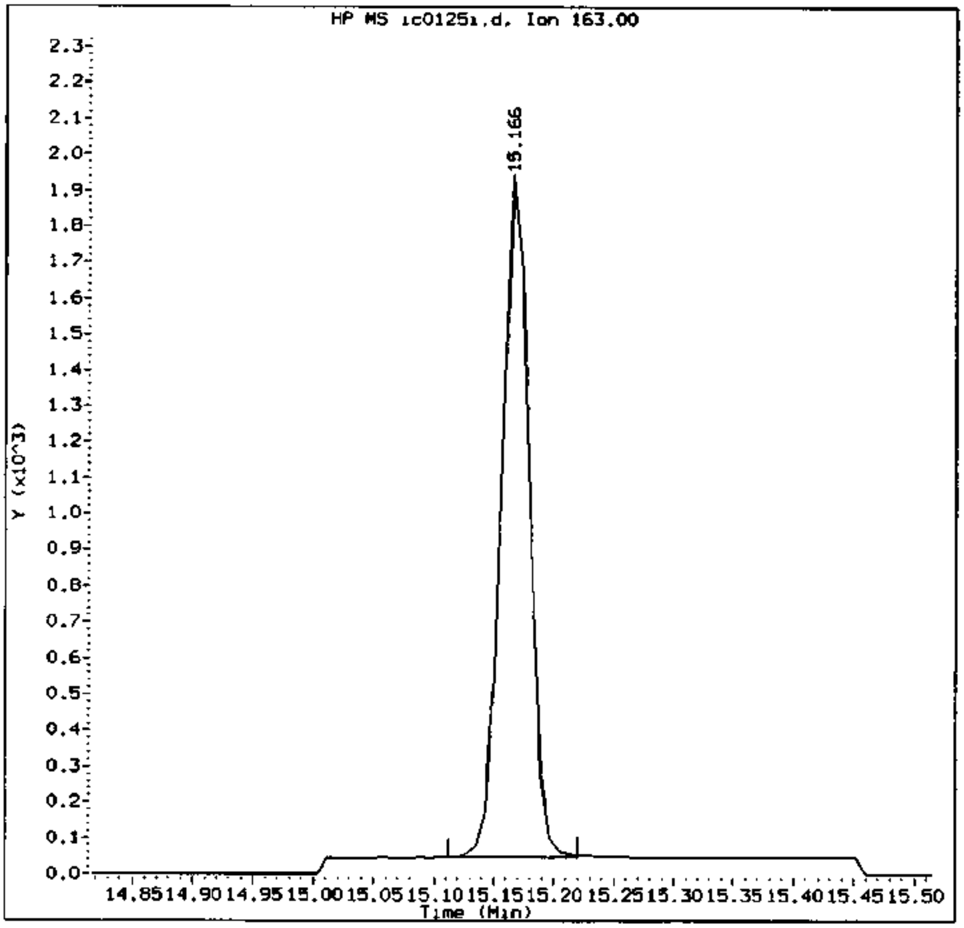
Compound: Dimethylphthalate
CAS Number: 131-11-3



WC32 01061

IC0125I, /chem1/nt10.i/20130125.b/SIM.b/ic0125i.d

Dimethylphthalate   Amount: 0.10   Area: 3070



MANUAL INTEGRATION for Dimethylphthalate

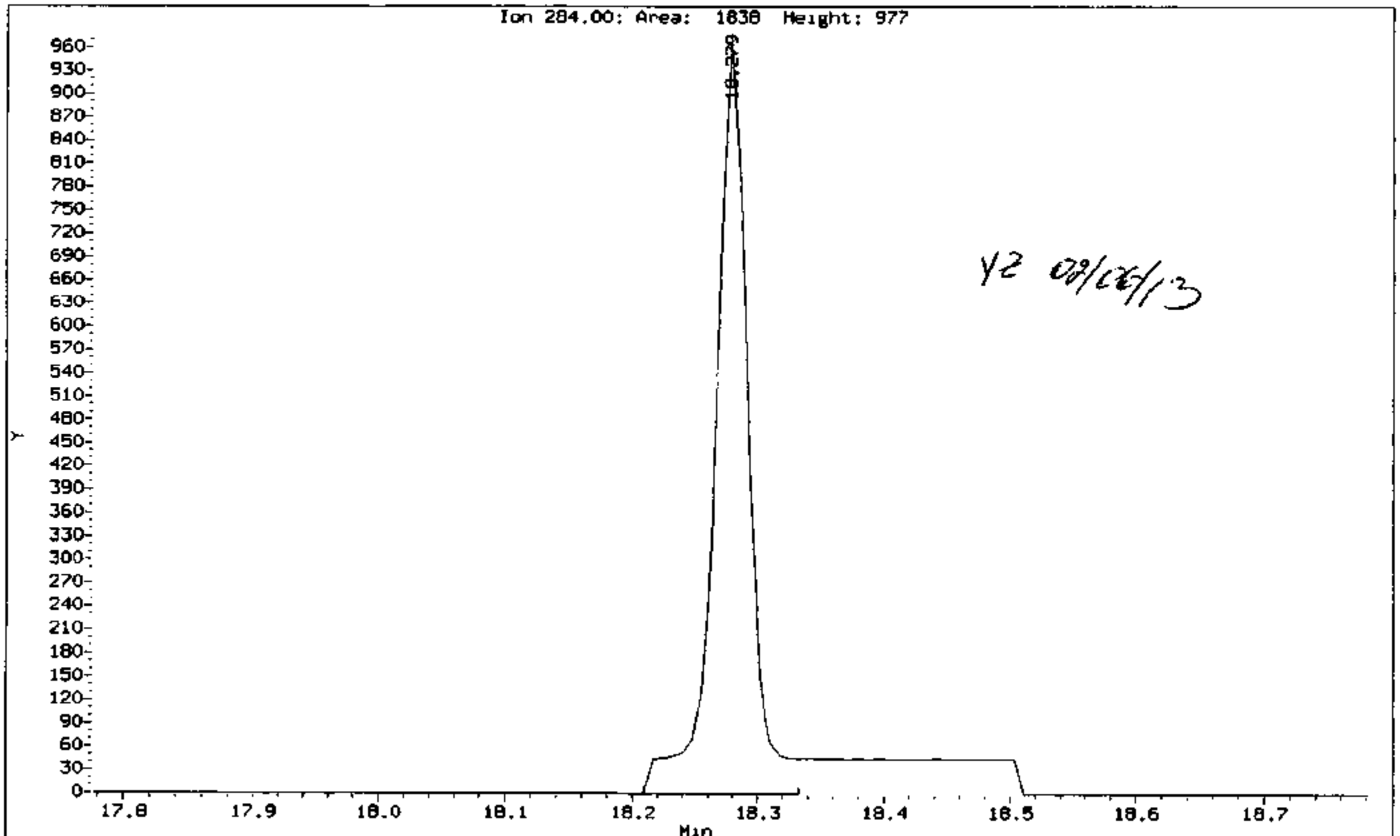
1. Baseline correction ✓
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other ______________________

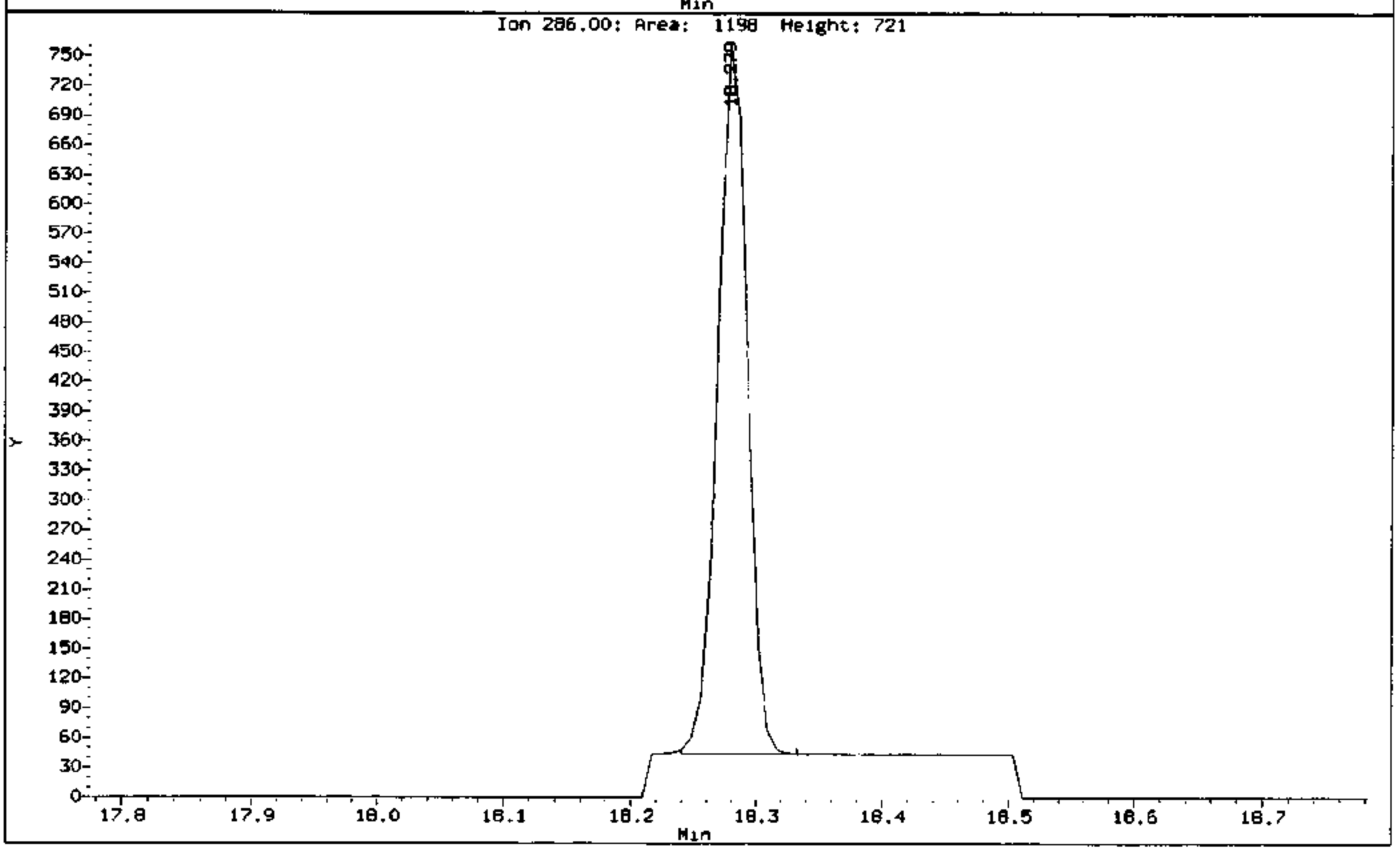
Analyst: YZ   Date: 02/06/13

Data File: /chem1/nt10.i/20130125.b/SIM.b/ic0125i.d
Injection Date: 25-JAN-2013 17:53
Instrument: nt10.i
Client Sample ID:

Compound: Hexachlorobenzene
CAS Number: 118-74-1



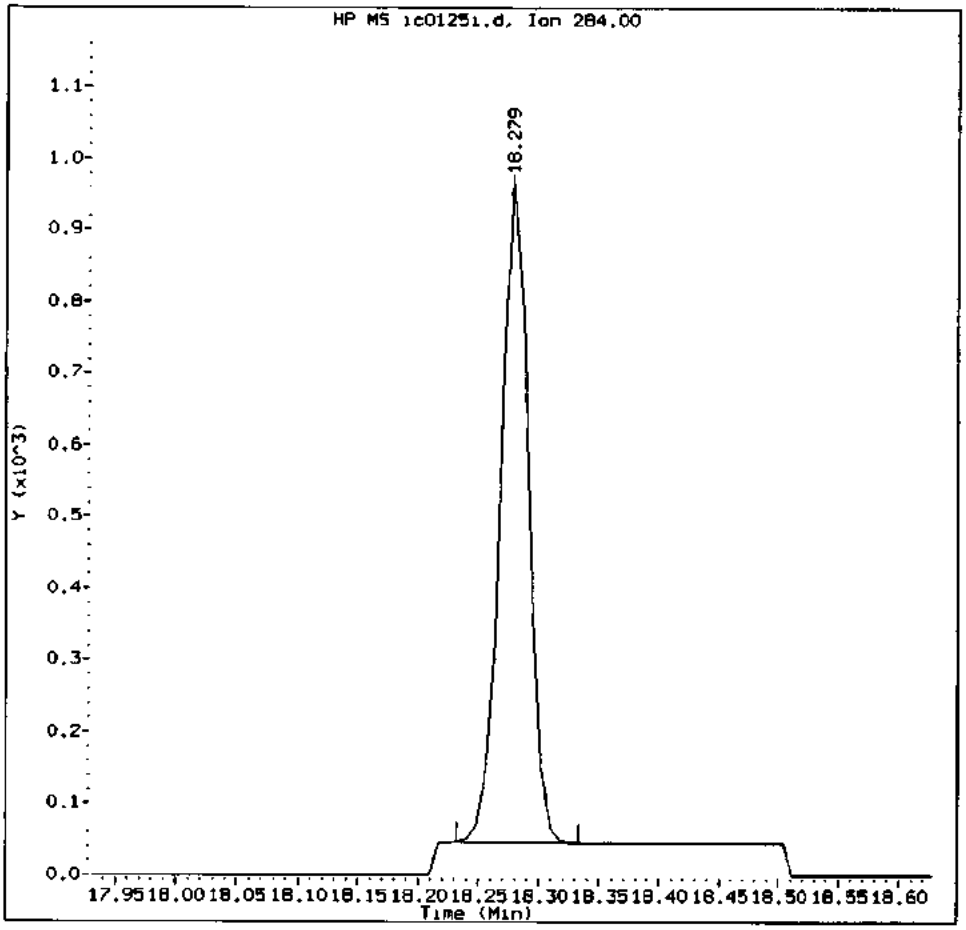
YZ 02/06/13



WC02 01060

IC0125I, /chem1/nt10.i/20130125.b/SIM.b/ic0125i.d

Hexachlorobenzene   Amount: 0.10   Area: 1494



MANUAL INTEGRATION for Hexachlorobenzene

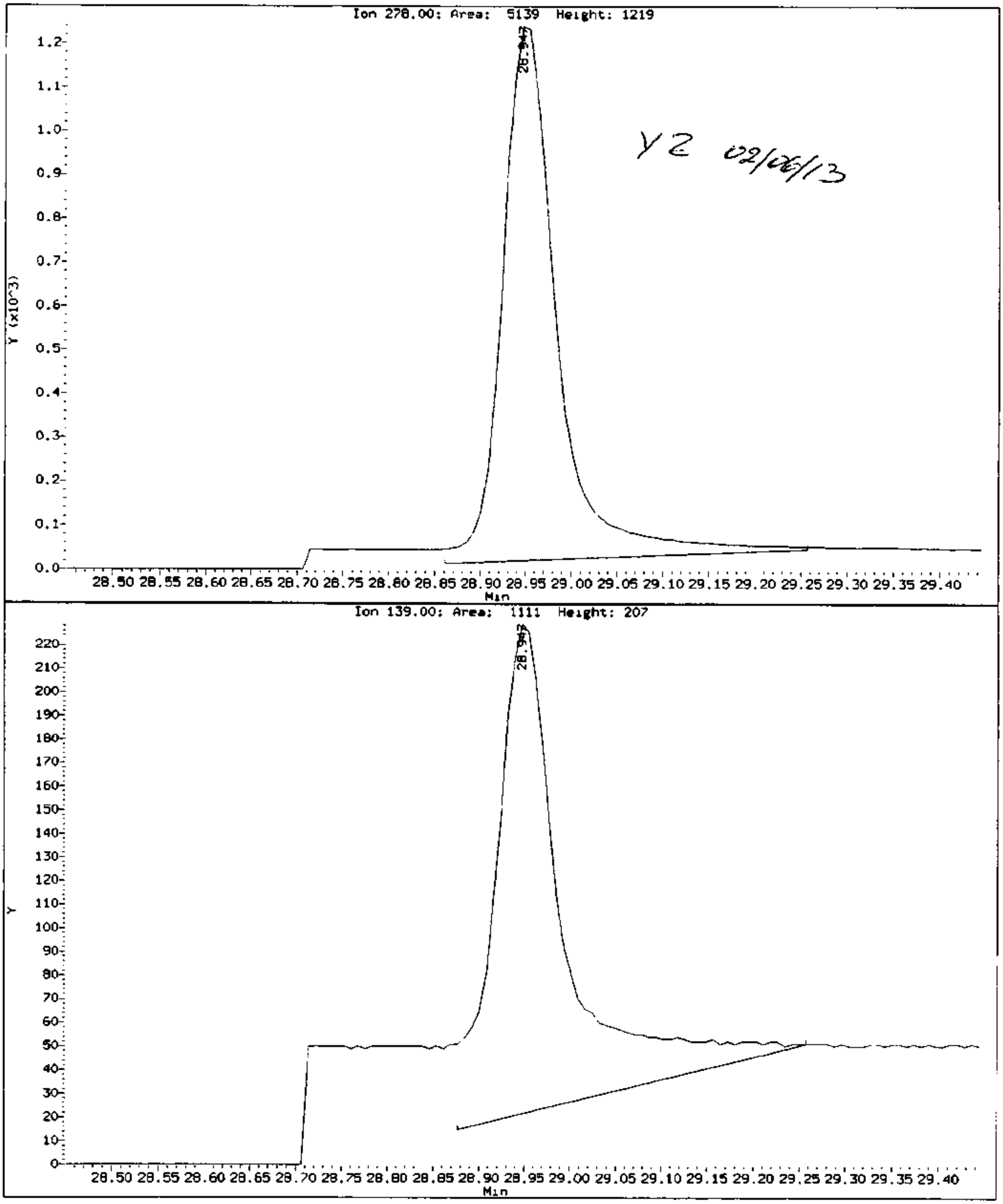
1. Baseline correction ✓
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other ____________________

Analyst: YZ   Date: 02/06/13

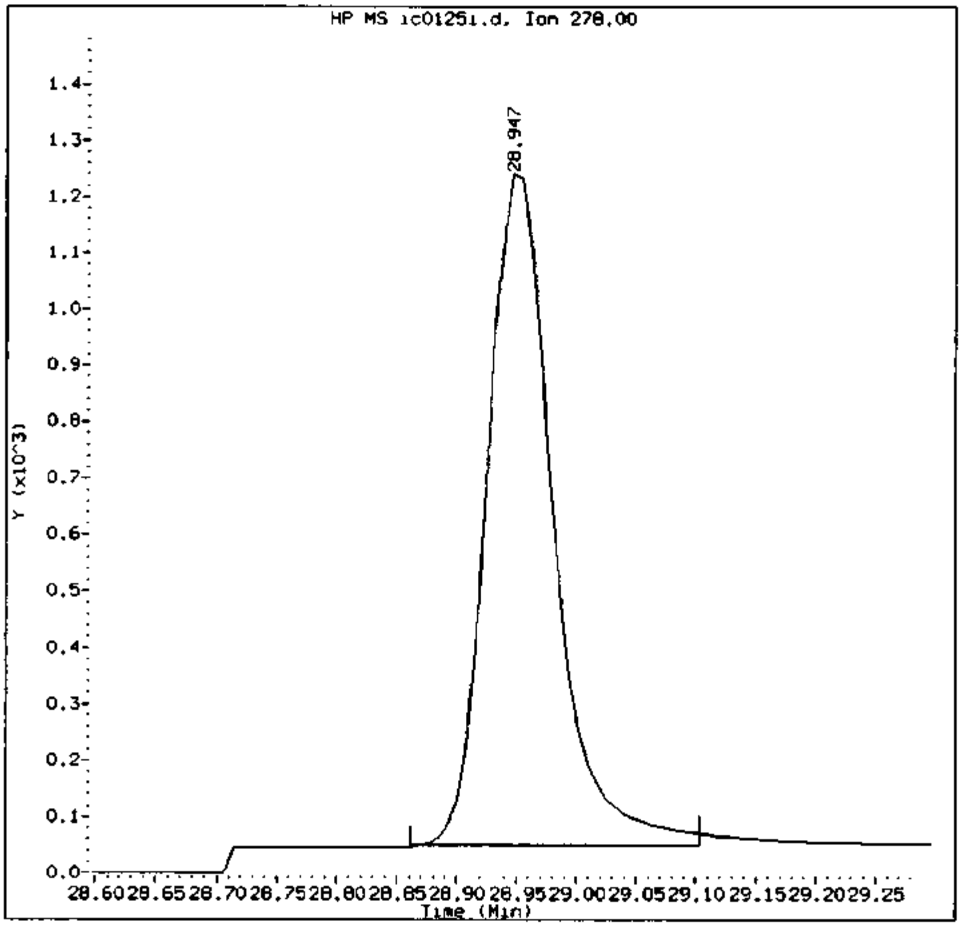
Data File: /chem1/nt10.i/20130125.b/SIM.b/ic0125i.d
Injection Date: 25-JAN-2013 17:53
Instrument: nt10.i
Client Sample ID:

Compound: Dibenzo(a,h)anthracene
CAS Number: 53-70-3



IC0125I, /chem1/nt10.i/20130125.b/SIM.b/ic0125i.d

Dibenzo(a,h)anthracene   Amount: 0.09   Area: 4594



MANUAL INTEGRATION for Dibenzo(a,h)anthracene

1. Baseline correction ✓
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other ______________________

Analyst: YZ   Date: 02/06/13

CO-ELUTION SUMMARY FOR FILE - ic0125i.d

Lab ID: IC0125I, Method: SIM.b/SIMABN2.m, Instrument: nt10.i, Date: 25-JAN-20

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Data File: /chem1/nt10.i/20130125.b/df0125.d

Date : 25-JAN-2013 12:43

Client ID: DFTPP

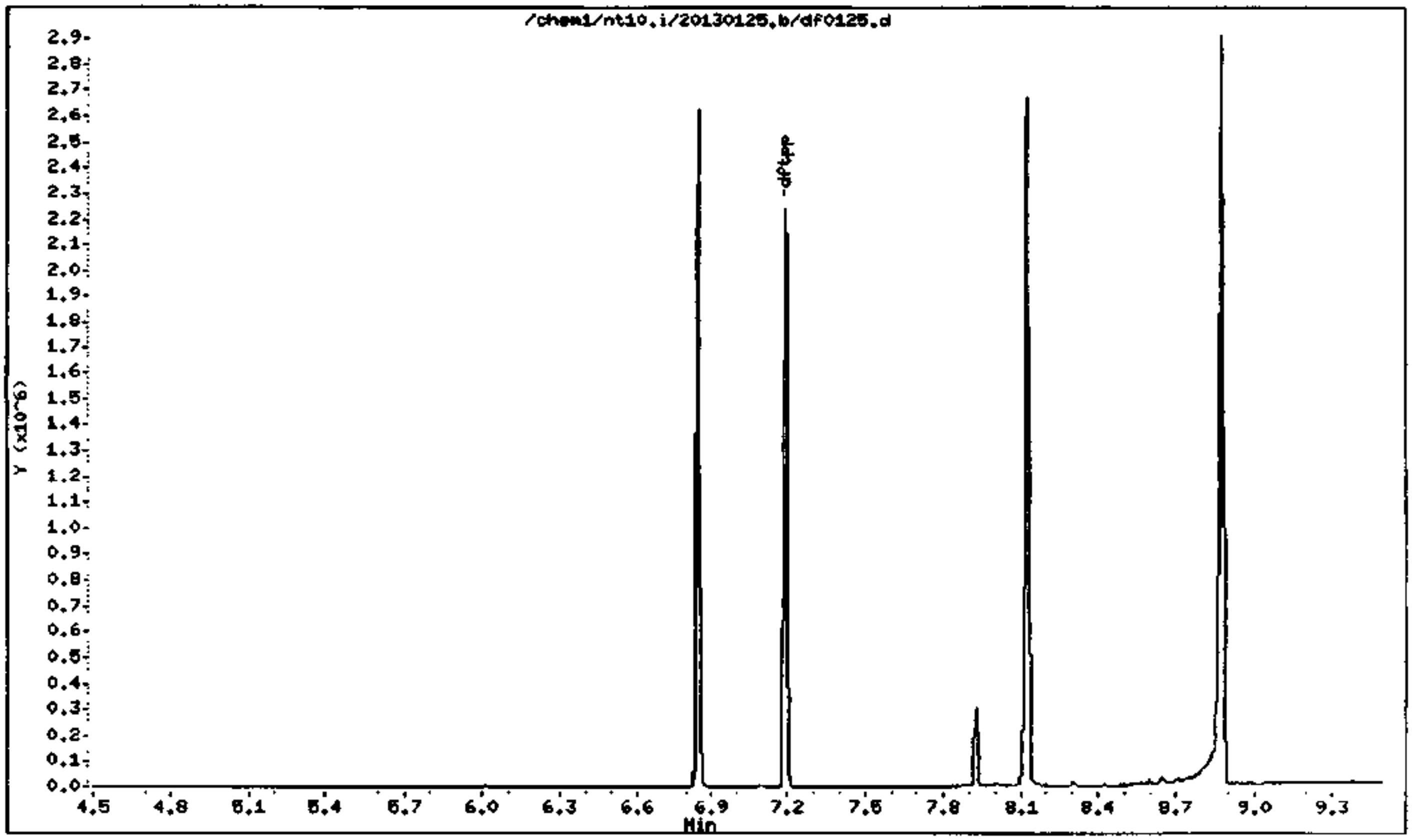
Sample Info: DFTPP

Column phase: ZB-5msi

Instrument: nt10.i

Operator: YZ

Column diameter: 0.25



Data File: /chem1/nt10.i/20130125.b/df0125.d

Date : 25-JAN-2013 12:43

Client ID: DFTPP

Sample Info: DFTPP

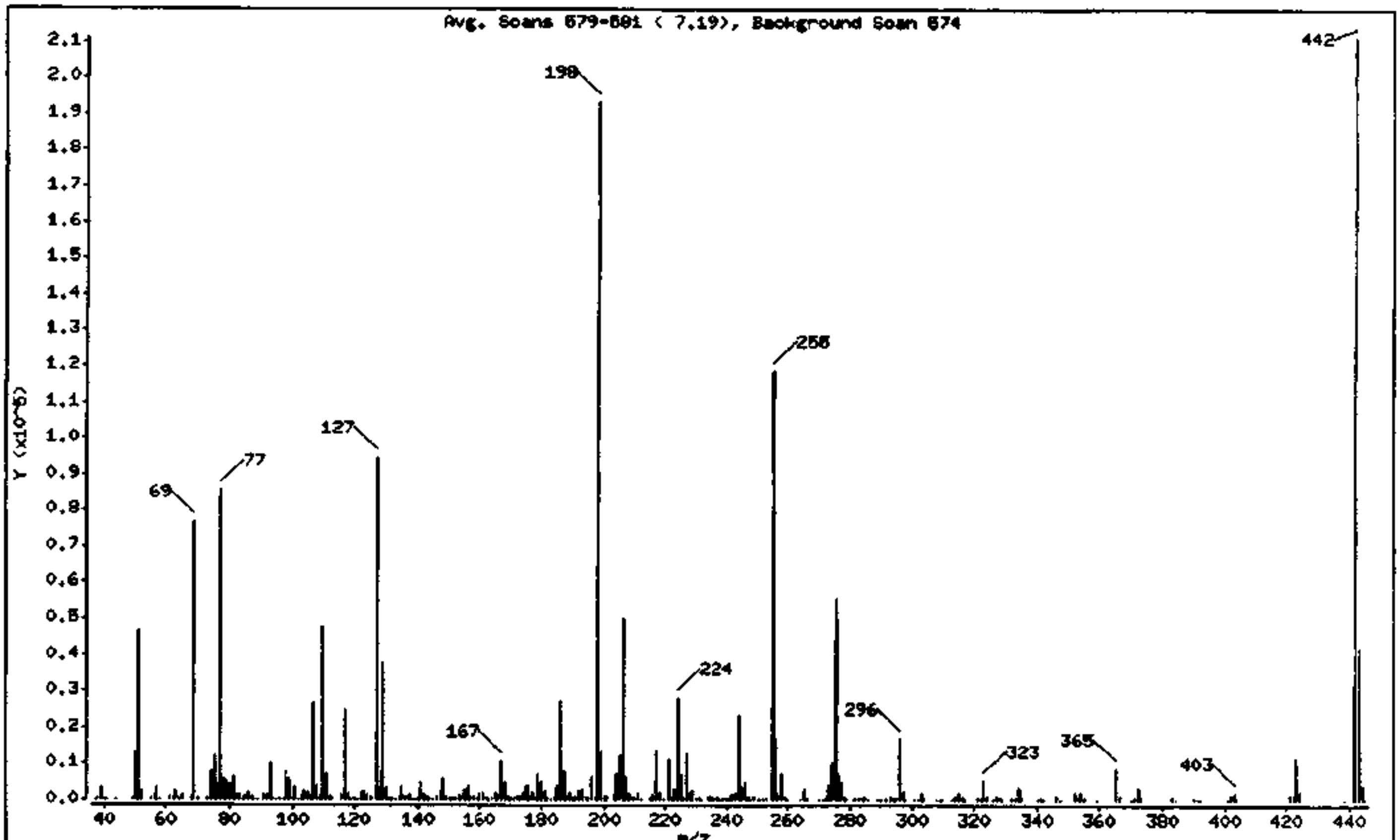
Instrument: nt10.i

Operator: YZ

Column phase: ZB-5ms|

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	24.19
68	Less than 2.00% of mass 69	0.61 (1.54)
69	Mass 69 relative abundance	39.80
70	Less than 2.00% of mass 69	0.19 (0.49)
127	10.00 - 80.00% of mass 198	48.91
197	Less than 2.00% of mass 198	0.21
199	5.00 - 9.00% of mass 198	6.67
275	10.00 - 60.00% of mass 198	28.93
365	Greater than 1.00% of mass 198	4.43
441	0.01 - 24.00% of mass 442	16.45 (15.06)
442	50.00 - 200.00% of mass 198	109.23
443	15.00 - 24.00% of mass 442	21.82 (19.98)

Data File: /chem1/nt10.i/20130125.b/df0125.d

Date : 25-JAN-2013 12:43

Client ID: DFTPP

Instrument: nt10.i

Sample Info: DFTPP

Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

Data File: df0125.d

Spectrum: Avg. Scans 579-581 (7.19), Background Scan 574

Location of Maximum: 442.00

Number of points: 292

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	197	129.00	37936	204.00	7247	290.00	134
38.00	705	130.00	3252	205.00	12071	291.00	73
39.00	3533	131.00	616	206.00	50152	292.00	193
40.00	113	132.00	309	207.00	6355	293.00	1040
41.00	57	133.00	201	208.00	1855	294.00	300
44.00	41	134.00	1063	209.00	685	295.00	432
49.00	407	135.00	3189	210.00	390	296.00	17168
50.00	12941	136.00	1177	211.00	2076	297.00	2409
51.00	46792	137.00	1570	212.00	126	298.00	117
52.00	2479	138.00	318	215.00	691	301.00	186
55.00	299	139.00	141	216.00	1249	302.00	228
56.00	1601	140.00	439	217.00	13670	303.00	1845
57.00	3595	141.00	5058	218.00	1710	304.00	531
58.00	186	142.00	1565	219.00	125	308.00	197
61.00	736	143.00	1108	221.00	10937	309.00	121
62.00	914	144.00	315	222.00	480	310.00	187
63.00	2618	145.00	214	223.00	3072	313.00	153
64.00	316	146.00	882	224.00	28320	314.00	792
65.00	1300	147.00	2615	225.00	7216	315.00	2023
68.00	1189	148.00	6026	226.00	852	316.00	1067
69.00	76976	149.00	1129	227.00	12743	317.00	159
70.00	375	150.00	301	228.00	1719	321.00	538
73.00	705	151.00	726	229.00	2389	322.00	299
74.00	7863	152.00	293	230.00	329	323.00	5388
75.00	12207	153.00	1577	231.00	1021	324.00	1013
76.00	4289	154.00	1181	232.00	167	326.00	50
77.00	85576	155.00	2757	233.00	188	327.00	1029
78.00	5655	156.00	4011	234.00	771	328.00	558
79.00	5556	157.00	812	235.00	861	329.00	60
80.00	4359	158.00	873	236.00	627	332.00	351
81.00	6233	159.00	710	237.00	1022	333.00	548
82.00	1534	160.00	1489	238.00	110	334.00	3620
83.00	1401	161.00	2161	239.00	841	335.00	964
84.00	112	162.00	649	240.00	417	340.00	51
85.00	1085	163.00	146	241.00	730	341.00	679

Date : 25-JAN-2013 12:43

Client ID: DFTPP   Instrument: nt10.i

Sample Info: DFTPP

Operator: YZ

Column phase: ZB-5msi   Column diameter: 0.25

Data File: df0125.d

Spectrum: Avg. Scans 579-581 (7.19), Background Scan 574

Location of Maximum: 442.00

Number of points: 292

m/z	Y	m/z	Y	m/z	Y	m/z	Y
86.00	1703	164.00	290	242.00	1687	342.00	153
87.00	795	165.00	1882	243.00	1735	346.00	1164
88.00	279	166.00	1494	244.00	23312	347.00	162
89.00	81	167.00	10689	245.00	3158	352.00	1760
91.00	1338	168.00	4694	246.00	4620	353.00	1209
92.00	1519	169.00	848	247.00	978	354.00	1709
93.00	9994	170.00	329	248.00	181	355.00	309
94.00	645	171.00	378	249.00	862	359.00	64
95.00	134	172.00	865	250.00	149	365.00	8559
96.00	471	173.00	1141	251.00	169	366.00	1203
97.00	212	174.00	2025	252.00	221	370.00	156
98.00	7840	175.00	3911	253.00	595	371.00	436
99.00	5867	176.00	1174	255.00	118624	372.00	3166
100.00	531	177.00	1772	256.00	17216	373.00	730
101.00	3503	178.00	645	257.00	1329	383.00	830
102.00	180	179.00	7329	258.00	7275	384.00	228
103.00	1140	180.00	4831	259.00	1188	390.00	433
104.00	2300	181.00	2296	260.00	200	391.00	237
105.00	2067	182.00	354	261.00	142	392.00	163
106.00	732	183.00	241	264.00	186	401.00	177
107.00	26848	184.00	572	265.00	2938	402.00	1244
108.00	4043	185.00	3662	266.00	493	403.00	1787
109.00	744	186.00	27072	270.00	126	404.00	646
110.00	47768	187.00	7673	271.00	234	421.00	1637
111.00	7142	188.00	763	272.00	384	422.00	1574
112.00	909	189.00	1730	273.00	3889	423.00	11637
113.00	338	190.00	325	274.00	10079	424.00	2495
116.00	1403	191.00	859	275.00	65962	425.00	200
117.00	24664	192.00	2439	276.00	7415	437.00	50
118.00	1723	193.00	2782	277.00	4869	438.00	71
119.00	207	194.00	548	278.00	775	441.00	31824
120.00	344	195.00	439	279.00	140	442.00	211264
121.00	108	196.00	6210	281.00	108	443.00	42208
122.00	1841	197.00	402	282.00	139	444.00	4074
123.00	2656	198.00	193408	283.00	558	445.00	209

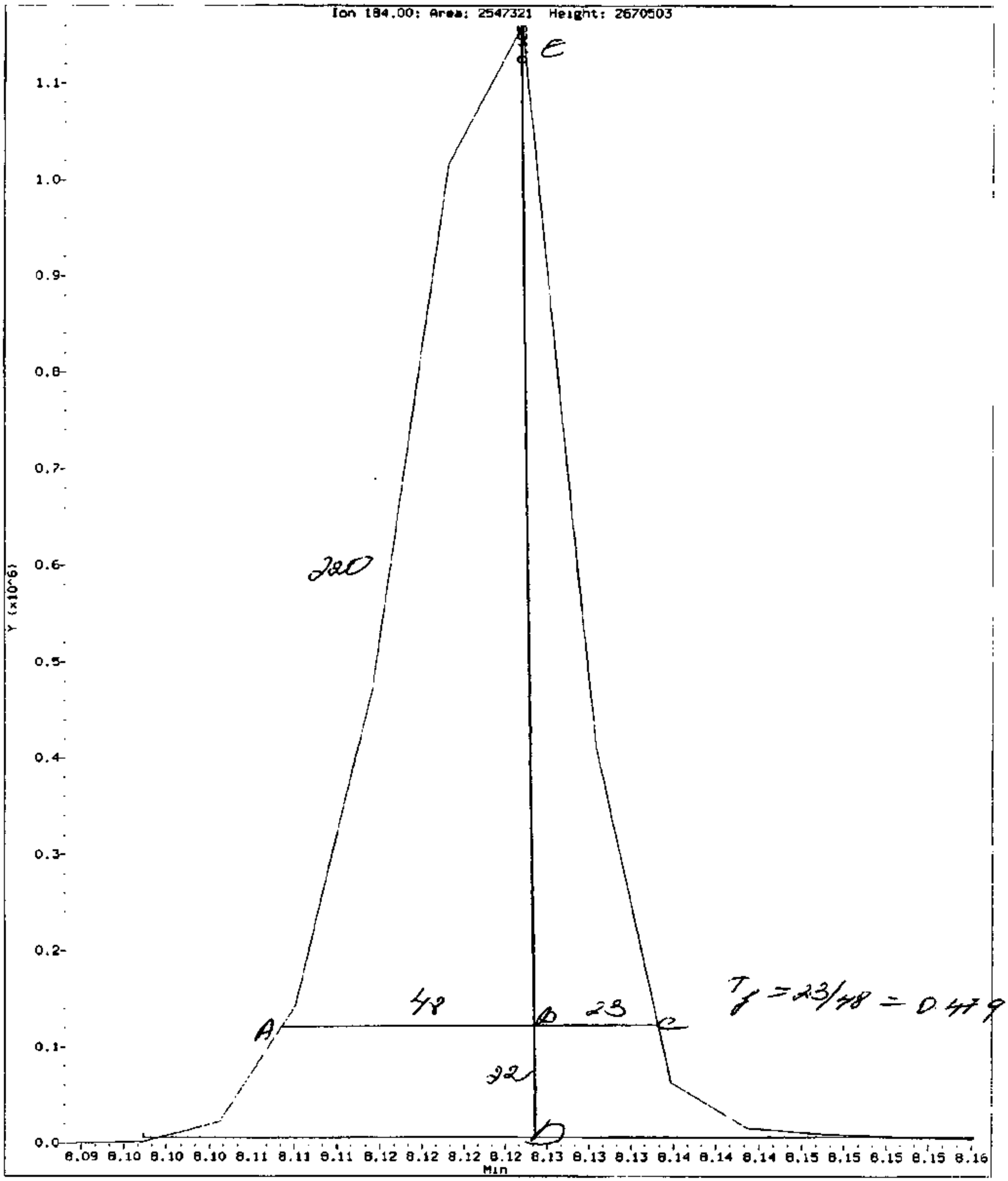
Date : 25-JAN-2013 12:43
Client ID: DFTPP
Instrument: nt10.i
Sample Info: DFTPP
Operator: YZ
Column phase: ZB-5msi
Column diameter: 0.25

Data File: df0125.d
Spectrum: Avg. Scans 579-581 (7.19), Background Scan 574
Location of Maximum: 442.00
Number of points: 292

m/z	Y	m/z	Y	m/z	Y	m/z	Y
124.00	1219	199.00	12893	284.00	387		
125.00	1090	200.00	1075	285.00	813		
127.00	94600	201.00	925	286.00	126		
128.00	7116	203.00	1424	289.00	147		

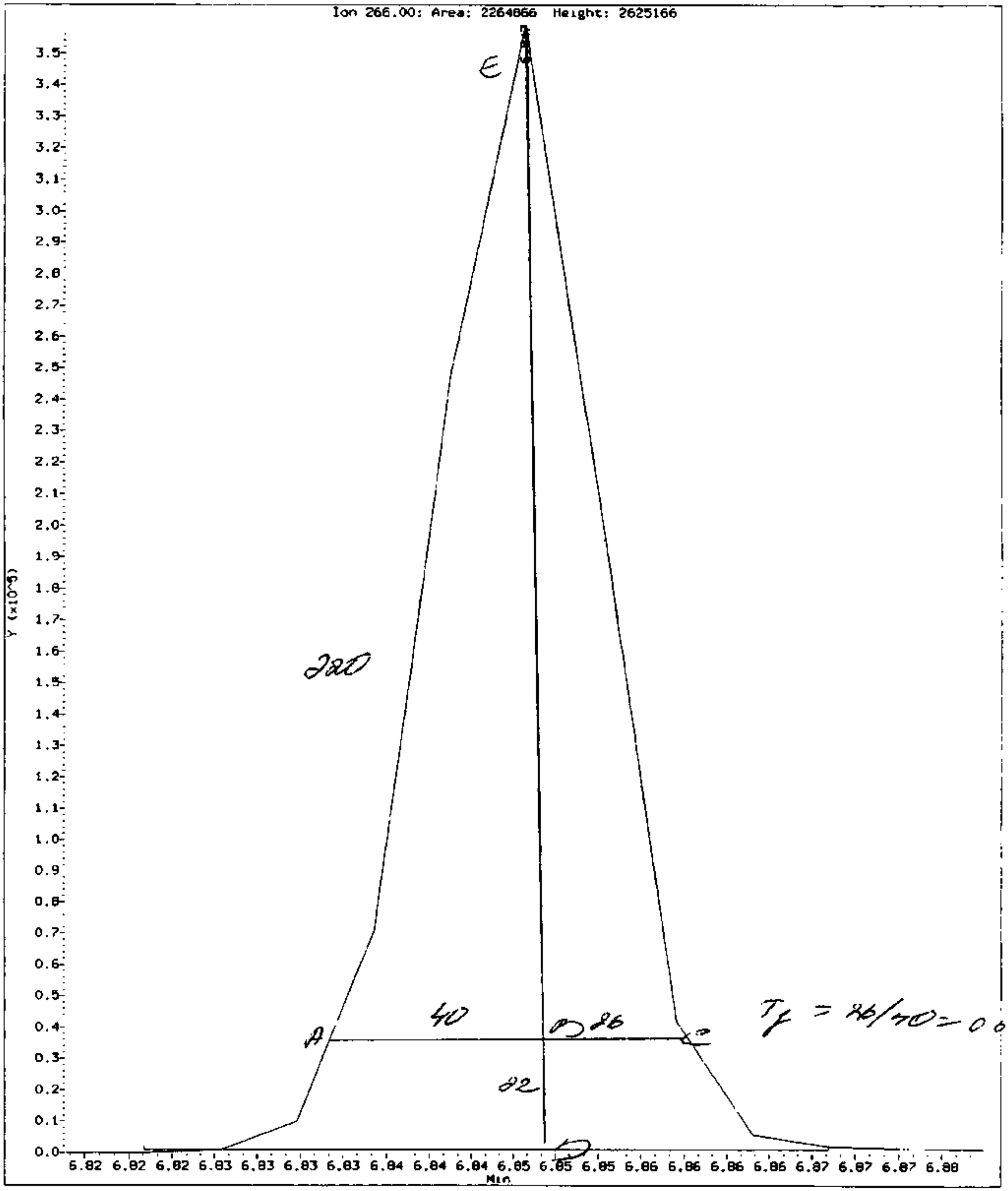
Data File: /chem1/nt10.i/20130125.b/ddt.b/df0125.d
Injection Date: 25-JAN-2013 12:43
Instrument: nt10.i
Client Sample ID: DFTPP

Compound: Benzidine
CAS Number:



Data File: /chem1/nt10.i/20130125.b/ddt.b/df0125.d
Injection Date: 25-JAN-2013 12:43
Instrument: nt10.i
Client Sample ID: DFTPP

Compound: Pentachlorophenol
CAS Number: 87-86-5



Analytical Resources Inc.
ABN by sw846 8270C
DDT Breakdown Report

Data file: /chem1/nt10.i/20130125.b/ddt.b/df0125.d   ARI ID: DFTPP
Method: /chem1/nt10.i/20130125.b/ddt.b/sw846ddt.m   Misc: 11-
Analysis Date: 25-JAN-2013 12:43   Instrument: nt10.i

COMPOUND	RT	AREA
Pentachlorophenol	6.847	2264865
Benzidine	8.125	2547321
4,4'-DDE	8.307	1813
4,4'-DDD	8.644	5130
4,4'-DDT	8.874	537797

$$\text{DDT Percent Breakdown} = \frac{(\text{DDE Area} + \text{DDD Area}) * 100}{(\text{DDE Area} + \text{DDD Area} + \text{DDT Area})}$$

$$\text{DDT Percent Breakdown} = \frac{(1813 + 5130) * 100}{(1813 + 5130 + 537797)}$$

DDT Percent Breakdown = 1.3 %

SIM Semivolatile Raw Data
Run Logs, Continuing Calibrations, and Raw Data

ARI Job ID: WC32, WC33

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC/MS SVOA Analyst Notes / Corrective Action Log

ARI Project ID: WC32 Client ID: Floyd-Snider

ARI SOP: **801S**(SIM-PNA) **802S**(Butyl Tins) **804S**(SVOA-8270D) **805S**(op-Pest)

Parameter(s): SIM SVOA

Instrument: NT-4 NT-6 NT-8 NT-10 NT11 NT12

Curve Date: 01/25/13 Analysis Start Date: 02/15/13

DFTPP Tune Meets Criteria?	YES / NO	Internal Standard Meets Criteria?	YES / NO
DDT Breakdown <20%?	YES / NO / NA	Method Blank In Control?	YES / NO
Peak Tailing Factor ≤2?	YES / NO / NA	LCS / LCSD Recovery In Control?	YES / NO
ICal acceptable? Q flag applied?	YES / NO YES / NO	CCal acceptable? Q flag applied?	YES / NO YES / NO
Surrogate Recovery in Control?	YES / NO	Special Analysis Criteria Met?	YES / NO / NA
Manual Integrations for ICal?	YES / NO	Manual Integrations for Samples?	Yes / NO

Detail problems, corrective actions and/or other pertinent information below (use reverse side when necessary):

Sample C was re-run @ 5x dilution, due to matrix, bad chromatography.

Additional Details on Reverse: Yes / No

Analyst: YZ **Date:** 2/20/13

Reviewer: [signature] **Date:** 2/20/13

Form 7015F Version 014 6/18/10

WC32 : 01077

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC/MS SVOA Analyst Notes / Corrective Action Log

ARI Project ID: WC32 Client ID: Floyd-Snider

ARI SOP: **801S**(SIM-PNA) **802S**(Butyl Tins) **804S**(SVOA-8270D) **805S**(op-Pest)

Parameter(s): SIM SVOA

Instrument: NT-4 NT-6 NT-8 NT-10 NT11 NT12

Curve Date: 02/05/13 Analysis Start Date: 02/15/13

DFTPP Tune Meets Criteria? YES / NO Internal Standard Meets Criteria? YES / NO

DDT Breakdown <20%? YES / NO / NA Method Blank In Control? YES / NO

Peak Tailing Factor ≤2? YES / NO / NA LCS / LCSD Recovery In Control? YES / NO

ICal acceptable? YES / NO CCal acceptable? YES / NO
Q flag applied? YES / NO Q flag applied? YES / NO

Surrogate Recovery in Control? YES / NO Special Analysis Criteria Met? YES / NO / NA

Manual Integrations for ICal? YES / NO Manual Integrations for Samples? Yes / NO

Detail problems, corrective actions and/or other pertinent information below (use reverse side when necessary):

Additional Details on Reverse: Yes / No

Analyst: YZ **Date:** 2/20/13

Reviewer: **Date:** 2/20/13

Analytical Resources Inc.: Organics Instrument Log
NT-10 Serial No.:GC=CN10837018, MS= US83131105

Date: 2·15·13 Analysis: Sim ABN Analyst: YZ/LD

GC Program: ABN 2 Column No: 247358 Column Type: ZB5msi

Instrument Tune (.U or .CT.): 1212044 EM Voltage: 1500

Calibration File: DF 0215 Curve Date: 1/25/13 Injection Vol.: 1 ul

IS/SS	Ical/Ccal	LCS/ICV
1978-2	2036-2 2050-1,2	
	2064-2 1998-4.	
	2068-3	

Document All Maintenance Tasks In StarLIMS

INTERNAL STANDARD SUMMARY FOR DATABATCH - /chem1/nt10.i/20130215.b

	Time	Filename	LabID	ClientId	DF												
1	1103	df0215.d	DFTPP	DFTPP	1	NO ISTDS FOUND											
2	1156	cc0215a.d	CC0215A		1	8.75	41099	11.39	154370	15.28	84986	18.55	160855	23.66	188710	26.07	188958
3	1650	wc32mb.d	WC32MBS1	WC32MBS1	1	8.76	35677	11.41	133920	15.30	73003	18.59	144090	23.69	174620	26.12	148785
4	1726	wc32sb.d	WC32LCSS1	WC32LCSS1	1	8.76	30534	11.40	116174	15.29	66038	18.58	128820	23.69	157056	26.11	146032
5	1803	wc32sbd.d	WC32LCSDS1	WC32LCSDS1	1	8.76	34427	11.41	130152	15.29	71063	18.58	137448	23.69	169021	26.11	155868
6	1839	wc32a.d	WC32A	SG-12-0-10-0	1	8.76	33865	11.41	130230	15.29	70834	18.58	138021	23.69	170306	26.12	154422
7	1915	wc32b.d	WC32B	SG-13-0-10-0	1	8.77	30932	11.42	122045	15.31	67747	18.59	132508	23.70	168973	26.12	145016
8	1952	wc32c.d	WC32C	SG-07-0-10-0	1	8.76	34061	11.40	127739	15.29	72831	18.58	138245	23.70	157346	26.12	152548
9	2028	wc32d.d	WC32D	SG-06-0-10-0	1	8.76	33933	11.40	133338	15.29	72106	18.58	139278	23.70	170533	26.12	151563
10	2104	wc32e.d	WC32E	SG-05-0-10-0	1	8.75	35201	11.40	131028	15.29	71300	18.58	138079	23.69	171424	26.12	150796
11	2140	wc32f.d	WC32F	SG-95-0-10-0	1	8.76	33717	11.40	129116	15.29	70443	18.58	137674	23.69	169628	26.12	151151
12	2217	wc32g.d	WC32G	SG-08-0-10-0	1	8.78	28413	11.45	117601	15.25	8290	18.61	136158	23.72	172816	26.17	150232
13	2253	wc32gms.d	WC32GMS	SG-08-0-10-0	1	8.76	27833	11.41	106127	15.30	60834	18.59	117013	23.71	146375	26.14	127344

YZ 2/20/13

Every line must contain information or be lined out. Make all entries legible.
Start a new page for each QC period. Document All Maintenance Tasks In StarLIMS

Q-FLAG SUMMARY FOR DATABATCH - /chem1/nt10.i/20130215.b/SIM.b

Instrument: nt10.i   Date: 15-FEB-2013   Method: SIM.b/SIMABN2.m

INITIAL CAL: 25-JAN-2013

Compound	%RSD or R^2
NO Q-FLAGS	

CONTINUING CAL: 15-FEB-2013

Compound	%D
Pentachlorophenol	-64.3
Butylbenzylphthalate	26.8
Dibenzo(a,h)anthracene	20.5

Data File: /chem1/nt10.i/20130215.b/df0215.d

Date : 15-FEB-2013 11:03

Client ID: DFTPP

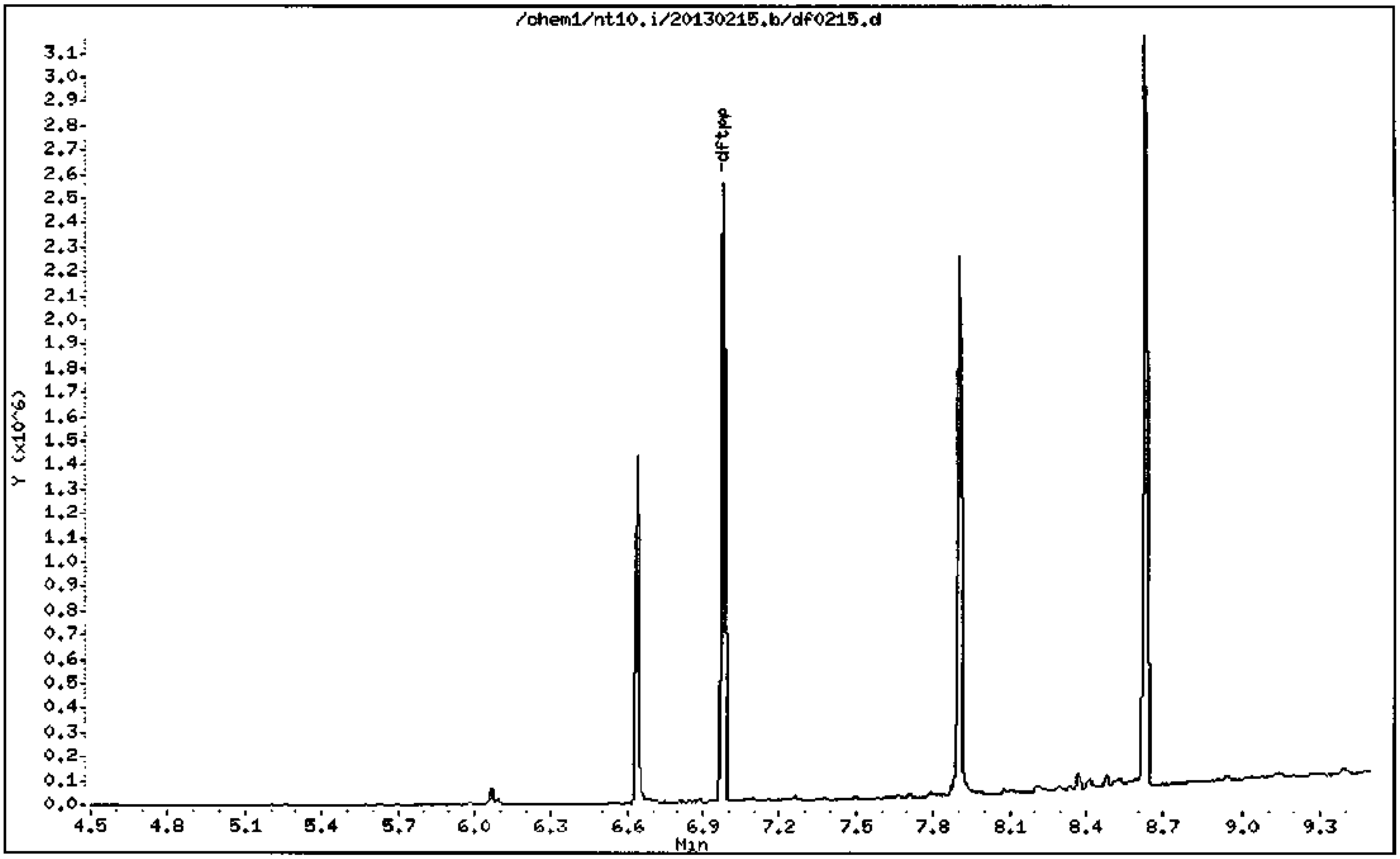
Instrument: nt10.i

Sample Info: DFTPP

Operator: YZ

Column phase: ZB-5ms

Column diameter: 0.25



Data File: /chem1/nt10.i/20130215.b/df0215.d

Date : 15-FEB-2013 11:03

Client ID: DFTPP

Instrument: nt10.i

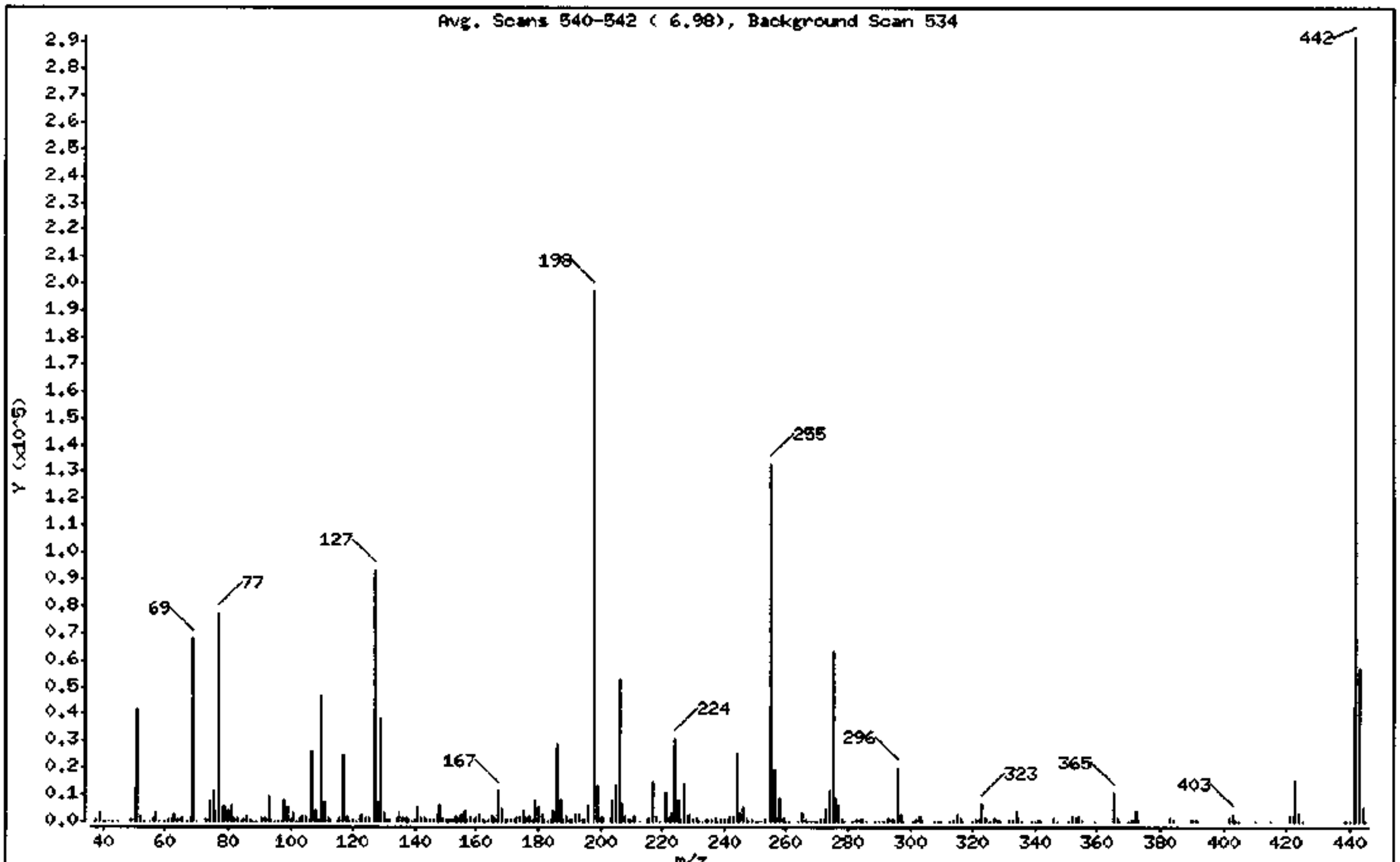
Sample Info: DFTPP

Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	21.15
68	Less than 2.00% of mass 69	0.55 (1.62)
69	Mass 69 relative abundance	34.27
70	Less than 2.00% of mass 69	0.14 (0.40)
127	10.00 - 80.00% of mass 198	47.32
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.82
275	10.00 - 60.00% of mass 198	32.13
365	Greater than 1.00% of mass 198	5.39
441	0.01 - 24.00% of mass 442	21.71 (14.67)
442	50.00 - 200.00% of mass 198	148.02
443	15.00 - 24.00% of mass 442	29.04 (19.62)

Data File: /chem1/nt10.i/20130215.b/df0215.d

Date : 15-FEB-2013 11:03

Client ID: DFTPP

Instrument: nt10.i

Sample Info: DFTPP

Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

Data File: df0215.d

Spectrum: Avg. Scans 540-542 (6.98), Background Scan 534

Location of Maximum: 442.00

Number of points: 310

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	156	127.00	93392	207.00	7005	294.00	347
38.00	609	128.00	7302	208.00	1875	295.00	495
39.00	3135	129.00	38096	209.00	729	296.00	20352
40.00	147	130.00	3178	210.00	933	297.00	2814
41.00	98	131.00	642	211.00	2314	298.00	226
42.00	122	132.00	370	213.00	258	301.00	280
43.00	4	133.00	141	215.00	683	302.00	347
45.00	140	134.00	1204	216.00	1271	303.00	2299
49.00	402	135.00	3073	217.00	14874	304.00	621
50.00	11826	136.00	1339	218.00	2009	308.00	283
51.00	41744	137.00	1499	219.00	191	309.00	138
52.00	2175	138.00	357	221.00	10983	310.00	287
53.00	119	139.00	318	222.00	1531	313.00	225
55.00	212	140.00	478	223.00	3392	314.00	1007
56.00	1460	141.00	5081	224.00	31008	315.00	2415
57.00	3249	142.00	1664	225.00	7943	316.00	1308
58.00	166	143.00	1138	226.00	885	317.00	223
60.00	53	144.00	358	227.00	14254	320.00	53
61.00	767	145.00	408	228.00	2026	321.00	640
62.00	851	146.00	950	229.00	2769	322.00	355
63.00	2416	147.00	2604	230.00	449	323.00	6385
64.00	350	148.00	6278	231.00	1264	324.00	1182
65.00	1255	149.00	1496	232.00	157	325.00	141
67.00	64	150.00	388	233.00	256	326.00	128
68.00	1093	151.00	744	234.00	862	327.00	1462
69.00	67640	152.00	446	235.00	1005	328.00	636
70.00	269	153.00	1772	236.00	727	329.00	173
73.00	515	154.00	1255	237.00	1205	332.00	529
74.00	7268	155.00	3004	238.00	154	333.00	694
75.00	11237	156.00	4266	239.00	520	334.00	4359
76.00	4030	157.00	884	240.00	470	335.00	1104
77.00	77536	158.00	1048	241.00	887	336.00	71
78.00	5458	159.00	837	242.00	1769	339.00	57
79.00	5179	160.00	1635	243.00	1906	340.00	69
80.00	4134	161.00	2423	244.00	25472	341.00	945

Date : 15-FEB-2013 11:03

Client ID: DFTPP

Instrument: nt10.i

Sample Info: DFTPP

Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

Data File: df0215.d
Spectrum: Avg. Scans 540-542 (6.98), Background Scan 534
Location of Maximum: 442.00
Number of points: 310

m/z	Y	m/z	Y	m/z	Y	m/z	Y
81.00	5822	162.00	669	245.00	3455	342.00	233
82.00	1310	163.00	208	246.00	5360	346.00	1455
83.00	1237	164.00	346	247.00	1104	347.00	272
84.00	49	165.00	1915	248.00	220	351.00	63
85.00	927	166.00	1479	249.00	922	352.00	2119
86.00	1770	167.00	11125	250.00	176	353.00	1393
87.00	664	168.00	4660	251.00	322	354.00	2181
88.00	311	169.00	899	252.00	302	355.00	530
89.00	155	170.00	385	253.00	659	359.00	79
91.00	1252	171.00	591	255.00	132992	365.00	10610
92.00	1538	172.00	975	256.00	19544	366.00	1366
93.00	9669	173.00	1277	257.00	1526	367.00	56
94.00	696	174.00	2262	258.00	8478	370.00	232
95.00	89	175.00	4040	259.00	1435	371.00	589
96.00	252	176.00	1225	260.00	195	372.00	3819
97.00	217	177.00	1963	261.00	261	373.00	913
98.00	7894	178.00	746	264.00	193	383.00	1016
99.00	5546	179.00	7942	265.00	3517	384.00	343
100.00	526	180.00	5333	266.00	471	390.00	552
101.00	3383	181.00	2565	267.00	140	391.00	393
102.00	179	182.00	423	268.00	74	392.00	259
103.00	1146	183.00	323	269.00	109	401.00	293
104.00	2181	184.00	770	270.00	236	402.00	1631
105.00	1986	185.00	3953	271.00	343	403.00	2452
106.00	707	186.00	28560	272.00	426	404.00	864
107.00	26392	187.00	8181	273.00	4573	405.00	62
108.00	4156	188.00	793	274.00	11378	410.00	50
109.00	810	189.00	1988	275.00	63416	415.00	62
110.00	47144	190.00	341	276.00	8446	421.00	2155
111.00	7116	191.00	843	277.00	5821	422.00	1996
112.00	1014	192.00	2594	278.00	975	423.00	15721
113.00	378	193.00	2851	279.00	233	424.00	3062
115.00	95	194.00	589	281.00	110	425.00	320
116.00	1652	195.00	572	282.00	269	438.00	203
117.00	25088	196.00	6256	283.00	743	439.00	261

Data File: /chem1/nt10.i/20130215.b/df0215.d

Date : 15-FEB-2013 11:03

Client ID: DFTPP

Instrument: nt10.i

Sample Info: DFTPP

Operator: YZ

Column phase: ZB-5msi

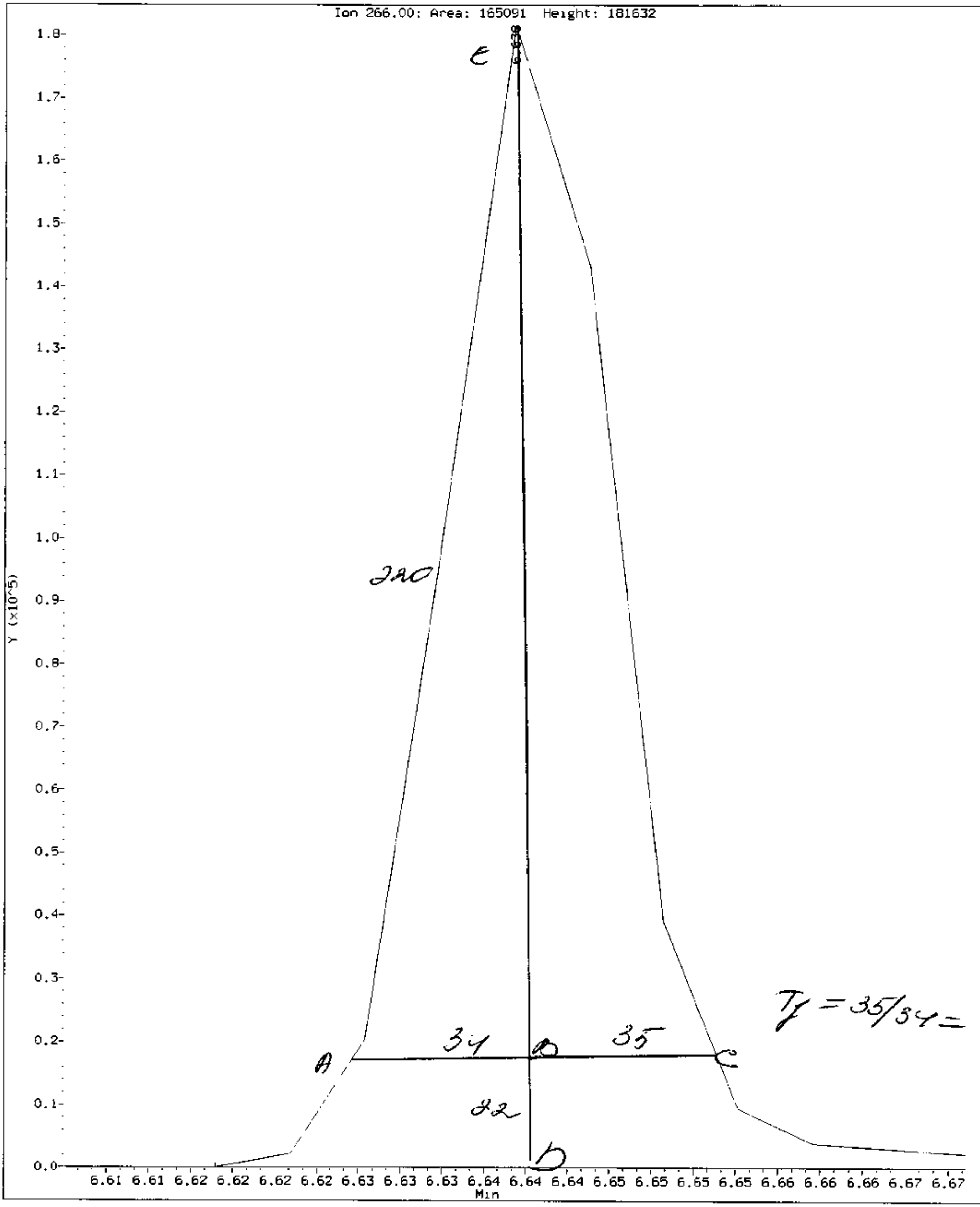
Column diameter: 0.25

Data File: df0215.d
Spectrum: Avg. Scans 540-542 (6.98), Background Scan 534
Location of Maximum: 442.00
Number of points: 310

m/z	Y	m/z	Y	m/z	Y	m/z	Y
118.00	1682	198.00	197376	284.00	463	440.00	85
119.00	154	199.00	13462	285.00	972	441.00	42856
120.00	413	200.00	1158	286.00	177	442.00	292160
121.00	157	201.00	1012	289.00	214	443.00	57320
122.00	1943	203.00	1592	290.00	153	444.00	5396
123.00	2649	204.00	7747	291.00	58	445.00	308
124.00	1142	205.00	13363	292.00	218		
125.00	1341	206.00	52792	293.00	1269		

Data File: /chemi/nt10.i/20130215.b/DDT.b/df0215.d
Injection Date: 15-FEB-2013 11:03
Instrument: nt10.i
Client Sample ID: DFTPP

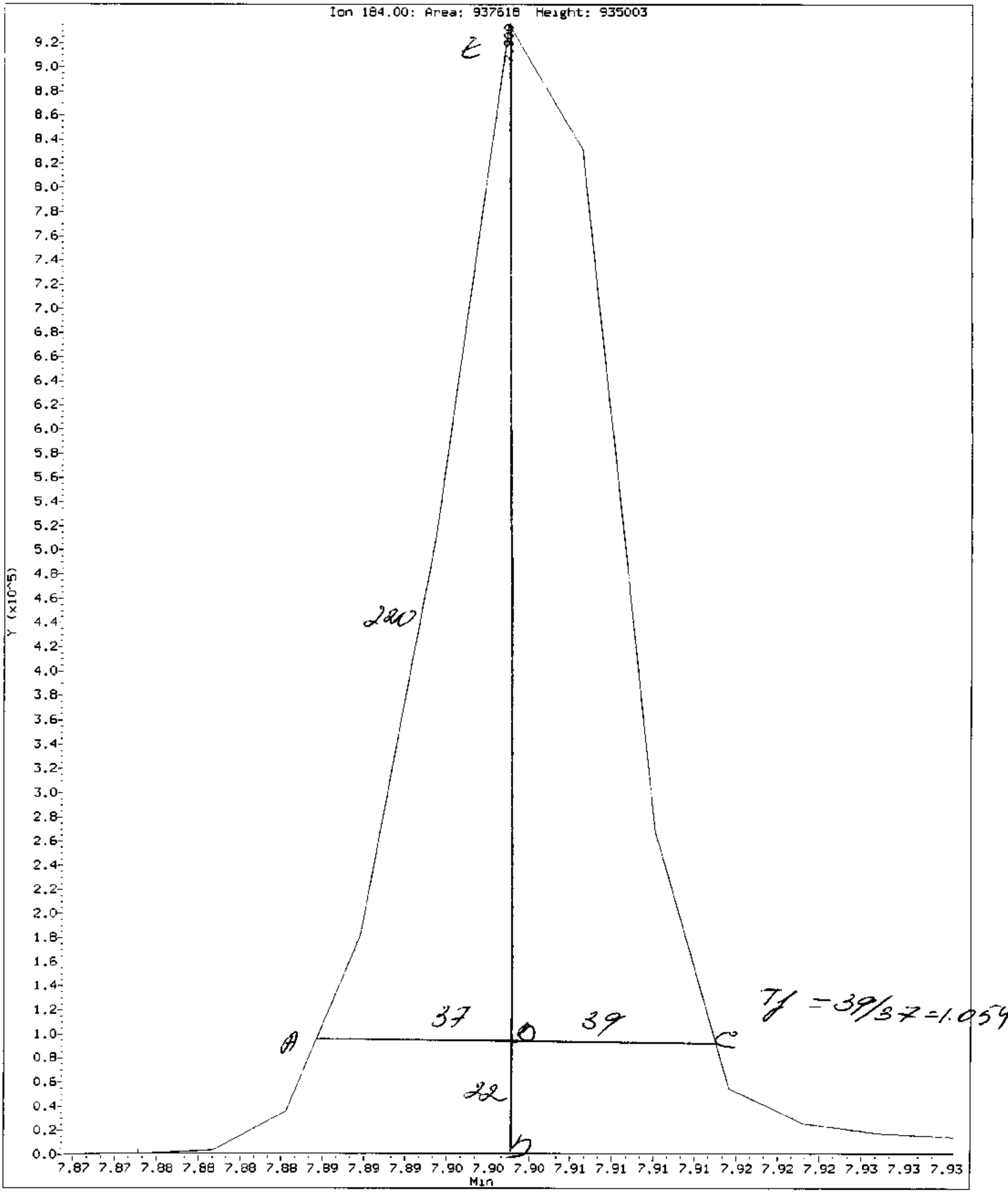
Compound: Pentachlorophenol
CAS Number: 87-86-5



$T_f = 35/34 = 1.029$

Data File: /chem1/nt10.i/20130215.b/DDT.b/df0215.d
Injection Date: 15-FEB-2013 11:03
Instrument: nt10.i
Client Sample ID: DFTPP

Compound: Benzidine
CAS Number:



Analytical Resources Inc.
ABN by sw846 8270C
DDT Breakdown Report

Data file: /chem1/nt10.i/20130215.b/DDT.b/df0215.d   ARI ID: DFTPP
Method: /chem1/nt10.i/20130215.b/DDT.b/sw846ddt.m   Misc: 11-
Analysis Date: 15-FEB-2013 11:03   Instrument: nt10.i

COMPOUND	RT	AREA
Pentachlorophenol	6.638	165091
Benzidine	7.900	937618
4,4'-DDE	8.077	2089
4,4'-DDD	8.371	12846
4,4'-DDT	8.628	598975

$$\text{DDT Percent Breakdown} = \frac{(\text{DDE Area} + \text{DDD Area}) * 100}{(\text{DDE Area} + \text{DDD Area} + \text{DDT Area})}$$

$$\text{DDT Percent Breakdown} = \frac{(2089 + 12846) * 100}{(2089 + 12846 + 598975)}$$

DDT Percent Breakdown = 2.4 %

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt10.i Injection Date: 15-FEB-2013 11:56
Lab File ID: cc0215a.d Init. Cal. Date(s): 25-JAN-2013 25-JAN-2013
Analysis Type: Init. Cal. Times: 12:59 17:53
Lab Sample ID: CC0215A Quant Type: ISTD
Method: /chem1/nt10.i/20130215.b/SIM.b/SIMABN2.m

COMPOUND	RRF / AMOUNT	RF1	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 1 2-Fluorophenol	1.27261	1.29444	0.010	1.71492	20.00000	Averaged
3 Phenol	1.61623	1.79284	0.010	10.92724	20.00000	Averaged
7 1,3-Dichlorobenzene	1.62301	1.59021	0.010	-2.02111	20.00000	Averaged
9 1,4-Dichlorobenzene	1.62039	1.56714	0.010	-3.28585	20.00000	Averaged
11 Benzyl alcohol	0.95765	0.96547	0.010	0.81728	20.00000	Averaged
12 1,2-Dichlorobenzene	1.53436	1.49386	0.010	-2.63956	20.00000	Averaged
13 2-Methylphenol	1.21614	1.28470	0.010	5.63786	20.00000	Averaged
15 4-Methylphenol	1.25940	1.30942	0.010	3.97198	20.00000	Averaged
16 N-Nitroso-di-n-propylamine	0.79168	0.81326	0.050	2.72508	20.00000	Averaged
22 2,4-Dimethylphenol	0.34482	0.36068	0.010	4.59967	20.00000	Averaged
26 1,2,4-Trichlorobenzene	0.37237	0.36012	0.010	-3.29053	20.00000	Averaged
30 Hexachlorobutadiene	0.22607	0.21862	0.010	-3.29633	20.00000	Averaged
39 Dimethylphthalate	1.21772	1.31457	0.010	7.95335	20.00000	Averaged
50 Diethylphthalate	1.42267	1.48241	0.010	4.19918	20.00000	Averaged
54 N-Nitrosodiphenylamine	0.46501	0.50030	0.010	7.59017	20.00000	Averaged
57 Hexachlorobenzene	0.30248	0.30236	0.010	-0.04074	20.00000	Averaged
58 Pentachlorophenol	0.17865	0.06383	0.005	-64.26907	20.00000	Averaged <-
$ 66 Terphenyl-d14	0.53149	0.54352	0.010	2.26362	20.00000	Averaged
67 Butylbenzylphthalate	0.38233	0.48462	0.010	26.75378	20.00000	Averaged <-
79 Dibenzo(a,h)anthracene	0.95339	1.14868	0.010	20.48382	20.00000	Averaged <-
90 N-Nitrosodimethylamine	0.75935	0.71734	0.010	-5.53192	20.00000	Averaged

Analytical Resources, Inc.

YZ 02/19/13

METHOD 8270D-SIM

Data file : /chem1/nt10.i/20130215.b/SIM.b/cc0215a.d
Lab Smp Id: CC0215A
Inj Date : 15-FEB-2013 11:56
Operator : YZ Inst ID: nt10.i
Smp Info : CC0215A
Misc Info :
Comment :
Method : /chem1/nt10.i/20130215.b/SIM.b/SIMABN2.m
Meth Date : 19-Feb-2013 14:39 yev Quant Type: ISTD
Cal Date : 25-JAN-2013 17:53 Cal File: ic0125i.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 3.50

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.464	6.464	(0.739)	13300	1.00000	1.017
	3 Phenol	94	8.203	8.203	(0.937)	18421	1.00000	1.109
	7 1,3-Dichlorobenzene	146	8.683	8.683	(0.992)	16339	1.00000	0.9798
*	8 1,4-Dichlorobenzene-d4	152	8.752	8.752	(1.000)	41099	4.00000	
	9 1,4-Dichlorobenzene	146	8.783	8.783	(1.004)	16102	1.00000	0.9671
	11 Benzyl alcohol	79	9.086	9.086	(1.038)	9920	1.00000	1.008
	12 1,2-Dichlorobenzene	146	9.156	9.156	(1.046)	15349	1.00000	0.9736
	13 2-Methylphenol	108	9.366	9.366	(1.070)	13200	1.00000	1.056
	15 4-Methylphenol	108	9.668	9.668	(1.105)	13454	1.00000	1.040
	16 N-Nitroso-di-n-propylamine	70	9.668	9.668	(1.105)	8356	1.00000	1.027
	22 2,4-Dimethylphenol	107	10.762	10.762	(0.945)	27839	2.00000	2.092
	26 1,2,4-Trichlorobenzene	180	11.317	11.317	(0.993)	13898	1.00000	0.9671
*	27 Naphthalene-d8	136	11.394	11.394	(1.000)	154370	4.00000	
	30 Hexachlorobutadiene	225	11.842	11.842	(1.039)	8437	1.00000	0.9670
	39 Dimethylphthalate	163	14.806	14.806	(0.969)	27930	1.00000	1.080
*	42 Acenaphthene-d10	162	15.278	15.278	(1.000)	84986	4.00000	
	50 Diethylphthalate	149	16.384	16.384	(1.072)	31496	1.00000	1.042
	54 N-Nitrosodiphenylamine	169	16.777	16.777	(0.904)	20119	1.00000	1.076
	57 Hexachlorobenzene	284	17.888	17.888	(0.964)	12159	1.00000	0.9996
	58 Pentachlorophenol	266	18.314	18.314	(0.987)	5134	2.00000	0.7146
*	59 Phenanthrene-d10	188	18.554	18.554	(1.000)	160855	4.00000	
$	66 Terphenyl-d14	244	21.788	21.788	(0.921)	25642	1.00000	1.023
	67 Butylbenzylphthalate	149	22.741	22.741	(0.961)	22863	1.00000	1.268
*	69 Chrysene-d12	240	23.662	23.662	(1.000)	188710	4.00000	
*	77 Perylene-d12	264	26.070	26.070	(1.000)	188958	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.295	28.295	(1.085)	54263	1.00000	1.205(M)
	90 N-Nitrosodimethylamine	74	4.148	4.148	(0.474)	14741	2.00000	1.889

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: cc0215a.d
Lab Smp Id: CC0215A
Analysis Type: SV
Quant Type: ISTD
Operator: YZ
Method File: /chem1/nt10.i/20130215.b/SIM.b/SIMABN2.m
Misc Info:

Calibration Date: 15-FEB-2013
Calibration Time: 11:56

Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	53853	26926	107706	41099	-23.68
27 Naphthalene-d8	200104	100052	400208	154370	-22.86
42 Acenaphthene-d10	112392	56196	224784	84986	-24.38
59 Phenanthrene-d10	210710	105355	421420	160855	-23.66
69 Chrysene-d12	240805	120402	481610	188710	-21.63
77 Perylene-d12	230834	115417	461668	188958	-18.14

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.75	8.25	9.25	8.75	0.00
27 Naphthalene-d8	11.39	10.89	11.89	11.39	0.00
42 Acenaphthene-d10	15.28	14.78	15.78	15.28	0.00
59 Phenanthrene-d10	18.55	18.05	19.05	18.55	0.00
69 Chrysene-d12	23.66	23.16	24.16	23.66	0.00
77 Perylene-d12	26.07	25.57	26.57	26.07	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/nt10.i/20130215.b/SIM.b/cc0215a.d

Date : 15-FEB-2013 11:56

Client ID:

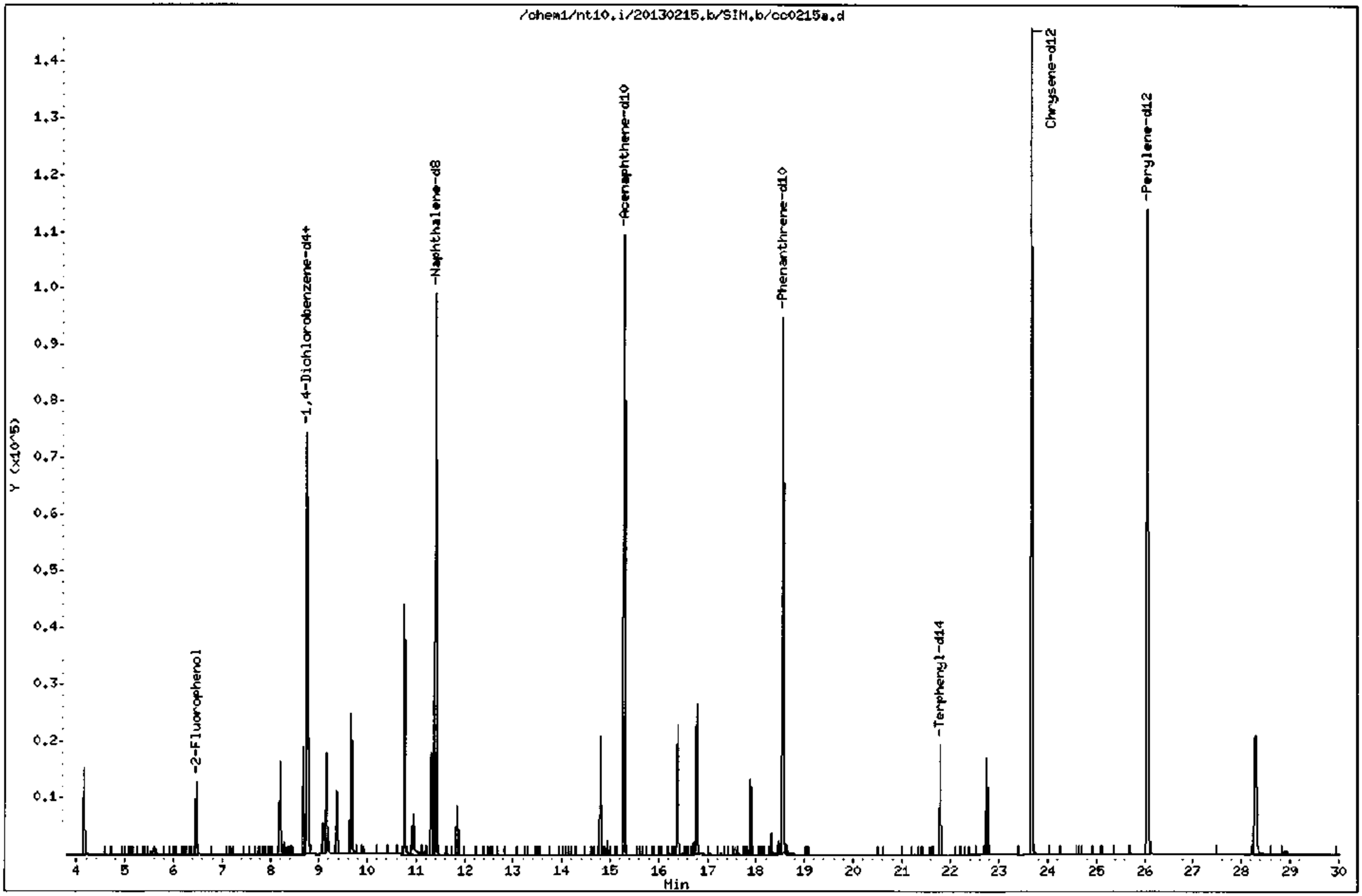
Instrument: nt10.i

Sample Info: CC0215A

Operator: YZ

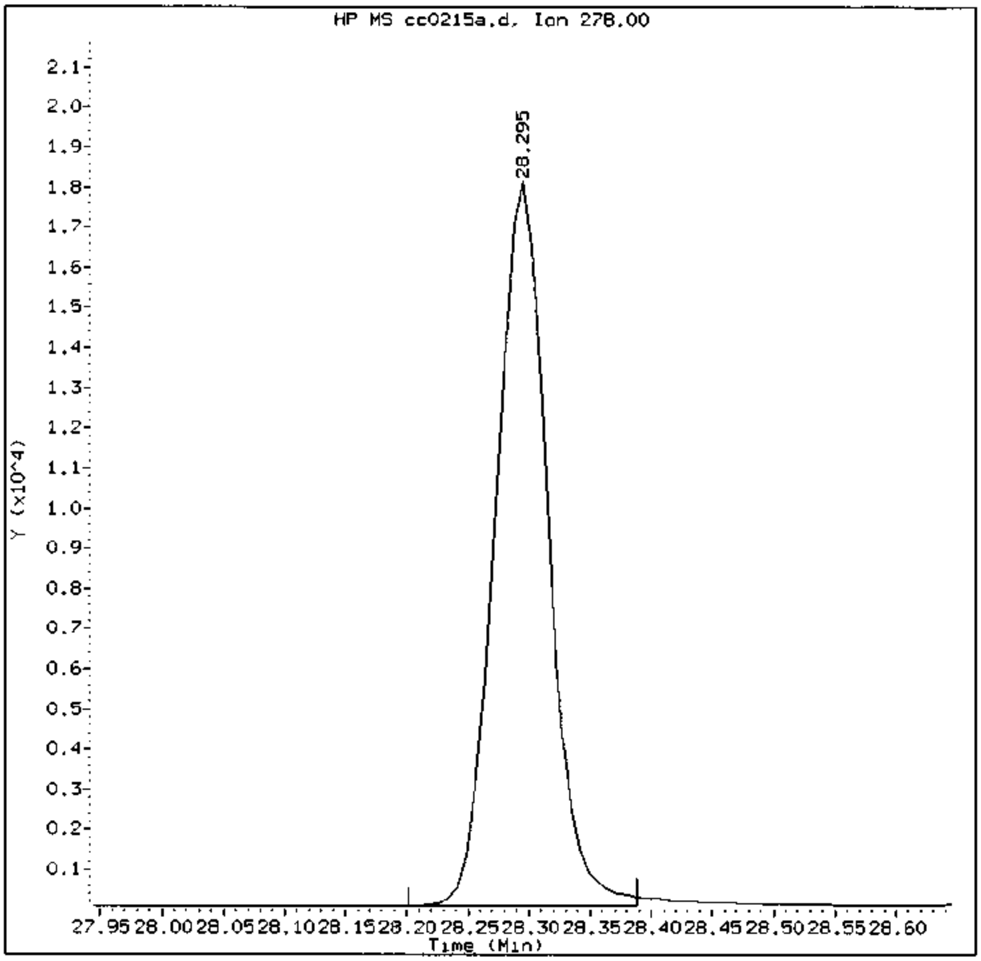
Column phase: ZB-5msi

Column diameter: 0.25



CC0215A, /chem1/nt10.i/20130215.b/SIM.b/cc0215a.d

Dibenzo(a,h)anthracene   Amount: 1.20   Area: 54263



MANUAL INTEGRATION for Dibenzo(a,h)anthracene

1. Baseline correction ✓
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other ______________________

Analyst: VL   Date: 2/19/13

CO-ELUTION SUMMARY FOR FILE - cc0215a.d

Lab ID: CC0215A, Method: SIM.b/SIMABN2.m, Instrument: nt10.i, Date: 15-FEB-20

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

MANUAL INTEGRATION SUMMARY FOR DATABATCH - /chem1/nt10.i/20130215.b/SIM.b

ARI Job No.: WC32 Method: SIM.b/SIMABN2.m Instrument: nt10.i Date: 15-FEB-2013

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1650	wc32mb.d	WC32MBS1	WC32MBS1	1	Phenol, Diethylphthalate,
1726	wc32sb.d	WC32LCSS1	WC32LCSS1	1	NO MANUAL INTEGRATION
1803	wc32sbd.d	WC32LCSDS1	WC32LCSDS1	1	NO MANUAL INTEGRATION
1839	wc32a.d	WC32A	SG-12-0-10	1	1,4-Dichlorobenzene, Benzyl alcohol, Dimethylphthalate, Diethylphthalate,
1915	wc32b.d	WC32B	SG-13-0-10	1	1,4-Dichlorobenzene, Dimethylphthalate, Diethylphthalate, Pentachlorophenol,
1952	wc32c.d	WC32C	SG-07-0-10	1	Benzyl alcohol, Dimethylphthalate, Diethylphthalate,
2028	wc32d.d	WC32D	SG-06-0-10	1	1,4-Dichlorobenzene, Benzyl alcohol, Dimethylphthalate,
2104	wc32e.d	WC32E	SG-05-0-10	1	Phenol, Diethylphthalate,
2140	wc32f.d	WC32F	SG-95-0-10	1	N-Nitrosodiphenylamine,
2253	wc32gms.d	WC32GMS	SG-08-0-10	1	NO MANUAL INTEGRATION
1900	wc32g.d	WC32G	SG-08-0-10	5	Diethylphthalate,
1936	wc32gmsd.d	WC32GMSD	SG-08-0-10	1	2-Fluorophenol,
2012	wc32h.d	WC32H	SG-09-0-10	1	1,4-Dichlorobenzene, Benzyl alcohol, Diethylphthalate,
2048	wc33g.d	WC33G	HA-09-0-10	1	NO MANUAL INTEGRATION

Analytical Resources, Inc.

YZ 2/19/13

METHOD 8270D-SIM

Data file : /chem1/nt10.i/20130215.b/SIM.b/wc32mb.d
Lab Smp Id: WC32MBS1 Client Smp ID: WC32MBS1
Inj Date : 15-FEB-2013 16:50
Operator : VTS/YZ Inst ID: nt10.i
Smp Info : WC32MBS1
Misc Info : 13-2430
Comment :
Method : /chem1/nt10.i/20130215.b/SIM.b/SIMABN2.m
Meth Date : 19-Feb-2013 14:01 yev Quant Type: ISTD
Cal Date : 25-JAN-2013 17:53 Cal File: ic0125i.d
Als bottle: 9 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Ws	10.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
$	1 2-Fluorophenol	112	6.487	6.464	(0.741)	55374	4.87845	487.8
	3 Phenol	94	8.226	8.203	(0.939)	594	0.04121	NFB 4.121(M)
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	8.760	8.752	(1.000)	35677	4.00000	
	9 1,4-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	79	Compound Not Detected.					
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	13 2-Methylphenol	108	Compound Not Detected.					
	15 4-Methylphenol	108	Compound Not Detected.					
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	Compound Not Detected.					
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	11.410	11.394	(1.000)	133920	4.00000	
	30 Hexachlorobutadiene	225	Compound Not Detected.					

							CONCENTRATIONS	
		QUANT SIG					ON-COLUMN	FINAL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/kg)
=========================		====	==	======	======	========	=======	=======
	39 Dimethylphthalate	163	Compound Not Detected.					
*	42 Acenaphthene-d10	162	15.301	15.278	(1.000)	73003	4.00000	
	50 Diethylphthalate	149	16.399	16.384	(1.072)	2379	0.09162	9.162(M)
	54 N-Nitrosodiphenylamine	169	Compound Not Detected.					
	57 Hexachlorobenzene	284	Compound Not Detected.					
	58 Pentachlorophenol	266	Compound Not Detected.					
*	59 Phenanthrene-d10	188	18.585	18.554	(1.000)	144090	4.00000	
$	66 Terphenyl-d14	244	21.819	21.788	(0.921)	121520	5.23743	523.7
	67 Butylbenzylphthalate	149	Compound Not Detected.					
*	69 Chrysene-d12	240	23.693	23.662	(1.000)	174620	4.00000	
*	77 Perylene-d12	264	26.116	26.070	(1.000)	148785	4.00000	
	79 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	90 N-Nitrosodimethylamine	74	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: wc32mb.d
Lab Smp Id: WC32MBS1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS/YZ
Method File: /chem1/nt10.i/20130215.b/SIM.b/SIMABN2.m
Misc Info: 13-2430

Calibration Date: 15-FEB-2013
Calibration Time: 11:56
Client Smp ID: WC32MBS1
Level: LOW
Sample Type: Solid

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	53853	26926	107706	35677	-33.75
27 Naphthalene-d8	200104	100052	400208	133920	-33.07
42 Acenaphthene-d10	112392	56196	224784	73003	-35.05
59 Phenanthrene-d10	210710	105355	421420	144090	-31.62
69 Chrysene-d12	240805	120402	481610	174620	-27.48
77 Perylene-d12	230834	115417	461668	148785	-35.54

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.75	8.25	9.25	8.76	0.09
27 Naphthalene-d8	11.39	10.89	11.89	11.41	0.14
42 Acenaphthene-d10	15.28	14.78	15.78	15.30	0.15
59 Phenanthrene-d10	18.55	18.05	19.05	18.59	0.17
69 Chrysene-d12	23.66	23.16	24.16	23.69	0.13
77 Perylene-d12	26.07	25.57	26.57	26.12	0.18

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

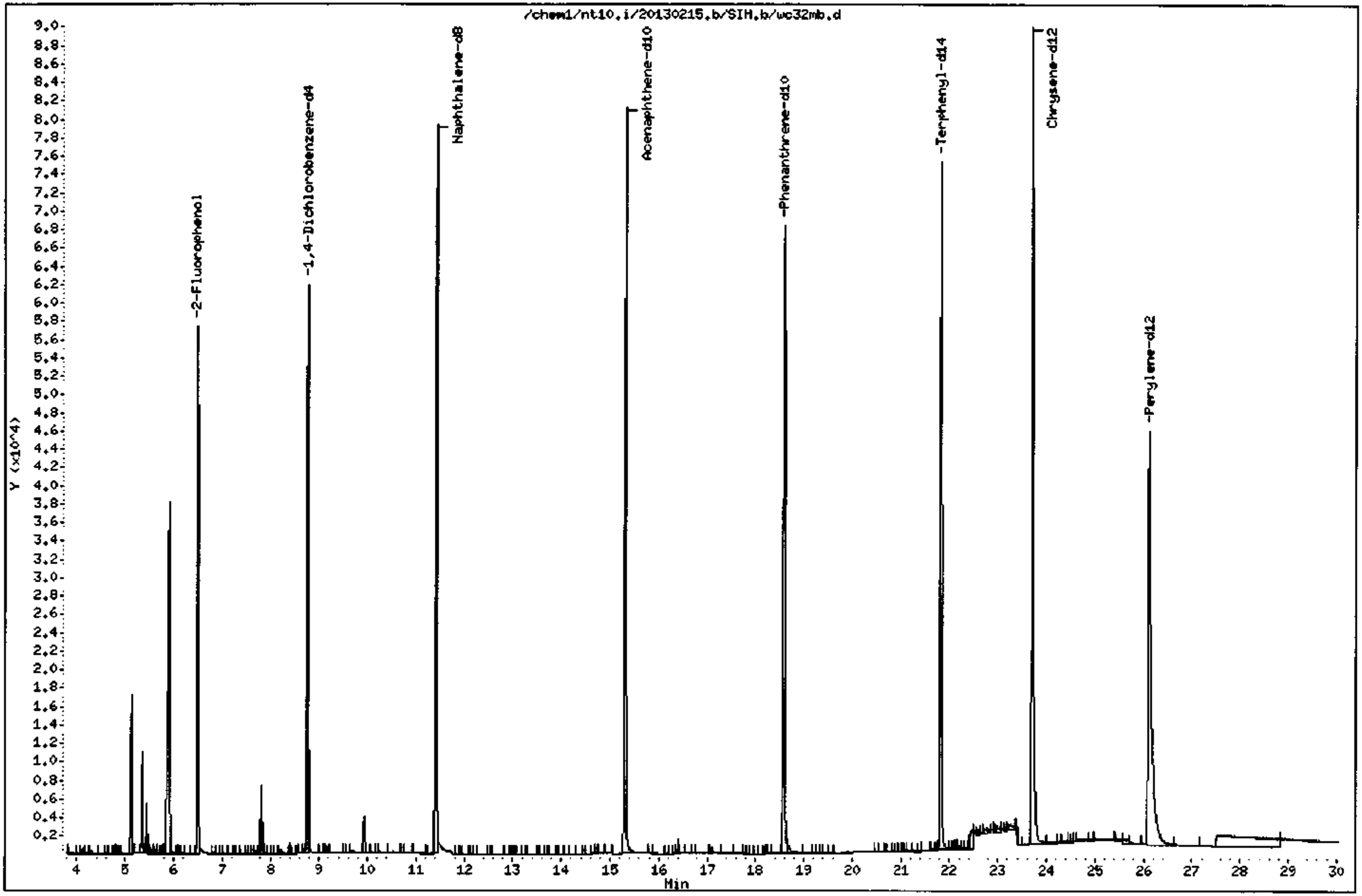
RECOVERY REPORT

Client Name: Floyd-Snider
Sample Matrix: SOLID
Lab Smp Id: WC32MBS1
Level: LOW
Data Type: MS DATA
SpikeList File: SHORTPSDDA.spk
Sublist File: PSDDA.sub
Method File: /chem1/nt10.i/20130215.b/SIM.b/SIMABN2.m
Misc Info: 13-2430

Client SDG: WC32
Fraction: SV
Client Smp ID: WC32MBS1
Operator: VTS/YZ
SampleType: BLANK
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 1 2-Fluorophenol	750.0	487.8	65.05	30-160
$ 66 Terphenyl-d14	500.0	523.7	104.75	30-160

Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32mb.d
Date : 15-FEB-2013 16:50
Client ID: WC32MBS1 Instrument: nt10.i
Sample Info: WC32MBS1
Volume Injected (uL): 1.0 Operator: VTS/YZ
Column phase: ZB-5msi Column diameter: 0.25



WC32 . 01101

CO-ELUTION SUMMARY FOR FILE - wc32mb.d

Lab ID: WC32MBS1, Method: SIM.b/SIMABN2.m, Instrument: nt10.i, Date: 15-FEB-2

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Analytical Resources, Inc.

"Z 2/19/13

METHOD 8270D-SIM

Data file : /chem1/nt10.i/20130215.b/SIM.b/wc32sb.d
Lab Smp Id: WC32LCSS1 Client Smp ID: WC32LCSS1
Inj Date : 15-FEB-2013 17:26
Operator : VTS/YZ Inst ID: nt10.i
Smp Info : WC32LCSS1
Misc Info : 13-2430
Comment :
Method : /chem1/nt10.i/20130215.b/SIM.b/SIMABN2.m
Meth Date : 19-Feb-2013 14:39 yev Quant Type: ISTD
Cal Date : 25-JAN-2013 17:53 Cal File: ic0125i.d
Als bottle: 10 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Ws	10.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
$	1 2-Fluorophenol	112	6.487	6.464	(0.741)	56593	5.82564	582.6
	3 Phenol	94	8.226	8.203	(0.939)	46551	3.77313	377.3
	7 1,3-Dichlorobenzene	146	8.683	8.683	(0.991)	44523	3.59368	359.4
*	8 1,4-Dichlorobenzene-d4	152	8.760	8.752	(1.000)	30534	4.00000	
	9 1,4-Dichlorobenzene	146	8.791	8.783	(1.004)	44768	3.61931	361.9
	11 Benzyl alcohol	79	9.094	9.086	(1.038)	31000	4.24065	424.1
	12 1,2-Dichlorobenzene	146	9.164	9.156	(1.046)	42949	3.66693	366.7
	13 2-Methylphenol	108	9.381	9.366	(1.071)	34352	3.70037	370.0
	15 4-Methylphenol	108	9.692	9.668	(1.106)	73604	7.65621	765.6
	16 N-Nitroso-di-n-propylamine	70	9.668	9.668	(1.104)	24509	4.05556	405.6
	22 2,4-Dimethylphenol	107	10.777	10.762	(0.945)	92150	9.20144	920.1
	26 1,2,4-Trichlorobenzene	180	11.325	11.317	(0.993)	40256	3.72221	372.2
*	27 Naphthalene-d8	136	11.402	11.394	(1.000)	116174	4.00000	
	30 Hexachlorobutadiene	225	11.850	11.842	(1.039)	24904	3.79296	379.3
	39 Dimethylphthalate	163	14.822	14.806	(0.969)	103318	5.13919	513.9

								CONCENTRATIONS	
		QUANT SIG						ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE		(ug/mL)	(ug/kg)
*	42 Acenaphthene-d10	162	15.294	15.278	(1.000)	66038		4.00000	
	50 Diethylphthalate	149	16.399	16.384	(1.072)	114988		4.89570	489.6
	54 N-Nitrosodiphenylamine	169	16.793	16.777	(0.904)	62162		4.15090	415.1
	57 Hexachlorobenzene	284	17.904	17.888	(0.964)	41775		4.28838	428.8
	58 Pentachlorophenol	266	18.337	18.314	(0.987)	40021		6.95597	695.6
*	59 Phenanthrene-d10	188	18.577	18.554	(1.000)	128820		4.00000	
$	66 Terphenyl-d14	244	21.811	21.788	(0.921)	110726		5.30590	530.6
	67 Butylbenzylphthalate	149	22.764	22.741	(0.961)	94586		6.30079	630.1
*	69 Chrysene-d12	240	23.693	23.662	(1.000)	157056		4.00000	
*	77 Perylene-d12	264	26.109	26.070	(1.000)	146032		4.00000	
	79 Dibenzo(a,h)anthracene	278	28.373	28.295	(1.087)	102188		2.93589	293.6
	90 N-Nitrosodimethylamine	74	4.186	4.148	(0.478)	57513		9.92206	992.2

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: wc32sb.d
Lab Smp Id: WC32LCSS1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS/YZ
Method File: /chem1/nt10.i/20130215.b/SIM.b/SIMABN2.m
Misc Info: 13-2430

Calibration Date: 15-FEB-2013
Calibration Time: 11:56
Client Smp ID: WC32LCSS1
Level: LOW
Sample Type: Solid

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	53853	26926	107706	30534	-43.30
27 Naphthalene-d8	200104	100052	400208	116174	-41.94
42 Acenaphthene-d10	112392	56196	224784	66038	-41.24
59 Phenanthrene-d10	210710	105355	421420	128820	-38.86
69 Chrysene-d12	240805	120402	481610	157056	-34.78
77 Perylene-d12	230834	115417	461668	146032	-36.74

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.75	8.25	9.25	8.76	0.09
27 Naphthalene-d8	11.39	10.89	11.89	11.40	0.07
42 Acenaphthene-d10	15.28	14.78	15.78	15.29	0.10
59 Phenanthrene-d10	18.55	18.05	19.05	18.58	0.13
69 Chrysene-d12	23.66	23.16	24.16	23.69	0.13
77 Perylene-d12	26.07	25.57	26.57	26.11	0.15

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd-Snider
Sample Matrix: SOLID
Lab Smp Id: WC32LCSS1
Level: LOW
Data Type: MS DATA
SpikeList File: PSDDASIMLCS.spk
Sublist File: PSDDA.sub
Method File: /chem1/nt10.i/20130215.b/SIM.b/SIMABN2.m
Misc Info: 13-2430

Client SDG: WC32
Fraction: SV
Client Smp ID: WC32LCSS1
Operator: VTS/YZ
SampleType: LCS
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
3 Phenol	500.0	377.3	75.46	30-160
7 1,3-Dichlorobenzen	500.0	359.4	71.87	30-160
9 1,4-Dichlorobenzen	500.0	361.9	72.39	30-160
11 Benzyl alcohol	500.0	424.1	84.81	30-160
12 1,2-Dichlorobenzen	500.0	366.7	73.34	30-160
13 2-Methylphenol	500.0	370.0	74.01	30-160
15 4-Methylphenol	1000	765.6	76.56	30-160
16 N-Nitroso-di-n-pro	500.0	405.6	81.11	30-160
22 2,4-Dimethylphenol	1000	920.1	92.01	30-160
26 1,2,4-Trichloroben	500.0	372.2	74.44	30-160
30 Hexachlorobutadien	500.0	379.3	75.86	30-160
39 Dimethylphthalate	500.0	513.9	102.78	30-160
50 Diethylphthalate	500.0	489.6	97.91	30-160
54 N-Nitrosodiphenyla	500.0	415.1	83.02	30-160
57 Hexachlorobenzene	500.0	428.8	85.77	30-160
58 Pentachlorophenol	1000	695.6	69.56	30-160
67 Butylbenzylphthala	500.0	630.1	126.02	30-160
79 Dibenzo(a,h)anthra	500.0	293.6	58.72	30-160
90 N-Nitrosodimethyla	1000	992.2	99.22	30-160

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 1 2-Fluorophenol	750.0	582.6	77.68	30-160
$ 66 Terphenyl-d14	500.0	530.6	106.12	30-160

Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32sb.d

Date : 15-FEB-2013 17:26

Client ID: WC32LCSS1

Sample Info: WC32LCSS1

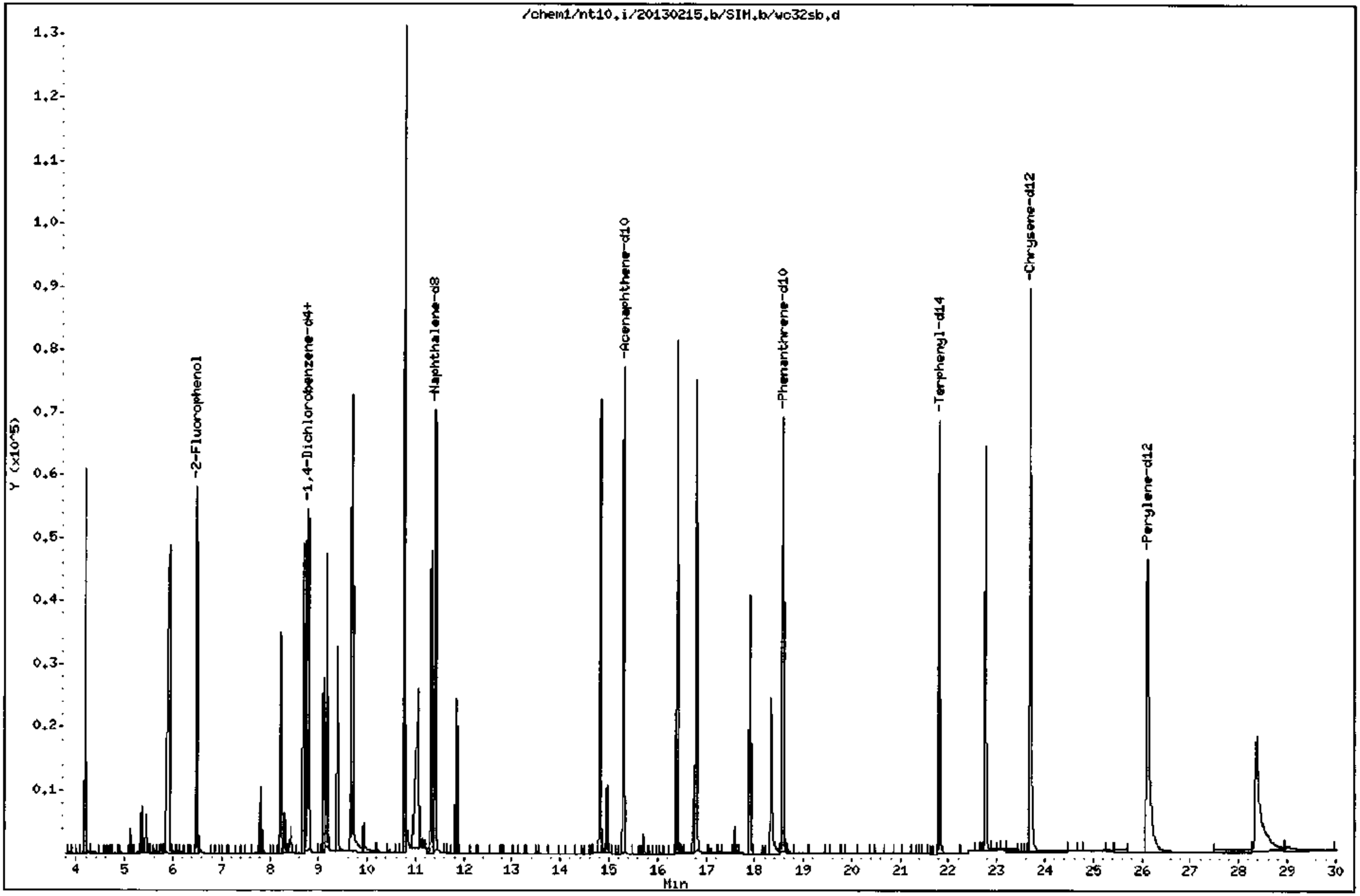
Volume Injected (uL): 1.0

Column phase: ZB-5msi

Instrument: nt10.i

Operator: VTS/YZ

Column diameter: 0.25



CO-ELUTION SUMMARY FOR FILE - wc32sb.d

Lab ID: WC32LCSS1, Method: SIM.b/SIMABN2.m, Instrument: nt10.i, Date: 15-FEB-

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Report Date: 19-Feb-2013 14:40

Analytical Resources, Inc.

METHOD 8270D-SIM

YZ 2/19/13

Data file : /chem1/nt10.i/20130215.b/SIM.b/wc32sbd.d
Lab Smp Id: WC32LCSDS1 Client Smp ID: WC32LCSDS1
Inj Date : 15-FEB-2013 18:03
Operator : VTS/YZ Inst ID: nt10.i
Smp Info : WC32LCSDS1
Misc Info : 13-2430
Comment :
Method : /chem1/nt10.i/20130215.b/SIM.b/SIMABN2.m
Meth Date : 19-Feb-2013 14:39 yev Quant Type: ISTD
Cal Date : 25-JAN-2013 17:53 Cal File: ic0125i.d
Als bottle: 11 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Ws	10.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

		QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/kg)
$	1 2-Fluorophenol	112	6.487	6.464	(0.741)	58484	5.33952	534.0
	3 Phenol	94	8.218	8.203	(0.938)	50717	3.64595	364.6
	7 1,3-Dichlorobenzene	146	8.682	8.683	(0.991)	47420	3.39469	339.5
*	8 1,4-Dichlorobenzene-d4	152	8.760	8.752	(1.000)	34427	4.00000	
	9 1,4-Dichlorobenzene	146	8.791	8.783	(1.004)	47518	3.40722	340.7
	11 Benzyl alcohol	79	9.093	9.086	(1.038)	32540	3.94796	394.8
	12 1,2-Dichlorobenzene	146	9.163	9.156	(1.046)	46294	3.50557	350.6
	13 2-Methylphenol	108	9.381	9.366	(1.071)	36295	3.46756	346.8
	15 4-Methylphenol	108	9.691	9.668	(1.106)	77501	7.14997	715.0
	16 N-Nitroso-di-n-propylamine	70	9.668	9.668	(1.104)	25450	3.73506	373.5
	22 2,4-Dimethylphenol	107	10.777	10.762	(0.945)	87950	7.83889	783.9
	26 1,2,4-Trichlorobenzene	180	11.324	11.317	(0.993)	42550	3.51179	351.2
*	27 Naphthalene-d8	136	11.409	11.394	(1.000)	130152	4.00000	
	30 Hexachlorobutadiene	225	11.849	11.842	(1.039)	26027	3.53827	353.8
	39 Dimethylphthalate	163	14.821	14.806	(0.969)	109490	5.06108	506.1

Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32sbd.d
Report Date: 19-Feb-2013 14:40

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
* 42 Acenaphthene-d10	162	15.293	15.278	(1.000)	71063	4.00000	
50 Diethylphthalate	149	16.399	16.384	(1.072)	122230	4.83605	483.6
54 N-Nitrosodiphenylamine	169	16.792	16.777	(0.904)	69231	4.33284	433.3
57 Hexachlorobenzene	284	17.903	17.888	(0.964)	44264	4.25874	425.9
58 Pentachlorophenol	266	18.329	18.314	(0.987)	43236	7.04319	704.3
* 59 Phenanthrene-d10	188	18.577	18.554	(1.000)	137445	4.00000	
$ 66 Terphenyl-d14	244	21.811	21.788	(0.921)	112754	5.02060	502.1
67 Butylbenzylphthalate	149	22.763	22.741	(0.961)	101061	6.25555	625.6
* 69 Chrysene-d12	240	23.693	23.662	(1.000)	169021	4.00000	
* 77 Perylene-d12	264	26.108	26.070	(1.000)	155858	4.00000	
79 Dibenzo(a,h)anthracene	278	28.364	28.295	(1.086)	116241	3.12910	312.9
90 N-Nitrosodimethylamine	74	4.186	4.148	(0.478)	60520	9.26017	926.0

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: wc32sbd.d
Lab Smp Id: WC32LCSDS1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS/YZ
Method File: /chem1/nt10.i/20130215.b/SIM.b/SIMABN2.m
Misc Info: 13-2430

Calibration Date: 15-FEB-2013
Calibration Time: 11:56
Client Smp ID: WC32LCSDS1
Level: LOW
Sample Type: Solid

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	53853	26926	107706	34427	-36.07
27 Naphthalene-d8	200104	100052	400208	130152	-34.96
42 Acenaphthene-d10	112392	56196	224784	71063	-36.77
59 Phenanthrene-d10	210710	105355	421420	137445	-34.77
69 Chrysene-d12	240805	120402	481610	169021	-29.81
77 Perylene-d12	230834	115417	461668	155858	-32.48

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.75	8.25	9.25	8.76	0.08
27 Naphthalene-d8	11.39	10.89	11.89	11.41	0.13
42 Acenaphthene-d10	15.28	14.78	15.78	15.29	0.10
59 Phenanthrene-d10	18.55	18.05	19.05	18.58	0.12
69 Chrysene-d12	23.66	23.16	24.16	23.69	0.13
77 Perylene-d12	26.07	25.57	26.57	26.11	0.15

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32sbd.d
Report Date: 19-Feb-2013 14:40

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd-Snider
Sample Matrix: SOLID
Lab Smp Id: WC32LCSDS1
Level: LOW
Data Type: MS DATA
SpikeList File: PSDDASIMLCS.spk
Sublist File: PSDDA.sub
Method File: /chem1/nt10.i/20130215.b/SIM.b/SIMABN2.m
Misc Info: 13-2430

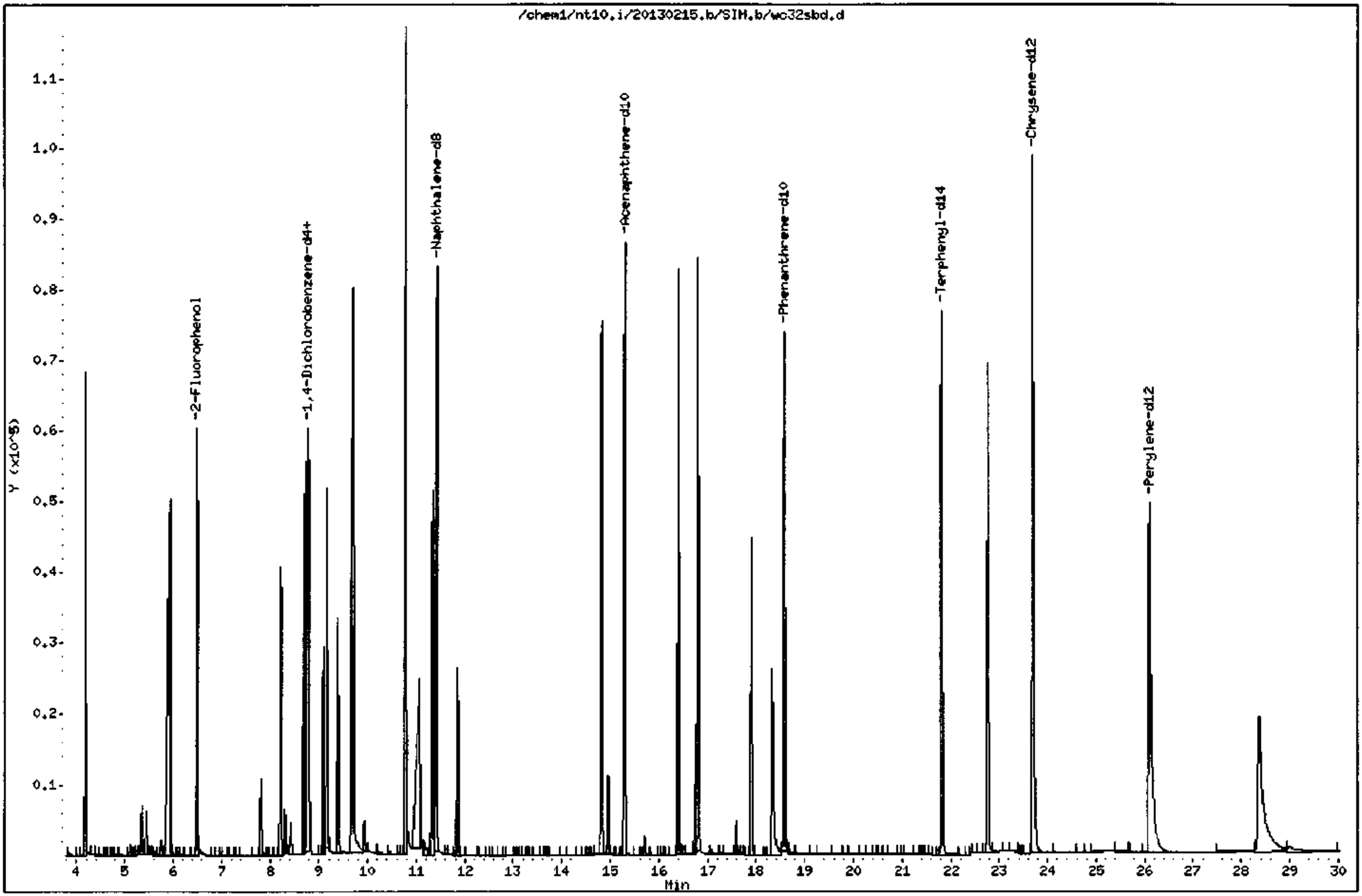
Client SDG: WC32
Fraction: SV
Client Smp ID: WC32LCSDS1
Operator: VTS/YZ
SampleType: LCSD
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
3 Phenol	500.0	364.6	72.92	30-160
7 1,3-Dichlorobenzen	500.0	339.5	67.89	30-160
9 1,4-Dichlorobenzen	500.0	340.7	68.14	30-160
11 Benzyl alcohol	500.0	394.8	78.96	30-160
12 1,2-Dichlorobenzen	500.0	350.6	70.11	30-160
13 2-Methylphenol	500.0	346.8	69.35	30-160
15 4-Methylphenol	1000	715.0	71.50	30-160
16 N-Nitroso-di-n-pro	500.0	373.5	74.70	30-160
22 2,4-Dimethylphenol	1000	783.9	78.39	30-160
26 1,2,4-Trichloroben	500.0	351.2	70.24	30-160
30 Hexachlorobutadien	500.0	353.8	70.77	30-160
39 Dimethylphthalate	500.0	506.1	101.22	30-160
50 Diethylphthalate	500.0	483.6	96.72	30-160
54 N-Nitrosodiphenyla	500.0	433.3	86.66	30-160
57 Hexachlorobenzene	500.0	425.9	85.17	30-160
58 Pentachlorophenol	1000	704.3	70.43	30-160
67 Butylbenzylphthala	500.0	625.6	125.11	30-160
79 Dibenzo(a,h)anthra	500.0	312.9	62.58	30-160
90 N-Nitrosodimethyla	1000	926.0	92.60	30-160

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 1 2-Fluorophenol	750.0	534.0	71.19	30-160
$ 66 Terphenyl-d14	500.0	502.1	100.41	30-160

Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32sbd.d
Date : 15-FEB-2013 18:03
Client ID: WC32LCSDS1
Sample Info: WC32LCSDS1
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt10.i
Operator: VTS/YZ
Column diameter: 0.25



CO-ELUTION SUMMARY FOR FILE - wc32sbd.d

Lab ID: WC32LCSDS1, Method: SIM.b/SIMABN2.m, Instrument: nt10.i, Date: 15-FEB

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Analytical Resources, Inc.

YZ 2/19/13

METHOD 8270D-SIM

Data file : /chem1/nt10.i/20130215.b/SIM.b/wc32gms.d
Lab Smp Id: WC32GMS Client Smp ID: SG-08-0-10-0131 MS
Inj Date : 15-FEB-2013 22:53
Operator : VTS/YZ Inst ID: nt10.i
Smp Info : WC32GMS
Misc Info : 13-2430
Comment :
Method : /chem1/nt10.i/20130215.b/SIM.b/SIMABN2.m
Meth Date : 19-Feb-2013 14:39 yev Quant Type: ISTD
Cal Date : 25-JAN-2013 17:53 Cal File: ic0125i.d
Als bottle: 19 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Ws	20.10000	Weight of sample extracted (g)
M	48.50000	% Moisture

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
$	1 2-Fluorophenol	112	6.534	6.464	(0.746)	46417	5.24181	506.4
	3 Phenol	94	8.249	8.203	(0.942)	42663	3.79357	366.5
	7 1,3-Dichlorobenzene	146	8.690	8.683	(0.992)	36372	3.22066	311.1
*	8 1,4-Dichlorobenzene-d4	152	8.760	8.752	(1.000)	27833	4.00000	
	9 1,4-Dichlorobenzene	146	8.791	8.783	(1.004)	40960	3.63280	350.9
	11 Benzyl alcohol	79	9.117	9.086	(1.041)	29782	4.46939	431.8
	12 1,2-Dichlorobenzene	146	9.171	9.156	(1.047)	36386	3.40807	329.2
	13 2-Methylphenol	108	9.412	9.366	(1.074)	31406	3.71133	358.5
	15 4-Methylphenol	108	9.715	9.668	(1.109)	77343	8.82586	852.6
	16 N-Nitroso-di-n-propylamine	70	9.699	9.668	(1.107)	22367	4.06029	392.2
	22 2,4-Dimethylphenol	107	10.785	10.762	(0.945)	113546	12.4113	1199
	26 1,2,4-Trichlorobenzene	180	11.325	11.317	(0.993)	34532	3.49523	337.7
*	27 Naphthalene-d8	136	11.409	11.394	(1.000)	106127	4.00000	
	30 Hexachlorobutadiene	225	11.850	11.842	(1.039)	21156	3.52716	340.7
	39 Dimethylphthalate	163	14.829	14.806	(0.969)	91567	4.96881	480.0

							CONCENTRATIONS	
		QUANT SIG					ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/kg)
*	42 Acenaphthene-d10	162	15.301	15.278	(1.000)	60534	4.00000	
	50 Diethylphthalate	149	16.414	16.384	(1.073)	103598	4.81181	464.8
	54 N-Nitrosodiphenylamine	169	16.839	16.777	(0.906)	52144	3.83332	370.3
	57 Hexachlorobenzene	284	17.919	17.888	(0.964)	37261	4.21099	406.8
	58 Pentachlorophenol	266	18.353	18.314	(0.987)	48332	9.24820	893.4
*	59 Phenanthrene-d10	188	18.593	18.554	(1.000)	117012	4.00000	
$	66 Terphenyl-d14	244	21.819	21.788	(0.920)	91297	4.69412	453.5
	67 Butylbenzylphthalate	149	22.771	22.741	(0.960)	83706	5.98291	578.0
*	69 Chrysene-d12	240	23.708	23.662	(1.000)	146375	4.00000	
*	77 Perylene-d12	264	26.139	26.070	(1.000)	127344	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.411	28.295	(1.087)	92479	3.04686	294.3
	90 N-Nitrosodimethylamine	74	4.186	4.148	(0.478)	54385	10.2929	994.3

Report Date: 19-Feb-2013 14:40

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: wc32gms.d
Lab Smp Id: WC32GMS
Analysis Type: SV
Quant Type: ISTD
Operator: VTS/YZ
Method File: /chem1/nt10.i/20130215.b/SIM.b/SIMABN2.m
Misc Info: 13-2430

Calibration Date: 15-FEB-2013
Calibration Time: 11:56
Client Smp ID: SG-08-0-10-0131
Level: LOW
Sample Type: Sediment

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	53853	26926	107706	27833	-48.32
27 Naphthalene-d8	200104	100052	400208	106127	-46.96
42 Acenaphthene-d10	112392	56196	224784	60534	-46.14
59 Phenanthrene-d10	210710	105355	421420	117012	-44.47
69 Chrysene-d12	240805	120402	481610	146375	-39.21
77 Perylene-d12	230834	115417	461668	127344	-44.83

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.75	8.25	9.25	8.76	0.09
27 Naphthalene-d8	11.39	10.89	11.89	11.41	0.13
42 Acenaphthene-d10	15.28	14.78	15.78	15.30	0.15
59 Phenanthrene-d10	18.55	18.05	19.05	18.59	0.21
69 Chrysene-d12	23.66	23.16	24.16	23.71	0.20
77 Perylene-d12	26.07	25.57	26.57	26.14	0.27

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 19-Feb-2013 14:40

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: FSI
Sample Matrix: SOLID
Lab Smp Id: WC32GMS
Level: LOW
Data Type: MS DATA
SpikeList File: PSDDASIMLCS.spk
Sublist File: PSDDA.sub
Method File: /chem1/nt10.i/20130215.b/SIM.b/SIMABN2.m
Misc Info: 13-2430

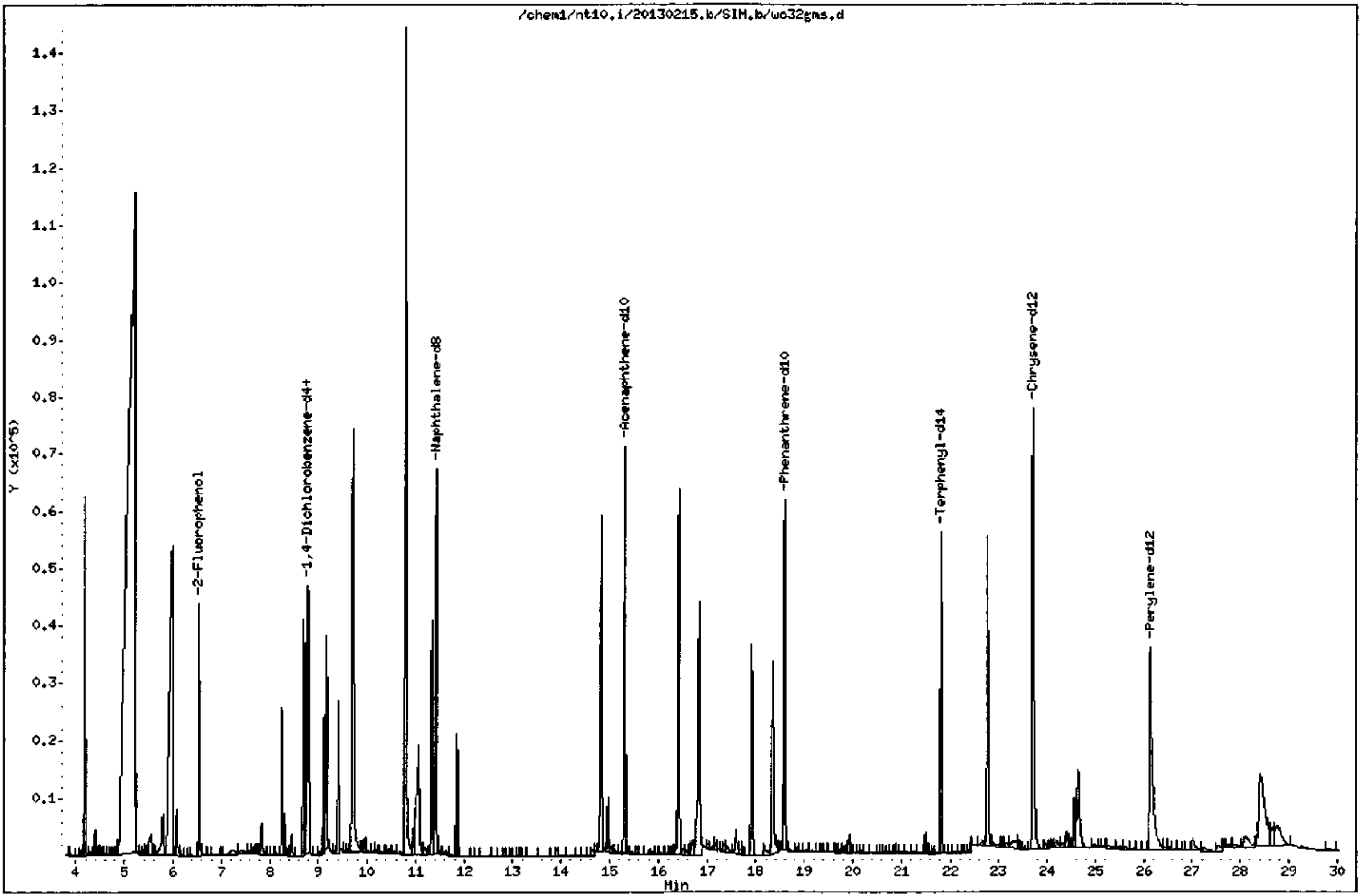
Client SDG: WC32
Fraction: SV
Client Smp ID: SG-08-0-10-0131 MS
Operator: VTS/YZ
SampleType: MS
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
3 Phenol	483.0	366.5	75.87	30-160
7 1,3-Dichlorobenzen	483.0	311.1	64.41	30-160
9 1,4-Dichlorobenzen	483.0	350.9	72.66	30-160
11 Benzyl alcohol	483.0	431.8	89.39	30-160
12 1,2-Dichlorobenzen	483.0	329.2	68.16	30-160
13 2-Methylphenol	483.0	358.5	74.23	30-160
15 4-Methylphenol	966.0	852.6	88.26	30-160
16 N-Nitroso-di-n-pro	483.0	392.2	81.21	30-160
22 2,4-Dimethylphenol	966.0	1199	124.11	30-160
26 1,2,4-Trichloroben	483.0	337.7	69.90	30-160
30 Hexachlorobutadien	483.0	340.7	70.54	30-160
39 Dimethylphthalate	483.0	480.0	99.38	30-160
50 Diethylphthalate	483.0	464.8	96.24	30-160
54 N-Nitrosodiphenyla	483.0	370.3	76.67	30-160
57 Hexachlorobenzene	483.0	406.8	84.22	30-160
58 Pentachlorophenol	966.0	893.4	92.48	30-160
67 Butylbenzylphthala	483.0	578.0	119.66	30-160
79 Dibenzo(a,h)anthra	483.0	294.3	60.94	30-160
90 N-Nitrosodimethyla	966.0	994.3	102.93	30-160

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 1 2-Fluorophenol	724.5	506.4	69.89	30-160
$ 66 Terphenyl-d14	483.0	453.5	93.88	30-160

Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32gms.d
Date : 15-FEB-2013 22:53
Client ID: SG-08-0-10-0131 MS
Sample Info: WC32GMS
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt10.i
Operator: VTS/YZ
Column diameter: 0.25



WC32 01110

CO-ELUTION SUMMARY FOR FILE - wc32gms.d

Lab ID: WC32GMS, Method: SIM.b/SIMABN2.m, Instrument: nt10.i, Date: 15-FEB-20

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32a.d
Report Date: 19-Feb-2013 14:01

Analytical Resources, Inc.

YZ 2/19/13

METHOD 8270D-SIM

Data file : /chem1/nt10.i/20130215.b/SIM.b/wc32a.d
Lab Smp Id: WC32A   Client Smp ID: SG-12-0-10-013113
Inj Date : 15-FEB-2013 18:39
Operator : VTS/YZ   Inst ID: nt10.i
Smp Info : WC32A
Misc Info : 13-2424
Comment :
Method : /chem1/nt10.i/20130215.b/SIM.b/SIMABN2.m
Meth Date : 19-Feb-2013 14:01 yev   Quant Type: ISTD
Cal Date : 25-JAN-2013 17:53   Cal File: ic0125i.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: PSDDA.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Ws	25.10000	Weight of sample extracted (g)
M	59.80000	% Moisture

Cpnd Variable   Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
$	1 2-Fluorophenol	112	6.495	6.464	(0.741)	54295	5.03933	499.4
	3 Phenol	94	8.234	8.203	(0.940)	9348	0.68316	67.71
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	8.760	8.752	(1.000)	33865	4.00000	
	9 1,4-Dichlorobenzene	146	8.791	8.783	(1.004)	343	0.02500 J	2.478(M)
	11 Benzyl alcohol	79	9.101	9.086	(1.039)	4347	0.53616	53.14(M)
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	13 2-Methylphenol	108	Compound Not Detected.					
	15 4-Methylphenol	108	9.691	9.668	(1.106)	37549	3.52163	349.0
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	Compound Not Detected.					
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	11.409	11.394	(1.000)	130230	4.00000	
	30 Hexachlorobutadiene	225	Compound Not Detected.					

							CONCENTRATIONS	
		QUANT SIG					ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/kg)
	39 Dimethylphthalate	163	14.822	14.806	(0.969)	2843	0.13184	13.07(M)
*	42 Acenaphthene-d10	162	15.293	15.278	(1.000)	70834	4.00000	
	50 Diethylphthalate	149	16.399	16.384	(1.072)	2609	0.10356	10.26(M)
	54 N-Nitrosodiphenylamine	169	Compound Not Detected.					
	57 Hexachlorobenzene	284	Compound Not Detected.					
	58 Pentachlorophenol	266	Compound Not Detected.					
*	59 Phenanthrene-d10	188	18.577	18.554	(1.000)	138021	4.00000	
$	66 Terphenyl-d14	244	21.819	21.788	(0.921)	106238	4.69477	465.3
	67 Butylbenzylphthalate	149	22.764	22.741	(0.961)	591	0.03631	3.598
*	69 Chrysene-d12	240	23.693	23.662	(1.000)	170306	4.00000	
*	77 Perylene-d12	264	26.116	26.070	(1.000)	154422	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.372	28.295	(1.086)	4179	0.11354	11.25
	90 N-Nitrosodimethylamine	74	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

Report Date: 19-Feb-2013 14:01

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: wc32a.d
Lab Smp Id: WC32A
Analysis Type: SV
Quant Type: ISTD
Operator: VTS/YZ
Method File: /chem1/nt10.i/20130215.b/SIM.b/SIMABN2.m
Misc Info: 13-2424

Calibration Date: 15-FEB-2013
Calibration Time: 11:56
Client Smp ID: SG-12-0-10-01311
Level: LOW
Sample Type: Sediment

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	53853	26926	107706	33865	-37.12
27 Naphthalene-d8	200104	100052	400208	130230	-34.92
42 Acenaphthene-d10	112392	56196	224784	70834	-36.98
59 Phenanthrene-d10	210710	105355	421420	138021	-34.50
69 Chrysene-d12	240805	120402	481610	170306	-29.28
77 Perylene-d12	230834	115417	461668	154422	-33.10

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.75	8.25	9.25	8.76	0.09
27 Naphthalene-d8	11.39	10.89	11.89	11.41	0.13
42 Acenaphthene-d10	15.28	14.78	15.78	15.29	0.10
59 Phenanthrene-d10	18.55	18.05	19.05	18.58	0.12
69 Chrysene-d12	23.66	23.16	24.16	23.69	0.13
77 Perylene-d12	26.07	25.57	26.57	26.12	0.18

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 19-Feb-2013 14:01

Analytical Resources, Inc.

RECOVERY REPORT

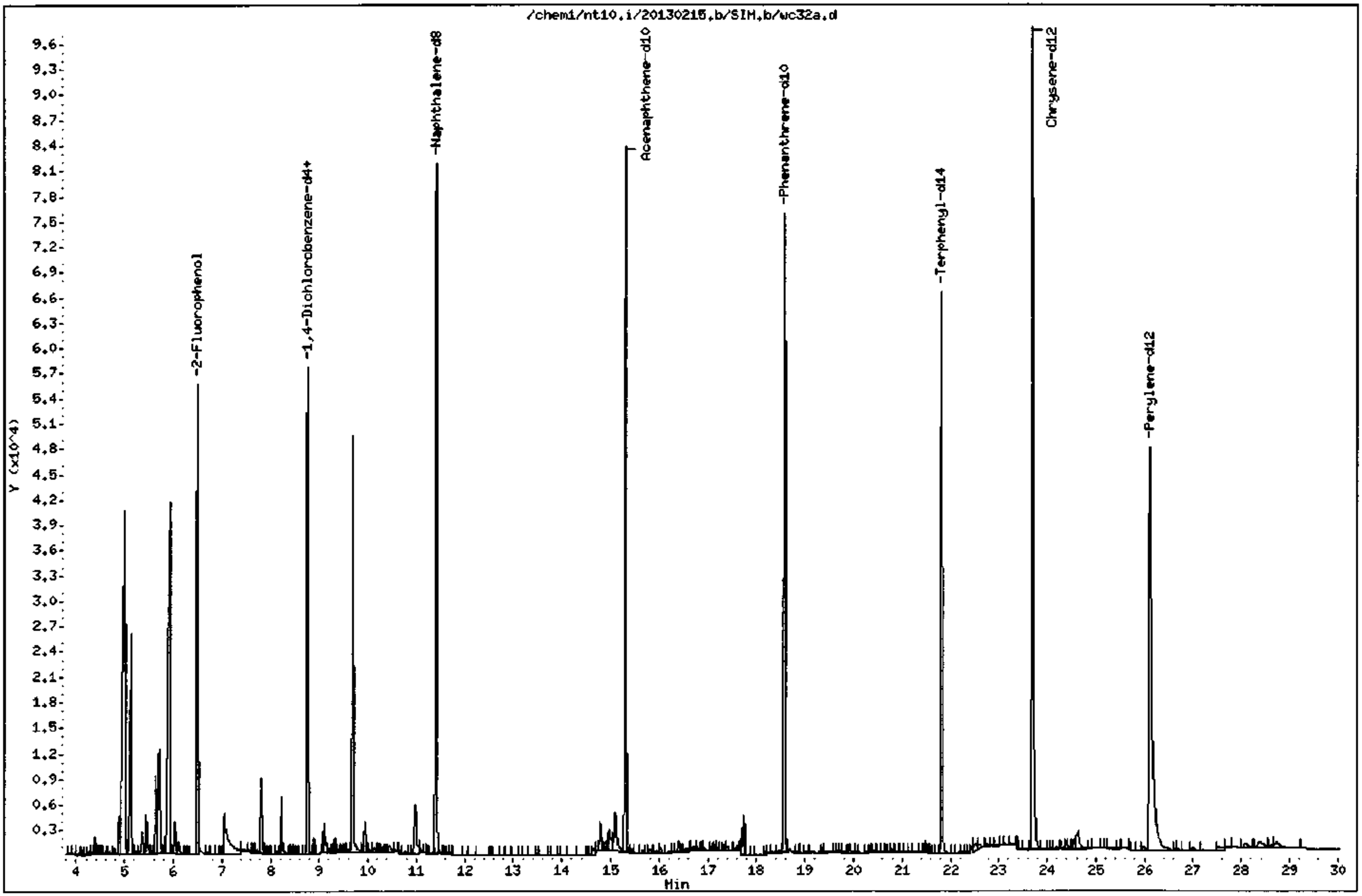
Client Name: Floyd-Snider
Sample Matrix: SOLID
Lab Smp Id: WC32A
Level: LOW
Data Type: MS DATA
SpikeList File: SHORTPSDDA.spk
Sublist File: PSDDA.sub
Method File: /chem1/nt10.i/20130215.b/SIM.b/SIMABN2.m
Misc Info: 13-2424

Client SDG: WC32
Fraction: SV
Client Smp ID: SG-12-0-10-013113
Operator: VTS/YZ
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 1 2-Fluorophenol	743.3	499.4	67.19	30-160
$ 66 Terphenyl-d14	495.5	465.3	93.90	30-160

Data File: /chemi/nt10.i/20130215.b/SIM.b/wc32a.d
Date : 15-FEB-2013 18:39
Client ID: SG-12-0-10-013113
Sample Info: WC32A
Volume Injected (uL): 1.0
Column phase: ZB-5ms

Instrument: nt10.i
Operator: VTS/YZ
Column diameter: 0.25



Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32a.d

Date : 15-FEB-2013 18:39

Client ID: SG-12-0-10-013113

Instrument: nt10.i

Sample Info: WC32A

Volume Injected (uL): 1.0

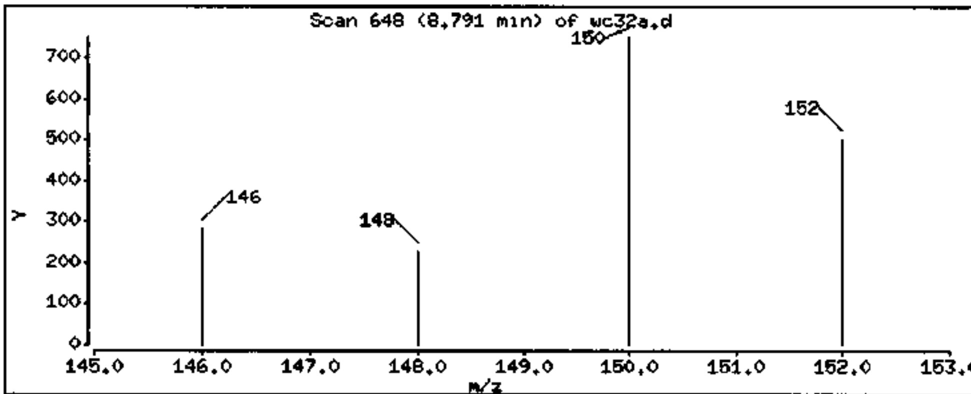
Operator: VTS/YZ

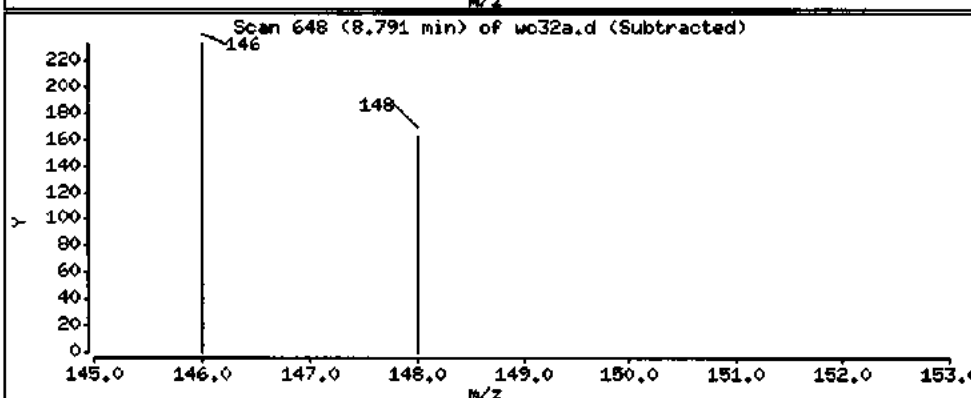
Column phase: ZB-5msi

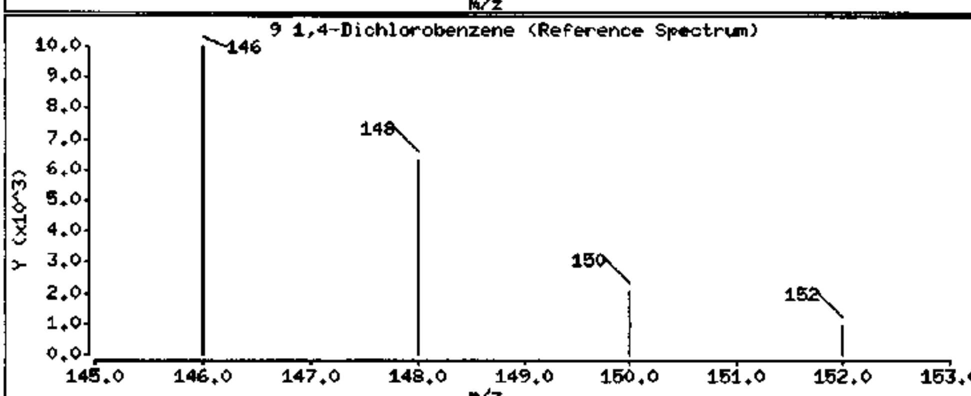
Column diameter: 0.25

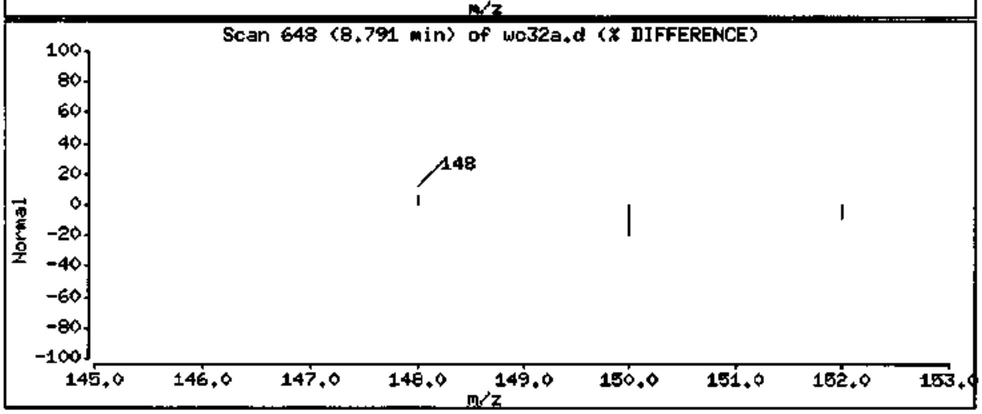
9 1,4-Dichlorobenzene

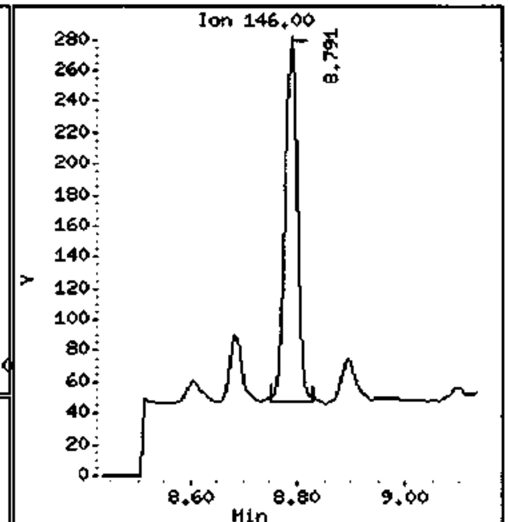
Concentration: 2.478 ug/kg

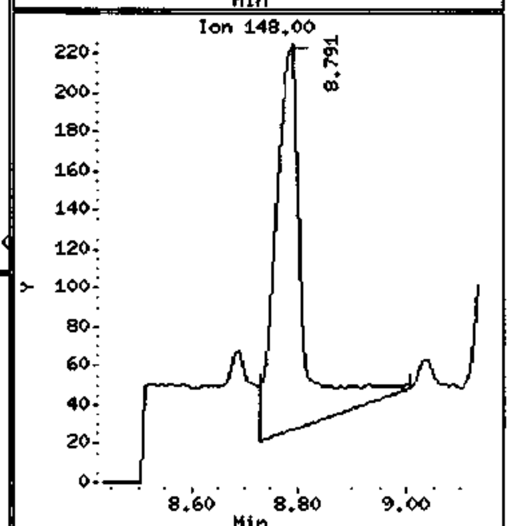












Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32a.d

Date : 15-FEB-2013 18:39

Client ID: SG-12-0-10-013113

Instrument: nt10.i

Sample Info: WC32A

Volume Injected (uL): 1.0

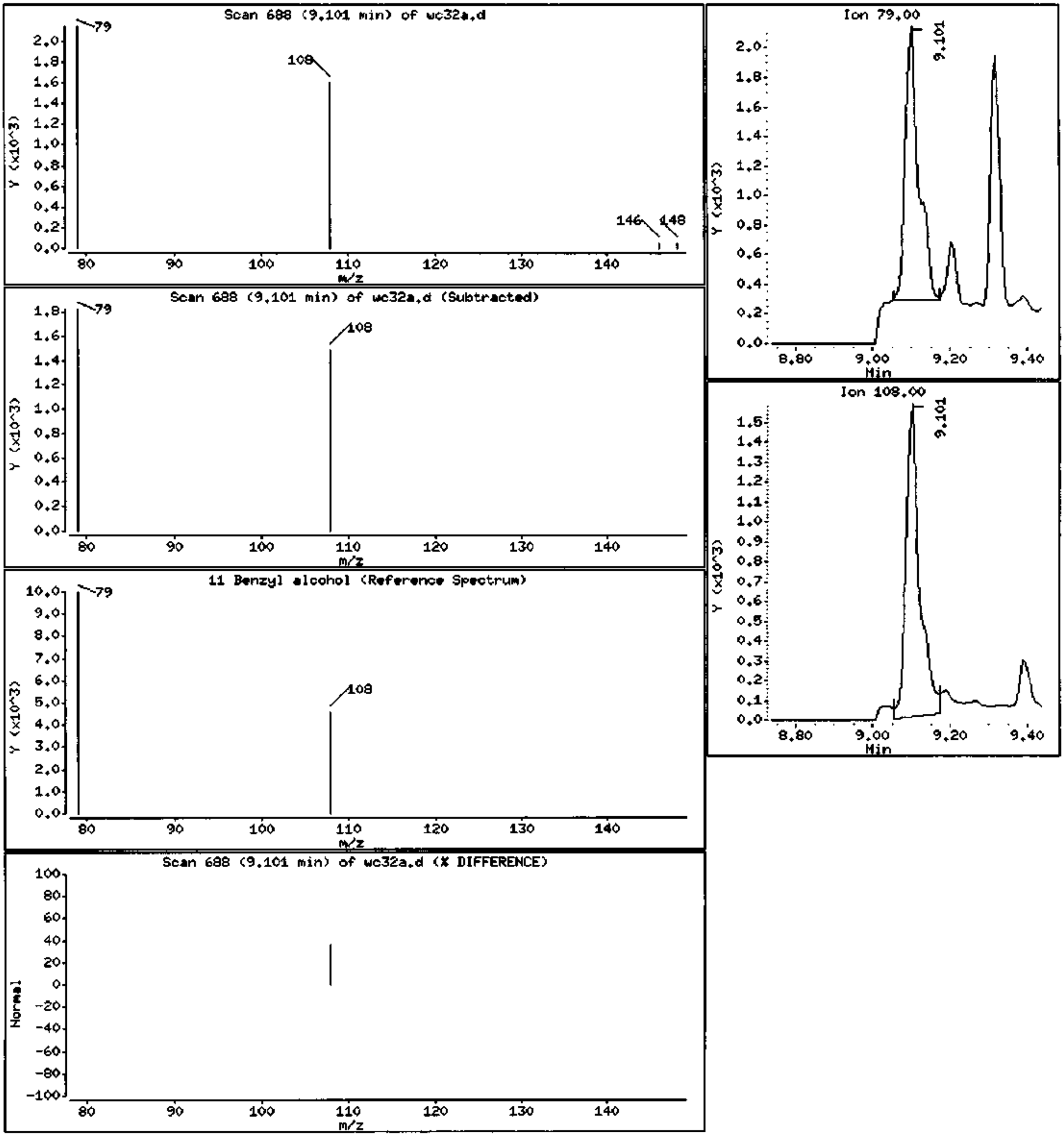
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

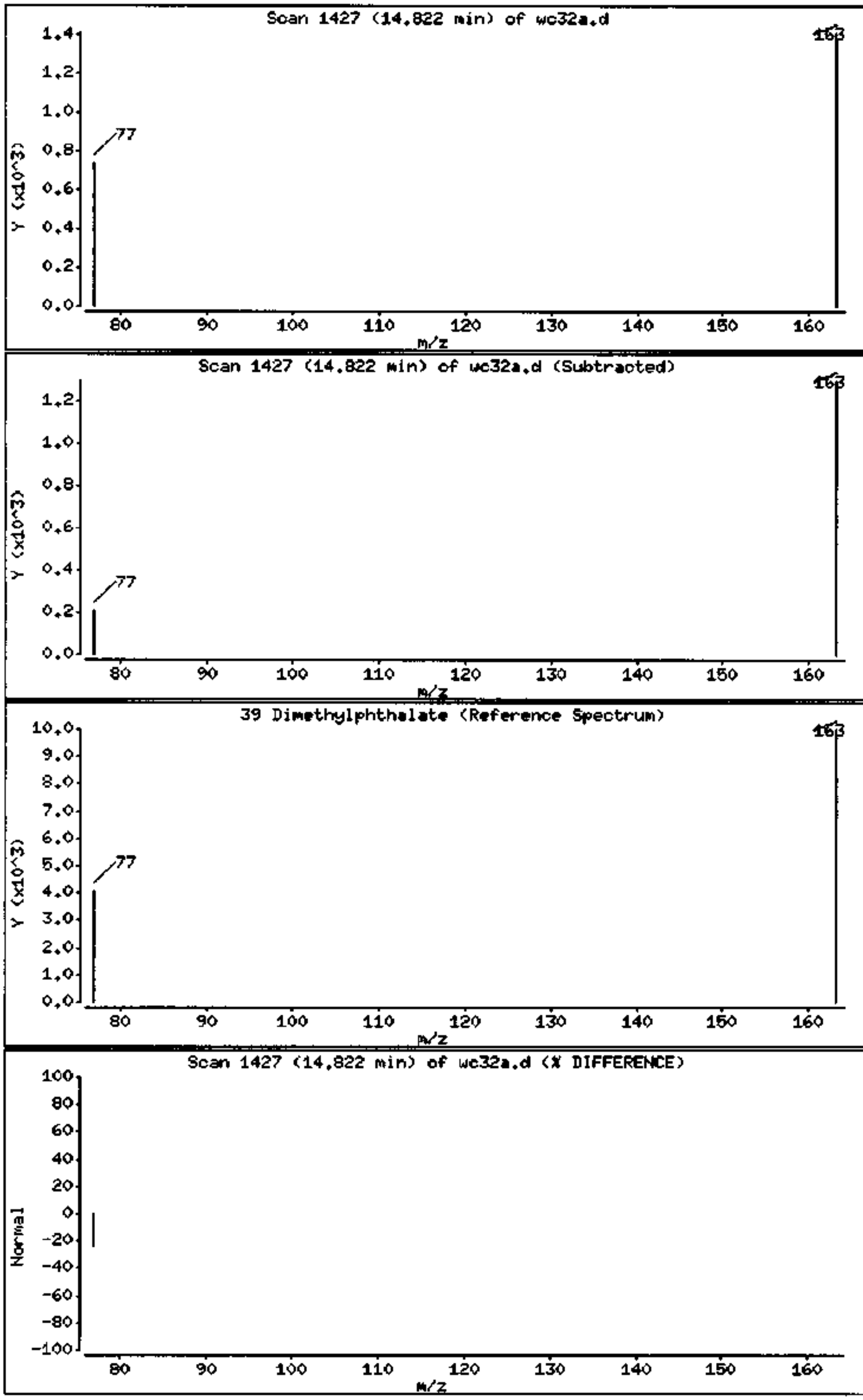
11 Benzyl alcohol

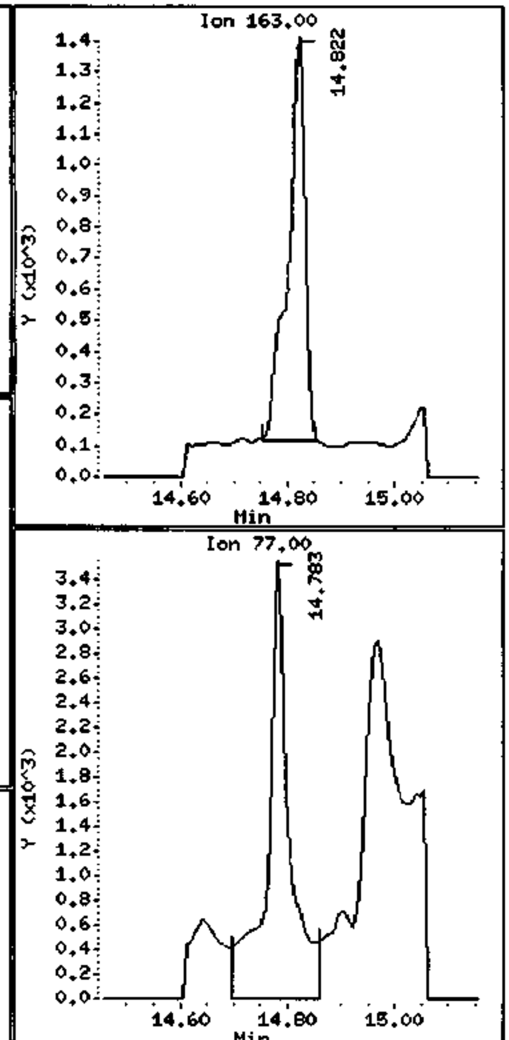
Concentration: 53.14 ug/kg



Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32a.d
Date : 15-FEB-2013 18:39
Client ID: SG-12-0-10-013113 Instrument: nt10.i
Sample Info: WC32A
Volume Injected (uL): 1.0 Operator: VTS/YZ
Column phase: ZB-5msi Column diameter: 0.25

39 Dimethylphthalate Concentration: 13.07 ug/kg





Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32a.d

Date : 15-FEB-2013 18:39

Client ID: SG-12-0-10-013113

Instrument: nt10.i

Sample Info: WC32A

Volume Injected (uL): 1.0

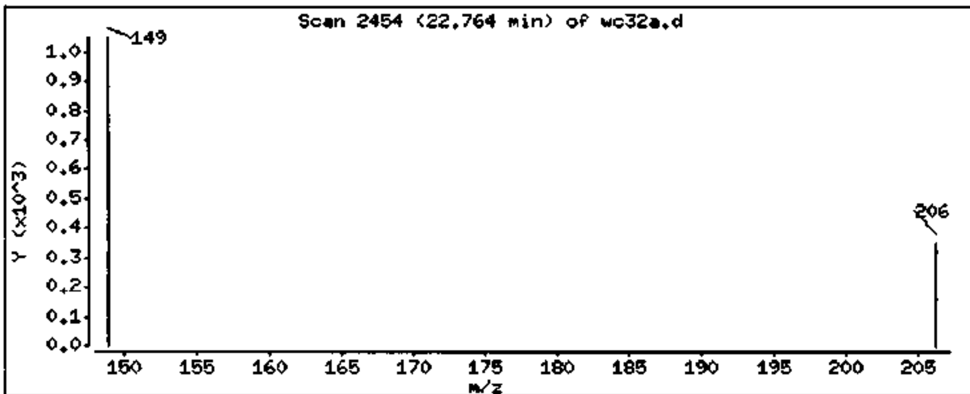
Operator: VTS/YZ

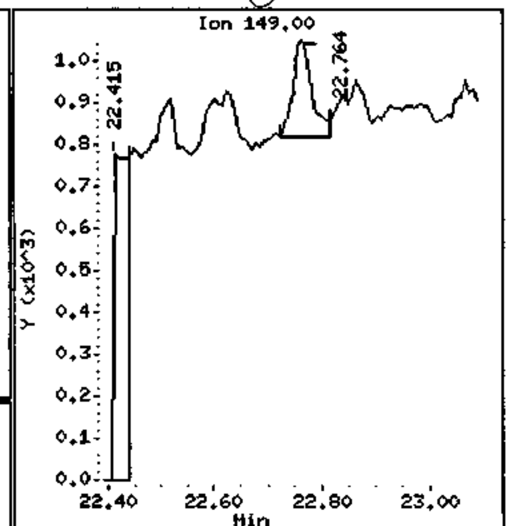
Column phase: ZB-5msi

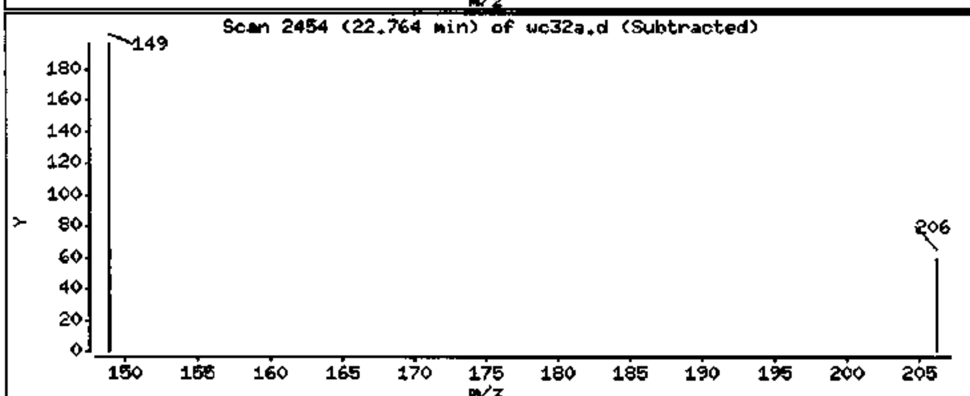
Column diameter: 0.25

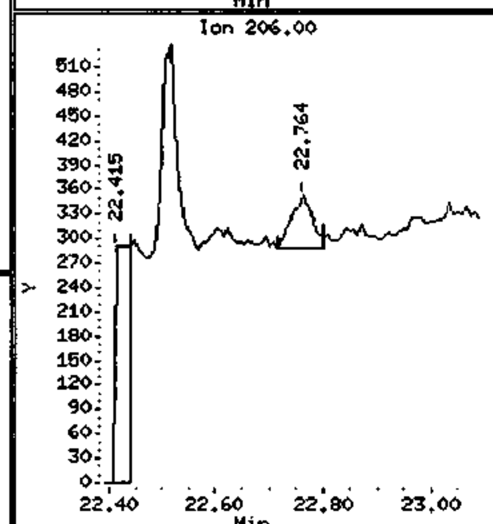
67 Butylbenzylphthalate

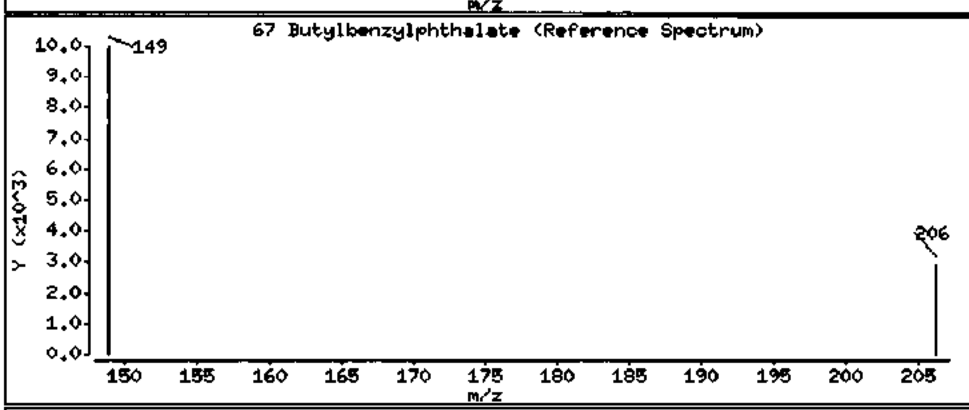
Concentration: 3.598 ug/kg

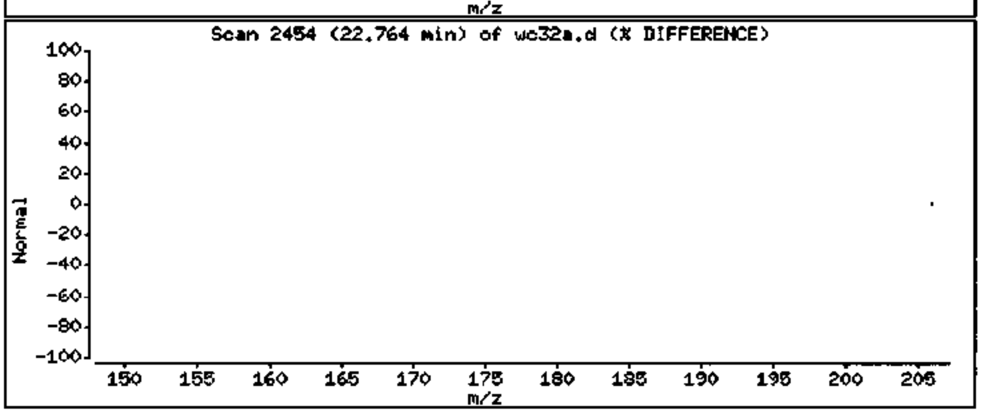












Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32a.d

Date : 15-FEB-2013 18:39

Client ID: SG-12-0-10-013113

Instrument: nt10.i

Sample Info: WC32A

Volume Injected (uL): 1.0

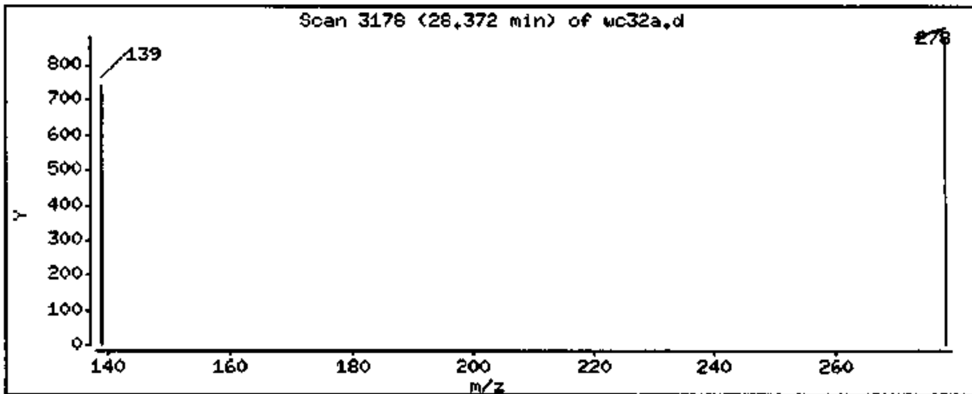
Operator: VTS/YZ

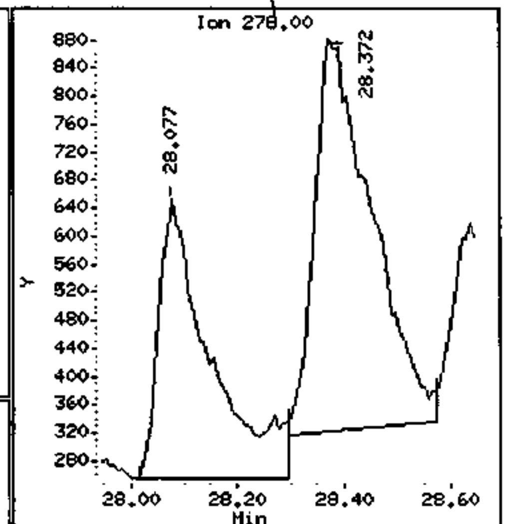
Column phase: ZB-5msi

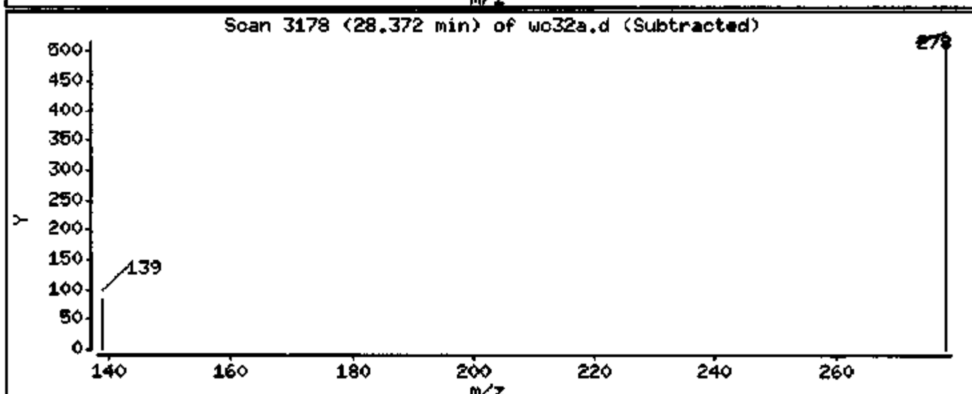
Column diameter: 0.25

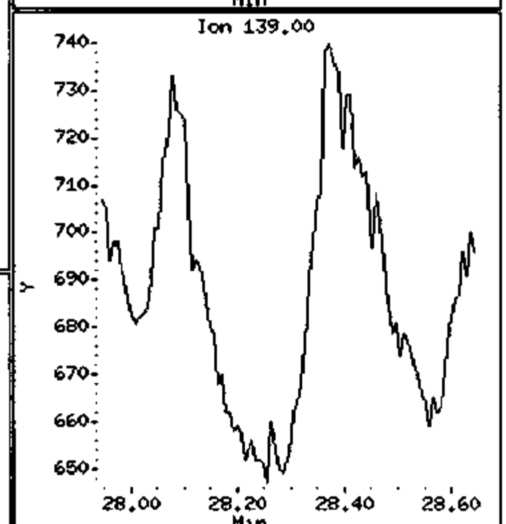
79 Dibenzo(a,h)anthracene

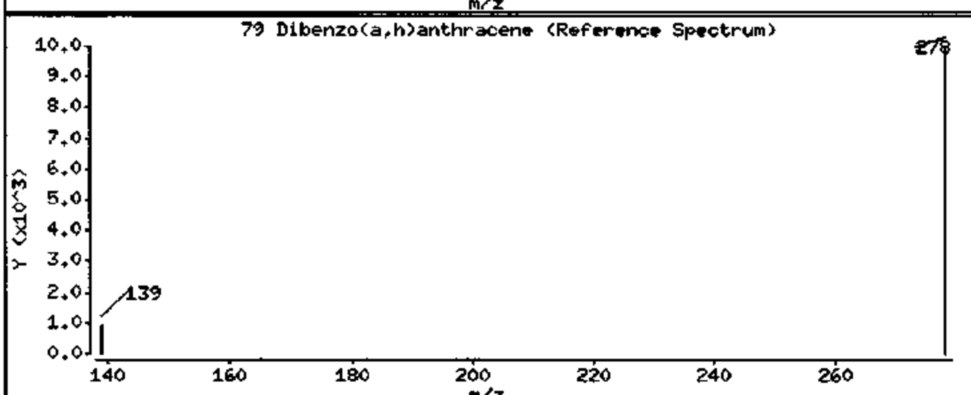
Concentration: 11.25 ug/kg

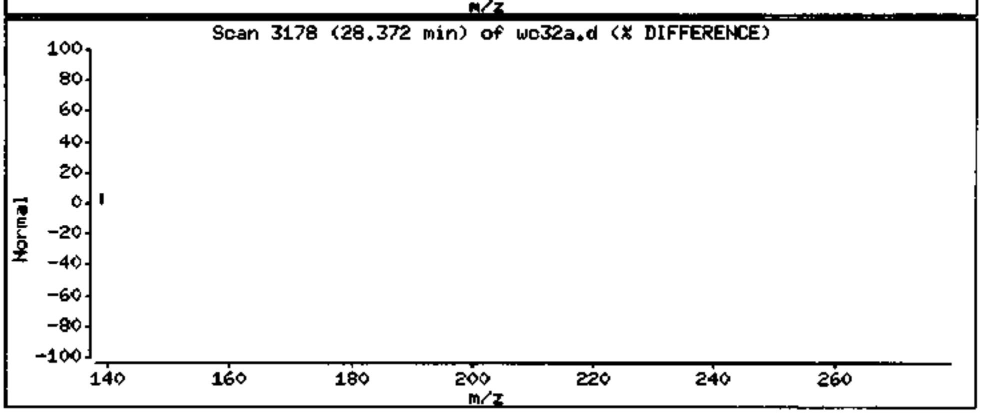






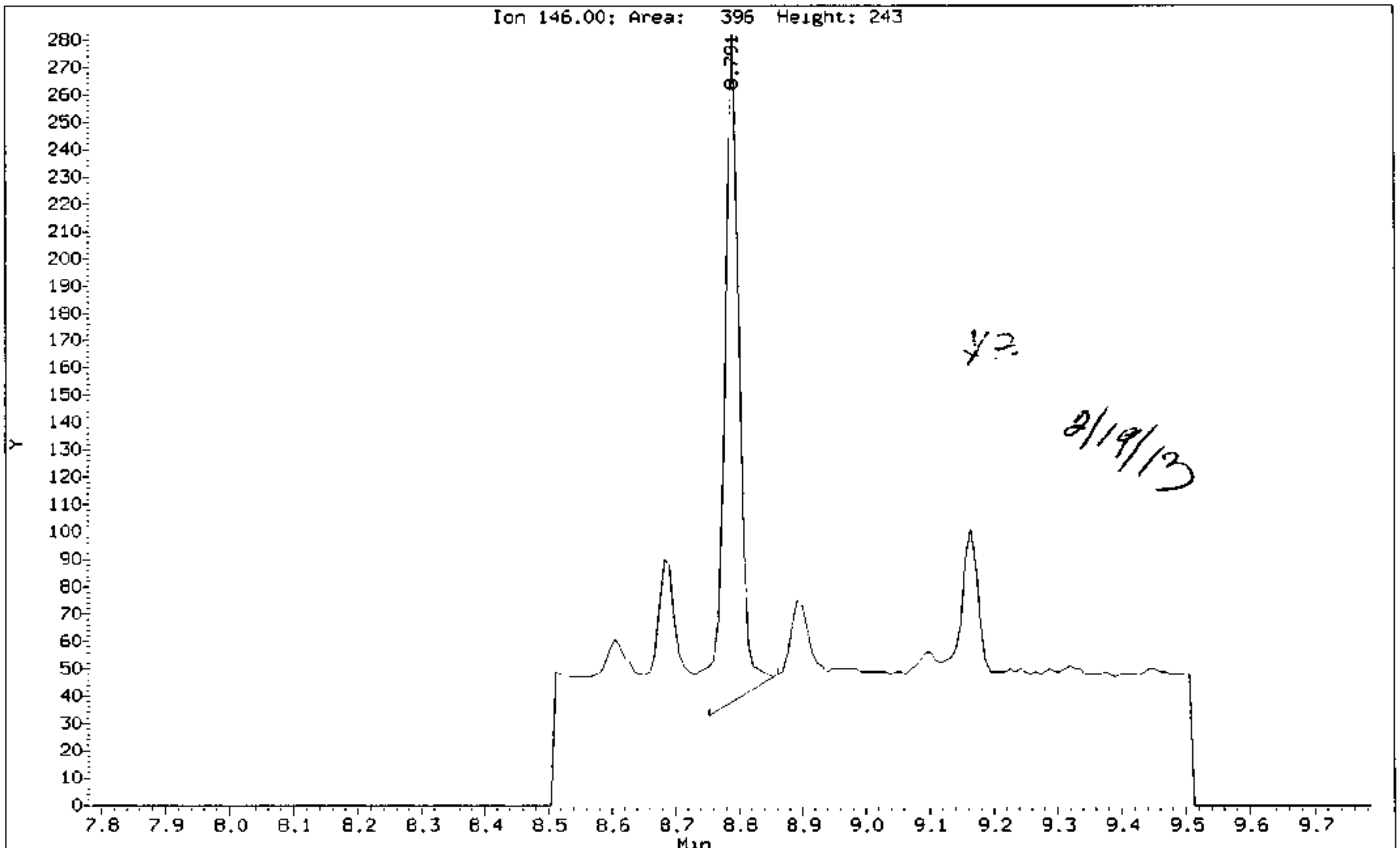


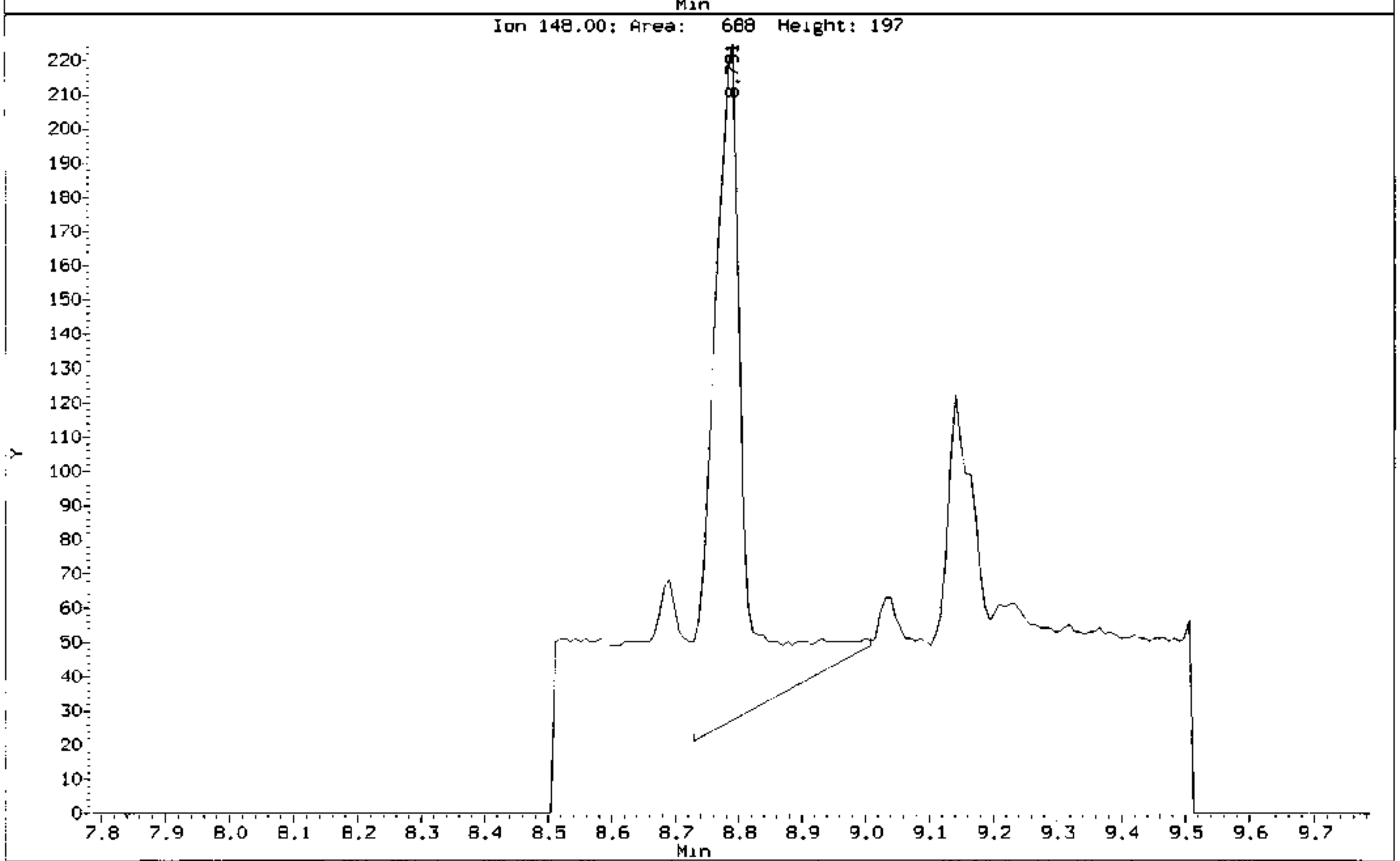




Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32a.d
Injection Date: 15-FEB-2013 18:39
Instrument: nt10.i
Client Sample ID: SG-12-0-10-013113

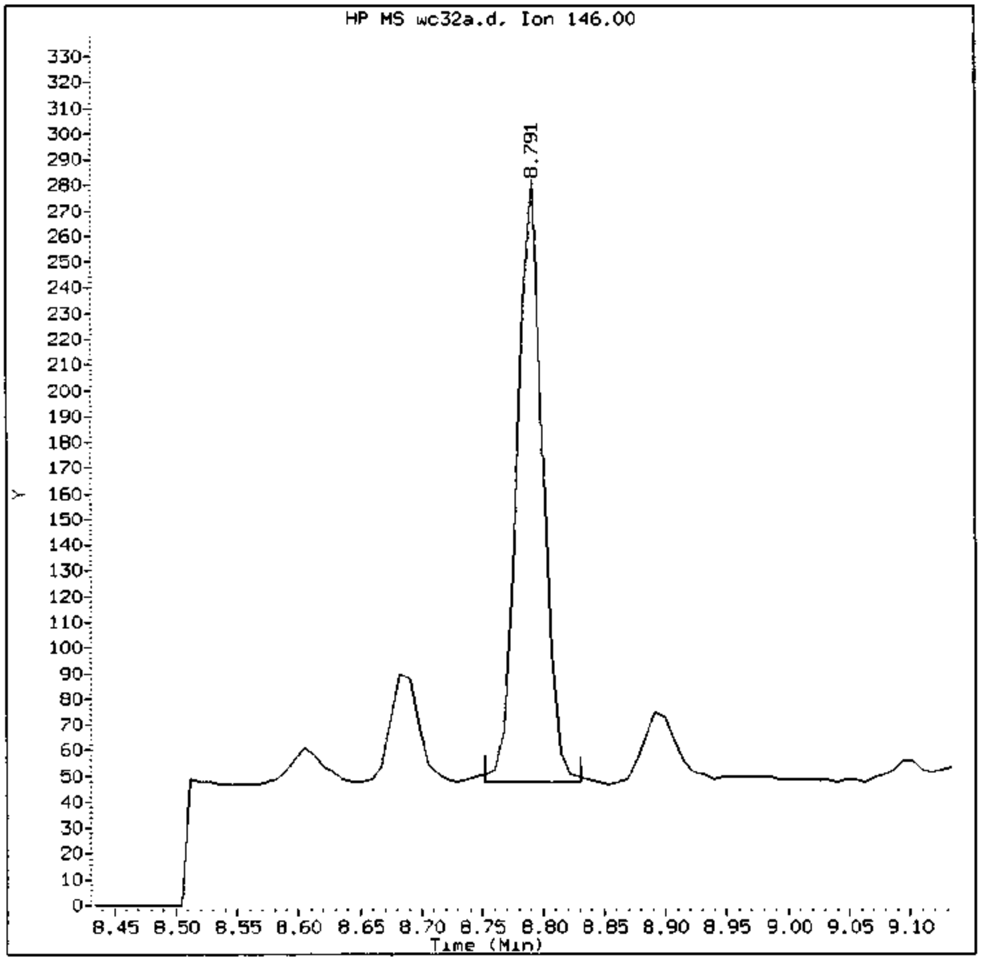
Compound: 1,4-Dichlorobenzene
CAS Number: 106-46-7





WC32A, /chem1/nt10.i/20130215.b/SIM.b/wc32a.d

1,4-Dichlorobenzene Amount: 0.03 Area: 343



MANUAL INTEGRATION for 1,4-Dichlorobenzene

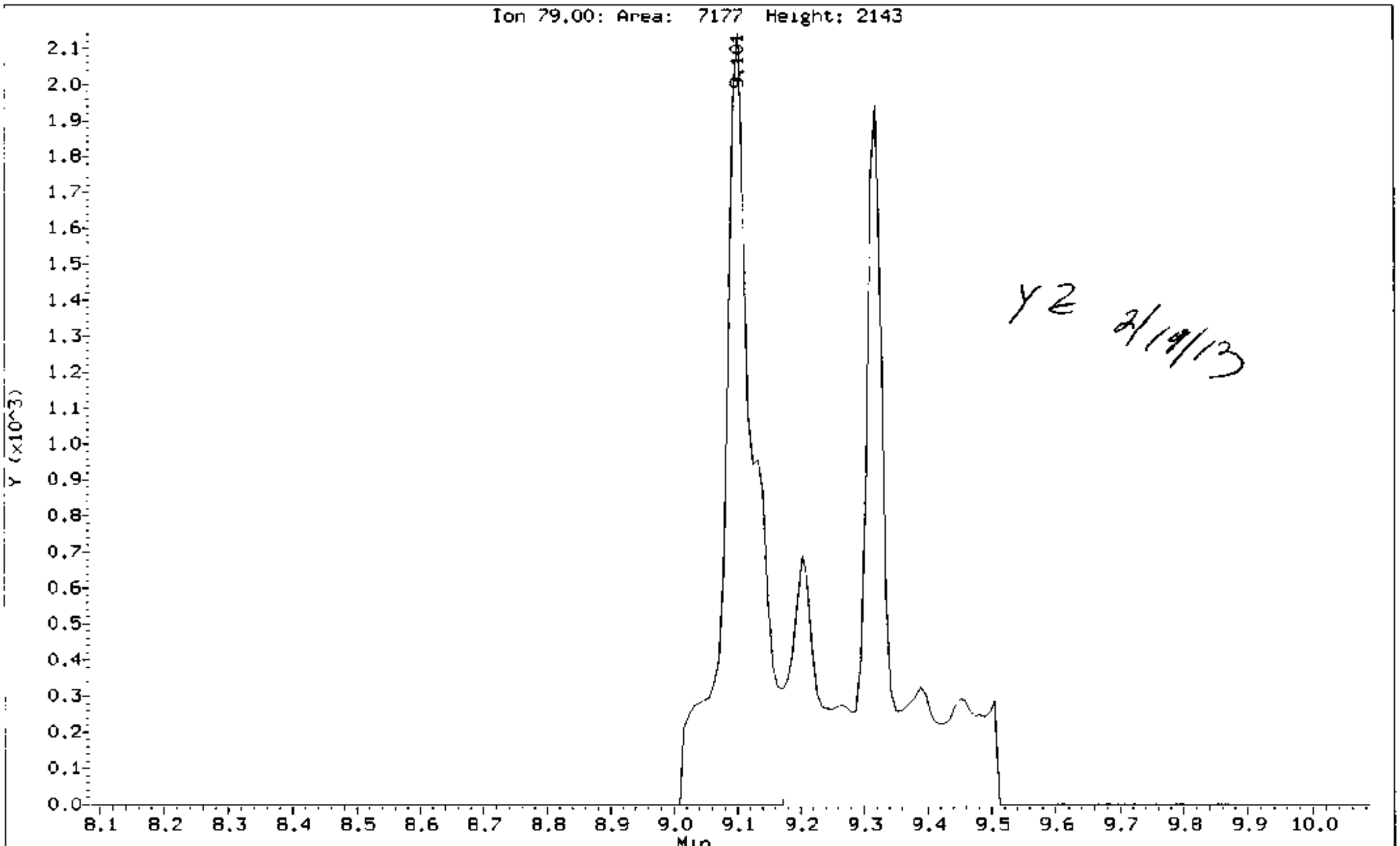
1. Baseline correction ✓
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other ______________________

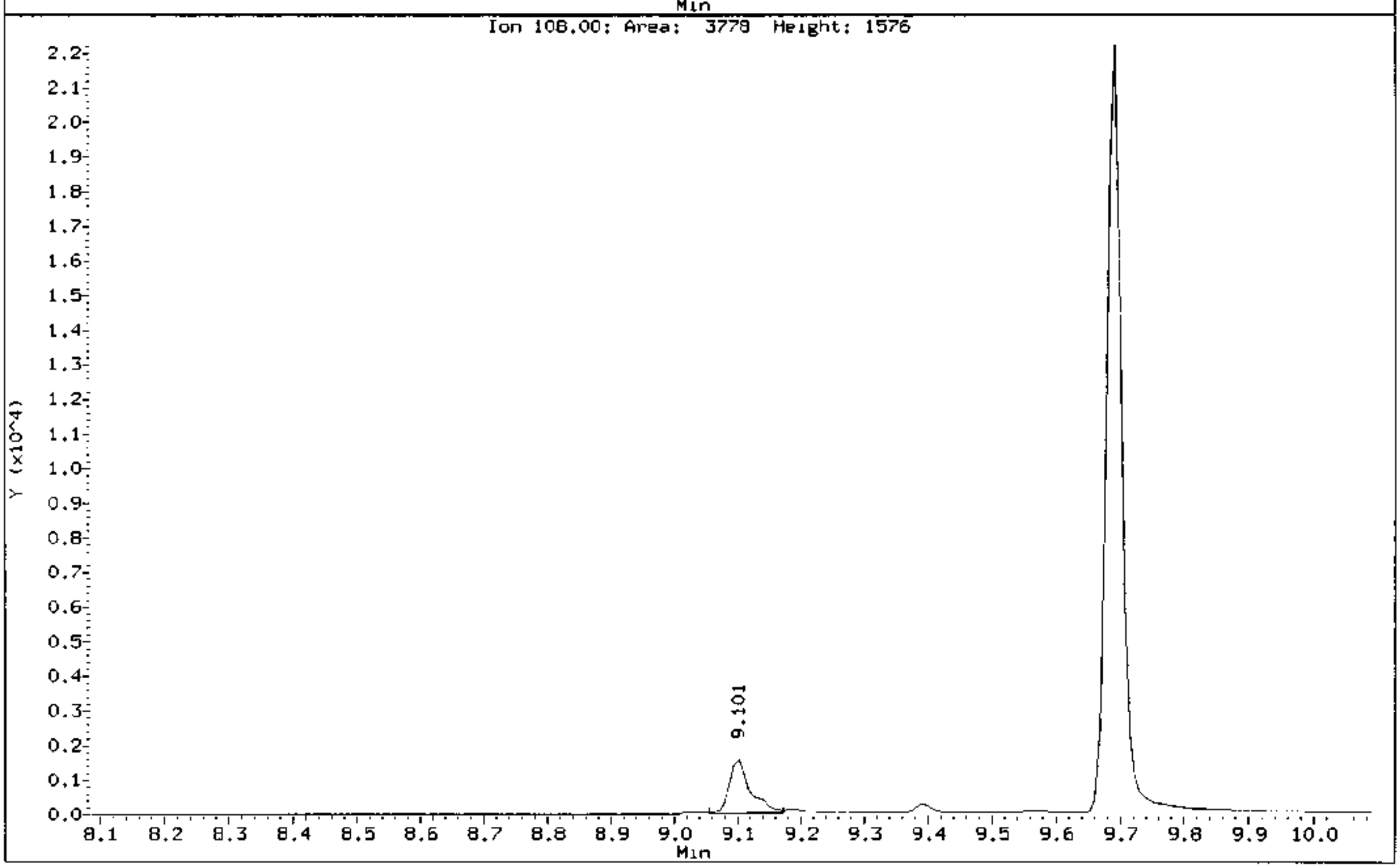
Analyst: Y2 Date: 2/19/13

Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32a.d
Injection Date: 15-FEB-2013 18:39
Instrument: nt10.i
Client Sample ID: SG-12-0-10-013113

Compound: Benzyl alcohol
CAS Number: 100-51-6



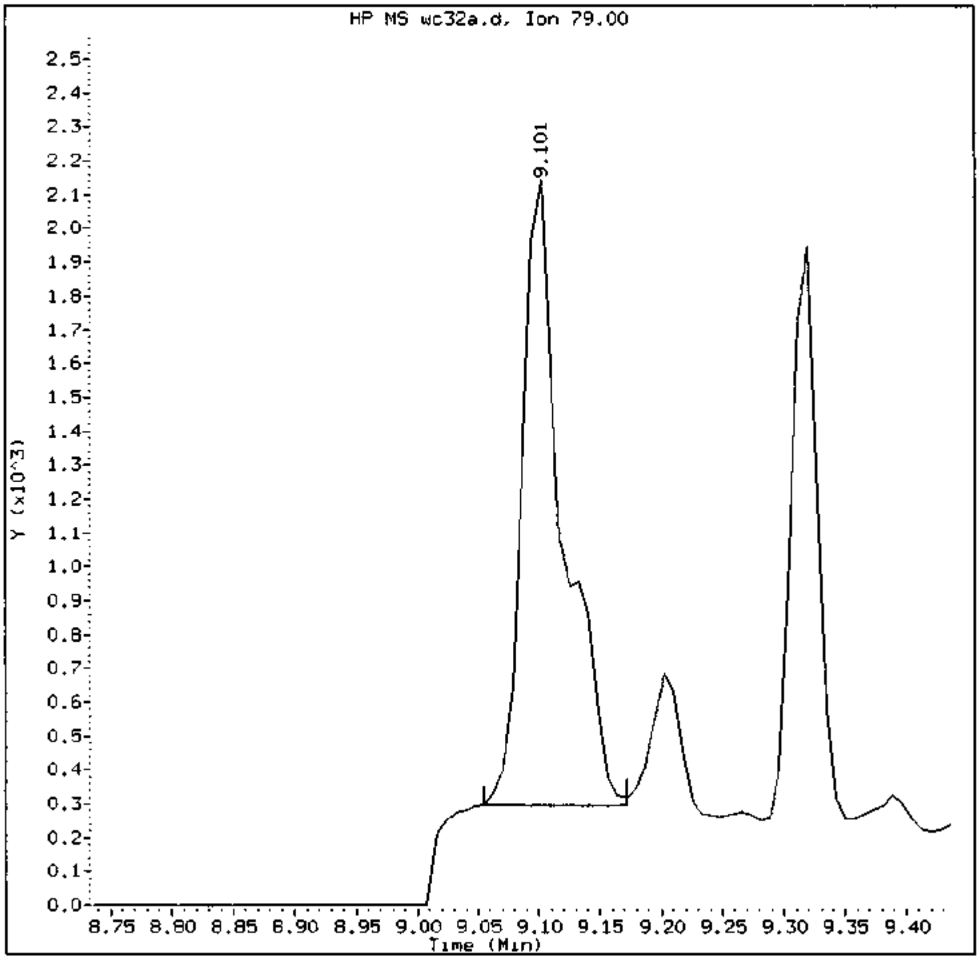
YZ 2/19/13



WC32 : 01133

WC32A, /chem1/nt10.i/20130215.b/SIM.b/wc32a.d

Benzyl alcohol   Amount: 0.54   Area: 4347



MANUAL INTEGRATION for Benzyl alcohol

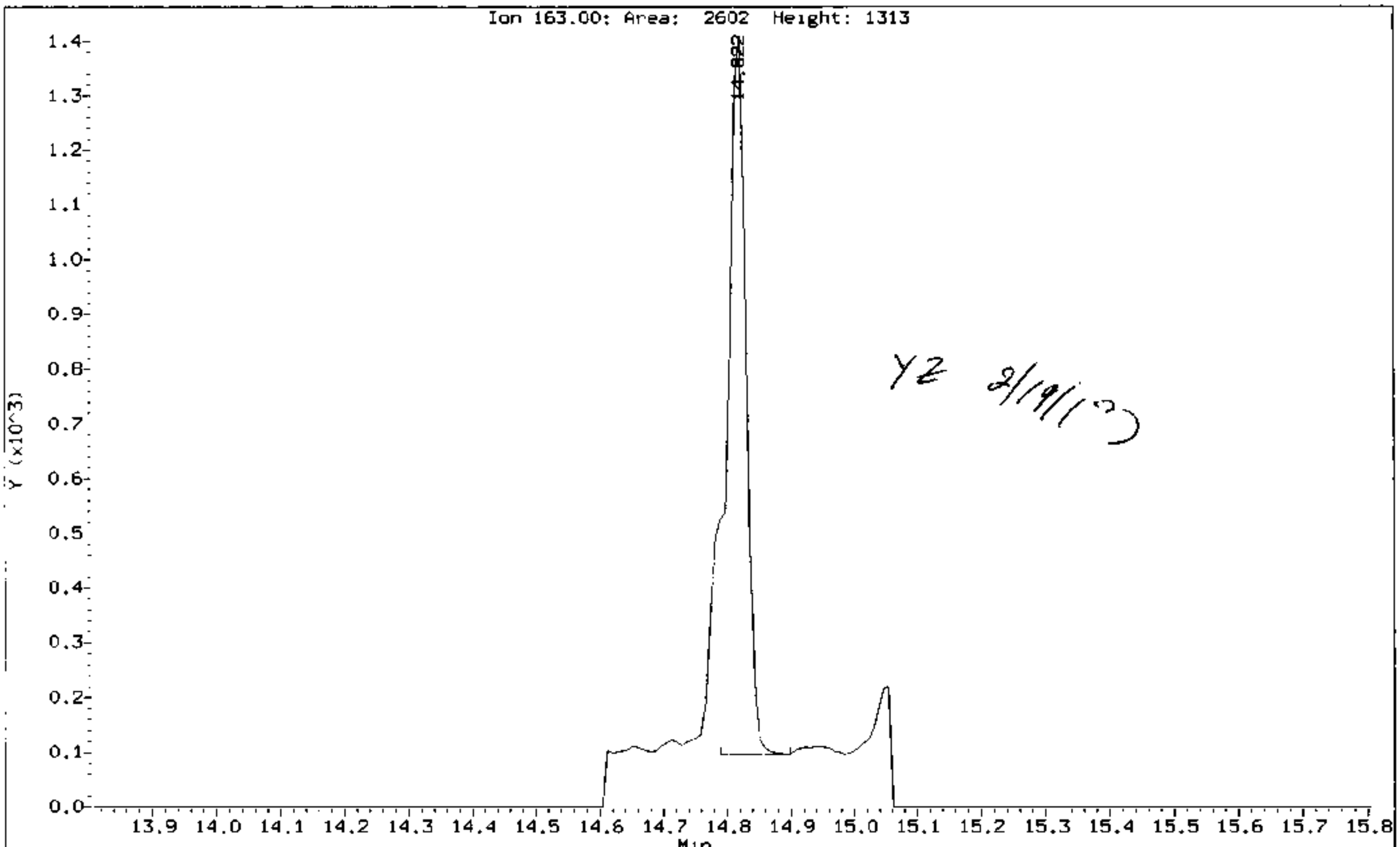
1. Baseline correction ✓
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other ______________________

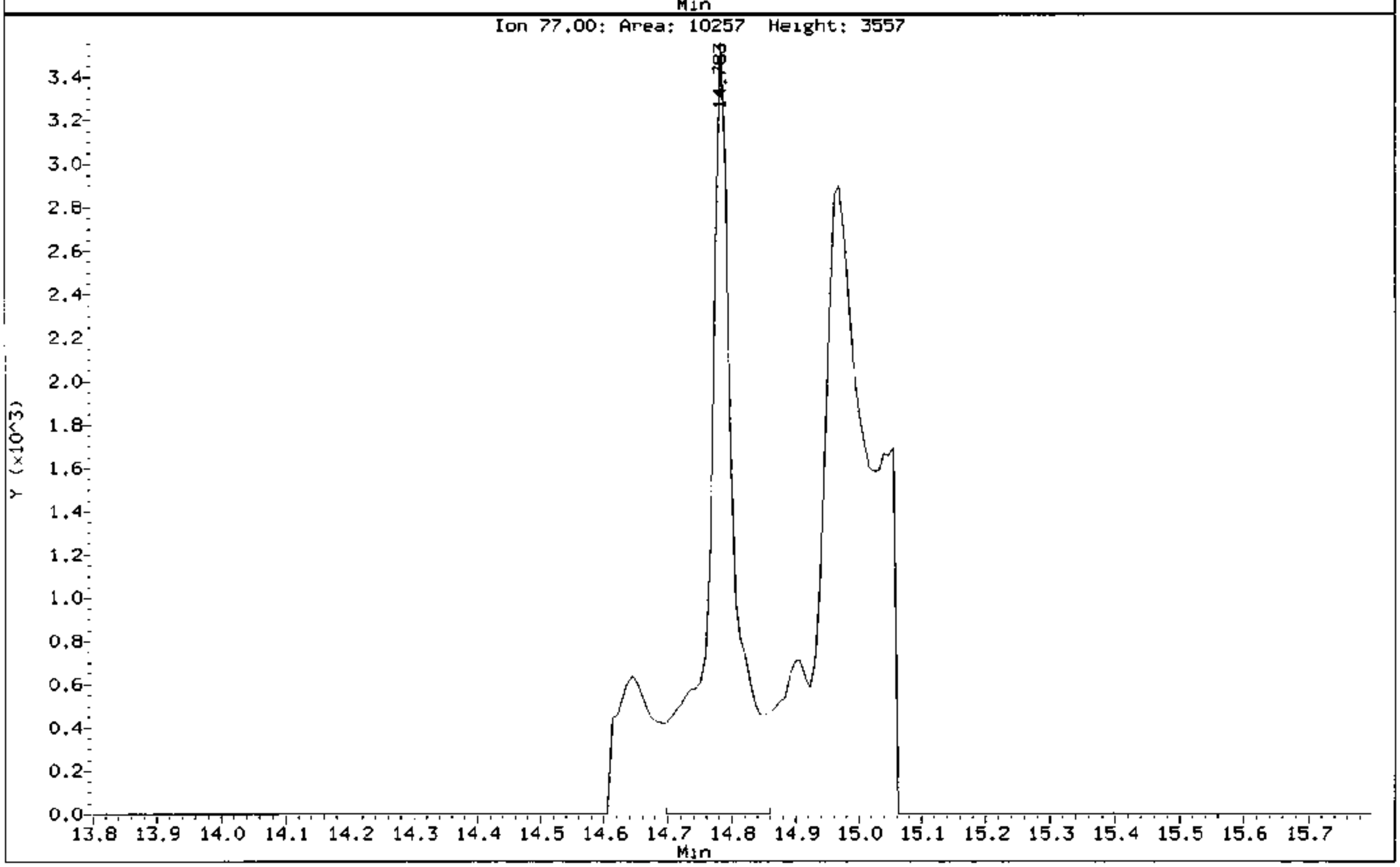
Analyst: YZ   Date: 2/19/13

Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32a.d
Injection Date: 15-FEB-2013 18:39
Instrument: nt10.i
Client Sample ID: SG-12-0-10-013113

Compound: Dimethylphthalate
CAS Number: 131-11-3

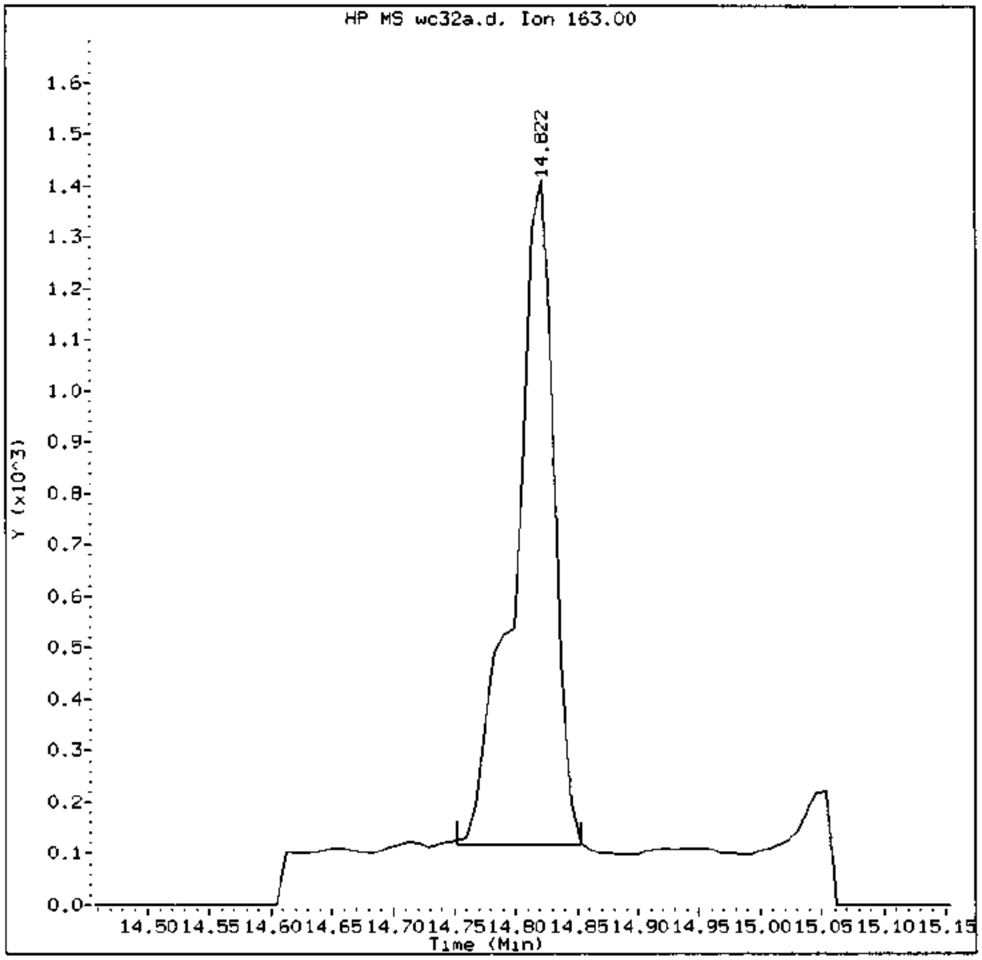


YZ 2/19/13



WC32A, /chem1/nt10.i/20130215.b/SIM.b/wc32a.d

Dimethylphthalate   Amount: 0.13   Area: 2843



MANUAL INTEGRATION for Dimethylphthalate

1. Baseline correction ✓
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other ______________________

Analyst: YZ   Date: 2/19/13

CO-ELUTION SUMMARY FOR FILE - wc32a.d

Lab ID: WC32A, Method: SIM.b/SIMABN2.m, Instrument: nt10.i, Date: 15-FEB-2013

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32b.d Page 1
Report Date: 19-Feb-2013 14:01

Analytical Resources, Inc.

YZ 2/19/13

METHOD 8270D-SIM

Data file : /chem1/nt10.i/20130215.b/SIM.b/wc32b.d
Lab Smp Id: WC32B Client Smp ID: SG-13-0-10-013113
Inj Date : 15-FEB-2013 19:15
Operator : VTS/YZ Inst ID: nt10.i
Smp Info : WC32B
Misc Info : 13-2425
Comment :
Method : /chem1/nt10.i/20130215.b/SIM.b/SIMABN2.m
Meth Date : 19-Feb-2013 14:01 yev Quant Type: ISTD
Cal Date : 25-JAN-2013 17:53 Cal File: ic0125i.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Ws	29.30000	Weight of sample extracted (g)
M	65.20000	% Moisture

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
$	1 2-Fluorophenol	112	6.603	6.464	(0.753)	48925	4.97150	487.6
	3 Phenol	94	8.311	8.203	(0.948)	7565	0.60528	59.36(H)
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	8.768	8.752	(1.000)	30932	4.00000	
	9 1,4-Dichlorobenzene	146	8.799	8.783	(1.004)	316	0.02522	2.473(M)
	11 Benzyl alcohol	79	Compound Not Detected.					
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	13 2-Methylphenol	108	9.435	9.366	(1.076)	542	0.05763	5.652
	15 4-Methylphenol	108	9.738	9.668	(1.111)	8492	0.87196	85.52
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	Compound Not Detected.					
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	11.417	11.394	(1.000)	122845	4.00000	
	30 Hexachlorobutadiene	225	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
39 Dimethylphthalate	163	14.798	14.806	(0.967)	2790	0.13528	13.27(M)
* 42 Acenaphthene-d10	162	15.309	15.278	(1.000)	67747	4.00000	
50 Diethylphthalate	149	16.422	16.384	(1.073)	4193	0.17402	17.07(M)
54 N-Nitrosodiphenylamine	169	Compound Not Detected.					
57 Hexachlorobenzene	284	Compound Not Detected.					
58 Pentachlorophenol	266	18.353	18.314	(0.987)	1005	0.16982	16.65(M)
* 59 Phenanthrene-d10	188	18.593	18.554	(1.000)	132508	4.00000	
$ 66 Terphenyl-d14	244	21.819	21.788	(0.921)	106528	4.74472	465.3
67 Butylbenzylphthalate	149	Compound Not Detected.					
* 69 Chrysene-d12	240	23.701	23.662	(1.000)	168973	4.00000	
* 77 Perylene-d12	264	26.124	26.070	(1.000)	149016	4.00000	
79 Dibenzo(a,h)anthracene	278	28.396	28.295	(1.087)	3790	0.10671	10.47
90 N-Nitrosodimethylamine	74	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Report Date: 19-Feb-2013 14:01

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: wc32b.d
Lab Smp Id: WC32B
Analysis Type: SV
Quant Type: ISTD
Operator: VTS/YZ
Method File: /chem1/nt10.i/20130215.b/SIM.b/SIMABN2.m
Misc Info: 13-2425

Calibration Date: 15-FEB-2013
Calibration Time: 11:56
Client Smp ID: SG-13-0-10-01311
Level: LOW
Sample Type: Sediment

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	53853	26926	107706	30932	-42.56
27 Naphthalene-d8	200104	100052	400208	122845	-38.61
42 Acenaphthene-d10	112392	56196	224784	67747	-39.72
59 Phenanthrene-d10	210710	105355	421420	132508	-37.11
69 Chrysene-d12	240805	120402	481610	168973	-29.83
77 Perylene-d12	230834	115417	461668	149016	-35.44

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.75	8.25	9.25	8.77	0.17
27 Naphthalene-d8	11.39	10.89	11.89	11.42	0.20
42 Acenaphthene-d10	15.28	14.78	15.78	15.31	0.20
59 Phenanthrene-d10	18.55	18.05	19.05	18.59	0.21
69 Chrysene-d12	23.66	23.16	24.16	23.70	0.16
77 Perylene-d12	26.07	25.57	26.57	26.12	0.21

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

RECOVERY REPORT

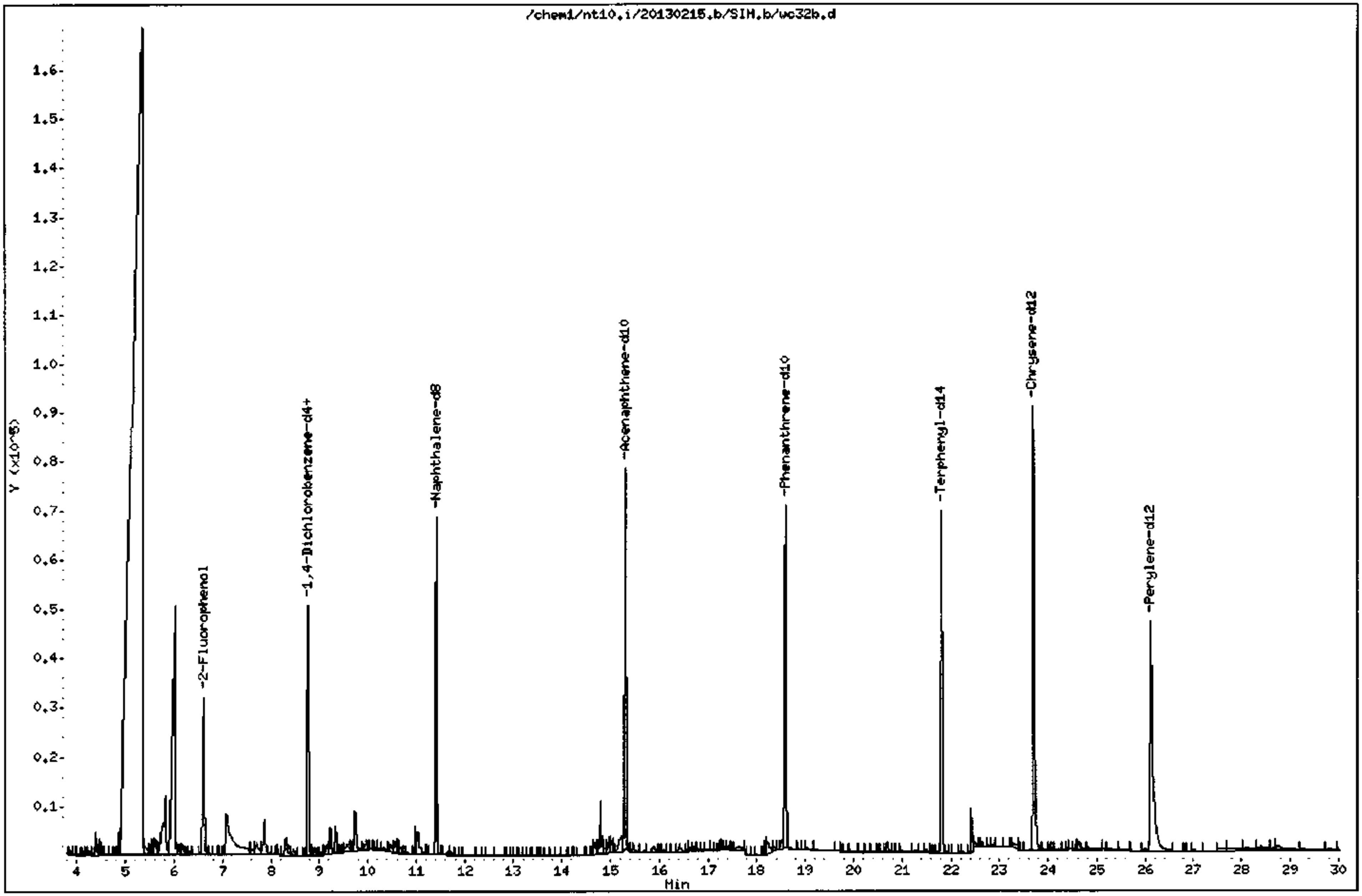
Client Name: Floyd-Snider
Sample Matrix: SOLID
Lab Smp Id: WC32B
Level: LOW
Data Type: MS DATA
SpikeList File: SHORTPSDDA.spk
Sublist File: PSDDA.sub
Method File: /chem1/nt10.i/20130215.b/SIM.b/SIMABN2.m
Misc Info: 13-2425

Client SDG: WC32
Fraction: SV
Client Smp ID: SG-13-0-10-013113
Operator: VTS/YZ
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 1 2-Fluorophenol	735.6	487.6	66.29	30-160
$ 66 Terphenyl-d14	490.4	465.3	94.89	30-160

Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32b.d
Date : 15-FEB-2013 19:15
Client ID: SG-13-0-10-013113
Sample Info: WC32B
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt10.i
Operator: VTS/YZ
Column diameter: 0.25



Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32b.d

Date : 15-FEB-2013 19:15

Client ID: SG-13-0-10-013113

Instrument: nt10.i

Sample Info: WC32B

Volume Injected (uL): 1.0

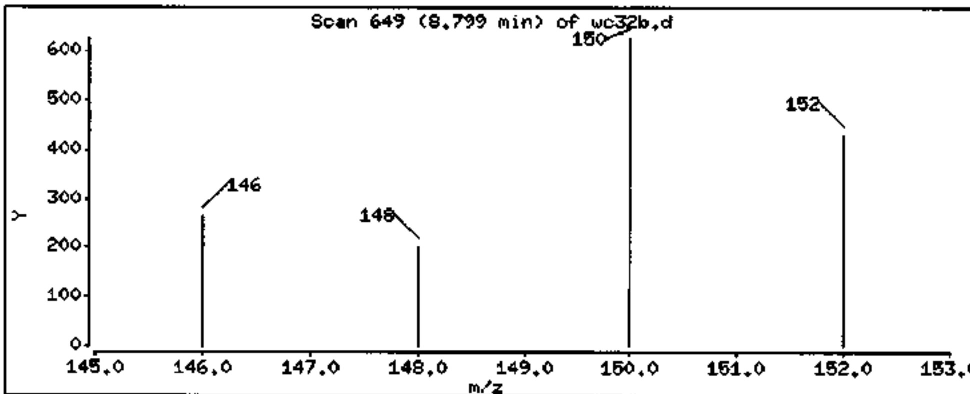
Operator: VTS/YZ

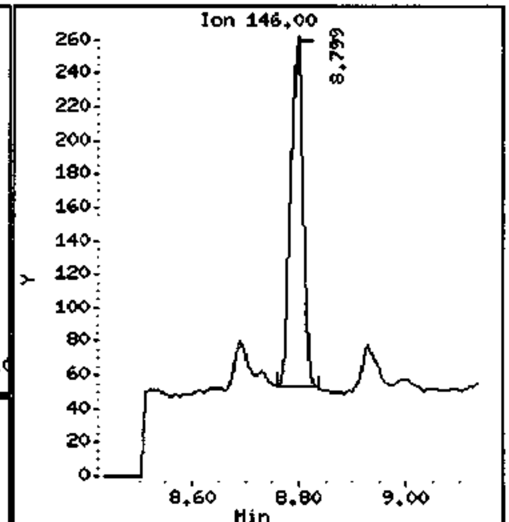
Column phase: ZB-5msi

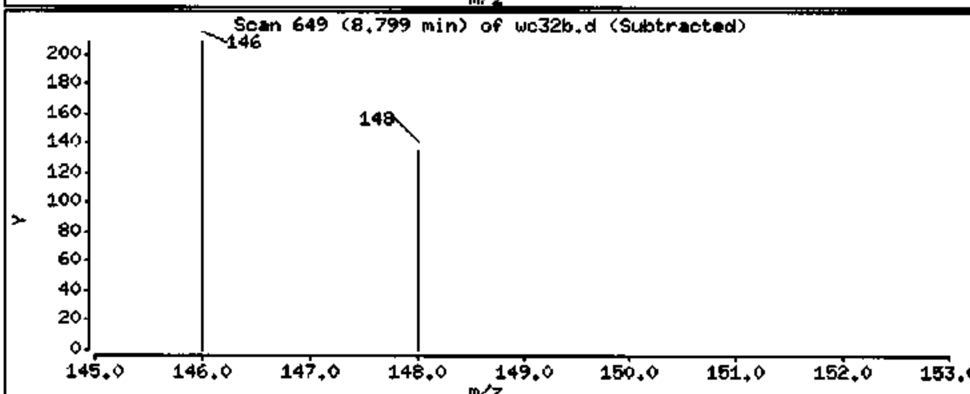
Column diameter: 0.25

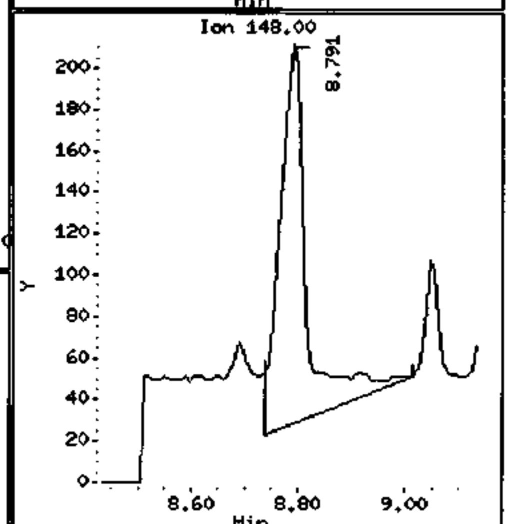
9 1,4-Dichlorobenzene

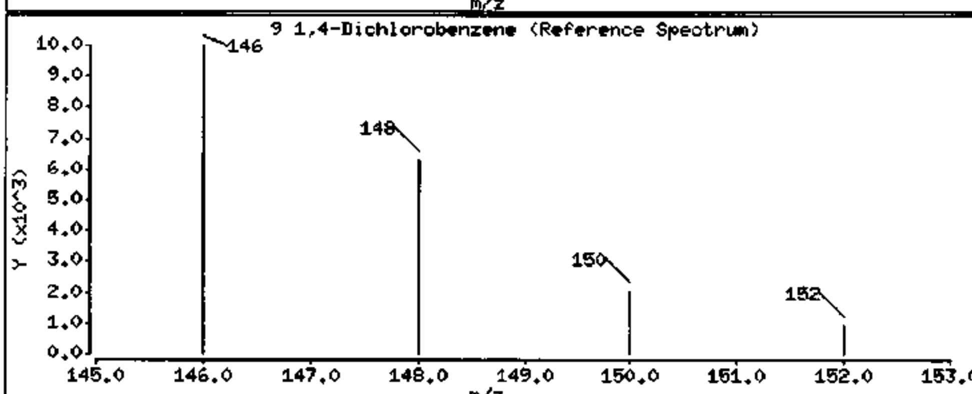
Concentration: 2.473 ug/kg

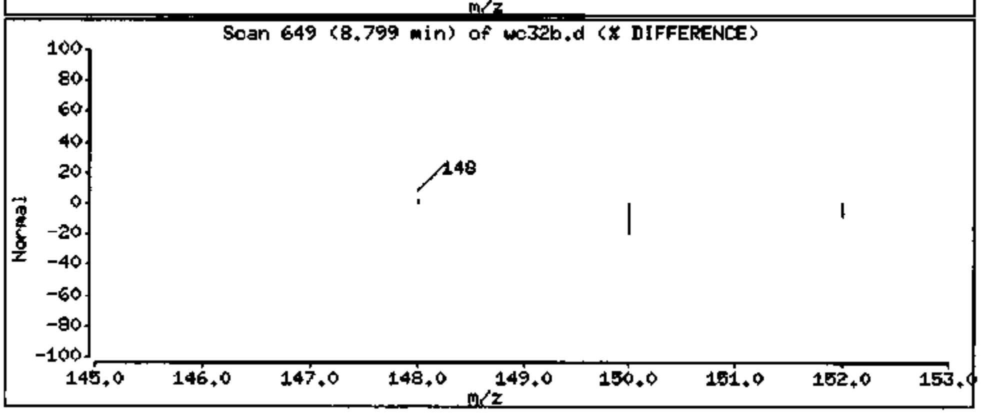












Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32b.d

Date : 15-FEB-2013 19:15

Client ID: SG-13-0-10-013113

Instrument: nt10.i

Sample Info: WC32B

Volume Injected (uL): 1.0

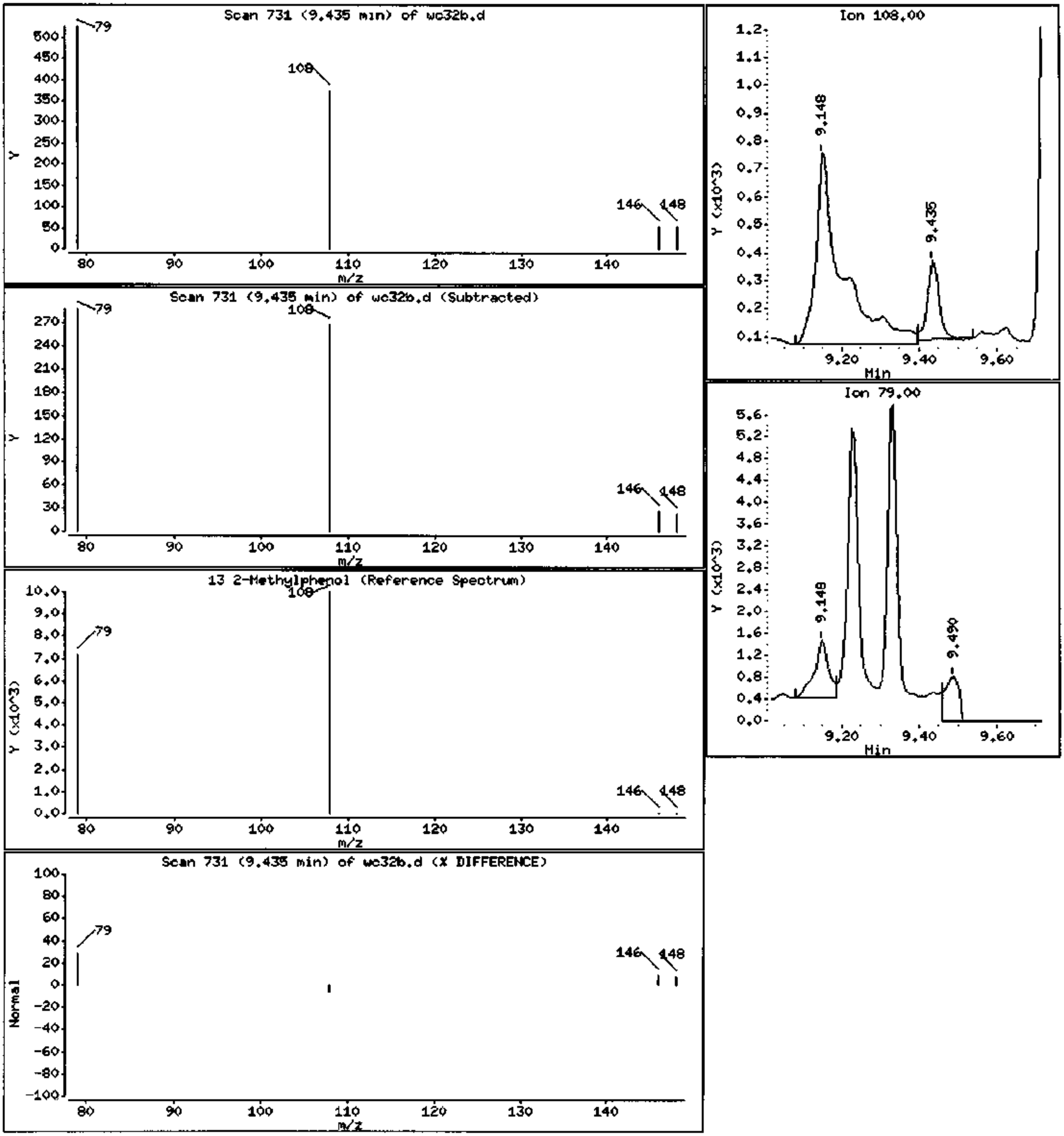
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 5.652 ug/kg



Data File: /chem1/nt10.i/20130215.b/SIH.b/wc32b.d

Date : 15-FEB-2013 19:15

Client ID: SG-13-0-10-013113

Instrument: nt10.i

Sample Info: WC32B

Volume Injected (uL): 1.0

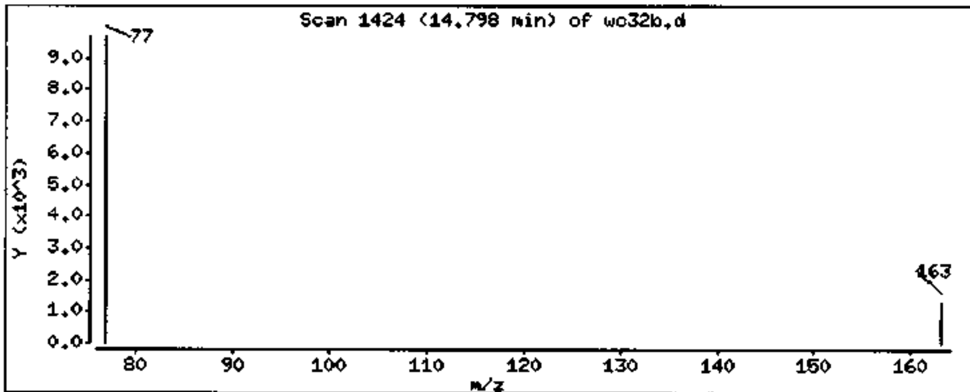
Operator: VTS/YZ

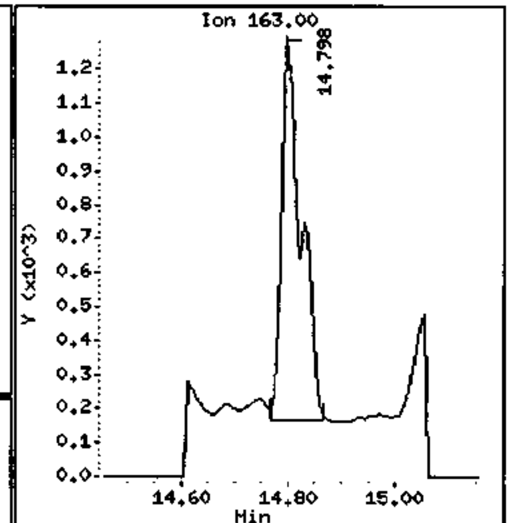
Column phase: ZB-5msi

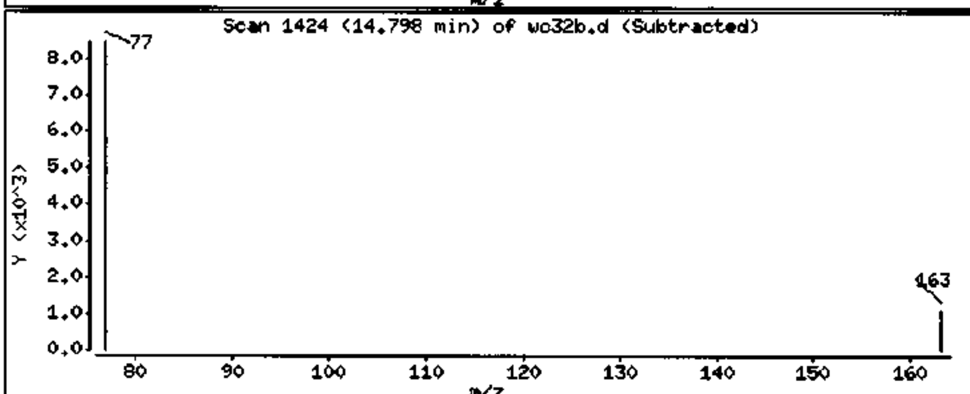
Column diameter: 0.25

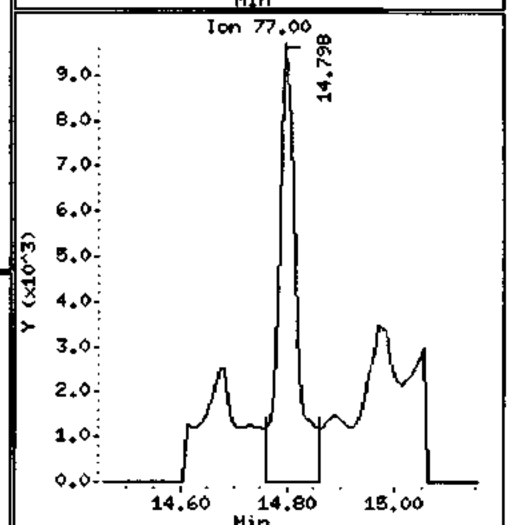
39 Dimethylphthalate

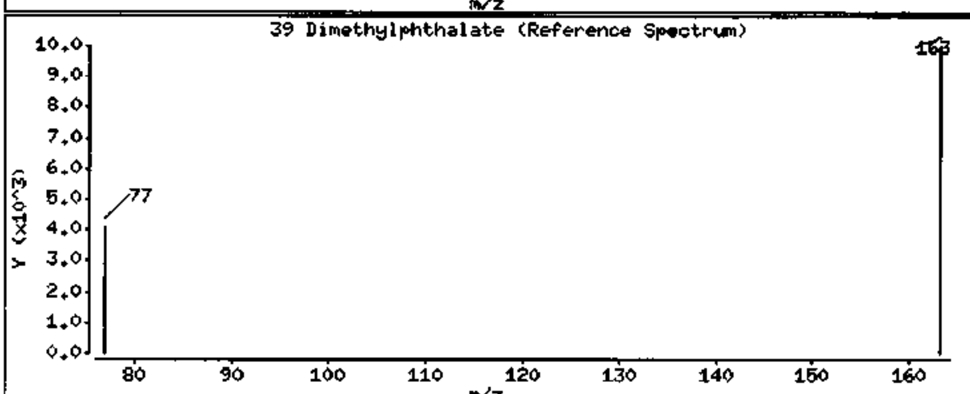
Concentration: 13.27 ug/kg

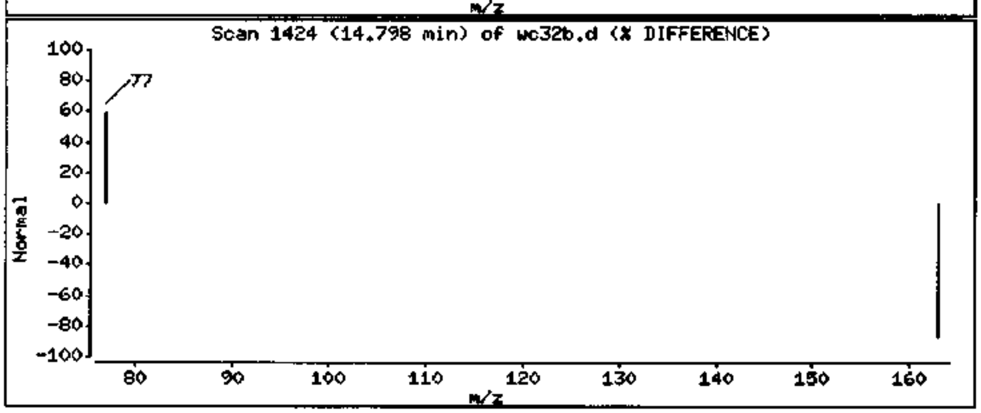












Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32b.d

Date : 15-FEB-2013 19:15

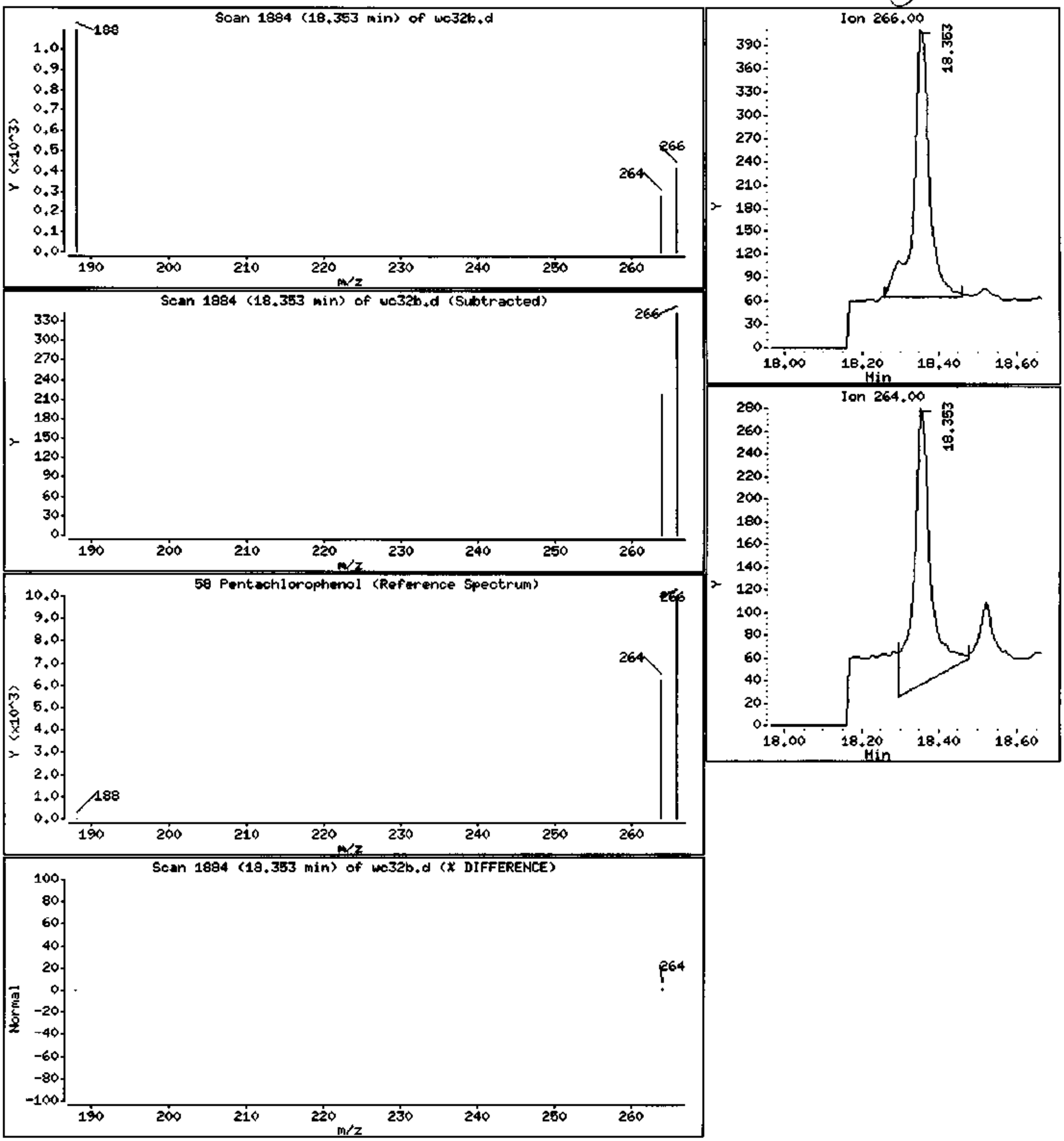
Client ID: SG-13-0-10-013113 Instrument: nt10.i

Sample Info: WC32B

Volume Injected (uL): 1.0 Operator: VTS/YZ

Column phase: ZB-5msi Column diameter: 0.25

58 Pentachlorophenol Concentration: 16.65 ug/kg



Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32b.d

Date : 15-FEB-2013 19:15

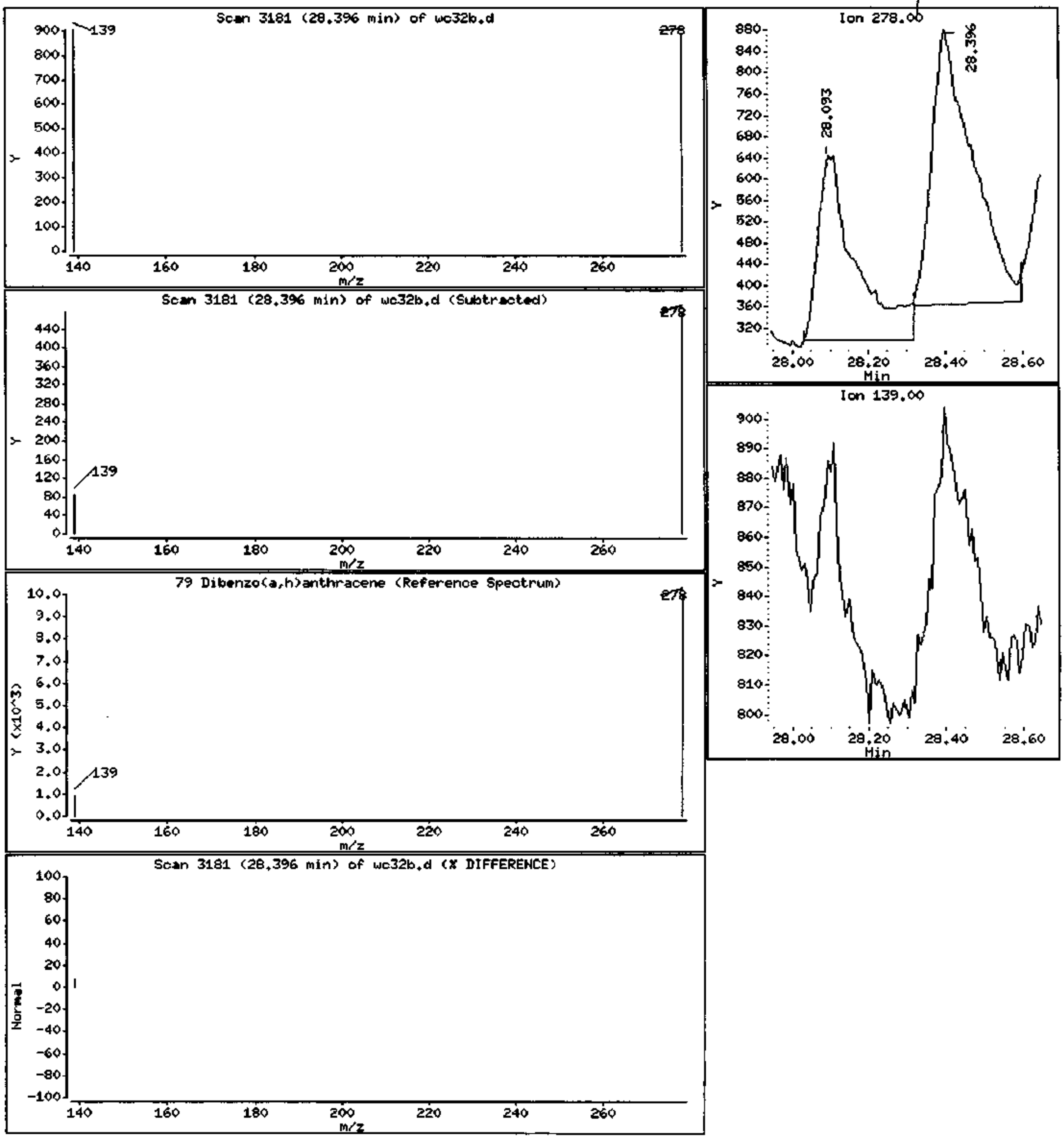
Client ID: SC-13-0-10-013113 Instrument: nt10.i

Sample Info: WC32B

Volume Injected (uL): 1.0 Operator: VTS/YZ

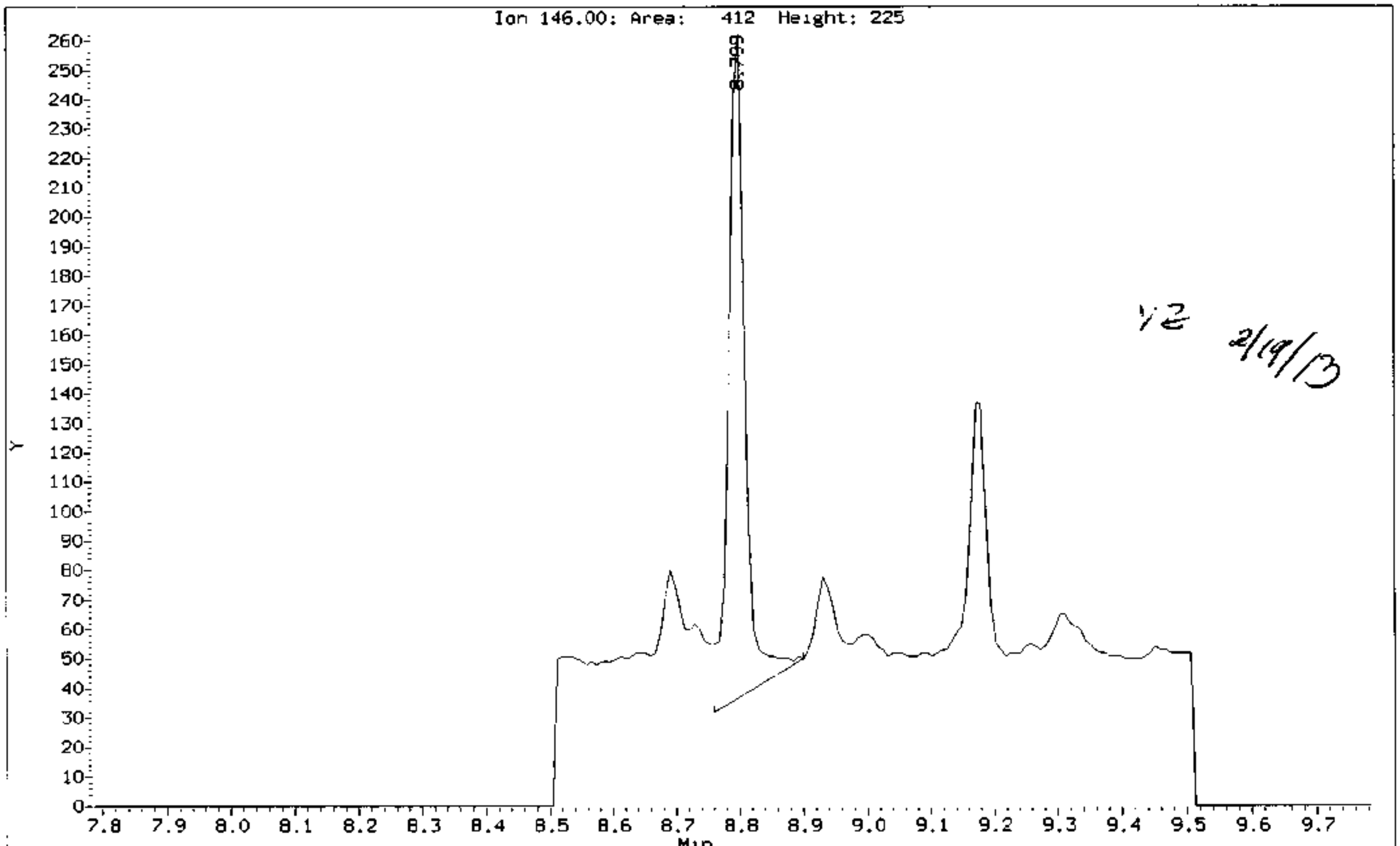
Column phase: ZB-5msi Column diameter: 0.25

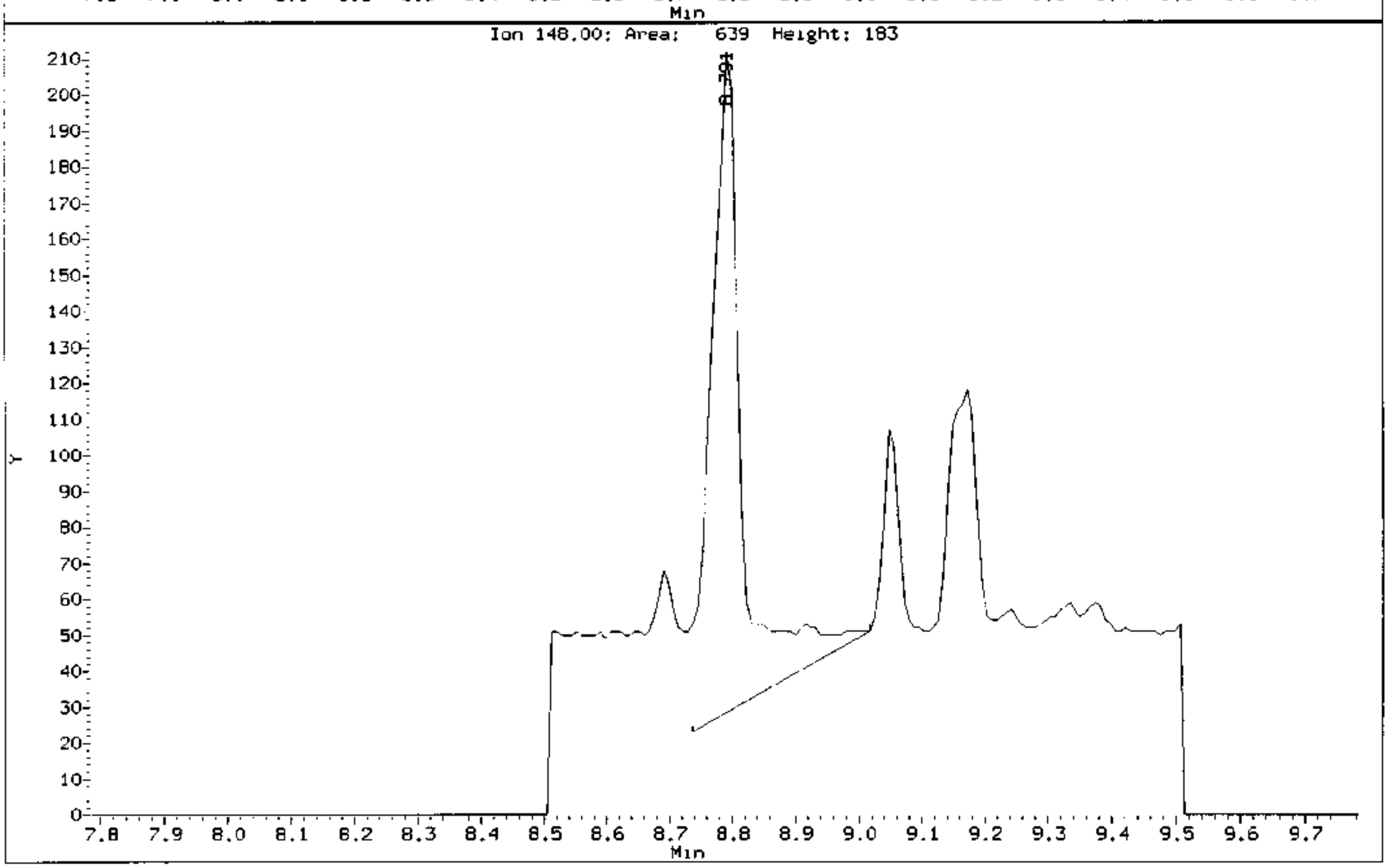
79 Dibenzo(a,h)anthracene Concentration: 10.47 ug/kg



Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32b.d
Injection Date: 15-FEB-2013 19:15
Instrument: nt10.i
Client Sample ID: SG-13-0-10-013113

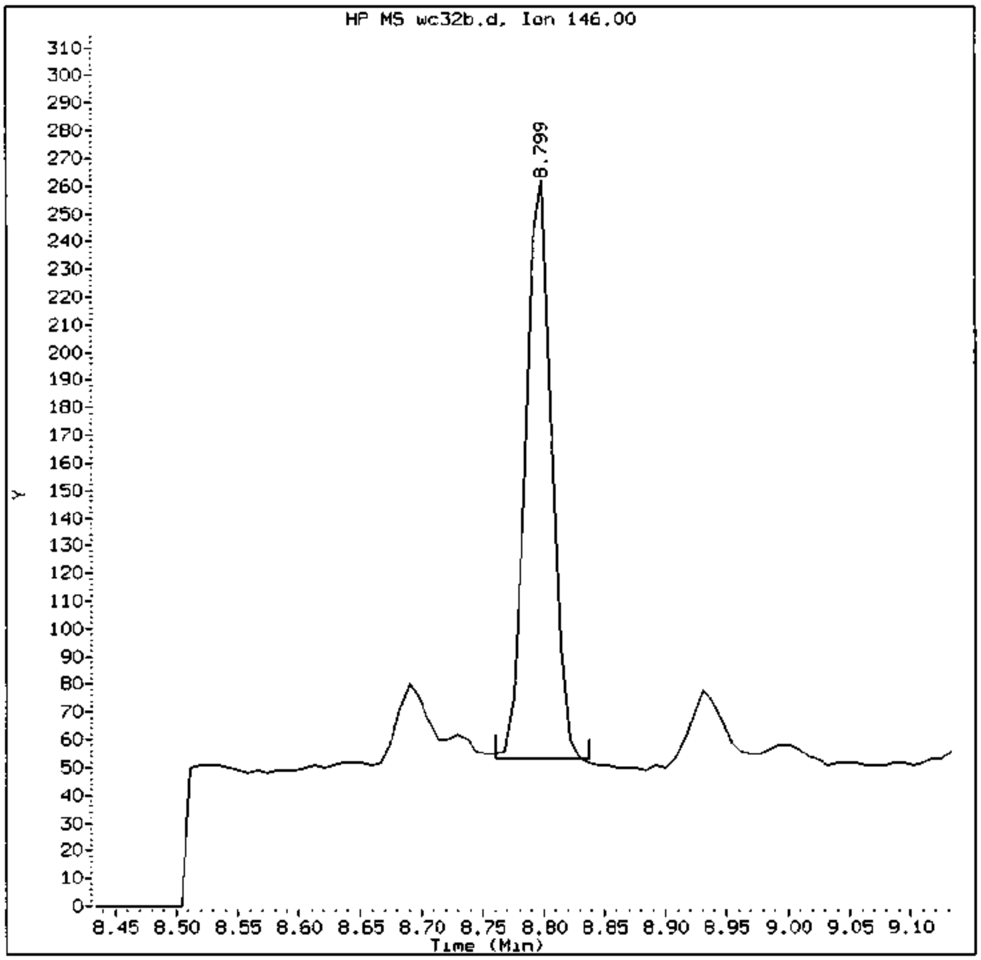
Compound: 1,4-Dichlorobenzene
CAS Number: 106-46-7





WC32B, /chem1/nt10.i/20130215.b/SIM.b/wc32b.d

1,4-Dichlorobenzene   Amount: 0.03   Area: 316



MANUAL INTEGRATION for 1,4-Dichlorobenzene

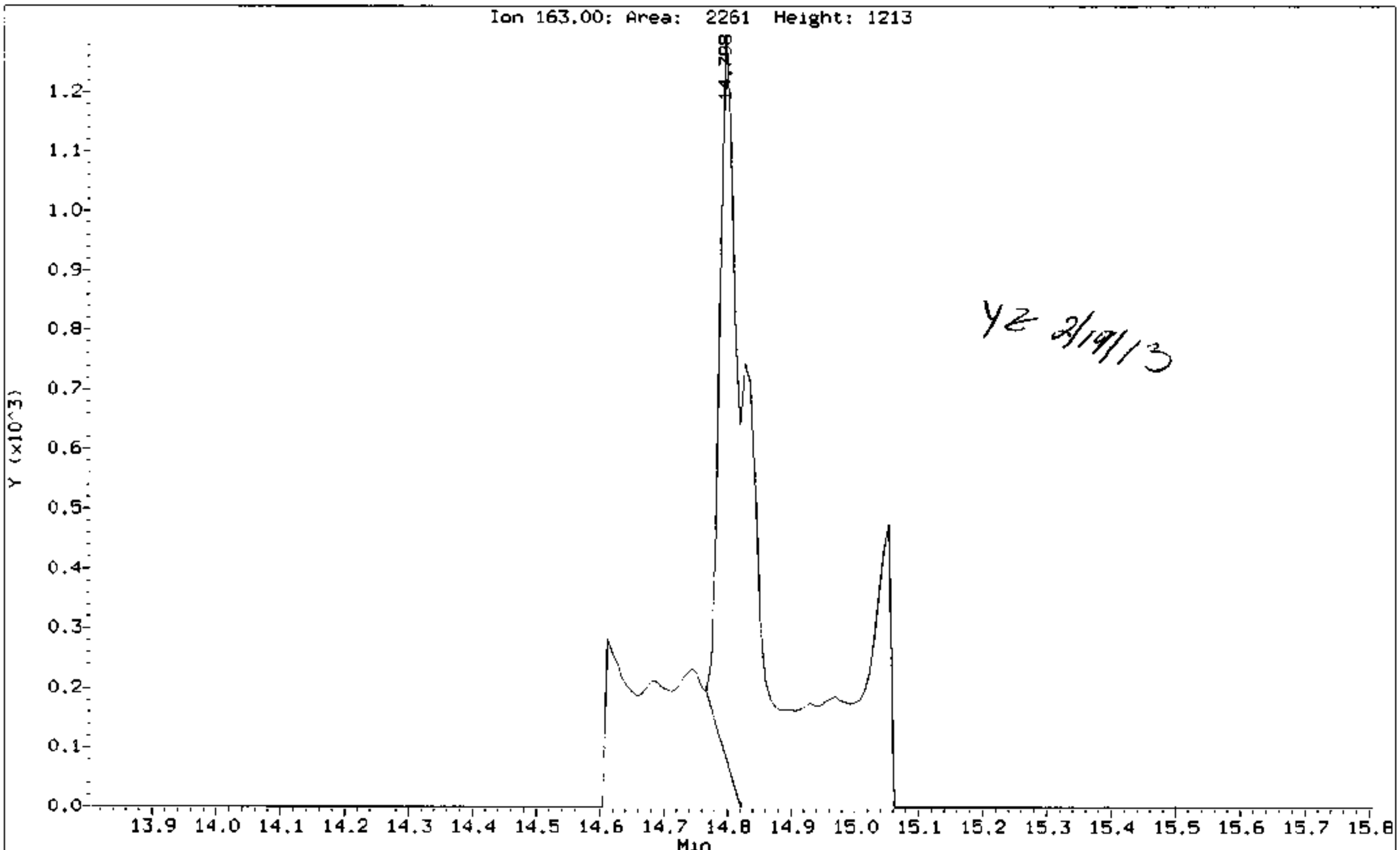
1. Baseline correction ✓
2. Poor chromatography
3. Peak not found
4. Totals calculation

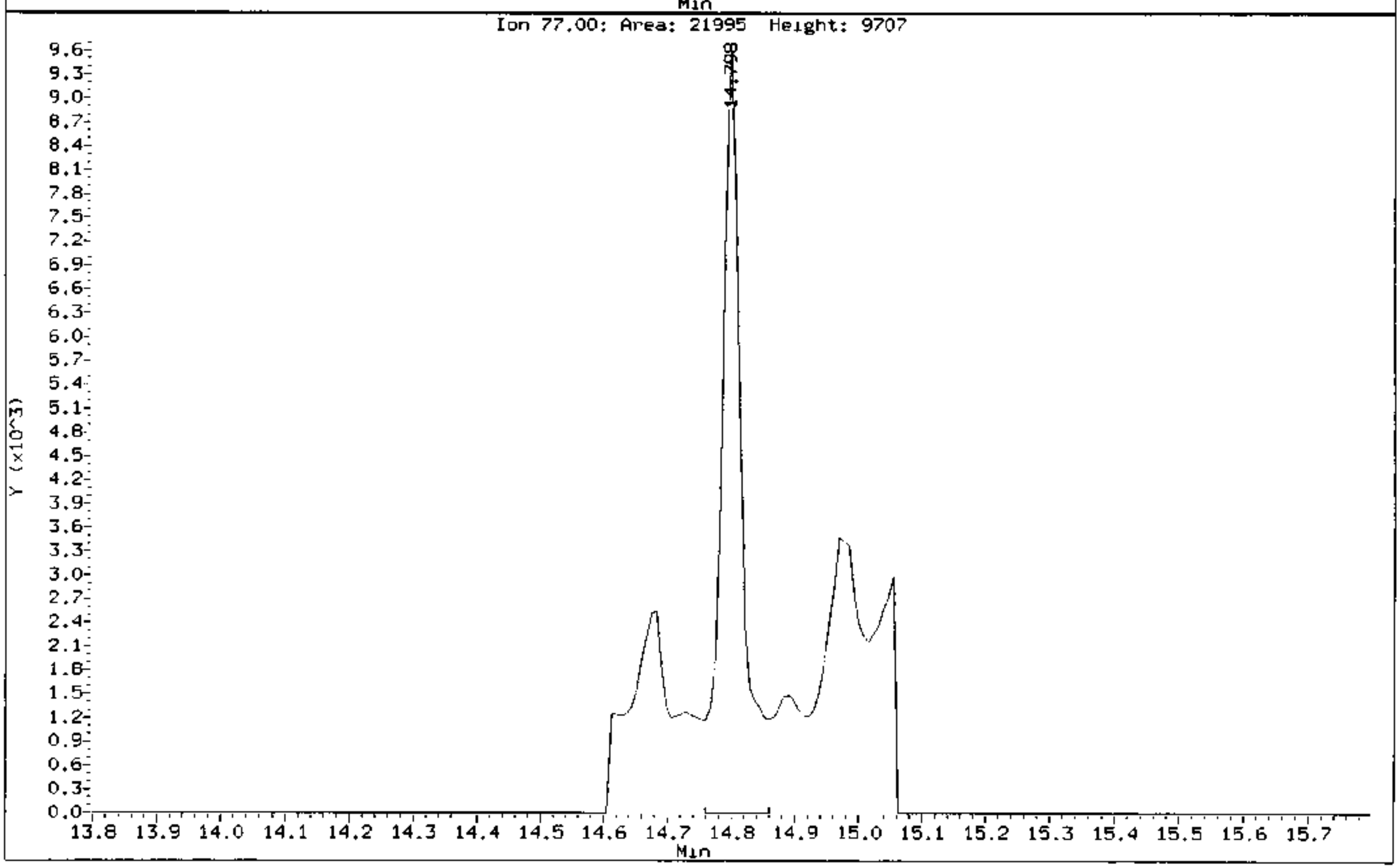
5. Other ______________________

Analyst: YB   Date: 2/19/13

Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32b.d
Injection Date: 15-FEB-2013 19:15
Instrument: nt10.i
Client Sample ID: SG-13-0-10-013113

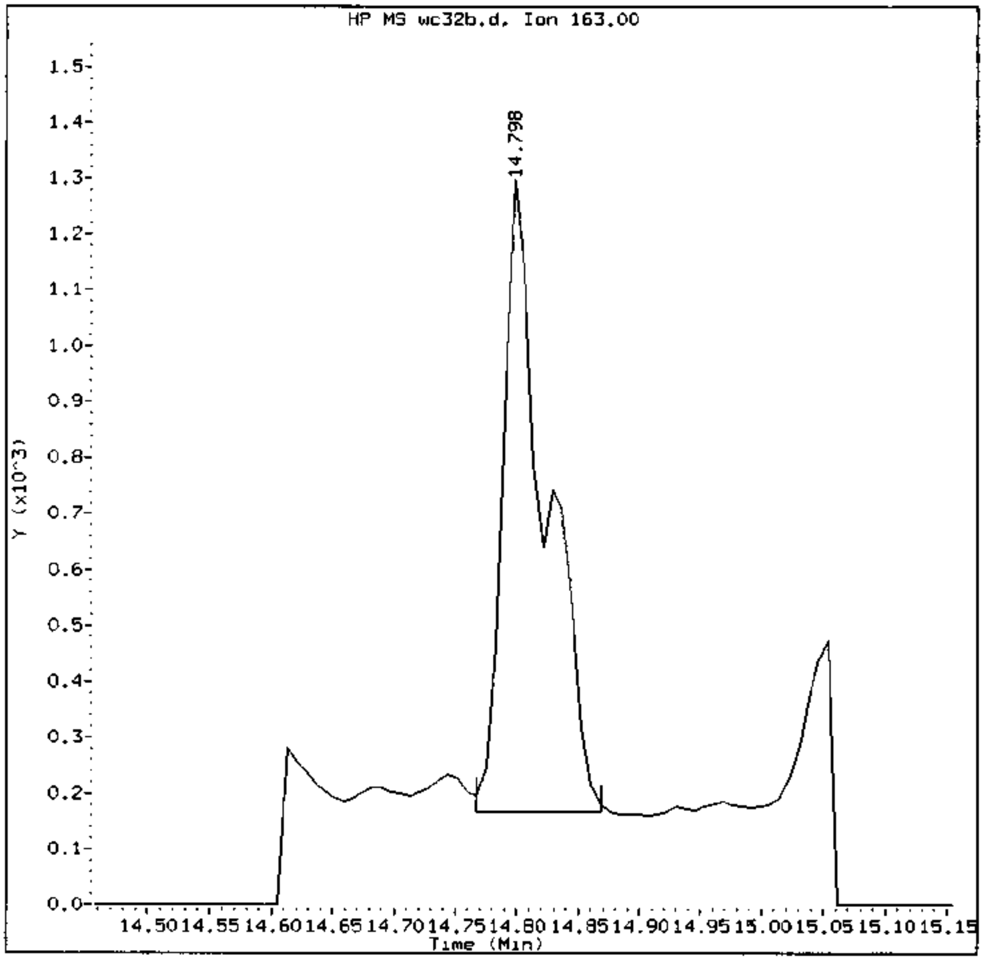
Compound: Dimethylphthalate
CAS Number: 131-11-3





WC32B, /chem1/nt10.i/20130215.b/SIM.b/wc32b.d

Dimethylphthalate Amount: 0.14 Area: 2790



MANUAL INTEGRATION for Dimethylphthalate

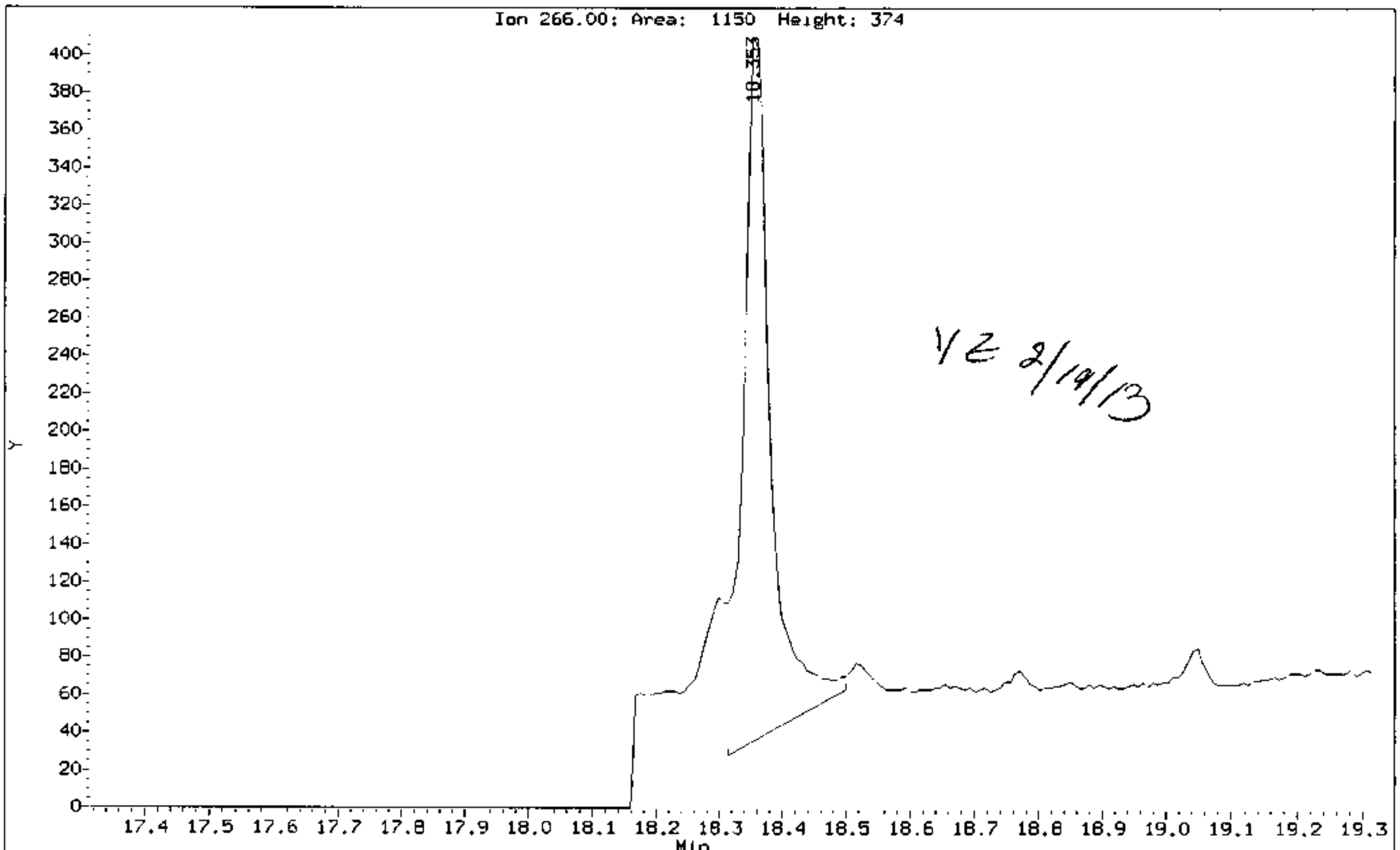
1. Baseline correction ✓
2. Poor chromatography
3. Peak not found
4. Totals calculation

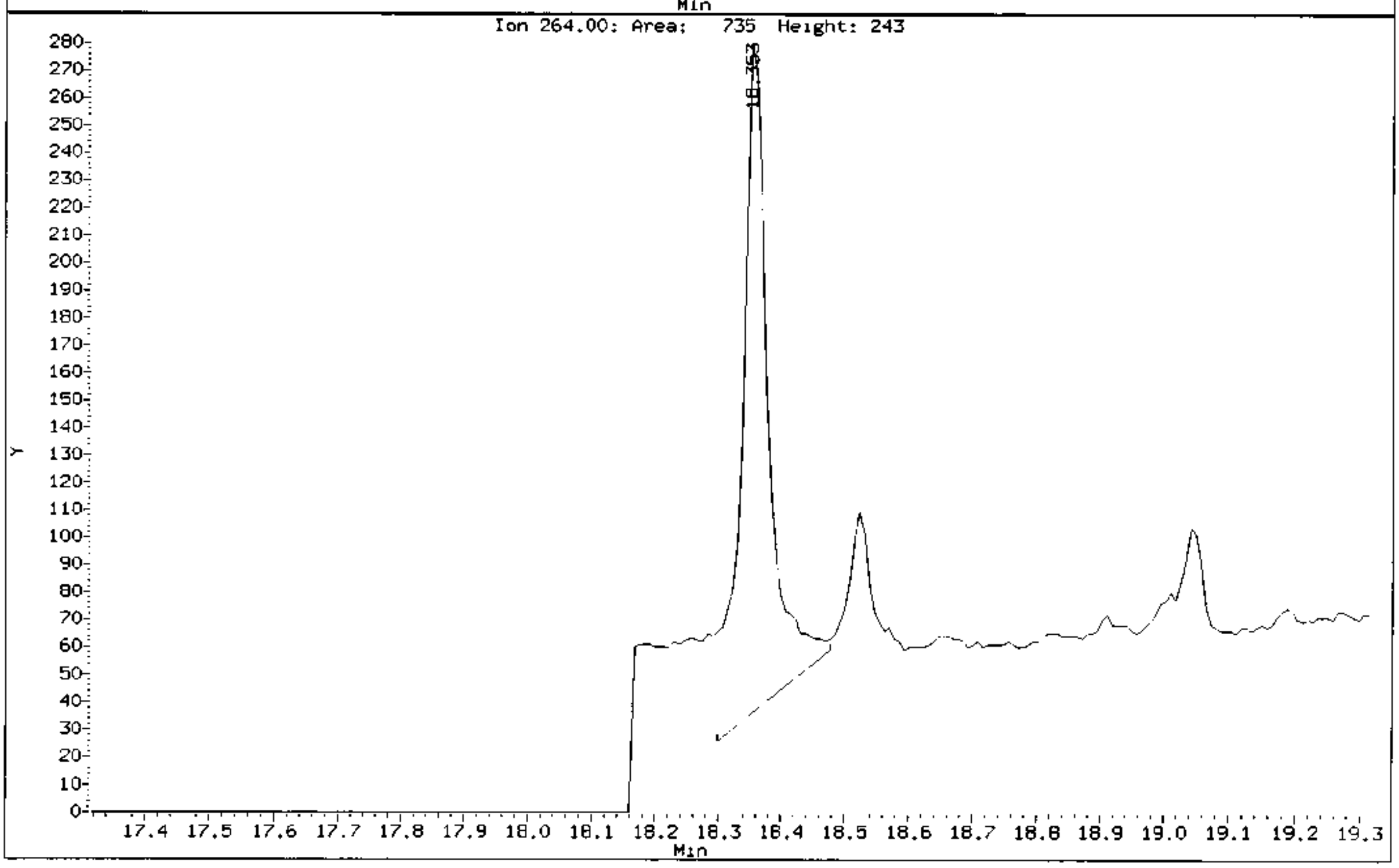
5. Other ______________________

Analyst: YZ Date: 2/19/13

Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32b.d
Injection Date: 15-FEB-2013 19:15
Instrument: nt10.i
Client Sample ID: SG-13-0-10-013113

Compound: Pentachlorophenol
CAS Number: 87-86-5

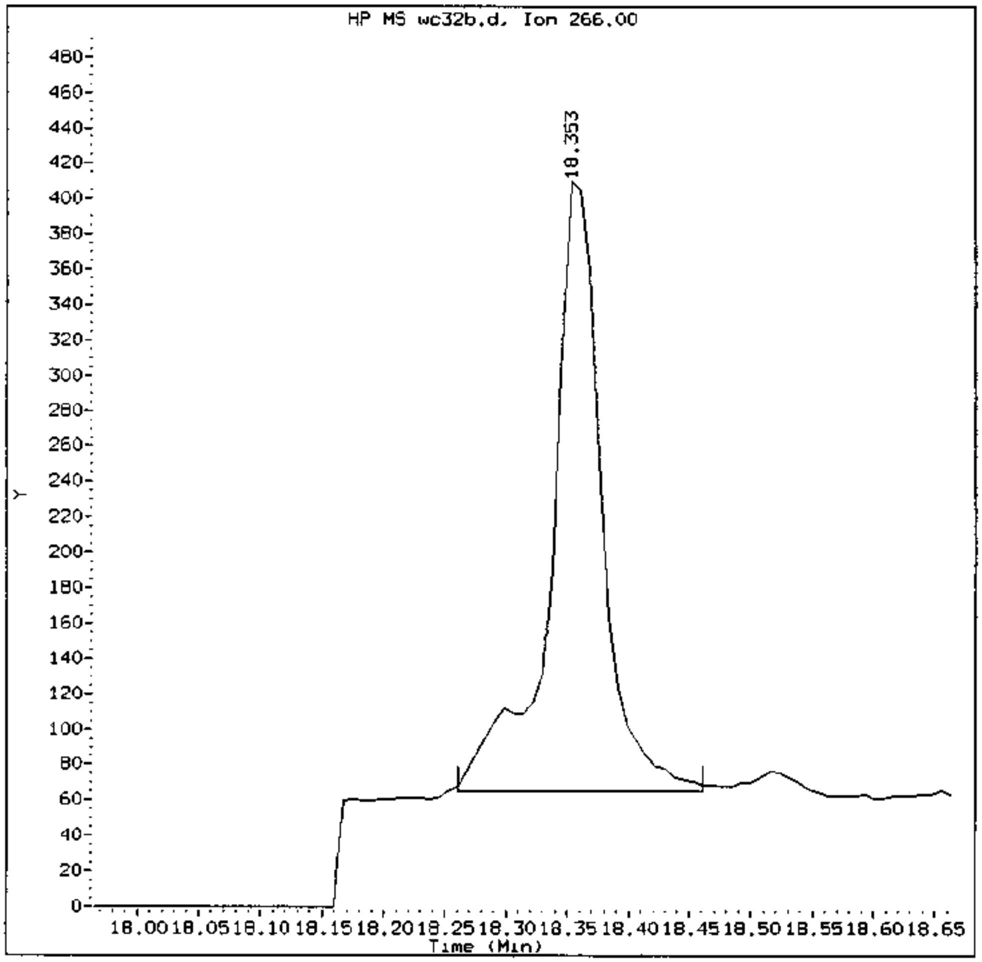




WC32:01152

WC32B, /chem1/nt10.i/20130215.b/SIM.b/wc32b.d

Pentachlorophenol Amount: 0.17 Area: 1005



MANUAL INTEGRATION for Pentachlorophenol

1. Baseline correction ✓
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other ______________________

Analyst: YZ Date: 2/19/13

CO-ELUTION SUMMARY FOR FILE - wc32b.d

Lab ID: WC32B, Method: SIM.b/SIMABN2.m, Instrument: nt10.i, Date: 15-FEB-2013

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32c.d
Report Date: 19-Feb-2013 14:01

Analytical Resources, Inc.

METHOD 8270D-SIM

YZ 2/19/13

Data file : /chem1/nt10.i/20130215.b/SIM.b/wc32c.d
Lab Smp Id: WC32C   Client Smp ID: SG-07-0-10-013113
Inj Date : 15-FEB-2013 19:52
Operator : VTS/YZ   Inst ID: nt10.i
Smp Info : WC32C
Misc Info : 13-2426
Comment   :
Method   : /chem1/nt10.i/20130215.b/SIM.b/SIMABN2.m
Meth Date : 19-Feb-2013 14:01 yev   Quant Type: ISTD
Cal Date : 25-JAN-2013 17:53   Cal File: ic0125i.d
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: PSDDA.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Ws	13.10000	Weight of sample extracted (g)
M	22.80000	% Moisture

Cpnd Variable   Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
$	1 2-Fluorophenol	112	6.495	6.464	(0.741)	57649	5.31984	526.0
	3 Phenol	94	8.226	8.203	(0.939)	4525	0.32879	32.51
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	8.760	8.752	(1.000)	34061	4.00000	
	9 1,4-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	79	9.094	9.086	(1.038)	306	0.03752	3.710(M)
	12 1,2-Dichlorobenzene	146	9.163	9.156	(1.046)	380	0.02908	2.876
	13 2-Methylphenol	108	9.389	9.366	(1.072)	2054	0.19834	19.61
	15 4-Methylphenol	108	9.684	9.668	(1.105)	7713	0.71922	71.12
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	10.777	10.762	(0.945)	3068	0.27861	27.55
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	11.402	11.394	(1.000)	127739	4.00000	
	30 Hexachlorobutadiene	225	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
	39 Dimethylphthalate	163	14.845	14.806	(0.971)	1831	0.08259	8.167(M)
*	42 Acenaphthene-d10	162	15.293	15.278	(1.000)	72821	4.00000	
	50 Diethylphthalate	149	16.399	16.384	(1.072)	8203	0.31672	31.32(M)
	54 N-Nitrosodiphenylamine	169	16.785	16.777	(0.904)	1468	0.09134	9.032
	57 Hexachlorobenzene	284	Compound Not Detected.					
	58 Pentachlorophenol	266	Compound Not Detected.					
*	59 Phenanthrene-d10	188	18.577	18.554	(1.000)	138245	4.00000	
$	66 Terphenyl-d14	244	21.811	21.788	(0.920)	110396	4.96480	490.9
	67 Butylbenzylphthalate	149	22.764	22.741	(0.960)	597	0.03732 J	3.691
*	69 Chrysene-d12	240	23.701	23.662	(1.000)	167346	4.00000	
*	77 Perylene-d12	264	26.116	26.070	(1.000)	152548	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.396	28.295	(1.087)	6393	0.17583	17.39
	90 N-Nitrosodimethylamine	74	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: wc32c.d
Lab Smp Id: WC32C
Analysis Type: SV
Quant Type: ISTD
Operator: VTS/YZ
Method File: /chem1/nt10.i/20130215.b/SIM.b/SIMABN2.m
Misc Info: 13-2426

Calibration Date: 15-FEB-2013
Calibration Time: 11:56
Client Smp ID: SG-07-0-10-01311
Level: LOW
Sample Type: Sediment

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	53853	26926	107706	34061	-36.75
27 Naphthalene-d8	200104	100052	400208	127739	-36.16
42 Acenaphthene-d10	112392	56196	224784	72821	-35.21
59 Phenanthrene-d10	210710	105355	421420	138245	-34.39
69 Chrysene-d12	240805	120402	481610	167346	-30.51
77 Perylene-d12	230834	115417	461668	152548	-33.91

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.75	8.25	9.25	8.76	0.09
27 Naphthalene-d8	11.39	10.89	11.89	11.40	0.07
42 Acenaphthene-d10	15.28	14.78	15.78	15.29	0.10
59 Phenanthrene-d10	18.55	18.05	19.05	18.58	0.12
69 Chrysene-d12	23.66	23.16	24.16	23.70	0.16
77 Perylene-d12	26.07	25.57	26.57	26.12	0.18

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd-Snider
Sample Matrix: SOLID
Lab Smp Id: WC32C
Level: LOW
Data Type: MS DATA
SpikeList File: SHORTPSDDA.spk
Sublist File: PSDDA.sub
Method File: /chem1/nt10.i/20130215.b/SIM.b/SIMABN2.m
Misc Info: 13-2426

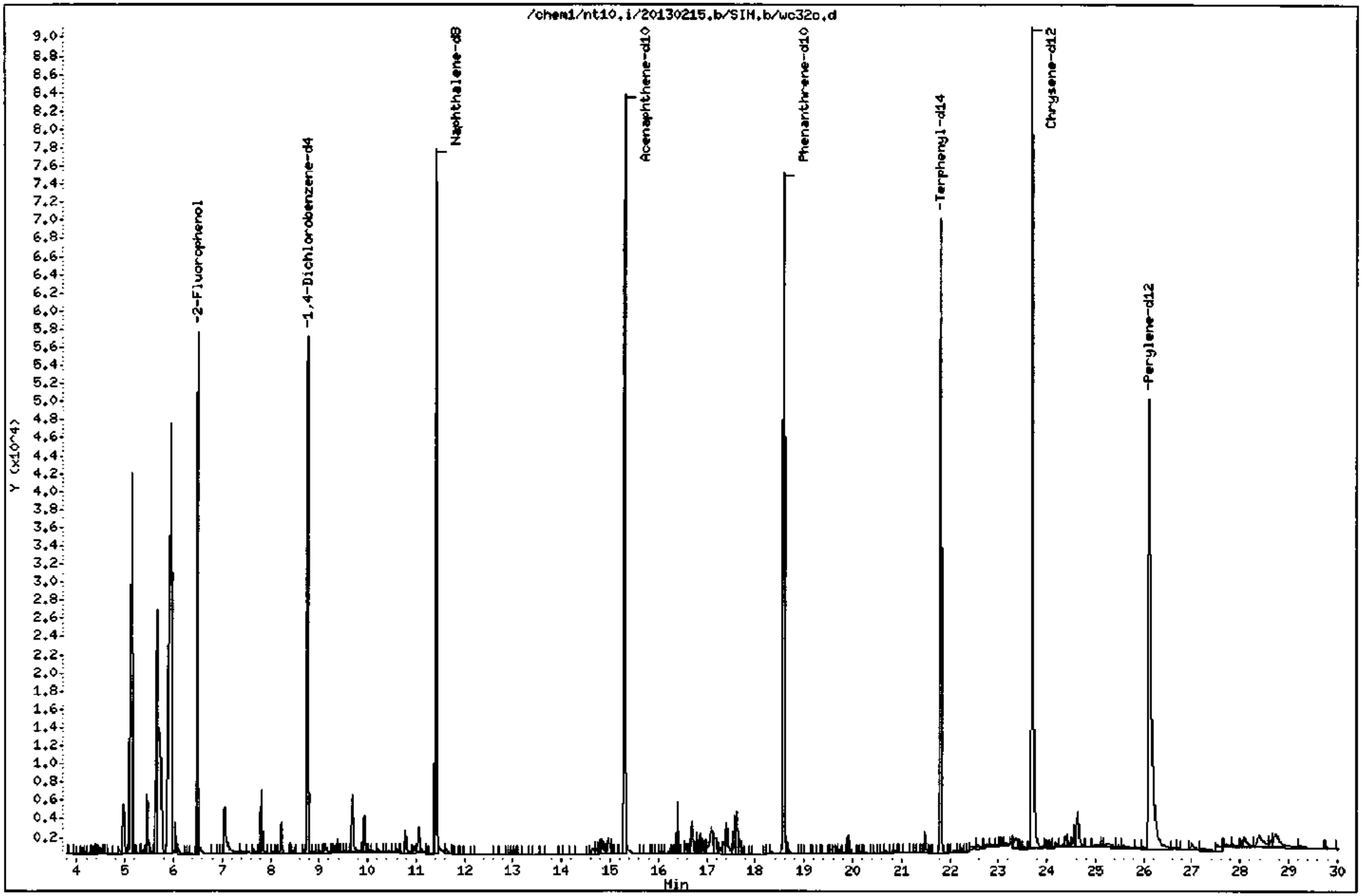
Client SDG: WC32
Fraction: SV
Client Smp ID: SG-07-0-10-013113
Operator: VTS/YZ
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 1 2-Fluorophenol	741.6	526.0	70.93	30-160
$ 66 Terphenyl-d14	494.4	490.9	99.30	30-160

Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32c.d
Date : 15-FEB-2013 19:52
Client ID: SG-07-0-10-013113
Sample Info: WC32C
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt10.i

Operator: VTS/YZ
Column diameter: 0.25



Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32c.d

Date : 15-FEB-2013 19:52

Client ID: SG-07-0-10-013113

Instrument: nt10.i

Sample Info: WC32C

Volume Injected (uL): 1.0

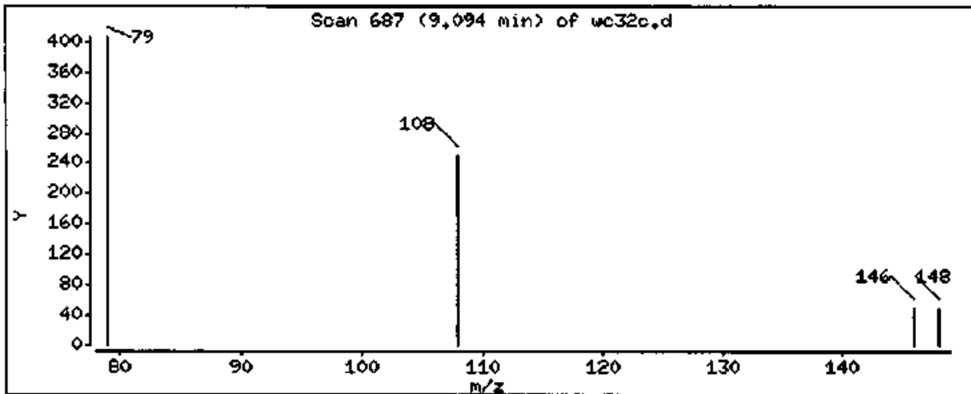
Operator: VTS/YZ

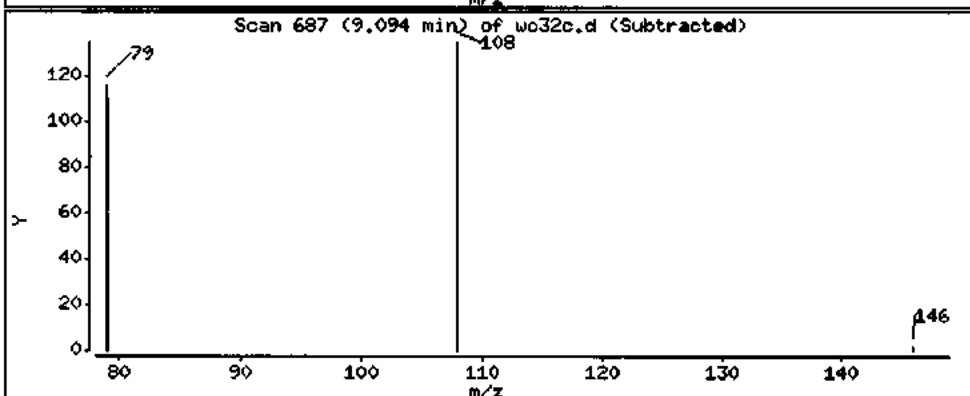
Column phase: ZB-5msi

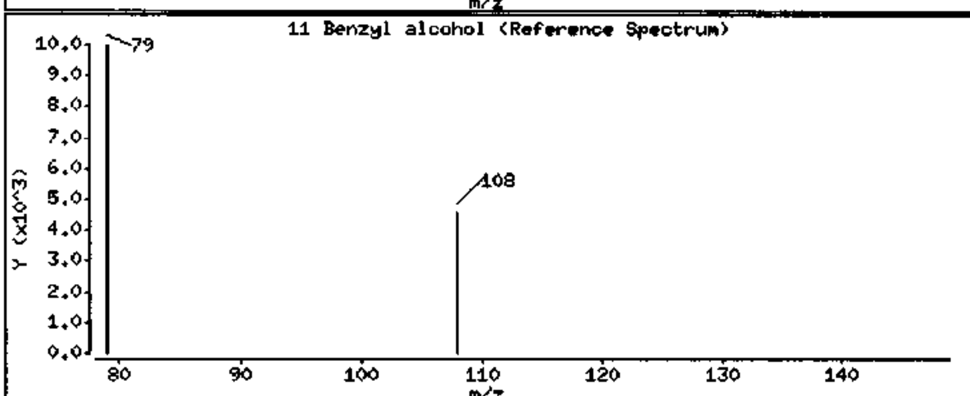
Column diameter: 0.25

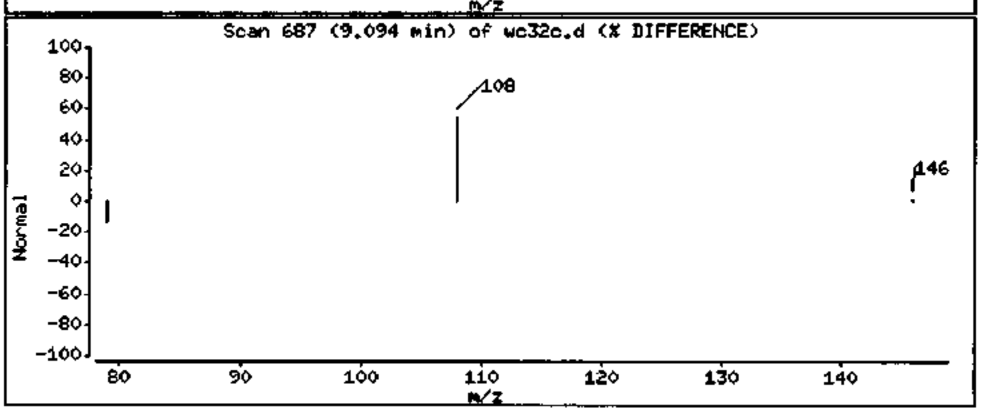
11 Benzyl alcohol

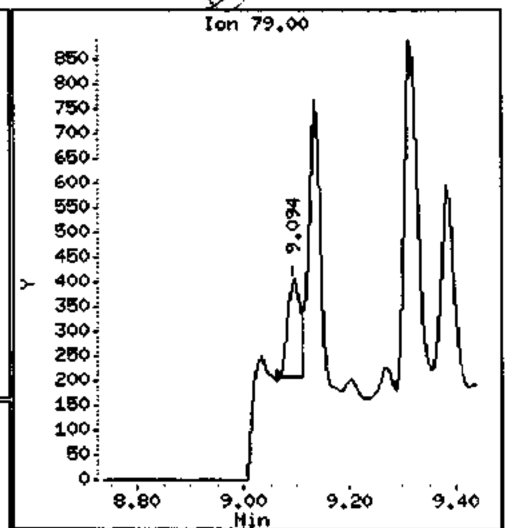
Concentration: 3.710 ug/kg

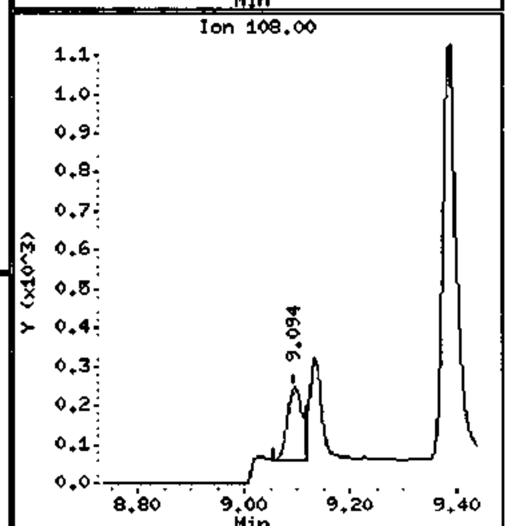












Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32c.d

Date : 15-FEB-2013 19:52

Client ID: SG-07-0-10-013113

Instrument: nt10.i

Sample Info: WC32C

Volume Injected (uL): 1.0

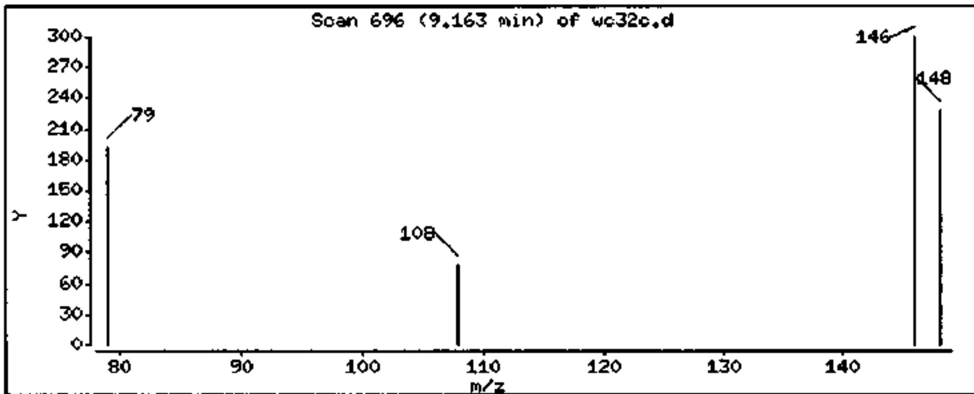
Operator: VTS/YZ

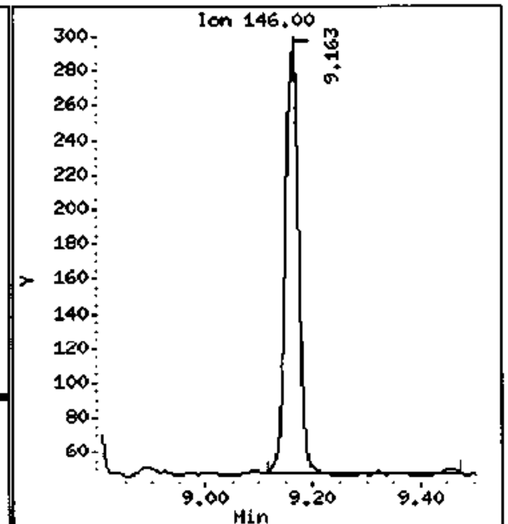
Column phase: ZB-5ms1

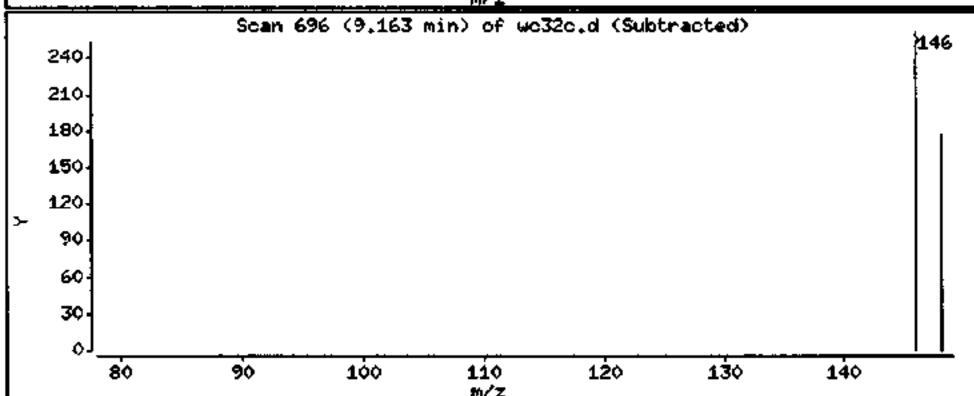
Column diameter: 0.25

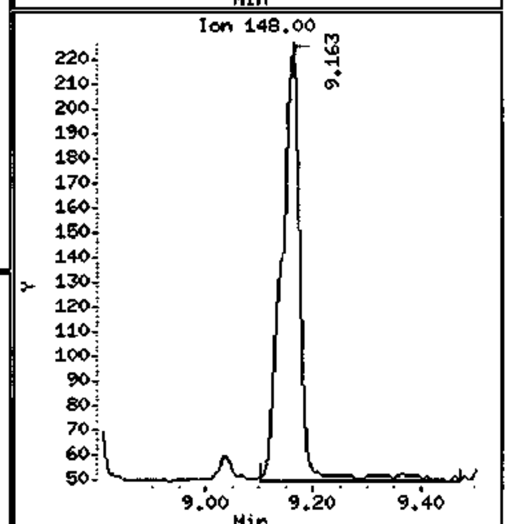
12 1,2-Dichlorobenzene

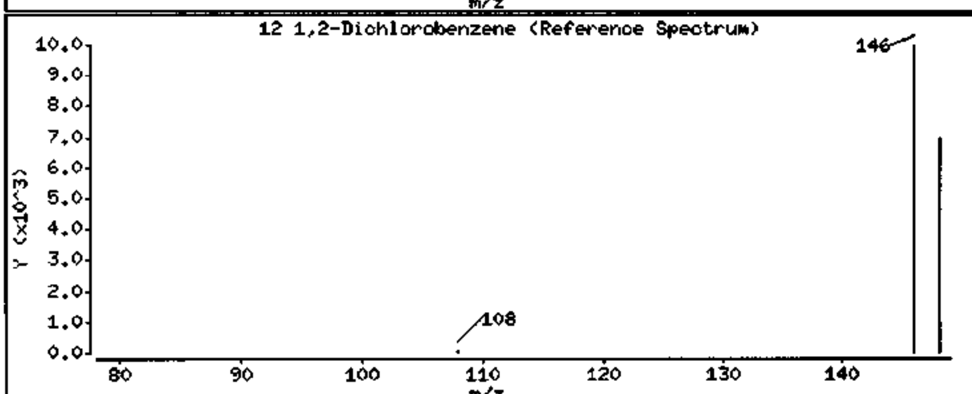
Concentration: 2.876 ug/kg

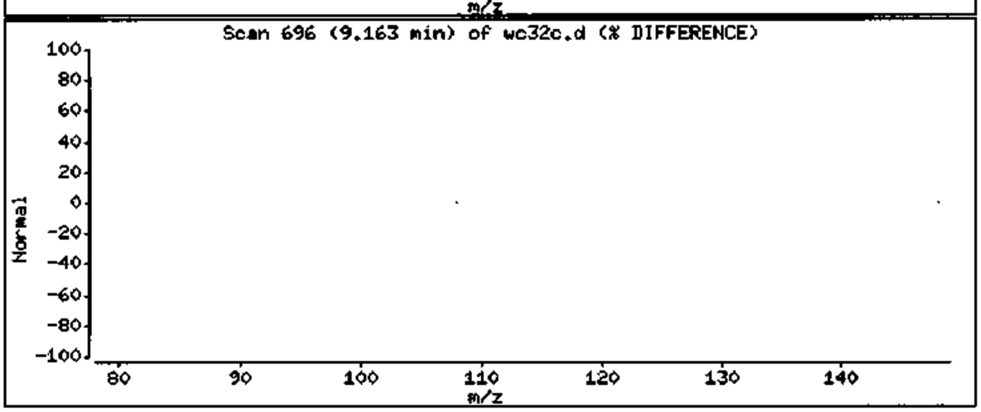






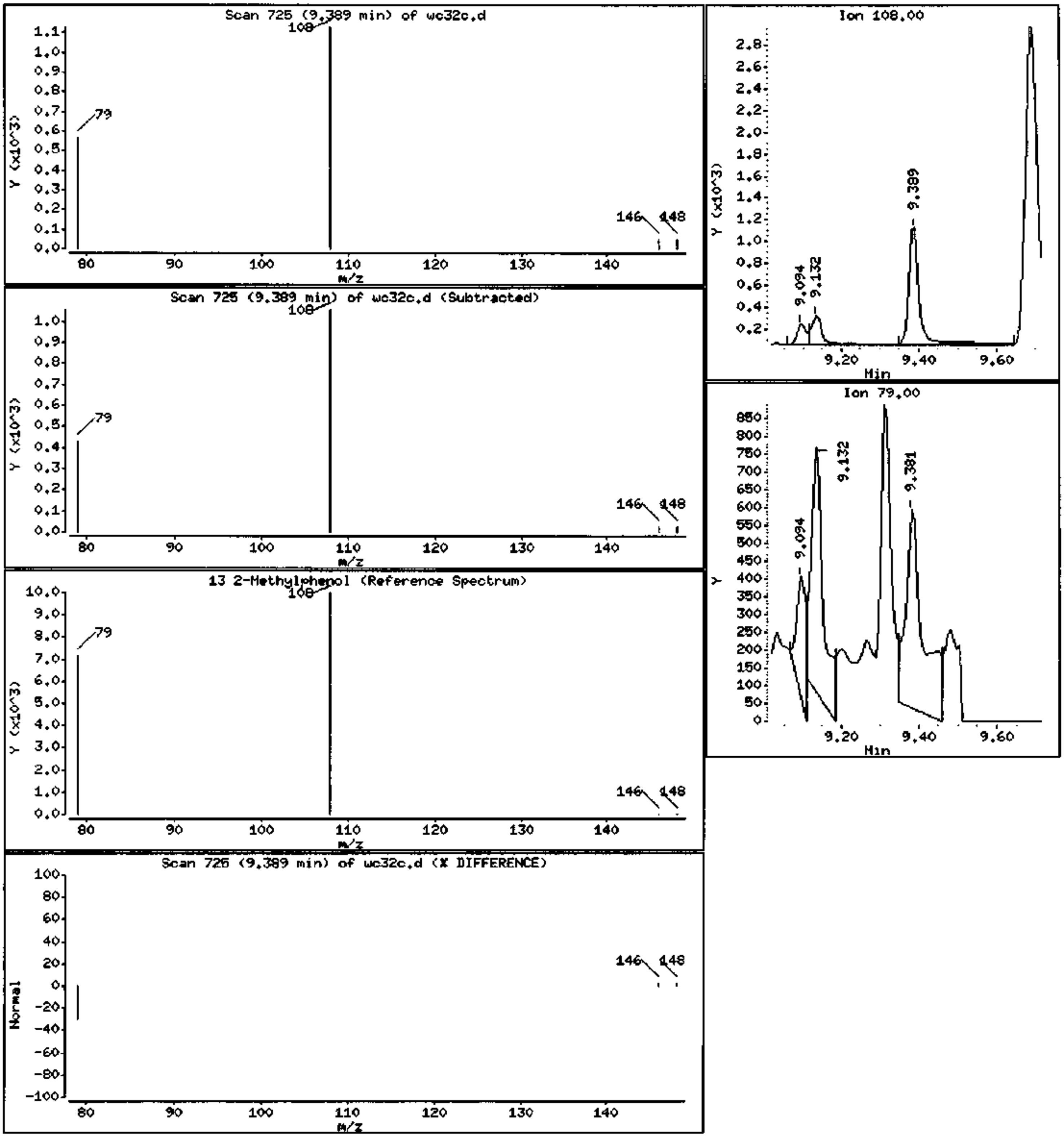






Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32c.d
Date : 15-FEB-2013 19:52
Client ID: SG-07-0-10-013113 Instrument: nt10.i
Sample Info: WC32C
Volume Injected (uL): 1.0 Operator: VTS/YZ
Column phase: ZB-5msi Column diameter: 0.25

13 2-Methylphenol Concentration: 19.61 ug/kg



Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32c.d

Date : 15-FEB-2013 19:52

Client ID: SG-07-0-10-013113

Instrument: nt10.i

Sample Info: WC32C

Volume Injected (uL): 1.0

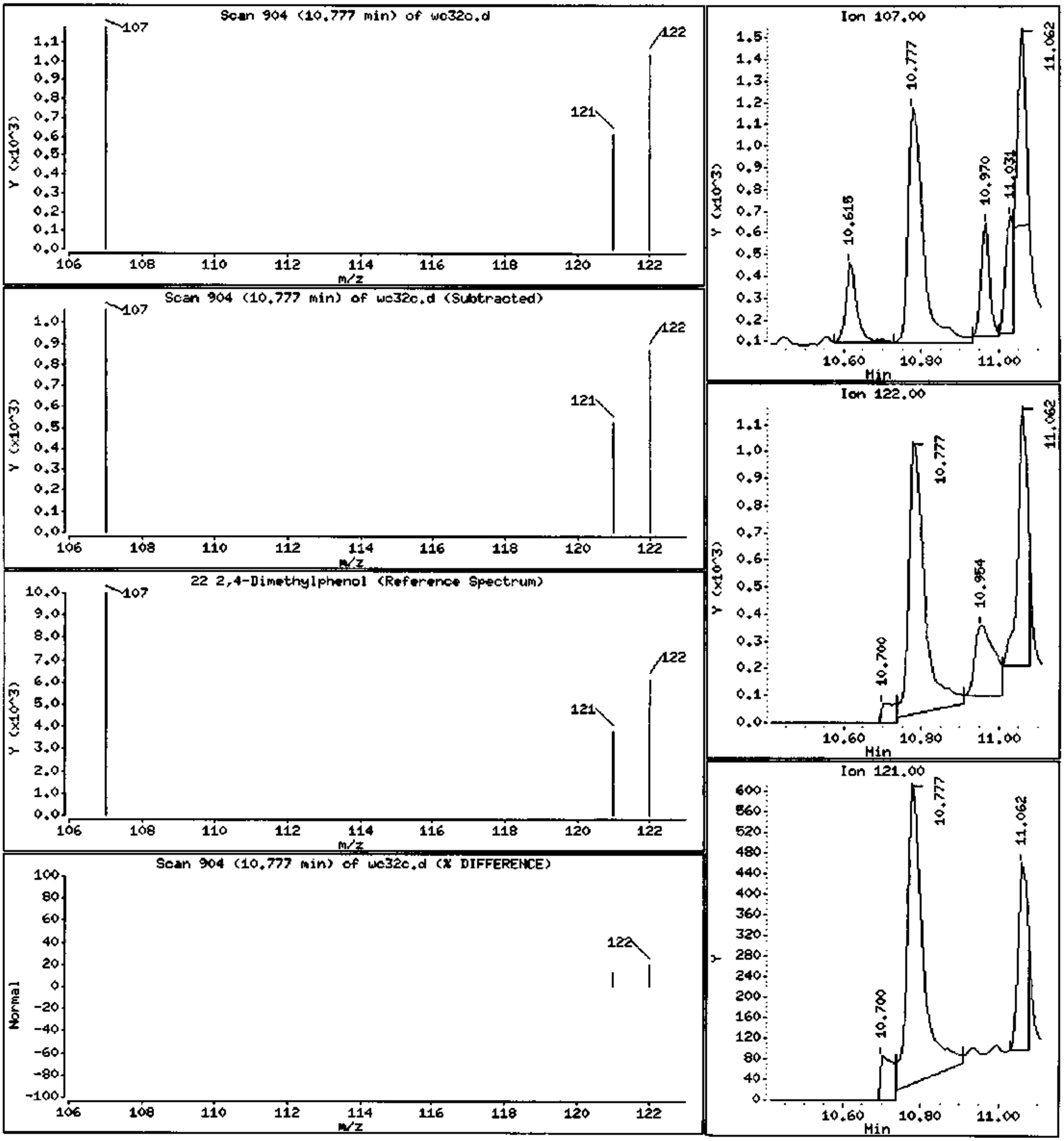
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

22 2,4-Dimethylphenol

Concentration: 27.55 ug/kg



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Date : 15-FEB-2013 19:52

Client ID: SG-07-0-10-013113

Instrument: nt10.i

Sample Info: WC32C

Volume Injected (uL): 1.0

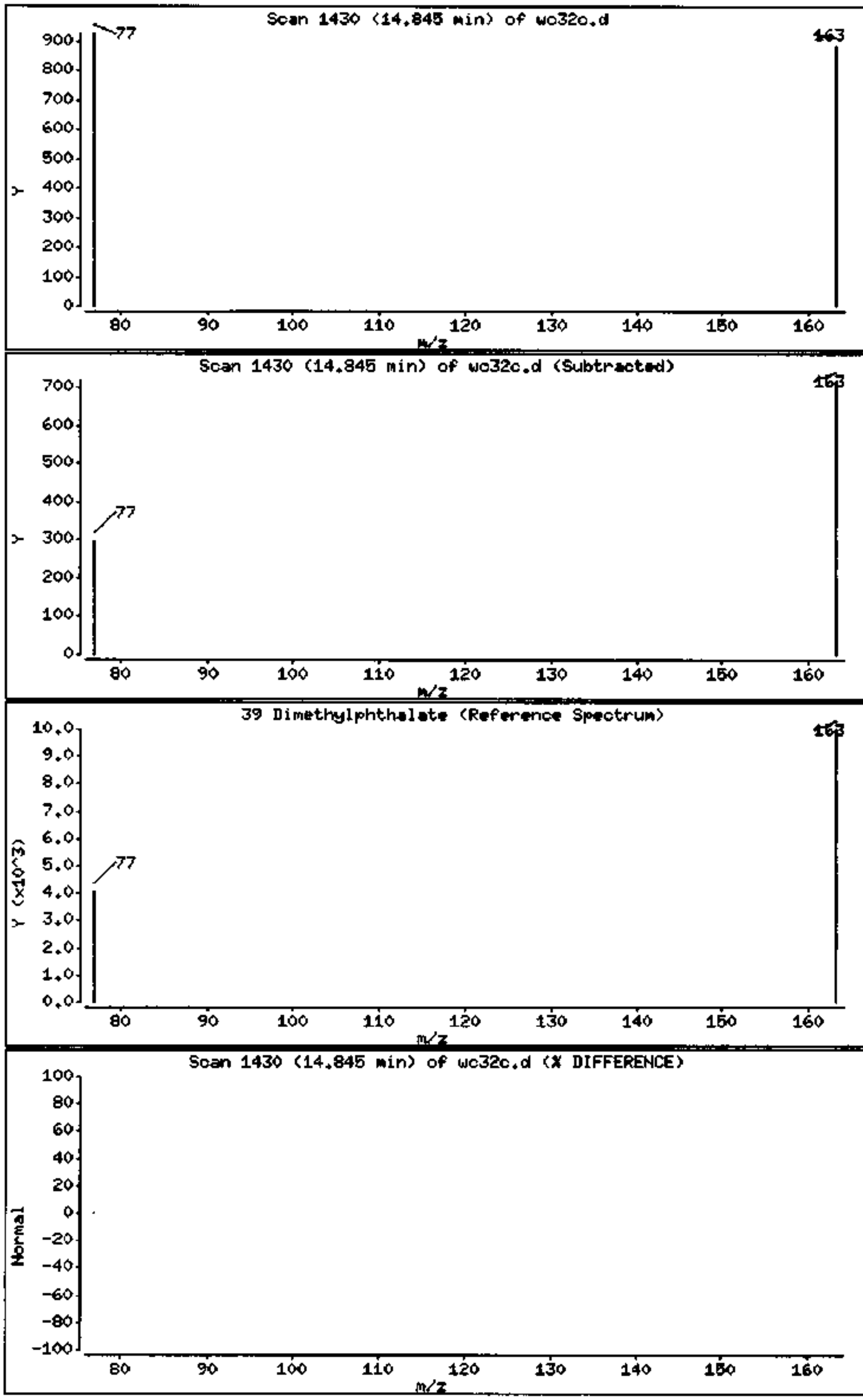
Operator: VTS/YZ

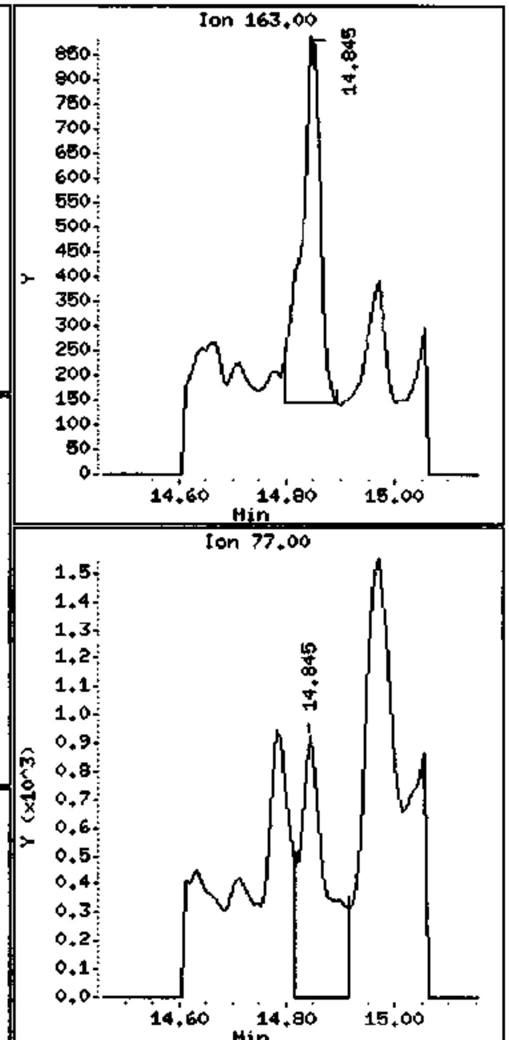
Column phase: ZB-5msi

Column diameter: 0.25

39 Dimethylphthalate

Concentration: 8.167 ug/kg





Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32c.d

Page 14

Date : 15-FEB-2013 19:52

Client ID: SG-07-0-10-013113

Instrument: nt10.i

Sample Info: WC32C

Volume Injected (uL): 1.0

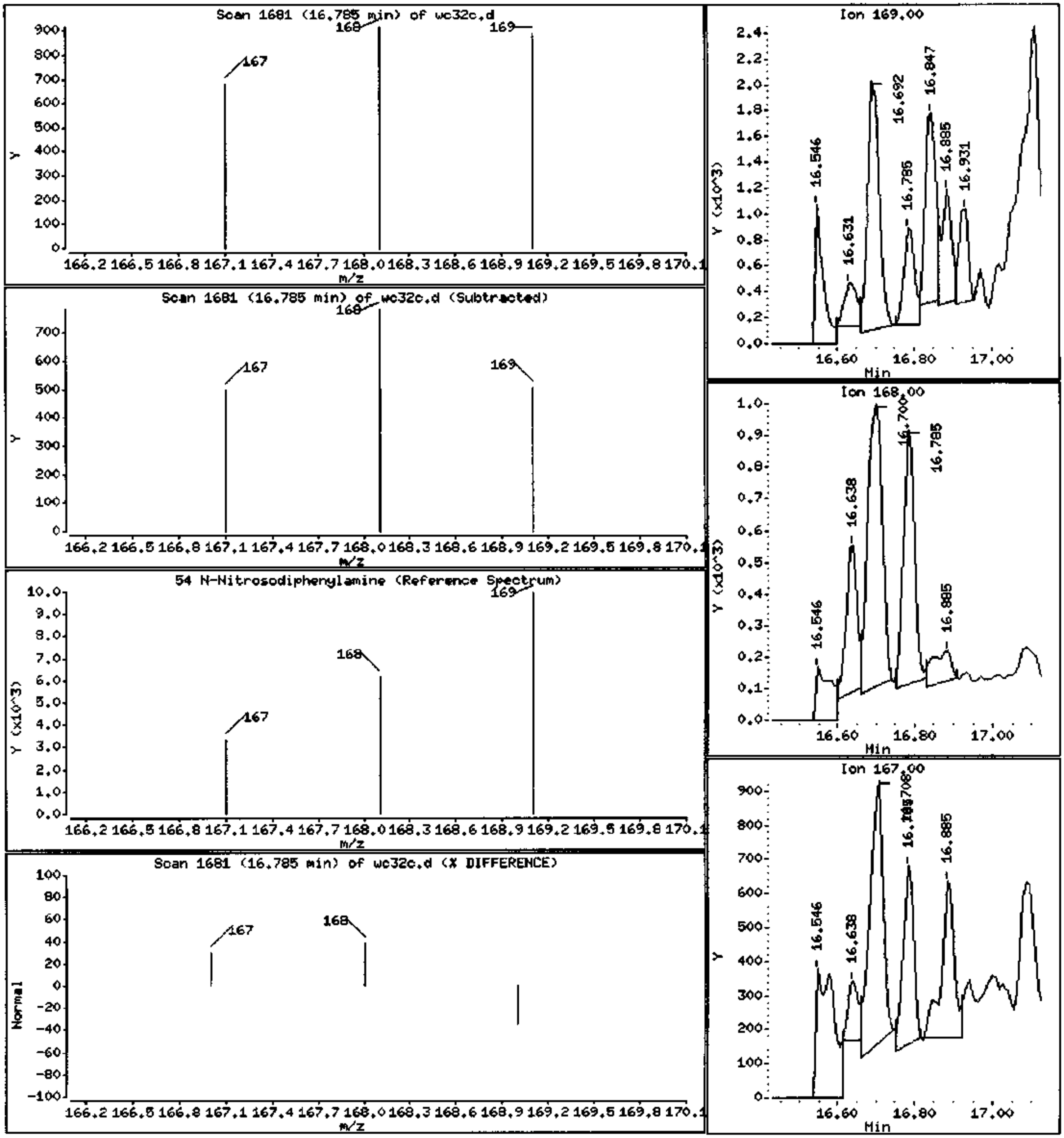
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

54 N-Nitrosodiphenylamine

Concentration: 9.032 ug/kg



Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32c.d

Date : 15-FEB-2013 19:52

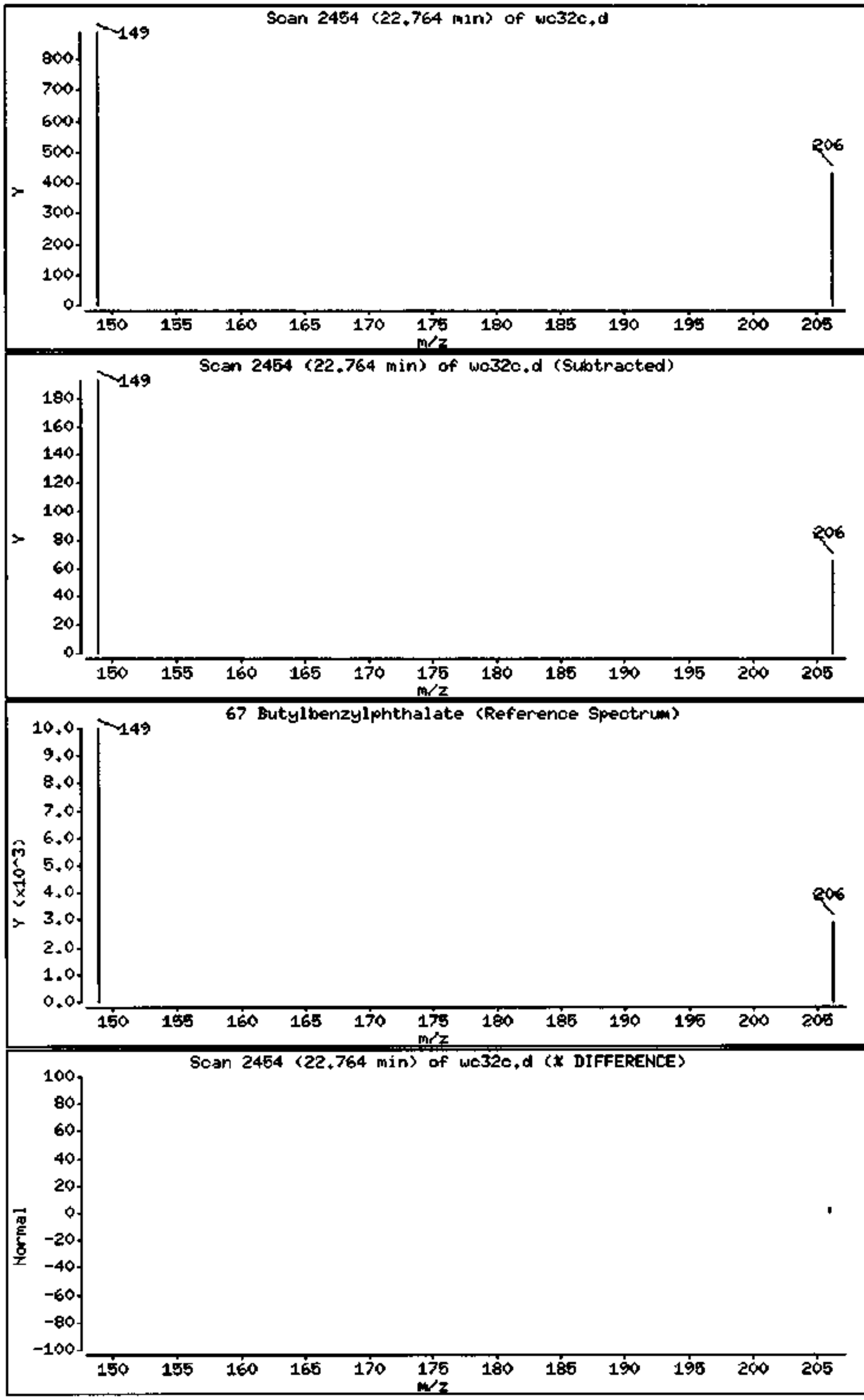
Client ID: SG-07-0-10-013113 Instrument: nt10.i

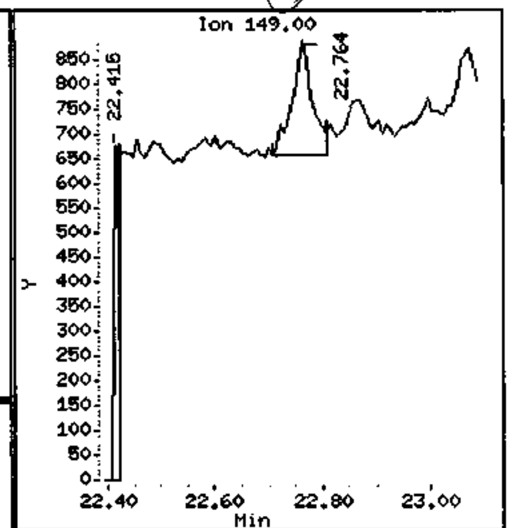
Sample Info: WC32C

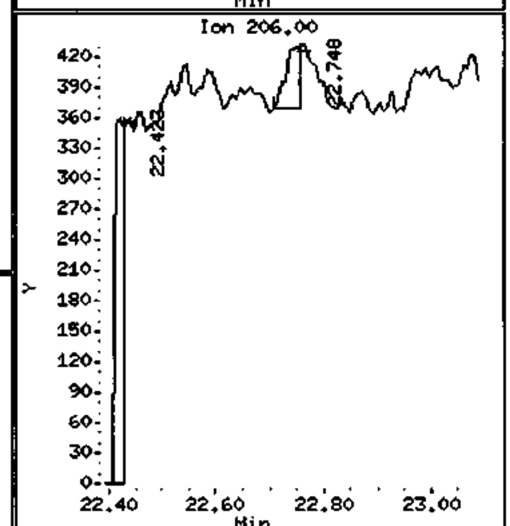
Volume Injected (uL): 1.0 Operator: VTS/YZ

Column phase: ZB-5msi Column diameter: 0.25

67 Butylbenzylphthalate Concentration: 3.691 ug/kg







Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32c.d

Date : 15-FEB-2013 19:52

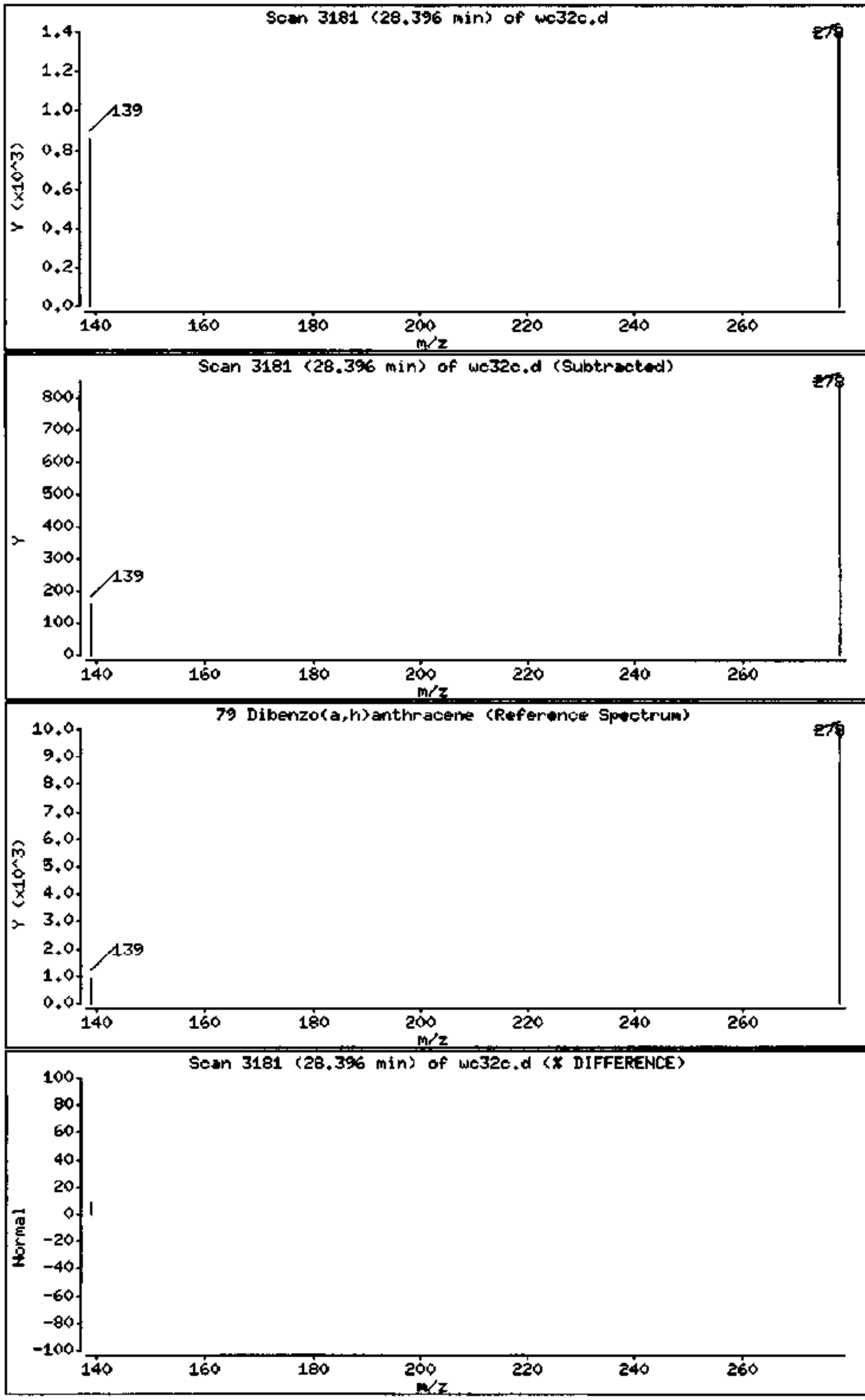
Client ID: SG-07-0-10-013113 Instrument: nt10.i

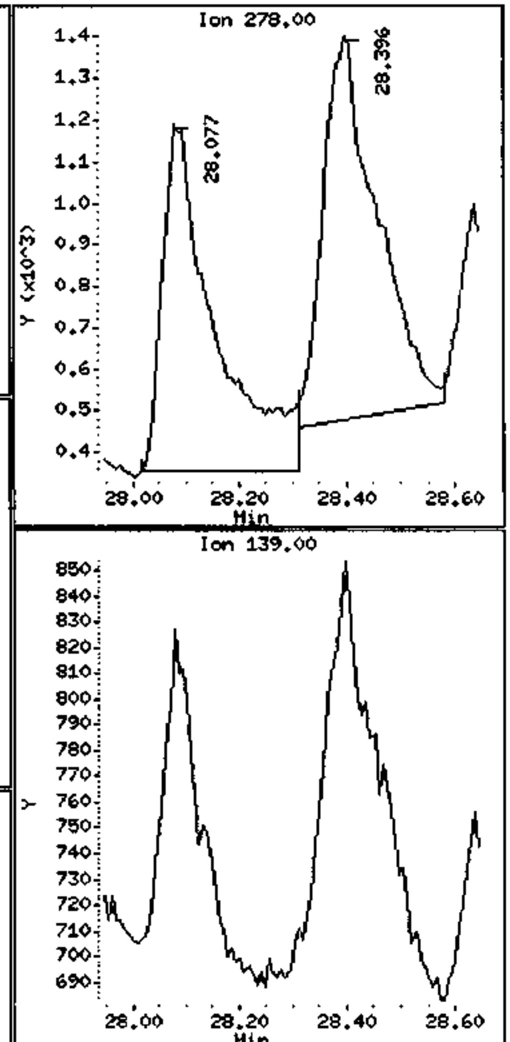
Sample Info: WC32C

Volume Injected (uL): 1.0 Operator: VTS/YZ

Column phase: ZB-5msi Column diameter: 0.25

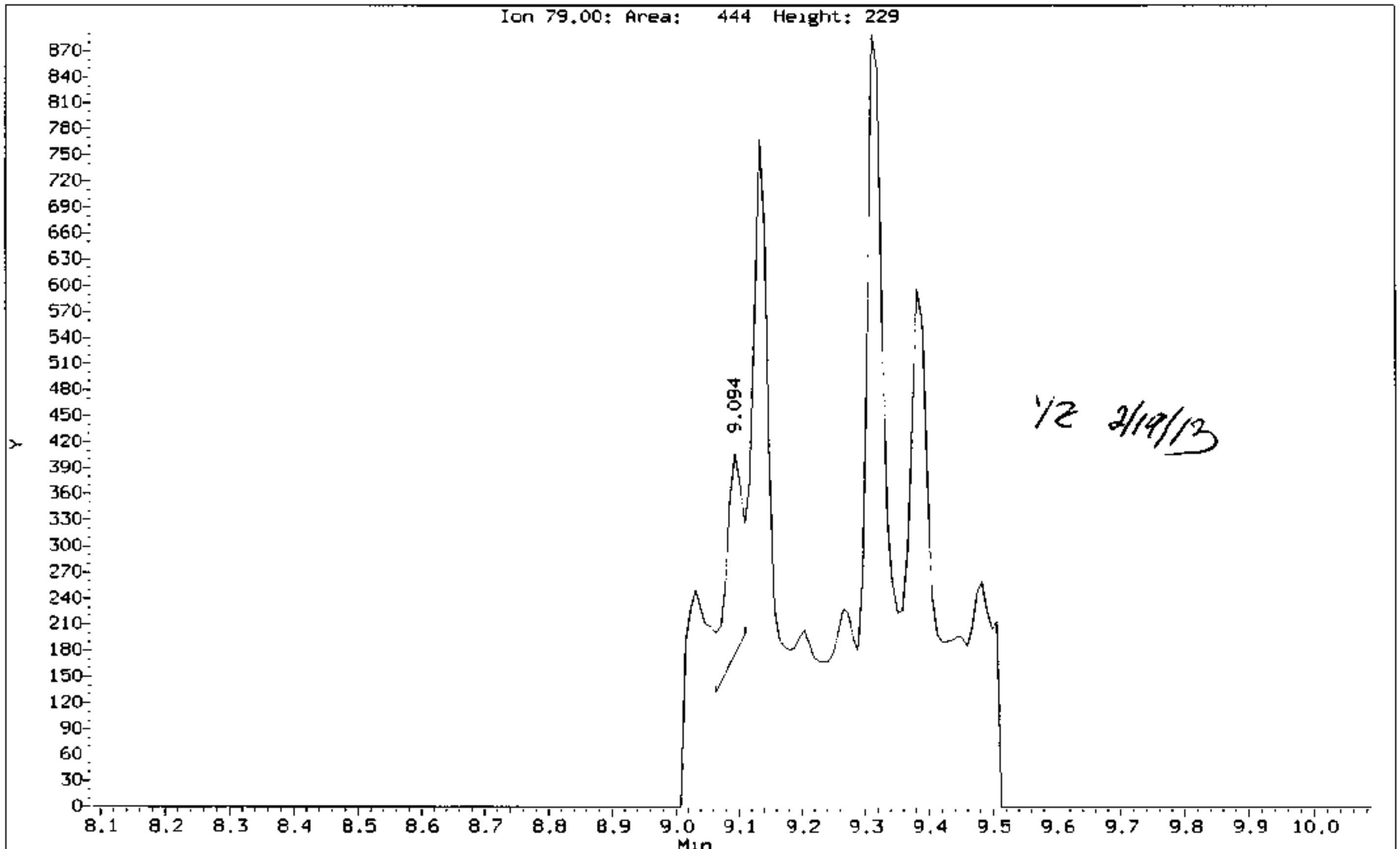
79 Dibenzo(a,h)anthracene Concentration: 17.39 ug/kg

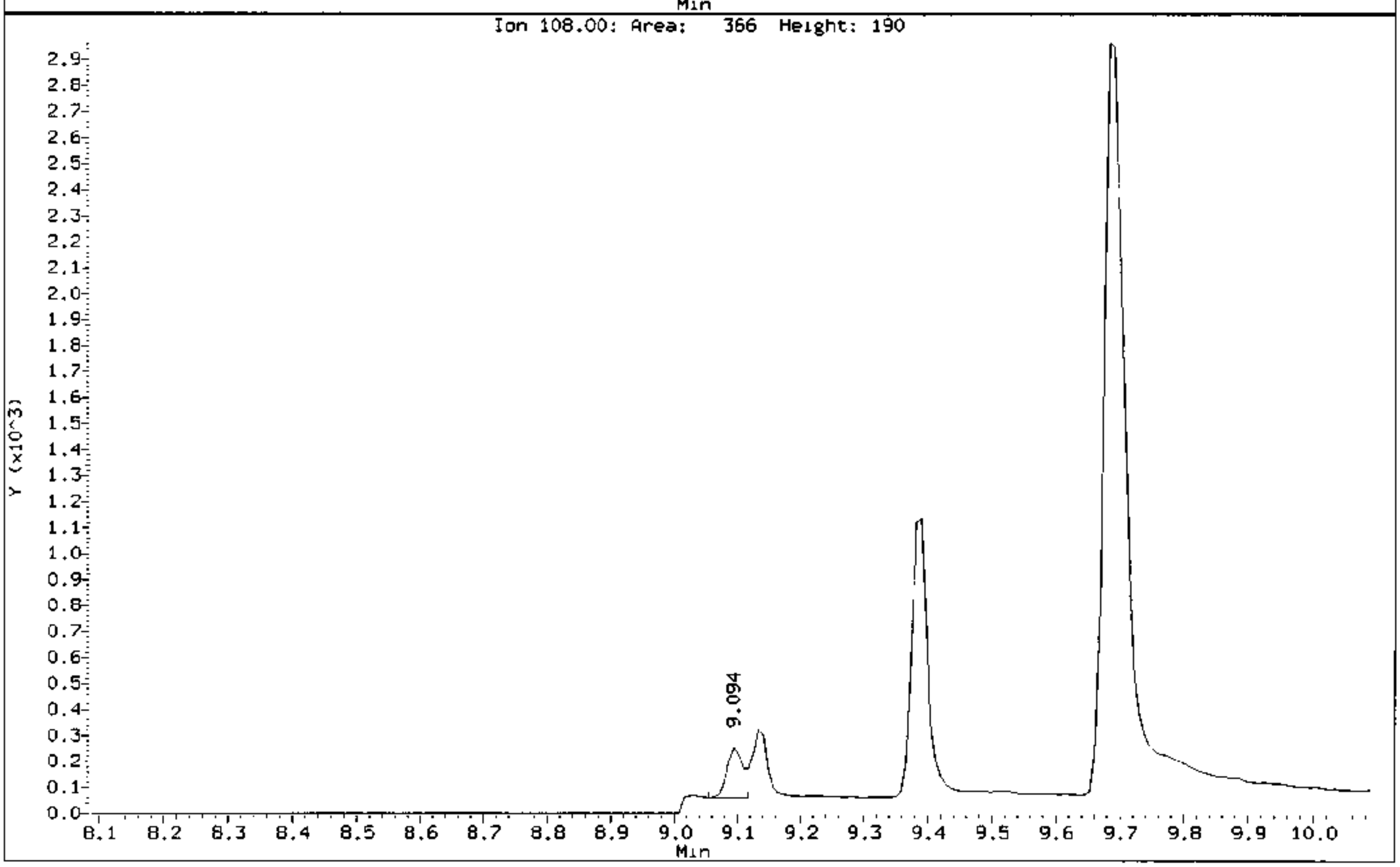




Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32c.d
Injection Date: 15-FEB-2013 19:52
Instrument: nt10.i
Client Sample ID: SG-07-0-10-013113

Compound: Benzyl alcohol
CAS Number: 100-51-6

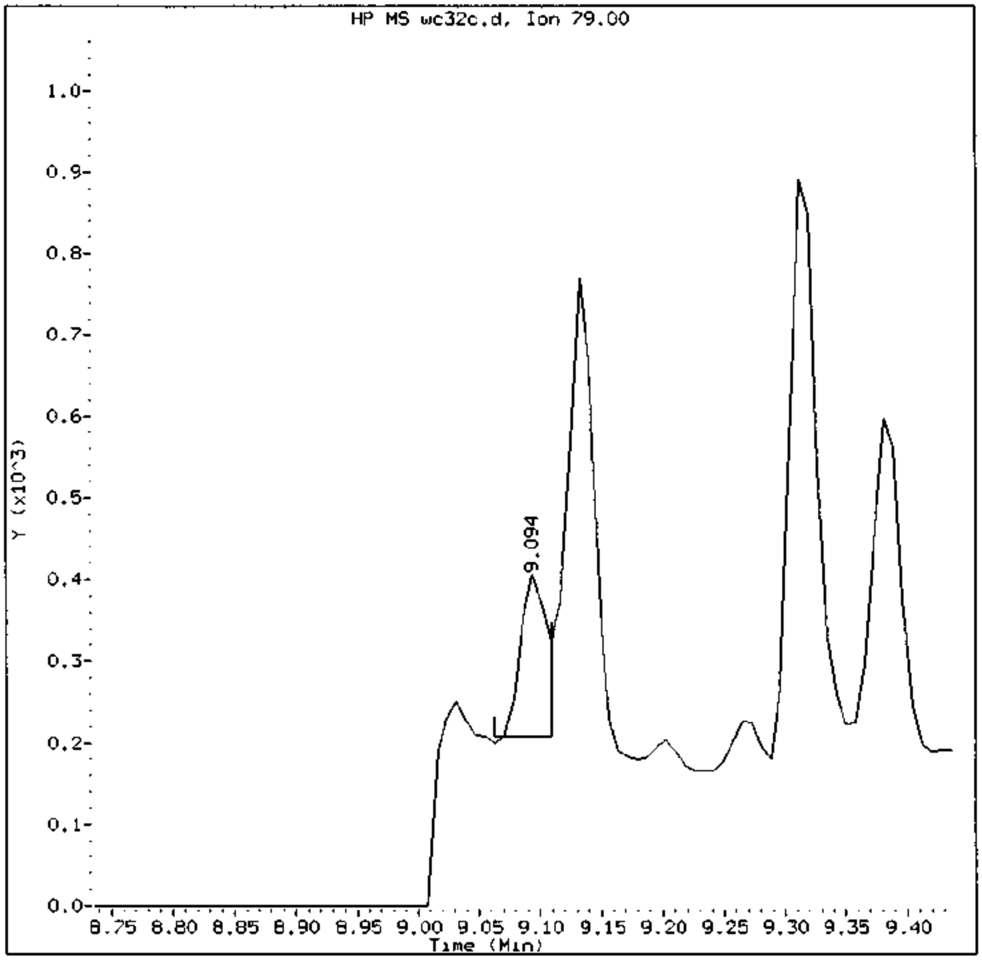




WC32:01166

WC32C, /chem1/nt10.i/20130215.b/SIM.b/wc32c.d

Benzyl alcohol   Amount: 0.04   Area: 306



MANUAL INTEGRATION for Benzyl alcohol

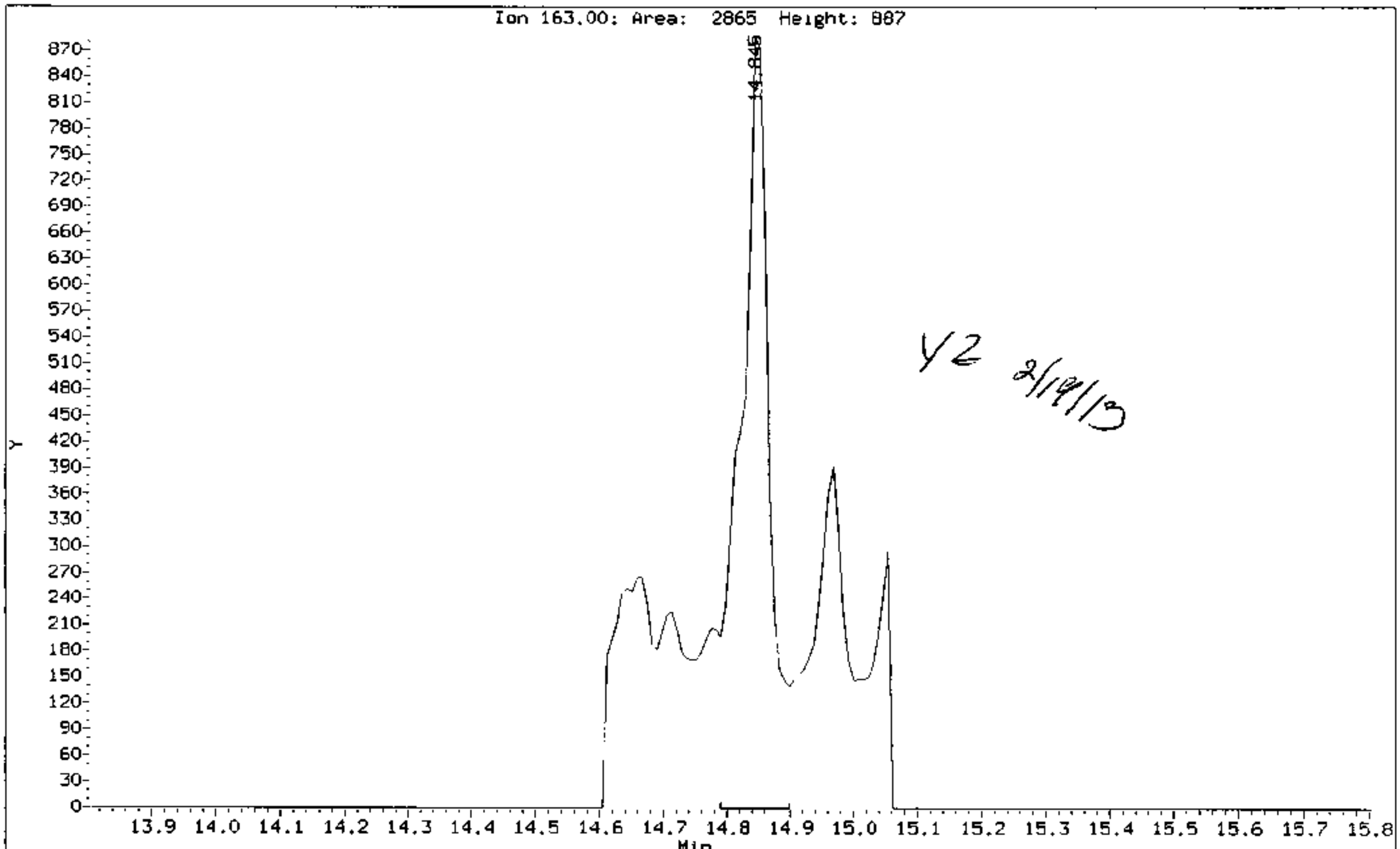
1. Baseline correction ✓
2. Poor chromatography
3. Peak not found
4. Totals calculation

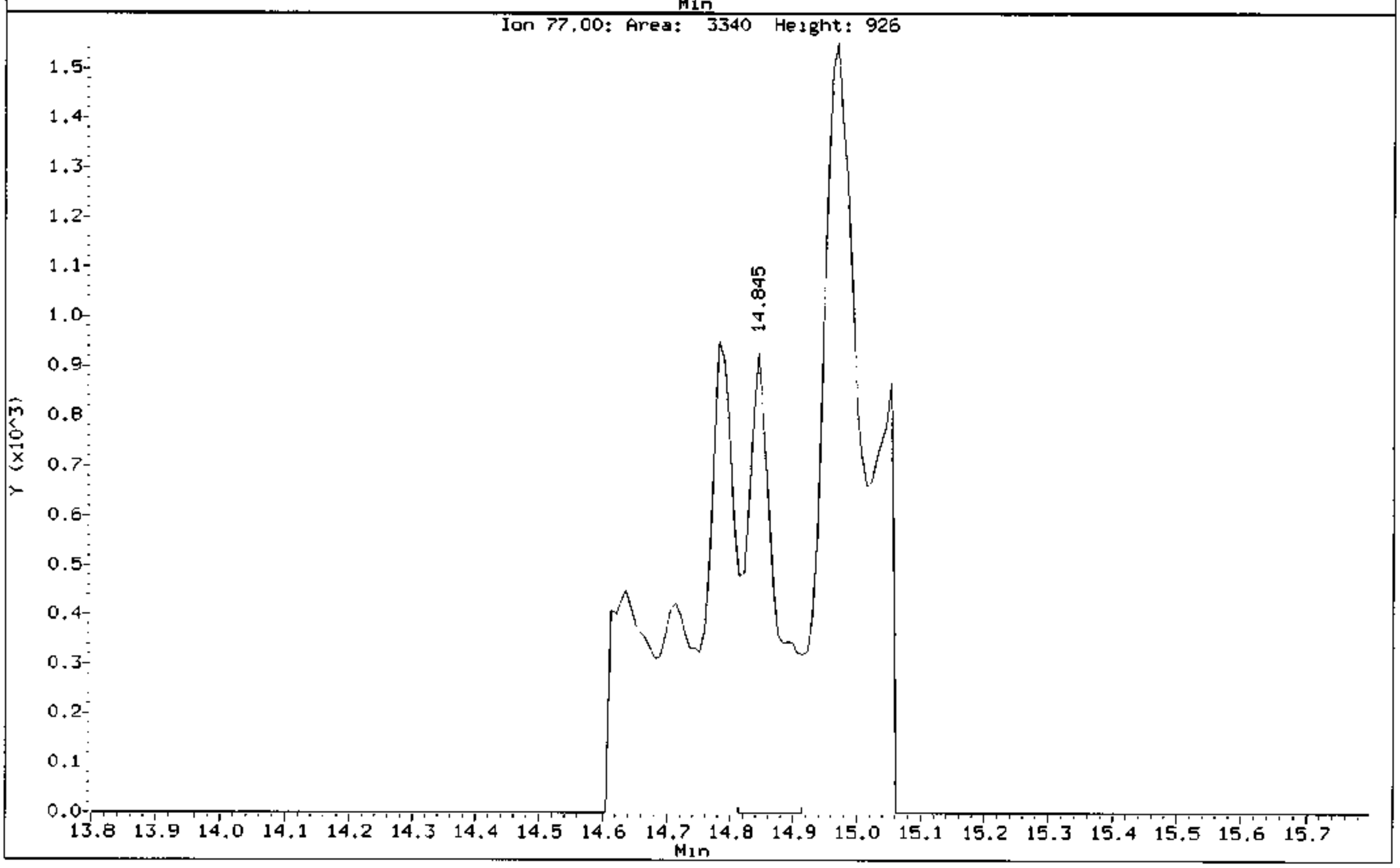
5. Other ______________________________

Analyst: YZ   Date: 2/19/13

Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32c.d
Injection Date: 15-FEB-2013 19:52
Instrument: nt10.i
Client Sample ID: SG-07-0-10-013113

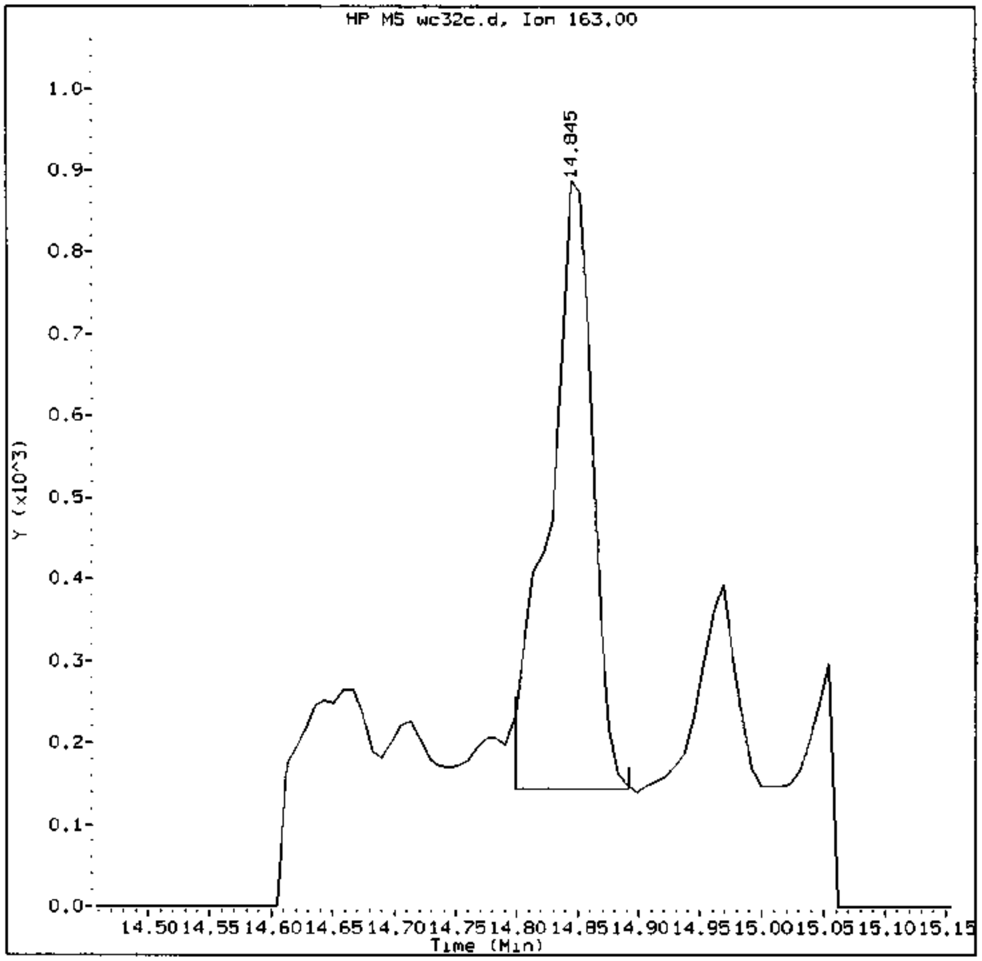
Compound: Dimethylphthalate
CAS Number: 131-11-3





WC32C, /chem1/nt10.i/20130215.b/SIM.b/wc32c.d

Dimethylphthalate   Amount: 0.08   Area: 1831



MANUAL INTEGRATION for Dimethylphthalate

1. Baseline correction ✓
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other ____________________

Analyst: VZ   Date: 2/19/13

CO-ELUTION SUMMARY FOR FILE - wc32c.d

Lab ID: WC32C, Method: SIM.b/SIMABN2.m, Instrument: nt10.i, Date: 15-FEB-2013

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Analytical Resources, Inc.

YZ 2/19/13

METHOD 8270D-SIM

Data file : /chem1/nt10.i/20130215.b/SIM.b/wc32d.d
Lab Smp Id: WC32D Client Smp ID: SG-06-0-10-013113
Inj Date : 15-FEB-2013 20:28
Operator : VTS/YZ Inst ID: nt10.i
Smp Info : WC32D
Misc Info : 13-2427
Comment :
Method : /chem1/nt10.i/20130215.b/SIM.b/SIMABN2.m
Meth Date : 19-Feb-2013 14:01 yev Quant Type: ISTD
Cal Date : 25-JAN-2013 17:53 Cal File: ic0125i.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Ws	17.30000	Weight of sample extracted (g)
M	41.00000	% Moisture

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
$	1 2-Fluorophenol	112	6.503	6.464	(0.742)	48774	4.51784	442.6
	3 Phenol	94	8.234	8.203	(0.940)	39780	2.90134	284.3
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	8.760	8.752	(1.000)	33933	4.00000	
	9 1,4-Dichlorobenzene	146	8.791	8.783	(1.004)	447	0.03252	3.186(M)
	11 Benzyl alcohol	79	9.094	9.086	(1.038)	6488	0.79863	78.24(M)
	12 1,2-Dichlorobenzene	146	9.163	9.156	(1.046)	343	0.02635	2.582
	13 2-Methylphenol	108	9.396	9.366	(1.073)	398	0.03858	3.780
	15 4-Methylphenol	108	9.691	9.668	(1.106)	5444	0.50956	49.92
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	10.777	10.762	(0.945)	532	0.04628	4.534
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	11.402	11.394	(1.000)	133338	4.00000	
	30 Hexachlorobutadiene	225	Compound Not Detected.					

							CONCENTRATIONS	
		QUANT SIG					ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/kg)
	39 Dimethylphthalate	163	14.814	14.806	(0.969)	3487	0.15885	15.56(M)
*	42 Acenaphthene-d10	162	15.293	15.278	(1.000)	72106	4.00000	
	50 Diethylphthalate	149	16.407	16.384	(1.073)	3911	0.15250	14.94
	54 N-Nitrosodiphenylamine	169	16.793	16.777	(0.904)	1008	0.06226	6.099
	57 Hexachlorobenzene	284	Compound Not Detected.					
	58 Pentachlorophenol	266	18.345	18.314	(0.987)	3000	0.48227	47.25
*	59 Phenanthrene-d10	188	18.585	18.554	(1.000)	139278	4.00000	
$	66 Terphenyl-d14	244	21.819	21.788	(0.921)	93701	4.13523	405.1
	67 Butylbenzylphthalate	149	22.764	22.741	(0.960)	4576	0.28074	27.50
*	69 Chrysene-d12	240	23.701	23.662	(1.000)	170533	4.00000	
*	77 Perylene-d12	264	26.124	26.070	(1.000)	151563	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.404	28.295	(1.087)	15893	0.43995	43.10
	90 N-Nitrosodimethylamine	74	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: wc32d.d
Lab Smp Id: WC32D
Analysis Type: SV
Quant Type: ISTD
Operator: VTS/YZ
Method File: /chem1/nt10.i/20130215.b/SIM.b/SIMABN2.m
Misc Info: 13-2427

Calibration Date: 15-FEB-2013
Calibration Time: 11:56
Client Smp ID: SG-06-0-10-01311
Level: LOW
Sample Type: Sediment

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	53853	26926	107706	33933	-36.99
27 Naphthalene-d8	200104	100052	400208	133338	-33.37
42 Acenaphthene-d10	112392	56196	224784	72106	-35.84
59 Phenanthrene-d10	210710	105355	421420	139278	-33.90
69 Chrysene-d12	240805	120402	481610	170533	-29.18
77 Perylene-d12	230834	115417	461668	151563	-34.34

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.75	8.25	9.25	8.76	0.09
27 Naphthalene-d8	11.39	10.89	11.89	11.40	0.07
42 Acenaphthene-d10	15.28	14.78	15.78	15.29	0.10
59 Phenanthrene-d10	18.55	18.05	19.05	18.58	0.17
69 Chrysene-d12	23.66	23.16	24.16	23.70	0.16
77 Perylene-d12	26.07	25.57	26.57	26.12	0.21

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 19-Feb-2013 14:02

Analytical Resources, Inc.

RECOVERY REPORT

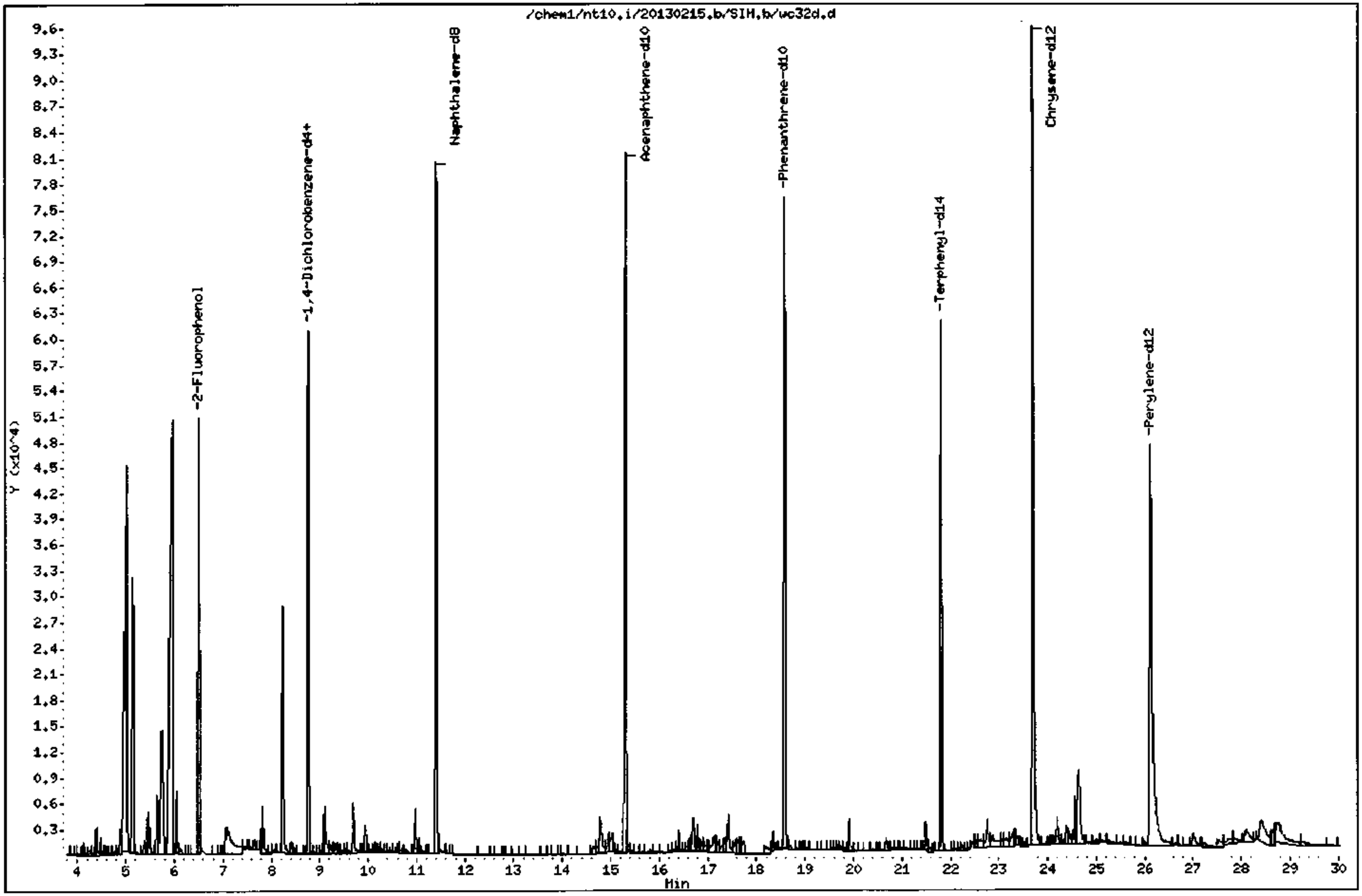
Client Name: Floyd-Snider
Sample Matrix: SOLID
Lab Smp Id: WC32D
Level: LOW
Data Type: MS DATA
SpikeList File: SHORTPSDDA.spk
Sublist File: PSDDA.sub
Method File: /chem1/nt10.i/20130215.b/SIM.b/SIMABN2.m
Misc Info: 13-2427

Client SDG: WC32
Fraction: SV
Client Smp ID: SG-06-0-10-013113
Operator: VTS/YZ
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 1 2-Fluorophenol	734.8	442.6	60.24	30-160
$ 66 Terphenyl-d14	489.9	405.1	82.70	30-160

Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32d.d
Date : 15-FEB-2013 20:28
Client ID: SG-06-0-10-013113
Sample Info: WC32D
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt10.i
Operator: VTS/YZ
Column diameter: 0.25



Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32d.d

Date : 15-FEB-2013 20:28

Client ID: SG-06-0-10-013113

Instrument: nt10.i

Sample Info: WC32D

Volume Injected (uL): 1.0

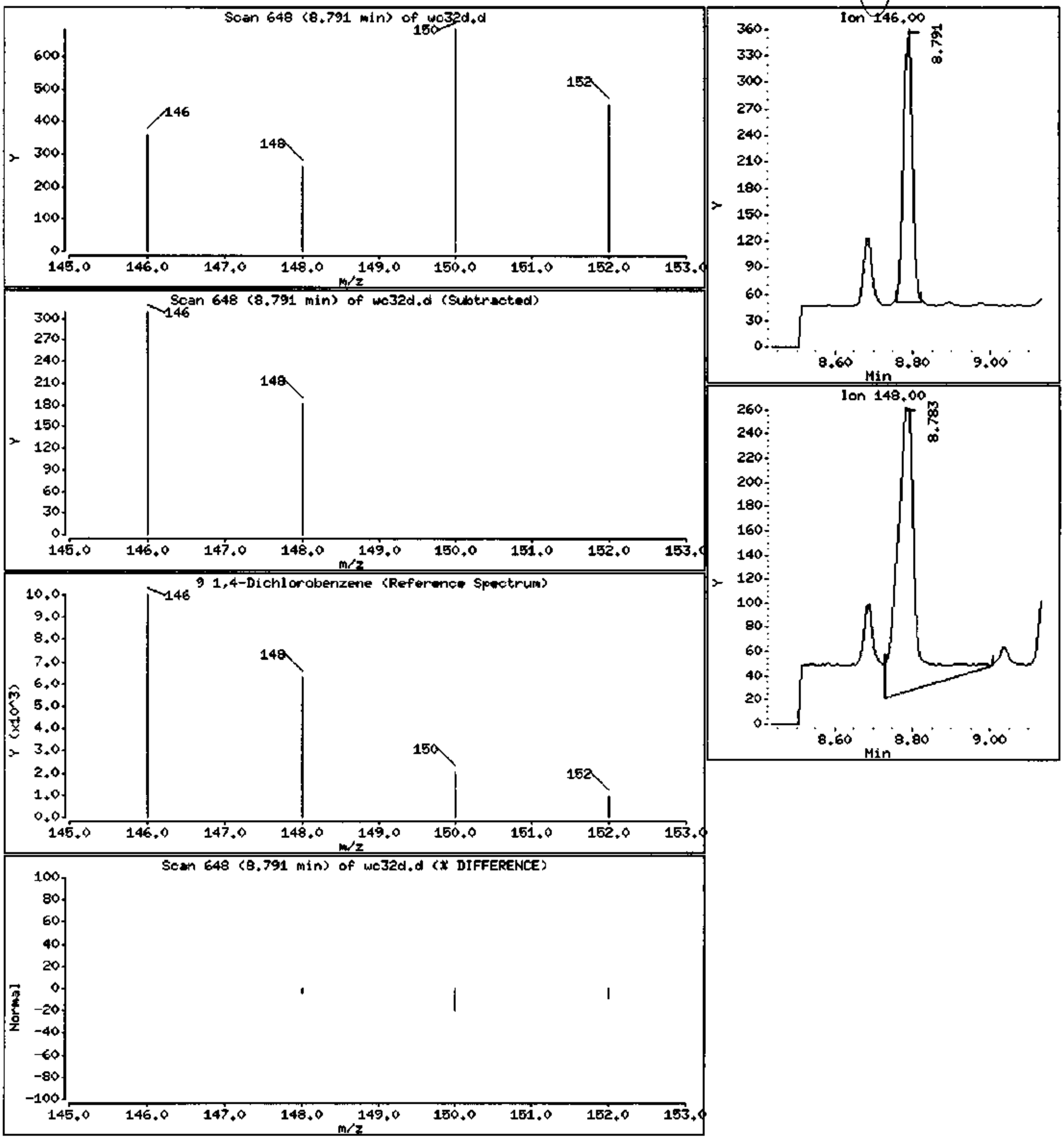
Operator: VTS/YZ

Column phase: ZB-5msi

Column diameter: 0.25

9 1,4-Dichlorobenzene

Concentration: 3.186 ug/kg



Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32d.d

Date : 15-FEB-2013 20:28

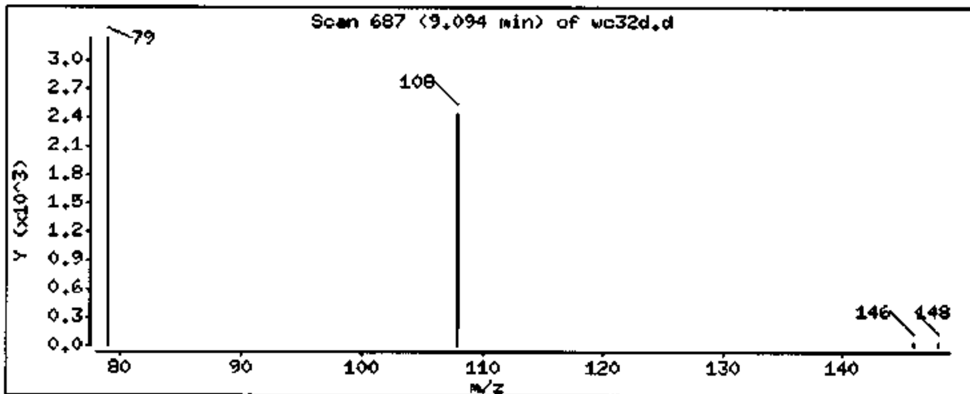
Client ID: SG-06-0-10-013113 Instrument: nt10.i

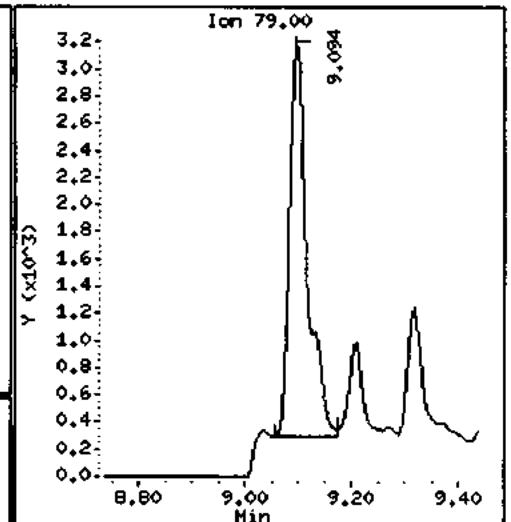
Sample Info: WC32D

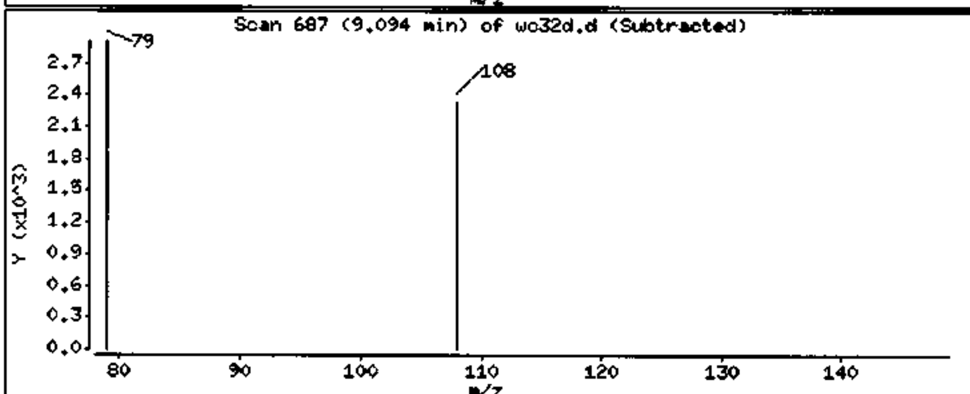
Volume Injected (uL): 1.0 Operator: VTS/YZ

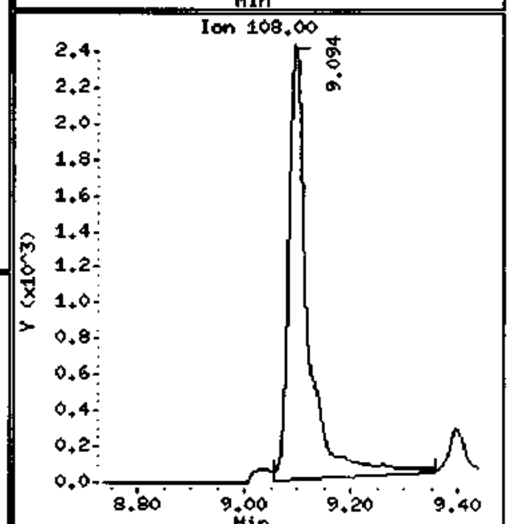
Column phase: ZB-5msi Column diameter: 0.25

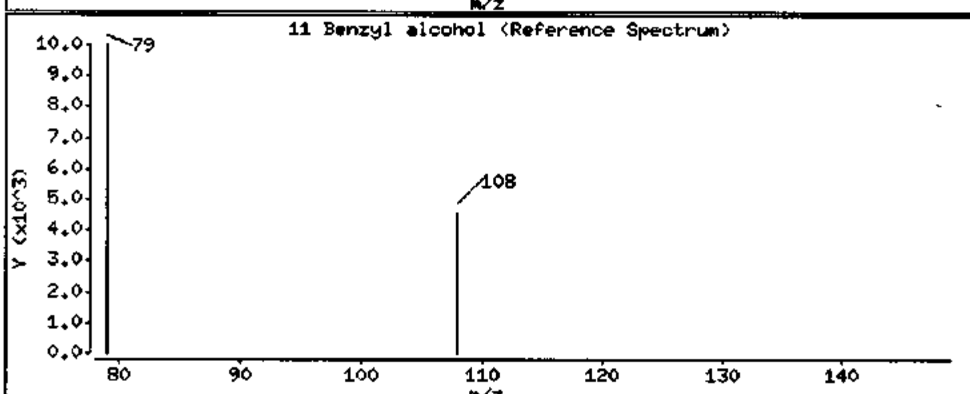
11 Benzyl alcohol Concentration: 78.24 ug/kg

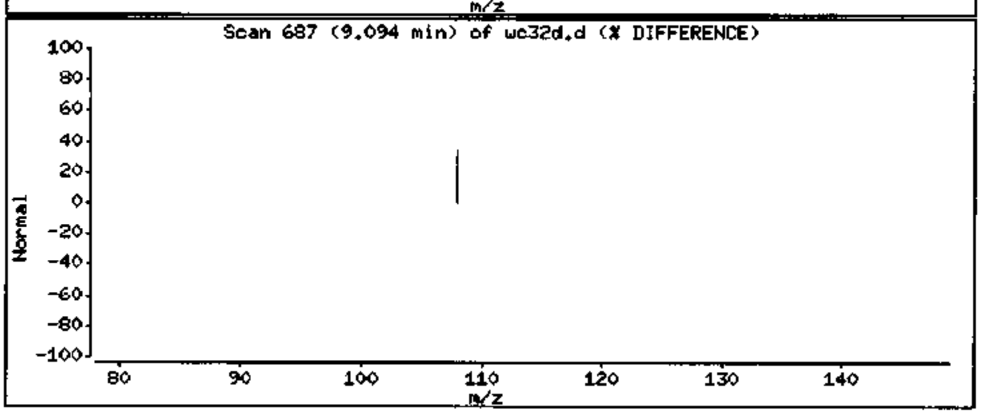












Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32d.d

Date : 15-FEB-2013 20:28

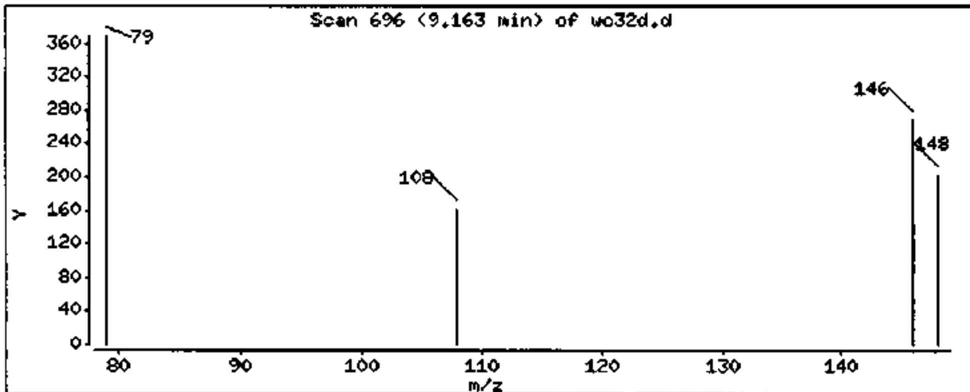
Client ID: SG-06-0-10-013113 Instrument: nt10.i

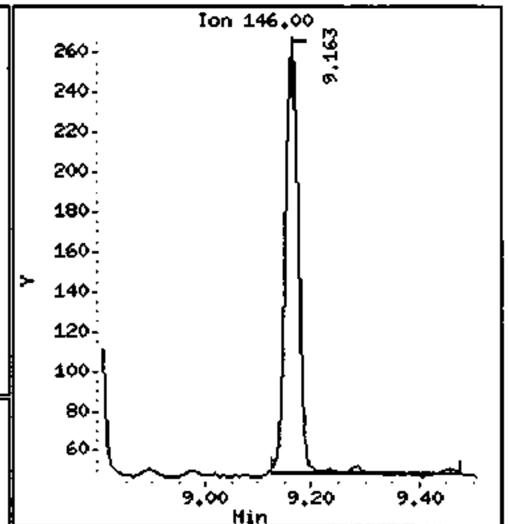
Sample Info: WC32D

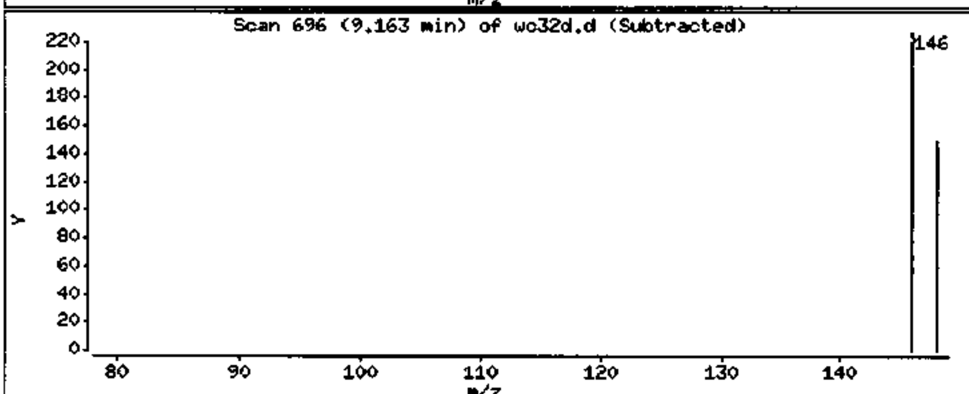
Volume Injected (uL): 1.0 Operator: VTS/YZ

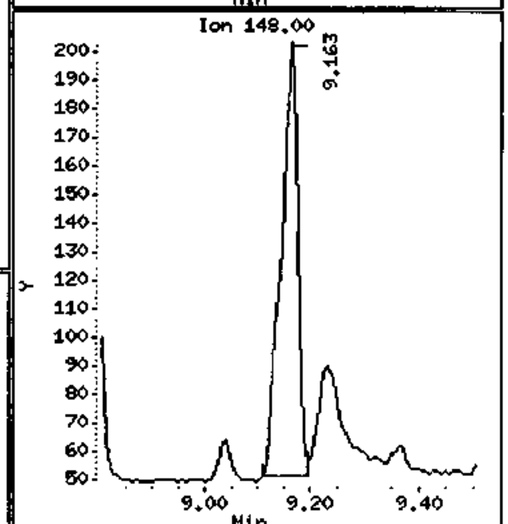
Column phase: ZB-5msi Column diameter: 0.25

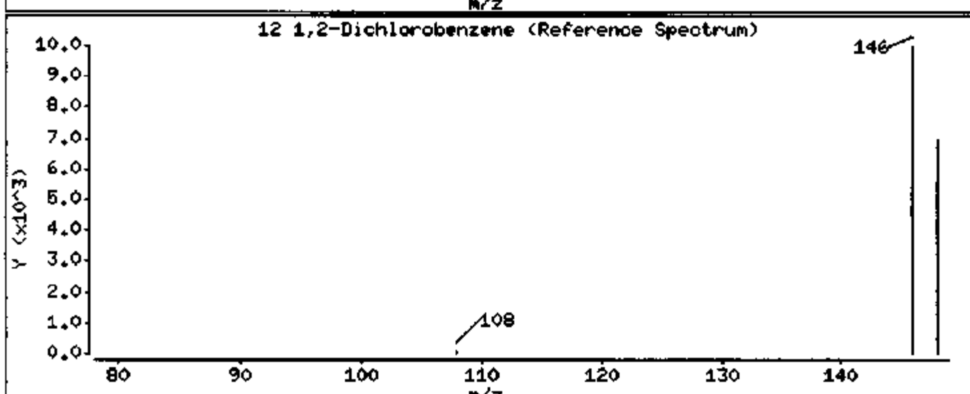
12 1,2-Dichlorobenzene Concentration: 2,582 ug/kg

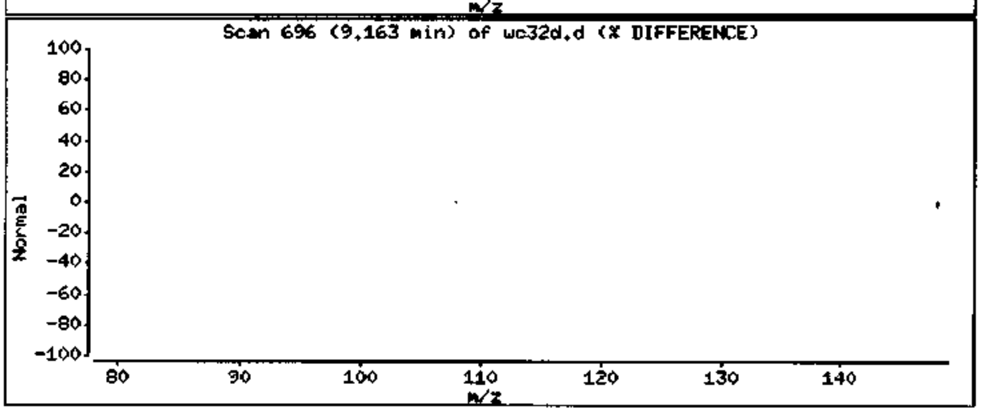












Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32d.d

Date : 15-FEB-2013 20:28

Client ID: SG-06-0-10-013113

Instrument: nt10.i

Sample Info: WC32D

Volume Injected (uL): 1.0

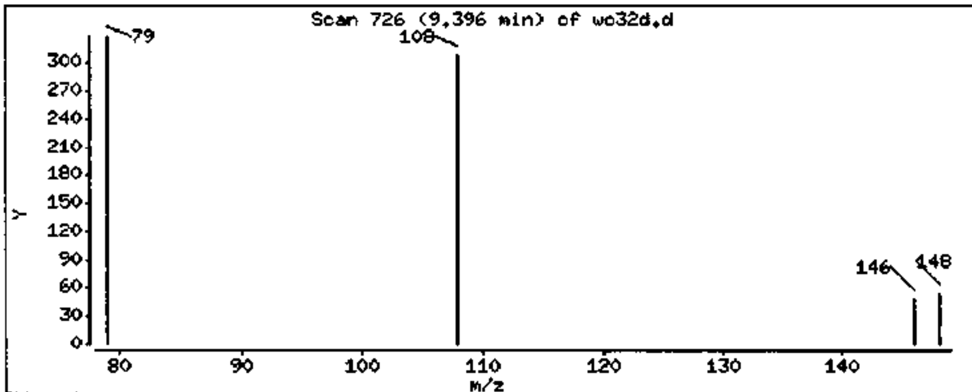
Operator: VTS/YZ

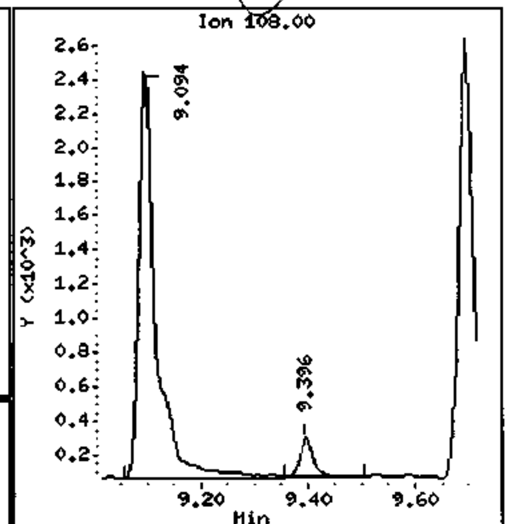
Column phase: ZB-5msi

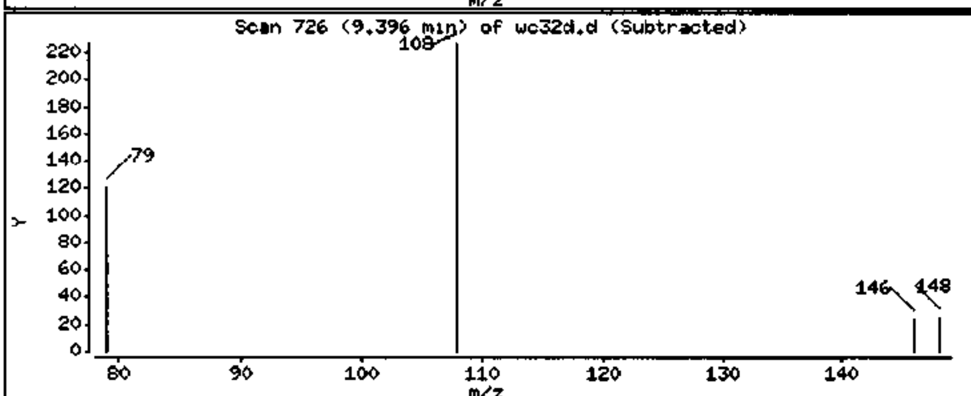
Column diameter: 0.25

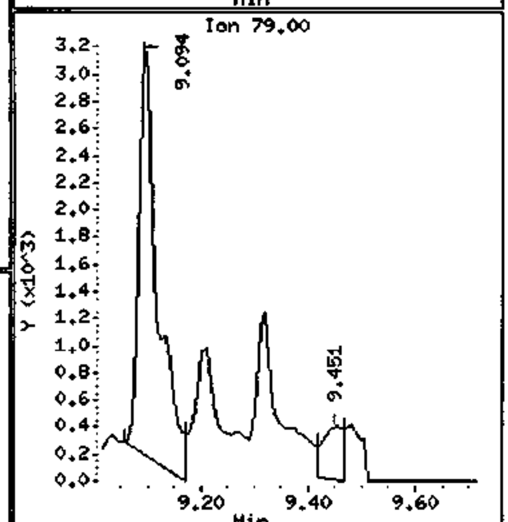
13 2-Methylphenol

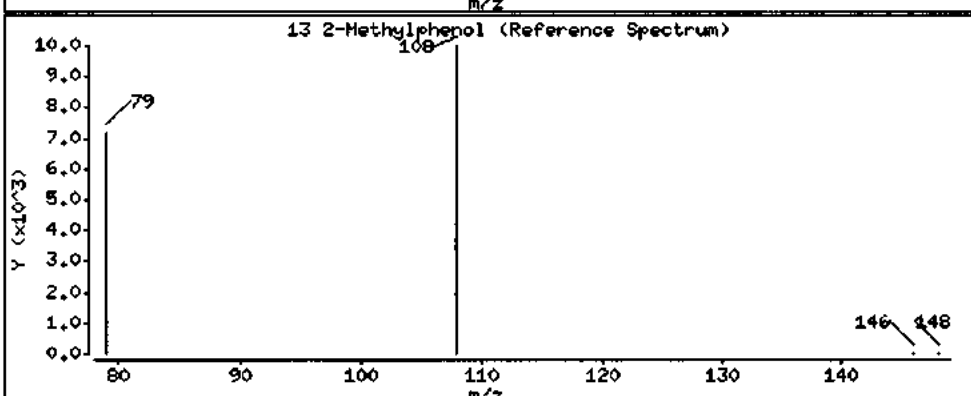
Concentration: 3.780 ug/kg

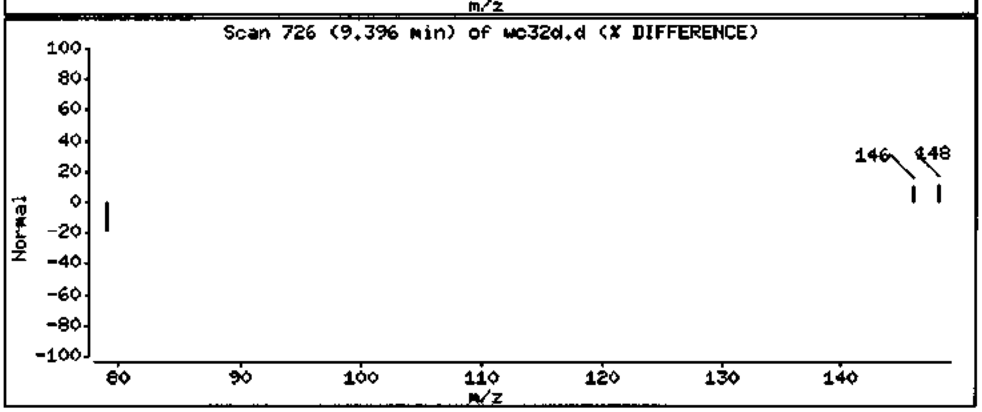












Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32d.d

Date : 15-FEB-2013 20:28

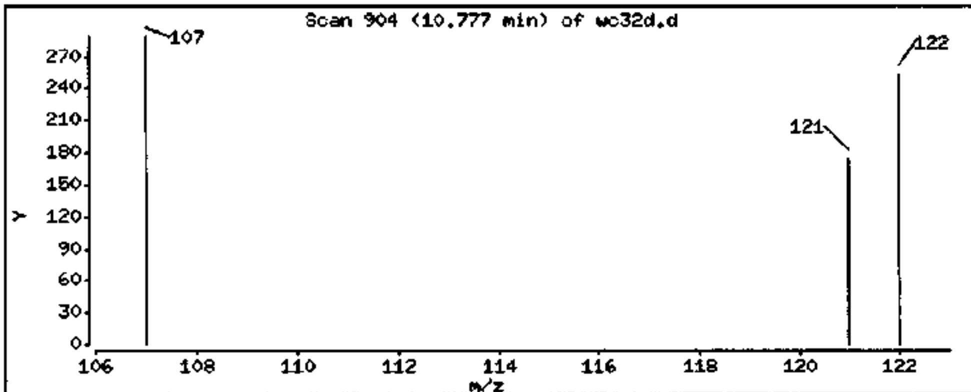
Client ID: SG-06-0-10-013113 | Instrument: nt10.i

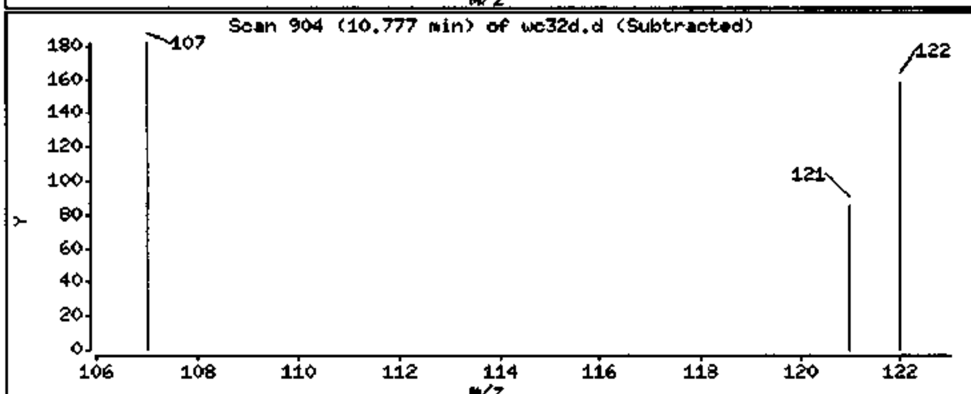
Sample Info: WC32D

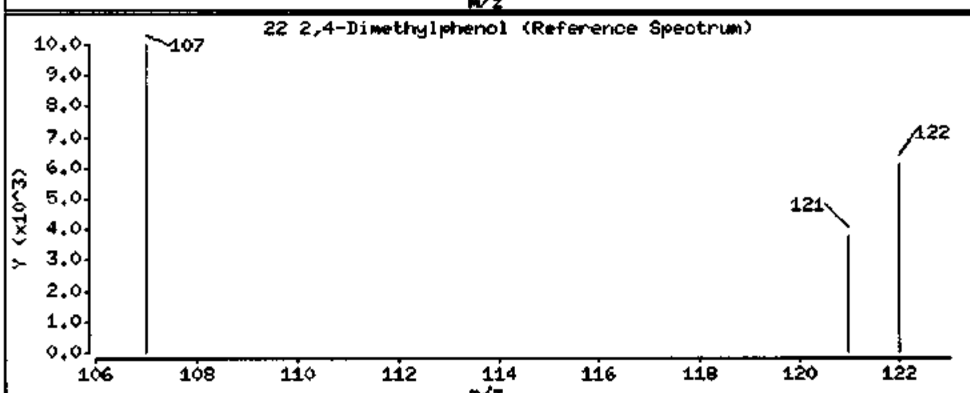
Volume Injected (uL): 1.0 | Operator: VTS/YZ

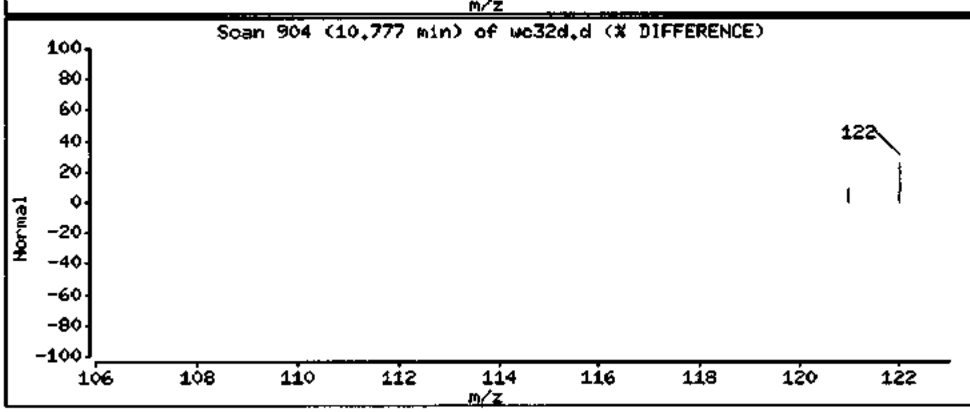
Column phase: ZB-5msi | Column diameter: 0.25

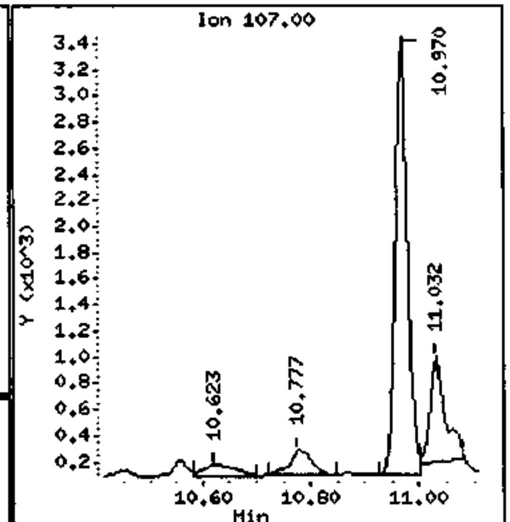
22 2,4-Dimethylphenol | Concentration: 4.534 ug/kg

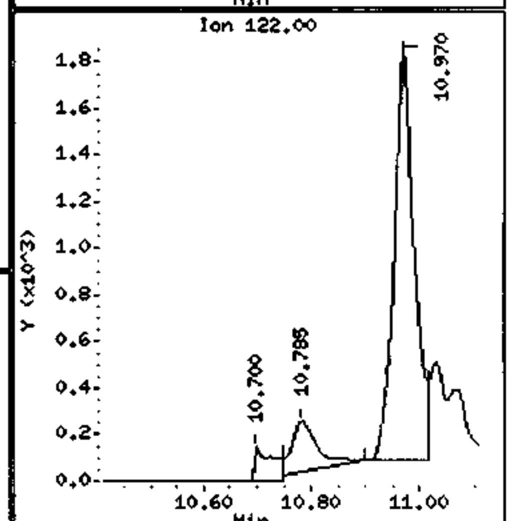


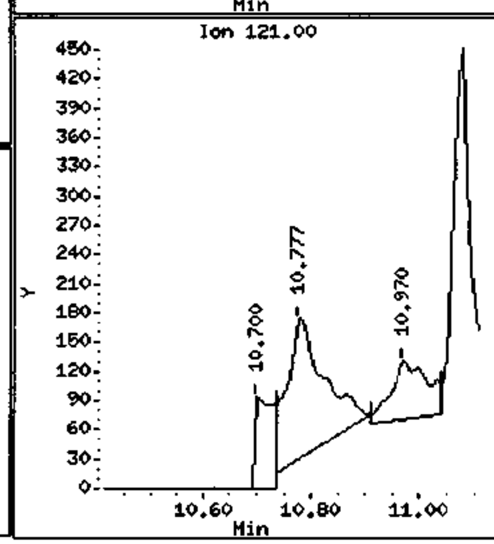












Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32d.d

Date : 15-FEB-2013 20:28

Client ID: SG-06-0-10-013113

Instrument: nt10.i

Sample Info: WC32D

Volume Injected (uL): 1.0

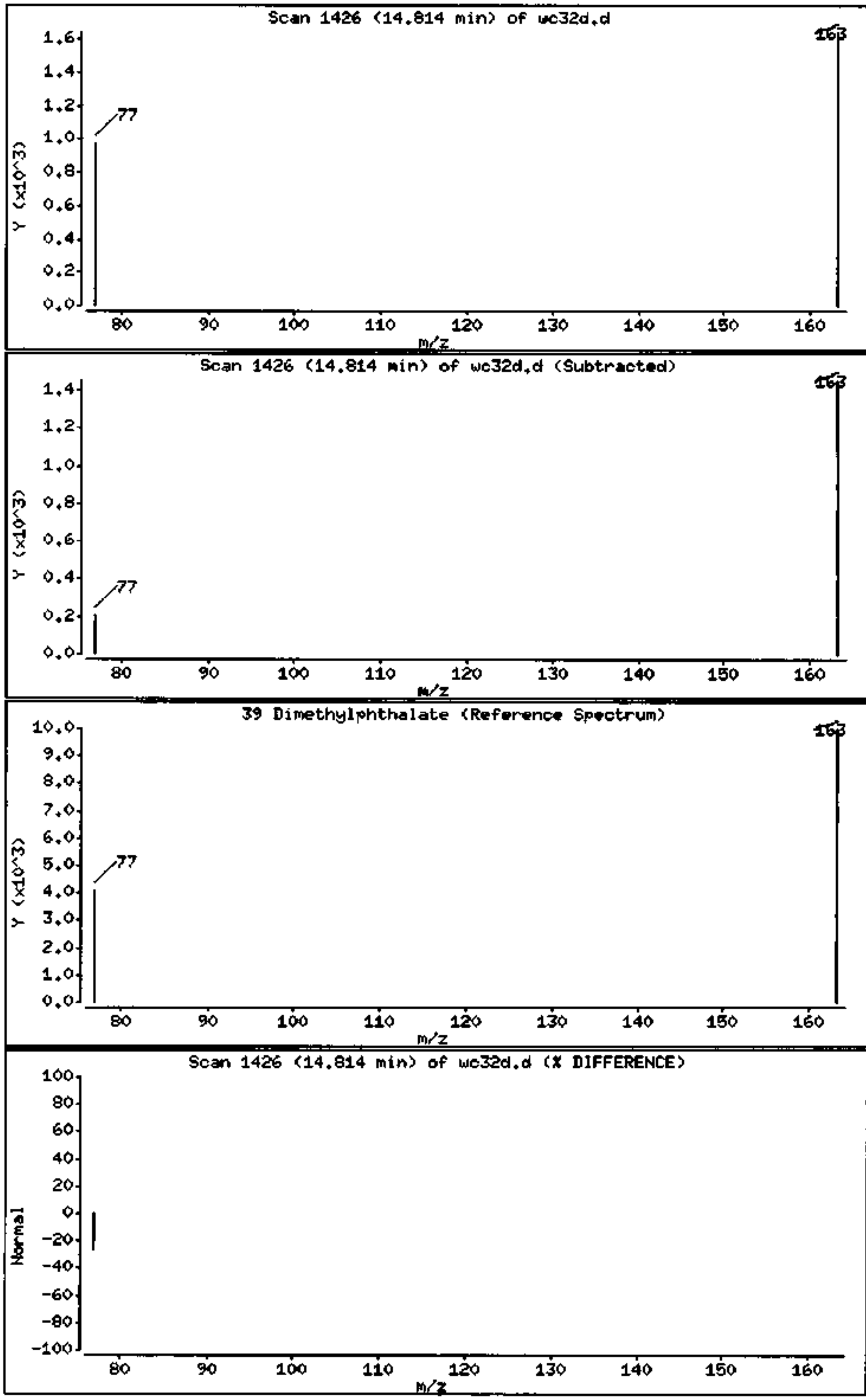
Operator: VTS/YZ

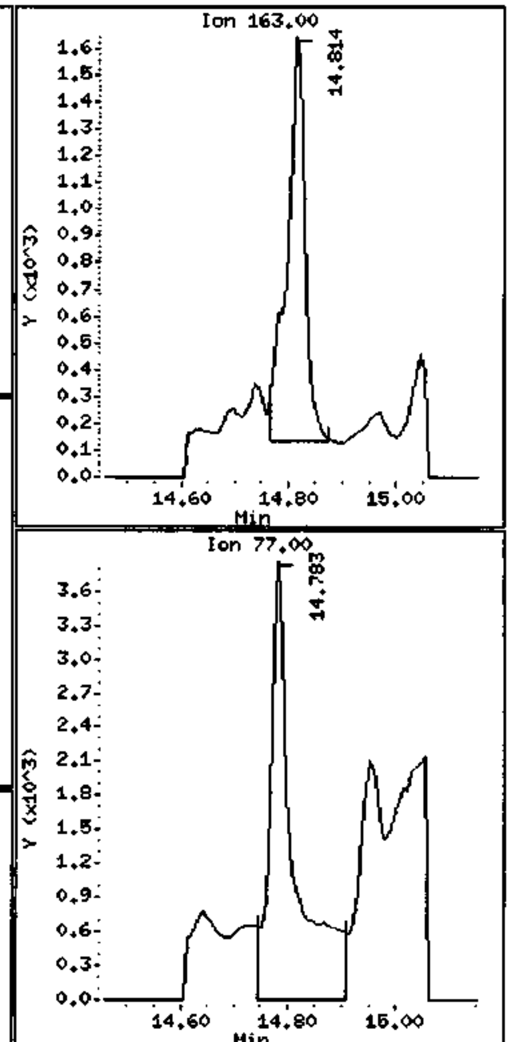
Column phase: ZB-5msi

Column diameter: 0.25

39 Dimethylphthalate

Concentration: 15.56 ug/kg





Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32d.d

Date : 15-FEB-2013 20:28

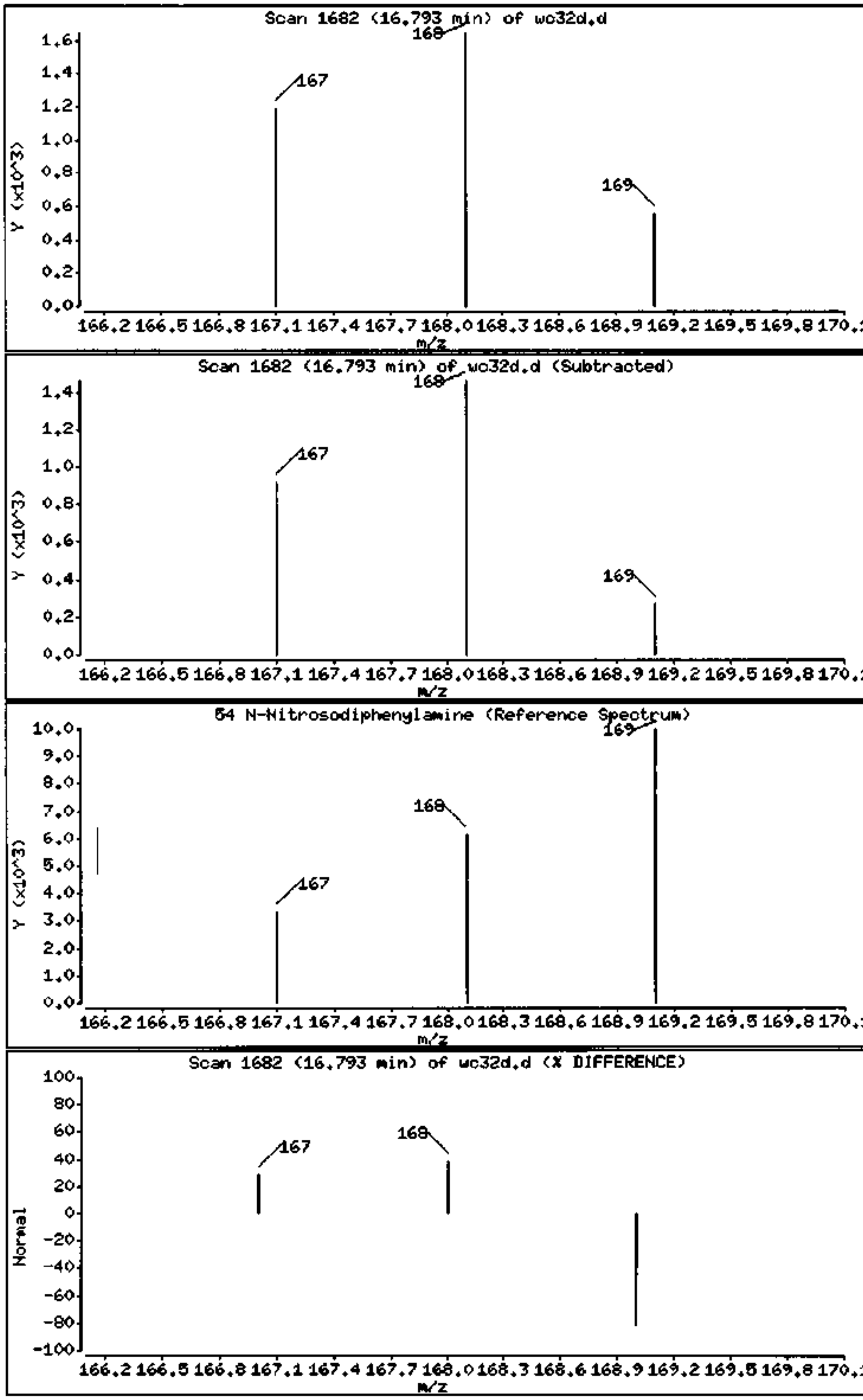
Client ID: SG-06-0-10-013113 Instrument: nt10.i

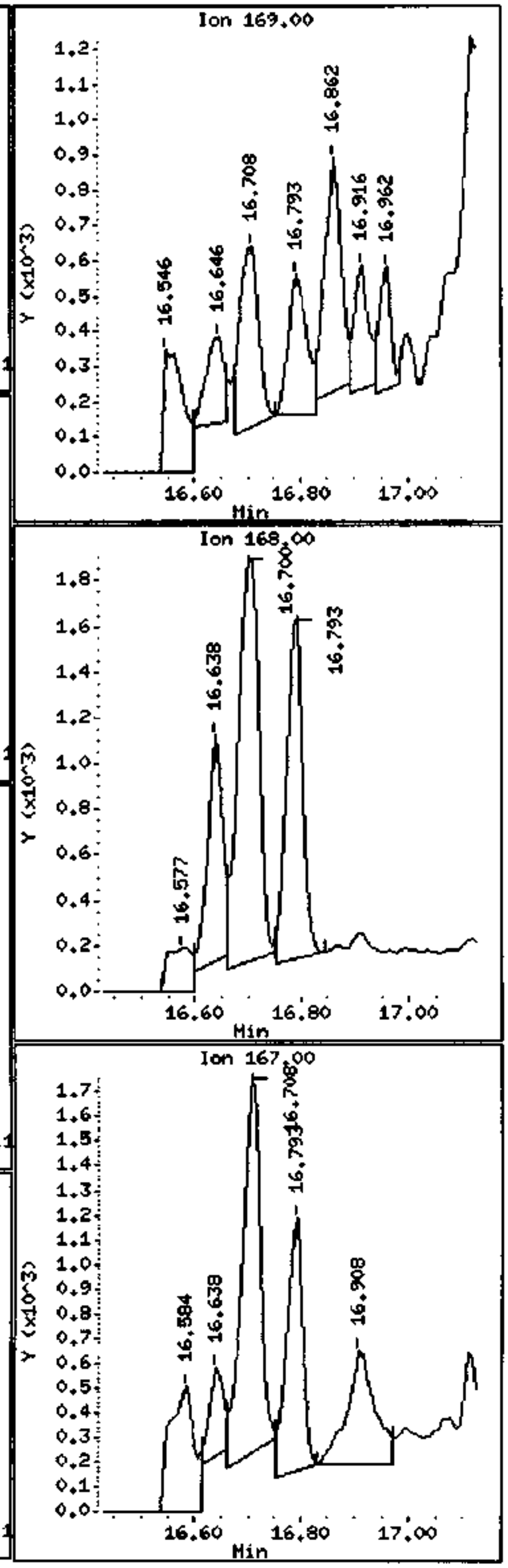
Sample Info: WC32D

Volume Injected (uL): 1.0 Operator: VTS/YZ

Column phase: ZB-5msi Column diameter: 0.25

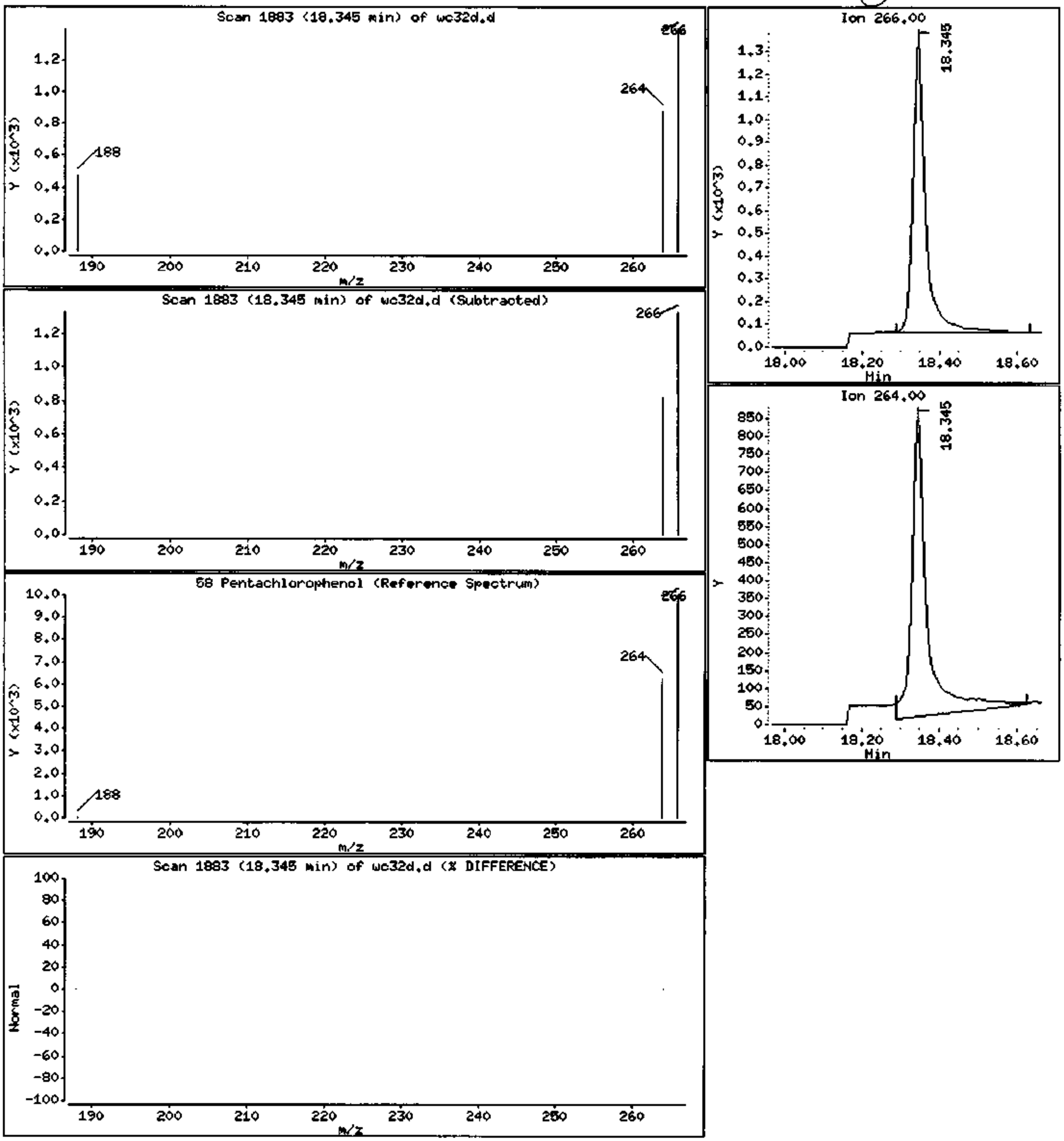
54 N-Nitrosodiphenylamine Concentration: 6.099 ug/kg





Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32d.d
Date : 15-FEB-2013 20:28
Client ID: SG-06-0-10-013113 Instrument: nt10.i
Sample Info: WC32D
Volume Injected (uL): 1.0 Operator: VTS/YZ
Column phase: ZB-5msi Column diameter: 0.25

58 Pentachlorophenol Concentration: 47.25 ug/kg



Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32d.d

Date : 15-FEB-2013 20:28

Client ID: SG-06-0-10-013113

Instrument: nt10.i

Sample Info: WC32D

Volume Injected (uL): 1.0

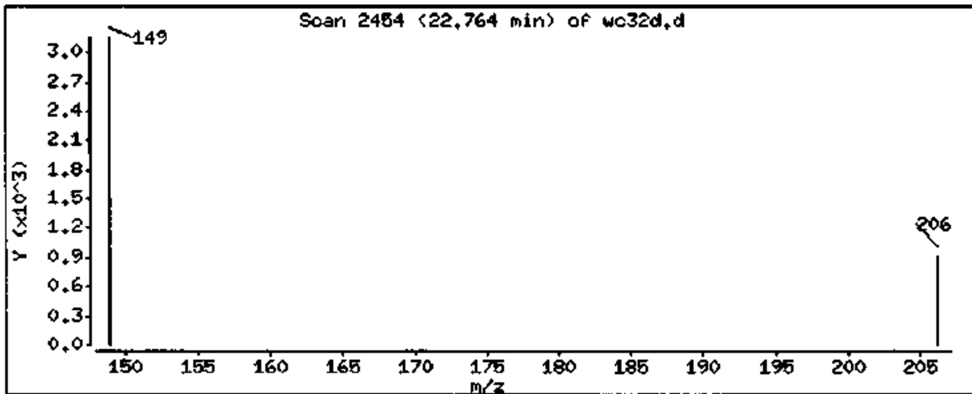
Operator: VTS/YZ

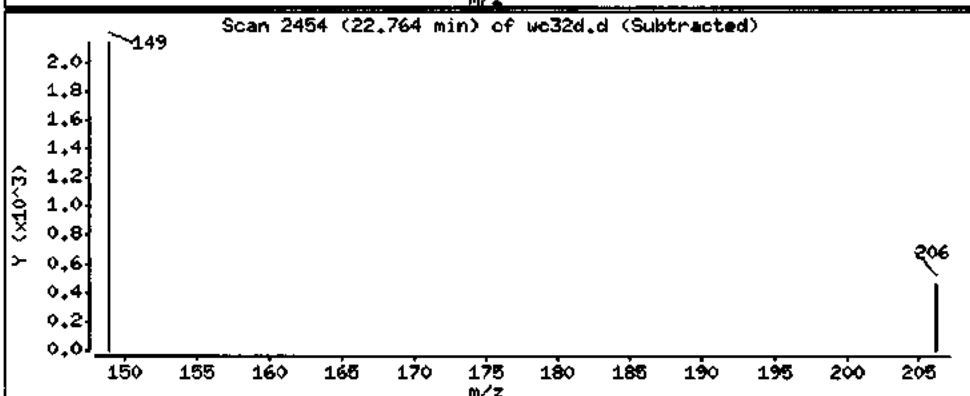
Column phase: ZB-5msi

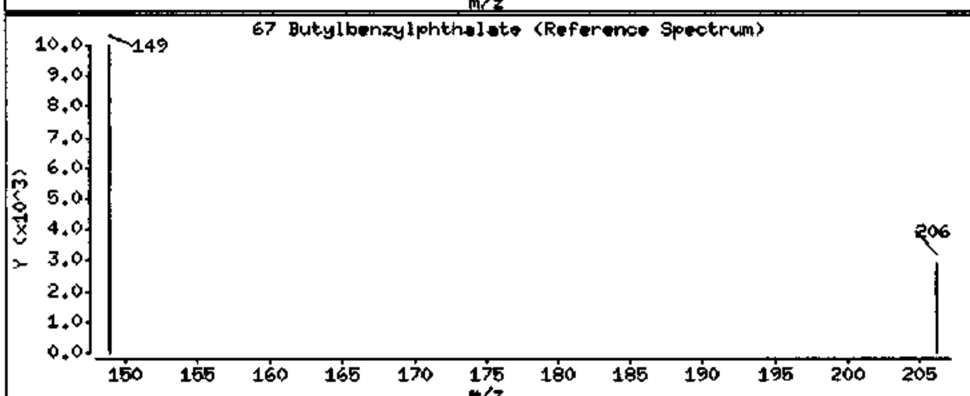
Column diameter: 0.25

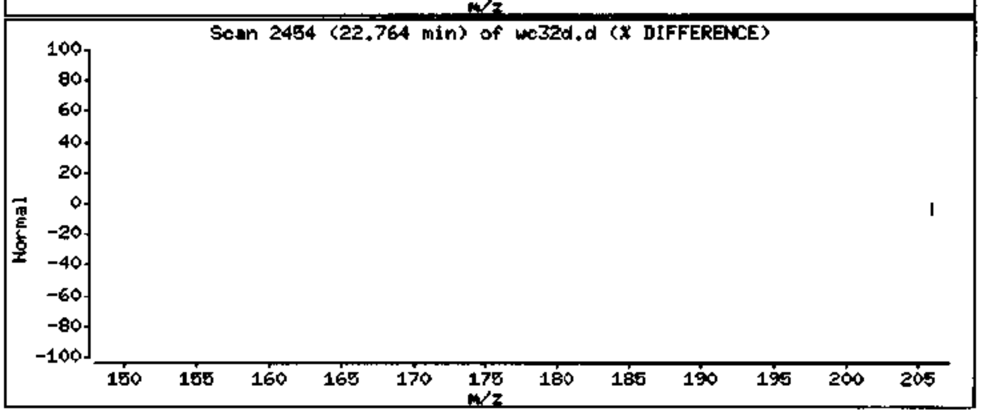
67 Butylbenzylphthalate

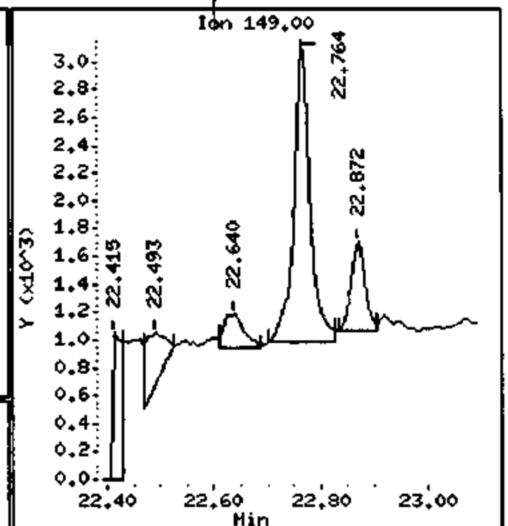
Concentration: 27.50 ug/kg

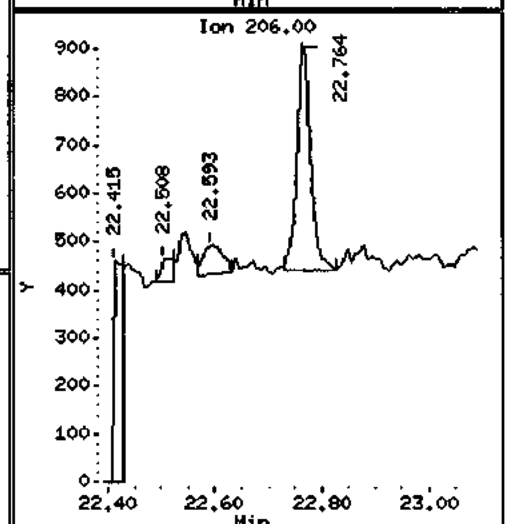








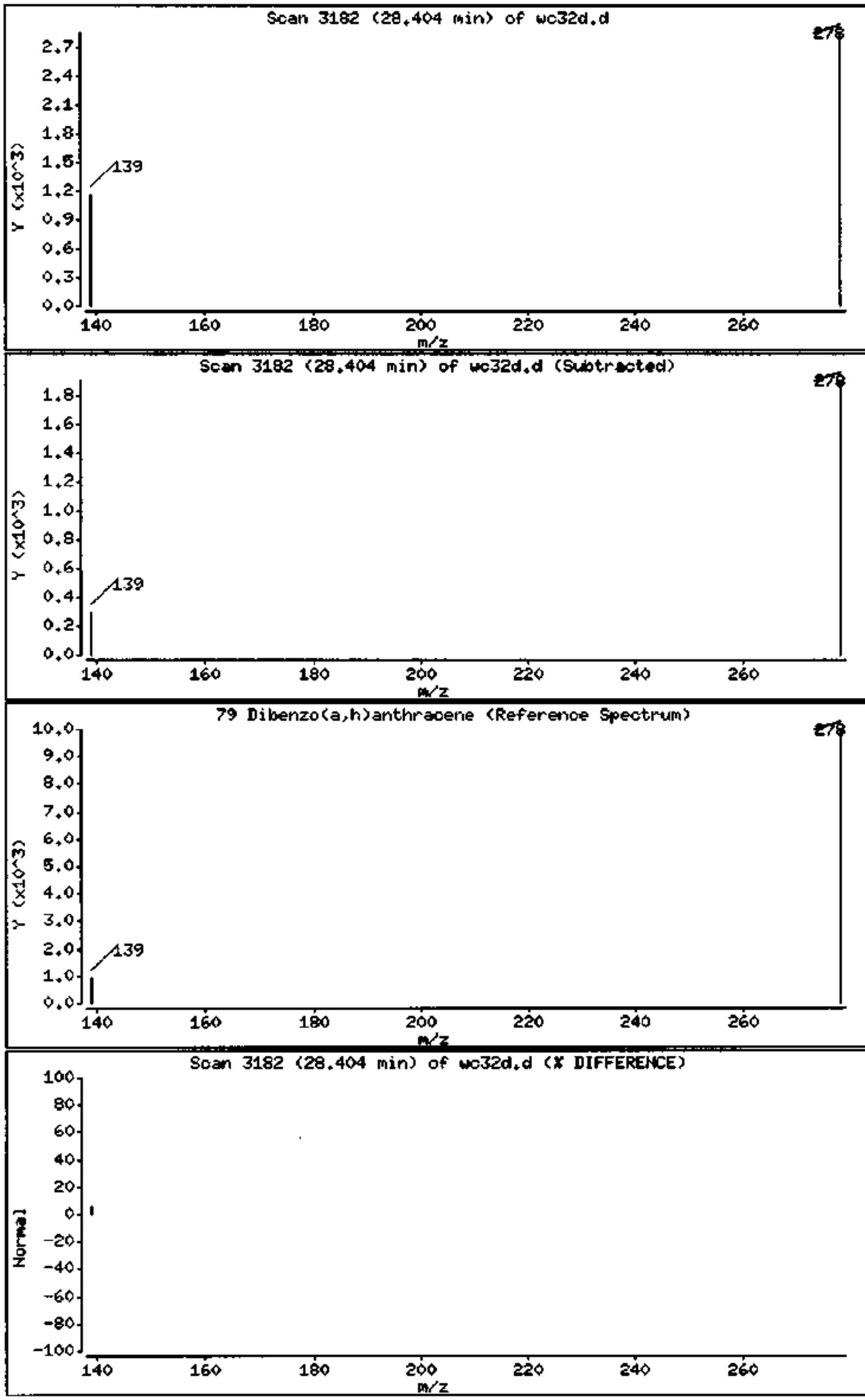


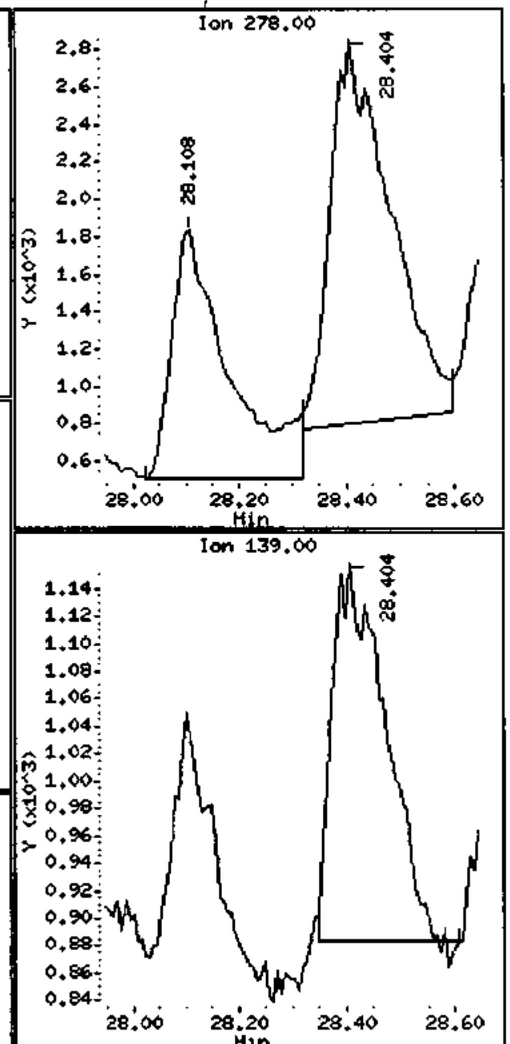


Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32d.d
Date : 15-FEB-2013 20:28
Client ID: SG-06-0-10-013113
Instrument: nt10.i
Sample Info: WC32D
Volume Injected (uL): 1.0
Operator: VTS/YZ
Column phase: ZB-5msi
Column diameter: 0.25

79 Dibenzo(a,h)anthracene
Concentration: 43.10 ug/kg

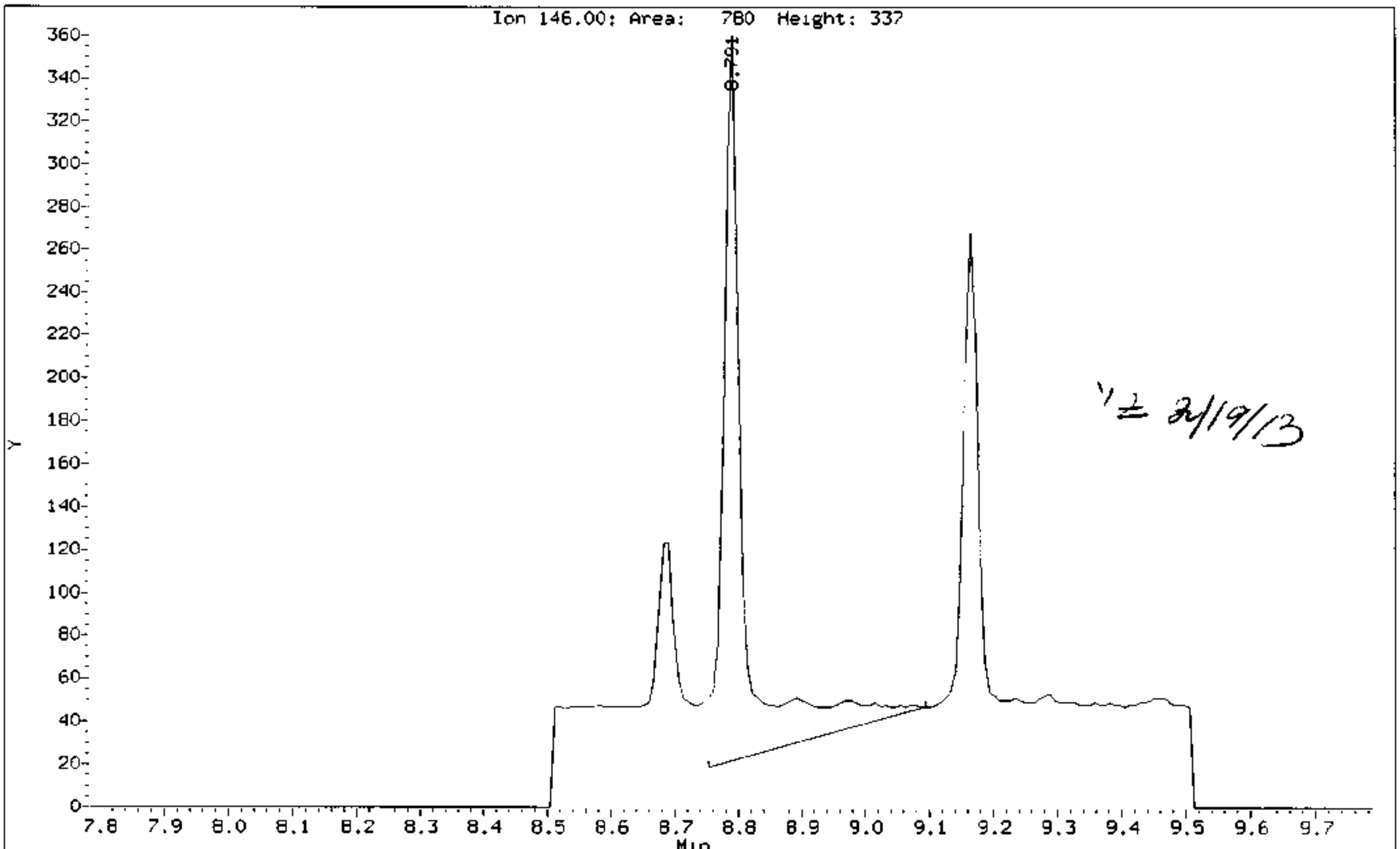
Q



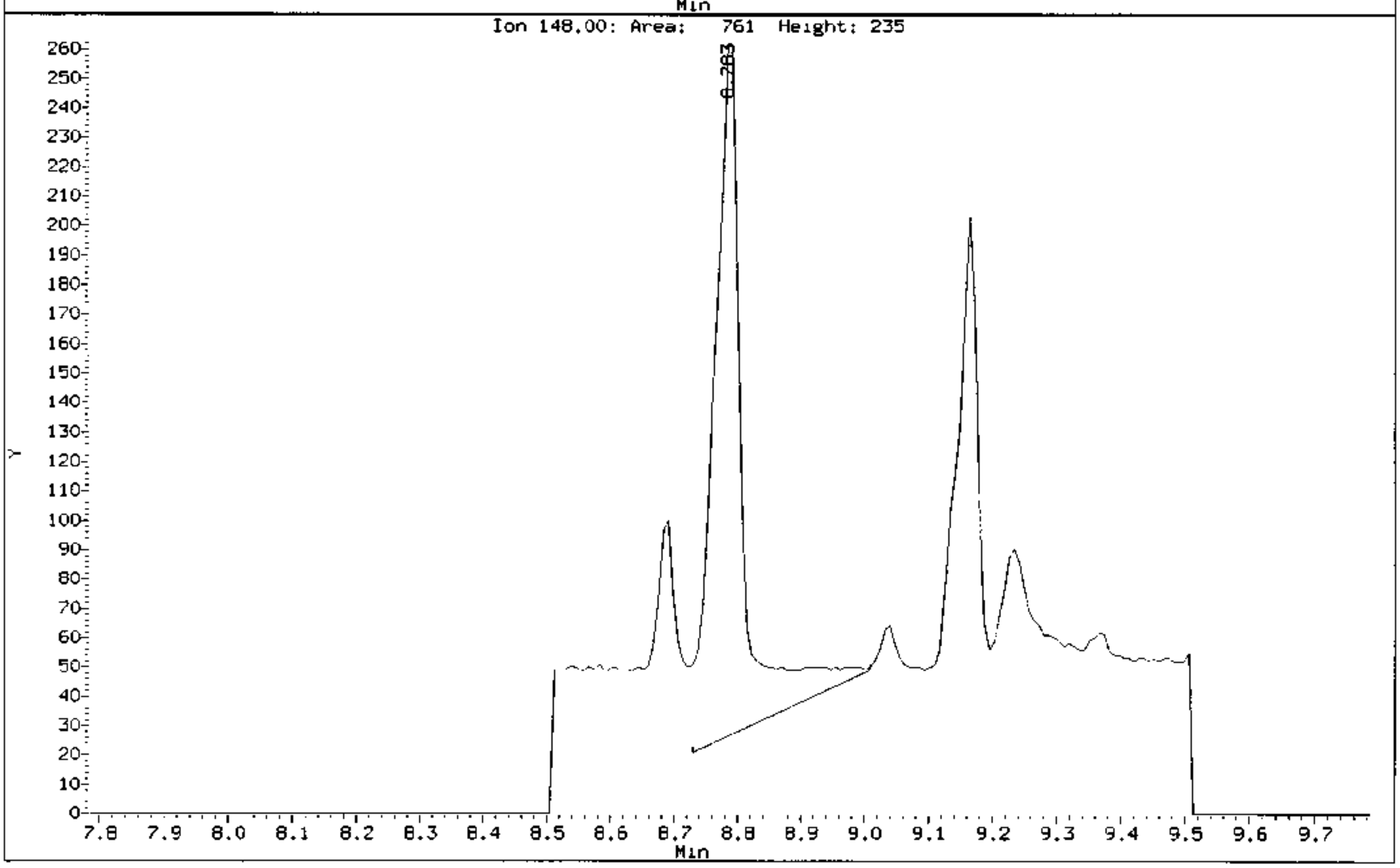


Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32d.d
Injection Date: 15-FEB-2013 20:28
Instrument: nt10.i
Client Sample ID: SG-06-0-10-013113

Compound: 1,4-Dichlorobenzene
CAS Number: 106-46-7

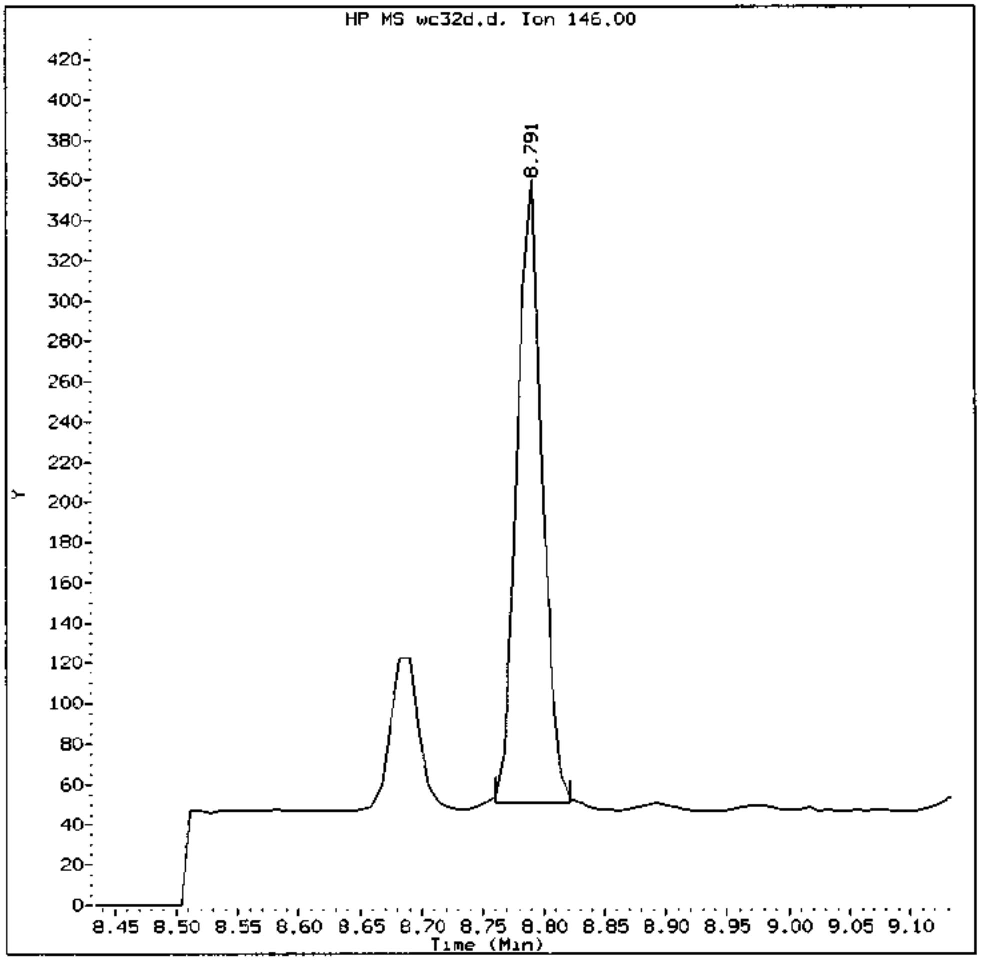


2/19/13



WC32D, /chem1/nt10.i/20130215.b/SIM.b/wc32d.d

1,4-Dichlorobenzene   Amount: 0.03   Area: 447



MANUAL INTEGRATION for 1,4-Dichlorobenzene

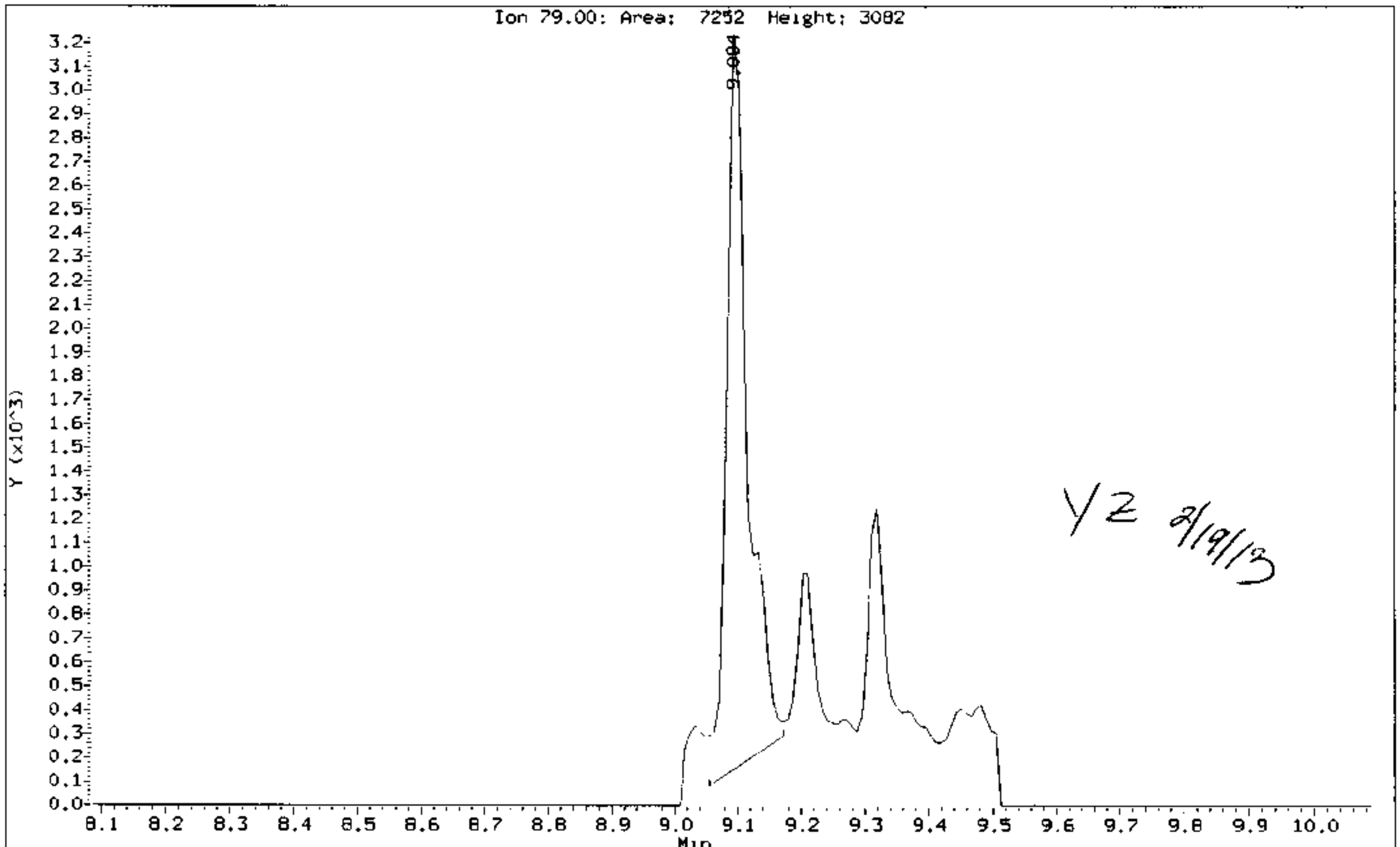
1. Baseline correction ✓
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other ______________________

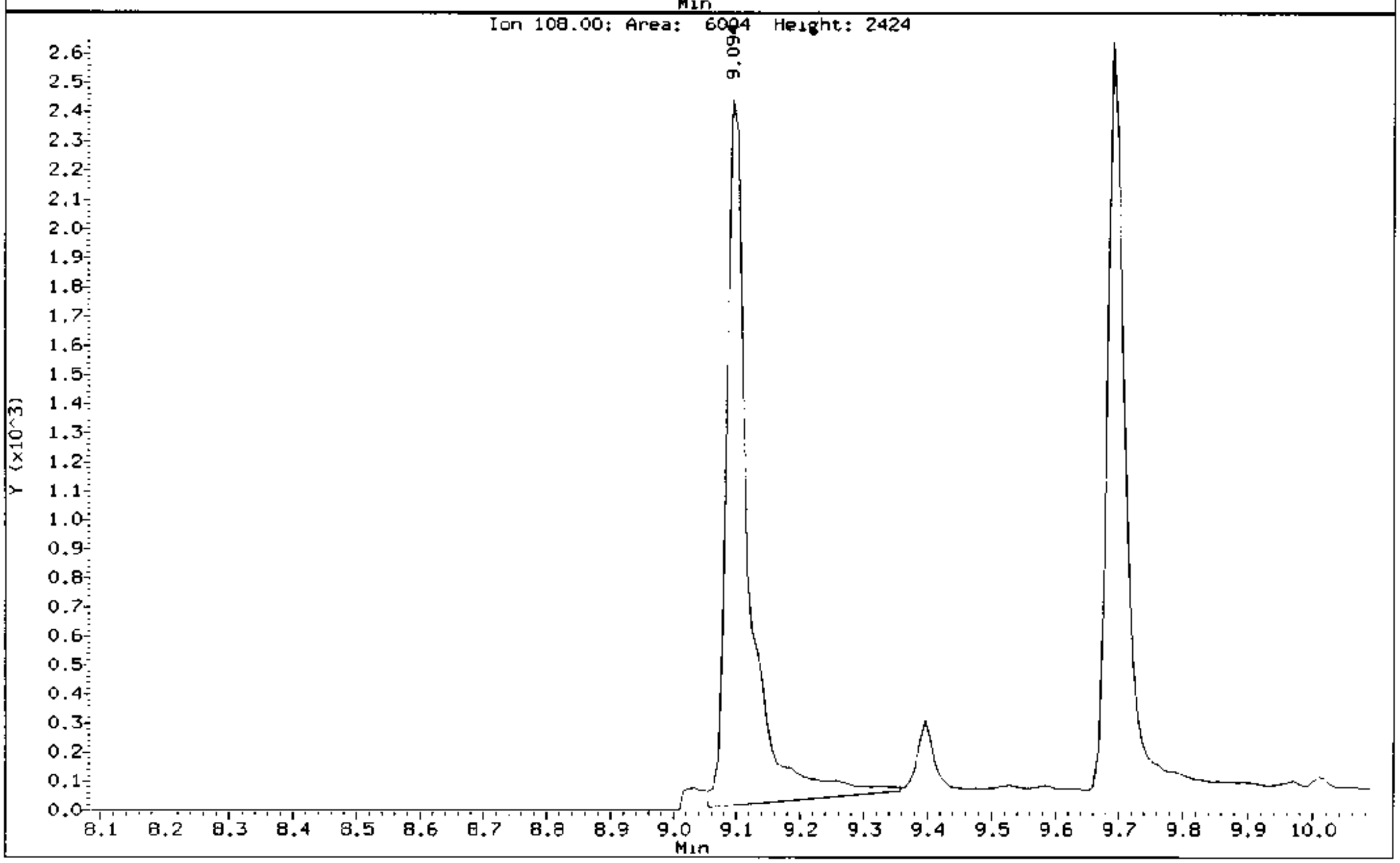
Analyst: YZ   Date: 2/19/13

Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32d.d
Injection Date: 15-FEB-2013 20:28
Instrument: nt10.i
Client Sample ID: SG-06-0-10-013113

Compound: Benzyl alcohol
CAS Number: 100-51-6



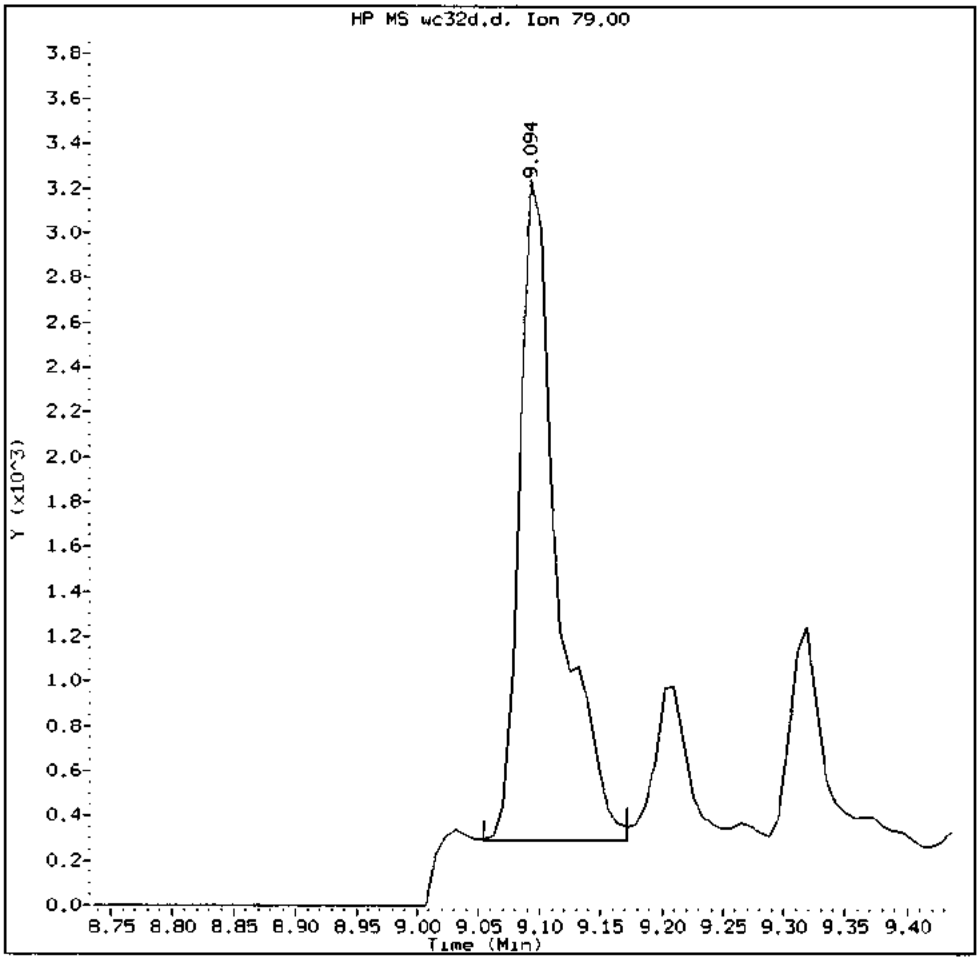
YZ 2/19/13



WC32 01109

WC32D, /chem1/nt10.i/20130215.b/SIM.b/wc32d.d

Benzyl alcohol   Amount: 0.80   Area: 6488



MANUAL INTEGRATION for Benzyl alcohol

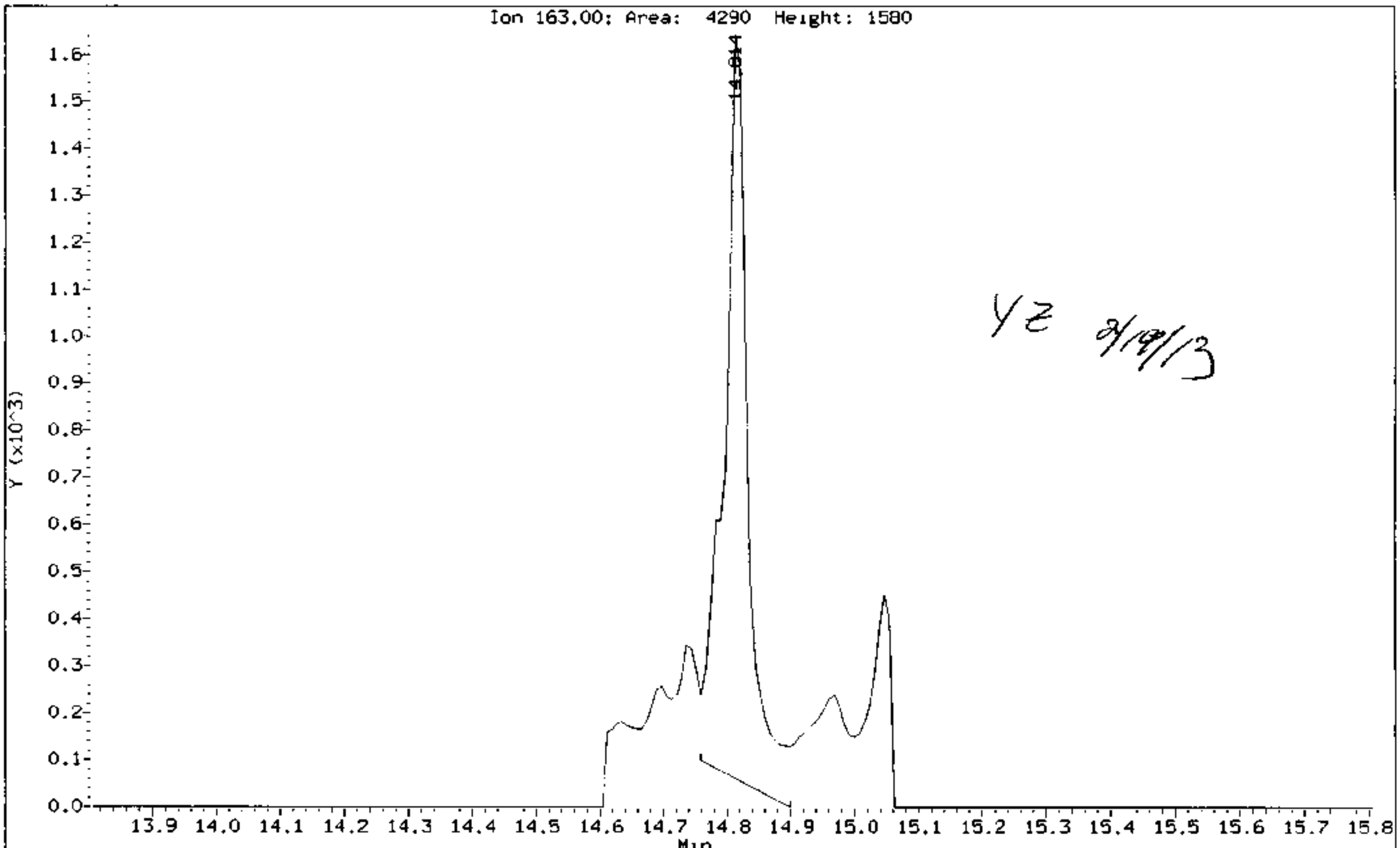
1. Baseline correction ✓
2. Poor chromatography
3. Peak not found
4. Totals calculation

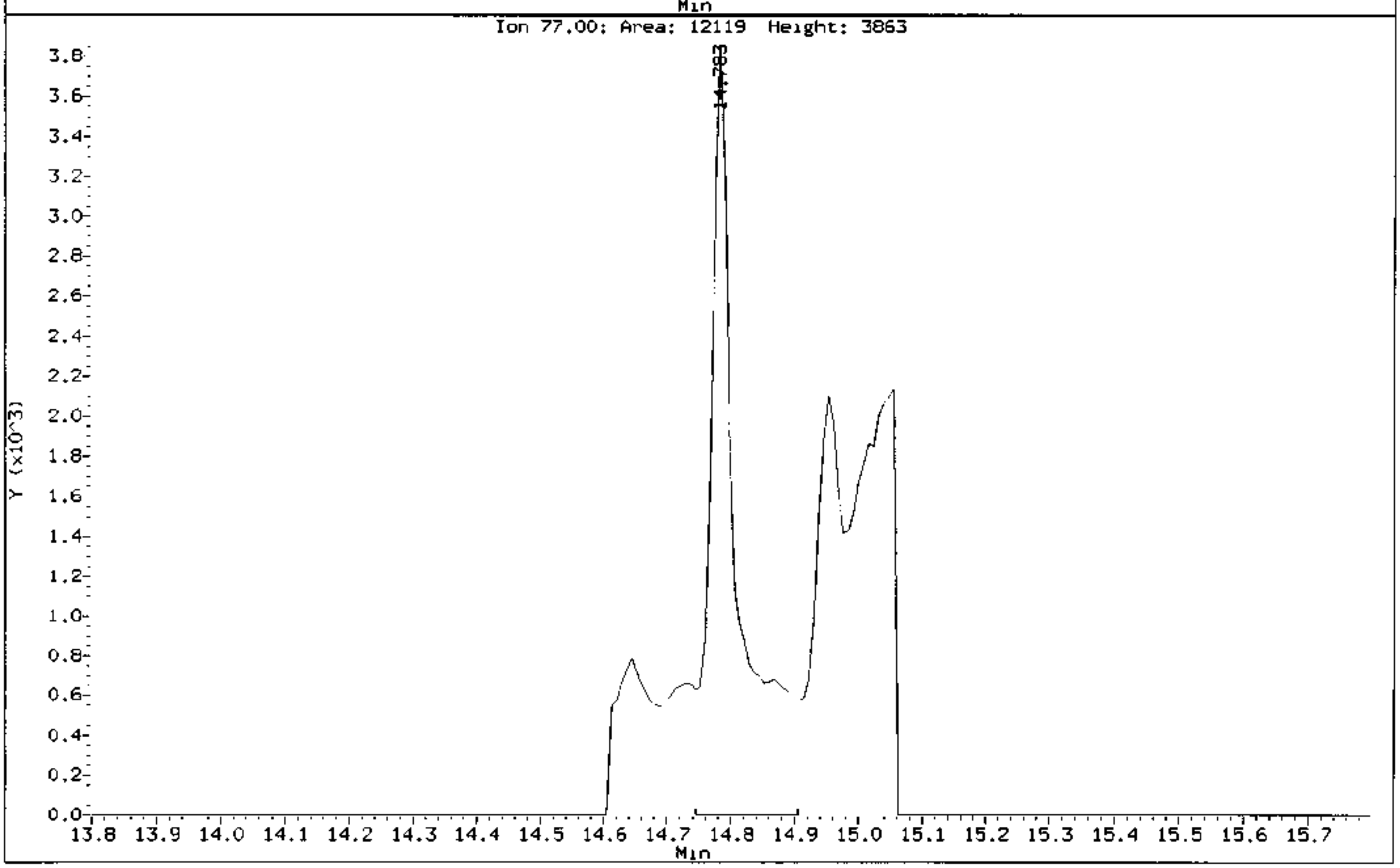
5. Other ______________________

Analyst: YZ   Date: 2/19/13

Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32d.d
Injection Date: 15-FEB-2013 20:28
Instrument: nt10.i
Client Sample ID: SG-06-0-10-013113

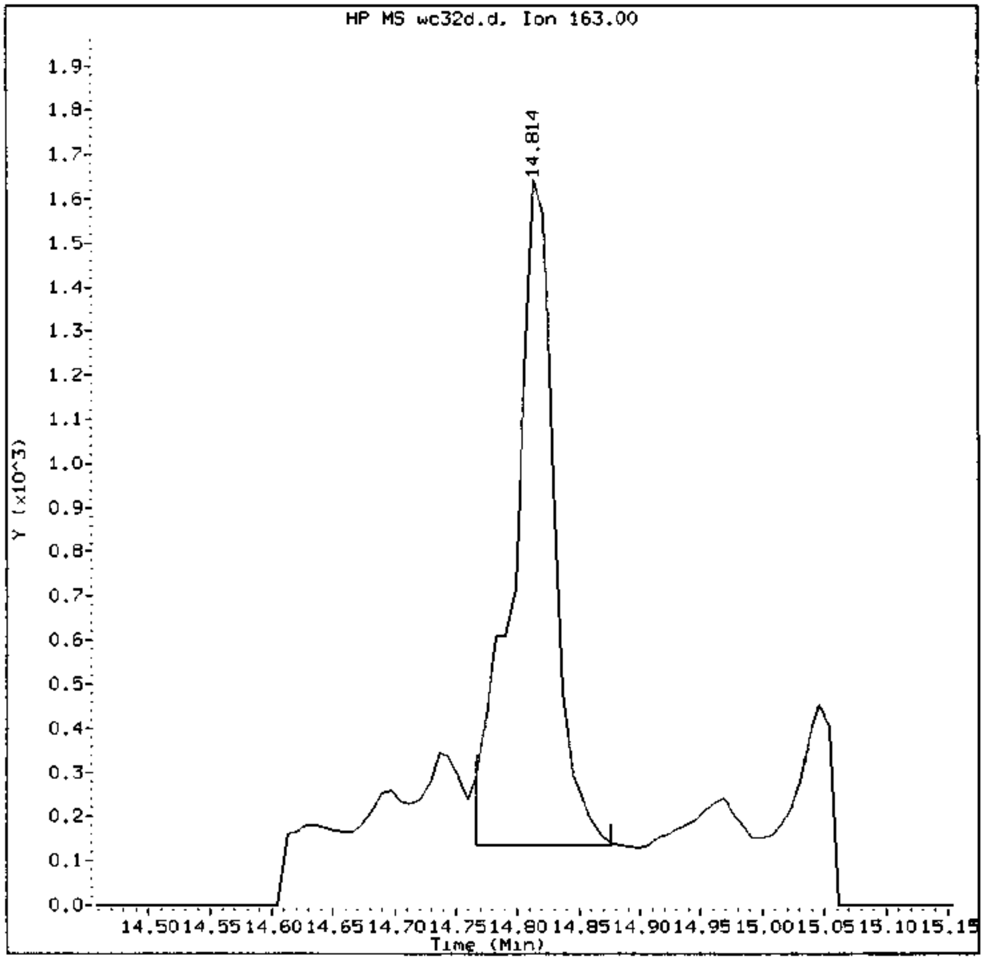
Compound: Dimethylphthalate
CAS Number: 131-11-3





WC32D, /chem1/nt10.i/20130215.b/SIM.b/wc32d.d

Dimethylphthalate   Amount: 0.16   Area: 3487



MANUAL INTEGRATION for Dimethylphthalate

1. Baseline correction ✓
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other ______________________

Analyst: YZ   Date: 2/18/13

CO-ELUTION SUMMARY FOR FILE - wc32d.d

Lab ID: WC32D, Method: SIM.b/SIMABN2.m, Instrument: nt10.i, Date: 15-FEB-2013

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Analytical Resources, Inc.

METHOD 8270D-SIM

YZ 2/19/13

Data file : /chem1/nt10.i/20130215.b/SIM.b/wc32e.d
Lab Smp Id: WC32E Client Smp ID: SG-05-0-10-013113
Inj Date : 15-FEB-2013 21:04
Operator : VTS/YZ Inst ID: nt10.i
Smp Info : WC32E
Misc Info : 13-2428
Comment :
Method : /chem1/nt10.i/20130215.b/SIM.b/SIMABN2.m
Meth Date : 19-Feb-2013 14:01 yev Quant Type: ISTD
Cal Date : 25-JAN-2013 17:53 Cal File: ic0125i.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Ws	11.20000	Weight of sample extracted (g)
M	5.70000	% Moisture

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
$	1 2-Fluorophenol	112	6.487	6.464	(0.741)	50748	4.52108 ✓	428.1
	3 Phenol	94	8.218	8.203	(0.939)	608	0.04265	4.038(M)
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	8.752	8.752	(1.000)	35281	4.00000	
	9 1,4-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	79	Compound Not Detected.					
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	13 2-Methylphenol	108	Compound Not Detected.					
	15 4-Methylphenol	108	9.699	9.668	(1.108)	292	0.02629	2.489
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	Compound Not Detected.					
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	11.402	11.394	(1.000)	131028	4.00000	
	30 Hexachlorobutadiene	225	Compound Not Detected.					

							CONCENTRATIONS	
		QUANT SIG					ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/kg)
	========================	====	==	======	======	========	=======	=======
	39 Dimethylphthalate	163	Compound Not Detected.					
*	42 Acenaphthene-d10	162	15.294	15.278	(1.000)	71300	4.00000	
	50 Diethylphthalate	149	16.391	16.384	(1.072)	3788	0.14937	14.14(M)
	54 N-Nitrosodiphenylamine	169	Compound Not Detected.					
	57 Hexachlorobenzene	284	Compound Not Detected.					
	58 Pentachlorophenol	266	Compound Not Detected.					
*	59 Phenanthrene-d10	188	18.577	18.554	(1.000)	138079	4.00000	
$	66 Terphenyl-d14	244	21.811	21.788	(0.921)	99992	4.38993	415.7
	67 Butylbenzylphthalate	149	22.764	22.741	(0.961)	1623	0.09905	9.379
*	69 Chrysene-d12	240	23.693	23.662	(1.000)	171424	4.00000	
*	77 Perylene-d12	264	26.116	26.070	(1.000)	150796	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.388	28.295	(1.087)	2946	0.08197	7.761
	90 N-Nitrosodimethylamine	74	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

Report Date: 19-Feb-2013 14:02

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: wc32e.d
Lab Smp Id: WC32E
Analysis Type: SV
Quant Type: ISTD
Operator: VTS/YZ
Method File: /chem1/nt10.i/20130215.b/SIM.b/SIMABN2.m
Misc Info: 13-2428

Calibration Date: 15-FEB-2013
Calibration Time: 11:56
Client Smp ID: SG-05-0-10-01311
Level: LOW
Sample Type: Sediment

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	53853	26926	107706	35281	-34.49
27 Naphthalene-d8	200104	100052	400208	131028	-34.52
42 Acenaphthene-d10	112392	56196	224784	71300	-36.56
59 Phenanthrene-d10	210710	105355	421420	138079	-34.47
69 Chrysene-d12	240805	120402	481610	171424	-28.81
77 Perylene-d12	230834	115417	461668	150796	-34.67

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.75	8.25	9.25	8.75	0.00
27 Naphthalene-d8	11.39	10.89	11.89	11.40	0.07
42 Acenaphthene-d10	15.28	14.78	15.78	15.29	0.10
59 Phenanthrene-d10	18.55	18.05	19.05	18.58	0.12
69 Chrysene-d12	23.66	23.16	24.16	23.69	0.13
77 Perylene-d12	26.07	25.57	26.57	26.12	0.18

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd-Snider
Sample Matrix: SOLID
Lab Smp Id: WC32E
Level: LOW
Data Type: MS DATA
SpikeList File: SHORTPSDDA.spk
Sublist File: PSDDA.sub
Method File: /chem1/nt10.i/20130215.b/SIM.b/SIMABN2.m
Misc Info: 13-2428

Client SDG: WC32
Fraction: SV
Client Smp ID: SG-05-0-10-013113
Operator: VTS/YZ
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 1 2-Fluorophenol	710.1	428.1	60.28	30-160
$ 66 Terphenyl-d14	473.4	415.7	87.80	30-160

Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32e.d

Date : 15-FEB-2013 21:04

Client ID: SG-05-0-10-013113

Sample Info: WC32E

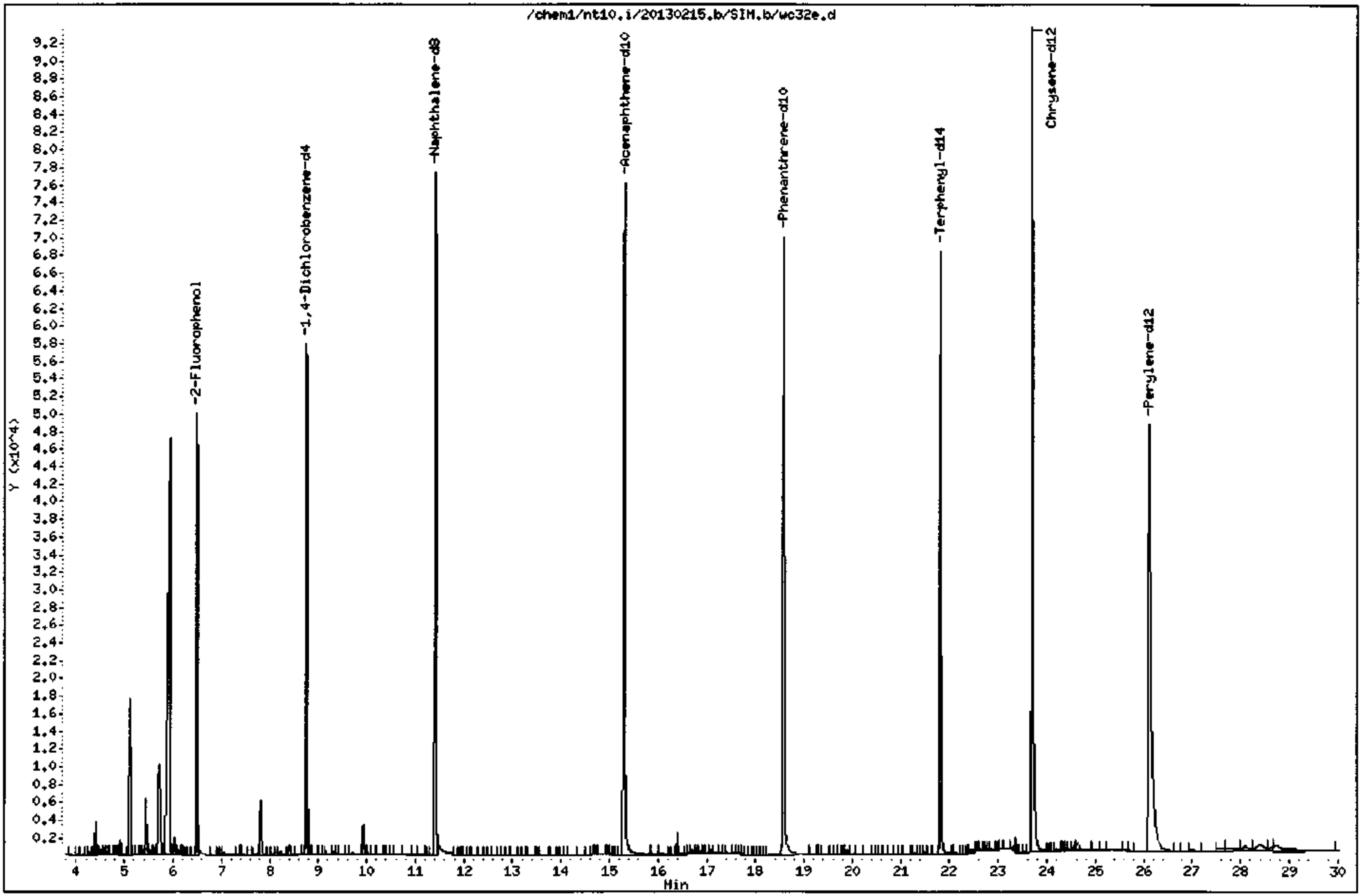
Volume Injected (uL): 1.0

Column phase: ZB-5msi

Instrument: nt10.i

Operator: VTS/YZ

Column diameter: 0.25



Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32e.d

Date : 15-FEB-2013 21:04

Client ID: SC-05-0-10-013113

Instrument: nt10.i

Sample Info: WC32E

Volume Injected (uL): 1.0

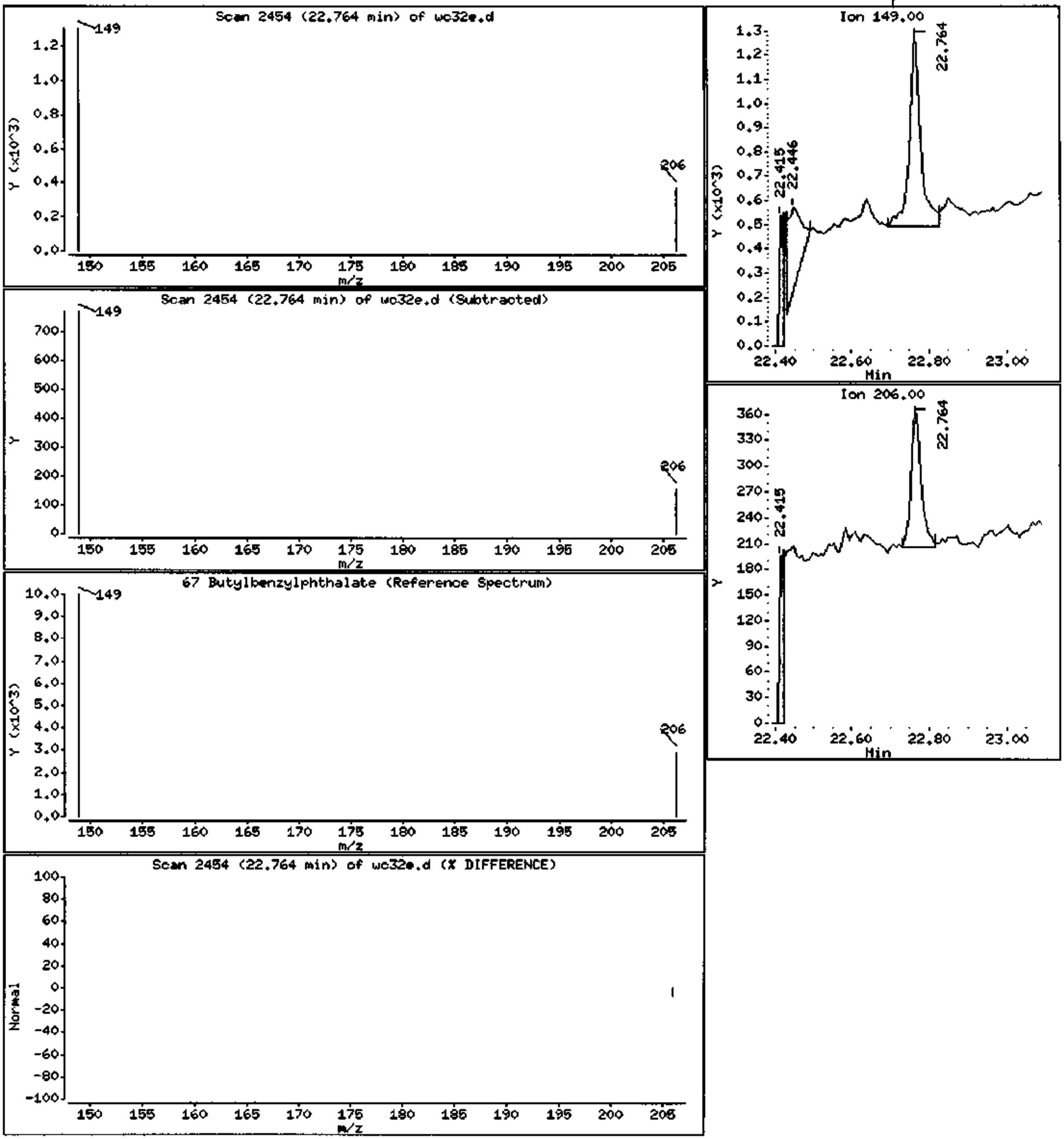
Operator: VTS/YZ

Column phase: ZB-5ms1

Column diameter: 0.25

67 Butylbenzylphthalate

Concentration: 9.379 ug/kg



Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32e.d

Date : 15-FEB-2013 21:04

Client ID: SG-05-0-10-013113

Instrument: nt10.i

Sample Info: WC32E

Volume Injected (uL): 1.0

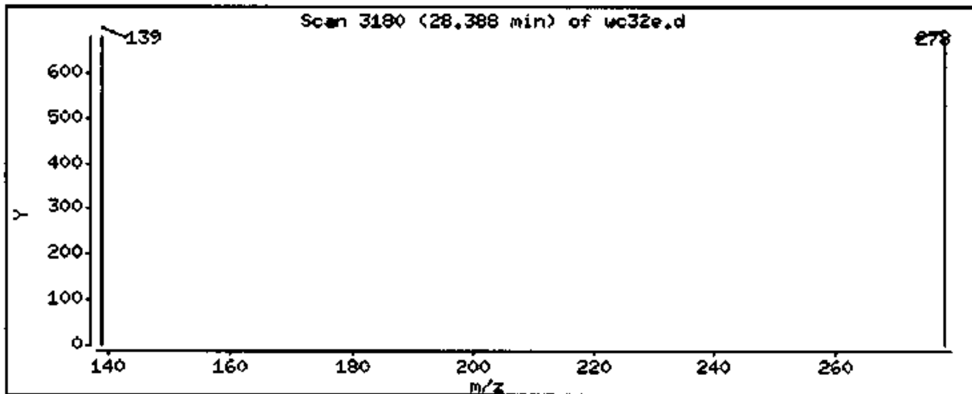
Operator: VTS/YZ

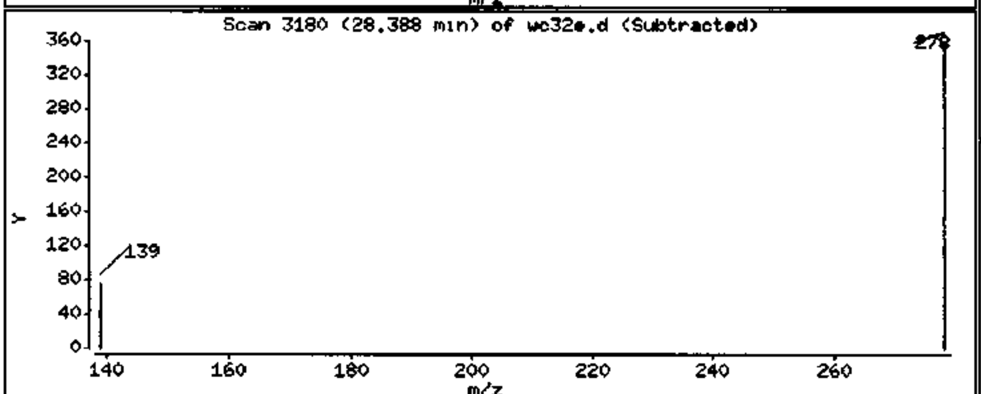
Column phase: ZB-5msi

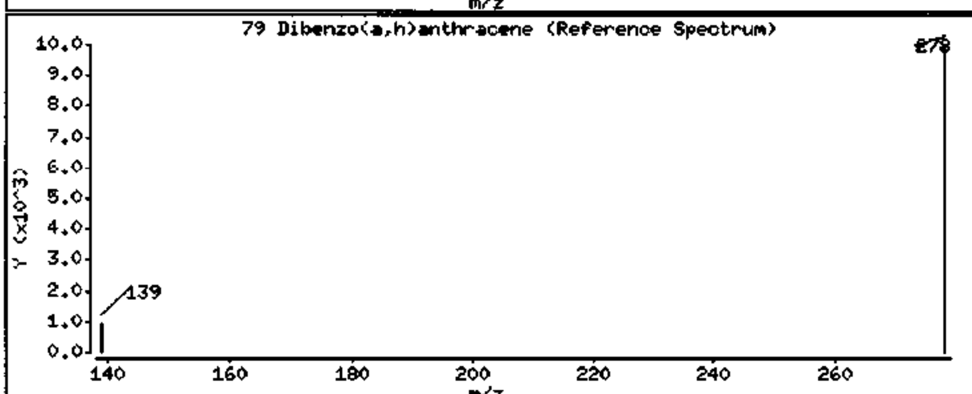
Column diameter: 0.25

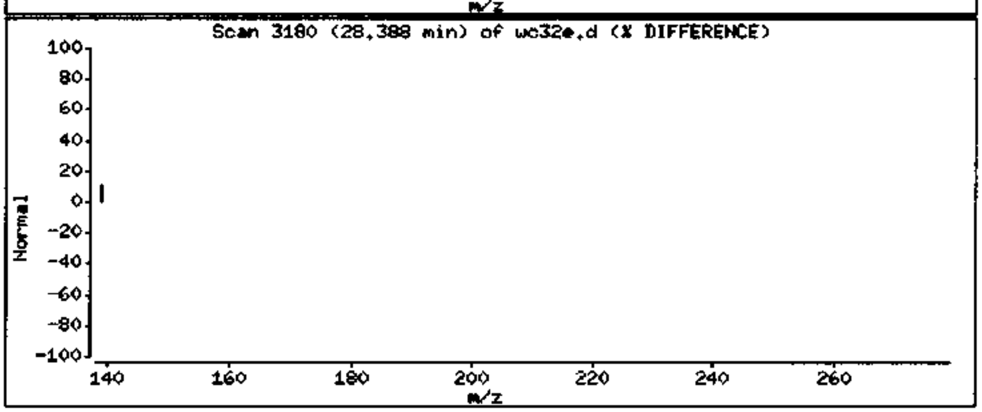
79 Dibenzo(a,h)anthracene

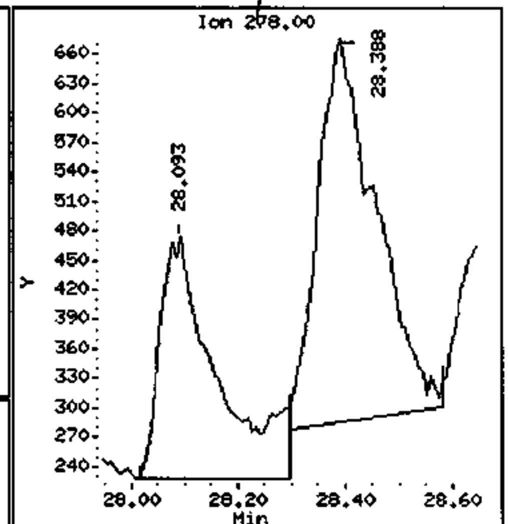
Concentration: 7.761 ug/kg

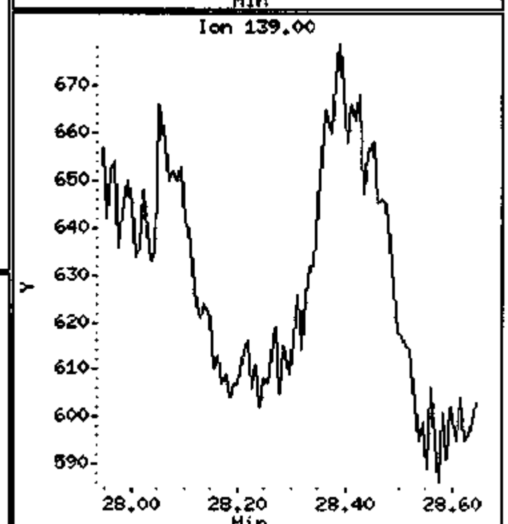












CO-ELUTION SUMMARY FOR FILE - wc32e.d

Lab ID: WC32E, Method: SIM.b/SIMABN2.m, Instrument: nt10.i, Date: 15-FEB-2013

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32f.d
Report Date: 19-Feb-2013 14:02

Analytical Resources, Inc.

YZ 2/19/13

METHOD 8270D-SIM

Data file : /chem1/nt10.i/20130215.b/SIM.b/wc32f.d
Lab Smp Id: WC32F   Client Smp ID: SG-95-0-10-013113
Inj Date : 15-FEB-2013 21:40
Operator : VTS/YZ   Inst ID: nt10.i
Smp Info : WC32F
Misc Info : 13-2429
Comment :
Method : /chem1/nt10.i/20130215.b/SIM.b/SIMABN2.m
Meth Date : 19-Feb-2013 14:01 yev   Quant Type: ISTD
Cal Date : 25-JAN-2013 17:53   Cal File: ic0125i.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: PSDDA.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Ws	11.40000	Weight of sample extracted (g)
M	6.50000	% Moisture

Cpnd Variable   Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
$ 1 2-Fluorophenol	112	6.487	6.464	(0.741)	55957	5.21639	489.4
3 Phenol	94	8.218	8.203	(0.938)	614	0.04507	4.228
7 1,3-Dichlorobenzene	146	Compound Not Detected.					
* 8 1,4-Dichlorobenzene-d4	152	8.760	8.752	(1.000)	33717	4.00000	
9 1,4-Dichlorobenzene	146	Compound Not Detected.					
11 Benzyl alcohol	79	Compound Not Detected.					
12 1,2-Dichlorobenzene	146	Compound Not Detected.					
13 2-Methylphenol	108	Compound Not Detected.					
15 4-Methylphenol	108	9.699	9.668	(1.107)	267	0.02515	2.360
16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
22 2,4-Dimethylphenol	107	Compound Not Detected.					
26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
* 27 Naphthalene-d8	136	11.402	11.394	(1.000)	129115	4.00000	
30 Hexachlorobutadiene	225	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
	39 Dimethylphthalate	163	Compound Not Detected.					
*	42 Acenaphthene-d10	162	15.293	15.278	(1.000)	70443	4.00000	
	50 Diethylphthalate	149	16.391	16.384	(1.072)	2599	0.10373	9.732
	54 N-Nitrosodiphenylamine	169	16.785	16.777	(0.904)	438	0.02737	2.567(M)
	57 Hexachlorobenzene	284	Compound Not Detected.					
	58 Pentachlorophenol	266	Compound Not Detected.					
*	59 Phenanthrene-d10	188	18.577	18.554	(1.000)	137674	4.00000	
$	66 Terphenyl-d14	244	21.811	21.788	(0.921)	114248	5.07490	476.1
	67 Butylbenzylphthalate	149	Compound Not Detected.					
*	69 Chrysene-d12	240	23.693	23.662	(1.000)	169428	4.00000	
*	77 Perylene-d12	264	26.124	26.070	(1.000)	151151	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.380	28.295	(1.086)	22406	0.62193	58.35
	90 N-Nitrosodimethylamine	74	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

Report Date: 19-Feb-2013 14:02

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: wc32f.d
Lab Smp Id: WC32F
Analysis Type: SV
Quant Type: ISTD
Operator: VTS/YZ
Method File: /chem1/nt10.i/20130215.b/SIM.b/SIMABN2.m
Misc Info: 13-2429

Calibration Date: 15-FEB-2013
Calibration Time: 11:56
Client Smp ID: SG-95-0-10-01311
Level: LOW
Sample Type: Sediment

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	53853	26926	107706	33717	-37.39
27 Naphthalene-d8	200104	100052	400208	129115	-35.48
42 Acenaphthene-d10	112392	56196	224784	70443	-37.32
59 Phenanthrene-d10	210710	105355	421420	137674	-34.66
69 Chrysene-d12	240805	120402	481610	169428	-29.64
77 Perylene-d12	230834	115417	461668	151151	-34.52

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.75	8.25	9.25	8.76	0.09
27 Naphthalene-d8	11.39	10.89	11.89	11.40	0.07
42 Acenaphthene-d10	15.28	14.78	15.78	15.29	0.10
59 Phenanthrene-d10	18.55	18.05	19.05	18.58	0.12
69 Chrysene-d12	23.66	23.16	24.16	23.69	0.13
77 Perylene-d12	26.07	25.57	26.57	26.12	0.21

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 19-Feb-2013 14:02

Analytical Resources, Inc.

RECOVERY REPORT

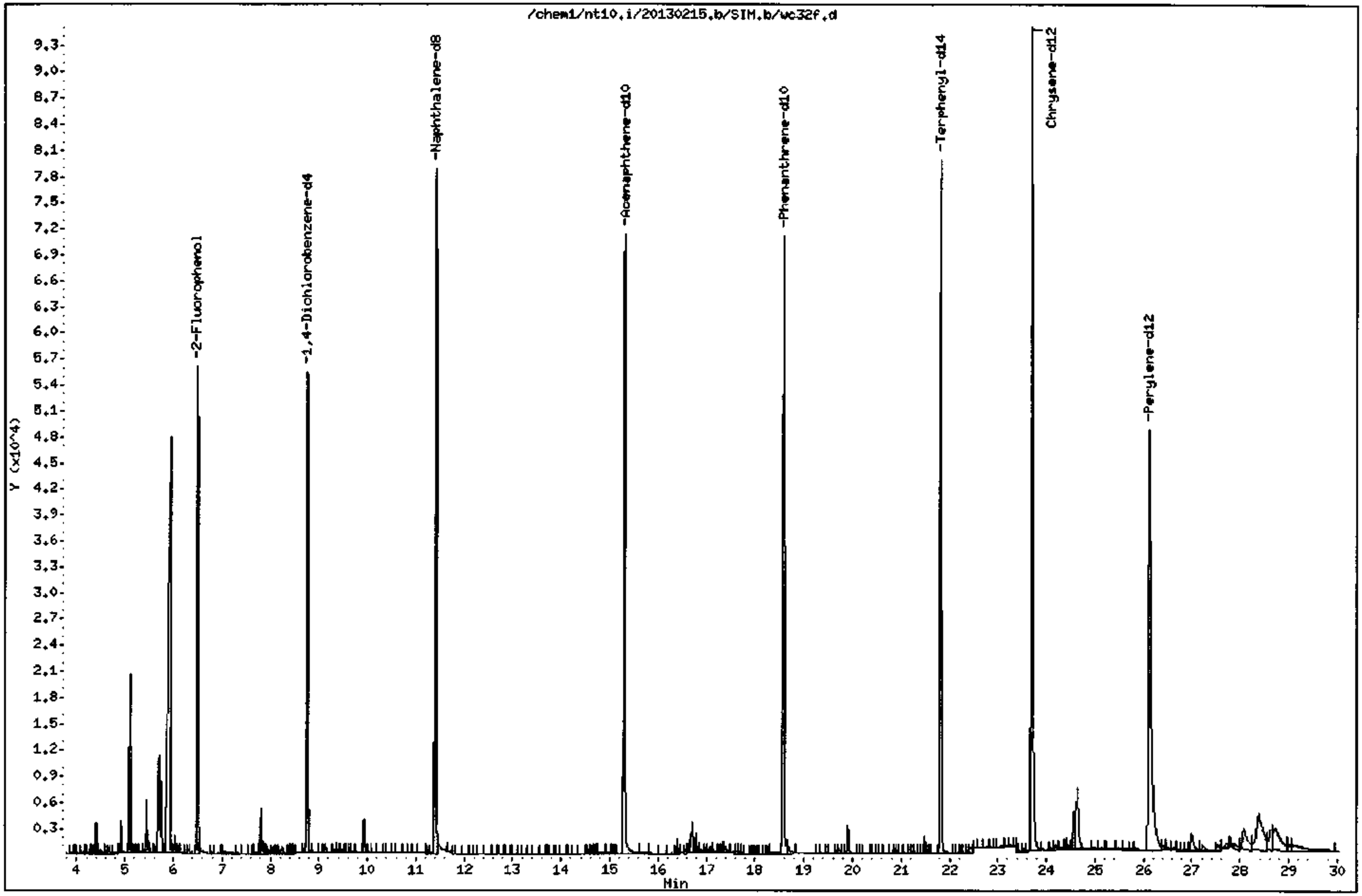
Client Name: Floyd-Snider
Sample Matrix: SOLID
Lab Smp Id: WC32F
Level: LOW
Data Type: MS DATA
SpikeList File: SHORTPSDDA.spk
Sublist File: PSDDA.sub
Method File: /chem1/nt10.i/20130215.b/SIM.b/SIMABN2.m
Misc Info: 13-2429

Client SDG: WC32
Fraction: SV
Client Smp ID: SG-95-0-10-013113
Operator: VTS/YZ
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 1 2-Fluorophenol	703.6	489.4	69.55	30-160
$ 66 Terphenyl-d14	469.1	476.1	101.50	30-160

Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32f.d
Date : 15-FEB-2013 21:40
Client ID: SG-95-0-10-013113
Sample Info: WC32F
Volume Injected (uL): 1.0
Column phase: ZB-5ms1

Instrument: nt10.i
Operator: VTS/YZ
Column diameter: 0.25



Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32f.d

Date : 15-FEB-2013 21:40

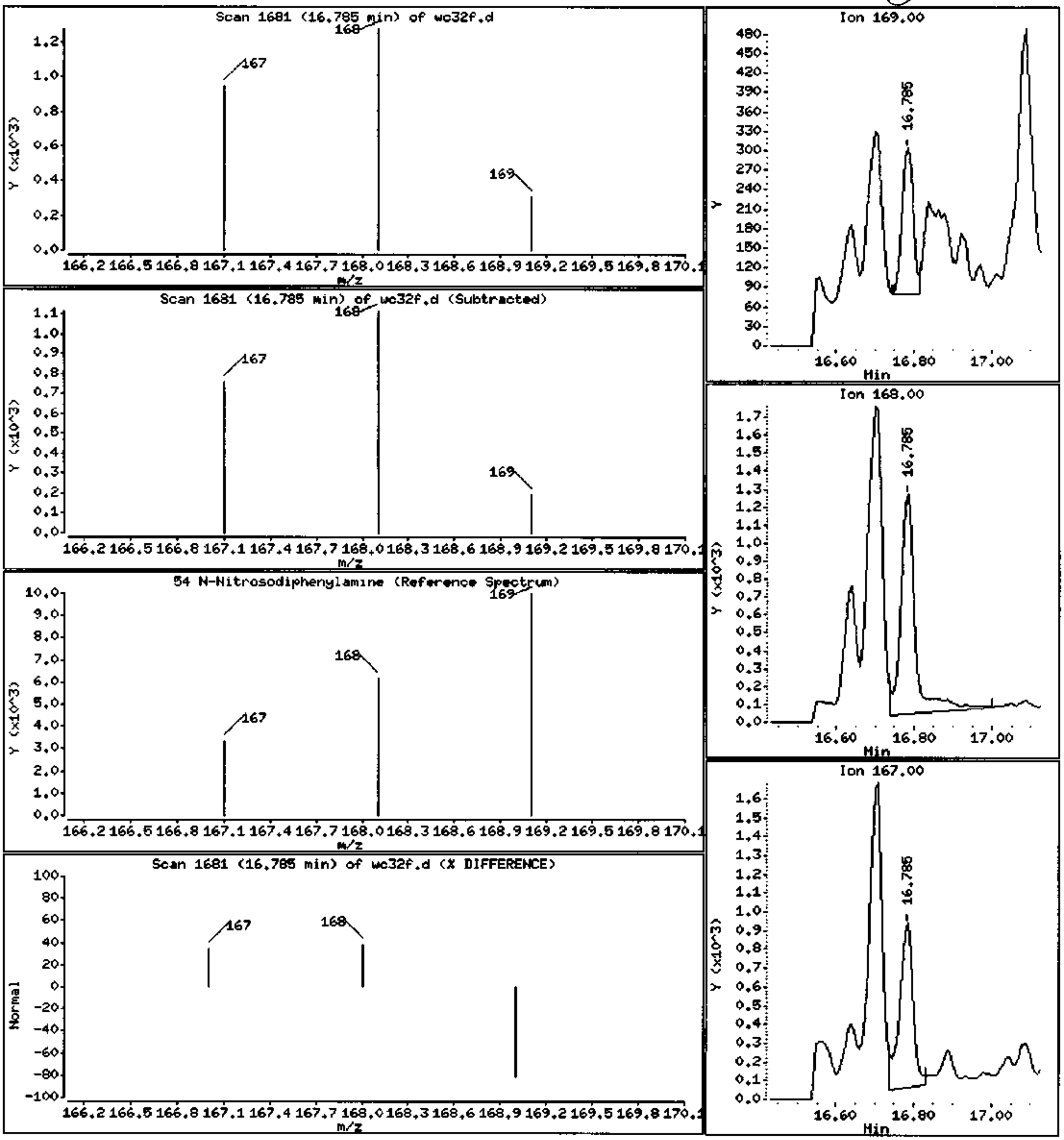
Client ID: SG-95-0-10-013113 Instrument: nt10.i

Sample Info: WC32F

Volume Injected (uL): 1.0 Operator: VTS/YZ

Column phase: ZB-5msi Column diameter: 0.25

54 N-Nitrosodiphenylamine Concentration: 2.567 ug/kg



Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32f.d

Date : 15-FEB-2013 21:40

Client ID: SC-95-0-10-013113 | Instrument: nt10.i

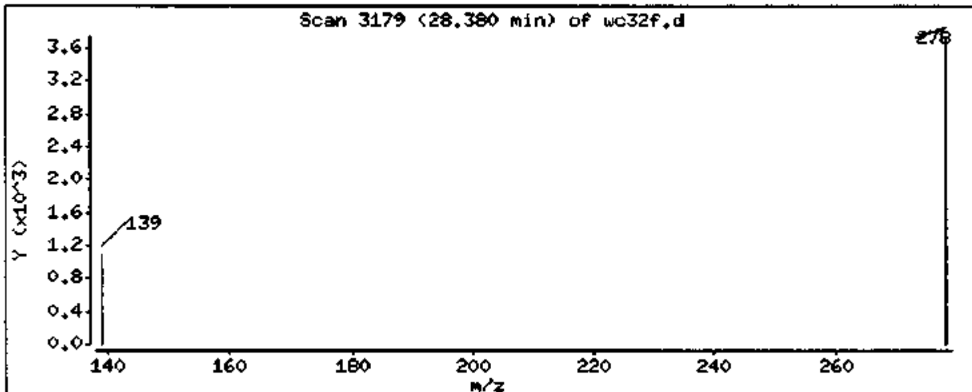
Sample Info: WC32F

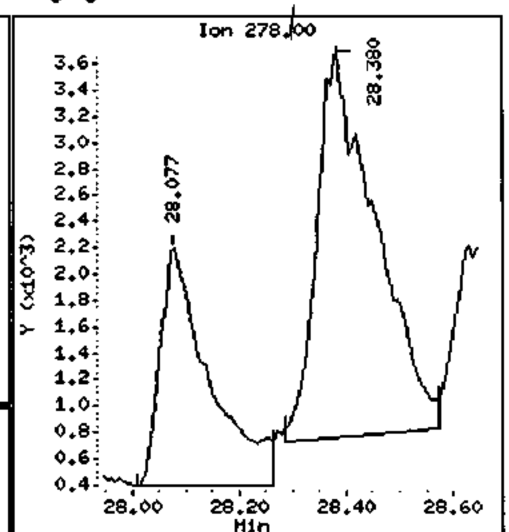
Volume Injected (uL): 1.0 | Operator: VTS/YZ

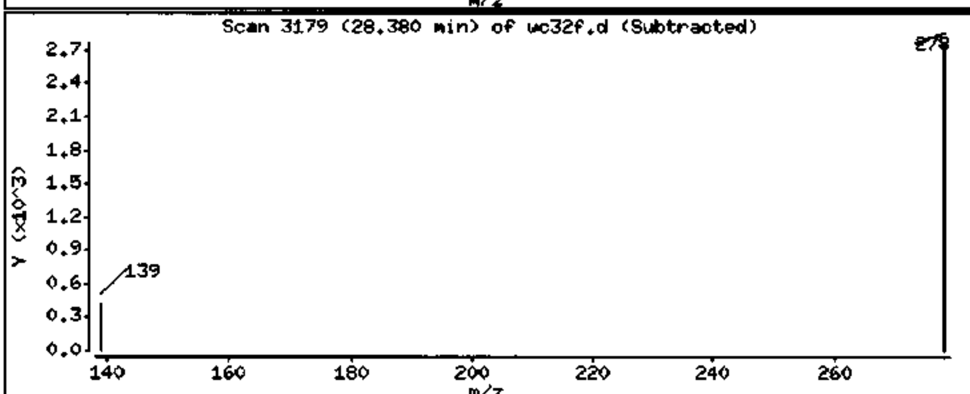
Column phase: ZB-5msi | Column diameter: 0.25

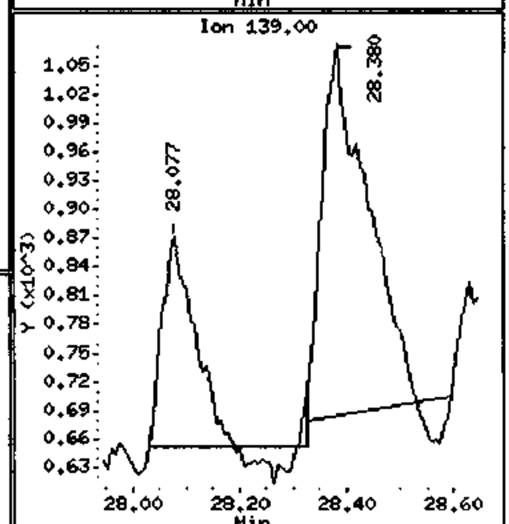
79 Dibenzo(a,h)anthracene | Concentration: 58.35 ug/kg

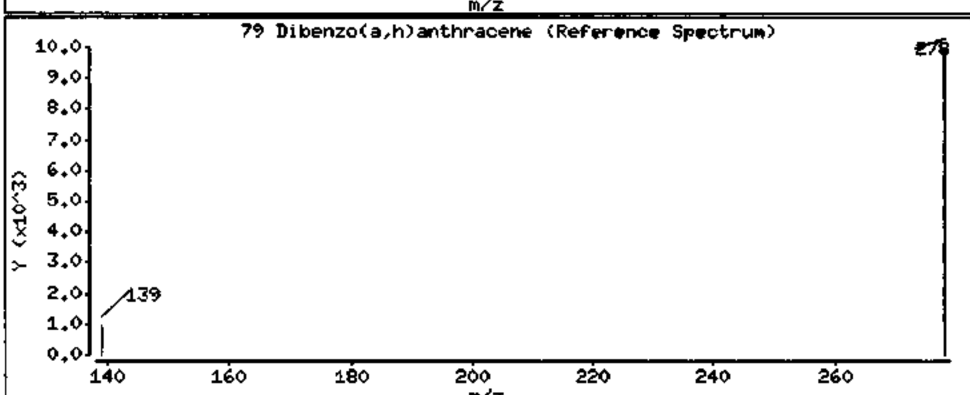
U

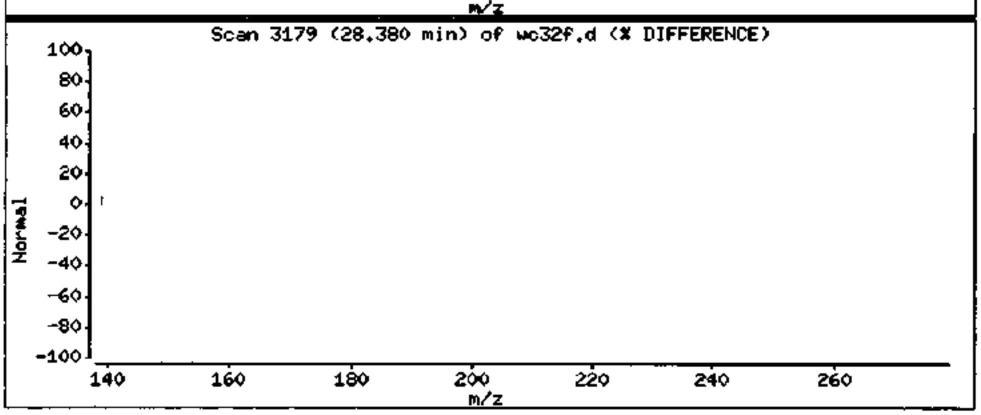






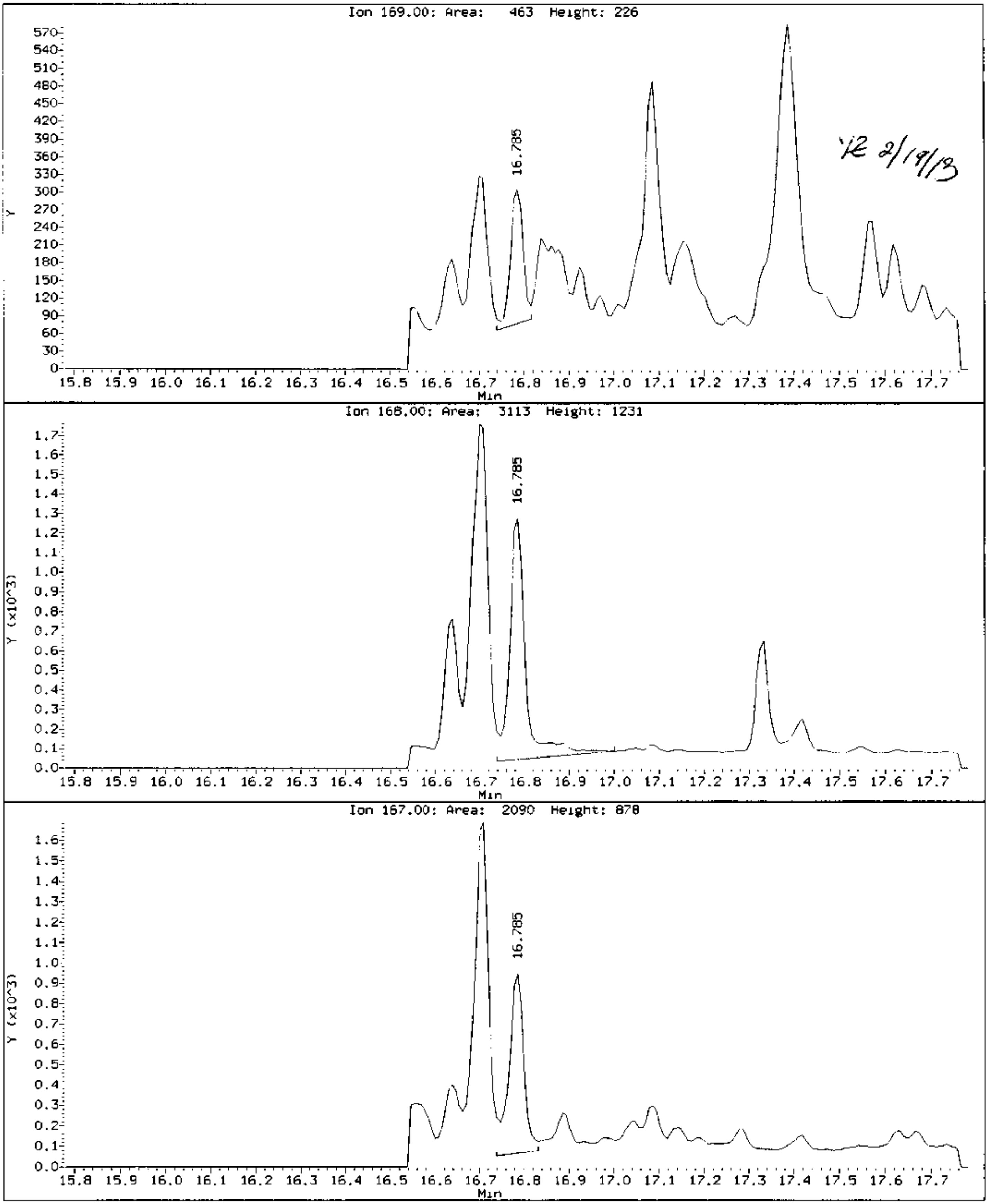






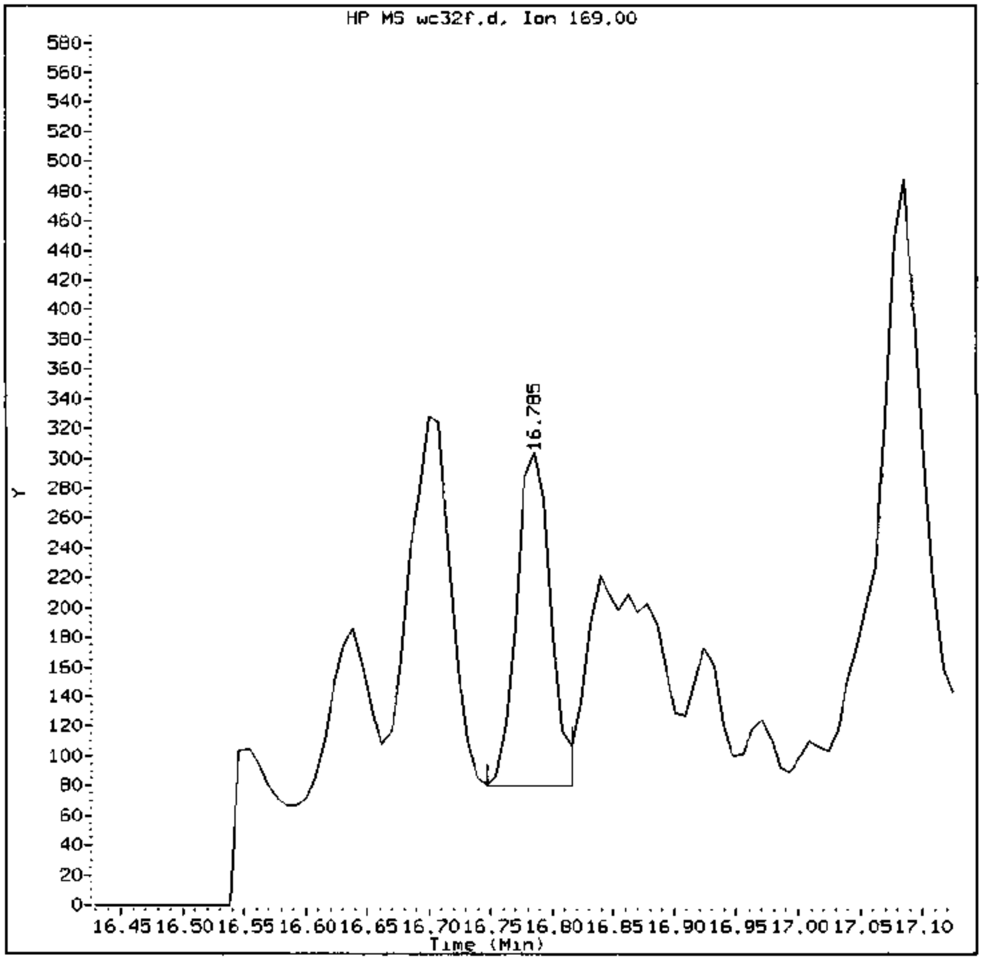
Data File: /chem1/nt10.i/20130215.b/SIM.b/wc32f.d
Injection Date: 15-FEB-2013 21:40
Instrument: nt10.i
Client Sample ID: SG-95-0-10-013113

Compound: N-Nitrosodiphenylamine
CAS Number: 86-30-6



WC32F, /chem1/nt10.i/20130215.b/SIM.b/wc32f.d

N-Nitrosodiphenylamine   Amount: 0.03   Area: 438



MANUAL INTEGRATION for N-Nitrosodiphenylamine

1. Baseline correction ✓
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other ______________________

Analyst: VB   Date: 2/19/13

CO-ELUTION SUMMARY FOR FILE - wc32f.d

Lab ID: WC32F, Method: SIM.b/SIMABN2.m, Instrument: nt10.i, Date: 15-FEB-2013

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Analytical Resources Inc.: Organics Instrument Log

NT-10 Serial No.:GC=CN10837018, MS= US83131105

Date: 2/16/13 Analysis: ABN/SIMABN Analyst: YZ

GC Program: ABN2 Column No: 247358 Column Type: ZB5ms

Instrument Tune (.U or .CT.): 1212 DFT EM Voltage: ____

Calibration File: ____ Curve Date: ____ Injection Vol.: ____

IS/SS	Ical/Ccal	LCS/ICV
1978-2	2006-2	
	2064-2	
	2067-3	
	2050-1,2	
	1998-4	

Document All Maintenance Tasks In StarLIMS

INTERNAL STANDARD SUMMARY FOR DATABATCH - /chem1/nt10.i/20130216.b

	Time	Filename	LabID	ClientId	DF												
1	1040	df0216.d	DFTPP	DFTPP	1	NO ISTDS FOUND											
2	1140	cc0216a.d	ABN 1		1	8.65	57062	11.30	211300	15.19	113596	18.46	216553	23.58	244346	25.96	255939
3	1900	wc32g.d	WC32G	SG-08-0-10-0	5	8.67	41040	11.33	159427	15.22	88068	18.50	165739	23.62	217348	26.01	236659
4	1936	wc32gmsd.d	WC32GMSD	SG-08-0-10-0	1	8.68	42965	11.34	167595	15.23	97752	18.52	189098	23.65	248303	26.04	260303
5	2012	wc32h.d	WC32H	SG-09-0-10-0	1	8.67	47756	11.32	181920	15.22	97854	18.51	172362	23.61	233923	26.02	243901
6	2048	wc33g.d	WC33G	MA-09-0-10-0	1	8.67	45519	11.32	169051	15.22	92993	18.49	176289	23.62	217527	26.01	226575

YZ 2/20/13

Every line must contain information or be lined out. Make all entries legible.
Start a new page for each QC period. Document All Maintenance Tasks In StarLIMS

MANUAL INTEGRATION SUMMARY FOR DATABATCH - /chem1/nt10.i/20130215.b/SIM.b

ARI Job No.: WC32 Method: SIM.b/SIMABN2.m Instrument: nt10.i Date: 15-FEB-2013

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1650	wc32mb.d	WC32MBS1	WC32MBS1	1	Phenol, Diethylphthalate,
1726	wc32sb.d	WC32LCSS1	WC32LCSS1	1	NO MANUAL INTEGRATION
1803	wc32sbd.d	WC32LCSDS1	WC32LCSDS1	1	NO MANUAL INTEGRATION
1839	wc32a.d	WC32A	SG-12-0-10	1	1,4-Dichlorobenzene, Benzyl alcohol, Dimethylphthalate, Diethylphthalate,
1915	wc32b.d	WC32B	SG-13-0-10	1	1,4-Dichlorobenzene, Dimethylphthalate, Diethylphthalate, Pentachlorophenol,
1952	wc32c.d	WC32C	SG-07-0-10	1	Benzyl alcohol, Dimethylphthalate, Diethylphthalate,
2028	wc32d.d	WC32D	SG-06-0-10	1	1,4-Dichlorobenzene, Benzyl alcohol, Dimethylphthalate,
2104	wc32e.d	WC32E	SG-05-0-10	1	Phenol, Diethylphthalate,
2140	wc32f.d	WC32F	SG-95-0-10	1	N-Nitrosodiphenylamine,
2253	wc32gms.d	WC32GMS	SG-08-0-10	1	NO MANUAL INTEGRATION
1900	wc32g.d	WC32G	SG-08-0-10	5	Diethylphthalate,
1936	wc32gmsd.d	WC32GMSD	SG-08-0-10	1	2-Fluorophenol,
2012	wc32h.d	WC32H	SG-09-0-10	1	1,4-Dichlorobenzene, Benzyl alcohol, Diethylphthalate,
2048	wc33g.d	WC33G	HA-09-0-10	1	NO MANUAL INTEGRATION

5002:0131

Q-FLAG SUMMARY FOR DATABATCH - /chem1/nt10.i/20130216.b/SIM.b

Instrument: nt10.i   Date: 16-FEB-2013   Method: SIM.b/SIMABN2.m

INITIAL CAL: 25-JAN-2013

Compound	%RSD or R^2
NO Q-FLAGS	

CONTINUING CAL: 16-FEB-2013

Compound	%D
~~Diethylphthalate~~	~~20.5~~
Pentachlorophenol	-72.3
Butylbenzylphthalate	31.9
Dibenzo(a,h)anthracene	24.9

Data File: /chem1/nt10.i/20130216.b/df0216.d

Date : 16-FEB-2013 10:48

Client ID: DFTPP

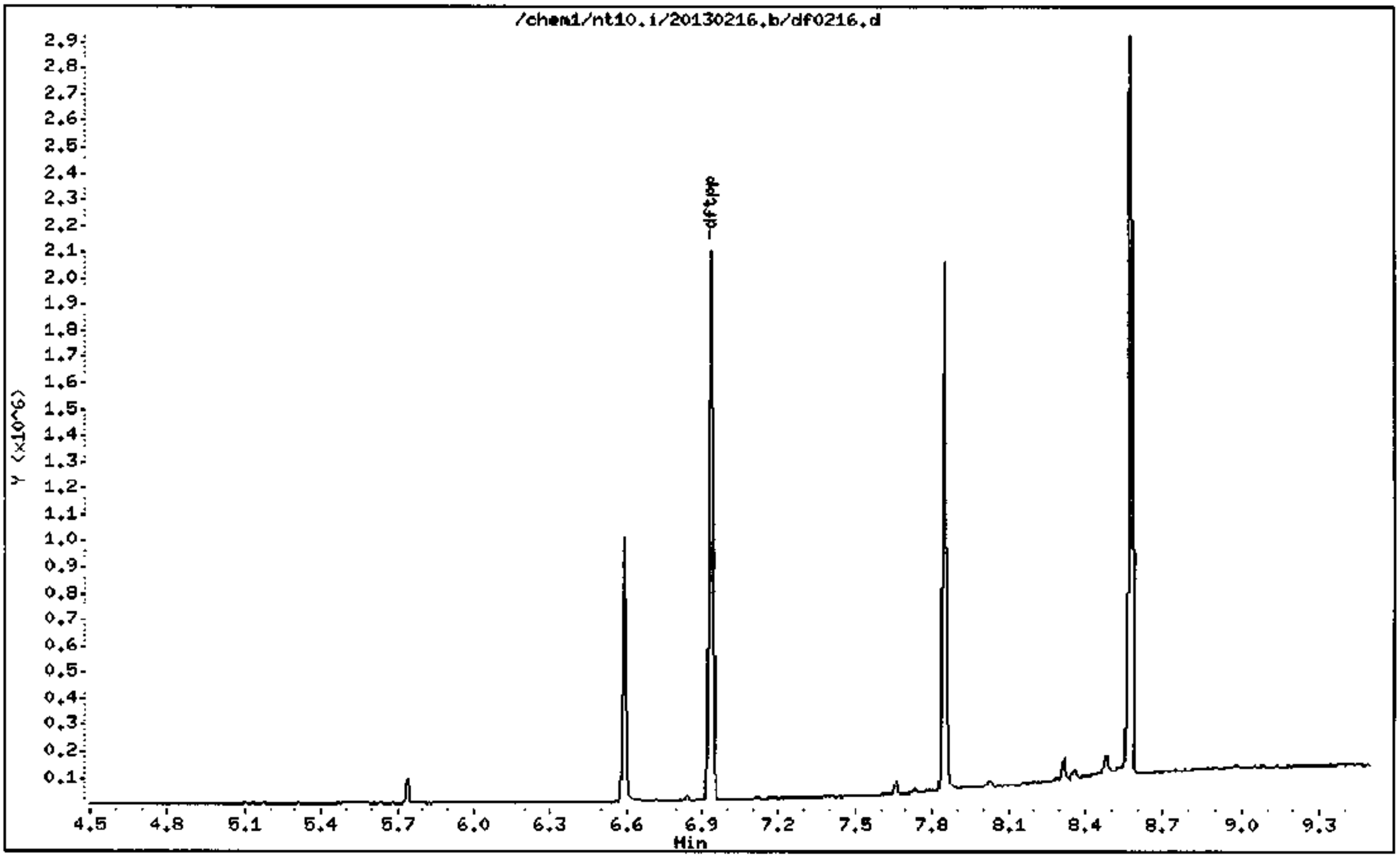
Instrument: nt10.i

Sample Info: DFTPP

Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25



Data File: /chem1/nt10.i/20130216.b/df0216.d

Date : 16-FEB-2013 10:48

Client ID: DFTPP

Instrument: nt10.i

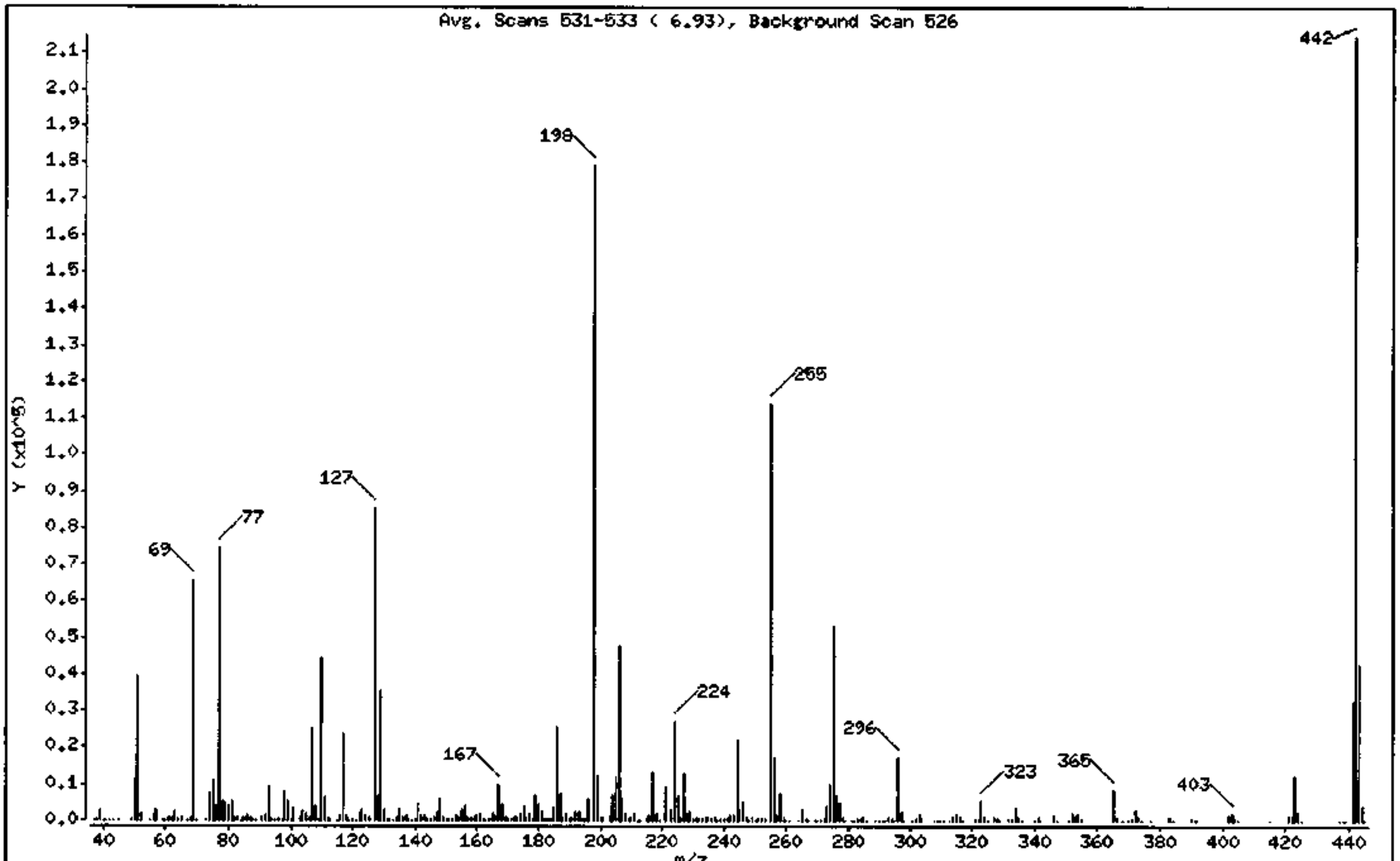
Sample Info: DFTPP

Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	22.12
68	Less than 2.00% of mass 69	0.58 (1.57)
69	Mass 69 relative abundance	36.62
70	Less than 2.00% of mass 69	0.13 (0.35)
127	10.00 - 80.00% of mass 198	47.82
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.78
275	10.00 - 60.00% of mass 198	29.83
365	Greater than 1.00% of mass 198	4.81
441	0.01 - 24.00% of mass 442	18.17 (15.15)
442	50.00 - 200.00% of mass 198	119.92
443	15.00 - 24.00% of mass 442	24.07 (20.07)

Date : 16-FEB-2013 10:48

Client ID: DFTPP

Instrument: nt10.i

Sample Info: DFTPP

Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

Data File: df0216.d
Spectrum: Avg. Scans 531-533 (6.93), Background Scan 526
Location of Maximum: 442.00
Number of points: 307

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	185	125.00	1140	205.00	11950	292.00	218
38.00	579	127.00	85600	206.00	47688	293.00	1094
39.00	2882	128.00	6688	207.00	6211	294.00	285
40.00	123	129.00	35536	208.00	1831	295.00	234
41.00	135	130.00	3084	209.00	441	296.00	17280
42.00	169	131.00	582	210.00	850	297.00	2357
43.00	59	132.00	392	211.00	2086	298.00	152
45.00	121	133.00	191	212.00	202	301.00	192
49.00	353	134.00	1135	213.00	216	302.00	279
50.00	11288	135.00	2781	215.00	735	303.00	1993
51.00	39592	136.00	1195	216.00	1279	304.00	562
52.00	2071	137.00	1361	217.00	13461	308.00	217
53.00	119	138.00	395	218.00	1828	309.00	147
55.00	230	139.00	98	219.00	217	310.00	193
56.00	1405	140.00	506	221.00	9554	311.00	56
57.00	3000	141.00	4595	223.00	2960	313.00	166
59.00	52	142.00	1468	224.00	27352	314.00	869
60.00	59	143.00	1244	225.00	7056	315.00	2020
61.00	776	144.00	310	226.00	829	316.00	1107
62.00	844	145.00	362	227.00	12729	317.00	178
63.00	2256	146.00	913	228.00	1900	321.00	575
64.00	330	147.00	2436	229.00	2486	322.00	274
65.00	1172	148.00	5850	230.00	325	323.00	5349
67.00	120	149.00	992	231.00	1027	324.00	1063
68.00	1030	150.00	325	232.00	250	325.00	58
69.00	65552	151.00	669	233.00	248	327.00	1149
70.00	227	152.00	486	234.00	766	328.00	536
73.00	589	153.00	1618	235.00	950	329.00	145
74.00	7175	154.00	1132	236.00	689	332.00	415
75.00	10790	155.00	2774	237.00	1026	333.00	549
76.00	3744	156.00	3792	238.00	149	334.00	3622
77.00	74552	157.00	816	239.00	469	335.00	961
78.00	5226	158.00	886	240.00	506	336.00	109
79.00	5098	159.00	821	241.00	808	340.00	50
80.00	3986	160.00	1566	242.00	1526	341.00	750

Data File: /chem1/nt10.i/20130216.b/df0216.d

Date : 16-FEB-2013 10:48

Client ID: DFTPP Instrument: nt10.i

Sample Info: DFTPP

Operator: YZ

Column phase: ZB-5msi Column diameter: 0.25

Data File: df0216.d
Spectrum: Avg. Scans 531-533 (6.93), Background Scan 526
Location of Maximum: 442.00
Number of points: 307

m/z	Y	m/z	Y	m/z	Y	m/z	Y
81.00	5478	161.00	2156	243.00	1651	342.00	176
82.00	1215	162.00	670	244.00	21968	346.00	1264
83.00	1146	163.00	127	245.00	3005	347.00	205
84.00	88	164.00	288	246.00	4810	351.00	54
85.00	834	165.00	1900	247.00	1014	352.00	1737
86.00	1550	166.00	1535	248.00	210	353.00	1250
87.00	874	167.00	9747	249.00	826	354.00	1770
88.00	266	168.00	4401	250.00	130	355.00	503
89.00	194	169.00	873	251.00	276	365.00	8615
91.00	1205	170.00	351	252.00	350	366.00	1143
92.00	1474	171.00	346	253.00	638	368.00	79
93.00	9408	172.00	905	255.00	113928	370.00	152
94.00	696	173.00	1173	256.00	17088	371.00	492
95.00	47	174.00	2067	257.00	1268	372.00	3063
96.00	374	175.00	3735	258.00	7345	373.00	782
97.00	73	176.00	1091	259.00	1177	374.00	69
98.00	7875	177.00	1851	260.00	157	377.00	50
99.00	5362	178.00	677	261.00	178	383.00	850
100.00	534	179.00	7073	264.00	187	384.00	211
101.00	3235	180.00	4669	265.00	3068	390.00	404
102.00	138	181.00	2297	266.00	425	391.00	244
103.00	1191	182.00	383	267.00	143	392.00	173
104.00	2248	183.00	272	269.00	54	401.00	203
105.00	1865	184.00	693	270.00	239	402.00	1383
106.00	743	185.00	3324	271.00	239	403.00	1889
107.00	25192	186.00	25792	272.00	412	404.00	637
108.00	3807	187.00	7481	273.00	3746	405.00	61
109.00	681	188.00	796	274.00	9905	415.00	51
110.00	44632	189.00	1797	275.00	53392	421.00	1637
111.00	6653	190.00	357	276.00	7028	422.00	1497
112.00	1021	191.00	1058	277.00	4860	423.00	12129
113.00	326	192.00	2370	278.00	787	424.00	2390
115.00	152	193.00	2425	279.00	146	425.00	198
116.00	1612	194.00	639	281.00	46	437.00	60
117.00	23856	195.00	327	282.00	214	438.00	155

Data File: /chem1/nt10.i/20130216.b/df0216.d

Date : 16-FEB-2013 10:48

Client ID: DFTPP

Instrument: nt10.i

Sample Info: DFTPP

Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

Data File: df0216.d

Spectrum: Avg. Scans 531-533 (6.93), Background Scan 526

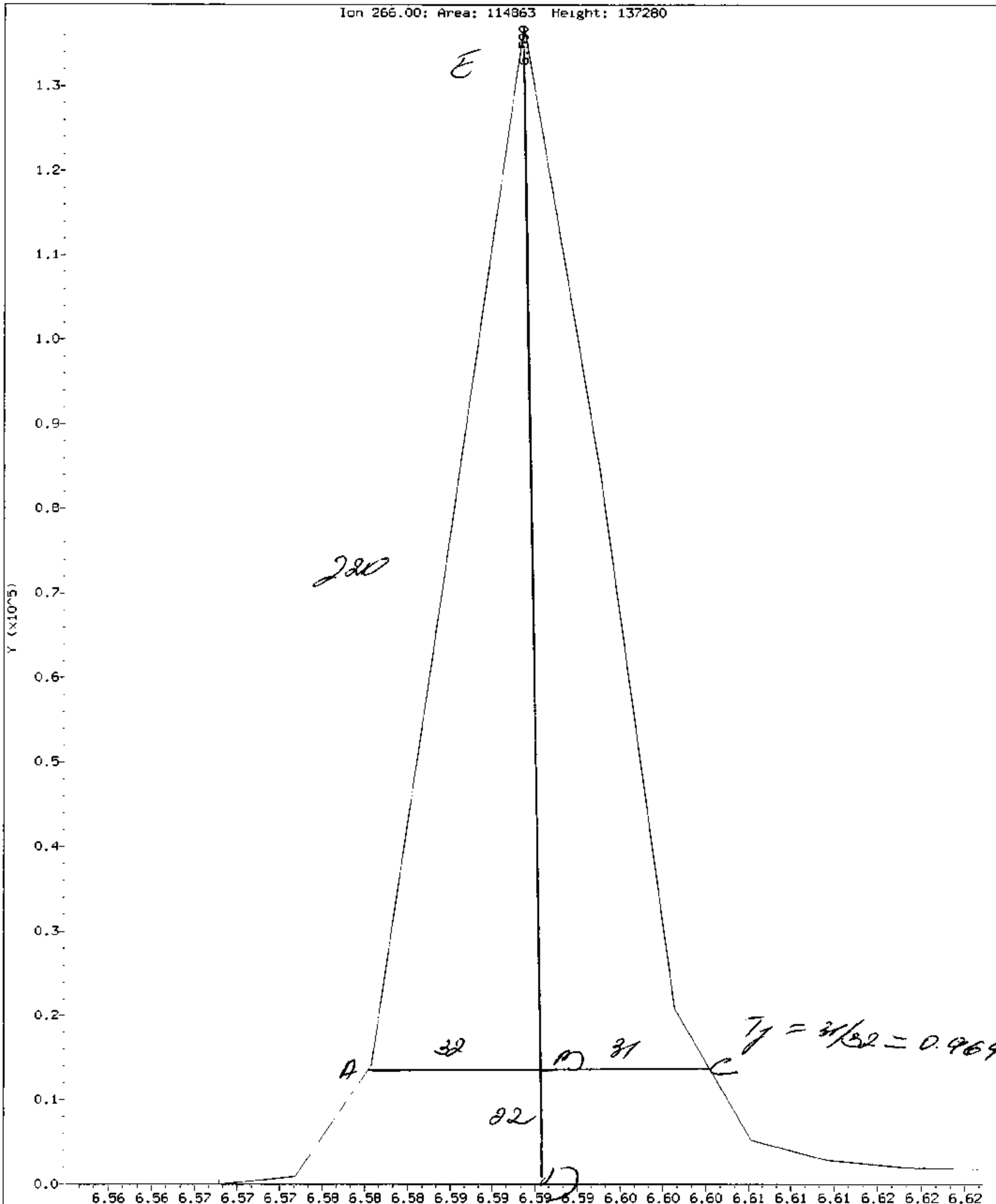
Location of Maximum: 442.00

Number of points: 307

m/z	Y	m/z	Y	m/z	Y	m/z	Y
118.00	1688	196.00	5897	283.00	672	439.00	138
119.00	118	198.00	178944	284.00	408	441.00	32520
120.00	377	199.00	12133	285.00	784	442.00	214656
121.00	166	200.00	984	286.00	180	443.00	43080
122.00	1812	201.00	984	289.00	203	444.00	4044
123.00	2928	203.00	1549	290.00	135	445.00	177
124.00	1292	204.00	7095	291.00	50		

Data File: /chem1/nt10.i/20130216.b/DDT.b/df0216.d
Injection Date: 16-FEB-2013 10:48
Instrument: nt10.i
Client Sample ID: DFTPP

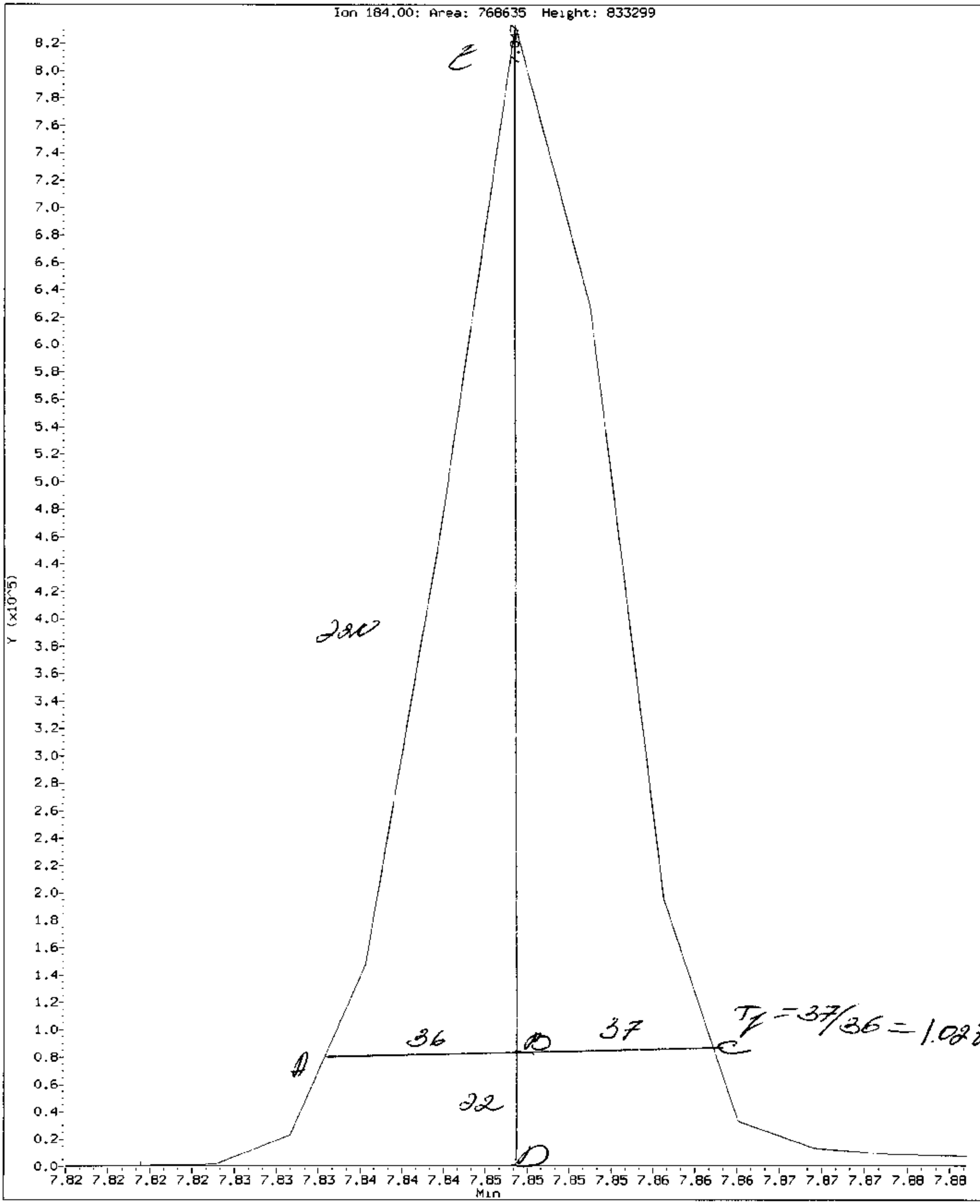
Compound: Pentachlorophenol
CAS Number: 87-86-5



WC02 01221

Data File: /chem1/nt10.i/20130216.b/DDT.b/df0216.d
Injection Date: 16-FEB-2013 10:48
Instrument: nt10.i
Client Sample ID: DFTPP

Compound: Benzidine
CAS Number:



WC02 : 01222

Analytical Resources Inc.
ABN by sw846 8270C
DDT Breakdown Report

Data file: /chem1/nt10.i/20130216.b/DDT.b/df0216.d
Method: /chem1/nt10.i/20130216.b/DDT.b/sw846ddt.m
Analysis Date: 16-FEB-2013 10:48

ARI ID: DFTPP
Misc: 11-
Instrument: nt10.i

COMPOUND	RT	AREA
Pentachlorophenol	6.590	114863
Benzidine	7.847	768635
4,4'-DDE	8.029	2273
4,4'-DDD	8.318	14663
4,4'-DDT	8.574	526932

$$\text{DDT Percent Breakdown} = \frac{(\text{DDE Area} + \text{DDD Area}) * 100}{(\text{DDE Area} + \text{DDD Area} + \text{DDT Area})}$$

$$\text{DDT Percent Breakdown} = \frac{(\ 2273 + 14663)\ *\ 100}{(\ 2273 + 14663 + 526932)}$$

DDT Percent Breakdown = 3.1 %

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt10.i Injection Date: 16-FEB-2013 11:40
Lab File ID: cc0216a.d Init. Cal. Date(s): 25-JAN-2013 25-JAN-2013
Analysis Type: Init. Cal. Times: 12:59 17:53
Lab Sample ID: ABN 1 Quant Type: ISTD
Method: /chem1/nt10.i/20130216.b/SIM.b/SIMABN2.m

COMPOUND	RRF / AMOUNT	RF1	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 1 2-Fluorophenol	1.27261	1.29908	0.010	2.07975	20.00000	Averaged
3 Phenol	1.61623	1.78991	0.010	10.74602	20.00000	Averaged
7 1,3-Dichlorobenzene	1.62301	1.54190	0.010	-4.99751	20.00000	Averaged
9 1,4-Dichlorobenzene	1.62039	1.54008	0.010	-4.95604	20.00000	Averaged
11 Benzyl alcohol	0.95765	1.00971	0.010	5.43643	20.00000	Averaged
12 1,2-Dichlorobenzene	1.53436	1.46690	0.010	-4.39669	20.00000	Averaged
13 2-Methylphenol	1.21614	1.30244	0.010	7.09659	20.00000	Averaged
15 4-Methylphenol	1.25940	1.34597	0.010	6.87423	20.00000	Averaged
16 N-Nitroso-di-n-propylamine	0.79168	0.80761	0.050	2.01229	20.00000	Averaged
22 2,4-Dimethylphenol	0.34482	0.36611	0.010	6.17330	20.00000	Averaged
26 1,2,4-Trichlorobenzene	0.37237	0.36305	0.010	-2.50476	20.00000	Averaged
30 Hexachlorobutadiene	0.22607	0.22389	0.010	-0.96404	20.00000	Averaged
39 Dimethylphthalate	1.21772	1.35396	0.010	11.18781	20.00000	Averaged
50 Diethylphthalate	1.42267	1.71411	0.010	20.48553	20.00000	Averaged <-
54 N-Nitrosodiphenylamine	0.46501	0.47975	0.010	3.17124	20.00000	Averaged
57 Hexachlorobenzene	0.30248	0.30884	0.010	2.10142	20.00000	Averaged
58 Pentachlorophenol	0.17865	0.04952	0.005	-72.28049	20.00000	Averaged <-
$ 66 Terphenyl-d14	0.53149	0.56371	0.010	6.06181	20.00000	Averaged
67 Butylbenzylphthalate	0.38233	0.50428	0.010	31.89811	20.00000	Averaged <-
79 Dibenzo(a,h)anthracene	0.95339	1.19077	0.010	24.89807	20.00000	Averaged <-
90 N-Nitrosodimethylamine	0.75935	0.72696	0.010	-4.26470	20.00000	Averaged

Data File: /chem1/nt10.i/20130216.b/SIM.b/cc0216a.d Page 1
Report Date: 19-Feb-2013 16:02

Analytical Resources, Inc.

METHOD 8270D-SIM

Data file : /chem1/nt10.i/20130216.b/SIM.b/cc0216a.d
Lab Smp Id: ABN 1
Inj Date : 16-FEB-2013 11:40
Operator : YZ Inst ID: nt10.i
Smp Info : ABN 1
Misc Info :
Comment :
Method : /chem1/nt10.i/20130216.b/SIM.b/SIMABN2.m
Meth Date : 19-Feb-2013 14:16 yev Quant Type: ISTD
Cal Date : 25-JAN-2013 17:53 Cal File: ic0125i.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 3.50

YZ 3/19/13

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.356	6.356	(0.735)	18532	1.00000	1.021
	3 Phenol	94	8.110	8.110	(0.937)	25534	1.00000	1.107
	7 1,3-Dichlorobenzene	146	8.574	8.574	(0.991)	21996	1.00000	0.9500
*	8 1,4-Dichlorobenzene-d4	152	8.651	8.651	(1.000)	57062	4.00000	
	9 1,4-Dichlorobenzene	146	8.682	8.682	(1.004)	21970	1.00000	0.9504
	11 Benzyl alcohol	79	8.985	8.985	(1.039)	14404	1.00000	1.054
	12 1,2-Dichlorobenzene	146	9.055	9.055	(1.047)	20926	1.00000	0.9560
	13 2-Methylphenol	108	9.272	9.272	(1.072)	18580	1.00000	1.071
	15 4-Methylphenol	108	9.575	9.575	(1.107)	19201	1.00000	1.069
	16 N-Nitroso-di-n-propylamine	70	9.567	9.567	(1.106)	11521	1.00000	1.020
	22 2,4-Dimethylphenol	107	10.677	10.677	(0.945)	38679	2.00000	2.123
	26 1,2,4-Trichlorobenzene	180	11.216	11.216	(0.992)	19178	1.00000	0.9750
*	27 Naphthalene-d8	136	11.301	11.301	(1.000)	211300	4.00000	
	30 Hexachlorobutadiene	225	11.749	11.749	(1.040)	11827	1.00000	0.9904
	39 Dimethylphthalate	163	14.721	14.721	(0.969)	38451	1.00000	1.112
*	42 Acenaphthene-d10	162	15.193	15.193	(1.000)	113596	4.00000	
	50 Diethylphthalate	149	16.306	16.306	(1.073)	48679	1.00000	1.205
	54 N-Nitrosodiphenylamine	169	16.692	16.692	(0.904)	25973	1.00000	1.032
	57 Hexachlorobenzene	284	17.795	17.795	(0.964)	16720	1.00000	1.021
	58 Pentachlorophenol	266	18.221	18.221	(0.987)	5362	2.00000	0.5544
*	59 Phenanthrene-d10	188	18.461	18.461	(1.000)	216553	4.00000	
$	66 Terphenyl-d14	244	21.710	21.710	(0.921)	34435	1.00000	1.061
	67 Butylbenzylphthalate	149	22.662	22.662	(0.961)	30805	1.00000	1.319
*	69 Chrysene-d12	240	23.584	23.584	(1.000)	244346	4.00000	
*	77 Perylene-d12	264	25.961	25.961	(1.000)	255939	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.154	28.154	(1.085)	76191	1.00000	1.249
	90 N-Nitrosodimethylamine	74	4.039	4.039	(0.467)	20741	2.00000	1.915

Report Date: 19-Feb-2013 16:02

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: cc0216a.d
Lab Smp Id: ABN 1
Analysis Type: SV
Quant Type: ISTD
Operator: YZ
Method File: /chem1/nt10.i/20130216.b/SIM.b/SIMABN2.m
Misc Info:

Calibration Date: 16-FEB-2013
Calibration Time: 11:40

Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 5.

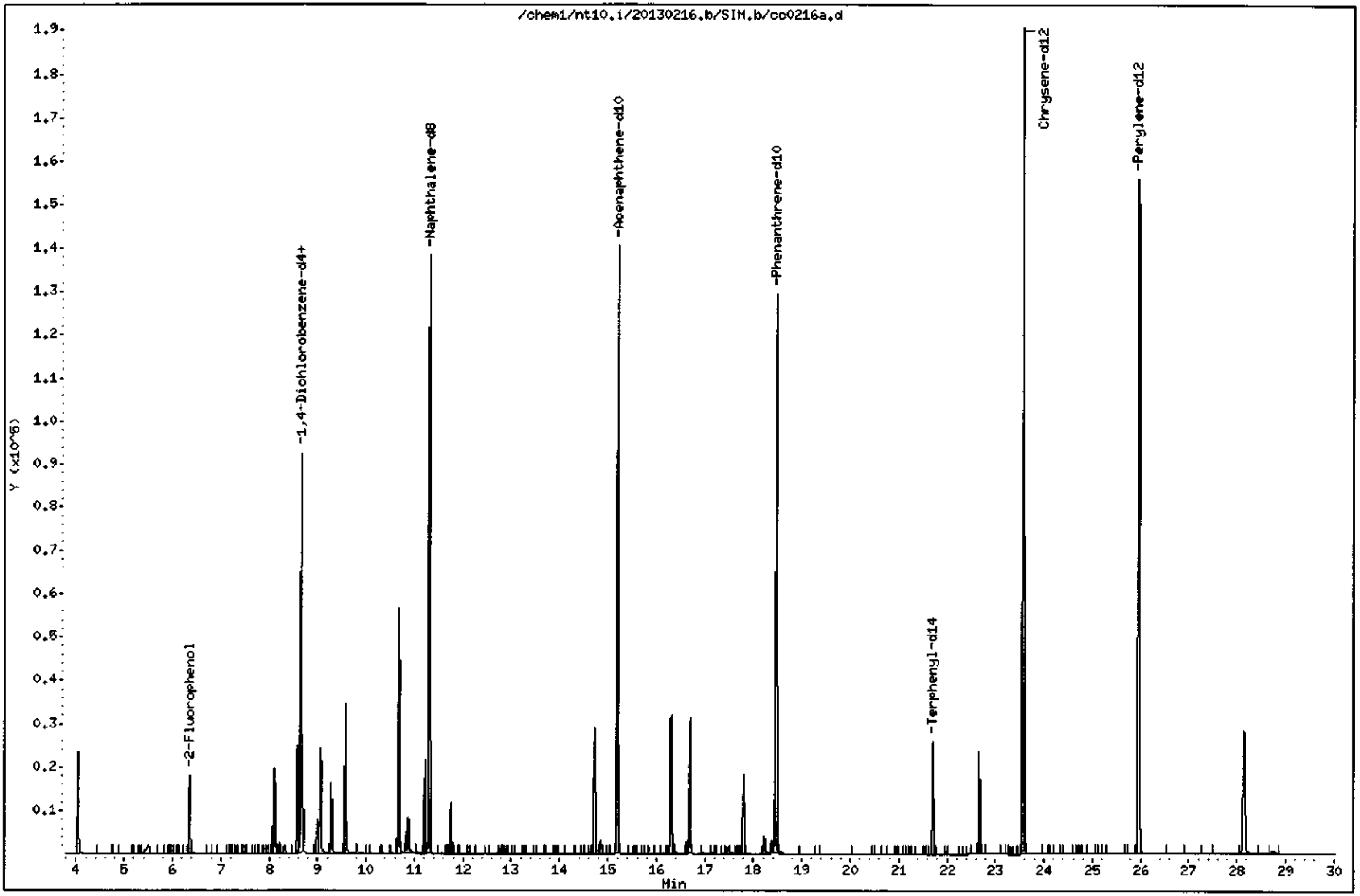
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	53853	26926	107706	57062	5.96
27 Naphthalene-d8	200104	100052	400208	211300	5.60
42 Acenaphthene-d10	112392	56196	224784	113596	1.07
59 Phenanthrene-d10	210710	105355	421420	216553	2.77
69 Chrysene-d12	240805	120402	481610	244346	1.47
77 Perylene-d12	230834	115417	461668	255939	10.88

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.65	8.15	9.15	8.65	0.00
27 Naphthalene-d8	11.30	10.80	11.80	11.30	0.00
42 Acenaphthene-d10	15.19	14.69	15.69	15.19	0.00
59 Phenanthrene-d10	18.46	17.96	18.96	18.46	0.00
69 Chrysene-d12	23.58	23.08	24.08	23.58	0.00
77 Perylene-d12	25.96	25.46	26.46	25.96	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/nt10.i/20130216.b/SIM.b/co0216a.d
Date : 16-FEB-2013 11:40
Client ID:
Sample Info: ABN 1
Column phase: ZB-5msi

Instrument: nt10.i
Operator: YZ
Column diameter: 0.25



CO-ELUTION SUMMARY FOR FILE - cc0216a.d

Lab ID: ABN 1, Method: SIM.b/SIMABN2.m, Instrument: nt10.i, Date: 16-FEB-2013

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Analytical Resources, Inc.

YZ 2/19/13

METHOD 8270D-SIM

Data file : /chem1/nt10.i/20130216.b/SIM.b/wc32g.d
Lab Smp Id: WC32G Client Smp ID: SG-08-0-10-013113
Inj Date : 16-FEB-2013 19:00
Operator : VTS/YZ Inst ID: nt10.i
Smp Info : WC32G,5
Misc Info : 13-2430
Comment :
Method : /chem1/nt10.i/20130216.b/SIM.b/SIMABN2.m
Meth Date : 19-Feb-2013 14:16 yev Quant Type: ISTD
Cal Date : 25-JAN-2013 17:53 Cal File: ic0125i.d
Als bottle: 16
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	5.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Ws	20.10000	Weight of sample extracted (g)
M	48.50000	% Moisture

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
$	1 2-Fluorophenol	112	6.565	6.356	(0.757)	10861	0.83181	401.8(H)
	3 Phenol	94	8.218	8.110	(0.947)	3497	0.21088	101.9
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	8.675	8.651	(1.000)	41040	4.00000	
	9 1,4-Dichlorobenzene	146	8.706	8.682	(1.004)	483	0.02905	14.03
	11 Benzyl alcohol	79	Compound Not Detected.					
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	13 2-Methylphenol	108	9.342	9.272	(1.077)	346	0.02773	13.39
	15 4-Methylphenol	108	9.645	9.575	(1.112)	5009	0.38765	187.2
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	10.723	10.677	(0.946)	403	0.02932	14.16
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	11.332	11.301	(1.000)	159427	4.00000	
	30 Hexachlorobutadiene	225	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
39 Dimethylphthalate	163	Compound Not Detected.					
* 42 Acenaphthene-d10	162	15.224	15.193	(1.000)	88068	4.00000	
50 Diethylphthalate	149	16.337	16.306	(1.073)	3211	0.10251	49.52(M)
54 N-Nitrosodiphenylamine	169	16.715	16.692	(0.904)	587	0.03047 J	14.72
57 Hexachlorobenzene	284	Compound Not Detected.					
58 Pentachlorophenol	266	Compound Not Detected.					
* 59 Phenanthrene-d10	188	18.499	18.461	(1.000)	165739	4.00000	
$ 66 Terphenyl-d14	244	21.749	21.710	(0.921)	26717	0.92512	446.9
67 Butylbenzylphthalate	149	Compound Not Detected.					
* 69 Chrysene-d12	240	23.623	23.584	(1.000)	217348	4.00000	
* 77 Perylene-d12	264	26.015	25.961	(1.000)	236659	4.00000	
79 Dibenzo(a,h)anthracene	278	28.217	28.154	(1.085)	30331	0.53772	259.7(H)
~~90 N-Nitrosodimethylamine~~	~~74~~	~~4.055~~	~~4.039~~	~~(0.467)~~	~~1013~~	~~0.13002~~	~~62.80~~

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Report Date: 19-Feb-2013 14:16

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: wc32g.d
Lab Smp Id: WC32G
Analysis Type: SV
Quant Type: ISTD
Operator: VTS/YZ
Method File: /chem1/nt10.i/20130216.b/SIM.b/SIMABN2.m
Misc Info: 13-2430

Calibration Date: 16-FEB-2013
Calibration Time: 11:40
Client Smp ID: SG-08-0-10-01311
Level: LOW
Sample Type: Sediment

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	53853	26926	107706	41040	-23.79
27 Naphthalene-d8	200104	100052	400208	159427	-20.33
42 Acenaphthene-d10	112392	56196	224784	88068	-21.64
59 Phenanthrene-d10	210710	105355	421420	165739	-21.34
69 Chrysene-d12	240805	120402	481610	217348	-9.74
77 Perylene-d12	230834	115417	461668	236659	2.52

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.65	8.15	9.15	8.67	0.27
27 Naphthalene-d8	11.30	10.80	11.80	11.33	0.27
42 Acenaphthene-d10	15.19	14.69	15.69	15.22	0.20
59 Phenanthrene-d10	18.46	17.96	18.96	18.50	0.21
69 Chrysene-d12	23.58	23.08	24.08	23.62	0.16
77 Perylene-d12	25.96	25.46	26.46	26.01	0.21

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 19-Feb-2013 14:16

Analytical Resources, Inc.

RECOVERY REPORT

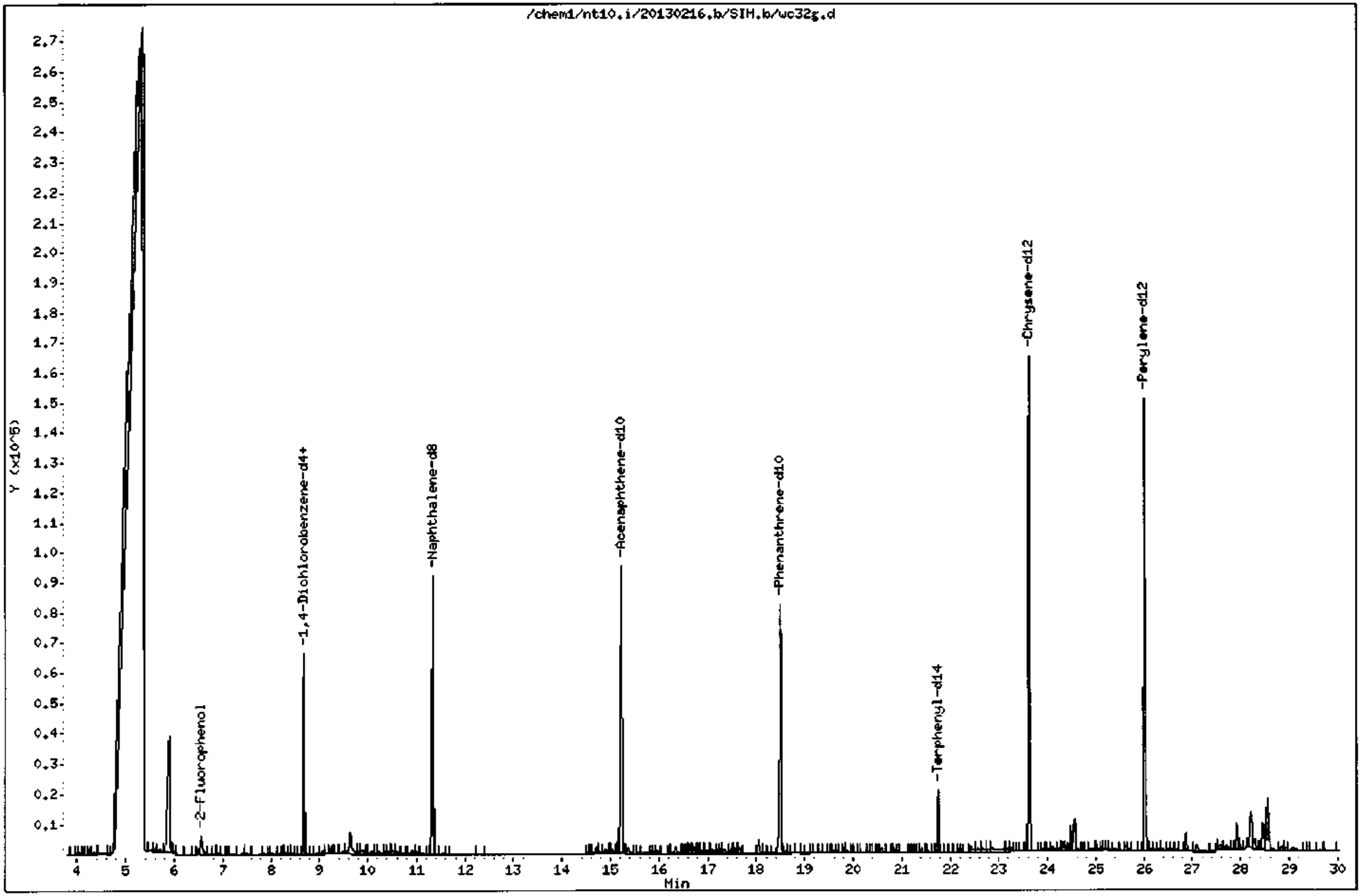
Client Name: Floyd-Snider
Sample Matrix: SOLID
Lab Smp Id: WC32G
Level: LOW
Data Type: MS DATA
SpikeList File: SHORTPSDDA.spk
Sublist File: PSDDA.sub
Method File: /chem1/nt10.i/20130216.b/SIM.b/SIMABN2.m
Misc Info: 13-2430

Client SDG: WC32
Fraction: SV
Client Smp ID: SG-08-0-10-013113
Operator: VTS/YZ
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 1 2-Fluorophenol	724.5	401.8	55.45	30-160
$ 66 Terphenyl-d14	483.0	446.9	92.51	30-160

Data File: /chem1/nt10.i/20130216.b/SIM.b/wc32g.d
Date : 16-FEB-2013 19:00
Client ID: SG-08-0-10-013113
Sample Info: WC32G,5
Volume Injected (uL): 1.0
Column phase: ZB-5ms:

Instrument: nt10.i
Operator: VTS/YZ
Column diameter: 0.25



WC32 : 01203

Data File: /chem1/nt10.i/20130216.b/SIM.b/wc32g.d

Date : 16-FEB-2013 19:00

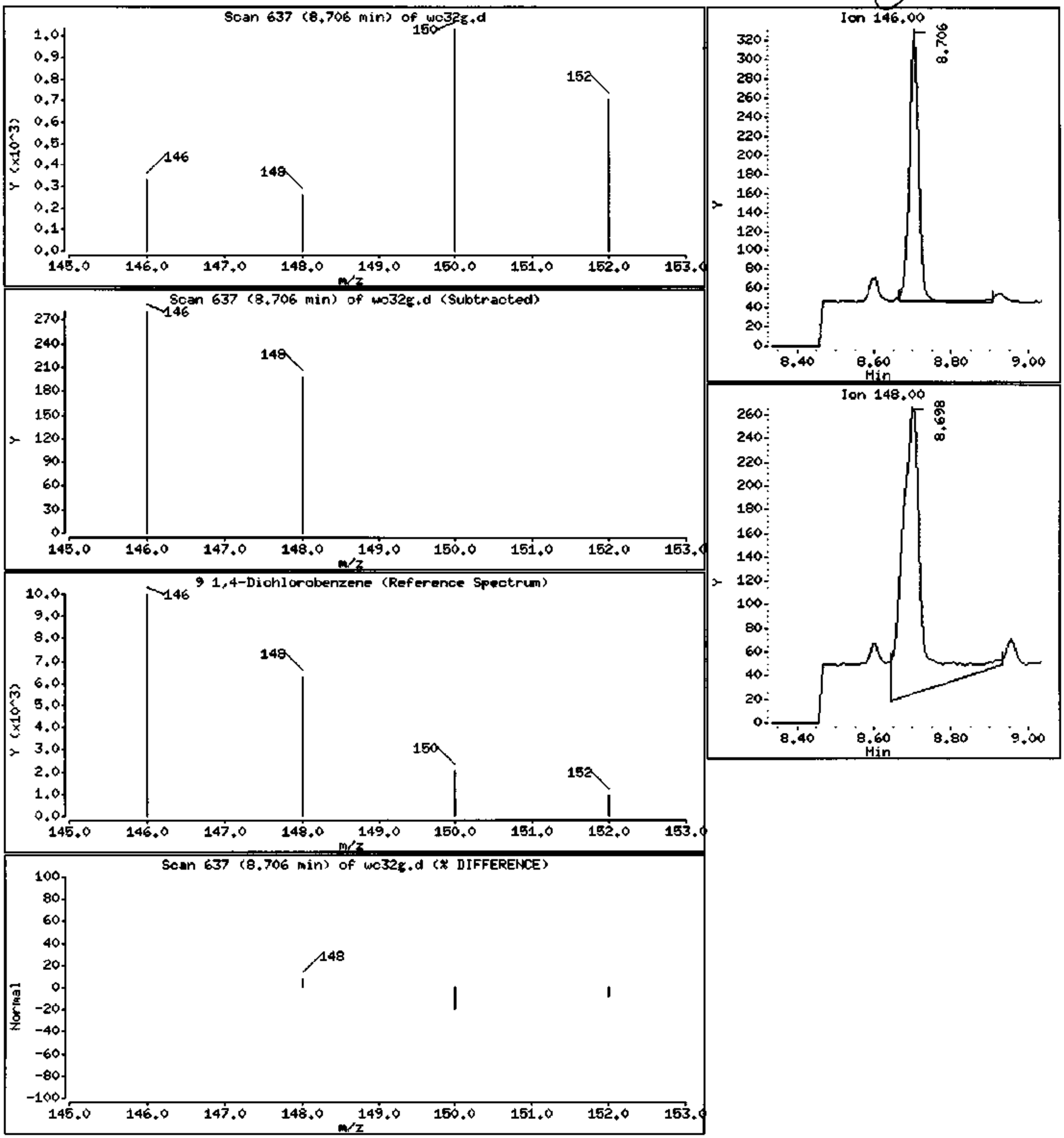
Client ID: SG-08-0-10-013113 Instrument: nt10.i

Sample Info: WC32G,5

Volume Injected (uL): 1.0 Operator: VTS/YZ

Column phase: ZB-5msi Column diameter: 0.25

9 1,4-Dichlorobenzene Concentration: 14.03 ug/kg



Data File: /chem1/nt10.i/20130216.b/SIM.b/wc32g.d

Date : 16-FEB-2013 19:00

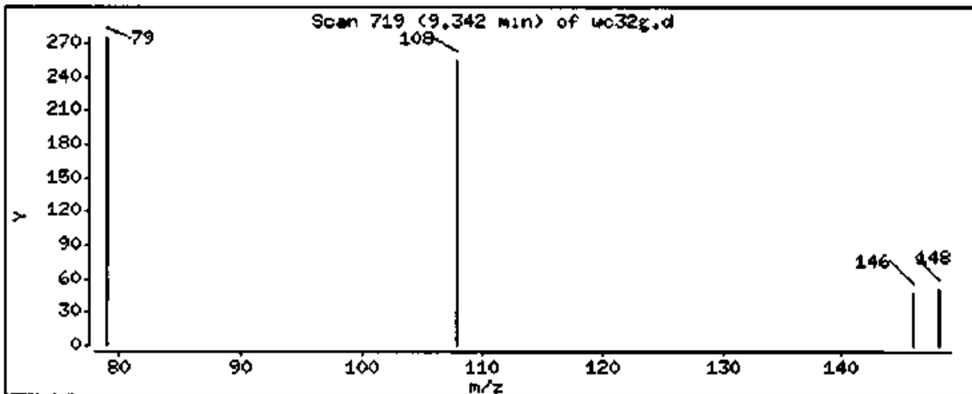
Client ID: SG-08-0-10-013113 Instrument: nt10.i

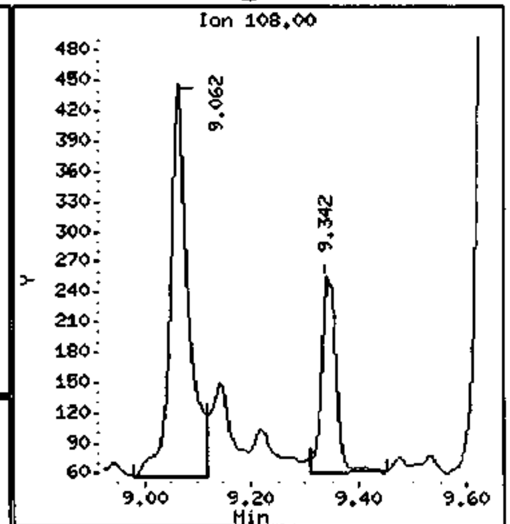
Sample Info: WC32G,5

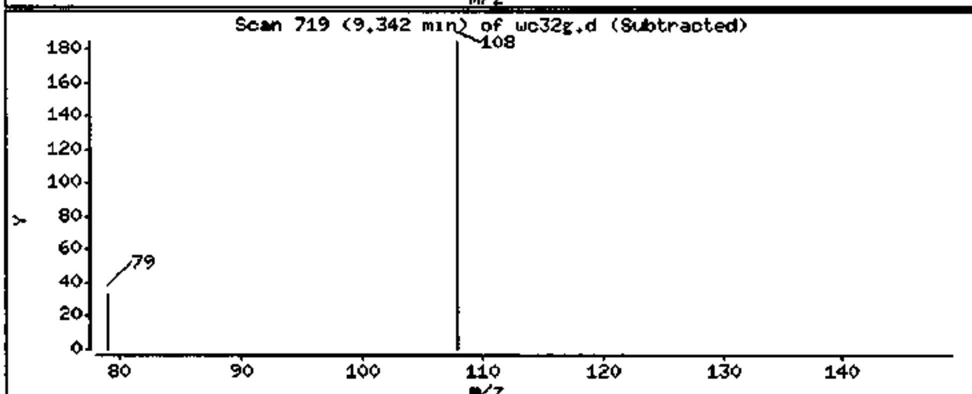
Volume Injected (uL): 1.0 Operator: VTS/YZ

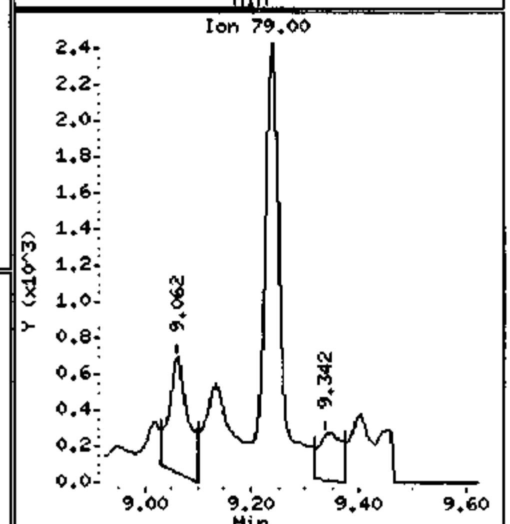
Column phase: ZB-5msi Column diameter: 0.25

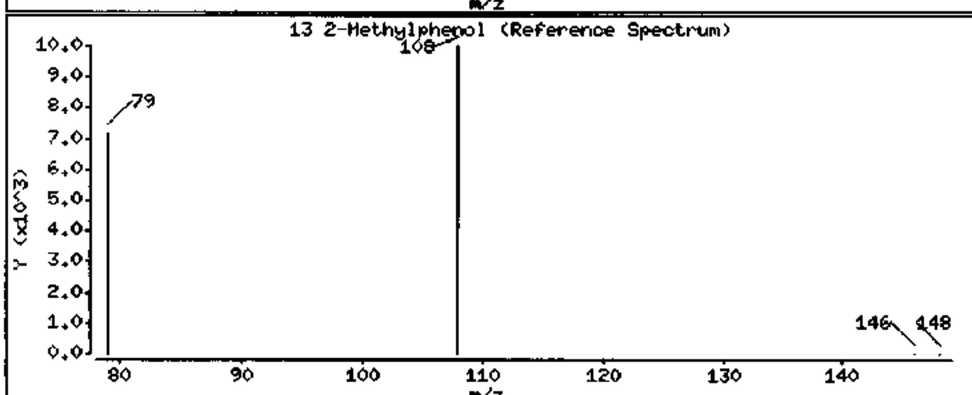
13 2-Methylphenol Concentration: 13.39 ug/kg

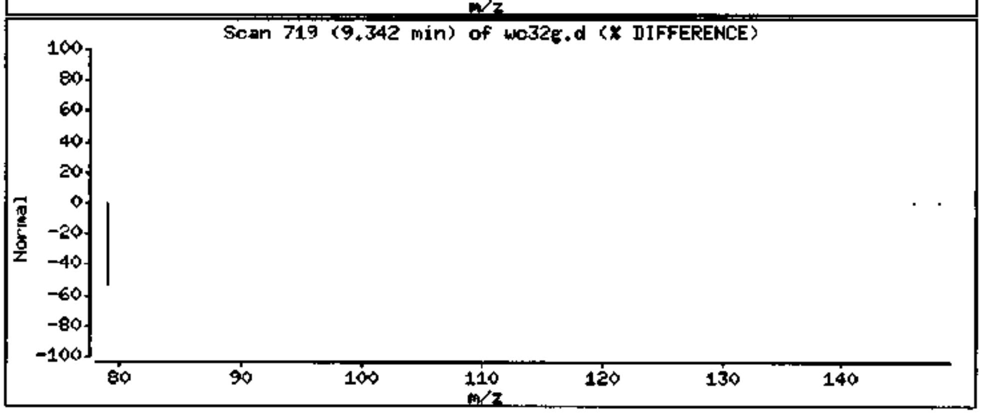












Data File: /chem1/nt10.i/20130216.b/SIM.b/wc32g.d

Date : 16-FEB-2013 19:00

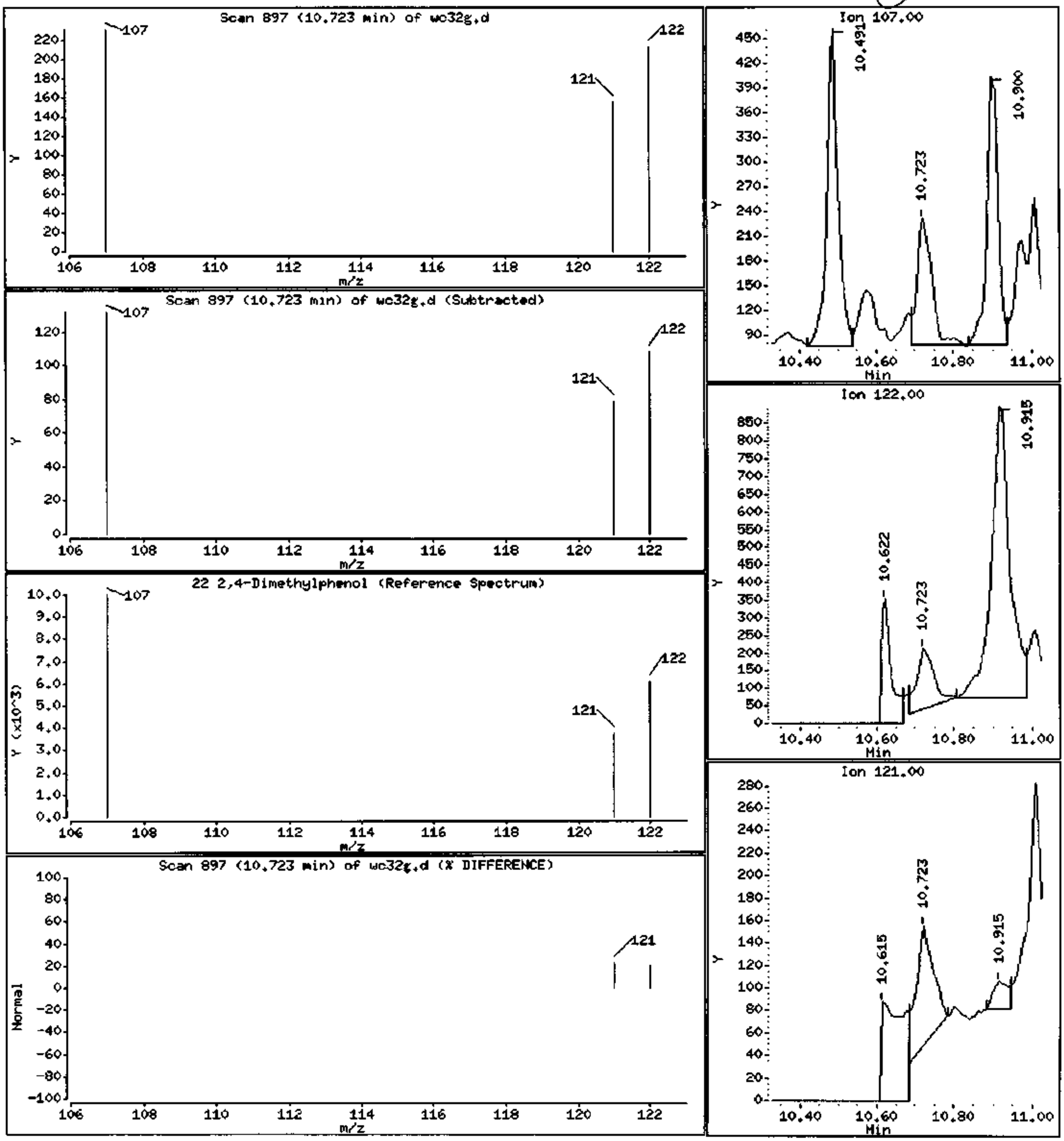
Client ID: SC-08-0-10-013113 Instrument: nt10.i

Sample Info: WC32G,5

Volume Injected (uL): 1.0 Operator: VTS/YZ

Column phase: ZB-5msi Column diameter: 0.25

22 2,4-Dimethylphenol Concentration: 14.16 ug/kg



Data File: /chem1/nt10.i/20130216.b/SIM.b/wc32g.d

Date : 16-FEB-2013 19:00

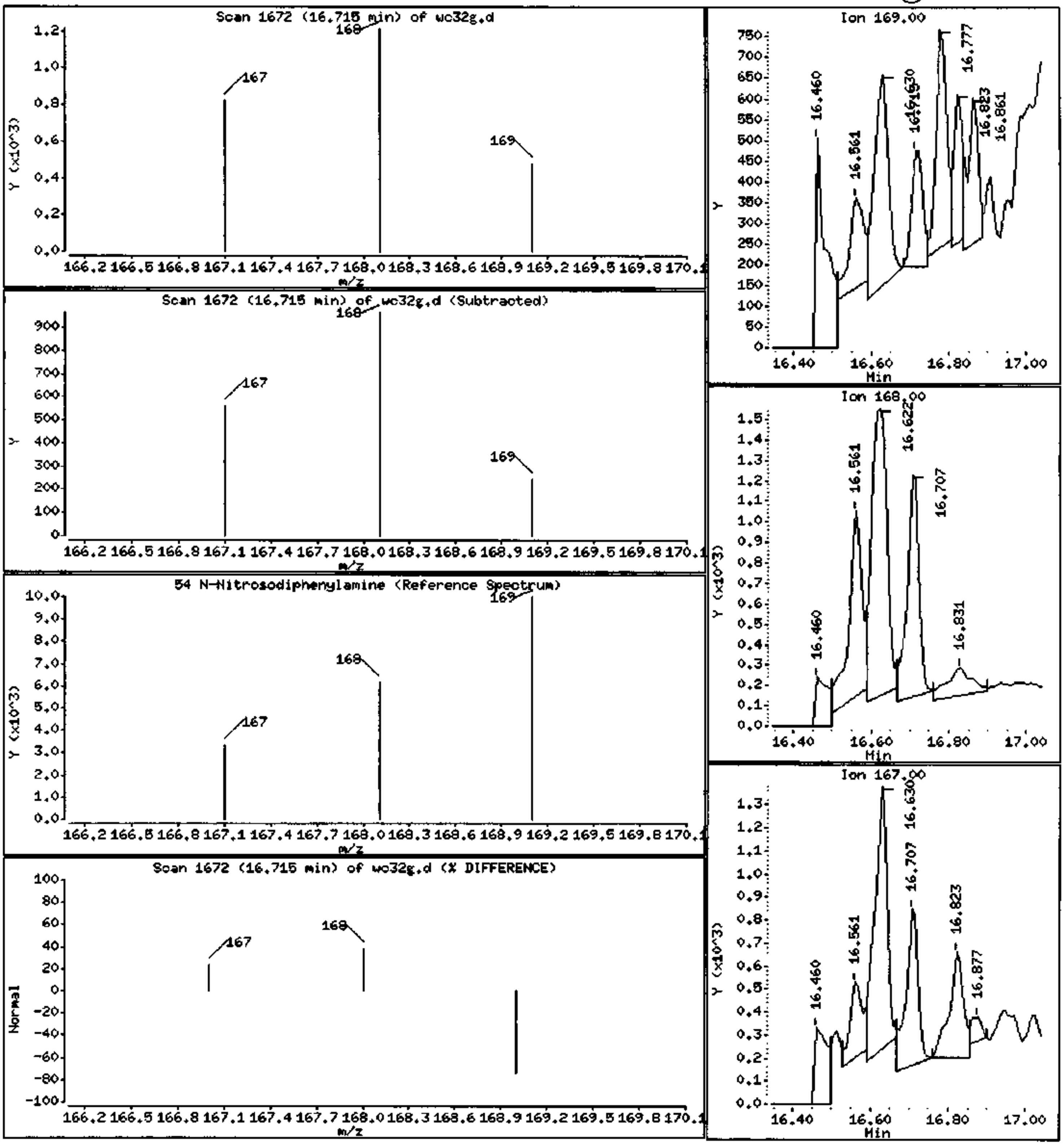
Client ID: SG-08-0-10-013113 Instrument: nt10.i

Sample Info: WC32G,5

Volume Injected (uL): 1.0 Operator: VTS/YZ

Column phase: ZB-5msi Column diameter: 0.25

54 N-Nitrosodiphenylamine Concentration: 14.72 ug/kg



Data File: /chem1/nt10.i/20130216.b/SIM.b/wc32g.d

Date : 16-FEB-2013 19:00

Client ID: SG-08-0-10-013113

Instrument: nt10.i

Sample Info: WC32G,5

Volume Injected (uL): 1.0

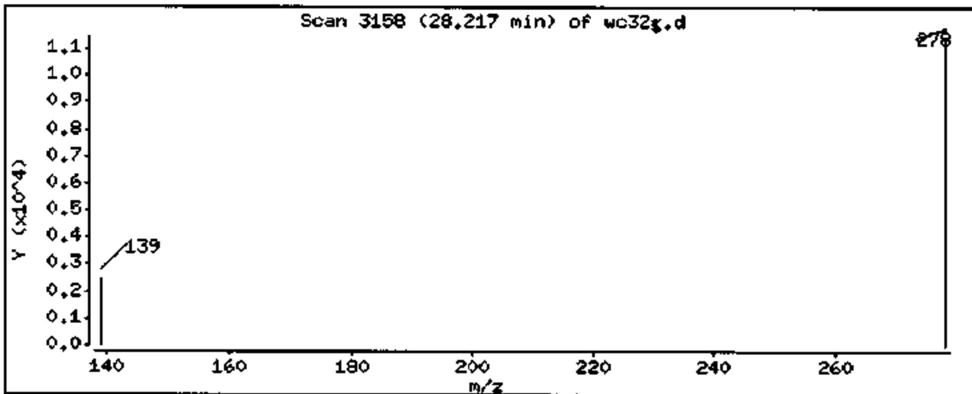
Operator: VTS/YZ

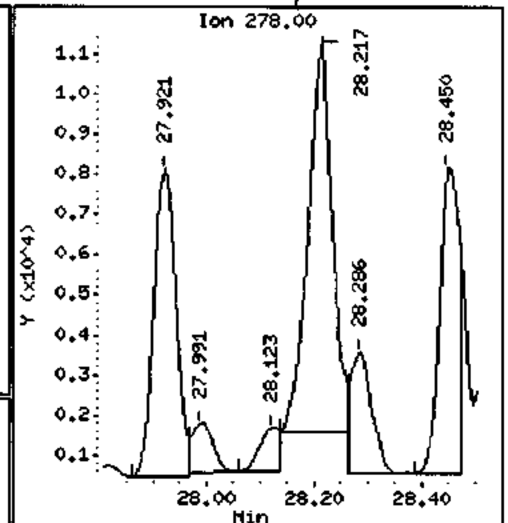
Column phase: ZB-5msi

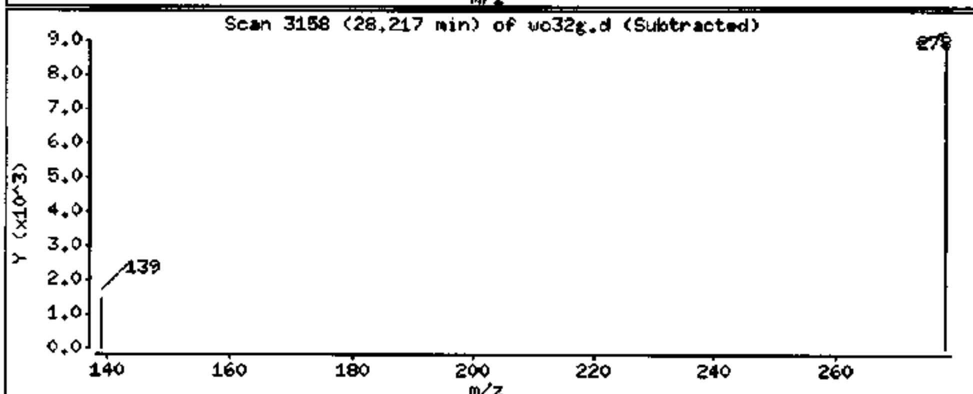
Column diameter: 0.25

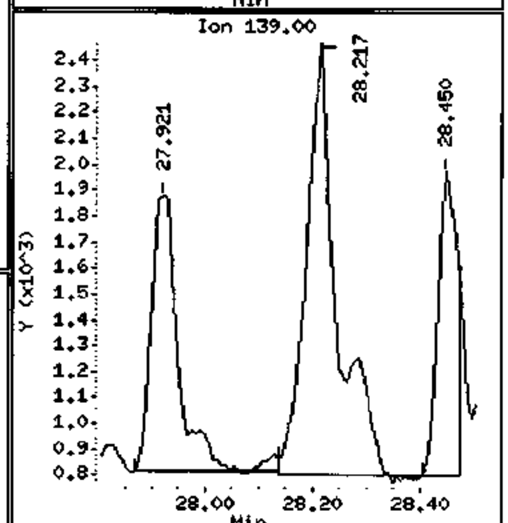
79 Dibenzo(a,h)anthracene

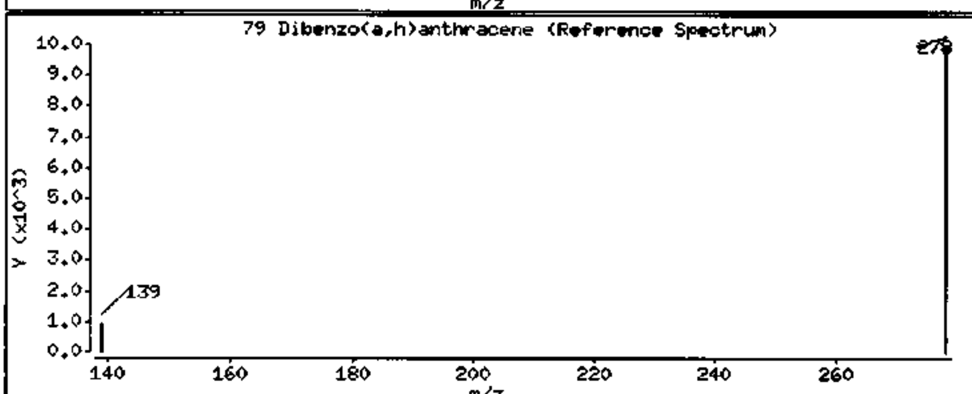
Concentration: 259.7 ug/kg

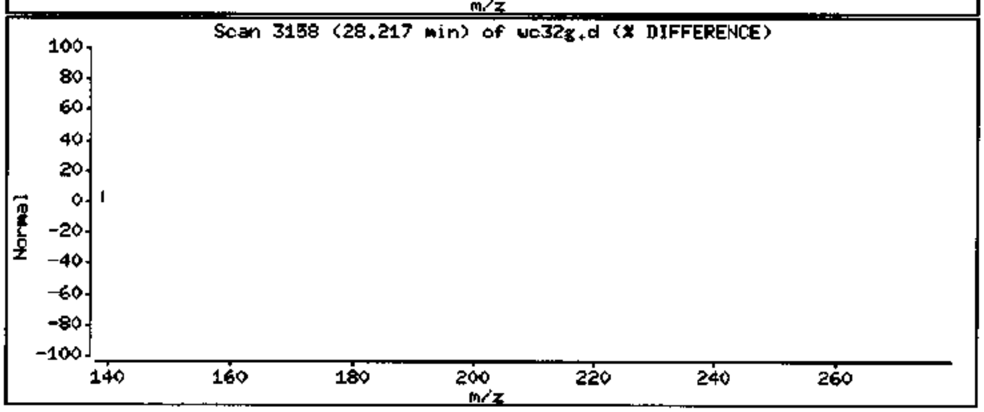












CO-ELUTION SUMMARY FOR FILE - wc32g.d

Lab ID: WC32G, Method: SIM.b/SIMABN2.m, Instrument: nt10.i, Date: 16-FEB-2013

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Data File: /chem1/nt10.i/20130216.b/SIM.b/wc32gmsd.d
Report Date: 19-Feb-2013 14:16

Analytical Resources, Inc.

YZ 2/19/13

METHOD 8270D-SIM

Data file : /chem1/nt10.i/20130216.b/SIM.b/wc32gmsd.d
Lab Smp Id: WC32GMSD   Client Smp ID: SG-08-0-10-0131 MSD
Inj Date : 16-FEB-2013 19:36
Operator : VTS/YZ   Inst ID: nt10.i
Smp Info : WC32GMSD
Misc Info : 13-2430
Comment :
Method : /chem1/nt10.i/20130216.b/SIM.b/SIMABN2.m
Meth Date : 16-Feb-2013 12:27 van   Quant Type: ISTD
Cal Date : 25-JAN-2013 17:53   Cal File: ic0125i.d
Als bottle: 17   QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: PSDDA.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Ws	20.20000	Weight of sample extracted (g)
M	48.50000	% Moisture

Cpnd Variable   Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
$ 1 2-Fluorophenol	112	6.689	6.356	(0.770)	52075	3.80959	366.2(M)
3 Phenol	94	8.272	8.110	(0.953)	64138	3.69451	355.1
7 1,3-Dichlorobenzene	146	8.605	8.574	(0.991)	51608	2.96033	284.6
* 8 1,4-Dichlorobenzene-d4	152	8.683	8.651	(1.000)	42965	4.00000	
9 1,4-Dichlorobenzene	146	8.714	8.682	(1.004)	54517	3.13227	301.1
11 Benzyl alcohol	79	9.109	8.985	(1.049)	30796	2.99388	287.8(H)
12 1,2-Dichlorobenzene	146	9.086	9.055	(1.046)	51768	3.14109	301.9
13 2-Methylphenol	108	9.381	9.272	(1.080)	45403	3.47574	334.1(H)
15 4-Methylphenol	108	9.692	9.575	(1.116)	113679	8.40353	807.8
16 N-Nitroso-di-n-propylamine	70	9.668	9.567	(1.114)	31897	3.75098	360.6(H)
22 2,4-Dimethylphenol	107	10.738	10.677	(0.947)	164843	11.4126	1097
26 1,2,4-Trichlorobenzene	180	11.255	11.216	(0.992)	51571	3.30619	317.8
* 27 Naphthalene-d8	136	11.340	11.301	(1.000)	167555	4.00000	
30 Hexachlorobutadiene	225	11.772	11.749	(1.038)	31545	3.33113	320.2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
39 Dimethylphthalate	163	14.767	14.721	(0.970)	144461	4.85442	466.6
* 42 Acenaphthene-d10	162	15.232	15.193	(1.000)	97752	4.00000	
50 Diethylphthalate	149	16.360	16.306	(1.074)	155597	4.47540	430.2
54 N-Nitrosodiphenylamine	169	16.769	16.692	(0.906)	46116	2.08897	200.8(H)
57 Hexachlorobenzene	284	17.842	17.795	(0.964)	57766	4.02264	386.7
58 Pentachlorophenol	266	18.275	18.221	(0.987)	63905	7.53473	724.3
* 59 Phenanthrene-d10	188	18.515	18.461	(1.000)	189898	4.00000	
$ 66 Terphenyl-d14	244	21.757	21.710	(0.920)	140289	4.25212	408.7
67 Butylbenzylphthalate	149	22.717	22.662	(0.961)	131875	5.55652	534.1
* 69 Chrysene-d12	240	23.646	23.584	(1.000)	248303	4.00000	
* 77 Perylene-d12	264	26.038	25.961	(1.000)	260301	4.00000	
79 Dibenzo(a,h)anthracene	278	28.263	28.154	(1.085)	357937	5.76925	554.6
90 N-Nitrosodimethylamine	74	4.078	4.039	(0.470)	88193	10.8128	1039

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Report Date: 19-Feb-2013 14:16

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: wc32gmsd.d
Lab Smp Id: WC32GMSD
Analysis Type: SV
Quant Type: ISTD
Operator: VTS/YZ
Method File: /chem1/nt10.i/20130216.b/SIM.b/SIMABN2.m
Misc Info: 13-2430

Calibration Date: 16-FEB-2013
Calibration Time: 11:40
Client Smp ID: SG-08-0-10-0131
Level: LOW
Sample Type: Sediment

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	53853	26926	107706	42965	-20.22
27 Naphthalene-d8	200104	100052	400208	167555	-16.27
42 Acenaphthene-d10	112392	56196	224784	97752	-13.03
59 Phenanthrene-d10	210710	105355	421420	189898	-9.88
69 Chrysene-d12	240805	120402	481610	248303	3.11
77 Perylene-d12	230834	115417	461668	260301	12.77

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.65	8.15	9.15	8.68	0.36
27 Naphthalene-d8	11.30	10.80	11.80	11.34	0.34
42 Acenaphthene-d10	15.19	14.69	15.69	15.23	0.26
59 Phenanthrene-d10	18.46	17.96	18.96	18.52	0.29
69 Chrysene-d12	23.58	23.08	24.08	23.65	0.26
77 Perylene-d12	25.96	25.46	26.46	26.04	0.30

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 19-Feb-2013 14:16

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: FSI
Sample Matrix: SOLID
Lab Smp Id: WC32GMSD
Level: LOW
Data Type: MS DATA
SpikeList File: PSDDASIMLCS.spk
Sublist File: PSDDA.sub
Method File: /chem1/nt10.i/20130216.b/SIM.b/SIMABN2.m
Misc Info: 13-2430

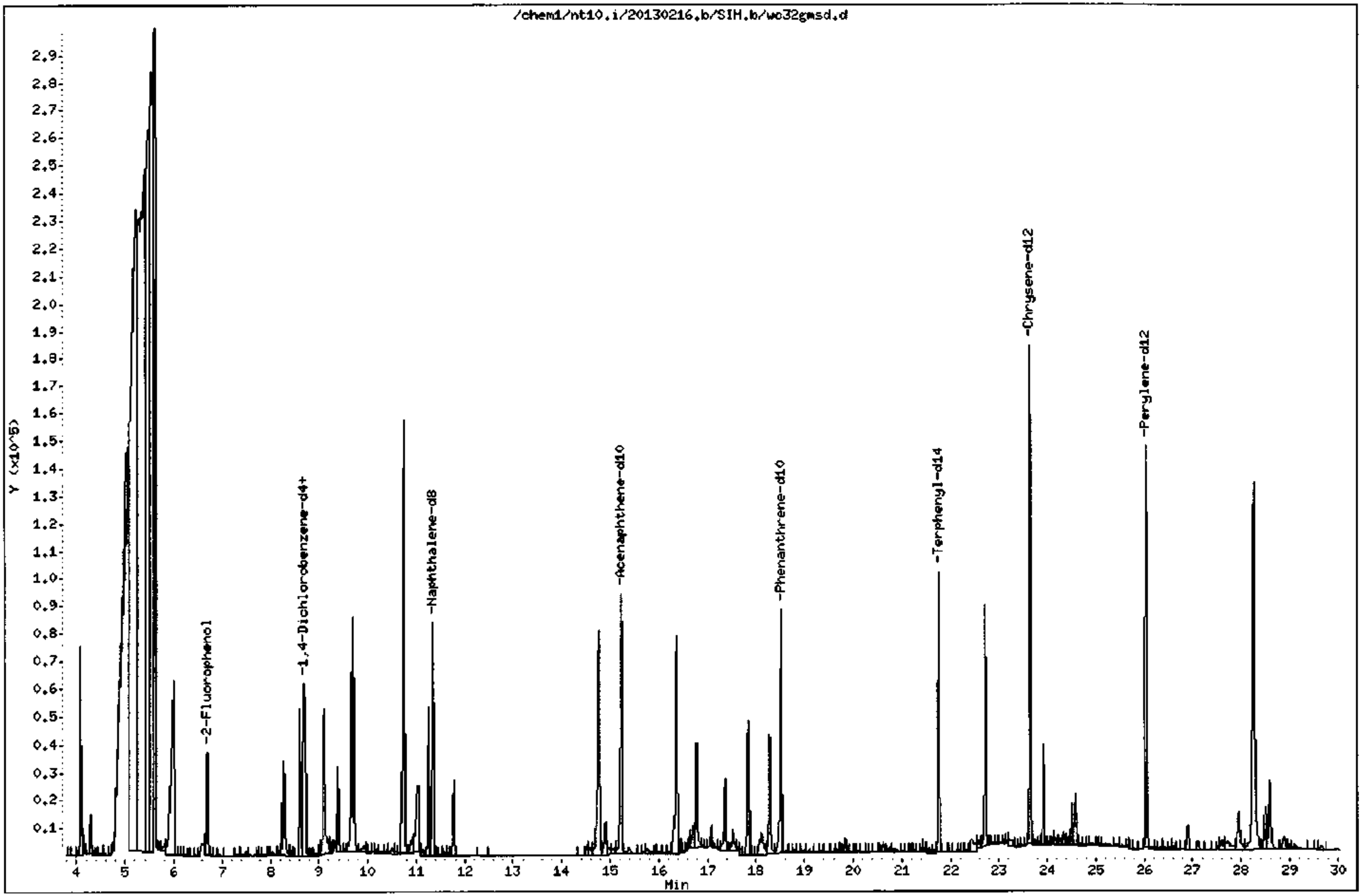
Client SDG: WC32
Fraction: SV
Client Smp ID: SG-08-0-10-0131 MSD
Operator: VTS/YZ
SampleType: MSD
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
3 Phenol	480.6	355.1	73.89	30-160
7 1,3-Dichlorobenzen	480.6	284.6	59.21	30-160
9 1,4-Dichlorobenzen	480.6	301.1	62.65	30-160
11 Benzyl alcohol	480.6	287.8	59.88	30-160
12 1,2-Dichlorobenzen	480.6	301.9	62.82	30-160
13 2-Methylphenol	480.6	334.1	69.51	30-160
15 4-Methylphenol	961.3	807.8	84.04	30-160
16 N-Nitroso-di-n-pro	480.6	360.6	75.02	30-160
22 2,4-Dimethylphenol	961.3	1097	114.13	30-160
26 1,2,4-Trichloroben	480.6	317.8	66.12	30-160
30 Hexachlorobutadien	480.6	320.2	66.62	30-160
39 Dimethylphthalate	480.6	466.6	97.09	30-160
50 Diethylphthalate	480.6	430.2	89.51	30-160
54 N-Nitrosodiphenyla	480.6	200.8	41.78	30-160
57 Hexachlorobenzene	480.6	386.7	80.45	30-160
58 Pentachlorophenol	961.3	724.3	75.35	30-160
67 Butylbenzylphthala	480.6	534.1	111.13	30-160
79 Dibenzo(a,h)anthra	480.6	554.6	115.38	30-160
90 N-Nitrosodimethyla	961.3	1039	108.13	30-160

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 1 2-Fluorophenol	720.9	366.2	50.79	30-160
$ 66 Terphenyl-d14	480.6	408.7	85.04	30-160

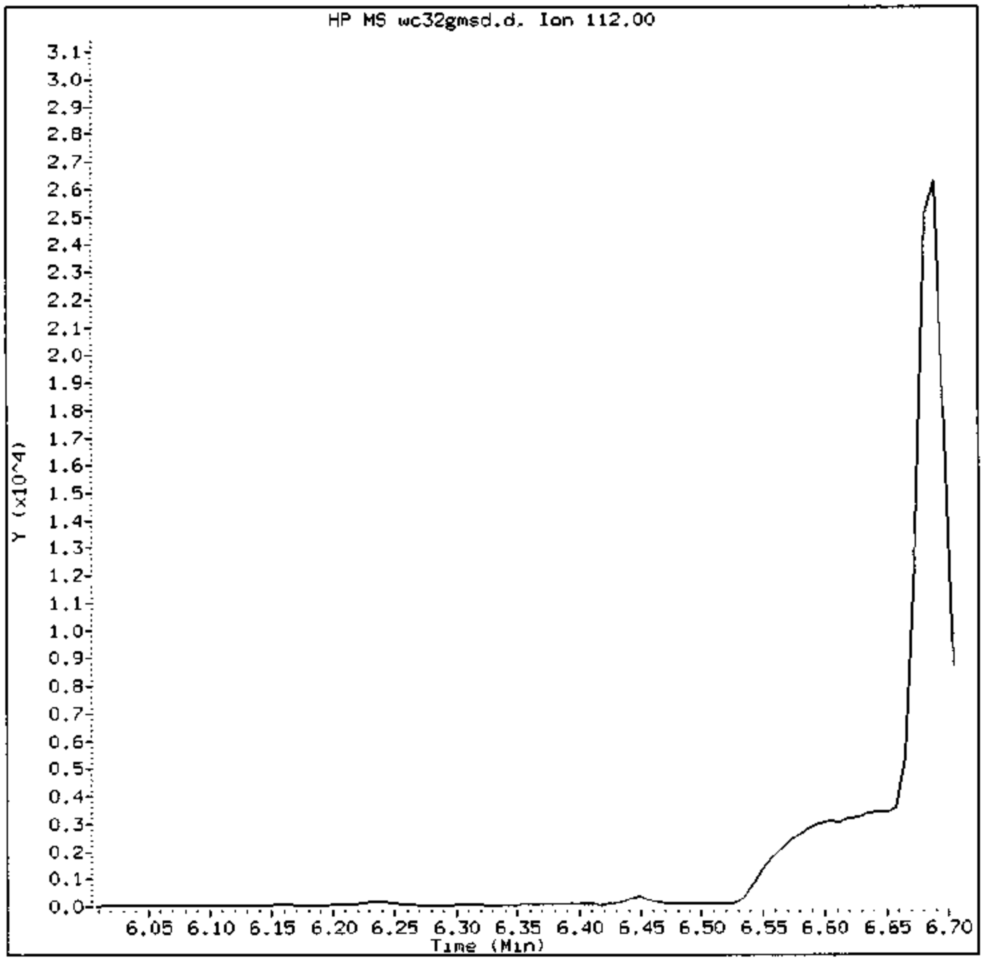
Data File: /chem1/nt10.i/20130216.b/SIM.b/wc32gmsd.d
Date : 16-FEB-2013 19:36
Client ID: SG-08-0-10-0131 MSD
Sample Info: WC32GMSD
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt10.i
Operator: VTS/YZ
Column diameter: 0.25



WC32GMSD, /chem1/nt10.i/20130216.b/SIM.b/wc32gmsd.d

2-Fluorophenol   Amount: 3.81   Area: 52075



MANUAL INTEGRATION for 2-Fluorophenol

1. Baseline correction
2. Poor chromatography
3. Peak not found ✓
4. Totals calculation

5. Other ______________________

Analyst: VZ   Date: 2/19/13

CO-ELUTION SUMMARY FOR FILE - wc32gmsd.d

Lab ID: WC32GMSD, Method: SIM.b/SIMABN2.m, Instrument: nt10.i, Date: 16-FEB-2

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Analytical Resources, Inc.

YZ 2/19/13

METHOD 8270D-SIM

Data file : /chem1/nt10.i/20130216.b/SIM.b/wc32h.d
Lab Smp Id: WC32H Client Smp ID: SG-09-0-10-013113
Inj Date : 16-FEB-2013 20:12
Operator : VTS/YZ Inst ID: nt10.i
Smp Info : WC32H
Misc Info : 13-2431
Comment :
Method : /chem1/nt10.i/20130216.b/SIM.b/SIMABN2.m
Meth Date : 19-Feb-2013 14:16 yev Quant Type: ISTD
Cal Date : 25-JAN-2013 17:53 Cal File: ic0125i.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Ws	20.40000	Weight of sample extracted (g)
M	47.60000	% Moisture

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
$	1 2-Fluorophenol	112	6.402	6.356	(0.739)	79103	5.20630	487.0
	3 Phenol	94	8.149	8.110	(0.940)	29859	1.54740	144.8
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	8.667	8.651	(1.000)	47756	4.00000	
	9 1,4-Dichlorobenzene	146	8.698	8.682	(1.004)	569	0.02941	2.751(M)
	11 Benzyl alcohol	79	9.008	8.985	(1.039)	4256	0.37224	34.82(M)
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	13 2-Methylphenol	108	9.016	9.272	(1.040)	3797	0.26151	24.46
	15 4-Methylphenol	108	9.614	9.575	(1.109)	36396	2.42059	226.4
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	10.707	10.677	(0.946)	773	0.04929	4.611
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	11.324	11.301	(1.000)	181920	4.00000	
	30 Hexachlorobutadiene	225	Compound Not Detected.					

							CONCENTRATIONS	
		QUANT SIG					ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/kg)
	39 Dimethylphthalate	163	Compound Not Detected.					
*	42 Acenaphthene-d10	162	15.224	15.193	(1.000)	97854	4.00000	
	50 Diethylphthalate	149	16.345	16.306	(1.074)	8779	0.25225	23.60(MH)
	54 N-Nitrosodiphenylamine	169	Compound Not Detected.					
	57 Hexachlorobenzene	284	Compound Not Detected.					
	58 Pentachlorophenol	266	Compound Not Detected.					
*	59 Phenanthrene-d10	188	18.507	18.461	(1.000)	172362	4.00000	(H)
$	66 Terphenyl-d14	244	21.757	21.710	(0.921)	140052	4.50589	421.5
	67 Butylbenzylphthalate	149	Compound Not Detected.					
*	69 Chrysene-d12	240	23.630	23.584	(1.000)	233923	4.00000	
*	77 Perylene-d12	264	26.023	25.961	(1.000)	243901	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.232	28.154	(1.085)	16544	0.28459	26.62
	90 N-Nitrosodimethylamine	74	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Report Date: 19-Feb-2013 14:35

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: wc32h.d
Lab Smp Id: WC32H
Analysis Type: SV
Quant Type: ISTD
Operator: VTS/YZ
Method File: /chem1/nt10.i/20130216.b/SIM.b/SIMABN2.m
Misc Info: 13-2431

Calibration Date: 16-FEB-2013
Calibration Time: 11:40
Client Smp ID: SG-09-0-10-01311
Level: LOW
Sample Type: Sediment

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	53853	26926	107706	47756	-11.32
27 Naphthalene-d8	200104	100052	400208	181920	-9.09
42 Acenaphthene-d10	112392	56196	224784	97854	-12.94
59 Phenanthrene-d10	210710	105355	421420	172362	-18.20
69 Chrysene-d12	240805	120402	481610	233923	-2.86
77 Perylene-d12	230834	115417	461668	243901	5.66

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.65	8.15	9.15	8.67	0.18
27 Naphthalene-d8	11.30	10.80	11.80	11.32	0.20
42 Acenaphthene-d10	15.19	14.69	15.69	15.22	0.20
59 Phenanthrene-d10	18.46	17.96	18.96	18.51	0.25
69 Chrysene-d12	23.58	23.08	24.08	23.63	0.20
77 Perylene-d12	25.96	25.46	26.46	26.02	0.24

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 19-Feb-2013 14:35

Analytical Resources, Inc.

RECOVERY REPORT

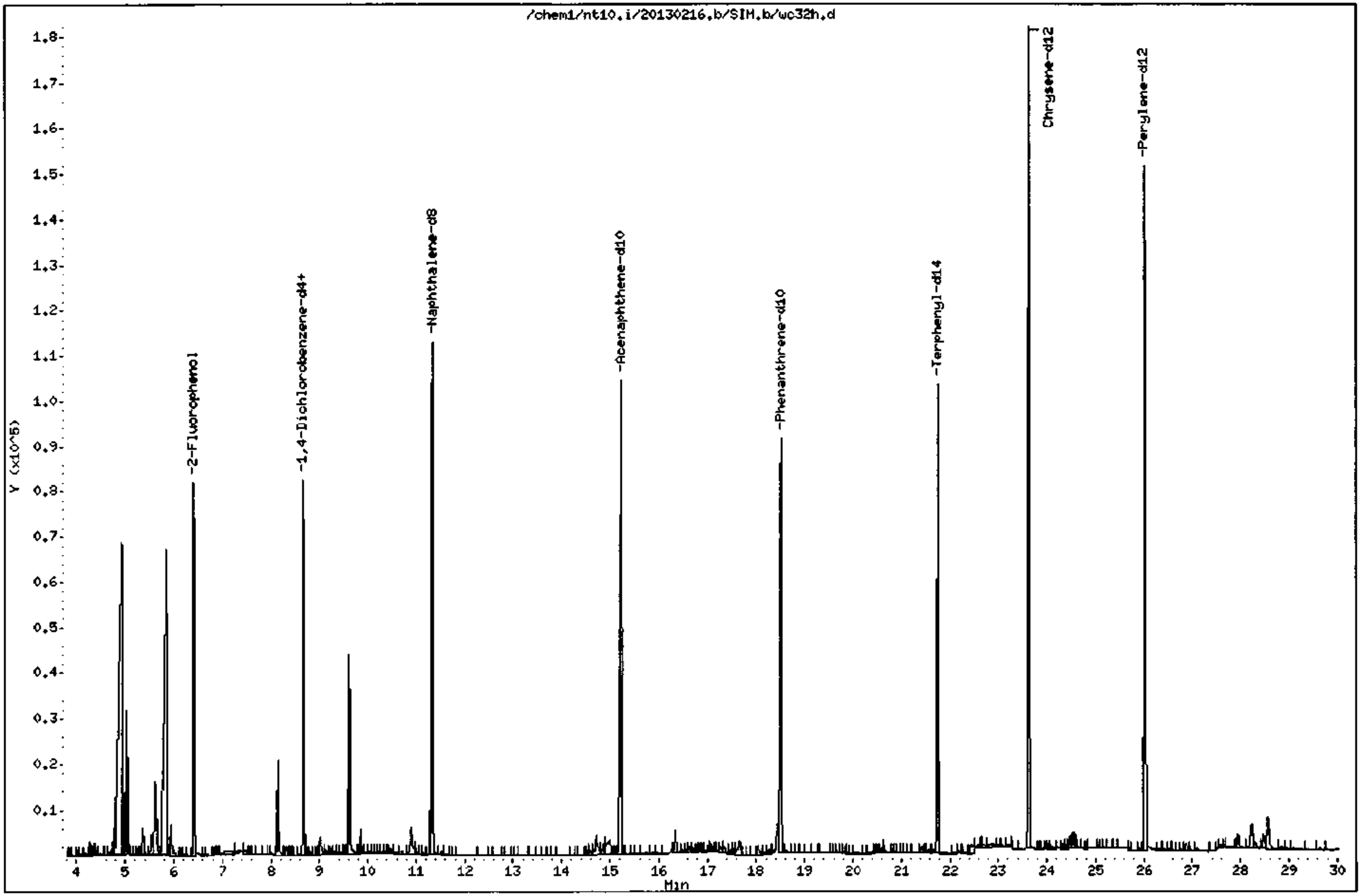
Client Name: Floyd-Snider
Sample Matrix: SOLID
Lab Smp Id: WC32H
Level: LOW
Data Type: MS DATA
SpikeList File: SHORTPSDDA.spk
Sublist File: PSDDA.sub
Method File: /chem1/nt10.i/20130216.b/SIM.b/SIMABN2.m
Misc Info: 13-2431

Client SDG: WC32
Fraction: SV
Client Smp ID: SG-09-0-10-013113
Operator: VTS/YZ
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 1 2-Fluorophenol	701.6	487.0	69.42	30-160
$ 66 Terphenyl-d14	467.7	421.5	90.12	30-160

Data File: /chem1/nt10.i/20130216.b/SIM.b/wc32h.d
Date : 16-FEB-2013 20:12
Client ID: SC-09-0-10-013113
Sample Info: WC32H
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt10.i
Operator: VTS/YZ
Column diameter: 0.25



Data File: /chem1/nt10.i/20130216.b/SIM.b/wc32h.d

Date : 16-FEB-2013 20:12

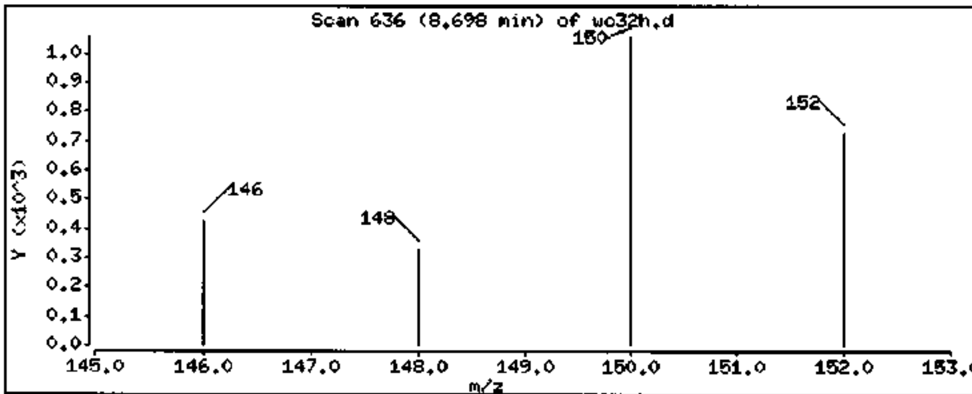
Client ID: SG-09-0-10-013113 Instrument: nt10.i

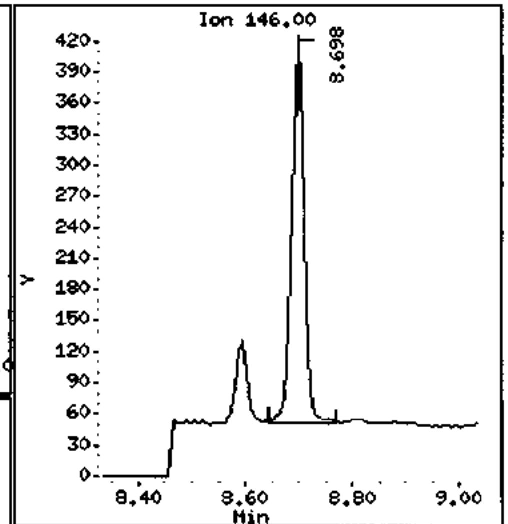
Sample Info: WC32H

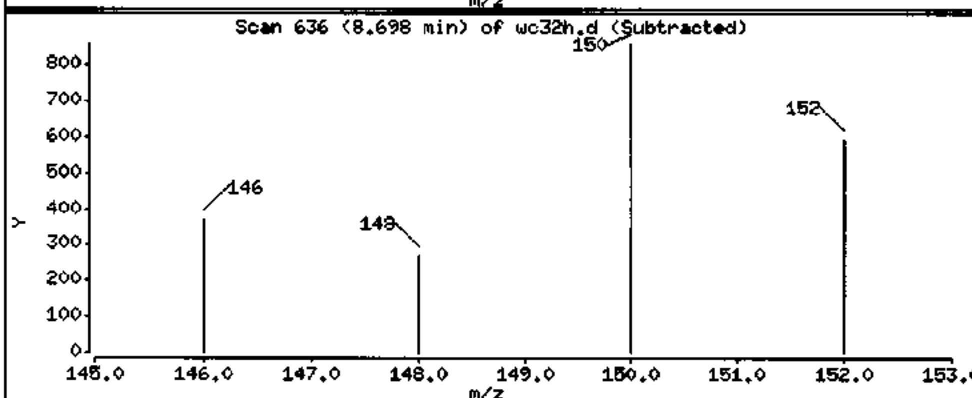
Volume Injected (uL): 1.0 Operator: VTS/YZ

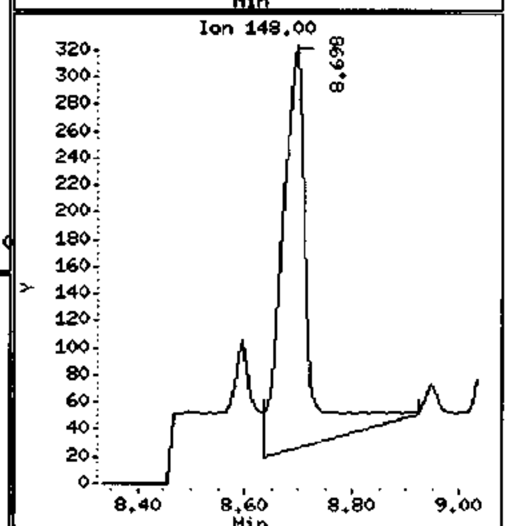
Column phase: ZB-5msi Column diameter: 0.25

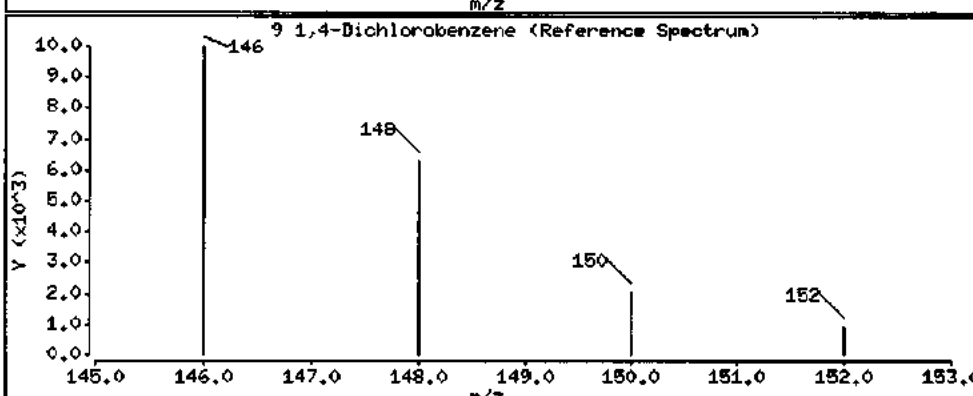
9 1,4-Dichlorobenzene Concentration: 2.751 ug/kg

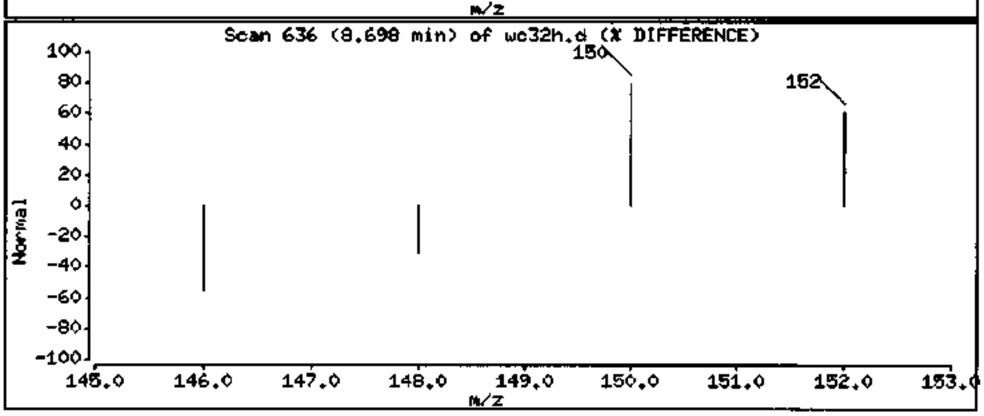












Data File: /chem1/nt10.i/20130216.b/SIM.b/wc32h.d

Date : 16-FEB-2013 20:12

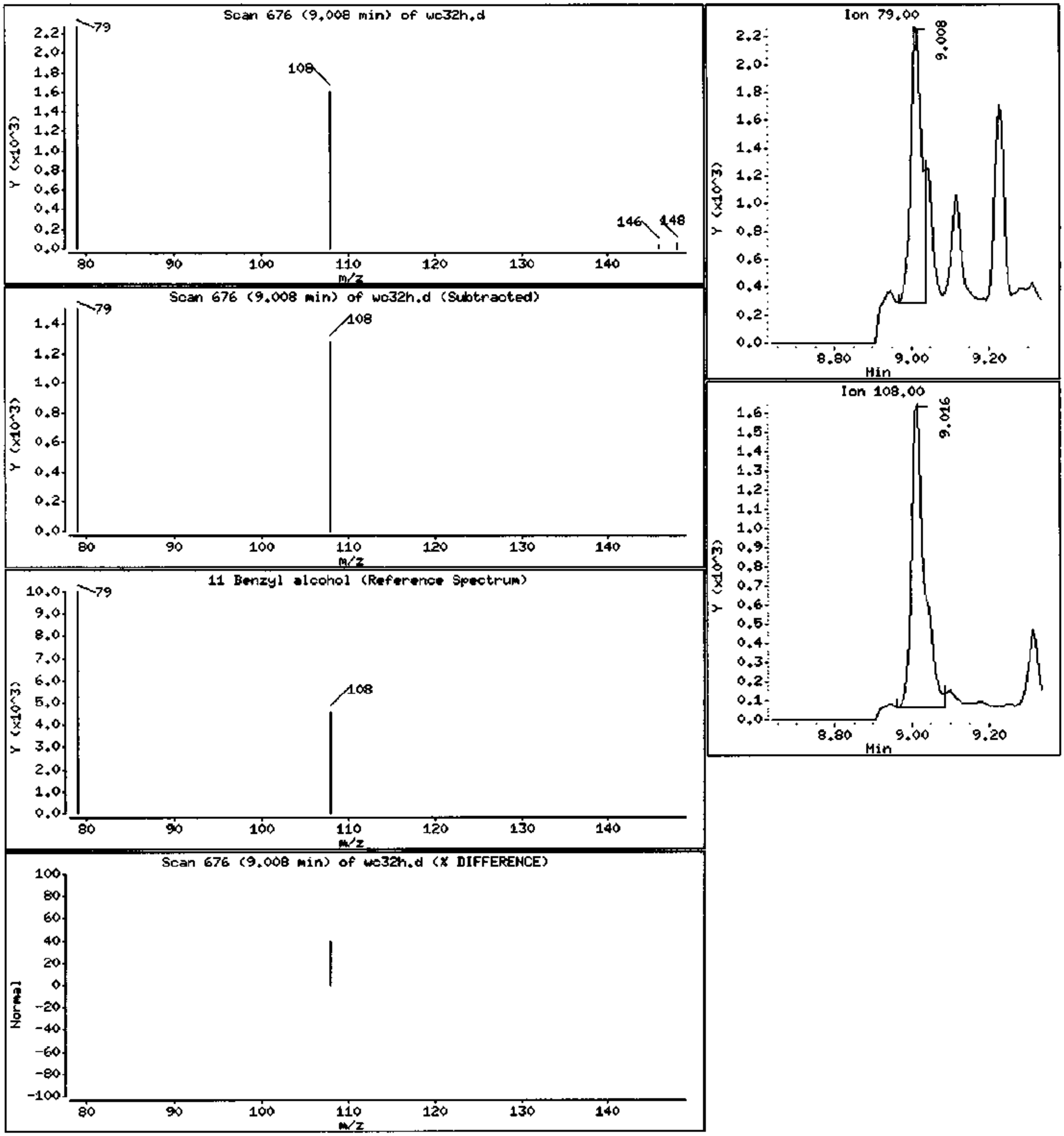
Client ID: SG-09-0-10-013113 | Instrument: nt10.i

Sample Info: WC32H

Volume Injected (uL): 1.0 | Operator: VTS/YZ

Column phase: ZB-5ms1 | Column diameter: 0.25

11 Benzyl alcohol | Concentration: 34.82 ug/kg



Data File: /chem1/nt10.i/20130216.b/SIM.b/wc32h.d

Date : 16-FEB-2013 20:12

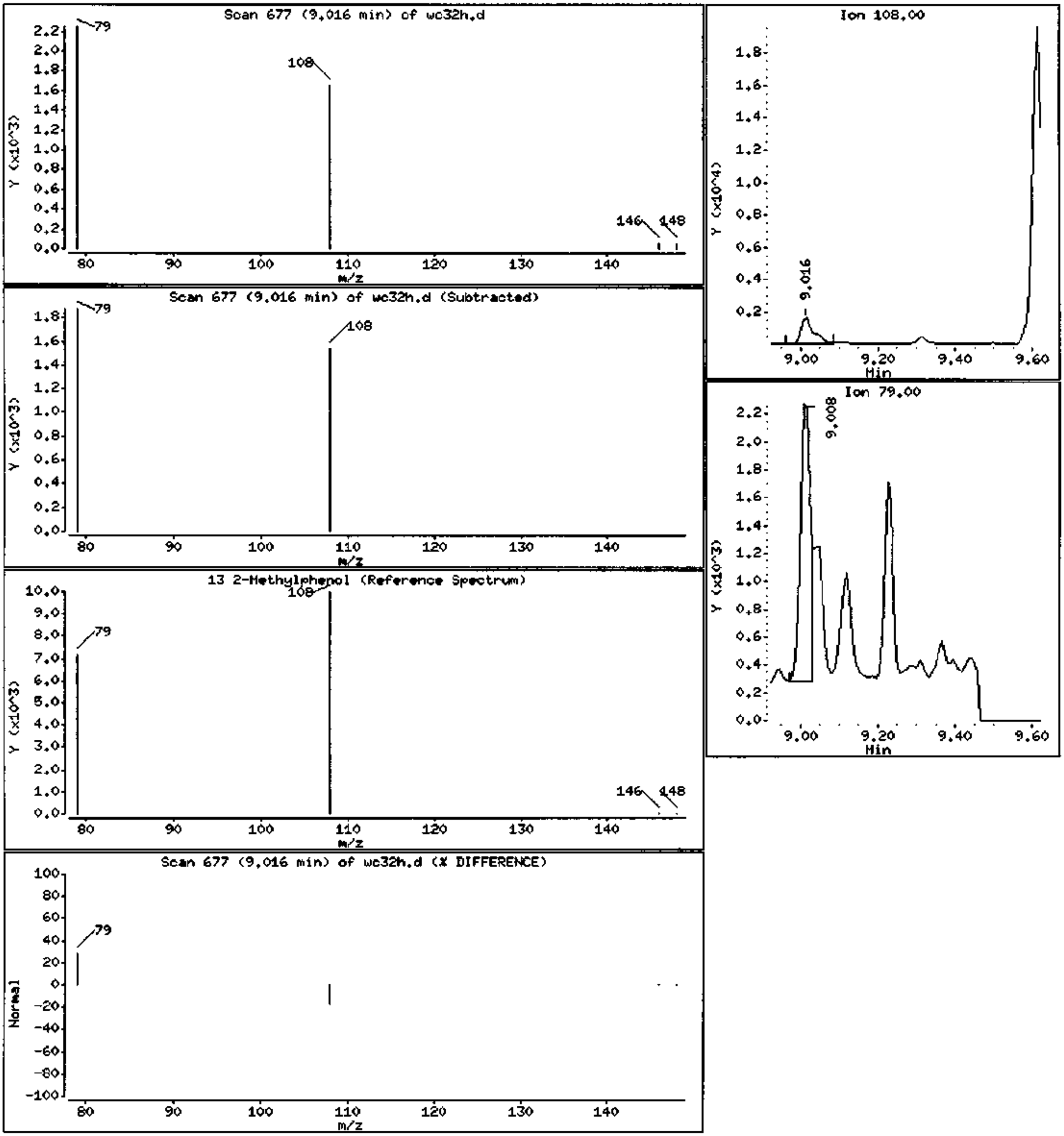
Client ID: SG-09-0-10-013113 | Instrument: nt10.i

Sample Info: WC32H

Volume Injected (uL): 1.0 | Operator: VTS/YZ

Column phase: ZB-5msi | Column diameter: 0.25

13 2-Methylphenol | Concentration: 24.46 ug/kg



Data File: /chem1/nt10.i/20130216.b/SIH.b/wc32h.d

Date : 16-FEB-2013 20:12

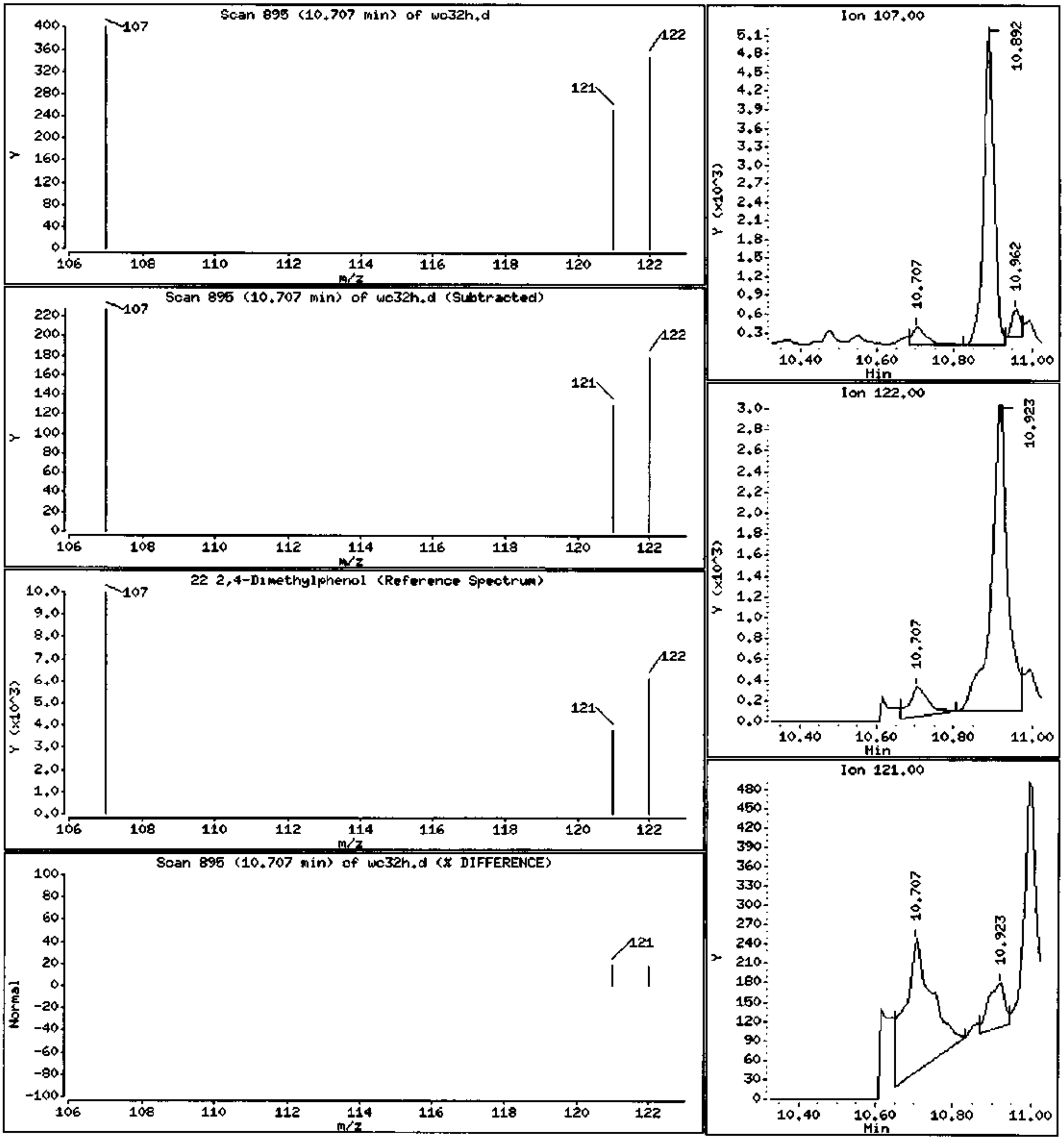
Client ID: SG-09-0-10-013113 | Instrument: nt10.i

Sample Info: WC32H

Volume Injected (uL): 1.0 | Operator: VTS/YZ

Column phase: ZB-5msi | Column diameter: 0.25

22 2,4-Dimethylphenol | Concentration: 4.611 ug/kg



Data File: /chem1/nt10.i/20130216.b/SIM.b/wc32h.d

Date : 16-FEB-2013 20:12

Client ID: SG-09-0-10-013113

Instrument: nt10.i

Sample Info: WC32H

Volume Injected (uL): 1.0

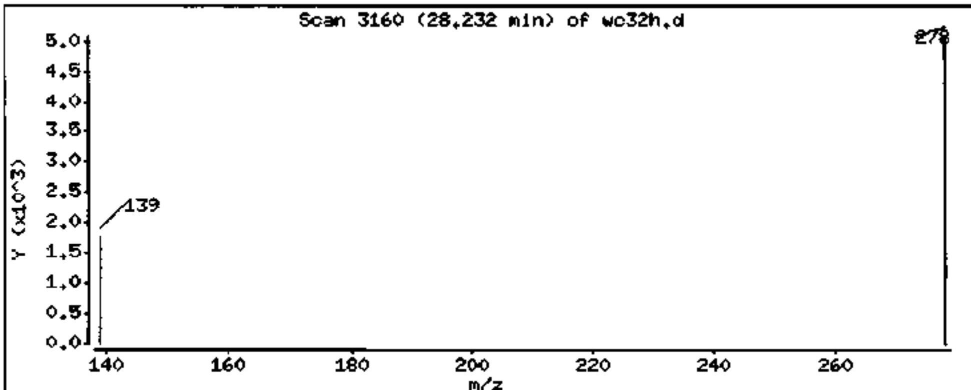
Operator: VTS/YZ

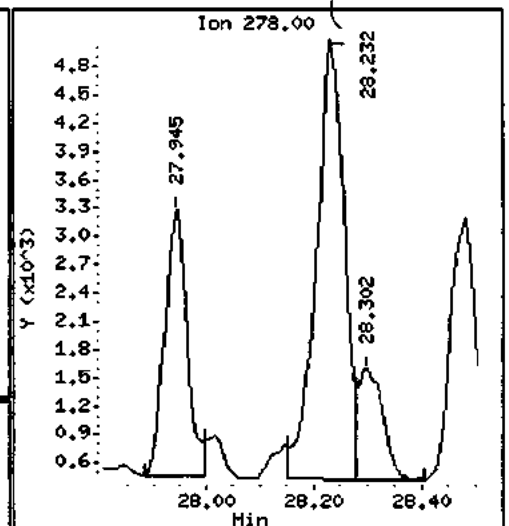
Column phase: ZB-5msi

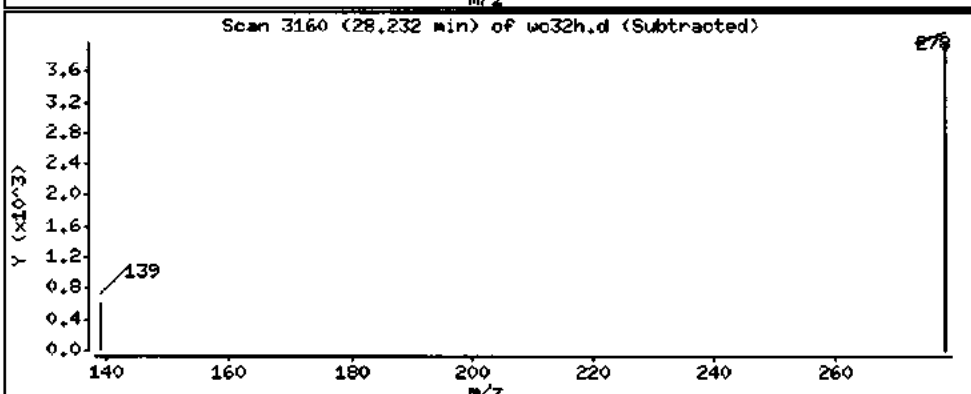
Column diameter: 0.25

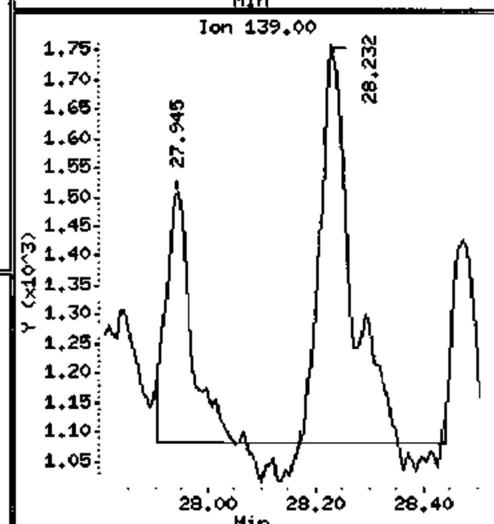
79 Dibenzo(a,h)anthracene

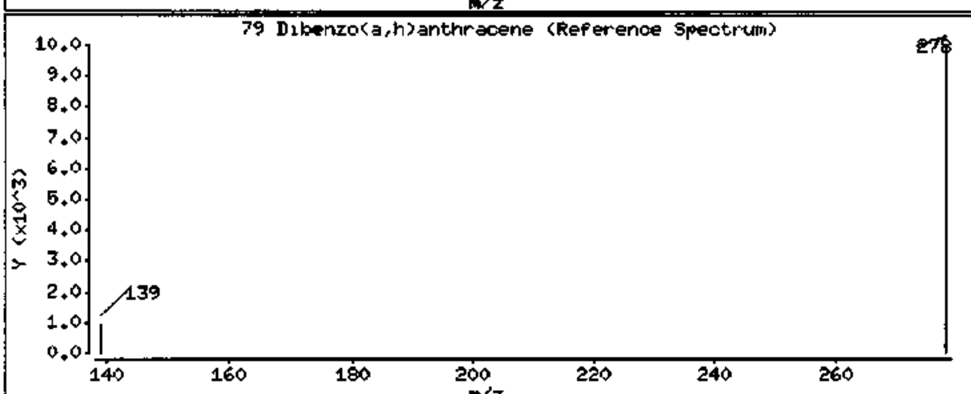
Concentration: 26.62 ug/kg

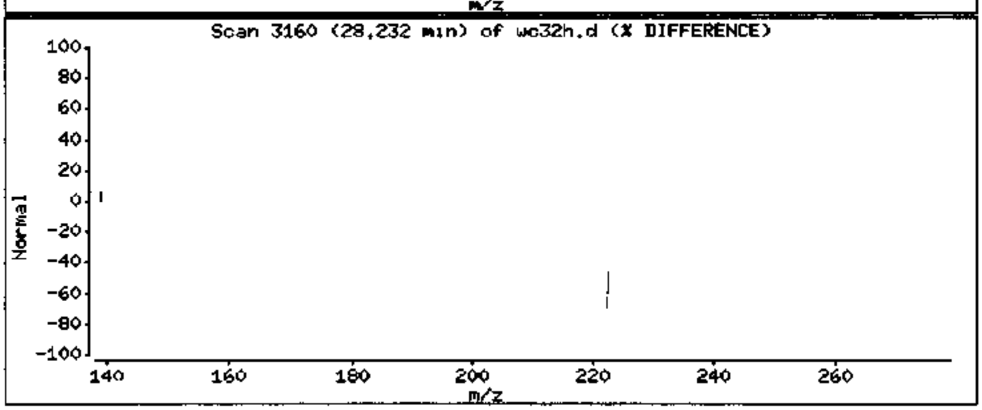






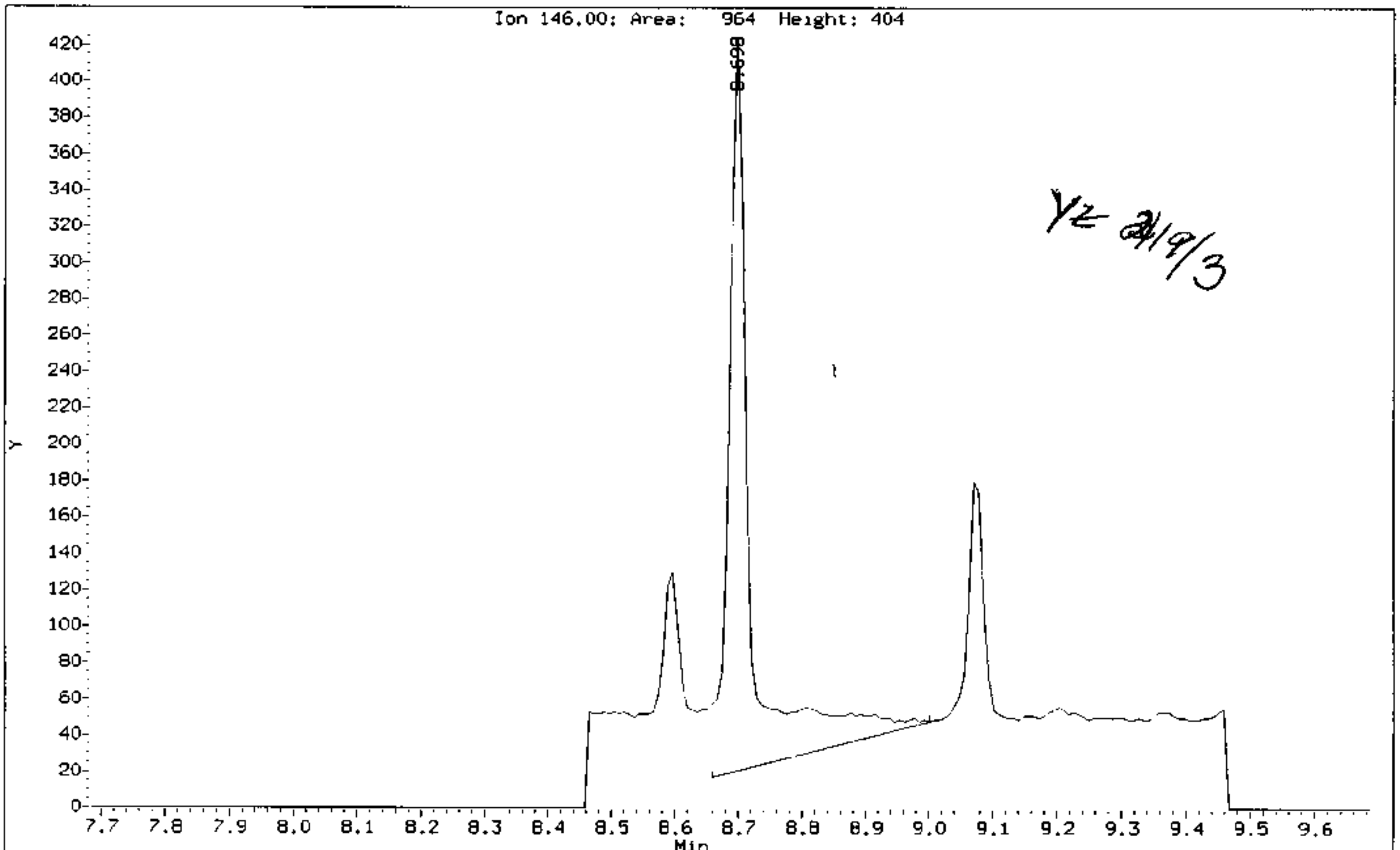




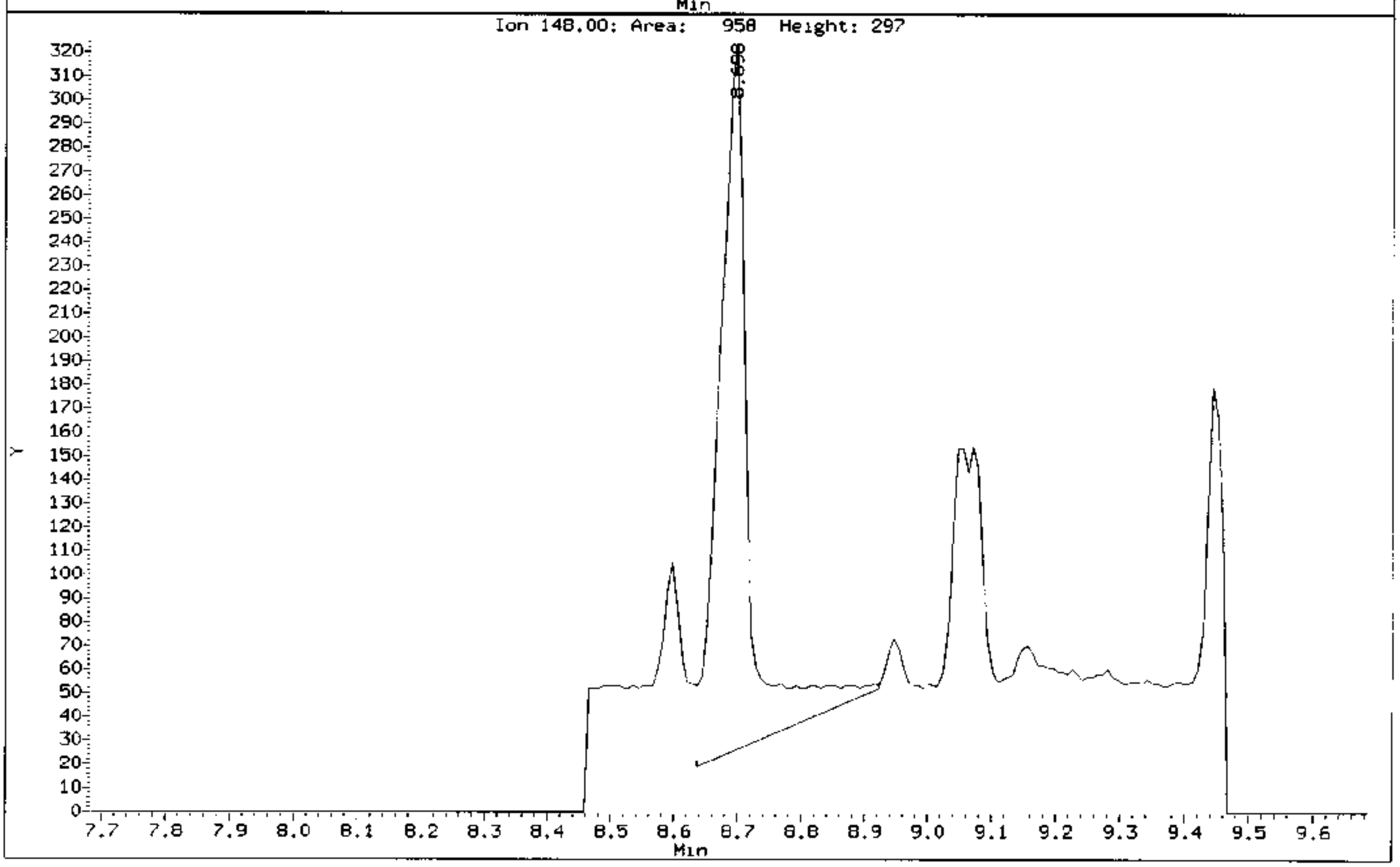


Data File: /chem1/nt10.i/20130216.b/SIM.b/wc32h.d
Injection Date: 16-FEB-2013 20:12
Instrument: nt10.i
Client Sample ID: SG-09-0-10-013113

Compound: 1,4-Dichlorobenzene
CAS Number: 106-46-7

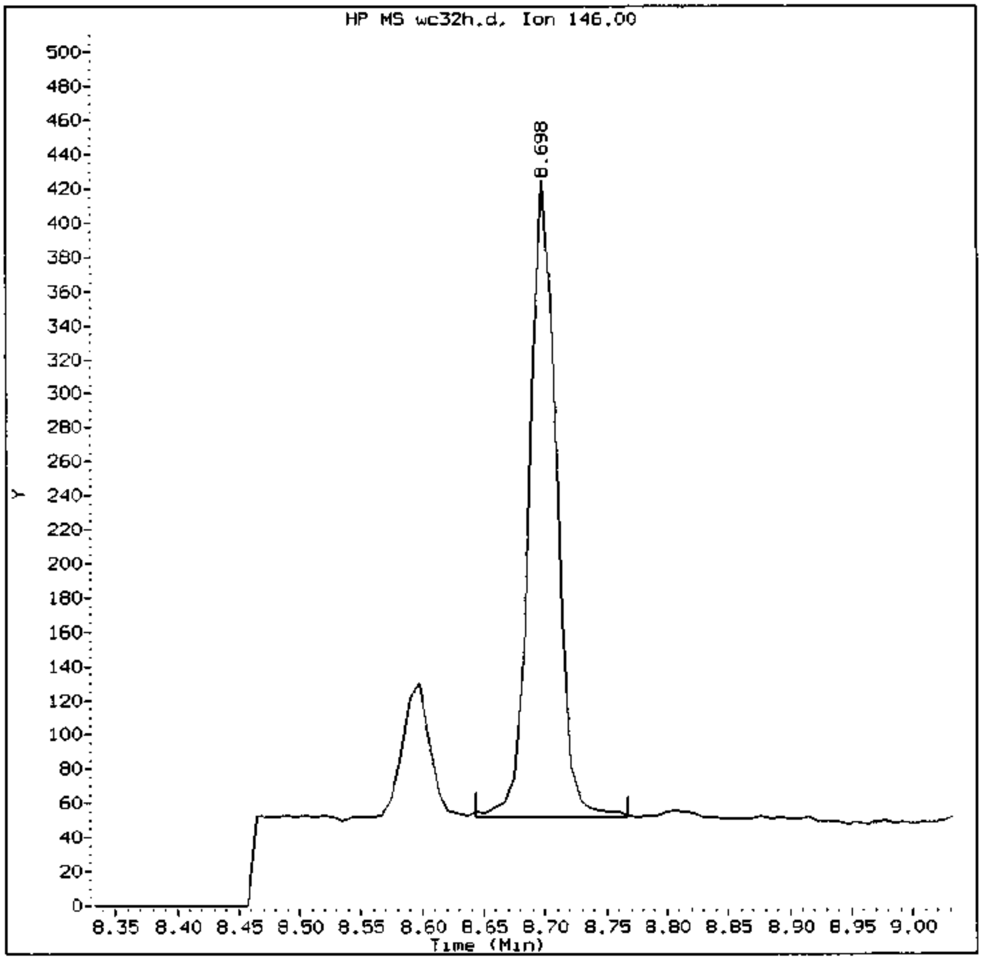


YZ 2/19/13



WC32H, /chem1/nt10.i/20130216.b/SIM.b/wc32h.d

1,4-Dichlorobenzene   Amount: 0.03   Area: 569



MANUAL INTEGRATION for 1,4-Dichlorobenzene

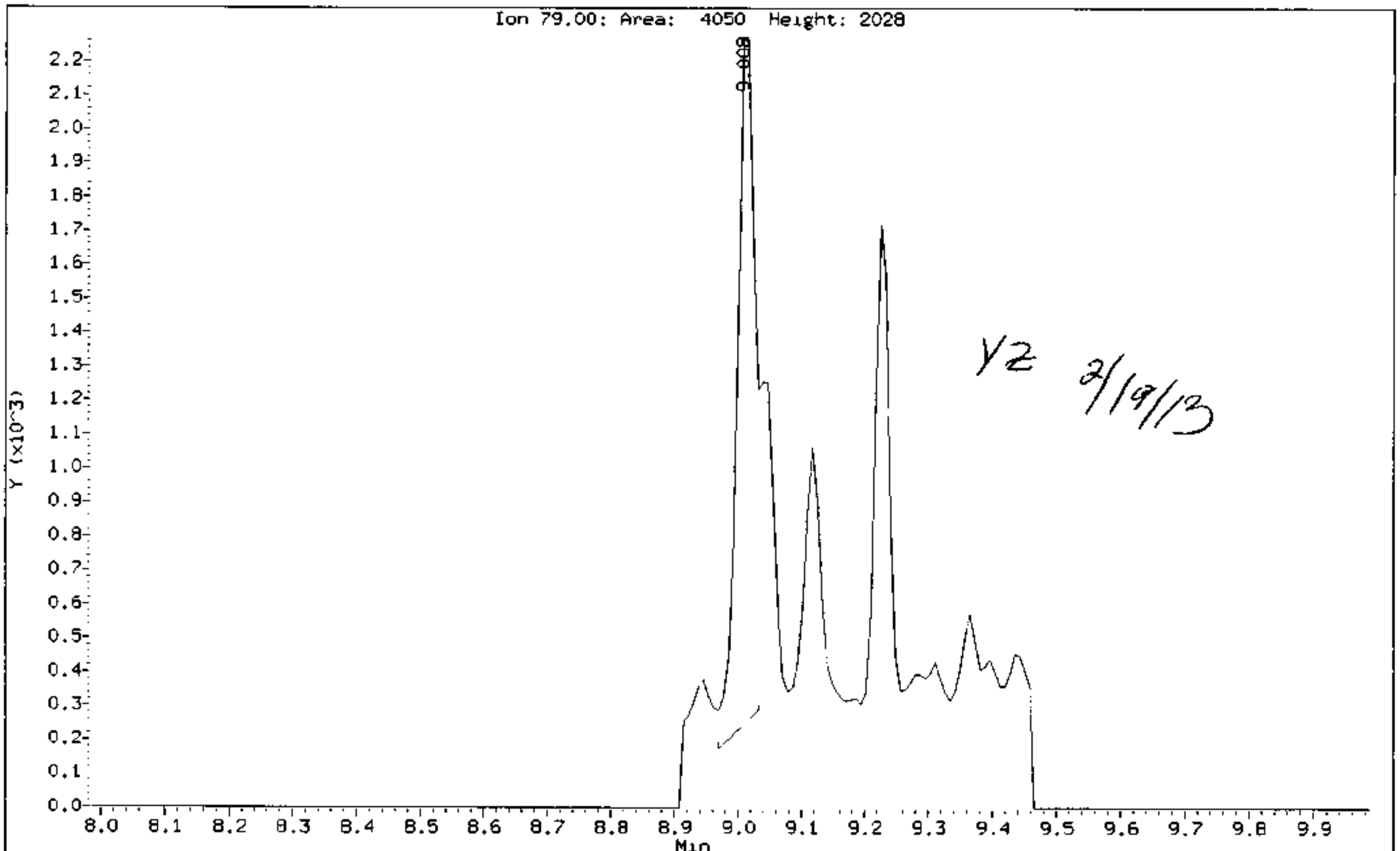
1. Baseline correction ✓
2. Poor chromatography
3. Peak not found
4. Totals calculation

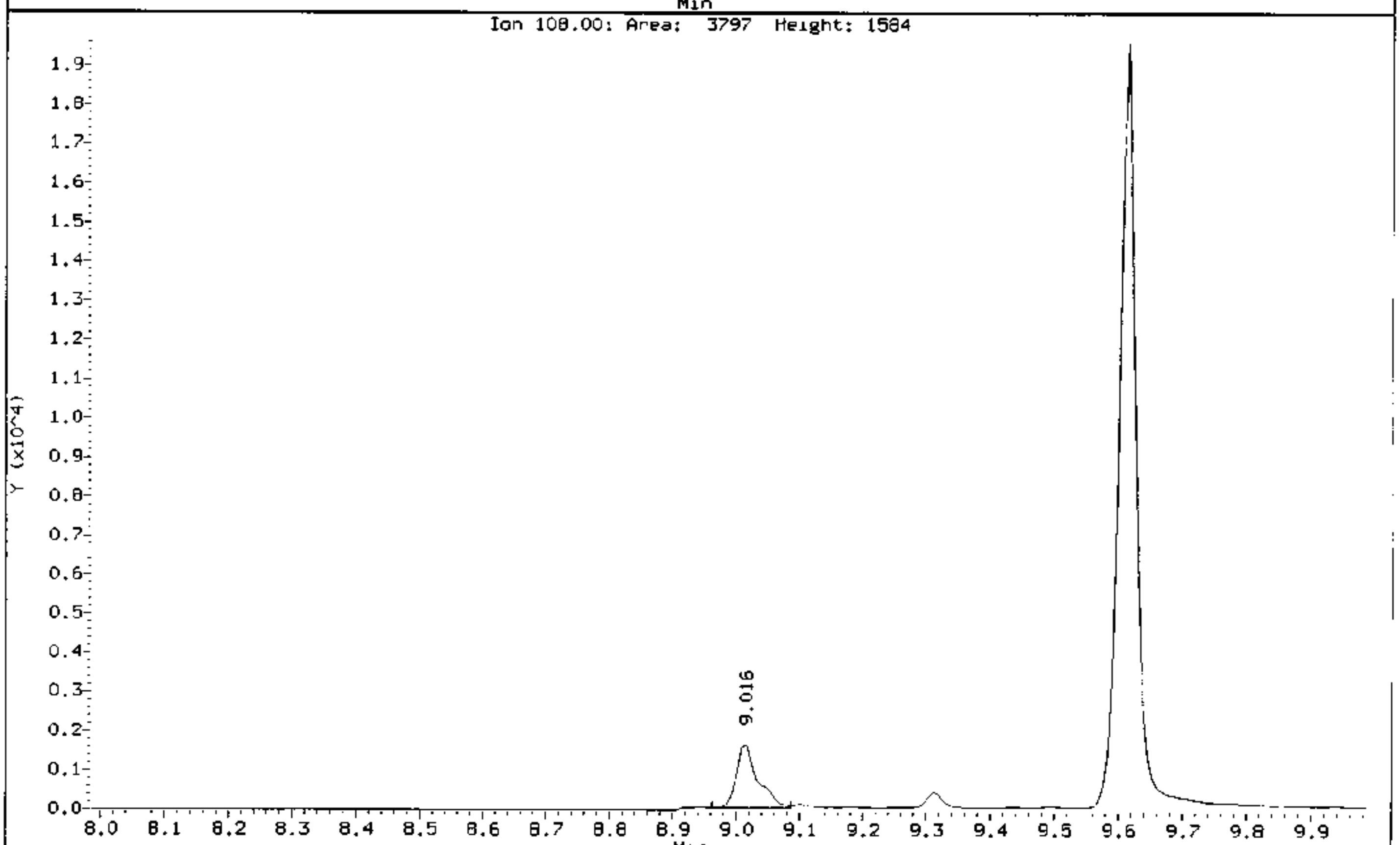
5. Other ______________________

Analyst: YZ   Date: 2/19/13

Data File: /chem1/nt10.i/20130216.b/SIM.b/wc32h.d
Injection Date: 16-FEB-2013 20:12
Instrument: nt10.i
Client Sample ID: SG-09-0-10-013113

Compound: Benzyl alcohol
CAS Number: 100-51-6

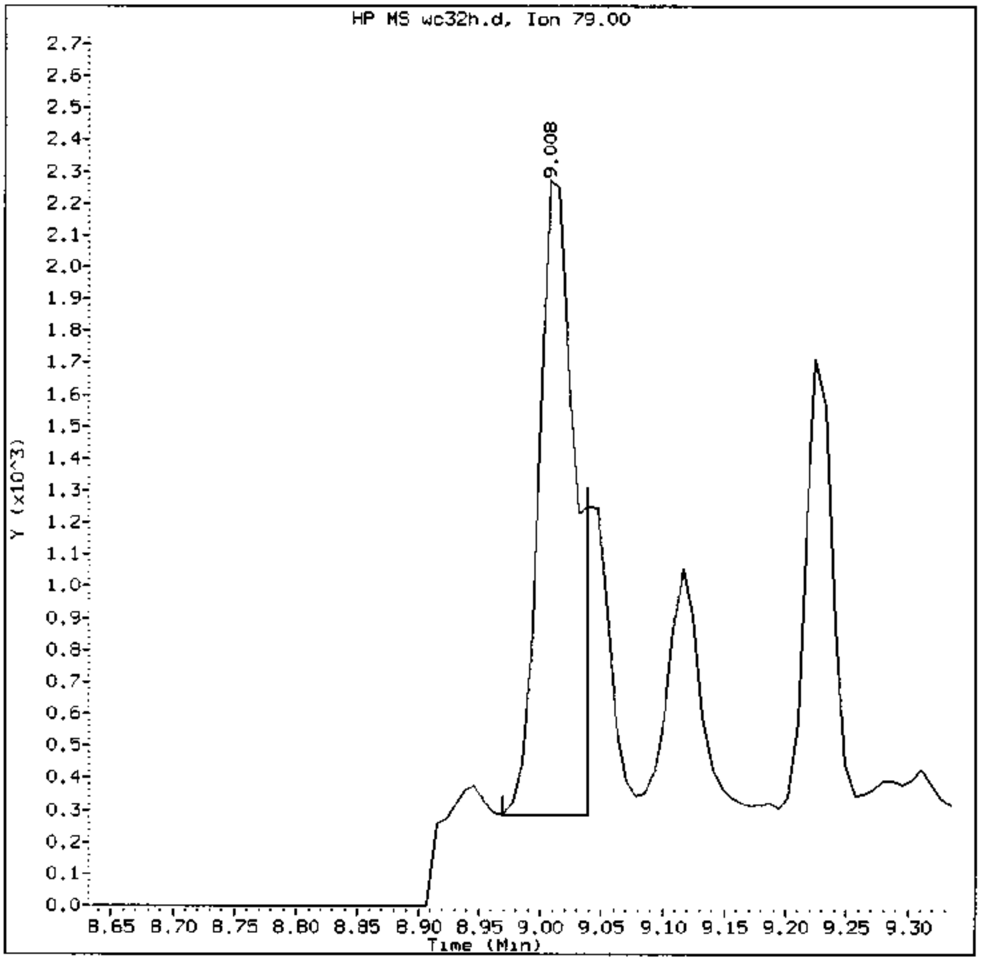




WC32 : 01250

WC32H, /chem1/nt10.i/20130216.b/SIM.b/wc32h.d

Benzyl alcohol   Amount: 0.37   Area: 4256



MANUAL INTEGRATION for Benzyl alcohol

1. Baseline correction ✓
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other ______________________

Analyst: VZ   Date: 2/19/13

CO-ELUTION SUMMARY FOR FILE - wc32h.d

Lab ID: WC32H, Method: SIM.b/SIMABN2.m, Instrument: nt10.i, Date: 16-FEB-2013

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Analytical Resources, Inc.

vz 2/19/13

METHOD 8270D-SIM

Data file : /chem1/nt10.i/20130216.b/SIM.b/wc33g.d
Lab Smp Id: WC33G Client Smp ID: HA-09-0-10-013013
Inj Date : 16-FEB-2013 20:48
Operator : VTS/YZ Inst ID: nt10.i
Smp Info : WC33G
Misc Info : 13-2451
Comment :
Method : /chem1/nt10.i/20130216.b/SIM.b/SIMABN2.m
Meth Date : 19-Feb-2013 14:16 yev Quant Type: ISTD
Cal Date : 25-JAN-2013 17:53 Cal File: ic0125i.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Ws	11.30000	Weight of sample extracted (g)
M	5.80000	% Moisture

Cpnd Variable Local Compound Variable

		QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/kg)
$	1 2-Fluorophenol	112	6.387	6.356	(0.737)	74565	5.14881	483.7
	3 Phenol	94	8.141	8.110	(0.939)	878	0.04774	4.485
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	8.667	8.651	(1.000)	45519	4.00000	
	9 1,4-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	79	Compound Not Detected.					
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	13 2-Methylphenol	108	Compound Not Detected.					
	15 4-Methylphenol	108	Compound Not Detected.					
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	Compound Not Detected.					
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	11.324	11.301	(1.000)	169051	4.00000	
	30 Hexachlorobutadiene	225	Compound Not Detected.					

		QUANT SIG					CONCENTRATIONS	
							ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/kg)
	=========================	====	==	======	======	========	=======	=======
	39 Dimethylphthalate	163	Compound Not Detected.					
*	42 Acenaphthene-d10	162	15.216	15.193	(1.000)	92993	4.00000	
	50 Diethylphthalate	149	16.329	16.306	(1.073)	8258	0.24968	23.46
	54 N-Nitrosodiphenylamine	169	Compound Not Detected.					
	57 Hexachlorobenzene	284	Compound Not Detected.					
	58 Pentachlorophenol	266	18.259	18.221	(0.987)	1065	0.13525 J	12.71
*	59 Phenanthrene-d10	188	18.491	18.461	(1.000)	176299	4.00000	
$	66 Terphenyl-d14	244	21.741	21.710	(0.920)	143697	4.97163	467.1
	67 Butylbenzylphthalate	149	Compound Not Detected.					
*	69 Chrysene-d12	240	23.622	23.584	(1.000)	217527	4.00000	
*	77 Perylene-d12	264	26.015	25.961	(1.000)	226575	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.216	28.154	(1.085)	2249	0.04165 J	3.912
	90 N-Nitrosodimethylamine	74	Compound Not Detected.					

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: wc33g.d
Lab Smp Id: WC33G
Analysis Type: SV
Quant Type: ISTD
Operator: VTS/YZ
Method File: /chem1/nt10.i/20130216.b/SIM.b/SIMABN2.m
Misc Info: 13-2451

Calibration Date: 16-FEB-2013
Calibration Time: 11:40
Client Smp ID: HA-09-0-10-01301
Level: LOW
Sample Type: Sediment

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	53853	26926	107706	45519	-15.48
27 Naphthalene-d8	200104	100052	400208	169051	-15.52
42 Acenaphthene-d10	112392	56196	224784	92993	-17.26
59 Phenanthrene-d10	210710	105355	421420	176299	-16.33
69 Chrysene-d12	240805	120402	481610	217527	-9.67
77 Perylene-d12	230834	115417	461668	226575	-1.85

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.65	8.15	9.15	8.67	0.18
27 Naphthalene-d8	11.30	10.80	11.80	11.32	0.20
42 Acenaphthene-d10	15.19	14.69	15.69	15.22	0.15
59 Phenanthrene-d10	18.46	17.96	18.96	18.49	0.17
69 Chrysene-d12	23.58	23.08	24.08	23.62	0.16
77 Perylene-d12	25.96	25.46	26.46	26.01	0.21

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 19-Feb-2013 14:17

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd-Snider
Sample Matrix: SOLID
Lab Smp Id: WC33G
Level: LOW
Data Type: MS DATA
SpikeList File: SHORTPSDDA.spk
Sublist File: PSDDA.sub
Method File: /chem1/nt10.i/20130216.b/SIM.b/SIMABN2.m
Misc Info: 13-2451

Client SDG: WC33
Fraction: SV
Client Smp ID: HA-09-0-10-013013
Operator: VTS/YZ
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 1 2-Fluorophenol	704.6	483.7	68.65	30-160
$ 66 Terphenyl-d14	469.7	467.1	99.43	30-160

Data File: /chem1/nt10.i/20130216.b/SIM.b/wc33g.d

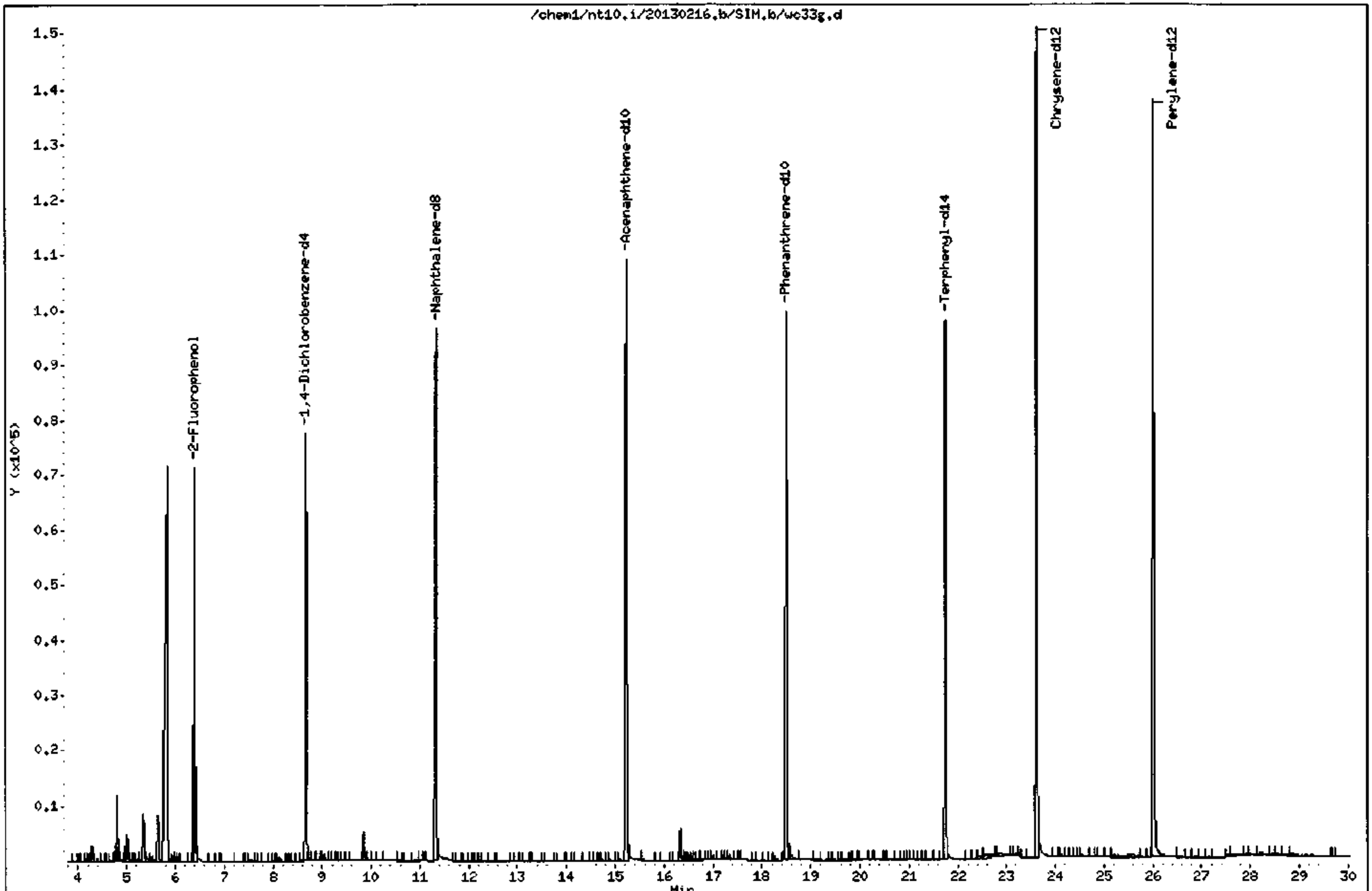
Date : 16-FEB-2013 20:48

Client ID: HA-09-0-10-013013 Instrument: nt10.i

Sample Info: WC33G

Volume Injected (uL): 1.0 Operator: VTS/YZ

Column phase: ZB-5msi Column diameter: 0.25



Data File: /chem1/nt10.i/20130216.b/SIM.b/wc33g.d

Date : 16-FEB-2013 20:48

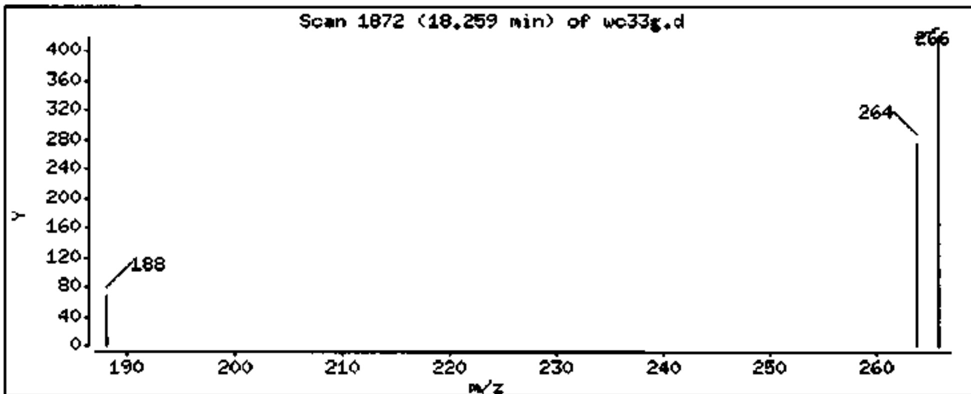
Client ID: HA-09-0-10-013013 Instrument: nt10.i

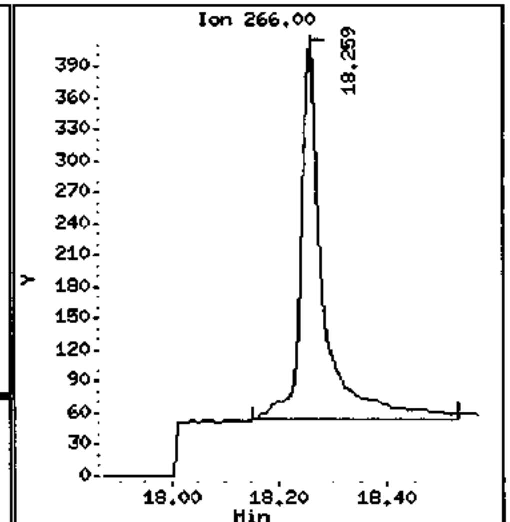
Sample Info: WC33G

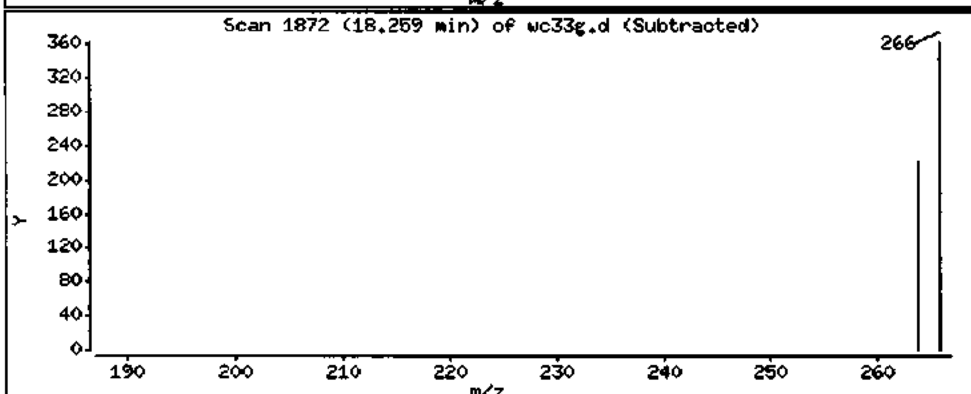
Volume Injected (uL): 1.0 Operator: VTS/YZ

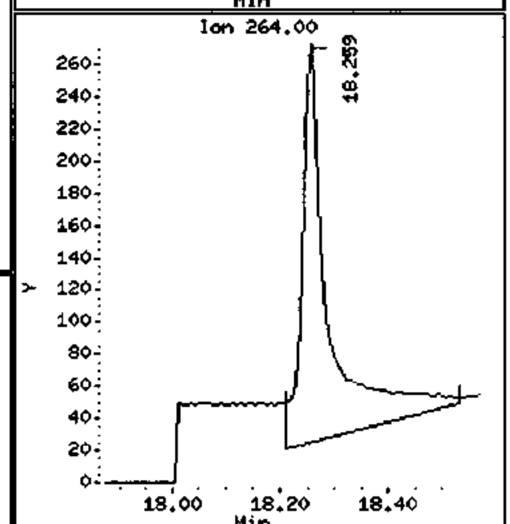
Column phase: ZB-5ms: Column diameter: 0.25

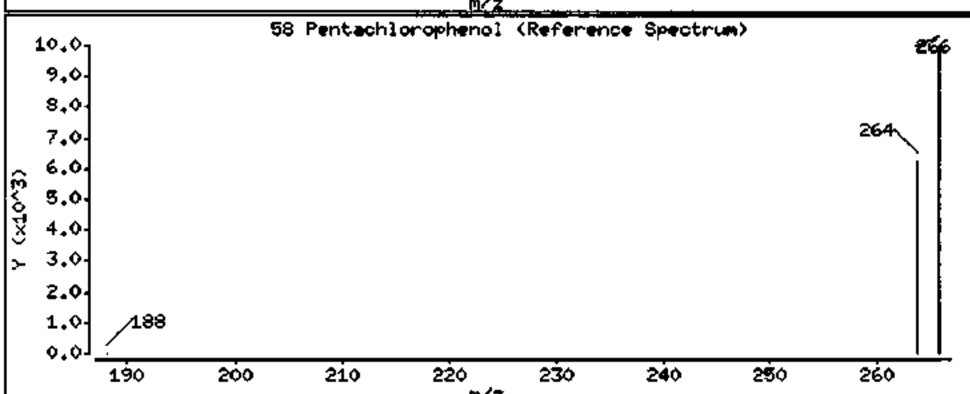
58 Pentachlorophenol Concentration: 12.71 ug/kg

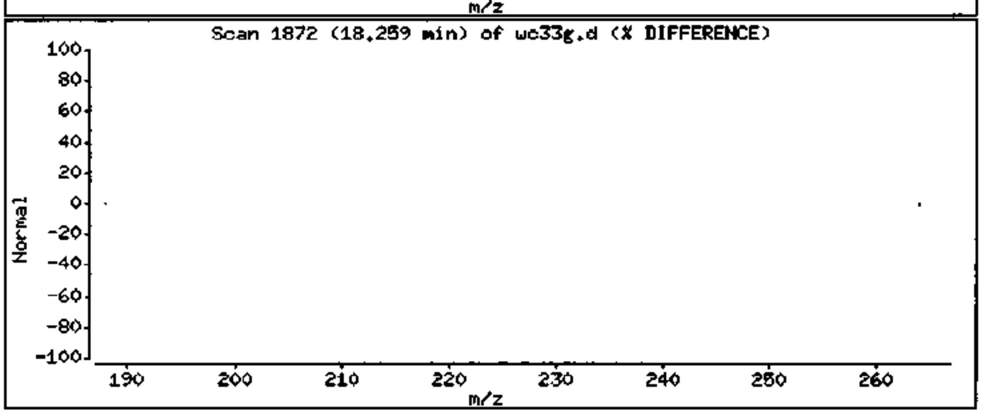












Data File: /chem1/nt10.i/20130216.b/SIM.b/wc33g.d

Date : 16-FEB-2013 20:48

Client ID: HA-09-0-10-013013

Instrument: nt10.i

Sample Info: WC33G

Volume Injected (uL): 1.0

Operator: VTS/YZ

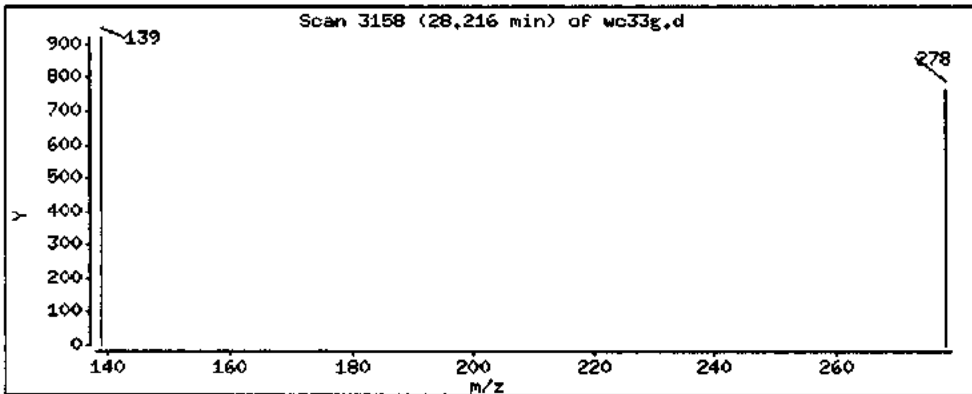
Column phase: ZB-5msi

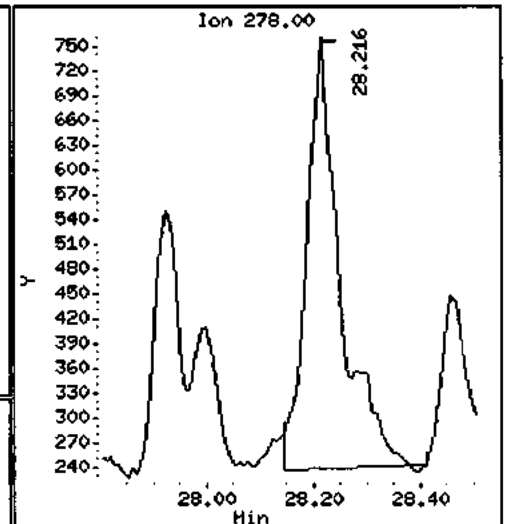
Column diameter: 0.25

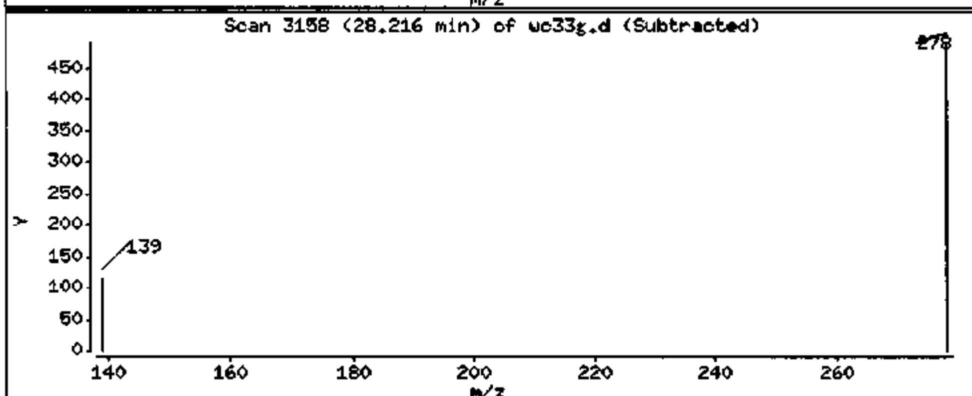
JQ cal

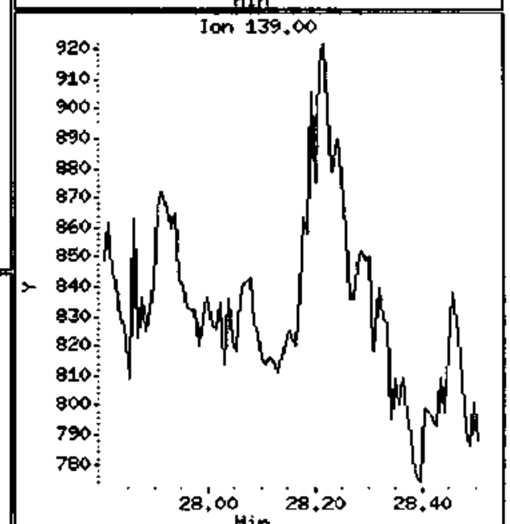
79 Dibenzo(a,h)anthracene

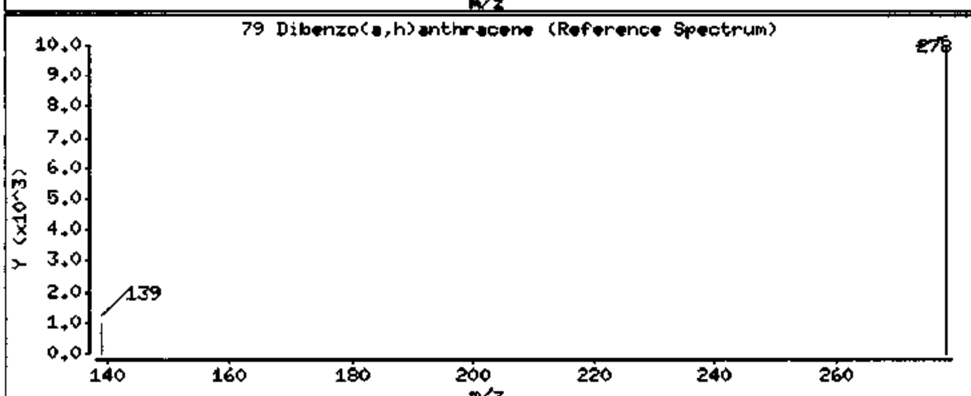
Concentration: 3.912 ug/kg

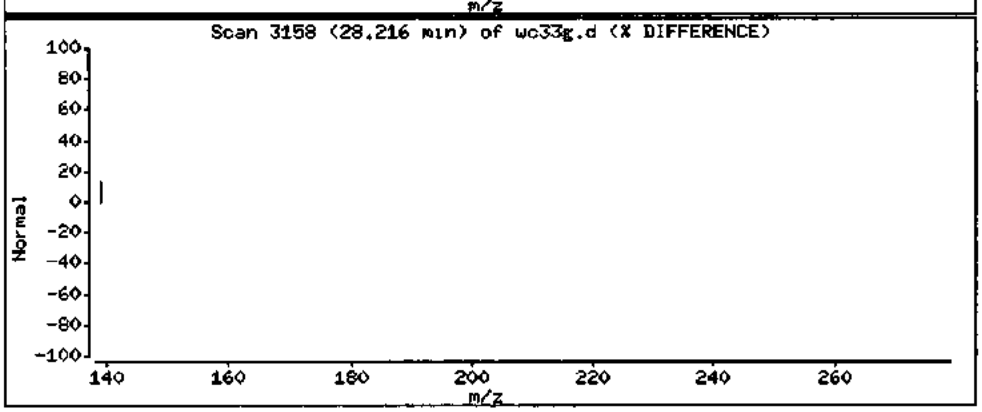












CO-ELUTION SUMMARY FOR FILE - wc33g.d

Lab ID: WC33G, Method: SIM.b/SIMABN2.m, Instrument: nt10.i, Date: 16-FEB-2013

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Dioxin Raw Data
Extraction Bench Sheets and Notes

ARI Job ID: WC32, WC33

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Dioxin / Furan Bench Sheet EPA Methods 8290A & 1613B
Solid Samples

ARI Job No(s) wc32, wc33			
Matrix (circle one)	Soil	Sediment	Oil Tissue
Extraction Method	Start Time/Date:		End Time/Date:
Soxhlet	11:50 2/11/13		0509 2/12/13

Reagent / Standard	NA	ID / Lot Number	Initials	Date
Analytical Balance		SN 24650344	PD	2/11/13
Purified Sand		10/13/12	PD	2/11/13
Toluene		I8007	PD	2/11/13
Hexane		I8020/I8072	M / M	2/12/13/2/13/13
CH_2Cl_2		I7946	M	2/13/13
H_2SO_4		I8012	M	2/12/13
Na_2SO_4		I7950	M	2/13/13
Glasswool		5/18/13	M	2/13/13
10 % $AgNO_3$		~~5/10/12~~	~~M~~	~~2/13/13~~ M 2/13/13
Basic Silica		G933	M	2/13/13
Acid Silica		H090	M	2/13/13
0% Silica		I7968	M	2/13/13
Activated Florisil		H013	M	2/13/13
Dual Carbon Column	/			
Other ( )				
Nonane		I5167	M	2/13/13

Bottle ID	ARI Sample ID	Sample Weight (eq to dry wt)	Roto Vap 45 °C	Final Vol.	H20 Trap Vol (mL)	Comments
2/11/13	wc32MB	10.00g	1/2	10uL	0.5	
↓	OPR	10.00g	1/2	10uL	0.5	
↓	QLS	10.00g	1/2	10uL	0.5	See Analyst note
3	A	24.89	1/2	10uL	14.0	
3	B	28.79	1/2	10uL	19.0	
3	C	13.00	1/2	10uL	3.2	
3	D	17.26	1/2	10uL	7.0	
1	N	16.61	1/2	10uL	7.6	
1	wc33E	~~11.01~~ 5.31	1/2	10uL	0.7	
1	F	~~11.01~~ 5.31	1/2	10uL	0.4	
			1/2	10uL		
			1/2	10uL		
			1/2	10uL		
			1/2	10uL		
			1/2	10uL		
			1/2	10uL		
			1/2	10uL		
			1/2	10uL		
			1/2	10uL		
			1/2	10uL		
			1/2	10uL		
			1/2	10uL		
			1/2	10uL		
			1/2	10uL		
Prep Analyst/Date		PD 2/11/13	M 2/12/13	M 2/13/13	PD 2/12/13	

Reagent / Standard	Vol	ID / Lot Number	Solution Conc.	Expiration Date	Initials	Date	Witness
Recovery Standard	1.0 mL	2062-3	2/4ng/mL	1/15/14	M	2/11/13	PD
Ongoing Precision /Recovery	20 µL	1954-3	10/50/100ng/mL	2/27/13	M	2/11/13	PD
QLS Standard	10 µL	21/ 1954-4	0.5/2.5/5ng/mL	2/27/13	M	2/11/13	PD
Clean-up Standard	1.0 mL	2070-2	0.8ng/mL	2/6/14	M	2/13/13	PD
Internal Standard	10 µL		200ng/mL				

Verify Client ID	
Analyst/Date	PD 2/11/13
Acid Clean	Y/N
Analyst/Date	M 2/12/13
Silica-Florisil	Y/N
Analyst/Date	M 2/13/13

Supervisor Review: [signature] 2/12/13

Bench Sheet No.: 00017

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

ARI Job No.: WC32 — Client ID: Floyd-Snider

Parameter: Dioxin 1613B — Client Project: POB-Harris

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☒ No Anomalies (standard soil/wet sediment/sand/gravel)= A, B, ~~C~~, C, D, E, F, G, H, N	YL 2/4/13
☒ Standing Water Decanted (Not shared)= A, B, C, D, G, N.	YL 2/4/13
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay/Clumps (Difficult to homogenize)=	
☒ Rocks (%+size)? 25.% small rocks C, 40.% small E, 5.% F, 2.% small rocks G,	YL 2/4/13
☒ Organics (Leaves/sticks/grass)= C, D, N	YL 2/4/13
☒ Oily, obvious fuel/sulfur odors= C, D, H, N	YL 2/4/13
☒ Other (Details)= 10.% shell ~~segments~~ fragments C, E, F, G YL 2/4/13	YL 2/4/13

Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Other (Details)=	

☒ Other Notes/Comments= (Note problems, concerns, corrective actions). (Centrifuge#1 used for all Centrifugations)	
WC32-QLS: Sample could have lost ~10% while rotor vap sample start to bump while trying to lower the pressure.	M 2/12/13

3056F

Review: [signature] 2/12/13

Revision 009
08/14/12

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

ARI Job No.: WC33

Client ID: Floyd-Snider

Parameter: Dioxin 1613B

Client Project: POB-Harris

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☒ No Anomalies (standard soil/wet sediment/sand/gravel)= E, F, G	YC 2/4/13
☐ Standing Water Decanted (Not shared)=	
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay/Clumps (Difficult to homogenize)=	
☒ Rocks (%+size)? 10% small & medium E, [illegible] 2/4/13.	YC 2/4/13
☐ Organics (Leaves/sticks/grass)=	
☒ Oily, obvious fuel/sulfur odors= F	YC 2/4/13
☒ Other (Details)= 10% ~~[illegible]~~ 2/4/13 shell fragment ~~[illegible]~~ 2/4/13, G.	YC 2/4/13
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Other (Details)=	
☐ Other Notes/Comments= (Note problems, concerns, corrective actions). (Centrifuge#1 used for all Centrifugations)	

3056F

Revision 009
08/14/12

Dioxin Raw Data
Initial Calibration

ARI Job ID: WC32, WC33

Analytical Resources, Incorporated
Analytical Chemists and Consultants

HR-GC/MS Analyst Notes / Corrective Action Log

RI Project ID: ____________ Client ID: ____________

RI SOP: **806S** (Dioxins)

arameter(s): Dioxin Curve 2/11/13

strument: **AutoSpec01**

urve Date: 2/11/13 Analysis Start Date: ____________

iternal Standard Meets Criteria?	YES / NO	Method Blank in Control?	YES / NO
xtraction Std Recovery in Control?	~~YES / NO~~	IPR / OPR Recovery in Control?	YES / NO
Cal acceptable?	YES / NO	CCal acceptable?	YES / NO
lanual Integrations for ICal?	YES / NO	Manual Integrations for Samples?	Yes /NO
pecial Analysis Criteria Met?	YES / NO / NA		

etail problems, corrective actions and/or other pertinent information below (use reverse side hen necessary):

- All cpnds < 20% RSD. All 6pts: CSL – CS5.
- Man Int. on CSL for TF, PF, PD, OCDD.

Additional Details on Reverse: Yes / No

Analyst: [signature] **Date:** 2/12/13

Reviewer: ____________ **Date:** ____________

Analytical Resources Inc.: Organics Instrument Log

AutoSpec01 Serial No.:GC=CN10921030, MS=P764

Date: 2/11/13 Analysis: Dioxins Analyst: [illegible]

GC Program: 8290C Column No: I7818 Column Type: [illegible]

Inj Vol: 1ul Instrument Tune (IPR): 10k8290B Detector Voltage: 340

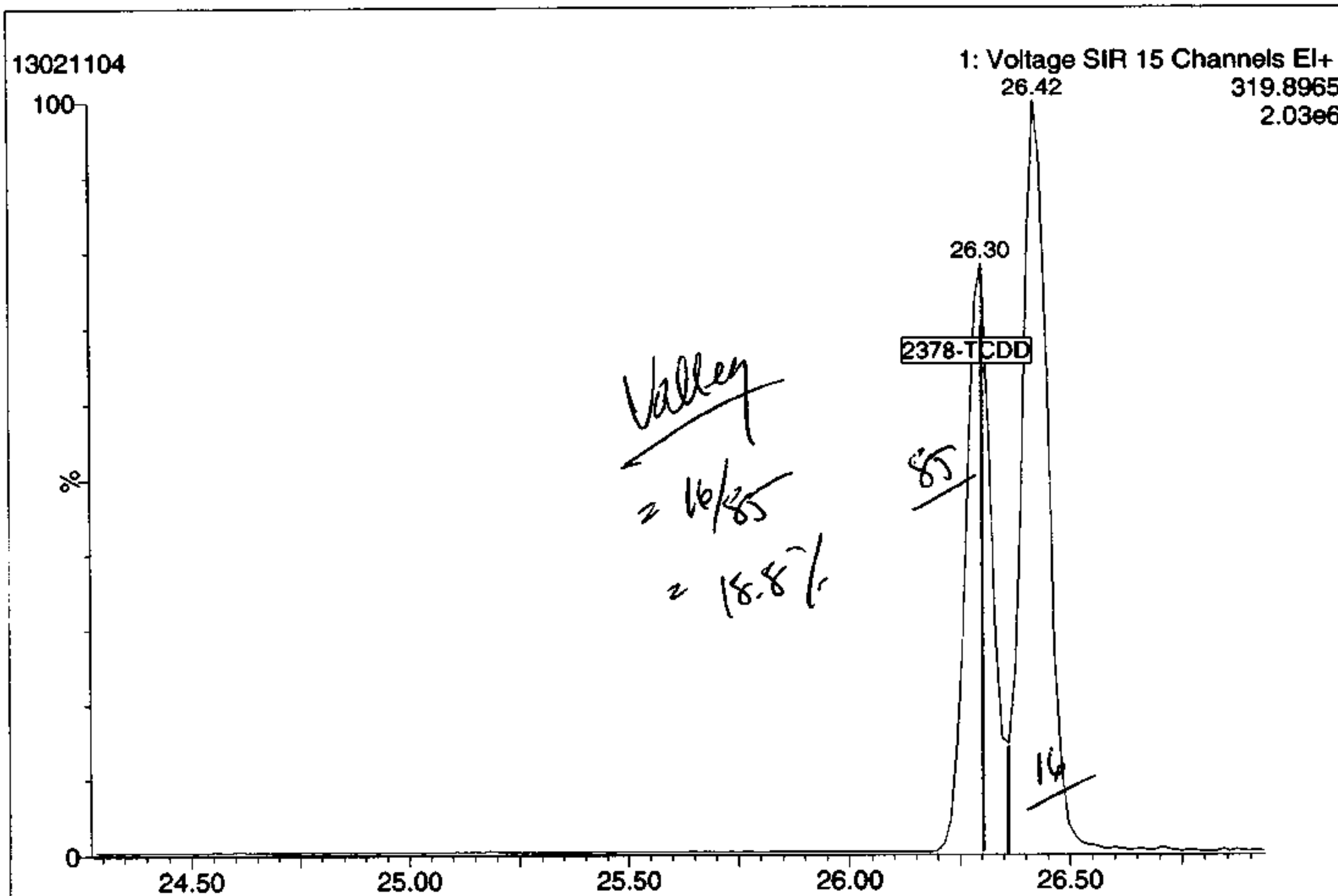
Resolution Check Files: Curve Date: 2/11/13

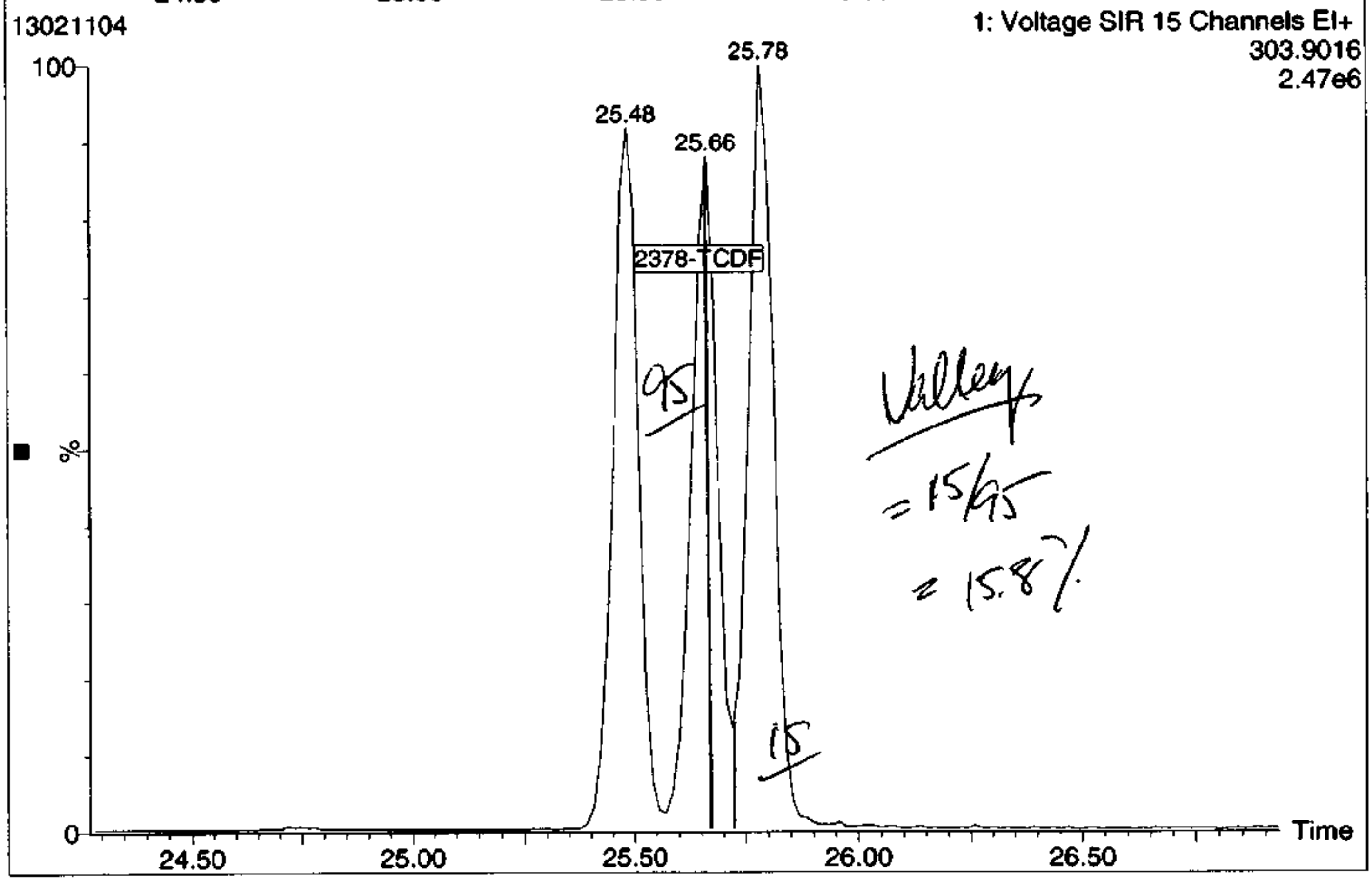
IS/SS	Ical/Ccal	LCS/ICV
I7908	I7333 - I7337	I7383
	I7214	
	1997-2	

1	11-Feb-13	12:04:12	13021102	PCDFS
2	11-Feb-13	12:55:00	13021103	CS3
3	11-Feb-13	13:54:29	13021104	ISC01
4	11-Feb-13	14:45:17	13021105	CSL
5	11-Feb-13	15:40:00	13021106	CS1
6	11-Feb-13	16:30:49	13021107	CS2
7	11-Feb-13	17:23:26	13021108	CS3
8	11-Feb-13	18:16:11	13021109	CS4
9	11-Feb-13	19:08:49	13021110	CS5
10	11-Feb-13	20:01:34	13021111	ICV
11	11-Feb-13	20:54:12	13021112	CS3
12	11-Feb-13	21:55:09	13021113	ISC02

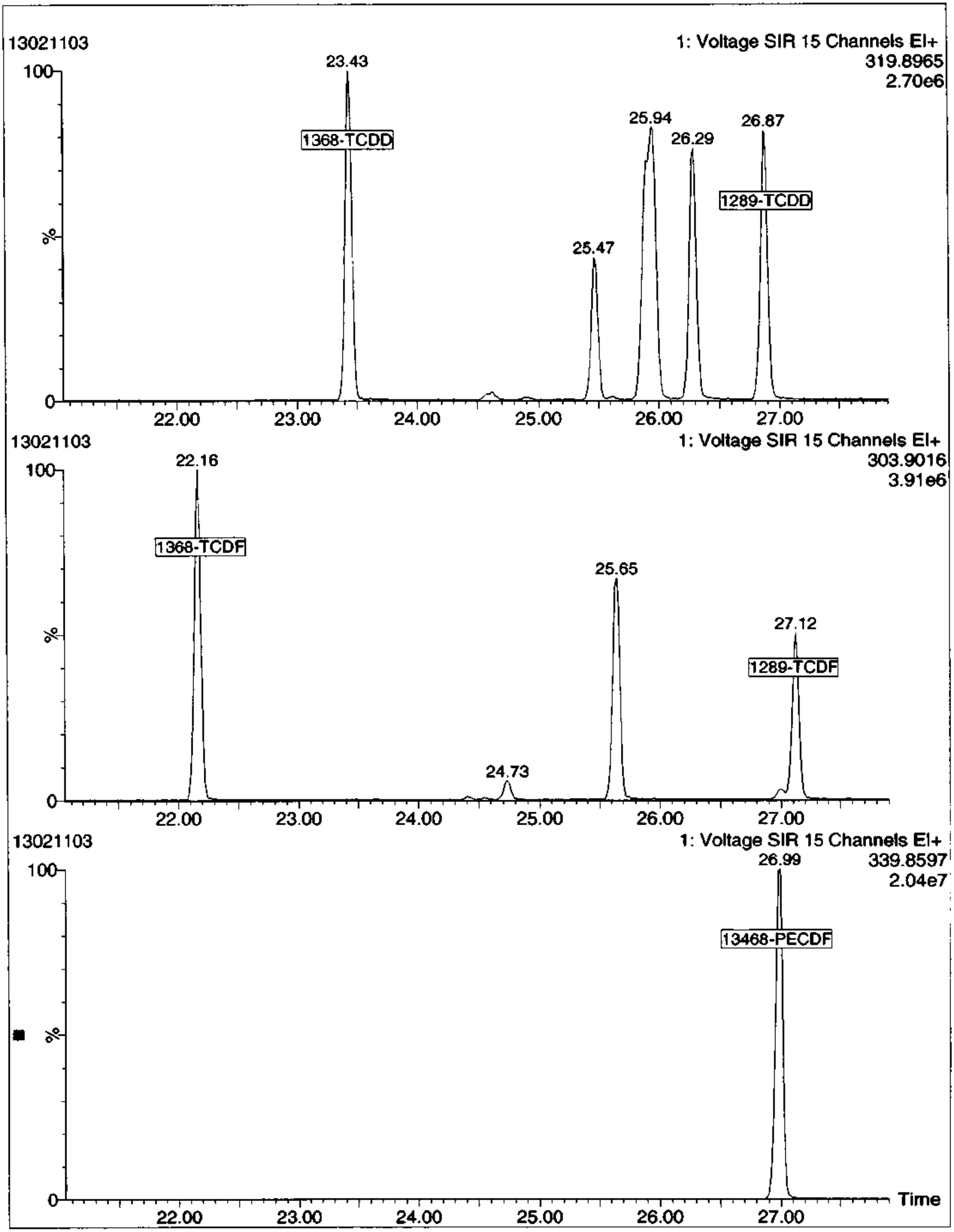
[illegible] 2/12/13

Every line must contain information or be lined out. Make all entries legible.
Start a new page for each QC period. Document All Maintenance Tasks in StarLIMS

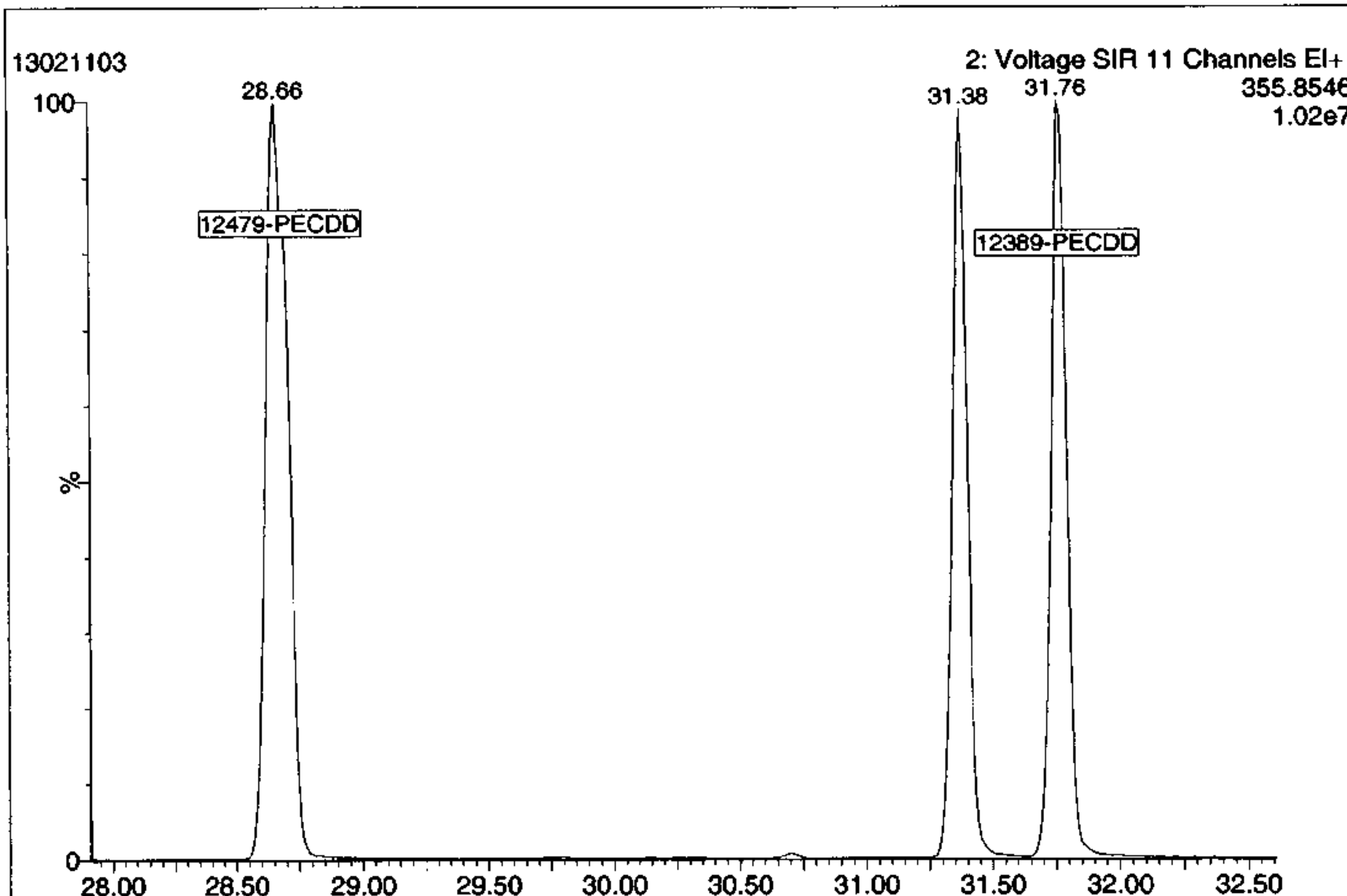

13021104
1: Voltage SIR 15 Channels EI+
319.8965
2.03e6
26.42
26.30
2378-TCDD
100
%
0
24.50
25.00
25.50
26.00
26.50
Valley
= 16/85
= 18.8%
85
16

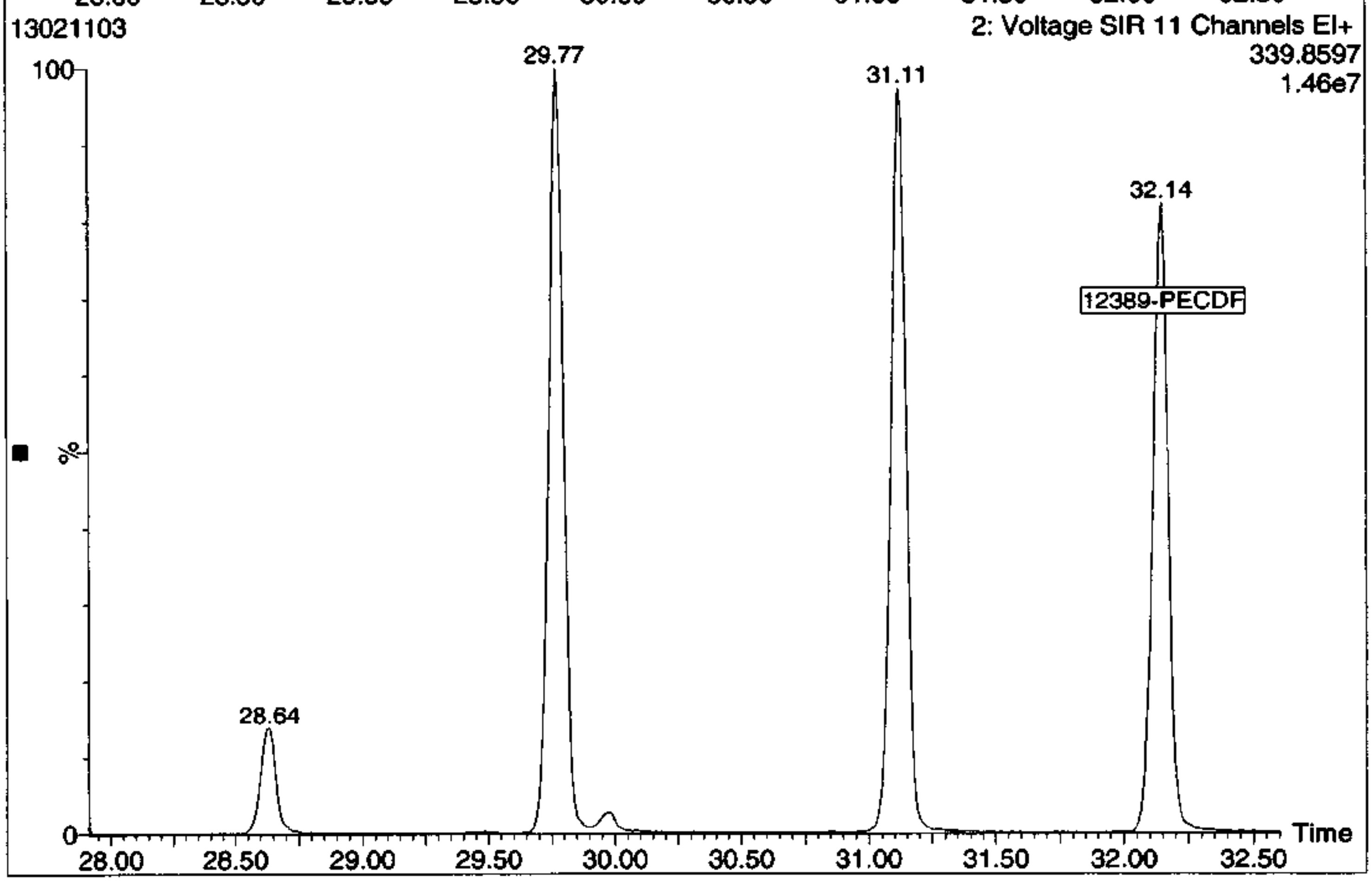

13021104
1: Voltage SIR 15 Channels EI+
303.9016
2.47e6
25.78
25.48
25.66
2378-TCDF
100
%
0
Time
24.50
25.00
25.50
26.00
26.50
Valleys
= 15/95
= 15.8%
95
15

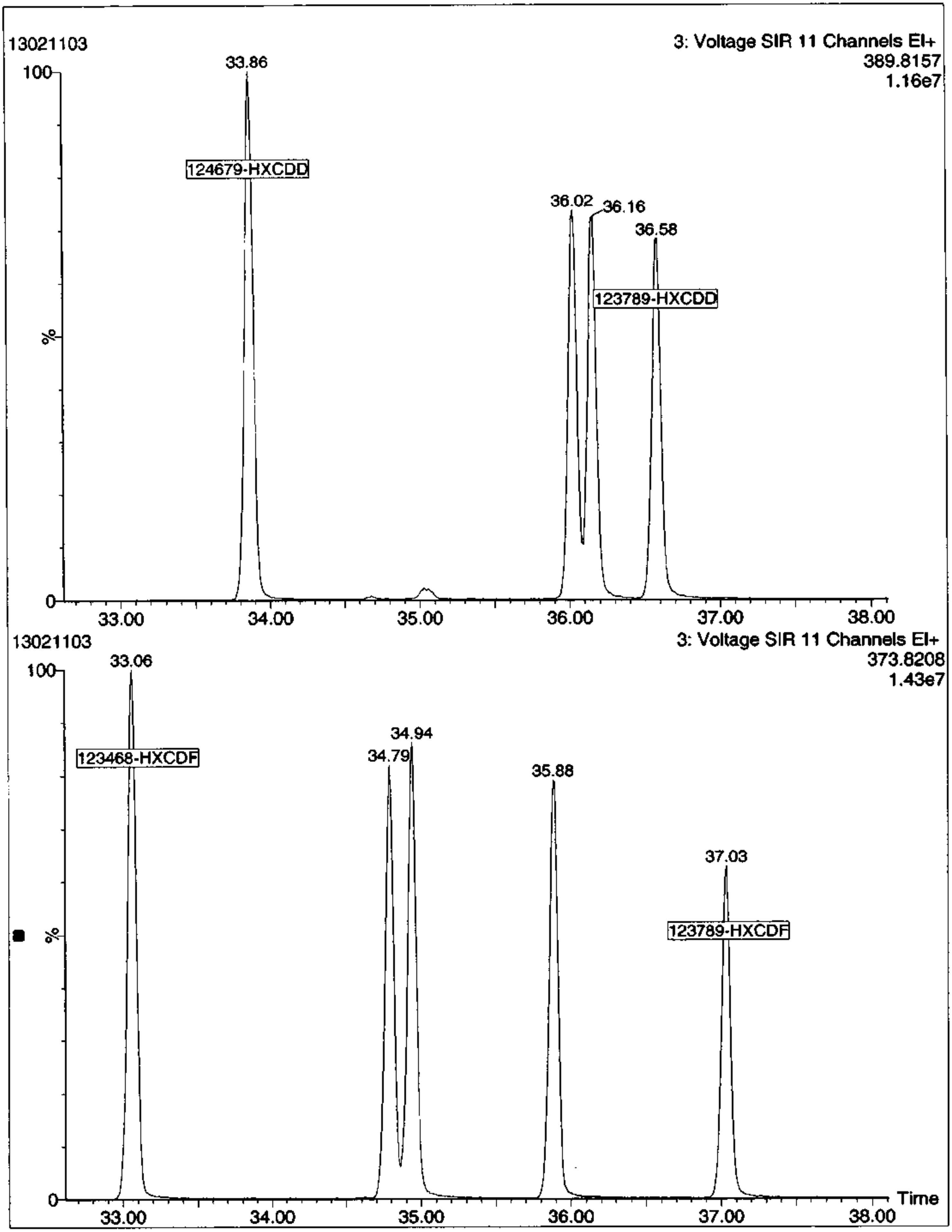
WC92 : 01277

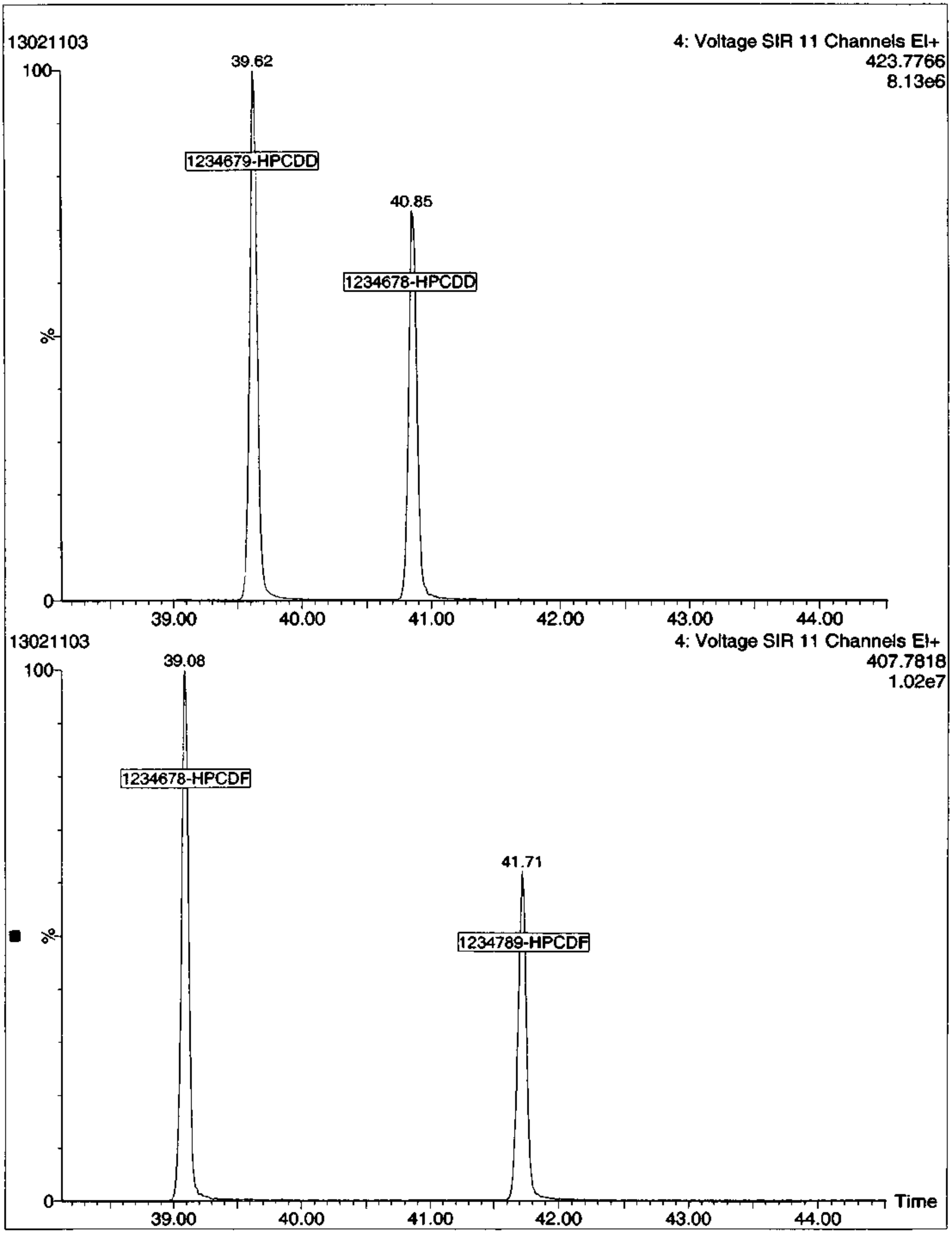

13021103
1: Voltage SIR 15 Channels EI+
319.8965
2.70e6
23.43
1368-TCDD
25.94
26.29
26.87
1289-TCDD
25.47
100
%
0
22.00
23.00
24.00
25.00
26.00
27.00
13021103
1: Voltage SIR 15 Channels EI+
303.9016
3.91e6
22.16
1368-TCDF
25.65
27.12
1289-TCDF
24.73
13021103
1: Voltage SIR 15 Channels EI+
339.8597
2.04e7
26.99
13468-PECDF
Time

WC02 . 01278


13021103
2: Voltage SIR 11 Channels EI+
355.8546
1.02e7
28.66
31.38
31.76
12479-PECDD
12389-PECDD
100
%
0
28.00
28.50
29.00
29.50
30.00
30.50
31.00
31.50
32.00
32.50


13021103
2: Voltage SIR 11 Channels EI+
339.8597
1.46e7
29.77
31.11
32.14
12389-PECDF
28.64
100
%
0
28.00
28.50
29.00
29.50
30.00
30.50
31.00
31.50
32.00
32.50
Time


13021103
3: Voltage SIR 11 Channels EI+
389.8157
1.16e7
100
%
0
33.86
124679-HXCDD
36.02
36.16
36.58
123789-HXCDD
33.00
34.00
35.00
36.00
37.00
38.00
13021103
3: Voltage SIR 11 Channels EI+
373.8208
1.43e7
100
%
0
33.06
123468-HXCDF
34.79
34.94
35.88
37.03
123789-HXCDF
Time
33.00
34.00
35.00
36.00
37.00
38.00

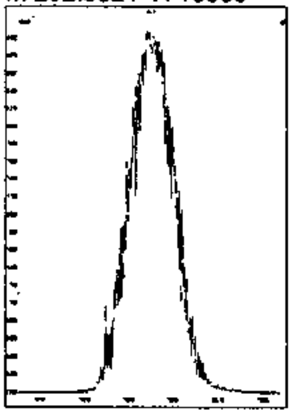


13021103
4: Voltage SIR 11 Channels EI+
423.7766
8.13e6
39.62
1234679-HPCDD
40.85
1234678-HPCDD
100
%
0
39.00
40.00
41.00
42.00
43.00
44.00
13021103
4: Voltage SIR 11 Channels EI+
407.7818
1.02e7
39.08
1234678-HPCDF
41.71
1234789-HPCDF
100
%
0
Time
39.00
40.00
41.00
42.00
43.00
44.00

VC32 : 01201

Printed: Monday, February 11, 2013 11:55:39 Pacific Standard Time

M 292.9824 R 13855



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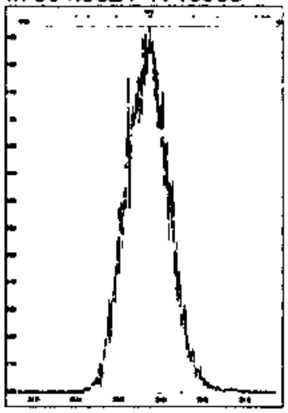

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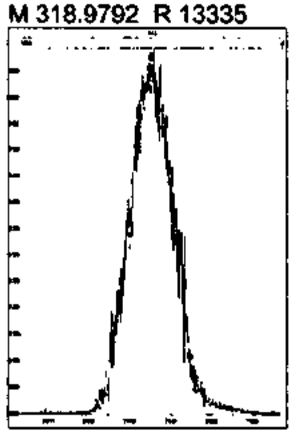

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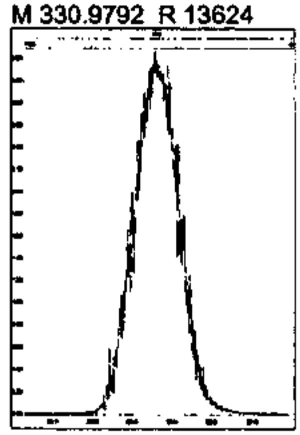

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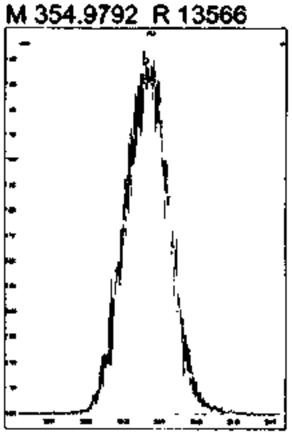

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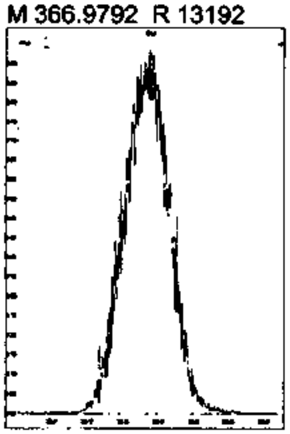

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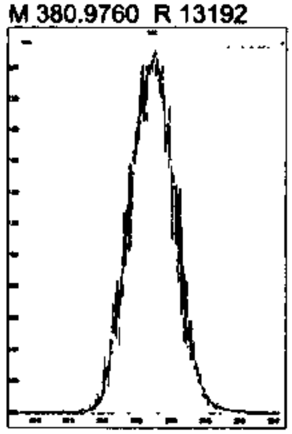

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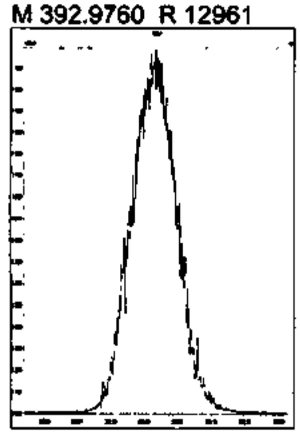

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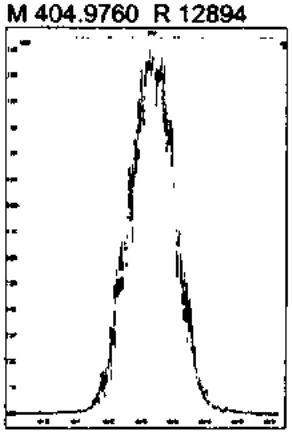

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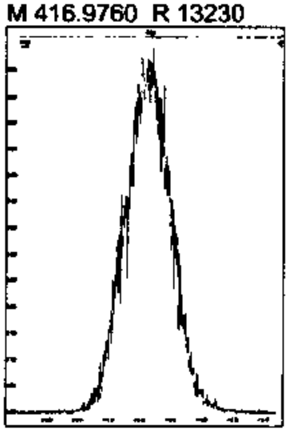

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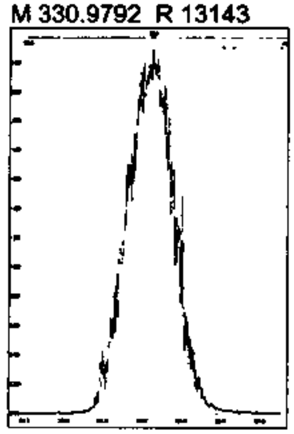

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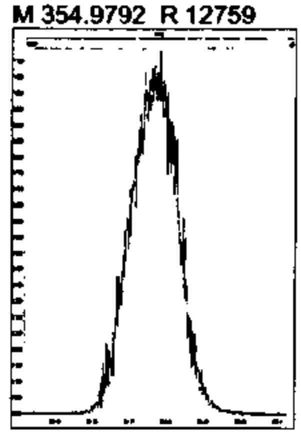

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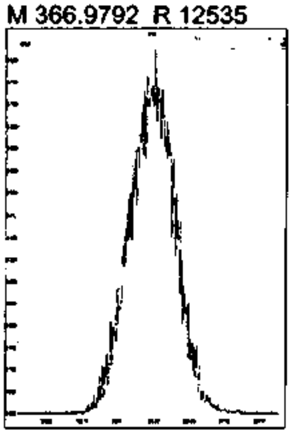

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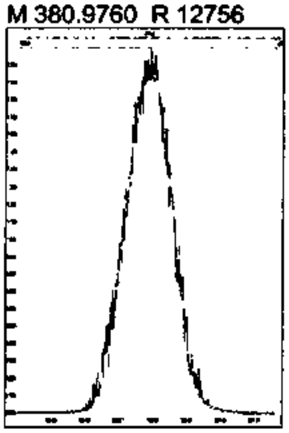

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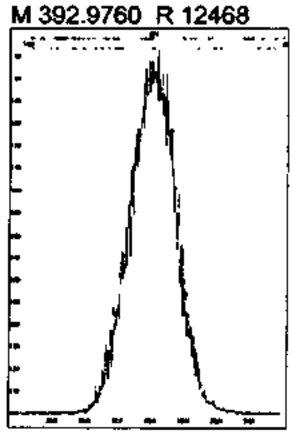

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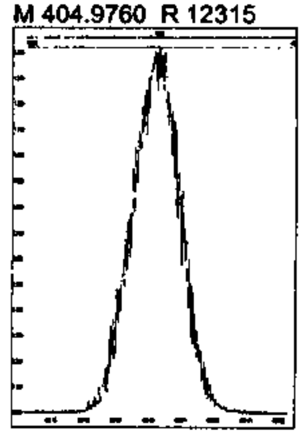

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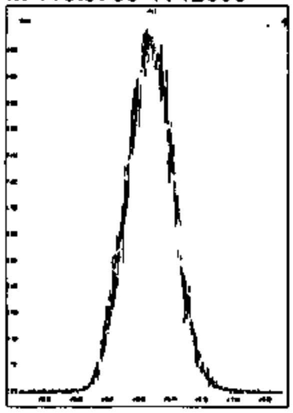

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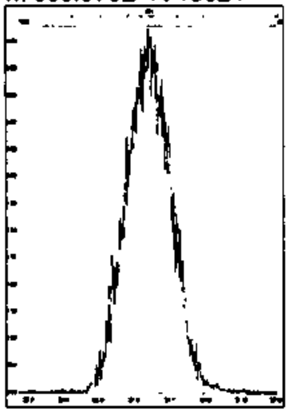

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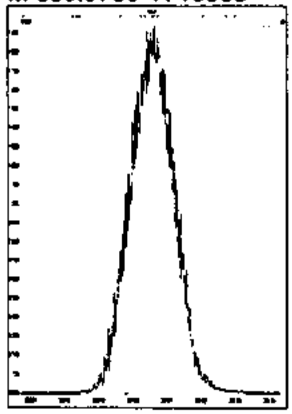

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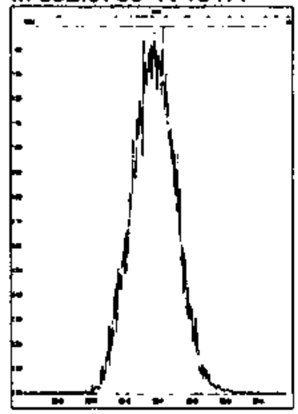

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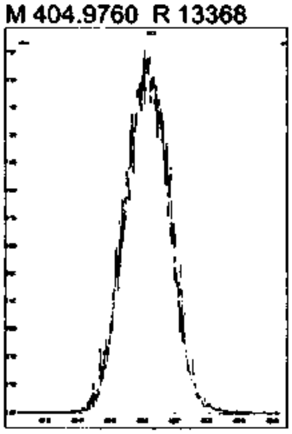

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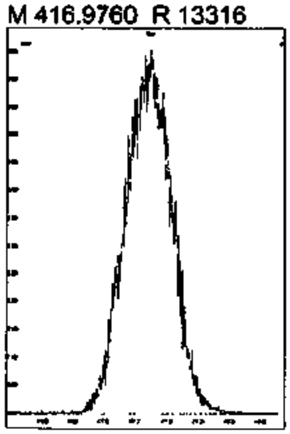

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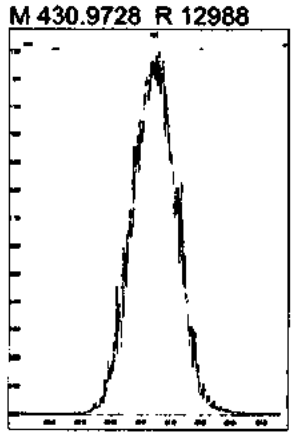

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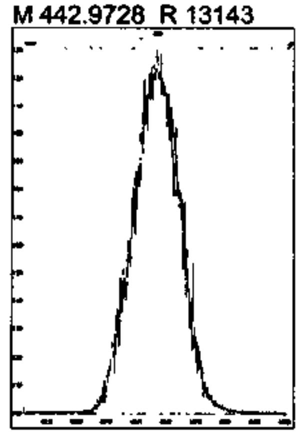

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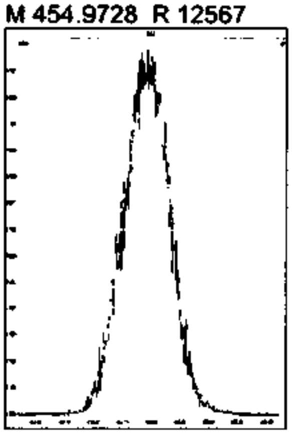

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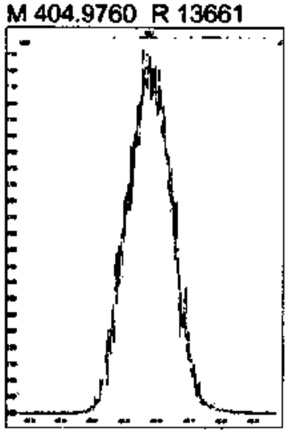

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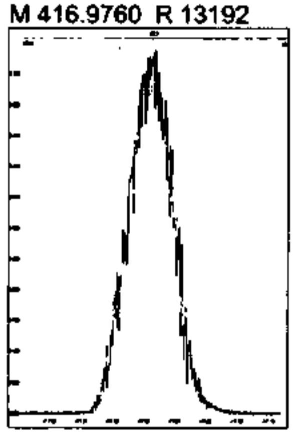

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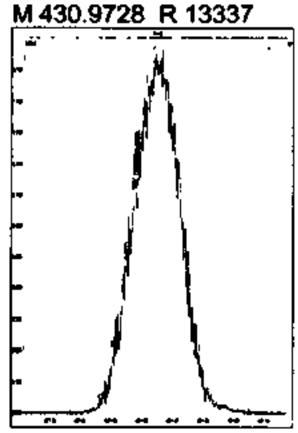

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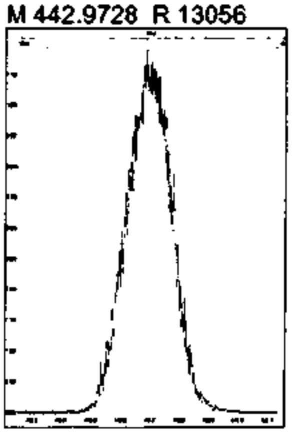

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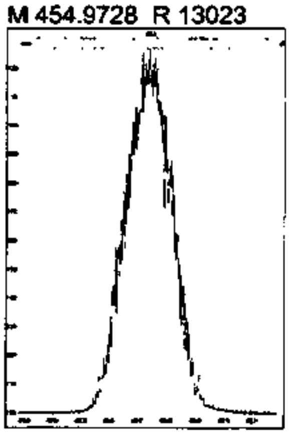

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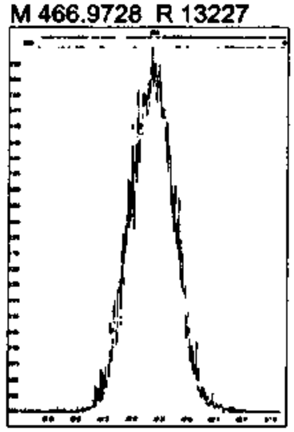

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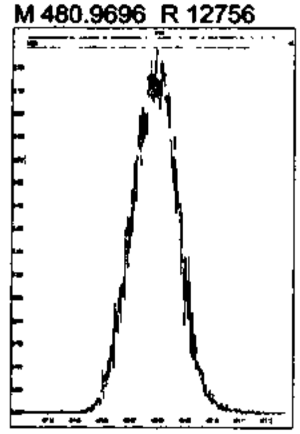

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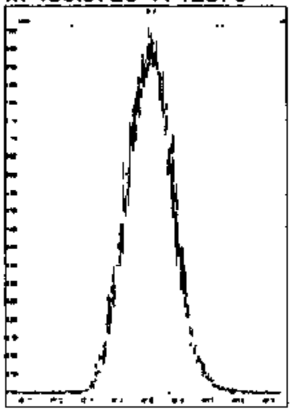

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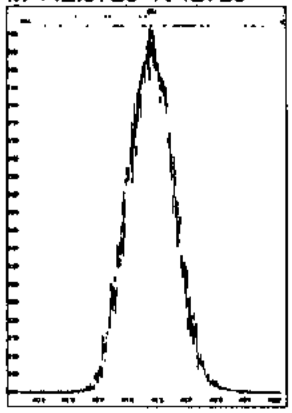

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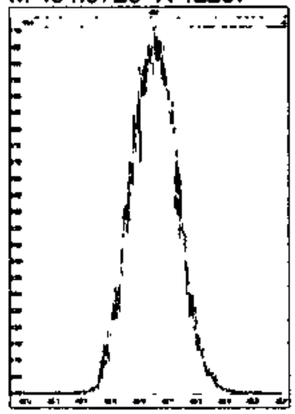

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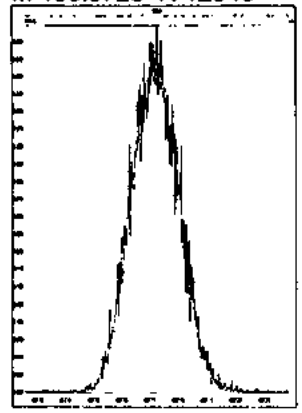

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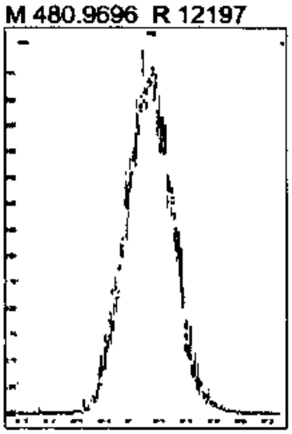

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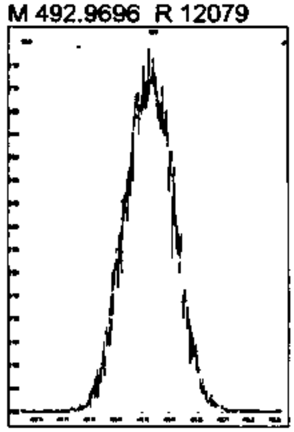

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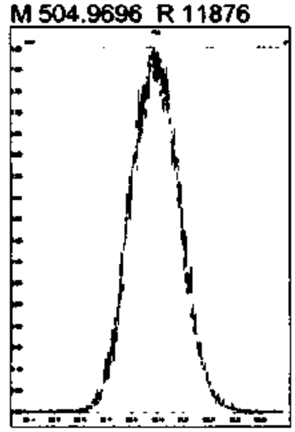

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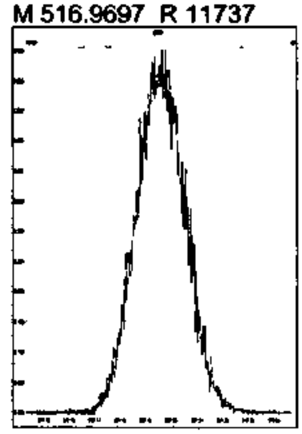

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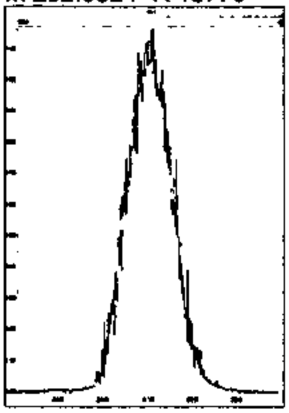

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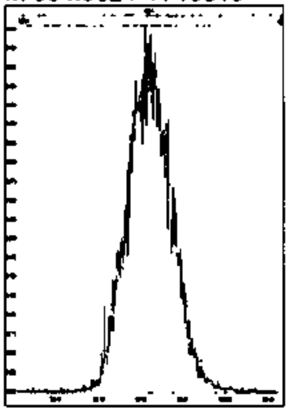

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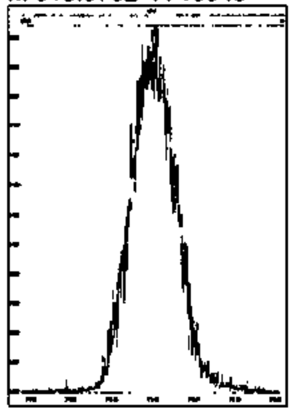

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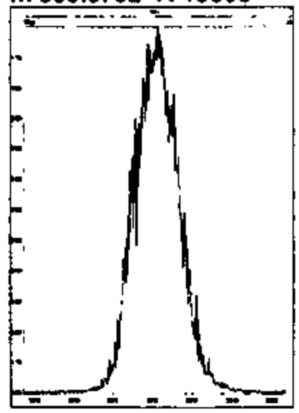

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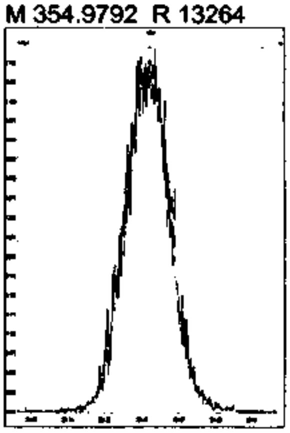

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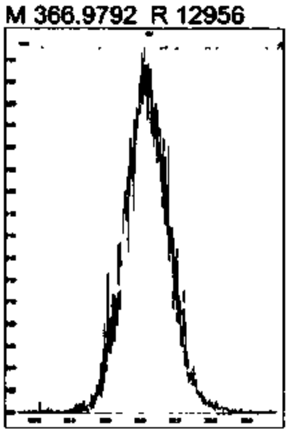

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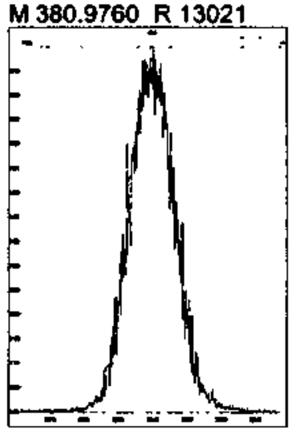

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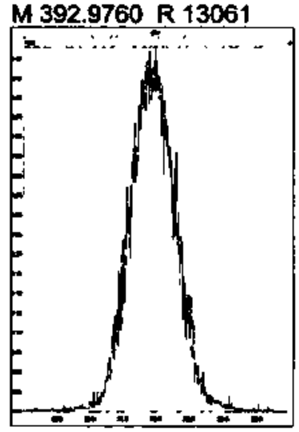

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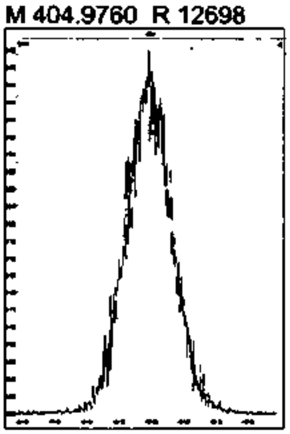

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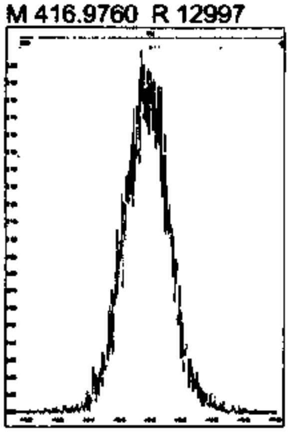

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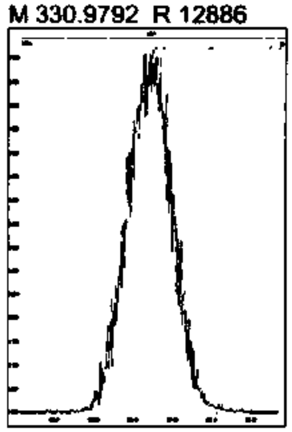

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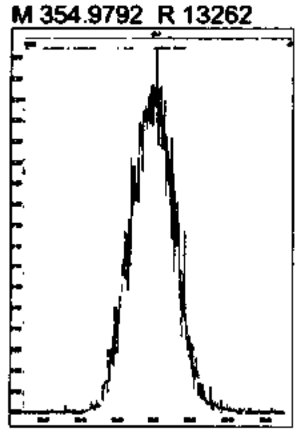

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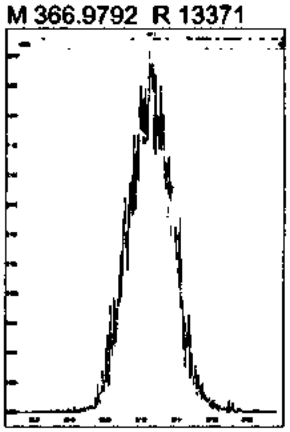

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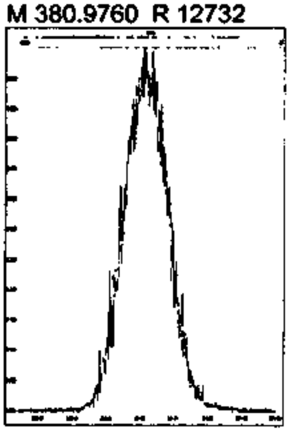

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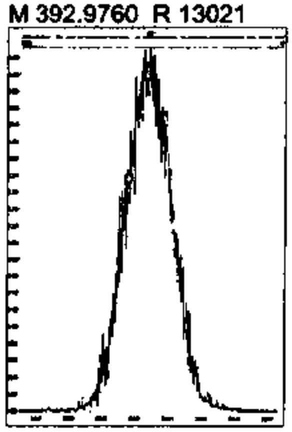

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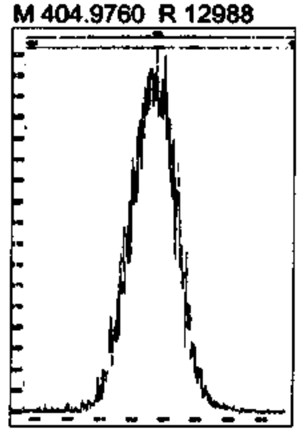

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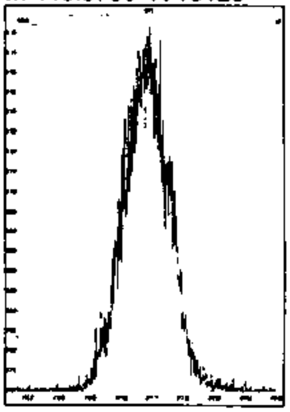

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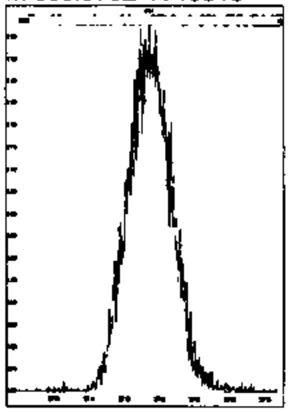

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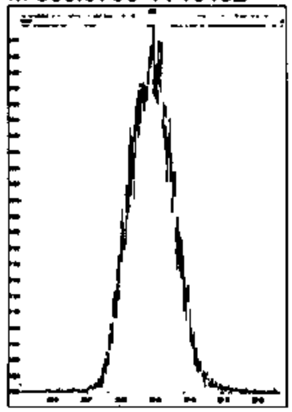

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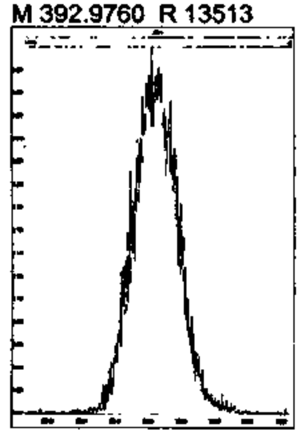

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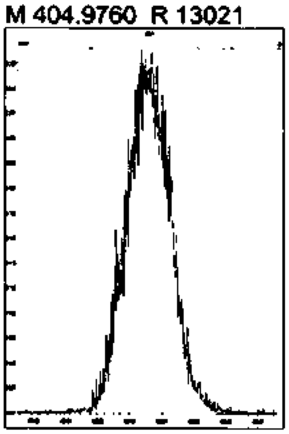

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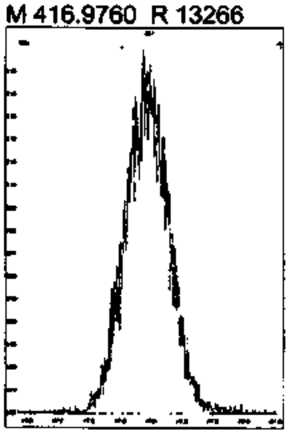

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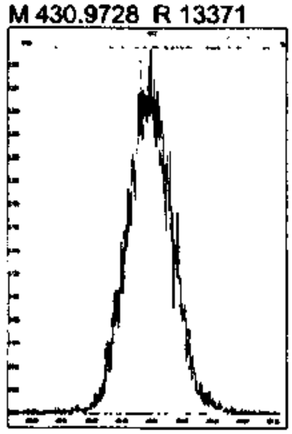

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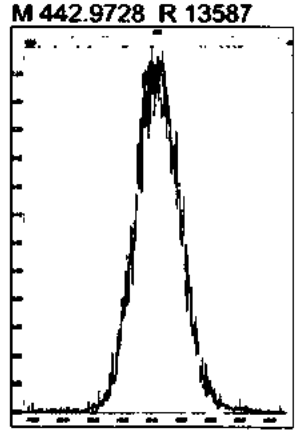

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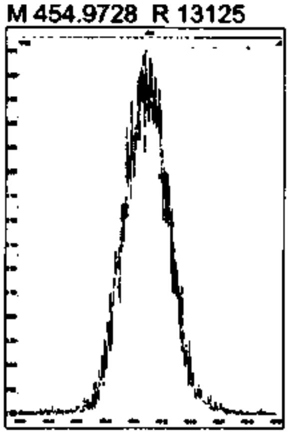

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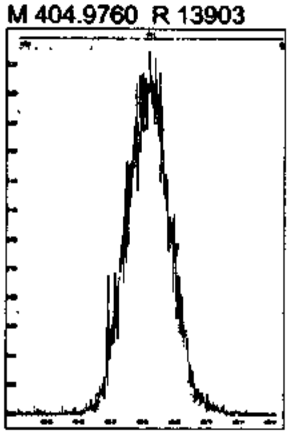

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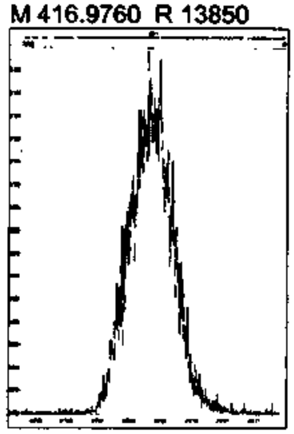

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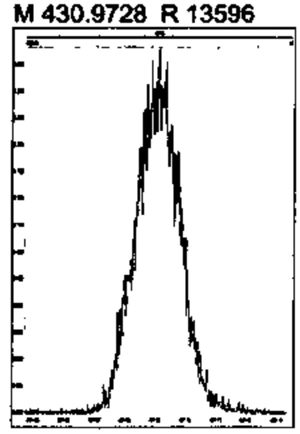

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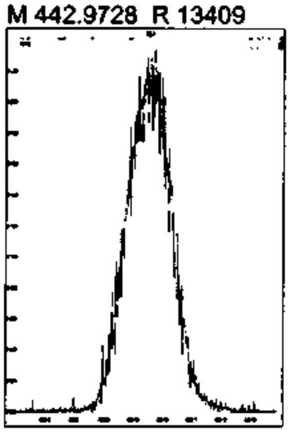

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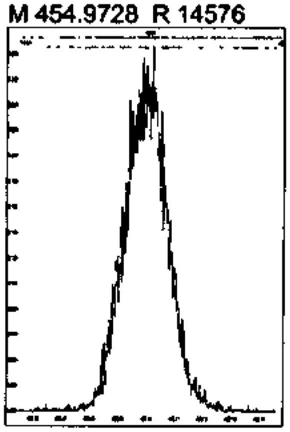

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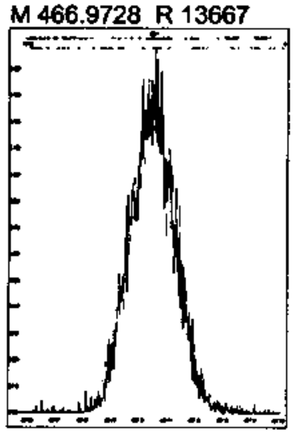

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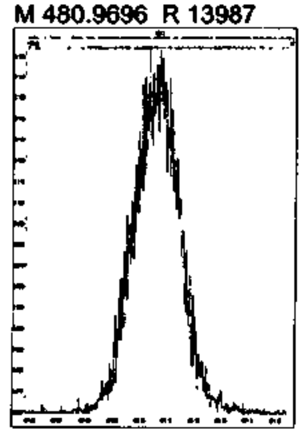

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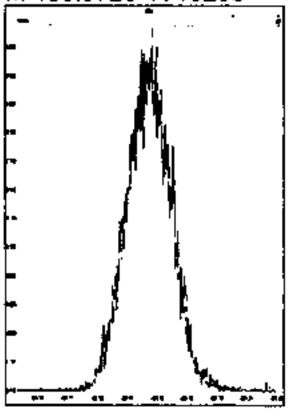

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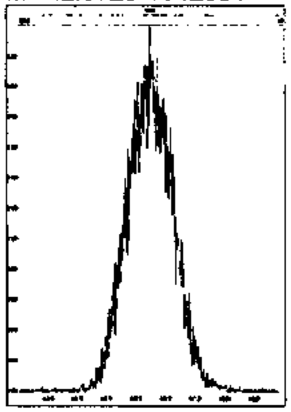

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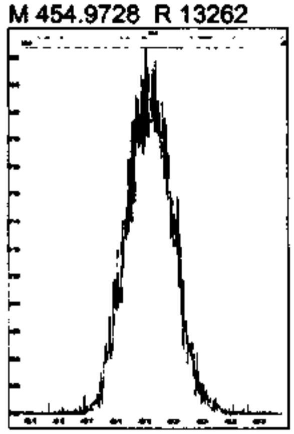

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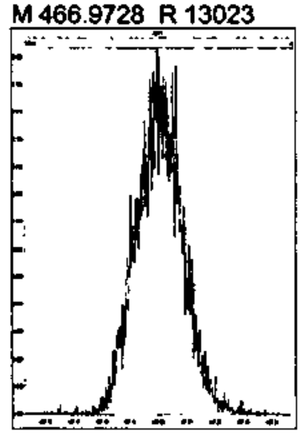

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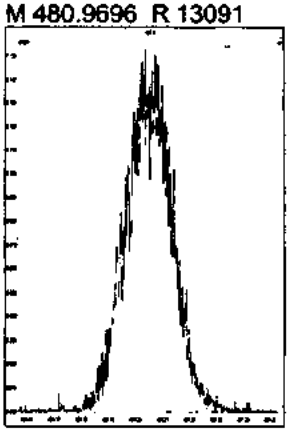

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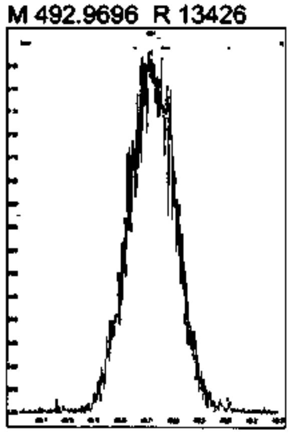

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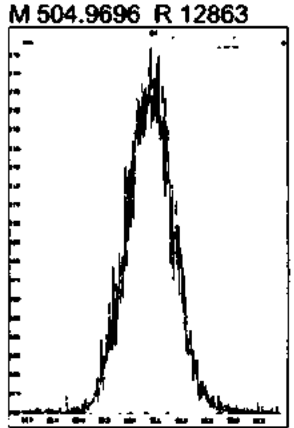

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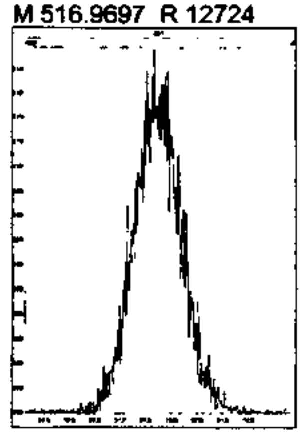

Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:35:49 Pacific Standard Time

Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 04 Feb 2013 12:23:30
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: CSL, Name: 13021105, Date: 11-Feb-2013, Time: 14:45:17, Conditions: AUTOSPEC01, User: pk

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Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:35:49 Pacific Standard Time

ID: CSL, Name: 13021105, Date: 11-Feb-2013, Time: 14:45:17, Conditions: AUTOSPEC01, User: pk

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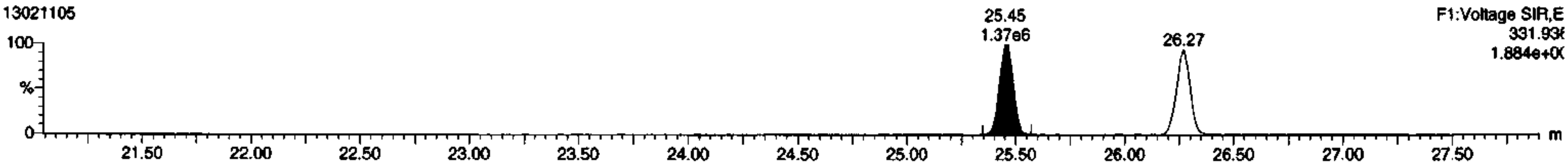
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:35:49 Pacific Standard Time

Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 04 Feb 2013 12:23:30
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: CSL, Name: 13021105, Date: 11-Feb-2013, Time: 14:45:17, Conditions: AUTOSPEC01, User: pk

13C-1234-TCDD



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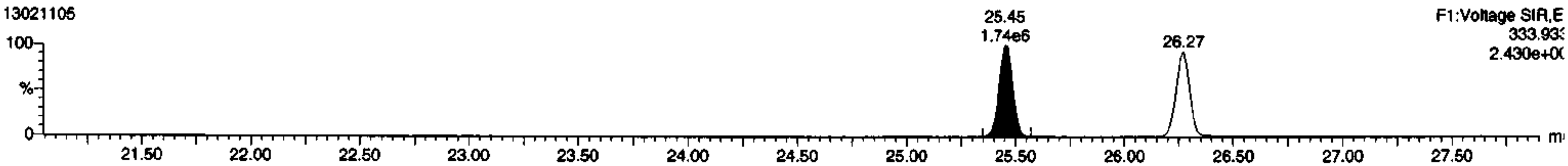
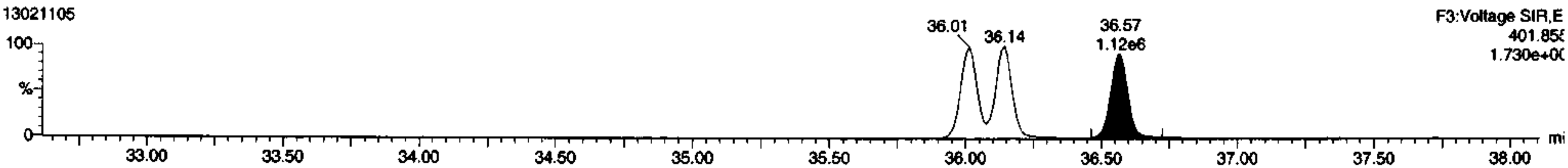


13C-123789-HxCDD



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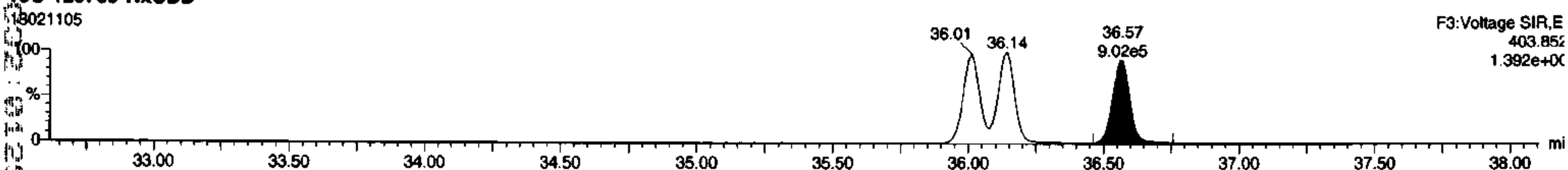

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ID: CSL, Name: 13021105, Date: 11-Feb-2013, Time: 14:45:17, Conditions: AUTOSPEC01, User: pk

13C-2378-TCDD
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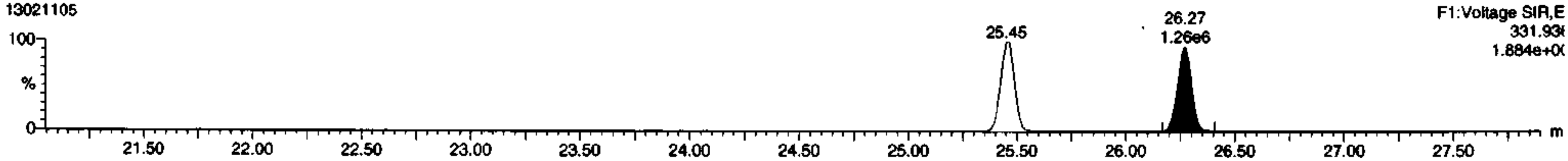

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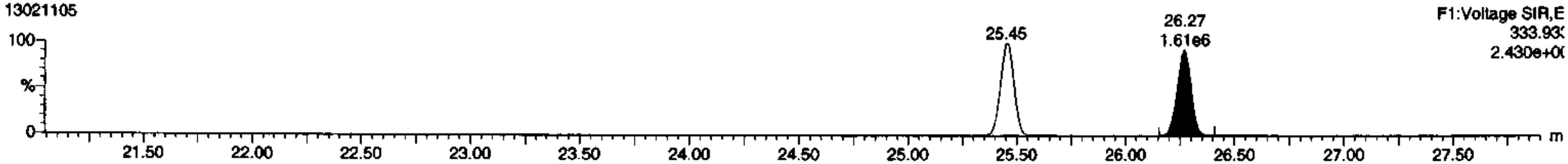

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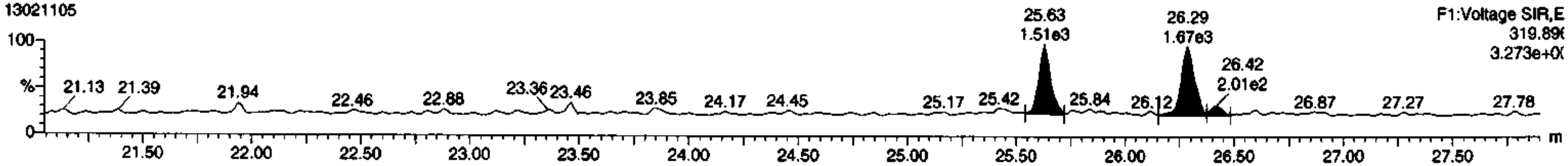

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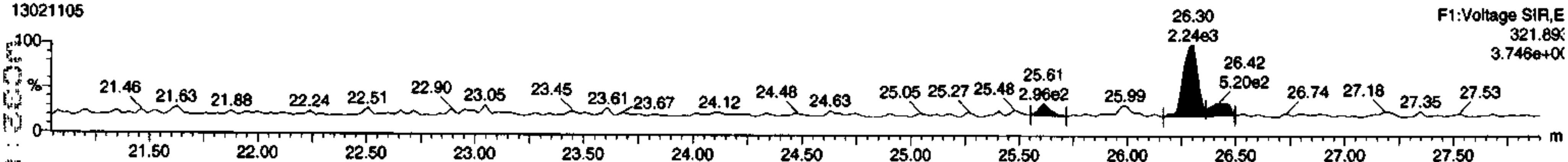

FUNCTION1 PFK
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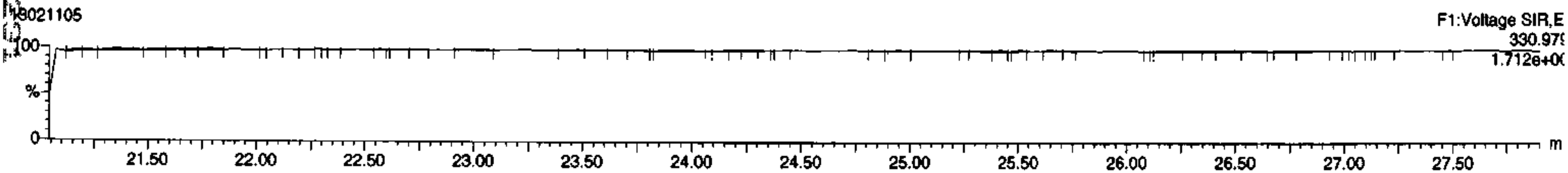

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Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:35:49 Pacific Standard Time

ID: CSL, Name: 13021105, Date: 11-Feb-2013, Time: 14:45:17, Conditions: AUTOSPEC01, User: pk

13C-2378-TCDF
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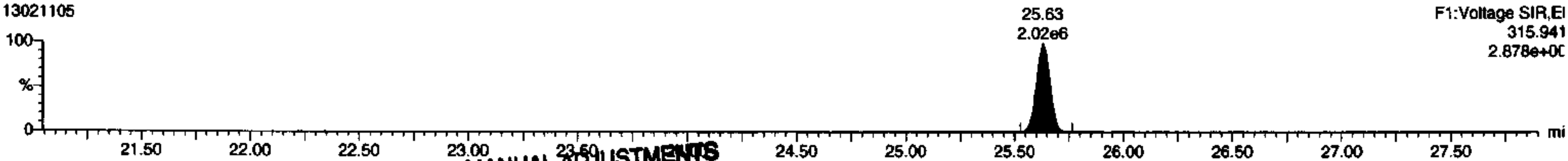
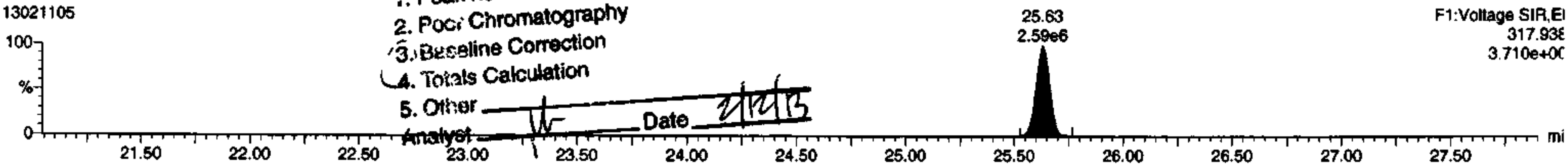


MANUAL ADJUSTMENTS
1. Peak not found
2. Poor Chromatography
3. Baseline Correction
4. Totals Calculation
5. Other
Analyst Date 2/12/13

13C-2378-TCDF
13021105



Total-tetrafurans
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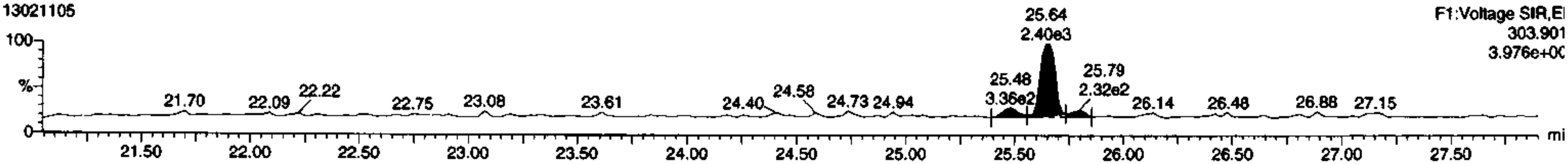

Total-tetrafurans
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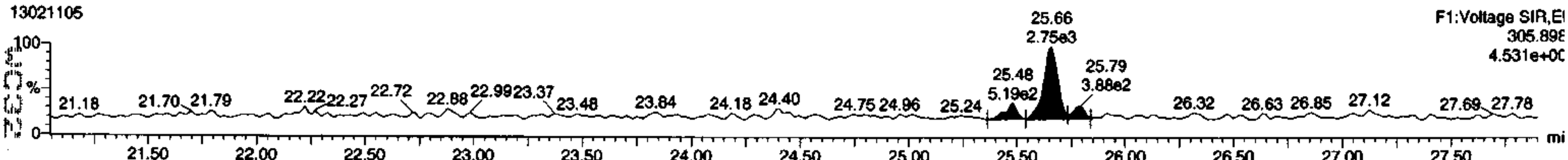

FUNCTION1 HXCDPE
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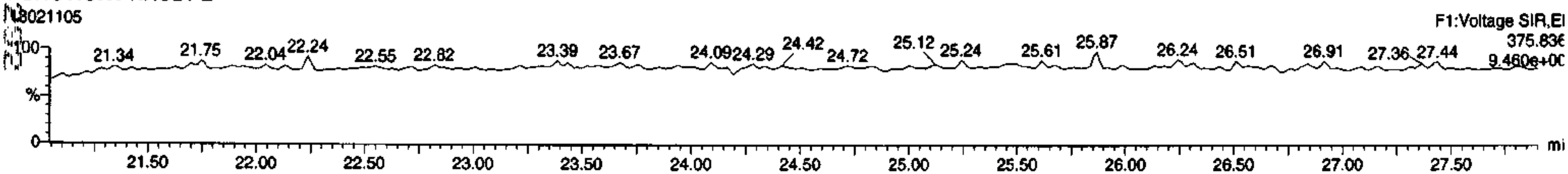

Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
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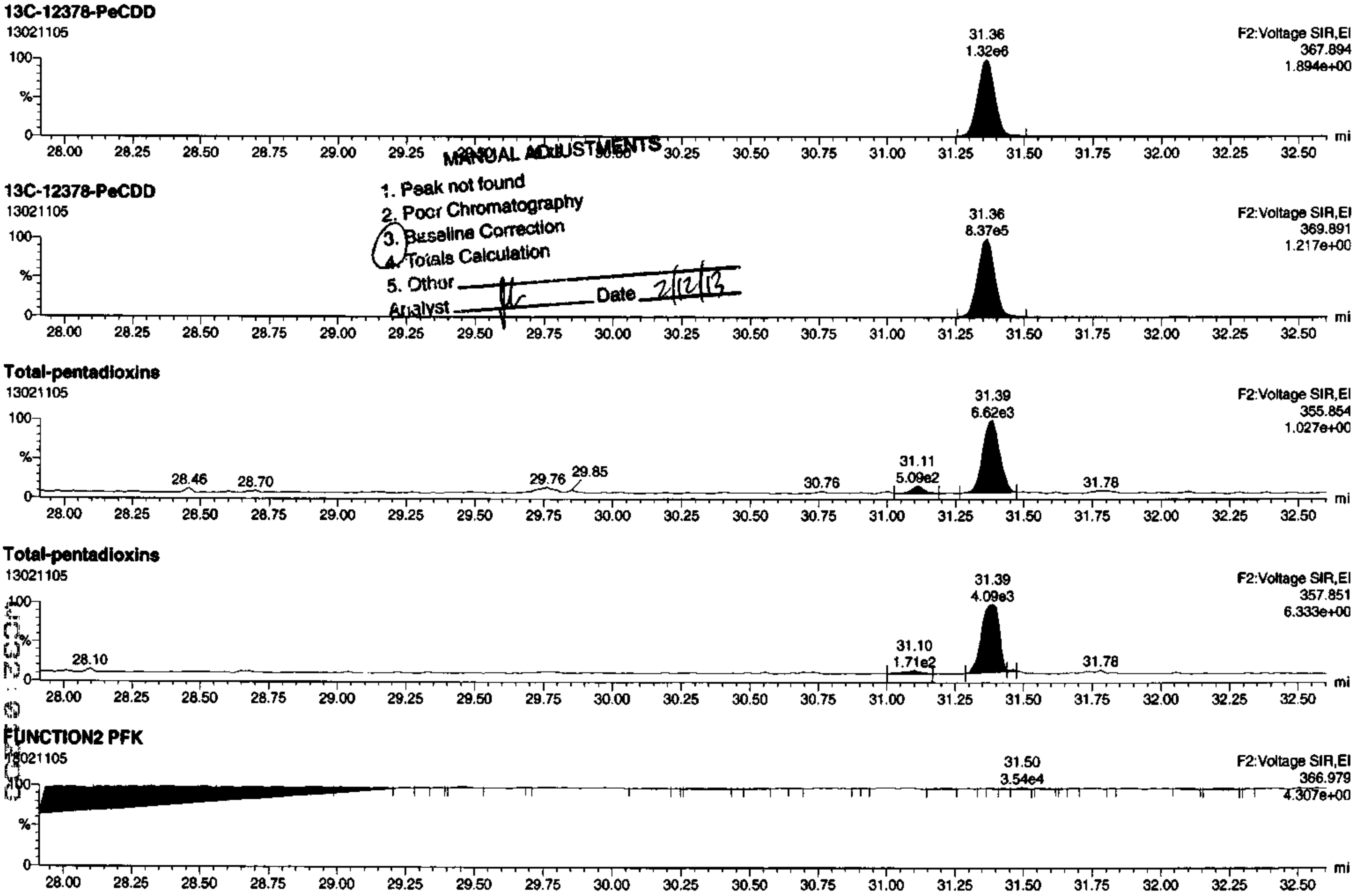
ID: CSL, Name: 13021105, Date: 11-Feb-2013, Time: 14:45:17, Conditions: AUTOSPEC01, User: pk



MANUAL ADJUSTMENTS
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2. Poor Chromatography
3. Baseline Correction
4. Totals Calculation
5. Other
Analyst ~~pk~~ Date ~~2/12/13~~

Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:35:49 Pacific Standard Time

ID: CSL, Name: 13021105, Date: 11-Feb-2013, Time: 14:45:17, Conditions: AUTOSPEC01, User: pk

13C-12378-PeCDF
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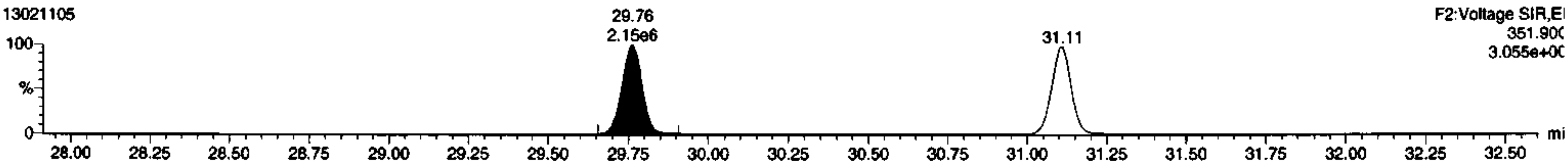

13C-12378-PeCDF
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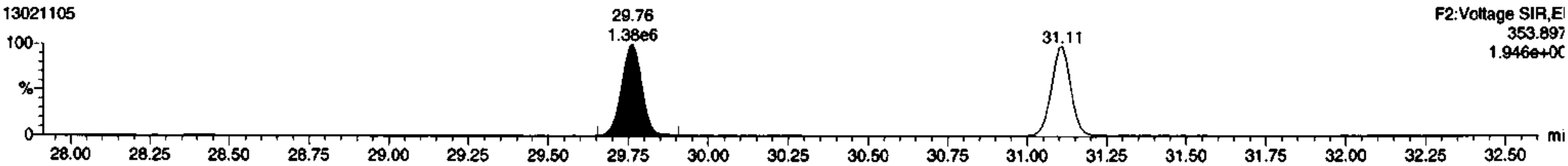

Total-penta1
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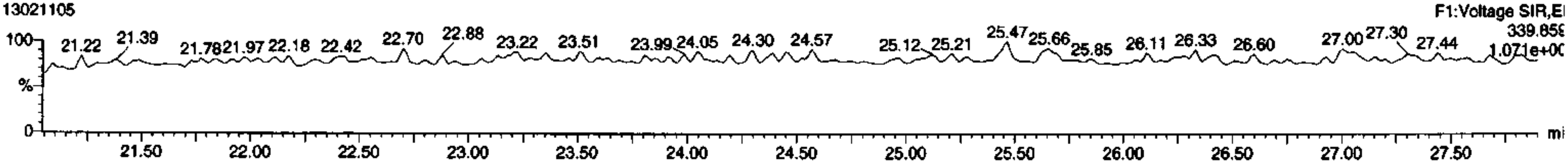

Total-penta1
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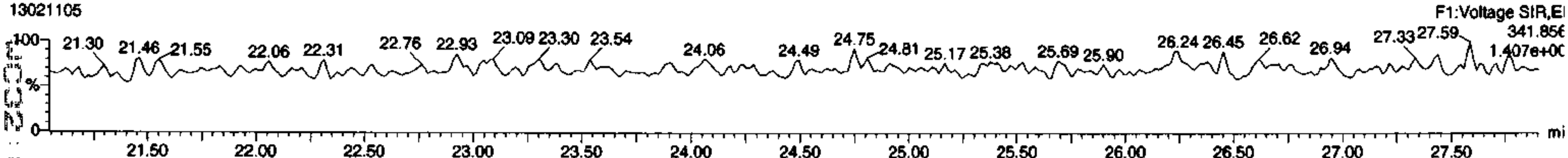

FUNCTION1 HPCDPE
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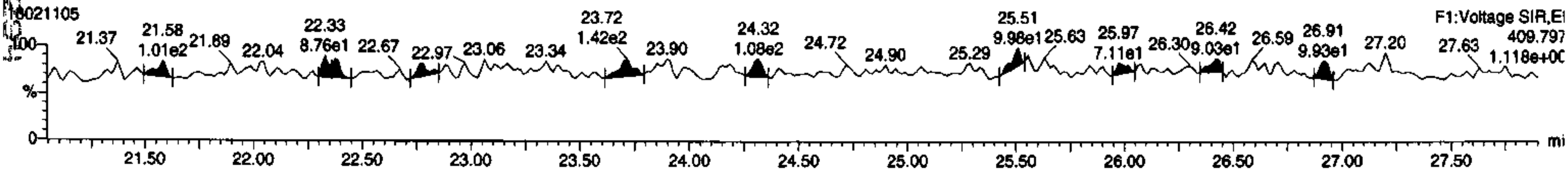
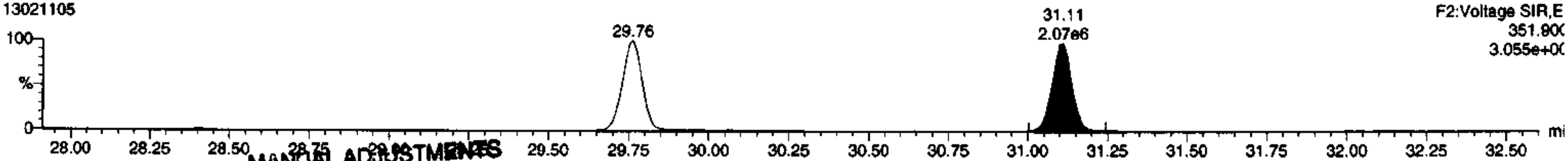


Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:35:49 Pacific Standard Time

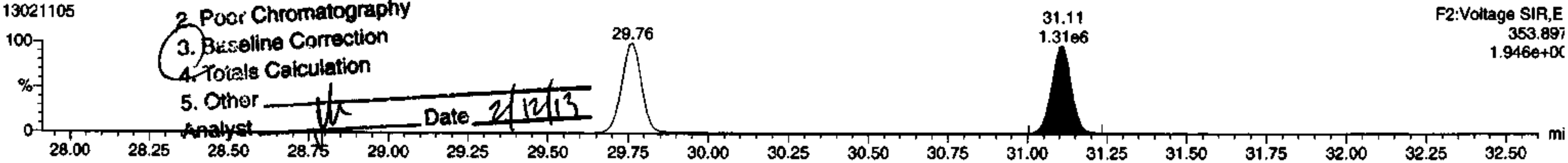
ID: CSL, Name: 13021105, Date: 11-Feb-2013, Time: 14:45:17, Conditions: AUTOSPEC01, User: pk

13C-23478-PeCDF
13021105



MANUAL ADJUSTMENTS
1. Peak not found
2. Poor Chromatography
3. Baseline Correction
4. Totals Calculation
5. Other
Analyst Date 2/12/13

13C-23478-PeCDF
13021105



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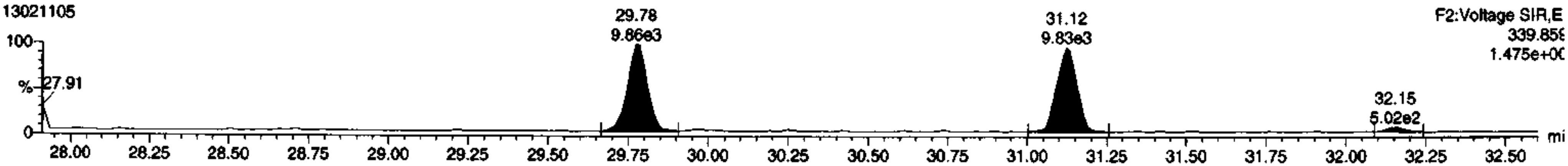
13021105



Total-pentafurans
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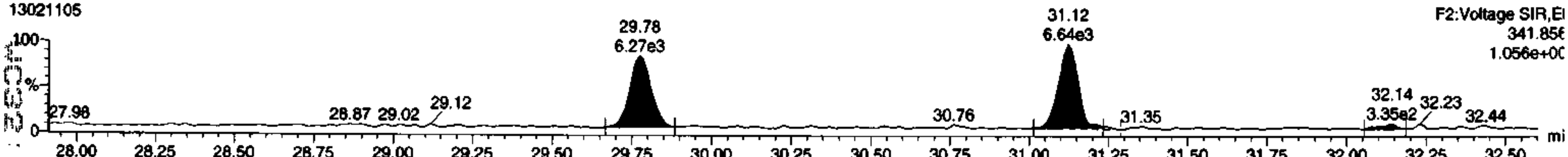
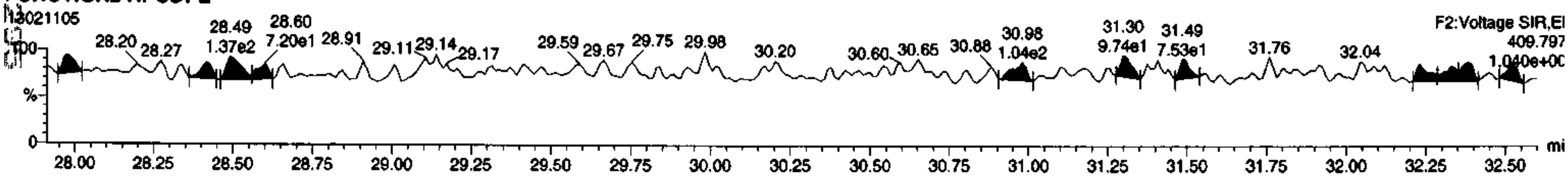


FUNCTION2 HPCDPE
13021105



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Printed: Tuesday, February 12, 2013 09:35:49 Pacific Standard Time

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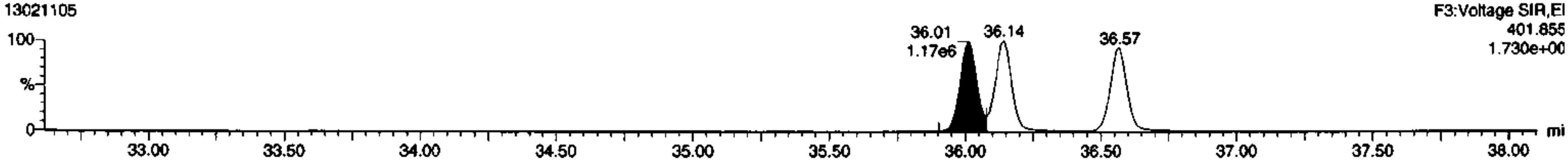
13C-123478-HxCDD



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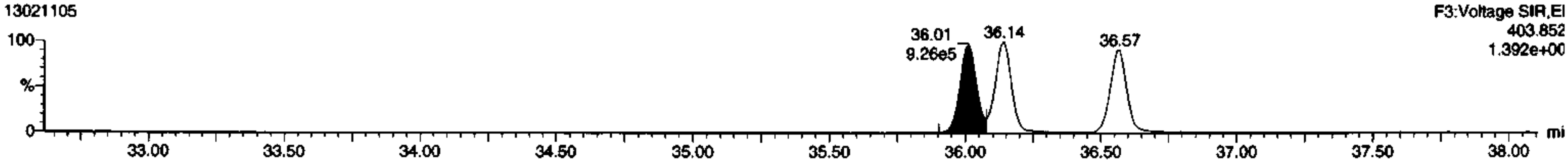

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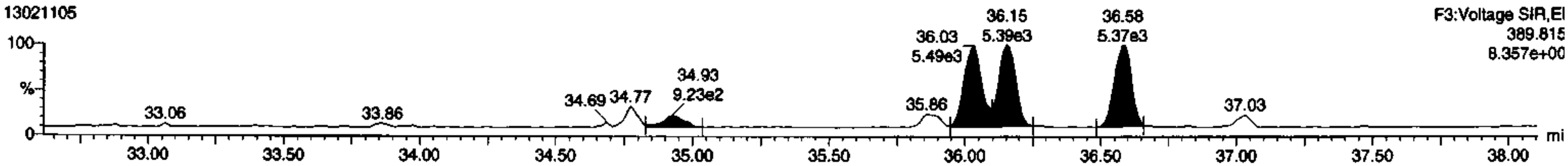
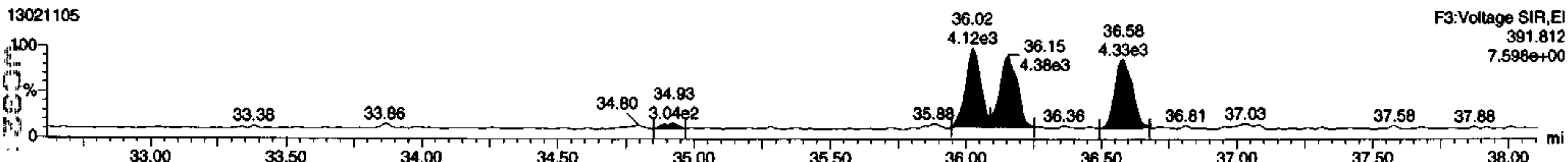
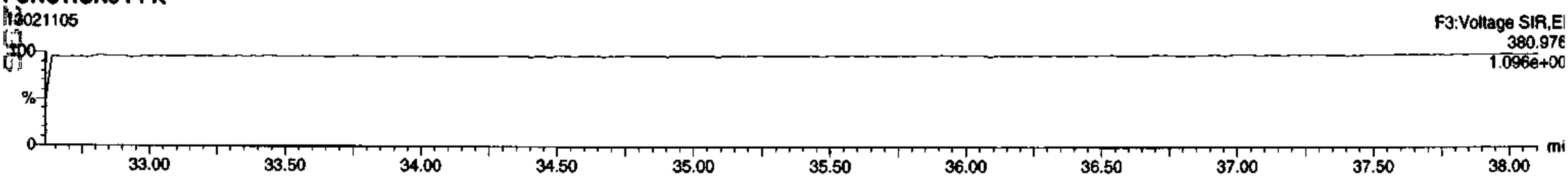


Total-hexadioxins



FUNCTION3 PFK



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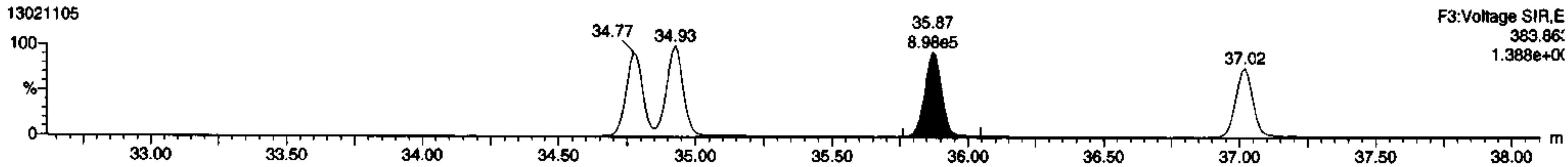
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:35:49 Pacific Standard Time

ID: CSL, Name: 13021105, Date: 11-Feb-2013, Time: 14:45:17, Conditions: AUTOSPEC01, User: pk

13C-234678-HxCDF



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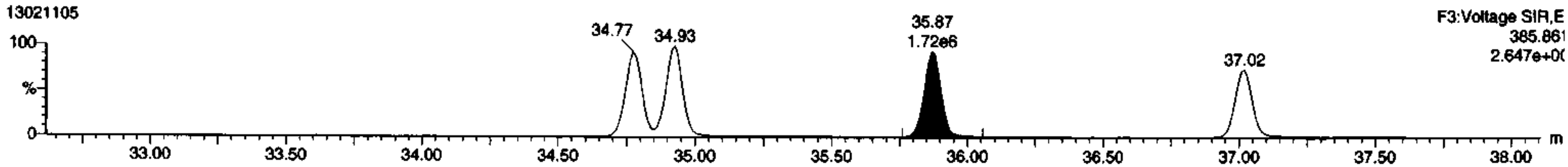
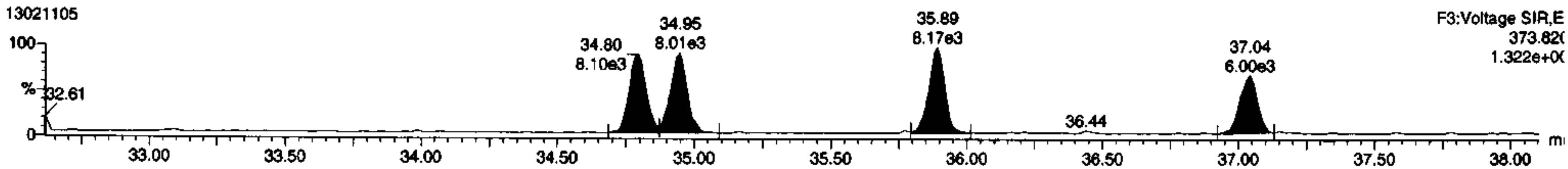
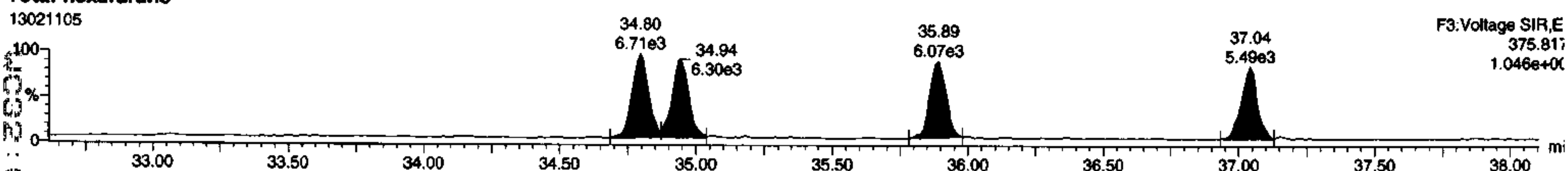


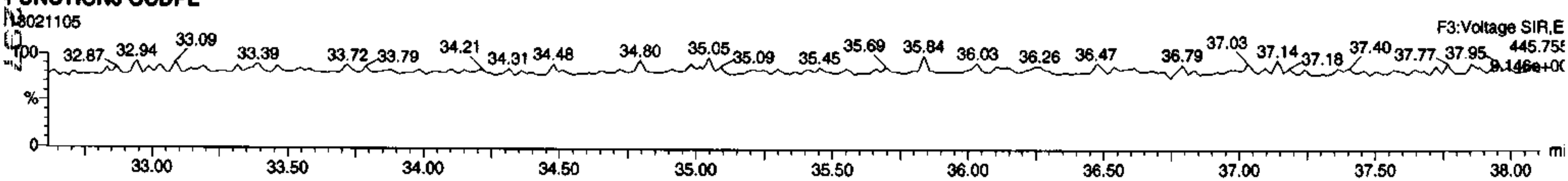
Total-hexafurans



Total-hexafurans



FUNCTION3 OCDPE



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Printed: Tuesday, February 12, 2013 09:35:49 Pacific Standard Time

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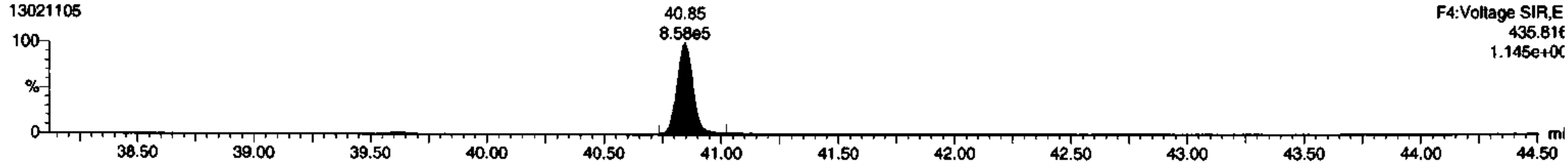
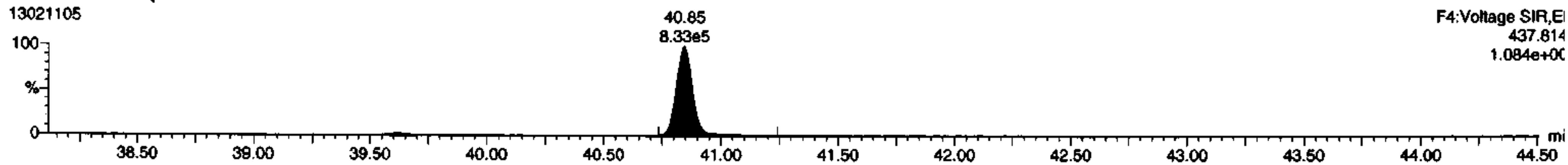
13C-1234678-HpCDD
13021105



13C-1234678-HpCDD
13021105



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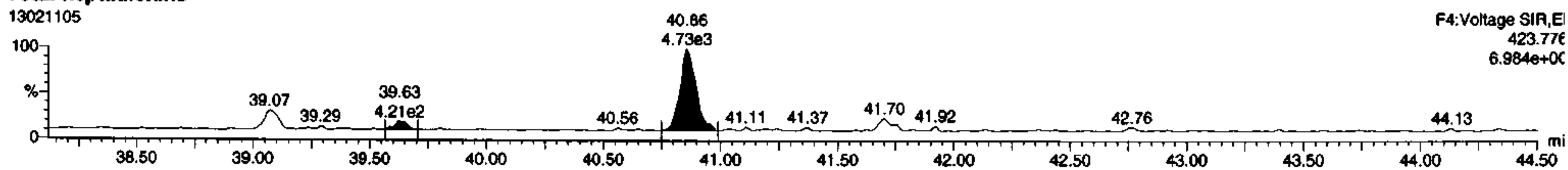

Total-heptadioxins
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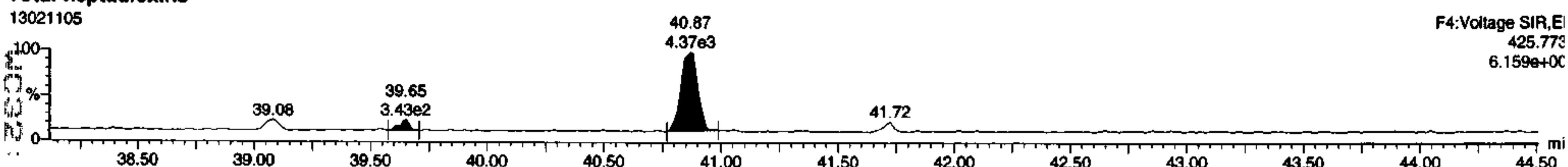

FUNCTION4 PFK
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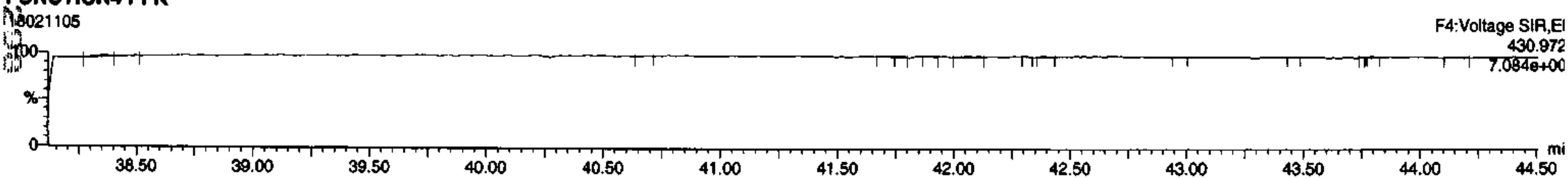
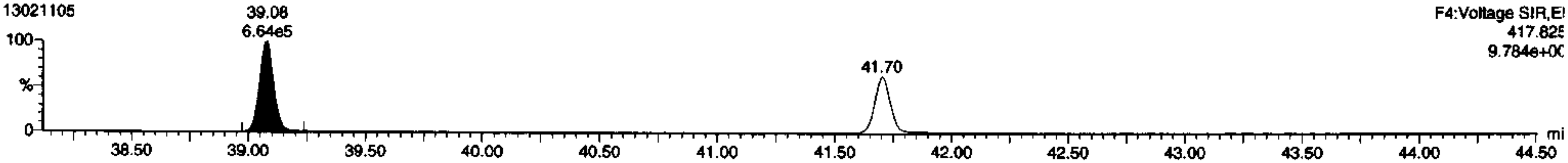


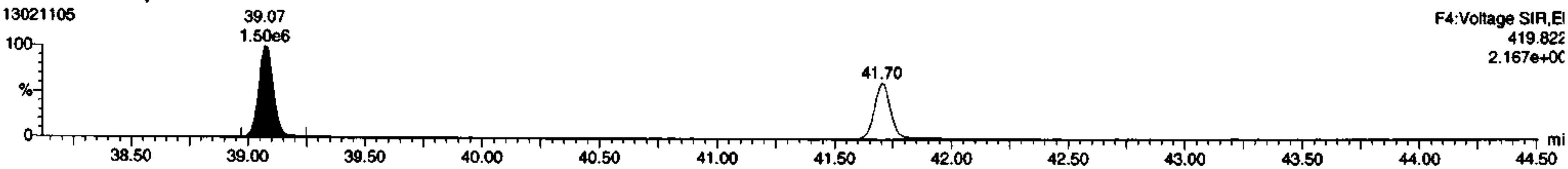
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:35:49 Pacific Standard Time

ID: CSL, Name: 13021105, Date: 11-Feb-2013, Time: 14:45:17, Conditions: AUTOSPEC01, User: pk

13C-1234678-HpCDF
13021105



13C-1234678-HpCDF
13021105



Total-heptafurans
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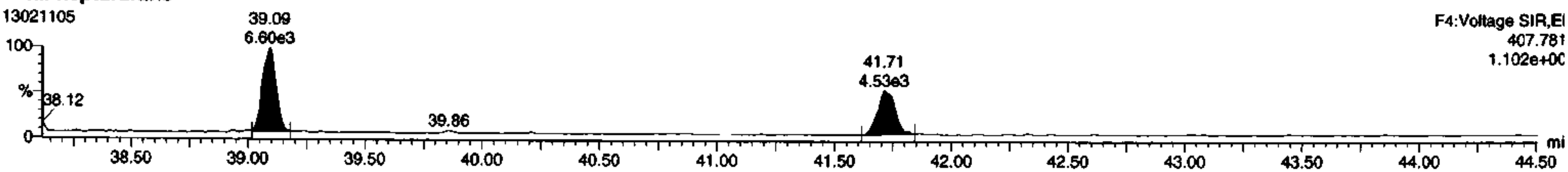

Total-heptafurans
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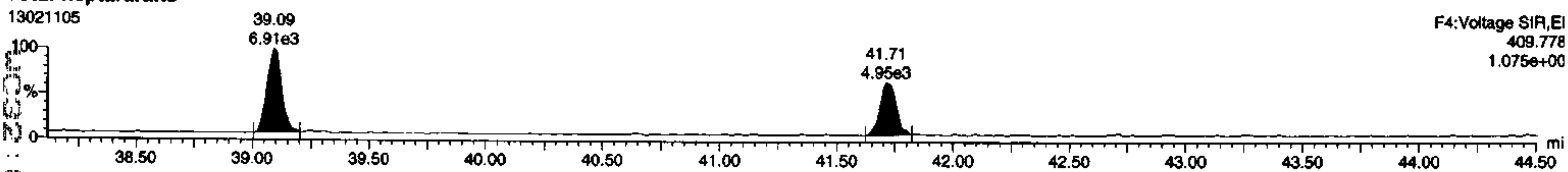

FUNCTION4 NCDPE
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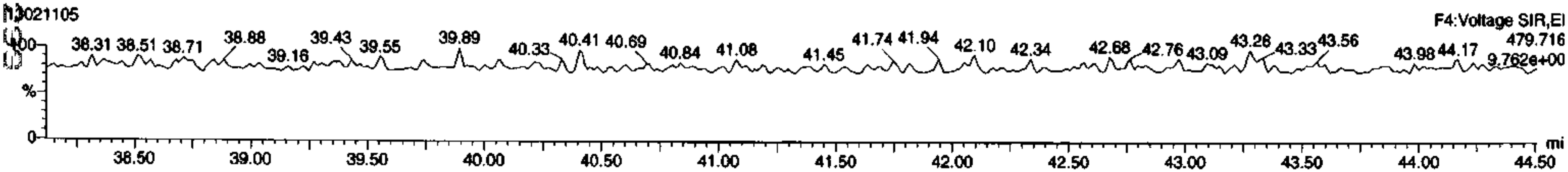
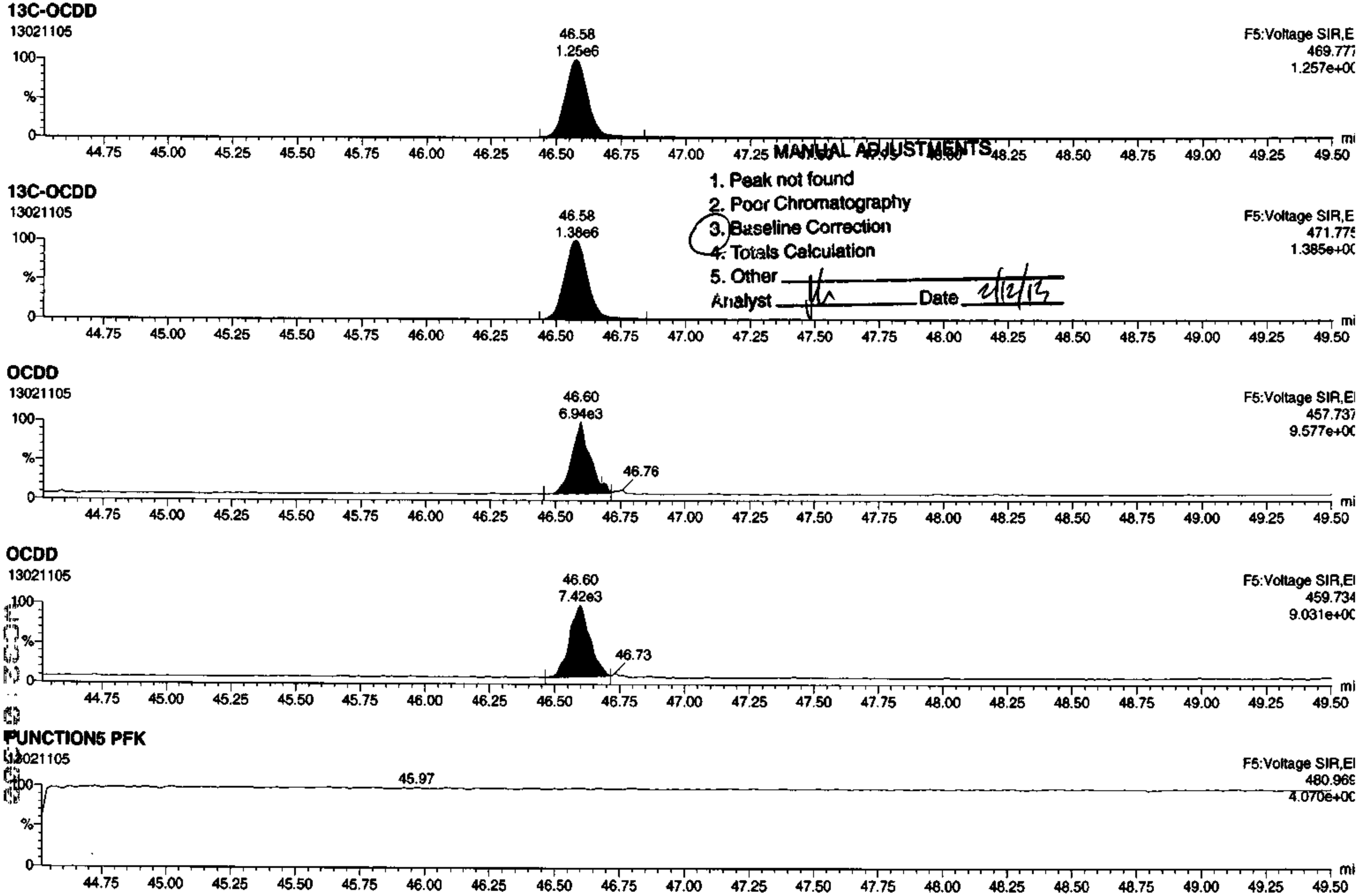


Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:35:49 Pacific Standard Time

ID: CSL, Name: 13021105, Date: 11-Feb-2013, Time: 14:45:17, Conditions: AUTOSPEC01, User: pk

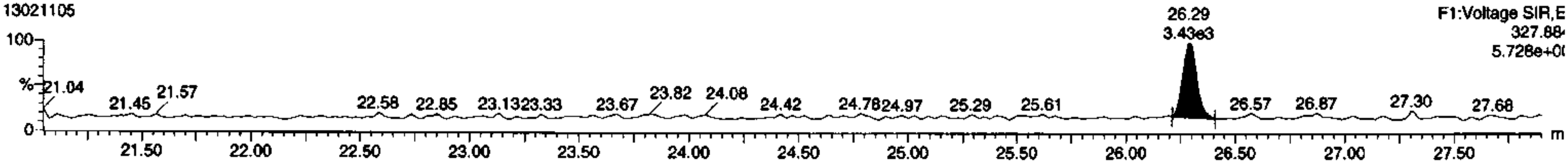


MANUAL ADJUSTMENTS
1. Peak not found
2. Poor Chromatography
3. Baseline Correction
4. Totals Calculation
5. Other
Analyst ___ Date 2/12/13

Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:35:49 Pacific Standard Time

ID: CSL, Name: 13021105, Date: 11-Feb-2013, Time: 14:45:17, Conditions: AUTOSPEC01, User: pk

37CL-2378-TCDD



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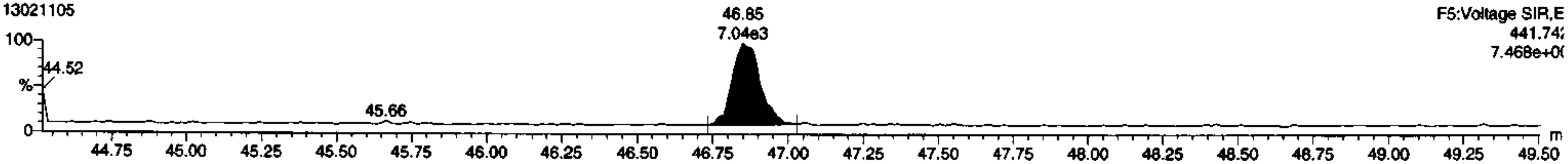
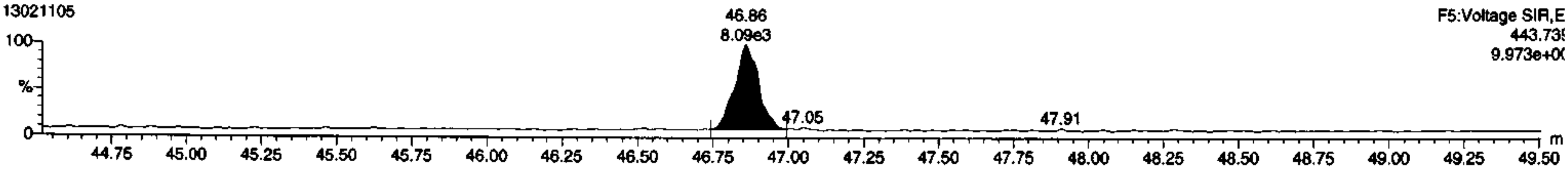
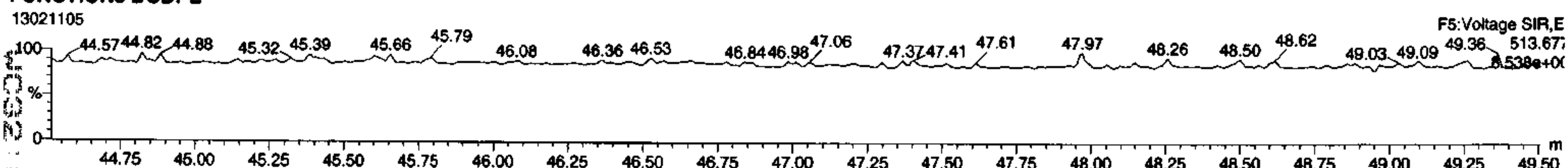


OCDF



FUNCTION5 DCDPE



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Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:35:59 Pacific Standard Time

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Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: CS1, Name: 13021106, Date: 11-Feb-2013, Time: 15:40:00, Conditions: AUTOSPEC01, User: pk

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ID: CS1, Name: 13021106, Date: 11-Feb-2013, Time: 15:40:00, Conditions: AUTOSPEC01, User: pk

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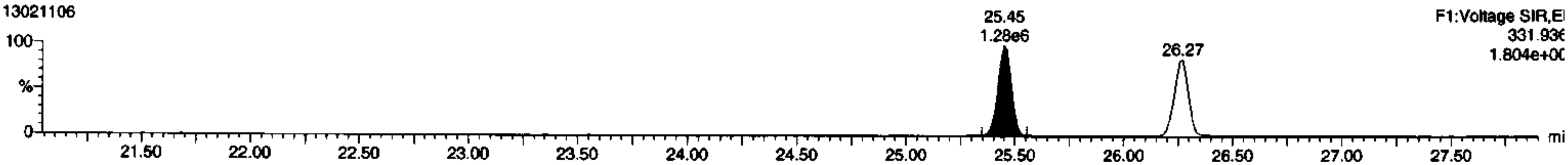
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:35:59 Pacific Standard Time

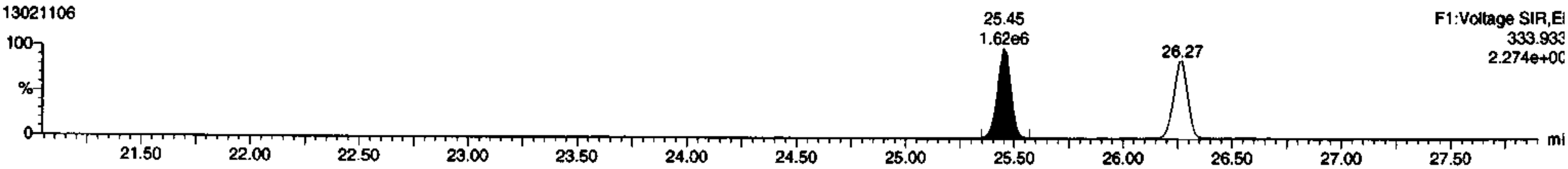
Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 04 Feb 2013 12:23:30
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: CS1, Name: 13021106, Date: 11-Feb-2013, Time: 15:40:00, Conditions: AUTOSPEC01, User: pk

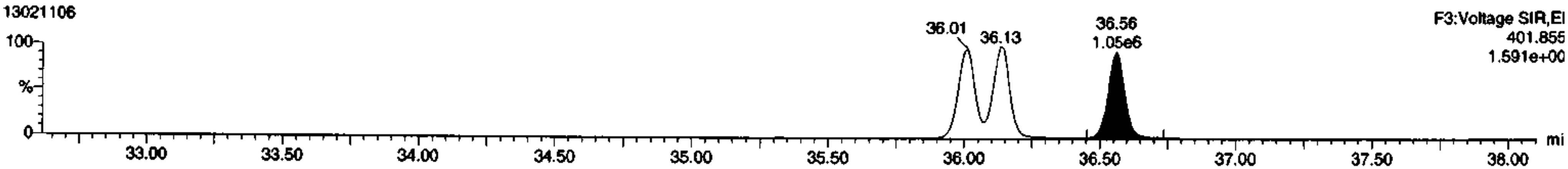
13C-1234-TCDD



13C-1234-TCDD



13C-123789-HxCDD



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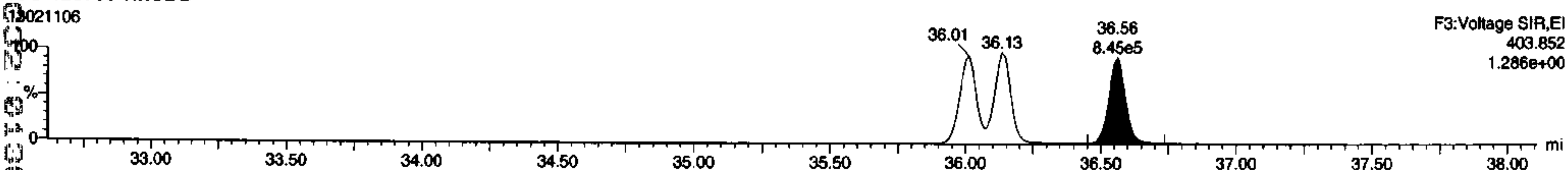

Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
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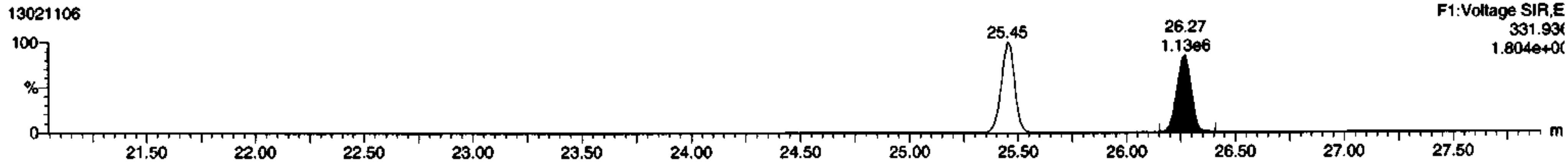
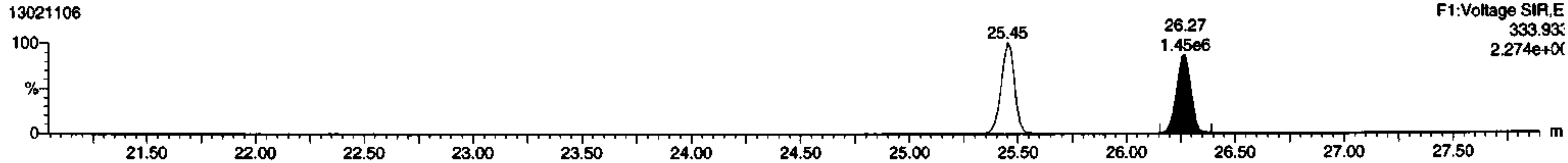
ID: CS1, Name: 13021106, Date: 11-Feb-2013, Time: 15:40:00, Conditions: AUTOSPEC01, User: pk

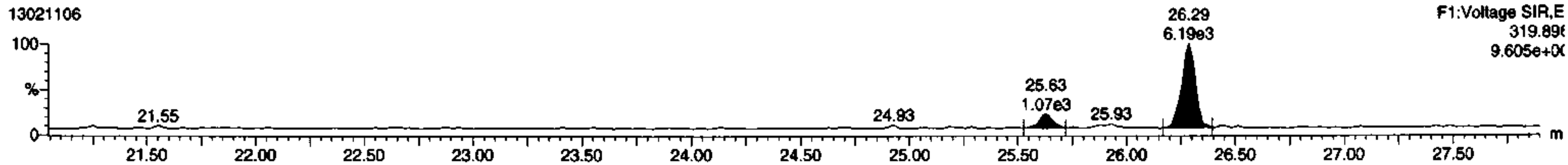
13C-2378-TCDD



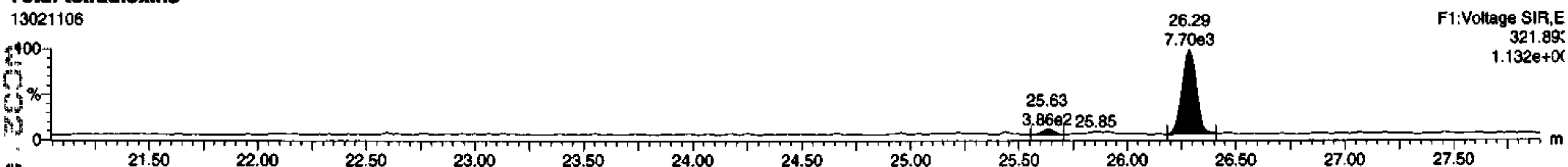
13C-2378-TCDD



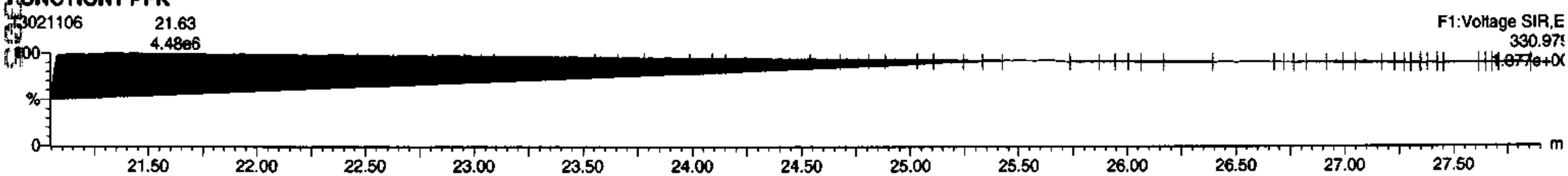
Total-tetradioxins



Total-tetradioxins



FUNCTION1 PFK



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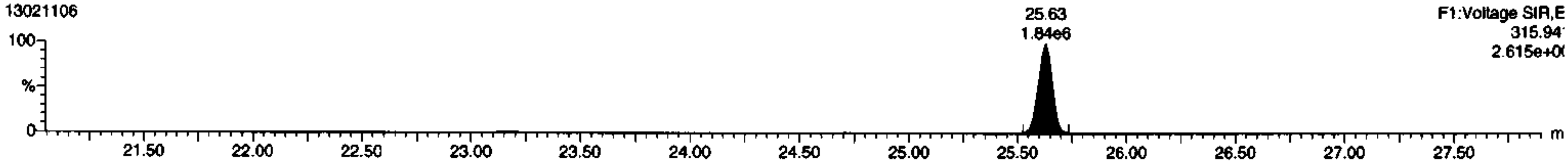
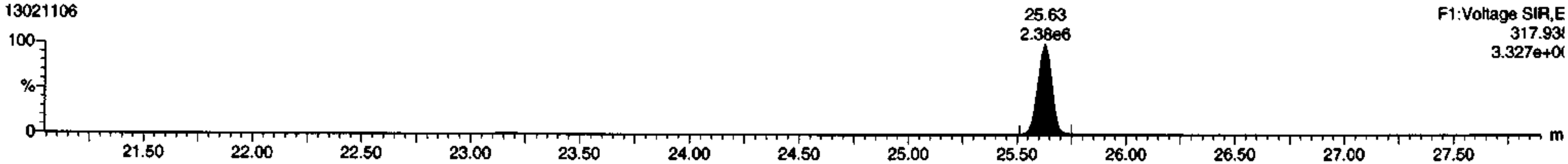
Printed: Tuesday, February 12, 2013 09:35:59 Pacific Standard Time

ID: CS1, Name: 13021106, Date: 11-Feb-2013, Time: 15:40:00, Conditions: AUTOSPEC01, User: pk

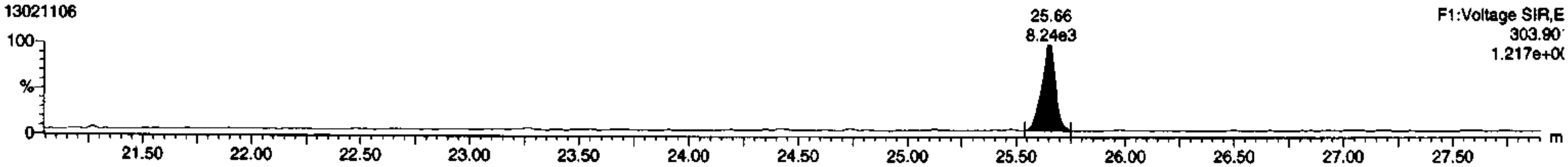
13C-2378-TCDF
13021106



13C-2378-TCDF
13021106



Total-tetrafurans
13021106



Total-tetrafurans
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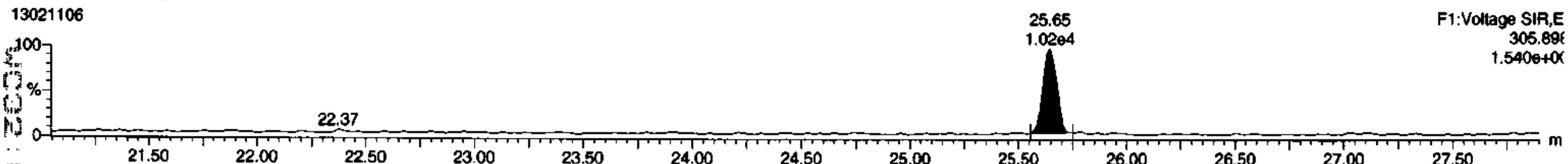
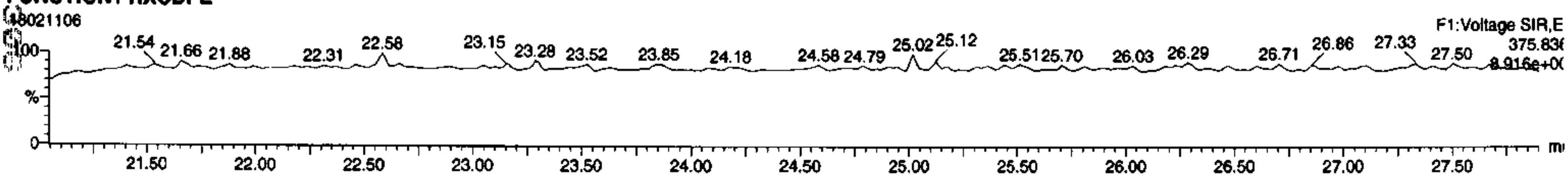


FUNCTION1 HXCDPE
13021106



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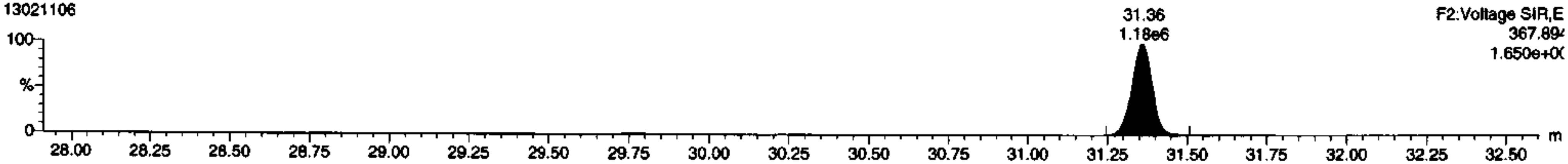
ID: CS1, Name: 13021106, Date: 11-Feb-2013, Time: 15:40:00, Conditions: AUTOSPEC01, User: pk

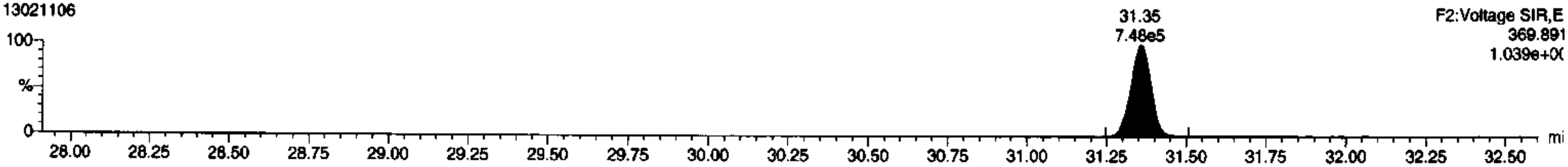
13C-12378-PeCDD

13021106



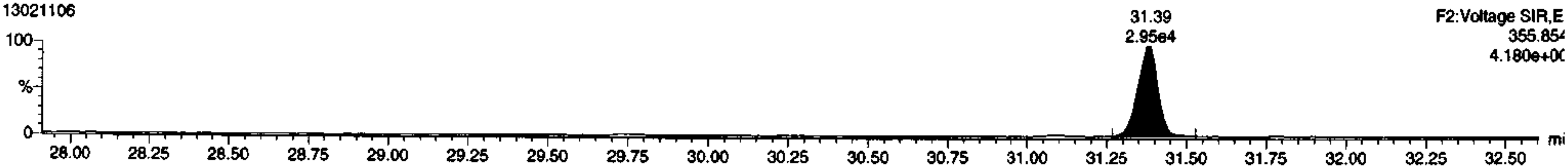
13C-12378-PeCDD

13021106



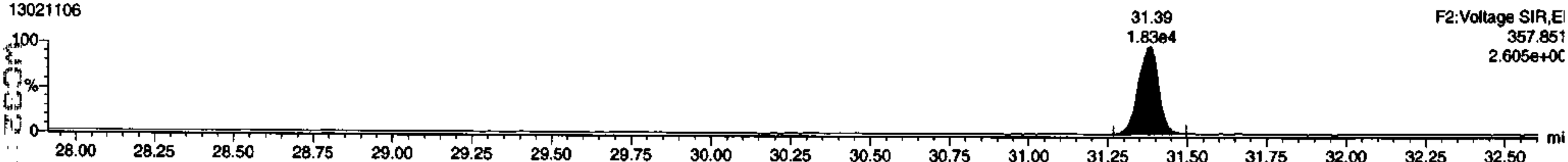
Total-pentadioxins

13021106



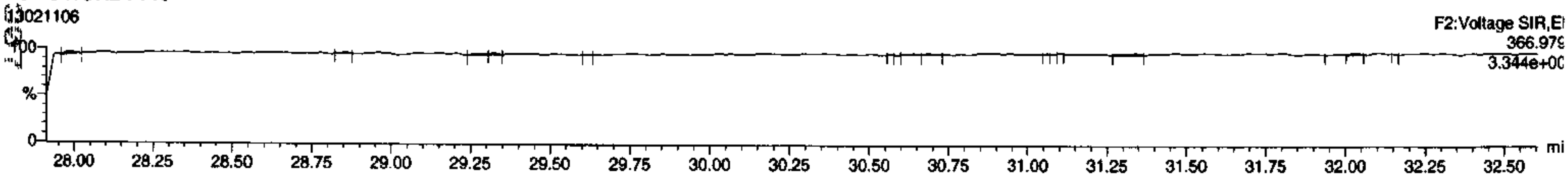
Total-pentadioxins

13021106



FUNCTION2 PFK

13021106



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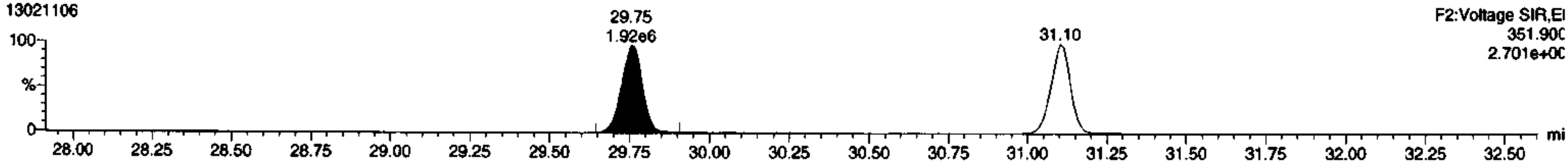
Printed: Tuesday, February 12, 2013 09:35:59 Pacific Standard Time

ID: CS1, Name: 13021106, Date: 11-Feb-2013, Time: 15:40:00, Conditions: AUTOSPEC01, User: pk

13C-12378-PeCDF



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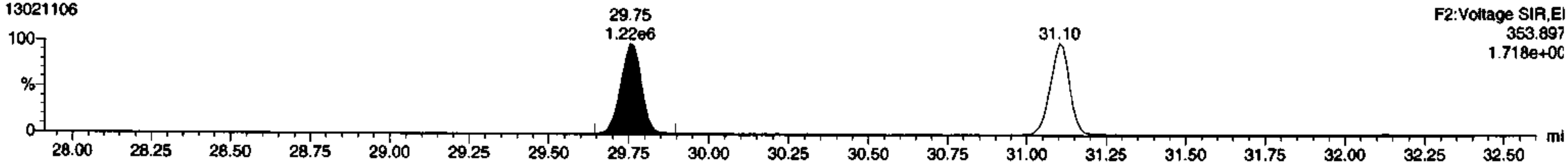

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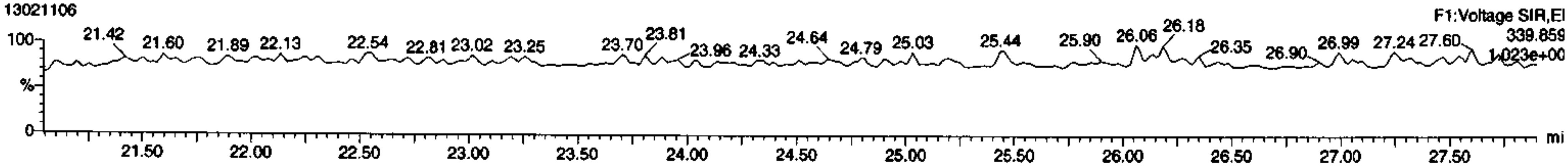

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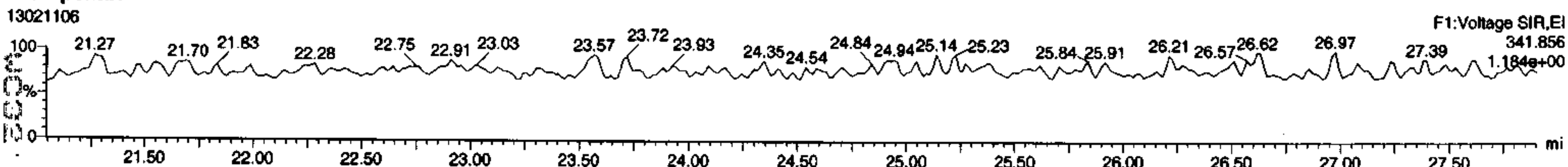
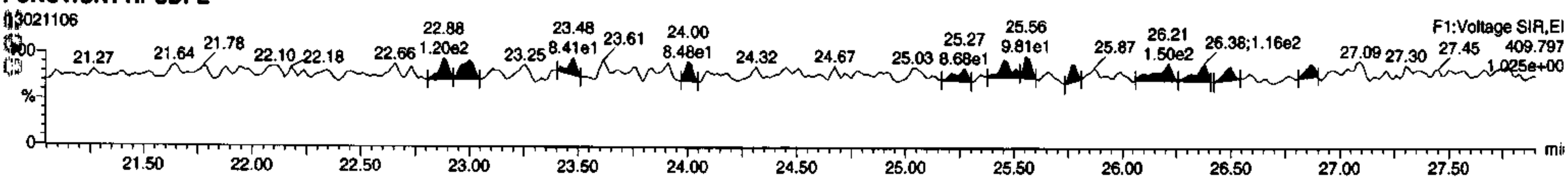


FUNCTION1 HPCDPE



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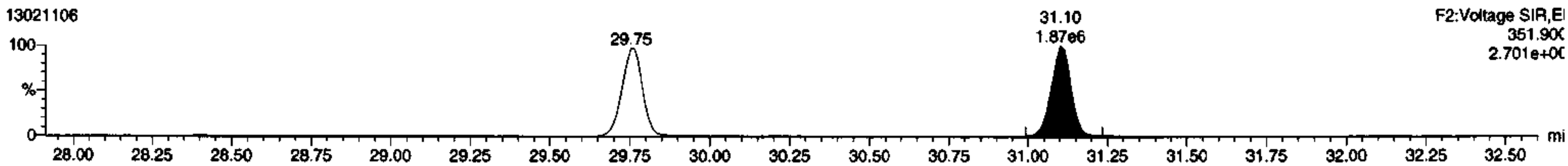
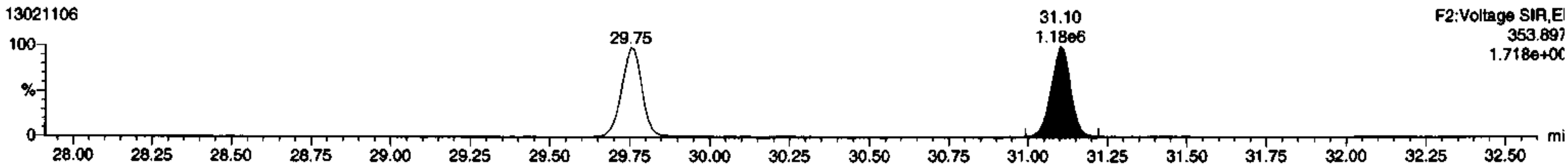
Printed: Tuesday, February 12, 2013 09:35:59 Pacific Standard Time

ID: CS1, Name: 13021106, Date: 11-Feb-2013, Time: 15:40:00, Conditions: AUTOSPEC01, User: pk

13C-23478-PeCDF



13C-23478-PeCDF



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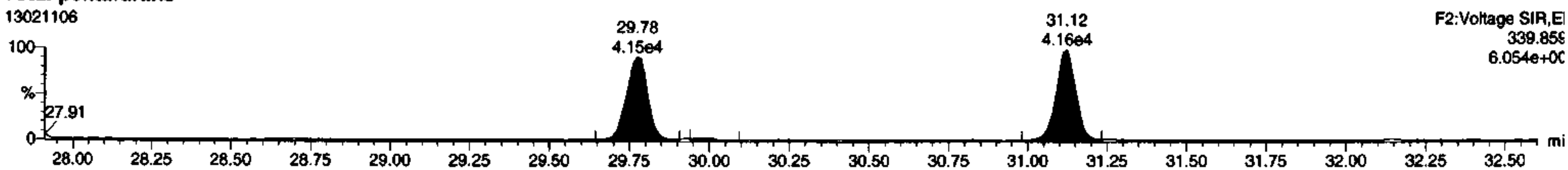

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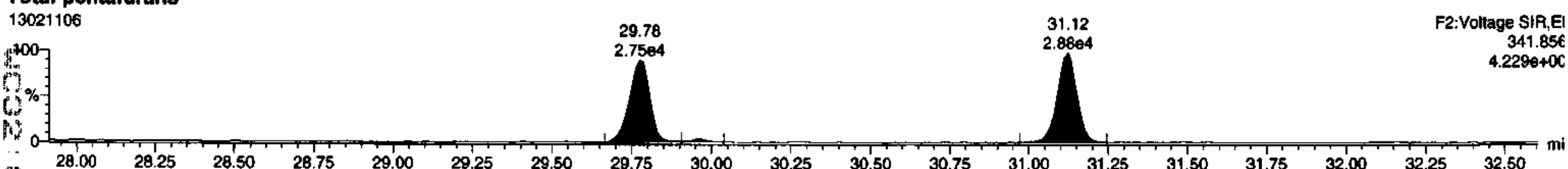
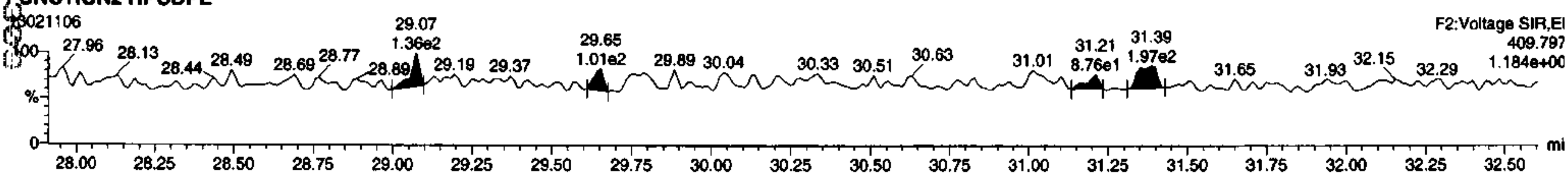


FUNCTION2 HPCDPE



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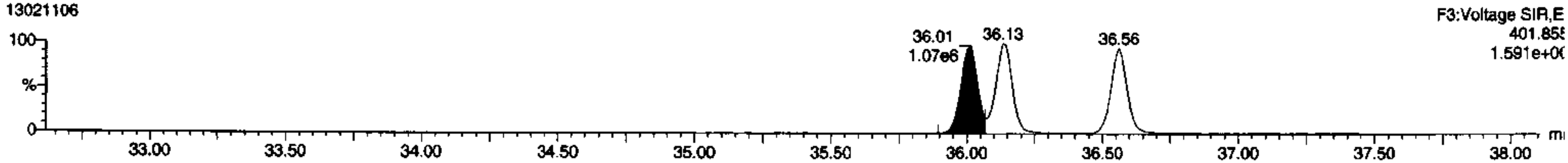
ID: CS1, Name: 13021106, Date: 11-Feb-2013, Time: 15:40:00, Conditions: AUTOSPEC01, User: pk

13C-123478-HxCDD



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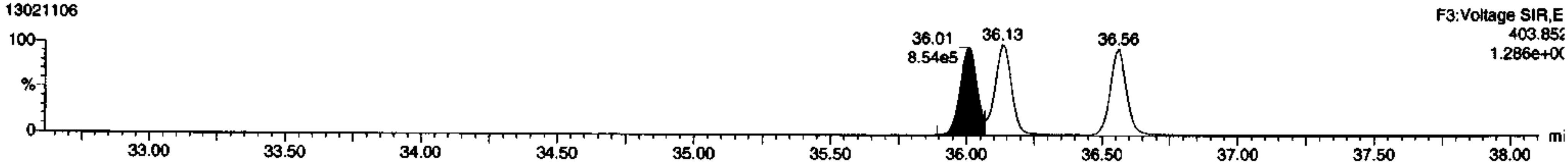

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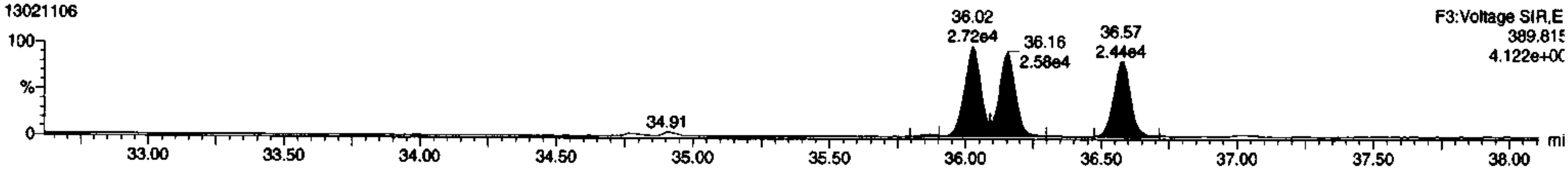
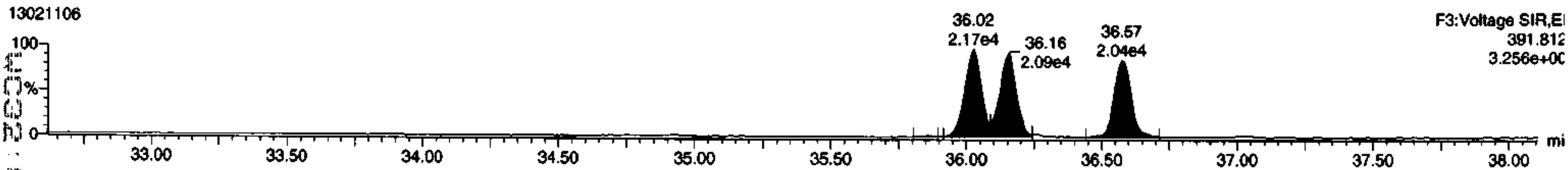
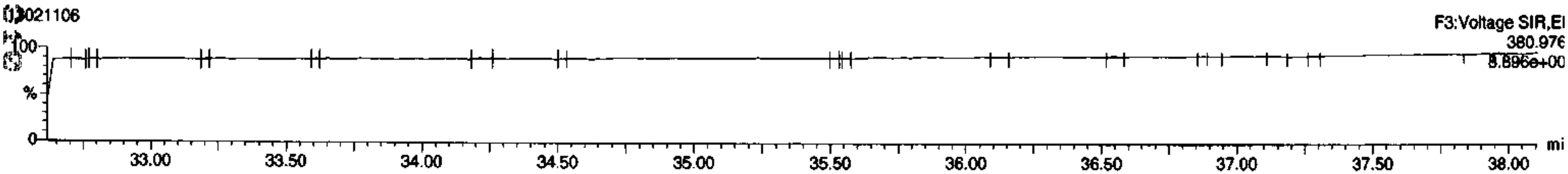


Total-hexadioxins



FUNCTION3 PFK



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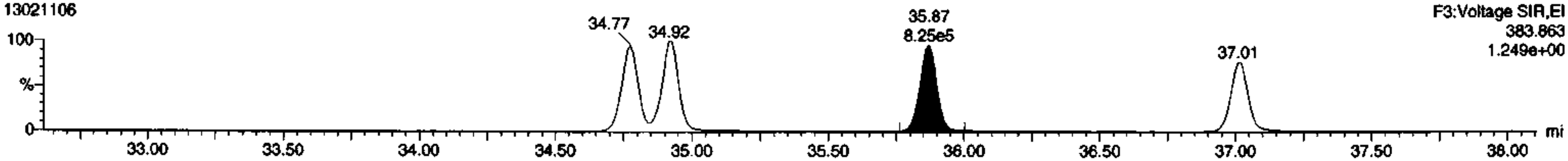
ID: CS1, Name: 13021106, Date: 11-Feb-2013, Time: 15:40:00, Conditions: AUTOSPEC01, User: pk

13C-234678-HxCDF



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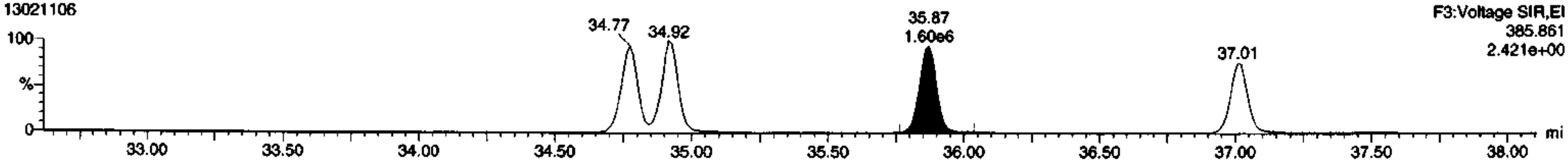
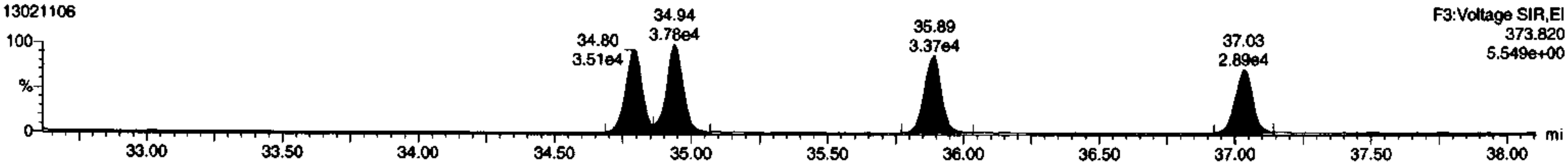
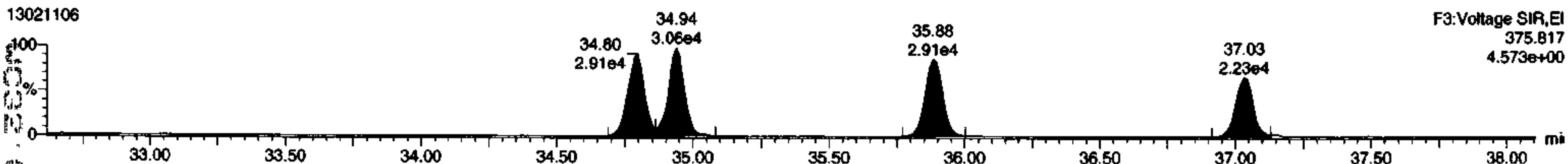


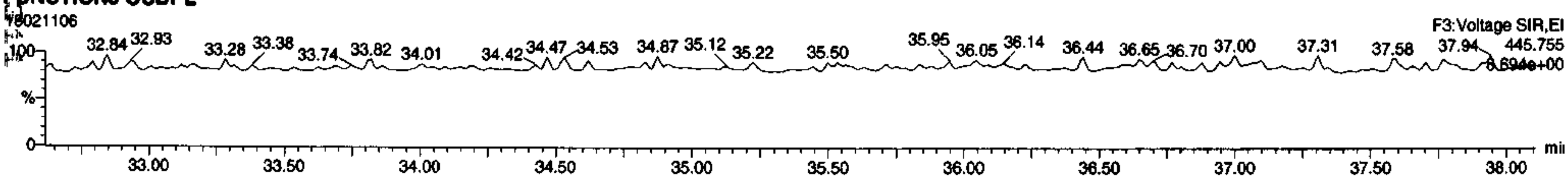
Total-hexafurans



Total-hexafurans



FUNCTION3 OCDPE



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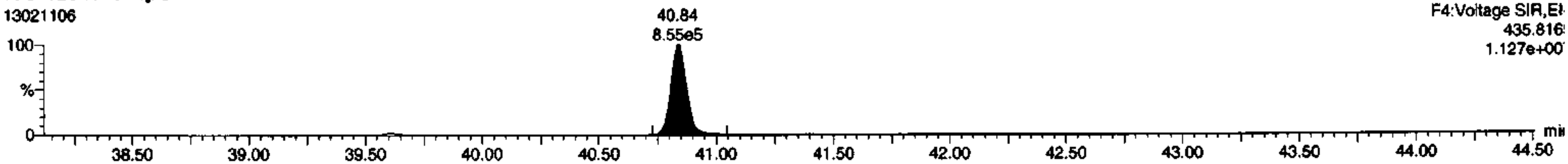
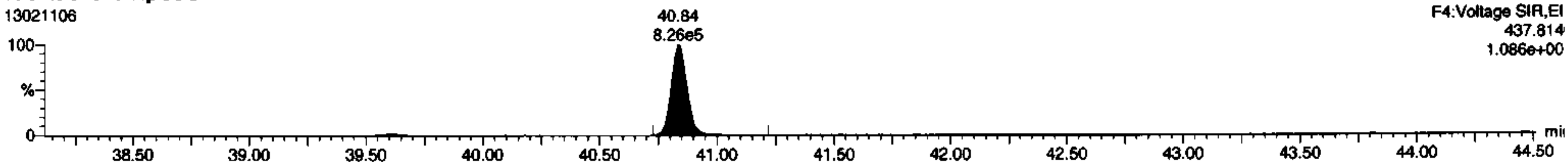
13C-1234678-HpCDD

13021106



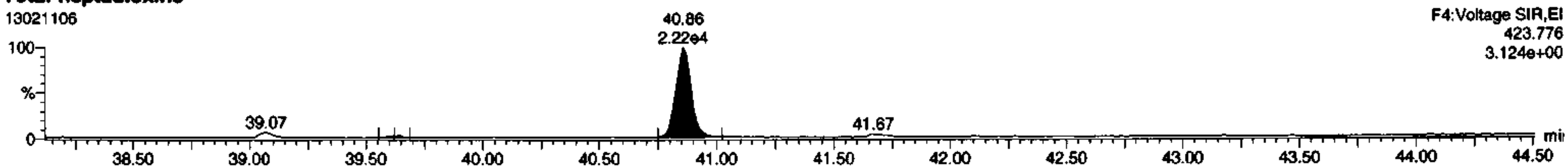
13C-1234678-HpCDD

13021106



Total-heptadioxins

13021106



Total-heptadioxins

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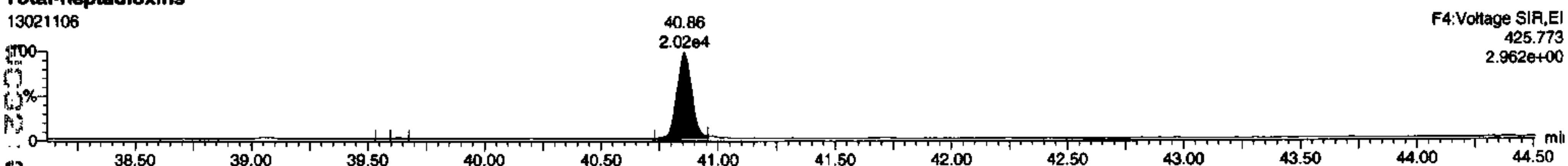
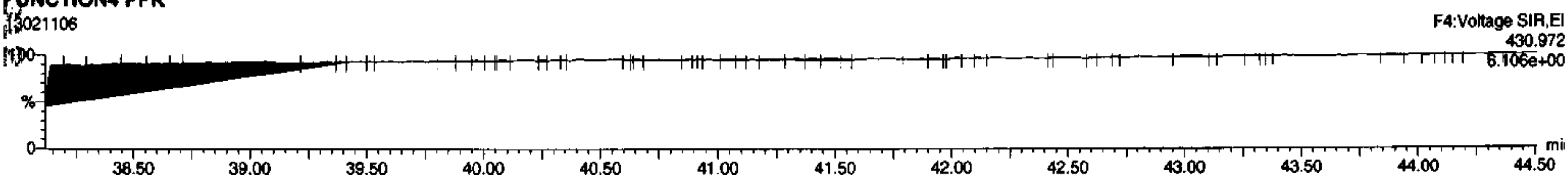


FUNCTION4 PFK

13021106



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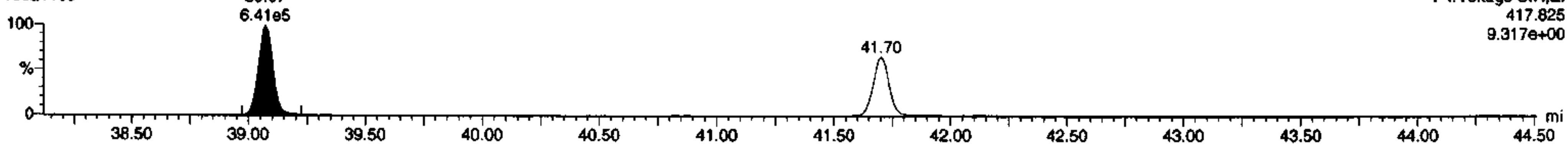
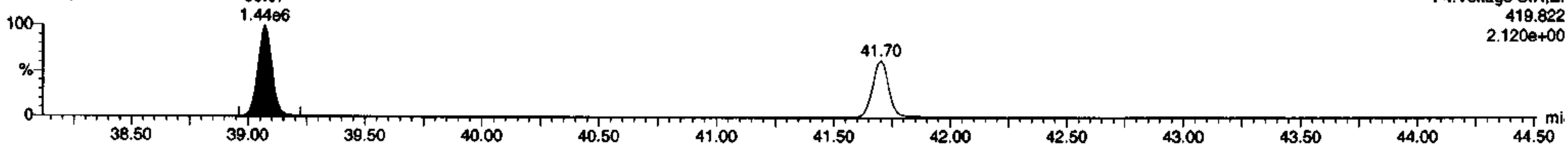
13C-1234678-HpCDF
13021106



13C-1234678-HpCDF
13021106



Total-heptafurans
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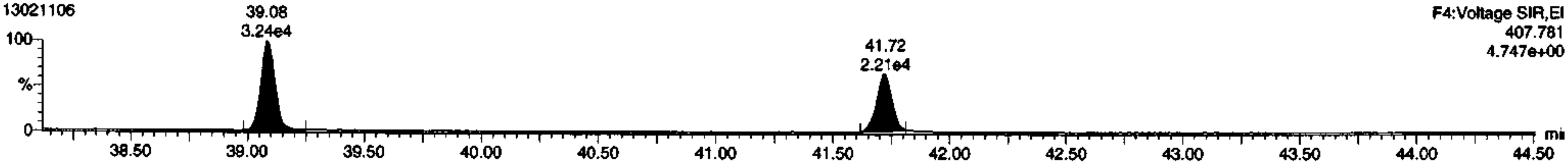

Total-heptafurans
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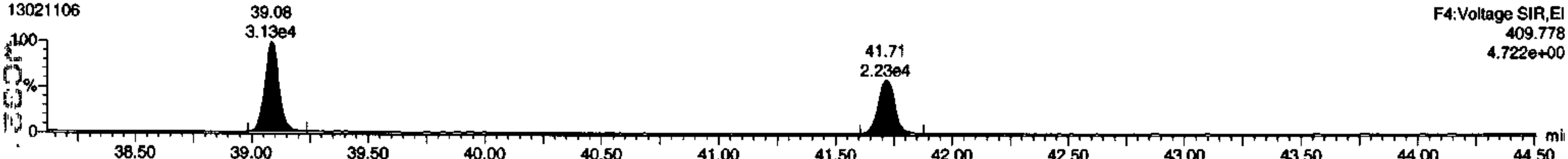
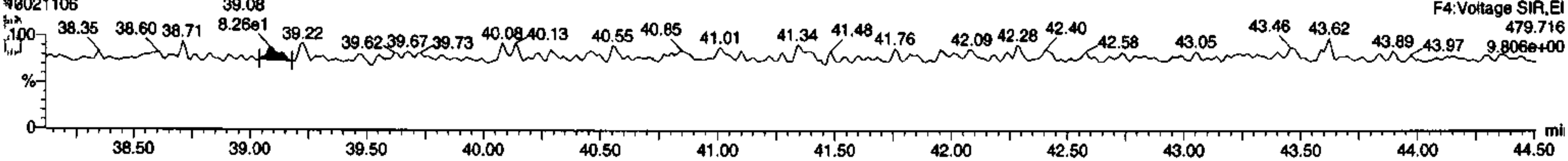


FUNCTION4 NCDPE
13021106



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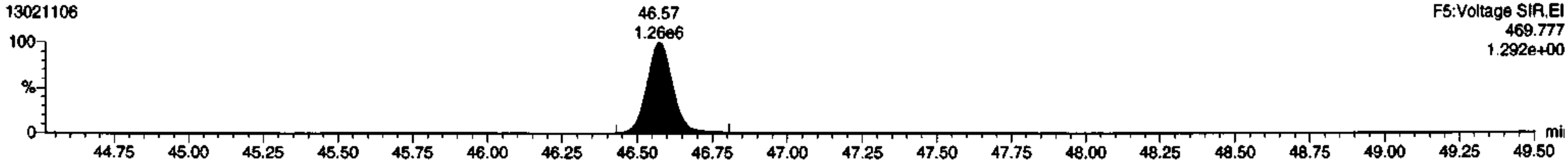
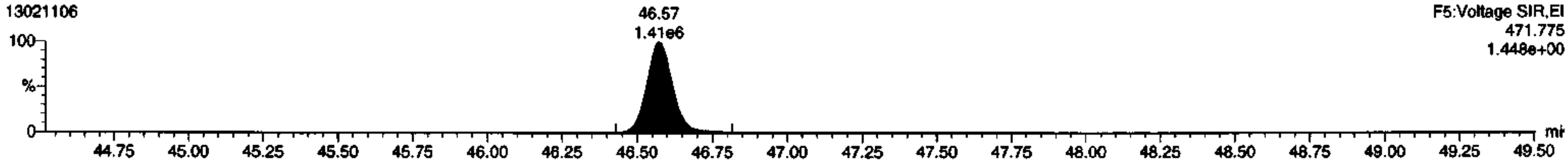
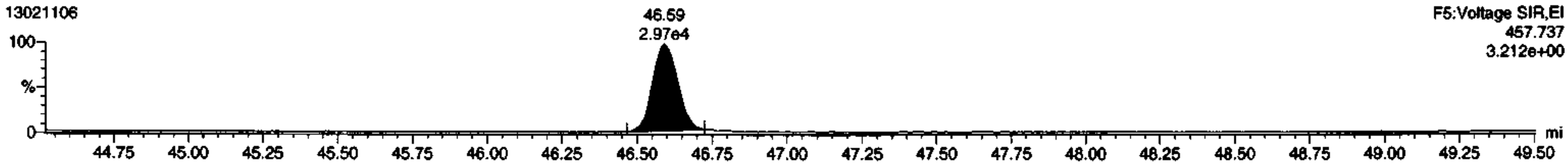
13C-OCDD
13021106



13C-OCDD
13021106



OCDD
13021106



OCDD
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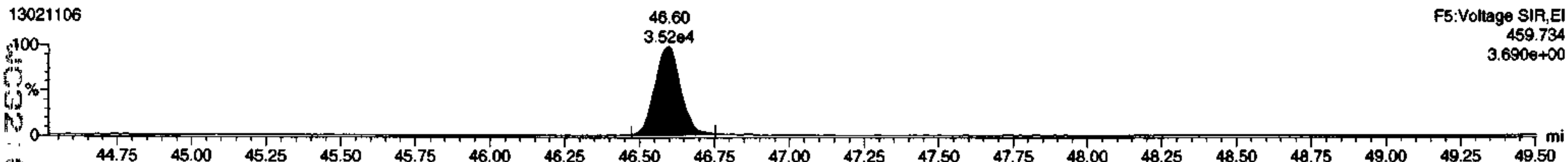
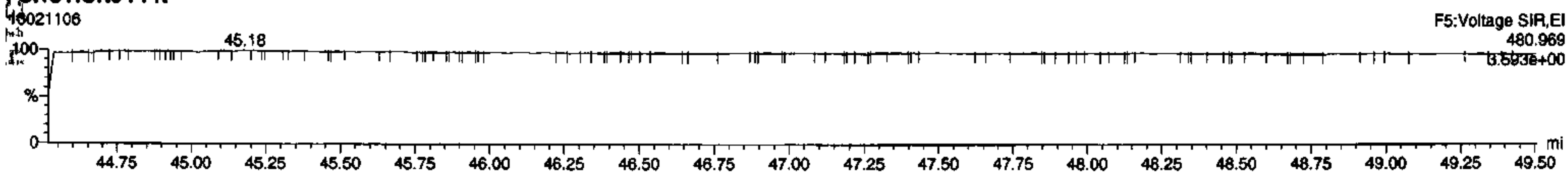


FUNCTION5 PFK
13021106



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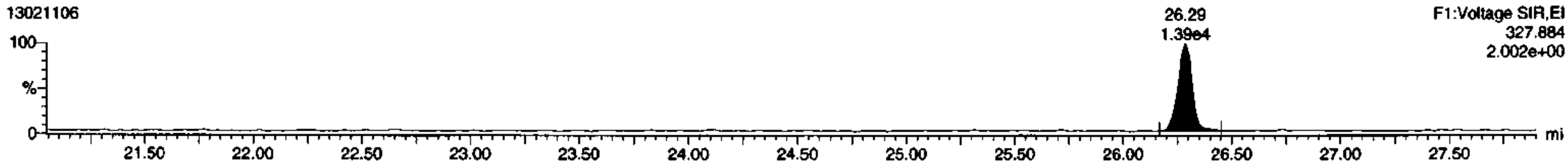
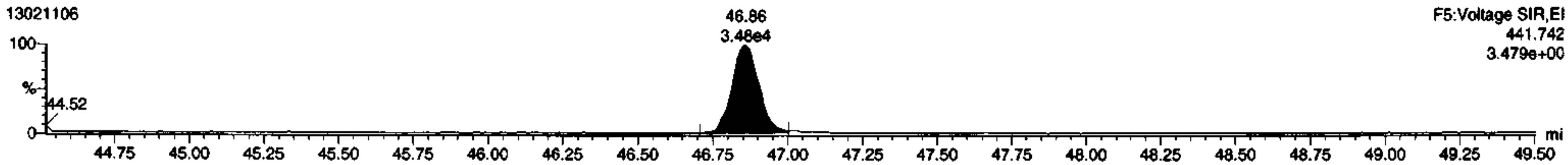
ID: CS1, Name: 13021106, Date: 11-Feb-2013, Time: 15:40:00, Conditions: AUTOSPEC01, User: pk

37CL-2378-TCDD



OCDF



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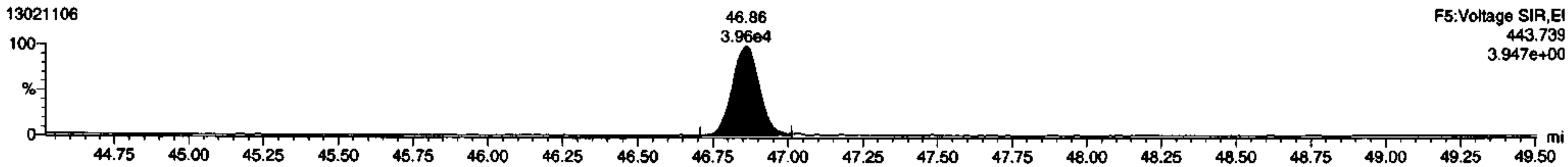
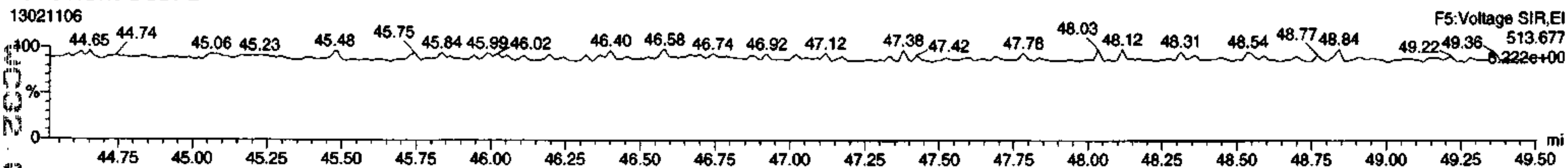


FUNCTION5 DCDPE



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Printed: Tuesday, February 12, 2013 09:36:09 Pacific Standard Time

Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 04 Feb 2013 12:23:30
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ID: CS2, Name: 13021107, Date: 11-Feb-2013, Time: 16:30:49, Conditions: AUTOSPEC01, User: pk

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	23478-PeCDF	31.123	1.000	2.02e5	1.37e5	0.943	1.480	1.550	2526.8	NO	9.606	9.606
	123478-HxCDF	34.795	1.001	1.64e5	1.38e5	1.101	1.185	1.240	1391.2	NO	9.803	9.803
	234678-HxCDF	35.891	1.000	1.59e5	1.31e5	1.073	1.215	1.240	1352.1	NO	9.821	9.821
	123678-HxCDF	34.949	1.001	1.68e5	1.41e5	1.056	1.192	1.240	1391.4	NO	9.788	9.788
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	1234678-HpCDF	39.092	1.000	1.32e5	1.34e5	1.238	0.990	1.050	1662.4	NO	9.721	9.721
	1234789-HpCDF	41.723	1.001	9.48e4	9.38e4	1.224	1.011	1.050	995.8	NO	9.843	9.843
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	12378-PeCDD	31.386	1.001	1.40e5	8.99e4	1.001	1.561	1.550	1172.0	NO	9.809	9.809
	123478-HxCDD	36.034	1.001	1.15e5	9.42e4	0.978	1.226	1.240	1609.7	NO	9.760	9.760
	123678-HxCDD	36.154	1.000	1.20e5	9.49e4	0.929	1.268	1.240	1621.9	NO	10.047	10.047
	123789-HxCDD	36.582	1.012	1.11e5	8.82e4	0.904	1.254	1.240	1486.1	NO	9.765	9.765
	1234678-HpCDD	40.868	1.001	8.85e4	8.49e4	1.029	1.043	1.050	937.7	NO	9.874	9.874
	OCDD	46.597	1.000	1.25e5	1.37e5	1.011	0.914	0.890	1488.4	NO	19.411	19.411
	13C-2378-TCDF	25.630	1.006	2.33e6	2.99e6	1.522	0.780	0.770	10937.8	NO		100.611
	13C-12378-PeCDF	29.764	1.169	2.39e6	1.53e6	1.185	1.558	1.550	11627.8	NO		95.316
	13C-23478-PeCDF	31.112	1.222	2.29e6	1.46e6	1.136	1.566	1.550	11563.9	NO		94.992
	13C-123478-HxCDF	34.773	0.951	9.53e5	1.85e6	1.284	0.516	0.510	3893.2	NO		102.298
	13C-123678-HxCDF	34.927	0.955	1.02e6	1.97e6	1.383	0.518	0.510	4155.7	NO		101.506
	13C-234678-HxCDF	35.881	0.981	9.45e5	1.81e6	1.283	0.522	0.510	3774.2	NO		100.615
	13C-123789-HxCDF	37.021	1.012	7.89e5	1.57e6	1.099	0.504	0.510	3197.3	NO		100.470
	13C-1234678-HpCDF	39.081	1.069	6.88e5	1.52e6	1.070	0.451	0.440	4622.8	NO		96.933
	13C-1234789-HpCDF	41.701	1.140	4.88e5	1.08e6	0.774	0.453	0.440	2873.8	NO		94.897
	13C-1234-TCDD	25.465	0.000	1.53e6	1.94e6	1.000	0.791	0.770	4055.9	NO		100.000
	13C-2378-TCDD	26.272	1.032	1.44e6	1.84e6	0.943	0.781	0.770	3816.9	NO		100.002
	13C-12378-PeCDD	31.365	1.232	1.44e6	9.07e5	0.715	1.583	1.550	10853.2	NO		94.366
	13C-123478-HxCDD	36.012	0.985	1.23e6	9.71e5	1.032	1.261	1.240	7646.5	NO		99.794
	13C-123678-HxCDD	36.144	0.988	1.27e6	1.03e6	1.076	1.232	1.240	8043.3	NO		100.428
	13C-1234678-HpCDD	40.846	1.117	8.72e5	8.35e5	0.838	1.044	1.050	5071.5	NO		95.549
	13C-OCDD	46.579	1.274	1.27e6	1.40e6	0.675	0.906	0.890	6376.9	NO		184.840

Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
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ID: CS2, Name: 13021107, Date: 11-Feb-2013, Time: 16:30:49, Conditions: AUTOSPEC01, User: pk

[redacted]												
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[redacted]	FUNCTION1 PFK			2.70e6								
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WC32 01317

Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
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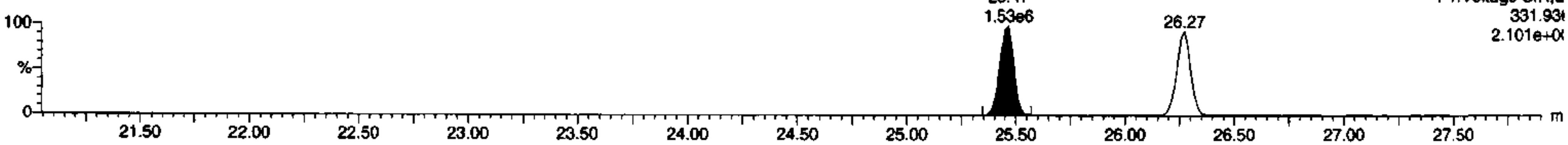
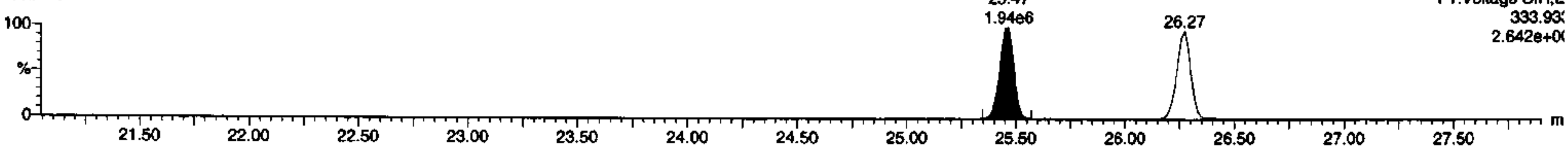
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: CS2, Name: 13021107, Date: 11-Feb-2013, Time: 16:30:49, Conditions: AUTOSPEC01, User: pk

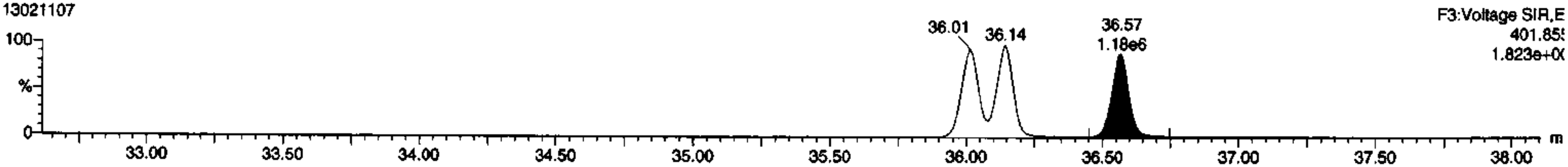
13C-1234-TCDD
13021107



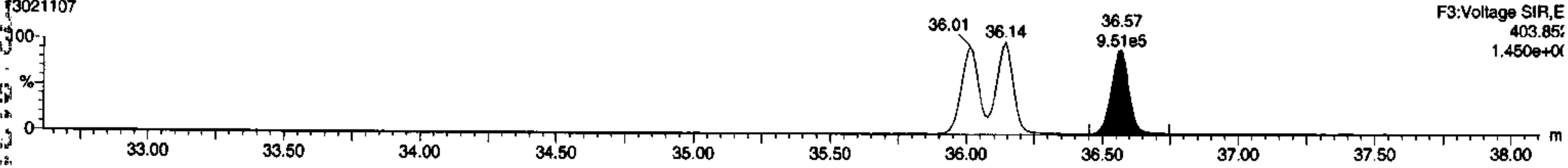
13C-1234-TCDD
13021107



13C-123789-HxCDD
13021107



13C-123789-HxCDD
13021107



Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
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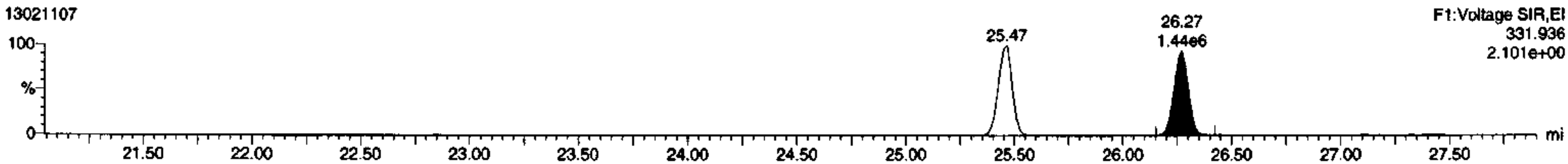
ID: CS2, Name: 13021107, Date: 11-Feb-2013, Time: 16:30:49, Conditions: AUTOSPEC01, User: pk

13C-2378-TCDD



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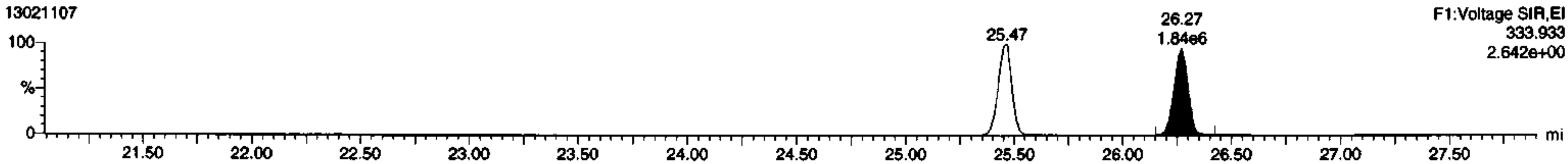
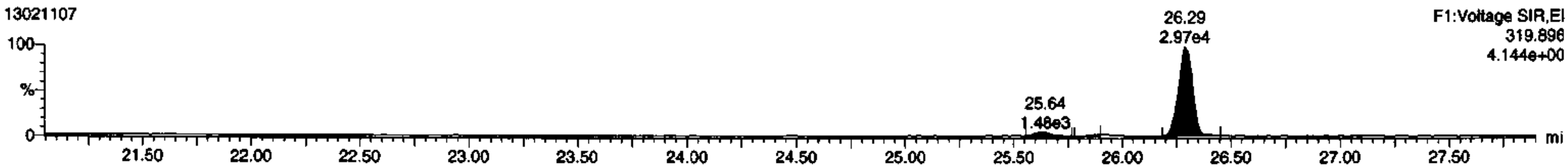
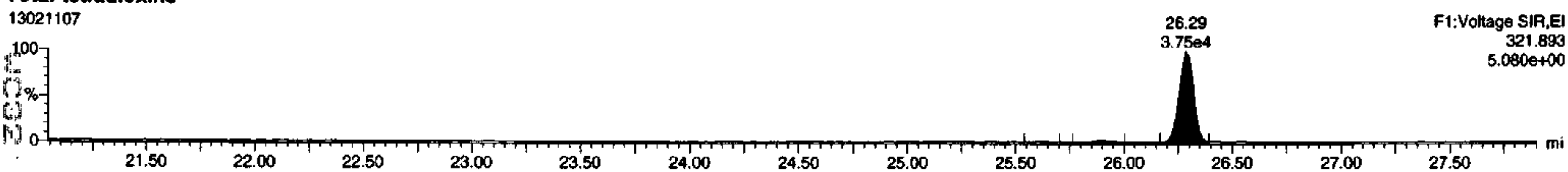


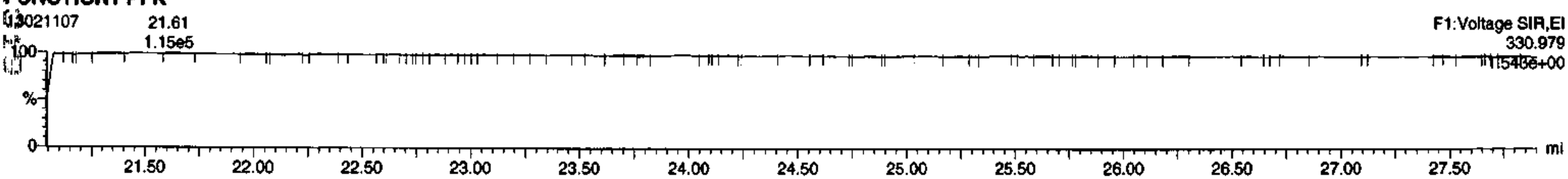
Total-tetradioxins



Total-tetradioxins



FUNCTION1 PFK



Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
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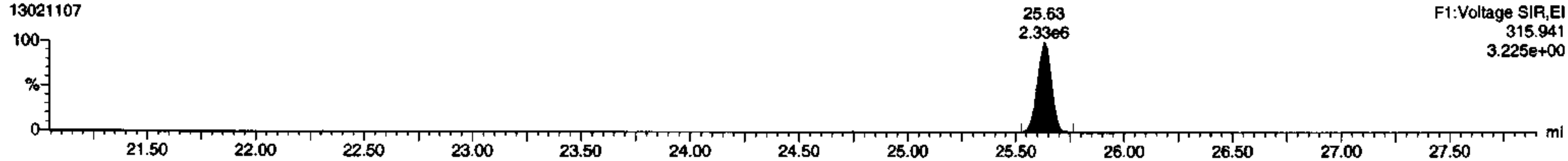
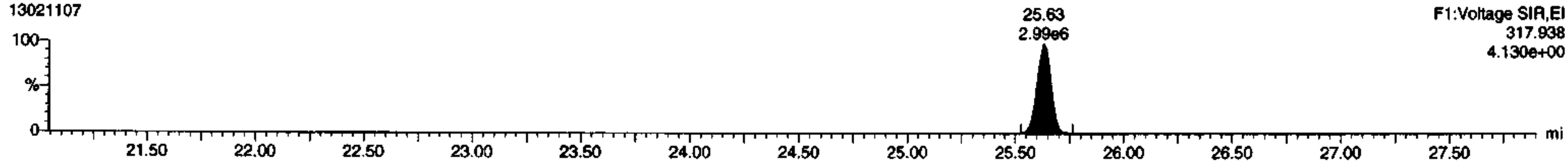
ID: CS2, Name: 13021107, Date: 11-Feb-2013, Time: 16:30:49, Conditions: AUTOSPEC01, User: pk

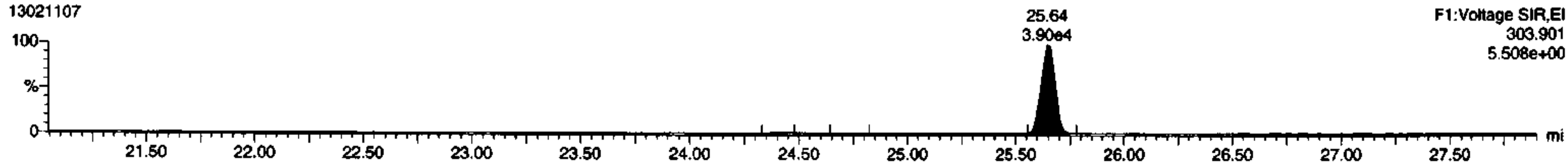
13C-2378-TCDF
13021107



13C-2378-TCDF
13021107



Total-tetrafurans
13021107



Total-tetrafurans
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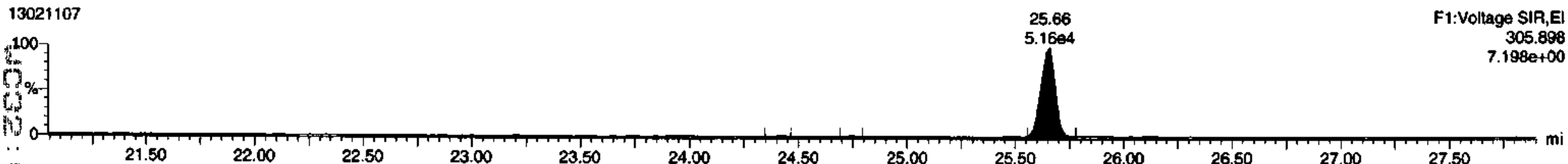
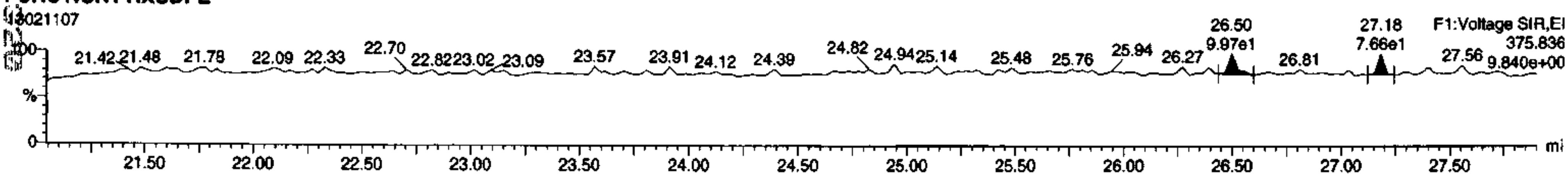


FUNCTION1 HXCDPE
13021107



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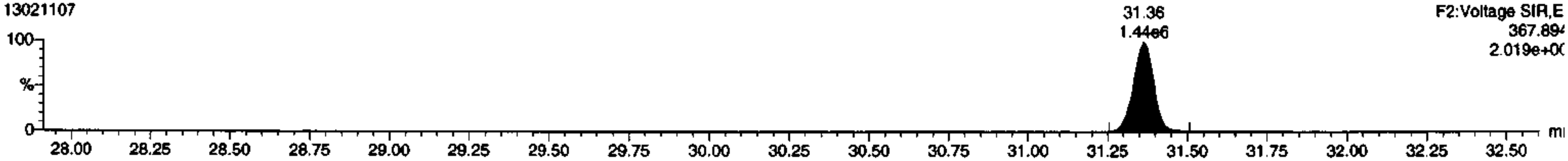
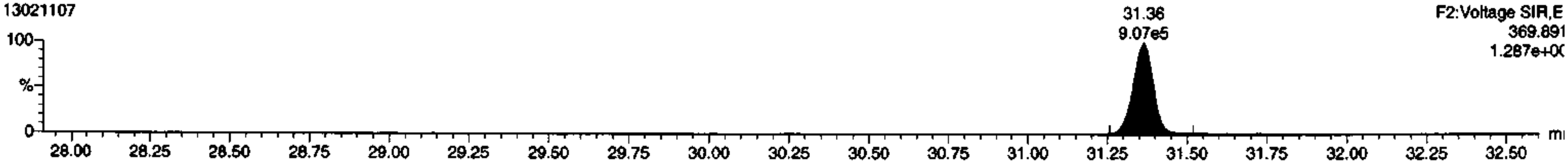
ID: CS2, Name: 13021107, Date: 11-Feb-2013, Time: 16:30:49, Conditions: AUTOSPEC01, User: pk

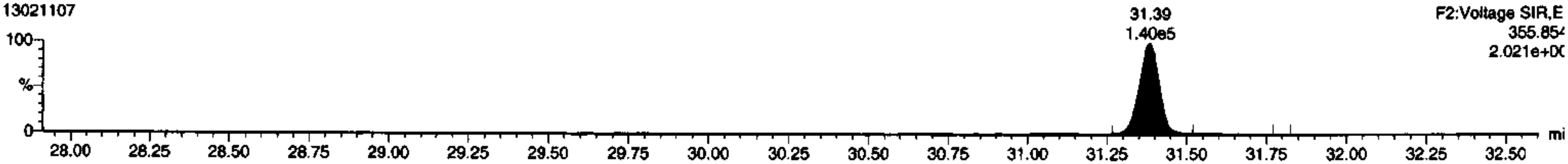
13C-12378-PeCDD



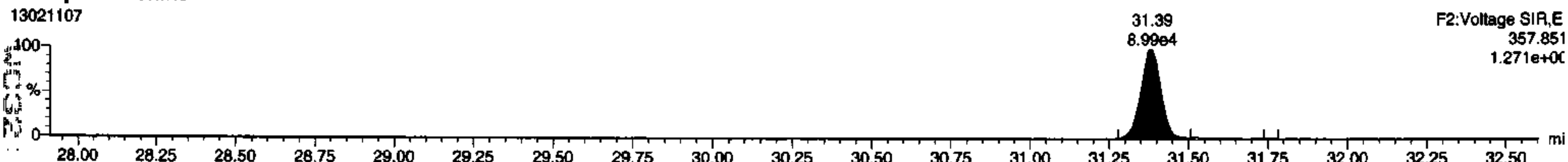
13C-12378-PeCDD



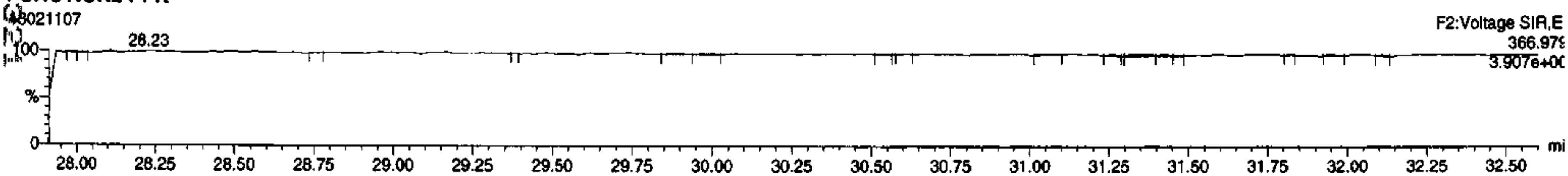
Total-pentadioxins



Total-pentadioxins



FUNCTION2 PFK



Dataset: P:\DIOXIN8290.PRO\130211IC.qld
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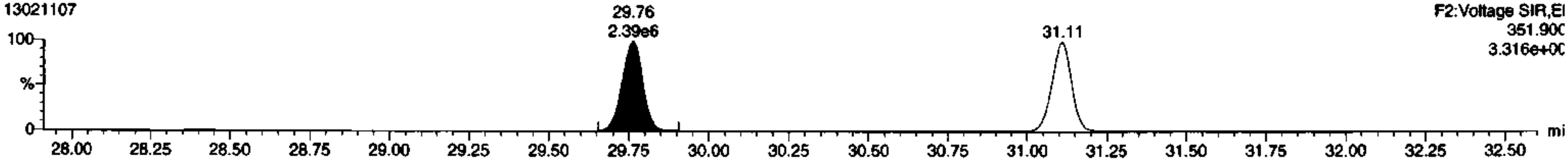
13C-12378-PeCDF



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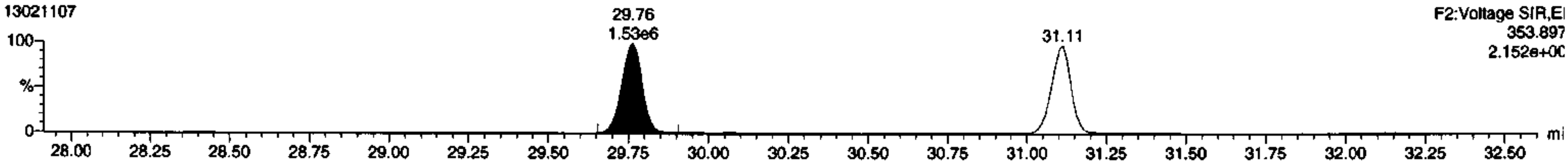
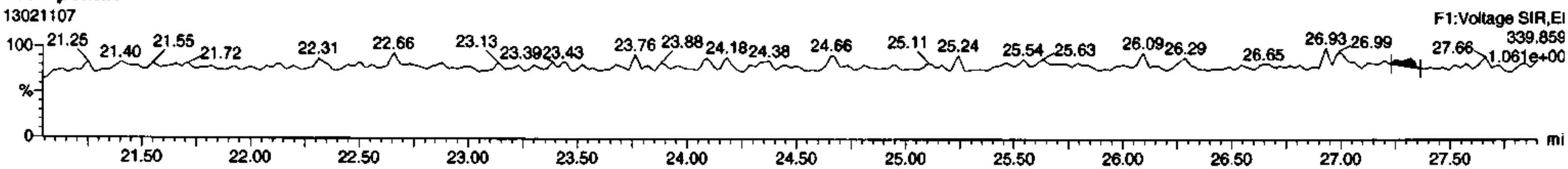
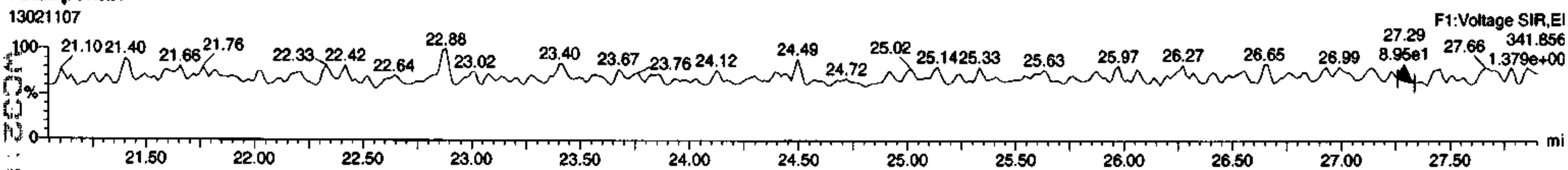


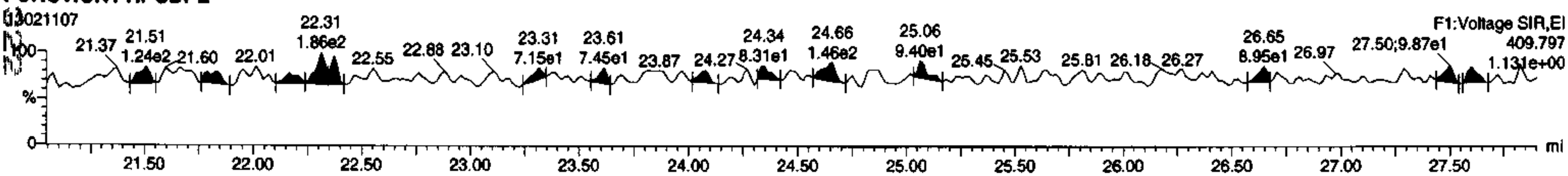
Total-penta1



Total-penta1



FUNCTION1 HPCDPE



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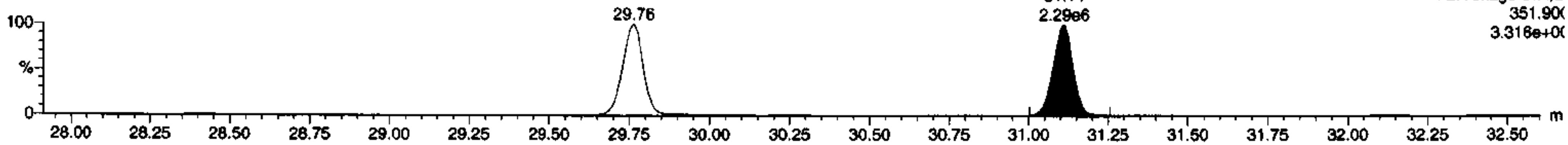
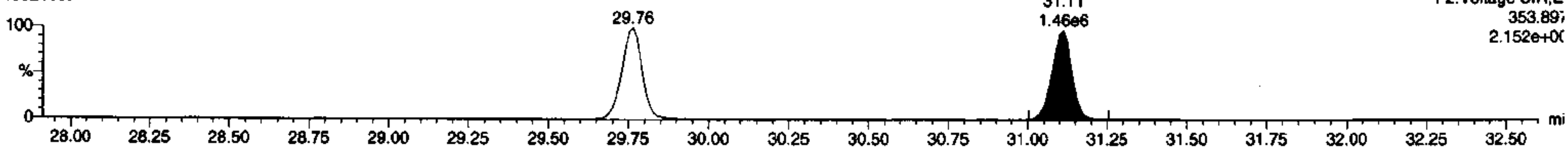
13C-23478-PeCDF

13021107



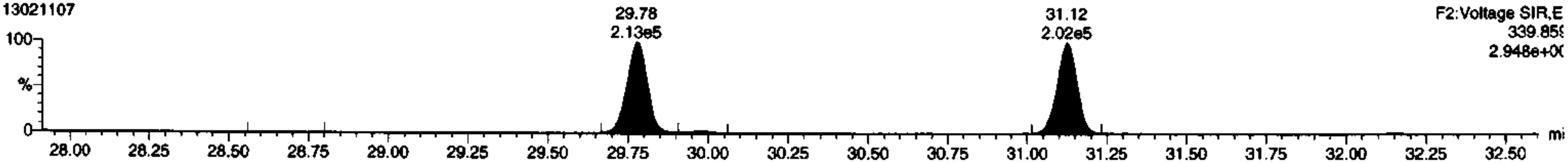
13C-23478-PeCDF

13021107



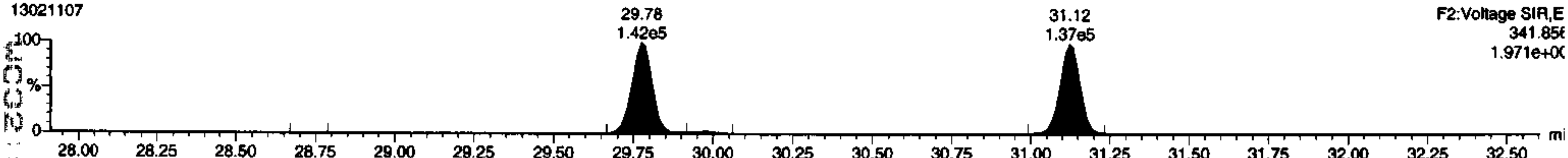
Total-pentafurans

13021107



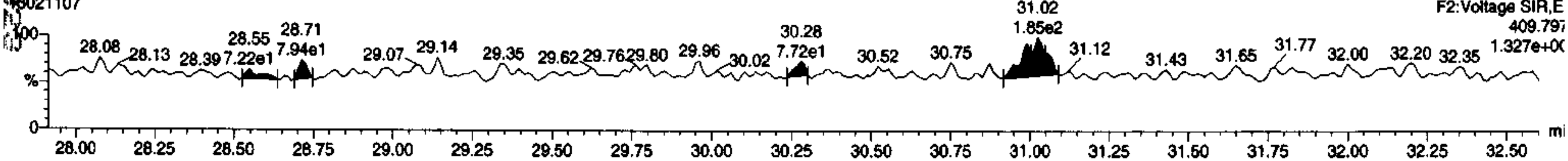
Total-pentafurans

13021107



FUNCTION2 HPCDPE

13021107



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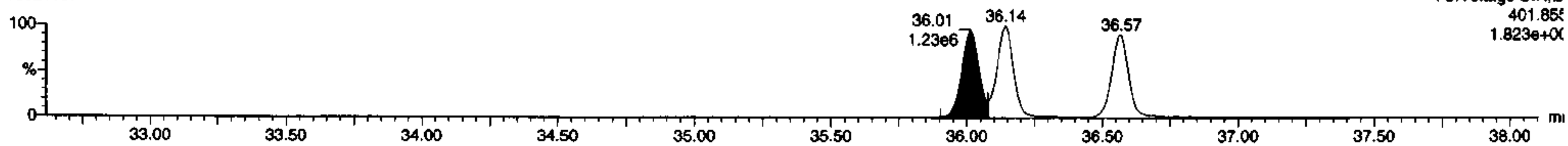
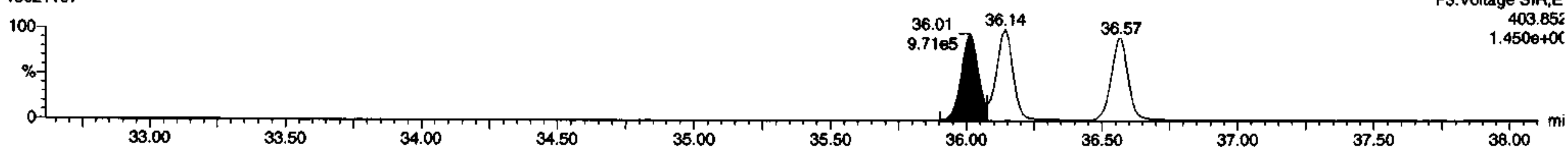
13C-123478-HxCDD
13021107



13C-123478-HxCDD
13021107



Total-hexadioxins
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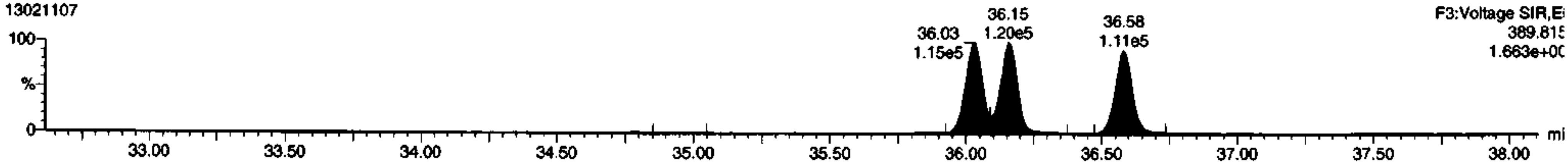

Total-hexadioxins
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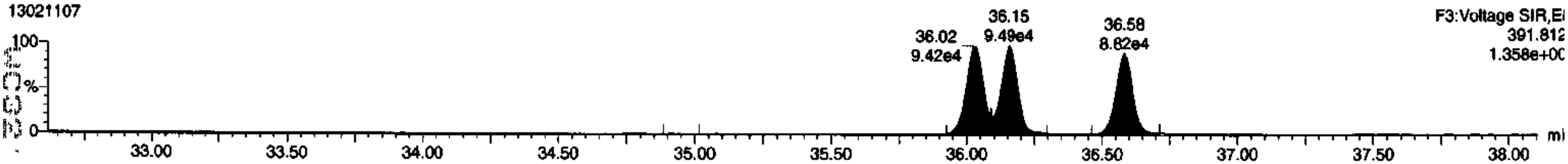

FUNCTION3 PFK
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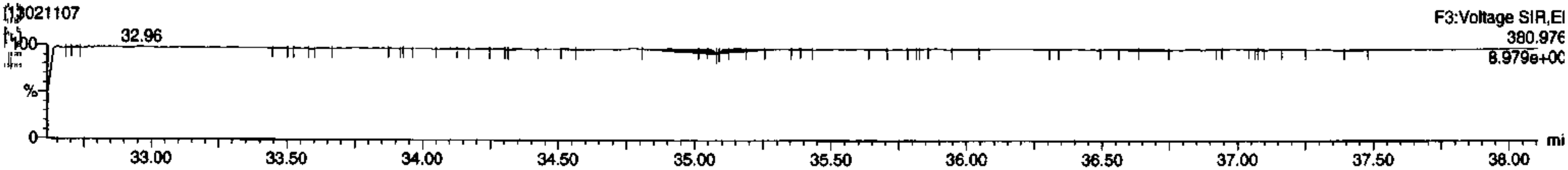

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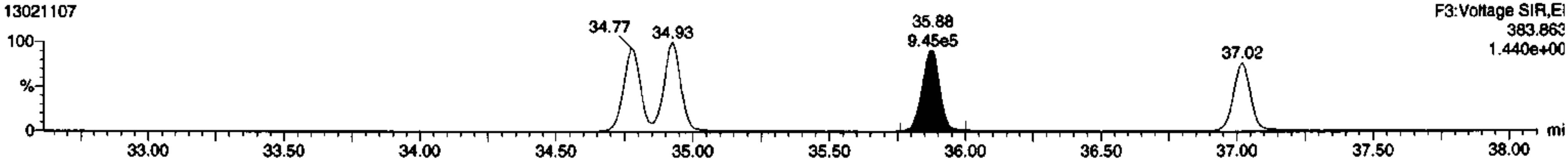
13C-234678-HxCDF



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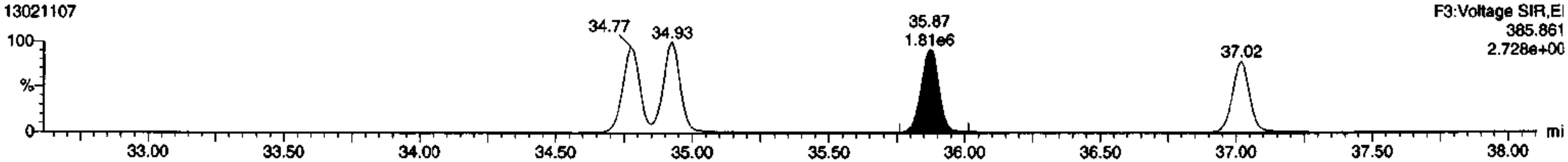
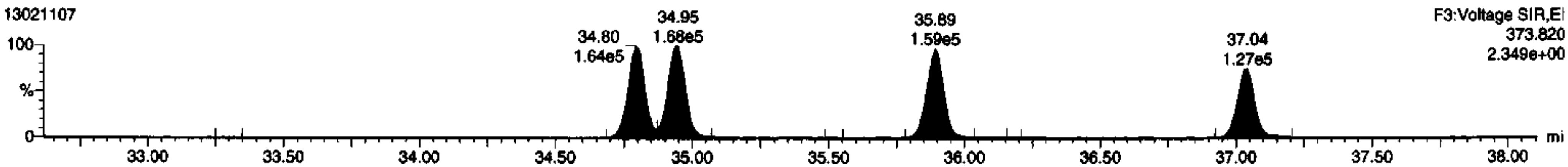
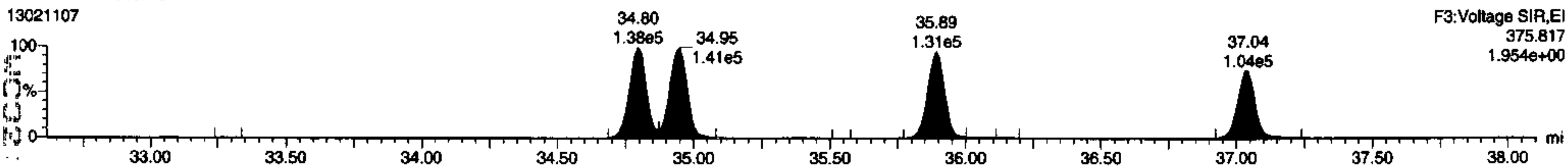


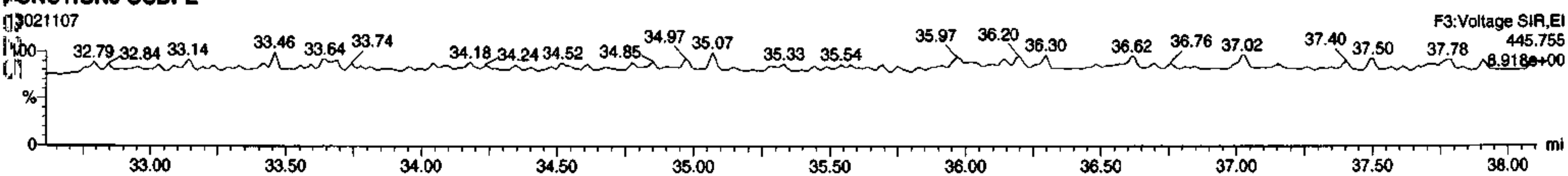
Total-hexafurans



Total-hexafurans



FUNCTION3 OCDPE



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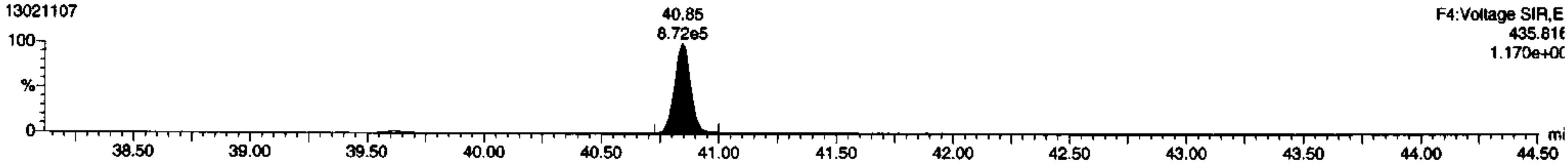
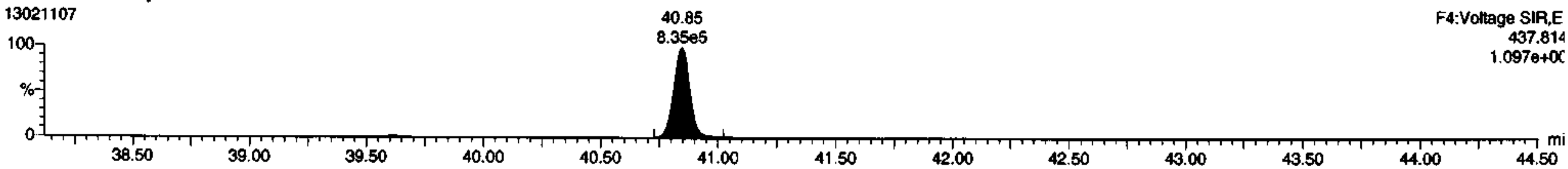
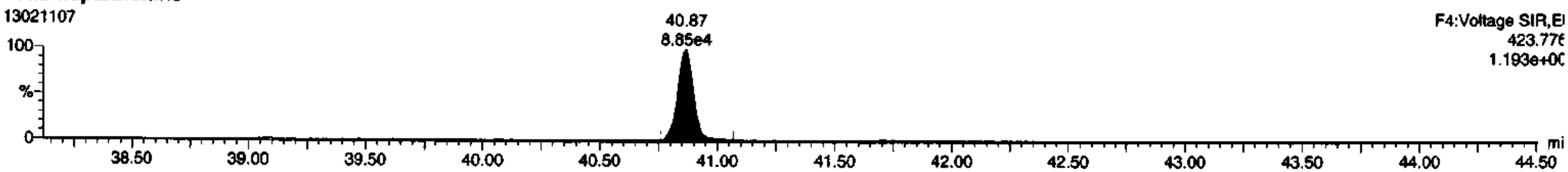
13C-1234678-HpCDD



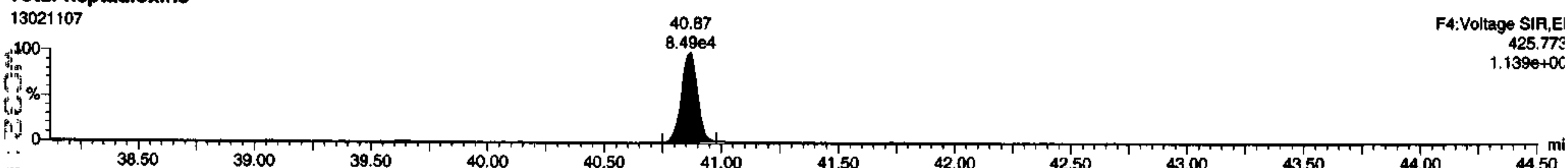
13C-1234678-HpCDD



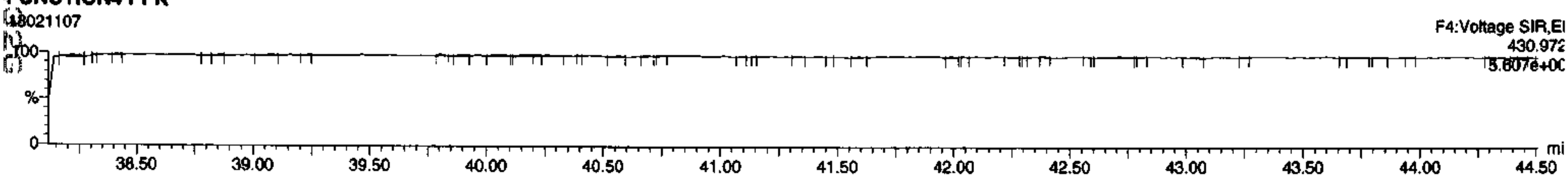
Total-heptadioxins



Total-heptadioxins

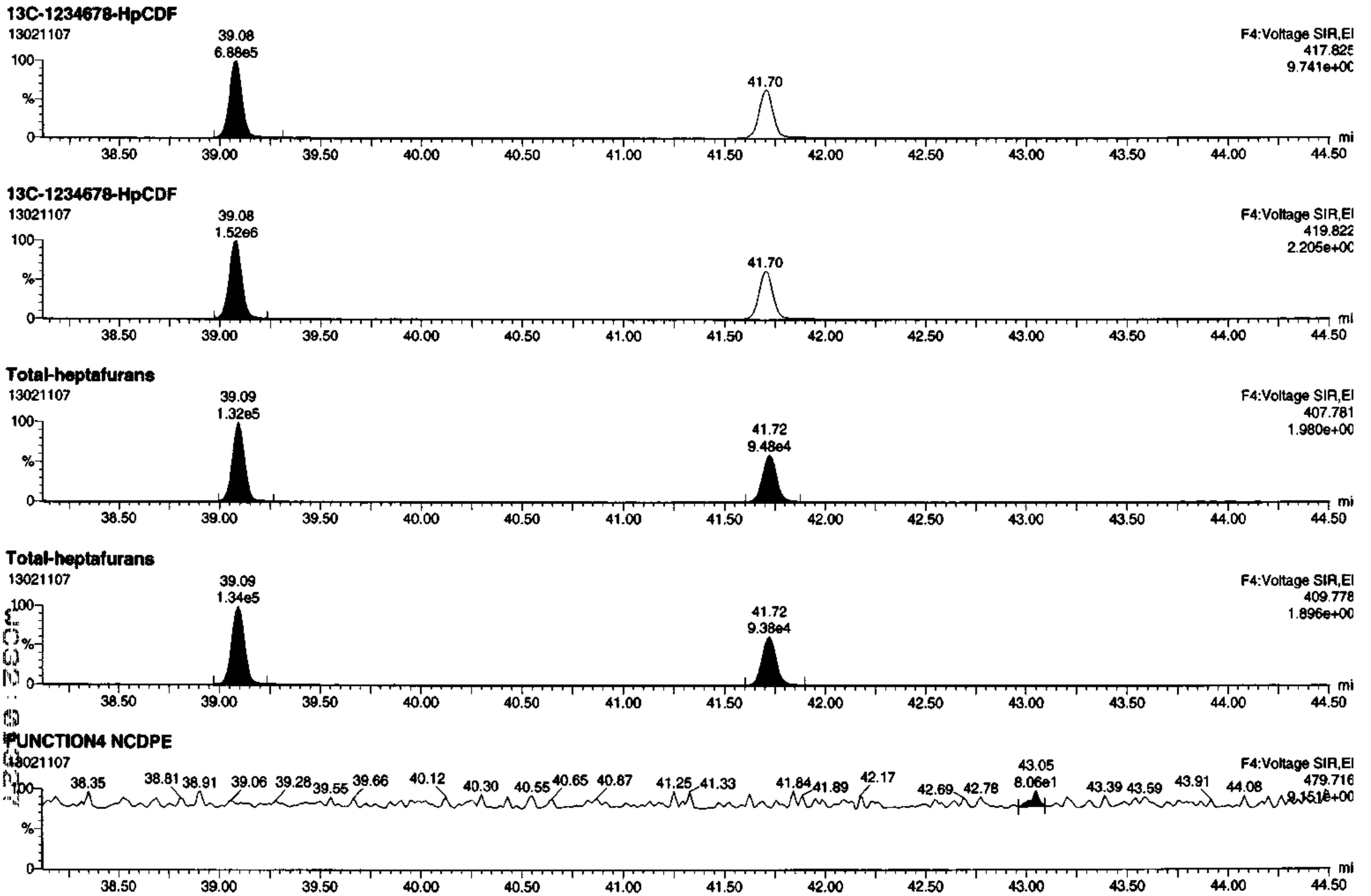


FUNCTION4 PFK



Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:09 Pacific Standard Time

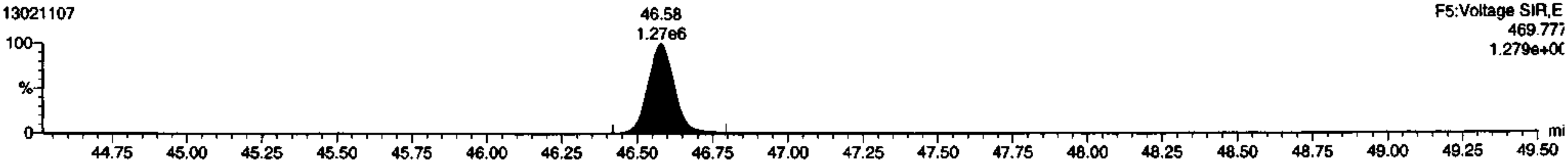
ID: CS2, Name: 13021107, Date: 11-Feb-2013, Time: 16:30:49, Conditions: AUTOSPEC01, User: pk



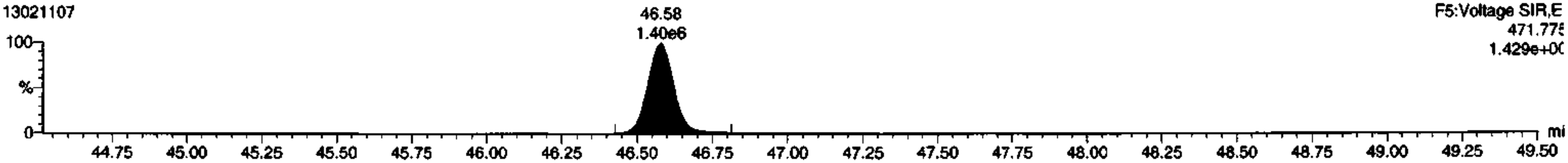
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:09 Pacific Standard Time

ID: CS2, Name: 13021107, Date: 11-Feb-2013, Time: 16:30:49, Conditions: AUTOSPEC01, User: pk

13C-OCDD
13021107



13C-OCDD
13021107



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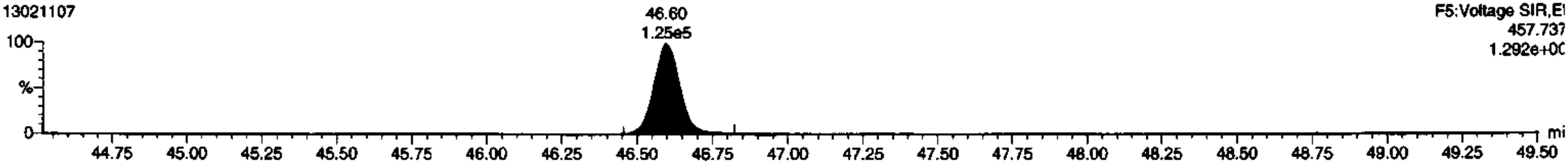
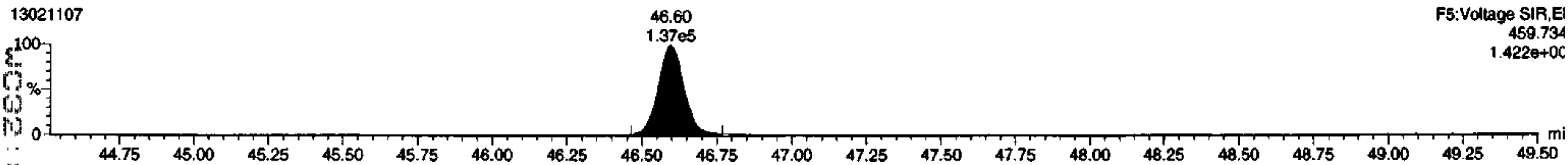
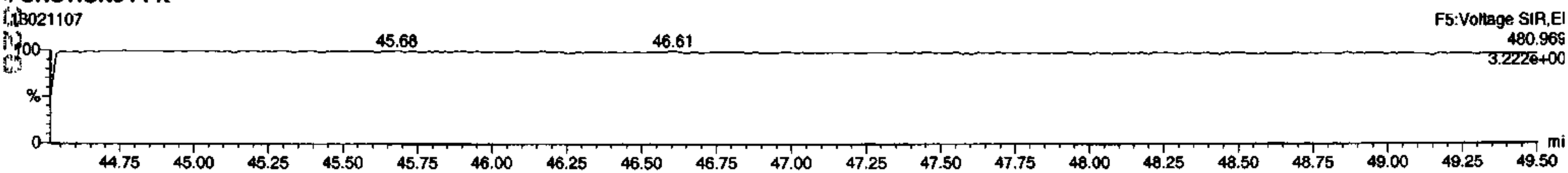


OCDD
13021107



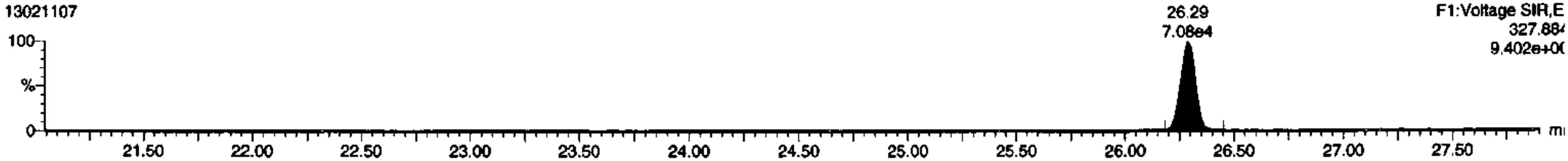
FUNCTION5 PFK
13021107



Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:09 Pacific Standard Time

ID: CS2, Name: 13021107, Date: 11-Feb-2013, Time: 16:30:49, Conditions: AUTOSPEC01, User: pk

37CL-2378-TCDD



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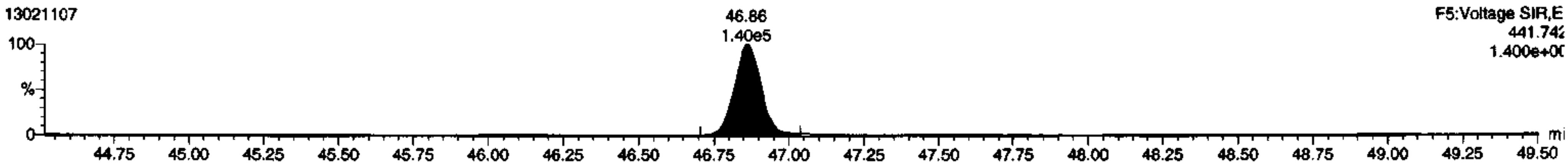
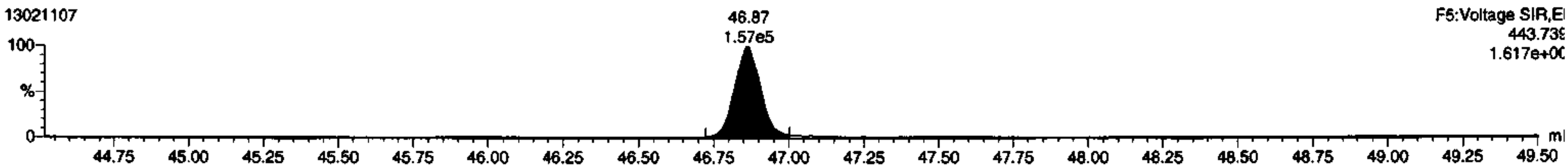
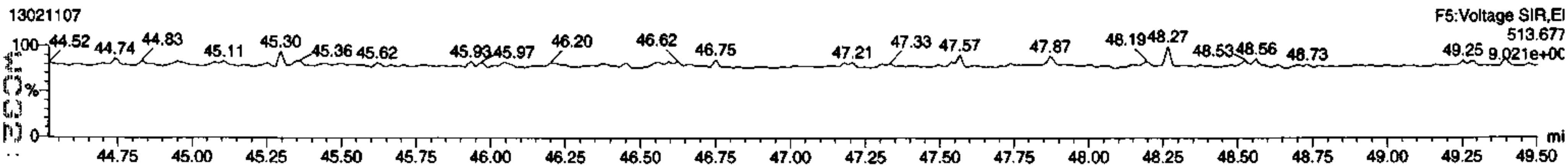


OCDF



FUNCTION5 DCDPE



Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:19 Pacific Standard Time

Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 04 Feb 2013 12:23:30
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: CS3, Name: 13021108, Date: 11-Feb-2013, Time: 17:23:26, Conditions: AUTOSPEC01, User: pk

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[redacted]	12378-PeCDF	29.764	1.000	7.87e5	5.09e5	0.912	1.546	1.550	2970.7	NO	49.730	49.730
[redacted]	23478-PeCDF	31.112	1.000	7.74e5	5.11e5	0.943	1.514	1.550	2985.5	NO	49.316	49.316
[redacted]	123478-HxCDF	34.785	1.001	6.36e5	5.21e5	1.101	1.221	1.240	2657.3	NO	49.302	49.302
[redacted]	234678-HxCDF	35.881	1.001	6.20e5	5.19e5	1.073	1.196	1.240	2585.2	NO	49.934	49.934
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[redacted]	OCDF	46.849	1.006	6.16e5	7.04e5	1.162	0.875	0.890	3240.3	NO	100.342	100.342
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[redacted]	12378-PeCDD	31.376	1.001	5.27e5	3.41e5	1.001	1.549	1.550	2999.5	NO	49.996	49.996
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[redacted]	13C-12378-PeCDD	31.354	1.232	1.06e6	6.69e5	0.715	1.590	1.550	9642.2	NO		100.089
[redacted]	13C-123478-HxCDD	36.001	0.985	9.61e5	7.57e5	1.032	1.270	1.240	6467.6	NO		99.761
[redacted]	13C-123678-HxCDD	36.133	0.988	1.00e6	7.91e5	1.076	1.264	1.240	6604.1	NO		99.756
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[redacted]	13C-OCDD	46.571	1.274	1.06e6	1.20e6	0.675	0.887	0.890	4617.9	NO		200.935

Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:19 Pacific Standard Time

ID: CS3, Name: 13021108, Date: 11-Feb-2013, Time: 17:23:26, Conditions: AUTOSPEC01, User: pk

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[redacted]	Total-penta1			1.04e6								66.870
[redacted]	Total-pentafurans			2.36e6		0.927						149.827
[redacted]	Total-hexafurans			3.20e6		1.062						259.881
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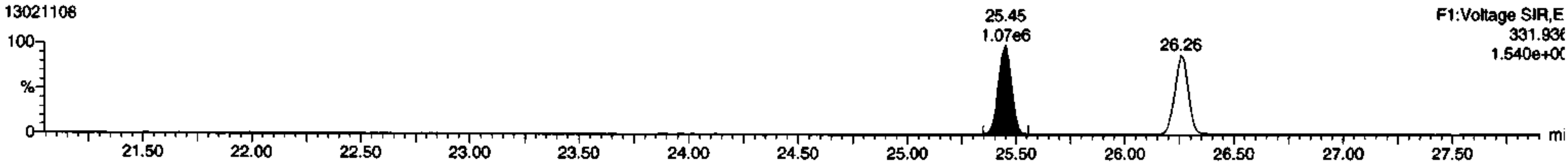
W002 01031

Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:19 Pacific Standard Time

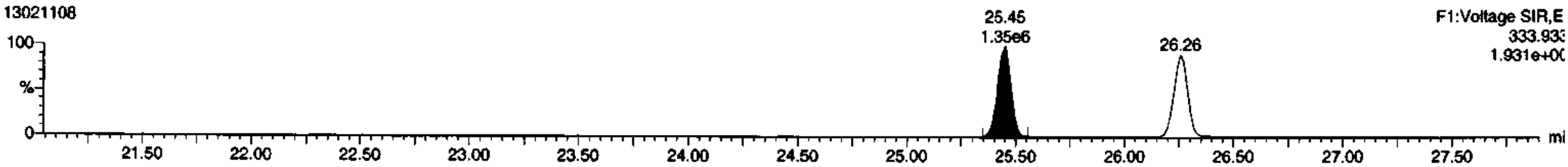
Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 04 Feb 2013 12:23:30
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: CS3, Name: 13021108, Date: 11-Feb-2013, Time: 17:23:26, Conditions: AUTOSPEC01, User: pk

13C-1234-TCDD



13C-1234-TCDD



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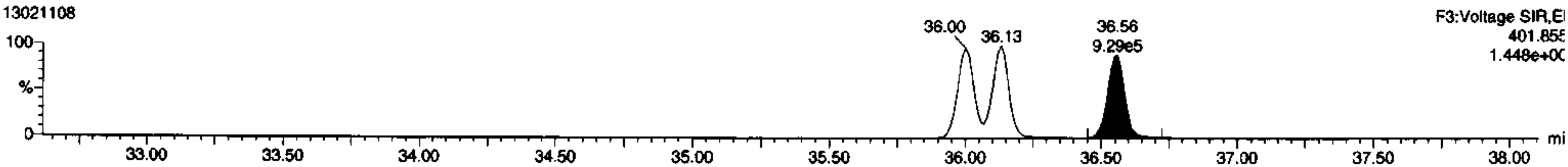

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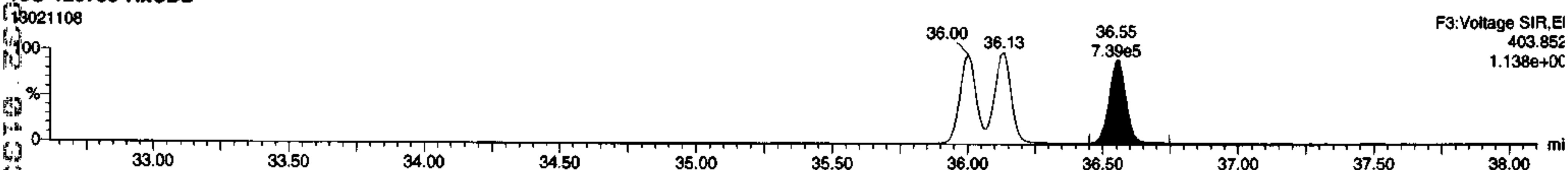

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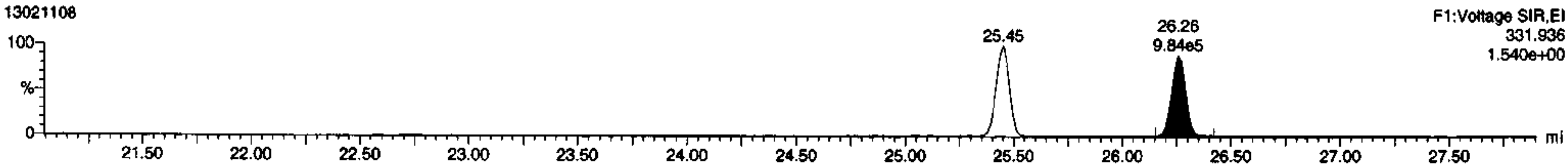
Last Altered:	Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed:	Tuesday, February 12, 2013 09:36:19 Pacific Standard Time

ID: CS3, Name: 13021108, Date: 11-Feb-2013, Time: 17:23:26, Conditions: AUTOSPEC01, User: pk

13C-2378-TCDD



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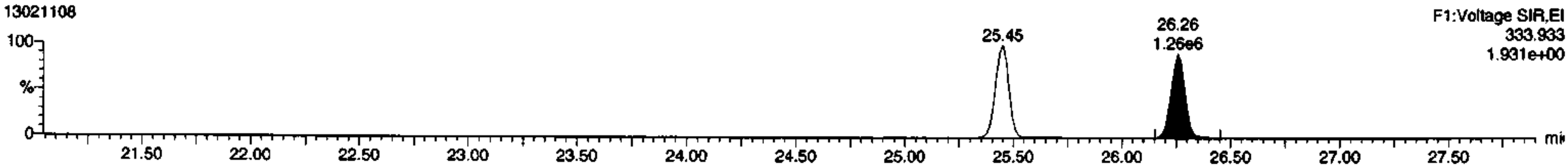

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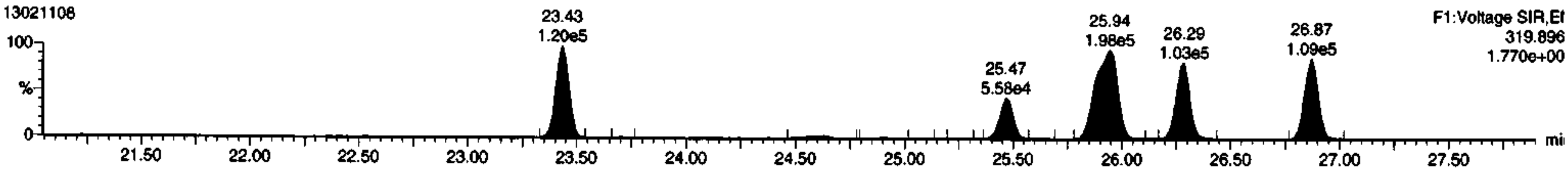
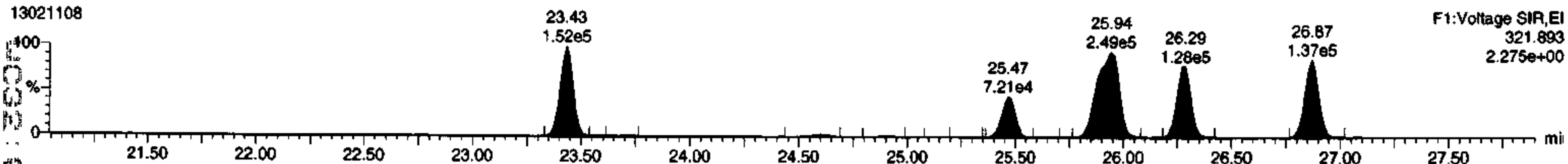
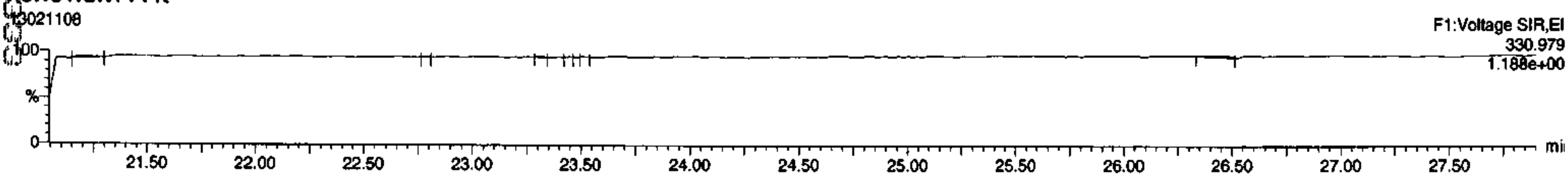


Total-tetradioxins



FUNCTION1 PFK



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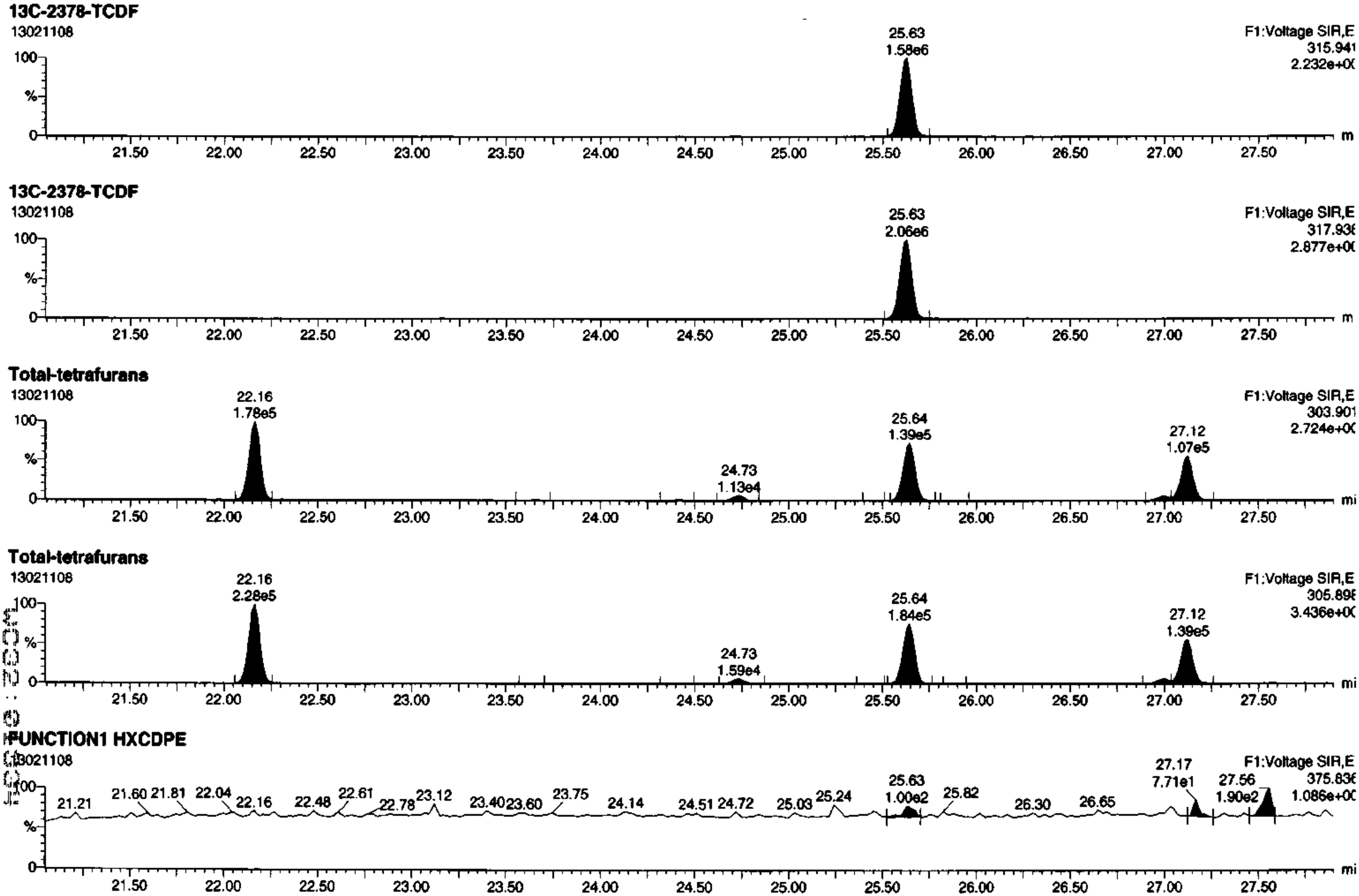
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:19 Pacific Standard Time

ID: CS3, Name: 13021108, Date: 11-Feb-2013, Time: 17:23:26, Conditions: AUTOSPEC01, User: pk



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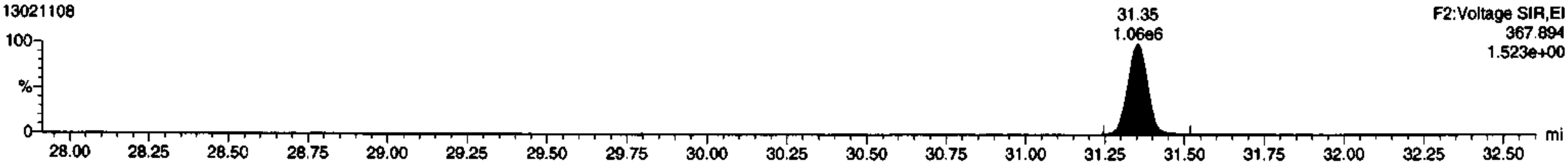
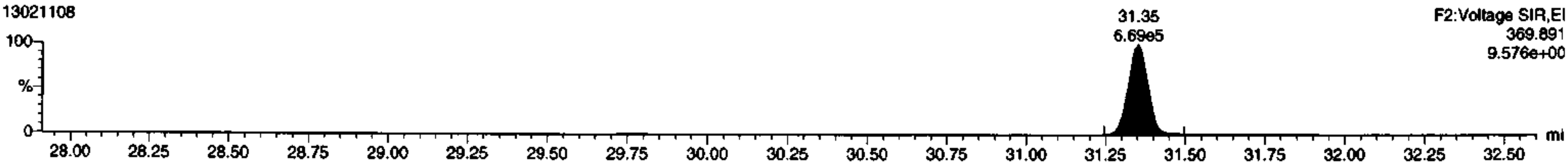
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:19 Pacific Standard Time

ID: CS3, Name: 13021108, Date: 11-Feb-2013, Time: 17:23:26, Conditions: AUTOSPEC01, User: pk

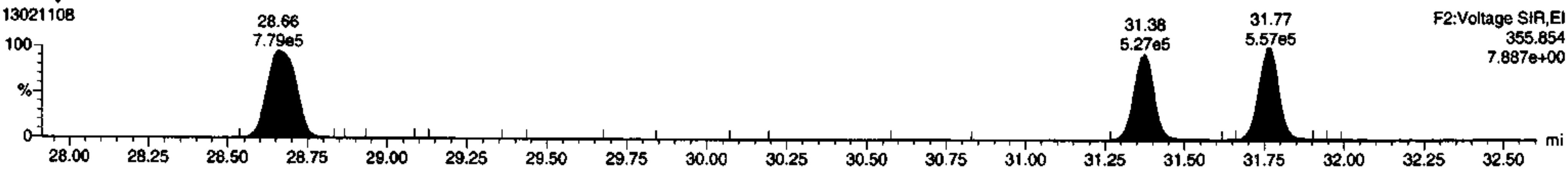
13C-12378-PeCDD



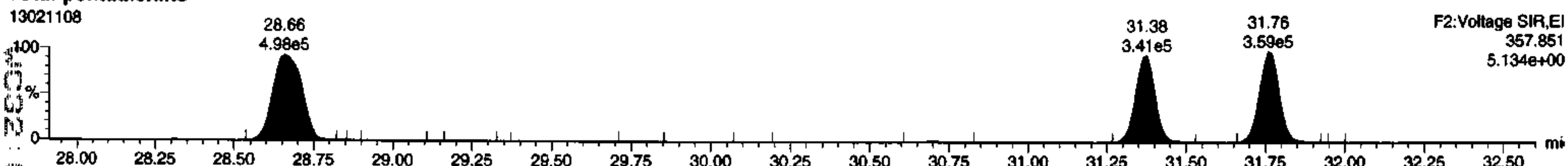
13C-12378-PeCDD



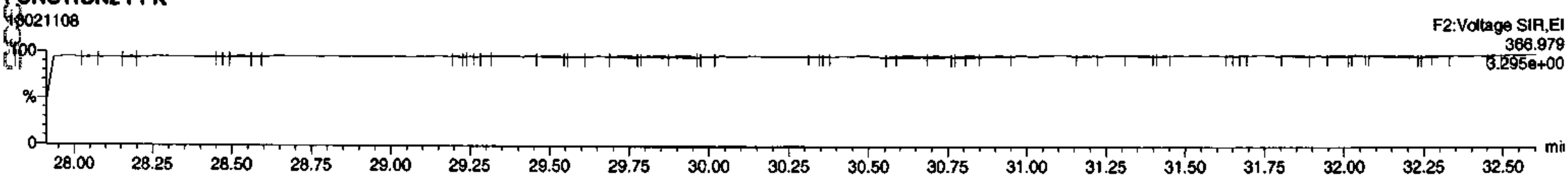
Total-pentadioxins



Total-pentadioxins



FUNCTION2 PFK



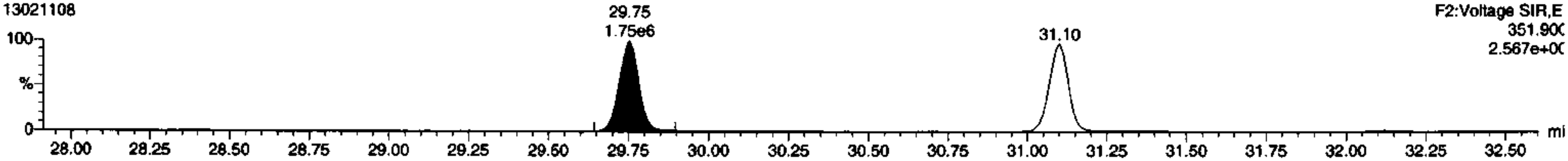
Dataset: P:\DIOXIN8290.PRO\130211IC.qld

Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time

Printed: Tuesday, February 12, 2013 09:36:19 Pacific Standard Time

ID: CS3, Name: 13021108, Date: 11-Feb-2013, Time: 17:23:26, Conditions: AUTOSPEC01, User: pk

13C-12378-PeCDF



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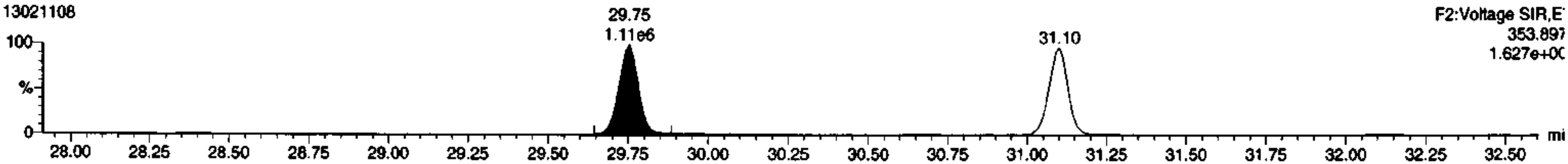
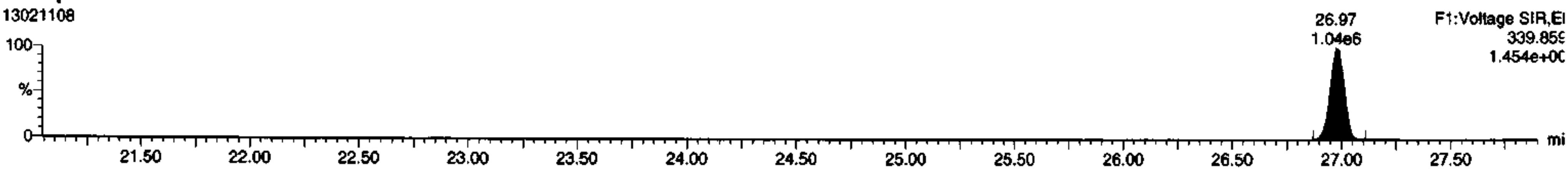
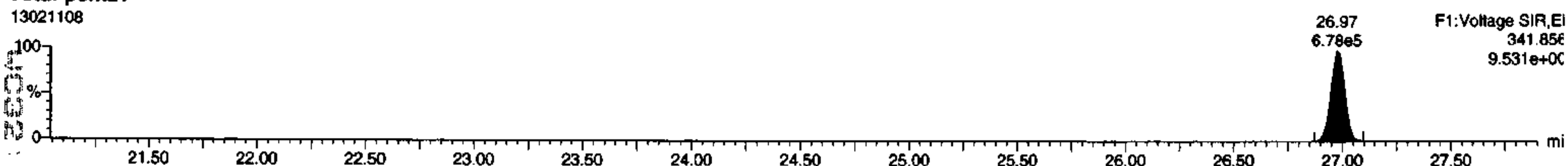


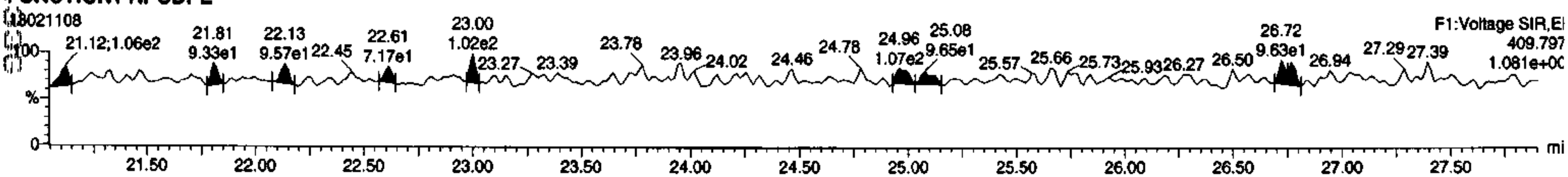
Total-penta1



Total-penta1

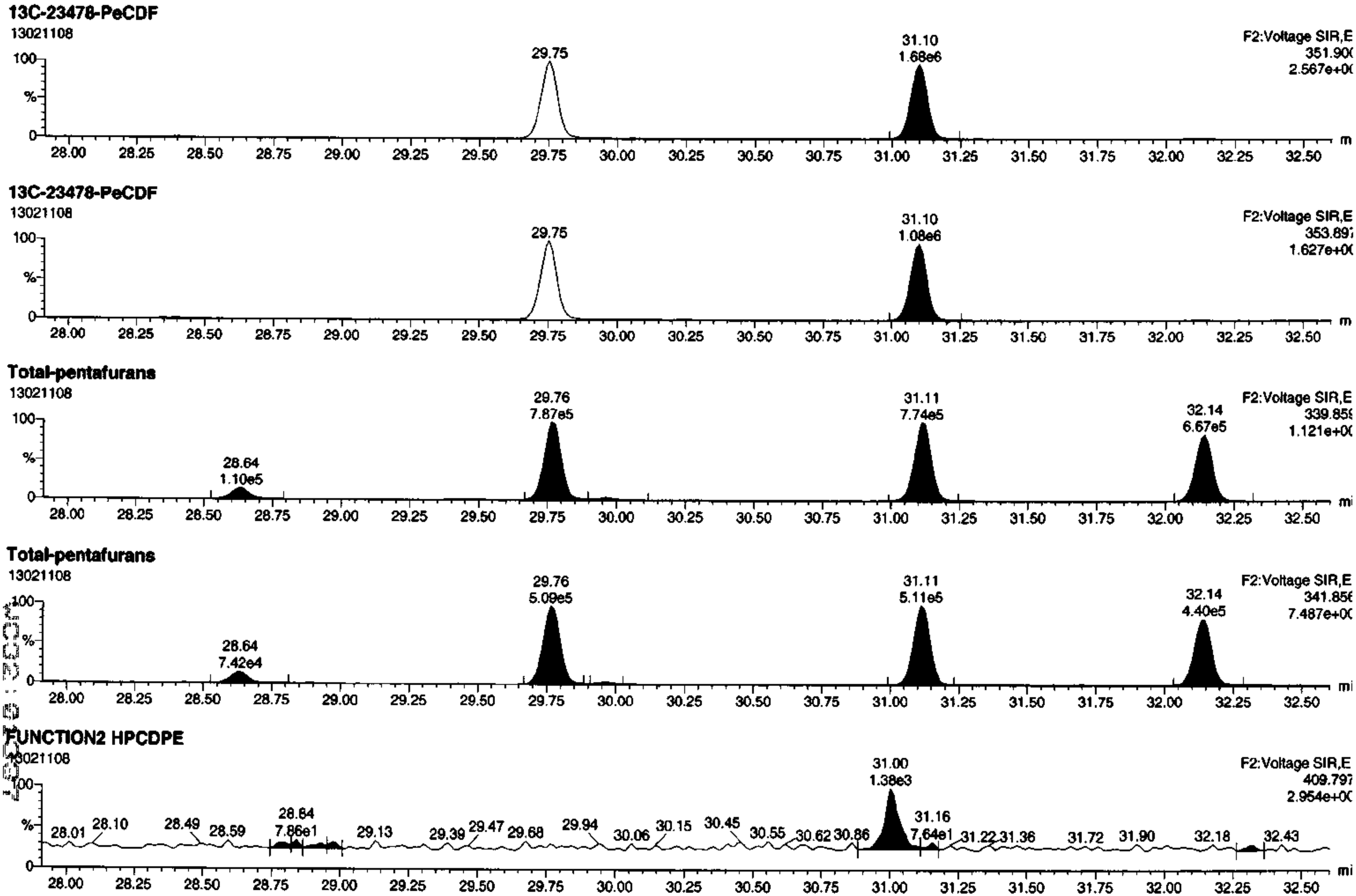


FUNCTION1 HPCDPE



Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:19 Pacific Standard Time

ID: CS3, Name: 13021108, Date: 11-Feb-2013, Time: 17:23:26, Conditions: AUTOSPEC01, User: pk



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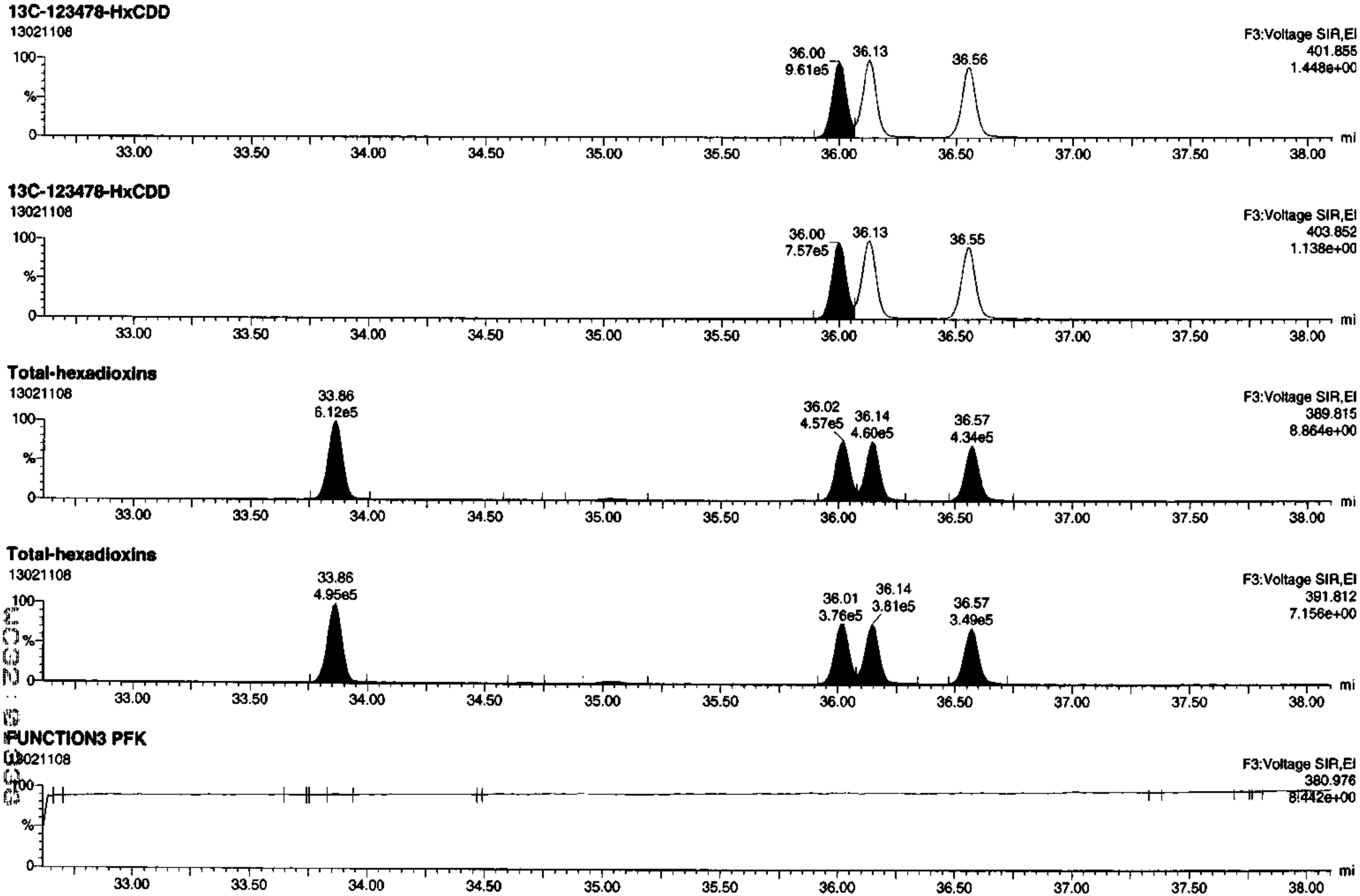
ID: CS3, Name: 13021108, Date: 11-Feb-2013, Time: 17:23:26, Conditions: AUTOSPEC01, User: pk



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Printed: Tuesday, February 12, 2013 09:36:19 Pacific Standard Time

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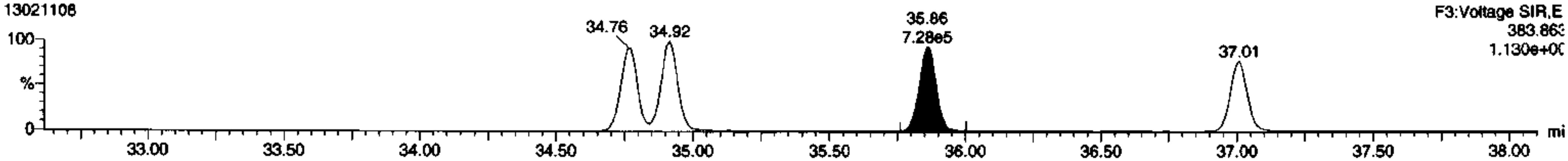
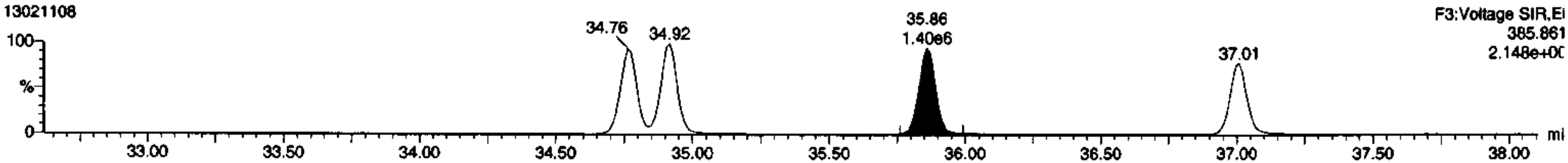
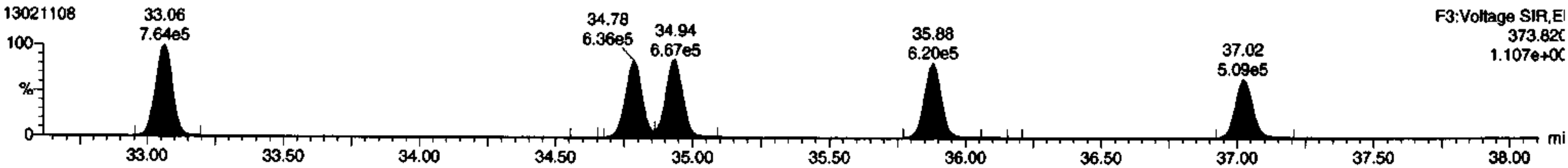
13C-234678-HxCDF



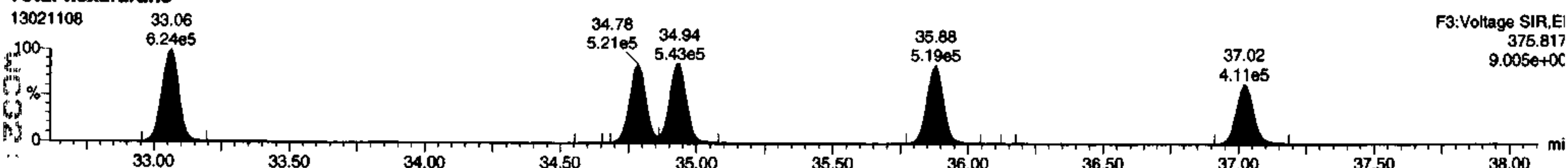
13C-234678-HxCDF



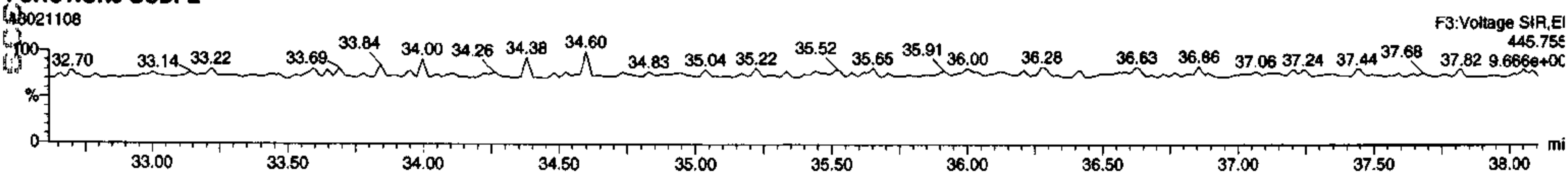
Total-hexafurans



Total-hexafurans

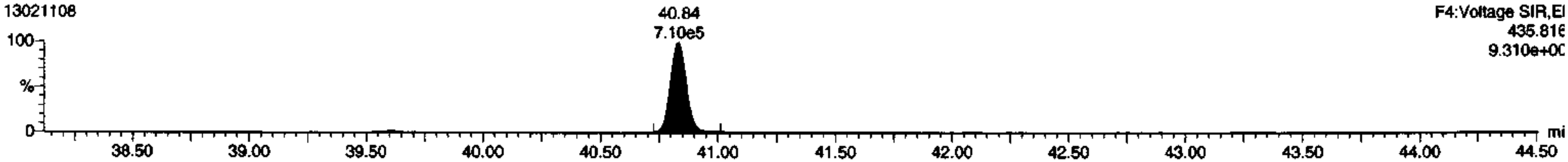


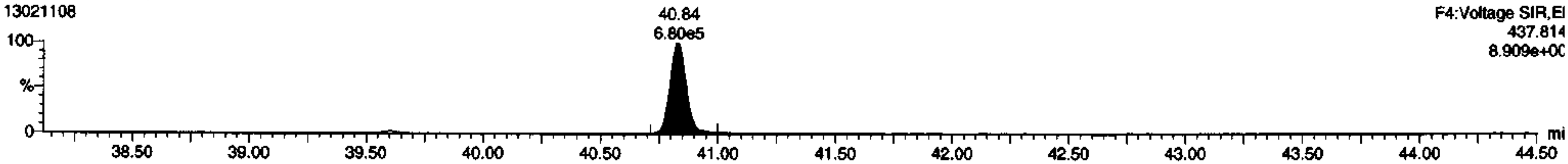
FUNCTION3 OCDPE

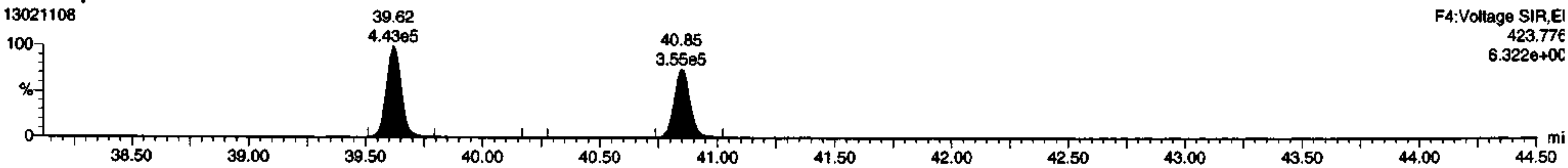


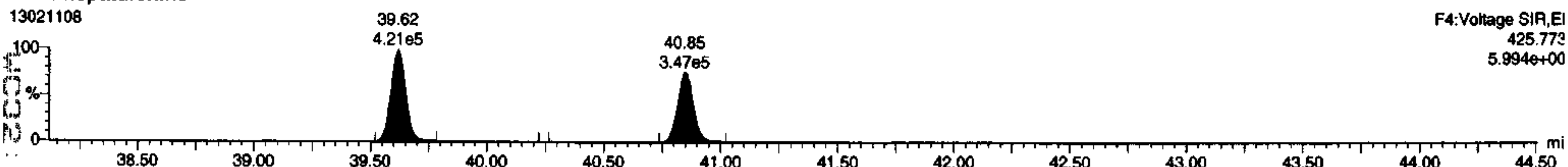
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:19 Pacific Standard Time

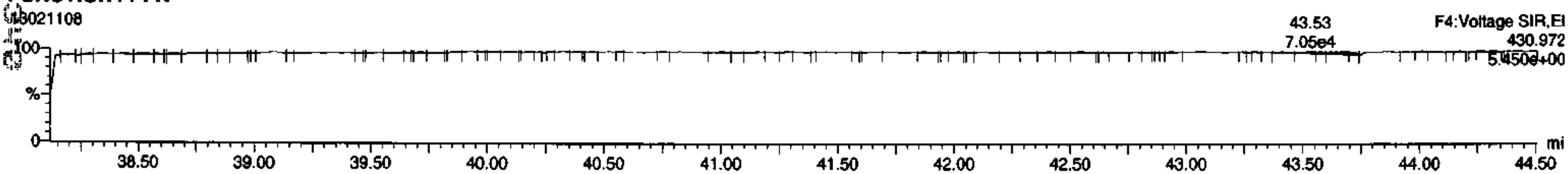
ID: CS3, Name: 13021108, Date: 11-Feb-2013, Time: 17:23:26, Conditions: AUTOSPEC01, User: pk











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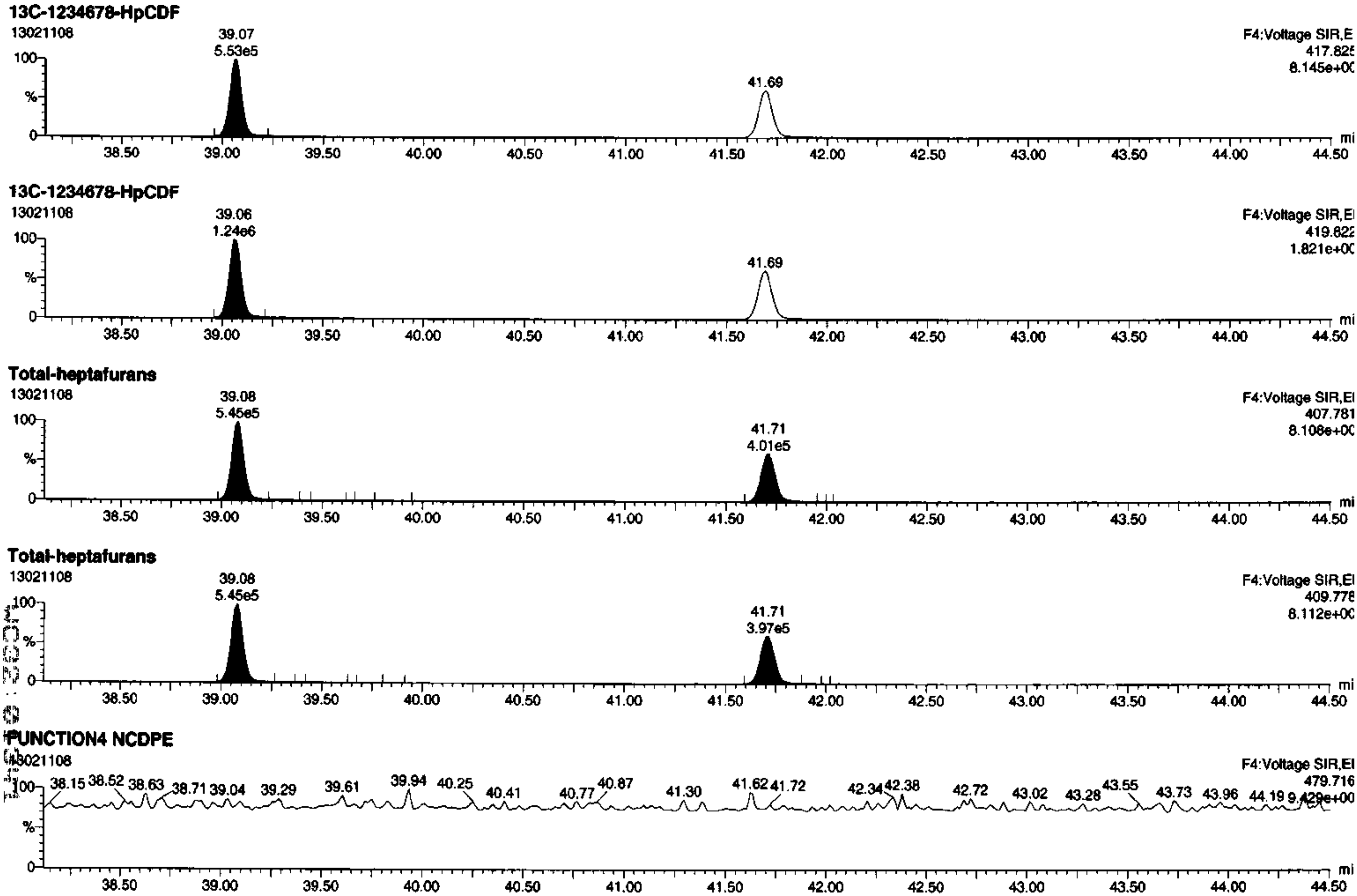
ID: CS3, Name: 13021108, Date: 11-Feb-2013, Time: 17:23:26, Conditions: AUTOSPEC01, User: pk



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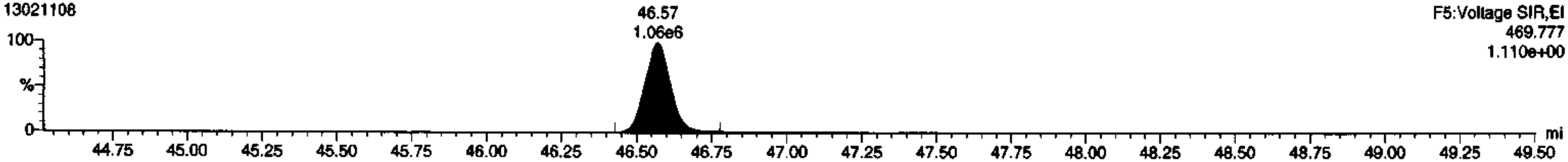
ID: CS3, Name: 13021108, Date: 11-Feb-2013, Time: 17:23:26, Conditions: AUTOSPEC01, User: pk

13C-OCDD



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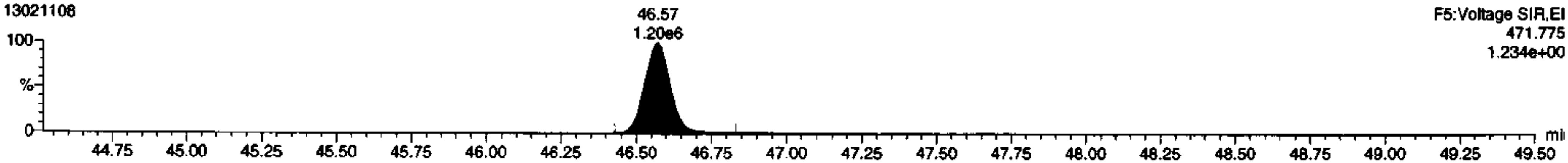

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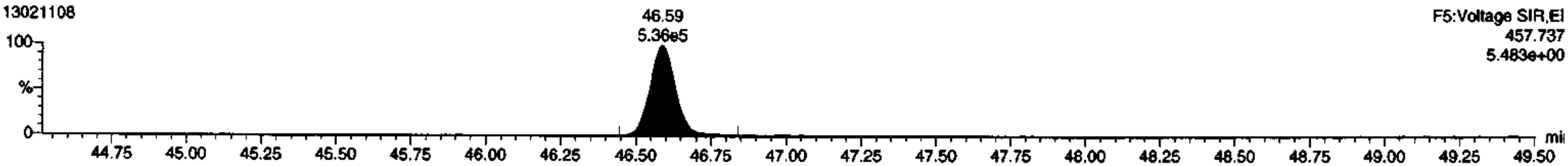

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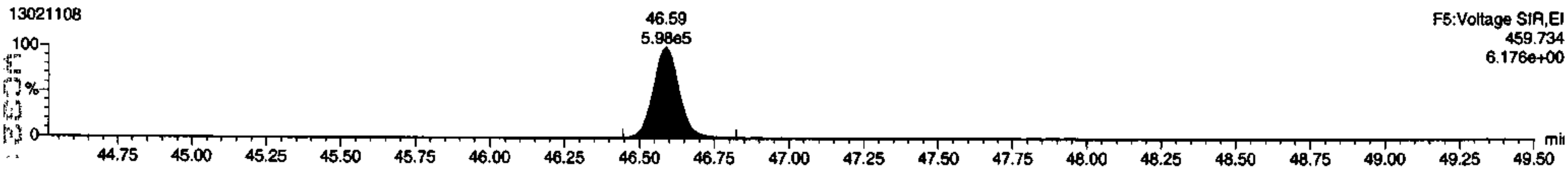
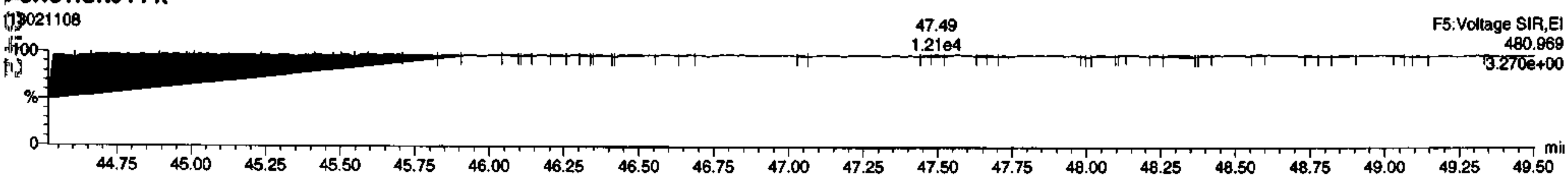


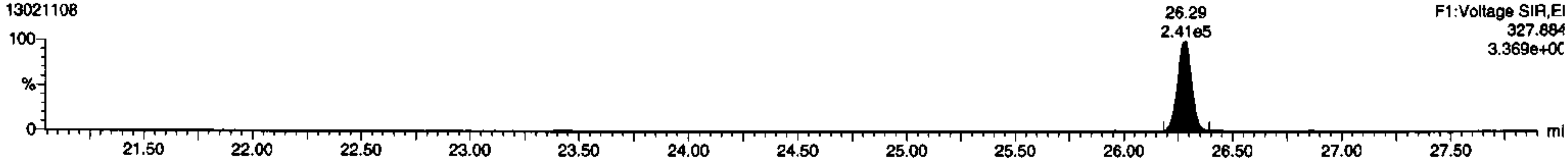
FUNCTION5 PFK



Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:19 Pacific Standard Time

ID: CS3, Name: 13021108, Date: 11-Feb-2013, Time: 17:23:26, Conditions: AUTOSPEC01, User: pk

37CL-2378-TCDD



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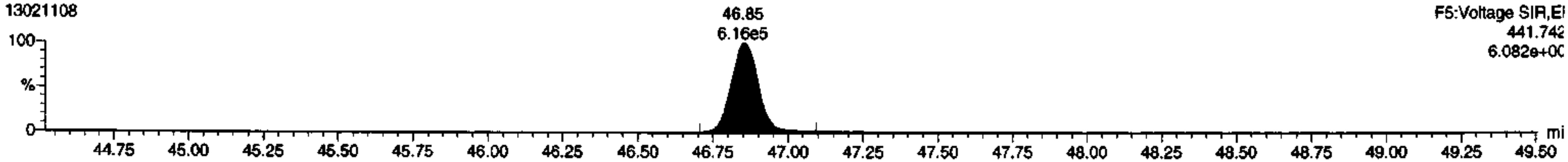

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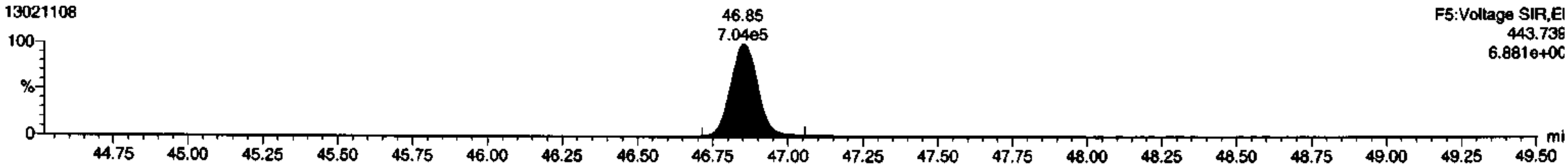
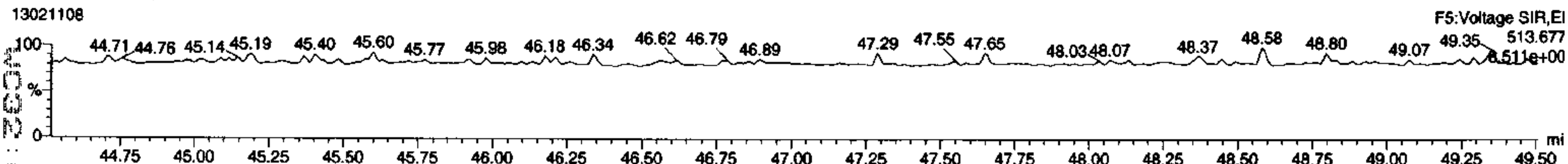


FUNCTION5 DCDPE



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Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:29 Pacific Standard Time

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Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: CS4, Name: 13021109, Date: 11-Feb-2013, Time: 18:16:11, Conditions: AUTOSPEC01, User: pk

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Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:29 Pacific Standard Time

ID: CS4, Name: 13021109, Date: 11-Feb-2013, Time: 18:16:11, Conditions: AUTOSPEC01, User: pk

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UC32 : 01345

Dataset: P:\DIOXIN8290.PRO\130211IC.qld
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Printed: Tuesday, February 12, 2013 09:36:29 Pacific Standard Time

Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 04 Feb 2013 12:23:30
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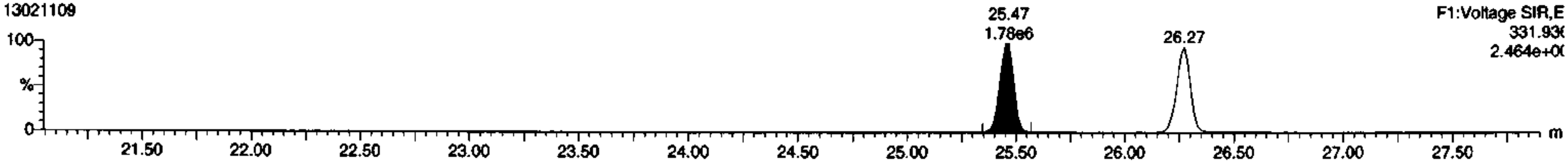
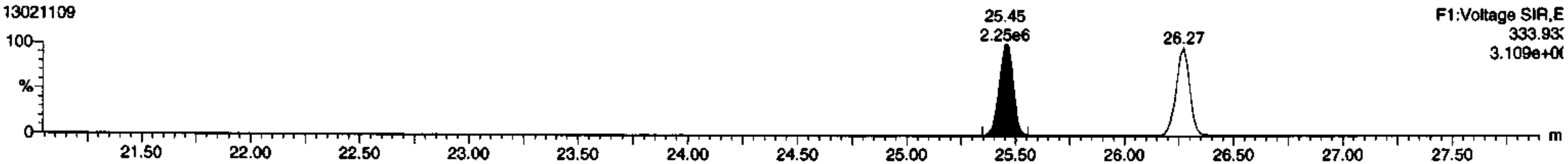
ID: CS4, Name: 13021109, Date: 11-Feb-2013, Time: 18:16:11, Conditions: AUTOSPEC01, User: pk

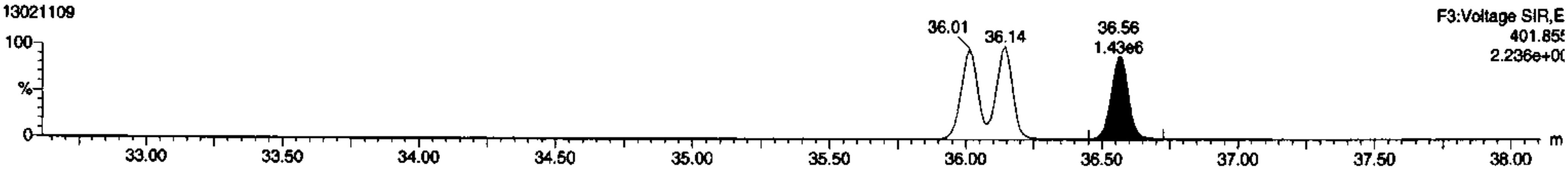
13C-1234-TCDD



13C-1234-TCDD



13C-123789-HxCDD



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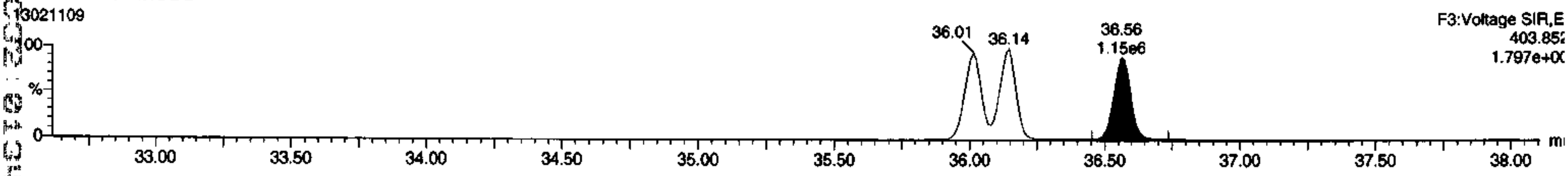

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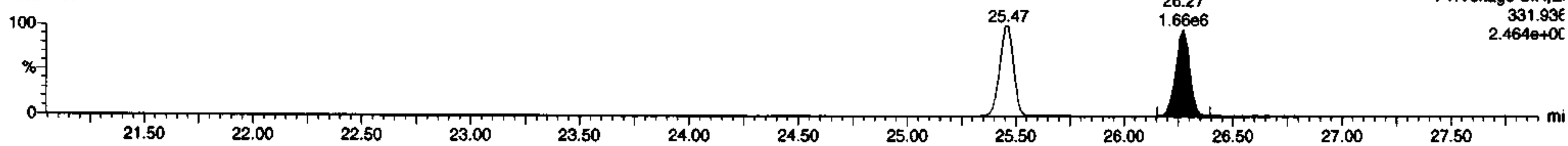
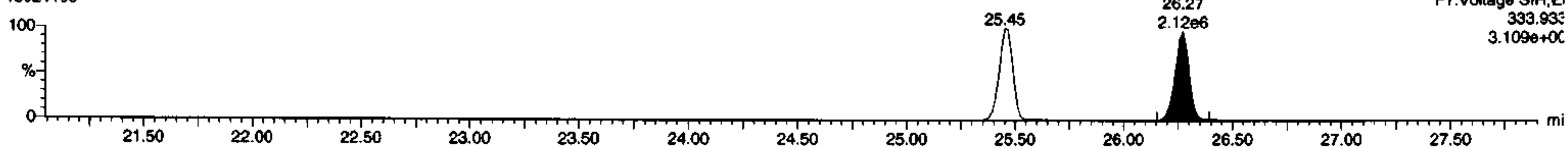
13C-2378-TCDD
13021109



13C-2378-TCDD
13021109



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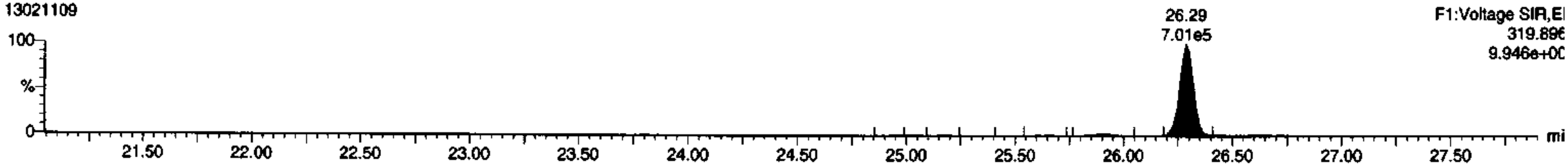

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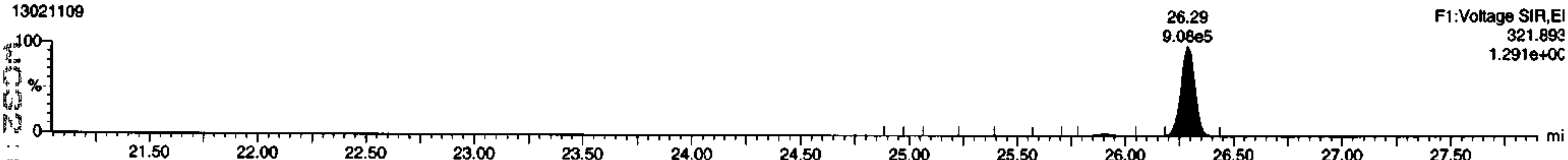

FUNCTION1 PFK
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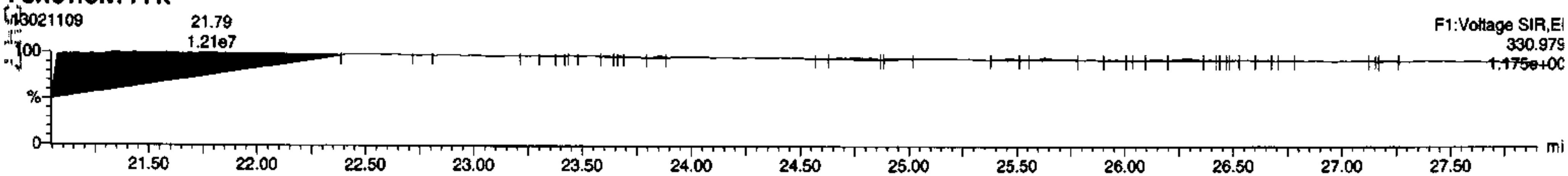

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Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
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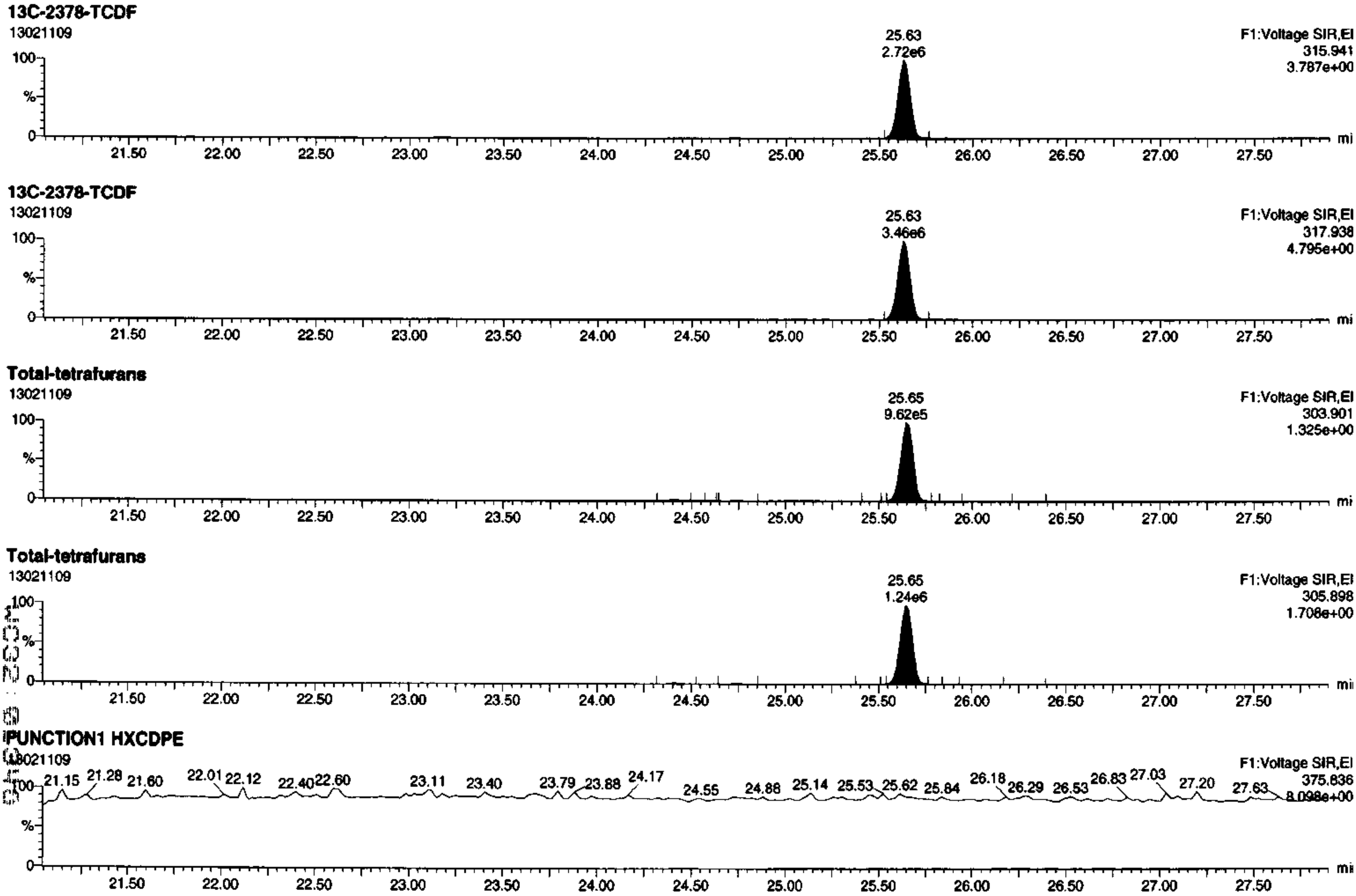

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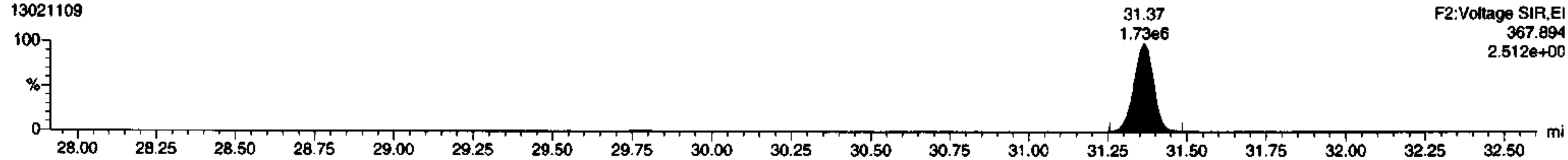
13C-12378-PeCDD



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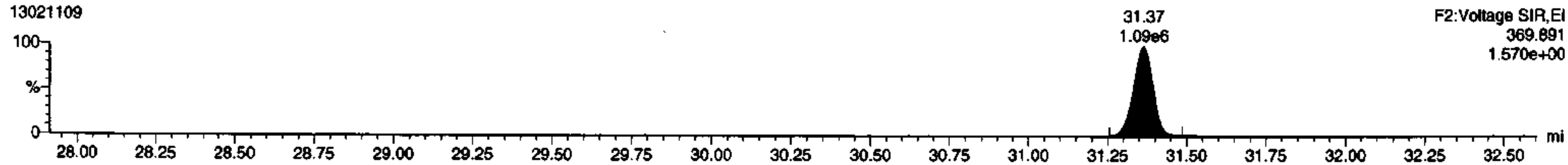
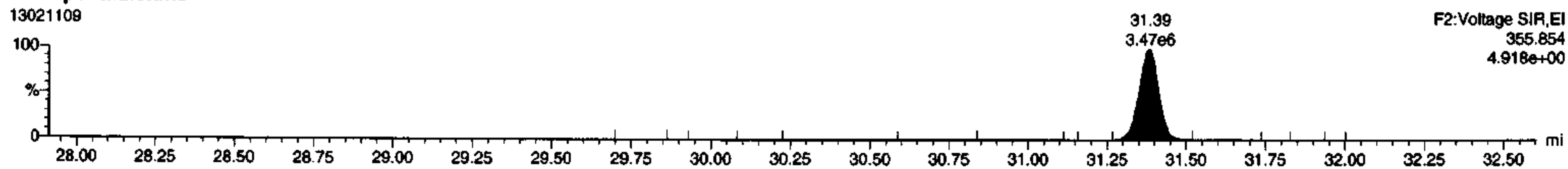
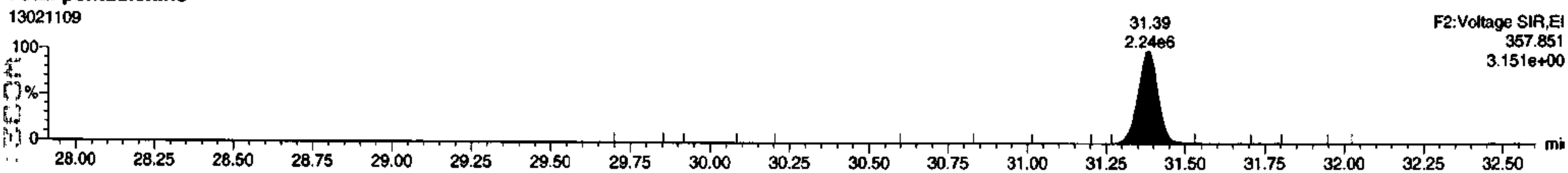


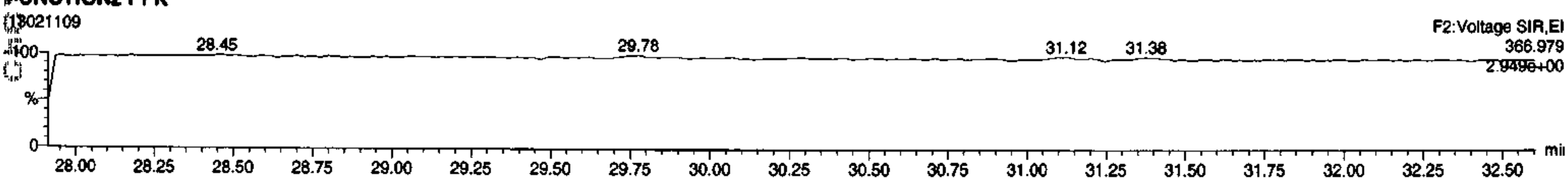
Total-pentadioxins



Total-pentadioxins



FUNCTION2 PFK



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Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
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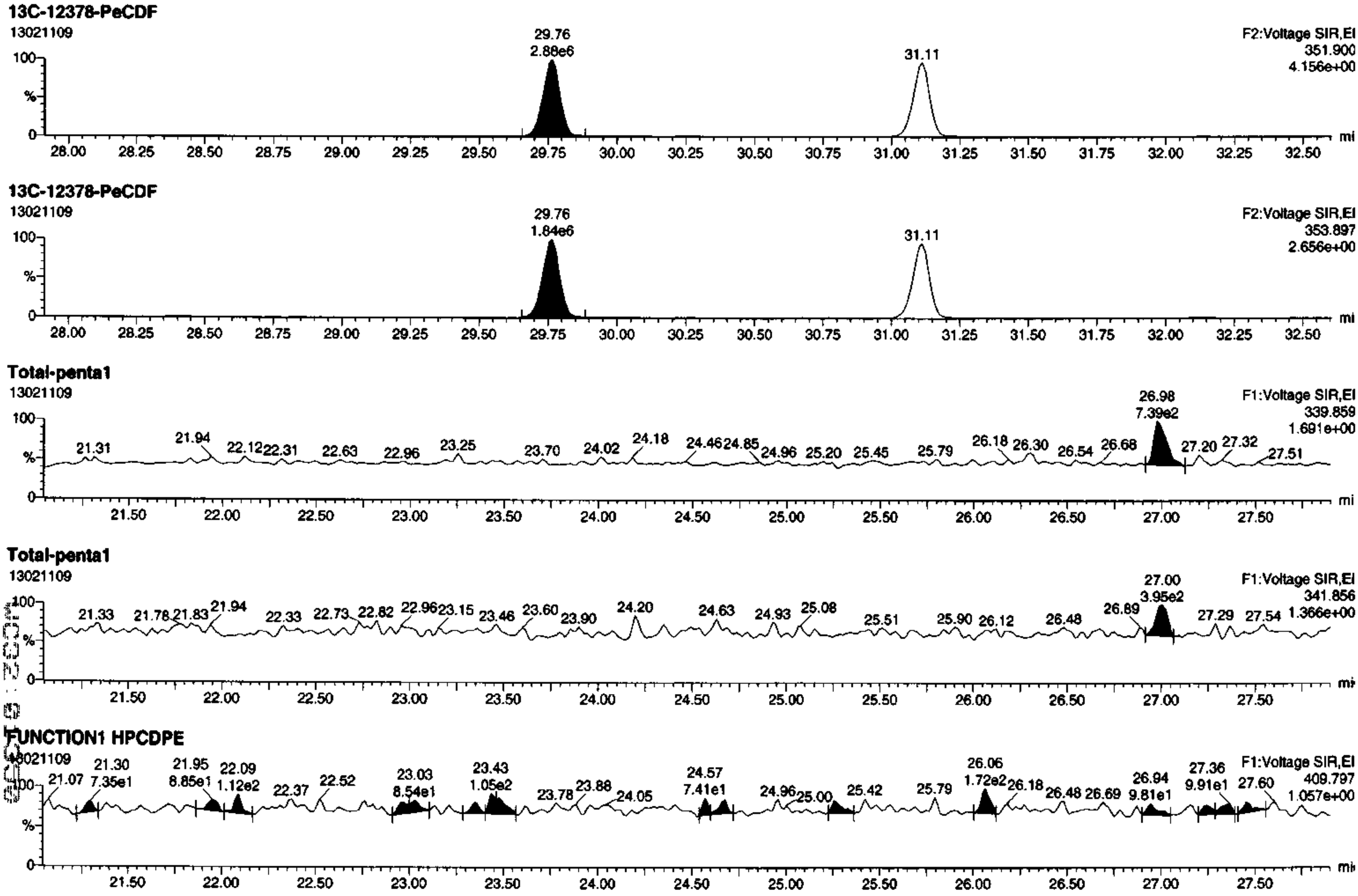

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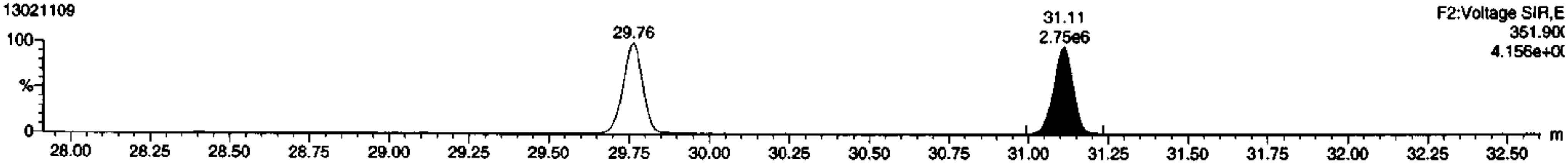
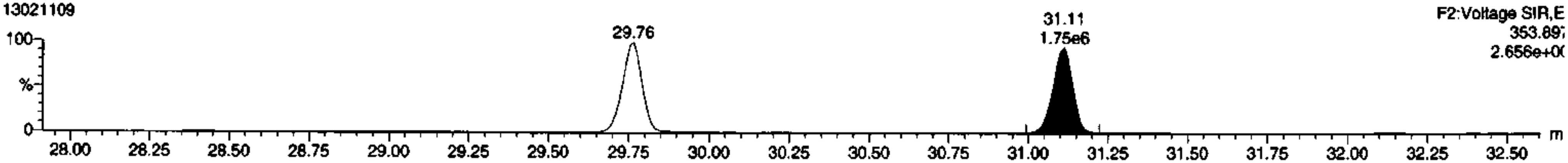
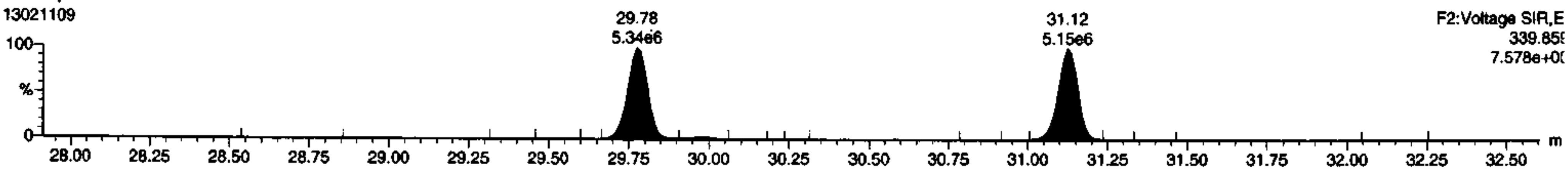
13C-23478-PeCDF



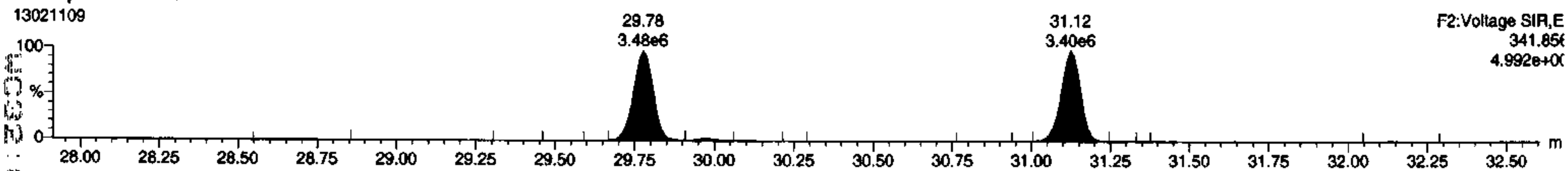
13C-23478-PeCDF



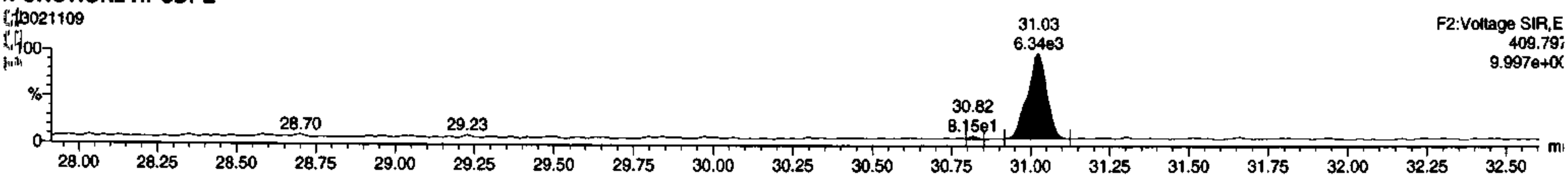
Total-pentafurans



Total-pentafurans



FUNCTION2 HPCDPE



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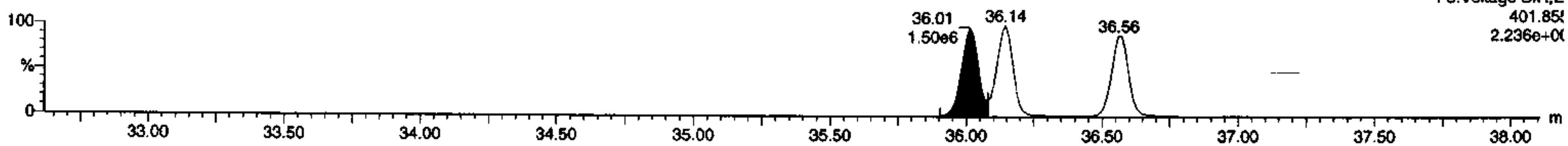
Printed: Tuesday, February 12, 2013 09:36:29 Pacific Standard Time

ID: CS4, Name: 13021109, Date: 11-Feb-2013, Time: 18:16:11, Conditions: AUTOSPEC01, User: pk

13C-123478-HxCDD
13021109



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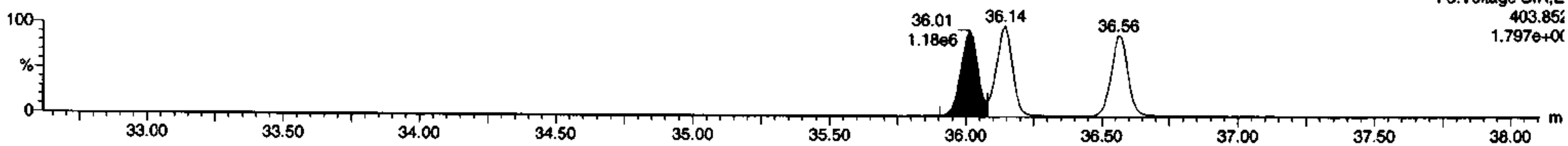
13021109



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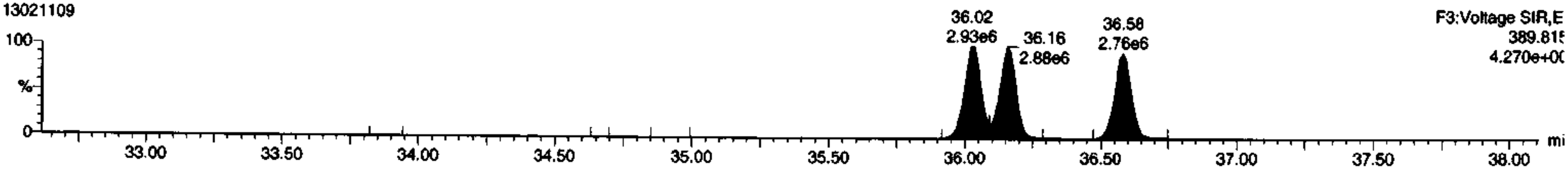

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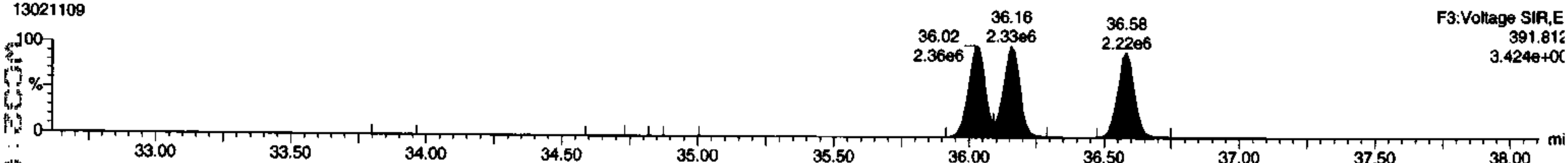

FUNCTION3 PFK
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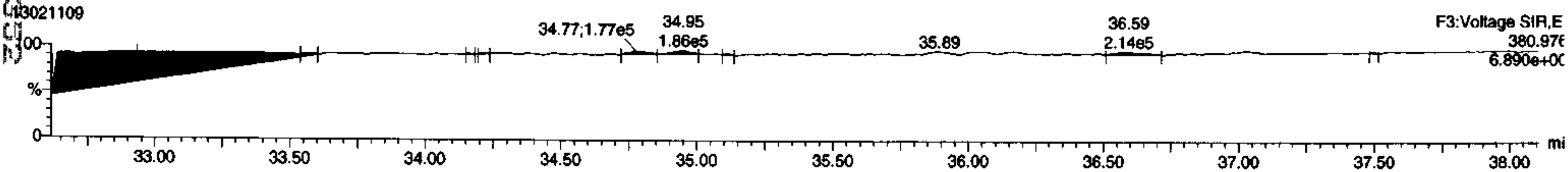

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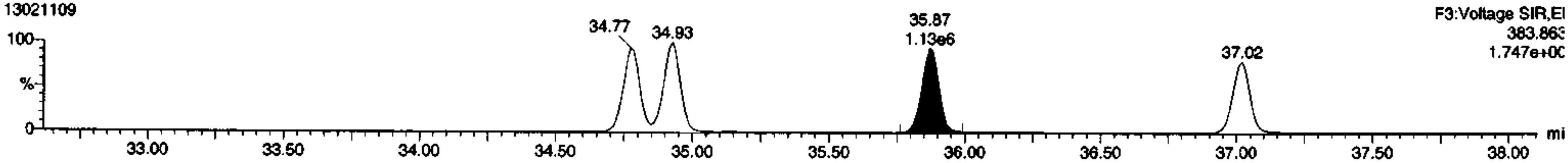
ID: CS4, Name: 13021109, Date: 11-Feb-2013, Time: 18:16:11, Conditions: AUTOSPEC01, User: pk

13C-234678-HxCDF

13021109



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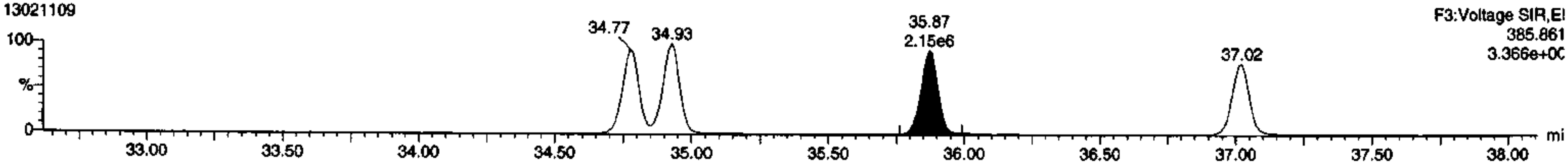

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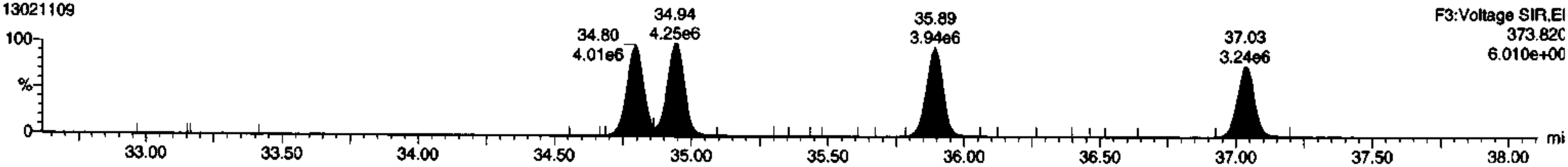

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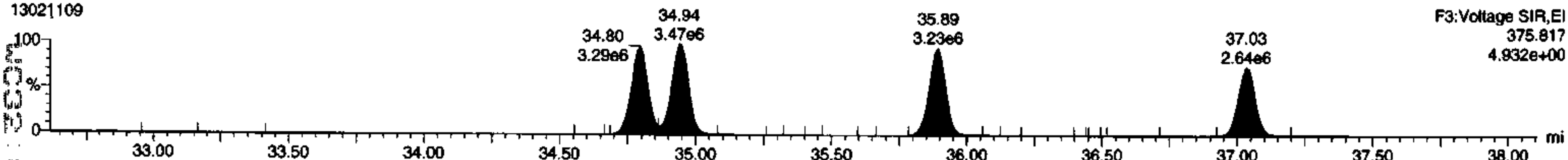
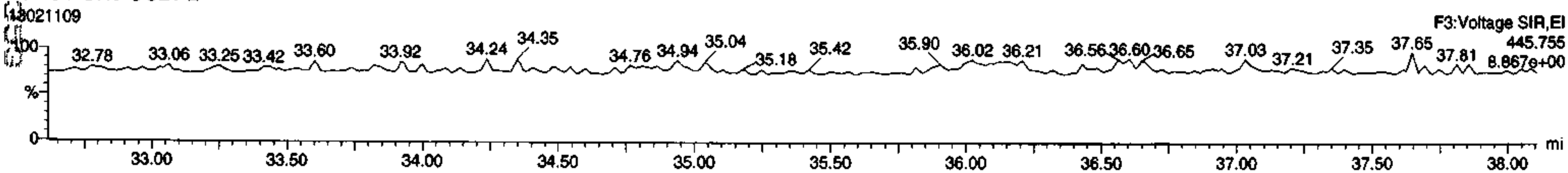


FUNCTION3 OCDPE

13021109



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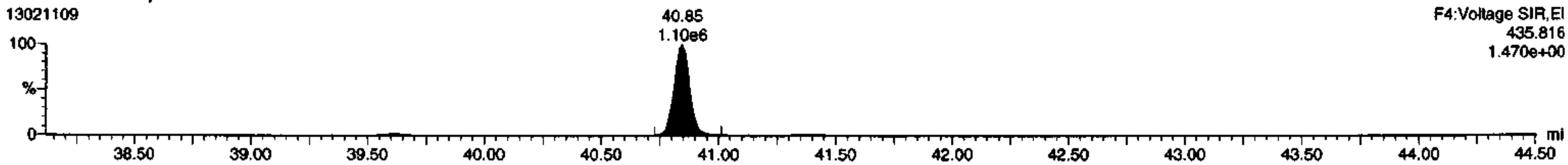

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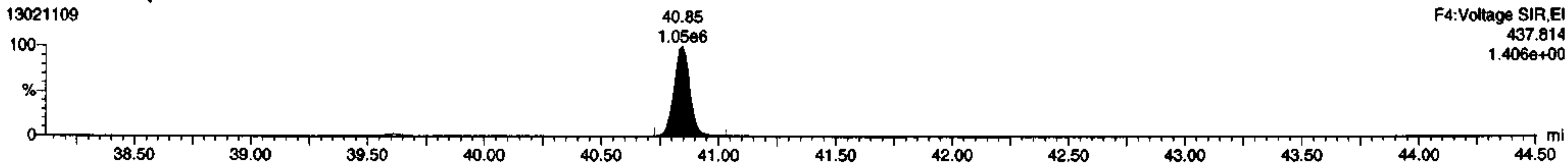

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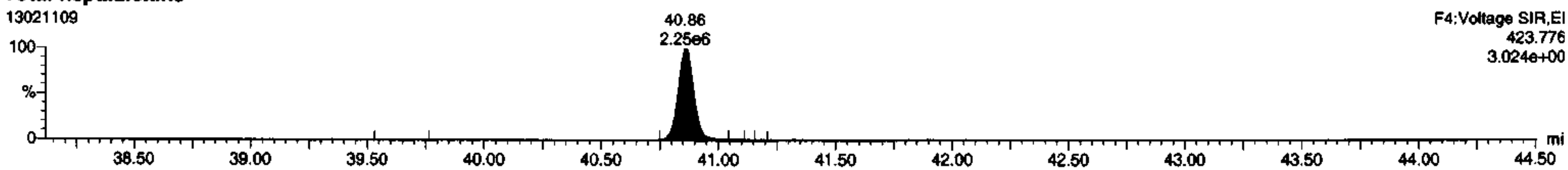

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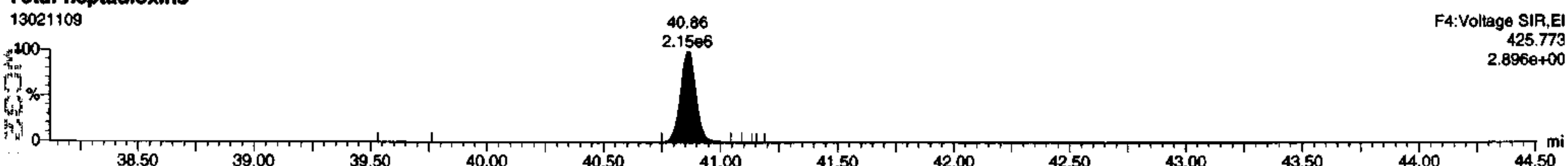

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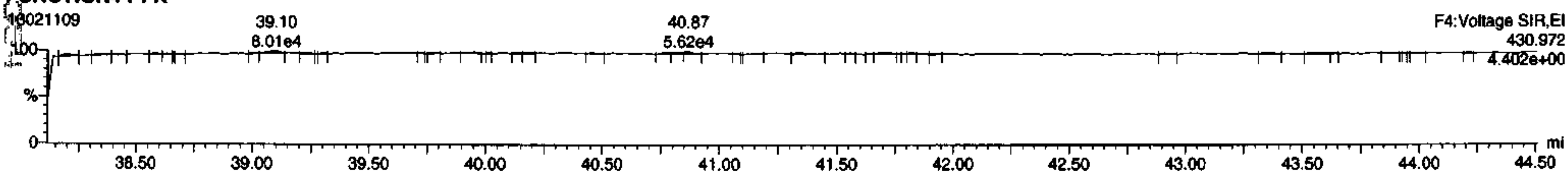

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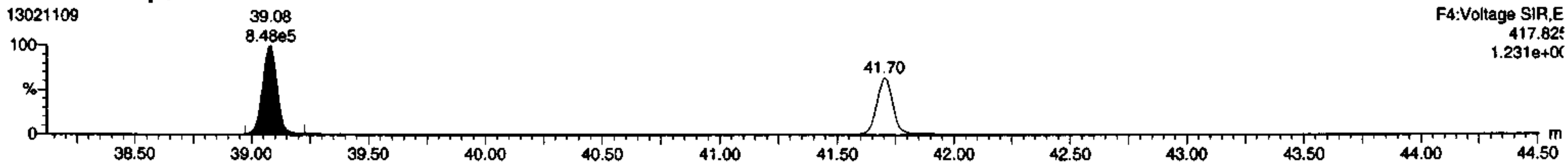

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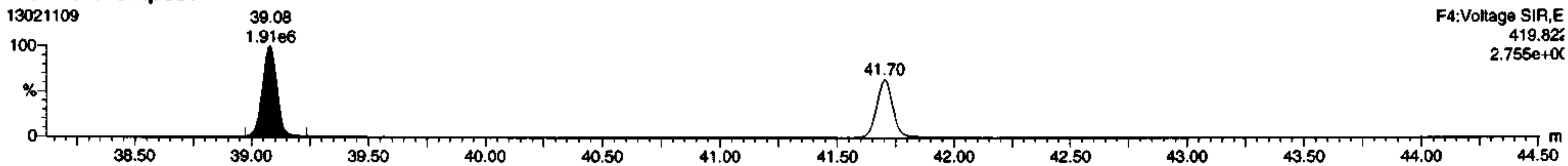

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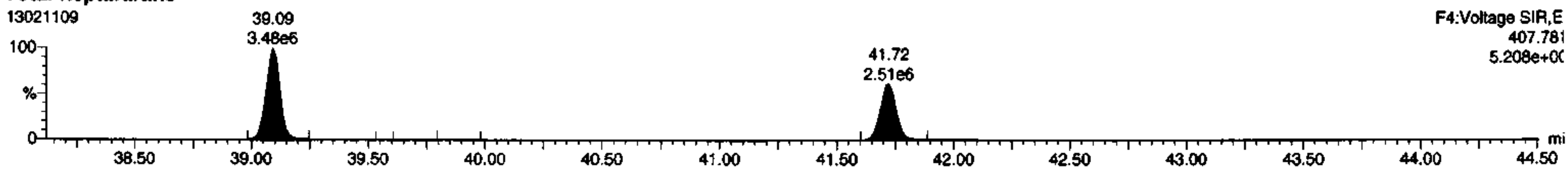

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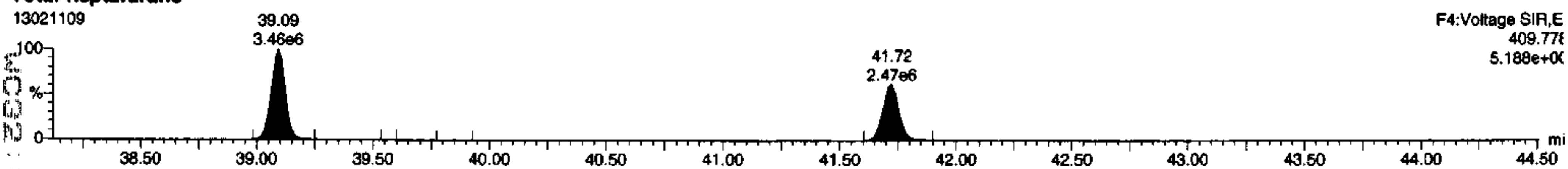
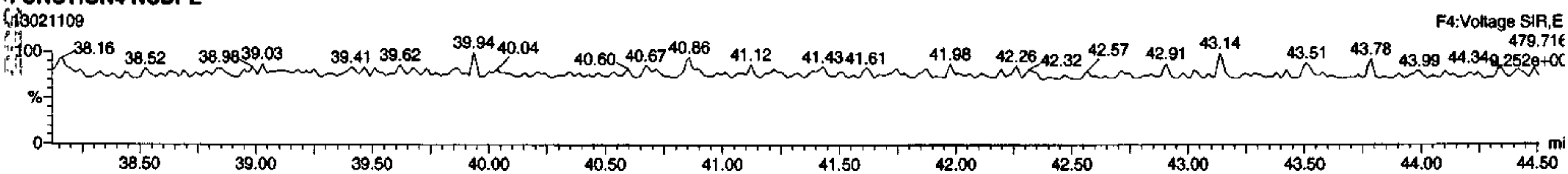


FUNCTION4 NCDPE


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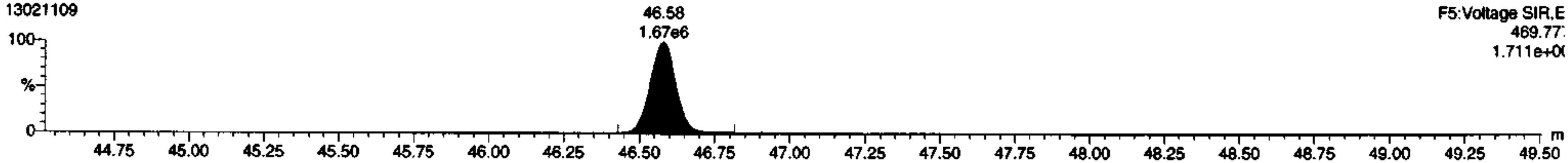
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:29 Pacific Standard Time

ID: CS4, Name: 13021109, Date: 11-Feb-2013, Time: 18:16:11, Conditions: AUTOSPEC01, User: pk

13C-OCDD



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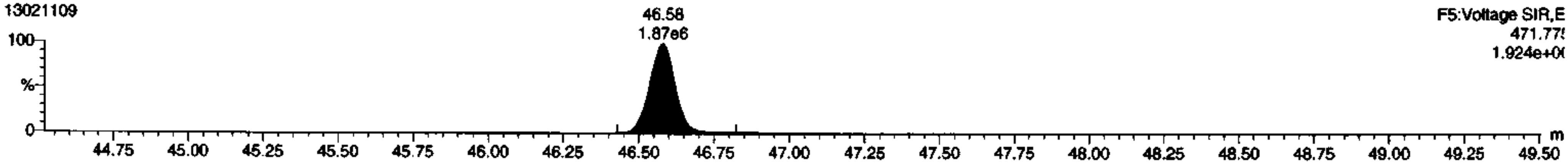

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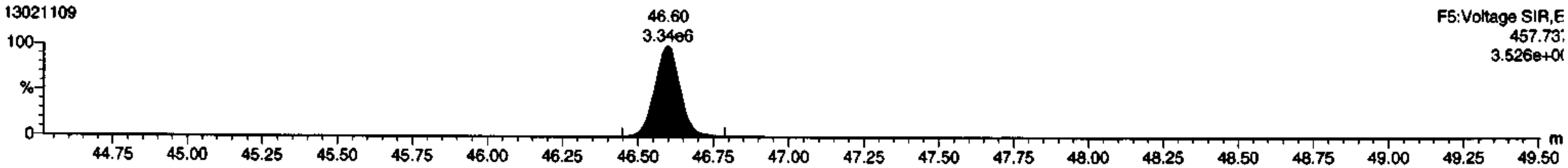

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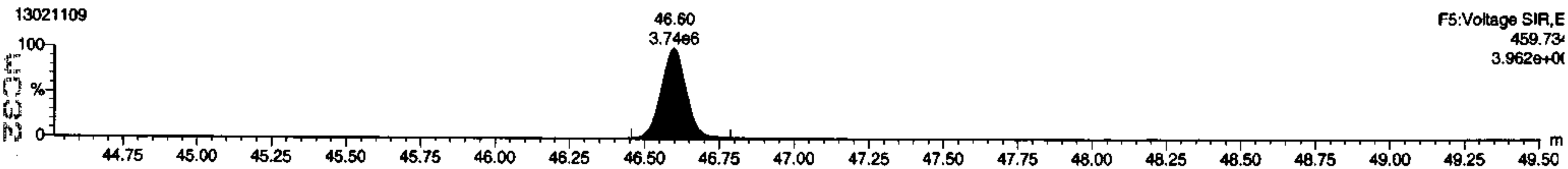

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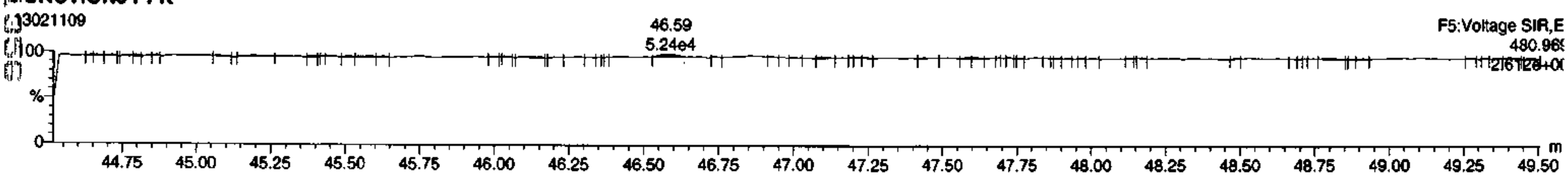
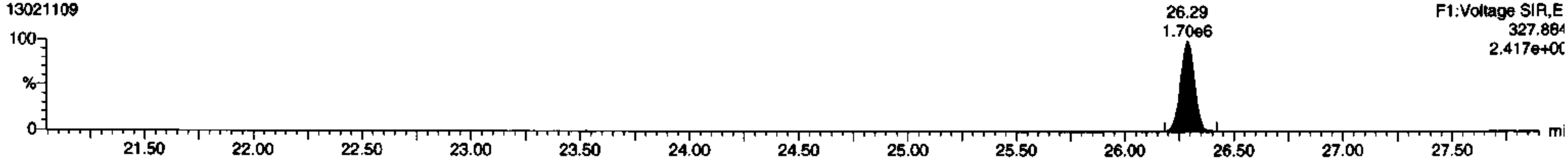


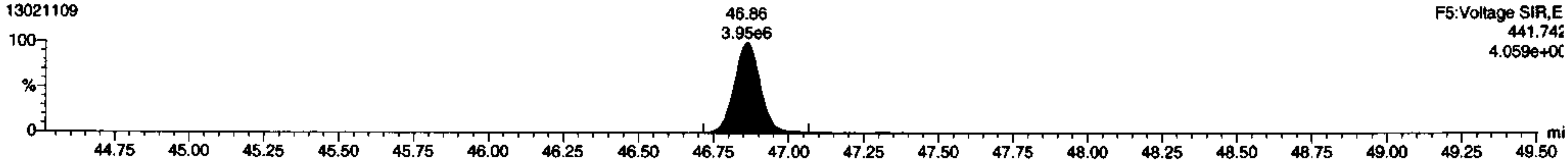
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:29 Pacific Standard Time

ID: CS4, Name: 13021109, Date: 11-Feb-2013, Time: 18:16:11, Conditions: AUTOSPEC01, User: pk

37CL-2378-TCDD



OCDF



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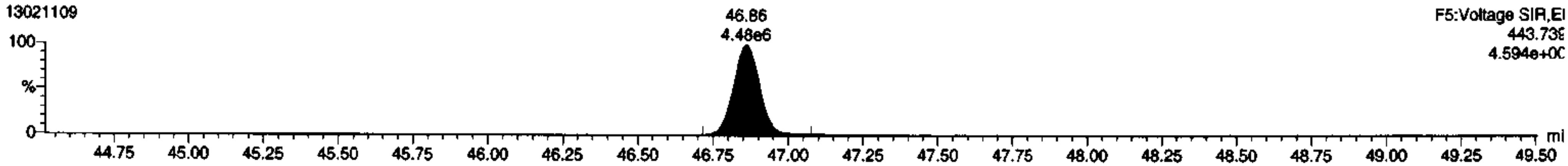
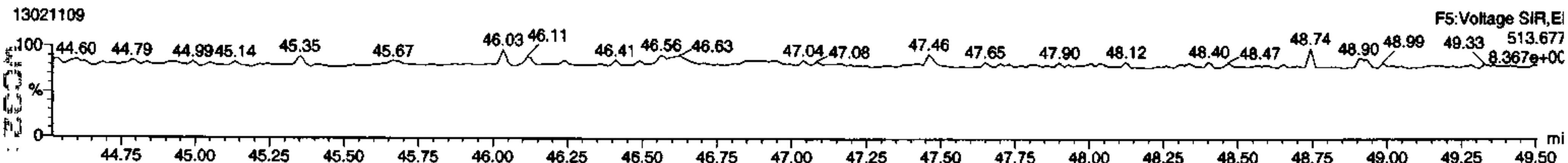


FUNCTIONS DCDPE



Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:39 Pacific Standard Time

Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 04 Feb 2013 12:23:30
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ID: CS5, Name: 13021110, Date: 11-Feb-2013, Time: 19:08:49, Conditions: AUTOSPEC01, User: pk

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Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:39 Pacific Standard Time

ID: CS5, Name: 13021110, Date: 11-Feb-2013, Time: 19:08:49, Conditions: AUTOSPEC01, User: pk

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	Total-penta1			0.00e0								
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	Total-heptafurans			3.63e7		1.231						2074.818
	Total-Furans			2.22e8		1.065						10603.812
	Total-tetradioxins			3.91e6		1.108						199.772
	Total-pentadioxins			2.04e7		1.001						1025.595
	Total-hexadioxins			5.18e7		0.937						3075.698
	Total-heptadioxins			1.35e7		1.029						1012.974
	Total-Dioxins			1.10e8		0.994						7337.202
	Total-TEQ			3.32e8								17941.013
	37CL-2378-TCDD	26.288	1.033	9.18e6		1.051			65861.4			223.756
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	FUNCTION2 PFK			6.95e5								0.000
	FUNCTION3 PFK			3.86e6								0.000
	FUNCTION4 PFK			9.04e5								
	FUNCTION5 PFK			0.00e0								
	FUNCTION1 HXCDPE			7.19e1								0.000
	FUNCTION1 HPCDPE			1.05e3								0.000
	FUNCTION2 HPCDPE			3.19e4								0.000
	FUNCTION3 OCDPE			1.13e3								0.000
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Dataset: P:\DIOXIN8290.PRO\130211IC.qld
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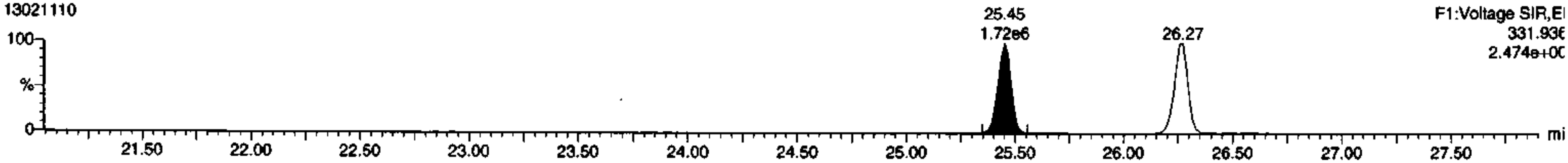
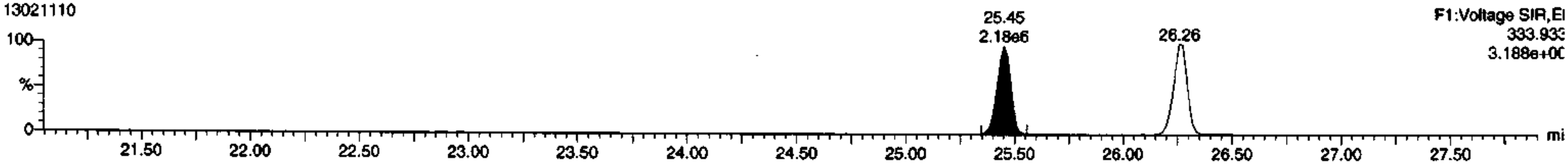
Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 04 Feb 2013 12:23:30
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: CS5, Name: 13021110, Date: 11-Feb-2013, Time: 19:08:49, Conditions: AUTOSPEC01, User: pk

13C-1234-TCDD
13021110



13C-1234-TCDD
13021110



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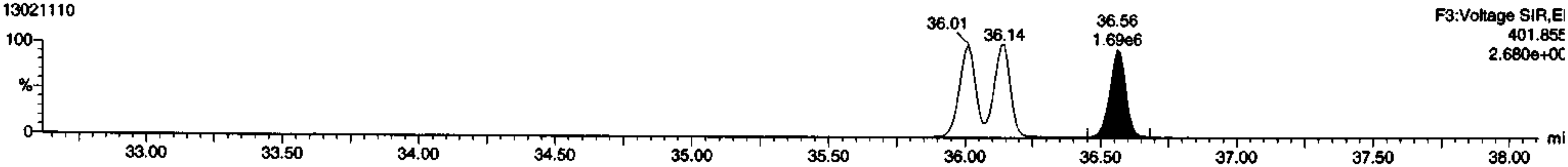
13021110



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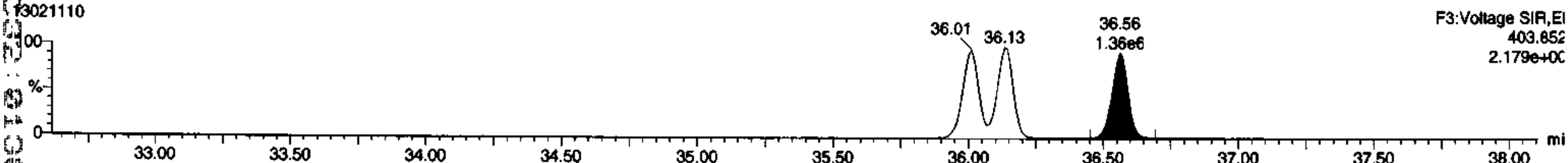

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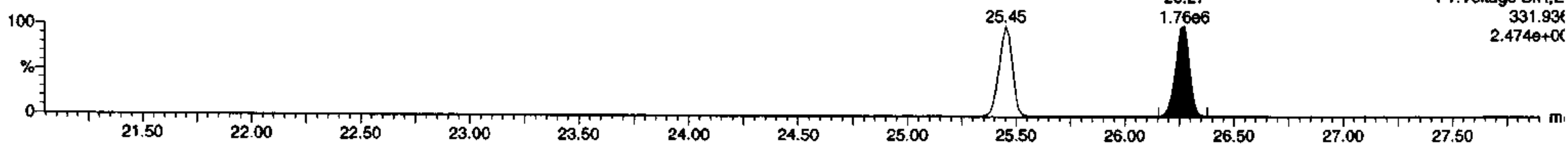
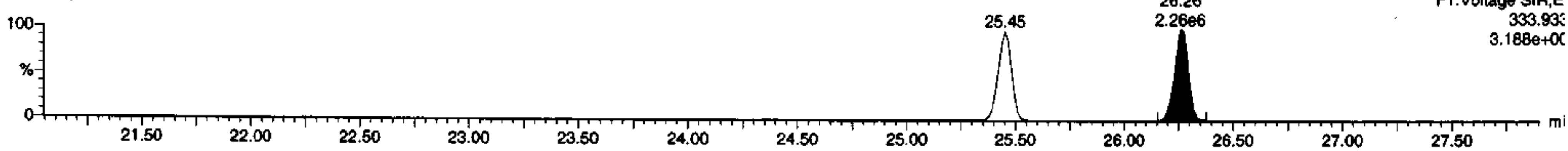
ID: CS5, Name: 13021110, Date: 11-Feb-2013, Time: 19:08:49, Conditions: AUTOSPEC01, User: pk

13C-2378-TCDD
13021110



13C-2378-TCDD
13021110



Total-tetradioxins
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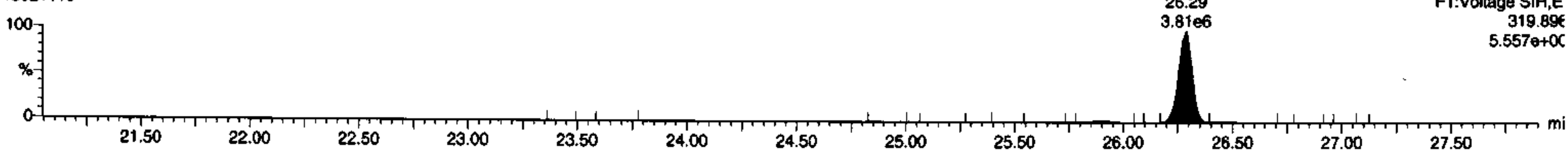
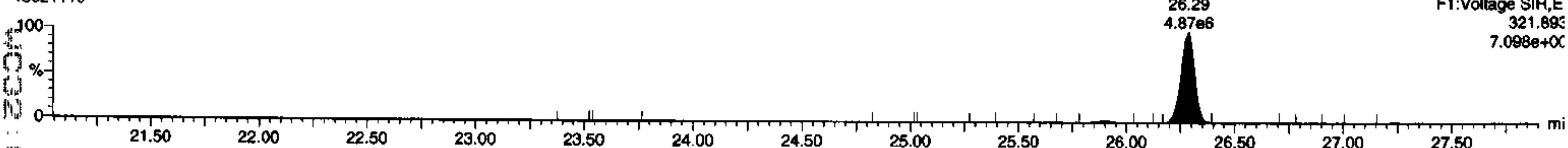
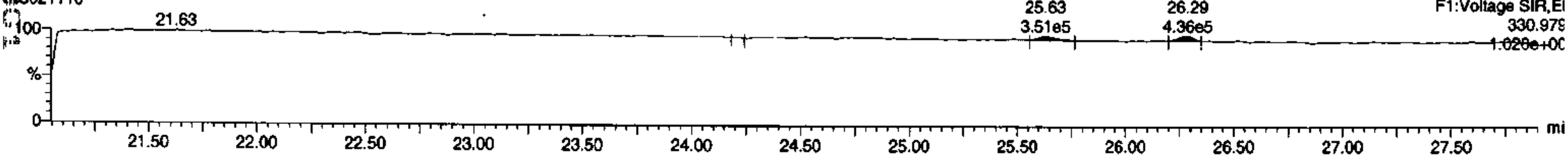


Total-tetradioxins
13021110



FUNCTION1 PFK
13021110



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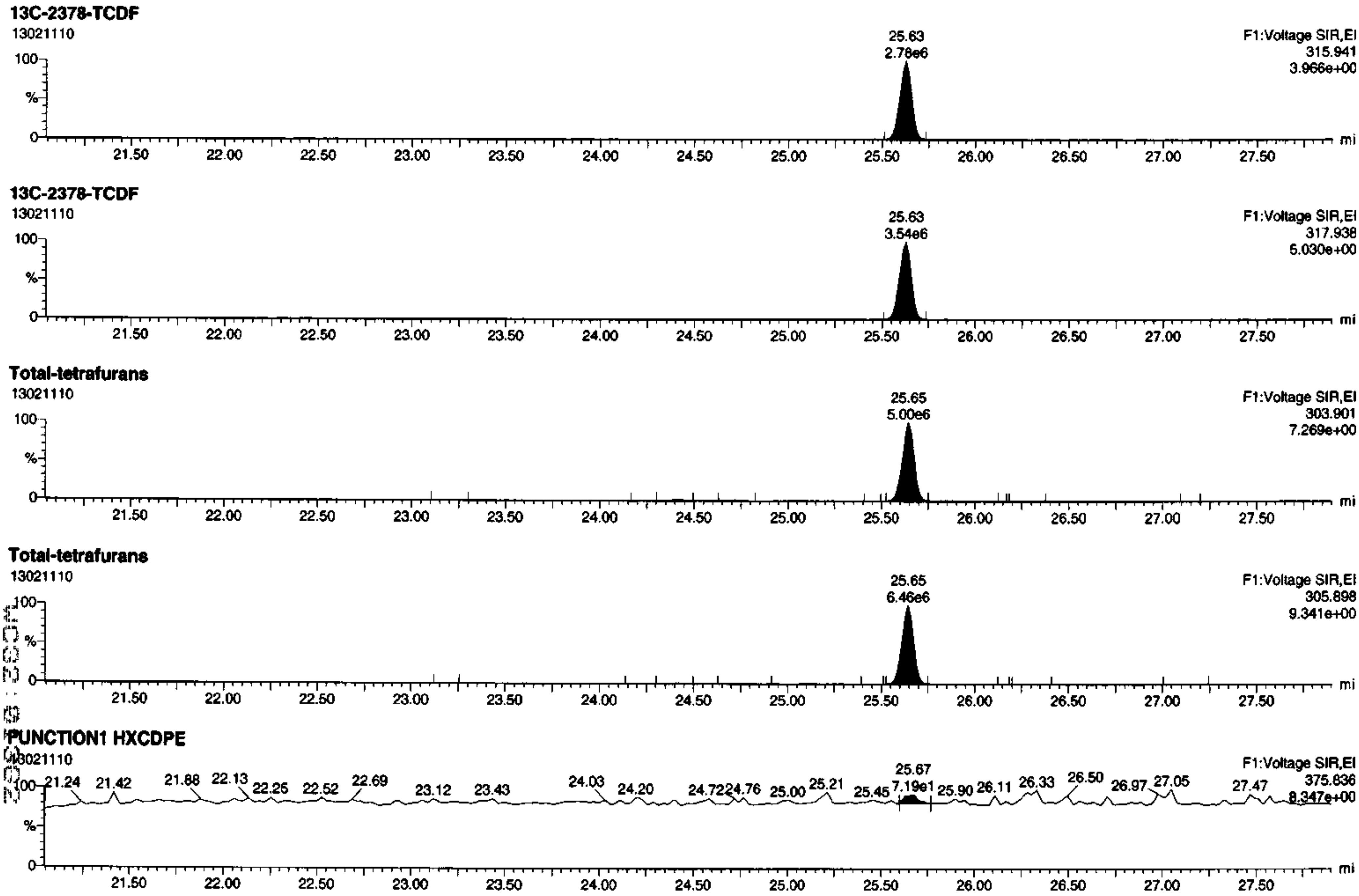

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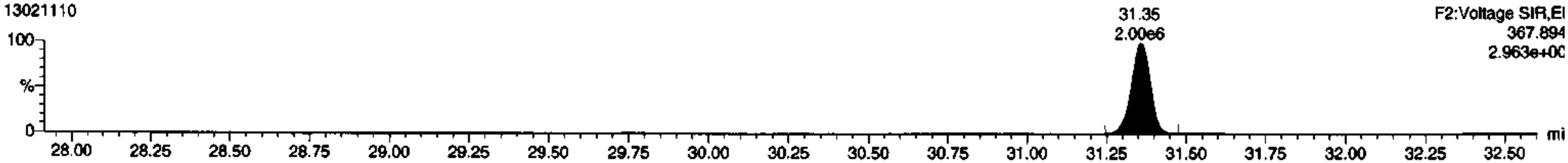
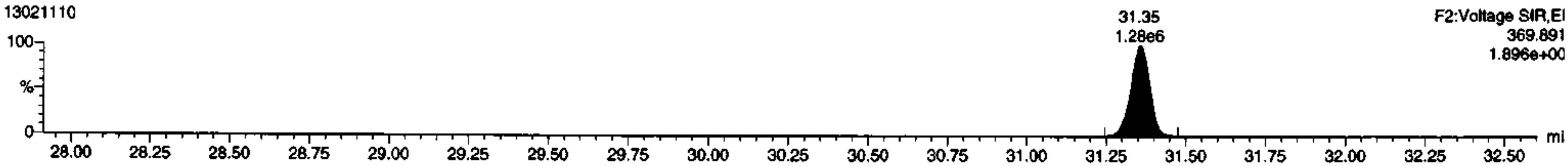
Printed: Tuesday, February 12, 2013 09:36:39 Pacific Standard Time

ID: CS5, Name: 13021110, Date: 11-Feb-2013, Time: 19:08:49, Conditions: AUTOSPEC01, User: pk

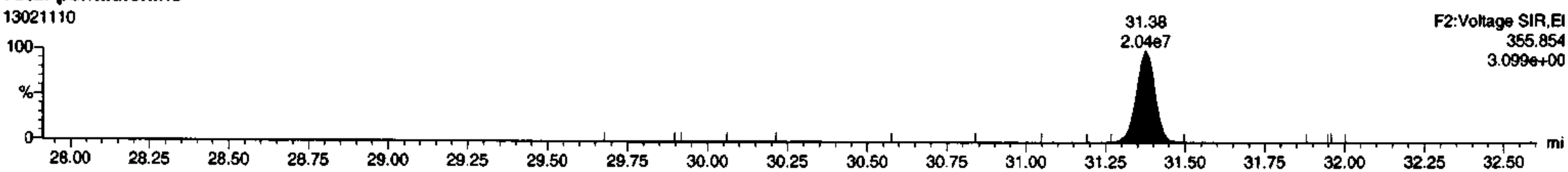
13C-12378-PeCDD



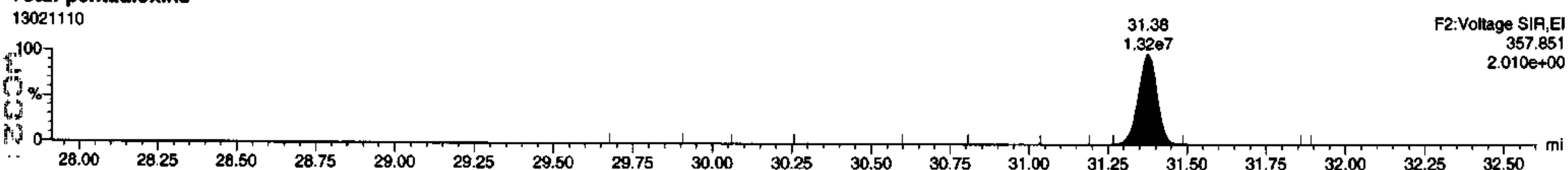
13C-12378-PeCDD



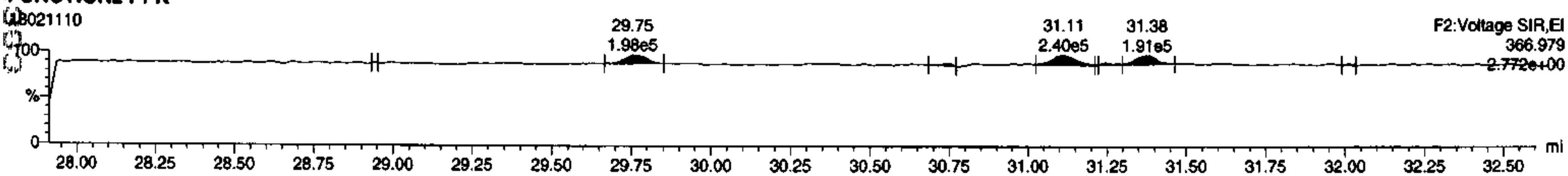
Total-pentadioxins



Total-pentadioxins



FUNCTION2 PFK



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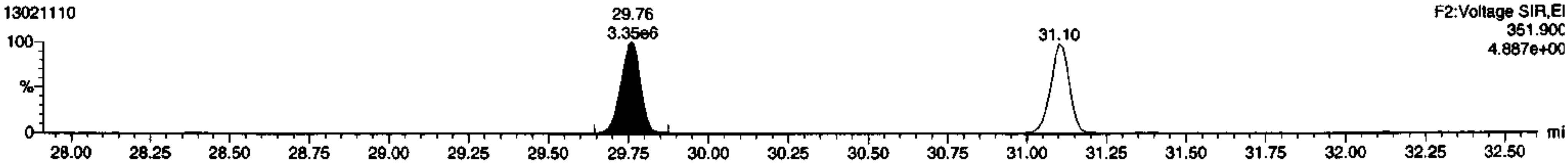
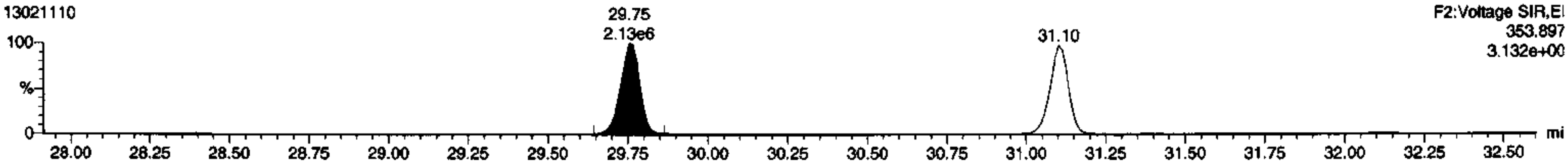
ID: CS5, Name: 13021110, Date: 11-Feb-2013, Time: 19:08:49, Conditions: AUTOSPEC01, User: pk

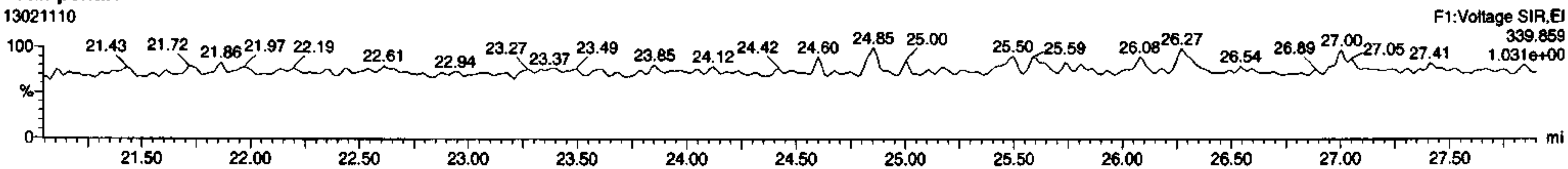
13C-12378-PeCDF



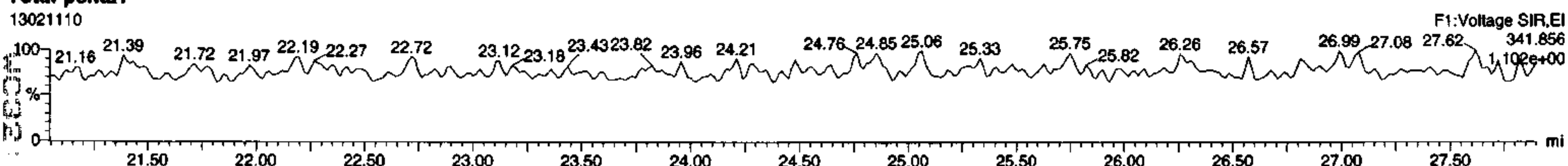
13C-12378-PeCDF



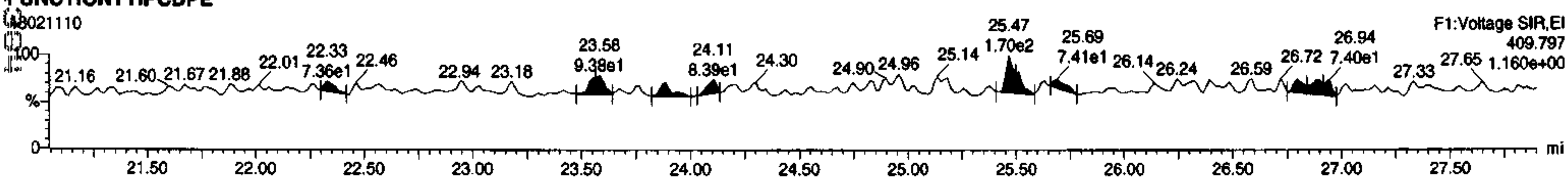
Total-penta1



Total-penta1



FUNCTION1 HPCDPE



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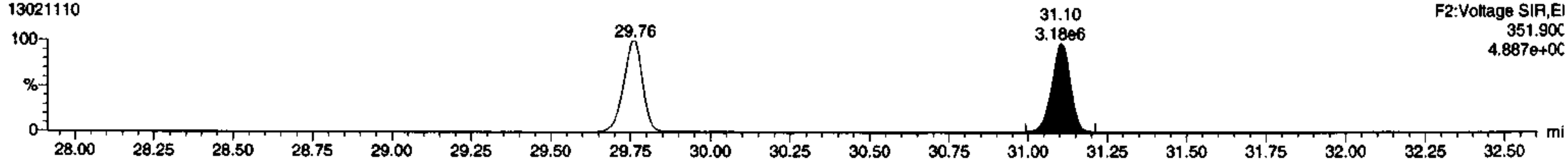
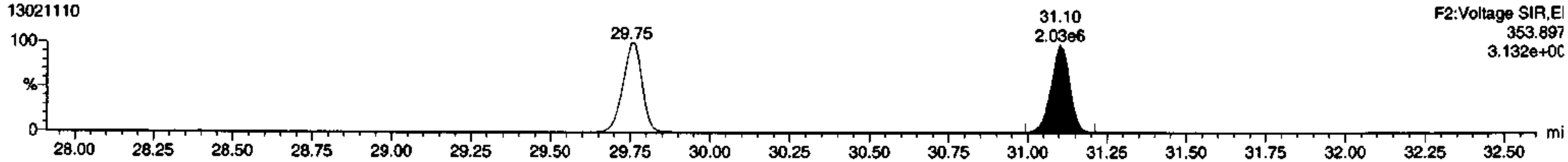
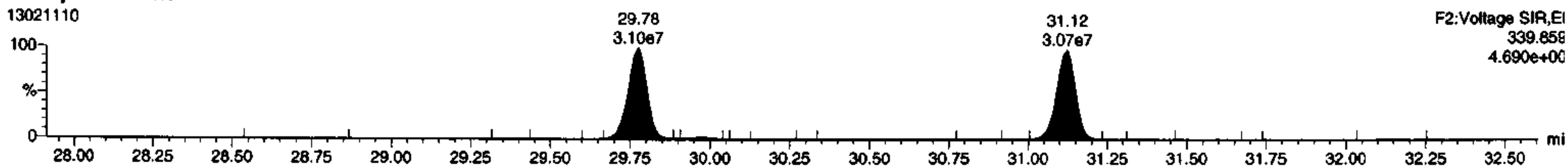
13C-23478-PeCDF



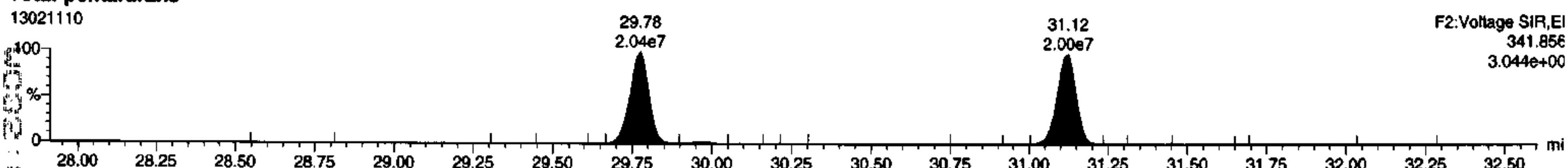
13C-23478-PeCDF



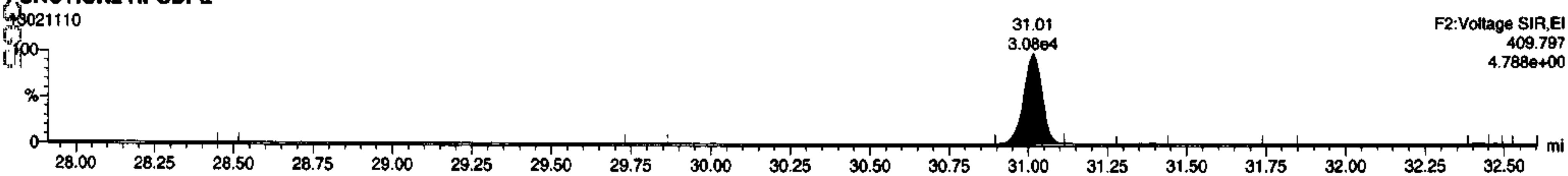
Total-pentafurans



Total-pentafurans



FUNCTION2 HPCDPE



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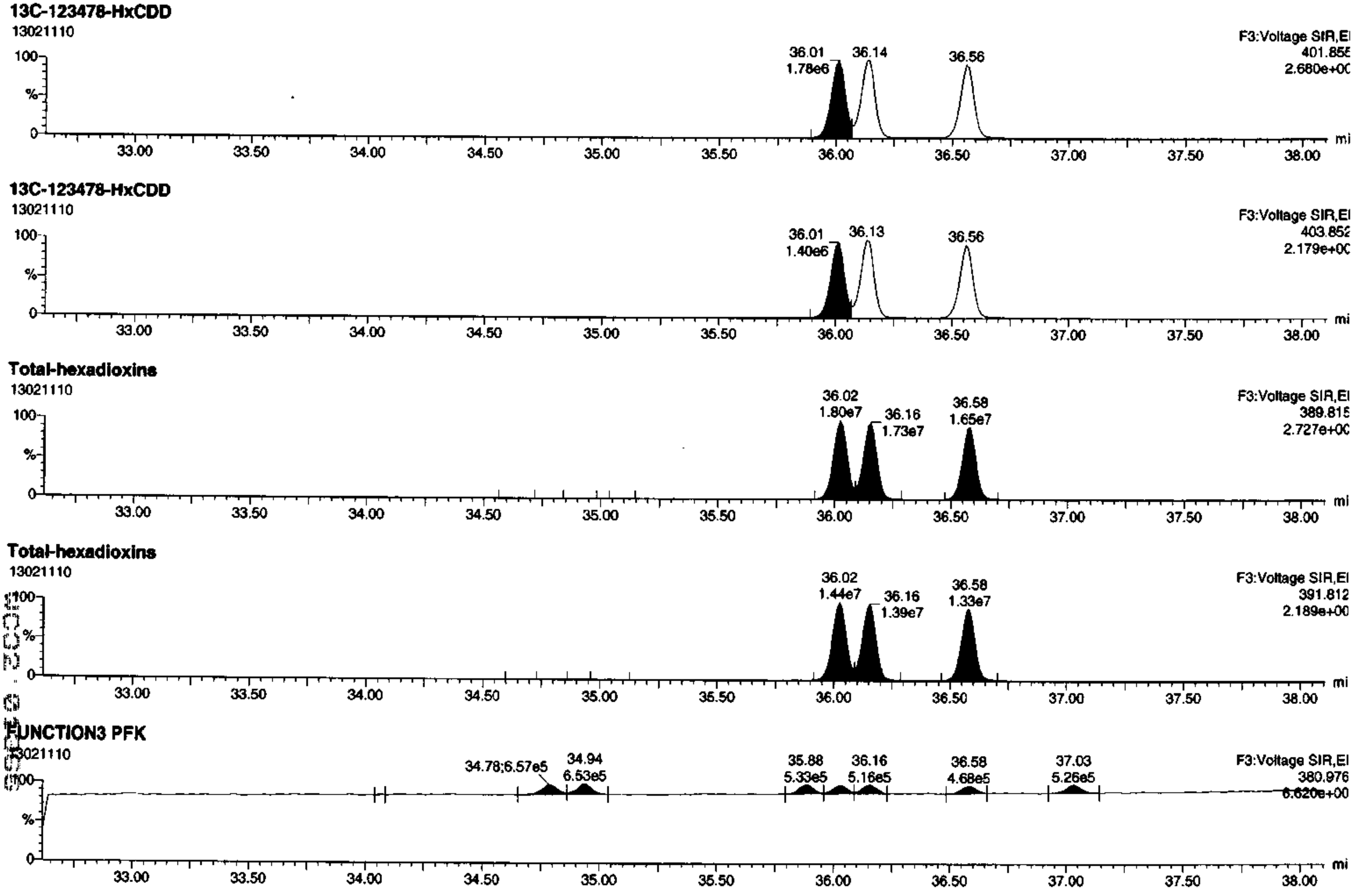
Printed: Tuesday, February 12, 2013 09:36:39 Pacific Standard Time

ID: CS5, Name: 13021110, Date: 11-Feb-2013, Time: 19:08:49, Conditions: AUTOSPEC01, User: pk



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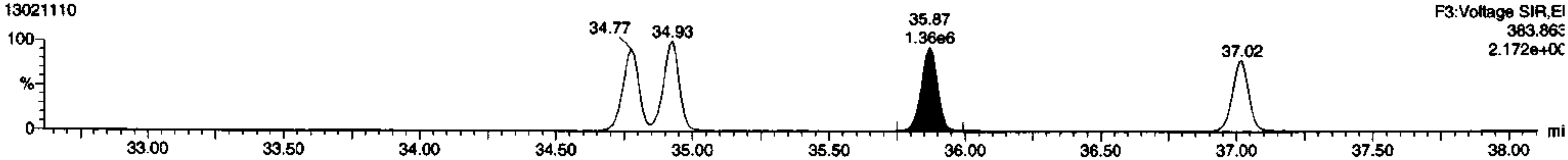
13C-234678-HxCDF



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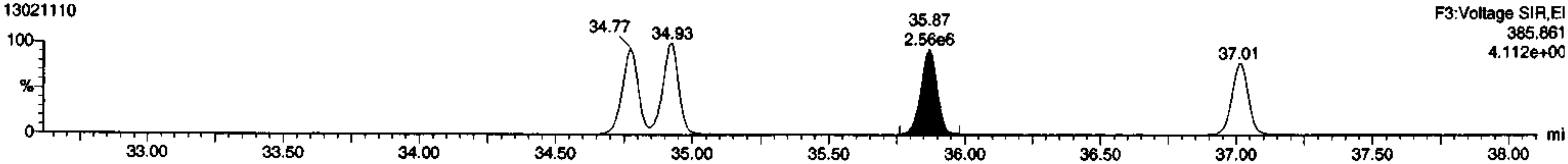
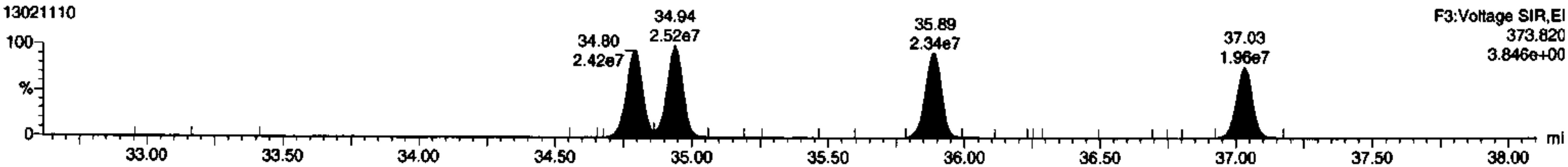
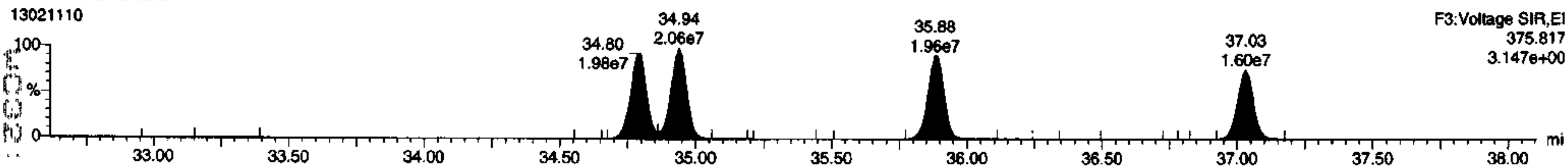


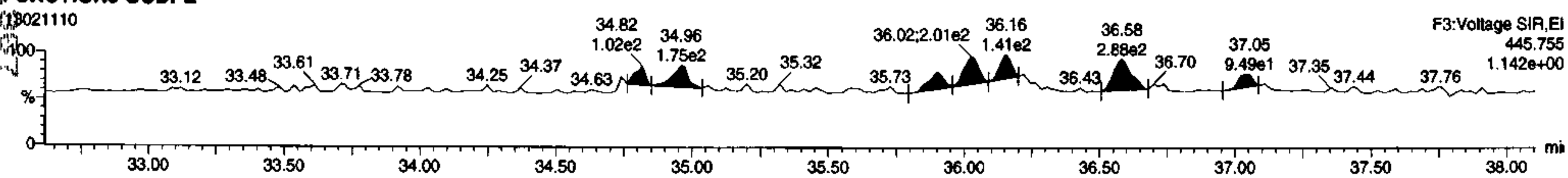
Total-hexafurans



Total-hexafurans



FUNCTION3 OCDPE



Dataset: P:\DIOXIN8290.PRO\130211IC.qld
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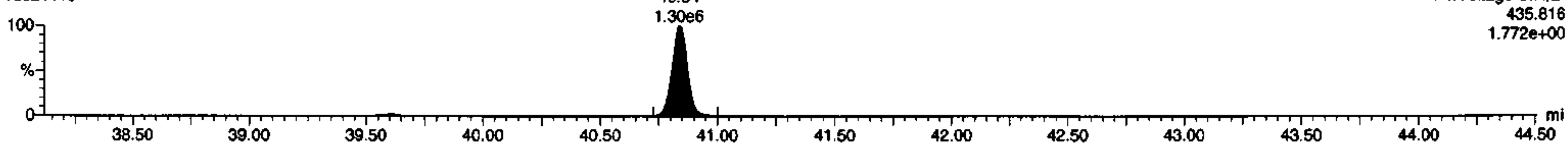
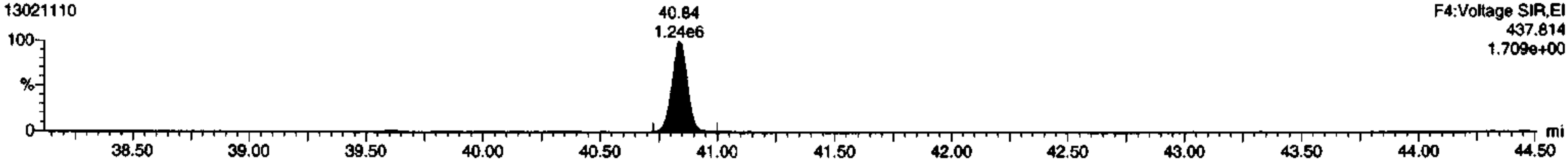
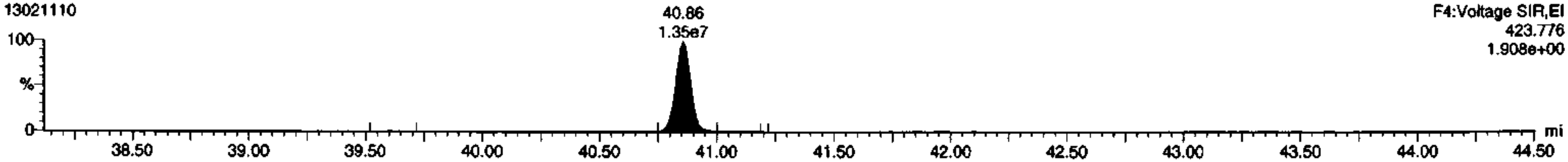
13C-1234678-HpCDD
13021110



13C-1234678-HpCDD
13021110



Total-heptadioxins
13021110



Total-heptadioxins
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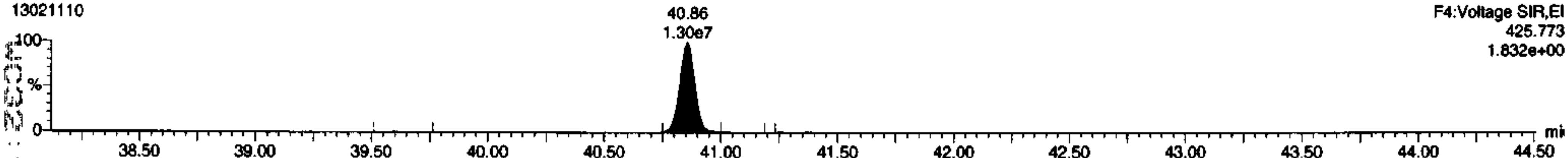
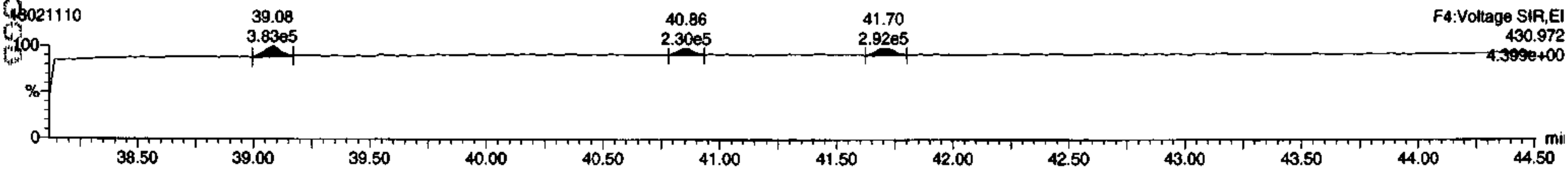


FUNCTION4 PFK
13021110



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Printed: Tuesday, February 12, 2013 09:36:39 Pacific Standard Time

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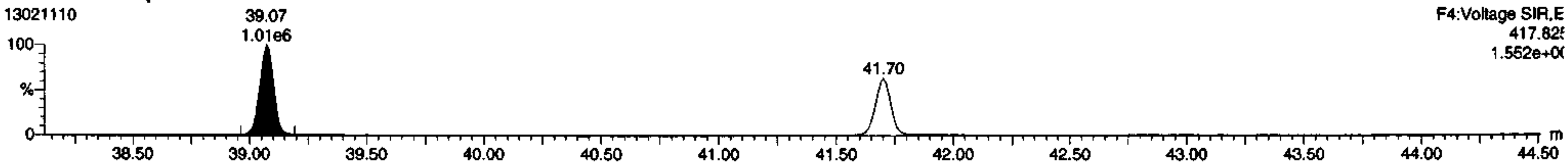
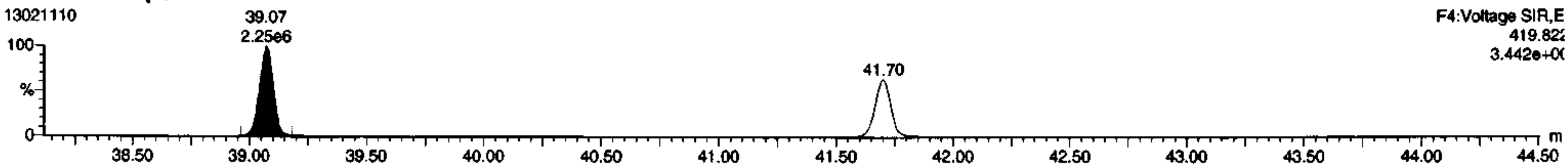
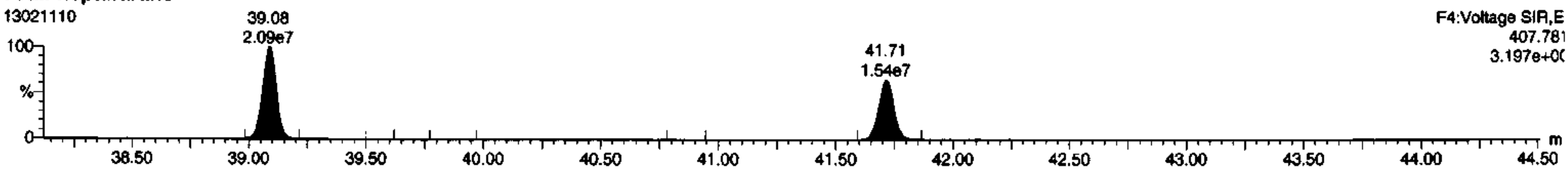
13C-1234678-HpCDF



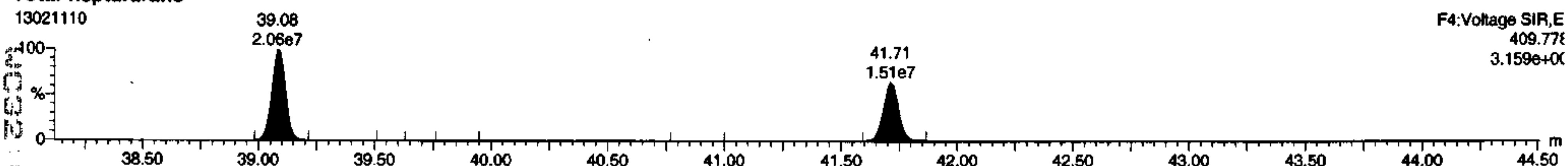
13C-1234678-HpCDF



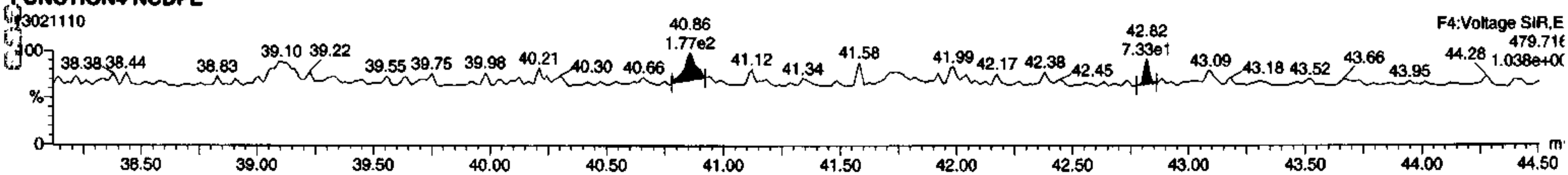
Total-heptafurans



Total-heptafurans



FUNCTION4 NCDPE



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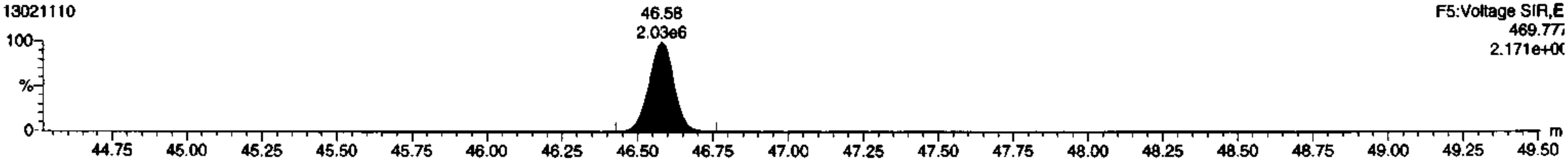
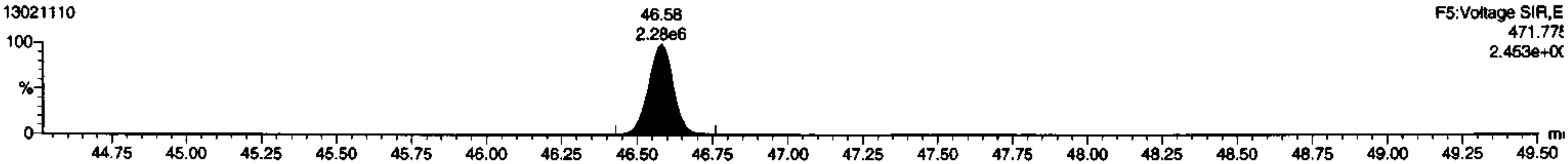
ID: CS5, Name: 13021110, Date: 11-Feb-2013, Time: 19:08:49, Conditions: AUTOSPEC01, User: pk

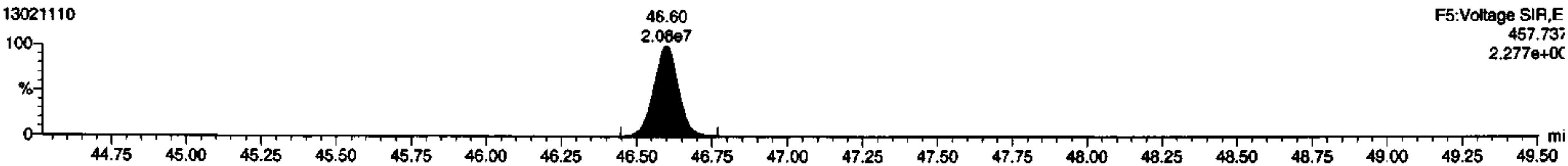
13C-OCDD



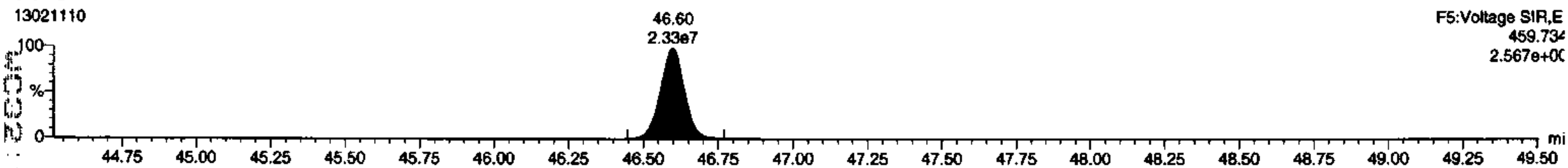
13C-OCDD



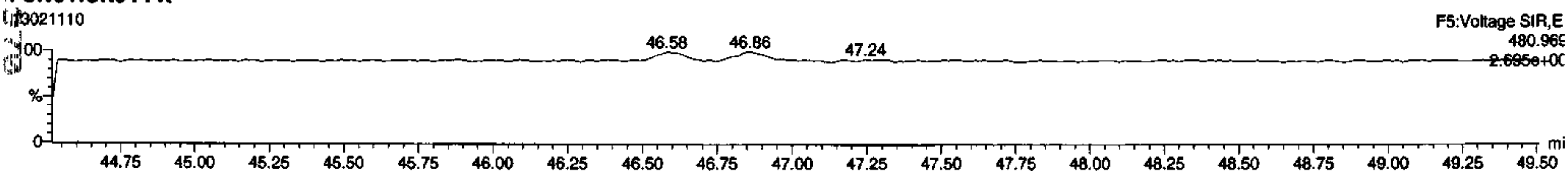
OCDD



OCDD



FUNCTION5 PFK



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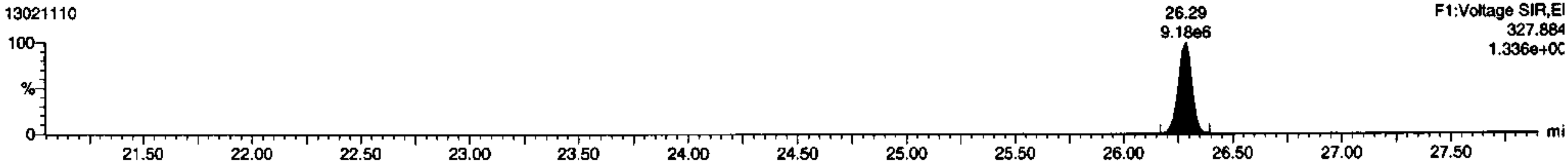
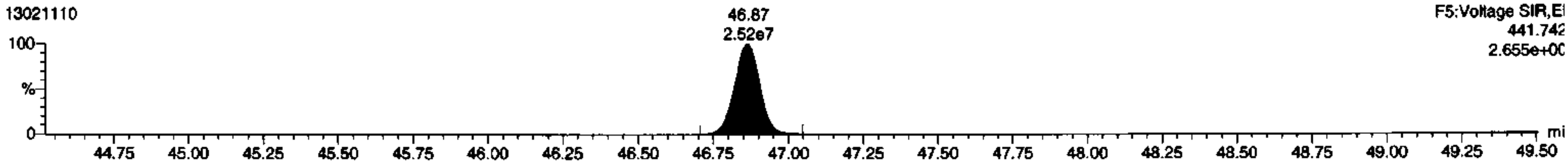
ID: CS5, Name: 13021110, Date: 11-Feb-2013, Time: 19:08:49, Conditions: AUTOSPEC01, User: pk

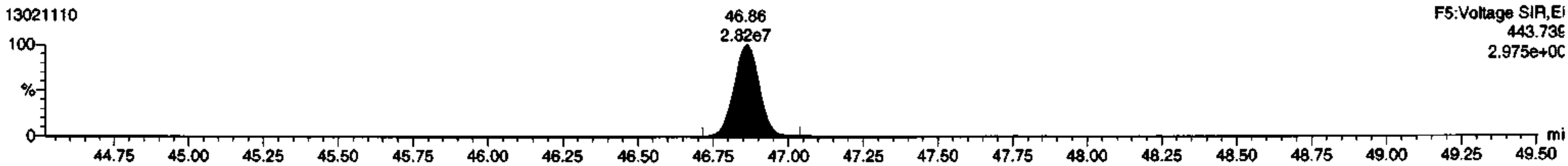
37CL-2378-TCDD



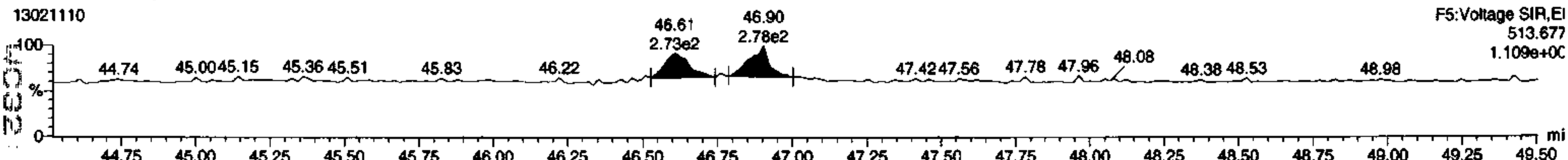
OCDF



OCDF



FUNCTIONS DCDPE



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Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: ICV, Name: 13021111, Date: 11-Feb-2013, Time: 20:01:34, Conditions: AUTOSPEC01, User: pk

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[redacted]	13C-1234678-HpCDD	40.836	1.117	9.87e5	9.50e5	0.838	1.039	1.050	5914.4	NO		106.431
[redacted]	13C-OCDD	46.572	1.274	1.30e6	1.46e6	0.675	0.888	0.890	7809.7	NO		187.770

Dataset: P:\DIOXIN8290.PRO\130211DATA.qld
Last Altered: Tuesday, February 12, 2013 09:40:18 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:41:37 Pacific Standard Time

ID: ICV, Name: 13021111, Date: 11-Feb-2013, Time: 20:01:34, Conditions: AUTOSPEC01, User: pk

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
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[redacted]	Total-pentadioxins			6.86e5		1.001						47.450
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[redacted]	FUNCTION2 PFK			3.52e5								0.000
[redacted]	FUNCTION3 PFK			1.31e6								0.000
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[redacted]	FUNCTION1 HXCDPE			0.00e0								
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[redacted]	FUNCTION3 OCDPE			0.00e0								
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WC02 · 01070

Dataset: P:\DIOXIN8290.PRO\130211DATA.qld

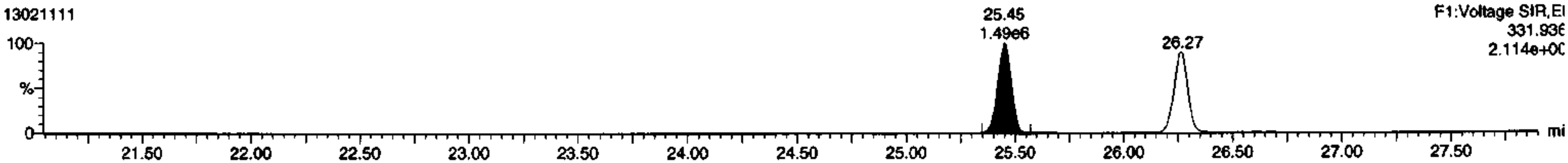
Last Altered: Tuesday, February 12, 2013 09:40:18 Pacific Standard Time

Printed: Tuesday, February 12, 2013 09:41:37 Pacific Standard Time

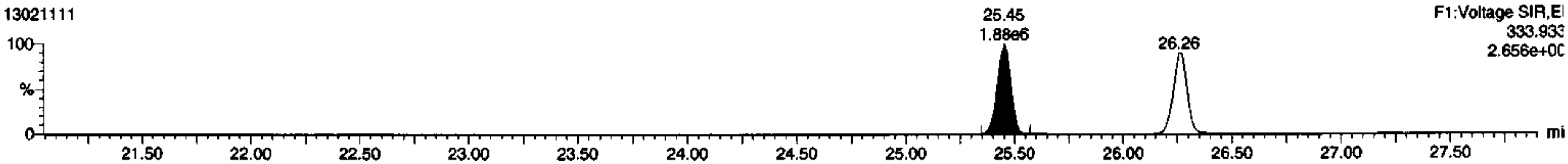
Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 04 Feb 2013 12:23:30
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: ICV, Name: 13021111, Date: 11-Feb-2013, Time: 20:01:34, Conditions: AUTOSPEC01, User: pk

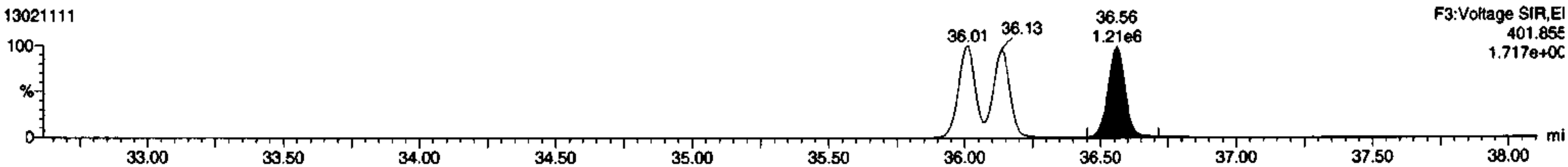
13C-1234-TCDD



13C-1234-TCDD



13C-123789-HxCDD



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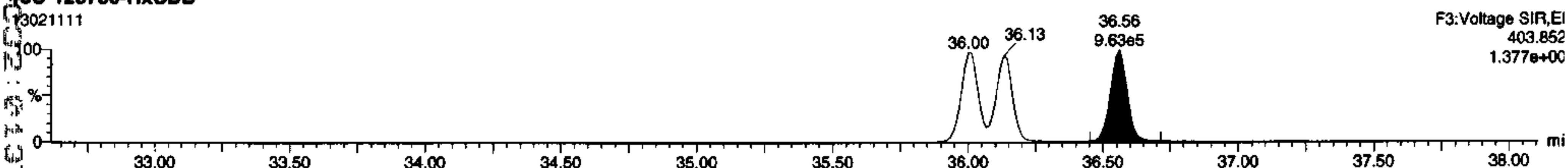
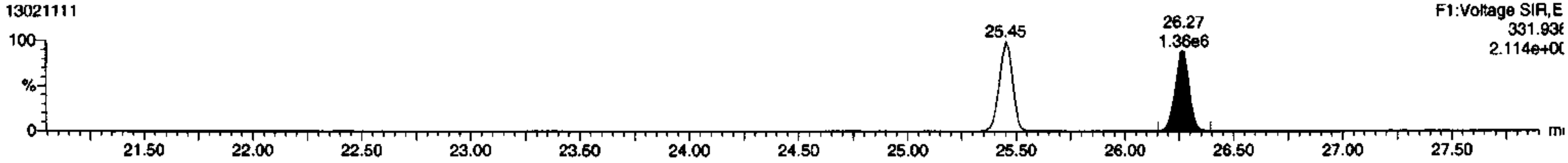


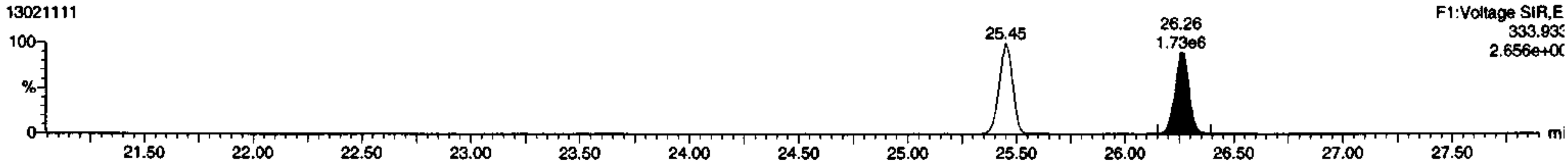
Dataset: P:\DIOXIN8290.PRO\130211DATA.qld
Last Altered: Tuesday, February 12, 2013 09:40:18 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:41:37 Pacific Standard Time

ID: ICV, Name: 13021111, Date: 11-Feb-2013, Time: 20:01:34, Conditions: AUTOSPEC01, User: pk

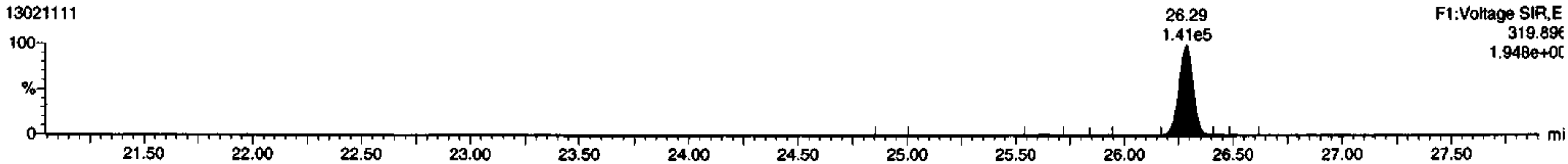
13C-2378-TCDD



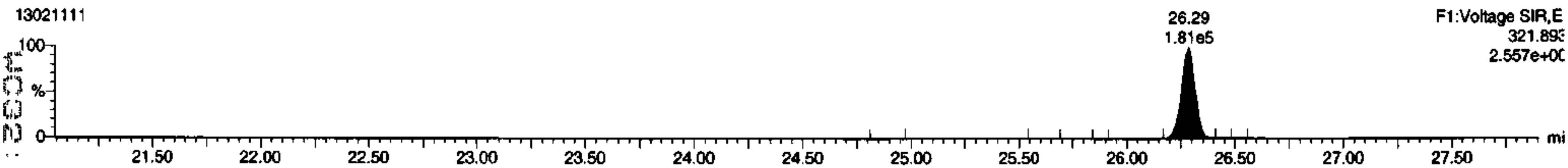
13C-2378-TCDD



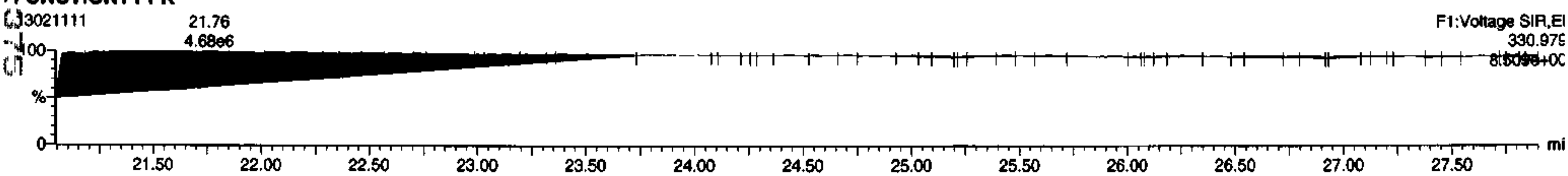
Total-tetradioxins



Total-tetradioxins

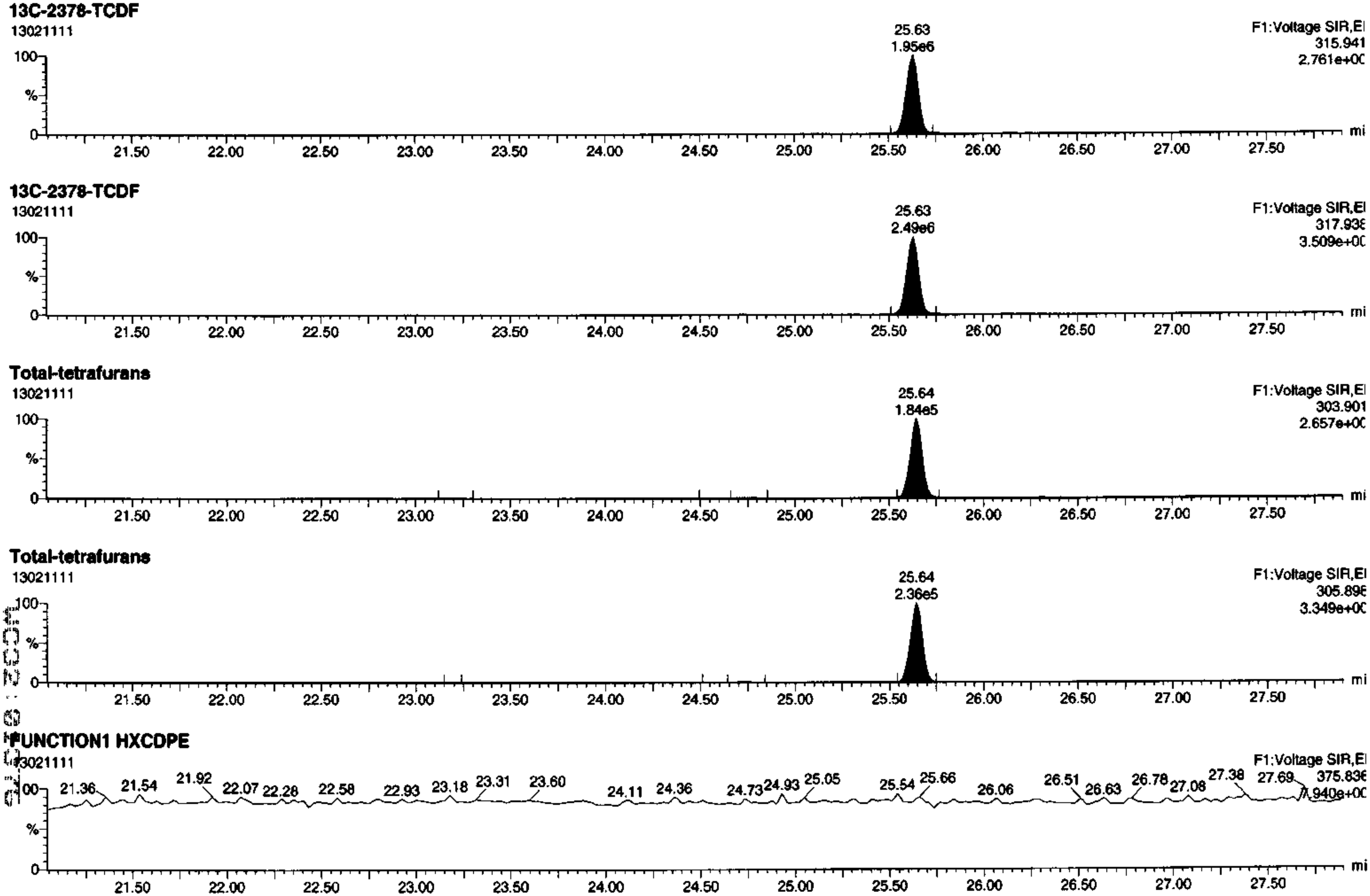


FUNCTION1 PFK



Dataset: P:\DIOXIN8290.PRO\130211DATA.qld
Last Altered: Tuesday, February 12, 2013 09:40:18 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:41:37 Pacific Standard Time

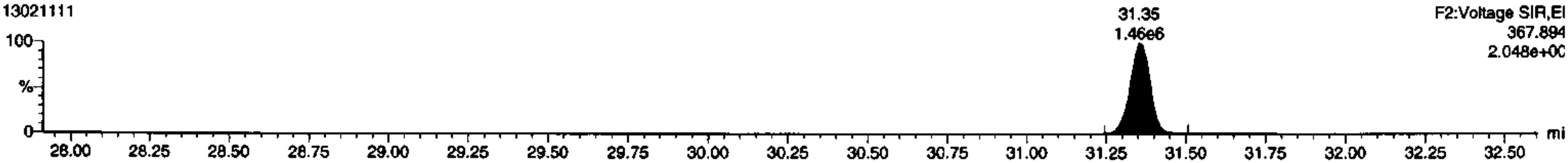
ID: ICV, Name: 13021111, Date: 11-Feb-2013, Time: 20:01:34, Conditions: AUTOSPEC01, User: pk



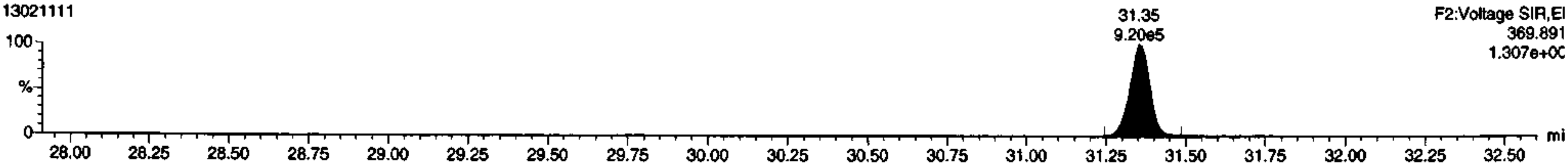
Dataset: P:\DIOXIN8290.PRO\130211DATA.qld
Last Altered: Tuesday, February 12, 2013 09:40:18 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:41:37 Pacific Standard Time

ID: ICV, Name: 13021111, Date: 11-Feb-2013, Time: 20:01:34, Conditions: AUTOSPEC01, User: pk

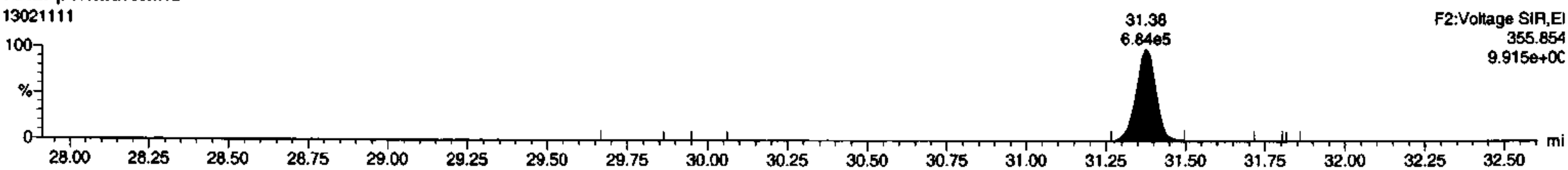
13C-12378-PeCDD



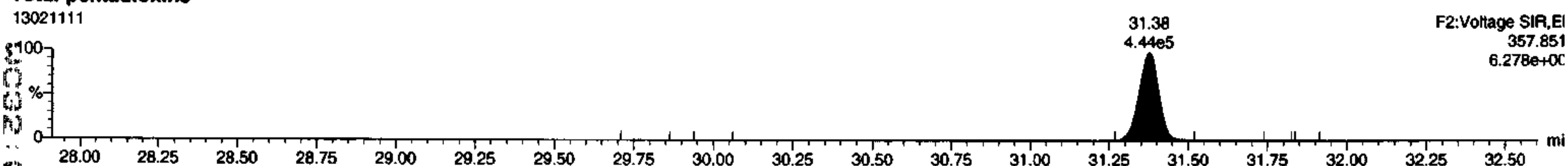
13C-12378-PeCDD



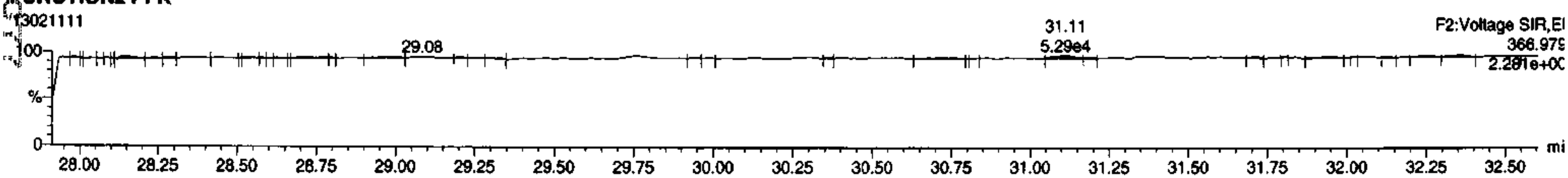
Total-pentadioxins



Total-pentadioxins



FUNCTION2 PFK



Dataset: P:\DIOXIN8290.PRO\130211DATA.qld

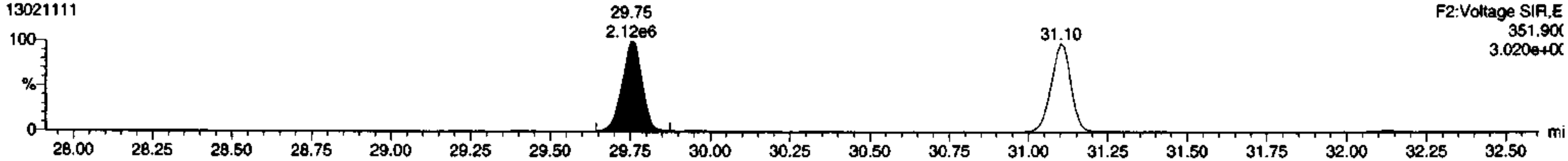
Last Altered: Tuesday, February 12, 2013 09:40:18 Pacific Standard Time

Printed: Tuesday, February 12, 2013 09:41:37 Pacific Standard Time

ID: ICV, Name: 13021111, Date: 11-Feb-2013, Time: 20:01:34, Conditions: AUTOSPEC01, User: pk

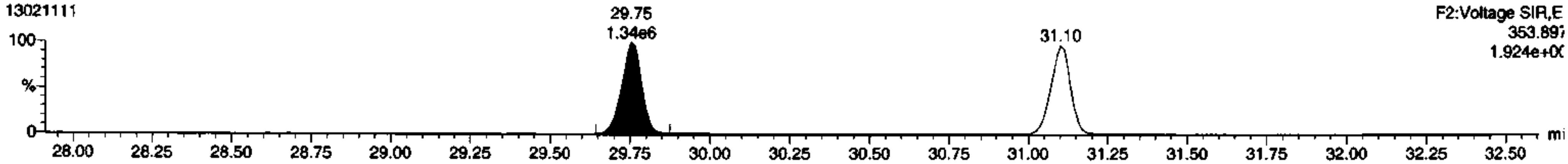
13C-12378-PeCDF

13021111



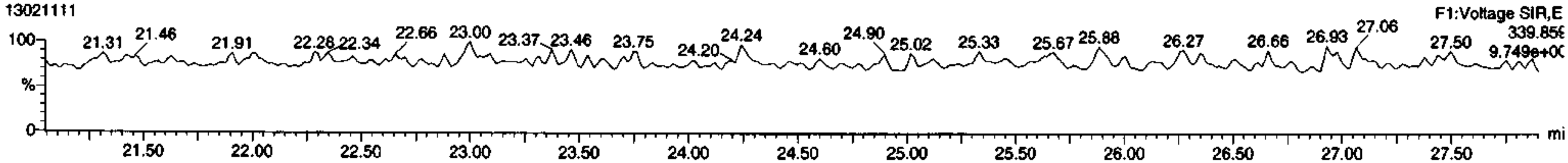
13C-12378-PeCDF

13021111



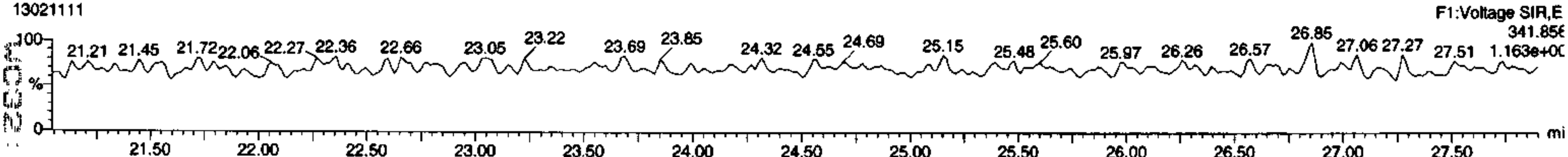
Total-penta1

13021111



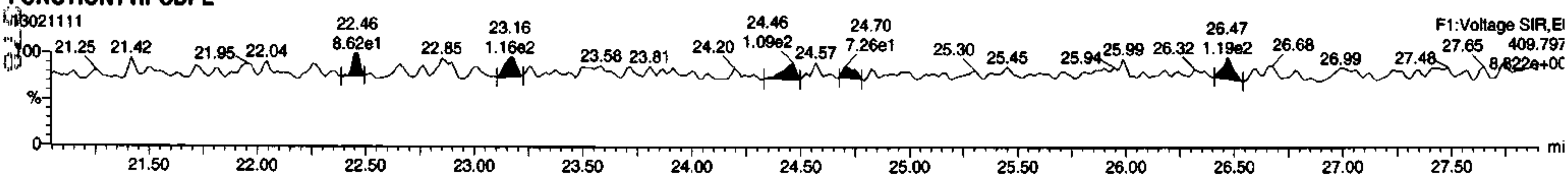
Total-penta1

13021111



FUNCTION1 HPCDPE

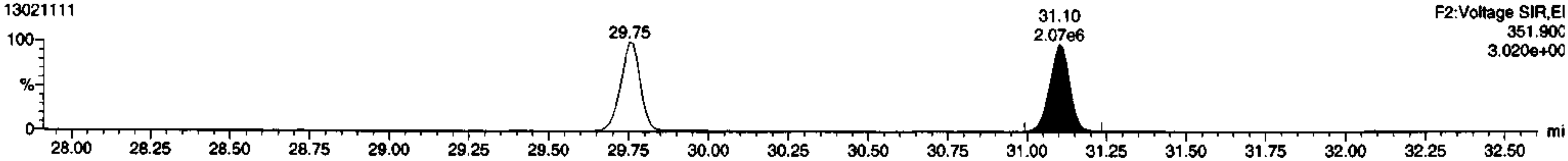
13021111



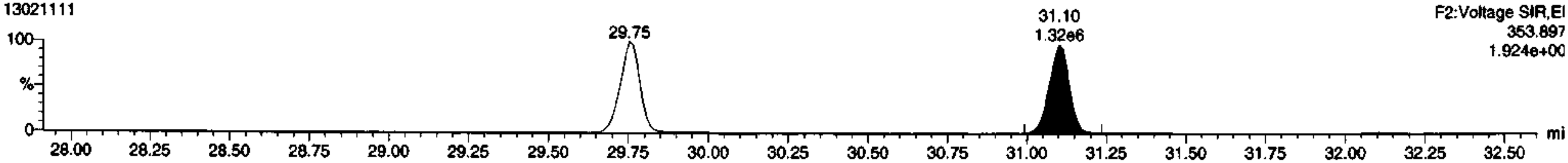
Dataset: P:\DIOXIN8290.PRO\130211DATA.qld
Last Altered: Tuesday, February 12, 2013 09:40:18 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:41:37 Pacific Standard Time

ID: ICV, Name: 13021111, Date: 11-Feb-2013, Time: 20:01:34, Conditions: AUTOSPEC01, User: pk

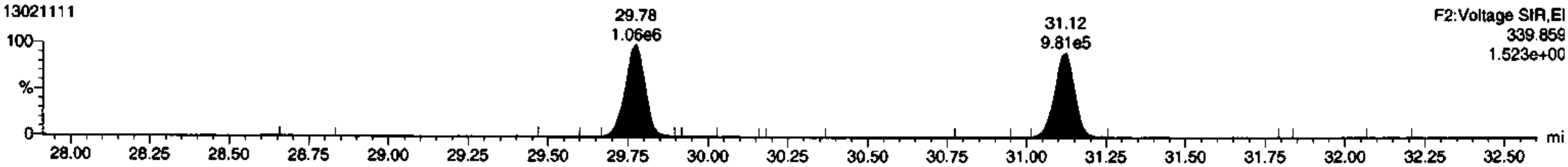
13C-23478-PeCDF



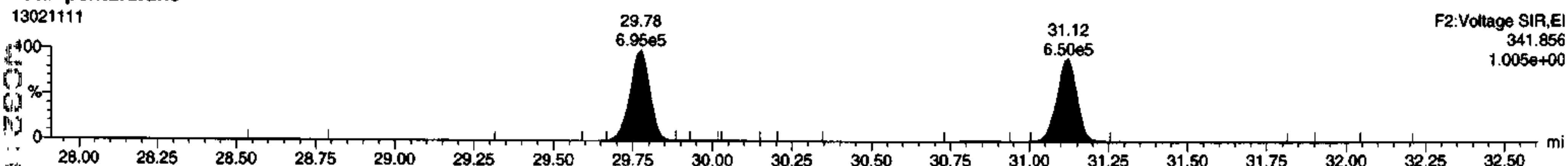
13C-23478-PeCDF



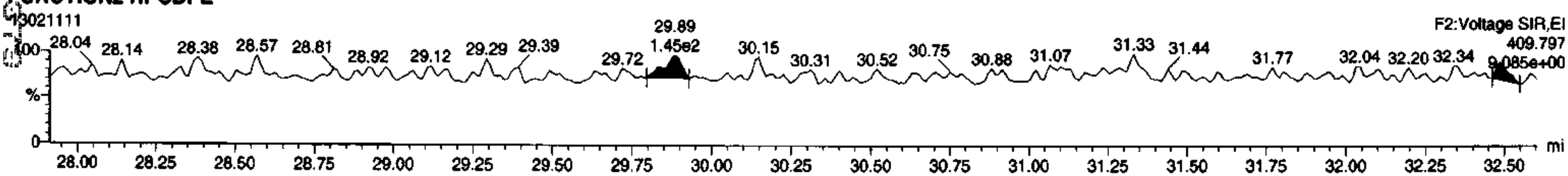
Total-pentafurans



Total-pentafurans



FUNCTION2 HPCDPE



Dataset: P:\DIOXIN8290.PRO\130211DATA.qld
Last Altered: Tuesday, February 12, 2013 09:40:18 Pacific Standard Time
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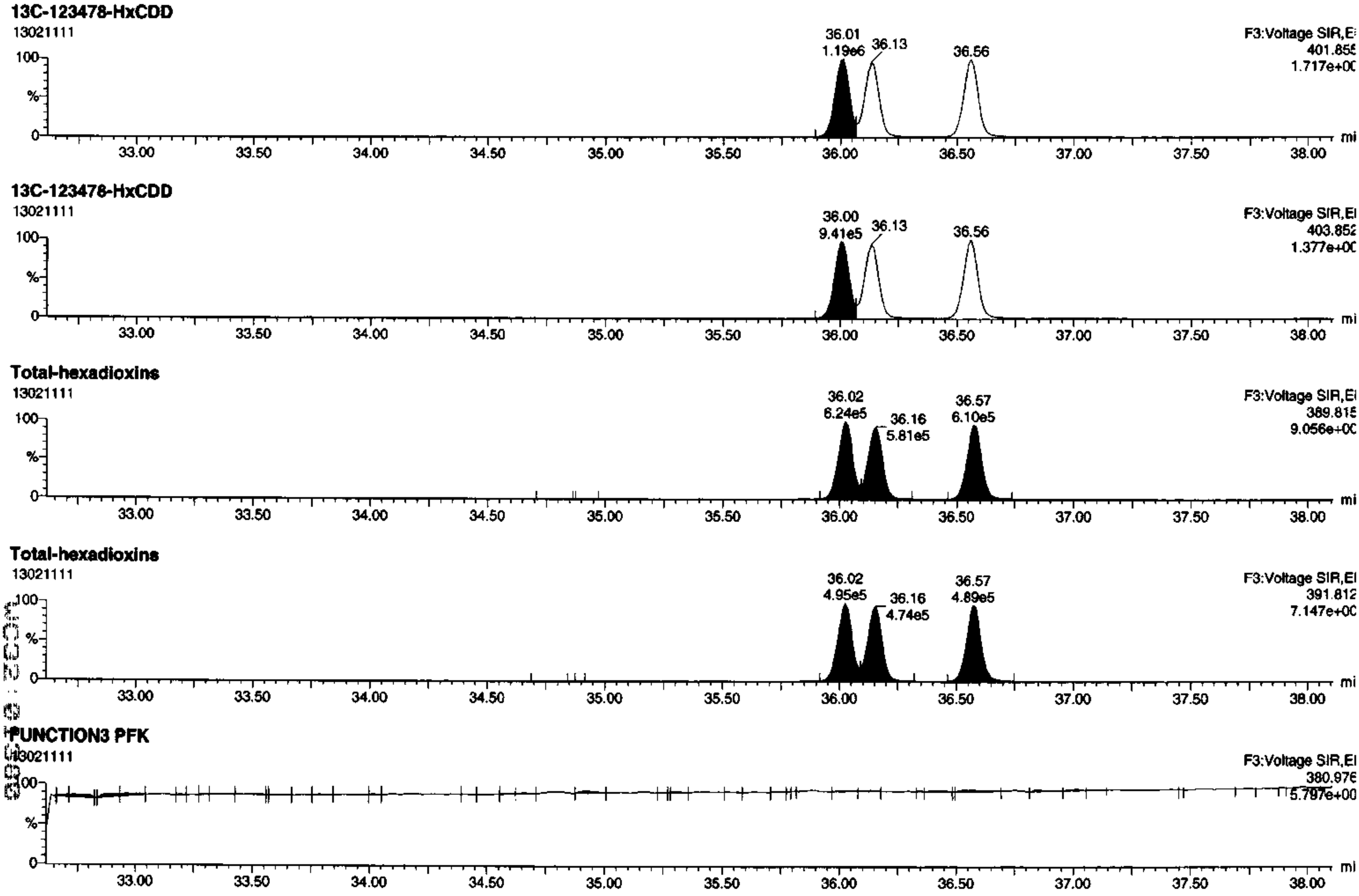

Dataset: P:\DIOXIN8290.PRO\130211DATA.qld
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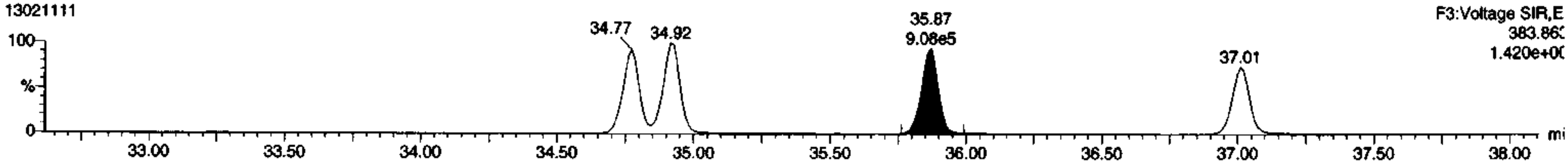
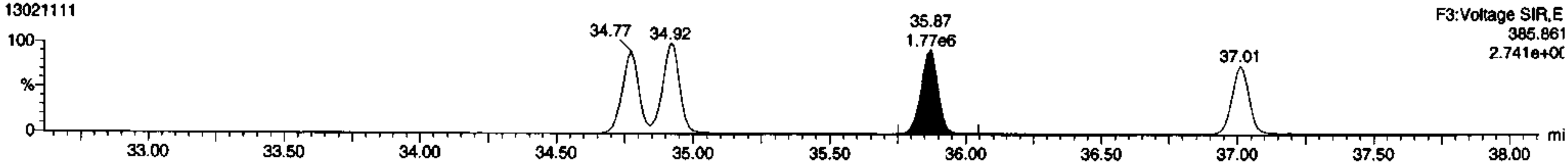
ID: ICV, Name: 13021111, Date: 11-Feb-2013, Time: 20:01:34, Conditions: AUTOSPEC01, User: pk

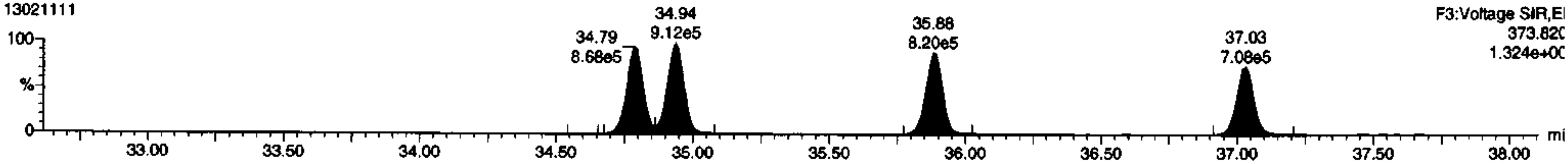
13C-234678-HxCDF
13021111



13C-234678-HxCDF
13021111



Total-hexafurans
13021111



Total-hexafurans
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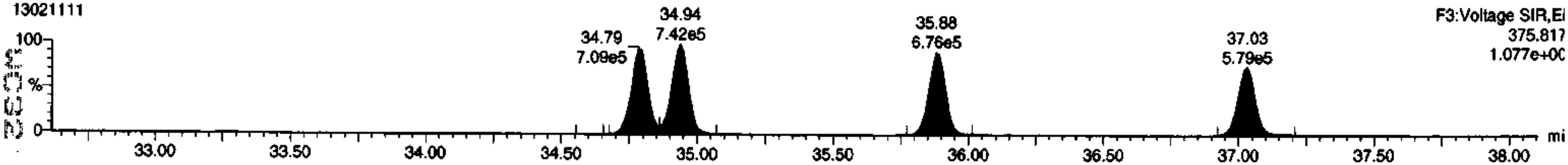
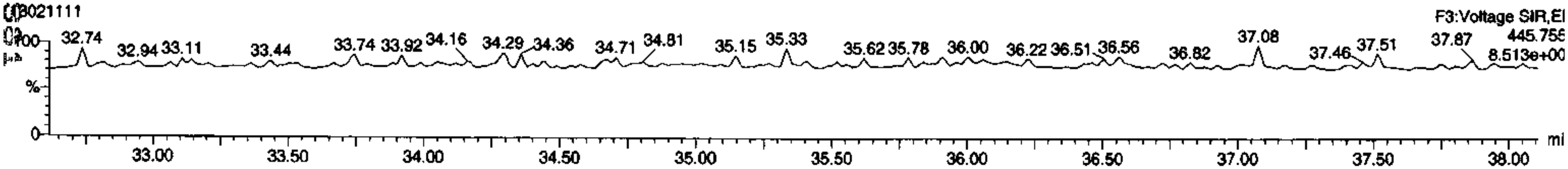


FUNCTION3 OCDPE
13021111



Dataset: P:\DIOXIN8290.PRO\130211DATA.qld
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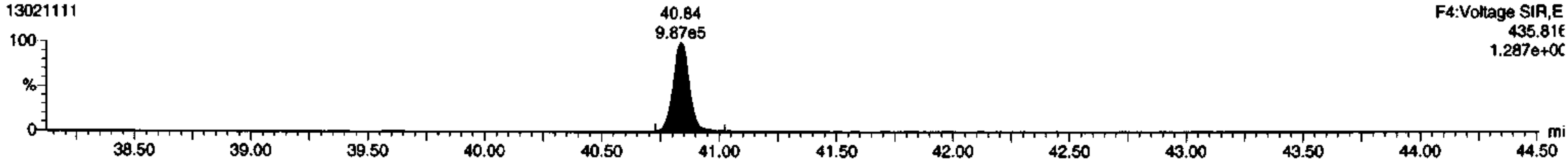
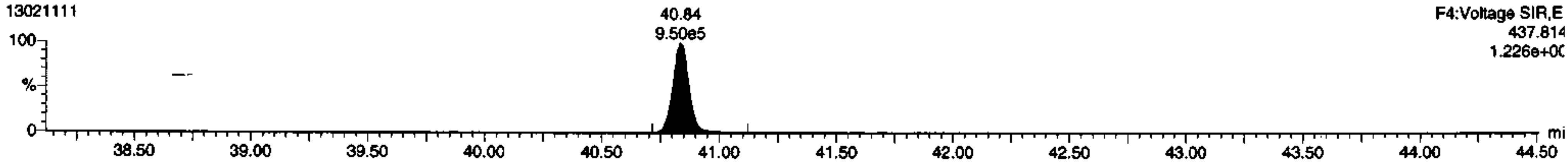
ID: ICV, Name: 13021111, Date: 11-Feb-2013, Time: 20:01:34, Conditions: AUTOSPEC01, User: pk

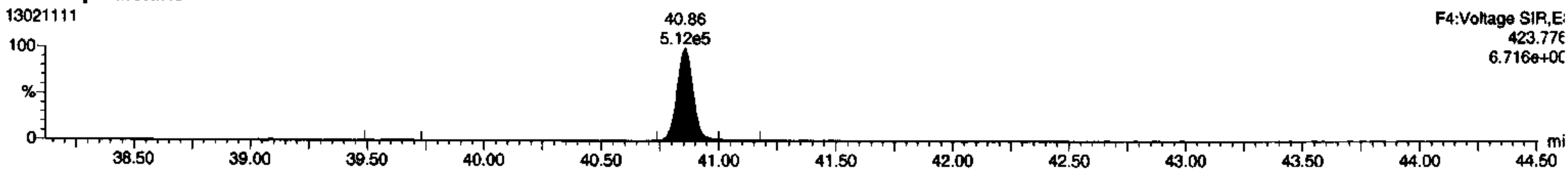
13C-1234678-HpCDD



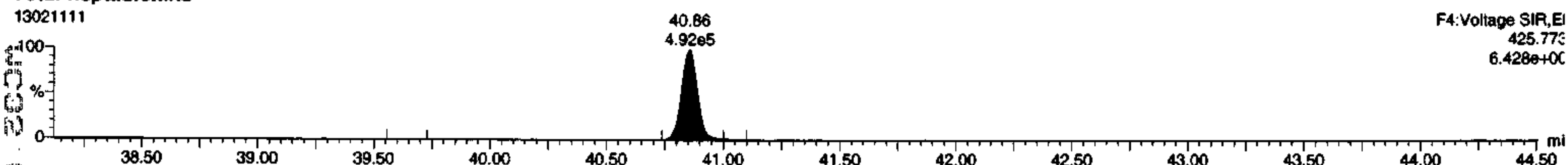
13C-1234678-HpCDD



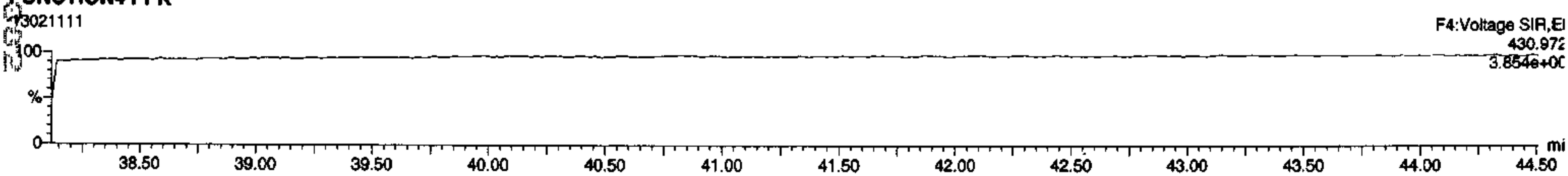
Total-heptadioxins



Total-heptadioxins



FUNCTION4 PFK



Dataset: P:\DIOXIN8290.PRO\130211DATA.qld
Last Altered: Tuesday, February 12, 2013 09:40:18 Pacific Standard Time
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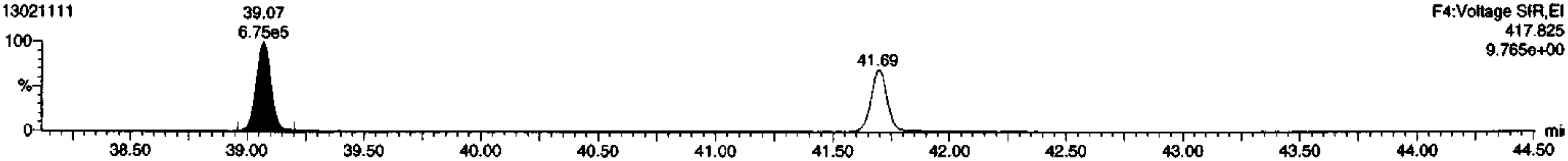
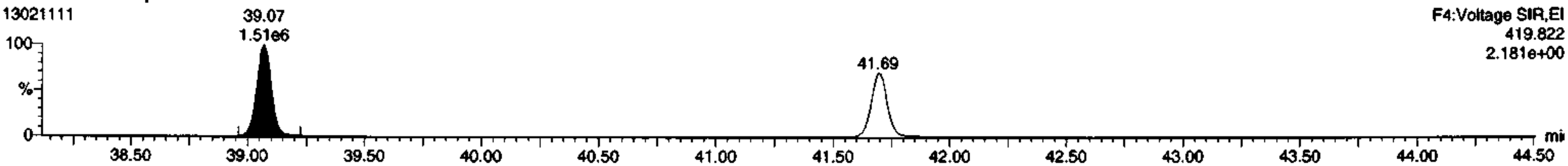
ID: ICV, Name: 13021111, Date: 11-Feb-2013, Time: 20:01:34, Conditions: AUTOSPEC01, User: pk

13C-1234678-HpCDF
13021111



13C-1234678-HpCDF
13021111



Total-heptafurans
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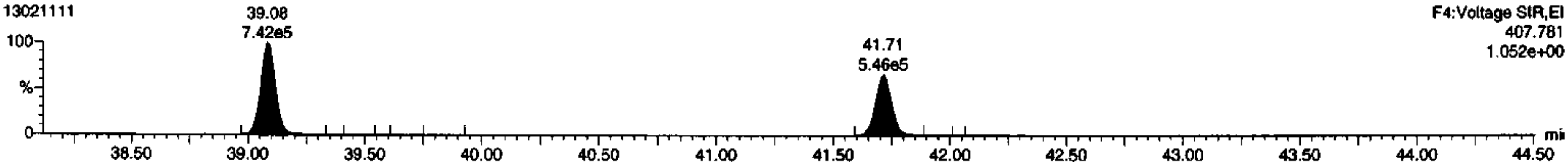

Total-heptafurans
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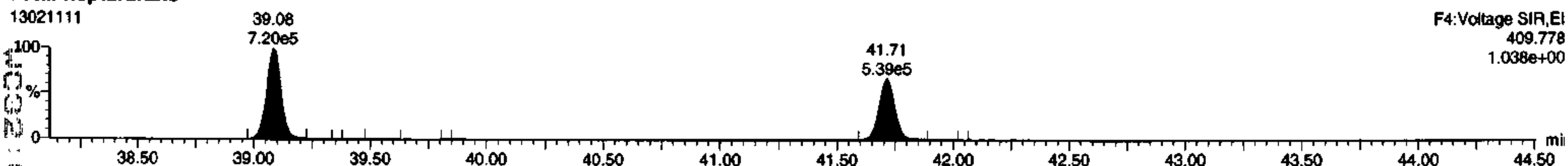
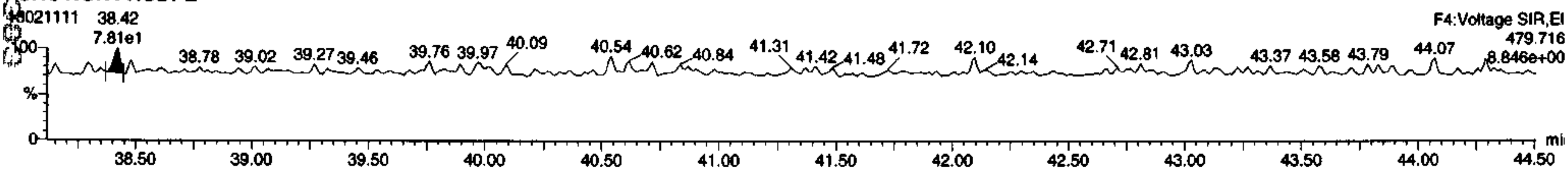


FUNCTION4 NCDPE
13021111



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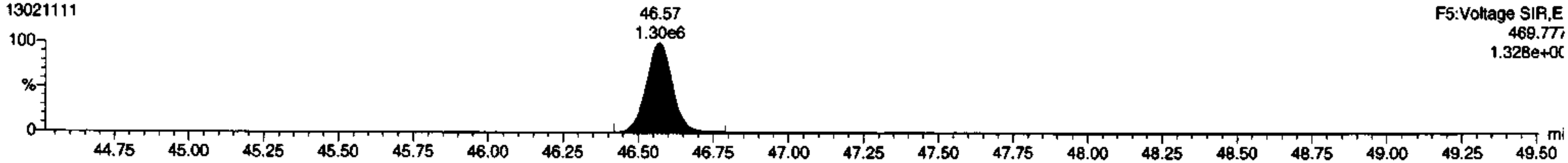
ID: ICV, Name: 13021111, Date: 11-Feb-2013, Time: 20:01:34, Conditions: AUTOSPEC01, User: pk

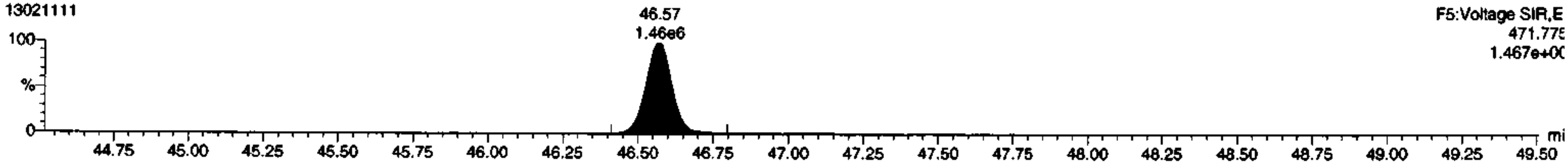
13C-OCDD

13021111



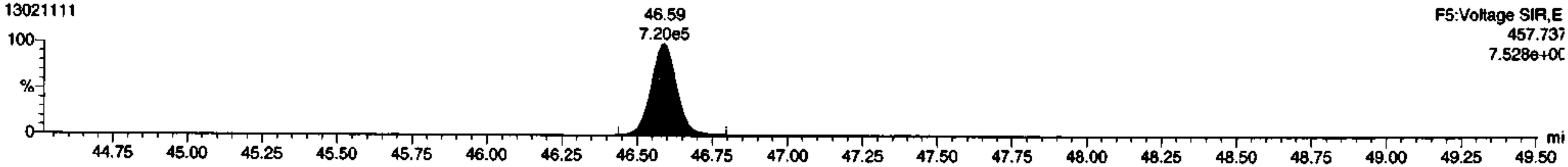
13C-OCDD

13021111



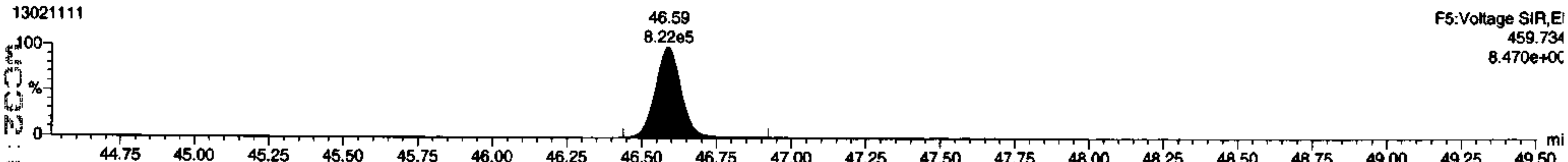
OCDD

13021111



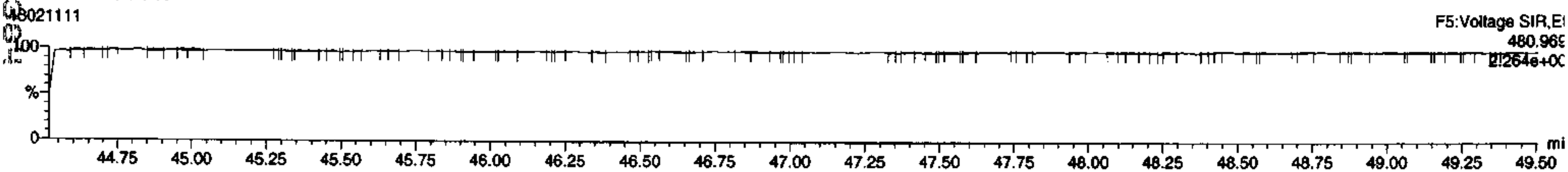
OCDD

13021111



FUNCTION5 PFK

13021111



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Last Altered: Tuesday, February 12, 2013 09:40:18 Pacific Standard Time
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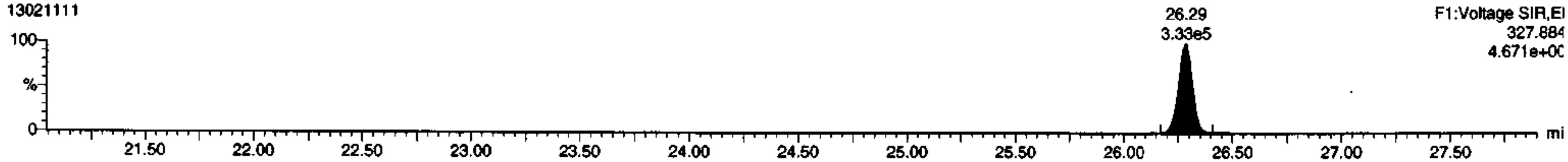
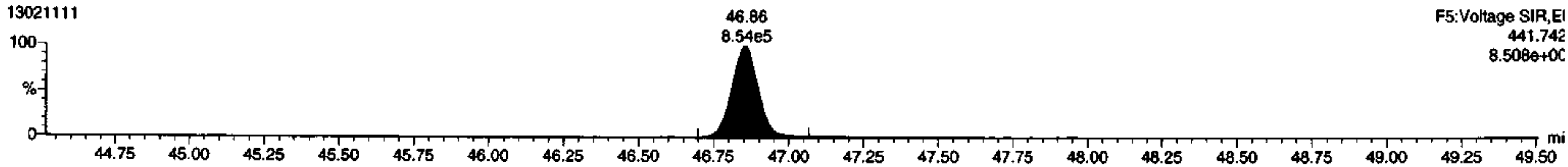
ID: ICV, Name: 13021111, Date: 11-Feb-2013, Time: 20:01:34, Conditions: AUTOSPEC01, User: pk

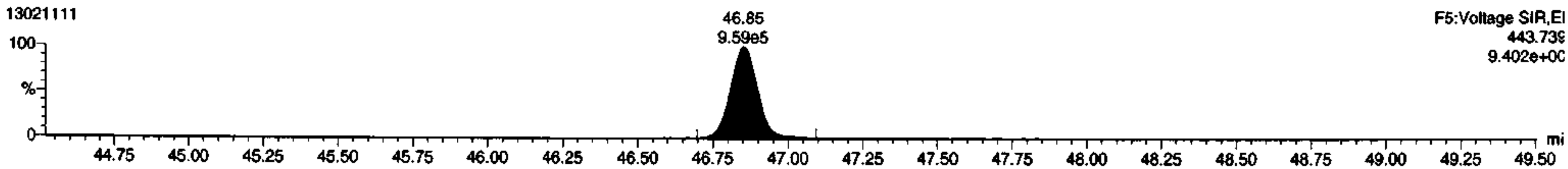
37CL-2378-TCDD



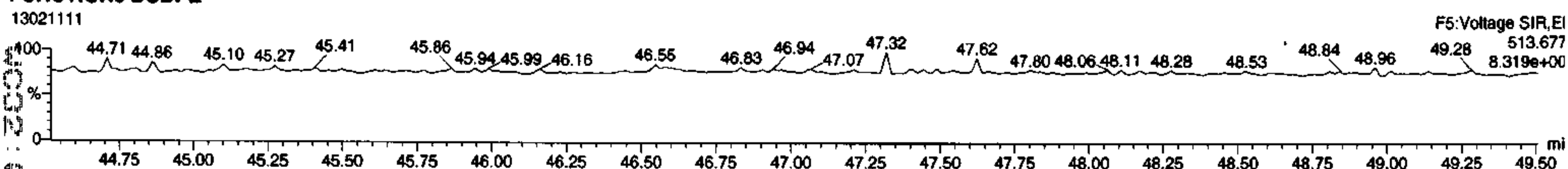
OCDF



OCDF



FUNCTION5 DCDPE



Dioxin Raw Data
Run Logs, Continuing Calibrations, and Raw Data

ARI Job ID: WC32, WC33

HR-GC/MS Analyst Notes / Corrective Action Log

ARI Project ID: WC32, WC33 Client ID: Floyd-Snider

ARI SOP: **806S** (Dioxins)

Parameter(s): 16B

Instrument: **AutoSpec01**

Curve Date: 2/11/13 Analysis Start Date: 2/13/13

Internal Standard Meets Criteria? YES / NO Method Blank in Control? YES / NO

Extraction Std Recovery in Control? YES / NO IPR / OPR Recovery in Control? YES / NO

ICal acceptable? YES / NO CCal acceptable? YES / NO

Manual Integrations for ICal? YES / NO Manual Integrations for Samples? Yes /NO

Special Analysis Criteria Met? YES / NO / NA

Detail problems, corrective actions and/or other pertinent information below (use reverse side when necessary):

Ok.

Additional Details on Reverse: Yes / No

Analyst: [signature] **Date:** 2/14/13

Reviewer: [signature] **Date:** 2/15

Analytical Resources Inc.: Organics Instrument Log

AutoSpec01 Serial No.:GC=CN10921030, MS=P764

Date: 2/13/13 Analysis: Dioxins Analyst: Mk

GC Program: 8290C Column No: F7818 Column Type: DB5-Dioxin

Inj Vol: 1ul Instrument Tune (IPR): 10K8290B Detector Voltage: 340

Resolution Check Files: 11:02, 22:39 Curve Date: 2/11/13

IS/SS	Ical/Ccal	LCS/ICV
F7908	F7214	
	P972	

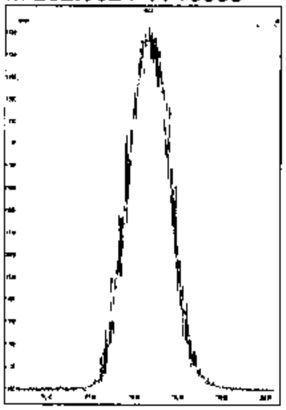
1	13-Feb-13	11:03:27	13021302	CS3
2	13-Feb-13	11:54:32	13021303	ISC01
3	13-Feb-13	12:47:57	13021304	WC26H 10X
4	13-Feb-13	13:45:15	13021305	WC32MBS
5	13-Feb-13	14:38:53	13021306	WC32OPR
6	13-Feb-13	15:29:41	13021307	WC32A
7	13-Feb-13	16:22:20	13021308	WC32B
8	13-Feb-13	17:15:03	13021309	WC32C
9	13-Feb-13	18:07:43	13021310	WC32D
10	13-Feb-13	19:00:27	13021311	WC32N
11	13-Feb-13	19:53:05	13021312	WC33E
12	13-Feb-13	20:45:50	13021313	WC33F
13	13-Feb-13	21:38:29	13021314	CS3
14	13-Feb-13	22:39:25	13021315	WC32QLS

Mk 2/14/13

Every line must contain information or be lined out. Make all entries legible.
Start a new page for each QC period. Document All Maintenance Tasks in StarLIMS

Printed: Wednesday, February 13, 2013 11:02:18 Pacific Standard Time

M 292.9824 R 13853



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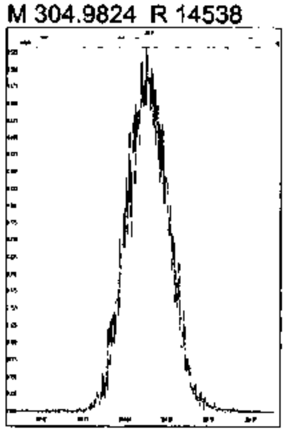

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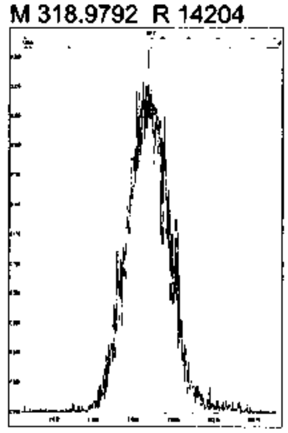

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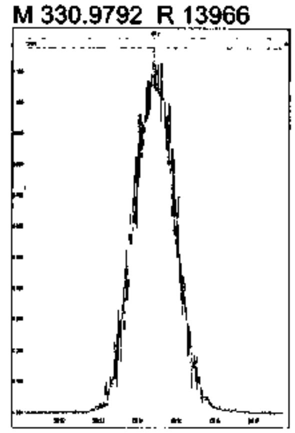

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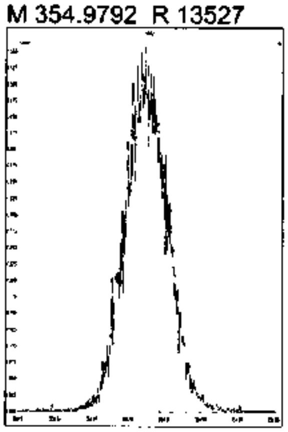

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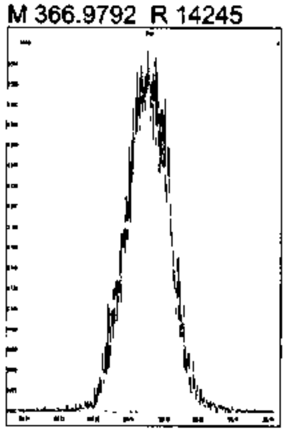

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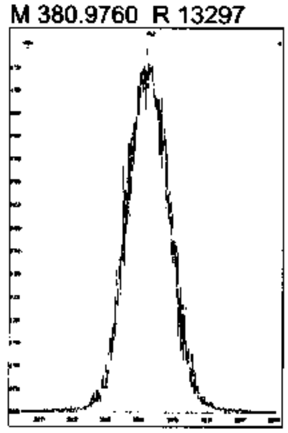

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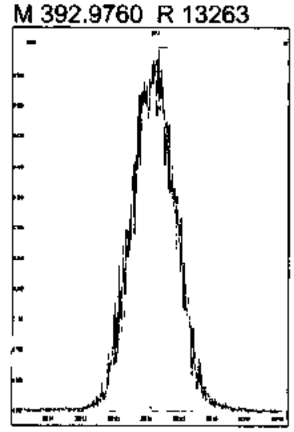

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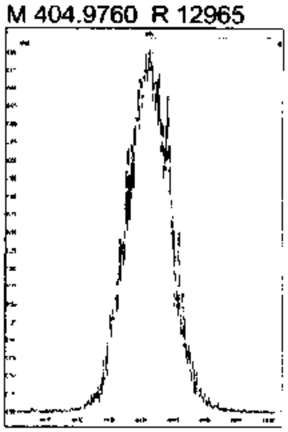

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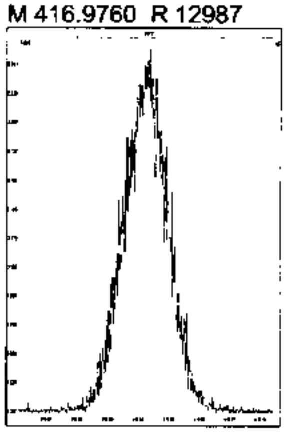

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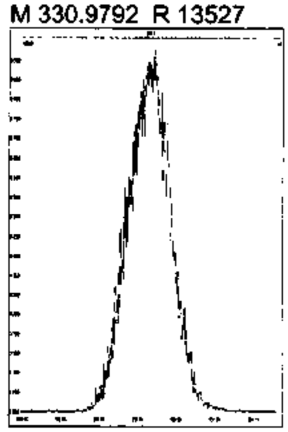

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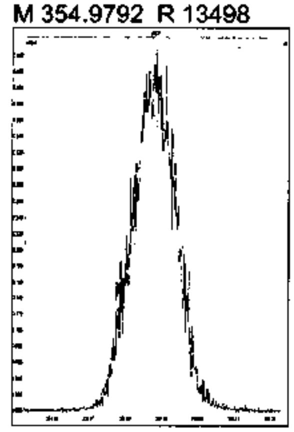

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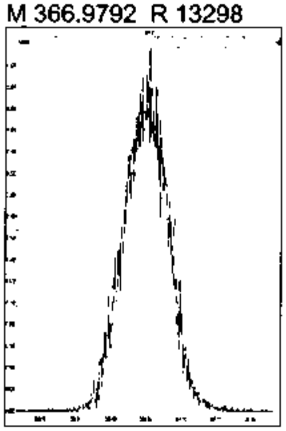

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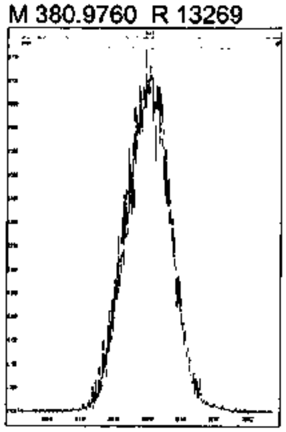

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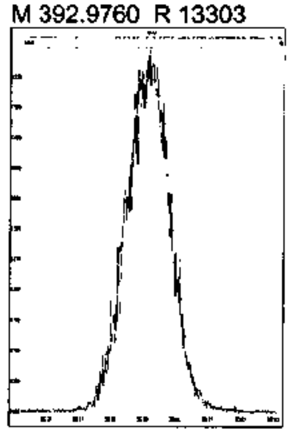

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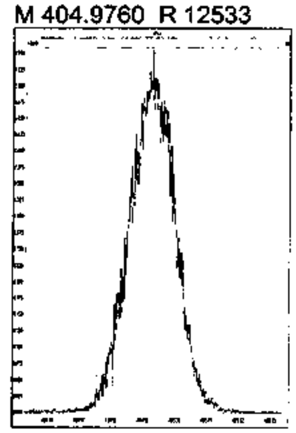

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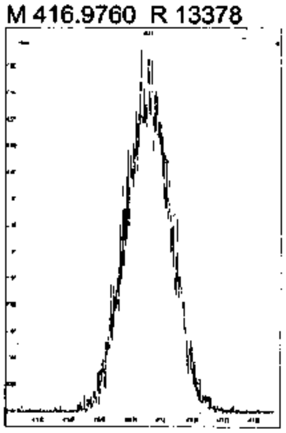

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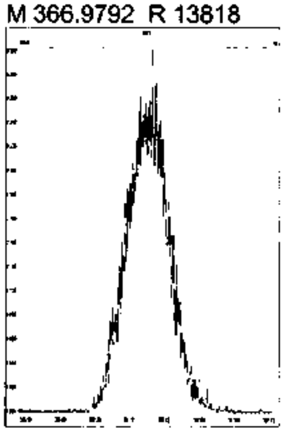

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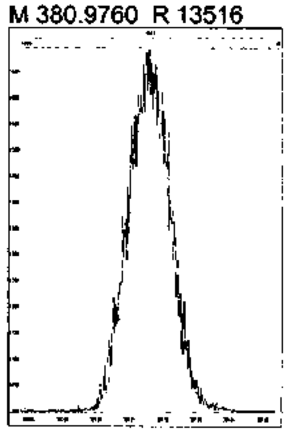

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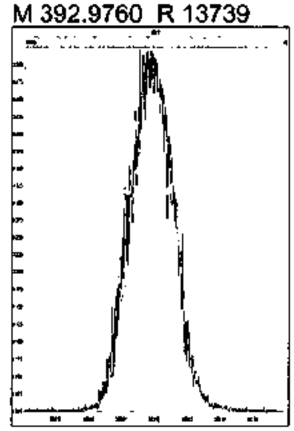

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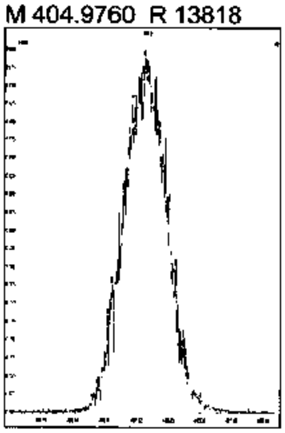

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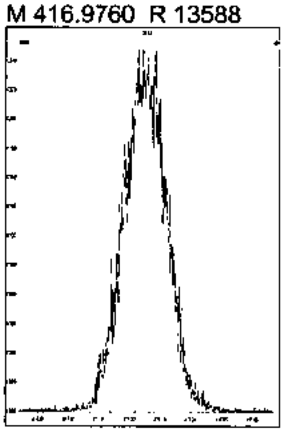

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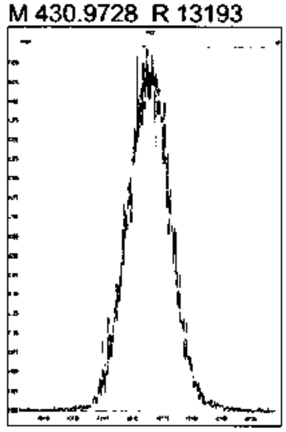

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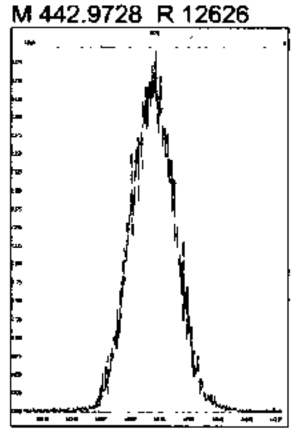

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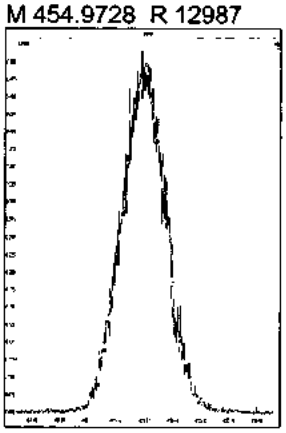

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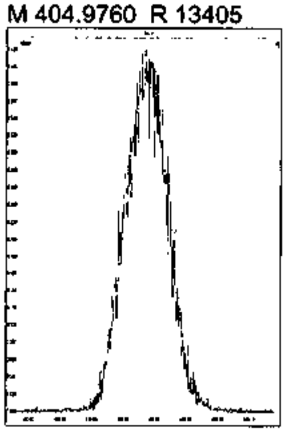

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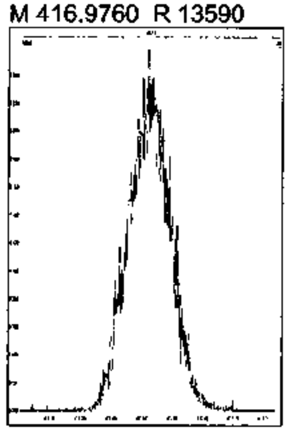

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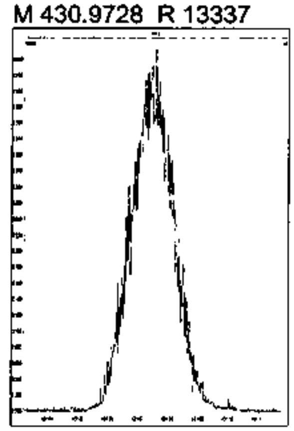

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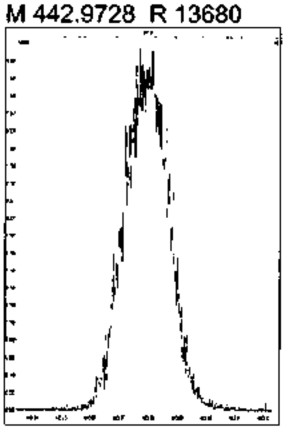

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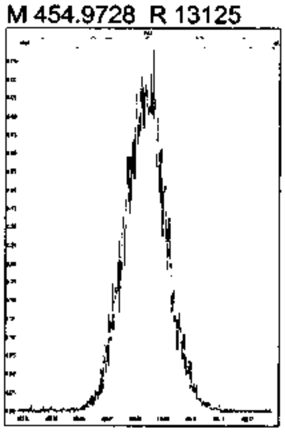

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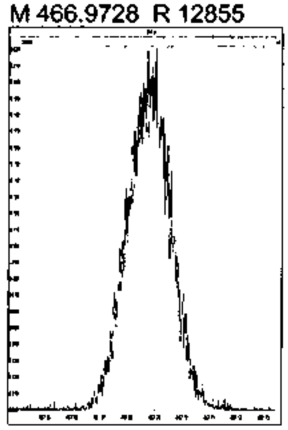

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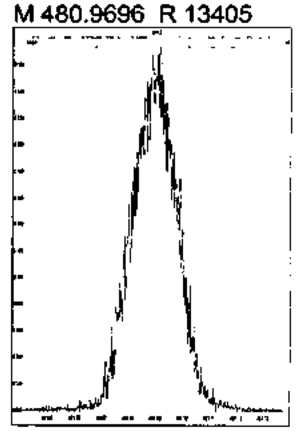

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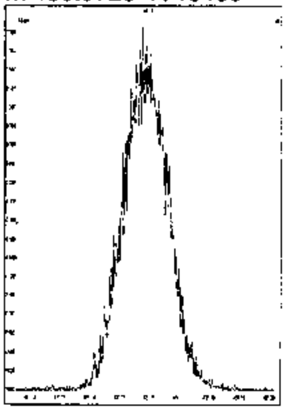

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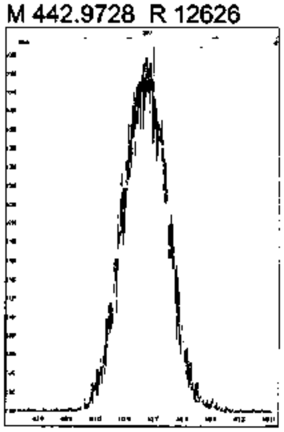

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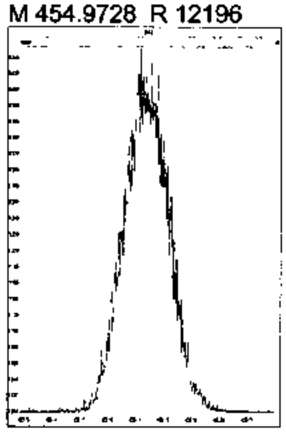

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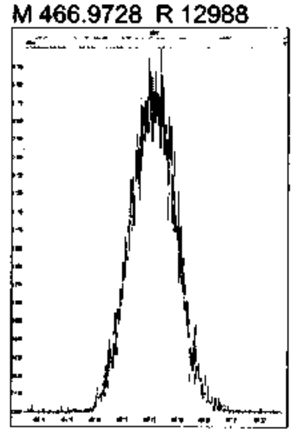

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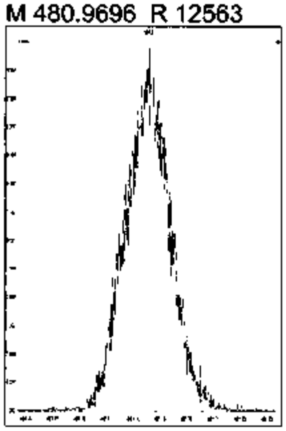

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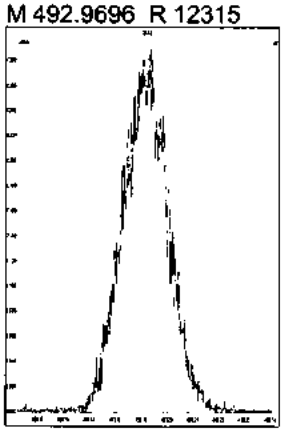

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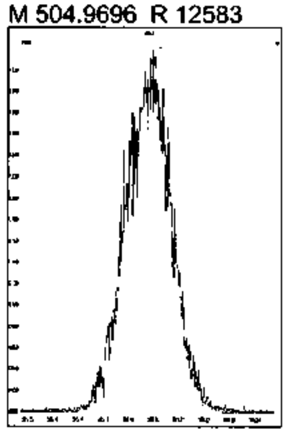

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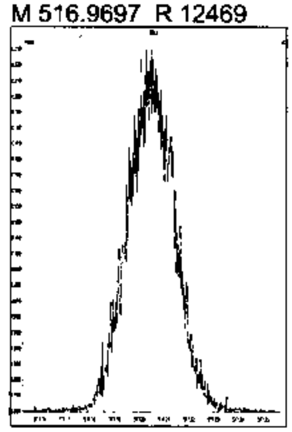

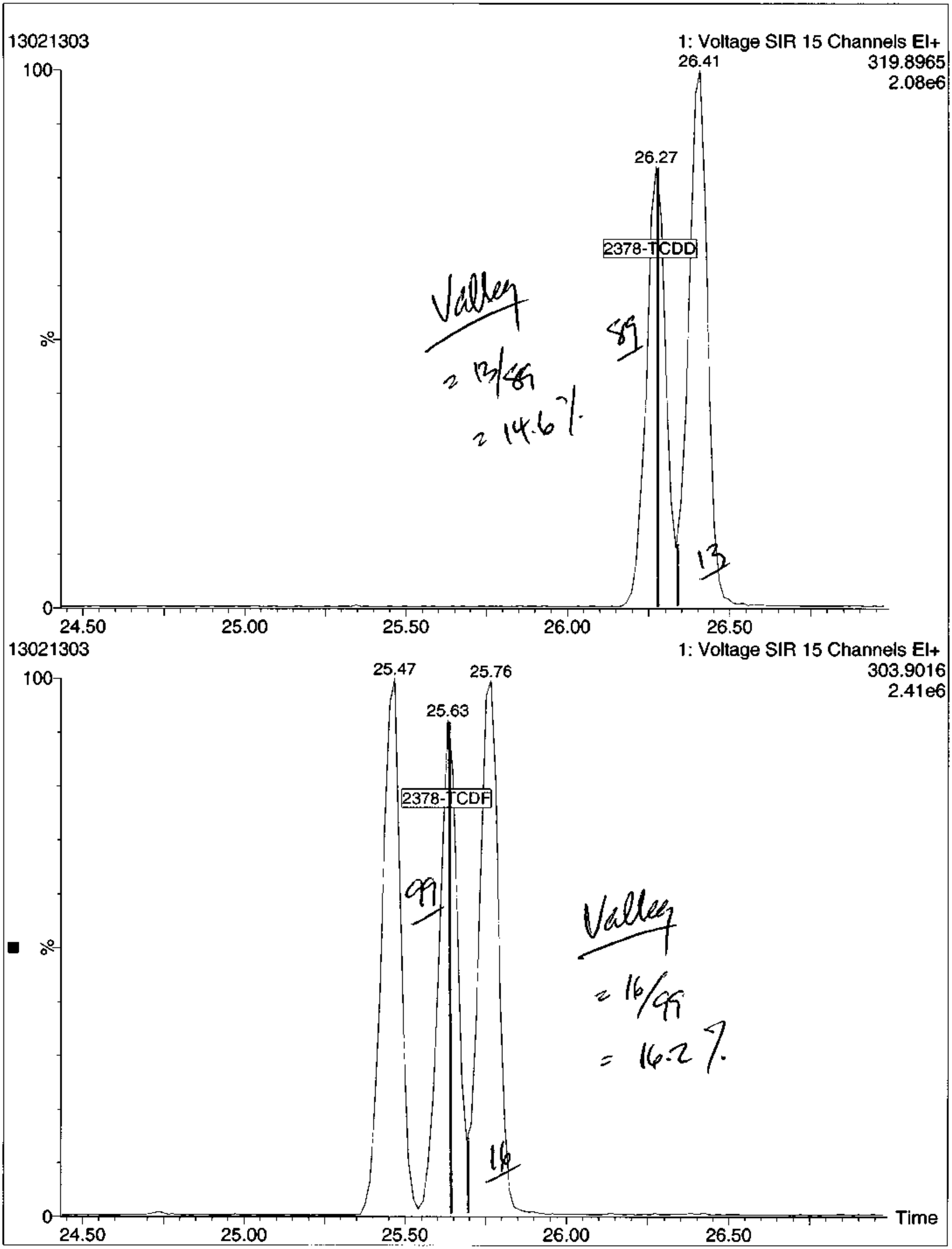
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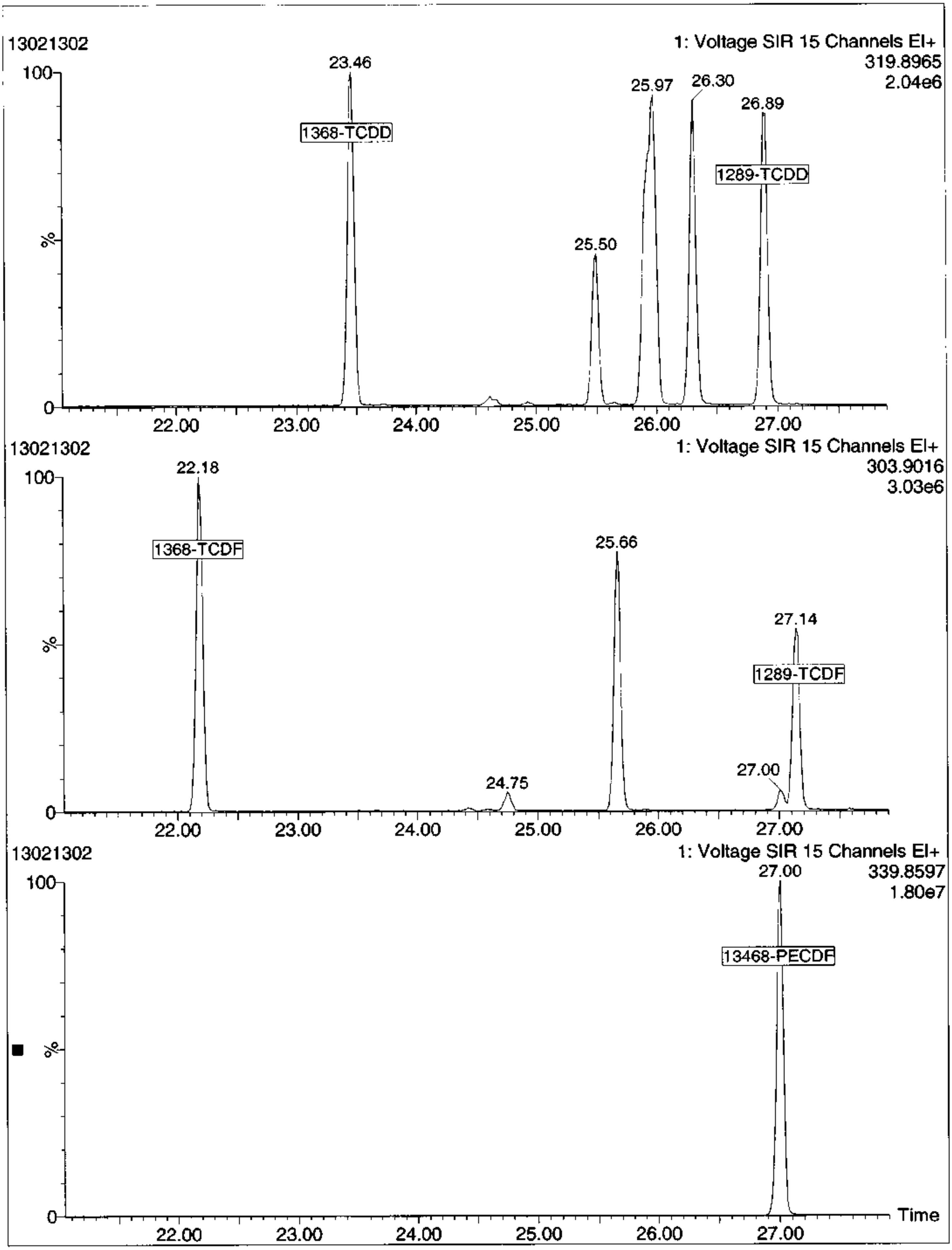
26.41
319.8965
2.08e6
100
26.27
2378-TCDD
Valley
89
= 13/89
= 14.6%
%
13
0
24.50
25.00
25.50
26.00
26.50
13021303
1: Voltage SIR 15 Channels EI+
25.47
25.76
303.9016
2.41e6
100
25.63
2378-TCDF
99
Valley
%
= 16/99
= 16.2%
16
0
Time
24.50
25.00
25.50
26.00
26.50

WCG2 01992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100
%
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1368-TCDD
25.50
25.97
26.30
26.89
1289-TCDD
22.00
23.00
24.00
25.00
26.00
27.00
13021302
1: Voltage SIR 15 Channels EI+
303.9016
3.03e6
100
%
0
22.18
1368-TCDF
24.75
25.66
27.00
27.14
1289-TCDF
22.00
23.00
24.00
25.00
26.00
27.00
13021302
1: Voltage SIR 15 Channels EI+
339.8597
1.80e7
100
%
0
27.00
13468-PECDF
Time
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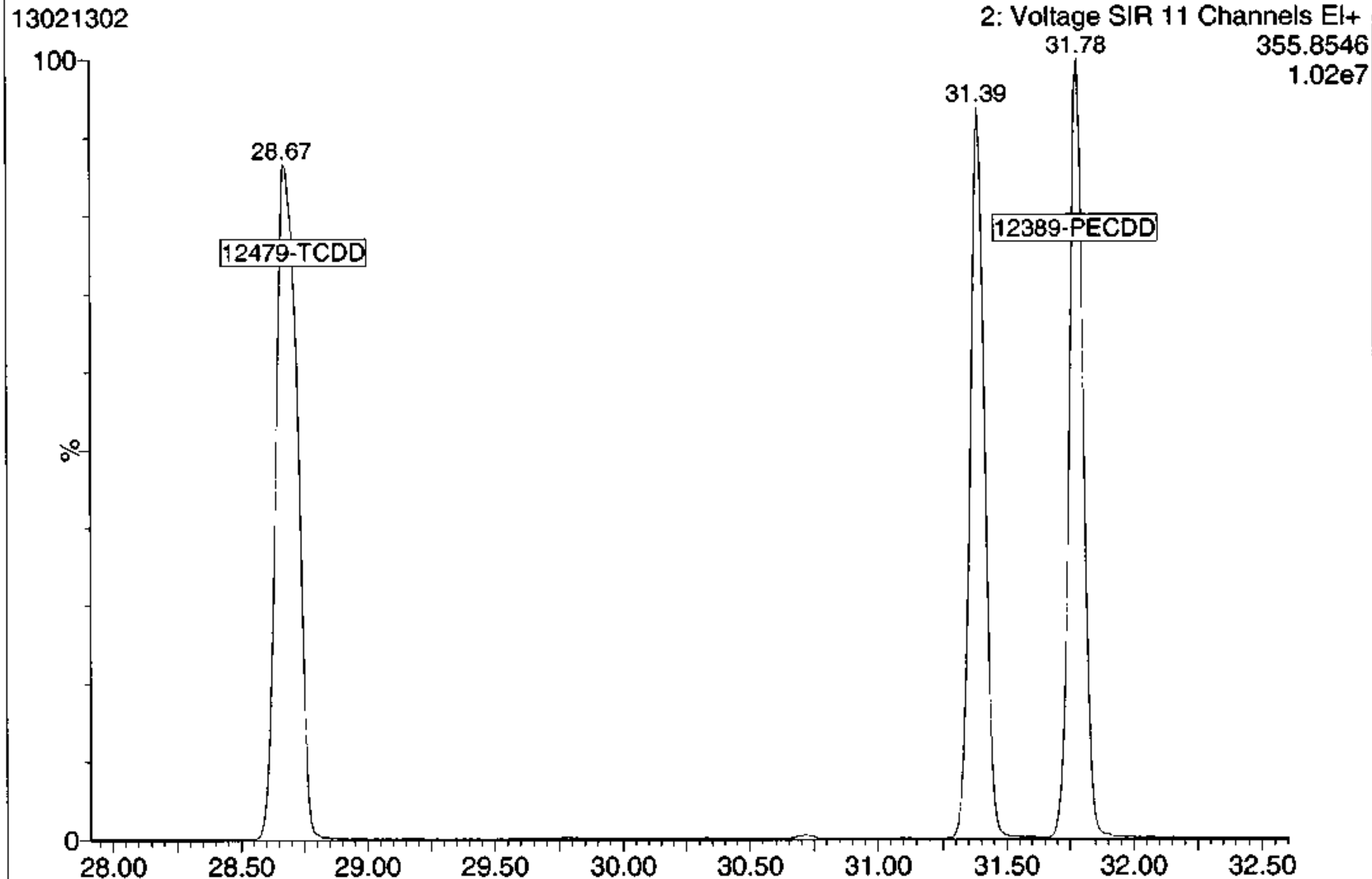
23.00
24.00
25.00
26.00
27.00



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%
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31.78
12389-PECDD
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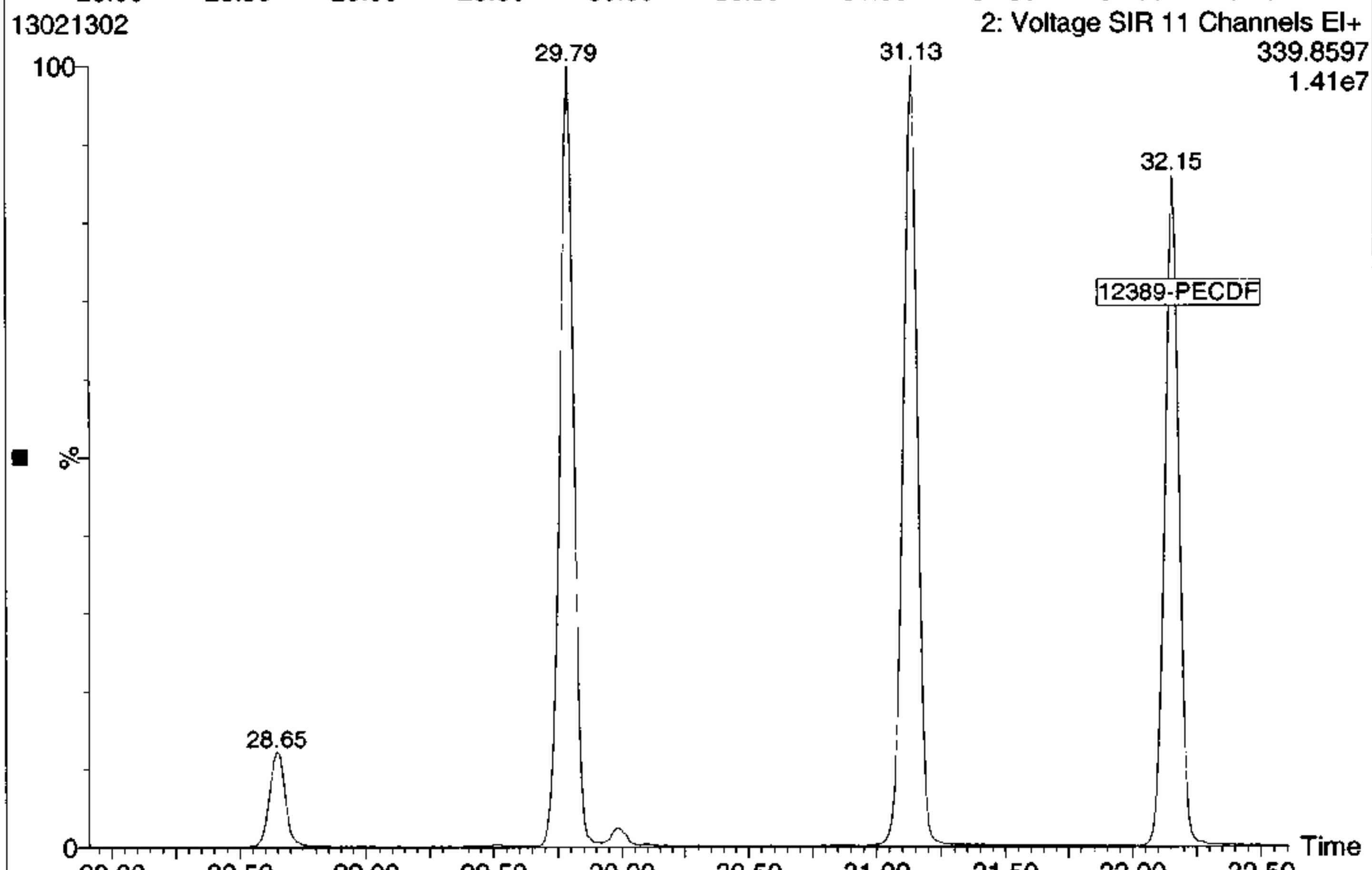
29.00
29.50
30.00
30.50
31.00
31.50
32.00
32.50



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1.41e7
100
%
0
28.65
29.79
31.13
32.15
12389-PECDF
Time
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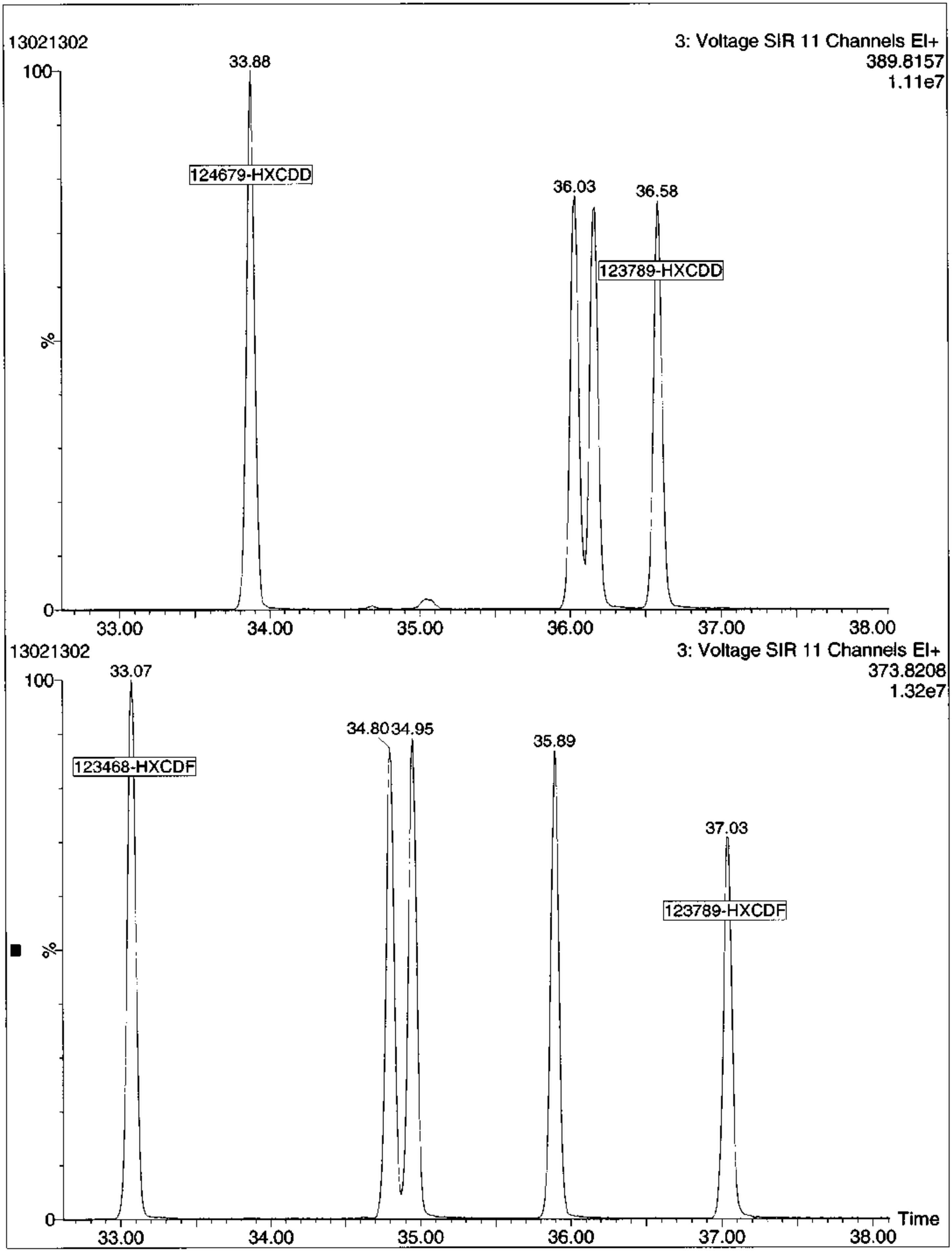
28.50
29.00
29.50
30.00
30.50
31.00
31.50
32.00
32.50

WC02 : 01394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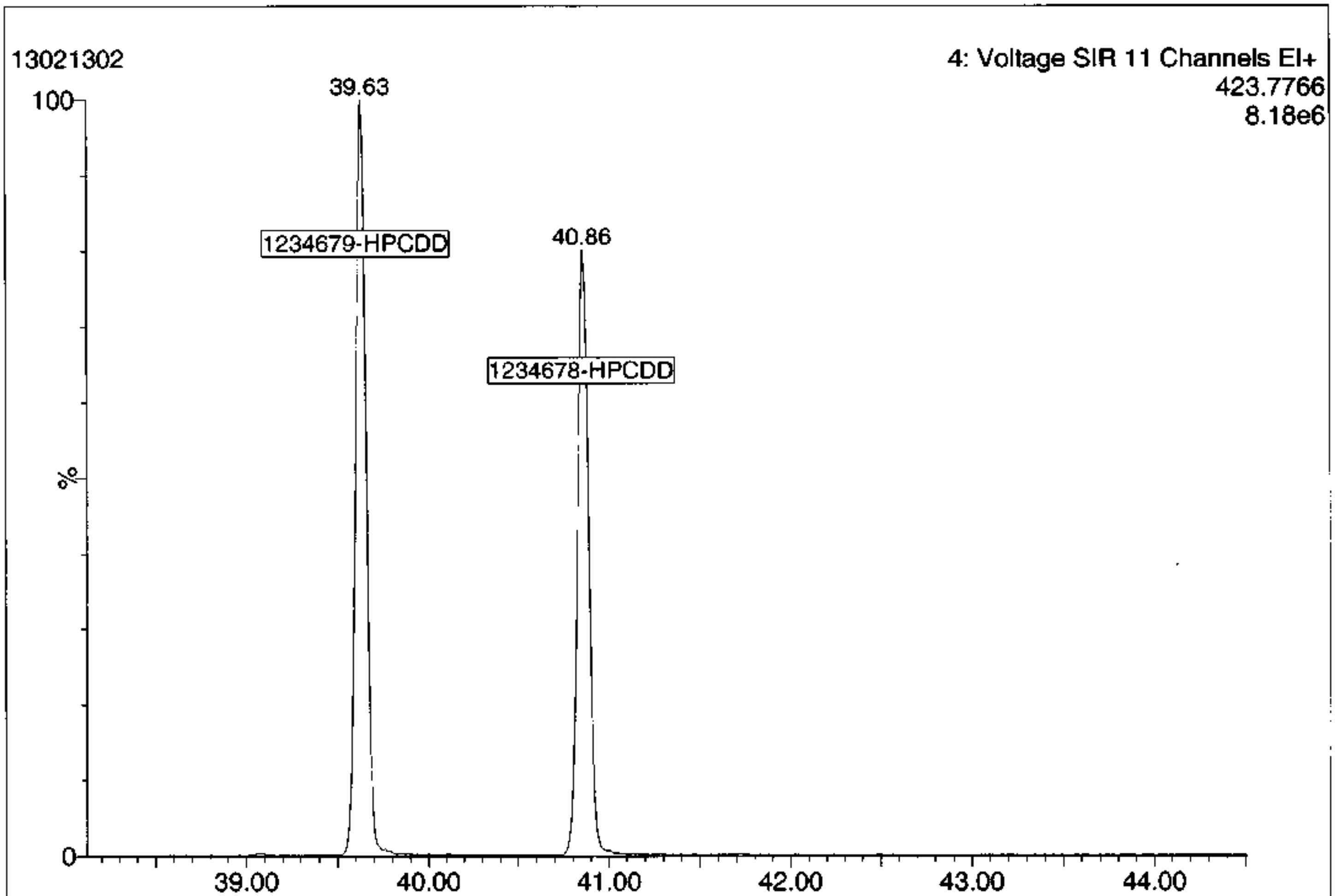
100
%
0
33.88
124679-HXCDD
36.03
36.58
123789-HXCDD
33.00
34.00
35.00
36.00
37.00
38.00
13021302
3: Voltage SIR 11 Channels EI+
373.8208
1.32e7
100
%
0
33.07
123468-HXCDF
34.80
34.95
35.89
37.03
123789-HXCDF
Time
33.00
34.00
35.00
36.00
37.00
38.00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423.7766
8.18e6
39.63
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1234678-HPCDD
100
%
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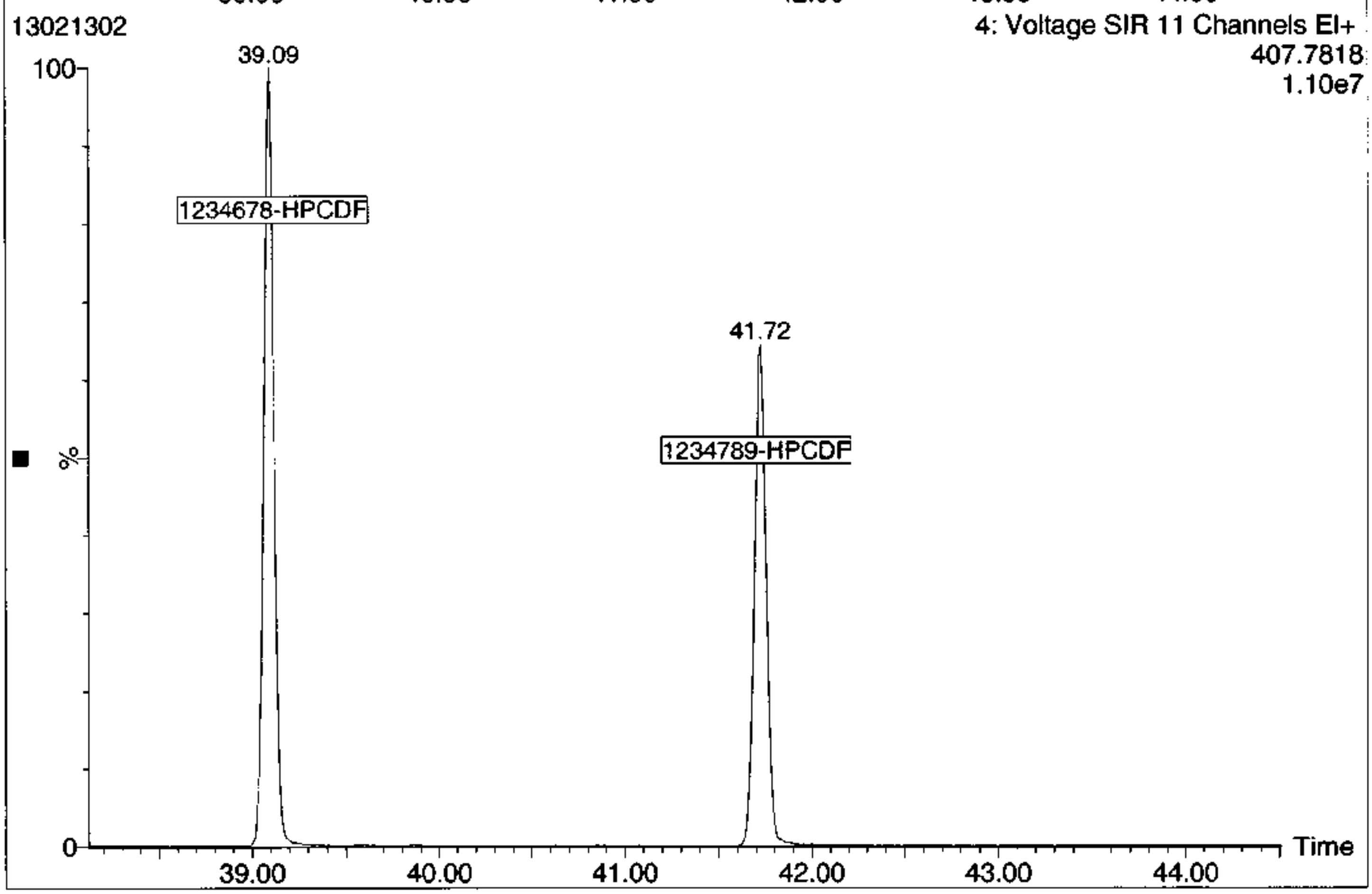
39.00
40.00
41.00
42.00
43.00
44.00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1.10e7
39.09
1234678-HPCDF
41.72
1234789-HPCDF
100
%
0
39.00
40.00
41.00
42.00
43.00
44.00
Time

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Last Altered: Wednesday, February 13, 2013 11:57:32 Pacific Standard Time
Printed: Wednesday, February 13, 2013 11:58:37 Pacific Standard Time

Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 12 Feb 2013 12:25:57
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: CS3, Name: 13021302, Date: 13-Feb-2013, Time: 11:03:27, Conditions: AUTOSPEC01, User: pk

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[redacted]	1234789-HpCDF	41.724	1.001	5.22e5	5.07e5	1.224	1.030	1.050	3032.8	NO	51.532	51.532
[redacted]	OCDF	46.859	1.006	7.64e5	8.68e5	1.162	0.881	0.890	3667.9	NO	98.655	98.655
[redacted]	2378-TCDD	26.302	1.001	1.14e5	1.48e5	1.106	0.772	0.770	1677.5	NO	9.463	9.463
[redacted]	12378-PeCDD	31.387	1.001	6.15e5	3.92e5	1.001	1.567	1.550	4464.3	NO	49.557	49.557
[redacted]	123478-HxCDD	36.034	1.001	5.62e5	4.49e5	0.978	1.251	1.240	3794.3	NO	51.071	51.071
[redacted]	123678-HxCDD	36.155	1.000	5.31e5	4.28e5	0.929	1.242	1.240	3666.6	NO	49.450	49.450
[redacted]	123789-HxCDD	36.583	1.012	5.33e5	4.30e5	0.904	1.239	1.240	3711.7	NO	51.749	51.749
[redacted]	1234678-HpCDD	40.858	1.000	4.57e5	4.42e5	1.029	1.034	1.050	3556.3	NO	49.123	49.123
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[redacted]	13C-2378-TCDF	25.645	1.007	1.76e6	2.25e6	1.522	0.781	0.770	12445.3	NO		100.909
[redacted]	13C-12378-PeCDF	29.775	1.169	1.96e6	1.24e6	1.185	1.576	1.550	7804.3	NO		103.493
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[redacted]	13C-123678-HxCDF	34.927	0.955	9.00e5	1.72e6	1.383	0.524	0.510	5371.3	NO		92.733
[redacted]	13C-234678-HxCDF	35.881	0.981	8.72e5	1.66e6	1.283	0.526	0.510	5121.7	NO		96.640
[redacted]	13C-123789-HxCDF	37.021	1.012	7.63e5	1.45e6	1.099	0.526	0.510	4457.9	NO		98.631
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[redacted]	13C-1234789-HpCDF	41.702	1.140	5.09e5	1.12e6	0.774	0.453	0.440	4651.3	NO		103.439
[redacted]	13C-1234-TCDD	25.465	0.000	1.15e6	1.46e6	1.000	0.785	0.770	4673.2	NO		100.000
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[redacted]	13C-12378-PeCDD	31.365	1.232	1.24e6	7.92e5	0.715	1.564	1.550	10123.3	NO		108.680
[redacted]	13C-123478-HxCDD	36.013	0.985	1.13e6	8.94e5	1.032	1.264	1.240	7443.4	NO		96.179
[redacted]	13C-123678-HxCDD	36.144	0.988	1.16e6	9.31e5	1.076	1.241	1.240	7772.2	NO		95.066
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Dataset: P:\DIOXIN8290.PRO\130213OPEN.qld

Last Altered: Wednesday, February 13, 2013 11:57:32 Pacific Standard Time

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ID: CS3, Name: 13021302, Date: 13-Feb-2013, Time: 11:03:27, Conditions: AUTOSPEC01, User: pk

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	Total-penta1			1.17e6								66.169
	Total-pentafurans			2.68e6		0.927						152.106
	Total-hexafurans			3.70e6		1.062						259.107
	Total-heptafurans			1.19e6		1.231						101.805
	Total-Furans			9.99e6		1.065						707.639
	Total-tetradioxins			6.39e5		1.106						52.873
	Total-pentadioxins			2.14e6		1.001						172.508
	Total-hexadioxins			2.34e6		0.937						219.306
	Total-heptadioxins			9.85e5		1.029						106.163
	Total-Dioxins			6.79e6		0.994						651.328
	Total-TEQ			1.68e7								1358.967
	37CL-2378-TCDD	26.302	1.033	2.80e5		1.051			2239.5			10.200
	FUNCTION1 PFK			3.26e6								
	FUNCTION2 PFK			3.14e5								0.000
	FUNCTION3 PFK			1.13e6								0.000
	FUNCTION4 PFK			7.76e5								
	FUNCTION5 PFK			2.94e5								
	FUNCTION1 HXCDPE			2.73e2								0.000
	FUNCTION1 HPCDPE			1.18e3								0.000
	FUNCTION2 HPCDPE			1.55e3								0.000
	FUNCTION3 OCDPE			1.03e2								0.000
	FUNCTION4 NCDPE			2.58e2								0.000
	FUNCTION5 DCDPE			0.00e0								

Dataset: P:\DIOXIN8290.PRO\130213OPEN.qld
Last Altered: Wednesday, February 13, 2013 11:57:32 Pacific Standard Time
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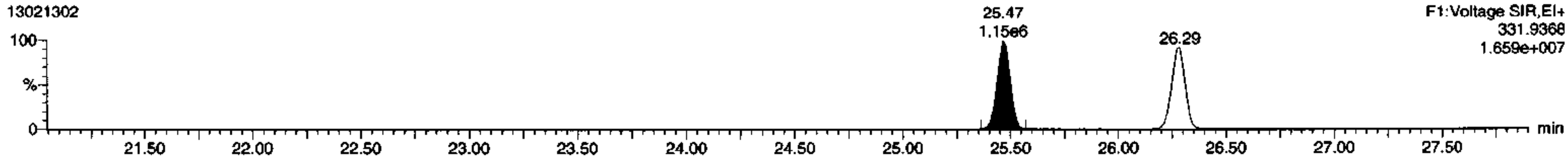
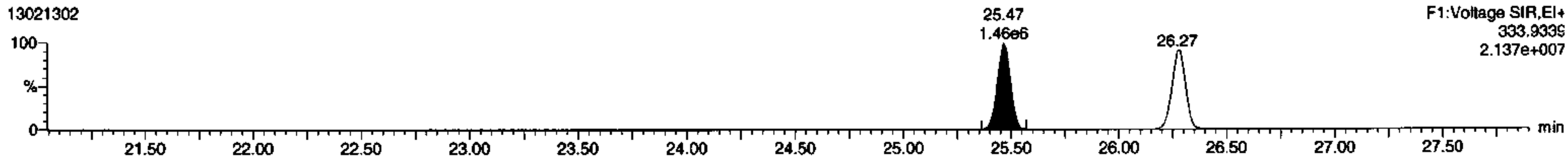
Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 12 Feb 2013 12:25:57
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: CS3, Name: 13021302, Date: 13-Feb-2013, Time: 11:03:27, Conditions: AUTOSPEC01, User: pk

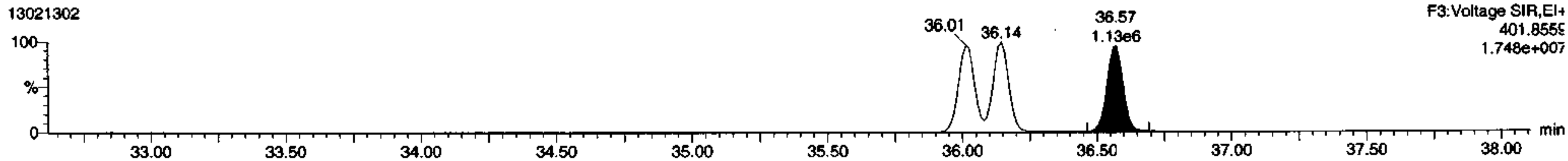
13C-1234-TCDD



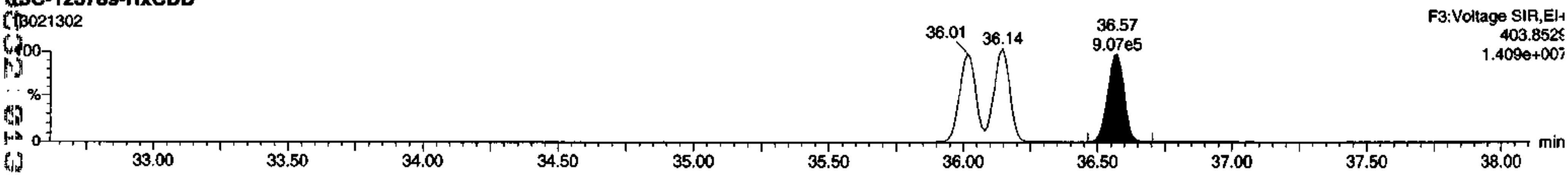
13C-1234-TCDD



13C-123789-HxCDD



13C-123789-HxCDD



Quantify Sample Report MassLynx 4.1 SCN 714
Dataset: P:\DIOXIN8290.PRO\130213OPEN.qld
Last Altered: Wednesday, February 13, 2013 11:57:32 Pacific Standard Time
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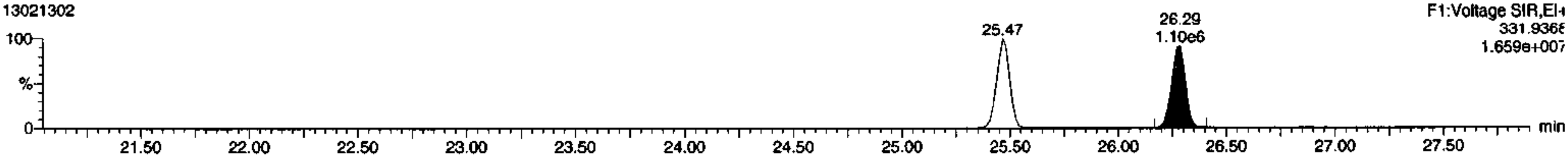
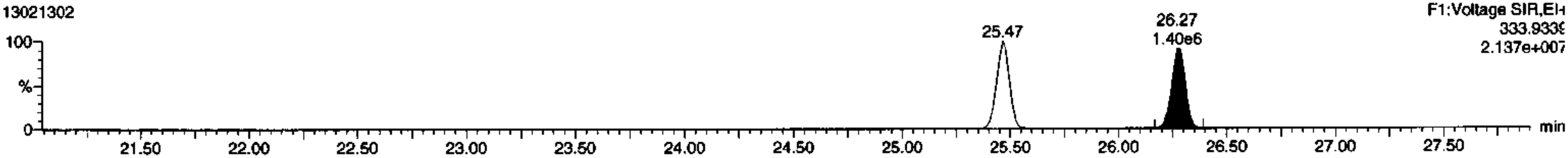
ID: CS3, Name: 13021302, Date: 13-Feb-2013, Time: 11:03:27, Conditions: AUTOSPEC01, User: pk

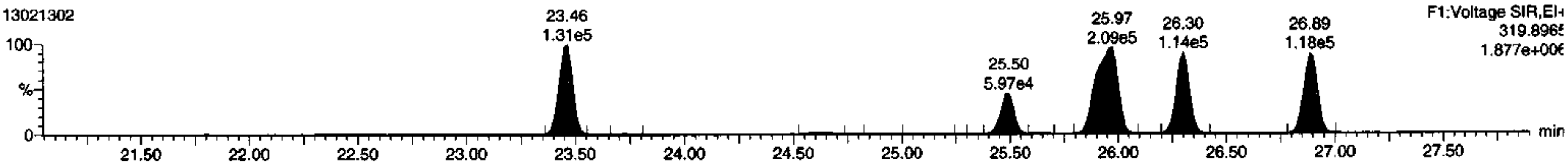
13C-2378-TCDD
13021302



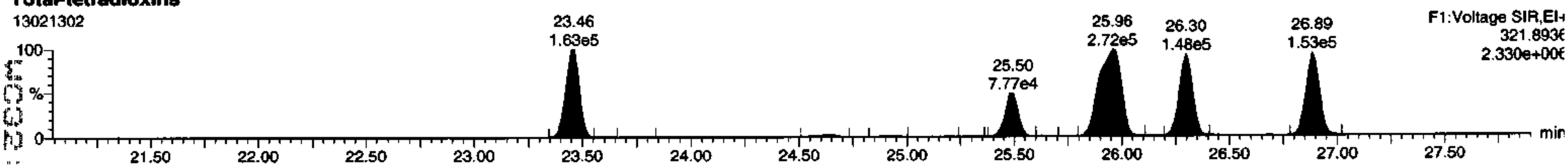
13C-2378-TCDD
13021302



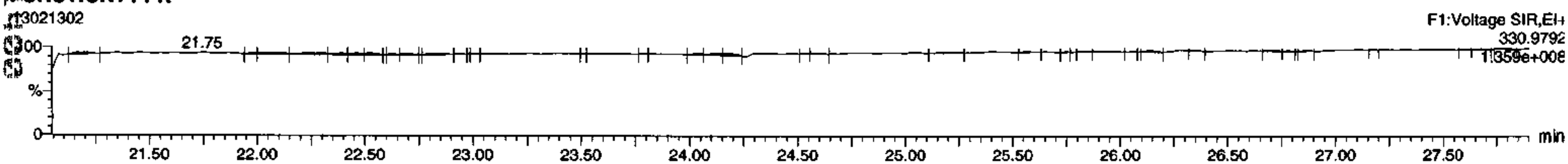
Total-tetradioxins
13021302



Total-tetradioxins
13021302



FUNCTION1 PFK
13021302

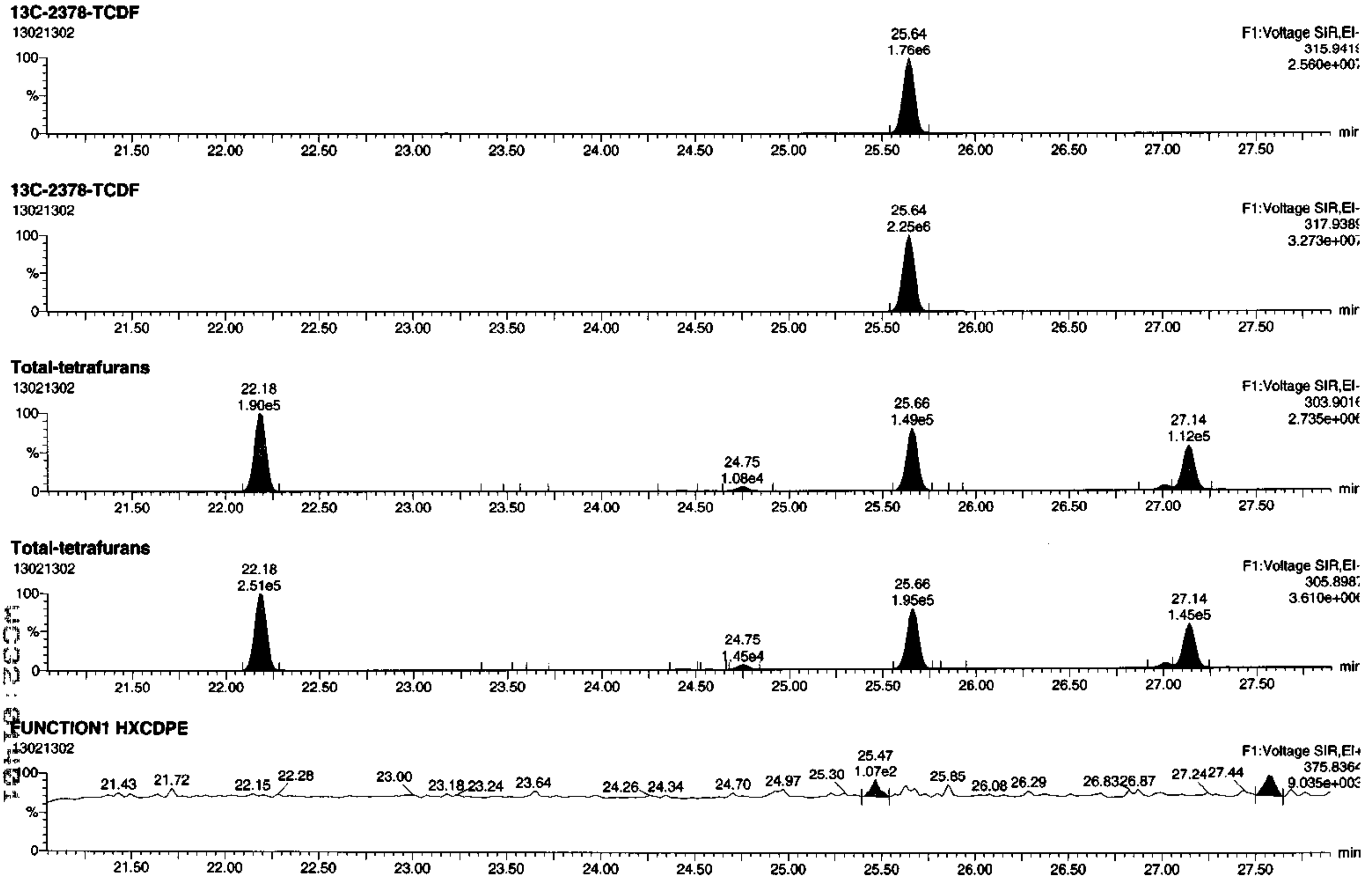


Dataset: P:\DIOXIN8290.PRO\130213OPEN.qld

Last Altered: Wednesday, February 13, 2013 11:57:32 Pacific Standard Time

Printed: Wednesday, February 13, 2013 11:58:37 Pacific Standard Time

ID: CS3, Name: 13021302, Date: 13-Feb-2013, Time: 11:03:27, Conditions: AUTOSPEC01, User: pk



Quantify Sample Report **MassLynx 4.1 SCN 714**

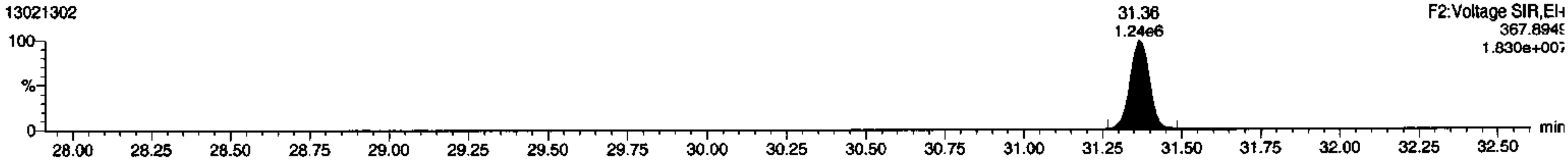
Dataset: P:\DIOXIN8290.PRO\130213OPEN.qld

Last Altered: Wednesday, February 13, 2013 11:57:32 Pacific Standard Time

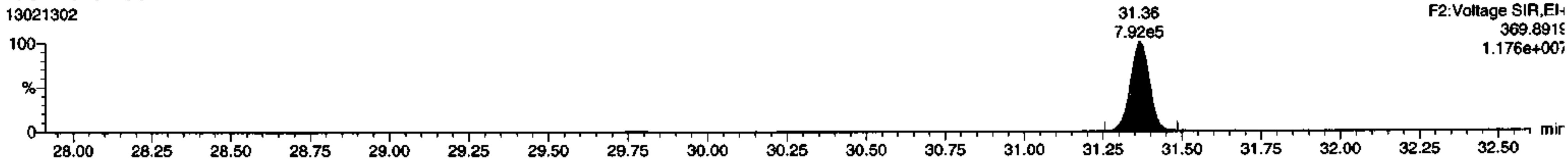
Printed: Wednesday, February 13, 2013 11:58:37 Pacific Standard Time

ID: CS3, Name: 13021302, Date: 13-Feb-2013, Time: 11:03:27, Conditions: AUTOSPEC01, User: pk

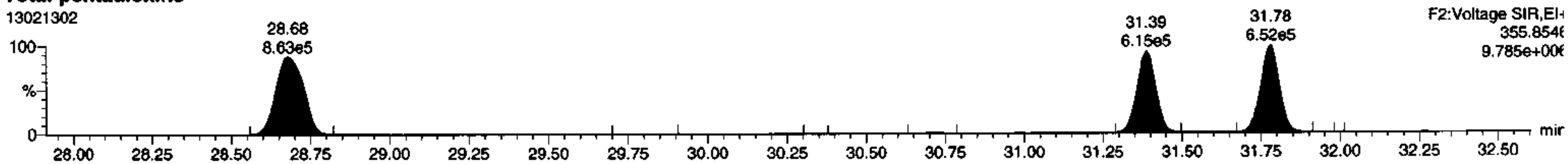
13C-12378-PeCDD



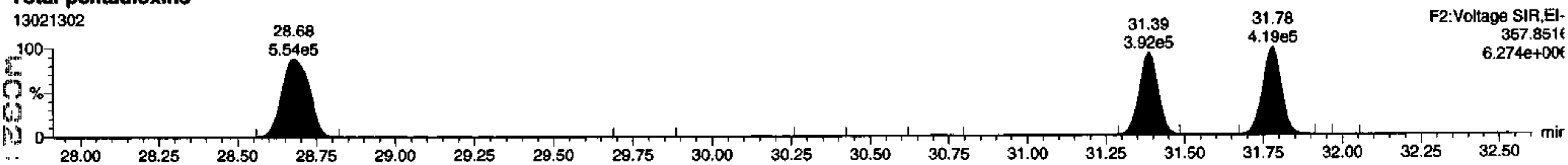
13C-12378-PeCDD



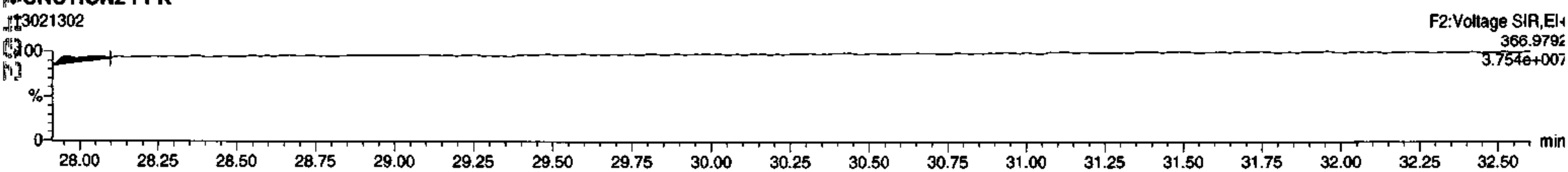
Total-pentadioxins



Total-pentadioxins



FUNCTION2 PFK



Quantify Sample Report MassLynx 4.1 SCN 714
Dataset: P:\DIOXIN8290.PRO\130213OPEN.qld
Last Altered: Wednesday, February 13, 2013 11:57:32 Pacific Standard Time
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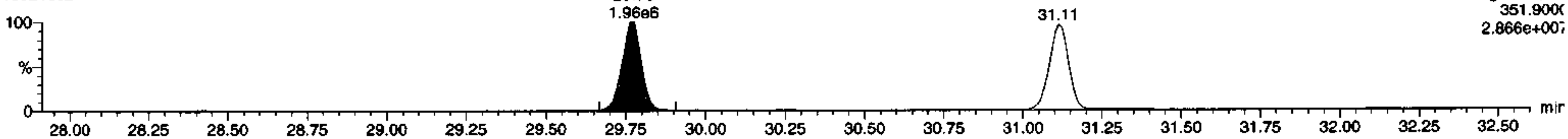
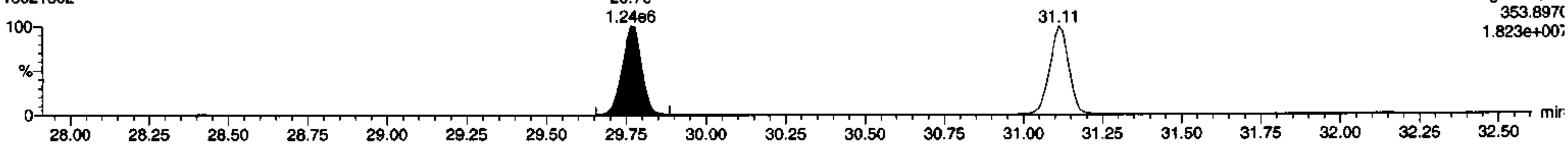
ID: CS3, Name: 13021302, Date: 13-Feb-2013, Time: 11:03:27, Conditions: AUTOSPEC01, User: pk

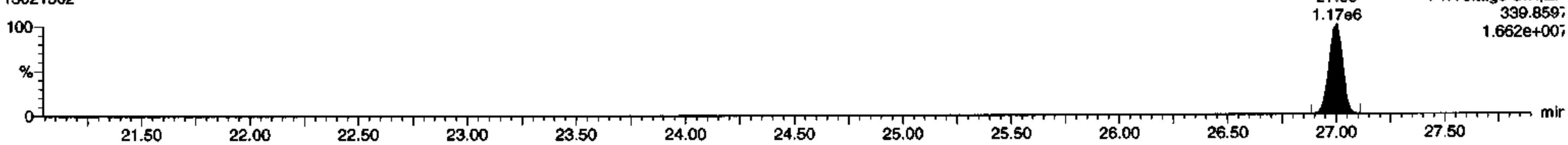
13C-12378-PeCDF
13021302



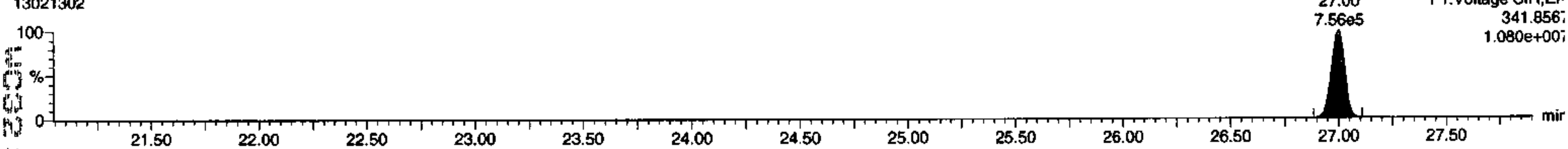
13C-12378-PeCDF
13021302



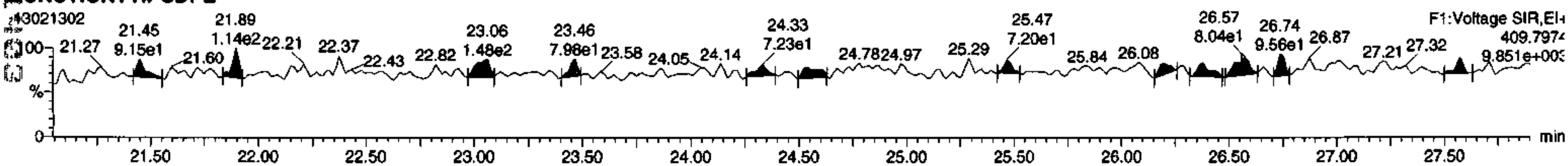
Total-penta1
13021302



Total-penta1
13021302



FUNCTION1 HPCDPE
13021302



Dataset: P:\DIOXIN8290.PRO\130213OPEN.qld
Last Altered: Wednesday, February 13, 2013 11:57:32 Pacific Standard Time
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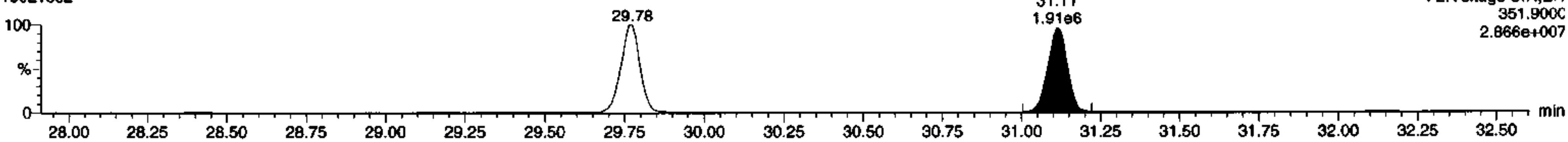
ID: CS3, Name: 13021302, Date: 13-Feb-2013, Time: 11:03:27, Conditions: AUTOSPEC01, User: pk

13C-23478-PeCDF
13021302


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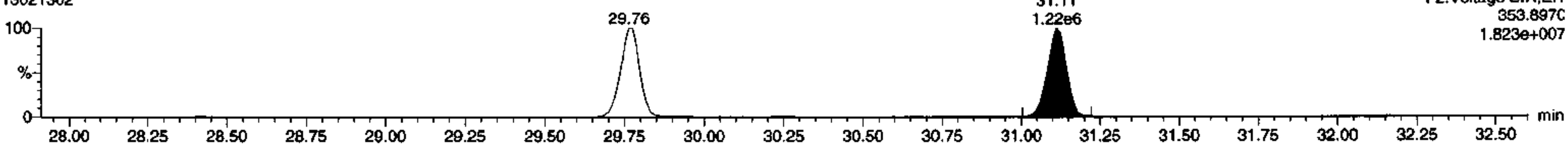
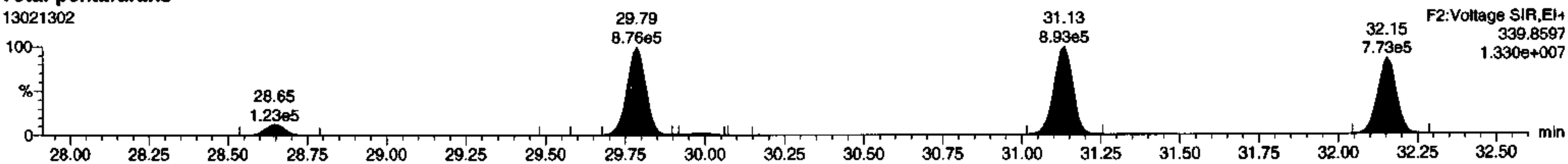
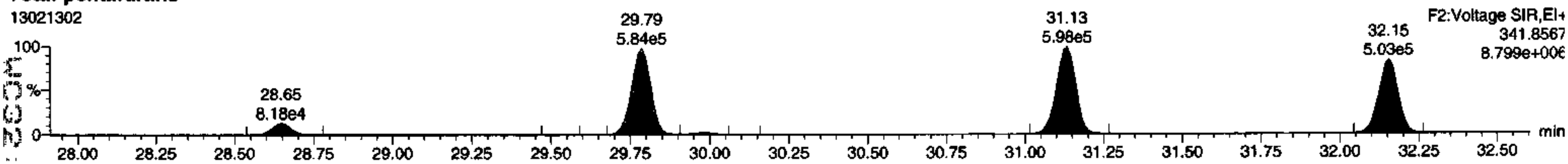
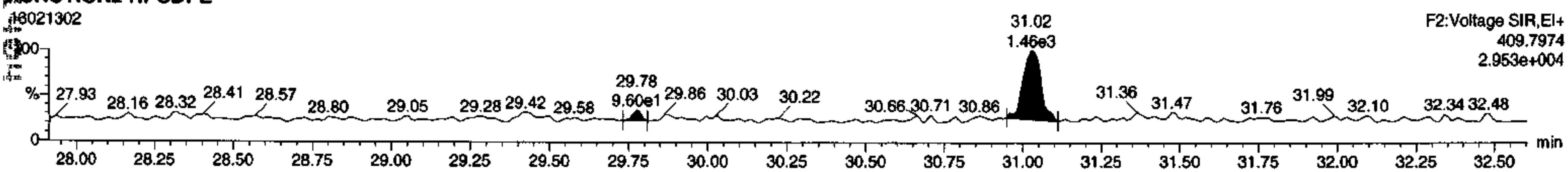
13021302


Total-pentafurans
13021302


Total-pentafurans
13021302


FUNCTION2 HPCDPE
13021302


Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213OPEN.qld
Last Altered: Wednesday, February 13, 2013 11:57:32 Pacific Standard Time
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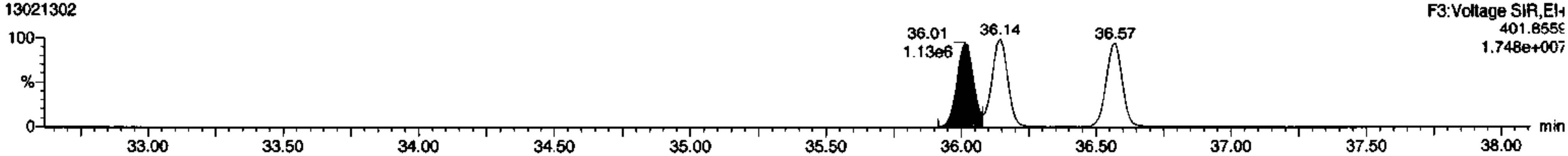
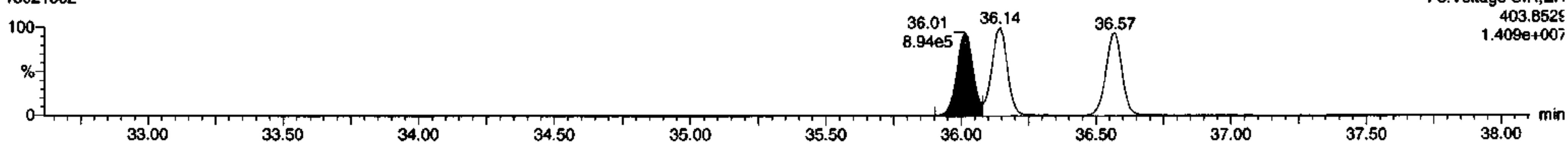
ID: CS3, Name: 13021302, Date: 13-Feb-2013, Time: 11:03:27, Conditions: AUTOSPEC01, User: pk

13C-123478-HxCDD
13021302



13C-123478-HxCDD
13021302



Total-hexadioxins
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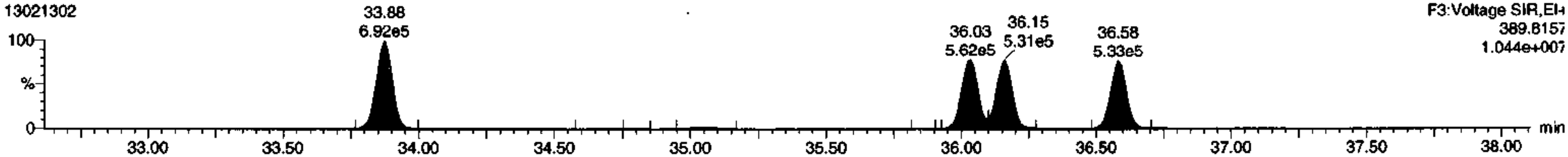
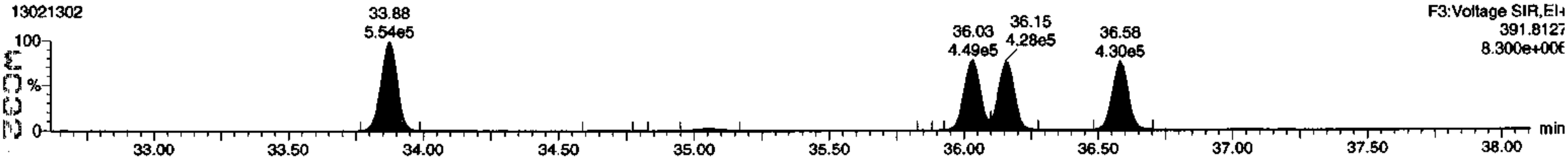
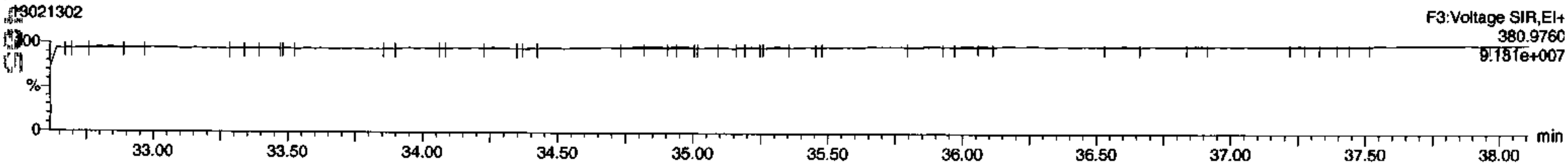


Total-hexadioxins
13021302



FUNCTION3 PFK
13021302



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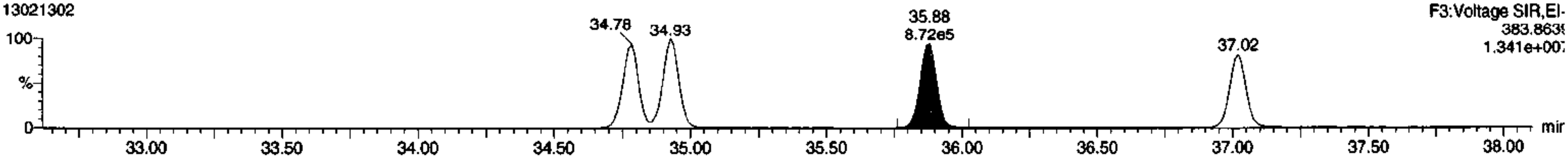
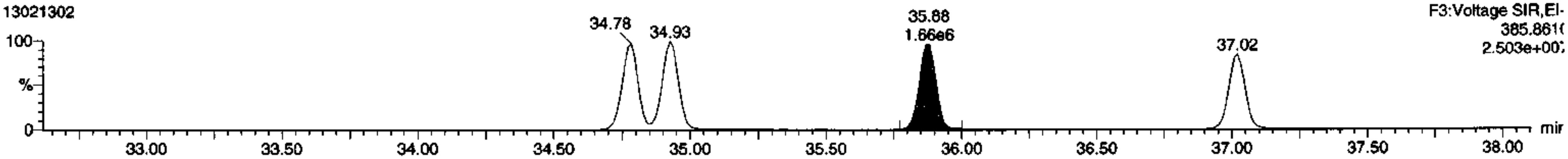
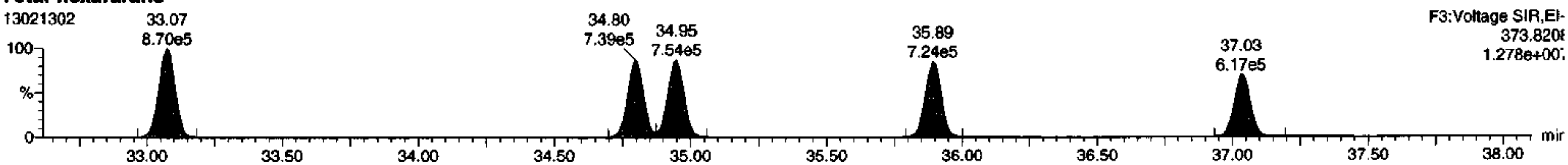
13C-234678-HxCDF



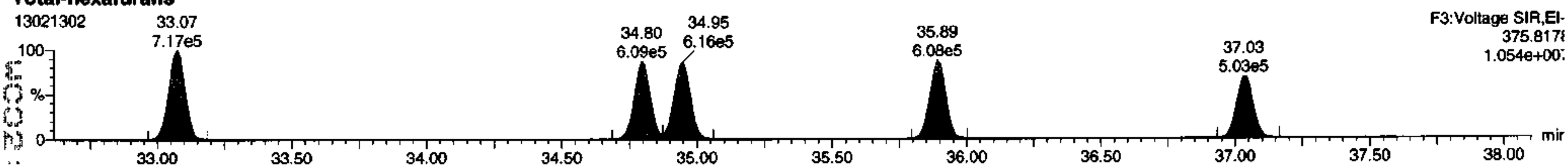
13C-234678-HxCDF



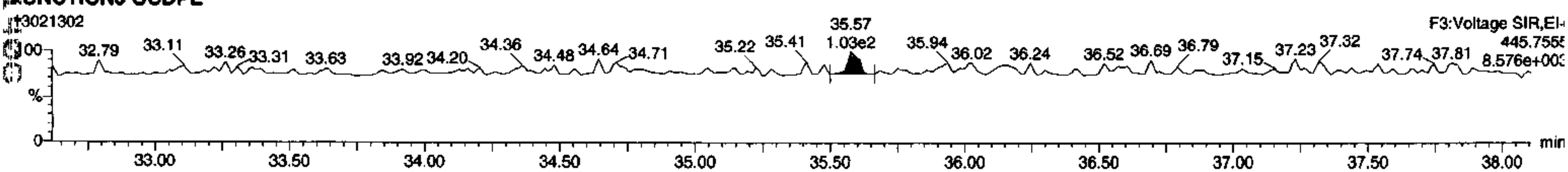
Total-hexafurans



Total-hexafurans



FUNCTION3 OCDPE



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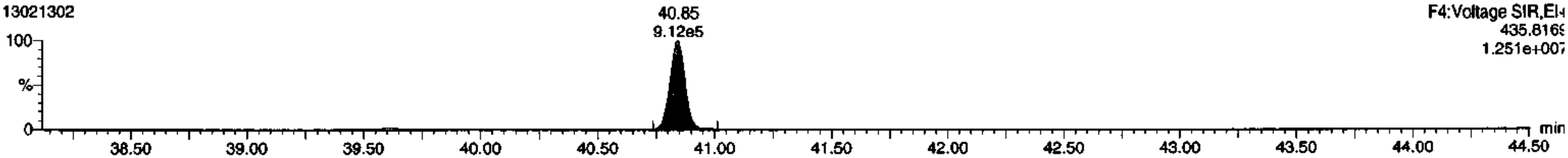
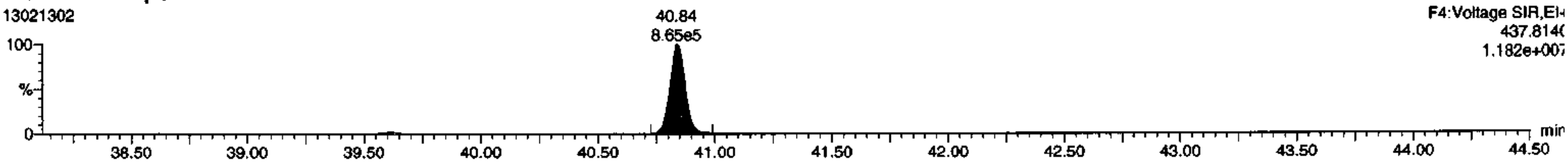
ID: CS3, Name: 13021302, Date: 13-Feb-2013, Time: 11:03:27, Conditions: AUTOSPEC01, User: pk

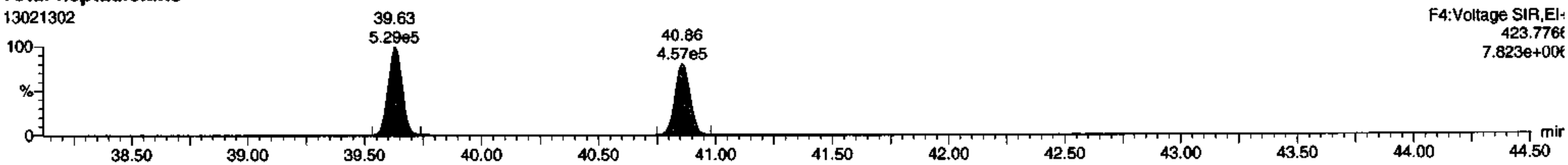
13C-1234678-HpCDD



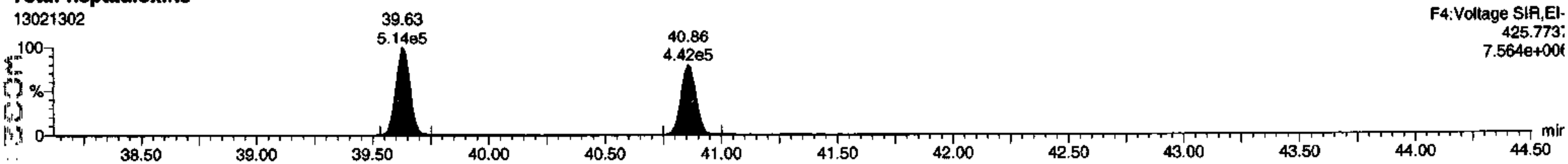
13C-1234678-HpCDD



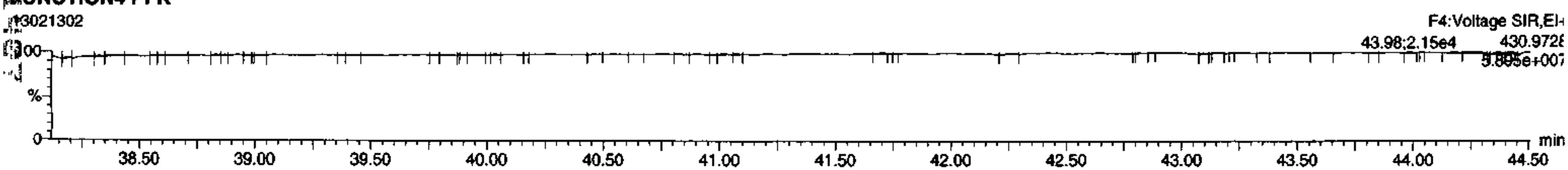
Total-heptadioxins



Total-heptadioxins



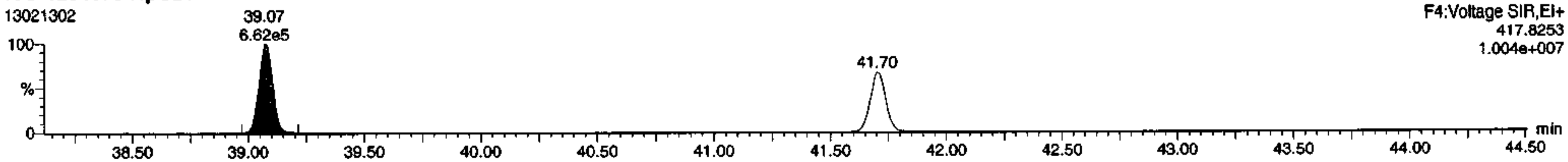
FUNCTION4 PFK



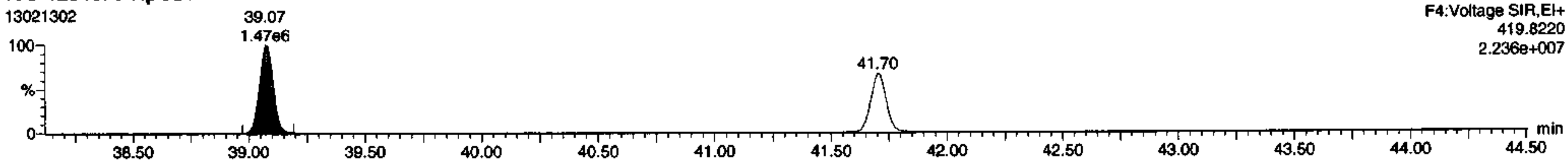
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213OPEN.qld
Last Altered: Wednesday, February 13, 2013 11:57:32 Pacific Standard Time
Printed: Wednesday, February 13, 2013 11:58:37 Pacific Standard Time

ID: CS3, Name: 13021302, Date: 13-Feb-2013, Time: 11:03:27, Conditions: AUTOSPEC01, User: pk

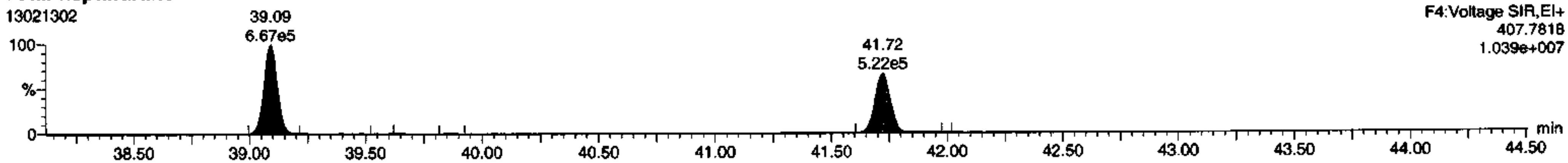
13C-1234678-HpCDF



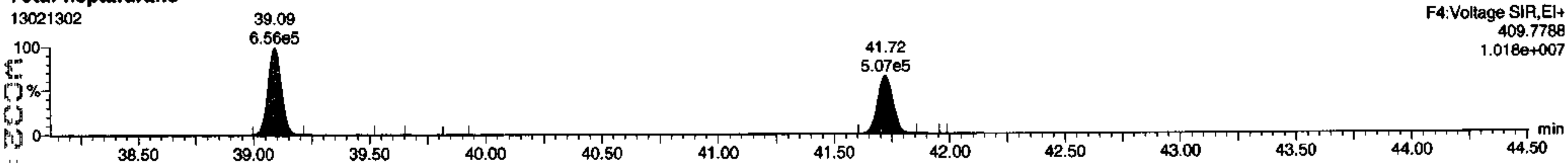
13C-1234678-HpCDF



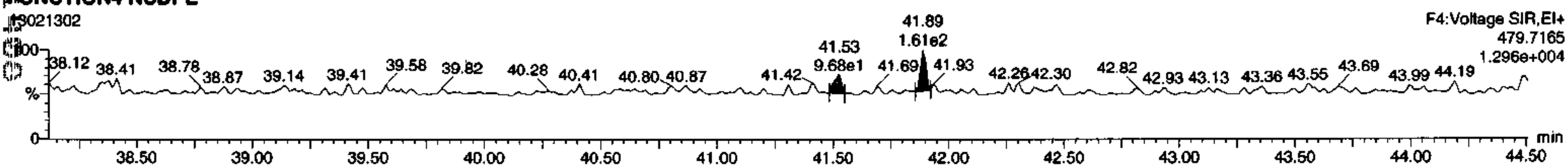
Total-heptafurans



Total-heptafurans



FUNCTION4 NCDPE



Quantify Sample Report **MassLynx 4.1 SCN 714**

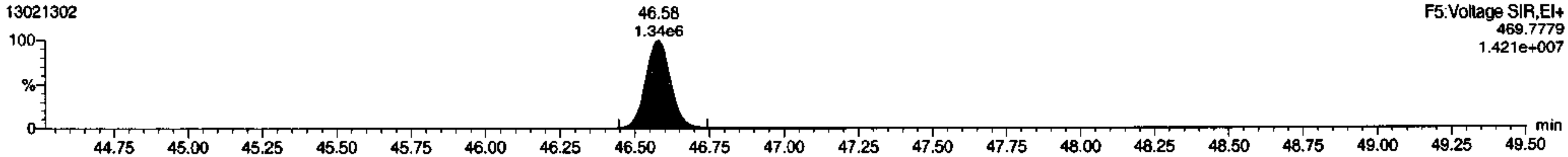
Dataset: P:\DIOXIN8290.PRO\130213OPEN.qld

Last Altered: Wednesday, February 13, 2013 11:57:32 Pacific Standard Time

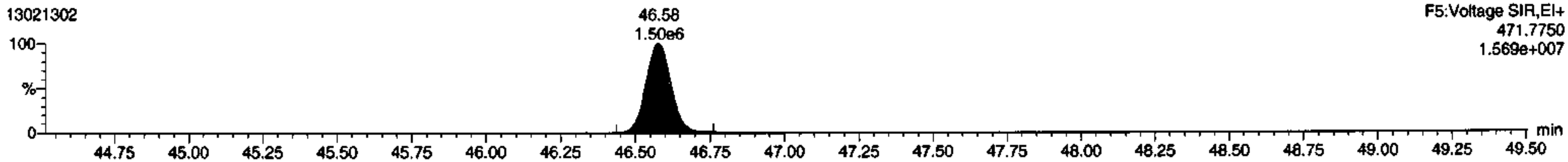
Printed: Wednesday, February 13, 2013 11:58:37 Pacific Standard Time

ID: CS3, Name: 13021302, Date: 13-Feb-2013, Time: 11:03:27, Conditions: AUTOSPEC01, User: pk

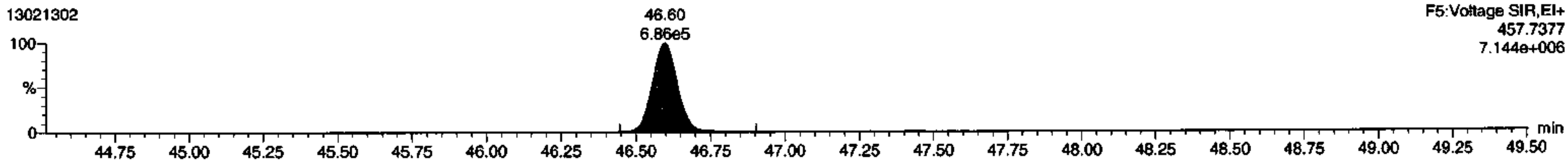
13C-OCDD



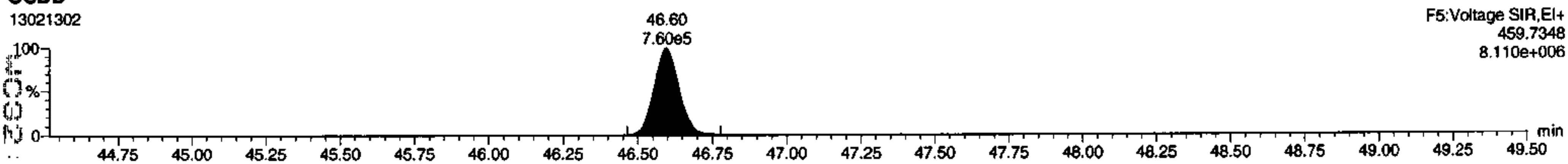
13C-OCDD



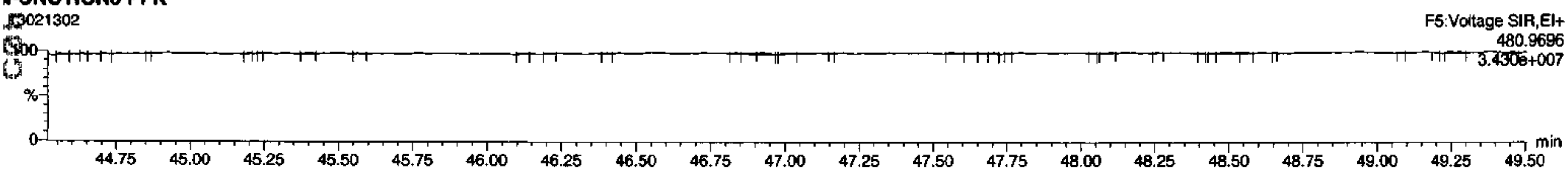
OCDD



OCDD



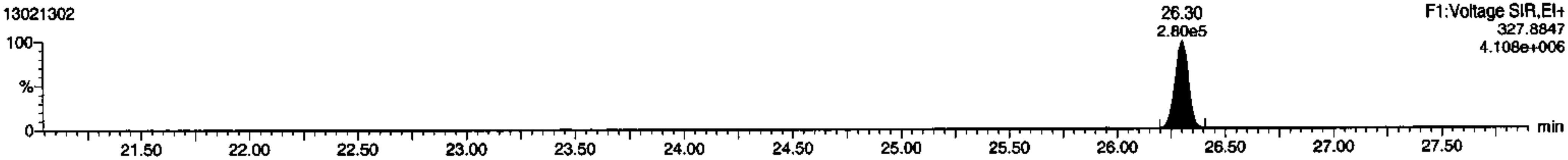
FUNCTION5 PFK



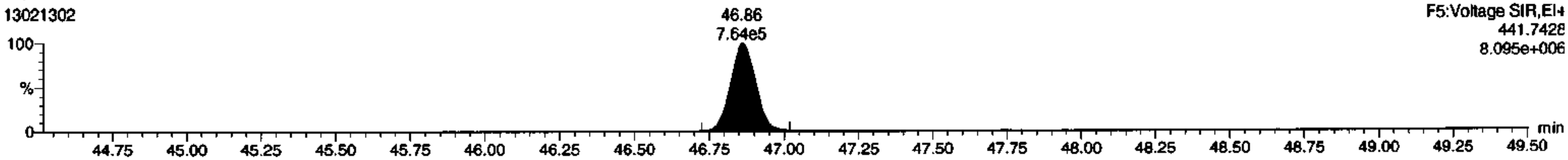
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213OPEN.qld
Last Altered: Wednesday, February 13, 2013 11:57:32 Pacific Standard Time
Printed: Wednesday, February 13, 2013 11:58:37 Pacific Standard Time

ID: CS3, Name: 13021302, Date: 13-Feb-2013, Time: 11:03:27, Conditions: AUTOSPEC01, User: pk

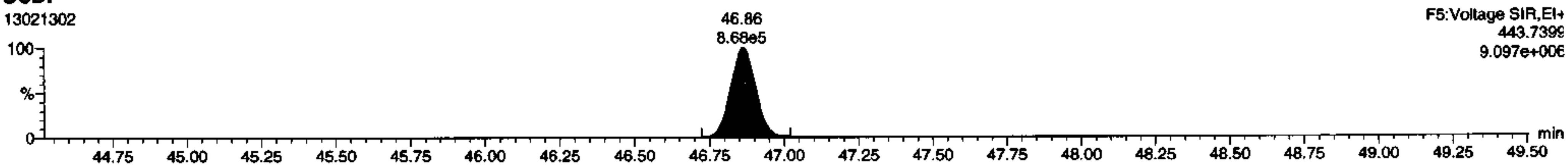
37CL-2378-TCDD
13021302



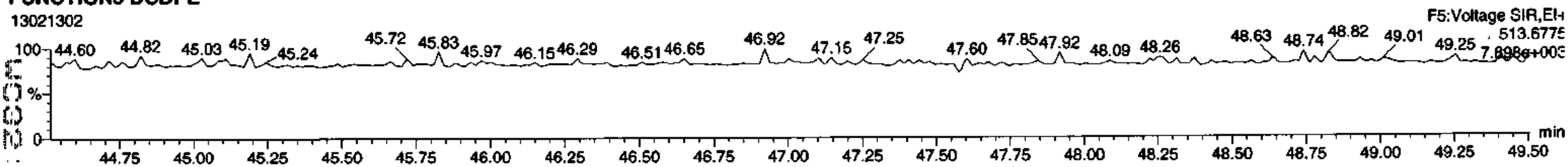
OCDF
13021302



OCDF
13021302



FUNCTION5 DCDPE
13021302



ARI
CDD/CDF EDL DATA
HIGH RESOLUTION

Lab.Sample ID: WC32MBS
Lab.File ID: 13021305
Date Analysed: 13-Feb-13

Target Analytes	Selected Ions	Peak RT	Conc	EMPC	EDL
2378-TCDD	320/322	0.00			0.017
12378-PeCDD	356/358	0.00			0.020
123478-HxCDD	390/392	0.00			0.020
123678-HxCDD	390/392	0.00			0.020
123789-HxCDD	390/392	0.00			0.021
1234678-HpCDD	424/426	40.85	0.123		
OCDD	458/460	0.00			0.050
2378-TCDF	304/306	0.00			0.013
12378-PeCDF	340/342	0.00			0.015
23478-PeCDF	340/342	0.00			0.016
123478-HxCDF	374/376	0.00			0.014
234678-HxCDF	374/376	0.00			0.015
123678-HxCDF	374/376	0.00			0.013
123789-HxCDF	374/376	0.00			0.020
1234678-HpCDF	408/410	39.08	0.0215		
1234789-HpCDF	408/410	0.00			0.025
OCDF	442/444	0.00			0.051

Note: EDLs are on column values. Final EDL values are corrected for final volume of the extract (normally 20ul) and amount of sample extracted.

Quantify Sample Summary Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:46:36 Pacific Standard Time

Mr 2/14/13

Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 12 Feb 2013 12:25:57
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: WC32MBS, Name: 13021305, Date: 13-Feb-2013, Time: 13:45:15, Conditions: AUTOSPEC01, User: pk

[redacted]																
[redacted]	2378-TCDF					0.921		0.770		957	1415					
[redacted]	12378-PeCDF					0.912		1.550		712	1239					
[redacted]	23478-PeCDF					0.943		1.550		712	1239					
[redacted]	123478-HxCDF					1.101		1.240		664	690					
[redacted]	234678-HxCDF					1.073		1.240		664	690					
[redacted]	123678-HxCDF					1.056		1.240		664	690					
[redacted]	123789-HxCDF					1.017		1.240		664	690					
[redacted]	1234678-HpCDF	39.082	1.000	1.34e2	1.37e2	1.238	0.979	1.050	5.2	605	612	3.12e3	2.78e3	NO	0.022	0.022
[redacted]	1234789-HpCDF					1.224		1.050		605	612					
[redacted]	OCDF					1.162		0.890		659	913					
[redacted]	2378-TCDD					1.106		0.770		1171	1137					
[redacted]	12378-PeCDD					1.001		1.550		1056	669					
[redacted]	123478-HxCDD					0.978		1.240		654	866					
[redacted]	123678-HxCDD					0.929		1.240		654	866					
[redacted]	123789-HxCDD					0.904		1.240		654	866					
[redacted]	1234678-HpCDD	40.847	1.000	6.11e2	6.39e2	1.029	0.956	1.050	8.5	904	799	7.72e3	1.15e4	NO	0.123	0.123
[redacted]	OCDD					1.011	,895	0.890		693	663			NO		0.911
[redacted]	13C-2378-TCDF	25.630	1.007	1.45e6	1.85e6	1.522	0.782	0.770	8372.4	2668	2362	2.23e7	2.87e7	NO		95.244
[redacted]	13C-12378-PeCDF	29.754	1.169	1.44e6	9.13e5	1.185	1.579	1.550	7520.3	2970	3074	2.23e7	1.42e7	NO		87.408
[redacted]	13C-23478-PeCDF	31.102	1.222	1.23e6	7.88e5	1.136	1.567	1.550	6447.1	2970	3074	1.91e7	1.22e7	NO		78.348
[redacted]	13C-123478-HxCDF	34.763	0.951	4.83e5	9.28e5	1.284	0.521	0.510	3535.3	2093	2034	7.40e6	1.43e7	NO		87.911
[redacted]	13C-123678-HxCDF	34.917	0.955	5.58e5	1.05e6	1.383	0.529	0.510	4113.2	2093	2034	8.61e6	1.65e7	NO		93.312
[redacted]	13C-234678-HxCDF	35.860	0.981	4.52e5	8.78e5	1.283	0.515	0.510	3305.2	2093	2034	6.92e6	1.34e7	NO		82.915
[redacted]	13C-123789-HxCDF	37.011	1.013	3.70e5	7.17e5	1.099	0.517	0.510	2646.5	2093	2034	5.54e6	1.07e7	NO		79.139
[redacted]	13C-1234678-HpCDF	39.071	1.069	3.14e5	7.05e5	1.070	0.445	0.440	3264.0	1450	2012	4.73e6	1.07e7	NO		76.229
[redacted]	13C-1234789-HpCDF	41.691	1.141	2.36e5	5.26e5	0.774	0.449	0.440	2132.9	1450	2012	3.09e6	7.01e6	NO		78.781
[redacted]	13C-1234-TCDD	25.451	0.000	9.96e5	1.28e6	1.000	0.781	0.770	3735.1	4117	1948	1.54e7	1.97e7	NO		100.000
[redacted]	13C-2378-TCDD	26.258	1.032	8.82e5	1.14e6	0.943	0.773	0.770	3156.6	4117	1948	1.30e7	1.68e7	NO		94.467
[redacted]	13C-12378-PeCDD	31.354	1.232	8.53e5	5.38e5	0.715	1.584	1.550	8250.4	1588	1155	1.31e7	8.36e6	NO		85.584
[redacted]	13C-123478-HxCDD	36.002	0.985	7.04e5	5.58e5	1.032	1.261	1.240	3859.9	2851	1345	1.10e7	8.67e6	NO		97.821
[redacted]	13C-123678-HxCDD	36.134	0.989	7.34e5	5.87e5	1.076	1.250	1.240	3938.1	2851	1345	1.12e7	8.92e6	NO		98.158
[redacted]	13C-1234678-HpCDD	40.836	1.117	5.06e5	4.84e5	0.838	1.044	1.050	4299.8	1655	1213	7.11e6	6.78e6	NO		94.549
[redacted]	13C-OCDD	46.563	1.274	6.11e5	6.75e5	0.675	0.904	0.890	2911.7	2183	1597	6.36e6	7.20e6	NO		152.313

Quantify Sample Summary Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:46:36 Pacific Standard Time

ID: WC32MBS, Name: 13021305, Date: 13-Feb-2013, Time: 13:45:15, Conditions: AUTOSPEC01, User: pk

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	13C-123789-HxCDD	36.550	0.000	6.95e5	5.55e5	1.000	1.254	1.240	3684.0	2851	1345	1.05e7	8.57e6	NO		100.000
[redacted]	Total-tetrafurans			0.00e0		0.921				957		0.00e0				
[redacted]	Total-penta1			0.00e0						569		0.00e0				
[redacted]	Total-pentafurans			0.00e0		0.927				712		0.00e0				
[redacted]	Total-hexafurans			0.00e0		1.062				664		0.00e0				
[redacted]	Total-heptafurans			2.96e2		1.231				605		5.58e3				0.051
[redacted]	Total-Furans			2.96e2		1.065				957		5.58e3				0.051
[redacted]	Total-tetradioxins			7.89e2		1.106				1171		1.41e4				0.041 E
[redacted]	Total-pentadioxins			0.00e0		1.001				1056		0.00e0				
[redacted]	Total-hexadioxins			6.31e2		0.937				654		1.14e4				0.076 E
[redacted]	Total-heptadioxins			1.87e3		1.029				904		2.85e4				0.382
[redacted]	Total-Dioxins			3.36e3		0.994				1171		5.54e4				0.510
[redacted]	Total-TEQ			3.66e3						1171		6.10e4				0.561
[redacted]	37CL-2378-TCDD	26.288	1.033	9.19e5		1.051			9792.5	1427		1.40e7				38.484
[redacted]	FUNCTION1 PFK			7.43e6						913333		9.81e7				
[redacted]	FUNCTION2 PFK			8.27e4						390456		1.28e6				0.000
[redacted]	FUNCTION3 PFK			3.08e5						633198		9.28e6				0.000
[redacted]	FUNCTION4 PFK			3.88e5						413255		1.24e7				
[redacted]	FUNCTION5 PFK			3.87e5						294860		1.38e7				
[redacted]	FUNCTION1 HXCDPE			1.92e2						374		3.26e3				0.000
[redacted]	FUNCTION1 HPCDPE			1.07e3						911		1.99e4				0.000
[redacted]	FUNCTION2 HPCDPE			2.78e2						1123		7.91e3				0.000
[redacted]	FUNCTION3 OCDPE			7.98e1						523		1.35e3				0.000
[redacted]	FUNCTION4 NCDPE			3.30e2						760		7.81e3				0.000
[redacted]	FUNCTION5 DCDPE			0.00e0						284		0.00e0				

4032 : 01410

Quantify Totals Report MassLynx 4.1 SCN 714

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:46:36 Pacific Standard Time

Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 12 Feb 2013 12:25:57
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: WC32MBS, Name: 13021305, Date: 13-Feb-2013, Time: 13:45:15, Conditions: AUTOSPEC01, User: pk

TF

[redacted]												
[redacted]												

PP

[redacted]												
[redacted]												

PF

[redacted]												
[redacted]												

HF

[redacted]												
[redacted]												

HPF

[redacted]												
[redacted]	39	Total-heptafurans	407.7818	39.85	325.138	1.231	0.030		1.00	1.05	NO	4.1
[redacted]	8	1234678-HpCDF	407.7818	39.08	271.519	1.238	0.022	0.022	0.98	1.05	NO	5.2

Furans,TF,PP,PF,HF,HPF,OF

[redacted]												
[redacted]	39	Total-heptafurans	407.7818	39.85	325.138	1.231	0.030		1.00	1.05	NO	4.1
[redacted]	8	1234678-HpCDF	407.7818	39.08	271.519	1.238	0.022	0.022	0.98	1.05	NO	5.2

TD

[redacted]												
[redacted]	41	Total-tetradioxins	319.8965	25.63	920.141	1.106	0.041		6.04	0.77	YES	12.0

PD

[redacted]												
[redacted]												

HD

[redacted]												
[redacted]	43	Total-hexadioxins	389.8157	35.85	634.514	0.937	0.052		4.29	1.24	YES	13.9
[redacted]	43	Total-hexadioxins	389.8157	33.85	285.471	0.937	0.024		0.68	1.24	YES	3.5

ID: WC32MBS, Name: 13021305, Date: 13-Feb-2013, Time: 13:45:15, Conditions: AUTOSPEC01, User: pk

HPD

[redacted]	16	1234678-HpCDD	423.7766	40.85	1249.415	1.029	0.123	0.123	0.96	1.05	NO	8.5
[redacted]	44	Total-heptadioxins	423.7766	39.63	2644.899	1.029	0.260		0.90	1.05	NO	23.0

Dioxins,TD,PD,HD,HPD,OD

[redacted]	45	Total-Dioxins	319.8965	27.32	209.675	0.994	0.010		0.57	0.77	YES	1.3
[redacted]	41	Total-tetradioxins	319.8965	25.63	920.141	1.106	0.041		6.04	0.77	YES	12.0
[redacted]	43	Total-hexadioxins	389.8157	35.85	634.514	0.937	0.052		4.29	1.24	YES	13.9
[redacted]	43	Total-hexadioxins	389.8157	33.85	285.471	0.937	0.024		0.68	1.24	YES	3.5
[redacted]	16	1234678-HpCDD	423.7766	40.85	1249.415	1.029	0.123	0.123	0.96	1.05	NO	8.5
[redacted]	44	Total-heptadioxins	423.7766	39.63	2644.899	1.029	0.260		0.90	1.05	NO	23.0

TotalTEQ,Furans,Dioxins

[redacted]	39	Total-heptafurans	407.7818	39.85	325.138	1.231	0.030		1.00	1.05	NO	4.1
[redacted]	8	1234678-HpCDF	407.7818	39.08	271.519	1.238	0.022	0.022	0.98	1.05	NO	5.2
[redacted]	45	Total-Dioxins	319.8965	27.32	209.675	0.994	0.010		0.57	0.77	YES	1.3
[redacted]	41	Total-tetradioxins	319.8965	25.63	920.141	1.106	0.041		6.04	0.77	YES	12.0
[redacted]	43	Total-hexadioxins	389.8157	35.85	634.514	0.937	0.052		4.29	1.24	YES	13.9
[redacted]	43	Total-hexadioxins	389.8157	33.85	285.471	0.937	0.024		0.68	1.24	YES	3.5
[redacted]	16	1234678-HpCDD	423.7766	40.85	1249.415	1.029	0.123	0.123	0.96	1.05	NO	8.5
[redacted]	44	Total-heptadioxins	423.7766	39.63	2644.899	1.029	0.260		0.90	1.05	NO	23.0

PFK1

[redacted]	48	FUNCTION1 PFK	330.9792	21.27	0.000							6.4
[redacted]	48	FUNCTION1 PFK	330.9792	21.18	0.000							0.7
[redacted]	48	FUNCTION1 PFK	330.9792	26.89	0.000							4.5
[redacted]	48	FUNCTION1 PFK	330.9792	26.81	0.000							10.3
[redacted]	48	FUNCTION1 PFK	330.9792	26.69	0.000							10.6
[redacted]	48	FUNCTION1 PFK	330.9792	26.48	0.000							4.6
[redacted]	48	FUNCTION1 PFK	330.9792	26.17	0.000							4.7
[redacted]	48	FUNCTION1 PFK	330.9792	25.62	0.000							9.6
[redacted]	48	FUNCTION1 PFK	330.9792	25.38	0.000							3.8
[redacted]	48	FUNCTION1 PFK	330.9792	25.14	0.000							4.3
[redacted]	48	FUNCTION1 PFK	330.9792	24.78	0.000							3.0
[redacted]	48	FUNCTION1 PFK	330.9792	23.91	0.000							4.8
[redacted]	48	FUNCTION1 PFK	330.9792	23.09	0.000							3.5
[redacted]	48	FUNCTION1 PFK	330.9792	22.76	0.000							2.4
[redacted]	48	FUNCTION1 PFK	330.9792	22.36	0.000							2.5
[redacted]	48	FUNCTION1 PFK	330.9792	22.27	0.000							1.5
[redacted]	48	FUNCTION1 PFK	330.9792	21.94	0.000							0.5
[redacted]	48	FUNCTION1 PFK	330.9792	21.46	0.000							1.0
[redacted]	48	FUNCTION1 PFK	330.9792	27.51	0.000							13.3
[redacted]	48	FUNCTION1 PFK	330.9792	27.35	0.000							5.2
[redacted]	48	FUNCTION1 PFK	330.9792	27.17	0.000							10.0

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:46:36 Pacific Standard Time

ID: WC32MBS, Name: 13021305, Date: 13-Feb-2013, Time: 13:45:15, Conditions: AUTOSPEC01, User: pk

PFK2

[redacted]												
[redacted]	49	FUNCTION2 PFK	366.9792	28.05	0.000		0.000					3.3

PFK3

[redacted]												
[redacted]	50	FUNCTION3 PFK	380.9760	36.03	0.000		0.000					1.0
	50	FUNCTION3 PFK	380.9760	35.59	0.000		0.000					0.5
	50	FUNCTION3 PFK	380.9760	35.44	0.000		0.000					1.2
	50	FUNCTION3 PFK	380.9760	35.31	0.000		0.000					0.6
	50	FUNCTION3 PFK	380.9760	33.91	0.000		0.000					1.6
	50	FUNCTION3 PFK	380.9760	33.88	0.000		0.000					2.4
	50	FUNCTION3 PFK	380.9760	33.43	0.000		0.000					0.6
	50	FUNCTION3 PFK	380.9760	33.38	0.000		0.000					0.9
	50	FUNCTION3 PFK	380.9760	33.20	0.000		0.000					1.5
	50	FUNCTION3 PFK	380.9760	32.81	0.000		0.000					1.2
	50	FUNCTION3 PFK	380.9760	37.46	0.000		0.000					0.6
	50	FUNCTION3 PFK	380.9760	37.38	0.000		0.000					0.6
	50	FUNCTION3 PFK	380.9760	37.13	0.000		0.000					2.1

PFK4

[redacted]												
[redacted]	51	FUNCTION4 PFK	430.9728	40.56	0.000							1.6
	51	FUNCTION4 PFK	430.9728	40.51	0.000							1.4
	51	FUNCTION4 PFK	430.9728	40.33	0.000							0.5
	51	FUNCTION4 PFK	430.9728	40.28	0.000							1.7
	51	FUNCTION4 PFK	430.9728	40.11	0.000							1.5
	51	FUNCTION4 PFK	430.9728	39.94	0.000							1.0
	51	FUNCTION4 PFK	430.9728	39.85	0.000							1.1
	51	FUNCTION4 PFK	430.9728	39.09	0.000							1.3
	51	FUNCTION4 PFK	430.9728	39.04	0.000							0.7
	51	FUNCTION4 PFK	430.9728	38.80	0.000							0.8
	51	FUNCTION4 PFK	430.9728	38.64	0.000							0.8
	51	FUNCTION4 PFK	430.9728	38.27	0.000							0.6
	51	FUNCTION4 PFK	430.9728	43.92	0.000							0.9
	51	FUNCTION4 PFK	430.9728	43.81	0.000							0.7
	51	FUNCTION4 PFK	430.9728	43.60	0.000							0.8
	51	FUNCTION4 PFK	430.9728	43.57	0.000							1.0
	51	FUNCTION4 PFK	430.9728	43.47	0.000							1.4
	51	FUNCTION4 PFK	430.9728	43.18	0.000							1.1
	51	FUNCTION4 PFK	430.9728	42.69	0.000							1.0
	51	FUNCTION4 PFK	430.9728	42.50	0.000							1.2
	51	FUNCTION4 PFK	430.9728	42.22	0.000							0.6
	51	FUNCTION4 PFK	430.9728	41.50	0.000							1.4
	51	FUNCTION4 PFK	430.9728	41.47	0.000							1.4
	51	FUNCTION4 PFK	430.9728	41.37	0.000							1.5
	51	FUNCTION4 PFK	430.9728	41.14	0.000							1.0
	51	FUNCTION4 PFK	430.9728	41.10	0.000							1.5
	51	FUNCTION4 PFK	430.9728	40.68	0.000							1.6

ID: WC32MBS, Name: 13021305, Date: 13-Feb-2013, Time: 13:45:15, Conditions: AUTOSPEC01, User: pk

PFK5

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	52	FUNCTION5 PFK	480.9696	46.10	0.000							1.4
[redacted]	52	FUNCTION5 PFK	480.9696	46.05	0.000							1.6
[redacted]	52	FUNCTION5 PFK	480.9696	45.96	0.000							0.8
[redacted]	52	FUNCTION5 PFK	480.9696	45.93	0.000							0.4
[redacted]	52	FUNCTION5 PFK	480.9696	45.88	0.000							1.7
[redacted]	52	FUNCTION5 PFK	480.9696	45.74	0.000							0.4
[redacted]	52	FUNCTION5 PFK	480.9696	45.62	0.000							0.7
[redacted]	52	FUNCTION5 PFK	480.9696	45.35	0.000							1.1
[redacted]	52	FUNCTION5 PFK	480.9696	45.29	0.000							1.1
[redacted]	52	FUNCTION5 PFK	480.9696	45.22	0.000							1.5
[redacted]	52	FUNCTION5 PFK	480.9696	45.18	0.000							1.4
[redacted]	52	FUNCTION5 PFK	480.9696	44.89	0.000							0.4
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[redacted]	52	FUNCTION5 PFK	480.9696	44.70	0.000							0.6
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[redacted]	52	FUNCTION5 PFK	480.9696	48.02	0.000							0.6
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[redacted]	52	FUNCTION5 PFK	480.9696	47.78	0.000							1.6
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[redacted]	52	FUNCTION5 PFK	480.9696	47.60	0.000							1.7
[redacted]	52	FUNCTION5 PFK	480.9696	47.52	0.000							0.3
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[redacted]	52	FUNCTION5 PFK	480.9696	48.86	0.000							0.5
[redacted]	52	FUNCTION5 PFK	480.9696	48.82	0.000							1.6
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[redacted]	52	FUNCTION5 PFK	480.9696	48.51	0.000							1.7
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[redacted]	52	FUNCTION5 PFK	480.9696	48.38	0.000							1.2
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[redacted]	52	FUNCTION5 PFK	480.9696	48.30	0.000							0.7

ID: WC32MBS, Name: 13021305, Date: 13-Feb-2013, Time: 13:45:15, Conditions: AUTOSPEC01, User: pk

ETHERS1

[redacted]												
[redacted]	53	FUNCTION1 HXCD...	375.8364	24.32	0.000		0.000					4.1
[redacted]	53	FUNCTION1 HXCD...	375.8364	26.21	0.000		0.000					4.6

ETHERS2

[redacted]												
[redacted]	54	FUNCTION1 HPCD...	409.7974	25.38	0.000		0.000					1.9
[redacted]	54	FUNCTION1 HPCD...	409.7974	25.26	0.000		0.000					4.7
[redacted]	54	FUNCTION1 HPCD...	409.7974	25.03	0.000		0.000					2.6
[redacted]	54	FUNCTION1 HPCD...	409.7974	23.25	0.000		0.000					2.2
[redacted]	54	FUNCTION1 HPCD...	409.7974	22.61	0.000		0.000					1.7
[redacted]	54	FUNCTION1 HPCD...	409.7974	22.13	0.000		0.000					1.8
[redacted]	54	FUNCTION1 HPCD...	409.7974	21.97	0.000		0.000					2.0
[redacted]	54	FUNCTION1 HPCD...	409.7974	21.64	0.000		0.000					2.9
[redacted]	54	FUNCTION1 HPCD...	409.7974	21.27	0.000		0.000					2.2

ETHERS3

[redacted]												
[redacted]	55	FUNCTION2 HPCD...	409.7974	32.53	0.000		0.000					1.7
[redacted]	55	FUNCTION2 HPCD...	409.7974	32.09	0.000		0.000					2.6
[redacted]	55	FUNCTION2 HPCD...	409.7974	31.84	0.000		0.000					2.7

ETHERS4

[redacted]												
[redacted]	56	FUNCTION3 OCDPE	445.7555	36.77	0.000		0.000					2.6

ETHERS5

[redacted]												
[redacted]	57	FUNCTION4 NCDPE	479.7165	44.30	0.000		0.000					1.7
[redacted]	57	FUNCTION4 NCDPE	479.7165	40.85	0.000		0.000					4.2
[redacted]	57	FUNCTION4 NCDPE	479.7165	39.95	0.000		0.000					2.6
[redacted]	57	FUNCTION4 NCDPE	479.7165	39.60	0.000		0.000					1.7

ETHERS6

[redacted]												
[redacted]												

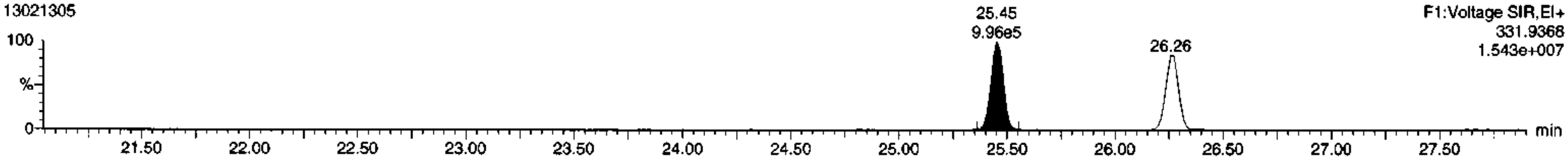
Quantify Sample Report **MassLynx 4.1 SCN 714**

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:46:36 Pacific Standard Time

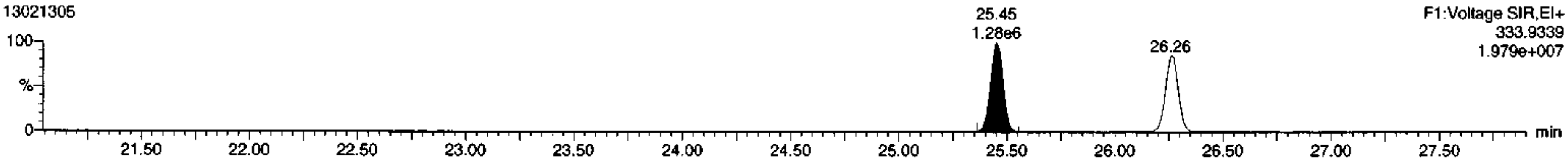
Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 12 Feb 2013 12:25:57
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: WC32MBS, Name: 13021305, Date: 13-Feb-2013, Time: 13:45:15, Conditions: AUTOSPEC01, User: pk

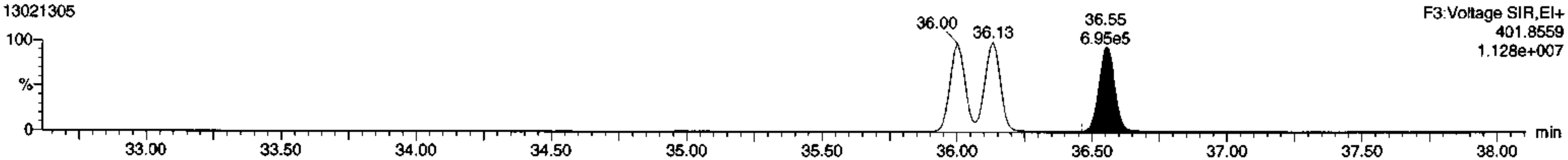
13C-1234-TCDD



13C-1234-TCDD



13C-123789-HxCDD



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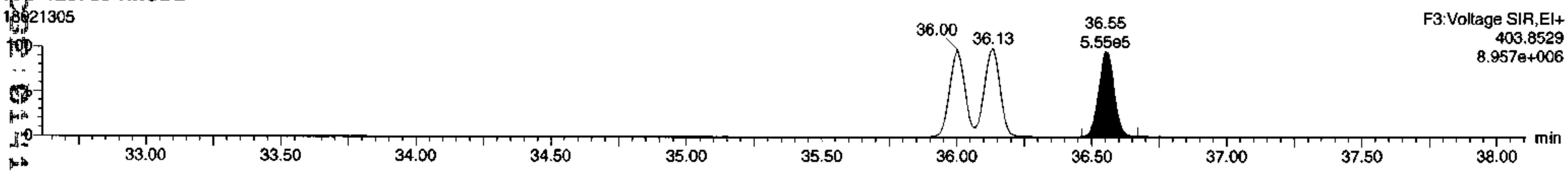
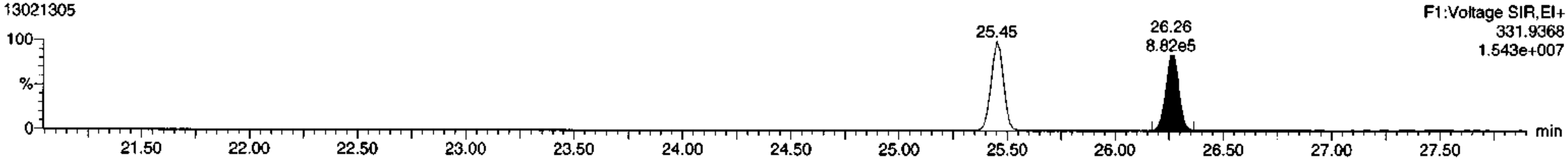


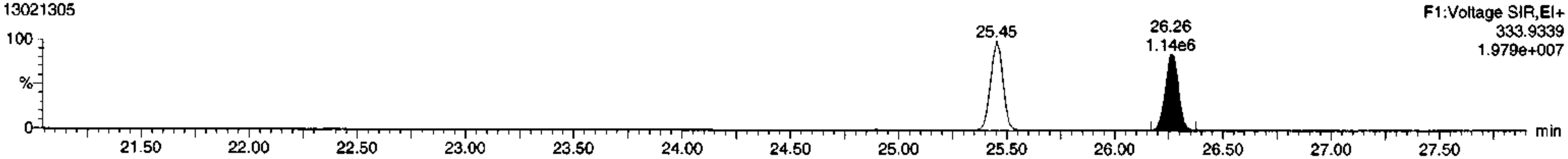
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:46:36 Pacific Standard Time

ID: WC32MBS, Name: 13021305, Date: 13-Feb-2013, Time: 13:45:15, Conditions: AUTOSPEC01, User: pk

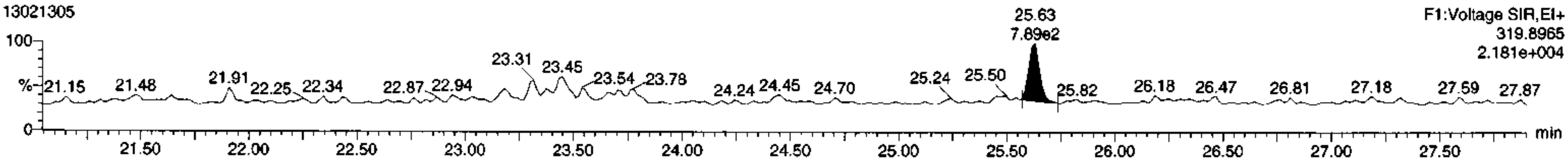
13C-2378-TCDD
13021305



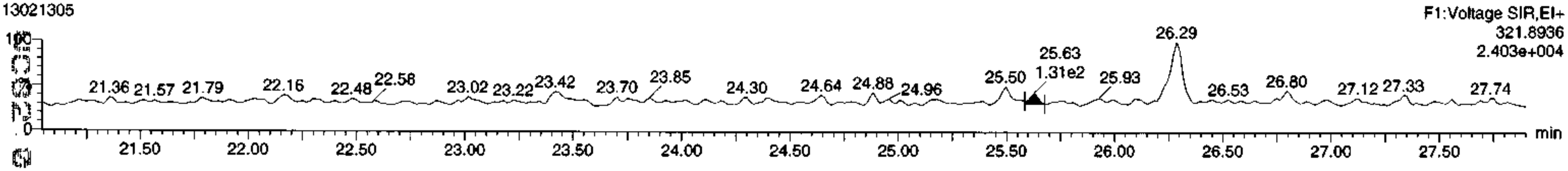
13C-2378-TCDD
13021305



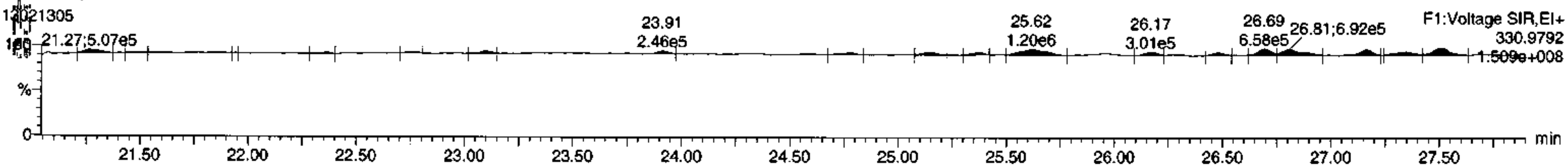
Total-tetradioxins
13021305



Total-tetradioxins
13021305



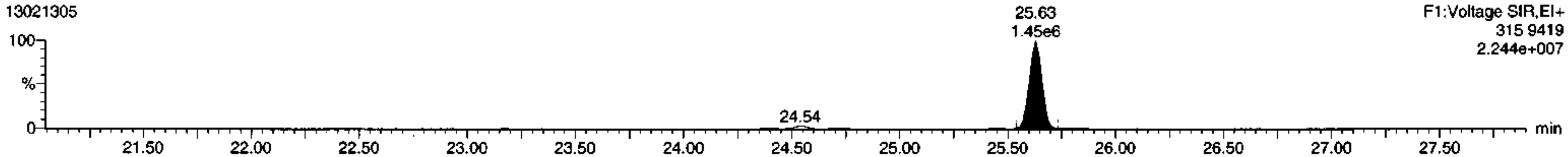
FUNCTION1 PFK
13021305



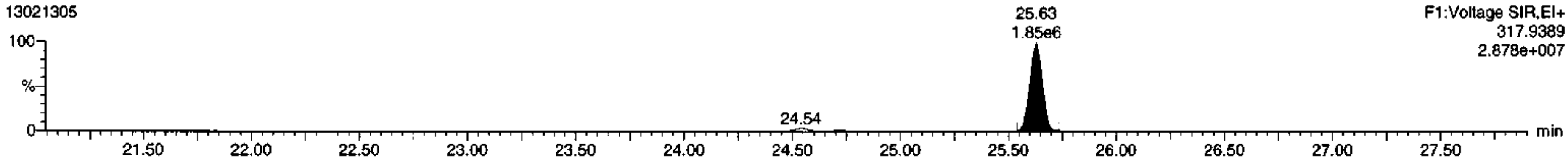
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:46:36 Pacific Standard Time

ID: WC32MBS, Name: 13021305, Date: 13-Feb-2013, Time: 13:45:15, Conditions: AUTOSPEC01, User: pk

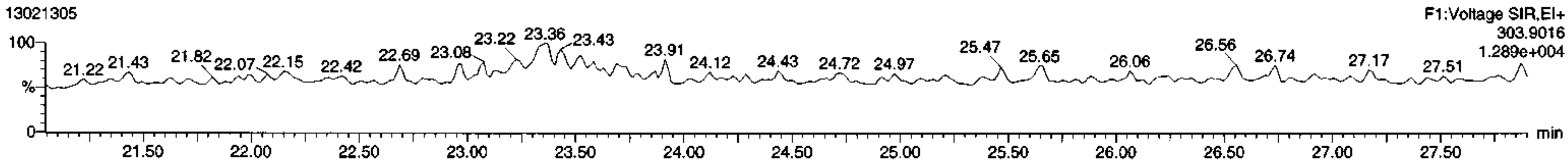
13C-2378-TCDF



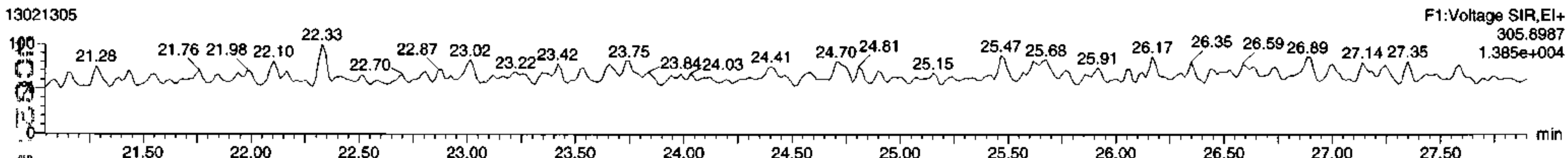
13C-2378-TCDF



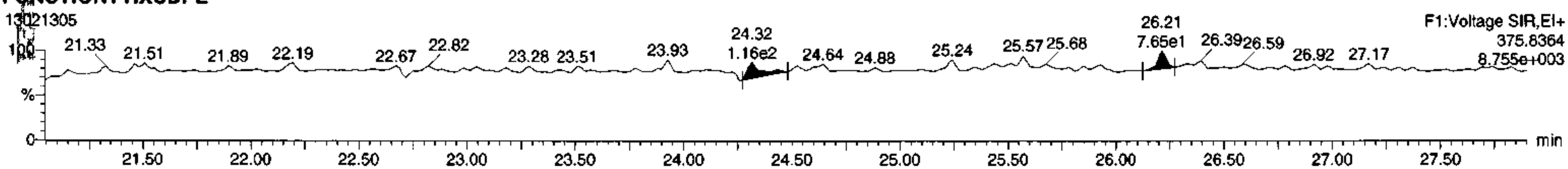
Total-tetrafurans



Total-tetrafurans



FUNCTION1 HXCDPE



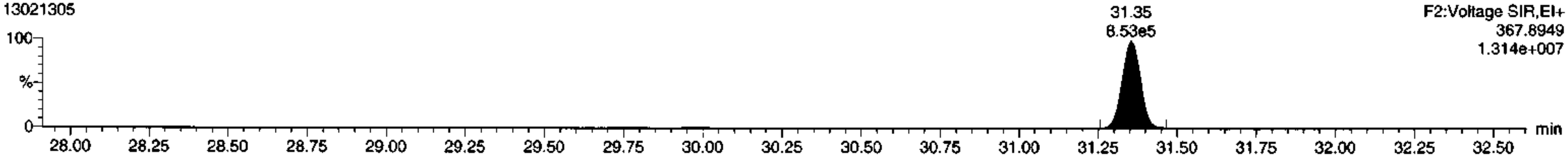
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld

Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time

Printed: Thursday, February 14, 2013 10:46:36 Pacific Standard Time

ID: WC32MBS, Name: 13021305, Date: 13-Feb-2013, Time: 13:45:15, Conditions: AUTOSPEC01, User: pk

13C-12378-PeCDD



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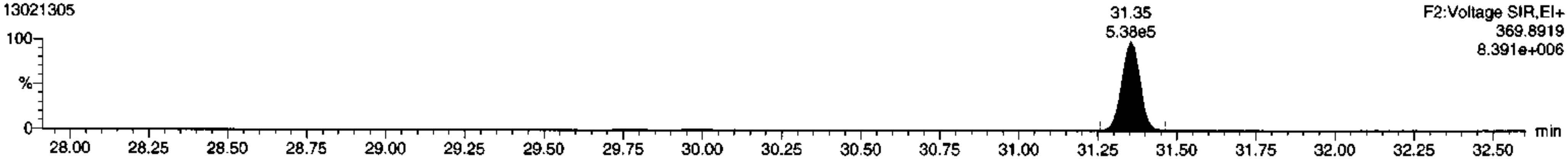
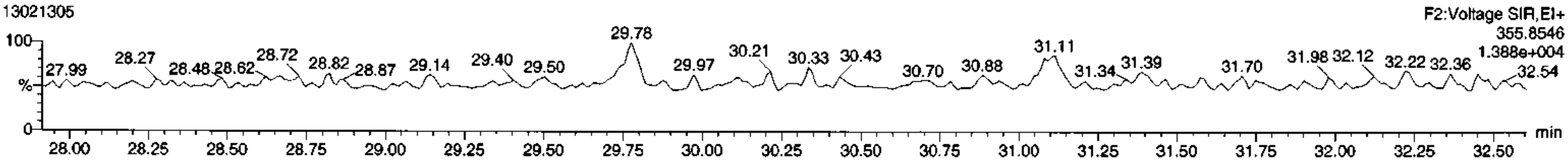
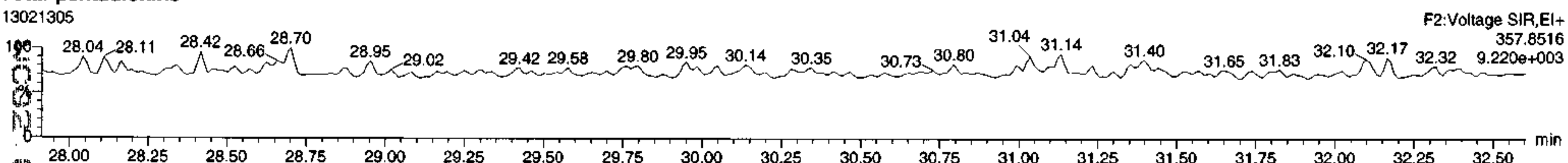


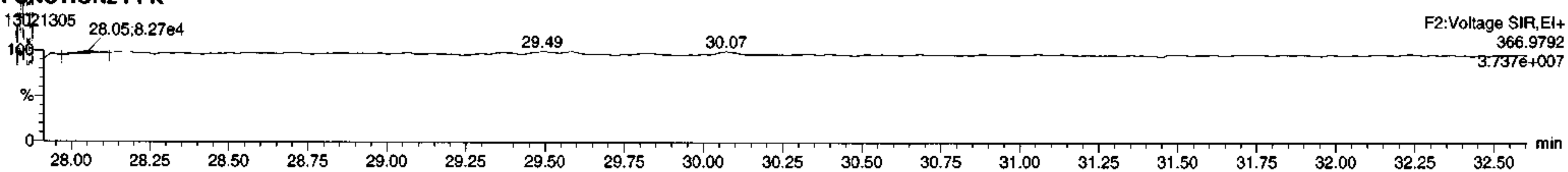
Total-pentadioxins



Total-pentadioxins



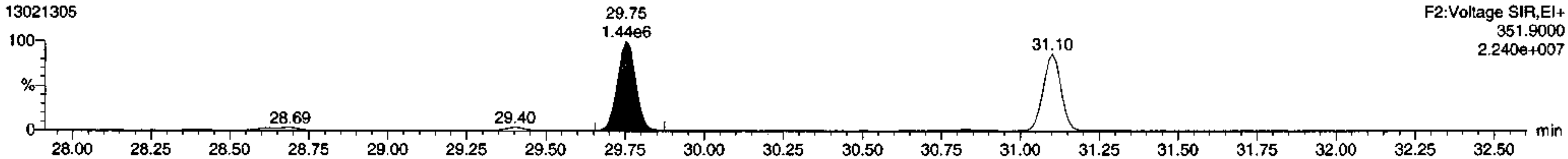
FUNCTION2 PFK



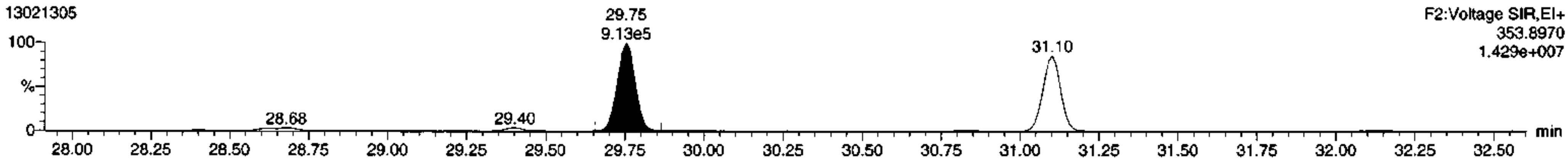
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:46:36 Pacific Standard Time

ID: WC32MBS, Name: 13021305, Date: 13-Feb-2013, Time: 13:45:15, Conditions: AUTOSPEC01, User: pk

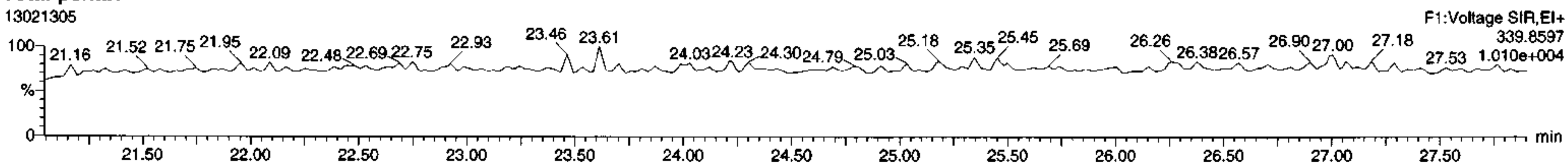
13C-12378-PeCDF



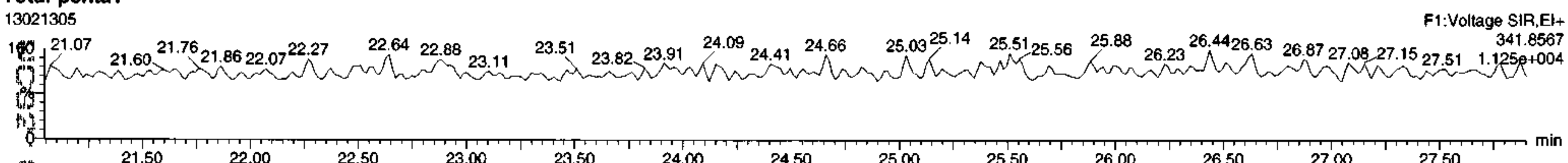
13C-12378-PeCDF



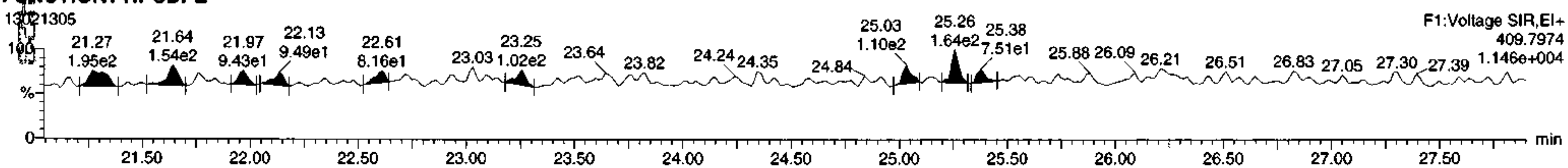
Total-penta1



Total-penta1



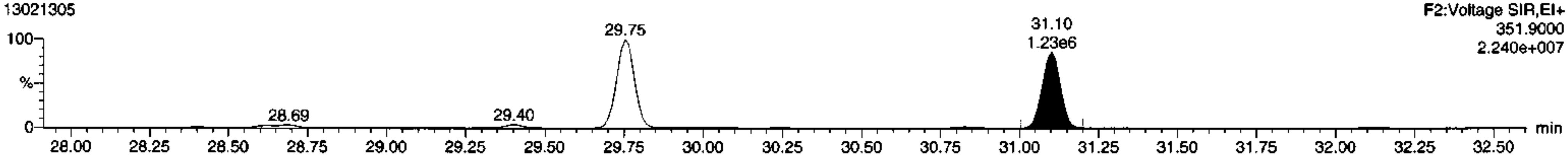
FUNCTION1 HPCDPE



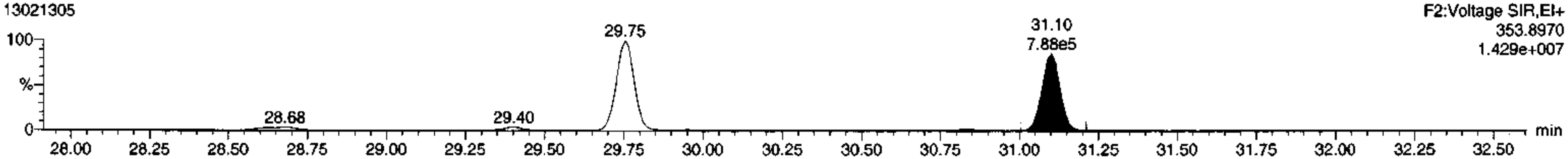
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:46:36 Pacific Standard Time

ID: WC32MBS, Name: 13021305, Date: 13-Feb-2013, Time: 13:45:15, Conditions: AUTOSPEC01, User: pk

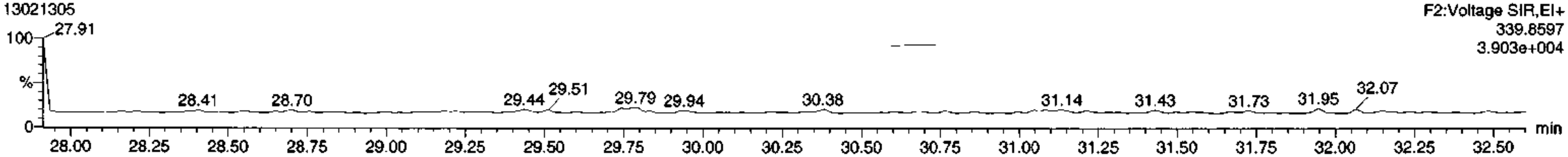
13C-23478-PeCDF
13021305



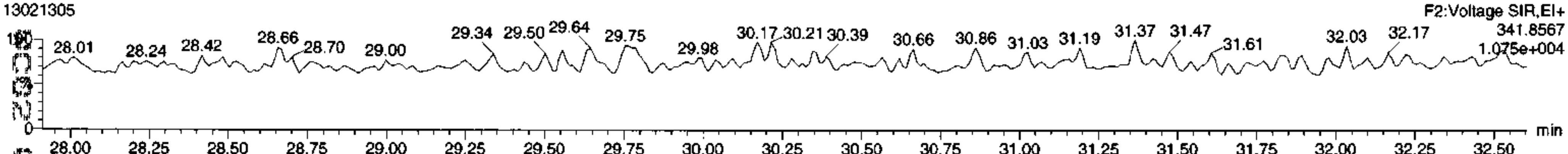
13C-23478-PeCDF
13021305



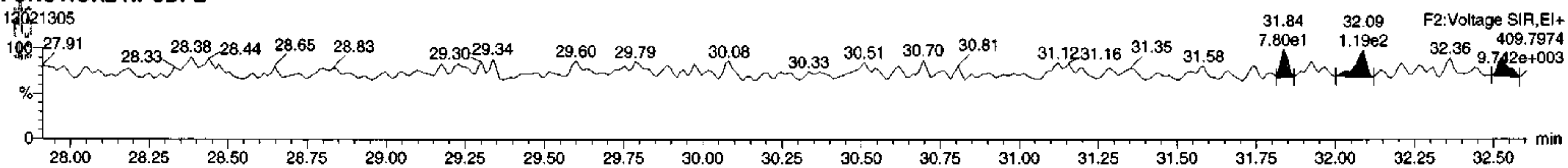
Total-pentafurans
13021305



Total-pentafurans
13021305



FUNCTION2 HPCDPE
13021305



Quantify Sample Report **MassLynx 4.1 SCN 714**

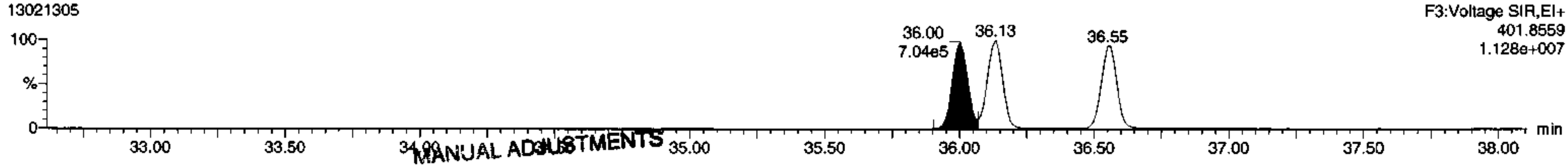
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld

Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time

Printed: Thursday, February 14, 2013 10:46:36 Pacific Standard Time

ID: WC32MBS, Name: 13021305, Date: 13-Feb-2013, Time: 13:45:15, Conditions: AUTOSPEC01, User: pk

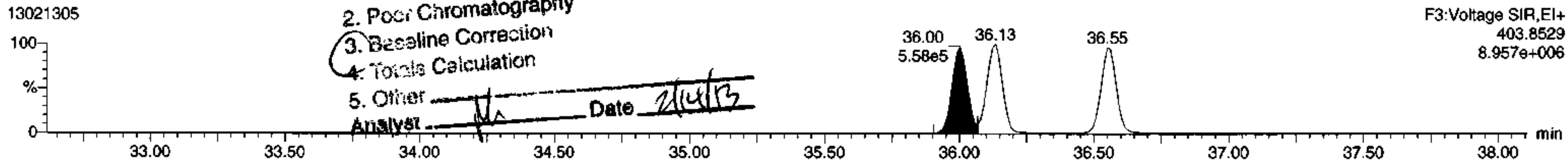
13C-123478-HxCDD



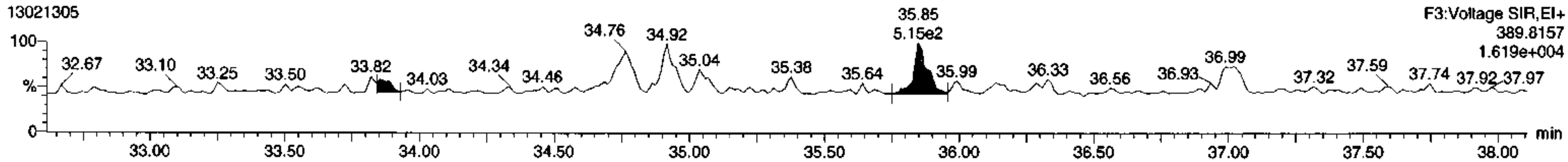
MANUAL ADJUSTMENTS

1. Peak not found
2. Poor Chromatography
3. Baseline Correction
4. Totals Calculation
5. Other
Analyst Date 2/14/13

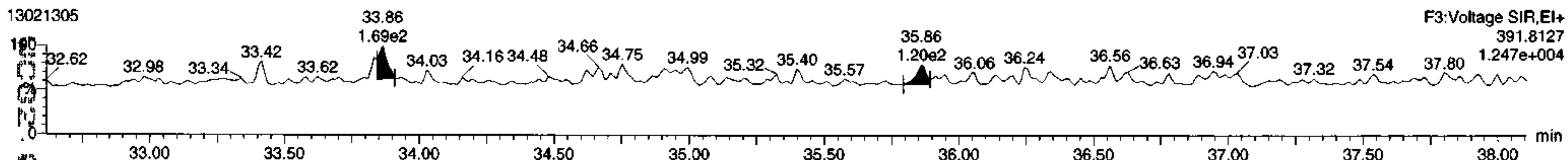
13C-123478-HxCDD



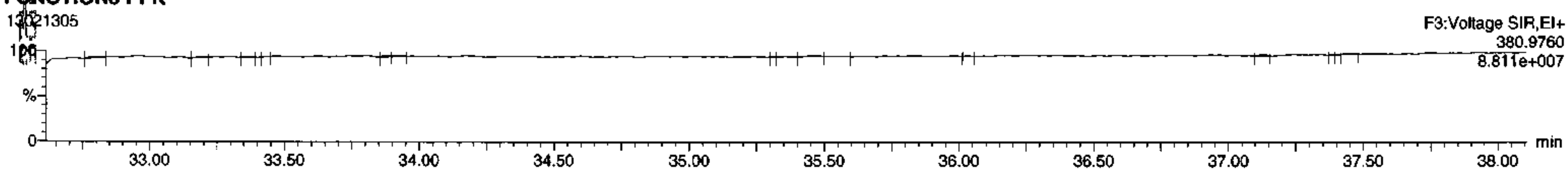
Total-hexadioxins



Total-hexadioxins



FUNCTION3 PFK



Quantify Sample Report **MassLynx 4.1 SCN 714**

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld

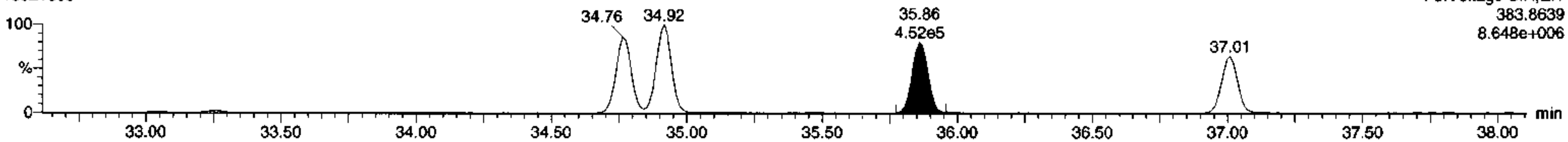
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time

Printed: Thursday, February 14, 2013 10:46:36 Pacific Standard Time

ID: WC32MBS, Name: 13021305, Date: 13-Feb-2013, Time: 13:45:15, Conditions: AUTOSPEC01, User: pk

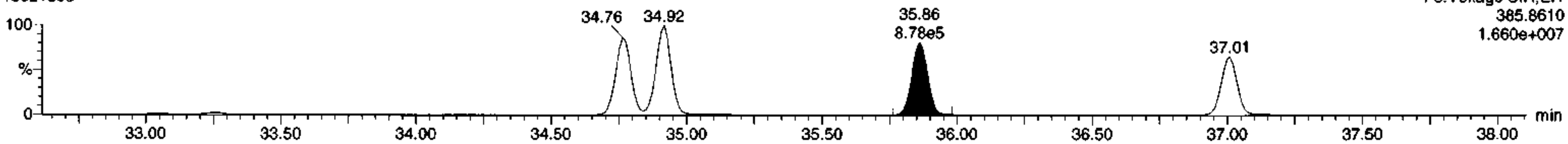
13C-234678-HxCDF

13021305



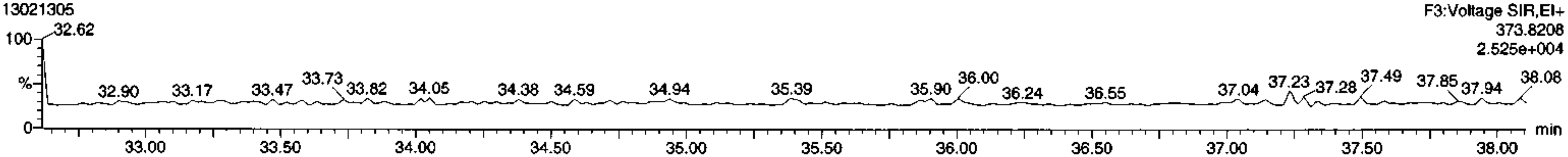
13C-234678-HxCDF

13021305



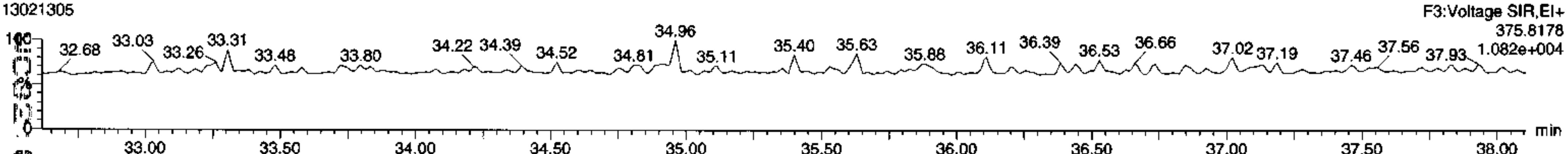
Total-hexafurans

13021305



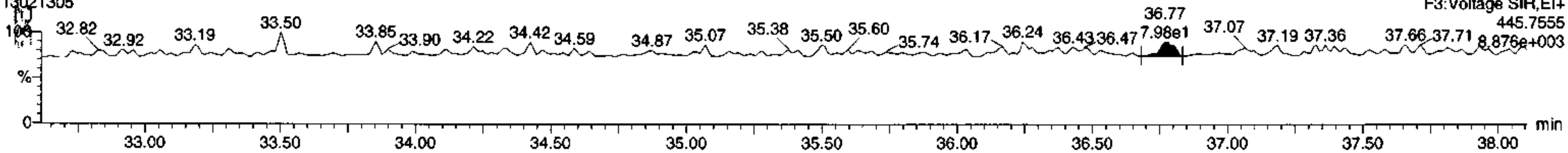
Total-hexafurans

13021305



FUNCTION3 OCDPE

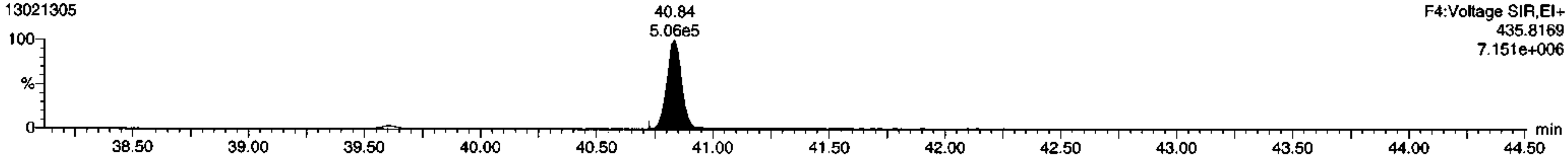
13021305



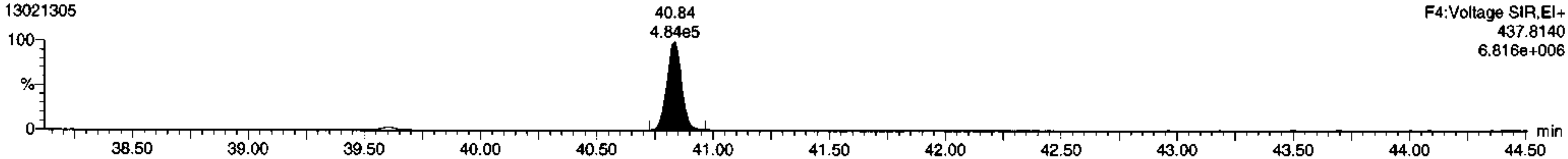
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:46:36 Pacific Standard Time

ID: WC32MBS, Name: 13021305, Date: 13-Feb-2013, Time: 13:45:15, Conditions: AUTOSPEC01, User: pk

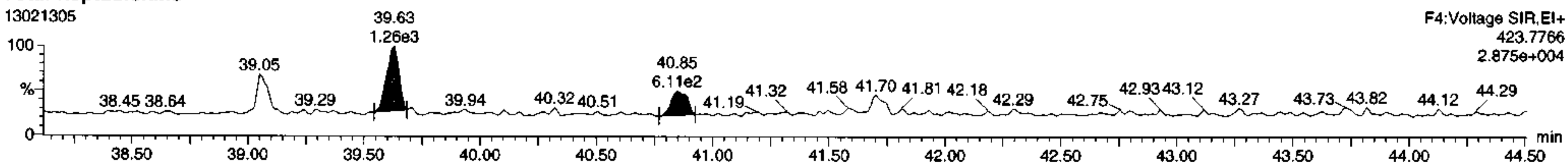
13C-1234678-HpCDD



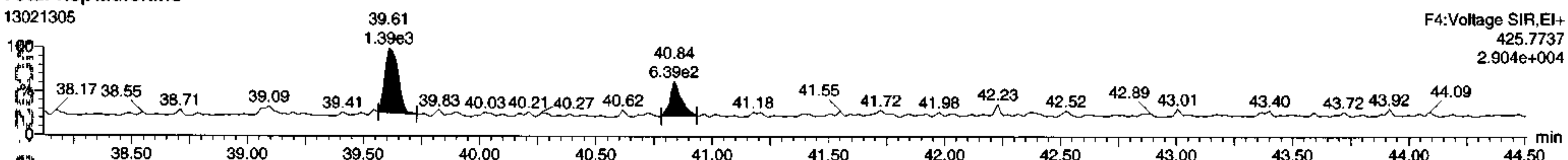
13C-1234678-HpCDD



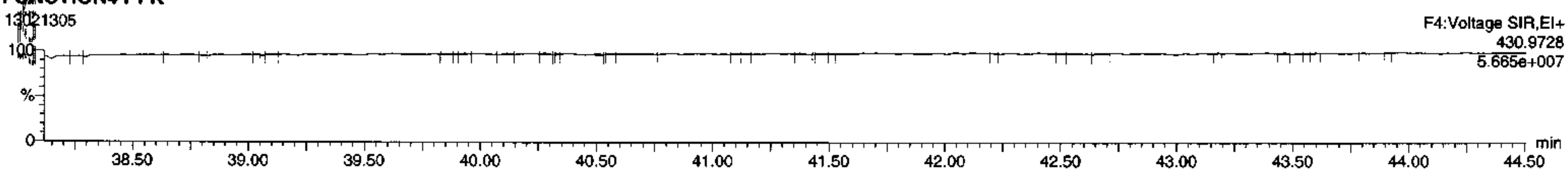
Total-heptadioxins



Total-heptadioxins



FUNCTION4 PFK



Quantify Sample Report **MassLynx 4.1 SCN 714**

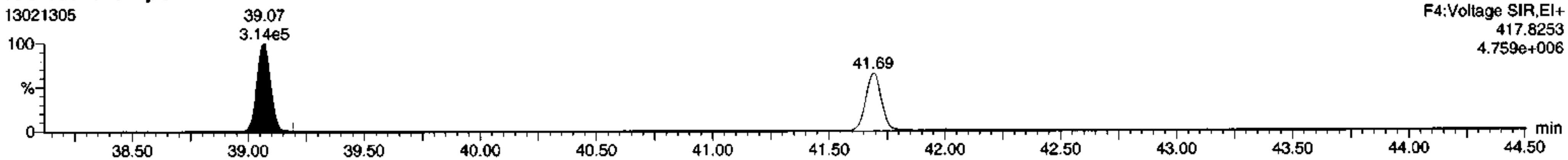
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld

Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time

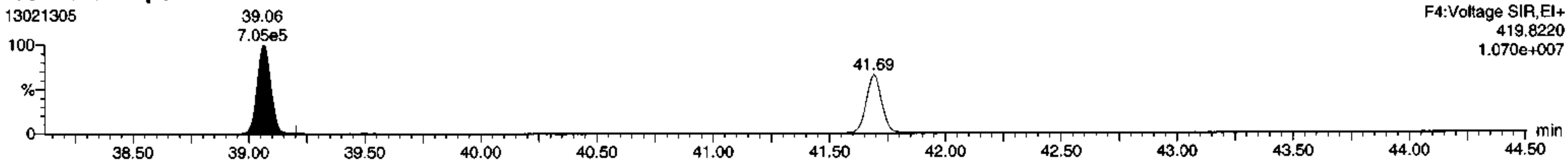
Printed: Thursday, February 14, 2013 10:46:36 Pacific Standard Time

ID: WC32MBS, Name: 13021305, Date: 13-Feb-2013, Time: 13:45:15, Conditions: AUTOSPEC01, User: pk

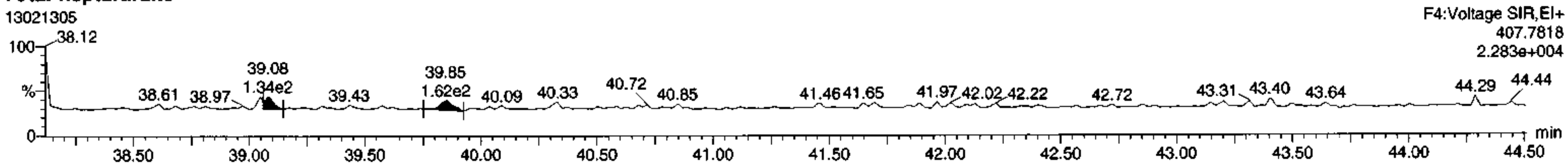
13C-1234678-HpCDF



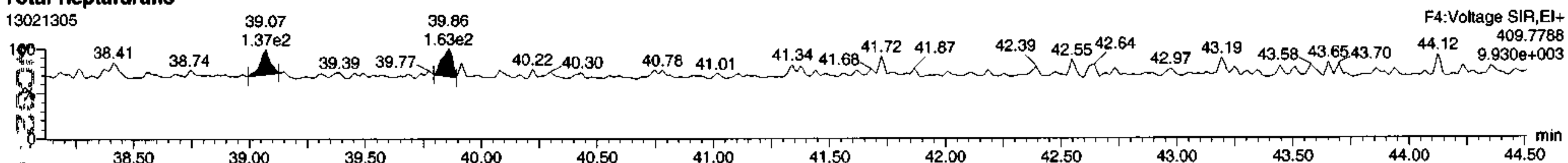
13C-1234678-HpCDF



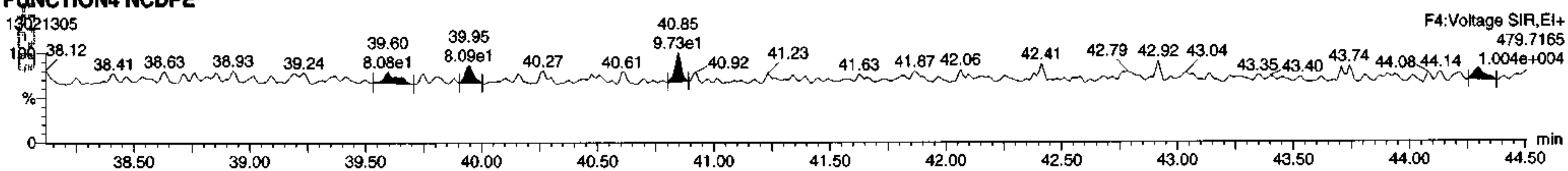
Total-heptafurans



Total-heptafurans



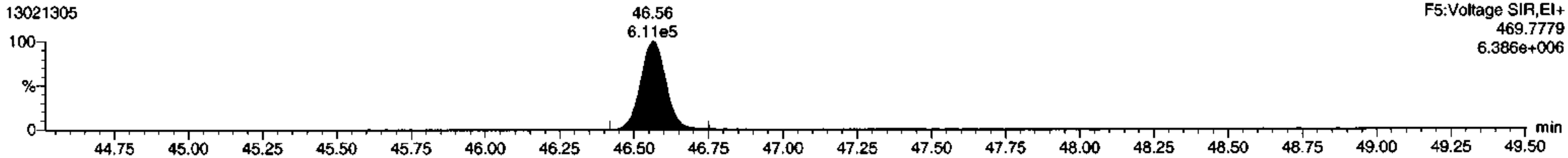
FUNCTION4 NCDPE



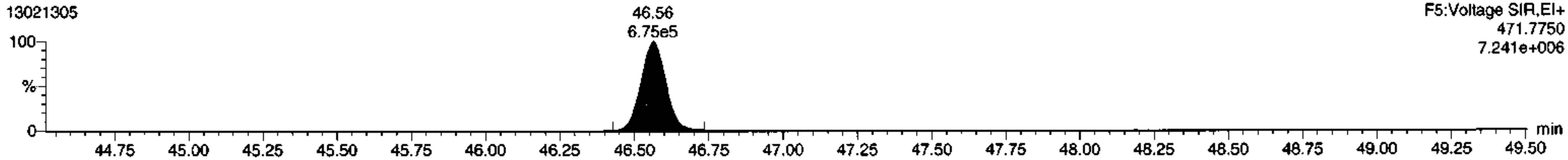
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:46:36 Pacific Standard Time

ID: WC32MBS, Name: 13021305, Date: 13-Feb-2013, Time: 13:45:15, Conditions: AUTOSPEC01, User: pk

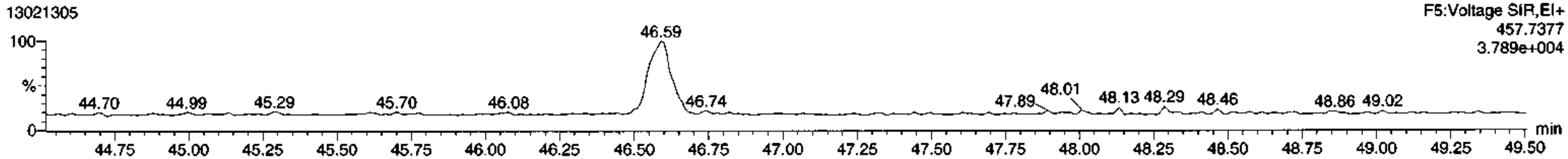
13C-OCDD
13021305



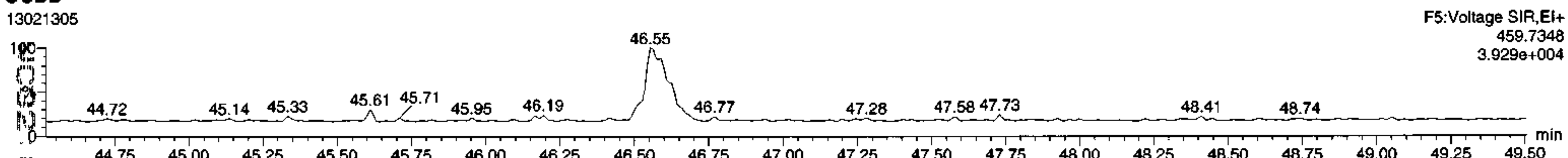
13C-OCDD
13021305



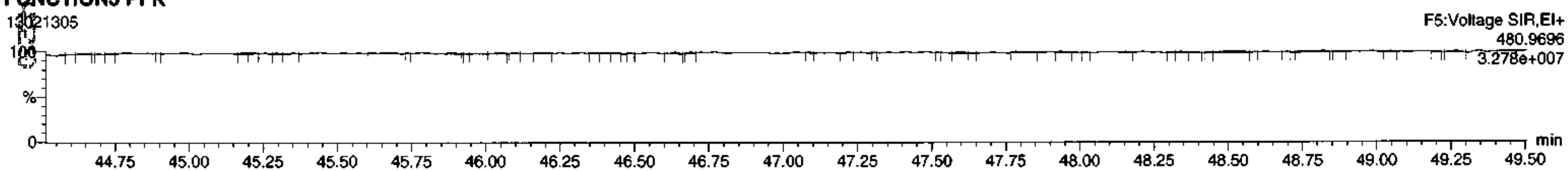
OCDD
13021305



OCDD
13021305



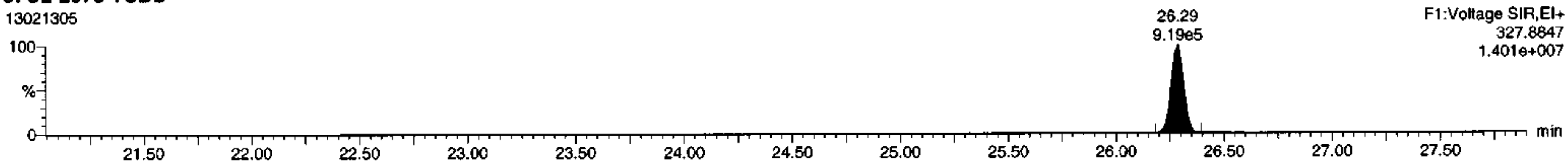
FUNCTION5 PFK
13021305



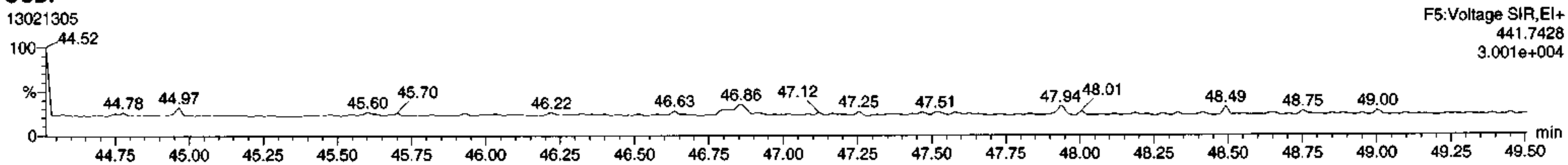
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:46:36 Pacific Standard Time

ID: WC32MBS, Name: 13021305, Date: 13-Feb-2013, Time: 13:45:15, Conditions: AUTOSPEC01, User: pk

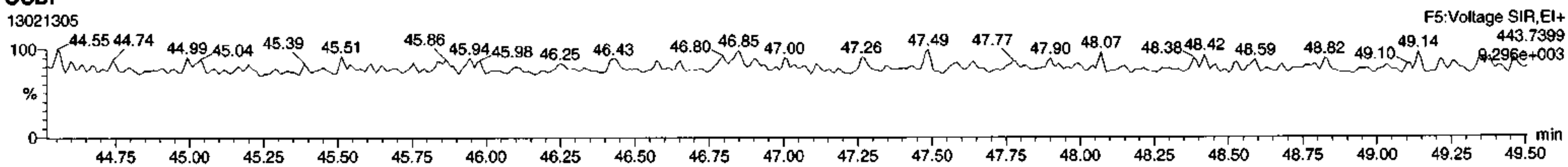
37CL-2378-TCDD



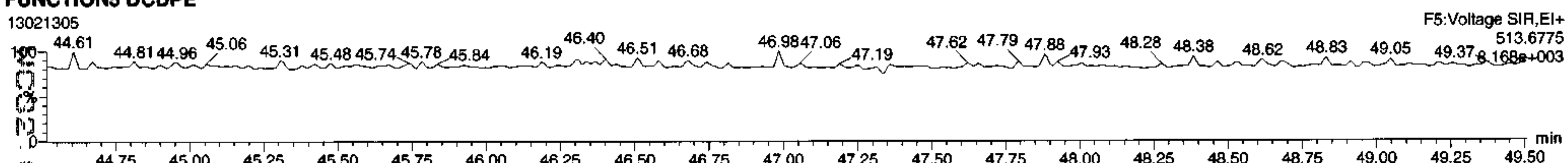
OCDF



OCDF



FUNCTION5 DCDPE

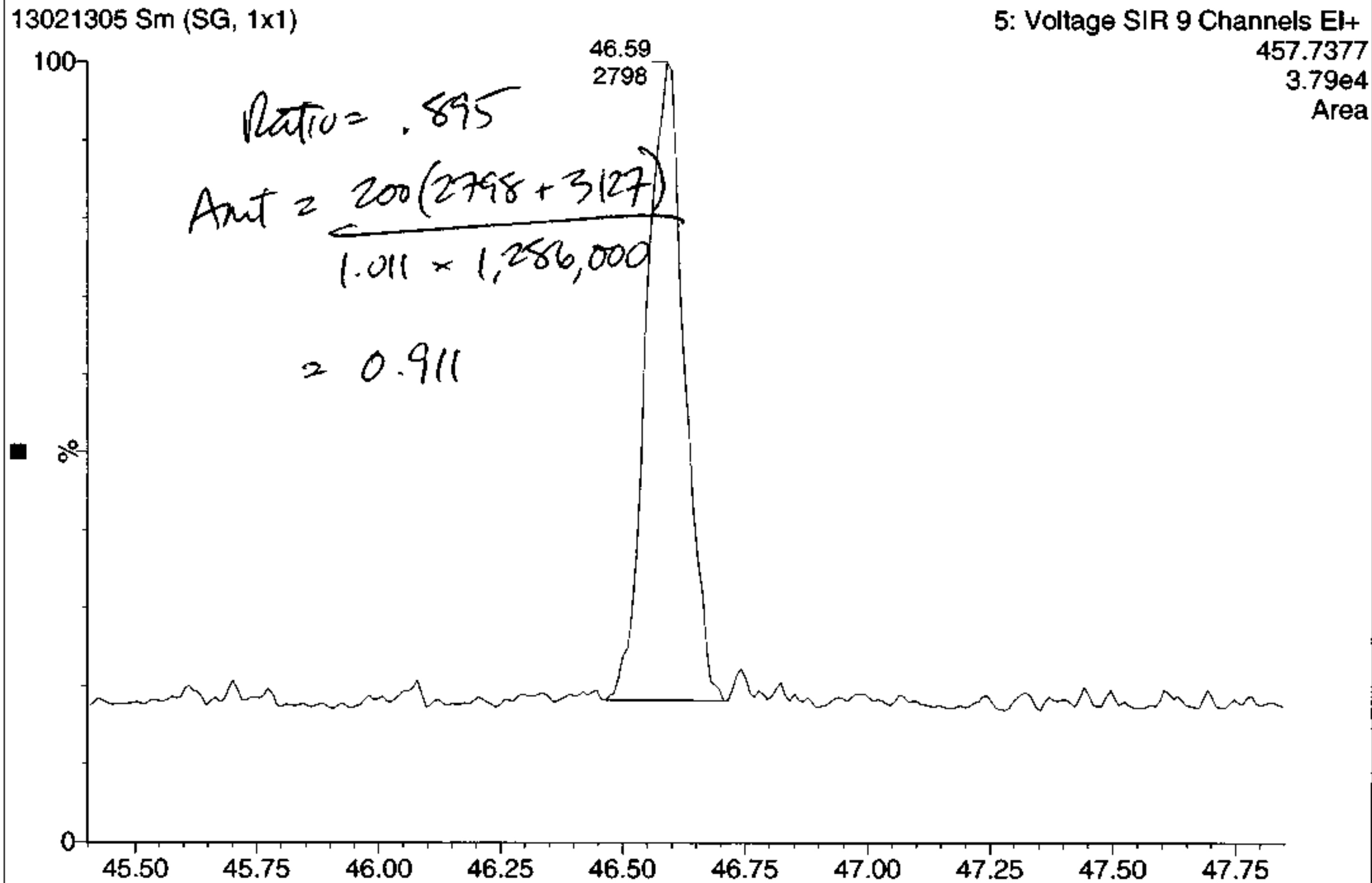


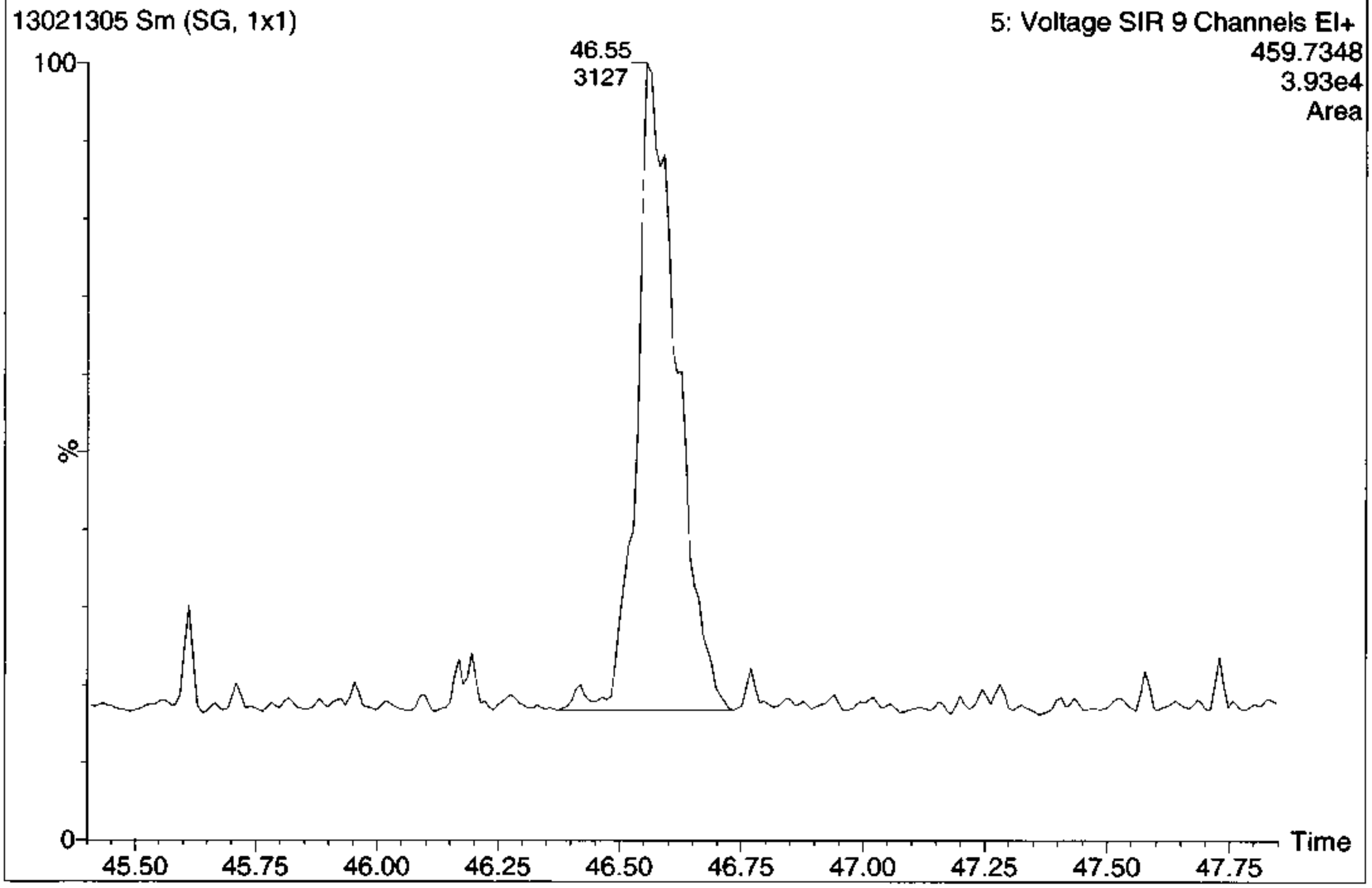
OCDD Manual Quant ph 2/14/13

Ratio = .895

$$\text{Amt} = \frac{200(2798+3127)}{1.011 \times 1{,}286{,}000}$$

$= 0.911$





Quantify Sample Summary Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:46:53 Pacific Standard Time

pk 2/14/13

Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 12 Feb 2013 12:25:57
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: WC32OPR, Name: 13021306, Date: 13-Feb-2013, Time: 14:38:53, Conditions: AUTOSPEC01, User: pk

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	2378-TCDF	25.645	1.001	1.66e5	2.22e5	0.921	0.748	0.770	2048.3	1239	1656	2.54e6	3.42e6	NO	11.406	11.406
[redacted]	12378-PeCDF	29.776	1.001	8.21e5	5.41e5	0.912	1.517	1.550	4985.1	2565	1773	1.28e7	8.45e6	NO	54.585	54.585
[redacted]	23478-PeCDF	31.124	1.001	6.86e5	4.60e5	0.943	1.492	1.550	4126.9	2565	1773	1.06e7	7.15e6	NO	54.277	54.277
[redacted]	123478-HxCDF	34.785	1.001	5.19e5	4.28e5	1.101	1.212	1.240	3864.3	2045	2394	7.90e6	6.56e6	NO	53.882	53.882
[redacted]	234678-HxCDF	35.881	1.001	5.22e5	4.30e5	1.073	1.213	1.240	4027.3	2045	2394	8.24e6	6.66e6	NO	58.156	58.156
[redacted]	123678-HxCDF	34.938	1.001	5.91e5	4.88e5	1.056	1.211	1.240	4411.5	2045	2394	9.02e6	7.45e6	NO	55.128	55.128
[redacted]	123789-HxCDF	37.032	1.001	3.85e5	3.21e5	1.017	1.199	1.240	2825.4	2045	2394	5.78e6	4.77e6	NO	53.953	53.953
[redacted]	1234678-HpCDF	39.082	1.000	5.49e5	5.39e5	1.238	1.018	1.050	5859.7	1447	1787	8.48e6	8.28e6	NO	71.701	71.701
[redacted]	1234789-HpCDF	41.712	1.001	3.19e5	3.17e5	1.224	1.008	1.050	2945.6	1447	1787	4.26e6	4.17e6	NO	56.668	56.668
[redacted]	OCDF	46.849	1.006	4.15e5	4.69e5	1.162	0.885	0.890	1609.8	2688	1595	4.33e6	4.89e6	NO	91.976	91.976
[redacted]	2378-TCDD	26.288	1.001	1.14e5	1.46e5	1.106	0.780	0.770	1281.1	1379	1256	1.77e6	2.25e6	NO	10.176	10.176
[redacted]	12378-PeCDD	31.376	1.001	5.14e5	3.37e5	1.001	1.526	1.550	4012.9	1963	966	7.88e6	5.12e6	NO	53.767	53.767
[redacted]	123478-HxCDD	36.023	1.001	4.42e5	3.53e5	0.978	1.253	1.240	2955.1	2289	1471	6.76e6	5.29e6	NO	55.460	55.460
[redacted]	123678-HxCDD	36.144	1.000	4.23e5	3.39e5	0.929	1.247	1.240	2839.5	2289	1471	6.50e6	5.29e6	NO	52.796	52.796
[redacted]	123789-HxCDD	36.571	1.012	4.05e5	3.30e5	0.904	1.227	1.240	2713.3	2289	1471	6.21e6	4.98e6	NO	53.868	53.868
[redacted]	1234678-HpCDD	40.846	1.000	3.38e5	3.23e5	1.029	1.048	1.050	1770.7	2657	1360	4.71e6	4.46e6	NO	53.178	53.178
[redacted]	OCDD	46.580	1.000	4.22e5	4.66e5	1.011	0.906	0.890	3678.8	1186	1078	4.36e6	4.90e6	NO	106.234	106.234
[redacted]	13C-2378-TCDF	25.630	1.007	1.61e6	2.08e6	1.522	0.774	0.770	10774.0	2322	2249	2.50e7	3.21e7	NO		89.960
[redacted]	13C-12378-PeCDF	29.754	1.169	1.67e6	1.07e6	1.185	1.564	1.550	11792.8	2217	1546	2.61e7	1.66e7	NO		85.676
[redacted]	13C-23478-PeCDF	31.102	1.222	1.37e6	8.67e5	1.136	1.585	1.550	9694.6	2217	1546	2.15e7	1.35e7	NO		73.226
[redacted]	13C-123478-HxCDF	34.763	0.951	5.46e5	1.05e6	1.284	0.520	0.510	4001.8	2057	3693	8.23e6	1.59e7	NO		80.702
[redacted]	13C-123678-HxCDF	34.917	0.955	6.36e5	1.22e6	1.383	0.522	0.510	4764.3	2057	3693	9.80e6	1.86e7	NO		87.030
[redacted]	13C-234678-HxCDF	35.859	0.981	5.25e5	1.00e6	1.283	0.525	0.510	3851.4	2057	3693	7.92e6	1.52e7	NO		77.128
[redacted]	13C-123789-HxCDF	37.010	1.012	4.44e5	8.42e5	1.099	0.527	0.510	3178.6	2057	3693	6.54e6	1.25e7	NO		75.910
[redacted]	13C-1234678-HpCDF	39.071	1.069	3.82e5	8.45e5	1.070	0.452	0.440	4496.4	1277	2094	5.74e6	1.26e7	NO		74.415
[redacted]	13C-1234789-HpCDF	41.690	1.140	2.83e5	6.35e5	0.774	0.446	0.440	2961.6	1277	2094	3.78e6	8.49e6	NO		77.005
[redacted]	13C-1234-TCDD	25.451	0.000	1.19e6	1.51e6	1.000	0.788	0.770	5021.1	3662	1842	1.84e7	2.34e7	NO		100.000
[redacted]	13C-2378-TCDD	26.258	1.032	1.01e6	1.29e6	0.943	0.785	0.770	4156.2	3662	1842	1.52e7	1.93e7	NO		90.701
[redacted]	13C-12378-PeCDD	31.354	1.232	9.65e5	6.15e5	0.715	1.568	1.550	11189.0	1341	1139	1.50e7	9.52e6	NO		81.953
[redacted]	13C-123478-HxCDD	36.001	0.985	8.17e5	6.48e5	1.032	1.260	1.240	4743.0	2673	2543	1.27e7	1.02e7	NO		92.112
[redacted]	13C-123678-HxCDD	36.133	0.988	8.63e5	6.90e5	1.076	1.251	1.240	4969.7	2673	2543	1.33e7	1.07e7	NO		93.606
[redacted]	13C-1234678-HpCDD	40.835	1.117	6.20e5	5.88e5	0.838	1.055	1.050	5508.7	1588	1864	8.75e6	8.36e6	NO		93.624
[redacted]	13C-OCDD	46.562	1.274	7.82e5	8.72e5	0.675	0.897	0.890	3368.9	2424	1425	8.17e6	9.07e6	NO		158.913

Quantify Sample Summary Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:46:53 Pacific Standard Time

ID: WC32OPR, Name: 13021306, Date: 13-Feb-2013, Time: 14:38:53, Conditions: AUTOSPEC01, User: pk

[redacted]																
[redacted]	13C-123789-HxCDD	36.561	0.000	8.58e5	6.82e5	1.000	1.258	1.240	4850.2	2673	2543	1.30e7	1.03e7	NO		100.000
[redacted]	Total-tetrafurans			2.10e5		0.921				1239		3.21e6				14.388
[redacted]	Total-penta1			4.45e2						666		5.53e3				0.032
[redacted]	Total-pentafurans			1.62e6		0.927				2565		2.52e7				116.831
[redacted]	Total-hexafurans			2.04e6		1.062				2045		3.13e7				223.981
[redacted]	Total-heptafurans			8.72e5		1.231				1447		1.28e7				128.789
[redacted]	Total-Furans			5.16e6		1.065				1239		7.68e7				575.997
[redacted]	Total-tetradioxins			1.19e5		1.106				1379		1.84e6				10.591
[redacted]	Total-pentadioxins			5.20e5		1.001				1963		7.98e6				54.410
[redacted]	Total-hexadioxins			1.27e6		0.937				2289		1.95e7				162.275
[redacted]	Total-heptadioxins			3.45e5		1.029				2657		4.81e6				54.292
[redacted]	Total-Dioxins			2.68e6		0.994				1379		3.85e7				387.802
[redacted]	Total-TEQ			7.84e6						1379		1.15e8				963.798
[redacted]	37CL-2378-TCDD	26.288	1.033	1.06e6		1.051			8887.7	1803		1.60e7				37.264
[redacted]	FUNCTION1 PFK			1.10e7						952147		1.47e8				
[redacted]	FUNCTION2 PFK			1.64e5						321181		2.88e6				0.000
[redacted]	FUNCTION3 PFK			5.57e5						513187		1.44e7				0.000
[redacted]	FUNCTION4 PFK			7.55e5						391188		1.95e7				
[redacted]	FUNCTION5 PFK			4.83e5						260507		1.60e7				
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[redacted]	FUNCTION1 HPCDPE			7.90e2						1098		1.52e4				0.000
[redacted]	FUNCTION2 HPCDPE			6.70e2						967		1.98e4				0.000
[redacted]	FUNCTION3 OCDPE			0.00e0						494		0.00e0				
[redacted]	FUNCTION4 NCDPE			7.46e1						752		2.88e3				0.000
[redacted]	FUNCTION5 DCDPE			0.00e0						309		0.00e0				

Quantify Totals Report MassLynx 4.1 SCN 714
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:46:53 Pacific Standard Time

Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 12 Feb 2013 12:25:57
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: WC32OPR, Name: 13021306, Date: 13-Feb-2013, Time: 14:38:53, Conditions: AUTOSPEC01, User: pk

TF

	35	Total-tetrafurans	303.9016	25.87	409.132	0.921	0.012		1.36	0.77	YES	4.1
	1	2378-TCDF	303.9016	25.65	387676.125	0.921	11.406	11.406	0.75	0.77	NO	2048.3
	35	Total-tetrafurans	303.9016	25.47	3198.803	0.921	0.094		0.66	0.77	NO	18.7
	35	Total-tetrafurans	303.9016	24.73	15178.995	0.921	0.447		0.79	0.77	NO	82.5
	35	Total-tetrafurans	303.9016	24.57	70268.199	0.921	2.067		0.75	0.77	NO	363.8
	35	Total-tetrafurans	303.9016	24.42	7747.268	0.921	0.228		0.82	0.77	NO	43.5
	35	Total-tetrafurans	303.9016	23.66	993.378	0.921	0.029		1.11	0.77	YES	7.6
	35	Total-tetrafurans	303.9016	23.19	2596.280	0.921	0.076		0.53	0.77	YES	13.2
	35	Total-tetrafurans	303.9016	22.99	971.563	0.921	0.029		0.67	0.77	NO	5.1

fz

PP

	36	Total-penta1	339.8597	27.06	728.072		0.032		1.57	1.55	NO	8.3

PF

	2	12378-PeCDF	339.8597	29.78	1362932.688	0.912	54.585	54.585	1.52	1.55	NO	4985.1
	37	Total-pentafurans	339.8597	29.41	54455.395	0.927	2.359		1.55	1.55	NO	190.3
	37	Total-pentafurans	339.8597	28.70	51084.818	0.927	2.213		1.77	1.55	NO	192.4
	37	Total-pentafurans	339.8597	28.64	36003.782	0.927	1.560		1.34	1.55	NO	145.8
	37	Total-pentafurans	339.8597	32.14	8598.707	0.927	0.372		1.69	1.55	NO	30.4
	3	23478-PeCDF	339.8597	31.12	1146773.188	0.943	54.277	54.277	1.49	1.55	NO	4126.9
	37	Total-pentafurans	339.8597	30.85	1778.406	0.927	0.077		1.34	1.55	NO	6.0
	37	Total-pentafurans	339.8597	30.24	454.888	0.927	0.020		1.26	1.55	YES	3.1
	37	Total-pentafurans	339.8597	30.07	1549.431	0.927	0.067		1.49	1.55	NO	7.2
	37	Total-pentafurans	339.8597	29.97	30043.906	0.927	1.301		1.68	1.55	NO	127.5

fr

HF

	38	Total-hexafurans	373.8208	33.06	13443.700	1.062	0.809		1.22	1.24	NO	59.7
	7	123789-HxCDF	373.8208	37.03	705492.813	1.017	53.953	53.953	1.20	1.24	NO	2825.4
	5	234678-HxCDF	373.8208	35.88	951434.251	1.073	58.156	58.156	1.21	1.24	NO	4027.3
	6	123678-HxCDF	373.8208	34.94	1079132.313	1.056	55.128	55.128	1.21	1.24	NO	4411.5
	4	123478-HxCDF	373.8208	34.78	947286.938	1.101	53.882	53.882	1.21	1.24	NO	3864.3
	38	Total-hexafurans	373.8208	34.61	1938.614	1.062	0.117		1.19	1.24	NO	9.0
	38	Total-hexafurans	373.8208	33.28	32178.114	1.062	1.936		1.20	1.24	NO	127.8

HPF

	39	Total-heptafurans	407.7818	39.85	5549.754	1.231	0.421		1.08	1.05	NO	32.4
	8	1234678-HpCDF	407.7818	39.08	1088426.250	1.238	71.701	71.701	1.02	1.05	NO	5859.7
	9	1234789-HpCDF	407.7818	41.71	636363.157	1.224	56.668	56.668	1.01	1.05	NO	2945.6

Quantify Totals Report MassLynx 4.1 SCN 714
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:46:53 Pacific Standard Time

ID: WC32OPR, Name: 13021306, Date: 13-Feb-2013, Time: 14:38:53, Conditions: AUTOSPEC01, User: pk

Furans,TF,PP,PF,HF,HPF,OF

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	35 Total-tetrafurans	303.9016	25.87	409.132	0.921	0.012		1.36	0.77	YES	4.1
[redacted]	1 2378-TCDF	303.9016	25.65	387676.125	0.921	11.406	11.406	0.75	0.77	NO	2048.3
[redacted]	35 Total-tetrafurans	303.9016	25.47	3198.803	0.921	0.094		0.66	0.77	NO	18.7
[redacted]	35 Total-tetrafurans	303.9016	24.73	15176.995	0.921	0.447		0.79	0.77	NO	82.5
[redacted]	35 Total-tetrafurans	303.9016	24.57	70268.199	0.921	2.067		0.75	0.77	NO	363.8
[redacted]	35 Total-tetrafurans	303.9016	24.42	7747.268	0.921	0.228		0.82	0.77	NO	43.5
[redacted]	35 Total-tetrafurans	303.9016	23.66	993.378	0.921	0.029		1.11	0.77	YES	7.6
[redacted]	35 Total-tetrafurans	303.9016	23.19	2596.280	0.921	0.076		0.53	0.77	YES	13.2
[redacted]	35 Total-tetrafurans	303.9016	22.99	971.563	0.921	0.029		0.67	0.77	NO	5.1
[redacted]	2 12378-PeCDF	339.8597	29.78	1362932.688	0.912	54.585	54.585	1.52	1.55	NO	4985.1
[redacted]	37 Total-pentafurans	339.8597	29.41	54455.395	0.927	2.359		1.55	1.55	NO	190.3
[redacted]	37 Total-pentafurans	339.8597	28.70	51084.818	0.927	2.213		1.77	1.55	NO	192.4
[redacted]	37 Total-pentafurans	339.8597	28.64	36003.782	0.927	1.560		1.34	1.55	NO	145.8
[redacted]	37 Total-pentafurans	339.8597	32.14	8598.707	0.927	0.372		1.69	1.55	NO	30.4
[redacted]	3 23478-PeCDF	339.8597	31.12	1146773.188	0.943	54.277	54.277	1.49	1.55	NO	4126.9
[redacted]	37 Total-pentafurans	339.8597	30.85	1778.406	0.927	0.077		1.34	1.55	NO	6.0
[redacted]	37 Total-pentafurans	339.8597	30.24	454.888	0.927	0.020		1.26	1.55	YES	3.1
[redacted]	37 Total-pentafurans	339.8597	30.07	1549.431	0.927	0.067		1.49	1.55	NO	7.2
[redacted]	37 Total-pentafurans	339.8597	29.97	30043.906	0.927	1.301		1.68	1.55	NO	127.5
[redacted]	38 Total-hexafurans	373.8208	33.06	13443.700	1.062	0.809		1.22	1.24	NO	59.7
[redacted]	7 123789-HxCDF	373.8208	37.03	705492.813	1.017	53.953	53.953	1.20	1.24	NO	2825.4
[redacted]	5 234678-HxCDF	373.8208	35.88	951434.251	1.073	58.156	58.156	1.21	1.24	NO	4027.3
[redacted]	6 123678-HxCDF	373.8208	34.94	1079132.313	1.056	55.128	55.128	1.21	1.24	NO	4411.5
[redacted]	4 123478-HxCDF	373.8208	34.78	947286.938	1.101	53.882	53.882	1.21	1.24	NO	3864.3
[redacted]	38 Total-hexafurans	373.8208	34.61	1938.614	1.062	0.117		1.19	1.24	NO	9.0
[redacted]	38 Total-hexafurans	373.8208	33.28	32178.114	1.062	1.936		1.20	1.24	NO	127.8
[redacted]	39 Total-heptafurans	407.7818	39.85	5549.754	1.231	0.421		1.08	1.05	NO	32.4
[redacted]	8 1234678-HpCDF	407.7818	39.08	1088426.250	1.238	71.701	71.701	1.02	1.05	NO	5859.7
[redacted]	10 OCDF	441.7428	46.85	883862.782	1.162	91.976	91.976	0.88	0.89	NO	1609.8
[redacted]	9 1234789-HpCDF	407.7818	41.71	636363.157	1.224	56.668	56.668	1.01	1.05	NO	2945.6
[redacted]	36 Total-penta1	339.8597	27.06	728.072		0.032		1.57	1.55	NO	8.3

TD

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	41 Total-tetradioxins	319.8965	23.45	419.971	1.106	0.016		0.66	0.77	NO	2.6
[redacted]	11 2378-TCDD	319.8965	26.29	259446.461	1.106	10.176	10.176	0.78	0.77	NO	1281.1
[redacted]	41 Total-tetradioxins	319.8965	25.90	7171.920	1.106	0.281		0.87	0.77	NO	29.8
[redacted]	41 Total-tetradioxins	319.8965	25.63	955.941	1.106	0.037		2.38	0.77	YES	8.5
[redacted]	41 Total-tetradioxins	319.8965	25.17	516.791	1.106	0.020		0.78	0.77	NO	3.3
[redacted]	41 Total-tetradioxins	319.8965	24.91	1502.515	1.106	0.059		0.61	0.77	YES	6.2

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
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ID: WC32OPR, Name: 13021306, Date: 13-Feb-2013, Time: 14:38:53, Conditions: AUTOSPEC01, User: pk

PD

[redacted]												
[redacted]	12	12378-PeCDD	355.8546	31.38	850437.719	1.001	53.767	53.767	1.53	1.55	NO	4012.9
[redacted]	42	Total-pentadioxins	355.8546	30.72	1395.253	1.001	0.088		1.43	1.55	NO	5.4
[redacted]	42	Total-pentadioxins	355.8546	30.14	3034.364	1.001	0.192		1.44	1.55	NO	15.1
[redacted]	42	Total-pentadioxins	355.8546	30.00	2881.782	1.001	0.182		1.74	1.55	NO	14.6
[redacted]	42	Total-pentadioxins	355.8546	29.78	2866.222	1.001	0.181		1.92	1.55	YES	14.9

f2

HD

[redacted]												
[redacted]	14	123678-HxCDD	389.8157	36.14	761677.126	0.929	52.796	52.796	1.25	1.24	NO	2839.5
[redacted]	13	123478-HxCDD	389.8157	36.02	794267.406	0.978	55.460	55.460	1.25	1.24	NO	2955.1
[redacted]	43	Total-hexadioxins	389.8157	35.07	1525.609	0.937	0.108		0.92	1.24	YES	7.4
[redacted]	43	Total-hexadioxins	389.8157	34.66	614.884	0.937	0.043		1.65	1.24	YES	3.6
[redacted]	15	123789-HxCDD	389.8157	36.57	734909.657	0.904	53.868	53.868	1.23	1.24	NO	2713.3

f2

HPD

[redacted]												
[redacted]	44	Total-heptadioxins	423.7766	41.02	2102.368	1.029	0.169		1.53	1.05	YES	8.8
[redacted]	16	1234678-HpCDD	423.7766	40.85	661021.562	1.029	53.178	53.178	1.05	1.05	NO	1770.7
[redacted]	44	Total-heptadioxins	423.7766	39.62	11741.138	1.029	0.945		0.90	1.05	NO	29.3

f2

Dioxins,TD,PD,HD,HPD,OD

[redacted]												
[redacted]	41	Total-tetradioxins	319.8965	23.45	419.971	1.106	0.016		0.66	0.77	NO	2.6
[redacted]	11	2378-TCDD	319.8965	26.29	259446.461	1.106	10.176	10.176	0.78	0.77	NO	1281.1
[redacted]	41	Total-tetradioxins	319.8965	25.90	7171.920	1.106	0.281		0.87	0.77	NO	29.8
[redacted]	41	Total-tetradioxins	319.8965	25.63	955.941	1.106	0.037		2.38	0.77	YES	8.5
[redacted]	41	Total-tetradioxins	319.8965	25.17	516.791	1.106	0.020		0.78	0.77	NO	3.3
[redacted]	41	Total-tetradioxins	319.8965	24.91	1502.515	1.106	0.059		0.61	0.77	YES	6.2
[redacted]	12	12378-PeCDD	355.8546	31.38	850437.719	1.001	53.767	53.767	1.53	1.55	NO	4012.9
[redacted]	42	Total-pentadioxins	355.8546	30.72	1395.253	1.001	0.088		1.43	1.55	NO	5.4
[redacted]	42	Total-pentadioxins	355.8546	30.14	3034.364	1.001	0.192		1.44	1.55	NO	15.1
[redacted]	42	Total-pentadioxins	355.8546	30.00	2881.782	1.001	0.182		1.74	1.55	NO	14.6
[redacted]	42	Total-pentadioxins	355.8546	29.78	2866.222	1.001	0.181		1.92	1.55	YES	14.9
[redacted]	14	123678-HxCDD	389.8157	36.14	761677.126	0.929	52.796	52.796	1.25	1.24	NO	2839.5
[redacted]	13	123478-HxCDD	389.8157	36.02	794267.406	0.978	55.460	55.460	1.25	1.24	NO	2955.1
[redacted]	43	Total-hexadioxins	389.8157	35.07	1525.609	0.937	0.108		0.92	1.24	YES	7.4
[redacted]	43	Total-hexadioxins	389.8157	34.66	614.884	0.937	0.043		1.65	1.24	YES	3.6
[redacted]	15	123789-HxCDD	389.8157	36.57	734909.657	0.904	53.868	53.868	1.23	1.24	NO	2713.3
[redacted]	44	Total-heptadioxins	423.7766	41.02	2102.368	1.029	0.169		1.53	1.05	YES	8.8
[redacted]	16	1234678-HpCDD	423.7766	40.85	661021.562	1.029	53.178	53.178	1.05	1.05	NO	1770.7
[redacted]	44	Total-heptadioxins	423.7766	39.62	11741.138	1.029	0.945		0.90	1.05	NO	29.3
[redacted]	17	OCDD	457.7377	46.58	888392.500	1.011	106.234	106....	0.91	0.89	NO	3678.8

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:46:53 Pacific Standard Time

ID: WC32OPR, Name: 13021306, Date: 13-Feb-2013, Time: 14:38:53, Conditions: AUTOSPEC01, User: pk

TotalTEQ,Furans,Dioxins

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	35 Total-tetrafurans	303.9016	25.87	409.132	0.921	0.012		1.36	0.77	YES	4.1
[redacted]	1 2378-TCDF	303.9016	25.65	387676.125	0.921	11.406	11.406	0.75	0.77	NO	2048.3
[redacted]	35 Total-tetrafurans	303.9016	25.47	3198.803	0.921	0.094		0.66	0.77	NO	18.7
[redacted]	35 Total-tetrafurans	303.9016	24.73	15178.995	0.921	0.447		0.79	0.77	NO	82.5
[redacted]	35 Total-tetrafurans	303.9016	24.57	70268.199	0.921	2.067		0.75	0.77	NO	363.8
[redacted]	35 Total-tetrafurans	303.9016	24.42	7747.268	0.921	0.228		0.82	0.77	NO	43.5
[redacted]	35 Total-tetrafurans	303.9016	23.66	993.378	0.921	0.029		1.11	0.77	YES	7.6
[redacted]	35 Total-tetrafurans	303.9016	23.19	2596.280	0.921	0.076		0.53	0.77	YES	13.2
[redacted]	35 Total-tetrafurans	303.9016	22.99	971.563	0.921	0.029		0.67	0.77	NO	5.1
[redacted]	2 12378-PeCDF	339.8597	29.78	1362932.688	0.912	54.585	54.585	1.52	1.55	NO	4985.1
[redacted]	37 Total-pentafurans	339.8597	29.41	54455.395	0.927	2.359		1.55	1.55	NO	190.3
[redacted]	37 Total-pentafurans	339.8597	28.70	51084.818	0.927	2.213		1.77	1.55	NO	192.4
[redacted]	37 Total-pentafurans	339.8597	28.64	36003.782	0.927	1.560		1.34	1.55	NO	145.8
[redacted]	37 Total-pentafurans	339.8597	32.14	8598.707	0.927	0.372		1.69	1.55	NO	30.4
[redacted]	3 23478-PeCDF	339.8597	31.12	1146773.188	0.943	54.277	54.277	1.49	1.55	NO	4126.9
[redacted]	37 Total-pentafurans	339.8597	30.85	1778.406	0.927	0.077		1.34	1.55	NO	6.0
[redacted]	37 Total-pentafurans	339.8597	30.24	454.888	0.927	0.020		1.26	1.55	YES	3.1
[redacted]	37 Total-pentafurans	339.8597	30.07	1549.431	0.927	0.067		1.49	1.55	NO	7.2
[redacted]	37 Total-pentafurans	339.8597	29.97	30043.906	0.927	1.301		1.68	1.55	NO	127.5
[redacted]	38 Total-hexafurans	373.8208	33.06	13443.700	1.062	0.809		1.22	1.24	NO	59.7
[redacted]	7 123789-HxCDF	373.8208	37.03	705492.813	1.017	53.953	53.953	1.20	1.24	NO	2825.4
[redacted]	5 234678-HxCDF	373.8208	35.88	951434.251	1.073	58.156	58.156	1.21	1.24	NO	4027.3
[redacted]	6 123678-HxCDF	373.8208	34.94	1079132.313	1.056	55.128	55.128	1.21	1.24	NO	4411.5
[redacted]	4 123478-HxCDF	373.8208	34.78	947286.938	1.101	53.882	53.882	1.21	1.24	NO	3864.3
[redacted]	38 Total-hexafurans	373.8208	34.61	1938.614	1.062	0.117		1.19	1.24	NO	9.0
[redacted]	38 Total-hexafurans	373.8208	33.28	32178.114	1.062	1.936		1.20	1.24	NO	127.8
[redacted]	39 Total-heptafurans	407.7818	39.85	5549.754	1.231	0.421		1.08	1.05	NO	32.4
[redacted]	8 1234678-HpCDF	407.7818	39.08	1088426.250	1.238	71.701	71.701	1.02	1.05	NO	5859.7
[redacted]	10 OCDF	441.7428	46.85	883862.782	1.162	91.976	91.976	0.88	0.89	NO	1609.8
[redacted]	9 1234789-HpCDF	407.7818	41.71	636363.157	1.224	56.668	56.668	1.01	1.05	NO	2945.6
[redacted]	36 Total-penta1	339.8597	27.06	728.072		0.032		1.57	1.55	NO	8.3
[redacted]	41 Total-tetradioxins	319.8965	23.45	419.971	1.106	0.016		0.66	0.77	NO	2.6
[redacted]	11 2378-TCDD	319.8965	26.29	259446.461	1.106	10.176	10.176	0.78	0.77	NO	1281.1
[redacted]	41 Total-tetradioxins	319.8965	25.90	7171.920	1.106	0.281		0.87	0.77	NO	29.8
[redacted]	41 Total-tetradioxins	319.8965	25.63	955.941	1.106	0.037		2.38	0.77	YES	8.5
[redacted]	41 Total-tetradioxins	319.8965	25.17	516.791	1.106	0.020		0.78	0.77	NO	3.3
[redacted]	41 Total-tetradioxins	319.8965	24.91	1502.515	1.106	0.059		0.61	0.77	YES	6.2
[redacted]	12 12378-PeCDD	355.8546	31.38	850437.719	1.001	53.767	53.767	1.53	1.55	NO	4012.9
[redacted]	42 Total-pentadioxins	355.8546	30.72	1395.253	1.001	0.088		1.43	1.55	NO	5.4
[redacted]	42 Total-pentadioxins	355.8546	30.14	3034.364	1.001	0.192		1.44	1.55	NO	15.1
[redacted]	42 Total-pentadioxins	355.8546	30.00	2881.782	1.001	0.182		1.74	1.55	NO	14.6
[redacted]	42 Total-pentadioxins	355.8546	29.78	2866.222	1.001	0.181		1.92	1.55	YES	14.9
[redacted]	14 123678-HxCDD	389.8157	36.14	761677.126	0.929	52.796	52.796	1.25	1.24	NO	2839.5
[redacted]	13 123478-HxCDD	389.8157	36.02	794267.406	0.978	55.460	55.460	1.25	1.24	NO	2955.1
[redacted]	43 Total-hexadioxins	389.8157	35.07	1525.609	0.937	0.108		0.92	1.24	YES	7.4
[redacted]	43 Total-hexadioxins	389.8157	34.66	614.884	0.937	0.043		1.65	1.24	YES	3.6
[redacted]	15 123789-HxCDD	389.8157	36.57	734909.657	0.904	53.868	53.868	1.23	1.24	NO	2713.3
[redacted]	44 Total-heptadioxins	423.7766	41.02	2102.368	1.029	0.169		1.53	1.05	YES	8.8
[redacted]	16 1234678-HpCDD	423.7766	40.85	661021.562	1.029	53.178	53.178	1.05	1.05	NO	1770.7

ID: WC32OPR, Name: 13021306, Date: 13-Feb-2013, Time: 14:38:53, Conditions: AUTOSPEC01, User: pk

TotalTEQ,Furans,Dioxins

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	44	Total-heptadioxins	423.7766	39.62	11741.138	1.029	0.945		0.90	1.05	NO	29.3
[redacted]	17	OCDD	457.7377	46.58	888392.500	1.011	106.234	106....	0.91	0.89	NO	3678.8

PFK1

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
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[redacted]	48	FUNCTION1 PFK	330.9792	21.25	0.000							11.5
[redacted]	48	FUNCTION1 PFK	330.9792	25.94	0.000							3.9
[redacted]	48	FUNCTION1 PFK	330.9792	25.67	0.000							8.9
[redacted]	48	FUNCTION1 PFK	330.9792	25.63	0.000							8.8
[redacted]	48	FUNCTION1 PFK	330.9792	25.47	0.000							1.8
[redacted]	48	FUNCTION1 PFK	330.9792	25.38	0.000							4.7
[redacted]	48	FUNCTION1 PFK	330.9792	25.14	0.000							5.2
[redacted]	48	FUNCTION1 PFK	330.9792	24.78	0.000							4.2
[redacted]	48	FUNCTION1 PFK	330.9792	24.42	0.000							0.5
[redacted]	48	FUNCTION1 PFK	330.9792	23.91	0.000							10.7
[redacted]	48	FUNCTION1 PFK	330.9792	23.76	0.000							1.9
[redacted]	48	FUNCTION1 PFK	330.9792	23.48	0.000							3.0
[redacted]	48	FUNCTION1 PFK	330.9792	23.18	0.000							0.6
[redacted]	48	FUNCTION1 PFK	330.9792	22.76	0.000							7.4
[redacted]	48	FUNCTION1 PFK	330.9792	22.36	0.000							1.7
[redacted]	48	FUNCTION1 PFK	330.9792	21.98	0.000							0.8
[redacted]	48	FUNCTION1 PFK	330.9792	21.61	0.000							2.5
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[redacted]	48	FUNCTION1 PFK	330.9792	27.17	0.000							11.4
[redacted]	48	FUNCTION1 PFK	330.9792	26.89	0.000							6.3
[redacted]	48	FUNCTION1 PFK	330.9792	26.81	0.000							8.4
[redacted]	48	FUNCTION1 PFK	330.9792	26.69	0.000							10.6
[redacted]	48	FUNCTION1 PFK	330.9792	26.59	0.000							2.3
[redacted]	48	FUNCTION1 PFK	330.9792	26.48	0.000							4.4
[redacted]	48	FUNCTION1 PFK	330.9792	26.18	0.000							4.2

PFK2

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	49	FUNCTION2 PFK	366.9792	30.06	0.000		0.000					5.2
[redacted]	49	FUNCTION2 PFK	366.9792	29.49	0.000		0.000					3.8

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:46:53 Pacific Standard Time

ID: WC32OPR, Name: 13021306, Date: 13-Feb-2013, Time: 14:38:53, Conditions: AUTOSPEC01, User: pk

PFK3

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
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[redacted]	50	FUNCTION3 PFK	380.9760	32.74	0.000		0.000					1.5
[redacted]	50	FUNCTION3 PFK	380.9760	32.68	0.000		0.000					1.5
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[redacted]	50	FUNCTION3 PFK	380.9760	37.73	0.000		0.000					1.9
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[redacted]	50	FUNCTION3 PFK	380.9760	37.14	0.000		0.000					1.3
[redacted]	50	FUNCTION3 PFK	380.9760	37.08	0.000		0.000					0.6
[redacted]	50	FUNCTION3 PFK	380.9760	36.45	0.000		0.000					1.9
[redacted]	50	FUNCTION3 PFK	380.9760	35.40	0.000		0.000					0.6
[redacted]	50	FUNCTION3 PFK	380.9760	35.26	0.000		0.000					1.0
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[redacted]	50	FUNCTION3 PFK	380.9760	34.94	0.000		0.000					2.3
[redacted]	50	FUNCTION3 PFK	380.9760	34.22	0.000		0.000					1.8
[redacted]	50	FUNCTION3 PFK	380.9760	34.12	0.000		0.000					1.6
[redacted]	50	FUNCTION3 PFK	380.9760	33.72	0.000		0.000					0.7
[redacted]	50	FUNCTION3 PFK	380.9760	33.18	0.000		0.000					1.3
[redacted]	50	FUNCTION3 PFK	380.9760	33.11	0.000		0.000					0.9
[redacted]	50	FUNCTION3 PFK	380.9760	33.06	0.000		0.000					0.5

ID: WC32OPR, Name: 13021306, Date: 13-Feb-2013, Time: 14:38:53, Conditions: AUTOSPEC01, User: pk

PFK4

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
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[redacted]	51	FUNCTION4 PFK	430.9728	40.09	0.000							0.7
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[redacted]	51	FUNCTION4 PFK	430.9728	39.70	0.000							2.7
[redacted]	51	FUNCTION4 PFK	430.9728	39.62	0.000							2.3
[redacted]	51	FUNCTION4 PFK	430.9728	39.44	0.000							0.7
[redacted]	51	FUNCTION4 PFK	430.9728	39.40	0.000							1.4
[redacted]	51	FUNCTION4 PFK	430.9728	39.18	0.000							1.2
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[redacted]	51	FUNCTION4 PFK	430.9728	38.33	0.000							1.7
[redacted]	51	FUNCTION4 PFK	430.9728	38.26	0.000							0.9
[redacted]	51	FUNCTION4 PFK	430.9728	43.98	0.000							1.4
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D: WC32OPR, Name: 13021306, Date: 13-Feb-2013, Time: 14:38:53, Conditions: AUTOSPEC01, User: pk

PFK5

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[redacted]	52	FUNCTION5 PFK	480.9696	45.20	0.000							1.3
[redacted]	52	FUNCTION5 PFK	480.9696	45.17	0.000							1.3
[redacted]	52	FUNCTION5 PFK	480.9696	45.14	0.000							1.4
[redacted]	52	FUNCTION5 PFK	480.9696	45.11	0.000							2.2
[redacted]	52	FUNCTION5 PFK	480.9696	45.03	0.000							2.6
[redacted]	52	FUNCTION5 PFK	480.9696	44.97	0.000							1.0
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[redacted]	52	FUNCTION5 PFK	480.9696	44.71	0.000							1.4
[redacted]	52	FUNCTION5 PFK	480.9696	44.65	0.000							0.8
[redacted]	52	FUNCTION5 PFK	480.9696	44.56	0.000							3.4
[redacted]	52	FUNCTION5 PFK	480.9696	47.80	0.000							2.1
[redacted]	52	FUNCTION5 PFK	480.9696	47.76	0.000							2.3
[redacted]	52	FUNCTION5 PFK	480.9696	47.71	0.000							2.5
[redacted]	52	FUNCTION5 PFK	480.9696	47.60	0.000							1.5
[redacted]	52	FUNCTION5 PFK	480.9696	47.38	0.000							0.6
[redacted]	52	FUNCTION5 PFK	480.9696	47.15	0.000							1.7
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[redacted]	52	FUNCTION5 PFK	480.9696	46.24	0.000							1.3
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[redacted]	52	FUNCTION5 PFK	480.9696	45.25	0.000							1.0
[redacted]	52	FUNCTION5 PFK	480.9696	49.33	0.000							1.3
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[redacted]	52	FUNCTION5 PFK	480.9696	48.97	0.000							1.6
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[redacted]	52	FUNCTION5 PFK	480.9696	48.64	0.000							0.6
[redacted]	52	FUNCTION5 PFK	480.9696	48.61	0.000							1.0
[redacted]	52	FUNCTION5 PFK	480.9696	48.48	0.000							0.9
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ETHERS1

[redacted]												
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ID: WC32OPR, Name: 13021306, Date: 13-Feb-2013, Time: 14:38:53, Conditions: AUTOSPEC01, User: pk

ETHERS2

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
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[redacted]	54	FUNCTION1 HPCD...	409.7974	26.87	0.000		0.000					1.3
[redacted]	54	FUNCTION1 HPCD...	409.7974	26.63	0.000		0.000					1.4
[redacted]	54	FUNCTION1 HPCD...	409.7974	25.57	0.000		0.000					1.6
[redacted]	54	FUNCTION1 HPCD...	409.7974	24.29	0.000		0.000					1.6
[redacted]	54	FUNCTION1 HPCD...	409.7974	24.02	0.000		0.000					1.4
[redacted]	54	FUNCTION1 HPCD...	409.7974	23.79	0.000		0.000					1.2
[redacted]	54	FUNCTION1 HPCD...	409.7974	23.25	0.000		0.000					2.3
[redacted]	54	FUNCTION1 HPCD...	409.7974	23.09	0.000		0.000					1.5

ETHERS3

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	55	FUNCTION2 HPCD...	409.7974	29.10	0.000		0.000					3.1
[redacted]	55	FUNCTION2 HPCD...	409.7974	28.25	0.000		0.000					3.2
[redacted]	55	FUNCTION2 HPCD...	409.7974	32.35	0.000		0.000					2.2
[redacted]	55	FUNCTION2 HPCD...	409.7974	31.34	0.000		0.000					3.7
[redacted]	55	FUNCTION2 HPCD...	409.7974	31.16	0.000		0.000					1.8
[redacted]	55	FUNCTION2 HPCD...	409.7974	30.24	0.000		0.000					2.5
[redacted]	55	FUNCTION2 HPCD...	409.7974	30.08	0.000		0.000					2.6
[redacted]	55	FUNCTION2 HPCD...	409.7974	29.96	0.000		0.000					1.4

ETHERS4

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]												

ETHERS5

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	57	FUNCTION4 NCDPE	479.7165	39.19	0.000		0.000					3.8

ETHERS6

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]												

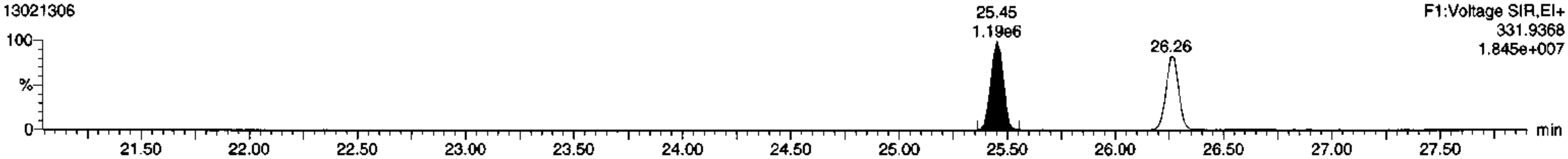
Quantify Sample Report **MassLynx 4.1 SCN 714**

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:46:53 Pacific Standard Time

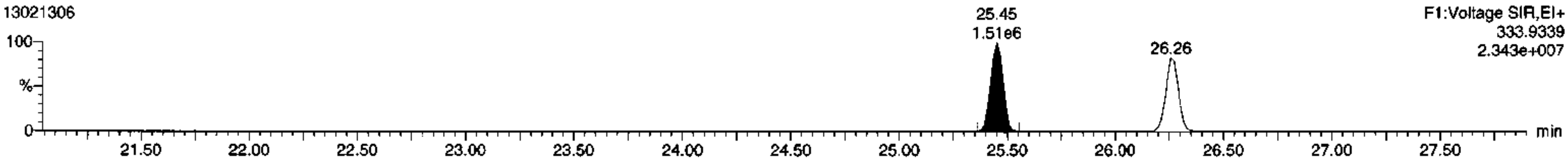
Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 12 Feb 2013 12:25:57
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: WC32OPR, Name: 13021306, Date: 13-Feb-2013, Time: 14:38:53, Conditions: AUTOSPEC01, User: pk

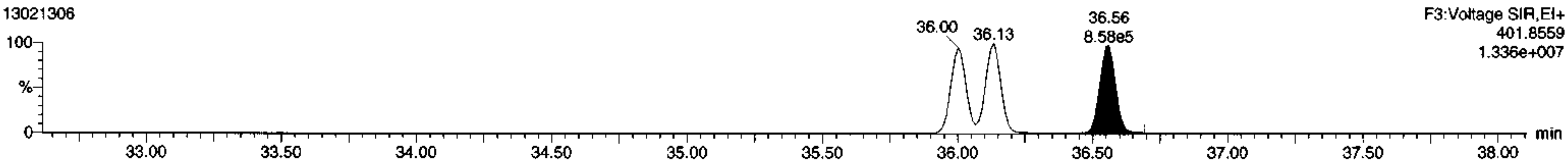
13C-1234-TCDD
13021306



13C-1234-TCDD
13021306



13C-123789-HxCDD
13021306



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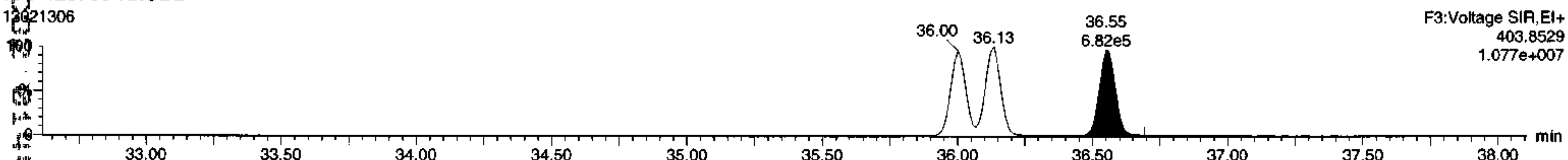
13021306



Quantify Sample Report **MassLynx 4.1 SCN 714**

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld

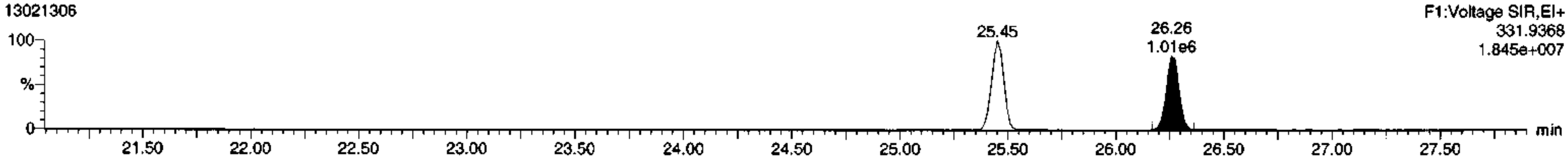
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time

Printed: Thursday, February 14, 2013 10:46:53 Pacific Standard Time

ID: WC32OPR, Name: 13021306, Date: 13-Feb-2013, Time: 14:38:53, Conditions: AUTOSPEC01, User: pk

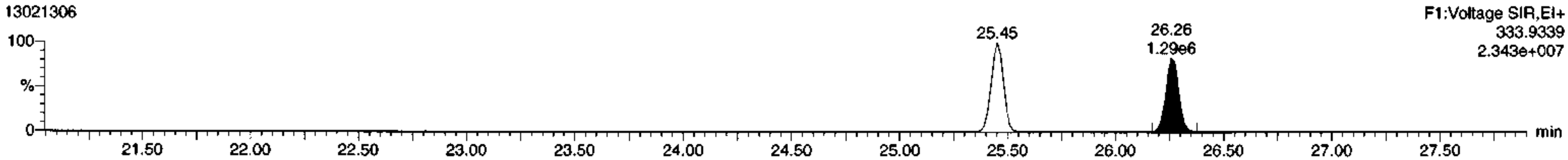
13C-2378-TCDD

13021306



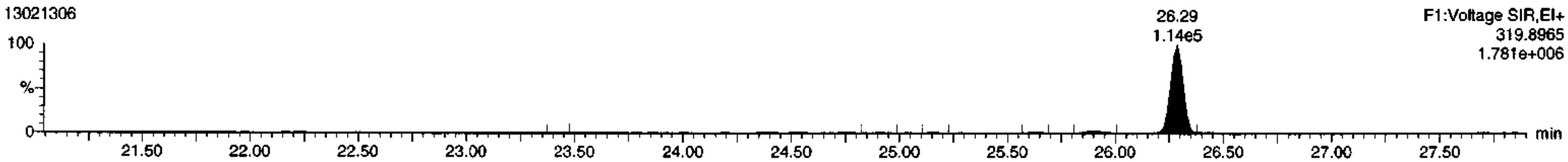
13C-2378-TCDD

13021306



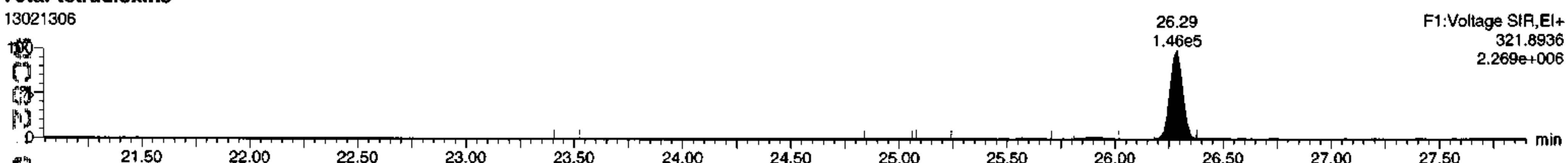
Total-tetradioxins

13021306



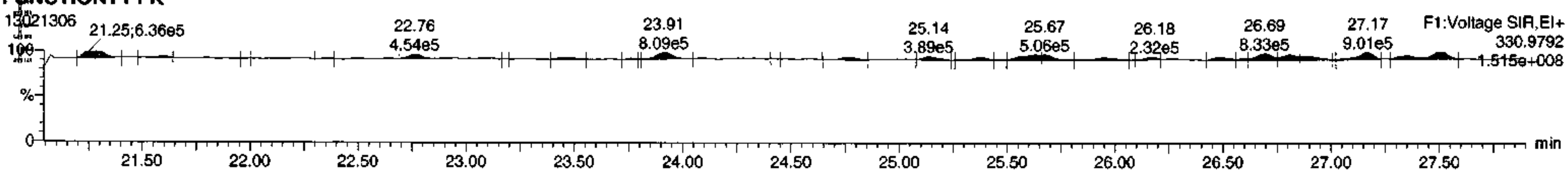
Total-tetradioxins

13021306



FUNCTION1 PFK

13021306



Quantify Sample Report **MassLynx 4.1 SCN 714**

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld

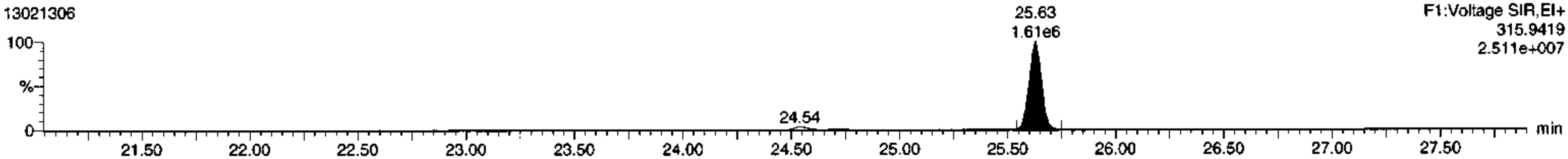
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time

Printed: Thursday, February 14, 2013 10:46:53 Pacific Standard Time

ID: WC32OPR, Name: 13021306, Date: 13-Feb-2013, Time: 14:38:53, Conditions: AUTOSPEC01, User: pk

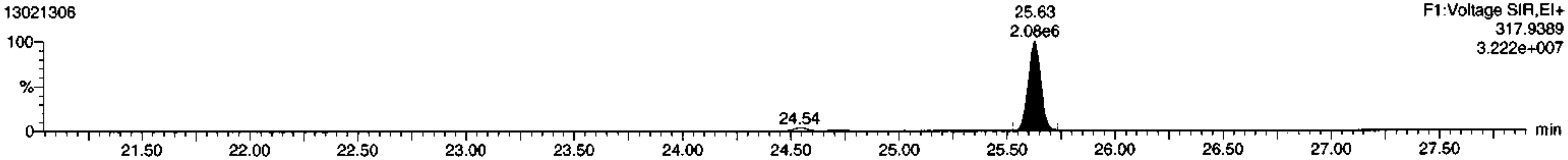
13C-2378-TCDF

13021306



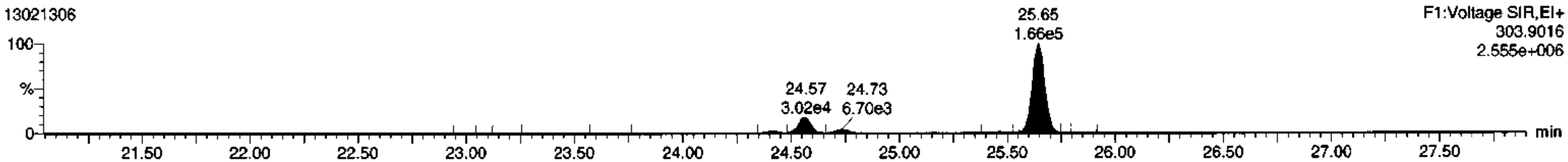
13C-2378-TCDF

13021306



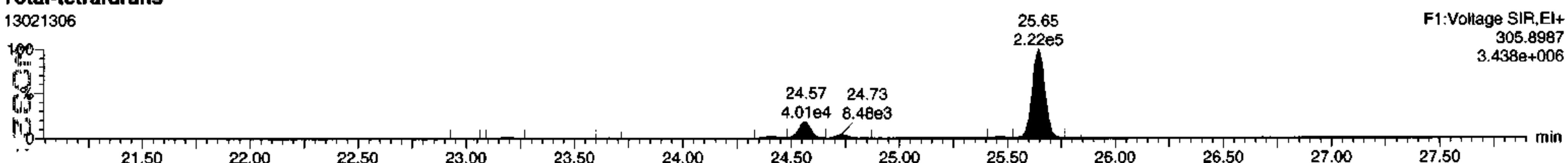
Total-tetrafurans

13021306



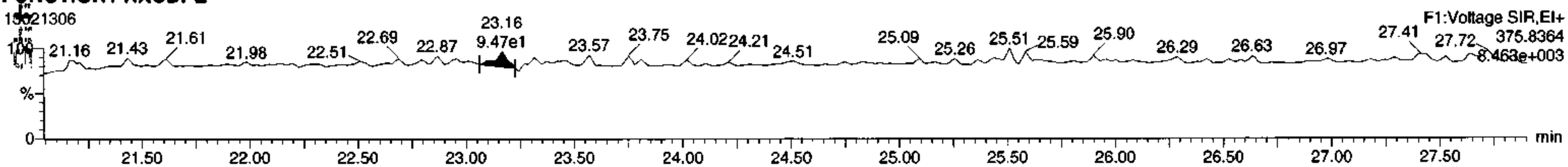
Total-tetrafurans

13021306



FUNCTION1 HXCDPE

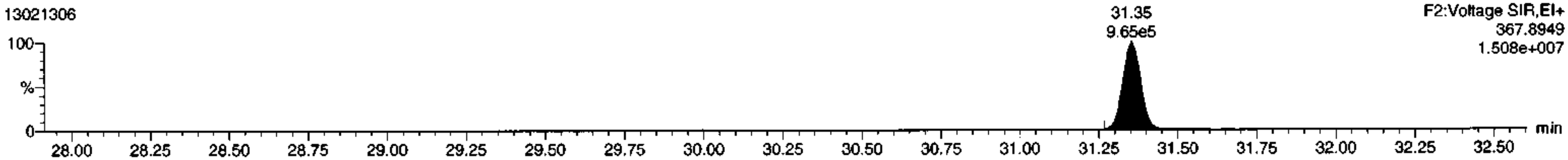
13021306



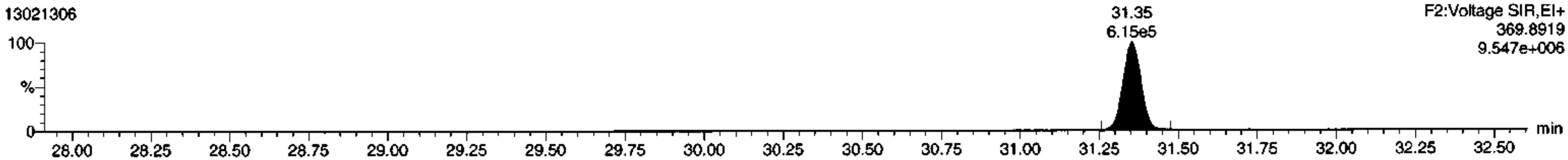
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:46:53 Pacific Standard Time

ID: WC32OPR, Name: 13021306, Date: 13-Feb-2013, Time: 14:38:53, Conditions: AUTOSPEC01, User: pk

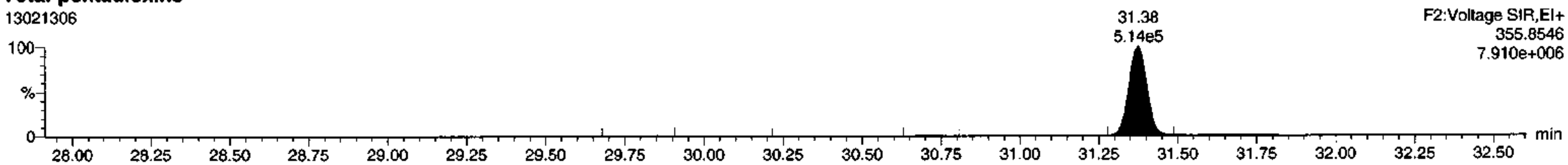
13C-12378-PeCDD
13021306



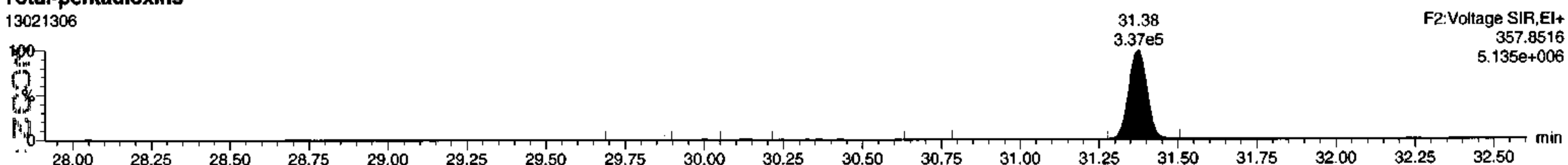
13C-12378-PeCDD
13021306



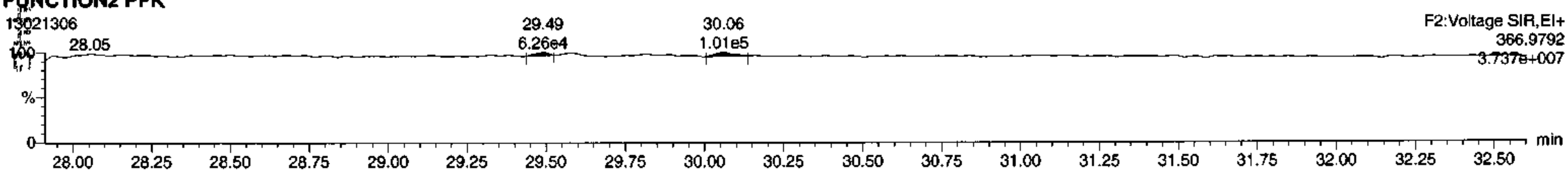
Total-pentadioxins
13021306



Total-pentadioxins
13021306



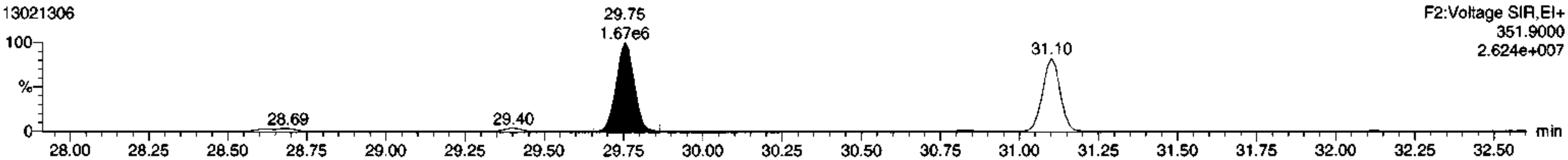
FUNCTION2 PFK
13021306



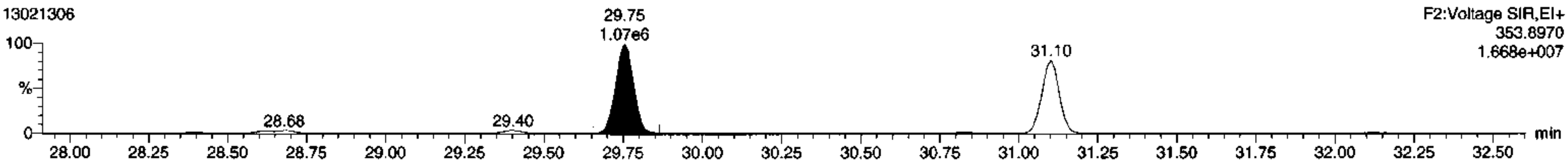
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:46:53 Pacific Standard Time

ID: WC32OPR, Name: 13021306, Date: 13-Feb-2013, Time: 14:38:53, Conditions: AUTOSPEC01, User: pk

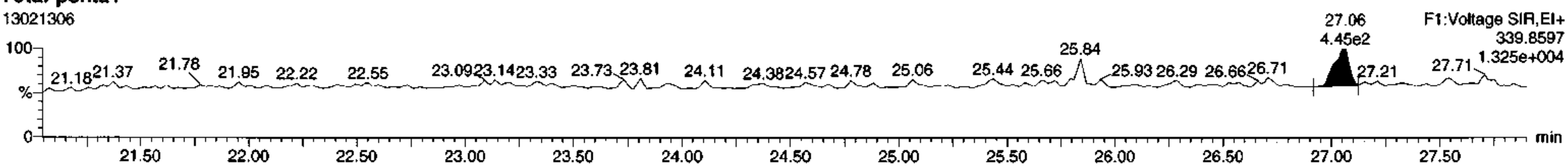
13C-12378-PeCDF



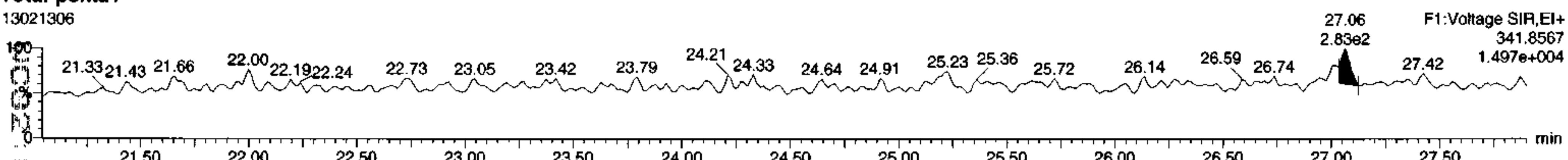
13C-12378-PeCDF



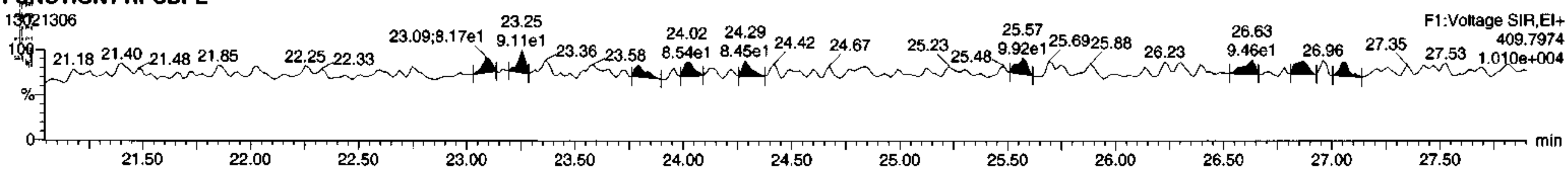
Total-penta1



Total-penta1



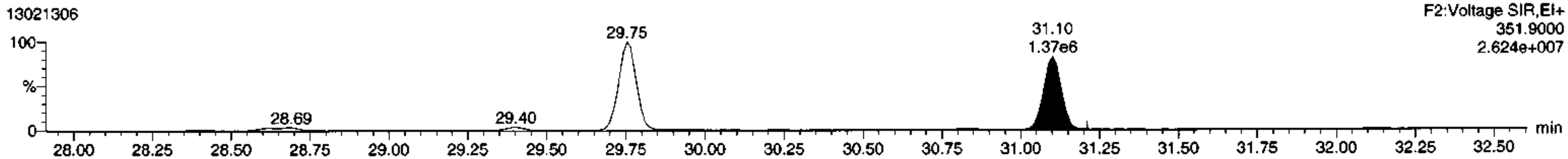
FUNCTION1 HPCDPE



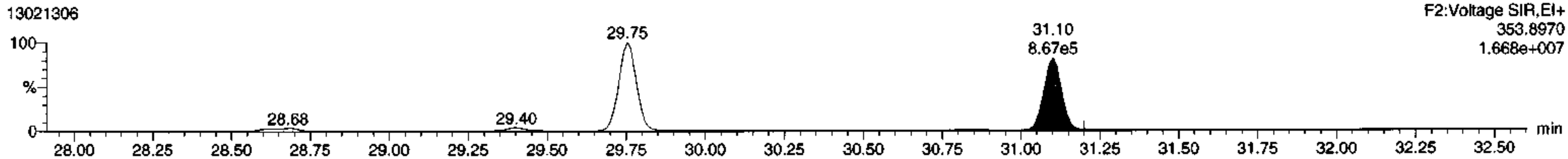
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:46:53 Pacific Standard Time

ID: WC32OPR, Name: 13021306, Date: 13-Feb-2013, Time: 14:38:53, Conditions: AUTOSPEC01, User: pk

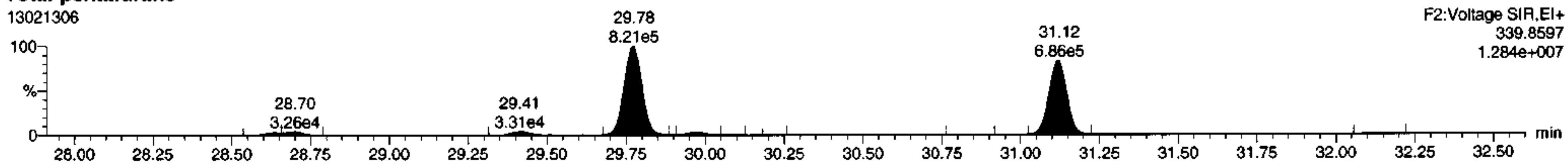
13C-23478-PeCDF



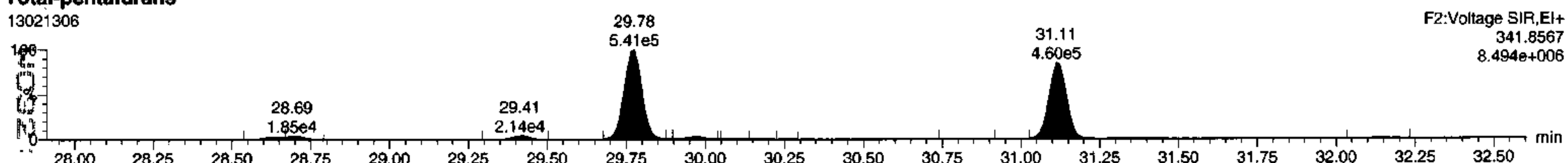
13C-23478-PeCDF



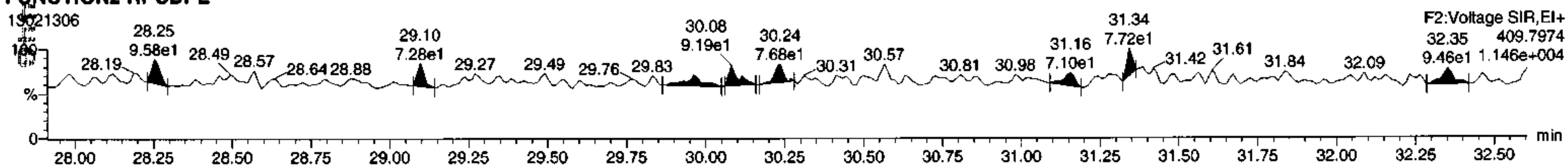
Total-pentafurans



Total-pentafurans



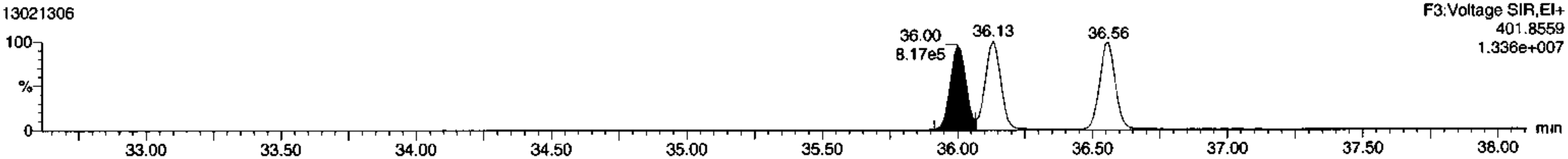
FUNCTION2 HPCDPE



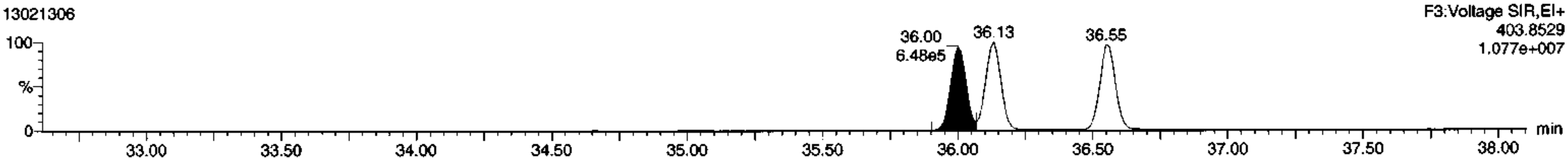
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:46:53 Pacific Standard Time

ID: WC32OPR, Name: 13021306, Date: 13-Feb-2013, Time: 14:38:53, Conditions: AUTOSPEC01, User: pk

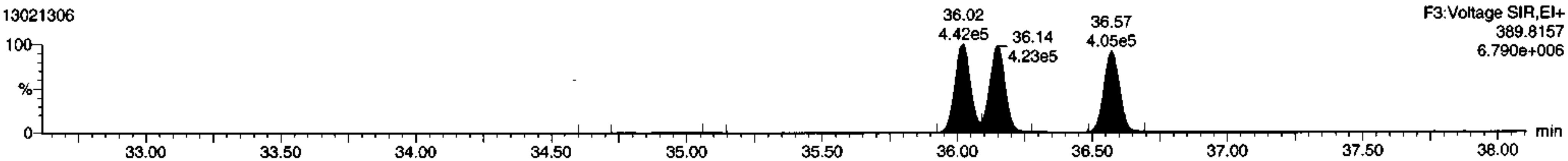
13C-123478-HxCDD
13021306



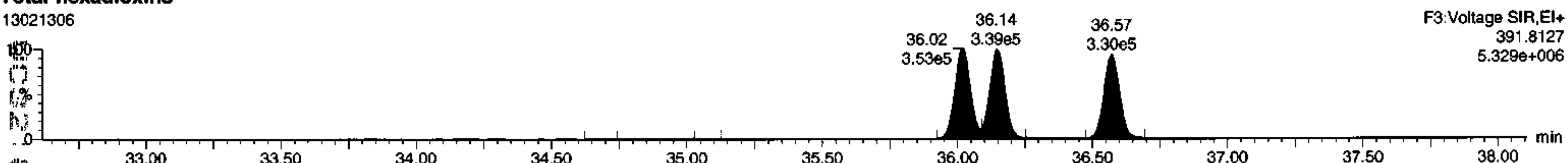
13C-123478-HxCDD
13021306



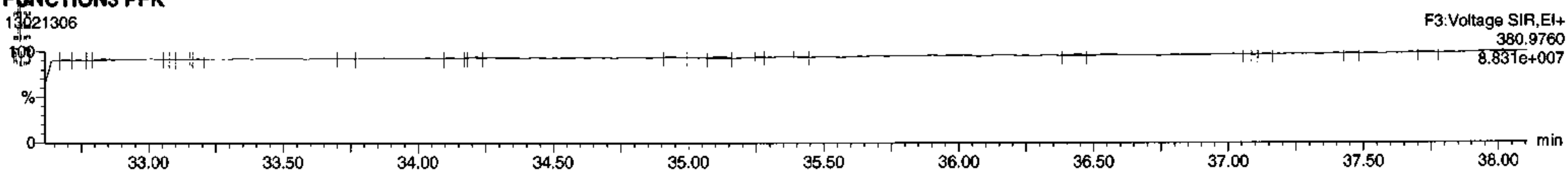
Total-hexadioxins
13021306



Total-hexadioxins
13021306

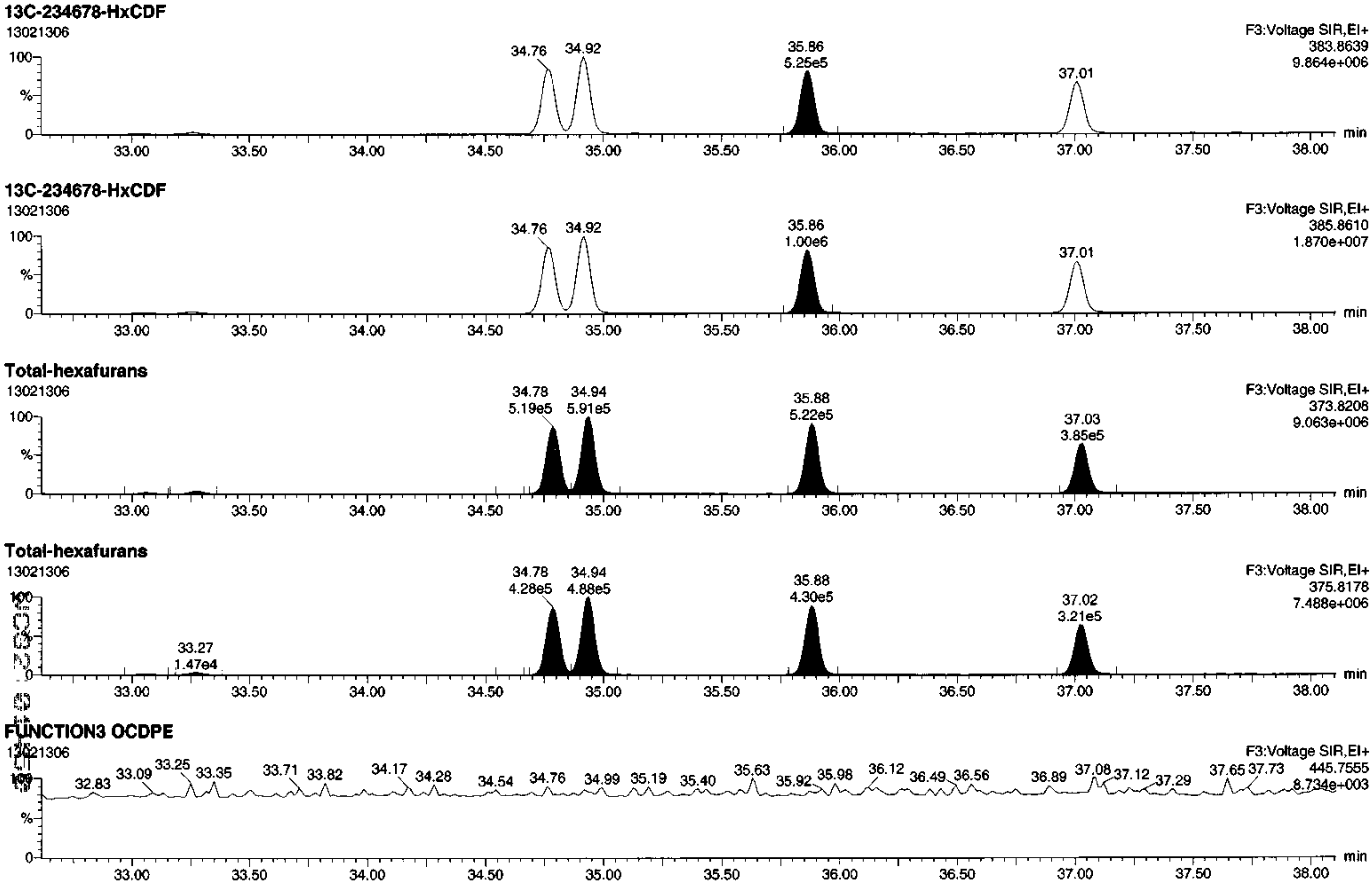


FUNCTION3 PFK
13021306



Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:46:53 Pacific Standard Time

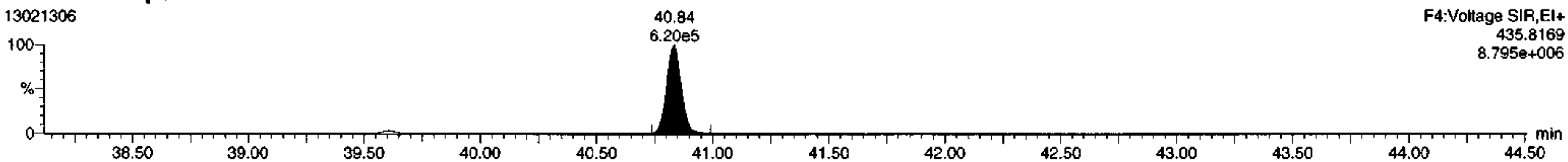
ID: WC32OPR, Name: 13021306, Date: 13-Feb-2013, Time: 14:38:53, Conditions: AUTOSPEC01, User: pk



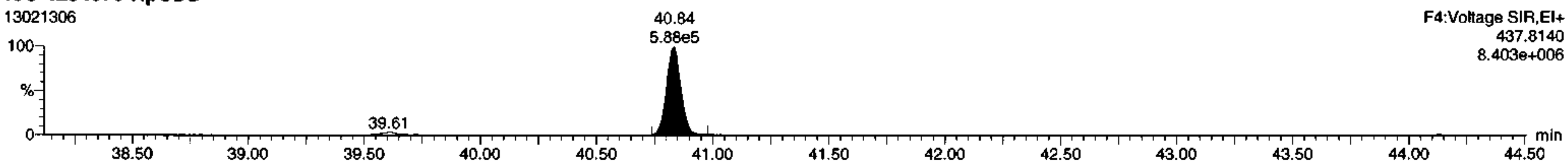
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:46:53 Pacific Standard Time

ID: WC32OPR, Name: 13021306, Date: 13-Feb-2013, Time: 14:38:53, Conditions: AUTOSPEC01, User: pk

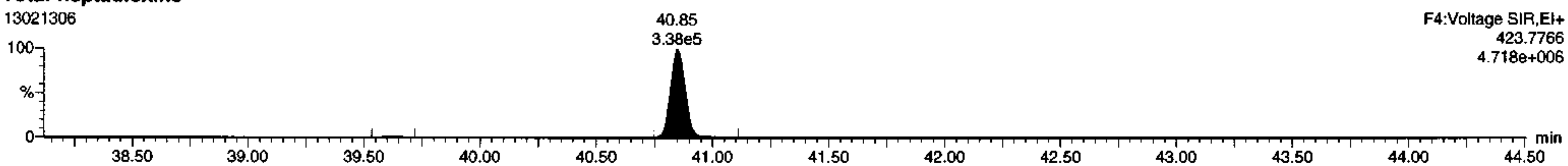
13C-1234678-HpCDD



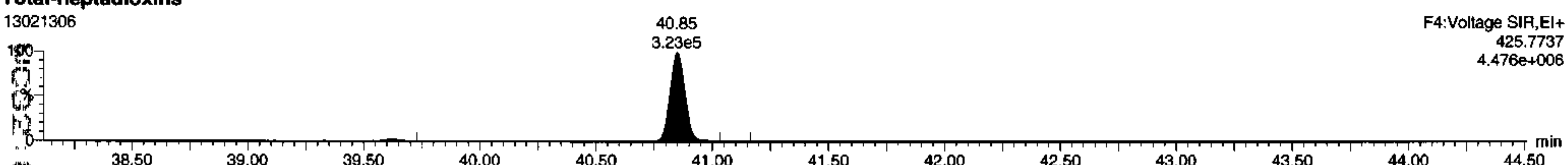
13C-1234678-HpCDD



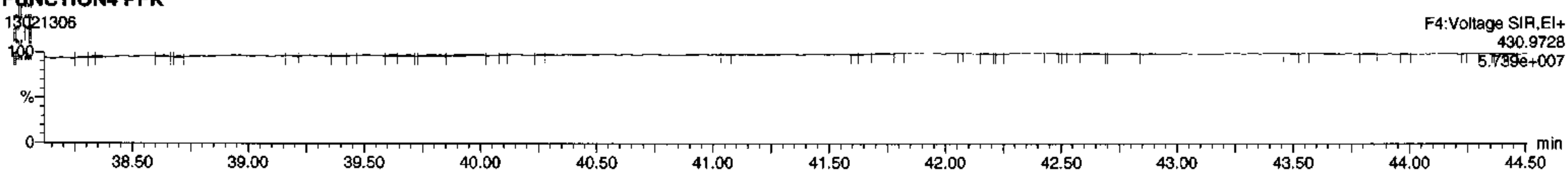
Total-heptadioxins



Total-heptadioxins



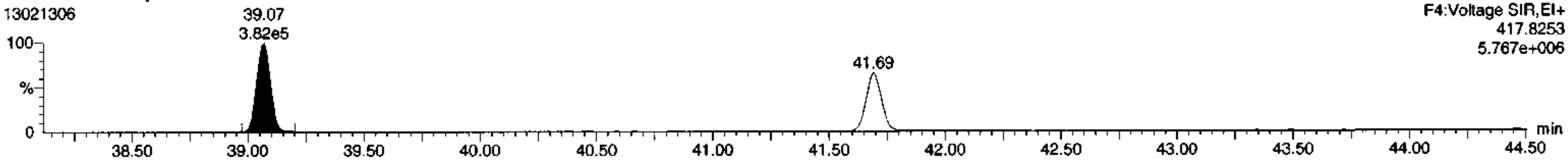
FUNCTION4 PFK



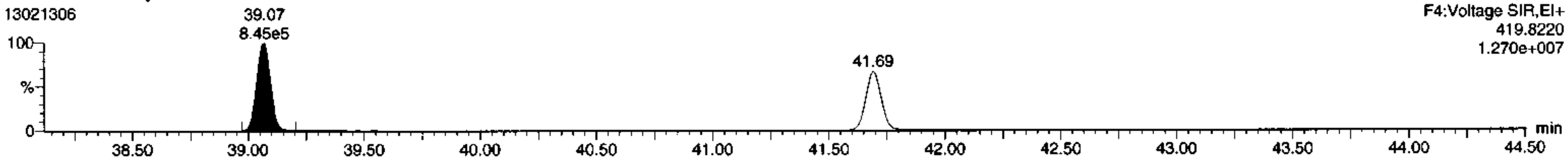
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:46:53 Pacific Standard Time

ID: WC32OPR, Name: 13021306, Date: 13-Feb-2013, Time: 14:38:53, Conditions: AUTOSPEC01, User: pk

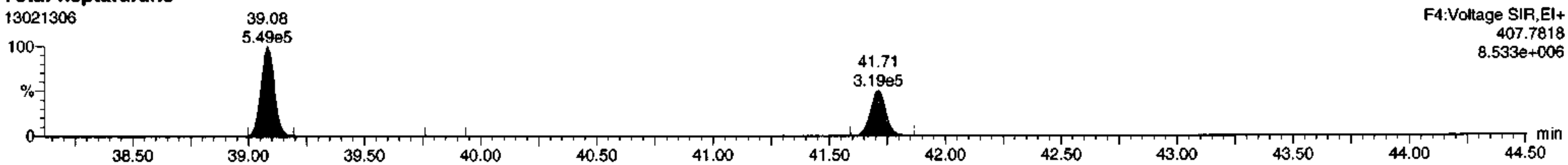
13C-1234678-HpCDF



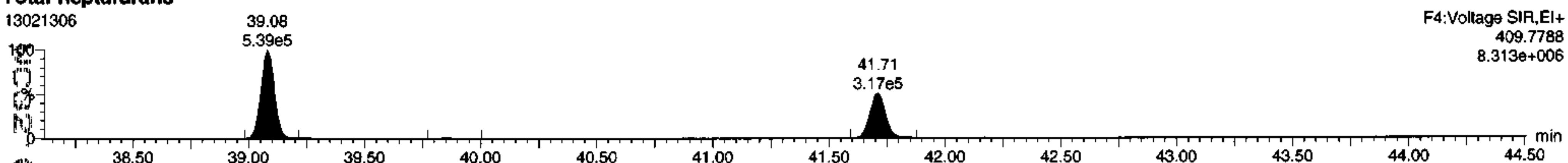
13C-1234678-HpCDF



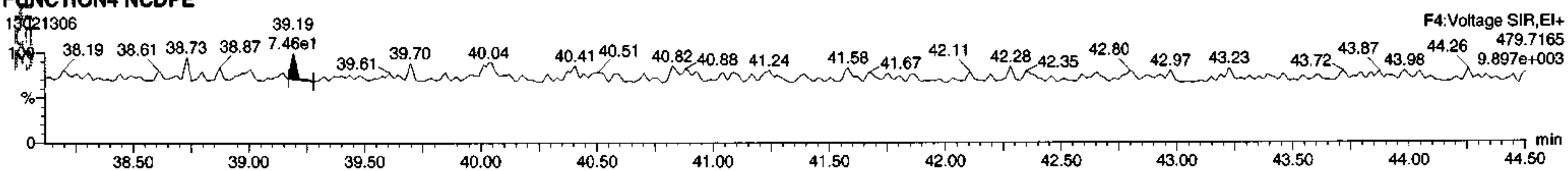
Total-heptafurans



Total-heptafurans



FUNCTION4 NCDPE

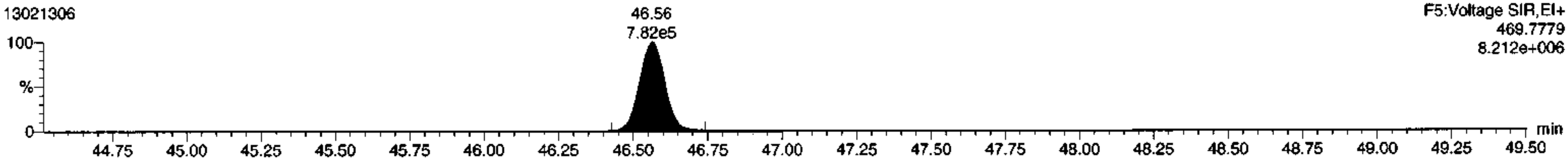


Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:46:53 Pacific Standard Time

ID: WC32OPR, Name: 13021306, Date: 13-Feb-2013, Time: 14:38:53, Conditions: AUTOSPEC01, User: pk

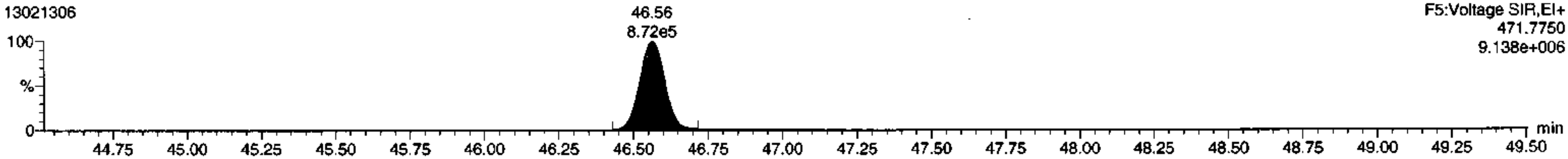
13C-OCDD

13021306



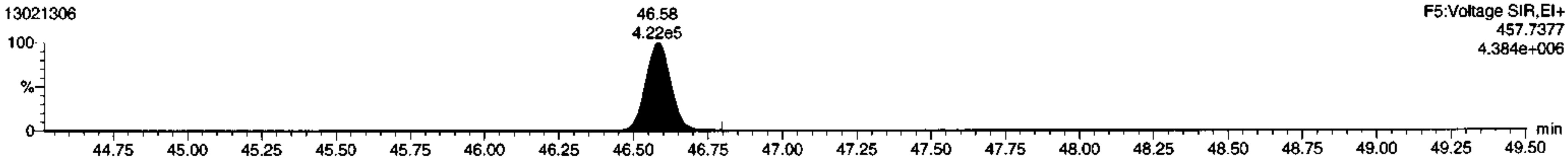
13C-OCDD

13021306



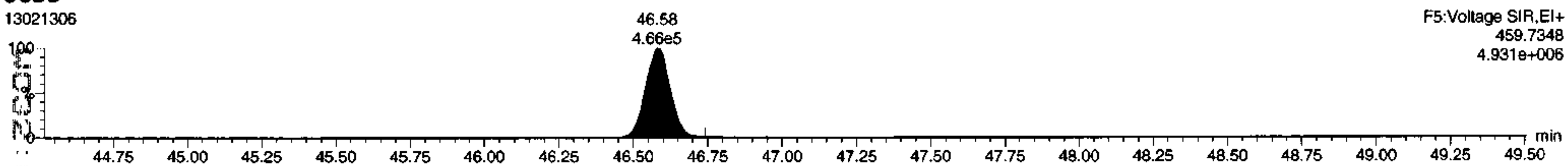
OCDD

13021306



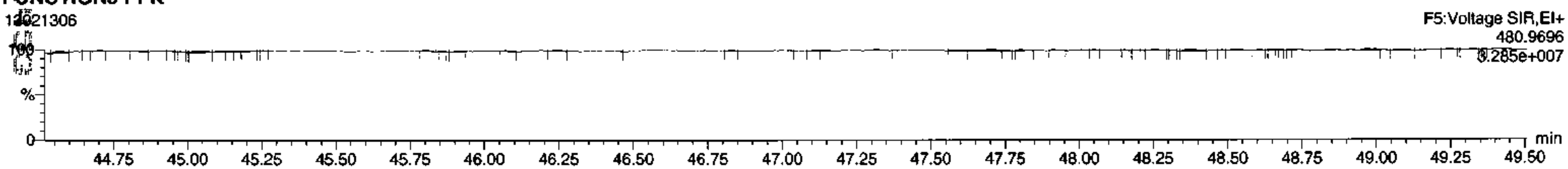
OCDD

13021306



FUNCTION5 PFK

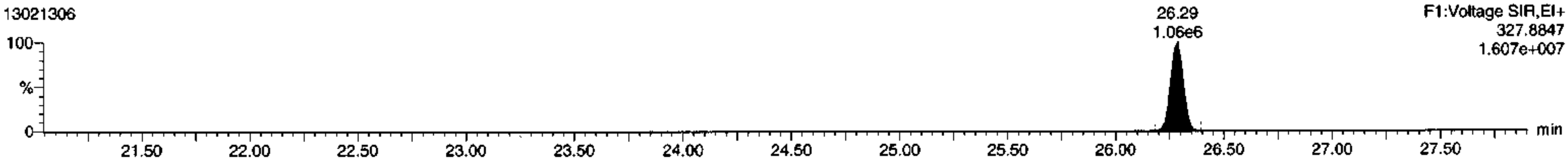
13021306



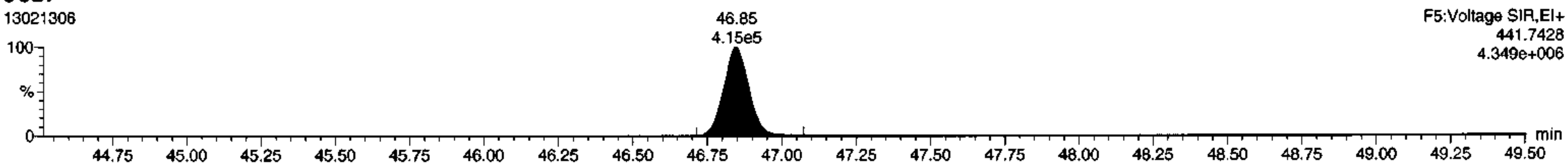
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:46:53 Pacific Standard Time

ID: WC32OPR, Name: 13021306, Date: 13-Feb-2013, Time: 14:38:53, Conditions: AUTOSPEC01, User: pk

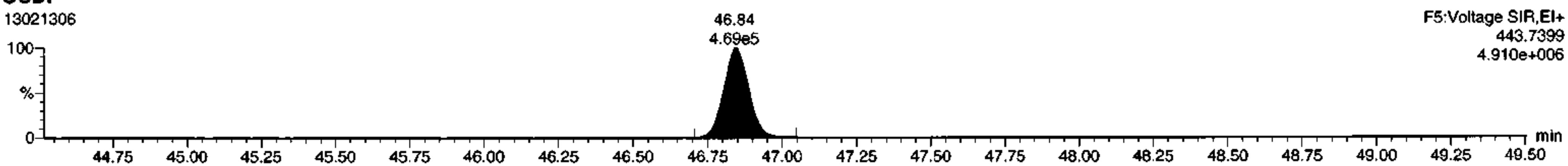
37CL-2378-TCDD



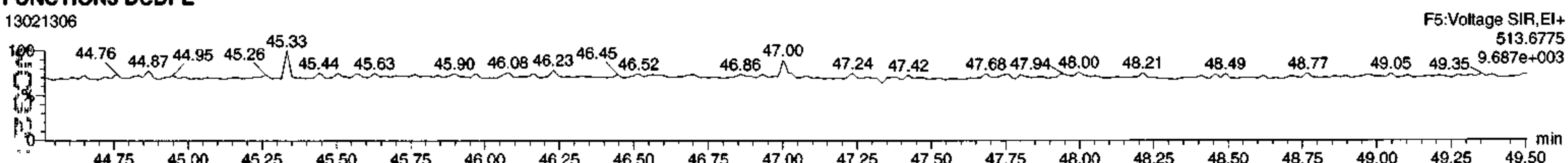
OCDF



OCDF



FUNCTION5 DCDPE



Quantify Sample Summary Report **MassLynx 4.1 SCN 714**

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld

Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time

Printed: Thursday, February 14, 2013 10:47:13 Pacific Standard Time

Mr 2/14/13

Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 12 Feb 2013 12:25:57
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: WC32A, Name: 13021307, Date: 13-Feb-2013, Time: 15:29:41, Conditions: AUTOSPEC01, User: pk

2378-TCDF	25.630	1.001	2.33e5	3.00e5	0.921	0.777	0.770	1907.9	1776	2278	3.39e6	4.39e6	NO	11.760	11.760	
12378-PeCDF	29.764	1.001	2.44e4	1.60e4	0.912	1.529	1.550	276.4	1351	2973	3.73e5	2.37e5	NO	1.318	1.318	X
23478-PeCDF	31.112	1.001	2.33e4	1.72e4	0.943	1.355	1.550	255.1	1351	2973	3.45e5	2.43e5	NO	1.377	1.377	
123478-HxCDF	34.785	1.001	2.75e4	2.29e4	1.101	1.200	1.240	85.7	4720	1721	4.05e5	3.21e5	NO	1.848	1.848	X
234678-HxCDF	35.903	1.001	2.29e4	1.87e4	1.073	1.229	1.240	41.8	4720	1721	1.97e5	1.71e5	NO	1.702	1.702	X
123678-HxCDF	34.938	1.001	1.57e4	1.39e4	1.056	1.128	1.240	45.5	4720	1721	2.15e5	1.98e5	NO	1.105	1.105	
123789-HxCDF	36.988	1.000	1.21e4	1.08e4	1.017	1.114	1.240	35.4	4720	1721	1.67e5	1.68e5	NO	0.839	0.839	
1234678-HpCDF	39.082	1.001	2.25e5	2.26e5	1.238	0.999	1.050	2638.9	1261	1872	3.33e6	3.32e6	NO	19.017	19.017	
1234789-HpCDF	41.701	1.000	1.15e4	1.25e4	1.224	0.917	1.050	119.4	1261	1872	1.51e5	1.62e5	NO	1.333	1.333	
OCDF	46.849	1.006	2.78e5	3.24e5	1.162	0.857	0.890	2204.8	1287	1582	2.84e6	3.23e6	NO	46.250	46.250	
2378-TCDD	26.272	1.001	6.38e3	9.41e3	1.106	0.677	0.770	49.2	1900	2141	9.34e4	1.41e5	NO	0.517	0.517	
12378-PeCDD	31.365	1.001	3.89e4	2.58e4	1.001	1.508	1.550	136.0	3881	3208	5.28e5	3.59e5	NO	3.275	3.275	
123478-HxCDD	36.035	1.000	1.27e5	1.03e5	0.978	1.227	1.240	411.8	4293	2820	1.77e6	1.39e6	NO	11.314	11.314	
123678-HxCDD	36.177	1.001	1.79e5	1.47e5	0.929	1.218	1.240	575.6	4293	2820	2.47e6	2.06e6	NO	17.010	17.010	
123789-HxCDD	36.593	1.012	1.28e5	1.03e5	0.904	1.238	1.240	455.9	4293	2820	1.96e6	1.63e6	NO	12.328	12.328	
1234678-HpCDD	40.847	1.001	1.62e6	1.56e6	1.029	1.038	1.050	5073.4	4473	4937	2.27e7	2.20e7	NO	181.451	181.451	
OCDD	46.580	1.000	4.34e6	4.88e6	1.011	0.890	0.890	12712.6	3626	2627	4.61e7	5.17e7	NO	813.161	813.161	
13C-2378-TCDF	25.615	1.007	2.15e6	2.77e6	1.522	0.775	0.770	6861.6	4629	2271	3.18e7	4.09e7	NO		83.231	
13C-12378-PeCDF	29.742	1.169	2.05e6	1.31e6	1.185	1.565	1.550	5442.2	5818	2605	3.17e7	2.01e7	NO		72.965	
13C-23478-PeCDF	31.091	1.222	1.91e6	1.21e6	1.136	1.587	1.550	4969.0	5818	2605	2.89e7	1.82e7	NO		70.686	
13C-123478-HxCDF	34.763	0.951	8.48e5	1.63e6	1.284	0.521	0.510	3818.8	3204	5295	1.22e7	2.34e7	NO		80.504	
13C-123678-HxCDF	34.916	0.955	8.66e5	1.67e6	1.383	0.518	0.510	3892.9	3204	5295	1.25e7	2.38e7	NO		76.637	
13C-234678-HxCDF	35.881	0.981	7.81e5	1.50e6	1.283	0.521	0.510	3323.1	3204	5295	1.06e7	2.07e7	NO		74.193	
13C-123789-HxCDF	36.999	1.012	9.19e5	1.77e6	1.099	0.521	0.510	4617.1	3204	5295	1.48e7	2.86e7	NO		102.036	
13C-1234678-HpCDF	39.060	1.068	5.95e5	1.32e6	1.070	0.450	0.440	2854.1	3035	1889	8.66e6	1.97e7	NO		74.820	
13C-1234789-HpCDF	41.690	1.140	4.59e5	1.02e6	0.774	0.451	0.440	1962.2	3035	1889	5.96e6	1.33e7	NO		79.626	
13C-1234-TCDD	25.436	0.000	1.71e6	2.18e6	1.000	0.787	0.770	6851.8	3742	2162	2.56e7	3.26e7	NO		100.000	
13C-2378-TCDD	26.257	1.032	1.21e6	1.55e6	0.943	0.782	0.770	4785.7	3742	2162	1.79e7	2.29e7	NO		75.348	
13C-12378-PeCDD	31.343	1.232	1.21e6	7.65e5	0.715	1.583	1.550	11934.9	1547	1509	1.85e7	1.17e7	NO		71.055	
13C-123478-HxCDD	36.023	0.985	1.16e6	9.15e5	1.032	1.273	1.240	6753.1	2416	3693	1.63e7	1.28e7	NO		84.155	
13C-123678-HxCDD	36.155	0.989	1.14e6	9.19e5	1.076	1.243	1.240	6712.8	2416	3693	1.62e7	1.31e7	NO		79.967	
13C-1234678-HpCDD	40.825	1.116	8.71e5	8.31e5	0.838	1.048	1.050	6186.5	1971	1723	1.22e7	1.16e7	NO		84.897	
13C-OCDD	46.571	1.273	1.07e6	1.18e6	0.675	0.906	0.890	5235.4	2132	1969	1.12e7	1.23e7	NO		138.644	

Quantify Sample Summary Report **MassLynx 4.1 SCN 714**

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld

Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time

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ID: WC32A, Name: 13021307, Date: 13-Feb-2013, Time: 15:29:41, Conditions: AUTOSPEC01, User: pk

[redacted]																	
[redacted]	13C-123789-HxCDD	36.571	0.000	1.34e6	1.06e6	1.000	1.262	1.240	8152.4	2416	3693	1.97e7	1.59e7	NO		100.000	
[redacted]	Total-tetrafurans			9.97e5		0.921				1776		1.40e7				50.543	E
[redacted]	Total-penta1			1.42e5						802		1.89e6				7.820	
[redacted]	Total-pentafurans			2.72e5		0.927				1351		3.86e6				15.164	E
[redacted]	Total-hexafurans			5.10e5		1.062				4720		7.28e6				35.619	E
[redacted]	Total-heptafurans			6.98e5		1.231				1261		1.03e7				64.216	
[redacted]	Total-Furans			2.90e6		1.065				1776		4.02e7				219.613	
[redacted]	Total-tetradioxins			9.20e6		1.106				1900		1.38e8				689.703	E
[redacted]	Total-pentadioxins			7.61e6		1.001				3881		1.08e8				634.735	E
[redacted]	Total-hexadioxins			9.05e6		0.937				4293		1.30e8				841.496	
[redacted]	Total-heptadioxins			2.97e6		1.029				4473		4.28e7				332.855	
[redacted]	Total-Dioxins			3.32e7		0.994				1900		4.65e8				3312.056	
[redacted]	Total-TEQ			3.61e7						1900		5.05e8				3531.669	
[redacted]	37CL-2378-TCDD	26.272	1.033	1.30e6		1.051			9744.2	2016		1.96e7				31.881	
[redacted]	FUNCTION1 PFK			8.27e6						979821		9.62e7					
[redacted]	FUNCTION2 PFK			4.95e5						299680		1.23e7				0.000	
[redacted]	FUNCTION3 PFK			5.76e7						669032		6.17e8				0.000	
[redacted]	FUNCTION4 PFK			2.18e6						448775		4.54e7					
[redacted]	FUNCTION5 PFK			2.24e5						265156		2.75e6					
[redacted]	FUNCTION1 HXCDPE			1.02e4						392		1.27e5				0.000	
[redacted]	FUNCTION1 HPCDPE			9.76e2						876		1.91e4				0.000	
[redacted]	FUNCTION2 HPCDPE			9.93e4						1500		1.44e6				0.000	
[redacted]	FUNCTION3 OCDPE			1.35e5						2631		1.71e6				0.000	
[redacted]	FUNCTION4 NCDPE			2.23e5						1513		2.37e6				0.000	
[redacted]	FUNCTION5 DCDPE			2.46e4						1541		2.28e5				0.000	

Quantify Totals Report MassLynx 4.1 SCN 714
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
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Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 12 Feb 2013 12:25:57
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: WC32A, Name: 13021307, Date: 13-Feb-2013, Time: 15:29:41, Conditions: AUTOSPEC01, User: pk

TF

[redacted]												
[redacted]	35	Total-tetrafurans	303.9016	24.55	96439.430	0.921	2.127		0.75	0.77	NO	314.3
[redacted]	35	Total-tetrafurans	303.9016	24.39	117056.218	0.921	2.581		0.77	0.77	NO	439.0
[redacted]	35	Total-tetrafurans	303.9016	24.30	112898.664	0.921	2.489		0.78	0.77	NO	285.3
[redacted]	35	Total-tetrafurans	303.9016	23.88	53213.906	0.921	1.173		0.81	0.77	NO	202.8
[redacted]	35	Total-tetrafurans	303.9016	23.75	24559.802	0.921	0.542		0.74	0.77	NO	84.7
[redacted]	35	Total-tetrafurans	303.9016	23.64	61151.908	0.921	1.348		0.78	0.77	NO	221.6
[redacted]	35	Total-tetrafurans	303.9016	23.48	45289.139	0.921	0.999		0.79	0.77	NO	190.3
[redacted]	35	Total-tetrafurans	303.9016	23.39	89199.750	0.921	1.967		0.74	0.77	NO	297.7
[redacted]	35	Total-tetrafurans	303.9016	23.30	64463.061	0.921	1.421		0.72	0.77	NO	191.1
[redacted]	35	Total-tetrafurans	303.9016	23.18	119722.289	0.921	2.640		0.76	0.77	NO	285.1
[redacted]	35	Total-tetrafurans	303.9016	22.99	220172.297	0.921	4.855		0.75	0.77	NO	750.7
[redacted]	35	Total-tetrafurans	303.9016	22.42	31533.527	0.921	0.695		0.75	0.77	NO	117.7
[redacted]	35	Total-tetrafurans	303.9016	22.15	53158.239	0.921	1.172		0.72	0.77	NO	192.5
[redacted]	35	Total-tetrafurans	303.9016	27.11	64190.025	0.921	1.415		0.81	0.77	NO	190.5
[redacted]	35	Total-tetrafurans	303.9016	26.42	940.380	0.921	0.021		0.98	0.77	YES	4.4
[redacted]	35	Total-tetrafurans	303.9016	26.14	5646.695	0.921	0.125		0.78	0.77	NO	20.2
[redacted]	35	Total-tetrafurans	303.9016	25.85	103768.629	0.921	2.288		0.80	0.77	NO	333.9
[redacted]	35	Total-tetrafurans	303.9016	25.76	27547.245	0.921	0.607		0.82	0.77	NO	113.5
[redacted]	1	2378-TCDF	303.9016	25.63	533318.704	0.921	11.760	11.760	0.78	0.77	NO	1907.9
[redacted]	35	Total-tetrafurans	303.9016	25.45	60852.977	0.921	1.342		0.78	0.77	NO	235.0
[redacted]	35	Total-tetrafurans	303.9016	25.41	47503.266	0.921	1.047		0.73	0.77	NO	201.1
[redacted]	35	Total-tetrafurans	303.9016	25.27	8002.777	0.921	0.176		0.77	0.77	NO	28.9
[redacted]	35	Total-tetrafurans	303.9016	25.14	30780.968	0.921	0.679		0.80	0.77	NO	97.8
[redacted]	35	Total-tetrafurans	303.9016	24.94	42440.121	0.921	0.936		0.80	0.77	NO	145.0
[redacted]	35	Total-tetrafurans	303.9016	24.72	278285.766	0.921	6.136		0.76	0.77	NO	1016.7

PP

[redacted]												
[redacted]	36	Total-penta1	339.8597	27.05	232393.860		7.820		1.56	1.55	NO	2360.5

Quantify Totals Report MassLynx 4.1 SCN 714
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
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PF

	37	Total-pentafurans	339.8597	28.82	6507.109	0.927	0.216		1.32	1.55	NO	49.1	
	37	Total-pentafurans	339.8597	28.69	56937.857	0.927	1.894		1.45	1.55	NO	378.5	
	37	Total-pentafurans	339.8597	28.62	59589.264	0.927	1.983		1.47	1.55	NO	416.1	
	37	Total-pentafurans	339.8597	28.49	34616.424	0.927	1.152		1.47	1.55	NO	177.1	
	37	Total-pentafurans	339.8597	28.41	15902.227	0.927	0.529		1.54	1.55	NO	112.0	
	3	23478-PeCDF	339.8597	31.11	40497.473	0.943	1.377	1.377	1.35	1.55	NO	255.1	
	37	Total-pentafurans	339.8597	30.95	21337.538	0.927	0.710		1.59	1.55	NO	147.3	
	37	Total-pentafurans	339.8597	30.84	26738.240	0.927	0.890		1.50	1.55	NO	167.8	
	37	Total-pentafurans	339.8597	30.60	3987.789	0.927	0.133		1.72	1.55	NO	29.3	
	37	Total-pentafurans	339.8597	30.25	4056.127	0.927	0.135		1.44	1.55	NO	26.0	
	37	Total-pentafurans	339.8597	30.06	15102.553	0.927	0.502		1.52	1.55	NO	88.2	
	37	Total-pentafurans	339.8597	29.96	25410.245	0.927	0.845		1.54	1.55	NO	177.9	
	2	12378-PeCDF	339.8597	29.76	40410.776	0.912	1.318	1.318	1.53	1.55	NO	276.4	
	37	Total-pentafurans	339.8597	29.41	68890.348	0.927	2.292		1.57	1.55	NO	314.7	
	37	Total-pentafurans	339.8597	29.30	7716.529	0.927	0.257		1.45	1.55	NO	56.4	R
	37	Total-pentafurans	339.8597	29.19	6965.576	0.927	0.232		1.01	1.55	YES	59.9	
	37	Total-pentafurans	339.8597	29.15	8408.504	0.927	0.280		1.50	1.55	NO	58.1	
	37	Total-pentafurans	339.8597	29.00	5044.683	0.927	0.168		1.31	1.55	YES	35.6	
	37	Total-pentafurans	339.8597	32.13	7579.868	0.927	0.252		1.53	1.55	NO	35.6	

HF

	38	Total-hexafurans	373.8208	33.81	12096.760	1.062	0.457		1.25	1.24	NO	19.6	
	38	Total-hexafurans	373.8208	33.54	4911.253	1.062	0.185		1.09	1.24	NO	7.1	
	38	Total-hexafurans	373.8208	33.27	270096.844	1.062	10.201		1.17	1.24	NO	427.9	
	38	Total-hexafurans	373.8208	33.05	125236.836	1.062	4.730		1.21	1.24	NO	223.5	
	7	123789-HxCDF	373.8208	36.99	22925.763	1.017	0.839	0.839	1.11	1.24	NO	35.4	
	5	234678-HxCDF	373.8208	35.90	41609.420	1.073	1.702	1.702	1.23	1.24	NO	41.8	
	38	Total-hexafurans	373.8208	35.50	4277.146	1.062	0.162		1.21	1.24	NO	8.5	
	38	Total-hexafurans	373.8208	35.29	3796.971	1.062	0.143		0.95	1.24	YES	5.9	R
	38	Total-hexafurans	373.8208	35.15	2772.589	1.062	0.105		0.78	1.24	YES	4.5	
	6	123678-HxCDF	373.8208	34.94	29604.467	1.056	1.105	1.105	1.13	1.24	NO	45.5	
	4	123478-HxCDF	373.8208	34.78	50369.119	1.101	1.848	1.848	1.20	1.24	NO	85.7	
	38	Total-hexafurans	373.8208	34.62	23028.263	1.062	0.870		1.14	1.24	NO	25.8	
	38	Total-hexafurans	373.8208	34.14	351413.875	1.062	13.272		1.19	1.24	NO	611.4	

HPF

	9	1234789-HpCDF	407.7818	41.70	24045.815	1.224	1.333	1.333	0.92	1.05	NO	119.4
	39	Total-heptafurans	407.7818	40.85	2838.949	1.231	0.136		0.90	1.05	NO	12.8
	39	Total-heptafurans	407.7818	39.85	894902.219	1.231	42.895		1.01	1.05	NO	5304.1
	39	Total-heptafurans	407.7818	39.55	17440.250	1.231	0.836		1.08	1.05	NO	97.4
	8	1234678-HpCDF	407.7818	39.08	450964.578	1.238	19.017	19.017	1.00	1.05	NO	2638.9

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Furans,TF,PP,PF,HF,HPF,OF

[redacted]											
[redacted]	35 Total-tetrafurans	303.9016	24.55	96439.430	0.921	2.127		0.75	0.77	NO	314.3
[redacted]	35 Total-tetrafurans	303.9016	24.39	117056.218	0.921	2.581		0.77	0.77	NO	439.0
[redacted]	35 Total-tetrafurans	303.9016	24.30	112898.664	0.921	2.489		0.78	0.77	NO	285.3
[redacted]	35 Total-tetrafurans	303.9016	23.88	53213.906	0.921	1.173		0.81	0.77	NO	202.8
[redacted]	35 Total-tetrafurans	303.9016	23.75	24559.802	0.921	0.542		0.74	0.77	NO	84.7
[redacted]	35 Total-tetrafurans	303.9016	23.64	61151.908	0.921	1.348		0.78	0.77	NO	221.6
[redacted]	35 Total-tetrafurans	303.9016	23.48	45289.139	0.921	0.999		0.79	0.77	NO	190.3
[redacted]	35 Total-tetrafurans	303.9016	23.39	89199.750	0.921	1.967		0.74	0.77	NO	297.7
[redacted]	35 Total-tetrafurans	303.9016	23.30	64463.061	0.921	1.421		0.72	0.77	NO	191.1
[redacted]	35 Total-tetrafurans	303.9016	23.18	119722.289	0.921	2.640		0.76	0.77	NO	285.1
[redacted]	35 Total-tetrafurans	303.9016	22.99	220172.297	0.921	4.855		0.75	0.77	NO	750.7
[redacted]	35 Total-tetrafurans	303.9016	22.42	31533.527	0.921	0.695		0.75	0.77	NO	117.7
[redacted]	35 Total-tetrafurans	303.9016	22.15	53158.239	0.921	1.172		0.72	0.77	NO	192.5
[redacted]	35 Total-tetrafurans	303.9016	27.11	64190.025	0.921	1.415		0.81	0.77	NO	190.5
[redacted]	35 Total-tetrafurans	303.9016	26.42	940.380	0.921	0.021		0.98	0.77	YES	4.4
[redacted]	35 Total-tetrafurans	303.9016	26.14	5646.695	0.921	0.125		0.78	0.77	NO	20.2
[redacted]	35 Total-tetrafurans	303.9016	25.85	103768.629	0.921	2.288		0.80	0.77	NO	333.9
[redacted]	35 Total-tetrafurans	303.9016	25.76	27547.245	0.921	0.607		0.82	0.77	NO	113.5
[redacted]	1 2378-TCDF	303.9016	25.63	533318.704	0.921	11.760	11.760	0.78	0.77	NO	1907.9
[redacted]	35 Total-tetrafurans	303.9016	25.45	60852.977	0.921	1.342		0.78	0.77	NO	235.0
[redacted]	35 Total-tetrafurans	303.9016	25.41	47503.266	0.921	1.047		0.73	0.77	NO	201.1
[redacted]	35 Total-tetrafurans	303.9016	25.27	8002.777	0.921	0.176		0.77	0.77	NO	28.9
[redacted]	35 Total-tetrafurans	303.9016	25.14	30780.968	0.921	0.679		0.80	0.77	NO	97.8
[redacted]	35 Total-tetrafurans	303.9016	24.94	42440.121	0.921	0.936		0.80	0.77	NO	145.0
[redacted]	35 Total-tetrafurans	303.9016	24.72	278285.766	0.921	6.136		0.76	0.77	NO	1016.7
[redacted]	37 Total-pentafurans	339.8597	28.82	6507.109	0.927	0.216		1.32	1.55	NO	49.1
[redacted]	37 Total-pentafurans	339.8597	28.69	56937.857	0.927	1.894		1.45	1.55	NO	378.5
[redacted]	37 Total-pentafurans	339.8597	28.62	59589.264	0.927	1.983		1.47	1.55	NO	416.1
[redacted]	37 Total-pentafurans	339.8597	28.49	34616.424	0.927	1.152		1.47	1.55	NO	177.1
[redacted]	37 Total-pentafurans	339.8597	28.41	15902.227	0.927	0.529		1.54	1.55	NO	112.0
[redacted]	3 23478-PeCDF	339.8597	31.11	40497.473	0.943	1.377	1.377	1.35	1.55	NO	255.1
[redacted]	37 Total-pentafurans	339.8597	30.95	21337.538	0.927	0.710		1.59	1.55	NO	147.3
[redacted]	37 Total-pentafurans	339.8597	30.84	26738.240	0.927	0.890		1.50	1.55	NO	167.8
[redacted]	37 Total-pentafurans	339.8597	30.60	3987.789	0.927	0.133		1.72	1.55	NO	29.3
[redacted]	37 Total-pentafurans	339.8597	30.25	4056.127	0.927	0.135		1.44	1.55	NO	26.0
[redacted]	37 Total-pentafurans	339.8597	30.06	15102.553	0.927	0.502		1.52	1.55	NO	88.2
[redacted]	37 Total-pentafurans	339.8597	29.96	25410.245	0.927	0.845		1.54	1.55	NO	177.9
[redacted]	2 12378-PeCDF	339.8597	29.76	40410.776	0.912	1.318	1.318	1.53	1.55	NO	276.4
[redacted]	37 Total-pentafurans	339.8597	29.41	68890.348	0.927	2.292		1.57	1.55	NO	314.7
[redacted]	37 Total-pentafurans	339.8597	29.30	7716.529	0.927	0.257		1.45	1.55	NO	56.4
[redacted]	37 Total-pentafurans	339.8597	29.19	6965.576	0.927	0.232		1.01	1.55	YES	59.9
[redacted]	37 Total-pentafurans	339.8597	29.15	8408.504	0.927	0.280		1.50	1.55	NO	58.1
[redacted]	37 Total-pentafurans	339.8597	29.00	5044.683	0.927	0.168		1.31	1.55	YES	35.6
[redacted]	37 Total-pentafurans	339.8597	32.13	7579.868	0.927	0.252		1.53	1.55	NO	35.6
[redacted]	38 Total-hexafurans	373.8208	33.81	12096.760	1.062	0.457		1.25	1.24	NO	19.6
[redacted]	38 Total-hexafurans	373.8208	33.54	4911.253	1.062	0.185		1.09	1.24	NO	7.1
[redacted]	38 Total-hexafurans	373.8208	33.27	270096.844	1.062	10.201		1.17	1.24	NO	427.9
[redacted]	38 Total-hexafurans	373.8208	33.05	125236.836	1.062	4.730		1.21	1.24	NO	223.5
[redacted]	7 123789-HxCDF	373.8208	36.99	22925.763	1.017	0.839	0.839	1.11	1.24	NO	35.4

Quantify Totals Report MassLynx 4.1 SCN 714
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
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ID: WC32A, Name: 13021307, Date: 13-Feb-2013, Time: 15:29:41, Conditions: AUTOSPEC01, User: pk

Furans,TF,PP,PF,HF,HPF,OF

	5	234678-HxCDF	373.8208	35.90	41609.420	1.073	1.702	1.702	1.23	1.24	NO	41.8
	38	Total-hexafurans	373.8208	35.50	4277.146	1.062	0.162		1.21	1.24	NO	8.5
	38	Total-hexafurans	373.8208	35.29	3796.971	1.062	0.143		0.95	1.24	YES	5.9
	38	Total-hexafurans	373.8208	35.15	2772.589	1.062	0.105		0.78	1.24	YES	4.5
	6	123678-HxCDF	373.8208	34.94	29604.467	1.056	1.105	1.105	1.13	1.24	NO	45.5
	4	123478-HxCDF	373.8208	34.78	50369.119	1.101	1.848	1.848	1.20	1.24	NO	85.7
	38	Total-hexafurans	373.8208	34.62	23028.263	1.062	0.870		1.14	1.24	NO	25.8
	38	Total-hexafurans	373.8208	34.14	351413.875	1.062	13.272		1.19	1.24	NO	611.4
	9	1234789-HpCDF	407.7818	41.70	24045.815	1.224	1.333	1.333	0.92	1.05	NO	119.4
	39	Total-heptafurans	407.7818	40.85	2838.949	1.231	0.136		0.90	1.05	NO	12.8
	39	Total-heptafurans	407.7818	39.85	894902.219	1.231	42.895		1.01	1.05	NO	5304.1
	39	Total-heptafurans	407.7818	39.55	17440.250	1.231	0.836		1.08	1.05	NO	97.4
	8	1234678-HpCDF	407.7818	39.08	450964.578	1.238	19.017	19.017	1.00	1.05	NO	2638.9
	10	OCDF	441.7428	46.85	602486.125	1.162	46.250	46.250	0.86	0.89	NO	2204.8
	36	Total-penta1	339.8597	27.05	232393.860		7.820		1.56	1.55	NO	2360.5

TD

	41	Total-tetradioxins	319.8965	24.42	3536.760	1.106	0.116		0.72	0.77	NO	12.4
	41	Total-tetradioxins	319.8965	24.27	962.990	1.106	0.032		0.54	0.77	YES	3.7
	41	Total-tetradioxins	319.8965	23.91	16934.904	1.106	0.554		0.81	0.77	NO	65.3
	41	Total-tetradioxins	319.8965	23.69	5928014.250	1.106	194.086		0.78	0.77	NO	20828.0
	41	Total-tetradioxins	319.8965	23.43	11306260....	1.106	370.172		0.77	0.77	NO	38847.2
	41	Total-tetradioxins	319.8965	26.85	5195.078	1.106	0.170		0.85	0.77	NO	14.6
	41	Total-tetradioxins	319.8965	26.41	38363.744	1.106	1.256		0.79	0.77	NO	124.4
	11	2378-TCDD	319.8965	26.27	15789.874	1.106	0.517	0.517	0.68	0.77	NO	49.2
	41	Total-tetradioxins	319.8965	25.90	514224.610	1.106	16.836		0.78	0.77	NO	1470.7
	41	Total-tetradioxins	319.8965	25.60	21098.023	1.106	0.691		0.92	0.77	YES	68.1
	41	Total-tetradioxins	319.8965	25.47	2359723.375	1.106	77.258		0.78	0.77	NO	8111.3
	41	Total-tetradioxins	319.8965	25.26	34862.618	1.106	1.141		0.72	0.77	NO	111.3
	41	Total-tetradioxins	319.8965	25.15	3402.577	1.106	0.111		0.63	0.77	YES	13.2
	41	Total-tetradioxins	319.8965	24.90	577354.126	1.106	18.903		0.78	0.77	NO	2058.2
	41	Total-tetradioxins	319.8965	24.61	240054.344	1.106	7.859		0.79	0.77	NO	847.9

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PD

	12	12378-PeCDD	355.8546	31.36	64771.141	1.001	3.275	3.275	1.51	1.55	NO	136.0
	42	Total-pentadioxins	355.8546	30.70	1176171.281	1.001	59.472		1.55	1.55	NO	2734.4
	42	Total-pentadioxins	355.8546	30.27	7170.075	1.001	0.363		2.48	1.55	YES	12.3
	42	Total-pentadioxins	355.8546	30.13	4126604.125	1.001	208.657		1.54	1.55	NO	9923.2
	42	Total-pentadioxins	355.8546	29.98	36767.899	1.001	1.859		1.40	1.55	NO	102.2
	42	Total-pentadioxins	355.8546	29.78	4490290.625	1.001	227.047		1.54	1.55	NO	10966.0
	42	Total-pentadioxins	355.8546	29.15	13790.743	1.001	0.697		1.77	1.55	NO	33.7
	42	Total-pentadioxins	355.8546	28.66	2627091.188	1.001	132.836		1.53	1.55	NO	3896.5
	42	Total-pentadioxins	355.8546	31.76	10478.458	1.001	0.530		1.20	1.55	YES	24.1

R

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:47:13 Pacific Standard Time

ID: WC32A, Name: 13021307, Date: 13-Feb-2013, Time: 15:29:41, Conditions: AUTOSPEC01, User: pk

HD

[redacted]	43	Total-hexadioxins	389.8157	33.86	316343.563	0.937	16.308		1.25	1.24	NO	614.8
[redacted]	15	123789-HxCDD	389.8157	36.59	230770.562	0.904	12.328	12.328	1.24	1.24	NO	455.9
[redacted]	43	Total-hexadioxins	389.8157	36.35	31698.931	0.937	1.634		1.21	1.24	NO	58.8
[redacted]	14	123678-HxCDD	389.8157	36.18	325728.016	0.929	17.010	17.010	1.22	1.24	NO	575.6
[redacted]	13	123478-HxCDD	389.8157	36.03	230019.367	0.978	11.314	11.314	1.23	1.24	NO	411.8
[redacted]	43	Total-hexadioxins	389.8157	35.06	1196013.751	0.937	61.657		1.25	1.24	NO	1472.0
[redacted]	43	Total-hexadioxins	389.8157	34.68	13990648....	0.937	721.245		1.24	1.24	NO	26589.2

HPD

[redacted]	16	1234678-HpCDD	423.7766	40.85	3177765.375	1.029	181.451	181....	1.04	1.05	NO	5073.4
[redacted]	44	Total-heptadioxins	423.7766	39.62	2651549.750	1.029	151.404		1.04	1.05	NO	4504.8

ID: WC32A, Name: 13021307, Date: 13-Feb-2013, Time: 15:29:41, Conditions: AUTOSPEC01, User: pk

Dioxins,TD,PD,HD,HPD,OD

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	41	Total-tetradioxins	319.8965	24.42	3536.760	1.106	0.116		0.72	0.77	NO	12.4
[redacted]	41	Total-tetradioxins	319.8965	24.27	962.990	1.106	0.032		0.54	0.77	YES	3.7
[redacted]	41	Total-tetradioxins	319.8965	23.91	16934.904	1.106	0.554		0.81	0.77	NO	65.3
[redacted]	41	Total-tetradioxins	319.8965	23.69	5928014.250	1.106	194.086		0.78	0.77	NO	20828.0
[redacted]	41	Total-tetradioxins	319.8965	23.43	11306260....	1.106	370.172		0.77	0.77	NO	38847.2
[redacted]	45	Total-Dioxins	319.8965	21.67	496.695	0.994	0.018		0.90	0.77	YES	2.6
[redacted]	45	Total-Dioxins	319.8965	27.78	1790.197	0.994	0.065		2.51	0.77	YES	6.8
[redacted]	45	Total-Dioxins	319.8965	27.57	625.196	0.994	0.023		1.65	0.77	YES	3.5
[redacted]	41	Total-tetradioxins	319.8965	26.85	5195.078	1.106	0.170		0.85	0.77	NO	14.6
[redacted]	41	Total-tetradioxins	319.8965	26.41	38363.744	1.106	1.256		0.79	0.77	NO	124.4
[redacted]	11	2378-TCDD	319.8965	26.27	15789.874	1.106	0.517	0.517	0.68	0.77	NO	49.2
[redacted]	41	Total-tetradioxins	319.8965	25.90	514224.610	1.106	16.836		0.78	0.77	NO	1470.7
[redacted]	41	Total-tetradioxins	319.8965	25.60	21098.023	1.106	0.691		0.92	0.77	YES	68.1
[redacted]	41	Total-tetradioxins	319.8965	25.47	2359723.375	1.106	77.258		0.78	0.77	NO	8111.3
[redacted]	41	Total-tetradioxins	319.8965	25.26	34862.618	1.106	1.141		0.72	0.77	NO	111.3
[redacted]	41	Total-tetradioxins	319.8965	25.15	3402.577	1.106	0.111		0.63	0.77	YES	13.2
[redacted]	41	Total-tetradioxins	319.8965	24.90	577354.126	1.106	18.903		0.78	0.77	NO	2058.2
[redacted]	41	Total-tetradioxins	319.8965	24.61	240054.344	1.106	7.859		0.79	0.77	NO	847.9
[redacted]	12	12378-PeCDD	355.8546	31.36	64771.141	1.001	3.275	3.275	1.51	1.55	NO	136.0
[redacted]	42	Total-pentadioxins	355.8546	30.70	1176171.281	1.001	59.472		1.55	1.55	NO	2734.4
[redacted]	42	Total-pentadioxins	355.8546	30.27	7170.075	1.001	0.363		2.48	1.55	YES	12.3
[redacted]	42	Total-pentadioxins	355.8546	30.13	4126604.125	1.001	208.657		1.54	1.55	NO	9923.2
[redacted]	42	Total-pentadioxins	355.8546	29.98	36767.899	1.001	1.859		1.40	1.55	NO	102.2
[redacted]	42	Total-pentadioxins	355.8546	29.78	4490290.625	1.001	227.047		1.54	1.55	NO	10966.0
[redacted]	42	Total-pentadioxins	355.8546	29.15	13790.743	1.001	0.697		1.77	1.55	NO	33.7
[redacted]	42	Total-pentadioxins	355.8546	28.66	2627091.188	1.001	132.836		1.53	1.55	NO	3896.5
[redacted]	43	Total-hexadioxins	389.8157	33.86	316343.563	0.937	16.308		1.25	1.24	NO	614.8
[redacted]	42	Total-pentadioxins	355.8546	31.76	10478.458	1.001	0.530		1.20	1.55	YES	24.1
[redacted]	15	123789-HxCDD	389.8157	36.59	230770.562	0.904	12.328	12.328	1.24	1.24	NO	455.9
[redacted]	43	Total-hexadioxins	389.8157	36.35	31698.931	0.937	1.634		1.21	1.24	NO	58.8
[redacted]	14	123678-HxCDD	389.8157	36.18	325728.016	0.929	17.010	17.010	1.22	1.24	NO	575.6
[redacted]	13	123478-HxCDD	389.8157	36.03	230019.367	0.978	11.314	11.314	1.23	1.24	NO	411.8
[redacted]	43	Total-hexadioxins	389.8157	35.06	1196013.751	0.937	61.657		1.25	1.24	NO	1472.0
[redacted]	43	Total-hexadioxins	389.8157	34.68	13990648....	0.937	721.245		1.24	1.24	NO	26589.2
[redacted]	16	1234678-HpCDD	423.7766	40.85	3177765.375	1.029	181.451	181....	1.04	1.05	NO	5073.4
[redacted]	44	Total-heptadioxins	423.7766	39.62	2651549.750	1.029	151.404		1.04	1.05	NO	4504.8
[redacted]	17	OCDD	457.7377	46.58	9218026.000	1.011	813.161	813....	0.89	0.89	NO	12712.6

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TotalTEQ,Furans,Dioxins

[redacted]											
[redacted]	35 Total-tetrafurans	303.9016	24.55	96439.430	0.921	2.127		0.75	0.77	NO	314.3
[redacted]	35 Total-tetrafurans	303.9016	24.39	117056.218	0.921	2.581		0.77	0.77	NO	439.0
[redacted]	35 Total-tetrafurans	303.9016	24.30	112898.664	0.921	2.489		0.78	0.77	NO	285.3
[redacted]	35 Total-tetrafurans	303.9016	23.88	53213.906	0.921	1.173		0.81	0.77	NO	202.8
[redacted]	35 Total-tetrafurans	303.9016	23.75	24559.802	0.921	0.542		0.74	0.77	NO	84.7
[redacted]	35 Total-tetrafurans	303.9016	23.64	61151.908	0.921	1.348		0.78	0.77	NO	221.6
[redacted]	35 Total-tetrafurans	303.9016	23.48	45289.139	0.921	0.999		0.79	0.77	NO	190.3
[redacted]	35 Total-tetrafurans	303.9016	23.39	89199.750	0.921	1.967		0.74	0.77	NO	297.7
[redacted]	35 Total-tetrafurans	303.9016	23.30	64463.061	0.921	1.421		0.72	0.77	NO	191.1
[redacted]	35 Total-tetrafurans	303.9016	23.18	119722.289	0.921	2.640		0.76	0.77	NO	285.1
[redacted]	35 Total-tetrafurans	303.9016	22.99	220172.297	0.921	4.855		0.75	0.77	NO	750.7
[redacted]	35 Total-tetrafurans	303.9016	22.42	31533.527	0.921	0.695		0.75	0.77	NO	117.7
[redacted]	35 Total-tetrafurans	303.9016	22.15	53158.239	0.921	1.172		0.72	0.77	NO	192.5
[redacted]	35 Total-tetrafurans	303.9016	27.11	64190.025	0.921	1.415		0.81	0.77	NO	190.5
[redacted]	35 Total-tetrafurans	303.9016	26.42	940.380	0.921	0.021		0.98	0.77	YES	4.4
[redacted]	35 Total-tetrafurans	303.9016	26.14	5646.695	0.921	0.125		0.78	0.77	NO	20.2
[redacted]	35 Total-tetrafurans	303.9016	25.85	103768.629	0.921	2.288		0.80	0.77	NO	333.9
[redacted]	35 Total-tetrafurans	303.9016	25.76	27547.245	0.921	0.607		0.82	0.77	NO	113.5
[redacted]	1 2378-TCDF	303.9016	25.63	533318.704	0.921	11.760	11.760	0.78	0.77	NO	1907.9
[redacted]	35 Total-tetrafurans	303.9016	25.45	60852.977	0.921	1.342		0.78	0.77	NO	235.0
[redacted]	35 Total-tetrafurans	303.9016	25.41	47503.266	0.921	1.047		0.73	0.77	NO	201.1
[redacted]	35 Total-tetrafurans	303.9016	25.27	8002.777	0.921	0.176		0.77	0.77	NO	28.9
[redacted]	35 Total-tetrafurans	303.9016	25.14	30780.968	0.921	0.679		0.80	0.77	NO	97.8
[redacted]	35 Total-tetrafurans	303.9016	24.94	42440.121	0.921	0.936		0.80	0.77	NO	145.0
[redacted]	35 Total-tetrafurans	303.9016	24.72	278285.766	0.921	6.136		0.76	0.77	NO	1016.7
[redacted]	37 Total-pentafurans	339.8597	28.82	6507.109	0.927	0.216		1.32	1.55	NO	49.1
[redacted]	37 Total-pentafurans	339.8597	28.69	56937.857	0.927	1.894		1.45	1.55	NO	378.5
[redacted]	37 Total-pentafurans	339.8597	28.62	59589.264	0.927	1.983		1.47	1.55	NO	416.1
[redacted]	37 Total-pentafurans	339.8597	28.49	34616.424	0.927	1.152		1.47	1.55	NO	177.1
[redacted]	37 Total-pentafurans	339.8597	28.41	15902.227	0.927	0.529		1.54	1.55	NO	112.0
[redacted]	3 23478-PeCDF	339.8597	31.11	40497.473	0.943	1.377	1.377	1.35	1.55	NO	255.1
[redacted]	37 Total-pentafurans	339.8597	30.95	21337.538	0.927	0.710		1.59	1.55	NO	147.3
[redacted]	37 Total-pentafurans	339.8597	30.84	26738.240	0.927	0.890		1.50	1.55	NO	167.8
[redacted]	37 Total-pentafurans	339.8597	30.60	3987.789	0.927	0.133		1.72	1.55	NO	29.3
[redacted]	37 Total-pentafurans	339.8597	30.25	4056.127	0.927	0.135		1.44	1.55	NO	26.0
[redacted]	37 Total-pentafurans	339.8597	30.06	15102.553	0.927	0.502		1.52	1.55	NO	88.2
[redacted]	37 Total-pentafurans	339.8597	29.96	25410.245	0.927	0.845		1.54	1.55	NO	177.9
[redacted]	2 12378-PeCDF	339.8597	29.76	40410.776	0.912	1.318	1.318	1.53	1.55	NO	276.4
[redacted]	37 Total-pentafurans	339.8597	29.41	68890.348	0.927	2.292		1.57	1.55	NO	314.7
[redacted]	37 Total-pentafurans	339.8597	29.30	7716.529	0.927	0.257		1.45	1.55	NO	56.4
[redacted]	37 Total-pentafurans	339.8597	29.19	6965.576	0.927	0.232		1.01	1.55	YES	59.9
[redacted]	37 Total-pentafurans	339.8597	29.15	8408.504	0.927	0.280		1.50	1.55	NO	58.1
[redacted]	37 Total-pentafurans	339.8597	29.00	5044.683	0.927	0.168		1.31	1.55	YES	35.6
[redacted]	37 Total-pentafurans	339.8597	32.13	7579.868	0.927	0.252		1.53	1.55	NO	35.6
[redacted]	38 Total-hexafurans	373.8208	33.81	12096.760	1.062	0.457		1.25	1.24	NO	19.6
[redacted]	38 Total-hexafurans	373.8208	33.54	4911.253	1.062	0.185		1.09	1.24	NO	7.1
[redacted]	38 Total-hexafurans	373.8208	33.27	270096.844	1.062	10.201		1.17	1.24	NO	427.9
[redacted]	38 Total-hexafurans	373.8208	33.05	125236.836	1.062	4.730		1.21	1.24	NO	223.5
[redacted]	7 123789-HxCDF	373.8208	36.99	22925.763	1.017	0.839	0.839	1.11	1.24	NO	35.4

WC32-01403

Quantify Totals Report MassLynx 4.1 SCN 714
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:47:13 Pacific Standard Time

ID: WC32A, Name: 13021307, Date: 13-Feb-2013, Time: 15:29:41, Conditions: AUTOSPEC01, User: pk

TotalTEQ,Furans,Dioxins

[redacted]												
[redacted]	5	234678-HxCDF	373.8208	35.90	41609.420	1.073	1.702	1.702	1.23	1.24	NO	41.8
[redacted]	38	Total-hexafurans	373.8208	35.50	4277.146	1.062	0.162		1.21	1.24	NO	8.5
[redacted]	38	Total-hexafurans	373.8208	35.29	3796.971	1.062	0.143		0.95	1.24	YES	5.9
[redacted]	38	Total-hexafurans	373.8208	35.15	2772.589	1.062	0.105		0.78	1.24	YES	4.5
[redacted]	6	123678-HxCDF	373.8208	34.94	29604.467	1.056	1.105	1.105	1.13	1.24	NO	45.5
[redacted]	4	123478-HxCDF	373.8208	34.78	50369.119	1.101	1.848	1.848	1.20	1.24	NO	85.7
[redacted]	38	Total-hexafurans	373.8208	34.62	23028.263	1.062	0.870		1.14	1.24	NO	25.8
[redacted]	38	Total-hexafurans	373.8208	34.14	351413.875	1.062	13.272		1.19	1.24	NO	611.4
[redacted]	9	1234789-HpCDF	407.7818	41.70	24045.815	1.224	1.333	1.333	0.92	1.05	NO	119.4
[redacted]	39	Total-heptafurans	407.7818	40.85	2838.949	1.231	0.136		0.90	1.05	NO	12.8
[redacted]	39	Total-heptafurans	407.7818	39.85	894902.219	1.231	42.895		1.01	1.05	NO	5304.1
[redacted]	39	Total-heptafurans	407.7818	39.55	17440.250	1.231	0.836		1.08	1.05	NO	97.4
[redacted]	8	1234678-HpCDF	407.7818	39.08	450964.578	1.238	19.017	19.017	1.00	1.05	NO	2638.9
[redacted]	10	OCDF	441.7428	46.85	602486.125	1.162	46.250	46.250	0.86	0.89	NO	2204.8
[redacted]	36	Total-penta1	339.8597	27.05	232393.860		7.820		1.56	1.55	NO	2360.5
[redacted]	41	Total-tetradioxins	319.8965	24.42	3536.760	1.106	0.116		0.72	0.77	NO	12.4
[redacted]	41	Total-tetradioxins	319.8965	24.27	962.990	1.106	0.032		0.54	0.77	YES	3.7
[redacted]	41	Total-tetradioxins	319.8965	23.91	16934.904	1.106	0.554		0.81	0.77	NO	65.3
[redacted]	41	Total-tetradioxins	319.8965	23.69	5928014.250	1.106	194.086		0.78	0.77	NO	20828.0
[redacted]	41	Total-tetradioxins	319.8965	23.43	11306260....	1.106	370.172		0.77	0.77	NO	38847.2
[redacted]	45	Total-Dioxins	319.8965	21.67	496.695	0.994	0.018		0.90	0.77	YES	2.6
[redacted]	45	Total-Dioxins	319.8965	27.78	1790.197	0.994	0.065		2.51	0.77	YES	6.8
[redacted]	45	Total-Dioxins	319.8965	27.57	625.196	0.994	0.023		1.65	0.77	YES	3.5
[redacted]	41	Total-tetradioxins	319.8965	26.85	5195.078	1.106	0.170		0.85	0.77	NO	14.6
[redacted]	41	Total-tetradioxins	319.8965	26.41	38363.744	1.106	1.256		0.79	0.77	NO	124.4
[redacted]	11	2378-TCDD	319.8965	26.27	15789.874	1.106	0.517	0.517	0.68	0.77	NO	49.2
[redacted]	41	Total-tetradioxins	319.8965	25.90	514224.610	1.106	16.836		0.78	0.77	NO	1470.7
[redacted]	41	Total-tetradioxins	319.8965	25.60	21098.023	1.106	0.691		0.92	0.77	YES	68.1
[redacted]	41	Total-tetradioxins	319.8965	25.47	2359723.375	1.106	77.258		0.78	0.77	NO	8111.3
[redacted]	41	Total-tetradioxins	319.8965	25.26	34862.618	1.106	1.141		0.72	0.77	NO	111.3
[redacted]	41	Total-tetradioxins	319.8965	25.15	3402.577	1.106	0.111		0.63	0.77	YES	13.2
[redacted]	41	Total-tetradioxins	319.8965	24.90	577354.126	1.106	18.903		0.78	0.77	NO	2058.2
[redacted]	41	Total-tetradioxins	319.8965	24.61	240054.344	1.106	7.859		0.79	0.77	NO	847.9
[redacted]	12	12378-PeCDD	355.8546	31.36	64771.141	1.001	3.275	3.275	1.51	1.55	NO	136.0
[redacted]	42	Total-pentadioxins	355.8546	30.70	1176171.281	1.001	59.472		1.55	1.55	NO	2734.4
[redacted]	42	Total-pentadioxins	355.8546	30.27	7170.075	1.001	0.363		2.48	1.55	YES	12.3
[redacted]	42	Total-pentadioxins	355.8546	30.13	4126604.125	1.001	208.657		1.54	1.55	NO	9923.2
[redacted]	42	Total-pentadioxins	355.8546	29.98	36767.899	1.001	1.859		1.40	1.55	NO	102.2
[redacted]	42	Total-pentadioxins	355.8546	29.78	4490290.625	1.001	227.047		1.54	1.55	NO	10966.0
[redacted]	42	Total-pentadioxins	355.8546	29.15	13790.743	1.001	0.697		1.77	1.55	NO	33.7
[redacted]	42	Total-pentadioxins	355.8546	28.66	2627091.188	1.001	132.836		1.53	1.55	NO	3896.5
[redacted]	43	Total-hexadioxins	389.8157	33.86	316343.563	0.937	16.308		1.25	1.24	NO	614.8
[redacted]	42	Total-pentadioxins	355.8546	31.76	10478.458	1.001	0.530		1.20	1.55	YES	24.1
[redacted]	15	123789-HxCDD	389.8157	36.59	230770.562	0.904	12.328	12.328	1.24	1.24	NO	455.9
[redacted]	43	Total-hexadioxins	389.8157	36.35	31698.931	0.937	1.634		1.21	1.24	NO	58.8
[redacted]	14	123678-HxCDD	389.8157	36.18	325728.016	0.929	17.010	17.010	1.22	1.24	NO	575.6
[redacted]	13	123478-HxCDD	389.8157	36.03	230019.367	0.978	11.314	11.314	1.23	1.24	NO	411.8
[redacted]	43	Total-hexadioxins	389.8157	35.06	1196013.751	0.937	61.657		1.25	1.24	NO	1472.0
[redacted]	43	Total-hexadioxins	389.8157	34.68	13990648....	0.937	721.245		1.24	1.24	NO	26589.8

WC32 0146[illegible]

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TotalTEQ,Furans,Dioxins

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	16	1234678-HpCDD	423.7766	40.85	3177765.375	1.029	181.451	181....	1.04	1.05	NO	5073.4
[redacted]	44	Total-heptadioxins	423.7766	39.62	2651549.750	1.029	151.404		1.04	1.05	NO	4504.8
[redacted]	17	OCDD	457.7377	46.58	9218026.000	1.011	813.161	813....	0.89	0.89	NO	12712.6

PFK1

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	48	FUNCTION1 PFK	330.9792	23.37	0.000							11.8
[redacted]	48	FUNCTION1 PFK	330.9792	23.08	0.000							12.6
[redacted]	48	FUNCTION1 PFK	330.9792	22.93	0.000							5.7
[redacted]	48	FUNCTION1 PFK	330.9792	22.61	0.000							4.7
[redacted]	48	FUNCTION1 PFK	330.9792	22.49	0.000							4.4
[redacted]	48	FUNCTION1 PFK	330.9792	21.85	0.000							2.9
[redacted]	48	FUNCTION1 PFK	330.9792	25.67	0.000							12.6
[redacted]	48	FUNCTION1 PFK	330.9792	25.36	0.000							14.3
[redacted]	48	FUNCTION1 PFK	330.9792	24.58	0.000							7.0
[redacted]	48	FUNCTION1 PFK	330.9792	24.27	0.000							10.7
[redacted]	48	FUNCTION1 PFK	330.9792	23.46	0.000							11.4

PFK2

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	49	FUNCTION2 PFK	366.9792	30.53	0.000		0.000					1.1
[redacted]	49	FUNCTION2 PFK	366.9792	30.43	0.000		0.000					0.9
[redacted]	49	FUNCTION2 PFK	366.9792	29.64	0.000		0.000					1.7
[redacted]	49	FUNCTION2 PFK	366.9792	29.58	0.000		0.000					2.2
[redacted]	49	FUNCTION2 PFK	366.9792	29.27	0.000		0.000					4.8
[redacted]	49	FUNCTION2 PFK	366.9792	29.18	0.000		0.000					5.4
[redacted]	49	FUNCTION2 PFK	366.9792	29.14	0.000		0.000					6.1
[redacted]	49	FUNCTION2 PFK	366.9792	28.36	0.000		0.000					1.3
[redacted]	49	FUNCTION2 PFK	366.9792	28.32	0.000		0.000					2.1
[redacted]	49	FUNCTION2 PFK	366.9792	28.15	0.000		0.000					1.8
[redacted]	49	FUNCTION2 PFK	366.9792	32.00	0.000		0.000					1.9
[redacted]	49	FUNCTION2 PFK	366.9792	31.68	0.000		0.000					1.0
[redacted]	49	FUNCTION2 PFK	366.9792	31.47	0.000		0.000					0.8
[redacted]	49	FUNCTION2 PFK	366.9792	31.43	0.000		0.000					1.7
[redacted]	49	FUNCTION2 PFK	366.9792	31.22	0.000		0.000					0.6
[redacted]	49	FUNCTION2 PFK	366.9792	31.18	0.000		0.000					2.4
[redacted]	49	FUNCTION2 PFK	366.9792	31.15	0.000		0.000					1.5
[redacted]	49	FUNCTION2 PFK	366.9792	30.64	0.000		0.000					1.8
[redacted]	49	FUNCTION2 PFK	366.9792	30.61	0.000		0.000					1.9

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PFK3

[redacted]							
[redacted]	50 FUNCTION3 PFK	380.9760	33.04	0.000	0.000		45.8
[redacted]	50 FUNCTION3 PFK	380.9760	33.00	0.000	0.000		43.5
[redacted]	50 FUNCTION3 PFK	380.9760	32.89	0.000	0.000		41.4
[redacted]	50 FUNCTION3 PFK	380.9760	32.82	0.000	0.000		41.9
[redacted]	50 FUNCTION3 PFK	380.9760	32.72	0.000	0.000		43.8
[redacted]	50 FUNCTION3 PFK	380.9760	32.68	0.000	0.000		43.9
[redacted]	50 FUNCTION3 PFK	380.9760	34.91	0.000	0.000		6.7
[redacted]	50 FUNCTION3 PFK	380.9760	34.83	0.000	0.000		7.1
[redacted]	50 FUNCTION3 PFK	380.9760	34.65	0.000	0.000		16.2
[redacted]	50 FUNCTION3 PFK	380.9760	34.58	0.000	0.000		15.9
[redacted]	50 FUNCTION3 PFK	380.9760	34.44	0.000	0.000		13.5
[redacted]	50 FUNCTION3 PFK	380.9760	34.26	0.000	0.000		17.7
[redacted]	50 FUNCTION3 PFK	380.9760	34.20	0.000	0.000		18.0
[redacted]	50 FUNCTION3 PFK	380.9760	34.12	0.000	0.000		19.5
[redacted]	50 FUNCTION3 PFK	380.9760	34.06	0.000	0.000		21.5
[redacted]	50 FUNCTION3 PFK	380.9760	33.96	0.000	0.000		23.3
[redacted]	50 FUNCTION3 PFK	380.9760	33.90	0.000	0.000		24.2
[redacted]	50 FUNCTION3 PFK	380.9760	33.70	0.000	0.000		35.9
[redacted]	50 FUNCTION3 PFK	380.9760	33.51	0.000	0.000		31.0
[redacted]	50 FUNCTION3 PFK	380.9760	33.35	0.000	0.000		37.7
[redacted]	50 FUNCTION3 PFK	380.9760	33.26	0.000	0.000		35.3
[redacted]	50 FUNCTION3 PFK	380.9760	33.18	0.000	0.000		37.4
[redacted]	50 FUNCTION3 PFK	380.9760	36.49	0.000	0.000		11.9
[redacted]	50 FUNCTION3 PFK	380.9760	36.31	0.000	0.000		13.6
[redacted]	50 FUNCTION3 PFK	380.9760	36.17	0.000	0.000		8.8
[redacted]	50 FUNCTION3 PFK	380.9760	36.11	0.000	0.000		7.5
[redacted]	50 FUNCTION3 PFK	380.9760	35.97	0.000	0.000		8.0
[redacted]	50 FUNCTION3 PFK	380.9760	35.87	0.000	0.000		5.1
[redacted]	50 FUNCTION3 PFK	380.9760	35.73	0.000	0.000		5.4
[redacted]	50 FUNCTION3 PFK	380.9760	35.60	0.000	0.000		1.2
[redacted]	50 FUNCTION3 PFK	380.9760	35.58	0.000	0.000		1.7
[redacted]	50 FUNCTION3 PFK	380.9760	35.49	0.000	0.000		1.7
[redacted]	50 FUNCTION3 PFK	380.9760	35.38	0.000	0.000		0.7
[redacted]	50 FUNCTION3 PFK	380.9760	35.27	0.000	0.000		0.6
[redacted]	50 FUNCTION3 PFK	380.9760	35.22	0.000	0.000		0.5
[redacted]	50 FUNCTION3 PFK	380.9760	35.11	0.000	0.000		1.1
[redacted]	50 FUNCTION3 PFK	380.9760	35.06	0.000	0.000		3.3
[redacted]	50 FUNCTION3 PFK	380.9760	34.98	0.000	0.000		4.5
[redacted]	50 FUNCTION3 PFK	380.9760	37.87	0.000	0.000		3.7
[redacted]	50 FUNCTION3 PFK	380.9760	37.79	0.000	0.000		5.5
[redacted]	50 FUNCTION3 PFK	380.9760	37.68	0.000	0.000		6.3
[redacted]	50 FUNCTION3 PFK	380.9760	37.60	0.000	0.000		7.1
[redacted]	50 FUNCTION3 PFK	380.9760	37.54	0.000	0.000		9.1
[redacted]	50 FUNCTION3 PFK	380.9760	37.50	0.000	0.000		10.2
[redacted]	50 FUNCTION3 PFK	380.9760	37.35	0.000	0.000		13.6
[redacted]	50 FUNCTION3 PFK	380.9760	37.27	0.000	0.000		15.7
[redacted]	50 FUNCTION3 PFK	380.9760	37.21	0.000	0.000		16.3
[redacted]	50 FUNCTION3 PFK	380.9760	37.12	0.000	0.000		20.0
[redacted]	50 FUNCTION3 PFK	380.9760	37.01	0.000	0.000		25.8

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PFK3

[redacted]												
[redacted]	50	FUNCTION3 PFK	380.9760	36.89	0.000		0.000					30.6
[redacted]	50	FUNCTION3 PFK	380.9760	36.82	0.000		0.000					17.7
[redacted]	50	FUNCTION3 PFK	380.9760	36.74	0.000		0.000					14.9
[redacted]	50	FUNCTION3 PFK	380.9760	36.63	0.000		0.000					14.1
[redacted]	50	FUNCTION3 PFK	380.9760	36.56	0.000		0.000					12.8
[redacted]	50	FUNCTION3 PFK	380.9760	38.10	0.000		0.000					1.0
[redacted]	50	FUNCTION3 PFK	380.9760	37.99	0.000		0.000					1.3

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PFK4

[redacted]						
[redacted]	51	FUNCTION4 PFK	430.9728	39.81	0.000	2.5
[redacted]	51	FUNCTION4 PFK	430.9728	39.72	0.000	2.3
[redacted]	51	FUNCTION4 PFK	430.9728	39.55	0.000	2.8
[redacted]	51	FUNCTION4 PFK	430.9728	39.48	0.000	2.3
[redacted]	51	FUNCTION4 PFK	430.9728	39.38	0.000	1.0
[redacted]	51	FUNCTION4 PFK	430.9728	39.34	0.000	1.6
[redacted]	51	FUNCTION4 PFK	430.9728	39.24	0.000	3.2
[redacted]	51	FUNCTION4 PFK	430.9728	38.74	0.000	1.7
[redacted]	51	FUNCTION4 PFK	430.9728	38.63	0.000	4.2
[redacted]	51	FUNCTION4 PFK	430.9728	38.56	0.000	2.1
[redacted]	51	FUNCTION4 PFK	430.9728	38.51	0.000	2.7
[redacted]	51	FUNCTION4 PFK	430.9728	38.30	0.000	0.5
[redacted]	51	FUNCTION4 PFK	430.9728	38.25	0.000	0.8
[redacted]	51	FUNCTION4 PFK	430.9728	41.57	0.000	2.1
[redacted]	51	FUNCTION4 PFK	430.9728	41.34	0.000	1.6
[redacted]	51	FUNCTION4 PFK	430.9728	41.10	0.000	3.8
[redacted]	51	FUNCTION4 PFK	430.9728	41.03	0.000	6.7
[redacted]	51	FUNCTION4 PFK	430.9728	40.86	0.000	2.6
[redacted]	51	FUNCTION4 PFK	430.9728	40.66	0.000	1.5
[redacted]	51	FUNCTION4 PFK	430.9728	40.59	0.000	0.4
[redacted]	51	FUNCTION4 PFK	430.9728	40.51	0.000	1.7
[redacted]	51	FUNCTION4 PFK	430.9728	40.42	0.000	2.5
[redacted]	51	FUNCTION4 PFK	430.9728	40.33	0.000	2.2
[redacted]	51	FUNCTION4 PFK	430.9728	40.28	0.000	1.2
[redacted]	51	FUNCTION4 PFK	430.9728	40.13	0.000	0.9
[redacted]	51	FUNCTION4 PFK	430.9728	39.99	0.000	2.1
[redacted]	51	FUNCTION4 PFK	430.9728	39.95	0.000	2.1
[redacted]	51	FUNCTION4 PFK	430.9728	39.89	0.000	0.9
[redacted]	51	FUNCTION4 PFK	430.9728	39.85	0.000	1.9
[redacted]	51	FUNCTION4 PFK	430.9728	42.93	0.000	0.9
[redacted]	51	FUNCTION4 PFK	430.9728	42.90	0.000	1.0
[redacted]	51	FUNCTION4 PFK	430.9728	42.84	0.000	0.7
[redacted]	51	FUNCTION4 PFK	430.9728	42.71	0.000	0.7
[redacted]	51	FUNCTION4 PFK	430.9728	42.57	0.000	0.6
[redacted]	51	FUNCTION4 PFK	430.9728	42.49	0.000	1.3
[redacted]	51	FUNCTION4 PFK	430.9728	42.42	0.000	0.5
[redacted]	51	FUNCTION4 PFK	430.9728	42.35	0.000	0.6
[redacted]	51	FUNCTION4 PFK	430.9728	42.30	0.000	0.9
[redacted]	51	FUNCTION4 PFK	430.9728	42.25	0.000	0.9
[redacted]	51	FUNCTION4 PFK	430.9728	42.21	0.000	0.6
[redacted]	51	FUNCTION4 PFK	430.9728	42.03	0.000	1.7
[redacted]	51	FUNCTION4 PFK	430.9728	41.99	0.000	2.4
[redacted]	51	FUNCTION4 PFK	430.9728	41.93	0.000	1.5
[redacted]	51	FUNCTION4 PFK	430.9728	41.72	0.000	1.1
[redacted]	51	FUNCTION4 PFK	430.9728	41.67	0.000	2.0
[redacted]	51	FUNCTION4 PFK	430.9728	44.39	0.000	0.9
[redacted]	51	FUNCTION4 PFK	430.9728	44.29	0.000	1.5
[redacted]	51	FUNCTION4 PFK	430.9728	43.97	0.000	0.6
[redacted]	51	FUNCTION4 PFK	430.9728	43.90	0.000	[illegible]

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PFK4

	51	FUNCTION4 PFK	430.9728	43.87	0.000							2.7
	51	FUNCTION4 PFK	430.9728	43.84	0.000							2.2
	51	FUNCTION4 PFK	430.9728	43.78	0.000							1.5
	51	FUNCTION4 PFK	430.9728	43.74	0.000							1.6
	51	FUNCTION4 PFK	430.9728	43.66	0.000							0.6
	51	FUNCTION4 PFK	430.9728	43.40	0.000							0.7
	51	FUNCTION4 PFK	430.9728	43.33	0.000							1.0
	51	FUNCTION4 PFK	430.9728	43.23	0.000							0.9
	51	FUNCTION4 PFK	430.9728	43.10	0.000							0.8
	51	FUNCTION4 PFK	430.9728	43.07	0.000							1.2
	51	FUNCTION4 PFK	430.9728	43.04	0.000							1.4
	51	FUNCTION4 PFK	430.9728	42.99	0.000							1.3
	51	FUNCTION4 PFK	430.9728	44.45	0.000							0.9

PFK5

	52	FUNCTION5 PFK	480.9696	46.95	0.000							8.3
	52	FUNCTION5 PFK	480.9696	44.99	0.000							2.1

ETHERS1

	53	FUNCTION1 HXCD...	375.8364	27.24	0.000		0.000					4.5
	53	FUNCTION1 HXCD...	375.8364	27.14	0.000		0.000					5.4
	53	FUNCTION1 HXCD...	375.8364	27.00	0.000		0.000					4.9
	53	FUNCTION1 HXCD...	375.8364	26.66	0.000		0.000					7.7
	53	FUNCTION1 HXCD...	375.8364	25.70	0.000		0.000					170.3
	53	FUNCTION1 HXCD...	375.8364	25.44	0.000		0.000					117.2
	53	FUNCTION1 HXCD...	375.8364	25.18	0.000		0.000					9.8
	53	FUNCTION1 HXCD...	375.8364	24.82	0.000		0.000					4.5

ETHERS2

	54	FUNCTION1 HPCD...	409.7974	21.98	0.000		0.000					2.2
	54	FUNCTION1 HPCD...	409.7974	21.39	0.000		0.000					2.3
	54	FUNCTION1 HPCD...	409.7974	27.32	0.000		0.000					1.3
	54	FUNCTION1 HPCD...	409.7974	26.03	0.000		0.000					2.6
	54	FUNCTION1 HPCD...	409.7974	25.50	0.000		0.000					3.2
	54	FUNCTION1 HPCD...	409.7974	25.23	0.000		0.000					2.0
	54	FUNCTION1 HPCD...	409.7974	25.09	0.000		0.000					1.5
	54	FUNCTION1 HPCD...	409.7974	23.88	0.000		0.000					2.9
	54	FUNCTION1 HPCD...	409.7974	22.13	0.000		0.000					3.6

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:47:13 Pacific Standard Time

ID: WC32A, Name: 13021307, Date: 13-Feb-2013, Time: 15:29:41, Conditions: AUTOSPEC01, User: pk

ETHERS3

[redacted]							
[redacted]	55	FUNCTION2 HPCD...	409.7974	31.34	0.000	0.000	4.9
[redacted]	55	FUNCTION2 HPCD...	409.7974	31.19	0.000	0.000	54.8
[redacted]	55	FUNCTION2 HPCD...	409.7974	30.94	0.000	0.000	30.6
[redacted]	55	FUNCTION2 HPCD...	409.7974	30.65	0.000	0.000	24.9
[redacted]	55	FUNCTION2 HPCD...	409.7974	30.01	0.000	0.000	19.7
[redacted]	55	FUNCTION2 HPCD...	409.7974	29.73	0.000	0.000	315.4
[redacted]	55	FUNCTION2 HPCD...	409.7974	29.40	0.000	0.000	355.9
[redacted]	55	FUNCTION2 HPCD...	409.7974	29.13	0.000	0.000	52.9
[redacted]	55	FUNCTION2 HPCD...	409.7974	32.36	0.000	0.000	44.6
[redacted]	55	FUNCTION2 HPCD...	409.7974	32.07	0.000	0.000	8.5
[redacted]	55	FUNCTION2 HPCD...	409.7974	32.03	0.000	0.000	7.3
[redacted]	55	FUNCTION2 HPCD...	409.7974	31.76	0.000	0.000	35.5
[redacted]	55	FUNCTION2 HPCD...	409.7974	31.40	0.000	0.000	4.7

ETHERS4

[redacted]							
[redacted]	56	FUNCTION3 OCDPE	445.7555	35.94	0.000	0.000	55.8
[redacted]	56	FUNCTION3 OCDPE	445.7555	35.86	0.000	0.000	49.6
[redacted]	56	FUNCTION3 OCDPE	445.7555	35.63	0.000	0.000	10.6
[redacted]	56	FUNCTION3 OCDPE	445.7555	35.04	0.000	0.000	2.1
[redacted]	56	FUNCTION3 OCDPE	445.7555	35.00	0.000	0.000	3.2
[redacted]	56	FUNCTION3 OCDPE	445.7555	34.96	0.000	0.000	2.0
[redacted]	56	FUNCTION3 OCDPE	445.7555	34.73	0.000	0.000	58.4
[redacted]	56	FUNCTION3 OCDPE	445.7555	34.57	0.000	0.000	26.3
[redacted]	56	FUNCTION3 OCDPE	445.7555	34.46	0.000	0.000	38.2
[redacted]	56	FUNCTION3 OCDPE	445.7555	33.60	0.000	0.000	1.2
[redacted]	56	FUNCTION3 OCDPE	445.7555	37.77	0.000	0.000	2.1
[redacted]	56	FUNCTION3 OCDPE	445.7555	37.69	0.000	0.000	1.5
[redacted]	56	FUNCTION3 OCDPE	445.7555	37.65	0.000	0.000	1.5
[redacted]	56	FUNCTION3 OCDPE	445.7555	37.33	0.000	0.000	1.0
[redacted]	56	FUNCTION3 OCDPE	445.7555	37.20	0.000	0.000	28.7
[redacted]	56	FUNCTION3 OCDPE	445.7555	36.98	0.000	0.000	15.1
[redacted]	56	FUNCTION3 OCDPE	445.7555	36.86	0.000	0.000	42.1
[redacted]	56	FUNCTION3 OCDPE	445.7555	36.63	0.000	0.000	51.1
[redacted]	56	FUNCTION3 OCDPE	445.7555	36.43	0.000	0.000	41.0
[redacted]	56	FUNCTION3 OCDPE	445.7555	36.35	0.000	0.000	78.6
[redacted]	56	FUNCTION3 OCDPE	445.7555	36.24	0.000	0.000	69.2
[redacted]	56	FUNCTION3 OCDPE	445.7555	36.09	0.000	0.000	16.4
[redacted]	56	FUNCTION3 OCDPE	445.7555	36.00	0.000	0.000	53.9

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:47:13 Pacific Standard Time

ID: WC32A, Name: 13021307, Date: 13-Feb-2013, Time: 15:29:41, Conditions: AUTOSPEC01, User: pk

ETHERS5

[redacted]						
[redacted]	57 FUNCTION4 NCDPE	479.7165	39.62	0.000	0.000	27.3
[redacted]	57 FUNCTION4 NCDPE	479.7165	38.68	0.000	0.000	211.1
[redacted]	57 FUNCTION4 NCDPE	479.7165	44.44	0.000	0.000	2.0
[redacted]	57 FUNCTION4 NCDPE	479.7165	43.28	0.000	0.000	8.3
[redacted]	57 FUNCTION4 NCDPE	479.7165	43.17	0.000	0.000	5.6
[redacted]	57 FUNCTION4 NCDPE	479.7165	42.96	0.000	0.000	4.9
[redacted]	57 FUNCTION4 NCDPE	479.7165	42.74	0.000	0.000	7.8
[redacted]	57 FUNCTION4 NCDPE	479.7165	42.49	0.000	0.000	7.2
[redacted]	57 FUNCTION4 NCDPE	479.7165	42.32	0.000	0.000	25.6
[redacted]	57 FUNCTION4 NCDPE	479.7165	42.10	0.000	0.000	8.3
[redacted]	57 FUNCTION4 NCDPE	479.7165	41.38	0.000	0.000	9.9
[redacted]	57 FUNCTION4 NCDPE	479.7165	41.34	0.000	0.000	7.2
[redacted]	57 FUNCTION4 NCDPE	479.7165	41.18	0.000	0.000	66.3
[redacted]	57 FUNCTION4 NCDPE	479.7165	41.04	0.000	0.000	93.6
[redacted]	57 FUNCTION4 NCDPE	479.7165	40.84	0.000	0.000	669.4
[redacted]	57 FUNCTION4 NCDPE	479.7165	40.62	0.000	0.000	220.4
[redacted]	57 FUNCTION4 NCDPE	479.7165	40.48	0.000	0.000	189.4
[redacted]	57 FUNCTION4 NCDPE	479.7165	39.82	0.000	0.000	5.7

ETHERS6

[redacted]						
[redacted]	58 FUNCTION5 DCDPE	513.6775	49.27	0.000	0.000	11.1
[redacted]	58 FUNCTION5 DCDPE	513.6775	49.04	0.000	0.000	39.4
[redacted]	58 FUNCTION5 DCDPE	513.6775	48.87	0.000	0.000	19.1
[redacted]	58 FUNCTION5 DCDPE	513.6775	48.56	0.000	0.000	3.3
[redacted]	58 FUNCTION5 DCDPE	513.6775	47.75	0.000	0.000	1.5
[redacted]	58 FUNCTION5 DCDPE	513.6775	47.71	0.000	0.000	1.6
[redacted]	58 FUNCTION5 DCDPE	513.6775	47.26	0.000	0.000	31.4
[redacted]	58 FUNCTION5 DCDPE	513.6775	46.95	0.000	0.000	3.3
[redacted]	58 FUNCTION5 DCDPE	513.6775	46.79	0.000	0.000	31.2
[redacted]	58 FUNCTION5 DCDPE	513.6775	46.62	0.000	0.000	5.9

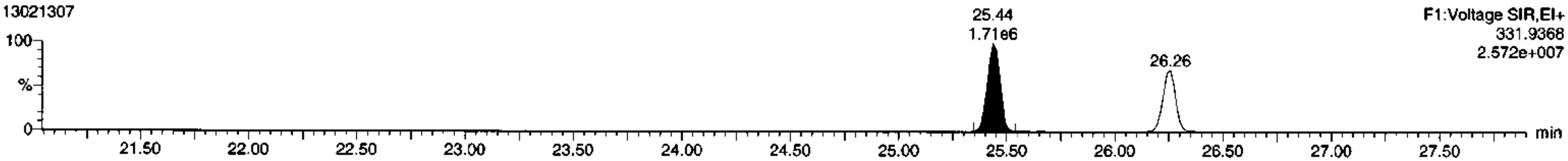
Quantify Sample Report **MassLynx 4.1 SCN 714**

Dataset:	P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered:	Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed:	Thursday, February 14, 2013 10:47:13 Pacific Standard Time

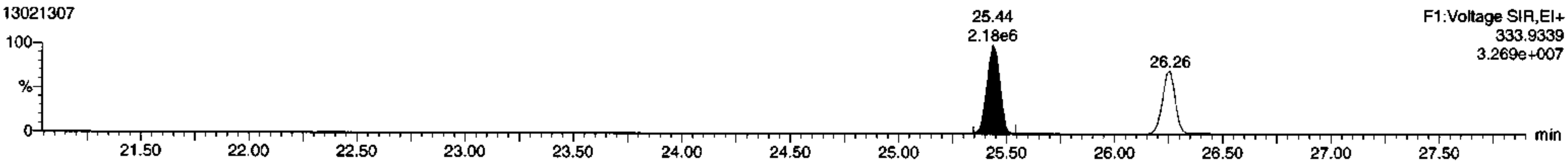
Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 12 Feb 2013 12:25:57
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: WC32A, Name: 13021307, Date: 13-Feb-2013, Time: 15:29:41, Conditions: AUTOSPEC01, User: pk

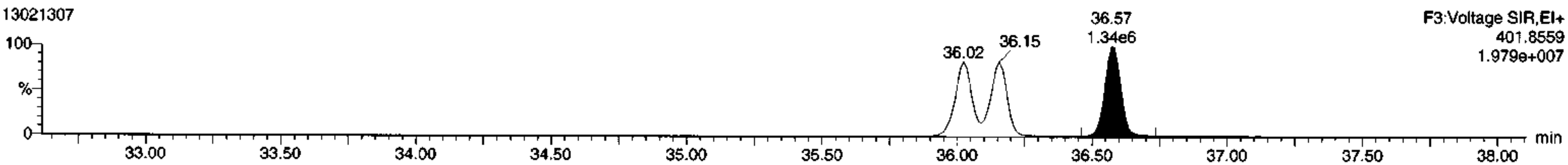
13C-1234-TCDD
13021307



13C-1234-TCDD
13021307



13C-123789-HxCDD
13021307



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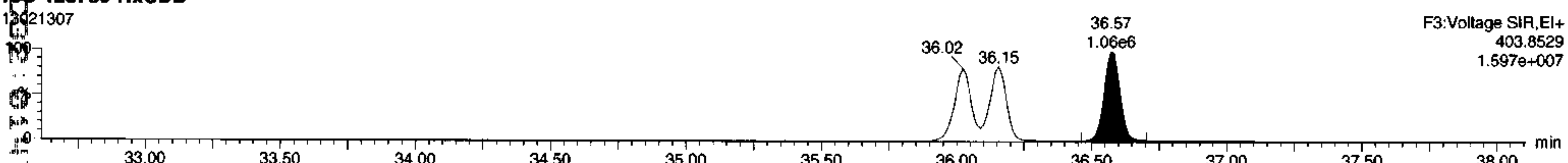
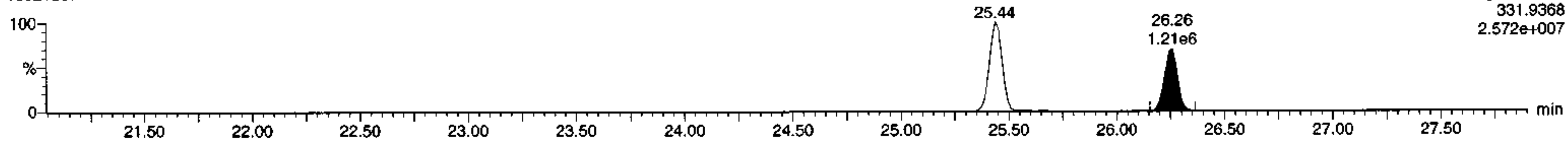
13021307



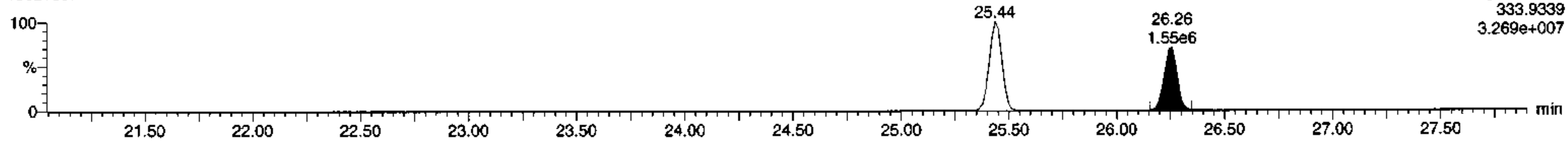
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:47:13 Pacific Standard Time

ID: WC32A, Name: 13021307, Date: 13-Feb-2013, Time: 15:29:41, Conditions: AUTOSPEC01, User: pk

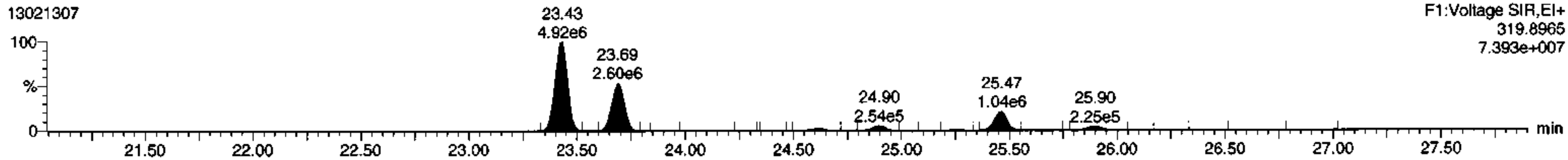
13C-2378-TCDD
13021307
F1:Voltage SIR,EI+
331.9368
2.572e+007



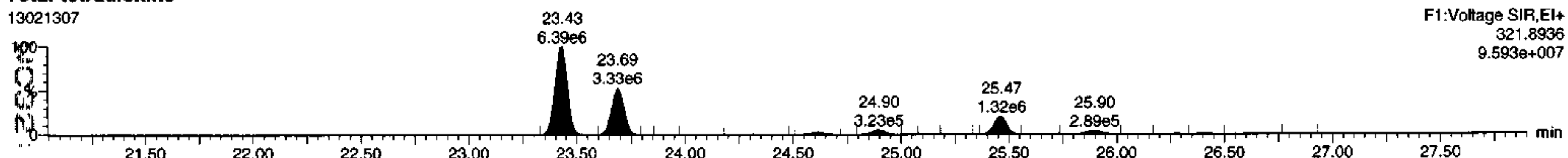
13C-2378-TCDD
13021307
F1:Voltage SIR,EI+
333.9339
3.269e+007



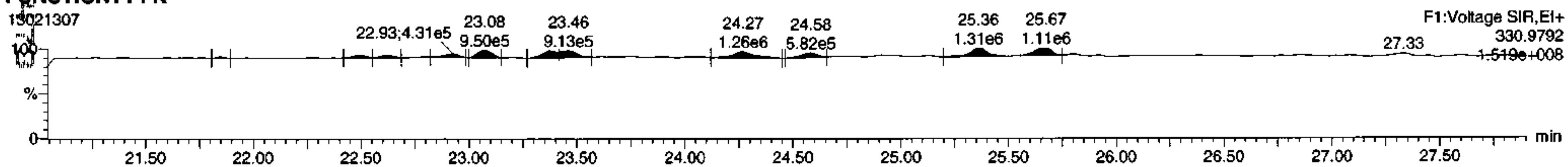
Total-tetradioxins
13021307
F1:Voltage SIR,EI+
319.8965
7.393e+007



Total-tetradioxins
13021307
F1:Voltage SIR,EI+
321.8936
9.593e+007



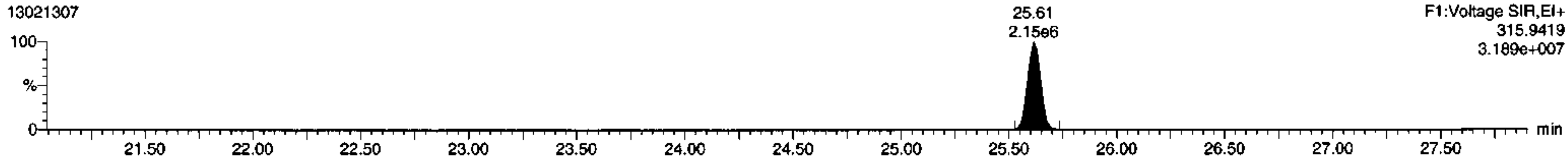
FUNCTION1 PFK
13021307
F1:Voltage SIR,EI+
330.9792
1.519e+008



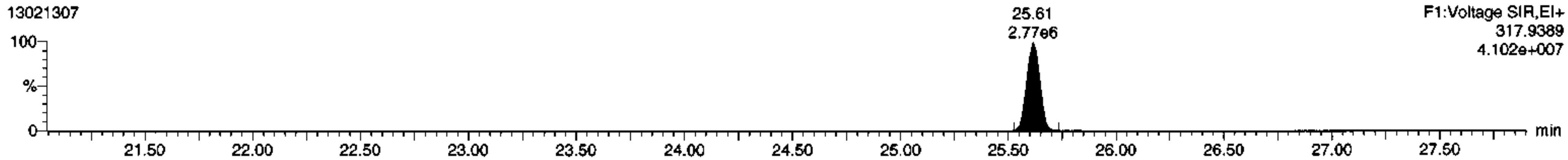
Quantify Sample Report MassLynx 4.1 SCN 714
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:47:13 Pacific Standard Time

ID: WC32A, Name: 13021307, Date: 13-Feb-2013, Time: 15:29:41, Conditions: AUTOSPEC01, User: pk

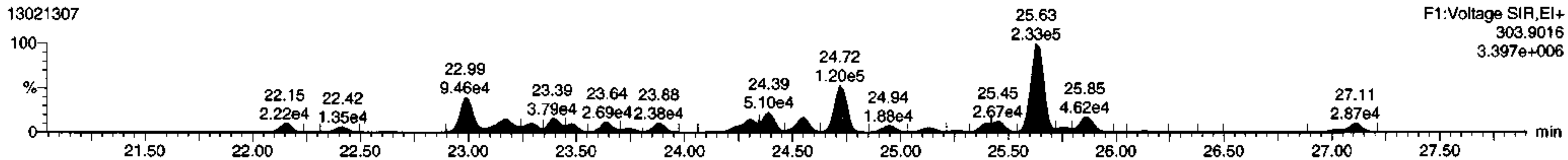
13C-2378-TCDF



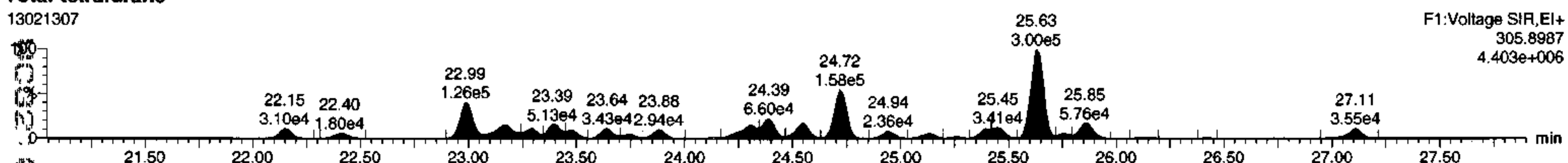
13C-2378-TCDF



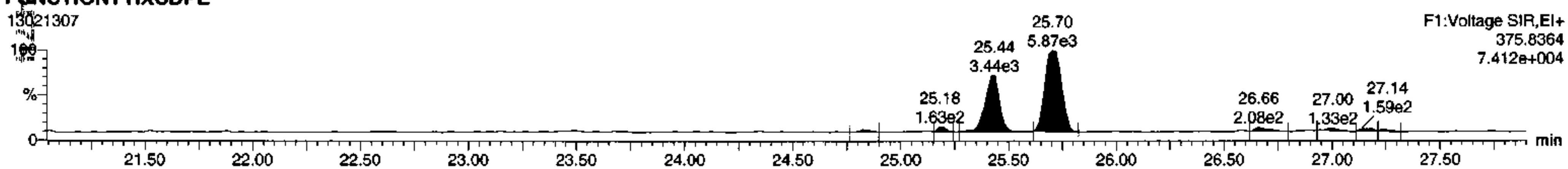
Total-tetrafurans



Total-tetrafurans



FUNCTION1 HXCDPE

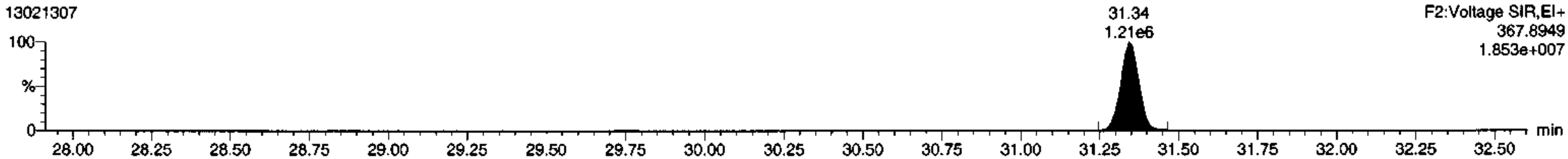


Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:47:13 Pacific Standard Time

ID: WC32A, Name: 13021307, Date: 13-Feb-2013, Time: 15:29:41, Conditions: AUTOSPEC01, User: pk

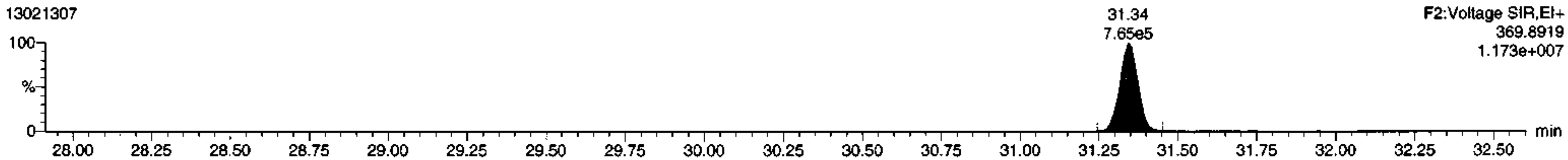
13C-12378-PeCDD

13021307



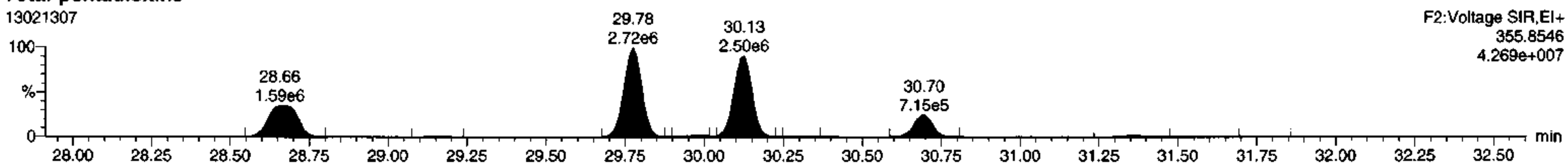
13C-12378-PeCDD

13021307



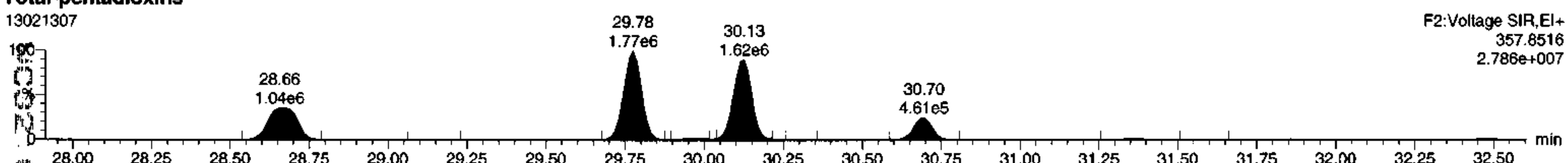
Total-pentadioxins

13021307



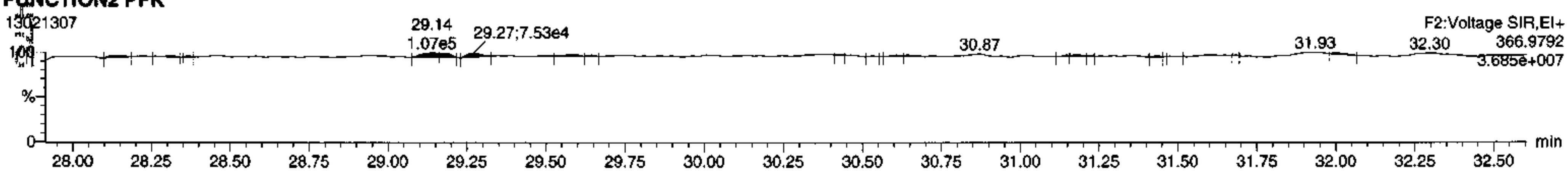
Total-pentadioxins

13021307



FUNCTION2 PFK

13021307



Quantify Sample Report **MassLynx 4.1 SCN 714**

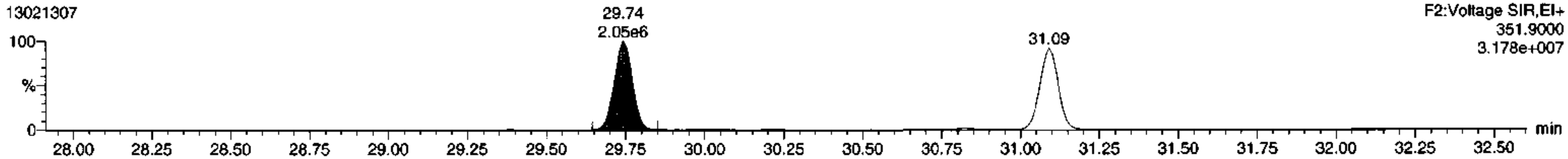
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld

Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time

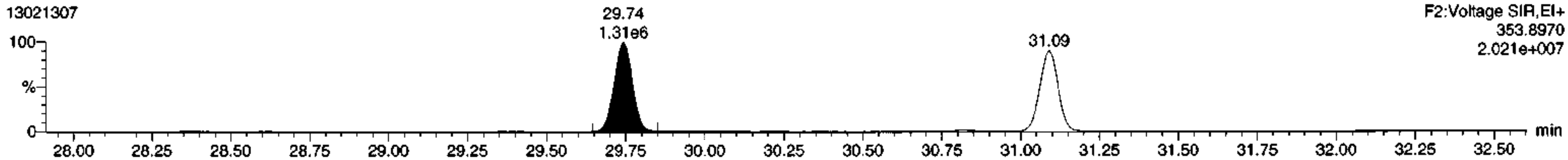
Printed: Thursday, February 14, 2013 10:47:13 Pacific Standard Time

ID: WC32A, Name: 13021307, Date: 13-Feb-2013, Time: 15:29:41, Conditions: AUTOSPEC01, User: pk

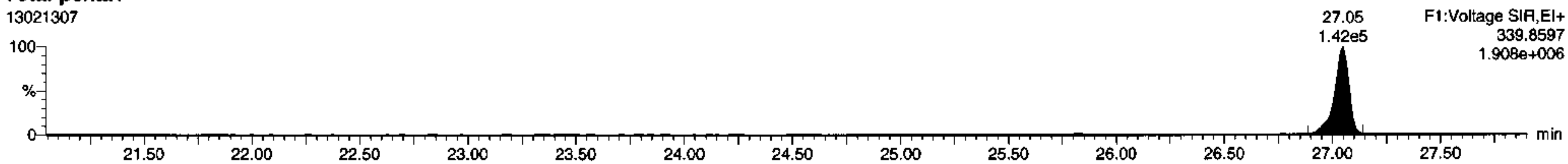
13C-12378-PeCDF



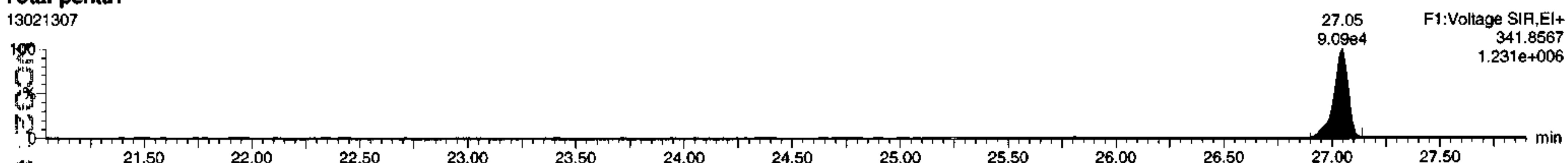
13C-12378-PeCDF



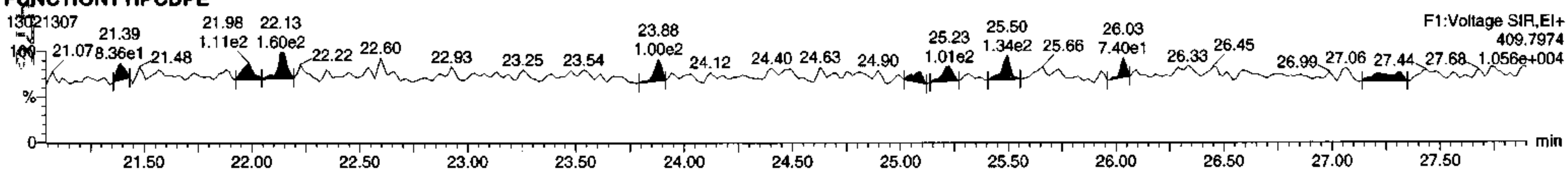
Total-penta1



Total-penta1



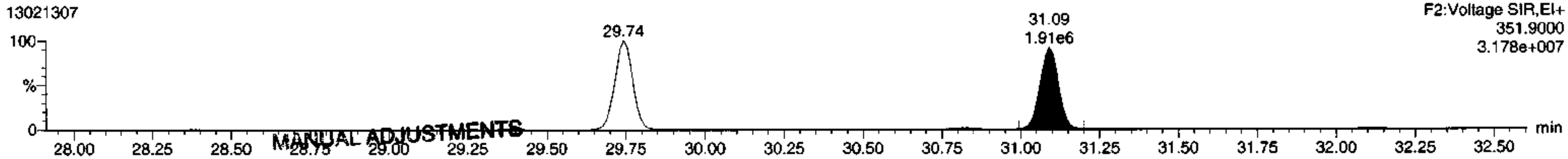
FUNCTION1 HPCDPE



Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:47:13 Pacific Standard Time

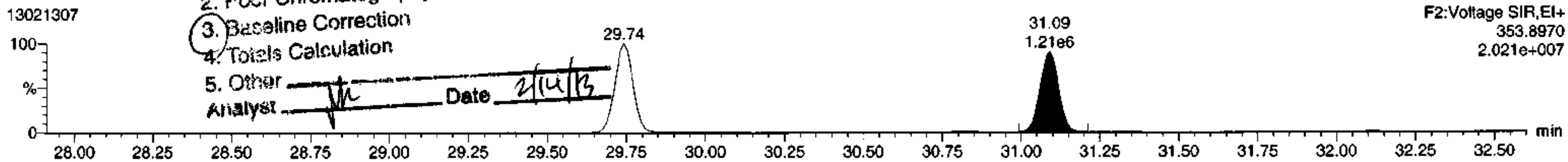
ID: WC32A, Name: 13021307, Date: 13-Feb-2013, Time: 15:29:41, Conditions: AUTOSPEC01, User: pk

13C-23478-PeCDF
13021307

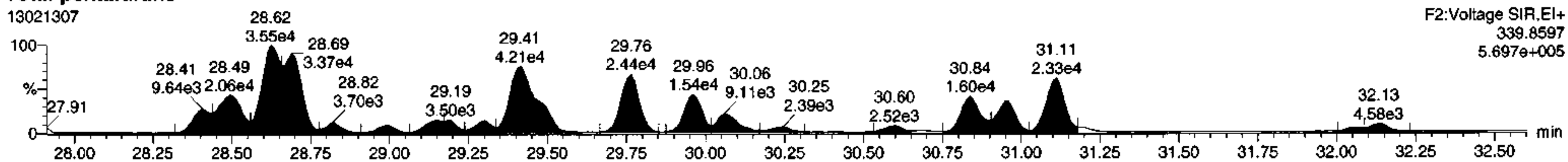


MANUAL ADJUSTMENTS
1. Peak not found
2. Poor Chromatography
3. Baseline Correction
4. Totals Calculation
5. Other
Analyst Date 2/14/13

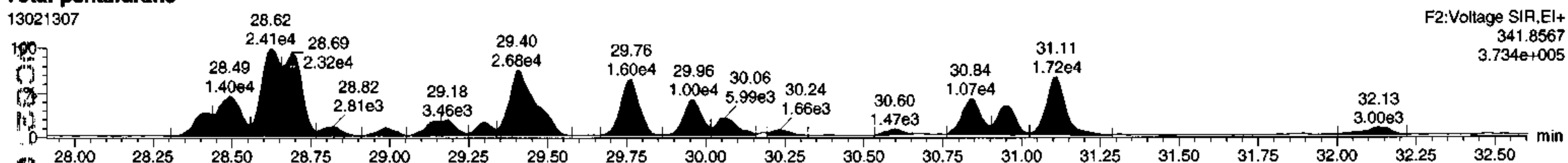
13C-23478-PeCDF
13021307



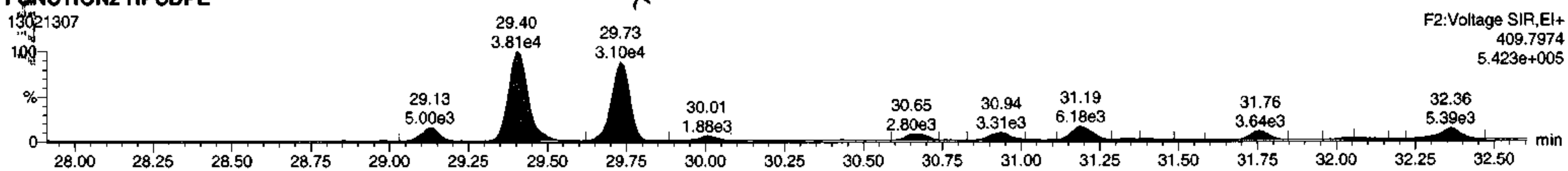
Total-pentafurans
13021307



Total-pentafurans
13021307



FUNCTION2 HPCDPE
13021307

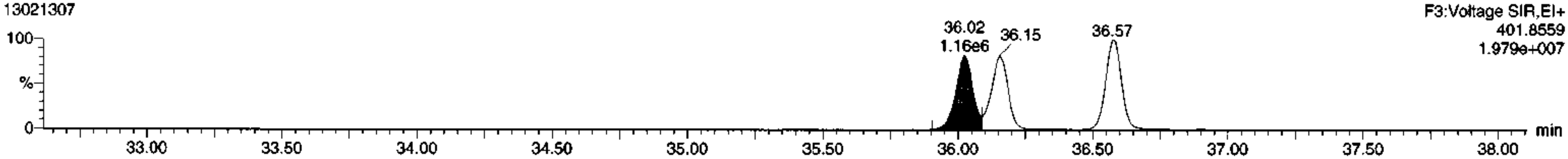


Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:47:13 Pacific Standard Time

ID: WC32A, Name: 13021307, Date: 13-Feb-2013, Time: 15:29:41, Conditions: AUTOSPEC01, User: pk

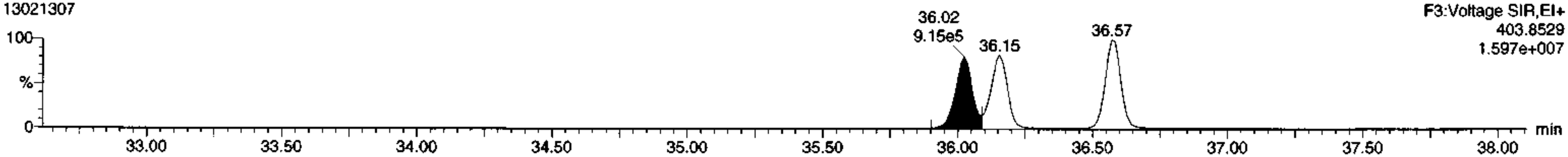
13C-123478-HxCDD

13021307



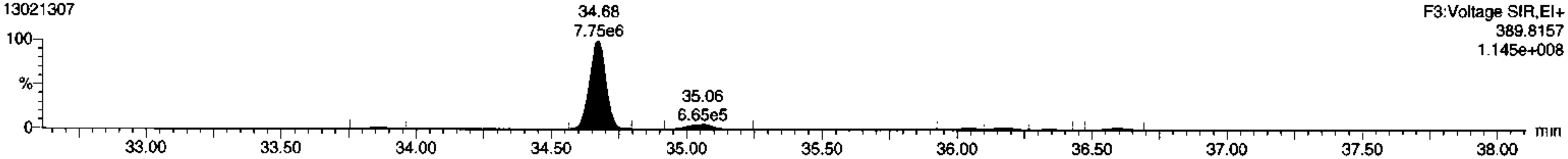
13C-123478-HxCDD

13021307



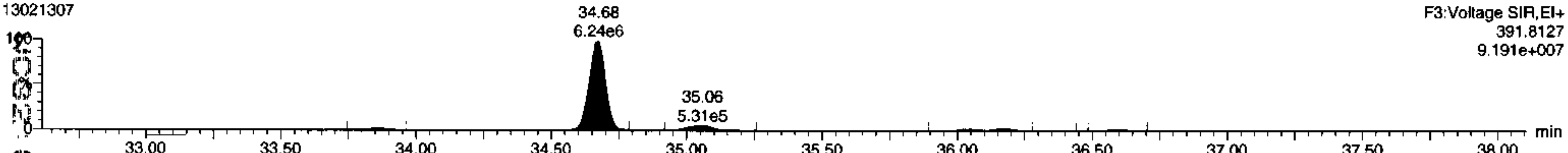
Total-hexadioxins

13021307



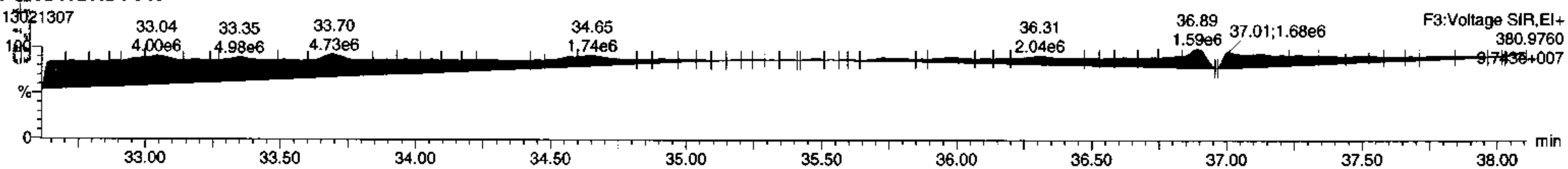
Total-hexadioxins

13021307



FUNCTION3 PFK

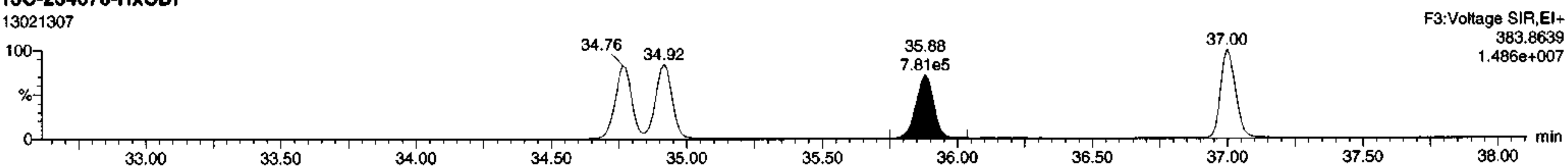
13021307



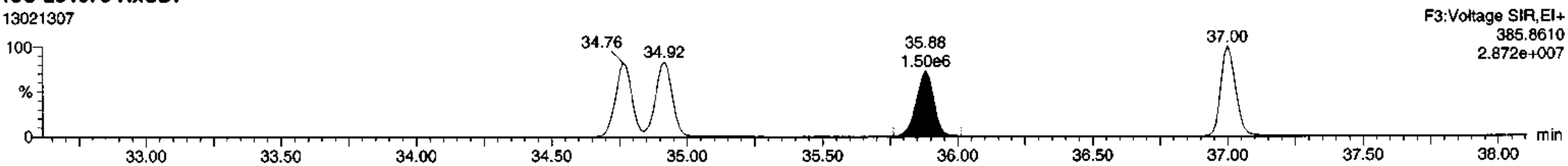
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:47:13 Pacific Standard Time

ID: WC32A, Name: 13021307, Date: 13-Feb-2013, Time: 15:29:41, Conditions: AUTOSPEC01, User: pk

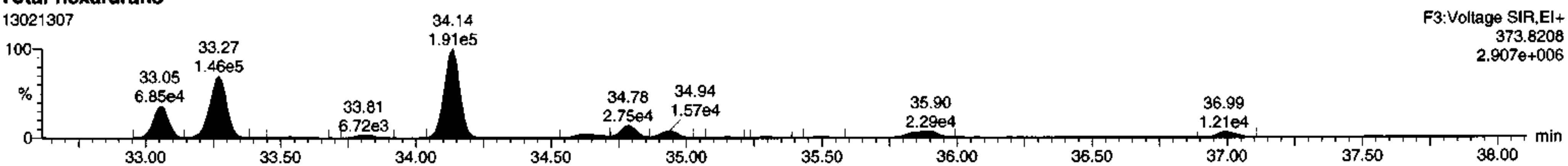
13C-234678-HxCDF
13021307



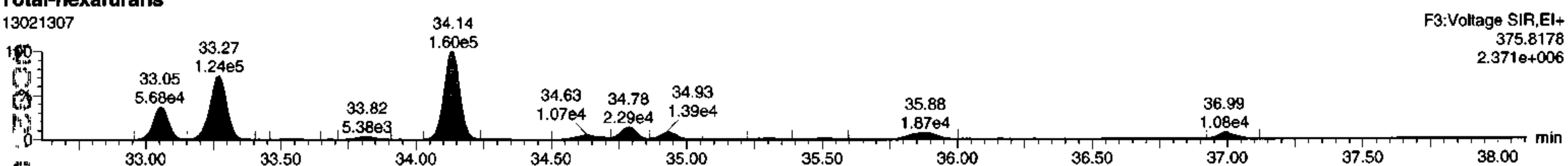
13C-234678-HxCDF
13021307



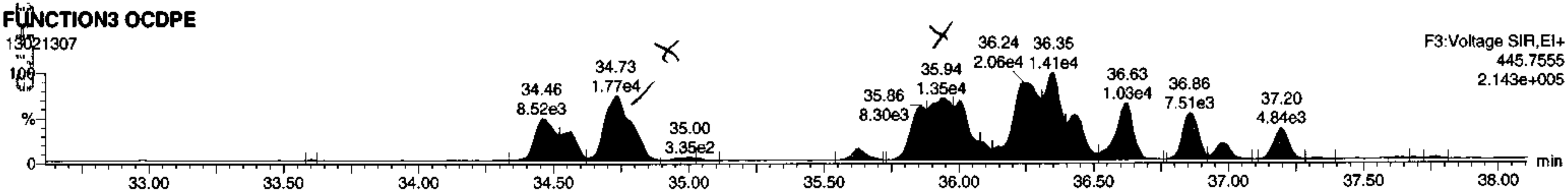
Total-hexafurans
13021307



Total-hexafurans
13021307



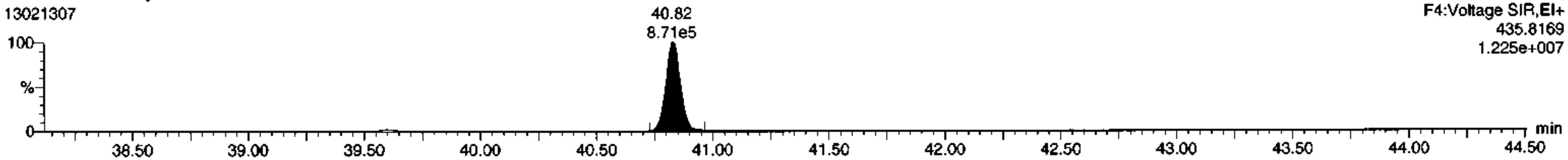
FUNCTION3 OCDPE
13021307



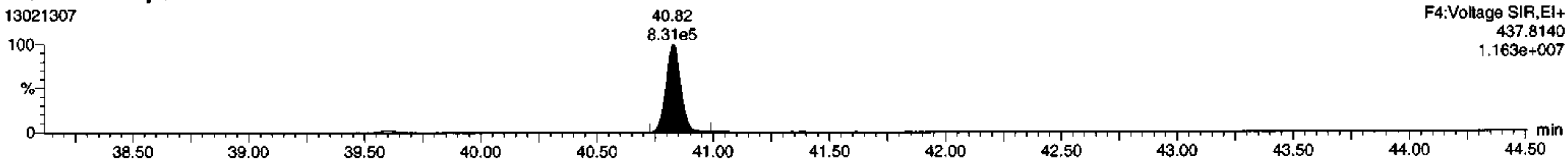
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:47:13 Pacific Standard Time

ID: WC32A, Name: 13021307, Date: 13-Feb-2013, Time: 15:29:41, Conditions: AUTOSPEC01, User: pk

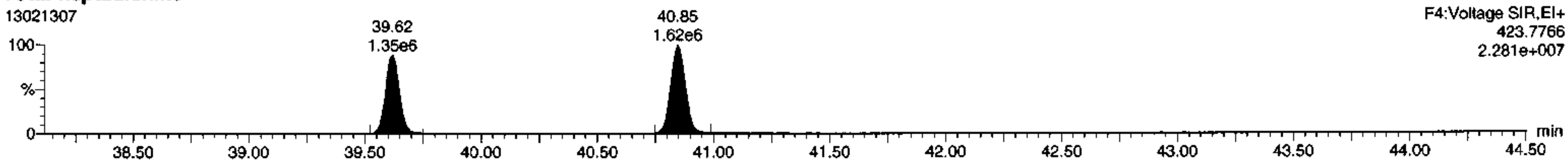
13C-1234678-HpCDD



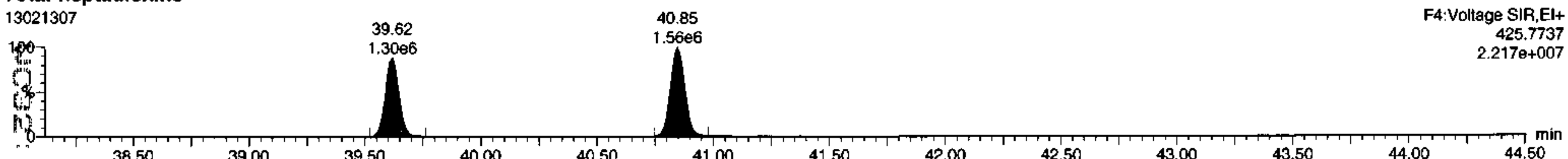
13C-1234678-HpCDD



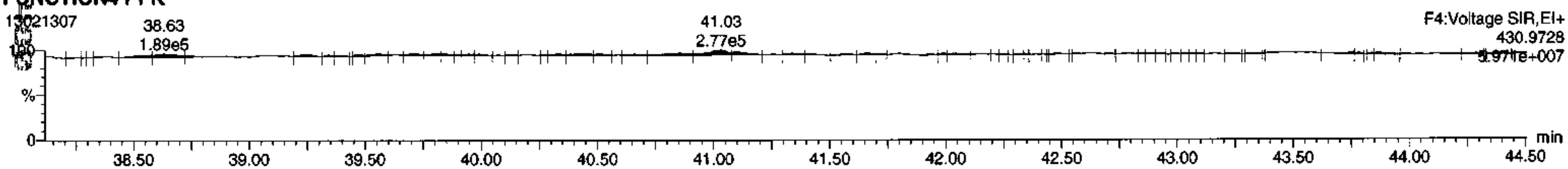
Total-heptadioxins



Total-heptadioxins



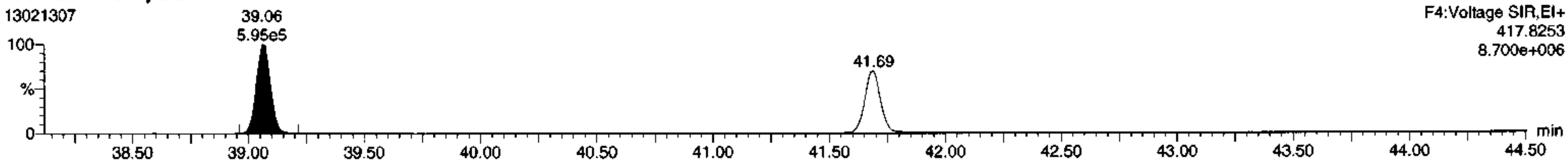
FUNCTION4 PFK



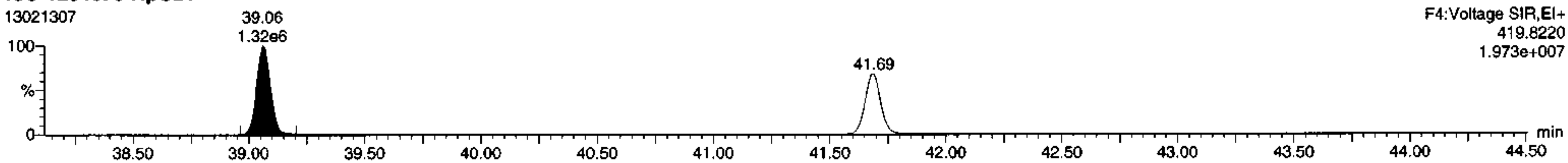
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:47:13 Pacific Standard Time

ID: WC32A, Name: 13021307, Date: 13-Feb-2013, Time: 15:29:41, Conditions: AUTOSPEC01, User: pk

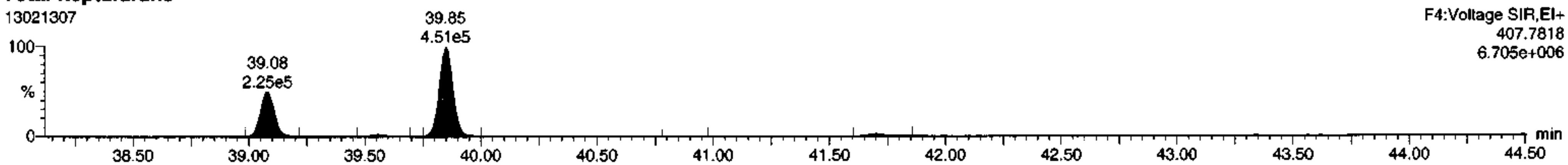
13C-1234678-HpCDF



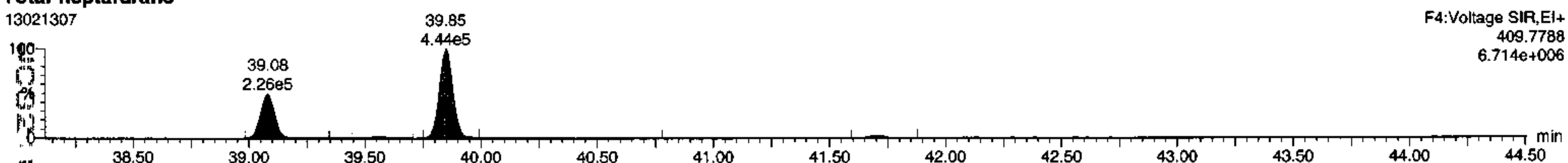
13C-1234678-HpCDF



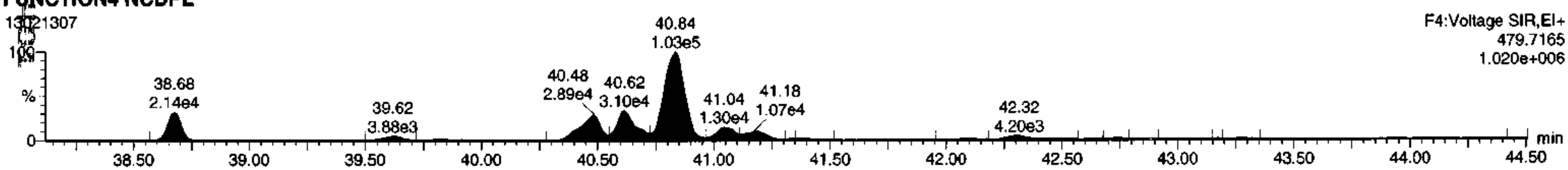
Total-heptafurans



Total-heptafurans

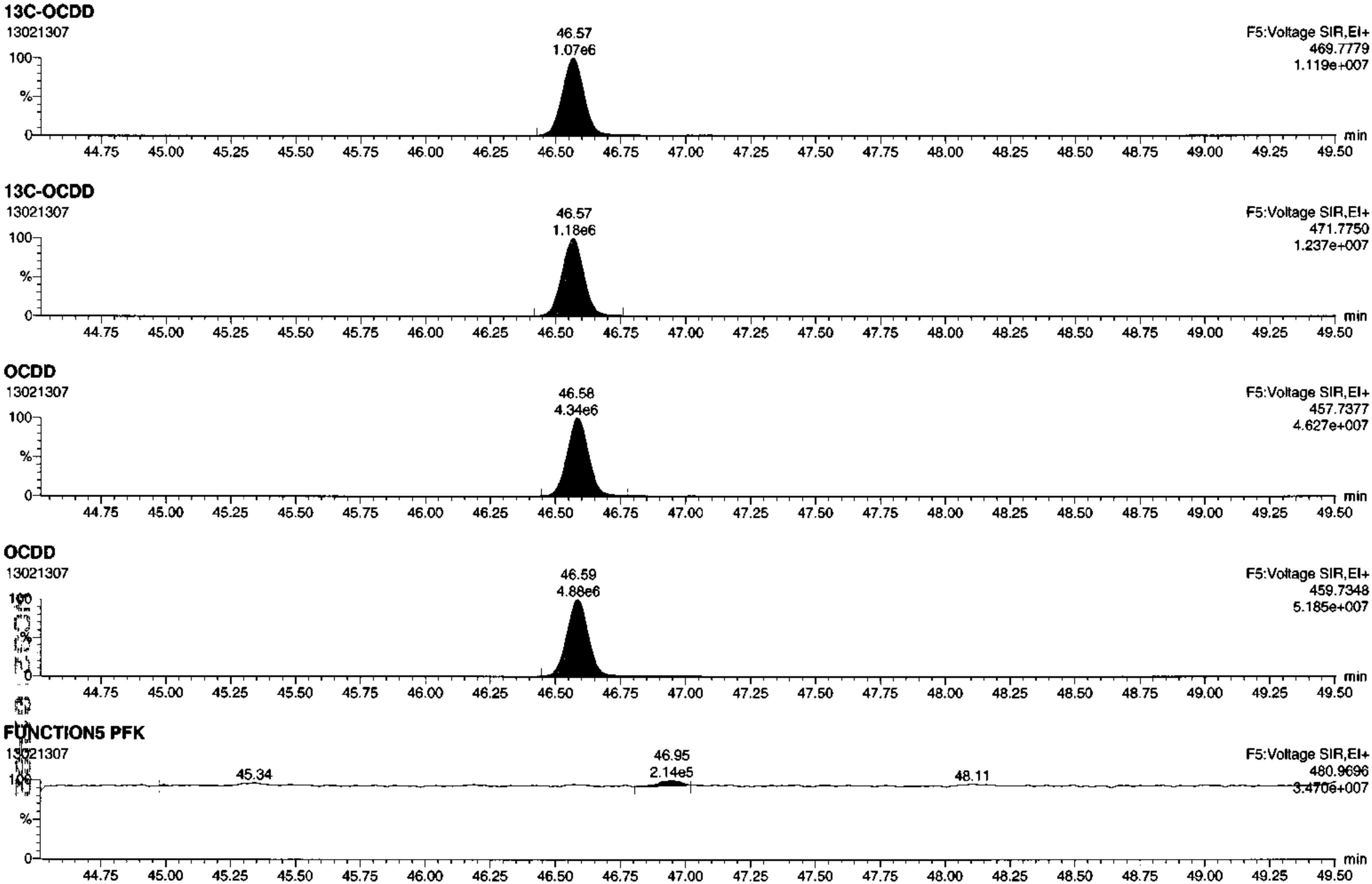


FUNCTION4 NCDPE



Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:47:13 Pacific Standard Time

ID: WC32A, Name: 13021307, Date: 13-Feb-2013, Time: 15:29:41, Conditions: AUTOSPEC01, User: pk



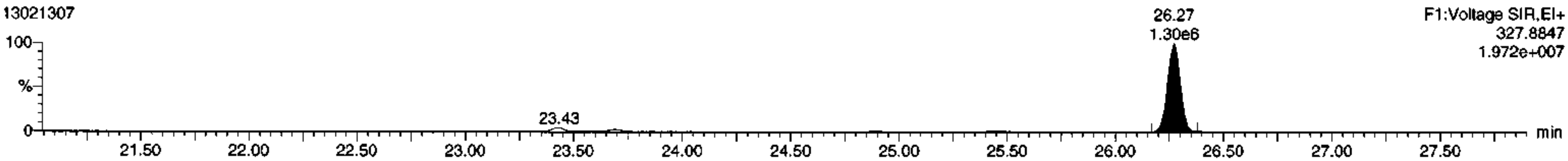
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld

Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time

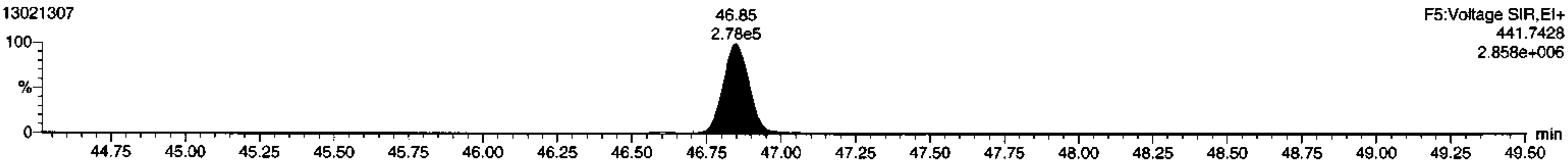
Printed: Thursday, February 14, 2013 10:47:13 Pacific Standard Time

ID: WC32A, Name: 13021307, Date: 13-Feb-2013, Time: 15:29:41, Conditions: AUTOSPEC01, User: pk

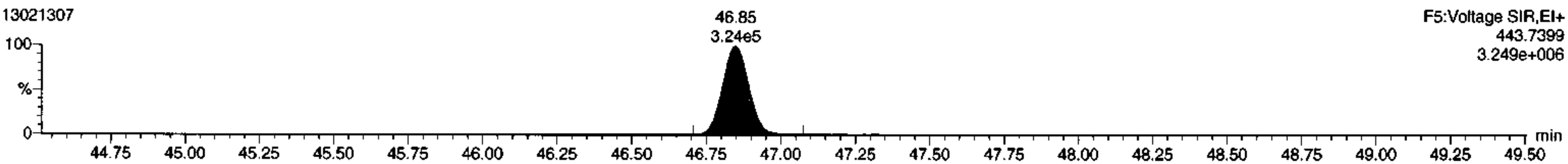
37CL-2378-TCDD



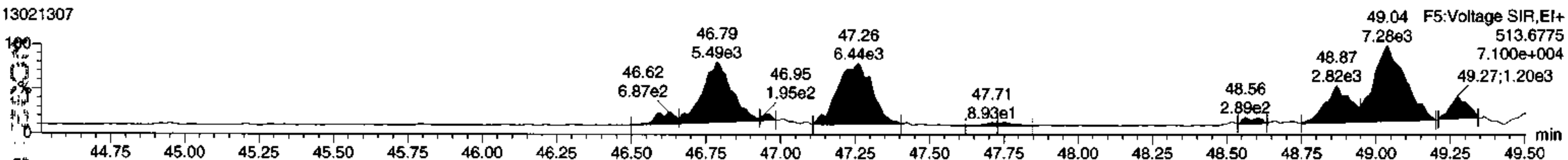
OCDF



OCDF



FUNCTION5 DCDPE



Quantify Sample Summary Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:47:39 Pacific Standard Time

pk 2/14/13

Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 12 Feb 2013 12:25:57
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: WC32B, Name: 13021308, Date: 13-Feb-2013, Time: 16:22:20, Conditions: AUTOSPEC01, User: pk

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	2378-TCDF	25.645	1.001	3.80e4	4.99e4	0.921	0.760	0.770	560.8	1020	1624	5.72e5	7.19e5	NO	2.590	2.590
[redacted]	12378-PeCDF	29.775	1.001	9.79e3	6.86e3	0.912	1.428	1.550	141.8	1032	2431	1.46e5	1.06e5	NO	0.685	0.685
[redacted]	23478-PeCDF	31.124	1.001	1.08e4	7.03e3	0.943	1.541	1.550	150.4	1032	2431	1.55e5	1.04e5	NO	0.739	0.739
[redacted]	123478-HxCDF	34.806	1.001	2.13e4	1.83e4	1.101	1.166	1.240	142.6	2113	2078	3.01e5	2.58e5	NO	1.877	1.877
[redacted]	234678-HxCDF	35.913	1.000	9.51e3	9.85e3	1.073	0.965	1.240	67.9	2113	2078	1.44e5	1.29e5	YES	0.881	0.993
[redacted]	123678-HxCDF	34.949	1.000	1.07e4	9.32e3	1.056	1.144	1.240	74.2	2113	2078	1.57e5	1.49e5	NO	0.947	0.947
[redacted]	123789-HxCDF	37.009	1.000	1.07e4	1.03e4	1.017	1.038	1.240	80.6	2113	2078	1.70e5	1.66e5	YES	0.874	0.950
[redacted]	1234678-HpCDF	39.092	1.000	2.00e5	1.98e5	1.238	1.015	1.050	2226.1	1371	1753	3.05e6	2.96e6	NO	21.679	21.679
[redacted]	1234789-HpCDF	41.723	1.001	9.70e3	9.87e3	1.224	0.983	1.050	95.3	1371	1753	1.31e5	1.32e5	NO	1.323	1.323
[redacted]	OCDF	46.867	1.006	2.35e5	2.74e5	1.162	0.858	0.890	2891.3	808	1137	2.34e6	2.81e6	NO	48.143	48.143
[redacted]	2378-TCDD	26.287	1.001	1.60e3	3.64e3	1.106	0.441	0.770	19.6	1424	1241	2.79e4	5.14e4	YES	0.152	0.216
[redacted]	12378-PeCDD	31.375	1.000	1.11e4	6.37e3	1.001	1.740	1.550	85.4	1737	1064	1.48e5	9.58e4	NO	1.093	1.093
[redacted]	123478-HxCDD	36.056	1.000	2.17e4	1.70e4	0.978	1.276	1.240	102.8	3031	2228	3.11e5	2.36e5	NO	2.349	2.349
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[redacted]	123789-HxCDD	36.615	1.012	3.18e4	2.61e4	0.904	1.219	1.240	157.1	3031	2228	4.76e5	3.94e5	NO	3.877	3.877
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[redacted]	OCDD	46.597	1.000	4.84e6	5.44e6	1.011	0.889	0.890	18020.7	2821	2788	5.08e7	5.71e7	NO	1117.296	1117.296
[redacted]	13C-2378-TCDF	25.630	1.007	1.60e6	2.08e6	1.522	0.771	0.770	5846.2	4051	4555	2.37e7	3.09e7	NO		78.462
[redacted]	13C-12378-PeCDF	29.753	1.169	1.63e6	1.04e6	1.185	1.573	1.550	10044.2	2464	2398	2.48e7	1.59e7	NO		72.876
[redacted]	13C-23478-PeCDF	31.101	1.222	1.56e6	9.99e5	1.136	1.566	1.550	9665.9	2464	2398	2.38e7	1.51e7	NO		73.159
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[redacted]	13C-123678-HxCDF	34.938	0.955	6.85e5	1.32e6	1.383	0.521	0.510	2708.2	3579	2996	9.69e6	1.86e7	NO		76.928
[redacted]	13C-234678-HxCDF	35.902	0.981	6.22e5	1.19e6	1.283	0.521	0.510	2355.5	3579	2996	8.43e6	1.62e7	NO		75.260
[redacted]	13C-123789-HxCDF	37.009	1.011	7.45e5	1.44e6	1.099	0.519	0.510	3369.9	3579	2996	1.21e7	2.34e7	NO		105.520
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[redacted]	13C-1234789-HpCDF	41.701	1.140	3.74e5	8.35e5	0.774	0.447	0.440	2113.4	2337	2133	4.94e6	1.09e7	NO		83.090
[redacted]	13C-1234-TCDD	25.451	0.000	1.36e6	1.72e6	1.000	0.793	0.770	5453.4	3823	2095	2.08e7	2.63e7	NO		100.000
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[redacted]	13C-OCDD	46.579	1.273	8.61e5	9.57e5	0.675	0.899	0.890	5449.6	1670	1496	9.10e6	1.01e7	NO		143.160

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:47:39 Pacific Standard Time

ID: WC32B, Name: 13021308, Date: 13-Feb-2013, Time: 16:22:20, Conditions: AUTOSPEC01, User: pk

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	13C-123789-HxCDD	36.593	0.000	1.05e6	8.34e5	1.000	1.256	1.240	6641.0	2379	2118	1.58e7	1.25e7	NO		100.000
[redacted]	Total-tetrafurans			2.02e5		0.921				1020		2.84e6				13.828
[redacted]	Total-penta1			1.15e5						878		1.66e6				7.909
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[redacted]	FUNCTION1 PFK			3.81e6						1161413		5.05e7				
[redacted]	FUNCTION2 PFK			1.43e6						315396		2.01e7				0.000
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[redacted]	FUNCTION4 PFK			4.40e5						455702		1.22e7				
[redacted]	FUNCTION5 PFK			7.17e5						271143		1.87e7				
[redacted]	FUNCTION1 HXCDPE			5.60e3						467		7.40e4				0.000
[redacted]	FUNCTION1 HPCDPE			1.14e3						1289		2.35e4				0.000
[redacted]	FUNCTION2 HPCDPE			9.82e3						2050		1.49e5				0.000
[redacted]	FUNCTION3 OCDPE			1.36e4						1074		2.38e5				0.000
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[redacted]	FUNCTION5 DCDPE			2.88e3						579		7.27e4				0.000

2

4C02 : 01485

Quantify Totals Report MassLynx 4.1 SCN 714
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:47:39 Pacific Standard Time

Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 12 Feb 2013 12:25:57
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: WC32B, Name: 13021308, Date: 13-Feb-2013, Time: 16:22:20, Conditions: AUTOSPEC01, User: pk

TF

[redacted]	35 Total-tetrafurans	303.9016	24.32	26473.849	0.921	0.780		0.78	0.77	NO	123.2
[redacted]	35 Total-tetrafurans	303.9016	23.90	11138.603	0.921	0.328		0.76	0.77	NO	71.9
[redacted]	35 Total-tetrafurans	303.9016	23.76	7297.039	0.921	0.215		0.84	0.77	NO	51.1
[redacted]	35 Total-tetrafurans	303.9016	23.66	17355.568	0.921	0.512		0.81	0.77	NO	119.5
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[redacted]	35 Total-tetrafurans	303.9016	23.31	18150.659	0.921	0.535		0.80	0.77	NO	83.3
[redacted]	35 Total-tetrafurans	303.9016	23.19	21945.758	0.921	0.647		0.60	0.77	YES	88.5
[redacted]	35 Total-tetrafurans	303.9016	23.02	46035.681	0.921	1.357		0.73	0.77	NO	271.4 E
[redacted]	35 Total-tetrafurans	303.9016	22.42	8840.012	0.921	0.261		0.95	0.77	YES	65.8
[redacted]	35 Total-tetrafurans	303.9016	22.16	10448.976	0.921	0.308		0.59	0.77	YES	64.0
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[redacted]	35 Total-tetrafurans	303.9016	25.87	25139.055	0.921	0.741		0.80	0.77	NO	148.9
[redacted]	35 Total-tetrafurans	303.9016	25.78	9165.932	0.921	0.270		0.71	0.77	NO	53.0
[redacted]	1 2378-TCDF	303.9016	25.64	87870.836	0.921	2.590	2.590	0.76	0.77	NO	560.8
[redacted]	35 Total-tetrafurans	303.9016	25.47	15554.570	0.921	0.458		0.76	0.77	NO	85.1
[redacted]	35 Total-tetrafurans	303.9016	25.41	7445.843	0.921	0.219		0.72	0.77	NO	71.4
[redacted]	35 Total-tetrafurans	303.9016	25.27	1764.514	0.921	0.052		0.74	0.77	NO	11.8
[redacted]	35 Total-tetrafurans	303.9016	25.15	8139.139	0.921	0.240		0.82	0.77	NO	47.0
[redacted]	35 Total-tetrafurans	303.9016	24.96	9770.441	0.921	0.288		0.67	0.77	NO	64.9
[redacted]	35 Total-tetrafurans	303.9016	24.73	48724.844	0.921	1.436		0.74	0.77	NO	301.2
[redacted]	35 Total-tetrafurans	303.9016	24.57	24196.518	0.921	0.713		0.71	0.77	NO	133.2
[redacted]	35 Total-tetrafurans	303.9016	24.40	20688.281	0.921	0.610		0.79	0.77	NO	121.7

PP

[redacted]	36 Total-penta1	339.8597	27.06	189542.273		7.909		1.53	1.55	NO	1895.3

ID: WC32B, Name: 13021308, Date: 13-Feb-2013, Time: 16:22:20, Conditions: AUTOSPEC01, User: pk

PF

[redacted]											
[redacted]	37 Total-pentafurans	339.8597	28.83	973.131	0.927	0.040		1.50	1.55	NO	9.1
[redacted]	37 Total-pentafurans	339.8597	28.71	36417.542	0.927	1.502		1.57	1.55	NO	330.3
[redacted]	37 Total-pentafurans	339.8597	28.65	22181.190	0.927	0.915		1.53	1.55	NO	225.4
[redacted]	37 Total-pentafurans	339.8597	28.50	12460.158	0.927	0.514		1.73	1.55	NO	89.3
[redacted]	37 Total-pentafurans	339.8597	28.42	2873.436	0.927	0.119		1.32	1.55	NO	35.1
[redacted]	37 Total-pentafurans	339.8597	32.14	2634.874	0.927	0.109		2.53	1.55	YES	22.9
[redacted]	3 23478-PeCDF	339.8597	31.12	17848.259	0.943	0.739	0.739	1.54	1.55	NO	150.4
[redacted]	37 Total-pentafurans	339.8597	30.97	17490.760	0.927	0.722		1.42	1.55	NO	149.7
[redacted]	37 Total-pentafurans	339.8597	30.84	8171.949	0.927	0.337		1.38	1.55	NO	66.3
[redacted]	37 Total-pentafurans	339.8597	30.08	4096.997	0.927	0.169		1.59	1.55	NO	34.2
[redacted]	37 Total-pentafurans	339.8597	29.97	15114.472	0.927	0.624		1.53	1.55	NO	139.5
[redacted]	2 12378-PeCDF	339.8597	29.78	16641.430	0.912	0.685	0.685	1.43	1.55	NO	141.8
[redacted]	37 Total-pentafurans	339.8597	29.50	6216.668	0.927	0.256		1.51	1.55	NO	68.4
[redacted]	37 Total-pentafurans	339.8597	29.42	19717.166	0.927	0.813		1.46	1.55	NO	165.9
[redacted]	37 Total-pentafurans	339.8597	29.31	4225.174	0.927	0.174		1.65	1.55	NO	40.3
[redacted]	37 Total-pentafurans	339.8597	29.19	4845.457	0.927	0.200		1.31	1.55	YES	32.9
[redacted]	37 Total-pentafurans	339.8597	29.01	1494.649	0.927	0.062		1.42	1.55	NO	14.9

R

HF

[redacted]											
[redacted]	6 123678-HxCDF	373.8208	34.95	19989.403	1.056	0.947	0.947	1.14	1.24	NO	74.2
[redacted]	4 123478-HxCDF	373.8208	34.81	39542.912	1.101	1.877	1.877	1.17	1.24	NO	142.6
[redacted]	38 Total-hexafurans	373.8208	34.63	7811.058	1.062	0.372		1.28	1.24	NO	26.4
[redacted]	38 Total-hexafurans	373.8208	34.15	401824.953	1.062	19.135		1.19	1.24	NO	1566.9
[redacted]	38 Total-hexafurans	373.8208	33.84	5268.488	1.062	0.251		1.10	1.24	NO	18.1
[redacted]	38 Total-hexafurans	373.8208	33.56	1313.853	1.062	0.063		1.29	1.24	NO	4.7
[redacted]	38 Total-hexafurans	373.8208	33.28	266526.859	1.062	12.692		1.22	1.24	NO	1009.8
[redacted]	38 Total-hexafurans	373.8208	33.07	108837.848	1.062	5.183		1.23	1.24	NO	439.9
[redacted]	7 123789-HxCDF	373.8208	37.01	21068.941	1.017	0.950	0.874	1.04	1.24	YES	80.6
[redacted]	5 234678-HxCDF	373.8208	35.91	19354.226	1.073	0.993	0.881	0.97	1.24	YES	67.9
[redacted]	38 Total-hexafurans	373.8208	35.86	11226.677	1.062	0.535		1.38	1.24	NO	59.3
[redacted]	38 Total-hexafurans	373.8208	35.32	2265.606	1.062	0.108		1.55	1.24	YES	9.0

R

HPF

[redacted]											
[redacted]	39 Total-heptafurans	407.7818	39.86	835382.313	1.231	50.433		1.01	1.05	NO	4344.1
[redacted]	39 Total-heptafurans	407.7818	39.57	8915.705	1.231	0.538		1.04	1.05	NO	43.5
[redacted]	8 1234678-HpCDF	407.7818	39.09	397968.094	1.238	21.679	21.679	1.01	1.05	NO	2226.1
[redacted]	9 1234789-HpCDF	407.7818	41.72	19564.707	1.224	1.323	1.323	0.98	1.05	NO	95.3
[redacted]	39 Total-heptafurans	407.7818	40.86	1299.308	1.231	0.078		0.69	1.05	YES	6.5

R

Quantify Totals Report MassLynx 4.1 SCN 714
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:47:39 Pacific Standard Time

ID: WC32B, Name: 13021308, Date: 13-Feb-2013, Time: 16:22:20, Conditions: AUTOSPEC01, User: pk

Furans,TF,PP,PF,HF,HPF,OF

[redacted]											
[redacted]	35 Total-tetrafurans	303.9016	24.32	26473.849	0.921	0.780		0.78	0.77	NO	123.2
[redacted]	35 Total-tetrafurans	303.9016	23.90	11138.603	0.921	0.328		0.76	0.77	NO	71.9
[redacted]	35 Total-tetrafurans	303.9016	23.76	7297.039	0.921	0.215		0.84	0.77	NO	51.1
[redacted]	35 Total-tetrafurans	303.9016	23.66	17355.568	0.921	0.512		0.81	0.77	NO	119.5
[redacted]	35 Total-tetrafurans	303.9016	23.49	8742.619	0.921	0.258		0.77	0.77	NO	57.0
[redacted]	35 Total-tetrafurans	303.9016	23.40	19580.684	0.921	0.577		0.78	0.77	NO	125.3
[redacted]	35 Total-tetrafurans	303.9016	23.31	18150.659	0.921	0.535		0.80	0.77	NO	83.3
[redacted]	35 Total-tetrafurans	303.9016	23.19	21945.758	0.921	0.647		0.60	0.77	YES	88.5
[redacted]	35 Total-tetrafurans	303.9016	23.02	46035.681	0.921	1.357		0.73	0.77	NO	271.4
[redacted]	35 Total-tetrafurans	303.9016	22.42	8840.012	0.921	0.261		0.95	0.77	YES	65.8
[redacted]	35 Total-tetrafurans	303.9016	22.16	10448.976	0.921	0.308		0.59	0.77	YES	64.0
[redacted]	40 Total-Furans	303.9016	21.39	268.587	1.065	0.007		0.92	0.77	YES	2.5
[redacted]	35 Total-tetrafurans	303.9016	27.12	13518.576	0.921	0.398		1.00	0.77	YES	56.4
[redacted]	35 Total-tetrafurans	303.9016	26.15	1169.264	0.921	0.034		0.61	0.77	YES	5.0
[redacted]	35 Total-tetrafurans	303.9016	25.87	25139.055	0.921	0.741		0.80	0.77	NO	148.9
[redacted]	35 Total-tetrafurans	303.9016	25.78	9165.932	0.921	0.270		0.71	0.77	NO	53.0
[redacted]	1 2378-TCDF	303.9016	25.64	87870.836	0.921	2.590	2.590	0.76	0.77	NO	560.8
[redacted]	35 Total-tetrafurans	303.9016	25.47	15554.570	0.921	0.458		0.76	0.77	NO	85.1
[redacted]	35 Total-tetrafurans	303.9016	25.41	7445.843	0.921	0.219		0.72	0.77	NO	71.4
[redacted]	35 Total-tetrafurans	303.9016	25.27	1764.514	0.921	0.052		0.74	0.77	NO	11.8
[redacted]	35 Total-tetrafurans	303.9016	25.15	8139.139	0.921	0.240		0.82	0.77	NO	47.0
[redacted]	35 Total-tetrafurans	303.9016	24.96	9770.441	0.921	0.288		0.67	0.77	NO	64.9
[redacted]	35 Total-tetrafurans	303.9016	24.73	48724.844	0.921	1.436		0.74	0.77	NO	301.2
[redacted]	35 Total-tetrafurans	303.9016	24.57	24196.518	0.921	0.713		0.71	0.77	NO	133.2
[redacted]	35 Total-tetrafurans	303.9016	24.40	20688.281	0.921	0.610		0.79	0.77	NO	121.7
[redacted]	37 Total-pentafurans	339.8597	28.83	973.131	0.927	0.040		1.50	1.55	NO	9.1
[redacted]	37 Total-pentafurans	339.8597	28.71	36417.542	0.927	1.502		1.57	1.55	NO	330.3
[redacted]	37 Total-pentafurans	339.8597	28.65	22181.190	0.927	0.915		1.53	1.55	NO	225.4
[redacted]	37 Total-pentafurans	339.8597	28.50	12460.158	0.927	0.514		1.73	1.55	NO	89.3
[redacted]	37 Total-pentafurans	339.8597	28.42	2873.436	0.927	0.119		1.32	1.55	NO	35.1
[redacted]	37 Total-pentafurans	339.8597	32.14	2634.874	0.927	0.109		2.53	1.55	YES	22.9
[redacted]	3 23478-PeCDF	339.8597	31.12	17848.259	0.943	0.739	0.739	1.54	1.55	NO	150.4
[redacted]	37 Total-pentafurans	339.8597	30.97	17490.760	0.927	0.722		1.42	1.55	NO	149.7
[redacted]	37 Total-pentafurans	339.8597	30.84	8171.949	0.927	0.337		1.38	1.55	NO	66.3
[redacted]	37 Total-pentafurans	339.8597	30.08	4096.997	0.927	0.169		1.59	1.55	NO	34.2
[redacted]	37 Total-pentafurans	339.8597	29.97	15114.472	0.927	0.624		1.53	1.55	NO	139.5
[redacted]	2 12378-PeCDF	339.8597	29.78	16641.430	0.912	0.685	0.685	1.43	1.55	NO	141.8
[redacted]	37 Total-pentafurans	339.8597	29.50	6216.668	0.927	0.256		1.51	1.55	NO	68.4
[redacted]	37 Total-pentafurans	339.8597	29.42	19717.166	0.927	0.813		1.46	1.55	NO	165.9
[redacted]	37 Total-pentafurans	339.8597	29.31	4225.174	0.927	0.174		1.65	1.55	NO	40.3
[redacted]	37 Total-pentafurans	339.8597	29.19	4845.457	0.927	0.200		1.31	1.55	YES	32.9
[redacted]	37 Total-pentafurans	339.8597	29.01	1494.649	0.927	0.062		1.42	1.55	NO	14.9
[redacted]	6 123678-HxCDF	373.8208	34.95	19989.403	1.056	0.947	0.947	1.14	1.24	NO	74.2
[redacted]	4 123478-HxCDF	373.8208	34.81	39542.912	1.101	1.877	1.877	1.17	1.24	NO	142.6
[redacted]	38 Total-hexafurans	373.8208	34.63	7811.058	1.062	0.372		1.28	1.24	NO	26.4
[redacted]	38 Total-hexafurans	373.8208	34.15	401824.953	1.062	19.135		1.19	1.24	NO	1566.9
[redacted]	38 Total-hexafurans	373.8208	33.84	5268.488	1.062	0.251		1.10	1.24	NO	18.1
[redacted]	38 Total-hexafurans	373.8208	33.56	1313.853	1.062	0.063		1.29	1.24	NO	4.7
[redacted]	38 Total-hexafurans	373.8208	33.28	266526.859	1.062	12.692		1.22	1.24	NO	1009.8

Quantify Totals Report MassLynx 4.1 SCN 714
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
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ID: WC32B, Name: 13021308, Date: 13-Feb-2013, Time: 16:22:20, Conditions: AUTOSPEC01, User: pk

Furans,TF,PP,PF,HF,HPF,OF

	38	Total-hexafurans	373.8208	33.07	108837.848	1.062	5.183		1.23	1.24	NO	439.9
	7	123789-HxCDF	373.8208	37.01	21068.941	1.017	0.950	0.874	1.04	1.24	YES	80.6
	5	234678-HxCDF	373.8208	35.91	19354.226	1.073	0.993	0.881	0.97	1.24	YES	67.9
	38	Total-hexafurans	373.8208	35.86	11226.677	1.062	0.535		1.38	1.24	NO	59.3
	38	Total-hexafurans	373.8208	35.32	2265.606	1.062	0.108		1.55	1.24	YES	9.0
	39	Total-heptafurans	407.7818	39.86	835382.313	1.231	50.433		1.01	1.05	NO	4344.1
	39	Total-heptafurans	407.7818	39.57	8915.705	1.231	0.538		1.04	1.05	NO	43.5
	8	1234678-HpCDF	407.7818	39.09	397968.094	1.238	21.679	21.679	1.01	1.05	NO	2226.1
	9	1234789-HpCDF	407.7818	41.72	19564.707	1.224	1.323	1.323	0.98	1.05	NO	95.3
	39	Total-heptafurans	407.7818	40.86	1299.308	1.231	0.078		0.69	1.05	YES	6.5
	10	OCDF	441.7428	46.87	508713.282	1.162	48.143	48.143	0.86	0.89	NO	2891.3
	36	Total-penta1	339.8597	27.06	189542.273		7.909		1.53	1.55	NO	1895.3

TD

	41	Total-tetradioxins	319.8965	25.48	245884.507	1.106	10.127		0.78	0.77	NO	1123.0
	41	Total-tetradioxins	319.8965	25.27	5550.903	1.106	0.229		0.79	0.77	NO	27.1
	41	Total-tetradioxins	319.8965	25.15	1489.627	1.106	0.061		0.74	0.77	NO	6.8
	41	Total-tetradioxins	319.8965	24.91	68911.173	1.106	2.838		0.74	0.77	NO	318.0
	41	Total-tetradioxins	319.8965	24.63	28470.571	1.106	1.173		0.78	0.77	NO	132.5
	41	Total-tetradioxins	319.8965	24.43	2175.057	1.106	0.090		0.63	0.77	YES	9.6
	41	Total-tetradioxins	319.8965	23.93	4346.237	1.106	0.179		0.87	0.77	NO	22.7
	41	Total-tetradioxins	319.8965	23.70	636330.532	1.106	26.208		0.79	0.77	NO	3117.9
	41	Total-tetradioxins	319.8965	23.45	1130785.907	1.106	46.572		0.77	0.77	NO	5288.3
	41	Total-tetradioxins	319.8965	26.85	2168.621	1.106	0.089		0.71	0.77	NO	7.6
	41	Total-tetradioxins	319.8965	26.42	6403.506	1.106	0.264		0.81	0.77	NO	29.6
	11	2378-TCDD	319.8965	26.29	5241.280	1.106	0.216	0.152	0.44	0.77	YES	19.6
	41	Total-tetradioxins	319.8965	25.91	61945.244	1.106	2.551		0.80	0.77	NO	225.0
	41	Total-tetradioxins	319.8965	25.61	3084.602	1.106	0.127		2.76	0.77	YES	20.0

fL

PD

	42	Total-pentadioxins	355.8546	29.96	26815.613	1.001	1.679		1.72	1.55	NO	98.1
	42	Total-pentadioxins	355.8546	29.79	500893.063	1.001	31.355		1.56	1.55	NO	2739.9
	42	Total-pentadioxins	355.8546	29.16	9110.617	1.001	0.570		1.65	1.55	NO	50.3
	42	Total-pentadioxins	355.8546	28.69	318850.946	1.001	19.959		1.56	1.55	NO	1067.3
	42	Total-pentadioxins	355.8546	31.78	3621.645	1.001	0.227		1.47	1.55	NO	20.3
	12	12378-PeCDD	355.8546	31.38	17464.208	1.001	1.093	1.093	1.74	1.55	NO	85.4
	42	Total-pentadioxins	355.8546	30.71	124534.055	1.001	7.796		1.60	1.55	NO	655.5
	42	Total-pentadioxins	355.8546	30.32	9787.353	1.001	0.613		1.55	1.55	NO	39.2
	42	Total-pentadioxins	355.8546	30.14	465024.485	1.001	29.110		1.56	1.55	NO	2496.7

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld

Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time

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ID: WC32B, Name: 13021308, Date: 13-Feb-2013, Time: 16:22:20, Conditions: AUTOSPEC01, User: pk

HD

[redacted]												
[redacted]	15	123789-HxCDD	389.8157	36.61	57941.461	0.904	3.877	3.877	1.22	1.24	NO	157.1
[redacted]	43	Total-hexadioxins	389.8157	36.35	11402.107	0.937	0.736		1.30	1.24	NO	27.4
[redacted]	14	123678-HxCDD	389.8157	36.19	140020.489	0.929	9.299	9.299	1.22	1.24	NO	361.7
[redacted]	13	123478-HxCDD	389.8157	36.06	38698.639	0.978	2.349	2.349	1.28	1.24	NO	102.8
[redacted]	43	Total-hexadioxins	389.8157	35.19	18655.596	0.937	1.205		1.27	1.24	NO	57.5
[redacted]	43	Total-hexadioxins	389.8157	35.08	322818.094	0.937	20.844		1.24	1.24	NO	587.1
[redacted]	43	Total-hexadioxins	389.8157	34.69	1604221.376	0.937	103.583		1.24	1.24	NO	4359.1
[redacted]	43	Total-hexadioxins	389.8157	33.87	197551.875	0.937	12.756		1.25	1.24	NO	561.1

HPD

[redacted]												
[redacted]	16	1234678-HpCDD	423.7766	40.87	2122459.438	1.029	152.462	152....	1.06	1.05	NO	3736.5
[redacted]	44	Total-heptadioxins	423.7766	39.63	2830627.875	1.029	203.332		1.04	1.05	NO	5237.6

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Dioxins,TD,PD,HD,HPD,OD

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	41	Total-tetradioxins	319.8965	25.48	245884.507	1.106	10.127		0.78	0.77	NO	1123.0
[redacted]	41	Total-tetradioxins	319.8965	25.27	5550.903	1.106	0.229		0.79	0.77	NO	27.1
[redacted]	41	Total-tetradioxins	319.8965	25.15	1489.627	1.106	0.061		0.74	0.77	NO	6.8
[redacted]	41	Total-tetradioxins	319.8965	24.91	68911.173	1.106	2.838		0.74	0.77	NO	318.0
[redacted]	41	Total-tetradioxins	319.8965	24.63	28470.571	1.106	1.173		0.78	0.77	NO	132.5
[redacted]	41	Total-tetradioxins	319.8965	24.43	2175.057	1.106	0.090		0.63	0.77	YES	9.6
[redacted]	41	Total-tetradioxins	319.8965	23.93	4346.237	1.106	0.179		0.87	0.77	NO	22.7
[redacted]	41	Total-tetradioxins	319.8965	23.70	636330.532	1.106	26.208		0.79	0.77	NO	3117.9
[redacted]	41	Total-tetradioxins	319.8965	23.45	1130785.907	1.106	46.572		0.77	0.77	NO	5288.3
[redacted]	41	Total-tetradioxins	319.8965	26.85	2168.621	1.106	0.089		0.71	0.77	NO	7.6
[redacted]	41	Total-tetradioxins	319.8965	26.42	6403.506	1.106	0.264		0.81	0.77	NO	29.6
[redacted]	11	2378-TCDD	319.8965	26.29	5241.280	1.106	0.216	0.152	0.44	0.77	YES	19.6
[redacted]	41	Total-tetradioxins	319.8965	25.91	61945.244	1.106	2.551		0.80	0.77	NO	225.0
[redacted]	41	Total-tetradioxins	319.8965	25.61	3084.602	1.106	0.127		2.76	0.77	YES	20.0
[redacted]	42	Total-pentadioxins	355.8546	29.96	26815.613	1.001	1.679		1.72	1.55	NO	98.1
[redacted]	42	Total-pentadioxins	355.8546	29.79	500893.063	1.001	31.355		1.56	1.55	NO	2739.9
[redacted]	42	Total-pentadioxins	355.8546	29.16	9110.617	1.001	0.570		1.65	1.55	NO	50.3
[redacted]	42	Total-pentadioxins	355.8546	28.69	318850.946	1.001	19.959		1.56	1.55	NO	1067.3
[redacted]	42	Total-pentadioxins	355.8546	31.78	3621.645	1.001	0.227		1.47	1.55	NO	20.3
[redacted]	12	12378-PeCDD	355.8546	31.38	17464.208	1.001	1.093	1.093	1.74	1.55	NO	85.4
[redacted]	42	Total-pentadioxins	355.8546	30.71	124534.055	1.001	7.796		1.60	1.55	NO	655.5
[redacted]	42	Total-pentadioxins	355.8546	30.32	9787.353	1.001	0.613		1.55	1.55	NO	39.2
[redacted]	42	Total-pentadioxins	355.8546	30.14	465024.485	1.001	29.110		1.56	1.55	NO	2496.7
[redacted]	15	123789-HxCDD	389.8157	36.61	57941.461	0.904	3.877	3.877	1.22	1.24	NO	157.1
[redacted]	43	Total-hexadioxins	389.8157	36.35	11402.107	0.937	0.736		1.30	1.24	NO	27.4
[redacted]	14	123678-HxCDD	389.8157	36.19	140020.489	0.929	9.299	9.299	1.22	1.24	NO	361.7
[redacted]	13	123478-HxCDD	389.8157	36.06	38698.639	0.978	2.349	2.349	1.28	1.24	NO	102.8
[redacted]	43	Total-hexadioxins	389.8157	35.19	18655.596	0.937	1.205		1.27	1.24	NO	57.5
[redacted]	43	Total-hexadioxins	389.8157	35.08	322818.094	0.937	20.844		1.24	1.24	NO	587.1
[redacted]	43	Total-hexadioxins	389.8157	34.69	1604221.376	0.937	103.583		1.24	1.24	NO	4359.1
[redacted]	43	Total-hexadioxins	389.8157	33.87	197551.875	0.937	12.756		1.25	1.24	NO	561.1
[redacted]	17	OCDD	457.7377	46.60	10273927....	1.011	1117.2...	1117...	0.89	0.89	NO	18020.7
[redacted]	16	1234678-HpCDD	423.7766	40.87	2122459.438	1.029	152.462	152....	1.06	1.05	NO	3736.5
[redacted]	44	Total-heptadioxins	423.7766	39.63	2830627.875	1.029	203.332		1.04	1.05	NO	5237.6

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:47:39 Pacific Standard Time

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TotalTEQ,Furans,Dioxins

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	35 Total-tetrafurans	303.9016	24.32	26473.849	0.921	0.780		0.78	0.77	NO	123.2
[redacted]	35 Total-tetrafurans	303.9016	23.90	11138.603	0.921	0.328		0.76	0.77	NO	71.9
[redacted]	35 Total-tetrafurans	303.9016	23.76	7297.039	0.921	0.215		0.84	0.77	NO	51.1
[redacted]	35 Total-tetrafurans	303.9016	23.66	17355.568	0.921	0.512		0.81	0.77	NO	119.5
[redacted]	35 Total-tetrafurans	303.9016	23.49	8742.619	0.921	0.258		0.77	0.77	NO	57.0
[redacted]	35 Total-tetrafurans	303.9016	23.40	19580.684	0.921	0.577		0.78	0.77	NO	125.3
[redacted]	35 Total-tetrafurans	303.9016	23.31	18150.659	0.921	0.535		0.80	0.77	NO	83.3
[redacted]	35 Total-tetrafurans	303.9016	23.19	21945.758	0.921	0.647		0.60	0.77	YES	88.5
[redacted]	35 Total-tetrafurans	303.9016	23.02	46035.681	0.921	1.357		0.73	0.77	NO	271.4
[redacted]	35 Total-tetrafurans	303.9016	22.42	8840.012	0.921	0.261		0.95	0.77	YES	65.8
[redacted]	35 Total-tetrafurans	303.9016	22.16	10448.976	0.921	0.308		0.59	0.77	YES	64.0
[redacted]	40 Total-Furans	303.9016	21.39	268.587	1.065	0.007		0.92	0.77	YES	2.5
[redacted]	35 Total-tetrafurans	303.9016	27.12	13518.576	0.921	0.398		1.00	0.77	YES	56.4
[redacted]	35 Total-tetrafurans	303.9016	26.15	1169.264	0.921	0.034		0.61	0.77	YES	5.0
[redacted]	35 Total-tetrafurans	303.9016	25.87	25139.055	0.921	0.741		0.80	0.77	NO	148.9
[redacted]	35 Total-tetrafurans	303.9016	25.78	9165.932	0.921	0.270		0.71	0.77	NO	53.0
[redacted]	1 2378-TCDF	303.9016	25.64	87870.836	0.921	2.590	2.590	0.76	0.77	NO	560.8
[redacted]	35 Total-tetrafurans	303.9016	25.47	15554.570	0.921	0.458		0.76	0.77	NO	85.1
[redacted]	35 Total-tetrafurans	303.9016	25.41	7445.843	0.921	0.219		0.72	0.77	NO	71.4
[redacted]	35 Total-tetrafurans	303.9016	25.27	1764.514	0.921	0.052		0.74	0.77	NO	11.8
[redacted]	35 Total-tetrafurans	303.9016	25.15	8139.139	0.921	0.240		0.82	0.77	NO	47.0
[redacted]	35 Total-tetrafurans	303.9016	24.96	9770.441	0.921	0.288		0.67	0.77	NO	64.9
[redacted]	35 Total-tetrafurans	303.9016	24.73	48724.844	0.921	1.436		0.74	0.77	NO	301.2
[redacted]	35 Total-tetrafurans	303.9016	24.57	24196.518	0.921	0.713		0.71	0.77	NO	133.2
[redacted]	35 Total-tetrafurans	303.9016	24.40	20688.281	0.921	0.610		0.79	0.77	NO	121.7
[redacted]	37 Total-pentafurans	339.8597	28.83	973.131	0.927	0.040		1.50	1.55	NO	9.1
[redacted]	37 Total-pentafurans	339.8597	28.71	36417.542	0.927	1.502		1.57	1.55	NO	330.3
[redacted]	37 Total-pentafurans	339.8597	28.65	22181.190	0.927	0.915		1.53	1.55	NO	225.4
[redacted]	37 Total-pentafurans	339.8597	28.50	12460.158	0.927	0.514		1.73	1.55	NO	89.3
[redacted]	37 Total-pentafurans	339.8597	28.42	2873.436	0.927	0.119		1.32	1.55	NO	35.1
[redacted]	37 Total-pentafurans	339.8597	32.14	2634.874	0.927	0.109		2.53	1.55	YES	22.9
[redacted]	3 23478-PeCDF	339.8597	31.12	17848.259	0.943	0.739	0.739	1.54	1.55	NO	150.4
[redacted]	37 Total-pentafurans	339.8597	30.97	17490.760	0.927	0.722		1.42	1.55	NO	149.7
[redacted]	37 Total-pentafurans	339.8597	30.84	8171.949	0.927	0.337		1.38	1.55	NO	66.3
[redacted]	37 Total-pentafurans	339.8597	30.08	4096.997	0.927	0.169		1.59	1.55	NO	34.2
[redacted]	37 Total-pentafurans	339.8597	29.97	15114.472	0.927	0.624		1.53	1.55	NO	139.5
[redacted]	2 12378-PeCDF	339.8597	29.78	16641.430	0.912	0.685	0.685	1.43	1.55	NO	141.8
[redacted]	37 Total-pentafurans	339.8597	29.50	6216.668	0.927	0.256		1.51	1.55	NO	68.4
[redacted]	37 Total-pentafurans	339.8597	29.42	19717.166	0.927	0.813		1.46	1.55	NO	165.9
[redacted]	37 Total-pentafurans	339.8597	29.31	4225.174	0.927	0.174		1.65	1.55	NO	40.3
[redacted]	37 Total-pentafurans	339.8597	29.19	4845.457	0.927	0.200		1.31	1.55	YES	32.9
[redacted]	37 Total-pentafurans	339.8597	29.01	1494.649	0.927	0.062		1.42	1.55	NO	14.9
[redacted]	6 123678-HxCDF	373.8208	34.95	19989.403	1.056	0.947	0.947	1.14	1.24	NO	74.2
[redacted]	4 123478-HxCDF	373.8208	34.81	39542.912	1.101	1.877	1.877	1.17	1.24	NO	142.6
[redacted]	38 Total-hexafurans	373.8208	34.63	7811.058	1.062	0.372		1.28	1.24	NO	26.4
[redacted]	38 Total-hexafurans	373.8208	34.15	401824.953	1.062	19.135		1.19	1.24	NO	1566.9
[redacted]	38 Total-hexafurans	373.8208	33.84	5268.488	1.062	0.251		1.10	1.24	NO	18.1
[redacted]	38 Total-hexafurans	373.8208	33.56	1313.853	1.062	0.063		1.29	1.24	NO	4.7
[redacted]	38 Total-hexafurans	373.8208	33.28	266526.859	1.062	12.692		1.22	1.24	NO	1009.8

WC32 01452

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TotalTEQ,Furans,Dioxins

[redacted]												
[redacted]	38	Total-hexafurans	373.8208	33.07	108837.848	1.062	5.183		1.23	1.24	NO	439.9
[redacted]	7	123789-HxCDF	373.8208	37.01	21068.941	1.017	0.950	0.874	1.04	1.24	YES	80.6
[redacted]	5	234678-HxCDF	373.8208	35.91	19354.226	1.073	0.993	0.881	0.97	1.24	YES	67.9
[redacted]	38	Total-hexafurans	373.8208	35.86	11226.677	1.062	0.535		1.38	1.24	NO	59.3
[redacted]	38	Total-hexafurans	373.8208	35.32	2265.606	1.062	0.108		1.55	1.24	YES	9.0
[redacted]	39	Total-heptafurans	407.7818	39.86	835382.313	1.231	50.433		1.01	1.05	NO	4344.1
[redacted]	39	Total-heptafurans	407.7818	39.57	8915.705	1.231	0.538		1.04	1.05	NO	43.5
[redacted]	8	1234678-HpCDF	407.7818	39.09	397968.094	1.238	21.679	21.679	1.01	1.05	NO	2226.1
[redacted]	9	1234789-HpCDF	407.7818	41.72	19564.707	1.224	1.323	1.323	0.98	1.05	NO	95.3
[redacted]	39	Total-heptafurans	407.7818	40.86	1299.308	1.231	0.078		0.69	1.05	YES	6.5
[redacted]	10	OCDF	441.7428	46.87	508713.282	1.162	48.143	48.143	0.86	0.89	NO	2891.3
[redacted]	36	Total-penta1	339.8597	27.06	189542.273		7.909		1.53	1.55	NO	1895.3
[redacted]	41	Total-tetradioxins	319.8965	25.48	245884.507	1.106	10.127		0.78	0.77	NO	1123.0
[redacted]	41	Total-tetradioxins	319.8965	25.27	5550.903	1.106	0.229		0.79	0.77	NO	27.1
[redacted]	41	Total-tetradioxins	319.8965	25.15	1489.627	1.106	0.061		0.74	0.77	NO	6.8
[redacted]	41	Total-tetradioxins	319.8965	24.91	68911.173	1.106	2.838		0.74	0.77	NO	318.0
[redacted]	41	Total-tetradioxins	319.8965	24.63	28470.571	1.106	1.173		0.78	0.77	NO	132.5
[redacted]	41	Total-tetradioxins	319.8965	24.43	2175.057	1.106	0.090		0.63	0.77	YES	9.6
[redacted]	41	Total-tetradioxins	319.8965	23.93	4346.237	1.106	0.179		0.87	0.77	NO	22.7
[redacted]	41	Total-tetradioxins	319.8965	23.70	636330.532	1.106	26.208		0.79	0.77	NO	3117.9
[redacted]	41	Total-tetradioxins	319.8965	23.45	1130785.907	1.106	46.572		0.77	0.77	NO	5288.3
[redacted]	41	Total-tetradioxins	319.8965	26.85	2168.621	1.106	0.089		0.71	0.77	NO	7.6
[redacted]	41	Total-tetradioxins	319.8965	26.42	6403.506	1.106	0.264		0.81	0.77	NO	29.6
[redacted]	11	2378-TCDD	319.8965	26.29	5241.280	1.106	0.216	0.152	0.44	0.77	YES	19.6
[redacted]	41	Total-tetradioxins	319.8965	25.91	61945.244	1.106	2.551		0.80	0.77	NO	225.0
[redacted]	41	Total-tetradioxins	319.8965	25.61	3084.602	1.106	0.127		2.76	0.77	YES	20.0
[redacted]	42	Total-pentadioxins	355.8546	29.96	26815.613	1.001	1.679		1.72	1.55	NO	98.1
[redacted]	42	Total-pentadioxins	355.8546	29.79	500893.063	1.001	31.355		1.56	1.55	NO	2739.9
[redacted]	42	Total-pentadioxins	355.8546	29.16	9110.617	1.001	0.570		1.65	1.55	NO	50.3
[redacted]	42	Total-pentadioxins	355.8546	28.69	318850.946	1.001	19.959		1.56	1.55	NO	1067.3
[redacted]	42	Total-pentadioxins	355.8546	31.78	3621.645	1.001	0.227		1.47	1.55	NO	20.3
[redacted]	12	12378-PeCDD	355.8546	31.38	17464.208	1.001	1.093	1.093	1.74	1.55	NO	85.4
[redacted]	42	Total-pentadioxins	355.8546	30.71	124534.055	1.001	7.796		1.60	1.55	NO	655.5
[redacted]	42	Total-pentadioxins	355.8546	30.32	9787.353	1.001	0.613		1.55	1.55	NO	39.2
[redacted]	42	Total-pentadioxins	355.8546	30.14	465024.485	1.001	29.110		1.56	1.55	NO	2496.7
[redacted]	15	123789-HxCDD	389.8157	36.61	57941.461	0.904	3.877	3.877	1.22	1.24	NO	157.1
[redacted]	43	Total-hexadioxins	389.8157	36.35	11402.107	0.937	0.736		1.30	1.24	NO	27.4
[redacted]	14	123678-HxCDD	389.8157	36.19	140020.489	0.929	9.299	9.299	1.22	1.24	NO	361.7
[redacted]	13	123478-HxCDD	389.8157	36.06	38698.639	0.978	2.349	2.349	1.28	1.24	NO	102.8
[redacted]	43	Total-hexadioxins	389.8157	35.19	18655.596	0.937	1.205		1.27	1.24	NO	57.5
[redacted]	43	Total-hexadioxins	389.8157	35.08	322818.094	0.937	20.844		1.24	1.24	NO	587.1
[redacted]	43	Total-hexadioxins	389.8157	34.69	1604221.376	0.937	103.583		1.24	1.24	NO	4359.1
[redacted]	43	Total-hexadioxins	389.8157	33.87	197551.875	0.937	12.756		1.25	1.24	NO	561.1
[redacted]	17	OCDD	457.7377	46.60	10273927....	1.011	1117.2...	1117...	0.89	0.89	NO	18020.7
[redacted]	16	1234678-HpCDD	423.7766	40.87	2122459.438	1.029	152.462	152....	1.06	1.05	NO	3736.5
[redacted]	44	Total-heptadioxins	423.7766	39.63	2830627.875	1.029	203.332		1.04	1.05	NO	5237.6

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PFK1

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	48	FUNCTION1 PFK	330.9792	27.54	0.000							2.0
[redacted]	48	FUNCTION1 PFK	330.9792	25.67	0.000							11.1
[redacted]	48	FUNCTION1 PFK	330.9792	25.38	0.000							9.6
[redacted]	48	FUNCTION1 PFK	330.9792	25.15	0.000							2.7
[redacted]	48	FUNCTION1 PFK	330.9792	24.29	0.000							4.9
[redacted]	48	FUNCTION1 PFK	330.9792	23.09	0.000							9.1
[redacted]	48	FUNCTION1 PFK	330.9792	22.94	0.000							4.0

PFK2

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	49	FUNCTION2 PFK	366.9792	27.94	0.000		0.000					2.6
[redacted]	49	FUNCTION2 PFK	366.9792	30.67	0.000		0.000					0.8
[redacted]	49	FUNCTION2 PFK	366.9792	30.44	0.000		0.000					3.1
[redacted]	49	FUNCTION2 PFK	366.9792	30.08	0.000		0.000					0.9
[redacted]	49	FUNCTION2 PFK	366.9792	29.94	0.000		0.000					0.4
[redacted]	49	FUNCTION2 PFK	366.9792	29.75	0.000		0.000					1.2
[redacted]	49	FUNCTION2 PFK	366.9792	29.55	0.000		0.000					1.1
[redacted]	49	FUNCTION2 PFK	366.9792	29.50	0.000		0.000					2.0
[redacted]	49	FUNCTION2 PFK	366.9792	29.28	0.000		0.000					10.7
[redacted]	49	FUNCTION2 PFK	366.9792	29.19	0.000		0.000					12.2
[redacted]	49	FUNCTION2 PFK	366.9792	28.78	0.000		0.000					1.8
[redacted]	49	FUNCTION2 PFK	366.9792	28.70	0.000		0.000					1.0
[redacted]	49	FUNCTION2 PFK	366.9792	28.67	0.000		0.000					1.2
[redacted]	49	FUNCTION2 PFK	366.9792	28.61	0.000		0.000					0.5
[redacted]	49	FUNCTION2 PFK	366.9792	28.46	0.000		0.000					1.0
[redacted]	49	FUNCTION2 PFK	366.9792	28.25	0.000		0.000					1.0
[redacted]	49	FUNCTION2 PFK	366.9792	28.12	0.000		0.000					1.1
[redacted]	49	FUNCTION2 PFK	366.9792	32.50	0.000		0.000					2.4
[redacted]	49	FUNCTION2 PFK	366.9792	32.31	0.000		0.000					5.6
[redacted]	49	FUNCTION2 PFK	366.9792	32.26	0.000		0.000					4.6
[redacted]	49	FUNCTION2 PFK	366.9792	32.19	0.000		0.000					1.1
[redacted]	49	FUNCTION2 PFK	366.9792	32.03	0.000		0.000					1.0
[redacted]	49	FUNCTION2 PFK	366.9792	31.42	0.000		0.000					0.5
[redacted]	49	FUNCTION2 PFK	366.9792	31.39	0.000		0.000					1.5
[redacted]	49	FUNCTION2 PFK	366.9792	31.19	0.000		0.000					1.7
[redacted]	49	FUNCTION2 PFK	366.9792	31.08	0.000		0.000					0.9
[redacted]	49	FUNCTION2 PFK	366.9792	30.95	0.000		0.000					0.7
[redacted]	49	FUNCTION2 PFK	366.9792	30.72	0.000		0.000					1.0

PFK3

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	50	FUNCTION3 PFK	380.9760	36.91	0.000		0.000					30.9
[redacted]	50	FUNCTION3 PFK	380.9760	33.70	0.000		0.000					9.5
[redacted]	50	FUNCTION3 PFK	380.9760	33.05	0.000		0.000					8.8
[redacted]	50	FUNCTION3 PFK	380.9760	32.98	0.000		0.000					5.4
[redacted]	50	FUNCTION3 PFK	380.9760	37.02	0.000		0.000					26.2

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PFK4

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	51	FUNCTION4 PFK	430.9728	42.67	0.000	1.3
[redacted]	51	FUNCTION4 PFK	430.9728	41.84	0.000	1.8
[redacted]	51	FUNCTION4 PFK	430.9728	41.78	0.000	1.5
[redacted]	51	FUNCTION4 PFK	430.9728	41.60	0.000	1.5
[redacted]	51	FUNCTION4 PFK	430.9728	41.40	0.000	1.8
[redacted]	51	FUNCTION4 PFK	430.9728	41.37	0.000	2.2
[redacted]	51	FUNCTION4 PFK	430.9728	40.83	0.000	1.0
[redacted]	51	FUNCTION4 PFK	430.9728	40.35	0.000	2.3
[redacted]	51	FUNCTION4 PFK	430.9728	40.29	0.000	1.1
[redacted]	51	FUNCTION4 PFK	430.9728	40.00	0.000	1.3
[redacted]	51	FUNCTION4 PFK	430.9728	39.74	0.000	1.0
[redacted]	51	FUNCTION4 PFK	430.9728	39.60	0.000	3.1
[redacted]	51	FUNCTION4 PFK	430.9728	39.18	0.000	1.0
[redacted]	51	FUNCTION4 PFK	430.9728	38.48	0.000	1.3
[redacted]	51	FUNCTION4 PFK	430.9728	43.83	0.000	0.9
[redacted]	51	FUNCTION4 PFK	430.9728	43.53	0.000	1.1
[redacted]	51	FUNCTION4 PFK	430.9728	43.42	0.000	0.5
[redacted]	51	FUNCTION4 PFK	430.9728	43.26	0.000	0.5
[redacted]	51	FUNCTION4 PFK	430.9728	43.11	0.000	1.5

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:47:39 Pacific Standard Time

ID: WC32B, Name: 13021308, Date: 13-Feb-2013, Time: 16:22:20, Conditions: AUTOSPEC01, User: pk

PFK5

[redacted]					
[redacted]	52 FUNCTION5 PFK	480.9696	45.34	0.000	1.5
[redacted]	52 FUNCTION5 PFK	480.9696	45.22	0.000	1.2
[redacted]	52 FUNCTION5 PFK	480.9696	44.88	0.000	0.5
[redacted]	52 FUNCTION5 PFK	480.9696	44.84	0.000	1.9
[redacted]	52 FUNCTION5 PFK	480.9696	44.78	0.000	1.5
[redacted]	52 FUNCTION5 PFK	480.9696	44.75	0.000	2.3
[redacted]	52 FUNCTION5 PFK	480.9696	44.71	0.000	2.9
[redacted]	52 FUNCTION5 PFK	480.9696	44.66	0.000	2.0
[redacted]	52 FUNCTION5 PFK	480.9696	44.61	0.000	2.8
[redacted]	52 FUNCTION5 PFK	480.9696	44.59	0.000	2.3
[redacted]	52 FUNCTION5 PFK	480.9696	47.25	0.000	0.8
[redacted]	52 FUNCTION5 PFK	480.9696	47.13	0.000	1.1
[redacted]	52 FUNCTION5 PFK	480.9696	47.10	0.000	1.2
[redacted]	52 FUNCTION5 PFK	480.9696	47.06	0.000	1.8
[redacted]	52 FUNCTION5 PFK	480.9696	46.94	0.000	4.3
[redacted]	52 FUNCTION5 PFK	480.9696	46.35	0.000	2.1
[redacted]	52 FUNCTION5 PFK	480.9696	46.17	0.000	2.4
[redacted]	52 FUNCTION5 PFK	480.9696	46.02	0.000	0.8
[redacted]	52 FUNCTION5 PFK	480.9696	45.93	0.000	1.6
[redacted]	52 FUNCTION5 PFK	480.9696	45.86	0.000	2.4
[redacted]	52 FUNCTION5 PFK	480.9696	45.79	0.000	1.5
[redacted]	52 FUNCTION5 PFK	480.9696	45.74	0.000	2.0
[redacted]	52 FUNCTION5 PFK	480.9696	45.71	0.000	2.2
[redacted]	52 FUNCTION5 PFK	480.9696	45.61	0.000	1.5
[redacted]	52 FUNCTION5 PFK	480.9696	45.58	0.000	1.2
[redacted]	52 FUNCTION5 PFK	480.9696	45.56	0.000	1.2
[redacted]	52 FUNCTION5 PFK	480.9696	49.32	0.000	0.9
[redacted]	52 FUNCTION5 PFK	480.9696	49.22	0.000	0.7
[redacted]	52 FUNCTION5 PFK	480.9696	49.18	0.000	0.7
[redacted]	52 FUNCTION5 PFK	480.9696	48.95	0.000	0.6
[redacted]	52 FUNCTION5 PFK	480.9696	48.91	0.000	0.8
[redacted]	52 FUNCTION5 PFK	480.9696	48.83	0.000	1.6
[redacted]	52 FUNCTION5 PFK	480.9696	48.71	0.000	0.5
[redacted]	52 FUNCTION5 PFK	480.9696	48.37	0.000	0.7
[redacted]	52 FUNCTION5 PFK	480.9696	48.28	0.000	1.1
[redacted]	52 FUNCTION5 PFK	480.9696	48.19	0.000	1.9
[redacted]	52 FUNCTION5 PFK	480.9696	48.13	0.000	3.4
[redacted]	52 FUNCTION5 PFK	480.9696	48.10	0.000	3.5
[redacted]	52 FUNCTION5 PFK	480.9696	47.97	0.000	1.0
[redacted]	52 FUNCTION5 PFK	480.9696	47.94	0.000	1.4
[redacted]	52 FUNCTION5 PFK	480.9696	47.84	0.000	1.0
[redacted]	52 FUNCTION5 PFK	480.9696	47.72	0.000	1.4
[redacted]	52 FUNCTION5 PFK	480.9696	49.41	0.000	0.9

Quantify Totals Report MassLynx 4.1 SCN 714
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:47:39 Pacific Standard Time

ID: WC32B, Name: 13021308, Date: 13-Feb-2013, Time: 16:22:20, Conditions: AUTOSPEC01, User: pk

ETHERS1

[redacted]												
[redacted]	53	FUNCTION1 HXCD...	375.8364	27.65	0.000		0.000					2.8
[redacted]	53	FUNCTION1 HXCD...	375.8364	27.00	0.000		0.000					3.7
[redacted]	53	FUNCTION1 HXCD...	375.8364	25.72	0.000		0.000					119.8
[redacted]	53	FUNCTION1 HXCD...	375.8364	25.44	0.000		0.000					28.2
[redacted]	53	FUNCTION1 HXCD...	375.8364	25.24	0.000		0.000					3.9

ETHERS2

[redacted]												
[redacted]	54	FUNCTION1 HPCD...	409.7974	24.05	0.000		0.000					1.4
[redacted]	54	FUNCTION1 HPCD...	409.7974	23.82	0.000		0.000					1.2
[redacted]	54	FUNCTION1 HPCD...	409.7974	23.33	0.000		0.000					1.7
[redacted]	54	FUNCTION1 HPCD...	409.7974	22.58	0.000		0.000					1.4
[redacted]	54	FUNCTION1 HPCD...	409.7974	22.39	0.000		0.000					1.8
[redacted]	54	FUNCTION1 HPCD...	409.7974	22.10	0.000		0.000					1.5
[redacted]	54	FUNCTION1 HPCD...	409.7974	21.79	0.000		0.000					1.2
[redacted]	54	FUNCTION1 HPCD...	409.7974	21.19	0.000		0.000					3.9
[redacted]	54	FUNCTION1 HPCD...	409.7974	25.61	0.000		0.000					2.1
[redacted]	54	FUNCTION1 HPCD...	409.7974	25.00	0.000		0.000					2.0

ETHERS3

[redacted]												
[redacted]	55	FUNCTION2 HPCD...	409.7974	32.27	0.000		0.000					1.6
[redacted]	55	FUNCTION2 HPCD...	409.7974	32.06	0.000		0.000					2.3
[redacted]	55	FUNCTION2 HPCD...	409.7974	31.76	0.000		0.000					3.8
[redacted]	55	FUNCTION2 HPCD...	409.7974	31.21	0.000		0.000					6.2
[redacted]	55	FUNCTION2 HPCD...	409.7974	30.98	0.000		0.000					3.4
[redacted]	55	FUNCTION2 HPCD...	409.7974	30.67	0.000		0.000					2.3
[redacted]	55	FUNCTION2 HPCD...	409.7974	29.74	0.000		0.000					22.8
[redacted]	55	FUNCTION2 HPCD...	409.7974	29.42	0.000		0.000					28.3
[redacted]	55	FUNCTION2 HPCD...	409.7974	28.55	0.000		0.000					2.1

ID: WC32B, Name: 13021308, Date: 13-Feb-2013, Time: 16:22:20, Conditions: AUTOSPEC01, User: pk

ETHERS4

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	56	FUNCTION3 OCDPE	445.7555	34.55	0.000		0.000					9.5
[redacted]	56	FUNCTION3 OCDPE	445.7555	34.48	0.000		0.000					10.1
[redacted]	56	FUNCTION3 OCDPE	445.7555	34.28	0.000		0.000					1.8
[redacted]	56	FUNCTION3 OCDPE	445.7555	37.22	0.000		0.000					11.7
[redacted]	56	FUNCTION3 OCDPE	445.7555	37.00	0.000		0.000					5.9
[redacted]	56	FUNCTION3 OCDPE	445.7555	36.89	0.000		0.000					15.1
[redacted]	56	FUNCTION3 OCDPE	445.7555	36.65	0.000		0.000					10.6
[redacted]	56	FUNCTION3 OCDPE	445.7555	36.45	0.000		0.000					15.7
[redacted]	56	FUNCTION3 OCDPE	445.7555	36.36	0.000		0.000					20.1
[redacted]	56	FUNCTION3 OCDPE	445.7555	36.25	0.000		0.000					22.7
[redacted]	56	FUNCTION3 OCDPE	445.7555	36.06	0.000		0.000					7.8
[redacted]	56	FUNCTION3 OCDPE	445.7555	36.00	0.000		0.000					14.9
[redacted]	56	FUNCTION3 OCDPE	445.7555	35.98	0.000		0.000					15.2
[redacted]	56	FUNCTION3 OCDPE	445.7555	35.92	0.000		0.000					13.3
[redacted]	56	FUNCTION3 OCDPE	445.7555	35.89	0.000		0.000					14.4
[redacted]	56	FUNCTION3 OCDPE	445.7555	35.65	0.000		0.000					2.2
[redacted]	56	FUNCTION3 OCDPE	445.7555	34.80	0.000		0.000					11.3
[redacted]	56	FUNCTION3 OCDPE	445.7555	34.74	0.000		0.000					12.1
[redacted]	56	FUNCTION3 OCDPE	445.7555	34.59	0.000		0.000					6.7

ETHERS5

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	57	FUNCTION4 NCDPE	479.7165	43.32	0.000		0.000					2.3
[redacted]	57	FUNCTION4 NCDPE	479.7165	41.23	0.000		0.000					6.2
[redacted]	57	FUNCTION4 NCDPE	479.7165	41.20	0.000		0.000					6.9
[redacted]	57	FUNCTION4 NCDPE	479.7165	41.06	0.000		0.000					8.9
[redacted]	57	FUNCTION4 NCDPE	479.7165	40.85	0.000		0.000					84.9
[redacted]	57	FUNCTION4 NCDPE	479.7165	40.63	0.000		0.000					29.8
[redacted]	57	FUNCTION4 NCDPE	479.7165	40.49	0.000		0.000					26.0
[redacted]	57	FUNCTION4 NCDPE	479.7165	39.65	0.000		0.000					4.6
[redacted]	57	FUNCTION4 NCDPE	479.7165	39.50	0.000		0.000					3.5
[redacted]	57	FUNCTION4 NCDPE	479.7165	39.45	0.000		0.000					3.6
[redacted]	57	FUNCTION4 NCDPE	479.7165	38.69	0.000		0.000					621.0

ID: WC32B, Name: 13021308, Date: 13-Feb-2013, Time: 16:22:20, Conditions: AUTOSPEC01, User: pk

ETHERS6

[redacted]						
[redacted]	58 FUNCTION5 DCDPE	513.6775	47.21	0.000	0.000	5.7
[redacted]	58 FUNCTION5 DCDPE	513.6775	46.82	0.000	0.000	13.8
[redacted]	58 FUNCTION5 DCDPE	513.6775	46.77	0.000	0.000	15.4
[redacted]	58 FUNCTION5 DCDPE	513.6775	49.25	0.000	0.000	3.7
[redacted]	58 FUNCTION5 DCDPE	513.6775	49.18	0.000	0.000	4.5
[redacted]	58 FUNCTION5 DCDPE	513.6775	49.11	0.000	0.000	10.5
[redacted]	58 FUNCTION5 DCDPE	513.6775	49.05	0.000	0.000	16.0
[redacted]	58 FUNCTION5 DCDPE	513.6775	49.01	0.000	0.000	7.2
[redacted]	58 FUNCTION5 DCDPE	513.6775	48.94	0.000	0.000	5.3
[redacted]	58 FUNCTION5 DCDPE	513.6775	48.88	0.000	0.000	7.1
[redacted]	58 FUNCTION5 DCDPE	513.6775	48.83	0.000	0.000	3.1
[redacted]	58 FUNCTION5 DCDPE	513.6775	47.30	0.000	0.000	10.7
[redacted]	58 FUNCTION5 DCDPE	513.6775	47.27	0.000	0.000	11.6
[redacted]	58 FUNCTION5 DCDPE	513.6775	47.23	0.000	0.000	10.9

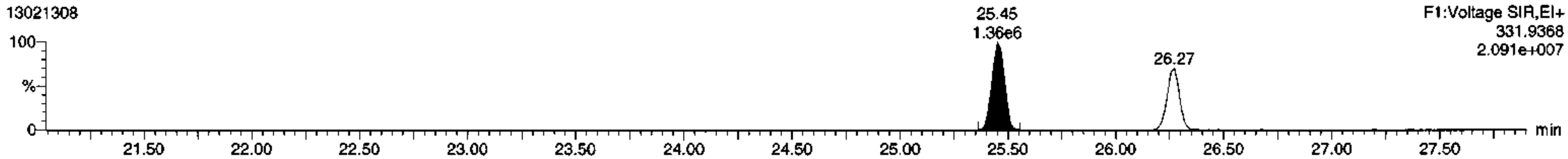
Quantify Sample Report **MassLynx 4.1 SCN 714**

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:47:39 Pacific Standard Time

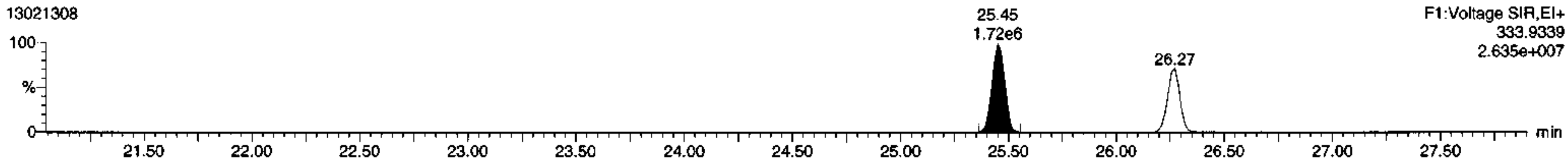
Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 12 Feb 2013 12:25:57
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: WC32B, Name: 13021308, Date: 13-Feb-2013, Time: 16:22:20, Conditions: AUTOSPEC01, User: pk

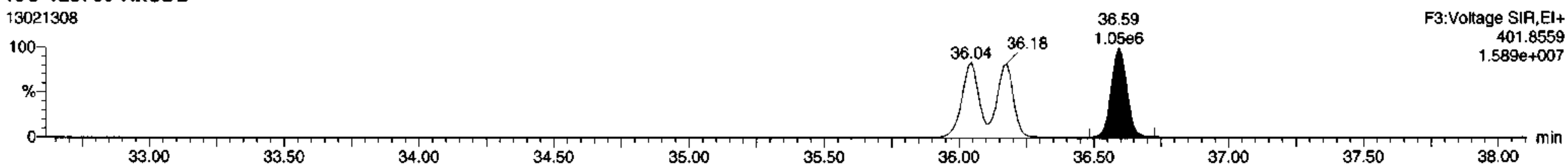
13C-1234-TCDD



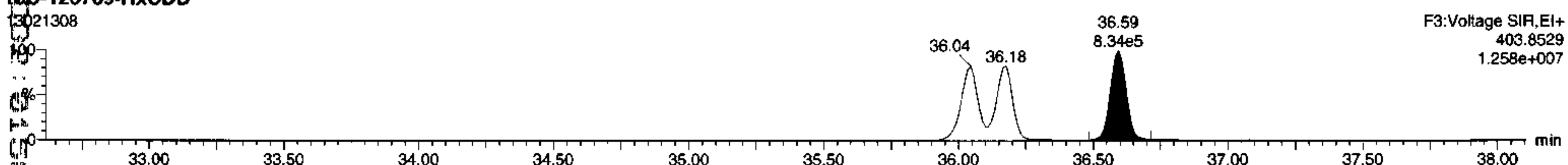
13C-1234-TCDD



13C-123789-HxCDD



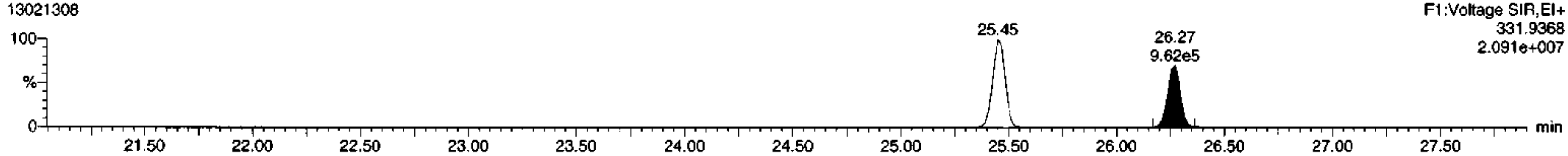
13C-123789-HxCDD



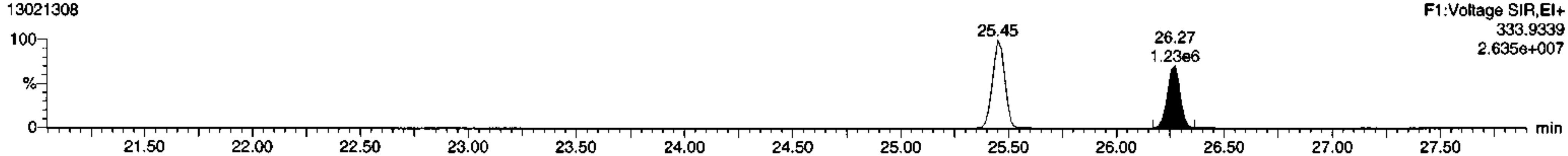
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:47:39 Pacific Standard Time

ID: WC32B, Name: 13021308, Date: 13-Feb-2013, Time: 16:22:20, Conditions: AUTOSPEC01, User: pk

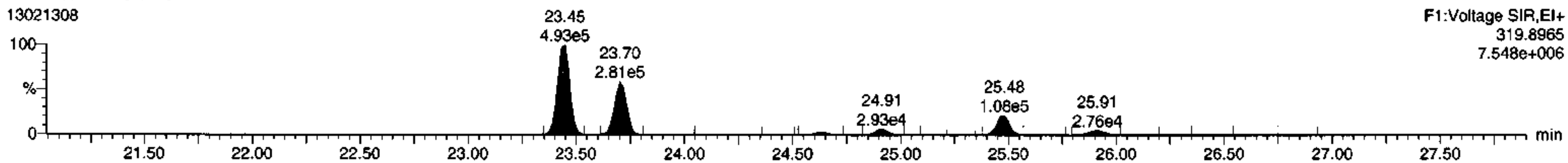
13C-2378-TCDD
13021308



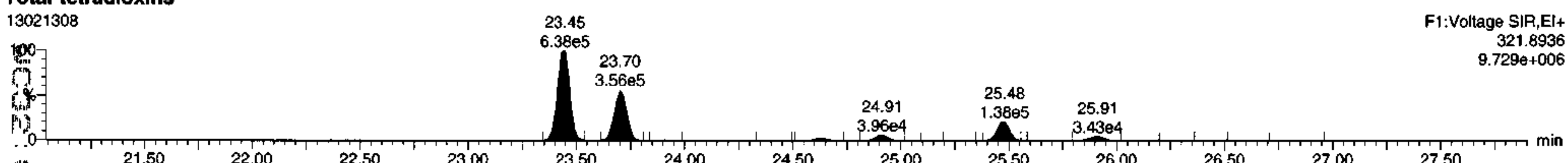
13C-2378-TCDD
13021308



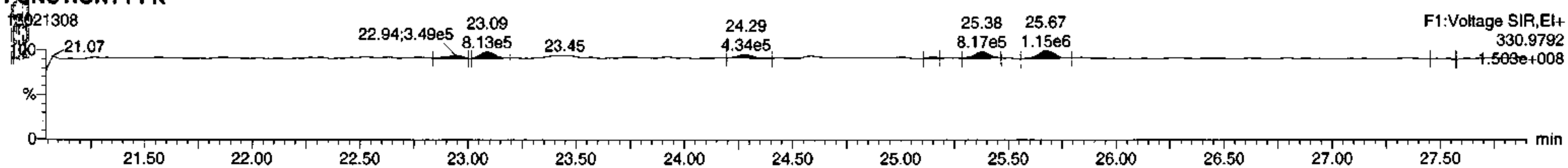
Total-tetradioxins
13021308



Total-tetradioxins
13021308



FUNCTION1 PFK
13021308



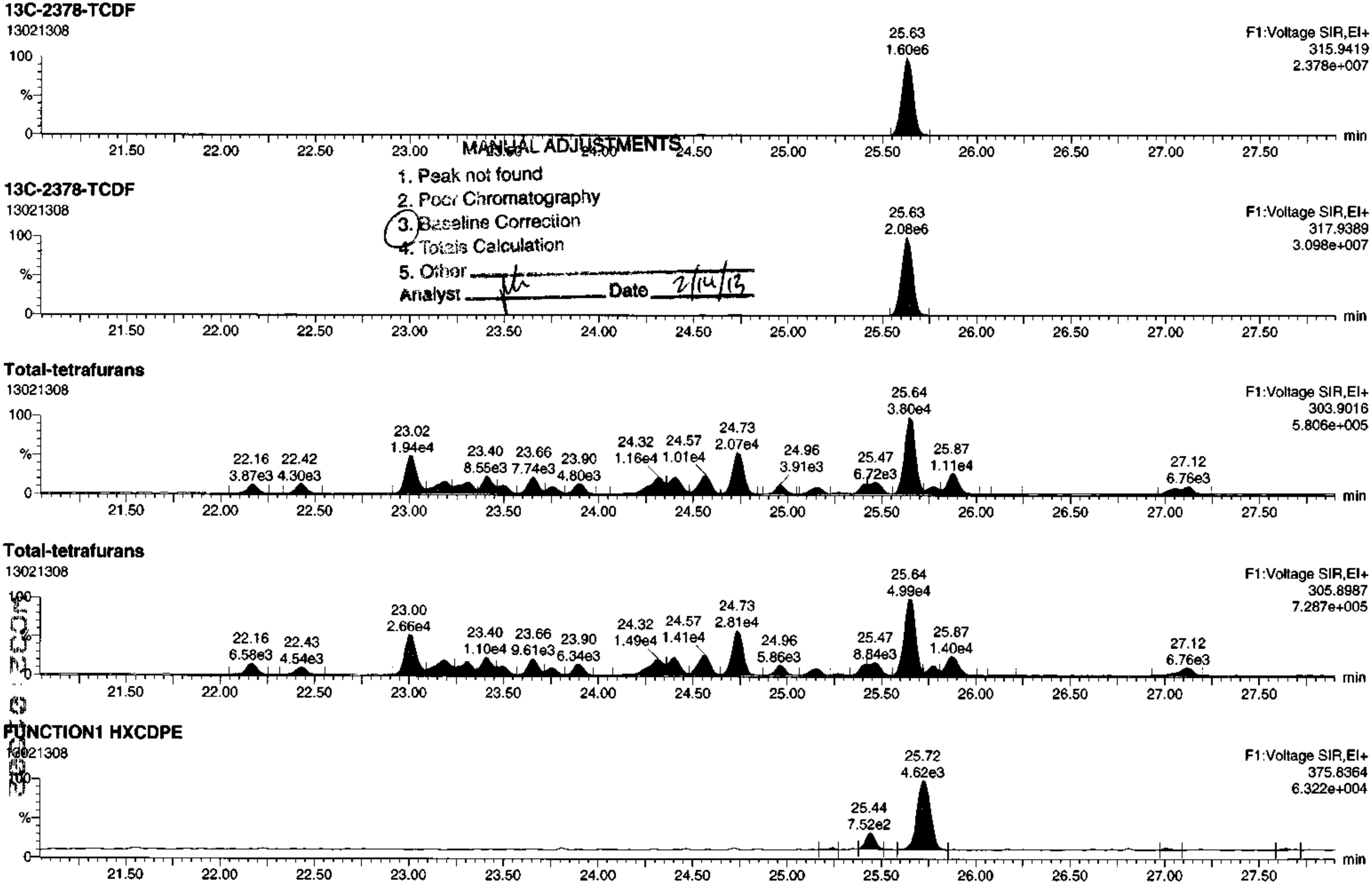
Quantify Sample Report **MassLynx 4.1 SCN 714**

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld

Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time

Printed: Thursday, February 14, 2013 10:47:39 Pacific Standard Time

ID: WC32B, Name: 13021308, Date: 13-Feb-2013, Time: 16:22:20, Conditions: AUTOSPEC01, User: pk

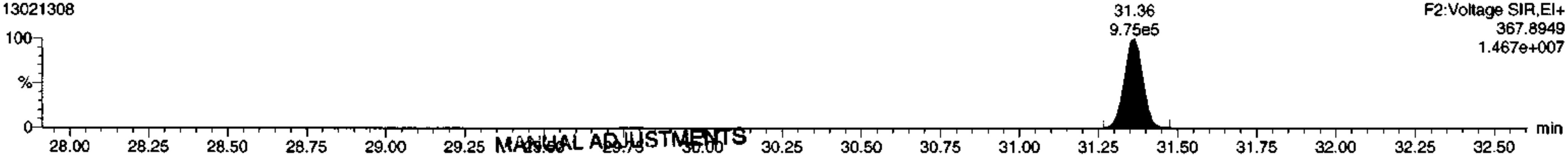


MANUAL ADJUSTMENTS
1. Peak not found
2. Poor Chromatography
3. Baseline Correction
4. Totals Calculation
5. Other
Analyst pk Date 2/14/13

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:47:39 Pacific Standard Time

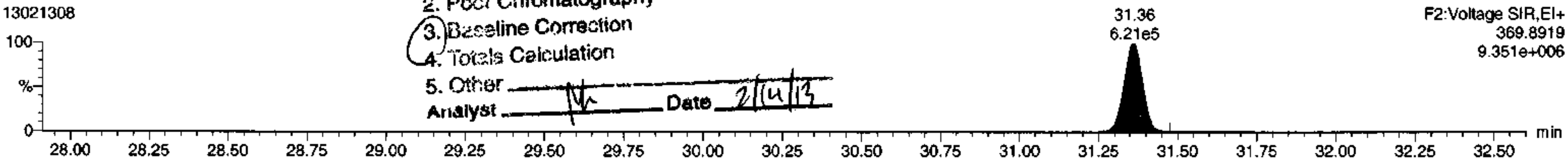
ID: WC32B, Name: 13021308, Date: 13-Feb-2013, Time: 16:22:20, Conditions: AUTOSPEC01, User: pk

13C-12378-PeCDD
13021308

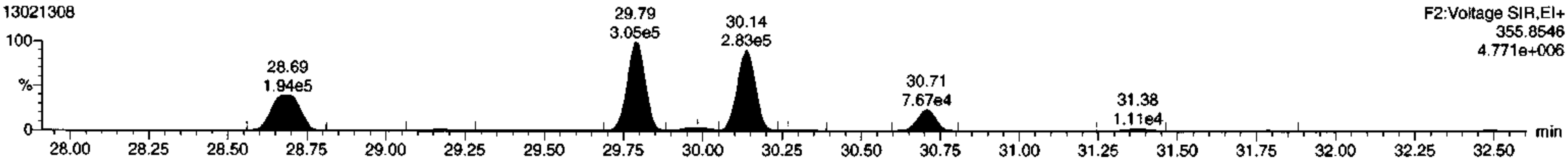


MANUAL ADJUSTMENTS
1. Peak not found
2. Poor Chromatography
3. Baseline Correction
4. Totals Calculation
5. Other
Analyst ~~Nr~~ Date 2/14/13

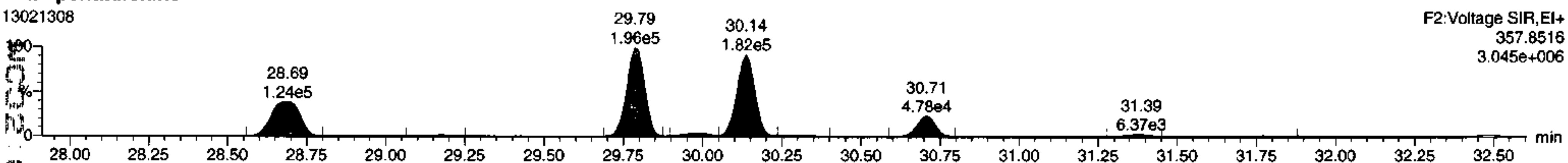
13C-12378-PeCDD
13021308



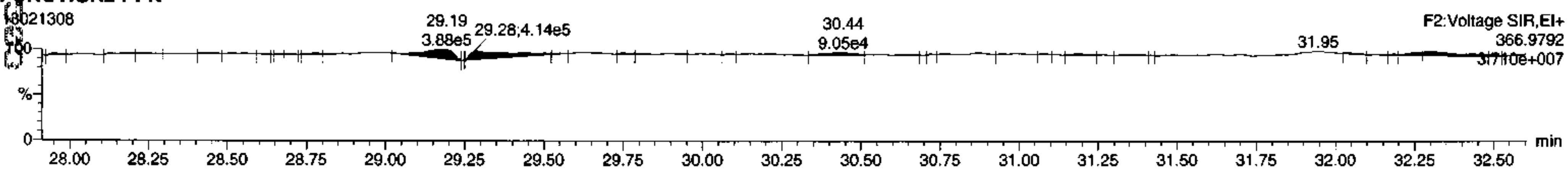
Total-pentadioxins
13021308



Total-pentadioxins
13021308



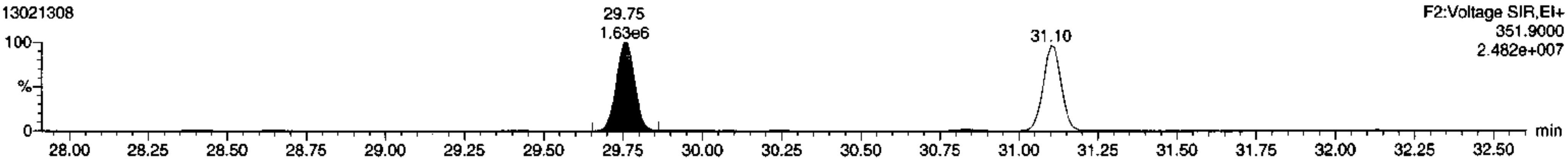
FUNCTION2 PFK
13021308



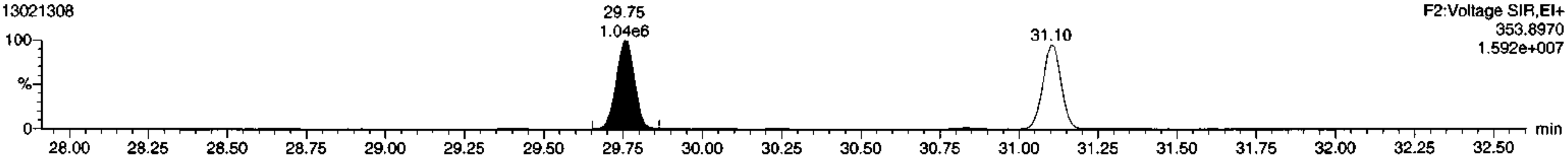
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:47:39 Pacific Standard Time

ID: WC32B, Name: 13021308, Date: 13-Feb-2013, Time: 16:22:20, Conditions: AUTOSPEC01, User: pk

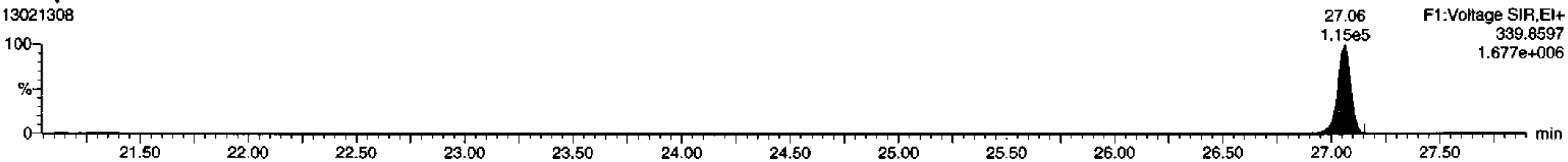
13C-12378-PeCDF



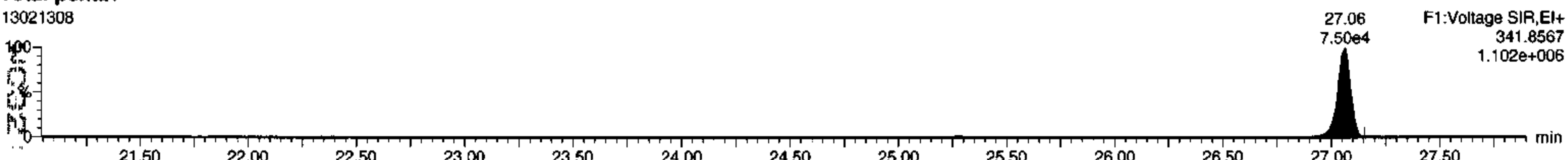
13C-12378-PeCDF



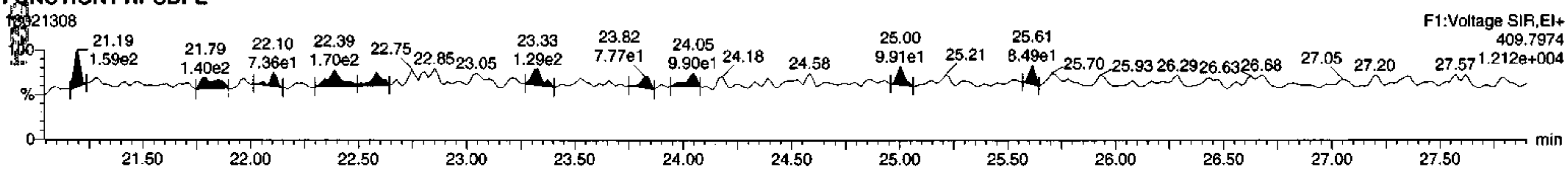
Total-penta1



Total-penta1



FUNCTION1 HPCDPE



Quantify Sample Report **MassLynx 4.1 SCN 714**

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld

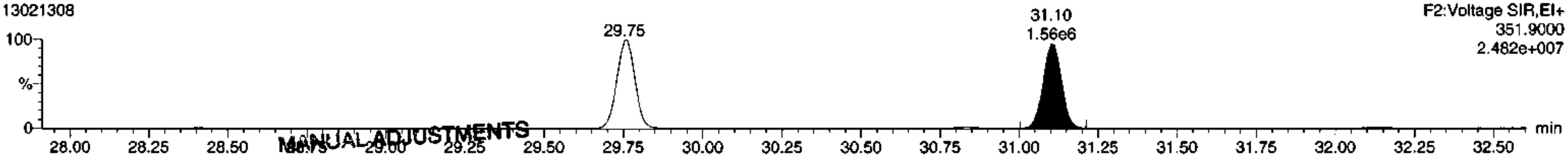
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time

Printed: Thursday, February 14, 2013 10:47:39 Pacific Standard Time

ID: WC32B, Name: 13021308, Date: 13-Feb-2013, Time: 16:22:20, Conditions: AUTOSPEC01, User: pk

13C-23478-PeCDF

13021308



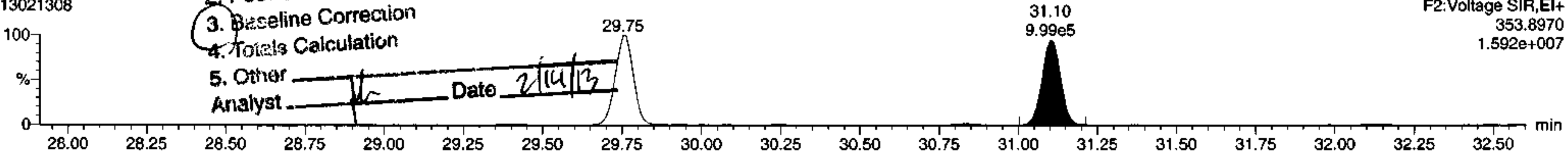
MANUAL ADJUSTMENTS

1. Peak not found
2. Poor Chromatography
3. Baseline Correction
4. Totals Calculation
5. Other

Analyst Date 2/14/13

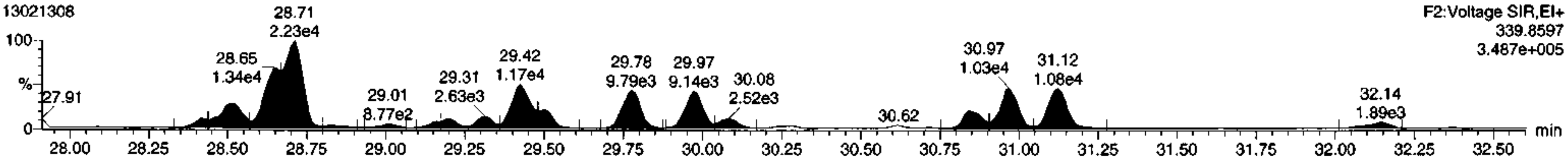
13C-23478-PeCDF

13021308



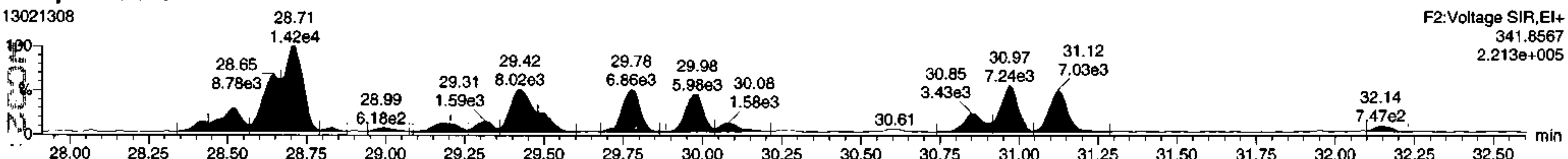
Total-pentafurans

13021308



Total-pentafurans

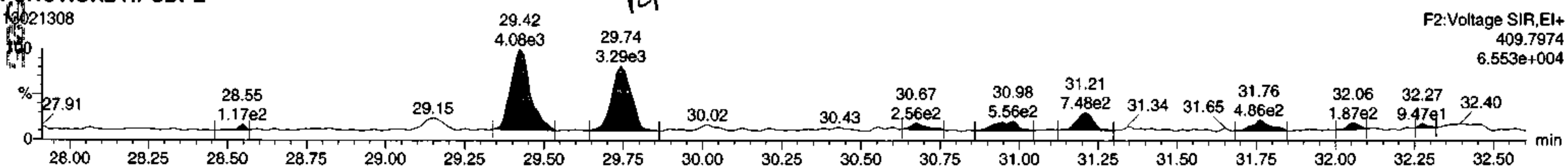
13021308



FUNCTION2 HPCDPE

13021308

RT

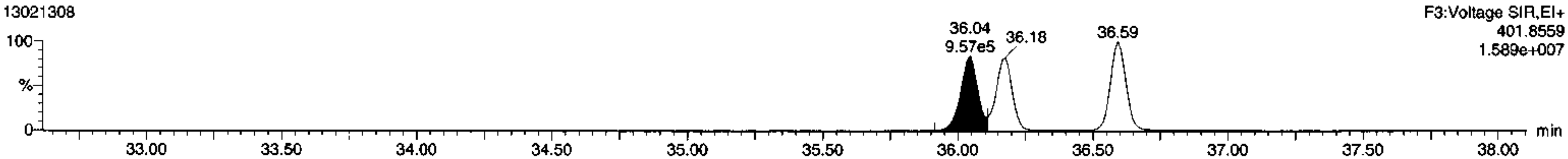


Quantify Sample Report **MassLynx 4.1 SCN 714**

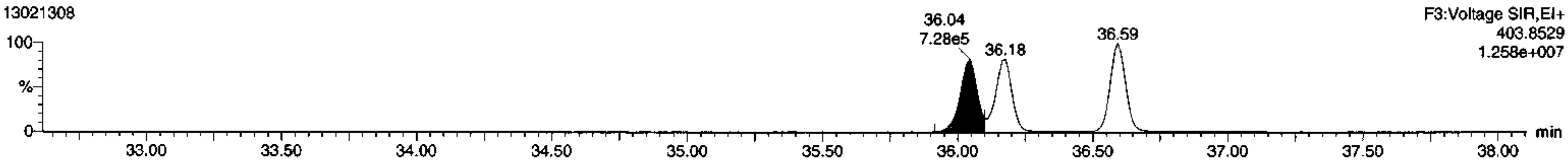
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:47:39 Pacific Standard Time

ID: WC32B, Name: 13021308, Date: 13-Feb-2013, Time: 16:22:20, Conditions: AUTOSPEC01, User: pk

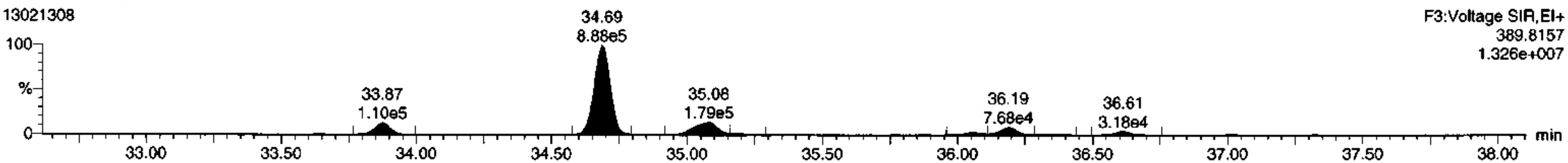
13C-123478-HxCDD



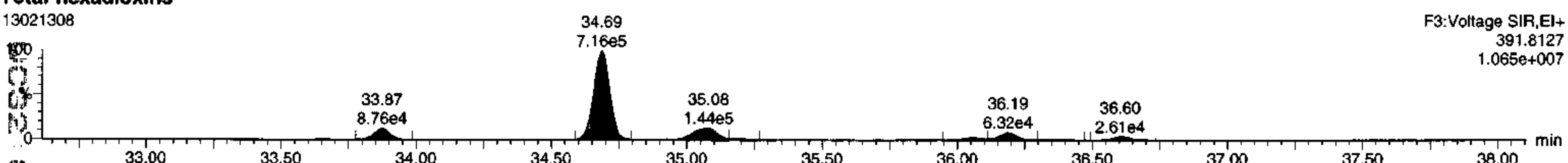
13C-123478-HxCDD



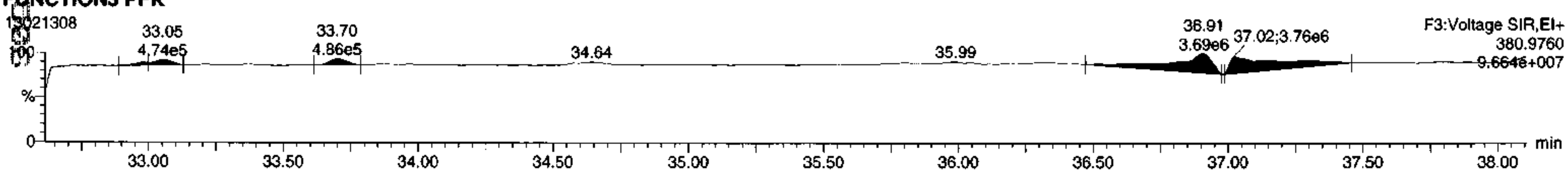
Total-hexadioxins



Total-hexadioxins



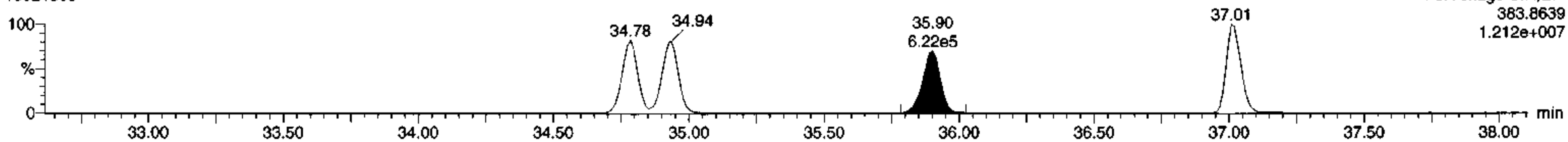
FUNCTION3 PFK



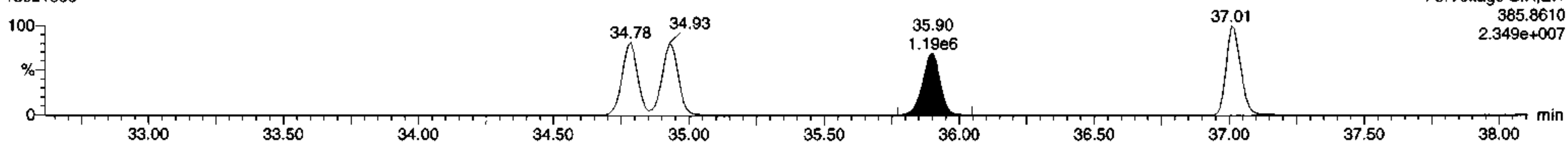
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:47:39 Pacific Standard Time

ID: WC32B, Name: 13021308, Date: 13-Feb-2013, Time: 16:22:20, Conditions: AUTOSPEC01, User: pk

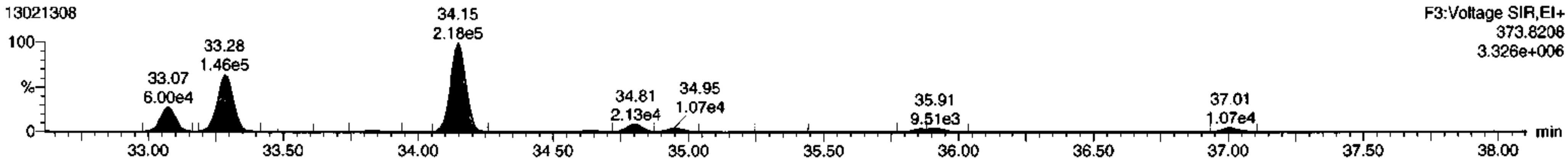
13C-234678-HxCDF
13021308



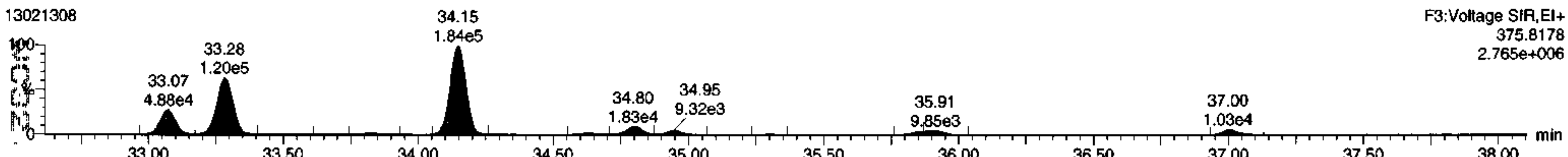
13C-234678-HxCDF
13021308



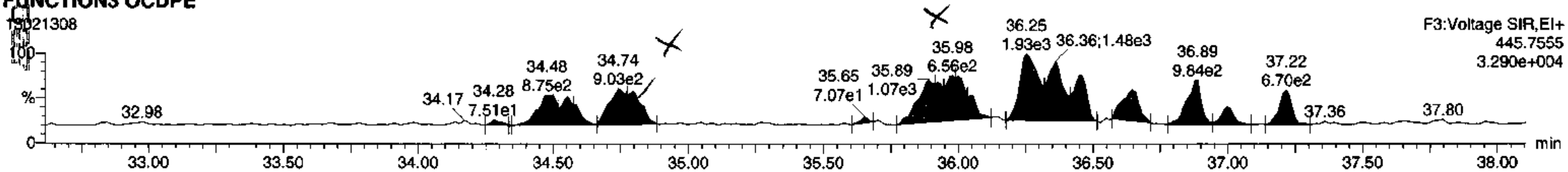
Total-hexafurans
13021308



Total-hexafurans
13021308



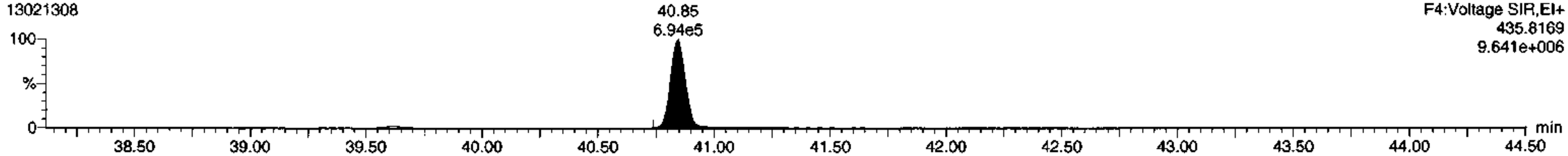
FUNCTION3 OCDPE
13021308



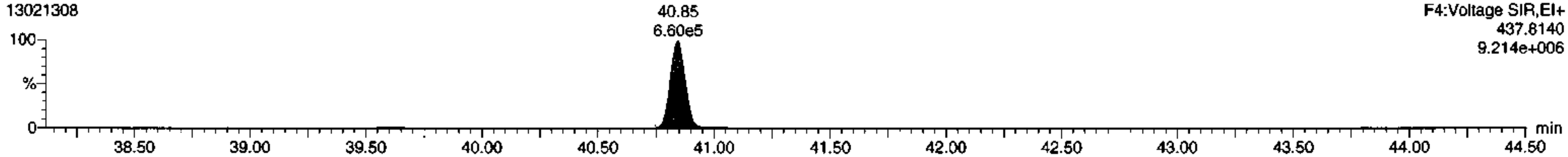
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:47:39 Pacific Standard Time

ID: WC32B, Name: 13021308, Date: 13-Feb-2013, Time: 16:22:20, Conditions: AUTOSPEC01, User: pk

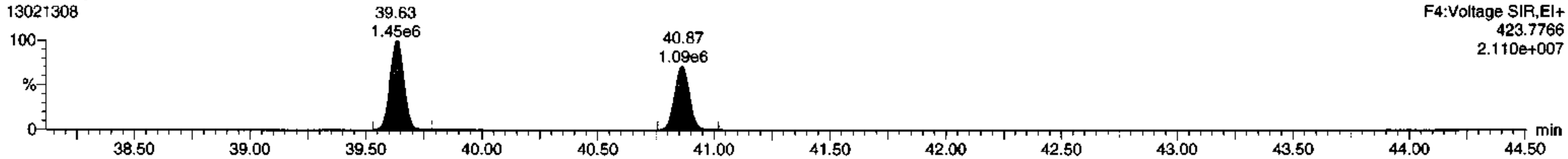
13C-1234678-HpCDD



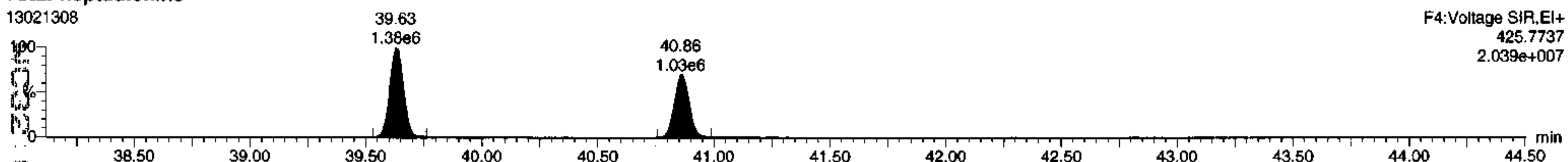
13C-1234678-HpCDD



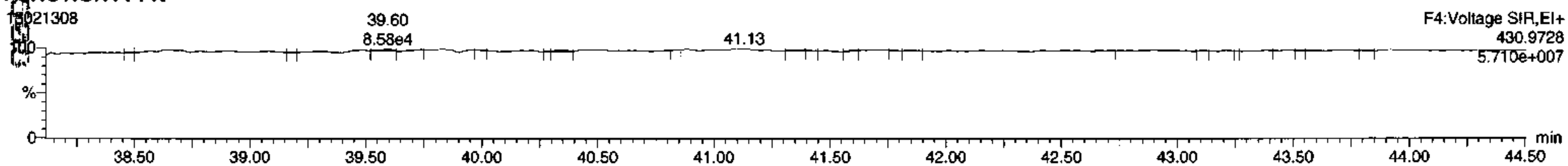
Total-heptadioxins



Total-heptadioxins



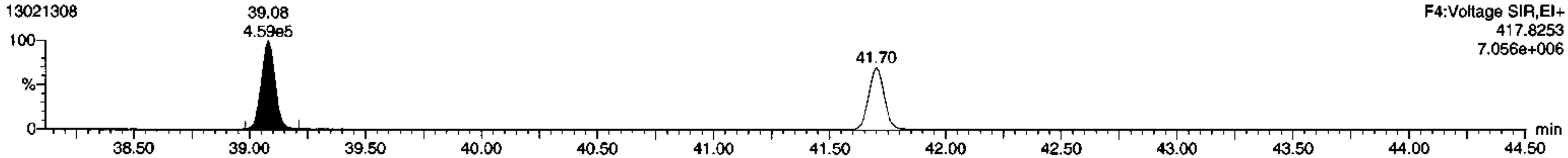
FUNCTION4 PFK



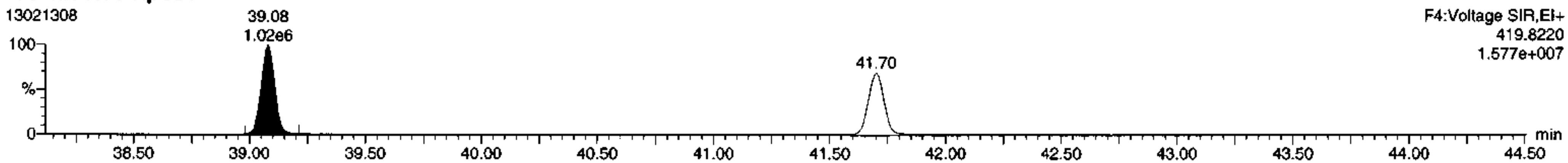
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:47:39 Pacific Standard Time

ID: WC32B, Name: 13021308, Date: 13-Feb-2013, Time: 16:22:20, Conditions: AUTOSPEC01, User: pk

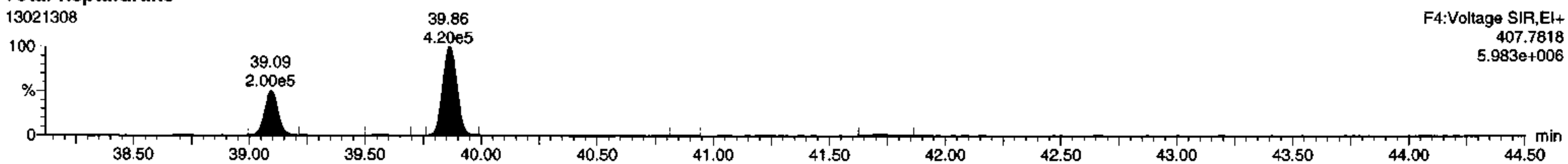
13C-1234678-HpCDF



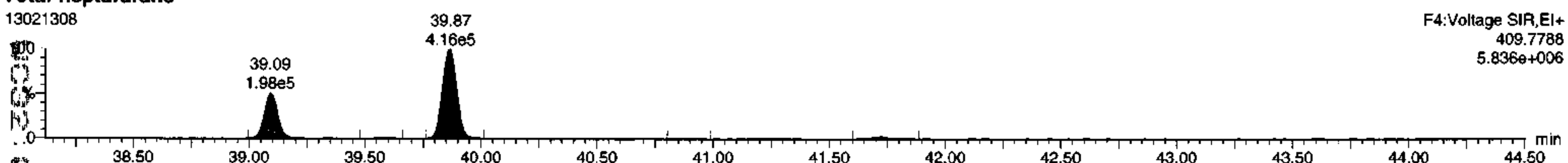
13C-1234678-HpCDF



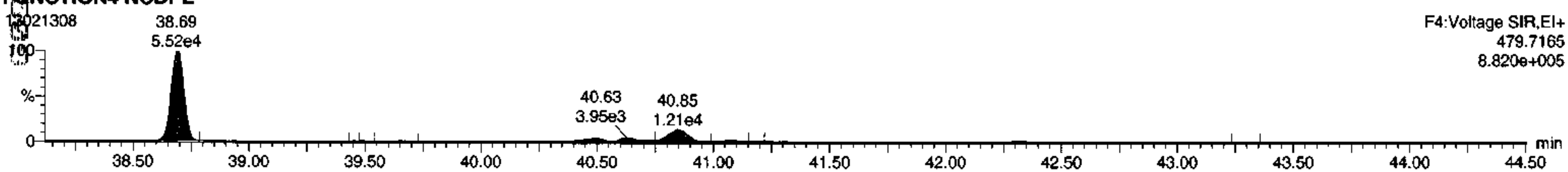
Total-heptafurans



Total-heptafurans



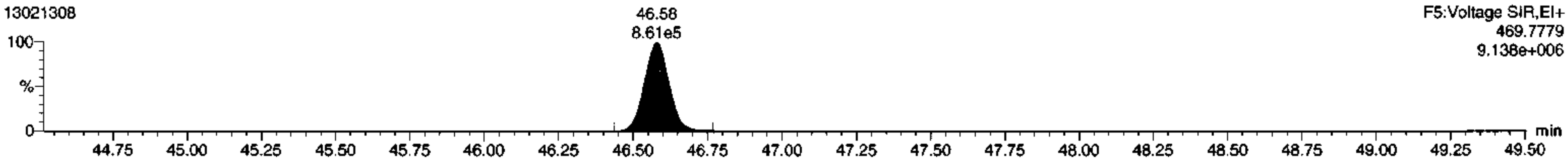
FUNCTION4 NCDPE



Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:47:39 Pacific Standard Time

ID: WC32B, Name: 13021308, Date: 13-Feb-2013, Time: 16:22:20, Conditions: AUTOSPEC01, User: pk

13C-OCDD



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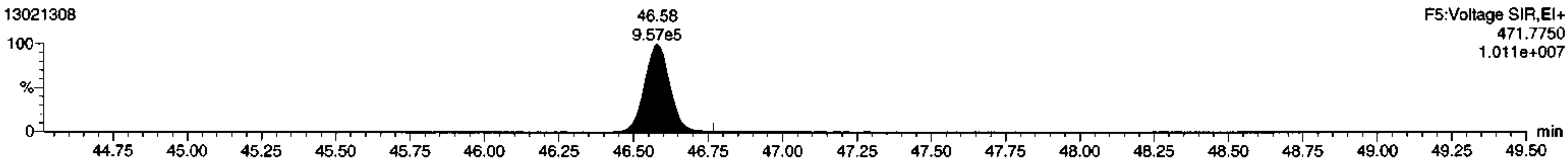
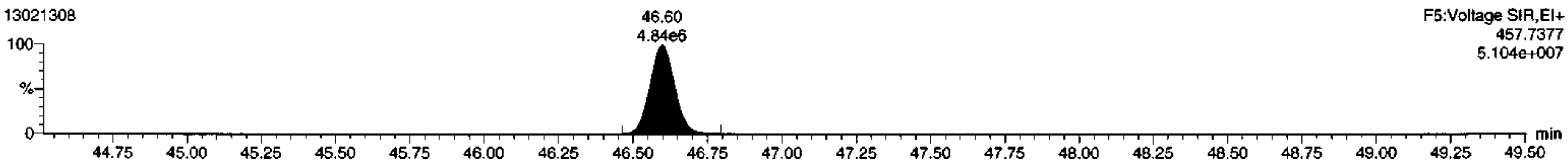
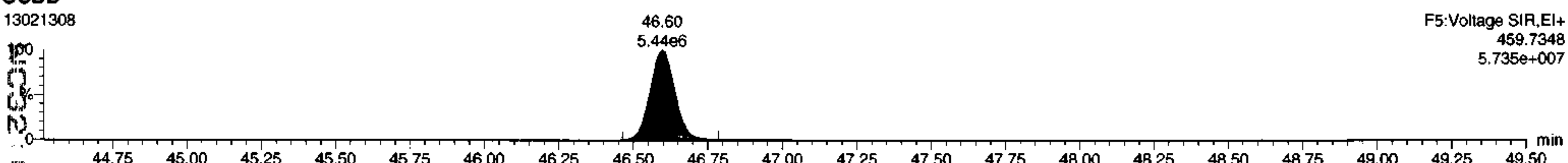


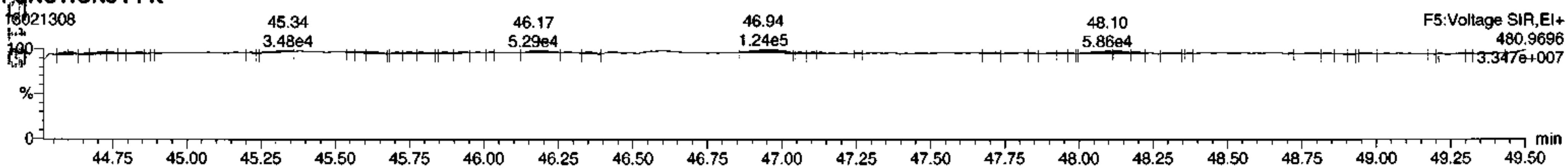
OCDD



OCDD



FUNCTION5 PFK



Quantify Sample Report **MassLynx 4.1 SCN 714**

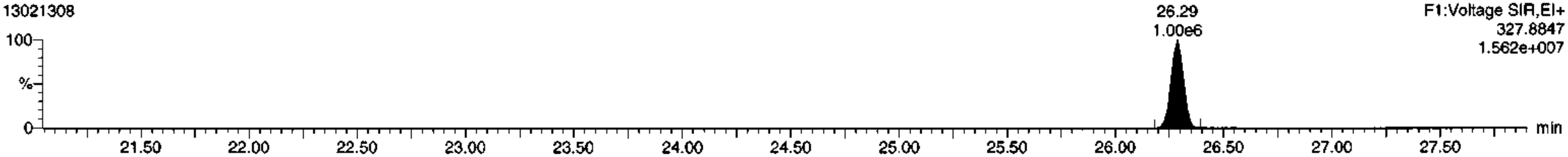
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld

Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time

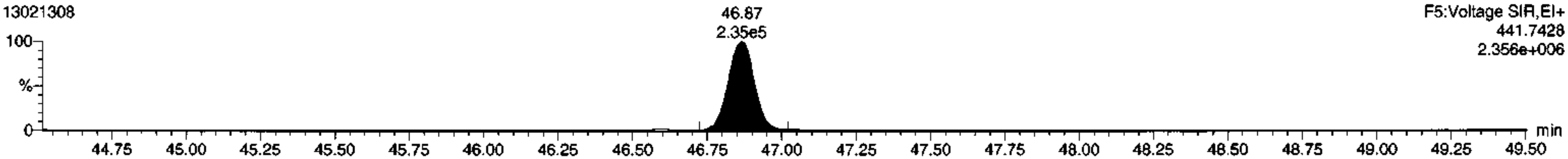
Printed: Thursday, February 14, 2013 10:47:39 Pacific Standard Time

ID: WC32B, Name: 13021308, Date: 13-Feb-2013, Time: 16:22:20, Conditions: AUTOSPEC01, User: pk

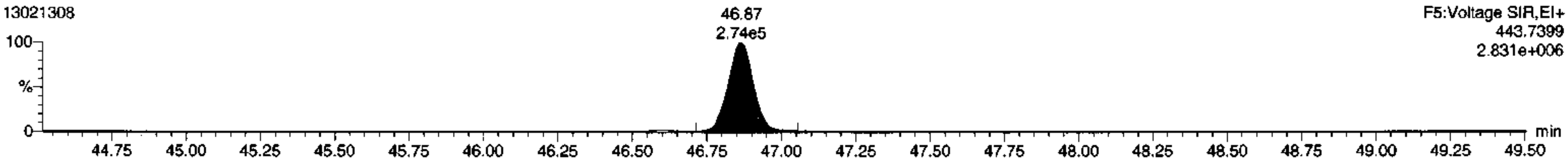
37CL-2378-TCDD



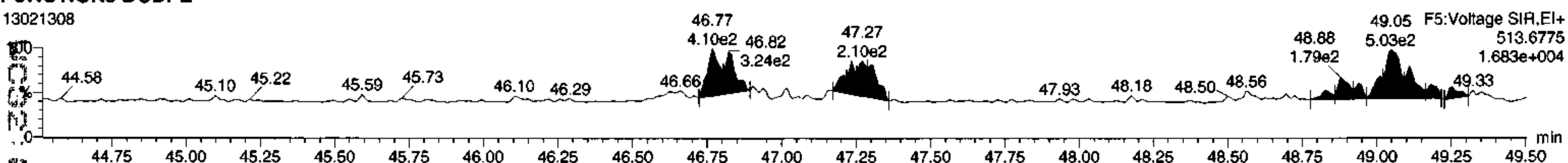
OCDF



OCDF



FUNCTION5 DCDPE



Quantify Sample Summary Report **MassLynx 4.1 SCN 714**

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld

Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time

Printed: Thursday, February 14, 2013 10:48:03 Pacific Standard Time

pk 2/14/13

Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 12 Feb 2013 12:25:57
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: WC32C, Name: 13021309, Date: 13-Feb-2013, Time: 17:15:03, Conditions: AUTOSPEC01, User: pk

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	2378-TCDF	25.645	1.001	1.77e4	2.34e4	0.921	0.756	0.770	139.2	1978	1563	2.75e5	3.65e5	NO	0.946	0.946
[redacted]	12378-PeCDF	29.764	1.000	8.31e3	5.40e3	0.912	1.538	1.550	81.9	1659	1872	1.36e5	7.71e4	NO	0.448	0.448 X
[redacted]	23478-PeCDF	31.124	1.000	8.94e3	5.35e3	0.943	1.673	1.550	80.3	1659	1872	1.33e5	7.74e4	NO	0.500	0.500
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[redacted]	234678-HxCDF	35.979	1.001	4.14e3	2.96e3	1.073	1.400	1.240	53.9	1174	1356	6.33e4	5.26e4	NO	0.346	0.346
[redacted]	123678-HxCDF	34.993	1.001	7.72e3	6.38e3	1.056	1.210	1.240	100.5	1174	1356	1.18e5	9.50e4	NO	0.562	0.562
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[redacted]	1234678-HpCDF	39.114	1.001	1.26e5	1.23e5	1.238	1.030	1.050	1995.0	960	1074	1.92e6	1.81e6	NO	12.098	12.098
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[redacted]	OCDF	46.884	1.006	1.65e5	1.90e5	1.162	0.868	0.890	1223.4	1355	1033	1.66e6	1.88e6	NO	32.849	32.849
[redacted]	2378-TCDD	26.287	1.001	1.85e3	3.47e3	1.106	0.533	0.770	28.3	966	1048	2.74e4	5.23e4	YES	0.142	0.177
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[redacted]	123478-HxCDD	36.122	1.001	7.30e3	5.34e3	0.978	1.368	1.240	47.3	2324	1406	1.10e5	7.67e4	NO	0.702	0.702
[redacted]	123678-HxCDD	36.242	1.000	4.18e4	3.43e4	0.929	1.220	1.240	251.4	2324	1406	5.84e5	4.78e5	NO	4.315	4.315
[redacted]	123789-HxCDD	36.681	1.012	9.84e3	8.60e3	0.904	1.145	1.240	59.6	2324	1406	1.39e5	1.24e5	NO	1.091	1.091
[redacted]	1234678-HpCDD	40.868	1.000	7.17e5	6.98e5	1.029	1.028	1.050	4335.8	2325	2369	1.01e7	9.81e6	NO	80.171	80.171
[redacted]	OCDD	46.624	1.000	2.41e6	2.74e6	1.011	0.880	0.890	16301.5	1545	3337	2.52e7	2.83e7	NO	548.369	548.369
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Quantify Sample Summary Report **MassLynx 4.1 SCN 714**

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:48:03 Pacific Standard Time

ID: WC32C, Name: 13021309, Date: 13-Feb-2013, Time: 17:15:03, Conditions: AUTOSPEC01, User: pk

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
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[redacted]	37CL-2378-TCDD	26.287	1.033	1.24e6		1.051			11945.2	1584		1.89e7				31.989
[redacted]	FUNCTION1 PFK			1.58e7						662326		1.65e8				
[redacted]	FUNCTION2 PFK			1.58e6						276490		1.66e7				0.000
[redacted]	FUNCTION3 PFK			2.94e7						619495		1.46e8				0.000
[redacted]	FUNCTION4 PFK			6.41e5						465461		1.10e7				
[redacted]	FUNCTION5 PFK			4.82e6						290547		1.35e7				
[redacted]	FUNCTION1 HXCDPE			5.29e2						499		1.06e4				0.000
[redacted]	FUNCTION1 HPCDPE			8.41e2						834		1.50e4				0.000
[redacted]	FUNCTION2 HPCDPE			1.24e3						1947		2.34e4				0.000
[redacted]	FUNCTION3 OCDPE			5.44e2						933		9.81e3				0.000
[redacted]	FUNCTION4 NCDPE			5.66e3						783		1.01e5				0.000
[redacted]	FUNCTION5 DCDPE			0.00e0						409		0.00e0				

Quantify Totals Report MassLynx 4.1 SCN 714
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:48:03 Pacific Standard Time

Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 12 Feb 2013 12:25:57
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: WC32C, Name: 13021309, Date: 13-Feb-2013, Time: 17:15:03, Conditions: AUTOSPEC01, User: pk

TF

[illegible]	35 Total-tetrafurans	303.9016	24.40	10796.861	0.921	0.249		0.69	0.77	NO	40.5
[illegible]	35 Total-tetrafurans	303.9016	24.32	30055.109	0.921	0.692		0.83	0.77	NO	77.9
[illegible]	35 Total-tetrafurans	303.9016	23.88	17380.467	0.921	0.400		0.79	0.77	NO	53.2
[illegible]	35 Total-tetrafurans	303.9016	23.75	19527.917	0.921	0.450		0.81	0.77	NO	67.7
[illegible]	35 Total-tetrafurans	303.9016	23.64	19120.444	0.921	0.440		0.80	0.77	NO	66.3
[illegible]	35 Total-tetrafurans	303.9016	23.49	11655.933	0.921	0.268		0.88	0.77	NO	43.0
[illegible]	35 Total-tetrafurans	303.9016	23.40	14179.879	0.921	0.327		0.72	0.77	NO	46.6
[illegible]	35 Total-tetrafurans	303.9016	23.30	15531.015	0.921	0.358		0.59	0.77	YES	43.9
[illegible]	35 Total-tetrafurans	303.9016	23.18	33564.815	0.921	0.773		0.92	0.77	YES	74.3
[illegible]	35 Total-tetrafurans	303.9016	23.00	24400.799	0.921	0.562		0.76	0.77	NO	68.5
[illegible]	35 Total-tetrafurans	303.9016	22.42	10754.788	0.921	0.248		0.78	0.77	NO	35.4
[illegible]	35 Total-tetrafurans	303.9016	22.16	10031.836	0.921	0.231		0.84	0.77	NO	37.3
[illegible]	35 Total-tetrafurans	303.9016	27.12	3797.410	0.921	0.087		0.60	0.77	YES	11.0
[illegible]	35 Total-tetrafurans	303.9016	27.03	3598.922	0.921	0.083		1.82	0.77	YES	12.3
[illegible]	35 Total-tetrafurans	303.9016	26.12	1374.061	0.921	0.032		0.36	0.77	YES	2.7
[illegible]	35 Total-tetrafurans	303.9016	25.87	37705.668	0.921	0.868		0.72	0.77	NO	123.2
[illegible]	35 Total-tetrafurans	303.9016	25.76	14252.180	0.921	0.328		0.82	0.77	NO	50.9
[illegible]	1 2378-TCDF	303.9016	25.64	41094.059	0.921	0.946	0.946	0.76	0.77	NO	139.2
[illegible]	35 Total-tetrafurans	303.9016	25.47	8677.918	0.921	0.200		0.59	0.77	YES	34.1
[illegible]	35 Total-tetrafurans	303.9016	25.41	12649.237	0.921	0.291		0.87	0.77	NO	41.2
[illegible]	35 Total-tetrafurans	303.9016	25.27	2127.441	0.921	0.049		0.50	0.77	YES	5.9
[illegible]	35 Total-tetrafurans	303.9016	25.15	9790.939	0.921	0.225		0.73	0.77	NO	25.3
[illegible]	35 Total-tetrafurans	303.9016	24.96	13164.274	0.921	0.303		0.72	0.77	NO	43.4
[illegible]	35 Total-tetrafurans	303.9016	24.73	31887.262	0.921	0.734		0.76	0.77	NO	105.6
[illegible]	35 Total-tetrafurans	303.9016	24.55	25245.858	0.921	0.581		0.74	0.77	NO	77.5

PP

[illegible]	36 Total-penta1	339.8597	27.06	141716.028		4.841		1.50	1.55	NO	2062.8

Quantify Totals Report MassLynx 4.1 SCN 714
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:48:03 Pacific Standard Time

ID: WC32C, Name: 13021309, Date: 13-Feb-2013, Time: 17:15:03, Conditions: AUTOSPEC01, User: pk

PF

[redacted]												
[redacted]	37	Total-pentafurans	339.8597	28.51	13681.073	0.927	0.462		1.46	1.55	NO	58.6
[redacted]	37	Total-pentafurans	339.8597	28.43	2405.072	0.927	0.081		2.02	1.55	YES	19.9
[redacted]	37	Total-pentafurans	339.8597	30.97	9999.205	0.927	0.338		1.52	1.55	NO	51.5
[redacted]	37	Total-pentafurans	339.8597	30.85	6923.661	0.927	0.234		1.81	1.55	YES	41.9
[redacted]	37	Total-pentafurans	339.8597	30.26	593.013	0.927	0.020		1.90	1.55	YES	3.9
[redacted]	37	Total-pentafurans	339.8597	30.07	3633.829	0.927	0.123		1.90	1.55	YES	21.9
[redacted]	37	Total-pentafurans	339.8597	29.97	12883.138	0.927	0.435		1.63	1.55	NO	76.4
[redacted]	2	12378-PeCDF	339.8597	29.76	13708.966	0.912	0.448	0.448	1.54	1.55	NO	81.9
[redacted]	37	Total-pentafurans	339.8597	29.50	3878.236	0.927	0.131		1.56	1.55	NO	30.1
[redacted]	37	Total-pentafurans	339.8597	29.44	11292.026	0.927	0.381		1.47	1.55	NO	54.5
[redacted]	37	Total-pentafurans	339.8597	29.30	3006.716	0.927	0.102		1.85	1.55	YES	19.2
[redacted]	37	Total-pentafurans	339.8597	29.21	1212.894	0.927	0.041		2.08	1.55	YES	8.4
[redacted]	37	Total-pentafurans	339.8597	28.71	25668.074	0.927	0.867		1.46	1.55	NO	138.9
[redacted]	37	Total-pentafurans	339.8597	28.64	23222.088	0.927	0.784		1.47	1.55	NO	135.6
[redacted]	37	Total-pentafurans	339.8597	32.15	1843.762	0.927	0.062		1.66	1.55	NO	8.8
[redacted]	3	23478-PeCDF	339.8597	31.12	14288.874	0.943	0.500	0.500	1.67	1.55	NO	80.3

R

HF

[redacted]												
[redacted]	38	Total-hexafurans	373.8208	35.35	1294.002	1.062	0.059		0.94	1.24	YES	8.1
[redacted]	6	123678-HxCDF	373.8208	34.99	14094.371	1.056	0.562	0.562	1.21	1.24	NO	100.5
[redacted]	4	123478-HxCDF	373.8208	34.84	24286.999	1.101	0.970	0.970	1.15	1.24	NO	146.6
[redacted]	38	Total-hexafurans	373.8208	34.65	3812.982	1.062	0.173		1.17	1.24	NO	25.6
[redacted]	38	Total-hexafurans	373.8208	34.17	222225.531	1.062	10.065		1.20	1.24	NO	1505.4
[redacted]	38	Total-hexafurans	373.8208	33.85	2084.580	1.062	0.094		1.25	1.24	NO	13.6
[redacted]	38	Total-hexafurans	373.8208	33.30	160682.430	1.062	7.277		1.21	1.24	NO	1038.4
[redacted]	38	Total-hexafurans	373.8208	33.09	72383.875	1.062	3.278		1.22	1.24	NO	518.5
[redacted]	7	123789-HxCDF	373.8208	37.04	8087.092	1.017	0.453	0.453	1.13	1.24	NO	69.2
[redacted]	5	234678-HxCDF	373.8208	35.98	7104.592	1.073	0.346	0.346	1.40	1.24	NO	53.9
[redacted]	38	Total-hexafurans	373.8208	35.90	10685.587	1.062	0.484		0.89	1.24	YES	63.5
[redacted]	38	Total-hexafurans	373.8208	35.81	568.019	1.062	0.026		1.39	1.24	NO	7.6

F

HPF

[redacted]												
[redacted]	39	Total-heptafurans	407.7818	39.88	573728.281	1.231	31.651		1.02	1.05	NO	4375.0
[redacted]	39	Total-heptafurans	407.7818	39.59	3180.707	1.231	0.175		1.13	1.05	NO	22.0
[redacted]	8	1234678-HpCDF	407.7818	39.11	249200.758	1.238	12.098	12.098	1.03	1.05	NO	1995.0
[redacted]	9	1234789-HpCDF	407.7818	41.71	13168.802	1.224	0.840	0.840	1.06	1.05	NO	89.2
[redacted]	39	Total-heptafurans	407.7818	40.90	847.114	1.231	0.047		1.04	1.05	NO	5.9

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
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ID: WC32C, Name: 13021309, Date: 13-Feb-2013, Time: 17:15:03, Conditions: AUTOSPEC01, User: pk

Furans,TF,PP,PF,HF,HPF,OF

[redacted]											
[redacted]	35 Total-tetrafurans	303.9016	24.40	10796.861	0.921	0.249		0.69	0.77	NO	40.5
[redacted]	35 Total-tetrafurans	303.9016	24.32	30055.109	0.921	0.692		0.83	0.77	NO	77.9
[redacted]	35 Total-tetrafurans	303.9016	23.88	17380.467	0.921	0.400		0.79	0.77	NO	53.2
[redacted]	35 Total-tetrafurans	303.9016	23.75	19527.917	0.921	0.450		0.81	0.77	NO	67.7
[redacted]	35 Total-tetrafurans	303.9016	23.64	19120.444	0.921	0.440		0.80	0.77	NO	66.3
[redacted]	35 Total-tetrafurans	303.9016	23.49	11655.933	0.921	0.268		0.88	0.77	NO	43.0
[redacted]	35 Total-tetrafurans	303.9016	23.40	14179.879	0.921	0.327		0.72	0.77	NO	46.6
[redacted]	35 Total-tetrafurans	303.9016	23.30	15531.015	0.921	0.358		0.59	0.77	YES	43.9
[redacted]	35 Total-tetrafurans	303.9016	23.18	33564.815	0.921	0.773		0.92	0.77	YES	74.3
[redacted]	35 Total-tetrafurans	303.9016	23.00	24400.799	0.921	0.562		0.76	0.77	NO	68.5
[redacted]	35 Total-tetrafurans	303.9016	22.42	10754.788	0.921	0.248		0.78	0.77	NO	35.4
[redacted]	35 Total-tetrafurans	303.9016	22.16	10031.836	0.921	0.231		0.84	0.77	NO	37.3
[redacted]	35 Total-tetrafurans	303.9016	27.12	3797.410	0.921	0.087		0.60	0.77	YES	11.0
[redacted]	35 Total-tetrafurans	303.9016	27.03	3598.922	0.921	0.083		1.82	0.77	YES	12.3
[redacted]	35 Total-tetrafurans	303.9016	26.12	1374.061	0.921	0.032		0.36	0.77	YES	2.7
[redacted]	35 Total-tetrafurans	303.9016	25.87	37705.668	0.921	0.868		0.72	0.77	NO	123.2
[redacted]	35 Total-tetrafurans	303.9016	25.76	14252.180	0.921	0.328		0.82	0.77	NO	50.9
[redacted]	1 2378-TCDF	303.9016	25.64	41094.059	0.921	0.946	0.946	0.76	0.77	NO	139.2
[redacted]	35 Total-tetrafurans	303.9016	25.47	8677.918	0.921	0.200		0.59	0.77	YES	34.1
[redacted]	35 Total-tetrafurans	303.9016	25.41	12649.237	0.921	0.291		0.87	0.77	NO	41.2
[redacted]	35 Total-tetrafurans	303.9016	25.27	2127.441	0.921	0.049		0.50	0.77	YES	5.9
[redacted]	35 Total-tetrafurans	303.9016	25.15	9790.939	0.921	0.225		0.73	0.77	NO	25.3
[redacted]	35 Total-tetrafurans	303.9016	24.96	13164.274	0.921	0.303		0.72	0.77	NO	43.4
[redacted]	35 Total-tetrafurans	303.9016	24.73	31887.262	0.921	0.734		0.76	0.77	NO	105.6
[redacted]	35 Total-tetrafurans	303.9016	24.55	25245.858	0.921	0.581		0.74	0.77	NO	77.5
[redacted]	37 Total-pentafurans	339.8597	28.51	13681.073	0.927	0.462		1.46	1.55	NO	58.6
[redacted]	37 Total-pentafurans	339.8597	28.43	2405.072	0.927	0.081		2.02	1.55	YES	19.9
[redacted]	37 Total-pentafurans	339.8597	30.97	9999.205	0.927	0.338		1.52	1.55	NO	51.5
[redacted]	37 Total-pentafurans	339.8597	30.85	6923.661	0.927	0.234		1.81	1.55	YES	41.9
[redacted]	37 Total-pentafurans	339.8597	30.26	593.013	0.927	0.020		1.90	1.55	YES	3.9
[redacted]	37 Total-pentafurans	339.8597	30.07	3633.829	0.927	0.123		1.90	1.55	YES	21.9
[redacted]	37 Total-pentafurans	339.8597	29.97	12883.138	0.927	0.435		1.63	1.55	NO	76.4
[redacted]	2 12378-PeCDF	339.8597	29.76	13708.966	0.912	0.448	0.448	1.54	1.55	NO	81.9
[redacted]	37 Total-pentafurans	339.8597	29.50	3878.236	0.927	0.131		1.56	1.55	NO	30.1
[redacted]	37 Total-pentafurans	339.8597	29.44	11292.026	0.927	0.381		1.47	1.55	NO	54.5
[redacted]	37 Total-pentafurans	339.8597	29.30	3006.716	0.927	0.102		1.85	1.55	YES	19.2
[redacted]	37 Total-pentafurans	339.8597	29.21	1212.894	0.927	0.041		2.08	1.55	YES	8.4
[redacted]	37 Total-pentafurans	339.8597	28.71	25668.074	0.927	0.867		1.46	1.55	NO	138.9
[redacted]	37 Total-pentafurans	339.8597	28.64	23222.088	0.927	0.784		1.47	1.55	NO	135.6
[redacted]	37 Total-pentafurans	339.8597	32.15	1843.762	0.927	0.062		1.66	1.55	NO	8.8
[redacted]	3 23478-PeCDF	339.8597	31.12	14288.874	0.943	0.500	0.500	1.67	1.55	NO	80.3
[redacted]	38 Total-hexafurans	373.8208	35.35	1294.002	1.062	0.059		0.94	1.24	YES	8.1
[redacted]	6 123678-HxCDF	373.8208	34.99	14094.371	1.056	0.562	0.562	1.21	1.24	NO	100.5
[redacted]	4 123478-HxCDF	373.8208	34.84	24286.999	1.101	0.970	0.970	1.15	1.24	NO	146.6
[redacted]	38 Total-hexafurans	373.8208	34.65	3812.982	1.062	0.173		1.17	1.24	NO	25.6
[redacted]	38 Total-hexafurans	373.8208	34.17	222225.531	1.062	10.065		1.20	1.24	NO	1505.4
[redacted]	38 Total-hexafurans	373.8208	33.65	2084.580	1.062	0.094		1.25	1.24	NO	13.6
[redacted]	38 Total-hexafurans	373.8208	33.30	160682.430	1.062	7.277		1.21	1.24	NO	1038.4
[redacted]	38 Total-hexafurans	373.8208	33.09	72383.875	1.062	3.278		1.22	1.24	NO	518.5

WC32 01516

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
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ID: WC32C, Name: 13021309, Date: 13-Feb-2013, Time: 17:15:03, Conditions: AUTOSPEC01, User: pk

Furans,TF,PP,PF,HF,HPF,OF

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	7	123789-HxCDF	373.8208	37.04	8087.092	1.017	0.453	0.453	1.13	1.24	NO	69.2
[redacted]	5	234678-HxCDF	373.8208	35.98	7104.592	1.073	0.346	0.346	1.40	1.24	NO	53.9
[redacted]	38	Total-hexafurans	373.8208	35.90	10685.587	1.062	0.484		0.89	1.24	YES	63.5
[redacted]	38	Total-hexafurans	373.8208	35.81	568.019	1.062	0.026		1.39	1.24	NO	7.6
[redacted]	39	Total-heptafurans	407.7818	39.88	573728.281	1.231	31.651		1.02	1.05	NO	4375.0
[redacted]	39	Total-heptafurans	407.7818	39.59	3180.707	1.231	0.175		1.13	1.05	NO	22.0
[redacted]	8	1234678-HpCDF	407.7818	39.11	249200.758	1.238	12.098	12.098	1.03	1.05	NO	1995.0
[redacted]	9	1234789-HpCDF	407.7818	41.71	13168.802	1.224	0.840	0.840	1.06	1.05	NO	89.2
[redacted]	39	Total-heptafurans	407.7818	40.90	847.114	1.231	0.047		1.04	1.05	NO	5.9
[redacted]	10	OCDF	441.7428	46.88	354665.359	1.162	32.849	32.849	0.87	0.89	NO	1223.4
[redacted]	36	Total-penta1	339.8597	27.06	141716.028		4.841		1.50	1.55	NO	2062.8

TD

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	11	2378-TCDD	319.8965	26.29	5316.129	1.106	0.177	0.142	0.53	0.77	YES	28.3
[redacted]	41	Total-tetradioxins	319.8965	25.91	13953.243	1.106	0.465		0.75	0.77	NO	73.4
[redacted]	41	Total-tetradioxins	319.8965	25.61	2670.210	1.106	0.089		1.71	0.77	YES	21.6
[redacted]	41	Total-tetradioxins	319.8965	25.47	30688.952	1.106	1.023		0.75	0.77	NO	204.2
[redacted]	41	Total-tetradioxins	319.8965	25.26	2778.064	1.106	0.093		0.75	0.77	NO	19.6
[redacted]	41	Total-tetradioxins	319.8965	25.15	1187.428	1.106	0.040		0.58	0.77	YES	8.9
[redacted]	41	Total-tetradioxins	319.8965	25.05	175.752	1.106	0.006		0.83	0.77	NO	1.6
[redacted]	41	Total-tetradioxins	319.8965	24.91	15123.801	1.106	0.504		0.88	0.77	NO	112.0
[redacted]	41	Total-tetradioxins	319.8965	24.63	8244.744	1.106	0.275		0.82	0.77	NO	57.1
[redacted]	41	Total-tetradioxins	319.8965	24.40	872.640	1.106	0.029		0.69	0.77	NO	5.6
[redacted]	41	Total-tetradioxins	319.8965	23.91	2209.904	1.106	0.074		0.75	0.77	NO	12.9
[redacted]	41	Total-tetradioxins	319.8965	23.70	90454.578	1.106	3.015		0.82	0.77	NO	653.7
[redacted]	41	Total-tetradioxins	319.8965	23.43	132288.816	1.106	4.410		0.81	0.77	NO	1019.2
[redacted]	41	Total-tetradioxins	319.8965	26.87	1109.647	1.106	0.037		0.80	0.77	NO	7.0
[redacted]	41	Total-tetradioxins	319.8965	26.41	4825.327	1.106	0.161		0.77	0.77	NO	35.1

R

PD

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	42	Total-pentadioxins	355.8546	30.71	17070.777	1.001	0.905		1.71	1.55	NO	115.1
[redacted]	42	Total-pentadioxins	355.8546	30.32	2803.357	1.001	0.149		2.11	1.55	YES	13.8
[redacted]	42	Total-pentadioxins	355.8546	30.14	62857.754	1.001	3.332		1.53	1.55	NO	381.1
[redacted]	42	Total-pentadioxins	355.8546	30.01	5856.908	1.001	0.310		1.90	1.55	YES	35.7
[redacted]	42	Total-pentadioxins	355.8546	29.94	4382.793	1.001	0.232		1.39	1.55	NO	36.2
[redacted]	42	Total-pentadioxins	355.8546	29.80	66731.345	1.001	3.538		1.53	1.55	NO	408.8
[redacted]	42	Total-pentadioxins	355.8546	29.16	2638.798	1.001	0.140		1.08	1.55	YES	16.7
[redacted]	42	Total-pentadioxins	355.8546	28.69	46742.912	1.001	2.478		1.53	1.55	NO	177.2
[redacted]	42	Total-pentadioxins	355.8546	31.79	1279.361	1.001	0.068		1.38	1.55	NO	8.2
[redacted]	12	12378-PeCDD	355.8546	31.39	6994.972	1.001	0.371	0.371	1.47	1.55	NO	38.1

E

D: WC32C, Name: 13021309, Date: 13-Feb-2013, Time: 17:15:03, Conditions: AUTOSPEC01, User: pk

HD

[redacted]												
[redacted]	15	123789-HxCDD	389.8157	36.68	18436.383	0.904	1.091	1.091	1.14	1.24	NO	59.6
[redacted]	43	Total-hexadioxins	389.8157	36.43	3273.436	0.937	0.187		1.07	1.24	NO	9.8
[redacted]	14	123678-HxCDD	389.8157	36.24	76031.824	0.929	4.315	4.315	1.22	1.24	NO	251.4
[redacted]	13	123478-HxCDD	389.8157	36.12	12640.719	0.978	0.702	0.702	1.37	1.24	NO	47.3
[redacted]	43	Total-hexadioxins	389.8157	35.12	120042.152	0.937	6.853		1.27	1.24	NO	290.9
[redacted]	43	Total-hexadioxins	389.8157	34.72	179168.008	0.937	10.229		1.22	1.24	NO	591.4
[redacted]	43	Total-hexadioxins	389.8157	33.90	68686.550	0.937	3.921		1.25	1.24	NO	231.1

HPD

[redacted]												
[redacted]	16	1234678-HpCDD	423.7766	40.87	1415795.250	1.029	80.171	80.171	1.03	1.05	NO	4335.8
[redacted]	44	Total-heptadioxins	423.7766	39.65	1100948.063	1.029	62.343		1.04	1.05	NO	3487.3

Quantify Totals Report MassLynx 4.1 SCN 714
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:48:03 Pacific Standard Time

ID: WC32C, Name: 13021309, Date: 13-Feb-2013, Time: 17:15:03, Conditions: AUTOSPEC01, User: pk

Dioxins,TD,PD,HD,HPD,OD

[redacted]											
[redacted]	11 2378-TCDD	319.8965	26.29	5316.129	1.106	0.177	0.142	0.53	0.77	YES	28.3
[redacted]	41 Total-tetradioxins	319.8965	25.91	13953.243	1.106	0.465		0.75	0.77	NO	73.4
[redacted]	41 Total-tetradioxins	319.8965	25.61	2670.210	1.106	0.089		1.71	0.77	YES	21.6
[redacted]	41 Total-tetradioxins	319.8965	25.47	30688.952	1.106	1.023		0.75	0.77	NO	204.2
[redacted]	41 Total-tetradioxins	319.8965	25.26	2778.064	1.106	0.093		0.75	0.77	NO	19.6
[redacted]	41 Total-tetradioxins	319.8965	25.15	1187.428	1.106	0.040		0.58	0.77	YES	8.9
[redacted]	41 Total-tetradioxins	319.8965	25.05	175.752	1.106	0.006		0.83	0.77	NO	1.6
[redacted]	41 Total-tetradioxins	319.8965	24.91	15123.801	1.106	0.504		0.88	0.77	NO	112.0
[redacted]	41 Total-tetradioxins	319.8965	24.63	8244.744	1.106	0.275		0.82	0.77	NO	57.1
[redacted]	41 Total-tetradioxins	319.8965	24.40	872.640	1.106	0.029		0.69	0.77	NO	5.6
[redacted]	41 Total-tetradioxins	319.8965	23.91	2209.904	1.106	0.074		0.75	0.77	NO	12.9
[redacted]	41 Total-tetradioxins	319.8965	23.70	90454.578	1.106	3.015		0.82	0.77	NO	653.7
[redacted]	41 Total-tetradioxins	319.8965	23.43	132288.816	1.106	4.410		0.81	0.77	NO	1019.2
[redacted]	41 Total-tetradioxins	319.8965	26.87	1109.647	1.106	0.037		0.80	0.77	NO	7.0
[redacted]	41 Total-tetradioxins	319.8965	26.41	4825.327	1.106	0.161		0.77	0.77	NO	35.1
[redacted]	42 Total-pentadioxins	355.8546	30.71	17070.777	1.001	0.905		1.71	1.55	NO	115.1
[redacted]	42 Total-pentadioxins	355.8546	30.32	2803.357	1.001	0.149		2.11	1.55	YES	13.8
[redacted]	42 Total-pentadioxins	355.8546	30.14	62857.754	1.001	3.332		1.53	1.55	NO	381.1
[redacted]	42 Total-pentadioxins	355.8546	30.01	5856.908	1.001	0.310		1.90	1.55	YES	35.7
[redacted]	42 Total-pentadioxins	355.8546	29.94	4382.793	1.001	0.232		1.39	1.55	NO	36.2
[redacted]	42 Total-pentadioxins	355.8546	29.80	66731.345	1.001	3.538		1.53	1.55	NO	408.8
[redacted]	42 Total-pentadioxins	355.8546	29.18	2638.798	1.001	0.140		1.08	1.55	YES	16.7
[redacted]	42 Total-pentadioxins	355.8546	28.69	46742.912	1.001	2.478		1.53	1.55	NO	177.2
[redacted]	42 Total-pentadioxins	355.8546	31.79	1279.361	1.001	0.068		1.38	1.55	NO	8.2
[redacted]	12 12378-PeCDD	355.8546	31.39	6994.972	1.001	0.371	0.371	1.47	1.55	NO	38.1
[redacted]	15 123789-HxCDD	389.8157	36.68	18436.383	0.904	1.091	1.091	1.14	1.24	NO	59.6
[redacted]	43 Total-hexadioxins	389.8157	36.43	3273.436	0.937	0.187		1.07	1.24	NO	9.8
[redacted]	14 123678-HxCDD	389.8157	36.24	76031.824	0.929	4.315	4.315	1.22	1.24	NO	251.4
[redacted]	13 123478-HxCDD	389.8157	36.12	12640.719	0.978	0.702	0.702	1.37	1.24	NO	47.3
[redacted]	43 Total-hexadioxins	389.8157	35.12	120042.152	0.937	6.853		1.27	1.24	NO	290.9
[redacted]	43 Total-hexadioxins	389.8157	34.72	179168.008	0.937	10.229		1.22	1.24	NO	591.4
[redacted]	43 Total-hexadioxins	389.8157	33.90	68686.550	0.937	3.921		1.25	1.24	NO	231.1
[redacted]	17 OCDD	457.7377	46.62	5152293.500	1.011	546.369	548....	0.88	0.89	NO	16301.5
[redacted]	16 1234678-HpCDD	423.7766	40.87	1415795.250	1.029	80.171	80.171	1.03	1.05	NO	4335.8
[redacted]	44 Total-heptadioxins	423.7766	39.65	1100948.063	1.029	62.343		1.04	1.05	NO	3487.3

ID: WC32C, Name: 13021309, Date: 13-Feb-2013, Time: 17:15:03, Conditions: AUTOSPEC01, User: pk

TotalTEQ,Furans,Dioxins

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	35	Total-tetrafurans	303.9016	24.40	10796.861	0.921	0.249		0.69	0.77	NO	40.5
[redacted]	35	Total-tetrafurans	303.9016	24.32	30055.109	0.921	0.692		0.83	0.77	NO	77.9
[redacted]	35	Total-tetrafurans	303.9016	23.88	17380.467	0.921	0.400		0.79	0.77	NO	53.2
[redacted]	35	Total-tetrafurans	303.9016	23.75	19527.917	0.921	0.450		0.81	0.77	NO	67.7
[redacted]	35	Total-tetrafurans	303.9016	23.64	19120.444	0.921	0.440		0.80	0.77	NO	66.3
[redacted]	35	Total-tetrafurans	303.9016	23.49	11655.933	0.921	0.268		0.88	0.77	NO	43.0
[redacted]	35	Total-tetrafurans	303.9016	23.40	14179.879	0.921	0.327		0.72	0.77	NO	46.6
[redacted]	35	Total-tetrafurans	303.9016	23.30	15531.015	0.921	0.358		0.59	0.77	YES	43.9
[redacted]	35	Total-tetrafurans	303.9016	23.18	33564.815	0.921	0.773		0.92	0.77	YES	74.3
[redacted]	35	Total-tetrafurans	303.9016	23.00	24400.799	0.921	0.562		0.76	0.77	NO	68.5
[redacted]	35	Total-tetrafurans	303.9016	22.42	10754.788	0.921	0.248		0.78	0.77	NO	35.4
[redacted]	35	Total-tetrafurans	303.9016	22.16	10031.836	0.921	0.231		0.84	0.77	NO	37.3
[redacted]	35	Total-tetrafurans	303.9016	27.12	3797.410	0.921	0.087		0.60	0.77	YES	11.0
[redacted]	35	Total-tetrafurans	303.9016	27.03	3598.922	0.921	0.083		1.82	0.77	YES	12.3
[redacted]	35	Total-tetrafurans	303.9016	26.12	1374.061	0.921	0.032		0.36	0.77	YES	2.7
[redacted]	35	Total-tetrafurans	303.9016	25.87	37705.668	0.921	0.868		0.72	0.77	NO	123.2
[redacted]	35	Total-tetrafurans	303.9016	25.76	14252.180	0.921	0.328		0.82	0.77	NO	50.9
[redacted]	1	2378-TCDF	303.9016	25.64	41094.059	0.921	0.946	0.946	0.76	0.77	NO	139.2
[redacted]	35	Total-tetrafurans	303.9016	25.47	8677.918	0.921	0.200		0.59	0.77	YES	34.1
[redacted]	35	Total-tetrafurans	303.9016	25.41	12649.237	0.921	0.291		0.87	0.77	NO	41.2
[redacted]	35	Total-tetrafurans	303.9016	25.27	2127.441	0.921	0.049		0.50	0.77	YES	5.9
[redacted]	35	Total-tetrafurans	303.9016	25.15	9790.939	0.921	0.225		0.73	0.77	NO	25.3
[redacted]	35	Total-tetrafurans	303.9016	24.96	13164.274	0.921	0.303		0.72	0.77	NO	43.4
[redacted]	35	Total-tetrafurans	303.9016	24.73	31887.262	0.921	0.734		0.76	0.77	NO	105.6
[redacted]	35	Total-tetrafurans	303.9016	24.55	25245.858	0.921	0.581		0.74	0.77	NO	77.5
[redacted]	37	Total-pentafurans	339.8597	28.51	13681.073	0.927	0.462		1.46	1.55	NO	58.6
[redacted]	37	Total-pentafurans	339.8597	28.43	2405.072	0.927	0.081		2.02	1.55	YES	19.9
[redacted]	37	Total-pentafurans	339.8597	30.97	9999.205	0.927	0.338		1.52	1.55	NO	51.5
[redacted]	37	Total-pentafurans	339.8597	30.85	6923.661	0.927	0.234		1.81	1.55	YES	41.9
[redacted]	37	Total-pentafurans	339.8597	30.26	593.013	0.927	0.020		1.90	1.55	YES	3.9
[redacted]	37	Total-pentafurans	339.8597	30.07	3633.829	0.927	0.123		1.90	1.55	YES	21.9
[redacted]	37	Total-pentafurans	339.8597	29.97	12883.138	0.927	0.435		1.63	1.55	NO	76.4
[redacted]	2	12378-PeCDF	339.8597	29.76	13708.966	0.912	0.448	0.448	1.54	1.55	NO	81.9
[redacted]	37	Total-pentafurans	339.8597	29.50	3878.236	0.927	0.131		1.56	1.55	NO	30.1
[redacted]	37	Total-pentafurans	339.8597	29.44	11292.026	0.927	0.381		1.47	1.55	NO	54.5
[redacted]	37	Total-pentafurans	339.8597	29.30	3006.716	0.927	0.102		1.85	1.55	YES	19.2
[redacted]	37	Total-pentafurans	339.8597	29.21	1212.894	0.927	0.041		2.08	1.55	YES	8.4
[redacted]	37	Total-pentafurans	339.8597	28.71	25668.074	0.927	0.867		1.46	1.55	NO	138.9
[redacted]	37	Total-pentafurans	339.8597	28.64	23222.088	0.927	0.784		1.47	1.55	NO	135.6
[redacted]	37	Total-pentafurans	339.8597	32.15	1843.762	0.927	0.062		1.66	1.55	NO	8.8
[redacted]	3	23478-PeCDF	339.8597	31.12	14288.874	0.943	0.500	0.500	1.67	1.55	NO	80.3
[redacted]	38	Total-hexafurans	373.8208	35.35	1294.002	1.062	0.059		0.94	1.24	YES	8.1
[redacted]	6	123678-HxCDF	373.8208	34.99	14094.371	1.056	0.562	0.562	1.21	1.24	NO	100.5
[redacted]	4	123478-HxCDF	373.8208	34.84	24286.999	1.101	0.970	0.970	1.15	1.24	NO	146.6
[redacted]	38	Total-hexafurans	373.8208	34.65	3812.982	1.062	0.173		1.17	1.24	NO	25.6
[redacted]	38	Total-hexafurans	373.8208	34.17	222225.531	1.062	10.065		1.20	1.24	NO	1505.4
[redacted]	38	Total-hexafurans	373.8208	33.85	2084.580	1.062	0.094		1.25	1.24	NO	13.6
[redacted]	38	Total-hexafurans	373.8208	33.30	160682.430	1.062	7.277		1.21	1.24	NO	1038.4
[redacted]	38	Total-hexafurans	373.8208	33.09	72383.875	1.062	3.278		1.22	1.24	NO	518.5

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:48:03 Pacific Standard Time

ID: WC32C, Name: 13021309, Date: 13-Feb-2013, Time: 17:15:03, Conditions: AUTOSPEC01, User: pk

TotalTEQ,Furans,Dioxins

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	7	123789-HxCDF	373.8208	37.04	8087.092	1.017	0.453	0.453	1.13	1.24	NO	69.2
[redacted]	5	234678-HxCDF	373.8208	35.98	7104.592	1.073	0.346	0.346	1.40	1.24	NO	53.9
[redacted]	38	Total-hexafurans	373.8208	35.90	10685.587	1.062	0.484		0.89	1.24	YES	63.5
[redacted]	38	Total-hexafurans	373.8208	35.81	568.019	1.062	0.026		1.39	1.24	NO	7.6
[redacted]	39	Total-heptafurans	407.7818	39.88	573728.281	1.231	31.651		1.02	1.05	NO	4375.0
[redacted]	39	Total-heptafurans	407.7818	39.59	3180.707	1.231	0.175		1.13	1.05	NO	22.0
[redacted]	8	1234678-HpCDF	407.7818	39.11	249200.758	1.238	12.098	12.098	1.03	1.05	NO	1995.0
[redacted]	9	1234789-HpCDF	407.7818	41.71	13168.802	1.224	0.840	0.840	1.06	1.05	NO	89.2
[redacted]	39	Total-heptafurans	407.7818	40.90	847.114	1.231	0.047		1.04	1.05	NO	5.9
[redacted]	10	OCDF	441.7428	46.88	354665.359	1.162	32.849	32.849	0.87	0.89	NO	1223.4
[redacted]	36	Total-penta1	339.8597	27.06	141716.028		4.841		1.50	1.55	NO	2062.8
[redacted]	11	2378-TCDD	319.8965	26.29	5316.129	1.106	0.177	0.142	0.53	0.77	YES	28.3
[redacted]	41	Total-tetradioxins	319.8965	25.91	13953.243	1.106	0.465		0.75	0.77	NO	73.4
[redacted]	41	Total-tetradioxins	319.8965	25.61	2670.210	1.106	0.089		1.71	0.77	YES	21.6
[redacted]	41	Total-tetradioxins	319.8965	25.47	30688.952	1.106	1.023		0.75	0.77	NO	204.2
[redacted]	41	Total-tetradioxins	319.8965	25.26	2778.064	1.106	0.093		0.75	0.77	NO	19.6
[redacted]	41	Total-tetradioxins	319.8965	25.15	1187.428	1.106	0.040		0.58	0.77	YES	8.9
[redacted]	41	Total-tetradioxins	319.8965	25.05	175.752	1.106	0.006		0.83	0.77	NO	1.6
[redacted]	41	Total-tetradioxins	319.8965	24.91	15123.801	1.106	0.504		0.88	0.77	NO	112.0
[redacted]	41	Total-tetradioxins	319.8965	24.63	8244.744	1.106	0.275		0.82	0.77	NO	57.1
[redacted]	41	Total-tetradioxins	319.8965	24.40	872.640	1.106	0.029		0.69	0.77	NO	5.6
[redacted]	41	Total-tetradioxins	319.8965	23.91	2209.904	1.106	0.074		0.75	0.77	NO	12.9
[redacted]	41	Total-tetradioxins	319.8965	23.70	90454.578	1.106	3.015		0.82	0.77	NO	653.7
[redacted]	41	Total-tetradioxins	319.8965	23.43	132288.816	1.106	4.410		0.81	0.77	NO	1019.2
[redacted]	41	Total-tetradioxins	319.8965	26.87	1109.647	1.106	0.037		0.80	0.77	NO	7.0
[redacted]	41	Total-tetradioxins	319.8965	26.41	4825.327	1.106	0.161		0.77	0.77	NO	35.1
[redacted]	42	Total-pentadioxins	355.8546	30.71	17070.777	1.001	0.905		1.71	1.55	NO	115.1
[redacted]	42	Total-pentadioxins	355.8546	30.32	2803.357	1.001	0.149		2.11	1.55	YES	13.8
[redacted]	42	Total-pentadioxins	355.8546	30.14	62857.754	1.001	3.332		1.53	1.55	NO	381.1
[redacted]	42	Total-pentadioxins	355.8546	30.01	5856.908	1.001	0.310		1.90	1.55	YES	35.7
[redacted]	42	Total-pentadioxins	355.8546	29.94	4382.793	1.001	0.232		1.39	1.55	NO	36.2
[redacted]	42	Total-pentadioxins	355.8546	29.80	66731.345	1.001	3.538		1.53	1.55	NO	408.8
[redacted]	42	Total-pentadioxins	355.8546	29.18	2638.798	1.001	0.140		1.08	1.55	YES	16.7
[redacted]	42	Total-pentadioxins	355.8546	28.69	46742.912	1.001	2.478		1.53	1.55	NO	177.2
[redacted]	42	Total-pentadioxins	355.8546	31.79	1279.361	1.001	0.068		1.38	1.55	NO	8.2
[redacted]	12	12378-PeCDD	355.8546	31.39	6994.972	1.001	0.371	0.371	1.47	1.55	NO	38.1
[redacted]	15	123789-HxCDD	389.8157	36.68	18436.383	0.904	1.091	1.091	1.14	1.24	NO	59.6
[redacted]	43	Total-hexadioxins	389.8157	36.43	3273.436	0.937	0.187		1.07	1.24	NO	9.8
[redacted]	14	123678-HxCDD	389.8157	36.24	76031.824	0.929	4.315	4.315	1.22	1.24	NO	251.4
[redacted]	13	123478-HxCDD	389.8157	36.12	12640.719	0.978	0.702	0.702	1.37	1.24	NO	47.3
[redacted]	43	Total-hexadioxins	389.8157	35.12	120042.152	0.937	6.853		1.27	1.24	NO	290.9
[redacted]	43	Total-hexadioxins	389.8157	34.72	179168.008	0.937	10.229		1.22	1.24	NO	591.4
[redacted]	43	Total-hexadioxins	389.8157	33.90	68686.550	0.937	3.921		1.25	1.24	NO	231.1
[redacted]	17	OCDD	457.7377	46.62	5152293.500	1.011	548.369	548....	0.88	0.89	NO	16301.5
[redacted]	16	1234678-HpCDD	423.7766	40.87	1415795.250	1.029	80.171	80.171	1.03	1.05	NO	4335.8
[redacted]	44	Total-heptadioxins	423.7766	39.65	1100948.063	1.029	62.343		1.04	1.05	NO	3487.3

ID: WC32C, Name: 13021309, Date: 13-Feb-2013, Time: 17:15:03, Conditions: AUTOSPEC01, User: pk

PFK1

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	48	FUNCTION1 PFK	330.9792	21.13	0.000							3.7
[redacted]	48	FUNCTION1 PFK	330.9792	25.36	0.000							11.3
[redacted]	48	FUNCTION1 PFK	330.9792	25.14	0.000							13.4
[redacted]	48	FUNCTION1 PFK	330.9792	24.88	0.000							3.7
[redacted]	48	FUNCTION1 PFK	330.9792	24.76	0.000							5.3
[redacted]	48	FUNCTION1 PFK	330.9792	24.58	0.000							6.0
[redacted]	48	FUNCTION1 PFK	330.9792	24.26	0.000							15.4
[redacted]	48	FUNCTION1 PFK	330.9792	24.11	0.000							9.9
[redacted]	48	FUNCTION1 PFK	330.9792	23.91	0.000							10.4
[redacted]	48	FUNCTION1 PFK	330.9792	23.64	0.000							7.5
[redacted]	48	FUNCTION1 PFK	330.9792	23.42	0.000							8.1
[redacted]	48	FUNCTION1 PFK	330.9792	23.08	0.000							18.8
[redacted]	48	FUNCTION1 PFK	330.9792	22.94	0.000							5.8
[redacted]	48	FUNCTION1 PFK	330.9792	22.76	0.000							10.8
[redacted]	48	FUNCTION1 PFK	330.9792	21.78	0.000							2.2
[redacted]	48	FUNCTION1 PFK	330.9792	21.61	0.000							5.2
[redacted]	48	FUNCTION1 PFK	330.9792	21.25	0.000							15.5
[redacted]	48	FUNCTION1 PFK	330.9792	27.87	0.000							3.8
[redacted]	48	FUNCTION1 PFK	330.9792	27.66	0.000							2.6
[redacted]	48	FUNCTION1 PFK	330.9792	27.50	0.000							13.8
[redacted]	48	FUNCTION1 PFK	330.9792	27.33	0.000							13.0
[redacted]	48	FUNCTION1 PFK	330.9792	27.15	0.000							10.1
[redacted]	48	FUNCTION1 PFK	330.9792	26.88	0.000							12.2
[redacted]	48	FUNCTION1 PFK	330.9792	26.69	0.000							10.2
[redacted]	48	FUNCTION1 PFK	330.9792	26.44	0.000							4.3
[redacted]	48	FUNCTION1 PFK	330.9792	26.15	0.000							3.9
[redacted]	48	FUNCTION1 PFK	330.9792	26.03	0.000							4.4
[redacted]	48	FUNCTION1 PFK	330.9792	25.61	0.000							17.3

PFK2

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	49	FUNCTION2 PFK	366.9792	30.45	0.000		0.000					4.3
[redacted]	49	FUNCTION2 PFK	366.9792	29.30	0.000		0.000					18.3
[redacted]	49	FUNCTION2 PFK	366.9792	29.17	0.000		0.000					19.8
[redacted]	49	FUNCTION2 PFK	366.9792	28.19	0.000		0.000					4.1
[redacted]	49	FUNCTION2 PFK	366.9792	32.35	0.000		0.000					6.3
[redacted]	49	FUNCTION2 PFK	366.9792	32.24	0.000		0.000					7.2

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:48:03 Pacific Standard Time

ID: WC32C, Name: 13021309, Date: 13-Feb-2013, Time: 17:15:03, Conditions: AUTOSPEC01, User: pk

PFK3

[redacted]												
[redacted]	50	FUNCTION3 PFK	380.9760	38.08	0.000		0.000					3.1
[redacted]	50	FUNCTION3 PFK	380.9760	37.20	0.000		0.000					52.5
[redacted]	50	FUNCTION3 PFK	380.9760	37.13	0.000		0.000					57.9
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[redacted]	50	FUNCTION3 PFK	380.9760	36.33	0.000		0.000					19.6
[redacted]	50	FUNCTION3 PFK	380.9760	35.81	0.000		0.000					7.8
[redacted]	50	FUNCTION3 PFK	380.9760	35.58	0.000		0.000					5.7
[redacted]	50	FUNCTION3 PFK	380.9760	33.70	0.000		0.000					11.1
[redacted]	50	FUNCTION3 PFK	380.9760	33.20	0.000		0.000					8.2
[redacted]	50	FUNCTION3 PFK	380.9760	33.05	0.000		0.000					9.0

PFK4

[redacted]												
[redacted]	51	FUNCTION4 PFK	430.9728	38.89	0.000							6.2
[redacted]	51	FUNCTION4 PFK	430.9728	38.77	0.000							7.1
[redacted]	51	FUNCTION4 PFK	430.9728	39.73	0.000							4.8
[redacted]	51	FUNCTION4 PFK	430.9728	39.59	0.000							5.4

PFK5

[redacted]												
[redacted]	52	FUNCTION5 PFK	480.9696	48.15	0.000							10.3
[redacted]	52	FUNCTION5 PFK	480.9696	46.95	0.000							12.9
[redacted]	52	FUNCTION5 PFK	480.9696	45.34	0.000							10.4
[redacted]	52	FUNCTION5 PFK	480.9696	45.05	0.000							13.1

ETHERS1

[redacted]												
[redacted]	53	FUNCTION1 HXCD...	375.8364	25.72	0.000		0.000					16.4
[redacted]	53	FUNCTION1 HXCD...	375.8364	21.33	0.000		0.000					4.8

ETHERS2

[redacted]												
[redacted]	54	FUNCTION1 HPCD...	409.7974	22.82	0.000		0.000					1.9
[redacted]	54	FUNCTION1 HPCD...	409.7974	22.58	0.000		0.000					1.2
[redacted]	54	FUNCTION1 HPCD...	409.7974	22.15	0.000		0.000					2.0
[redacted]	54	FUNCTION1 HPCD...	409.7974	21.22	0.000		0.000					2.3
[redacted]	54	FUNCTION1 HPCD...	409.7974	21.15	0.000		0.000					1.4
[redacted]	54	FUNCTION1 HPCD...	409.7974	27.69	0.000		0.000					3.0
[redacted]	54	FUNCTION1 HPCD...	409.7974	26.30	0.000		0.000					1.1
[redacted]	54	FUNCTION1 HPCD...	409.7974	25.93	0.000		0.000					2.3
[redacted]	54	FUNCTION1 HPCD...	409.7974	23.64	0.000		0.000					2.8

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:48:03 Pacific Standard Time

ID: WC32C, Name: 13021309, Date: 13-Feb-2013, Time: 17:15:03, Conditions: AUTOSPEC01, User: pk

ETHERS3

[redacted]						
[redacted]	55 FUNCTION2 HPCD...	409.7974	31.23	0.000	0.000	1.0
[redacted]	55 FUNCTION2 HPCD...	409.7974	29.78	0.000	0.000	2.5
[redacted]	55 FUNCTION2 HPCD...	409.7974	29.74	0.000	0.000	3.0
[redacted]	55 FUNCTION2 HPCD...	409.7974	29.41	0.000	0.000	2.7
[redacted]	55 FUNCTION2 HPCD...	409.7974	29.12	0.000	0.000	1.1
[redacted]	55 FUNCTION2 HPCD...	409.7974	28.30	0.000	0.000	1.6

ETHERS4

[redacted]						
[redacted]	56 FUNCTION3 OCDPE	445.7555	36.69	0.000	0.000	2.4
[redacted]	56 FUNCTION3 OCDPE	445.7555	36.52	0.000	0.000	2.2
[redacted]	56 FUNCTION3 OCDPE	445.7555	36.42	0.000	0.000	1.8
[redacted]	56 FUNCTION3 OCDPE	445.7555	35.53	0.000	0.000	1.7
[redacted]	56 FUNCTION3 OCDPE	445.7555	36.90	0.000	0.000	2.5

ETHERS5

[redacted]						
[redacted]	57 FUNCTION4 NCDPE	479.7165	41.24	0.000	0.000	4.1
[redacted]	57 FUNCTION4 NCDPE	479.7165	41.06	0.000	0.000	4.2
[redacted]	57 FUNCTION4 NCDPE	479.7165	40.92	0.000	0.000	6.1
[redacted]	57 FUNCTION4 NCDPE	479.7165	40.82	0.000	0.000	17.4
[redacted]	57 FUNCTION4 NCDPE	479.7165	40.63	0.000	0.000	8.2
[redacted]	57 FUNCTION4 NCDPE	479.7165	40.52	0.000	0.000	5.7
[redacted]	57 FUNCTION4 NCDPE	479.7165	39.55	0.000	0.000	2.8
[redacted]	57 FUNCTION4 NCDPE	479.7165	38.69	0.000	0.000	80.5

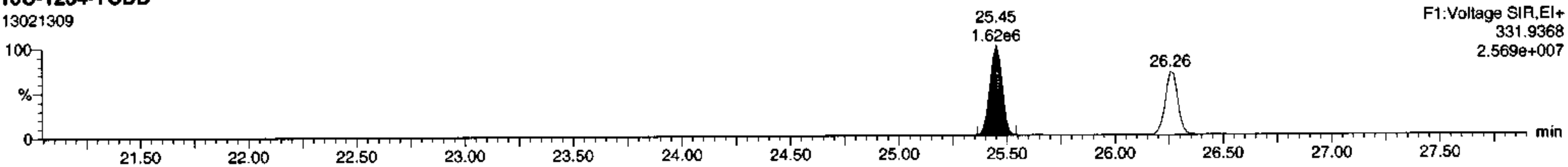
ETHERS6

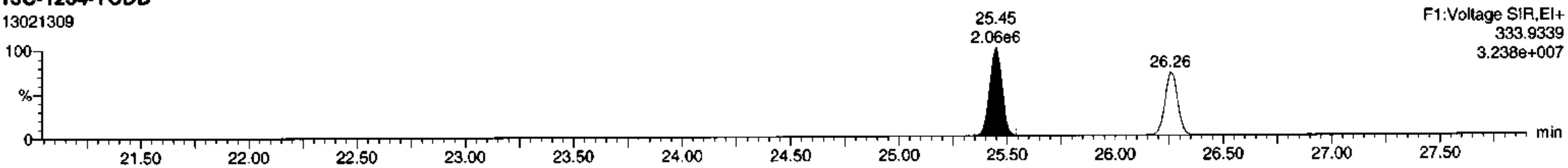
[redacted]
[redacted]

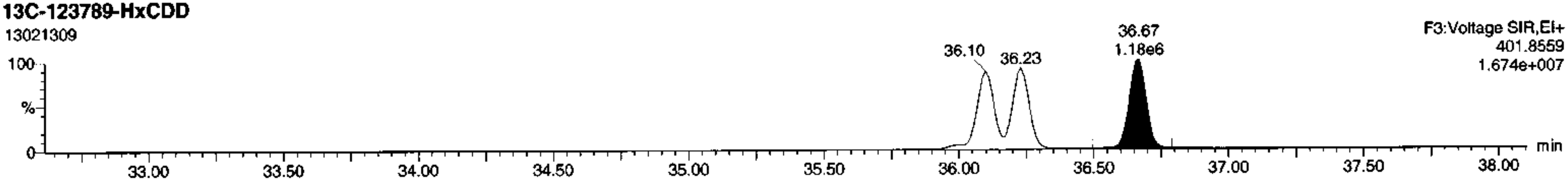
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:48:03 Pacific Standard Time

Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 12 Feb 2013 12:25:57
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: WC32C, Name: 13021309, Date: 13-Feb-2013, Time: 17:15:03, Conditions: AUTOSPEC01, User: pk

13C-1234-TCDD
13021309


13C-1234-TCDD
13021309


13C-123789-HxCDD
13021309


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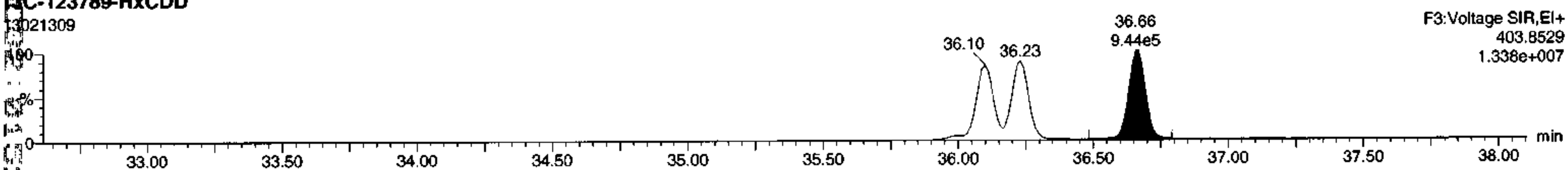
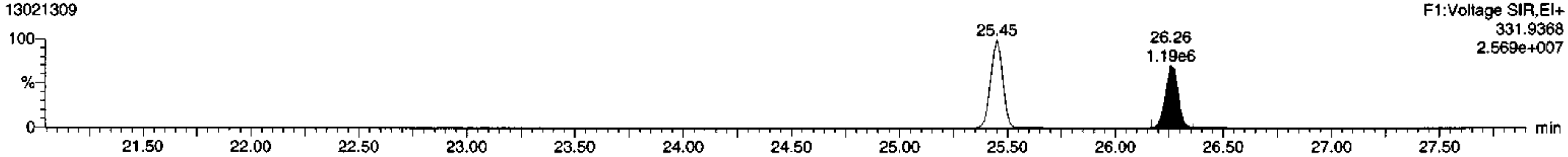
13021309


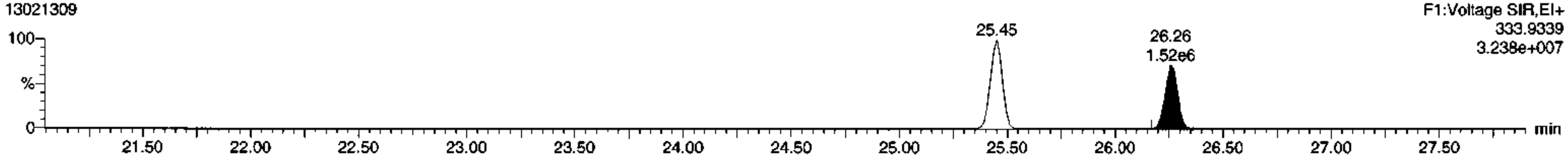
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:48:03 Pacific Standard Time

ID: WC32C, Name: 13021309, Date: 13-Feb-2013, Time: 17:15:03, Conditions: AUTOSPEC01, User: pk

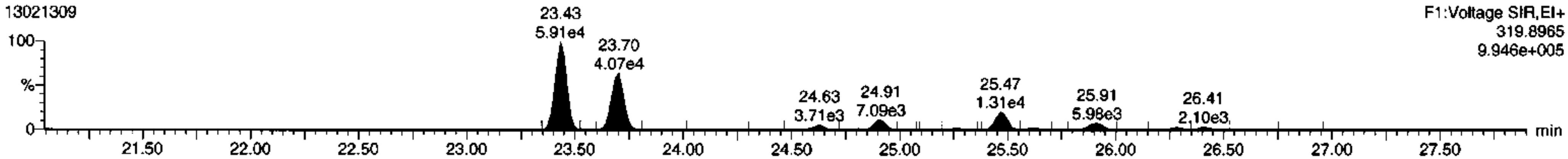
13C-2378-TCDD



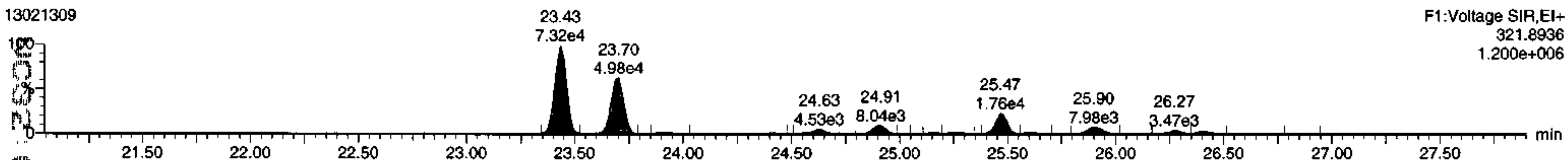
13C-2378-TCDD



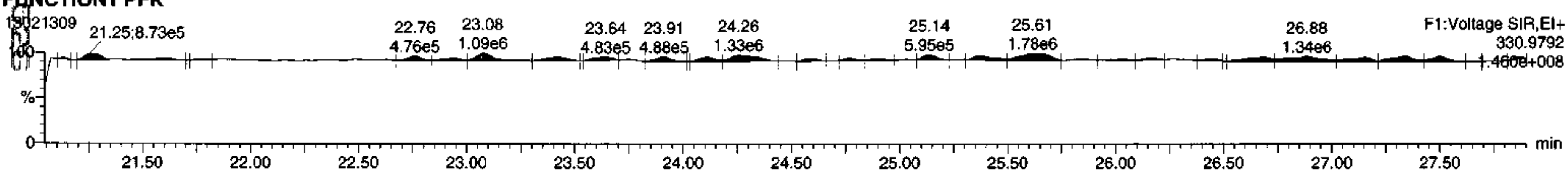
Total-tetradioxins



Total-tetradioxins



FUNCTION1 PFK



Quantify Sample Report **MassLynx 4.1 SCN 714**

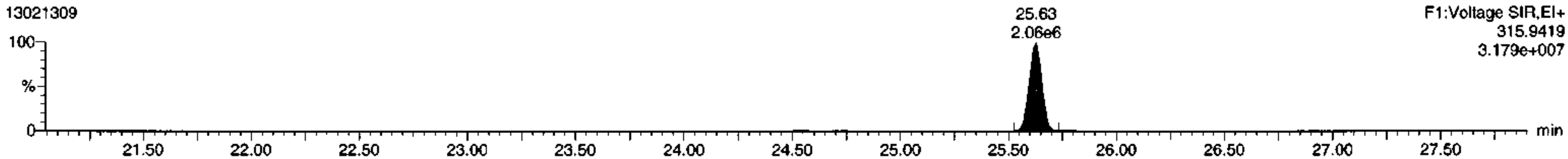
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld

Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time

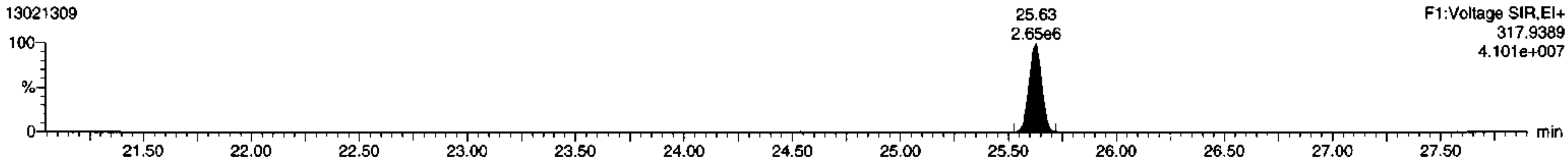
Printed: Thursday, February 14, 2013 10:48:03 Pacific Standard Time

ID: WC32C, Name: 13021309, Date: 13-Feb-2013, Time: 17:15:03, Conditions: AUTOSPEC01, User: pk

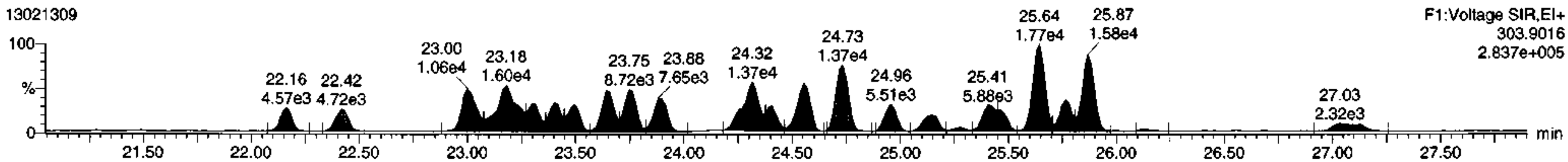
13C-2378-TCDF



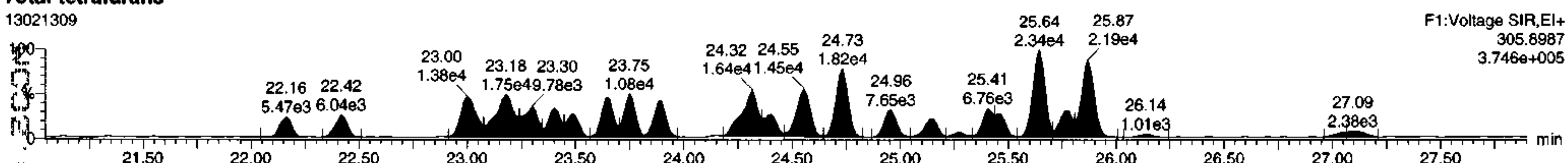
13C-2378-TCDF



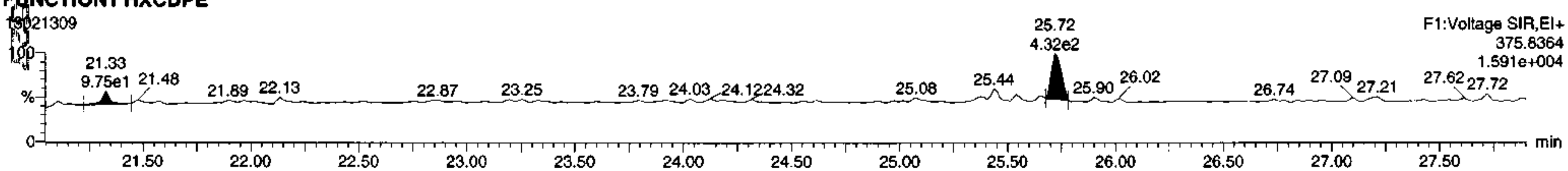
Total-tetrafurans



Total-tetrafurans



FUNCTION1 HXCDPE



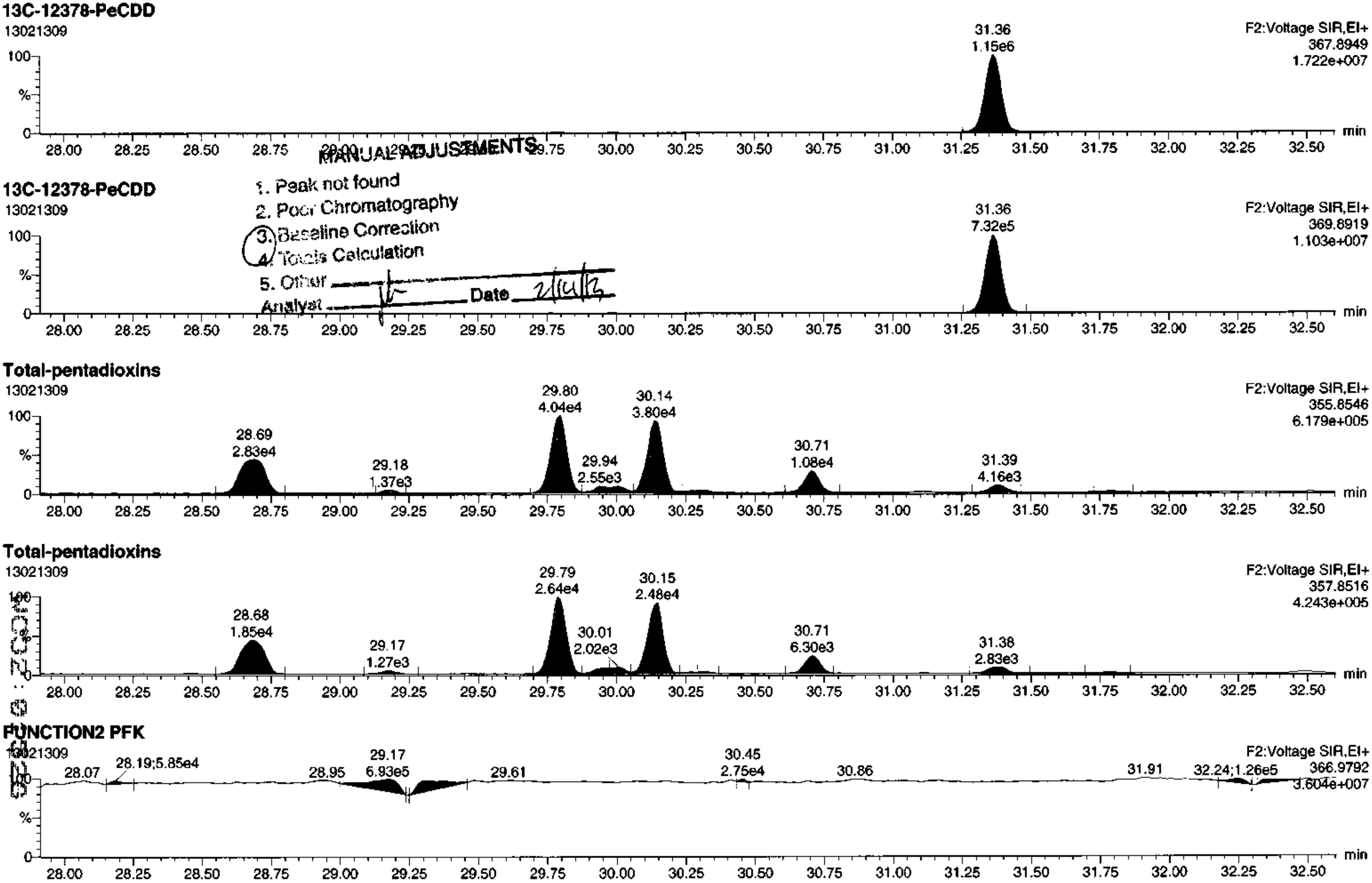
Quantify Sample Report **MassLynx 4.1 SCN 714**

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld

Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time

Printed: Thursday, February 14, 2013 10:48:03 Pacific Standard Time

ID: WC32C, Name: 13021309, Date: 13-Feb-2013, Time: 17:15:03, Conditions: AUTOSPEC01, User: pk



MANUAL ADJUSTMENTS

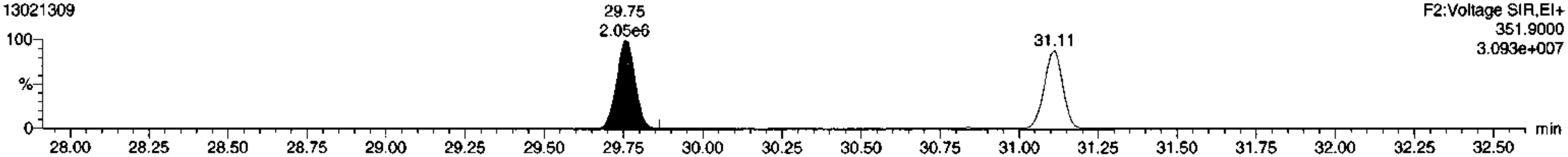
1. Peak not found
2. Poor Chromatography
3. Baseline Correction
4. Totals Calculation
5. Other

Analyst Date 2/14/13

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:48:03 Pacific Standard Time

ID: WC32C, Name: 13021309, Date: 13-Feb-2013, Time: 17:15:03, Conditions: AUTOSPEC01, User: pk

13C-12378-PeCDF



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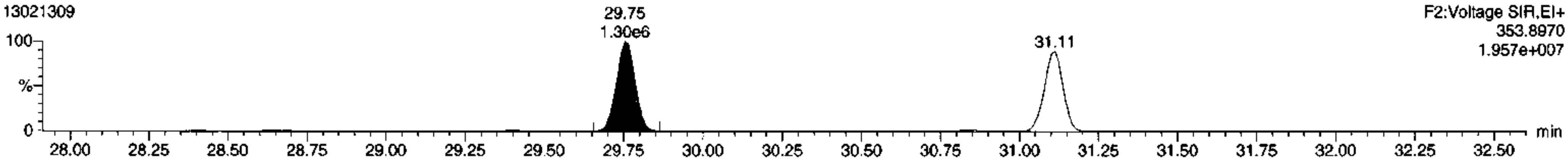
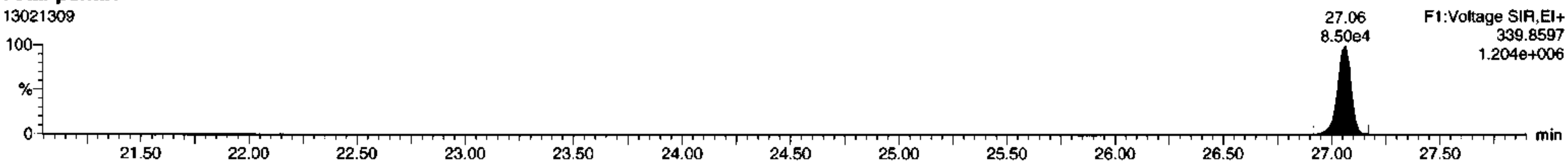
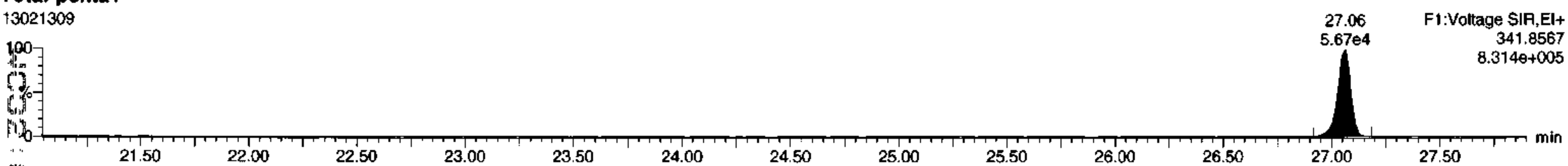


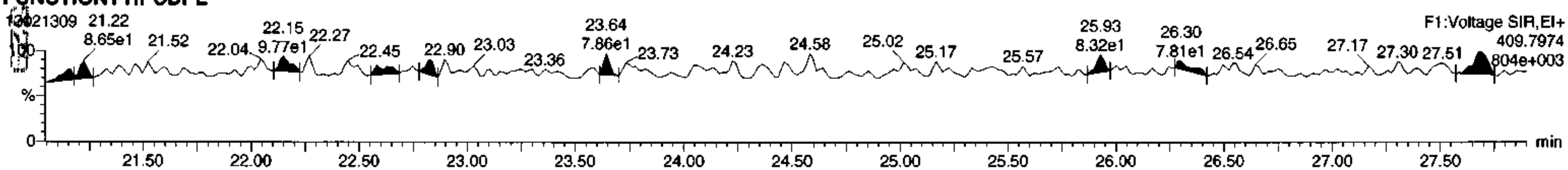
Total-penta1



Total-penta1



FUNCTION1 HPCDPE



Quantify Sample Report **MassLynx 4.1 SCN 714**

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld

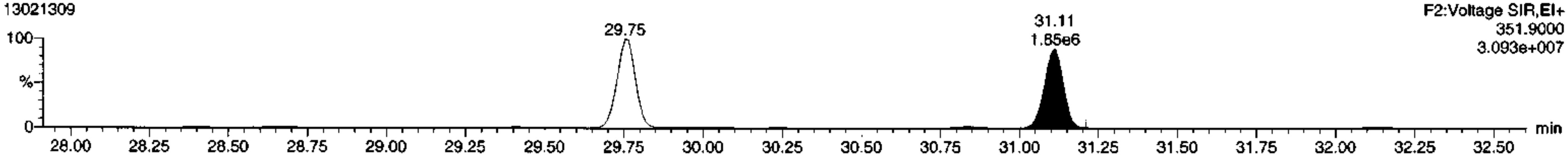
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time

Printed: Thursday, February 14, 2013 10:48:03 Pacific Standard Time

ID: WC32C, Name: 13021309, Date: 13-Feb-2013, Time: 17:15:03, Conditions: AUTOSPEC01, User: pk

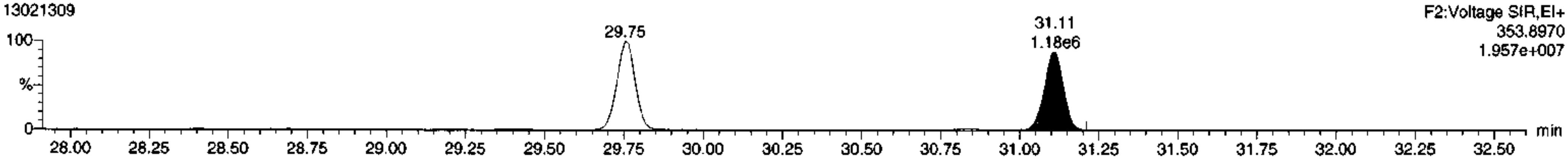
13C-23478-PeCDF

13021309



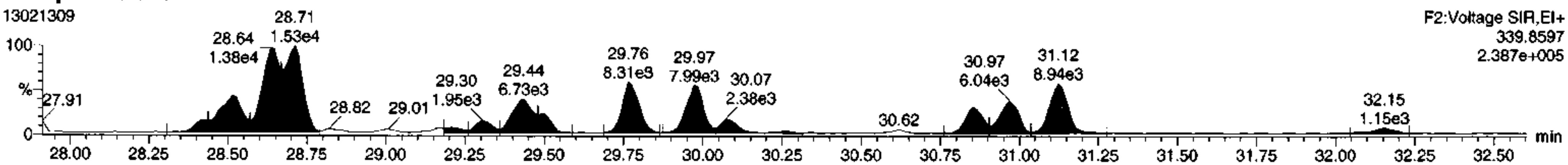
13C-23478-PeCDF

13021309



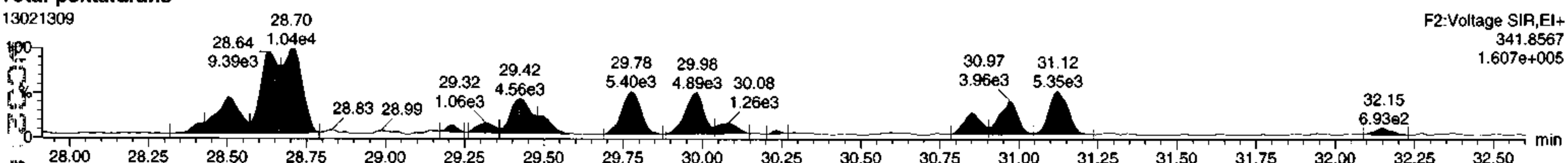
Total-pentafurans

13021309



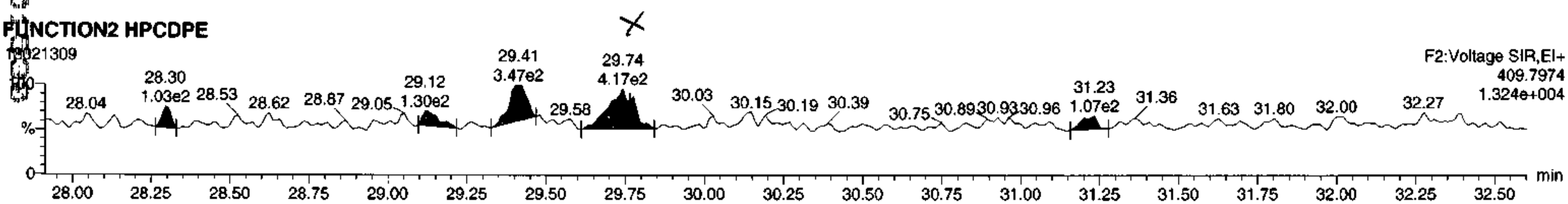
Total-pentafurans

13021309



FUNCTION2 HPCDPE

13021309



Quantify Sample Report **MassLynx 4.1 SCN 714**

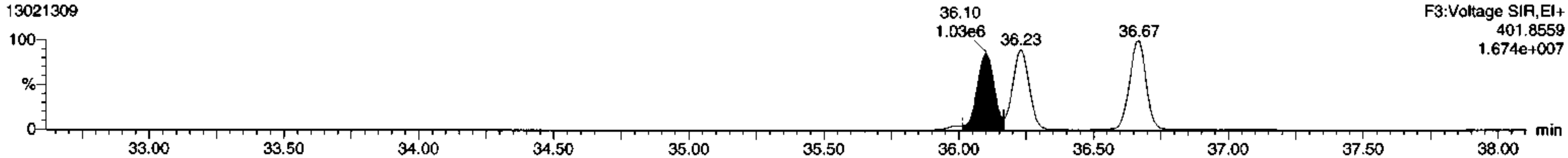
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld

Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time

Printed: Thursday, February 14, 2013 10:48:03 Pacific Standard Time

ID: WC32C, Name: 13021309, Date: 13-Feb-2013, Time: 17:15:03, Conditions: AUTOSPEC01, User: pk

13C-123478-HxCDD



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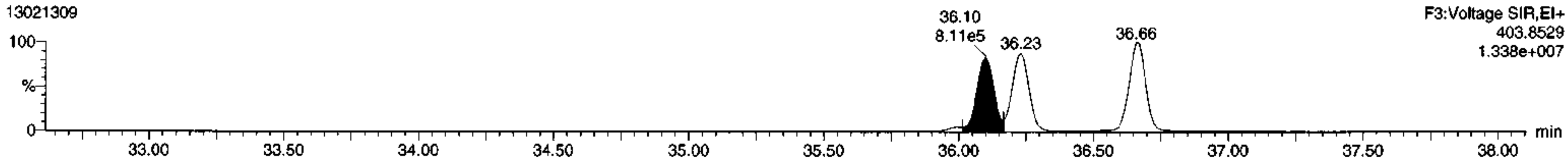
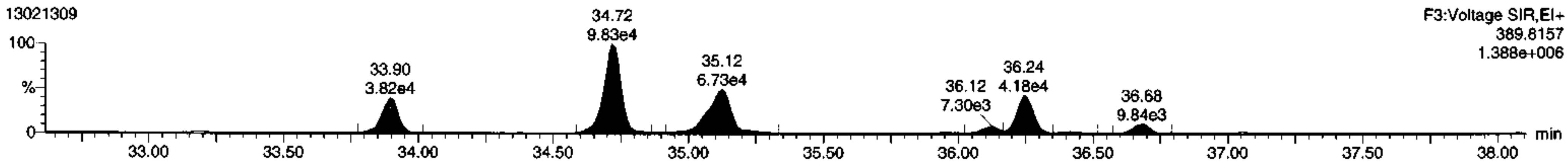
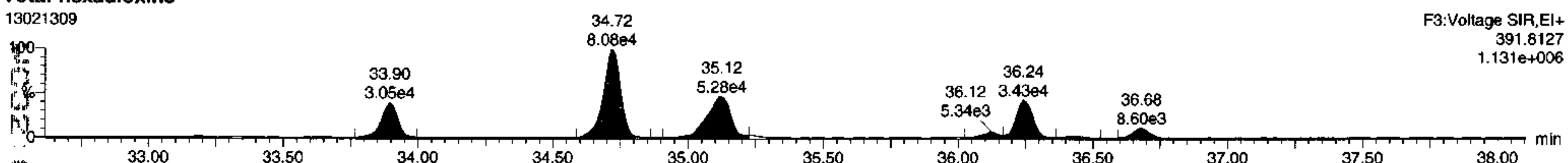


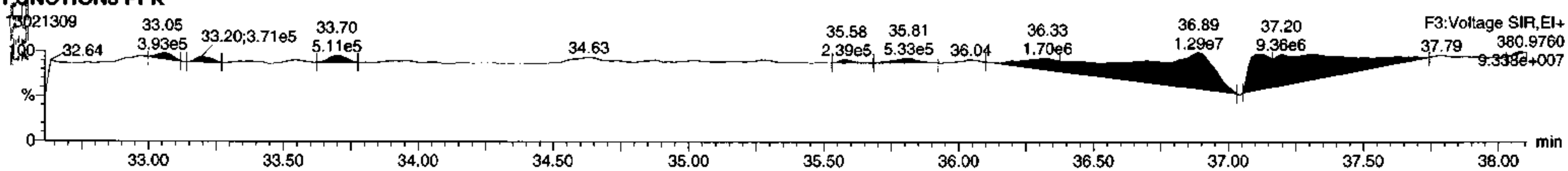
Total-hexadioxins



Total-hexadioxins



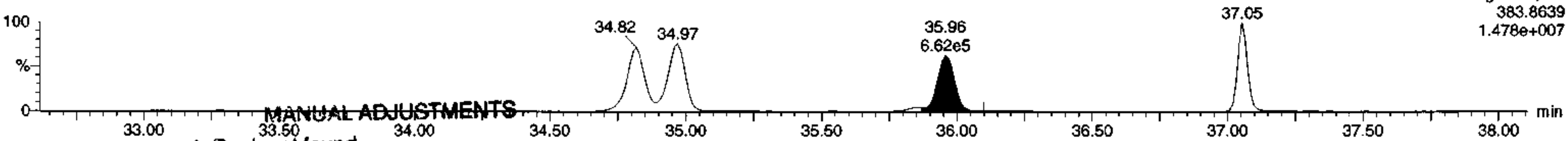
FUNCTION3 PFK



Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:48:03 Pacific Standard Time

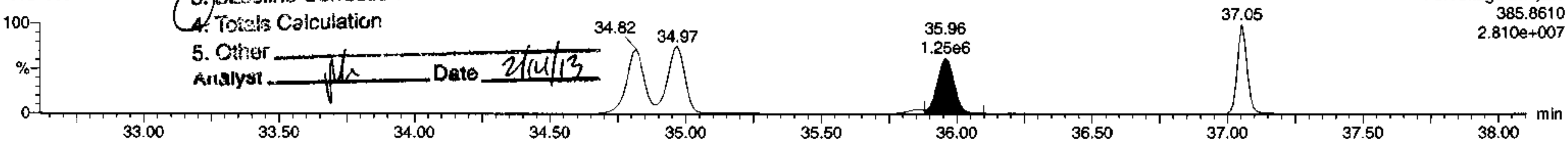
ID: WC32C, Name: 13021309, Date: 13-Feb-2013, Time: 17:15:03, Conditions: AUTOSPEC01, User: pk

13C-234678-HxCDF

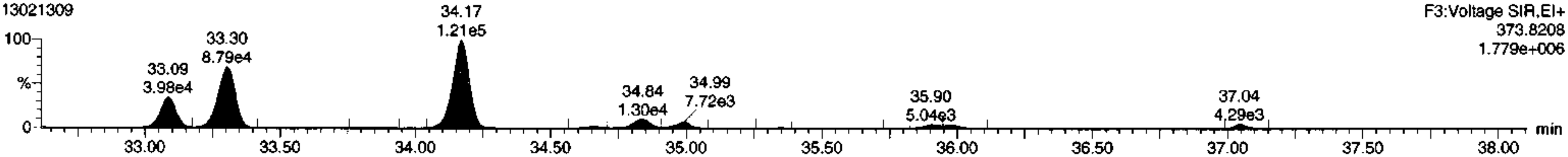


MANUAL ADJUSTMENTS
1. Peak not found
2. Poor Chromatography
3. Baseline Correction
4. Totals Calculation
5. Other
Analyst Date 2/14/13

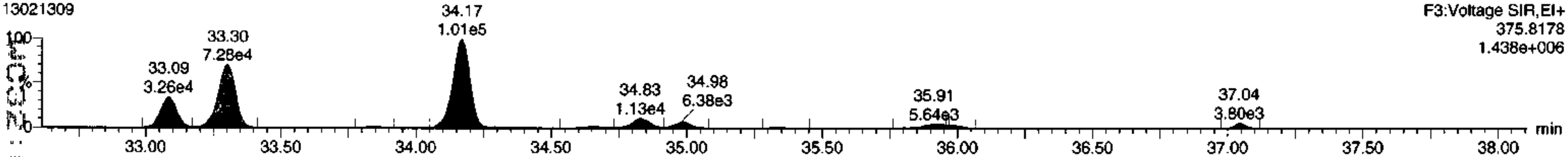
13C-234678-HxCDF



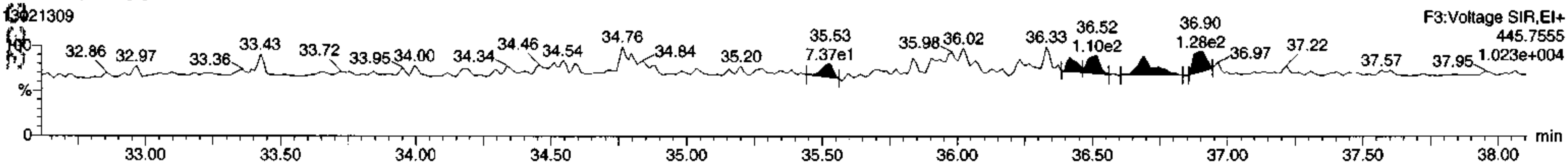
Total-hexafurans



Total-hexafurans



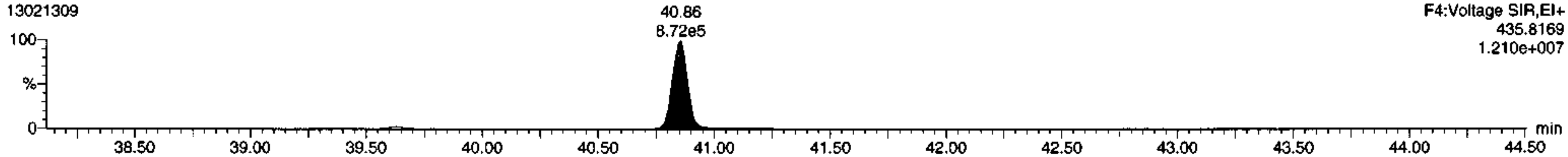
FUNCTION3 OCDPE



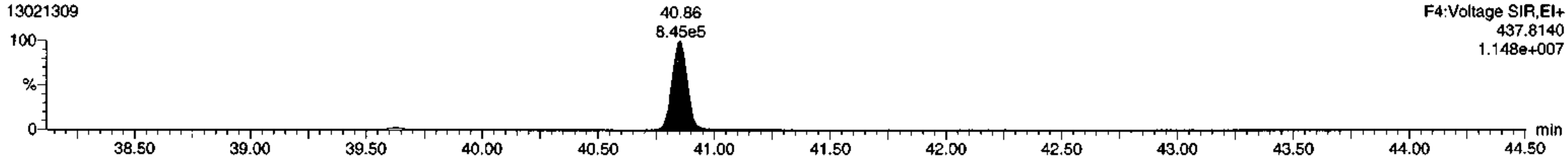
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:48:03 Pacific Standard Time

ID: WC32C, Name: 13021309, Date: 13-Feb-2013, Time: 17:15:03, Conditions: AUTOSPEC01, User: pk

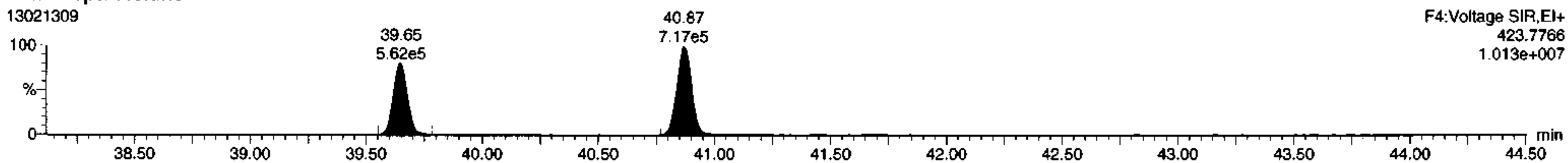
13C-1234678-HpCDD



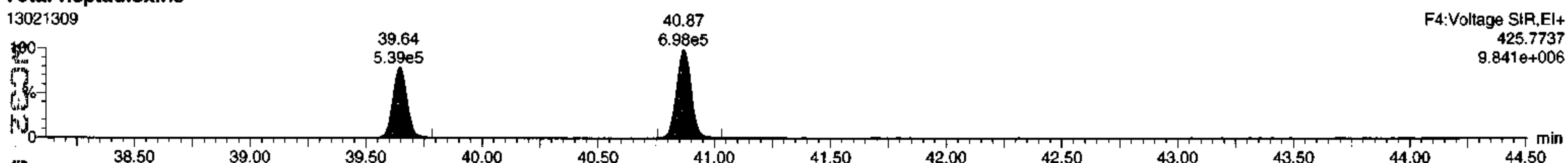
13C-1234678-HpCDD



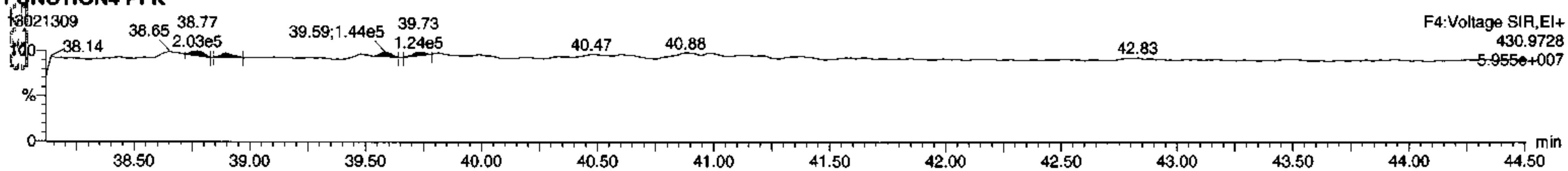
Total-heptadioxins



Total-heptadioxins



FUNCTION4 PFK

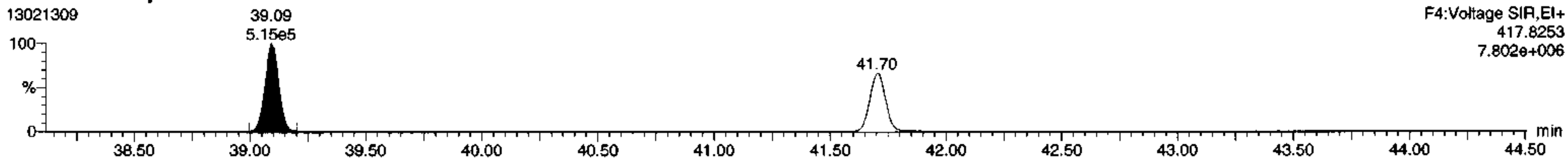


Quantify Sample Report **MassLynx 4.1 SCN 714**

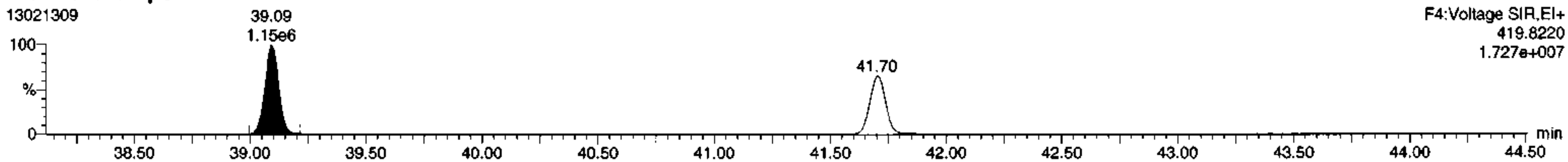
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:48:03 Pacific Standard Time

ID: WC32C, Name: 13021309, Date: 13-Feb-2013, Time: 17:15:03, Conditions: AUTOSPEC01, User: pk

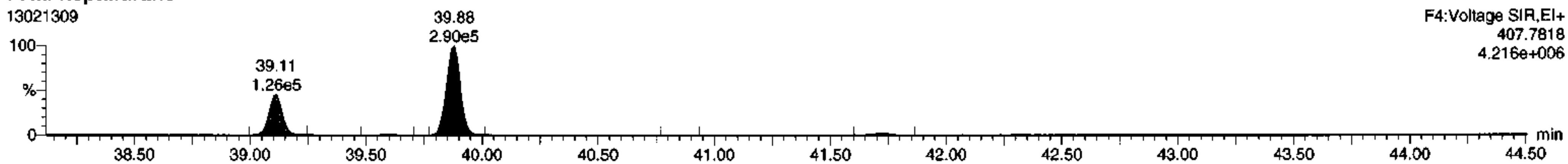
13C-1234678-HpCDF



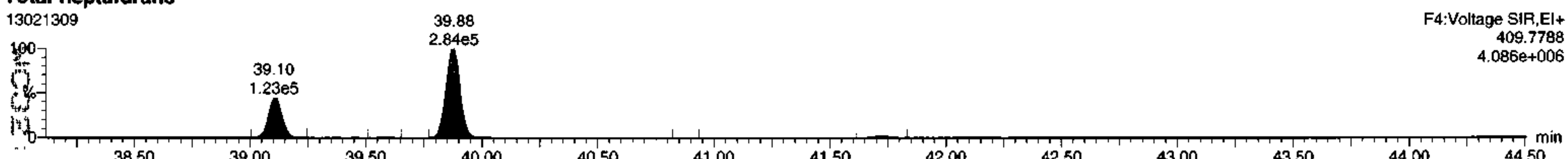
13C-1234678-HpCDF



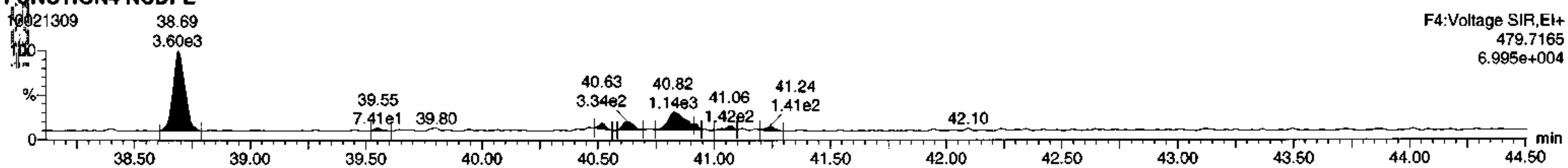
Total-heptafurans



Total-heptafurans



FUNCTION4 NCDPE



Quantify Sample Report **MassLynx 4.1 SCN 714**

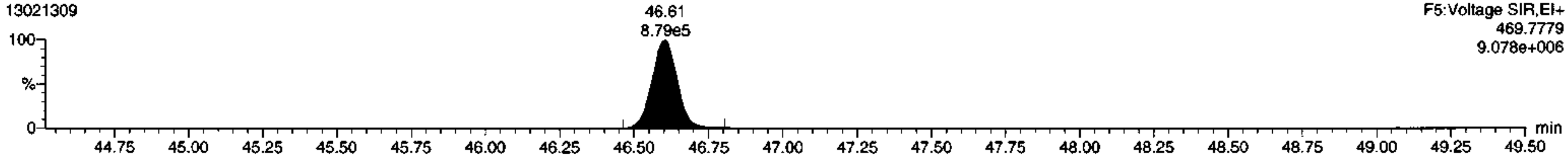
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld

Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time

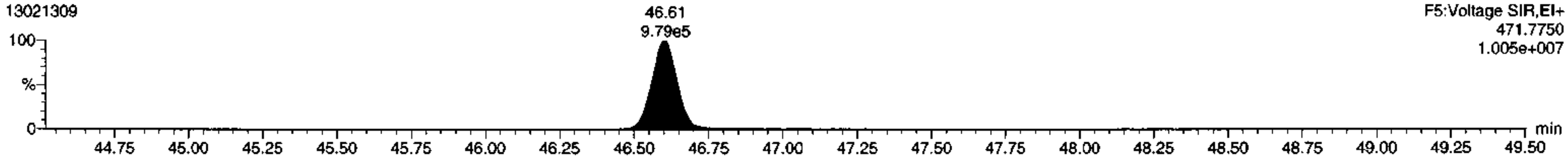
Printed: Thursday, February 14, 2013 10:48:03 Pacific Standard Time

ID: WC32C, Name: 13021309, Date: 13-Feb-2013, Time: 17:15:03, Conditions: AUTOSPEC01, User: pk

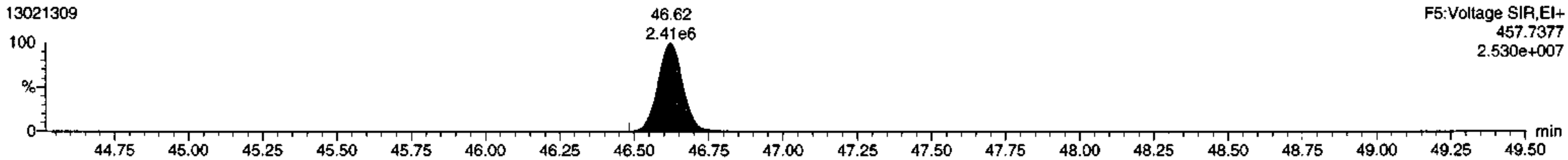
13C-OCDD



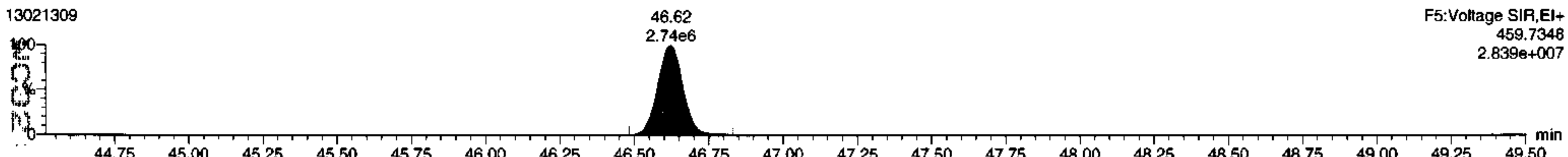
13C-OCDD



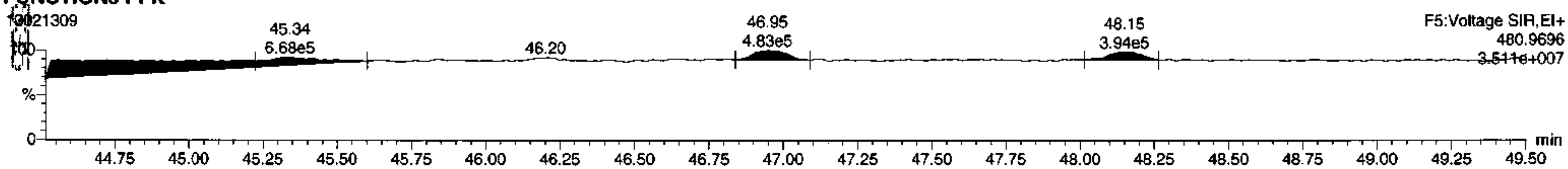
OCDD



OCDD



FUNCTION5 PFK

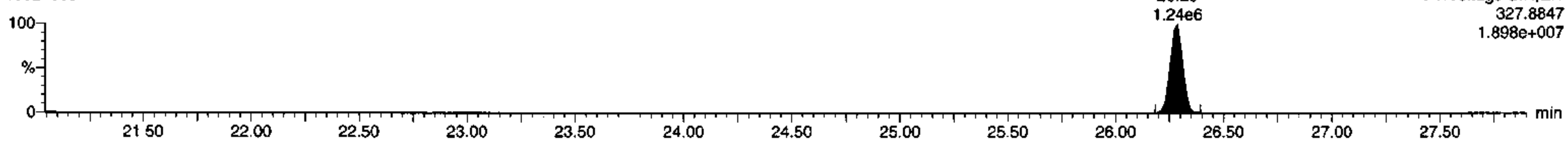


Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:48:03 Pacific Standard Time

ID: WC32C, Name: 13021309, Date: 13-Feb-2013, Time: 17:15:03, Conditions: AUTOSPEC01, User: pk

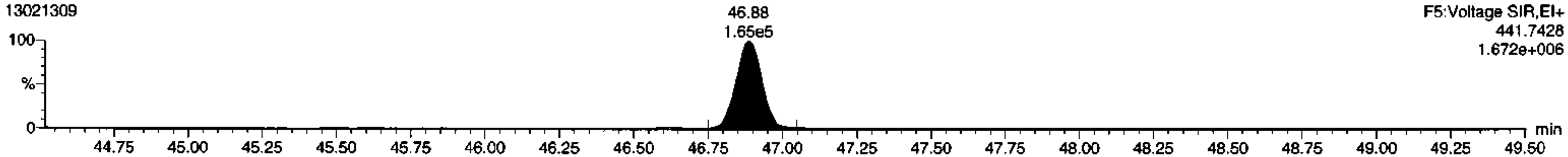
37CL-2378-TCDD

13021309



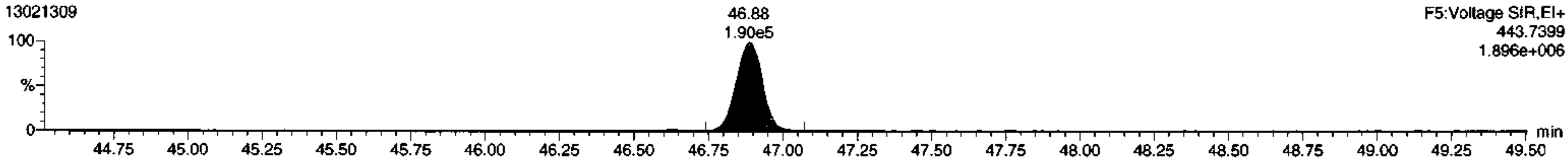
OCDF

13021309



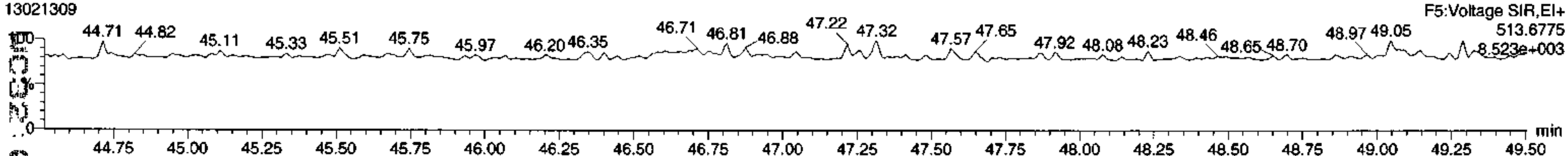
OCDF

13021309



FUNCTION5 DCDPE

13021309



Quantify Sample Summary Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:48:25 Pacific Standard Time

nk 2/14/13

Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 12 Feb 2013 12:25:57
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: WC32D, Name: 13021310, Date: 13-Feb-2013, Time: 18:07:43, Conditions: AUTOSPEC01, User: pk

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	2378-TCDF	25.645	1.001	2.33e4	3.25e4	0.921	0.717	0.770	163.0	1959	2213	3.19e5	4.61e5	NO	1.220	1.220
[redacted]	12378-PeCDF	29.776	1.000	4.18e4	2.76e4	0.912	1.512	1.550	273.6	2264	1706	6.19e5	4.04e5	NO	1.984	1.984
[redacted]	23478-PeCDF	31.135	1.001	4.99e4	3.21e4	0.943	1.555	1.550	308.8	2264	1706	6.99e5	4.50e5	NO	2.329	2.329
[redacted]	123478-HxCDF	34.851	1.001	1.39e5	1.17e5	1.101	1.192	1.240	564.5	3258	2529	1.84e6	1.56e6	NO	8.116	8.116
[redacted]	234678-HxCDF	36.002	1.001	4.87e4	4.05e4	1.073	1.201	1.240	204.5	3258	2529	6.66e5	5.66e5	NO	3.579	3.579
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[redacted]	123789-HxCDF	37.065	1.000	4.30e4	3.64e4	1.017	1.183	1.240	297.1	3258	2529	9.68e5	8.24e5	NO	4.286	4.286
[redacted]	1234678-HpCDF	39.115	1.000	9.87e5	9.78e5	1.238	1.010	1.050	4585.1	3174	3187	1.46e7	1.43e7	NO	78.760	78.760
[redacted]	1234789-HpCDF	41.735	1.001	5.02e4	5.10e4	1.224	0.984	1.050	206.3	3174	3187	6.55e5	6.80e5	NO	5.123	5.123
[redacted]	OCDF	46.895	1.006	8.29e5	9.62e5	1.162	0.861	0.890	6379.9	1345	2233	8.58e6	9.91e6	NO	123.896	123.896
[redacted]	2378-TCDD	26.288	1.001	2.75e3	5.70e3	1.106	0.484	0.770	27.1	1498	1379	4.07e4	8.51e4	YES	0.178	0.237
[redacted]	12378-PeCDD	31.387	1.000	2.52e4	1.62e4	1.001	1.558	1.550	185.2	1804	1101	3.34e5	2.11e5	NO	1.763	1.763
[redacted]	123478-HxCDD	36.145	1.001	5.69e4	4.69e4	0.978	1.214	1.240	220.4	3528	4819	7.78e5	6.38e5	NO	4.755	4.755
[redacted]	123678-HxCDD	36.265	1.000	3.95e5	3.24e5	0.929	1.220	1.240	1532.5	3528	4819	5.41e6	4.49e6	NO	34.567	34.567
[redacted]	123789-HxCDD	36.704	1.012	7.64e4	6.13e4	0.904	1.247	1.240	323.1	3528	4819	1.14e6	8.99e5	NO	6.813	6.813
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[redacted]	OCDD	46.635	1.000	3.02e7	3.39e7	1.011	0.892	0.890	61128.5	5365	5548	3.28e8	3.67e8	NO	5100.266	5100.266 E
[redacted]	13C-2378-TCDF	25.630	1.006	2.16e6	2.80e6	1.522	0.771	0.770	3434.1	9091	4172	3.12e7	4.06e7	NO		70.167
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[redacted]	13C-23478-PeCDF	31.113	1.222	2.28e6	1.45e6	1.136	1.575	1.550	7916.9	4062	3401	3.22e7	2.06e7	NO		70.621
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[redacted]	13C-1234678-HpCDF	39.104	1.066	6.26e5	1.39e6	1.070	0.451	0.440	4501.2	2092	2005	9.42e6	2.07e7	NO		66.711
[redacted]	13C-1234789-HpCDF	41.713	1.137	5.01e5	1.11e6	0.774	0.450	0.440	3122.8	2092	2005	6.53e6	1.46e7	NO		73.863
[redacted]	13C-1234-TCDD	25.466	0.000	2.05e6	2.60e6	1.000	0.786	0.770	6343.6	4664	2816	2.96e7	3.79e7	NO		100.000
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Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:48:25 Pacific Standard Time

ID: WC32D, Name: 13021310, Date: 13-Feb-2013, Time: 18:07:43, Conditions: AUTOSPEC01, User: pk

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
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[redacted]	Total-tetrafurans			2.01e5		0.921				1959		2.75e6				10.402
[redacted]	Total-penta1			5.89e5						1113		8.53e6				27.852
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[redacted]	Total-Dioxins			4.79e7		0.994				1498		5.80e8				6769.010
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[redacted]	37CL-2378-TCDD	26.288	1.032	1.44e6		1.051			9757.9	2184		2.13e7				29.356
[redacted]	FUNCTION1 PFK			4.44e6						934933		5.15e7				
[redacted]	FUNCTION2 PFK			3.50e6						358166		1.13e7				0.000
[redacted]	FUNCTION3 PFK			3.61e7						720007		1.20e8				0.000
[redacted]	FUNCTION4 PFK			7.24e4						578932		1.66e6				
[redacted]	FUNCTION5 PFK			2.83e5						326022		2.44e6				
[redacted]	FUNCTION1 HXCDPE			3.48e3						525		4.55e4				0.000
[redacted]	FUNCTION1 HPCDPE			1.49e3						967		2.78e4				0.000
[redacted]	FUNCTION2 HPCDPE			2.93e3						1118		6.29e4				0.000
[redacted]	FUNCTION3 OCDPE			2.50e3						926		4.27e4				0.000
[redacted]	FUNCTION4 NCDPE			3.07e4						1070		4.88e5				0.000
[redacted]	FUNCTION5 DCDPE			3.41e2						470		4.19e3				0.000

Quantify Totals Report MassLynx 4.1 SCN 714
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:48:25 Pacific Standard Time

Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 12 Feb 2013 12:25:57
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: WC32D, Name: 13021310, Date: 13-Feb-2013, Time: 18:07:43, Conditions: AUTOSPEC01, User: pk

TF

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
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[redacted]	35	Total-tetrafurans	303.9016	24.41	15724.142	0.921	0.344		0.84	0.77	NO	49.7
[redacted]	35	Total-tetrafurans	303.9016	24.32	30737.907	0.921	0.672		0.63	0.77	YES	69.7
[redacted]	35	Total-tetrafurans	303.9016	23.90	11720.644	0.921	0.256		0.80	0.77	NO	39.8
[redacted]	35	Total-tetrafurans	303.9016	23.75	9465.149	0.921	0.207		0.79	0.77	NO	31.8
[redacted]	35	Total-tetrafurans	303.9016	23.66	30456.715	0.921	0.666		0.75	0.77	NO	98.3
[redacted]	35	Total-tetrafurans	303.9016	23.49	8501.275	0.921	0.186		0.77	0.77	NO	32.4
[redacted]	35	Total-tetrafurans	303.9016	23.40	20405.988	0.921	0.446		0.73	0.77	NO	61.3
[redacted]	35	Total-tetrafurans	303.9016	23.31	15755.246	0.921	0.344		0.70	0.77	NO	40.9
[redacted]	35	Total-tetrafurans	303.9016	23.02	49434.785	0.921	1.080		0.79	0.77	NO	148.8
[redacted]	35	Total-tetrafurans	303.9016	22.43	11127.692	0.921	0.243		0.68	0.77	NO	36.0
[redacted]	35	Total-tetrafurans	303.9016	22.18	8024.799	0.921	0.175		0.81	0.77	NO	23.9
[redacted]	35	Total-tetrafurans	303.9016	27.08	18345.352	0.921	0.401		0.87	0.77	NO	38.1
[redacted]	35	Total-tetrafurans	303.9016	26.06	1366.205	0.921	0.030		0.38	0.77	YES	4.1
[redacted]	35	Total-tetrafurans	303.9016	25.87	24983.292	0.921	0.546		0.78	0.77	NO	77.4
[redacted]	35	Total-tetrafurans	303.9016	25.78	13764.963	0.921	0.301		0.86	0.77	NO	42.8
[redacted]	1	2378-TCDF	303.9016	25.65	55842.131	0.921	1.220	1.220	0.72	0.77	NO	163.0
[redacted]	35	Total-tetrafurans	303.9016	25.47	13102.939	0.921	0.286		0.97	0.77	YES	52.6
[redacted]	35	Total-tetrafurans	303.9016	25.42	14665.640	0.921	0.320		0.63	0.77	YES	53.4
[redacted]	35	Total-tetrafurans	303.9016	25.29	1481.573	0.921	0.032		0.53	0.77	YES	4.8
[redacted]	35	Total-tetrafurans	303.9016	25.17	14465.509	0.921	0.316		0.77	0.77	NO	43.8
[redacted]	35	Total-tetrafurans	303.9016	24.96	11672.885	0.921	0.255		0.80	0.77	NO	39.8
[redacted]	35	Total-tetrafurans	303.9016	24.75	40429.008	0.921	0.883		0.75	0.77	NO	125.7
[redacted]	35	Total-tetrafurans	303.9016	23.18	21887.276	0.921	0.478		0.44	0.77	YES	40.4

f2

PP

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	36	Total-penta1	339.8597	27.06	966290.813		27.852		1.56	1.55	NO	7665.4

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PF

	37 Total-pentafurans	339.8597	29.00	4989.517	0.927	0.142		1.67	1.55	NO	19.6	
	37 Total-pentafurans	339.8597	28.86	4068.958	0.927	0.116		1.39	1.55	NO	17.9	
	37 Total-pentafurans	339.8597	28.72	230902.961	0.927	6.580		1.54	1.55	NO	632.4	
	37 Total-pentafurans	339.8597	28.52	29154.129	0.927	0.831		1.30	1.55	YES	87.4	
	37 Total-pentafurans	339.8597	28.44	5334.961	0.927	0.152		2.37	1.55	YES	29.8	
	37 Total-pentafurans	339.8597	32.17	12229.596	0.927	0.349		1.19	1.55	YES	37.2	
	3 23478-PeCDF	339.8597	31.14	81906.022	0.943	2.329	2.329	1.56	1.55	NO	308.8	
	37 Total-pentafurans	339.8597	30.98	110462.644	0.927	3.148		1.45	1.55	NO	398.7	
	37 Total-pentafurans	339.8597	30.87	19374.411	0.927	0.552		1.37	1.55	NO	73.6	
	37 Total-pentafurans	339.8597	30.62	2670.439	0.927	0.076		1.82	1.55	YES	11.2	
	37 Total-pentafurans	339.8597	30.08	9079.404	0.927	0.259		1.27	1.55	YES	32.2	
	37 Total-pentafurans	339.8597	29.98	84369.547	0.927	2.404		1.53	1.55	NO	319.1	
	2 12378-PeCDF	339.8597	29.78	69428.540	0.912	1.984	1.984	1.51	1.55	NO	273.6	
	37 Total-pentafurans	339.8597	29.43	78968.799	0.927	2.250		1.50	1.55	NO	184.3	
	37 Total-pentafurans	339.8597	29.32	15061.781	0.927	0.429		1.43	1.55	NO	68.3	
	37 Total-pentafurans	339.8597	29.22	8927.200	0.927	0.254		1.56	1.55	NO	34.8	

Fz

HF

	38 Total-hexafurans	373.8208	35.93	79580.911	1.062	3.081		1.17	1.24	NO	172.9	
	38 Total-hexafurans	373.8208	35.37	7202.009	1.062	0.279		1.00	1.24	YES	17.4	
	6 123678-HxCDF	373.8208	35.00	98995.848	1.056	3.440	3.440	1.17	1.24	NO	224.5	
	4 123478-HxCDF	373.8208	34.85	255871.390	1.101	8.116	8.116	1.19	1.24	NO	564.5	
	38 Total-hexafurans	373.8208	34.68	25596.874	1.062	0.991		1.23	1.24	NO	61.3	
	38 Total-hexafurans	373.8208	34.18	2661087.125	1.062	103.009		1.21	1.24	NO	6093.8	
	38 Total-hexafurans	373.8208	33.85	16395.701	1.062	0.635		1.41	1.24	NO	40.0	
	38 Total-hexafurans	373.8208	33.32	1551894.813	1.062	60.073		1.20	1.24	NO	3550.2	
	38 Total-hexafurans	373.8208	33.10	613522.875	1.062	23.749		1.23	1.24	NO	1464.5	
	7 123789-HxCDF	373.8208	37.07	79401.770	1.017	4.286	4.286	1.18	1.24	NO	297.1	
	5 234678-HxCDF	373.8208	36.00	89165.051	1.073	3.579	3.579	1.20	1.24	NO	204.5	

Fz

HPF

	9 1234789-HpCDF	407.7818	41.74	101156.293	1.224	5.123	5.123	0.98	1.05	NO	206.3	
	39 Total-heptafurans	407.7818	40.89	6880.637	1.231	0.308		1.24	1.05	YES	16.3	
	39 Total-heptafurans	407.7818	39.88	4300851.500	1.231	192.583		1.02	1.05	NO	9809.1	
	39 Total-heptafurans	407.7818	39.59	26494.195	1.231	1.186		0.90	1.05	NO	42.7	
	8 1234678-HpCDF	407.7818	39.12	1964819.688	1.238	78.760	78.760	1.01	1.05	NO	4585.1	

Fz

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
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ID: WC32D, Name: 13021310, Date: 13-Feb-2013, Time: 18:07:43, Conditions: AUTOSPEC01, User: pk

Furans,TF,PP,PF,HF,HPF,OF

[redacted]											
[redacted]	35 Total-tetrafurans	303.9016	24.57	32671.756	0.921	0.714		0.70	0.77	NO	87.8
	35 Total-tetrafurans	303.9016	24.41	15724.142	0.921	0.344		0.84	0.77	NO	49.7
	35 Total-tetrafurans	303.9016	24.32	30737.907	0.921	0.672		0.63	0.77	YES	69.7
	35 Total-tetrafurans	303.9016	23.90	11720.644	0.921	0.256		0.80	0.77	NO	39.8
	35 Total-tetrafurans	303.9016	23.75	9465.149	0.921	0.207		0.79	0.77	NO	31.8
	35 Total-tetrafurans	303.9016	23.66	30456.715	0.921	0.666		0.75	0.77	NO	98.3
	35 Total-tetrafurans	303.9016	23.49	8501.275	0.921	0.186		0.77	0.77	NO	32.4
	35 Total-tetrafurans	303.9016	23.40	20405.988	0.921	0.446		0.73	0.77	NO	61.3
	35 Total-tetrafurans	303.9016	23.31	15755.246	0.921	0.344		0.70	0.77	NO	40.9
	35 Total-tetrafurans	303.9016	23.02	49434.785	0.921	1.080		0.79	0.77	NO	148.8
	35 Total-tetrafurans	303.9016	22.43	11127.692	0.921	0.243		0.68	0.77	NO	36.0
	35 Total-tetrafurans	303.9016	22.18	8024.799	0.921	0.175		0.81	0.77	NO	23.9
	35 Total-tetrafurans	303.9016	27.08	18345.352	0.921	0.401		0.87	0.77	NO	38.1
	35 Total-tetrafurans	303.9016	26.06	1366.205	0.921	0.030		0.38	0.77	YES	4.1
	35 Total-tetrafurans	303.9016	25.87	24983.292	0.921	0.546		0.78	0.77	NO	77.4
	35 Total-tetrafurans	303.9016	25.78	13764.963	0.921	0.301		0.86	0.77	NO	42.8
	1 2378-TCDF	303.9016	25.65	55842.131	0.921	1.220	1.220	0.72	0.77	NO	163.0
	35 Total-tetrafurans	303.9016	25.47	13102.939	0.921	0.286		0.97	0.77	YES	52.6
	35 Total-tetrafurans	303.9016	25.42	14665.640	0.921	0.320		0.63	0.77	YES	53.4
	35 Total-tetrafurans	303.9016	25.29	1481.573	0.921	0.032		0.53	0.77	YES	4.8
	35 Total-tetrafurans	303.9016	25.17	14465.509	0.921	0.316		0.77	0.77	NO	43.8
	35 Total-tetrafurans	303.9016	24.96	11672.885	0.921	0.255		0.80	0.77	NO	39.8
	35 Total-tetrafurans	303.9016	24.75	40429.008	0.921	0.883		0.75	0.77	NO	125.7
	37 Total-pentafurans	339.8597	29.00	4989.517	0.927	0.142		1.67	1.55	NO	19.6
	37 Total-pentafurans	339.8597	28.86	4068.958	0.927	0.116		1.39	1.55	NO	17.9
	37 Total-pentafurans	339.8597	28.72	230902.961	0.927	6.580		1.54	1.55	NO	632.4
	37 Total-pentafurans	339.8597	28.52	29154.129	0.927	0.831		1.30	1.55	YES	87.4
	37 Total-pentafurans	339.8597	28.44	5334.961	0.927	0.152		2.37	1.55	YES	29.8
	37 Total-pentafurans	339.8597	32.17	12229.596	0.927	0.349		1.19	1.55	YES	37.2
	3 23478-PeCDF	339.8597	31.14	81906.022	0.943	2.329	2.329	1.56	1.55	NO	308.8
	37 Total-pentafurans	339.8597	30.98	110462.644	0.927	3.148		1.45	1.55	NO	398.7
	37 Total-pentafurans	339.8597	30.87	19374.411	0.927	0.552		1.37	1.55	NO	73.6
	37 Total-pentafurans	339.8597	30.62	2670.439	0.927	0.076		1.82	1.55	YES	11.2
	37 Total-pentafurans	339.8597	30.08	9079.404	0.927	0.259		1.27	1.55	YES	32.2
	37 Total-pentafurans	339.8597	29.98	84369.547	0.927	2.404		1.53	1.55	NO	319.1
	2 12378-PeCDF	339.8597	29.78	69428.540	0.912	1.984	1.984	1.51	1.55	NO	273.6
	37 Total-pentafurans	339.8597	29.43	78968.799	0.927	2.250		1.50	1.55	NO	184.3
	37 Total-pentafurans	339.8597	29.32	15061.781	0.927	0.429		1.43	1.55	NO	68.3
	37 Total-pentafurans	339.8597	29.22	8927.200	0.927	0.254		1.56	1.55	NO	34.8
	38 Total-hexafurans	373.8208	35.93	79580.911	1.062	3.081		1.17	1.24	NO	172.9
	38 Total-hexafurans	373.8208	35.37	7202.009	1.062	0.279		1.00	1.24	YES	17.4
	6 123678-HxCDF	373.8208	35.00	98995.848	1.056	3.440	3.440	1.17	1.24	NO	224.5
	4 123478-HxCDF	373.8208	34.85	255871.390	1.101	8.116	8.116	1.19	1.24	NO	564.5
	38 Total-hexafurans	373.8208	34.68	25596.874	1.062	0.991		1.23	1.24	NO	61.3
	38 Total-hexafurans	373.8208	34.18	2661087.125	1.062	103.009		1.21	1.24	NO	6093.8
	38 Total-hexafurans	373.8208	33.85	16395.701	1.062	0.635		1.41	1.24	NO	40.0
	38 Total-hexafurans	373.8208	33.32	1551894.813	1.062	60.073		1.20	1.24	NO	3550.2
	38 Total-hexafurans	373.8208	33.10	613522.875	1.062	23.749		1.23	1.24	NO	1464.5
	7 123789-HxCDF	373.8208	37.07	79401.770	1.017	4.286	4.286	1.18	1.24	NO	297.1

WC02 02541

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Furans,TF,PP,PF,HF,HPF,OF

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	5	234678-HxCDF	373.8208	36.00	89165.051	1.073	3.579	3.579	1.20	1.24	NO	204.5
[redacted]	9	1234789-HpCDF	407.7818	41.74	101156.293	1.224	5.123	5.123	0.98	1.05	NO	206.3
[redacted]	39	Total-heptafurans	407.7818	40.89	6880.637	1.231	0.308		1.24	1.05	YES	16.3
[redacted]	39	Total-heptafurans	407.7818	39.88	4300851.500	1.231	192.583		1.02	1.05	NO	9809.1
[redacted]	39	Total-heptafurans	407.7818	39.59	26494.195	1.231	1.186		0.90	1.05	NO	42.7
[redacted]	8	1234678-HpCDF	407.7818	39.12	1964819.688	1.238	78.760	78.760	1.01	1.05	NO	4585.1
[redacted]	10	OCDF	441.7428	46.90	1791105.188	1.162	123.896	123....	0.86	0.89	NO	6379.9
[redacted]	36	Total-penta1	339.8597	27.06	966290.813		27.852		1.56	1.55	NO	7665.4
[redacted]	35	Total-tetrafurans	303.9016	23.18	21887.276	0.921	0.478		0.44	0.77	YES	40.4

TD

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	11	2378-TCDD	319.8965	26.29	8450.535	1.106	0.237	0.178	0.48	0.77	YES	27.1
[redacted]	41	Total-tetradioxins	319.8965	25.90	17452.547	1.106	0.490		0.77	0.77	NO	52.2
[redacted]	41	Total-tetradioxins	319.8965	25.62	5350.979	1.106	0.150		1.17	0.77	YES	26.7
[redacted]	41	Total-tetradioxins	319.8965	25.48	32830.711	1.106	0.922		0.74	0.77	NO	139.5
[redacted]	41	Total-tetradioxins	319.8965	25.27	5732.639	1.106	0.161		0.76	0.77	NO	27.5
[redacted]	41	Total-tetradioxins	319.8965	25.17	2048.200	1.106	0.058		1.02	0.77	YES	10.4
[redacted]	41	Total-tetradioxins	319.8965	24.91	21422.476	1.106	0.602		0.81	0.77	NO	92.1
[redacted]	41	Total-tetradioxins	319.8965	24.63	13983.674	1.106	0.393		0.73	0.77	NO	46.9
[redacted]	41	Total-tetradioxins	319.8965	24.42	2546.901	1.106	0.072		0.72	0.77	NO	10.1
[redacted]	41	Total-tetradioxins	319.8965	23.91	4695.061	1.106	0.132		0.71	0.77	NO	19.5
[redacted]	41	Total-tetradioxins	319.8965	23.70	88125.254	1.106	2.475		0.83	0.77	NO	413.9
[redacted]	41	Total-tetradioxins	319.8965	23.45	135809.410	1.106	3.814		0.77	0.77	NO	594.3
[redacted]	41	Total-tetradioxins	319.8965	26.87	3225.701	1.106	0.091		0.94	0.77	YES	13.7
[redacted]	41	Total-tetradioxins	319.8965	26.42	7784.284	1.106	0.219		0.79	0.77	NO	32.6

PD

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	42	Total-pentadioxins	355.8546	31.79	7294.932	1.001	0.311		1.42	1.55	NO	35.8
[redacted]	12	12378-PeCDD	355.8546	31.39	41393.006	1.001	1.763	1.763	1.56	1.55	NO	185.2
[redacted]	42	Total-pentadioxins	355.8546	30.72	24883.851	1.001	1.060		1.36	1.55	NO	114.7
[redacted]	42	Total-pentadioxins	355.8546	30.32	22873.136	1.001	0.974		1.38	1.55	NO	80.9
[redacted]	42	Total-pentadioxins	355.8546	30.15	72714.031	1.001	3.097		1.56	1.55	NO	352.4
[redacted]	42	Total-pentadioxins	355.8546	29.95	99058.629	1.001	4.218		1.48	1.55	NO	360.2
[redacted]	42	Total-pentadioxins	355.8546	29.80	80478.002	1.001	3.427		1.54	1.55	NO	388.1
[redacted]	42	Total-pentadioxins	355.8546	29.18	24012.634	1.001	1.023		1.42	1.55	NO	122.0
[redacted]	42	Total-pentadioxins	355.8546	28.70	89000.836	1.001	3.790		1.53	1.55	NO	269.1

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[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	15	123789-HxCDD	389.8157	36.70	137717.844	0.904	6.813	6.813	1.25	1.24	NO	323.1
[redacted]	43	Total-hexadioxins	389.8157	36.45	27794.310	0.937	1.327		1.05	1.24	YES	55.2
[redacted]	14	123678-HxCDD	389.8157	36.27	719048.000	0.929	34.567	34.567	1.22	1.24	NO	1532.5
[redacted]	13	123478-HxCDD	389.8157	36.14	103770.571	0.978	4.755	4.755	1.21	1.24	NO	220.4
[redacted]	43	Total-hexadioxins	389.8157	36.02	4280.164	0.937	0.204		1.40	1.24	NO	11.9
[redacted]	43	Total-hexadioxins	389.8157	35.25	97864.836	0.937	4.672		1.29	1.24	NO	235.2
[redacted]	43	Total-hexadioxins	389.8157	35.14	1037426.594	0.937	49.525		1.23	1.24	NO	1639.8
[redacted]	43	Total-hexadioxins	389.8157	34.73	269657.219	0.937	12.873		1.26	1.24	NO	567.6
[redacted]	43	Total-hexadioxins	389.8157	33.91	820092.844	0.937	39.150		1.23	1.24	NO	1757.0
[redacted]	43	Total-hexadioxins	389.8157	33.66	10331.669	0.937	0.493		1.22	1.24	NO	26.0

HPD

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	16	1234678-HpCDD	423.7766	40.88	12968823....	1.029	635.895	635....	1.04	1.05	NO	8393.4
[redacted]	44	Total-heptadioxins	423.7766	39.65	17312946....	1.029	848.898		1.03	1.05	NO	11417.7

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:48:25 Pacific Standard Time

ID: WC32D, Name: 13021310, Date: 13-Feb-2013, Time: 18:07:43, Conditions: AUTOSPEC01, User: pk

Dioxins,TD,PD,HD,HPD,OD

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	45 Total-Dioxins	319.8965	21.42	2298.718	0.994	0.072		0.32	0.77	YES	4.7
[redacted]	11 2378-TCDD	319.8965	26.29	8450.535	1.106	0.237	0.178	0.48	0.77	YES	27.1
[redacted]	41 Total-tetradioxins	319.8965	25.90	17452.547	1.106	0.490		0.77	0.77	NO	52.2
[redacted]	41 Total-tetradioxins	319.8965	25.62	5350.979	1.106	0.150		1.17	0.77	YES	26.7
[redacted]	41 Total-tetradioxins	319.8965	25.48	32830.711	1.106	0.922		0.74	0.77	NO	139.5
[redacted]	41 Total-tetradioxins	319.8965	25.27	5732.639	1.106	0.161		0.76	0.77	NO	27.5
[redacted]	41 Total-tetradioxins	319.8965	25.17	2048.200	1.106	0.058		1.02	0.77	YES	10.4
[redacted]	41 Total-tetradioxins	319.8965	24.91	21422.476	1.106	0.602		0.81	0.77	NO	92.1
[redacted]	41 Total-tetradioxins	319.8965	24.63	13983.674	1.106	0.393		0.73	0.77	NO	46.9
[redacted]	41 Total-tetradioxins	319.8965	24.42	2546.901	1.106	0.072		0.72	0.77	NO	10.1
[redacted]	41 Total-tetradioxins	319.8965	23.91	4695.061	1.106	0.132		0.71	0.77	NO	19.5
[redacted]	41 Total-tetradioxins	319.8965	23.70	88125.254	1.106	2.475		0.83	0.77	NO	413.9
[redacted]	41 Total-tetradioxins	319.8965	23.45	135809.410	1.106	3.814		0.77	0.77	NO	594.3
[redacted]	45 Total-Dioxins	319.8965	27.65	745.780	0.994	0.023		0.65	0.77	YES	3.6
[redacted]	41 Total-tetradioxins	319.8965	26.87	3225.701	1.106	0.091		0.94	0.77	YES	13.7
[redacted]	41 Total-tetradioxins	319.8965	26.42	7784.284	1.106	0.219		0.79	0.77	NO	32.6
[redacted]	42 Total-pentadioxins	355.8546	31.79	7294.932	1.001	0.311		1.42	1.55	NO	35.8
[redacted]	12 12378-PeCDD	355.8546	31.39	41393.006	1.001	1.763	1.763	1.56	1.55	NO	185.2
[redacted]	42 Total-pentadioxins	355.8546	30.72	24883.851	1.001	1.060		1.36	1.55	NO	114.7
[redacted]	42 Total-pentadioxins	355.8546	30.32	22873.136	1.001	0.974		1.38	1.55	NO	80.9
[redacted]	42 Total-pentadioxins	355.8546	30.15	72714.031	1.001	3.097		1.56	1.55	NO	352.4
[redacted]	42 Total-pentadioxins	355.8546	29.95	99058.629	1.001	4.218		1.48	1.55	NO	360.2
[redacted]	42 Total-pentadioxins	355.8546	29.80	80478.002	1.001	3.427		1.54	1.55	NO	388.1
[redacted]	42 Total-pentadioxins	355.8546	29.18	24012.634	1.001	1.023		1.42	1.55	NO	122.0
[redacted]	42 Total-pentadioxins	355.8546	28.70	89000.836	1.001	3.790		1.53	1.55	NO	269.1
[redacted]	15 123789-HxCDD	389.8157	36.70	137717.844	0.904	6.813	6.813	1.25	1.24	NO	323.1
[redacted]	43 Total-hexadioxins	389.8157	36.45	27794.310	0.937	1.327		1.05	1.24	YES	55.2
[redacted]	14 123678-HxCDD	389.8157	36.27	719048.000	0.929	34.567	34.567	1.22	1.24	NO	1532.5
[redacted]	13 123478-HxCDD	389.8157	36.14	103770.571	0.978	4.755	4.755	1.21	1.24	NO	220.4
[redacted]	43 Total-hexadioxins	389.8157	36.02	4280.164	0.937	0.204		1.40	1.24	NO	11.9
[redacted]	43 Total-hexadioxins	389.8157	35.25	97864.836	0.937	4.672		1.29	1.24	NO	235.2
[redacted]	43 Total-hexadioxins	389.8157	35.14	1037426.594	0.937	49.525		1.23	1.24	NO	1639.8
[redacted]	43 Total-hexadioxins	389.8157	34.73	269657.219	0.937	12.873		1.26	1.24	NO	567.6
[redacted]	43 Total-hexadioxins	389.8157	33.91	820092.844	0.937	39.150		1.23	1.24	NO	1757.0
[redacted]	43 Total-hexadioxins	389.8157	33.66	10331.669	0.937	0.493		1.22	1.24	NO	26.0
[redacted]	16 1234678-HpCDD	423.7766	40.88	12968823....	1.029	635.895	635....	1.04	1.05	NO	8393.4
[redacted]	44 Total-heptadioxins	423.7766	39.65	17312946....	1.029	848.898		1.03	1.05	NO	11417.7
[redacted]	17 OCDD	457.7377	46.63	64163124....	1.011	5100.2...	5100...	0.89	0.89	NO	61128.5

ID: WC32D, Name: 13021310, Date: 13-Feb-2013, Time: 18:07:43, Conditions: AUTOSPEC01, User: pk

TotalTEQ,Furans,Dioxins

[redacted]											
[redacted]	35 Total-tetrafurans	303.9016	24.57	32671.756	0.921	0.714		0.70	0.77	NO	87.8
[redacted]	35 Total-tetrafurans	303.9016	24.41	15724.142	0.921	0.344		0.84	0.77	NO	49.7
[redacted]	35 Total-tetrafurans	303.9016	24.32	30737.907	0.921	0.672		0.63	0.77	YES	69.7
[redacted]	35 Total-tetrafurans	303.9016	23.90	11720.644	0.921	0.256		0.80	0.77	NO	39.8
[redacted]	35 Total-tetrafurans	303.9016	23.75	9465.149	0.921	0.207		0.79	0.77	NO	31.8
[redacted]	35 Total-tetrafurans	303.9016	23.66	30456.715	0.921	0.666		0.75	0.77	NO	98.3
[redacted]	35 Total-tetrafurans	303.9016	23.49	8501.275	0.921	0.186		0.77	0.77	NO	32.4
[redacted]	35 Total-tetrafurans	303.9016	23.40	20405.988	0.921	0.446		0.73	0.77	NO	61.3
[redacted]	35 Total-tetrafurans	303.9016	23.31	15755.246	0.921	0.344		0.70	0.77	NO	40.9
[redacted]	35 Total-tetrafurans	303.9016	23.02	49434.785	0.921	1.080		0.79	0.77	NO	148.8
[redacted]	35 Total-tetrafurans	303.9016	22.43	11127.692	0.921	0.243		0.68	0.77	NO	36.0
[redacted]	35 Total-tetrafurans	303.9016	22.18	8024.799	0.921	0.175		0.81	0.77	NO	23.9
[redacted]	35 Total-tetrafurans	303.9016	27.08	18345.352	0.921	0.401		0.87	0.77	NO	38.1
[redacted]	35 Total-tetrafurans	303.9016	26.06	1366.205	0.921	0.030		0.38	0.77	YES	4.1
[redacted]	35 Total-tetrafurans	303.9016	25.87	24983.292	0.921	0.546		0.78	0.77	NO	77.4
[redacted]	35 Total-tetrafurans	303.9016	25.78	13764.963	0.921	0.301		0.86	0.77	NO	42.8
[redacted]	1 2378-TCDF	303.9016	25.65	55842.131	0.921	1.220	1.220	0.72	0.77	NO	163.0
[redacted]	35 Total-tetrafurans	303.9016	25.47	13102.939	0.921	0.286		0.97	0.77	YES	52.6
[redacted]	35 Total-tetrafurans	303.9016	25.42	14665.640	0.921	0.320		0.63	0.77	YES	53.4
[redacted]	35 Total-tetrafurans	303.9016	25.29	1481.573	0.921	0.032		0.53	0.77	YES	4.8
[redacted]	35 Total-tetrafurans	303.9016	25.17	14465.509	0.921	0.316		0.77	0.77	NO	43.8
[redacted]	35 Total-tetrafurans	303.9016	24.96	11672.885	0.921	0.255		0.80	0.77	NO	39.8
[redacted]	35 Total-tetrafurans	303.9016	24.75	40429.008	0.921	0.883		0.75	0.77	NO	125.7
[redacted]	37 Total-pentafurans	339.8597	29.00	4989.517	0.927	0.142		1.67	1.55	NO	19.6
[redacted]	37 Total-pentafurans	339.8597	28.86	4068.958	0.927	0.116		1.39	1.55	NO	17.9
[redacted]	37 Total-pentafurans	339.8597	28.72	230902.961	0.927	6.580		1.54	1.55	NO	632.4
[redacted]	37 Total-pentafurans	339.8597	28.52	29154.129	0.927	0.831		1.30	1.55	YES	87.4
[redacted]	37 Total-pentafurans	339.8597	28.44	5334.961	0.927	0.152		2.37	1.55	YES	29.8
[redacted]	37 Total-pentafurans	339.8597	32.17	12229.596	0.927	0.349		1.19	1.55	YES	37.2
[redacted]	3 23478-PeCDF	339.8597	31.14	81906.022	0.943	2.329	2.329	1.56	1.55	NO	308.8
[redacted]	37 Total-pentafurans	339.8597	30.98	110462.644	0.927	3.148		1.45	1.55	NO	398.7
[redacted]	37 Total-pentafurans	339.8597	30.87	19374.411	0.927	0.552		1.37	1.55	NO	73.6
[redacted]	37 Total-pentafurans	339.8597	30.62	2670.439	0.927	0.076		1.82	1.55	YES	11.2
[redacted]	37 Total-pentafurans	339.8597	30.08	9079.404	0.927	0.259		1.27	1.55	YES	32.2
[redacted]	37 Total-pentafurans	339.8597	29.98	84369.547	0.927	2.404		1.53	1.55	NO	319.1
[redacted]	2 12378-PeCDF	339.8597	29.78	69428.540	0.912	1.984	1.984	1.51	1.55	NO	273.6
[redacted]	37 Total-pentafurans	339.8597	29.43	78968.799	0.927	2.250		1.50	1.55	NO	184.3
[redacted]	37 Total-pentafurans	339.8597	29.32	15061.781	0.927	0.429		1.43	1.55	NO	68.3
[redacted]	37 Total-pentafurans	339.8597	29.22	8927.200	0.927	0.254		1.56	1.55	NO	34.8
[redacted]	38 Total-hexafurans	373.8208	35.93	79580.911	1.062	3.081		1.17	1.24	NO	172.9
[redacted]	38 Total-hexafurans	373.8208	35.37	7202.009	1.062	0.279		1.00	1.24	YES	17.4
[redacted]	6 123678-HxCDF	373.8208	35.00	98995.848	1.056	3.440	3.440	1.17	1.24	NO	224.5
[redacted]	4 123478-HxCDF	373.8208	34.85	255871.390	1.101	8.116	8.116	1.19	1.24	NO	564.5
[redacted]	38 Total-hexafurans	373.8208	34.68	25596.874	1.062	0.991		1.23	1.24	NO	61.3
[redacted]	38 Total-hexafurans	373.8208	34.18	2661087.125	1.062	103.009		1.21	1.24	NO	6093.8
[redacted]	38 Total-hexafurans	373.8208	33.85	16396.701	1.062	0.635		1.41	1.24	NO	40.0
[redacted]	38 Total-hexafurans	373.8208	33.32	1551894.813	1.062	60.073		1.20	1.24	NO	3550.2
[redacted]	38 Total-hexafurans	373.8208	33.10	613522.875	1.062	23.749		1.23	1.24	NO	1464.5
[redacted]	7 123789-HxCDF	373.8208	37.07	79401.770	1.017	4.286	4.286	1.18	1.24	NO	297.1

WC32 01545

Quantify Totals Report MassLynx 4.1 SCN 714
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
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ID: WC32D, Name: 13021310, Date: 13-Feb-2013, Time: 18:07:43, Conditions: AUTOSPEC01, User: pk

TotalTEQ,Furans,Dioxins

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	5	234678-HxCDF	373.8208	36.00	89165.051	1.073	3.579	3.579	1.20	1.24	NO	204.5
[redacted]	9	1234789-HpCDF	407.7818	41.74	101156.293	1.224	5.123	5.123	0.98	1.05	NO	206.3
[redacted]	39	Total-heptafurans	407.7818	40.89	6860.637	1.231	0.308		1.24	1.05	YES	16.3
[redacted]	39	Total-heptafurans	407.7818	39.88	4300851.500	1.231	192.583		1.02	1.05	NO	9809.1
[redacted]	39	Total-heptafurans	407.7818	39.59	26494.195	1.231	1.186		0.90	1.05	NO	42.7
[redacted]	8	1234678-HpCDF	407.7818	39.12	1964819.688	1.238	78.760	78.760	1.01	1.05	NO	4585.1
[redacted]	10	OCDF	441.7428	46.90	1791105.188	1.162	123.896	123....	0.86	0.89	NO	6379.9
[redacted]	36	Total-penta1	339.8597	27.06	966290.813		27.852		1.56	1.55	NO	7665.4
[redacted]	35	Total-tetrafurans	303.9016	23.18	21887.276	0.921	0.478		0.44	0.77	YES	40.4
[redacted]	45	Total-Dioxins	319.8965	21.42	2298.718	0.994	0.072		0.32	0.77	YES	4.7
[redacted]	11	2378-TCDD	319.8965	26.29	8450.535	1.106	0.237	0.178	0.48	0.77	YES	27.1
[redacted]	41	Total-tetradioxins	319.8965	25.90	17452.547	1.106	0.490		0.77	0.77	NO	52.2
[redacted]	41	Total-tetradioxins	319.8965	25.62	5350.979	1.106	0.150		1.17	0.77	YES	26.7
[redacted]	41	Total-tetradioxins	319.8965	25.48	32830.711	1.106	0.922		0.74	0.77	NO	139.5
[redacted]	41	Total-tetradioxins	319.8965	25.27	5732.639	1.106	0.161		0.76	0.77	NO	27.5
[redacted]	41	Total-tetradioxins	319.8965	25.17	2048.200	1.106	0.058		1.02	0.77	YES	10.4
[redacted]	41	Total-tetradioxins	319.8965	24.91	21422.476	1.106	0.602		0.81	0.77	NO	92.1
[redacted]	41	Total-tetradioxins	319.8965	24.63	13983.674	1.106	0.393		0.73	0.77	NO	46.9
[redacted]	41	Total-tetradioxins	319.8965	24.42	2546.901	1.106	0.072		0.72	0.77	NO	10.1
[redacted]	41	Total-tetradioxins	319.8965	23.91	4695.061	1.106	0.132		0.71	0.77	NO	19.5
[redacted]	41	Total-tetradioxins	319.8965	23.70	88125.254	1.106	2.475		0.83	0.77	NO	413.9
[redacted]	41	Total-tetradioxins	319.8965	23.45	135809.410	1.106	3.814		0.77	0.77	NO	594.3
[redacted]	45	Total-Dioxins	319.8965	27.65	745.780	0.994	0.023		0.65	0.77	YES	3.6
[redacted]	41	Total-tetradioxins	319.8965	26.87	3225.701	1.106	0.091		0.94	0.77	YES	13.7
[redacted]	41	Total-tetradioxins	319.8965	26.42	7784.284	1.106	0.219		0.79	0.77	NO	32.6
[redacted]	42	Total-pentadioxins	355.8546	31.79	7294.932	1.001	0.311		1.42	1.55	NO	35.8
[redacted]	12	12378-PeCDD	355.8546	31.39	41393.006	1.001	1.763	1.763	1.56	1.55	NO	185.2
[redacted]	42	Total-pentadioxins	355.8546	30.72	24883.851	1.001	1.060		1.36	1.55	NO	114.7
[redacted]	42	Total-pentadioxins	355.8546	30.32	22873.136	1.001	0.974		1.38	1.55	NO	80.9
[redacted]	42	Total-pentadioxins	355.8546	30.15	72714.031	1.001	3.097		1.56	1.55	NO	352.4
[redacted]	42	Total-pentadioxins	355.8546	29.95	99058.629	1.001	4.218		1.48	1.55	NO	360.2
[redacted]	42	Total-pentadioxins	355.8546	29.80	80478.002	1.001	3.427		1.54	1.55	NO	388.1
[redacted]	42	Total-pentadioxins	355.8546	29.18	24012.634	1.001	1.023		1.42	1.55	NO	122.0
[redacted]	42	Total-pentadioxins	355.8546	28.70	89000.836	1.001	3.790		1.53	1.55	NO	269.1
[redacted]	15	123789-HxCDD	389.8157	36.70	137717.844	0.904	6.813	6.813	1.25	1.24	NO	323.1
[redacted]	43	Total-hexadioxins	389.8157	36.45	27794.310	0.937	1.327		1.05	1.24	YES	55.2
[redacted]	14	123678-HxCDD	389.8157	36.27	719048.000	0.929	34.567	34.567	1.22	1.24	NO	1532.5
[redacted]	13	123478-HxCDD	389.8157	36.14	103770.571	0.978	4.755	4.755	1.21	1.24	NO	220.4
[redacted]	43	Total-hexadioxins	389.8157	36.02	4280.164	0.937	0.204		1.40	1.24	NO	11.9
[redacted]	43	Total-hexadioxins	389.8157	35.25	97864.836	0.937	4.672		1.29	1.24	NO	235.2
[redacted]	43	Total-hexadioxins	389.8157	35.14	1037426.594	0.937	49.525		1.23	1.24	NO	1639.8
[redacted]	43	Total-hexadioxins	389.8157	34.73	269657.219	0.937	12.873		1.26	1.24	NO	567.6
[redacted]	43	Total-hexadioxins	389.8157	33.91	820092.844	0.937	39.150		1.23	1.24	NO	1757.0
[redacted]	43	Total-hexadioxins	389.8157	33.66	10331.669	0.937	0.493		1.22	1.24	NO	26.0
[redacted]	16	1234678-HpCDD	423.7766	40.88	12968823....	1.029	635.895	635....	1.04	1.05	NO	8393.4
[redacted]	44	Total-heptadioxins	423.7766	39.65	17312946....	1.029	848.898		1.03	1.05	NO	11417.7
[redacted]	17	OCDD	457.7377	46.63	64163124....	1.011	5100.2...	5100...	0.89	0.89	NO	61128.5

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ID: WC32D, Name: 13021310, Date: 13-Feb-2013, Time: 18:07:43, Conditions: AUTOSPEC01, User: pk

PFK1

[illegible]	48	FUNCTION1 PFK	330.9792	25.36	0.000							7.8
[illegible]	48	FUNCTION1 PFK	330.9792	24.60	0.000							4.4
[illegible]	48	FUNCTION1 PFK	330.9792	24.49	0.000							6.8
[illegible]	48	FUNCTION1 PFK	330.9792	24.29	0.000							7.2
[illegible]	48	FUNCTION1 PFK	330.9792	23.63	0.000							3.7
[illegible]	48	FUNCTION1 PFK	330.9792	23.09	0.000							7.1
[illegible]	48	FUNCTION1 PFK	330.9792	21.27	0.000							2.0
[illegible]	48	FUNCTION1 PFK	330.9792	26.45	0.000							2.1
[illegible]	48	FUNCTION1 PFK	330.9792	25.94	0.000							3.5
[illegible]	48	FUNCTION1 PFK	330.9792	25.72	0.000							4.3
[illegible]	48	FUNCTION1 PFK	330.9792	25.65	0.000							6.4

PFK2

[illegible]	49	FUNCTION2 PFK	366.9792	29.58	0.000		0.000					8.6
[illegible]	49	FUNCTION2 PFK	366.9792	29.50	0.000		0.000					11.9
[illegible]	49	FUNCTION2 PFK	366.9792	28.94	0.000		0.000					11.1

PFK3

[illegible]	50	FUNCTION3 PFK	380.9760	37.13	0.000		0.000					59.4
[illegible]	50	FUNCTION3 PFK	380.9760	36.88	0.000		0.000					50.0
[illegible]	50	FUNCTION3 PFK	380.9760	36.22	0.000		0.000					2.2
[illegible]	50	FUNCTION3 PFK	380.9760	35.80	0.000		0.000					6.3
[illegible]	50	FUNCTION3 PFK	380.9760	33.71	0.000		0.000					6.3
[illegible]	50	FUNCTION3 PFK	380.9760	33.22	0.000		0.000					4.6
[illegible]	50	FUNCTION3 PFK	380.9760	33.06	0.000		0.000					7.6
[illegible]	50	FUNCTION3 PFK	380.9760	38.07	0.000		0.000					7.3
[illegible]	50	FUNCTION3 PFK	380.9760	37.79	0.000		0.000					23.5

PFK4

[illegible]	51	FUNCTION4 PFK	430.9728	39.50	0.000							2.9

PFK5

[illegible]	52	FUNCTION5 PFK	480.9696	48.18	0.000							7.5

ID: WC32D, Name: 13021310, Date: 13-Feb-2013, Time: 18:07:43, Conditions: AUTOSPEC01, User: pk

ETHERS1

[illegible]	53	FUNCTION1 HXCD...	375.8364	26.69	0.000		0.000					5.6
[illegible]	53	FUNCTION1 HXCD...	375.8364	26.03	0.000		0.000					15.6
[illegible]	53	FUNCTION1 HXCD...	375.8364	25.72	0.000		0.000					43.4
[illegible]	53	FUNCTION1 HXCD...	375.8364	25.45	0.000		0.000					6.3
[illegible]	53	FUNCTION1 HXCD...	375.8364	23.70	0.000		0.000					13.1
[illegible]	53	FUNCTION1 HXCD...	375.8364	22.67	0.000		0.000					2.7

ETHERS2

[illegible]	54	FUNCTION1 HPCD...	409.7974	22.01	0.000		0.000					2.1
[illegible]	54	FUNCTION1 HPCD...	409.7974	21.72	0.000		0.000					1.5
[illegible]	54	FUNCTION1 HPCD...	409.7974	27.84	0.000		0.000					4.8
[illegible]	54	FUNCTION1 HPCD...	409.7974	27.80	0.000		0.000					5.2
[illegible]	54	FUNCTION1 HPCD...	409.7974	27.30	0.000		0.000					2.9
[illegible]	54	FUNCTION1 HPCD...	409.7974	26.59	0.000		0.000					2.9
[illegible]	54	FUNCTION1 HPCD...	409.7974	25.51	0.000		0.000					1.7
[illegible]	54	FUNCTION1 HPCD...	409.7974	23.49	0.000		0.000					3.1
[illegible]	54	FUNCTION1 HPCD...	409.7974	23.22	0.000		0.000					3.4
[illegible]	54	FUNCTION1 HPCD...	409.7974	22.93	0.000		0.000					1.2

ETHERS3

[illegible]	55	FUNCTION2 HPCD...	409.7974	29.94	0.000		0.000					3.0
[illegible]	55	FUNCTION2 HPCD...	409.7974	29.80	0.000		0.000					4.7
[illegible]	55	FUNCTION2 HPCD...	409.7974	29.74	0.000		0.000					5.6
[illegible]	55	FUNCTION2 HPCD...	409.7974	29.44	0.000		0.000					8.6
[illegible]	55	FUNCTION2 HPCD...	409.7974	29.02	0.000		0.000					9.2
[illegible]	55	FUNCTION2 HPCD...	409.7974	28.99	0.000		0.000					12.0
[illegible]	55	FUNCTION2 HPCD...	409.7974	28.84	0.000		0.000					13.1

ETHERS4

[illegible]	56	FUNCTION3 OCDPE	445.7555	36.75	0.000		0.000					3.2
[illegible]	56	FUNCTION3 OCDPE	445.7555	36.70	0.000		0.000					2.9
[illegible]	56	FUNCTION3 OCDPE	445.7555	36.34	0.000		0.000					4.1
[illegible]	56	FUNCTION3 OCDPE	445.7555	36.06	0.000		0.000					3.4
[illegible]	56	FUNCTION3 OCDPE	445.7555	34.77	0.000		0.000					3.8
[illegible]	56	FUNCTION3 OCDPE	445.7555	34.54	0.000		0.000					3.9
[illegible]	56	FUNCTION3 OCDPE	445.7555	34.12	0.000		0.000					16.7
[illegible]	56	FUNCTION3 OCDPE	445.7555	32.99	0.000		0.000					8.2

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
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ID: WC32D, Name: 13021310, Date: 13-Feb-2013, Time: 18:07:43, Conditions: AUTOSPEC01, User: pk

ETHERS5

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	57	FUNCTION4 NCDPE	479.7165	41.07	0.000		0.000					2.3
[redacted]	57	FUNCTION4 NCDPE	479.7165	40.92	0.000		0.000					6.8
[redacted]	57	FUNCTION4 NCDPE	479.7165	40.87	0.000		0.000					15.6
[redacted]	57	FUNCTION4 NCDPE	479.7165	40.64	0.000		0.000					5.9
[redacted]	57	FUNCTION4 NCDPE	479.7165	39.50	0.000		0.000					2.5
[redacted]	57	FUNCTION4 NCDPE	479.7165	38.70	0.000		0.000					420.2
[redacted]	57	FUNCTION4 NCDPE	479.7165	41.36	0.000		0.000					2.3

ETHERS6

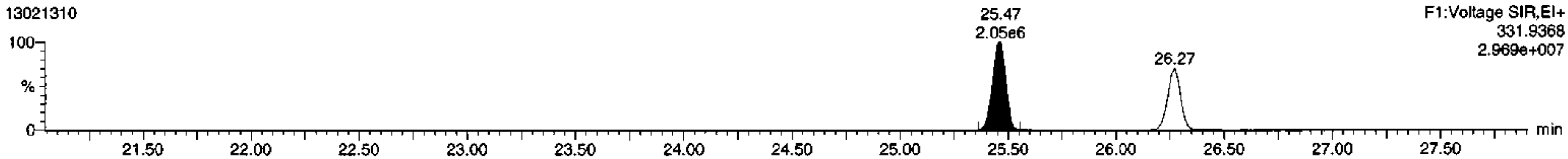
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	58	FUNCTION5 DCDPE	513.6775	46.63	0.000		0.000					8.9

Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:48:25 Pacific Standard Time

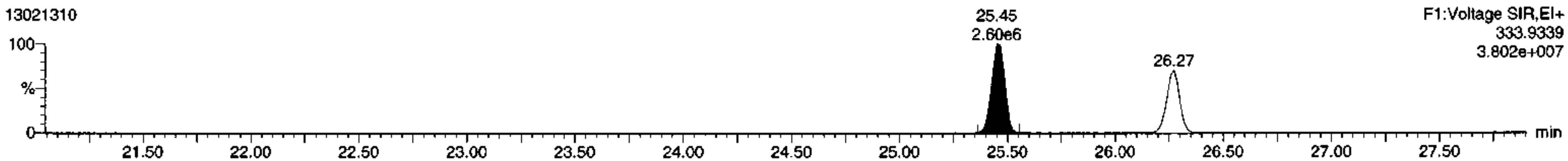
Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 12 Feb 2013 12:25:57
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: WC32D, Name: 13021310, Date: 13-Feb-2013, Time: 18:07:43, Conditions: AUTOSPEC01, User: pk

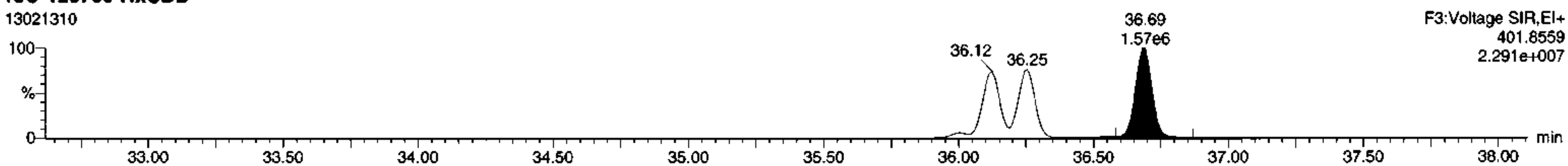
13C-1234-TCDD



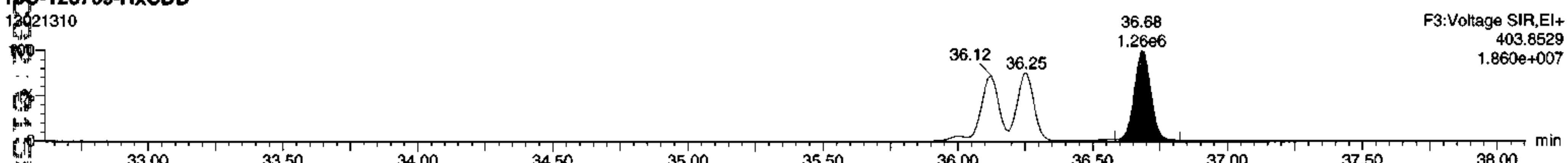
13C-1234-TCDD



13C-123789-HxCDD



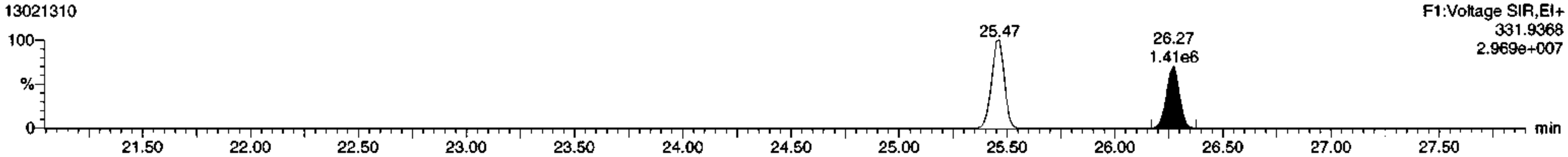
13C-123789-HxCDD



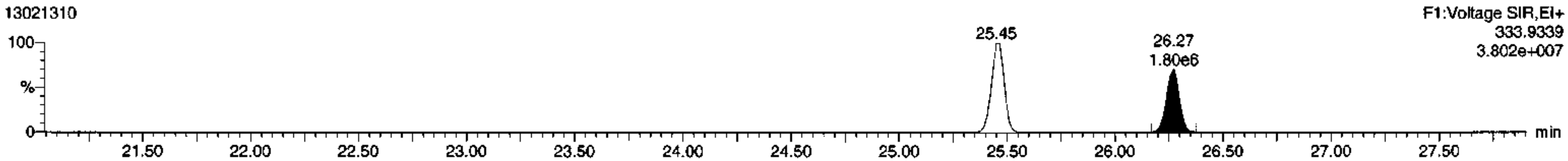
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:48:25 Pacific Standard Time

ID: WC32D, Name: 13021310, Date: 13-Feb-2013, Time: 18:07:43, Conditions: AUTOSPEC01, User: pk

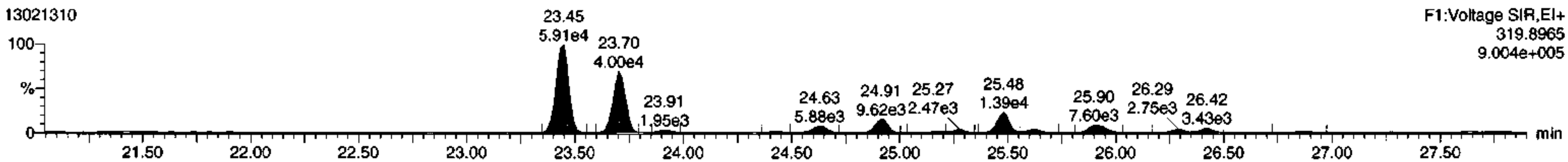
13C-2378-TCDD



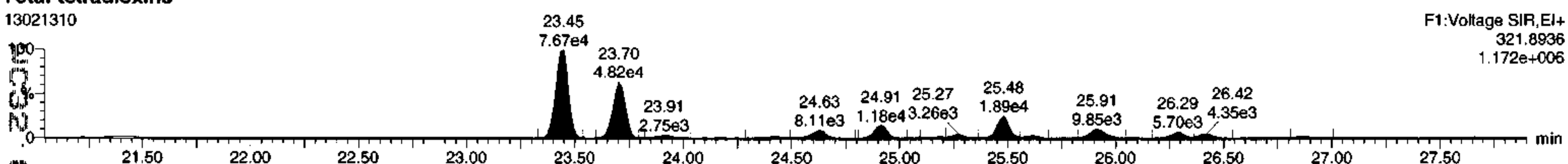
13C-2378-TCDD



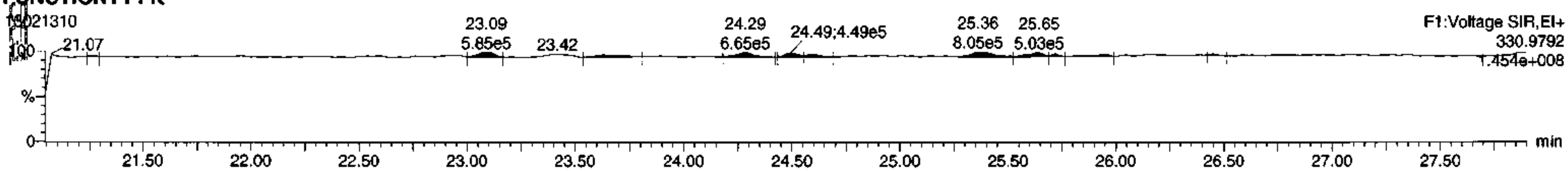
Total-tetradioxins



Total-tetradioxins



FUNCTION1 PFK



Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
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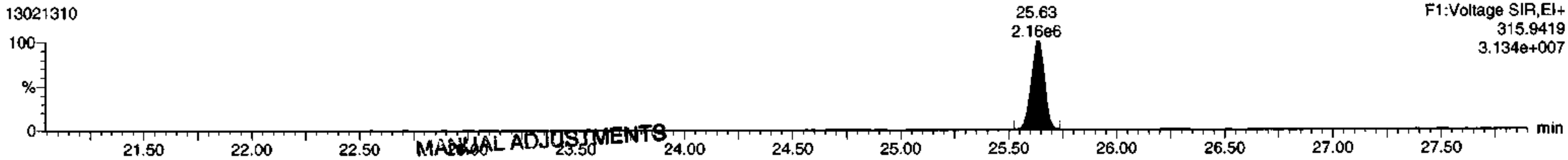
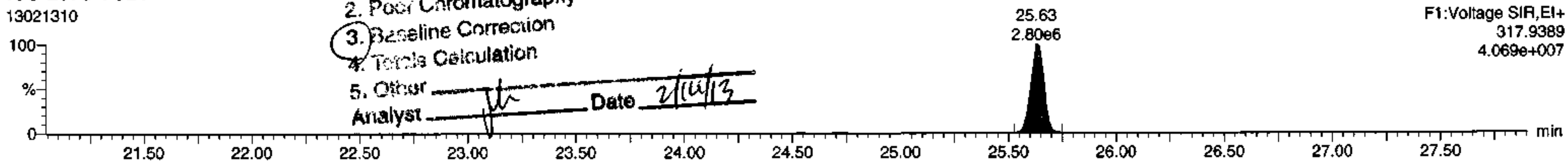
ID: WC32D, Name: 13021310, Date: 13-Feb-2013, Time: 18:07:43, Conditions: AUTOSPEC01, User: pk

13C-2378-TCDF
13021310

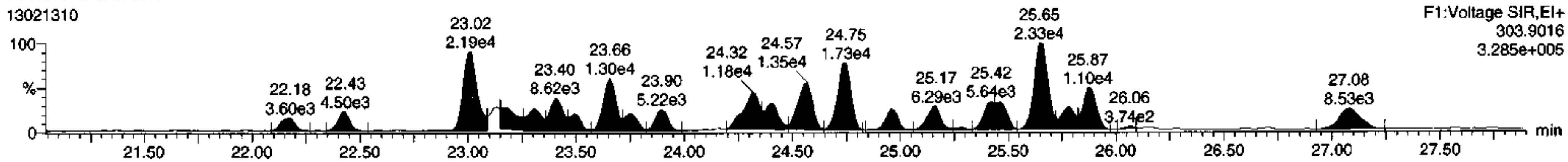


MANUAL ADJUSTMENTS
1. Peak not found
2. Poor Chromatography
3. Baseline Correction
4. Totals Calculation
5. Other
Analyst Date 2/14/13

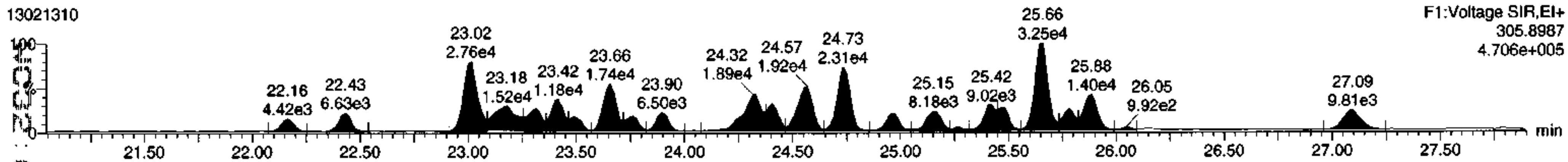
13C-2378-TCDF
13021310



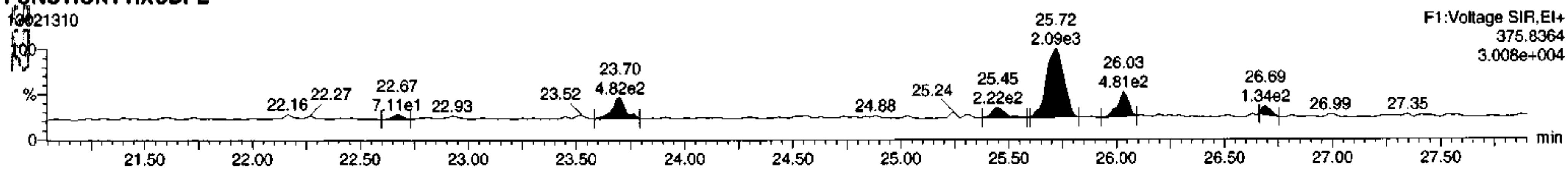
Total-tetrafurans
13021310



Total-tetrafurans
13021310



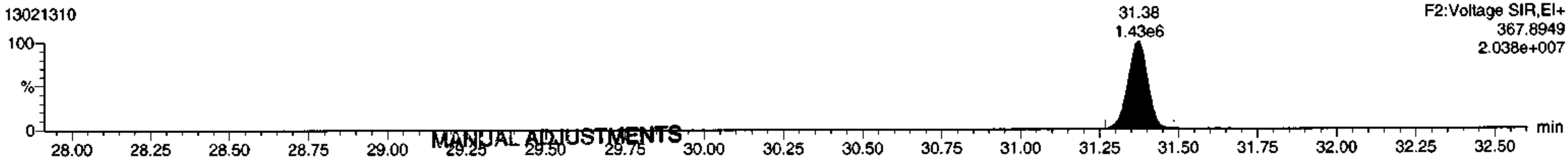
FUNCTION1 HXCDPE
13021310



Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:48:25 Pacific Standard Time

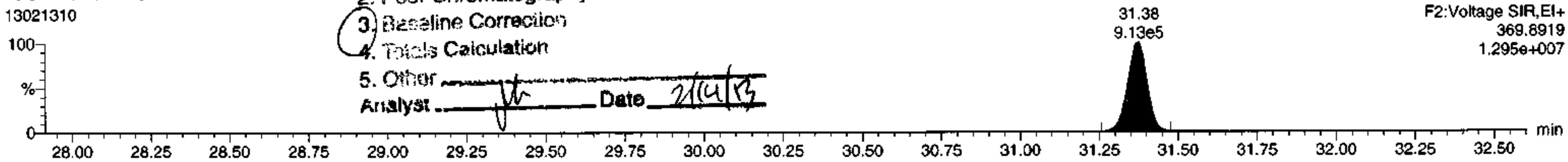
ID: WC32D, Name: 13021310, Date: 13-Feb-2013, Time: 18:07:43, Conditions: AUTOSPEC01, User: pk

13C-12378-PeCDD

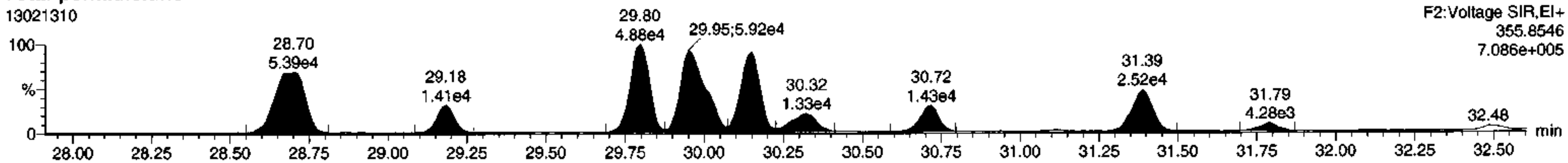


MANUAL ADJUSTMENTS
1. Peak not found
2. Poor Chromatography
3. Baseline Correction
4. Totals Calculation
5. Other
Analyst jt Date 2/14/13

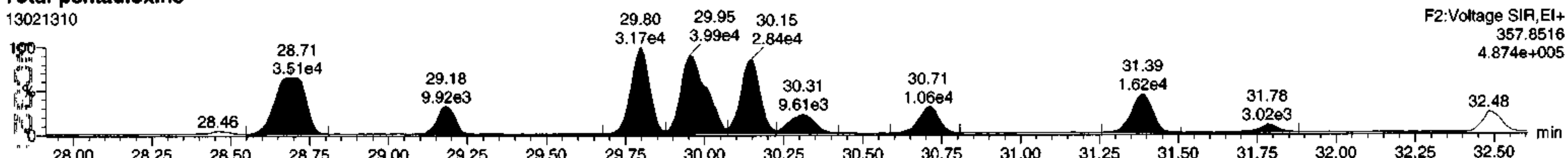
13C-12378-PeCDD



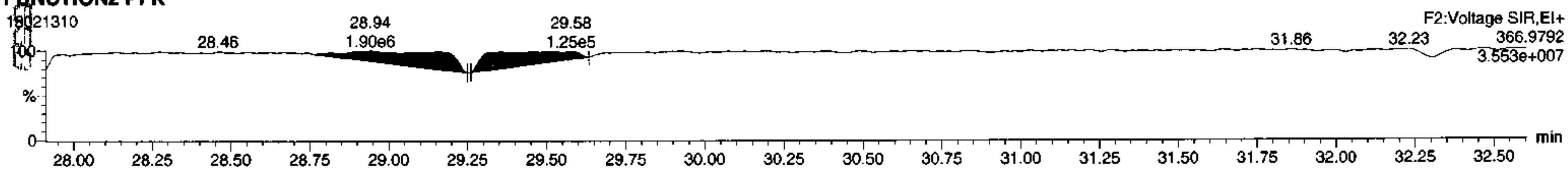
Total-pentadioxins



Total-pentadioxins



FUNCTION2 PFK



Quantify Sample Report **MassLynx 4.1 SCN 714**

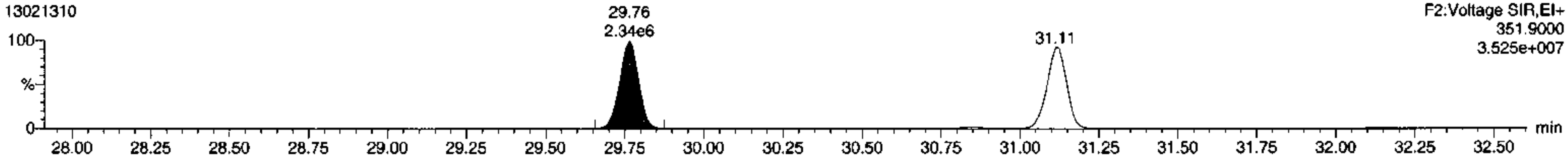
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld

Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time

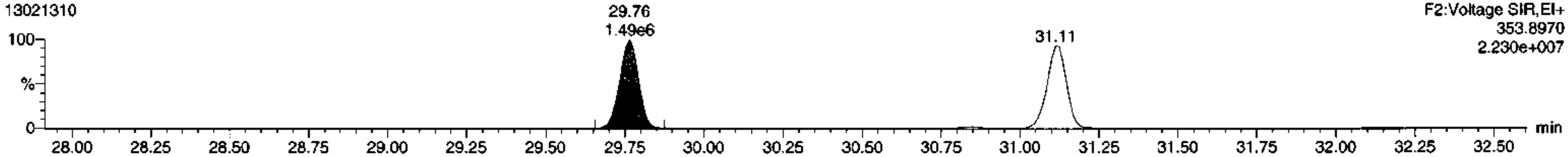
Printed: Thursday, February 14, 2013 10:48:25 Pacific Standard Time

ID: WC32D, Name: 13021310, Date: 13-Feb-2013, Time: 18:07:43, Conditions: AUTOSPEC01, User: pk

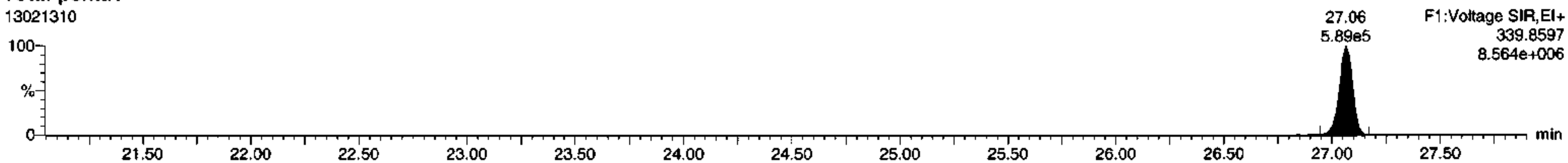
13C-12378-PeCDF



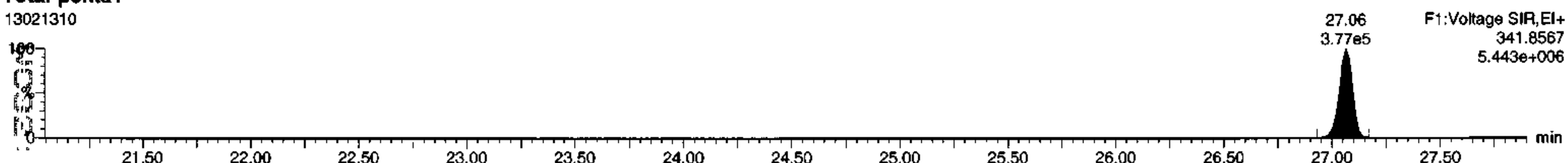
13C-12378-PeCDF



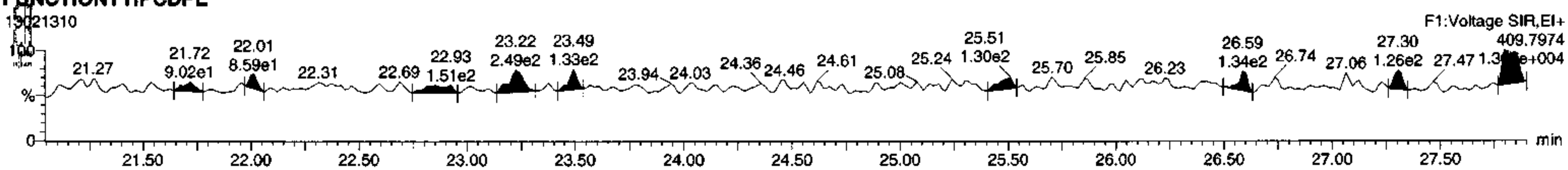
Total-penta1



Total-penta1



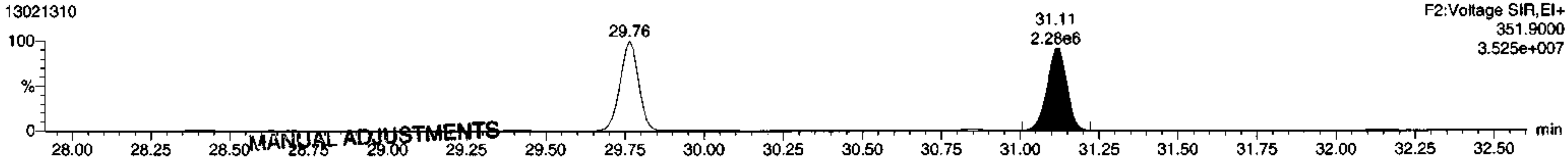
FUNCTION1 HPCDPE



Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:48:25 Pacific Standard Time

ID: WC32D, Name: 13021310, Date: 13-Feb-2013, Time: 18:07:43, Conditions: AUTOSPEC01, User: pk

13C-23478-PeCDF



MANUAL ADJUSTMENTS
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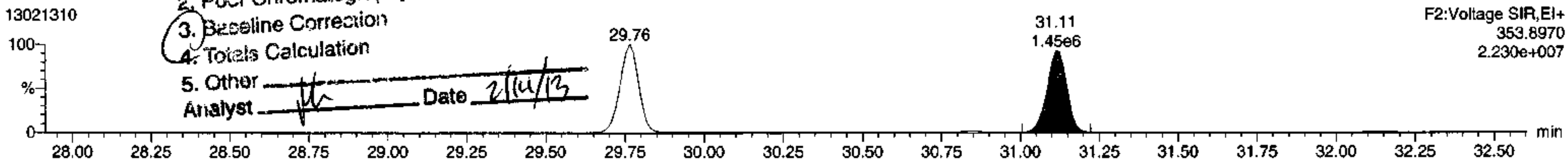
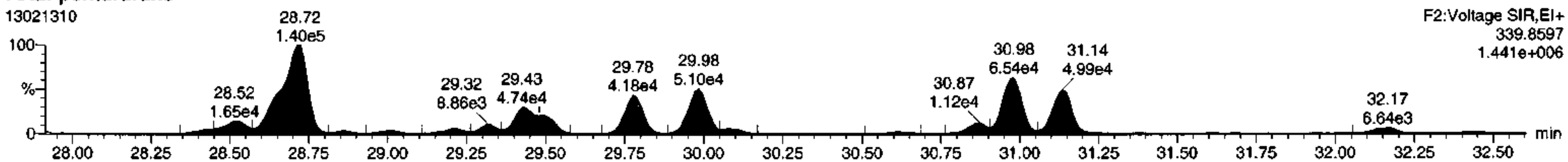
2. Poor Chromatography
3. Baseline Correction
4. Totals Calculation
5. Other
Analyst ____ Date 2/14/13

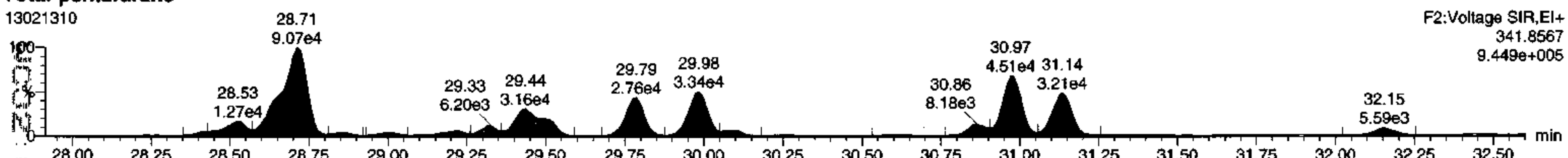
13C-23478-PeCDF



Total-pentafurans

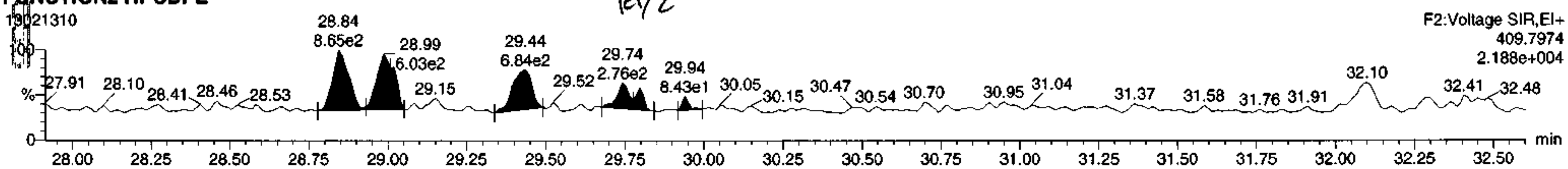


Total-pentafurans



FUNCTION2 HPCDPE

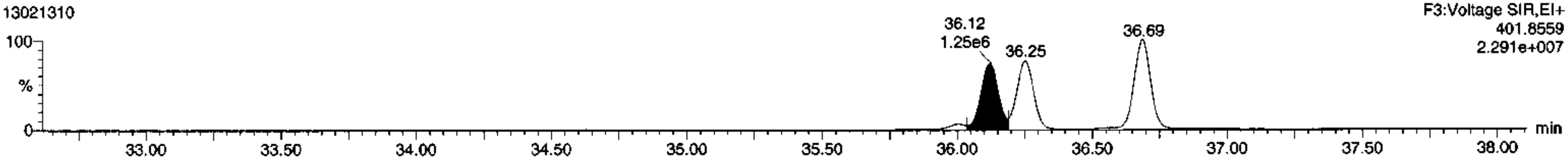
RT/L



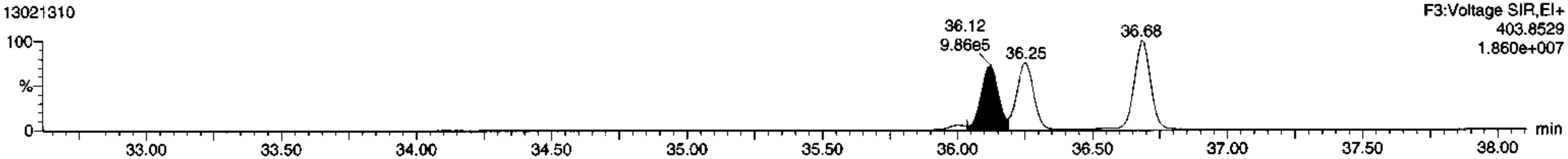
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:48:25 Pacific Standard Time

ID: WC32D, Name: 13021310, Date: 13-Feb-2013, Time: 18:07:43, Conditions: AUTOSPEC01, User: pk

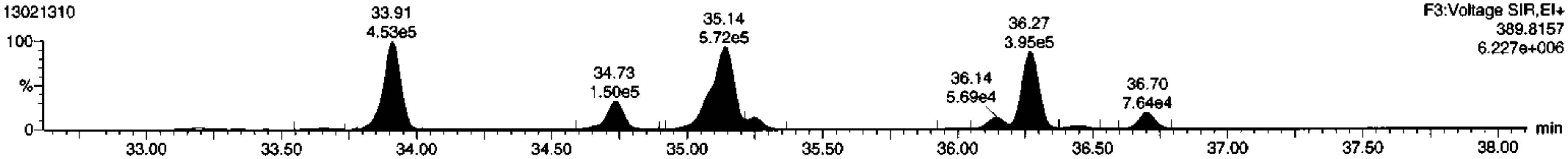
13C-123478-HxCDD



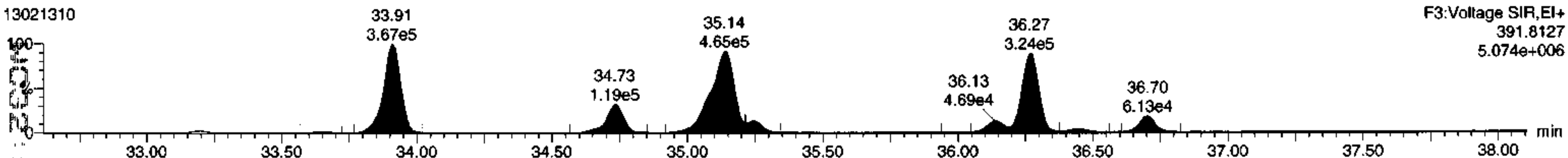
13C-123478-HxCDD



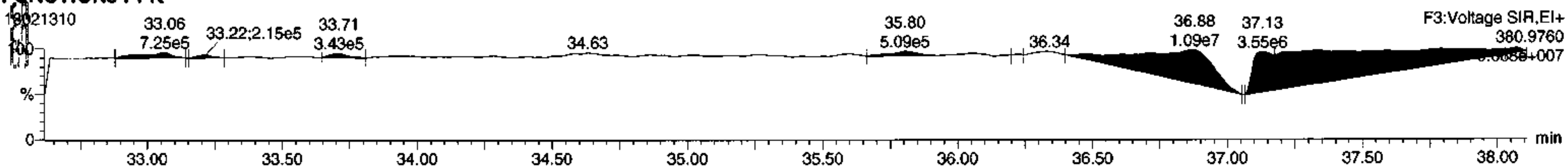
Total-hexadioxins



Total-hexadioxins



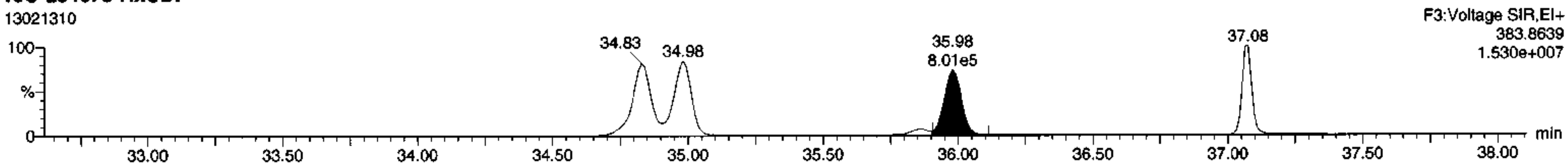
FUNCTION3 PFK



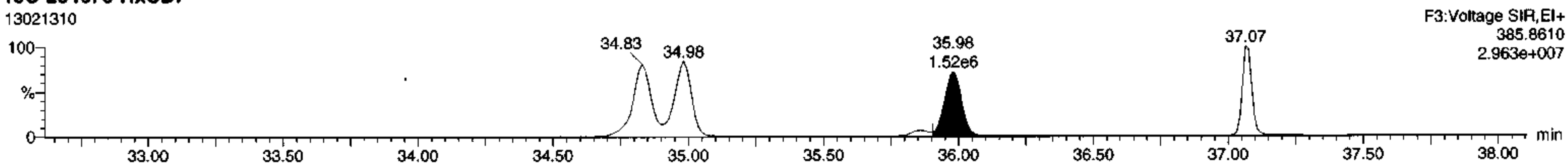
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:48:25 Pacific Standard Time

ID: WC32D, Name: 13021310, Date: 13-Feb-2013, Time: 18:07:43, Conditions: AUTOSPEC01, User: pk

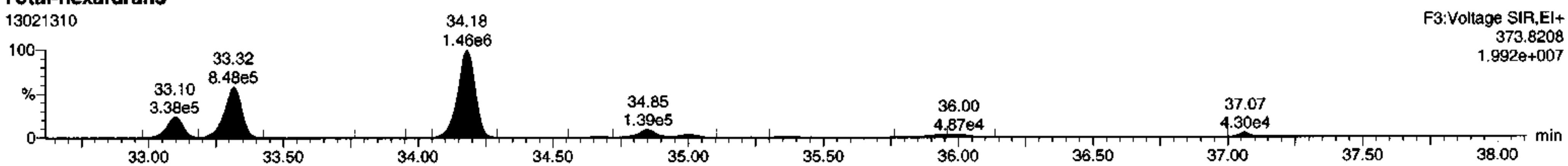
13C-234678-HxCDF
13021310



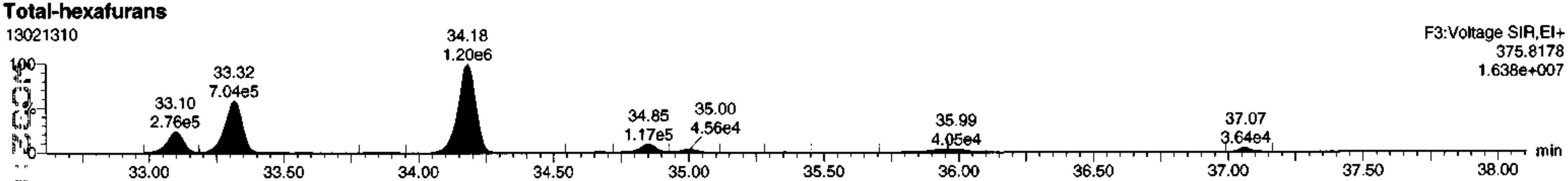
13C-234678-HxCDF
13021310



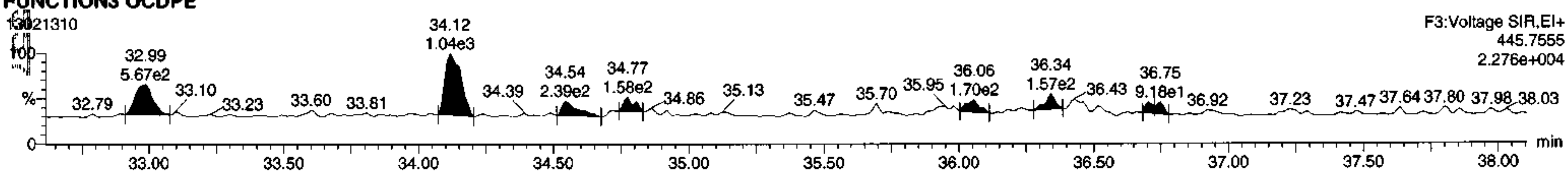
Total-hexafurans
13021310



Total-hexafurans
13021310



FUNCTION3 OCDPE
13021310



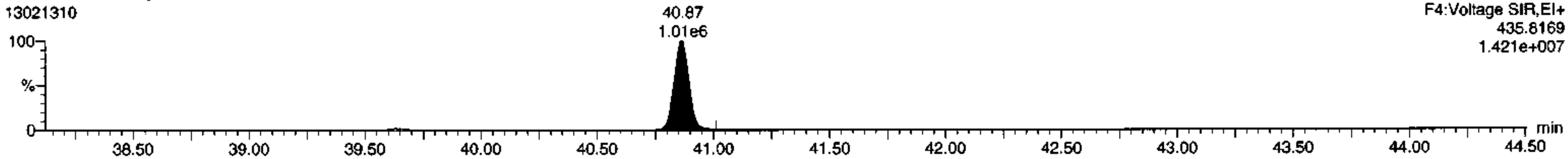
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld

Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time

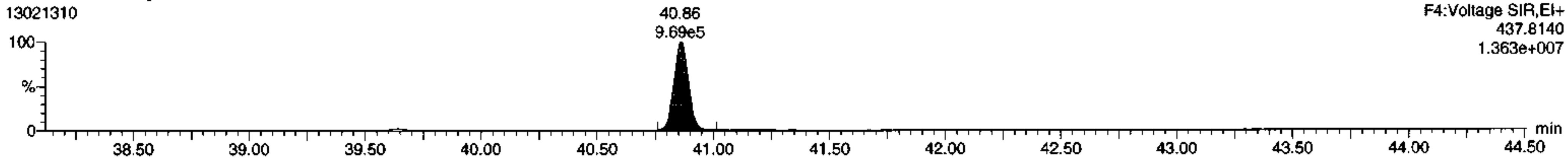
Printed: Thursday, February 14, 2013 10:48:25 Pacific Standard Time

ID: WC32D, Name: 13021310, Date: 13-Feb-2013, Time: 18:07:43, Conditions: AUTOSPEC01, User: pk

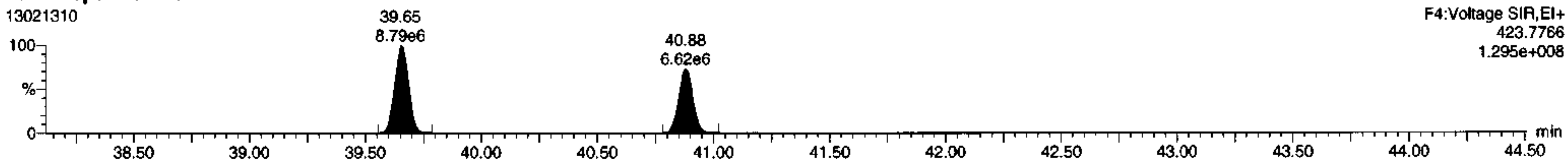
13C-1234678-HpCDD



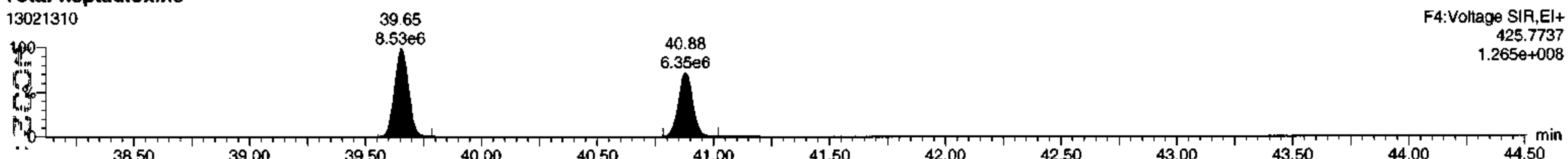
13C-1234678-HpCDD



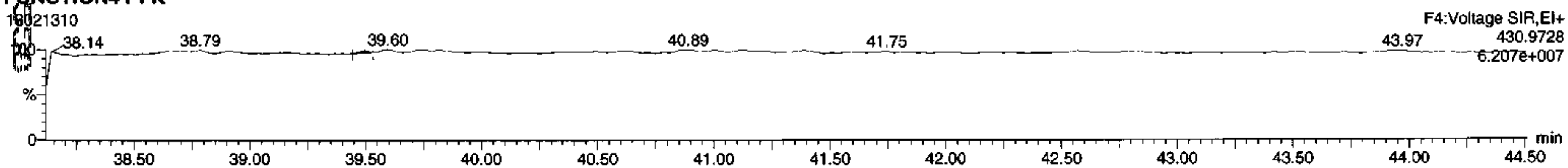
Total-heptadioxins



Total-heptadioxins

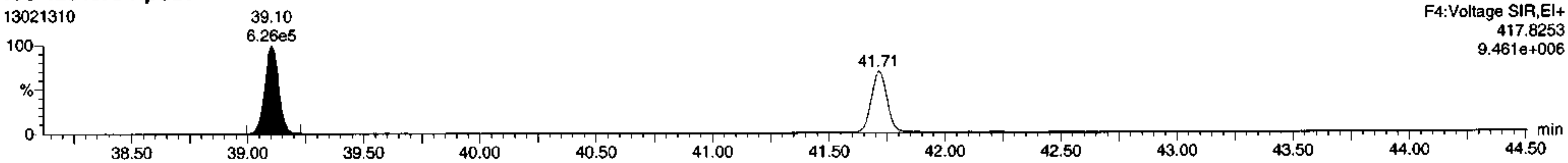


FUNCTION4 PFK



Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:48:25 Pacific Standard Time

ID: WC32D, Name: 13021310, Date: 13-Feb-2013, Time: 18:07:43, Conditions: AUTOSPEC01, User: pk

13C-1234678-HpCDF


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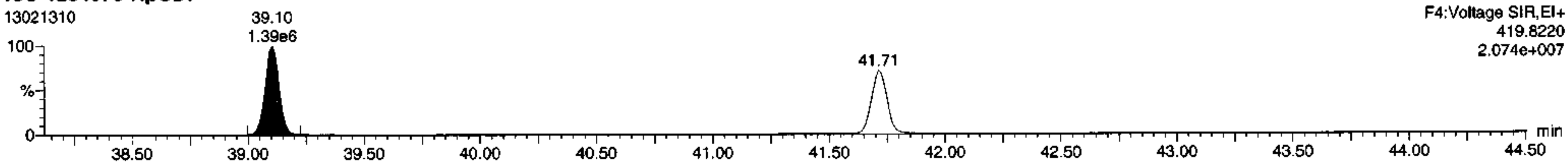

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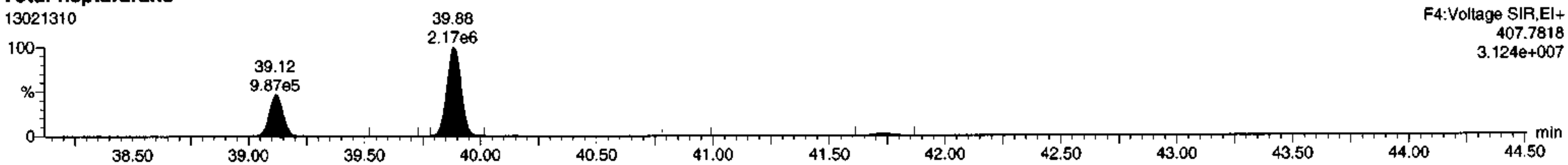

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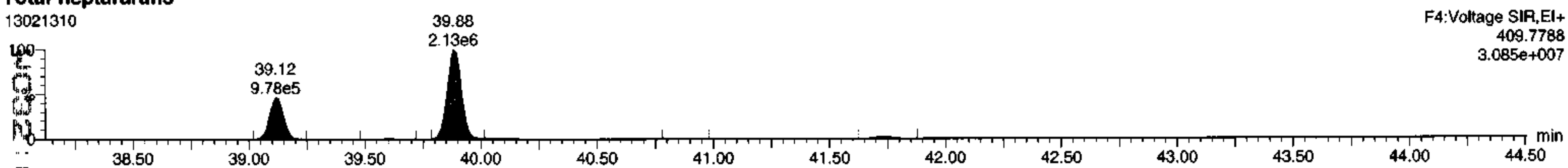
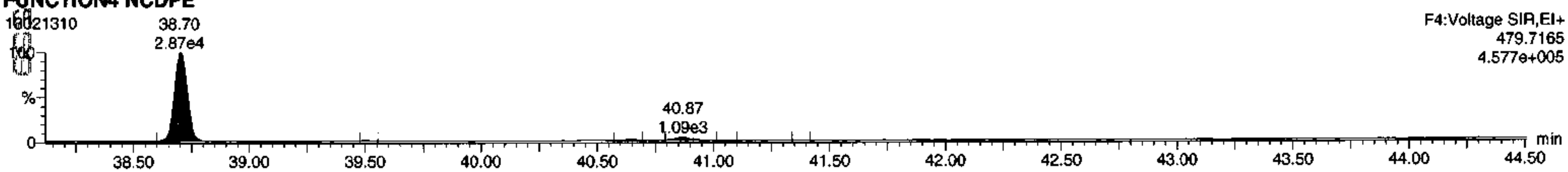
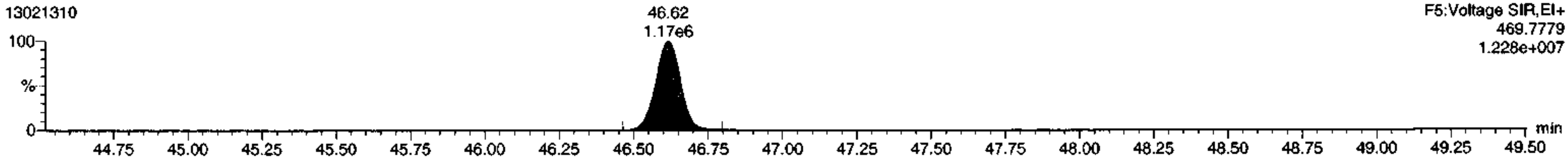


FUNCTION4 NCDPE


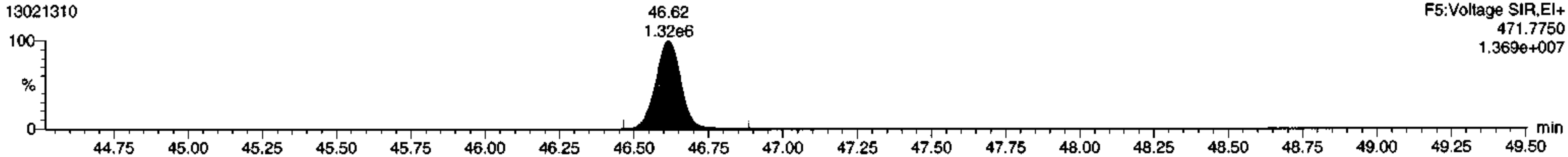
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:48:25 Pacific Standard Time

ID: WC32D, Name: 13021310, Date: 13-Feb-2013, Time: 18:07:43, Conditions: AUTOSPEC01, User: pk

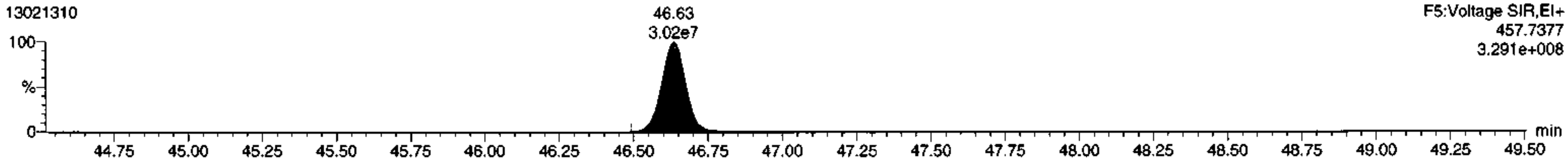
13C-OCDD



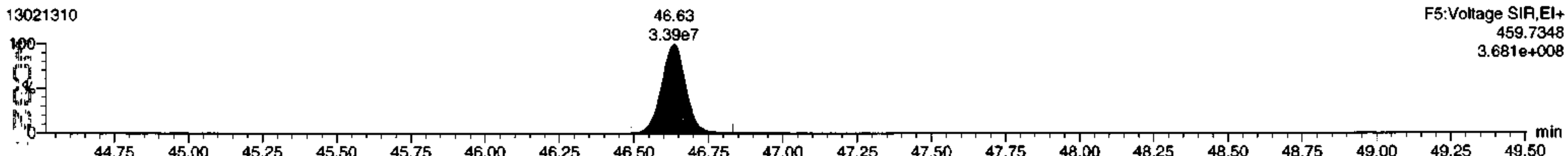
13C-OCDD



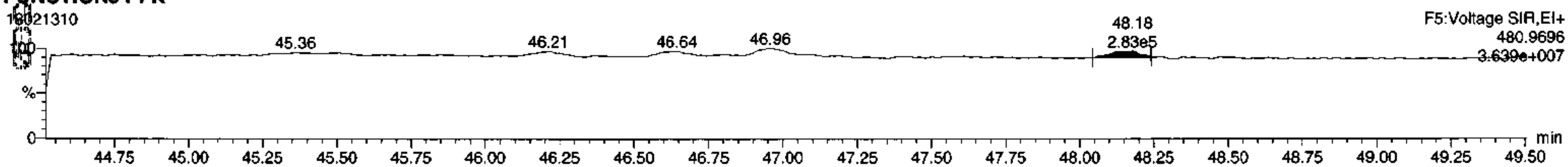
OCDD



OCDD



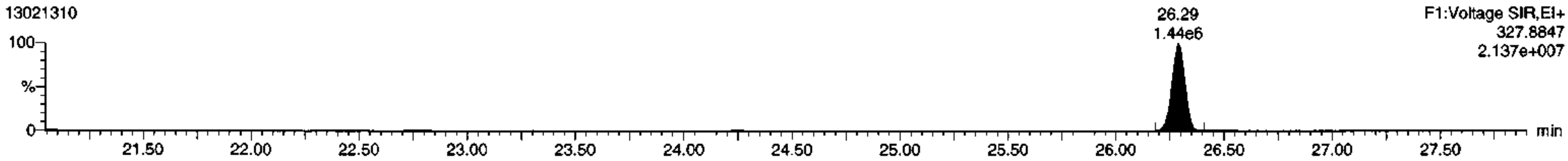
FUNCTION5 PFK



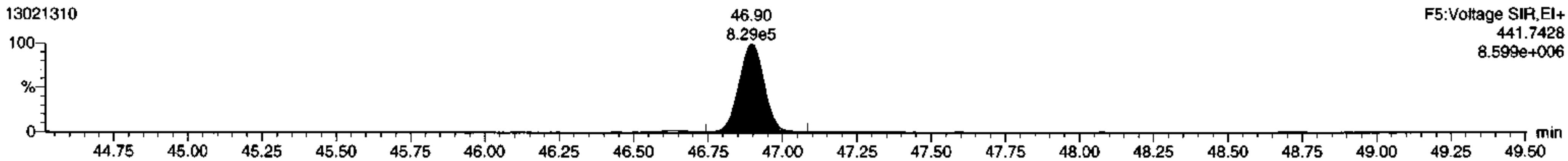
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:48:25 Pacific Standard Time

ID: WC32D, Name: 13021310, Date: 13-Feb-2013, Time: 18:07:43, Conditions: AUTOSPEC01, User: pk

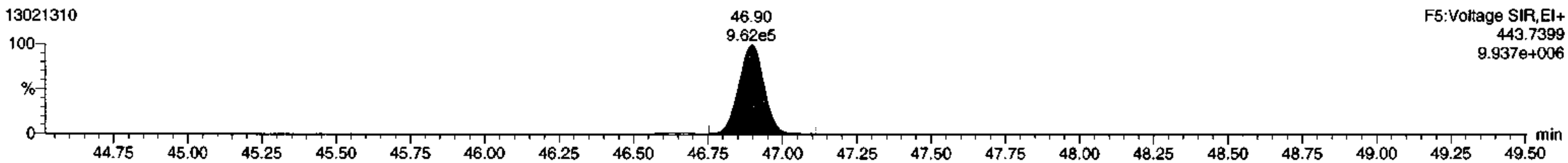
37CL-2378-TCDD



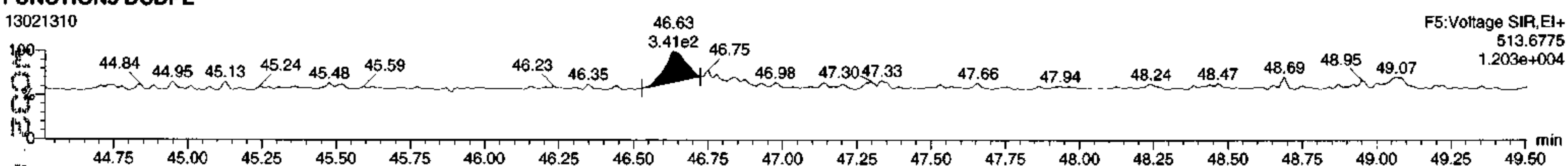
OCDF



OCDF



FUNCTION5 DCDPE



Quantify Sample Summary Report MassLynx 4.1 SCN 714

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:55:54 Pacific Standard Time

pk 2/14/13

Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 12 Feb 2013 12:25:57
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: WC32N, Name: 13021311, Date: 13-Feb-2013, Time: 19:00:27, Conditions: AUTOSPEC01, User: pk

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	2378-TCDF	25.660	1.001	2.53e4	3.37e4	0.921	0.751	0.770	162.7	2259	1720	3.68e5	5.06e5	NO	1.210	1.210
[redacted]	12378-PeCDF	29.776	1.000	3.59e4	2.50e4	0.912	1.438	1.550	354.7	1541	2177	5.47e5	3.62e5	NO	1.851	1.851
[redacted]	23478-PeCDF	31.135	1.001	4.58e4	2.93e4	0.943	1.563	1.550	444.6	1541	2177	6.85e5	4.33e5	NO	2.280	2.280
[redacted]	123478-HxCDF	34.840	1.001	1.08e5	9.14e4	1.101	1.184	1.240	665.5	2250	3351	1.50e6	1.26e6	NO	7.149	7.149
[redacted]	234678-HxCDF	35.980	1.000	4.24e4	3.36e4	1.073	1.262	1.240	253.4	2250	3351	5.70e5	4.63e5	NO	3.305	3.305
[redacted]	123678-HxCDF	34.993	1.001	4.63e4	3.88e4	1.056	1.191	1.240	278.2	2250	3351	6.26e5	5.55e5	NO	3.247	3.247
[redacted]	123789-HxCDF	37.054	1.000	3.93e4	3.27e4	1.017	1.204	1.240	404.9	2250	3351	9.11e5	7.57e5	NO	3.757	3.757
[redacted]	1234678-HpCDF	39.104	1.001	8.49e5	8.30e5	1.238	1.023	1.050	4008.2	3161	2384	1.27e7	1.23e7	NO	69.732	69.732
[redacted]	1234789-HpCDF	41.724	1.001	4.57e4	4.61e4	1.224	0.992	1.050	184.8	3161	2384	5.84e5	5.92e5	NO	4.748	4.748
[redacted]	OCDF	46.877	1.006	9.32e5	1.08e6	1.162	0.863	0.890	5955.5	1584	1693	9.43e6	1.11e7	NO	145.943	145.943
[redacted]	2378-TCDD	26.302	1.001	2.58e3	5.14e3	1.106	0.502	0.770	17.0	2345	1306	3.99e4	6.92e4	YES	0.183	0.238
[redacted]	12378-PeCDD	31.387	1.001	2.49e4	1.62e4	1.001	1.539	1.550	56.6	5759	1307	3.26e5	2.17e5	NO	1.917	1.917
[redacted]	123478-HxCDD	36.133	1.001	5.13e4	4.15e4	0.978	1.238	1.240	229.6	3223	3223	7.40e5	5.77e5	NO	4.671	4.671
[redacted]	123678-HxCDD	36.265	1.001	3.30e5	2.65e5	0.929	1.243	1.240	1415.6	3223	3223	4.56e6	3.62e6	NO	31.133	31.133
[redacted]	123789-HxCDD	36.693	1.012	8.34e4	6.78e4	0.904	1.230	1.240	383.7	3223	3223	1.24e6	1.01e6	NO	8.178	8.178
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[redacted]	OCDD	46.617	1.000	2.67e7	3.00e7	1.011	0.891	0.890	52520.3	5528	4709	2.90e8	3.26e8	NO	4732.384	4732.384 E
[redacted]	13C-2378-TCDF	25.630	1.007	2.31e6	2.98e6	1.522	0.777	0.770	9510.9	3611	3108	3.43e7	4.45e7	NO		82.988
[redacted]	13C-12378-PeCDF	29.765	1.169	2.20e6	1.40e6	1.185	1.571	1.550	8187.3	4092	2490	3.35e7	2.14e7	NO		72.582
[redacted]	13C-23478-PeCDF	31.113	1.222	2.13e6	1.36e6	1.136	1.567	1.550	7749.3	4092	2490	3.17e7	2.01e7	NO		73.351
[redacted]	13C-123478-HxCDF	34.818	0.949	8.68e5	1.67e6	1.284	0.520	0.510	4634.2	2438	4042	1.13e7	2.16e7	NO		77.903
[redacted]	13C-123678-HxCDF	34.972	0.953	8.59e5	1.62e6	1.383	0.529	0.510	4893.6	2438	4042	1.19e7	2.25e7	NO		70.815
[redacted]	13C-234678-HxCDF	35.969	0.981	7.35e5	1.41e6	1.283	0.522	0.510	4165.5	2438	4042	1.02e7	1.93e7	NO		65.830
[redacted]	13C-123789-HxCDF	37.065	1.010	6.41e5	1.24e6	1.099	0.516	0.510	7014.1	2438	4042	1.71e7	3.25e7	NO		67.565
[redacted]	13C-1234678-HpCDF	39.082	1.065	6.03e5	1.34e6	1.070	0.449	0.440	3762.6	2376	2613	8.94e6	1.98e7	NO		71.728
[redacted]	13C-1234789-HpCDF	41.702	1.137	4.88e5	1.09e6	0.774	0.447	0.440	2706.5	2376	2613	6.43e6	1.44e7	NO		80.532
[redacted]	13C-1234-TCDD	25.451	0.000	1.85e6	2.35e6	1.000	0.787	0.770	8830.5	3083	2315	2.72e7	3.49e7	NO		100.000
[redacted]	13C-2378-TCDD	26.272	1.032	1.29e6	1.63e6	0.943	0.793	0.770	6381.6	3083	2315	1.97e7	2.49e7	NO		74.044
[redacted]	13C-12378-PeCDD	31.365	1.232	1.31e6	8.32e5	0.715	1.575	1.550	8900.7	2186	1690	1.95e7	1.23e7	NO		71.480
[redacted]	13C-123478-HxCDD	36.111	0.984	1.13e6	8.97e5	1.032	1.266	1.240	8042.4	1981	1348	1.59e7	1.26e7	NO		77.639
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[redacted]	13C-1234678-HpCDD	40.847	1.114	8.96e5	8.48e5	0.838	1.056	1.050	5810.3	2125	2240	1.23e7	1.18e7	NO		82.129
[redacted]	13C-OCDD	46.599	1.270	1.12e6	1.25e6	0.675	0.893	0.890	6179.6	1907	1728	1.18e7	1.33e7	NO		138.446

Quantify Sample Summary Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:55:54 Pacific Standard Time

ID: WC32N, Name: 13021311, Date: 13-Feb-2013, Time: 19:00:27, Conditions: AUTOSPEC01, User: pk

[redacted]																
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[redacted]	Total-tetrafurans			2.60e5		0.921				2259		3.71e6				12.378
[redacted]	Total-penta1			5.27e5						1065		7.91e6				26.474
[redacted]	Total-pentafurans			4.30e5		0.927				1541		5.46e6				21.819
[redacted]	Total-hexafurans			2.43e6		1.062				2250		3.44e7				184.431
[redacted]	Total-heptafurans			2.84e6		1.231				3161		4.20e7				252.530
[redacted]	Total-Furans			7.42e6		1.065				2259		1.03e8				643.577
[redacted]	Total-tetradioxins			1.61e5		1.106				2345		2.43e6				11.493
[redacted]	Total-pentadioxins			2.56e5		1.001				5759		3.47e6				20.010
[redacted]	Total-hexadioxins			1.63e6		0.937				3223		2.07e7				154.437
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[redacted]	Total-Dioxins			4.17e7		0.994				2345		5.07e8				6334.127
[redacted]	Total-TEQ			4.92e7						2345		6.10e8				6977.703
[redacted]	37CL-2378-TCDD	26.288	1.033	1.31e6		1.051			10412.1	1906		1.98e7				29.633
[redacted]	FUNCTION1 PFK			1.25e7						1150190		1.69e8				
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[redacted]	FUNCTION1 HXCDPE			1.61e3						626		2.43e4				0.000
[redacted]	FUNCTION1 HPCDPE			1.03e3						957		2.01e4				0.000
[redacted]	FUNCTION2 HPCDPE			2.03e3						1143		4.46e4				0.000
[redacted]	FUNCTION3 OCDPE			6.55e2						923		1.59e4				0.000
[redacted]	FUNCTION4 NCDPE			4.35e4						797		7.25e5				0.000
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Quantify Totals Report MassLynx 4.1 SCN 714
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:55:54 Pacific Standard Time

Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 12 Feb 2013 12:25:57
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: WC32N, Name: 13021311, Date: 13-Feb-2013, Time: 19:00:27, Conditions: AUTOSPEC01, User: pk

TF

[redacted]											
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[redacted]	35 Total-tetrafurans	303.9016	23.90	14024.723	0.921	0.288		0.79	0.77	NO	38.1
[redacted]	35 Total-tetrafurans	303.9016	23.76	11732.056	0.921	0.241		0.78	0.77	NO	33.2
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[redacted]	35 Total-tetrafurans	303.9016	23.49	14821.112	0.921	0.304		0.91	0.77	YES	48.4
[redacted]	35 Total-tetrafurans	303.9016	23.42	31801.718	0.921	0.652		0.80	0.77	NO	93.4
[redacted]	35 Total-tetrafurans	303.9016	23.31	24774.105	0.921	0.508		0.86	0.77	NO	58.7
[redacted]	35 Total-tetrafurans	303.9016	23.18	25592.870	0.921	0.525		0.75	0.77	NO	67.9
[redacted]	35 Total-tetrafurans	303.9016	23.14	13966.342	0.921	0.286		0.78	0.77	NO	54.6
[redacted]	35 Total-tetrafurans	303.9016	23.00	56169.400	0.921	1.152		0.73	0.77	NO	136.2
[redacted]	35 Total-tetrafurans	303.9016	22.43	12634.053	0.921	0.259		0.74	0.77	NO	39.4
[redacted]	35 Total-tetrafurans	303.9016	22.16	11283.697	0.921	0.231		0.65	0.77	YES	30.5
[redacted]	35 Total-tetrafurans	303.9016	27.08	15680.158	0.921	0.322		0.79	0.77	NO	29.9
[redacted]	35 Total-tetrafurans	303.9016	26.15	1400.174	0.921	0.029		0.54	0.77	YES	4.7
[redacted]	35 Total-tetrafurans	303.9016	25.88	33021.098	0.921	0.677		0.73	0.77	NO	89.0
[redacted]	35 Total-tetrafurans	303.9016	25.78	19995.945	0.921	0.410		0.70	0.77	NO	56.7
[redacted]	1 2378-TCDF	303.9016	25.66	58991.297	0.921	1.210	1.210	0.75	0.77	NO	162.7
[redacted]	35 Total-tetrafurans	303.9016	25.47	14442.712	0.921	0.296		0.87	0.77	NO	54.3
[redacted]	35 Total-tetrafurans	303.9016	25.42	20129.790	0.921	0.413		0.75	0.77	NO	56.9
[redacted]	35 Total-tetrafurans	303.9016	25.15	18476.683	0.921	0.379		0.69	0.77	NO	50.6
[redacted]	35 Total-tetrafurans	303.9016	24.96	15673.533	0.921	0.321		0.73	0.77	NO	44.4
[redacted]	35 Total-tetrafurans	303.9016	24.75	42496.373	0.921	0.871		0.75	0.77	NO	120.1
[redacted]	35 Total-tetrafurans	303.9016	24.57	40447.342	0.921	0.829		0.75	0.77	NO	101.2
[redacted]	35 Total-tetrafurans	303.9016	24.41	21747.504	0.921	0.446		0.86	0.77	NO	62.5

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[redacted]											
[redacted]	36 Total-penta1	339.8597	27.06	861543.719		26.474		1.58	1.55	NO	7425.7

Quantify Totals Report MassLynx 4.1 SCN 714
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:55:54 Pacific Standard Time

ID: WC32N, Name: 13021311, Date: 13-Feb-2013, Time: 19:00:27, Conditions: AUTOSPEC01, User: pk

PF

[redacted]											
[redacted]	37 Total-pentafurans	339.8597	29.32	14517.349	0.927	0.441		1.37	1.55	NO	88.1
[redacted]	37 Total-pentafurans	339.8597	29.22	11938.802	0.927	0.363		1.29	1.55	YES	57.6
[redacted]	37 Total-pentafurans	339.8597	28.85	1592.574	0.927	0.048		1.31	1.55	YES	10.7
[redacted]	37 Total-pentafurans	339.8597	28.72	211623.343	0.927	6.430		1.54	1.55	NO	850.6
[redacted]	37 Total-pentafurans	339.8597	28.53	30113.448	0.927	0.915		1.43	1.55	NO	133.3
[redacted]	37 Total-pentafurans	339.8597	28.43	6725.152	0.927	0.204		1.73	1.55	NO	51.1
[redacted]	37 Total-pentafurans	339.8597	32.15	10144.772	0.927	0.308		1.56	1.55	NO	56.1
[redacted]	3 23478-PeCDF	339.8597	31.13	75032.030	0.943	2.280	2.280	1.56	1.55	NO	444.6
[redacted]	37 Total-pentafurans	339.8597	30.97	103993.926	0.927	3.160		1.56	1.55	NO	595.0
[redacted]	37 Total-pentafurans	339.8597	30.86	21849.635	0.927	0.664		1.39	1.55	NO	124.0
[redacted]	37 Total-pentafurans	339.8597	30.62	2458.198	0.927	0.075		1.25	1.55	YES	16.0
[redacted]	37 Total-pentafurans	339.8597	30.08	8773.708	0.927	0.267		1.43	1.55	NO	54.5
[redacted]	37 Total-pentafurans	339.8597	29.98	74634.659	0.927	2.268		1.42	1.55	NO	425.1
[redacted]	2 12378-PeCDF	339.8597	29.78	60882.092	0.912	1.851	1.851	1.44	1.55	NO	354.7
[redacted]	37 Total-pentafurans	339.8597	29.44	83849.000	0.927	2.548		1.46	1.55	NO	282.3

fr

HF

[redacted]											
[redacted]	7 123789-HxCDF	373.8208	37.05	71960.261	1.017	3.757	3.757	1.20	1.24	NO	404.9
[redacted]	5 234678-HxCDF	373.8208	35.98	75955.820	1.073	3.305	3.305	1.26	1.24	NO	253.4
[redacted]	38 Total-hexafurans	373.8208	35.93	63886.136	1.062	2.661		1.15	1.24	NO	220.4
[redacted]	38 Total-hexafurans	373.8208	35.56	2565.045	1.062	0.107		1.18	1.24	NO	8.8
[redacted]	38 Total-hexafurans	373.8208	35.34	6268.494	1.062	0.261		1.20	1.24	NO	22.9
[redacted]	6 123678-HxCDF	373.8208	34.99	85121.203	1.056	3.247	3.247	1.19	1.24	NO	278.2
[redacted]	4 123478-HxCDF	373.8208	34.84	199686.742	1.101	7.149	7.149	1.18	1.24	NO	665.5
[redacted]	38 Total-hexafurans	373.8208	34.66	27777.609	1.062	1.157		1.22	1.24	NO	88.6
[redacted]	38 Total-hexafurans	373.8208	34.17	2113158.313	1.062	88.022		1.21	1.24	NO	7217.1
[redacted]	38 Total-hexafurans	373.8208	33.85	15931.060	1.062	0.664		1.26	1.24	NO	51.5
[redacted]	38 Total-hexafurans	373.8208	33.56	1364.057	1.062	0.057		1.86	1.24	YES	6.2
[redacted]	38 Total-hexafurans	373.8208	33.31	1262950.750	1.062	52.607		1.22	1.24	NO	4281.7
[redacted]	38 Total-hexafurans	373.8208	33.09	514638.750	1.062	21.437		1.18	1.24	NO	1798.4

E

HPF

[redacted]											
[redacted]	9 1234789-HpCDF	407.7818	41.72	91770.113	1.224	4.748	4.748	0.99	1.05	NO	184.8
[redacted]	39 Total-heptafurans	407.7818	40.88	5574.974	1.231	0.257		1.12	1.05	NO	12.7
[redacted]	39 Total-heptafurans	407.7818	39.87	3830205.875	1.231	176.574		1.01	1.05	NO	9041.6
[redacted]	39 Total-heptafurans	407.7818	39.59	26456.057	1.231	1.220		1.09	1.05	NO	48.0
[redacted]	8 1234678-HpCDF	407.7818	39.10	1679234.063	1.238	69.732	69.732	1.02	1.05	NO	4008.2

Quantify Totals Report MassLynx 4.1 SCN 714
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:55:54 Pacific Standard Time

ID: WC32N, Name: 13021311, Date: 13-Feb-2013, Time: 19:00:27, Conditions: AUTOSPEC01, User: pk

Furans,TF,PP,PF,HF,HPF,OF

[redacted]											
[redacted]	35 Total-tetrafurans	303.9016	24.32	44417.361	0.921	0.911		0.65	0.77	YES	87.7
[redacted]	35 Total-tetrafurans	303.9016	23.90	14024.723	0.921	0.288		0.79	0.77	NO	38.1
[redacted]	35 Total-tetrafurans	303.9016	23.76	11732.056	0.921	0.241		0.78	0.77	NO	33.2
[redacted]	35 Total-tetrafurans	303.9016	23.66	39873.783	0.921	0.818		0.82	0.77	NO	118.9
[redacted]	35 Total-tetrafurans	303.9016	23.49	14821.112	0.921	0.304		0.91	0.77	YES	48.4
[redacted]	35 Total-tetrafurans	303.9016	23.42	31801.718	0.921	0.652		0.80	0.77	NO	93.4
[redacted]	35 Total-tetrafurans	303.9016	23.31	24774.105	0.921	0.508		0.86	0.77	NO	58.7
[redacted]	35 Total-tetrafurans	303.9016	23.18	25592.870	0.921	0.525		0.75	0.77	NO	67.9
[redacted]	35 Total-tetrafurans	303.9016	23.14	13966.342	0.921	0.286		0.78	0.77	NO	54.6
[redacted]	35 Total-tetrafurans	303.9016	23.00	56169.400	0.921	1.152		0.73	0.77	NO	136.2
[redacted]	35 Total-tetrafurans	303.9016	22.43	12634.053	0.921	0.259		0.74	0.77	NO	39.4
[redacted]	35 Total-tetrafurans	303.9016	22.16	11283.697	0.921	0.231		0.65	0.77	YES	30.5
[redacted]	35 Total-tetrafurans	303.9016	27.08	15680.158	0.921	0.322		0.79	0.77	NO	29.9
[redacted]	35 Total-tetrafurans	303.9016	26.15	1400.174	0.921	0.029		0.54	0.77	YES	4.7
[redacted]	35 Total-tetrafurans	303.9016	25.88	33021.098	0.921	0.677		0.73	0.77	NO	89.0
[redacted]	35 Total-tetrafurans	303.9016	25.78	19995.945	0.921	0.410		0.70	0.77	NO	56.7
[redacted]	1 2378-TCDF	303.9016	25.66	58991.297	0.921	1.210	1.210	0.75	0.77	NO	162.7
[redacted]	35 Total-tetrafurans	303.9016	25.47	14442.712	0.921	0.296		0.87	0.77	NO	54.3
[redacted]	35 Total-tetrafurans	303.9016	25.42	20129.790	0.921	0.413		0.75	0.77	NO	56.9
[redacted]	35 Total-tetrafurans	303.9016	25.15	18476.683	0.921	0.379		0.69	0.77	NO	50.6
[redacted]	35 Total-tetrafurans	303.9016	24.96	15673.533	0.921	0.321		0.73	0.77	NO	44.4
[redacted]	35 Total-tetrafurans	303.9016	24.75	42496.373	0.921	0.871		0.75	0.77	NO	120.1
[redacted]	35 Total-tetrafurans	303.9016	24.57	40447.342	0.921	0.829		0.75	0.77	NO	101.2
[redacted]	35 Total-tetrafurans	303.9016	24.41	21747.504	0.921	0.446		0.86	0.77	NO	62.5
[redacted]	37 Total-pentafurans	339.8597	29.32	14517.349	0.927	0.441		1.37	1.55	NO	88.1
[redacted]	37 Total-pentafurans	339.8597	29.22	11938.802	0.927	0.363		1.29	1.55	YES	57.6
[redacted]	37 Total-pentafurans	339.8597	28.85	1592.574	0.927	0.048		1.31	1.55	YES	10.7
[redacted]	37 Total-pentafurans	339.8597	28.72	211623.343	0.927	6.430		1.54	1.55	NO	850.6
[redacted]	37 Total-pentafurans	339.8597	28.53	30113.448	0.927	0.915		1.43	1.55	NO	133.3
[redacted]	37 Total-pentafurans	339.8597	28.43	6725.152	0.927	0.204		1.73	1.55	NO	51.1
[redacted]	37 Total-pentafurans	339.8597	32.15	10144.772	0.927	0.308		1.56	1.55	NO	56.1
[redacted]	3 23478-PeCDF	339.8597	31.13	75032.030	0.943	2.280	2.280	1.56	1.55	NO	444.6
[redacted]	37 Total-pentafurans	339.8597	30.97	103993.926	0.927	3.160		1.56	1.55	NO	595.0
[redacted]	37 Total-pentafurans	339.8597	30.86	21849.635	0.927	0.664		1.39	1.55	NO	124.0
[redacted]	37 Total-pentafurans	339.8597	30.62	2458.198	0.927	0.075		1.25	1.55	YES	16.0
[redacted]	37 Total-pentafurans	339.8597	30.08	8773.708	0.927	0.267		1.43	1.55	NO	54.5
[redacted]	37 Total-pentafurans	339.8597	29.98	74634.659	0.927	2.268		1.42	1.55	NO	425.1
[redacted]	2 12378-PeCDF	339.8597	29.78	60882.092	0.912	1.851	1.851	1.44	1.55	NO	354.7
[redacted]	37 Total-pentafurans	339.8597	29.44	83849.000	0.927	2.548		1.46	1.55	NO	282.3
[redacted]	7 123789-HxCDF	373.8208	37.05	71960.261	1.017	3.757	3.757	1.20	1.24	NO	404.9
[redacted]	5 234678-HxCDF	373.8208	35.98	75955.820	1.073	3.305	3.305	1.26	1.24	NO	253.4
[redacted]	38 Total-hexafurans	373.8208	35.93	63886.136	1.062	2.661		1.15	1.24	NO	220.4
[redacted]	38 Total-hexafurans	373.8208	35.56	2565.045	1.062	0.107		1.18	1.24	NO	8.8
[redacted]	38 Total-hexafurans	373.8208	35.34	6268.494	1.062	0.261		1.20	1.24	NO	22.9
[redacted]	6 123678-HxCDF	373.8208	34.99	85121.203	1.056	3.247	3.247	1.19	1.24	NO	278.2
[redacted]	4 123478-HxCDF	373.8208	34.84	199686.742	1.101	7.149	7.149	1.18	1.24	NO	665.5
[redacted]	38 Total-hexafurans	373.8208	34.66	27777.609	1.062	1.157		1.22	1.24	NO	88.6
[redacted]	38 Total-hexafurans	373.8208	34.17	2113158.313	1.062	88.022		1.21	1.24	NO	7217.1
[redacted]	38 Total-hexafurans	373.8208	33.85	15931.060	1.062	0.664		1.26	1.24	NO	51.5

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ID: WC32N, Name: 13021311, Date: 13-Feb-2013, Time: 19:00:27, Conditions: AUTOSPEC01, User: pk

Furans,TF,PP,PF,HF,HPF,OF

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	38	Total-hexafurans	373.8208	33.56	1364.057	1.062	0.057		1.86	1.24	YES	6.2
[redacted]	38	Total-hexafurans	373.8208	33.31	1262950.750	1.062	52.607		1.22	1.24	NO	4281.7
[redacted]	38	Total-hexafurans	373.8208	33.09	514638.750	1.062	21.437		1.18	1.24	NO	1798.4
[redacted]	9	1234789-HpCDF	407.7818	41.72	91770.113	1.224	4.748	4.748	0.99	1.05	NO	184.8
[redacted]	39	Total-heptafurans	407.7818	40.88	5574.974	1.231	0.257		1.12	1.05	NO	12.7
[redacted]	39	Total-heptafurans	407.7818	39.87	3830205.875	1.231	176.574		1.01	1.05	NO	9041.6
[redacted]	39	Total-heptafurans	407.7818	39.59	26456.057	1.231	1.220		1.09	1.05	NO	48.0
[redacted]	8	1234678-HpCDF	407.7818	39.10	1679234.063	1.238	69.732	69.732	1.02	1.05	NO	4008.2
[redacted]	10	OCDF	441.7428	46.88	2010886.125	1.162	145.943	145....	0.86	0.89	NO	5955.5
[redacted]	36	Total-penta1	339.8597	27.06	861543.719		26.474		1.58	1.55	NO	7425.7

TD

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	41	Total-tetradioxins	319.8965	26.41	7830.899	1.106	0.242		0.77	0.77	NO	19.4
[redacted]	11	2378-TCDD	319.8965	26.30	7716.328	1.106	0.238	0.183	0.50	0.77	YES	17.0
[redacted]	41	Total-tetradioxins	319.8965	25.93	16752.350	1.106	0.518		0.85	0.77	NO	35.1
[redacted]	41	Total-tetradioxins	319.8965	25.63	2729.146	1.106	0.084		1.31	0.77	YES	11.8
[redacted]	41	Total-tetradioxins	319.8965	25.48	34165.204	1.106	1.056		0.73	0.77	NO	94.1
[redacted]	41	Total-tetradioxins	319.8965	25.27	5055.186	1.106	0.156		0.75	0.77	NO	14.9
[redacted]	41	Total-tetradioxins	319.8965	25.17	2418.655	1.106	0.075		0.84	0.77	NO	6.8
[redacted]	41	Total-tetradioxins	319.8965	24.91	21784.441	1.106	0.673		0.78	0.77	NO	62.5
[redacted]	41	Total-tetradioxins	319.8965	24.63	12952.316	1.106	0.400		0.66	0.77	NO	29.5
[redacted]	41	Total-tetradioxins	319.8965	24.42	1771.396	1.106	0.055		0.77	0.77	NO	5.7
[redacted]	41	Total-tetradioxins	319.8965	23.93	4642.555	1.106	0.143		0.92	0.77	YES	12.7
[redacted]	41	Total-tetradioxins	319.8965	23.70	87886.078	1.106	2.715		0.79	0.77	NO	252.7
[redacted]	41	Total-tetradioxins	319.8965	23.45	161445.593	1.106	4.988		0.76	0.77	NO	464.8
[redacted]	41	Total-tetradioxins	319.8965	26.87	4848.170	1.106	0.150		0.71	0.77	NO	9.4

R

PD

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	42	Total-pentadioxins	355.8546	31.78	6861.216	1.001	0.320		1.71	1.55	NO	11.5
[redacted]	12	12378-PeCDD	355.8546	31.39	41118.529	1.001	1.917	1.917	1.54	1.55	NO	56.6
[redacted]	42	Total-pentadioxins	355.8546	30.72	22327.481	1.001	1.041		1.58	1.55	NO	30.9
[redacted]	42	Total-pentadioxins	355.8546	30.32	21523.573	1.001	1.003		1.54	1.55	NO	22.9
[redacted]	42	Total-pentadioxins	355.8546	30.15	71495.395	1.001	3.332		1.56	1.55	NO	110.4
[redacted]	42	Total-pentadioxins	355.8546	29.96	34772.794	1.001	1.621		2.13	1.55	YES	61.3
[redacted]	42	Total-pentadioxins	355.8546	29.80	78547.916	1.001	3.661		1.61	1.55	NO	122.3
[redacted]	42	Total-pentadioxins	355.8546	29.18	27273.065	1.001	1.271		1.50	1.55	NO	43.4
[redacted]	42	Total-pentadioxins	355.8546	28.71	86104.629	1.001	4.013		1.58	1.55	NO	83.3
[redacted]	42	Total-pentadioxins	355.8546	29.99	39298.126	1.001	1.832		0.63	1.55	YES	59.3

R

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HD

	15	123789-HxCDD	389.8157	36.69	151240.258	0.904	8.178	8.178	1.23	1.24	NO	383.7
	43	Total-hexadioxins	389.8157	36.44	28265.413	0.937	1.475		1.20	1.24	NO	63.9
	14	123678-HxCDD	389.8157	36.26	595478.282	0.929	31.133	31.133	1.24	1.24	NO	1415.6
	13	123478-HxCDD	389.8157	36.13	92804.597	0.978	4.671	4.671	1.24	1.24	NO	229.6
	43	Total-hexadioxins	389.8157	36.01	3973.551	0.937	0.207		1.20	1.24	NO	11.6
	43	Total-hexadioxins	389.8157	35.23	63714.549	0.937	3.325		1.23	1.24	NO	186.9
	43	Total-hexadioxins	389.8157	35.14	914716.626	0.937	47.730		1.23	1.24	NO	1523.6
	43	Total-hexadioxins	389.8157	34.73	251805.578	0.937	13.139		1.29	1.24	NO	587.2
	43	Total-hexadioxins	389.8157	33.90	828462.562	0.937	43.229		1.23	1.24	NO	1953.8
	43	Total-hexadioxins	389.8157	33.66	25875.742	0.937	1.350		1.20	1.24	NO	69.2

HPD

	16	1234678-HpCDD	423.7766	40.87	10533357....	1.029	586.957	586....	1.04	1.05	NO	7650.5
	44	Total-heptadioxins	423.7766	39.64	14873607....	1.029	828.812		1.04	1.05	NO	11541.8

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
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ID: WC32N, Name: 13021311, Date: 13-Feb-2013, Time: 19:00:27, Conditions: AUTOSPEC01, User: pk

Dioxins,TD,PD,HD,HPD,OD

[redacted]											
[redacted]	41 Total-tetradioxins	319.8965	26.41	7830.899	1.106	0.242		0.77	0.77	NO	19.4
[redacted]	11 2378-TCDD	319.8965	26.30	7716.328	1.106	0.238	0.183	0.50	0.77	YES	17.0
[redacted]	41 Total-tetradioxins	319.8965	25.93	16752.350	1.106	0.518		0.85	0.77	NO	35.1
[redacted]	41 Total-tetradioxins	319.8965	25.63	2729.146	1.106	0.084		1.31	0.77	YES	11.8
[redacted]	41 Total-tetradioxins	319.8965	25.48	34165.204	1.106	1.056		0.73	0.77	NO	94.1
[redacted]	41 Total-tetradioxins	319.8965	25.27	5055.186	1.106	0.156		0.75	0.77	NO	14.9
[redacted]	41 Total-tetradioxins	319.8965	25.17	2418.655	1.106	0.075		0.84	0.77	NO	6.8
[redacted]	41 Total-tetradioxins	319.8965	24.91	21784.441	1.106	0.673		0.78	0.77	NO	62.5
[redacted]	41 Total-tetradioxins	319.8965	24.63	12952.316	1.106	0.400		0.66	0.77	NO	29.5
[redacted]	41 Total-tetradioxins	319.8965	24.42	1771.396	1.106	0.055		0.77	0.77	NO	5.7
[redacted]	41 Total-tetradioxins	319.8965	23.93	4642.555	1.106	0.143		0.92	0.77	YES	12.7
[redacted]	41 Total-tetradioxins	319.8965	23.70	87886.078	1.106	2.715		0.79	0.77	NO	252.7
[redacted]	41 Total-tetradioxins	319.8965	23.45	161445.593	1.106	4.988		0.76	0.77	NO	464.8
[redacted]	45 Total-Dioxins	319.8965	27.66	952.361	0.994	0.033		0.80	0.77	NO	3.4
[redacted]	41 Total-tetradioxins	319.8965	26.87	4848.170	1.106	0.150		0.71	0.77	NO	9.4
[redacted]	42 Total-pentadioxins	355.8546	31.78	6861.216	1.001	0.320		1.71	1.55	NO	11.5
[redacted]	12 12378-PeCDD	355.8546	31.39	41118.529	1.001	1.917	1.917	1.54	1.55	NO	56.6
[redacted]	42 Total-pentadioxins	355.8546	30.72	22327.481	1.001	1.041		1.58	1.55	NO	30.9
[redacted]	42 Total-pentadioxins	355.8546	30.32	21523.573	1.001	1.003		1.54	1.55	NO	22.9
[redacted]	42 Total-pentadioxins	355.8546	30.15	71495.395	1.001	3.332		1.56	1.55	NO	110.4
[redacted]	42 Total-pentadioxins	355.8546	29.96	34772.794	1.001	1.621		2.13	1.55	YES	61.3
[redacted]	42 Total-pentadioxins	355.8546	29.80	78547.916	1.001	3.661		1.61	1.55	NO	122.3
[redacted]	42 Total-pentadioxins	355.8546	29.18	27273.065	1.001	1.271		1.50	1.55	NO	43.4
[redacted]	42 Total-pentadioxins	355.8546	28.71	86104.629	1.001	4.013		1.58	1.55	NO	83.3
[redacted]	15 123789-HxCDD	389.8157	36.69	151240.258	0.904	8.178	8.178	1.23	1.24	NO	383.7
[redacted]	43 Total-hexadioxins	389.8157	36.44	28265.413	0.937	1.475		1.20	1.24	NO	63.9
[redacted]	14 123678-HxCDD	389.8157	36.26	595478.282	0.929	31.133	31.133	1.24	1.24	NO	1415.6
[redacted]	13 123478-HxCDD	389.8157	36.13	92804.597	0.978	4.671	4.671	1.24	1.24	NO	229.6
[redacted]	43 Total-hexadioxins	389.8157	36.01	3973.551	0.937	0.207		1.20	1.24	NO	11.6
[redacted]	43 Total-hexadioxins	389.8157	35.23	63714.549	0.937	3.325		1.23	1.24	NO	186.9
[redacted]	43 Total-hexadioxins	389.8157	35.14	914716.626	0.937	47.730		1.23	1.24	NO	1523.6
[redacted]	43 Total-hexadioxins	389.8157	34.73	251805.578	0.937	13.139		1.29	1.24	NO	587.2
[redacted]	43 Total-hexadioxins	389.8157	33.90	828462.562	0.937	43.229		1.23	1.24	NO	1953.8
[redacted]	43 Total-hexadioxins	389.8157	33.66	25875.742	0.937	1.350		1.20	1.24	NO	69.2
[redacted]	17 OCDD	457.7377	46.62	56743078....	1.011	4732.3...	4732...	0.89	0.89	NO	52520.3
[redacted]	16 1234678-HpCDD	423.7766	40.87	10533357....	1.029	586.957	586....	1.04	1.05	NO	7650.5
[redacted]	44 Total-heptadioxins	423.7766	39.64	14873607....	1.029	828.812		1.04	1.05	NO	11541.8
[redacted]	42 Total-pentadioxins	355.8546	29.99	39298.126	1.001	1.832		0.63	1.55	YES	59.3

Quantify Totals Report MassLynx 4.1 SCN 714
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:55:54 Pacific Standard Time

ID: WC32N, Name: 13021311, Date: 13-Feb-2013, Time: 19:00:27, Conditions: AUTOSPEC01, User: pk

TotalTEQ,Furans,Dioxins

[redacted]											
[redacted]	35 Total-tetrafurans	303.9016	24.32	44417.361	0.921	0.911		0.65	0.77	YES	87.7
[redacted]	35 Total-tetrafurans	303.9016	23.90	14024.723	0.921	0.288		0.79	0.77	NO	38.1
[redacted]	35 Total-tetrafurans	303.9016	23.76	11732.056	0.921	0.241		0.78	0.77	NO	33.2
[redacted]	35 Total-tetrafurans	303.9016	23.66	39873.783	0.921	0.818		0.82	0.77	NO	118.9
[redacted]	35 Total-tetrafurans	303.9016	23.49	14821.112	0.921	0.304		0.91	0.77	YES	48.4
[redacted]	35 Total-tetrafurans	303.9016	23.42	31801.718	0.921	0.652		0.80	0.77	NO	93.4
[redacted]	35 Total-tetrafurans	303.9016	23.31	24774.105	0.921	0.508		0.86	0.77	NO	58.7
[redacted]	35 Total-tetrafurans	303.9016	23.18	25592.870	0.921	0.525		0.75	0.77	NO	67.9
[redacted]	35 Total-tetrafurans	303.9016	23.14	13966.342	0.921	0.286		0.78	0.77	NO	54.6
[redacted]	35 Total-tetrafurans	303.9016	23.00	56169.400	0.921	1.152		0.73	0.77	NO	136.2
[redacted]	35 Total-tetrafurans	303.9016	22.43	12634.053	0.921	0.259		0.74	0.77	NO	39.4
[redacted]	35 Total-tetrafurans	303.9016	22.16	11283.697	0.921	0.231		0.65	0.77	YES	30.5
[redacted]	35 Total-tetrafurans	303.9016	27.08	15680.158	0.921	0.322		0.79	0.77	NO	29.9
[redacted]	35 Total-tetrafurans	303.9016	26.15	1400.174	0.921	0.029		0.54	0.77	YES	4.7
[redacted]	35 Total-tetrafurans	303.9016	25.88	33021.098	0.921	0.677		0.73	0.77	NO	89.0
[redacted]	35 Total-tetrafurans	303.9016	25.78	19995.945	0.921	0.410		0.70	0.77	NO	56.7
[redacted]	1 2378-TCDF	303.9016	25.66	58991.297	0.921	1.210	1.210	0.75	0.77	NO	162.7
[redacted]	35 Total-tetrafurans	303.9016	25.47	14442.712	0.921	0.296		0.87	0.77	NO	54.3
[redacted]	35 Total-tetrafurans	303.9016	25.42	20129.790	0.921	0.413		0.75	0.77	NO	56.9
[redacted]	35 Total-tetrafurans	303.9016	25.15	18476.683	0.921	0.379		0.69	0.77	NO	50.6
[redacted]	35 Total-tetrafurans	303.9016	24.96	15673.533	0.921	0.321		0.73	0.77	NO	44.4
[redacted]	35 Total-tetrafurans	303.9016	24.75	42496.373	0.921	0.871		0.75	0.77	NO	120.1
[redacted]	35 Total-tetrafurans	303.9016	24.57	40447.342	0.921	0.829		0.75	0.77	NO	101.2
[redacted]	35 Total-tetrafurans	303.9016	24.41	21747.504	0.921	0.446		0.86	0.77	NO	62.5
[redacted]	37 Total-pentafurans	339.8597	29.32	14517.349	0.927	0.441		1.37	1.55	NO	88.1
[redacted]	37 Total-pentafurans	339.8597	29.22	11938.802	0.927	0.363		1.29	1.55	YES	57.6
[redacted]	37 Total-pentafurans	339.8597	28.85	1592.574	0.927	0.048		1.31	1.55	YES	10.7
[redacted]	37 Total-pentafurans	339.8597	28.72	211623.343	0.927	6.430		1.54	1.55	NO	850.6
[redacted]	37 Total-pentafurans	339.8597	28.53	30113.448	0.927	0.915		1.43	1.55	NO	133.3
[redacted]	37 Total-pentafurans	339.8597	28.43	6725.152	0.927	0.204		1.73	1.55	NO	51.1
[redacted]	37 Total-pentafurans	339.8597	32.15	10144.772	0.927	0.308		1.56	1.55	NO	56.1
[redacted]	3 23478-PeCDF	339.8597	31.13	75032.030	0.943	2.280	2.280	1.56	1.55	NO	444.6
[redacted]	37 Total-pentafurans	339.8597	30.97	103993.926	0.927	3.160		1.56	1.55	NO	595.0
[redacted]	37 Total-pentafurans	339.8597	30.86	21849.635	0.927	0.664		1.39	1.55	NO	124.0
[redacted]	37 Total-pentafurans	339.8597	30.62	2458.198	0.927	0.075		1.25	1.55	YES	16.0
[redacted]	37 Total-pentafurans	339.8597	30.08	8773.708	0.927	0.267		1.43	1.55	NO	54.5
[redacted]	37 Total-pentafurans	339.8597	29.98	74634.659	0.927	2.268		1.42	1.55	NO	425.1
[redacted]	2 12378-PeCDF	339.8597	29.78	60882.092	0.912	1.851	1.851	1.44	1.55	NO	354.7
[redacted]	37 Total-pentafurans	339.8597	29.44	83849.000	0.927	2.548		1.46	1.55	NO	282.3
[redacted]	7 123789-HxCDF	373.8208	37.05	71960.261	1.017	3.757	3.757	1.20	1.24	NO	404.9
[redacted]	5 234678-HxCDF	373.8208	35.98	75955.820	1.073	3.305	3.305	1.26	1.24	NO	253.4
[redacted]	38 Total-hexafurans	373.8208	35.93	63886.136	1.062	2.661		1.15	1.24	NO	220.4
[redacted]	38 Total-hexafurans	373.8208	35.56	2565.045	1.062	0.107		1.18	1.24	NO	8.8
[redacted]	38 Total-hexafurans	373.8208	35.34	6268.494	1.062	0.261		1.20	1.24	NO	22.9
[redacted]	6 123678-HxCDF	373.8208	34.99	85121.203	1.056	3.247	3.247	1.19	1.24	NO	278.2
[redacted]	4 123478-HxCDF	373.8208	34.84	199686.742	1.101	7.149	7.149	1.18	1.24	NO	665.5
[redacted]	38 Total-hexafurans	373.8208	34.66	27777.609	1.062	1.157		1.22	1.24	NO	88.6
[redacted]	38 Total-hexafurans	373.8208	34.17	2113158.313	1.062	88.022		1.21	1.24	NO	7217.1
[redacted]	38 Total-hexafurans	373.8208	33.85	15931.060	1.062	0.664		1.26	1.24	NO	51.5

WC32-01570

ID: WC32N, Name: 13021311, Date: 13-Feb-2013, Time: 19:00:27, Conditions: AUTOSPEC01, User: pk

TotalTEQ,Furans,Dioxins

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	38	Total-hexafurans	373.8208	33.56	1364.057	1.062	0.057		1.86	1.24	YES	6.2
[redacted]	38	Total-hexafurans	373.8208	33.31	1262950.750	1.062	52.607		1.22	1.24	NO	4281.7
[redacted]	38	Total-hexafurans	373.8208	33.09	514638.750	1.062	21.437		1.18	1.24	NO	1798.4
[redacted]	9	1234789-HpCDF	407.7818	41.72	91770.113	1.224	4.748	4.748	0.99	1.05	NO	184.8
[redacted]	39	Total-heptafurans	407.7818	40.88	5574.974	1.231	0.257		1.12	1.05	NO	12.7
[redacted]	39	Total-heptafurans	407.7818	39.87	3830205.875	1.231	176.574		1.01	1.05	NO	9041.6
[redacted]	39	Total-heptafurans	407.7818	39.59	26456.057	1.231	1.220		1.09	1.05	NO	48.0
[redacted]	8	1234678-HpCDF	407.7818	39.10	1679234.063	1.238	69.732	69.732	1.02	1.05	NO	4008.2
[redacted]	10	OCDF	441.7428	46.88	2010886.125	1.162	145.943	145....	0.86	0.89	NO	5955.5
[redacted]	36	Total-penta1	339.8597	27.06	861543.719		26.474		1.58	1.55	NO	7425.7
[redacted]	41	Total-tetradioxins	319.8965	26.41	7830.899	1.106	0.242		0.77	0.77	NO	19.4
[redacted]	11	2378-TCDD	319.8965	26.30	7716.328	1.106	0.238	0.183	0.50	0.77	YES	17.0
[redacted]	41	Total-tetradioxins	319.8965	25.93	16752.350	1.106	0.518		0.85	0.77	NO	35.1
[redacted]	41	Total-tetradioxins	319.8965	25.63	2729.146	1.106	0.084		1.31	0.77	YES	11.8
[redacted]	41	Total-tetradioxins	319.8965	25.48	34165.204	1.106	1.056		0.73	0.77	NO	94.1
[redacted]	41	Total-tetradioxins	319.8965	25.27	5055.186	1.106	0.156		0.75	0.77	NO	14.9
[redacted]	41	Total-tetradioxins	319.8965	25.17	2418.655	1.106	0.075		0.84	0.77	NO	6.8
[redacted]	41	Total-tetradioxins	319.8965	24.91	21784.441	1.106	0.673		0.78	0.77	NO	62.5
[redacted]	41	Total-tetradioxins	319.8965	24.63	12952.316	1.106	0.400		0.66	0.77	NO	29.5
[redacted]	41	Total-tetradioxins	319.8965	24.42	1771.396	1.106	0.055		0.77	0.77	NO	5.7
[redacted]	41	Total-tetradioxins	319.8965	23.93	4642.555	1.106	0.143		0.92	0.77	YES	12.7
[redacted]	41	Total-tetradioxins	319.8965	23.70	87886.078	1.106	2.715		0.79	0.77	NO	252.7
[redacted]	41	Total-tetradioxins	319.8965	23.45	161445.593	1.106	4.988		0.76	0.77	NO	464.8
[redacted]	45	Total-Dioxins	319.8965	27.66	952.361	0.994	0.033		0.80	0.77	NO	3.4
[redacted]	41	Total-tetradioxins	319.8965	26.87	4846.170	1.106	0.150		0.71	0.77	NO	9.4
[redacted]	42	Total-pentadioxins	355.8546	31.78	6861.216	1.001	0.320		1.71	1.55	NO	11.5
[redacted]	12	12378-PeCDD	355.8546	31.39	41118.529	1.001	1.917	1.917	1.54	1.55	NO	56.6
[redacted]	42	Total-pentadioxins	355.8546	30.72	22327.481	1.001	1.041		1.58	1.55	NO	30.9
[redacted]	42	Total-pentadioxins	355.8546	30.32	21523.573	1.001	1.003		1.54	1.55	NO	22.9
[redacted]	42	Total-pentadioxins	355.8546	30.15	71495.395	1.001	3.332		1.56	1.55	NO	110.4
[redacted]	42	Total-pentadioxins	355.8546	29.96	34772.794	1.001	1.621		2.13	1.55	YES	61.3
[redacted]	42	Total-pentadioxins	355.8546	29.80	78547.916	1.001	3.661		1.61	1.55	NO	122.3
[redacted]	42	Total-pentadioxins	355.8546	29.18	27273.065	1.001	1.271		1.50	1.55	NO	43.4
[redacted]	42	Total-pentadioxins	355.8546	28.71	86104.629	1.001	4.013		1.58	1.55	NO	83.3
[redacted]	15	123789-HxCDD	389.8157	36.69	151240.258	0.904	8.178	8.178	1.23	1.24	NO	383.7
[redacted]	43	Total-hexadioxins	389.8157	36.44	28265.413	0.937	1.475		1.20	1.24	NO	63.9
[redacted]	14	123678-HxCDD	389.8157	36.26	595478.282	0.929	31.133	31.133	1.24	1.24	NO	1415.6
[redacted]	13	123478-HxCDD	389.8157	36.13	92804.597	0.978	4.671	4.671	1.24	1.24	NO	229.6
[redacted]	43	Total-hexadioxins	389.8157	36.01	3973.551	0.937	0.207		1.20	1.24	NO	11.6
[redacted]	43	Total-hexadioxins	389.8157	35.23	63714.549	0.937	3.325		1.23	1.24	NO	186.9
[redacted]	43	Total-hexadioxins	389.8157	35.14	914716.626	0.937	47.730		1.23	1.24	NO	1523.6
[redacted]	43	Total-hexadioxins	389.8157	34.73	251805.578	0.937	13.139		1.29	1.24	NO	587.2
[redacted]	43	Total-hexadioxins	389.8157	33.90	828462.562	0.937	43.229		1.23	1.24	NO	1953.8
[redacted]	43	Total-hexadioxins	389.8157	33.66	25875.742	0.937	1.350		1.20	1.24	NO	69.2
[redacted]	17	OCDD	457.7377	46.62	56743078....	1.011	4732.3...	4732...	0.89	0.89	NO	52520.3
[redacted]	16	1234678-HpCDD	423.7766	40.87	10533357....	1.029	586.957	586....	1.04	1.05	NO	7650.5
[redacted]	44	Total-heptadioxins	423.7766	39.64	14873607....	1.029	828.812		1.04	1.05	NO	11541.8
[redacted]	42	Total-pentadioxins	355.8546	29.99	39298.126	1.001	1.832		0.63	1.55	YES	59.3

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Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
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ID: WC32N, Name: 13021311, Date: 13-Feb-2013, Time: 19:00:27, Conditions: AUTOSPEC01, User: pk

PFK1

[redacted]												
[redacted]	48	FUNCTION1 PFK	330.9792	22.04	0.000							0.8
[redacted]	48	FUNCTION1 PFK	330.9792	21.86	0.000							2.8
[redacted]	48	FUNCTION1 PFK	330.9792	21.76	0.000							2.0
[redacted]	48	FUNCTION1 PFK	330.9792	21.54	0.000							0.8
[redacted]	48	FUNCTION1 PFK	330.9792	21.40	0.000							1.5
[redacted]	48	FUNCTION1 PFK	330.9792	21.28	0.000							2.9
[redacted]	48	FUNCTION1 PFK	330.9792	21.15	0.000							3.3
[redacted]	48	FUNCTION1 PFK	330.9792	24.78	0.000							3.6
[redacted]	48	FUNCTION1 PFK	330.9792	24.60	0.000							9.9
[redacted]	48	FUNCTION1 PFK	330.9792	24.27	0.000							8.7
[redacted]	48	FUNCTION1 PFK	330.9792	24.14	0.000							2.2
[redacted]	48	FUNCTION1 PFK	330.9792	24.00	0.000							0.7
[redacted]	48	FUNCTION1 PFK	330.9792	23.93	0.000							1.4
[redacted]	48	FUNCTION1 PFK	330.9792	23.64	0.000							2.6
[redacted]	48	FUNCTION1 PFK	330.9792	23.43	0.000							7.7
[redacted]	48	FUNCTION1 PFK	330.9792	23.28	0.000							0.9
[redacted]	48	FUNCTION1 PFK	330.9792	23.12	0.000							4.8
[redacted]	48	FUNCTION1 PFK	330.9792	23.06	0.000							8.3
[redacted]	48	FUNCTION1 PFK	330.9792	22.96	0.000							6.1
[redacted]	48	FUNCTION1 PFK	330.9792	22.63	0.000							2.9
[redacted]	48	FUNCTION1 PFK	330.9792	22.52	0.000							4.4
[redacted]	48	FUNCTION1 PFK	330.9792	22.40	0.000							1.0
[redacted]	48	FUNCTION1 PFK	330.9792	22.30	0.000							3.0
[redacted]	48	FUNCTION1 PFK	330.9792	26.57	0.000							1.5
[redacted]	48	FUNCTION1 PFK	330.9792	26.44	0.000							1.4
[redacted]	48	FUNCTION1 PFK	330.9792	26.38	0.000							1.6
[redacted]	48	FUNCTION1 PFK	330.9792	26.26	0.000							1.2
[redacted]	48	FUNCTION1 PFK	330.9792	26.18	0.000							1.0
[redacted]	48	FUNCTION1 PFK	330.9792	26.11	0.000							0.6
[redacted]	48	FUNCTION1 PFK	330.9792	26.05	0.000							0.6
[redacted]	48	FUNCTION1 PFK	330.9792	25.94	0.000							1.7
[redacted]	48	FUNCTION1 PFK	330.9792	25.82	0.000							2.2
[redacted]	48	FUNCTION1 PFK	330.9792	25.72	0.000							4.0
[redacted]	48	FUNCTION1 PFK	330.9792	25.65	0.000							8.3
[redacted]	48	FUNCTION1 PFK	330.9792	25.41	0.000							6.5
[redacted]	48	FUNCTION1 PFK	330.9792	25.35	0.000							8.8
[redacted]	48	FUNCTION1 PFK	330.9792	25.15	0.000							5.9
[redacted]	48	FUNCTION1 PFK	330.9792	25.00	0.000							2.5
[redacted]	48	FUNCTION1 PFK	330.9792	24.90	0.000							3.6
[redacted]	48	FUNCTION1 PFK	330.9792	27.77	0.000							0.6
[redacted]	48	FUNCTION1 PFK	330.9792	27.62	0.000							0.7
[redacted]	48	FUNCTION1 PFK	330.9792	27.35	0.000							4.4
[redacted]	48	FUNCTION1 PFK	330.9792	27.14	0.000							1.5
[redacted]	48	FUNCTION1 PFK	330.9792	27.08	0.000							1.6
[redacted]	48	FUNCTION1 PFK	330.9792	26.89	0.000							3.3
[redacted]	48	FUNCTION1 PFK	330.9792	26.68	0.000							1.3

ID: WC32N, Name: 13021311, Date: 13-Feb-2013, Time: 19:00:27, Conditions: AUTOSPEC01, User: pk

PFK2

[redacted]												
[redacted]	49	FUNCTION2 PFK	366.9792	29.32	0.000		0.000					27.9
[redacted]	49	FUNCTION2 PFK	366.9792	29.14	0.000		0.000					18.5

PFK3

[redacted]												
[redacted]	50	FUNCTION3 PFK	380.9760	33.72	0.000		0.000					13.8
[redacted]	50	FUNCTION3 PFK	380.9760	33.55	0.000		0.000					4.6
[redacted]	50	FUNCTION3 PFK	380.9760	33.20	0.000		0.000					4.8
[redacted]	50	FUNCTION3 PFK	380.9760	33.05	0.000		0.000					12.6
[redacted]	50	FUNCTION3 PFK	380.9760	32.77	0.000		0.000					1.2
[redacted]	50	FUNCTION3 PFK	380.9760	37.79	0.000		0.000					19.5
[redacted]	50	FUNCTION3 PFK	380.9760	37.32	0.000		0.000					50.2
[redacted]	50	FUNCTION3 PFK	380.9760	36.89	0.000		0.000					61.5
[redacted]	50	FUNCTION3 PFK	380.9760	36.33	0.000		0.000					20.2
[redacted]	50	FUNCTION3 PFK	380.9760	34.42	0.000		0.000					1.7

PFK4

[redacted]												
[redacted]	51	FUNCTION4 PFK	430.9728	42.52	0.000							1.9
[redacted]	51	FUNCTION4 PFK	430.9728	39.48	0.000							4.5
[redacted]	51	FUNCTION4 PFK	430.9728	38.45	0.000							2.1

PFK5

[redacted]												
[redacted]	52	FUNCTION5 PFK	480.9696	48.11	0.000							6.7
[redacted]	52	FUNCTION5 PFK	480.9696	46.95	0.000							6.2
[redacted]	52	FUNCTION5 PFK	480.9696	46.60	0.000							8.5
[redacted]	52	FUNCTION5 PFK	480.9696	46.20	0.000							9.2
[redacted]	52	FUNCTION5 PFK	480.9696	44.58	0.000							48.5

ETHERS1

[redacted]												
[redacted]	53	FUNCTION1 HXCD...	375.8364	27.77	0.000		0.000					2.2
[redacted]	53	FUNCTION1 HXCD...	375.8364	27.20	0.000		0.000					3.4
[redacted]	53	FUNCTION1 HXCD...	375.8364	25.73	0.000		0.000					21.4
[redacted]	53	FUNCTION1 HXCD...	375.8364	25.45	0.000		0.000					7.8
[redacted]	53	FUNCTION1 HXCD...	375.8364	24.85	0.000		0.000					4.1

ID: WC32N, Name: 13021311, Date: 13-Feb-2013, Time: 19:00:27, Conditions: AUTOSPEC01, User: pk

ETHERS2

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	54 FUNCTION1 HPCD...	409.7974	27.09	0.000	0.000	1.6
[redacted]	54 FUNCTION1 HPCD...	409.7974	24.96	0.000	0.000	2.4
[redacted]	54 FUNCTION1 HPCD...	409.7974	24.09	0.000	0.000	1.9
[redacted]	54 FUNCTION1 HPCD...	409.7974	23.34	0.000	0.000	1.3
[redacted]	54 FUNCTION1 HPCD...	409.7974	23.00	0.000	0.000	2.3
[redacted]	54 FUNCTION1 HPCD...	409.7974	22.94	0.000	0.000	4.4
[redacted]	54 FUNCTION1 HPCD...	409.7974	22.73	0.000	0.000	2.6
[redacted]	54 FUNCTION1 HPCD...	409.7974	22.28	0.000	0.000	2.0
[redacted]	54 FUNCTION1 HPCD...	409.7974	21.92	0.000	0.000	2.5

ETHERS3

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	55 FUNCTION2 HPCD...	409.7974	32.49	0.000	0.000	2.5
[redacted]	55 FUNCTION2 HPCD...	409.7974	32.45	0.000	0.000	3.7
[redacted]	55 FUNCTION2 HPCD...	409.7974	32.02	0.000	0.000	2.3
[redacted]	55 FUNCTION2 HPCD...	409.7974	31.83	0.000	0.000	2.1
[redacted]	55 FUNCTION2 HPCD...	409.7974	31.23	0.000	0.000	2.7
[redacted]	55 FUNCTION2 HPCD...	409.7974	30.55	0.000	0.000	1.3
[redacted]	55 FUNCTION2 HPCD...	409.7974	29.78	0.000	0.000	4.2
[redacted]	55 FUNCTION2 HPCD...	409.7974	29.74	0.000	0.000	4.0
[redacted]	55 FUNCTION2 HPCD...	409.7974	29.49	0.000	0.000	2.2
[redacted]	55 FUNCTION2 HPCD...	409.7974	29.44	0.000	0.000	7.7
[redacted]	55 FUNCTION2 HPCD...	409.7974	29.36	0.000	0.000	1.9
[redacted]	55 FUNCTION2 HPCD...	409.7974	29.15	0.000	0.000	4.2

ETHERS4

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	56 FUNCTION3 OCDPE	445.7555	34.85	0.000	0.000	2.9
[redacted]	56 FUNCTION3 OCDPE	445.7555	34.75	0.000	0.000	3.0
[redacted]	56 FUNCTION3 OCDPE	445.7555	34.52	0.000	0.000	1.9
[redacted]	56 FUNCTION3 OCDPE	445.7555	36.70	0.000	0.000	2.2
[redacted]	56 FUNCTION3 OCDPE	445.7555	36.37	0.000	0.000	3.9
[redacted]	56 FUNCTION3 OCDPE	445.7555	35.99	0.000	0.000	3.4

ETHERS5

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	57 FUNCTION4 NCDPE	479.7165	43.09	0.000	0.000	4.2
[redacted]	57 FUNCTION4 NCDPE	479.7165	40.88	0.000	0.000	13.9
[redacted]	57 FUNCTION4 NCDPE	479.7165	40.84	0.000	0.000	17.4
[redacted]	57 FUNCTION4 NCDPE	479.7165	40.49	0.000	0.000	4.0
[redacted]	57 FUNCTION4 NCDPE	479.7165	39.50	0.000	0.000	7.4
[redacted]	57 FUNCTION4 NCDPE	479.7165	38.70	0.000	0.000	862.3

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:55:54 Pacific Standard Time

ID: WC32N, Name: 13021311, Date: 13-Feb-2013, Time: 19:00:27, Conditions: AUTOSPEC01, User: pk

ETHERS6

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	58	FUNCTION5 DCDPE	513.6775	46.63	0.000		0.000					9.2

Quantify Sample Report **MassLynx 4.1 SCN 714**

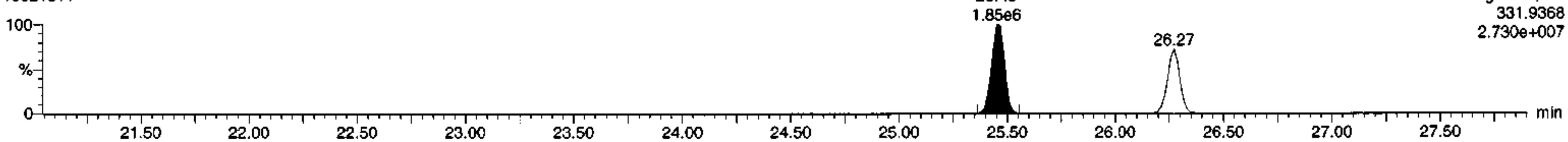
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:55:54 Pacific Standard Time

Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 12 Feb 2013 12:25:57
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: WC32N, Name: 13021311, Date: 13-Feb-2013, Time: 19:00:27, Conditions: AUTOSPEC01, User: pk

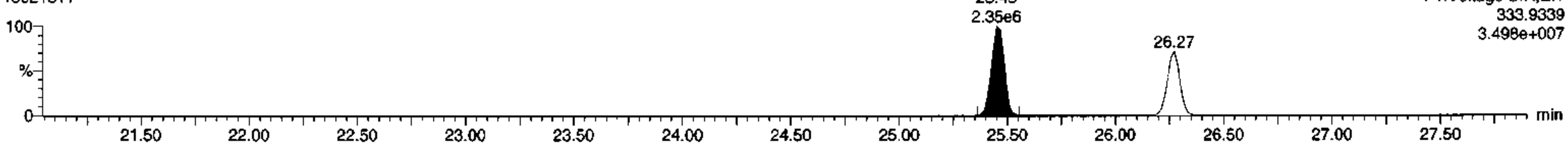
13C-1234-TCDD

13021311



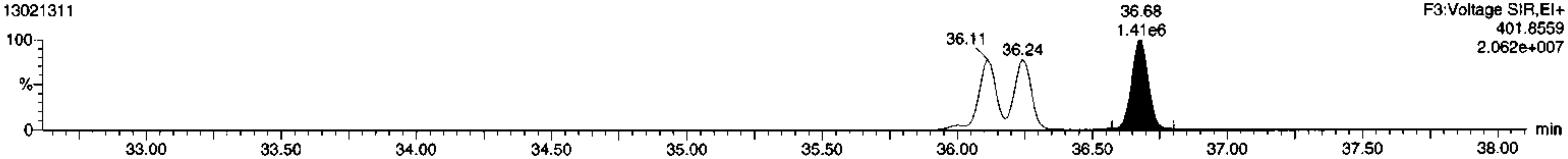
13C-1234-TCDD

13021311



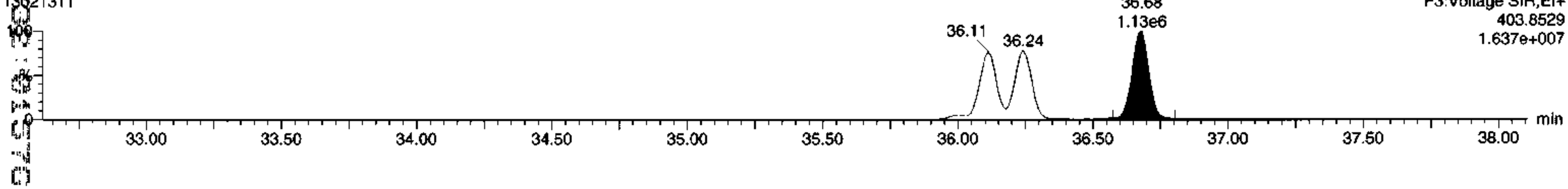
13C-123789-HxCDD

13021311



13C-123789-HxCDD

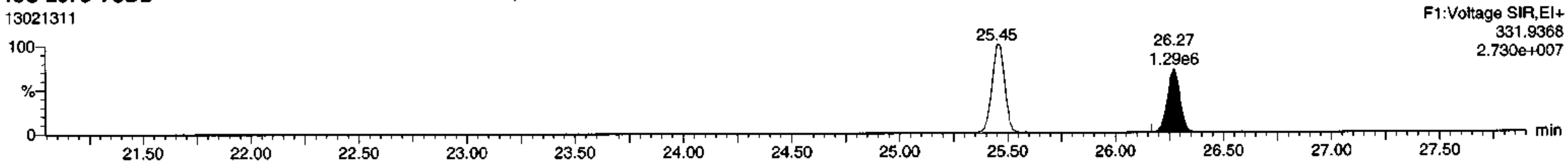
13021311



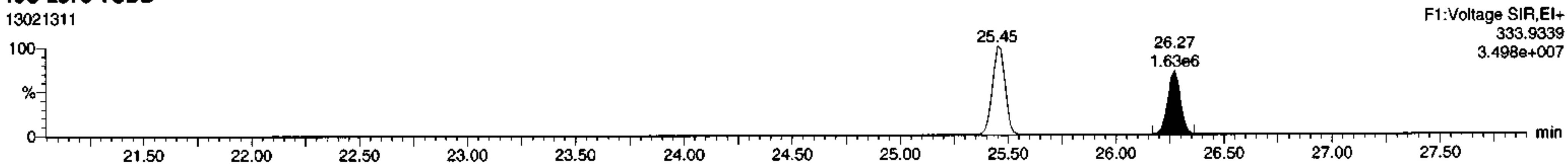
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:55:54 Pacific Standard Time

ID: WC32N, Name: 13021311, Date: 13-Feb-2013, Time: 19:00:27, Conditions: AUTOSPEC01, User: pk

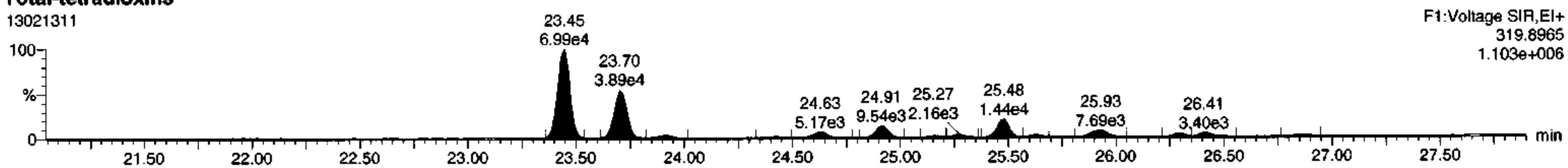
13C-2378-TCDD
13021311



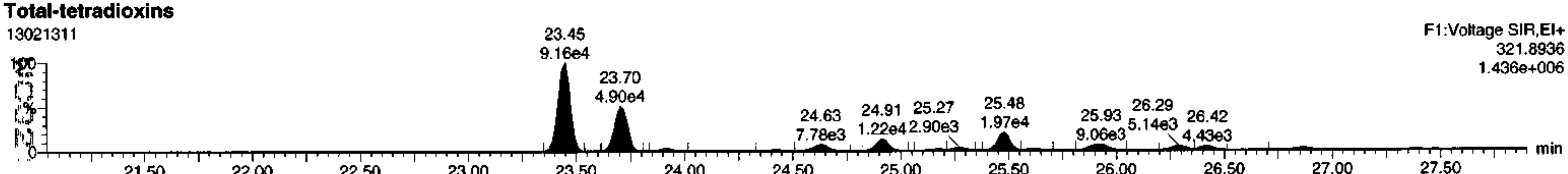
13C-2378-TCDD
13021311



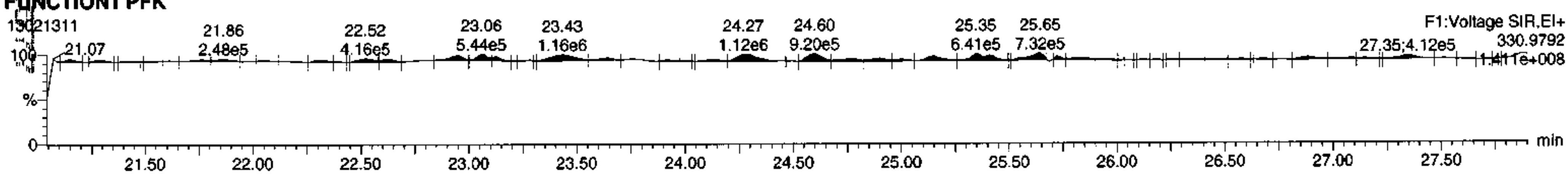
Total-tetradioxins
13021311



Total-tetradioxins
13021311



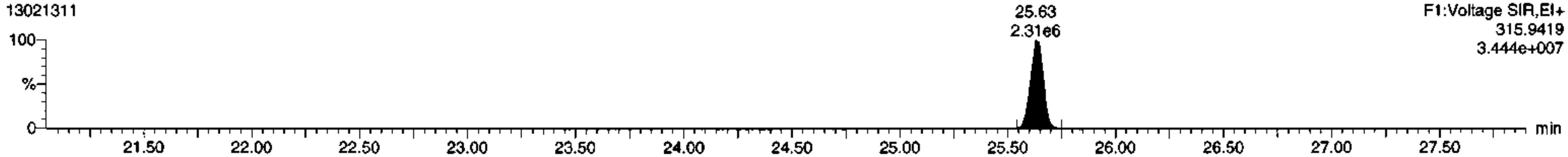
FUNCTION1 PFK
13021311



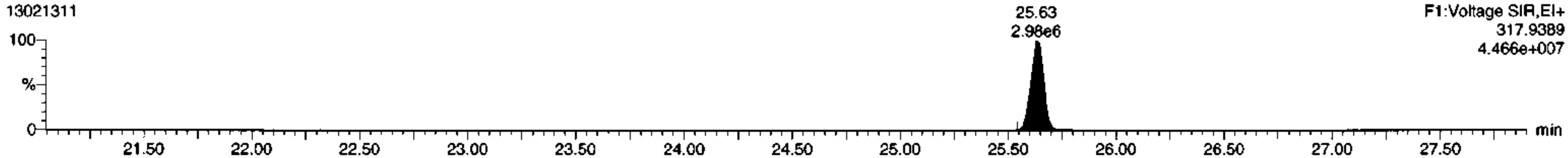
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:55:54 Pacific Standard Time

ID: WC32N, Name: 13021311, Date: 13-Feb-2013, Time: 19:00:27, Conditions: AUTOSPEC01, User: pk

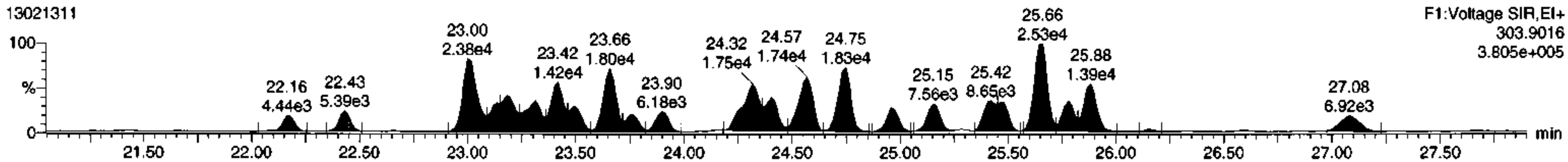
13C-2378-TCDF



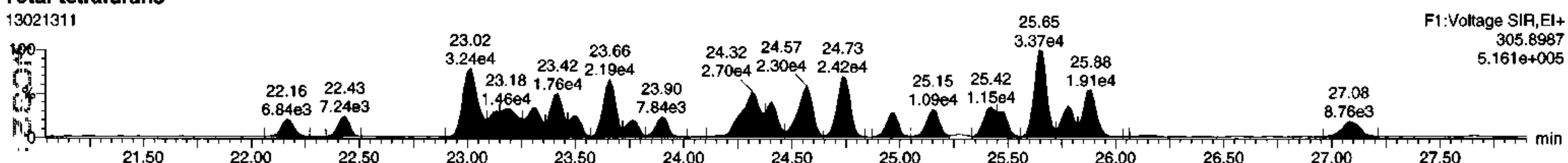
13C-2378-TCDF



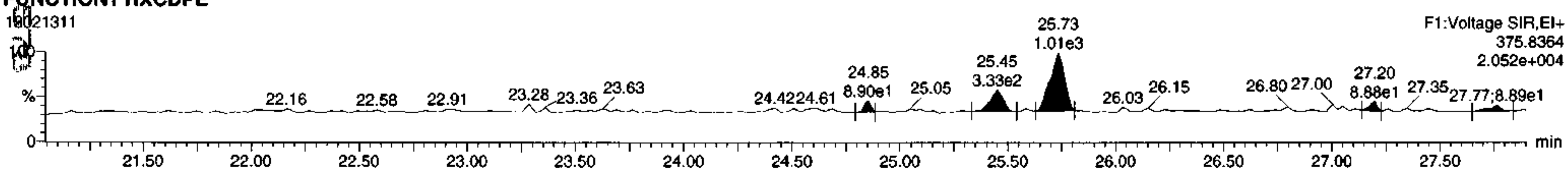
Total-tetrafurans



Total-tetrafurans



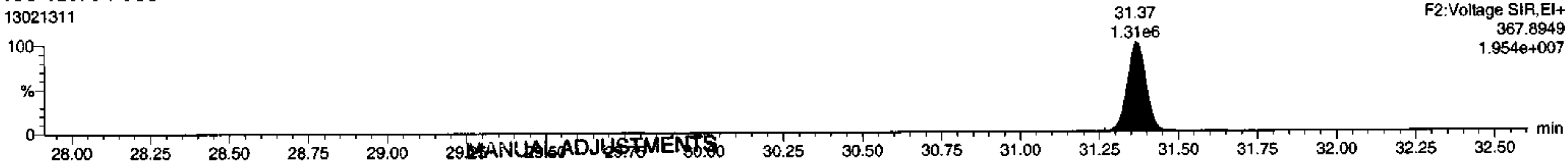
FUNCTION1 HXCDPE



Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:55:54 Pacific Standard Time

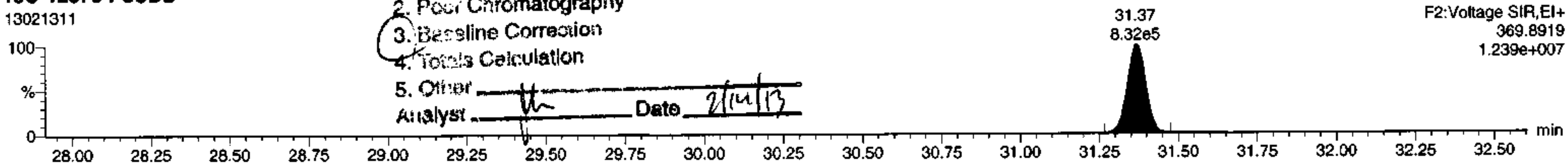
ID: WC32N, Name: 13021311, Date: 13-Feb-2013, Time: 19:00:27, Conditions: AUTOSPEC01, User: pk

13C-12378-PeCDD
13021311

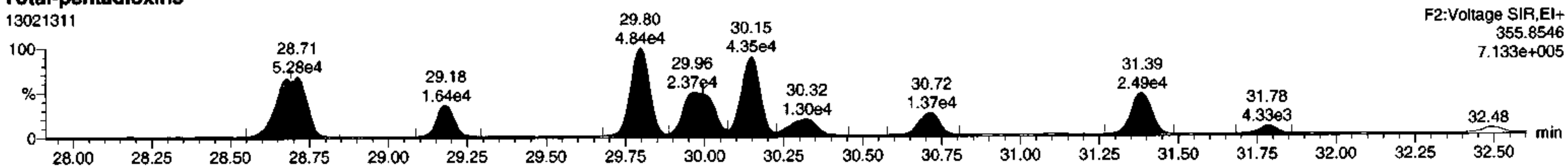


MANUAL ADJUSTMENTS
1. Peak not found
2. Poor Chromatography
3. Baseline Correction
4. Totals Calculation
5. Other
Analyst ___ Date 2/14/13

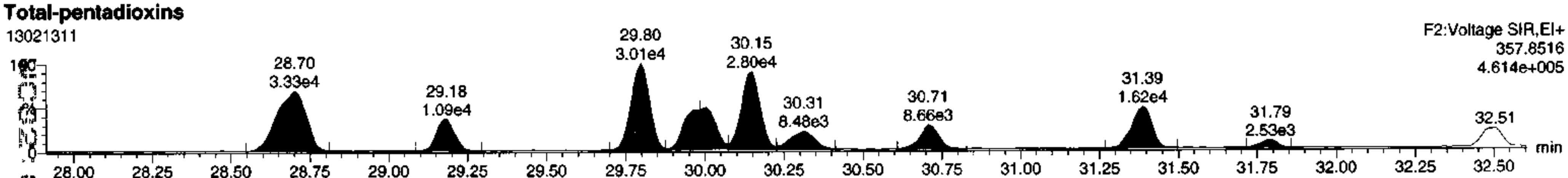
13C-12378-PeCDD
13021311



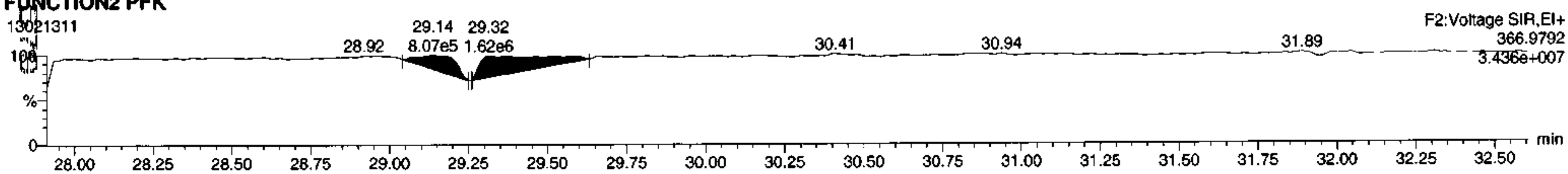
Total-pentadioxins
13021311



Total-pentadioxins
13021311



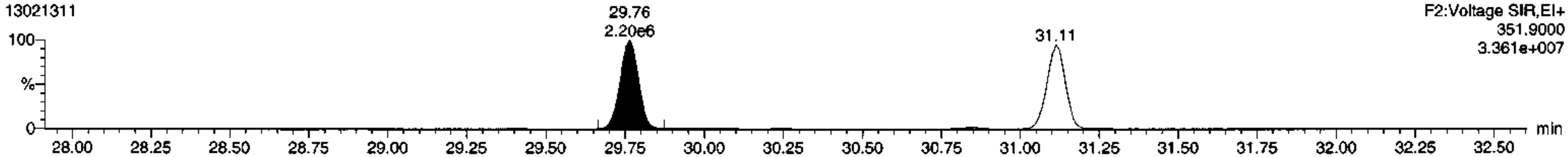
FUNCTION2 PFK
13021311



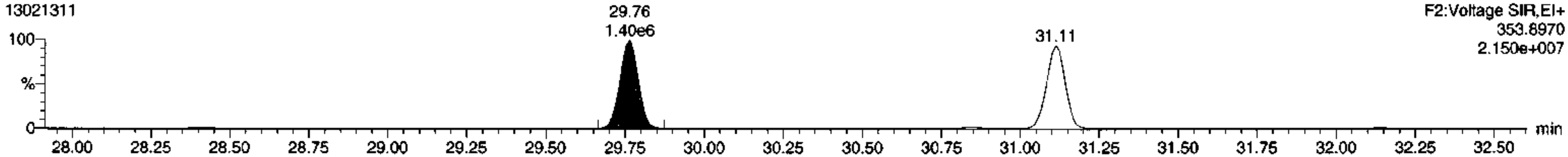
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:55:54 Pacific Standard Time

ID: WC32N, Name: 13021311, Date: 13-Feb-2013, Time: 19:00:27, Conditions: AUTOSPEC01, User: pk

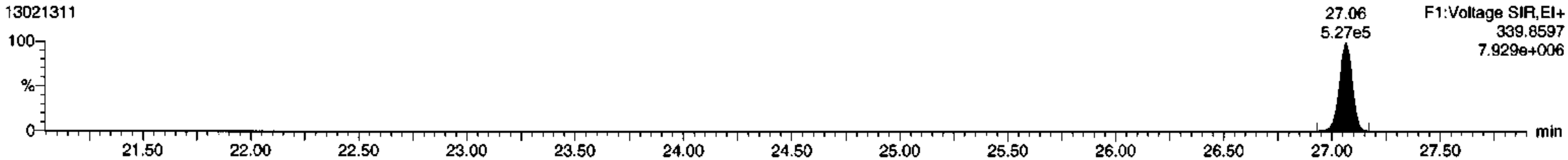
13C-12378-PeCDF



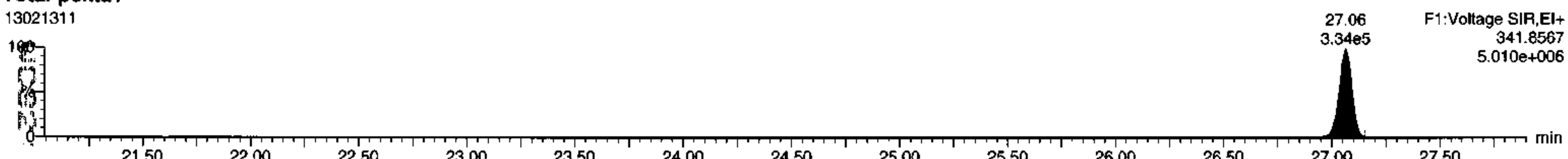
13C-12378-PeCDF



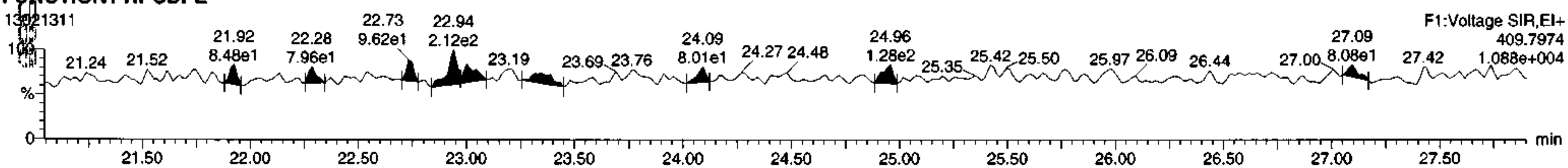
Total-penta1



Total-penta1



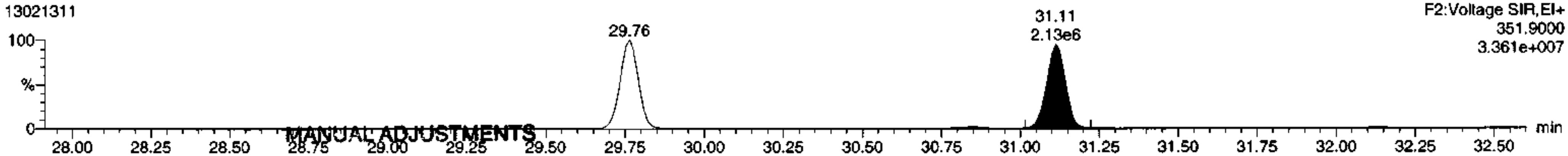
FUNCTION1 HPCDPE



Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:55:54 Pacific Standard Time

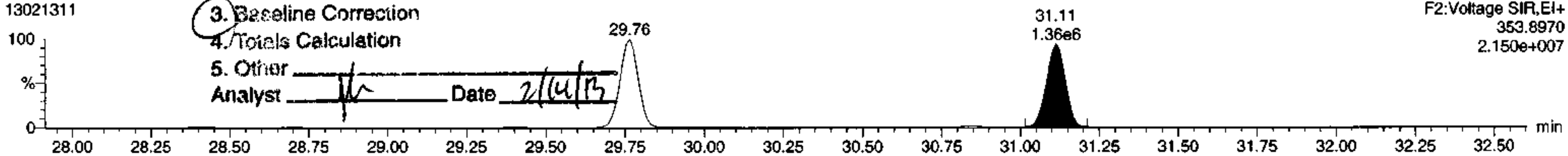
ID: WC32N, Name: 13021311, Date: 13-Feb-2013, Time: 19:00:27, Conditions: AUTOSPEC01, User: pk

13C-23478-PeCDF
13021311

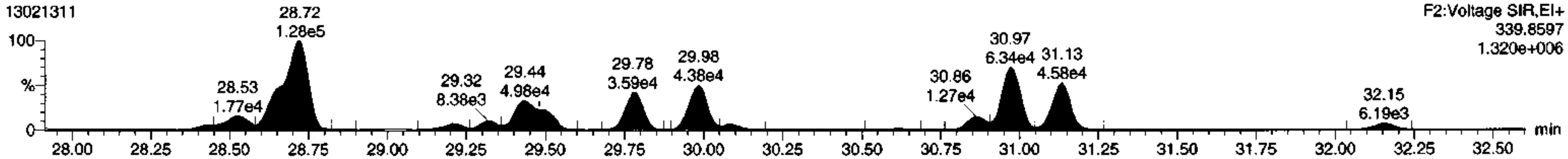


MANUAL ADJUSTMENTS
1. Peak not found
2. Poor Chromatography
3. Baseline Correction
4. Totals Calculation
5. Other ______
Analyst ___ *[signature]* ___ Date *2/14/13*

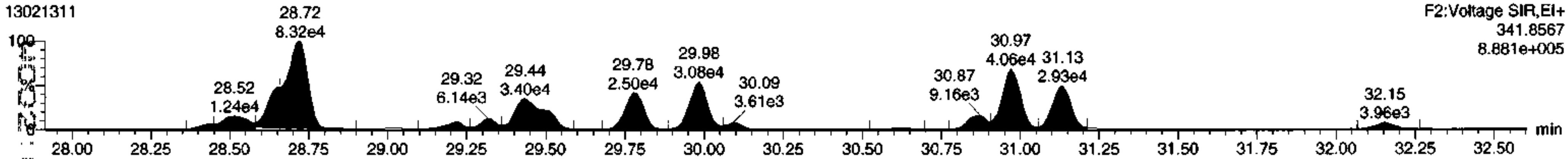
13C-23478-PeCDF
13021311



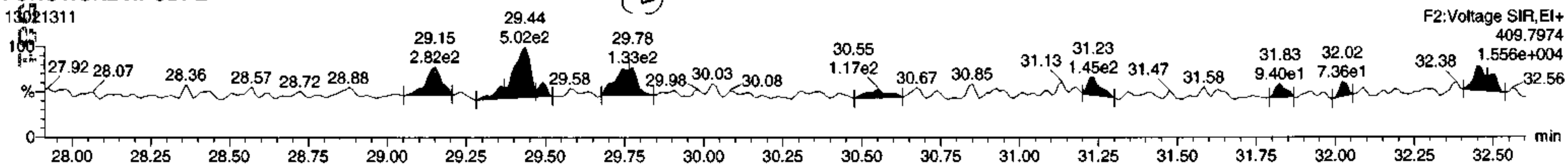
Total-pentafurans
13021311



Total-pentafurans
13021311



FUNCTION2 HPCDPE
13021311

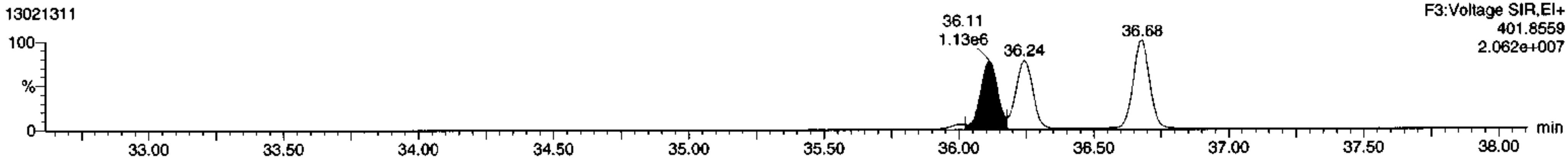


(L)

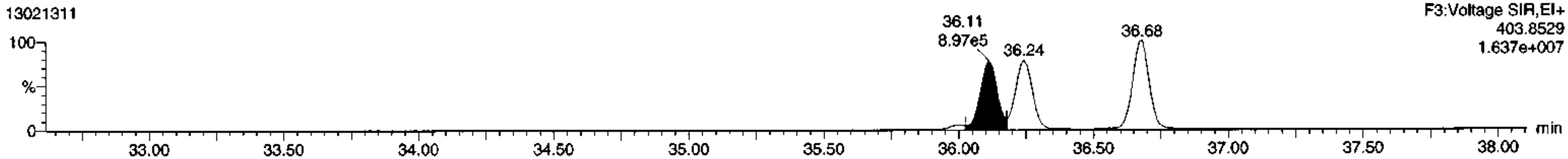
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:55:54 Pacific Standard Time

ID: WC32N, Name: 13021311, Date: 13-Feb-2013, Time: 19:00:27, Conditions: AUTOSPEC01, User: pk

13C-123478-HxCDD
13021311



13C-123478-HxCDD
13021311



Total-hexadioxins
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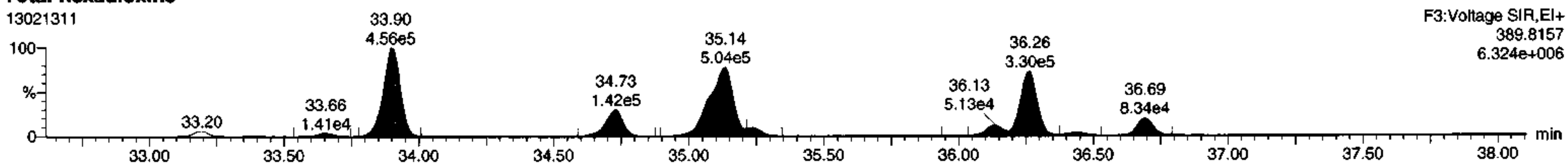
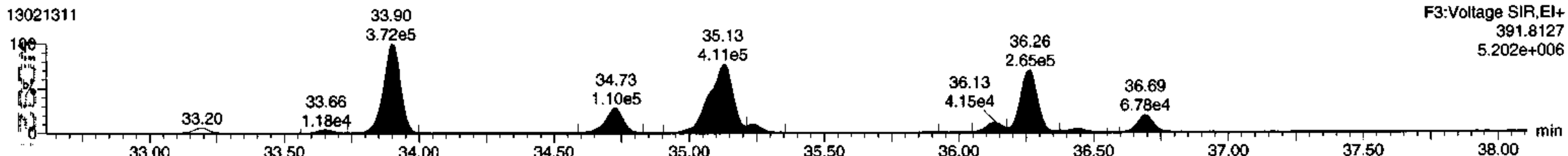
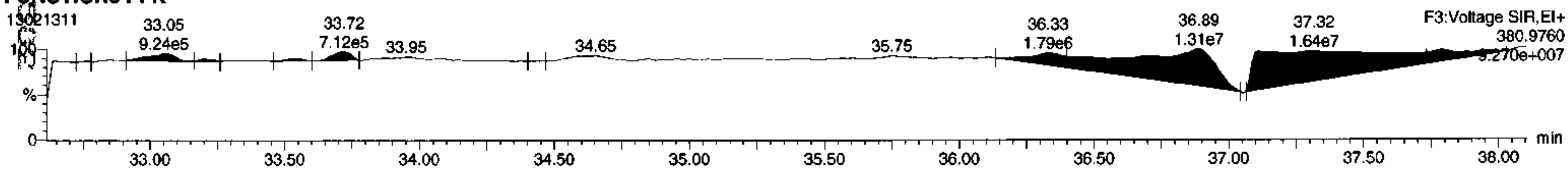


Total-hexadioxins
13021311



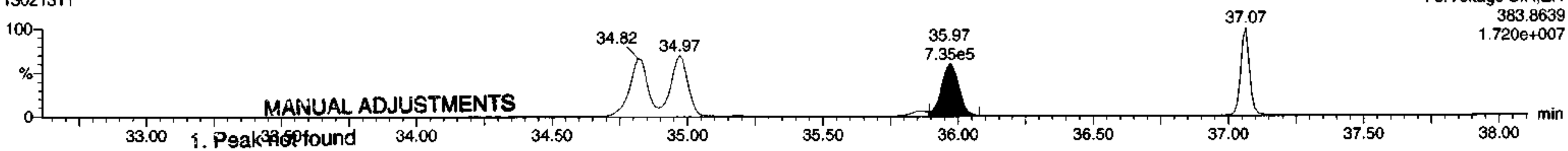
FUNCTION3 PFK
13021311



Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:55:54 Pacific Standard Time

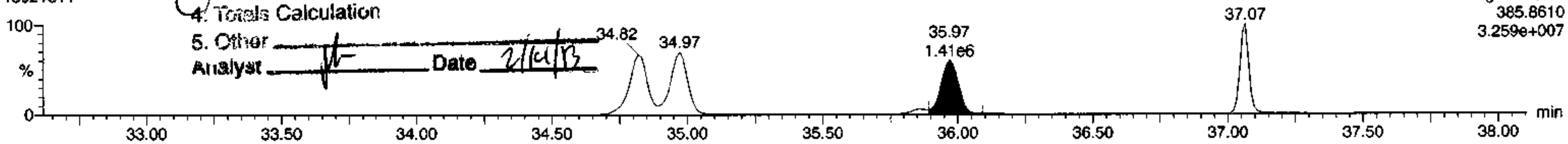
ID: WC32N, Name: 13021311, Date: 13-Feb-2013, Time: 19:00:27, Conditions: AUTOSPEC01, User: pk

13C-234678-HxCDF
13021311

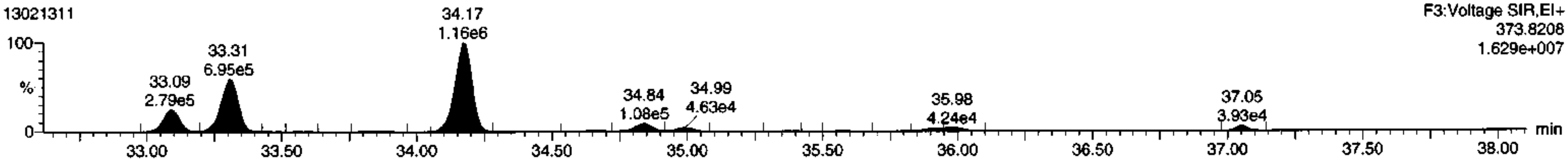


MANUAL ADJUSTMENTS
1. Peak not found
2. Poor Chromatography
3. Baseline Correction
4. Totals Calculation
5. Other
Analyst ____ Date 2/14/13

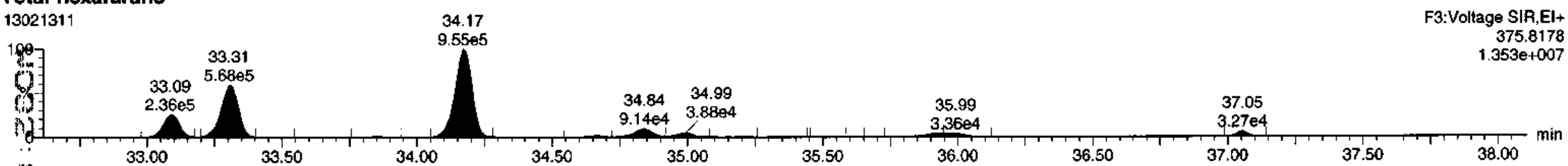
13C-234678-HxCDF
13021311



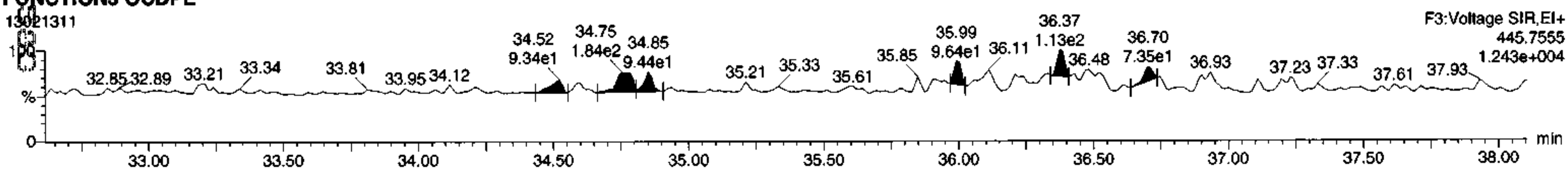
Total-hexafurans
13021311



Total-hexafurans
13021311



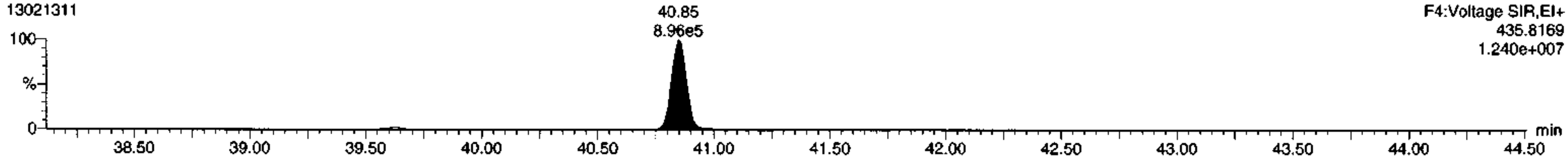
FUNCTION3 OCDPE
13021311



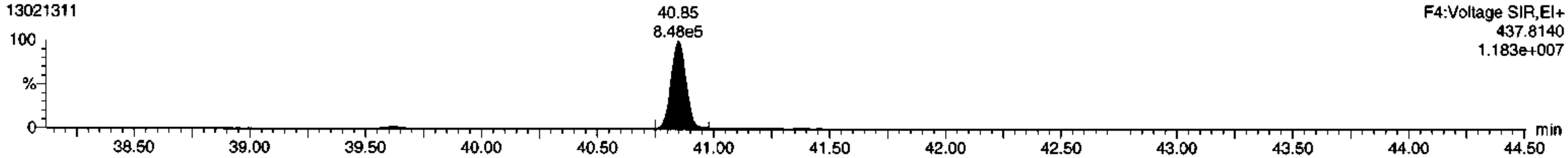
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:55:54 Pacific Standard Time

ID: WC32N, Name: 13021311, Date: 13-Feb-2013, Time: 19:00:27, Conditions: AUTOSPEC01, User: pk

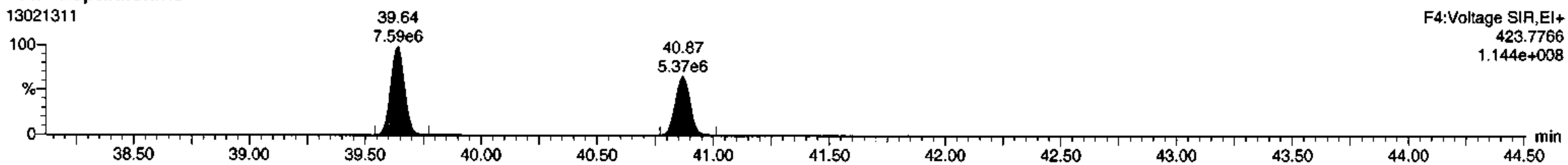
13C-1234678-HpCDD



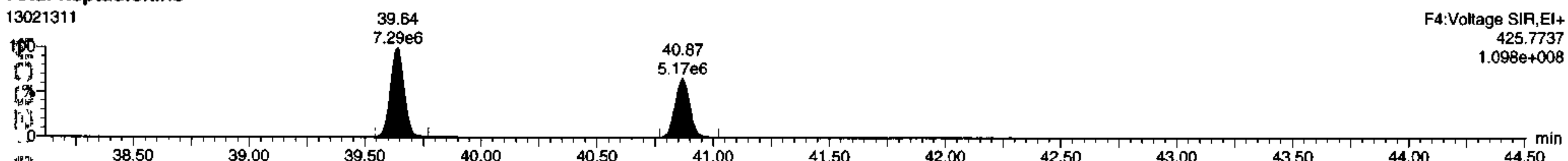
13C-1234678-HpCDD



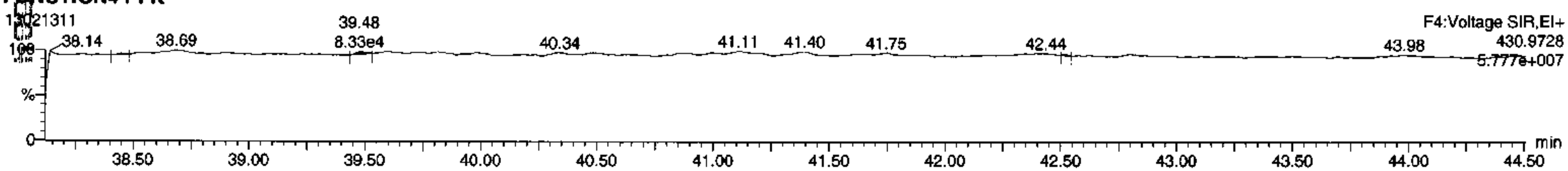
Total-heptadioxins



Total-heptadioxins



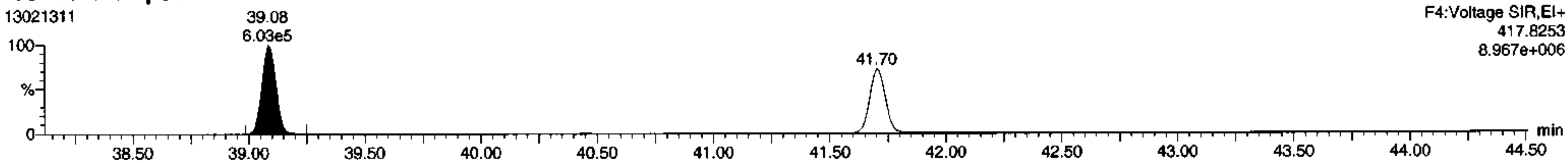
FUNCTION4 PFK



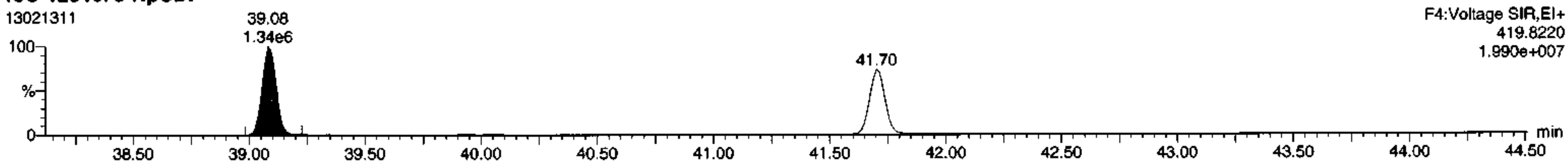
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:55:54 Pacific Standard Time

ID: WC32N, Name: 13021311, Date: 13-Feb-2013, Time: 19:00:27, Conditions: AUTOSPEC01, User: pk

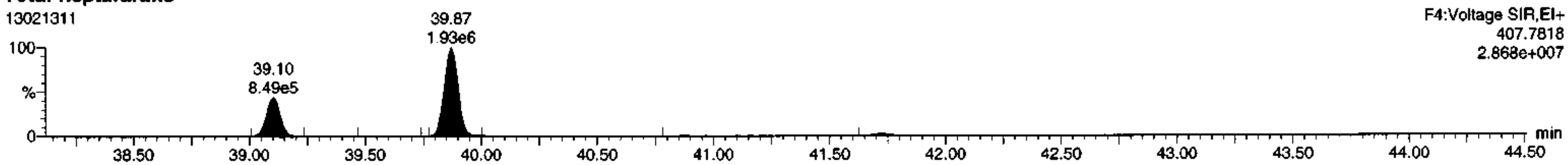
13C-1234678-HpCDF



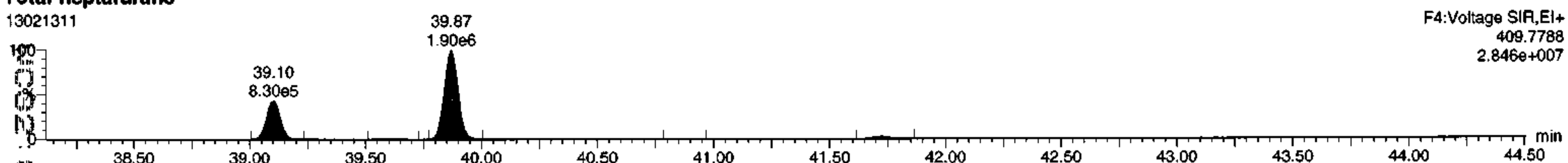
13C-1234678-HpCDF



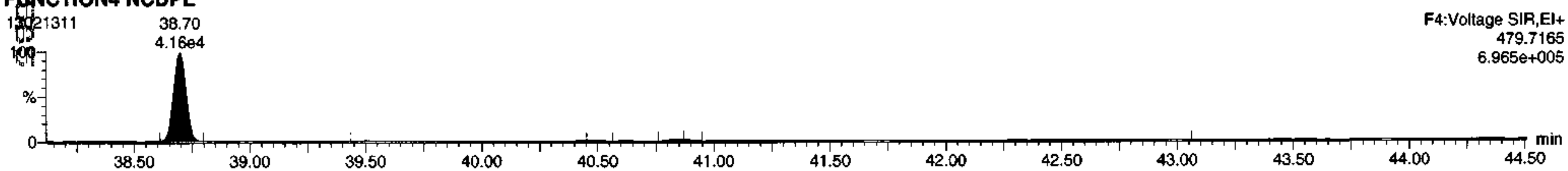
Total-heptafurans



Total-heptafurans

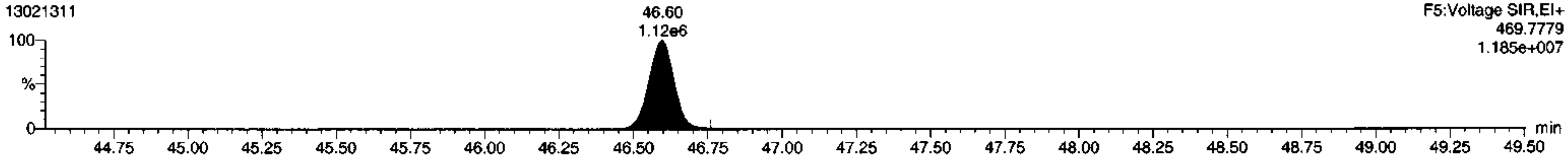


FUNCTION4 NCDPE

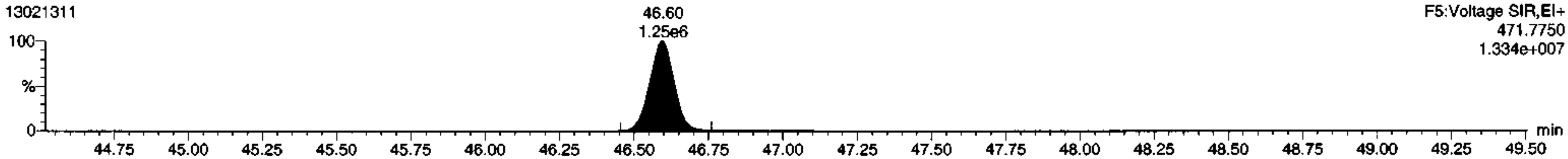


ID: WC32N, Name: 13021311, Date: 13-Feb-2013, Time: 19:00:27, Conditions: AUTOSPEC01, User: pk

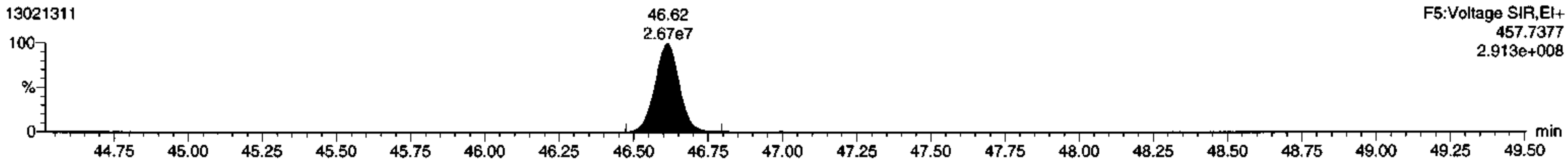
13C-OCDD
13021311



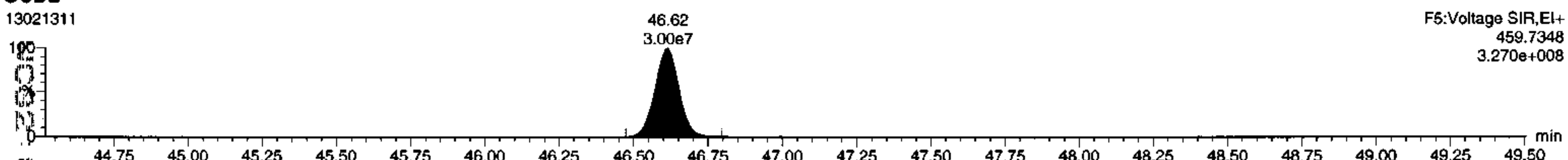
13C-OCDD
13021311



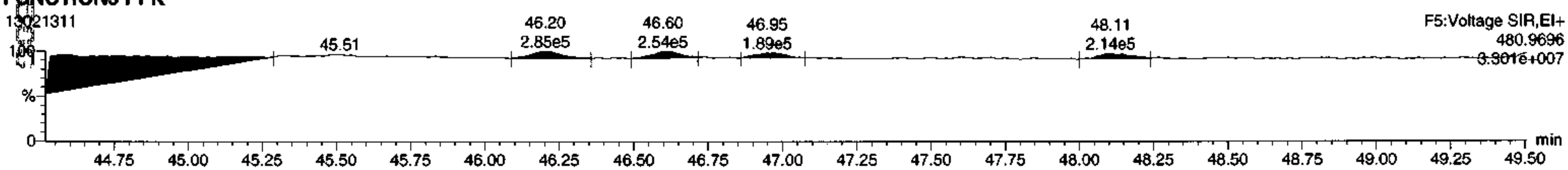
OCDD
13021311



OCDD
13021311



FUNCTION5 PFK
13021311

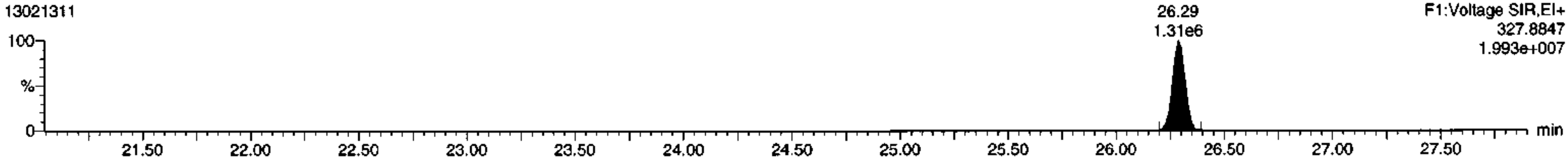


Quantify Sample Report **MassLynx 4.1 SCN 714**

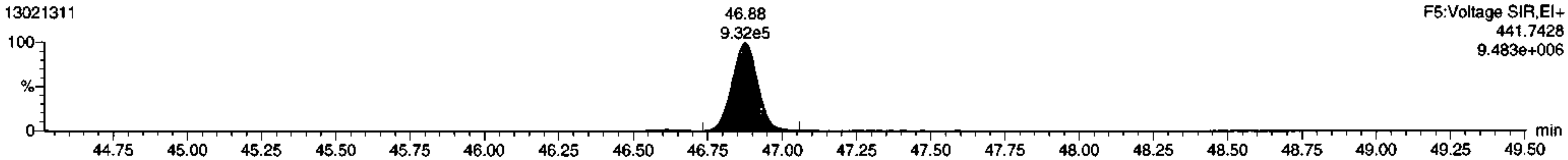
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:55:54 Pacific Standard Time

ID: WC32N, Name: 13021311, Date: 13-Feb-2013, Time: 19:00:27, Conditions: AUTOSPEC01, User: pk

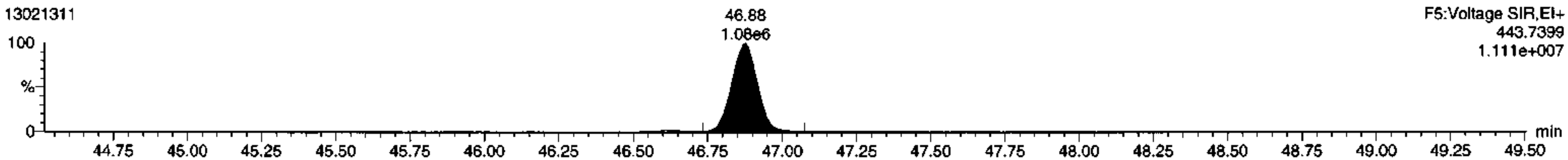
37CL-2378-TCDD



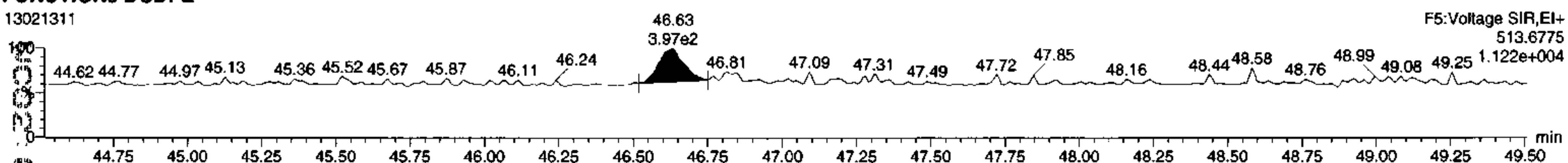
OCDF



OCDF



FUNCTION5 DCDPE



Quantify Sample Summary Report **MassLynx 4.1 SCN 714**

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld

Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time

Printed: Thursday, February 14, 2013 10:56:17 Pacific Standard Time

jh 2/14/13

Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 12 Feb 2013 12:25:57
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: WC33E, Name: 13021312, Date: 13-Feb-2013, Time: 19:53:05, Conditions: AUTOSPEC01, User: pk

[redacted]																
[redacted]	2378-TCDF	25.660	1.001	5.33e3	6.40e3	0.921	0.832	0.770	51.2	1572	1652	8.05e4	1.03e5	NO	0.262	0.262
[redacted]	12378-PeCDF	29.786	1.001	9.67e3	6.57e3	0.912	1.471	1.550	52.9	2722	2353	1.44e5	9.96e4	NO	0.476	0.476
[redacted]	23478-PeCDF	31.135	1.001	9.19e3	6.49e3	0.943	1.417	1.550	48.1	2722	2353	1.31e5	9.45e4	NO	0.482	0.482
[redacted]	123478-HxCDF	34.851	1.001	3.14e4	2.66e4	1.101	1.179	1.240	205.0	2037	2744	4.18e5	3.51e5	NO	1.997	1.997
[redacted]	234678-HxCDF	35.980	1.000	1.62e4	1.37e4	1.073	1.183	1.240	124.3	2037	2744	2.53e5	2.27e5	NO	1.226	1.226
[redacted]	123678-HxCDF	35.004	1.001	2.51e4	2.00e4	1.056	1.254	1.240	167.8	2037	2744	3.42e5	2.84e5	NO	1.624	1.624
[redacted]	123789-HxCDF	37.054	1.000	6.12e3	5.07e3	1.017	1.207	1.240	60.3	2037	2744	1.23e5	1.03e5	NO	0.593	0.593
[redacted]	1234678-HpCDF	39.137	1.001	8.63e5	8.48e5	1.238	1.018	1.050	3972.4	3281	2587	1.30e7	1.27e7	NO	71.594	71.594
[redacted]	1234789-HpCDF	41.745	1.001	5.87e4	5.62e4	1.224	1.044	1.050	236.2	3281	2587	7.75e5	7.29e5	NO	6.270	6.270
[redacted]	OCDF	46.930	1.006	2.66e6	3.07e6	1.162	0.869	0.890	10557.9	2766	1553	2.92e7	3.37e7	NO	388.950	388.950
[redacted]	2378-TCDD	26.302	1.001	2.23e3	4.06e3	1.106	0.548	0.770	20.7	1641	1423	3.40e4	5.36e4	YES	0.157	0.193
[redacted]	12378-PeCDD	31.387	1.000	1.88e4	1.26e4	1.001	1.493	1.550	187.6	1312	1140	2.46e5	1.74e5	NO	1.428	1.428
[redacted]	123478-HxCDD	36.122	1.000	3.25e4	2.77e4	0.978	1.171	1.240	222.3	2127	2343	4.73e5	3.88e5	NO	2.700	2.700
[redacted]	123678-HxCDD	36.254	1.000	1.81e5	1.43e5	0.929	1.268	1.240	1185.5	2127	2343	2.52e6	2.01e6	NO	15.393	15.393
[redacted]	123789-HxCDD	36.692	1.012	5.83e4	4.66e4	0.904	1.249	1.240	395.8	2127	2343	8.42e5	6.87e5	NO	5.108	5.108
[redacted]	1234678-HpCDD	40.890	1.000	6.51e6	6.25e6	1.029	1.041	1.050	9276.8	9966	8539	9.25e7	8.93e7	NO	648.472	648.472
[redacted]	OCDD	46.670	1.000	4.83e7	5.42e7	1.011	0.891	0.890	71475.3	7191	4804	5.14e8	5.76e8	NO	7998.363	7998.363 F2
[redacted]	13C-2378-TCDF	25.645	1.007	2.12e6	2.74e6	1.522	0.776	0.770	13653.4	2273	2238	3.10e7	4.00e7	NO		76.953
[redacted]	13C-12378-PeCDF	29.764	1.169	2.29e6	1.45e6	1.185	1.572	1.550	15918.5	2153	1843	3.43e7	2.19e7	NO		75.988
[redacted]	13C-23478-PeCDF	31.113	1.222	2.11e6	1.35e6	1.136	1.566	1.550	14071.1	2153	1843	3.03e7	1.95e7	NO		73.202
[redacted]	13C-123478-HxCDF	34.829	0.950	9.01e5	1.73e6	1.284	0.520	0.510	3505.6	3414	2609	1.20e7	2.29e7	NO		79.643
[redacted]	13C-123678-HxCDF	34.982	0.954	9.03e5	1.73e6	1.383	0.523	0.510	3794.3	3414	2609	1.30e7	2.45e7	NO		73.878
[redacted]	13C-234678-HxCDF	35.969	0.981	7.88e5	1.49e6	1.283	0.528	0.510	3157.2	3414	2609	1.08e7	2.06e7	NO		68.958
[redacted]	13C-123789-HxCDF	37.065	1.011	6.37e5	1.22e6	1.099	0.522	0.510	4284.6	3414	2609	1.46e7	2.79e7	NO		65.553
[redacted]	13C-1234678-HpCDF	39.114	1.067	5.95e5	1.34e6	1.070	0.445	0.440	4757.3	1886	1584	8.97e6	2.01e7	NO		70.055
[redacted]	13C-1234789-HpCDF	41.723	1.138	4.61e5	1.04e6	0.774	0.444	0.440	3175.1	1886	1584	5.99e6	1.38e7	NO		75.196
[redacted]	13C-1234-TCDD	25.465	0.000	1.83e6	2.32e6	1.000	0.788	0.770	6323.0	4285	2218	2.71e7	3.40e7	NO		100.000
[redacted]	13C-2378-TCDD	26.272	1.032	1.30e6	1.65e6	0.943	0.790	0.770	4565.1	4285	2218	1.96e7	2.48e7	NO		75.320
[redacted]	13C-12378-PeCDD	31.376	1.232	1.34e6	8.51e5	0.715	1.579	1.550	10958.5	1772	1223	1.94e7	1.22e7	NO		73.923
[redacted]	13C-123478-HxCDD	36.111	0.985	1.25e6	1.03e6	1.032	1.221	1.240	10300.5	1720	1562	1.77e7	1.38e7	NO		85.747
[redacted]	13C-123678-HxCDD	36.243	0.988	1.25e6	1.01e6	1.076	1.246	1.240	10346.5	1720	1562	1.78e7	1.43e7	NO		81.592
[redacted]	13C-1234678-HpCDD	40.879	1.115	9.74e5	9.40e5	0.838	1.035	1.050	7816.2	1754	1675	1.37e7	1.31e7	NO		88.693
[redacted]	13C-OCDD	46.652	1.272	1.21e6	1.33e6	0.675	0.910	0.890	7436.5	1669	3427	1.24e7	1.36e7	NO		145.695

Quantify Sample Summary Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:56:17 Pacific Standard Time

ID: WC33E, Name: 13021312, Date: 13-Feb-2013, Time: 19:53:05, Conditions: AUTOSPEC01, User: pk

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	13C-123789-HxCDD	36.670	0.000	1.43e6	1.15e6	1.000	1.244	1.240	12228.0	1720	1562	2.10e7	1.70e7	NO		100.000
[redacted]	Total-tetrafurans			8.54e4		0.921				1572		1.19e6				4.356
[redacted]	Total-penta1			2.54e5						824		3.68e6				12.697
[redacted]	Total-pentafurans			1.34e5		0.927				2722		1.95e6				6.651
[redacted]	Total-hexafurans			1.13e6		1.062				2037		1.58e7				82.503
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[redacted]	Total-hexadioxins			7.80e5		0.937				2127		9.73e6				66.488
[redacted]	Total-heptadioxins			1.00e7		1.029				9966		1.44e8				997.149
[redacted]	Total-Dioxins			5.92e7		0.994				1641		6.69e8				9072.376
[redacted]	Total-TEQ			6.69e7						1641		7.71e8				9879.374
[redacted]	37CL-2378-TCDD	26.287	1.032	1.33e6		1.051			12364.6	1599		1.98e7				30.449
[redacted]	FUNCTION1 PFK			1.35e8						830791		1.18e9				
[redacted]	FUNCTION2 PFK			2.69e6						354299		4.11e7				0.000
[redacted]	FUNCTION3 PFK			3.05e7						771557		8.68e7				0.000
[redacted]	FUNCTION4 PFK			2.17e5						430958		4.97e6				
[redacted]	FUNCTION5 PFK			0.00e0						284117		0.00e0				
[redacted]	FUNCTION1 HXCDPE			7.01e1						446		1.81e3				0.000
[redacted]	FUNCTION1 HPCDPE			5.49e2						1016		1.11e4				0.000
[redacted]	FUNCTION2 HPCDPE			4.38e2						972		1.16e4				0.000
[redacted]	FUNCTION3 OCDPE			8.38e1						447		1.17e3				0.000
[redacted]	FUNCTION4 NCDPE			1.54e3						862		3.20e4				0.000
[redacted]	FUNCTION5 DCDPE			7.33e2						712		7.22e3				0.000

Quantify Totals Report MassLynx 4.1 SCN 714

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld

Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time

Printed: Thursday, February 14, 2013 10:56:17 Pacific Standard Time

Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 12 Feb 2013 12:25:57

Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: WC33E, Name: 13021312, Date: 13-Feb-2013, Time: 19:53:05, Conditions: AUTOSPEC01, User: pk

TF

[redacted]	35	Total-tetrafurans	303.9016	24.73	9720.166	0.921	0.217		0.80	0.77	NO	36.4
[redacted]	35	Total-tetrafurans	303.9016	24.57	18493.710	0.921	0.413		0.74	0.77	NO	72.3
[redacted]	35	Total-tetrafurans	303.9016	24.40	9890.430	0.921	0.221		0.70	0.77	NO	39.4
[redacted]	35	Total-tetrafurans	303.9016	24.32	8501.673	0.921	0.190		0.94	0.77	YES	27.5
[redacted]	35	Total-tetrafurans	303.9016	23.90	4303.942	0.921	0.096		0.94	0.77	YES	19.7
[redacted]	35	Total-tetrafurans	303.9016	23.76	2858.624	0.921	0.064		0.72	0.77	NO	11.0
[redacted]	35	Total-tetrafurans	303.9016	23.66	14503.259	0.921	0.324		0.73	0.77	NO	59.8
[redacted]	35	Total-tetrafurans	303.9016	23.42	10643.892	0.921	0.238		0.71	0.77	NO	32.5
[redacted]	35	Total-tetrafurans	303.9016	23.28	4124.994	0.921	0.092		0.82	0.77	NO	13.7
[redacted]	35	Total-tetrafurans	303.9016	23.00	62402.496	0.921	1.393		0.79	0.77	NO	250.1
[redacted]	35	Total-tetrafurans	303.9016	22.42	3701.724	0.921	0.083		0.57	0.77	YES	13.4
[redacted]	35	Total-tetrafurans	303.9016	22.16	2822.170	0.921	0.063		0.99	0.77	YES	14.4
[redacted]	35	Total-tetrafurans	303.9016	27.08	6268.334	0.921	0.140		1.02	0.77	YES	28.0
[redacted]	35	Total-tetrafurans	303.9016	25.88	8024.774	0.921	0.179		0.71	0.77	NO	28.4
[redacted]	35	Total-tetrafurans	303.9016	25.79	3542.294	0.921	0.079		0.97	0.77	YES	16.3
[redacted]	1	2378-TCDF	303.9016	25.66	11728.532	0.921	0.262	0.262	0.83	0.77	NO	51.2
[redacted]	35	Total-tetrafurans	303.9016	25.44	6756.695	0.921	0.151		0.65	0.77	YES	15.8
[redacted]	35	Total-tetrafurans	303.9016	25.27	557.612	0.921	0.012		1.10	0.77	YES	3.7
[redacted]	35	Total-tetrafurans	303.9016	25.15	3509.326	0.921	0.078		0.67	0.77	NO	13.9
[redacted]	35	Total-tetrafurans	303.9016	24.96	2775.753	0.921	0.062		0.79	0.77	NO	11.7

F2

PP

[redacted]	36	Total-penta1	339.8597	27.06	418702.468		12.697		1.55	1.55	NO	4465.0

PF

[redacted]	37	Total-pentafurans	339.8597	30.07	1955.916	0.927	0.059		2.98	1.55	YES	7.4
[redacted]	37	Total-pentafurans	339.8597	29.97	16399.790	0.927	0.492		1.27	1.55	YES	46.1
[redacted]	2	12378-PeCDF	339.8597	29.79	16244.643	0.912	0.476	0.476	1.47	1.55	NO	52.9
[redacted]	37	Total-pentafurans	339.8597	29.42	44139.340	0.927	1.323		1.50	1.55	NO	121.5
[redacted]	37	Total-pentafurans	339.8597	29.32	2276.349	0.927	0.068		1.63	1.55	NO	10.7
[redacted]	37	Total-pentafurans	339.8597	29.21	3373.227	0.927	0.101		1.83	1.55	YES	10.0
[redacted]	37	Total-pentafurans	339.8597	28.71	54851.605	0.927	1.645		1.39	1.55	NO	188.8
[redacted]	37	Total-pentafurans	339.8597	28.65	36218.715	0.927	1.086		1.89	1.55	YES	132.4
[redacted]	37	Total-pentafurans	339.8597	28.51	8745.947	0.927	0.262		1.82	1.55	YES	27.2
[redacted]	37	Total-pentafurans	339.8597	32.15	1702.752	0.927	0.051		1.07	1.55	YES	5.0
[redacted]	3	23478-PeCDF	339.8597	31.13	15675.131	0.943	0.482	0.482	1.42	1.55	NO	48.1
[redacted]	37	Total-pentafurans	339.8597	30.98	15261.893	0.927	0.458		1.52	1.55	NO	49.4
[redacted]	37	Total-pentafurans	339.8597	30.87	4965.490	0.927	0.149		1.34	1.55	NO	17.2

E

D: WC33E, Name: 13021312, Date: 13-Feb-2013, Time: 19:53:05, Conditions: AUTOSPEC01, User: pk

HF

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	38	Total-hexafurans	373.8208	34.18	905176.563	1.062	36.271		1.21	1.24	NO	3376.8
[redacted]	38	Total-hexafurans	373.8208	33.86	8506.783	1.062	0.341		1.26	1.24	NO	34.2
[redacted]	38	Total-hexafurans	373.8208	33.32	708580.625	1.062	28.393		1.22	1.24	NO	2644.8
[redacted]	38	Total-hexafurans	373.8208	33.10	245312.461	1.062	9.830		1.18	1.24	NO	945.2
[redacted]	7	123789-HxCDF	373.8208	37.05	11198.358	1.017	0.593	0.593	1.21	1.24	NO	60.3
[redacted]	5	234678-HxCDF	373.8208	35.98	29977.117	1.073	1.226	1.226	1.18	1.24	NO	124.3
[redacted]	38	Total-hexafurans	373.8208	35.92	46692.258	1.062	1.871		1.30	1.24	NO	161.8
[redacted]	38	Total-hexafurans	373.8208	35.35	1536.549	1.062	0.062		0.63	1.24	YES	7.2
[redacted]	6	123678-HxCDF	373.8208	35.00	45125.096	1.056	1.624	1.624	1.25	1.24	NO	167.8
[redacted]	4	123478-HxCDF	373.8208	34.85	57944.586	1.101	1.997	1.997	1.18	1.24	NO	205.0
[redacted]	38	Total-hexafurans	373.8208	34.68	7358.793	1.062	0.295		1.05	1.24	YES	27.1

HPF

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	39	Total-heptafurans	407.7818	39.90	4913111.500	1.231	232.851		1.01	1.05	NO	11034.4
[redacted]	39	Total-heptafurans	407.7818	39.61	17360.829	1.231	0.823		0.99	1.05	NO	35.9
[redacted]	8	1234678-HpCDF	407.7818	39.14	1710713.375	1.238	71.594	71.594	1.02	1.05	NO	3972.4
[redacted]	9	1234789-HpCDF	407.7818	41.75	114959.605	1.224	6.270	6.270	1.04	1.05	NO	236.2
[redacted]	39	Total-heptafurans	407.7818	40.90	6397.655	1.231	0.303		1.03	1.05	NO	15.5

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:56:17 Pacific Standard Time

D: WC33E, Name: 13021312, Date: 13-Feb-2013, Time: 19:53:05, Conditions: AUTOSPEC01, User: pk

Furans,TF,PP,PF,HF,HPF,OF

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	35	Total-tetrafurans	303.9016	24.73	9720.166	0.921	0.217		0.80	0.77	NO	36.4
[redacted]	35	Total-tetrafurans	303.9016	24.57	18493.710	0.921	0.413		0.74	0.77	NO	72.3
[redacted]	35	Total-tetrafurans	303.9016	24.40	9890.430	0.921	0.221		0.70	0.77	NO	39.4
[redacted]	35	Total-tetrafurans	303.9016	24.32	8501.673	0.921	0.190		0.94	0.77	YES	27.5
[redacted]	35	Total-tetrafurans	303.9016	23.90	4303.942	0.921	0.096		0.94	0.77	YES	19.7
[redacted]	35	Total-tetrafurans	303.9016	23.76	2858.624	0.921	0.064		0.72	0.77	NO	11.0
[redacted]	35	Total-tetrafurans	303.9016	23.66	14503.259	0.921	0.324		0.73	0.77	NO	59.8
[redacted]	35	Total-tetrafurans	303.9016	23.42	10643.892	0.921	0.238		0.71	0.77	NO	32.5
[redacted]	35	Total-tetrafurans	303.9016	23.28	4124.994	0.921	0.092		0.82	0.77	NO	13.7
[redacted]	35	Total-tetrafurans	303.9016	23.00	62402.496	0.921	1.393		0.79	0.77	NO	250.1
[redacted]	35	Total-tetrafurans	303.9016	22.42	3701.724	0.921	0.083		0.57	0.77	YES	13.4
[redacted]	35	Total-tetrafurans	303.9016	22.16	2822.170	0.921	0.063		0.99	0.77	YES	14.4
[redacted]	35	Total-tetrafurans	303.9016	27.08	6268.334	0.921	0.140		1.02	0.77	YES	28.0
[redacted]	35	Total-tetrafurans	303.9016	25.88	8024.774	0.921	0.179		0.71	0.77	NO	28.4
[redacted]	35	Total-tetrafurans	303.9016	25.79	3542.294	0.921	0.079		0.97	0.77	YES	16.3
[redacted]	1	2378-TCDF	303.9016	25.66	11728.532	0.921	0.262	0.262	0.83	0.77	NO	51.2
[redacted]	35	Total-tetrafurans	303.9016	25.44	6756.695	0.921	0.151		0.65	0.77	YES	15.8
[redacted]	35	Total-tetrafurans	303.9016	25.27	557.612	0.921	0.012		1.10	0.77	YES	3.7
[redacted]	35	Total-tetrafurans	303.9016	25.15	3509.326	0.921	0.078		0.67	0.77	NO	13.9
[redacted]	35	Total-tetrafurans	303.9016	24.96	2775.753	0.921	0.062		0.79	0.77	NO	11.7
[redacted]	37	Total-pentafurans	339.8597	30.07	1955.916	0.927	0.059		2.98	1.55	YES	7.4
[redacted]	37	Total-pentafurans	339.8597	29.97	16399.790	0.927	0.492		1.27	1.55	YES	46.1
[redacted]	2	12378-PeCDF	339.8597	29.79	16244.643	0.912	0.476	0.476	1.47	1.55	NO	52.9
[redacted]	37	Total-pentafurans	339.8597	29.42	44139.340	0.927	1.323		1.50	1.55	NO	121.5
[redacted]	37	Total-pentafurans	339.8597	29.32	2276.349	0.927	0.068		1.63	1.55	NO	10.7
[redacted]	37	Total-pentafurans	339.8597	29.21	3373.227	0.927	0.101		1.83	1.55	YES	10.0
[redacted]	37	Total-pentafurans	339.8597	28.71	54851.605	0.927	1.645		1.39	1.55	NO	188.8
[redacted]	37	Total-pentafurans	339.8597	28.65	36218.715	0.927	1.086		1.89	1.55	YES	132.4
[redacted]	37	Total-pentafurans	339.8597	28.51	8745.947	0.927	0.262		1.82	1.55	YES	27.2
[redacted]	37	Total-pentafurans	339.8597	32.15	1702.752	0.927	0.051		1.07	1.55	YES	5.0
[redacted]	3	23478-PeCDF	339.8597	31.13	15675.131	0.943	0.482	0.482	1.42	1.55	NO	48.1
[redacted]	37	Total-pentafurans	339.8597	30.98	15261.893	0.927	0.458		1.52	1.55	NO	49.4
[redacted]	37	Total-pentafurans	339.8597	30.87	4965.490	0.927	0.149		1.34	1.55	NO	17.2
[redacted]	38	Total-hexafurans	373.8208	34.18	905176.563	1.062	36.271		1.21	1.24	NO	3376.8
[redacted]	38	Total-hexafurans	373.8208	33.86	8506.783	1.062	0.341		1.26	1.24	NO	34.2
[redacted]	38	Total-hexafurans	373.8208	33.32	708580.625	1.062	28.393		1.22	1.24	NO	2644.8
[redacted]	38	Total-hexafurans	373.8208	33.10	245312.461	1.062	9.830		1.18	1.24	NO	945.2
[redacted]	7	123789-HxCDF	373.8208	37.05	11198.358	1.017	0.593	0.593	1.21	1.24	NO	60.3
[redacted]	5	234678-HxCDF	373.8208	35.98	29977.117	1.073	1.226	1.226	1.18	1.24	NO	124.3
[redacted]	38	Total-hexafurans	373.8208	35.92	46692.258	1.062	1.871		1.30	1.24	NO	161.8
[redacted]	38	Total-hexafurans	373.8208	35.35	1536.549	1.062	0.062		0.63	1.24	YES	7.2
[redacted]	6	123678-HxCDF	373.8208	35.00	45125.096	1.056	1.624	1.624	1.25	1.24	NO	167.8
[redacted]	4	123478-HxCDF	373.8208	34.85	57944.586	1.101	1.997	1.997	1.18	1.24	NO	205.0
[redacted]	38	Total-hexafurans	373.8208	34.68	7358.793	1.062	0.295		1.05	1.24	YES	27.1
[redacted]	39	Total-heptafurans	407.7818	39.90	4913111.500	1.231	232.851		1.01	1.05	NO	11034.4
[redacted]	39	Total-heptafurans	407.7818	39.61	17360.829	1.231	0.823		0.99	1.05	NO	35.9
[redacted]	8	1234678-HpCDF	407.7818	39.14	1710713.375	1.238	71.594	71.594	1.02	1.05	NO	3972.4
[redacted]	10	OCDF	441.7428	46.93	5729697.750	1.162	388.950	388....	0.87	0.89	NO	10557.9
[redacted]	9	1234789-HpCDF	407.7818	41.75	114959.605	1.224	6.270	6.270	1.04	1.05	NO	[illegible]

ID: WC33E, Name: 13021312, Date: 13-Feb-2013, Time: 19:53:05, Conditions: AUTOSPEC01, User: pk

Furans,TF,PP,PF,HF,HPF,OF

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	39	Total-heptafurans	407.7818	40.90	6397.655	1.231	0.303		1.03	1.05	NO	15.5
[redacted]	36	Total-penta1	339.8597	27.06	418702.468		12.697		1.55	1.55	NO	4465.0

TD

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	41	Total-tetradioxins	319.8965	25.63	2498.252	1.106	0.077		1.20	0.77	YES	12.9
[redacted]	41	Total-tetradioxins	319.8965	25.48	5251.583	1.106	0.161		0.74	0.77	NO	19.0
[redacted]	41	Total-tetradioxins	319.8965	25.27	4331.455	1.106	0.133		0.79	0.77	NO	16.8
[redacted]	41	Total-tetradioxins	319.8965	25.17	1667.912	1.106	0.051		1.01	0.77	YES	7.7
[redacted]	41	Total-tetradioxins	319.8965	24.91	10597.430	1.106	0.325		0.84	0.77	NO	42.1
[redacted]	41	Total-tetradioxins	319.8965	24.63	6890.180	1.106	0.211		0.84	0.77	NO	21.3
[redacted]	41	Total-tetradioxins	319.8965	24.42	1594.002	1.106	0.049		1.06	0.77	YES	7.5
[redacted]	41	Total-tetradioxins	319.8965	23.93	3878.010	1.106	0.119		0.98	0.77	YES	16.5
[redacted]	41	Total-tetradioxins	319.8965	23.70	6548.146	1.106	0.201		0.87	0.77	NO	27.0
[redacted]	41	Total-tetradioxins	319.8965	23.45	11905.258	1.106	0.365		0.83	0.77	NO	52.2
[redacted]	41	Total-tetradioxins	319.8965	26.85	4110.230	1.106	0.126		0.64	0.77	YES	11.5
[redacted]	41	Total-tetradioxins	319.8965	26.42	6175.987	1.106	0.189		0.56	0.77	YES	21.8
[redacted]	11	2378-TCDD	319.8965	26.30	6288.204	1.106	0.193	0.157	0.55	0.77	YES	20.7
[redacted]	41	Total-tetradioxins	319.8965	25.91	6415.213	1.106	0.197		0.79	0.77	NO	20.4

E

PD

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	42	Total-pentadioxins	355.8546	29.17	10782.576	1.001	0.491		1.75	1.55	NO	77.8
[redacted]	42	Total-pentadioxins	355.8546	28.70	40921.595	1.001	1.862		1.61	1.55	NO	183.7
[redacted]	42	Total-pentadioxins	355.8546	31.78	7419.494	1.001	0.338		1.59	1.55	NO	48.5
[redacted]	12	12378-PeCDD	355.8546	31.39	31390.895	1.001	1.428	1.428	1.49	1.55	NO	187.6
[redacted]	42	Total-pentadioxins	355.8546	30.70	4144.467	1.001	0.189		1.59	1.55	NO	24.9
[redacted]	42	Total-pentadioxins	355.8546	30.31	19708.062	1.001	0.897		1.47	1.55	NO	91.1
[redacted]	42	Total-pentadioxins	355.8546	30.15	14947.336	1.001	0.680		1.43	1.55	NO	94.8
[redacted]	42	Total-pentadioxins	355.8546	30.01	27237.108	1.001	1.239		1.70	1.55	NO	190.5
[redacted]	42	Total-pentadioxins	355.8546	29.80	18124.245	1.001	0.824		1.60	1.55	NO	122.4

HD

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	15	123789-HxCDD	389.8157	36.69	104921.414	0.904	5.108	5.108	1.25	1.24	NO	395.8
[redacted]	43	Total-hexadioxins	389.8157	36.44	18252.386	0.937	0.858		1.41	1.24	NO	73.3
[redacted]	14	123678-HxCDD	389.8157	36.25	323656.594	0.929	15.393	15.393	1.27	1.24	NO	1185.5
[redacted]	13	123478-HxCDD	389.8157	36.12	60179.397	0.978	2.700	2.700	1.17	1.24	NO	222.3
[redacted]	43	Total-hexadioxins	389.8157	35.14	551563.640	0.937	25.914		1.22	1.24	NO	1387.2
[redacted]	43	Total-hexadioxins	389.8157	34.73	49360.568	0.937	2.319		1.22	1.24	NO	172.0
[redacted]	43	Total-hexadioxins	389.8157	33.91	292627.828	0.937	13.749		1.25	1.24	NO	1099.3
[redacted]	43	Total-hexadioxins	389.8157	33.64	9531.093	0.937	0.448		1.22	1.24	NO	40.1

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:56:17 Pacific Standard Time

ID: WC33E, Name: 13021312, Date: 13-Feb-2013, Time: 19:53:05, Conditions: AUTOSPEC01, User: pk

HPD

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	16	1234678-HpCDD	423.7766	40.89	12767875....	1.029	648.472	648....	1.04	1.05	NO	9276.8
[redacted]	44	Total-heptadioxins	423.7766	39.67	6865161.750	1.029	348.677		1.04	1.05	NO	5148.4

Dioxins,TD,PD,HD,HPD,OD

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	41	Total-tetradioxins	319.8965	25.63	2498.252	1.106	0.077		1.20	0.77	YES	12.9
[redacted]	41	Total-tetradioxins	319.8965	25.48	5251.583	1.106	0.161		0.74	0.77	NO	19.0
[redacted]	41	Total-tetradioxins	319.8965	25.27	4331.455	1.106	0.133		0.79	0.77	NO	16.8
[redacted]	41	Total-tetradioxins	319.8965	25.17	1667.912	1.106	0.051		1.01	0.77	YES	7.7
[redacted]	41	Total-tetradioxins	319.8965	24.91	10597.430	1.106	0.325		0.84	0.77	NO	42.1
[redacted]	41	Total-tetradioxins	319.8965	24.63	6890.180	1.106	0.211		0.84	0.77	NO	21.3
[redacted]	41	Total-tetradioxins	319.8965	24.42	1594.002	1.106	0.049		1.06	0.77	YES	7.5
[redacted]	41	Total-tetradioxins	319.8965	23.93	3878.010	1.106	0.119		0.98	0.77	YES	16.5
[redacted]	41	Total-tetradioxins	319.8965	23.70	6546.146	1.106	0.201		0.87	0.77	NO	27.0
[redacted]	41	Total-tetradioxins	319.8965	23.45	11905.258	1.106	0.365		0.83	0.77	NO	52.2
[redacted]	45	Total-Dioxins	319.8965	22.82	759.733	0.994	0.026		0.35	0.77	YES	2.4
[redacted]	45	Total-Dioxins	319.8965	27.35	213.600	0.994	0.007		1.32	0.77	YES	2.5
[redacted]	41	Total-tetradioxins	319.8965	26.85	4110.230	1.106	0.126		0.64	0.77	YES	11.5
[redacted]	41	Total-tetradioxins	319.8965	26.42	6175.987	1.106	0.189		0.56	0.77	YES	21.8
[redacted]	11	2378-TCDD	319.8965	26.30	6288.204	1.106	0.193	0.157	0.55	0.77	YES	20.7
[redacted]	41	Total-tetradioxins	319.8965	25.91	6415.213	1.106	0.197		0.79	0.77	NO	20.4
[redacted]	42	Total-pentadioxins	355.8546	29.17	10782.576	1.001	0.491		1.75	1.55	NO	77.8
[redacted]	42	Total-pentadioxins	355.8546	28.70	40921.595	1.001	1.862		1.61	1.55	NO	183.7
[redacted]	42	Total-pentadioxins	355.8546	31.78	7419.494	1.001	0.338		1.59	1.55	NO	48.5
[redacted]	12	12378-PeCDD	355.8546	31.39	31390.895	1.001	1.428	1.428	1.49	1.55	NO	187.6
[redacted]	42	Total-pentadioxins	355.8546	30.70	4144.467	1.001	0.189		1.59	1.55	NO	24.9
[redacted]	42	Total-pentadioxins	355.8546	30.31	19708.062	1.001	0.897		1.47	1.55	NO	91.1
[redacted]	42	Total-pentadioxins	355.8546	30.15	14947.336	1.001	0.680		1.43	1.55	NO	94.8
[redacted]	42	Total-pentadioxins	355.8546	30.01	27237.108	1.001	1.239		1.70	1.55	NO	190.5
[redacted]	42	Total-pentadioxins	355.8546	29.80	18124.245	1.001	0.824		1.60	1.55	NO	122.4
[redacted]	15	123789-HxCDD	389.8157	36.69	104921.414	0.904	5.108	5.108	1.25	1.24	NO	395.8
[redacted]	43	Total-hexadioxins	389.8157	36.44	18252.386	0.937	0.858		1.41	1.24	NO	73.3
[redacted]	14	123678-HxCDD	389.8157	36.25	323656.594	0.929	15.393	15.393	1.27	1.24	NO	1185.5
[redacted]	13	123478-HxCDD	389.8157	36.12	60179.397	0.978	2.700	2.700	1.17	1.24	NO	222.3
[redacted]	43	Total-hexadioxins	389.8157	35.14	551563.640	0.937	25.914		1.22	1.24	NO	1387.2
[redacted]	43	Total-hexadioxins	389.8157	34.73	49360.568	0.937	2.319		1.22	1.24	NO	172.0
[redacted]	43	Total-hexadioxins	389.8157	33.91	292627.828	0.937	13.749		1.25	1.24	NO	1099.3
[redacted]	43	Total-hexadioxins	389.8157	33.64	9531.093	0.937	0.448		1.22	1.24	NO	40.1
[redacted]	16	1234678-HpCDD	423.7766	40.89	12767875....	1.029	648.472	648....	1.04	1.05	NO	9276.8
[redacted]	44	Total-heptadioxins	423.7766	39.67	6865161.750	1.029	348.677		1.04	1.05	NO	5148.4
[redacted]	17	OCDD	457.7377	46.67	102534260...	1.011	7998.3...	7998...	0.89	0.89	NO	71475.3

ID: WC33E, Name: 13021312, Date: 13-Feb-2013, Time: 19:53:05, Conditions: AUTOSPEC01, User: pk

TotalTEQ,Furans,Dioxins

[redacted]											
[redacted]	35 Total-tetrafurans	303.9016	24.73	9720.166	0.921	0.217		0.80	0.77	NO	36.4
[redacted]	35 Total-tetrafurans	303.9016	24.57	18493.710	0.921	0.413		0.74	0.77	NO	72.3
[redacted]	35 Total-tetrafurans	303.9016	24.40	9890.430	0.921	0.221		0.70	0.77	NO	39.4
[redacted]	35 Total-tetrafurans	303.9016	24.32	8501.673	0.921	0.190		0.94	0.77	YES	27.5
[redacted]	35 Total-tetrafurans	303.9016	23.90	4303.942	0.921	0.096		0.94	0.77	YES	19.7
[redacted]	35 Total-tetrafurans	303.9016	23.76	2858.624	0.921	0.064		0.72	0.77	NO	11.0
[redacted]	35 Total-tetrafurans	303.9016	23.66	14503.259	0.921	0.324		0.73	0.77	NO	59.8
[redacted]	35 Total-tetrafurans	303.9016	23.42	10643.892	0.921	0.238		0.71	0.77	NO	32.5
[redacted]	35 Total-tetrafurans	303.9016	23.28	4124.994	0.921	0.092		0.82	0.77	NO	13.7
[redacted]	35 Total-tetrafurans	303.9016	23.00	62402.496	0.921	1.393		0.79	0.77	NO	250.1
[redacted]	35 Total-tetrafurans	303.9016	22.42	3701.724	0.921	0.083		0.57	0.77	YES	13.4
[redacted]	35 Total-tetrafurans	303.9016	22.16	2822.170	0.921	0.063		0.99	0.77	YES	14.4
[redacted]	35 Total-tetrafurans	303.9016	27.08	6268.334	0.921	0.140		1.02	0.77	YES	28.0
[redacted]	35 Total-tetrafurans	303.9016	25.88	8024.774	0.921	0.179		0.71	0.77	NO	28.4
[redacted]	35 Total-tetrafurans	303.9016	25.79	3542.294	0.921	0.079		0.97	0.77	YES	16.3
[redacted]	1 2378-TCDF	303.9016	25.66	11728.532	0.921	0.262	0.262	0.83	0.77	NO	51.2
[redacted]	35 Total-tetrafurans	303.9016	25.44	6756.695	0.921	0.151		0.65	0.77	YES	15.8
[redacted]	35 Total-tetrafurans	303.9016	25.27	557.612	0.921	0.012		1.10	0.77	YES	3.7
[redacted]	35 Total-tetrafurans	303.9016	25.15	3509.326	0.921	0.078		0.67	0.77	NO	13.9
[redacted]	35 Total-tetrafurans	303.9016	24.96	2775.753	0.921	0.062		0.79	0.77	NO	11.7
[redacted]	37 Total-pentafurans	339.8597	30.07	1955.916	0.927	0.059		2.98	1.55	YES	7.4
[redacted]	37 Total-pentafurans	339.8597	29.97	16399.790	0.927	0.492		1.27	1.55	YES	46.1
[redacted]	2 12378-PeCDF	339.8597	29.79	16244.643	0.912	0.476	0.476	1.47	1.55	NO	52.9
[redacted]	37 Total-pentafurans	339.8597	29.42	44139.340	0.927	1.323		1.50	1.55	NO	121.5
[redacted]	37 Total-pentafurans	339.8597	29.32	2276.349	0.927	0.068		1.63	1.55	NO	10.7
[redacted]	37 Total-pentafurans	339.8597	29.21	3373.227	0.927	0.101		1.83	1.55	YES	10.0
[redacted]	37 Total-pentafurans	339.8597	28.71	54851.605	0.927	1.645		1.39	1.55	NO	188.8
[redacted]	37 Total-pentafurans	339.8597	28.65	36218.715	0.927	1.086		1.89	1.55	YES	132.4
[redacted]	37 Total-pentafurans	339.8597	28.51	8745.947	0.927	0.262		1.82	1.55	YES	27.2
[redacted]	37 Total-pentafurans	339.8597	32.15	1702.752	0.927	0.051		1.07	1.55	YES	5.0
[redacted]	3 23478-PeCDF	339.8597	31.13	15675.131	0.943	0.482	0.482	1.42	1.55	NO	48.1
[redacted]	37 Total-pentafurans	339.8597	30.98	15261.893	0.927	0.458		1.52	1.55	NO	49.4
[redacted]	37 Total-pentafurans	339.8597	30.87	4965.490	0.927	0.149		1.34	1.55	NO	17.2
[redacted]	38 Total-hexafurans	373.8208	34.18	905176.563	1.062	36.271		1.21	1.24	NO	3376.8
[redacted]	38 Total-hexafurans	373.8208	33.86	8506.783	1.062	0.341		1.26	1.24	NO	34.2
[redacted]	38 Total-hexafurans	373.8208	33.32	708580.625	1.062	28.393		1.22	1.24	NO	2644.8
[redacted]	38 Total-hexafurans	373.8208	33.10	245312.461	1.062	9.830		1.18	1.24	NO	945.2
[redacted]	7 123789-HxCDF	373.8208	37.05	11198.358	1.017	0.593	0.593	1.21	1.24	NO	60.3
[redacted]	5 234678-HxCDF	373.8208	35.98	29977.117	1.073	1.226	1.226	1.18	1.24	NO	124.3
[redacted]	38 Total-hexafurans	373.8208	35.92	46692.258	1.062	1.871		1.30	1.24	NO	161.8
[redacted]	38 Total-hexafurans	373.8208	35.35	1536.549	1.062	0.062		0.63	1.24	YES	7.2
[redacted]	6 123678-HxCDF	373.8208	35.00	45125.096	1.056	1.624	1.624	1.25	1.24	NO	167.8
[redacted]	4 123478-HxCDF	373.8208	34.85	57944.586	1.101	1.997	1.997	1.18	1.24	NO	205.0
[redacted]	38 Total-hexafurans	373.8208	34.68	7358.793	1.062	0.295		1.05	1.24	YES	27.1
[redacted]	39 Total-heptafurans	407.7818	39.90	4913111.500	1.231	232.851		1.01	1.05	NO	11034.4
[redacted]	39 Total-heptafurans	407.7818	39.61	17360.829	1.231	0.823		0.99	1.05	NO	35.9
[redacted]	8 1234678-HpCDF	407.7818	39.14	1710713.375	1.238	71.594	71.594	1.02	1.05	NO	3972.4
[redacted]	10 OCDF	441.7428	46.93	5729697.750	1.162	388.950	388....	0.87	0.89	NO	10557.9
[redacted]	9 1234789-HpCDF	407.7818	41.75	114959.605	1.224	6.270	6.270	1.04	1.05	NO	238.2

Quantify Totals Report MassLynx 4.1 SCN 714
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:56:17 Pacific Standard Time

ID: WC33E, Name: 13021312, Date: 13-Feb-2013, Time: 19:53:05, Conditions: AUTOSPEC01, User: pk

TotalTEQ,Furans,Dioxins

[redacted]												
[redacted]	39	Total-heptafurans	407.7818	40.90	6397.655	1.231	0.303		1.03	1.05	NO	15.5
[redacted]	36	Total-penta1	339.8597	27.06	418702.468		12.697		1.55	1.55	NO	4465.0
[redacted]	41	Total-tetradioxins	319.8965	25.63	2498.252	1.106	0.077		1.20	0.77	YES	12.9
[redacted]	41	Total-tetradioxins	319.8965	25.48	5251.583	1.106	0.161		0.74	0.77	NO	19.0
[redacted]	41	Total-tetradioxins	319.8965	25.27	4331.455	1.106	0.133		0.79	0.77	NO	16.8
[redacted]	41	Total-tetradioxins	319.8965	25.17	1667.912	1.106	0.051		1.01	0.77	YES	7.7
[redacted]	41	Total-tetradioxins	319.8965	24.91	10597.430	1.106	0.325		0.84	0.77	NO	42.1
[redacted]	41	Total-tetradioxins	319.8965	24.63	6890.180	1.106	0.211		0.84	0.77	NO	21.3
[redacted]	41	Total-tetradioxins	319.8965	24.42	1594.002	1.106	0.049		1.06	0.77	YES	7.5
[redacted]	41	Total-tetradioxins	319.8965	23.93	3878.010	1.106	0.119		0.98	0.77	YES	16.5
[redacted]	41	Total-tetradioxins	319.8965	23.70	6548.146	1.106	0.201		0.87	0.77	NO	27.0
[redacted]	41	Total-tetradioxins	319.8965	23.45	11905.258	1.106	0.365		0.83	0.77	NO	52.2
[redacted]	45	Total-Dioxins	319.8965	22.82	759.733	0.994	0.026		0.35	0.77	YES	2.4
[redacted]	45	Total-Dioxins	319.8965	27.35	213.600	0.994	0.007		1.32	0.77	YES	2.5
[redacted]	41	Total-tetradioxins	319.8965	26.85	4110.230	1.106	0.126		0.64	0.77	YES	11.5
[redacted]	41	Total-tetradioxins	319.8965	26.42	6175.987	1.106	0.189		0.56	0.77	YES	21.8
[redacted]	11	2378-TCDD	319.8965	26.30	6288.204	1.106	0.193	0.157	0.55	0.77	YES	20.7
[redacted]	41	Total-tetradioxins	319.8965	25.91	6415.213	1.106	0.197		0.79	0.77	NO	20.4
[redacted]	42	Total-pentadioxins	355.8546	29.17	10782.576	1.001	0.491		1.75	1.55	NO	77.8
[redacted]	42	Total-pentadioxins	355.8546	28.70	40921.595	1.001	1.862		1.61	1.55	NO	183.7
[redacted]	42	Total-pentadioxins	355.8546	31.78	7419.494	1.001	0.338		1.59	1.55	NO	48.5
[redacted]	12	12378-PeCDD	355.8546	31.39	31390.895	1.001	1.428	1.428	1.49	1.55	NO	187.6
[redacted]	42	Total-pentadioxins	355.8546	30.70	4144.467	1.001	0.189		1.59	1.55	NO	24.9
[redacted]	42	Total-pentadioxins	355.8546	30.31	19708.062	1.001	0.897		1.47	1.55	NO	91.1
[redacted]	42	Total-pentadioxins	355.8546	30.15	14947.336	1.001	0.680		1.43	1.55	NO	94.8
[redacted]	42	Total-pentadioxins	355.8546	30.01	27237.108	1.001	1.239		1.70	1.55	NO	190.5
[redacted]	42	Total-pentadioxins	355.8546	29.80	18124.245	1.001	0.824		1.60	1.55	NO	122.4
[redacted]	15	123789-HxCDD	389.8157	36.69	104921.414	0.904	5.108	5.108	1.25	1.24	NO	395.8
[redacted]	43	Total-hexadioxins	389.8157	36.44	18252.386	0.937	0.858		1.41	1.24	NO	73.3
[redacted]	14	123678-HxCDD	389.8157	36.25	323656.594	0.929	15.393	15.393	1.27	1.24	NO	1185.5
[redacted]	13	123478-HxCDD	389.8157	36.12	60179.397	0.978	2.700	2.700	1.17	1.24	NO	222.3
[redacted]	43	Total-hexadioxins	389.8157	35.14	551563.640	0.937	25.914		1.22	1.24	NO	1387.2
[redacted]	43	Total-hexadioxins	389.8157	34.73	49360.568	0.937	2.319		1.22	1.24	NO	172.0
[redacted]	43	Total-hexadioxins	389.8157	33.91	292627.828	0.937	13.749		1.25	1.24	NO	1099.3
[redacted]	43	Total-hexadioxins	389.8157	33.64	9531.093	0.937	0.448		1.22	1.24	NO	40.1
[redacted]	16	1234678-HpCDD	423.7766	40.89	12767875....	1.029	648.472	648....	1.04	1.05	NO	9276.8
[redacted]	44	Total-heptadioxins	423.7766	39.67	6865161.750	1.029	348.677		1.04	1.05	NO	5148.4
[redacted]	17	OCDD	457.7377	46.67	102534260...	1.011	7998.3...	7998...	0.89	0.89	NO	71475.3

ID: WC33E, Name: 13021312, Date: 13-Feb-2013, Time: 19:53:05, Conditions: AUTOSPEC01, User: pk

PFK1

[redacted]					
[redacted]	48 FUNCTION1 PFK	330.9792	21.24	0.000	10.9
[redacted]	48 FUNCTION1 PFK	330.9792	23.15	0.000	29.0
[redacted]	48 FUNCTION1 PFK	330.9792	23.05	0.000	32.3
[redacted]	48 FUNCTION1 PFK	330.9792	22.96	0.000	33.3
[redacted]	48 FUNCTION1 PFK	330.9792	22.87	0.000	25.1
[redacted]	48 FUNCTION1 PFK	330.9792	22.76	0.000	25.6
[redacted]	48 FUNCTION1 PFK	330.9792	22.67	0.000	30.4
[redacted]	48 FUNCTION1 PFK	330.9792	22.52	0.000	22.1
[redacted]	48 FUNCTION1 PFK	330.9792	22.37	0.000	13.1
[redacted]	48 FUNCTION1 PFK	330.9792	22.30	0.000	16.7
[redacted]	48 FUNCTION1 PFK	330.9792	22.16	0.000	7.5
[redacted]	48 FUNCTION1 PFK	330.9792	22.03	0.000	7.3
[redacted]	48 FUNCTION1 PFK	330.9792	21.86	0.000	12.2
[redacted]	48 FUNCTION1 PFK	330.9792	21.75	0.000	7.1
[redacted]	48 FUNCTION1 PFK	330.9792	21.60	0.000	3.5
[redacted]	48 FUNCTION1 PFK	330.9792	21.45	0.000	1.0
[redacted]	48 FUNCTION1 PFK	330.9792	21.30	0.000	9.3
[redacted]	48 FUNCTION1 PFK	330.9792	25.44	0.000	43.8
[redacted]	48 FUNCTION1 PFK	330.9792	25.33	0.000	47.9
[redacted]	48 FUNCTION1 PFK	330.9792	25.21	0.000	43.4
[redacted]	48 FUNCTION1 PFK	330.9792	25.11	0.000	46.0
[redacted]	48 FUNCTION1 PFK	330.9792	25.00	0.000	46.8
[redacted]	48 FUNCTION1 PFK	330.9792	24.78	0.000	46.6
[redacted]	48 FUNCTION1 PFK	330.9792	24.63	0.000	42.1
[redacted]	48 FUNCTION1 PFK	330.9792	24.57	0.000	44.8
[redacted]	48 FUNCTION1 PFK	330.9792	24.30	0.000	42.9
[redacted]	48 FUNCTION1 PFK	330.9792	24.26	0.000	44.3
[redacted]	48 FUNCTION1 PFK	330.9792	24.09	0.000	34.2
[redacted]	48 FUNCTION1 PFK	330.9792	23.91	0.000	39.4
[redacted]	48 FUNCTION1 PFK	330.9792	23.76	0.000	33.6
[redacted]	48 FUNCTION1 PFK	330.9792	23.63	0.000	30.5
[redacted]	48 FUNCTION1 PFK	330.9792	23.40	0.000	39.1
[redacted]	48 FUNCTION1 PFK	330.9792	23.24	0.000	25.8
[redacted]	48 FUNCTION1 PFK	330.9792	27.68	0.000	0.3
[redacted]	48 FUNCTION1 PFK	330.9792	27.50	0.000	10.5
[redacted]	48 FUNCTION1 PFK	330.9792	27.32	0.000	18.0
[redacted]	48 FUNCTION1 PFK	330.9792	27.15	0.000	16.6
[redacted]	48 FUNCTION1 PFK	330.9792	27.06	0.000	21.2
[redacted]	48 FUNCTION1 PFK	330.9792	26.87	0.000	28.7
[redacted]	48 FUNCTION1 PFK	330.9792	26.69	0.000	25.9
[redacted]	48 FUNCTION1 PFK	330.9792	26.48	0.000	31.5
[redacted]	48 FUNCTION1 PFK	330.9792	26.39	0.000	31.6
[redacted]	48 FUNCTION1 PFK	330.9792	26.36	0.000	31.4
[redacted]	48 FUNCTION1 PFK	330.9792	26.17	0.000	38.3
[redacted]	48 FUNCTION1 PFK	330.9792	26.02	0.000	40.3
[redacted]	48 FUNCTION1 PFK	330.9792	25.93	0.000	42.6
[redacted]	48 FUNCTION1 PFK	330.9792	25.81	0.000	45.5
[redacted]	48 FUNCTION1 PFK	330.9792	25.75	0.000	45.3
[redacted]	48 FUNCTION1 PFK	330.9792	25.57	0.000	51.4

Quantify Totals Report MassLynx 4.1 SCN 714
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:56:17 Pacific Standard Time

ID: WC33E, Name: 13021312, Date: 13-Feb-2013, Time: 19:53:05, Conditions: AUTOSPEC01, User: pk

PFK2

[redacted]	49 FUNCTION2 PFK	366.9792	28.96	0.000	0.000	3.6
[redacted]	49 FUNCTION2 PFK	366.9792	28.91	0.000	0.000	1.9
[redacted]	49 FUNCTION2 PFK	366.9792	28.85	0.000	0.000	1.1
[redacted]	49 FUNCTION2 PFK	366.9792	28.74	0.000	0.000	0.5
[redacted]	49 FUNCTION2 PFK	366.9792	28.70	0.000	0.000	0.5
[redacted]	49 FUNCTION2 PFK	366.9792	28.64	0.000	0.000	1.3
[redacted]	49 FUNCTION2 PFK	366.9792	28.59	0.000	0.000	0.4
[redacted]	49 FUNCTION2 PFK	366.9792	28.42	0.000	0.000	0.5
[redacted]	49 FUNCTION2 PFK	366.9792	28.37	0.000	0.000	1.5
[redacted]	49 FUNCTION2 PFK	366.9792	28.33	0.000	0.000	1.5
[redacted]	49 FUNCTION2 PFK	366.9792	28.27	0.000	0.000	1.9
[redacted]	49 FUNCTION2 PFK	366.9792	28.15	0.000	0.000	2.3
[redacted]	49 FUNCTION2 PFK	366.9792	28.09	0.000	0.000	1.6
[redacted]	49 FUNCTION2 PFK	366.9792	28.05	0.000	0.000	2.1
[redacted]	49 FUNCTION2 PFK	366.9792	27.99	0.000	0.000	0.4
[redacted]	49 FUNCTION2 PFK	366.9792	30.19	0.000	0.000	0.7
[redacted]	49 FUNCTION2 PFK	366.9792	30.10	0.000	0.000	1.0
[redacted]	49 FUNCTION2 PFK	366.9792	30.07	0.000	0.000	1.6
[redacted]	49 FUNCTION2 PFK	366.9792	30.01	0.000	0.000	1.8
[redacted]	49 FUNCTION2 PFK	366.9792	29.94	0.000	0.000	1.4
[redacted]	49 FUNCTION2 PFK	366.9792	29.87	0.000	0.000	2.6
[redacted]	49 FUNCTION2 PFK	366.9792	29.83	0.000	0.000	2.1
[redacted]	49 FUNCTION2 PFK	366.9792	29.78	0.000	0.000	2.5
[redacted]	49 FUNCTION2 PFK	366.9792	29.72	0.000	0.000	2.9
[redacted]	49 FUNCTION2 PFK	366.9792	29.65	0.000	0.000	3.7
[redacted]	49 FUNCTION2 PFK	366.9792	29.58	0.000	0.000	4.8
[redacted]	49 FUNCTION2 PFK	366.9792	29.30	0.000	0.000	6.7
[redacted]	49 FUNCTION2 PFK	366.9792	29.14	0.000	0.000	6.4
[redacted]	49 FUNCTION2 PFK	366.9792	29.11	0.000	0.000	5.4
[redacted]	49 FUNCTION2 PFK	366.9792	29.06	0.000	0.000	4.5
[redacted]	49 FUNCTION2 PFK	366.9792	28.99	0.000	0.000	3.7
[redacted]	49 FUNCTION2 PFK	366.9792	31.98	0.000	0.000	3.5
[redacted]	49 FUNCTION2 PFK	366.9792	31.88	0.000	0.000	3.9
[redacted]	49 FUNCTION2 PFK	366.9792	31.68	0.000	0.000	0.8
[redacted]	49 FUNCTION2 PFK	366.9792	31.65	0.000	0.000	0.8
[redacted]	49 FUNCTION2 PFK	366.9792	31.50	0.000	0.000	0.3
[redacted]	49 FUNCTION2 PFK	366.9792	31.44	0.000	0.000	0.4
[redacted]	49 FUNCTION2 PFK	366.9792	31.38	0.000	0.000	1.9
[redacted]	49 FUNCTION2 PFK	366.9792	31.30	0.000	0.000	0.8
[redacted]	49 FUNCTION2 PFK	366.9792	31.13	0.000	0.000	1.2
[redacted]	49 FUNCTION2 PFK	366.9792	31.10	0.000	0.000	1.1
[redacted]	49 FUNCTION2 PFK	366.9792	31.00	0.000	0.000	0.4
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[redacted]	49 FUNCTION2 PFK	366.9792	32.54	0.000	0.000	2.7
[redacted]	49 FUNCTION2 PFK	366.9792	32.48	0.000	0.000	

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
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ID: WC33E, Name: 13021312, Date: 13-Feb-2013, Time: 19:53:05, Conditions: AUTOSPEC01, User: pk

PFK2

[redacted]												
[redacted]	49	FUNCTION2 PFK	366.9792	32.37	0.000		0.000					5.9
[redacted]	49	FUNCTION2 PFK	366.9792	32.23	0.000		0.000					7.2
[redacted]	49	FUNCTION2 PFK	366.9792	32.10	0.000		0.000					5.0

PFK3

[redacted]												
[redacted]	50	FUNCTION3 PFK	380.9760	38.07	0.000		0.000					5.2
[redacted]	50	FUNCTION3 PFK	380.9760	37.95	0.000		0.000					11.0
[redacted]	50	FUNCTION3 PFK	380.9760	37.11	0.000		0.000					48.7
[redacted]	50	FUNCTION3 PFK	380.9760	36.87	0.000		0.000					40.9
[redacted]	50	FUNCTION3 PFK	380.9760	33.70	0.000		0.000					5.4
[redacted]	50	FUNCTION3 PFK	380.9760	32.71	0.000		0.000					1.2

PFK4

[redacted]												
[redacted]	51	FUNCTION4 PFK	430.9728	41.88	0.000							1.6
[redacted]	51	FUNCTION4 PFK	430.9728	39.48	0.000							4.7
[redacted]	51	FUNCTION4 PFK	430.9728	38.74	0.000							3.2
[redacted]	51	FUNCTION4 PFK	430.9728	42.53	0.000							2.0

PFK5

[redacted]												
[redacted]												

ETHERS1

[redacted]												
[redacted]	53	FUNCTION1 HXCD...	375.8364	23.51	0.000		0.000					4.1

ETHERS2

[redacted]												
[redacted]	54	FUNCTION1 HPCD...	409.7974	27.50	0.000		0.000					2.1
[redacted]	54	FUNCTION1 HPCD...	409.7974	26.12	0.000		0.000					1.7
[redacted]	54	FUNCTION1 HPCD...	409.7974	23.18	0.000		0.000					2.4
[redacted]	54	FUNCTION1 HPCD...	409.7974	22.96	0.000		0.000					3.1
[redacted]	54	FUNCTION1 HPCD...	409.7974	22.34	0.000		0.000					1.7

ETHERS3

[redacted]												
[redacted]	55	FUNCTION2 HPCD...	409.7974	32.38	0.000		0.000					2.6
[redacted]	55	FUNCTION2 HPCD...	409.7974	32.06	0.000		0.000					2.9
[redacted]	55	FUNCTION2 HPCD...	409.7974	31.53	0.000		0.000					3.0
[redacted]	55	FUNCTION2 HPCD...	409.7974	31.13	0.000		0.000					1.7
[redacted]	55	FUNCTION2 HPCD...	409.7974	29.74	0.000		0.000					1.8

Quantify Totals Report MassLynx 4.1 SCN 714
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:56:17 Pacific Standard Time

ID: WC33E, Name: 13021312, Date: 13-Feb-2013, Time: 19:53:05, Conditions: AUTOSPEC01, User: pk

ETHERS4

[redacted]												
[redacted]	56	FUNCTION3 OCDPE	445.7555	36.22	0.000		0.000					2.6

ETHERS5

[redacted]												
[redacted]	57	FUNCTION4 NCDPE	479.7165	44.10	0.000		0.000					2.7
[redacted]	57	FUNCTION4 NCDPE	479.7165	42.47	0.000		0.000					4.7
[redacted]	57	FUNCTION4 NCDPE	479.7165	42.25	0.000		0.000					5.6
[redacted]	57	FUNCTION4 NCDPE	479.7165	42.18	0.000		0.000					7.1
[redacted]	57	FUNCTION4 NCDPE	479.7165	38.75	0.000		0.000					4.2
[redacted]	57	FUNCTION4 NCDPE	479.7165	38.71	0.000		0.000					5.2
[redacted]	57	FUNCTION4 NCDPE	479.7165	38.56	0.000		0.000					3.7
[redacted]	57	FUNCTION4 NCDPE	479.7165	38.33	0.000		0.000					4.0

ETHERS6

[redacted]												
[redacted]	58	FUNCTION5 DCDPE	513.6775	46.69	0.000		0.000					10.1

Quantify Sample Report **MassLynx 4.1 SCN 714**

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
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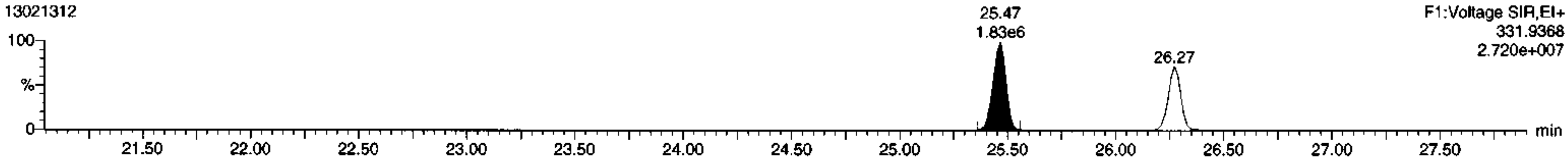
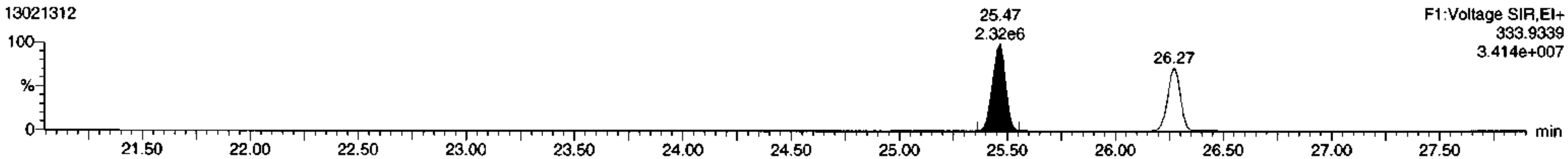
Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 12 Feb 2013 12:25:57
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: WC33E, Name: 13021312, Date: 13-Feb-2013, Time: 19:53:05, Conditions: AUTOSPEC01, User: pk

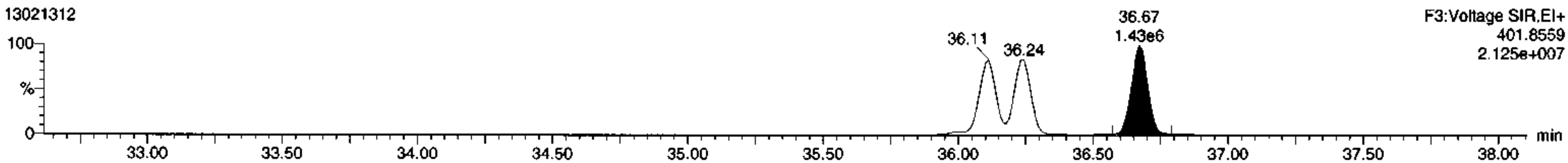
13C-1234-TCDD
13021312



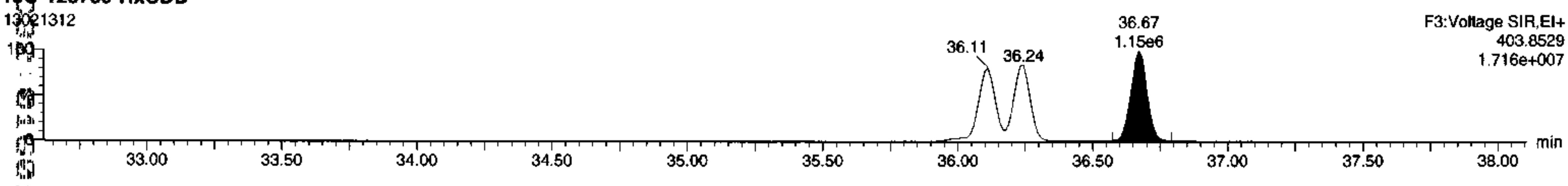
13C-1234-TCDD
13021312



13C-123789-HxCDD
13021312



13C-123789-HxCDD
13021312



Quantify Sample Report **MassLynx 4.1 SCN 714**

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld

Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time

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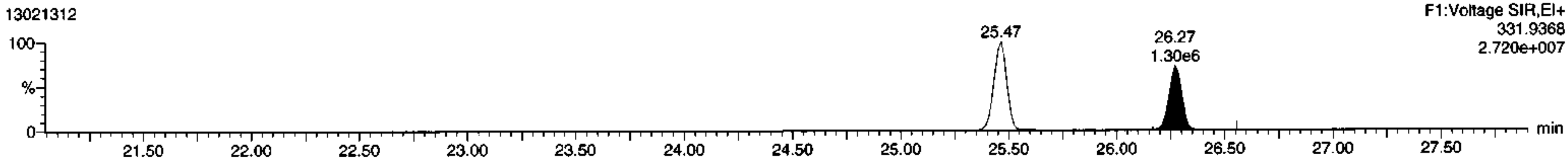
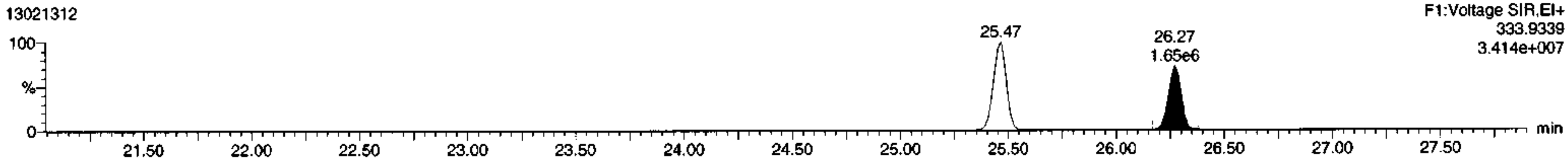
ID: WC33E, Name: 13021312, Date: 13-Feb-2013, Time: 19:53:05, Conditions: AUTOSPEC01, User: pk

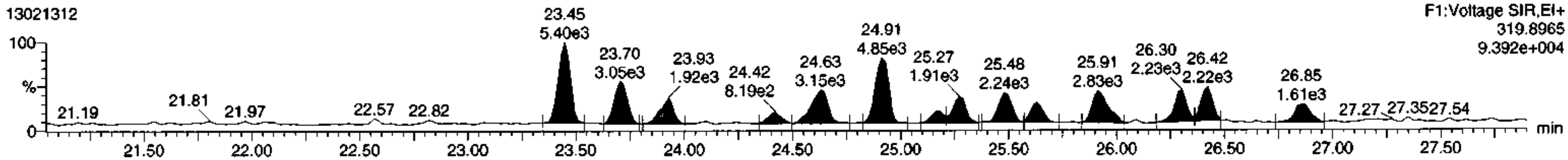
13C-2378-TCDD



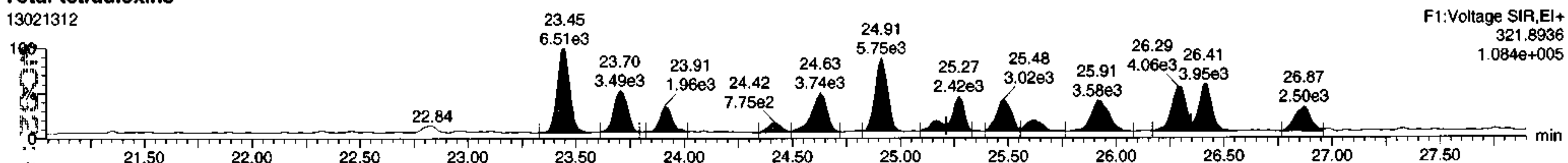
13C-2378-TCDD



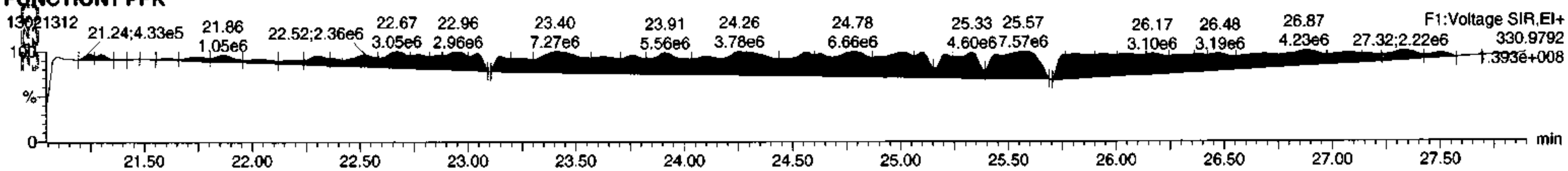
Total-tetradioxins



Total-tetradioxins



FUNCTION1 PFK



Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
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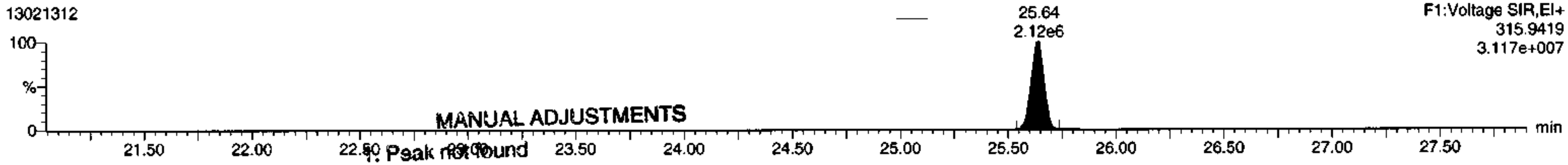
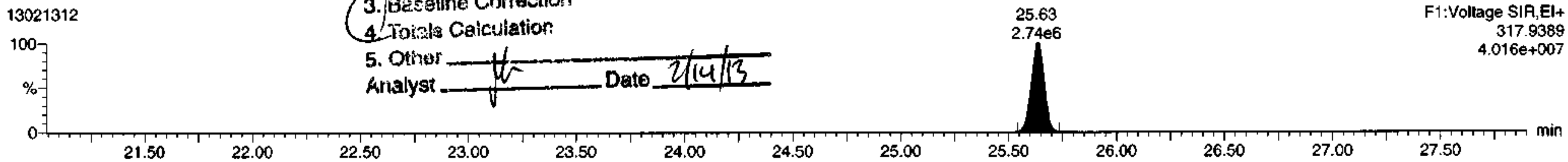
ID: WC33E, Name: 13021312, Date: 13-Feb-2013, Time: 19:53:05, Conditions: AUTOSPEC01, User: pk

13C-2378-TCDF
13021312

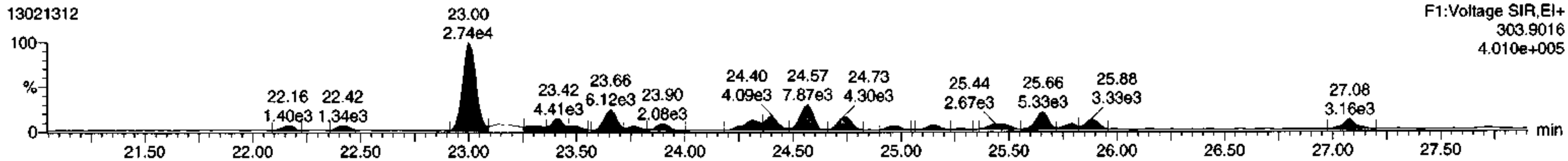


MANUAL ADJUSTMENTS
1. Peak not found
2. Poor Chromatography
3. Baseline Correction
4. Totals Calculation
5. Other
Analyst [signature] Date 2/14/13

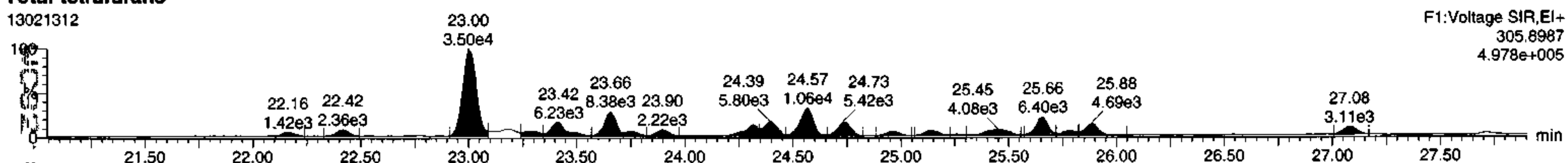
13C-2378-TCDF
13021312



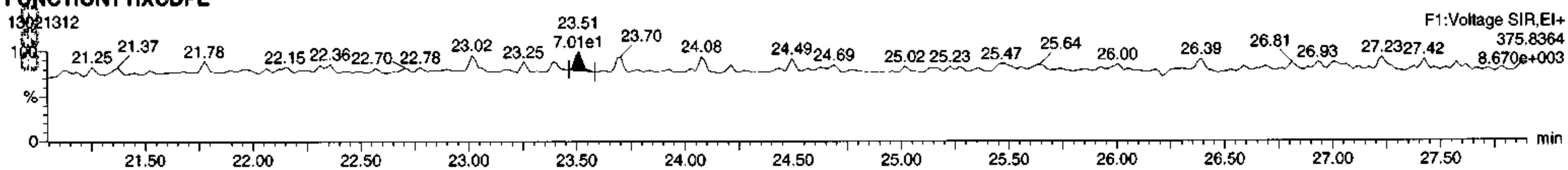
Total-tetrafurans
13021312



Total-tetrafurans
13021312



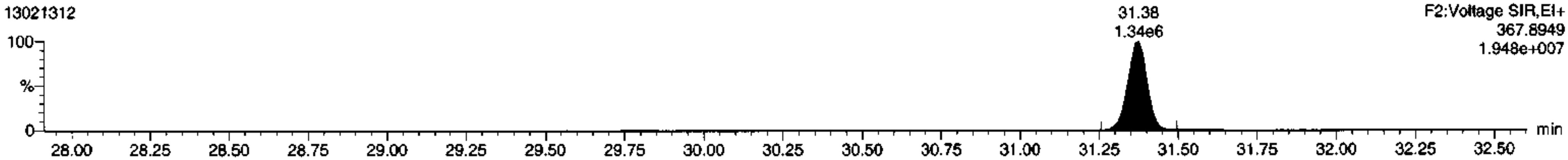
FUNCTION1 HXCDPE
13021312



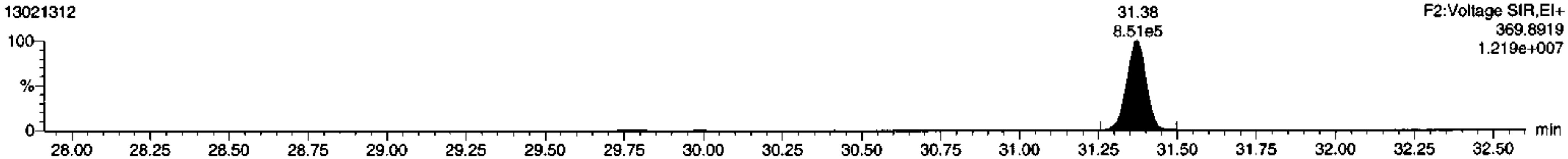
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:56:17 Pacific Standard Time

ID: WC33E, Name: 13021312, Date: 13-Feb-2013, Time: 19:53:05, Conditions: AUTOSPEC01, User: pk

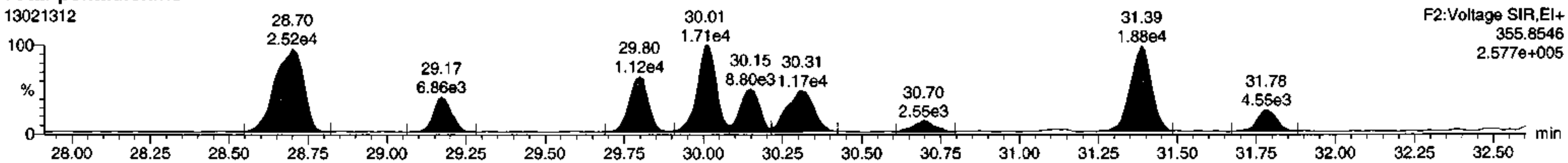
13C-12378-PeCDD



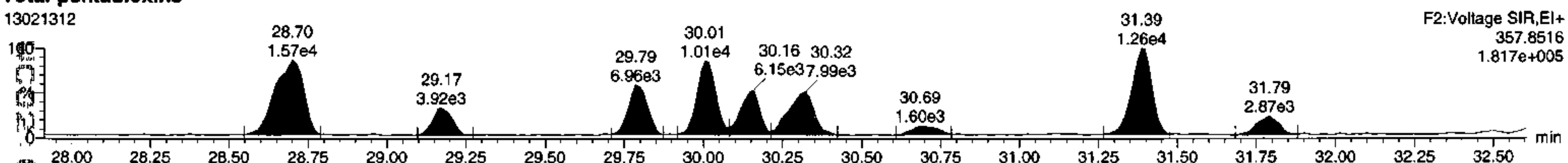
13C-12378-PeCDD



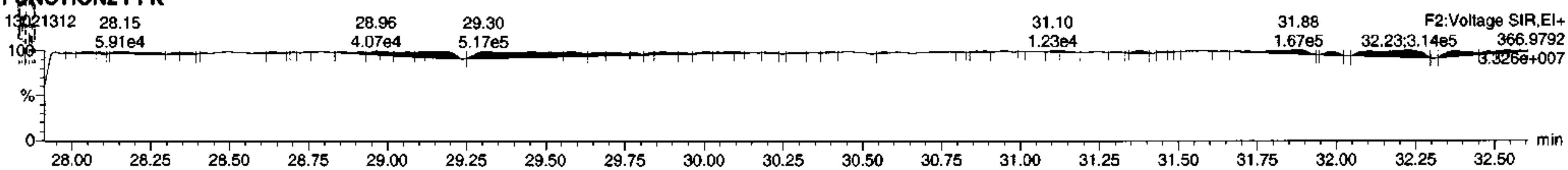
Total-pentadioxins



Total-pentadioxins



FUNCTION2 PFK



Quantify Sample Report **MassLynx 4.1 SCN 714**

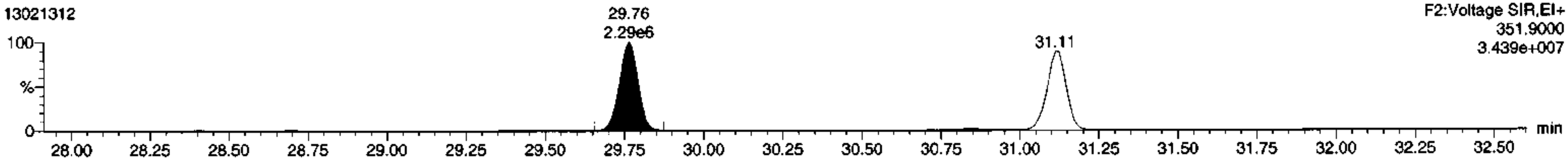
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld

Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time

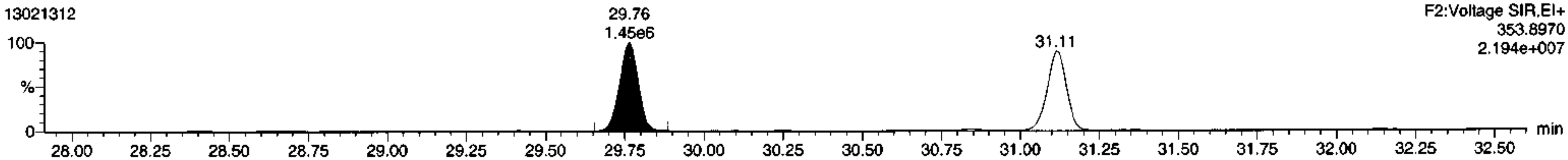
Printed: Thursday, February 14, 2013 10:56:17 Pacific Standard Time

ID: WC33E, Name: 13021312, Date: 13-Feb-2013, Time: 19:53:05, Conditions: AUTOSPEC01, User: pk

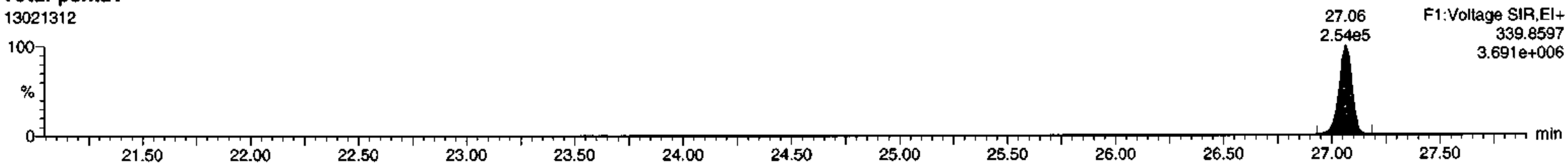
13C-12378-PeCDF



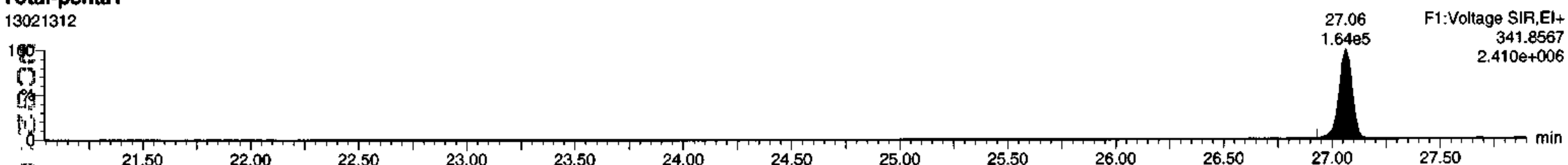
13C-12378-PeCDF



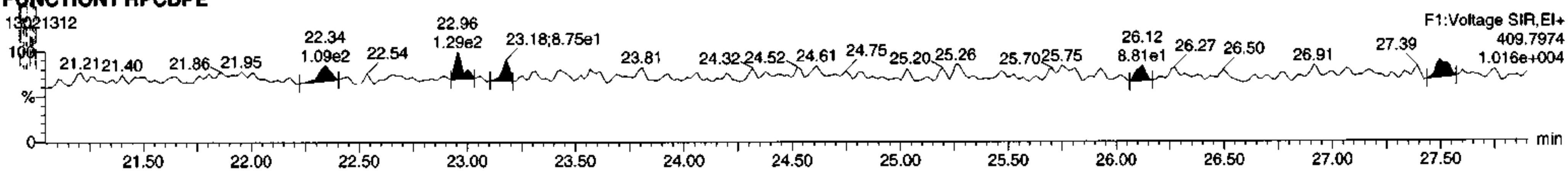
Total-penta1



Total-penta1



FUNCTION1 HPCDPE



Quantify Sample Report **MassLynx 4.1 SCN 714**

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
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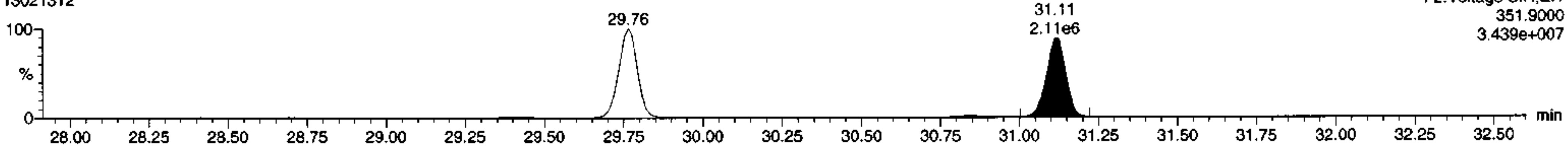
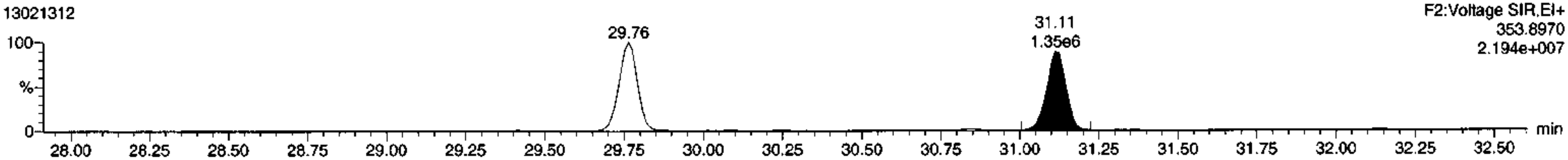
ID: WC33E, Name: 13021312, Date: 13-Feb-2013, Time: 19:53:05, Conditions: AUTOSPEC01, User: pk

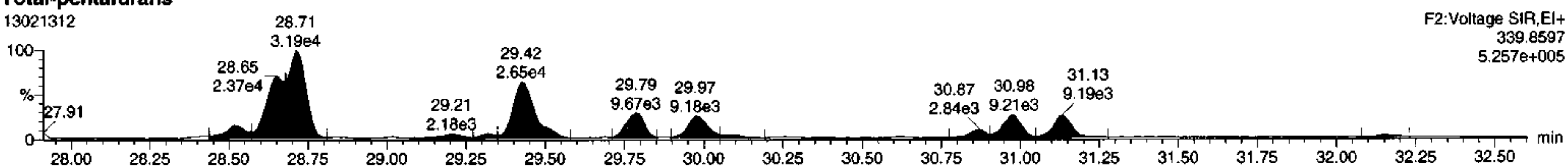
13C-23478-PeCDF
13021312



13C-23478-PeCDF
13021312



Total-pentafurans
13021312



Total-pentafurans
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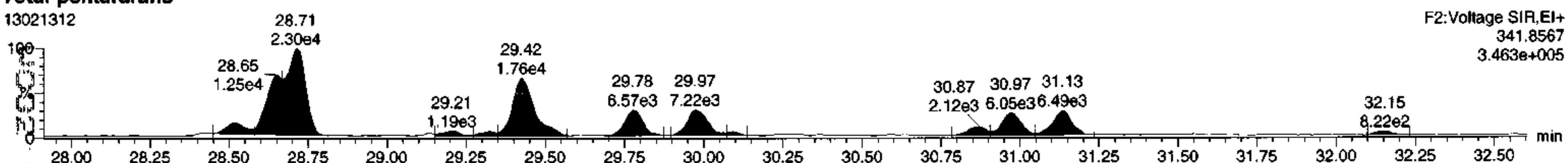
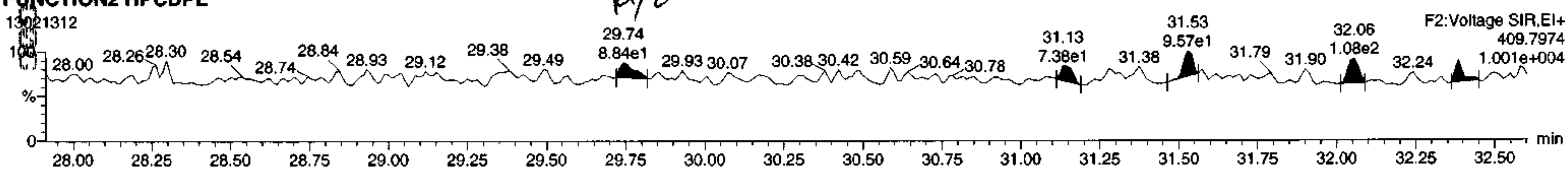


FUNCTION2 HPCDPE
13021312

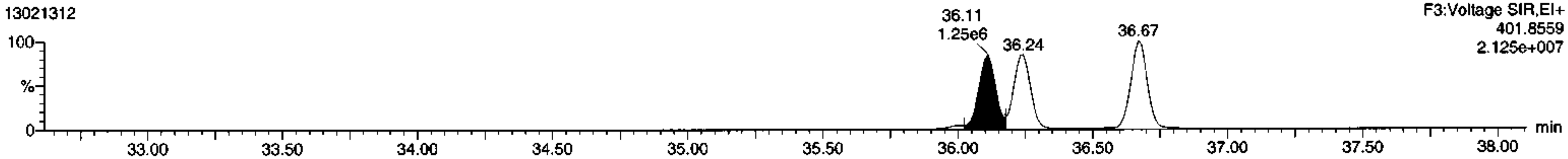
FI/c



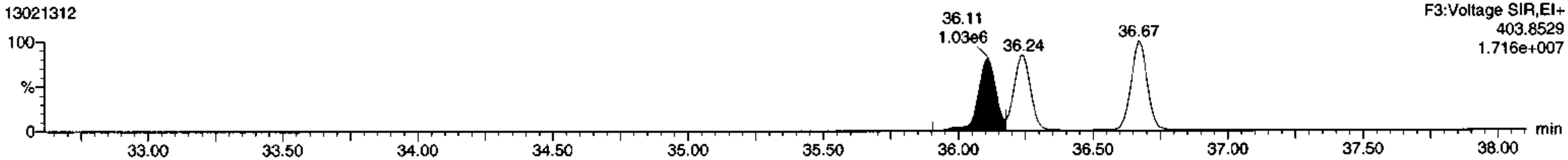
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:56:17 Pacific Standard Time

ID: WC33E, Name: 13021312, Date: 13-Feb-2013, Time: 19:53:05, Conditions: AUTOSPEC01, User: pk

13C-123478-HxCDD
13021312



13C-123478-HxCDD
13021312



Total-hexadioxins
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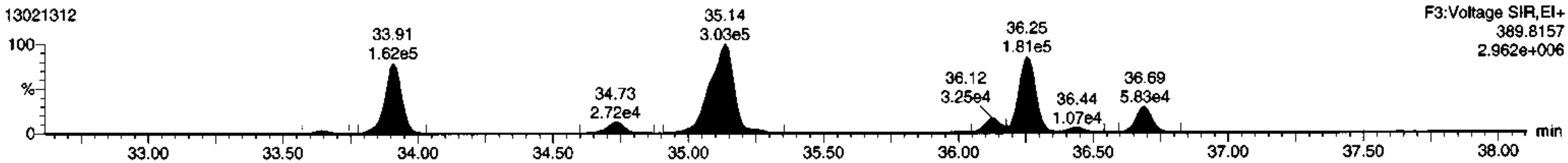

Total-hexadioxins
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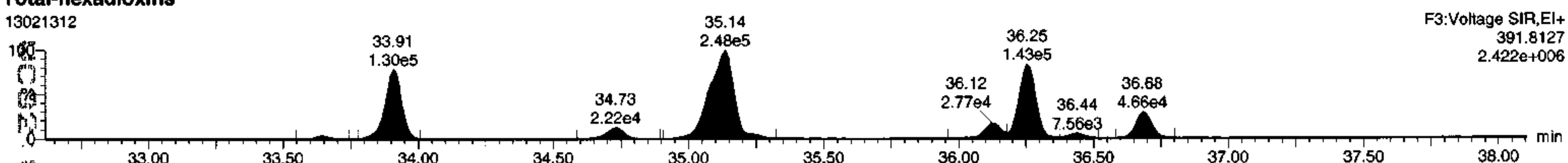
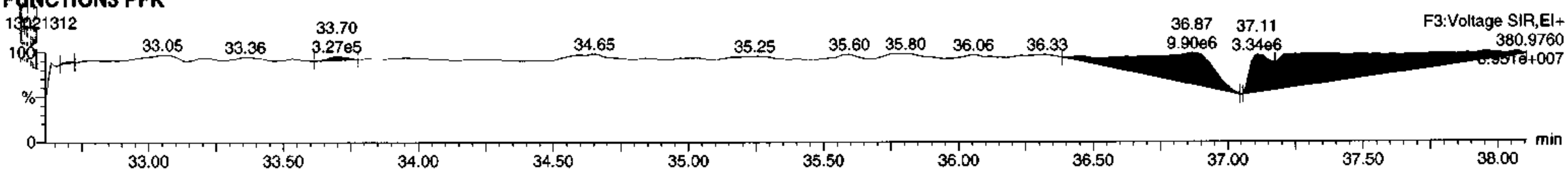


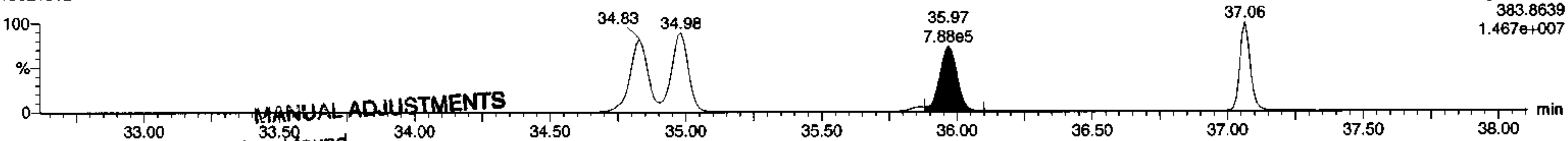
FUNCTION3 PFK
13021312



Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:56:17 Pacific Standard Time

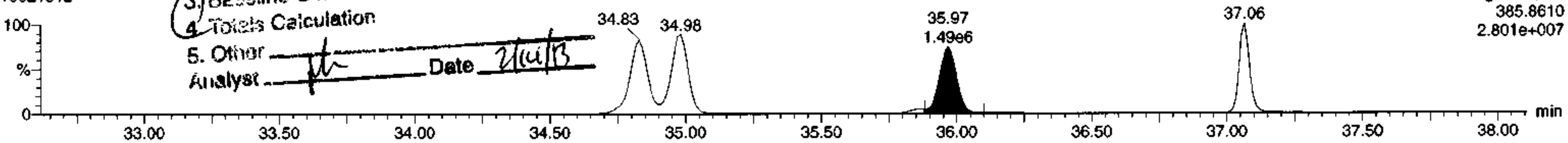
ID: WC33E, Name: 13021312, Date: 13-Feb-2013, Time: 19:53:05, Conditions: AUTOSPEC01, User: pk

13C-234678-HxCDF
13021312

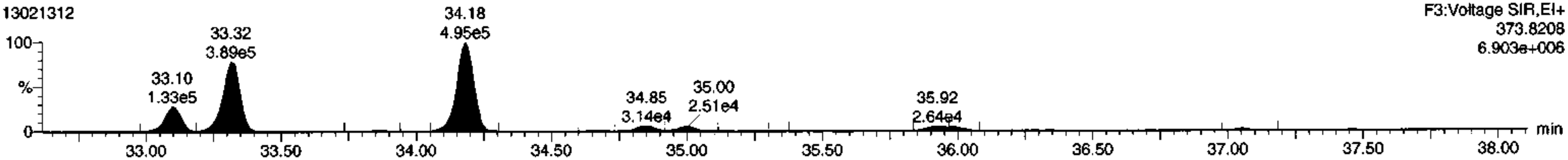


MANUAL ADJUSTMENTS
1. Peak not found
2. Poor Chromatography
3. Baseline Correction
4. Totals Calculation
5. Other
Analyst Date 2/14/13

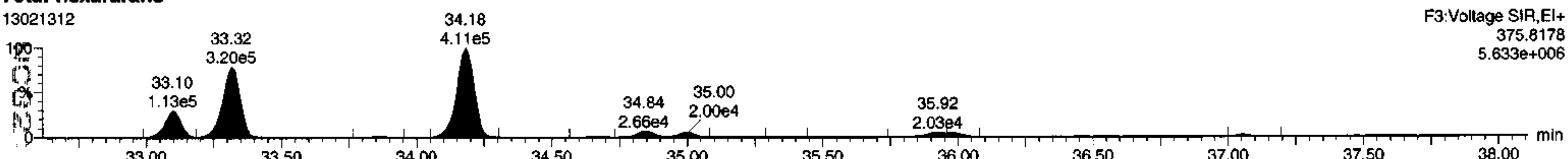
13C-234678-HxCDF
13021312



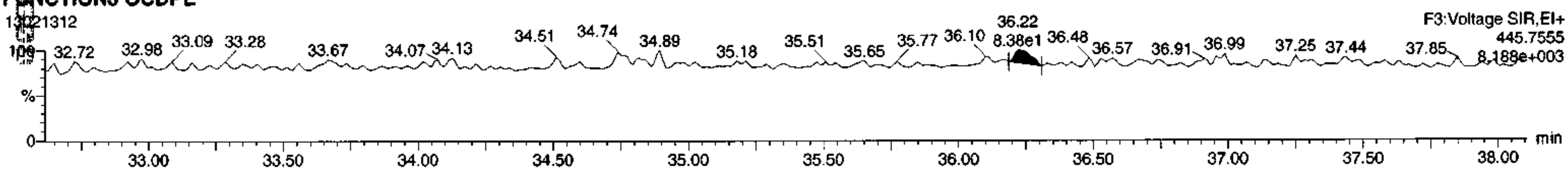
Total-hexafurans
13021312



Total-hexafurans
13021312



FUNCTION3 OCDPE
13021312



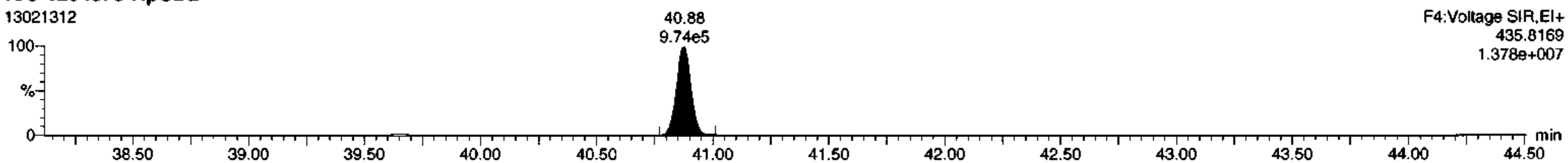
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld

Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time

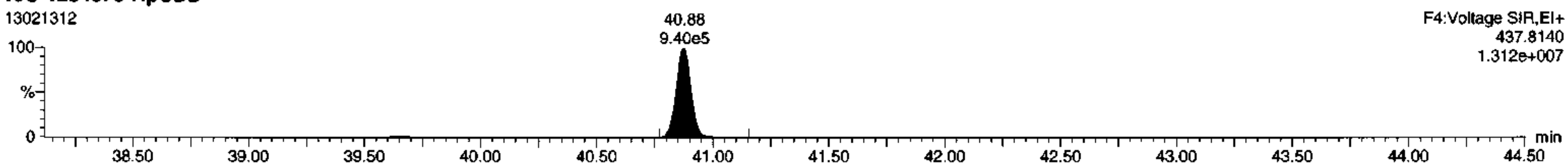
Printed: Thursday, February 14, 2013 10:56:17 Pacific Standard Time

ID: WC33E, Name: 13021312, Date: 13-Feb-2013, Time: 19:53:05, Conditions: AUTOSPEC01, User: pk

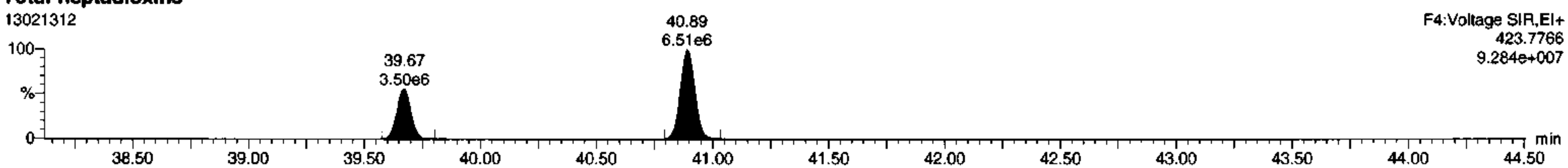
13C-1234678-HpCDD



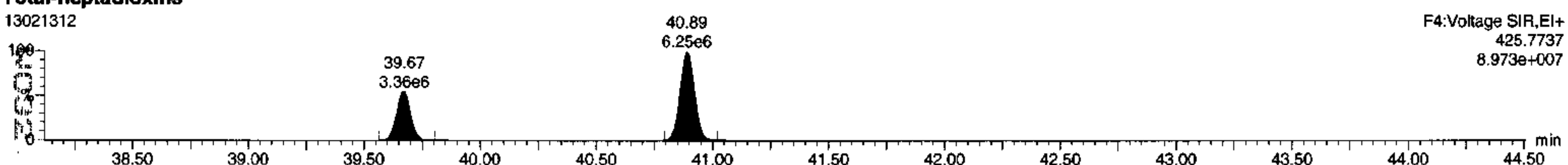
13C-1234678-HpCDD



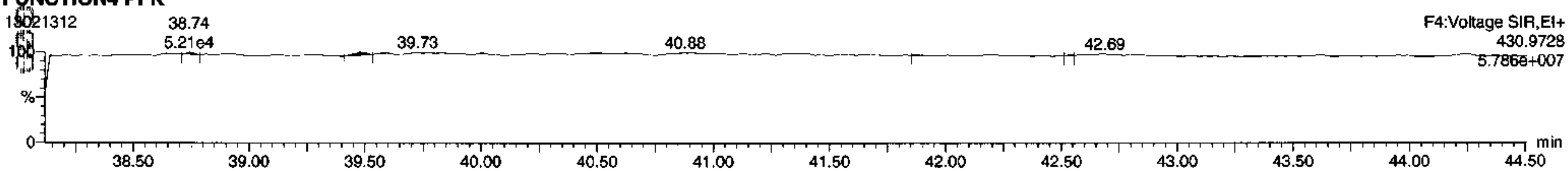
Total-heptadioxins



Total-heptadioxins



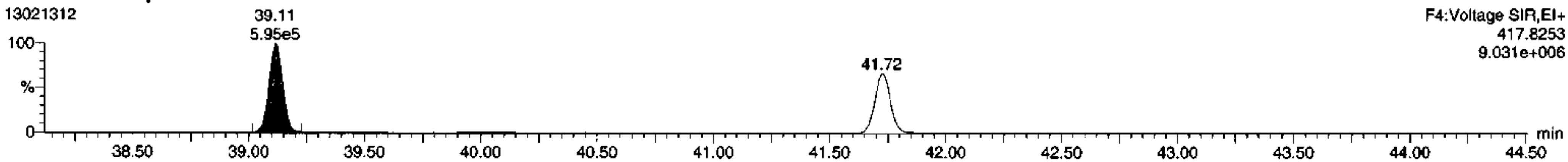
FUNCTION4 PFK



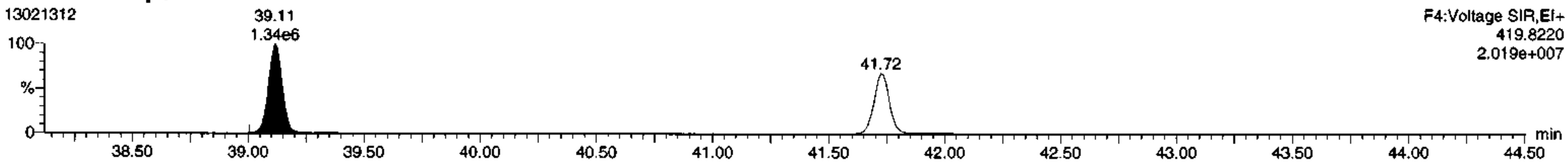
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:56:17 Pacific Standard Time

ID: WC33E, Name: 13021312, Date: 13-Feb-2013, Time: 19:53:05, Conditions: AUTOSPEC01, User: pk

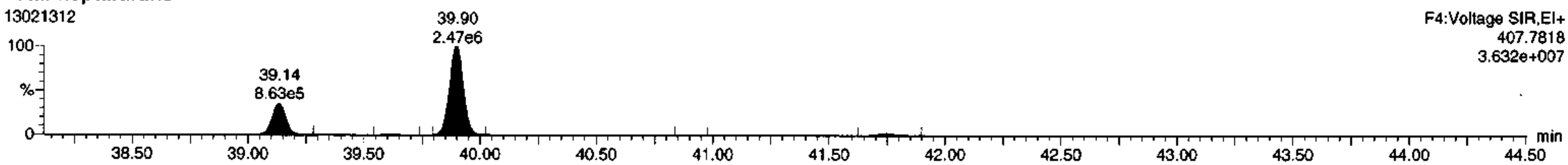
13C-1234678-HpCDF



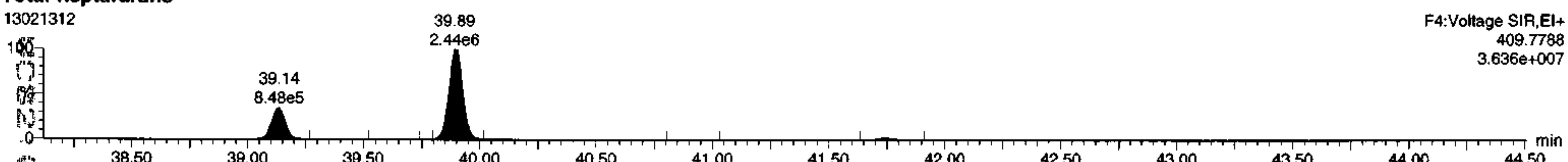
13C-1234678-HpCDF



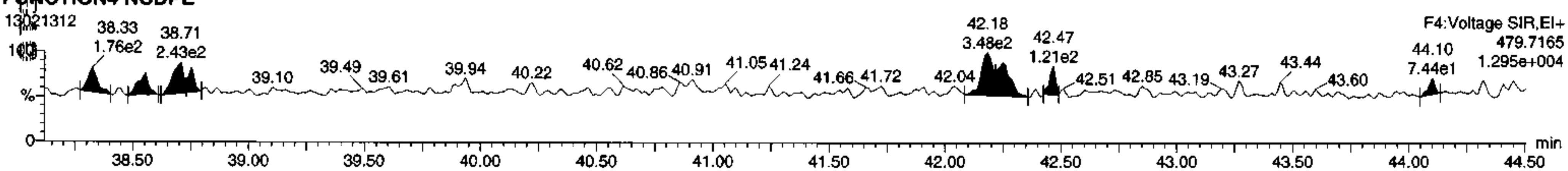
Total-heptafurans



Total-heptafurans



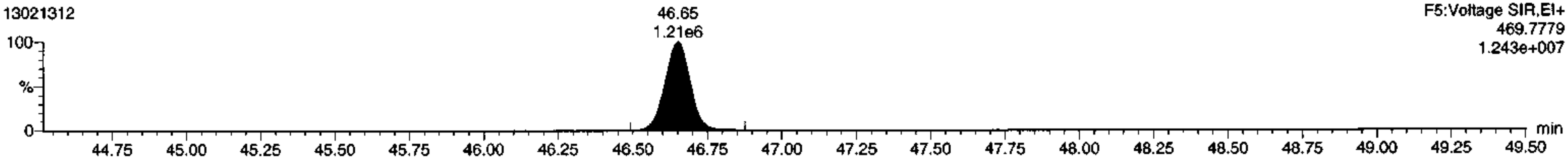
FUNCTION4 NCDPE



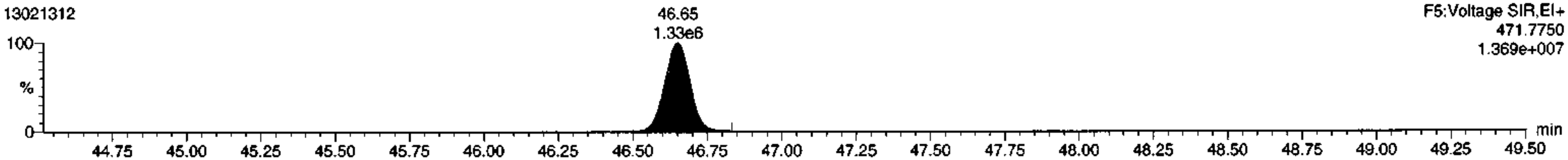
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:56:17 Pacific Standard Time

ID: WC33E, Name: 13021312, Date: 13-Feb-2013, Time: 19:53:05, Conditions: AUTOSPEC01, User: pk

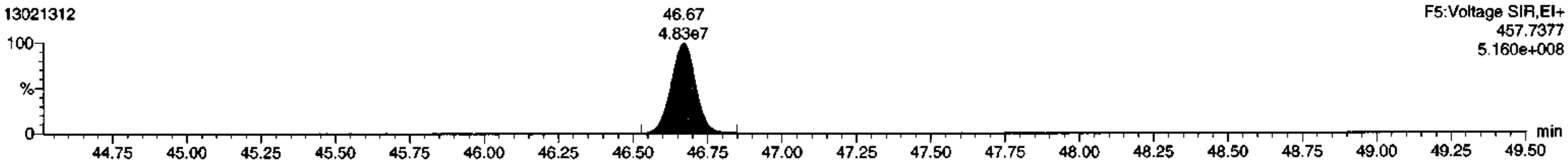
13C-OCDD



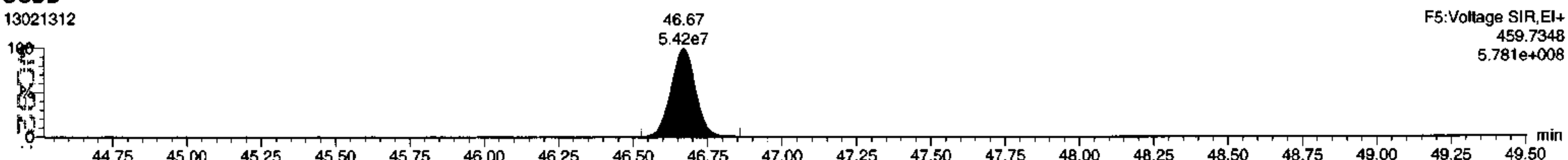
13C-OCDD



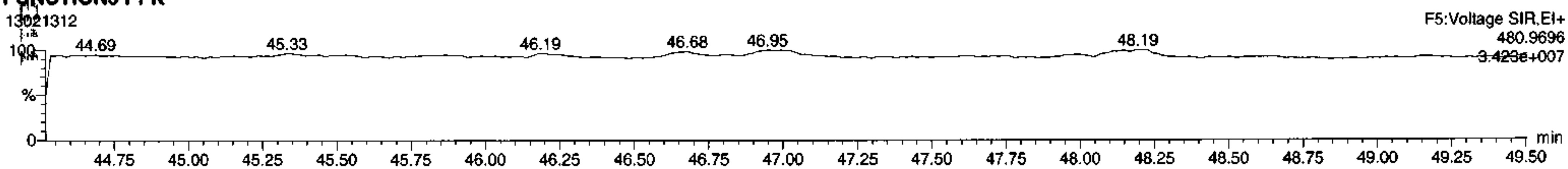
OCDD



OCDD



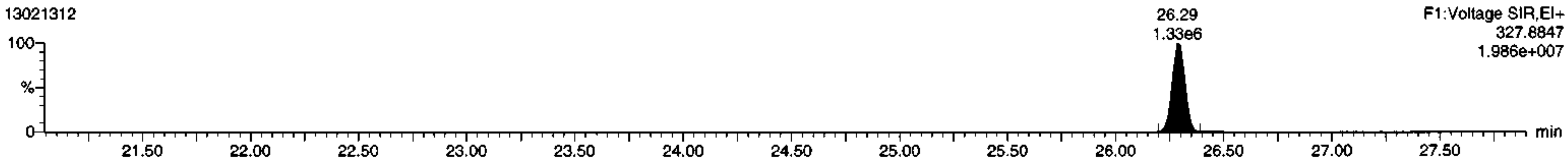
FUNCTION5 PFK



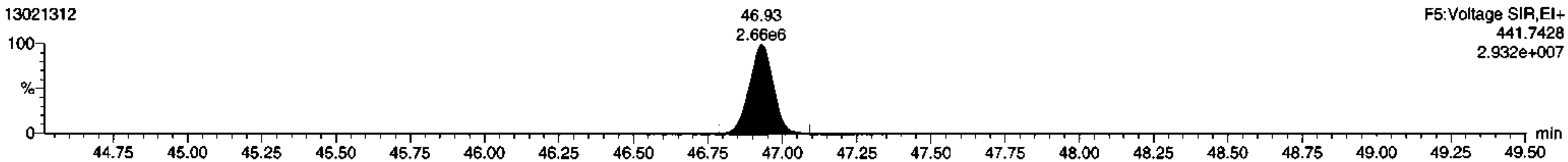
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:56:17 Pacific Standard Time

ID: WC33E, Name: 13021312, Date: 13-Feb-2013, Time: 19:53:05, Conditions: AUTOSPEC01, User: pk

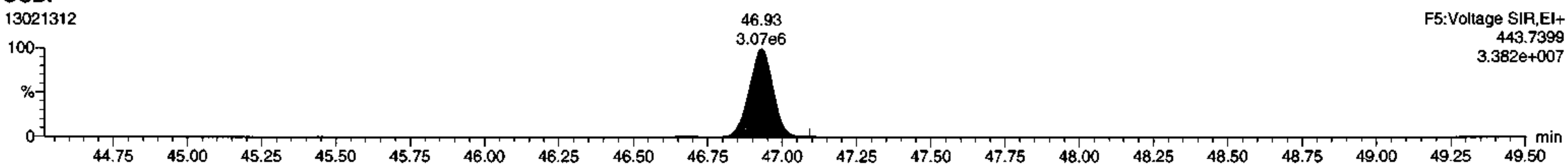
37CL-2378-TCDD



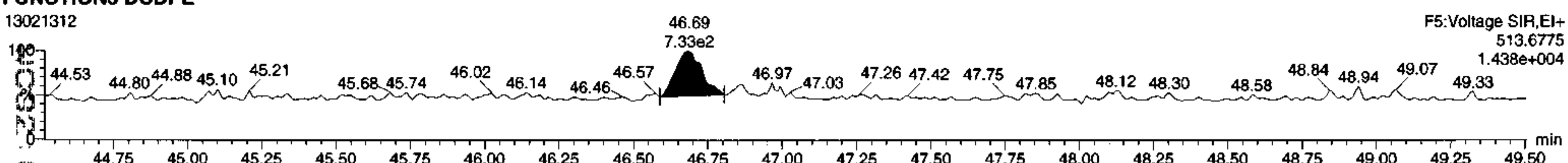
OCDF



OCDF



FUNCTION5 DCDPE



Quantify Sample Summary Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:56:40 Pacific Standard Time

Mh 2/14/13

Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 12 Feb 2013 12:25:57
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: WC33F, Name: 13021313, Date: 13-Feb-2013, Time: 20:45:50, Conditions: AUTOSPEC01, User: pk

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	2378-TCDF	25.645	1.001	1.17e4	1.57e4	0.921	0.748	0.770	95.9	1913	3225	1.84e5	2.20e5	NO	0.550	0.550
[redacted]	12378-PeCDF	29.775	1.001	8.03e3	5.54e3	0.912	1.451	1.550	71.7	1613	3103	1.16e5	8.08e4	NO	0.405	0.405 X
[redacted]	23478-PeCDF	31.124	1.001	1.11e4	6.43e3	0.943	1.724	1.550	97.9	1613	3103	1.58e5	9.58e4	NO	0.575	0.575
[redacted]	123478-HxCDF	34.807	1.001	2.26e4	1.80e4	1.101	1.254	1.240	136.5	2299	3398	3.14e5	2.61e5	NO	1.624	1.624
[redacted]	234678-HxCDF	35.936	1.000	1.86e4	1.58e4	1.073	1.180	1.240	106.9	2299	3398	2.46e5	1.94e5	NO	1.450	1.450
[redacted]	123678-HxCDF	34.949	1.000	2.06e4	1.59e4	1.056	1.298	1.240	125.2	2299	3398	2.88e5	2.27e5	NO	1.391	1.391
[redacted]	123789-HxCDF	37.010	1.000	4.75e3	4.81e3	1.017	0.987	1.240	35.4	2299	3398	8.14e4	8.44e4	YES	0.394	0.439
[redacted]	1234678-HpCDF	39.104	1.001	5.78e5	5.77e5	1.238	1.001	1.050	4564.0	1932	1795	8.82e6	8.57e6	NO	52.104	52.104
[redacted]	1234789-HpCDF	41.723	1.001	2.70e4	2.57e4	1.224	1.050	1.050	187.0	1932	1795	3.61e5	3.21e5	NO	3.056	3.056
[redacted]	OCDF	46.885	1.006	1.03e6	1.20e6	1.162	0.862	0.890	5635.2	1833	1694	1.03e7	1.21e7	NO	161.001	161.001
[redacted]	2378-TCDD	26.288	1.001	2.08e3	3.58e3	1.106	0.581	0.770	11.5	2935	1992	3.39e4	4.99e4	YES	0.153	0.181
[redacted]	12378-PeCDD	31.376	1.001	1.79e4	1.15e4	1.001	1.554	1.550	89.6	2567	1133	2.30e5	1.64e5	NO	1.419	1.419
[redacted]	123478-HxCDD	36.089	1.001	2.08e4	1.83e4	0.978	1.137	1.240	169.4	1573	1521	2.66e5	2.32e5	NO	1.894	1.894
[redacted]	123678-HxCDD	36.210	1.000	8.61e4	6.77e4	0.929	1.271	1.240	775.8	1573	1521	1.22e6	9.99e5	NO	8.221	8.221
[redacted]	123789-HxCDD	36.637	1.012	4.23e4	3.55e4	0.904	1.191	1.240	406.7	1573	1521	6.40e5	5.20e5	NO	4.172	4.172
[redacted]	1234678-HpCDD	40.857	1.000	2.34e6	2.25e6	1.029	1.039	1.050	6288.2	5171	5305	3.25e7	3.14e7	NO	256.094	256.094
[redacted]	OCDD	46.616	1.000	1.46e7	1.63e7	1.011	0.891	0.890	41107.1	3731	3968	1.53e8	1.73e8	NO	2564.374	2564.374 6
[redacted]	13C-2378-TCDF	25.630	1.007	2.37e6	3.04e6	1.522	0.777	0.770	12851.8	2796	2180	3.59e7	4.61e7	NO		89.109
[redacted]	13C-12378-PeCDF	29.754	1.169	2.24e6	1.43e6	1.185	1.561	1.550	14636.1	2306	1497	3.37e7	2.15e7	NO		77.560
[redacted]	13C-23478-PeCDF	31.102	1.222	1.98e6	1.26e6	1.136	1.569	1.550	12999.6	2306	1497	3.00e7	1.93e7	NO		71.368
[redacted]	13C-123478-HxCDF	34.785	0.950	7.76e5	1.50e6	1.284	0.517	0.510	4883.7	2162	2853	1.06e7	2.07e7	NO		69.325
[redacted]	13C-123678-HxCDF	34.938	0.954	8.55e5	1.63e6	1.383	0.524	0.510	5625.1	2162	2853	1.22e7	2.31e7	NO		70.402
[redacted]	13C-234678-HxCDF	35.925	0.981	7.60e5	1.45e6	1.283	0.525	0.510	4595.7	2162	2853	9.94e6	1.88e7	NO		67.379
[redacted]	13C-123789-HxCDF	37.021	1.011	7.32e5	1.41e6	1.099	0.519	0.510	7058.4	2162	2853	1.53e7	2.94e7	NO		76.262
[redacted]	13C-1234678-HpCDF	39.082	1.067	5.57e5	1.23e6	1.070	0.451	0.440	6758.0	1221	2952	8.25e6	1.86e7	NO		65.497
[redacted]	13C-1234789-HpCDF	41.701	1.139	4.39e5	9.70e5	0.774	0.452	0.440	4794.0	1221	2952	5.86e6	1.27e7	NO		71.274
[redacted]	13C-1234-TCDD	25.451	0.000	1.77e6	2.22e6	1.000	0.799	0.770	7039.0	3771	1852	2.65e7	3.29e7	NO		100.000
[redacted]	13C-2378-TCDD	26.258	1.032	1.24e6	1.59e6	0.943	0.782	0.770	4862.6	3771	1852	1.83e7	2.36e7	NO		75.323
[redacted]	13C-12378-PeCDD	31.354	1.232	1.26e6	8.06e5	0.715	1.567	1.550	12001.6	1572	1305	1.89e7	1.20e7	NO		72.516
[redacted]	13C-123478-HxCDD	36.067	0.985	1.18e6	9.36e5	1.032	1.259	1.240	6563.9	2379	1605	1.56e7	1.24e7	NO		80.157
[redacted]	13C-123678-HxCDD	36.199	0.988	1.12e6	8.92e5	1.076	1.256	1.240	6757.9	2379	1605	1.61e7	1.28e7	NO		73.195
[redacted]	13C-1234678-HpCDD	40.847	1.115	8.94e5	8.48e5	0.838	1.054	1.050	9449.9	1322	1377	1.25e7	1.18e7	NO		81.363
[redacted]	13C-OCDD	46.607	1.273	1.13e6	1.26e6	0.675	0.895	0.890	7221.3	1627	1638	1.17e7	1.31e7	NO		138.066

Quantify Sample Summary Report **MassLynx 4.1 SCN 714**

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld

Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time

Printed: Thursday, February 14, 2013 10:56:40 Pacific Standard Time

ID: WC33F, Name: 13021313, Date: 13-Feb-2013, Time: 20:45:50, Conditions: AUTOSPEC01, User: pk

	13C-123789-HxCDD	36.626	0.000	1.42e6	1.13e6	1.000	1.253	1.240	8768.6	2379	1605	2.09e7	1.67e7	NO		100.000	
	Total-tetrafurans			1.55e5		0.921				1913		2.13e6				7.108	fr
	Total-penta1			2.11e5						1017		3.06e6				10.948	
	Total-pentafurans			1.52e5		0.927				1613		2.13e6				7.985	
	Total-hexafurans			7.49e5		1.062				2299		1.09e7				56.648	
	Total-heptafurans			1.80e6		1.231				1932		2.66e7				175.578	
	Total-Furans			4.10e6		1.065				1913		5.52e7				419.293	
	Total-tetradioxins			6.25e4		1.106				2935		9.32e5				4.378	fr
	Total-pentadioxins			1.14e5		1.001				2567		1.67e6				9.045	fr
	Total-hexadioxins			4.65e5		0.937				1573		5.79e6				43.743	
	Total-heptadioxins			3.80e6		1.029				5171		5.43e7				417.128	
	Total-Dioxins			1.90e7		0.994				2935		2.16e8				3038.690	
	Total-TEQ			2.31e7						2935		2.71e8				3457.983	
	37CL-2378-TCDD	26.288	1.033	1.29e6		1.051			9700.8	1996		1.94e7				30.829	
	FUNCTION1 PFK			2.16e7						777603		2.48e8					
	FUNCTION2 PFK			3.75e6						358456		2.21e7				0.000	
	FUNCTION3 PFK			2.17e7						543763		1.49e8				0.000	
	FUNCTION4 PFK			5.68e5						369669		8.64e6					
	FUNCTION5 PFK			5.49e6						319519		9.07e6					
	FUNCTION1 HXCDPE			3.80e2						506		6.07e3				0.000	
	FUNCTION1 HPCDPE			8.36e2						952		1.58e4				0.000	
	FUNCTION2 HPCDPE			1.03e3						1123		2.57e4				0.000	
	FUNCTION3 OCDPE			4.16e2						619		7.24e3				0.000	
	FUNCTION4 NCDPE			1.39e3						819		1.60e4				0.000	
	FUNCTION5 DCDPE			1.52e2						472		1.80e3				0.000	

CC2 : 01614

Quantify Totals Report MassLynx 4.1 SCN 714
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:56:40 Pacific Standard Time

Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 12 Feb 2013 12:25:57
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: WC33F, Name: 13021313, Date: 13-Feb-2013, Time: 20:45:50, Conditions: AUTOSPEC01, User: pk

TF

[redacted]												
[redacted]	35	Total-tetrafurans	303.9016	24.55	36031.035	0.921	0.723		0.85	0.77	NO	116.4
[redacted]	35	Total-tetrafurans	303.9016	24.39	11293.283	0.921	0.227		0.82	0.77	NO	40.8
[redacted]	35	Total-tetrafurans	303.9016	24.32	27655.046	0.921	0.555		0.81	0.77	NO	66.4
[redacted]	35	Total-tetrafurans	303.9016	23.88	8890.053	0.921	0.178		0.78	0.77	NO	27.5
[redacted]	35	Total-tetrafurans	303.9016	23.75	6395.422	0.921	0.128		0.76	0.77	NO	26.0
[redacted]	35	Total-tetrafurans	303.9016	23.66	14345.741	0.921	0.288		0.72	0.77	NO	45.1
[redacted]	35	Total-tetrafurans	303.9016	23.49	7442.133	0.921	0.149		0.77	0.77	NO	26.1
[redacted]	35	Total-tetrafurans	303.9016	23.40	8574.570	0.921	0.172		0.81	0.77	NO	29.8
[redacted]	35	Total-tetrafurans	303.9016	23.30	13338.796	0.921	0.268		0.83	0.77	NO	44.0
[redacted]	35	Total-tetrafurans	303.9016	23.18	17357.886	0.921	0.348		0.79	0.77	NO	46.2
[redacted]	35	Total-tetrafurans	303.9016	23.14	11746.405	0.921	0.236		0.81	0.77	NO	45.5
[redacted]	35	Total-tetrafurans	303.9016	23.00	49736.568	0.921	0.998		0.72	0.77	NO	153.7
[redacted]	35	Total-tetrafurans	303.9016	22.42	10485.722	0.921	0.210		0.69	0.77	NO	31.5
[redacted]	35	Total-tetrafurans	303.9016	22.16	7072.011	0.921	0.142		0.90	0.77	YES	27.9
[redacted]	35	Total-tetrafurans	303.9016	27.08	6017.165	0.921	0.121		0.92	0.77	YES	17.1
[redacted]	35	Total-tetrafurans	303.9016	25.87	26009.197	0.921	0.522		0.74	0.77	NO	81.7
[redacted]	35	Total-tetrafurans	303.9016	25.78	11835.294	0.921	0.237		0.83	0.77	NO	42.9
[redacted]	1	2378-TCDF	303.9016	25.65	27394.216	0.921	0.550	0.550	0.75	0.77	NO	95.9
[redacted]	35	Total-tetrafurans	303.9016	25.41	18267.939	0.921	0.367		0.72	0.77	NO	35.3
[redacted]	35	Total-tetrafurans	303.9016	25.29	2039.269	0.921	0.041		1.12	0.77	YES	8.6
[redacted]	35	Total-tetrafurans	303.9016	25.14	11043.959	0.921	0.222		0.76	0.77	NO	37.3
[redacted]	35	Total-tetrafurans	303.9016	24.94	8544.327	0.921	0.171		0.72	0.77	NO	25.7
[redacted]	35	Total-tetrafurans	303.9016	24.73	12754.681	0.921	0.256		0.77	0.77	NO	43.3

PP

[redacted]												
[redacted]	36	Total-penta1	339.8597	27.06	346458.641		10.948		1.55	1.55	NO	3012.3

PF

[redacted]												
[redacted]	37	Total-pentafurans	339.8597	29.30	4257.126	0.927	0.133		1.48	1.55	NO	29.0
[redacted]	37	Total-pentafurans	339.8597	29.21	10064.158	0.927	0.314		1.44	1.55	NO	53.3
[redacted]	37	Total-pentafurans	339.8597	29.01	1972.607	0.927	0.062		1.88	1.55	YES	11.6
[redacted]	37	Total-pentafurans	339.8597	28.71	53009.520	0.927	1.656		1.48	1.55	NO	274.8
[redacted]	37	Total-pentafurans	339.8597	28.65	35755.622	0.927	1.117		1.36	1.55	NO	210.9
[redacted]	37	Total-pentafurans	339.8597	28.50	21754.194	0.927	0.680		1.41	1.55	NO	79.9
[redacted]	37	Total-pentafurans	339.8597	32.12	1078.139	0.927	0.034		1.80	1.55	YES	5.3
[redacted]	3	23478-PeCDF	339.8597	31.12	17525.631	0.943	0.575	0.575	1.72	1.55	NO	97.9
[redacted]	37	Total-pentafurans	339.8597	30.96	14580.736	0.927	0.456		1.38	1.55	NO	81.4
[redacted]	37	Total-pentafurans	339.8597	30.85	15747.704	0.927	0.492		1.44	1.55	NO	85.5
[redacted]	37	Total-pentafurans	339.8597	30.07	7544.106	0.927	0.236		1.50	1.55	NO	43.7
[redacted]	37	Total-pentafurans	339.8597	29.97	15468.529	0.927	0.483		1.35	1.55	NO	88.6
[redacted]	2	12378-PeCDF	339.8597	29.78	13568.164	0.912	0.405	0.405	1.45	1.55	NO	71.7
[redacted]	37	Total-pentafurans	339.8597	29.41	42973.506	0.927	1.343		1.52	1.55	NO	185.4

Quantify Totals Report MassLynx 4.1 SCN 714
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
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HF

	5	234678-HxCDF	373.8208	35.94	34364.321	1.073	1.450	1.450	1.18	1.24	NO	106.9
	38	Total-hexafurans	373.8208	35.88	20542.655	1.062	0.849		1.18	1.24	NO	85.3
	38	Total-hexafurans	373.8208	35.32	2286.546	1.062	0.095		1.15	1.24	NO	8.6
	6	123678-HxCDF	373.8208	34.95	36535.636	1.056	1.391	1.391	1.30	1.24	NO	125.2
	4	123478-HxCDF	373.8208	34.81	40669.119	1.101	1.624	1.624	1.25	1.24	NO	136.5
	38	Total-hexafurans	373.8208	34.64	13296.800	1.062	0.550		1.23	1.24	NO	43.7
	38	Total-hexafurans	373.8208	34.15	473956.718	1.062	19.594		1.20	1.24	NO	1651.8
	38	Total-hexafurans	373.8208	33.83	9196.694	1.062	0.380		1.30	1.24	NO	31.5
	38	Total-hexafurans	373.8208	33.56	1212.119	1.062	0.050		0.98	1.24	YES	5.3
	38	Total-hexafurans	373.8208	33.29	535518.344	1.062	22.139		1.20	1.24	NO	1831.3
	38	Total-hexafurans	373.8208	33.08	195609.492	1.062	8.087		1.20	1.24	NO	691.0
	7	123789-HxCDF	373.8208	37.01	9563.929	1.017	0.439	0.394	0.99	1.24	YES	35.4

HPF

	39	Total-heptafurans	407.7818	40.87	2572.931	1.231	0.131		1.00	1.05	NO	10.3
	39	Total-heptafurans	407.7818	39.87	2353873.875	1.231	119.581		1.02	1.05	NO	8938.7
	39	Total-heptafurans	407.7818	39.58	13891.950	1.231	0.706		0.99	1.05	NO	48.6
	8	1234678-HpCDF	407.7818	39.10	1154504.500	1.238	52.104	52.104	1.00	1.05	NO	4564.0
	9	1234789-HpCDF	407.7818	41.72	52684.467	1.224	3.056	3.056	1.05	1.05	NO	187.0

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
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Furans,TF,PP,PF,HF,HPF,OF

[redacted]											
[redacted]	35 Total-tetrafurans	303.9016	24.55	36031.035	0.921	0.723		0.85	0.77	NO	116.4
[redacted]	35 Total-tetrafurans	303.9016	24.39	11293.283	0.921	0.227		0.82	0.77	NO	40.8
[redacted]	35 Total-tetrafurans	303.9016	24.32	27655.046	0.921	0.555		0.81	0.77	NO	66.4
[redacted]	35 Total-tetrafurans	303.9016	23.88	8890.053	0.921	0.178		0.78	0.77	NO	27.5
[redacted]	35 Total-tetrafurans	303.9016	23.75	6395.422	0.921	0.128		0.76	0.77	NO	26.0
[redacted]	35 Total-tetrafurans	303.9016	23.66	14345.741	0.921	0.288		0.72	0.77	NO	45.1
[redacted]	35 Total-tetrafurans	303.9016	23.49	7442.133	0.921	0.149		0.77	0.77	NO	26.1
[redacted]	35 Total-tetrafurans	303.9016	23.40	8574.570	0.921	0.172		0.81	0.77	NO	29.8
[redacted]	35 Total-tetrafurans	303.9016	23.30	13338.796	0.921	0.268		0.83	0.77	NO	44.0
[redacted]	35 Total-tetrafurans	303.9016	23.18	17357.886	0.921	0.348		0.79	0.77	NO	46.2
[redacted]	35 Total-tetrafurans	303.9016	23.14	11746.405	0.921	0.236		0.81	0.77	NO	45.5
[redacted]	35 Total-tetrafurans	303.9016	23.00	49736.568	0.921	0.998		0.72	0.77	NO	153.7
[redacted]	35 Total-tetrafurans	303.9016	22.42	10485.722	0.921	0.210		0.69	0.77	NO	31.5
[redacted]	35 Total-tetrafurans	303.9016	22.16	7072.011	0.921	0.142		0.90	0.77	YES	27.9
[redacted]	40 Total-Furans	303.9016	27.75	1370.484	1.065	0.024		0.50	0.77	YES	3.6
[redacted]	35 Total-tetrafurans	303.9016	27.08	6017.165	0.921	0.121		0.92	0.77	YES	17.1
[redacted]	35 Total-tetrafurans	303.9016	25.87	26009.197	0.921	0.522		0.74	0.77	NO	81.7
[redacted]	35 Total-tetrafurans	303.9016	25.78	11835.294	0.921	0.237		0.83	0.77	NO	42.9
[redacted]	1 2378-TCDF	303.9016	25.65	27394.216	0.921	0.550	0.550	0.75	0.77	NO	95.9
[redacted]	35 Total-tetrafurans	303.9016	25.41	18267.939	0.921	0.367		0.72	0.77	NO	35.3
[redacted]	35 Total-tetrafurans	303.9016	25.29	2039.269	0.921	0.041		1.12	0.77	YES	8.6
[redacted]	35 Total-tetrafurans	303.9016	25.14	11043.959	0.921	0.222		0.76	0.77	NO	37.3
[redacted]	35 Total-tetrafurans	303.9016	24.94	8544.327	0.921	0.171		0.72	0.77	NO	25.7
[redacted]	35 Total-tetrafurans	303.9016	24.73	12754.681	0.921	0.256		0.77	0.77	NO	43.3
[redacted]	37 Total-pentafurans	339.8597	29.30	4257.126	0.927	0.133		1.48	1.55	NO	29.0
[redacted]	37 Total-pentafurans	339.8597	29.21	10064.158	0.927	0.314		1.44	1.55	NO	53.3
[redacted]	37 Total-pentafurans	339.8597	29.01	1972.607	0.927	0.062		1.88	1.55	YES	11.6
[redacted]	37 Total-pentafurans	339.8597	28.71	53009.520	0.927	1.656		1.48	1.55	NO	274.8
[redacted]	37 Total-pentafurans	339.8597	28.65	35755.622	0.927	1.117		1.36	1.55	NO	210.9
[redacted]	37 Total-pentafurans	339.8597	28.50	21754.194	0.927	0.680		1.41	1.55	NO	79.9
[redacted]	37 Total-pentafurans	339.8597	32.12	1078.139	0.927	0.034		1.80	1.55	YES	5.3
[redacted]	3 23478-PeCDF	339.8597	31.12	17525.631	0.943	0.575	0.575	1.72	1.55	NO	97.9
[redacted]	37 Total-pentafurans	339.8597	30.96	14580.736	0.927	0.456		1.38	1.55	NO	81.4
[redacted]	37 Total-pentafurans	339.8597	30.85	15747.704	0.927	0.492		1.44	1.55	NO	85.5
[redacted]	37 Total-pentafurans	339.8597	30.07	7544.106	0.927	0.236		1.50	1.55	NO	43.7
[redacted]	37 Total-pentafurans	339.8597	29.97	15468.529	0.927	0.483		1.35	1.55	NO	88.6
[redacted]	2 12378-PeCDF	339.8597	29.78	13568.164	0.912	0.405	0.405	1.45	1.55	NO	71.7
[redacted]	37 Total-pentafurans	339.8597	29.41	42973.506	0.927	1.343		1.52	1.55	NO	185.4
[redacted]	5 234678-HxCDF	373.8208	35.94	34364.321	1.073	1.450	1.450	1.18	1.24	NO	106.9
[redacted]	38 Total-hexafurans	373.8208	35.88	20542.655	1.062	0.849		1.18	1.24	NO	85.3
[redacted]	38 Total-hexafurans	373.8208	35.32	2286.546	1.062	0.095		1.15	1.24	NO	8.6
[redacted]	6 123678-HxCDF	373.8208	34.95	36535.636	1.056	1.391	1.391	1.30	1.24	NO	125.2
[redacted]	4 123478-HxCDF	373.8208	34.81	40669.119	1.101	1.624	1.624	1.25	1.24	NO	136.5
[redacted]	38 Total-hexafurans	373.8208	34.64	13296.800	1.062	0.550		1.23	1.24	NO	43.7
[redacted]	38 Total-hexafurans	373.8208	34.15	473956.718	1.062	19.594		1.20	1.24	NO	1651.8
[redacted]	38 Total-hexafurans	373.8208	33.83	9196.694	1.062	0.380		1.30	1.24	NO	31.5
[redacted]	38 Total-hexafurans	373.8208	33.56	1212.119	1.062	0.050		0.98	1.24	YES	5.3
[redacted]	38 Total-hexafurans	373.8208	33.29	535518.344	1.062	22.139		1.20	1.24	NO	1831.3
[redacted]	38 Total-hexafurans	373.8208	33.08	195609.492	1.062	8.087		1.20	1.24	NO	[illegible]

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Furans,TF,PP,PF,HF,HPF,OF

[redacted]												
[redacted]	7 123789-HxCDF	373.8208	37.01	9563.929	1.017	0.439	0.394	0.99	1.24	YES	35.4	
[redacted]	39 Total-heptafurans	407.7818	40.87	2572.931	1.231	0.131		1.00	1.05	NO	10.3	
[redacted]	39 Total-heptafurans	407.7818	39.87	2353873.875	1.231	119.581		1.02	1.05	NO	8938.7	
[redacted]	39 Total-heptafurans	407.7818	39.58	13891.950	1.231	0.706		0.99	1.05	NO	48.6	
[redacted]	8 1234678-HpCDF	407.7818	39.10	1154504.500	1.238	52.104	52.104	1.00	1.05	NO	4564.0	
[redacted]	9 1234789-HpCDF	407.7818	41.72	52684.467	1.224	3.056	3.056	1.05	1.05	NO	187.0	
[redacted]	10 OCDF	441.7428	46.89	2229245.188	1.162	161.001	161....	0.86	0.89	NO	5635.2	
[redacted]	36 Total-penta1	339.8597	27.06	346458.641		10.948		1.55	1.55	NO	3012.3	

TD

[redacted]												
[redacted]	41 Total-tetradioxins	319.8965	23.91	2806.563	1.106	0.090		0.66	0.77	NO	6.1	
[redacted]	41 Total-tetradioxins	319.8965	23.70	26112.428	1.106	0.833		0.88	0.77	NO	63.4	
[redacted]	41 Total-tetradioxins	319.8965	23.43	45504.230	1.106	1.452		0.81	0.77	NO	112.2	
[redacted]	41 Total-tetradioxins	319.8965	26.87	1668.272	1.106	0.053		0.93	0.77	YES	4.0	
[redacted]	41 Total-tetradioxins	319.8965	26.41	5203.625	1.106	0.166		0.90	0.77	YES	13.1	
[redacted]	11 2378-TCDD	319.8965	26.29	5666.365	1.106	0.181	0.153	0.58	0.77	YES	11.5	R
[redacted]	41 Total-tetradioxins	319.8965	25.90	9908.272	1.106	0.316		0.76	0.77	NO	14.6	
[redacted]	41 Total-tetradioxins	319.8965	25.62	2823.468	1.106	0.090		1.86	0.77	YES	9.7	
[redacted]	41 Total-tetradioxins	319.8965	25.48	9583.031	1.106	0.306		0.85	0.77	NO	18.9	
[redacted]	41 Total-tetradioxins	319.8965	25.26	2948.617	1.106	0.094		0.93	0.77	YES	7.8	
[redacted]	41 Total-tetradioxins	319.8965	25.15	1694.323	1.106	0.054		0.61	0.77	YES	4.2	
[redacted]	41 Total-tetradioxins	319.8965	24.91	13655.854	1.106	0.436		0.77	0.77	NO	29.9	
[redacted]	41 Total-tetradioxins	319.8965	24.61	8195.578	1.106	0.261		0.98	0.77	YES	18.1	
[redacted]	41 Total-tetradioxins	319.8965	24.42	1447.223	1.106	0.046		1.33	0.77	YES	4.0	

PD

[redacted]												
[redacted]	42 Total-pentadioxins	355.8546	31.77	6186.789	1.001	0.299		1.55	1.55	NO	19.9	
[redacted]	12 12378-PeCDD	355.8546	31.38	29406.855	1.001	1.419	1.419	1.55	1.55	NO	89.6	
[redacted]	42 Total-pentadioxins	355.8546	30.71	11687.101	1.001	0.564		1.65	1.55	NO	38.4	
[redacted]	42 Total-pentadioxins	355.8546	30.32	13118.563	1.001	0.633		1.45	1.55	NO	29.8	
[redacted]	42 Total-pentadioxins	355.8546	30.13	27914.301	1.001	1.347		1.61	1.55	NO	95.2	
[redacted]	42 Total-pentadioxins	355.8546	29.99	20588.909	1.001	0.994		1.54	1.55	NO	70.1	
[redacted]	42 Total-pentadioxins	355.8546	29.79	31790.531	1.001	1.534		1.54	1.55	NO	117.9	R
[redacted]	42 Total-pentadioxins	355.8546	29.17	7914.123	1.001	0.382		1.94	1.55	YES	32.2	
[redacted]	42 Total-pentadioxins	355.8546	28.70	19152.716	1.001	0.924		1.85	1.55	YES	83.9	
[redacted]	42 Total-pentadioxins	355.8546	28.67	19643.770	1.001	0.948		1.22	1.55	YES	74.7	

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HD

[illegible]	15	123789-HxCDD	389.8157	36.64	77852.078	0.904	4.172	4.172	1.19	1.24	NO	406.7
[illegible]	43	Total-hexadioxins	389.8157	36.39	11134.784	0.937	0.576		1.20	1.24	NO	58.9
[illegible]	14	123678-HxCDD	389.8157	36.21	153808.860	0.929	8.221	8.221	1.27	1.24	NO	775.8
[illegible]	13	123478-HxCDD	389.8157	36.09	39154.719	0.978	1.894	1.894	1.14	1.24	NO	169.4
[illegible]	43	Total-hexadioxins	389.8157	35.09	296432.610	0.937	15.329		1.25	1.24	NO	969.5
[illegible]	43	Total-hexadioxins	389.8157	34.70	97539.558	0.937	5.044		1.25	1.24	NO	462.7
[illegible]	43	Total-hexadioxins	389.8157	33.88	145882.656	0.937	7.544		1.23	1.24	NO	739.2
[illegible]	43	Total-hexadioxins	389.8157	33.65	18617.432	0.937	0.963		1.21	1.24	NO	98.7

HPD

[illegible]	16	1234678-HpCDD	423.7766	40.86	4587858.250	1.029	256.094	256....	1.04	1.05	NO	6288.2
[illegible]	44	Total-heptadioxins	423.7766	39.63	2884886.750	1.029	161.034		1.03	1.05	NO	4221.6

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Dioxins,TD,PD,HD,HPD,OD

[redacted]												
[redacted]	41	Total-tetradioxins	319.8965	23.91	2806.563	1.106	0.090		0.66	0.77	NO	6.1
[redacted]	41	Total-tetradioxins	319.8965	23.70	26112.428	1.106	0.833		0.88	0.77	NO	63.4
[redacted]	41	Total-tetradioxins	319.8965	23.43	45504.230	1.106	1.452		0.81	0.77	NO	112.2
[redacted]	45	Total-Dioxins	319.8965	22.82	645.987	0.994	0.023		1.58	0.77	YES	2.1
[redacted]	41	Total-tetradioxins	319.8965	26.87	1668.272	1.106	0.053		0.93	0.77	YES	4.0
[redacted]	41	Total-tetradioxins	319.8965	26.41	5203.625	1.106	0.166		0.90	0.77	YES	13.1
[redacted]	11	2378-TCDD	319.8965	26.29	5666.365	1.106	0.181	0.153	0.58	0.77	YES	11.5
[redacted]	41	Total-tetradioxins	319.8965	25.90	9908.272	1.106	0.316		0.76	0.77	NO	14.6
[redacted]	41	Total-tetradioxins	319.8965	25.62	2823.468	1.106	0.090		1.86	0.77	YES	9.7
[redacted]	41	Total-tetradioxins	319.8965	25.48	9583.031	1.106	0.306		0.85	0.77	NO	18.9
[redacted]	41	Total-tetradioxins	319.8965	25.26	2948.617	1.106	0.094		0.93	0.77	YES	7.8
[redacted]	41	Total-tetradioxins	319.8965	25.15	1694.323	1.106	0.054		0.61	0.77	YES	4.2
[redacted]	41	Total-tetradioxins	319.8965	24.91	13655.854	1.106	0.436		0.77	0.77	NO	29.9
[redacted]	41	Total-tetradioxins	319.8965	24.61	8195.578	1.106	0.261		0.98	0.77	YES	18.1
[redacted]	41	Total-tetradioxins	319.8965	24.42	1447.223	1.106	0.046		1.33	0.77	YES	4.0
[redacted]	42	Total-pentadioxins	355.8546	31.77	6186.789	1.001	0.299		1.55	1.55	NO	19.9
[redacted]	12	12378-PeCDD	355.8546	31.38	29406.855	1.001	1.419	1.419	1.55	1.55	NO	89.6
[redacted]	42	Total-pentadioxins	355.8546	30.71	11687.101	1.001	0.564		1.65	1.55	NO	38.4
[redacted]	42	Total-pentadioxins	355.8546	30.32	13118.563	1.001	0.633		1.45	1.55	NO	29.8
[redacted]	42	Total-pentadioxins	355.8546	30.13	27914.301	1.001	1.347		1.61	1.55	NO	95.2
[redacted]	42	Total-pentadioxins	355.8546	29.99	20588.909	1.001	0.994		1.54	1.55	NO	70.1
[redacted]	42	Total-pentadioxins	355.8546	29.79	31790.531	1.001	1.534		1.54	1.55	NO	117.9
[redacted]	42	Total-pentadioxins	355.8546	29.17	7914.123	1.001	0.382		1.94	1.55	YES	32.2
[redacted]	42	Total-pentadioxins	355.8546	28.70	19152.716	1.001	0.924		1.85	1.55	YES	83.9
[redacted]	42	Total-pentadioxins	355.8546	28.67	19643.770	1.001	0.948		1.22	1.55	YES	74.7
[redacted]	15	123789-HxCDD	389.8157	36.64	77852.078	0.904	4.172	4.172	1.19	1.24	NO	406.7
[redacted]	43	Total-hexadioxins	389.8157	36.39	11134.784	0.937	0.576		1.20	1.24	NO	58.9
[redacted]	14	123678-HxCDD	389.8157	36.21	153808.860	0.929	8.221	8.221	1.27	1.24	NO	775.8
[redacted]	13	123478-HxCDD	389.8157	36.09	39154.719	0.978	1.894	1.894	1.14	1.24	NO	169.4
[redacted]	43	Total-hexadioxins	389.8157	35.09	296432.610	0.937	15.329		1.25	1.24	NO	969.5
[redacted]	43	Total-hexadioxins	389.8157	34.70	97539.558	0.937	5.044		1.25	1.24	NO	462.7
[redacted]	43	Total-hexadioxins	389.8157	33.88	145882.656	0.937	7.544		1.23	1.24	NO	739.2
[redacted]	43	Total-hexadioxins	389.8157	33.65	18617.432	0.937	0.963		1.21	1.24	NO	98.7
[redacted]	16	1234678-HpCDD	423.7766	40.86	4587858.250	1.029	256.094	256....	1.04	1.05	NO	6288.2
[redacted]	44	Total-heptadioxins	423.7766	39.63	2884886.750	1.029	161.034		1.03	1.05	NO	4221.6
[redacted]	17	OCDD	457.7377	46.62	30898644....	1.011	2564.3...	2564...	0.89	0.89	NO	41107.1

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TotalTEQ,Furans,Dioxins

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	35 Total-tetrafurans	303.9016	24.55	36031.035	0.921	0.723		0.85	0.77	NO	116.4
[redacted]	35 Total-tetrafurans	303.9016	24.39	11293.283	0.921	0.227		0.82	0.77	NO	40.8
[redacted]	35 Total-tetrafurans	303.9016	24.32	27655.046	0.921	0.555		0.81	0.77	NO	66.4
[redacted]	35 Total-tetrafurans	303.9016	23.88	8890.053	0.921	0.178		0.78	0.77	NO	27.5
[redacted]	35 Total-tetrafurans	303.9016	23.75	6395.422	0.921	0.128		0.76	0.77	NO	26.0
[redacted]	35 Total-tetrafurans	303.9016	23.66	14345.741	0.921	0.288		0.72	0.77	NO	45.1
[redacted]	35 Total-tetrafurans	303.9016	23.49	7442.133	0.921	0.149		0.77	0.77	NO	26.1
[redacted]	35 Total-tetrafurans	303.9016	23.40	8574.570	0.921	0.172		0.81	0.77	NO	29.8
[redacted]	35 Total-tetrafurans	303.9016	23.30	13338.796	0.921	0.268		0.83	0.77	NO	44.0
[redacted]	35 Total-tetrafurans	303.9016	23.18	17357.886	0.921	0.348		0.79	0.77	NO	46.2
[redacted]	35 Total-tetrafurans	303.9016	23.14	11746.405	0.921	0.236		0.81	0.77	NO	45.5
[redacted]	35 Total-tetrafurans	303.9016	23.00	49736.568	0.921	0.998		0.72	0.77	NO	153.7
[redacted]	35 Total-tetrafurans	303.9016	22.42	10485.722	0.921	0.210		0.69	0.77	NO	31.5
[redacted]	35 Total-tetrafurans	303.9016	22.16	7072.011	0.921	0.142		0.90	0.77	YES	27.9
[redacted]	40 Total-Furans	303.9016	27.75	1370.484	1.065	0.024		0.50	0.77	YES	3.6
[redacted]	35 Total-tetrafurans	303.9016	27.08	6017.165	0.921	0.121		0.92	0.77	YES	17.1
[redacted]	35 Total-tetrafurans	303.9016	25.87	26009.197	0.921	0.522		0.74	0.77	NO	81.7
[redacted]	35 Total-tetrafurans	303.9016	25.78	11835.294	0.921	0.237		0.83	0.77	NO	42.9
[redacted]	1 2378-TCDF	303.9016	25.65	27394.216	0.921	0.550	0.550	0.75	0.77	NO	95.9
[redacted]	35 Total-tetrafurans	303.9016	25.41	18267.939	0.921	0.367		0.72	0.77	NO	35.3
[redacted]	35 Total-tetrafurans	303.9016	25.29	2039.269	0.921	0.041		1.12	0.77	YES	8.6
[redacted]	35 Total-tetrafurans	303.9016	25.14	11043.959	0.921	0.222		0.76	0.77	NO	37.3
[redacted]	35 Total-tetrafurans	303.9016	24.94	8544.327	0.921	0.171		0.72	0.77	NO	25.7
[redacted]	35 Total-tetrafurans	303.9016	24.73	12754.681	0.921	0.256		0.77	0.77	NO	43.3
[redacted]	37 Total-pentafurans	339.8597	29.30	4257.126	0.927	0.133		1.48	1.55	NO	29.0
[redacted]	37 Total-pentafurans	339.8597	29.21	10064.158	0.927	0.314		1.44	1.55	NO	53.3
[redacted]	37 Total-pentafurans	339.8597	29.01	1972.607	0.927	0.062		1.88	1.55	YES	11.6
[redacted]	37 Total-pentafurans	339.8597	28.71	53009.520	0.927	1.656		1.48	1.55	NO	274.8
[redacted]	37 Total-pentafurans	339.8597	28.65	35755.622	0.927	1.117		1.36	1.55	NO	210.9
[redacted]	37 Total-pentafurans	339.8597	28.50	21754.194	0.927	0.680		1.41	1.55	NO	79.9
[redacted]	37 Total-pentafurans	339.8597	32.12	1078.139	0.927	0.034		1.80	1.55	YES	5.3
[redacted]	3 23478-PeCDF	339.8597	31.12	17525.631	0.943	0.575	0.575	1.72	1.55	NO	97.9
[redacted]	37 Total-pentafurans	339.8597	30.96	14580.736	0.927	0.456		1.38	1.55	NO	81.4
[redacted]	37 Total-pentafurans	339.8597	30.85	15747.704	0.927	0.492		1.44	1.55	NO	85.5
[redacted]	37 Total-pentafurans	339.8597	30.07	7544.106	0.927	0.236		1.50	1.55	NO	43.7
[redacted]	37 Total-pentafurans	339.8597	29.97	15468.529	0.927	0.483		1.35	1.55	NO	88.6
[redacted]	2 12378-PeCDF	339.8597	29.78	13568.164	0.912	0.405	0.405	1.45	1.55	NO	71.7
[redacted]	37 Total-pentafurans	339.8597	29.41	42973.506	0.927	1.343		1.52	1.55	NO	185.4
[redacted]	5 234678-HxCDF	373.8208	35.94	34364.321	1.073	1.450	1.450	1.18	1.24	NO	106.9
[redacted]	38 Total-hexafurans	373.8208	35.88	20542.655	1.062	0.849		1.18	1.24	NO	85.3
[redacted]	38 Total-hexafurans	373.8208	35.32	2286.546	1.062	0.095		1.15	1.24	NO	8.6
[redacted]	6 123678-HxCDF	373.8208	34.95	36535.636	1.056	1.391	1.391	1.30	1.24	NO	125.2
[redacted]	4 123478-HxCDF	373.8208	34.81	40669.119	1.101	1.624	1.624	1.25	1.24	NO	136.5
[redacted]	38 Total-hexafurans	373.8208	34.64	13296.800	1.062	0.550		1.23	1.24	NO	43.7
[redacted]	38 Total-hexafurans	373.8208	34.15	473956.718	1.062	19.594		1.20	1.24	NO	1651.8
[redacted]	38 Total-hexafurans	373.8208	33.83	9196.694	1.062	0.380		1.30	1.24	NO	31.5
[redacted]	38 Total-hexafurans	373.8208	33.56	1212.119	1.062	0.050		0.98	1.24	YES	5.3
[redacted]	38 Total-hexafurans	373.8208	33.29	535518.344	1.062	22.139		1.20	1.24	NO	1831.3
[redacted]	38 Total-hexafurans	373.8208	33.08	195609.492	1.062	8.087		1.20	[illegible]	NO	[illegible]

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TotalTEQ,Furans,Dioxins

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	7	123789-HxCDF	373.8208	37.01	9563.929	1.017	0.439	0.394	0.99	1.24	YES	35.4
[redacted]	39	Total-heptafurans	407.7818	40.87	2572.931	1.231	0.131		1.00	1.05	NO	10.3
[redacted]	39	Total-heptafurans	407.7818	39.87	2353873.875	1.231	119.581		1.02	1.05	NO	8938.7
[redacted]	39	Total-heptafurans	407.7818	39.58	13891.950	1.231	0.706		0.99	1.05	NO	48.6
[redacted]	8	1234678-HpCDF	407.7818	39.10	1154504.500	1.238	52.104	52.104	1.00	1.05	NO	4564.0
[redacted]	9	1234789-HpCDF	407.7818	41.72	52684.467	1.224	3.056	3.056	1.05	1.05	NO	187.0
[redacted]	10	OCDF	441.7428	46.89	2229245.188	1.162	161.001	161....	0.86	0.89	NO	5635.2
[redacted]	36	Total-penta1	339.8597	27.06	346458.641		10.948		1.55	1.55	NO	3012.3
[redacted]	41	Total-tetradioxins	319.8965	23.91	2806.563	1.106	0.090		0.66	0.77	NO	6.1
[redacted]	41	Total-tetradioxins	319.8965	23.70	26112.428	1.106	0.833		0.88	0.77	NO	63.4
[redacted]	41	Total-tetradioxins	319.8965	23.43	45504.230	1.106	1.452		0.81	0.77	NO	112.2
[redacted]	45	Total-Dioxins	319.8965	22.82	645.987	0.994	0.023		1.58	0.77	YES	2.1
[redacted]	41	Total-tetradioxins	319.8965	26.87	1668.272	1.106	0.053		0.93	0.77	YES	4.0
[redacted]	41	Total-tetradioxins	319.8965	26.41	5203.625	1.106	0.166		0.90	0.77	YES	13.1
[redacted]	11	2378-TCDD	319.8965	26.29	5666.365	1.106	0.181	0.153	0.58	0.77	YES	11.5
[redacted]	41	Total-tetradioxins	319.8965	25.90	9908.272	1.106	0.316		0.76	0.77	NO	14.6
[redacted]	41	Total-tetradioxins	319.8965	25.62	2823.468	1.106	0.090		1.86	0.77	YES	9.7
[redacted]	41	Total-tetradioxins	319.8965	25.48	9583.031	1.106	0.306		0.85	0.77	NO	18.9
[redacted]	41	Total-tetradioxins	319.8965	25.26	2948.617	1.106	0.094		0.93	0.77	YES	7.8
[redacted]	41	Total-tetradioxins	319.8965	25.15	1694.323	1.106	0.054		0.61	0.77	YES	4.2
[redacted]	41	Total-tetradioxins	319.8965	24.91	13655.854	1.106	0.436		0.77	0.77	NO	29.9
[redacted]	41	Total-tetradioxins	319.8965	24.61	8195.578	1.106	0.261		0.98	0.77	YES	18.1
[redacted]	41	Total-tetradioxins	319.8965	24.42	1447.223	1.106	0.046		1.33	0.77	YES	4.0
[redacted]	42	Total-pentadioxins	355.8546	31.77	6186.789	1.001	0.299		1.55	1.55	NO	19.9
[redacted]	12	12378-PeCDD	355.8546	31.38	29406.855	1.001	1.419	1.419	1.55	1.55	NO	89.6
[redacted]	42	Total-pentadioxins	355.8546	30.71	11687.101	1.001	0.564		1.65	1.55	NO	38.4
[redacted]	42	Total-pentadioxins	355.8546	30.32	13118.563	1.001	0.633		1.45	1.55	NO	29.8
[redacted]	42	Total-pentadioxins	355.8546	30.13	27914.301	1.001	1.347		1.61	1.55	NO	95.2
[redacted]	42	Total-pentadioxins	355.8546	29.99	20588.909	1.001	0.994		1.54	1.55	NO	70.1
[redacted]	42	Total-pentadioxins	355.8546	29.79	31790.531	1.001	1.534		1.54	1.55	NO	117.9
[redacted]	42	Total-pentadioxins	355.8546	29.17	7914.123	1.001	0.382		1.94	1.55	YES	32.2
[redacted]	42	Total-pentadioxins	355.8546	28.70	19152.716	1.001	0.924		1.85	1.55	YES	83.9
[redacted]	42	Total-pentadioxins	355.8546	28.67	19643.770	1.001	0.948		1.22	1.55	YES	74.7
[redacted]	15	123789-HxCDD	389.8157	36.64	77852.078	0.904	4.172	4.172	1.19	1.24	NO	406.7
[redacted]	43	Total-hexadioxins	389.8157	36.39	11134.784	0.937	0.576		1.20	1.24	NO	58.9
[redacted]	14	123678-HxCDD	389.8157	36.21	153808.860	0.929	8.221	8.221	1.27	1.24	NO	775.8
[redacted]	13	123478-HxCDD	389.8157	36.09	39154.719	0.978	1.894	1.894	1.14	1.24	NO	169.4
[redacted]	43	Total-hexadioxins	389.8157	35.09	296432.610	0.937	15.329		1.25	1.24	NO	969.5
[redacted]	43	Total-hexadioxins	389.8157	34.70	97539.558	0.937	5.044		1.25	1.24	NO	462.7
[redacted]	43	Total-hexadioxins	389.8157	33.88	145882.656	0.937	7.544		1.23	1.24	NO	739.2
[redacted]	43	Total-hexadioxins	389.8157	33.65	18617.432	0.937	0.963		1.21	1.24	NO	98.7
[redacted]	16	1234678-HpCDD	423.7766	40.86	4587858.250	1.029	256.094	256....	1.04	1.05	NO	6288.2
[redacted]	44	Total-heptadioxins	423.7766	39.63	2884886.750	1.029	161.034		1.03	1.05	NO	4221.6
[redacted]	17	OCDD	457.7377	46.62	30898644....	1.011	2564.3...	2564...	0.89	0.89	NO	41107.1

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PFK1

[redacted]					
[redacted]	48 FUNCTION1 PFK	330.9792	24.33	0.000	14.3
[redacted]	48 FUNCTION1 PFK	330.9792	24.29	0.000	15.8
[redacted]	48 FUNCTION1 PFK	330.9792	24.11	0.000	8.6
[redacted]	48 FUNCTION1 PFK	330.9792	23.91	0.000	13.4
[redacted]	48 FUNCTION1 PFK	330.9792	23.42	0.000	10.2
[redacted]	48 FUNCTION1 PFK	330.9792	23.06	0.000	13.3
[redacted]	48 FUNCTION1 PFK	330.9792	22.94	0.000	7.4
[redacted]	48 FUNCTION1 PFK	330.9792	22.76	0.000	5.1
[redacted]	48 FUNCTION1 PFK	330.9792	22.52	0.000	5.6
[redacted]	48 FUNCTION1 PFK	330.9792	21.85	0.000	5.0
[redacted]	48 FUNCTION1 PFK	330.9792	21.25	0.000	17.4
[redacted]	48 FUNCTION1 PFK	330.9792	27.50	0.000	16.2
[redacted]	48 FUNCTION1 PFK	330.9792	27.32	0.000	16.0
[redacted]	48 FUNCTION1 PFK	330.9792	27.15	0.000	12.9
[redacted]	48 FUNCTION1 PFK	330.9792	27.08	0.000	9.1
[redacted]	48 FUNCTION1 PFK	330.9792	26.89	0.000	15.2
[redacted]	48 FUNCTION1 PFK	330.9792	26.80	0.000	15.0
[redacted]	48 FUNCTION1 PFK	330.9792	26.69	0.000	15.0
[redacted]	48 FUNCTION1 PFK	330.9792	26.47	0.000	11.2
[redacted]	48 FUNCTION1 PFK	330.9792	26.17	0.000	9.3
[redacted]	48 FUNCTION1 PFK	330.9792	25.70	0.000	7.5
[redacted]	48 FUNCTION1 PFK	330.9792	25.56	0.000	13.4
[redacted]	48 FUNCTION1 PFK	330.9792	25.35	0.000	13.8
[redacted]	48 FUNCTION1 PFK	330.9792	25.12	0.000	13.9
[redacted]	48 FUNCTION1 PFK	330.9792	25.00	0.000	8.4
[redacted]	48 FUNCTION1 PFK	330.9792	24.78	0.000	11.6
[redacted]	48 FUNCTION1 PFK	330.9792	24.58	0.000	14.1

PFK2

[redacted]						
[redacted]	49 FUNCTION2 PFK	366.9792	29.57	0.000	0.000	10.5
[redacted]	49 FUNCTION2 PFK	366.9792	29.48	0.000	0.000	14.1
[redacted]	49 FUNCTION2 PFK	366.9792	29.29	0.000	0.000	19.5
[redacted]	49 FUNCTION2 PFK	366.9792	29.11	0.000	0.000	17.7

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PFK3

[redacted]												
[redacted]	50	FUNCTION3 PFK	380.9760	37.39	0.000		0.000					31.7
[redacted]	50	FUNCTION3 PFK	380.9760	37.28	0.000		0.000					39.9
[redacted]	50	FUNCTION3 PFK	380.9760	37.05	0.000		0.000					53.5
[redacted]	50	FUNCTION3 PFK	380.9760	36.89	0.000		0.000					52.4
[redacted]	50	FUNCTION3 PFK	380.9760	34.64	0.000		0.000					8.5
[redacted]	50	FUNCTION3 PFK	380.9760	33.98	0.000		0.000					3.8
[redacted]	50	FUNCTION3 PFK	380.9760	33.91	0.000		0.000					5.7
[redacted]	50	FUNCTION3 PFK	380.9760	33.70	0.000		0.000					15.3
[redacted]	50	FUNCTION3 PFK	380.9760	33.05	0.000		0.000					16.0
[redacted]	50	FUNCTION3 PFK	380.9760	33.00	0.000		0.000					10.8
[redacted]	50	FUNCTION3 PFK	380.9760	37.76	0.000		0.000					12.4
[redacted]	50	FUNCTION3 PFK	380.9760	37.51	0.000		0.000					23.2

PFK4

[redacted]												
[redacted]	51	FUNCTION4 PFK	430.9728	41.12	0.000							4.1
[redacted]	51	FUNCTION4 PFK	430.9728	39.72	0.000							4.5
[redacted]	51	FUNCTION4 PFK	430.9728	39.58	0.000							5.5
[redacted]	51	FUNCTION4 PFK	430.9728	39.48	0.000							9.3

PFK5

[redacted]												
[redacted]	52	FUNCTION5 PFK	480.9696	48.15	0.000							8.9
[redacted]	52	FUNCTION5 PFK	480.9696	46.97	0.000							12.1
[redacted]	52	FUNCTION5 PFK	480.9696	46.62	0.000							5.1
[redacted]	52	FUNCTION5 PFK	480.9696	45.18	0.000							2.3

ETHERS1

[redacted]												
[redacted]	53	FUNCTION1 HXCD...	375.8364	26.86	0.000		0.000					2.4
[redacted]	53	FUNCTION1 HXCD...	375.8364	26.66	0.000		0.000					5.4
[redacted]	53	FUNCTION1 HXCD...	375.8364	25.48	0.000		0.000					2.0
[redacted]	53	FUNCTION1 HXCD...	375.8364	27.65	0.000		0.000					2.2

ETHERS2

[redacted]												
[redacted]	54	FUNCTION1 HPCD...	409.7974	26.97	0.000		0.000					1.8
[redacted]	54	FUNCTION1 HPCD...	409.7974	26.27	0.000		0.000					1.9
[redacted]	54	FUNCTION1 HPCD...	409.7974	25.30	0.000		0.000					2.5
[redacted]	54	FUNCTION1 HPCD...	409.7974	24.11	0.000		0.000					2.7
[redacted]	54	FUNCTION1 HPCD...	409.7974	23.11	0.000		0.000					2.1
[redacted]	54	FUNCTION1 HPCD...	409.7974	22.72	0.000		0.000					1.7
[redacted]	54	FUNCTION1 HPCD...	409.7974	21.48	0.000		0.000					1.7
[redacted]	54	FUNCTION1 HPCD...	409.7974	21.34	0.000		0.000					2.2

ID: WC33F, Name: 13021313, Date: 13-Feb-2013, Time: 20:45:50, Conditions: AUTOSPEC01, User: pk

ETHERS3

[illegible]	55	FUNCTION2 HPCD...	409.7974	29.76	0.000		0.000					4.5
[illegible]	55	FUNCTION2 HPCD...	409.7974	29.72	0.000		0.000					3.2
[illegible]	55	FUNCTION2 HPCD...	409.7974	29.44	0.000		0.000					4.5
[illegible]	55	FUNCTION2 HPCD...	409.7974	29.39	0.000		0.000					3.4
[illegible]	55	FUNCTION2 HPCD...	409.7974	29.18	0.000		0.000					1.7
[illegible]	55	FUNCTION2 HPCD...	409.7974	31.29	0.000		0.000					1.6
[illegible]	55	FUNCTION2 HPCD...	409.7974	30.71	0.000		0.000					1.3
[illegible]	55	FUNCTION2 HPCD...	409.7974	29.81	0.000		0.000					2.7

ETHERS4

[illegible]	56	FUNCTION3 OCDPE	445.7555	36.39	0.000		0.000					3.1
[illegible]	56	FUNCTION3 OCDPE	445.7555	36.25	0.000		0.000					2.6
[illegible]	56	FUNCTION3 OCDPE	445.7555	33.48	0.000		0.000					2.6
[illegible]	56	FUNCTION3 OCDPE	445.7555	33.36	0.000		0.000					3.5

ETHERS5

[illegible]	57	FUNCTION4 NCDPE	479.7165	40.87	0.000		0.000					7.6
[illegible]	57	FUNCTION4 NCDPE	479.7165	40.51	0.000		0.000					3.8
[illegible]	57	FUNCTION4 NCDPE	479.7165	38.68	0.000		0.000					8.1

ETHERS6

[illegible]	58	FUNCTION5 DCDPE	513.6775	46.63	0.000		0.000					3.8

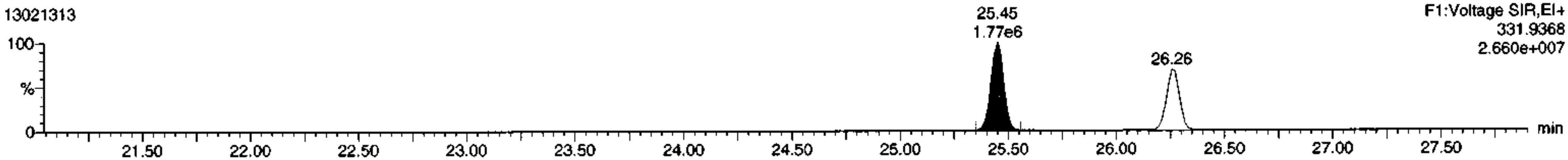
Quantify Sample Report MassLynx 4.1 SCN 714

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:56:40 Pacific Standard Time

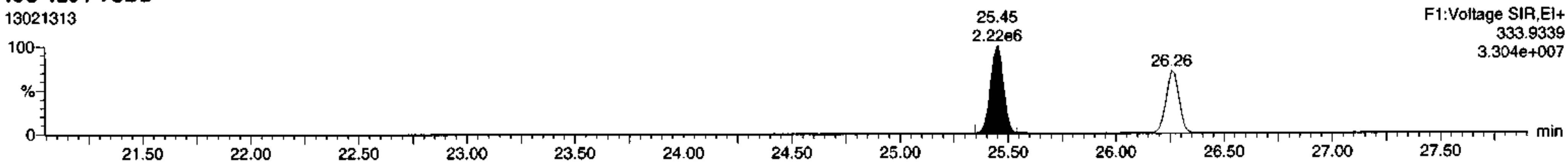
Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 12 Feb 2013 12:25:57
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: WC33F, Name: 13021313, Date: 13-Feb-2013, Time: 20:45:50, Conditions: AUTOSPEC01, User: pk

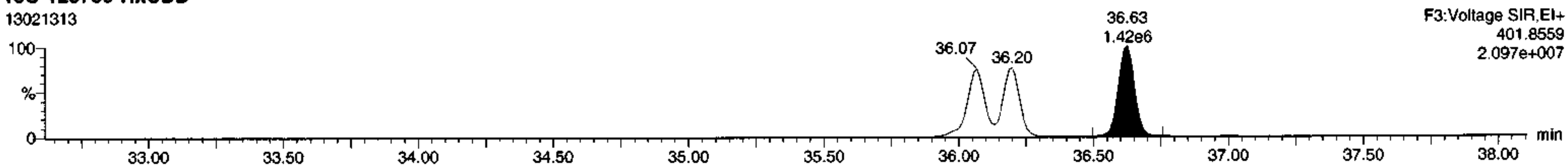
13C-1234-TCDD



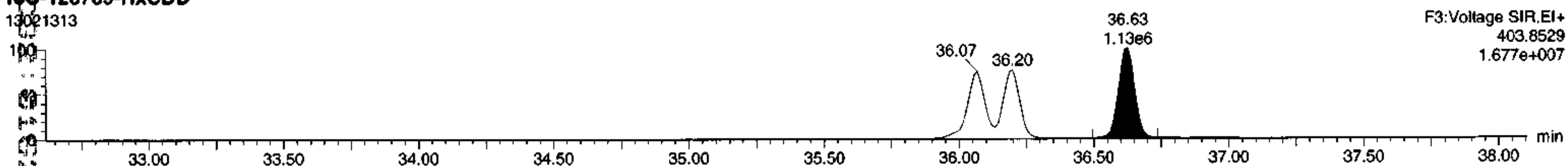
13C-1234-TCDD



13C-123789-HxCDD



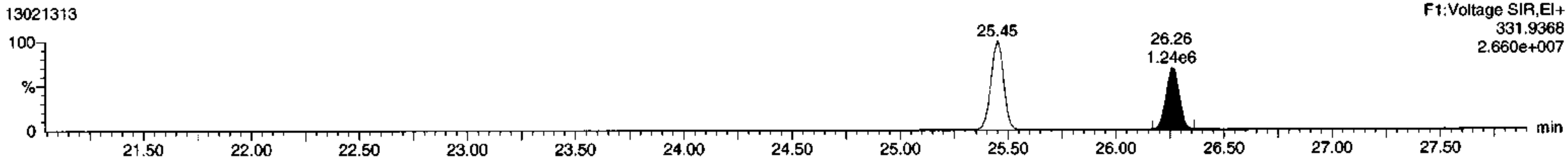
13C-123789-HxCDD



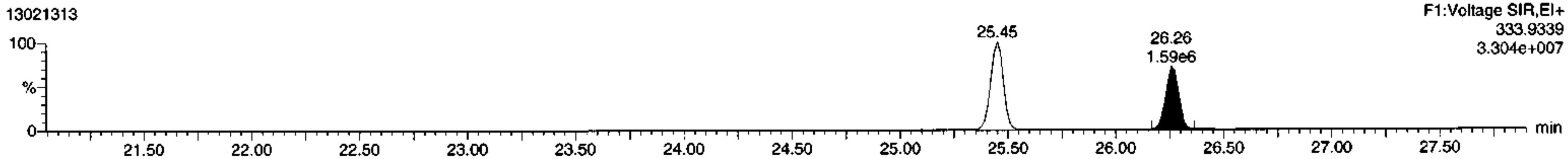
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:56:40 Pacific Standard Time

ID: WC33F, Name: 13021313, Date: 13-Feb-2013, Time: 20:45:50, Conditions: AUTOSPEC01, User: pk

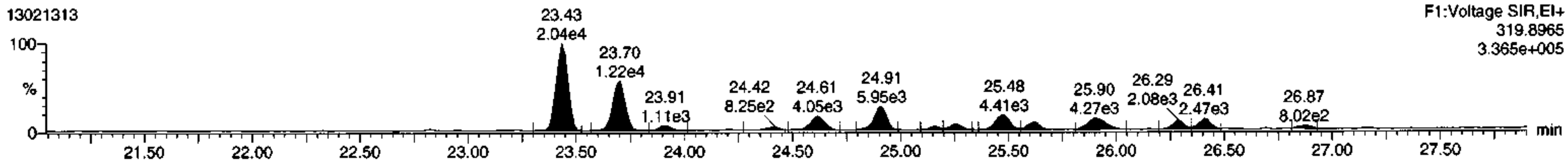
13C-2378-TCDD



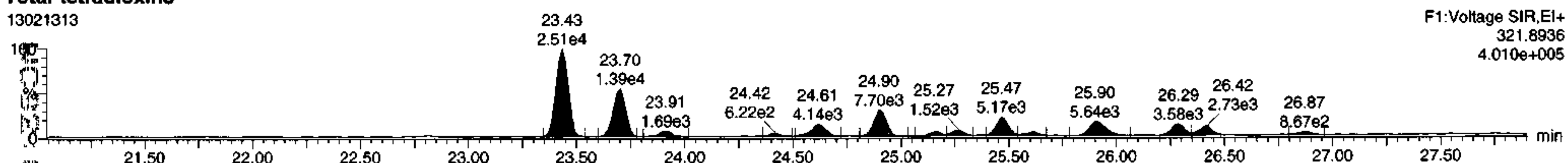
13C-2378-TCDD



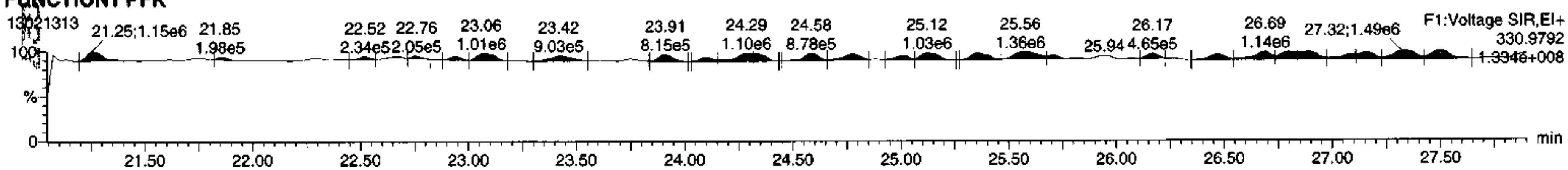
Total-tetradioxins



Total-tetradioxins



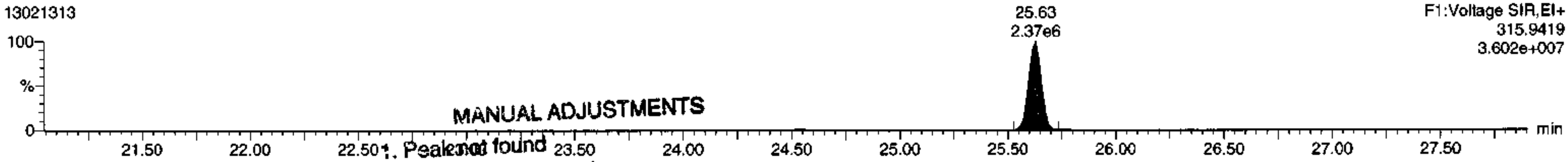
FUNCTION1 PFK



Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:56:40 Pacific Standard Time

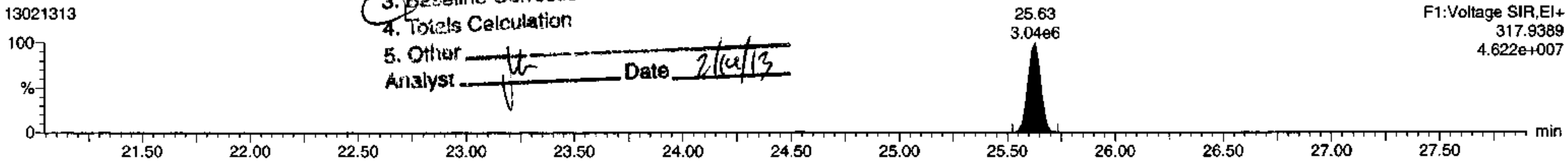
ID: WC33F, Name: 13021313, Date: 13-Feb-2013, Time: 20:45:50, Conditions: AUTOSPEC01, User: pk

13C-2378-TCDF
13021313

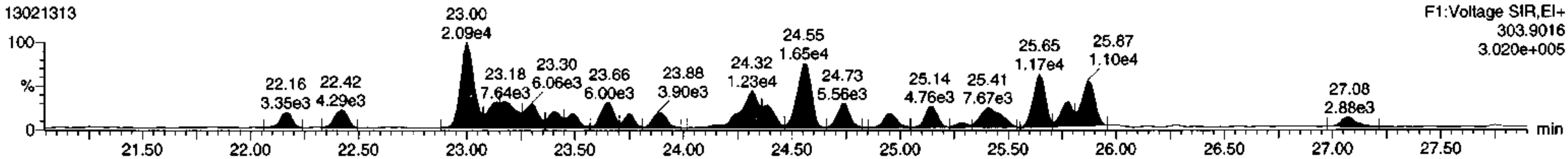


MANUAL ADJUSTMENTS
1. Peak not found
2. Poor Chromatography
3. Baseline Correction
4. Totals Calculation
5. Other
Analyst [handwritten initials] Date 2/14/13

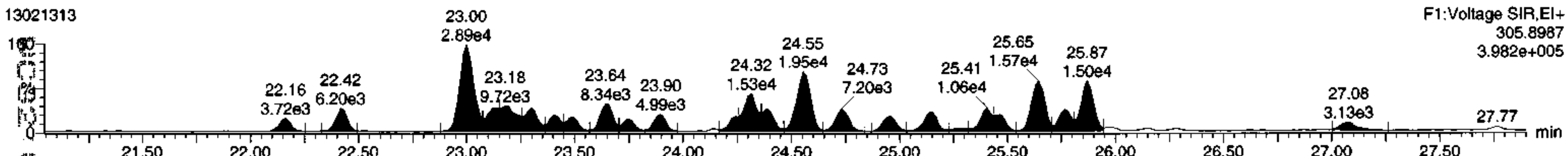
13C-2378-TCDF
13021313



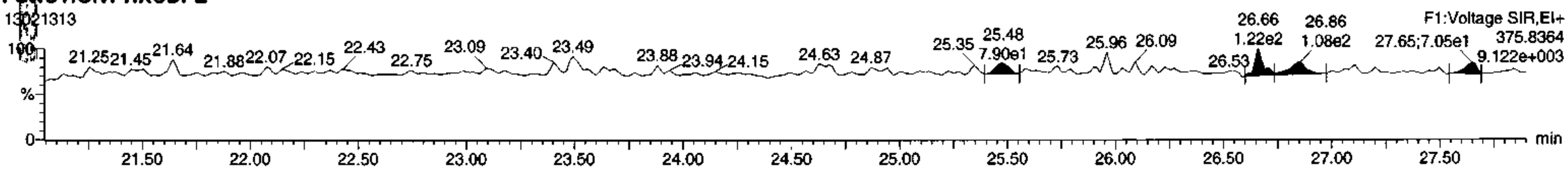
Total-tetrafurans
13021313



Total-tetrafurans
13021313



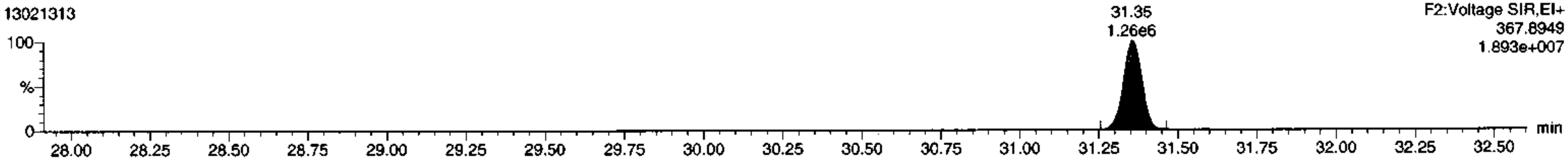
FUNCTION1 HXCDPE
13021313



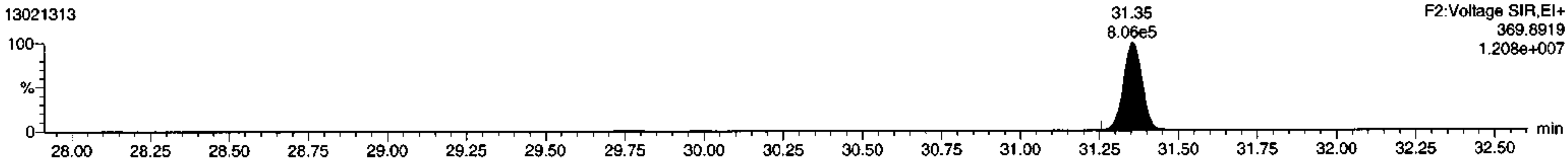
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:56:40 Pacific Standard Time

ID: WC33F, Name: 13021313, Date: 13-Feb-2013, Time: 20:45:50, Conditions: AUTOSPEC01, User: pk

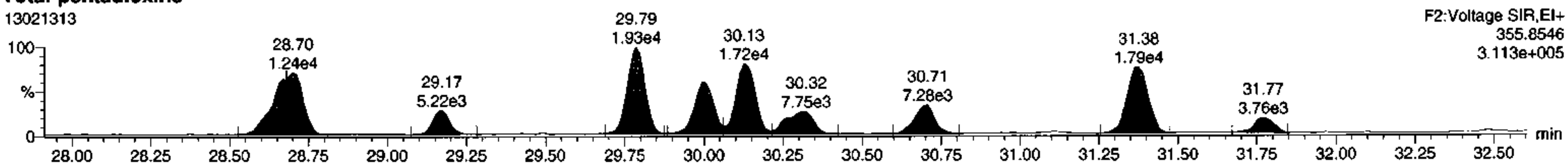
13C-12378-PeCDD



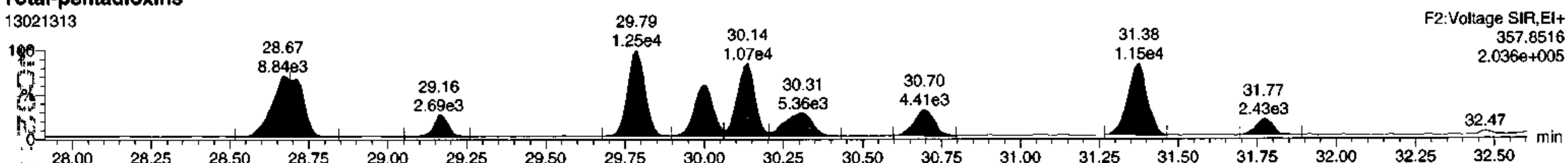
13C-12378-PeCDD



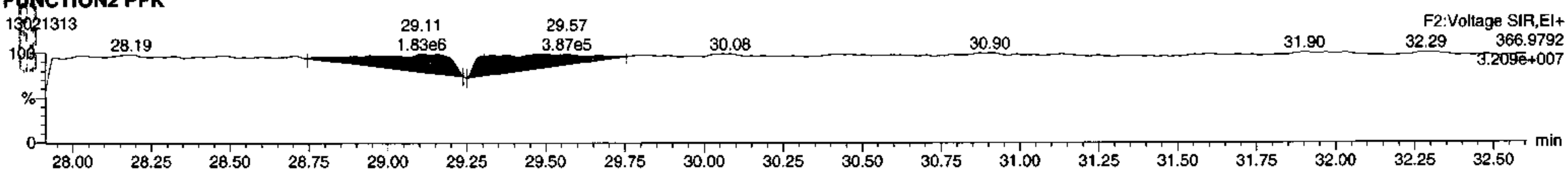
Total-pentadioxins



Total-pentadioxins



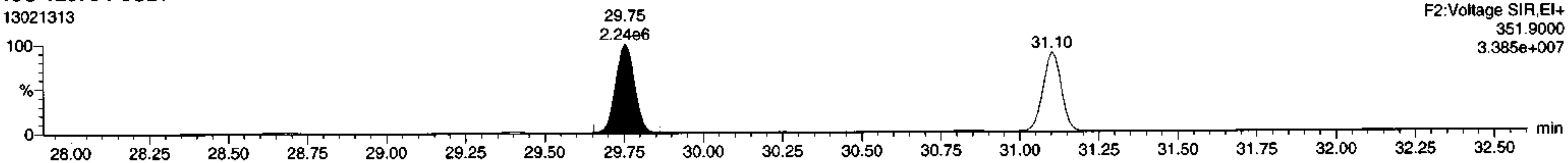
FUNCTION2 PFK



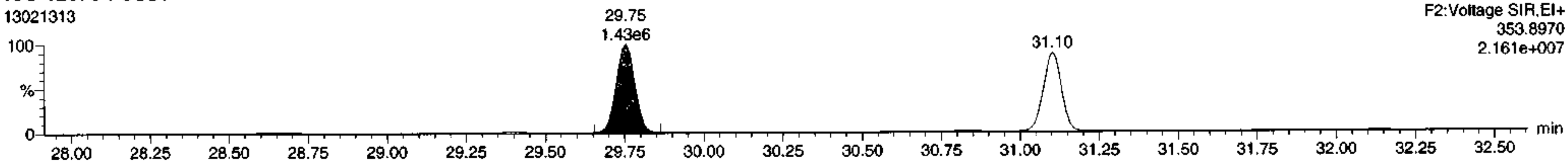
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:56:40 Pacific Standard Time

ID: WC33F, Name: 13021313, Date: 13-Feb-2013, Time: 20:45:50, Conditions: AUTOSPEC01, User: pk

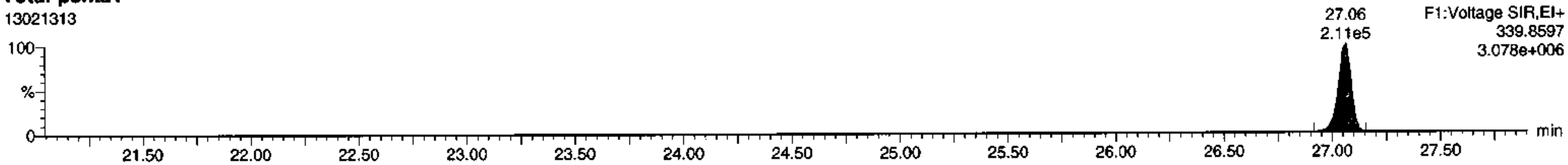
13C-12378-PeCDF



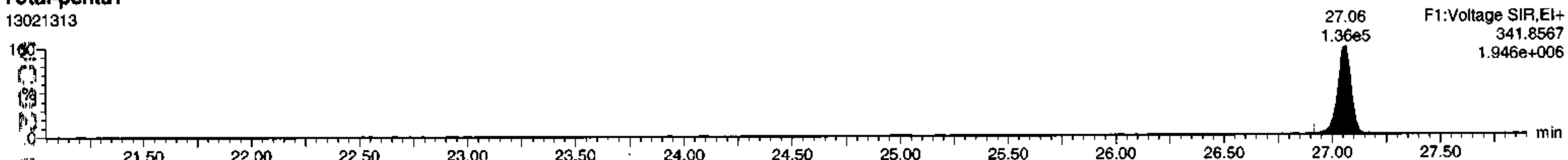
13C-12378-PeCDF



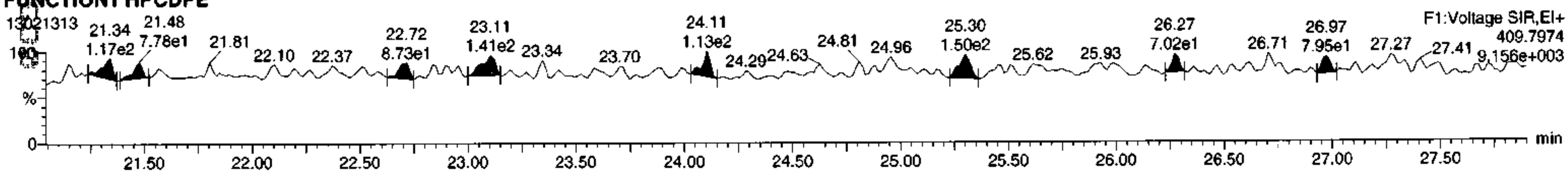
Total-penta1



Total-penta1



FUNCTION1 HPCDPE

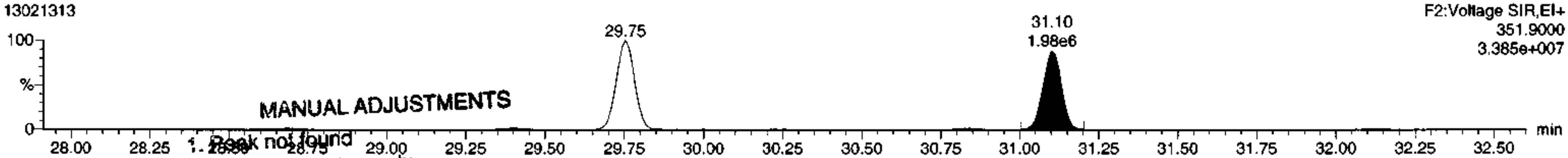


Quantify Sample Report **MassLynx 4.1 SCN 714**

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:56:40 Pacific Standard Time

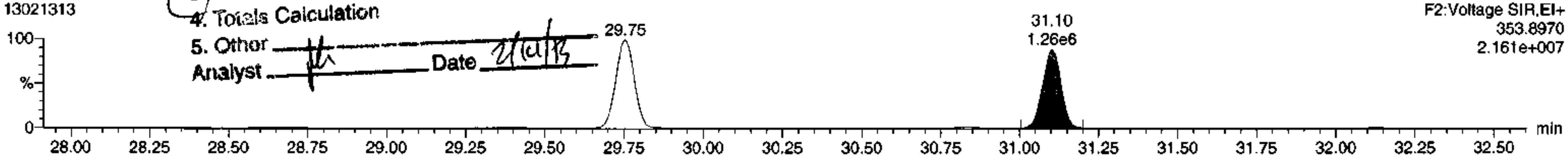
ID: WC33F, Name: 13021313, Date: 13-Feb-2013, Time: 20:45:50, Conditions: AUTOSPEC01, User: pk

13C-23478-PeCDF

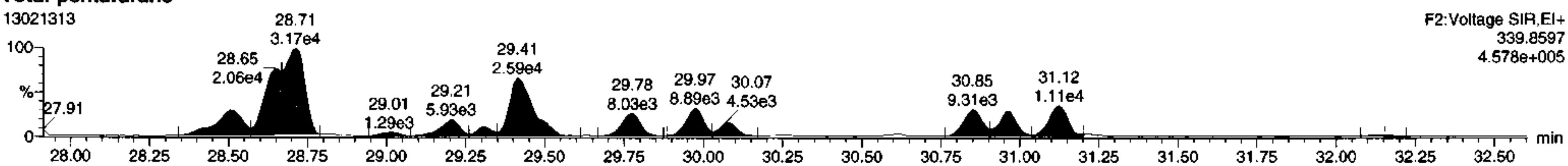


MANUAL ADJUSTMENTS
1. Peak not found
2. Poor Chromatography
3. Baseline Correction
4. Totals Calculation
5. Other
Analyst ~~ft~~ Date ~~2/14/13~~

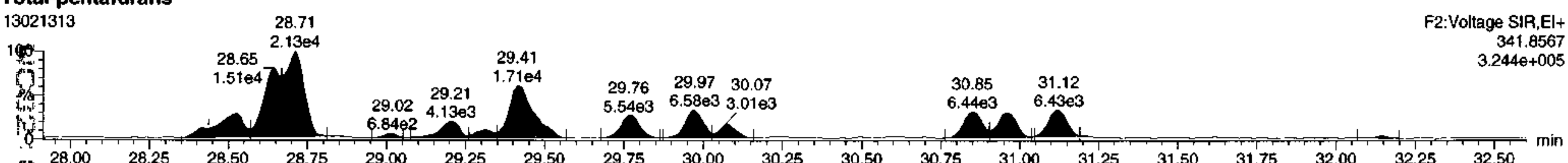
13C-23478-PeCDF



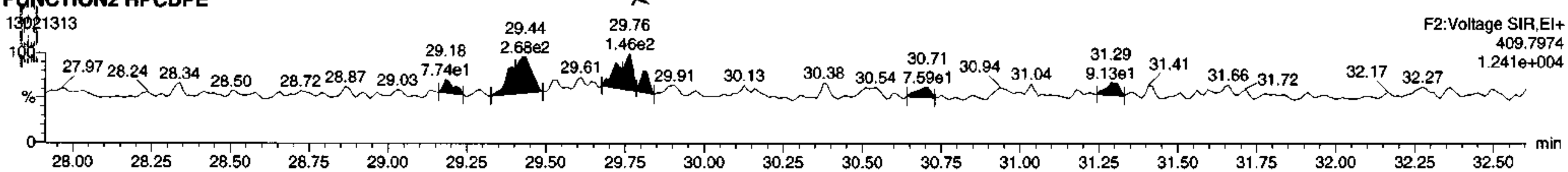
Total-pentafurans



Total-pentafurans



FUNCTION2 HPCDPE



Quantify Sample Report **MassLynx 4.1 SCN 714**

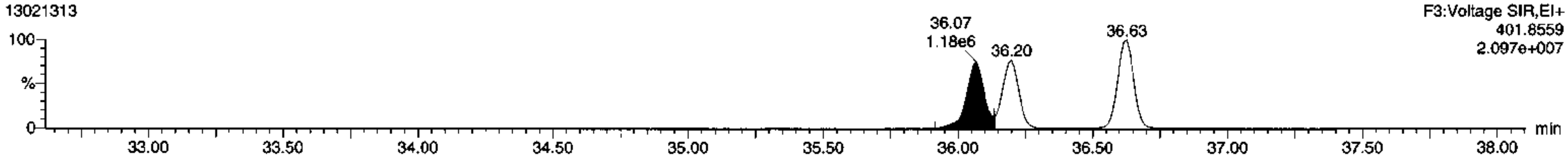
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld

Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time

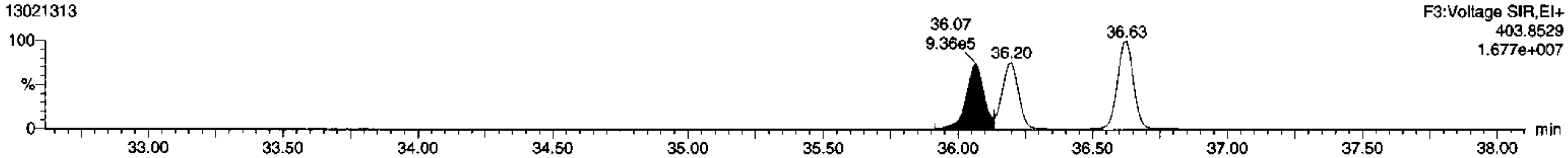
Printed: Thursday, February 14, 2013 10:56:40 Pacific Standard Time

ID: WC33F, Name: 13021313, Date: 13-Feb-2013, Time: 20:45:50, Conditions: AUTOSPEC01, User: pk

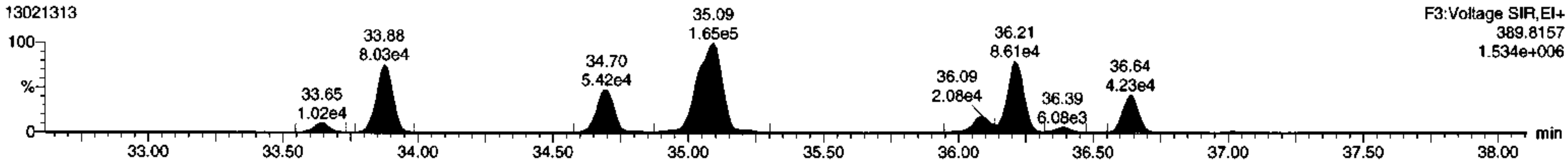
13C-123478-HxCDD



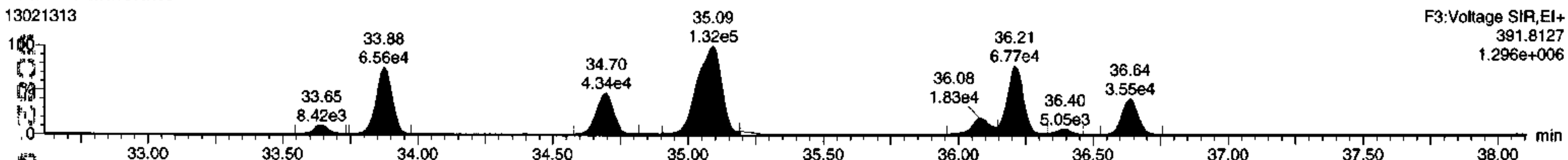
13C-123478-HxCDD



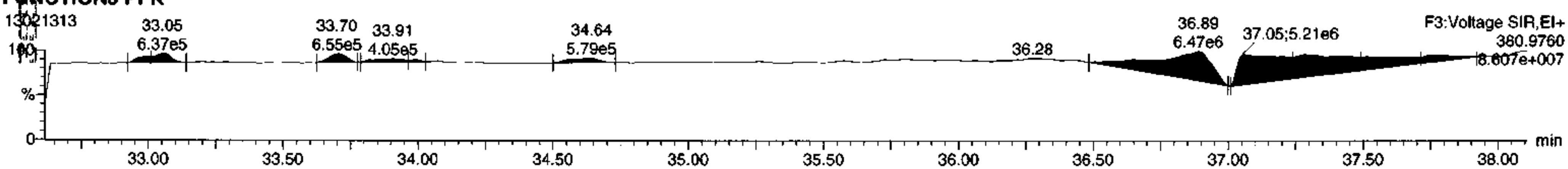
Total-hexadioxins



Total-hexadioxins



FUNCTION3 PFK



Quantify Sample Report **MassLynx 4.1 SCN 714**

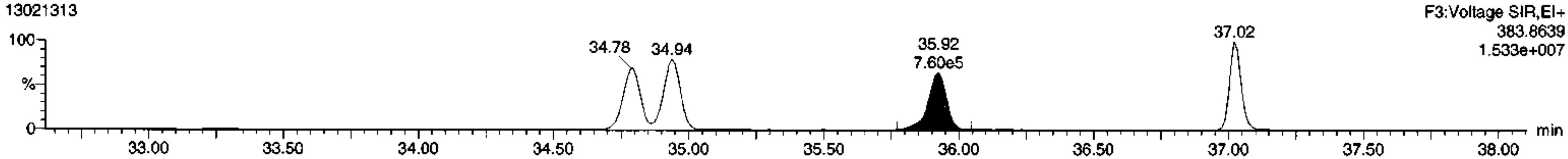
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld

Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time

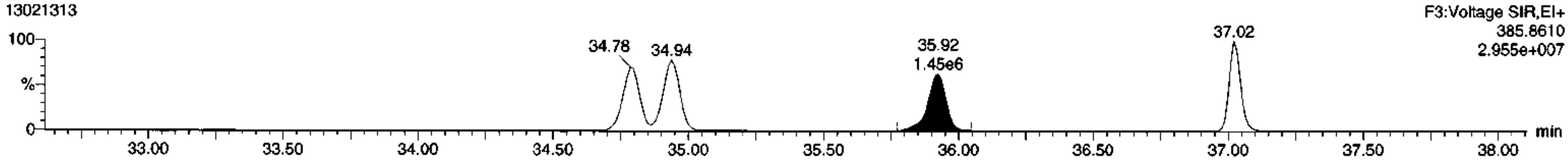
Printed: Thursday, February 14, 2013 10:56:40 Pacific Standard Time

ID: WC33F, Name: 13021313, Date: 13-Feb-2013, Time: 20:45:50, Conditions: AUTOSPEC01, User: pk

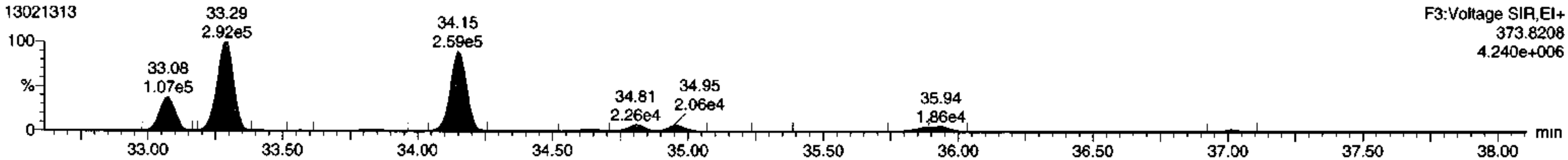
13C-234678-HxCDF



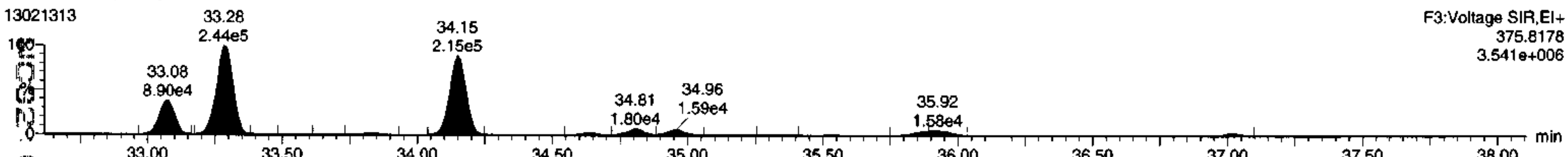
13C-234678-HxCDF



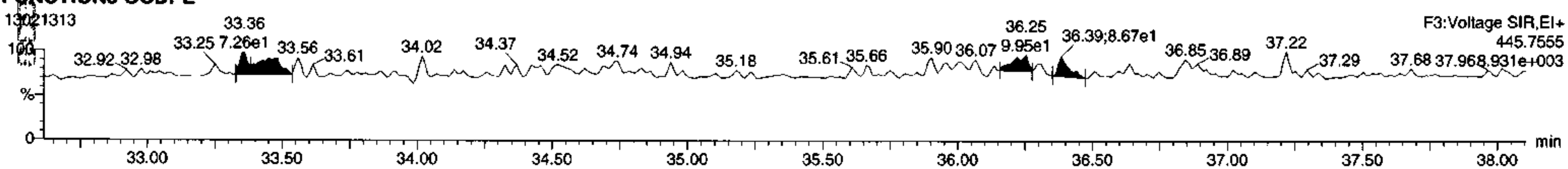
Total-hexafurans



Total-hexafurans



FUNCTION3 OCDPE



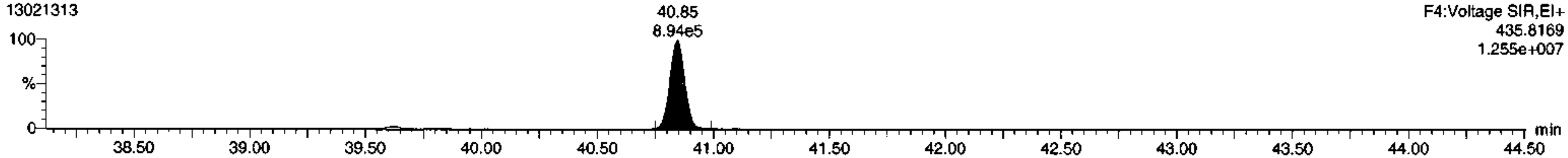
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld

Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time

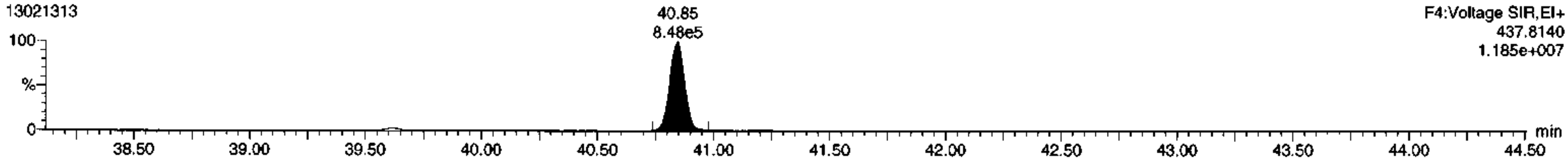
Printed: Thursday, February 14, 2013 10:56:40 Pacific Standard Time

ID: WC33F, Name: 13021313, Date: 13-Feb-2013, Time: 20:45:50, Conditions: AUTOSPEC01, User: pk

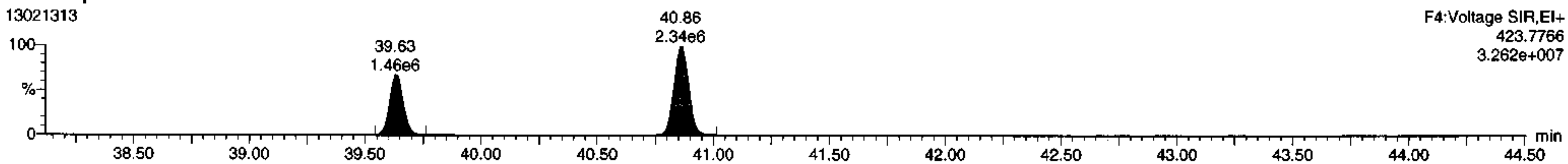
13C-1234678-HpCDD



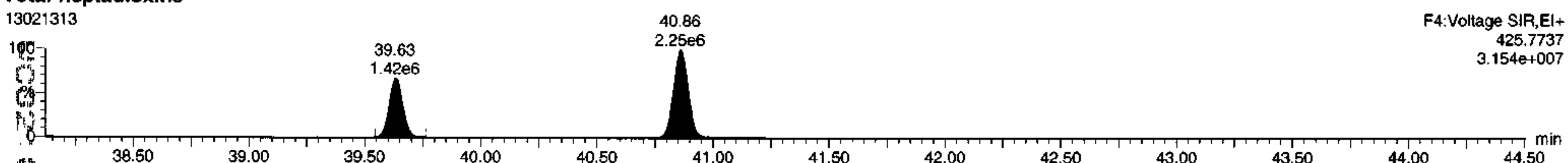
13C-1234678-HpCDD



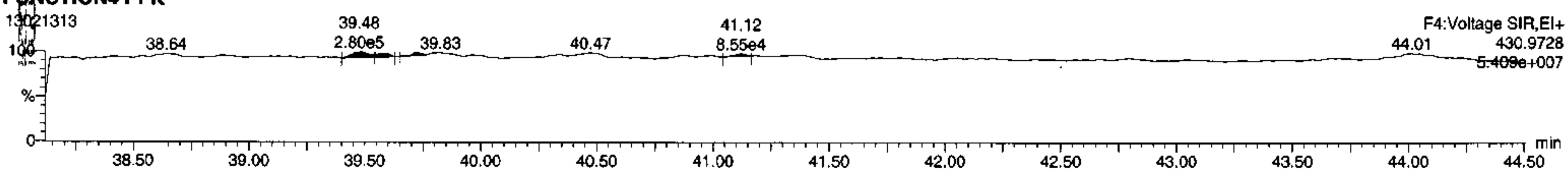
Total-heptadioxins



Total-heptadioxins



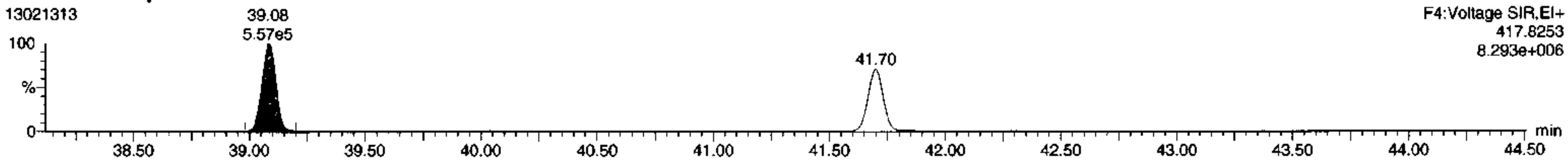
FUNCTION4 PFK



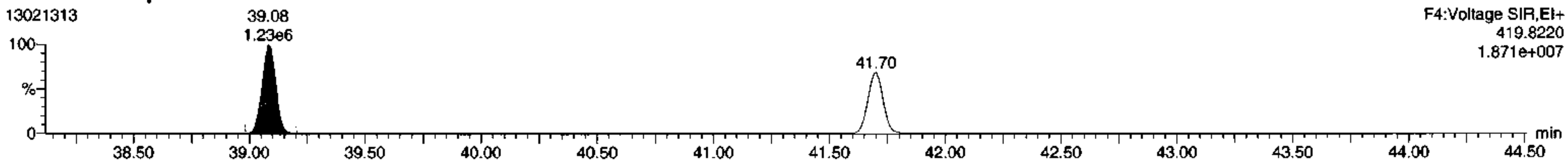
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:56:40 Pacific Standard Time

ID: WC33F, Name: 13021313, Date: 13-Feb-2013, Time: 20:45:50, Conditions: AUTOSPEC01, User: pk

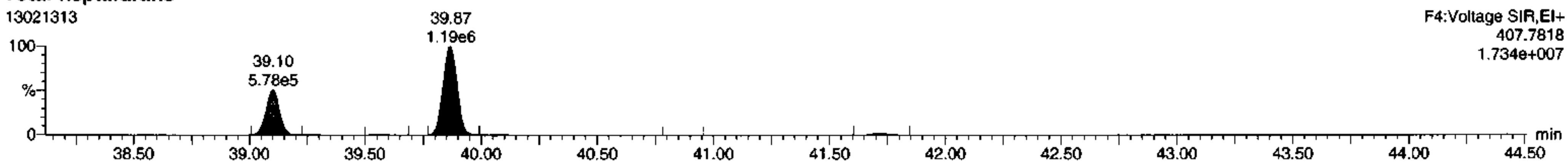
13C-1234678-HpCDF



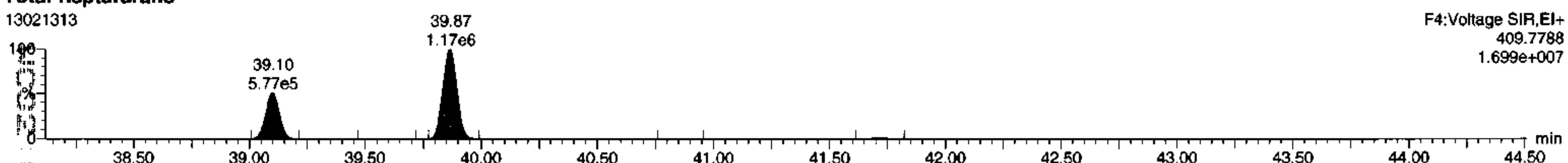
13C-1234678-HpCDF



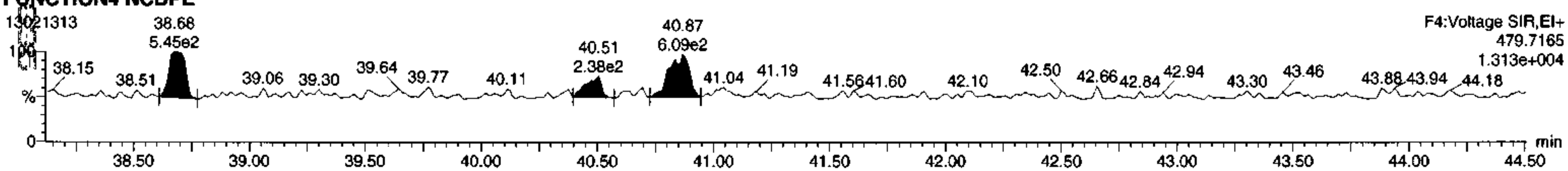
Total-heptafurans



Total-heptafurans



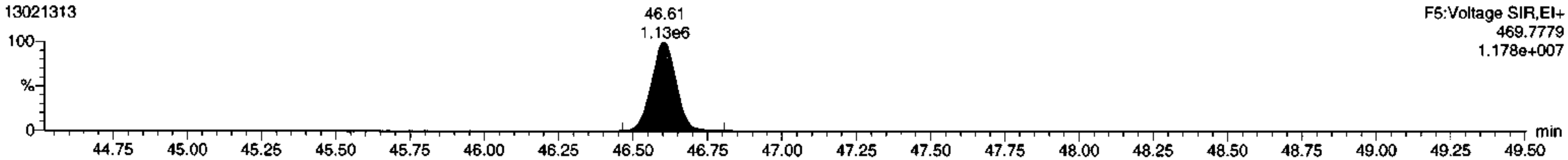
FUNCTION4 NCDPE



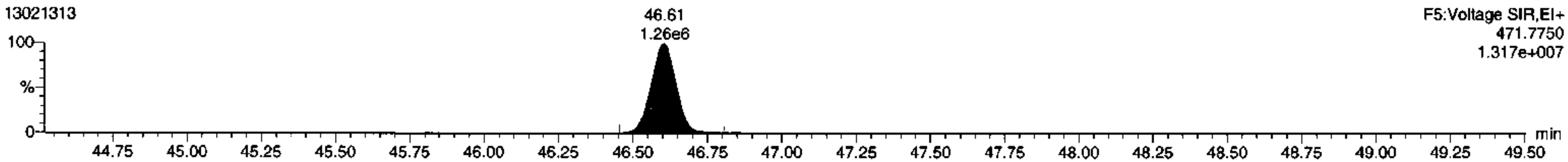
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time
Printed: Thursday, February 14, 2013 10:56:40 Pacific Standard Time

ID: WC33F, Name: 13021313, Date: 13-Feb-2013, Time: 20:45:50, Conditions: AUTOSPEC01, User: pk

13C-OCDD



13C-OCDD



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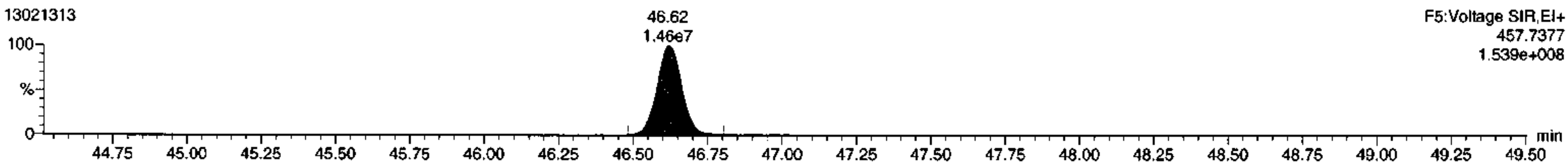

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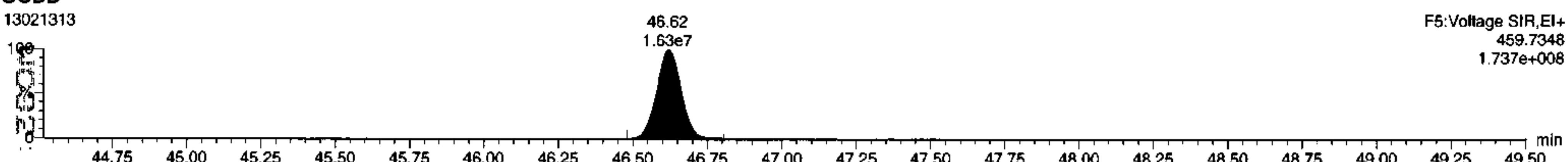

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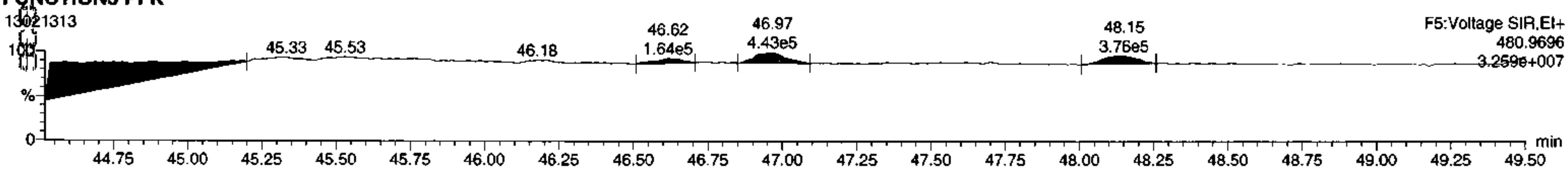


Quantify Sample Report **MassLynx 4.1 SCN 714**

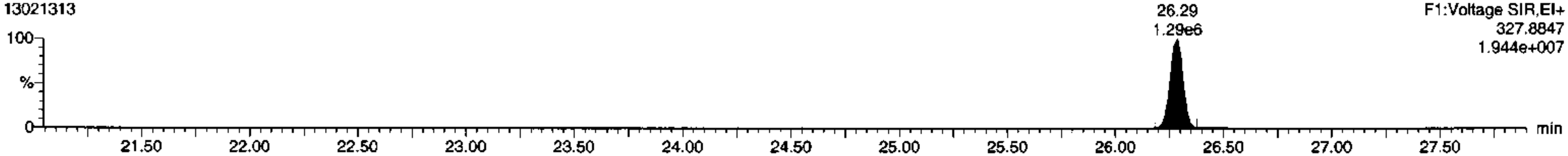
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld

Last Altered: Thursday, February 14, 2013 10:43:24 Pacific Standard Time

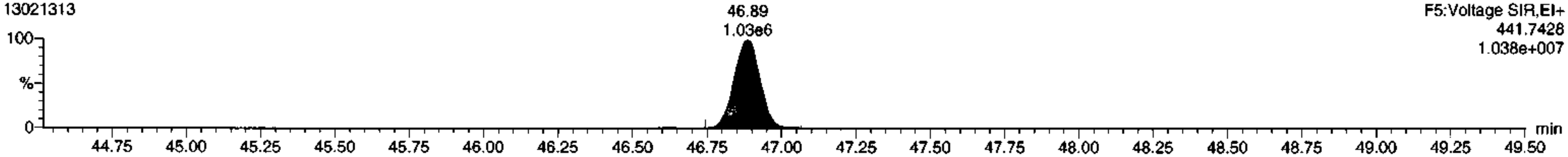
Printed: Thursday, February 14, 2013 10:56:40 Pacific Standard Time

ID: WC33F, Name: 13021313, Date: 13-Feb-2013, Time: 20:45:50, Conditions: AUTOSPEC01, User: pk

37CL-2378-TCDD



OCDF



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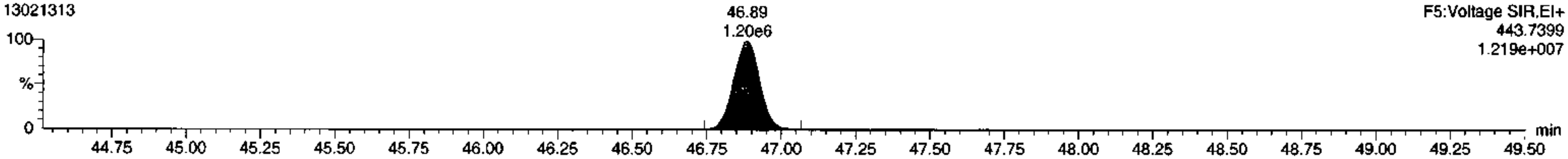
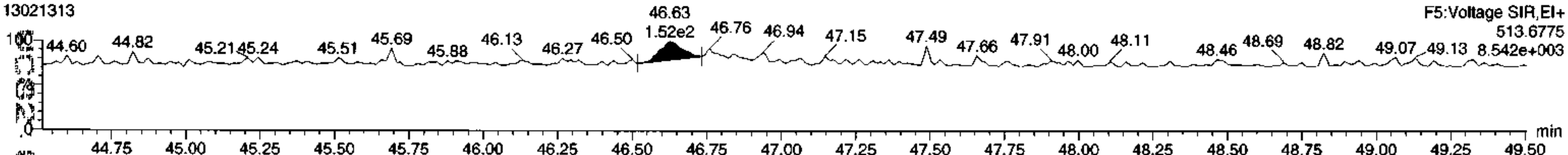


FUNCTION5 DCDPE



Printed: Wednesday, February 13, 2013 22:39:23 Pacific Standard Time

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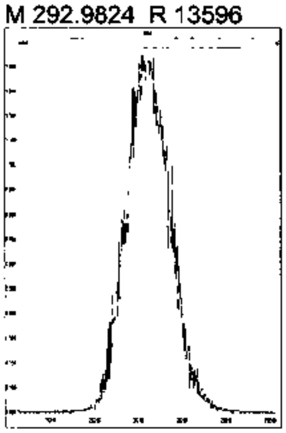

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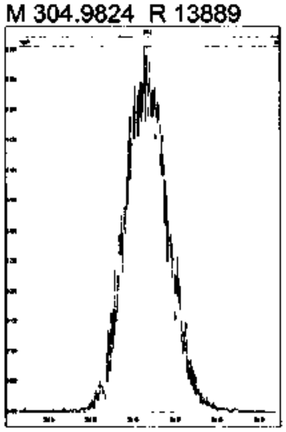

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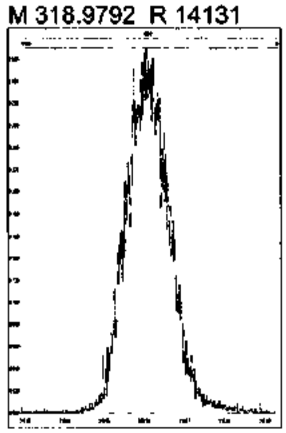

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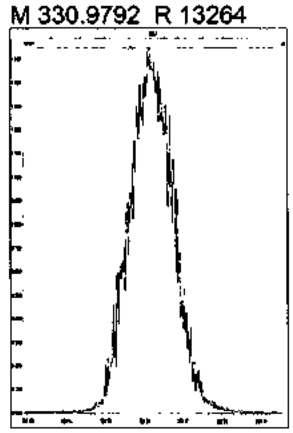

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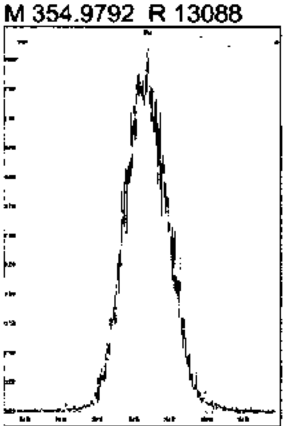

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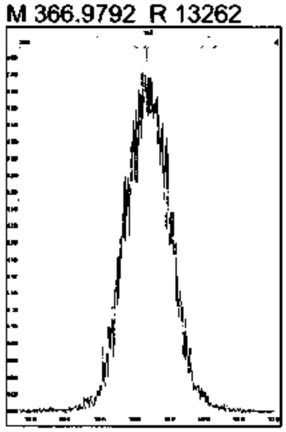

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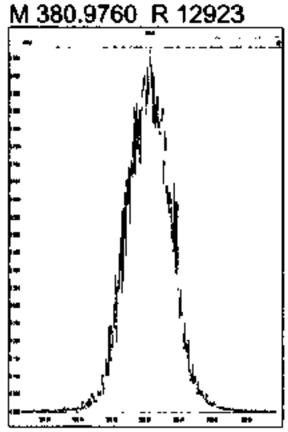

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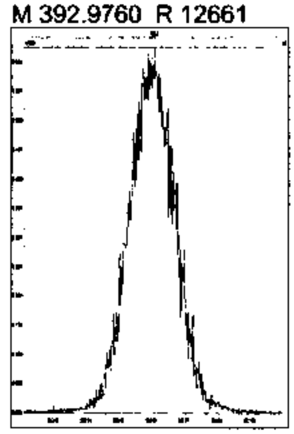

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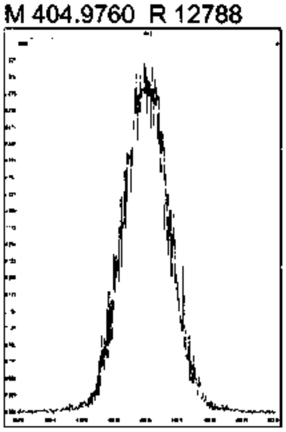

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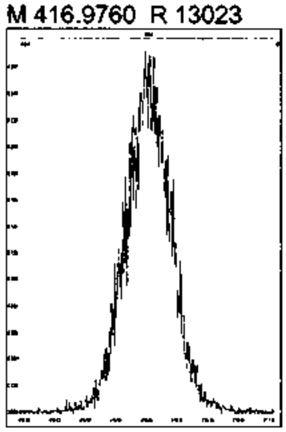

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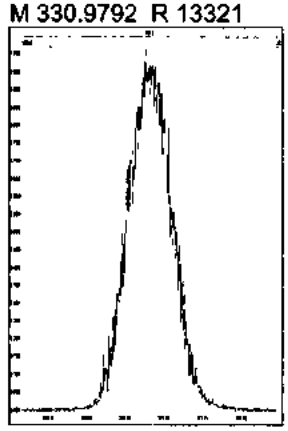

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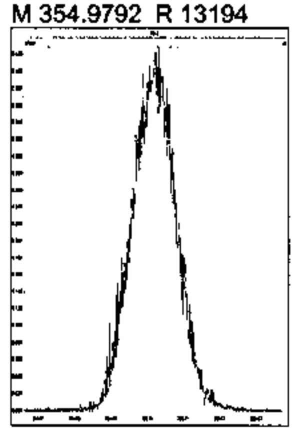

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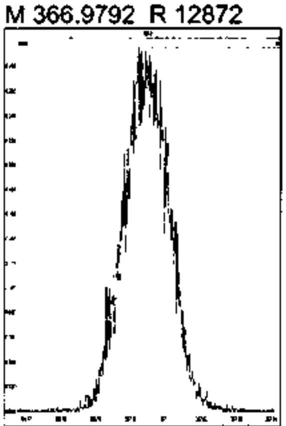
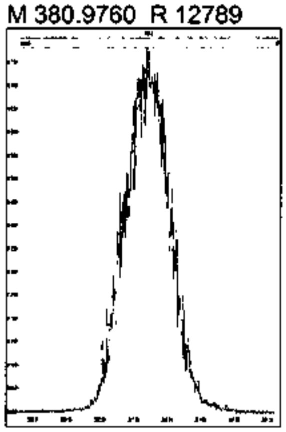


M 380.9760 R 12789



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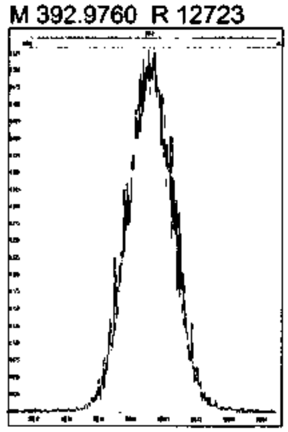

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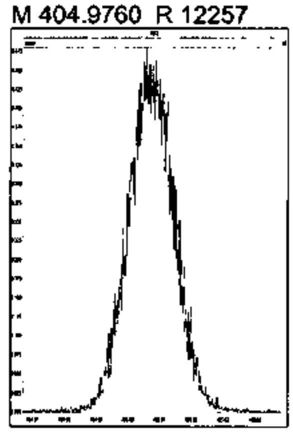

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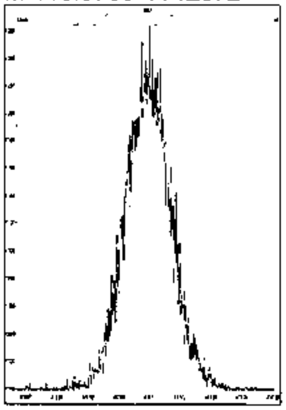

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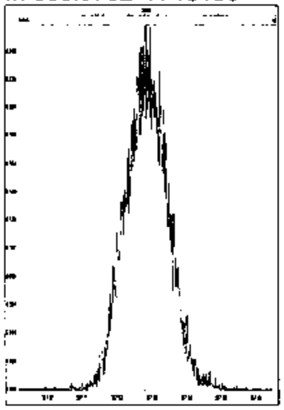

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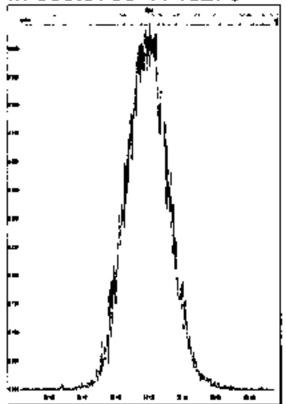

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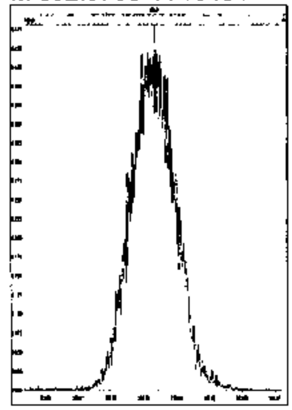

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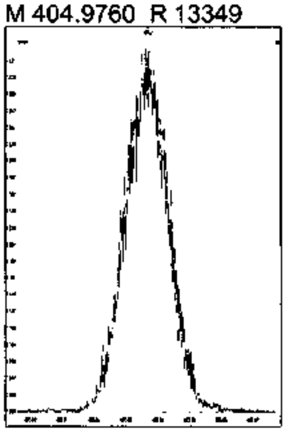

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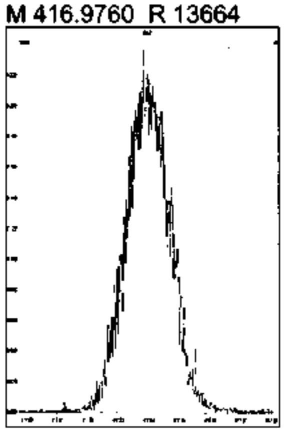

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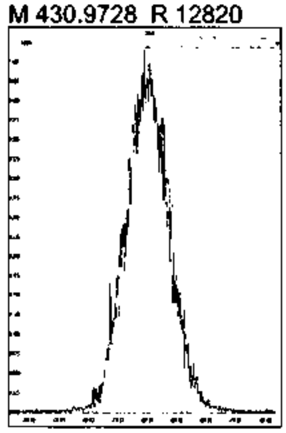

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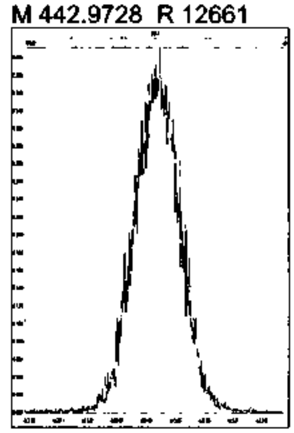

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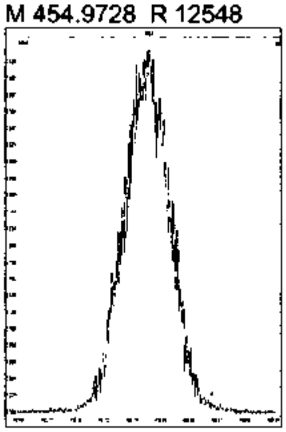
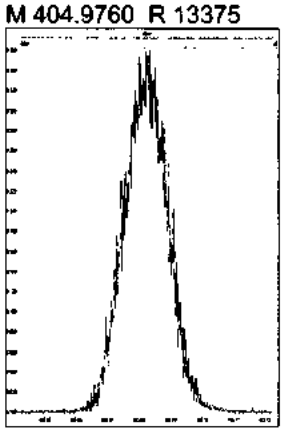


M 404.9760 R 13375



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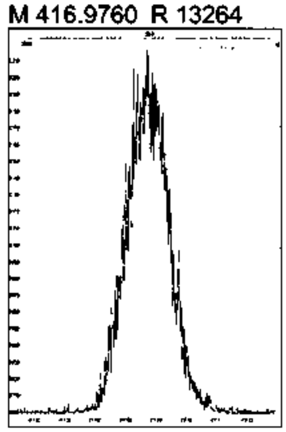

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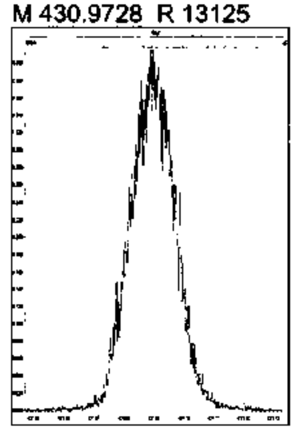

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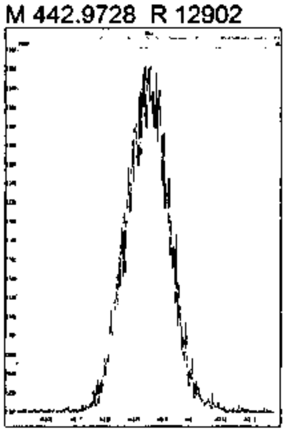

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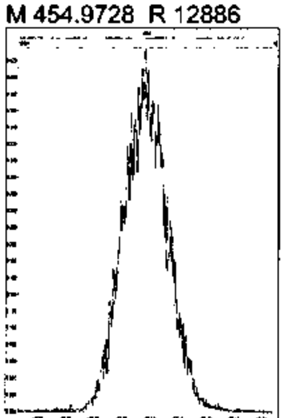

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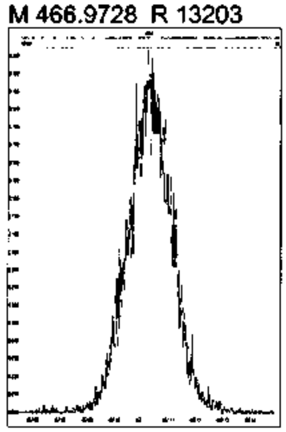

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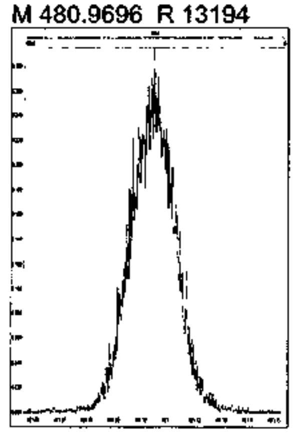
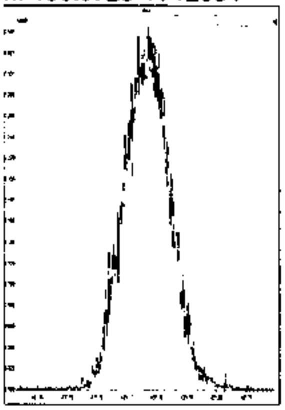


Printed: Wednesday, February 13, 2013 22:39:23 Pacific Standard Time

M 430.9728 R 12954



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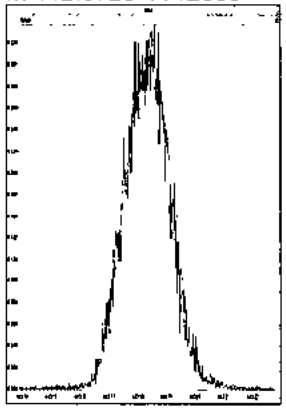

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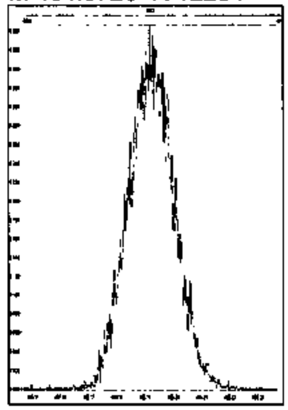

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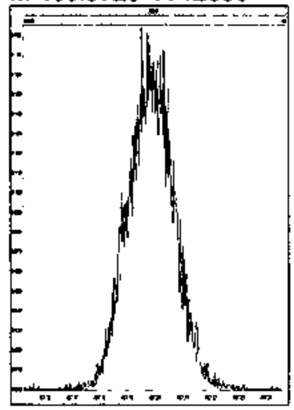

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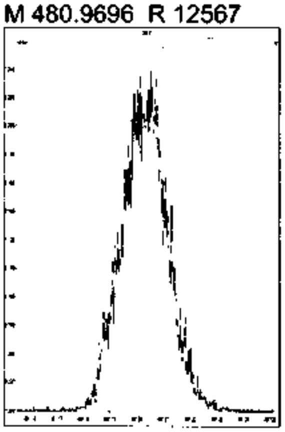

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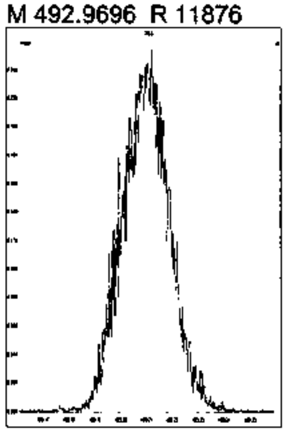

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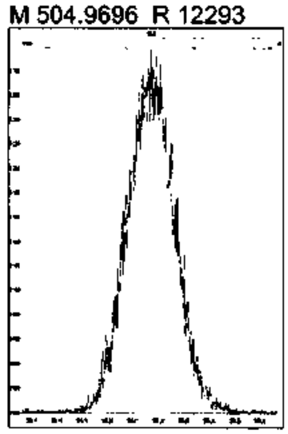

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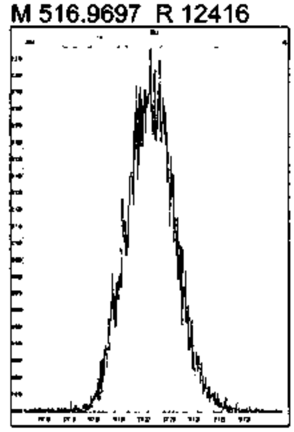

Quantify Sample Summary Report **MassLynx 4.1 SCN 714**
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Last Altered: Thursday, February 14, 2013 09:28:27 Pacific Standard Time
Printed: Thursday, February 14, 2013 09:31:22 Pacific Standard Time

Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 12 Feb 2013 12:25:57
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: CS3, Name: 13021314, Date: 13-Feb-2013, Time: 21:38:29, Conditions: AUTOSPEC01, User: pk

2378-TCDF	25.615	1.001	1.50e5	1.99e5	0.921	0.755	0.770	1532.3	NO	9.374	9.374
12378-PeCDF	29.754	1.001	8.83e5	5.80e5	0.912	1.521	1.550	6044.9	NO	50.716	50.716
23478-PeCDF	31.102	1.001	9.08e5	6.00e5	0.943	1.514	1.550	6274.1	NO	49.859	49.859
123478-HxCDF	34.763	1.000	7.13e5	5.85e5	1.101	1.218	1.240	3631.7	NO	49.930	49.930
234678-HxCDF	35.859	1.000	7.43e5	6.20e5	1.073	1.198	1.240	3794.4	NO	49.520	49.520
123678-HxCDF	34.916	1.001	7.25e5	5.98e5	1.056	1.211	1.240	3736.5	NO	50.244	50.244
123789-HxCDF	37.010	1.001	6.04e5	5.06e5	1.017	1.195	1.240	3062.9	NO	50.121	50.121
1234678-HpCDF	39.070	1.001	6.29e5	6.32e5	1.238	0.995	1.050	4102.7	NO	49.963	49.963
1234789-HpCDF	41.690	1.000	5.12e5	5.10e5	1.224	1.003	1.050	2925.5	NO	50.830	50.830
OCDF	46.831	1.006	7.07e5	7.99e5	1.162	0.884	0.890	4186.1	NO	99.279	99.279
2378-TCDD	26.258	1.001	1.17e5	1.50e5	1.106	0.780	0.770	1317.5	NO	9.536	9.536
12378-PeCDD	31.354	1.001	6.12e5	3.93e5	1.001	1.558	1.550	3864.1	NO	50.054	50.054
123478-HxCDD	36.001	1.001	5.56e5	4.53e5	0.978	1.228	1.240	3990.9	NO	51.059	51.059
123678-HxCDD	36.133	1.001	5.25e5	4.21e5	0.929	1.246	1.240	3875.3	NO	49.309	49.309
123789-HxCDD	36.549	1.012	5.31e5	4.20e5	0.904	1.263	1.240	3784.7	NO	51.469	51.469
1234678-HpCDD	40.835	1.001	4.26e5	4.16e5	1.029	1.026	1.050	3192.3	NO	49.469	49.469
OCDD	46.562	1.000	6.11e5	6.94e5	1.011	0.881	0.890	5313.8	NO	98.849	98.849
13C-2378-TCDF	25.600	1.006	1.78e6	2.27e6	1.522	0.785	0.770	9295.2	NO		100.751
13C-12378-PeCDF	29.732	1.169	1.93e6	1.24e6	1.185	1.557	1.550	11882.7	NO		101.060
13C-23478-PeCDF	31.080	1.222	1.96e6	1.25e6	1.136	1.563	1.550	12650.5	NO		107.014
13C-123478-HxCDF	34.752	0.951	8.03e5	1.56e6	1.284	0.515	0.510	5537.7	NO		92.017
13C-123678-HxCDF	34.894	0.955	8.55e5	1.64e6	1.383	0.522	0.510	5878.9	NO		90.245
13C-234678-HxCDF	35.848	0.981	8.82e5	1.68e6	1.283	0.524	0.510	6143.3	NO		100.024
13C-123789-HxCDF	36.988	1.012	7.43e5	1.43e6	1.099	0.518	0.510	5172.9	NO		99.106
13C-1234678-HpCDF	39.049	1.069	6.29e5	1.41e6	1.070	0.445	0.440	4657.2	NO		95.456
13C-1234789-HpCDF	41.680	1.141	5.11e5	1.13e6	0.774	0.452	0.440	3284.9	NO		106.323
13C-1234-TCDD	25.436	0.000	1.17e6	1.47e6	1.000	0.790	0.770	4389.1	NO		100.000
13C-2378-TCDD	26.243	1.032	1.11e6	1.41e6	0.943	0.789	0.770	4136.2	NO		101.495
13C-12378-PeCDD	31.332	1.232	1.22e6	7.81e5	0.715	1.565	1.550	11937.4	NO		106.137
13C-123478-HxCDD	35.979	0.985	1.13e6	8.92e5	1.032	1.266	1.240	9153.9	NO		97.996
13C-123678-HxCDD	36.111	0.988	1.15e6	9.14e5	1.076	1.259	1.240	9493.2	NO		95.944
13C-1234678-HpCDD	40.813	1.117	8.46e5	8.09e5	0.838	1.045	1.050	5979.6	NO		98.839
13C-OCDD	46.544	1.274	1.24e6	1.37e6	0.675	0.903	0.890	4982.7	NO		193.417

Quantify Sample Summary Report **MassLynx 4.1 SCN 714**

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld

Last Altered: Thursday, February 14, 2013 09:28:27 Pacific Standard Time

Printed: Thursday, February 14, 2013 09:31:22 Pacific Standard Time

ID: CS3, Name: 13021314, Date: 13-Feb-2013, Time: 21:38:29, Conditions: AUTOSPEC01, User: pk

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[redacted]	Total-tetrafurans			4.93e5		0.921						30.462
[redacted]	Total-penta1			1.13e6								63.788
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[redacted]	Total-hexafurans			3.62e6		1.062						260.060
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[redacted]	Total-pentadioxins			2.15e6		1.001						175.432
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[redacted]	Total-Dioxins			6.78e6		0.994						665.131
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[redacted]	FUNCTION1 PFK			5.64e7								
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[redacted]	FUNCTION4 PFK			0.00e0								
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[redacted]	FUNCTION1 HXCDPE			1.52e2								0.000
[redacted]	FUNCTION1 HPCDPE			2.08e3								0.000
[redacted]	FUNCTION2 HPCDPE			1.40e3								0.000
[redacted]	FUNCTION3 OCDPE			0.00e0								
[redacted]	FUNCTION4 NCDPE			1.42e2								0.000
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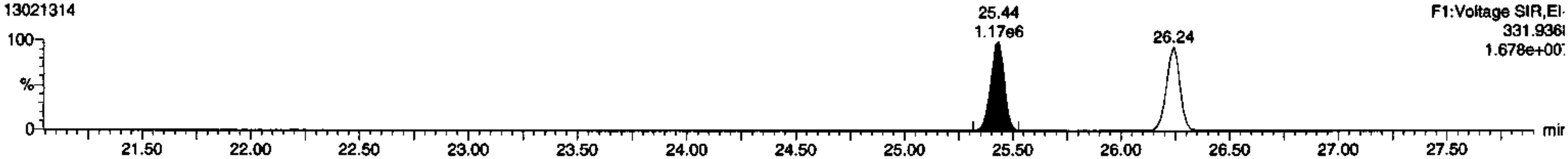
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 09:28:27 Pacific Standard Time
Printed: Thursday, February 14, 2013 09:31:22 Pacific Standard Time

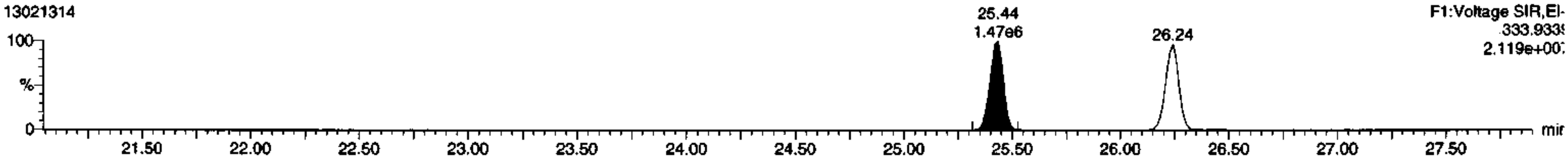
Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 12 Feb 2013 12:25:57
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: CS3, Name: 13021314, Date: 13-Feb-2013, Time: 21:38:29, Conditions: AUTOSPEC01, User: pk

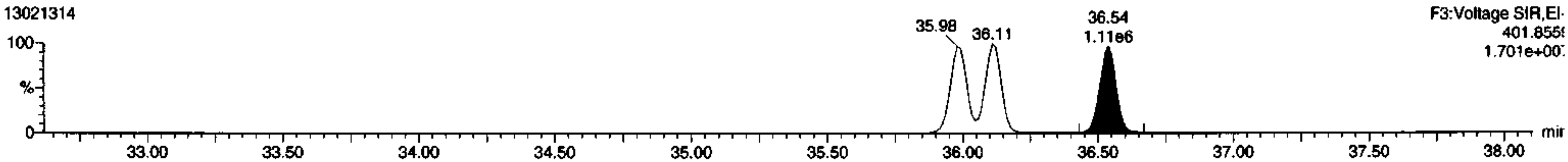
13C-1234-TCDD



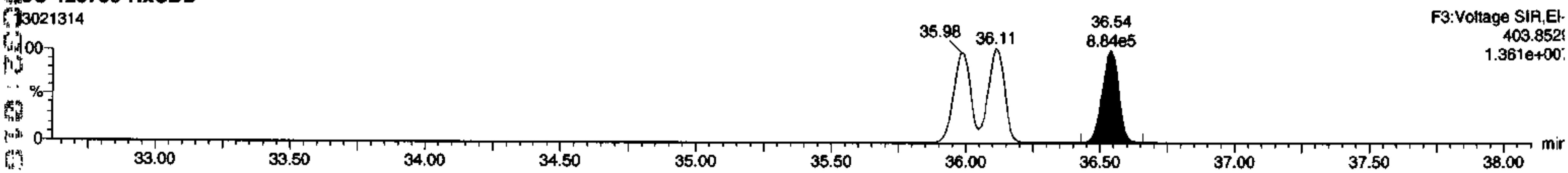
13C-1234-TCDD



13C-123789-HxCDD



13C-123789-HxCDD



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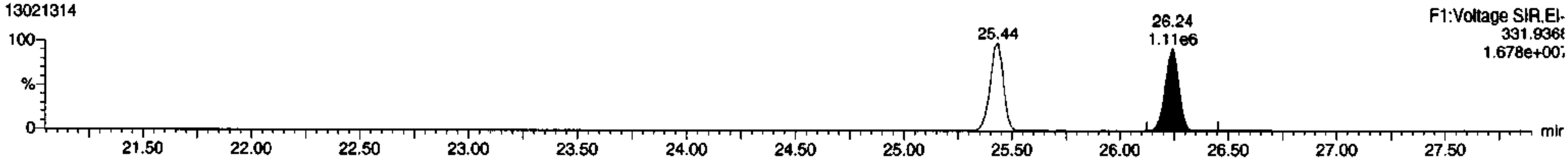
Printed: Thursday, February 14, 2013 09:31:22 Pacific Standard Time

ID: CS3, Name: 13021314, Date: 13-Feb-2013, Time: 21:38:29, Conditions: AUTOSPEC01, User: pk

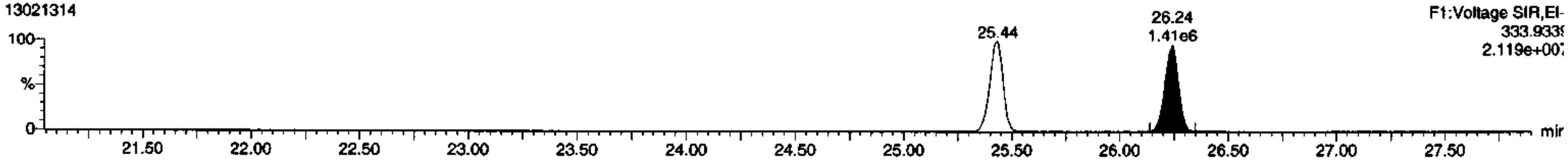
13C-2378-TCDD

13021314



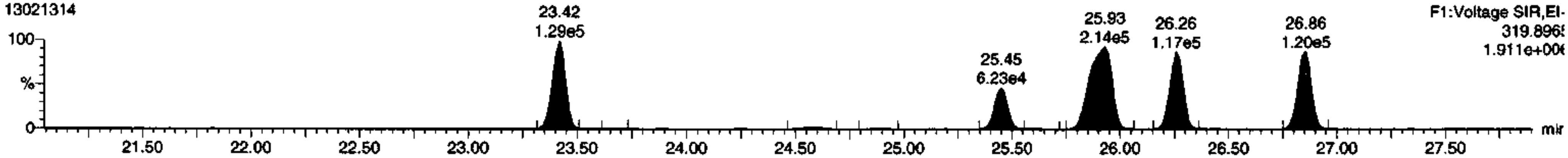
13C-2378-TCDD

13021314



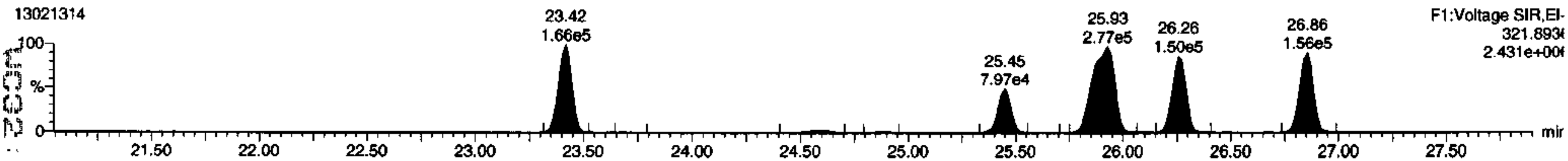
Total-tetradioxins

13021314



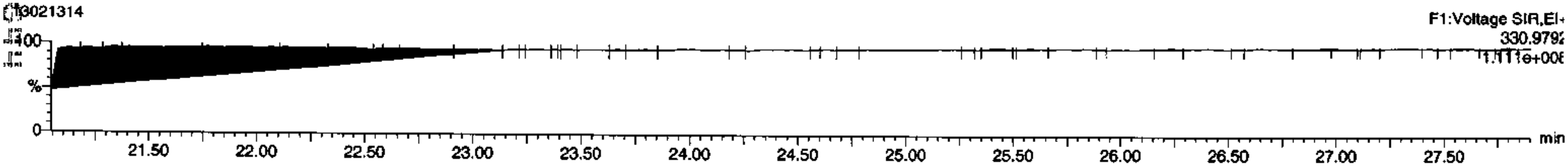
Total-tetradioxins

13021314



FUNCTION1 PFK

13021314



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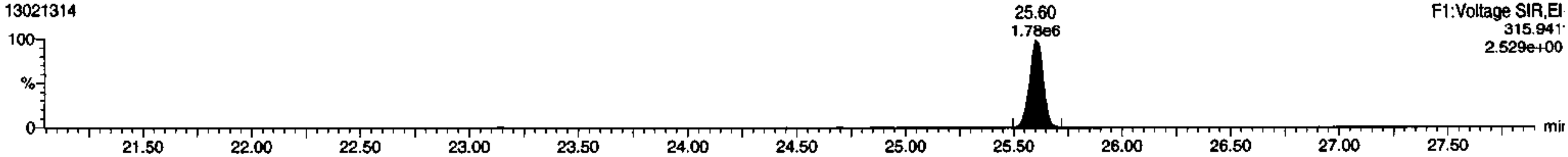
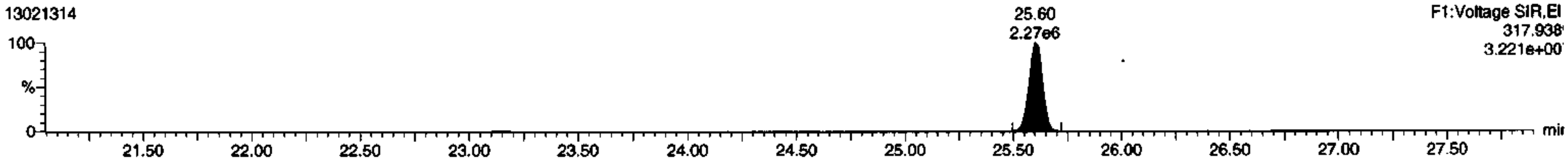
Printed: Thursday, February 14, 2013 09:31:22 Pacific Standard Time

ID: CS3, Name: 13021314, Date: 13-Feb-2013, Time: 21:38:29, Conditions: AUTOSPEC01, User: pk

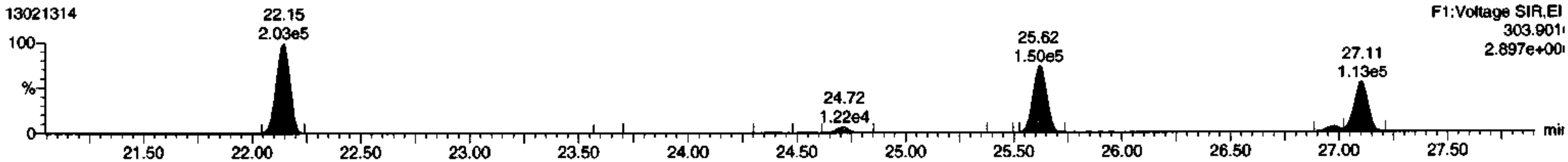
13C-2378-TCDF



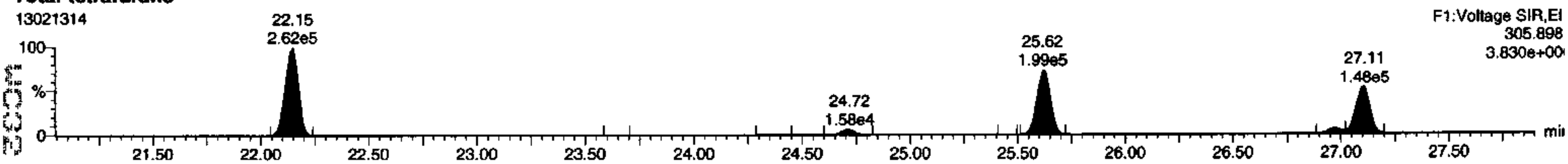
13C-2378-TCDF



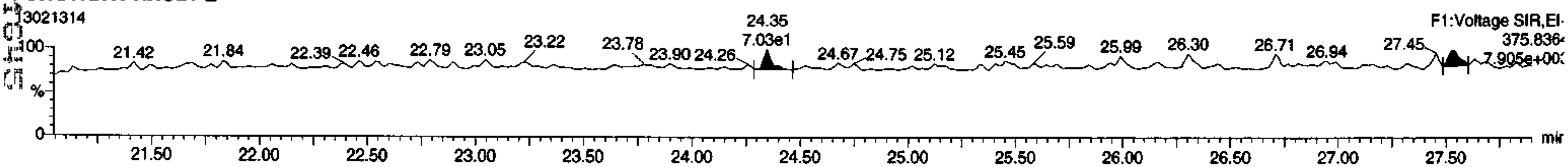
Total-tetrafurans



Total-tetrafurans



FUNCTION1 HXCDPE



Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
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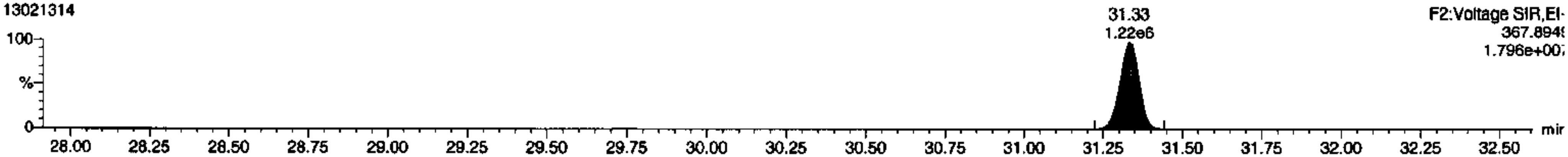
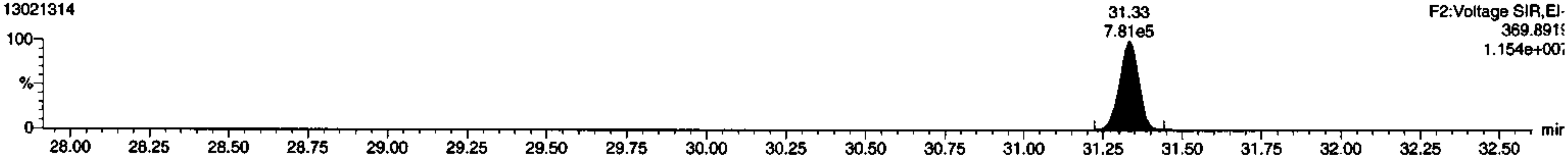
Printed: Thursday, February 14, 2013 09:31:22 Pacific Standard Time

ID: CS3, Name: 13021314, Date: 13-Feb-2013, Time: 21:38:29, Conditions: AUTOSPEC01, User: pk

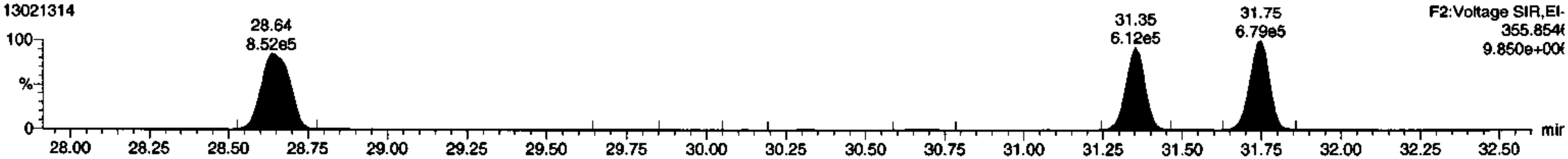
13C-12378-PeCDD
13021314



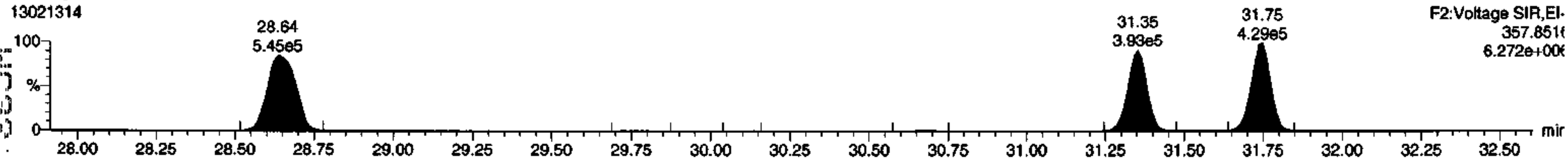
13C-12378-PeCDD
13021314



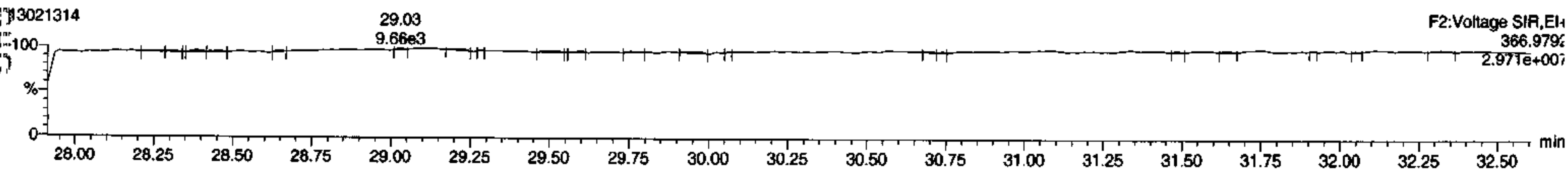
Total-pentadioxins
13021314



Total-pentadioxins
13021314



FUNCTION2 PFK
13021314



Dataset: P:\DIOXIN8290.PRO\130213DATA.qld

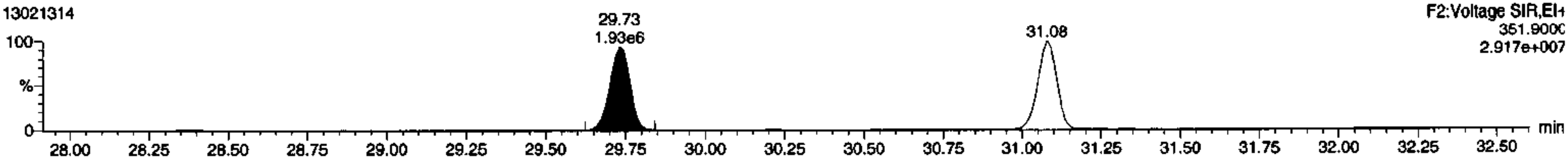
Last Altered: Thursday, February 14, 2013 09:28:27 Pacific Standard Time

Printed: Thursday, February 14, 2013 09:31:22 Pacific Standard Time

ID: CS3, Name: 13021314, Date: 13-Feb-2013, Time: 21:38:29, Conditions: AUTOSPEC01, User: pk

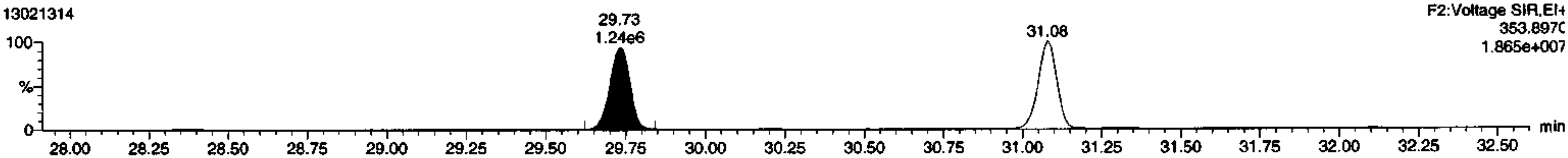
13C-12378-PeCDF

13021314



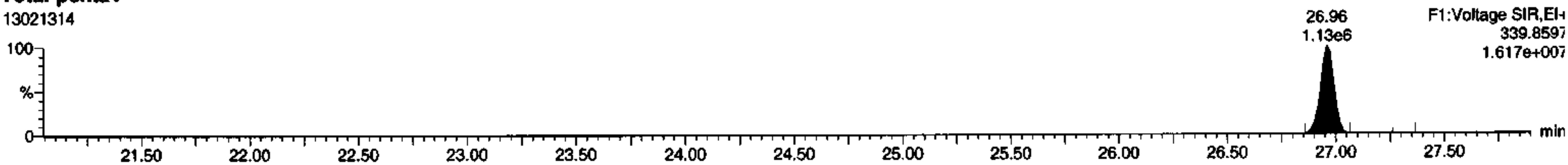
13C-12378-PeCDF

13021314



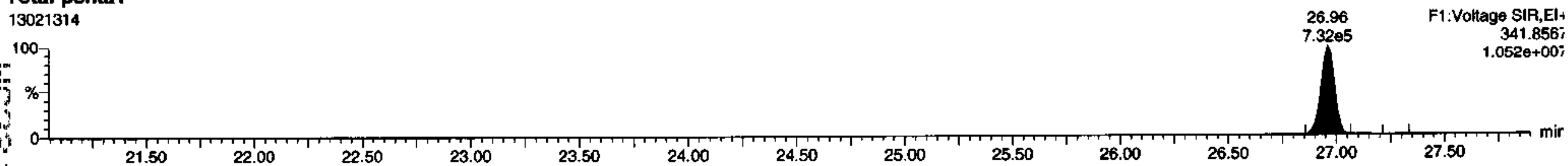
Total-penta1

13021314



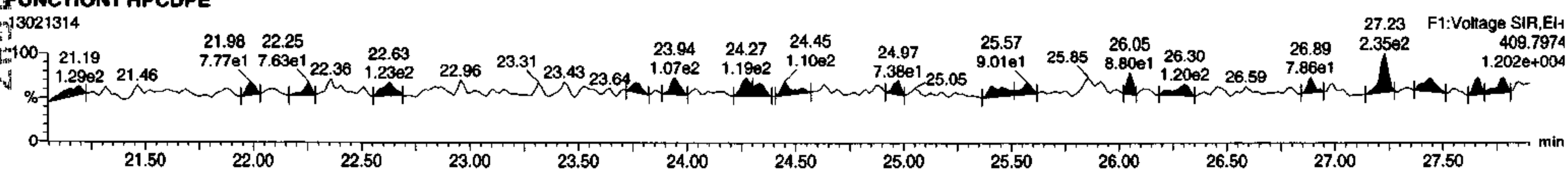
Total-penta1

13021314



FUNCTION1 HPCDPE

13021314



Dataset: P:\DIOXIN8290.PRO\130213DATA.qld

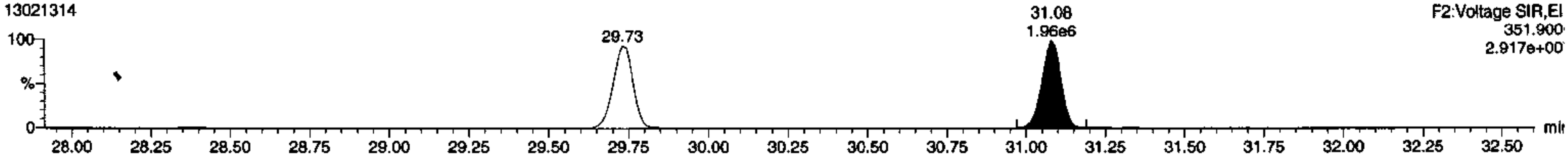
Last Altered: Thursday, February 14, 2013 09:28:27 Pacific Standard Time

Printed: Thursday, February 14, 2013 09:31:22 Pacific Standard Time

ID: CS3, Name: 13021314, Date: 13-Feb-2013, Time: 21:38:29, Conditions: AUTOSPEC01, User: pk

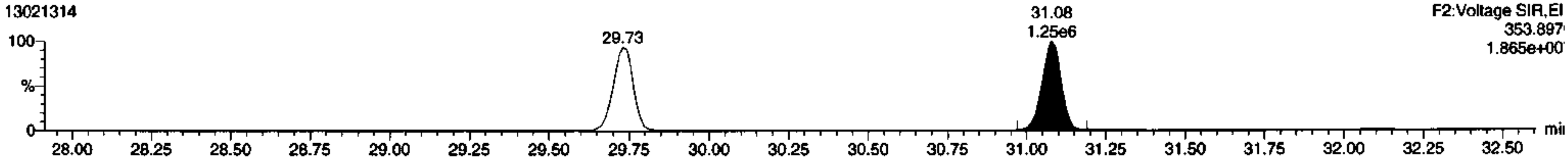
13C-23478-PeCDF

13021314



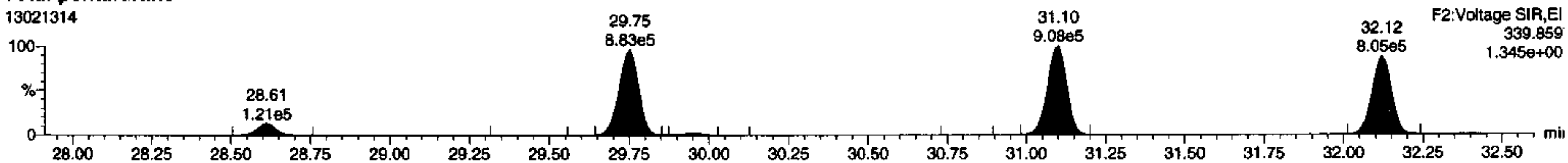
13C-23478-PeCDF

13021314



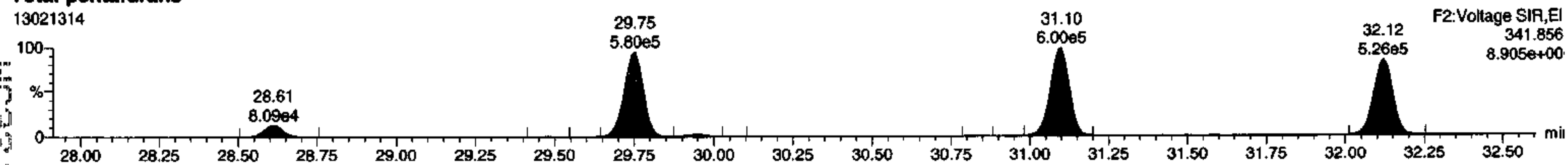
Total-pentafurans

13021314



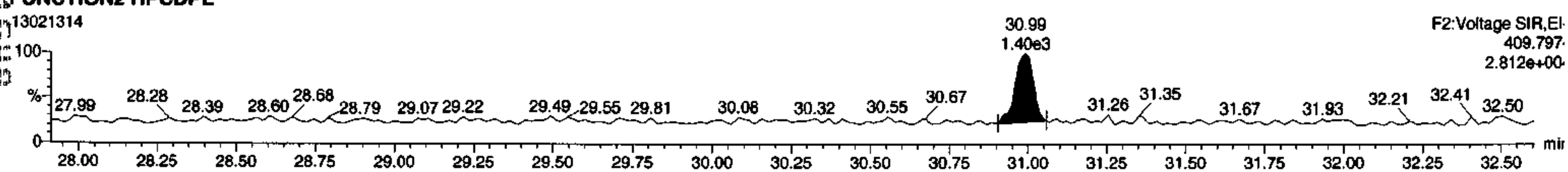
Total-pentafurans

13021314



FUNCTION2 HPCDPE

13021314



Quantify Sample Report **MassLynx 4.1 SCN 714**

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld

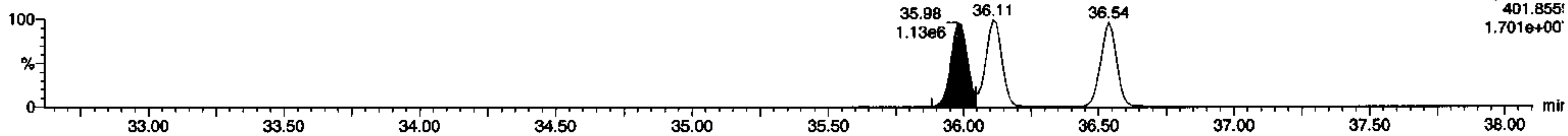
Last Altered: Thursday, February 14, 2013 09:28:27 Pacific Standard Time

Printed: Thursday, February 14, 2013 09:31:22 Pacific Standard Time

ID: CS3, Name: 13021314, Date: 13-Feb-2013, Time: 21:38:29, Conditions: AUTOSPEC01, User: pk

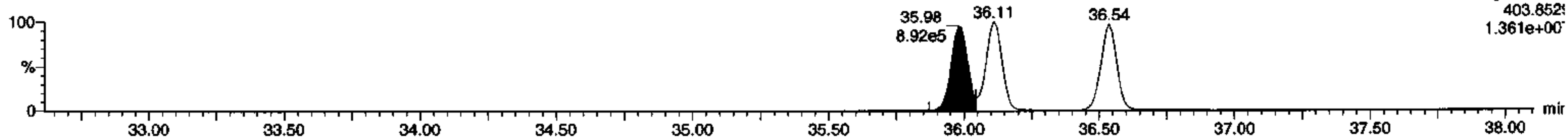
13C-123478-HxCDD

13021314



13C-123478-HxCDD

13021314



Total-hexadioxins

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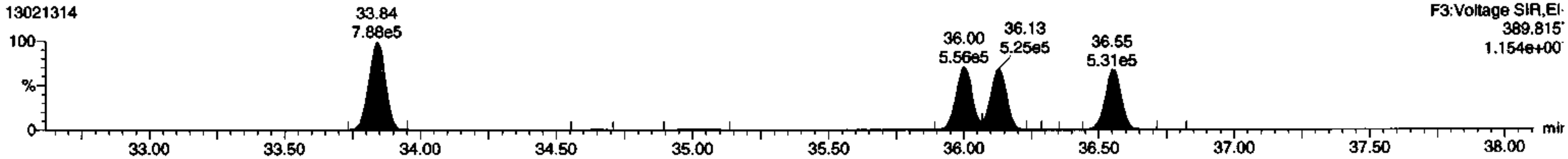
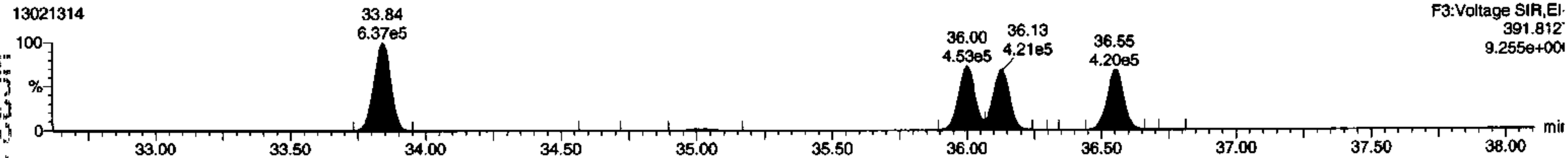


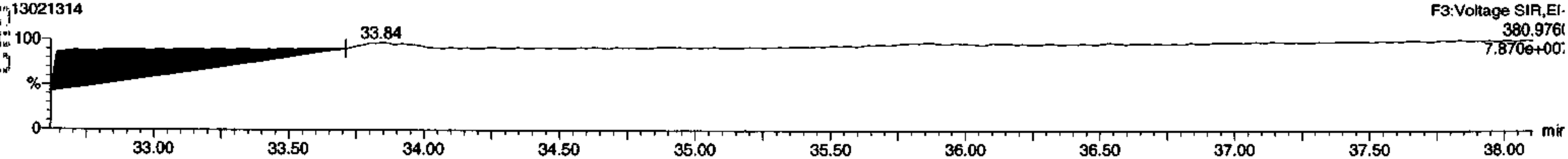
Total-hexadioxins

13021314



FUNCTION3 PFK

13021314



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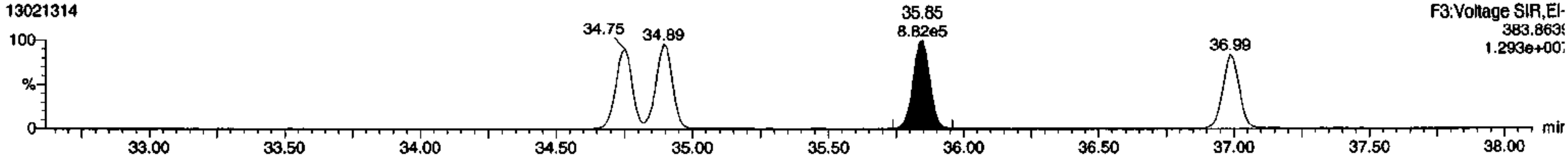
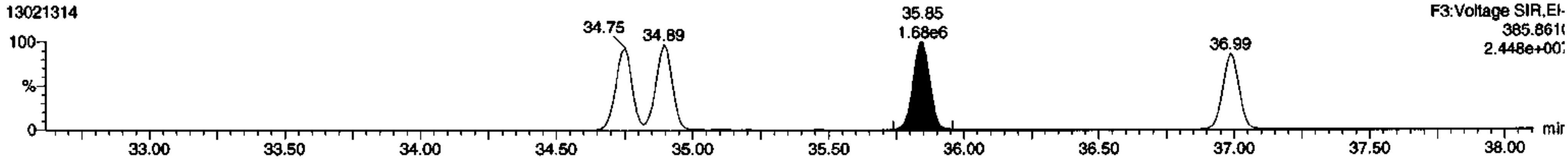
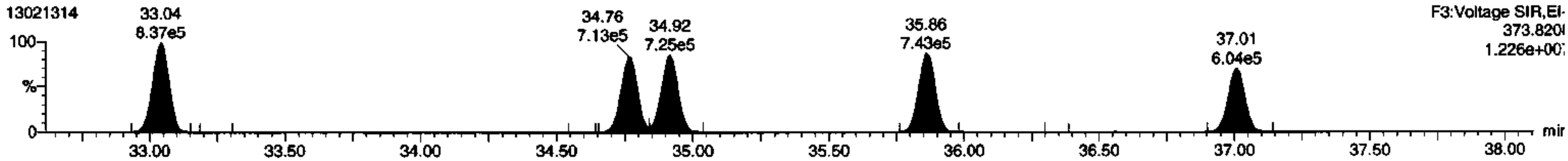
13C-234678-HxCDF



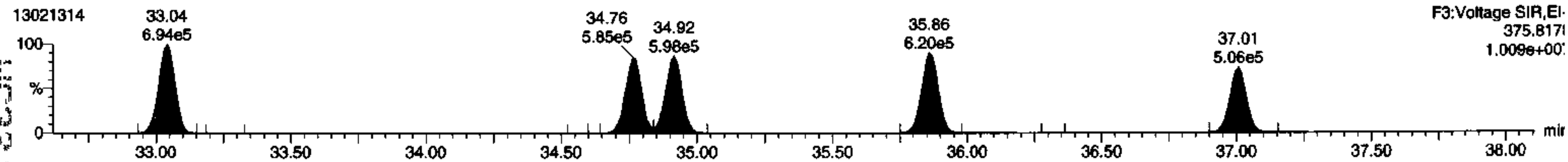
13C-234678-HxCDF



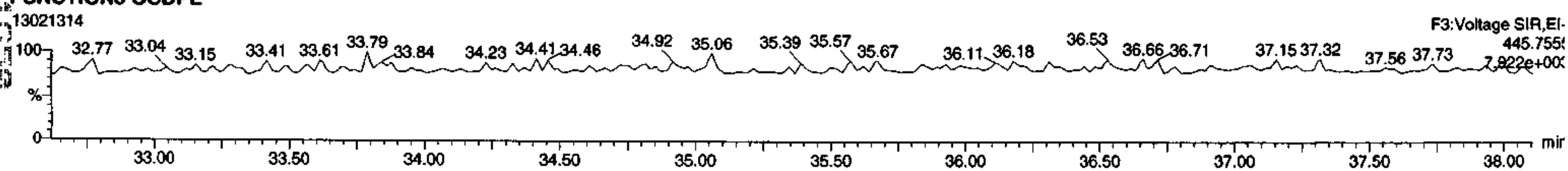
Total-hexafurans



Total-hexafurans



FUNCTION3 OCDPE



Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
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Printed: Thursday, February 14, 2013 09:31:22 Pacific Standard Time

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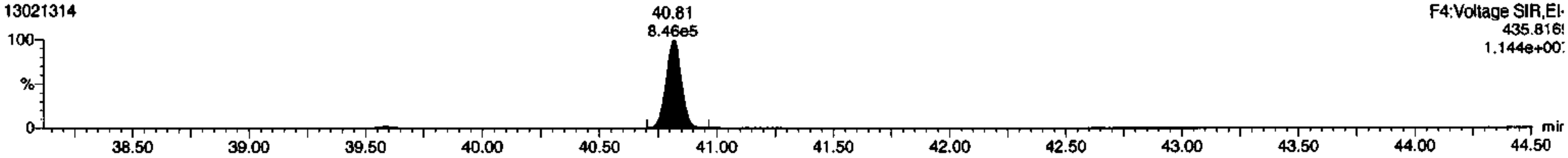
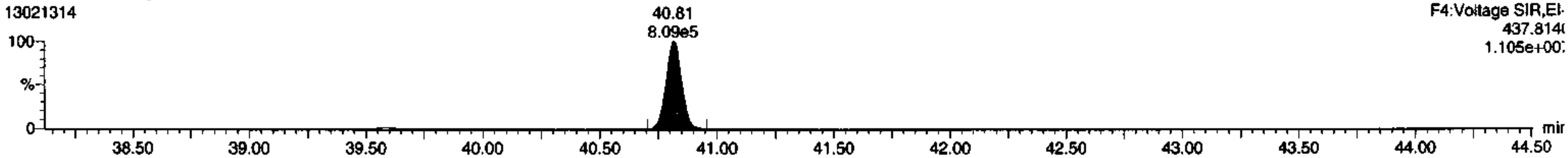
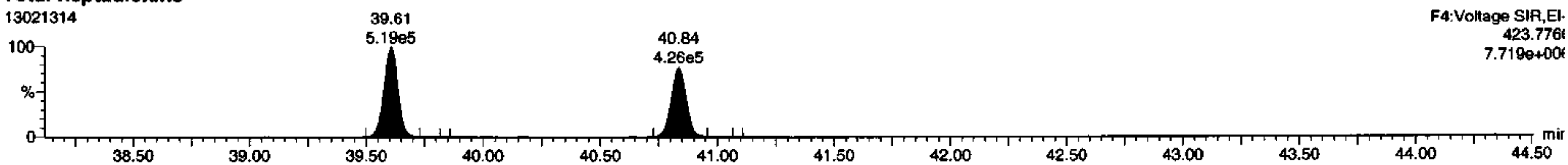
13C-1234678-HpCDD



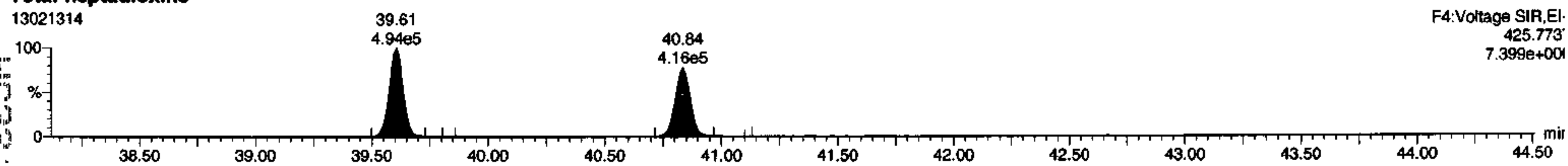
13C-1234678-HpCDD



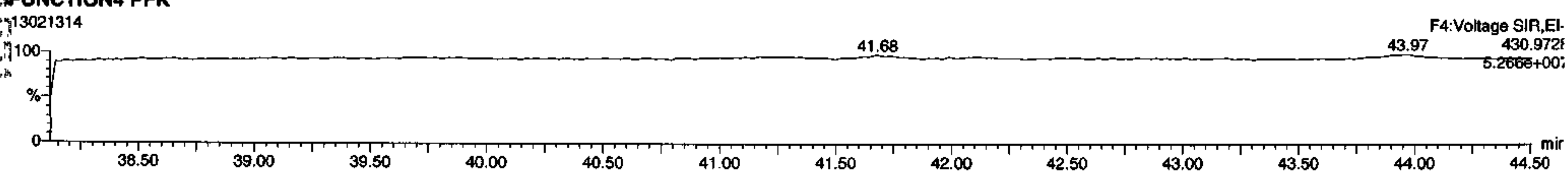
Total-heptadioxins



Total-heptadioxins



FUNCTION4 PFK



Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
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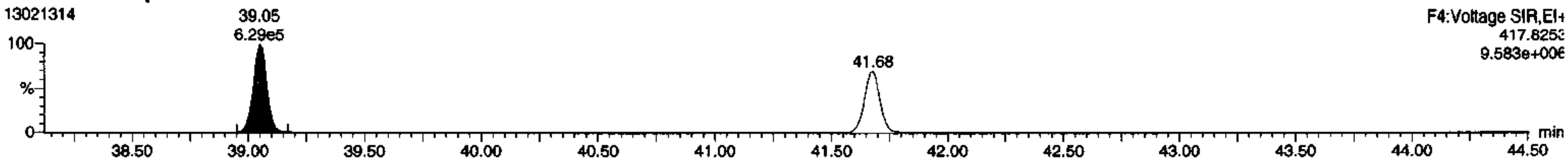
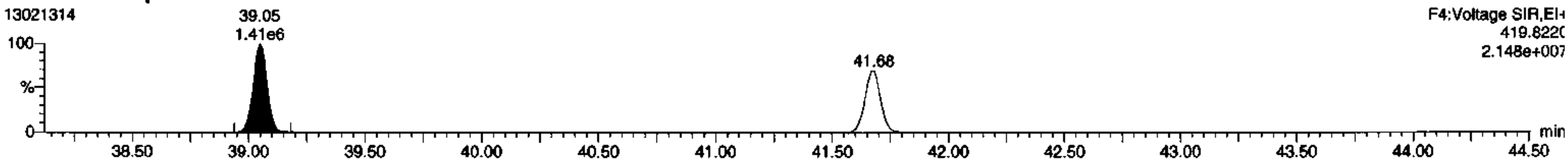
Printed: Thursday, February 14, 2013 09:31:22 Pacific Standard Time

ID: CS3, Name: 13021314, Date: 13-Feb-2013, Time: 21:38:29, Conditions: AUTOSPEC01, User: pk

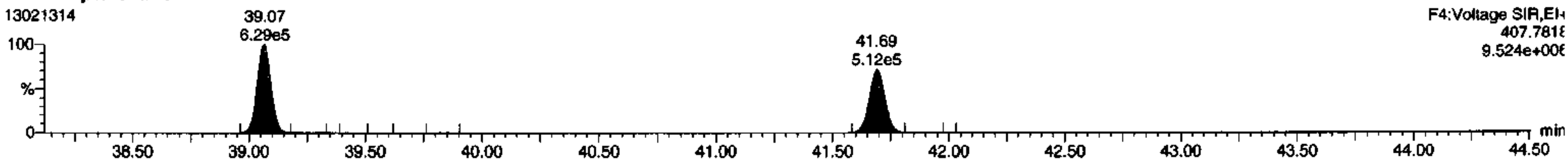
13C-1234678-HpCDF



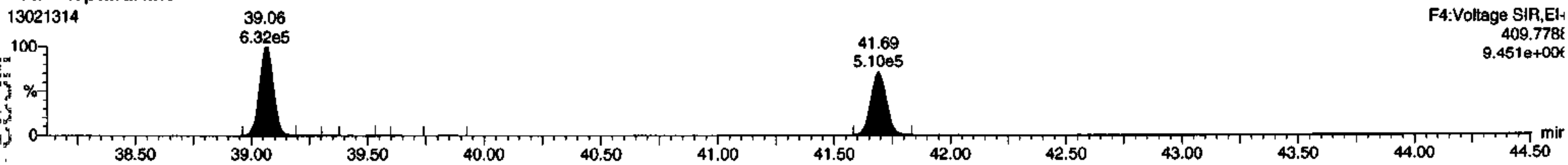
13C-1234678-HpCDF



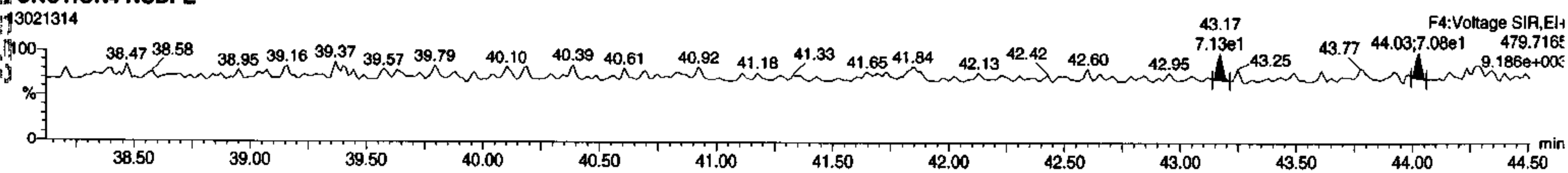
Total-heptafurans



Total-heptafurans



FUNCTION4 NCDPE



Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
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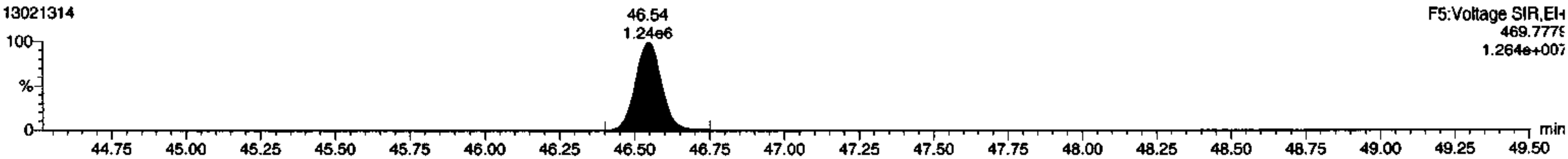
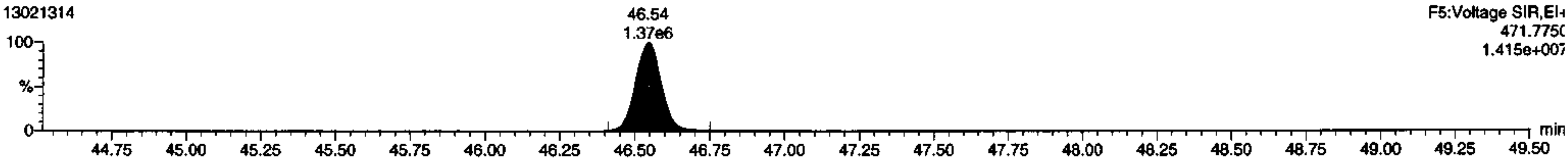
Printed: Thursday, February 14, 2013 09:31:22 Pacific Standard Time

ID: CS3, Name: 13021314, Date: 13-Feb-2013, Time: 21:38:29, Conditions: AUTOSPEC01, User: pk

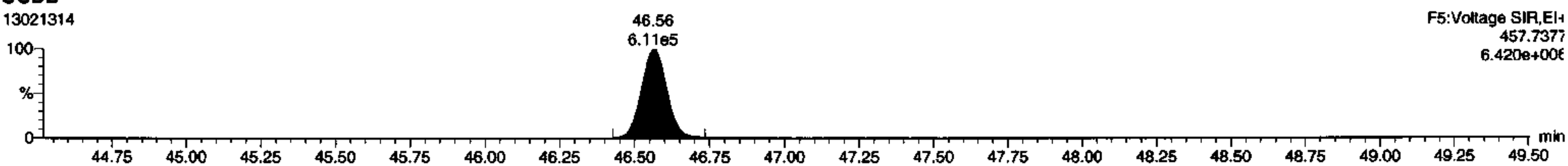
13C-OCDD



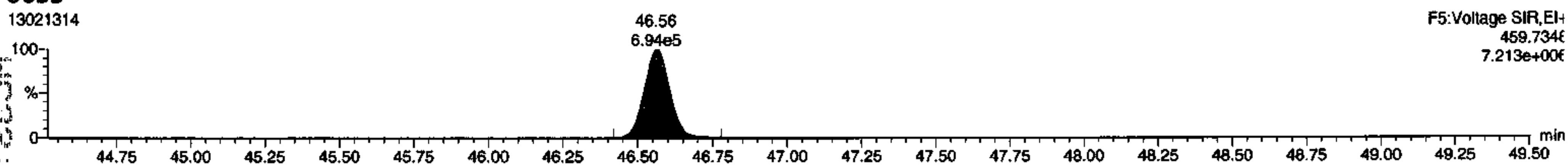
13C-OCDD



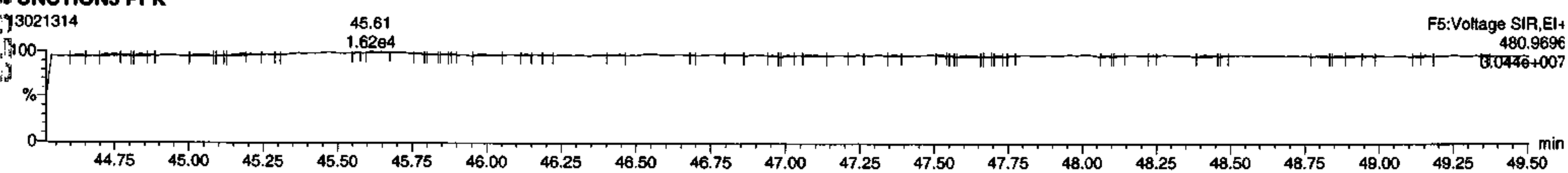
OCDD



OCDD



FUNCTION5 PFK



Quantity Sample Report MassLynx 4.1 SCN 714

Dataset: P:\DIOXIN8290.PRO\130213DATA.qld
Last Altered: Thursday, February 14, 2013 09:28:27 Pacific Standard Time
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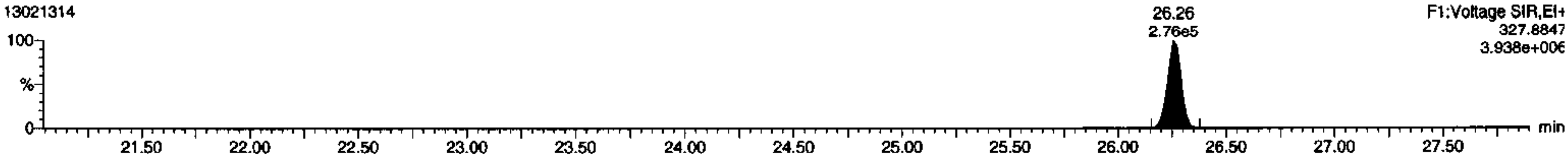
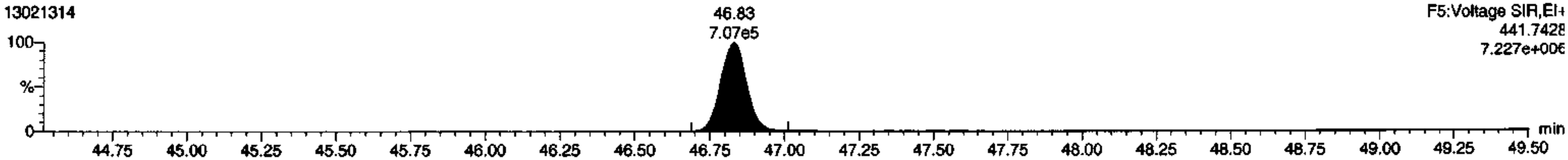
ID: CS3, Name: 13021314, Date: 13-Feb-2013, Time: 21:38:29, Conditions: AUTOSPEC01, User: pk

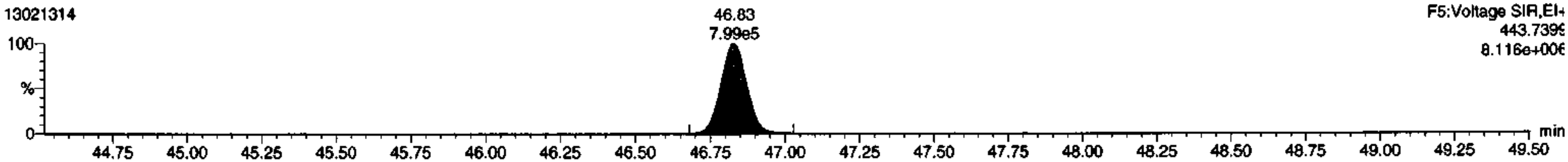
37CL-2378-TCDD



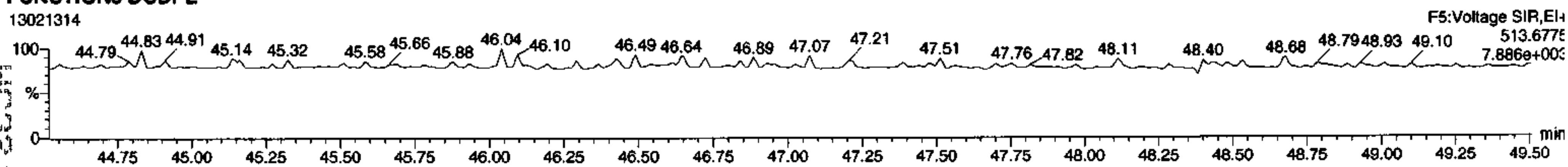
OCDF



OCDF



FUNCTION5 DCDPE



WC02:01654

Pesticide Raw Data
Extraction Bench Sheets and Notes

ARI Job ID: WC32, WC33

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Benchsheet

(8081B) Pest PSDDA – Soil/Sed
Microwave (3546) (SOP # 3304S)

Preparation Test Pest # 5 (PESSDMP)
PSDDA (1-2ppb)

ARI Job No(s) WC32, WC33 Page 1 of 2 Batch set up by: WW

Bottle #	ARI Sample I.D.	Weight Extracted (eq. to 12.5 dry wt)	(REQ) Sulfur Clean 2mL+0.5mL Ethyl Acetate 1 2 3 High Sulfur	(REQ) Silica Gel Clean (1:2.5)	Final Effective Volume	Volume to Lab	Comment	Verify Client ID M 2/8/13 Analyst/Date
	WC32 MBS	12.5g	2.5mL	(1:2.5) 1mL	2.5mL	1mL	**(10g Actual Wt)**	Microwave 1 2 3
	SBS	12.5g	2.5mL	(1:2.5) 1mL	2.5mL	1mL	**(10g Actual Wt)**	M 2/8/13
	SBS Dup.	12.5g	2.5mL	(1:2.5) 1mL	2.5mL	1mL	**(10g Actual Wt)**	Analyst/Date
	QLS	12.5g	2.5mL	(1:2.5) 1mL	2.5mL	1mL	**(10g Actual Wt)**	KD 100°C
2	A	32.17	2.5mL	(1:2.5) 1mL	2.5mL	1mL		Hexane Exchange (2 X 20mL) 1 2 3 4 5 6
2	B	36.13	2.5mL	(1:2.5) 1mL	2.5mL	1mL		YL / CT
2	C	17.75	2.5mL	(1:2.5) 1mL	2.5mL	1mL		2/9/13 Analyst/Date
2	D	22.29	2.5mL	(1:2.5) 1mL	2.5mL	1mL		TurboVap 1 2 3 Pre-Cleanups
2	E	14.08	2.5mL	(1:2.5) 1mL	2.5mL	1mL		
2	F	14.27	2.5mL	(1:2.5) 1mL	2.5mL	1mL		
2	G	25.09	2.5mL	(1:2.5) 1mL	2.5mL	1mL		CSZ 2/11/13 Analyst/Date
2	Gms	25.05	2.5mL	(1:2.5) 1mL	2.5mL	1mL		TurboVap 1 2 3 Post Cleanups
2	Gmsd	25.17	2.5mL	(1:2.5) 1mL	2.5mL	1mL		
2	H	24.13	2.5mL	(1:2.5) 1mL	2.5mL	1mL		2/12/13
Analyst/Date AC / M 2/8/13			CSZ 2/11/13	WW 2/11/13	CSZ 2/11/13	CSZ 2/12/13		CSZ ~~2/13~~ CSZ Analyst/Date

Standard	Standard ID	Concentration	Volume	Expiration Date	Analyst	Witness
Surrogate	N (2035-2)	2µg/mL	**50µL**	5/16/13	M	AC
Spike	3 (2046-1)	0.5/1/5µg/mL	**100µL**	12/10/13	M	AC
QLS Spike	10 (2046-2)	0.25-2.5µg/mL	**25µL**	12/10/13	M	AC
Extraction Time: 13:15			**Balance ID:** 38040092			

SPECIAL INSTRUCTIONS: 1. Weigh into beakers-lightly dry with Sodium Sulfate. 2. Transfer to microwave vessel. Note: do not fill vessel more than 2/3rd full. Some samples may require two vessels). 3. Add 1:1 Hex/ACE to the vessels (until solvent is 3" above soil layer after homogenization). 4. Add surr/spike. 5. Microwave on appropriate power setting determined by # of samples. 6. After microwave-re-homogenize while hot then let cool 15 min in cold water. Re-homogenize while cool. 7. Decant 1:1 Hex/ACE into Erlenmeyer flask with sodium sulfate in the bottom and funnel containing neutral glasswool. 8. Rinse with Hexane 9. Microwave a 2nd time using 8:2 Hex/Ace (until solvent is 3" above soil layer after homogenization). 10. Let cool and decant the solvent then empty the soil into the funnel and rinse with Hexane. 11. KD (Small or Large drying column) to 5mL at 100°C. 12. Exchange to Hexane (2 X with [illegible] 13. TurboVap. 14. Clean-ups. 15. TurboVap. 16. Vial in Hexane.

A. Need Total Solids Y / N   B. Archive/Freeze Y / N

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Benchsheet

(8081B) Pest PSDDA – Soil/Sed
Microwave (3546) (SOP # 3304S)

Preparation Test Pest # 5 (PESSDMP)
PSDDA (1-2ppb)

ARI Job No(s) WC32, WC33 Page 2 of 2 Batch set up by: WW

Bottle #	ARI Sample I.D.	Weight Extracted (eq. to 12.5 dry wt)	(REQ) Sulfur Clean 2mL+0.5mL Ethyl Acetate 1 2 3 ww Hig(?)salt	(REQ) Silica Gel Clean (1:2.5)	Final Effective Volume	Volume to Lab	Comment	Verify Client ID MC 2/8/13 Analyst/Date
	~~MBS~~	~~12.5g~~	~~2.5mL~~	~~(1:2.5) 1mL~~	~~2.5mL~~	~~1mL~~	~~(10g Actual Wt)~~	Microwave 1 2 3
	~~SBS~~	~~12.5g~~	~~2.5mL~~	~~(1:2.5) 1mL~~	~~2.5mL~~	~~1mL~~	~~(10g Actual Wt)~~	MC 2/8/13
	~~SBS Dup.~~	~~12.5g~~	~~2.5mL~~	~~(1:2.5) 1mL~~	~~2.5mL~~	~~1mL~~	~~(10g Actual Wt)~~	Analyst/Date
	~~QLS~~	~~12.5g~~	~~2.5mL~~	~~(1:2.5) 1mL~~	~~2.5mL~~	~~1mL~~	~~(10g Actual Wt)~~	KD 100°C Hexane Exchange (2 X 20mL) 1 2 3 4 5 6
2	WC33 G	14.24	2.5mL	(1:2.5) 1mL	2.5mL	1mL		YL / CT
			2.5mL	(1:2.5) 1mL	2.5mL	1mL		2/9/13
			2.5mL	(1:2.5) 1mL	2.5mL	1mL		Analyst/Date
			2.5mL	(1:2.5) 1mL	2.5mL	1mL		TurboVap 1 2 3 Pre-Cleanups
			2.5mL	(1:2.5) 1mL	2.5mL	1mL		
			2.5mL	(1:2.5) 1mL	2.5mL	1mL		
			2.5mL	(1:2.5) 1mL	2.5mL	1mL		CJZ 2/11/13 Analyst/Date
			2.5mL	(1:2.5) 1mL	2.5mL	1mL		TurboVap 1 2 3 Post Cleanups
			2.5mL	(1:2.5) 1mL	2.5mL	1mL	CJZ	
			2.5mL	(1:2.5) 1mL	2.5mL	1mL	2/12/13	
Analyst/Date		AC/ MC 2/8/13	CJZ 2/11/13	WW 2/11/13	CJZ 2/11/13	CJZ 2/12/13		CJZ 2/12/13 Analyst/Date

Standard	Standard ID	Concentration	Volume	Expiration Date	Analyst	Witness
Surrogate	N (2035-2)	2µg/mL	**50µL**	5/16/13	MC	AC
Spike	3 (2046-1)	0.5/1/5µg/mL	**100µL**	12/19/13	MC	AC
QLS Spike	~~10 ( )~~	~~0.25-2.5µg/mL~~	~~25µL~~			

Extraction Time: 13:35 **Balance ID:** 38040092

SPECIAL INSTRUCTIONS: 1. Weigh into beakers-lightly dry with Sodium Sulfate. 2. Transfer to microwave vessel.
Note: do not fill vessel more than 2/3rd full. Some samples may require two vessels).
3. Add 1:1 Hex/ACE to the vessels (until solvent is 3" above soil layer after homogenization). 4. Add surr/spike. 5. Microwave on appropriate power setting determined by # of samples. 6. After microwave-re-homogenize while hot then let cool 15 min in cold water. Re-homogenize while cool. 7. Decant 1:1 Hex/ACE into Erlenmeyer flask with sodium sulfate in the bottom and funnel containing neutral glasswool. 8. Rinse with Hexane 9. Microwave a 2nd time using 8:2 Hex/Ace (until solvent is 3" above soil layer after homogenization). 10. Let cool and decant the solvent then empty the soil into the funnel and rinse with Hexane. 11. KD (Small or Large drying column) to 5mL at 100°C. 12. Exchange to Hexane (2 X with 20mL). 13. TurboVap. 14. Clean-ups. 15. TurboVap. 16. Vial in Hexane.
A. Need Total Solids Y / N **B. Archive/Freeze Y / N**

Revision 17
01/17/13

Reagent and Solutions Identification

(8081B) Pest PSDDA – Soil/Sed
Microwave (3546) (SOP # 3304S)

ARI Job No(s) WC32/WC33

(8081B) Pest PSDDA Soil/Sediment/Solid/Other:	Analyst/Date
Microwave Station: Anhydrous Sodium Sulfate: (I# 7950 + jar date 11-12-12) Neutral Glasswool: (I# ~~7998~~ + jar date 12/6/12) 1:1 Hexane/Acetone: (H# 129) 80:20 Hexane/Acetone: (H# 126) Hexane: (I# 8418)	Microwave M 2/8/13
KD Station: Hexane: (I#) Anhydrous Sodium Sulfate: (I# + jar date) Neutral Glasswool: (I# + jar date)	KD
Vialing Station: Hexane: (I# 8036) Ethyl Acetate: (I# 6079) Tetrabutylammonium hydrogensulfate (TBAS): (H# 121) Sodium Sulfite: (I# 7704) Silica Gel (SPE) Darts: (I# 7914)	Vialing CJZ 2/12/13

Reagent and Solutions Identification

(8081B) Pest PSDDA – Soil/Sed
Microwave (3546) (SOP # 3304S)

ARI Job No(s) WC32 / WC33

(8081B) Pest PSDDA Soil/Sediment/Solid/Other:	Analyst/Date
Microwave Station: Anhydrous Sodium Sulfate: (I# 7916 + jar date 11-12-12) Neutral Glasswool: (I# 7498 + jar date 12/6/12) 1:1 Hexane/Acetone: (H# 129) 80:20 Hexane/Acetone: (H# 126) Hexane: (I# 8010)	Microwave M 2/8/13
KD Station: Hexane: (I#) Anhydrous Sodium Sulfate: (I# + jar date) Neutral Glasswool: (I# + jar date)	KD
Vialing Station: Hexane: (I# 8036) Ethyl Acetate: (I# 6079) Tetrabutylammonium hydrogensulfate (TBAS): (H# 121) Sodium Sulfite: (I# 7704) Silica Gel (SPE) Darts: (I# 7914)	Vialing OJZ 2/12/13

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

ARI Job No.: WC32 Client ID: Floyd-Snider

Parameter: PSDDA Pest Client Project:

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☒ No Anomalies (standard soil/wet sediment/sand/gravel)= A, B, ~~C~~ C, D, E, F, G, H, N	YL 2/4/13
☒ Standing Water Decanted (Not shared)= A, B, C, D, G, N.	YL 2/4/13
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay/Clumps (Difficult to homogenize)=	
☒ Rocks (%+size)? 25.% Small rocks C, 45.% Small E, 5.% F. 2.% Small rocks G,	YL 2/4/13
☒ Organics (Leaves/sticks/grass)= C, D, N	YL 2/4/13
☒ Oily, obvious fuel/sulfur odors= C, D, H, N	YL 2/4/13
☒ Other (Details)= 10.% shell ~~gragments~~ fragments C, E, F, G YL 2/4/13	YL 2/4/13
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Other (Details)=	
☐ Other Notes/Comments= (Note problems, concerns, corrective actions).	
(Centrifuge#1 used for all Centrifugations)	

3056F

Revision 009
08/14/12

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

ARI Job No.: WC33 Client ID: Floyd-Snider

Parameter: Paint Pest Client Project:

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☒ No Anomalies (standard soil/wet sediment/sand/gravel)= E, F, G	YC 2/4/13
☐ Standing Water Decanted (Not shared)=	
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay/Clumps (Difficult to homogenize)=	
☒ Rocks (%+size)? 10% small & medium E, ~~F~~ YC 2/4/13.	YC 2/4/13
☐ Organics (Leaves/sticks/grass)=	
☒ Oily, obvious fuel/sulfur odors= F	YC 2/4/13
☒ Other (Details)= 10.% ~~shell~~ YC 2/4/13 shell fragment ~~[illegible]~~ 2/4/13, G.	YC 2/4/13
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Other (Details)=	
☐ Other Notes/Comments= (Note problems, concerns, corrective actions). (Centrifuge#1 used for all Centrifugations)	

3056F

Revision 009
08/14/12

Pesticide Raw Data
Initial Calibration

ARI Job ID: WC32, WC33

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC Initial Calibration Notes

ARI SOP: **403S**(PCB) **405S**(Herb) **407S**(TPH-D) **409S**(HCID) **412S**(PCP) **423S**(Pest) **427S**(Dir Inj) **428S**(EPH) **Other**

Instrument: FID-3A FID-3B FID-4A FID-4B FID-5 FID-7 FID-8 FID-9 ECD-1 ECD-5 ECD-6 ECD-7 ECD-8

Curve Date(s): 12/18/12 Internal Standard ID 2006-1 Expiration 7/26/13

Endrin/DDT Breakdown <15%? YES / NO / NA

ICV Exceeding ±20%? YES / NO

ICal Meets %RSD & r^2 Criteria YES / NO

ICV Exceeding ±30%? YES / NO

Manual Integrations for ICal? YES / NO

Linear Fits Used? YES / NO

Minimum Response S/N Met YES / NO

Quadratic Fits Used? YES / NO

Calibration Points Dropped? YES / NO

Primary Source	Standard #	Expiration	Secondary Source	Standard #	Expiration
DS	1991-1	1/14/13	INDA Ia-	1987-3	
IB	1989-2	5/16/13		2023-1	5/16/13
INDA	2048-1	5/16/13			
Toxaph.	2048-2	5/16/13			

Detail problems, corrective actions and/or other pertinent information below:

WHO curve added on 01/09/13.

3 points 1 chloropyrene curve added on 01/09/13.

YZ 01/10/13

Analyst: YZ **Date:** 01/02/13

Reviewer: VD **Date:** 1/11/13

Analytical Resources Inc.: Organics Instrument Log

ECD6 Serial No.: US00007128

Date: 12/13/12 Analysis: Pest Analyst: YZ

Column 1 Serial No.: 1085684 Column Type: STX CLP

Column 2 Serial No.: 1094709 Column Type: STX CLP2

GC Method: Pest ICal Date: 12/13/12

IS	Ical/Ccal	ICV
2006-1	2048-1	2023-1.
	2048-2	
	1991-1	

Document All Maintenance Tasks In StarLIMS

GC LOG SUMMARY FOR DATABATCH - /chem2/ecd6.i/20121213PEST.b/ical-1.b

	Inject Date/Time	Filename	DF	LabID	ClientID
1	13-DEC-2012 15:32	1213A003.d	1	DS	
2	13-DEC-2012 15:50	1213A004.d	1	IB	
3	13-DEC-2012 16:08	1213A005.d	1	INDAE	
4	13-DEC-2012 16:26	1213A006.d	1	INDAA	
5	13-DEC-2012 16:44	1213A007.d	1	INDAB	
6	13-DEC-2012 17:01	1213A008.d	1	INDAC	
7	13-DEC-2012 17:19	1213A009.d	1	INDAD	
8	13-DEC-2012 17:37	1213A010.d	1	INDAF	
9	13-DEC-2012 17:55	1213A011.d	1	INDAG	
10	13-DEC-2012 18:13	1213A012.d	1	INDAICV	
11	13-DEC-2012 18:30	1213A013.d	1	TOXAPH	
12	13-DEC-2012 18:48	1213A014.d	1	DS	
13	13-DEC-2012 19:06	1213A015.d	1	INDAE	
14	13-DEC-2012 19:24	1213A016.d	1	TOXAPH	
15	13-DEC-2012 19:42	1213A017.d	1	VV10MBS1	VV10MBS1
16	13-DEC-2012 20:00	1213A018.d	1	VV10LCSS1	VV10LCSS1
17	13-DEC-2012 20:17	1213A019.d	1	VV10QLS	
18	13-DEC-2012 20:35	1213A020.d	1	VV10A	ICS-H-SE-4-112812
19	13-DEC-2012 20:53	1213A021.d	5	VV10B	ICS-I-SE-3-112812
20	13-DEC-2012 21:11	1213A022.d	1	VV10C	ICS-I-SE-5-112812
21	13-DEC-2012 21:29	1213A023.d	5	VV10D	ICS-J-SE-5-112812
22	13-DEC-2012 21:46	1213A024.d	5	VV10E	ICS-J-SE-6-112812
23	13-DEC-2012 22:04	1213A025.d	5	VV10F	ICS-K-SE-4-113012
24	13-DEC-2012 22:22	1213A026.d	1	DS	
25	13-DEC-2012 22:40	1213A027.d	1	INDAE	
26	13-DEC-2012 22:58	1213A028.d	1	TOXAPH	
27	13-DEC-2012 23:15	1213A029.d	5	VV10G	ICS-K-SE-5-113012
28	13-DEC-2012 23:33	1213A030.d	5	VV10H	ICS-L-SE-3-113012
29	13-DEC-2012 23:51	1213A031.d	5	VV10I	ICS-L-SE-4-113012
30	14-DEC-2012 00:09	1213A032.d	1	VV10J	ICS-M-SE-2-113012
31	14-DEC-2012 00:27	1213A033.d	1	VV10K	ICS-M-SE-3-113012
32	14-DEC-2012 00:44	1213A034.d	1	VV10KMS	ICS-M-SE-3-1130 MS
33	14-DEC-2012 01:02	1213A035.d	1	VV10KMSD	ICS-M-SE-3-1130 MSD
34	14-DEC-2012 01:20	1213A036.d	1	DS	
35	14-DEC-2012 01:38	1213A037.d	1	INDAE	
36	14-DEC-2012 01:56	1213A038.d	1	TOXAPH	

YZ 12/18/12

Analytical Resources Inc.: Organics Instrument Log

ECD6 Serial No.: US00007128

Date: 01/09/13 Analysis: Pest Analyst: YZ

Column 1 Serial No.: 1085684 Column Type: STX CLP

Column 2 Serial No.: 1094709 Column Type: STX CLP2

GC Method: Pest ICal Date: 12/13/12 01/09/13

IS	Ical/Ccal	ICV
2006-1	2020-2	1988-1
	1982-3	

Document All Maintenance Tasks in StarLIMS

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GC LOG SUMMARY FOR DATABATCH - /chem2/ecd6.i/20121213PEST.b/Clpyrene-1.b

    Inject Date/Time      Filename     DF  LabID         ClientID
-----------------------------------------------------------------
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 2  09-JAN-2013 13:16   0109A005.d    1  CLPYRENE.2
 3  09-JAN-2013 13:34   0109A006.d    1  CLPYRENE2.0
 4  09-JAN-2013 13:52   0109A007.d    1  WNDE
 5  09-JAN-2013 14:09   0109A008.d    1  WNDA
 6  09-JAN-2013 14:27   0109A009.d    1  WNDB
 7  09-JAN-2013 14:45   0109A010.d    1  WNDC
 8  09-JAN-2013 15:03   0109A011.d    1  WNDD
 9  09-JAN-2013 15:20   0109A012.d    1  WNDF
10  09-JAN-2013 15:38   0109A013.d    1  WNDG
11  09-JAN-2013 15:56   0109A014.d    1  WND ICV
```

YZ 01/16/13

Every line must contain information or be lined out. Make all entries legible.
Start a new page for each QC period. Document All Maintenance Tasks in StarLIMS

Report Date : 02-Jan-2013 02:27

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/ecd6.i/20121213PEST.b/PEST1213.m
Batch File: /chem2/ecd6.i/20121213PEST.b/ical-1.b
Inst ID: ecd6.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	1213A005	1213A006	1213A007	1213A008	1213A009	1213A010	1213A011
INJ.DATE:	13-DEC-2012	13-DEC-2012	13-DEC-2012	13-DEC-2012	13-DEC-2012	13-DEC-2012	13-DEC-2012
INJ.TIME:	16:08	16:26	16:44	17:01	17:19	17:37	17:55

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
1 Hexachlorobutadiene	2.197	2.196	2.196	2.196	2.195	2.196	2.197	2.197	2.147-2.247	2.196	0.001
* 54 1Bromo-2nitrobenzene	3.001	3.001	3.001	3.001	3.000	3.000	3.000	3.000	2.950-3.050	3.001	0.000
* 58 Hexabromobiphenyl	8.741	8.742	8.742	8.743	8.743	8.743	8.743	8.743	8.693-8.793	8.743	0.001
$ 2 Tetrachloro-m-xylene	3.664	3.671	3.670	3.668	3.667	3.662	3.660	3.660	3.610-3.710	3.666	0.004
3 Hexachlorobenzene	4.008	4.016	4.015	4.013	4.011	4.005	3.999	3.999	3.949-4.049	4.010	0.006
4 alpha-BHC	4.133	4.136	4.137	4.136	4.135	4.133	4.131	4.131	4.081-4.181	4.134	0.002
5 gamma-BHC (Lindane)	4.412	4.414	4.414	4.414	4.412	4.410	4.408	4.408	4.358-4.458	4.412	0.002
6 beta-BHC	4.511	4.533	4.530	4.527	4.520	4.505	4.498	4.498	4.448-4.548	4.518	0.013
7 delta-BHC	4.677	4.696	4.694	4.691	4.685	4.670	4.663	4.663	4.613-4.713	4.682	0.013
8 Heptachlor	4.841	4.843	4.843	4.843	4.842	4.841	4.840	4.840	4.790-4.890	4.842	0.001
9 Aldrin	5.126	5.127	5.127	5.127	5.125	5.125	5.124	5.124	5.074-5.174	5.126	0.001
38 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.627	13.577-13.677	+++++	+++++
10 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.869	10.819-10.919	+++++	+++++
11 Heptachlor epoxide b	5.699	5.700	5.700	5.700	5.699	5.697	5.696	5.696	5.646-5.746	5.699	0.002
12 gamma-Chlordane	5.824	5.828	5.828	5.827	5.825	5.821	5.820	5.820	5.770-5.870	5.825	0.003
13 alpha-Chlordane	5.945	5.949	5.949	5.949	5.946	5.944	5.942	5.942	5.892-5.992	5.946	0.003
14 Endosulfan I	6.076	6.079	6.078	6.079	6.077	6.074	6.073	6.073	6.023-6.123	6.076	0.002

Reviewer 1 ____ YZ ____ Date: 01/02/13
Reviewer 2 ____ VD ____ Date: 1/11/13

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/ecd6.i/20121213PEST.b/PEST1213.m
Batch File: /chem2/ecd6.i/20121213PEST.b/ical-1.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
15 4,4'-DDE	6.019	6.033	6.032	6.029	6.026	6.015	6.011	6.011	5.961-6.061	6.024	0.009
16 Dieldrin	6.297	6.299	6.299	6.299	6.298	6.296	6.295	6.295	6.245-6.345	6.298	0.002
17 Endrin	6.515	6.518	6.518	6.517	6.516	6.513	6.512	6.512	6.462-6.562	6.516	0.002
18 4,4'-DDD	6.574	6.587	6.587	6.584	6.581	6.571	6.567	6.567	6.517-6.617	6.579	0.008
19 Endosulfan II	6.724	6.730	6.729	6.728	6.726	6.722	6.721	6.721	6.671-6.771	6.726	0.003
20 4,4'-DDT	6.826	6.836	6.835	6.834	6.831	6.824	6.821	6.821	6.771-6.871	6.830	0.006
21 Endrin aldehyde	7.099	7.104	7.103	7.103	7.101	7.097	7.096	7.096	7.046-7.146	7.100	0.003
22 Methoxychlor	7.255	7.262	7.262	7.261	7.259	7.254	7.251	7.251	7.201-7.301	7.258	0.004
23 Endosulfan sulfate	7.488	7.491	7.491	7.490	7.489	7.487	7.485	7.485	7.435-7.535	7.489	0.002
24 Endrin ketone	7.741	7.744	7.744	7.743	7.742	7.740	7.737	7.737	7.687-7.787	7.742	0.002
$ 25 Decachlorobiphenyl	8.588	8.590	8.590	8.590	8.590	8.589	8.587	8.587	8.537-8.637	8.589	0.001
26 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.715-3.815	+++++	+++++
27 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.881	4.831-4.931	+++++	+++++
28 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.359	5.309-5.409	+++++	+++++
29 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.715-3.815	+++++	+++++
30 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.418	4.368-4.468	+++++	+++++
31 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.257	5.207-5.307	+++++	+++++
32 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.045	5.995-6.095	+++++	+++++
33 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.301	8.251-8.351	+++++	+++++
34 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.259	11.209-11.309	+++++	+++++
35 Toxaphene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.471	6.421-6.521	+++++	+++++
39 2,4-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.703	5.653-5.753	+++++	+++++

Report Date : 02-Jan-2013 02:27

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/ecd6.i/20121213PEST.b/PEST1213B.m
Batch File: /chem2/ecd6.i/20121213PEST.b/ical-2.b
Inst ID: ecd6.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	1213A005	1213A006	1213A007	1213A008	1213A009	1213A010	1213A011
INJ.DATE:	13-DEC-2012	13-DEC-2012	13-DEC-2012	13-DEC-2012	13-DEC-2012	13-DEC-2012	13-DEC-2012
INJ.TIME:	16:08	16:26	16:44	17:01	17:19	17:37	17:55

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	1 Hexachlorobutadiene	2.364	2.364	2.363	2.363	2.363	2.363	2.364	2.364	2.314-2.414	2.364	0.001
*	52 1Bromo-2nitrobenzene	3.182	3.182	3.183	3.182	3.181	3.181	3.181	3.181	3.131-3.231	3.182	0.001
*	55 Hexabromobiphenyl	10.078	10.078	10.078	10.079	10.078	10.077	10.077	10.077	10.027-10.127	10.078	0.001
$	2 Tetrachloro-m-xylene	3.998	4.003	4.003	4.001	3.999	3.997	3.996	3.996	3.946-4.046	4.000	0.003
	3 Hexachlorobenzene	4.454	4.460	4.459	4.458	4.455	4.452	4.449	4.449	4.399-4.499	4.455	0.004
	4 alpha-BHC	4.569	4.570	4.570	4.570	4.569	4.568	4.567	4.567	4.517-4.617	4.569	0.001
	5 gamma-BHC (Lindane)	4.920	4.921	4.921	4.921	4.919	4.918	4.918	4.918	4.868-4.968	4.920	0.001
	6 beta-BHC	5.006	5.019	5.016	5.015	5.010	5.002	4.998	4.998	4.948-5.048	5.009	0.008
	7 delta-BHC	5.310	5.321	5.318	5.317	5.314	5.306	5.303	5.303	5.253-5.353	5.313	0.007
	8 Heptachlor	5.374	5.376	5.375	5.376	5.375	5.374	5.374	5.374	5.324-5.424	5.375	0.001
	37 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.588	14.538-14.638	+++++	+++++
	9 Aldrin	5.712	5.712	5.712	5.713	5.712	5.710	5.711	5.711	5.661-5.761	5.712	0.001
	10 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.680	12.630-12.730	+++++	+++++
	11 Heptachlor epoxide b	6.270	6.271	6.271	6.271	6.270	6.268	6.268	6.268	6.218-6.318	6.270	0.001
	12 gamma-Chlordane	6.455	6.458	6.458	6.458	6.456	6.454	6.453	6.453	6.403-6.503	6.456	0.002
	13 alpha-Chlordane	6.592	6.594	6.594	6.594	6.592	6.591	6.590	6.590	6.540-6.640	6.592	0.002
	14 Endosulfan I	6.657	6.659	6.660	6.659	6.658	6.655	6.655	6.655	6.605-6.705	6.658	0.002

Reviewer 1 yz Date: 01/02/13
Reviewer 2 VA Date: 1/11/13

Report Date : 02-Jan-2013 02:27

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/ecd6.i/20121213PEST.b/PEST1213B.m
Batch File: /chem2/ecd6.i/20121213PEST.b/ical-2.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
15 4,4'-DDE	6.729	6.736	6.736	6.735	6.732	6.727	6.725	6.725	6.675-6.775	6.732	0.004
16 Dieldrin	6.914	6.917	6.915	6.916	6.914	6.913	6.913	6.913	6.863-6.963	6.915	0.001
17 Endrin	7.203	7.205	7.205	7.205	7.204	7.202	7.202	7.202	7.152-7.252	7.204	0.001
18 4,4'-DDD	7.268	7.274	7.274	7.273	7.271	7.266	7.264	7.264	7.214-7.314	7.270	0.004
19 Endosulfan II	7.395	7.398	7.397	7.398	7.396	7.394	7.393	7.393	7.343-7.443	7.396	0.002
20 4,4'-DDT	7.553	7.557	7.557	7.557	7.554	7.551	7.550	7.550	7.500-7.600	7.554	0.003
21 Endrin aldehyde	7.693	7.695	7.695	7.695	7.693	7.691	7.690	7.690	7.640-7.740	7.693	0.002
22 Endosulfan sulfate	7.937	7.939	7.939	7.939	7.938	7.936	7.935	7.935	7.885-7.985	7.938	0.002
23 Methoxychlor	8.136	8.139	8.139	8.139	8.137	8.136	8.135	8.135	8.085-8.185	8.137	0.002
24 Endrin ketone	8.424	8.425	8.426	8.426	8.424	8.423	8.422	8.422	8.372-8.472	8.424	0.001
$ 25 Decachlorobiphenyl	9.535	9.537	9.536	9.536	9.536	9.535	9.535	9.535	9.485-9.585	9.536	0.001
26 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.180	4.130-4.230	+++++	+++++
27 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.051	5.001-5.101	+++++	+++++
28 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.171	5.121-5.221	+++++	+++++
29 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.970	4.920-5.020	+++++	+++++
30 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.285	5.235-5.335	+++++	+++++
31 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.968	5.918-6.018	+++++	+++++
32 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.767	6.717-6.817	+++++	+++++
33 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.714	9.664-9.764	+++++	+++++
34 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.791	11.741-11.841	+++++	+++++
35 Toxaphene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.139	7.089-7.189	+++++	+++++
38 2,4-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.453	6.403-6.503	+++++	+++++

Report Date : 10-Jan-2013 03:30

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/ecd6.i/20121213PEST.b/PEST1213.m
Batch File: /chem2/ecd6.i/20121213PEST.b/wical-1.b
Inst ID: ecd6.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	0109A007	0109A008	0109A009	0109A010	0109A011	0109A012	0109A013
INJ.DATE:	09-JAN-2013	09-JAN-2013	09-JAN-2013	09-JAN-2013	09-JAN-2013	09-JAN-2013	09-JAN-2013
INJ.TIME:	13:52	14:09	14:27	14:45	15:03	15:20	15:38

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
1 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.197	2.147-2.247	+++++	+++++
* 54 1Bromo-2nitrobenzene	3.001	3.002	3.002	3.001	3.001	3.002	3.001	3.001	2.951-3.051	3.002	0.000
* 58 Hexabromobiphenyl	8.755	8.755	8.757	8.755	8.758	8.756	8.755	8.755	8.705-8.805	8.756	0.001
$ 2 Tetrachloro-m-xylene	3.670	3.634	3.687	3.687	3.685	3.668	3.665	3.660	3.610-3.710	3.671	0.019
3 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.999	3.949-4.049	+++++	+++++
4 alpha-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.131	4.081-4.181	+++++	+++++
5 gamma-BHC (Lindane)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.408	4.358-4.458	+++++	+++++
6 beta-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.498	4.448-4.548	+++++	+++++
7 delta-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.663	4.613-4.713	+++++	+++++
8 Heptachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.840	4.790-4.890	+++++	+++++
9 Aldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.124	5.074-5.174	+++++	+++++
38 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.627	13.577-13.677	+++++	+++++
10 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.869	10.819-10.919	+++++	+++++
11 Heptachlor epoxide b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.696	5.646-5.746	+++++	+++++
12 gamma-Chlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.820	5.770-5.870	+++++	+++++
13 alpha-Chlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.942	5.892-5.992	+++++	+++++
14 Endosulfan I	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.073	6.023-6.123	+++++	+++++

Reviewer 1 ______ J2 ______ Date: 01/10/13
Reviewer 2 ______________ Date: ________

Report Date : 10-Jan-2013 03:30

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/ecd6.i/20121213PEST.b/PEST1213.m
Batch File: /chem2/ecd6.i/20121213PEST.b/wical-1.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
15 4,4'-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.011	5.961-6.061	+++++	+++++
16 Dieldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.295	6.245-6.345	+++++	+++++
17 Endrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.512	6.462-6.562	+++++	+++++
18 4,4'-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.567	6.517-6.617	+++++	+++++
19 Endosulfan II	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.721	6.671-6.771	+++++	+++++
20 4,4'-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.821	6.771-6.871	+++++	+++++
21 Endrin aldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.096	7.046-7.146	+++++	+++++
22 Methoxychlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.251	7.201-7.301	+++++	+++++
23 Endosulfan sulfate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.485	7.435-7.535	+++++	+++++
24 Endrin ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.737	7.687-7.787	+++++	+++++
$ 25 Decachlorobiphenyl	8.596	8.599	8.599	8.598	8.598	8.595	8.593	8.587	8.537-8.637	8.597	0.002
26 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.715-3.815	+++++	+++++
27 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.881	4.831-4.931	+++++	+++++
28 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.359	5.309-5.409	+++++	+++++
29 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.715-3.815	+++++	+++++
30 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.418	4.368-4.468	+++++	+++++
31 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.257	5.207-5.307	+++++	+++++
32 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.045	5.995-6.095	+++++	+++++
33 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.301	8.251-8.351	+++++	+++++
34 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.259	11.209-11.309	+++++	+++++
35 Toxaphene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.471	6.421-6.521	+++++	+++++
39 2,4-DDE	5.714	5.730	5.727	5.724	5.723	5.707	5.699	5.699	5.649-5.749	5.718	0.012

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/ecd6.i/20121213PEST.b/PEST1213.m
Batch File: /chem2/ecd6.i/20121213PEST.b/wical-1.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD	6.202	6.218	6.215	6.212	6.210	6.196	6.189	6.189	6.139-6.239	6.206	0.011
41 2,4-DDT	6.427	6.438	6.437	6.435	6.434	6.423	6.418	6.418	6.368-6.468	6.430	0.008
42 Hexachloroethane	1.736	1.738	1.737	1.738	1.736	1.737	1.736	1.736	1.686-1.786	1.737	0.001
43 Oxychlordane	5.606	5.609	5.608	5.608	5.607	5.605	5.603	5.603	5.553-5.653	5.607	0.002
44 trans-Nonachlor	5.934	5.940	5.939	5.938	5.937	5.933	5.930	5.930	5.880-5.980	5.936	0.004
45 cis-Nonachlor	6.550	6.555	6.555	6.554	6.553	6.548	6.545	6.545	6.495-6.595	6.552	0.004
46 Mirex	7.413	7.415	7.415	7.414	7.414	7.412	7.411	7.411	7.361-7.461	7.413	0.002
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.156	20.106-20.206	+++++	+++++
59 Tech-Chlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.856	4.806-4.906	+++++	+++++
48 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.319	6.269-6.369	+++++	+++++
49 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.936	9.886-9.986	+++++	+++++
50 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.891	11.841-11.941	+++++	+++++
51 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.827	14.777-14.877	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.750	9.700-9.800	+++++	+++++
55 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.107	9.057-9.157	+++++	+++++
56 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.251	10.201-10.301	+++++	+++++
60 Kepone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.581	6.531-6.631	+++++	+++++
Unknown name	+++++	+++++	+++++	+++++	+++++	+++++	+++++				

Report Date : 10-Jan-2013 03:32

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/ecd6.i/20121213PEST.b/PEST1213B.m
Batch File: /chem2/ecd6.i/20121213PEST.b/wical-2.b
Inst ID: ecd6.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	0109A007	0109A008	0109A009	0109A010	0109A011	0109A012	0109A013
INJ.DATE:	09-JAN-2013	09-JAN-2013	09-JAN-2013	09-JAN-2013	09-JAN-2013	09-JAN-2013	09-JAN-2013
INJ.TIME:	13:52	14:09	14:27	14:45	15:03	15:20	15:38

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	1 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.364	2.314-2.414	+++++	+++++
*	52 1Bromo-2nitrobenzene	3.182	3.183	3.182	3.182	3.182	3.182	3.182	3.182	3.132-3.232	3.182	0.000
*	55 Hexabromobiphenyl	10.085	10.084	10.086	10.085	10.086	10.085	10.084	10.085	10.035-10.135	10.085	0.001
$	2 Tetrachloro-m-xylene	4.003	4.012	4.010	4.010	4.008	4.001	3.999	3.996	3.946-4.046	4.006	0.005
	3 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.449	4.399-4.499	+++++	+++++
	4 alpha-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.567	4.517-4.617	+++++	+++++
	5 gamma-BHC (Lindane)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.918	4.868-4.968	+++++	+++++
	6 beta-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.998	4.948-5.048	+++++	+++++
	7 delta-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.303	5.253-5.353	+++++	+++++
	8 Heptachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.374	5.324-5.424	+++++	+++++
	37 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.588	14.538-14.638	+++++	+++++
	9 Aldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.711	5.661-5.761	+++++	+++++
	10 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.680	12.630-12.730	+++++	+++++
	11 Heptachlor epoxide b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.268	6.218-6.318	+++++	+++++
	12 gamma-Chlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.453	6.403-6.503	+++++	+++++
	13 alpha-Chlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.590	6.540-6.640	+++++	+++++
	14 Endosulfan I	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.655	6.605-6.705	+++++	+++++

Reviewer 1 YZ Date: 01/10/13
Reviewer 2 Date:

Report Date : 10-Jan-2013 03:32

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/ecd6.i/20121213PEST.b/PEST1213B.m
Batch File: /chem2/ecd6.i/20121213PEST.b/wical-2.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
15 4,4'-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.725	6.675-6.775	+++++	+++++
16 Dieldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.913	6.863-6.963	+++++	+++++
17 Endrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.202	7.152-7.252	+++++	+++++
18 4,4'-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.264	7.214-7.314	+++++	+++++
19 Endosulfan II	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.393	7.343-7.443	+++++	+++++
20 4,4'-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.550	7.500-7.600	+++++	+++++
21 Endrin aldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.690	7.640-7.740	+++++	+++++
22 Endosulfan sulfate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.935	7.885-7.985	+++++	+++++
23 Methoxychlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.135	8.085-8.185	+++++	+++++
24 Endrin ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.422	8.372-8.472	+++++	+++++
$ 25 Decachlorobiphenyl	9.540	9.541	9.542	9.541	9.541	9.540	9.540	9.535	9.485-9.585	9.541	0.001
26 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.180	4.130-4.230	+++++	+++++
27 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.051	5.001-5.101	+++++	+++++
28 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.171	5.121-5.221	+++++	+++++
29 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.970	4.920-5.020	+++++	+++++
30 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.285	5.235-5.335	+++++	+++++
31 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.968	5.918-6.018	+++++	+++++
32 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.767	6.717-6.817	+++++	+++++
33 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.714	9.664-9.764	+++++	+++++
34 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.791	11.741-11.841	+++++	+++++
35 Toxaphene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.139	7.089-7.189	+++++	+++++
38 2,4-DDE	6.447	6.456	6.455	6.452	6.451	6.443	6.439	6.447	6.397-6.497	6.449	0.006

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/ecd6.i/20121213PEST.b/PEST1213B.m
Batch File: /chem2/ecd6.i/20121213PEST.b/wical-2.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
39 2,4-DDD	6.935	6.943	6.941	6.940	6.939	6.931	6.928	6.935	6.885-6.985	6.937	0.005
40 2,4-DDT	7.215	7.221	7.219	7.219	7.218	7.213	7.211	7.215	7.165-7.265	7.216	0.004
41 Hexachloroethane	1.743	1.736	1.735	1.738	1.734	1.736	1.735	1.743	1.693-1.793	1.737	0.003
42 Oxychlordane	6.180	6.183	6.182	6.183	6.182	6.181	6.179	6.180	6.130-6.230	6.181	0.001
43 trans-Nonachlor	6.541	6.545	6.544	6.544	6.544	6.540	6.539	6.541	6.491-6.591	6.542	0.002
44 cis-Nonachlor	7.267	7.269	7.269	7.269	7.268	7.265	7.265	7.267	7.217-7.317	7.267	0.002
45 Mirex	8.408	8.409	8.410	8.409	8.409	8.408	8.408	8.408	8.358-8.458	8.409	0.001
46 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.499	21.449-21.549	+++++	+++++
56 Tech-Chlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.391	5.341-5.441	+++++	+++++
47 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.871	4.821-4.921	+++++	+++++
48 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.640	6.590-6.690	+++++	+++++
49 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.115	8.065-8.165	+++++	+++++
50 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.286	11.236-11.336	+++++	+++++
51 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.527	6.477-6.577	+++++	+++++
53 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.342	6.292-6.392	+++++	+++++
54 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.841	6.791-6.891	+++++	+++++
57 Kepone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.336	7.286-7.386	+++++	+++++
Unknown name	+++++	+++++	+++++	+++++	+++++	+++++	+++++				

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 13-DEC-2012 16:08
End Cal Date : 09-JAN-2013 15:38
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd6.i/20121213PEST.b/PEST1213.m
Cal Date : 10-Jan-2013 01:56 yev
Curve Type : Average

Calibration File Names:
Level 1: /chem2/ecd6.i/20121213PEST.b/wical-1.b/0109A008.d
Level 2: /chem2/ecd6.i/20121213PEST.b/wical-1.b/0109A009.d
Level 3: /chem2/ecd6.i/20121213PEST.b/wical-1.b/0109A010.d
Level 4: /chem2/ecd6.i/20121213PEST.b/wical-1.b/0109A011.d
Level 5: /chem2/ecd6.i/20121213PEST.b/wical-1.b/0109A007.d
Level 6: /chem2/ecd6.i/20121213PEST.b/wical-1.b/0109A012.d
Level 7: /chem2/ecd6.i/20121213PEST.b/wical-1.b/0109A013.d

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD
	80.000 Level 7							
1 Hexachlorobutadiene	1.76519	1.76548	1.77606	1.76279	1.78034	1.63605		
	1.73799						1.74627	2.889
3 Hexachlorobenzene	1.47266	1.45036	1.39824	1.39685	1.37679	1.29131		
	1.33690						1.38902	4.488
4 alpha-BHC	1.48272	1.50443	1.53354	1.61581	1.66860	1.60483		
	1.70465						1.58780	5.281
5 gamma-BHC (Lindane)	1.18629	1.21986	1.24398	1.31809	1.38643	1.34483		
	1.44698						1.30664	7.233
6 beta-BHC	0.65555	0.66577	0.66029	0.66792	0.66709	0.62815		
	0.65797						0.65753	2.098
7 delta-BHC	1.12216	1.15013	1.16378	1.23286	1.34288	1.30857		
	1.41076						1.24731	8.776

Analytical Resources, Inc.

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Method file : /chem2/ecd6.i/20121213PEST.b/PEST1213.m
Cal Date : 10-Jan-2013 01:56 yev
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	RRF	% RSD
8 Heptachlor	1.26608	1.28335	1.27625	1.30974	1.32828	1.24825	1.29244	1.28634	2.085
9 Aldrin	1.21178	1.22912	1.23582	1.29217	1.31427	1.26793	1.31964	1.26725	3.393
38 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
10 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
11 Heptachlor epoxide b	1.22761	1.22523	1.20003	1.22025	1.22699	1.16532	1.19521	1.20866	1.922
12 gamma-Chlordane	1.21601	1.21445	1.19457	1.22086	1.24448	1.19907	1.24989	1.21990	1.714
13 alpha-Chlordane	1.15164	1.15358	1.13256	1.15485	1.17239	1.12525	1.17100	1.15161	1.537
14 Endosulfan I	1.41025	1.40285	1.36502	1.36653	1.30717	1.23061	1.22706	1.32993	5.768
15 4,4'-DDE	0.93006	0.96788	1.00058	1.06633	1.10624	1.05276	1.08768	1.03022	6.351

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 13-DEC-2012 16:08
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Origin : Disabled
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Integrator : HP Genie
Method file : /chem2/ecd6.i/20121213PEST.b/PEST1213.m
Cal Date : 10-Jan-2013 01:56 yev
Curve Type : Average

Compound	1.250 Level 1 / 80.000 Level 7	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD
16 Dieldrin	1.14100	1.17192	1.19499	1.23498	1.24337	1.17689		
	1.20448						1.19538	3.017
17 Endrin	1.05753	1.07560	1.06341	1.19774	1.24344	1.07513		
	1.12371						1.11951	6.562
18 4,4'-DDD	1.05925	1.07847	1.07664	1.23129	1.23848	1.09718		
	1.12882						1.13002	6.624
19 Endosulfan II	1.11871	1.13097	1.11361	1.25051	1.25224	1.09542		
	1.13047						1.15599	5.731
20 4,4'-DDT	0.92046	0.94185	0.93804	1.08811	1.16436	1.02203		
	1.06798						1.02040	8.992
21 Endrin aldehyde	0.95066	0.93487	0.90541	1.01166	1.00788	0.87704		
	0.90544						0.94185	5.519
22 Methoxychlor	0.53879	0.52925	0.49802	0.53732	0.51356	0.44454		
	0.46038						0.50312	7.489
23 Endosulfan sulfate	1.00811	0.97694	0.95051	1.07939	1.09637	0.94897		
	0.98867						1.00699	5.879
24 Endrin ketone	1.38747	1.30738	1.26424	1.40471	1.38783	1.20710		
	1.25243						1.31588	5.951

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 13-DEC-2012 16:08
End Cal Date : 09-JAN-2013 15:38
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd6.i/20121213PEST.b/PEST1213.m
Cal Date : 10-Jan-2013 01:56 yev
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD
	80.000 Level 7							
35 Toxaphene(1)	+++++	+++++	+++++	+++++	0.02709	+++++		
	+++++						0.02709	0.000
(2)	+++++	+++++	+++++	+++++	0.03980	+++++		
	+++++						0.03980	0.000
(3)	+++++	+++++	+++++	+++++	0.05642	+++++		
	+++++						0.05642	0.000
(4)	+++++	+++++	+++++	+++++	0.05260	+++++		
	+++++						0.05260	0.000
(5)	+++++	+++++	+++++	+++++	0.03922	+++++		
	+++++						0.03922	0.000
(6)	+++++	+++++	+++++	+++++	0.02354	+++++		
	+++++						0.02354	0.000
39 2,4-DDE	0.88116	0.93059	0.83856	1.00664	0.82976	0.77446		
	0.71117						0.85319	11.469
40 2,4-DDD	0.75007	0.76367	0.72246	0.87123	0.72497	0.68650		
	0.64645						0.73791	9.583
41 2,4-DDT	0.71385	0.80589	0.69551	0.85137	0.70740	0.68893		
	0.65180						0.73068	9.717

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 13-DEC-2012 16:08
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Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd6.i/20121213PEST.b/PEST1213.m
Cal Date : 10-Jan-2013 01:56 yev
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD
	80.000 Level 7							
42 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
43 Oxychlordane	0.96902	1.10014	0.90590	1.10168	0.91274	0.88035		
	0.84049						0.95862	10.905
44 trans-Nonachlor	1.25390	1.29412	1.20349	1.47024	1.22017	1.16701		
	1.09920						1.24402	9.449
45 cis-Nonachlor	1.32735	1.51790	1.28723	1.59147	1.32865	1.27499		
	1.21164						1.36275	10.161
46 Mirex	0.97018	0.96448	0.82607	0.97911	0.82337	0.77612		
	0.73086						0.86717	11.825
47 bis-(2-ethylhexyl) Phthalate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
59 Tech-Chlordane(1)	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 13-DEC-2012 16:08
End Cal Date : 09-JAN-2013 15:38
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd6.i/20121213PEST.b/PEST1213.m
Cal Date : 10-Jan-2013 01:56 yev
Curve Type : Average

Compound	1.250 Level 1 / 80.000 Level 7	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD
48 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
49 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
50 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
51 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
55 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
56 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
60 Kepone	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
61 1-Chloropyrene	0.03975	0.03502	0.02788	+++++	+++++	+++++		
	+++++						0.03422	17.460

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

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Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd6.i/20121213PEST.b/PEST1213.m
Cal Date : 10-Jan-2013 01:56 yev
Curve Type : Average

Compound	1.250 Level 1 / 80.000 Level 7	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD
$ 2 Tetrachloro-m-xylene	1.45623	1.39050	1.34219	1.34522	1.31484	1.22333		
	1.24505						1.33105	6.041
$ 25 Decachlorobiphenyl	1.20428	1.18439	1.12858	1.20849	1.16868	1.01808		
	1.04763						1.13716	6.725

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 13-DEC-2012 16:08
End Cal Date : 09-JAN-2013 15:38
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd6.i/20121213PEST.b/PEST1213B.m
Cal Date : 10-Jan-2013 01:57 yev
Curve Type : Average

Calibration File Names:
Level 1: /chem2/ecd6.i/20121213PEST.b/wical-2.b/0109A008.d
Level 2: /chem2/ecd6.i/20121213PEST.b/wical-2.b/0109A009.d
Level 3: /chem2/ecd6.i/20121213PEST.b/wical-2.b/0109A010.d
Level 4: /chem2/ecd6.i/20121213PEST.b/wical-2.b/0109A011.d
Level 5: /chem2/ecd6.i/20121213PEST.b/wical-2.b/0109A007.d
Level 6: /chem2/ecd6.i/20121213PEST.b/wical-2.b/0109A012.d
Level 7: /chem2/ecd6.i/20121213PEST.b/wical-2.b/0109A013.d

Compound	1.250 Level 1 / 80.000 Level 7	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD
1 Hexachlorobutadiene	1.51686	1.57640	1.55722	1.56058	1.64362	1.40912		
	1.45851						1.53176	5.100
3 Hexachlorobenzene	1.79846	1.85923	1.85792	1.93146	1.96041	1.83505		
	1.88663						1.87559	2.969
4 alpha-BHC	1.55281	1.66992	1.72549	1.82387	1.88157	1.76109		
	1.86381						1.75408	6.649
5 gamma-BHC (Lindane)	1.29951	1.38641	1.42065	1.50336	1.59400	1.48258		
	1.57235						1.46555	7.128
6 beta-BHC	0.61587	0.63352	0.62733	0.64684	0.70008	0.64330		
	0.68097						0.64970	4.648
7 delta-BHC	1.02091	1.10973	1.16026	1.28469	1.45433	1.38717		
	1.49502						1.27316	14.278

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 13-DEC-2012 16:08
End Cal Date : 09-JAN-2013 15:38
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd6.i/20121213PEST.b/PEST1213B.m
Cal Date : 10-Jan-2013 01:57 yev
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	RRF	% RSD
8 Heptachlor	1.41426	1.48315	1.48160	1.51960	1.54252	1.36805	1.33844	1.44966	5.339
37 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
9 Aldrin	1.26589	1.35151	1.36905	1.43266	1.44571	1.35106	1.35392	1.36711	4.368
10 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
11 Heptachlor epoxide b	1.18767	1.22298	1.22225	1.26518	1.27878	1.17594	1.16818	1.21728	3.538
12 gamma-Chlordane	1.19807	1.24330	1.23564	1.27844	1.29802	1.21473	1.22648	1.24210	2.832
13 alpha-Chlordane	1.10422	1.13054	1.12714	1.16556	1.18404	1.11302	1.13731	1.13741	2.491
14 Endosulfan I	1.12447	1.14905	1.14735	1.17620	1.16980	1.08352	1.07295	1.13191	3.571
15 4,4'-DDE	1.16409	1.22147	1.21948	1.24078	1.20274	1.09587	1.09850	1.17756	5.074

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 13-DEC-2012 16:08
End Cal Date : 09-JAN-2013 15:38
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd6.i/20121213PEST.b/PEST1213B.m
Cal Date : 10-Jan-2013 01:57 yev
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD
	80.000 Level 7							
16 Dieldrin	1.15017	1.20261	1.21627	1.25298	1.22847	1.11362		
	1.10360						1.18110	4.964
17 Endrin	1.51875	1.57092	1.55855	1.71744	1.72716	1.43498		
	1.42108						1.56413	7.803
18 4,4'-DDD	1.52860	1.61535	1.63073	1.80870	1.78221	1.53710		
	1.55994						1.63752	6.996
19 Endosulfan II	1.65424	1.70848	1.69858	1.92939	1.86183	1.57061		
	1.55636						1.71136	8.175
20 4,4'-DDT	1.25065	1.31906	1.32695	1.49807	1.54094	1.33387		
	1.38909						1.37980	7.561
21 Endrin aldehyde	1.32280	1.33384	1.31562	1.43521	1.42175	1.21592		
	1.23632						1.32592	6.267
22 Endosulfan sulfate	1.37233	1.38107	1.36814	1.51049	1.52180	1.30823		
	1.33660						1.39981	5.950
23 Methoxychlor	0.62733	0.62712	0.58968	0.61665	0.57600	0.47031		
	0.45520						0.56604	12.933
24 Endrin ketone	1.58005	1.59386	1.56930	1.69489	1.66107	1.43232		
	1.45748						1.56985	6.164

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 13-DEC-2012 16:08
End Cal Date : 09-JAN-2013 15:38
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd6.i/20121213PEST.b/PEST1213B.m
Cal Date : 10-Jan-2013 01:57 yev
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD
	80.000 Level 7							
(3)	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
(4)	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
(5)	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
34 Aroclor-1268(1)	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
(4)	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
(5)	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
35 Toxaphene(1)	+++++	+++++	+++++	+++++	0.05407	+++++		
	+++++						0.05407	0.000

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 13-DEC-2012 16:08
End Cal Date : 09-JAN-2013 15:38
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd6.i/20121213PEST.b/PEST1213B.m
Cal Date : 10-Jan-2013 01:57 yev
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	RRF	% RSD
(2)	+++++	+++++	+++++	+++++	0.07962	+++++	+++++	0.07962	0.000
(3)	+++++	+++++	+++++	+++++	0.08451	+++++	+++++	0.08451	0.000
(4)	+++++	+++++	+++++	+++++	0.05995	+++++	+++++	0.05995	0.000
(5)	+++++	+++++	+++++	+++++	0.02917	+++++	+++++	0.02917	0.000
38 2,4-DDE	0.79931	0.90219	0.78466	0.93437	0.77626	0.72918	0.65505	0.79729	12.038
39 2,4-DDD	1.10503	1.25179	1.08770	1.30871	1.08907	1.01960	0.93318	1.11358	11.587
40 2,4-DDT	0.90219	1.07803	0.93805	1.14724	0.95653	0.93428	0.87555	0.97598	10.146
41 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
42 Oxychlordane	1.04295	1.15648	1.02940	1.23857	1.04090	1.00968	0.95069	1.06695	9.129

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 13-DEC-2012 16:08
End Cal Date : 09-JAN-2013 15:38
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd6.i/20121213PEST.b/PEST1213B.m
Cal Date : 10-Jan-2013 01:57 yev
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	RRF	% RSD
43 trans-Nonachlor	1.83897	2.09199	1.87126	2.24957	1.89122	1.77453	1.61524	1.90468	10.937
44 cis-Nonachlor	1.92504	2.30580	2.01448	2.39123	1.97785	1.87004	1.77129	2.03653	11.211
45 Mirex	1.06864	1.17550	0.98558	1.18087	0.97272	0.92699	0.87997	1.02718	11.501
46 bis-(2-ethylhexyl) Phthalate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
56 Tech-Chlordane(1)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
47 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
48 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 13-DEC-2012 16:08
End Cal Date : 09-JAN-2013 15:38
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd6.i/20121213PEST.b/PEST1213B.m
Cal Date : 10-Jan-2013 01:57 yev
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	RRF	% RSD
49 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
50 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
51 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
53 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
54 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
57 Kepone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
58 1-Chloropyrene	0.04301	0.04471	0.03502	+++++	+++++	+++++	+++++	0.04091	12.645
$ 2 Tetrachloro-m-xylene	1.39648	1.44404	1.43410	1.45697	1.42175	1.29787	1.30709	1.39404	4.690
$ 25 Decachlorobiphenyl	1.66713	1.66472	1.60698	1.73490	1.71653	1.48638	1.55387	1.63293	5.476

7E

8081 DDT/ENDRIN BREAKDOWN VERIFICATION SUMMARY

Lab ID: DS   ARI Job No.:

Analysis Date: 13-DEC-2012 15:32   Init. Calib. Date: 13-DEC-2012

GC Column: STX-CLP1 ID: 0.53(mm)

COMPOUND	RT	AREA
4,4'-DDE	6.019	61185
Endrin	6.514	5107224
4,4'-DDD	6.574	462676
4,4'-DDT	6.826	4860779
Endrin ketone	7.740	443899
Endrin aldehyde	7.099	96210

DDT Percent Breakdown = 9.7 %
((61185+462676) * 100)/(61185+462676+4860779)

Endrin Percent Breakdown = 9.6 %
((96210+443899) * 100)/(96210+443899+5107224)

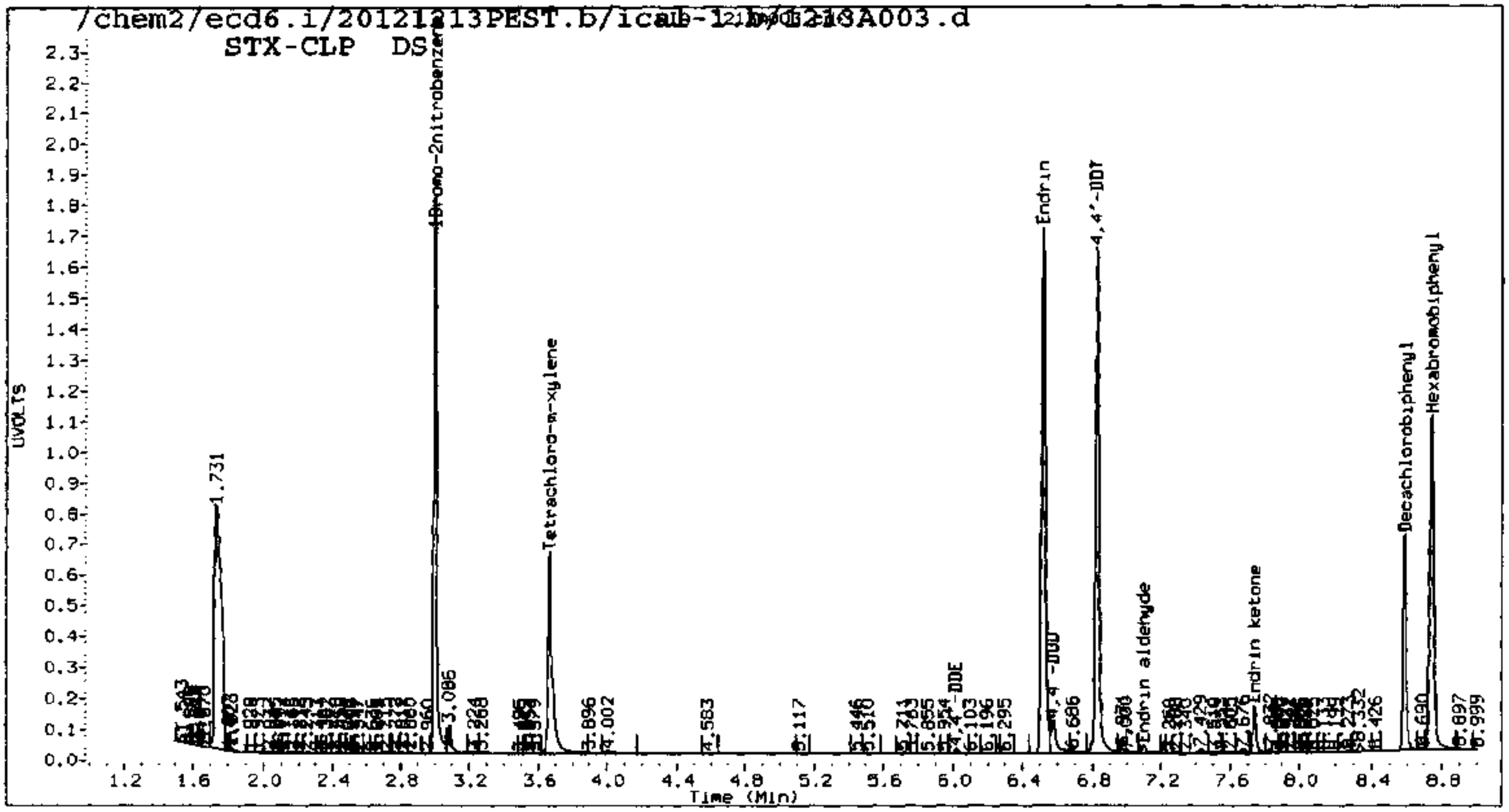
GC Column: STX-CLP2 ID: 0.53(mm)

COMPOUND	RT	AREA
4,4'-DDE	6.729	602291
Endrin	7.203	23145948
4,4'-DDD	7.267	2237373
4,4'-DDT	7.552	22509977
Endrin ketone	8.423	1883885
Endrin aldehyde	7.692	755387

DDT Percent Breakdown = 11.2 %
((602291+2237373) * 100)/(602291+2237373+22509977)

Endrin Percent Breakdown = 10.2 %
((755387+1883885) * 100)/(755387+1883885+23145948)

Form VII Pest-1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UVOLTS
Time (Min)
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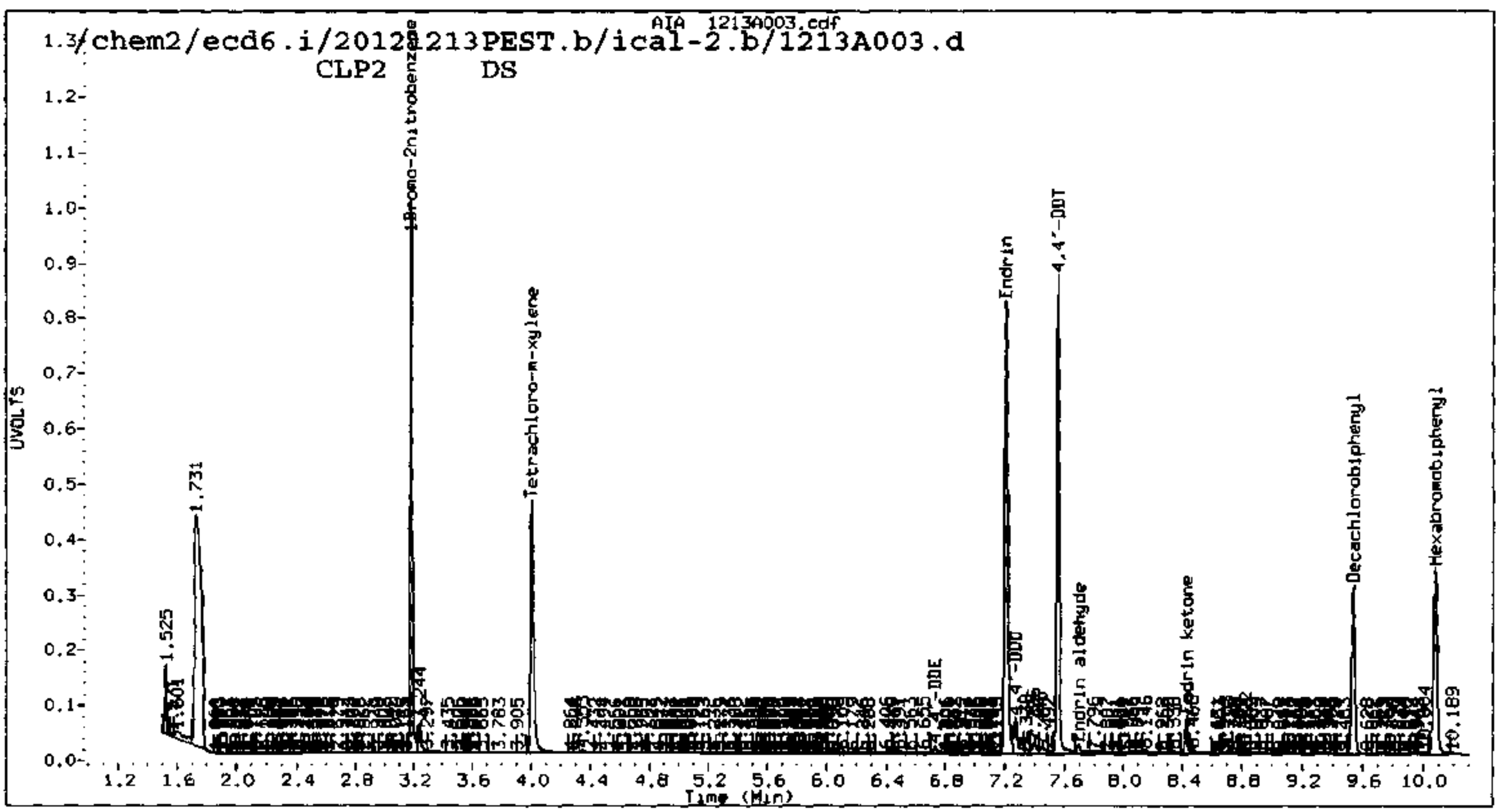
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Endrin
4,4'-DDT
4,4'-DDD
4,4'-DDE
Endrin aldehyde
Endrin ketone
Decachlorobiphenyl
Hexabromobiphenyl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/chem2/ecd6.i/20121213PEST.b/ical-2.b/1213A003.d
CLP2 DS
UVOLTS
Time (Min)
1.525
1.731
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Endrin
4,4'-DDT
4,4'-DDD
4,4'-DDE
Endrin aldehyde
Endrin ketone
Decachlorobiphenyl
Hexabromobiphenyl
10.189

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /chem2/ecd6.i/20121213PEST.b/ical-1.b/1213A004.d ARI ID: IB
Data file 2: /chem2/ecd6.i/20121213PEST.b/ical-2.b/1213A004.d Client ID:
Method: /chem2/ecd6.i/20121213PEST.b/PEST1213.m Injection Date: 13-DEC-2012 15:50
Compound Sublist: wpest Report Date: 01/02/2013 01:09
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: NONE
Operator: ar Dilution Factor: 1.000

STX-CLP Col RT	STX-CLP Col Shift	STX-CLP Col Response	CLP2 Col RT	CLP2 Col Shift	CLP2 Col Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
3.000	0.000	4246472	3.181	0.000	22343213	80.0000	80.0000	0.0	1Bromo-2nitrobenzen
----			4.571	0.004	9900	0.0000	0.0202	---	alpha-BHC
----			4.983	-0.015	52445	0.0000	0.2890	---	beta-BHC
----			5.289	-0.014	25306	0.0000	0.0712	---	delta-BHC
----			4.921	0.003	29171	0.0000	0.0713	---	gamma-BHC (Lindane)
----			5.352	-0.022	54208	0.0000	0.1339	---	Heptachlor
----			5.712	0.000	118050	0.0000	0.3092	---	Aldrin
----			6.272	0.003	84233	0.0000	0.2478	---	Heptachlor epoxide b
----			6.664	0.008	138326	0.0000	0.4376	---	Endosulfan I
----			6.918	0.005	109572	0.0000	0.3322	---	Dieldrin
----			6.745	0.019	116076	0.0000	0.3529	---	4,4'-DDE
----			7.169	-0.033	87596	0.0000	0.3437	---	Endrin
----			7.382	-0.011	129020	0.0000	0.4627	---	Endosulfan II
----			7.270	0.006	117610	0.0000	0.4408	---	4,4'-DDD
7.491	0.006	3894	7.950	0.014	99535	0.0836	0.4364	135.7*	Endosulfan sulfate
----			7.568	0.018	91694	0.0000	0.4078	---	4,4'-DDT
7.253	0.002	1662	8.136	0.001	78664	0.0714	0.8529	169.1*	Methoxychlor
7.757	0.019	15816	8.406	-0.016	221128	0.2598	0.8645	107.6*	Endrin ketone
7.100	0.004	2998	7.698	0.008	184559	0.0688	0.8543	170.2*	Endrin aldehyde
----			----			0.0000	0.0000	---	gamma-Chlordane
----			6.582	-0.008	200339	0.0000	0.6307	---	alpha-Chlordane
2.212	0.015	4742	2.354	-0.010	12217	0.0512	0.0286	56.7*	Hexachlorobutadiene
4.003	0.005	48033	4.433	-0.016	56476	0.6515	0.1078	143.2*	Hexachlorobenzene
----			6.221	0.019	23389	0.0000	0.0000	---	Oxychlordane
----			----			0.0000	0.0000	---	2,4-DDE
----			----			0.0000	0.0000	---	trans-Nonachlor
----			6.942	0.003	121148	0.0000	0.0000	---	2,4-DDD
----			7.227	0.000	161192	0.0000	0.0000	---	2,4-DDT
----			----			0.0000	0.0000	---	cis-Nonachlor
----			8.478	0.044	81305	0.0000	0.0000	---	Mirex
8.740	-0.003	3701542	10.077	0.000	13035275	80.0000	80.0000	0.0	Hexabromobiphenyl
1.732	-0.006	172986	1.732	0.004	49157123	0.0000	0.0000	---	Hexachloroethane
6.606	0.025	1037	7.330	-0.006	79995	0.0000	0.0000	---	Kepone
3.665	0.005	2502841	3.999	0.003	14747729	35.4242	37.8785	6.7	Tetrachloro-m-xylen
8.587	0.000	1839807	9.536	0.001	9480457	34.9669	35.6313	1.9	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	88.6	94.7	88.6~	130- 0
Decachlorobiphenyl	87.4	89.1	87.4~	130- 0

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4288295	4246472	-1.0
Hexabromobiphenyl	3547373	3701542	4.3

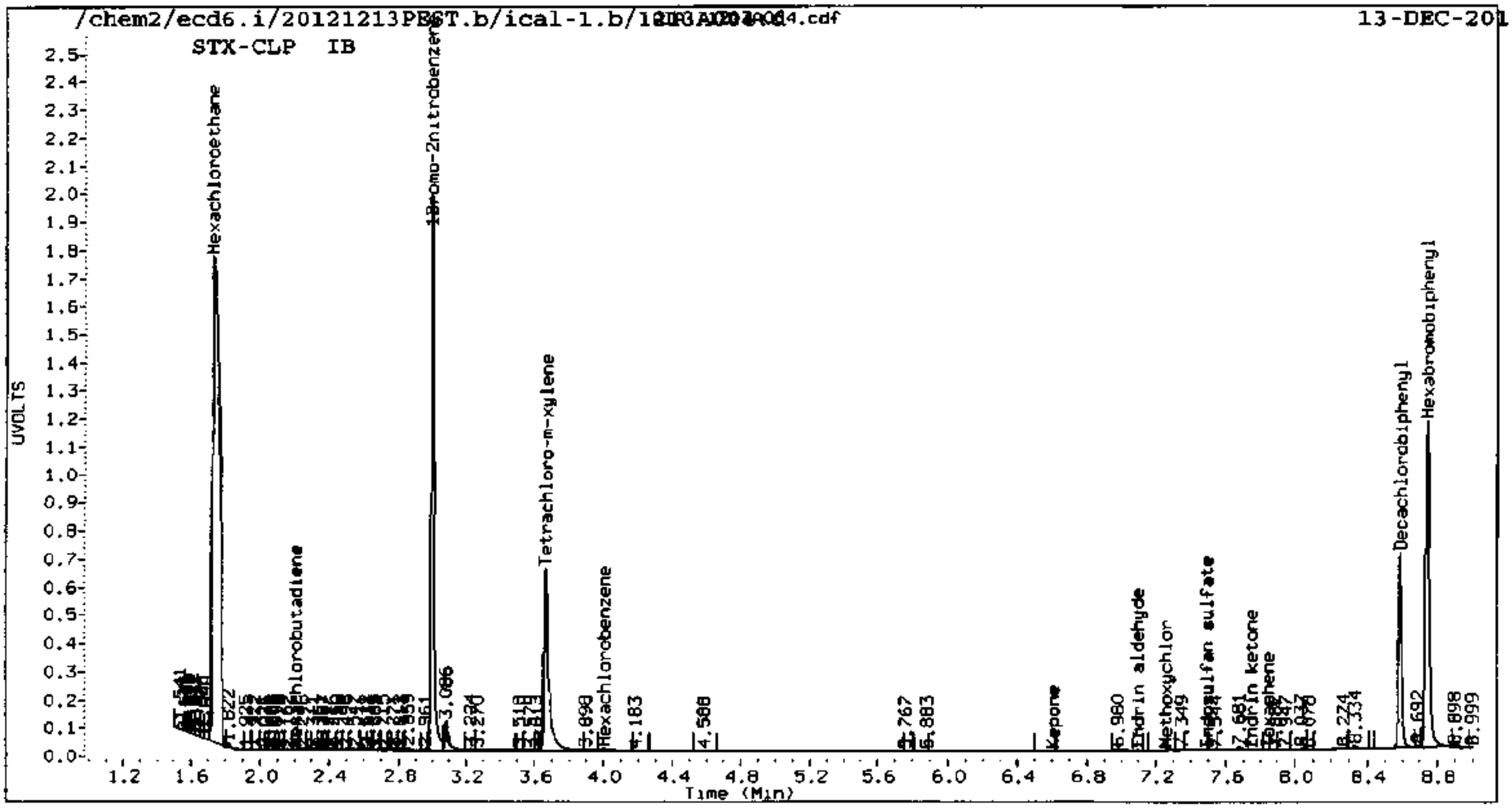
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	22962949	22343213	-2.7
Hexabromobiphenyl	12491507	13035275	4.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 13-DEC-2012
<- Indicates standard response outside Limits (-50 to +100%)

	STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount
Toxaphene	1	---			0.000	1	7.152	0.014	115097	12.8
Toxaphene	2	---			0.000	2	7.451	-0.013	458793	34.6
Toxaphene	3	7.100	0.021	2998	1.1	3	7.698	0.002	184559	13.1
Toxaphene	4	---			0.000	4	8.165	0.003	12719	1.3
Toxaphene	5	7.757	0.033	15816	8.7	5	8.503	-0.004	28206	5.9
Toxaphene	6	7.848	-0.006	5170	4.7	NS	---			----

Total STX-CLPAve (3 peaks): 4.870 Total CLP2Ave (5 peaks): 13.541 RPD = 94*
Corrected Ave: < 3 Peaks Corrected Ave (4 peaks): 8.272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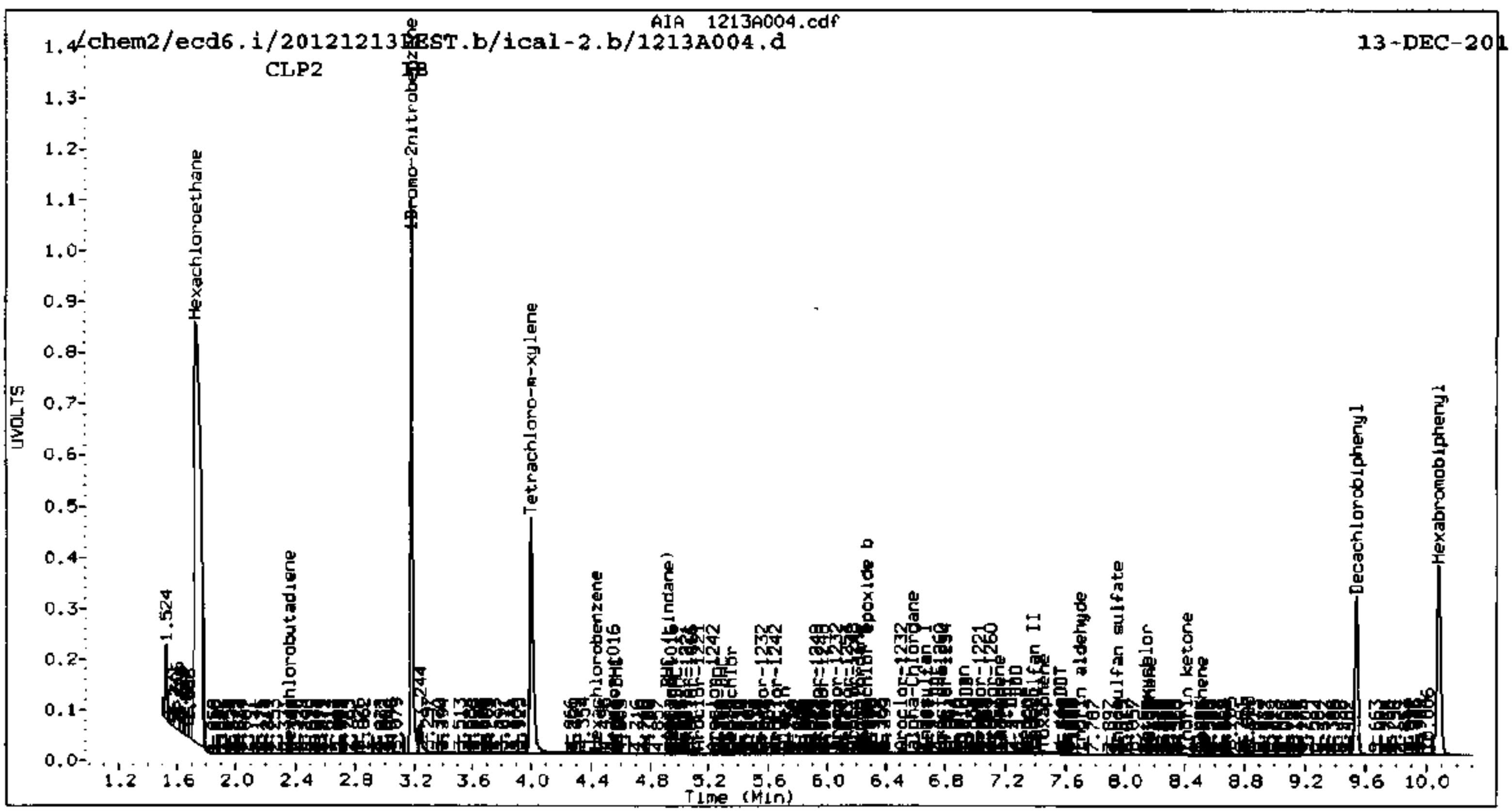
13-DEC-201
STX-CLP IB
UVOLTS
Hexachloroethane
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Hexachlorobenzene
Kepone
Endrin aldehyde
Methoxychlor
Endosulfan sulfate
Endrin ketone
Toxaphene
Decachlorobiphenyl
Hexabromobiphenyl
Time (Min)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13-DEC-201
CLP2 IB
UVOLTS
Hexachloroethane
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Hexachlorobutadiene
Decachlorobiphenyl
Hexabromobiphenyl
Endrin aldehyde
Endosulfan sulfate
Endrin ketone
Time (Min)

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /chem2/ecd6.i/20121213PEST.b/ical-1.b/1213A005.d ARI ID: INDAE
Data file 2: /chem2/ecd6.i/20121213PEST.b/ical-2.b/1213A005.d Client ID:
Method: /chem2/ecd6.i/20121213PEST.b/PEST1213.m
Injection Date: 13-DEC-2012 16:08
Compound Sublist: INDA
Report Date: 01/02/2013 02:21
Instrument, Inj. Vol.: ecd6.i, 1ul
Matrix: NONE
Operator: ar
Dilution Factor: 1.000

STX-CLP Col RT	Shift	Response	CLP2 Col RT	Shift	Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
3.001	0.000	4288295	3.182	0.001	22974785	80.0000	80.0000	0.0	1Bromo-2nitrobenzen
4.133	0.002	1788861	4.569	0.002	10986797	21.0178	21.8102	3.7	alpha-BHC
4.511	0.013	715172	5.006	0.008	4210146	20.2907	22.5642	10.6	beta-BHC
4.677	0.014	1439669	5.310	0.006	8466861	21.5325	23.1568	7.3	delta-BHC
4.412	0.004	1486354	4.920	0.002	9269891	21.2213	22.0248	3.7	gamma-BHC (Lindane)
4.841	0.002	1424014	5.374	0.001	9204759	20.6521	22.1098	6.8	Heptachlor
5.126	0.002	1408993	5.712	0.001	8681247	20.7421	22.1114	6.4	Aldrin
5.699	0.002	1315428	6.270	0.002	7614851	20.3033	21.7825	7.0	Heptachlor epoxide b
6.076	0.003	1401381	6.657	0.001	6878472	19.6578	21.1602	7.4	Endosulfan I
6.297	0.002	2665970	6.914	0.001	14548646	41.6060	42.8917	3.0	Dieldrin
6.019	0.009	2371937	6.729	0.004	14229127	42.9516	42.0759	2.1	4,4'-DDE
6.515	0.003	2205466	7.203	0.001	11001861	44.4279	44.8110	0.9	Endrin
6.724	0.004	2221088	7.395	0.002	11945092	43.3306	44.4671	2.6	Endosulfan II
6.574	0.007	2196674	7.268	0.004	11484481	43.8393	44.6803	1.9	4,4'-DDD
7.488	0.003	1944620	7.937	0.002	9873801	43.5502	44.9372	3.1	Endosulfan sulfate
6.826	0.006	2065205	7.553	0.003	9928694	45.6430	45.8421	0.4	4,4'-DDT
7.255	0.004	4554483	8.136	0.001	18298941	204.1494	205.9537	0.9	Methoxychlor
7.741	0.003	2461570	8.424	0.002	10703260	42.1870	43.4358	2.9	Endrin ketone
7.099	0.004	1787661	7.693	0.002	9157724	42.8042	44.0007	2.8	Endrin aldehyde
5.824	0.004	1334172	6.455	0.003	7734745	20.4029	21.6835	6.1	gamma-Chlordane
5.945	0.003	1256892	6.592	0.002	6955246	20.3609	21.2930	4.5	alpha-Chlordane
2.197	0.000	1908658	2.364	0.000	9403174	20.3902	21.3758	4.7	Hexachlorobutadiene
4.008	0.009	1476023	4.454	0.005	11411729	19.8240	21.1861	6.6	Hexachlorobenzene
8.741	-0.002	3547373	10.078	0.001	12557398	80.0000	80.0000	0.0	Hexabromobiphenyl
3.664	0.004	2819204	3.998	0.002	16474217	39.5127	41.1497	4.1	Tetrachloro-m-xylen
8.588	0.001	2072874	9.535	0.000	10916836	41.1087	42.5912	3.5	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	98.8	102.9	98.8~	115- 0
Decachlorobiphenyl	102.8	106.5	102.8~	115- 0

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

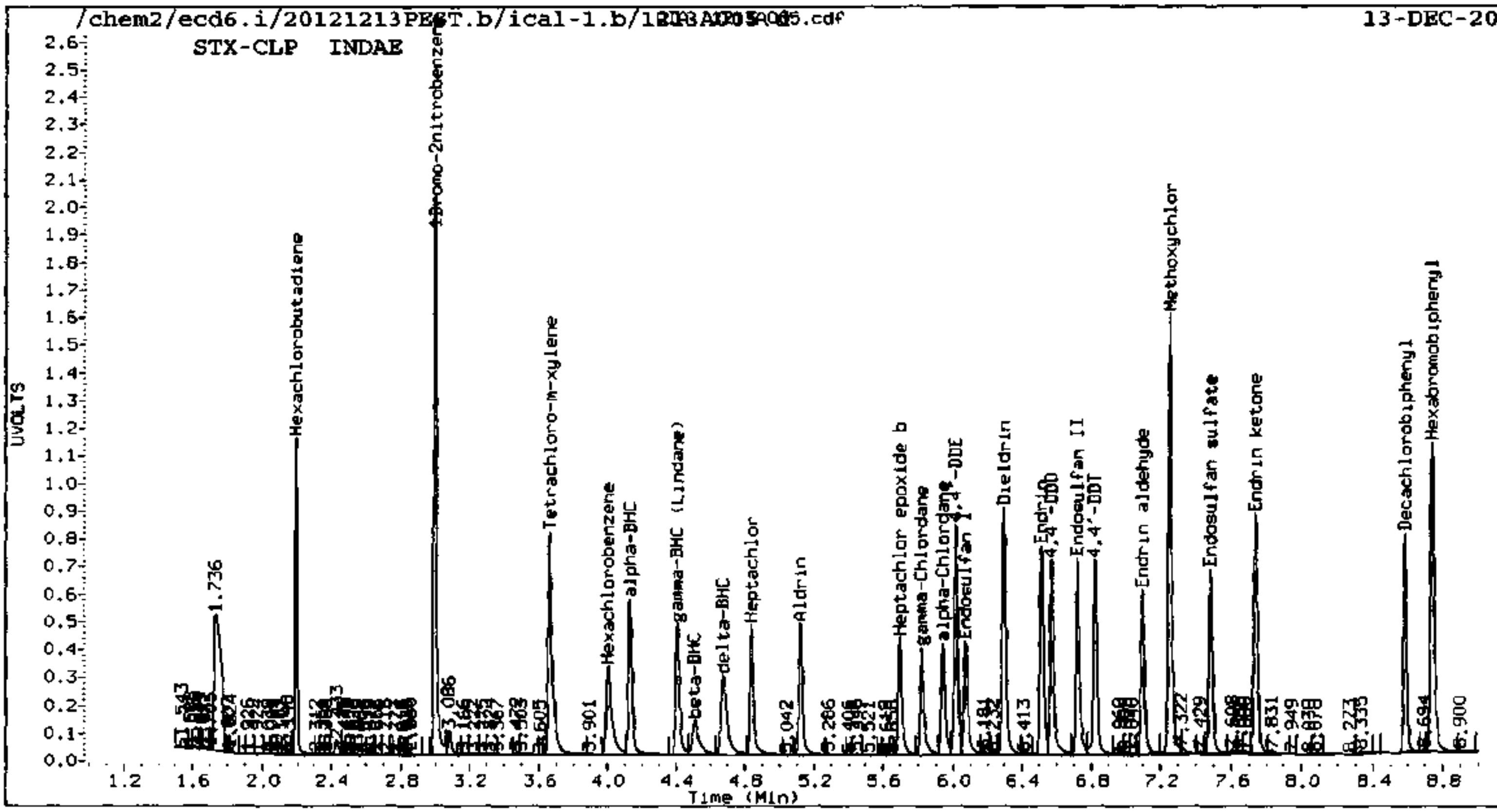
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4288295	4288295	0.0
Hexabromobiphenyl	3547373	3547373	0.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	22974785	22974785	0.0
Hexabromobiphenyl	12557398	12557398	0.0

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 13-DEC-2012
<- Indicates standard response outside Limits (-50 to +100%)

	STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount



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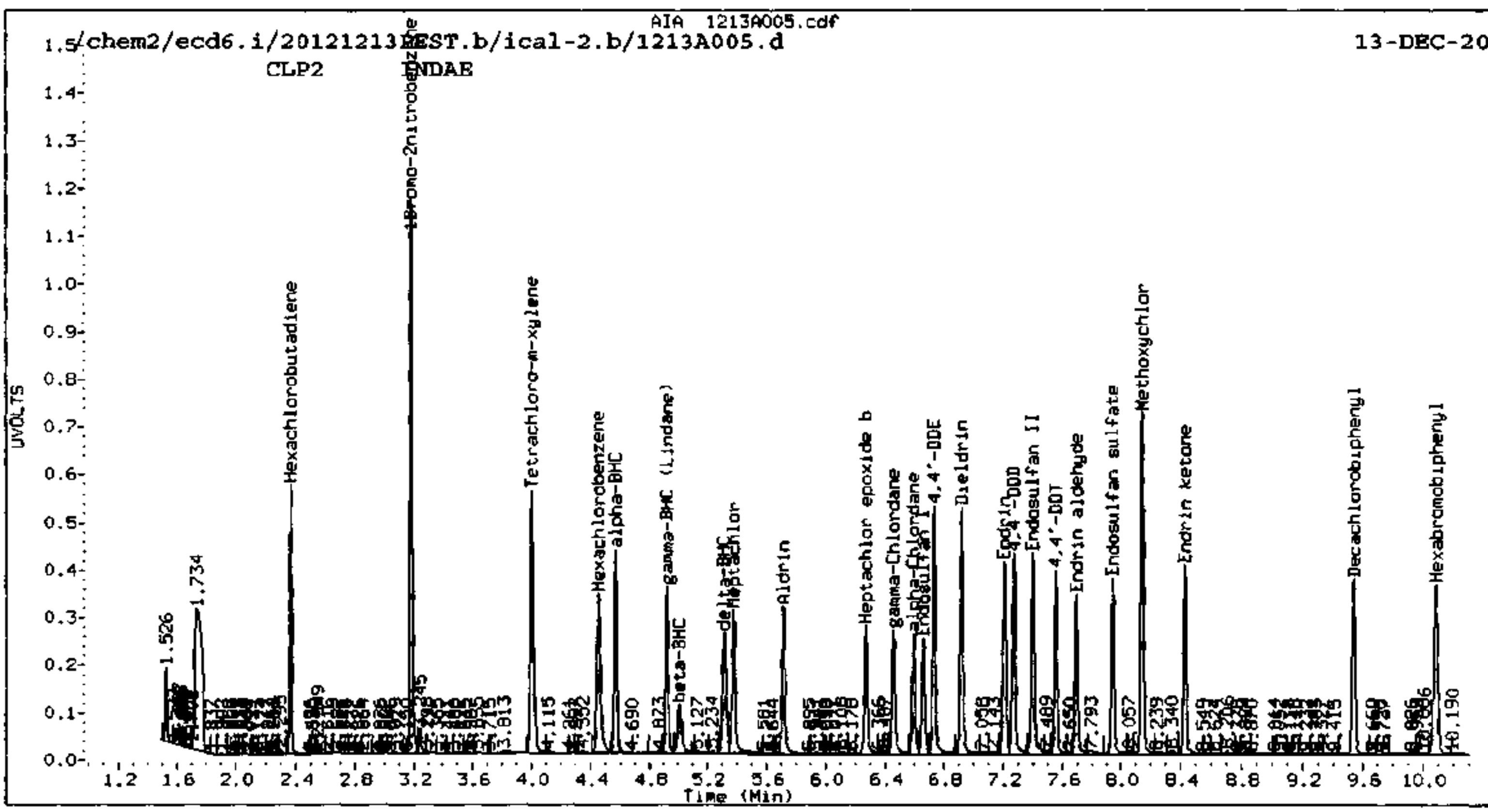
13-DEC-201
STX-CLP INDAE
UVOLTS
Time (Min)
1.736
Hexachlorobutadiene
1-Bromo-2nitrobenzene
Tetrachloro-m-xylene
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide b
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Methoxychlor
Endosulfan sulfate
Endrin ketone
Decachlorobiphenyl
Hexabromobiphenyl



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13-DEC-201
CLP2 INDAE
UVOLTS
Time (Min)
1.526
1.734
Hexachlorobutadiene
1-Bromo-2nitrobenzene
Tetrachloro-m-xylene
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide b
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl
Hexabromobiphenyl

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

YZ 01/03/13

Data file 1: /chem2/ecd6.i/20121213PEST.b/ical-1.b/1213A006.d ARI ID: INDAA
Data file 2: /chem2/ecd6.i/20121213PEST.b/ical-2.b/1213A006.d Client ID:
Method: /chem2/ecd6.i/20121213PEST.b/PEST1213.m
Compound Sublist: INDA
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: ar
Injection Date: 13-DEC-2012 16:26
Report Date: 01/02/2013 01:09
Matrix: NONE
Dilution Factor: 1.000

STX-CLP Col RT	Shift	Response	CLP2 Col RT	Shift	Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
3.001	0.001	4503948	3.182	0.001	24566001	80.0000	80.0000	0.0	1Bromo-2nitrobenzen
4.136	0.005	104345	4.570	0.003	720316	1.1673	1.3373	13.6	alpha-BHC
4.533	0.034	46134	5.019	0.021	447011	1.2462	2.2406	57.0*	beta-BHC
4.696	0.033	78971	5.321	0.017	491672	1.1246	1.2576	11.2	delta-BHC
4.414	0.006	83484	4.921	0.003	601287	1.1349	1.3361	16.3	gamma-BHC (Lindane)
4.843	0.003	89099	5.376	0.002	789974	1.2303	1.7746	36.2	Heptachlor
5.127	0.003	85278	5.712	0.001	634260	1.1953	1.5108	23.3	Aldrin
5.700	0.004	86392	6.271	0.003	685040	1.2696	1.8327	36.3	Heptachlor epoxide b
6.079	0.006	99245	6.659	0.003	575138	1.3255	1.6547	22.1	Endosulfan I
6.299	0.005	160594	6.917	0.004	1217315	2.3863	3.3564	33.8	Dieldrin
6.033	0.022	130905	6.736	0.011	1114156	2.2570	3.0812	30.9	4,4'-DDE
6.518	0.006	130715	7.205	0.003	832185	2.3616	2.9519	22.2	Endrin
6.730	0.009	138277	7.398	0.005	874134	2.4194	2.8339	15.8	Endosulfan II
6.587	0.020	130928	7.274	0.010	877144	2.3435	2.9719	23.6	4,4'-DDD
7.491	0.006	124606	7.939	0.004	903070	2.5028	3.5793	35.4	Endosulfan sulfate
6.836	0.015	113773	7.557	0.008	745485	2.2551	2.9976	28.3	4,4'-DDT
7.262	0.011	332985	8.139	0.004	1601739	13.3862	15.6997	15.9	Methoxychlor
7.744	0.007	171497	8.425	0.003	925240	2.6360	3.2700	21.5	Endrin ketone
7.104	0.008	117505	7.695	0.005	780427	2.5234	3.2656	25.6	Endrin aldehyde
5.828	0.008	85576	6.458	0.005	666519	1.2460	1.7475	33.5	gamma-Chlordane
5.949	0.007	81046	6.594	0.004	569333	1.2500	1.6301	26.4	alpha-Chlordane
2.196	0.000	124224	2.364	-0.001	616329	1.2635	1.3103	3.6	Hexachlorobutadiene
4.016	0.018	103637	4.460	0.011	812821	1.3253	1.4113	6.3	Hexachlorobenzene
8.742	-0.001	3955330	10.078	0.001	14419240	80.0000	80.0000	0.0	Hexabromobiphenyl
3.671	0.010	204962	4.003	0.007	1161010	2.7351	2.7122	0.8	Tetrachloro-m-xylene
8.590	0.003	148854	9.537	0.002	879209	2.6476	2.9873	12.1	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	6.8	6.8	6.8~	115- 0
Decachlorobiphenyl	6.6	7.5	6.6~	115- 0

~ Indicates recovery outside QC Limits

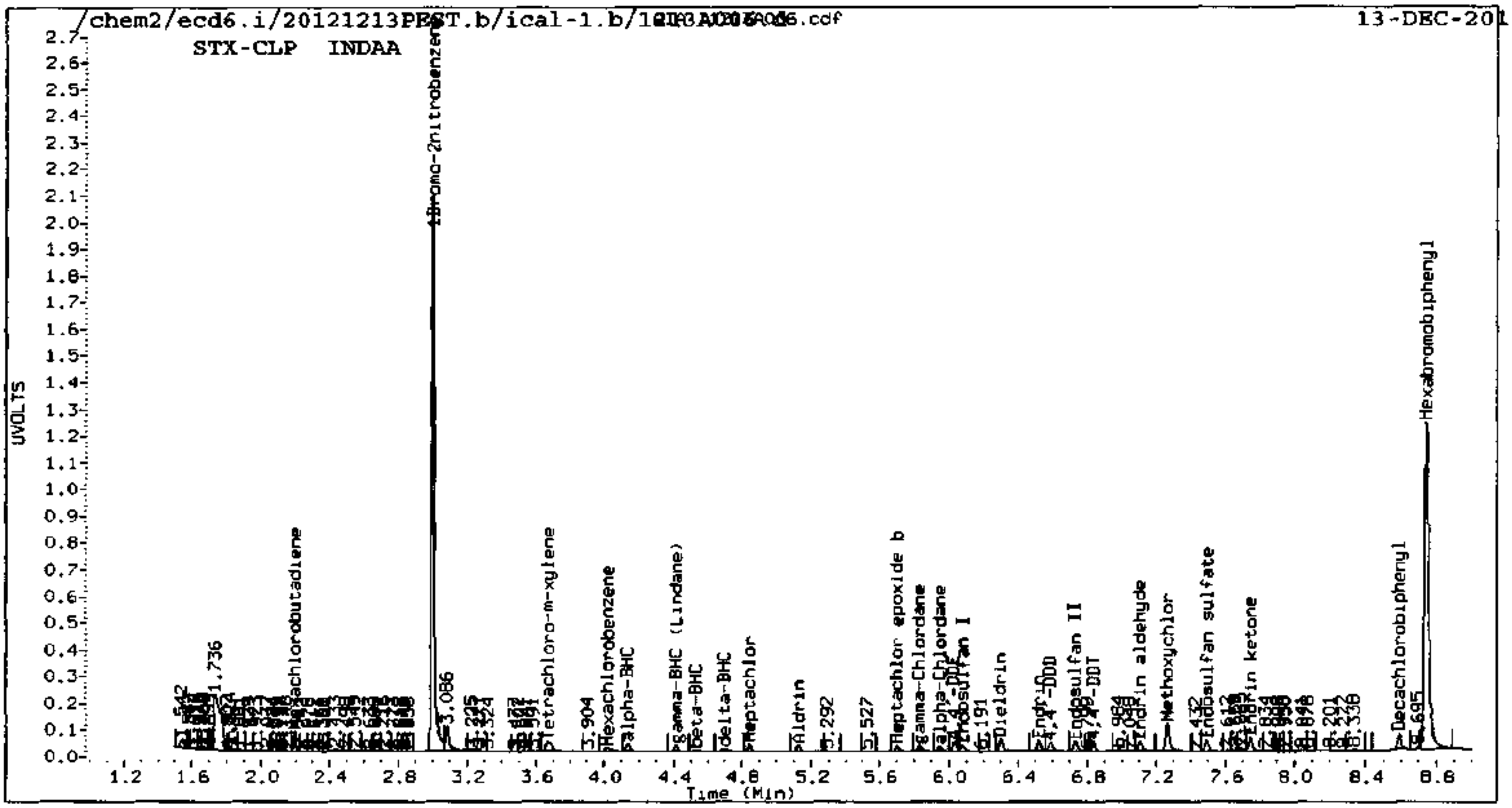
INTERNAL STANDARD SUMMARY

	Column 1		
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4288295	4503948	5.0
Hexabromobiphenyl	3547373	3955330	11.5

	Column 2		
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	22962949	24566001	7.0
Hexabromobiphenyl	12491507	14419240	15.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 13-DEC-2012
<- Indicates standard response outside Limits (-50 to +100%)

	STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount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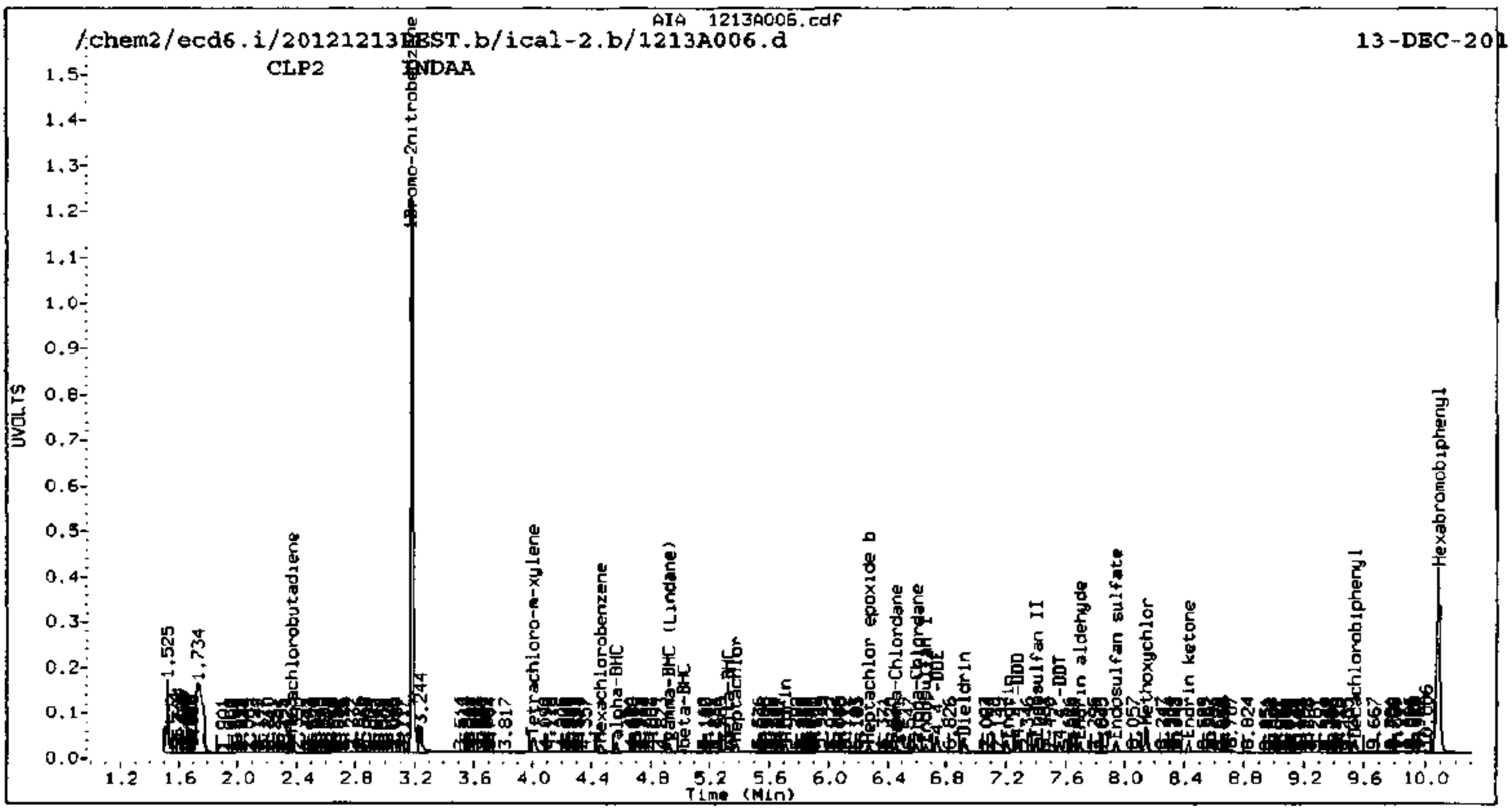
13-DEC-201
STX-CLP INDAA
UVOLTS
Time (Min)
1-Bromo-2nitrobenzene
Hexachlorobutadiene
Tetrachloro-m-xylene
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide b
gamma-Chlordane
alpha-Chlordane
Endosulfan I
Dieldrin
Endrin
Endosulfan II
Endrin aldehyde
Methoxychlor
Endosulfan sulfate
Endrin ketone
Decachlorobiphenyl
Hexabromobiphenyl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13-DEC-201
CLP2 INDAA
UVOLTS
Time (Min)
1-Bromo-2nitrobenzene
Hexachlorobutadiene
Tetrachloro-m-xylene
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
Heptachlor
Heptachlor epoxide b
gamma-Chlordane
Dieldrin
Endosulfan II
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl
Hexabromobiphenyl

YZ 01/02/13

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /chem2/ecd6.i/20121213PEST.b/ical-1.b/1213A007.d ARI ID: INDAB
Data file 2: /chem2/ecd6.i/20121213PEST.b/ical-2.b/1213A007.d Client ID:
Method: /chem2/ecd6.i/20121213PEST.b/PEST1213.m Injection Date: 13-DEC-2012 16:44
Compound Sublist: INDA Report Date: 01/02/2013 01:09
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: NONE
Operator: ar Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.001	0.001	4396432	3.183	0.001	24120879	80.0000	80.0000	0.0	1Bromo-2nitrobenzen
4.137	0.006	206692	4.570	0.003	1386725	2.3688	2.6220	10.1	alpha-BHC
4.530	0.031	91469	5.016	0.018	699512	2.5313	3.5709	34.1	beta-BHC
4.694	0.031	158014	5.318	0.015	920404	2.3052	2.3977	3.9	delta-BHC
4.414	0.006	167595	4.921	0.003	1140688	2.3340	2.5814	10.1	gamma-BHC (Lindane)
4.843	0.003	176317	5.375	0.002	1323570	2.4942	3.0282	19.3	Heptachlor
5.127	0.003	168867	5.712	0.001	1206524	2.4248	2.9270	18.8	Aldrin
5.700	0.004	168333	6.271	0.003	1116241	2.5343	3.0413	18.2	Heptachlor epoxide b
6.078	0.006	192735	6.660	0.004	989429	2.6371	2.8992	9.5	Endosulfan I
6.299	0.005	322016	6.915	0.003	2139451	4.9019	6.0077	20.3	Dieldrin
6.032	0.021	265952	6.736	0.011	2150227	4.6975	6.0562	25.3	4,4'-DDE
6.518	0.005	261427	7.205	0.003	1522024	4.8039	5.4920	13.4	Endrin
6.729	0.008	274883	7.397	0.004	1625983	4.8918	5.3624	9.2	Endosulfan II
6.587	0.020	262124	7.274	0.010	1639965	4.7719	5.6524	16.9	4,4'-DDD
7.491	0.006	237447	7.939	0.004	1411181	4.8508	5.6898	15.9	Endosulfan sulfate
6.835	0.015	228918	7.557	0.007	1338142	4.6151	5.4735	17.0	4,4'-DDT
7.262	0.011	643178	8.139	0.004	2915503	26.2984	29.0703	10.0	Methoxychlor
7.744	0.006	317761	8.426	0.003	1587026	4.9677	5.7057	13.8	Endrin ketone
7.103	0.008	227222	7.695	0.005	1343291	4.9630	5.7179	14.1	Endrin aldehyde
5.828	0.008	166851	6.458	0.005	1147722	2.4888	3.0646	20.7	gamma-Chlordane
5.949	0.007	158489	6.594	0.005	968617	2.5043	2.8245	12.0	alpha-Chlordane
2.196	-0.001	242557	2.363	-0.001	1232213	2.5275	2.6680	5.4	Hexachlorobutadiene
4.015	0.017	199263	4.459	0.010	1513883	2.6104	2.6770	2.5	Hexachlorobenzene
8.742	-0.001	3888823	10.078	0.001	14174474	80.0000	80.0000	0.0	Hexabromobiphenyl
3.670	0.010	382077	4.003	0.007	2274557	5.2233	5.4115	3.5	Tetrachloro-m-xylene
8.590	0.003	287867	9.536	0.001	1614596	5.2077	5.5806	6.9	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	13.1	13.5	13.1~	115- 0
Decachlorobiphenyl	13.0	14.0	13.0~	115- 0

~ Indicates recovery outside QC Limits

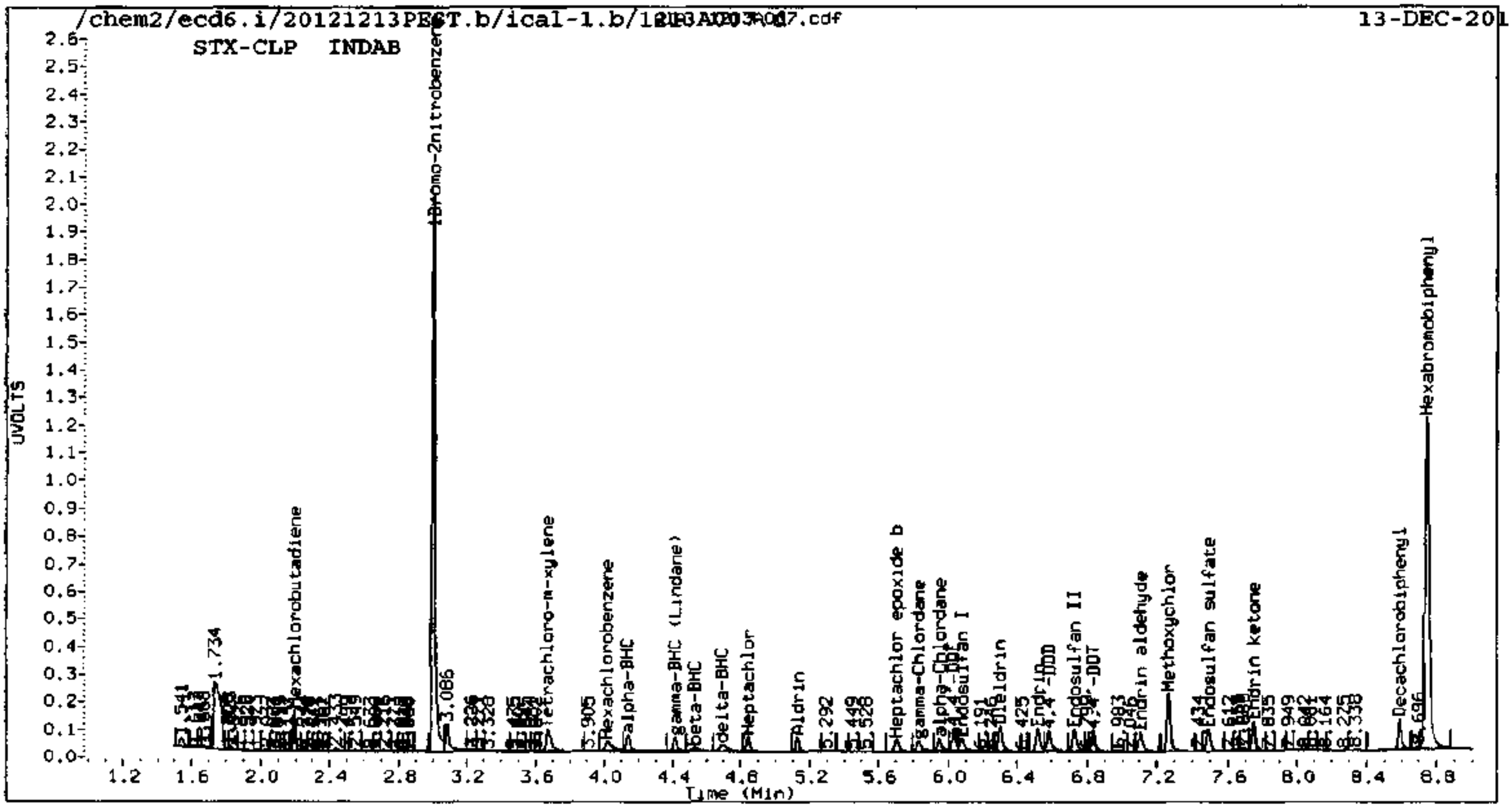
INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4288295	4396432	2.5
Hexabromobiphenyl	3547373	3888823	9.6

Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	22962949	24120879	5.0
Hexabromobiphenyl	12491507	14174474	13.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 13-DEC-2012
<- Indicates standard response outside Limits (-50 to +100%)

	STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount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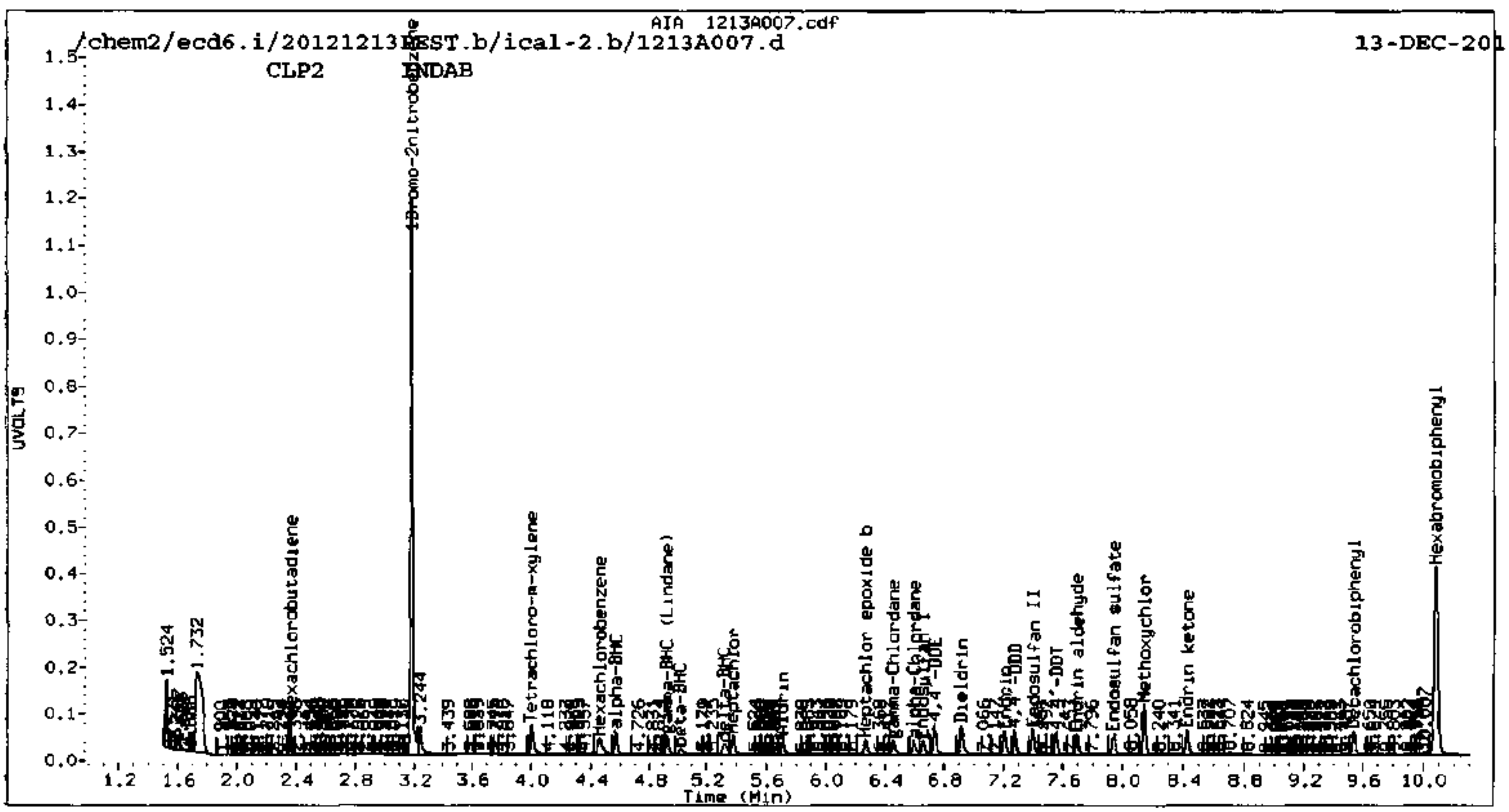
13-DEC-201
STX-CLP INDAB
UVOLTS
Time (Min)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13-DEC-201
CLP2 INDAB
UVOLTS
Time (Min)

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

YB 01/02/13

Data file 1: /chem2/ecd6.i/20121213PEST.b/ical-1.b/1213A008.d ARI ID: INDAC
Data file 2: /chem2/ecd6.i/20121213PEST.b/ical-2.b/1213A008.d Client ID:
Method: /chem2/ecd6.i/20121213PEST.b/PEST1213.m Injection Date: 13-DEC-2012 17:01
Compound Sublist: INDA Report Date: 01/02/2013 01:09
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: NONE
Operator: ar Dilution Factor: 1.000

STX-CLP Col RT	Shift	Response	CLP2 Col RT	Shift	Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
3.001	0.000	4325007	3.182	0.001	23944711	80.0000	80.0000	0.0	1Bromo-2nitrobenzen
4.136	0.005	414535	4.570	0.002	2738907	4.8291	5.2168	7.7	alpha-BHC
4.527	0.028	178484	5.015	0.017	1287688	5.0209	6.6218	27.5	beta-BHC
4.691	0.028	314584	5.317	0.013	1840109	4.6652	4.8288	3.4	delta-BHC
4.414	0.006	336264	4.921	0.003	2243155	4.7602	5.1137	7.2	gamma-BHC (Lindane)
4.843	0.003	344987	5.376	0.002	2464911	4.9608	5.6809	13.5	Heptachlor
5.127	0.003	334059	5.713	0.001	2327530	4.8760	5.6882	15.4	Aldrin
5.700	0.004	324383	6.271	0.003	2038632	4.9643	5.5954	12.0	Heptachlor epoxide b
6.079	0.006	368983	6.659	0.003	1854189	5.1320	5.4730	6.4	Endosulfan I
6.299	0.005	646044	6.916	0.003	4005917	9.9968	11.3317	12.5	Dieldrin
6.029	0.019	540937	6.735	0.010	3985696	9.7123	11.3084	15.2	4,4'-DDE
6.517	0.005	514223	7.205	0.003	2882233	9.4989	10.4015	9.1	Endrin
6.728	0.007	538497	7.398	0.005	3114284	9.6334	10.2721	6.4	Endosulfan II
6.584	0.017	520619	7.273	0.009	3098130	9.5276	10.6796	11.4	4,4'-DDD
7.490	0.005	459632	7.939	0.004	2638995	9.4391	10.6417	12.0	Endosulfan sulfate
6.834	0.013	453598	7.557	0.007	2519582	9.1928	10.3074	11.4	4,4'-DDT
7.261	0.010	1204116	8.139	0.004	5337326	49.4929	53.2252	7.3	Methoxychlor
7.743	0.006	611338	8.426	0.003	2978357	9.6076	10.7092	10.8	Endrin ketone
7.103	0.007	437819	7.695	0.005	2492014	9.6131	10.6089	9.8	Endrin aldehyde
5.827	0.008	322909	6.458	0.005	2080928	4.8962	5.5973	13.4	gamma-Chlordane
5.949	0.007	306146	6.594	0.004	1814280	4.9173	5.3293	8.0	alpha-Chlordane
2.196	-0.001	480093	2.363	-0.001	2405070	5.0853	5.2459	3.1	Hexachlorobutadiene
4.013	0.015	377963	4.458	0.009	2905715	5.0332	5.1760	2.8	Hexachlorobenzene
8.743	0.000	3868490	10.079	0.002	14172609	80.0000	80.0000	0.0	Hexabromobiphenyl
3.668	0.008	725625	4.001	0.005	4401583	10.0837	10.5490	4.5	Tetrachloro-m-xylene
8.590	0.003	545739	9.536	0.001	2985952	9.9246	10.3218	3.9	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	25.2	26.4	25.2~	115- 0
Decachlorobiphenyl	24.8	25.8	24.8~	115- 0

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

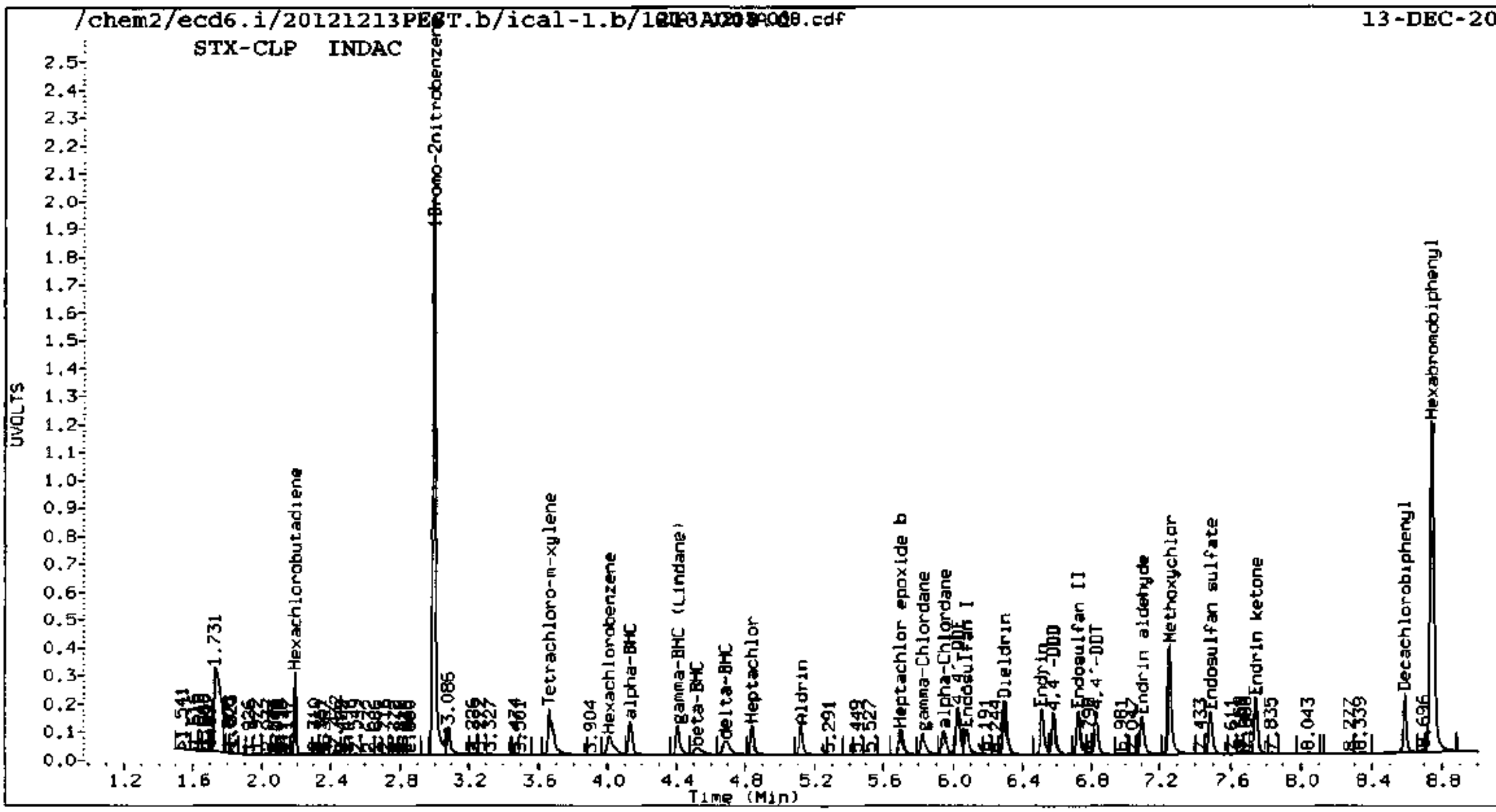
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4288295	4325007	0.9
Hexabromobiphenyl	3547373	3868490	9.1

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	22962949	23944711	4.3
Hexabromobiphenyl	12491507	14172609	13.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 13-DEC-2012
<- Indicates standard response outside Limits (-50 to +100%)

	STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount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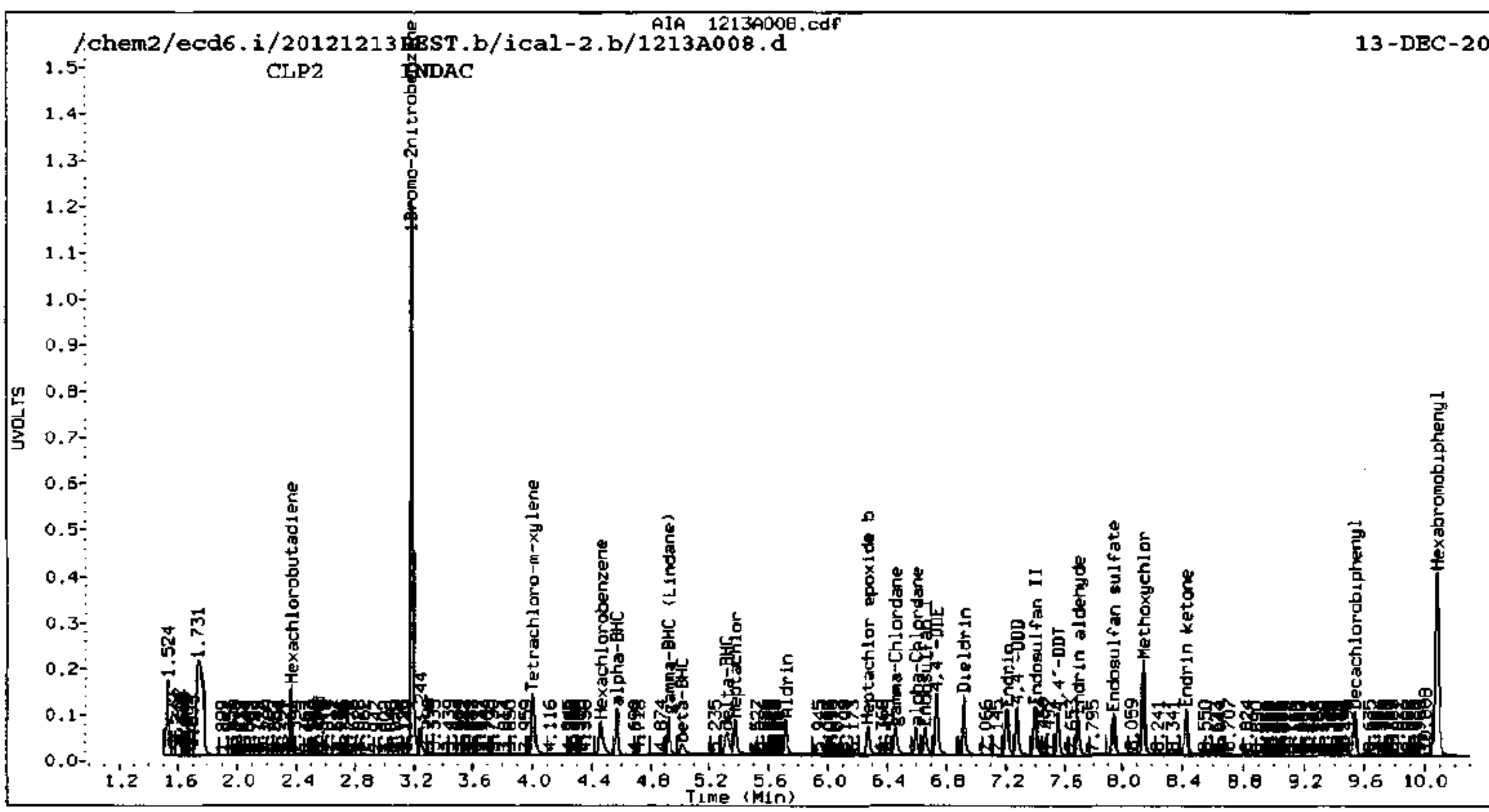
13-DEC-201
STX-CLP INDAC
UVOLTS
Time (Min)
1-Bromo-2nitrobenzene
Hexachlorobutadiene
Tetrachloro-m-xylene
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide b
gamma-Chlordane
alpha-Chlordane
Endosulfan I
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Methoxychlor
Endosulfan sulfate
Endrin ketone
Decachlorobiphenyl
Hexabromobiphenyl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13-DEC-201
CLP2 INDAC
UVOLTS
Time (Min)
1-Bromo-2nitrobenzene
Hexachlorobutadiene
Tetrachloro-m-xylene
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide b
gamma-Chlordane
alpha-Chlordane
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl
Hexabromobiphenyl

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /chem2/ecd6.i/20121213PEST.b/ical-1.b/1213A009.d ARI ID: INDAD YZ 01/07/13
Data file 2: /chem2/ecd6.i/20121213PEST.b/ical-2.b/1213A009.d Client ID:
Method: /chem2/ecd6.i/20121213PEST.b/PEST1213.m Injection Date: 13-DEC-2012 17:19
Compound Sublist: INDA Report Date: 01/02/2013 01:09
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: NONE
Operator: ar Dilution Factor: 1.000

STX-CLP Col RT	Shift	Response	CLP2 Col RT	Shift	Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
3.000	0.000	4236254	3.181	0.000	23244834	80.0000	80.0000	0.0	1Bromo-2nitrobenzen
4.135	0.004	855621	4.569	0.001	5460710	10.1764	10.7143	5.1	alpha-BHC
4.520	0.022	353684	5.010	0.012	2127249	10.1579	11.2685	10.4	beta-BHC
4.685	0.022	652841	5.314	0.011	3840659	9.8842	10.3821	4.9	delta-BHC
4.412	0.004	697971	4.919	0.002	4501122	10.0877	10.5702	4.7	gamma-BHC (Lindane)
4.842	0.002	693548	5.375	0.001	4692259	10.1819	11.1398	9.0	Heptachlor
5.125	0.002	684243	5.712	0.000	4445386	10.1966	11.1910	9.3	Aldrin
5.699	0.002	646161	6.270	0.002	3881944	10.0959	10.9754	8.3	Heptachlor epoxide b
6.077	0.004	723619	6.658	0.002	3564097	10.2752	10.8368	5.3	Endosulfan I
6.298	0.004	1307921	6.914	0.002	7695418	20.6626	22.4237	8.2	Dieldrin
6.026	0.015	1129306	6.732	0.007	7578939	20.7010	22.1507	6.8	4,4'-DDE
6.516	0.003	1043297	7.204	0.002	5603795	21.3976	22.1223	3.3	Endrin
6.726	0.006	1089263	7.396	0.003	6348687	21.6354	22.9067	5.7	Endosulfan II
6.581	0.014	1072522	7.271	0.007	5985108	21.7924	22.5687	3.5	4,4'-DDD
7.489	0.004	940203	7.938	0.003	5020075	21.4378	22.1443	3.2	Endosulfan sulfate
6.831	0.011	947806	7.554	0.005	4968350	21.3271	22.2338	4.2	4,4'-DDT
7.259	0.008	2340158	8.137	0.002	9982652	106.7963	108.8978	1.9	Methoxychlor
7.742	0.005	1223580	8.424	0.002	5673929	21.3502	22.3175	4.4	Endrin ketone
7.101	0.006	881209	7.693	0.003	4752428	21.4824	22.1318	3.0	Endrin aldehyde
5.826	0.006	646484	6.456	0.004	3951866	10.0078	10.9499	9.0	gamma-Chlordane
5.946	0.004	611529	6.592	0.003	3525646	10.0281	10.6681	6.2	alpha-Chlordane
2.195	-0.001	933453	2.363	-0.001	4790390	10.0946	10.7633	6.4	Hexachlorobutadiene
4.011	0.012	739679	4.455	0.006	5737268	10.0564	10.5276	4.6	Hexachlorobenzene
8.743	0.000	3484213	10.078	0.001	12955972	80.0000	80.0000	0.0	Hexabromobiphenyl
3.667	0.006	1424670	3.999	0.003	8587072	20.2129	21.1998	4.8	Tetrachloro-m-xylene
8.590	0.003	1052660	9.536	0.001	5718292	21.2545	21.6232	1.7	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	50.5	53.0	50.5~	115- 0
Decachlorobiphenyl	53.1	54.1	53.1~	115- 0

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

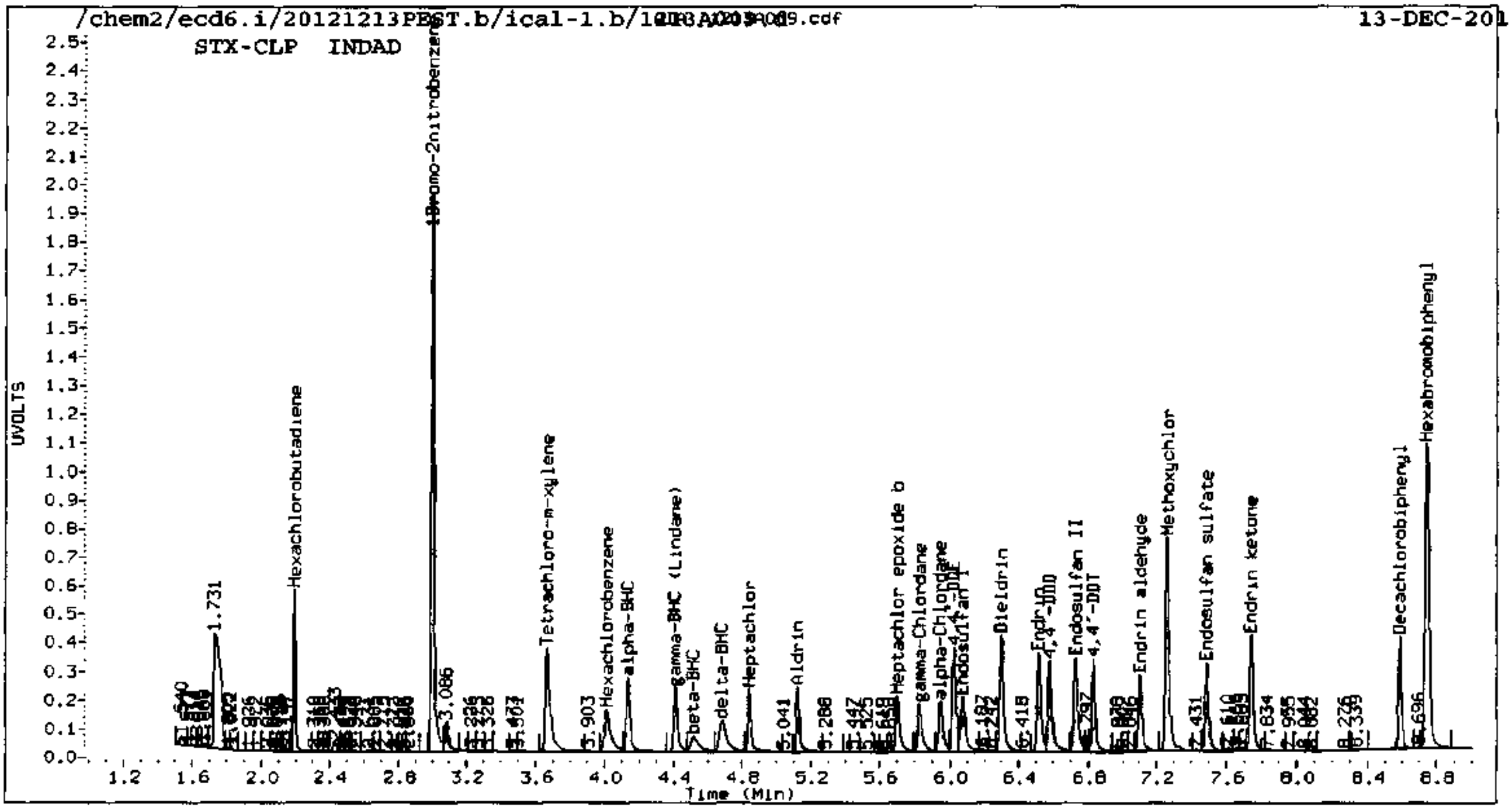
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4288295	4236254	-1.2
Hexabromobiphenyl	3547373	3484213	-1.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	22962949	23244834	1.2
Hexabromobiphenyl	12491507	12955972	3.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 13-DEC-2012
<- Indicates standard response outside Limits (-50 to +100%)

	STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount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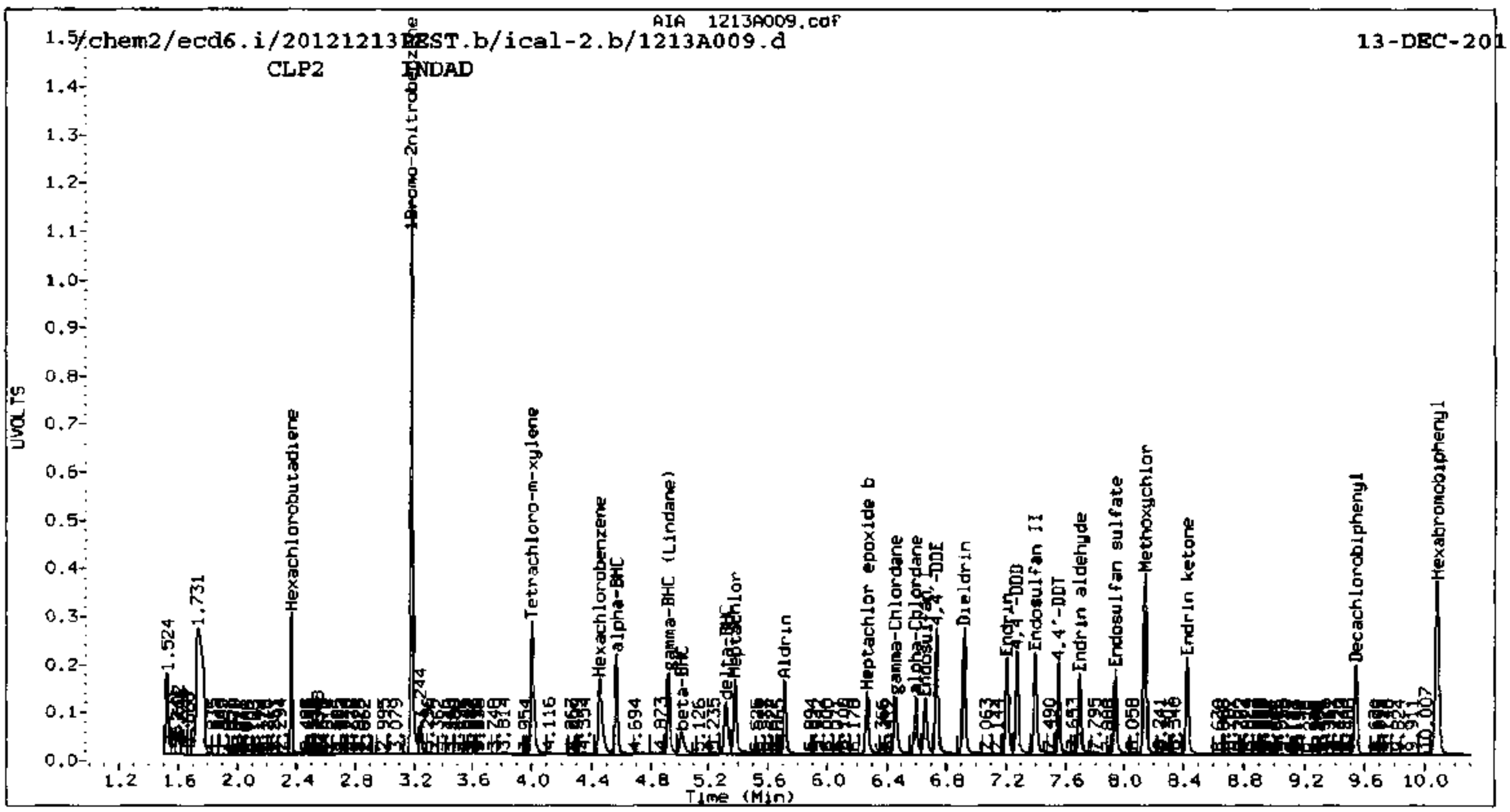
13-DEC-201
STX-CLP INDAD
UVOLTS
Time (Min)
1.731
Hexachlorobutadiene
1-Bromo-2nitrobenzene
3.086
Tetrachloro-m-xylene
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide b
gamma-Chlordane
alpha-Chlordane
4,4'-DDE
Endosulfan I
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Methoxychlor
Endosulfan sulfate
Endrin ketone
Decachlorobiphenyl
Hexabromobiphenyl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13-DEC-201
CLP2 INDAD
UVOLTS
Time (Min)
1.524
1.731
Hexachlorobutadiene
1-Bromo-2nitrobenzene
Tetrachloro-m-xylene
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide b
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl
Hexabromobiphenyl

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

y2 01/02/13

Data file 1: /chem2/ecd6.i/20121213PEST.b/ical-1.b/1213A010.d ARI ID: INDAF
Data file 2: /chem2/ecd6.i/20121213PEST.b/ical-2.b/1213A010.d Client ID:
Method: /chem2/ecd6.i/20121213PEST.b/PEST1213.m Injection Date: 13-DEC-2012 17:37
Compound Sublist: INDA Report Date: 01/02/2013 01:09
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: NONE
Operator: ar Dilution Factor: 1.000

STX-CLP Col RT	Shift	Response	CLP2 Col RT	Shift	Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
3.000	0.000	4282822	3.181	0.000	23556484	80.0000	80.0000	0.0	1Bromo-2nitrobenzen
4.133	0.002	3436611	4.568	0.000	20963070	40.4292	40.5868	0.4	alpha-BHC
4.505	0.007	1345137	5.002	0.004	7992576	38.2127	41.7783	8.9	beta-BHC
4.670	0.007	2802189	5.306	0.003	16500105	41.9647	44.0133	4.8	delta-BHC
4.410	0.002	2879834	4.918	0.000	17665244	41.1692	40.9353	0.6	gamma-BHC (Lindane)
4.841	0.001	2673011	5.374	0.000	16547370	38.8155	38.7652	0.1	Heptachlor
5.125	0.001	2715162	5.710	-0.001	16271617	40.0216	40.4209	1.0	Aldrin
5.697	0.001	2495430	6.268	0.000	14048110	38.5656	39.1927	1.6	Heptachlor epoxide
6.074	0.002	2635249	6.655	0.000	12952705	37.0130	38.8624	4.9	Endosulfan I
6.296	0.001	5040402	6.913	0.000	26830250	78.7627	77.1465	2.1	Dieldrin
6.015	0.005	4508791	6.727	0.002	26344374	81.7506	75.9773	7.3	4,4'-DDE
6.513	0.001	4096463	7.202	0.000	20072221	76.8288	73.4799	4.5	Endrin
6.722	0.002	4173753	7.394	0.001	22045832	75.8080	73.7617	2.7	Endosulfan II
6.571	0.004	4180454	7.266	0.002	21628422	77.6748	75.6282	2.7	4,4'-DDD
7.487	0.002	3615769	7.936	0.001	18436512	75.3904	75.4146	0.0	Endosulfan sulfate
6.824	0.003	3894142	7.551	0.001	18771832	80.1275	77.8994	2.8	4,4'-DDT
7.254	0.003	8468920	8.136	0.001	32825189	353.4242	332.0515	6.2	Methoxychlor
7.740	0.002	4599279	8.423	0.001	20210281	73.3865	73.7154	0.4	Endrin ketone
7.097	0.002	3341697	7.691	0.001	17106751	74.4950	73.8744	0.8	Endrin aldehyde
5.821	0.002	2567709	6.454	0.001	14619934	39.3170	39.9732	1.7	gamma-Chlordane
5.944	0.002	2409619	6.591	0.001	13292780	39.0843	39.6899	1.5	alpha-Chlordane
2.196	-0.001	3503445	2.363	-0.001	17464631	37.4752	38.7212	3.3	Hexachlorobutadiene
4.005	0.006	2765224	4.452	0.003	21771203	37.1863	39.4206	5.8	Hexachlorobenzene
8.743	0.000	3810198	10.077	0.000	13971565	80.0000	80.0000	0.0	Hexabromobiphenyl
3.662	0.002	5239309	3.997	0.001	30723882	73.5257	74.8478	1.8	Tetrachloro-m-xylen
8.589	0.002	3879084	9.535	0.000	21020533	71.6225	73.7091	2.9	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	183.8	187.1	183.8~	115- 0
Decachlorobiphenyl	179.1	184.3	179.1~	115- 0

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

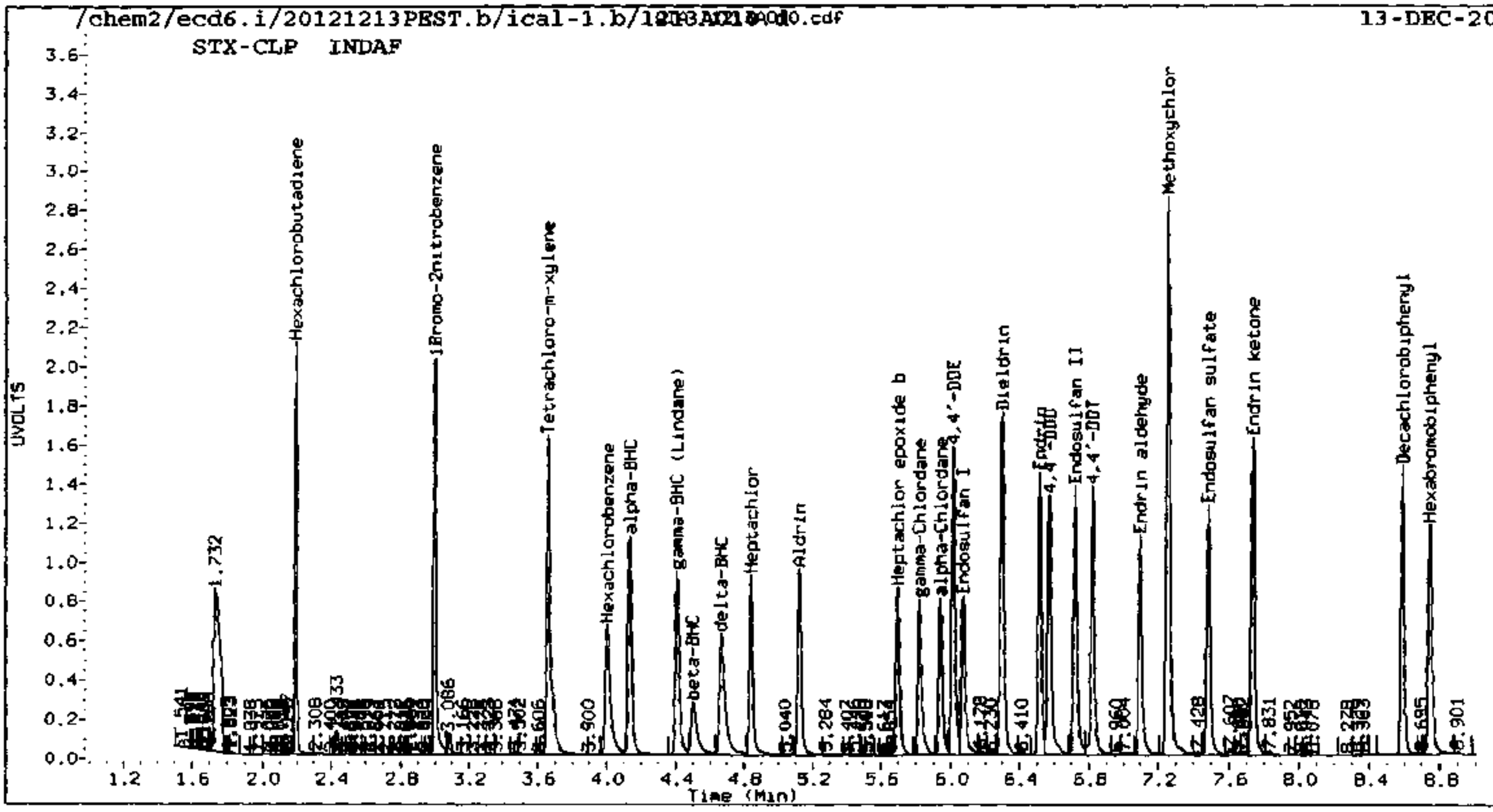
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4288295	4282822	-0.1
Hexabromobiphenyl	3547373	3810198	7.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	22962949	23556484	2.6
Hexabromobiphenyl	12491507	13971565	11.8

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 13-DEC-2012
<- Indicates standard response outside Limits (-50 to +100%)

	STX-CLP Col					CLP2 Col			
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount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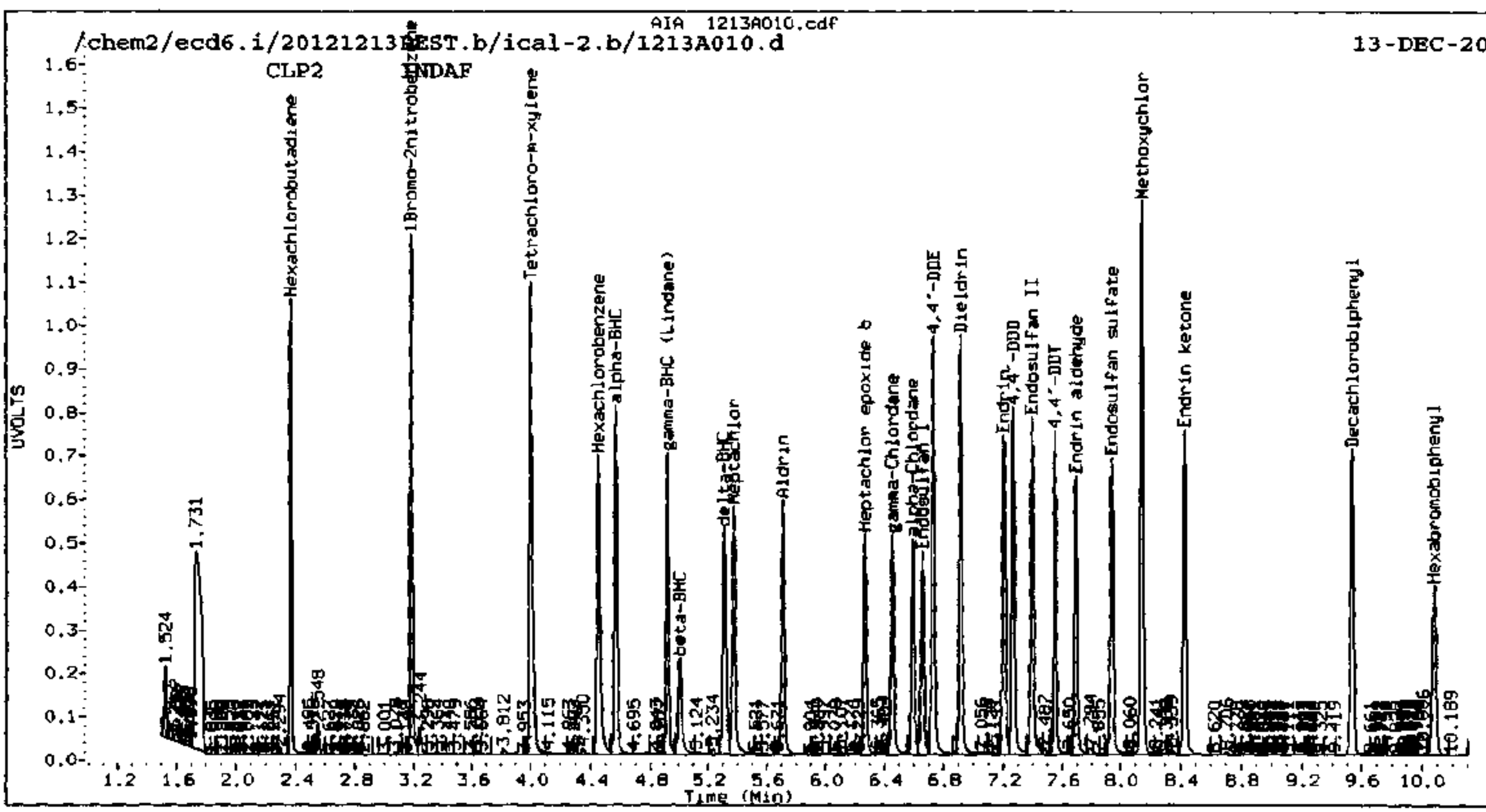
13-DEC-201
STX-CLP INDAF
UVOLTS
Time (Min)
Hexachlorobutadiene
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide b
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Methoxychlor
Endosulfan sulfate
Endrin ketone
Decachlorobiphenyl
Hexabromobiphenyl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13-DEC-201
CLP2 INDAF
UVOLTS
Time (Min)
Hexachlorobutadiene
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide b
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl
Hexabromobiphenyl

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

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Data file 2: /chem2/ecd6.i/20121213PEST.b/ical-2.b/1213A011.d Client ID:
Method: /chem2/ecd6.i/20121213PEST.b/PEST1213.m Injection Date: 13-DEC-2012 17:55
Compound Sublist: INDA Report Date: 01/02/2013 01:09
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: NONE
Operator: ar Dilution Factor: 1.000

STX-CLP Col RT	Shift	Response	CLP2 Col RT	Shift	Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
3.000	0.000	4067064	3.181	0.000	22370224	80.0000	80.0000	0.0	1Bromo-2nitrobenzen
4.131	0.000	6932902	4.567	0.000	41964754	85.8874	85.5568	0.4	alpha-BHC
4.498	0.000	2675995	4.998	0.000	15792607	80.0527	86.9277	8.2	beta-BHC
4.663	0.000	5737658	5.303	0.000	33653739	90.4838	94.5303	4.4	delta-BHC
4.408	0.000	5884974	4.918	0.000	35433218	88.5928	86.4627	2.4	gamma-BHC (Lindane)
4.840	0.000	5256422	5.374	0.000	30337805	80.3792	74.8406	7.1	Heptachlor
5.124	0.000	5367057	5.711	0.000	30702196	83.3075	80.3128	3.7	Aldrin
5.696	0.000	4861010	6.268	0.000	26360773	79.1097	77.4437	2.1	Heptachlor epoxide
6.073	0.000	4990516	6.655	0.000	24230713	73.8120	76.5554	3.6	Endosulfan I
6.295	0.000	9797385	6.913	0.000	49970737	161.2185	151.3030	6.3	Dieldrin
6.011	0.000	8847297	6.725	0.000	49717056	168.9237	150.9876	11.2	4,4'-DDE
6.512	0.000	8089823	7.202	0.000	37406596	160.6009	144.6765	10.4	Endrin
6.721	0.000	8138475	7.393	0.000	41064746	156.4681	145.1609	7.5	Endosulfan II
6.567	0.000	8126585	7.264	0.000	41231502	159.8304	152.3226	4.8	4,4'-DDD
7.485	0.000	7117636	7.935	0.000	35370153	157.0888	152.8585	2.7	Endosulfan sulfate
6.821	0.000	7688573	7.550	0.000	36711076	167.4596	160.9536	4.0	4,4'-DDT
7.251	0.000	16571703	8.135	0.000	59828916	732.0315	639.4191	13.5	Methoxychlor
7.737	0.000	9016459	8.422	0.000	38511886	152.2848	148.4079	2.6	Endrin ketone
7.096	0.000	6518447	7.690	0.000	32666984	153.8151	149.0431	3.2	Endrin aldehyde
5.820	0.000	5083375	6.453	0.000	27712415	81.9663	79.7881	2.7	gamma-Chlordane
5.942	0.000	4762524	6.590	0.000	25662796	81.3468	80.6879	0.8	alpha-Chlordane
2.197	0.000	7068504	2.364	0.000	34516341	79.6205	80.5851	1.2	Hexachlorobutadiene
3.999	0.000	5437270	4.449	0.000	42409517	76.9985	80.8619	4.9	Hexachlorobenzene
8.743	0.000	3599591	10.077	0.000	13224180	80.0000	80.0000	0.0	Hexabromobiphenyl
3.660	0.000	10127397	3.996	0.000	58672702	149.6622	150.5148	0.6	Tetrachloro-m-xyl
8.587	0.000	7542065	9.535	0.000	41675126	147.4025	154.3941	4.6	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	374.2	376.3	374.2~	115- 0
Decachlorobiphenyl	368.5	386.0	368.5~	115- 0

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

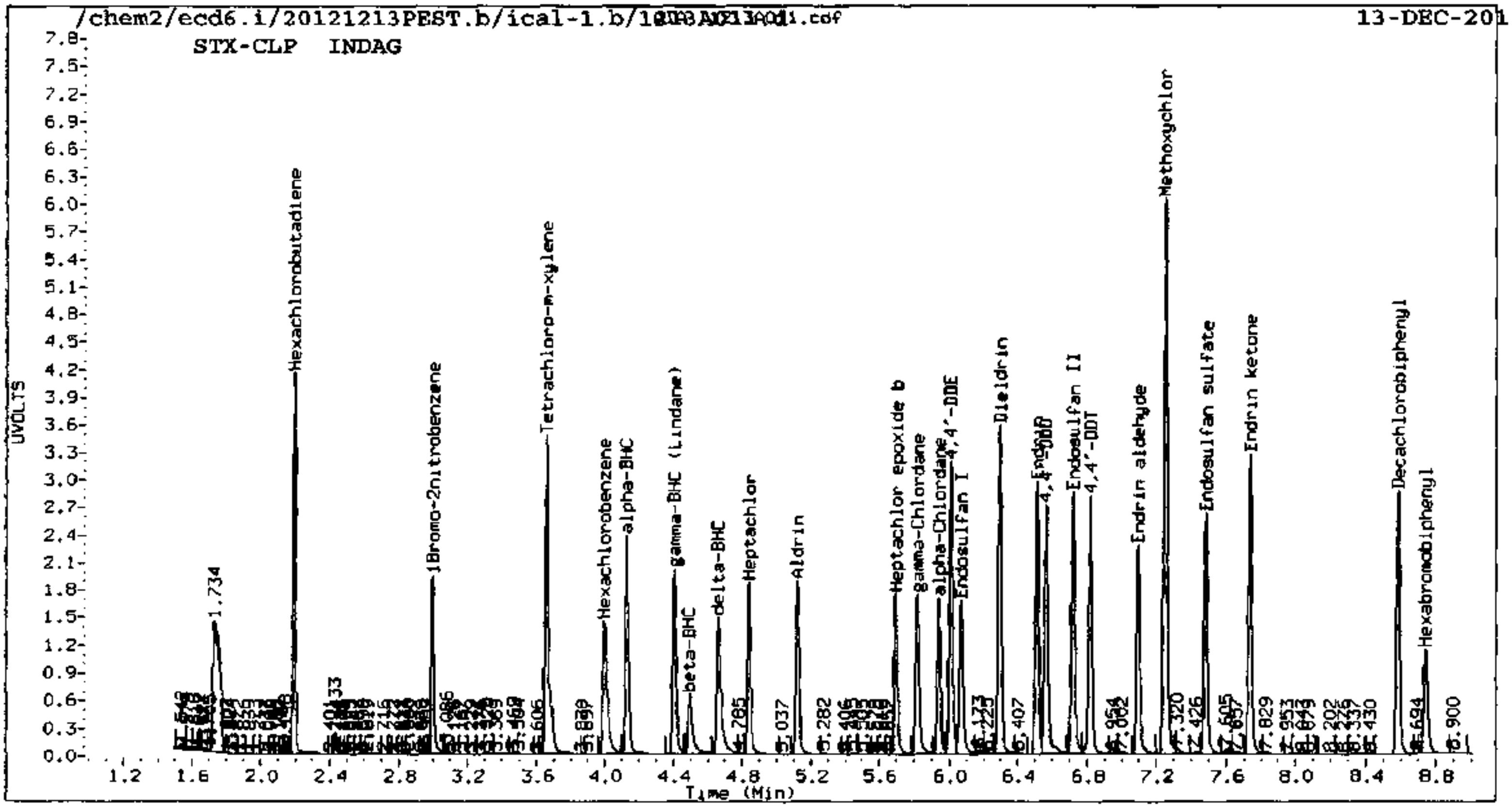
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4288295	4067064	-5.2
Hexabromobiphenyl	3547373	3599591	1.5

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	22962949	22370224	-2.6
Hexabromobiphenyl	12491507	13224180	5.9

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 13-DEC-2012
<- Indicates standard response outside Limits (-50 to +100%)

	STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount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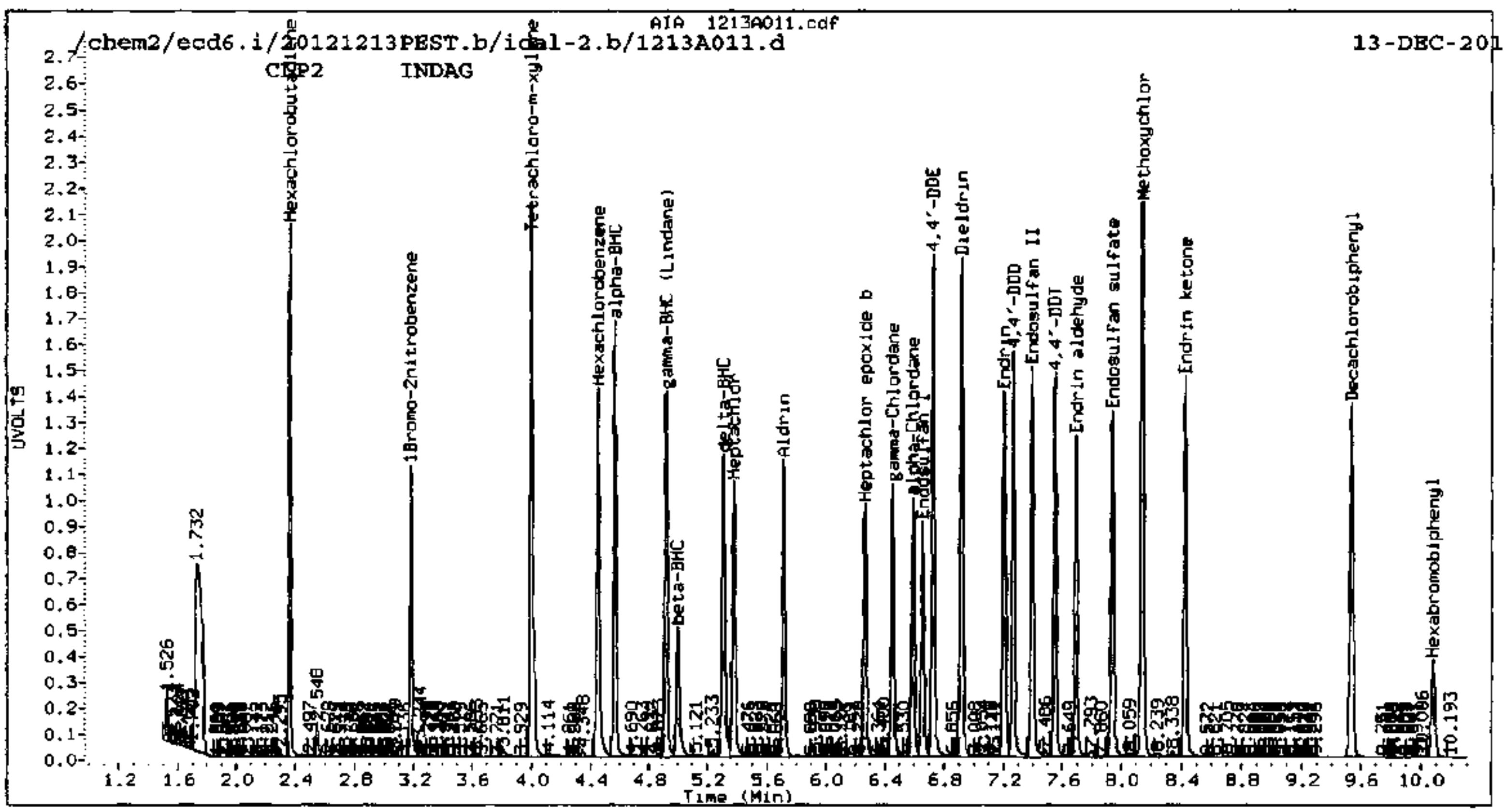
STX-CLP INDAG
UVOLTS
Time (Min)
1.734
Hexachlorobutadiene
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide b
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Methoxychlor
Endosulfan sulfate
Endrin ketone
Decachlorobiphenyl
Hexabromobiphenyl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13-DEC-201
CLP2 INDAG
UVOLTS
Time (Min)
1.526
1.732
Hexachlorobutadiene
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide b
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl
Hexabromobiphenyl
10.193

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

y.z
01/02/13

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Method: /chem2/ecd6.i/20121213PEST.b/PEST1213.m Injection Date: 13-DEC-2012 18:13
Compound Sublist: INDA Report Date: 01/02/2013 01:09
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: NONE
Operator: ar Dilution Factor: 1.000

STX-CLP Col RT	STX-CLP Col Shift	STX-CLP Col Response	CLP2 Col RT	CLP2 Col Shift	CLP2 Col Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
3.000	0.000	4142347	3.181	0.000	23294125	80.0000	80.0000	0.0	1Bromo-2nitrobenzen
4.133	0.002	3429226	4.568	0.000	22009260	41.7104	43.0923	3.3	alpha-BHC
4.509	0.011	1392499	5.004	0.006	8596115	40.8997	45.4392	10.5	beta-BHC
4.676	0.013	2911708	5.309	0.006	17362975	45.0836	46.8366	3.8	delta-BHC
4.411	0.003	2950631	4.918	0.001	18831063	43.6117	44.1283	1.2	gamma-BHC (Lindane)
4.841	0.001	2794980	5.373	0.000	17688617	41.9630	41.9055	0.1	Heptachlor
5.125	0.001	2846911	5.711	-0.001	17401844	43.3867	43.7154	0.8	Aldrin
5.698	0.002	2539636	6.269	0.001	14710371	40.5797	41.5026	2.2	Heptachlor epoxide
6.075	0.002	2711264	6.656	0.001	13504320	39.3720	40.9738	4.0	Endosulfan I
6.297	0.002	2651051	6.913	0.000	14833437	42.8309	43.1318	0.7	Dieldrin
6.024	0.013	2362411	6.731	0.006	15028592	44.2864	43.8307	1.0	4,4'-DDE
6.515	0.002	2122512	7.203	0.001	11041954	41.3850	40.9662	1.0	Endrin
6.725	0.004	2192274	7.395	0.002	12490107	41.3963	42.3523	2.3	Endosulfan II
6.582	0.015	2146185	7.271	0.007	11930058	41.4574	42.2774	2.0	4,4'-DDD
7.489	0.004	1881223	7.938	0.002	10014117	40.7788	41.5141	1.8	Endosulfan sulfate
6.832	0.011	1925901	7.554	0.005	9987231	41.1986	42.0029	1.9	4,4'-DDT
7.263	0.012	980667	8.140	0.005	4525486	42.5469	46.3949	8.7	Methoxychlor
7.742	0.004	2328397	8.424	0.002	10733339	38.6244	39.6759	2.7	Endrin ketone
7.100	0.005	1685127	7.693	0.003	9098155	39.0545	39.8186	1.9	Endrin aldehyde
5.823	0.004	2638187	6.455	0.002	15324241	41.7660	42.3708	1.4	gamma-Chlordane
5.945	0.003	2515889	6.591	0.002	13978395	42.1919	42.2071	0.0	alpha-Chlordane
2.212	0.015	5133	2.355	-0.010	16862	0.0568	0.0378	40.1*	Hexachlorobutadiene
4.003	0.004	40159	4.458	0.009	45274	0.5584	0.0829	148.3*	Hexachlorobenzene
8.744	0.001	3664960	10.078	0.000	13786011	80.0000	80.0000	0.0	Hexabromobiphenyl
3.665	0.005	2577814	3.998	0.002	15707293	37.4025	38.6962	3.4	Tetrachloro-m-xylen
8.591	0.003	1894311	9.536	0.001	10420748	36.3622	37.0325	1.8	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	93.5	96.7	93.5	115- 0
Decachlorobiphenyl	90.9	92.6	90.9	115- 0

~ Indicates recovery outside QC Limits

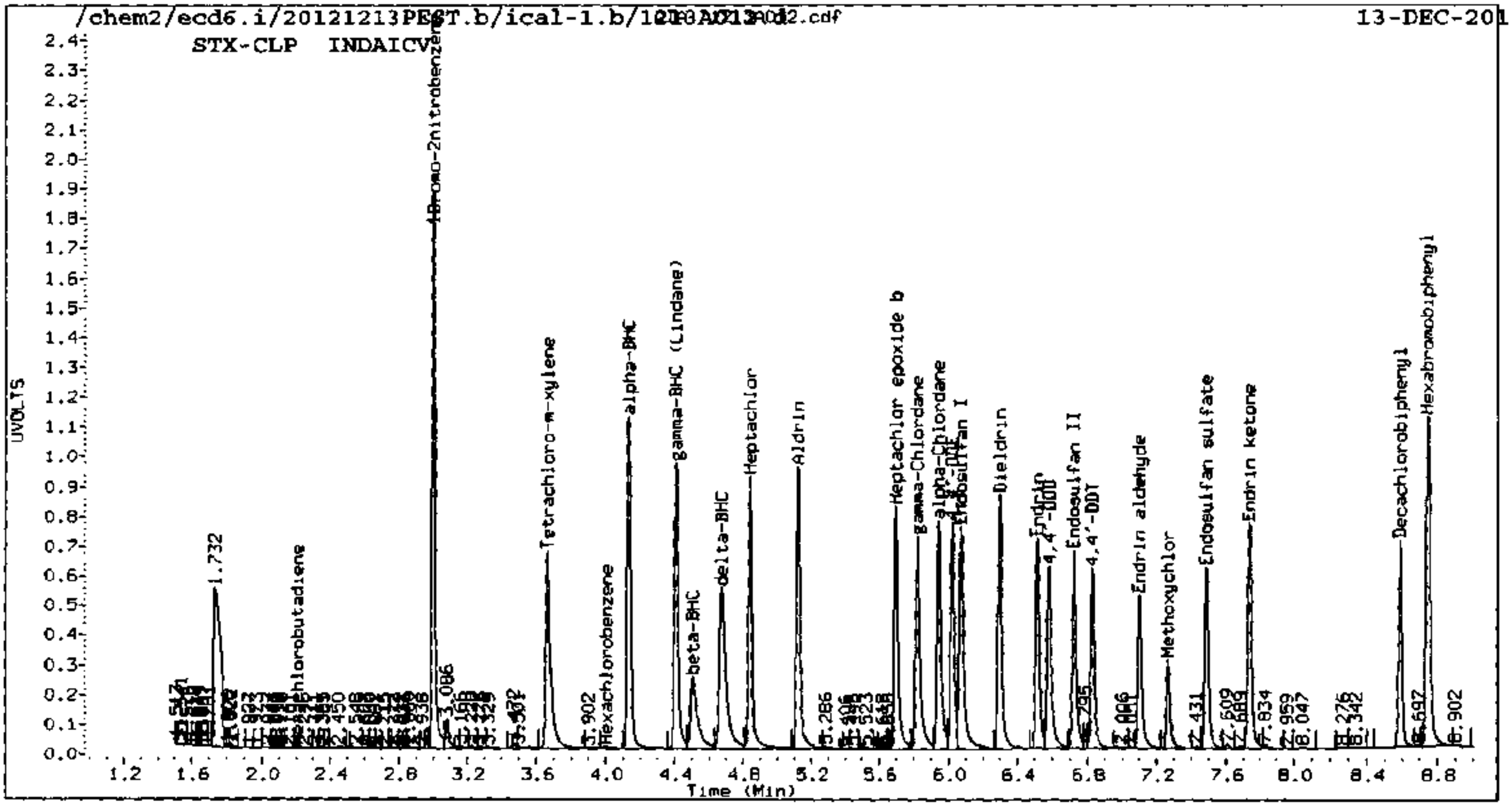
INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1 Standard Area*	Column 1 Sample Area	%D
Bromo-Nitrobenzene	4288295	4142347	-3.4
Hexabromobiphenyl	3547373	3664960	3.3

Standard Cpnd	Column 2 Standard Area*	Column 2 Sample Area	%D
Bromo-Nitrobenzene	22962949	23294125	1.4
Hexabromobiphenyl	12491507	13786011	10.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 13-DEC-2012
<- Indicates standard response outside Limits (-50 to +100%)

Cpnd	STX-CLP Col Peak#	RT	Shift	Height	Amount	CLP2 Col Peak#	RT	Shift	Height	Amount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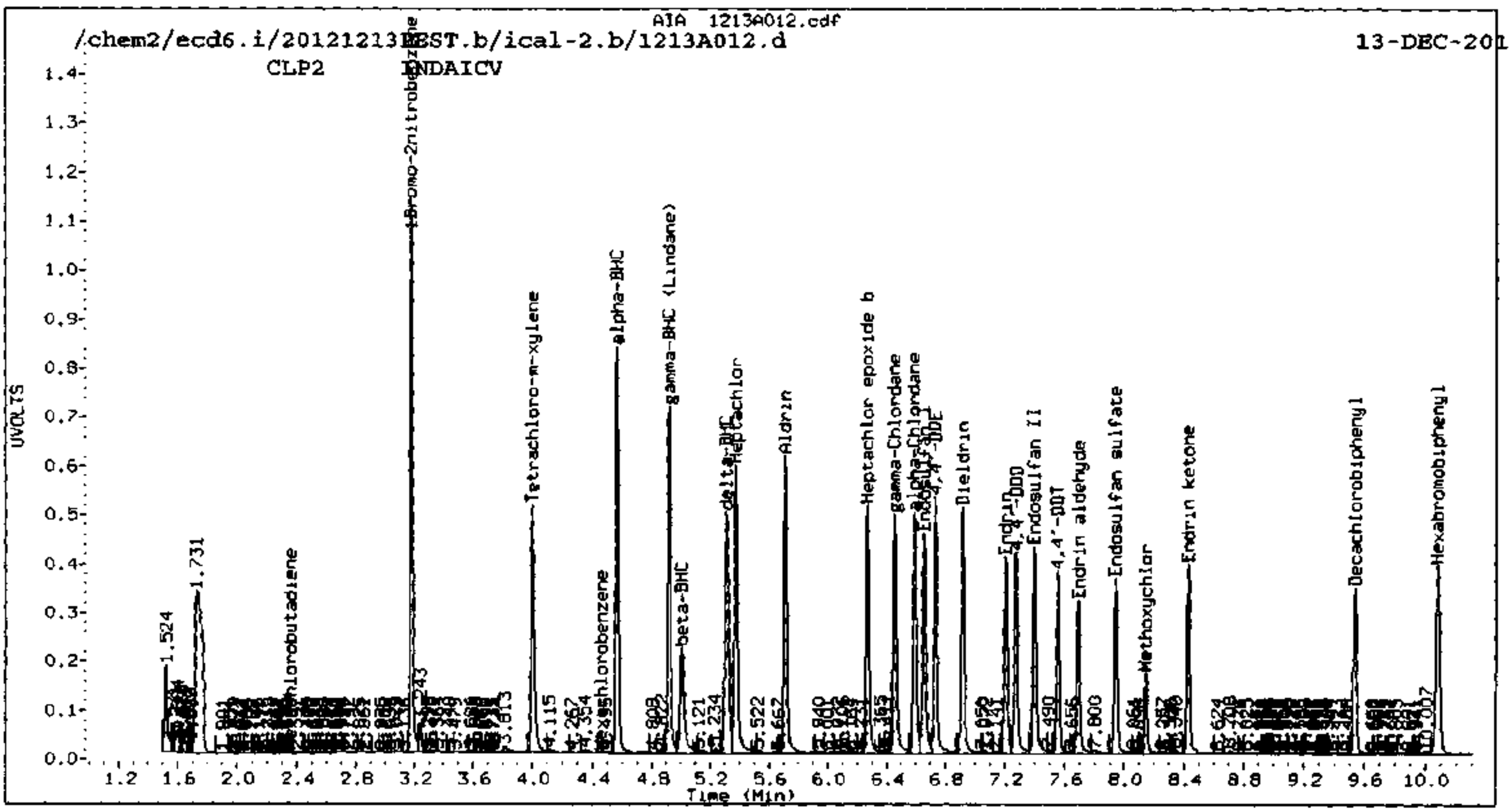
13-DEC-201
STX-CLP INDAICV
UVOLTS
Time (Min)
1.732
Hexachlorobutadiene
1-Bromo-2nitrobenzene
3.086
Tetrachloro-m-xylene
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide b
gamma-Chlordane
alpha-Chlordane
Endosulfan I
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Methoxychlor
Endosulfan sulfate
Endrin ketone
Decachlorobiphenyl
Hexabromobiphenyl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13-DEC-201
CLP2 INDAICV
UVOLTS
Time (Min)
1.524
1.731
Hexachlorobutadiene
1-Bromo-2nitrobenzene
Tetrachloro-m-xylene
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide b
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl
Hexabromobiphenyl

WC32:01718

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /chem2/ecd6.i/20121213PEST.b/ical-1.b/1213A013.d ARI ID: TOXAPH
Data file 2: /chem2/ecd6.i/20121213PEST.b/ical-2.b/1213A013.d Client ID:
Method: /chem2/ecd6.i/20121213PEST.b/PEST1213.m Injection Date: 13-DEC-2012 18:30
Compound Sublist: TOXAPH Report Date: 01/02/2013 02:26
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: NONE
Operator: ar Dilution Factor: 1.000

YZ 01/02/13

STX-CLP Col RT	Shift	Response	CLP2 Col RT	Shift	Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
3.000	0.000	4207259	3.182	0.000	23502430	80.0000	80.0000	0.0	1Bromo-2nitrobenzen
8.744	0.001	3711558	10.077	0.000	13776612	80.0000	80.0000	0.0	Hexabromobiphenyl
3.666	0.005	2339073	3.999	0.003	14709802	33.4149	35.9176	7.2	Tetrachloro-m-xylen
8.590	0.003	1828660	9.535	0.000	9861445	34.6613	35.0688	1.2	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	83.5	89.8	83.5~	150- 0
Decachlorobiphenyl	86.7	87.7	86.7~	150- 0

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4288295	4207259	-1.9
Hexabromobiphenyl	3547373	3711558	4.6

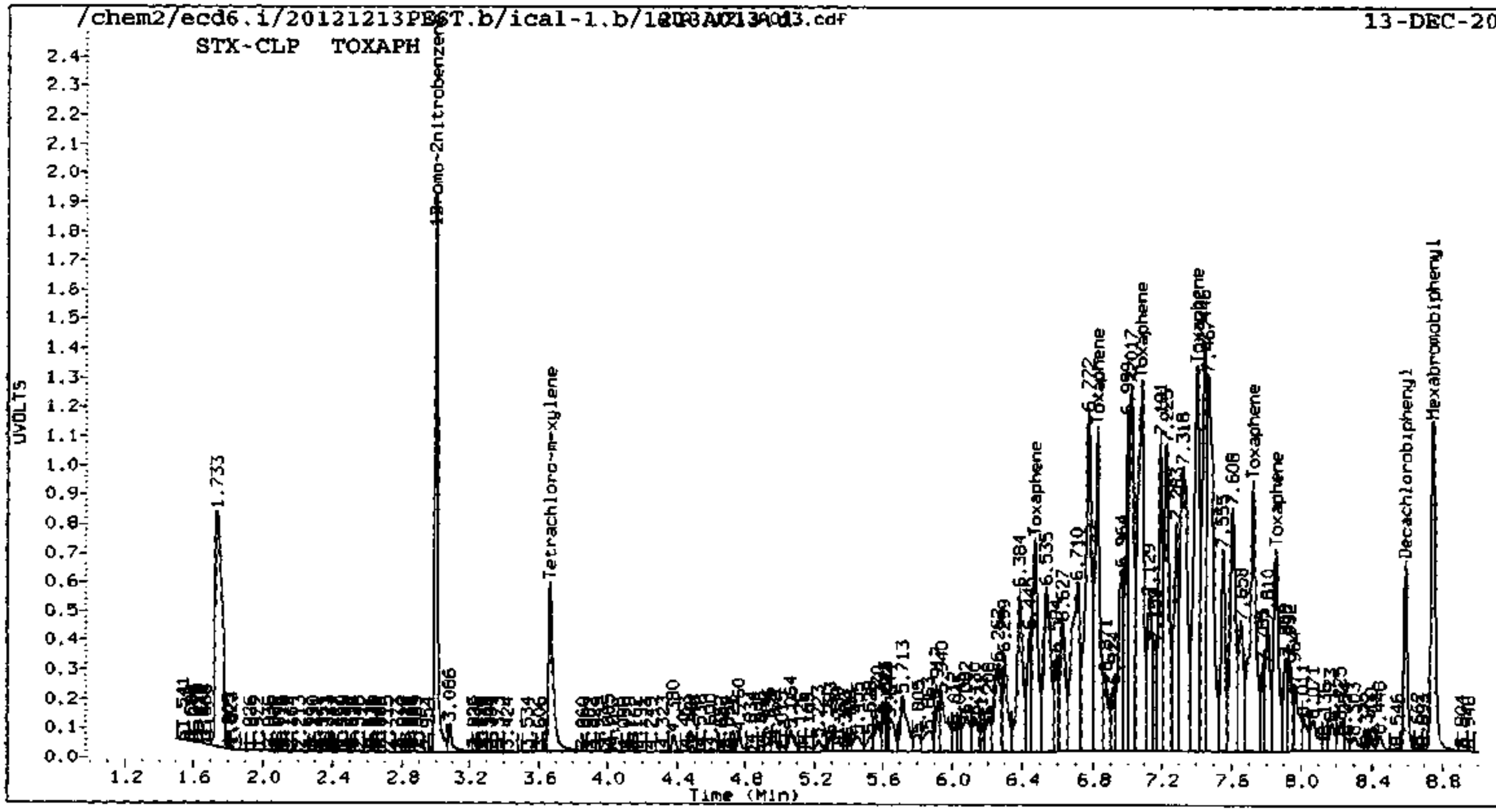
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	22974785	23502430	2.3
Hexabromobiphenyl	12557398	13776612	9.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 13-DEC-2012
<- Indicates standard response outside Limits (-50 to +100%)

			STX-CLP Col					CLP2 Col		
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount
Toxaphene	1	6.471	0.000	3142494	2500.0	1	7.139	0.000	23278339	2500.0
Toxaphene	2	6.823	0.000	4615860	2500.0	2	7.464	0.000	34279506	2500.0
Toxaphene	3	7.079	0.000	6543399	2500.0	3	7.696	0.000	36383377	2500.0
Toxaphene	4	7.404	0.000	6100673	2500.0	4	8.162	0.000	25809760	2500.0
Toxaphene	5	7.724	0.000	4549249	2500.0	5	8.507	0.000	12560321	2500.0
Toxaphene	6	7.854	0.000	2730558	2500.0	NS	---			----

Total STX-CLPAve (6 peaks): 2500.000 Total CLP2Ave (5 peaks): 2500.000 RPD = 0
Corrected Ave (6 peaks): 2500.000 Corrected Ave (5 peaks): 2500.000 RPD = 0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STX-CLP TOXAPH
UVOLTS
Time (Min)
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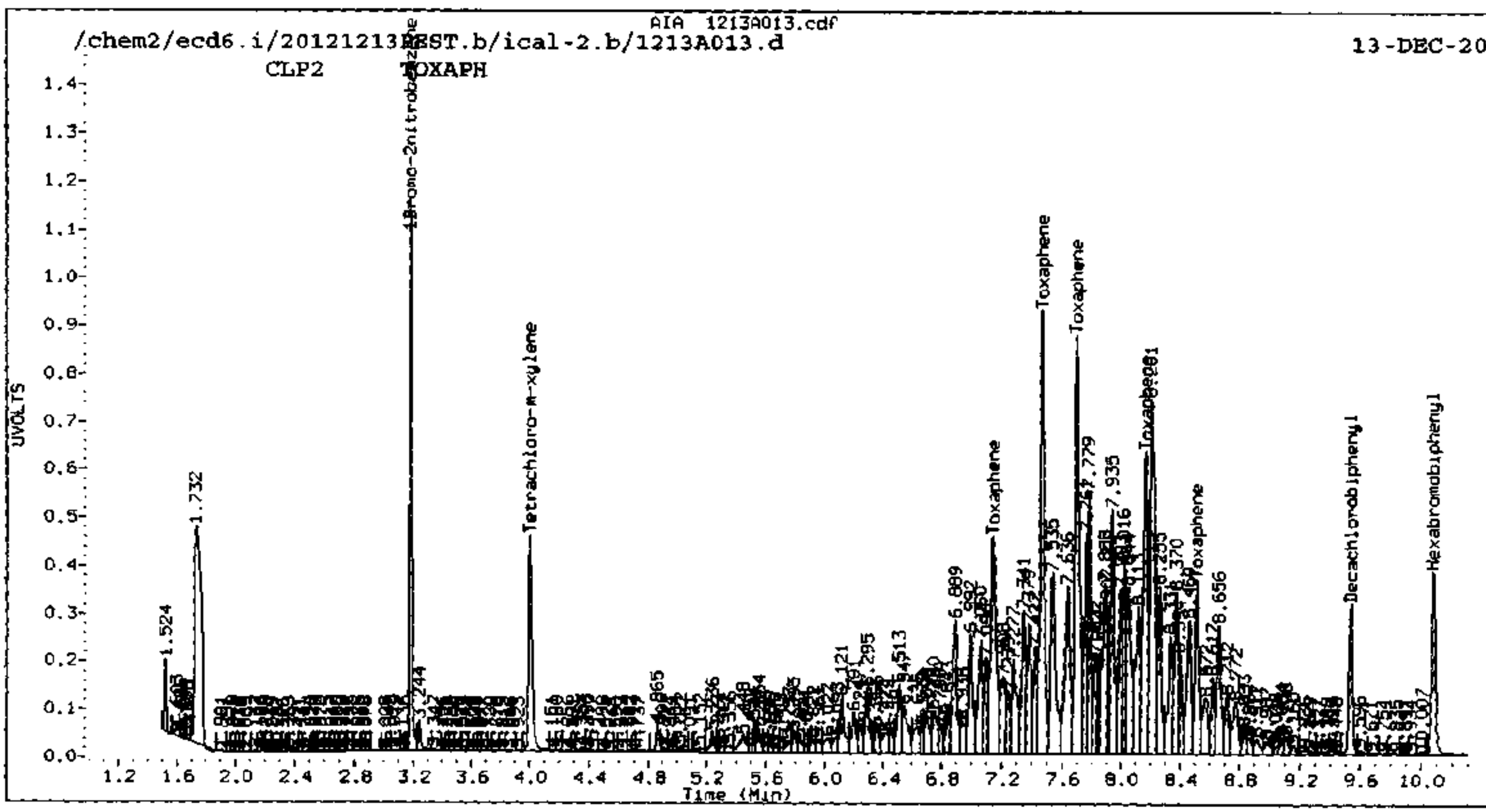
1-Bromo-2nitrobenzene
Tetrachloro-m-xylene
Toxaphene
Decachlorobiphenyl
Hexabromobiphenyl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13-DEC-201
CLP2 TOXAPH
UVOLTS
Time (Min)
1.732
1.524
1-Bromo-2nitrobenzene
Tetrachloro-m-xylene
Toxaphene
Decachlorobiphenyl
Hexabromobiphenyl

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /chem2/ecd6.i/20121213PEST.b/wical-1.b/0109A007.d ARI ID: WNDE   YZ 01/10/13
Data file 2: /chem2/ecd6.i/20121213PEST.b/wical-2.b/0109A007.d Client ID:
Method: /chem2/ecd6.i/20121213PEST.b/PEST1213.m   Injection Date: 09-JAN-2013 13:52
Compound Sublist: WND   Report Date: 01/10/2013 00:29
Instrument, Inj. Vol.: ecd6.i, 1ul   Matrix: NONE
Operator: ar   Dilution Factor: 1.000

STX-CLP Col RT	STX-CLP Col Shift	STX-CLP Col Response	CLP2 Col RT	CLP2 Col Shift	CLP2 Col Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
1.736	-0.001	469256	1.743	0.008	125699326	0.0000	0.0000	---	Hexachloroethane
3.001	0.000	4548858	3.182	0.000	24668517	80.0000	80.0000	0.0	1Bromo-2nitrobenzen
5.606	0.002	2040668	6.180	0.001	12838777	38.0858	39.0234	2.4	Oxychlordane
5.714	0.016	1855148	6.447	0.008	9574569	38.9016	38.9450	0.1	2,4-DDE
5.934	0.004	2728001	6.541	0.002	15661976	39.2332	39.7173	1.2	trans-Nonachlor
6.202	0.013	1620861	6.935	0.006	9019038	39.2988	39.1195	0.5	2,4-DDD
6.427	0.009	1581573	7.215	0.004	7921402	38.7257	39.2028	1.2	2,4-DDT
6.550	0.005	2970528	7.267	0.002	16379405	38.9991	38.8474	0.4	cis-Nonachlor
7.413	0.002	1840850	8.408	0.001	8055449	37.9796	37.8790	0.3	Mirex
8.755	0.000	4471512	10.085	0.000	16562804	80.0000	80.0000	0.0	Hexabromobiphenyl
3.670	0.010	2600592	4.003	0.008	15750709	34.3609	36.6413	6.4	Tetrachloro-m-xylen
8.596	0.009	2049021	9.540	0.005	11140514	32.2374	32.9529	2.2	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	85.9	91.6	85.9~	150- 0
Decachlorobiphenyl	80.6	82.4	80.6~	150- 0

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

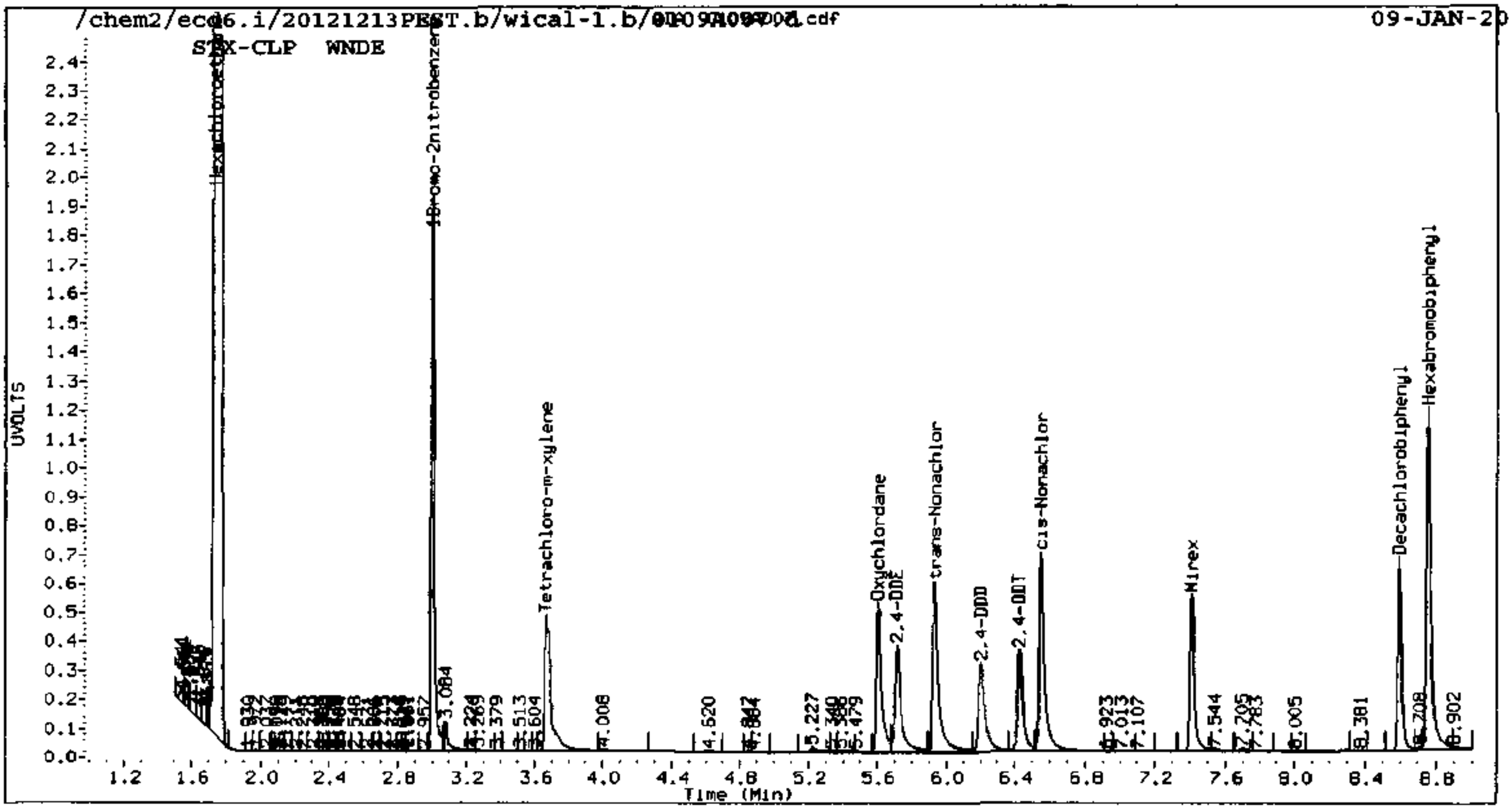
Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4288295	4548858	6.1
Hexabromobiphenyl	3547373	4471512	26.1

	Column 2		
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	22974785	24668517	7.4
Hexabromobiphenyl	12557398	16562804	31.9

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 13-DEC-2012
<- Indicates standard response outside Limits (-50 to +100%)

	STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount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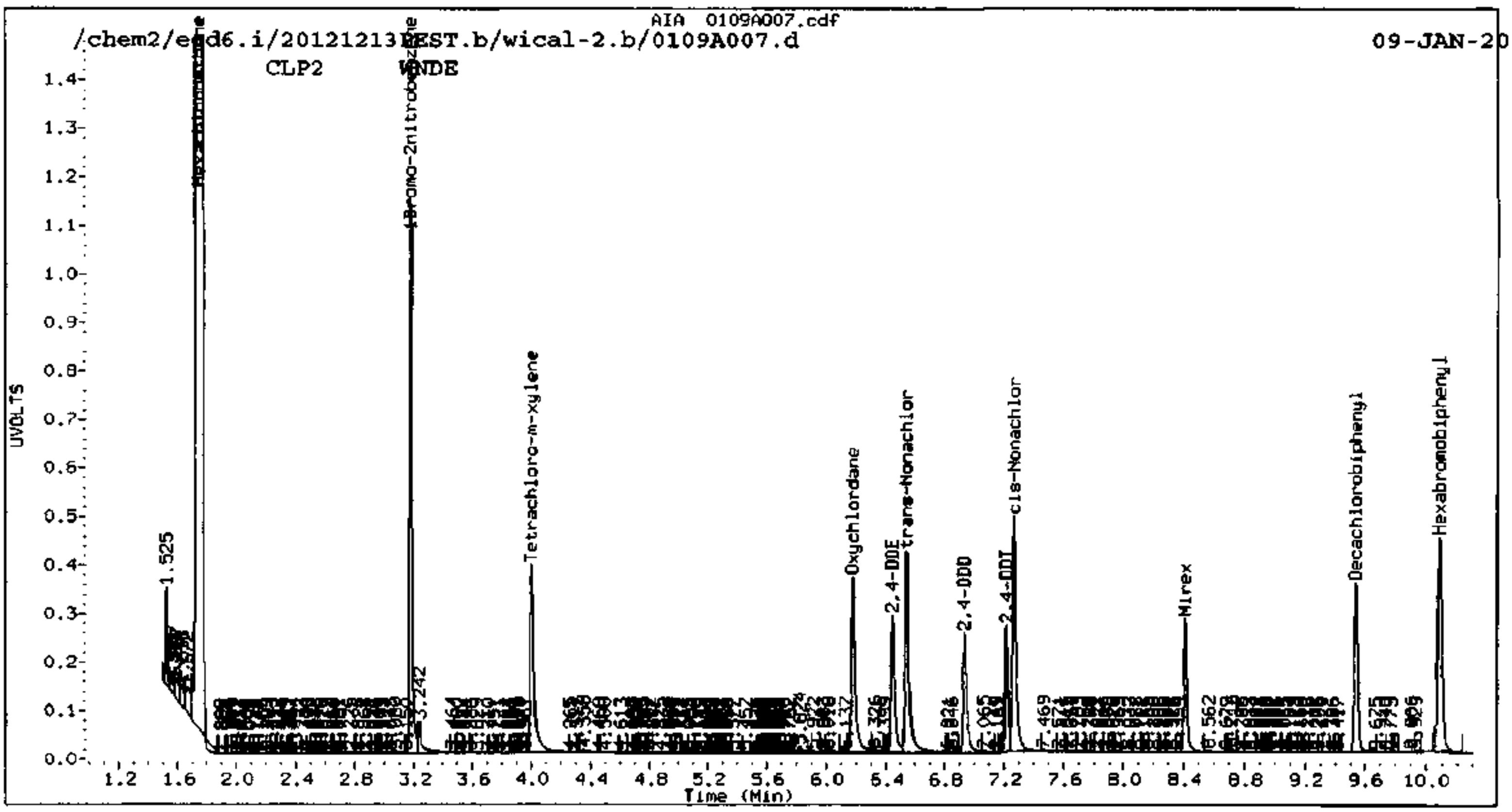
STX-CLP WNDE
09-JAN-20
UVOLTS
Time (Min)
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Oxychlordane
2,4-DDE
trans-Nonachlor
2,4-DDD
2,4-DDT
cis-Nonachlor
Mirex
Decachlorobiphenyl
Hexabromobiphenyl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CLP2 WNDE
09-JAN-20
UVOLTS
Time (Min)
1.525
1Bromo-2nitrobenzene
3.242
Tetrachloro-m-xylene
Oxychlordane
2,4-DDE
trans-Nonachlor
2,4-DDD
2,4-DDT
cis-Nonachlor
Mirex
Decachlorobiphenyl
Hexabromobiphenyl

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Y2 01/10/13

Data file 1: /chem2/ecd6.i/20121213PEST.b/wical-1.b/0109A008.d ARI ID: WNDA
Data file 2: /chem2/ecd6.i/20121213PEST.b/wical-2.b/0109A008.d Client ID:
Method: /chem2/ecd6.i/20121213PEST.b/PEST1213.m Injection Date: 09-JAN-2013 14:09
Compound Sublist: WND Report Date: 01/10/2013 00:29
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: NONE
Operator: ar Dilution Factor: 1.000

STX-CLP Col RT	STX-CLP Col Shift	STX-CLP Col Response	CLP2 Col RT	CLP2 Col Shift	CLP2 Col Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
1.738	0.001	319220	1.736	0.002	88797460	0.0000	0.0000	---	Hexachloroethane
3.002	0.001	4554155	3.183	0.001	24839983	80.0000	80.0000	0.0	1Bromo-2nitrobenzen
5.609	0.006	138397	6.183	0.004	809587	2.5271	2.4438	3.4	Oxychlordane
5.730	0.032	125849	6.456	0.018	620461	2.5819	2.5063	3.0	2,4-DDE
5.940	0.010	179085	6.545	0.006	961361	2.5199	2.4137	4.3	trans-Nonachlor
6.218	0.029	107127	6.943	0.014	577679	2.5412	2.4808	2.4	2,4-DDD
6.438	0.020	101953	7.221	0.010	471639	2.4424	2.3110	5.5	2,4-DDT
6.555	0.010	189574	7.269	0.004	1006357	2.4351	2.3631	3.0	cis-Nonachlor
7.415	0.004	138563	8.409	0.002	558653	2.7970	2.6009	7.3	Mirex
8.755	0.000	4570301	10.084	0.000	16728696	80.0000	80.0000	0.0	Hexabromobiphenyl
3.634	-0.026	2333	4.012	0.016	1136577	0.0308	2.6258	195.4*	Tetrachloro-m-xylene
8.599	0.012	163610	9.541	0.006	751816	2.5184	2.2018	13.4	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	0.1	6.6	0.1~	150- 0
Decachlorobiphenyl	6.3	5.5	5.5~	150- 0

~ Indicates recovery outside QC Limits

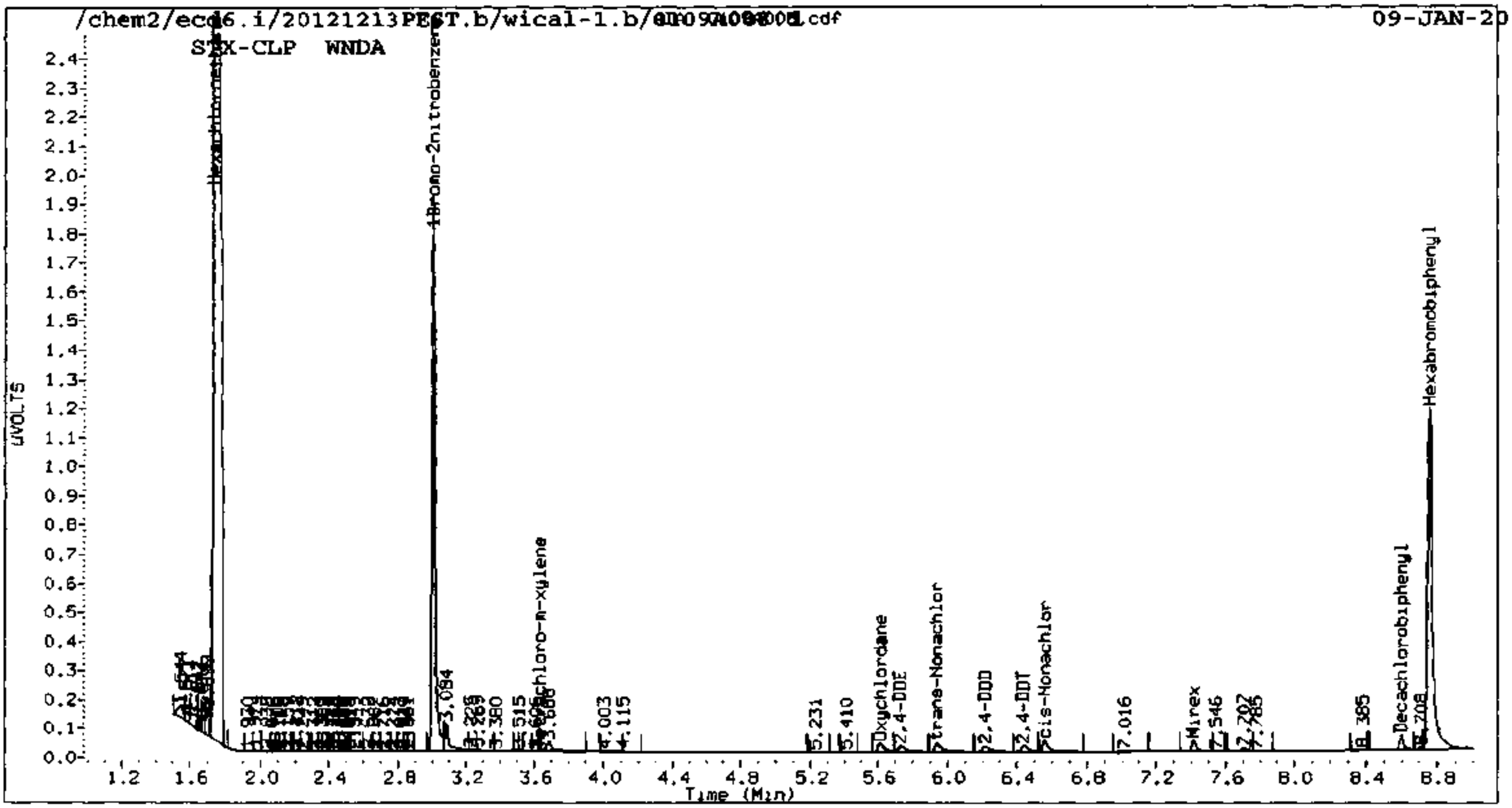
INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1 Standard Area*	Column 1 Sample Area	%D
Bromo-Nitrobenzene	4288295	4554155	6.2
Hexabromobiphenyl	3547373	4570301	28.8

Standard Cpnd	Column 2 Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	22974785	24839983	8.1
Hexabromobiphenyl	12557398	16728696	33.2

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 13-DEC-2012
<- Indicates standard response outside Limits (-50 to +100%)

	STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount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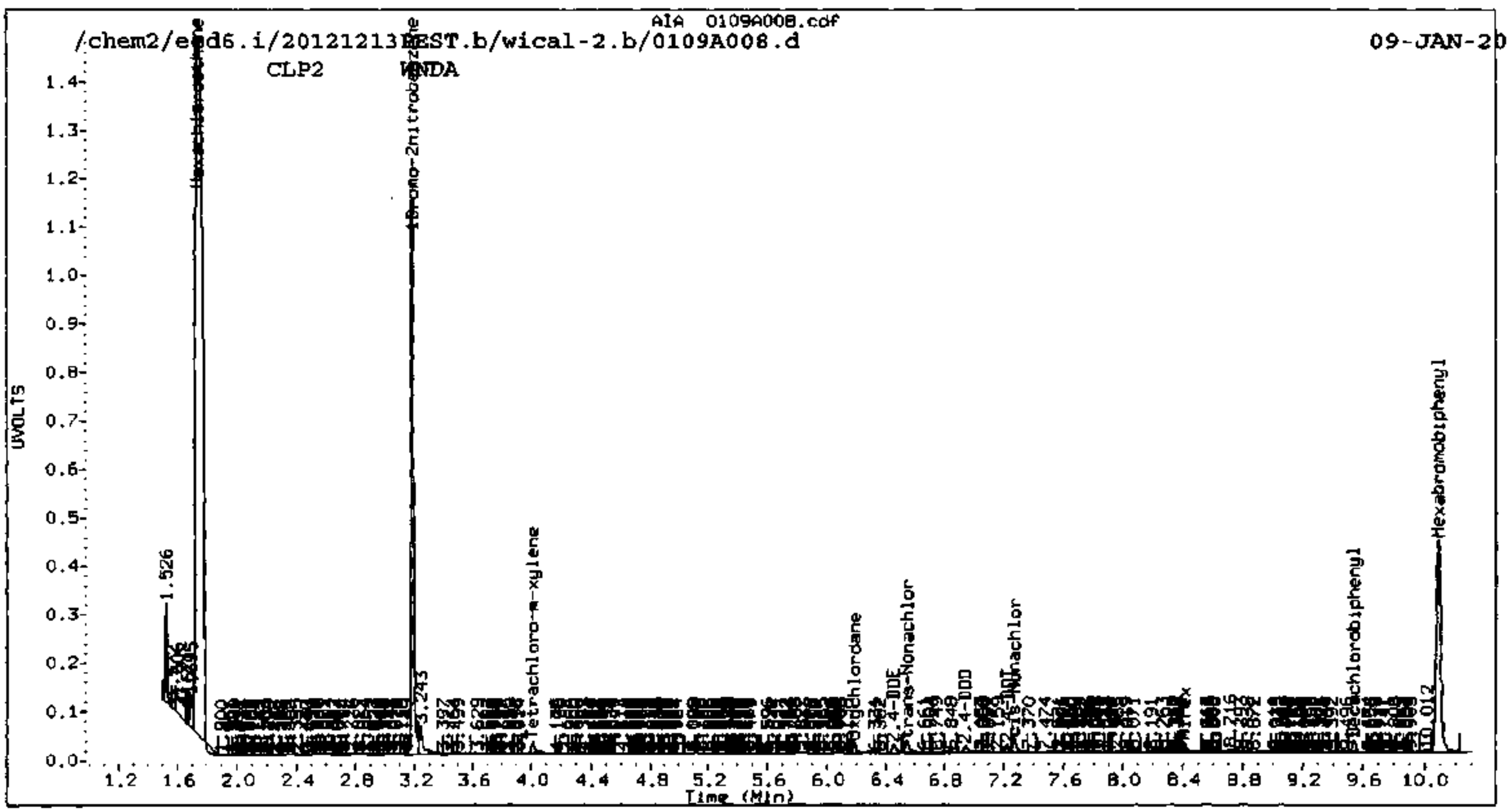
STX-CLP WNDA
UVOLTS
Time (Min)
Hexachlorobenzene
1-Bromo-2nitrobenzene
Tetrachloro-m-xylene
Oxychlordane
2,4-DDE
trans-Nonachlor
2,4-DDD
2,4-DDT
cis-Nonachlor
Mirex
Decachlorobiphenyl
Hexabromobiphenyl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09-JAN-20
CLP2 WNDA
UVOLTS
Time (Min)
Hexachlorobenzene
1-Bromo-2nitrobenzene
Tetrachloro-m-xylene
Oxychlordane
2,4-DDE
trans-Nonachlor
2,4-DDD
2,4-DDT
cis-Nonachlor
Mirex
Decachlorobiphenyl
Hexabromobiphenyl

WC022:01727

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /chem2/ecd6.i/20121213PEST.b/wical-1.b/0109A009.d ARI ID: WNDB 12 01/10/13
Data file 2: /chem2/ecd6.i/20121213PEST.b/wical-2.b/0109A009.d Client ID:
Method: /chem2/ecd6.i/20121213PEST.b/PEST1213.m Injection Date: 09-JAN-2013 14:27
Compound Sublist: WND Report Date: 01/10/2013 00:29
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: NONE
Operator: ar Dilution Factor: 1.000

RT	STX-CLP Col Shift	Response	RT	CLP2 Col Shift	Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
1.737	0.000	414675	1.735	0.001	115499216	0.0000	0.0000	---	Hexachloroethane
3.002	0.001	3924600	3.182	0.001	21517904	80.0000	80.0000	0.0	1Bromo-2nitrobenzen
5.608	0.005	269947	6.182	0.003	1555311	5.7382	5.4195	5.7	Oxychlordane
5.727	0.029	228345	6.455	0.016	1213330	5.4536	5.6579	3.7	2,4-DDE
5.939	0.009	317545	6.544	0.005	1871068	5.2014	5.4917	5.4	trans-Nonachlor
6.215	0.026	187386	6.941	0.013	1119598	5.1746	5.6206	8.3	2,4-DDD
6.437	0.019	197743	7.219	0.009	964187	5.5146	5.5228	0.1	2,4-DDT
6.555	0.010	372457	7.269	0.004	2062300	5.5693	5.6611	1.6	cis-Nonachlor
7.415	0.004	236659	8.410	0.002	1051359	5.5611	5.7220	2.9	Mirex
8.757	0.002	3926013	10.086	0.002	14310328	80.0000	80.0000	0.0	Hexabromobiphenyl
3.687	0.027	352839	4.010	0.014	2168223	5.4035	5.7825	6.8	Tetrachloro-m-xylene
8.599	0.012	311711	9.542	0.007	1516861	5.5856	5.1930	7.3	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	13.5	14.5	13.5~	150- 0
Decachlorobiphenyl	14.0	13.0	13.0~	150- 0

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

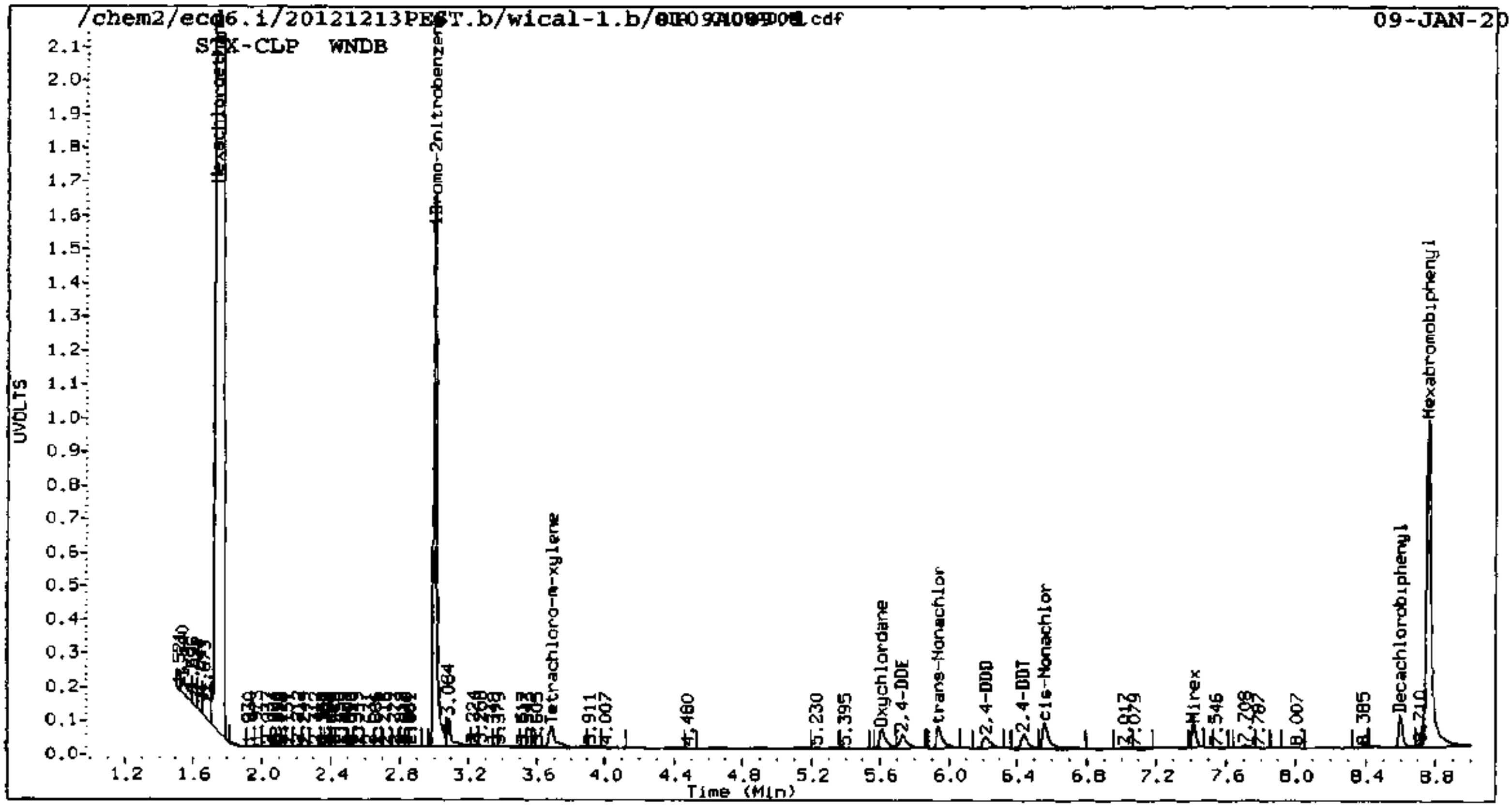
Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4288295	3924600	-8.5
Hexabromobiphenyl	3547373	3926013	10.7

Standard Cpnd	Column 2 Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	22974785	21517904	-6.3
Hexabromobiphenyl	12557398	14310328	14.0

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 13-DEC-2012
<- Indicates standard response outside Limits (-50 to +100%)

Cpnd	STX-CLP Col Peak#	RT	Shift	Height	Amount	CLP2 Col Peak#	RT	Shift	Height	Amount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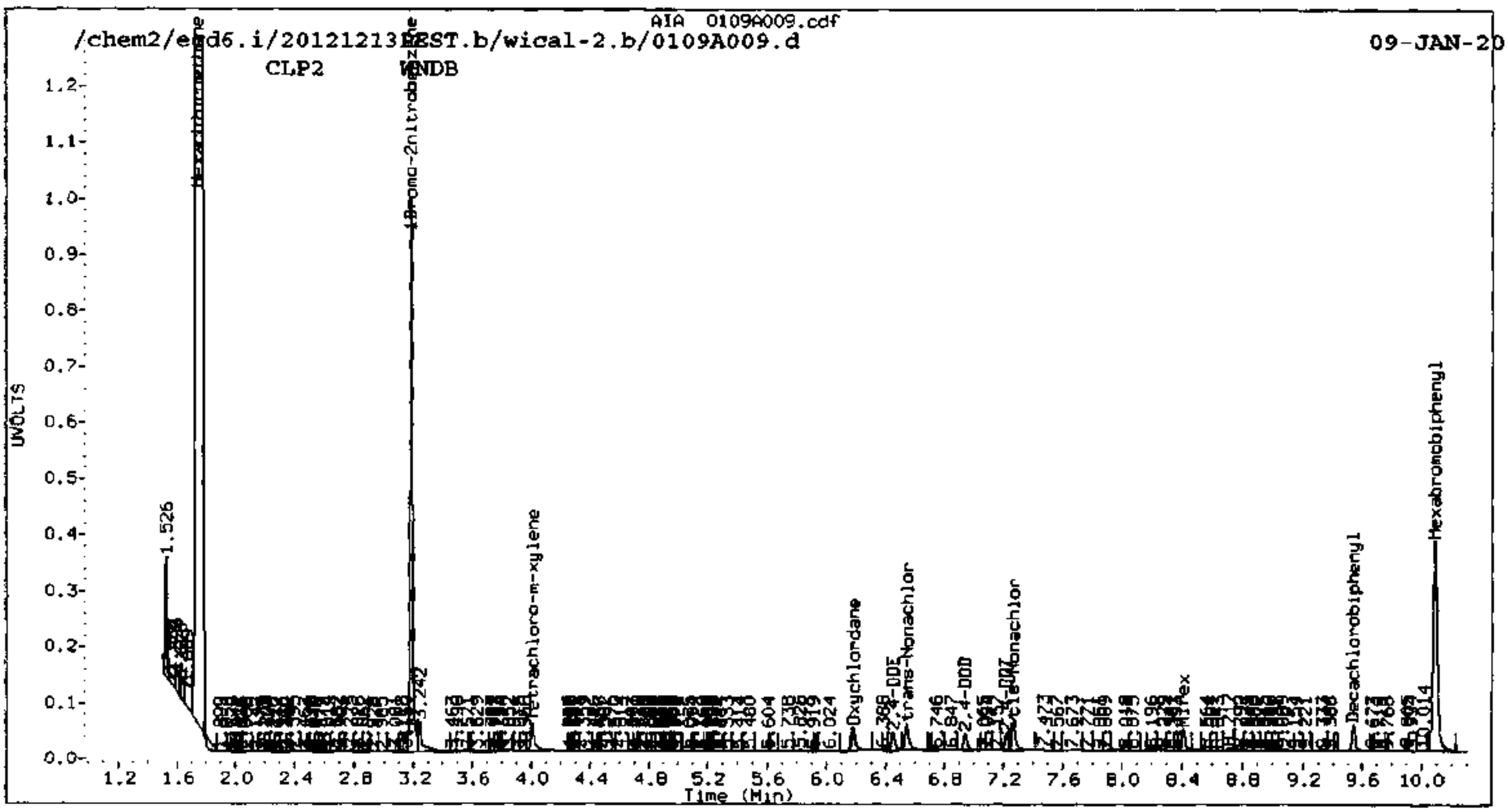
09-JAN-20
STX-CLP WNDB
UVOLTS
Time (Min)
Hexachlorobenzene
1-Bromo-2nitrobenzene
Tetrachloro-m-xylene
Oxychlordane
2,4-DDE
trans-Nonachlor
2,4-DDD
2,4-DDT
cis-Nonachlor
Mirex
Decachlorobiphenyl
Hexabromobiphenyl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09-JAN-20
CLP2 WNDB
UVOLTS
Time (Min)
1.526
Hexachlorobenzene
1-Bromo-2nitrobenzene
Tetrachloro-m-xylene
Oxychlordane
2,4-DDE
trans-Nonachlor
2,4-DDD
2,4-DDT
cis-Nonachlor
Mirex
Decachlorobiphenyl
Hexabromobiphenyl

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

YZ 01/10/13

Data file 1: /chem2/ecd6.i/20121213PEST.b/wical-1.b/0109A010.d ARI ID: WNDC
Data file 2: /chem2/ecd6.i/20121213PEST.b/wical-2.b/0109A010.d Client ID:
Method: /chem2/ecd6.i/20121213PEST.b/PEST1213.m Injection Date: 09-JAN-2013 14:45
Compound Sublist: WND Report Date: 01/10/2013 00:29
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: NONE
Operator: ar Dilution Factor: 1.000

STX-CLP Col RT	Shift	Response	CLP2 Col RT	Shift	Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
1.738	0.001	439688	1.738	0.003	121267990	0.0000	0.0000	---	Hexachloroethane
3.001	0.000	4631565	3.182	0.000	24852240	80.0000	80.0000	0.0	1Bromo-2nitrobenzen
5.608	0.005	527778	6.183	0.004	3197855	9.4500	9.6480	2.1	Oxychlordane
5.724	0.026	488549	6.452	0.014	2437558	9.8285	9.8416	0.1	2,4-DDE
5.938	0.008	701157	6.544	0.005	3902178	9.6742	9.8245	1.5	trans-Nonachlor
6.212	0.023	420909	6.940	0.012	2268202	9.7907	9.7675	0.2	2,4-DDD
6.435	0.017	405209	7.219	0.008	1956144	9.5187	9.6114	1.0	2,4-DDT
6.554	0.009	749944	7.269	0.004	4200844	9.4458	9.8917	4.6	cis-Nonachlor
7.414	0.003	481270	8.409	0.002	2055256	9.5260	9.5950	0.7	Mirex
8.755	0.001	4660830	10.085	0.001	16682587	80.0000	80.0000	0.0	Hexabromobiphenyl
3.687	0.026	687092	4.010	0.014	3949466	8.9163	9.1198	2.3	Tetrachloro-m-xylene
8.598	0.011	570209	9.541	0.006	2867035	8.6067	8.4196	2.2	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	22.3	22.8	22.3~	150- 0
Decachlorobiphenyl	21.5	21.0	21.0~	150- 0

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

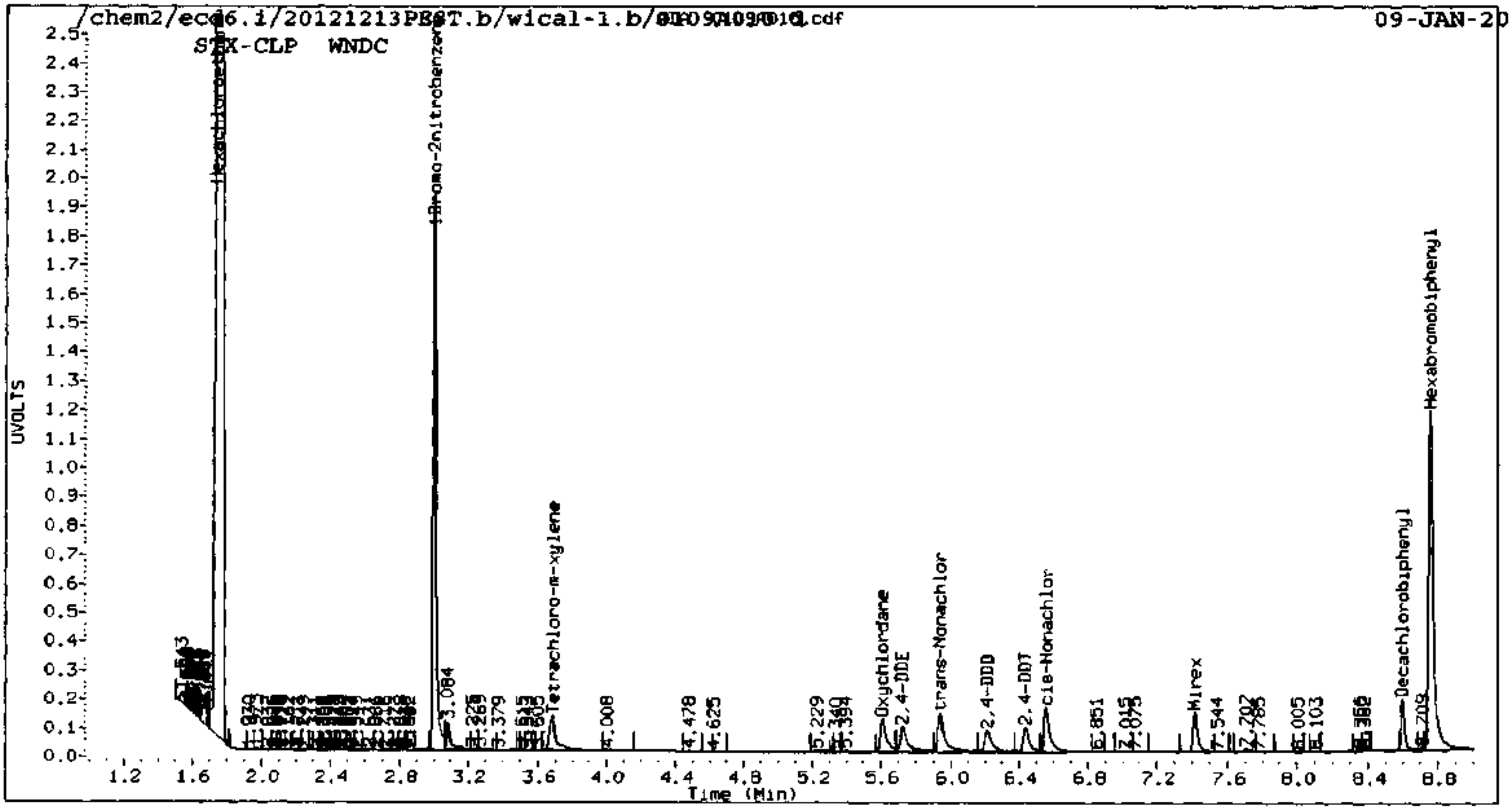
Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4288295	4631565	8.0
Hexabromobiphenyl	3547373	4660830	31.4

	Column 2		
	Standard	Sample	
Standard Cpnd	Area*	Area	%D
Bromo-Nitrobenzene	22974785	24852240	8.2
Hexabromobiphenyl	12557398	16682587	32.9

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 13-DEC-2012
<- Indicates standard response outside Limits (-50 to +100%)

	STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount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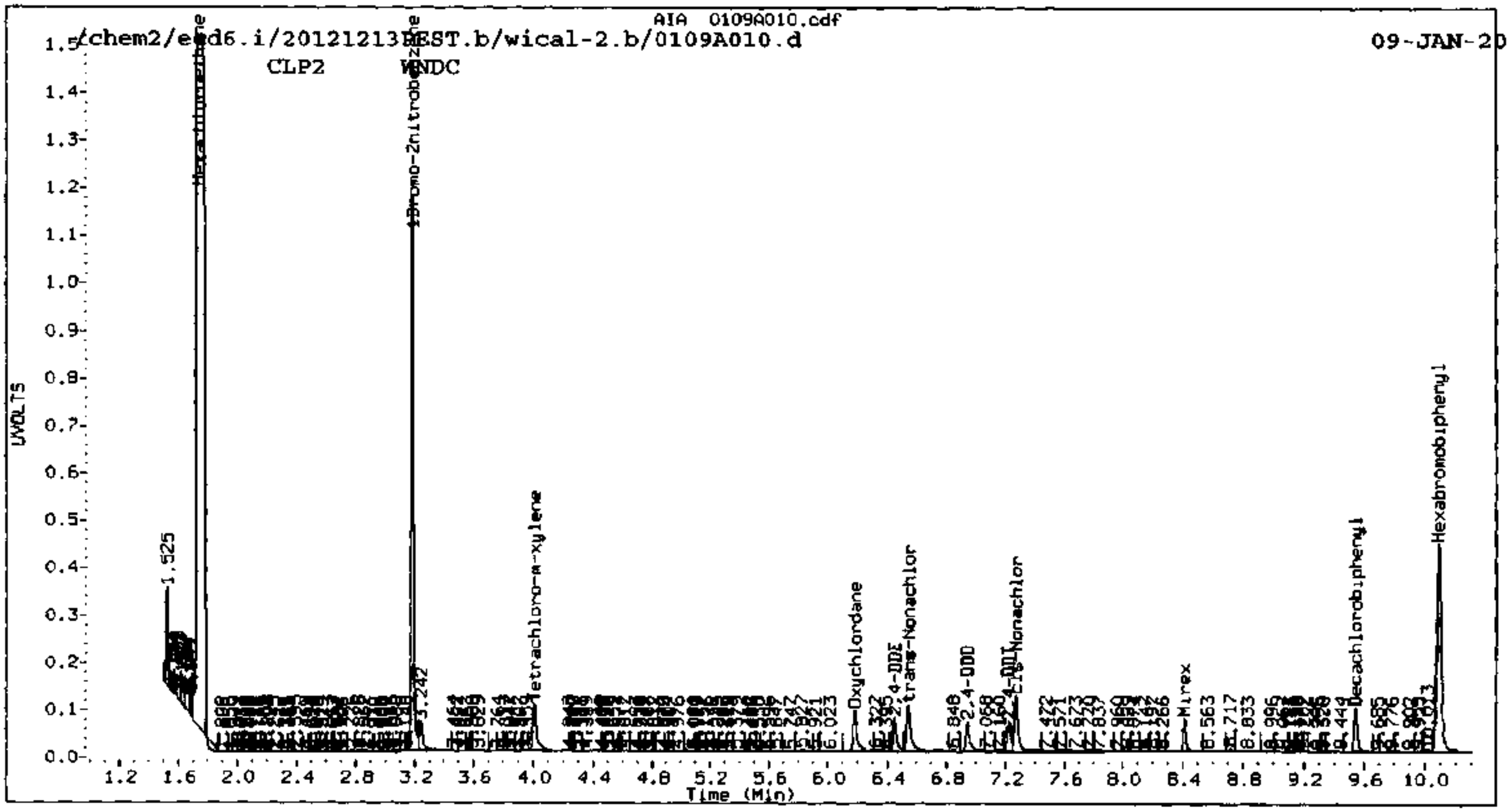
09-JAN-20
STX-CLP WNDC
UVOLTS
Time (Min)
Hexachlorobenzene
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Oxychlordane
2,4-DDE
trans-Nonachlor
2,4-DDD
2,4-DDT
cis-Nonachlor
Mirex
Decachlorobiphenyl
Hexabromobiphenyl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09-JAN-20
CLP2 WNDC
UVOLTS
Time (Min)
Hexachlorobenzene
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Oxychlordane
2,4-DDE
trans-Nonachlor
2,4-DDD
2,4-DDT
cis-Nonachlor
Mirex
Decachlorobiphenyl
Hexabromobiphenyl

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

YZ 01/10/13

Data file 1: /chem2/ecd6.i/20121213PEST.b/wical-1.b/0109A011.d ARI ID: WNDD
Data file 2: /chem2/ecd6.i/20121213PEST.b/wical-2.b/0109A011.d Client ID:
Method: /chem2/ecd6.i/20121213PEST.b/PEST1213.m Injection Date: 09-JAN-2013 15:03
Compound Sublist: WND Report Date: 01/10/2013 00:29
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: NONE
Operator: ar Dilution Factor: 1.000

STX-CLP Col RT	Shift	Response	CLP2 Col RT	Shift	Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
1.736	0.000	430415	1.734	0.000	116970952	0.0000	0.0000	---	Hexachloroethane
3.001	0.000	3797373	3.182	0.000	20707185	80.0000	80.0000	0.0	1Bromo-2nitrobenzen
5.607	0.004	1050051	6.182	0.003	6411816	22.9848	23.2169	1.0	Oxychlordane
5.723	0.024	959468	6.451	0.013	4837053	23.5971	23.4388	0.7	2,4-DDE
5.937	0.007	1401335	6.544	0.005	7768216	23.6369	23.6215	0.1	trans-Nonachlor
6.210	0.021	830402	6.939	0.011	4519222	23.6136	23.5044	0.5	2,4-DDD
6.434	0.016	811469	7.218	0.007	3961637	23.3035	23.5094	0.9	2,4-DDT
6.553	0.008	1516885	7.268	0.003	8257394	23.3568	23.4833	0.5	cis-Nonachlor
7.414	0.003	933223	8.409	0.001	4077773	22.5817	22.9924	1.8	Mirex
8.758	0.003	3812541	10.086	0.002	13812794	80.0000	80.0000	0.0	Hexabromobiphenyl
3.685	0.025	1350314	4.008	0.012	7978288	21.3721	22.1107	3.4	Tetrachloro-m-xylene
8.598	0.011	1095084	9.541	0.006	5778864	20.2069	20.4967	1.4	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	53.4	55.3	53.4~	150- 0
Decachlorobiphenyl	50.5	51.2	50.5~	150- 0

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

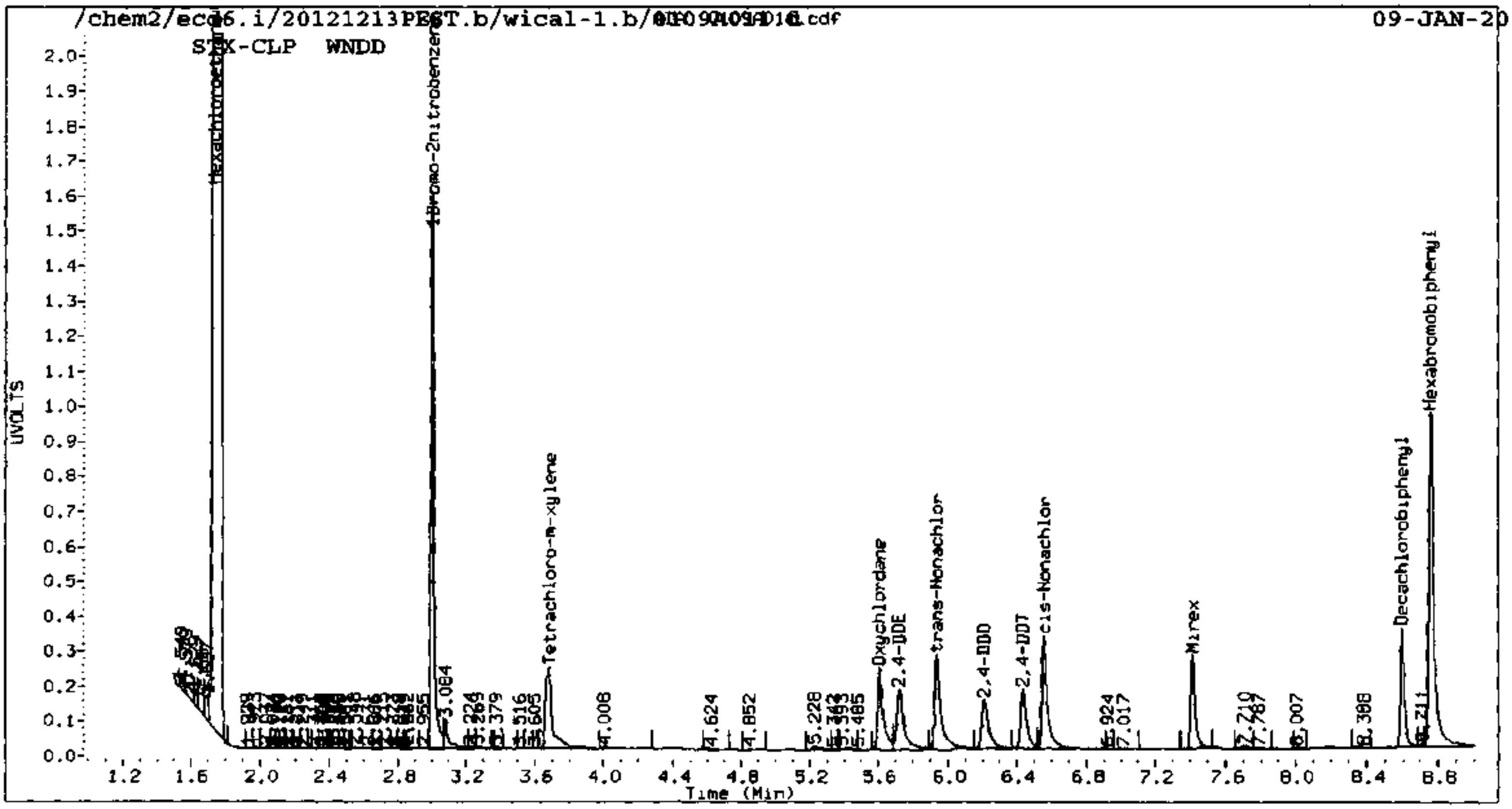
Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4288295	3797373	-11.4
Hexabromobiphenyl	3547373	3812541	7.5

Standard Cpnd	Column 2 Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	22974785	20707185	-9.9
Hexabromobiphenyl	12557398	13812794	10.0

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 13-DEC-2012
<- Indicates standard response outside Limits (-50 to +100%)

Cpnd	STX-CLP Col Peak#	RT	Shift	Height	Amount	CLP2 Col Peak#	RT	Shift	Height	Amount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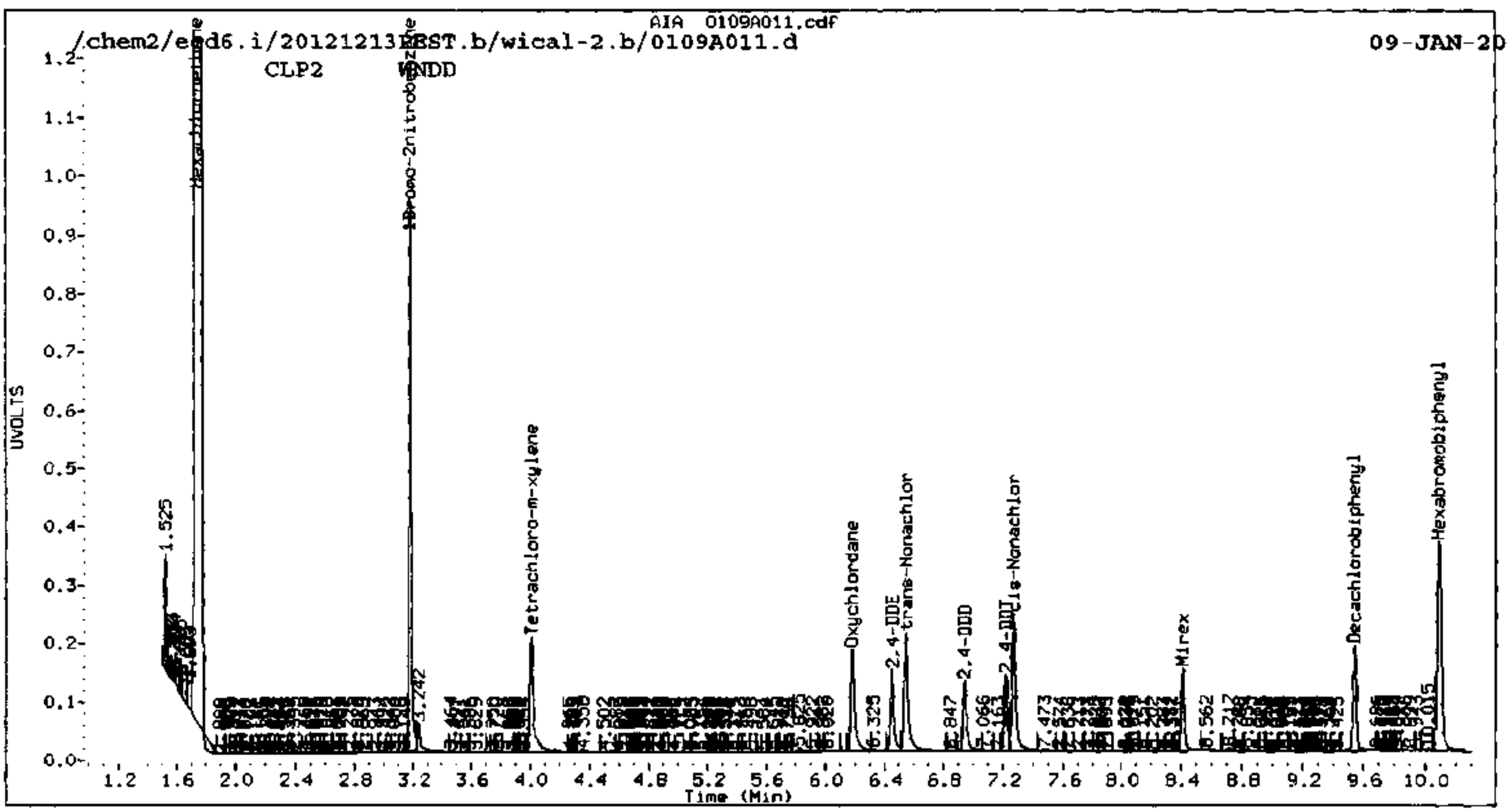
09-JAN-20
STX-CLP WNDD
Hexachlorobenzene
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Oxychlordane
2,4-DDE
trans-Nonachlor
2,4-DDD
2,4-DDT
cis-Nonachlor
Mirex
Decachlorobiphenyl
Hexabromobiphenyl
UVOLTS
Time (Min)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09-JAN-20
CLP2 WNDD
Hexachlorobenzene
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Oxychlordane
2,4-DDE
trans-Nonachlor
2,4-DDD
2,4-DDT
cis-Nonachlor
Mirex
Decachlorobiphenyl
Hexabromobiphenyl
UVOLTS
Time (Min)

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /chem2/ecd6.i/20121213PEST.b/wical-1.b/0109A012.d ARI ID: WNDF YZ 01/10/13
Data file 2: /chem2/ecd6.i/20121213PEST.b/wical-2.b/0109A012.d Client ID:
Method: /chem2/ecd6.i/20121213PEST.b/PEST1213.m Injection Date: 09-JAN-2013 15:20
Compound Sublist: WND Report Date: 01/10/2013 00:29
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: NONE
Operator: ar Dilution Factor: 1.000

STX-CLP Col RT	Shift	Response	CLP2 Col RT	Shift	Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
1.737	0.001	361864	1.736	0.002	102743095	0.0000	0.0000	---	Hexachloroethane
3.002	0.001	4544100	3.182	0.000	24462541	80.0000	80.0000	0.0	1Bromo-2nitrobenzen
5.605	0.002	4021061	6.181	0.001	24699366	73.4685	75.7058	3.0	Oxychlordane
5.707	0.009	3537393	6.443	0.005	17837491	72.6175	73.1657	0.8	2,4-DDE
5.933	0.003	5330409	6.540	0.001	29591001	75.0480	74.5335	0.7	trans-Nonachlor
6.196	0.007	3135656	6.931	0.003	17002235	74.4271	73.2484	1.6	2,4-DDD
6.423	0.005	3146750	7.213	0.002	15579386	75.4295	76.5815	1.5	2,4-DDT
6.548	0.003	5823617	7.265	0.000	31183622	74.8484	73.4598	1.9	cis-Nonachlor
7.412	0.001	3544977	8.408	0.001	15457928	71.6004	72.1970	0.8	Mirex
8.756	0.001	4567567	10.085	0.001	16675357	80.0000	80.0000	0.0	Hexabromobiphenyl
3.668	0.008	5081804	4.001	0.005	29540394	67.2149	69.2992	3.1	Tetrachloro-m-xylen
8.595	0.008	3980371	9.540	0.005	21750190	61.3065	63.9014	4.1	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	168.0	173.2	168.0~	150- 0
Decachlorobiphenyl	153.3	159.8	153.3~	150- 0

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

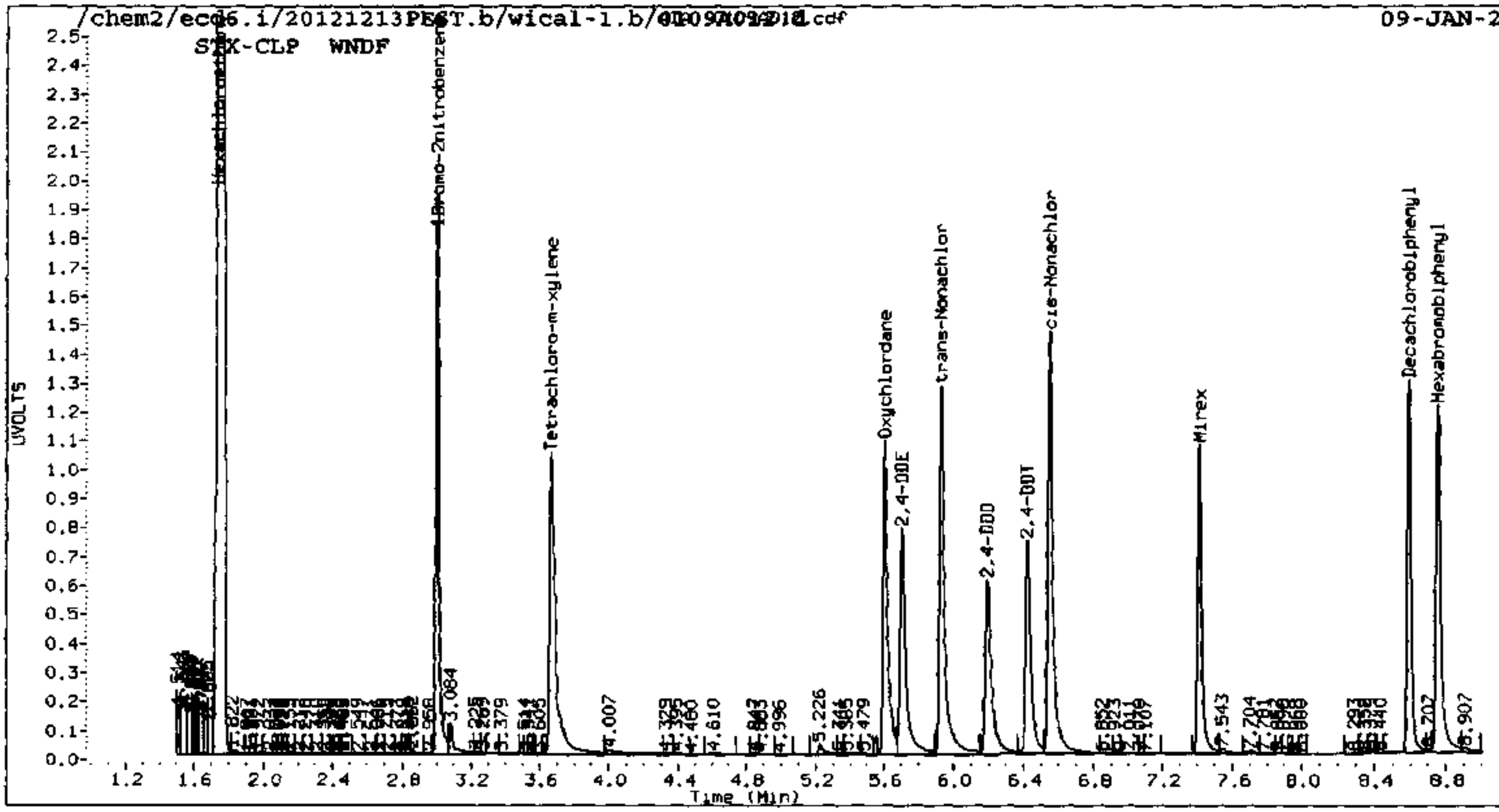
Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4288295	4544100	6.0
Hexabromobiphenyl	3547373	4567567	28.8

Standard Cpnd	Column 2 Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	22974785	24462541	6.5
Hexabromobiphenyl	12557398	16675357	32.8

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 13-DEC-2012
<- Indicates standard response outside Limits (-50 to +100%)

Cpnd	STX-CLP Col Peak#	RT	Shift	Height	Amount	CLP2 Col Peak#	RT	Shift	Height	Amount



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09-JAN-20
STK-CLP WNDF
UVOLTS
Time (Min)
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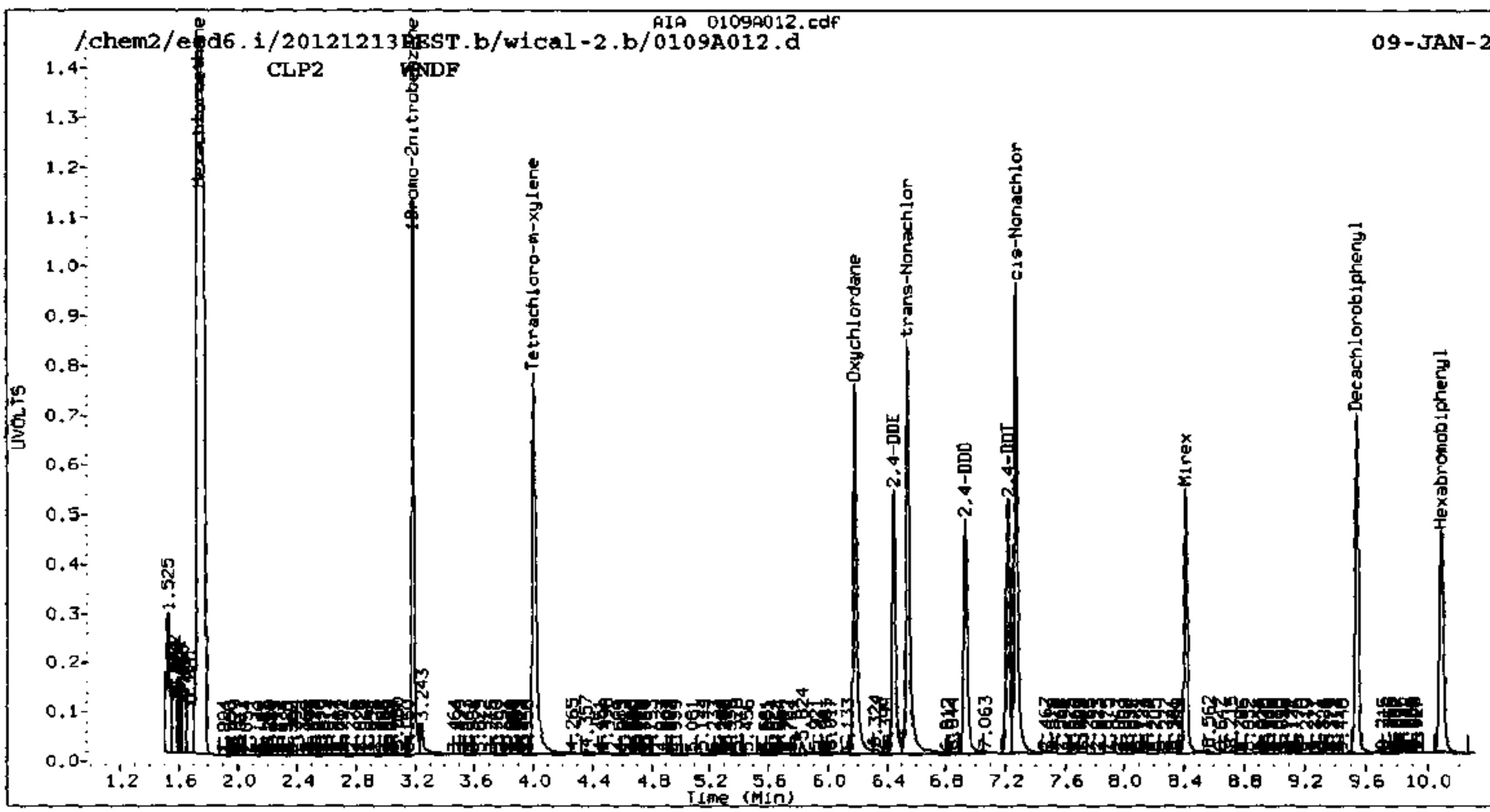
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Oxychlordane
2,4-DDE
trans-Nonachlor
2,4-DDD
2,4-DDT
cis-Nonachlor
Mirex
Decachlorobiphenyl
Hexabromobiphenyl



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09-JAN-20
CLP2 WNDF
UVOLTS
Time (Min)
Hexachlorobenzene
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Oxychlordane
2,4-DDE
trans-Nonachlor
2,4-DDD
2,4-DDT
cis-Nonachlor
Mirex
Decachlorobiphenyl
Hexabromobiphenyl

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /chem2/ecd6.i/20121213PEST.b/wical-1.b/0109A013.d ARI ID: WNDG   Y2 01/10/13
Data file 2: /chem2/ecd6.i/20121213PEST.b/wical-2.b/0109A013.d Client ID:
Method: /chem2/ecd6.i/20121213PEST.b/PEST1213.m   Injection Date: 09-JAN-2013 15:38
Compound Sublist: WND   Report Date: 01/10/2013 00:29
Instrument, Inj. Vol.: ecd6.i, 1ul   Matrix: NONE
Operator: ar   Dilution Factor: 1.000

STX-CLP Col RT	Shift	Response	CLP2 Col RT	Shift	Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
1.736	0.000	407723	1.735	0.000	116488293	0.0000	0.0000	---	Hexachloroethane
3.001	0.000	4478708	3.182	0.000	24111391	80.0000	80.0000	0.0	1Bromo-2nitrobenzen
5.603	0.000	7660753	6.179	0.000	45845127	140.2834	142.5659	1.6	Oxychlordane
5.699	0.000	6482070	6.439	0.000	31588320	133.3662	131.4557	1.4	2,4-DDE
5.930	0.000	10018808	6.539	0.000	53247962	141.3738	135.6855	4.1	trans-Nonachlor
6.189	0.000	5892128	6.928	0.000	30763281	140.1681	134.0798	4.4	2,4-DDD
6.418	0.000	5940977	7.211	0.000	28863427	142.7287	143.5357	0.6	2,4-DDT
6.545	0.000	11043707	7.265	0.000	58392366	142.2588	139.1611	2.2	cis-Nonachlor
7.411	0.000	6661519	8.408	0.000	29009273	134.8495	137.0703	1.6	Mirex
8.755	0.000	4557331	10.084	0.000	16483012	80.0000	80.0000	0.0	Hexabromobiphenyl
3.665	0.004	9430918	3.999	0.003	54295826	126.5600	129.2283	2.1	Tetrachloro-m-xyle
8.593	0.006	7435631	9.540	0.004	41624079	114.7823	123.7174	7.5	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	316.4	323.1	316.4~	150- 0
Decachlorobiphenyl	287.0	309.3	287.0~	150- 0

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

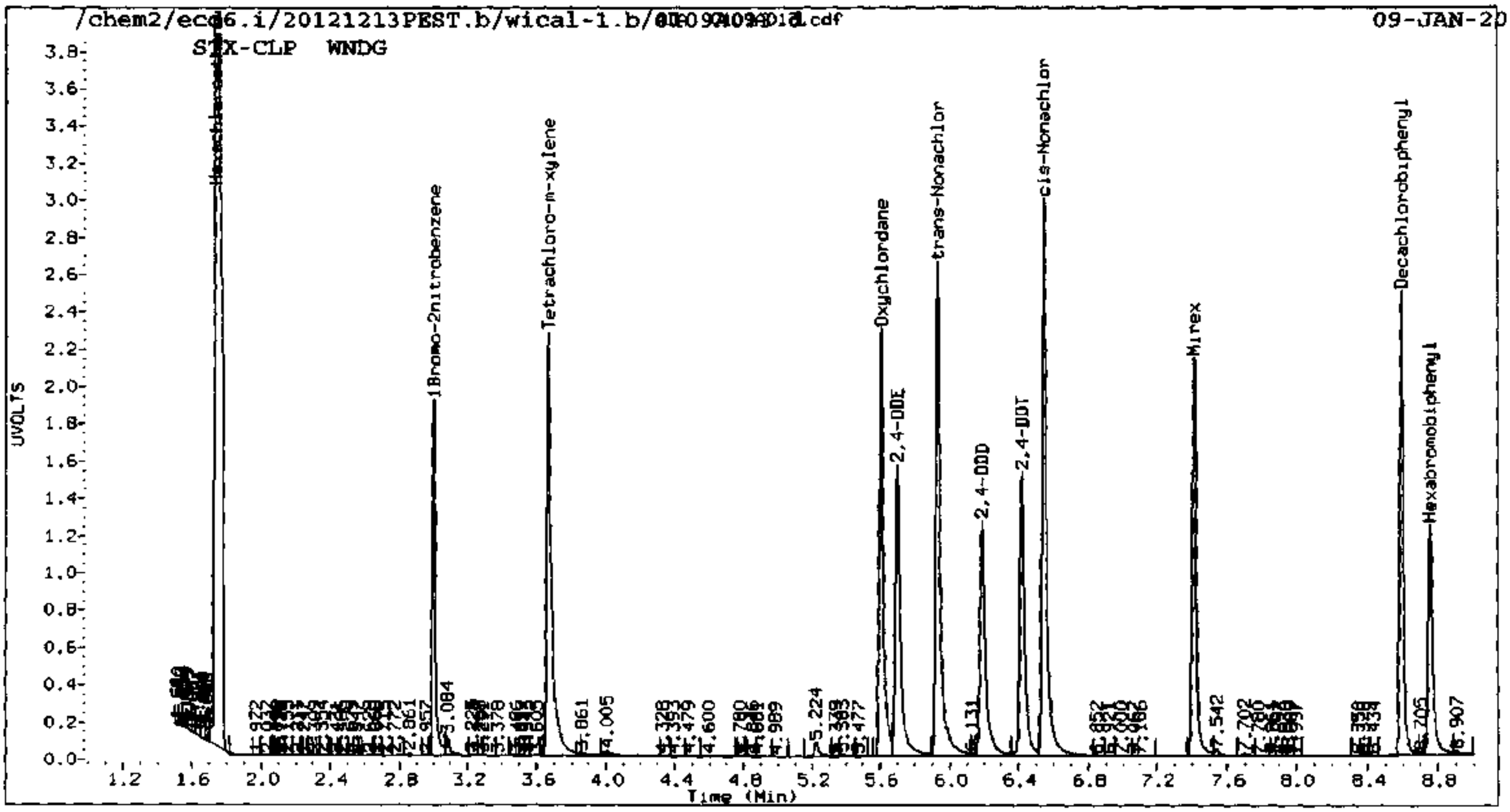
Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4288295	4478708	4.4
Hexabromobiphenyl	3547373	4557331	28.5

Standard Cpnd	Column 2 Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	22974785	24111391	4.9
Hexabromobiphenyl	12557398	16483012	31.3

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 13-DEC-2012
<- Indicates standard response outside Limits (-50 to +100%)

	STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount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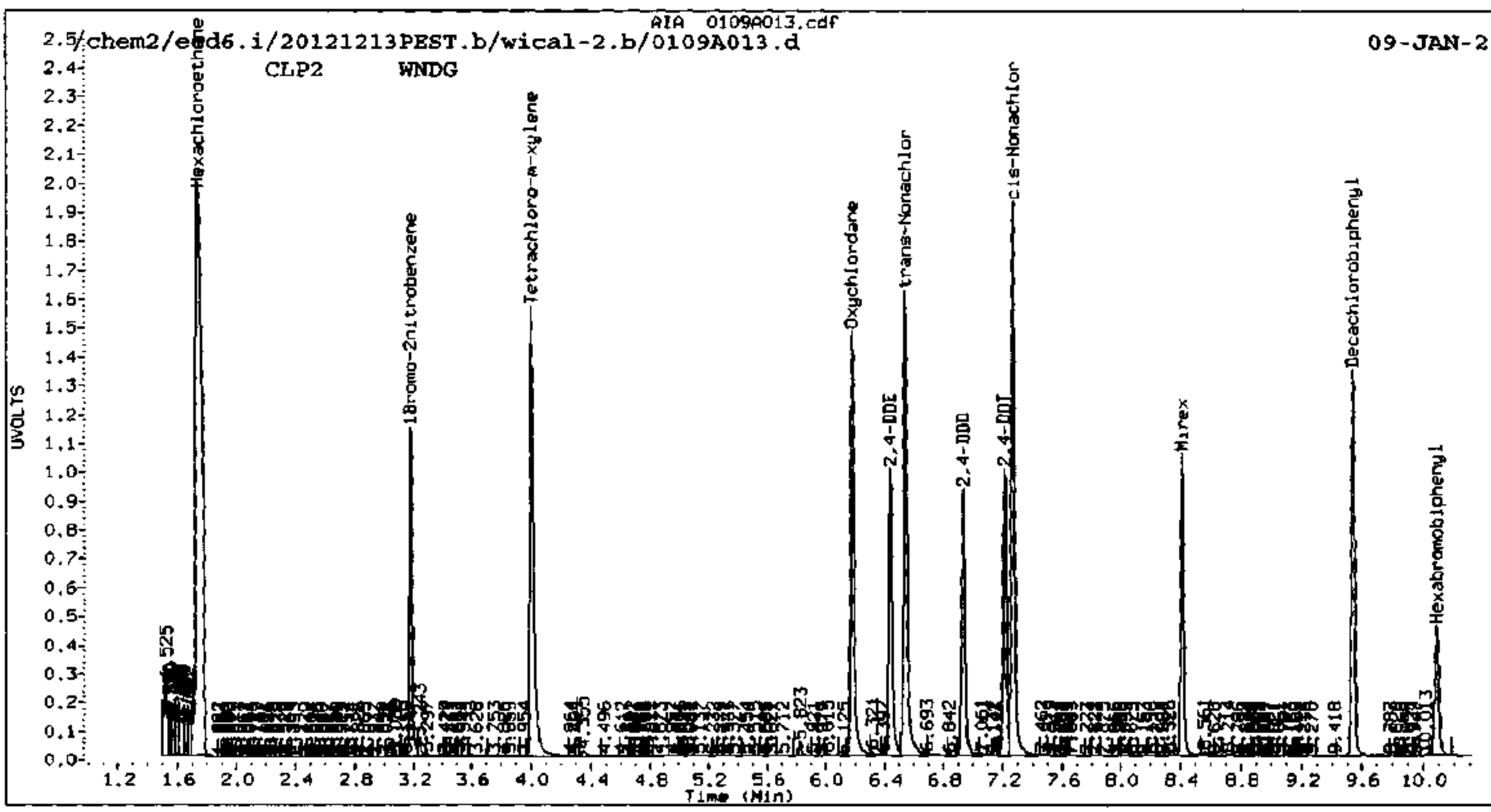
09-JAN-20
STX-CLP WNDG
UVOLTS
Time (Min)
Hexachloroethane
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Oxychlordane
2,4-DDE
trans-Nonachlor
2,4-DDD
2,4-DDT
cis-Nonachlor
Mirex
Decachlorobiphenyl
Hexabromobiphenyl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09-JAN-20
CLP2 WNDG
UVOLTS
Time (Min)
Hexachloroethane
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Oxychlordane
2,4-DDE
trans-Nonachlor
2,4-DDD
2,4-DDT
cis-Nonachlor
Mirex
Decachlorobiphenyl
Hexabromobiphenyl

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

YZ 01/10/13

Data file 1: /chem2/ecd6.i/20121213PEST.b/wical-1.b/0109A014.d ARI ID: WND ICV
Data file 2: /chem2/ecd6.i/20121213PEST.b/wical-2.b/0109A014.d Client ID:
Method: /chem2/ecd6.i/20121213PEST.b/PEST1213.m Injection Date: 09-JAN-2013 15:56
Compound Sublist: WND Report Date: 01/10/2013 00:29
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: NONE
Operator: ar Dilution Factor: 1.000

STX-CLP Col RT	STX-CLP Col Shift	STX-CLP Col Response	CLP2 Col RT	CLP2 Col Shift	CLP2 Col Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
1.737	0.001	446762	1.738	0.004	122557435	0.0000	0.0000	---	Hexachloroethane
3.002	0.001	4419171	3.183	0.001	23906066	80.0000	80.0000	0.0	1Bromo-2nitrobenzen
5.607	0.003	2534859	6.183	0.004	15769597	48.1815	49.4604	2.6	Oxychlordane
5.715	0.016	2263460	6.448	0.009	11396806	48.3389	47.8355	1.0	2,4-DDE
5.936	0.006	3238311	6.542	0.003	18252682	47.4311	47.1735	0.5	trans-Nonachlor
6.203	0.015	1950551	6.935	0.007	10896404	48.1644	48.1676	50 0.0	2,4-DDD
6.429	0.011	1986823	7.216	0.005	9916841	49.5455	50.0180	0.9	2,4-DDT
6.551	0.006	3487538	7.268	0.003	19078303	46.6310	46.1150	1.1	cis-Nonachlor
7.413	0.003	2268994	8.410	0.002	9788307	47.6762	46.9089	1.6	Mirex
8.757	0.003	4390548	10.086	0.001	16251584	80.0000	80.0000	0.0	Hexabromobiphenyl
3.671	0.011	2520727	4.006	0.010	15671746	34.2831	37.6203	9.3	Tetrachloro-m-xylen
8.598	0.011	2056747	9.541	0.006	11198536	32.9557	33.7589	2.4	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	85.7	94.1	85.7~	150- 0
Decachlorobiphenyl	82.4	84.4	82.4~	150- 0

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

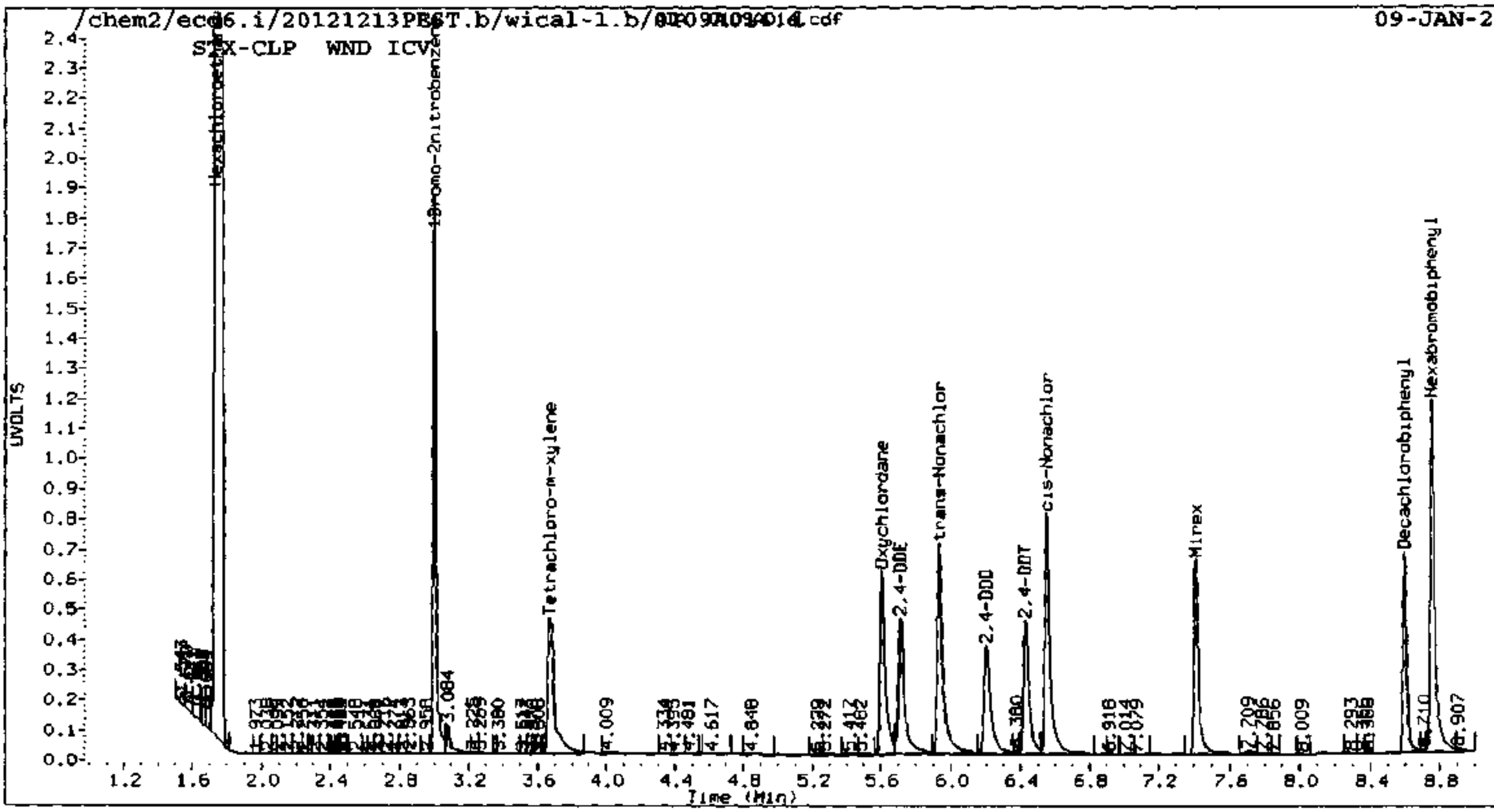
Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4288295	4419171	3.1
Hexabromobiphenyl	3547373	4390548	23.8

	Column 2		
	Standard	Sample	
Standard Cpnd	Area*	Area	%D
Bromo-Nitrobenzene	22974785	23906066	4.1
Hexabromobiphenyl	12557398	16251584	29.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 13-DEC-2012
<- Indicates standard response outside Limits (-50 to +100%)

	STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount



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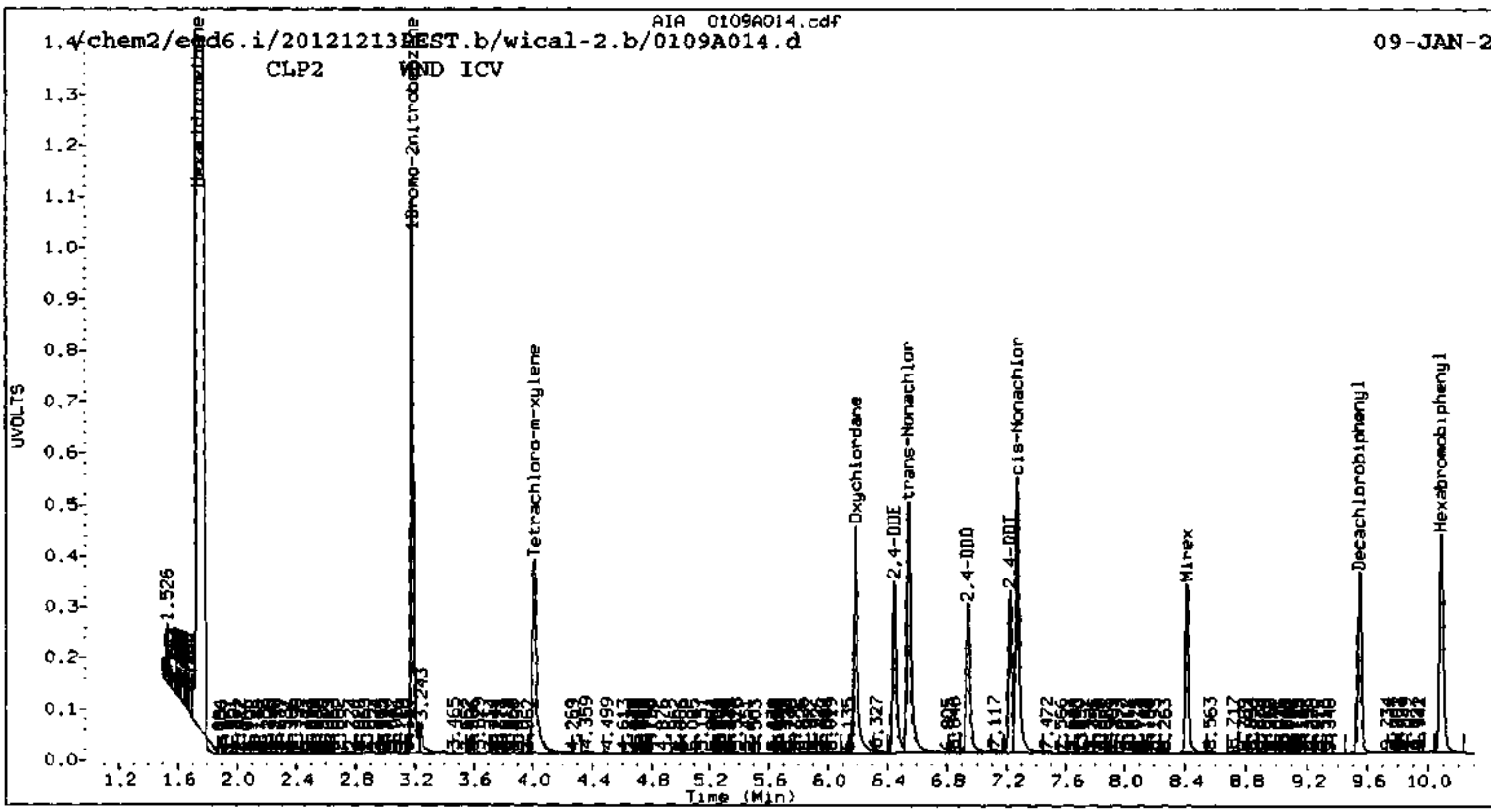
09-JAN-20
STX-CLP WND ICV
UVOLTS
Time (Min)
Hexachloroethane
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Oxychlordane
2,4-DDE
trans-Nonachlor
2,4-DDD
2,4-DDT
cis-Nonachlor
Mirex
Decachlorobiphenyl
Hexabromobiphenyl



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09-JAN-20
CLP2 WND ICV
UVOLTS
Time (Min)
Tetrachloro-m-xylene
Oxychlordane
2,4-DDE
trans-Nonachlor
2,4-DDD
2,4-DDT
cis-Nonachlor
Mirex
Decachlorobiphenyl
Hexabromobiphenyl

WC32 : 01745

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/ecd6.i/20121213PEST.b/PEST1213.m
Batch File: /chem2/ecd6.i/20121213PEST.b/Clpyrene-1.b
Inst ID: ecd6.i

ID:	RT01	RT02	RT03
FILENAME:	0109A004	0109A005	0109A006
INJ.DATE:	09-JAN-2013	09-JAN-2013	09-JAN-2013
INJ.TIME:	12:58	13:16	13:34

Compound	RT01	RT02	RT03	EXPEC RT	RT WINDOW	AVG RT	STD DEV
1 Hexachlorobutadiene	+++++	+++++	+++++	2.197	2.147-2.247	+++++	+++++
* 54 1Bromo-2nitrobenzene	3.001	3.002	3.002	3.002	2.951-3.051	3.002	0.000
* 58 Hexabromobiphenyl	8.753	8.754	8.754	8.754	8.704-8.804	8.754	0.001
$ 2 Tetrachloro-m-xylene	+++++	+++++	+++++	3.660	3.610-3.710	+++++	+++++
3 Hexachlorobenzene	+++++	+++++	+++++	3.999	3.949-4.049	+++++	+++++
4 alpha-BHC	+++++	+++++	+++++	4.131	4.081-4.181	+++++	+++++
5 gamma-BHC (Lindane)	+++++	+++++	+++++	4.408	4.358-4.458	+++++	+++++
6 beta-BHC	+++++	+++++	+++++	4.498	4.448-4.548	+++++	+++++
7 delta-BHC	+++++	+++++	+++++	4.663	4.613-4.713	+++++	+++++
8 Heptachlor	+++++	+++++	+++++	4.840	4.790-4.890	+++++	+++++
9 Aldrin	+++++	+++++	+++++	5.124	5.074-5.174	+++++	+++++
38 Chlorthalonil	+++++	+++++	+++++	13.627	13.577-13.677	+++++	+++++
10 Heptachlor Epoxide a	+++++	+++++	+++++	10.869	10.819-10.919	+++++	+++++
11 Heptachlor epoxide b	+++++	+++++	+++++	5.696	5.646-5.746	+++++	+++++
12 gamma-Chlordane	+++++	+++++	+++++	5.820	5.770-5.870	+++++	+++++
13 alpha-Chlordane	+++++	+++++	+++++	5.942	5.892-5.992	+++++	+++++
14 Endosulfan I	+++++	+++++	+++++	6.073	6.023-6.123	+++++	+++++

Reviewer 1 yz Date: 01/10/13
Reviewer 2 VD Date: 1/11/13

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/ecd6.i/20121213PEST.b/PEST1213.m
Batch File: /chem2/ecd6.i/20121213PEST.b/Clpyrene-1.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD	+++++	+++++	+++++	6.189	6.139-6.239	+++++	+++++
41 2,4-DDT	+++++	+++++	+++++	6.418	6.368-6.468	+++++	+++++
42 Hexachloroethane	+++++	+++++	+++++	1.736	1.686-1.786	+++++	+++++
43 Oxychlordane	+++++	+++++	+++++	5.603	5.553-5.653	+++++	+++++
44 trans-Nonachlor	+++++	+++++	+++++	5.930	5.880-5.980	+++++	+++++
45 cis-Nonachlor	+++++	+++++	+++++	6.545	6.495-6.595	+++++	+++++
46 Mirex	+++++	+++++	+++++	7.411	7.361-7.461	+++++	+++++
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	20.156	20.106-20.206	+++++	+++++
59 Tech-Chlordane	+++++	+++++	+++++	4.856	4.806-4.906	+++++	+++++
48 Trifluralin	+++++	+++++	+++++	6.319	6.269-6.369	+++++	+++++
49 Dacthal	+++++	+++++	+++++	9.936	9.886-9.986	+++++	+++++
50 Oxadiazon	+++++	+++++	+++++	11.891	11.841-11.941	+++++	+++++
51 Kelthane	+++++	+++++	+++++	14.827	14.777-14.877	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	9.750	9.700-9.800	+++++	+++++
55 Methyl Parathion	+++++	+++++	+++++	9.107	9.057-9.157	+++++	+++++
56 Ethyl Parathion	+++++	+++++	+++++	10.251	10.201-10.301	+++++	+++++
60 Kepone	+++++	+++++	+++++	6.581	6.531-6.631	+++++	+++++
61 1-Chloropyrene	6.961	6.981	6.953	6.953	6.903-7.003	6.965	0.014

UOO2 : 01747

Report Date : 10-Jan-2013 03:40

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/ecd6.i/20121213PEST.b/PEST1213B.m
Batch File: /chem2/ecd6.i/20121213PEST.b/Clpyrene-2.b
Inst ID: ecd6.i

ID:	RT01	RT02	RT03
FILENAME:	0109A004	0109A005	0109A006
INJ.DATE:	09-JAN-2013	09-JAN-2013	09-JAN-2013
INJ.TIME:	12:58	13:16	13:34

Compound	RT01	RT02	RT03	EXPEC RT	RT WINDOW	AVG RT	STD DEV
1 Hexachlorobutadiene	+++++	+++++	+++++	2.364	2.314-2.414	+++++	+++++
* 52 1Bromo-2nitrobenzene	3.182	3.182	3.182	3.182	3.132-3.232	3.182	0.000
* 55 Hexabromobiphenyl	10.082	10.084	10.084	10.084	10.034-10.134	10.084	0.001
$ 2 Tetrachloro-m-xylene	+++++	+++++	+++++	3.996	3.946-4.046	+++++	+++++
3 Hexachlorobenzene	+++++	+++++	+++++	4.449	4.399-4.499	+++++	+++++
4 alpha-BHC	+++++	+++++	+++++	4.567	4.517-4.617	+++++	+++++
5 gamma-BHC (Lindane)	+++++	+++++	+++++	4.918	4.868-4.968	+++++	+++++
6 beta-BHC	+++++	+++++	+++++	4.998	4.948-5.048	+++++	+++++
7 delta-BHC	+++++	+++++	+++++	5.303	5.253-5.353	+++++	+++++
8 Heptachlor	+++++	+++++	+++++	5.374	5.324-5.424	+++++	+++++
37 Chlorthalonil	+++++	+++++	+++++	14.588	14.538-14.638	+++++	+++++
9 Aldrin	+++++	+++++	+++++	5.711	5.661-5.761	+++++	+++++
10 Heptachlor Epoxide a	+++++	+++++	+++++	12.680	12.630-12.730	+++++	+++++
11 Heptachlor epoxide b	+++++	+++++	+++++	6.268	6.218-6.318	+++++	+++++
12 gamma-Chlordane	+++++	+++++	+++++	6.453	6.403-6.503	+++++	+++++
13 alpha-Chlordane	+++++	+++++	+++++	6.590	6.540-6.640	+++++	+++++
14 Endosulfan I	+++++	+++++	+++++	6.655	6.605-6.705	+++++	+++++

Reviewer 1 ____ r2 ____ Date: 01/10/13
Reviewer 2 ____ ____ Date: 1/11/13

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/ecd6.i/20121213PEST.b/PEST1213B.m
Batch File: /chem2/ecd6.i/20121213PEST.b/Clpyrene-2.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	EXPEC RT	RT WINDOW	AVG RT	STD DEV
39 2,4-DDD	+++++	+++++	+++++	6.928	6.878-6.978	+++++	+++++
40 2,4-DDT	+++++	+++++	+++++	7.211	7.161-7.261	+++++	+++++
41 Hexachloroethane	+++++	+++++	+++++	1.735	1.685-1.785	+++++	+++++
42 Oxychlordane	+++++	+++++	+++++	6.179	6.129-6.229	+++++	+++++
43 trans-Nonachlor	+++++	+++++	+++++	6.539	6.489-6.589	+++++	+++++
44 cis-Nonachlor	+++++	+++++	+++++	7.265	7.215-7.315	+++++	+++++
45 Mirex	+++++	+++++	+++++	8.408	8.358-8.458	+++++	+++++
46 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	21.499	21.449-21.549	+++++	+++++
56 Tech-Chlordane	+++++	+++++	+++++	5.391	5.341-5.441	+++++	+++++
47 Trifluralin	+++++	+++++	+++++	4.871	4.821-4.921	+++++	+++++
48 Dacthal	+++++	+++++	+++++	6.640	6.590-6.690	+++++	+++++
49 Oxadiazon	+++++	+++++	+++++	8.115	8.065-8.165	+++++	+++++
50 Kelthane	+++++	+++++	+++++	11.286	11.236-11.336	+++++	+++++
51 Chlorpyrifos	+++++	+++++	+++++	6.527	6.477-6.577	+++++	+++++
53 Methyl Parathion	+++++	+++++	+++++	6.342	6.292-6.392	+++++	+++++
54 Ethyl Parathion	+++++	+++++	+++++	6.841	6.791-6.891	+++++	+++++
57 Kepone	+++++	+++++	+++++	7.336	7.286-7.386	+++++	+++++
58 1-Chloropyrene	7.749	7.759	7.745	7.745	7.695-7.795	7.751	0.007

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

YZ 01/10/13

Data file 1: /chem2/ecd6.i/20121213PEST.b/Clpyrene-1.b/0109A004.d ARI ID: CL-PYRENE.8
Data file 2: /chem2/ecd6.i/20121213PEST.b/Clpyrene-2.b/0109A004.d Client ID:
Method: /chem2/ecd6.i/20121213PEST.b/PEST1213.m Injection Date: 09-JAN-2013 12:58
Compound Sublist: 1-Chloropyrene Report Date: 01/10/2013 02:52
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: NONE
Operator: ar Dilution Factor: 1.000

STX-CLP Col RT	STX-CLP Col Shift	STX-CLP Col Response	CLP2 Col RT	CLP2 Col Shift	CLP2 Col Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
3.001	0.000	4478948	3.182	0.000	23762483	80.0000	80.0000	0.0	1Bromo-2nitrobenzen
8.753	-0.002	4271886	10.082	-0.002	15622898	80.0000	80.0000	0.0	Hexabromobiphenyl
6.961	0.008	1495972	7.749	0.004	6984793	818.7131	874.2550	6.6	1-Chloropyrene MN

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

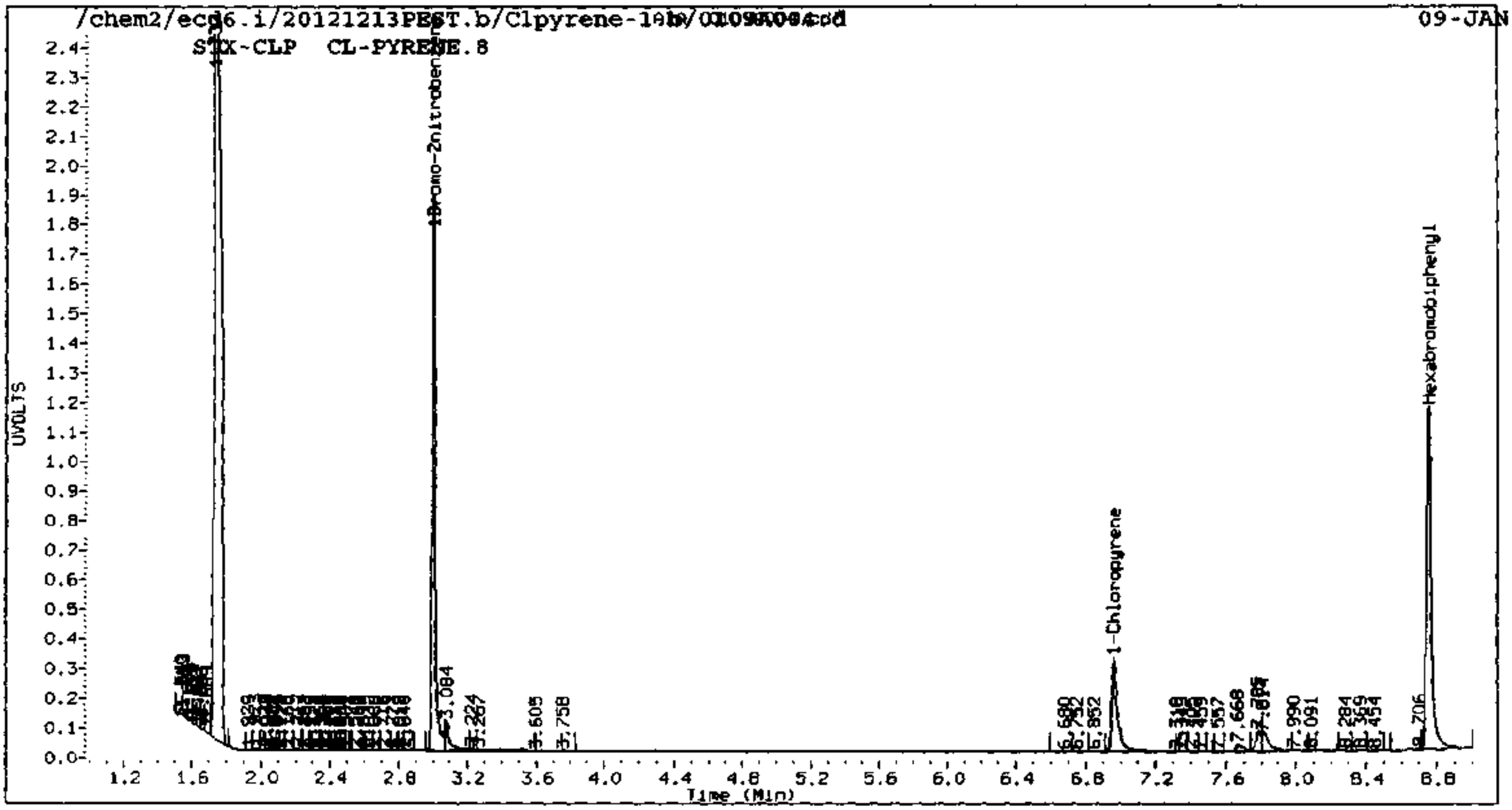
Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4288295	4478948	4.4
Hexabromobiphenyl	3547373	4271886	20.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	22974785	23762483	3.4
Hexabromobiphenyl	12557398	15622898	24.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 13-DEC-2012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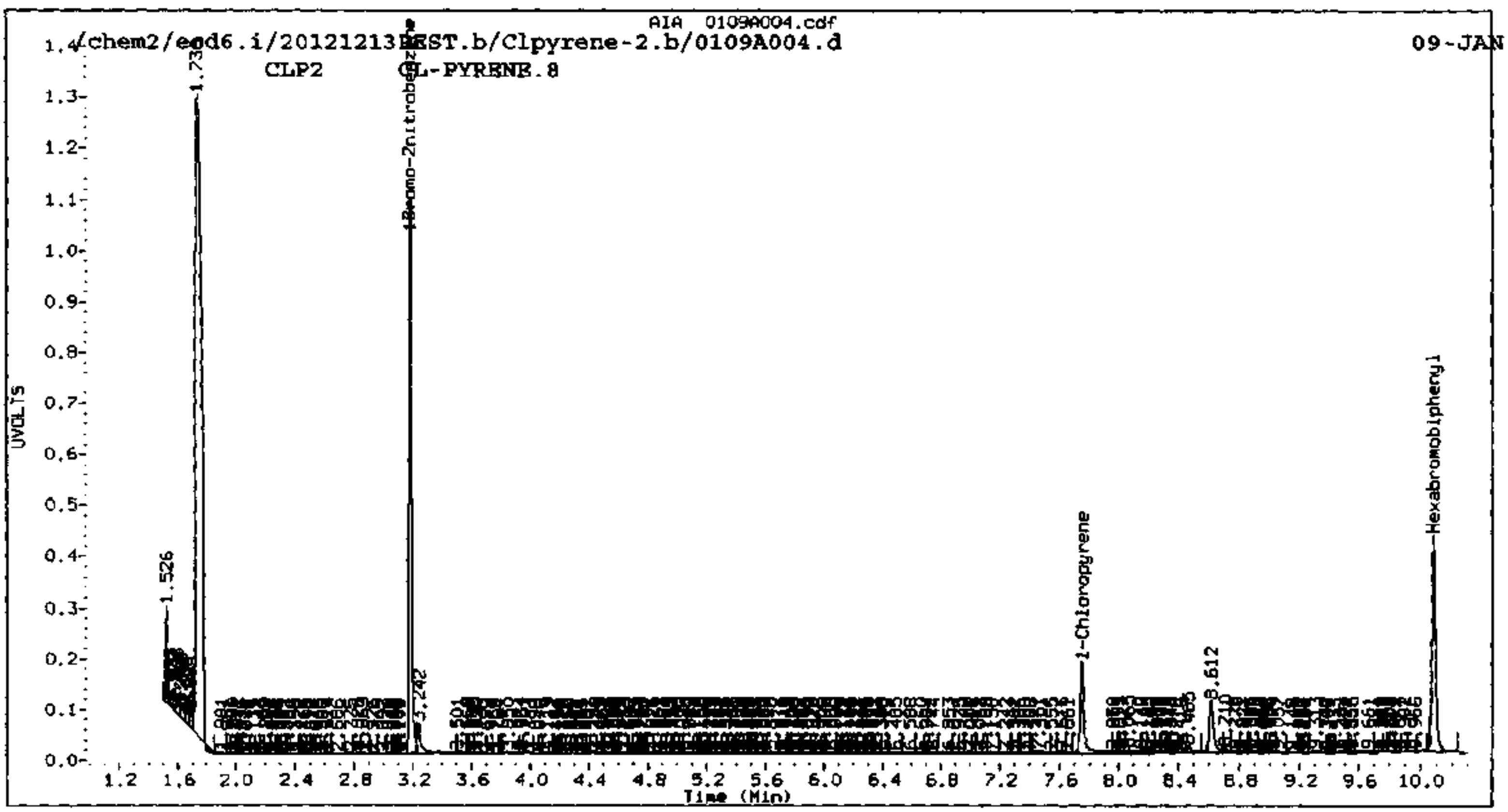
09-JAN
STX-CLP CL-PYRENE.8
1-Bromo-2nitrobenzene
1-Chloropyrene
Hexabromobiphenyl
UVOLTS
Time (Min)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09-JAN
CLP2 CL-PYRENE.8
1.730
1.526
1-Bromo-2nitrobenzene
3.242
1-Chloropyrene
8.612
Hexabromobiphenyl
UVOLTS
Time (Min)

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

YZ 01/10/13

Data file 1: /chem2/ecd6.i/20121213PEST.b/Clpyrene-1.b/0109A005.d ARI ID: CLPYRENE.2
Data file 2: /chem2/ecd6.i/20121213PEST.b/Clpyrene-2.b/0109A005.d Client ID:
Method: /chem2/ecd6.i/20121213PEST.b/PEST1213.m Injection Date: 09-JAN-2013 13:16
Compound Sublist: 1-Chloropyrene Report Date: 01/10/2013 02:52
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: NONE
Operator: ar Dilution Factor: 1.000

STX-CLP Col RT	STX-CLP Col Shift	STX-CLP Col Response	CLP2 Col RT	CLP2 Col Shift	CLP2 Col Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
3.002	0.000	4543962	3.182	0.000	24390385	80.0000	80.0000	0.0	1Bromo-2nitrobenzen
8.754	0.000	4438237	10.084	0.000	16168223	80.0000	80.0000	0.0	Hexabromobiphenyl
6.981	0.028	441078	7.759	0.014	1738321	232.3447	210.2393	10.0	1-Chloropyrene

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

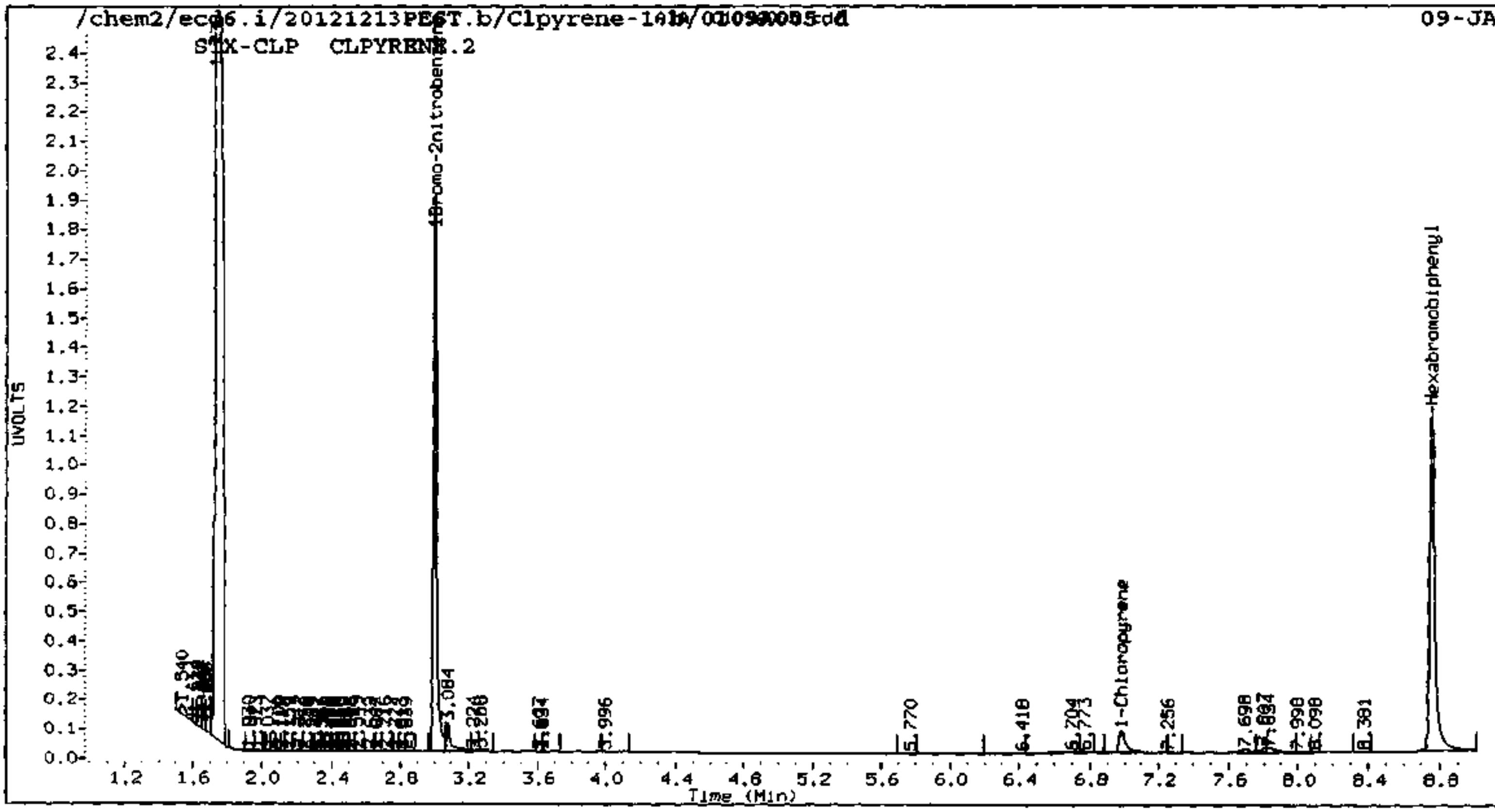
Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4288295	4543962	6.0
Hexabromobiphenyl	3547373	4438237	25.1

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	22974785	24390385	6.2
Hexabromobiphenyl	12557398	16168223	28.8

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 13-DEC-2012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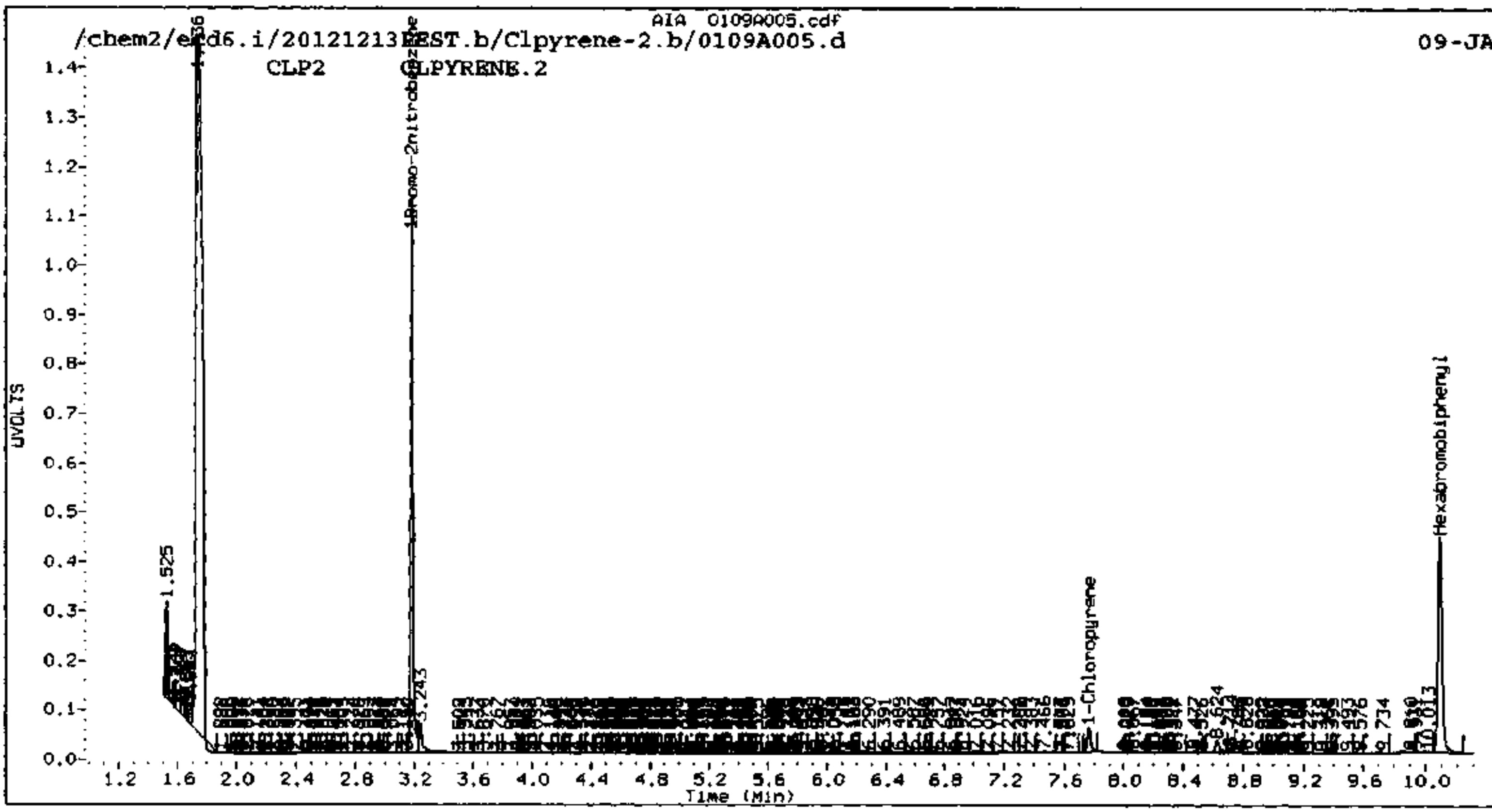
STX-CLP CLPYRENE.2
UVOLTS
1Bromo-2nitrobenzene
1-Chloropyrene
Hexabromobiphenyl
Time (Min)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09-JAN
CLP2 CLPYRENE.2
UVOLTS
1Bromo-2nitrobenzene
1-Chloropyrene
Hexabromobiphenyl
Time (Min)

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

YZ 01/10/13

Data file 1: /chem2/ecd6.i/20121213PEST.b/Clpyrene-1.b/0109A006.d ARI ID: CLPYRENE2.0
Data file 2: /chem2/ecd6.i/20121213PEST.b/Clpyrene-2.b/0109A006.d Client ID:
Method: /chem2/ecd6.i/20121213PEST.b/PEST1213.m Injection Date: 09-JAN-2013 13:34
Compound Sublist: 1-Chloropyrene Report Date: 01/10/2013 02:52
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: NONE
Operator: ar Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.002	0.000	4592363	3.182	0.000	24551724	80.0000	80.0000	0.0	1Bromo-2nitrobenzen
8.754	0.000	4538145	10.084	0.000	16207773	80.0000	80.0000	0.0	Hexabromobiphenyl
6.953	0.000	3163565	7.745	0.000	14189703	1629.7700	1711.9699	4.9	1-Chloropyrene

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

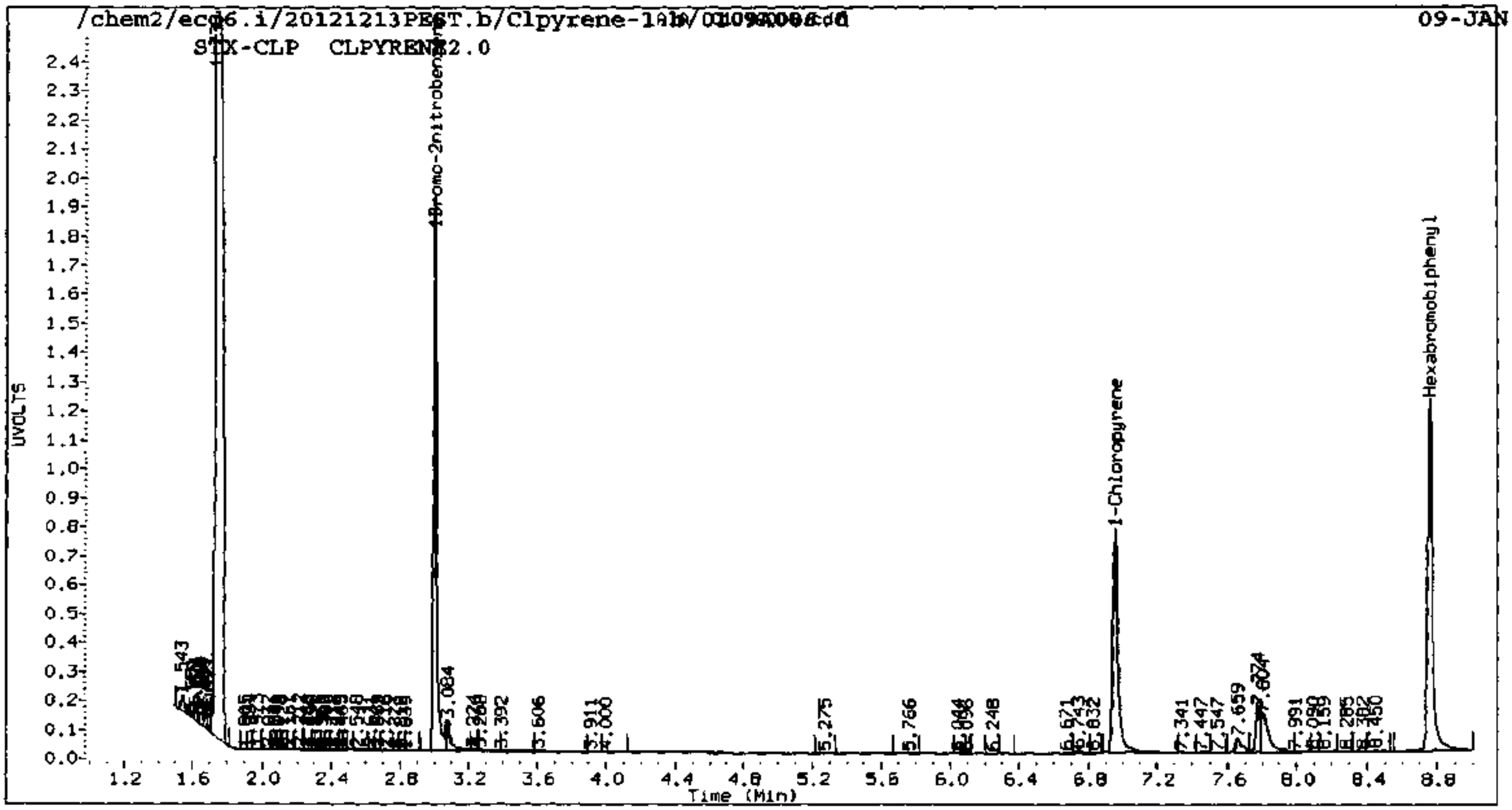
Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4288295	4592363	7.1
Hexabromobiphenyl	3547373	4538145	27.9

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	22974785	24551724	6.9
Hexabromobiphenyl	12557398	16207773	29.1

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 13-DEC-2012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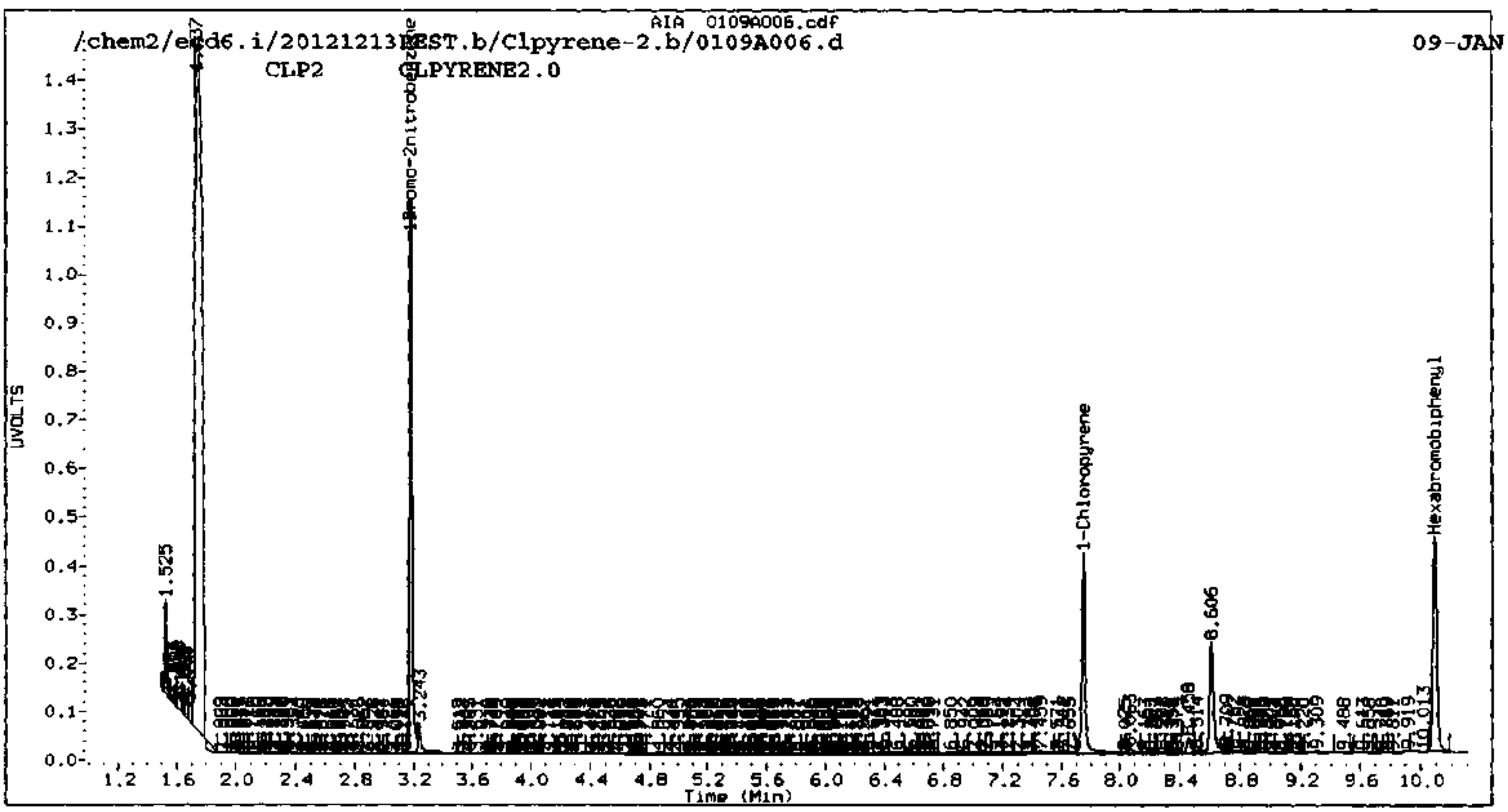
09-JAN
STX-CLP CLPYRENE2.0
1Bromo-2nitrobenzene
1-Chloropyrene
Hexabromobiphenyl
UVOLTS
Time (Min)


AIA 0109A006.cdf
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09-JAN
CLP2 CLPYRENE2.0
1Bromo-2nitrobenzene
1-Chloropyrene
Hexabromobiphenyl
1.525
8.606
UVOLTS
Time (Min)

Pesticide Raw Data
Run Logs, Continuing Calibrations, and Raw Data

ARI Job ID: WC32, WC33

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC Analyst Notes / Corrective Action Log

ARI Project ID: WC32/WC33 **Client ID:** Floyd -Snider

ARI SOP: 403S(PCB) 405S(Herb) 407S(TPH-D) 409S(HCID) 412S(PCP) 423S(Pest) 427S(Dir Inj) 428S(EPH) 432S(EDB) Other

Parameter(s): Pest

Instrument: FID-3A FID-3B FID-4A FID-4B FID-5 FID-7 FID-8 FID-9 ECD-1 ECD-5 ECD-6 ECD-7

Dates: Curve: 12/13/12 Analysis Start: 02/14/13

Endrin/DDT Breakdown <15%?	YES / NO / NA	Method Blank In Control?	YES / NO
ICal Meets RF & %RSD Criteria?	YES / NO	LCS/LCSD Recovery In Control?	YES / NO
CCal Meets RF & %RSD Criteria?	YES / NO	Surrogate Recovery In Control?	YES / NO
Manual Integrations for ICal?	YES / NO	Manual Integrations for Samples?	YES / NO
Internal Standard Meets Criteria?	YES / NO / NA	Special Analysis Criteria Met?	YES / NO / NA

Detail problems, corrective actions and/or other pertinent information below (use reverse side when necessary):

- All Samples except WC32 E, F and WC33 G were run @ 5x dilution due to very dark color of the extract.

- All samples were twice, both times DDT break down and closing CCALs failed due matrix effect. Second 02/14/13 run reported.

Additional Details on Reverse: Yes / No

Analyst: YZ **Date:** 02/18/13

Reviewer: MW **Date:** 2/18

Analytical Resources Inc.: Organics Instrument Log
ECD6 Serial No.: US00007128

Date: 02/14/13 Analysis: Pest Analyst: YZ

Column 1 Serial No.: 1085684 Column Type: STX CLP1

Column 2 Serial No.: 1094709 Column Type: STX CLP2

GC Method: Pest ICal Date: 12/13/12

IS	Ical/Ccal	ICV
2006-1	~~1991-1~~	
	2042-1	
	2048-2	
	2067-2	
	2067-1	

Document All Maintenance Tasks In StarLIMS

GC LOG SUMMARY FOR DATABATCH - /chem2/ecd6.i/20121213PEST.b/0214-1.b

	Inject Date/Time	Filename	DF	LabID	ClientID
1	14-FEB-2013 11:59	0214A004.d	1	DS	
2	14-FEB-2013 12:17	0214A005.d	1	INDAE	
3	14-FEB-2013 12:35	0214A006.d	1	WC32MBS1	WC32MBS1
4	14-FEB-2013 12:53	0214A007.d	1	WC32LCSS1	WC32LCSS1
5	14-FEB-2013 13:11	0214A008.d	1	WC32LCSDS1	WC32LCSDS1
6	14-FEB-2013 13:29	0214A009.d	1	WC32QLS	
7	14-FEB-2013 13:46	0214A010.d	1	WND	
8	14-FEB-2013 14:04	0214A011.d	1	WD35MBS1	WD35MBS1
9	14-FEB-2013 14:22	0214A012.d	1	WD35LCSS1	WD35LCSS1
10	14-FEB-2013 14:40	0214A013.d	1	WD35SRM1	CRM860-50G
11	14-FEB-2013 14:57	0214A014.d	1	WD35A	B13-TOP
12	14-FEB-2013 15:15	0214A015.d	1	WD35B	B13-BOTTOM
13	14-FEB-2013 15:33	0214A016.d	1	WD35BMS	B13-BOTTOM MS
14	14-FEB-2013 15:51	0214A017.d	1	WD35BMSD	B13-BOTTOM MSD
15	14-FEB-2013 16:09	0214A018.d	1	DS	
16	14-FEB-2013 16:26	0214A019.d	1	INDAE	
17	14-FEB-2013 16:44	0214A020.d	1	WND	
18	14-FEB-2013 17:02	0214A021.d	5	WC32A	SG-12-0-10-013113
19	14-FEB-2013 17:20	0214A022.d	5	WC32B	SG-13-0-10-013113
20	14-FEB-2013 17:38	0214A023.d	5	WC32C	SG-07-0-10-013113
21	14-FEB-2013 17:55	0214A024.d	5	WC32D	SG-06-0-10-013113
22	14-FEB-2013 18:13	0214A025.d	1	WC32E	SG-05-0-10-013113
23	14-FEB-2013 18:31	0214A026.d	1	WC32F	SG-95-0-10-013113
24	14-FEB-2013 18:49	0214A027.d	1	DS	
25	14-FEB-2013 19:07	0214A028.d	1	INDAE	
26	14-FEB-2013 19:24	0214A029.d	5	WC32G	SG-08-0-10-013113
27	14-FEB-2013 19:42	0214A030.d	5	WC32GMS	SG-08-0-10-0131 MS
28	14-FEB-2013 20:00	0214A031.d	5	WC32GMSD	SG-08-0-10-0131 MSD
29	14-FEB-2013 20:18	0214A032.d	5	WC32H	SG-09-0-10-013113
30	14-FEB-2013 20:36	0214A033.d	1	WC33G	HA-09-0-10-013013
31	14-FEB-2013 20:53	0214A034.d	1	DS	
32	14-FEB-2013 21:11	0214A035.d	1	INDAE	

YZ 02/15/13

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

YZ 02/14/13

Data file 1: /chem2/ecd6.i/20121213PEST.b/0214-1.b/0214A005.d ARI ID: INDAE
Data file 2: /chem2/ecd6.i/20121213PEST.b/0214-2.b/0214A005.d Client ID:
Method: /chem2/ecd6.i/20121213PEST.b/PEST1213.m Injection Date: 14-FEB-2013 12:17
Compound Sublist: INDA Report Date: 02/14/2013 14:26
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: NONE
Operator: ar Dilution Factor: 1.000

STX-CLP Col RT	Shift	Response	CLP2 Col RT	Shift	Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
3.002	0.000	5009839	3.183	0.000	25846224	80.0000	80.0000	0.0	1Bromo-2nitrobenzen
4.138	0.006	2051296	4.569	0.001	12086731	20.6300	21.3281	3.3	alpha-BHC
4.528	-0.021	797158	5.015	0.017	4500076	19.3594	21.4387	10.2	beta-BHC
4.693	-0.021	1557032	5.317	0.014	8349168	19.9338	20.2980	1.8	delta-BHC
4.413	0.005	1626543	4.919	0.001	9814557	19.8782	20.7282	4.2	gamma-BHC (Lindane)
4.840	0.000	1645869	5.371	-0.003	10478565	20.4318	22.3732	9.1	Heptachlor
5.123	-0.001	1540506	5.709	-0.003	8923597	19.4119	20.2036	4.0	Aldrin
5.696	-0.001	1443406	6.267	-0.002	8254072	19.0699	20.9879	9.6	Heptachlor epoxide b
6.073	0.000	1655723	6.654	-0.001	7645801	19.8805	20.9077	5.0	Endosulfan I
6.294	0.000	2925087	6.911	-0.002	16113335	39.0752	42.2270	7.8	Dieldrin
6.027	0.017	2512202	6.732	0.006	15575102	38.9396	40.9393	5.0	4,4'-DDE
6.512	-0.001	2429331	7.200	-0.002	12380865	41.6178	39.2615	5.8	Endrin
6.723	0.002	2479036	7.392	-0.001	13142066	41.1291	38.0900	7.7	Endosulfan II
6.582	0.016	2460559	7.270	0.008	12791588	41.7608	38.7460	7.5	4,4'-DDD
7.485	0.000	2154277	7.934	-0.001	11200191	41.0293	39.6867	3.3	Endosulfan sulfate
6.831	0.010	2274746	7.552	0.003	11212236	42.7544	40.3053	5.9	4,4'-DDT
7.260	0.009	5263903	8.136	0.001	20596318	200.6567	180.4806	10.6	Methoxychlor
7.738	0.001	2832877	8.420	-0.002	12476403	41.2887	39.4201	4.6	Endrin ketone
7.097	0.001	2010565	7.689	-0.001	10466042	40.9408	39.1518	4.5	Endrin aldehyde
5.823	0.003	1440470	6.453	0.000	8287006	18.8558	20.6507	9.1	gamma-Chlordane
5.943	0.001	1369729	6.589	-0.001	7497268	18.9931	20.4024	7.2	alpha-Chlordane
2.196	0.000	2125923	2.363	-0.001	9927381	19.4403	20.0603	3.1	Hexachlorobutadiene
4.017	0.018	1596278	4.460	0.011	11839751	18.3513	19.5387	6.3	Hexachlorobenzene
8.749	-0.005	4171286	10.076	-0.008	16128805	80.0000	80.0000	0.0	Hexabromobiphenyl
3.670	0.010	3131976	4.003	0.007	17887001	37.5742	39.7149	5.5	Tetrachloro-m-xylen
8.588	0.001	2287094	9.531	-0.004	12633664	38.5729	38.3751	0.5	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	93.9	99.3	93.9⁻	115- 0
Decachlorobiphenyl	96.4	95.9	95.9⁻	115- 0

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

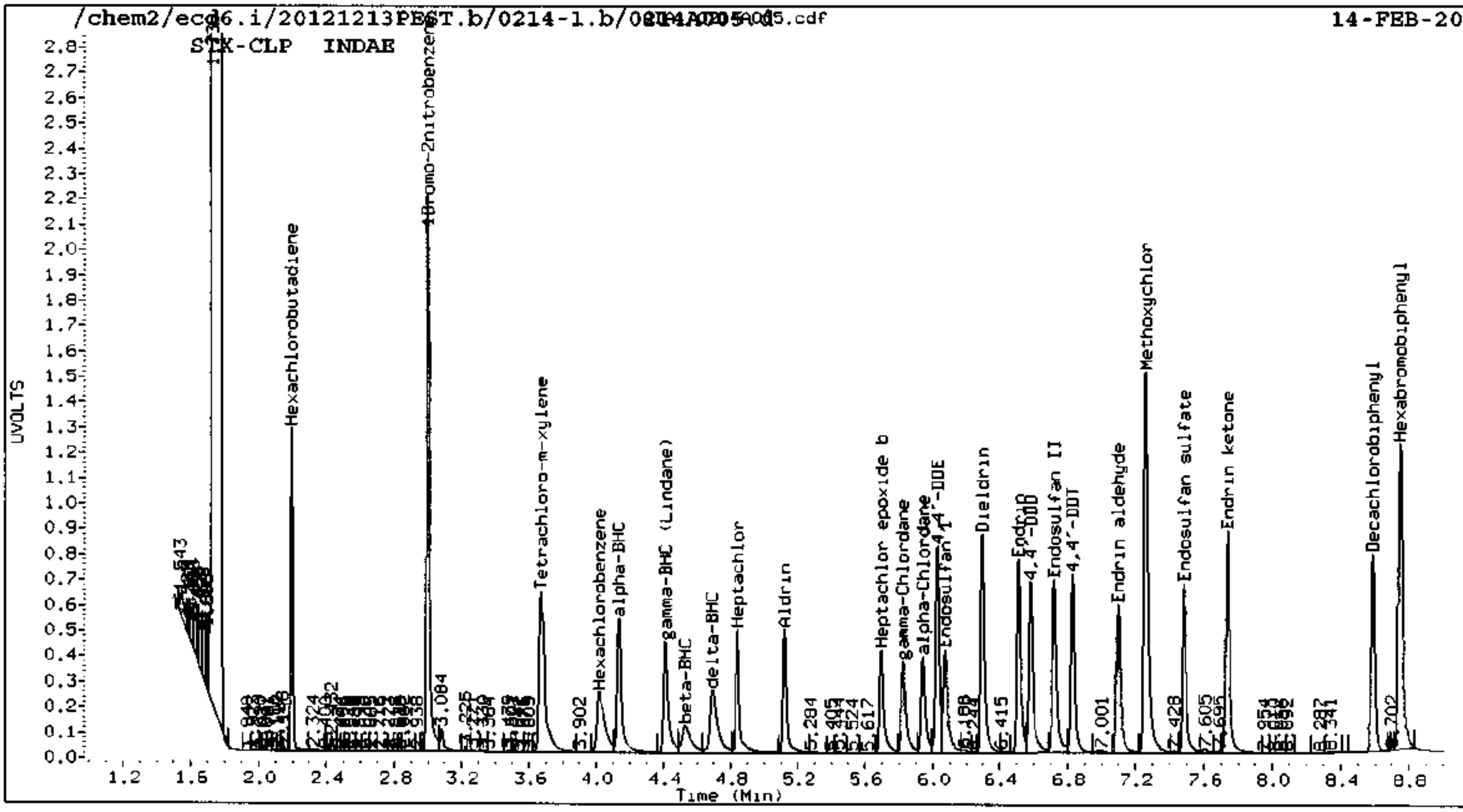
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4288295	5009839	16.8
Hexabromobiphenyl	3547373	4171286	17.6

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	22974785	25846224	12.5
Hexabromobiphenyl	12557398	16128805	28.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 13-DEC-2012
<- Indicates standard response outside Limits (-50 to +100%)

	STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount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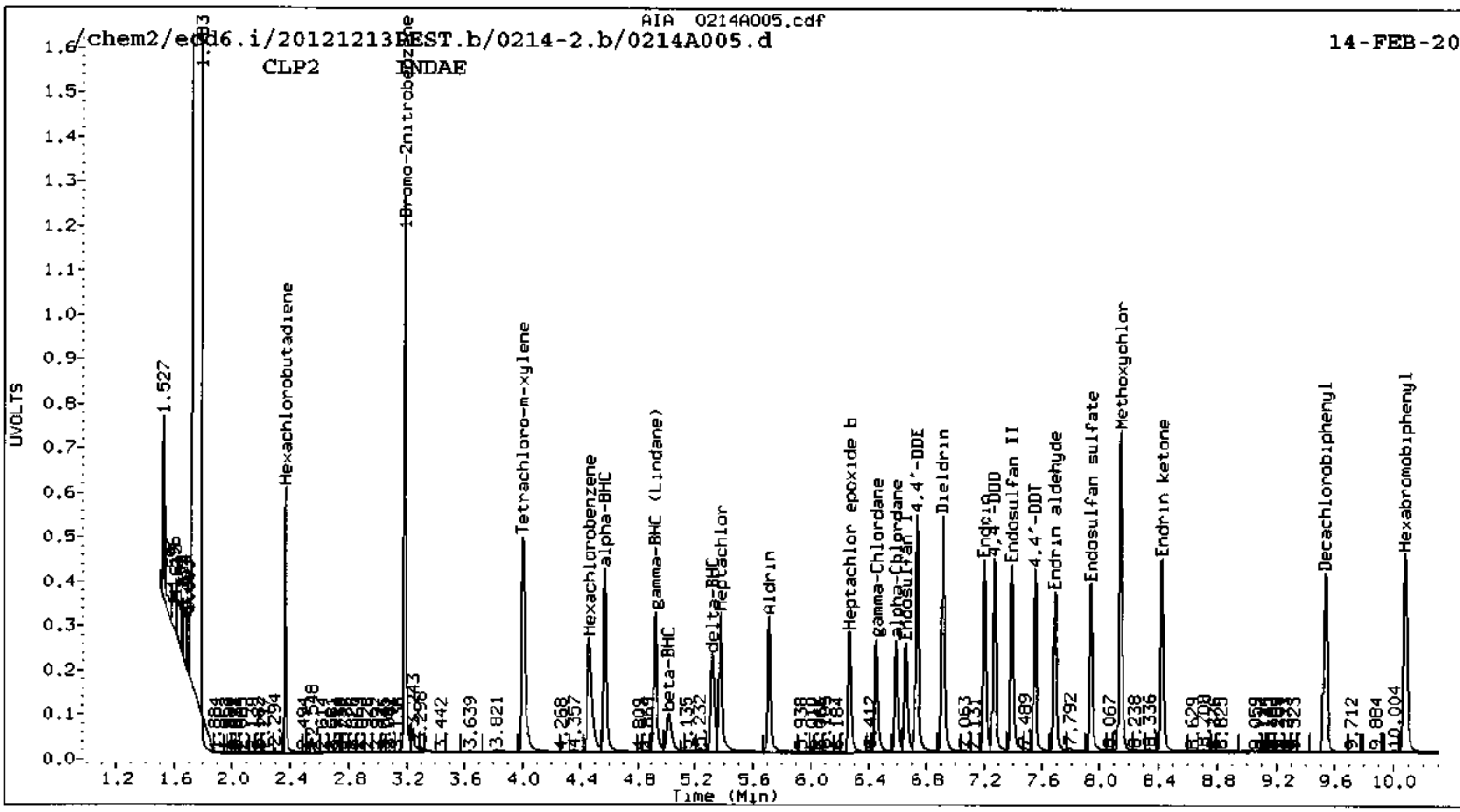
14-FEB-201
STK-CLP INDAE
UVOLTS
Time (Min)
Hexachlorobutadiene
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide b
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Methoxychlor
Endosulfan sulfate
Endrin ketone
Decachlorobiphenyl
Hexabromobiphenyl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14-FEB-201
CLP2 INDAE
UVOLTS
Time (Min)
Hexachlorobutadiene
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide b
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl
Hexabromobiphenyl

WC02:01761

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

YZ 02/14/13

Data file 1: /chem2/ecd6.i/20121213PEST.b/0214-1.b/0214A006.d ARI ID: WC32MBS1
Data file 2: /chem2/ecd6.i/20121213PEST.b/0214-2.b/0214A006.d Client ID: WC32MBS1
Method: /chem2/ecd6.i/20121213PEST.b/PEST1213.m Injection Date: 14-FEB-2013 12:35
Compound Sublist: wpest Report Date: 02/14/2013 14:26
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: SOIL
Operator: ar Dilution Factor: 1.000

STX-CLP Col RT	STX-CLP Col Shift	STX-CLP Col Response	CLP2 Col RT	CLP2 Col Shift	CLP2 Col Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
2.998	-0.004	4239631	3.180	-0.003	22146044	80.0000	80.0000 IS	0.0	1Bromo-2nitrobenzen
4.180	0.049	5414	4.566	-0.002	128556	~~0.0643~~	~~0.2648~~	121.8*	alpha-BHC
4.561	0.011	15327	5.019	0.021	81482	0.4398	0.4530	3.0	beta-BHC
4.722	0.008	1706	5.312	0.009	81234	0.0258	0.2305	159.7*	delta-BHC
4.401	-0.008	2253	4.886	-0.031	102158	0.0325	0.2518	154.2*	gamma-BHC (Lindane)
4.831	-0.009	2325	5.352	-0.021	107249	0.0341	0.2673	154.7*	Heptachlor
5.116	-0.008	8425	5.696	-0.016	779490	0.1254	2.0597	177.0*	Aldrin
5.700	0.004	1297	6.256	-0.012	151402	0.0202	0.4493	182.8*	Heptachlor epoxide b
6.114	0.042	1178	6.675	0.019	115207	0.0167	0.3677	182.6*	Endosulfan I
6.263	-0.031	1295	6.871	-0.042	35499	0.0204	0.1086	136.6*	Dieldrin
6.003	-0.008	1809	6.719	-0.006	53664	0.0331	0.1646	133.0*	4,4'-DDE
----			7.159	-0.043	100612	0.0000	0.3729	---	Endrin
6.674	-0.046	3134	7.357	-0.036	153385	0.0593	0.5196	159.0*	Endosulfan II
----			----			0.0000	0.0000	---	4,4'-DDD
7.476	-0.009	23468	----			0.5095	0.0000	---	Endosulfan sulfate
6.829	0.008	1990	7.546	-0.004	59534	0.0426	0.2501	141.7*	4,4'-DDT
7.226	-0.025	6760	8.115	-0.020	11531	0.2938	0.1181	85.3*	Methoxychlor
7.741	0.003	15164	8.422	0.000	85791	0.2520	0.3168	22.8	Endrin ketone
7.086	-0.010	3541	7.688	-0.002	35979	0.0822	0.1573	62.7*	Endrin aldehyde
5.816	-0.004	19579	6.464	0.011	187737	0.3028	0.5460	57.3*	gamma-Chlordane
5.964	0.021	2855	6.567	-0.023	90410	0.0468	0.2871	144.0*	alpha-Chlordane
2.204	0.008	36913	2.335	-0.029	4405658	0.3989	10.3900	185.2*	Hexachlorobutadiene
3.988	-0.011	53764	4.440	-0.009	122261	0.7304	0.2355	102.5*	Hexachlorobenzene
5.598	-0.006	8306	6.202	0.023	111382	0.1894	0.3771	66.2*	Oxychlordane
5.652	-0.047	1222	6.414	-0.025	71677	0.0313	0.3248	164.8*	2,4-DDE
----			----			0.0000	0.0000	---	trans-Nonachlor
6.226	0.037	1472	6.925	-0.003	191448	0.0436	0.9967	183.2*	2,4-DDD
6.422	0.004	1571	7.222	0.011	147262	0.0470	0.8747	179.6*	2,4-DDT
6.535	-0.010	1101	----			0.0177	0.0000	---	cis-Nonachlor
7.411	0.000	4746	8.393	-0.015	95934	0.1197	0.5414	127.6*	Mirex
8.726	-0.028	3658933	10.064	-0.020	13799886	80.0000	80.0000 IS	0.0	Hexabromobiphenyl
1.687	-0.049	38443	1.698	-0.037	6690250	0.0000	0.0000	---	Hexachloroethane
6.591	0.010	4073	----			0.0000	0.0000	---	Kepone
3.657	-0.004	1877310	3.992	-0.003	11468698	26.6136	29.7188	11.0	Tetrachloro-m-xylen
8.579	-0.008	2006673	9.525	-0.010	11083653	38.5825	39.3487	2.0	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	66.5	74.3	66.5	42-112
Decachlorobiphenyl	96.5	98.4	96.5	59-123

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4288295	4239631	-1.1
Hexabromobiphenyl	3547373	3658933	3.1

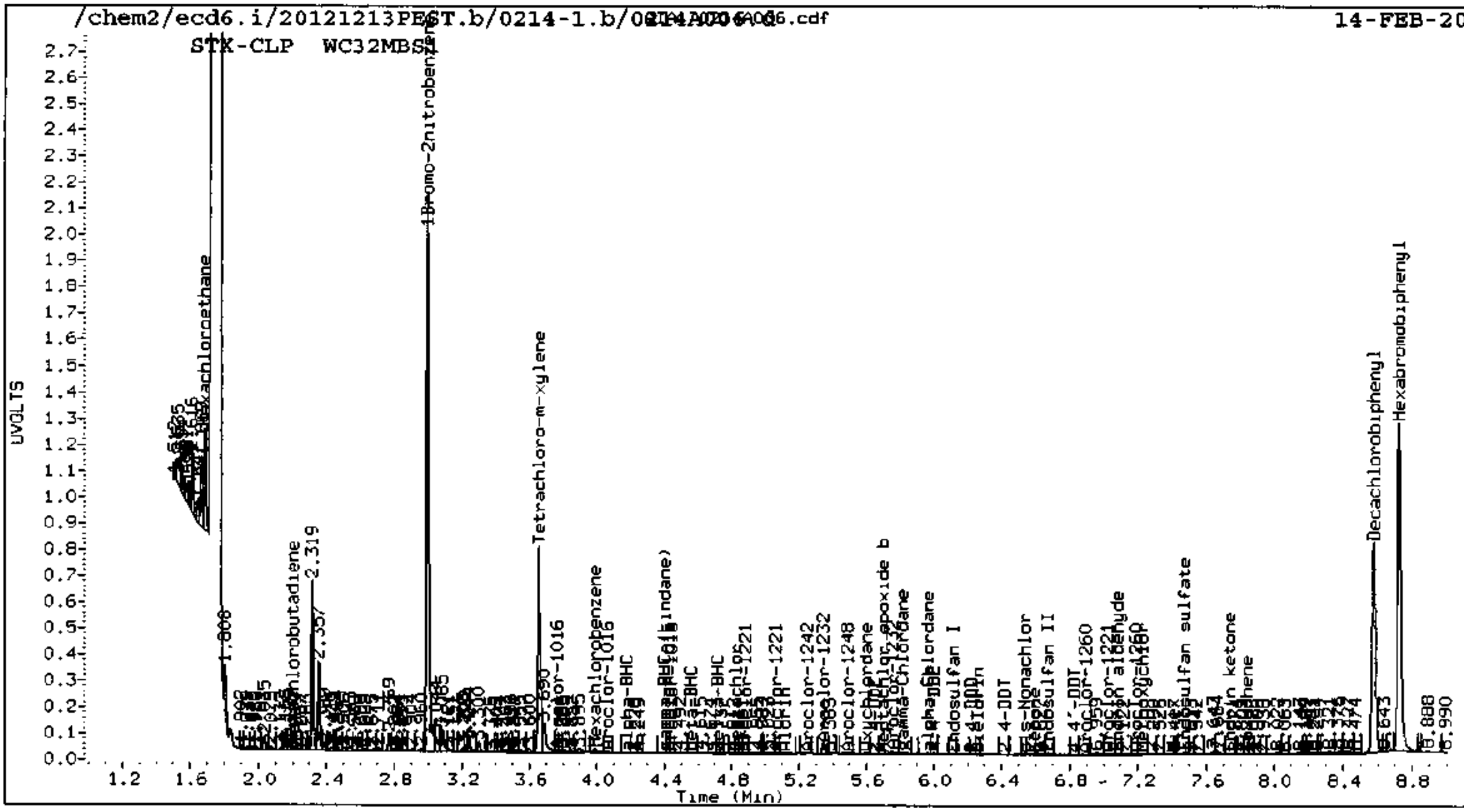
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	22974785	22146044	-3.6
Hexabromobiphenyl	12557398	13799886	9.9

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 13-DEC-2012
<- Indicates standard response outside Limits (-50 to +100%)

	STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount
Toxaphene	1	6.422	-0.048	1571	1.3	1	7.159	0.020	100612	10.8
Toxaphene	2	6.829	0.006	1990	1.1	2	7.486	0.022	50512	3.7
Toxaphene	3	7.086	0.007	3541	1.4	3	7.688	-0.008	35979	2.5
Toxaphene	4	7.411	0.007	4746	2.0	4	8.152	-0.010	48345	4.7
Toxaphene	5	7.741	0.017	15164	8.5	5	8.521	0.014	185589	36.9
Toxaphene	6	7.838	-0.016	5002	4.6	NS	---			----

Total STX-CLPAve (6 peaks): 3.134 Total CLP2Ave (5 peaks): 11.697 RPD = 115*
Corrected Ave (5 peaks): 2.070 Corrected Ave (4 peaks): 5.402 RPD = 89*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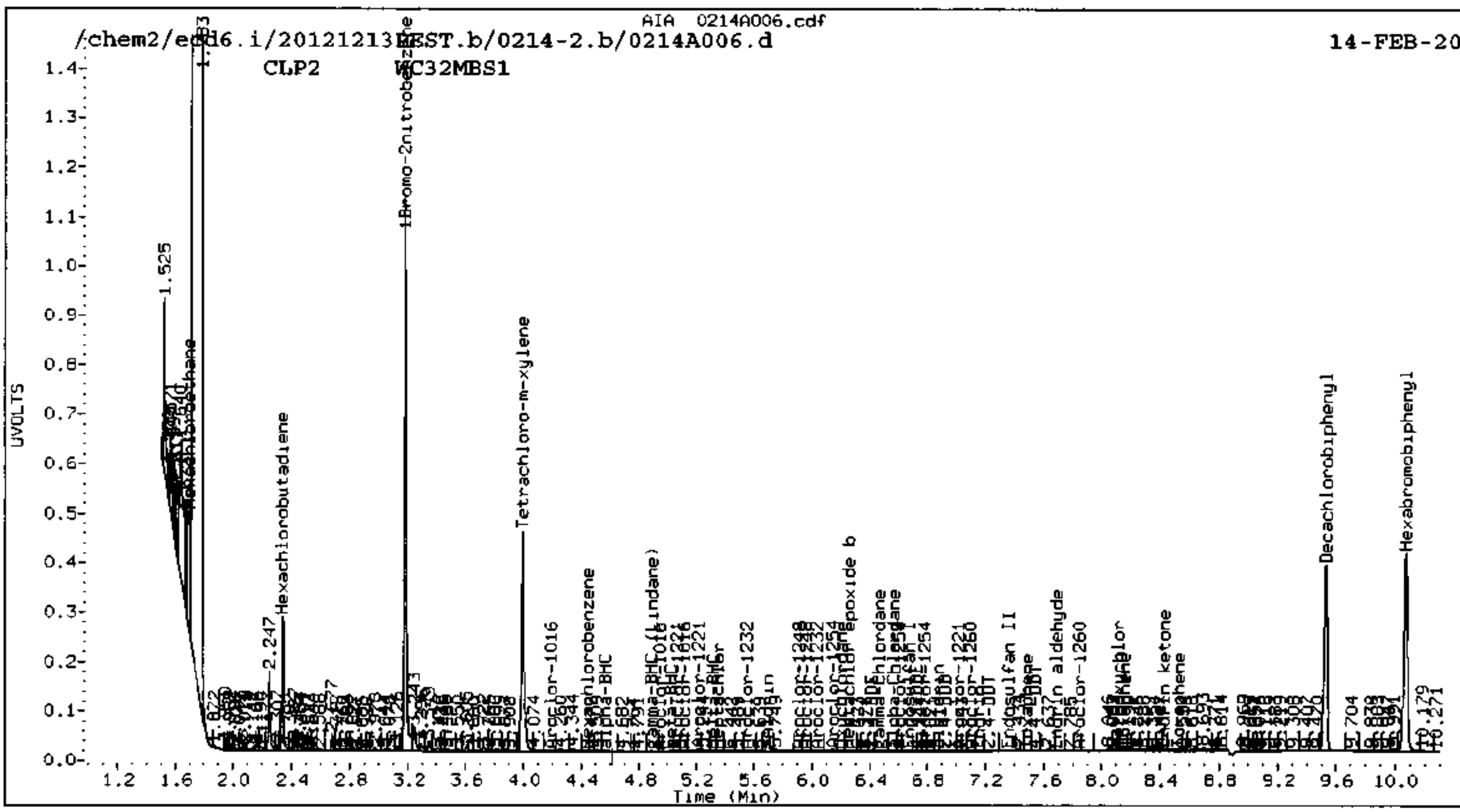
STK-CLP WC32MBS1
UVOLTS
Time (Min)
Hexachloroethane
Hexachlorobutadiene
1-Bromo-2nitrobenzene
Tetrachloro-m-xylene
Hexachlorobenzene
Decachlorobiphenyl
Hexabromobiphenyl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14-FEB-201
CLP2 WC32MBS1
UVOLTS
Time (Min)
1.525
Hexachlorobutadiene
2.247
1-Bromo-2nitrobenzene
Tetrachloro-m-xylene
Hexachlorobenzene
Decachlorobiphenyl
Hexabromobiphenyl

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /chem2/ecd6.i/20121213PEST.b/0214-1.b/0214A007.d ARI ID: WC32LCSS1 y2 02/14/13
Data file 2: /chem2/ecd6.i/20121213PEST.b/0214-2.b/0214A007.d Client ID: WC32LCSS1
Method: /chem2/ecd6.i/20121213PEST.b/PEST1213.m Injection Date: 14-FEB-2013 12:53
Compound Sublist: wpest Report Date: 02/14/2013 14:26
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: SOIL
Operator: ar Dilution Factor: 1.000

STX-CLP Col RT	Shift	Response	CLP2 Col RT	Shift	Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
2.998	-0.004	4381675	3.180	-0.002	22315418	80.0000	80.0000 IS	0.0	1Bromo-2nitrobenzen
4.126	-0.005	1115980	4.563	-0.005	6861939	12.8325	14.0243	8.9	alpha-BHC
4.489	-0.061	629584	4.992	-0.006	3540922	17.4818	19.5383	11.1	beta-BHC M
4.697	-0.017	19898	5.295	-0.009	417060	0.2913	1.1744	120.5*	delta-BHC
4.402	-0.006	1219017	4.913	-0.005	6915724	17.0335	16.9169	0.7	gamma-BHC (Lindane)
4.835	-0.005	1315024	5.369	-0.005	7574260	18.6650	18.7309	0.4	Heptachlor
5.119	-0.005	1311628	5.706	-0.005	6819536	18.8973	17.8828	5.5	Aldrin
5.691	-0.006	1292140	6.263	-0.005	7058732	19.5188	20.7883	6.3	Heptachlor epoxide b
6.067	-0.006	1239591	6.649	-0.006	6339082	17.0177	20.0771	16.5	Endosulfan I
6.289	-0.006	2580030	6.907	-0.006	13651631	39.4067	41.4364	5.0	Dieldrin
6.002	-0.008	2452538	6.718	-0.007	13560677	43.4647	41.2841	5.1	4,4'-DDE
6.506	-0.006	2243018	7.196	-0.006	10873870	42.5641	38.9126	9.0	Endrin N
6.714	-0.007	2220900	7.386	-0.006	10807786	40.8144	35.3487	14.4	Endosulfan II
6.559	-0.008	2009188	7.257	-0.005	10595299	37.7723	36.2164	4.2	4,4'-DDD MN
7.478	-0.007	1168656	7.929	-0.006	5815224	24.6546	23.2528	5.9	Endosulfan sulfate
6.814	-0.007	1900678	7.543	-0.006	8979025	39.5708	36.4241	8.3	4,4'-DDT
7.243	-0.008	4552536	8.128	-0.007	17298544	192.2286	171.0569	11.7	Methoxychlor
7.731	-0.006	2502384	8.416	-0.006	11272943	40.3996	40.1935	0.5	Endrin ketone
7.089	-0.007	1294086	7.684	-0.006	6706497	29.1890	28.3110	3.1	Endrin aldehyde
5.814	-0.006	1335809	6.447	-0.005	7242797	19.9926	20.9043	4.5	gamma-Chlordane
5.936	-0.006	1236336	6.584	-0.006	6452864	19.6011	20.3387	3.7	alpha-Chlordane
2.195	-0.001	1437607	2.363	-0.002	6557305	15.0307	15.3469	2.1	Hexachlorobutadiene
3.991	-0.008	1248840	4.444	-0.005	9199861	16.4153	17.5844	6.9	Hexachlorobenzene
5.608	0.005	16943	6.189	0.010	70044	~~0.3755~~	~~0.2353~~	45.9*	Oxychlordane
----			6.393	-0.046	299155	0.0000	1.3451	---	2,4-DDE
----			----			~~0.0000~~	~~0.0000~~	---	trans-Nonachlor
6.165	-0.024	29418	----			0.8469	0.0000	---	2,4-DDD
6.399	-0.019	13783	7.196	-0.015	10873870	0.4007	62.3621	197.4*	2,4-DDT
----			7.257	-0.008	10595299	0.0000	29.1205	---	cis-Nonachlor
7.419	0.008	29931	----			~~0.7333~~	~~0.0000~~	---	Mirex
8.726	-0.028	3765747	10.064	-0.020	14292635	80.0000	80.0000 IS	0.0	Hexabromobiphenyl
1.687	-0.050	57245	1.694	-0.041	18469793	0.0000	0.0000	---	Hexachloroethane
6.559	-0.022	2009188	----			~~0.0000~~	~~0.0000~~	---	Kepone
3.656	-0.004	2005351	3.992	-0.003	12281972	27.5071	31.5847	13.8	Tetrachloro-m-xylen
8.578	-0.009	2072820	9.526	-0.009	11654076	38.7238	39.9474	3.1	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	68.8	79.0	68.8	42-112
Decachlorobiphenyl	96.8	99.9	96.8	59-123
4,4'-DDE	0.0	0.0	0.0~	0- 0
Endrin	1702565.7	972815.2	972815.2~	10-200
4,4'-DDD	0.0	0.0	0.0~	0- 0
4,4'-DDT	1582832.6	910603.3	910603.3~	0- 0
Endrin ketone	0.0	0.0	0.0~	0- 0
Endrin aldehyde	0.0	0.0	0.0~	0- 0

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4288295	4381675	2.2
Hexabromobiphenyl	3547373	3765747	6.2

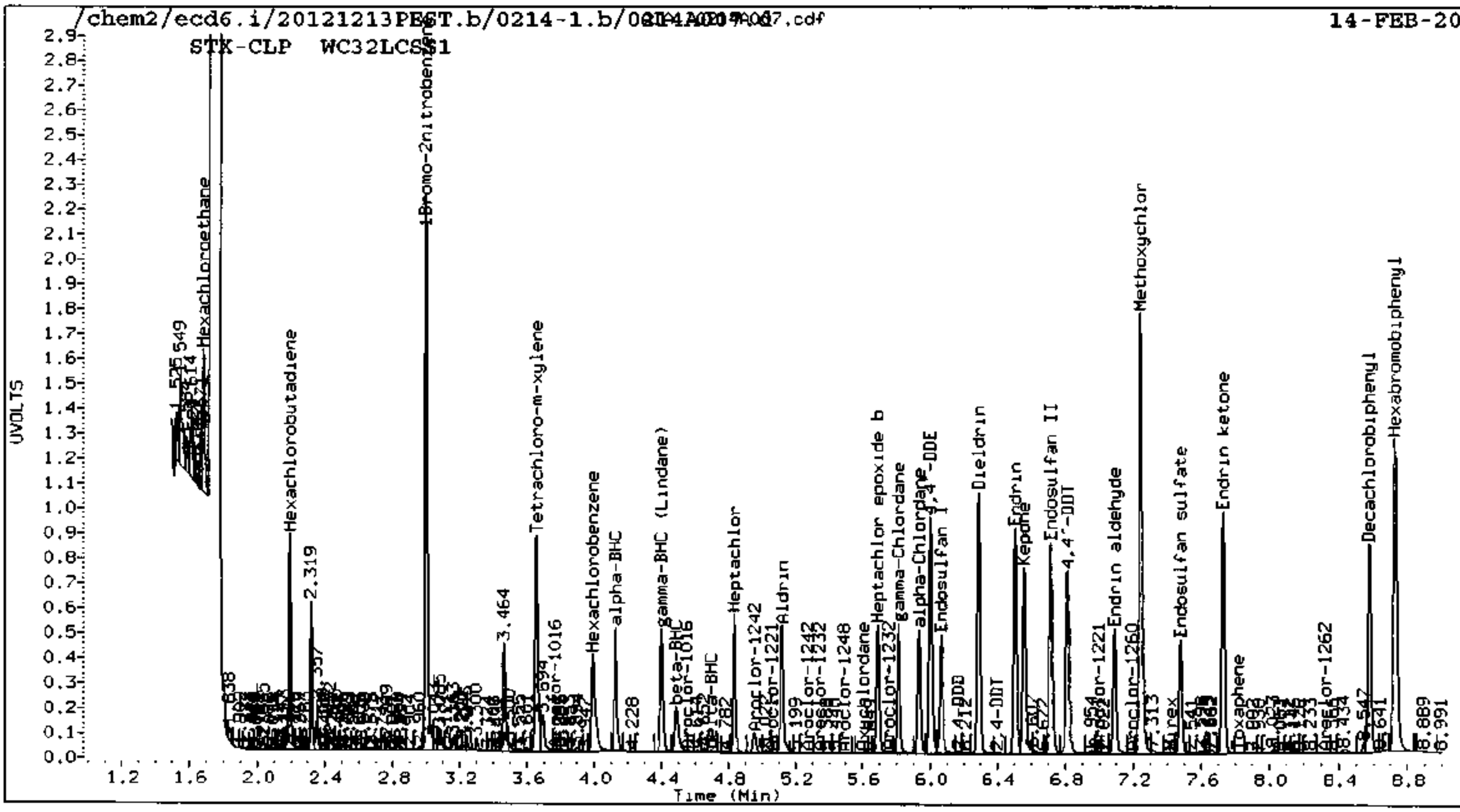
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	22974785	22315418	-2.9
Hexabromobiphenyl	12557398	14292635	13.8

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 13-DEC-2012
<- Indicates standard response outside Limits (-50 to +100%)

	STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount
Toxaphene	1	6.506	0.036	2243018	1758.7	1	7.135	-0.003	77004	8.0
Toxaphene	2	6.814	-0.009	1900678	1014.6	2	7.479	0.015	162431	11.4
Toxaphene	3	7.089	0.010	1294086	487.3	3	7.684	-0.011	6706497	444.2
Toxaphene	4	7.419	0.015	29931	12.1	4	8.128	-0.034	17298544	1615.1
Toxaphene	5	7.731	0.007	2502384	1355.4	5	---			0.0
Toxaphene	6	7.820	-0.034	27811	25.1	NS	---			----

Total STX-CLPAve (6 peaks): 775.539 Total CLP2Ave (4 peaks): 519.665 RPD = 40
Corrected Ave (4 peaks): 384.777 Corrected Ave (3 peaks): 154.525 RPD = 85*



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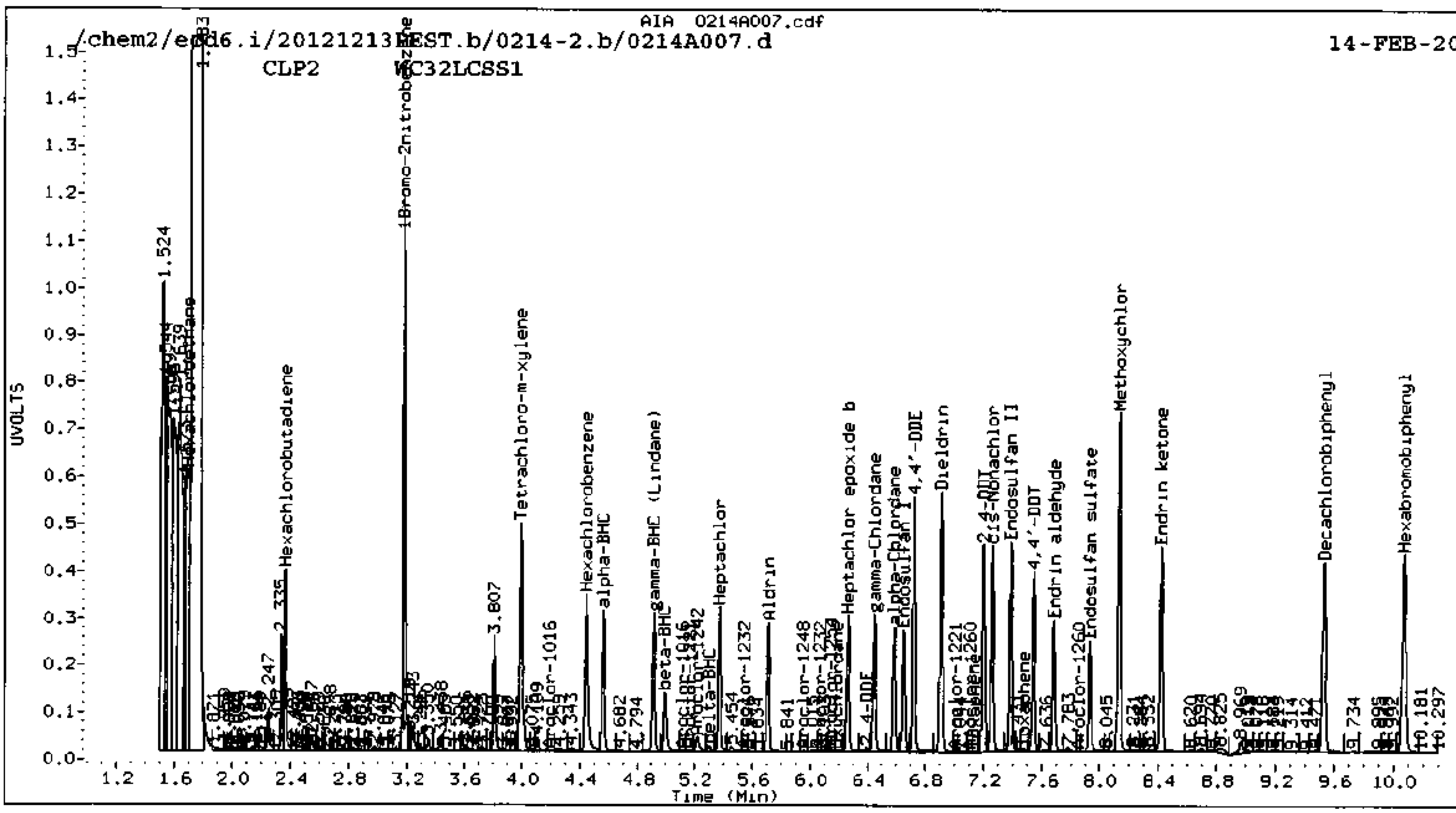
STK-CLP WC32LCSS1
UVOLTS
Time (Min)



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14-FEB-201
CLP2 WC32LCSS1
UVOLTS
Time (Min)

WC32 01767

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

YE 02/14/13

Data file 1: /chem2/ecd6.i/20121213PEST.b/0214-1.b/0214A008.d ARI ID: WC32LCSDS1
Data file 2: /chem2/ecd6.i/20121213PEST.b/0214-2.b/0214A008.d Client ID: WC32LCSDS1
Method: /chem2/ecd6.i/20121213PEST.b/PEST1213.m Injection Date: 14-FEB-2013 13:11
Compound Sublist: wpest Report Date: 02/14/2013 14:27
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: SOIL
Operator: ar Dilution Factor: 1.000

STX-CLP Col RT	Shift	Response	CLP2 Col RT	Shift	Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
2.998	-0.004	4664363	3.180	-0.002	23707192	80.0000	80.0000 IS	0.0	1Bromo-2nitrobenzen
4.126	-0.005	1269003	4.563	-0.005	7269610	13.7077	13.9853	2.0	alpha-BHC
4.487	-0.062	671845	4.991	-0.007	3847654	17.5246	19.9844	13.1	beta-BHC M
4.697	-0.017	19947	5.295	-0.009	451546	0.2743	1.1968	125.4*	delta-BHC
4.402	-0.007	1319375	4.912	-0.005	7868131	17.3185	18.1167	4.5	gamma-BHC (Lindane)
4.834	-0.005	1408090	5.369	-0.005	8107182	18.7747	18.8718	0.5	Heptachlor
5.118	-0.005	1422042	5.706	-0.005	7036668	19.2464	17.3689	10.3	Aldrin
5.690	-0.006	1436042	6.263	-0.005	7786866	20.3779	21.5864	5.8	Heptachlor epoxide b
6.066	-0.007	1388724	6.649	-0.006	7009275	17.9096	20.8965	15.4	Endosulfan I
6.288	-0.006	2899741	6.907	-0.006	15010048	41.6057	42.8849	3.0	Dieldrin
6.002	-0.009	2762458	6.718	-0.007	14975777	45.9901	42.9156	6.9	4,4'-DDE
6.506	-0.007	2514278	7.196	-0.006	11982762	44.8721	40.9861	9.1	Endrin N
6.714	-0.007	2482480	7.386	-0.007	11981218	42.9064	37.4551	13.6	Endosulfan II
6.558	-0.009	2259682	7.256	-0.006	11740573	39.9533	38.3579	4.1	4,4'-DDD MN
7.478	-0.008	1260859	7.929	-0.007	6184916	25.0167	23.6383	5.7	Endosulfan sulfate
6.813	-0.008	2138024	7.543	-0.007	10064335	41.8630	39.0228	7.0	4,4'-DDT
7.243	-0.008	5093443	8.127	-0.008	19118731	202.2682	180.7022	11.3	Methoxychlor
7.731	-0.007	2779073	8.416	-0.006	12193300	42.1963	41.5541	1.5	Endrin ketone
7.088	-0.008	1254576	7.684	-0.006	6435213	26.6137	25.9655	2.5	Endrin aldehyde
5.813	-0.007	1485405	6.447	-0.006	8113149	20.8841	22.0416	5.4	gamma-Chlordane
5.936	-0.006	1382587	6.584	-0.006	7130700	20.5913	21.1557	2.7	alpha-Chlordane
2.195	-0.001	1609277	2.363	-0.002	6693872	15.8058	14.7468	6.9	Hexachlorobutadiene
3.991	-0.008	1382372	4.443	-0.006	10293078	17.0693	18.5190	8.1	Hexachlorobenzene
5.606	0.003	20534	6.182	0.003	15520	0.4280	0.0491	158.8*	Oxychlordane
5.650	-0.049	1517	6.392	-0.047	285930	0.0355	1.2102	188.6*	2,4-DDE
----			----			0.0000	0.0000	---	trans-Nonachlor
6.164	-0.025	32931	----			0.8916	0.0000	---	2,4-DDD
6.398	-0.020	16987	7.196	-0.015	11982762	0.4645	65.6851	197.2*	2,4-DDT
----			7.256	-0.009	11740573	0.0000	30.8424	---	cis-Nonachlor
7.418	0.007	30472	----			0.7021	0.0000	---	Mirex
8.726	-0.028	4004051	10.064	-0.020	14953358	80.0000	80.0000 IS	0.0	Hexabromobiphenyl
1.686	-0.050	59219	----			0.0000	0.0000	---	Hexachloroethane
6.558	-0.023	2259682	----			0.0000	0.0000	---	Kepone
3.657	-0.004	2189762	3.992	-0.004	12696877	28.2163	30.7348	8.5	Tetrachloro-m-xylen
8.578	-0.009	2279388	9.525	-0.010	12771166	40.0485	41.8422	4.4	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	70.5	76.8	70.5	42-112
Decachlorobiphenyl	100.1	104.6	100.1	59-123
4,4'-DDE	0.0	0.0	0.0~	0- 0
Endrin	1794882.2	1024652.7	1024652.7~	10-200
4,4'-DDD	0.0	0.0	0.0~	0- 0
4,4'-DDT	1674520.9	975570.6	975570.6~	0- 0
Endrin ketone	0.0	0.0	0.0~	0- 0
Endrin aldehyde	0.0	0.0	0.0~	0- 0

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4288295	4664363	8.8
Hexabromobiphenyl	3547373	4004051	12.9

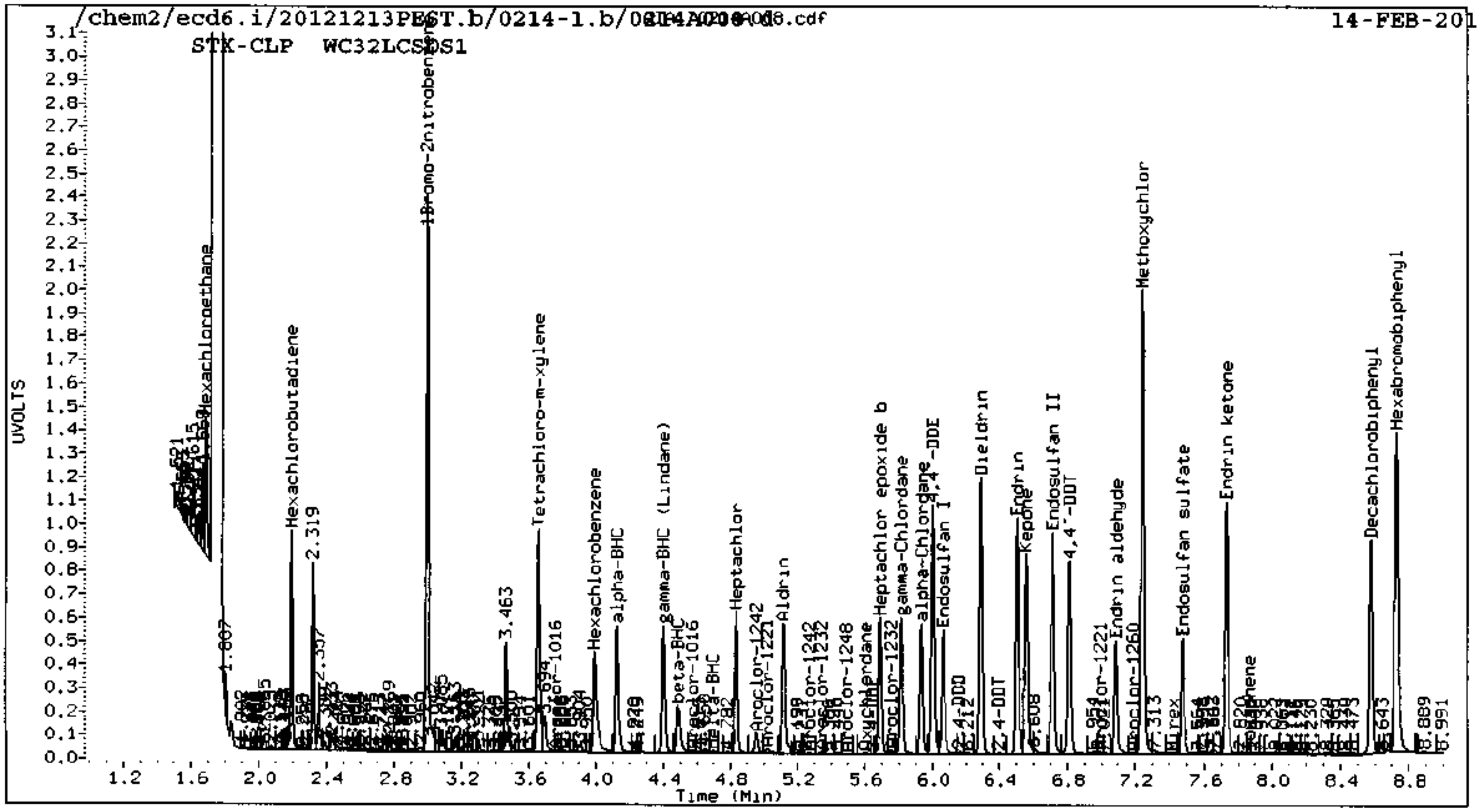
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	22974785	23707192	3.2
Hexabromobiphenyl	12557398	14953358	19.1

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 13-DEC-2012
<- Indicates standard response outside Limits (-50 to +100%)

	STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount
Toxaphene	1	6.506	0.035	2514278	1854.1	1	7.133	-0.006	35338	3.5
Toxaphene	2	6.813	-0.010	2138024	1073.4	2	7.479	0.015	150423	10.1
Toxaphene	3	7.088	0.010	1254576	444.3	3	7.684	-0.012	6435213	407.4
Toxaphene	4	7.418	0.015	30472	11.6	4	8.187	0.025	40035	3.6
Toxaphene	5	7.731	0.007	2779073	1415.7	5	8.517	0.010	83142	15.2
Toxaphene	6	7.871	0.016	5908	5.0	NS	---			----

Total STX-CLPAve (6 peaks): 800.676 Total CLP2Ave (5 peaks): 87.961 RPD = 160*
Corrected Ave (4 peaks): 383.573 Corrected Ave (4 peaks): 8.106 RPD = 192*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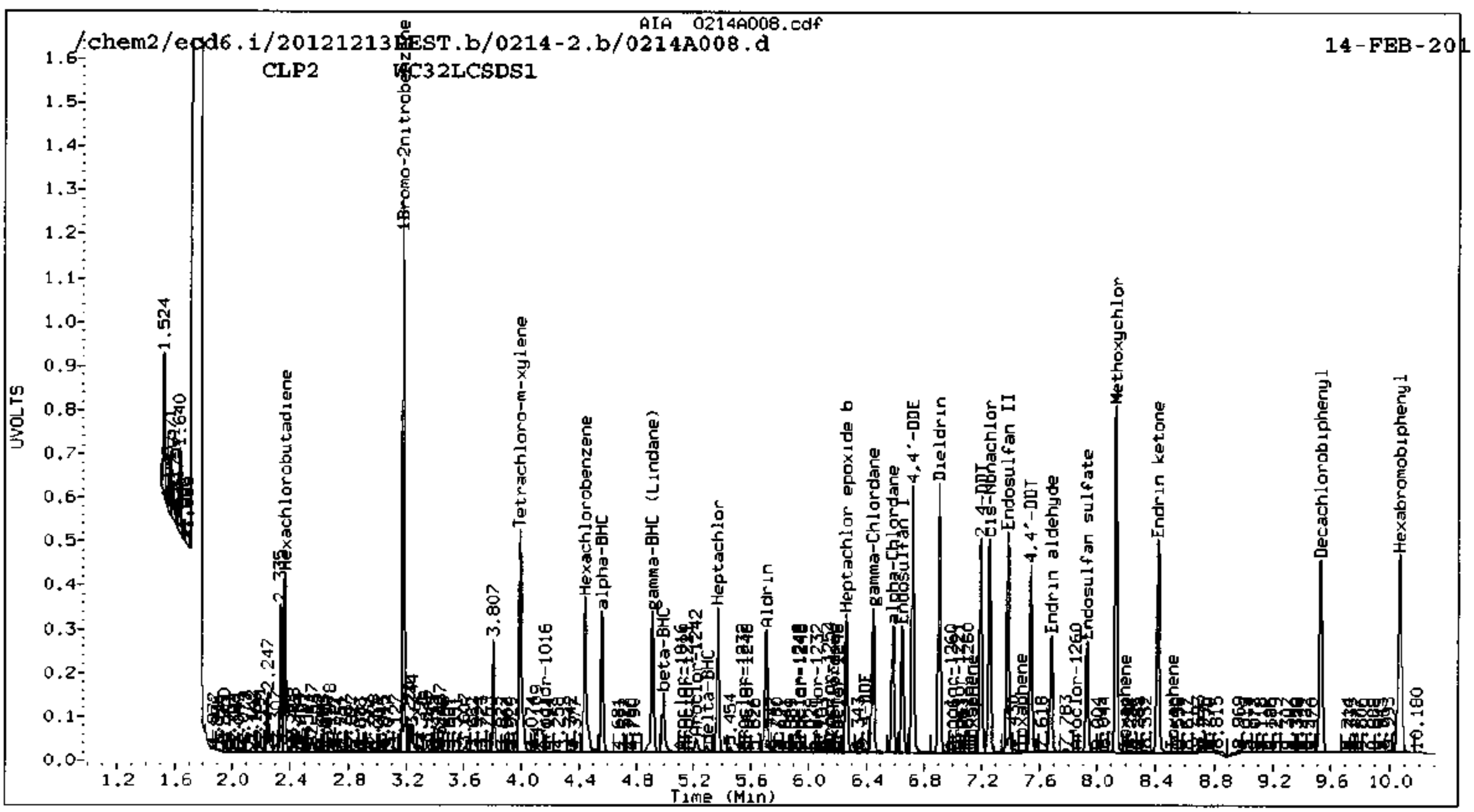
UVOLTS
Time (Min)
Hexachloroethane
Hexachlorobutadiene
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide b
gamma-Chlordane
alpha-Chlordane
4,4'-DDE
Endosulfan I
Dieldrin
Endrin
Kepone
Endosulfan II
4,4'-DDD
Endrin aldehyde
Methoxychlor
Endosulfan sulfate
Endrin ketone
Decachlorobiphenyl
Hexabromobiphenyl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14-FEB-201
CLP2 WC32LCSDS1
UVOLTS
Time (Min)
Hexachlorobutadiene
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
Heptachlor
Aldrin
Heptachlor epoxide b
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl
Hexabromobiphenyl

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /chem2/ecd6.i/20121213PEST.b/0214-1.b/0214A019.d ARI ID: INDAE YE 02/15/13
Data file 2: /chem2/ecd6.i/20121213PEST.b/0214-2.b/0214A019.d Client ID:
Method: /chem2/ecd6.i/20121213PEST.b/PEST1213.m Injection Date: 14-FEB-2013 16:26
Compound Sublist: INDA Report Date: 02/15/2013 11:09
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: NONE
Operator: ar Dilution Factor: 1.000

STX-CLP Col RT	Shift	Response	CLP2 Col RT	Shift	Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
3.001	-0.001	4991426	3.182	-0.001	25970339	80.0000	80.0000	0.0	1Bromo-2nitrobenzen
4.138	0.007	2049785	4.569	0.001	11985479	20.6909	21.0484	1.7	alpha-BHC
4.528	-0.021	792955	5.015	0.017	4379115	19.3284	20.7627	7.2	beta-BHC
4.695	-0.020	1522950	5.318	0.015	7829765	19.5694	18.9443	3.2	delta-BHC
4.412	0.004	1602171	4.919	0.001	9423403	19.6526	19.8070	0.8	gamma-BHC (Lindane)
4.839	0.000	1632166	5.371	-0.002	10112385	20.3364	21.4882	5.5	Heptachlor
5.123	-0.001	1518173	5.708	-0.003	8424133	19.2011	18.9816	1.1	Aldrin
5.696	-0.001	1408273	6.266	-0.002	7384487	18.6744	18.6871	0.1	Heptachlor epoxide b
6.073	0.000	1678142	6.654	-0.001	6741791	20.2240	18.3475	9.7	Endosulfan I
6.293	-0.001	2884635	6.910	-0.002	13934953	38.6769	36.3438	6.2	Dieldrin
6.030	0.019	2371616	6.733	0.007	13609458	36.8961	35.6016	3.6	4,4'-DDE
6.512	-0.001	2322419	7.200	-0.002	10471314	37.5891	38.0777	1.3	Endrin
6.722	0.002	2395999	7.392	-0.001	10963348	37.5563	36.4370	3.0	Endosulfan II
6.583	0.016	2371102	7.270	0.007	10839355	38.0202	37.6494	1.0	4,4'-DDD
7.485	0.000	2070761	7.934	-0.002	8213824	37.2608	33.3747	11.0	Endosulfan sulfate
6.832	0.011	2144416	7.553	0.003	8914860	38.0791	36.7483	3.6	4,4'-DDT
7.260	0.009	5088893	8.136	0.001	17652151	183.2731	177.3746	3.3	Methoxychlor
7.738	0.000	2769653	8.420	-0.002	9851222	38.1381	35.6921	6.6	Endrin ketone
7.097	0.001	1909916	7.689	-0.001	8231850	36.7436	35.3118	4.0	Endrin aldehyde
5.822	0.002	1400734	6.453	0.000	7457446	18.4033	18.4947	0.5	gamma-Chlordane
5.943	0.001	1339595	6.589	0.000	6564994	18.6437	17.7800	4.7	alpha-Chlordane
2.196	0.000	2127188	2.363	-0.001	9845570	19.5236	19.7999	1.4	Hexachlorobutadiene
4.017	0.018	1568388	4.460	0.011	11537620	18.0972	18.9492	4.6	Hexachlorobenzene
8.747	-0.007	4415098	10.075	-0.009	14065316	80.0000	80.0000	0.0	Hexabromobiphenyl
3.670	0.010	3108349	4.003	0.007	17972435	37.4283	39.7139	5.9	Tetrachloro-m-xylen
8.588	0.001	2413412	9.531	-0.004	10515317	38.4555	36.6265	4.9	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	93.6	99.3	93.6~	115- 0
Decachlorobiphenyl	96.1	91.6	91.6~	115- 0

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

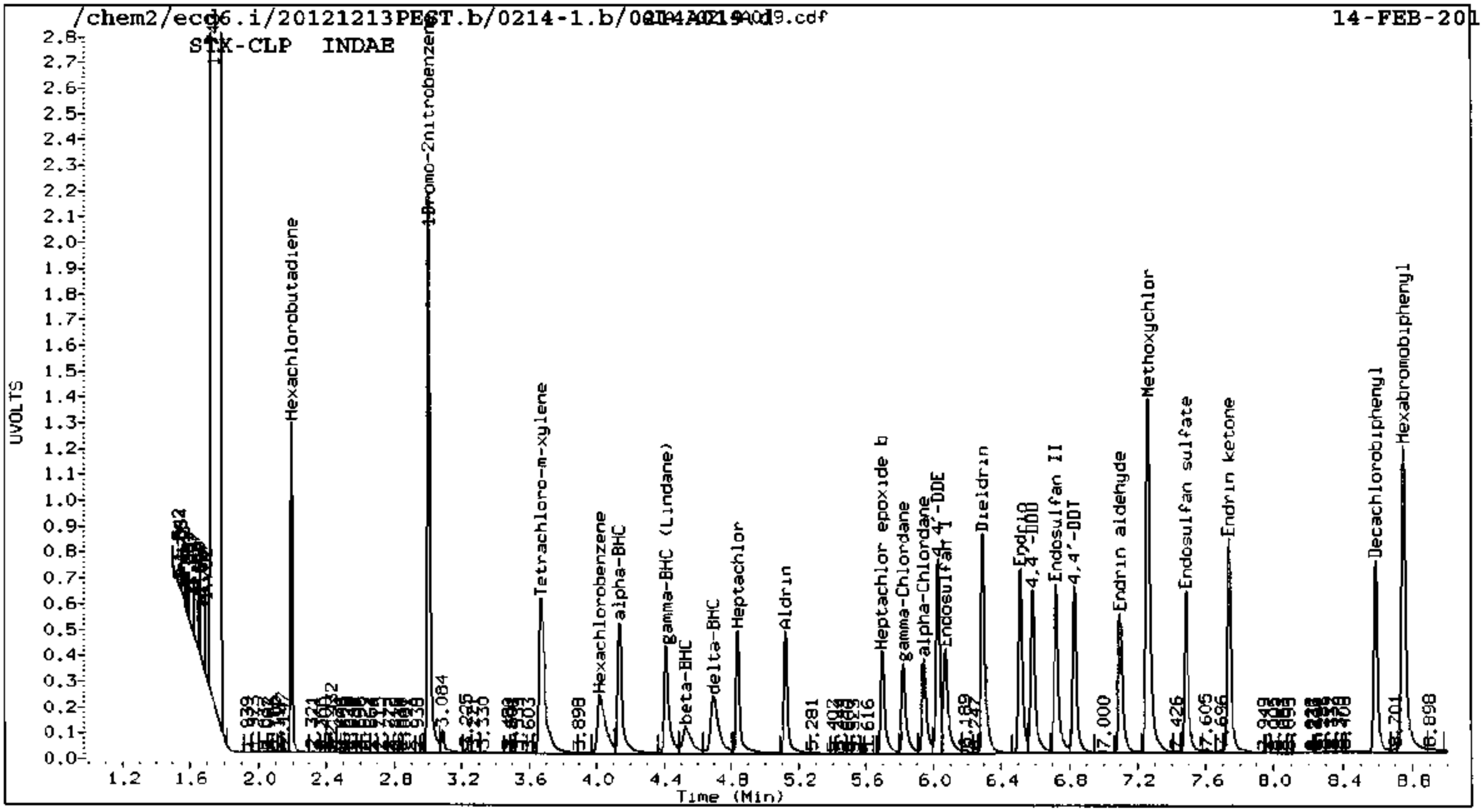
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4288295	4991426	16.4
Hexabromobiphenyl	3547373	4415098	24.5

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	22974785	25970339	13.0
Hexabromobiphenyl	12557398	14065316	12.0

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 13-DEC-2012
<- Indicates standard response outside Limits (-50 to +100%)

	STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount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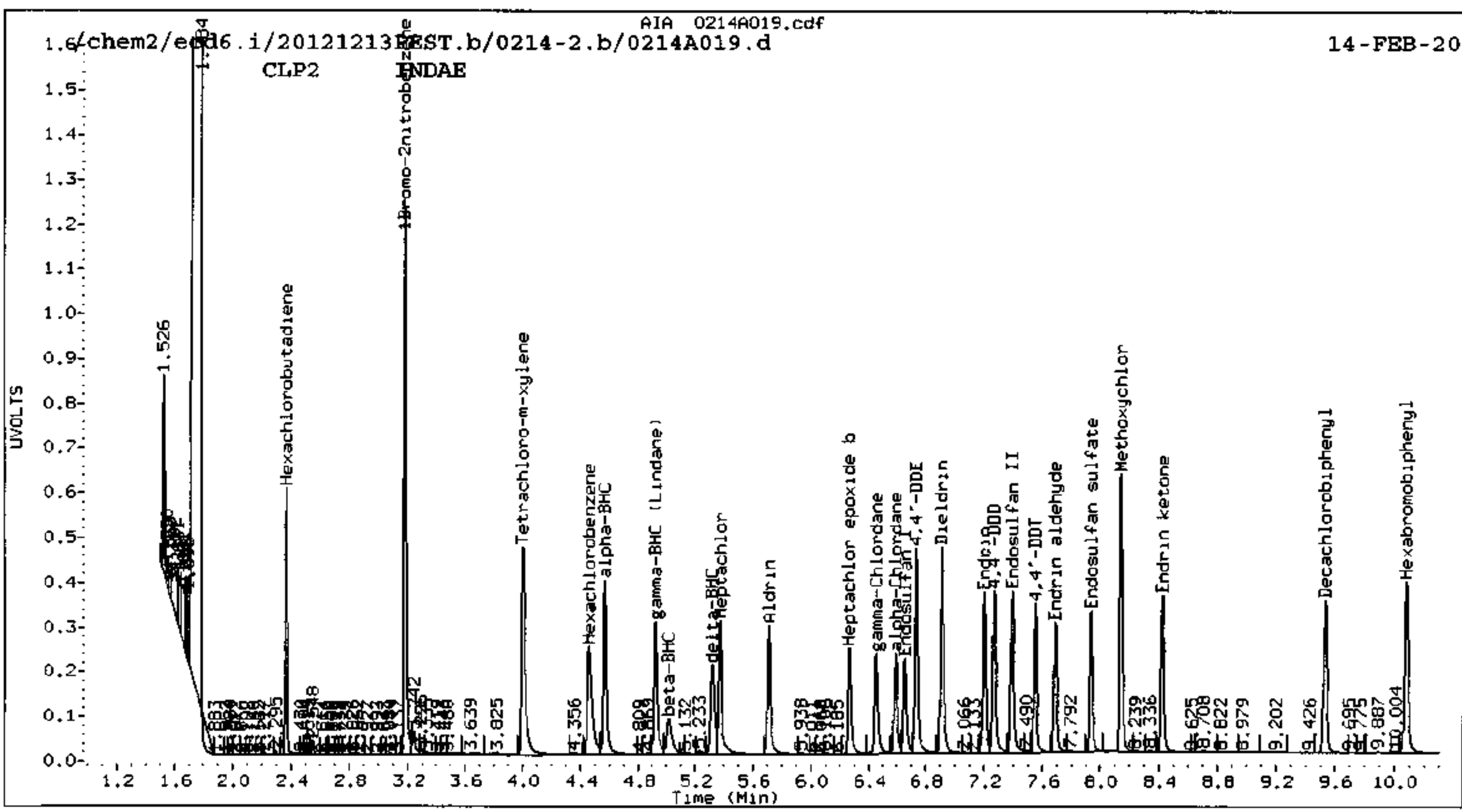
STK-CLP INDAE
UVOLTS
Time (Min)
Hexachlorobutadiene
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide b
gamma-Chlordane
alpha-Chlordane
4,4'-DDE
Endosulfan I
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Methoxychlor
Endosulfan sulfate
Endrin ketone
Decachlorobiphenyl
Hexabromobiphenyl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CLP2 INDAE
UVOLTS
Time (Min)
1.526
Hexachlorobutadiene
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide b
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl
Hexabromobiphenyl

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

YZ 02/15/13

Data file 1: /chem2/ecd6.i/20121213PEST.b/0214-1.b/0214A021.d ARI ID: WC32A
Data file 2: /chem2/ecd6.i/20121213PEST.b/0214-2.b/0214A021.d Client ID: SG-12-0-10-013113
Method: /chem2/ecd6.i/20121213PEST.b/PEST1213.m Injection Date: 14-FEB-2013 17:02
Compound Sublist: wpest Report Date: 02/15/2013 11:09
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: SOIL
Operator: ar Dilution Factor: 5.000

STX-CLP Col RT	Shift	Response	CLP2 Col RT	Shift	Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
2.997	-0.004	4821758	3.179	-0.003	21727211	80.0000	80.0000 IS	0.0	1Bromo-2nitrobenzen
4.105	-0.026	280719	4.564	-0.003	977385	2.9333	2.0516	35.4	alpha-BHC
4.581	0.032	157103	4.996	-0.002	234556	3.9642	1.3293	99.6*	beta-BHC
4.691	-0.024	45357	5.296	-0.007	939615	0.6033	2.7174	127.3*	delta-BHC
4.425	0.017	335753	4.910	-0.007	2955937	4.2633	7.4264	54.1*	gamma-BHC (Lindane)
4.842	0.003	208456	5.356	-0.017	15963	2.6887	0.0405	194.1*	Heptachlor
5.139	0.015	71828	5.730	0.019	527246	0.9404	1.4200	40.6*	Aldrin
5.647	-0.049	607843	6.249	-0.020	941515	8.3439	2.8479	98.2*	Heptachlor epoxide b
6.066	-0.007	41563	6.667	0.011	656213	0.5185	2.1346	121.8*	Endosulfan I
6.266	-0.029	43568	6.891	-0.021	133297	0.6047	0.4155	37.1	Dieldrin
5.999	-0.012	16978	6.718	-0.007	602681	~~0.2734~~	~~1.8845~~	149.3*	4,4'-DDE
6.529	0.016	962514	----			18.0756	0.0000	---	Endrin
6.732	0.011	68897	7.384	-0.009	689706	1.2530	3.0255	82.9*	Endosulfan II
6.582	0.015	10138	7.229	-0.034	808266	~~0.1886~~	~~3.7055~~	180.6*	4,4'-DDD
7.518	0.033	103652	7.892	-0.043	1199052	2.1640	6.4305	99.3*	Endosulfan sulfate
6.853	0.032	48378	7.521	-0.029	481546	~~0.9968~~	~~2.6200~~	89.8*	4,4'-DDT
7.275	0.024	90793	8.112	-0.023	92917	3.7940	1.2323	101.9*	Methoxychlor
7.717	-0.020	148319	8.407	-0.015	183043	2.3697	0.8753	92.1*	Endrin ketone
7.112	0.016	83160	7.684	-0.007	328612	1.8563	1.8605	0.2	Endrin aldehyde
5.782	-0.038	183750	----			2.4991	0.0000	---	gamma-Chlordane
5.915	-0.027	100655	6.590	0.000	194838	1.4502	0.6307	78.8*	alpha-Chlordane
2.170	-0.026	135501	2.336	-0.029	1331202	~~1.2874~~	~~3.1999~~	85.2*	Hexachlorobutadiene
4.010	0.011	555897	4.416	-0.033	3081060	6.6400	6.0485	9.3	Hexachlorobenzene RTs
5.607	0.004	37171	6.160	-0.019	1104316	0.8152	3.8110	129.5*	Oxychlordane
5.739	0.041	143572	6.429	-0.010	9986262	3.5378	46.1184	171.5*	2,4-DDE
5.957	0.028	51295	6.524	-0.015	1582087	0.8669	6.2357	151.2*	trans-Nonachlor
6.202	0.014	80022	6.966	0.038	4437944	2.2799	29.9181	171.7*	2,4-DDD
6.458	0.040	158277	7.195	-0.016	2882708	4.5541	22.1735	131.8*	2,4-DDT
----			7.283	0.018	472454	0.0000	1.7416	---	cis-Nonachlor
7.445	0.034	82771	8.377	-0.031	58628	2.0067	0.4285	129.6*	Mirex
8.720	-0.035	3805183	10.062	-0.022	10656510	80.0000	80.0000	0.0	Hexabromobiphenyl
1.737	0.001	818914	1.704	-0.031	1991059	0.0000	0.0000	---	Hexachloroethane
6.616	0.035	6518	7.332	-0.005	371065	0.0000	0.0000	---	Kepone
3.659	-0.001	1101834	3.989	-0.007	3349767	13.7343	8.8476	43.3*	Tetrachloro-m-xylene
8.577	-0.010	417707	9.526	-0.010	1680390	7.7226	7.7253	0.0	Decachlorobiphenyl

N.A

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	34.3	22.1	22.1~	42-112
Decachlorobiphenyl	19.3	19.3	19.3~	59-123

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4288295	4821758	12.4
Hexabromobiphenyl	3547373	3805183	7.3

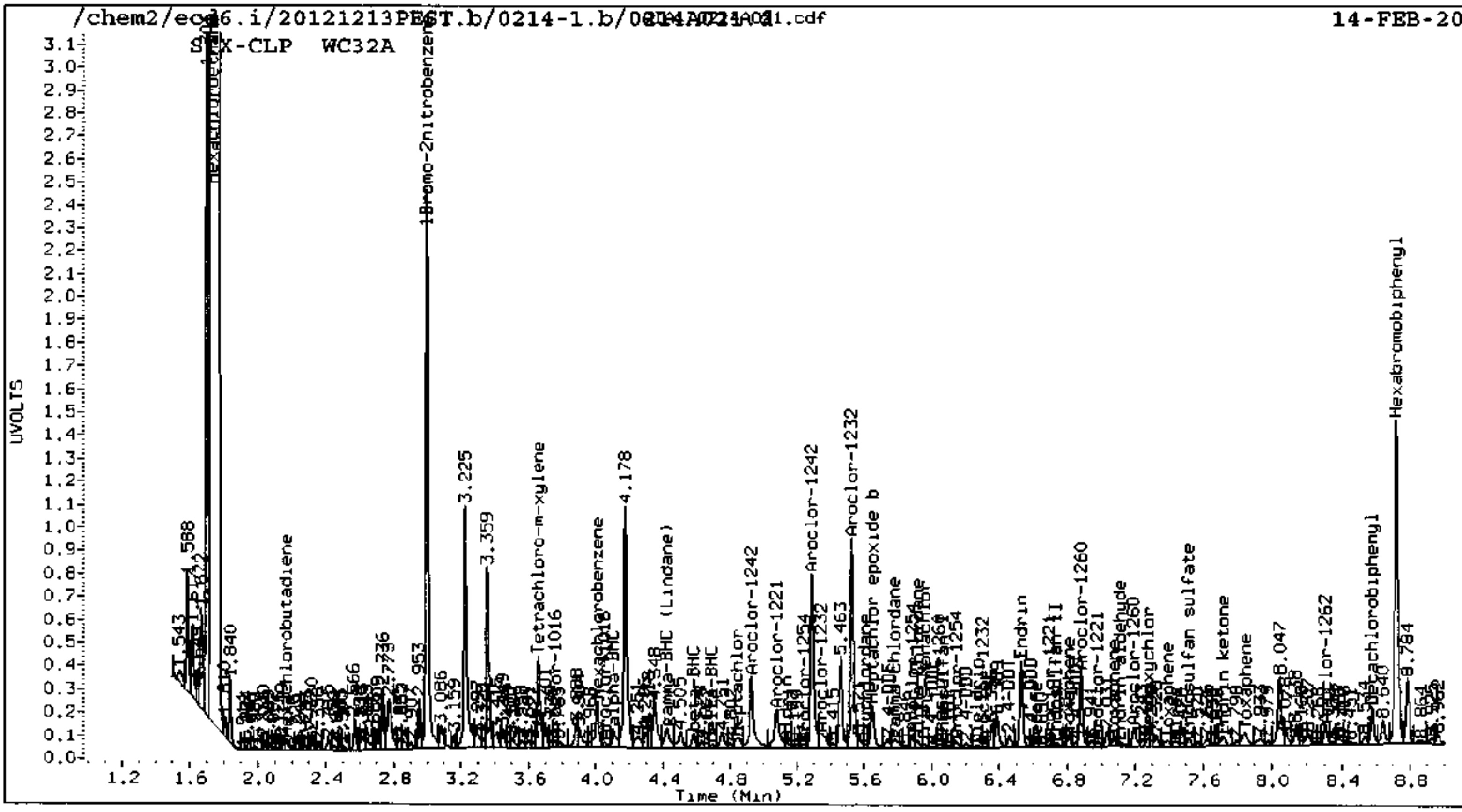
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	22974785	21727211	-5.4
Hexabromobiphenyl	12557398	10656510	-15.1

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 13-DEC-2012
<- Indicates standard response outside Limits (-50 to +100%)

	STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount
Toxaphene	1	6.458	-0.012	158277	122.8	1	7.094	-0.045	1185542	164.6
Toxaphene	2	6.811	-0.013	139433	73.7	2	7.483	0.019	274272	25.9
Toxaphene	3	7.073	-0.006	92802	34.6	3	7.684	-0.012	328612	29.2
Toxaphene	4	7.392	-0.012	106031	42.4	4	8.184	0.022	404554	50.7
Toxaphene	5	7.717	-0.007	148319	79.5	5	8.517	0.009	765877	197.1
Toxaphene	6	7.844	-0.011	259405	231.7	NS	---			----

Total STX-CLPAve (6 peaks): 97.434   Total CLP2Ave (5 peaks): 93.477   RPD = 4
Corrected Ave (5 peaks): 70.589   Corrected Ave (3 peaks): 35.237   RPD = 67*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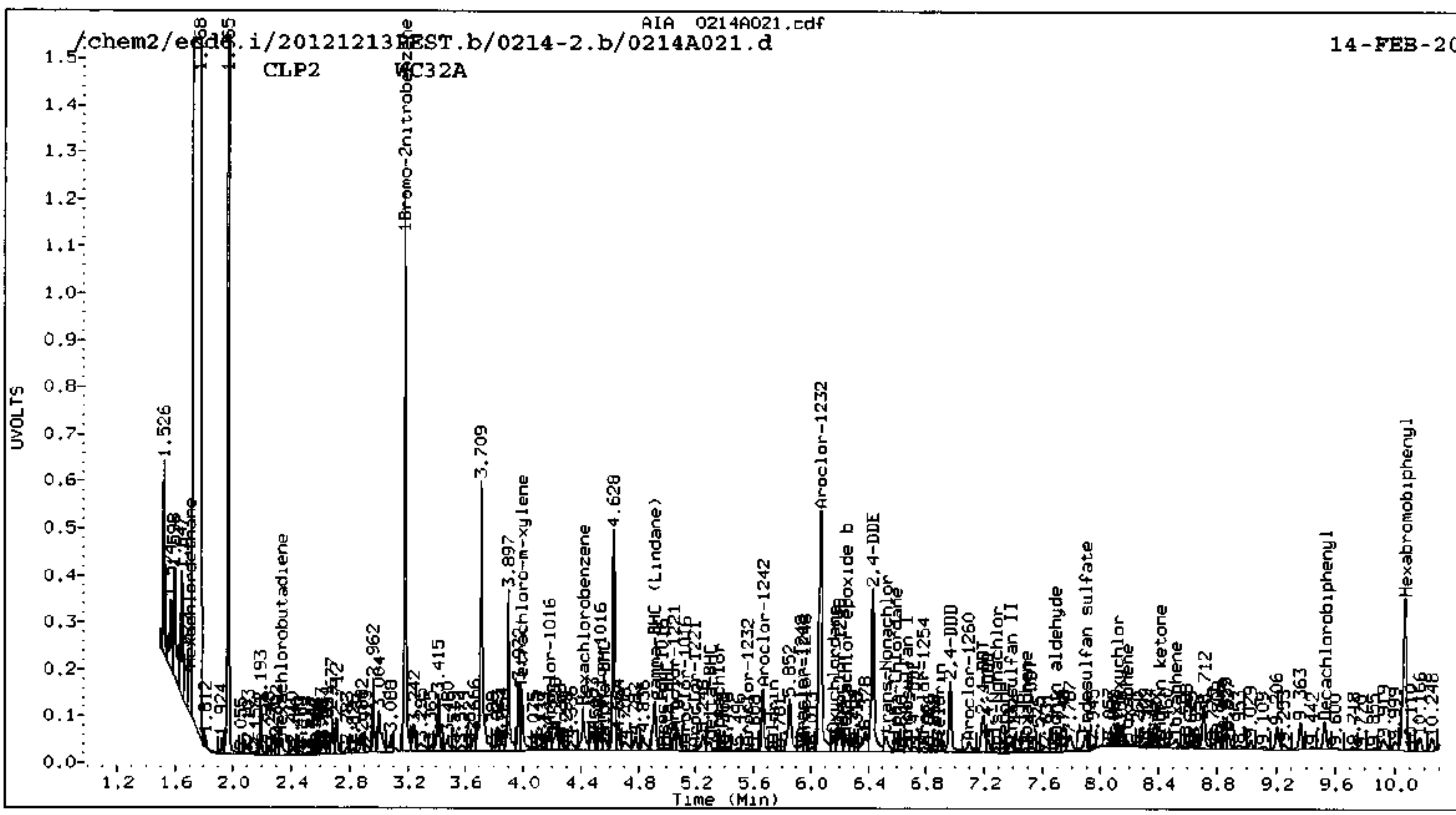
14-FEB-201
WC32A
UVOLTS
Time (Min)
1Bromo-2nitrobenzene
Hexabromobiphenyl
Tetrachloro-m-xylene
Decachlorobiphenyl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14-FEB-201
CLP2
WC32A
UVOLTS
Time (Min)
1Bromo-2nitrobenzene
Aroclor-1232
Hexabromobiphenyl
Decachlorobiphenyl

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

YB 02/15/13

Data file 1: /chem2/ecd6.i/20121213PEST.b/0214-1.b/0214A022.d ARI ID: WC32B
Data file 2: /chem2/ecd6.i/20121213PEST.b/0214-2.b/0214A022.d Client ID: SG-13-0-10-013113
Method: /chem2/ecd6.i/20121213PEST.b/PEST1213.m Injection Date: 14-FEB-2013 17:20
Compound Sublist: wpest Report Date: 02/15/2013 11:33
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: SOIL
Operator: ar Dilution Factor: 5.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
2.997	-0.005	4701565	3.179	-0.004	21700891	80.0000	80.0000 JS	0.0	1Bromo-2nitrobenzen
4.126	-0.005	240005	4.564	-0.003	1110411	2.5720	2.3337	9.7	alpha-BHC
4.572	0.023	51726	5.019	0.021	1499872	1.3386	8.5104	145.6*	beta-BHC
4.702	-0.012	27082	5.300	-0.003	877067	0.3694	2.5396	149.2*	delta-BHC
4.410	0.002	288040	4.911	-0.007	3985362	3.7510	10.0249	91.1*	gamma-BHC (Lindane)
4.853	0.013	25839	5.378	0.004	669051	0.3418	1.7014	133.1*	Heptachlor
5.133	0.009	167812	5.682	-0.029	720032	2.2532	1.9416	14.9	Aldrin
5.688	-0.009	172095	6.247	-0.021	677369	2.4228	2.0514	16.6	Heptachlor epoxide b
6.037	-0.036	29486	6.664	0.009	407199	0.3773	1.3262	111.4*	Endosulfan I
6.275	-0.020	43165	6.907	-0.006	471356	0.6144	1.4712	82.2*	Dieldrin
5.995	-0.015	60734	6.717	-0.008	524738	~~1.0031~~	~~1.6428~~	48.3*	4,4'-DDE
6.529	0.017	327881	----			6.3915	0.0000	---	Endrin
6.729	0.008	20564	7.383	-0.010	785270	0.3882	4.2360	166.4*	Endosulfan II
----			----			~~0.0000~~	~~0.0000~~	---	4,4'-DDD
7.520	0.035	87307	7.891	-0.044	1343755	1.8921	8.8619	129.6*	Endosulfan sulfate
6.843	0.022	21167	7.545	-0.004	630965	~~0.4527~~	~~4.2215~~	161.3*	4,4'-DDT
7.296	0.045	75935	8.129	-0.006	232314	3.2937	3.7888	14.0	Methoxychlor
7.762	0.025	13904	8.424	0.002	260159	0.2306	1.5299	147.6*	Endrin ketone
7.134	0.038	207058	7.678	-0.012	431413	4.7976	3.0036	46.0*	Endrin aldehyde
5.784	-0.036	199799	6.450	-0.003	802876	2.7869	2.3829	15.6	gamma-Chlordane
----			6.587	-0.003	390147	0.0000	1.2645	---	alpha-Chlordane
2.206	0.010	13640	2.350	-0.014	177549	~~0.1329~~	~~0.4273~~	105.1*	Hexachlorobutadiene
3.970	-0.028	274197	4.446	-0.003	663157	~~3.3589~~	~~1.3034~~	88.2*	Hexachlorobenzene
5.645	0.041	147562	6.159	-0.020	1602097	3.3593	5.5355	48.9*	Oxychlordane
5.736	0.037	90938	6.434	-0.005	505113	2.3260	2.3355	0.4	2,4-DDE
5.953	0.024	35373	6.523	-0.016	1049086	0.6205	5.0847	156.5*	trans-Nonachlor
6.195	0.006	83964	6.964	0.035	1071318	2.4832	8.8812	112.6*	2,4-DDD
6.457	0.039	59373	7.192	-0.019	2247108	1.7733	21.2548	169.2*	2,4-DDT
----			7.282	0.017	166173	0.0000	0.7533	---	cis-Nonachlor
7.433	0.022	57984	8.373	-0.035	1482293	1.4592	13.3217	160.5*	Mirex
8.719	-0.035	3665842	10.062	-0.022	8665956	80.0000	80.0000 JS	0.0	Hexabromobiphenyl M
1.737	0.000	827164	1.768	0.033	158197328	0.0000	0.0000	---	Hexachloroethane
6.615	0.034	105805	7.325	-0.011	226515	0.0000	0.0000	---	Kepone
3.656	-0.004	967853	3.989	-0.007	2618993	12.3726	6.9258	56.4*	Tetrachloro-m-xylene
8.576	-0.011	412907	9.525	-0.010	1323807	7.9240	7.4840	5.7	Decachlorobiphenyl

NR

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	30.9	17.3	17.3~	42-112
Decachlorobiphenyl	19.8	18.7	18.7~	59-123

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4288295	4701565	9.6
Hexabromobiphenyl	3547373	3665842	3.3

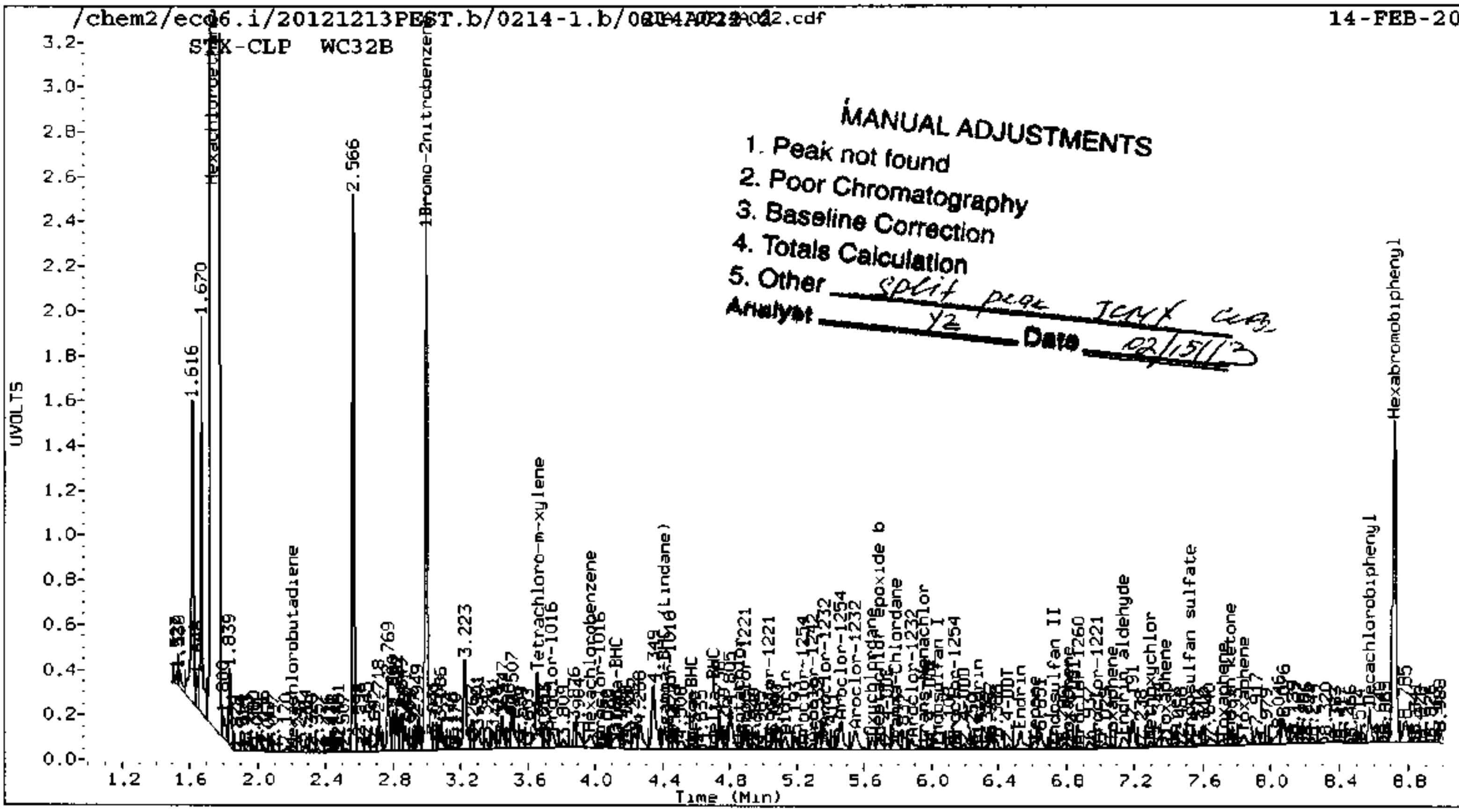
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	22974785	21700891	-5.5
Hexabromobiphenyl	12557398	8665956	-31.0

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 13-DEC-2012
<- Indicates standard response outside Limits (-50 to +100%)

	STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount
Toxaphene	1	6.457	-0.013	59373	47.8	1	7.123	-0.016	542537	92.6
Toxaphene	2	6.810	-0.013	56514	31.0	2	7.455	-0.009	332052	38.5
Toxaphene	3	7.072	-0.007	41117	15.9	3	7.678	-0.018	431413	47.1
Toxaphene	4	7.377	-0.027	150000	62.2	4	8.179	0.017	264446	40.7
Toxaphene	5	7.716	-0.008	102702	57.1	5	8.520	0.013	485993	153.8
Toxaphene	6	7.840	-0.014	174318	161.6	NS	---			----

Total STX-CLPAve (6 peaks): 62.614 Total CLP2Ave (5 peaks): 74.550 RPD = 17
Corrected Ave (5 peaks): 42.819 Corrected Ave (4 peaks): 54.743 RPD = 24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STX-CLP WC32B
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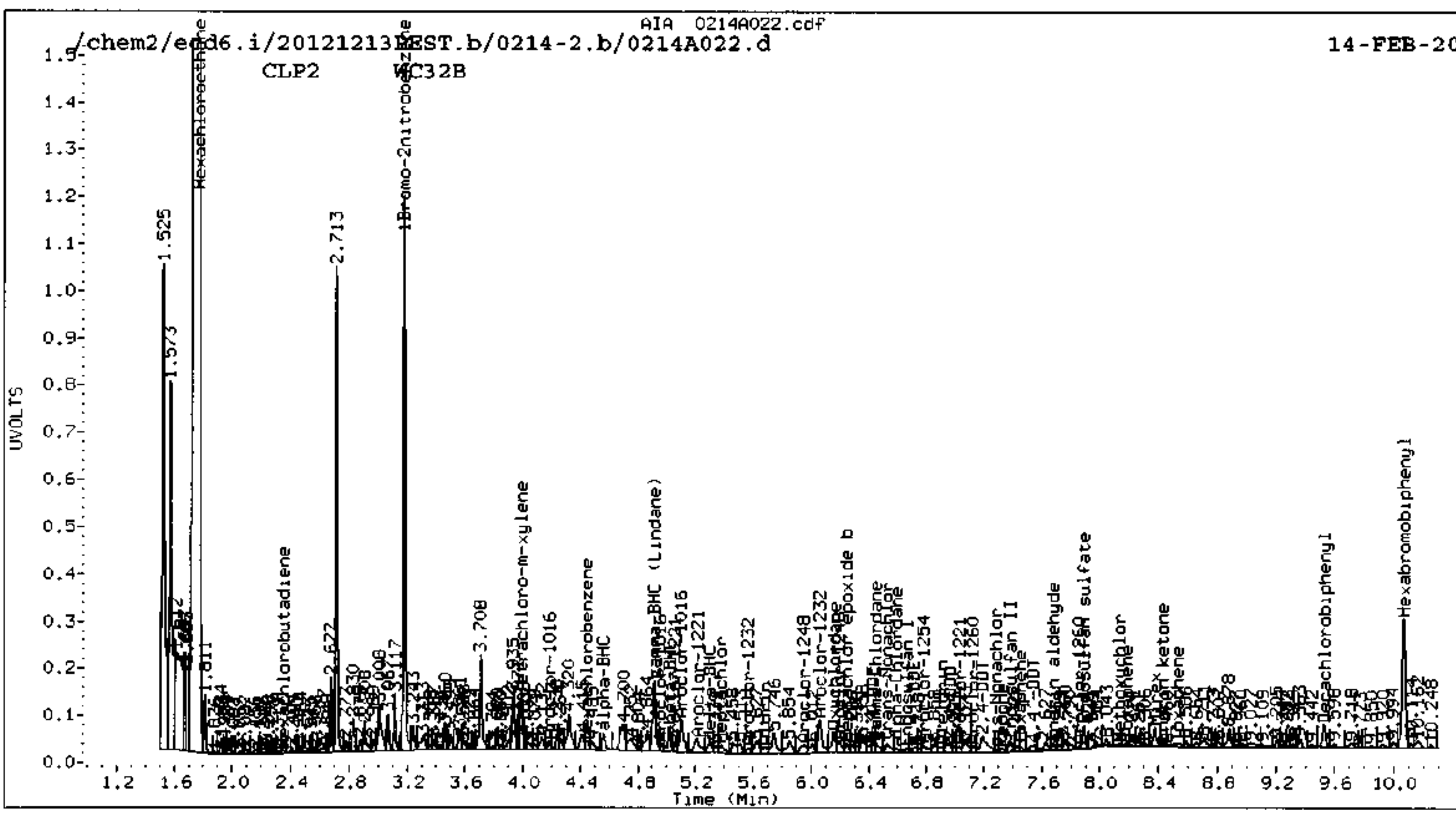
2. Poor Chromatography
3. Baseline Correction
4. Totals Calculation
5. Other split peak TCMX
Analyst Date 02/15/1
UVOLTS
Time (Min)
Hexabromobiphenyl
Decachlorobiphenyl
Tetrachloro-m-xylene
Hexachlorobutadiene
1Bromo-2nitrobenzene
2.566
1.670
1.616
3.223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14-FEB-201
CLP2 WC32B
UVOLTS
Time (Min)
Hexachloroethane
1Bromo-2nitrobenzene
Hexachlorobutadiene
Tetrachloro-m-xylene
Hexabromobiphenyl
Decachlorobiphenyl
1.525
1.573
2.713
3.708

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /chem2/ecd6.i/20121213PEST.b/0214-1.b/0214A023.d ARI ID: WC32C
Data file 2: /chem2/ecd6.i/20121213PEST.b/0214-2.b/0214A023.d Client ID: SG-07-0-10-013113
Method: /chem2/ecd6.i/20121213PEST.b/PEST1213.m Injection Date: 14-FEB-2013 17:38
Compound Sublist: wpest Report Date: 02/15/2013 11:09
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: SOIL
Operator: ar Dilution Factor: 5.000

STX-CLP Col RT	STX-CLP Col Shift	STX-CLP Col Response	CLP2 Col RT	CLP2 Col Shift	CLP2 Col Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
2.998	-0.004	4609647	3.180	-0.003	21079687	80.0000	80.0000 IS	0.0	1Bromo-2nitrobenzen
4.137	0.006	97838	4.563	-0.005	172575	1.0694	0.3734	96.5*	alpha-BHC
4.574	0.024	14982	5.003	0.005	78765	0.3954	0.4601	15.1	beta-BHC
4.702	-0.013	5105	5.285	-0.019	102180	0.0710	0.3046	124.4*	delta-BHC
4.407	-0.002	21228	4.904	-0.014	475423	0.2820	1.2311	125.5*	gamma-BHC (Lindane)
4.815	-0.024	52600	5.373	-0.001	175096	0.7097	0.4584	43.0*	Heptachlor
5.141	0.017	43237	5.728	0.017	115349	0.5921	0.3202	59.6*	Aldrin
5.688	-0.008	79458	6.246	-0.023	295462	1.1409	0.9212	21.3	Heptachlor epoxide b
6.036	-0.037	15709	6.670	0.015	81127	0.2050	0.2720	28.1	Endosulfan I
6.274	-0.020	39865	6.889	-0.024	257637	0.5788	0.8278	35.4	Dieldrin
5.995	-0.016	41470	6.716	-0.009	91651	~~0.6986~~	~~0.2954~~	81.1*	4,4'-DDE
6.526	0.014	116620	7.160	-0.042	64008	2.3520	0.3447	148.9*	Endrin
6.692	-0.029	4409	7.373	-0.020	328447	0.0861	1.6168	179.8*	Endosulfan II
----			7.235	-0.027	993603	~~0.0000~~	~~5.1116~~	---	4,4'-DDD
7.481	-0.004	26018	7.892	-0.044	1314886	0.5834	7.9132	172.5*	Endosulfan sulfate
6.819	-0.002	67117	7.532	-0.018	127000	~~1.4851~~	~~0.7754~~	62.8*	4,4'-DDT
7.245	-0.006	14762	8.103	-0.032	131097	0.6625	1.9511	98.6*	Methoxychlor
7.743	0.006	38626	8.421	-0.001	270549	0.6627	1.4518	74.6*	Endrin ketone
7.112	0.016	22243	7.677	-0.013	248036	0.5332	1.5759	98.9*	Endrin aldehyde
5.805	-0.015	18850	6.453	0.000	94240	0.2682	0.2879	7.1	gamma-Chlordane
5.955	0.013	19508	6.591	0.001	153904	0.2940	0.5135	54.4*	alpha-Chlordane
2.210	0.013	12409	2.336	-0.029	332498	~~0.1233~~	~~0.8238~~	147.9*	Hexachlorobutadiene
3.971	-0.028	141869	4.452	0.003	64332	~~1.7726~~	~~0.1302~~	172.6*	Hexachlorobenzene
5.646	0.043	25009	6.159	-0.020	1093629	0.5890	3.8900	147.4*	Oxychlordane
5.732	0.033	70291	6.415	-0.024	316847	1.8601	1.5082	20.9	2,4-DDE
5.884	-0.046	169671	6.523	-0.016	669814	3.0794	2.9625	3.9	trans-Nonachlor
6.195	0.006	111279	6.950	0.022	198266	3.4048	1.4999	77.7*	2,4-DDD
6.415	-0.003	8833	7.192	-0.019	342542	0.2729	2.9567	166.2*	2,4-DDT
----			----			0.0000	0.0000	---	cis-Nonachlor
7.429	0.018	34578	8.378	-0.029	95145	0.9003	0.7803	14.3	Mirex
8.719	-0.035	3543282	10.060	-0.024	9496393	80.0000	80.0000 IS	0.0	Hexabromobiphenyl
1.737	0.001	1156633	1.774	0.039	169718844	0.0000	0.0000	---	Hexachloroethane
6.576	-0.005	19115	7.304	-0.032	229638	0.0000	0.0000	---	Kepone
3.654	-0.006	520119	3.991	-0.005	2465862	6.7816	6.7130	1.0	Tetrachloro-m-xylene
8.577	-0.010	400334	9.525	-0.010	1439499	7.9485	7.4263	6.8	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	17.0	16.8	16.8~	42-112
Decachlorobiphenyl	19.9	18.6	18.6~	59-123

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4288295	4609647	7.5
Hexabromobiphenyl	3547373	3543282	-0.1

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	22974785	21079687	-8.2
Hexabromobiphenyl	12557398	9496393	-24.4

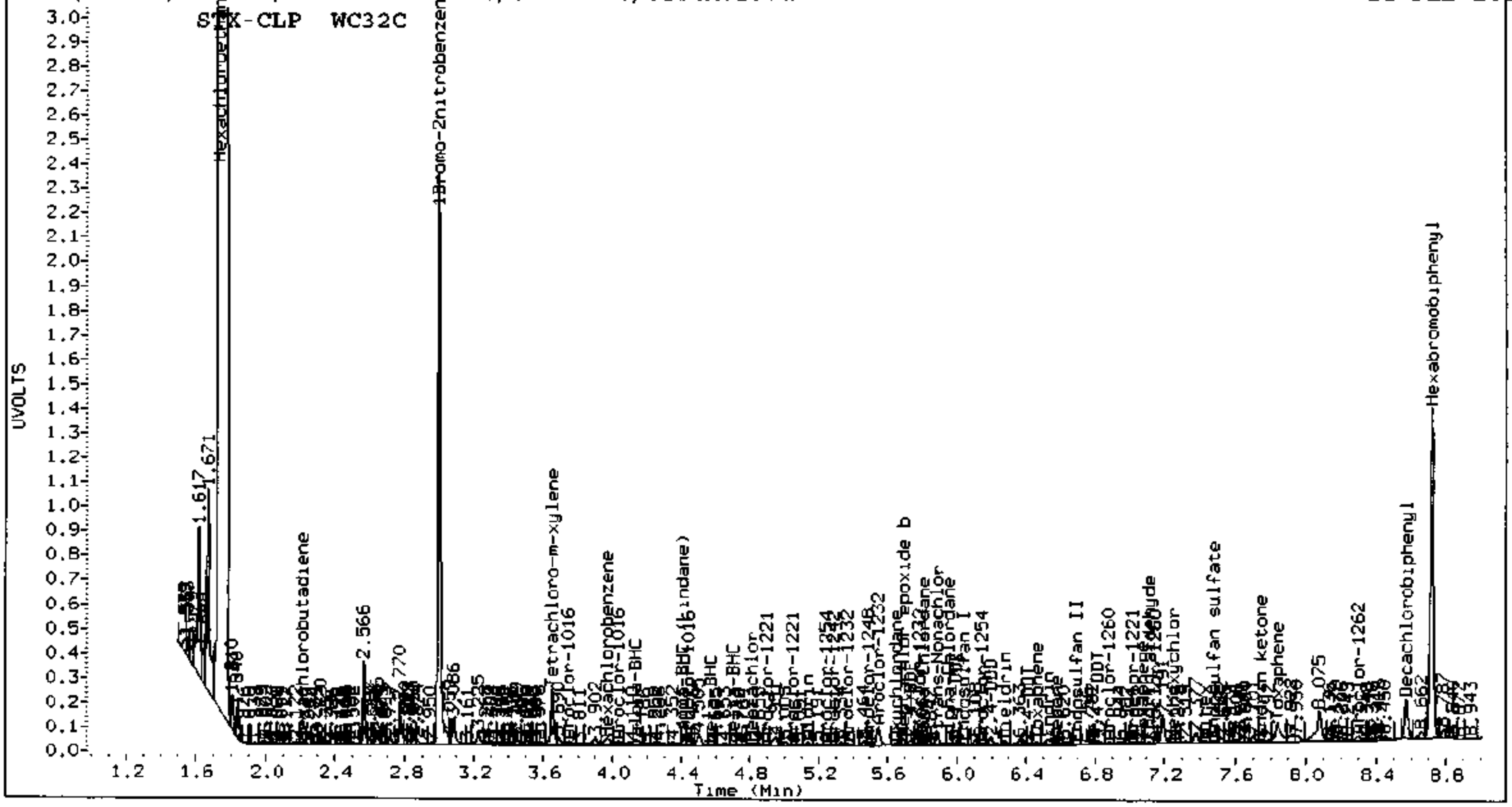
* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 13-DEC-2012
<- Indicates standard response outside Limits (-50 to +100%)

		STX-CLP Col					CLP2 Col			
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount
Toxaphene	1	6.460	-0.010	33539	27.9	1	7.125	-0.013	263272	41.0
Toxaphene	2	6.819	-0.004	67117	38.1	2	7.431	-0.033	287010	30.4
Toxaphene	3	7.073	-0.006	14912	6.0	3	7.677	-0.018	248036	24.7
Toxaphene	4	7.429	0.026	34578	14.8	4	8.179	0.017	290951	40.9
Toxaphene	5	7.743	0.019	38626	22.2	5	8.497	-0.011	70584	20.4
Toxaphene	6	7.841	-0.013	357040	342.4	NS	---			----

Total STX-CLPAve (6 peaks): 75.248 Total CLP2Ave (5 peaks): 31.475 RPD = 82*
Corrected Ave (5 peaks): 21.814 Corrected Ave (5 peaks): 31.475 RPD = 36

/chem2/ecd6.i/20121213PEST.b/0214-1.b/0214A023.d 14-FEB-201

STX-CLP WC32C



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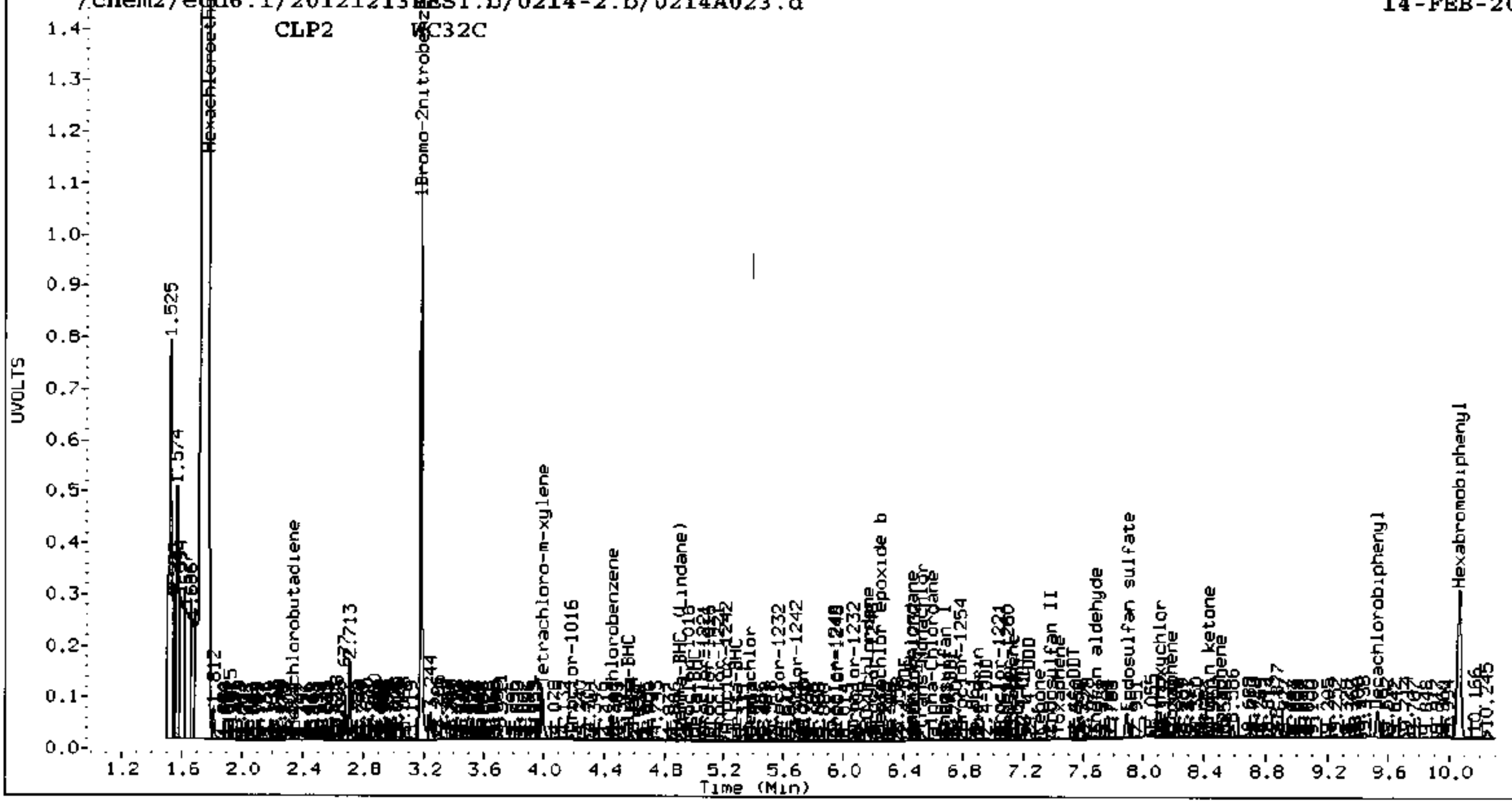
CLP2 WC32C



Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

YZ 02/15/13

Data file 1: /chem2/ecd6.i/20121213PEST.b/0214-1.b/0214A024.d ARI ID: WC32D
Data file 2: /chem2/ecd6.i/20121213PEST.b/0214-2.b/0214A024.d Client ID: SG-06-0-10-013113
Method: /chem2/ecd6.i/20121213PEST.b/PEST1213.m Injection Date: 14-FEB-2013 17:55
Compound Sublist: wpest Report Date: 02/15/2013 11:09
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: SOIL
Operator: ar Dilution Factor: 5.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
2.997	-0.005	4503775	3.180	-0.003	32220773	80.0000	80.0000 IS	0.0	1Bromo-2nitrobenzen
4.111	-0.020	138527	4.559	-0.008	706074	1.5497	0.9994	43.2*	alpha-BHC
4.571	0.022	23125	4.992	-0.006	161097	0.6247	0.6156	1.5	beta-BHC
4.702	-0.013	12482	5.301	-0.003	518544	0.1778	1.0112	140.2*	delta-BHC
4.409	0.001	72333	4.904	-0.013	1673028	0.9833	2.8344	97.0*	gamma-BHC (Lindane)
4.852	0.013	15226	5.370	-0.004	984985	0.2103	1.6870	155.7*	Heptachlor
5.135	0.011	79167	5.724	0.013	12600202	1.1097	22.8837	181.5*	Aldrin
5.686	-0.011	133282	6.242	-0.026	565748	1.9588	1.1539	51.7*	Heptachlor epoxide b
6.074	0.001	4692	6.666	0.011	51129	0.0627	0.1122	56.6*	Endosulfan I
6.274	-0.021	57904	----			0.8604	0.0000	---	Dieldrin
5.996	-0.015	102078	6.715	-0.010	205396	~~1.7600~~	~~0.4331~~	121.0*	4,4'-DDE
6.523	0.010	240543	----			4.5877	0.0000	---	Endrin
6.740	0.019	17087	7.376	-0.017	813598	0.3156	4.2766	172.5*	Endosulfan II
----			7.219	-0.043	744606	~~0.0000~~	~~4.0905~~	---	4,4'-DDD
7.519	0.034	603842	7.890	-0.045	8434779	12.8034	54.2048	123.6*	Endosulfan sulfate
6.819	-0.002	229734	7.548	-0.001	723112	$\boxed{4.8071}$	4.7143 J	1.9	4,4'-DDT
7.273	0.022	60835	8.104	-0.031	203667	2.5817	3.2367	22.5	Methoxychlor
7.787	0.050	141990	8.425	0.003	783710	2.3039	4.4909	64.4*	Endrin ketone
7.111	0.015	41468	7.729	0.039	638444	0.9401	4.3315	128.7*	Endrin aldehyde
5.836	0.016	2315	6.449	-0.004	295075	0.0337	0.5898	178.4*	gamma-Chlordane
----			----			0.0000	0.0000	---	alpha-Chlordane
2.207	0.011	12608	2.377	0.013	113614	~~0.1282~~	~~0.1842~~	35.8	Hexachlorobutadiene
3.981	-0.018	32821	4.415	-0.034	844883	~~0.4197~~	~~1.1184~~	90.9*	Hexachlorobenzene
5.641	0.038	39319	6.156	-0.023	6011963	0.8758	13.9902	176.4*	Oxychlordane
5.711	0.012	104834	6.416	-0.023	485541	2.6235	1.5120	53.8*	2,4-DDE
5.953	0.023	54391	6.524	-0.015	3917312	0.9335	18.5011	180.8*	trans-Nonachlor
6.190	0.001	586588	6.942	0.014	282946	16.9730	2.2857	152.5*	2,4-DDD
6.458	0.040	124957	7.191	-0.020	1000882	3.6514	9.2252	86.6*	2,4-DDT
6.505	-0.040	129531	7.253	-0.012	168413	2.0295	0.7439	92.7*	cis-Nonachlor
7.426	0.015	138989	----			3.4222	0.0000	---	Mirex
8.719	-0.036	3746808	10.061	-0.023	8893181	80.0000	80.0000 IS	0.0	Hexabromobiphenyl M
1.737	0.001	683259	1.764	0.029	146816041	0.0000	0.0000	---	Hexachloroethane
6.609	0.028	145430	7.324	-0.013	85261	0.0000	0.0000	---	Kepone
3.654	-0.007	567064	3.990	-0.006	2831689	7.5675	5.0434	40.0*	Tetrachloro-m-xylene
8.575	-0.012	738073	9.528	-0.007	1382491	13.8582	7.6160	58.1*	Decachlorobiphenyl

AR

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	18.9	12.6	12.6~	42-112
Decachlorobiphenyl	34.6	19.0	19.0~	59-123

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4288295	4503775	5.0
Hexabromobiphenyl	3547373	3746808	5.6

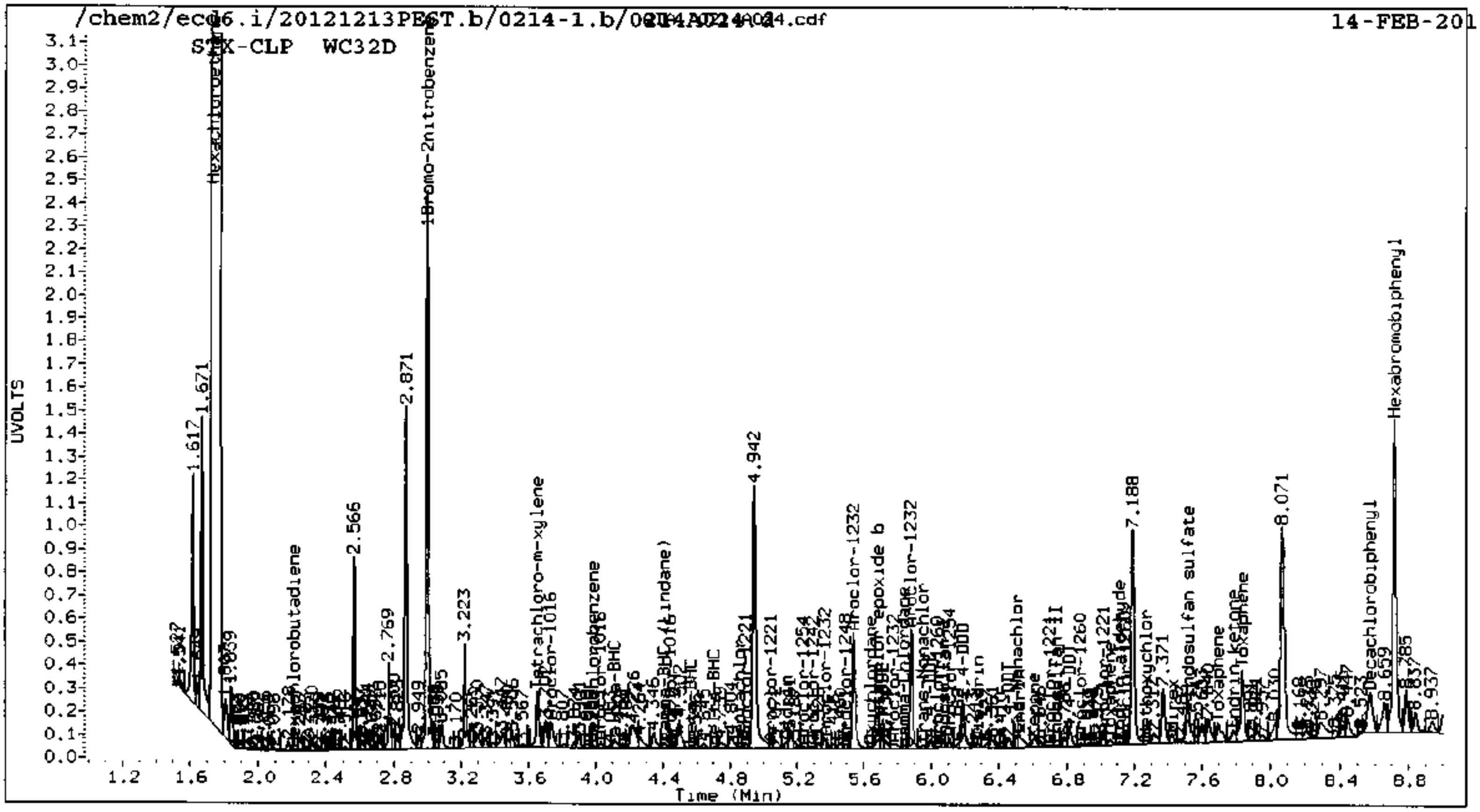
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	22974785	32220773	40.2
Hexabromobiphenyl	12557398	8893181	-29.2

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 13-DEC-2012
<- Indicates standard response outside Limits (-50 to +100%)

		STX-CLP Col						CLP2 Col		
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount
Toxaphene	1	6.458	-0.012	124957	98.5	1	7.124	-0.014	1209182	201.2
Toxaphene	2	6.819	-0.004	229734	123.3	2	7.460	-0.004	120169	13.6
Toxaphene	3	7.056	-0.023	94278	35.7	3	7.729	0.034	638444	68.0
Toxaphene	4	7.426	0.022	138989	56.4	4	8.177	0.015	2028798	304.4
Toxaphene	5	7.697	-0.027	306769	167.0	5	8.495	-0.012	295579	91.1
Toxaphene	6	7.838	-0.016	1025760	930.3	NS	---			----

Total STX-CLPAve (6 peaks): 235.190   Total CLP2Ave (5 peaks): 135.654   RPD = 54*
Corrected Ave (5 peaks): 96.166   Corrected Ave (4 peaks): 93.461   RPD = 3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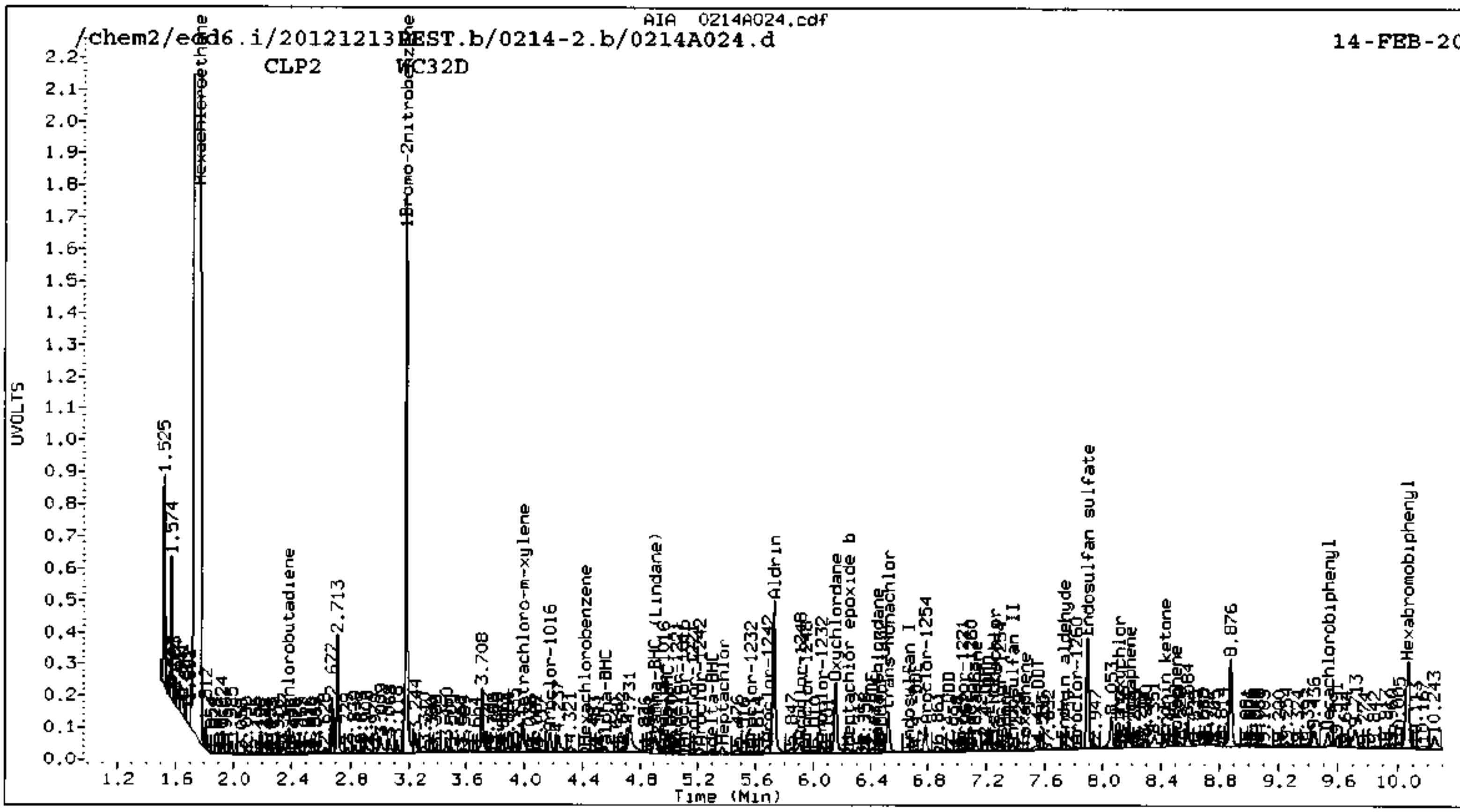
14-FEB-201
STX-CLP WC32D
UVOLTS
Time (Min)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14-FEB-201
CLP2 WC32D
UVOLTS
Time (Min)

WC32 01705

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

YE 02/15/13

Data file 1: /chem2/ecd6.i/20121213PEST.b/0214-1.b/0214A025.d ARI ID: WC32E
Data file 2: /chem2/ecd6.i/20121213PEST.b/0214-2.b/0214A025.d Client ID: SG-05-0-10-013113
Method: /chem2/ecd6.i/20121213PEST.b/PEST1213.m Injection Date: 14-FEB-2013 18:13
Compound Sublist: wpest Report Date: 02/15/2013 11:09
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: SOIL
Operator: ar Dilution Factor: 1.000

STX-CLP Col RT	Shift	Response	CLP2 Col RT	Shift	Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
2.997	-0.004	4191044	3.179	-0.003	19904216	80.0000	80.0000 IS	0.0	1Bromo-2nitrobenzen
4.127	-0.004	1320693	4.547	-0.020	445117	15.8772	1.0199	175.9*	alpha-BHC
4.566	0.016	663984	5.005	0.007	210311	19.2756	1.3010	174.7*	beta-BHC
4.700	-0.014	48724	5.269	-0.034	163126	0.7457	0.5150	36.6	delta-BHC
4.428	0.020	166329	4.950	0.032	2108258	2.4299	5.7819	81.6*	gamma-BHC (Lindane)
4.798	-0.042	174780	5.370	-0.004	231910	2.5936	0.6430	120.5*	Heptachlor
5.095	-0.029	5767	5.704	-0.008	1647184	0.0869	4.8426	193.0*	Aldrin
5.711	0.015	121830	6.258	-0.011	742809	1.9241	2.4526	24.2	Heptachlor epoxide b
6.033	-0.040	19333	6.674	0.018	290311	0.2775	1.0309	115.2*	Endosulfan I
6.274	-0.020	39371	6.898	-0.015	457869	0.6287	1.5581	85.0*	Dieldrin
5.995	-0.016	41144	6.712	-0.013	593955	~~0.7623~~	~~2.0273~~	90.7*	4,4'-DDE
6.467	-0.045	12310	7.161	-0.041	88351	0.2626	0.5064	63.4*	Endrin
6.693	-0.028	1744	7.368	-0.025	303600	0.0360	1.5906	191.1*	Endosulfan II
----			7.219	-0.043	248509	~~0.0000~~	~~1.3607~~	---	4,4'-DDD
7.473	-0.012	23233	7.891	-0.044	1338008	0.5509	8.5700	175.8*	Endosulfan sulfate
6.787	-0.034	57327	7.530	-0.019	392104	~~1.3415~~	~~2.5478~~	62.0*	4,4'-DDT
7.282	0.031	32562	8.106	-0.029	120857	1.5454	1.9143	21.3	Methoxychlor
7.703	-0.034	221103	8.419	-0.003	464440	4.0123	2.6525	40.8*	Endrin ketone
7.082	-0.014	5454	7.677	-0.013	314638	0.1383	2.1276	175.6*	Endrin aldehyde
5.809	-0.010	147763	6.453	0.000	96977	2.3121	0.3138	152.2*	gamma-Chlordane
5.933	-0.009	14824	----			0.2457	0.0000	---	alpha-Chlordane
2.179	-0.018	42497	2.374	0.010	207579	~~0.4645~~	~~0.5447~~	15.9	Hexachlorobutadiene
3.986	-0.013	74583	4.417	-0.032	7256677	~~1.0249~~	~~15.5505~~	175.3*	Hexachlorobenzene
5.591	-0.012	25327	6.179	-0.001	1388293	0.6309	5.2298	156.9*	Oxychlordane
5.653	-0.046	40718	6.415	-0.024	195431	1.1396	0.9852	14.5	2,4-DDE
5.881	-0.049	206770	6.524	-0.015	759232	3.9689	3.5739	10.5	trans-Nonachlor
6.176	-0.013	69605	----			2.2524	0.0000	---	2,4-DDD
6.407	-0.011	25151	7.195	-0.016	119211	0.8219	1.0951	28.5	2,4-DDT
6.527	-0.018	64946	7.253	-0.012	114542	1.1380	0.5043	77.2*	cis-Nonachlor
7.377	-0.034	103663	8.385	-0.023	508205	2.8545	4.4359	43.4*	Mirex
8.720	-0.035	3350270	10.062	-0.022	8922781	80.0000	80.0000 IS	0.0	Hexabromobiphenyl
1.738	0.001	1330337	1.773	0.039	167930820	0.0000	0.0000	---	Hexachloroethane
6.580	-0.001	265137	7.316	-0.020	84883	0.0000	0.0000	---	Kepone
3.654	-0.007	2123694	3.991	-0.005	10474025	30.4554	30.1983	0.8	Tetrachloro-m-xylen
8.578	-0.009	1720539	9.526	-0.009	6458541	36.1287	35.4615	1.9	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	76.1	75.5	75.5	42-112
Decachlorobiphenyl	90.3	88.7	88.7	59-123

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4288295	4191044	-2.3
Hexabromobiphenyl	3547373	3350270	-5.6

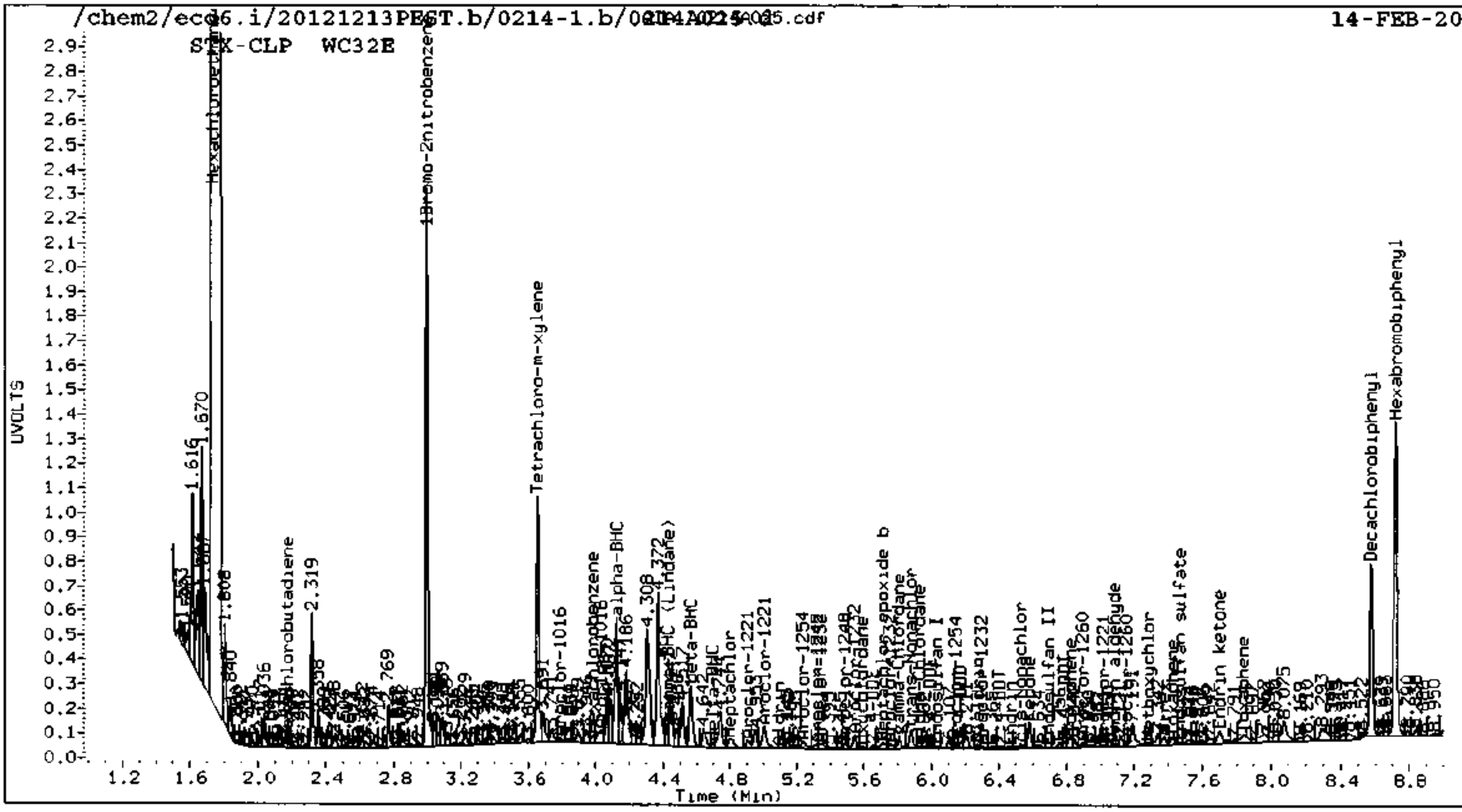
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	22974785	19904216	-13.4
Hexabromobiphenyl	12557398	8922781	-28.9

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 13-DEC-2012
<- Indicates standard response outside Limits (-50 to +100%)

		STX-CLP Col					CLP2 Col			
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount
Toxaphene	1	6.467	-0.003	12310	10.8	1	7.127	-0.012	190944	31.7
Toxaphene	2	6.821	-0.002	130165	78.1	2	7.467	0.003	132453	14.9
Toxaphene	3	7.082	0.003	5454	2.3	3	7.677	-0.019	314638	33.4
Toxaphene	4	7.428	0.025	87941	39.9	4	8.179	0.017	419423	62.7
Toxaphene	5	7.703	-0.020	221103	134.6	5	8.505	-0.002	487784	149.9
Toxaphene	6	7.843	-0.012	202614	205.5	NS	---			----

Total STX-CLPAve (6 peaks): 78.550 Total CLP2Ave (5 peaks): 58.517 RPD = 29
Corrected Ave (4 peaks): 32.796 Corrected Ave (4 peaks): 35.671 RPD = 8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UVOLTS
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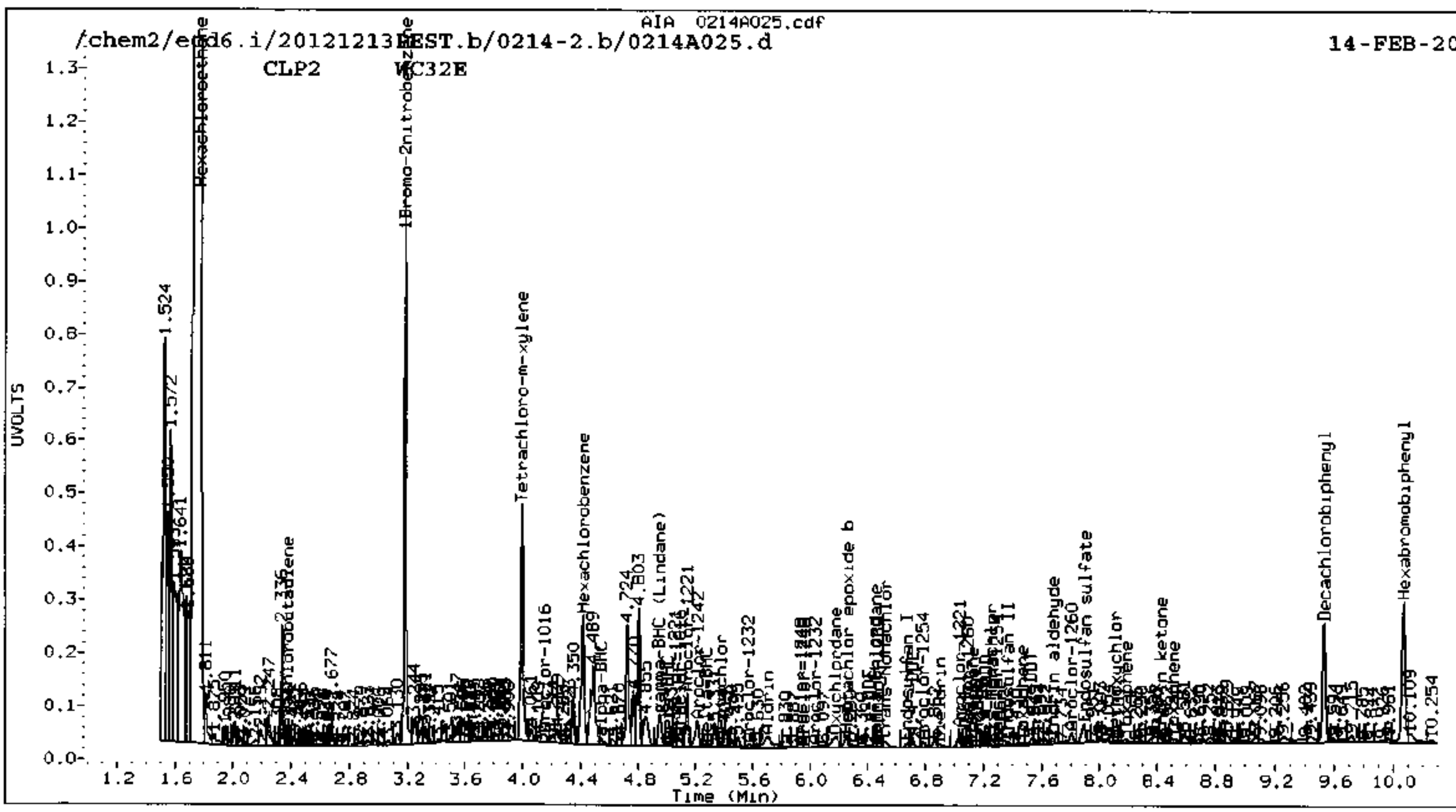
Tetrachloro-m-xylene
Decachlorobiphenyl
Hexabromobiphenyl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CLP2 WC32E
UVOLTS
Time (Min)
Hexachloroethane
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Hexachlorobenzene
Decachlorobiphenyl
Hexabromobiphenyl

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

YZ 02/15/13

Data file 1: /chem2/ecd6.i/20121213PEST.b/0214-1.b/0214A026.d ARI ID: WC32F
Data file 2: /chem2/ecd6.i/20121213PEST.b/0214-2.b/0214A026.d Client ID: SG-95-0-10-013113
Method: /chem2/ecd6.i/20121213PEST.b/PEST1213.m Injection Date: 14-FEB-2013 18:31
Compound Sublist: wpest Report Date: 02/15/2013 11:09
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: SOIL
Operator: ar Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
2.997	-0.004	4521256	3.180	-0.003	21525791	80.0000	80.0000 IS	0.0	1Bromo-2nitrobenzen
4.127	-0.004	1467055	4.549	-0.018	439616	16.3487	0.9314	178.4*	alpha-BHC
4.566	0.017	612920	5.006	0.008	146299	16.4936	0.8369	180.7*	beta-BHC
4.701	-0.014	89729	5.268	-0.035	178704	1.2729	0.5217	83.7*	delta-BHC
4.373	-0.035	1569643	4.951	0.033	1833985	21.2558	4.6508	128.2*	gamma-BHC (Lindane)
4.814	-0.026	129274	5.370	-0.004	211333	1.7782	0.5418	106.6*	Heptachlor
5.092	-0.032	28101	5.707	-0.005	496582	0.3924	1.3500	109.9*	Aldrin
5.661	-0.035	21364	6.258	-0.010	914501	0.3128	2.7921	159.7*	Heptachlor epoxide b
6.067	-0.005	2865	6.675	0.019	333849	0.0381	1.0962	186.6*	Endosulfan I
6.275	-0.020	36016	6.892	-0.021	207292	0.5331	0.6523	20.1	Dieldrin
5.996	-0.015	62126	6.717	-0.008	155240	~~1.0670~~	~~0.4899~~	74.1*	4,4'-DDE
6.525	0.012	145161	----			2.7971	0.0000	---	Endrin
6.749	0.029	12381	7.377	-0.016	386642	0.2310	2.1601	161.4*	Endosulfan II
----			7.220	-0.043	287264	~~0.0000~~	~~1.6773~~	---	4,4'-DDD
7.521	0.036	304393	7.891	-0.044	4956879	6.5208	33.8571	135.4*	Endosulfan sulfate
6.822	0.001	124961	7.551	0.001	434030	~~2.6418~~	~~3.0075~~	12.9	4,4'-DDT
7.276	0.025	46421	8.135	0.000	420464	1.9904	7.1022	112.4*	Methoxychlor
7.763	0.025	7196	8.426	0.004	587349	0.1180	3.5772	187.2*	Endrin ketone
7.110	0.014	27658	7.656	-0.034	218951	0.6335	1.5788	85.5*	Endrin aldehyde
5.811	-0.009	222020	6.452	0.000	85008	3.2203	0.2544	170.7*	gamma-Chlordane
----			6.583	-0.007	25746	0.0000	0.0841	---	alpha-Chlordane
2.178	-0.018	47626	2.374	0.010	145939	~~0.4826~~	~~0.3541~~	30.7	Hexachlorobutadiene
3.987	-0.012	145623	4.418	-0.031	6882247	1.8550	~~13.6371~~	152.1*	Hexachlorobenzene
----			6.159	-0.020	1734579	0.0000	6.0420	---	Oxychlordane
5.712	0.014	109477	6.413	-0.026	226449	2.7680	1.0556	89.6*	2,4-DDE
5.959	0.030	55342	6.524	-0.015	1160877	0.9597	5.8274	143.4*	trans-Nonachlor
6.193	0.004	248359	6.942	0.014	42609	7.2605	0.3658	180.8*	2,4-DDD
6.458	0.040	65003	7.192	-0.019	268113	1.9191	2.6266	31.1	2,4-DDT
6.575	0.030	10403	7.257	-0.008	64665	0.1647	0.3036	59.3*	cis-Nonachlor
7.426	0.015	99983	8.383	-0.025	344906	2.4872	3.2104	25.4	Mirex
8.721	-0.034	3708503	10.063	-0.021	8367192	80.0000	80.0000 IS	0.0	Hexabromobiphenyl M
1.709	-0.028	2310	1.690	-0.045	12687226	0.0000	0.0000	---	Hexachloroethane
6.621	0.040	61219	7.297	-0.039	17339	0.0000	0.0000	---	Kepone
3.654	-0.006	2246904	3.991	-0.005	10569771	29.8690	28.1786	5.8	Tetrachloro-m-xylen
8.578	-0.009	1995737	9.528	-0.007	6227755	37.8593	36.4649	3.8	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	74.7	70.4	70.4	42-112
Decachlorobiphenyl	94.6	91.2	91.2	59-123

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4288295	4521256	5.4
Hexabromobiphenyl	3547373	3708503	4.5

Column 2

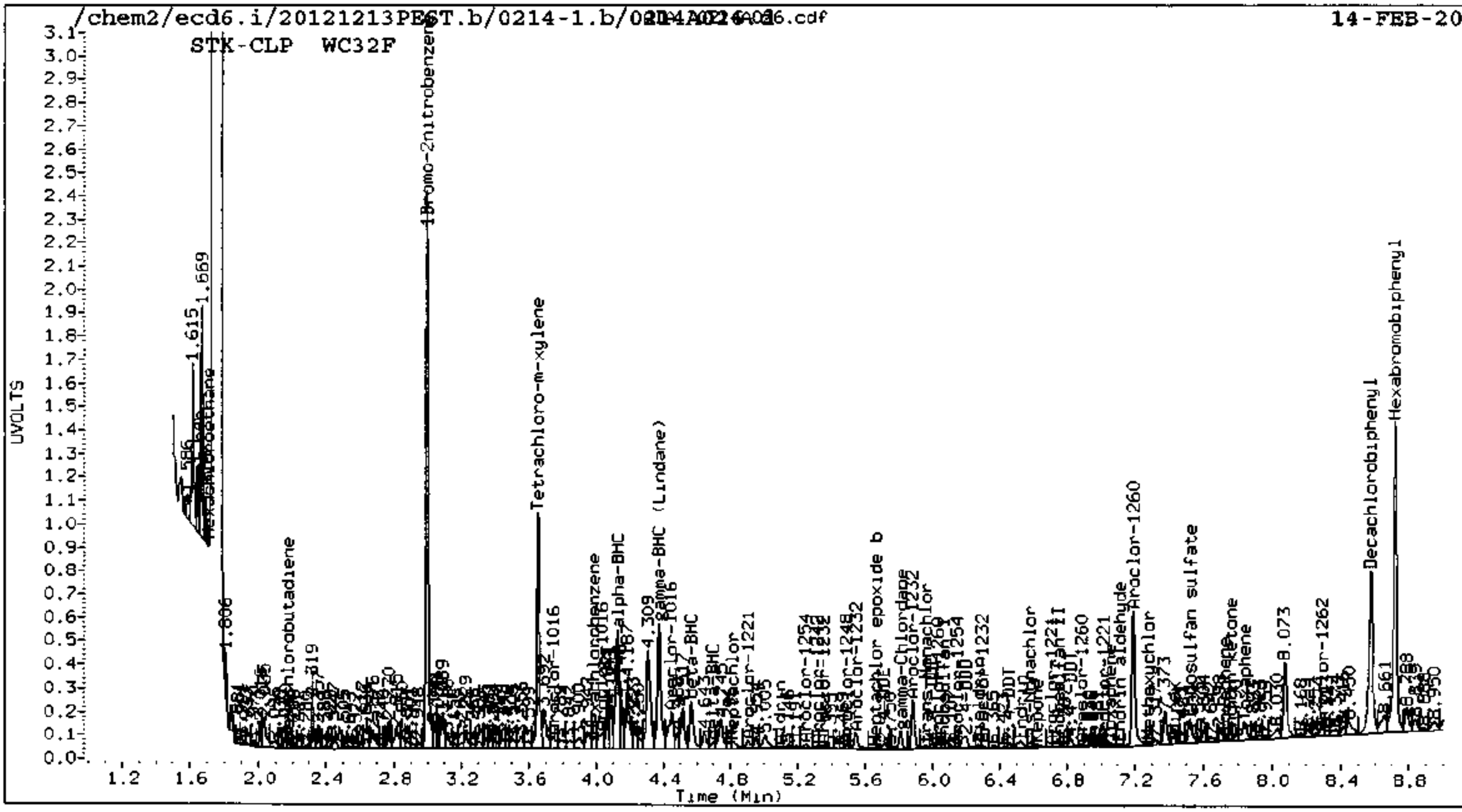
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	22974785	21525791	-6.3
Hexabromobiphenyl	12557398	8367192	-33.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 13-DEC-2012
<- Indicates standard response outside Limits (-50 to +100%)

		STX-CLP Col					CLP2 Col			
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount
Toxaphene	1	6.458	-0.013	65003	51.8	1	7.127	-0.012	576576	102.0
Toxaphene	2	6.822	-0.002	124961	67.7	2	7.471	0.007	63195	7.6
Toxaphene	3	7.054	-0.025	47398	18.1	3	7.732	0.037	162522	18.4
Toxaphene	4	7.426	0.022	99983	41.0	4	8.178	0.017	1269753	202.5
Toxaphene	5	7.722	-0.002	45735	25.2	5	8.497	-0.010	319558	104.7
Toxaphene	6	7.839	-0.015	310191	284.2	NS	---			----

Total STX-CLPAve (6 peaks): 81.335 Total CLP2Ave (5 peaks): 87.032 RPD = 7
Corrected Ave (5 peaks): 40.755 Corrected Ave (4 peaks): 58.164 RPD = 35

/chem2/ecd6.i/20121213PEST.b/0214-1.b/0214A026.d 14-FEB-201
STK-CLP WC32F



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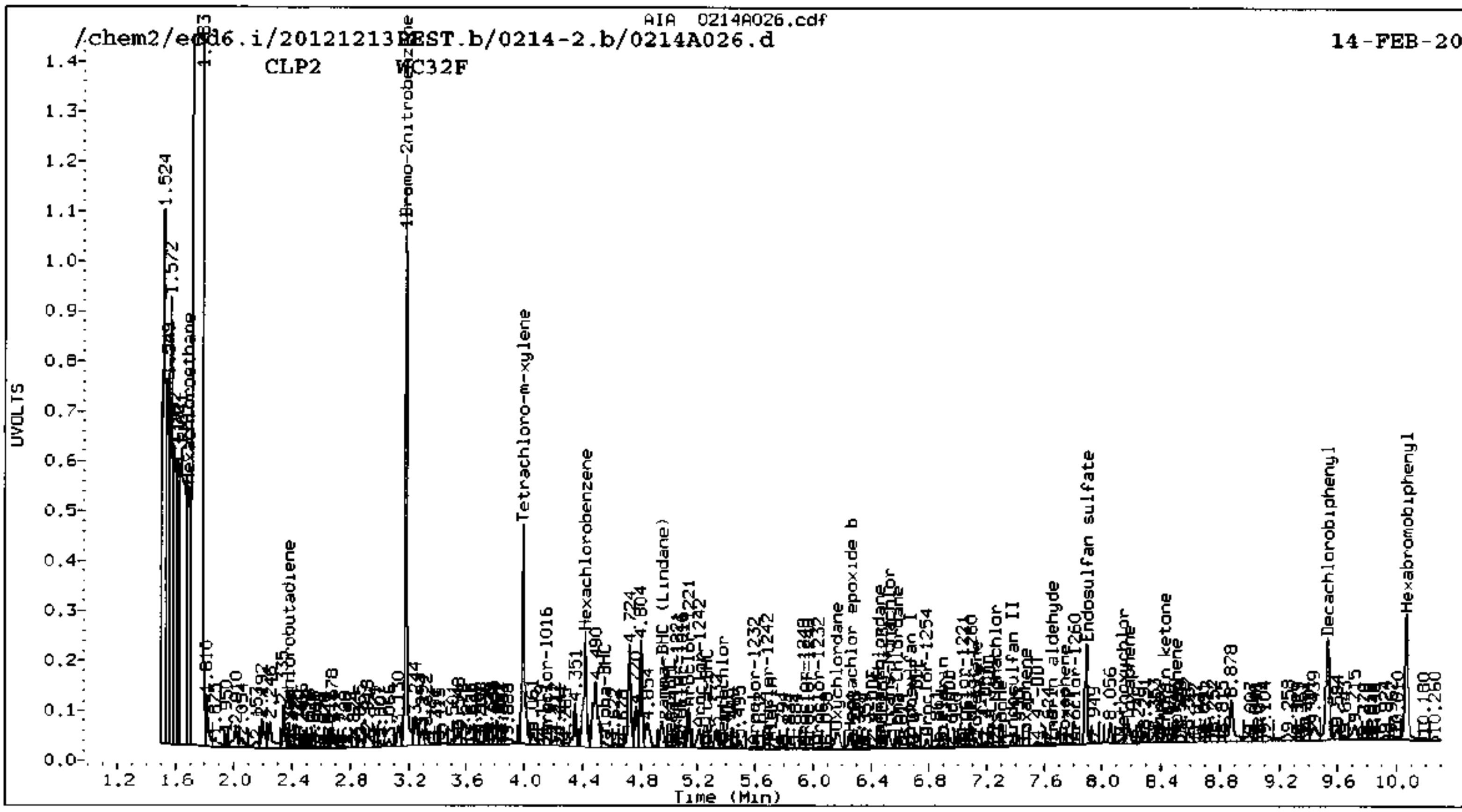
CLP2 WC32F



Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

12 02/15/13

Data file 1: /chem2/ecd6.i/20121213PEST.b/0214-1.b/0214A028.d ARI ID: INDAE
Data file 2: /chem2/ecd6.i/20121213PEST.b/0214-2.b/0214A028.d Client ID:
Method: /chem2/ecd6.i/20121213PEST.b/PEST1213.m Injection Date: 14-FEB-2013 19:07
Compound Sublist: INDA Report Date: 02/15/2013 11:09
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: NONE
Operator: ar Dilution Factor: 1.000

STX-CLP Col RT	Shift	Response	CLP2 Col RT	Shift	Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
3.001	-0.001	4962331	3.182	0.000	25754655	80.0000	80.0000	0.0	1Bromo-2nitrobenzen
4.133	0.002	1930459	4.569	0.001	10273708	19.6006	18.1933	7.4	alpha-BHC
4.513	-0.037	756307	5.006	0.008	3586358	18.5432	17.1464	7.8	beta-BHC
4.679	-0.036	1442846	5.311	0.008	6454979	18.6488	15.7488	16.9	delta-BHC
4.410	0.002	1525511	4.918	0.000	7796516	18.8219	16.5247	13.0	gamma-BHC (Lindane)
4.838	-0.002	1454573	5.371	-0.002	7639497	18.2299	16.3694	10.8	Heptachlor
5.122	-0.002	1436993	5.709	-0.003	6698596	18.2809	15.2200	18.3	Aldrin
5.694	-0.002	1333340	6.265	-0.003	5345207	17.7844	13.6398	26.4	Heptachlor epoxide b
6.070	-0.003	1518093	6.653	-0.003	4895888	18.4024	13.4356	31.2	Endosulfan I
6.292	-0.003	2649726	6.910	-0.003	9856635	35.7356	25.9224	31.8	Dieldrin
6.020	0.009	2270881	6.728	0.003	9758742	35.5361	25.7421	32.0	4,4'-DDE
6.509	-0.003	2094658	7.199	-0.003	7393241	37.0769	37.6316	1.5	Endrin
6.718	-0.003	2117402	7.390	-0.003	7800528	36.2967	36.2888	0.0	Endosulfan II
6.574	0.007	2344135	7.265	0.003	8349149	41.1069	40.5925	1.3	4,4'-DDD
7.481	-0.004	1787848	7.933	-0.003	6073564	35.1820	34.5433	1.8	Endosulfan sulfate
6.824	0.004	1528208	7.550	0.000	5103635	29.6775	29.4477	0.8	4,4'-DDT
7.253	0.002	3973703	8.134	-0.001	11861974	156.5089	166.8396	6.4	Methoxychlor
7.735	-0.003	2251046	8.420	-0.002	6730386	33.8989	34.1327	0.7	Endrin ketone
7.093	-0.003	1615592	7.687	-0.003	5454681	33.9913	32.7522	3.7	Endrin aldehyde
5.818	-0.002	1320775	6.451	-0.002	5421375	17.4545	13.5578	25.1	gamma-Chlordane
5.940	-0.002	1264748	6.588	-0.002	4814903	17.7053	13.1494	29.5	alpha-Chlordane
2.196	0.000	2108966	2.364	0.000	9712733	19.4698	19.6964	1.2	Hexachlorobutadiene
4.012	0.013	1541797	4.456	0.007	10280307	17.8947	17.0256	5.0	Hexachlorobenzene
8.738	-0.016	4037126	10.072	-0.012	10048493	80.0000	80.0000	0.0	Hexabromobiphenyl
3.667	0.006	2996724	4.000	0.004	16714820	36.2958	37.2443	2.6	Tetrachloro-m-xylen
8.584	-0.003	2089756	9.531	-0.005	7487328	36.4159	36.5047	0.2	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	90.7	93.1	90.7~	115- 0
Decachlorobiphenyl	91.0	91.3	91.0~	115- 0

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

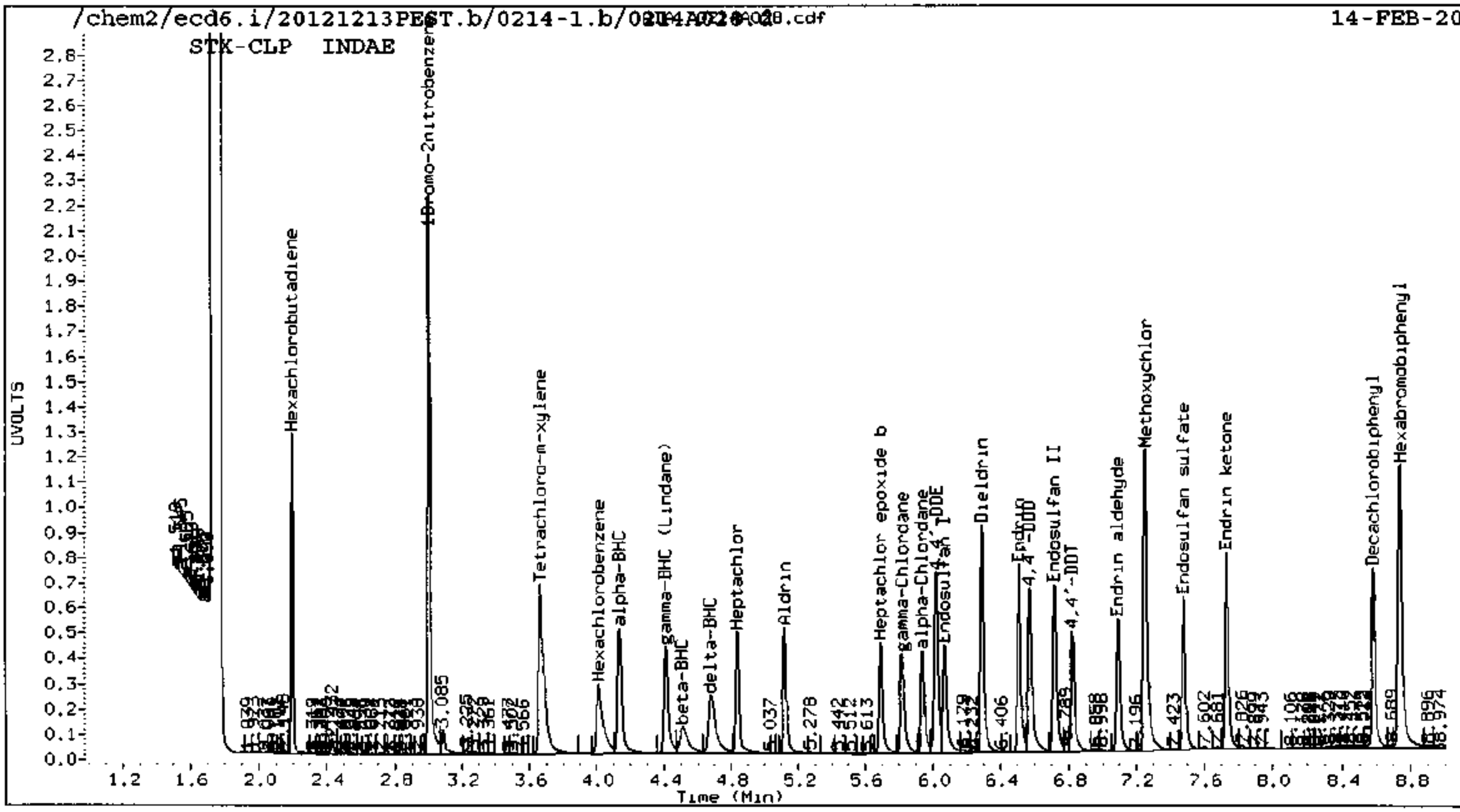
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4288295	4962331	15.7
Hexabromobiphenyl	3547373	4037126	13.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	22974785	25754655	12.1
Hexabromobiphenyl	12557398	10048493	-20.0

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 13-DEC-2012
<- Indicates standard response outside Limits (-50 to +100%)

	STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount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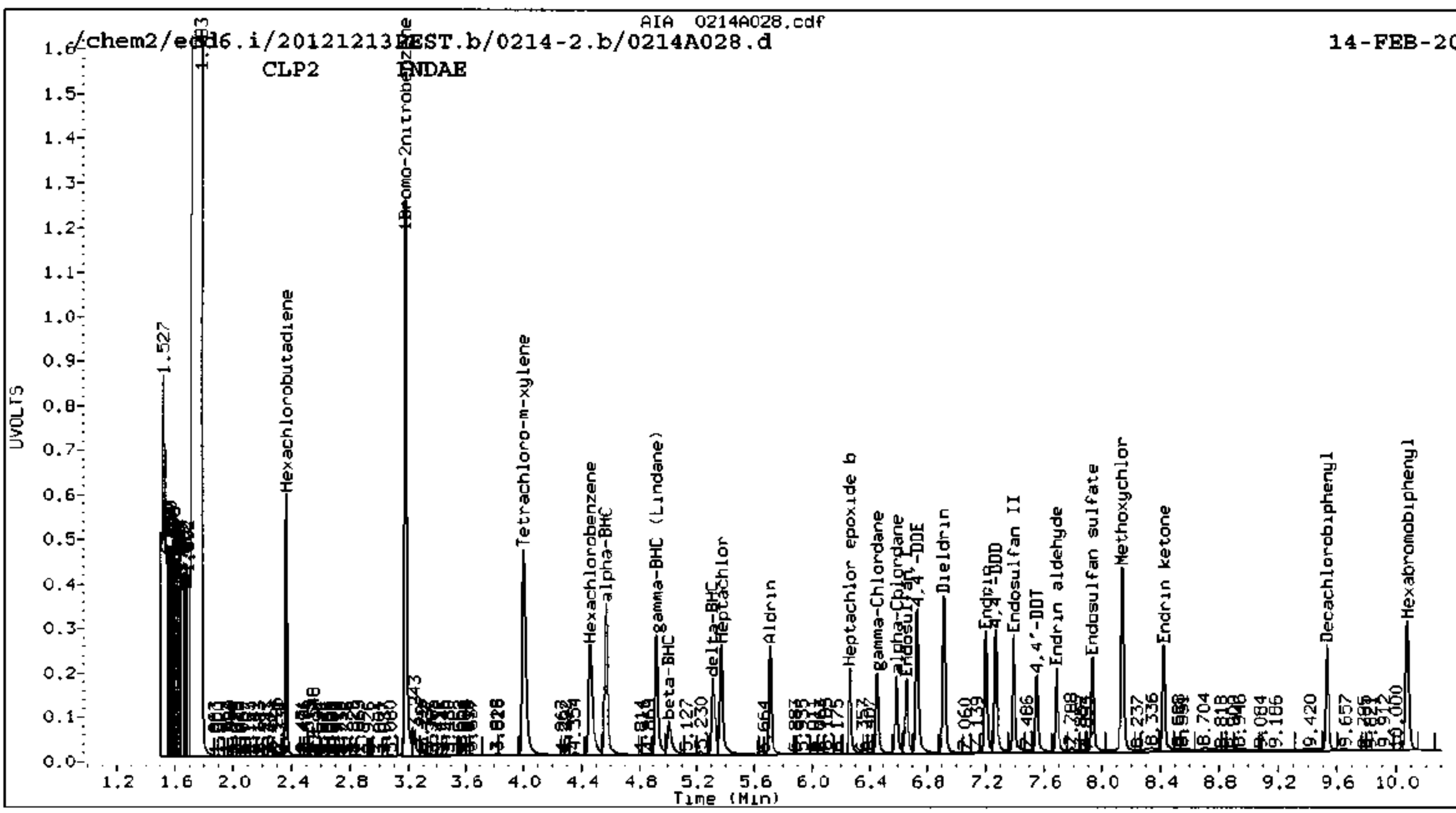
14-FEB-201
STK-CLP INDAE
UVOLTS
Time (Min)
Hexachlorobutadiene
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide b
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Methoxychlor
Endosulfan sulfate
Endrin ketone
Decachlorobiphenyl
Hexabromobiphenyl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14-FEB-201
CLP2 INDAE
UVOLTS
Time (Min)
1.527
Hexachlorobutadiene
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide b
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl
Hexabromobiphenyl

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

YZ 02/15/13

Data file 1: /chem2/ecd6.i/20121213PEST.b/0214-1.b/0214A029.d ARI ID: WC32G
Data file 2: /chem2/ecd6.i/20121213PEST.b/0214-2.b/0214A029.d Client ID: SG-08-0-10-013113
Method: /chem2/ecd6.i/20121213PEST.b/PEST1213.m Injection Date: 14-FEB-2013 19:24
Compound Sublist: wpest Report Date: 02/15/2013 11:09
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: SOIL
Operator: ar Dilution Factor: 5.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
2.997	-0.005	4326462	3.179	-0.003	20012516	80.0000	80.0000 IS	0.0	1Bromo-2nitrobenzen
4.129	-0.002	521606	4.565	-0.003	837100	6.0744	1.9077	104.4*	alpha-BHC
4.572	0.023	68436	5.020	0.022	1334120	1.9245	8.2086	124.0*	beta-BHC
4.702	-0.012	51050	5.281	-0.022	521285	0.7568	1.6367	73.5*	delta-BHC
4.409	0.001	216635	4.910	-0.008	1734964	3.0657	4.7324	42.7*	gamma-BHC (Lindane)
4.806	-0.033	647341	5.375	0.002	624122	9.3054	1.7210	137.6*	Heptachlor
5.132	0.009	183722	5.682	-0.029	1159957	2.6808	3.3918	23.4	Aldrin
5.687	-0.009	177670	6.248	-0.021	519104	2.7181	1.7047	45.8*	Heptachlor epoxide b
6.034	-0.039	44771	6.636	-0.020	99522	0.6225	0.3515	55.7*	Endosulfan I
6.273	-0.022	48125	6.890	-0.023	195601	0.7444	0.6620	11.7	Dieldrin
5.997	-0.014	50138	6.719	-0.006	130228	~~0.8999~~	~~0.4421~~	68.2*	4,4'-DDE
6.524	0.012	190219	----			3.9503	0.0000	---	Endrin
6.754	0.033	40203	7.376	-0.017	538653	0.8086	3.0725	116.7*	Endosulfan II
----			----			~~0.0000~~	~~0.0000~~	---	4,4'-DDD
7.519	0.034	148602	7.891	-0.044	1992026	3.4308	13.8914	120.8*	Endosulfan sulfate
6.843	0.022	81676	7.529	-0.021	562099	~~1.8609~~	~~3.9766~~	72.5*	4,4'-DDT
7.237	-0.014	83611	8.104	-0.031	615892	3.8636	10.6213	93.3*	Methoxychlor
7.761	0.024	18231	8.419	-0.003	670529	0.3221	4.1694	171.3*	Endrin ketone
7.128	0.032	78652	7.677	-0.013	544318	1.9415	4.0073	69.5*	Endrin aldehyde
5.777	-0.043	231888	----			3.5149	0.0000	---	gamma-Chlordane
5.916	-0.026	110742	6.587	-0.003	181614	1.7781	0.6383	94.3*	alpha-Chlordane
2.172	-0.025	83049	2.378	0.014	100363	~~0.8794~~	~~0.2619~~	108.2*	Hexachlorobutadiene
3.971	-0.027	108866	4.416	-0.033	1302658	~~1.4492~~	~~2.7764~~	62.8*	Hexachlorobenzene
5.644	0.041	156072	6.158	-0.021	1916874	3.7852	7.1819	61.9*	Oxychlordane
5.733	0.035	31616	6.432	-0.007	1156846	0.8615	5.8003	148.3*	2,4-DDE
5.954	0.024	22539	6.524	-0.015	1019687	0.4212	5.2259	170.2*	trans-Nonachlor
6.227	0.038	22624	6.944	0.016	500161	0.7128	4.3844	144.1*	2,4-DDD
6.458	0.040	90263	7.191	-0.019	2560425	2.8720	25.6088	159.7*	2,4-DDT
6.567	0.022	55613	----			0.9488	0.0000	---	cis-Nonachlor
7.431	0.020	73190	8.371	-0.037	589553	1.9622	5.6027	96.2*	Mirex
8.719	-0.035	3441008	10.061	-0.023	8195408	80.0000	80.0000 IS	0.0	Hexabromobiphenyl M
1.737	0.001	787926	1.767	0.032	157224953	0.0000	0.0000	---	Hexachloroethane
6.617	0.036	80135	7.311	-0.025	387533	0.0000	0.0000	---	Kepone
3.658	-0.003	881628	3.989	-0.007	2588550	12.2475	7.4228	49.1*	Tetrachloro-m-xylene
8.576	-0.011	400812	9.529	-0.006	770352	8.1945	4.6051	56.1*	Decachlorobiphenyl

NA

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	30.6	18.6	18.6~	42-112
Decachlorobiphenyl	20.5	11.5	11.5~	59-123

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4288295	4326462	0.9
Hexabromobiphenyl	3547373	3441008	-3.0

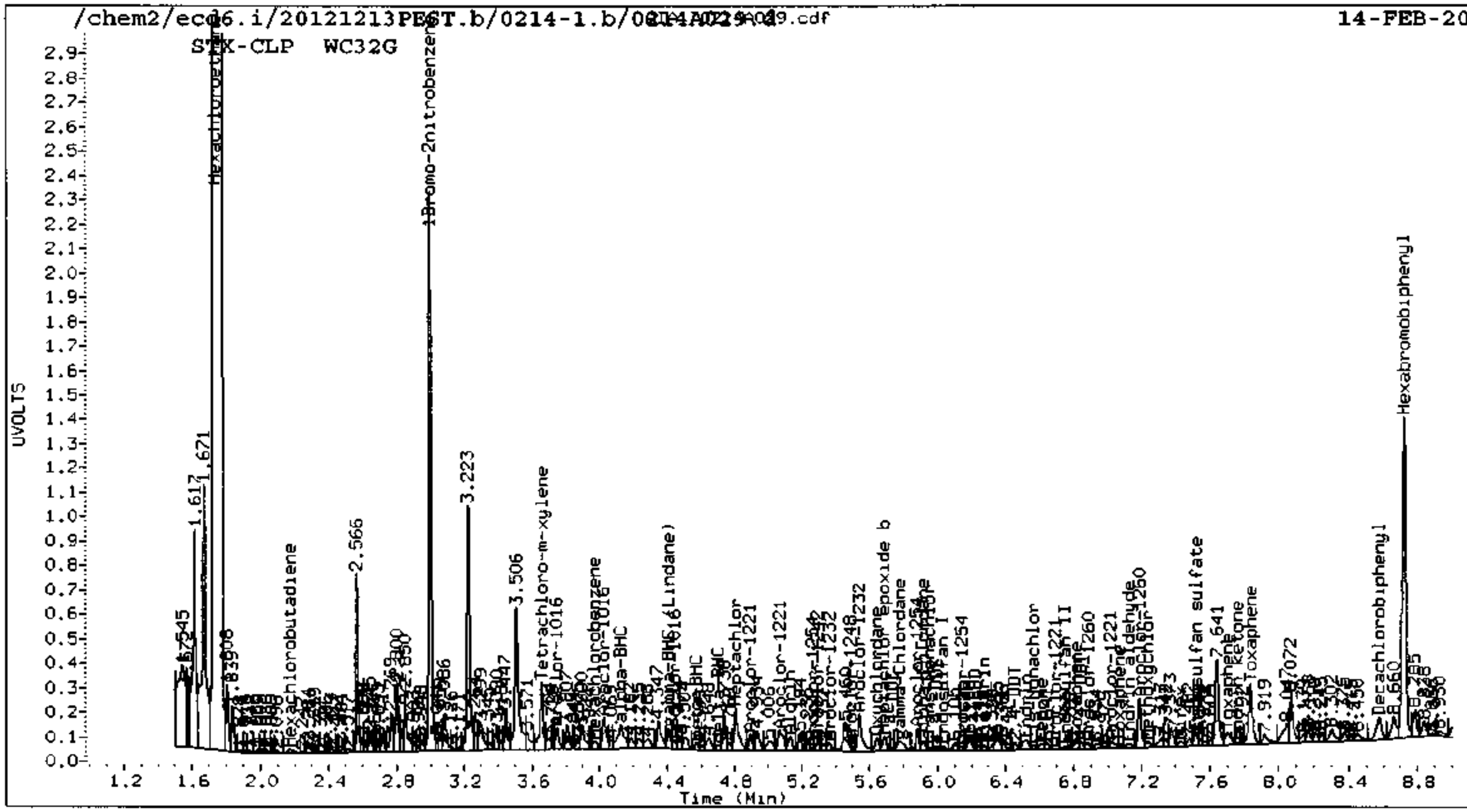
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	22974785	20012516	-12.9
Hexabromobiphenyl	12557398	8195408	-34.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 13-DEC-2012
<- Indicates standard response outside Limits (-50 to +100%)

Cpnd	STX-CLP Col Peak#	RT	Shift	Height	Amount	CLP2 Col Peak#	RT	Shift	Height	Amount
Toxaphene	1	6.458	-0.013	90263	77.5	1	7.124	-0.015	1253973	226.4
Toxaphene	2	6.818	-0.005	102937	60.1	2	7.433	-0.031	460679	56.5
Toxaphene	3	7.071	-0.008	38570	15.9	3	7.677	-0.018	544318	62.9
Toxaphene	4	7.431	0.027	73190	32.4	4	8.178	0.016	824837	134.3
Toxaphene	5	7.701	-0.022	222814	132.1	5	8.527	0.019	609508	203.9
Toxaphene	6	7.838	-0.016	746671	737.4	NS	---			---

Total STX-CLPAve (6 peaks): 175.881   Total CLP2Ave (5 peaks): 136.795   RPD = 25
Corrected Ave (5 peaks): 63.582   Corrected Ave (5 peaks): 136.795   RPD = 73*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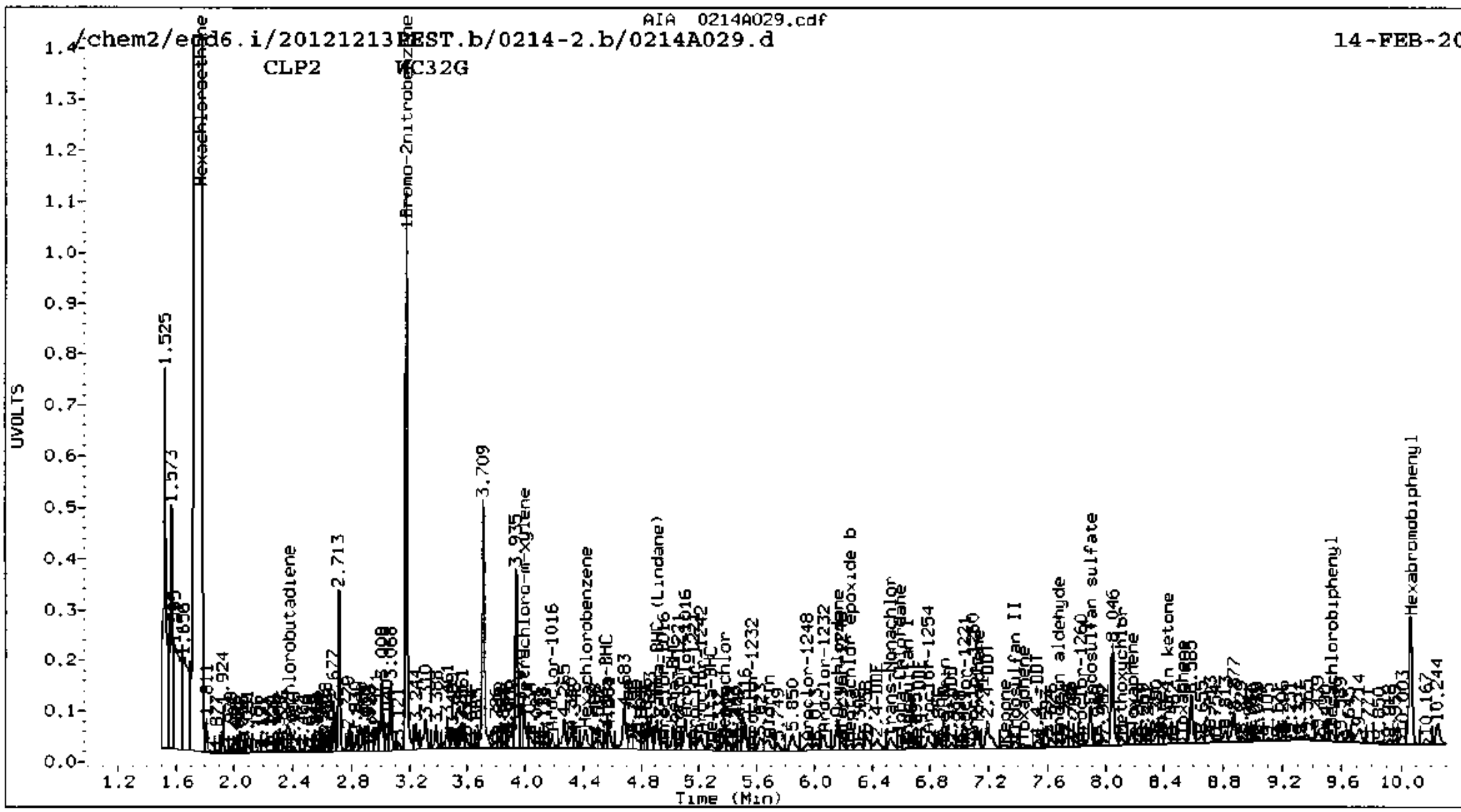
14-FEB-201
STX-CLP WC32G
UVOLTS
Time (Min)
Hexachloroethane
1Bromo-2nitrobenzene
Hexabromobiphenyl
Decachlorobiphenyl
Tetrachloro-m-xylene
Hexachlorobutadiene
Endosulfan sulfate
Toxaphene
3.223
3.506
2.566
1.617
1.671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14-FEB-201
CLP2 WC32G
UVOLTS
Time (Min)
Hexachloroethane
1Bromo-2nitrobenzene
Hexabromobiphenyl
Tetrachloro-m-xylene
Hexachlorobutadiene
Hexachlorobenzene
Endosulfan sulfate
1.525
1.573
2.713
3.709
3.935

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

2/15/13

Data file 1: /chem2/ecd6.i/20121213PEST.b/0214-1.b/0214A030.d ARI ID: WC32GMS
Data file 2: /chem2/ecd6.i/20121213PEST.b/0214-2.b/0214A030.d Client ID: SG-08-0-10-0131 MS
Method: /chem2/ecd6.i/20121213PEST.b/PEST1213.m Injection Date: 14-FEB-2013 19:42
Compound Sublist: wpest Report Date: 02/15/2013 11:34
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: SOIL
Operator: ar Dilution Factor: 5.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
2.997	-0.005	4508998	3.179	-0.003	19979364	80.0000	80.0000 IS	0.0	1Bromo-2nitrobenzen
4.125	-0.006	494692	4.563	-0.005	2283853	5.5278	5.2135	5.9	alpha-BHC
4.571	0.021	52650	4.988	-0.010	455119	1.4207	2.8049	65.5*	beta-BHC
4.701	-0.014	43155	5.285	-0.018	551498	0.6139	1.7345	95.4*	delta-BHC
4.402	-0.006	317833	4.910	-0.008	2226072	4.3157	6.0820	34.0	gamma-BHC (Lindane)
4.832	-0.007	331588	5.370	-0.003	1209252	4.5735	3.3401	31.2	Heptachlor
5.120	-0.004	335789	5.705	-0.006	939682	4.7013	2.7522	52.3*	Aldrin
5.688	-0.008	314860	6.262	-0.006	1196394	4.6219	3.9354	16.0	Heptachlor epoxide b
6.065	-0.008	139062	6.650	-0.006	581392	1.8552	2.0567	10.3	Endosulfan I
6.287	-0.008	405788	6.906	-0.007	1481087	6.0229	5.0211	18.1	Dieldrin
5.997	-0.014	397771	6.716	-0.009	1322045	6.8504	4.4954	41.5*	4,4'-DDE
6.505	-0.008	460398	7.195	-0.007	2552396	9.0451	14.6024	47.0*	Endrin N
6.711	-0.010	290794	7.384	-0.009	1569376	5.5327	8.2060	38.9	Endosulfan II
6.552	-0.015	378547	7.255	-0.008	1210969	7.3679	6.6175	10.7	4,4'-DDD MN
7.477	-0.008	197706	7.930	-0.006	639709	4.3182	4.0894	5.4	Endosulfan sulfate
6.813	-0.008	402665	7.540	-0.009	813971	8.6792	5.2788	48.7*	4,4'-DDT
7.240	-0.011	553463	8.127	-0.008	1635981	24.1948	25.8630	6.7	Methoxychlor
7.728	-0.009	432250	8.417	-0.005	1784211	7.2248	10.1703	33.9	Endrin ketone
7.084	-0.012	144167	7.679	-0.011	790533	3.3666	5.3352	45.2*	Endrin aldehyde
5.810	-0.009	247760	6.447	-0.006	1212884	3.6034	3.9100	8.2	gamma-Chlordane
5.933	-0.009	322813	6.584	-0.006	733780	4.9734	2.5832	63.3*	alpha-Chlordane
2.196	-0.001	260717	2.363	-0.001	1235806	2.6489	3.2305	19.8	Hexachlorobutadiene
3.983	-0.015	267444	4.439	-0.010	1821730	3.4161	3.8891	12.9	Hexachlorobenzene
5.645	0.041	143040	6.157	-0.022	4223339	3.2819	15.8496	131.4*	Oxychlordane
5.735	0.036	62345	----			1.6072	0.0000	---	2,4-DDE
5.881	-0.048	673917	6.525	-0.014	2089275	11.9148	9.8157	19.3	trans-Nonachlor
6.190	0.001	528893	6.943	0.015	296282	15.7642	2.3808	147.5*	2,4-DDD
6.414	-0.004	11555	7.195	-0.016	2552396	0.3478	23.4020	194.1*	2,4-DDT
6.552	0.007	378547	7.255	-0.010	1210969	6.1096	5.3209	13.8	cis-Nonachlor
7.426	0.015	103688	8.379	-0.029	547561	2.6299	4.7702	57.8*	Mirex
8.720	-0.034	3637332	10.062	-0.022	8940116	80.0000	80.0000 IS	0.0	Hexabromobiphenyl
1.737	0.001	1272914	1.698	-0.037	5011875	0.0000	0.0000	---	Hexachloroethane
6.609	0.028	222137	7.300	-0.036	246255	0.0000	0.0000	---	Kepone
3.655	-0.006	760484	3.989	-0.006	2864326	10.1369	8.2272	20.8	Tetrachloro-m-xylene
8.576	-0.011	822143	9.528	-0.007	1311394	15.9013	7.1864	75.5*	Decachlorobiphenyl

ir

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits	
Tetrachloro-m-xylene	25.3	20.6	20.6~	42-112	
Decachlorobiphenyl	39.8	18.0	18.0~	59-123	
4,4'-DDE	0.0	0.0	0.0~	0- 0	
Endrin	1809017.4	365059.3	365059.3~		10-200
4,4'-DDD	0.0	0.0	0.0~	0- 0	
4,4'-DDT	1735835.4	131971.0	131971.0~		0- 0
Endrin ketone	0.0	0.0	0.0~	0- 0	
Endrin aldehyde	0.0	0.0	0.0~	0- 0	

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4288295	4508998	5.1
Hexabromobiphenyl	3547373	3637332	2.5

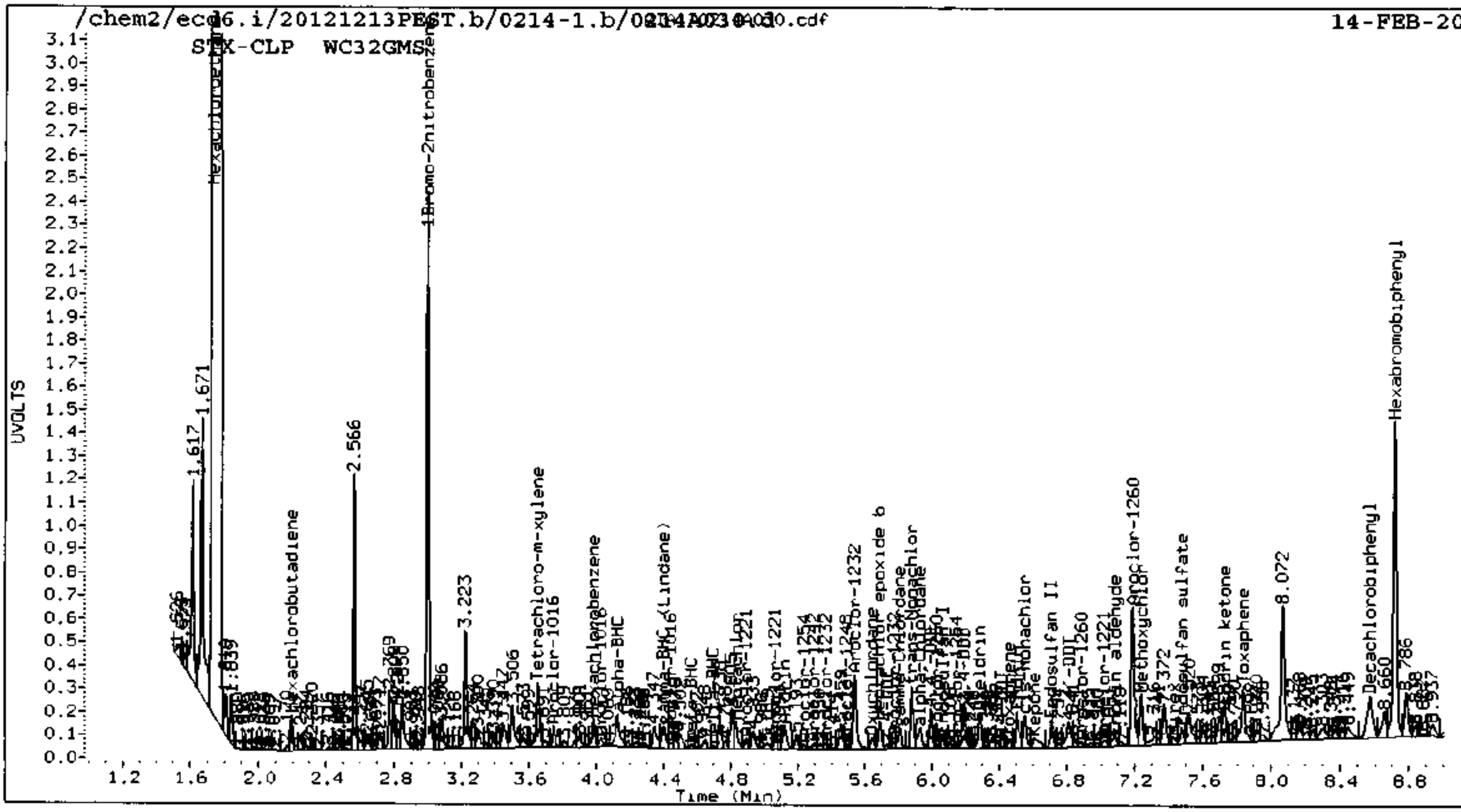
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	22974785	19979364	-13.0
Hexabromobiphenyl	12557398	8940116	-28.8

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 13-DEC-2012
<- Indicates standard response outside Limits (-50 to +100%)

	STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount
Toxaphene	1	6.458	-0.012	112811	91.6	1	7.125	-0.014	959985	158.9
Toxaphene	2	6.813	-0.010	402665	222.5	2	7.459	-0.004	98699	11.1
Toxaphene	3	7.084	0.005	144167	56.2	3	7.679	-0.016	790533	83.7
Toxaphene	4	7.426	0.023	103688	43.4	4	8.178	0.016	1798840	268.5
Toxaphene	5	7.728	0.004	432250	242.4	5	8.506	-0.002	1383316	424.3
Toxaphene	6	7.839	-0.015	850760	794.8	NS	---			----

Total STX-CLPAve (6 peaks): 241.814 Total CLP2Ave (5 peaks): 189.292 RPD = 24
Corrected Ave (5 peaks): 131.213 Corrected Ave (4 peaks): 130.544 RPD = 1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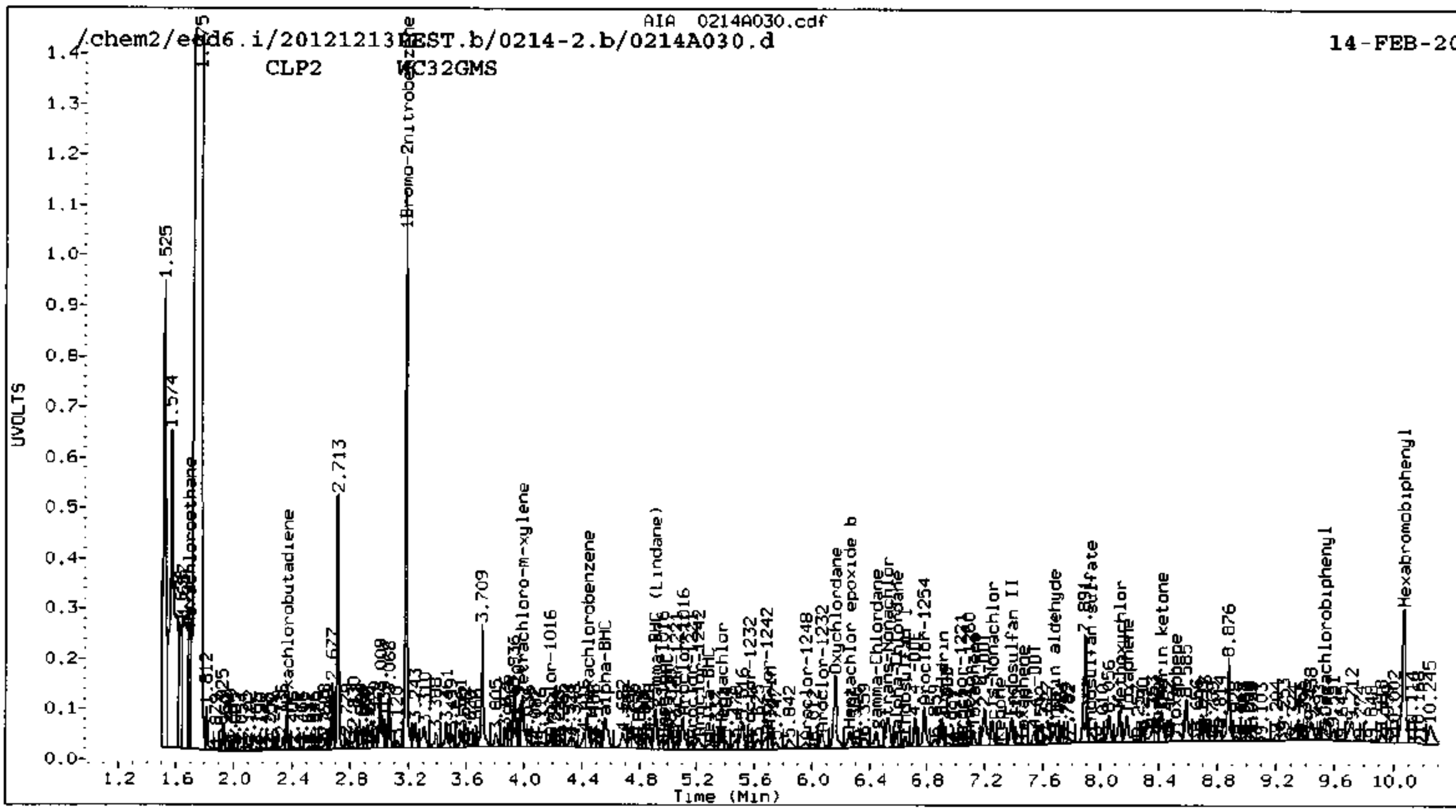
STX-CLP WC32GMS
UVOLTS
Time (Min)
Hexachlorobutadiene
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Hexabromobiphenyl
Decachlorobiphenyl
2.566
3.223
8.072
1.617
1.671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14-FEB-201
CLP2 WC32GMS
UVOLTS
Time (Min)
1Bromo-2nitrobenzene
Hexabromobiphenyl
1.525
1.574
2.713
3.709
8.876

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /chem2/ecd6.i/20121213PEST.b/0214-1.b/0214A031.d ARI ID: WC32GMSD YZ 02/15/13
Data file 2: /chem2/ecd6.i/20121213PEST.b/0214-2.b/0214A031.d Client ID: SG-08-0-10-0131 MSD
Method: /chem2/ecd6.i/20121213PEST.b/PEST1213.m Injection Date: 14-FEB-2013 20:00
Compound Sublist: wpest Report Date: 02/15/2013 11:10
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: SOIL
Operator: ar Dilution Factor: 5.000

STX-CLP Col RT	Shift	Response	CLP2 Col RT	Shift	Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
2.997	-0.005	3949629	3.180	-0.003	18600166	80.0000	80.0000 25	0.0	1Bromo-2nitrobenzen
4.126	-0.005	391486	4.563	-0.004	2418981	4.9941	5.9314	17.2	alpha-BHC
4.572	0.022	46426	4.988	-0.010	521781	1.4301	3.4542	82.9*	beta-BHC
4.702	-0.012	39563	5.298	-0.005	532699	0.6425	1.7996	94.8*	delta-BHC
4.401	-0.007	329693	4.911	-0.006	2962688	5.1108	8.6948	51.9*	gamma-BHC (Lindane)
4.833	-0.007	325187	5.370	-0.004	1322198	5.1205	3.9229	26.5	Heptachlor
5.119	-0.005	260748	5.706	-0.006	1683139	4.1677	5.2953	23.8	Aldrin
5.689	-0.008	259866	6.262	-0.006	1054207	4.3549	3.7248	15.6	Heptachlor epoxide b
6.065	-0.008	157223	6.649	-0.006	614650	2.3945	2.3356	2.5	Endosulfan I
6.287	-0.008	408062	6.906	-0.006	1492418	6.9144	5.4347	24.0	Dieldrin
5.997	-0.014	379356	6.716	-0.009	1381261	7.4585	5.0450	38.6	4,4'-DDE
6.505	-0.007	408046	7.195	-0.007	2399511	8.9443	15.3369	52.7*	Endrin N
6.711	-0.010	308650	7.385	-0.008	1443075	6.5520	8.4301	25.1	Endosulfan II
6.552	-0.015	374000	7.255	-0.008	1233560	8.1218	7.5312	7.5	4,4'-DDD MN
7.477	-0.009	214839	7.929	-0.007	596996	5.2354	4.2637	20.5	Endosulfan sulfate
6.811	-0.010	322229	7.540	-0.010	879217	7.7492	6.3704	19.5	4,4'-DDT
7.239	-0.012	582591	8.126	-0.009	1676536	28.4154	29.6110	4.1	Methoxychlor
7.728	-0.010	449594	8.416	-0.006	1922562	8.3843	12.2436	37.4	Endrin ketone
7.085	-0.011	134185	7.680	-0.010	733583	3.4961	5.5312	45.1*	Endrin aldehyde
5.811	-0.009	229418	6.447	-0.006	1102352	3.8092	3.8171	0.2	gamma-Chlordane
5.933	-0.009	283672	6.584	-0.005	739548	4.9894	2.7966	56.3*	alpha-Chlordane
2.196	-0.001	266436	2.363	-0.001	1272059	3.0904	3.5718	14.5	Hexachlorobutadiene
3.984	-0.014	238813	4.440	-0.009	3066886	3.4824	7.0329	67.5*	Hexachlorobenzene
5.601	-0.002	7600	6.158	-0.021	1325855	0.1946	5.3447	186.0*	Oxychlordane
5.738	0.040	53238	----			1.5312	0.0000	---	2,4-DDE
5.882	-0.048	188721	6.523	-0.016	729630	3.7227	3.8297	2.8	trans-Nonachlor
6.190	0.001	131475	6.962	0.034	323509	4.3723	2.9044	40.3*	2,4-DDD
6.414	-0.004	9378	7.195	-0.016	2399511	0.3150	24.5792	194.9*	2,4-DDT
6.552	0.007	374000	7.255	-0.010	1233560	6.7347	6.0556	10.6	cis-Nonachlor
7.426	0.015	101088	8.378	-0.030	407593	2.8606	3.9670	32.4	Mirex
8.719	-0.035	3260059	10.061	-0.023	8002083	80.0000	80.0000 25	0.0	Hexabromobiphenyl
1.738	0.001	1042432	1.773	0.038	161997476	0.0000	0.0000	---	Hexachloroethane
----			7.297	-0.039	316351	~~0.0000~~	~~0.0000~~	---	Kepone
3.654	-0.006	553292	3.990	-0.006	3627308	8.4196	11.1913	28.3	Tetrachloro-m-xylene
8.577	-0.010	659070	9.527	-0.008	1242560	14.2224	7.6074	60.6*	Decachlorobiphenyl

MA

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits	
Tetrachloro-m-xylene	21.0	28.0	21.0~	42-112	
Decachlorobiphenyl	35.6	19.0	19.0~	59-123	
4,4'-DDE	0.0	0.0	0.0~	0- 0	
Endrin	1788858.2	383423.1	383423.1~		10-200
4,4'-DDD	0.0	0.0	0.0~	0- 0	
4,4'-DDT	1549839.6	159259.5	159259.5~		0- 0
Endrin ketone	0.0	0.0	0.0~	0- 0	
Endrin aldehyde	0.0	0.0	0.0~	0- 0	

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4288295	3949629	-7.9
Hexabromobiphenyl	3547373	3260059	-8.1

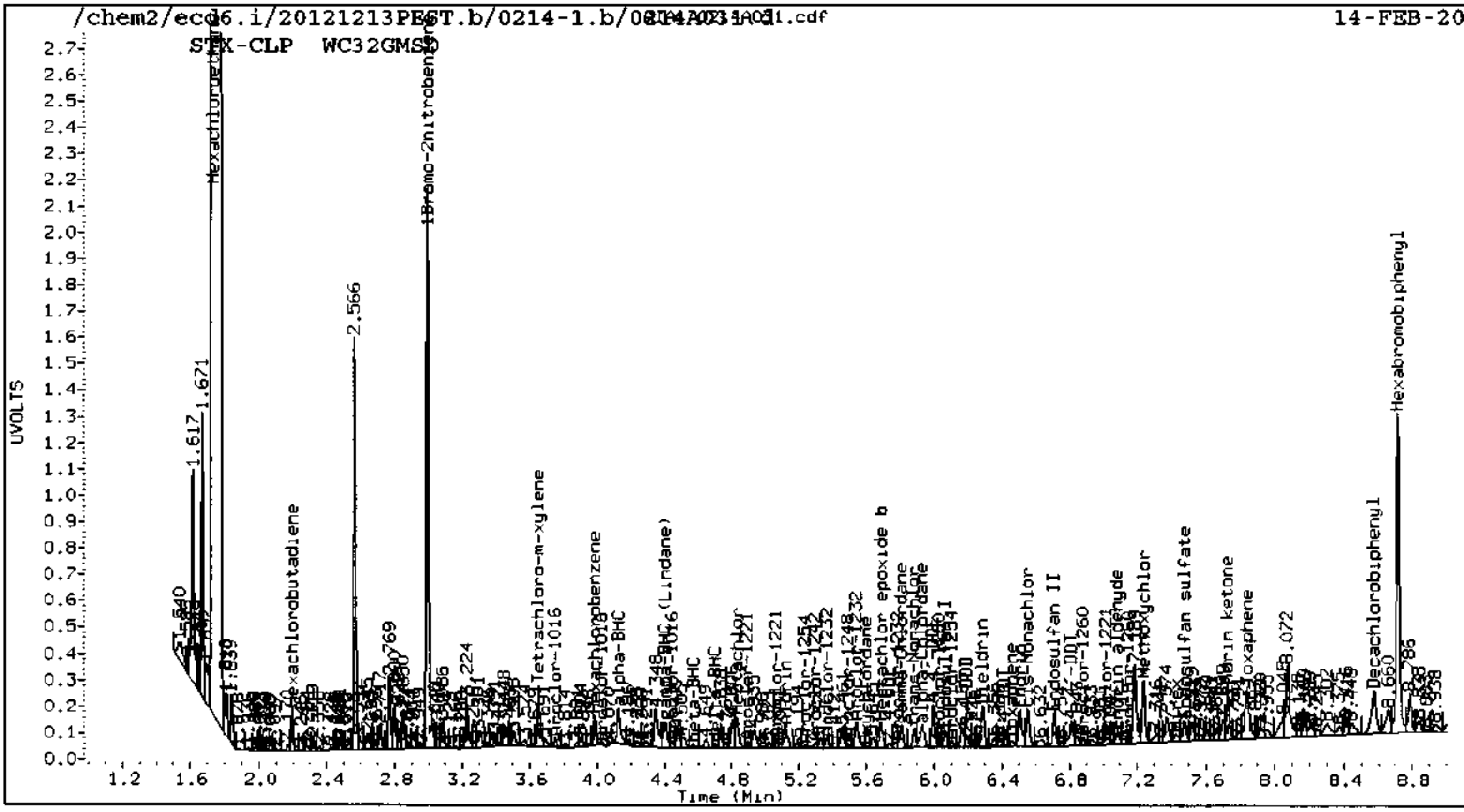
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	22974785	18600166	-19.0
Hexabromobiphenyl	12557398	8002083	-36.3

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 13-DEC-2012
<- Indicates standard response outside Limits (-50 to +100%)

	STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount
Toxaphene	1	6.458	-0.012	64139	58.1	1	7.124	-0.015	633114	117.1
Toxaphene	2	6.811	-0.012	322229	198.7	2	7.471	0.007	161716	20.3
Toxaphene	3	7.085	0.006	134185	58.4	3	7.680	-0.015	733583	86.8
Toxaphene	4	7.426	0.022	101088	47.2	4	8.177	0.016	776225	129.4
Toxaphene	5	7.728	0.004	449594	281.3	5	8.524	0.016	969833	~~332.3~~
Toxaphene	6	7.839	-0.016	698323	727.9	NS	---			----

Total STX-CLPAve (6 peaks): 228.585 Total CLP2Ave (5 peaks): 137.185 RPD = 50*
Corrected Ave (5 peaks): 128.721 Corrected Ave (4 peaks): 88.398 RPD = 37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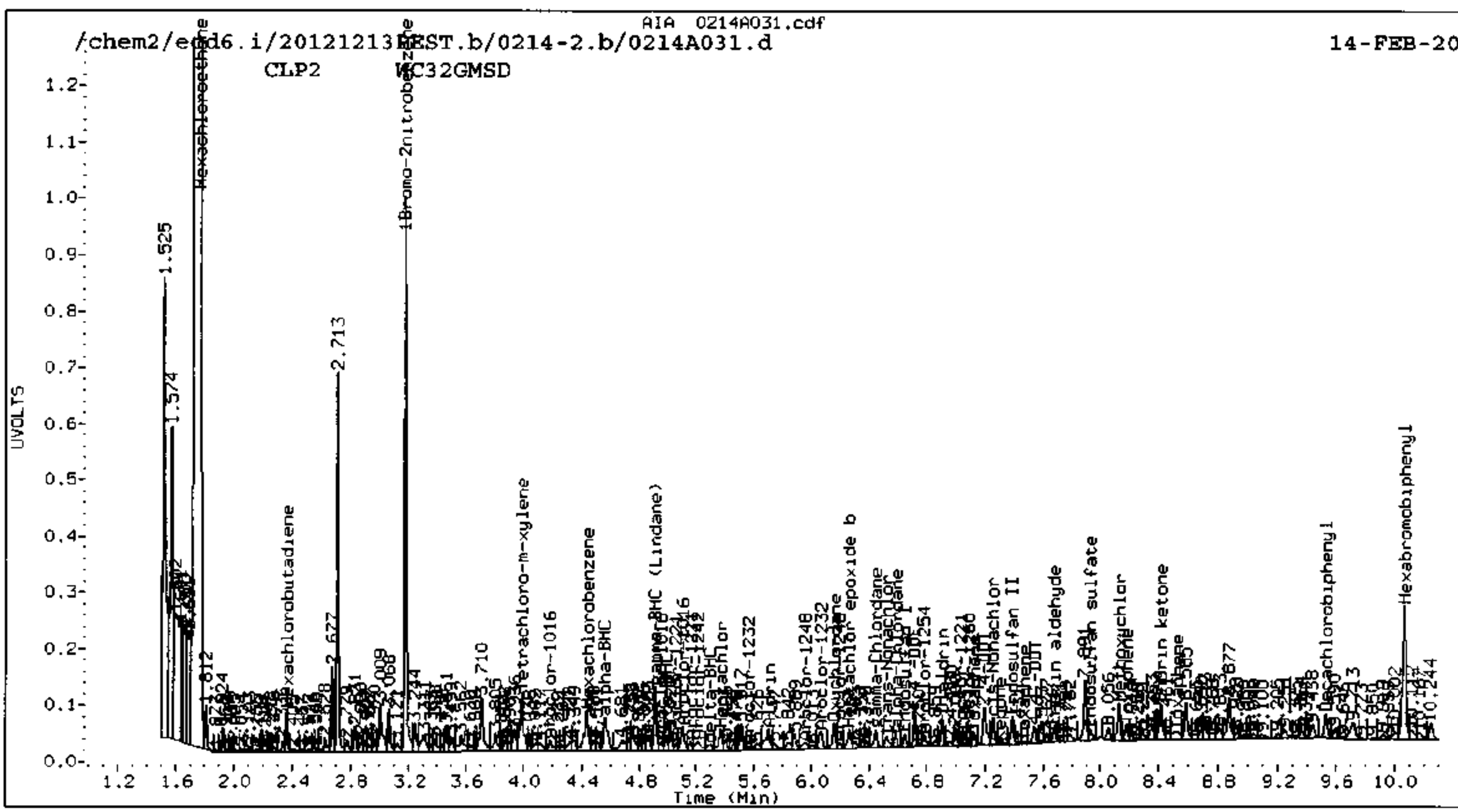
UVOLTS
Time (Min)
Hexachlorobutadiene
Tetrachloro-m-xylene
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
Heptachlor epoxide b
Endosulfan II
Methoxychlor
Endosulfan sulfate
Endrin ketone
Toxaphene
Decachlorobiphenyl
Hexabromobiphenyl
1Bromo-2nitrobenzene
2.566
1.671
1.617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CLP2 WC32GMSD
UVOLTS
Time (Min)
Hexachlorobutadiene
Tetrachloro-m-xylene
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
Heptachlor epoxide b
Endosulfan II
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl
Hexabromobiphenyl
1Bromo-2nitrobenzene
1.525
1.574
2.713
10.244

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /chem2/ecd6.i/20121213PEST.b/0214-1.b/0214A032.d ARI ID: WC32H
Data file 2: /chem2/ecd6.i/20121213PEST.b/0214-2.b/0214A032.d Client ID: SG-09-0-10-013113
Method: /chem2/ecd6.i/20121213PEST.b/PEST1213.m Injection Date: 14-FEB-2013 20:18
Compound Sublist: wpest Report Date: 02/15/2013 11:34
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: SOIL
Operator: ar Dilution Factor: 5.000

STX-CLP Col RT	Shift	Response	CLP2 Col RT	Shift	Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
2.997	-0.005	4603147	3.180	-0.003	20446901	80.0000	80.0000	0.0	1Bromo-2nitrobenzen
4.137	0.006	161206	4.567	-0.001	1463696	1.7645	3.2649	59.7*	alpha-BHC
4.570	0.020	215967	4.992	-0.006	111774	5.7083	0.6731	157.8*	beta-BHC
4.705	-0.009	53943	5.299	-0.004	619575	0.7516	1.9040	86.8*	delta-BHC
4.409	0.001	384267	4.909	-0.008	1176505	5.1111	3.1409	47.8*	gamma-BHC (Lindane)
4.855	0.015	69794	5.408	0.034	752102	0.9430	2.0299	73.1*	Heptachlor
5.137	0.013	49654	5.685	-0.026	679971	0.6810	1.9460	96.3*	Aldrin
5.688	-0.009	72895	6.250	-0.018	658178	1.0482	2.1155	67.5*	Heptachlor epoxide b
6.080	0.007	4623	6.637	-0.019	170577	0.0604	0.5896	162.8*	Endosulfan I
6.271	-0.024	171893	6.888	-0.025	403467	2.4991	1.3365	60.6*	Dieldrin
5.997	-0.014	53875	6.720	-0.006	405504	~~0.9089~~	~~1.3473~~	38.9	4,4'-DDE
6.524	0.012	337570	----			6.7373	0.0000	---	Endrin
6.729	0.008	63931	7.385	-0.008	655944	1.2357	3.4824	95.2*	Endosulfan II
----			----			~~0.0000~~	~~0.0000~~	---	4,4'-DDD
7.518	0.033	168014	7.893	-0.042	1446243	3.7279	9.3870	86.3*	Endosulfan sulfate
6.846	0.025	65283	7.532	-0.017	430391	~~1.4295~~	~~2.8340~~	65.9*	4,4'-DDT
7.298	0.047	133432	8.105	-0.030	723521	5.9256	11.6133	64.9*	Methoxychlor
7.763	0.025	22199	8.417	-0.005	1201775	0.3769	6.9553	179.4*	Endrin ketone
7.112	0.016	131205	7.678	-0.012	689685	3.1126	4.7259	41.2*	Endrin aldehyde
5.772	-0.048	451569	6.452	-0.001	906753	6.4333	2.8562	77.0*	gamma-Chlordane
5.918	-0.024	603969	6.584	-0.005	444475	9.1147	1.5290	142.5*	alpha-Chlordane
2.205	0.009	8432	2.336	-0.029	724852	~~0.0839~~	~~1.8515~~	182.7*	Hexachlorobutadiene
3.972	-0.027	203477	4.431	-0.018	1203465	2.5459	2.5105	1.4	Hexachlorobenzene
5.644	0.041	408405	6.159	-0.020	1380541	9.5191	5.0625	61.1*	Oxychlordane
----			----			0.0000	0.0000	---	2,4-DDE
5.883	-0.047	129590	6.524	-0.015	763350	2.3275	3.6413	44.0*	trans-Nonachlor
6.194	0.005	56053	6.946	0.018	504551	1.6973	4.1166	83.2*	2,4-DDD
6.458	0.040	95565	7.194	-0.017	3832502	2.9223	35.6774	169.7*	2,4-DDT
----			----			0.0000	0.0000	---	cis-Nonachlor
7.447	0.036	101965	8.365	-0.043	447293	2.6272	3.9564	40.4*	Mirex
8.720	-0.035	3580471	10.061	-0.023	8805174	80.0000	80.0000	0.0	Hexabromobiphenyl M
1.738	0.002	916227	1.702	-0.032	6738091	0.0000	0.0000	---	Hexachloroethane
----			7.296	-0.040	570844	0.0000	0.0000	---	Kepone
3.658	-0.002	1359127	3.990	-0.006	2650910	17.7460	7.4401	81.8*	Tetrachloro-m-xylene
8.577	-0.010	347351	9.526	-0.009	1292620	6.8249	7.1921	5.2	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	44.4	18.6	18.6~	42-112
Decachlorobiphenyl	17.1	18.0	17.1~	59-123

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4288295	4603147	7.3
Hexabromobiphenyl	3547373	3580471	0.9

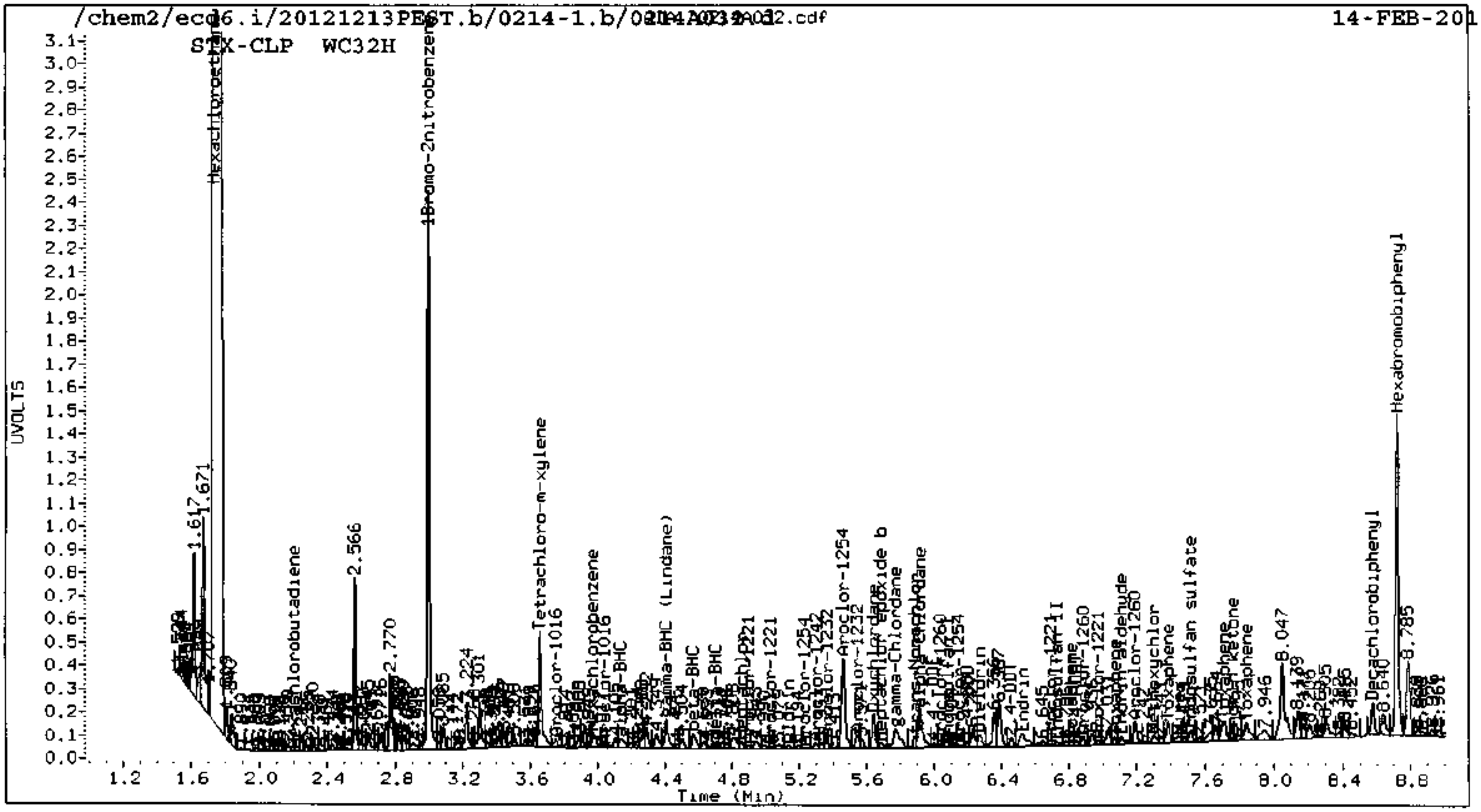
Column 2

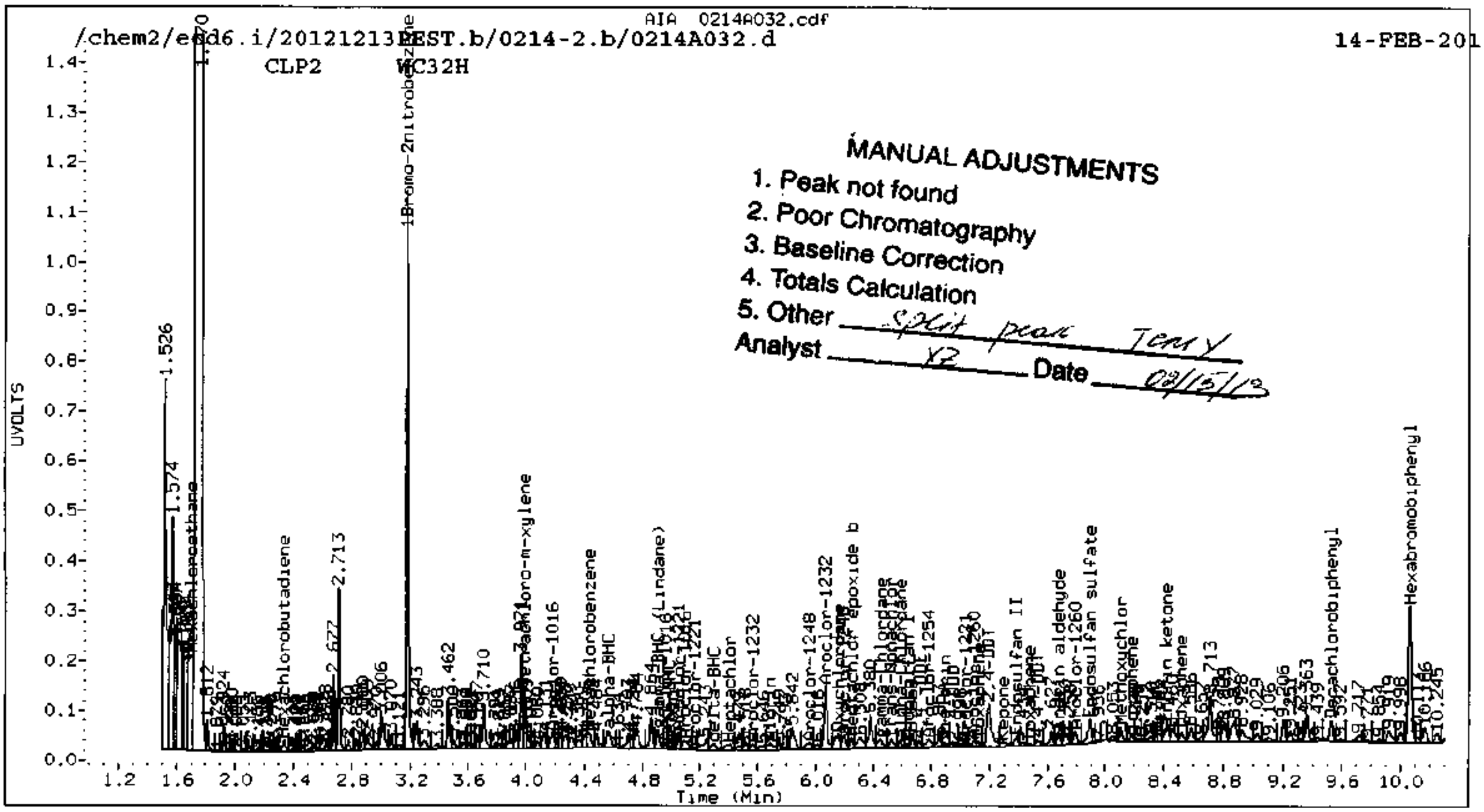
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	22974785	20446901	-11.0
Hexabromobiphenyl	12557398	8805174	-29.9

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 13-DEC-2012
<- Indicates standard response outside Limits (-50 to +100%)

		STX-CLP Col				CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount
Toxaphene	1	6.458	-0.013	95565	78.8	1	7.124	-0.015	329791	55.4
Toxaphene	2	6.815	-0.008	63915	35.9	2	7.474	0.010	211250	24.1
Toxaphene	3	7.073	-0.006	76112	30.1	3	7.678	-0.018	689685	74.1
Toxaphene	4	7.384	-0.020	277889	118.0	4	8.182	0.020	429513	65.1
Toxaphene	5	7.711	-0.013	363482	207.1	5	8.519	0.011	666307	207.5
Toxaphene	6	7.840	-0.014	355245	337.2	NS	---			----

Total STX-CLPAve (6 peaks): 134.517 Total CLP2Ave (5 peaks): 85.252 RPD = 45*
Corrected Ave (5 peaks): 93.989 Corrected Ave (4 peaks): 54.690 RPD = 53*





MANUAL ADJUSTMENTS

1. Peak not found
2. Poor Chromatography
3. Baseline Correction
4. Totals Calculation
5. Other Split peak Terry

Analyst YZ Date 08/15/13

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

YZ 02/15/13

Data file 1: /chem2/ecd6.i/20121213PEST.b/0214-1.b/0214A033.d ARI ID: WC33G
Data file 2: /chem2/ecd6.i/20121213PEST.b/0214-2.b/0214A033.d Client ID: HA-09-0-10-013013
Method: /chem2/ecd6.i/20121213PEST.b/PEST1213.m Injection Date: 14-FEB-2013 20:36
Compound Sublist: wpest Report Date: 02/15/2013 11:10
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: SOIL
Operator: ar Dilution Factor: 1.000

STX-CLP Col RT	Shift	Response	CLP2 Col RT	Shift	Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
2.998	-0.004	4298379	3.180	-0.002	21245385	80.0000	80.0000 IS	0.0	1Bromo-2nitrobenzen
4.115	-0.016	533408	4.559	-0.008	212190	6.2524	0.4555	172.8*	alpha-BHC
4.566	0.017	169795	5.006	0.008	156808	4.8061	0.9088	136.4*	beta-BHC
4.744	0.030	137881	5.296	-0.007	149175	2.0574	0.4412	129.4*	delta-BHC
4.373	-0.035	395191	4.906	-0.012	216451	5.6291	0.5561	164.0*	gamma-BHC (Lindane)
4.835	-0.005	30927	5.370	-0.003	87728	0.4475	0.2279	65.0*	Heptachlor
5.145	0.021	69724	5.700	-0.011	535495	1.0240	1.4749	36.1	Aldrin
5.685	-0.011	15450	6.246	-0.023	363913	0.2379	1.1257	130.2*	Heptachlor epoxide b
6.037	-0.036	18402	6.639	-0.016	12269	0.2575	0.0408	145.3*	Endosulfan I
6.274	-0.020	82236	6.890	-0.023	274646	1.2804	0.8756	37.5	Dieldrin
5.995	-0.016	59787	6.716	-0.009	210252	~~1.0801~~	~~0.6723~~	46.5*	4,4'-DDE
6.472	-0.040	25030	7.159	-0.043	159162	0.5239	0.8946	52.3*	Endrin
6.693	-0.027	7635	7.371	-0.022	471815	0.1548	2.4238	176.0*	Endosulfan II
----			----			~~0.0000~~	~~0.0000~~	---	4,4'-DDD
7.473	-0.012	35884	7.894	-0.042	1210837	0.8350	7.6048	160.4*	Endosulfan sulfate
6.788	-0.033	270014	7.552	0.002	686731	$\boxed{6.2005}$	4.3756	34.5	4,4'-DDT RT
7.255	0.004	14864	8.105	-0.030	294968	0.6923	4.5814	147.5*	Methoxychlor
7.702	-0.036	90851	8.424	0.002	416042	1.6178	2.3299	36.1	Endrin ketone
7.053	-0.043	57402	7.676	-0.014	152485	1.4281	1.0111	34.2	Endrin aldehyde
5.812	-0.008	46248	6.476	0.023	166125	0.7056	0.5036	33.4	gamma-Chlordane
5.957	0.015	31169	----			0.5037	0.0000	---	alpha-Chlordane
2.180	-0.017	38477	2.375	0.011	124208	~~0.4101~~	~~0.3053~~	29.3	Hexachlorobutadiene
3.985	-0.013	82233	4.418	-0.031	1569962	~~1.1019~~	~~3.1519~~	96.4*	Hexachlorobenzene
5.588	-0.016	17964	6.161	-0.018	720885	0.4391	2.5442	141.1*	Oxychlordane
5.655	-0.044	10412	6.416	-0.023	233950	0.2860	1.1049	117.8*	2,4-DDE
5.885	-0.045	135127	6.525	-0.014	537363	2.5452	2.4803	2.6	trans-Nonachlor
6.145	-0.044	26993	6.949	0.021	163173	0.8572	1.2882	40.2*	2,4-DDD
6.413	-0.005	6005	7.219	0.009	498750	0.1926	4.4927	183.6*	2,4-DDT
6.528	-0.017	151649	7.255	-0.010	99829	2.6076	0.4310	143.3*	cis-Nonachlor
7.382	-0.029	127972	8.385	-0.023	97397	3.4580	0.8336	122.3*	Mirex
8.720	-0.034	3414109	10.062	-0.022	9099603	80.0000	80.0000 IS	0.0	Hexabromobiphenyl
1.739	0.002	835707	1.768	0.034	159449692	0.0000	0.0000	---	Hexachloroethane
6.577	-0.004	22647	7.300	-0.036	60440	0.0000	~~0.0000~~	---	Kepone
3.654	-0.006	1932319	3.992	-0.004	10454770	27.0190	28.2399	4.4	Tetrachloro-m-xylen
8.578	-0.009	1806439	9.527	-0.008	6578839	37.2232	35.4201	5.0	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	67.5	70.6	67.5	42-112
Decachlorobiphenyl	93.1	88.6	88.6	59-123

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4288295	4298379	0.2
Hexabromobiphenyl	3547373	3414109	-3.8

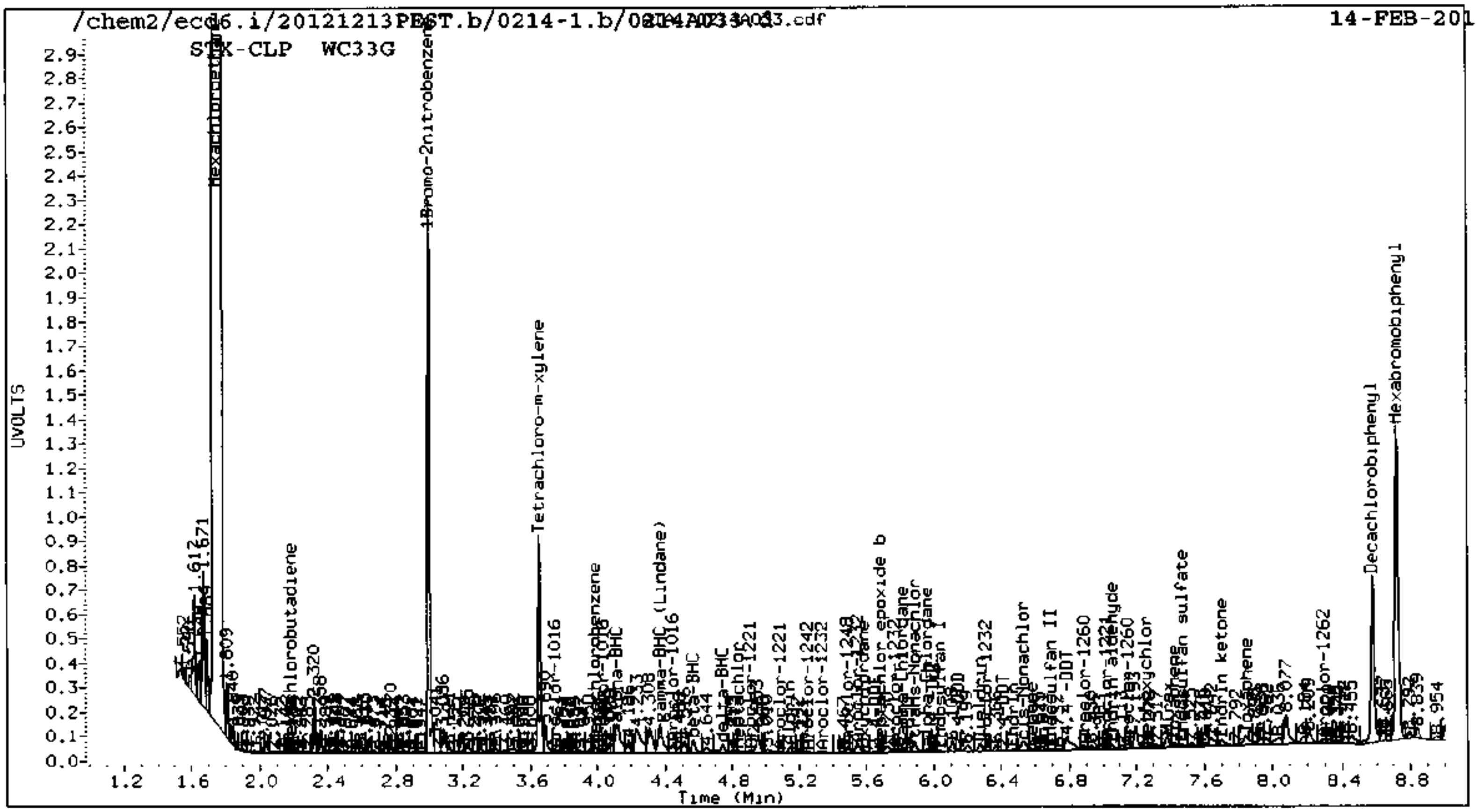
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	22974785	21245385	-7.5
Hexabromobiphenyl	12557398	9099603	-27.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 13-DEC-2012
<- Indicates standard response outside Limits (-50 to +100%)

		STX-CLP Col				CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount
Toxaphene	1	6.472	0.002	25030	21.6	1	7.131	-0.008	77735	12.6
Toxaphene	2	6.788	-0.035	270014	159.0	2	7.473	0.009	166191	18.3
Toxaphene	3	7.053	-0.026	57402	23.8	3	7.676	-0.019	152485	15.9
Toxaphene	4	7.425	0.021	43977	19.6	4	8.181	0.019	289883	42.5
Toxaphene	5	7.702	-0.022	90851	54.3	5	8.497	-0.010	121879	36.7
Toxaphene	6	7.844	-0.010	163591	162.8	NS	---			----

Total STX-CLPAve (6 peaks): 73.528 Total CLP2Ave (5 peaks): 25.218 RPD = 98*
Corrected Ave (4 peaks): 29.839 Corrected Ave (5 peaks): 25.218 RPD = 17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14-FEB-201
STK-CLP WC33G
UVOLTS
Time (Min)
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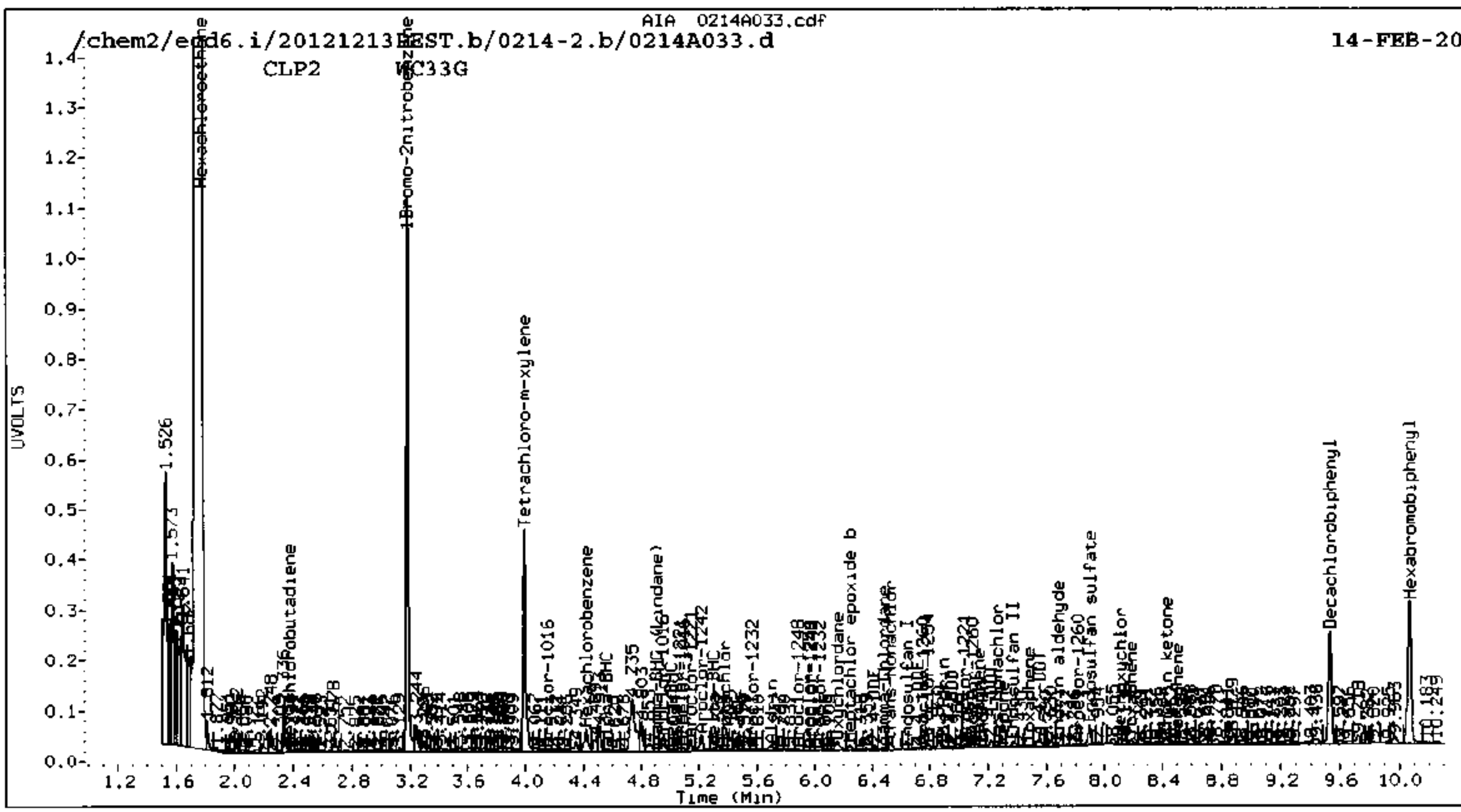
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Decachlorobiphenyl
Hexabromobiphenyl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14-FEB-201
CLP2 WC33G
UVOLTS
Time (Min)
Hexachloroethane
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Decachlorobiphenyl
Hexabromobiphenyl

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

yz 02/15/13

Data file 1: /chem2/ecd6.i/20121213PEST.b/0214-1.b/0214A035.d ARI ID: INDAE
Data file 2: /chem2/ecd6.i/20121213PEST.b/0214-2.b/0214A035.d Client ID:
Method: /chem2/ecd6.i/20121213PEST.b/PEST1213.m Injection Date: 14-FEB-2013 21:11
Compound Sublist: INDA Report Date: 02/15/2013 11:10
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: NONE
Operator: ar Dilution Factor: 1.000

STX-CLP Col RT	Shift	Response	CLP2 Col RT	Shift	Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
3.001	-0.001	4957307	3.183	0.000	26441594	80.0000	80.0000	0.0	1Bromo-2nitrobenzen
4.133	0.002	1982419	4.569	0.002	11711336	20.1486	20.2004	0.3	alpha-BHC
4.511	-0.038	794585	5.006	0.008	4214287	19.5014	19.6251	0.6	beta-BHC
4.679	-0.035	1512332	5.310	0.006	7952484	19.5667	18.8983	3.5	delta-BHC
4.410	0.002	1561973	4.918	0.000	9252574	19.2913	19.1013	1.0	gamma-BHC (Lindane)
4.838	-0.002	1537536	5.371	-0.003	9123183	19.2892	19.0407	1.3	Heptachlor
5.122	-0.002	1507327	5.708	-0.003	8150388	19.1951	18.0375	6.2	Aldrin
5.694	-0.002	1386161	6.265	-0.003	6979884	18.5077	17.3484	6.5	Heptachlor epoxide b
6.070	-0.003	1579161	6.652	-0.003	6136090	19.1621	16.4015	15.5	Endosulfan I
6.291	-0.003	2806015	6.909	-0.004	12828276	37.8817	32.8611	14.2	Dieldrin
6.019	0.009	2367289	6.727	0.002	12443740	37.0823	31.9720	14.8	4,4'-DDE
6.509	-0.003	2285147	7.198	-0.003	9526705	36.5311	38.7775	6.0	Endrin
6.718	-0.003	2268736	7.390	-0.003	10289498	35.1242	38.2792	8.6	Endosulfan II
6.573	0.006	2578492	7.265	0.003	11102370	40.8373	43.1657	5.5	4,4'-DDD
7.481	-0.004	2029473	7.932	-0.003	8213907	36.0689	37.3586	3.5	Endosulfan sulfate
6.824	0.003	1599405	7.549	0.000	6270343	28.0519	28.9323	3.1	4,4'-DDT
7.253	0.002	4118689	8.133	-0.002	13848500	146.5080	155.7632	6.1	Methoxychlor
7.734	-0.003	2484105	8.419	-0.003	8337918	33.7855	33.8149	0.1	Endrin ketone
7.093	-0.003	1835812	7.687	-0.003	7388909	34.8837	35.4790	1.7	Endrin aldehyde
5.818	-0.002	1384850	6.450	-0.002	6899314	18.3198	16.8055	8.6	gamma-Chlordane
5.940	-0.003	1321468	6.587	-0.003	6114318	18.5180	16.2643	13.0	alpha-Chlordane
2.197	0.000	2101054	2.364	0.000	9917696	19.4164	19.5895	0.9	Hexachlorobutadiene
4.011	0.012	1568421	4.456	0.007	11615585	18.2221	18.7372	2.8	Hexachlorobenzene
8.738	-0.017	4470062	10.071	-0.013	12565538	80.0000	80.0000	0.0	Hexabromobiphenyl
3.666	0.006	3071964	4.000	0.004	17868163	37.2448	38.7798	4.0	Tetrachloro-m-xylen
8.583	-0.004	2352774	9.530	-0.005	9515785	37.0284	37.1011	0.2	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	93.1	96.9	93.1~	115- 0
Decachlorobiphenyl	92.6	92.8	92.6~	115- 0

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

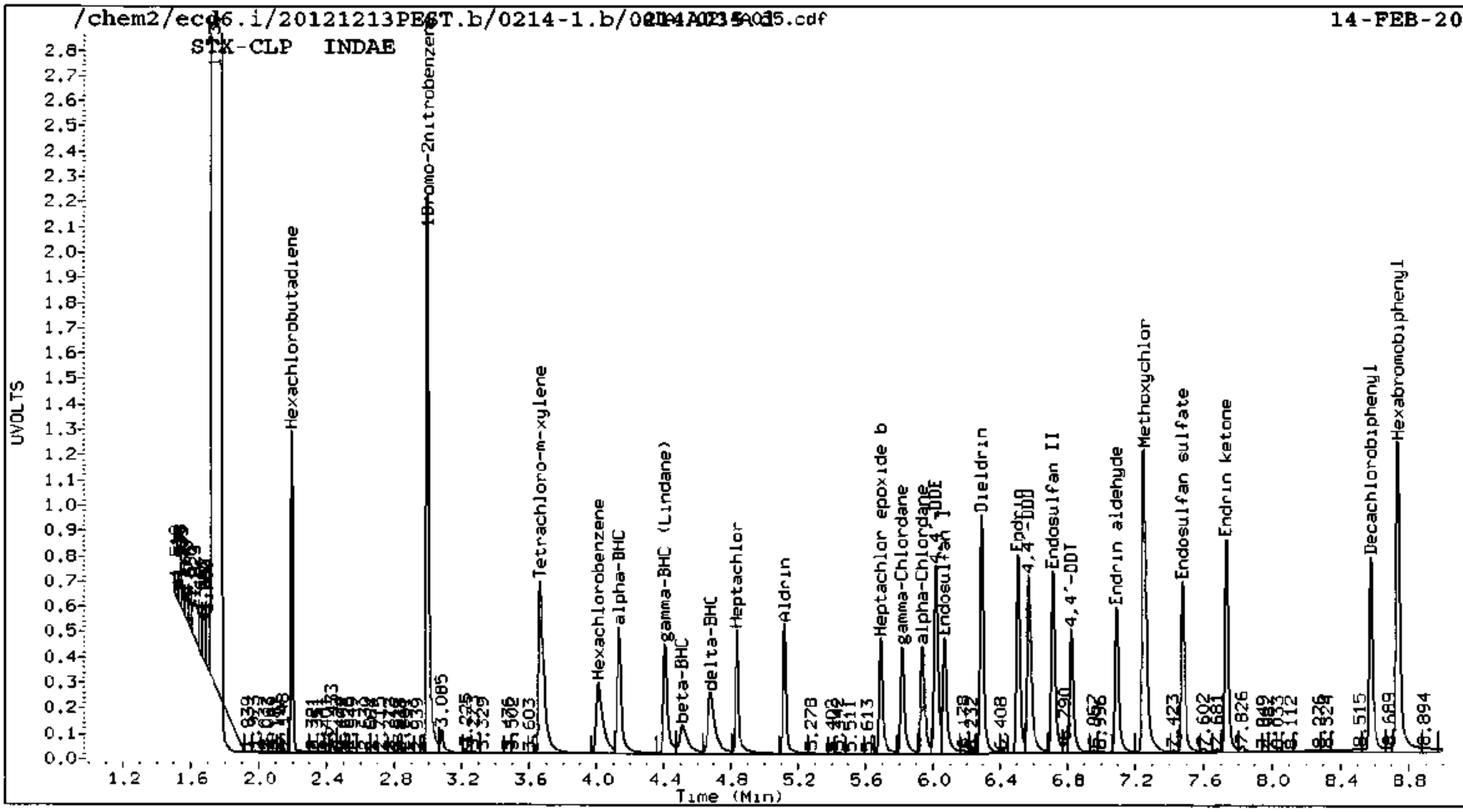
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4288295	4957307	15.6
Hexabromobiphenyl	3547373	4470062	26.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	22974785	26441594	15.1
Hexabromobiphenyl	12557398	12565538	0.1

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 13-DEC-2012
<- Indicates standard response outside Limits (-50 to +100%)

	STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount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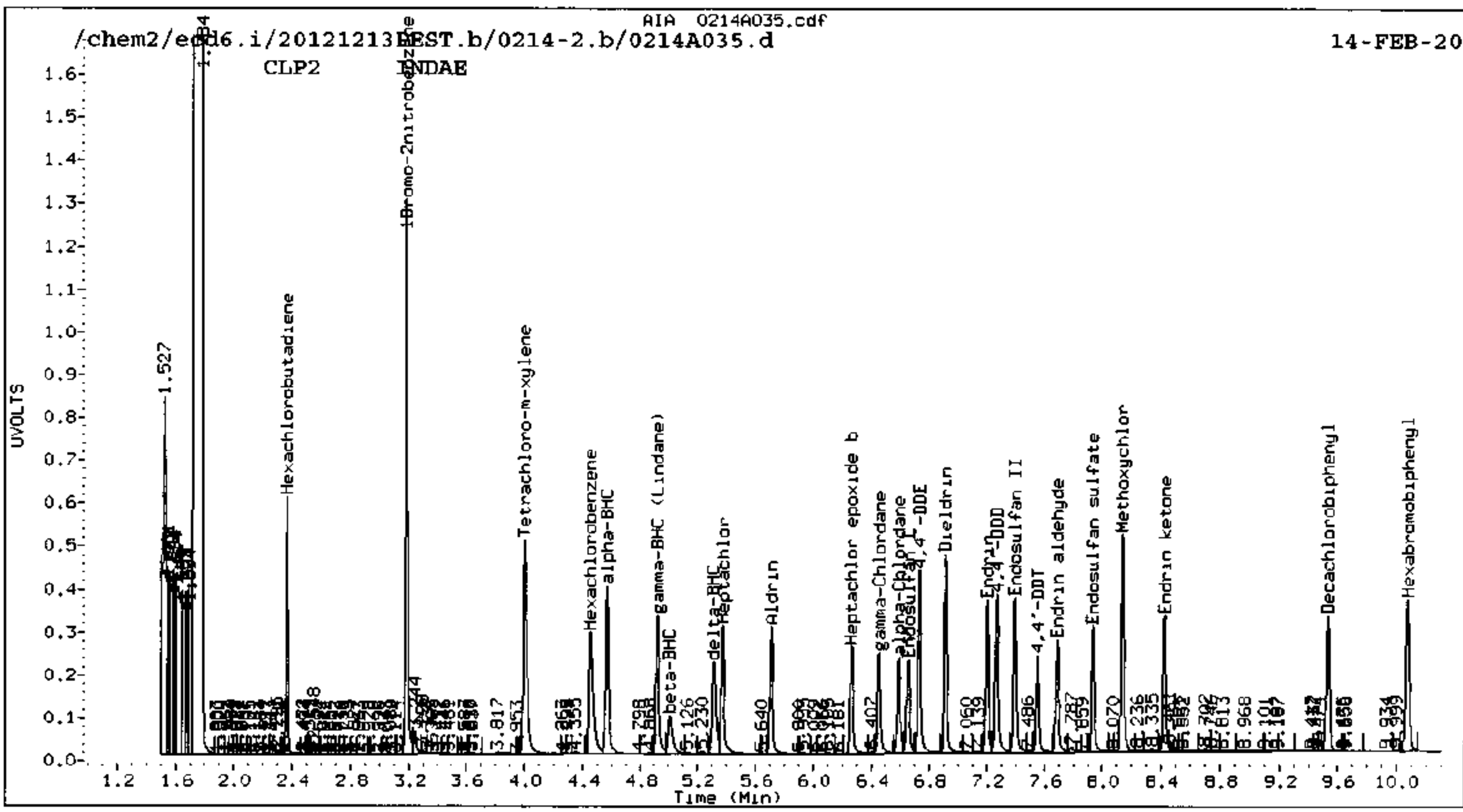
STX-CLP INDAE
UVOLTS
Time (Min)
Hexachlorobutadiene
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide b
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Methoxychlor
Endosulfan sulfate
Endrin ketone
Decachlorobiphenyl
Hexabromobiphenyl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UVOLTS
Time (Min)
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Hexachlorobutadiene
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide b
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl
Hexabromobiphenyl

PCB Raw Data
Extraction Bench Sheets and Notes

ARI Job ID: WC32, WC33

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Benchsheet
(8082A) PCB – Water
Separatory Funnel (3510C) (SOP # 3311S)

Preparation Test PCB # 1 (PCBWSI)
In-House (1ppb)

ARI Job No(s) WC32 Page 1 of 1 Batch set up by: WW

Bottle #	ARI Sample I.D.	Volume Extracted	(REQ) Acid Clean (5mL)	(REQ) Sulfur Clean (5mL) 1 2 3	(opt) Silica Gel Clean (1:5) Y/N	FEV	Volume to Lab	Comments	Verify Client ID AR 02/06/13
	WC32 MBW	500mL	5mL	5mL	1mL Y / N	5mL	1mL		
	SBW	500mL	5mL	5mL	1mL Y / N	5mL	1mL		Analyst/Date
	SBW Dup.	500mL	5mL	5mL	1mL Y / N	5mL	1mL		Verify pH is 5-9
	QLS	500mL	5mL	5mL	1mL Y / N	5mL	1mL		AR 02/06/13
1	WC32 I	500mL	5mL	5mL	1mL Y / N	5mL	1mL		
		~~500mL~~	~~5mL~~	~~5mL~~	~~1mL~~ Y / N	~~5mL~~	~~1mL~~		Analyst/Date
		500mL	5mL	5mL	1mL Y / N	5mL	1mL		KD 80-85°C
		500mL	5mL	5mL	1mL Y / N	5mL	1mL		Hexane Exchange
		500mL	5mL	5mL	1mL Y / N	5mL	1mL		(2 X 20mL) 100°C
		500mL	5mL	5mL	1mL Y / N	5mL	1mL		1 2 3 4 5 6
		500mL	5mL	5mL	1mL Y / N	5mL	1mL		02/07/13 Analyst/Date
		500mL	5mL	5mL	1mL Y / N	5mL	1mL		TurboVap 1 2 3
		500mL	5mL	5mL	1mL Y / N	5mL	1mL		Pre-Cleanups
		500mL	5mL	5mL	1mL Y / N	5mL	1mL		(4mL=10mL Hexane Exchange
		500mL	5mL	5mL	1mL Y / N	5mL	1mL		
		500mL	5mL	5mL	1mL Y / N	5mL	1mL		Analyst/Date
		500mL	5mL	5mL	1mL Y / N	5mL	1mL		TurboVap 1 2 3
		500mL	5mL	5mL	1mL Y / N	5mL	1mL		Post Cleanups
		500mL	5mL	5mL	1mL Y / N	5mL	1mL		WW 2/8/13
		~~500mL~~	~~5mL~~	~~5mL~~	~~1mL~~ Y / N	~~5mL~~	~~1mL~~		
Analyst/Date	AR 02/06/13 →		02/07/13	02/07/13	WW 2/8/13	02/07/13	WW 2/8/13		Analyst/Date

Standard	Standard ID	Concentration	Volume	Expiration Date	Analyst	Witness
Surrogate	N (2035-2)	2µg/mL	**100µL**	5/16/13	AR	WW
Spike	1 (2012-2)	20µg/mL	**125µL**	8/28/13	AR	WW
QLS Spike	5 (1967-1)	2µg/mL	**250µL**	4/03/13	AR	WW

Extraction Time: 10:45

SPECIAL INSTRUCTIONS: 1. Verify pH 2. Adjust pH (if necessary=Analyst Notes). 3. Add Surr/Spike. 4. Extract 3X with 30mL DCM. 5. KD (NO Drying Column) at 80°. 6. Exchange (2 X with 20mL) Hexane at 100°. 7. TurboVap to 4mL=10mL Hexane Exchange. 8. TurboVap 9. Clean-ups? 10. TurboVap (if Silica Clean). 11. Vial 1mL with Hexane. A. Archive Y / N

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

ARI Job No.: WC32

Client ID: Floyd-Snider

Parameter: PCB

Client Project: POB - Harris

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☐ No Anomalies (standard soil/wet sediment/sand/gravel)=	
☐ Standing Water Decanted (Not shared)=	
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay/Clumps (Difficult to homogenize)=	
☐ Rocks (%+size)?	
☐ Organics (Leaves/sticks/grass)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
Aqueous:	
☑ No Anomalies WC32 Sample I	AR 02/06/13
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Other (Details)=	
☐ Other Notes/Comments= (Note problems, concerns, corrective actions).	
(Centrifuge#1 used for all Centrifugations)	

3056F

Revision 009
08/14/12

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Benchsheet

(8082A) PCB – Soil / Sediment
Microwave (3546) (SOP # 3304S)

Preparation Test PCB PSDDA # 19 (PCBSDMP4)

ARI Job No(s) WC32, WC33

Page 1 of 1

PSDDA (4ppb)
Batch set up by: ww

Bottle #	ARI Sample I.D.	Weight Extracted (eq to 12.5g dry wt)	(REQ) Acid Clean (2.5mL)	(REQ) Sulfur Clean (2.5mL) High Sulfur 1 2 3	(REQ) Silica Gel Clean (1:2.5)	Extraction Final Volume	Volume to Lab	Comments	Verify Client ID
	WC32 MBS	12.50g	2.5mL	2.5mL	1mL	2.5mL	1mL	(10g Actual W)	AR 02/08/13 Analyst/Date
	SBS	12.50g	2.5mL	2.5mL	1mL	2.5mL	1mL	(10g Actual Wt)	Microwave 1 2 3
	SBSDup	12.50g	2.5mL	2.5mL	1mL	2.5mL	1mL	(10g Actual Wt)	AR 02/08/13
	QLS	12.50g	2.5mL	2.5mL	1mL	2.5mL	1mL	(10g Actual Wt)	Analyst/Date
	~~WC32 A~~	~~32.42~~	~~2.5mL~~	~~2.5mL~~	~~1mL~~	~~2.5mL~~	~~1mL~~	ww 2/11/13	KD 100°C Hexane Exchange (2 X 20mL) 1 2 3 4 5 6
	~~B~~	~~36.66~~	~~2.5mL~~	~~2.5mL~~	~~1mL~~	~~2.5mL~~	~~1mL~~	ww 2/11/13	
	~~C~~	~~17.04~~	~~2.5mL~~	~~2.5mL~~	~~1mL~~	~~2.5mL~~	~~1mL~~	ww 2/11/13	02/08/13
	~~D~~	~~22.85~~	~~2.5mL~~	~~2.5mL~~	~~1mL~~	~~2.5mL~~	~~1mL~~	ww 2/11/13	Analyst/Date
	E	14.49	2.5mL	2.5mL	1mL	2.5mL	1mL		TurboVap 1 2 3 Pre-Cleanups
	F	14.35	2.5mL	2.5mL	1mL	2.5mL	1mL		
	G	25.16	2.5mL	2.5mL	1mL	2.5mL	1mL		TH 2/8/13
	Gms	25.41	2.5mL	2.5mL	1mL	2.5mL	1mL		Analyst/Date
	Gmsd	25.75	2.5mL	2.5mL	1mL	2.5mL	1mL		TurboVap 1 2 3 Post Cleanups
	H	24.80	2.5mL	2.5mL	1mL	2.5mL	1mL		
	WC33 G	14.22	2.5mL	2.5mL	1mL	2.5mL	1mL		
Analyst/Date		AR 02/08/13	TH 2/8/13	TH 2/8/13	SP 2/9/13	TH 2/8/13	SP 2/9/13		SP 2/9/13 Analyst/Date

Standard	Standard ID	Concentration	Volume	Expiration Date	Analyst	Witness
Surrogate	N(2035-2)	2μg/mL	**50μL**	5/16/13	AR	SP
Spike	1(2012-2)	20μg/mL	**63μL**	8/28/13	AR	SP
QLS Spike	5(1967-1)	2μg/mL	**25μL**	4/03/13	AR	SP

Extraction Time: 0940 **Balance ID:** B139298002

SPECIAL INSTRUCTIONS: 1. Weigh soil/sed into beakers-lightly dry with sodium sulfate. 2. Transfer to microwave vessel(s). Note: (do not fill vessels more than 2/3rd full. Some samples may require two vessels). 3. Add 1:1 Hexane/Acetone until the solvent layer is 3" inches above the soil layer after homogenization. 4. Add surr/spike. 5. Microwave on appropriate power setting determined by # of samples. 6. After microwave-Re-homogenize while hot then cool vessels in cold water 15 minutes. Re-homogenize while cool. 7. Decant 1:1 Hex/Ace into E. flask with sodium sulfate in bottom+ funnel with neutral glasswool plug. 8. Rinse with Hexane. 9. Add 8:2 Hexane/Acetone to the vessel 3"inches above the soil layer after homogenization. Microwave a 2nd time. 10. Let cool and decant solvent then empty the soil into the funnel and rinse with Hexane. 11. KD (Small or Large Drying Column) on 100° bath. (Blanks=only 5g Sodium Sulfate). 12. Exchange (2 X with 20mL) Hexane. 13. TurboVap. 14. Clean-ups. 15. TurboVap. 16. Vial with Hexane.

A. Need Total Solids Y / N B. Archive/Freeze Y / N

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

ARI Job No.: WC32 Client ID: Floyd-Snider

Parameter: Pobit PCB (4ppt) Client Project: POB - Harris

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☒ No Anomalies (standard soil/wet sediment/sand/gravel)= A, B, C, D, E, F, G, H, N	YL 2/4/13
☒ Standing Water Decanted (Not shared)= A, B, C, D, G, N	YL 2/4/13
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay/Clumps (Difficult to homogenize)=	
☒ ~~Rocks (%+size)?~~ 25% Small rocks C, 40% 5% Small E, F, 2% Small Rocks G,	YL 2/4/13
☒ Organics (Leaves/sticks/grass)= C, D, N	YL 2/4/13
☒ Oily, obvious fuel/sulfur odors= C, D, H, N	YL 2/4/13
☒ Other (Details)= 10% shell fragments C, E, F, G YL 2/4/13	YL 2/4/13
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Other (Details)=	
☐ Other Notes/Comments= (Note problems, concerns, corrective actions). (Centrifuge#1 used for all Centrifugations)	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

ARI Job No.: WC33

Client ID: Floyd-Snider

Parameter: 8082A PCB (LLPON)

Client Project: 200 - Harris

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☒ No Anomalies (standard soil/wet sediment/sand/gravel)= E, F, G	YC 2/4/13
☐ Standing Water Decanted (Not shared)=	
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay/Clumps (Difficult to homogenize)=	
☒ Rocks (%+size)? 10% small & medium E, ~~F~~ YC 2/4/13.	YC 2/4/13
☐ Organics (Leaves/sticks/grass)=	
☒ Oily, obvious fuel/sulfur odors= F,	YC 2/4/13
☒ Other (Details)= 10% ~~shell~~ YC 2/4/13 shell fragments ~~[illegible]~~ 2/4/13, G.	YC 2/4/13
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Other (Details)=	
☐ Other Notes/Comments= (Note problems, concerns, corrective actions). (Centrifuge#1 used for all Centrifugations)	

3056F

Revision 009
08/14/12

PCB Raw Data
Initial Calibration

ARI Job ID: WC32, WC33

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC Initial Calibration Notes

ARI SOP: 403S(PCB) 405S(Herb) 407S(TPH-D) 409S(HCID) 412S(PCP) 423S(Pest) 427S(Dir Inj) 428S(EPH) Other

Instrument: FID-3A FID-3B ~~FID-4A~~ FID-4B FID-5 FID-7 FID-8 FID-9 ECD-1 ECD-5 ECD-6 ECD-7 ECD-8

Curve Date(s): 01/28/13 Internal Standard ID 2006-1 Expiration 07/26/13

Endrin/DDT Breakdown <15%? YES / NO / NA

ICal Meets %RSD & r^2 Criteria YES / NO

Manual Integrations for ICal? YES / NO

Minimum Response S/N Met YES / NO

ICV Exceeding ±20%? YES / NO

ICV Exceeding ±30%? YES / NO

Linear Fits Used? YES / NO

Quadratic Fits Used? YES / NO

Calibration Points Dropped? YES / NO

Primary Source	Standard #	Expiration	Secondary Source	Standard #	Expiration
AR1660	1980-1	5/10/13	AR1660	2009-2	5/16/13
AR 1242	1980-6		AR1242	2009-5	
AR 1248	1980-3		AR 1248	2009-6	
AR 1254 / AR 2162	1980-5 / 1980-2		AR 1254	2009-7	
AR 3268	1980-4		AR 3268	2009-4	
DDT	1991-1	01/21/13	AR 2102	2009-3	
BD	1982-2	01/14/13			
IB	1980-5	05/10/13			

Detail problems, corrective actions and/or other pertinent information below:

Analyst: YZ **Date:** 02/28/13

Reviewer: **Date:**

Analytical Resources Inc.: Organics Instrument Log

ECD-5 Serial No.: US00034118

Date: 01/28/13 Analysis: PCB's Analyst: [illegible]

Column 1 Serial No.: 196798 Column Type: ZB5

Column 2 Serial No.: 182259 Column Type: ZB35

GC Method: PCB[illegible] ICal Date: 01/28/13 Injection Volume: 2µL

IS	Ical/Ccal	ICV
2006-1	1980-1,2,3,4,5,6	2009-2,3,4,5,6,7

Document All Maintenance Tasks In StarLIMS

	Inject Date/Time	Filename	DF	LabID
1	28-JAN-2013 15:03	0128A002.d	1	DDT 0.1
2	28-JAN-2013 15:23	0128A003.d	1	DDTBD
3	28-JAN-2013 15:43	0128A004.d	1	IB
4	28-JAN-2013 16:03	0128A005.d	1	AR1660 250
5	28-JAN-2013 16:23	0128A006.d	1	AR1660 20
6	28-JAN-2013 16:43	0128A007.d	1	AR1660 50
7	28-JAN-2013 17:04	0128A008.d	1	AR1660 1000
8	28-JAN-2013 17:23	0128A009.d	1	AR1660 100
9	28-JAN-2013 17:44	0128A010.d	1	AR1660 500
10	28-JAN-2013 18:03	0128A011.d	1	AR1242
11	28-JAN-2013 18:24	0128A012.d	1	AR1248
12	28-JAN-2013 18:44	0128A013.d	1	AR1254
13	28-JAN-2013 19:04	0128A014.d	1	AR2162
14	28-JAN-2013 19:24	0128A015.d	1	AR3268
15	28-JAN-2013 19:45	0128A016.d	1	AR1660 ICV
16	28-JAN-2013 20:05	0128A017.d	1	AR1242 ICV
17	28-JAN-2013 20:25	0128A018.d	1	AR1248 ICV
18	28-JAN-2013 20:45	0128A019.d	1	AR1254 ICV
19	28-JAN-2013 21:05	0128A020.d	1	AR2162 ICV
20	28-JAN-2013 21:25	0128A021.d	1	AR3268 ICV
21	28-JAN-2013 22:05	0128A023.d	1	AR1242
22	28-JAN-2013 22:26	0128A024.d	1	AR1660
23	28-JAN-2013 22:46	0128A025.d	1	WB35MBW1
24	28-JAN-2013 23:06	0128A026.d	1	WB35LCSW1
25	28-JAN-2013 23:26	0128A027.d	1	WB35LCSDW1
26	28-JAN-2013 23:47	0128A028.d	1	WB35A
27	29-JAN-2013 00:07	0128A029.d	1	WB35B
28	29-JAN-2013 00:27	0128A030.d	1	WA51MBS1
29	29-JAN-2013 00:47	0128A031.d	1	WA51A
30	29-JAN-2013 01:08	0128A032.d	1	WA51B
31	29-JAN-2013 01:28	0128A033.d	1	WA51C
32	29-JAN-2013 01:48	0128A034.d	1	WA51D
33	29-JAN-2013 02:08	0128A035.d	1	WA51E
34	29-JAN-2013 02:28	0128A036.d	1	WA51F
35	29-JAN-2013 02:48	0128A037.d	1	WA51G
36	29-JAN-2013 03:09	0128A038.d	1	WA51H
37	29-JAN-2013 03:29	0128A039.d	1	AR1248
38	29-JAN-2013 03:49	0128A040.d	1	AR1660
39	29-JAN-2013 04:09	0128A041.d	1	WA47MBS1

[illegible] 01/31/13

Every line must contain information or be lined out. Make all entries legible.
Start a new page for each QC period. Document All Maintenance Tasks In StarLIMS

Report Date : 30-Jan-2013 13:40

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/ecd5.i/20130128.b/PCB1.m
Batch File: /chem2/ecd5.i/20130128.b/ical-1.b
Inst ID: ecd5.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06
FILENAME:	0128A005	0128A006	0128A007	0128A008	0128A009	0128A010
INJ.DATE:	28-JAN-2013	28-JAN-2013	28-JAN-2013	28-JAN-2013	28-JAN-2013	28-JAN-2013
INJ.TIME:	16:03	16:23	16:43	17:04	17:23	17:44

Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
* 41 IS-BNB	2.279	2.281	2.280	2.280	2.279	2.279	2.279	2.179-2.379	2.280	0.001
$ 1 Tetrachloro-m-xylene	4.442	4.443	4.442	4.444	4.441	4.443	4.442	4.342-4.542	4.442	0.001
2 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	5.097	4.997-5.197	+++++	+++++
3 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	6.087	5.987-6.187	+++++	+++++
4 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	6.090	5.990-6.190	+++++	+++++
7 Aroclor-1016	6.088	6.089	6.088	6.088	6.087	6.088	6.088	5.988-6.188	6.088	0.001
6 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	6.489	6.389-6.589	+++++	+++++
8 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	8.216	8.116-8.316	+++++	+++++
9 Aroclor-1260	9.989	9.989	9.989	9.990	9.988	9.990	9.989	9.889-10.089	9.989	0.001
10 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	10.306	10.206-10.406	+++++	+++++
11 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	11.197	11.097-11.297	+++++	+++++
$ 13 Decachlorobiphenyl	12.848	12.848	12.848	12.848	12.848	12.848	12.848	12.748-12.948	12.848	0.000
* 12 IS-HBBP	13.207	13.208	13.208	13.207	13.207	13.207	13.207	13.107-13.307	13.207	0.000
42 2,4-DDE	+++++	+++++	+++++	+++++	+++++	+++++	8.187	8.137-8.237	+++++	+++++
43 2,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++	8.737	8.687-8.787	+++++	+++++
44 2,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++	9.241	9.191-9.291	+++++	+++++
46 4,4-DDE	+++++	+++++	+++++	+++++	+++++	+++++	8.619	8.519-8.719	+++++	+++++

Reviewer 1 ___ kz ___ Date: 01/30/13
Reviewer 2 ______ Date: ______

WC32:01022

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/ecd5.i/20130128.b/PCB2.m
Batch File: /chem2/ecd5.i/20130128.b/ical-2.b
Inst ID: ecd5.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06
FILENAME:	0128A005	0128A006	0128A007	0128A008	0128A009	0128A010
INJ.DATE:	28-JAN-2013	28-JAN-2013	28-JAN-2013	28-JAN-2013	28-JAN-2013	28-JAN-2013
INJ.TIME:	16:03	16:23	16:43	17:04	17:23	17:44

Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
* 40 IS-BNB	2.761	2.761	2.760	2.760	2.762	2.760	2.761	2.661-2.861	2.761	0.001
$ 2 Tetrachloro-m-xylene	4.450	4.451	4.450	4.450	4.451	4.450	4.450	4.350-4.550	4.450	0.001
1 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	3.735	3.635-3.835	+++++	+++++
4 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	6.202	6.102-6.302	+++++	+++++
3 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	6.202	6.102-6.302	+++++	+++++
6 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	6.829	6.729-6.929	+++++	+++++
7 Aroclor-1016	6.201	6.201	6.201	6.201	6.201	6.200	6.201	6.101-6.301	6.201	0.000
8 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	8.332	8.232-8.432	+++++	+++++
10 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	10.293	10.193-10.393	+++++	+++++
9 Aroclor-1260	10.292	10.292	10.292	10.292	10.293	10.293	10.292	10.192-10.392	10.292	0.000
11 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	11.540	11.440-11.640	+++++	+++++
$ 13 Decachlorobiphenyl	13.239	13.238	13.238	13.238	13.239	13.239	13.239	13.139-13.339	13.238	0.000
* 12 IS-HBBP	14.105	14.105	14.106	14.106	14.105	14.106	14.105	14.005-14.205	14.106	0.000
41 2,4-DDE	+++++	+++++	+++++	+++++	+++++	+++++	8.601	8.551-8.651	+++++	+++++
42 2,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++	9.287	9.237-9.337	+++++	+++++
44 4,4-DDE	+++++	+++++	+++++	+++++	+++++	+++++	8.989	8.889-9.089	+++++	+++++
45 4,4-DDD/2,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++	9.750	9.650-9.850	+++++	+++++

Reviewer 1 YZ Date: 01/30/13
Reviewer 2 Date:

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-JAN-2013 16:03
End Cal Date : 28-JAN-2013 19:24
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd5.i/20130128.b/PCB1.m
Cal Date : 30-Jan-2013 10:05 jrains
Curve Type : Average

Calibration File Names:
Level 1: /chem2/ecd5.i/20130128.b/ical-1.b/0128A006.d
Level 2: /chem2/ecd5.i/20130128.b/ical-1.b/0128A007.d
Level 3: /chem2/ecd5.i/20130128.b/ical-1.b/0128A009.d
Level 4: /chem2/ecd5.i/20130128.b/ical-1.b/0128A005.d
Level 5: /chem2/ecd5.i/20130128.b/ical-1.b/0128A010.d
Level 6: /chem2/ecd5.i/20130128.b/ical-1.b/0128A008.d
Level 7: /chem2/ecd5.i/20130128.b/ical-1.b/0128A015.d

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	RRF	% RSD
2 Aroclor-1221(1)	+++++	+++++	+++++	+++++	+++++	+++++	0.03314	0.03314	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++	0.01044	0.01044	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++	0.01396	0.01396	0.000
3 Aroclor-1242(1)	+++++	+++++	+++++	+++++	+++++	+++++	0.02792	0.02792	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++	0.08717	0.08717	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++	0.03768	0.03768	0.000

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-JAN-2013 16:03
End Cal Date : 28-JAN-2013 19:24
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd5.i/20130128.b/PCB1.m
Cal Date : 30-Jan-2013 10:05 jrains
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
	250.000 Level 7							
(4)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.04513						0.04513	0.000
4 Aroclor-1232(1)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.01494						0.01494	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.04699						0.04699	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.02235						0.02235	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.02583						0.02583	0.000
7 Aroclor-1016(1)	0.04269	0.03944	0.03953	0.03678	0.03347	0.03055		
	+++++						0.03708	11.985
(2)	0.14252	0.13002	0.12559	0.11381	0.10288	0.09267		
	+++++						0.11791	15.595
(3)	0.05958	0.05391	0.05394	0.04918	0.04431	0.04001		
	+++++						0.05016	14.244
(4)	0.04025	0.03663	0.03808	0.03517	0.03208	0.02899		
	+++++						0.03520	11.649

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-JAN-2013 16:03
End Cal Date : 28-JAN-2013 19:24
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd5.i/20130128.b/PCB1.m
Cal Date : 30-Jan-2013 10:05 jrains
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
	250.000 Level 7							
6 Aroclor-1248(1)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.05704						0.05704	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.06048						0.06048	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.07619						0.07619	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.05943						0.05943	0.000
8 Aroclor-1254(1)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.07833						0.07833	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.05229						0.05229	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.10147						0.10147	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.11199						0.11199	0.000
(5)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.07020						0.07020	0.000

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-JAN-2013 16:03
End Cal Date : 28-JAN-2013 19:24
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd5.i/20130128.b/PCB1.m
Cal Date : 30-Jan-2013 10:05 jrains
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	RRF	% RSD
9 Aroclor-1260(1)	0.07170	0.06233	0.06083	0.05589	0.05052	+++++	+++++	0.06025	13.109
(2)	0.07272	0.06415	0.06113	0.05600	0.05099	+++++	+++++	0.06100	13.530
(3)	0.16923	0.15015	0.14052	0.12888	0.11784	+++++	+++++	0.14132	13.991
(4)	0.09429	0.08501	0.07832	0.07169	0.06629	+++++	+++++	0.07912	13.918
(5)	0.04514	0.04120	0.03908	0.03552	0.03336	+++++	+++++	0.03886	11.957
10 Aroclor-1262(1)	+++++	+++++	+++++	+++++	+++++	+++++	0.06584	0.06584	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++	0.16863	0.16863	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++	0.05984	0.05984	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++	0.06784	0.06784	0.000

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-JAN-2013 16:03
End Cal Date : 28-JAN-2013 19:24
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd5.i/20130128.b/PCB1.m
Cal Date : 30-Jan-2013 10:05 jrains
Curve Type : Average

Compound	20.000 Level 1 / 250.000 Level 7	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
(5)	+++++ / 0.05941	+++++	+++++	+++++	+++++	+++++	0.05941	0.000
11 Aroclor-1268(1)	+++++ / 0.17039	+++++	+++++	+++++	+++++	+++++	0.17039	0.000
(2)	+++++ / 0.16479	+++++	+++++	+++++	+++++	+++++	0.16479	0.000
(3)	+++++ / 0.14165	+++++	+++++	+++++	+++++	+++++	0.14165	0.000
(4)	+++++ / 0.38504	+++++	+++++	+++++	+++++	+++++	0.38504	0.000
42 2,4-DDE	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
43 2,4-DDD	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
44 2,4-DDT	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
46 4,4-DDE	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-JAN-2013 16:03
End Cal Date : 28-JAN-2013 19:24
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd5.i/20130128.b/PCB1.m
Cal Date : 30-Jan-2013 10:05 jrains
Curve Type : Average

Compound	20.000 Level 1 / 250.000 Level 7	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
47 4,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
48 4,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
$ 1 Tetrachloro-m-xylene	1.53761	1.50654	1.47478	1.41836	1.32812	1.24211		
	+++++						1.41792	8.003
$ 13 Decachlorobiphenyl	1.67304	1.68858	1.48800	1.25527	1.14679	1.06535		
	+++++						1.38617	19.397

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-JAN-2013 16:03
End Cal Date : 28-JAN-2013 19:24
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd5.i/20130128.b/PCB2.m
Cal Date : 30-Jan-2013 10:00 jrains
Curve Type : Average

Calibration File Names:
Level 1: /chem2/ecd5.i/20130128.b/ical-2.b/0128A006.d
Level 2: /chem2/ecd5.i/20130128.b/ical-2.b/0128A007.d
Level 3: /chem2/ecd5.i/20130128.b/ical-2.b/0128A009.d
Level 4: /chem2/ecd5.i/20130128.b/ical-2.b/0128A005.d
Level 5: /chem2/ecd5.i/20130128.b/ical-2.b/0128A010.d
Level 6: /chem2/ecd5.i/20130128.b/ical-2.b/0128A008.d
Level 7: /chem2/ecd5.i/20130128.b/ical-2.b/0128A015.d

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
	250.000 Level 7							
1 Aroclor-1221(1)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.00827						0.00827	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.01300						0.01300	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.00771						0.00771	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.02422						0.02422	0.000
4 Aroclor-1232(1)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.02014						0.02014	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.03934						0.03934	0.000

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-JAN-2013 16:03
End Cal Date : 28-JAN-2013 19:24
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd5.i/20130128.b/PCB2.m
Cal Date : 30-Jan-2013 10:00 jrains
Curve Type : Average

Compound	20.000 Level 1 / 250.000 Level 7	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
(3)	+++++ / 0.01619	+++++	+++++	+++++	+++++	+++++	0.01619	0.000
(4)	+++++ / 0.01388	+++++	+++++	+++++	+++++	+++++	0.01388	0.000
3 Aroclor-1242(1)	+++++ / 0.03372	+++++	+++++	+++++	+++++	+++++	0.03372	0.000
(2)	+++++ / 0.07241	+++++	+++++	+++++	+++++	+++++	0.07241	0.000
(3)	+++++ / 0.02986	+++++	+++++	+++++	+++++	+++++	0.02986	0.000
(4)	+++++ / 0.02589	+++++	+++++	+++++	+++++	+++++	0.02589	0.000
6 Aroclor-1248(1)	+++++ / 0.04717	+++++	+++++	+++++	+++++	+++++	0.04717	0.000
(2)	+++++ / 0.03952	+++++	+++++	+++++	+++++	+++++	0.03952	0.000
(3)	+++++ / 0.04108	+++++	+++++	+++++	+++++	+++++	0.04108	0.000

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-JAN-2013 16:03
End Cal Date : 28-JAN-2013 19:24
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd5.i/20130128.b/PCB2.m
Cal Date : 30-Jan-2013 10:00 jrains
Curve Type : Average

Compound	20.000 Level 1 / 250.000 Level 7	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
(4)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.05087						0.05087	0.000
7 Aroclor-1016 (1)	0.05564	0.05141	0.04875	0.04392	0.03976	0.03555		
	+++++						0.04584	16.385
(2)	0.11493	0.10849	0.10411	0.09373	0.08608	0.07764		
	+++++						0.09750	14.559
(3)	0.02849	0.02761	0.02697	0.02491	0.02313	0.02124		
	+++++						0.02539	11.080
(4)	0.03409	0.03187	0.03058	0.02777	0.02546	0.02311		
	+++++						0.02881	14.325
8 Aroclor-1254 (1)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.03496						0.03496	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.04489						0.04489	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.03479						0.03479	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.07569						0.07569	0.000

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-JAN-2013 16:03
End Cal Date : 28-JAN-2013 19:24
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd5.i/20130128.b/PCB2.m
Cal Date : 30-Jan-2013 10:00 jrains
Curve Type : Average

Compound	20.000 Level 1 / 250.000 Level 7	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
(5)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.04619						0.04619	0.000
10 Aroclor-1262(1)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.09368						0.09368	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.08021						0.08021	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.18098						0.18098	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.07335						0.07335	0.000
(5)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.06631						0.06631	0.000
9 Aroclor-1260(1)	0.07080	0.06750	0.06195	0.05757	0.05249	0.04884		
	+++++						0.05986	14.243
(2)	0.08942	0.08296	0.07551	0.06998	0.06402	0.05961		
	+++++						0.07358	15.398
(3)	0.17285	0.16561	0.15264	0.14205	0.13036	0.12160		
	+++++						0.14752	13.528

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-JAN-2013 16:03
End Cal Date : 28-JAN-2013 19:24
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd5.i/20130128.b/PCB2.m
Cal Date : 30-Jan-2013 10:00 jrains
Curve Type : Average

Compound	20.000 Level 1 / 250.000 Level 7	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
(4)	0.05286	0.04802	0.04396	0.04138	0.03834	0.03606		
	+++++						0.04344	14.367
11 Aroclor-1268(1)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.19050						0.19050	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.18415						0.18415	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.15367						0.15367	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.41868						0.41868	0.000
41 2,4-DDE	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
42 2,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
44 4,4-DDE	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
45 4,4-DDD/2,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-JAN-2013 16:03
End Cal Date : 28-JAN-2013 19:24
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd5.i/20130128.b/PCB2.m
Cal Date : 30-Jan-2013 10:00 jrains
Curve Type : Average

Compound	20.000 Level 1 / 250.000 Level 7	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
46 4,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
$ 2 Tetrachloro-m-xylene	1.26312	1.23429	1.21263	1.17049	1.11879	1.04443		
	+++++						1.17396	6.912
$ 13 Decachlorobiphenyl	1.69528	1.46192	1.37044	1.24651	1.18254	1.10258		
	+++++						1.34321	16.032

Analytical Resources Inc.
Dual Column PCBs by SW8082

Data file 1: 20130128.b/ical-1.b/0128A004.d
Data file 2: 20130128.b/ical-2.b/0128A004.d
Method: /chem2/ecd5.i/20130128.b/PCB1.m
Compound Sublist: PCB
Instrument, Inj. Vol.: ecd5.i, 2ul
Quant Method: Internal Std

ARI ID: IB
Client ID:
Injection Date: 28-JAN-2013 15:43
Ical Date: 28-JAN-2013
Matrix: NONE
Dilution Factor: 1.000

YZ 01/30/13

ZB5 Col RT	Shift	Response	ZB35 Col RT	Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
4.443	-0.001	30070977	4.450	-0.001	8485808	37.2	38.0	2.2	Tetrachloro-m-xylen
12.849	-0.001	33965617	13.238	-0.002	7108765	30.9	34.5	10.9	Decachlorobiphenyl

* Indicates RPD > 40%
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE PERCENT RECOVERY

SURROGATE	Col1	Col2
Tetrachloro-m-xylene	93.0	95.1
Decachlorobiphenyl	77.2	86.1

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	44738954	45584113	1.9
Hexabromobiphenyl	59848867	60462231	1.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	14899855	15205801	2.1
Hexabromobiphenyl	12307480	12286706	-0.2

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 28-JAN-2013
<- Indicates standard response outside Limits (-50 to +100%)

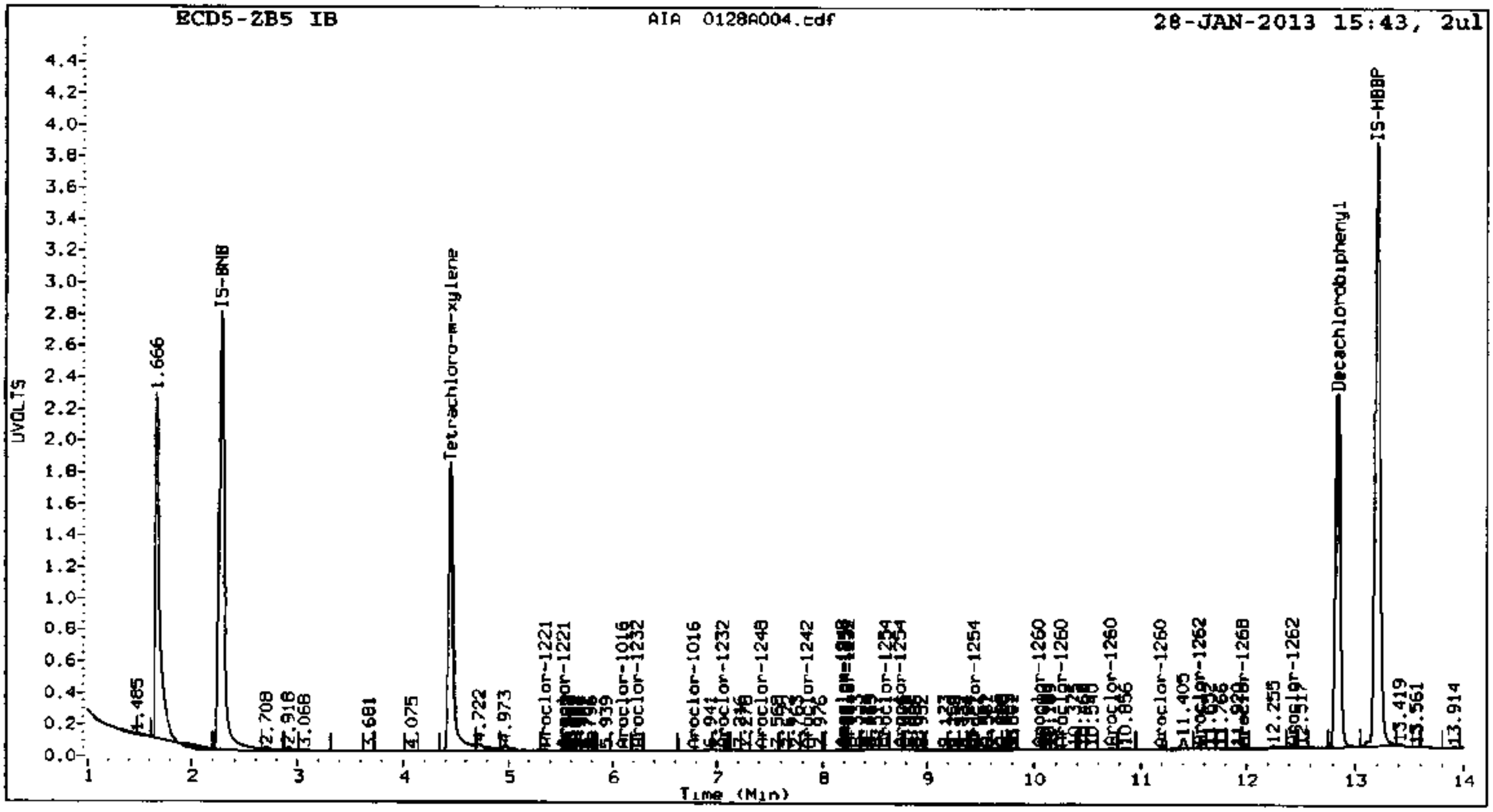
		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	6.093	0.002	44456	2.1	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	6.771	0.016	12415	0.6	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1221	1	---			0.0	1	5.150	1.416	106127	67.5
Aroclor-1221	2	5.361	-1.134	249678	42.0	2	---			0.0
Aroclor-1221	3	5.535	-2.369	18044	2.3	3	5.503	0.117	19230	13.1
Aroclor-1221	NS	---			----	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	6.230	0.140	97441	11.4	1	---			0.0
Aroclor-1232	2	6.771	0.278	12415	0.5	2	---			0.0
Aroclor-1232	3	7.050	-0.418	24776	1.9	3	---			0.0
Aroclor-1232	4	8.249	0.352	10696	0.7	4	---			0.0
	Total Col1Ave (4 peaks):			3.6		Col2Ave: <3 Quant Peaks				
Aroclor-1242	1	6.093	0.002	44456	2.8	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	7.847	-0.050	15531	0.6	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1248	1	---			0.0	1	---			0.0
Aroclor-1248	2	7.418	-0.051	18253	0.5	2	---			0.0
Aroclor-1248	3	7.847	-0.050	15531	0.4	3	---			0.0
Aroclor-1248	4	8.188	0.055	53384	1.6	4	---			0.0
	Total Col1Ave (3 peaks):			0.8		Col2Ave: <3 Quant Peaks				
Aroclor-1254	1	8.217	0.001	11502	0.3	1	---			0.0
Aroclor-1254	2	8.606	0.019	27597	0.9	2	---			0.0
Aroclor-1254	3	8.743	0.020	48796	0.8	3	---			0.0
Aroclor-1254	4	---			0.0	4	---			0.0
Aroclor-1254	5	9.447	0.014	30958	0.8	5	---			0.0
	Total Col1Ave (4 peaks):			0.7		Col2Ave: <3 Quant Peaks				
Aroclor-1260	1	10.047	0.056	93526	2.1	1	---			0.0
Aroclor-1260	2	10.253	-0.054	20163	0.4	2	10.803	0.059	14111	1.2
Aroclor-1260	3	10.719	0.038	141785	1.3	3	---			0.0
Aroclor-1260	4	---			0.0	4	11.488	-0.051	16922	2.5
Aroclor-1260	5	11.190	-0.081	36040	1.2	NS	---			----
	Total Col1Ave (4 peaks):			1.3		Col2Ave: <3 Quant Peaks				
Aroclor-1262	1	10.253	-0.053	20163	0.4	1	---			0.0
Aroclor-1262	2	10.719	0.039	141785	1.1	2	10.803	0.059	14111	1.1
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	11.547	0.278	195244	3.8	4	11.488	-0.051	16922	1.5
Aroclor-1262	5	12.432	0.493	79340	1.8	5	12.376	0.036	34100	3.3
	Total Col1Ave (4 peaks):			1.8		Total Col2Ave (3 peaks):			2.0	RPD = 12
	Corrected Ave (3 peaks):			1.1			Corrected Ave: < 3 Peaks			
Aroclor-1268	1	11.547	0.350	195244	1.5	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	11.966	0.312	33898	0.3	3	---			0.0
Aroclor-1268	4	12.849	0.406	33965617	116.7	4	---			0.0
	Total Col1Ave (3 peaks):			39.5		Col2Ave: <3 Quant Peaks				

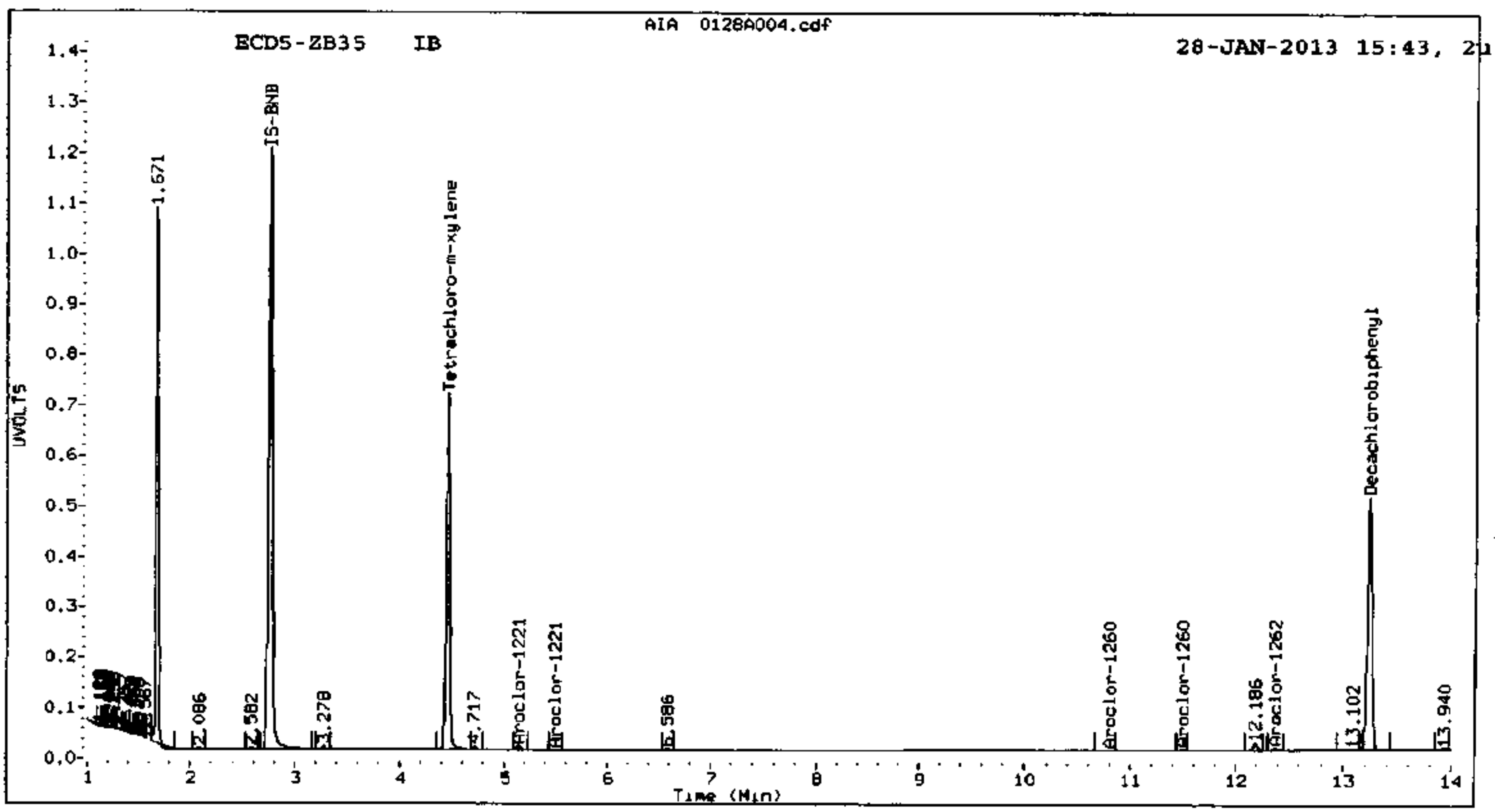
Total PCB Area Col1 (4.545 - 12.749) = 6315124 Col1 Total PCB = 0.0 ppm*

Total PCB Area Col2 (4.551 - 13.140) = 502919 Col2 Total PCB = 0.0 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.


ECD5-ZB5 IB
AIA 0128A004.cdf
28-JAN-2013 15:43, 2ul
UVOLTS
1.666
IS-BNB
Tetrachloro-m-xylene
Decachlorobiphenyl
IS-HBBP
Time (Min)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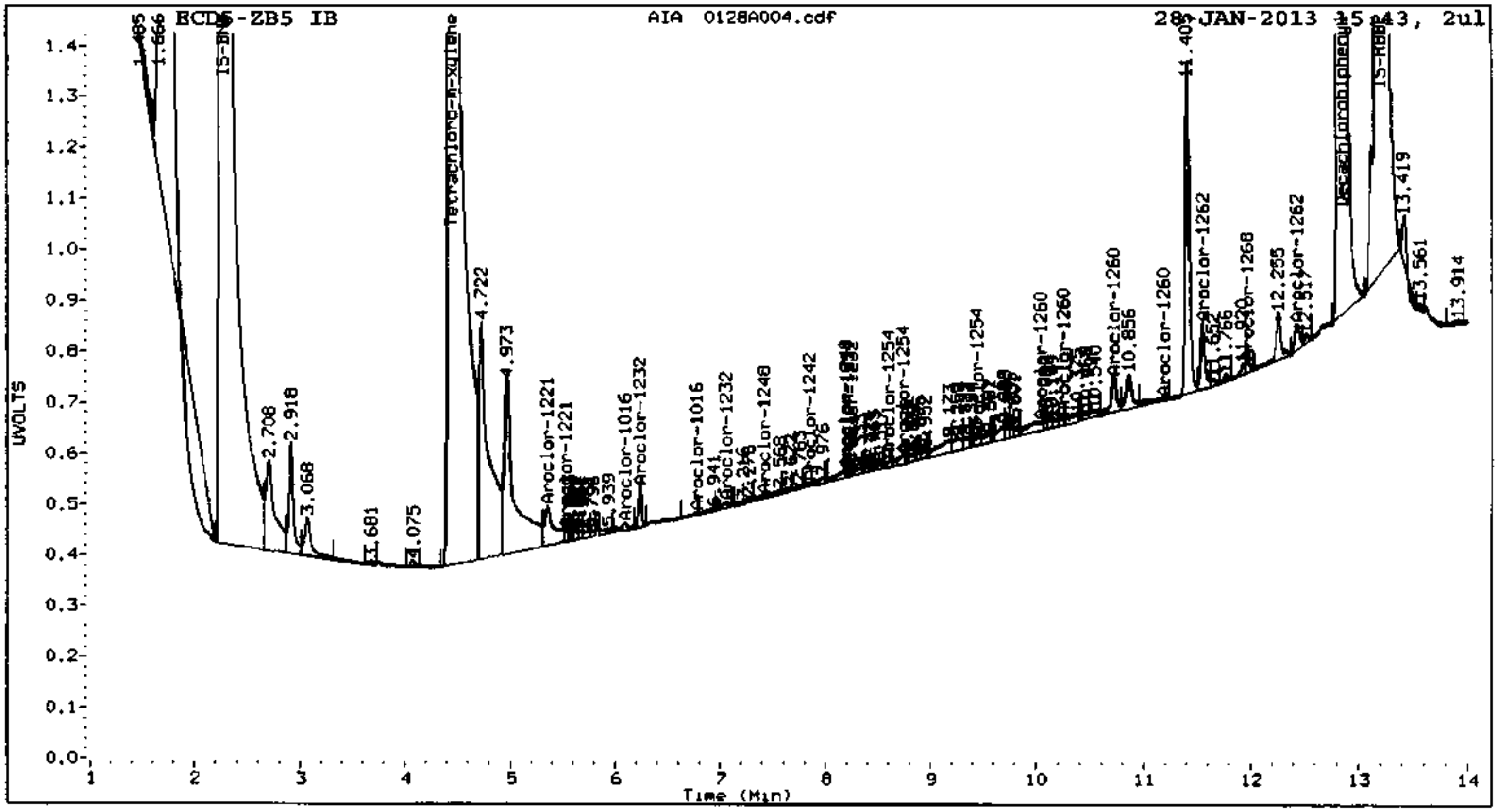
AIA 0128A004.cdf
28-JAN-2013 15:43, 2u
UVOLTS
1.571
IS-BNB
Tetrachloro-m-xylene
Decachlorobiphenyl
Time (Min)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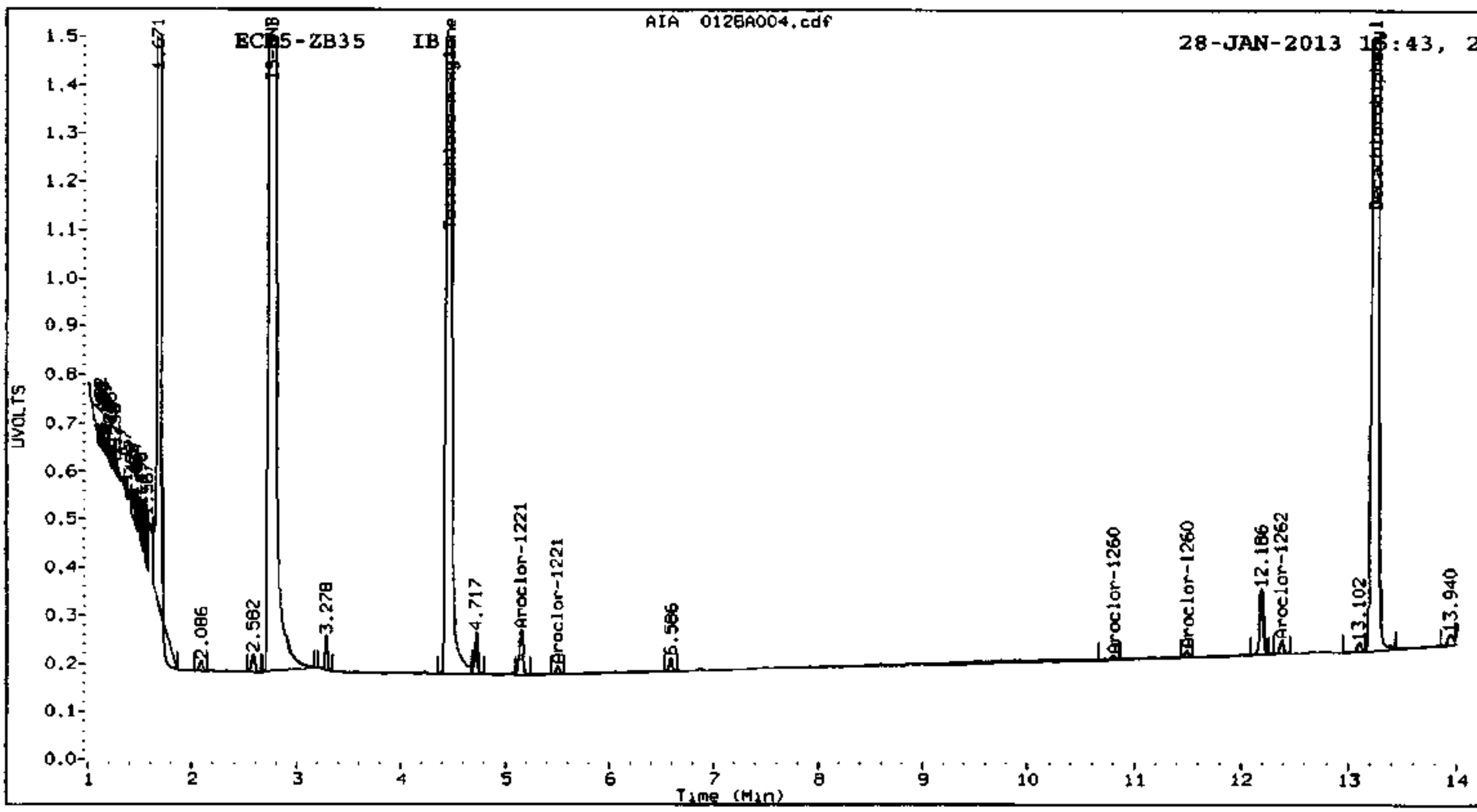
AIA 0128A004.cdf
28-JAN-2013 15:43, 2ul
UVOLTS
Time (Min)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AIA 0128A004.cdf
28-JAN-2013 15:43, 2u
UVOLTS
Time (Min)

Analytical Resources Inc.
Dual Column PCBs by SW8082

Data file 1: 20130128.b/ical-1.b/0128A005.d
Data file 2: 20130128.b/ical-2.b/0128A005.d
Method: /chem2/ecd5.i/20130128.b/PCB1.m
Compound Sublist: AR1660
Instrument, Inj. Vol.: ecd5.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660 250 YZ 01/30/13
Client ID:
Injection Date: 28-JAN-2013 16:03
Ical Date: 28-JAN-2013
Matrix: NONE
Dilution Factor: 1.000

ZB5 Col RT	ZB5 Col Shift	ZB5 Col Response	ZB35 Col RT	ZB35 Col Shift	ZB35 Col Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
4.442	-0.003	15863982	4.450	-0.001	4360042	20.0	19.9	0.3	Tetrachloro-m-xylen
12.848	-0.002	18781635	13.239	-0.001	3835350	18.1	18.6	2.4	Decachlorobiphenyl

* Indicates RPD > 40%
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE PERCENT RECOVERY

SURROGATE	Col1	Col2
Tetrachloro-m-xylene	50.0	49.9
Decachlorobiphenyl	45.3	46.4

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	44738954	44738954	0.0
Hexabromobiphenyl	59848867	59848867	0.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	14899855	14899855	0.0
Hexabromobiphenyl	12307480	12307480	0.0

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 28-JAN-2013
<- Indicates standard response outside Limits (-50 to +100%)

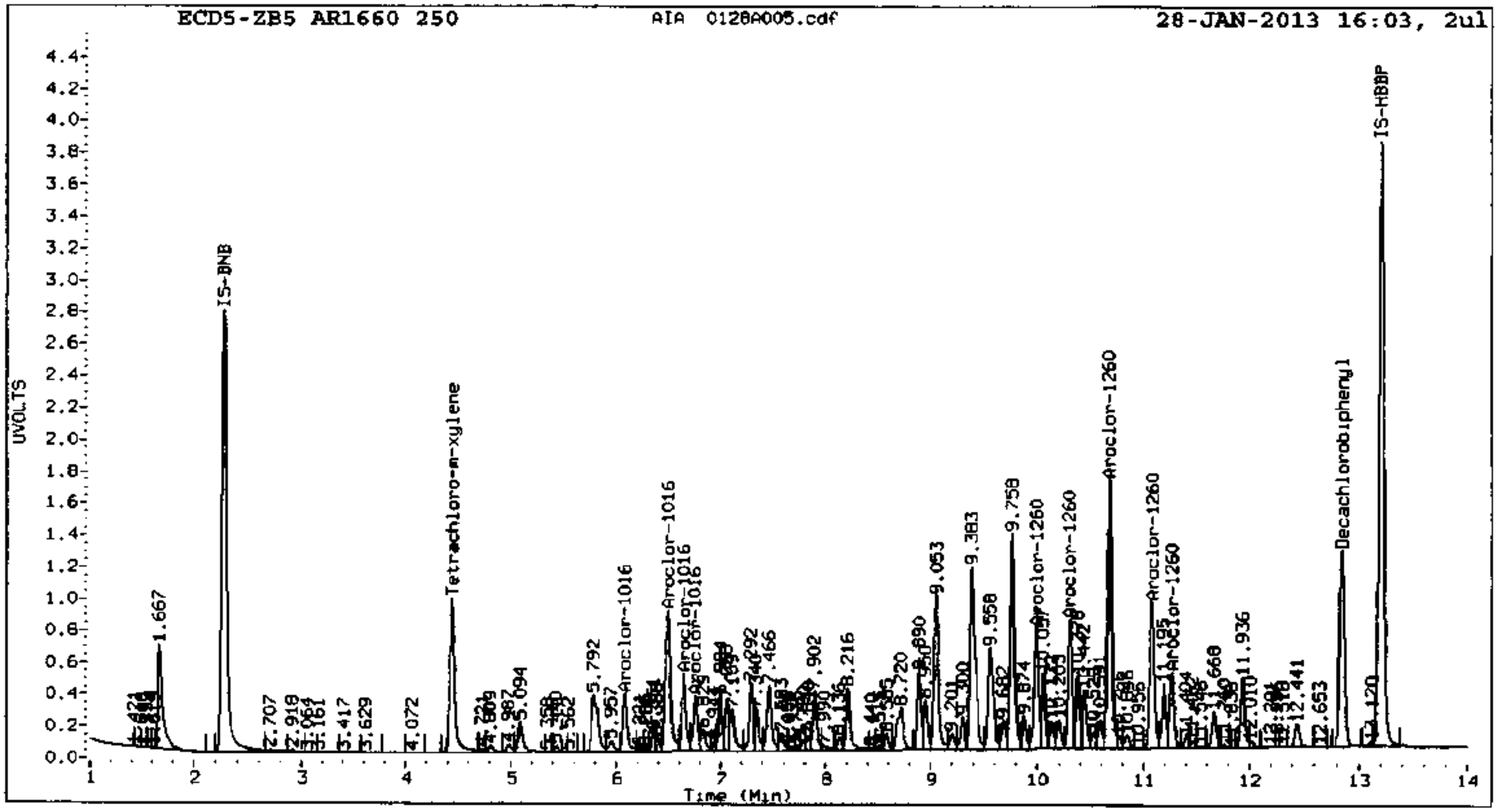
	ZB5 Col					ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	6.088	-0.003	5141757	248.0	1	6.201	-0.003	2045033	239.5
Aroclor-1016	2	6.492	-0.003	15911733	241.3	2	6.833	-0.001	4364262	240.3
Aroclor-1016	3	6.642	-0.003	6876493	245.2	3	7.217	-0.003	1160054	245.3
Aroclor-1016	4	6.753	-0.003	4917394	249.8	4	7.327	-0.002	1292993	241.0
	Total Col1Ave (4 peaks):			246.1	Total Col2Ave (4 peaks):				241.5	RPD = 2
	Corrected Ave (3 peaks):			244.8	Corrected Ave (3 peaks):				240.3	RPD = 2
Aroclor-1260	1	9.989	-0.002	10452745	231.9	1	10.292	-0.001	2214331	240.5
Aroclor-1260	2	10.305	-0.002	10473657	229.5	2	10.742	-0.002	2691500	237.8
Aroclor-1260	3	10.679	-0.002	24103664	228.0	3	11.017	-0.001	5463497	240.7
Aroclor-1260	4	11.078	-0.002	13408366	226.5	4	11.538	-0.001	1591509	238.2
Aroclor-1260	5	11.268	-0.003	6643876	228.5	NS	---			----
	Total Col1Ave (5 peaks):			228.9	Total Col2Ave (4 peaks):				239.3	RPD = 4
	Corrected Ave (4 peaks):			228.1	Corrected Ave (3 peaks):				238.8	RPD = 5

Total PCB Area Col1 (4.545 - 12.749) = 304153011 Col1 Total PCB = 0.5 ppm*

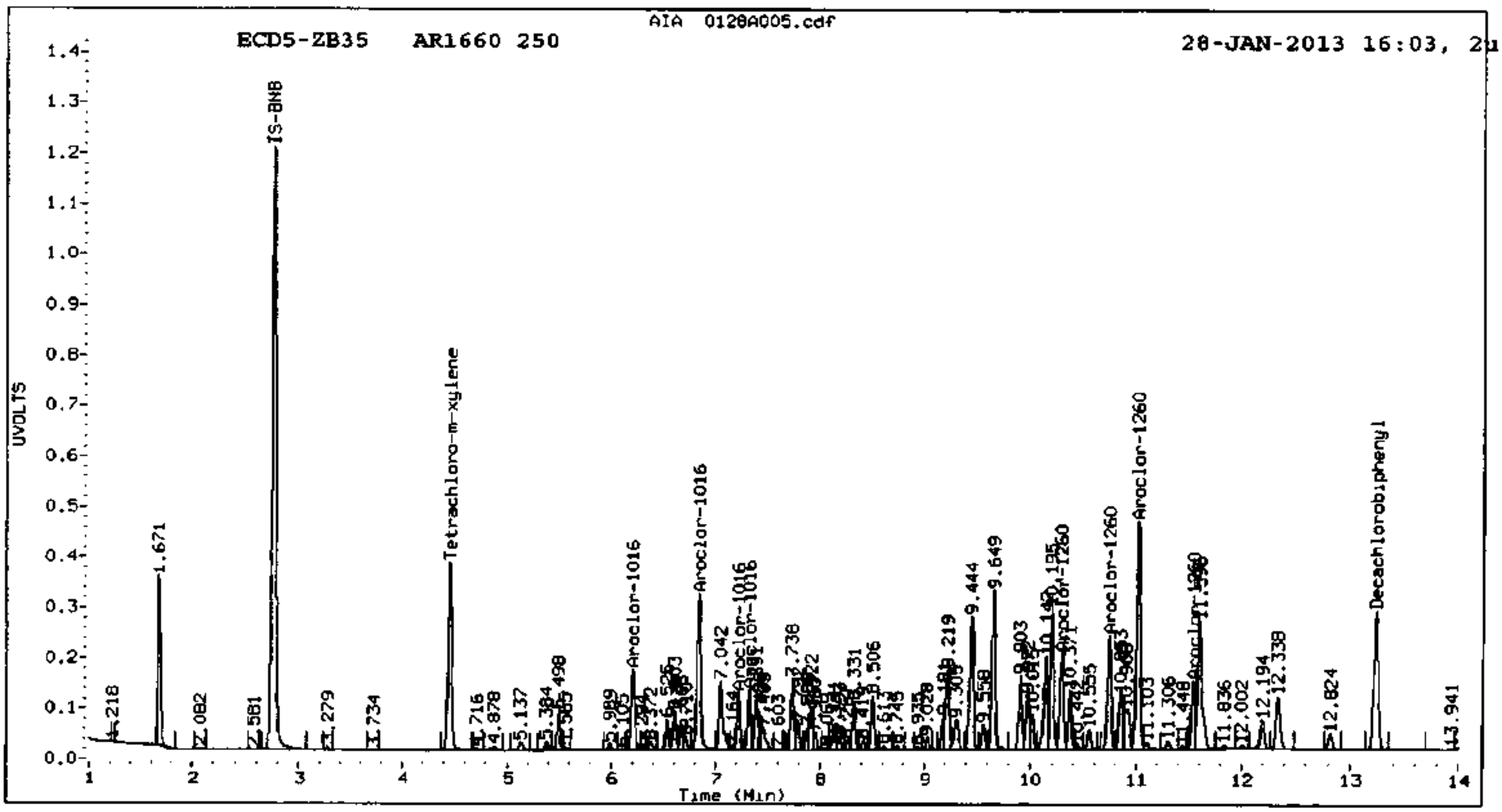
Total PCB Area Col2 (4.551 - 13.140) = 67218944 Col2 Total PCB = 0.6 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

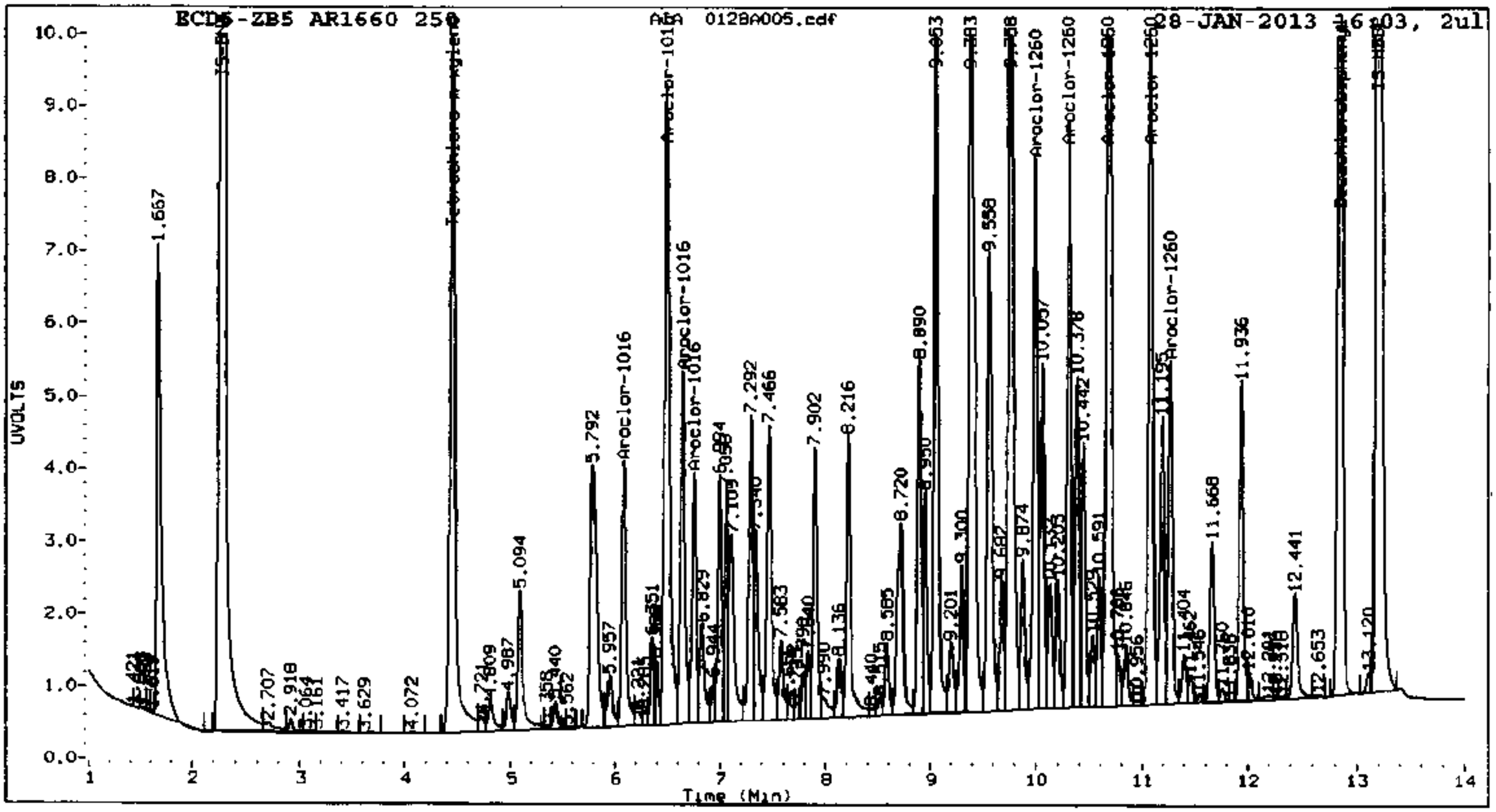


ECD5-ZB5 AR1660 250
AIA 0128A005.cdf
28-JAN-2013 16:03, 2ul
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Aroclor-1016
Aroclor-1260
Decachlorobiphenyl
IS-HBBP



ECD5-ZB35 AR1660 250
AIA 0128A005.cdf
28-JAN-2013 16:03, 2u
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Aroclor-1016
Aroclor-1260
Decachlorobiphenyl

WC02 01044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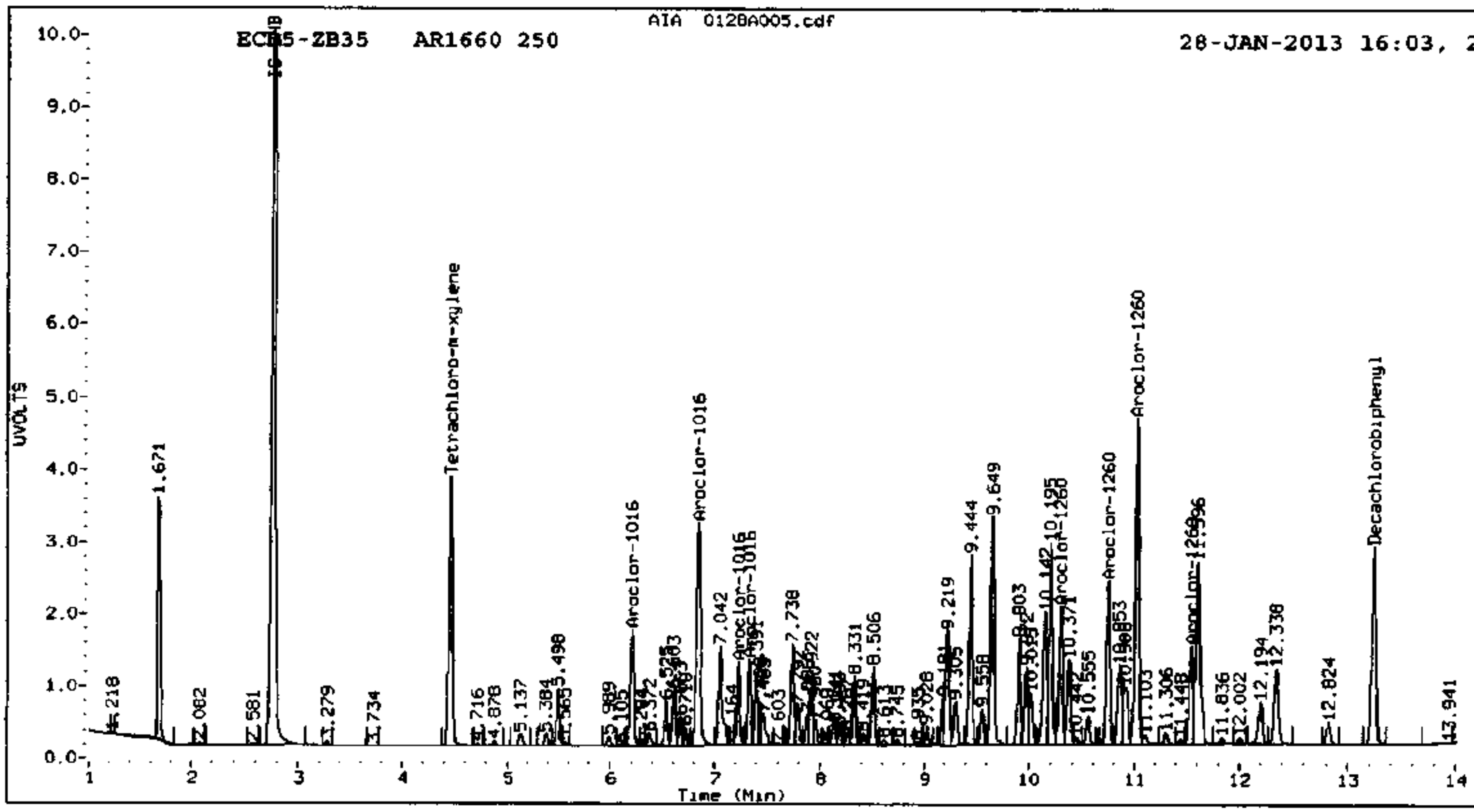
AIA 0128A005.cdf
28-JAN-2013 16:03, 2ul
UVOLTS
Time (Min)
Tetrachloro-m-xylene
Aroclor-1016
Aroclor-1260
Decachlorobiphenyl


ECD5-ZB35 AR1660 250
AIA 0128A005.cdf
28-JAN-2013 16:03, 2u
UVOLTS
Time (Min)
Tetrachloro-m-xylene
Aroclor-1016
Aroclor-1260
Decachlorobiphenyl

WCG2 01045

Analytical Resources Inc.
Dual Column PCBs by SW8082

YZ 01/30/13

Data file 1: 20130128.b/ical-1.b/0128A006.d
Data file 2: 20130128.b/ical-2.b/0128A006.d
Method: /chem2/ecd5.i/20130128.b/PCB1.m
Compound Sublist: AR1660
Instrument, Inj. Vol.: ecd5.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660 20
Client ID:
Injection Date: 28-JAN-2013 16:23
Ical Date: 28-JAN-2013
Matrix: NONE
Dilution Factor: 1.000

ZB5 Col RT	Shift	Response	ZB35 Col RT	Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
4.443	-0.002	1443061	4.451	0.000	387609	1.7	1.7	0.8	Tetrachloro-m-xylen
12.847	-0.002	2033682	13.238	-0.002	415036	1.9	2.0	4.5	Decachlorobiphenyl

* Indicates RPD > 40%
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE PERCENT RECOVERY

SURROGATE	Col1	Col2
Tetrachloro-m-xylene	4.3	4.3
Decachlorobiphenyl	4.8	5.0

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	44738954	46925513	4.9
Hexabromobiphenyl	59848867	60778033	1.6

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	14899855	15343289	3.0
Hexabromobiphenyl	12307480	12240942	-0.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 28-JAN-2013
<- Indicates standard response outside Limits (-50 to +100%)

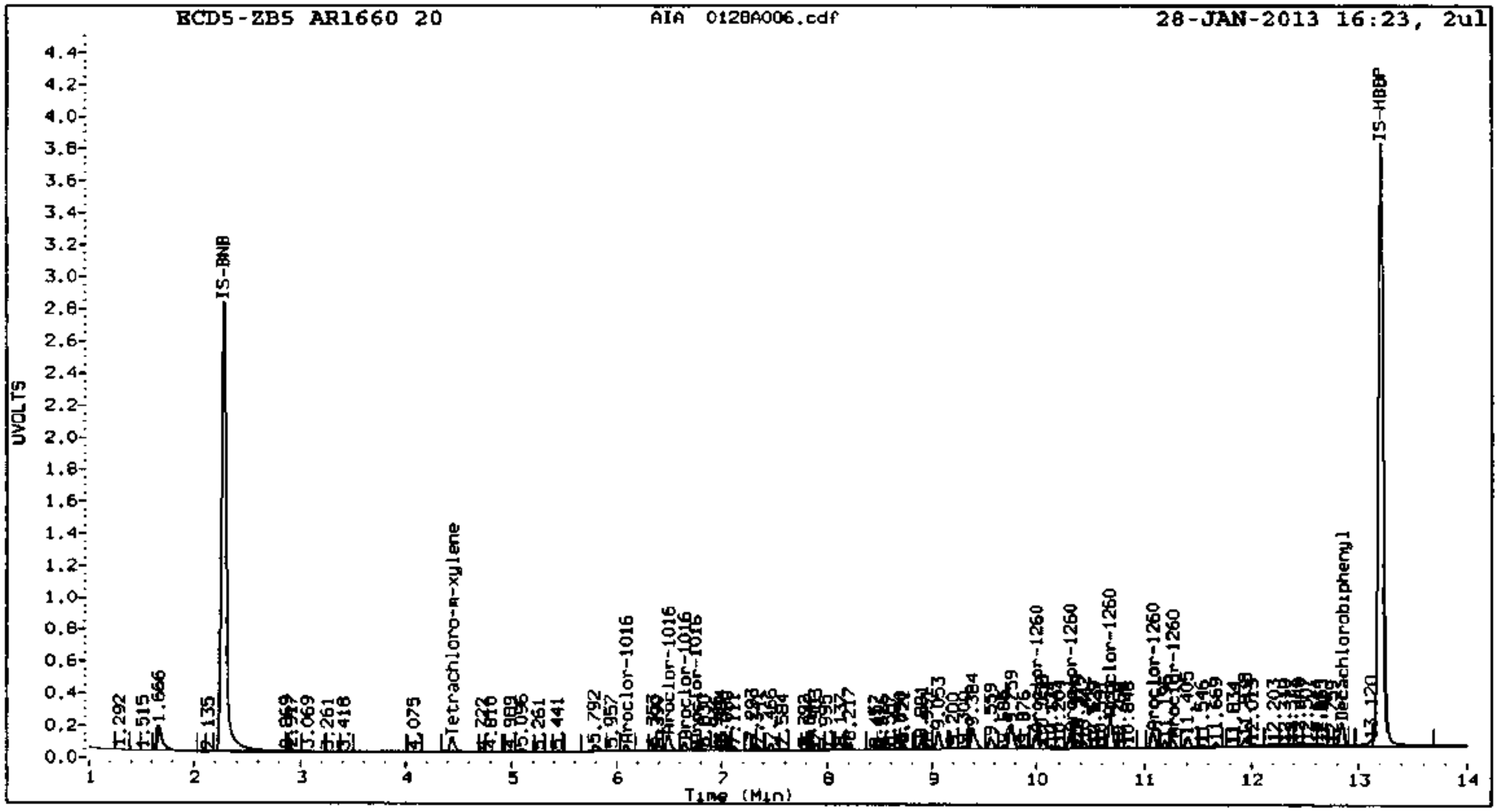
		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	6.089	-0.002	500762	23.0	1	6.201	-0.003	213440	24.3
Aroclor-1016	2	6.493	-0.003	1671927	24.2	2	6.833	-0.002	440859	23.6
Aroclor-1016	3	6.643	-0.002	698997	23.8	3	7.217	-0.003	109268	22.4
Aroclor-1016	4	6.754	-0.001	472141	22.9	4	7.327	-0.001	130752	23.7
	Total Col1Ave (4 peaks):			23.5		Total Col2Ave (4 peaks):			23.5	RPD = 0
	Corrected Ave (3 peaks):			23.2		Corrected Ave (3 peaks):			23.2	RPD = 0
Aroclor-1260	1	9.989	-0.002	1089501	23.8	1	10.292	-0.001	216666	23.7
Aroclor-1260	2	10.305	-0.002	1104945	23.8	2	10.742	-0.002	273642	24.3
Aroclor-1260	3	10.680	-0.002	2571313	23.9	3	11.016	-0.002	528957	23.4
Aroclor-1260	4	11.078	-0.003	1432621	23.8	4	11.538	-0.001	161757	24.3
Aroclor-1260	5	11.269	-0.002	685844	23.2	NS	---			----
	Total Col1Ave (5 peaks):			23.7		Total Col2Ave (4 peaks):			23.9	RPD = 1
	Corrected Ave (4 peaks):			23.7		Corrected Ave (3 peaks):			23.8	RPD = 1

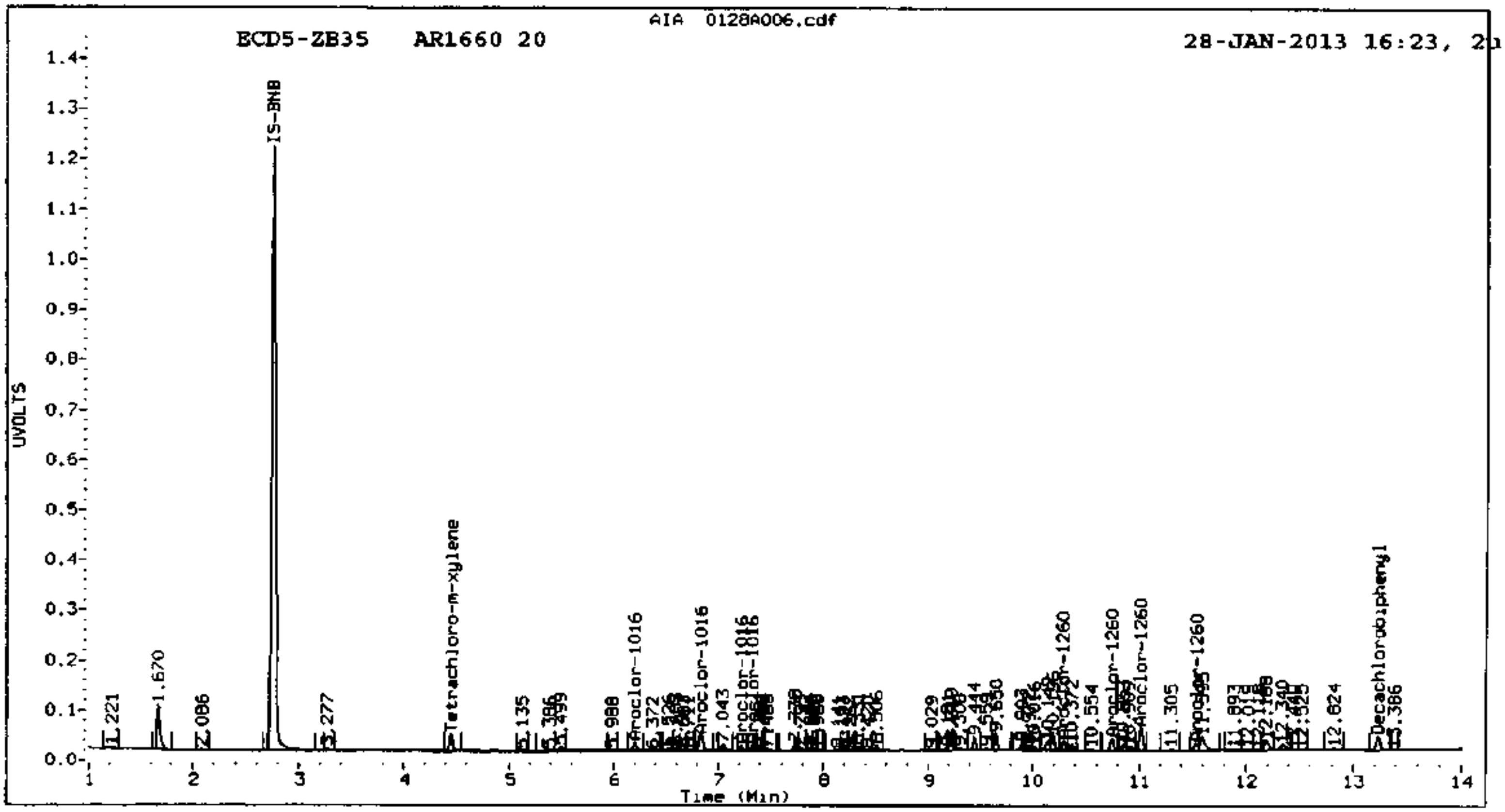
Total PCB Area Col1 (4.545 - 12.749) = 33723383 Col1 Total PCB = 0.1 ppm*

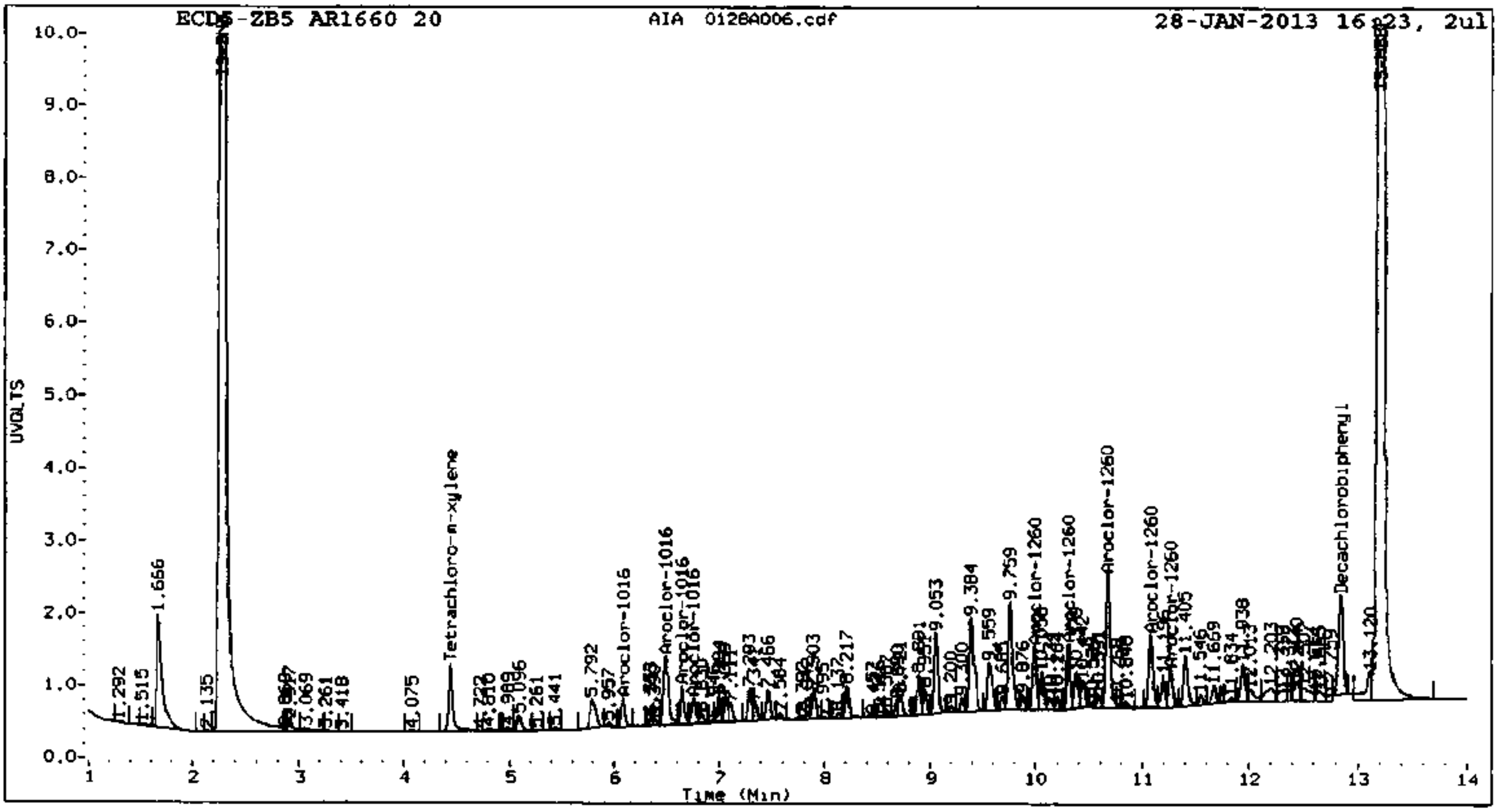
Total PCB Area Col2 (4.551 - 13.140) = 6972971 Col2 Total PCB = 0.1 ppm*

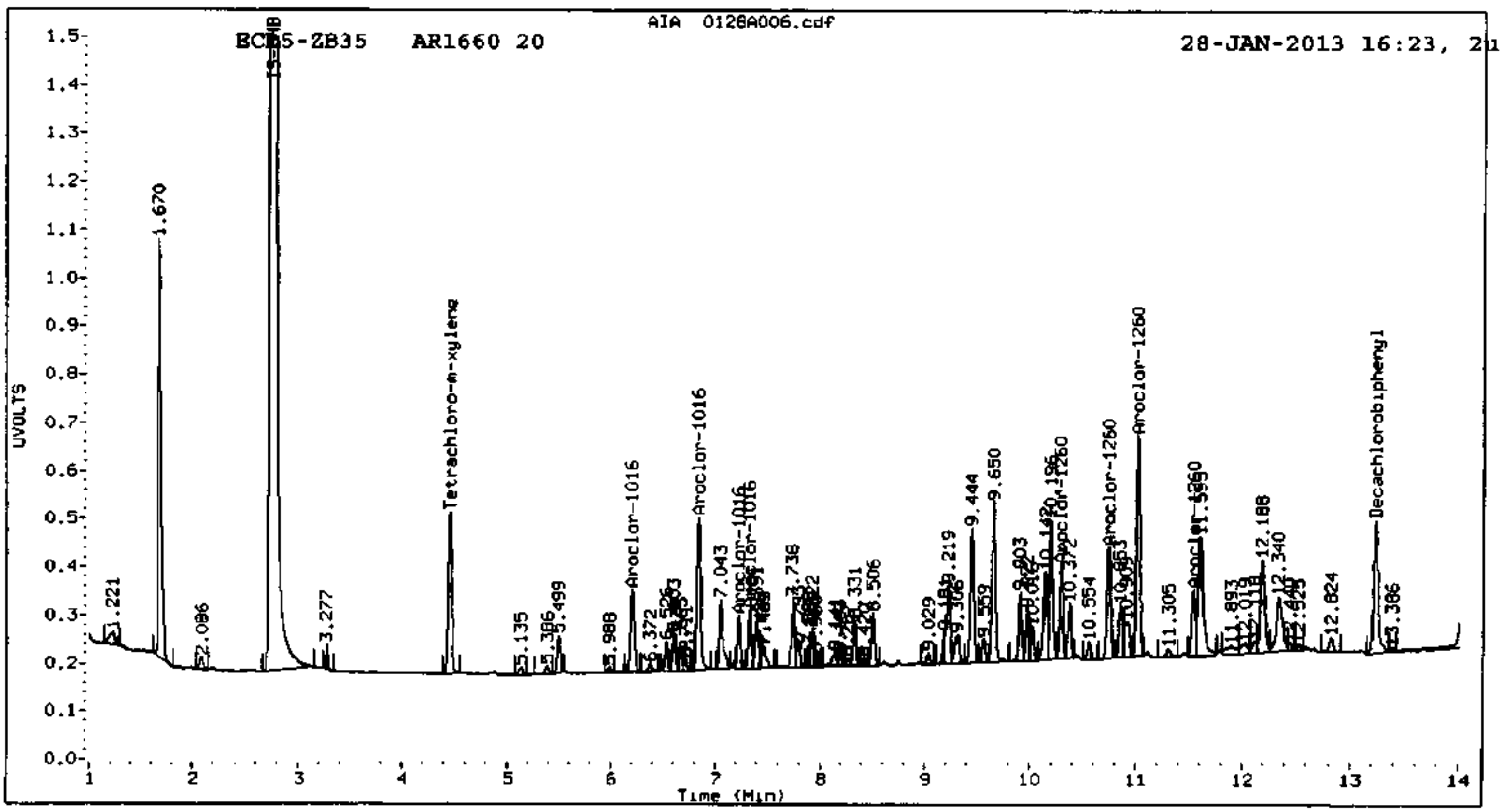
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.


ECD5-ZB5 AR1660 20
AIA 0128A006.cdf
28-JAN-2013 16:23, 2ul
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Aroclor-1016
Aroclor-1260
Decachlorobiphenyl
IS-HBBP


ECD5-ZB35 AR1660 20
AIA 0128A006.cdf
28-JAN-2013 16:23, 2u
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Aroclor-1016
Aroclor-1260
Decachlorobiphenyl


ECD5-ZB5 AR1660 20
AIA 0128A006.cdf
28-JAN-2013 16:23, 2ul
UVOLTS
Time (Min)
Tetrachloro-m-xylene
Aroclor-1016
Aroclor-1260
Decachlorobiphenyl


ECD5-ZB35 AR1660 20
AIA 0128A006.cdf
28-JAN-2013 16:23, 2u
UVOLTS
Time (Min)
Tetrachloro-m-xylene
Aroclor-1016
Aroclor-1260
Decachlorobiphenyl

Analytical Resources Inc.
Dual Column PCBs by SW8082

Data file 1: 20130128.b/ical-1.b/0128A007.d
Data file 2: 20130128.b/ical-2.b/0128A007.d
Method: /chem2/ecd5.i/20130128.b/PCB1.m
Compound Sublist: AR1660
Instrument, Inj. Vol.: ecd5.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660 50 YZ 01/30/13
Client ID:
Injection Date: 28-JAN-2013 16:43
Ical Date: 28-JAN-2013
Matrix: NONE
Dilution Factor: 1.000

ZB5 Col RT	Shift	Response	ZB35 Col RT	Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
4.442	-0.003	3521459	4.450	-0.001	945690	4.2	4.2	1.1	Tetrachloro-m-xylen
12.848	-0.001	5224243	13.238	-0.002	904241	4.9	4.4	11.3	Decachlorobiphenyl

* Indicates RPD > 40%
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE PERCENT RECOVERY

SURROGATE	Col1	Col2
Tetrachloro-m-xylene	10.6	10.5
Decachlorobiphenyl	12.2	10.9

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	44738954	46749066	4.5
Hexabromobiphenyl	59848867	61877391	3.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	14899855	15323608	2.8
Hexabromobiphenyl	12307480	12370613	0.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 28-JAN-2013
<- Indicates standard response outside Limits (-50 to +100%)

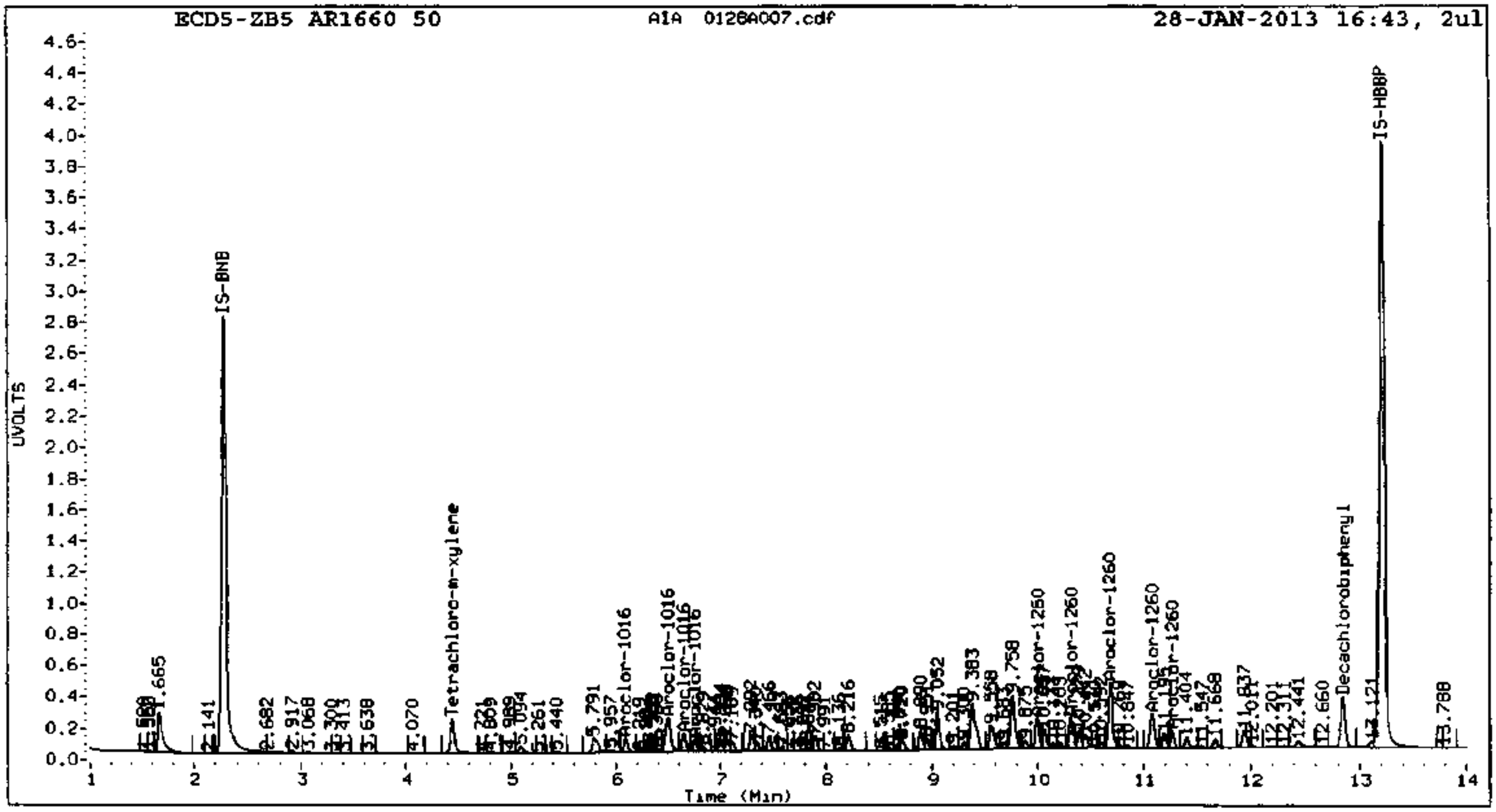
		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	6.088	-0.003	1152493	53.2	1	6.201	-0.003	492325	56.1
Aroclor-1016	2	6.492	-0.003	3798823	55.1	2	6.834	0.000	1039019	55.6
Aroclor-1016	3	6.642	-0.003	1575057	53.7	3	7.218	-0.002	264419	54.4
Aroclor-1016	4	6.753	-0.002	1070216	52.0	4	7.327	-0.001	305201	55.3
	Total Col1Ave (4 peaks):			53.5		Total Col2Ave (4 peaks):			55.3	RPD = 3
	Corrected Ave (3 peaks):			53.0		Corrected Ave (3 peaks):			55.1	RPD = 4
Aroclor-1260	1	9.989	-0.002	2410547	51.7	1	10.292	-0.001	521870	56.4
Aroclor-1260	2	10.305	-0.002	2480763	52.6	2	10.742	-0.002	641394	56.4
Aroclor-1260	3	10.680	-0.002	5806944	53.1	3	11.017	-0.001	1280469	56.1
Aroclor-1260	4	11.079	-0.002	3287647	53.7	4	11.538	-0.001	371303	55.3
Aroclor-1260	5	11.268	-0.003	1593456	53.0	NS	---			----
	Total Col1Ave (5 peaks):			52.8		Total Col2Ave (4 peaks):			56.0	RPD = 6
	Corrected Ave (4 peaks):			52.6		Corrected Ave (3 peaks):			55.9	RPD = 6

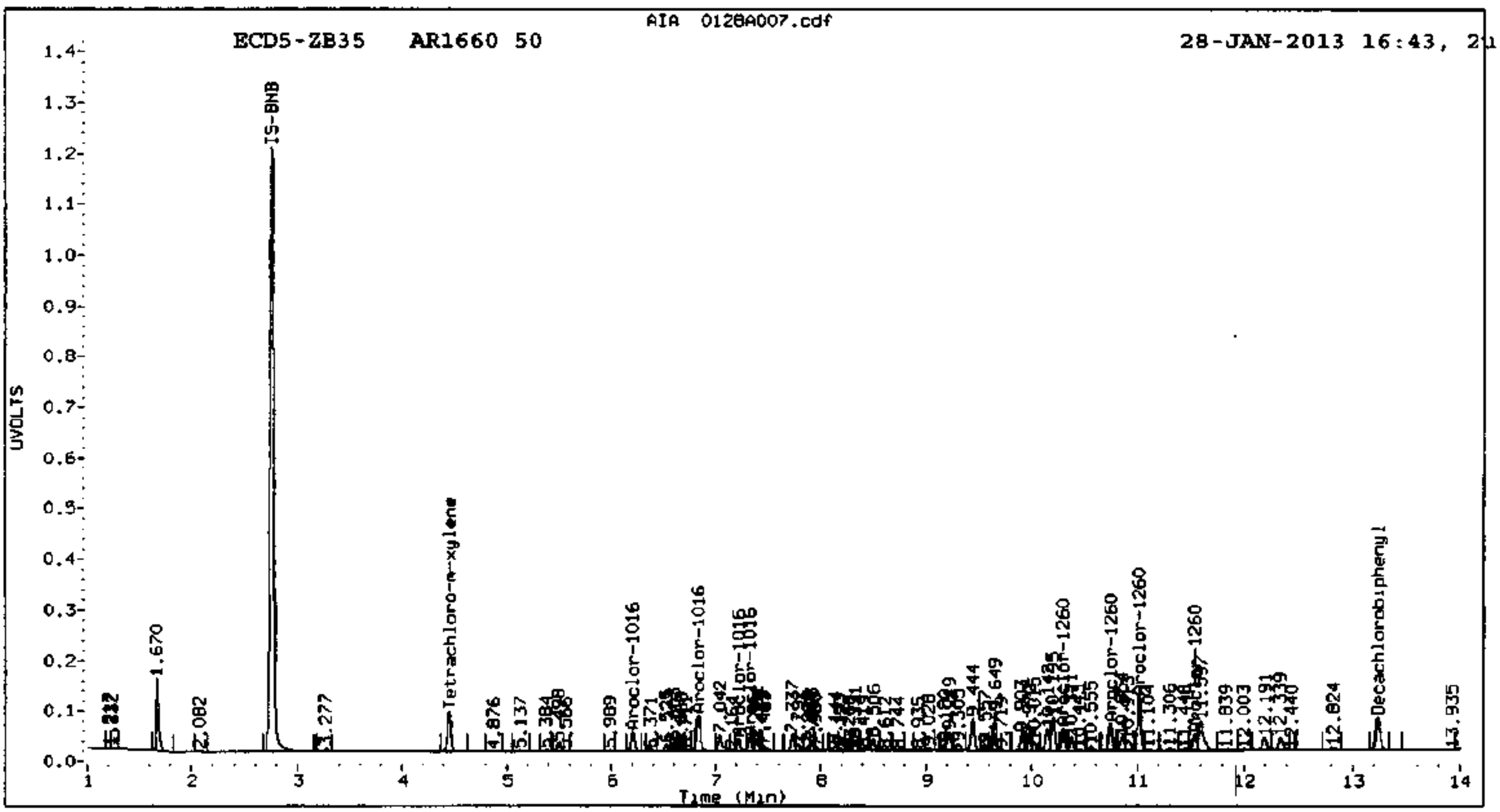
Total PCB Area Col1 (4.545 - 12.749) = 70015065 Col1 Total PCB = 0.1 ppm*

Total PCB Area Col2 (4.551 - 13.140) = 16001092 Col2 Total PCB = 0.1 ppm*

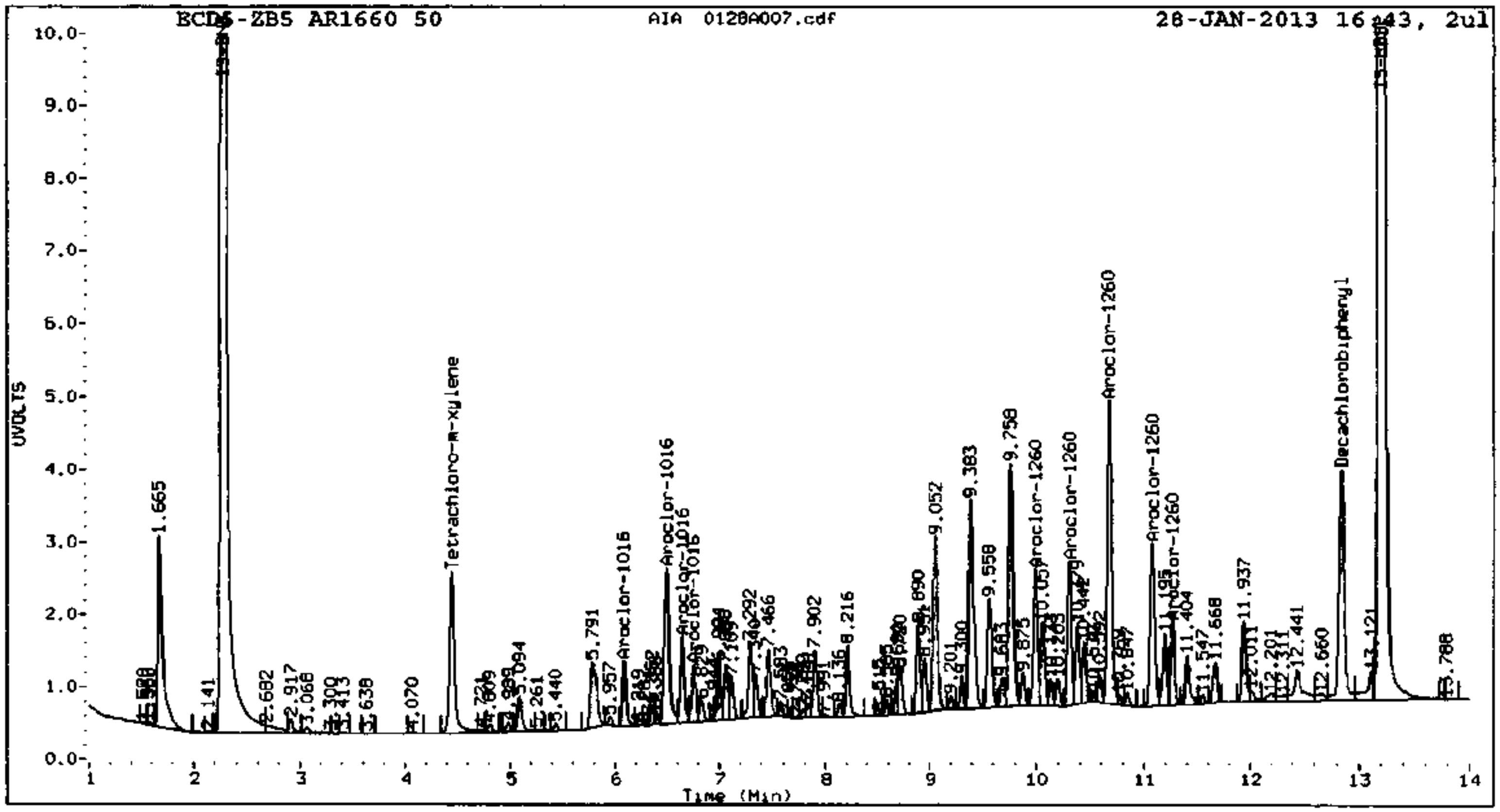
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.


ECD5-ZB5 AR1660 50
AIA 0128A007.cdf
28-JAN-2013 16:43, 2ul
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Aroclor-1016
Aroclor-1260
Decachlorobiphenyl
IS-HBBP


ECD5-ZB35 AR1660 50
AIA 0128A007.cdf
28-JAN-2013 16:43, 2u
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Aroclor-1016
Aroclor-1260
Decachlorobiphenyl

WC32:01054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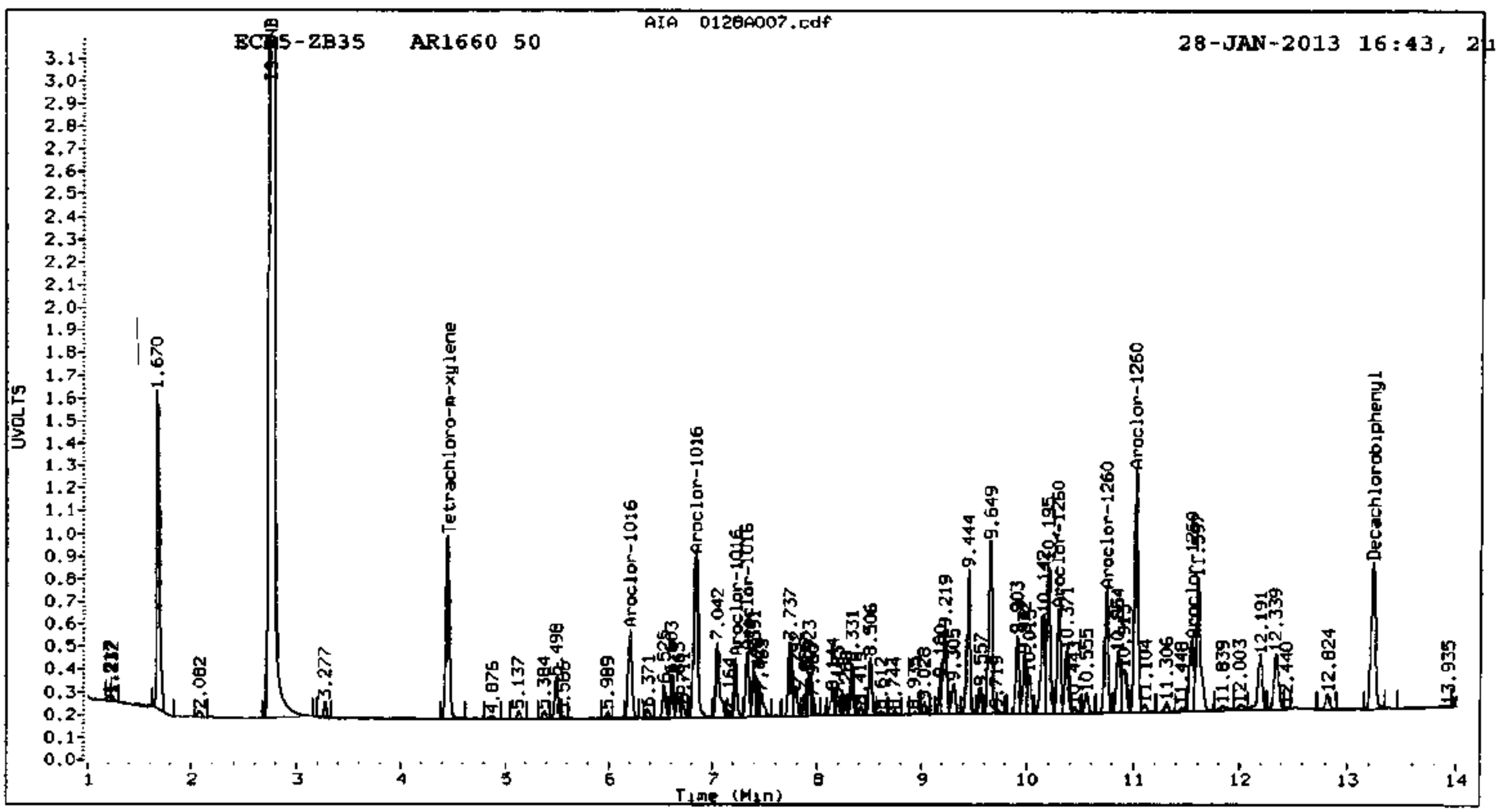
AIA 0128A007.cdf
28-JAN-2013 16:43, 2ul
UVOLTS
Time (Min)
Tetrachloro-m-xylene
Aroclor-1016
Aroclor-1260
Decachlorobiphenyl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28-JAN-2013 16:43, 2u
UVOLTS
Time (Min)
Tetrachloro-m-xylene
Aroclor-1016
Aroclor-1260
Decachlorobiphenyl

Analytical Resources Inc.
Dual Column PCBs by SW8082

Data file 1: 20130128.b/ical-1.b/0128A008.d
Data file 2: 20130128.b/ical-2.b/0128A008.d
Method: /chem2/ecd5.i/20130128.b/PCB1.m
Compound Sublist: AR1660
Instrument, Inj. Vol.: ecd5.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660 1000 YZ 01/30/13
Client ID:
Injection Date: 28-JAN-2013 17:04
Ical Date: 28-JAN-2013
Matrix: NONE
Dilution Factor: 1.000

ZB5 Col RT	Shift	Response	ZB35 Col RT	Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
4.444	-0.001	56900522	4.450	0.000	15724099	70.1	71.2	1.5	Tetrachloro-m-xylen
12.848	-0.001	66405429	13.238	-0.002	13682960	61.5	65.7	6.6	Decachlorobiphenyl

* Indicates RPD > 40%
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE PERCENT RECOVERY

SURROGATE	Col1	Col2
Tetrachloro-m-xylene	175.2	177.9
Decachlorobiphenyl	153.7	164.2

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	44738954	45809627	2.4
Hexabromobiphenyl	59848867	62331935	4.1

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	14899855	15055182	1.0
Hexabromobiphenyl	12307480	12409940	0.8

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 28-JAN-2013
<- Indicates standard response outside Limits (-50 to +100%)

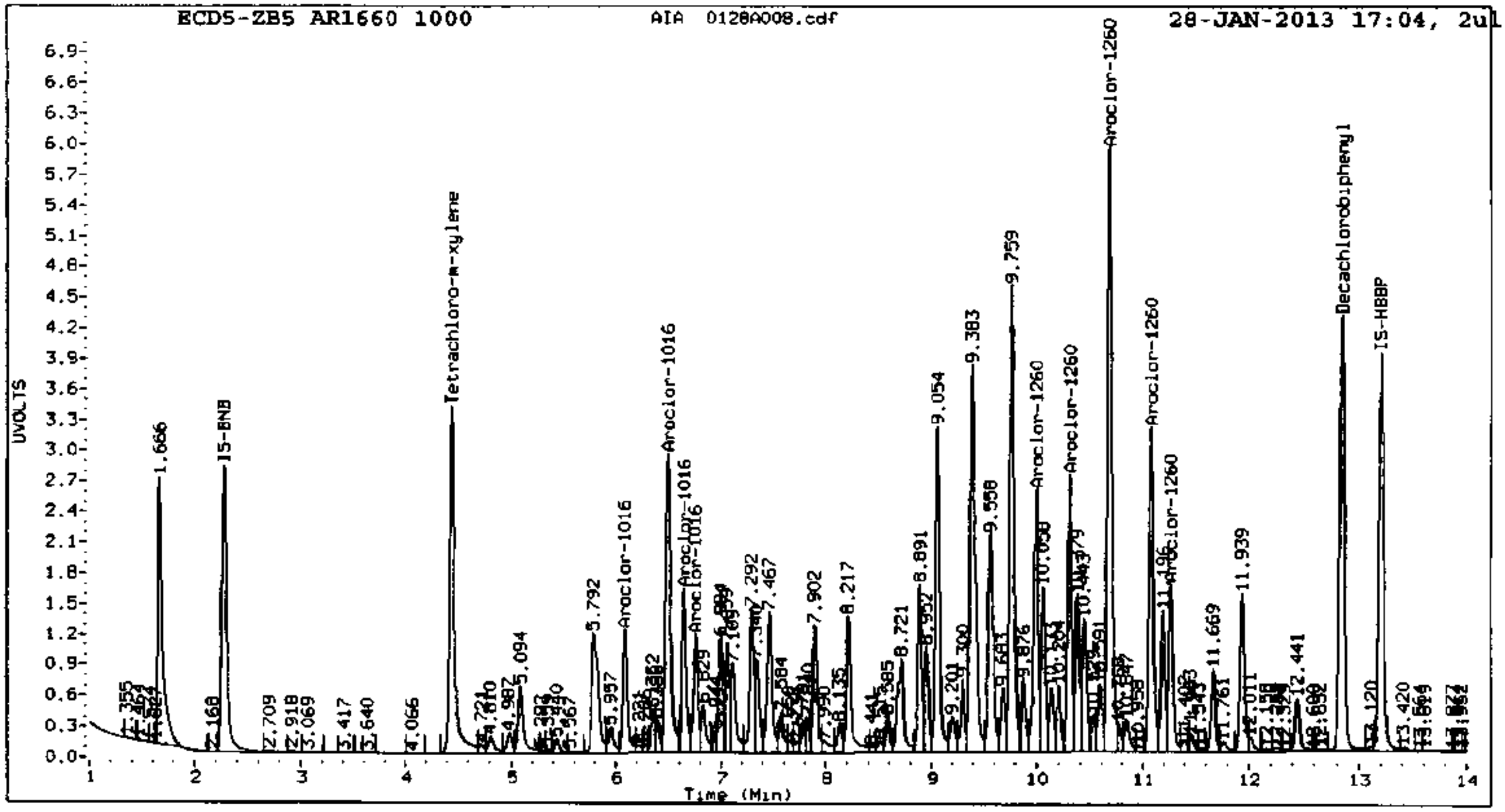
		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	6.088	-0.003	17496010	824.1	1	6.201	-0.003	6690418	775.6
Aroclor-1016	2	6.492	-0.003	53065241	785.9	2	6.833	-0.002	14610719	796.3
Aroclor-1016	3	6.642	-0.003	22911717	797.7	3	7.217	-0.003	3997379	836.5
Aroclor-1016	4	6.753	-0.003	16602716	823.7	4	7.326	-0.002	4348412	802.0
	Total Col1Ave (4 peaks):			807.9		Total Col2Ave (4 peaks):			802.6	RPD = 1
	Corrected Ave (3 peaks):			802.5		Corrected Ave (3 peaks):			791.3	RPD = 1
Aroclor-1260	1	9.990	-0.001	35566650	757.6	1	10.292	-0.001	7575984	815.9
Aroclor-1260	2	10.306	-0.001	35954832	756.5	2	10.742	-0.002	9247351	810.1
Aroclor-1260	3	10.681	-0.001	84080566	763.6	3	11.017	-0.001	18862681	824.3
Aroclor-1260	4	11.080	-0.001	47344766	768.0	4	11.538	-0.001	5593655	830.2
Aroclor-1260	5	11.269	-0.002	24166426	798.2	NS	---			----
	Total Col1Ave (5 peaks):			768.8		Total Col2Ave (4 peaks):			820.1	RPD = 6
	Corrected Ave (4 peaks):			761.4		Corrected Ave (3 peaks):			816.8	RPD = 7

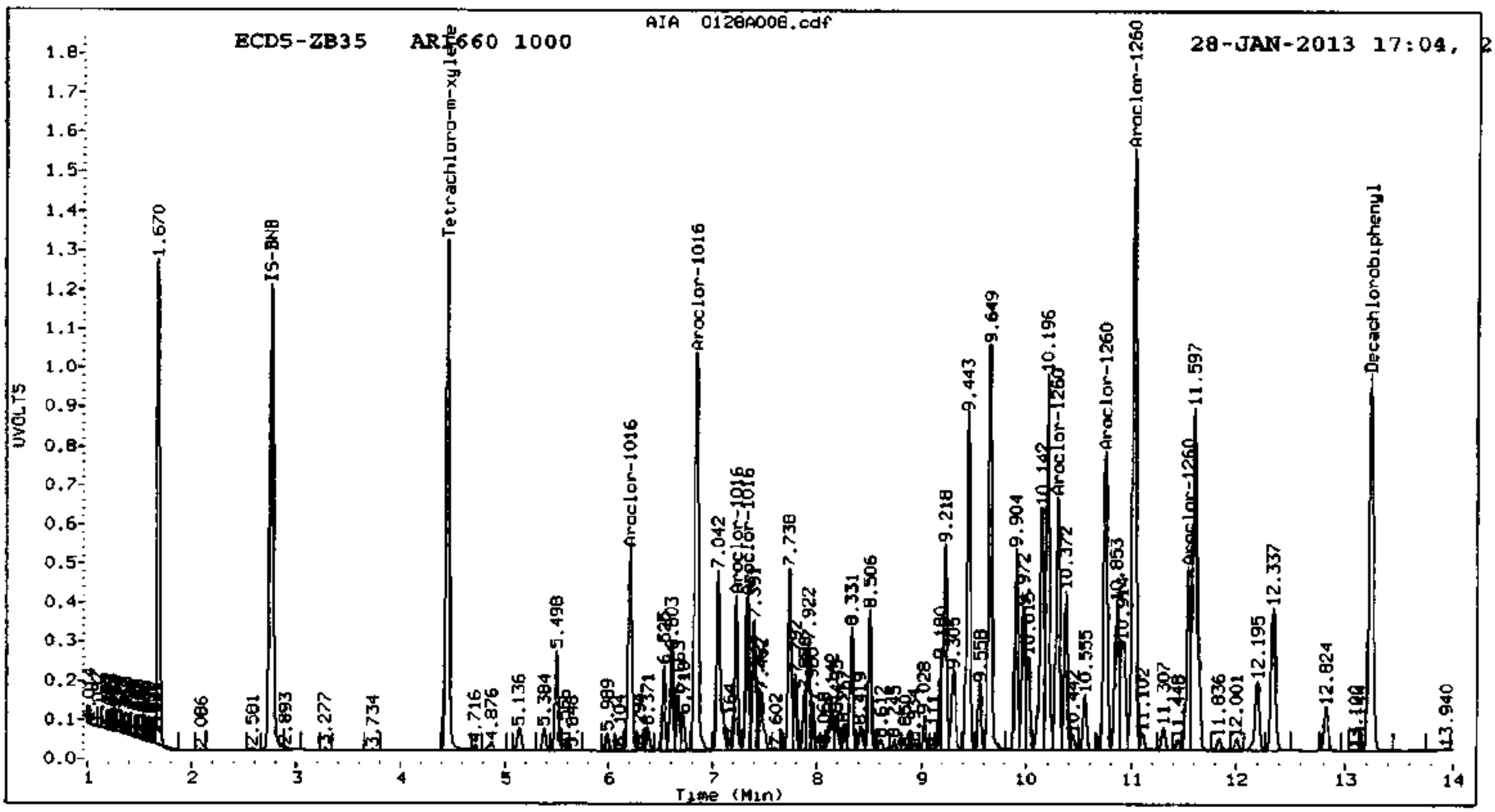
Total PCB Area Col1 (4.545 - 12.749) = 1063930761 Col1 Total PCB = 1.8 ppm*

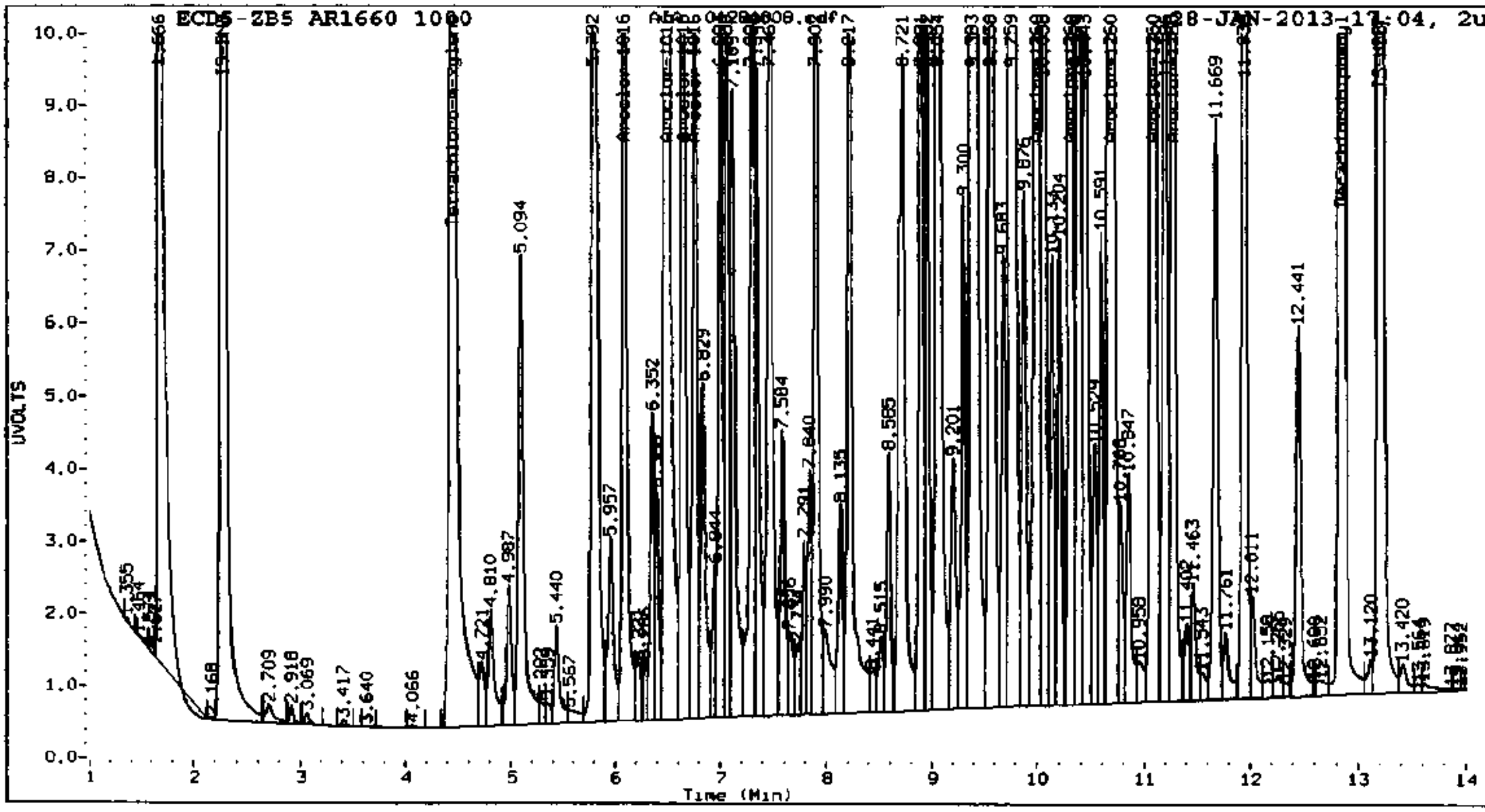
Total PCB Area Col2 (4.551 - 13.140) = 231241470 Col2 Total PCB = 2.0 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.


ECD5-ZB5 AR1660 1000
AIA 0128A008.cdf
28-JAN-2013 17:04, 2ul
UVOLTS
Time (Min)
Tetrachloro-m-xylene
IS-BNB
Aroclor-1016
Aroclor-1260
Decachlorobiphenyl
IS-HBBP


ECD5-ZB35 AR1660 1000
AIA 0128A008.cdf
28-JAN-2013 17:04, 2
UVOLTS
Time (Min)
Tetrachloro-m-xylene
IS-BNB
Aroclor-1016
Aroclor-1260
Decachlorobiphenyl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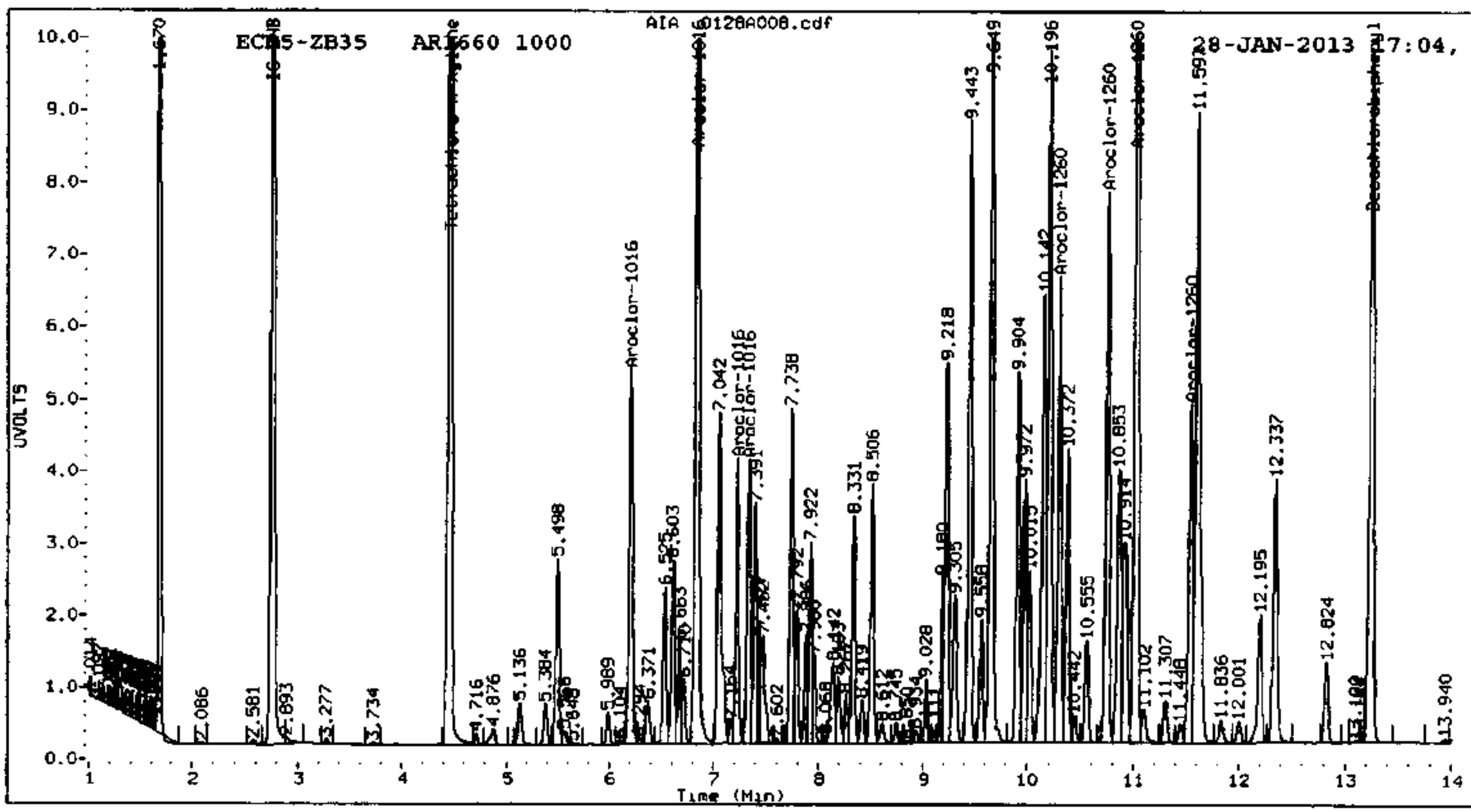
28-JAN-2013 17:04, 2ul
UVOLTS
Time (Min)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AIA u0128A008.cdf
28-JAN-2013 17:04,
UVOLTS
Time (Min)
Aroclor-1016
Aroclor-1260

WC32 01068

Analytical Resources Inc.
Dual Column PCBs by SW8082

Data file 1: 20130128.b/ical-1.b/0128A009.d
Data file 2: 20130128.b/ical-2.b/0128A009.d
Method: /chem2/ecd5.i/20130128.b/PCB1.m
Compound Sublist: AR1660
Instrument, Inj. Vol.: ecd5.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660 100 YE 01/30/13
Client ID:
Injection Date: 28-JAN-2013 17:23
Ical Date: 28-JAN-2013
Matrix: NONE
Dilution Factor: 1.000

ZB5 Col RT	ZB5 Col Shift	ZB5 Col Response	ZB35 Col RT	ZB35 Col Shift	ZB35 Col Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
4.441	-0.004	6768337	4.451	0.001	1814372	8.3	8.3	0.7	Tetrachloro-m-xylen
12.848	-0.002	9448873	13.239	-0.001	1729041	8.6	8.2	5.1	Decachlorobiphenyl

* Indicates RPD > 40%
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE PERCENT RECOVERY

SURROGATE	Col1	Col2
Tetrachloro-m-xylene	20.8	20.7
Decachlorobiphenyl	21.5	20.4

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	44738954	45893941	2.6
Hexabromobiphenyl	59848867	63500693	6.1

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	14899855	14962275	0.4
Hexabromobiphenyl	12307480	12616679	2.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 28-JAN-2013
<- Indicates standard response outside Limits (-50 to +100%)

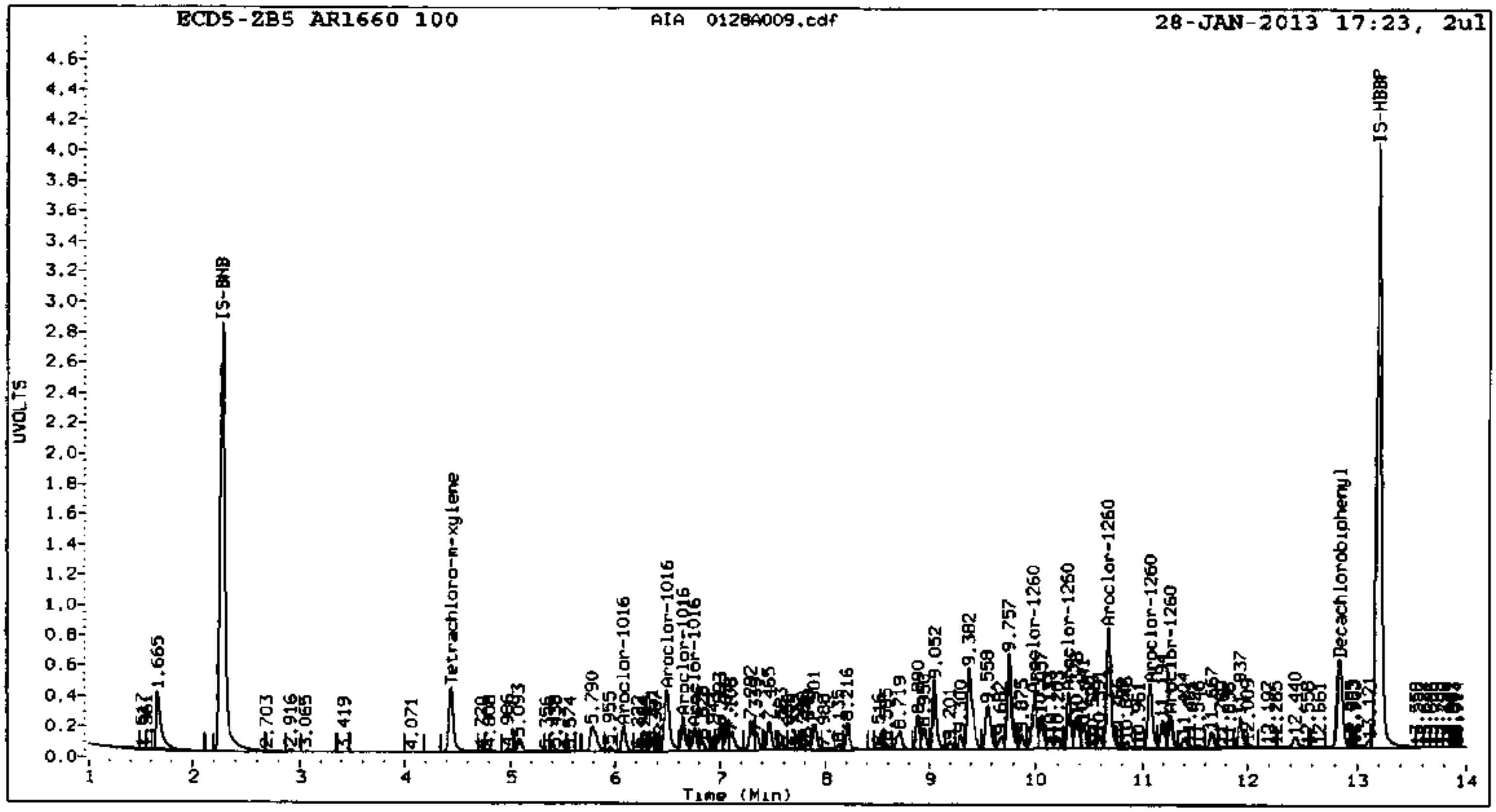
		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	6.087	-0.004	2267866	106.6	1	6.201	-0.003	911840	106.4
Aroclor-1016	2	6.491	-0.004	7204771	106.5	2	6.833	-0.001	1947134	106.8
Aroclor-1016	3	6.641	-0.004	3094135	107.5	3	7.218	-0.002	504456	106.2
Aroclor-1016	4	6.752	-0.003	2184767	108.2	4	7.327	-0.001	571902	106.1
	Total Col1Ave (4 peaks):			107.2		Total Col2Ave (4 peaks):			106.4	RPD = 1
	Corrected Ave (3 peaks):			106.9		Corrected Ave (3 peaks):			106.2	RPD = 1
Aroclor-1260	1	9.988	-0.002	4828196	101.0	1	10.293	0.000	977056	103.5
Aroclor-1260	2	10.305	-0.002	4852137	100.2	2	10.742	-0.002	1190808	102.6
Aroclor-1260	3	10.679	-0.002	11153570	99.4	3	11.016	-0.002	2407280	103.5
Aroclor-1260	4	11.078	-0.003	6216961	99.0	4	11.538	-0.001	693281	101.2
Aroclor-1260	5	11.268	-0.003	3101630	100.6	NS	---			----
	Total Col1Ave (5 peaks):			100.0		Total Col2Ave (4 peaks):			102.7	RPD = 3
	Corrected Ave (4 peaks):			99.8		Corrected Ave (3 peaks):			102.4	RPD = 3

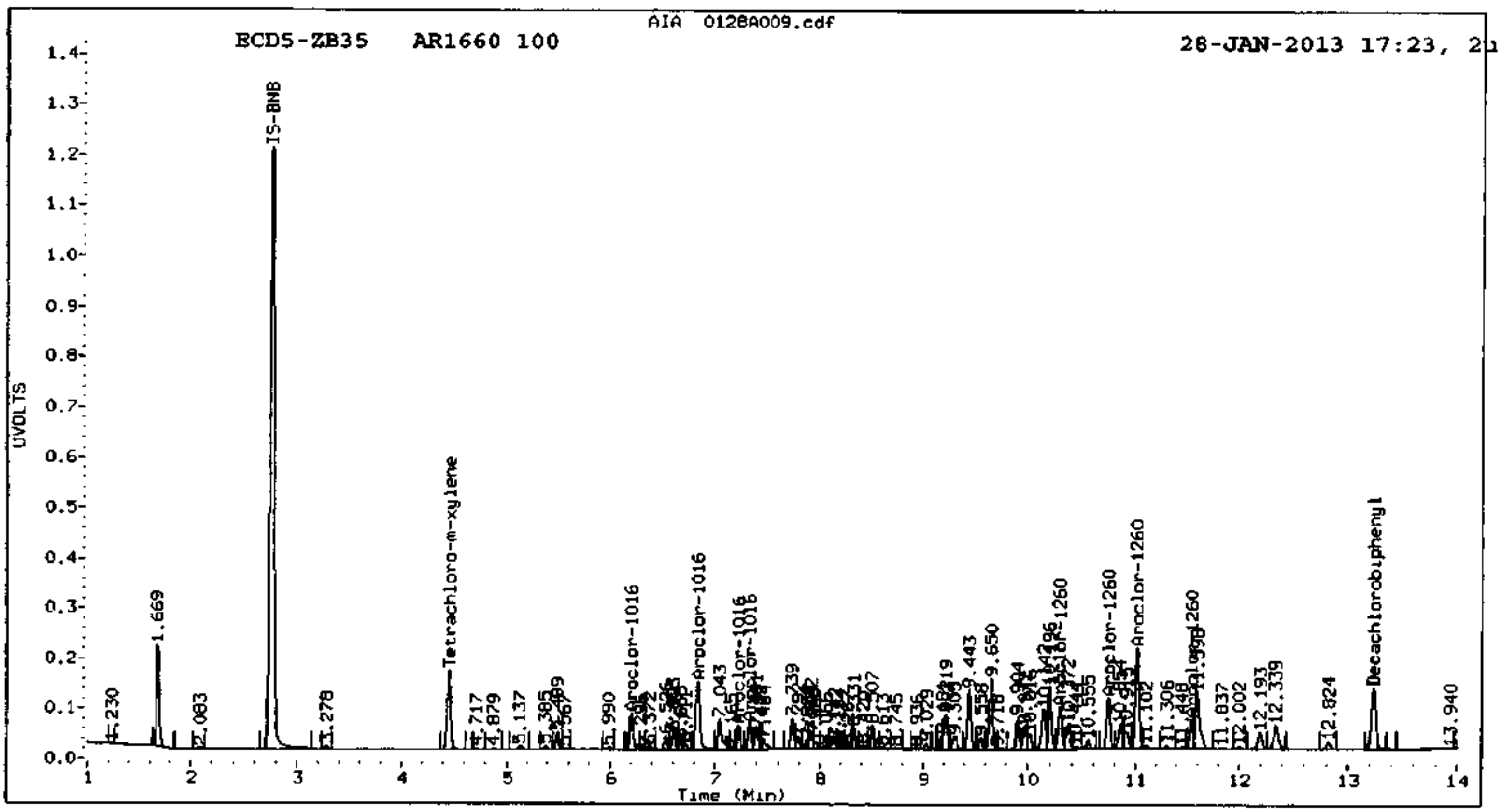
Total PCB Area Col1 (4.545 - 12.749) = 140250133 Col1 Total PCB = 0.2 ppm*

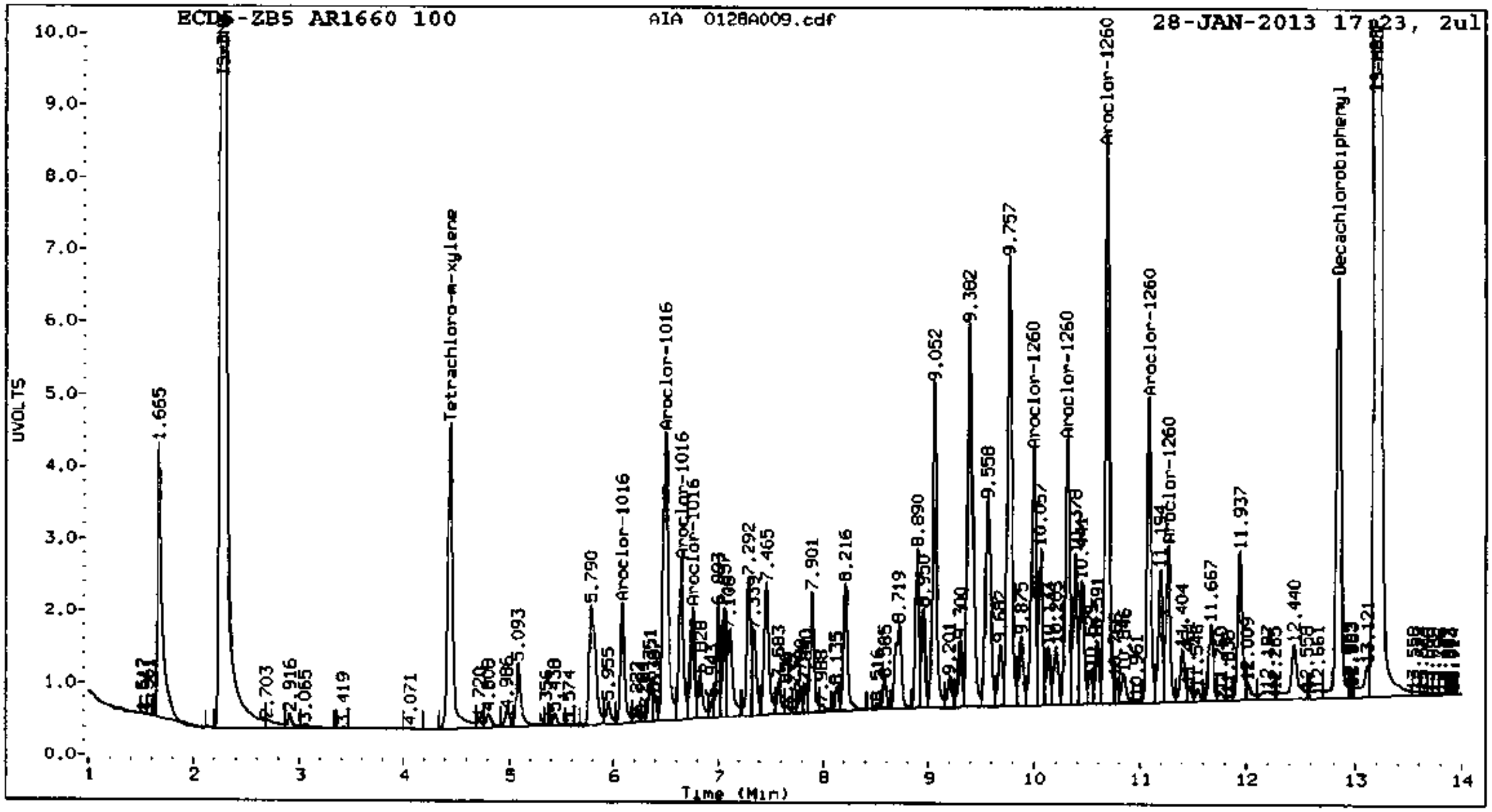
Total PCB Area Col2 (4.551 - 13.140) = 29991231 Col2 Total PCB = 0.3 ppm*

* Quantitated against AR1660 0.25ppm in Ical

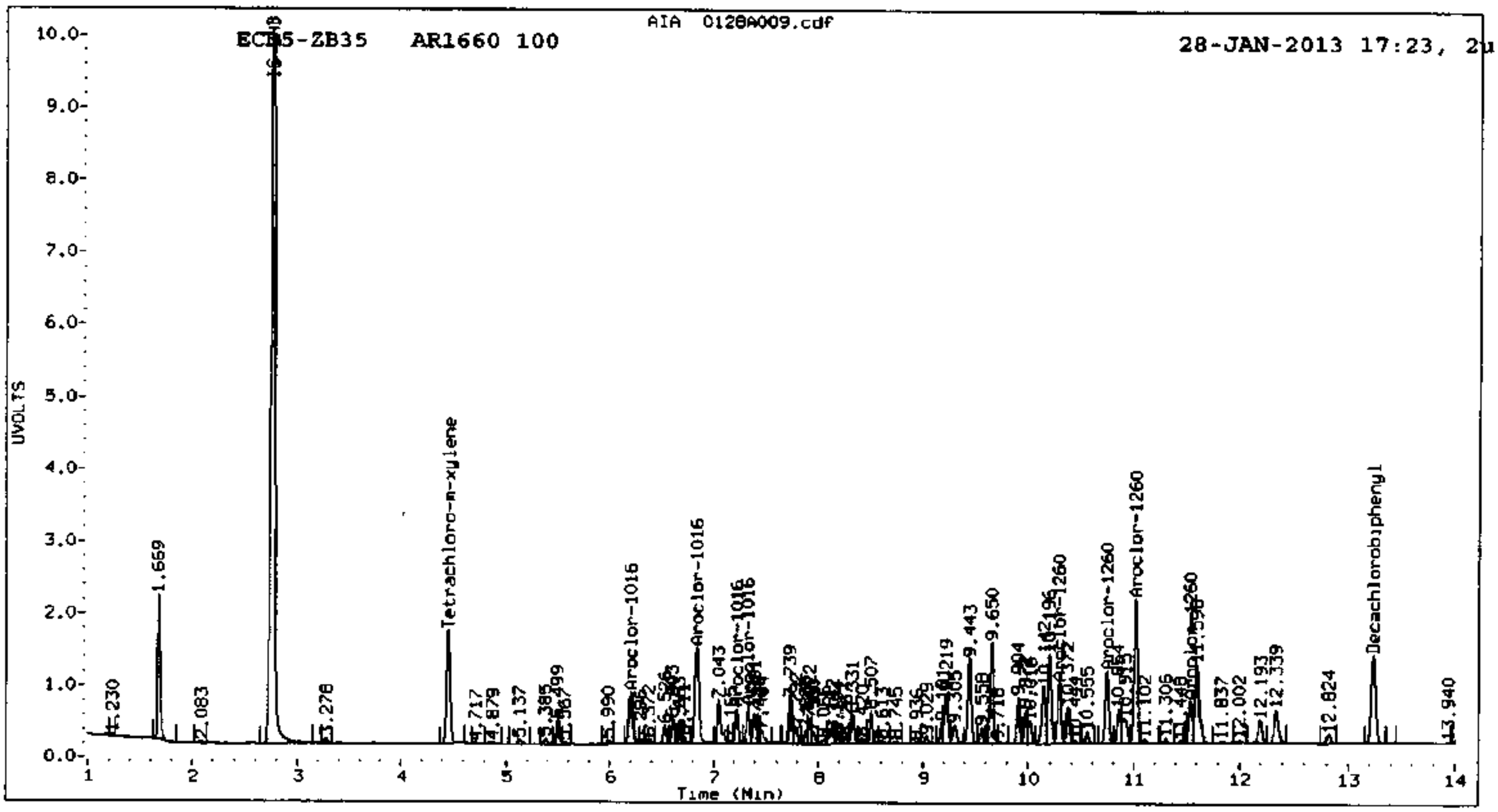
PCB-Form 10 Mod.


ECD5-ZB5 AR1660 100
AIA 0128A009.cdf
28-JAN-2013 17:23, 2ul
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Aroclor-1016
Aroclor-1260
Decachlorobiphenyl
IS-HBBP


ECD5-ZB35 AR1660 100
AIA 0128A009.cdf
28-JAN-2013 17:23, 2u
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Aroclor-1016
Aroclor-1260
Decachlorobiphenyl



ECD5-ZB5 AR1660 100
AIA 0128A009.cdf
28-JAN-2013 17:23, 2ul
UVOLTS
Time (Min)
Tetrachloro-m-xylene
Aroclor-1016
Aroclor-1260
Decachlorobiphenyl



ECD5-ZB35 AR1660 100
AIA 0128A009.cdf
28-JAN-2013 17:23, 2u
UVOLTS
Time (Min)
Tetrachloro-m-xylene
Aroclor-1016
Aroclor-1260
Decachlorobiphenyl

Analytical Resources Inc.
Dual Column PCBs by SW8082

Data file 1: 20130128.b/ical-1.b/0128A010.d
Data file 2: 20130128.b/ical-2.b/0128A010.d
Method: /chem2/ecd5.i/20130128.b/PCB1.m
Compound Sublist: AR1660
Instrument, Inj. Vol.: ecd5.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660 500 YZ 01/29/13
Client ID:
Injection Date: 28-JAN-2013 17:44
Ical Date: 28-JAN-2013
Matrix: NONE
Dilution Factor: 1.000

ZB5 Col RT	ZB5 Col Shift	ZB5 Col Response	ZB35 Col RT	ZB35 Col Shift	ZB35 Col Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
4.443	-0.002	30365991	4.450	-0.001	8386838	37.5	38.1	1.7	Tetrachloro-m-xylen
12.848	-0.001	35604198	13.239	-0.001	7458164	33.1	35.2	6.2	Decachlorobiphenyl

* Indicates RPD > 40%
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE PERCENT RECOVERY

SURROGATE	Col1	Col2
Tetrachloro-m-xylene	93.7	95.3
Decachlorobiphenyl	82.7	88.0

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	44738954	45727812	2.2
Hexabromobiphenyl	59848867	62093579	3.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	14899855	14992717	0.6
Hexabromobiphenyl	12307480	12613813	2.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 28-JAN-2013
<- Indicates standard response outside Limits (-50 to +100%)

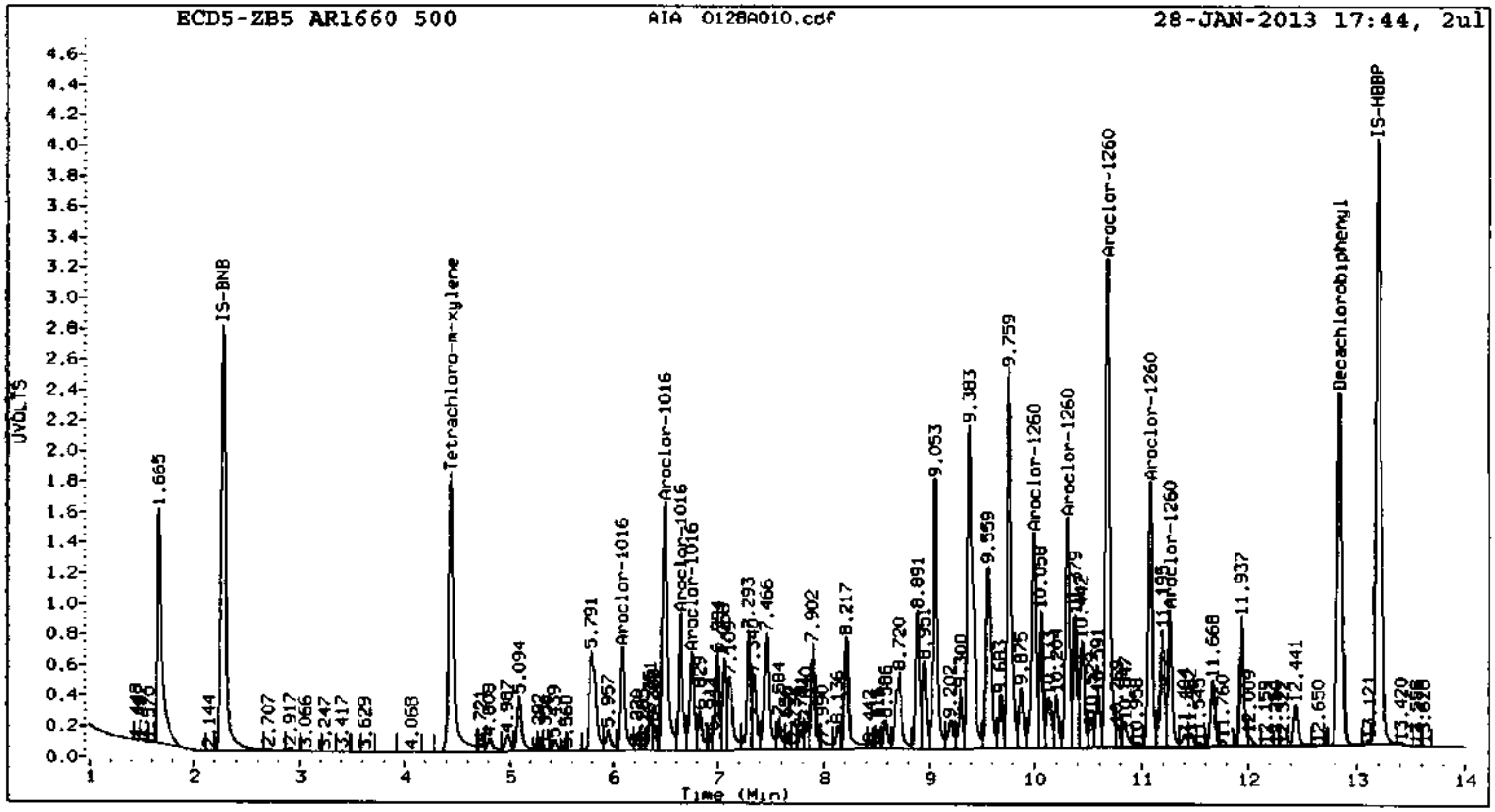
		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	6.088	-0.003	9565973	451.4	1	6.200	-0.004	3725795	433.7
Aroclor-1016	2	6.492	-0.004	29403201	436.3	2	6.832	-0.002	8066295	441.5
Aroclor-1016	3	6.642	-0.003	12665074	441.8	3	7.217	-0.003	2167037	455.4
Aroclor-1016	4	6.753	-0.003	9168206	455.7	4	7.326	-0.002	2385622	441.8
	Total Col1Ave (4 peaks):			446.3		Total Col2Ave (4 peaks):			443.1	RPD = 1
	Corrected Ave (3 peaks):			443.1		Corrected Ave (3 peaks):			439.0	RPD = 1
Aroclor-1260	1	9.990	-0.001	19605442	419.2	1	10.293	-0.001	4138177	438.5
Aroclor-1260	2	10.305	-0.002	19789175	418.0	2	10.742	-0.001	5047241	435.0
Aroclor-1260	3	10.680	-0.001	45730239	416.9	3	11.016	-0.002	10277496	441.9
Aroclor-1260	4	11.078	-0.002	25726887	418.9	4	11.538	-0.001	3022450	441.3
Aroclor-1260	5	11.269	-0.002	12945468	429.2	NS	---			----
	Total Col1Ave (5 peaks):			420.4		Total Col2Ave (4 peaks):			439.2	RPD = 4
	Corrected Ave (4 peaks):			418.3		Corrected Ave (3 peaks):			438.3	RPD = 5

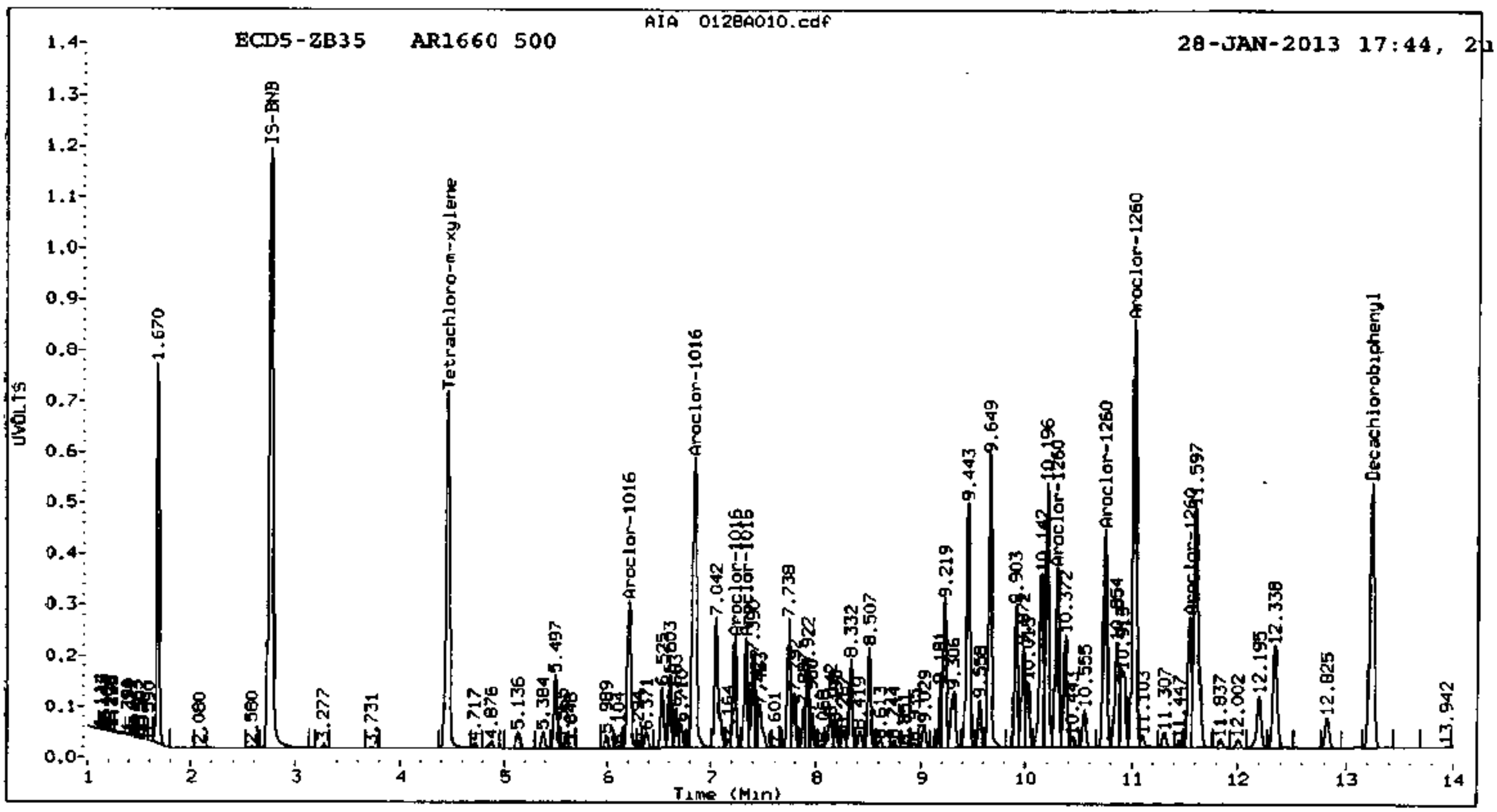
Total PCB Area Col1 (4.545 - 12.749) = 575043439 Col1 Total PCB = 1.0 ppm*

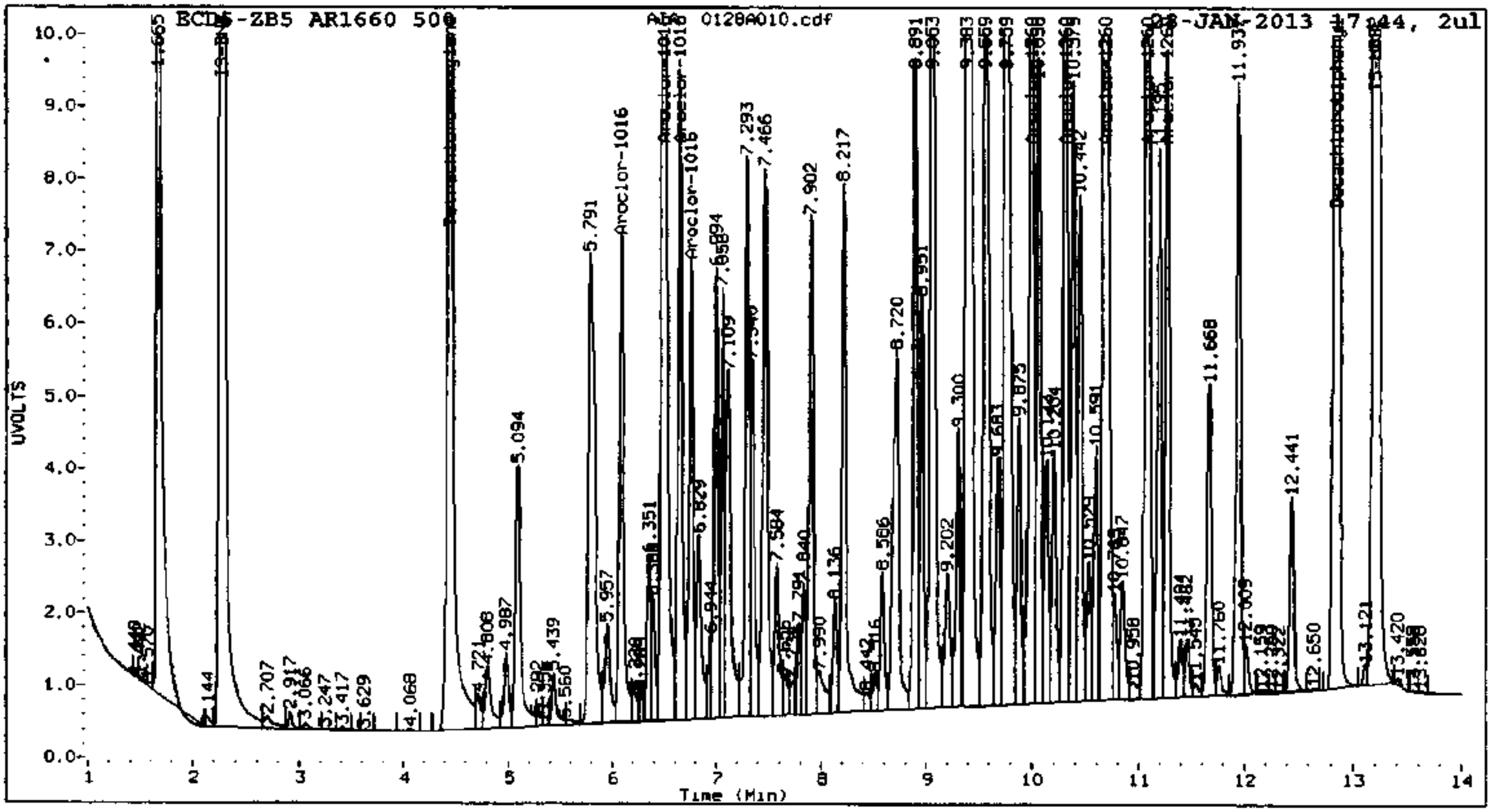
Total PCB Area Col2 (4.551 - 13.140) = 125827217 Col2 Total PCB = 1.1 ppm*

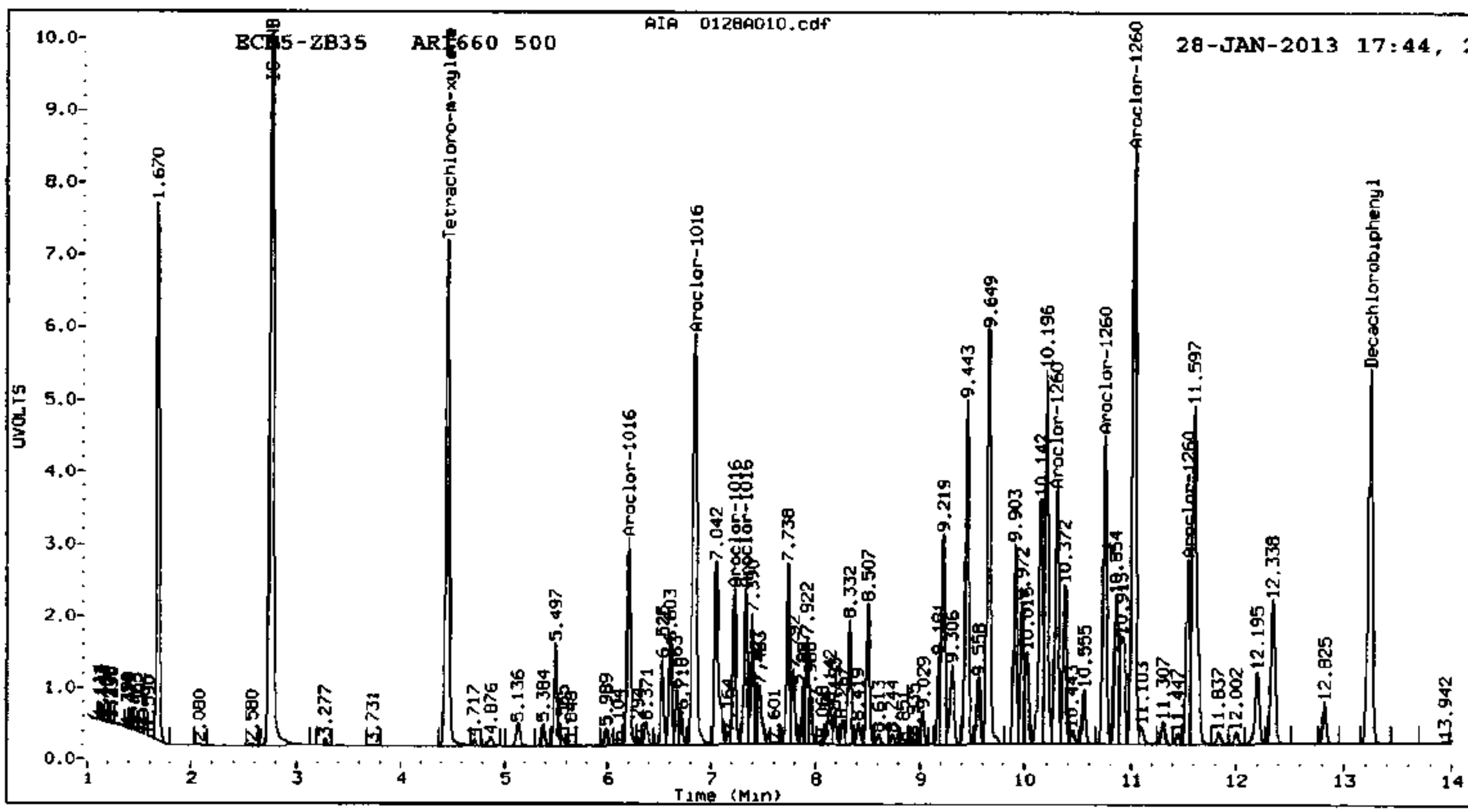
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.


ECD5-ZB5 AR1660 500
AIA 0128A010.cdf
28-JAN-2013 17:44, 2ul
UVOLTS
Time (Min)
1.665
IS-BNB
Tetrachloro-m-xylene
Aroclor-1016
Aroclor-1260
9.053
9.383
9.759
11.937
Decachlorobiphenyl
IS-HBBP


ECD5-ZB35 AR1660 500
AIA 0128A010.cdf
28-JAN-2013 17:44, 2u
UVOLTS
Time (Min)
1.670
IS-BNB
Tetrachloro-m-xylene
Aroclor-1016
Aroclor-1260
9.443
9.649
11.597
12.338
Decachlorobiphenyl


ECD5-ZB5 AR1660 500
AIA 0128A010.cdf
28-JAN-2013 17:44, 2ul
UVOLTS
Time (Min)
Aroclor-1016
Decachlorobiphenyl


ECD5-ZB35 AR1660 500
AIA 0128A010.cdf
28-JAN-2013 17:44, 2u
UVOLTS
Time (Min)
Tetrachloro-m-xylene
Aroclor-1016
Aroclor-1260
Decachlorobiphenyl

Analytical Resources Inc.
Dual Column PCBs by SW8082

Data file 1: 20130128.b/ical-1.b/0128A011.d
Data file 2: 20130128.b/ical-2.b/0128A011.d
Method: /chem2/ecd5.i/20130128.b/PCB1.m
Compound Sublist: AR1242
Instrument, Inj. Vol.: ecd5.i, 2ul
Quant Method: Internal Std

ARI ID: AR1242 YZ 01/29/13
Client ID:
Injection Date: 28-JAN-2013 18:03
Ical Date: 28-JAN-2013
Matrix: NONE
Dilution Factor: 1.000

ZB5 Col RT	ZB5 Col Shift	ZB5 Col Response	ZB35 Col RT	ZB35 Col Shift	ZB35 Col Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
4.441	-0.004	15885025	4.452	0.001	4355239	18.9	19.4	2.4	Tetrachloro-m-xylen
12.847	-0.002	19312903	13.238	-0.002	3913579	16.3	17.7	8.2	Decachlorobiphenyl

* Indicates RPD > 40%
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE PERCENT RECOVERY

SURROGATE	Col1	Col2
Tetrachloro-m-xylene	47.3	48.5
Decachlorobiphenyl	40.9	44.4

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	44738954	47348020	5.8
Hexabromobiphenyl	59848867	64942692	8.5

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	14899855	15308036	2.7
Hexabromobiphenyl	12307480	13137575	6.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 28-JAN-2013
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1242	1	6.087	-0.003	4131122	250.0	1	6.202	0.000	1613038	250.0
Aroclor-1242	2	6.492	-0.004	12897187	250.0	2	6.834	0.000	3463712	250.0
Aroclor-1242	3	6.641	-0.003	5575019	250.0	3	7.043	0.000	1428493	250.0
Aroclor-1242	4	7.893	-0.003	6677054	250.0	4	8.268	0.000	1238599	250.0

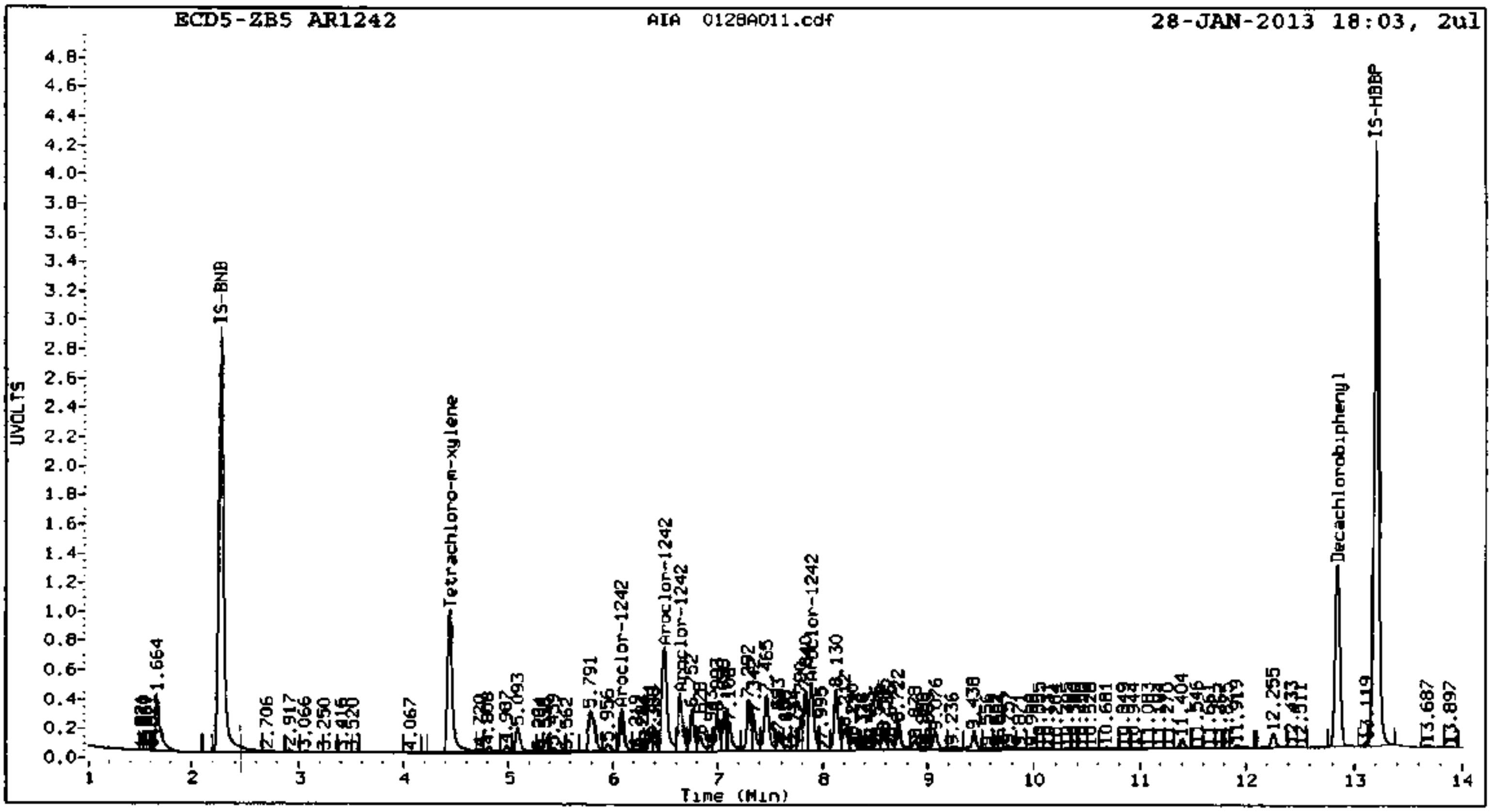
Total Col1Ave (4 peaks): 250.0 Total Col2Ave (4 peaks): 250.0 RPD = 0
Corrected Ave (3 peaks): 250.0 Corrected Ave (3 peaks): 250.0 RPD = 0

Total PCB Area Col1 (4.545 - 12.749) = 115958692 Col1 Total PCB = 0.2 ppm*

Total PCB Area Col2 (4.551 - 13.140) = 25266165 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.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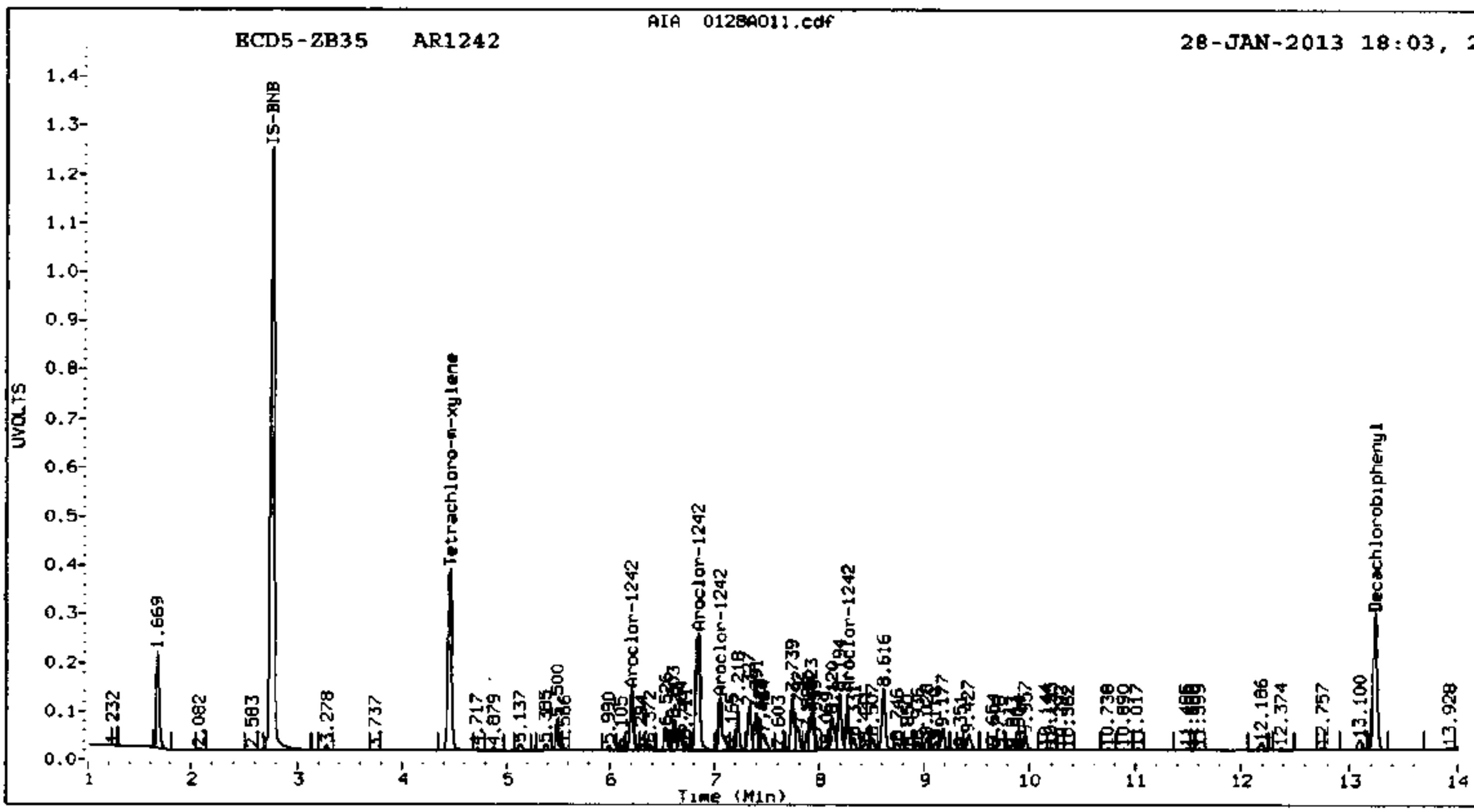
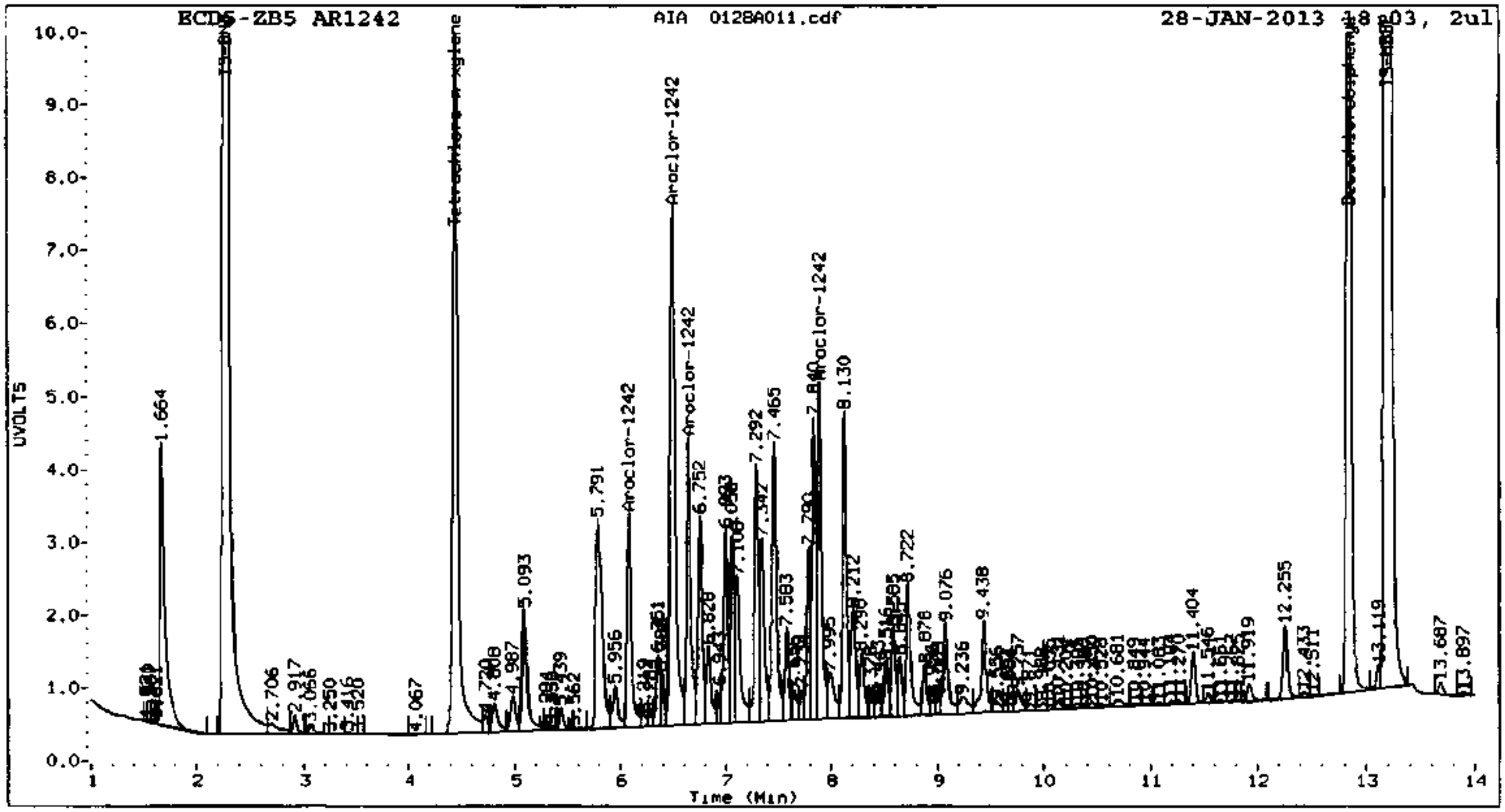
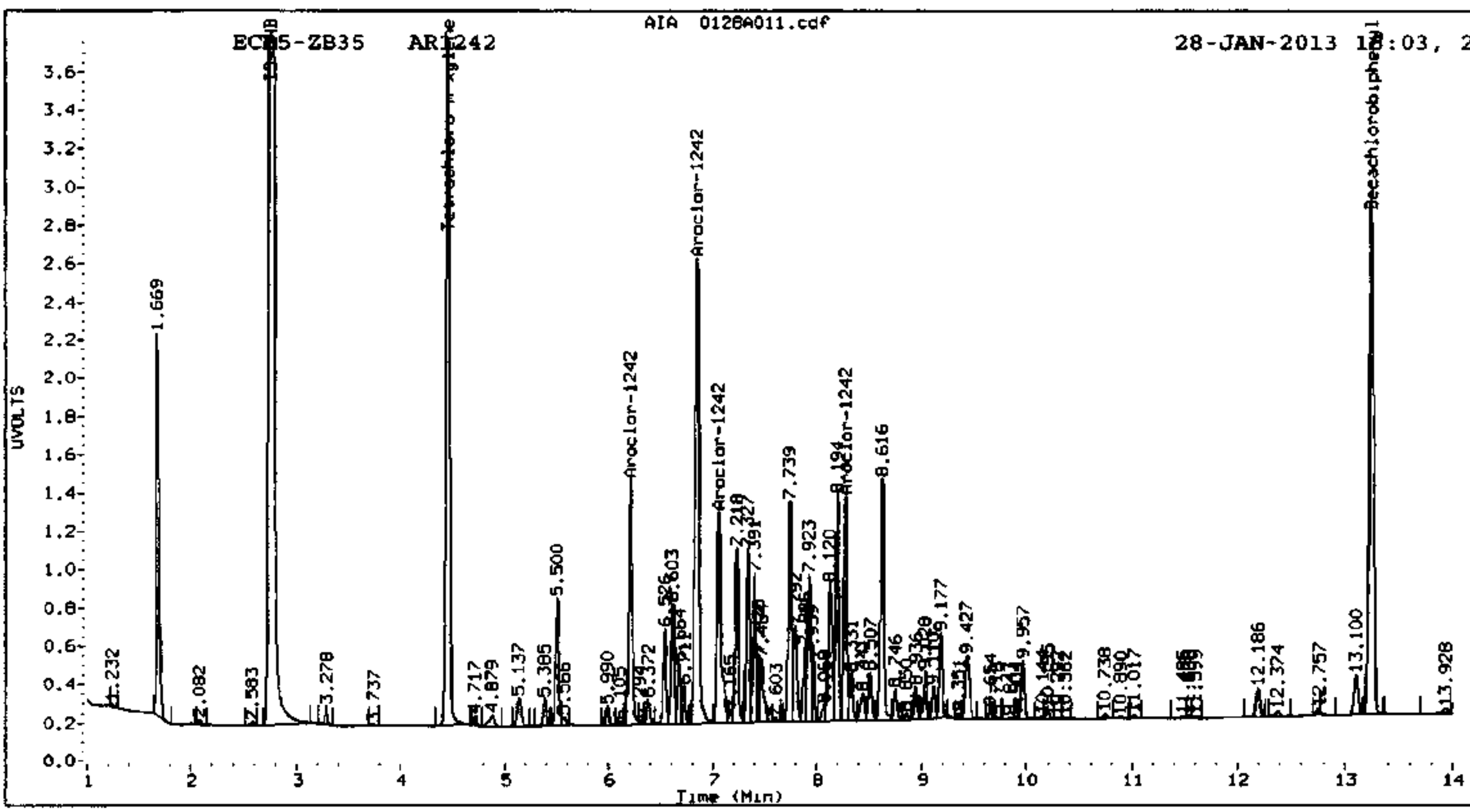
AIA 0128A011.cdf
28-JAN-2013 18:03, 2ul
UVOLTS
IS-BNB
Tetrachloro-m-xylene
Aroclor-1242
Aroclor-1242
Aroclor-1242
Aroclor-1242
Decachlorobiphenyl
IS-HBBP
1.664
12.255
13.687
13.897
Time (Min)


AIA 0128A011.cdf
ECD5-ZB35 AR1242
28-JAN-2013 18:03, 2u
UVOLTS
IS-BNB
Tetrachloro-m-xylene
Aroclor-1242
Aroclor-1242
Aroclor-1242
Aroclor-1242
Decachlorobiphenyl
1.669
8.616
12.186
12.374
13.928
Time (Min)


ECD5-ZB5 AR1242
AIA 0128A011.cdf
28-JAN-2013 18:03, 2ul
UVOLTS
Time (Min)
Tetrachloro-m-xylene
Aroclor-1242
Decachlorobiphenyl


ECD5-ZB35 AR1242
AIA 0128A011.cdf
28-JAN-2013 18:03, 2u
UVOLTS
Time (Min)
Aroclor-1242
Decachlorobiphenyl

Analytical Resources Inc.
Dual Column PCBs by SW8082

Data file 1: 20130128.b/ical-1.b/0128A012.d
Data file 2: 20130128.b/ical-2.b/0128A012.d
Method: /chem2/ecd5.i/20130128.b/PCB1.m
Compound Sublist: AR1248
Instrument, Inj. Vol.: ecd5.i, 2ul
Quant Method: Internal Std

ARI ID: AR1248 YZ 01/31/13
Client ID:
Injection Date: 28-JAN-2013 18:24
Ical Date: 28-JAN-2013
Matrix: NONE
Dilution Factor: 1.000

ZB5 Col RT	Shift	Response	ZB35 Col RT	Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
4.442	-0.002	15827030	4.451	0.000	4425890	18.9	19.7	4.2	Tetrachloro-m-xylen
12.848	-0.002	19070899	13.238	-0.002	3889500	16.8	18.4	9.3	Decachlorobiphenyl

* Indicates RPD > 40%
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE PERCENT RECOVERY

SURROGATE	Col1	Col2
Tetrachloro-m-xylene	47.2	49.2
Decachlorobiphenyl	42.0	46.1

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	44738954	47306862	5.7
Hexabromobiphenyl	59848867	62450070	4.3

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	14899855	15325996	2.9
Hexabromobiphenyl	12307480	12566076	2.1

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 28-JAN-2013
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1248	1	6.489	-0.002	8431791	250.0	1	6.829	0.000	2259260	250.0
Aroclor-1248	2	7.466	-0.002	8941147	250.0	2	7.738	0.000	1892688	250.0
Aroclor-1248	3	7.895	-0.002	11263329	250.0	3	8.267	0.000	1967370	250.0
Aroclor-1248	4	8.131	-0.003	8785453	250.0	4	8.613	0.000	2436527	250.0

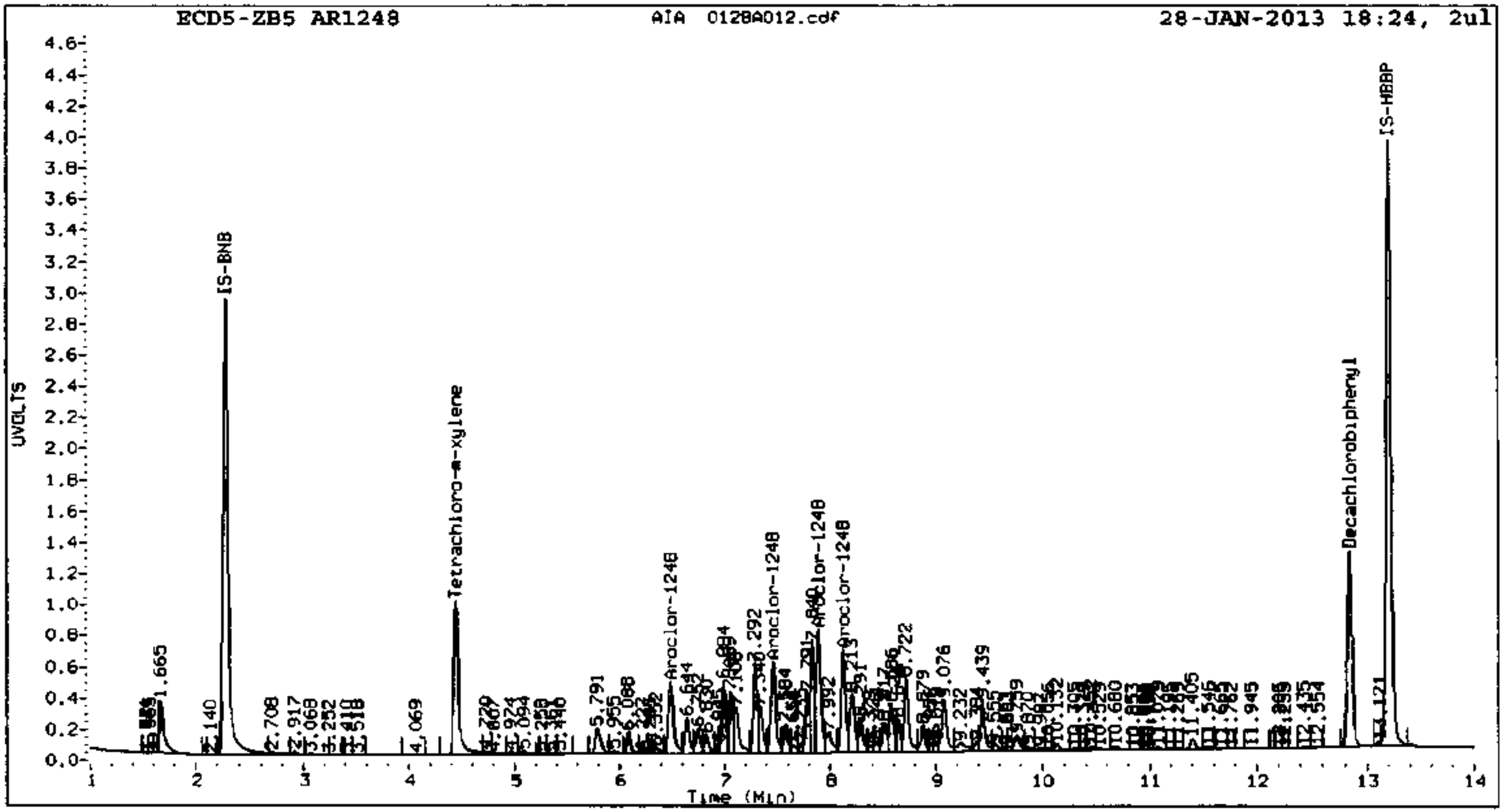
Total Col1Ave (4 peaks): 250.0 Total Col2Ave (4 peaks): 250.0 RPD = 0

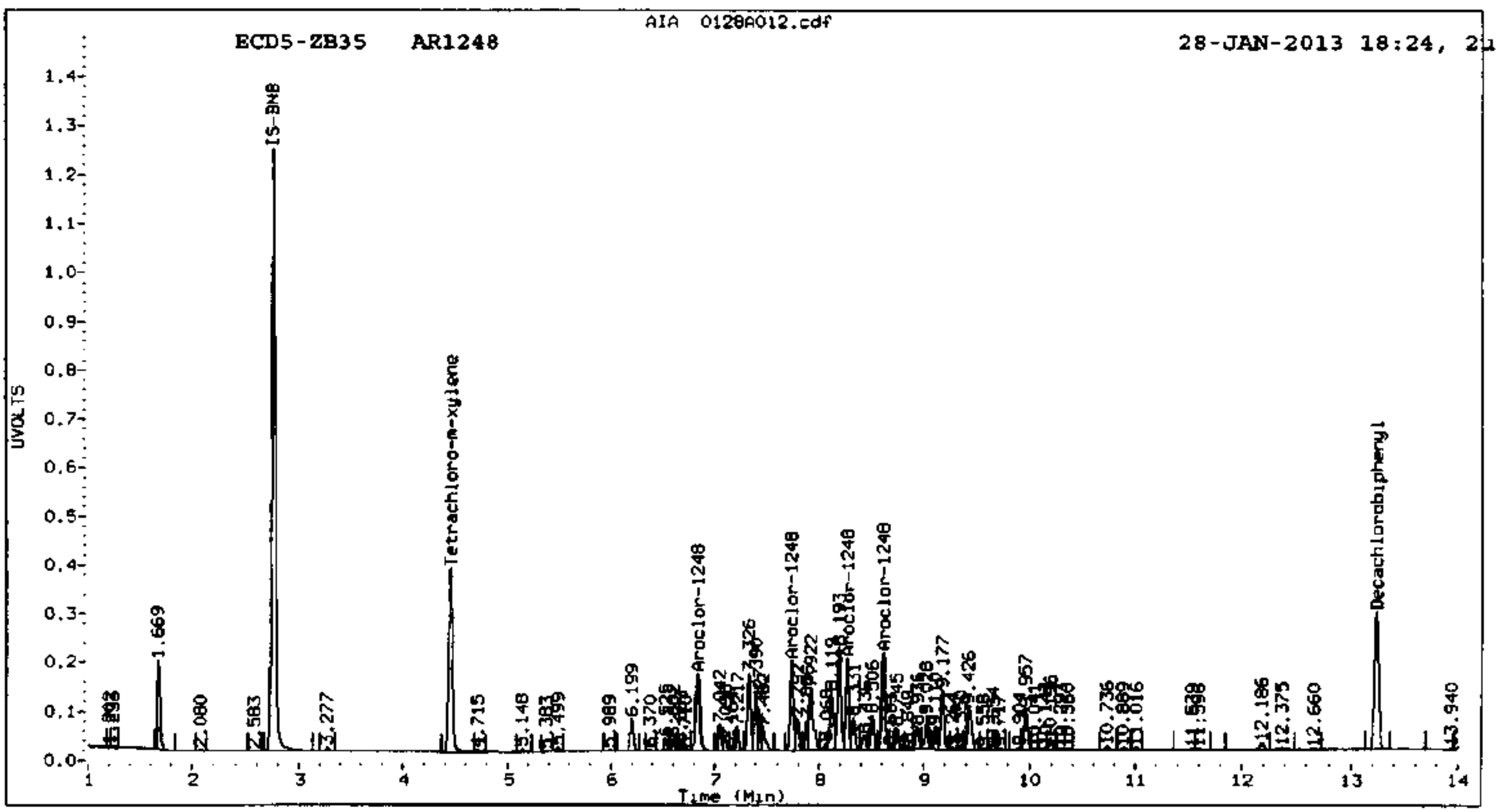
Corrected Ave (3 peaks): 250.0 Corrected Ave (3 peaks): 250.0 RPD = 0

Total PCB Area Col1 (4.545 - 12.749) = 148071031 Col1 Total PCB = 0.2 ppm*

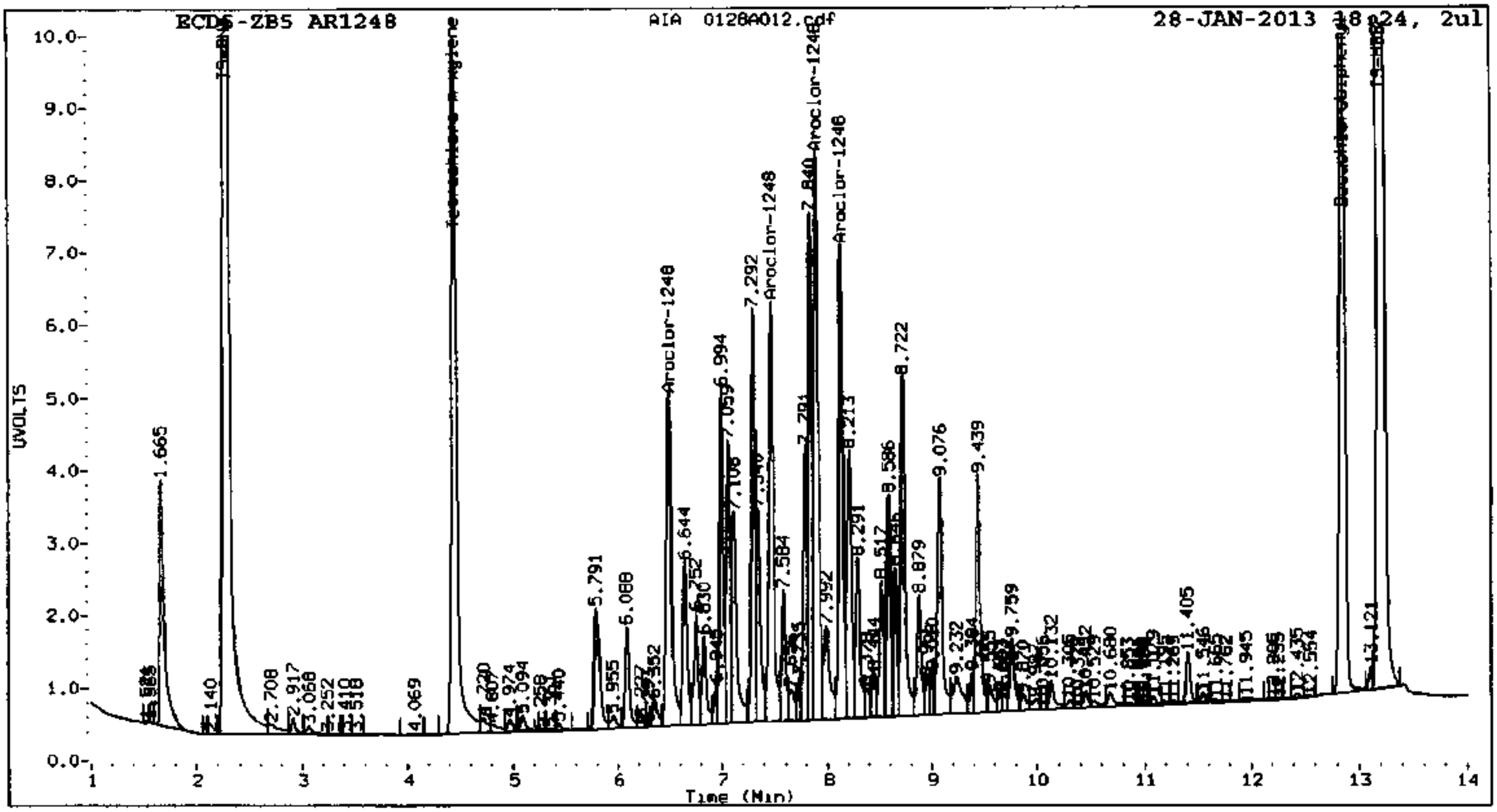
Total PCB Area Col2 (4.551 - 13.140) = 31452593 Col2 Total PCB = 0.3 ppm*

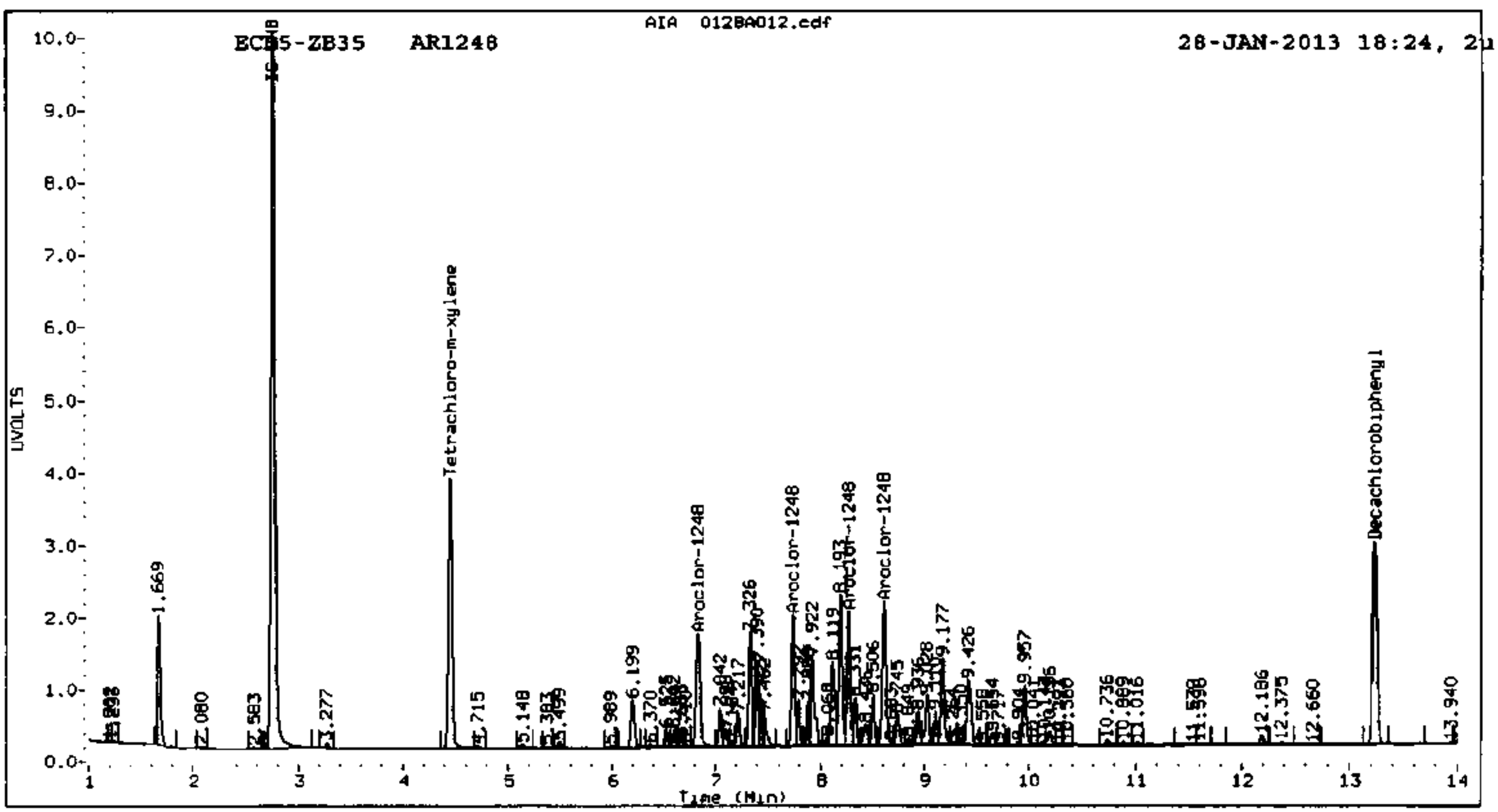
* Quantitated against AR1660 0.25ppm in Ical


ECD5-ZB5 AR1248
AIA 0128A012.cdf
28-JAN-2013 18:24, 2ul
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Aroclor-1248
Decachlorobiphenyl
IS-HBBP


ECD5-ZB35 AR1248
AIA 0128A012.cdf
28-JAN-2013 18:24, 2ul
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Aroclor-1248
Decachlorobiphenyl

WC02 01877


ECD6-ZB5 AR1248
AIA 0128A012.cdf
28-JAN-2013 18:24, 2ul
UVOLTS
Time (Min)
Tetrachloro-m-xylene
Aroclor-1248
Decachlorobiphenyl


ECD5-ZB35 AR1248
AIA 0128A012.cdf
28-JAN-2013 18:24, 2u
UVOLTS
Time (Min)
Tetrachloro-m-xylene
Aroclor-1248
Decachlorobiphenyl

Analytical Resources Inc.
Dual Column PCBs by SW8082

YB 01/29/13

Data file 1: 20130128.b/ical-1.b/0128A013.d
Data file 2: 20130128.b/ical-2.b/0128A013.d
Method: /chem2/ecd5.i/20130128.b/PCB1.m
Compound Sublist: AR1254
Instrument, Inj. Vol.: ecd5.i, 2ul
Quant Method: Internal Std

ARI ID: AR1254
Client ID:
Injection Date: 28-JAN-2013 18:44
Ical Date: 28-JAN-2013
Matrix: NONE
Dilution Factor: 1.000

ZB5 Col RT	Shift	Response	ZB35 Col RT	Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
4.444	-0.001	15684948	4.451	0.000	4345403	18.9	19.6	3.4	Tetrachloro-m-xylen
12.849	0.000	18928566	13.239	-0.001	3880377	16.8	18.6	10.2	Decachlorobiphenyl

* Indicates RPD > 40%
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE PERCENT RECOVERY

SURROGATE	Col1	Col2
Tetrachloro-m-xylene	47.4	49.0
Decachlorobiphenyl	42.1	46.6

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	44738954	46700419	4.4
Hexabromobiphenyl	59848867	61807844	3.3

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	14899855	15109703	1.4
Hexabromobiphenyl	12307480	12399732	0.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 28-JAN-2013
<- Indicates standard response outside Limits (-50 to +100%)

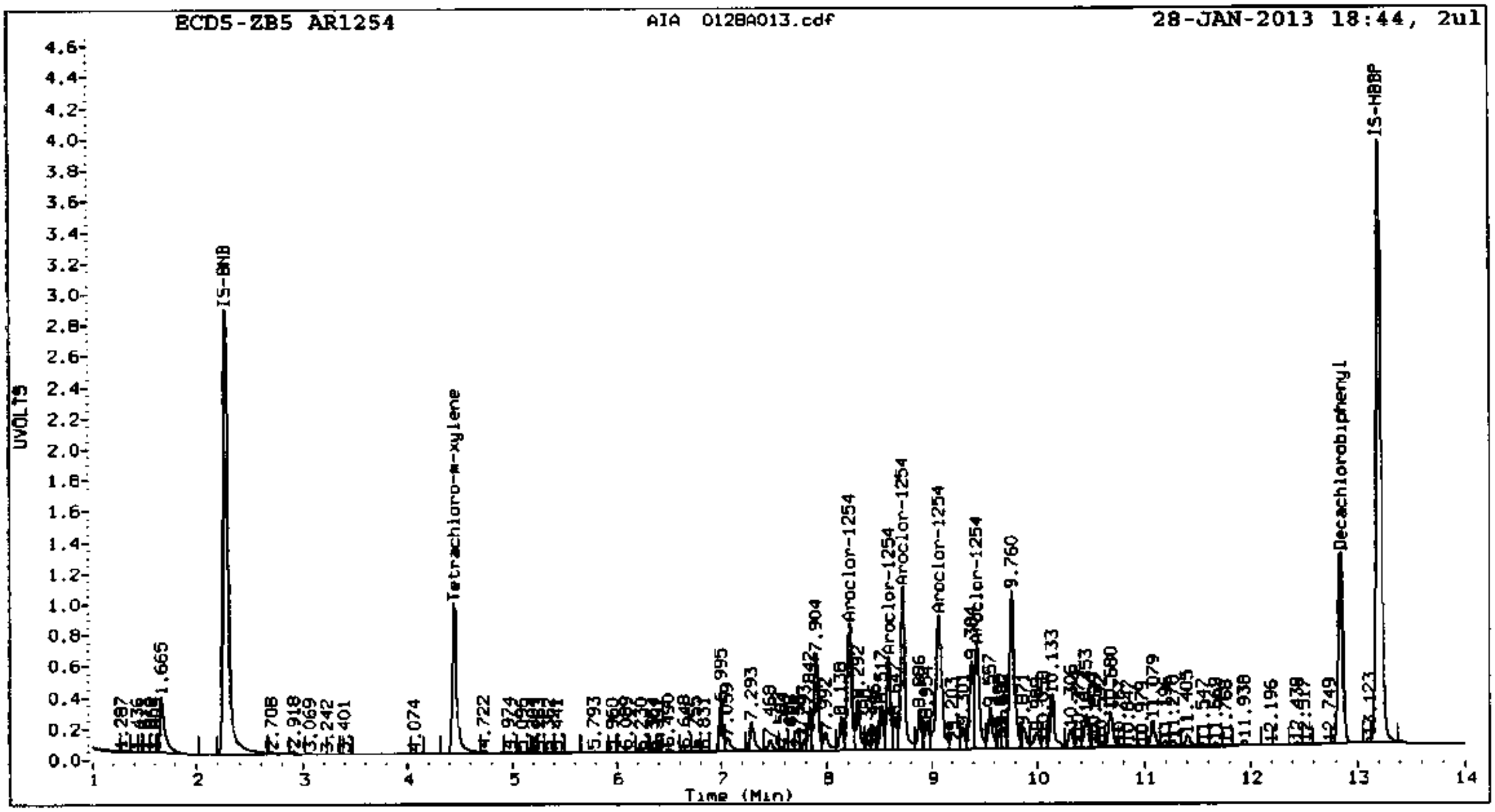
		ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1254	1	8.216	0.000	11431351	250.0	1	8.332	0.000	1650647	250.0
Aroclor-1254	2	8.587	0.000	7631410	250.0	2	8.507	0.000	2119663	250.0
Aroclor-1254	3	8.723	0.000	14808730	250.0	3	9.028	0.000	1642925	250.0
Aroclor-1254	4	9.073	0.000	16344125	250.0	4	9.179	0.000	3573715	250.0
Aroclor-1254	5	9.433	0.000	10245285	250.0	5	9.964	0.000	2180835	250.0

Total Col1Ave (5 peaks): 250.0 Total Col2Ave (5 peaks): 250.0 RPD = 0
Corrected Ave (4 peaks): 250.0 Corrected Ave (4 peaks): 250.0 RPD = 0

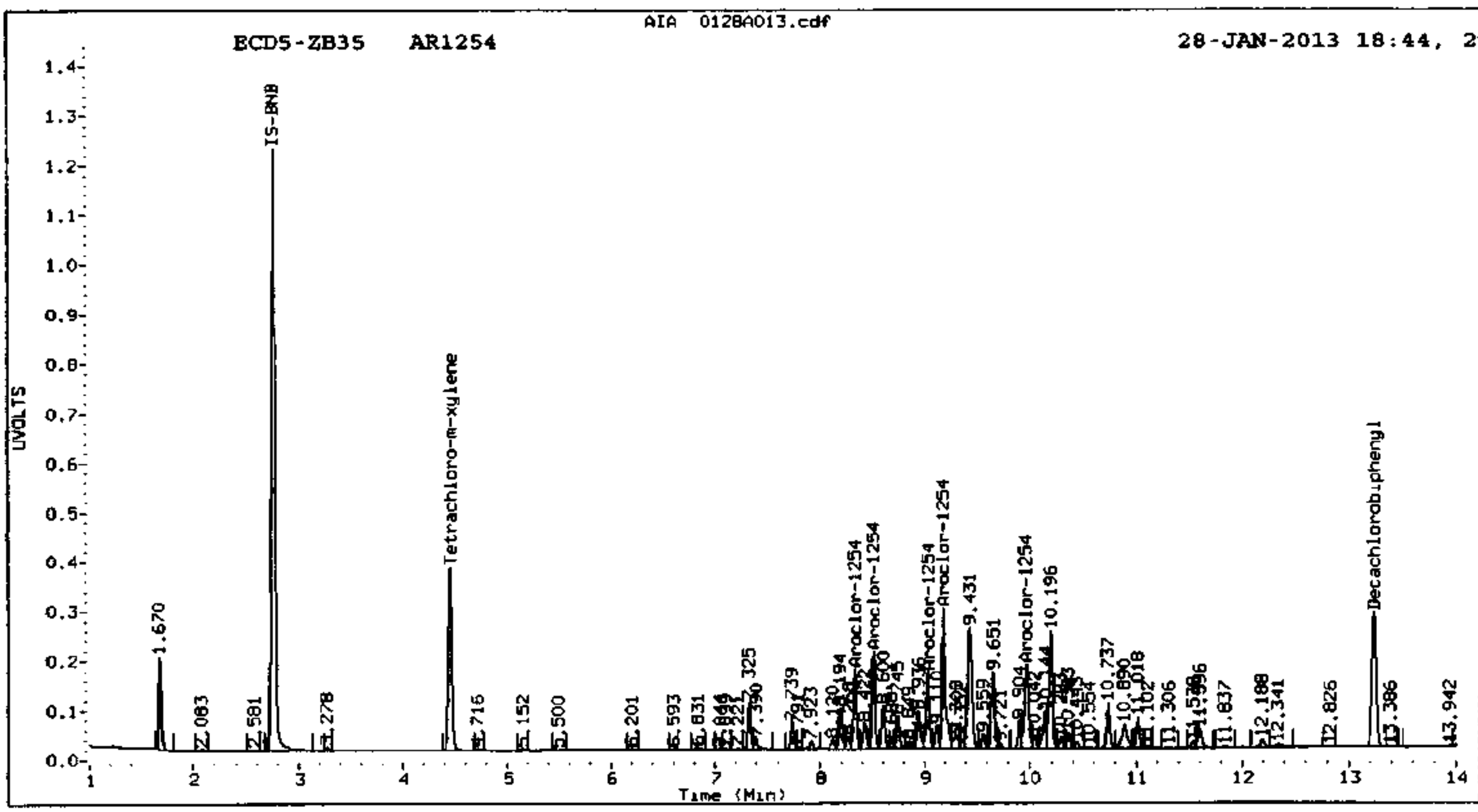
Total PCB Area Col1 (4.545 - 12.749) = 167007631 Col1 Total PCB = 0.3 ppm*

Total PCB Area Col2 (4.551 - 13.140) = 34388754 Col2 Total PCB = 0.3 ppm*

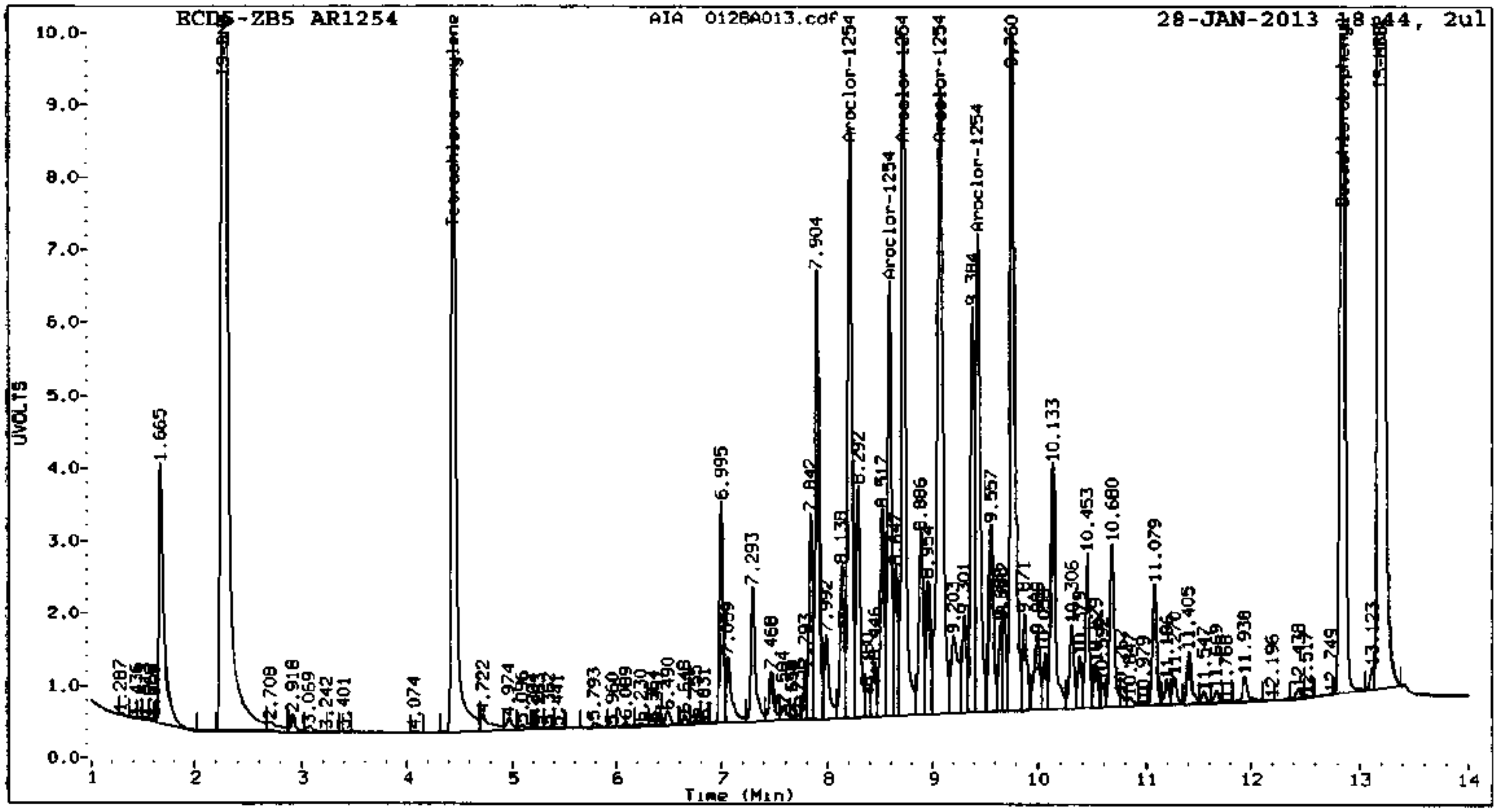
* Quantitated against AR1660 0.25ppm in Ical

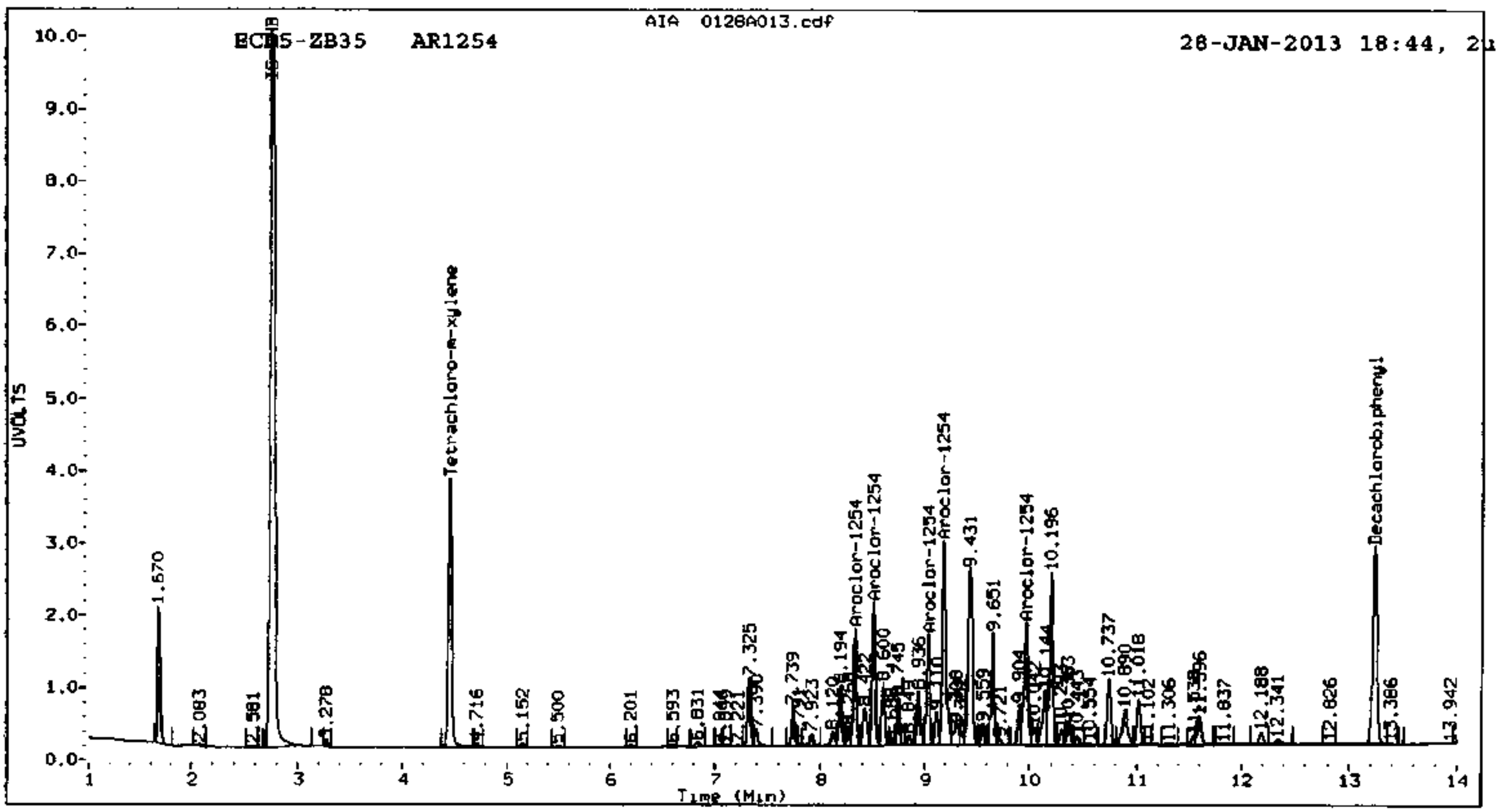


ECD5-ZB5 AR1254
AIA 0128A013.cdf
28-JAN-2013 18:44, 2ul
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Aroclor-1254
Aroclor-1254
Aroclor-1254
Aroclor-1254
Aroclor-1254
9.760
Decachlorobiphenyl
IS-HBBP



ECD5-ZB35 AR1254
AIA 0128A013.cdf
28-JAN-2013 18:44, 2u
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Aroclor-1254
Aroclor-1254
Aroclor-1254
Aroclor-1254
Aroclor-1254
9.431
10.196
Decachlorobiphenyl


ECD5-ZB5 AR1254
AIA 0128A013.cdf
28-JAN-2013 18:44, 2ul
UVOLTS
Time (Min)
Tetrachloro-m-xylene
Aroclor-1254
Decachlorobiphenyl


ECD5-ZB35 AR1254
AIA 0128A013.cdf
28-JAN-2013 18:44, 2u
UVOLTS
Time (Min)
Tetrachloro-m-xylene
Aroclor-1254
Decachlorobiphenyl

WC02 01882

Analytical Resources Inc.
Dual Column PCBs by SW8082

Data file 1: 20130128.b/ical-1.b/0128A014.d
Data file 2: 20130128.b/ical-2.b/0128A014.d
Method: /chem2/ecd5.i/20130128.b/PCB1.m
Compound Sublist: AR2162
Instrument, Inj. Vol.: ecd5.i, 2ul
Quant Method: Internal Std

ARI ID: AR2162 YZ 01/31/13
Client ID:
Injection Date: 28-JAN-2013 19:04
Ical Date: 28-JAN-2013
Matrix: NONE
Dilution Factor: 1.000

ZB5 Col RT	ZB5 Col Shift	ZB5 Col Response	ZB35 Col RT	ZB35 Col Shift	ZB35 Col Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
4.445	0.000	16233148	4.452	0.001	4419061	19.5	20.1	3.3	Tetrachloro-m-xylen
12.849	-0.001	19106539	13.238	-0.001	3910296	16.9	18.7	10.1	Decachlorobiphenyl

* Indicates RPD > 40%
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE PERCENT RECOVERY

SURROGATE	Col1	Col2
Tetrachloro-m-xylene	48.6	50.3
Decachlorobiphenyl	42.2	46.6

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	44738954	47074711	5.2
Hexabromobiphenyl	59848867	62286209	4.1

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	14899855	14980472	0.5
Hexabromobiphenyl	12307480	12481185	1.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 28-JAN-2013
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1221	1	5.097	0.000	4875256	250.0	1	3.735	0.000	387368	250.0
Aroclor-1221	2	6.495	0.000	1535830	250.0	2	5.135	0.000	608400	250.0
Aroclor-1221	3	7.904	0.000	2054353	250.0	3	5.386	0.000	361007	250.0
Aroclor-1221	NS	---			----	4	5.500	0.000	1133860	250.0

Total Col1Ave (3 peaks): 250.0 Total Col2Ave (4 peaks): 250.0 RPD = 0
Corrected Ave: < 3 Peaks Corrected Ave (3 peaks): 250.0

Aroclor-1262	1	10.306	0.000	12814843	250.0	1	10.293	0.000	3654042	250.0
Aroclor-1262	2	10.680	0.000	32822252	250.0	2	10.744	0.000	3128445	250.0
Aroclor-1262	3	11.080	0.000	11648336	250.0	3	11.017	0.000	7058858	250.0
Aroclor-1262	4	11.269	0.000	13203911	250.0	4	11.539	0.000	2860838	250.0
Aroclor-1262	5	11.939	0.000	11564322	250.0	5	12.340	0.000	2586233	250.0

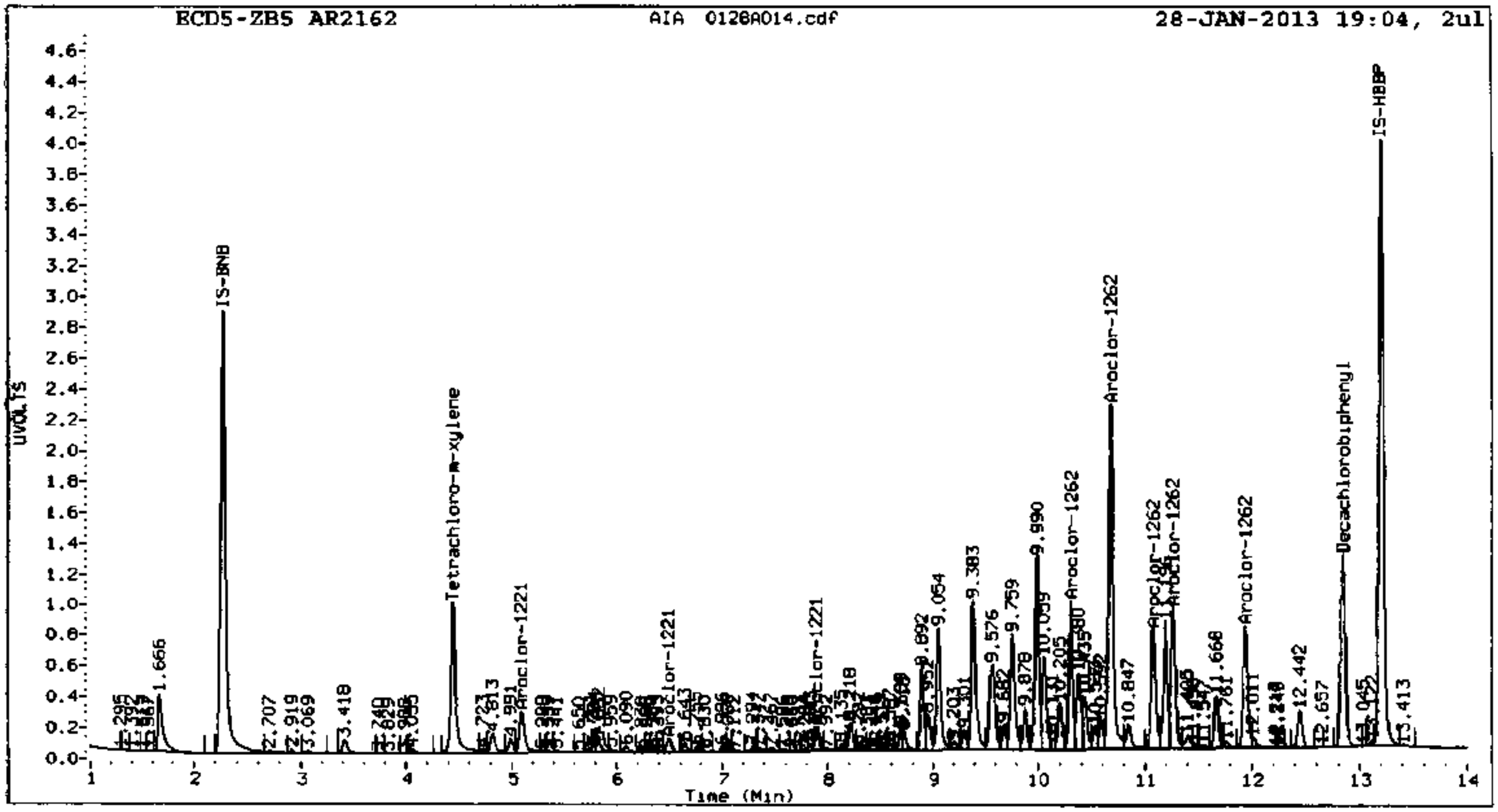
Total Col1Ave (5 peaks): 250.0 Total Col2Ave (5 peaks): 250.0 RPD = 0
Corrected Ave (4 peaks): 250.0 Corrected Ave (4 peaks): 250.0 RPD = 0

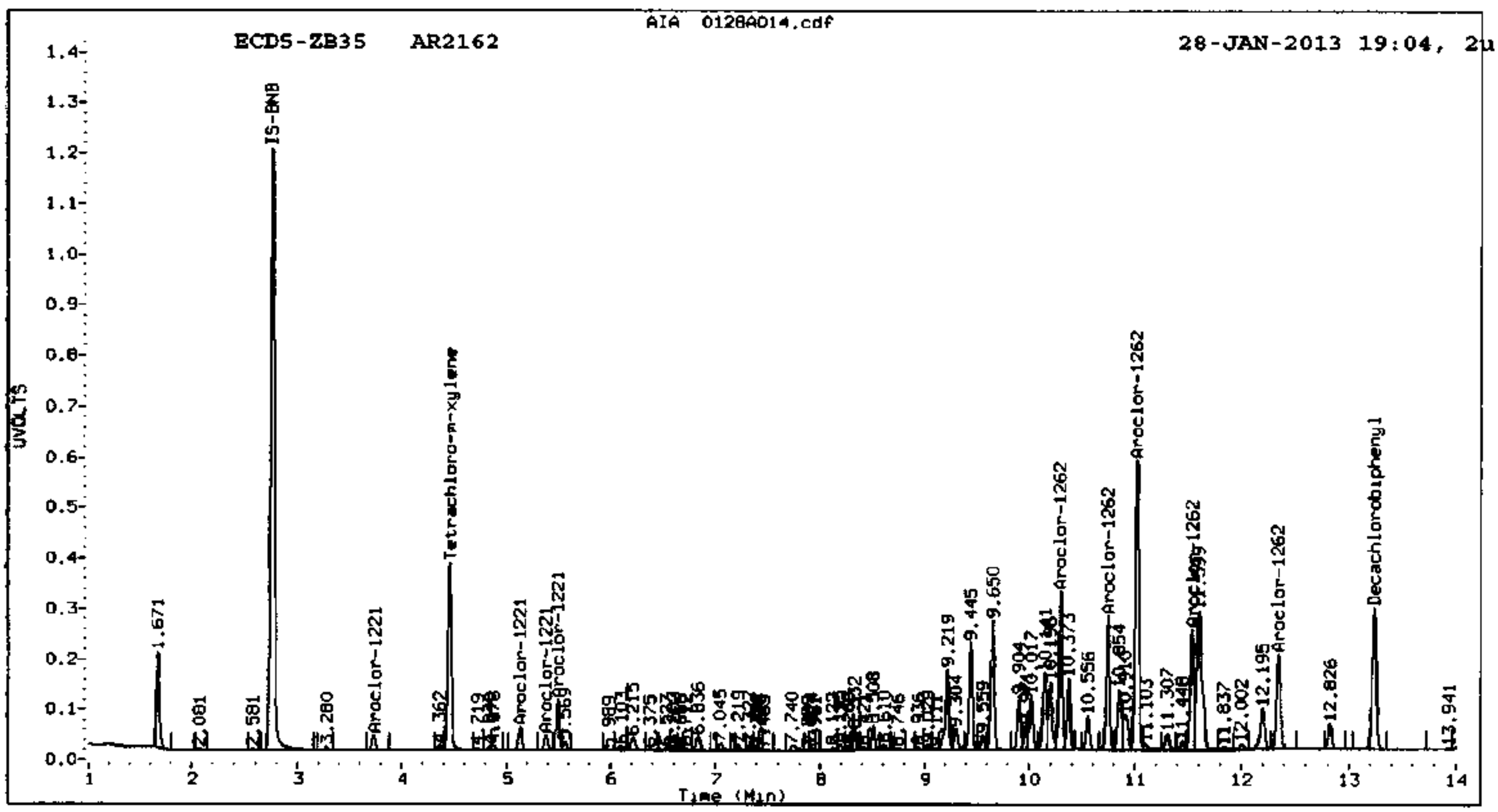
Total PCB Area Col1 (4.545 - 12.749) = 247992579 Col1 Total PCB = 0.4 ppm*

Total PCB Area Col2 (4.551 - 13.140) = 52206556 Col2 Total PCB = 0.5 ppm*

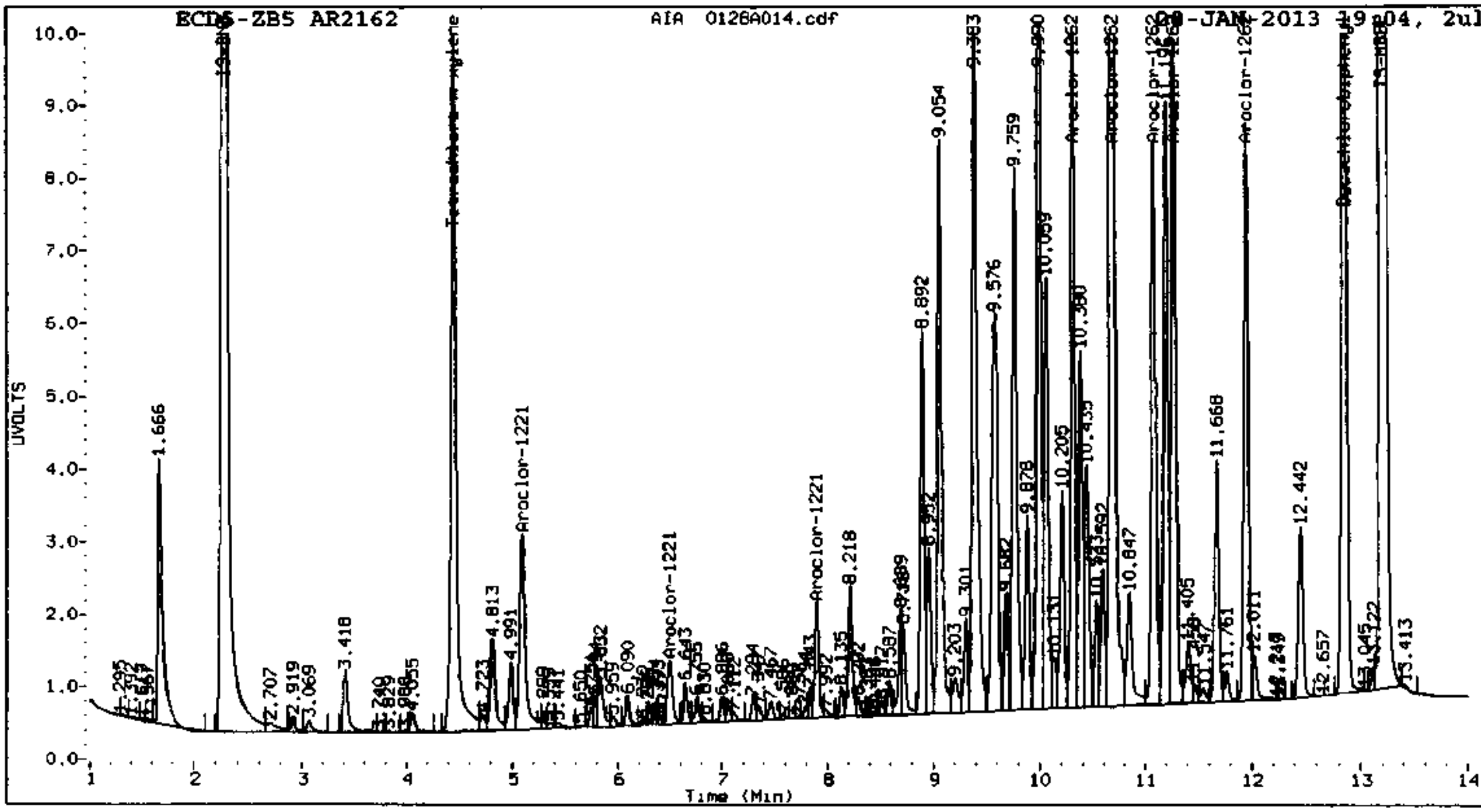
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

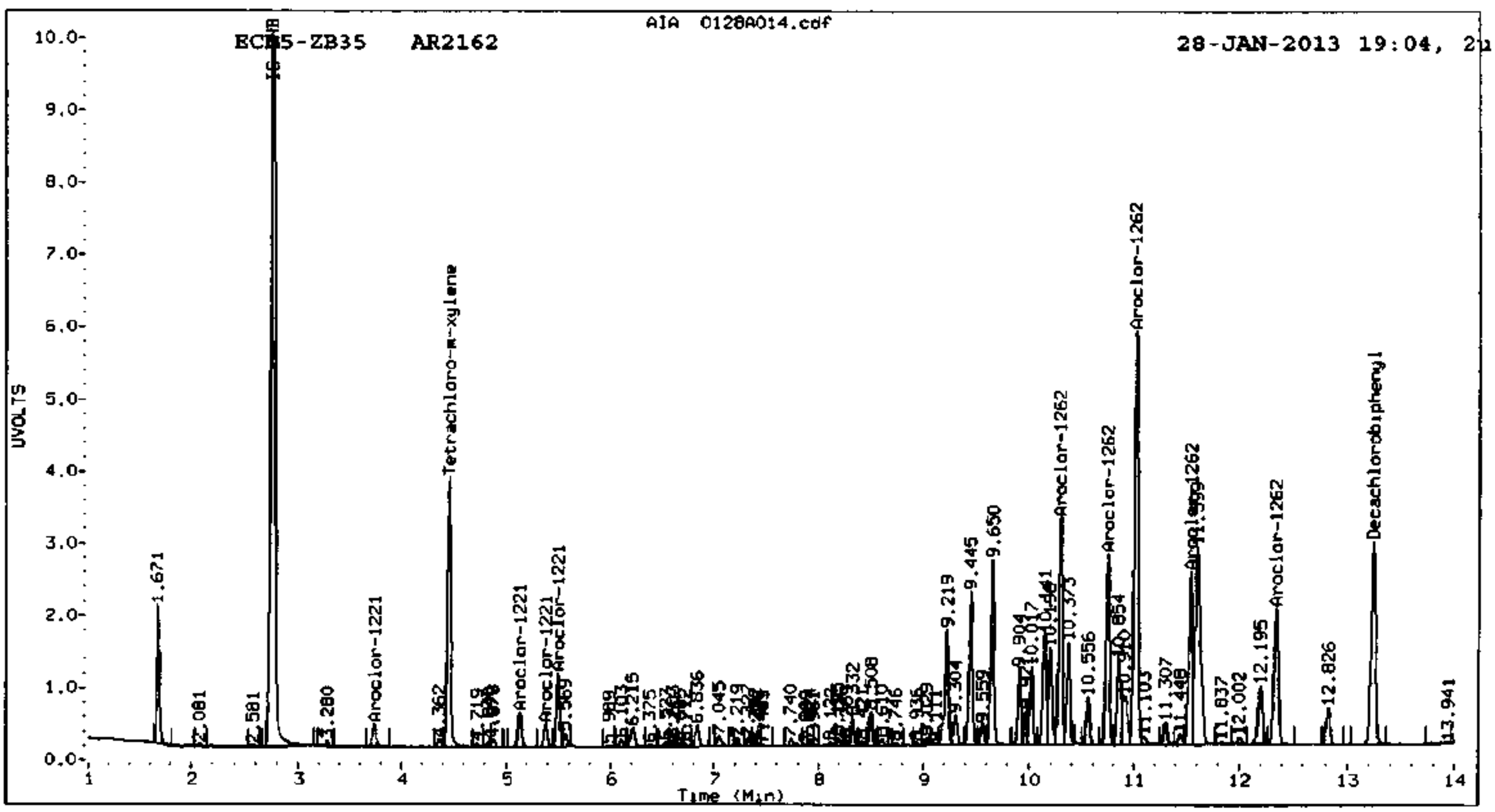

ECD5-ZB5 AR2162
AIA 0128A014.cdf
28-JAN-2013 19:04, 2ul
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Aroclor-1221
Aroclor-1262
Decachlorobiphenyl
IS-HBBP
1.666
9.054
9.383
9.576
9.759
9.990
10.847
11.668
12.442
13.413


ECD5-ZB35 AR2162
AIA 0128A014.cdf
28-JAN-2013 19:04, 2u
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Aroclor-1221
Aroclor-1262
Decachlorobiphenyl
1.671
3.280
9.219
9.445
9.650
10.373
10.556
12.195
12.826
13.941

VC32 01006



ECD5-ZB5 AR2162
AIA 0128A014.cdf
28-JAN-2013 19:04, 2ul
UVOLTS
Time (Min)
Tetrachloro-m-xylene
Aroclor-1221
Aroclor-1262



ECD5-ZB35 AR2162
AIA 0128A014.cdf
28-JAN-2013 19:04, 2u
UVOLTS
Time (Min)
Tetrachloro-m-xylene
Aroclor-1221
Aroclor-1262
Decachlorobiphenyl

WC02:01007

Analytical Resources Inc.
Dual Column PCBs by SW8082

Data file 1: 20130128.b/ical-1.b/0128A015.d
Data file 2: 20130128.b/ical-2.b/0128A015.d
Method: /chem2/ecd5.i/20130128.b/PCB1.m
Compound Sublist: AR3268
Instrument, Inj. Vol.: ecd5.i, 2ul
Quant Method: Internal Std

ARI ID: AR3268 YZ 01/30/13
Client ID:
Injection Date: 28-JAN-2013 19:24
Ical Date: 28-JAN-2013
Matrix: NONE
Dilution Factor: 1.000

ZB5 Col RT	ZB5 Col Shift	ZB5 Col Response	ZB35 Col RT	ZB35 Col Shift	ZB35 Col Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
4.444	-0.001	16228107	4.451	0.000	4462345	19.2	20.0	4.1	Tetrachloro-m-xylen
12.849	0.000	33613362	13.240	0.000	7025935	29.5	33.4	12.4	Decachlorobiphenyl

* Indicates RPD > 40%
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE PERCENT RECOVERY

SURROGATE	Col1	Col2
Tetrachloro-m-xylene	48.1	50.1
Decachlorobiphenyl	73.7	83.5

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	44738954	47629692	6.5
Hexabromobiphenyl	59848867	62645243	4.7

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	14899855	15185320	1.9
Hexabromobiphenyl	12307480	12533864	1.8

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 28-JAN-2013
<- Indicates standard response outside Limits (-50 to +100%)

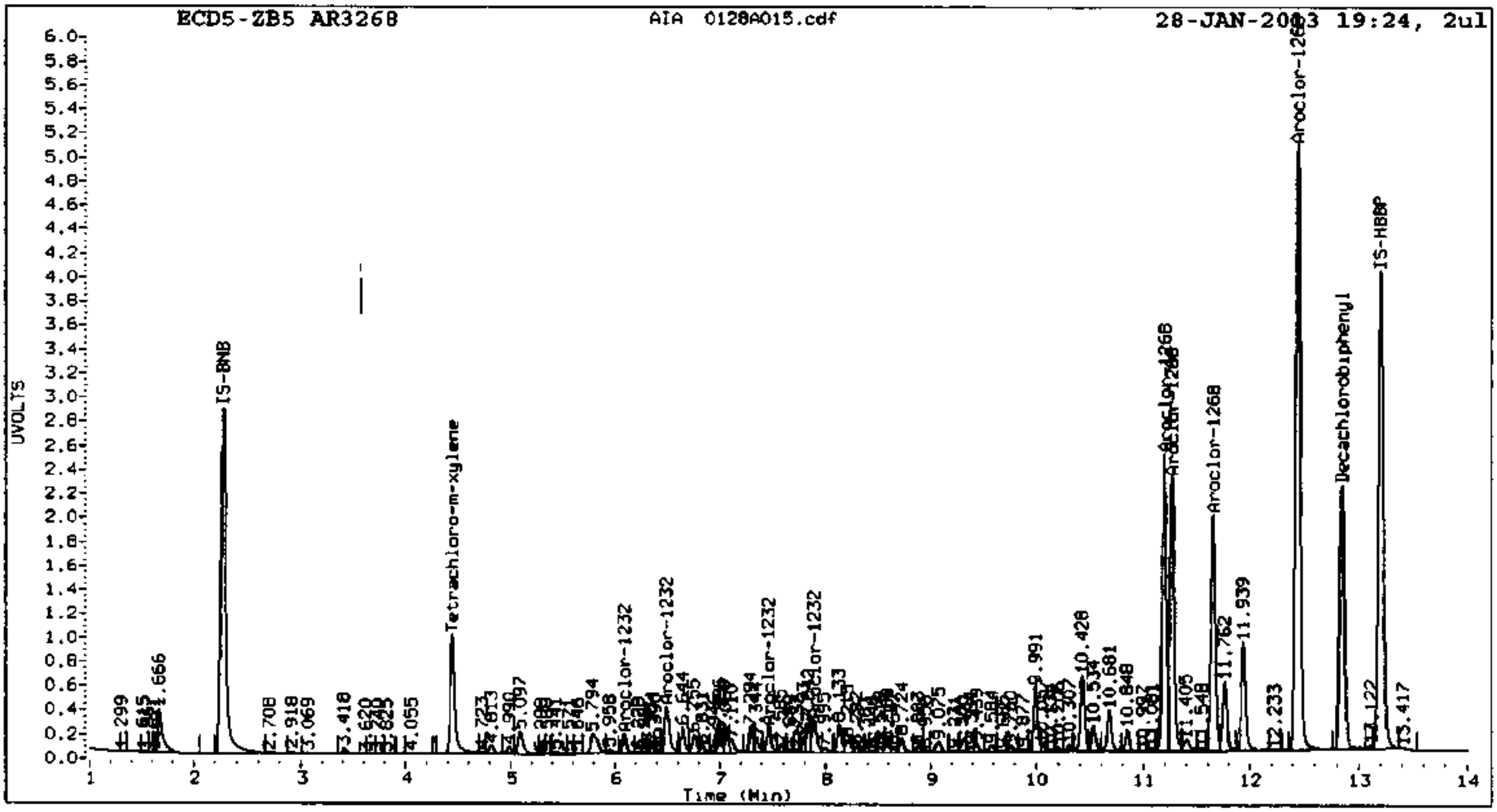
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
	ZB5 Col					ZB35 Col				
Aroclor-1232	1	6.090	0.000	2223014	250.0	1	6.202	0.000	955526	250.0
Aroclor-1232	2	6.494	0.000	6993627	250.0	2	6.833	0.000	1866992	250.0
Aroclor-1232	3	7.468	0.000	3326404	250.0	3	7.043	0.000	768168	250.0
Aroclor-1232	4	7.897	0.000	3844070	250.0	4	8.269	0.000	658882	250.0
	Total Col1Ave (4 peaks):			250.0		Total Col2Ave (4 peaks):			250.0	RPD = 0
	Corrected Ave (3 peaks):			250.0		Corrected Ave (3 peaks):			250.0	RPD = 0
Aroclor-1268	1	11.197	0.000	33356506	250.0	1	11.540	0.000	7461417	250.0
Aroclor-1268	2	11.269	0.000	32260645	250.0	2	11.606	0.000	7212842	250.0
Aroclor-1268	3	11.654	0.000	27729675	250.0	3	12.003	0.000	6018850	250.0
Aroclor-1268	4	12.443	0.000	75377565	250.0	4	12.826	0.000	16399047	250.0
	Total Col1Ave (4 peaks):			250.0		Total Col2Ave (4 peaks):			250.0	RPD = 0
	Corrected Ave (3 peaks):			250.0		Corrected Ave (3 peaks):			250.0	RPD = 0

Total PCB Area Col1 (4.545 - 12.749) = 288217192 Col1 Total PCB = 0.5 ppm*

Total PCB Area Col2 (4.551 - 13.140) = 62799820 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.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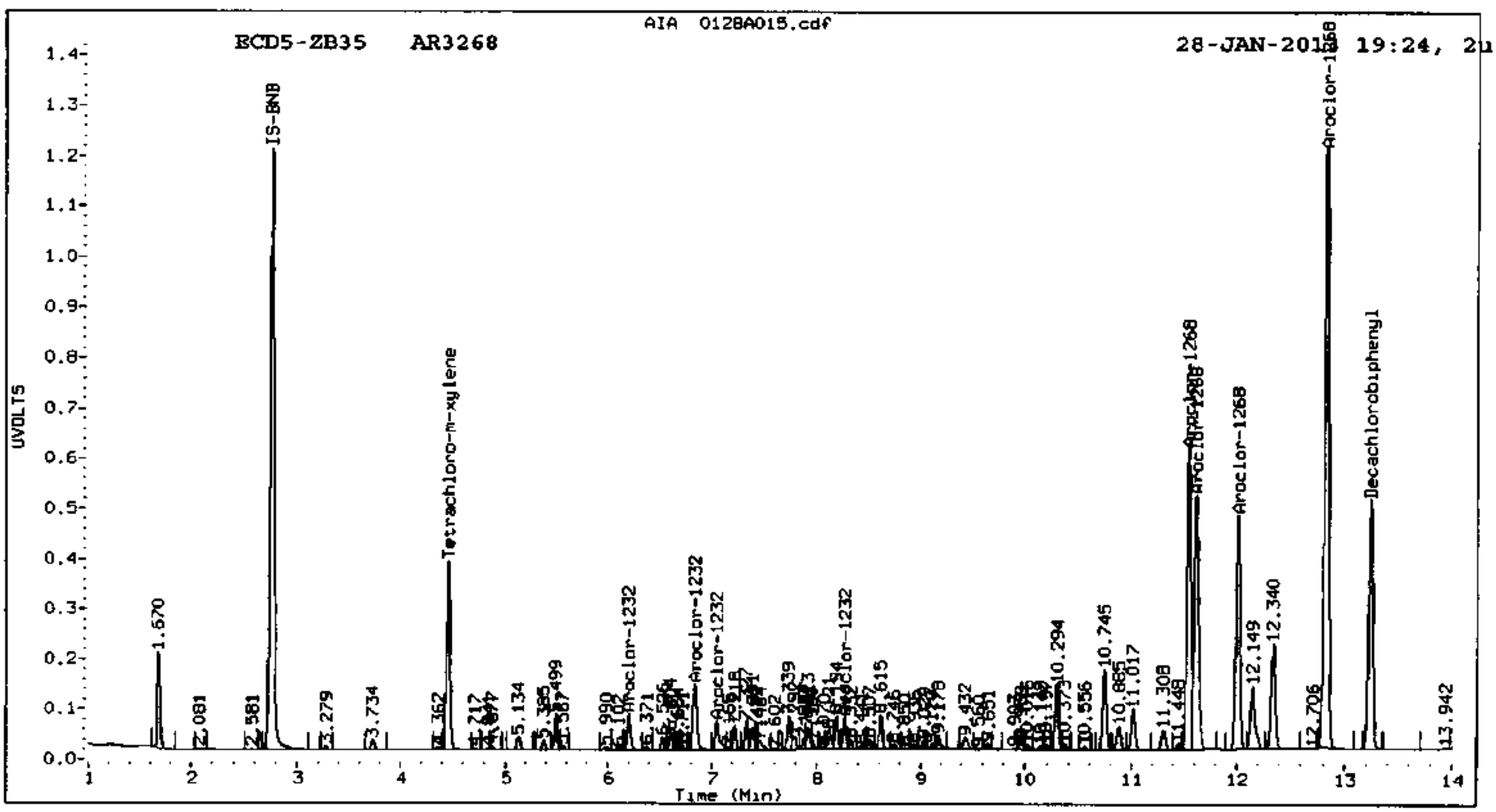
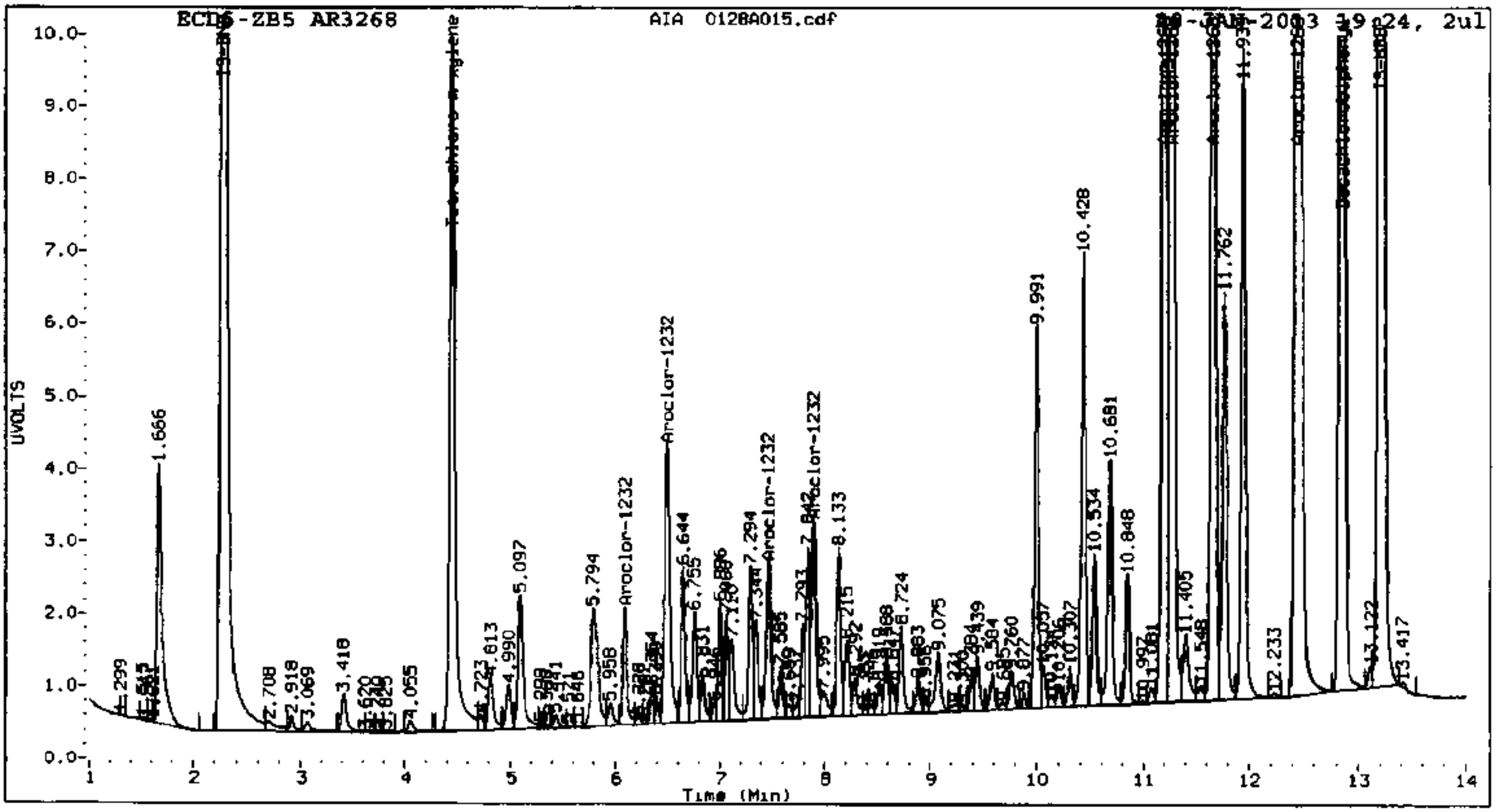
AIA 0128A015.cdf
28-JAN-2003 19:24, 2ul
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Aroclor-1232
Aroclor-1268
Decachlorobiphenyl
IS-HBBP


ECD5-ZB35 AR3268
AIA 0128A015.cdf
28-JAN-2003 19:24, 2u
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Aroclor-1232
Aroclor-1268
Decachlorobiphenyl

WC02 01001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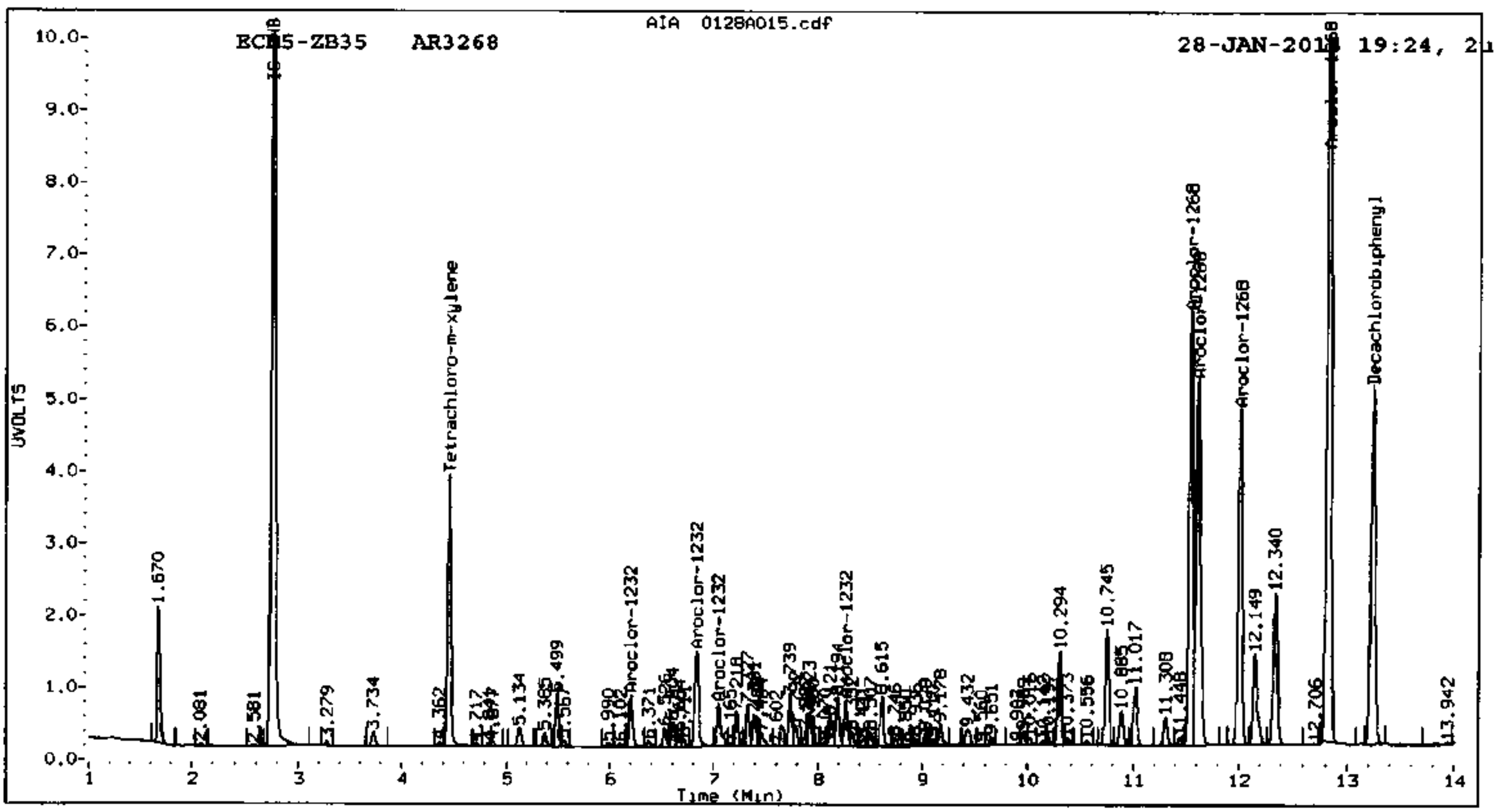
19:24, 2ul
Tetrachloro-m-xylene
Aroclor-1232
UVOLTS
Time (Min)


ECD5-ZB35 AR3268
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28-JAN-201 19:24,
Tetrachloro-m-xylene
Aroclor-1232
Aroclor-1268
Decachlorobiphenyl
UVOLTS
Time (Min)

Analytical Resources Inc.
Dual Column PCBs by SW8082

Data file 1: 20130128.b/ical-1.b/0128A016.d
Data file 2: 20130128.b/ical-2.b/0128A016.d
Method: /chem2/ecd5.i/20130128.b/PCB1.m
Compound Sublist: AR1660
Instrument, Inj. Vol.: ecd5.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660 ICV XZ 9/30/13
Client ID:
Injection Date: 28-JAN-2013 19:45
Ical Date: 28-JAN-2013
Matrix: NONE
Dilution Factor: 1.000

ZB5 Col RT	Shift	Response	ZB35 Col RT	Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
4.445	0.000	16523435	4.452	0.001	4616973	20.0	20.2	1.0	Tetrachloro-m-xylen
12.849	0.000	20029441	13.239	0.000	4088614	17.1	19.0	10.7	Decachlorobiphenyl

* Indicates RPD > 40%
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE PERCENT RECOVERY

SURROGATE	Col1	Col2
Tetrachloro-m-xylene	50.1	50.6
Decachlorobiphenyl	42.8	47.6

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	44738954	46527079	4.0
Hexabromobiphenyl	59848867	64334377	7.5

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	14899855	15541446	4.3
Hexabromobiphenyl	12307480	12783248	3.9

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 28-JAN-2013
<- Indicates standard response outside Limits (-50 to +100%)

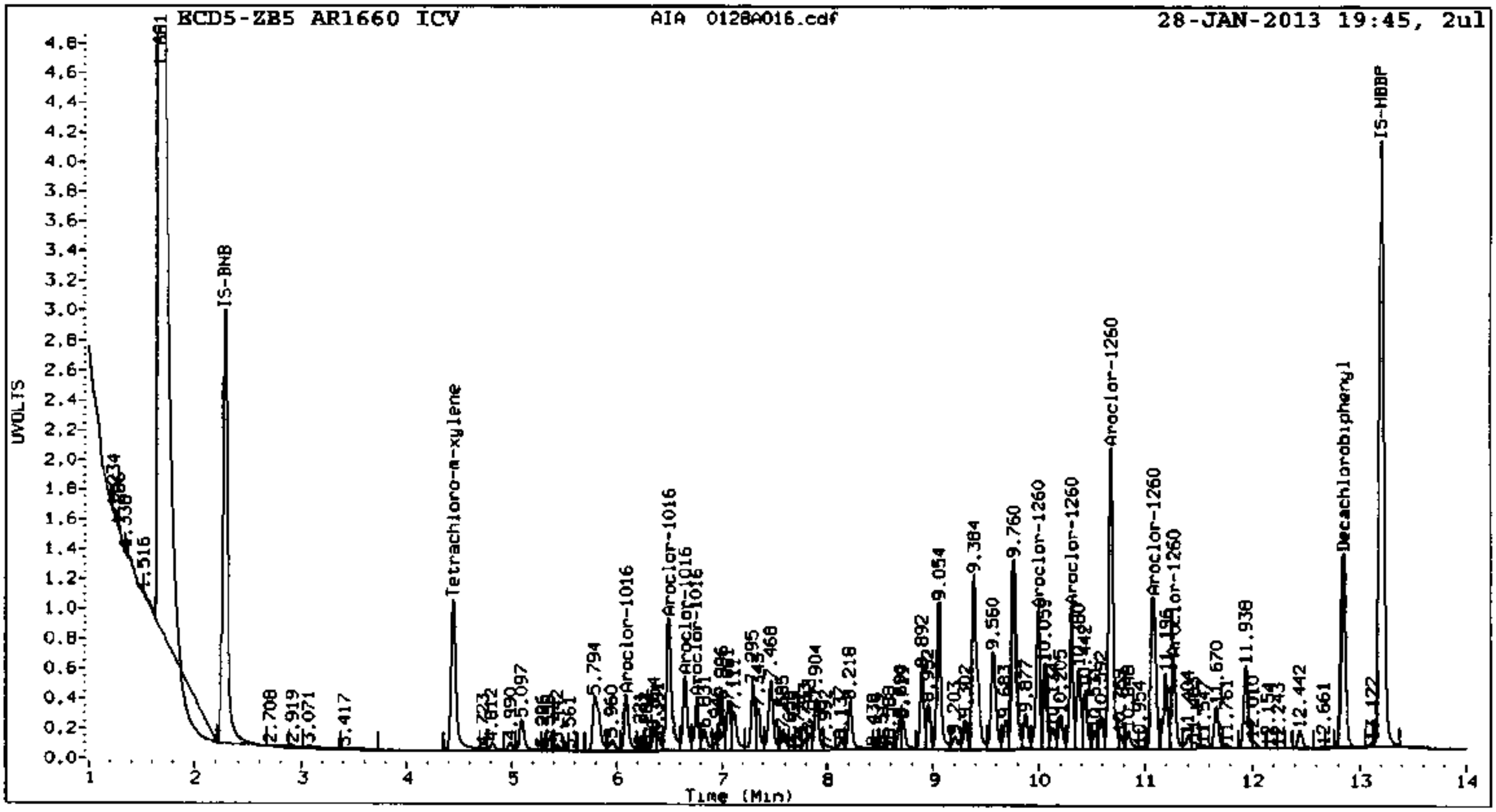
			ZB5 Col					ZB35 Col		
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	6.090	0.000	5146714	238.7	1	6.202	-0.001	2061007	231.4
Aroclor-1016	2	6.494	-0.001	16127440	235.2	2	6.834	0.000	4369912	230.7
Aroclor-1016	3	6.644	0.000	6947494	238.2	3	7.219	0.000	1157305	234.6
Aroclor-1016	4	6.755	0.000	5060699	247.2	4	7.328	-0.001	1265570	226.1
	Total Col1Ave (4 peaks):			239.8		Total Col2Ave (4 peaks):			230.7	RPD = 4
	Corrected Ave (3 peaks):			237.3		Corrected Ave (3 peaks):			229.4	RPD = 3
Aroclor-1260	1	9.990	0.000	12846004	265.1	1	10.293	0.000	2683020	280.5
Aroclor-1260	2	10.306	-0.001	12685243	258.6	2	10.744	0.000	3031325	257.8
Aroclor-1260	3	10.681	-0.001	29178616	256.7	3	11.017	-0.001	6412945	272.1
Aroclor-1260	4	11.080	-0.001	15323192	240.8	4	11.539	0.000	1930602	278.2
Aroclor-1260	5	11.270	-0.001	8861626	283.6	NS	---			----
	Total Col1Ave (5 peaks):			261.0		Total Col2Ave (4 peaks):			272.1	RPD = 4
	Corrected Ave (4 peaks):			255.3		Corrected Ave (3 peaks):			269.3	RPD = 5

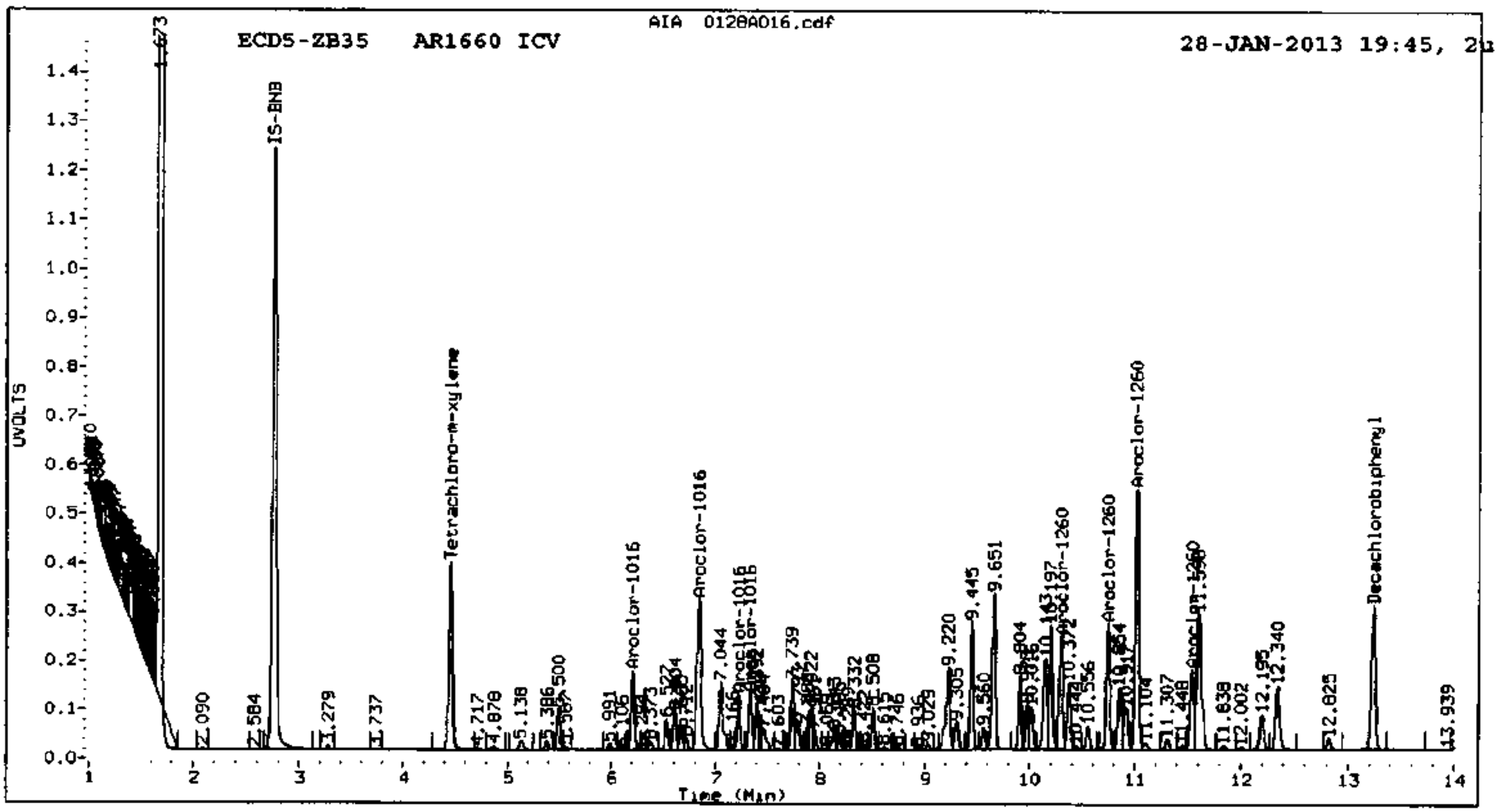
Total PCB Area Col1 (4.545 - 12.749) = 328461593 Col1 Total PCB = 0.5 ppm*

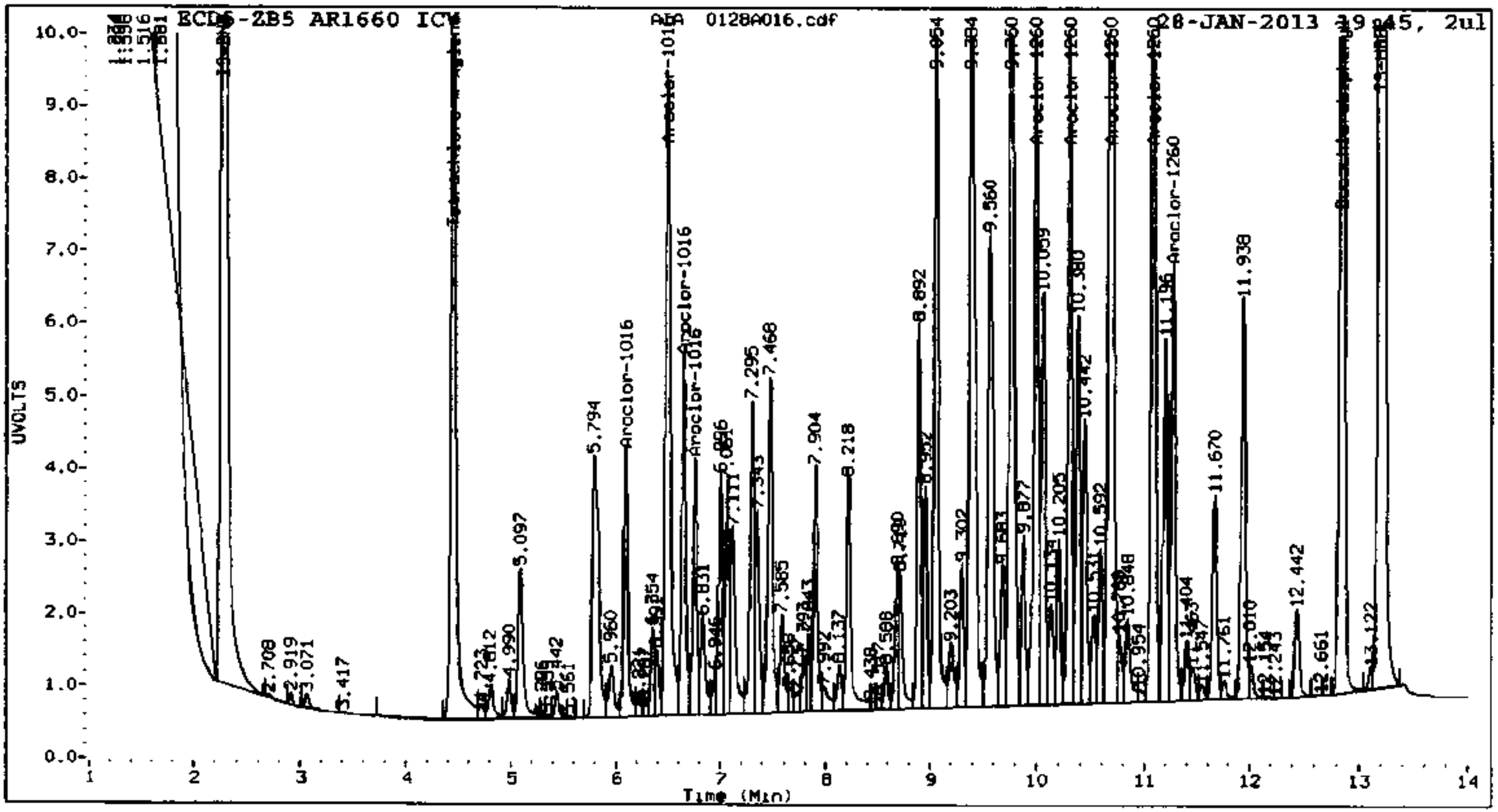
Total PCB Area Col2 (4.551 - 13.140) = 70423013 Col2 Total PCB = 0.6 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.


ECD5-ZB5 AR1660 ICV
AIA 0128A016.cdf
28-JAN-2013 19:45, 2ul
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Aroclor-1016
Aroclor-1260
Decachlorobiphenyl
IS-HBBP


ECD5-ZB35 AR1660 ICV
AIA 0128A016.cdf
28-JAN-2013 19:45, 2u
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Aroclor-1016
Aroclor-1260
Decachlorobiphenyl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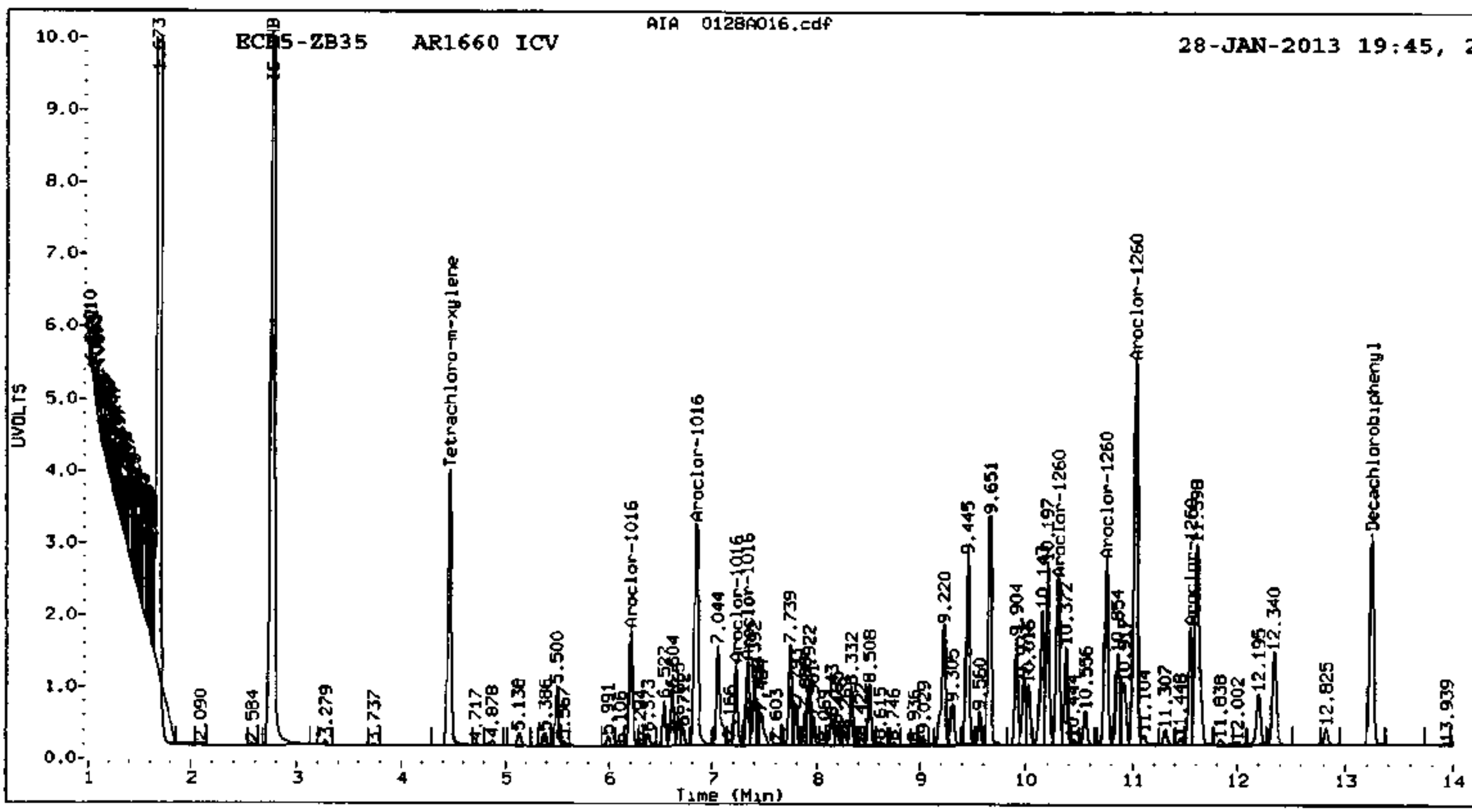
UVOLTS
Time (Min)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AIA 0128A016.cdf
28-JAN-2013 19:45, 2u
UVOLTS
Time (Min)
Tetrachloro-m-xylene
Decachlorobiphenyl

Analytical Resources Inc.
Dual Column PCBs by SW8082

Data file 1: 20130128.b/ical-1.b/0128A017.d
Data file 2: 20130128.b/ical-2.b/0128A017.d
Method: /chem2/ecd5.i/20130128.b/PCB1.m
Compound Sublist: AR1242
Instrument, Inj. Vol.: ecd5.i, 2ul
Quant Method: Internal Std

ARI ID: AR1242 ICV YZ 01/30/13
Client ID:
Injection Date: 28-JAN-2013 20:05
Ical Date: 28-JAN-2013
Matrix: NONE
Dilution Factor: 1.000

ZB5 Col RT	ZB5 Col Shift	ZB5 Col Response	ZB35 Col RT	ZB35 Col Shift	ZB35 Col Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
4.445	0.000	16672690	4.452	0.001	4566834	19.5	20.4	4.1	Tetrachloro-m-xylen
12.849	0.000	19946645	13.240	0.000	4094971	17.2	19.3	11.6	Decachlorobiphenyl

* Indicates RPD > 40%
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE PERCENT RECOVERY

SURROGATE	Col1	Col2
Tetrachloro-m-xylene	48.8	50.9
Decachlorobiphenyl	42.9	48.2

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	44738954	48159325	7.6
Hexabromobiphenyl	59848867	63842800	6.7

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	14899855	15290716	2.6
Hexabromobiphenyl	12307480	12644698	2.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 28-JAN-2013
<- Indicates standard response outside Limits (-50 to +100%)

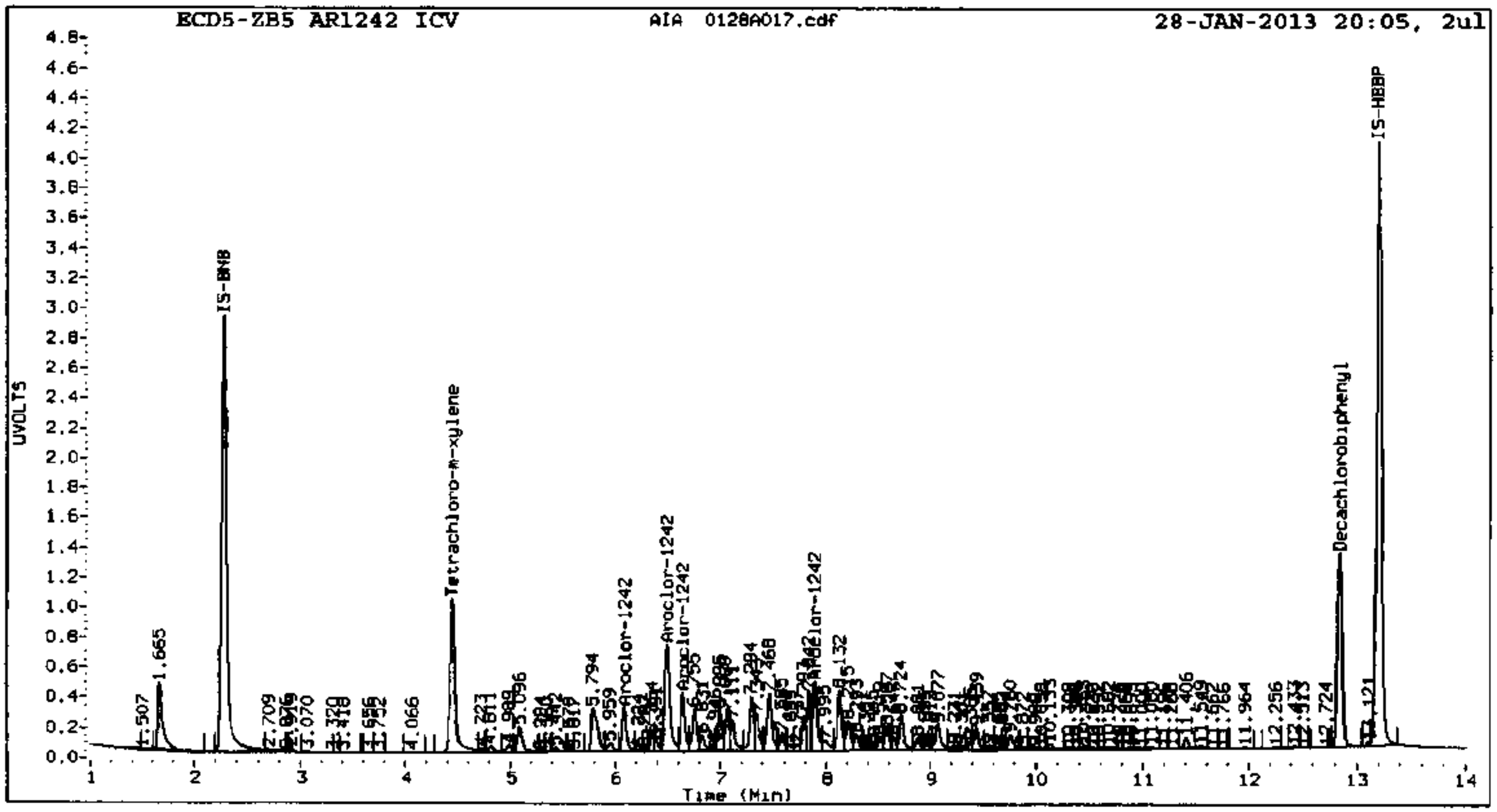
		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1242	1	6.090	-0.001	4112982	244.7	1	6.202	0.001	1601003	248.4
Aroclor-1242	2	6.494	-0.001	12767848	243.3	2	6.833	-0.001	3382882	244.4
Aroclor-1242	3	6.643	-0.001	5546767	244.5	3	7.044	0.001	1401300	245.5
Aroclor-1242	4	7.896	-0.001	6648379	244.7	4	8.269	0.001	1125018	227.3
	Total Col1Ave (4 peaks):			244.3		Total Col2Ave (4 peaks):			241.4	RPD = 1
	Corrected Ave (3 peaks):			244.2		Corrected Ave (3 peaks):			239.1	RPD = 2

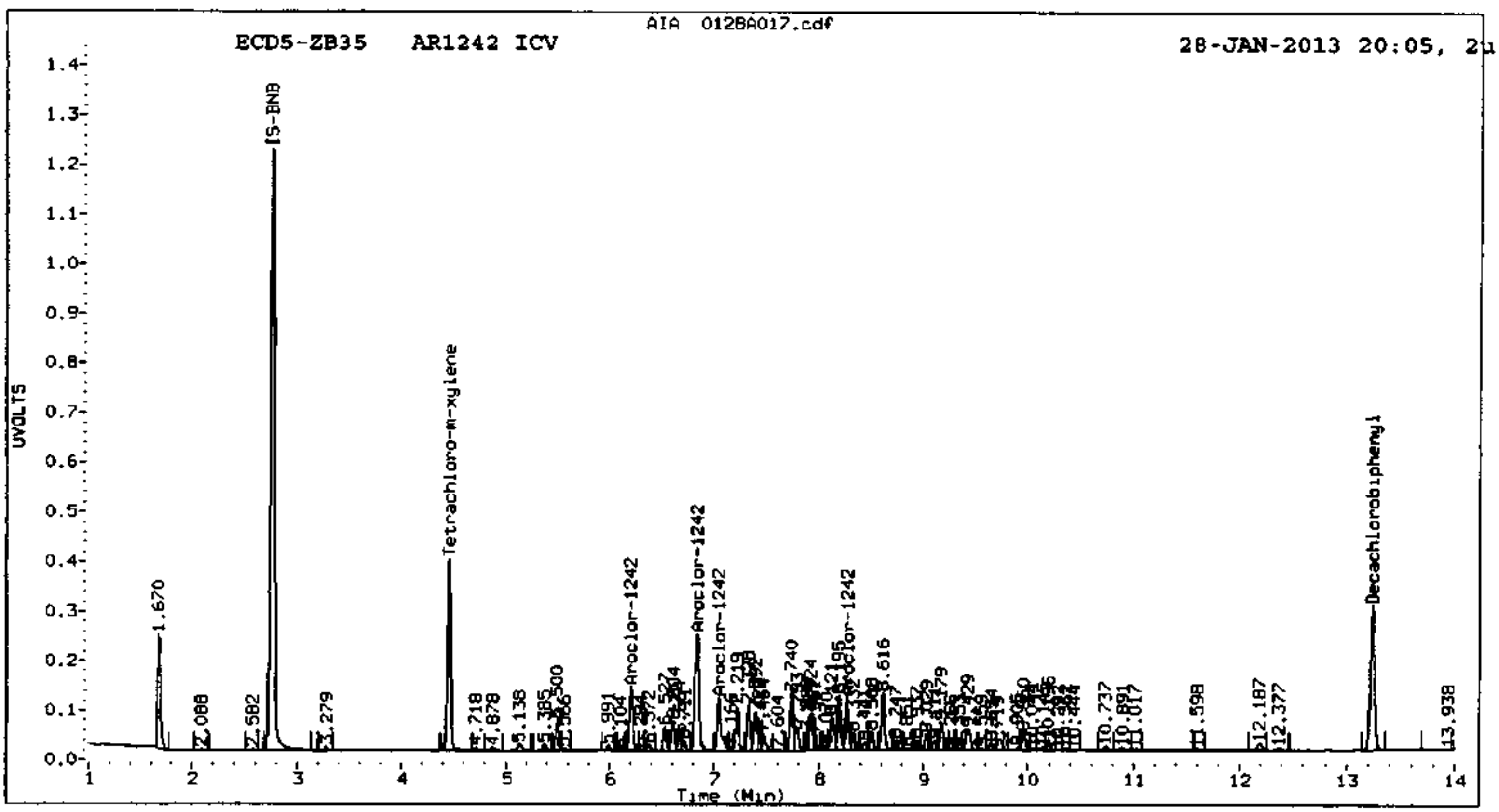
Total PCB Area Col1 (4.545 - 12.749) = 121002827 Col1 Total PCB = 0.2 ppm*

Total PCB Area Col2 (4.551 - 13.140) = 25868791 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.


ECD5-ZB5 AR1242 ICV
AIA 0128A017.cdf
28-JAN-2013 20:05, 2ul
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Aroclor-1242
Decachlorobiphenyl
IS-HBBP


ECD5-ZB35 AR1242 ICV
AIA 0128A017.cdf
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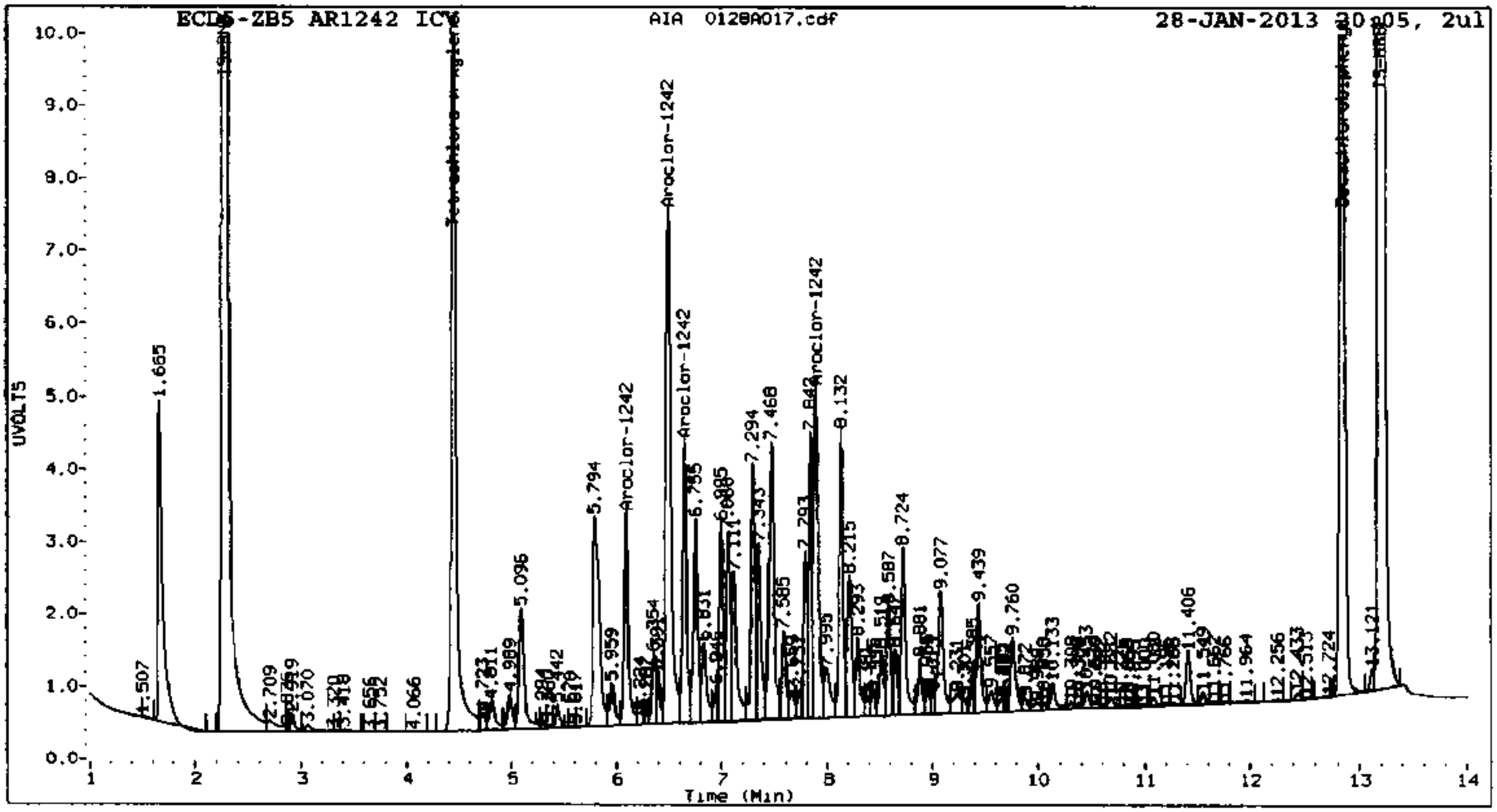
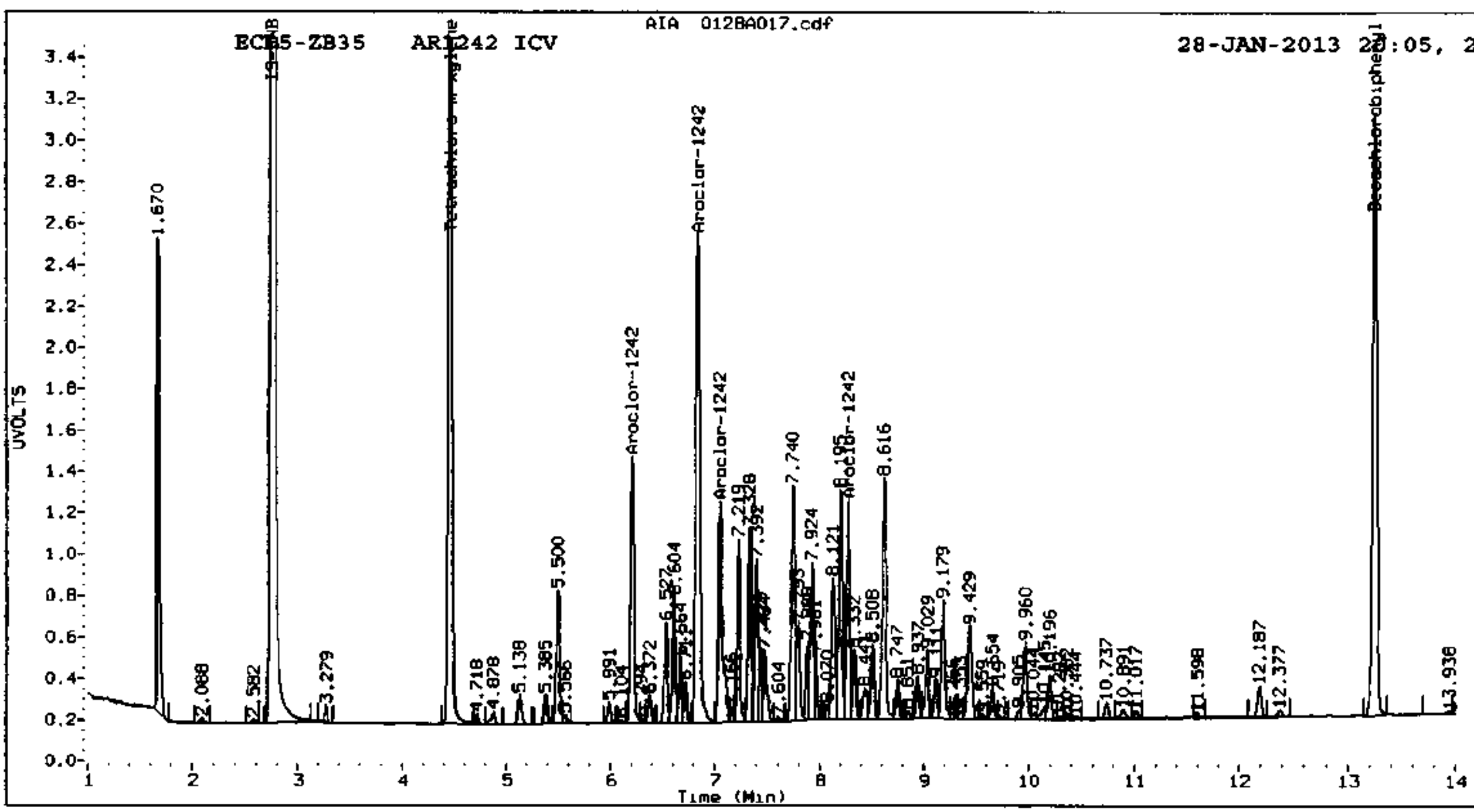
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Aroclor-1242
Decachlorobiphenyl



ECD5-ZB5 AR1242 ICV
AIA 0128A017.cdf
28-JAN-2013 20:05, 2ul
UVOLTS
Time (Min)



ECD5-ZB35 AR1242 ICV
AIA 0128A017.cdf
28-JAN-2013 20:05, 2ul
UVOLTS
Time (Min)

Analytical Resources Inc.
Dual Column PCBs by SW8082

Data file 1: 20130128.b/ical-1.b/0128A018.d
Data file 2: 20130128.b/ical-2.b/0128A018.d
Method: /chem2/ecd5.i/20130128.b/PCB1.m
Compound Sublist: AR1248
Instrument, Inj. Vol.: ecd5.i, 2ul
Quant Method: Internal Std

ARI ID: AR1248 ICV YZ 01/31/13
Client ID:
Injection Date: 28-JAN-2013 20:25
Ical Date: 28-JAN-2013
Matrix: NONE
Dilution Factor: 1.000

ZB5 Col RT	ZB5 Col Shift	ZB5 Col Response	ZB35 Col RT	ZB35 Col Shift	ZB35 Col Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
4.443	-0.002	16596101	4.453	0.002	4550875	19.4	20.3	4.5	Tetrachloro-m-xylen
12.849	-0.001	19881842	13.239	-0.001	4073389	17.3	19.4	11.4	Decachlorobiphenyl

* Indicates RPD > 40%
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE PERCENT RECOVERY

SURROGATE	Col1	Col2
Tetrachloro-m-xylene	48.4	50.7
Decachlorobiphenyl	43.3	48.5

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	44738954	48316847	8.0
Hexabromobiphenyl	59848867	63102237	5.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	14899855	15301069	2.7
Hexabromobiphenyl	12307480	12499631	1.6

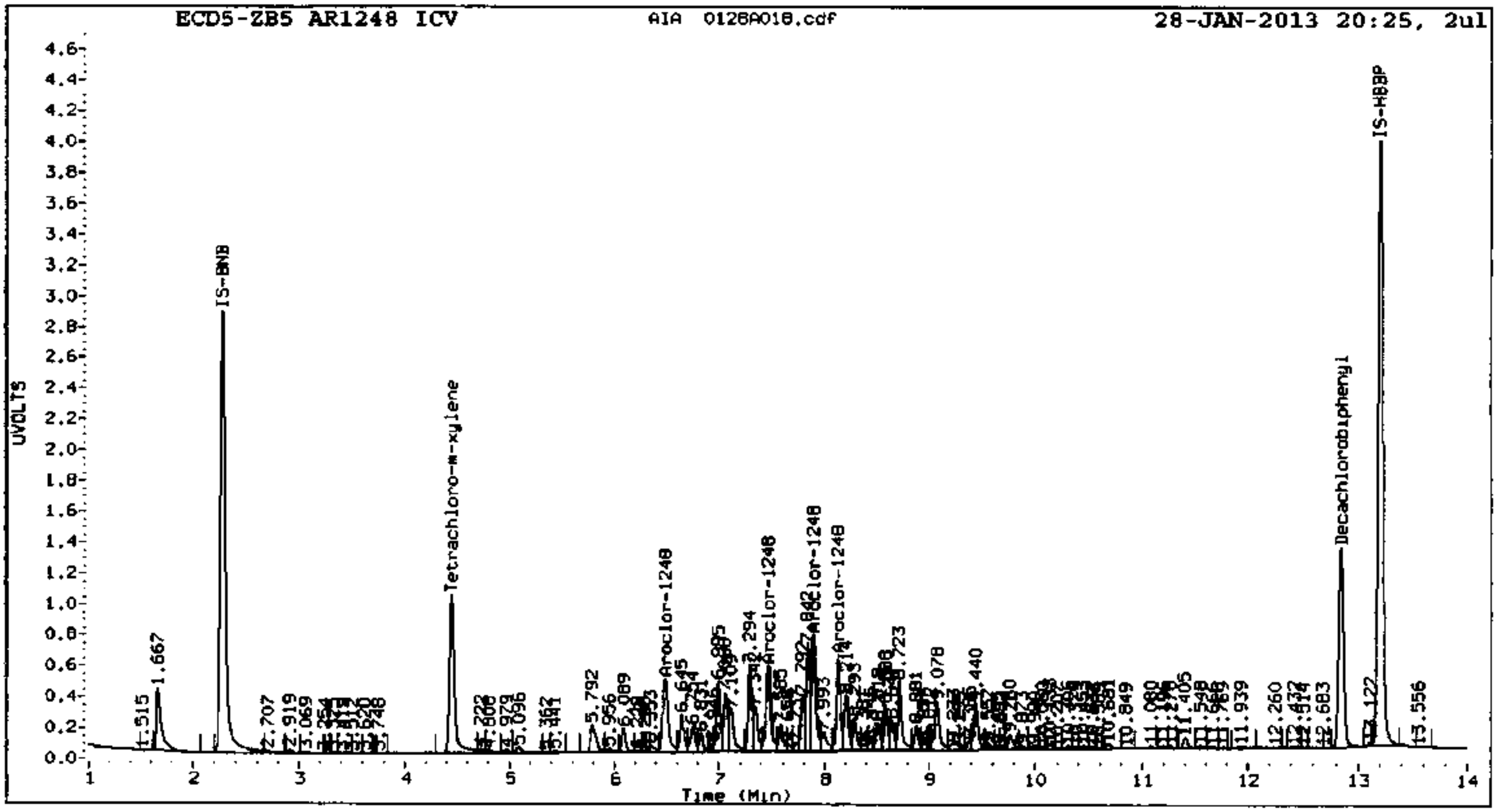
* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 28-JAN-2013
<- Indicates standard response outside Limits (-50 to +100%)

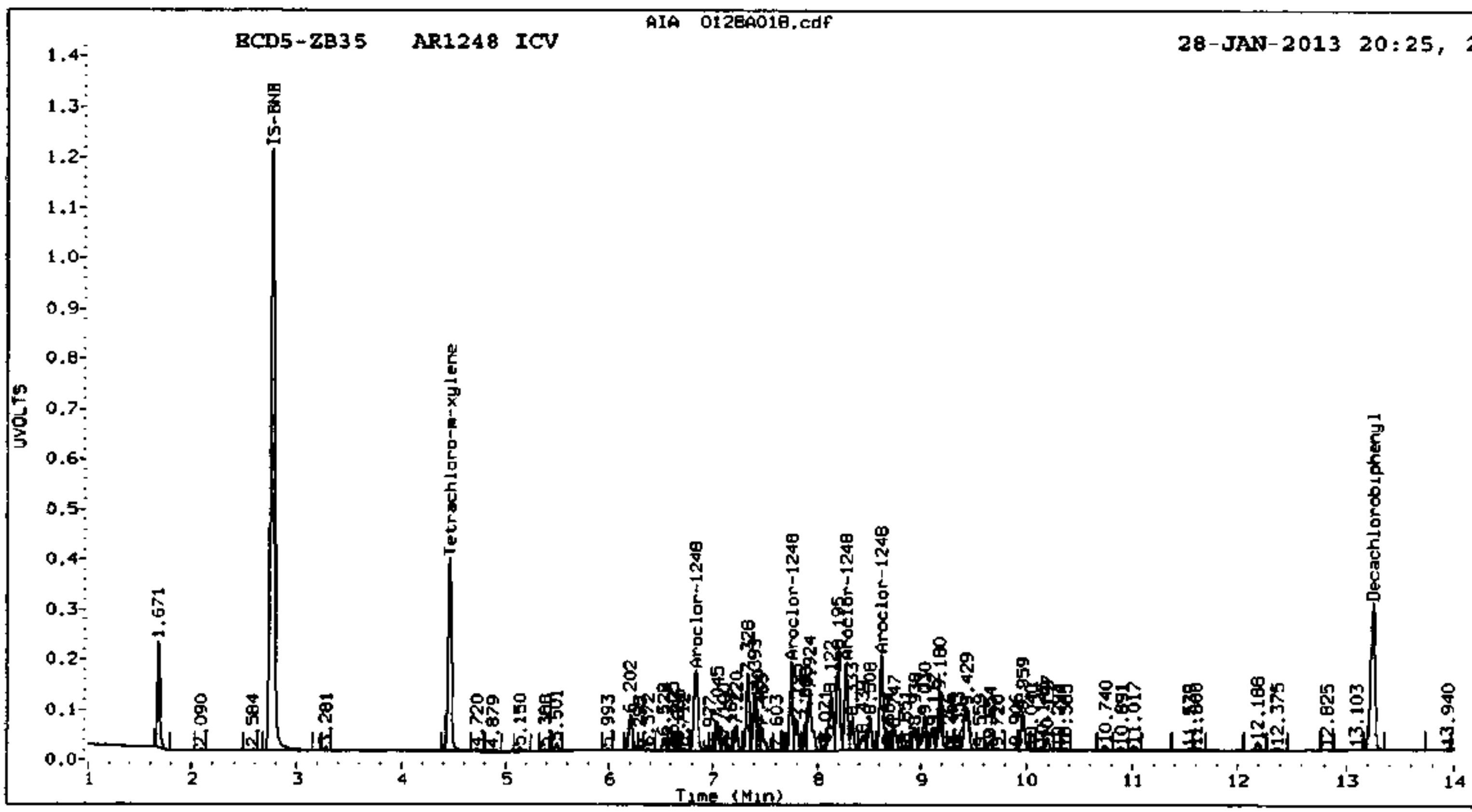
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
		ZB5 Col					ZB35 Col			
Aroclor-1248	1	6.491	-0.001	8802148	255.5	1	6.832	0.004	2307848	255.8
Aroclor-1248	2	7.467	-0.001	8622653	236.1	2	7.740	0.002	1834251	242.7
Aroclor-1248	3	7.896	-0.001	10805604	234.8	3	8.270	0.003	1841483	234.4
Aroclor-1248	4	8.132	-0.001	8361885	233.0	4	8.615	0.002	2283630	234.7
Total Col1Ave (4 peaks):				239.8		Total Col2Ave (4 peaks):		241.9	RPD = 1	
Corrected Ave (3 peaks):				234.6		Corrected Ave (3 peaks):		237.3	RPD = 1	

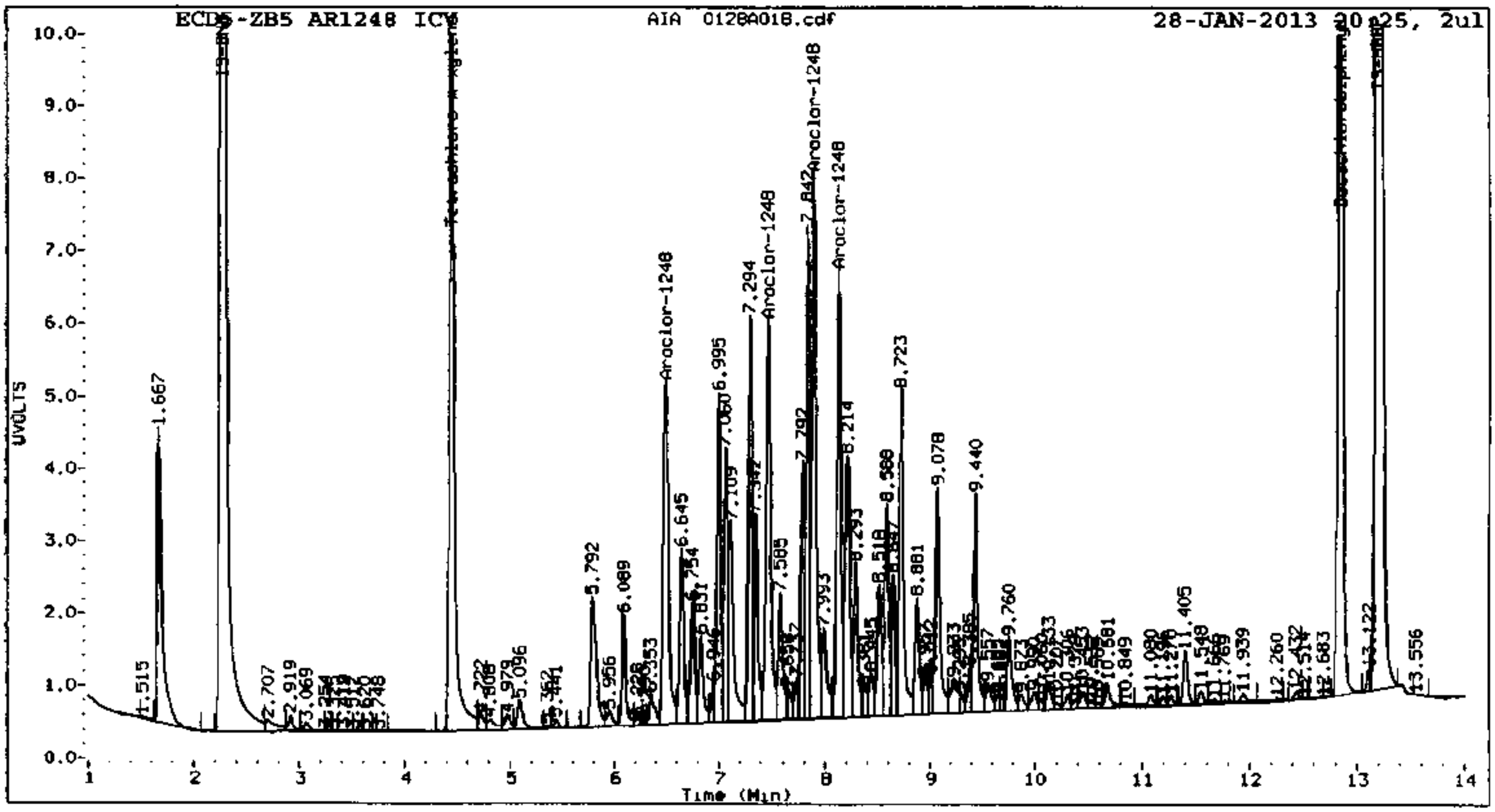
Total PCB Area Col1 (4.545 - 12.749) = 147452678 Col1 Total PCB = 0.2 ppm*

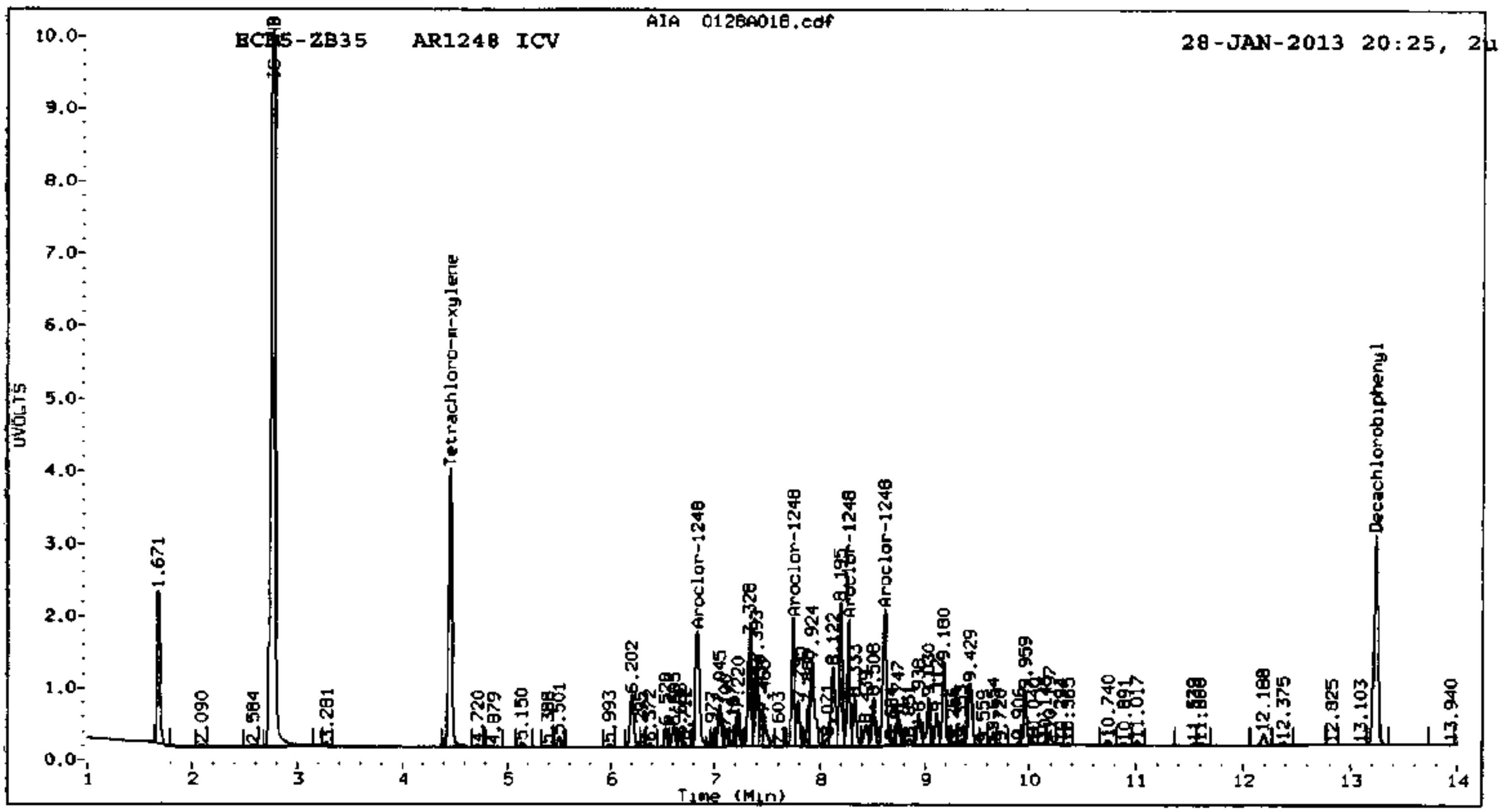
Total PCB Area Col2 (4.551 - 13.140) = 30994014 Col2 Total PCB = 0.3 ppm*

* Quantitated against AR1660 0.25ppm in Ical


ECD5-ZB5 AR1248 ICV
AIA 0128A018.cdf
28-JAN-2013 20:25, 2ul
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Aroclor-1248
Decachlorobiphenyl
IS-HBBP


ECD5-ZB35 AR1248 ICV
AIA 0128A018.cdf
28-JAN-2013 20:25, 2u
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Aroclor-1248
Decachlorobiphenyl


ECD5-ZB5 AR1248 ICV
AIA 0128A018.cdf
28-JAN-2013 20:25, 2ul
UVOLTS
Tetrachloro-m-xylene
Aroclor-1248
Aroclor-1248
Aroclor-1248
Aroclor-1248
Decachlorobiphenyl
Time (Min)


ECD5-ZB35 AR1248 ICV
AIA 0128A018.cdf
28-JAN-2013 20:25, 2u
UVOLTS
Tetrachloro-m-xylene
Aroclor-1248
Aroclor-1248
Aroclor-1248
Aroclor-1248
Decachlorobiphenyl
Time (Min)

UC02 01985

Analytical Resources Inc.
Dual Column PCBs by SW8082

Data file 1: 20130128.b/ical-1.b/0128A019.d
Data file 2: 20130128.b/ical-2.b/0128A019.d
Method: /chem2/ecd5.i/20130128.b/PCB1.m
Compound Sublist: AR1254
Instrument, Inj. Vol.: ecd5.i, 2ul
Quant Method: Internal Std

ARI ID: AR1254 ICV YZ 01/30/13
Client ID:
Injection Date: 28-JAN-2013 20:45
Ical Date: 28-JAN-2013
Matrix: NONE
Dilution Factor: 1.000

ZB5 Col RT	ZB5 Col Shift	ZB5 Col Response	ZB35 Col RT	ZB35 Col Shift	ZB35 Col Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
4.445	0.000	16219437	4.452	0.001	4487287	19.0	20.1	5.2	Tetrachloro-m-xylen
12.850	0.001	20471974	13.239	-0.001	4130209	17.5	19.2	9.5	Decachlorobiphenyl

* Indicates RPD > 40%
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE PERCENT RECOVERY

SURROGATE	Col1	Col2
Tetrachloro-m-xylene	47.6	50.2
Decachlorobiphenyl	43.6	48.0

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	44738954	48045656	7.4
Hexabromobiphenyl	59848867	64464942	7.7

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	14899855	15242268	2.3
Hexabromobiphenyl	12307480	12818069	4.1

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 28-JAN-2013
<- Indicates standard response outside Limits (-50 to +100%)

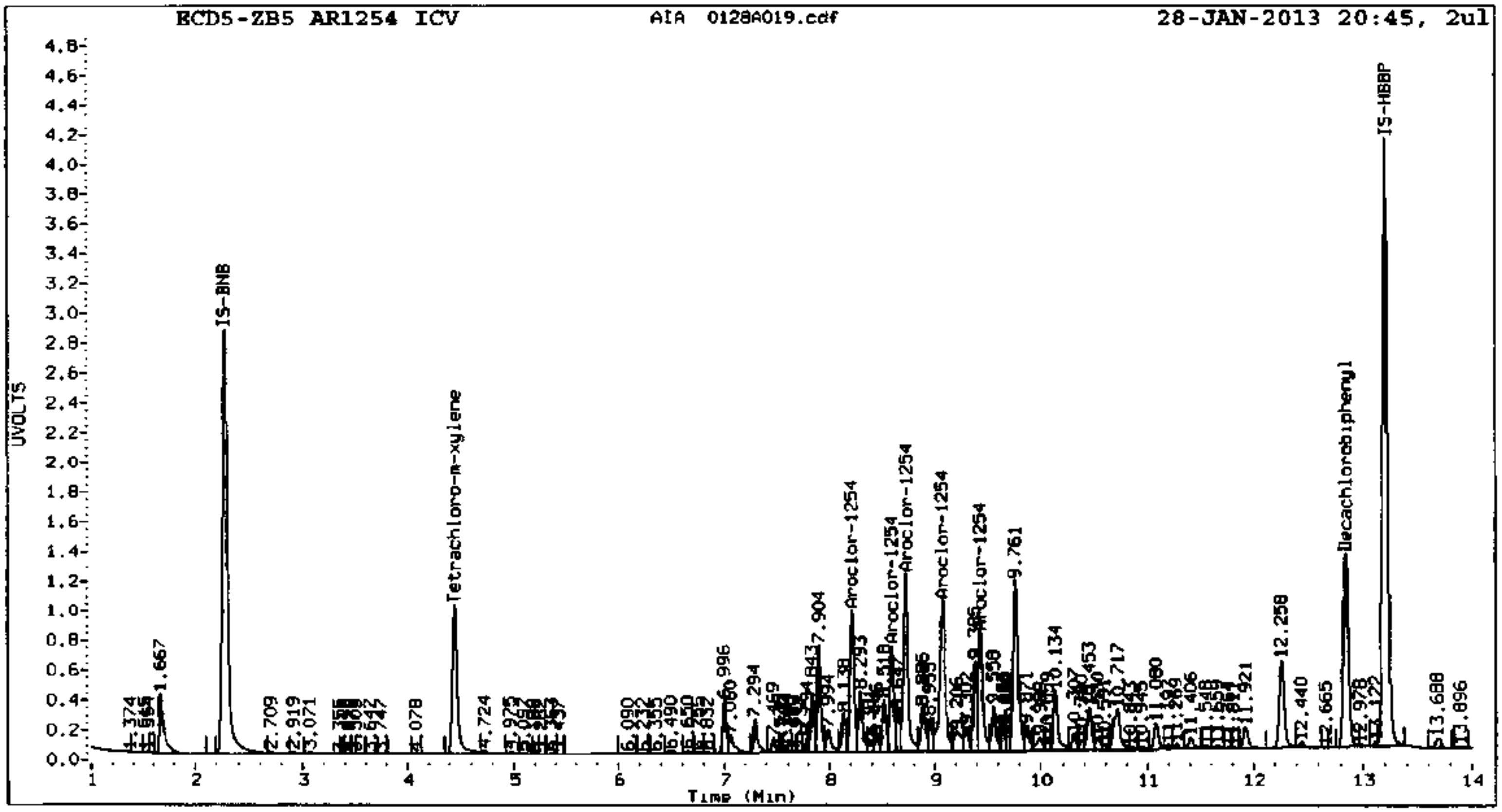
			ZB5 Col					ZB35 Col		
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1254	1	8.217	0.000	13182597	280.2	1	8.333	0.001	1896107	284.7
Aroclor-1254	2	8.588	0.001	9188343	292.6	2	8.508	0.001	2459666	287.6
Aroclor-1254	3	8.724	0.001	16971139	278.5	3	9.030	0.001	1999246	301.6
Aroclor-1254	4	9.074	0.001	19196934	285.4	4	9.179	0.000	4069338	282.2
Aroclor-1254	5	9.435	0.002	12271475	291.1	5	9.964	0.000	2618880	297.6

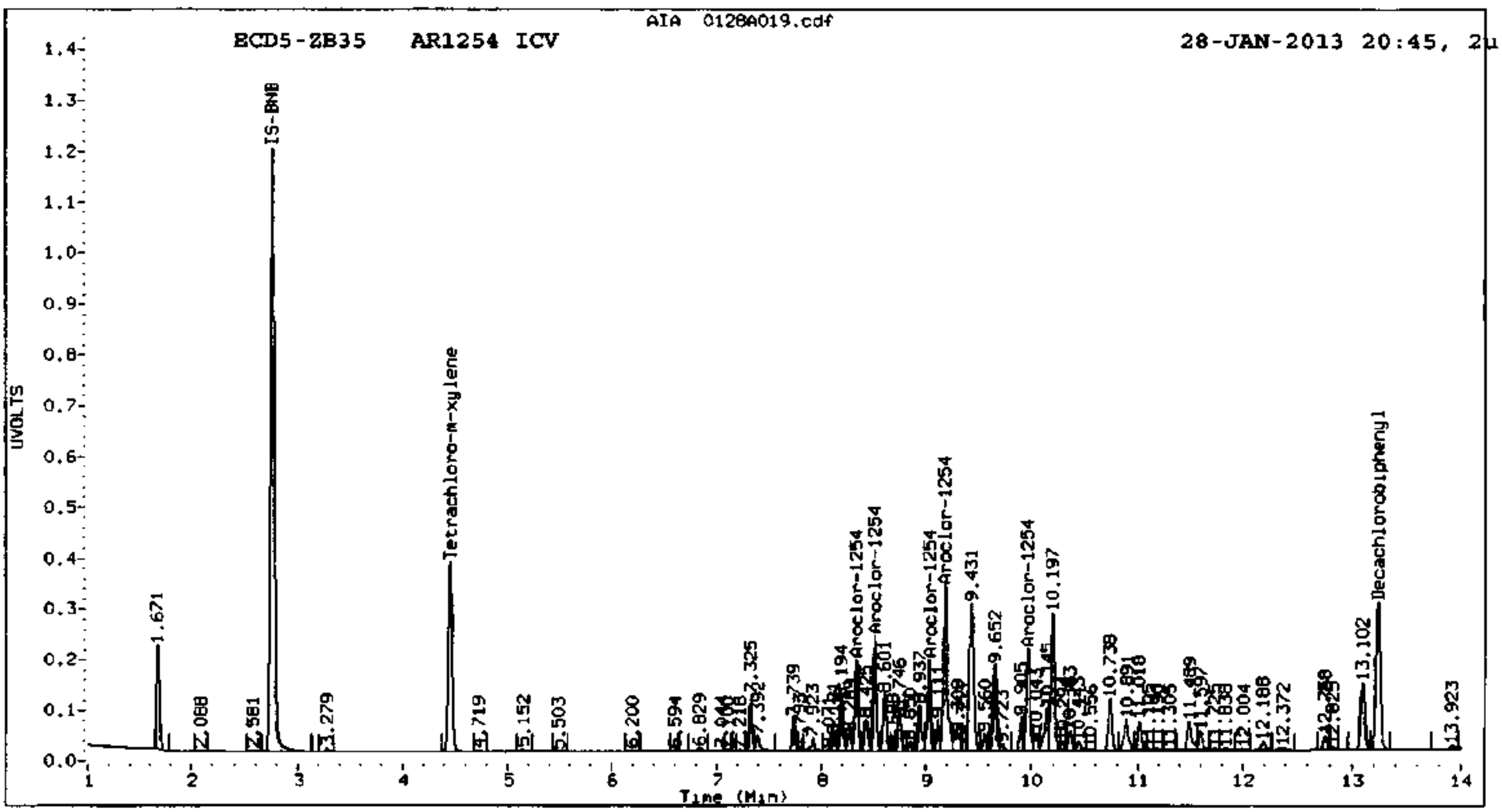
Total Col1Ave (5 peaks): 285.6 Total Col2Ave (5 peaks): 290.7 RPD = 2
Corrected Ave (4 peaks): 283.8 Corrected Ave (4 peaks): 288.0 RPD = 1

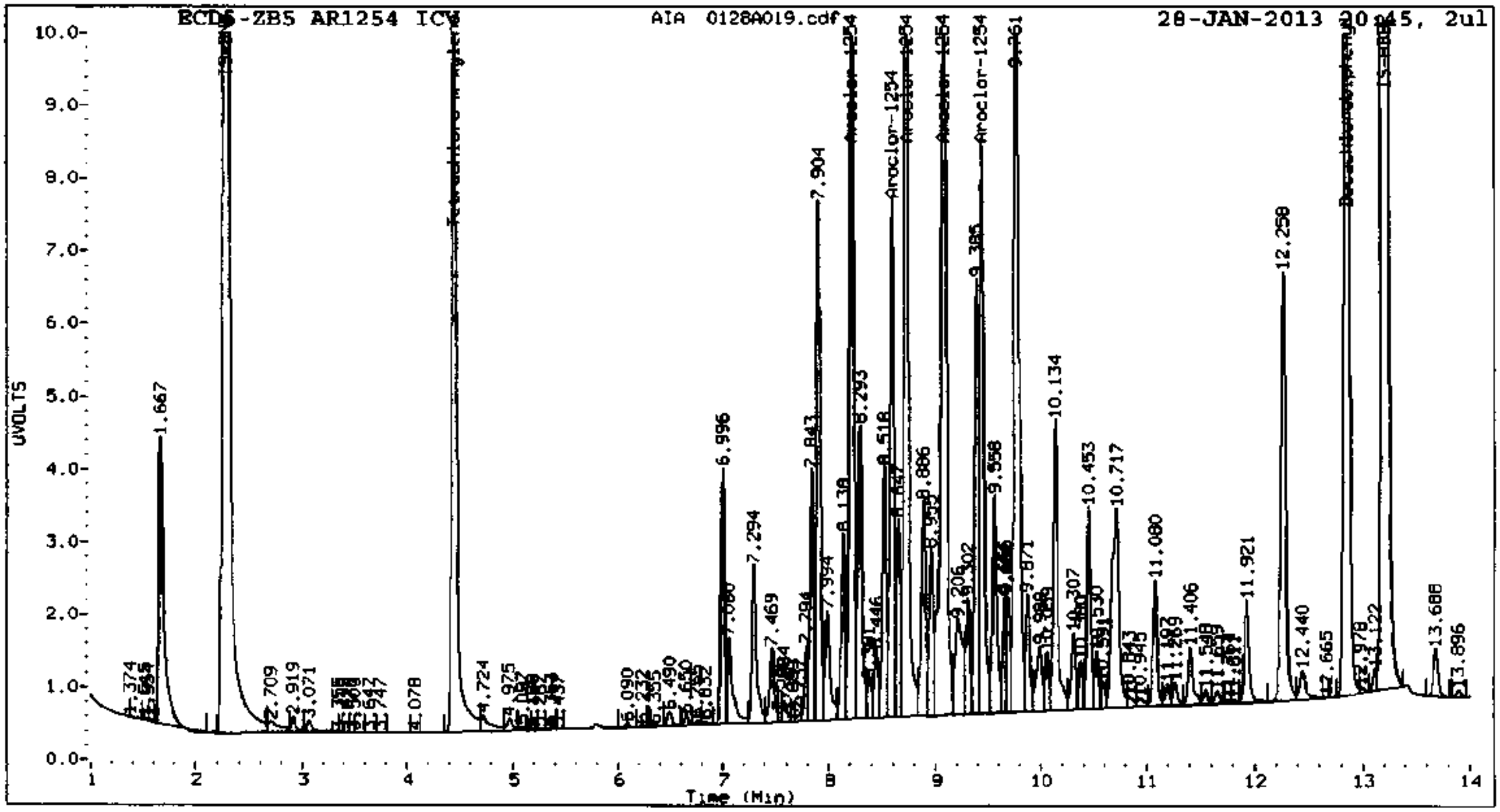
Total PCB Area Col1 (4.545 - 12.749) = 209941338 Col1 Total PCB = 0.3 ppm*

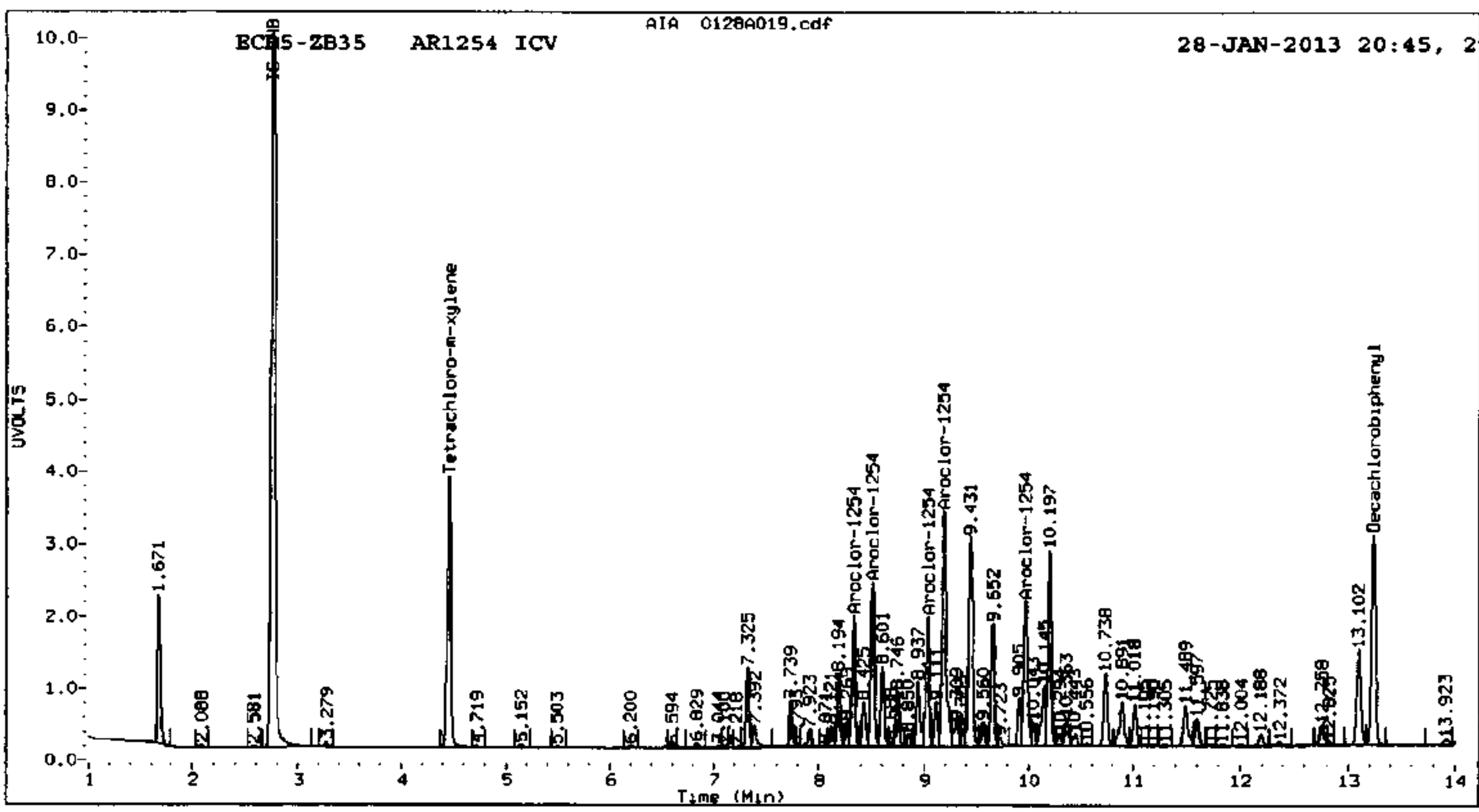
Total PCB Area Col2 (4.551 - 13.140) = 43484933 Col2 Total PCB = 0.4 ppm*

* Quantitated against AR1660 0.25ppm in Ical


ECD5-ZB5 AR1254 ICV
AIA 0128A019.cdf
28-JAN-2013 20:45, 2ul
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Aroclor-1254
9.761
12.258
Decachlorobiphenyl
IS-HBBP


ECD5-ZB35 AR1254 ICV
AIA 0128A019.cdf
28-JAN-2013 20:45, 2u
UVOLTS
Time (Min)
IS-BNB
1.671
Tetrachloro-m-xylene
Aroclor-1254
9.431
10.197
13.102
Decachlorobiphenyl


ECD5-ZB5 AR1254 ICV
AIA 0128A019.cdf
28-JAN-2013 20:45, 2ul
UVOLTS
Time (Min)
Tetrachloro-m-xylene
Aroclor-1254
Decachlorobiphenyl
1.667
6.996
7.294
7.904
9.761
10.134
10.453
10.717
11.080
11.921
12.258
13.688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AIA 0128A019.cdf
28-JAN-2013 20:45, 2u
UVOLTS
Time (Min)
Tetrachloro-m-xylene
Aroclor-1254
Decachlorobiphenyl
1.671
7.325
9.431
9.552
10.197
10.738
13.102
13.923

Analytical Resources Inc.
Dual Column PCBs by SW8082

Data file 1: 20130128.b/ical-1.b/0128A020.d
Data file 2: 20130128.b/ical-2.b/0128A020.d
Method: /chem2/ecd5.i/20130128.b/PCB1.m
Compound Sublist: AR2162
Instrument, Inj. Vol.: ecd5.i, 2ul
Quant Method: Internal Std

ARI ID: AR2162 ICV 12 01/29/13
Client ID:
Injection Date: 28-JAN-2013 21:05
Ical Date: 28-JAN-2013
Matrix: NONE
Dilution Factor: 1.000

ZB5 Col RT	ZB5 Col Shift	ZB5 Col Response	ZB35 Col RT	ZB35 Col Shift	ZB35 Col Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
4.445	0.000	16765887	4.451	0.001	4513412	19.9	20.8	4.4	Tetrachloro-m-xylen
12.850	0.000	19861422	13.239	0.000	4084733	17.3	19.5	11.7	Decachlorobiphenyl

* Indicates RPD > 40%
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE PERCENT RECOVERY

SURROGATE	Col1	Col2
Tetrachloro-m-xylene	49.6	51.9
Decachlorobiphenyl	43.3	48.7

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	44738954	47639174	6.5
Hexabromobiphenyl	59848867	63000337	5.3

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	14899855	14818072	-0.5
Hexabromobiphenyl	12307480	12487926	1.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 28-JAN-2013
<- Indicates standard response outside Limits (-50 to +100%)

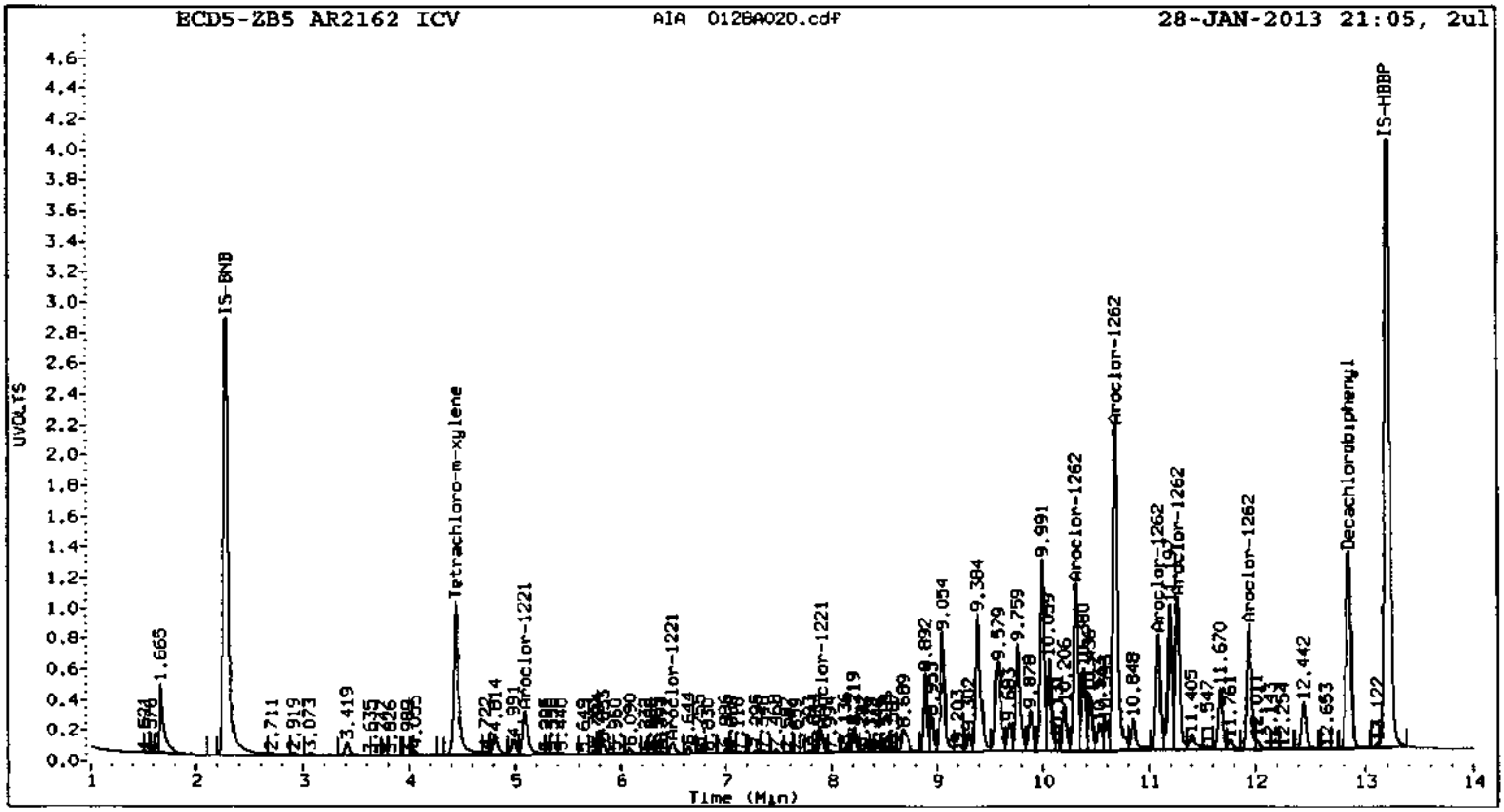
		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1221	1	5.097	0.000	5216010	264.3	1	3.736	0.001	399447	260.6
Aroclor-1221	2	6.496	0.001	1304485	209.8	2	5.134	-0.001	636761	264.5
Aroclor-1221	3	7.904	0.001	1857524	223.4	3	5.386	0.000	378924	265.3
Aroclor-1221	NS	---			----	4	5.500	0.000	1183661	263.8
	Total Col1Ave (3 peaks):			232.5		Total Col2Ave (4 peaks):			263.6	RPD = 13
	Corrected Ave: < 3 Peaks					Corrected Ave (3 peaks):			263.0	
Aroclor-1262	1	10.307	0.001	14355609	276.9	1	10.294	0.001	3647519	249.4
Aroclor-1262	2	10.681	0.001	31649226	238.3	2	10.745	0.001	3504157	279.9
Aroclor-1262	3	11.081	0.001	11386796	241.6	3	11.018	0.001	6709464	237.5
Aroclor-1262	4	11.270	0.001	14581595	273.0	4	11.539	0.000	3219533	281.2
Aroclor-1262	5	11.939	0.000	11718639	250.5	5	12.340	0.001	2612152	252.4
	Total Col1Ave (5 peaks):			256.1		Total Col2Ave (5 peaks):			260.1	RPD = 2
	Corrected Ave (4 peaks):			250.8		Corrected Ave (4 peaks):			254.8	RPD = 2

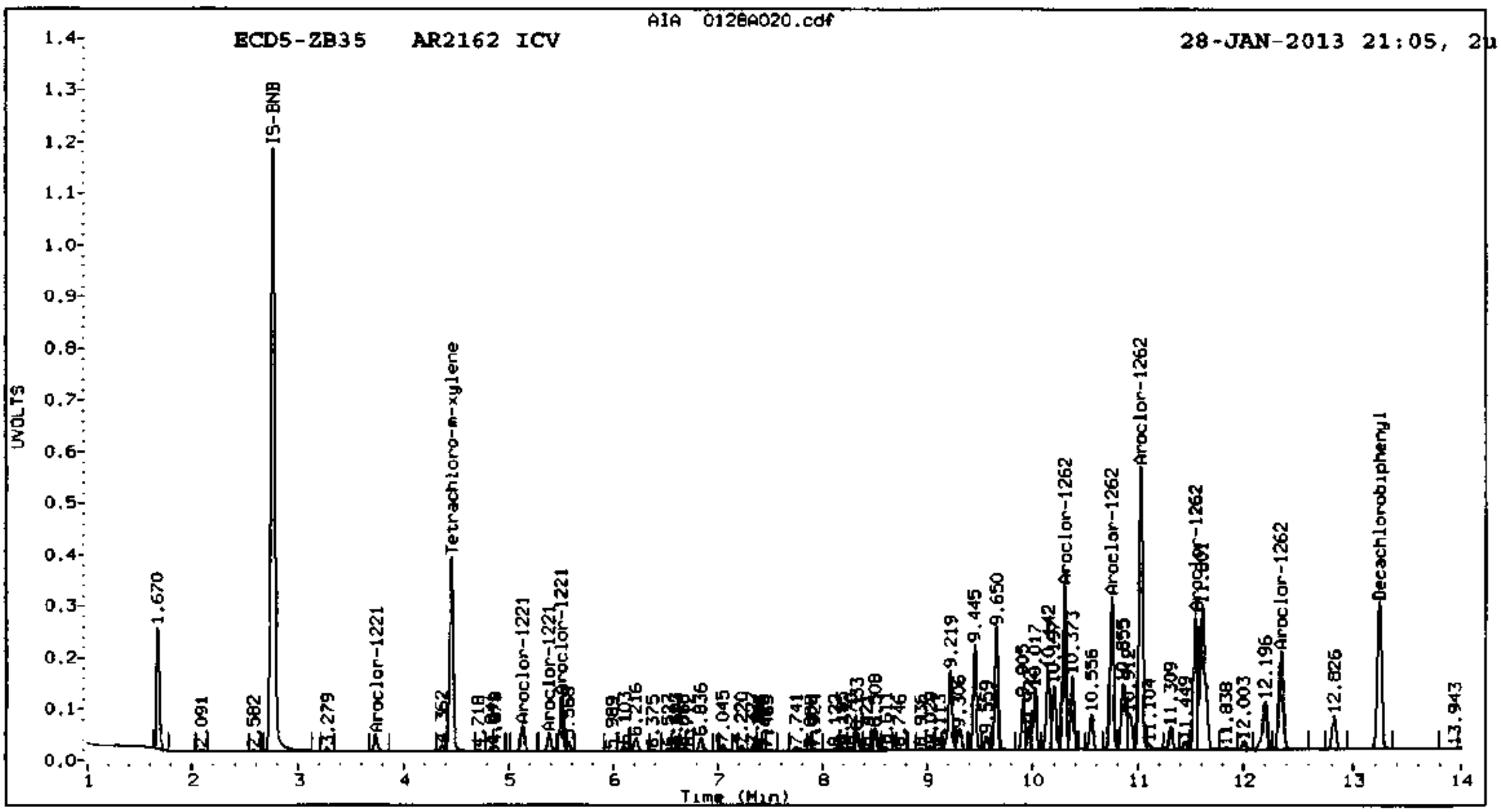
Total PCB Area Col1 (4.545 - 12.749) = 254062391 Col1 Total PCB = 0.4 ppm*

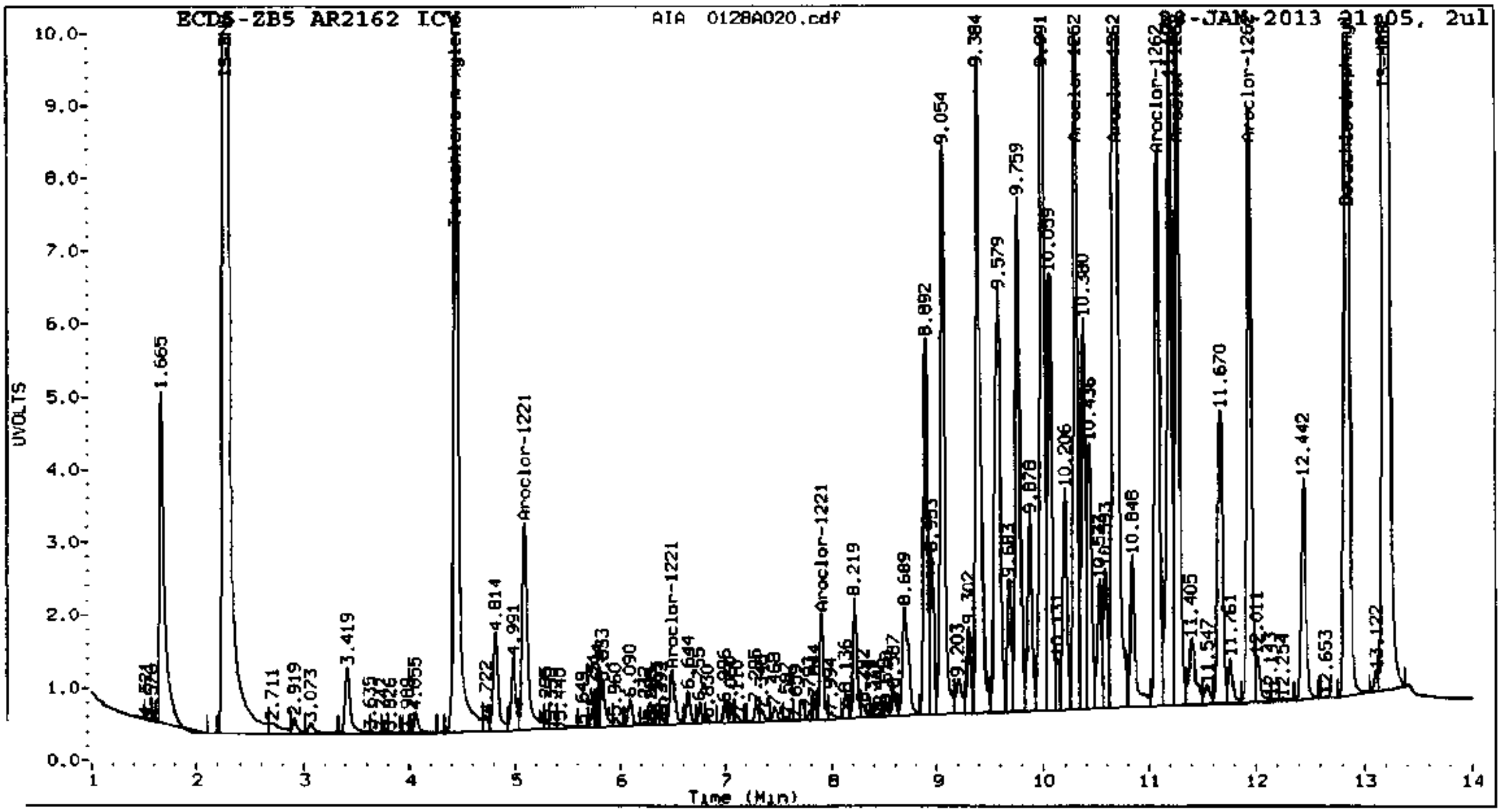
Total PCB Area Col2 (4.551 - 13.140) = 52780719 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.


ECD5-ZB5 AR2162 ICV
AIA 0128A020.cdf
28-JAN-2013 21:05, 2ul
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Decachlorobiphenyl
IS-HBBP


ECD5-ZB35 AR2162 ICV
AIA 0128A020.cdf
28-JAN-2013 21:05, 2u
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Decachlorobiphenyl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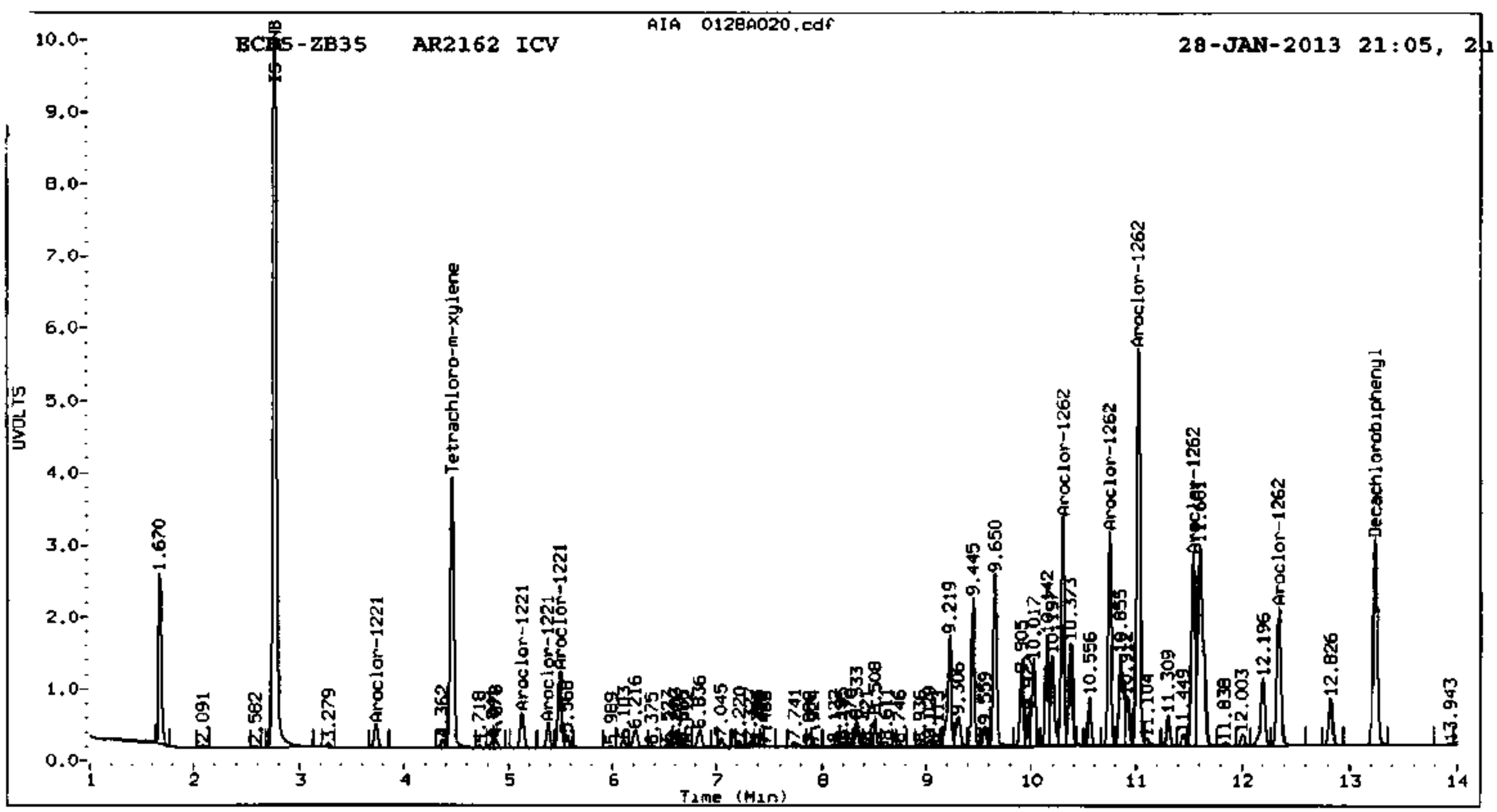
AIA 0128A020.cdf
28-JAN-2013 21:05, 2ul
UVOLTS
Time (Min)


ECD5-ZB35 AR2162 ICV
AIA 0128A020.cdf
28-JAN-2013 21:05, 2ul
Tetrachloro-m-xylene
Decachlorobiphenyl
UVOLTS
Time (Min)

Analytical Resources Inc.
Dual Column PCBs by SW8082

Data file 1: 20130128.b/ical-1.b/0128A021.d
Data file 2: 20130128.b/ical-2.b/0128A021.d
Method: /chem2/ecd5.i/20130128.b/PCB1.m
Compound Sublist: AR3268
Instrument, Inj. Vol.: ecd5.i, 2ul
Quant Method: Internal Std

ARI ID: AR3268 ICV YZ 01/30/13
Client ID:
Injection Date: 28-JAN-2013 21:25
Ical Date: 28-JAN-2013
Matrix: NONE
Dilution Factor: 1.000

ZB5 Col RT	ZB5 Col Shift	ZB5 Col Response	ZB35 Col RT	ZB35 Col Shift	ZB35 Col Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
4.446	0.001	16692744	4.453	0.002	4532342	19.8	20.7	4.6	Tetrachloro-m-xylen
12.850	0.001	31053167	13.239	0.000	6477449	26.8	30.4	12.5	Decachlorobiphenyl

* Indicates RPD > 40%
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE PERCENT RECOVERY

SURROGATE	Col1	Col2
Tetrachloro-m-xylene	49.4	51.8
Decachlorobiphenyl	67.1	76.0

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	44738954	47621696	6.4
Hexabromobiphenyl	59848867	63625896	6.3

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	14899855	14912893	0.1
Hexabromobiphenyl	12307480	12687017	3.1

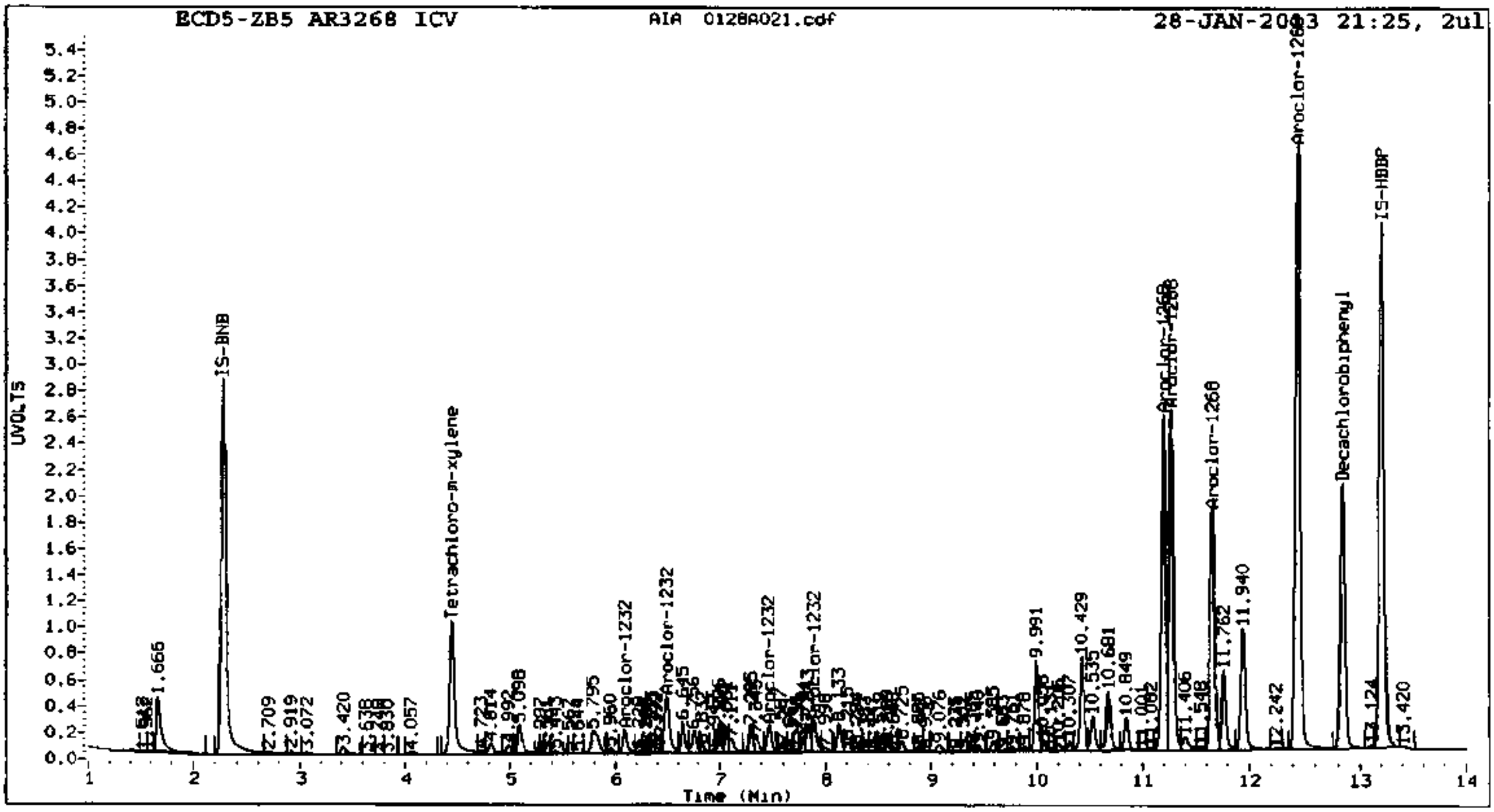
* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 28-JAN-2013
<- Indicates standard response outside Limits (-50 to +100%)

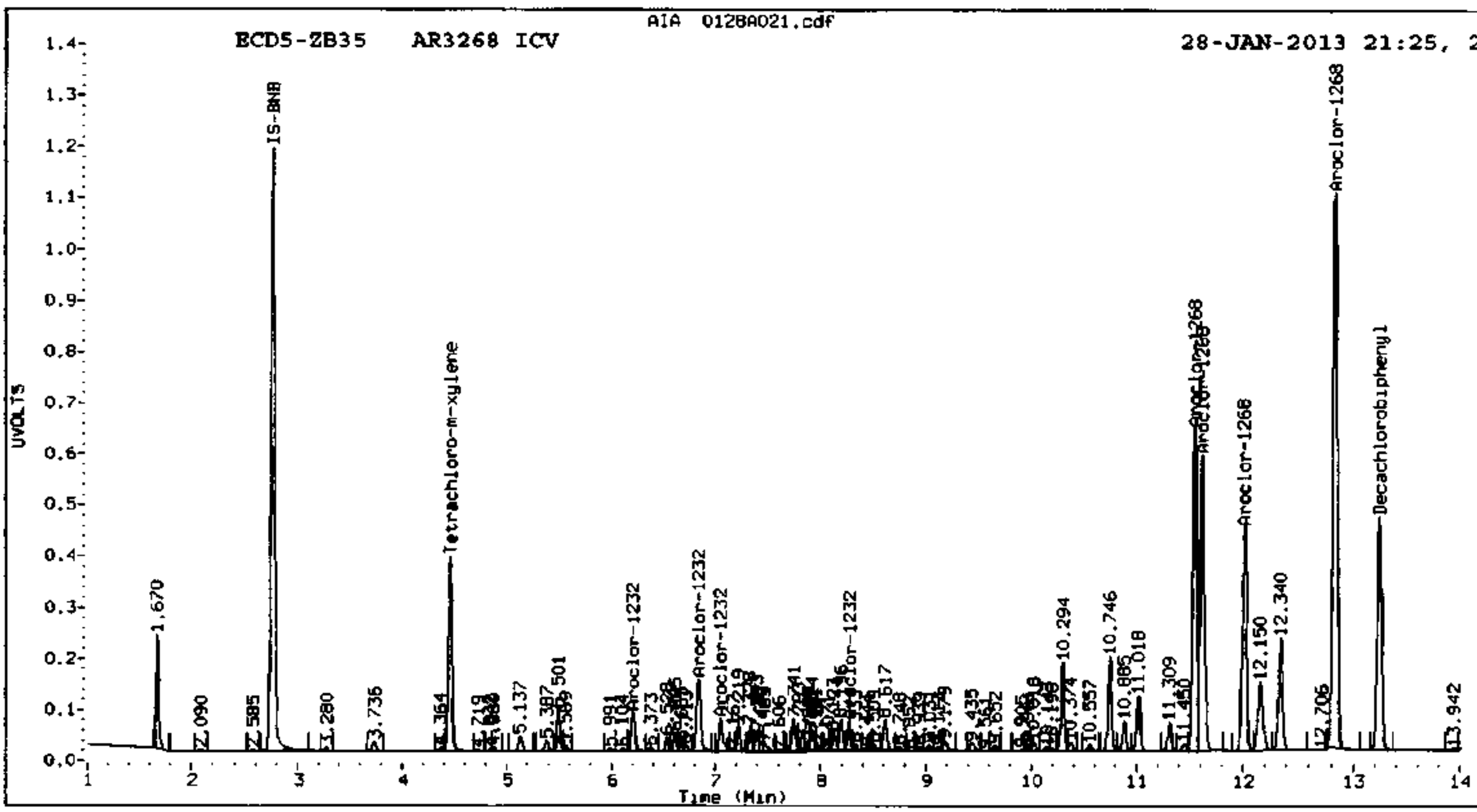
		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1232	1	6.091	0.001	2461604	276.9	1	6.204	0.003	1045934	278.7
Aroclor-1232	2	6.495	0.002	7620553	272.5	2	6.835	0.002	1983478	270.5
Aroclor-1232	3	7.469	0.001	3155662	237.2	3	7.045	0.002	812454	269.2
Aroclor-1232	4	7.897	0.000	3455072	224.7	4	8.270	0.001	623027	240.7
	Total Col1Ave (4 peaks):			252.8		Total Col2Ave (4 peaks):			264.8	RPD = 5
	Corrected Ave (3 peaks):			244.8		Corrected Ave (3 peaks):			260.1	RPD = 6
Aroclor-1268	1	11.198	0.001	35085679	258.9	1	11.541	0.001	7791427	257.9
Aroclor-1268	2	11.269	0.000	37088067	283.0	2	11.607	0.001	8256893	282.7
Aroclor-1268	3	11.655	0.000	26483945	235.1	3	12.003	0.000	5630648	231.1
Aroclor-1268	4	12.445	0.002	68344542	223.2	4	12.826	0.000	14707219	221.5
	Total Col1Ave (4 peaks):			250.0		Total Col2Ave (4 peaks):			248.3	RPD = 1
	Corrected Ave (3 peaks):			239.1		Corrected Ave (3 peaks):			236.8	RPD = 1

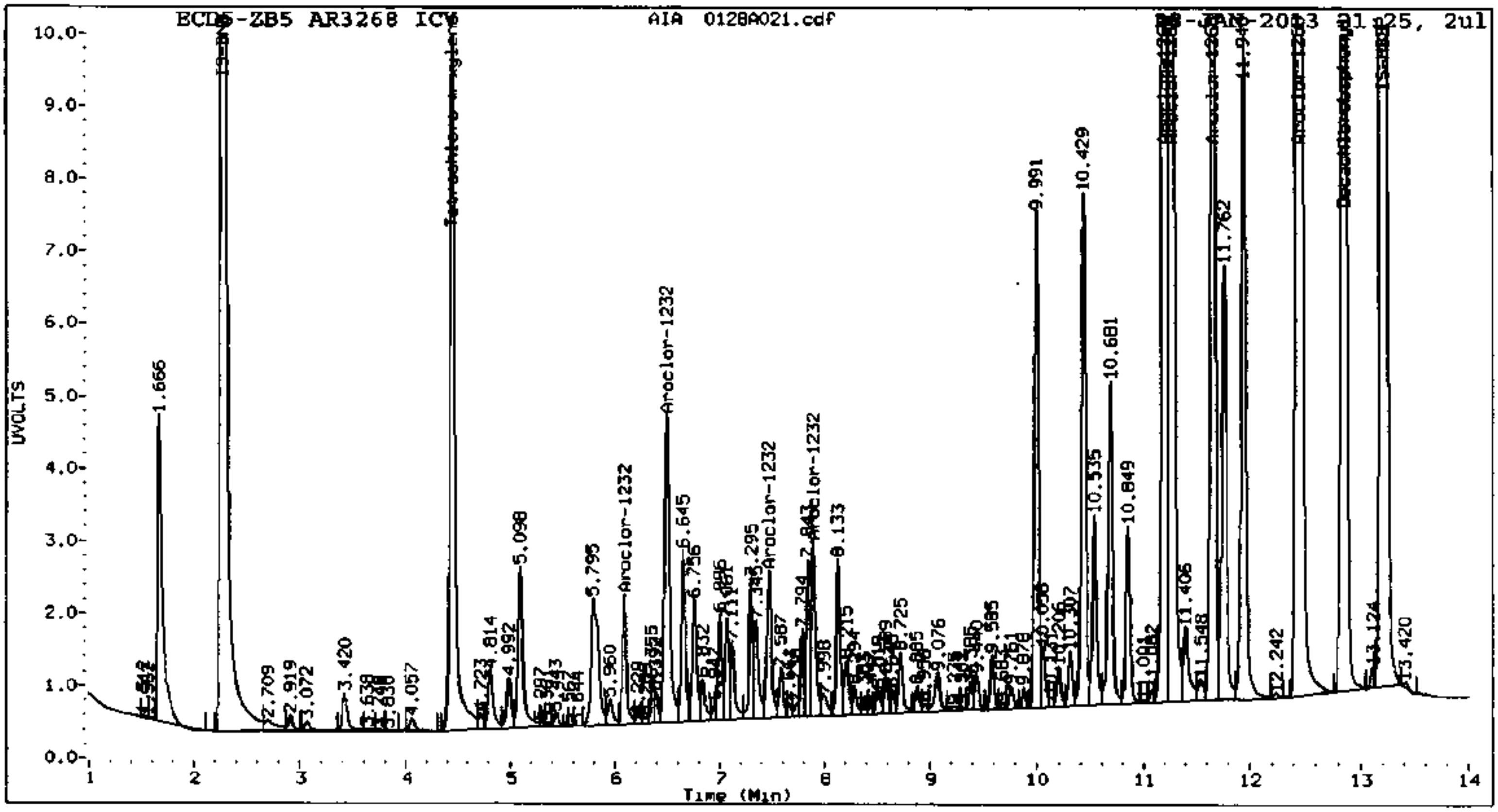
Total PCB Area Col1 (4.545 - 12.749) = 293754383 Col1 Total PCB = 0.5 ppm*

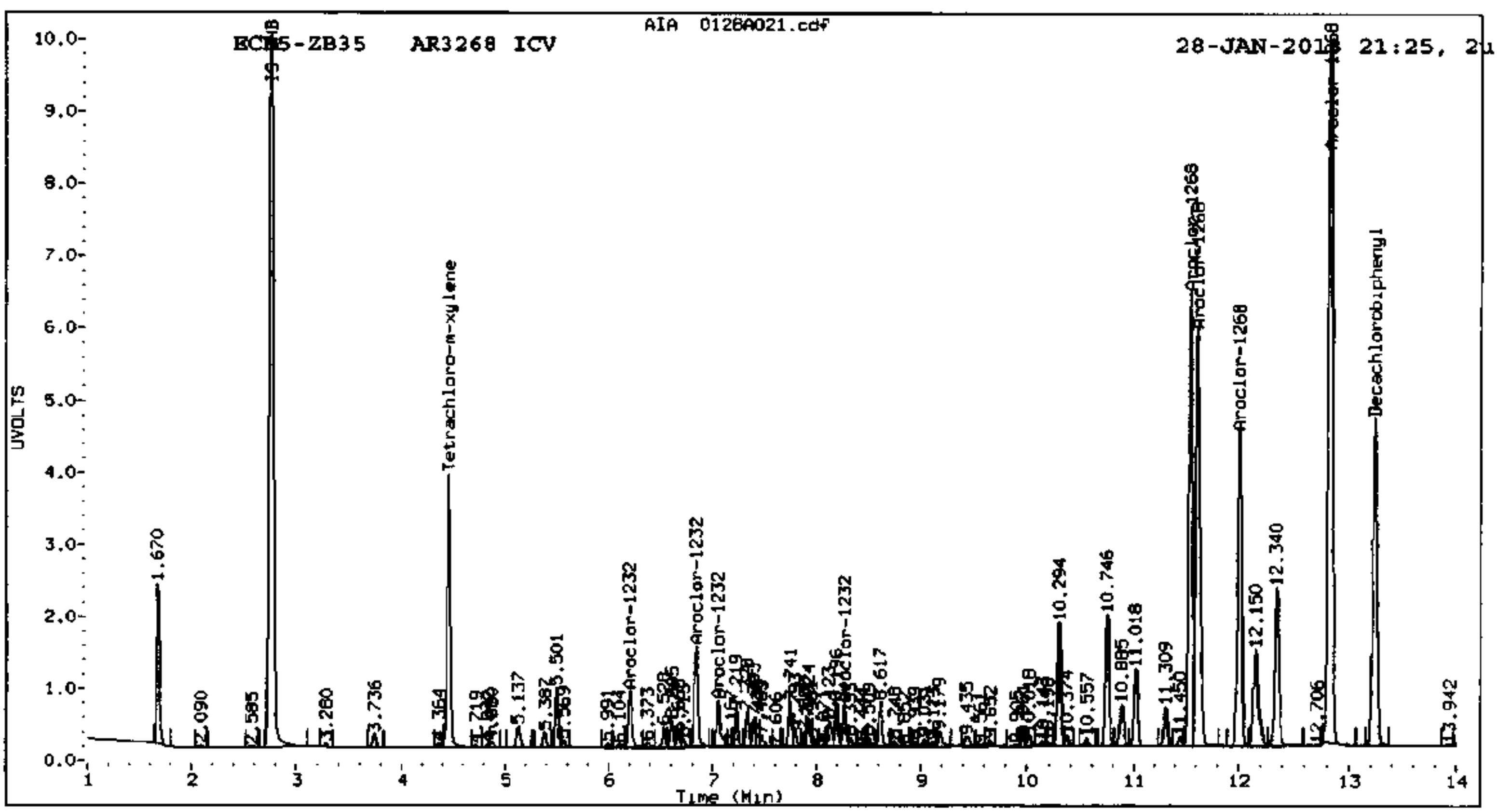
Total PCB Area Col2 (4.551 - 13.140) = 63516896 Col2 Total PCB = 0.6 ppm*

* Quantitated against AR1660 0.25ppm in Ical


ECD5-ZB5 AR3268 ICV
AIA 0128A021.cdf
28-JAN-2013 21:25, 2ul
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Aroclor-1232
Aroclor-1268
Decachlorobiphenyl
IS-HBBP
1.666
9.991
10.429
10.681
10.849
11.406
11.762
11.940
12.242
13.124
13.420


ECD5-ZB35 AR3268 ICV
AIA 0128A021.cdf
28-JAN-2013 21:25, 2u
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Aroclor-1232
Aroclor-1268
Decachlorobiphenyl
1.670
10.294
10.746
11.018
11.309
12.150
12.340
12.706
13.942


ECD5-ZB5 AR3268 ICV
AIA 0128A021.cdf
UVOLTS
Time (Min)


ECD5-ZB35 AR3268 ICV
AIA 0128A021.cdf
28-JAN-2013 21:25, 2u
UVOLTS
Tetrachloro-m-xylene
Decachlorobiphenyl
Time (Min)

PCB Raw Data
Run Logs, Continuing Calibrations, and Raw Data

ARI Job ID: WC32, WC33

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC Analyst Notes / Corrective Action Log

ARI Project ID: WC32 Client ID: POB Harris

ARI SOP: 403S(PCB) 405S(Herb) 407S(TPH-D) 409S(HCID) 412S(PCP) 423S(Pest) 427S(Dir Inj) 428S(EPH) 432S(EDB) Other

Parameter(s): PCB's TCMX DCB

Instrument: FID-3A FID-3B FID-4A FID-4B FID-5 FID-7 FID-8 FID-9 ECD-1 ECD-5 ECD-6 ECD-7

Dates: Curve: 01/28/13 Analysis Start: 02/09/13

Endrin/DDT Breakdown <15%? YES / NO / NA

Method Blank In Control? YES / NO

ICal Meets RF & %RSD Criteria? YES / NO

LCS/LCSD Recovery In Control? YES / NO

CCal Meets RF & %RSD Criteria? YES / NO

Surrogate Recovery In Control? YES / NO

Manual Integrations for ICal? YES / NO

Manual Integrations for Samples? YES / NO

Internal Standard Meets Criteria? YES / NO / NA

Special Analysis Criteria Met? YES / NO / NA

Detail problems, corrective actions and/or other pertinent information below (use reverse side when necessary):

Additional Details on Reverse: Yes / No

Analyst: JL **Date:** 02/11/13

Reviewer: B **Date:** 2/11/13

Analytical Resources Inc.: Organics Instrument Log

ECD-5 Serial No.: US00034118

Date: 02/09/13 Analysis: PCB's Analyst: ~~jc~~

Column 1 Serial No.: 196398 Column Type: ZB5

Column 2 Serial No.: 182259 Column Type: ZB35

GC Method: PCB 2 ICal Date: 01/28/13 Injection Volume: 2µL

IS	Ical/Ccal	ICV
2006-1	1930-1,2,3,4,5,6	2009-2,3,4,5,6,7

Document All Maintenance Tasks In StarLIMS

	Inject Date/Time	Filename	DF	LabID
1	09-FEB-2013 15:20	0209A001.d	1	RINSE
2	09-FEB-2013 15:40	0209A002.d	1	AR1660
3	09-FEB-2013 16:00	0209A003.d	1	AR1242
4	09-FEB-2013 16:21	0209A004.d	1	WC32MBW1
5	09-FEB-2013 16:41	0209A005.d	1	WC32LCSW1
6	09-FEB-2013 17:01	0209A006.d	1	WC32LCSDW1
7	09-FEB-2013 17:21	0209A007.d	1	WC32QLS
8	09-FEB-2013 17:40	0209A008.d	1	WC32I
9	09-FEB-2013 18:00	0209A009.d	5	WC55A
10	09-FEB-2013 18:20	0209A010.d	1	WC08MBW1
11	09-FEB-2013 18:40	0209A011.d	1	WC08LCSW1
12	09-FEB-2013 18:59	0209A012.d	1	WC08LCSDW1
13	09-FEB-2013 19:19	0209A013.d	1	WC08A
14	09-FEB-2013 19:39	0209A014.d	1	AR1660
15	09-FEB-2013 19:58	0209A015.d	1	AR1254
16	09-FEB-2013 20:19	0209A016.d	1	WC03MBS1
17	09-FEB-2013 20:38	0209A017.d	1	WC03LCSS1
18	09-FEB-2013 20:58	0209A018.d	1	WC03LCSDS1
19	09-FEB-2013 21:19	0209A019.d	1	WC03QLS
20	09-FEB-2013 21:39	0209A020.d	1	WC03A
21	09-FEB-2013 21:59	0209A021.d	5	WC03B
22	09-FEB-2013 22:19	0209A022.d	5	WC03C
23	09-FEB-2013 22:40	0209A023.d	1	WC03D
24	09-FEB-2013 23:00	0209A024.d	10	WC03E
25	09-FEB-2013 23:20	0209A025.d	5	WC03F
26	09-FEB-2013 23:40	0209A026.d	1	AR1660
27	10-FEB-2013 00:01	0209A027.d	1	AR1248
28	10-FEB-2013 00:21	0209A028.d	1	WC03G
29	10-FEB-2013 00:41	0209A029.d	10	WC03H
30	10-FEB-2013 01:01	0209A030.d	1	WC03I
31	10-FEB-2013 01:22	0209A031.d	1	WC03J
32	10-FEB-2013 01:42	0209A032.d	1	WC03JMS
33	10-FEB-2013 02:02	0209A033.d	1	WC03JMSD
34	10-FEB-2013 02:22	0209A034.d	1	WC03K
35	10-FEB-2013 02:43	0209A035.d	1	WC03L
36	10-FEB-2013 03:03	0209A036.d	10	WC03M
37	10-FEB-2013 03:23	0209A037.d	1	WC03N
38	10-FEB-2013 03:43	0209A038.d	1	AR1660
39	10-FEB-2013 04:04	0209A039.d	1	AR1242
40	10-FEB-2013 04:24	0209A040.d	1	WC32MBS1
41	10-FEB-2013 04:44	0209A041.d	1	WC32LCSS1
42	10-FEB-2013 05:04	0209A042.d	1	WC32LCSDS1
43	10-FEB-2013 05:24	0209A043.d	1	WC3QLS
44	10-FEB-2013 05:44	0209A044.d	1	WC32A
45	10-FEB-2013 06:04	0209A045.d	1	WC32B
46	10-FEB-2013 06:24	0209A046.d	1	WC32C
47	10-FEB-2013 06:43	0209A047.d	1	WC32D
48	10-FEB-2013 07:03	0209A048.d	1	WC32E
49	10-FEB-2013 07:24	0209A049.d	1	WC32F
50	10-FEB-2013 07:44	0209A050.d	1	~~AR~~1660
51	10-FEB-2013 08:04	0209A051.d	1	AR1254
52	10-FEB-2013 08:24	0209A052.d	1	WC32G
53	10-FEB-2013 08:45	0209A053.d	1	WC32GMS
54	10-FEB-2013 09:05	0209A054.d	1	WC32GMSD
55	10-FEB-2013 09:24	0209A055.d	1	WC32H
56	10-FEB-2013 09:45	0209A056.d	1	WC33G
57	10-FEB-2013 10:05	0209A057.d	1	AR1660
58	10-FEB-2013 10:25	0209A058.d	1	AR1248

JA

MO 02/11/13

Every line must contain information or be lined out. Make all entries legible.
Start a new page for each QC period. Document All Maintenance Tasks In StarLIMS

MANUAL INTEGRATION SUMMARY FOR DATABATCH - /chem2/ecd5.i/20130128.b/0209-1.b

ARI Job No.: AR16   Method: PCB1.m   Instrument: ecd5.i   Date: 09-FEB-2013

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1540	0209A002.d	AR1660		1	NO MANUAL INTEGRATION
1600	0209A003.d	AR1242		1	NO MANUAL INTEGRATION
1621	0209A004.d	WC32MBW1	WC32MBW1	1	NO MANUAL INTEGRATION
1641	0209A005.d	WC32LCSW1	WC32LCSW1	1	NO MANUAL INTEGRATION
1701	0209A006.d	WC32LCSDW1	WC32LCSDW1	1	NO MANUAL INTEGRATION
1721	0209A007.d	WC32QLS		1	NO MANUAL INTEGRATION
1740	0209A008.d	WC32I	SG-05-ER-0	1	NO MANUAL INTEGRATION
1939	0209A014.d	AR1660		1	NO MANUAL INTEGRATION
1958	0209A015.d	AR1254		1	NO MANUAL INTEGRATION

Analytical Resources Inc.
Dual Column PCBs by SW8082

Data file 1: 20130128.b/0209-1.b/0209A002.d
Data file 2: 20130128.b/0209-2.b/0209A002.d
Method: /chem2/ecd5.i/20130128.b/PCB1.m
Compound Sublist: AR1660
Instrument, Inj. Vol.: ecd5.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660
Client ID:
Injection Date: 09-FEB-2013 15:40
Ical Date: 28-JAN-2013
Matrix: NONE
Dilution Factor: 1.000

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.446	0.005	17705429	4.449	0.002	4812583	19.7	19.6	0.4	Tetrachloro-m-xylen
12.852	0.004	21849365	13.239	0.001	4494902	17.5	18.6	5.8	Decachlorobiphenyl

* Indicates RPD > 40%
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE PERCENT RECOVERY

SURROGATE	Col1	Col2
Tetrachloro-m-xylene	49.2	49.0
Decachlorobiphenyl	43.7	46.4

JDL 2/11/13

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	44738954	50790407	13.5
Hexabromobiphenyl	59848867	72061375	20.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	14899855	16740395	12.4
Hexabromobiphenyl	12307480	14431556	17.3

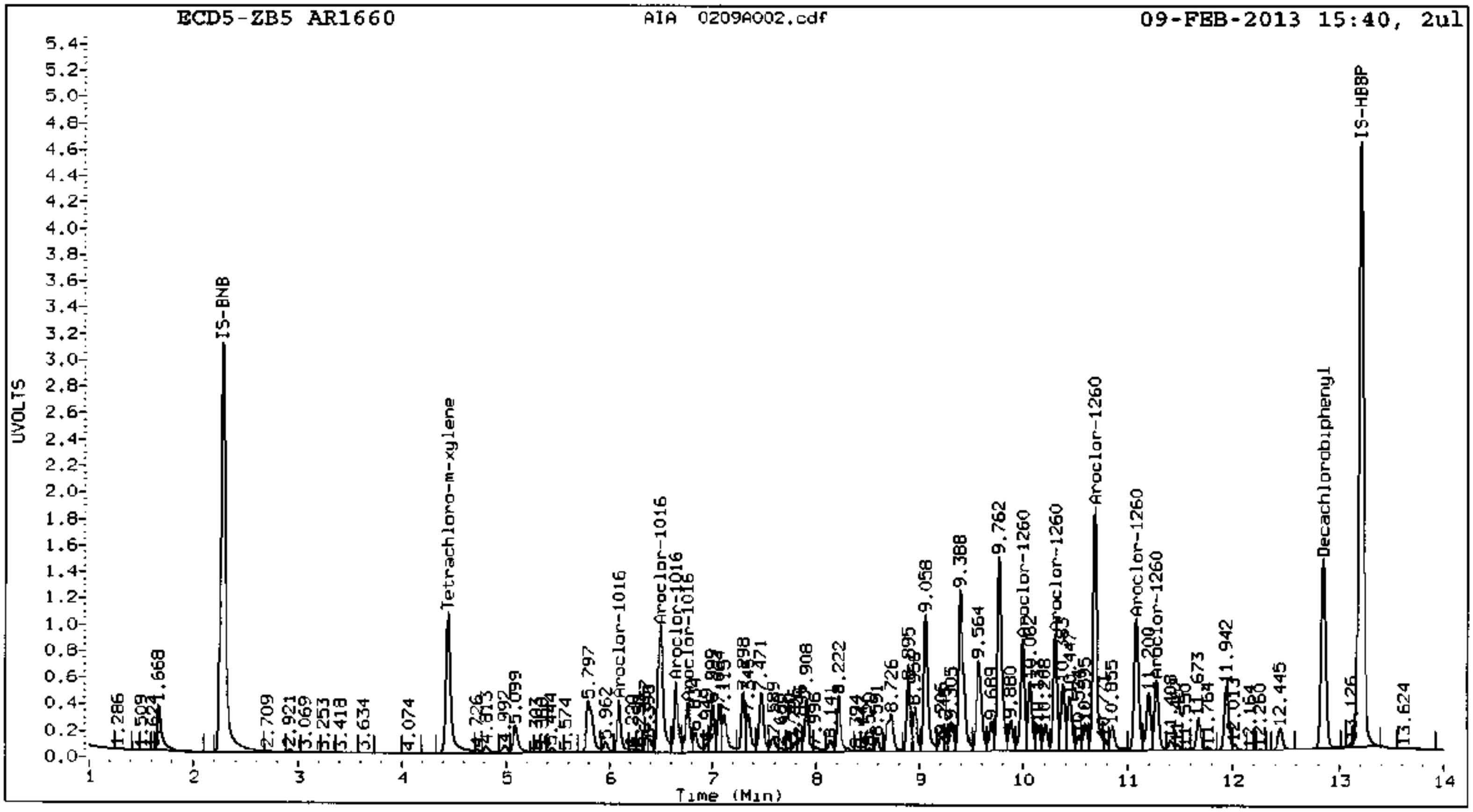
* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 28-JAN-2013
<- Indicates standard response outside Limits (-50 to +100%)

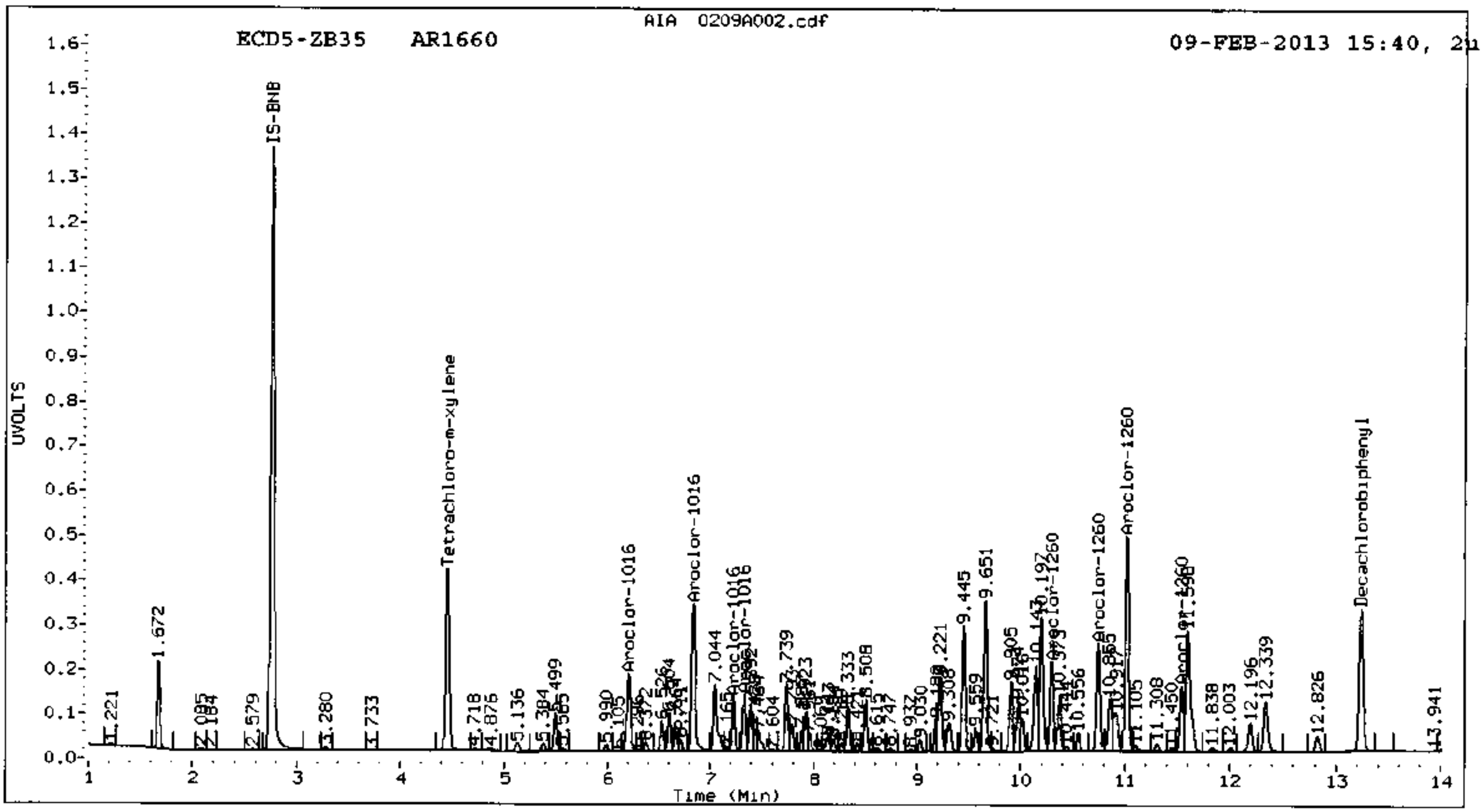
	ZB5 Col					ZB35 Col			
Aroclor Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016 1	6.093	0.005	5672170	241.0	1	6.202	0.001	2239328	233.5
Aroclor-1016 2	6.498	0.005	17540272	234.3	2	6.834	0.002	4805234	235.5
Aroclor-1016 3	6.647	0.005	7639155	239.9	3	7.219	0.001	1270647	239.1
Aroclor-1016 4	6.758	0.005	5473608	244.9	4	7.327	0.001	1413252	234.4
Total Col1Ave (4 peaks):			240.0		Total Col2Ave (4 peaks):			235.6	RPD = 2
Corrected Ave (3 peaks):			238.4		Corrected Ave (3 peaks):			234.5	RPD = 2
Aroclor-1260 1	9.994	0.004	11511558	212.1	1	10.293	0.001	2361660	218.7
Aroclor-1260 2	10.309	0.004	11598034	211.1	2	10.745	0.002	2922132	220.1
Aroclor-1260 3	10.684	0.004	26649219	209.3	3	11.018	0.000	5856450	220.1
Aroclor-1260 4	11.083	0.004	15019620	210.7	4	11.539	0.002	1728026	220.5
Aroclor-1260 5	11.274	0.004	7538193	215.4	NS	---			----
Total Col1Ave (5 peaks):			211.7		Total Col2Ave (4 peaks):			219.9	RPD = 4
Corrected Ave (4 peaks):			210.8		Corrected Ave (3 peaks):			219.6	RPD = 4

Total PCB Area Col1 (4.541 - 12.748) = 338505180 Col1 Total PCB = 0.5 ppm*

Total PCB Area Col2 (4.547 - 13.139) = 72996608 Col2 Total PCB = 0.6 ppm*

* Quantitated against AR1660 0.25ppm in Ical


ECD5-ZB5 AR1660
AIA 0209A002.cdf
09-FEB-2013 15:40, 2ul
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Aroclor-1016
Aroclor-1260
Decachlorobiphenyl
IS-HBBP


ECD5-ZB35 AR1660
AIA 0209A002.cdf
09-FEB-2013 15:40, 2u
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Aroclor-1016
Aroclor-1260
Decachlorobiphenyl

WC02:01025

Analytical Resources Inc.
Dual Column PCBs by SW8082

Data file 1: 20130128.b/0209-1.b/0209A003.d
Data file 2: 20130128.b/0209-2.b/0209A003.d
Method: /chem2/ecd5.i/20130128.b/PCB1.m
Compound Sublist: AR1242
Instrument, Inj. Vol.: ecd5.i, 2ul
Quant Method: Internal Std

ARI ID: AR1242
Client ID:
Injection Date: 09-FEB-2013 16:00
Ical Date: 28-JAN-2013
Matrix: NONE
Dilution Factor: 1.000

ZB5 Col RT	ZB5 Col Shift	ZB5 Col Response	ZB35 Col RT	ZB35 Col Shift	ZB35 Col Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
4.444	0.003	16247876	4.449	0.002	4382293	19.1	19.2	0.1	Tetrachloro-m-xylen
12.851	0.003	19993640	13.239	0.001	4076719	17.2	18.2	5.3	Decachlorobiphenyl

* Indicates RPD > 40%
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE PERCENT RECOVERY

SURROGATE	Col1	Col2
Tetrachloro-m-xylene	47.9	47.9
Decachlorobiphenyl	43.1	45.5

jkoz/11/13

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	44738954	47881223	7.0
Hexabromobiphenyl	59848867	66907814	11.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	14899855	15583786	4.6
Hexabromobiphenyl	12307480	13347517	8.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 28-JAN-2013
<- Indicates standard response outside Limits (-50 to +100%)

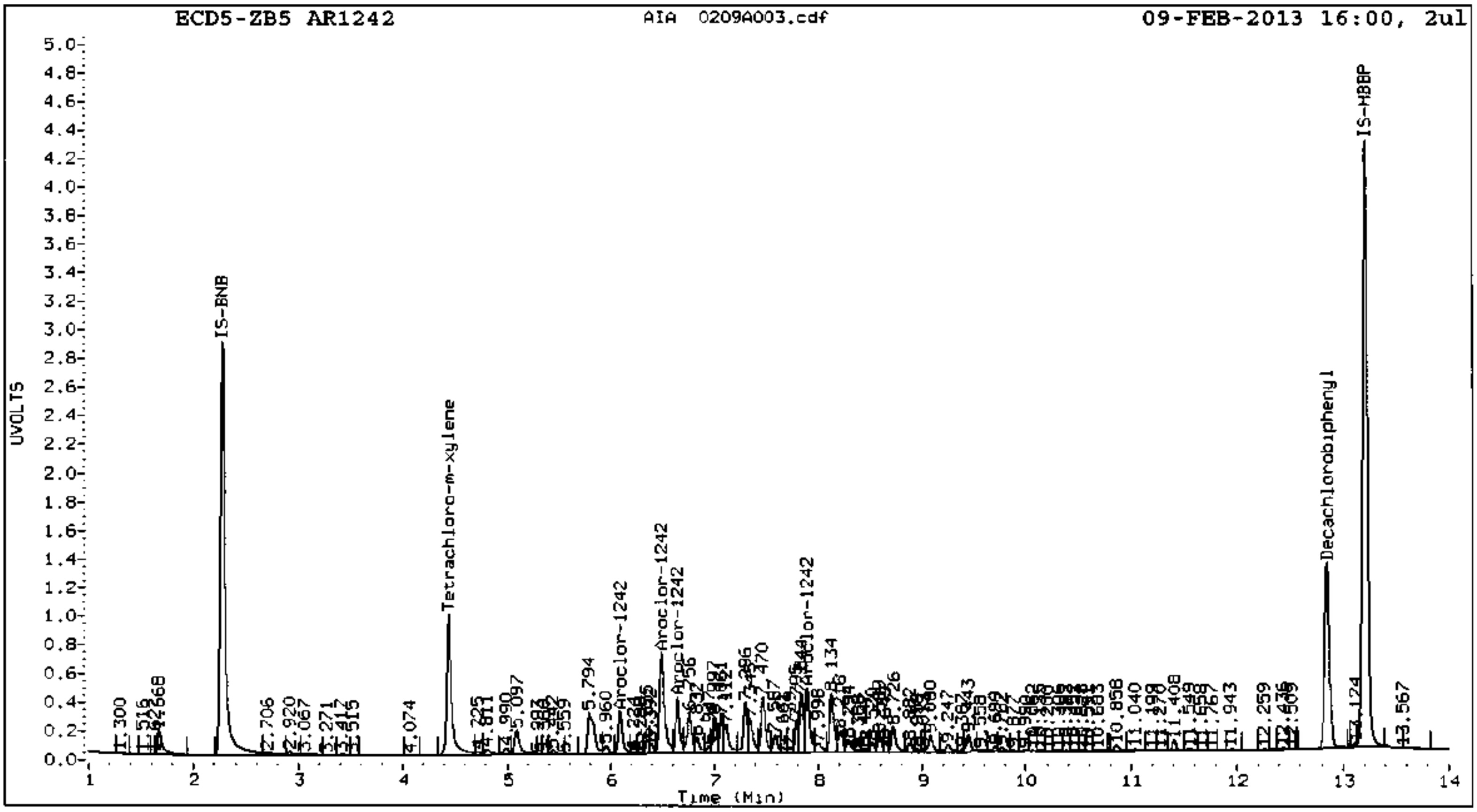
	ZB5 Col					ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1242	1	6.091	0.002	4189940	250.7	1	6.201	0.000	1623403	247.2
Aroclor-1242	2	6.496	0.001	12953255	248.3	2	6.833	-0.001	3468448	245.9
Aroclor-1242	3	6.645	0.002	5659278	251.0	3	7.044	0.000	1432302	246.2
Aroclor-1242	4	7.898	0.001	6707012	248.3	4	8.269	0.001	1228538	243.6

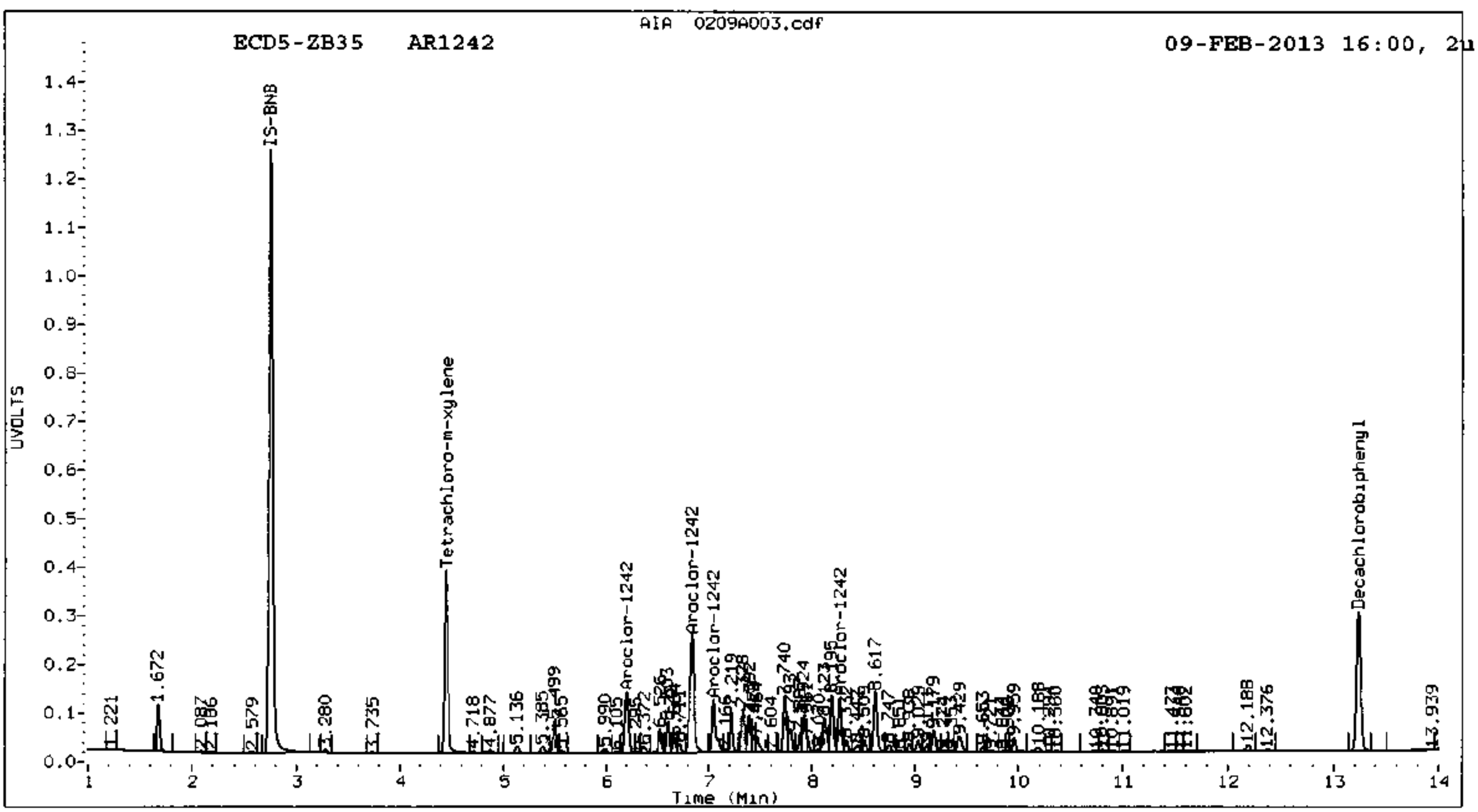
Total Col1Ave (4 peaks): 249.6 Total Col2Ave (4 peaks): 245.7 RPD = 2
Corrected Ave (3 peaks): 249.1 Corrected Ave (3 peaks): 245.2 RPD = 2

Total PCB Area Col1 (4.541 - 12.748) = 115028293 Col1 Total PCB = 0.2 ppm*

Total PCB Area Col2 (4.547 - 13.139) = 25328581 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical


ECD5-ZB5 AR1242
AIA 0209A003.cdf
09-FEB-2013 16:00, 2ul
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Aroclor-1242
Decachlorobiphenyl
IS-HBBP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ECD5-ZB35 AR1242
09-FEB-2013 16:00, 2u
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Aroclor-1242
Decachlorobiphenyl

WC02 01020

Analytical Resources Inc.
Dual Column PCBs by SW8082

Data file 1: 20130128.b/0209-1.b/0209A004.d
Data file 2: 20130128.b/0209-2.b/0209A004.d
Method: /chem2/ecd5.i/20130128.b/PCB1.m
Compound Sublist: PCB
Instrument, Inj. Vol.: ecd5.i, 2ul
Quant Method: Internal Std

ARI ID: WC32MBW1
Client ID: WC32MBW1
Injection Date: 09-FEB-2013 16:21
Ical Date: 28-JAN-2013
Matrix: WATER
Dilution Factor: 1.000

ZB5 Col RT	ZB5 Col Shift	ZB5 Col Response	ZB35 Col RT	ZB35 Col Shift	ZB35 Col Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
4.443	0.002	23815886	4.449	0.001	6423482	25.6	26.0	1.8	Tetrachloro-m-xylen
12.851	0.003	25158631	13.240	0.001	5089886	19.3	20.3	5.0	Decachlorobiphenyl

* Indicates RPD > 40%
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE PERCENT RECOVERY

SURROGATE	Col1	Col2
Tetrachloro-m-xylene	63.9	65.1
Decachlorobiphenyl	48.2	50.7

JK 02/11/13

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	44738954	52551510	17.5
Hexabromobiphenyl	59848867	75312216	25.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	14899855	16816369	12.9
Hexabromobiphenyl	12307480	14951984	21.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 28-JAN-2013
<- Indicates standard response outside Limits (-50 to +100%)

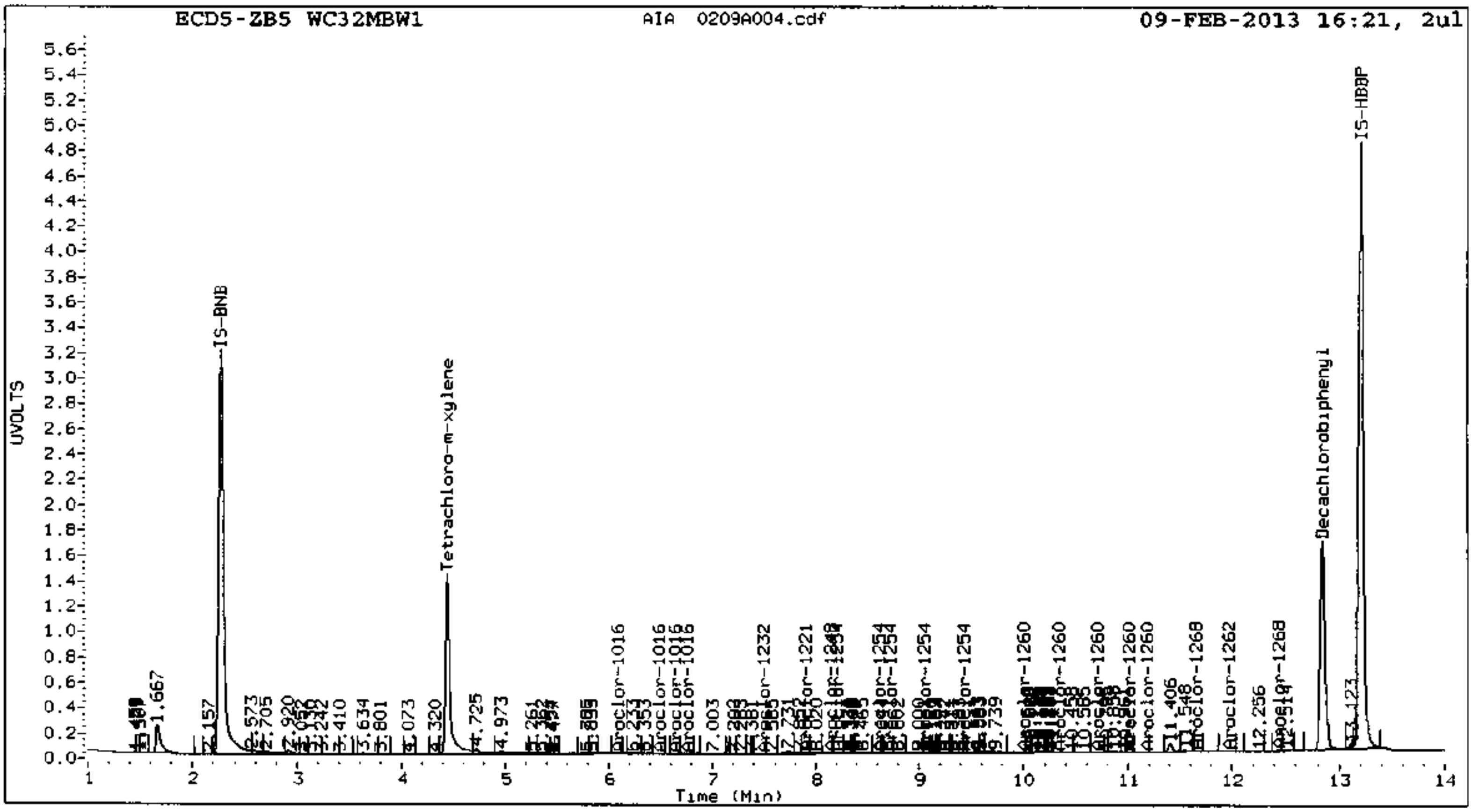
	ZB5 Col					ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	6.096	0.009	13150	0.5	1	---			0.0
Aroclor-1016	2	6.490	-0.002	20894	0.3	2	---			0.0
Aroclor-1016	3	6.651	0.009	18169	0.6	3	---			0.0
Aroclor-1016	4	6.757	0.004	52847	2.3	4	---			0.0
Total Col1Ave (4 peaks):				0.9		Col2Ave: <3 Quant Peaks				
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	6.490	-0.005	20894	3.0	2	5.150	0.002	87330	32.0
Aroclor-1221	3	7.914	0.010	59563	6.5	3	---			0.0
Aroclor-1221	NS	---			----	4	5.502	0.005	16074	3.2
Col1Ave: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	6.096	0.007	13150	1.3	1	---			0.0
Aroclor-1232	2	6.490	-0.004	20894	0.7	2	---			0.0
Aroclor-1232	3	7.506	0.038	49109	3.3	3	---			0.0
Aroclor-1232	4	7.914	0.017	59563	3.5	4	---			0.0
Total Col1Ave (4 peaks):				2.2		Col2Ave: <3 Quant Peaks				
Aroclor-1242	1	6.096	0.007	13150	0.7	1	---			0.0
Aroclor-1242	2	6.490	-0.004	20894	0.4	2	---			0.0
Aroclor-1242	3	6.651	0.007	18169	0.7	3	---			0.0
Aroclor-1242	4	7.914	0.017	59563	2.0	4	---			0.0
Total Col1Ave (4 peaks):				1.0		Col2Ave: <3 Quant Peaks				
Aroclor-1248	1	6.490	0.001	20894	0.6	1	---			0.0
Aroclor-1248	2	7.506	0.039	49109	1.2	2	---			0.0
Aroclor-1248	3	7.914	0.018	59563	1.2	3	---			0.0
Aroclor-1248	4	8.157	0.026	76988	2.0	4	---			0.0
Total Col1Ave (4 peaks):				1.2		Col2Ave: <3 Quant Peaks				
Aroclor-1254	1	8.217	0.000	95502	1.9	1	---			0.0
Aroclor-1254	2	8.621	0.033	51303	1.5	2	---			0.0
Aroclor-1254	3	8.732	0.008	91195	1.4	3	---			0.0
Aroclor-1254	4	9.058	-0.016	81510	1.1	4	---			0.0
Aroclor-1254	5	9.433	0.000	32003	0.7	5	---			0.0
Total Col1Ave (5 peaks):				1.3		Col2Ave: <3 Quant Peaks				
Aroclor-1260	1	10.001	0.012	130246	2.3	1	---			0.0
Aroclor-1260	2	10.352	0.047	56105	1.0	2	---			0.0
Aroclor-1260	3	10.713	0.033	117344	0.9	3	---			0.0
Aroclor-1260	4	11.013	-0.066	20087	0.3	4	---			0.0
Aroclor-1260	5	11.191	-0.078	39585	1.1	NS	---			----
Total Col1Ave (5 peaks):				1.1		Col2Ave: <3 Quant Peaks				
Aroclor-1262	1	10.352	0.046	56105	0.9	1	---			0.0
Aroclor-1262	2	10.713	0.032	117344	0.7	2	10.803	0.066	16527	1.1
Aroclor-1262	3	11.013	-0.067	20087	0.4	3	---			0.0
Aroclor-1262	4	11.191	-0.078	39585	0.6	4	---			0.0
Aroclor-1262	5	11.972	0.033	49156	0.9	5	12.373	0.034	28416	2.3
Total Col1Ave (5 peaks):				0.7		Col2Ave: <3 Quant Peaks				
Aroclor-1268	1	11.191	-0.006	39585	0.2	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	11.652	-0.002	15209	0.1	3	---			0.0
Aroclor-1268	4	12.439	-0.004	32941	0.1	4	---			0.0
Total Col1Ave (3 peaks):				0.2		Col2Ave: <3 Quant Peaks				

Total PCB Area Col1 (4.541 - 12.748) = 7232221 Col1 Total PCB = 0.0 ppm*

Total PCB Area Col2 (4.547 - 13.139) = 600809 Col2 Total PCB = 0.0 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.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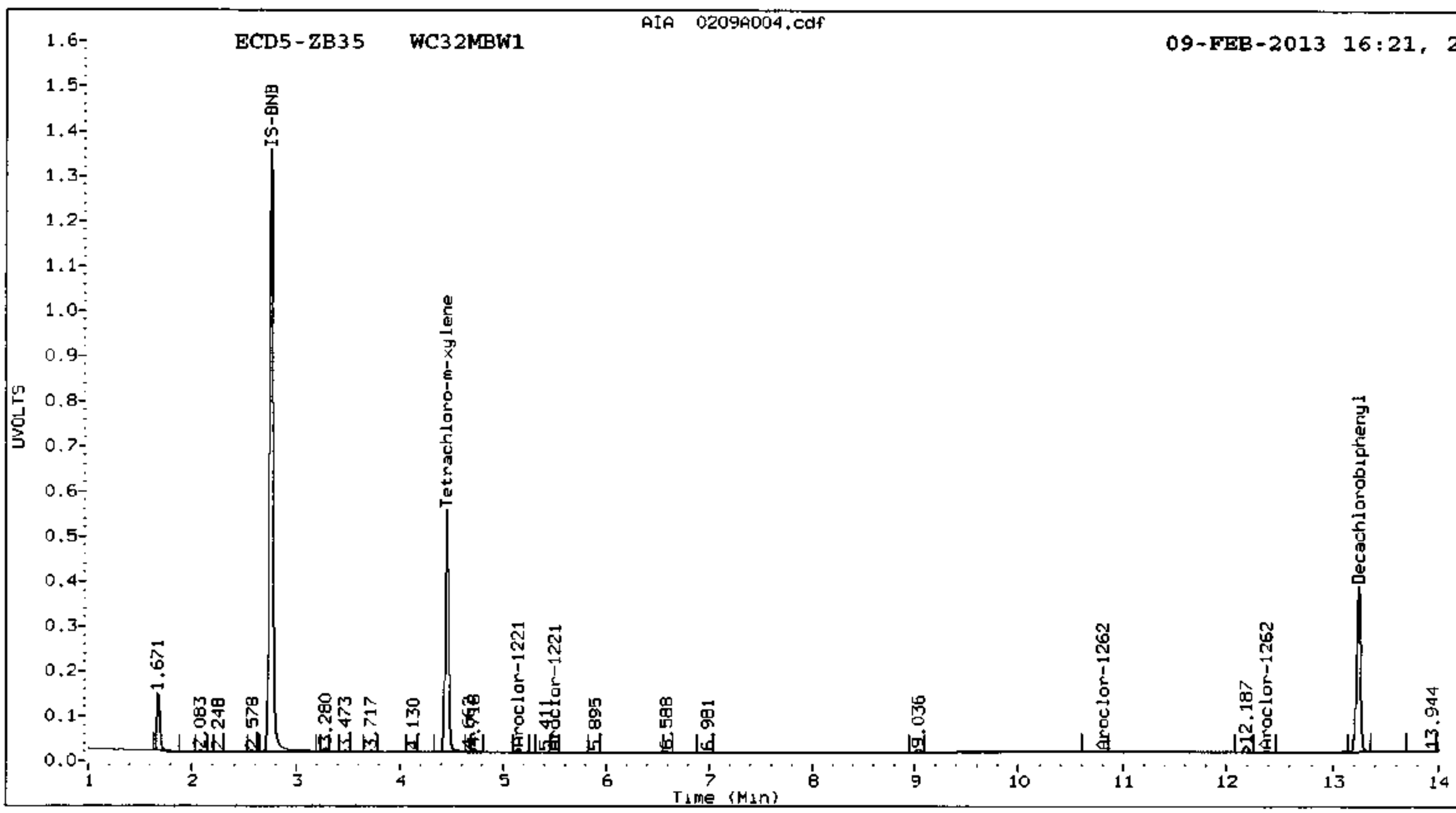
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Decachlorobiphenyl
IS-HBBP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UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Decachlorobiphenyl
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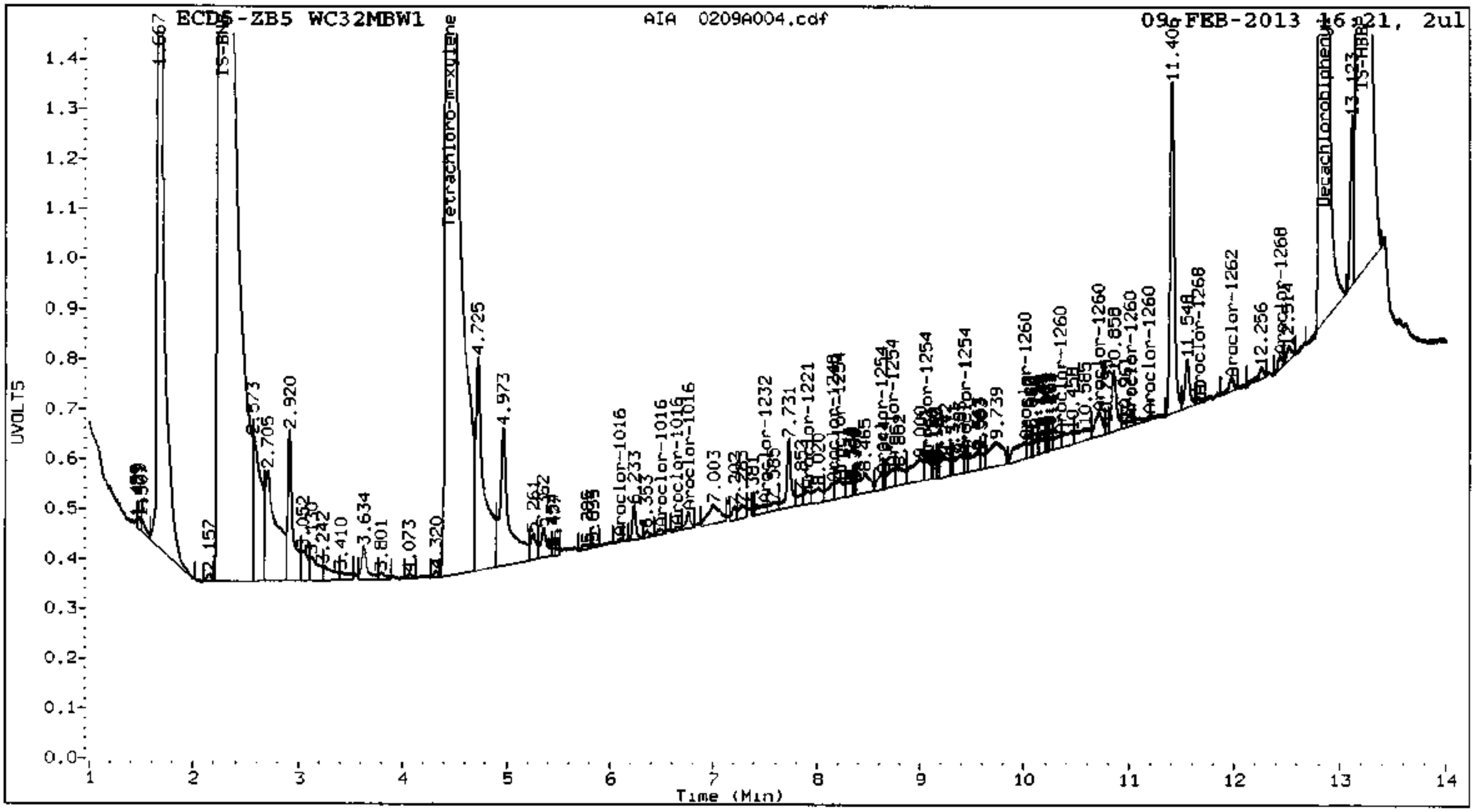
Aroclor-1221
Aroclor-1262
12.187
13.944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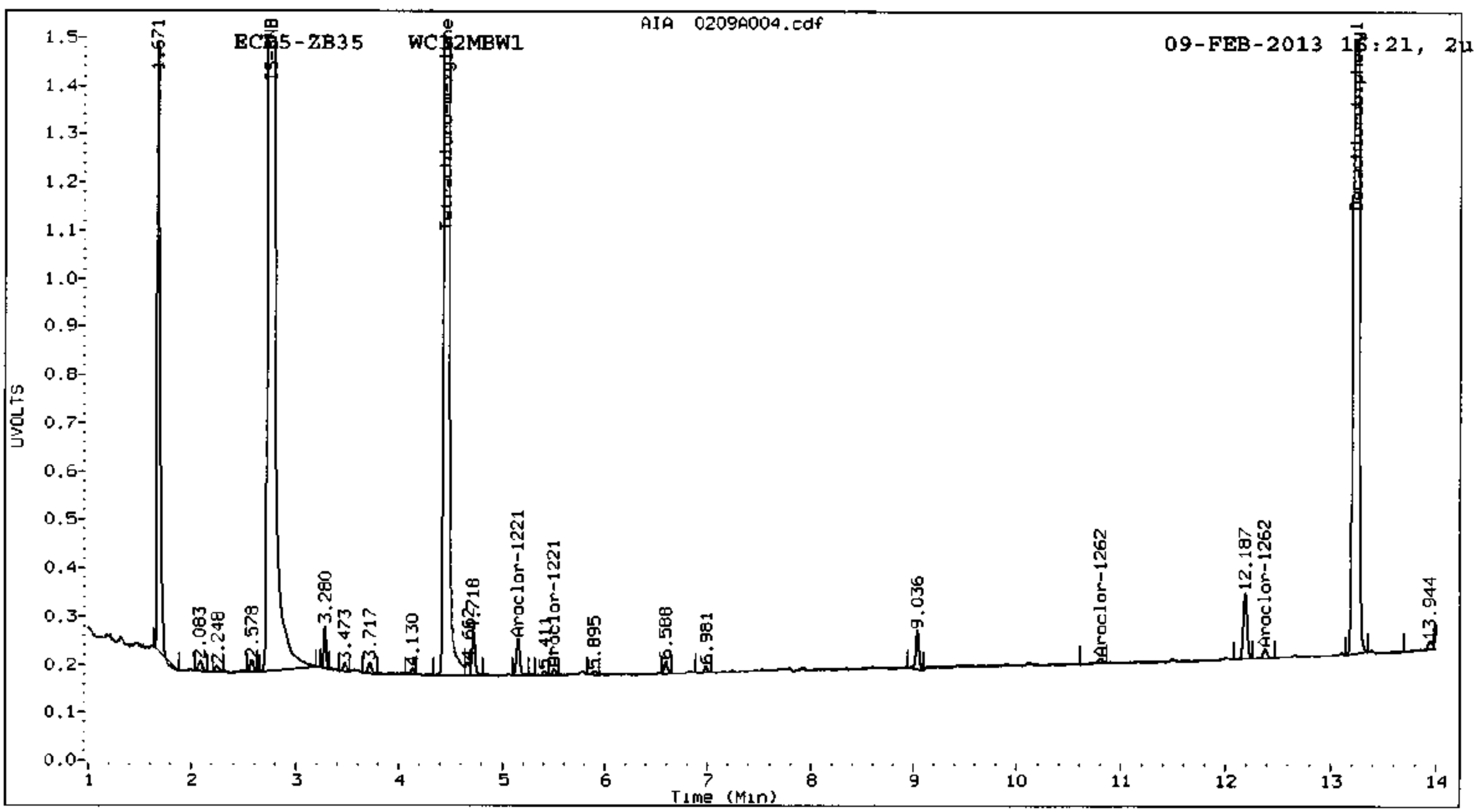
09-FEB-2013 16:21, 2ul
UVOLTS
Time (Min)
Tetrachloro-m-xylene
Decachlorobiphenyl
11.400
4.725
4.973
2.920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UVOLTS
Time (Min)
1.671
3.280
Aroclor-1221
9.036
Aroclor-1262
12.187
13.944

Analytical Resources Inc.
Dual Column PCBs by SW8082

Data file 1: 20130128.b/0209-1.b/0209A005.d
Data file 2: 20130128.b/0209-2.b/0209A005.d
Method: /chem2/ecd5.i/20130128.b/PCB1.m
Compound Sublist: PCB
Instrument, Inj. Vol.: ecd5.i, 2ul
Quant Method: Internal Std

ARI ID: WC32LCSW1
Client ID: WC32LCSW1
Injection Date: 09-FEB-2013 16:41
Ical Date: 28-JAN-2013
Matrix: WATER
Dilution Factor: 1.000

ZB5 Col RT	ZB5 Col Shift	ZB5 Col Response	ZB35 Col RT	ZB35 Col Shift	ZB35 Col Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
4.442	0.001	27028600	4.450	0.002	7154323	27.8	28.6	2.9	Tetrachloro-m-xylen
12.850	0.001	31915188	13.240	0.001	6483014	23.5	24.8	5.2	Decachlorobiphenyl

* Indicates RPD > 40%
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE PERCENT RECOVERY

SURROGATE	Col1	Col2
Tetrachloro-m-xylene	69.5	71.5
Decachlorobiphenyl	58.8	61.9

JL 02/11/13

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	44738954	54849238	22.6
Hexabromobiphenyl	59848867	78360512	30.9

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	14899855	17041197	14.4
Hexabromobiphenyl	12307480	15589218	26.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 28-JAN-2013
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	6.089	0.001	10187769	400.8	1	6.202	0.001	3792975	388.4
Aroclor-1016	2	6.494	0.001	32083025	396.9	2	6.834	0.002	8467233	407.7
Aroclor-1016	3	6.643	0.001	13975507	406.4	3	7.219	0.001	2314232	427.9
Aroclor-1016	4	6.754	0.001	10322165	427.7	4	7.328	0.001	2518737	410.4
Total Col1Ave (4 peaks):				407.9		Total Col2Ave (4 peaks):			408.6	RPD = 0
Corrected Ave (3 peaks):				401.3		Corrected Ave (3 peaks):			402.2	RPD = 0
Aroclor-1221	1	5.095	-0.003	6421812	282.6	1	---			0.0
Aroclor-1221	2	6.494	-0.001	32083025	4482.2	2	5.137	-0.011	389293	140.6
Aroclor-1221	3	7.904	0.000	10424148	1088.7	3	---			0.0
Aroclor-1221	NS	---			----	4	5.499	0.001	1591407	308.5
Total Col1Ave (3 peaks):				1951.2		Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	6.089	-0.001	10187769	994.9	1	6.202	0.002	3792975	884.3
Aroclor-1232	2	6.494	0.000	32083025	995.9	2	6.834	0.005	8467233	1010.3
Aroclor-1232	3	7.468	0.000	13511835	881.8	3	7.044	0.001	3556331	1031.4
Aroclor-1232	4	7.904	0.007	10424148	588.7	4	8.269	0.001	384747	130.1
Total Col1Ave (4 peaks):				865.3		Total Col2Ave (4 peaks):			764.0	RPD = 12
Corrected Ave (3 peaks):				821.8		Corrected Ave (3 peaks):			674.9	RPD = 20
Aroclor-1242	1	6.089	0.000	10187769	532.2	1	6.202	0.000	3792975	528.1
Aroclor-1242	2	6.494	-0.001	32083025	536.8	2	6.834	0.000	8467233	549.0
Aroclor-1242	3	6.643	0.000	13975507	541.0	3	7.044	0.000	3556331	559.1
Aroclor-1242	4	7.904	0.007	10424148	336.9	4	8.269	0.000	384747	69.8
Total Col1Ave (4 peaks):				486.7		Total Col2Ave (4 peaks):			426.5	RPD = 13
Corrected Ave (3 peaks):				468.7		Corrected Ave (3 peaks):			382.3	RPD = 20
Aroclor-1248	1	6.494	0.004	32083025	820.4	1	6.834	0.004	8467233	842.6
Aroclor-1248	2	7.468	0.001	13511835	325.8	2	7.739	0.001	2993506	355.6
Aroclor-1248	3	7.904	0.008	10424148	199.6	3	8.269	0.001	384747	44.0
Aroclor-1248	4	8.138	0.007	2457670	60.3	4	8.615	0.001	213480	19.7
Total Col1Ave (4 peaks):				351.5		Total Col2Ave (4 peaks):			315.5	RPD = 11
Corrected Ave (3 peaks):				195.2		Corrected Ave (3 peaks):			139.8	RPD = 33
Aroclor-1254	1	8.218	0.002	12457600	232.0	1	8.333	0.000	1966378	264.1
Aroclor-1254	2	8.586	-0.001	2829108	78.9	2	8.508	0.000	2273238	237.7
Aroclor-1254	3	8.721	-0.003	11844821	170.3	3	9.030	0.000	585651	79.0
Aroclor-1254	4	9.054	-0.020	28619878	372.7	4	9.182	0.003	1180209	73.2
Aroclor-1254	5	9.384	-0.049	41849467	869.5	5	9.974	0.010	2485985	252.7
Total Col1Ave (5 peaks):				344.7		Total Col2Ave (5 peaks):			181.3	RPD = 62*
Corrected Ave (4 peaks):				213.5		Corrected Ave (4 peaks):			160.7	RPD = 28
Aroclor-1260	1	9.991	0.001	22425213	380.0	1	10.294	0.002	4598397	394.2
Aroclor-1260	2	10.307	0.002	22651378	379.1	2	10.744	0.002	5638340	393.2
Aroclor-1260	3	10.681	0.001	52579790	379.8	3	11.018	0.001	11434606	397.8
Aroclor-1260	4	11.080	0.001	29675028	382.9	4	11.540	0.002	3326578	393.0
Aroclor-1260	5	11.270	0.001	15407405	404.8	NS	---			----
Total Col1Ave (5 peaks):				385.3		Total Col2Ave (4 peaks):			394.6	RPD = 2
Corrected Ave (4 peaks):				380.5		Corrected Ave (3 peaks):			393.5	RPD = 3
Aroclor-1262	1	10.307	0.001	22651378	351.2	1	10.294	0.002	4598397	251.9
Aroclor-1262	2	10.681	0.001	52579790	318.3	2	10.744	0.008	5638340	360.7
Aroclor-1262	3	11.080	0.000	29675028	506.2	3	11.018	0.002	11434606	324.2
Aroclor-1262	4	11.270	0.002	15407405	231.9	4	11.540	0.002	3326578	232.7
Aroclor-1262	5	11.939	0.000	14041948	241.3	5	12.341	0.001	3063379	237.1
Total Col1Ave (5 peaks):				329.8		Total Col2Ave (5 peaks):			281.3	RPD = 16
Corrected Ave (4 peaks):				285.7		Corrected Ave (4 peaks):			261.5	RPD = 9
Aroclor-1268	1	11.197	-0.001	12637597	75.7	1	11.540	0.002	3326578	89.6
Aroclor-1268	2	11.270	0.001	15407405	95.5	2	11.599	0.003	8056206	224.5

Aroclor-1268 3	11.670	0.016	7466018	53.8	3	---			0.0
Aroclor-1268 4	12.443	0.000	4773263	12.7	4	12.827	0.005	897191	11.0

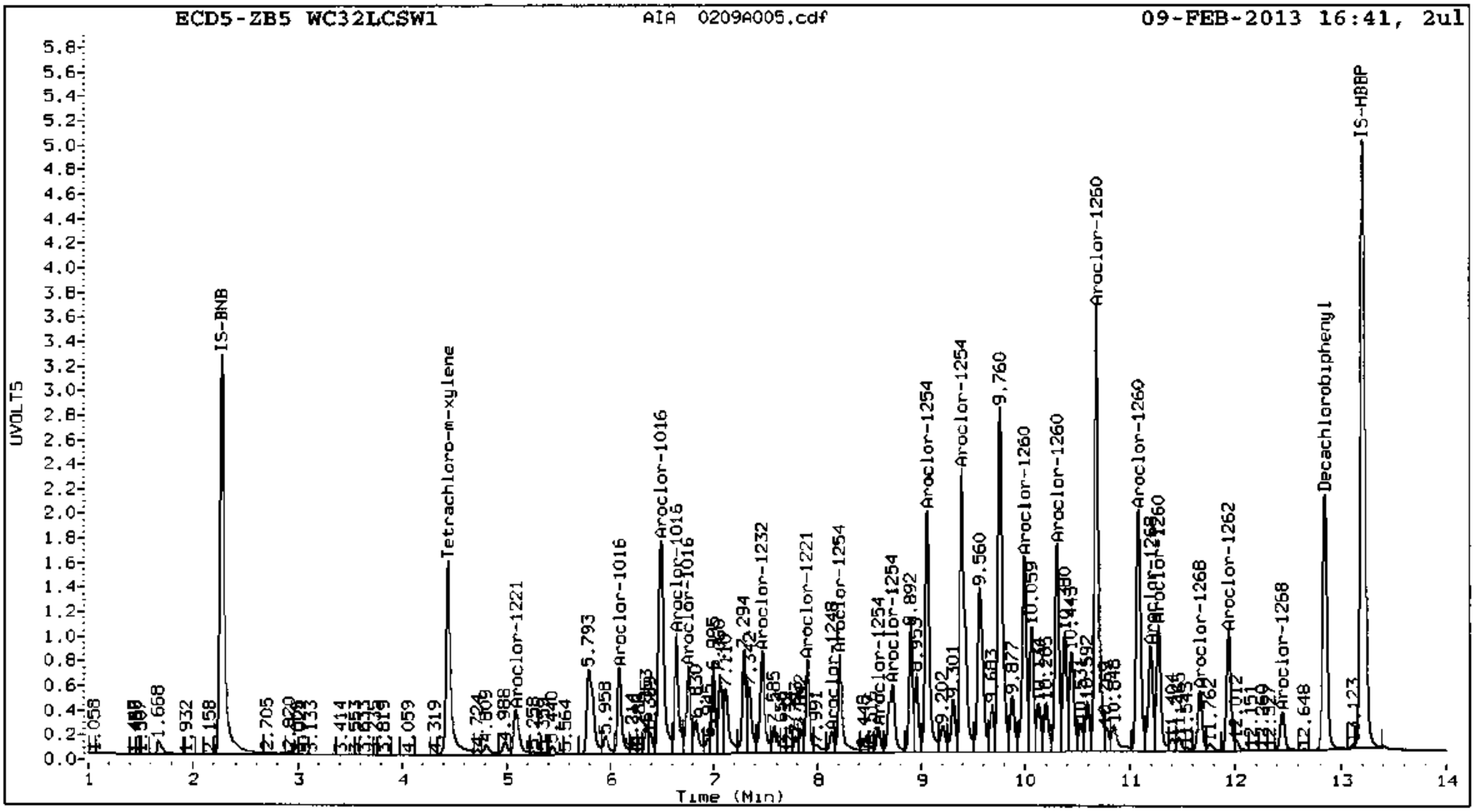
Total Col1Ave (4 peaks): 59.4 Total Col2Ave (3 peaks): 108.4 RPD = 58*

Corrected Ave (3 peaks): 47.4 Corrected Ave: < 3 Peaks

Total PCB Area Col1 (4.541 - 12.748) = 654485140 Col1 Total PCB = 0.9 ppm*

Total PCB Area Col2 (4.547 - 13.139) = 137917097 Col2 Total PCB = 1.1 ppm*

* Quantitated against AR1660 0.25ppm in Ical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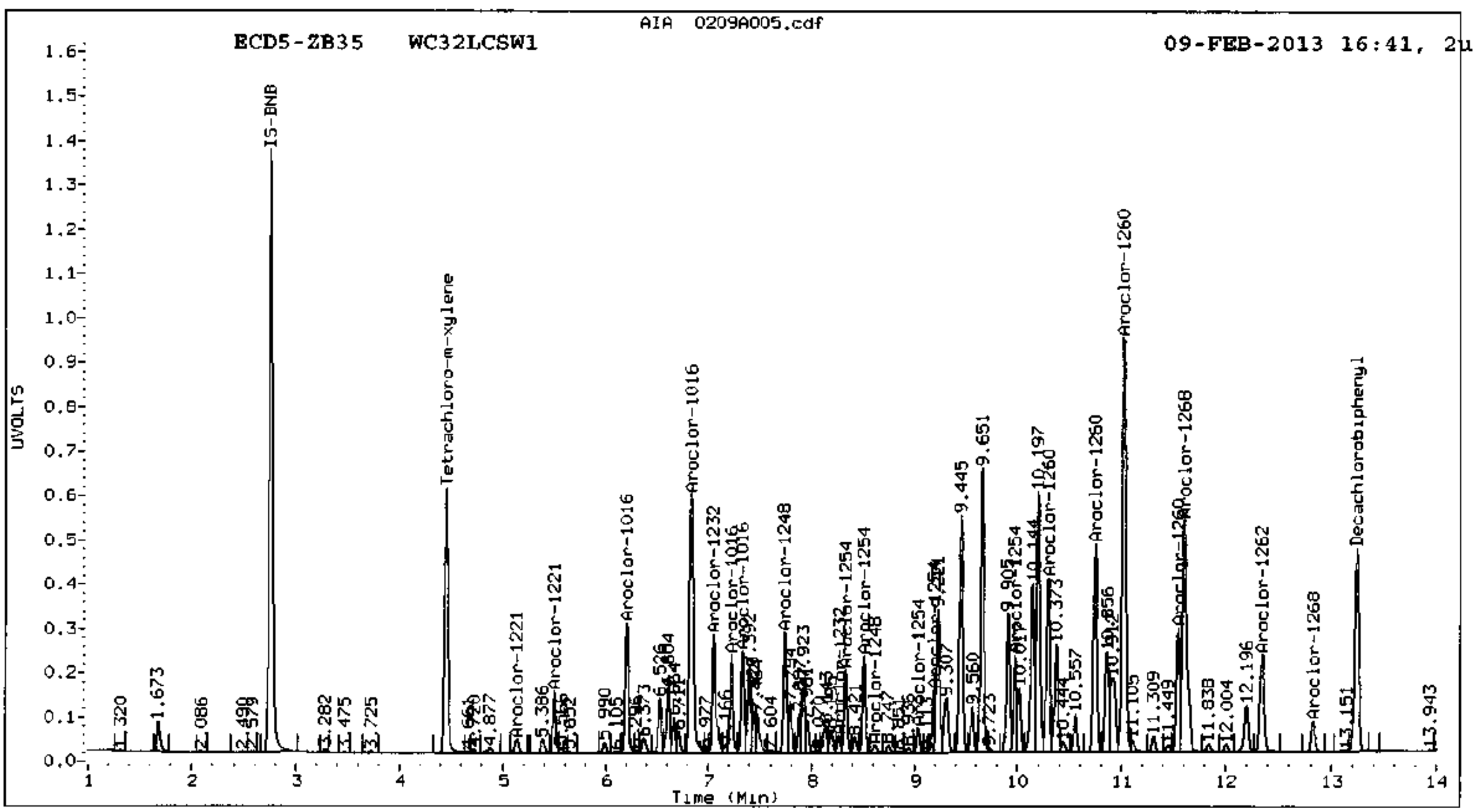
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Aroclor-1016
Aroclor-1221
Aroclor-1232
Aroclor-1248
Aroclor-1254
Aroclor-1260
Aroclor-1262
Aroclor-1268
Decachlorobiphenyl
IS-HBBP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Time (Min)
IS-BNB
Tetrachloro-m-xylene
Aroclor-1016
Aroclor-1221
Aroclor-1232
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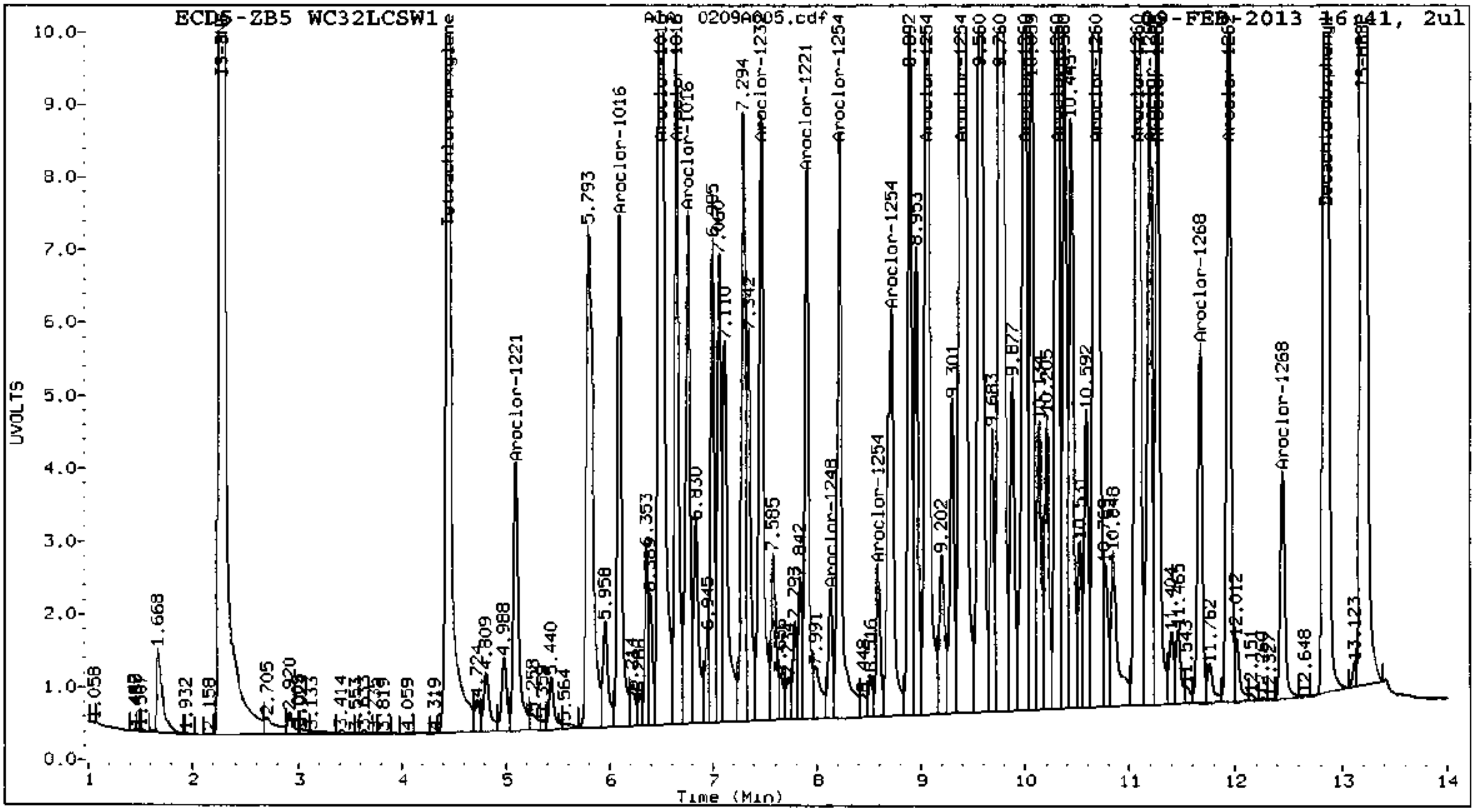
Aroclor-1254
Aroclor-1260
Aroclor-1262
Aroclor-1268
Decachlorobiphenyl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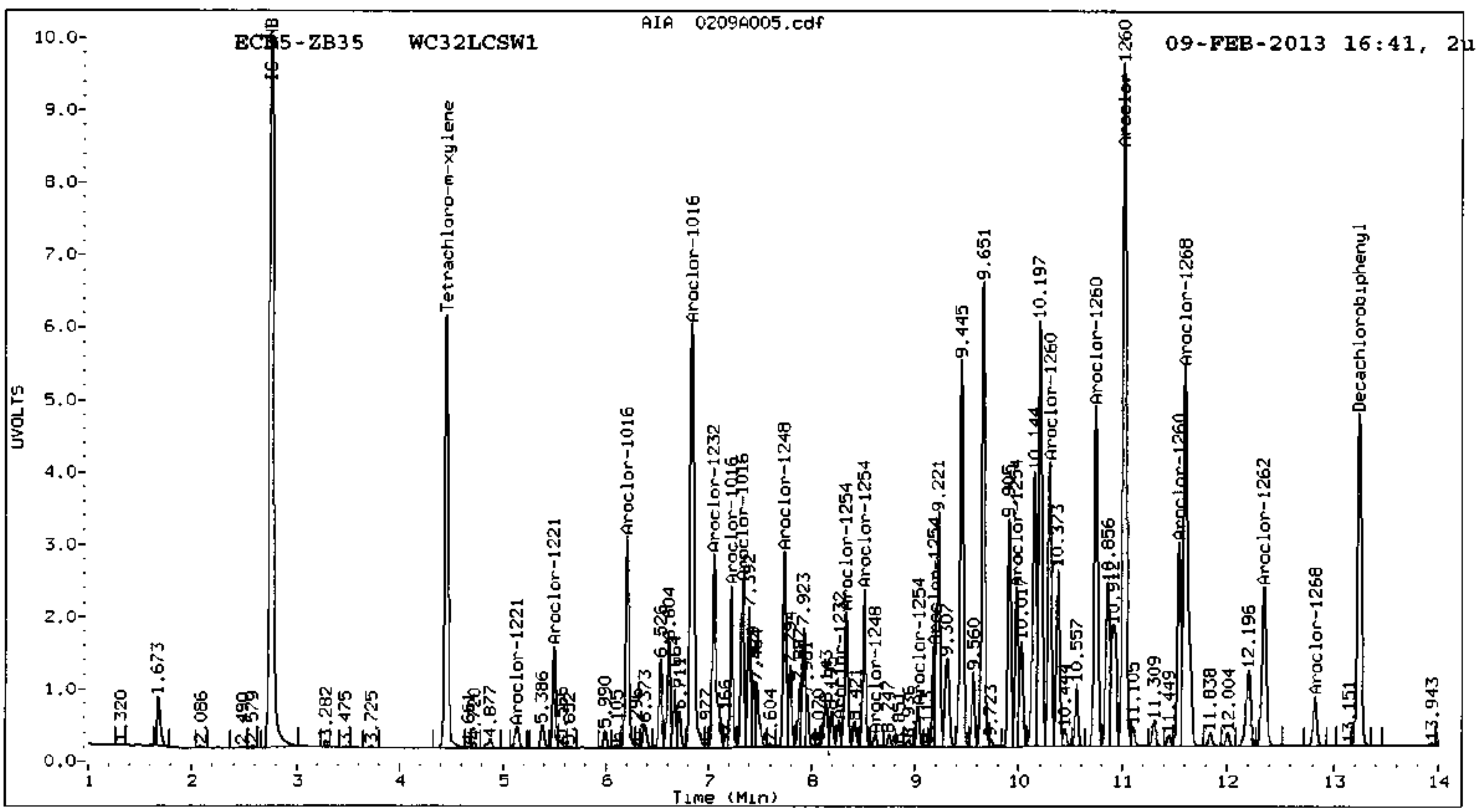
UVOLTS
Time (Min)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09-FEB-2013 16:41, 2u
UVOLTS
Time (Min)

Analytical Resources Inc.
Dual Column PCBs by SW8082

Data file 1: 20130128.b/0209-1.b/0209A006.d
Data file 2: 20130128.b/0209-2.b/0209A006.d
Method: /chem2/ecd5.i/20130128.b/PCB1.m
Compound Sublist: PCB
Instrument, Inj. Vol.: ecd5.i, 2ul
Quant Method: Internal Std

ARI ID: WC32LCSDW1
Client ID: WC32LCSDW1
Injection Date: 09-FEB-2013 17:01
Ical Date: 28-JAN-2013
Matrix: WATER
Dilution Factor: 1.000

ZB5 Col RT	Shift	Response	ZB35 Col RT	Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
4.443	0.001	27784306	4.450	0.003	7345714	27.6	28.3	2.5	Tetrachloro-m-xylen
12.850	0.002	27091660	13.239	0.001	5457696	20.0	21.0	4.4	Decachlorobiphenyl

* Indicates RPD > 40%
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE PERCENT RECOVERY

SURROGATE	Col1	Col2
Tetrachloro-m-xylene	68.9	70.7
Decachlorobiphenyl	50.1	52.4

JL 02/11/13

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	44738954	56849652	27.1
Hexabromobiphenyl	59848867	77982854	30.3

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	14899855	17711934	18.9
Hexabromobiphenyl	12307480	15510868	26.0

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 28-JAN-2013
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	6.089	0.002	10506180	398.7	1	6.202	0.002	3908884	385.2
Aroclor-1016	2	6.495	0.003	33116307	395.2	2	6.835	0.003	8730134	404.4
Aroclor-1016	3	6.644	0.002	14437687	405.1	3	7.220	0.002	2375297	422.5
Aroclor-1016	4	6.755	0.002	10720377	428.6	4	7.328	0.002	2593373	406.6
	Total Col1Ave (4 peaks):			406.9		Total Col2Ave (4 peaks):			404.7	RPD = 1
	Corrected Ave (3 peaks):			399.7		Corrected Ave (3 peaks):			398.7	RPD = 0
Aroclor-1221	1	5.095	-0.002	6627609	281.4	1	---			0.0
Aroclor-1221	2	6.495	0.000	33116307	4463.7	2	5.136	-0.012	404240	140.5
Aroclor-1221	3	7.904	0.001	10650116	1073.2	3	---			0.0
Aroclor-1221	NS	---			----	4	5.499	0.002	1628982	303.8
	Total Col1Ave (3 peaks):			1939.5		Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	6.089	0.000	10506180	989.9	1	6.202	0.002	3908884	876.8
Aroclor-1232	2	6.495	0.002	33116307	991.8	2	6.835	0.006	8730134	1002.3
Aroclor-1232	3	7.468	0.001	13848394	872.0	3	7.044	0.001	3652653	1019.2
Aroclor-1232	4	7.904	0.008	10650116	580.3	4	8.269	0.002	391964	127.5
	Total Col1Ave (4 peaks):			858.5		Total Col2Ave (4 peaks):			756.4	RPD = 13
	Corrected Ave (3 peaks):			814.1		Corrected Ave (3 peaks):			668.9	RPD = 20
Aroclor-1242	1	6.089	0.000	10506180	529.5	1	6.202	0.001	3908884	523.6
Aroclor-1242	2	6.495	0.001	33116307	534.6	2	6.835	0.001	8730134	544.6
Aroclor-1242	3	6.644	0.000	14437687	539.2	3	7.044	0.000	3652653	552.5
Aroclor-1242	4	7.904	0.008	10650116	332.1	4	8.269	0.001	391964	68.4
	Total Col1Ave (4 peaks):			483.9		Total Col2Ave (4 peaks):			422.3	RPD = 14
	Corrected Ave (3 peaks):			465.4		Corrected Ave (3 peaks):			378.9	RPD = 21
Aroclor-1248	1	6.495	0.006	33116307	817.1	1	6.835	0.005	8730134	835.9
Aroclor-1248	2	7.468	0.002	13848394	322.2	2	7.741	0.002	3072129	351.1
Aroclor-1248	3	7.904	0.009	10650116	196.7	3	8.269	0.001	391964	43.1
Aroclor-1248	4	8.138	0.007	2514075	59.5	4	8.615	0.001	214093	19.0
	Total Col1Ave (4 peaks):			348.9		Total Col2Ave (4 peaks):			312.3	RPD = 11
	Corrected Ave (3 peaks):			192.8		Corrected Ave (3 peaks):			137.7	RPD = 33
Aroclor-1254	1	8.219	0.002	12695279	228.1	1	8.334	0.001	1999859	258.4
Aroclor-1254	2	8.588	0.000	2836331	76.3	2	8.508	0.001	2309426	232.4
Aroclor-1254	3	8.722	-0.001	12018443	166.7	3	9.031	0.001	589115	76.5
Aroclor-1254	4	9.055	-0.019	29032070	364.8	4	9.182	0.002	1180216	70.4
Aroclor-1254	5	9.384	-0.048	42463271	851.2	5	9.973	0.010	2513508	245.8
	Total Col1Ave (5 peaks):			337.4		Total Col2Ave (5 peaks):			176.7	RPD = 63*
	Corrected Ave (4 peaks):			209.0		Corrected Ave (4 peaks):			156.3	RPD = 29
Aroclor-1260	1	9.990	0.001	22544938	383.8	1	10.294	0.001	4626013	398.6
Aroclor-1260	2	10.307	0.002	22726751	382.2	2	10.744	0.002	5691855	399.0
Aroclor-1260	3	10.682	0.002	52942804	384.3	3	11.018	0.001	11541316	403.5
Aroclor-1260	4	11.080	0.001	29976815	388.7	4	11.539	0.002	3346043	397.3
Aroclor-1260	5	11.271	0.001	15525517	409.9	NS	---			----
	Total Col1Ave (5 peaks):			389.8		Total Col2Ave (4 peaks):			399.6	RPD = 2
	Corrected Ave (4 peaks):			384.8		Corrected Ave (3 peaks):			398.3	RPD = 3
Aroclor-1262	1	10.307	0.001	22726751	354.1	1	10.294	0.002	4626013	254.7
Aroclor-1262	2	10.682	0.002	52942804	322.1	2	10.744	0.008	5691855	366.0
Aroclor-1262	3	11.080	0.000	29976815	513.9	3	11.018	0.003	11541316	328.9
Aroclor-1262	4	11.271	0.002	15525517	234.8	4	11.539	0.002	3346043	235.3
Aroclor-1262	5	11.939	0.000	14068528	242.9	5	12.339	0.000	3076964	239.3
	Total Col1Ave (5 peaks):			333.6		Total Col2Ave (5 peaks):			284.8	RPD = 16
	Corrected Ave (4 peaks):			288.5		Corrected Ave (4 peaks):			264.6	RPD = 9
Aroclor-1268	1	11.197	0.000	12645374	76.1	1	11.539	0.002	3346043	90.6
Aroclor-1268	2	11.271	0.002	15525517	96.7	2	11.599	0.003	8101613	226.9

Aroclor-1268 3	11.669	0.015	7425885	53.8	3	---			0.0
Aroclor-1268 4	12.442	-0.001	4836400	12.9	4	12.826	0.004	901928	11.1

Total Col1Ave (4 peaks): 59.9 Total Col2Ave (3 peaks): 109.5 RPD = 59*

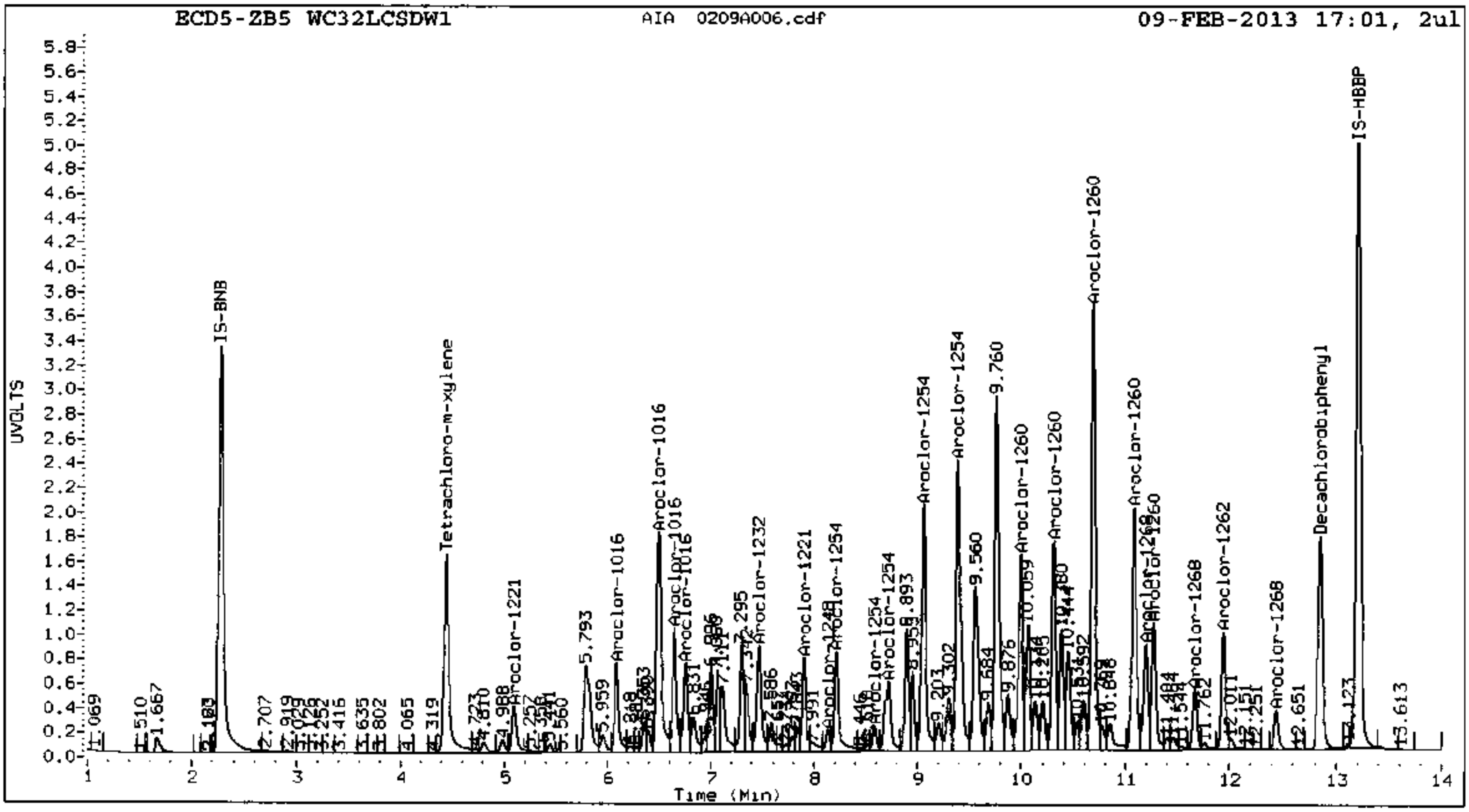
Corrected Ave (3 peaks): 47.6 Corrected Ave: < 3 Peaks

Total PCB Area Col1 (4.541 - 12.748) = 663106553 Col1 Total PCB = 0.9 ppm*

Total PCB Area Col2 (4.547 - 13.139) = 139747124 Col2 Total PCB = 1.0 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.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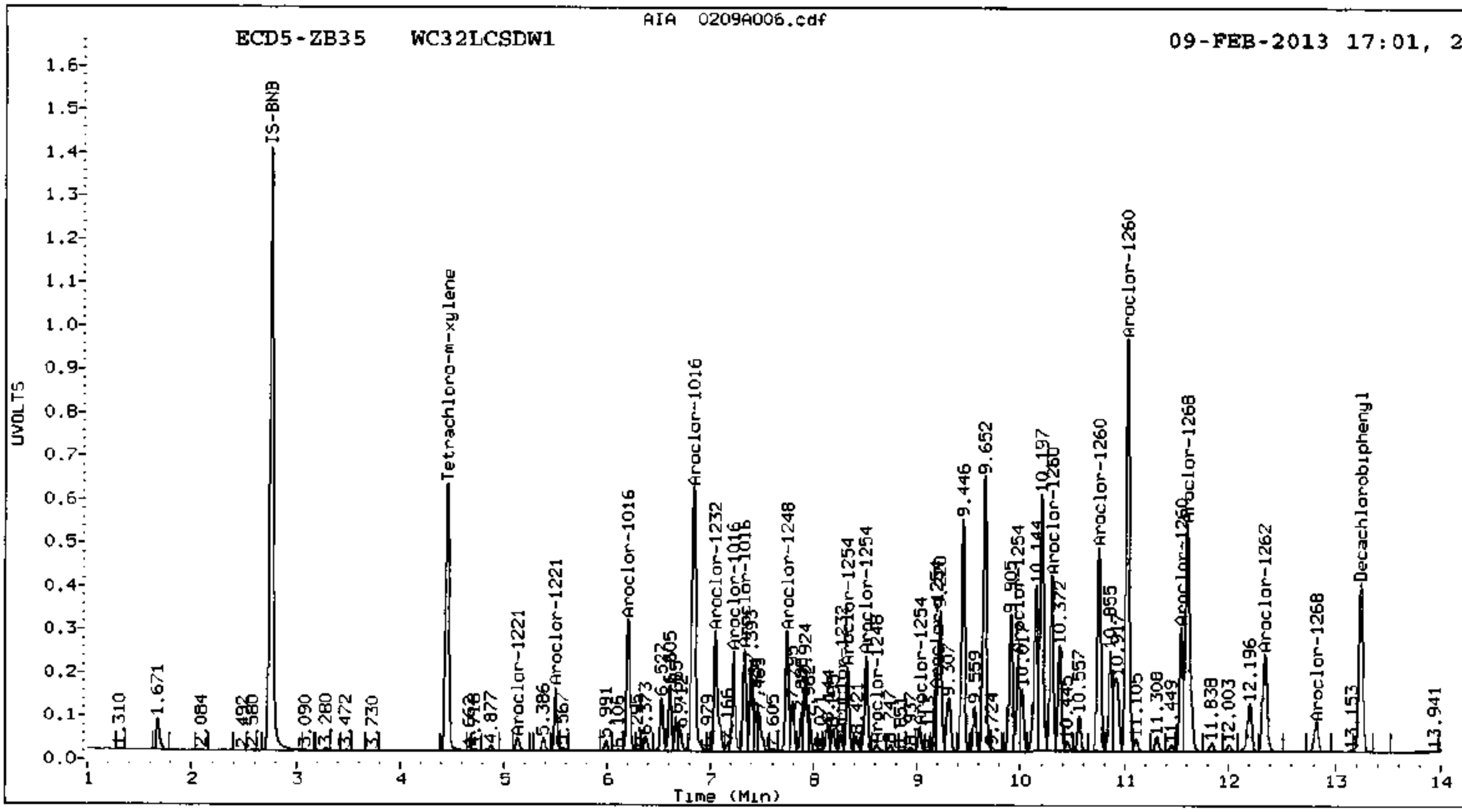
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Aroclor-1016
Aroclor-1221
Aroclor-1232
Aroclor-1248
Aroclor-1254
Aroclor-1260
Aroclor-1262
Aroclor-1268
Decachlorobiphenyl
IS-HBBP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Time (Min)
IS-BNB
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Aroclor-1221
Aroclor-1232
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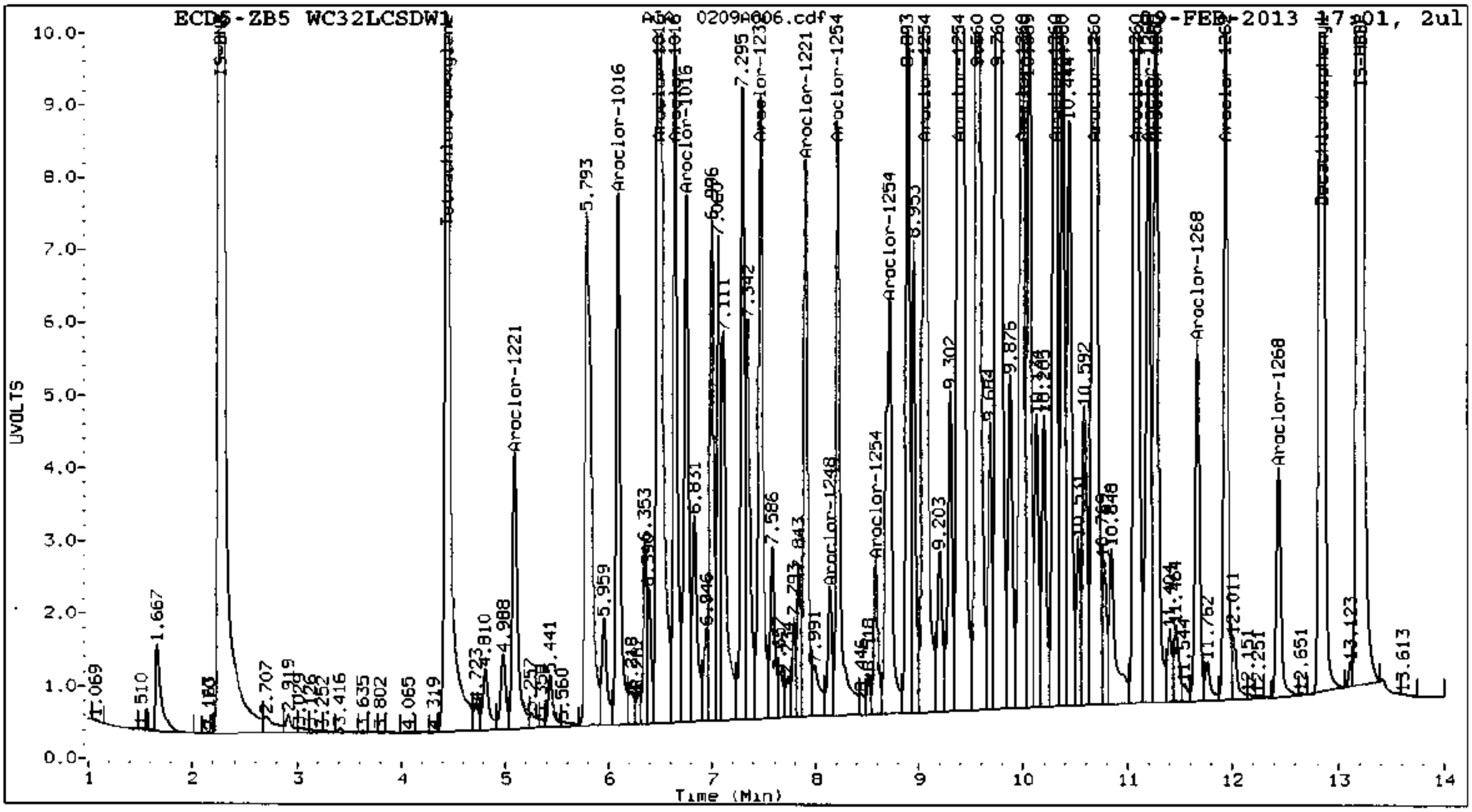
Aroclor-1268
Decachlorobiphenyl

WC32 01042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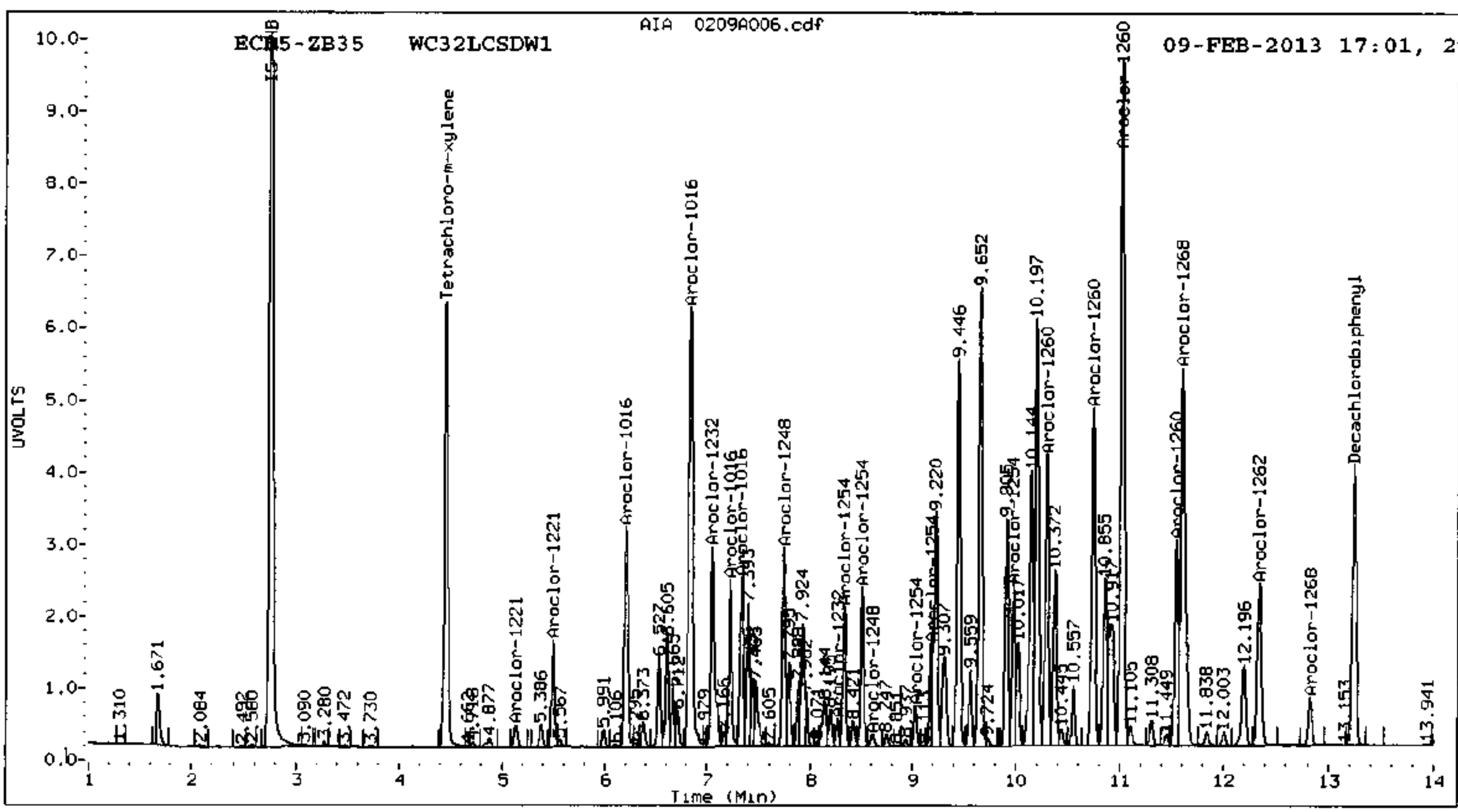
Time (Min)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UVOLTS
Time (Min)

WC32 : 01940

Analytical Resources Inc.
Dual Column PCBs by SW8082

Data file 1: 20130128.b/0209-1.b/0209A008.d
Data file 2: 20130128.b/0209-2.b/0209A008.d
Method: /chem2/ecd5.i/20130128.b/PCB1.m
Compound Sublist: PCB
Instrument, Inj. Vol.: ecd5.i, 2ul
Quant Method: Internal Std

ARI ID: WC32I
Client ID: SG-05-ER-013113
Injection Date: 09-FEB-2013 17:40
Ical Date: 28-JAN-2013
Matrix: WATER
Dilution Factor: 1.000

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.441	0.000	26108212	4.451	0.003	7022725	28.2	29.1	2.9	Tetrachloro-m-xylen
12.848	0.000	27023075	13.239	0.000	5445652	21.1	22.1	4.6	Decachlorobiphenyl

* Indicates RPD > 40%
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE PERCENT RECOVERY

SURROGATE	Col1	Col2
Tetrachloro-m-xylene	70.6	72.7
Decachlorobiphenyl	52.8	55.2

JL 02/11/13

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	44738954	52160284	16.6
Hexabromobiphenyl	59848867	73866717	23.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	14899855	16466180	10.5
Hexabromobiphenyl	12307480	14677278	19.3

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 28-JAN-2013
<- Indicates standard response outside Limits (-50 to +100%)

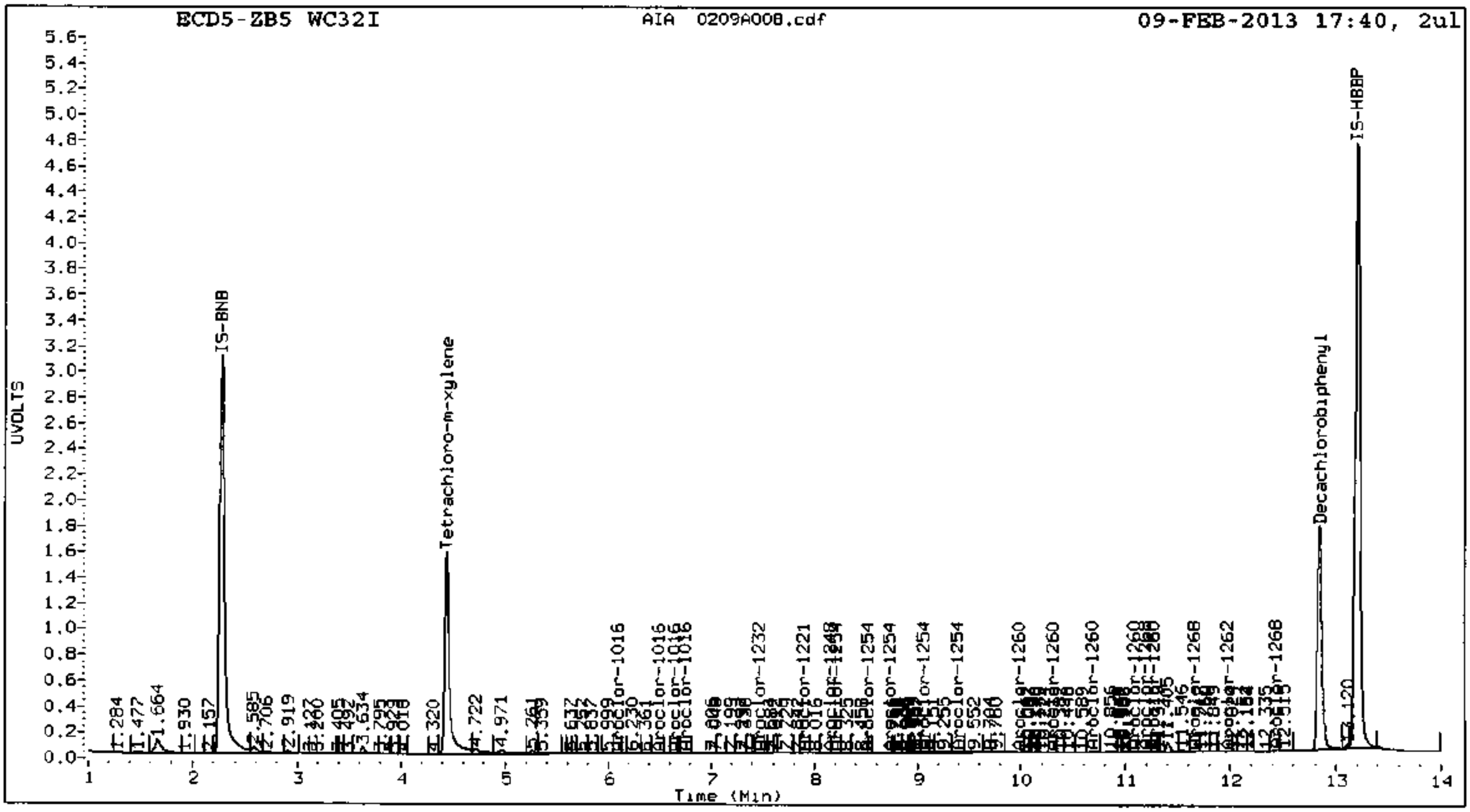
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
	ZB5 Col					ZB35 Col				
Aroclor-1016	1	6.089	0.001	12653	0.5	1	---			0.0
Aroclor-1016	2	6.490	-0.002	27182	0.4	2	---			0.0
Aroclor-1016	3	6.648	0.006	15088	0.5	3	---			0.0
Aroclor-1016	4	6.755	0.002	51400	2.2	4	---			0.0
Total Col1Ave (4 peaks):				0.9		Col2Ave: <3 Quant Peaks				
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	6.490	-0.005	27182	4.0	2	5.152	0.004	92793	34.7
Aroclor-1221	3	7.901	-0.002	56026	6.2	3	---			0.0
Aroclor-1221	NS	---			----	4	5.505	0.007	17138	3.4
Col1Ave: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	6.089	-0.001	12653	1.3	1	---			0.0
Aroclor-1232	2	6.490	-0.004	27182	0.9	2	---			0.0
Aroclor-1232	3	7.468	0.001	34605	2.4	3	---			0.0
Aroclor-1232	4	7.901	0.004	56026	3.3	4	---			0.0
Total Col1Ave (4 peaks):				2.0		Col2Ave: <3 Quant Peaks				
Aroclor-1242	1	6.089	0.000	12653	0.7	1	---			0.0
Aroclor-1242	2	6.490	-0.005	27182	0.5	2	---			0.0
Aroclor-1242	3	6.648	0.004	15088	0.6	3	---			0.0
Aroclor-1242	4	7.901	0.005	56026	1.9	4	---			0.0
Total Col1Ave (4 peaks):				0.9		Col2Ave: <3 Quant Peaks				
Aroclor-1248	1	6.490	0.001	27182	0.7	1	---			0.0
Aroclor-1248	2	7.468	0.002	34605	0.9	2	---			0.0
Aroclor-1248	3	7.901	0.006	56026	1.1	3	---			0.0
Aroclor-1248	4	8.150	0.019	56523	1.5	4	---			0.0
Total Col1Ave (4 peaks):				1.0		Col2Ave: <3 Quant Peaks				
Aroclor-1254	1	8.214	-0.002	72678	1.4	1	---			0.0
Aroclor-1254	2	8.519	-0.069	16670	0.5	2	---			0.0
Aroclor-1254	3	8.725	0.002	140095	2.1	3	---			0.0
Aroclor-1254	4	9.057	-0.017	99106	1.4	4	---			0.0
Aroclor-1254	5	9.387	-0.046	118715	2.6	5	---			0.0
Total Col1Ave (5 peaks):				1.6		Col2Ave: <3 Quant Peaks				
Aroclor-1260	1	9.984	-0.005	131590	2.4	1	---			0.0
Aroclor-1260	2	10.305	0.000	60231	1.1	2	---			0.0
Aroclor-1260	3	10.686	0.006	155617	1.2	3	---			0.0
Aroclor-1260	4	11.083	0.003	78539	1.1	4	---			0.0
Aroclor-1260	5	11.270	0.001	56211	1.6	NS	---			----
Total Col1Ave (5 peaks):				1.5		Col2Ave: <3 Quant Peaks				
Aroclor-1262	1	10.305	-0.001	60231	1.0	1	---			0.0
Aroclor-1262	2	10.686	0.006	155617	1.0	2	10.805	0.069	14153	1.0
Aroclor-1262	3	11.083	0.003	78539	1.4	3	---			0.0
Aroclor-1262	4	11.270	0.001	56211	0.9	4	---			0.0
Aroclor-1262	5	11.971	0.032	214843	3.9	5	12.376	0.036	31611	2.6
Total Col1Ave (5 peaks):				1.6		Col2Ave: <3 Quant Peaks				
Aroclor-1268	1	11.191	-0.006	109097	0.7	1	---			0.0
Aroclor-1268	2	11.270	0.001	56211	0.4	2	---			0.0
Aroclor-1268	3	11.655	0.001	123248	0.9	3	---			0.0
Aroclor-1268	4	12.432	-0.010	79405	0.2	4	---			0.0
Total Col1Ave (4 peaks):				0.6		Col2Ave: <3 Quant Peaks				

Total PCB Area Col1 (4.541 - 12.748) = 8640888 Col1 Total PCB = 0.0 ppm*

Total PCB Area Col2 (4.547 - 13.139) = 596358 Col2 Total PCB = 0.0 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.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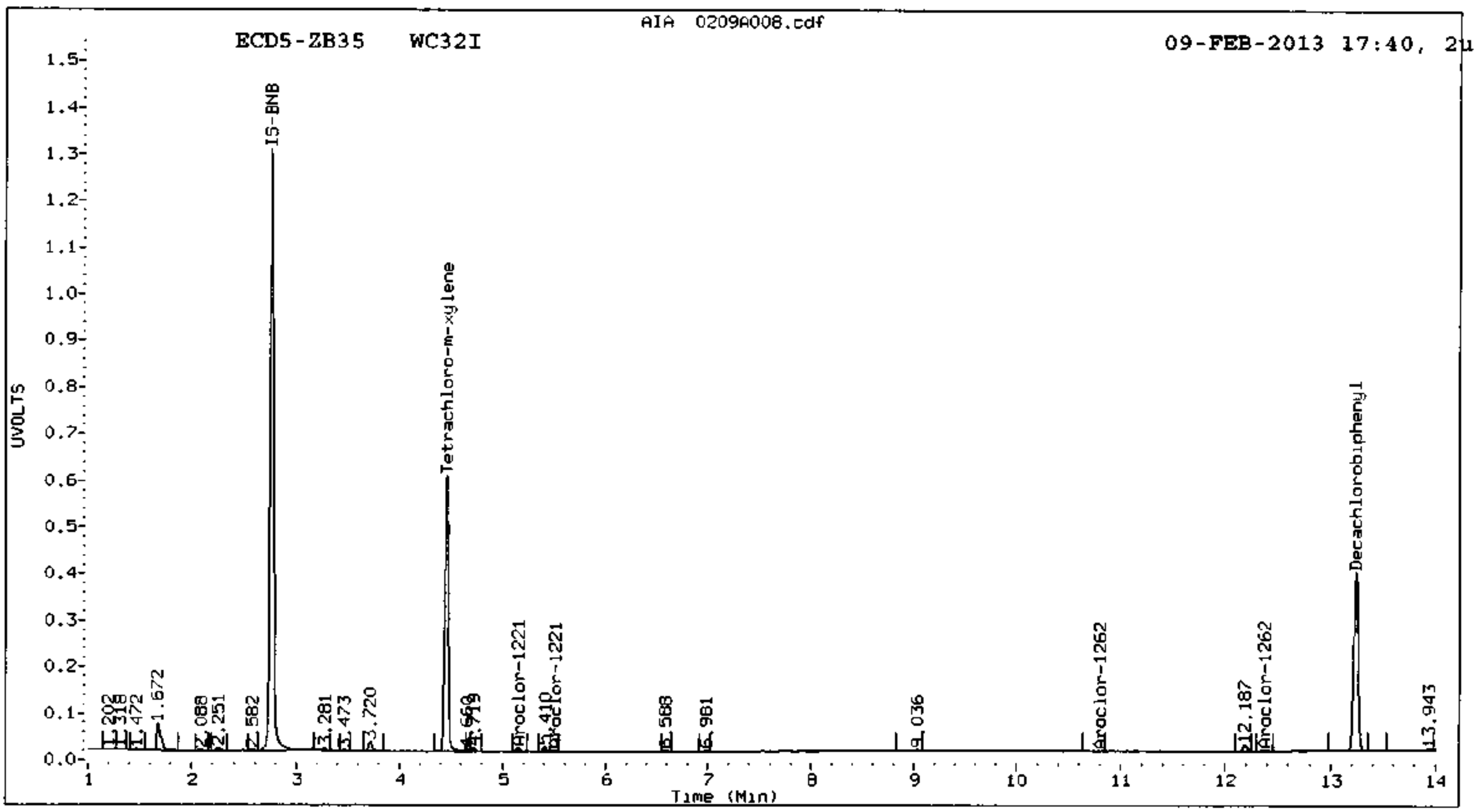
AIA 0209A008.cdf
09-FEB-2013 17:40, 2ul
UVOLTS
IS-BNB
Tetrachloro-m-xylene
Decachlorobiphenyl
IS-HBBP
Time (Min)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AIA 0209A008.cdf
09-FEB-2013 17:40, 2u
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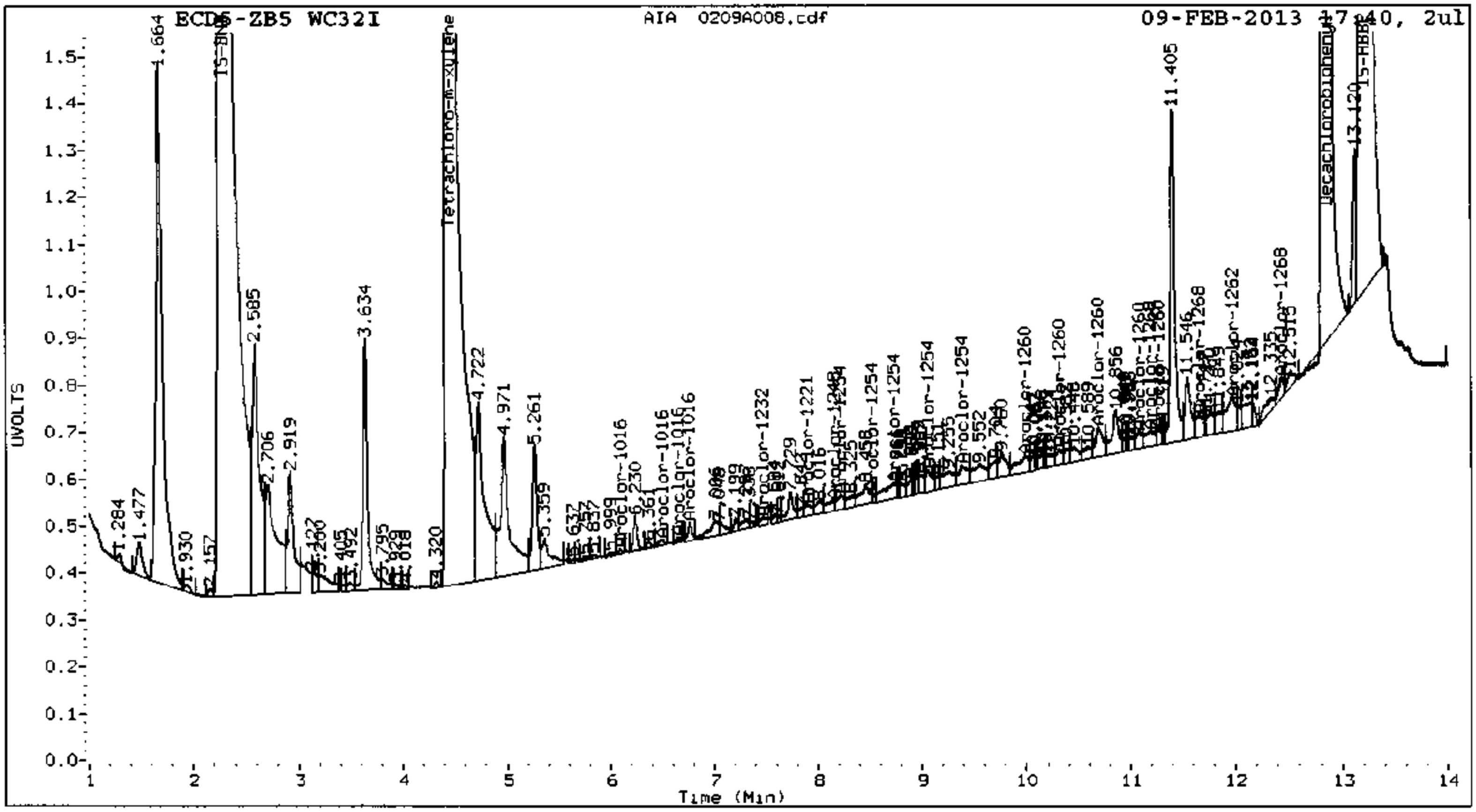
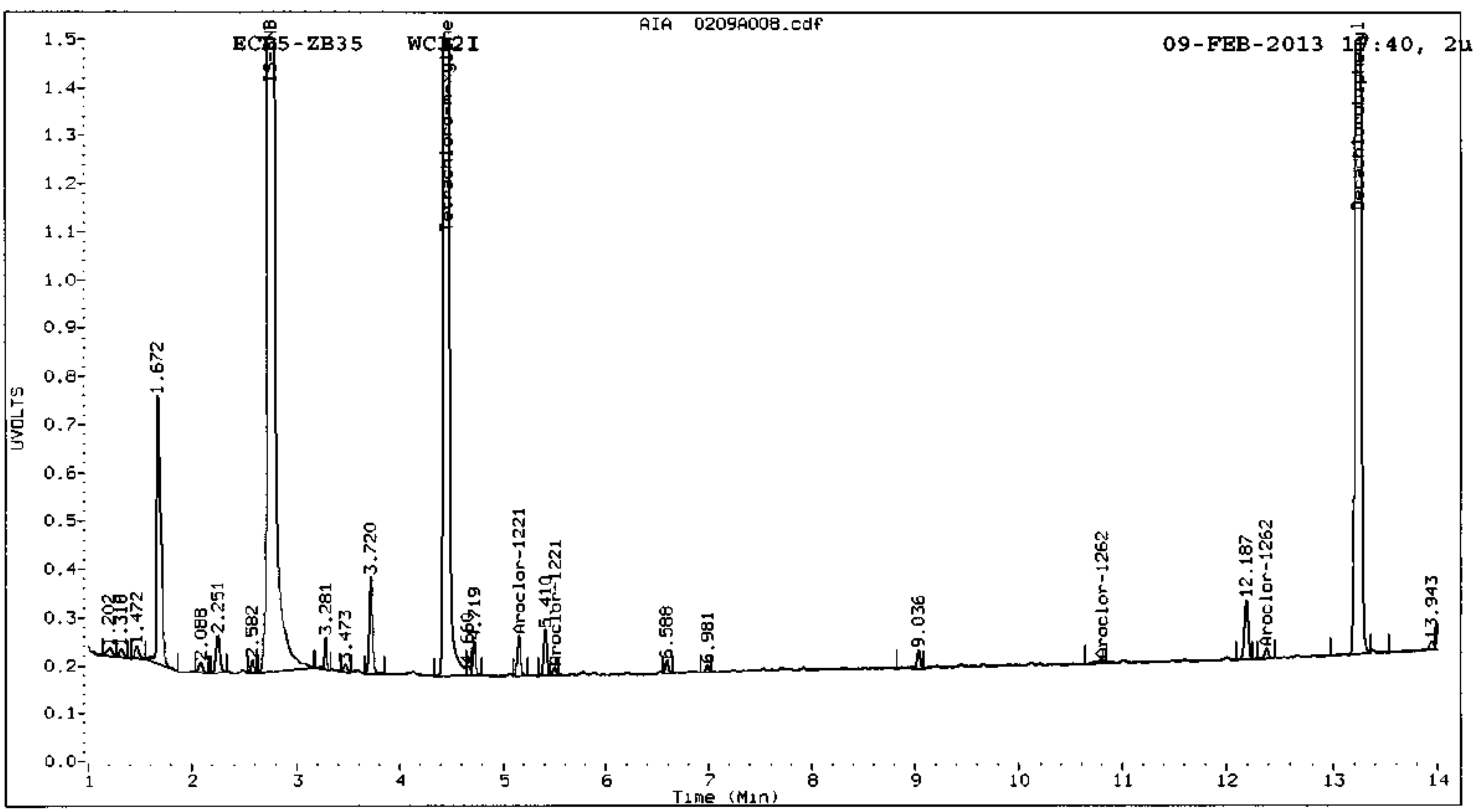
IS-BNB
Tetrachloro-m-xylene
Aroclor-1221
Aroclor-1262
Decachlorobiphenyl
Time (Min)


ECD5-ZB5 WC32I
AIA 0209A008.cdf
09-FEB-2013 17:40, 2ul
UVOLTS
Time (Min)


ECD5-ZB35 WC32I
AIA 0209A008.cdf
09-FEB-2013 17:40, 2u
UVOLTS
Time (Min)

Analytical Resources Inc.
Dual Column PCBs by SW8082

Data file 1: 20130128.b/0209-1.b/0209A014.d
Data file 2: 20130128.b/0209-2.b/0209A014.d
Method: /chem2/ecd5.i/20130128.b/PCB1.m
Compound Sublist: AR1660
Instrument, Inj. Vol.: ecd5.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660
Client ID:
Injection Date: 09-FEB-2013 19:39
Ical Date: 28-JAN-2013
Matrix: NONE
Dilution Factor: 1.000

ZB5 Col RT	ZB5 Col Shift	ZB5 Col Response	ZB35 Col RT	ZB35 Col Shift	ZB35 Col Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
4.440	-0.001	18302235	4.449	0.001	4835099	19.0	19.6	3.3	Tetrachloro-m-xylen
12.849	0.000	23519493	13.239	0.000	4568953	17.6	18.0	2.3	Decachlorobiphenyl

* Indicates RPD > 40%
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE PERCENT RECOVERY

SURROGATE	Col1	Col2
Tetrachloro-m-xylene	47.5	49.1
Decachlorobiphenyl	43.9	44.9

JW 2/11/13

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	44738954	54341039	21.5
Hexabromobiphenyl	59848867	77236626	29.1

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	14899855	16780585	12.6
Hexabromobiphenyl	12307480	15135323	23.0

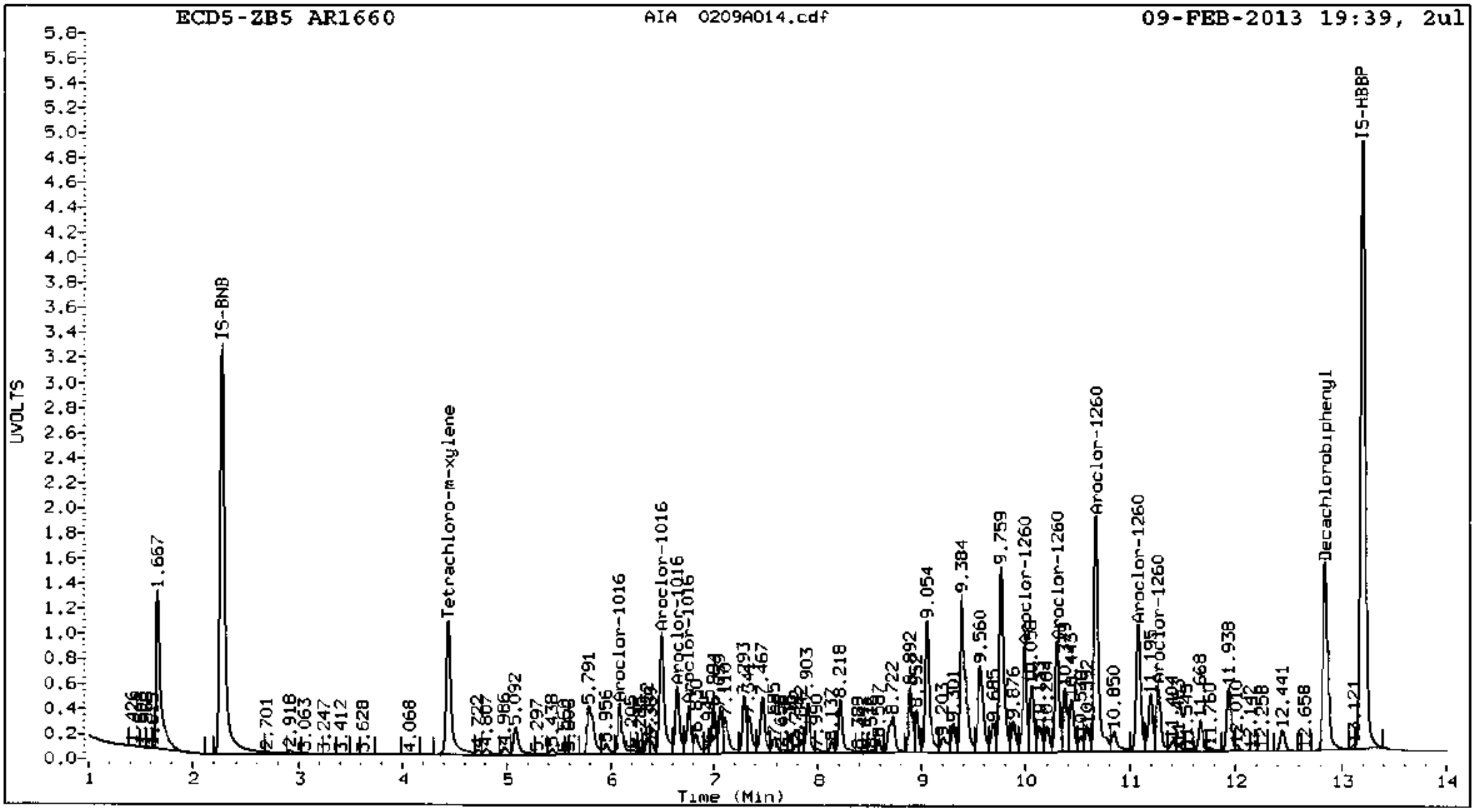
* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 28-JAN-2013
<- Indicates standard response outside Limits (-50 to +100%)

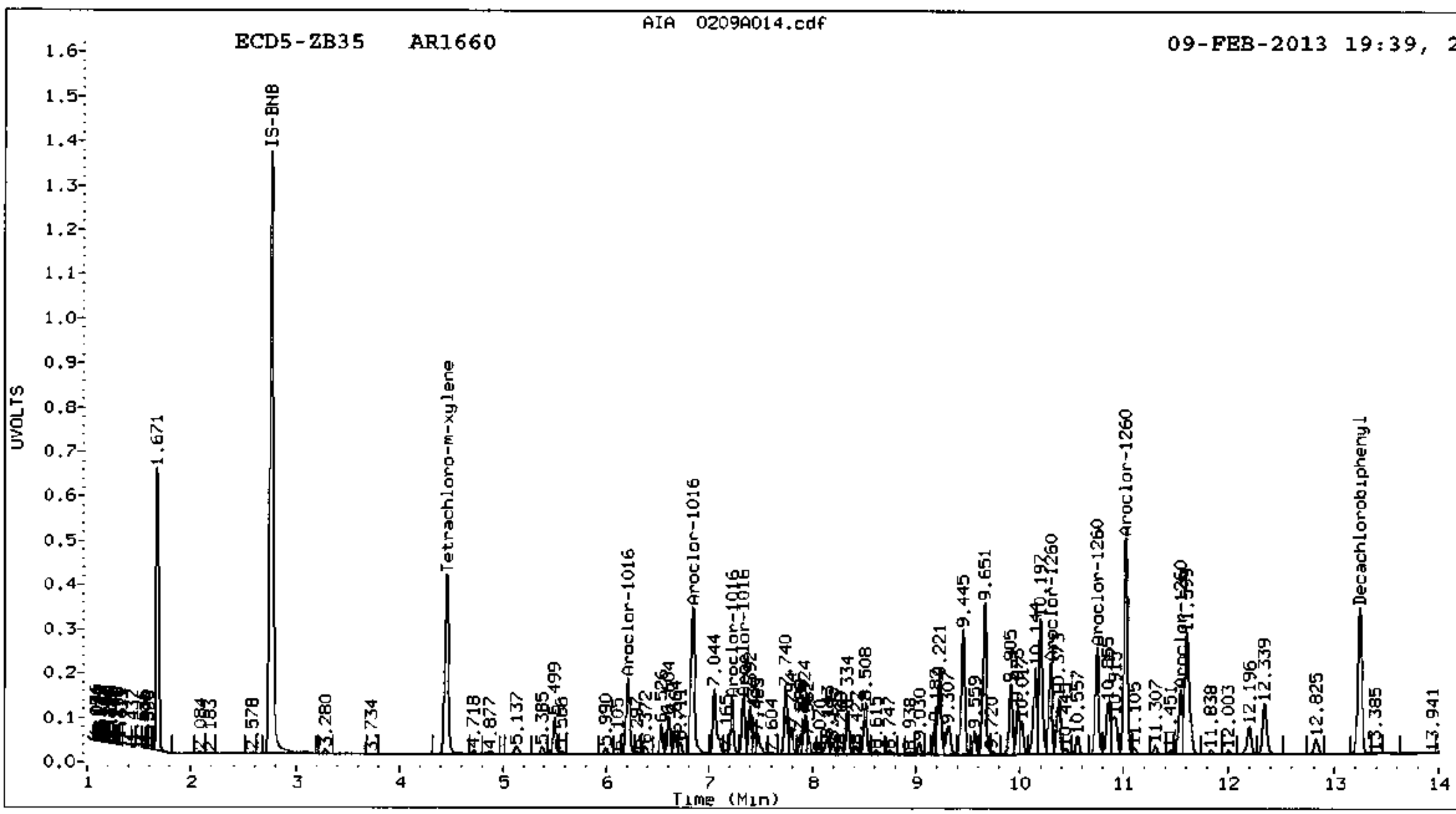
		ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	6.088	0.000	5818211	231.0	1	6.201	0.000	2225376	231.4
Aroclor-1016	2	6.493	0.000	18231795	227.6	2	6.835	0.003	4784870	234.0
Aroclor-1016	3	6.643	0.001	7947271	233.3	3	7.219	0.001	1266039	237.7
Aroclor-1016	4	6.754	0.001	5748543	240.4	4	7.328	0.001	1399553	231.6
	Total Col1Ave (4 peaks):			233.1		Total Col2Ave (4 peaks):		233.7	RPD = 0	
	Corrected Ave (3 peaks):			230.6		Corrected Ave (3 peaks):		232.3	RPD = 1	
Aroclor-1260	1	9.990	0.001	11938916	205.2	1	10.295	0.002	2361773	208.5
Aroclor-1260	2	10.306	0.001	11842700	201.1	2	10.744	0.002	2907028	208.8
Aroclor-1260	3	10.680	0.000	29100976	213.3	3	11.018	0.001	5875054	210.5
Aroclor-1260	4	11.079	0.000	15639341	204.7	4	11.540	0.002	1730844	210.6
Aroclor-1260	5	11.270	0.000	8247304	219.8	NS	---			----
	Total Col1Ave (5 peaks):			208.8		Total Col2Ave (4 peaks):		209.6	RPD = 0	
	Corrected Ave (4 peaks):			206.1		Corrected Ave (3 peaks):		209.3	RPD = 2	

Total PCB Area Col1 (4.541 - 12.748) = 356105779   Col1 Total PCB = 0.5 ppm*

Total PCB Area Col2 (4.547 - 13.139) = 73039253   Col2 Total PCB = 0.6 ppm*

* Quantitated against AR1660 0.25ppm in Ical


ECD5-ZB5 AR1660
AIA 0209A014.cdf
09-FEB-2013 19:39, 2ul
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Aroclor-1016
Aroclor-1260
Decachlorobiphenyl
IS-HBBP


ECD5-ZB35 AR1660
AIA 0209A014.cdf
09-FEB-2013 19:39, 2u
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Aroclor-1016
Aroclor-1260
Decachlorobiphenyl

WC02 01951

Analytical Resources Inc.
Dual Column PCBs by SW8082

Data file 1: 20130128.b/0209-1.b/0209A015.d
Data file 2: 20130128.b/0209-2.b/0209A015.d
Method: /chem2/ecd5.i/20130128.b/PCB1.m
Compound Sublist: AR1254
Instrument, Inj. Vol.: ecd5.i, 2ul
Quant Method: Internal Std

ARI ID: AR1254
Client ID:
Injection Date: 09-FEB-2013 19:58
Ical Date: 28-JAN-2013
Matrix: NONE
Dilution Factor: 1.000

ZB5 Col RT	Shift	Response	ZB35 Col RT	Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
4.441	0.000	17793185	4.450	0.003	4760314	18.7	19.6	4.5	Tetrachloro-m-xylen
12.849	0.000	22723962	13.239	0.000	4414941	17.6	18.0	1.9	Decachlorobiphenyl

* Indicates RPD > 40%
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE PERCENT RECOVERY

SURROGATE	Col1	Col2
Tetrachloro-m-xylene	46.8	48.9
Decachlorobiphenyl	44.1	45.0

JO2/11/13

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	44738954	53676008	20.0
Hexabromobiphenyl	59848867	74313871	24.2

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	14899855	16587579	11.3
Hexabromobiphenyl	12307480	14616992	18.8

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 28-JAN-2013
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1254 1	8.216	0.000	12064011	229.5	1	8.333	0.000	1775843	245.0
Aroclor-1254 2	8.587	-0.001	8238490	234.8	2	8.507	0.000	2275468	244.5
Aroclor-1254 3	8.723	-0.001	16604320	243.9	3	9.029	0.000	1765149	244.7
Aroclor-1254 4	9.073	0.000	18001895	239.6	4	9.180	0.000	3783119	241.1
Aroclor-1254 5	9.433	0.001	11420645	242.5	5	9.964	0.001	2318667	242.1

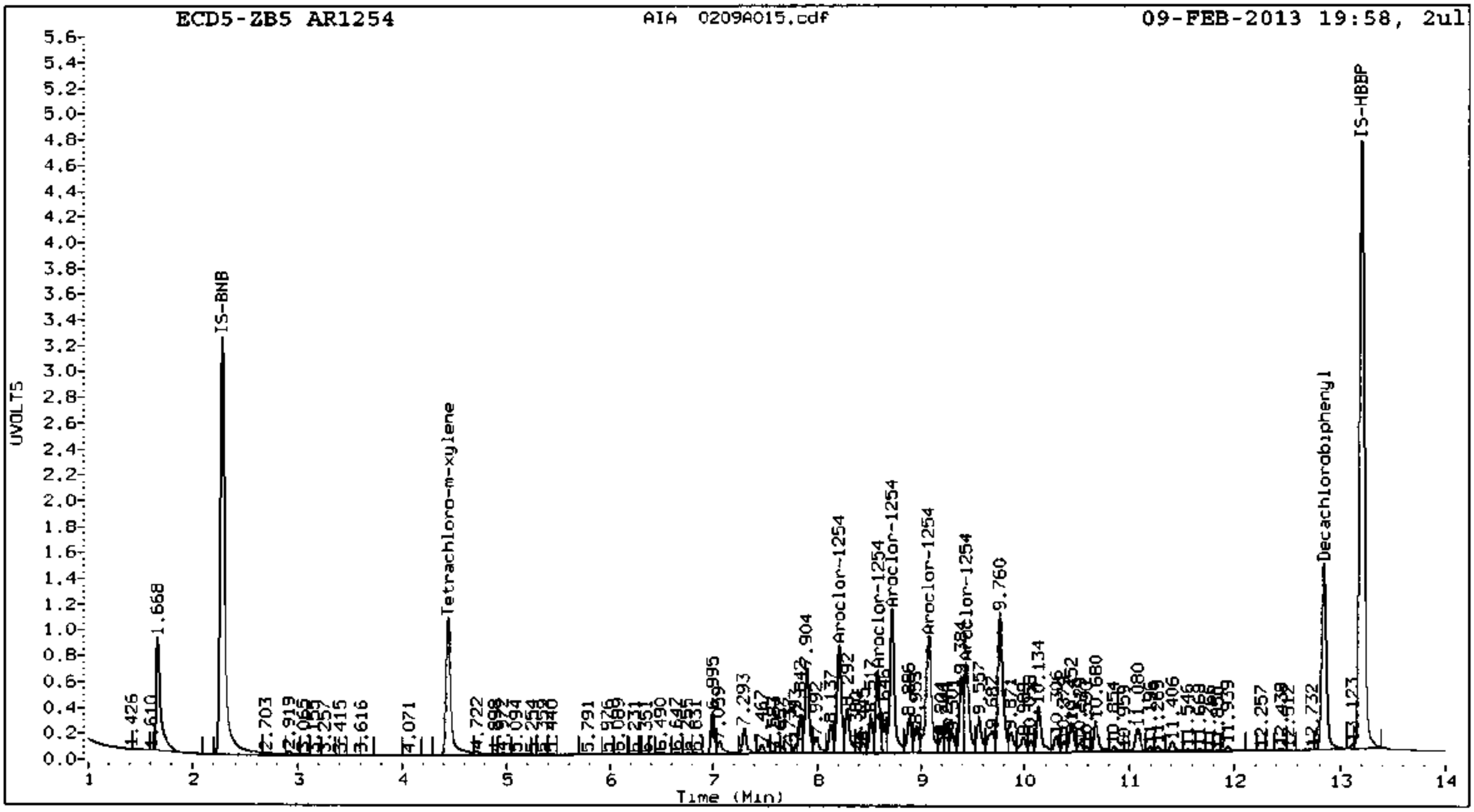
Total Col1Ave (5 peaks): 238.1 Total Col2Ave (5 peaks): 243.5 RPD = 2

Corrected Ave (4 peaks): 236.6 Corrected Ave (4 peaks): 243.1 RPD = 3

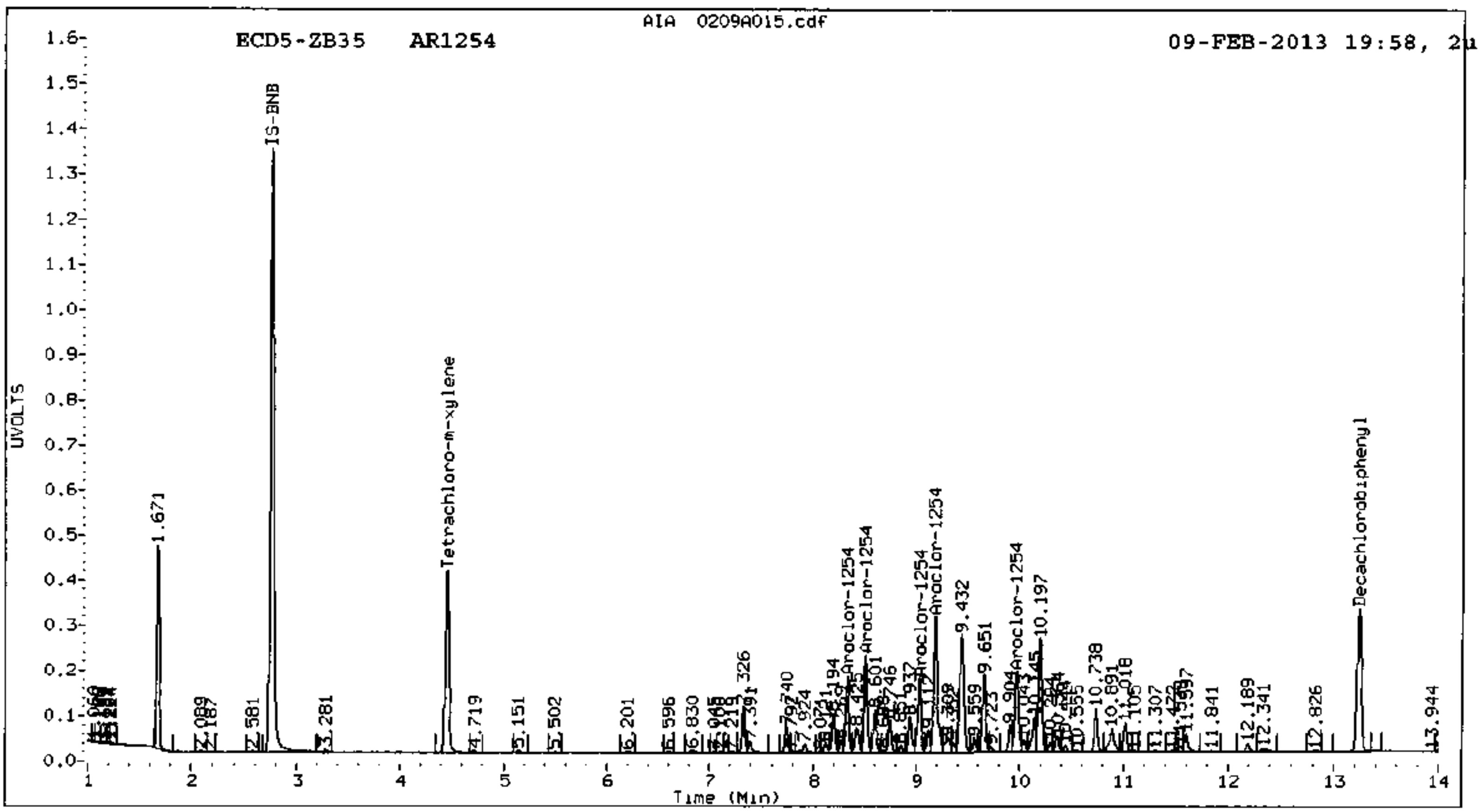
Total PCB Area Col1 (4.541 - 12.748) = 186546895 Col1 Total PCB = 0.3 ppm*

Total PCB Area Col2 (4.547 - 13.139) = 37196812 Col2 Total PCB = 0.3 ppm*

* Quantitated against AR1660 0.25ppm in Ical



ECD5-ZB5 AR1254
AIA 0209A015.cdf
09-FEB-2013 19:58, 2ul
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Aroclor-1254
Decachlorobiphenyl
IS-HBBP



ECD5-ZB35 AR1254
AIA 0209A015.cdf
09-FEB-2013 19:58, 2u
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Aroclor-1254
Decachlorobiphenyl

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC Analyst Notes / Corrective Action Log

ARI Project ID: WC32 / WC33 Client ID: POB Harris

ARI SOP: 403S(PCB) 405S(Herb) 407S(TPH-D) 409S(HCID) 412S(PCP) 423S(Pest)
427S(Dir Inj) 428S(EPH) 432S(EDB) Other

Parameter(s): PCB's TCMX DCB

Instrument: FID-3A FID-3B FID-4A FID-4B FID-5 FID-7 FID-8
FID-9 ECD-1 ECD-5 ECD-6 ECD-7

Dates: Curve: 01/28/13 Analysis Start: 02/09/13

Endrin/DDT Breakdown <15%? YES / NO / NA
Method Blank In Control? YES / NO

ICal Meets RF & %RSD Criteria? YES / NO
LCS/LCSD Recovery In Control? YES / NO

CCal Meets RF & %RSD Criteria? YES / NO
Surrogate Recovery In Control? YES / NO

Manual Integrations for ICal? YES / NO
Manual Integrations for Samples? YES / NO

Internal Standard Meets Criteria? YES / NO / NA
Special Analysis Criteria Met? YES / NO / NA

Detail problems, corrective actions and/or other pertinent information below (use reverse side when necessary): Skimmed baseline rise in sample WC33G went w/ best fit. y-flag's are for ranges GMS inflated by misc peaks throughout GMSD rec. is better fit pr 02/12/13
Sample Matrix homogenty -

Additional Details on Reverse: Yes / No

Analyst: pr **Date:** 02/12/13

Reviewer: [illegible] **Date:** 2/12/13

Analytical Resources Inc.: Organics Instrument Log

ECD-5 Serial No.: US00034118

Date: 02/09/13 Analysis: PCB's Analyst: JL

Column 1 Serial No.: 196398 Column Type: ZB5

Column 2 Serial No.: 182257 Column Type: ZB35

GC Method: PCB 2 ICal Date: 01/23/13 Injection Volume: 2µL

IS	Ical/Ccal	ICV
2006-1	1930-1,2,3,4,5,6	2009-2,3,4,5,6,7

Document All Maintenance Tasks In StarLIMS

	Inject Date/Time	Filename	DF	LabID
1	09-FEB-2013 15:20	0209A001.d	1	RINSE
2	09-FEB-2013 15:40	0209A002.d	1	AR1660
3	09-FEB-2013 16:00	0209A003.d	1	AR1242
4	09-FEB-2013 16:21	0209A004.d	1	WC32MBW1
5	09-FEB-2013 16:41	0209A005.d	1	WC32LCSW1
6	09-FEB-2013 17:01	0209A006.d	1	WC32LCSDW1
7	09-FEB-2013 17:21	0209A007.d	1	WC32QLS
8	09-FEB-2013 17:40	0209A008.d	1	WC32I
9	09-FEB-2013 18:00	0209A009.d	5	WC55A
10	09-FEB-2013 18:20	0209A010.d	1	WC08MBW1
11	09-FEB-2013 18:40	0209A011.d	1	WC08LCSW1
12	09-FEB-2013 18:59	0209A012.d	1	WC08LCSDW1
13	09-FEB-2013 19:19	0209A013.d	1	WC08A
14	09-FEB-2013 19:39	0209A014.d	1	AR1660
15	09-FEB-2013 19:58	0209A015.d	1	AR1254
16	09-FEB-2013 20:19	0209A016.d	1	WC03MBS1
17	09-FEB-2013 20:38	0209A017.d	1	WC03LCSS1
18	09-FEB-2013 20:58	0209A018.d	1	WC03LCSDS1
19	09-FEB-2013 21:19	0209A019.d	1	WC03QLS
20	09-FEB-2013 21:39	0209A020.d	1	WC03A
21	09-FEB-2013 21:59	0209A021.d	5	WC03B
22	09-FEB-2013 22:19	0209A022.d	5	WC03C
23	09-FEB-2013 22:40	0209A023.d	1	WC03D
24	09-FEB-2013 23:00	0209A024.d	10	WC03E
25	09-FEB-2013 23:20	0209A025.d	5	WC03F
26	09-FEB-2013 23:40	0209A026.d	1	AR1660
27	10-FEB-2013 00:01	0209A027.d	1	AR1248
28	10-FEB-2013 00:21	0209A028.d	1	WC03G
29	10-FEB-2013 00:41	0209A029.d	10	WC03H
30	10-FEB-2013 01:01	0209A030.d	1	WC03I
31	10-FEB-2013 01:22	0209A031.d	1	WC03J
32	10-FEB-2013 01:42	0209A032.d	1	WC03JMS
33	10-FEB-2013 02:02	0209A033.d	1	WC03JMSD
34	10-FEB-2013 02:22	0209A034.d	1	WC03K
35	10-FEB-2013 02:43	0209A035.d	1	WC03L
36	10-FEB-2013 03:03	0209A036.d	10	WC03M
37	10-FEB-2013 03:23	0209A037.d	1	WC03N
38	10-FEB-2013 03:43	0209A038.d	1	AR1660
39	10-FEB-2013 04:04	0209A039.d	1	AR1242
40	10-FEB-2013 04:24	0209A040.d	1	WC32MBS1
41	10-FEB-2013 04:44	0209A041.d	1	WC32LCSS1
42	10-FEB-2013 05:04	0209A042.d	1	WC32LCSDS1
43	10-FEB-2013 05:24	0209A043.d	1	WC3QLS
44	10-FEB-2013 05:44	0209A044.d	1	WC32A
45	10-FEB-2013 06:04	0209A045.d	1	WC32B
46	10-FEB-2013 06:24	0209A046.d	1	WC32C
47	10-FEB-2013 06:43	0209A047.d	1	WC32D
48	10-FEB-2013 07:03	0209A048.d	1	WC32E
49	10-FEB-2013 07:24	0209A049.d	1	WC32F
50	10-FEB-2013 07:44	0209A050.d	1	AR1660
51	10-FEB-2013 08:04	0209A051.d	1	AR1254
52	10-FEB-2013 08:24	0209A052.d	1	WC32G
53	10-FEB-2013 08:45	0209A053.d	1	WC32GMS
54	10-FEB-2013 09:05	0209A054.d	1	WC32GMSD
55	10-FEB-2013 09:24	0209A055.d	1	WC32H
56	10-FEB-2013 09:45	0209A056.d	1	WC33G
57	10-FEB-2013 10:05	0209A057.d	1	AR1660
58	10-FEB-2013 10:25	0209A058.d	1	AR1248

JL 02/11/13

Every line must contain information or be lined out. Make all entries legible.
Start a new page for each QC period. Document All Maintenance Tasks In StarLIMS

Analytical Resources Inc.
Dual Column PCBs by SW8082

Data file 1: 20130128.b/0209-1.b/0209A038.d
Data file 2: 20130128.b/0209-2.b/0209A038.d
Method: /chem2/ecd5.i/20130128.b/PCB1.m
Compound Sublist: AR1660
Instrument, Inj. Vol.: ecd5.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660
Client ID:
Injection Date: 10-FEB-2013 03:43
Ical Date: 28-JAN-2013
Matrix: NONE
Dilution Factor: 1.000

ZB5 Col RT	ZB5 Col Shift	ZB5 Col Response	ZB35 Col RT	ZB35 Col Shift	ZB35 Col Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
4.443	0.002	19070657	4.449	0.002	4823506	18.7	19.1	2.3	Tetrachloro-m-xylen
12.849	0.001	20202880	13.239	0.000	4150151	16.3	17.9	9.1	Decachlorobiphenyl

* Indicates RPD > 40%
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE PERCENT RECOVERY

SURROGATE	Col1	Col2
Tetrachloro-m-xylene	46.7	47.8
Decachlorobiphenyl	40.8	44.6

JK 02/12/13

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	44738954	57643892	28.8
Hexabromobiphenyl	59848867	71523882	19.5

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	14899855	17204970	15.5
Hexabromobiphenyl	12307480	13844405	12.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 28-JAN-2013
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	6.089	0.001	5629714	210.7	1	6.202	0.001	2162601	219.4
Aroclor-1016	2	6.495	0.002	18149771	213.6	2	6.834	0.002	4590136	218.9
Aroclor-1016	3	6.644	0.002	7771941	215.1	3	7.218	0.001	1155877	211.7
Aroclor-1016	4	6.754	0.001	5525571	217.9	4	7.327	0.001	1336045	215.6

Total Col1Ave (4 peaks): 214.3 Total Col2Ave (4 peaks): 216.4 RPD = 1
Corrected Ave (3 peaks): 213.1 Corrected Ave (3 peaks): 215.4 RPD = 1

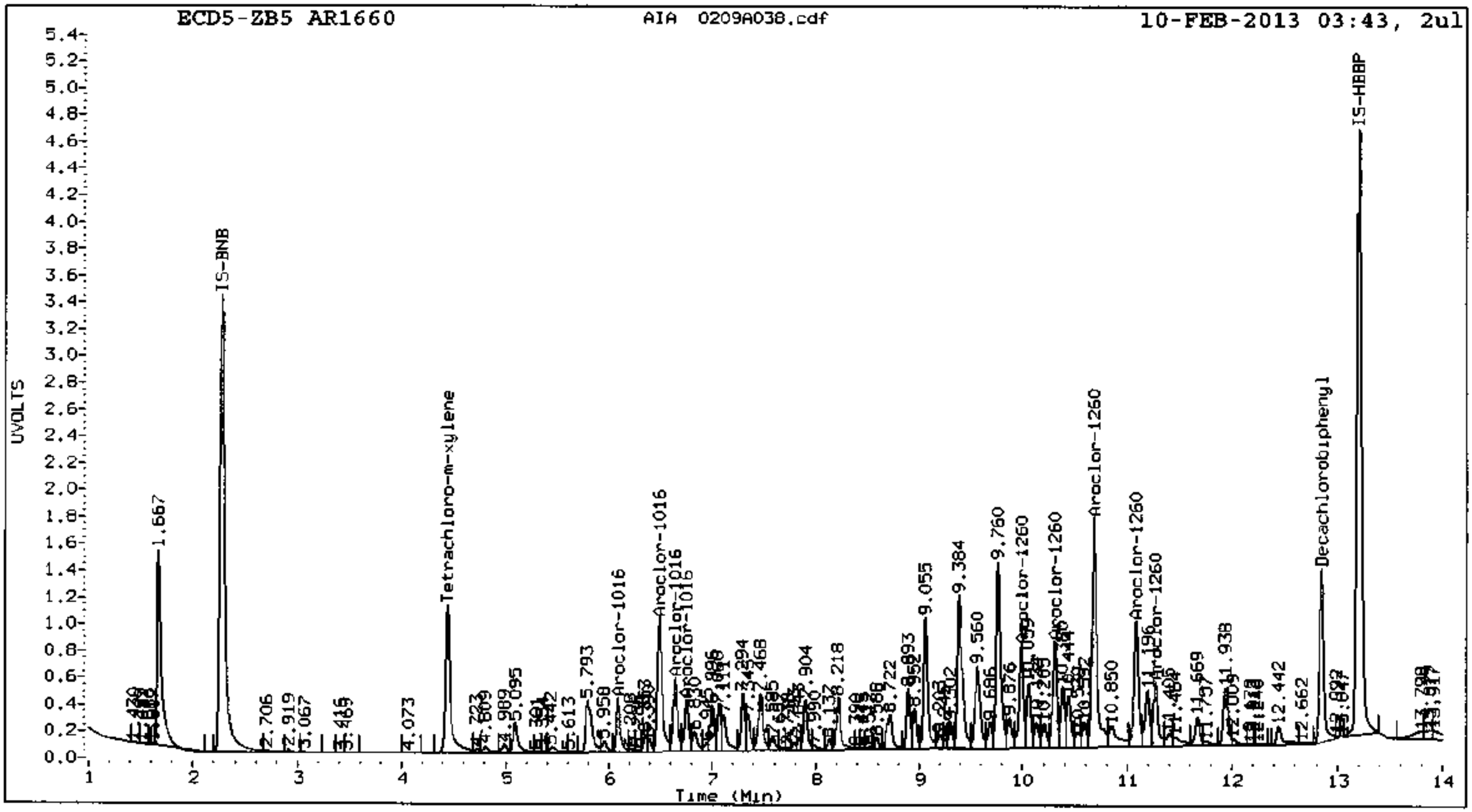
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1260	1	9.990	0.001	10720786	199.0	1	10.294	0.002	2017880	194.8
Aroclor-1260	2	10.307	0.002	10512616	192.8	2	10.744	0.001	2604132	204.5
Aroclor-1260	3	10.681	0.001	27209763	215.4	3	11.018	0.000	5181815	203.0
Aroclor-1260	4	11.080	0.001	14534764	205.5	4	11.539	0.001	1405783	~~187.0~~
Aroclor-1260	5	11.270	0.001	7811069	224.8	NS	---			----

Total Col1Ave (5 peaks): 207.5 Total Col2Ave (4 peaks): ~~197.3~~ RPD = 5
Corrected Ave (4 peaks): 203.2 Corrected Ave (3 peaks): ~~194.9~~ RPD = 4
100.0

Total PCB Area Col1 (4.541 - 12.748) = 328977282 Col1 Total PCB = 0.4 ppm*

Total PCB Area Col2 (4.547 - 13.139) = 67042837 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical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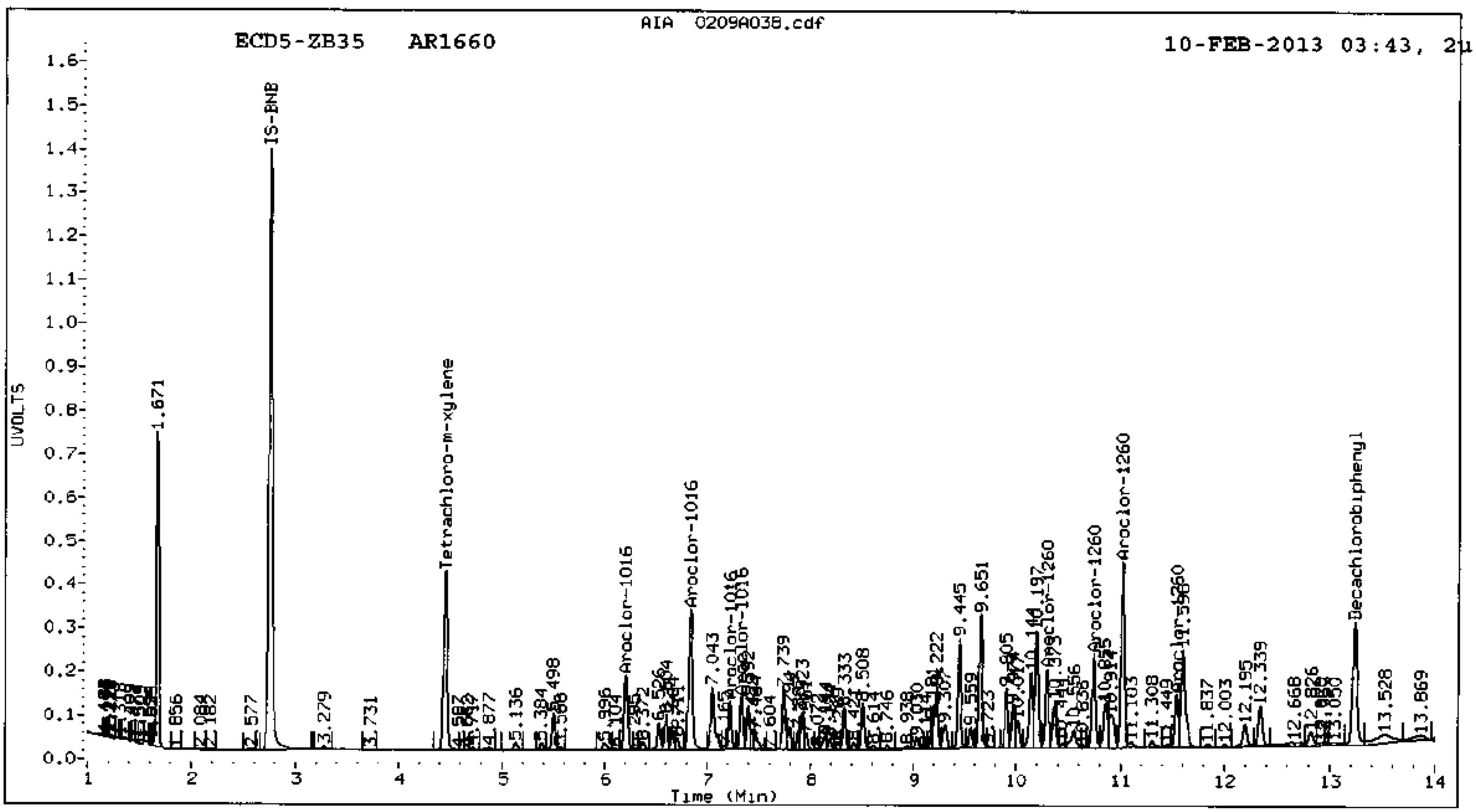
10-FEB-2013 03:43, 2ul
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Aroclor-1016
Aroclor-1260
Decachlorobiphenyl
IS-HBBP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AIA 0209A038.cdf
10-FEB-2013 03:43, 2u
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Aroclor-1016
Aroclor-1260
Decachlorobiphenyl

Analytical Resources Inc.
Dual Column PCBs by SW8082

Data file 1: 20130128.b/0209-1.b/0209A039.d
Data file 2: 20130128.b/0209-2.b/0209A039.d
Method: /chem2/ecd5.i/20130128.b/PCB1.m
Compound Sublist: AR1242
Instrument, Inj. Vol.: ecd5.i, 2ul
Quant Method: Internal Std

ARI ID: AR1242
Client ID:
Injection Date: 10-FEB-2013 04:04
Ical Date: 28-JAN-2013
Matrix: NONE
Dilution Factor: 1.000

ZB5 Col RT	ZB5 Col Shift	ZB5 Col Response	ZB35 Col RT	ZB35 Col Shift	ZB35 Col Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
4.442	0.001	17375101	4.448	0.001	4413849	18.8	19.3	2.7	Tetrachloro-m-xylen
12.849	0.000	19583547	13.239	0.000	3614328	16.8	17.0	0.9	Decachlorobiphenyl

* Indicates RPD > 40%
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE PERCENT RECOVERY

SURROGATE	Col1	Col2
Tetrachloro-m-xylene	46.9	48.2
Decachlorobiphenyl	42.1	42.4

fl 02/12/13

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	44738954	52257759	16.8
Hexabromobiphenyl	59848867	67171415	12.2

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	14899855	15600166	4.7
Hexabromobiphenyl	12307480	12683527	3.1

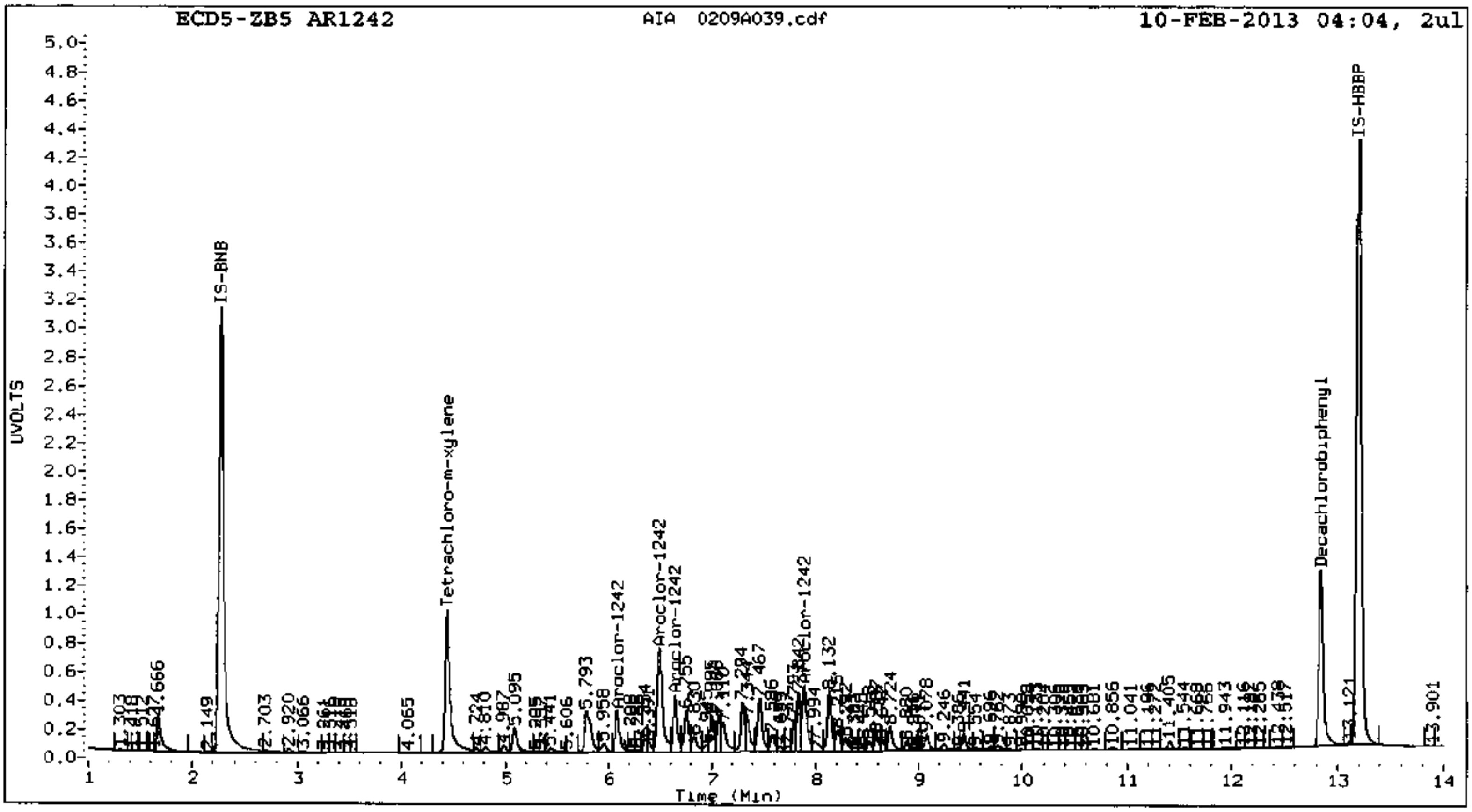
* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 28-JAN-2013
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1242	1	6.089	0.000	4300409	235.8	1	6.202	0.000	1605748	244.2
Aroclor-1242	2	6.495	0.000	13571282	238.4	2	6.835	0.000	3436651	243.4
Aroclor-1242	3	6.644	0.000	5852466	237.8	3	7.044	0.000	1402709	240.9
Aroclor-1242	4	7.896	0.000	6864809	232.9	4	8.269	0.000	1185369	234.8
	Total Col1Ave (4 peaks):			236.2		Total Col2Ave (4 peaks):			240.8	RPD = 2
	Corrected Ave (3 peaks):			235.5		Corrected Ave (3 peaks):			239.7	RPD = 2

Total PCB Area Col1 (4.541 - 12.748) = 116658320 Col1 Total PCB = 0.2 ppm*

Total PCB Area Col2 (4.547 - 13.139) = 24856950 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical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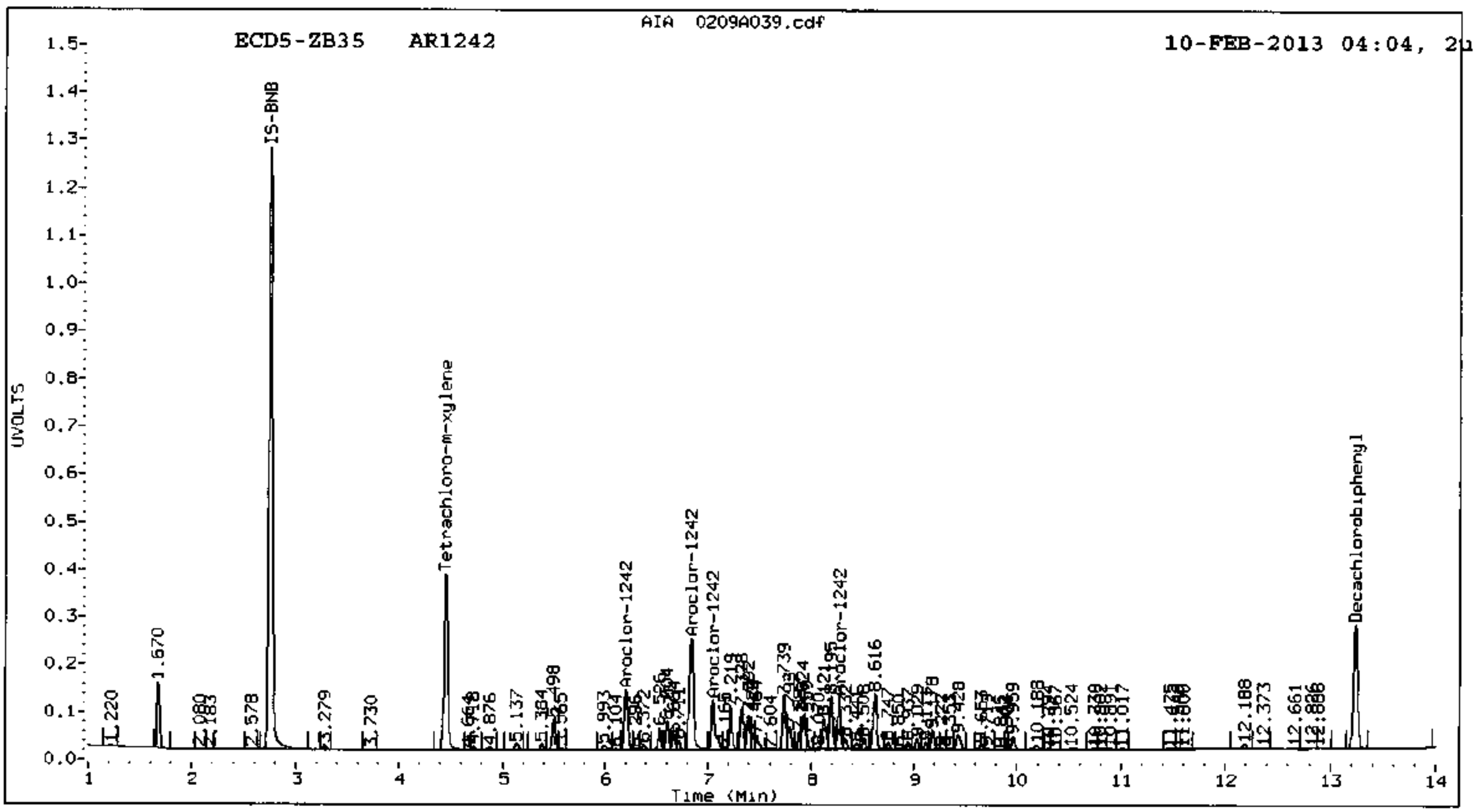
AIA 0209A039.cdf
10-FEB-2013 04:04, 2ul
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Aroclor-1242
Decachlorobiphenyl
IS-HBBP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ECD5-ZB35 AR1242
10-FEB-2013 04:04, 2u
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Aroclor-1242
Decachlorobiphenyl

Analytical Resources Inc.
Dual Column PCBs by SW8082

Data file 1: 20130128.b/0209-1.b/0209A040.d
Data file 2: 20130128.b/0209-2.b/0209A040.d
Method: /chem2/ecd5.i/20130128.b/PCB1.m
Compound Sublist: PCB
Instrument, Inj. Vol.: ecd5.i, 2ul
Quant Method: Internal Std

ARI ID: WC32MBS1
Client ID: WC32MBS1
Injection Date: 10-FEB-2013 04:24
Ical Date: 28-JAN-2013
Matrix: SOIL
Dilution Factor: 1.000

ZB5 Col RT	ZB5 Col Shift	ZB5 Col Response	ZB35 Col RT	ZB35 Col Shift	ZB35 Col Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
4.443	0.002	28571829	4.450	0.002	7244858	28.9	29.8	2.8	Tetrachloro-m-xylen
12.850	0.002	38246080	13.239	0.000	7236095	32.0	32.7	2.0	Decachlorobiphenyl

* Indicates RPD > 40%
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE PERCENT RECOVERY

SURROGATE	Col1	Col2
Tetrachloro-m-xylene	72.4	74.4
Decachlorobiphenyl	80.0	81.7

JW 02/12/13

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	44738954	55693485	24.5
Hexabromobiphenyl	59848867	68946657	15.2

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	14899855	16590652	11.3
Hexabromobiphenyl	12307480	13193136	7.2

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 28-JAN-2013
<- Indicates standard response outside Limits (-50 to +100%)

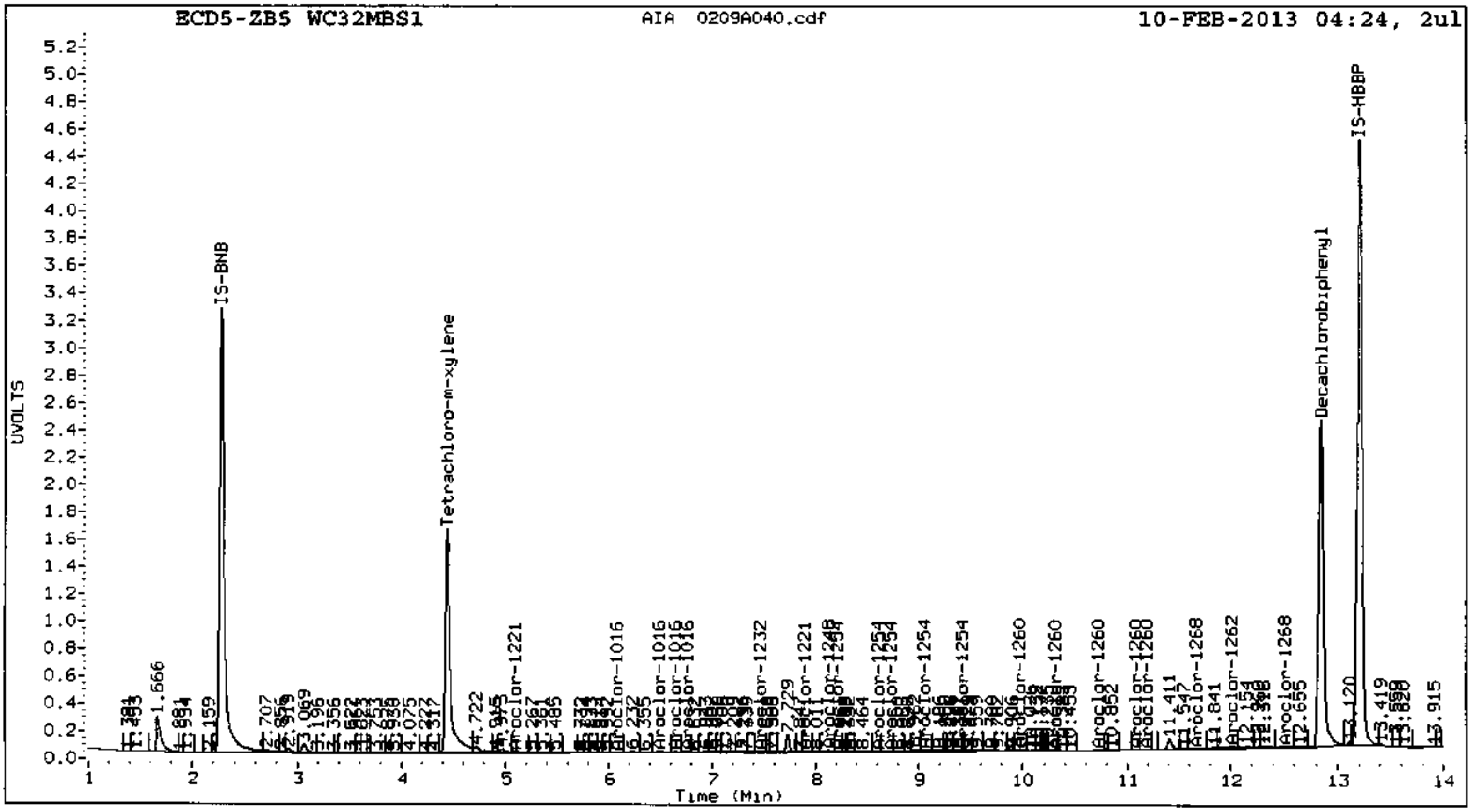
	ZB5 Col					ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	6.088	0.000	85228	3.3	1	6.203	0.002	18356	1.9
Aroclor-1016	2	6.493	0.001	196679	2.4	2	6.831	-0.002	34200	1.7
Aroclor-1016	3	6.647	0.005	96862	2.8	3	7.145	-0.073	47136	9.0
Aroclor-1016	4	6.756	0.003	160998	6.6	4	---			0.0
Total Col1Ave (4 peaks):					3.8	Total Col2Ave (3 peaks):			4.2	RPD = 11
Corrected Ave (3 peaks):					2.8		Corrected Ave: < 3 Peaks			
Aroclor-1221	1	5.095	-0.003	130085	5.6	1	---			0.0
Aroclor-1221	2	6.493	-0.002	196679	27.1	2	5.150	0.002	87541	32.5
Aroclor-1221	3	7.900	-0.004	109220	11.2	3	---			0.0
Aroclor-1221	NS	---			----	4	5.504	0.006	29798	5.9
Total Col1Ave (3 peaks):					14.6	Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	6.088	-0.002	85228	8.2	1	6.203	0.003	18356	4.4
Aroclor-1232	2	6.493	-0.001	196679	6.0	2	6.831	0.002	34200	4.2
Aroclor-1232	3	7.469	0.002	81341	5.2	3	6.980	-0.063	40789	12.2
Aroclor-1232	4	7.900	0.003	109220	6.1	4	---			0.0
Total Col1Ave (4 peaks):					6.4	Total Col2Ave (3 peaks):			6.9	RPD = 8
Corrected Ave (3 peaks):					5.8		Corrected Ave: < 3 Peaks			
Aroclor-1242	1	6.088	-0.001	85228	4.4	1	6.203	0.001	18356	2.6
Aroclor-1242	2	6.493	-0.001	196679	3.2	2	6.831	-0.004	34200	2.3
Aroclor-1242	3	6.647	0.003	96862	3.7	3	6.980	-0.064	40789	6.6
Aroclor-1242	4	7.900	0.003	109220	3.5	4	---			0.0
Total Col1Ave (4 peaks):					3.7	Total Col2Ave (3 peaks):			3.8	RPD = 3
Corrected Ave (3 peaks):					3.5		Corrected Ave: < 3 Peaks			
Aroclor-1248	1	6.493	0.004	196679	5.0	1	6.831	0.001	34200	3.5
Aroclor-1248	2	7.469	0.003	81341	1.9	2	7.739	0.000	19049	2.3
Aroclor-1248	3	7.900	0.004	109220	2.1	3	---			0.0
Aroclor-1248	4	8.130	-0.002	177829	4.3	4	---			0.0
Total Col1Ave (4 peaks):					3.3	Col2Ave: <3 Quant Peaks				
Aroclor-1254	1	8.217	0.000	90711	1.7	1	---			0.0
Aroclor-1254	2	8.610	0.023	48744	1.3	2	---			0.0
Aroclor-1254	3	8.727	0.003	117224	1.7	3	---			0.0
Aroclor-1254	4	9.063	-0.011	107095	1.4	4	---			0.0
Aroclor-1254	5	9.423	-0.010	25100	0.5	5	---			0.0
Total Col1Ave (5 peaks):					1.3	Col2Ave: <3 Quant Peaks				
Aroclor-1260	1	9.976	-0.014	171137	3.3	1	---			0.0
Aroclor-1260	2	10.308	0.003	39848	0.8	2	---			0.0
Aroclor-1260	3	10.719	0.039	148219	1.2	3	---			0.0
Aroclor-1260	4	11.086	0.006	15115	0.2	4	---			0.0
Aroclor-1260	5	11.186	-0.084	50738	1.5	NS	---			----
Total Col1Ave (5 peaks):					1.4	Col2Ave: <3 Quant Peaks				
Aroclor-1262	1	10.308	0.002	39848	0.7	1	---			0.0
Aroclor-1262	2	10.719	0.039	148219	1.0	2	---			0.0
Aroclor-1262	3	11.086	0.006	15115	0.3	3	---			0.0
Aroclor-1262	4	11.186	-0.083	50738	0.9	4	11.482	-0.055	26771	2.2
Aroclor-1262	5	12.014	0.075	458965	9.0	5	12.368	0.029	40036	3.7
Total Col1Ave (5 peaks):					2.4	Col2Ave: <3 Quant Peaks				
Aroclor-1268	1	11.186	-0.012	50738	0.3	1	11.482	-0.055	26771	0.9
Aroclor-1268	2	---			0.0	2	11.693	0.097	21341	0.7
Aroclor-1268	3	11.665	0.011	129418	1.1	3	---			0.0
Aroclor-1268	4	12.516	0.074	308629	0.9	4	---			0.0
Total Col1Ave (3 peaks):					0.8	Col2Ave: <3 Quant Peaks				

Total PCB Area Col1 (4.541 - 12.748) = 11007448 Col1 Total PCB = 0.0 ppm*

Total PCB Area Col2 (4.547 - 13.139) = 2277002 Col2 Total PCB = 0.0 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.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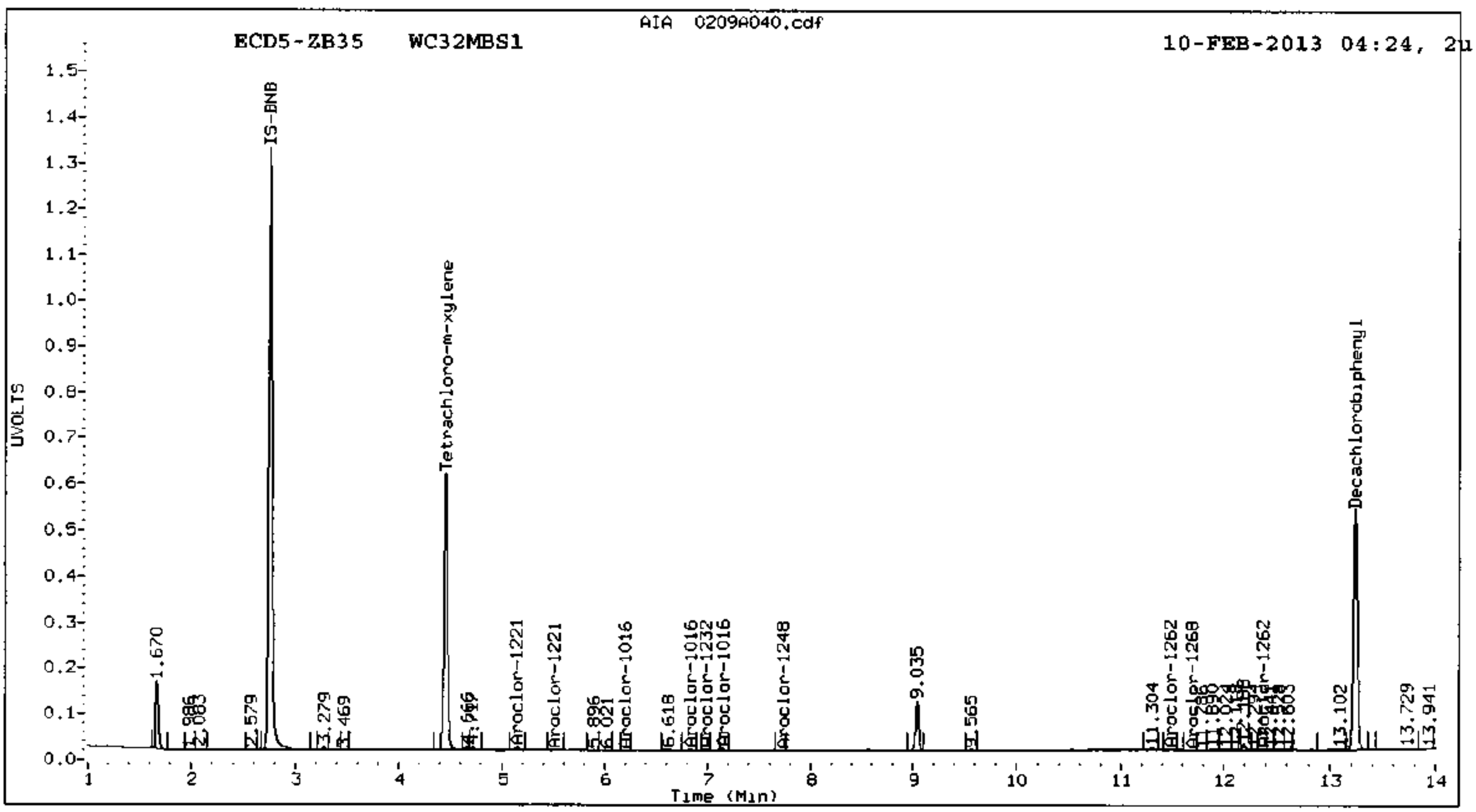
10-FEB-2013 04:24, 2ul
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Decachlorobiphenyl
IS-HBBP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AIA 0209A040.cdf
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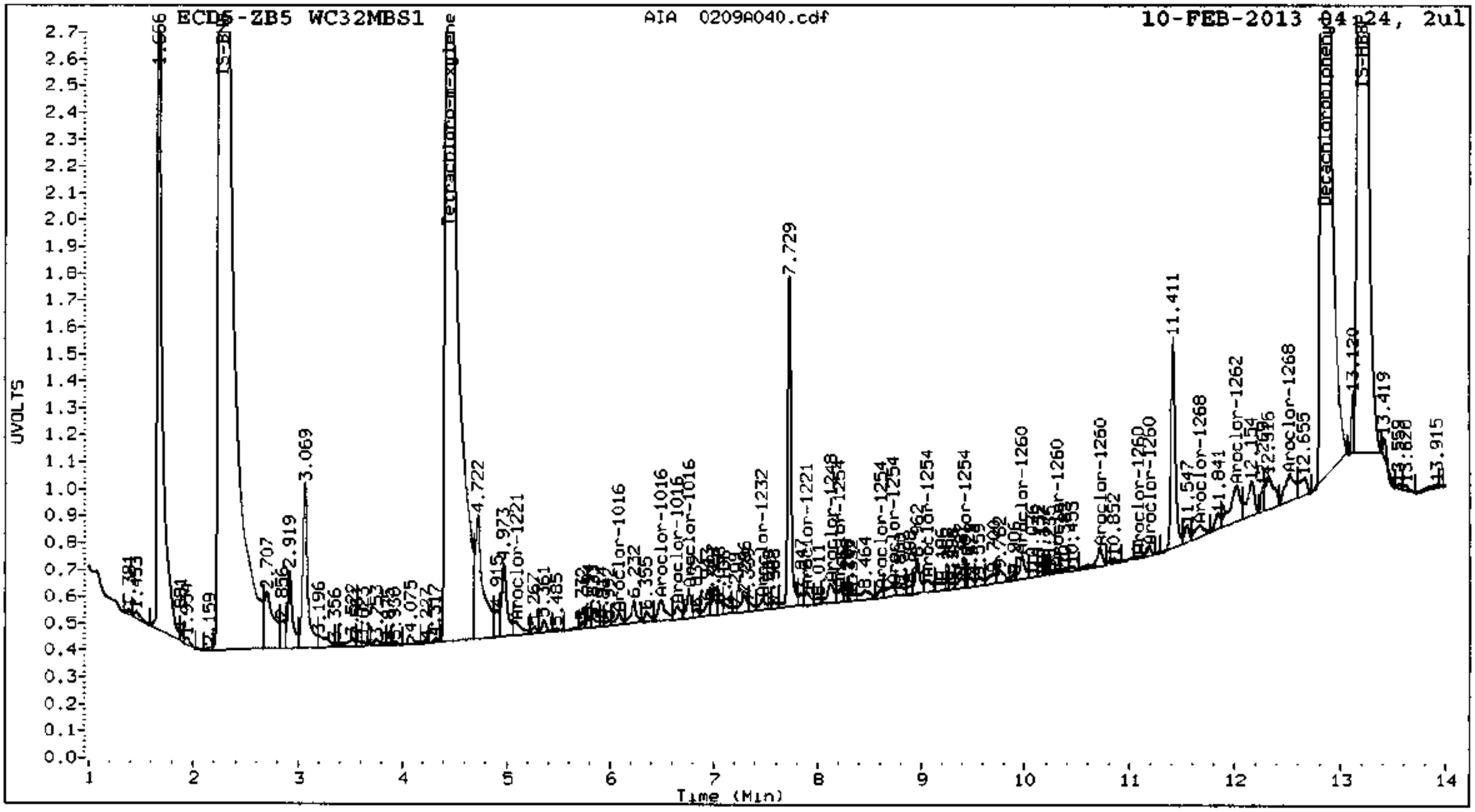
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Decachlorobiphenyl

WCG2:01966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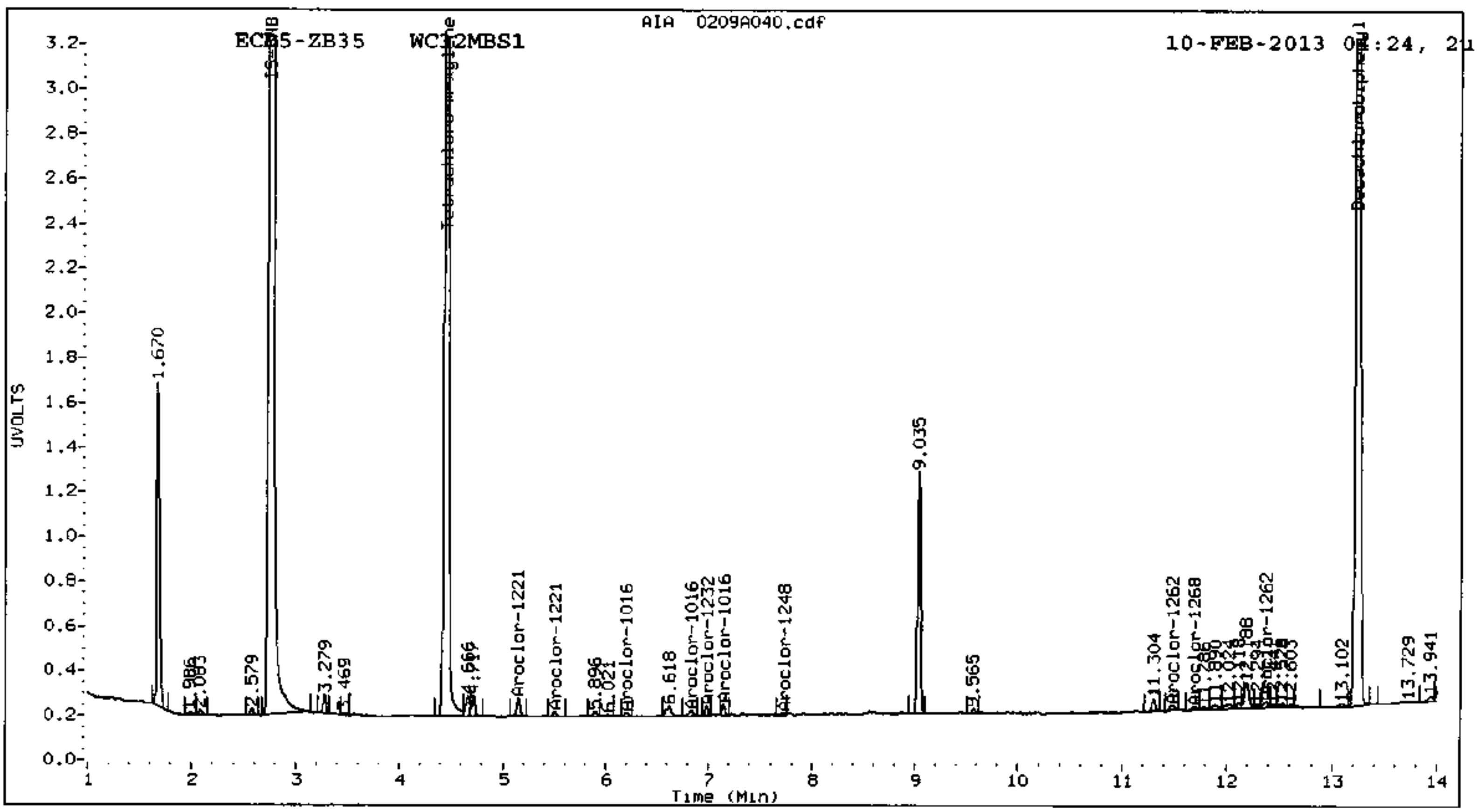
Time (Min)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10-FEB-2013 04:24, 2ul
UVOLTS
Time (Min)

Analytical Resources Inc.
Dual Column PCBs by SW8082

Data file 1: 20130128.b/0209-1.b/0209A041.d
Data file 2: 20130128.b/0209-2.b/0209A041.d
Method: /chem2/ecd5.i/20130128.b/PCB1.m
Compound Sublist: PCB
Instrument, Inj. Vol.: ecd5.i, 2ul
Quant Method: Internal Std

ARI ID: WC32LCSS1
Client ID: WC32LCSS1
Injection Date: 10-FEB-2013 04:44
Ical Date: 28-JAN-2013
Matrix: SOIL
Dilution Factor: 1.000

ZB5 Col RT	ZB5 Col Shift	ZB5 Col Response	ZB35 Col RT	ZB35 Col Shift	ZB35 Col Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
4.442	0.001	28768731	4.448	0.001	7272546	28.7	29.3	1.9	Tetrachloro-m-xylen
12.849	0.000	39832525	13.239	0.001	7530900	31.0	31.7	2.0	Decachlorobiphenyl

* Indicates RPD > 40%
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE PERCENT RECOVERY

SURROGATE	Col1	Col2
Tetrachloro-m-xylene	71.8	73.2
Decachlorobiphenyl	77.6	79.2

JK 02/12/13

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	44738954	56518380	26.3
Hexabromobiphenyl	59848867	74060128	23.7

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	14899855	16931115	13.6
Hexabromobiphenyl	12307480	14160410	15.1

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 28-JAN-2013
<- Indicates standard response outside Limits (-50 to +100%)

			ZB5 Col					ZB35 Col		
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	6.089	0.001	10185799	388.9	1	6.201	0.000	3707217	382.1
Aroclor-1016	2	6.494	0.002	32455483	389.6	2	6.834	0.002	8278333	401.2
Aroclor-1016	3	6.643	0.002	14124835	398.6	3	7.219	0.001	2237207	416.3
Aroclor-1016	4	6.754	0.001	10488030	421.7	4	7.327	0.001	2450235	401.8
	Total Col1Ave (4 peaks):			399.7		Total Col2Ave (4 peaks):			400.4	RPD = 0
	Corrected Ave (3 peaks):			392.4		Corrected Ave (3 peaks):			395.1	RPD = 1
Aroclor-1221	1	5.094	-0.003	6274173	268.0	1	1.050	0.050	84514	48.3
Aroclor-1221	2	6.494	-0.001	32455483	4400.3	2	5.136	-0.012	375990	136.7
Aroclor-1221	3	7.904	0.000	9939402	1007.4	3	---			0.0
Aroclor-1221	NS	---			----	4	5.498	0.000	1555021	303.4
	Total Col1Ave (3 peaks):			1891.9		Total Col2Ave (3 peaks):			162.8	RPD = 168*
	Corrected Ave: < 3 Peaks					Corrected Ave: < 3 Peaks				
Aroclor-1232	1	6.089	-0.001	10185799	965.3	1	6.201	0.001	3707217	869.9
Aroclor-1232	2	6.494	0.000	32455483	977.7	2	6.834	0.005	8278333	994.2
Aroclor-1232	3	7.468	0.000	13166734	833.9	3	7.043	0.001	3449495	1006.9
Aroclor-1232	4	7.904	0.007	9939402	544.7	4	8.269	0.001	363920	123.8
	Total Col1Ave (4 peaks):			830.4		Total Col2Ave (4 peaks):			748.7	RPD = 10
	Corrected Ave (3 peaks):			781.3		Corrected Ave (3 peaks):			662.7	RPD = 16
Aroclor-1242	1	6.089	0.000	10185799	516.4	1	6.201	-0.001	3707217	519.5
Aroclor-1242	2	6.494	0.000	32455483	527.0	2	6.834	0.000	8278333	540.2
Aroclor-1242	3	6.643	0.000	14124835	530.6	3	7.043	0.000	3449495	545.8
Aroclor-1242	4	7.904	0.008	9939402	311.8	4	8.269	0.000	363920	66.4
	Total Col1Ave (4 peaks):			471.5		Total Col2Ave (4 peaks):			418.0	RPD = 12
	Corrected Ave (3 peaks):			451.7		Corrected Ave (3 peaks):			375.4	RPD = 18
Aroclor-1248	1	6.494	0.005	32455483	805.5	1	6.834	0.004	8278333	829.2
Aroclor-1248	2	7.468	0.001	13166734	308.1	2	7.739	0.001	2898737	346.6
Aroclor-1248	3	7.904	0.008	9939402	184.7	3	8.269	0.001	363920	41.9
Aroclor-1248	4	8.138	0.007	2072214	49.4	4	8.615	0.001	194859	18.1
	Total Col1Ave (4 peaks):			336.9		Total Col2Ave (4 peaks):			308.9	RPD = 9
	Corrected Ave (3 peaks):			180.7		Corrected Ave (3 peaks):			135.5	RPD = 29
Aroclor-1254	1	8.219	0.002	11447024	206.9	1	8.333	0.000	1896628	256.4
Aroclor-1254	2	8.587	0.000	2347905	63.6	2	8.508	0.001	2194075	230.9
Aroclor-1254	3	8.722	-0.002	11006750	153.5	3	9.031	0.002	713683	96.9
Aroclor-1254	4	9.054	-0.019	28436979	359.4	4	9.182	0.002	1084687	67.7
Aroclor-1254	5	9.385	-0.048	41630645	839.4	5	9.973	0.009	2349216	240.3
	Total Col1Ave (5 peaks):			324.5		Total Col2Ave (5 peaks):			178.5	RPD = 58*
	Corrected Ave (4 peaks):			195.8		Corrected Ave (4 peaks):			159.0	RPD = 21
Aroclor-1260	1	9.991	0.002	21821751	391.2	1	10.293	0.001	4360573	411.6
Aroclor-1260	2	10.307	0.002	21748773	385.1	2	10.744	0.001	5329907	409.2
Aroclor-1260	3	10.682	0.002	55111759	421.3	3	11.018	0.000	10979544	420.5
Aroclor-1260	4	11.080	0.001	28703577	391.9	4	11.539	0.002	3205720	417.0
Aroclor-1260	5	11.270	0.001	15514213	431.3	NS	---			----
	Total Col1Ave (5 peaks):			404.2		Total Col2Ave (4 peaks):			414.6	RPD = 3
	Corrected Ave (4 peaks):			397.4		Corrected Ave (3 peaks):			412.6	RPD = 4
Aroclor-1262	1	10.307	0.001	21748773	356.8	1	10.293	0.002	4360573	263.0
Aroclor-1262	2	10.682	0.001	55111759	353.0	2	10.744	0.008	5329907	375.4
Aroclor-1262	3	11.080	0.000	28703577	518.1	3	11.018	0.002	10979544	342.7
Aroclor-1262	4	11.270	0.001	15514213	247.0	4	11.539	0.002	3205720	246.9
Aroclor-1262	5	11.939	0.000	13564791	246.6	5	12.340	0.000	2878434	245.2
	Total Col1Ave (5 peaks):			344.3		Total Col2Ave (5 peaks):			294.7	RPD = 16
	Corrected Ave (4 peaks):			300.9		Corrected Ave (4 peaks):			274.5	RPD = 9
Aroclor-1268	1	11.196	-0.001	12391683	78.6	1	11.539	0.002	3205720	95.1

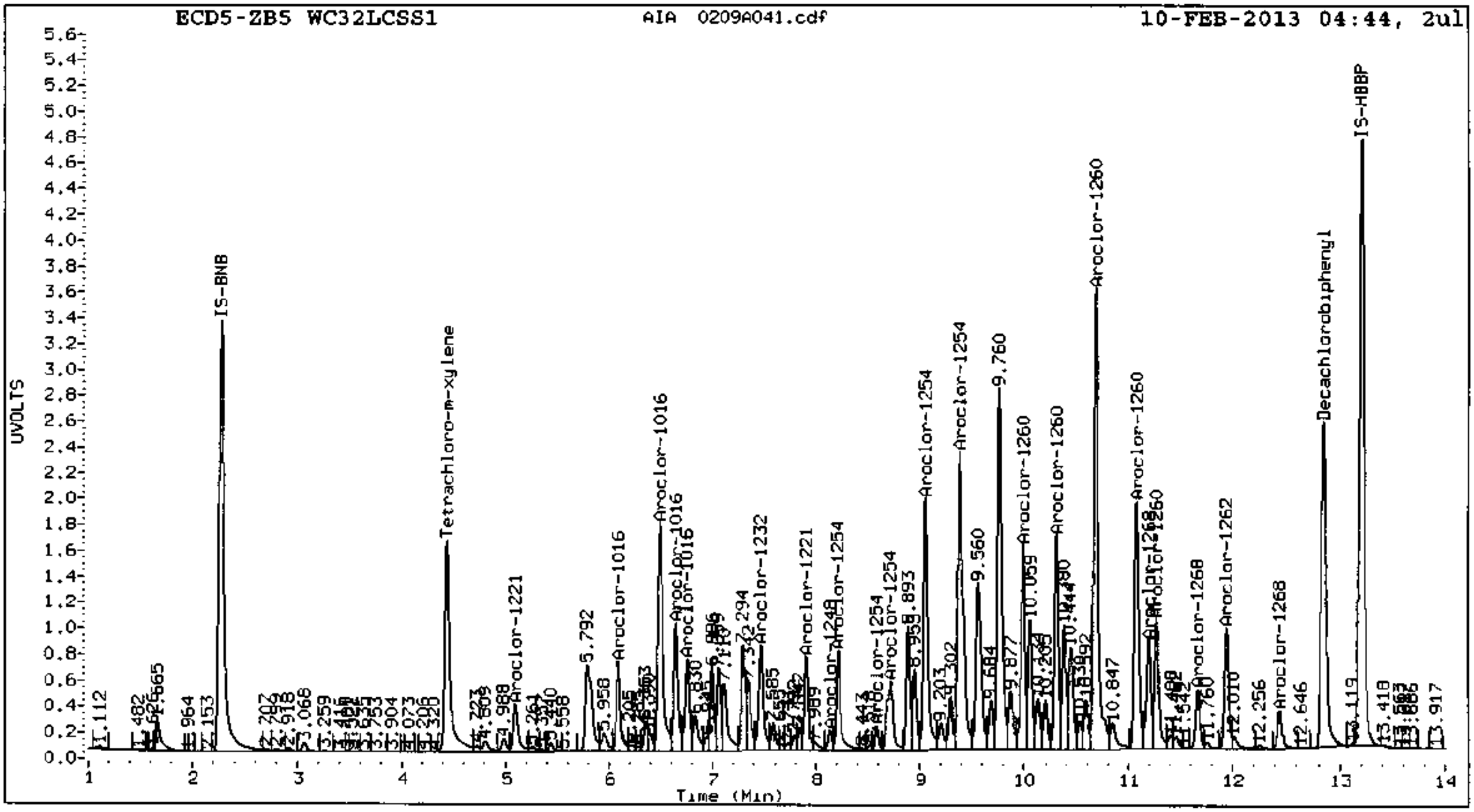
Aroclor-1268 2	11.270	0.001	15514213	101.7	2	11.598	0.003	7717618	236.8
Aroclor-1268 3	11.670	0.015	6871425	52.4	3	1.050	0.050	84514	3.1
Aroclor-1268 4	12.442	0.000	4640134	13.0	4	12.825	0.003	846083	11.4
	Total Col1Ave (4 peaks):			61.4	Total Col2Ave (4 peaks):			86.6	RPD = 34
	Corrected Ave (3 peaks):			48.0	Corrected Ave (3 peaks):			36.5	RPD = 27

Total PCB Area Col1 (4.541 - 12.748) = 639537419 Col1 Total PCB = 0.9 ppm*

Total PCB Area Col2 (4.547 - 13.139) = 132476951 Col2 Total PCB = 1.0 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.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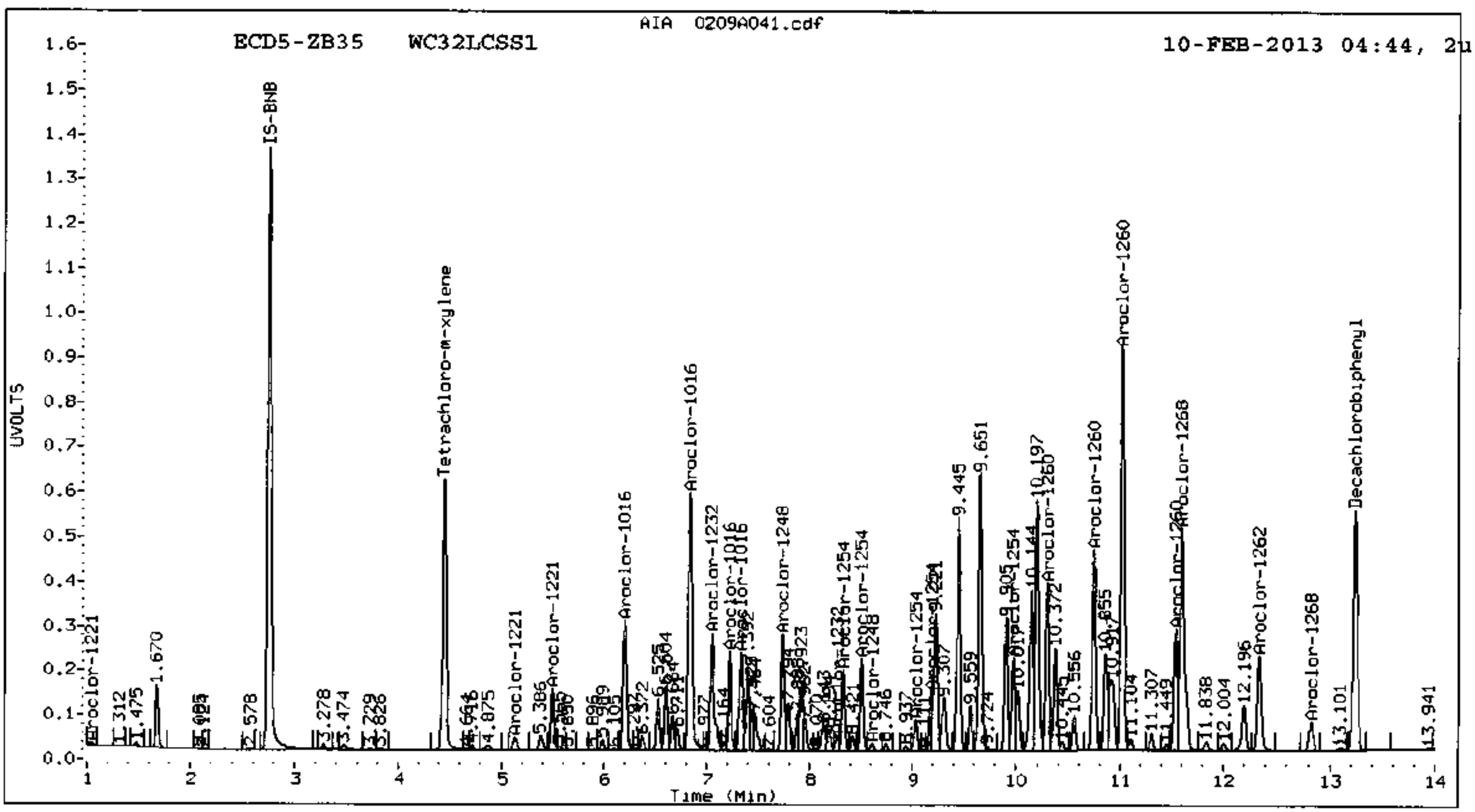
10-FEB-2013 04:44, 2ul
UVOLTS
Time (Min)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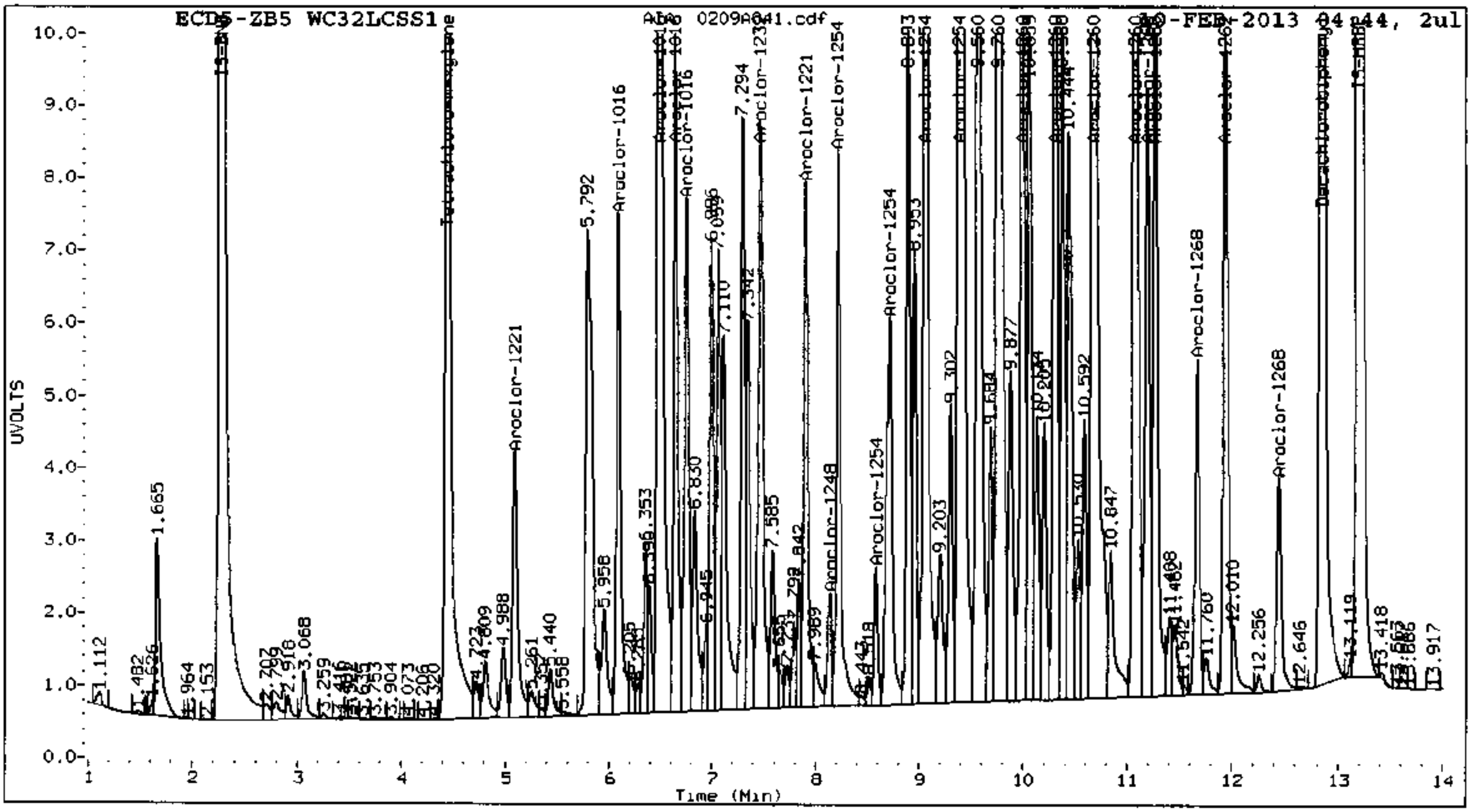
UVOLTS
Time (Min)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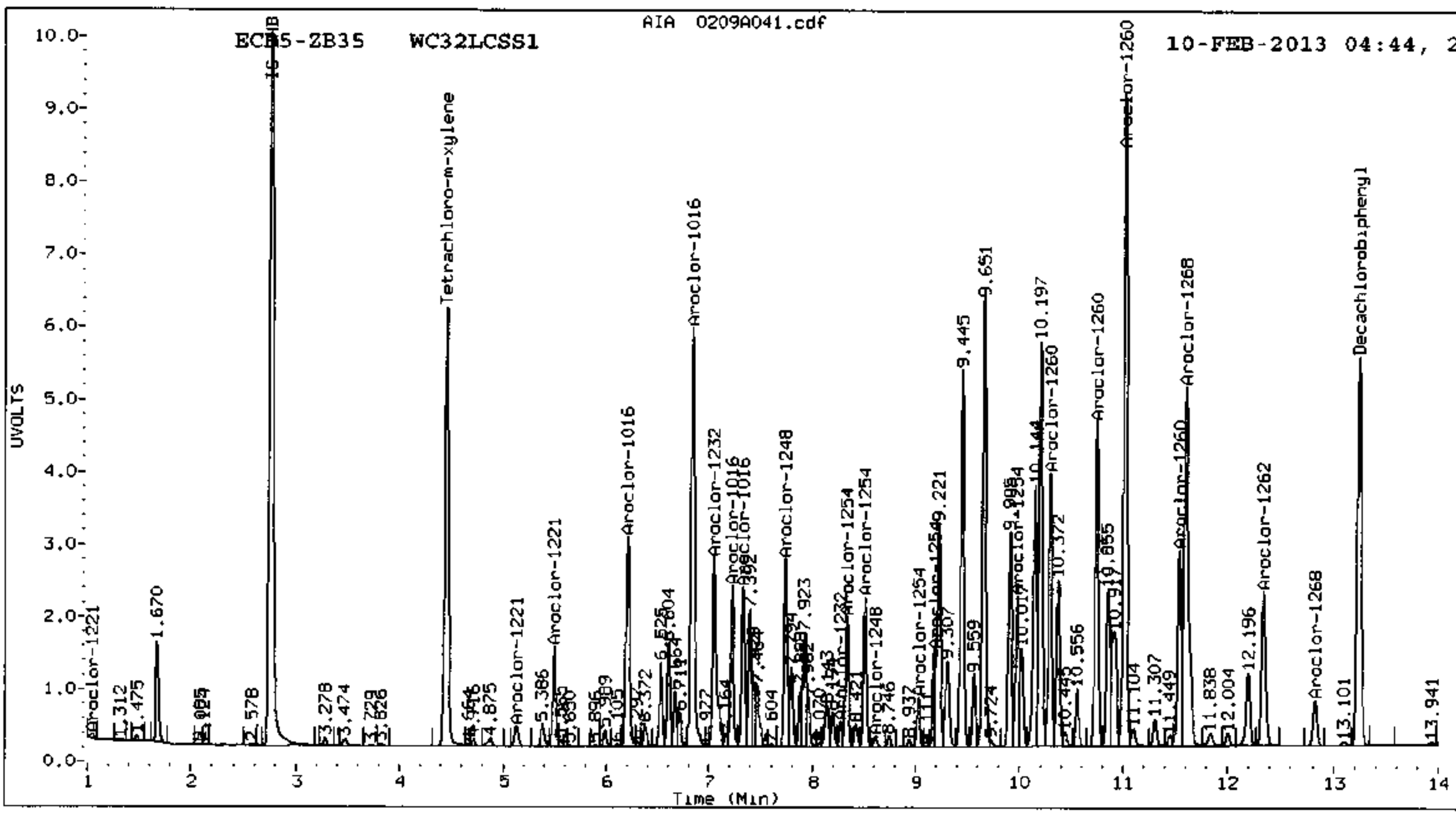
10-FEB-2013 04:44, 2ul
UVOLTS
Time (Min)
Tetrachloro-m-xylene
Aroclor-1221
Aroclor-1016
Aroclor-1248
Aroclor-1254
Aroclor-1260
Aroclor-1268
Decachlorobiphenyl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AIA 0209A041.cdf
10-FEB-2013 04:44, 2u
UVOLTS
Time (Min)
Tetrachloro-m-xylene
Aroclor-1221
Aroclor-1016
Aroclor-1232
Aroclor-1248
Aroclor-1254
Aroclor-1260
Aroclor-1262
Aroclor-1268
Decachlorobiphenyl

Analytical Resources Inc.
Dual Column PCBs by SW8082

Data file 1: 20130128.b/0209-1.b/0209A042.d
Data file 2: 20130128.b/0209-2.b/0209A042.d
Method: /chem2/ecd5.i/20130128.b/PCB1.m
Compound Sublist: PCB
Instrument, Inj. Vol.: ecd5.i, 2ul
Quant Method: Internal Std

ARI ID: WC32LCSDS1
Client ID: WC32LCSDS1
Injection Date: 10-FEB-2013 05:04
Ical Date: 28-JAN-2013
Matrix: SOIL
Dilution Factor: 1.000

ZB5 Col RT	ZB5 Col Shift	ZB5 Col Response	ZB35 Col RT	ZB35 Col Shift	ZB35 Col Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
4.443	0.002	29257512	4.450	0.003	7351040	29.5	30.0	1.6	Tetrachloro-m-xylen
12.850	0.001	40097500	13.239	0.000	7563630	31.9	32.1	0.6	Decachlorobiphenyl

* Indicates RPD > 40%
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE PERCENT RECOVERY

SURROGATE	Col1	Col2
Tetrachloro-m-xylene	73.7	74.9
Decachlorobiphenyl	79.9	80.4

JK 02/12/13

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	44738954	56002614	25.2
Hexabromobiphenyl	59848867	72441949	21.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	14899855	16723012	12.2
Hexabromobiphenyl	12307480	14014127	13.9

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 28-JAN-2013
<- Indicates standard response outside Limits (-50 to +100%)

			ZB5 Col					ZB35 Col		
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	6.090	0.002	10558758	406.8	1	6.201	0.001	3833137	400.0
Aroclor-1016	2	6.494	0.002	33557113	406.5	2	6.835	0.002	8487582	416.5
Aroclor-1016	3	6.644	0.002	14588134	415.5	3	7.219	0.001	2313724	435.9
Aroclor-1016	4	6.754	0.001	10812287	438.8	4	7.327	0.001	2530004	420.1
	Total Col1Ave (4 peaks):			416.9		Total Col2Ave (4 peaks):			418.1	RPD = 0
	Corrected Ave (3 peaks):			409.6		Corrected Ave (3 peaks):			412.2	RPD = 1
Aroclor-1221	1	5.095	-0.002	6580813	283.7	1	1.051	0.051	36597	21.2
Aroclor-1221	2	6.494	-0.001	33557113	4591.6	2	5.136	-0.012	397164	146.2
Aroclor-1221	3	7.904	0.000	10326354	1056.3	3	---			0.0
Aroclor-1221	NS	---			----	4	5.498	0.001	1604202	316.8
	Total Col1Ave (3 peaks):			1977.2		Total Col2Ave (3 peaks):			161.4	RPD = 170*
	Corrected Ave: < 3 Peaks					Corrected Ave: < 3 Peaks				
Aroclor-1232	1	6.090	0.000	10558758	1009.9	1	6.201	0.001	3833137	910.7
Aroclor-1232	2	6.494	0.001	33557113	1020.2	2	6.835	0.005	8487582	1032.0
Aroclor-1232	3	7.468	0.000	13679814	874.4	3	7.043	0.000	3567729	1054.4
Aroclor-1232	4	7.904	0.007	10326354	571.2	4	8.268	0.000	385747	132.9
	Total Col1Ave (4 peaks):			868.9		Total Col2Ave (4 peaks):			782.5	RPD = 10
	Corrected Ave (3 peaks):			818.5		Corrected Ave (3 peaks):			691.9	RPD = 17
Aroclor-1242	1	6.090	0.001	10558758	540.2	1	6.201	0.000	3833137	543.8
Aroclor-1242	2	6.494	0.000	33557113	549.9	2	6.835	0.000	8487582	560.8
Aroclor-1242	3	6.644	0.000	14588134	553.1	3	7.043	-0.001	3567729	571.6
Aroclor-1242	4	7.904	0.008	10326354	326.9	4	8.268	-0.001	385747	71.3
	Total Col1Ave (4 peaks):			492.5		Total Col2Ave (4 peaks):			436.9	RPD = 12
	Corrected Ave (3 peaks):			472.4		Corrected Ave (3 peaks):			392.0	RPD = 19
Aroclor-1248	1	6.494	0.005	33557113	840.5	1	6.835	0.005	8487582	860.7
Aroclor-1248	2	7.468	0.001	13679814	323.1	2	7.739	0.001	3005286	363.8
Aroclor-1248	3	7.904	0.008	10326354	193.6	3	8.268	0.000	385747	44.9
Aroclor-1248	4	8.138	0.006	2352876	56.6	4	8.614	0.000	242491	22.8
	Total Col1Ave (4 peaks):			353.4		Total Col2Ave (4 peaks):			323.1	RPD = 9
	Corrected Ave (3 peaks):			191.1		Corrected Ave (3 peaks):			143.8	RPD = 28
Aroclor-1254	1	8.218	0.002	12116535	221.0	1	8.393	0.000	1956280	267.7
Aroclor-1254	2	8.588	0.000	2386178	65.2	2	8.507	0.000	2279812	242.9
Aroclor-1254	3	8.722	-0.002	11490670	161.8	3	9.030	0.001	676394	93.0
Aroclor-1254	4	9.055	-0.019	28970319	369.5	4	9.182	0.002	1165056	73.6
Aroclor-1254	5	9.384	-0.048	42332892	861.4	5	9.973	0.009	2402690	248.9
	Total Col1Ave (5 peaks):			335.8		Total Col2Ave (5 peaks):			185.2	RPD = 58*
	Corrected Ave (4 peaks):			204.4		Corrected Ave (4 peaks):			164.6	RPD = 22
Aroclor-1260	1	9.991	0.002	22309751	408.9	1	10.294	0.001	4470504	426.3
Aroclor-1260	2	10.307	0.002	22234256	402.5	2	10.743	0.001	5438405	421.9
Aroclor-1260	3	10.681	0.001	56033405	437.9	3	11.018	0.001	11163845	432.0
Aroclor-1260	4	11.080	0.001	29295543	408.9	4	11.539	0.002	3291030	432.5
Aroclor-1260	5	11.271	0.002	15741675	447.4	NS	---			----
	Total Col1Ave (5 peaks):			421.1		Total Col2Ave (4 peaks):			428.2	RPD = 2
	Corrected Ave (4 peaks):			414.5		Corrected Ave (3 peaks):			426.7	RPD = 3
Aroclor-1262	1	10.307	0.001	22234256	373.0	1	10.294	0.002	4470504	272.4
Aroclor-1262	2	10.681	0.001	56033405	367.0	2	10.743	0.007	5438405	387.1
Aroclor-1262	3	11.080	0.000	29295543	540.6	3	11.018	0.003	11163845	352.1
Aroclor-1262	4	11.271	0.002	15741675	256.3	4	11.539	0.002	3291030	256.1
Aroclor-1262	5	11.938	0.000	14105233	262.2	5	12.339	0.000	3021279	260.1
	Total Col1Ave (5 peaks):			359.8		Total Col2Ave (5 peaks):			305.6	RPD = 16
	Corrected Ave (4 peaks):			314.6		Corrected Ave (4 peaks):			285.2	RPD = 10
Aroclor-1268	1	11.197	0.000	12633981	81.9	1	11.539	0.002	3291030	98.6

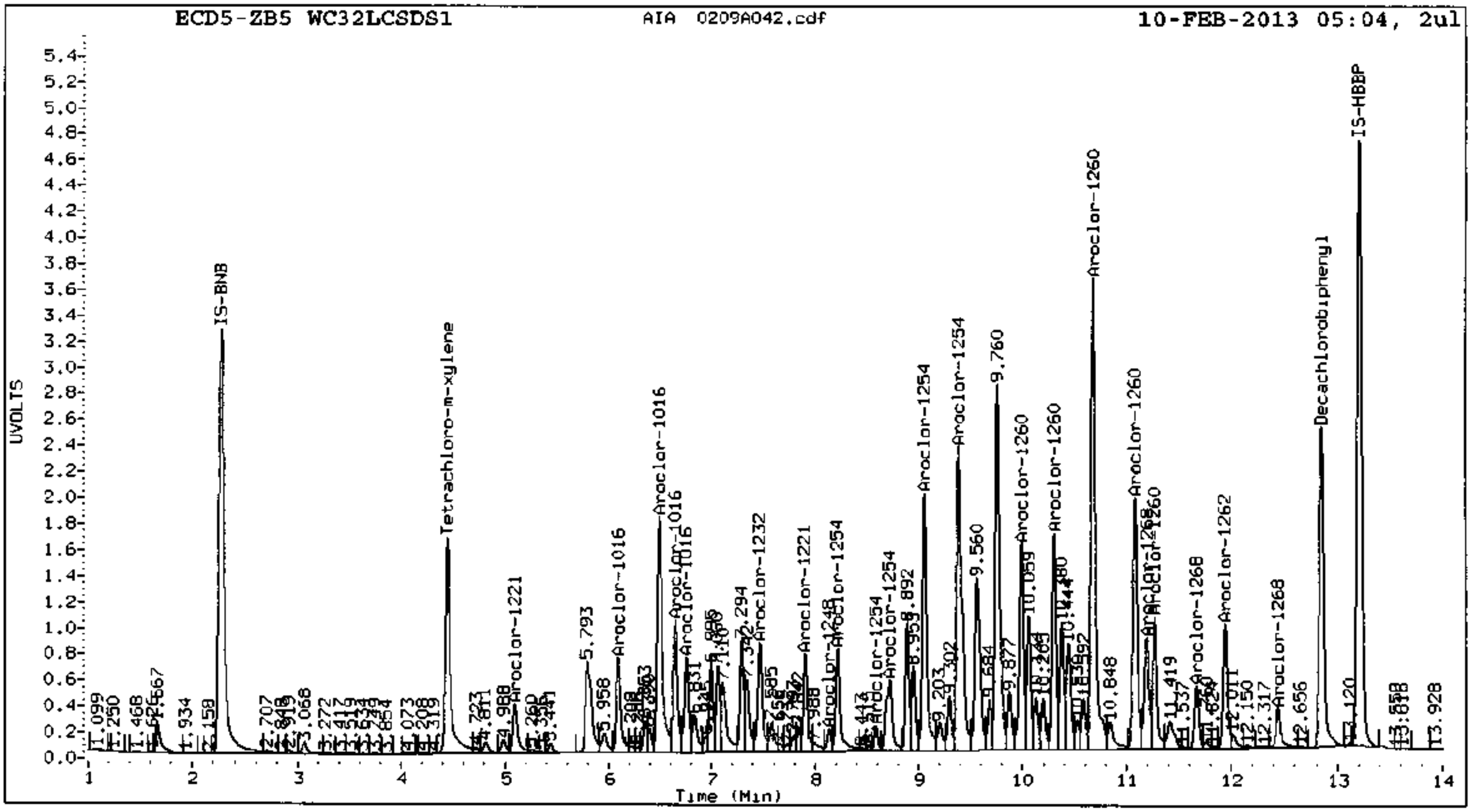
Aroclor-1268 2	11.271	0.002	15741675	105.5	2	11.598	0.002	7883328	244.4
Aroclor-1268 3	11.669	0.014	7179540	56.0	3	1.051	0.051	36597	1.4
Aroclor-1268 4	12.443	0.000	5472279	15.7	4	12.825	0.003	874394	11.9
Total Col1Ave (4 peaks):				64.8	Total Col2Ave (4 peaks):			89.1	RPD = 32
Corrected Ave (3 peaks):				51.2	Corrected Ave (3 peaks):			37.3	RPD = 31

Total PCB Area Col1 (4.541 - 12.748) = 660691279 Col1 Total PCB = 0.9 ppm*

Total PCB Area Col2 (4.547 - 13.139) = 136808281 Col2 Total PCB = 1.1 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.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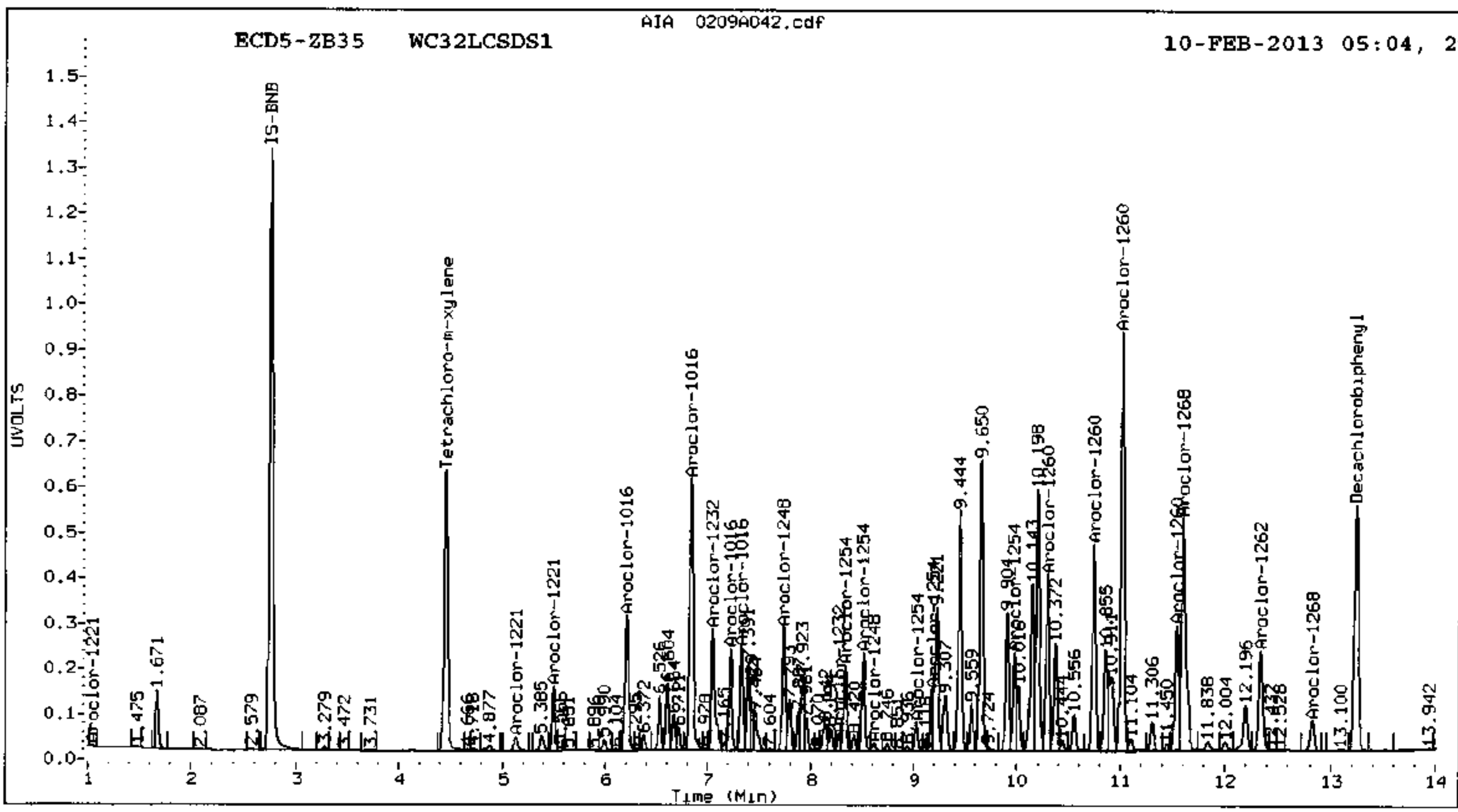
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Aroclor-1221
Aroclor-1016
Aroclor-1232
Aroclor-1248
Aroclor-1254
Aroclor-1260
Aroclor-1262
Aroclor-1268
Decachlorobiphenyl
IS-HBBP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Time (Min)
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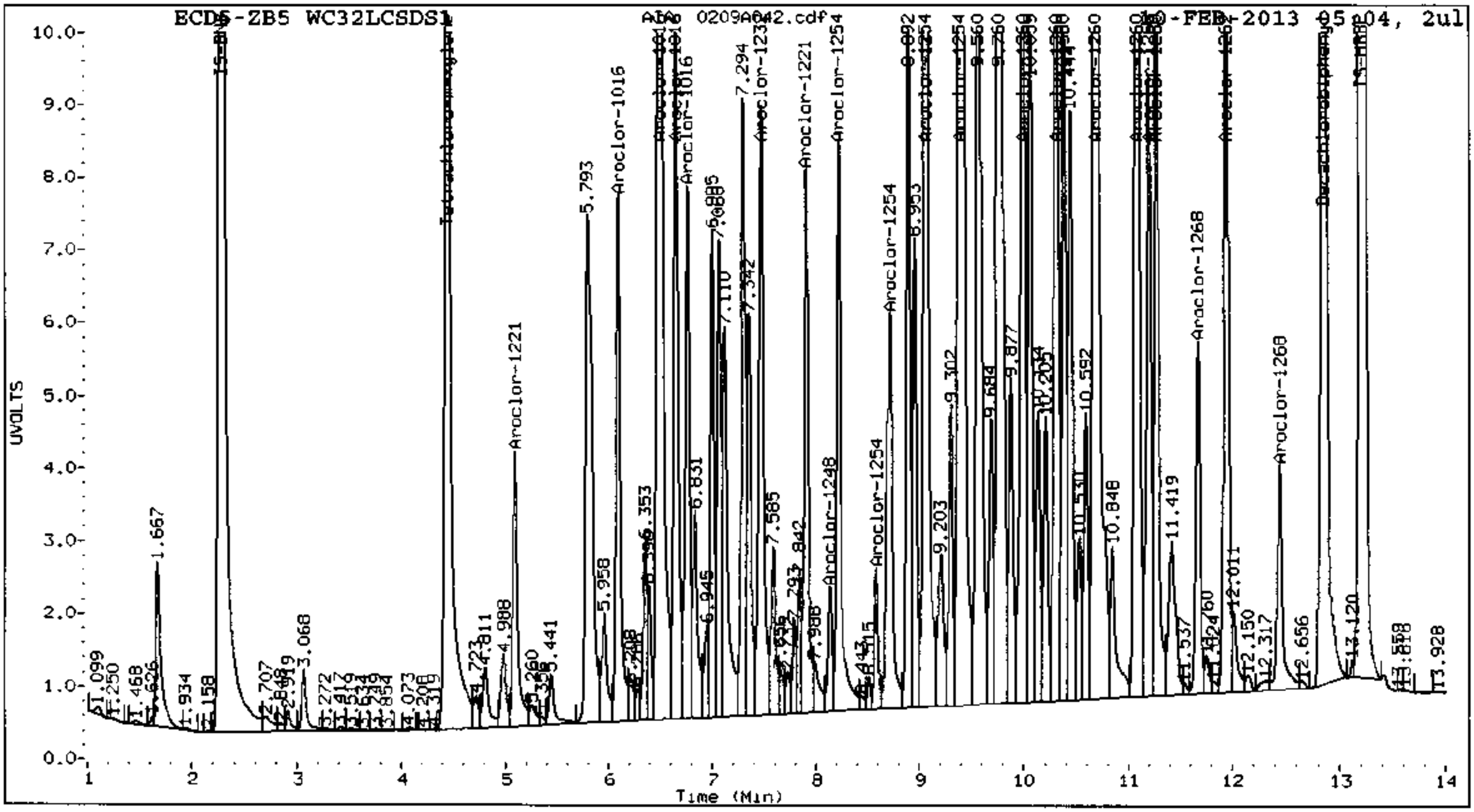
Aroclor-1016
Aroclor-1232
Aroclor-1248
Aroclor-1254
Aroclor-1260
Aroclor-1262
Aroclor-1268
Decachlorobiphenyl

ECD5-ZB5 WC32LCSDS1 AIA 0209A042.cdf 10-FEB-2013 05:04, 2ul



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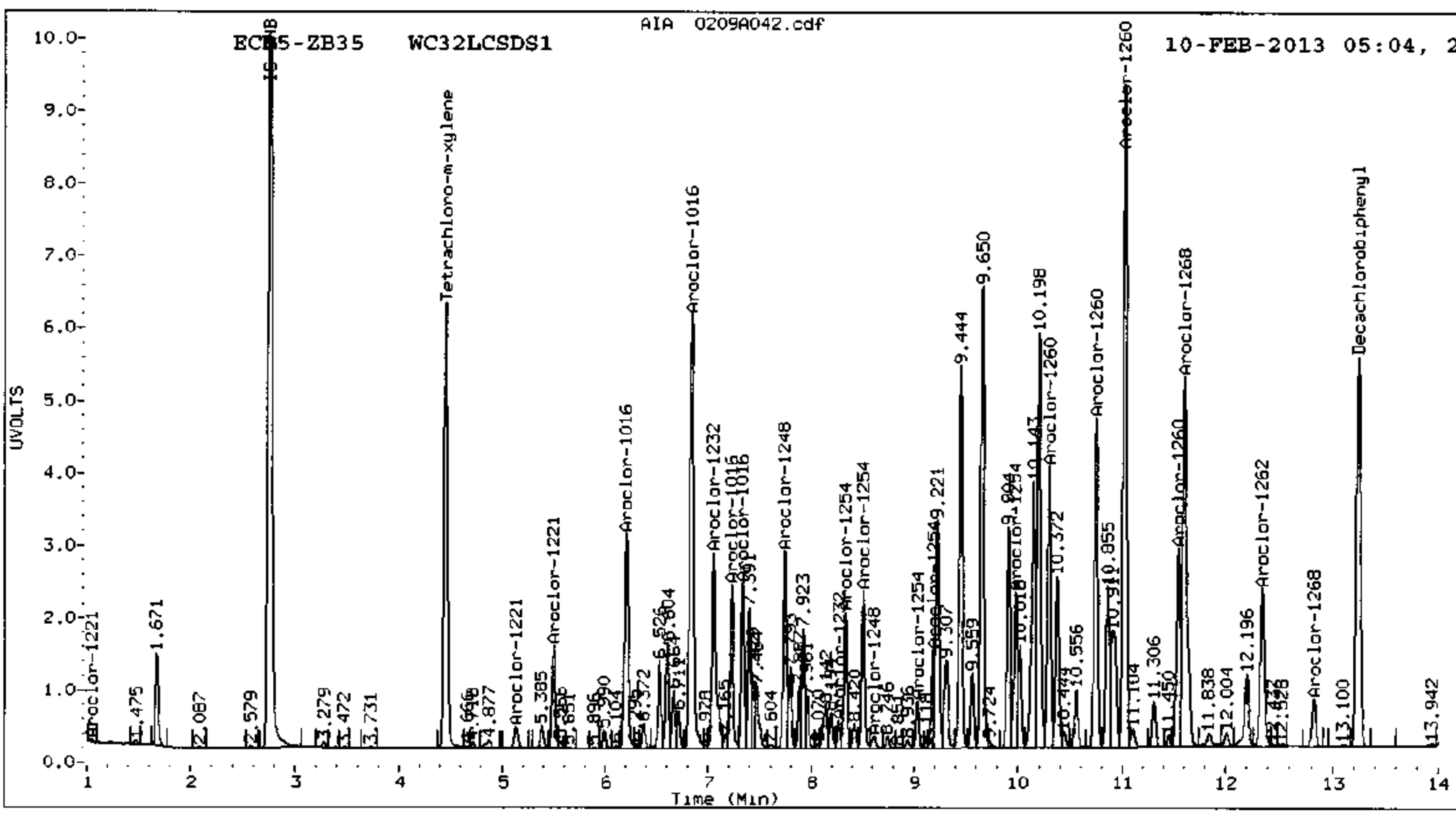


WC32 01977

Analytical Resources Inc.
Dual Column PCBs by SW8082

Data file 1: 20130128.b/0209-1.b/0209A048.d
Data file 2: 20130128.b/0209-2.b/0209A048.d
Method: /chem2/ecd5.i/20130128.b/PCB1.m
Compound Sublist: PCB
Instrument, Inj. Vol.: ecd5.i, 2ul
Quant Method: Internal Std

ARI ID: WC32E
Client ID: SG-05-0-10-013113
Injection Date: 10-FEB-2013 07:03
Ical Date: 28-JAN-2013
Matrix: SOIL
Dilution Factor: 1.000

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.441	0.000	29173241	4.449	0.001	7752253	29.5	32.2	8.8	Tetrachloro-m-xylen
12.850	0.002	36570050	13.238	0.000	7540469	31.2	33.9	8.2	Decachlorobiphenyl

* Indicates RPD > 40%
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE PERCENT RECOVERY

SURROGATE	Col1	Col2
Tetrachloro-m-xylene	73.7	80.5
Decachlorobiphenyl	78.0	84.6

JK 02/11/13

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	44738954	55859362	24.9
Hexabromobiphenyl	59848867	67646697	13.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	14899855	16414367	10.2
Hexabromobiphenyl	12307480	13264784	7.8

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 28-JAN-2013
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col					ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1016	1	6.059	-0.028	1138341	44.0	1	6.248	0.047	281168	29.9	
Aroclor-1016	2	6.557	0.065	473612	5.8	2	6.904	0.072	30680	1.5	
Aroclor-1016	3	6.662	0.021	481589	13.8	3	7.263	0.045	23022	4.4	
Aroclor-1016	4	6.758	0.005	675753	27.5	4	7.327	0.001	34850	5.9	
	Total Col1Ave (4 peaks):			22.7		Total Col2Ave (4 peaks):			10.4		RPD = 74*
	Corrected Ave (3 peaks):			15.7		Corrected Ave (3 peaks):			3.9		RPD = 119*
Aroclor-1221	1	5.101	0.004	99747	4.3	1	---			0.0	
Aroclor-1221	2	6.557	0.062	473612	65.0	2	5.146	-0.002	118886	44.6	
Aroclor-1221	3	7.909	0.005	742400	76.1	3	---			0.0	
Aroclor-1221	NS	---			----	4	5.519	0.021	461328	92.8	
	Total Col1Ave (3 peaks):			48.5		Col2Ave: <3 Quant Peaks					
Aroclor-1232	1	6.059	-0.030	1138341	109.2	1	6.248	0.048	281168	68.1	
Aroclor-1232	2	6.557	0.063	473612	14.4	2	6.904	0.075	30680	3.8	
Aroclor-1232	3	7.458	-0.010	105990	6.8	3	6.977	-0.066	77047	23.2	
Aroclor-1232	4	7.909	0.012	742400	41.2	4	8.268	0.000	45394	15.9	
	Total Col1Ave (4 peaks):			42.9		Total Col2Ave (4 peaks):			28.7		RPD = 43*
	Corrected Ave (3 peaks):			20.8		Corrected Ave (3 peaks):			14.3		RPD = 37
Aroclor-1242	1	6.059	-0.030	1138341	58.4	1	6.248	0.046	281168	40.6	
Aroclor-1242	2	6.557	0.062	473612	7.8	2	6.904	0.070	30680	2.1	
Aroclor-1242	3	6.662	0.019	481589	18.3	3	6.977	-0.067	77047	12.6	
Aroclor-1242	4	7.909	0.013	742400	23.6	4	8.268	-0.001	45394	8.5	
	Total Col1Ave (4 peaks):			27.0		Total Col2Ave (4 peaks):			16.0		RPD = 51*
	Corrected Ave (3 peaks):			16.5		Corrected Ave (3 peaks):			7.7		RPD = 73*
Aroclor-1248	1	6.557	0.068	473612	11.9	1	6.904	0.074	30680	3.2	
Aroclor-1248	2	7.458	-0.008	105990	2.5	2	7.741	0.003	56901	7.0	
Aroclor-1248	3	7.909	0.013	742400	14.0	3	8.268	0.000	45394	5.4	
Aroclor-1248	4	8.127	-0.004	325855	7.9	4	8.601	-0.013	88789	8.5	
	Total Col1Ave (4 peaks):			9.1		Total Col2Ave (4 peaks):			6.0		RPD = 40*
	Corrected Ave (3 peaks):			7.4		Corrected Ave (3 peaks):			5.2		RPD = 35
Aroclor-1254	1	8.214	-0.003	604723	11.1	1	8.332	-0.001	112328	15.7	
Aroclor-1254	2	8.597	0.009	580100	15.9	2	8.508	0.000	129699	14.1	
Aroclor-1254	3	8.723	-0.001	1010181	14.3	3	9.035	0.006	1142071	160.0	
Aroclor-1254	4	9.059	-0.015	1145976	14.7	4	9.180	0.000	183500	11.8	
Aroclor-1254	5	9.425	-0.008	633577	12.9	5	9.968	0.005	153094	16.2	
	Total Col1Ave (5 peaks):			13.8		Total Col2Ave (5 peaks):			43.5		RPD = 104*
	Corrected Ave (4 peaks):			13.2		Corrected Ave (4 peaks):			14.4		RPD = 9
Aroclor-1260	1	9.989	0.000	816200	16.0	1	10.294	0.002	114972	11.6	
Aroclor-1260	2	10.306	0.001	668568	13.0	2	10.741	-0.001	197778	16.2	
Aroclor-1260	3	10.682	0.002	1908503	16.0	3	11.020	0.002	322817	13.2	
Aroclor-1260	4	11.079	0.000	1335820	20.0	4	11.538	0.000	92681	12.9	
Aroclor-1260	5	11.267	-0.002	1376525	41.9	NS	---			----	
	Total Col1Ave (5 peaks):			[illegible]		Total Col2Ave (4 peaks):			13.5		RPD = 45*
	Corrected Ave (4 peaks):			16.2		Corrected Ave (3 peaks):			12.8		RPD = 26
Aroclor-1262	1	10.306	0.000	668568	12.0	1	10.294	0.003	114972	7.4	
Aroclor-1262	2	10.682	0.002	1908503	13.4	2	10.741	0.005	197778	14.9	
Aroclor-1262	3	11.079	-0.001	1335820	26.4	3	11.020	0.004	322817	10.8	
Aroclor-1262	4	11.267	-0.002	1376525	24.0	4	11.538	0.001	92681	7.6	
Aroclor-1262	5	11.934	-0.005	678392	13.5	5	12.365	0.025	175657	16.0	
	Total Col1Ave (5 peaks):			17.9		Total Col2Ave (5 peaks):			11.3		RPD = 45*
	Corrected Ave (4 peaks):			15.7		Corrected Ave (4 peaks):			10.2		RPD = 43*
Aroclor-1268	1	11.197	0.000	1440111	10.0	1	11.538	0.001	92681	2.9	
Aroclor-1268	2	11.267	-0.002	1376525	9.9	2	11.601	0.005	213577	7.0	

Aroclor-1268 3	11.669	0.015	732440	6.1	3	---			0.0
Aroclor-1268 4	12.444	0.002	325553	1.0	4	12.827	0.005	122069	1.8

Total Col1Ave (4 peaks): 6.7   Total Col2Ave (3 peaks): 3.9 RPD = 54*

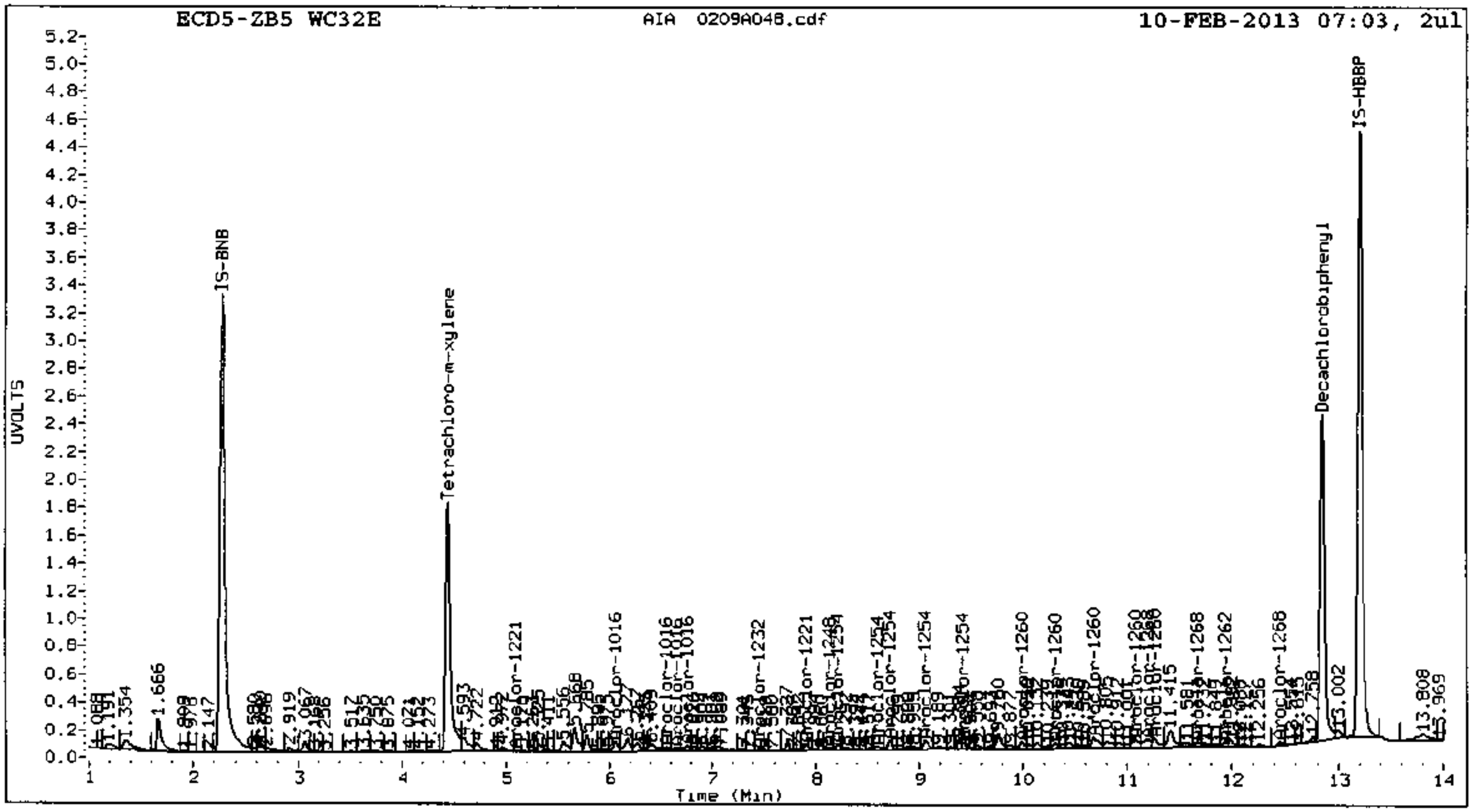
Corrected Ave (3 peaks): 5.7   Corrected Ave: < 3 Peaks

Total PCB Area Col1 (4.541 - 12.748) = 57409717   Col1 Total PCB = 0.1 ppm*

Total PCB Area Col2 (4.547 - 13.139) = 13562363   Col2 Total PCB = 0.1 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.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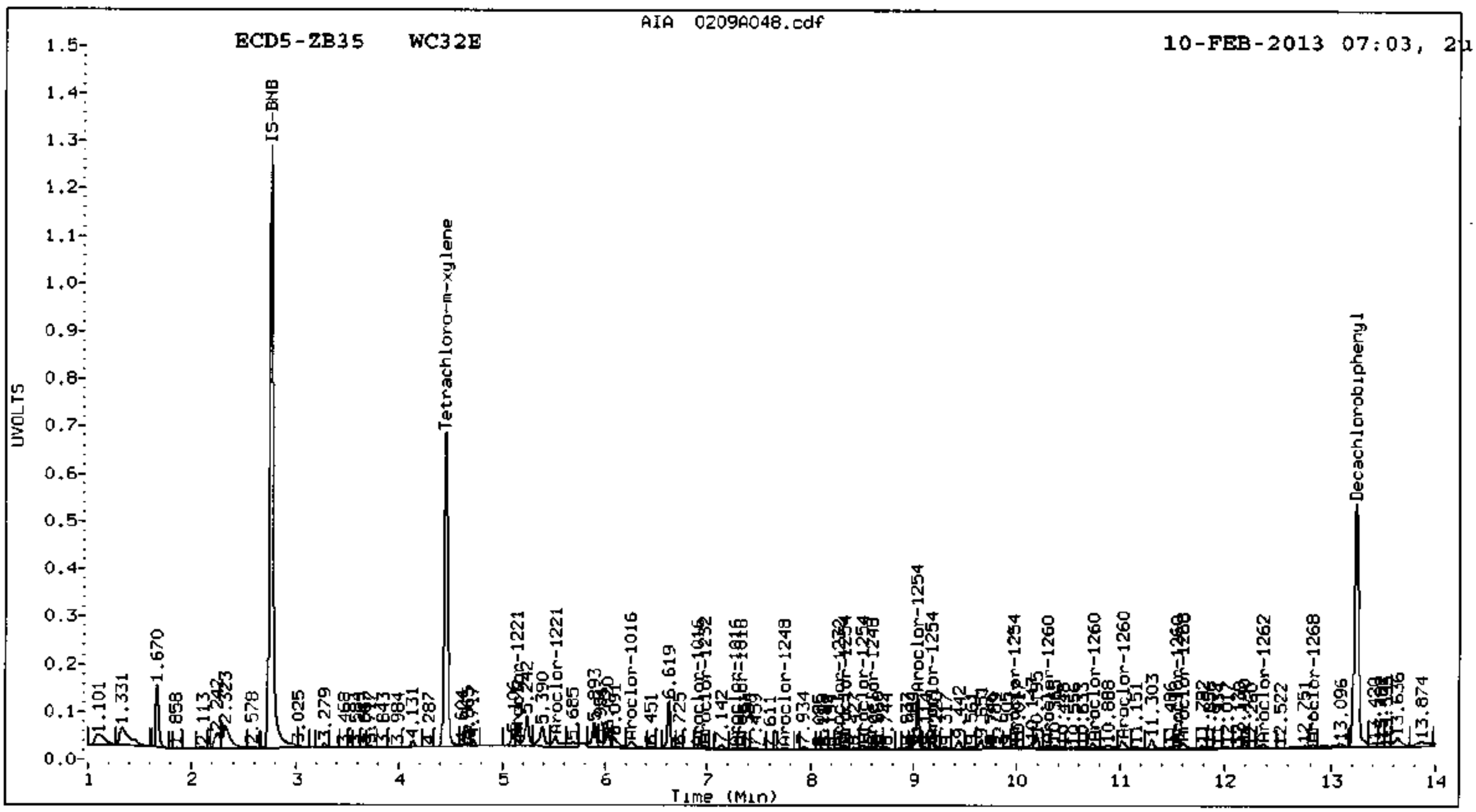
10-FEB-2013 07:03, 2ul
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Decachlorobiphenyl
IS-HBBP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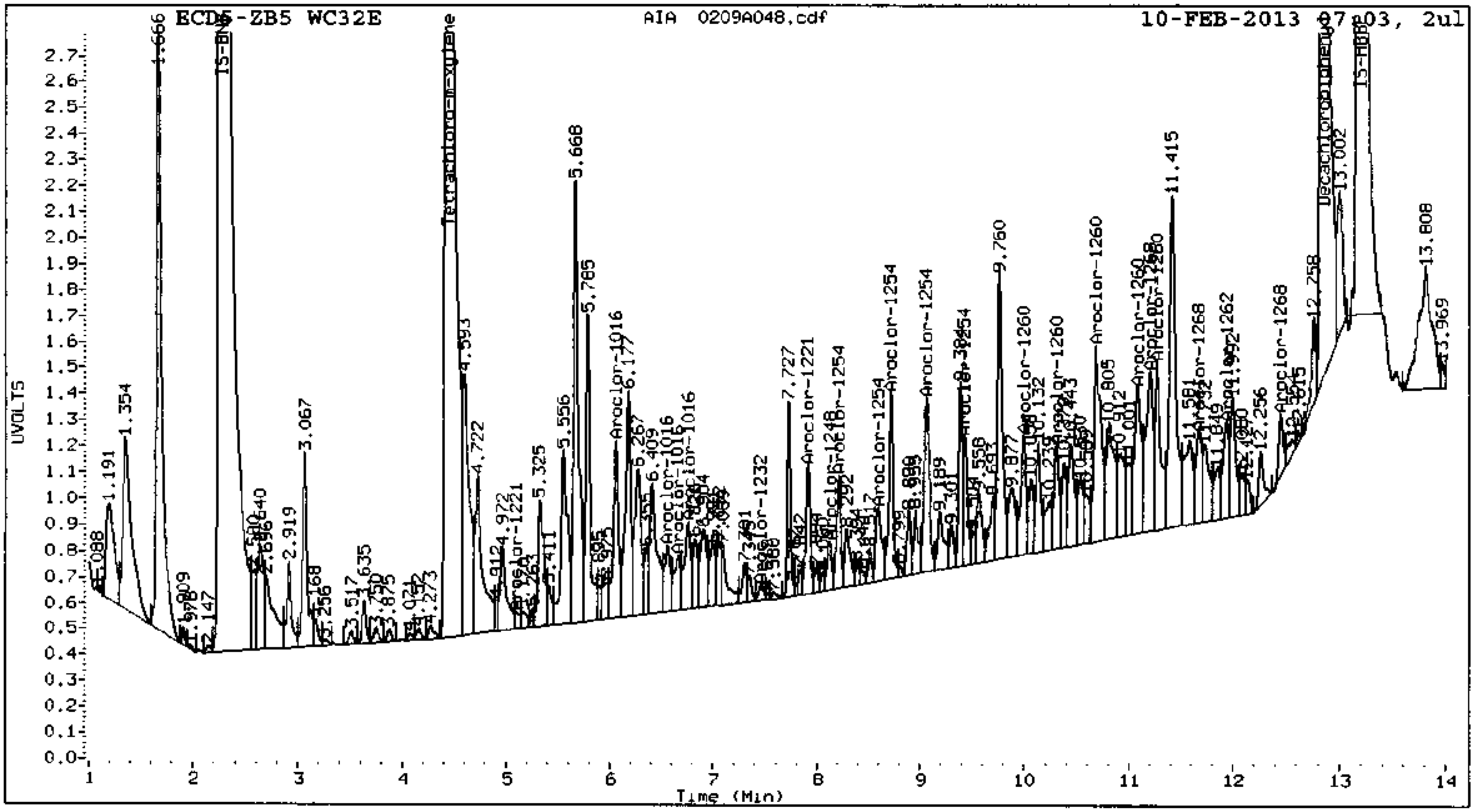
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Decachlorobiphenyl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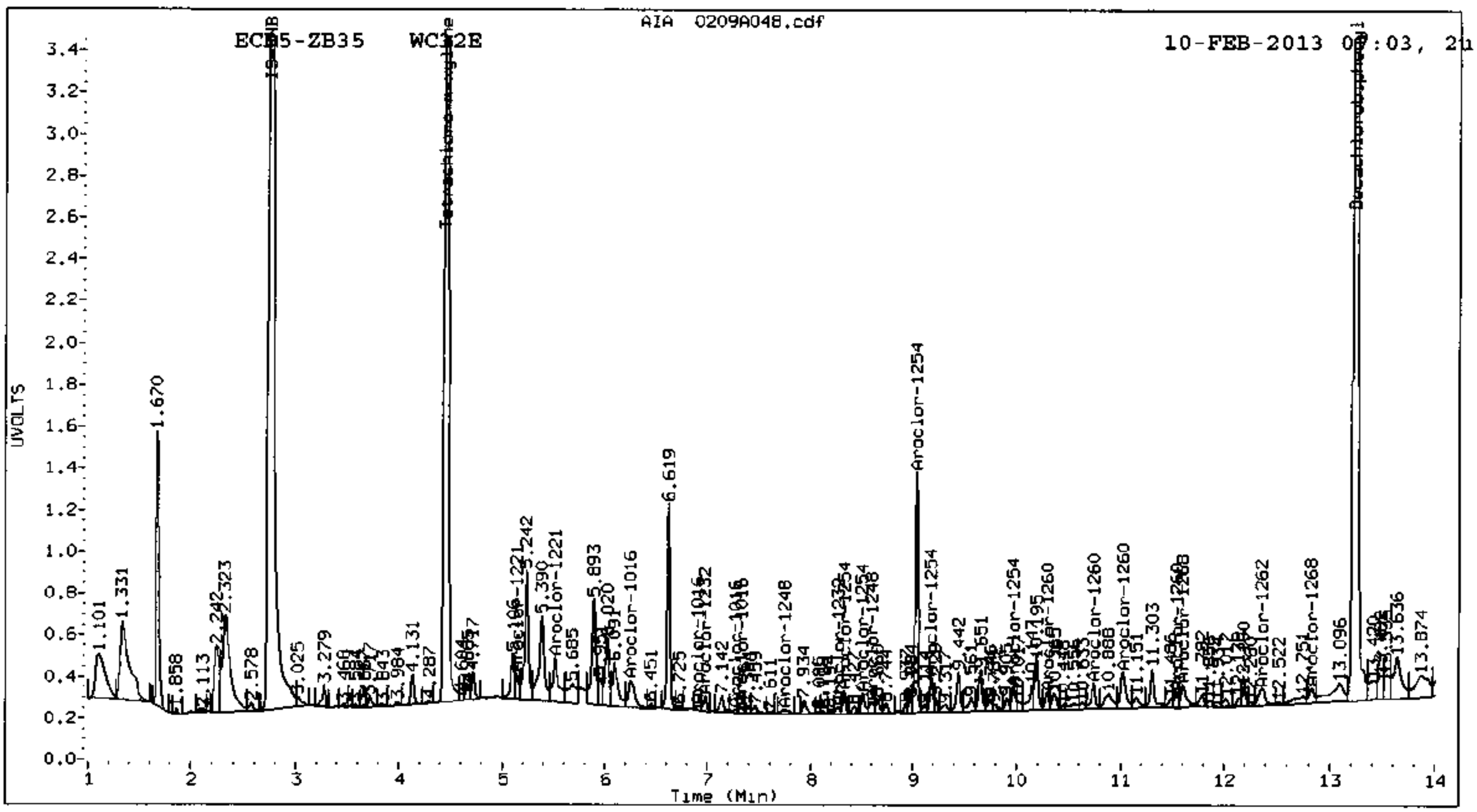
10-FEB-2013 07:03, 2ul
UVOLTS
Time (Min)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10-FEB-2013 07:03, 2ul
UVOLTS
Time (Min)

Analytical Resources Inc.
Dual Column PCBs by SW8082

Data file 1: 20130128.b/0209-1.b/0209A049.d
Data file 2: 20130128.b/0209-2.b/0209A049.d
Method: /chem2/ecd5.i/20130128.b/PCB1.m
Compound Sublist: PCB
Instrument, Inj. Vol.: ecd5.i, 2ul
Quant Method: Internal Std

ARI ID: WC32F
Client ID: SG-95-0-10-013113
Injection Date: 10-FEB-2013 07:24
Ical Date: 28-JAN-2013
Matrix: SOIL
Dilution Factor: 1.000

ZB5 Col RT	ZB5 Col Shift	ZB5 Col Response	ZB35 Col RT	ZB35 Col Shift	ZB35 Col Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
4.442	0.001	29883634	4.450	0.003	7344847	29.8	29.8	0.0	Tetrachloro-m-xylen
12.850	0.002	33534070	13.240	0.002	6767780	28.4	29.1	2.5	Decachlorobiphenyl

* Indicates RPD > 40%
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE PERCENT RECOVERY

SURROGATE	Col1	Col2
Tetrachloro-m-xylene	74.5	74.5
Decachlorobiphenyl	71.0	72.8

JK 02/12/13

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	44738954	56555835	26.4
Hexabromobiphenyl	59848867	68178061	13.9

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	14899855	16794694	12.7
Hexabromobiphenyl	12307480	13850213	12.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 28-JAN-2013
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	6.060	-0.028	567878	21.7	1	6.248	0.047	73302	7.6
Aroclor-1016	2	6.470	-0.023	297240	3.6	2	6.833	0.001	22054	1.1
Aroclor-1016	3	6.660	0.018	223229	6.3	3	7.261	0.043	11704	2.2
Aroclor-1016	4	6.757	0.004	339398	13.6	4	7.326	0.000	69970	11.6
	Total Col1Ave (4 peaks):			11.3		Total Col2Ave (4 peaks):			5.6	RPD = 67*
	Corrected Ave (3 peaks):			7.8		Corrected Ave (3 peaks):			3.6	RPD = 73*
Aroclor-1221	1	5.166	0.068	78254	3.3	1	---			0.0
Aroclor-1221	2	6.470	-0.025	297240	40.3	2	5.149	0.001	114566	42.0
Aroclor-1221	3	7.905	0.002	1975870	200.1	3	---			0.0
Aroclor-1221	NS	---			----	4	5.520	0.022	349545	68.7
	Total Col1Ave (3 peaks):			81.3		Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	6.060	-0.030	567878	53.8	1	6.248	0.048	73302	17.3
Aroclor-1232	2	6.470	-0.024	297240	8.9	2	6.833	0.004	22054	2.7
Aroclor-1232	3	7.461	-0.007	207975	13.2	3	6.976	-0.067	61525	18.1
Aroclor-1232	4	7.905	0.009	1975870	108.2	4	8.267	-0.001	63795	21.9
	Total Col1Ave (4 peaks):			46.0		Total Col2Ave (4 peaks):			15.0	RPD = 102*
	Corrected Ave (3 peaks):			25.3		Corrected Ave (3 peaks):			12.7	RPD = 66*
Aroclor-1242	1	6.060	-0.029	567878	28.8	1	6.248	0.046	73302	10.4
Aroclor-1242	2	6.470	-0.025	297240	4.8	2	6.833	-0.001	22054	1.5
Aroclor-1242	3	6.660	0.016	223229	8.4	3	6.976	-0.068	61525	9.8
Aroclor-1242	4	7.905	0.009	1975870	61.9	4	8.267	-0.002	63795	11.7
	Total Col1Ave (4 peaks):			26.0		Total Col2Ave (4 peaks):			8.3	RPD = 103*
	Corrected Ave (3 peaks):			14.0		Corrected Ave (3 peaks):			7.2	RPD = 64*
Aroclor-1248	1	6.470	-0.020	297240	7.4	1	6.833	0.003	22054	2.2
Aroclor-1248	2	7.461	-0.005	207975	4.9	2	7.740	0.002	50834	6.1
Aroclor-1248	3	7.905	0.010	1975870	36.7	3	8.267	-0.002	63795	7.4
Aroclor-1248	4	8.137	0.006	537499	12.8	4	8.600	-0.014	261499	24.5
	Total Col1Ave (4 peaks):			15.4		Total Col2Ave (4 peaks):			10.1	RPD = 42*
	Corrected Ave (3 peaks):			8.3		Corrected Ave (3 peaks):			5.3	RPD = 45*
Aroclor-1254	1	8.217	0.000	2387765	43.1	1	8.333	0.000	384342	52.4
Aroclor-1254	2	8.589	0.001	927242	25.1	2	8.508	0.001	496053	52.6
Aroclor-1254	3	8.722	-0.001	3476985	48.5	3	9.035	0.005	888900	121.7
Aroclor-1254	4	9.056	-0.018	6842870	86.4	4	9.179	0.000	443739	27.9
Aroclor-1254	5	9.384	-0.048	10604920	213.7	5	9.971	0.008	552877	57.0
	Total Col1Ave (5 peaks):			[illegible]3.4		Total Col2Ave (5 peaks):			62.[illegible]	RPD = 29
	Corrected Ave (4 peaks):			50.8		Corrected Ave (4 peaks):			47.5	RPD = 7
Aroclor-1260	1	9.990	0.001	5224953	101.8	1	10.294	0.001	1039719	100.3
Aroclor-1260	2	10.307	0.002	4911126	94.5	2	10.743	0.001	1237365	97.1
Aroclor-1260	3	10.681	0.001	15328442	127.3	3	11.018	0.000	2870505	112.4
Aroclor-1260	4	11.080	0.001	7538297	111.8	4	11.539	0.002	949243	126.2
Aroclor-1260	5	11.270	0.001	4566821	137.9	NS	---			----
	Total Col1Ave (5 peaks):			114.6		Total Col2Ave (4 peaks):			109.0	RPD = 5
	Corrected Ave (4 peaks):			108.8		Corrected Ave (3 peaks):			103.3	RPD = 5
Aroclor-1262	1	10.307	0.001	4911126	87.5	1	10.294	0.002	1039719	64.1
Aroclor-1262	2	10.681	0.001	15328442	106.7	2	10.743	0.007	1237365	89.1
Aroclor-1262	3	11.080	0.001	7538297	147.8	3	11.018	0.002	2870505	91.6
Aroclor-1262	4	11.270	0.001	4566821	79.0	4	11.539	0.002	949243	74.8
Aroclor-1262	5	11.938	-0.001	5049566	99.7	5	12.340	0.001	857649	74.7
	Total Col1Ave (5 peaks):			104.1		Total Col2Ave (5 peaks):			78.9	RPD = 28
	Corrected Ave (4 peaks):			93.2		Corrected Ave (4 peaks):			75.7	RPD = 21
Aroclor-1268	1	11.197	0.000	3399806	23.4	1	11.539	0.002	949243	28.8
Aroclor-1268	2	11.270	0.001	4566821	32.5	2	11.599	0.003	2007876	63.0

Aroclor-1268 3	11.670	0.015	2039444	16.9	3	---			0.0
Aroclor-1268 4	12.443	0.001	1463607	4.5	4	12.827	0.006	243390	3.4

Total Col1Ave (4 peaks): 19.3   Total Col2Ave (3 peaks): 31.7   RPD = 49*

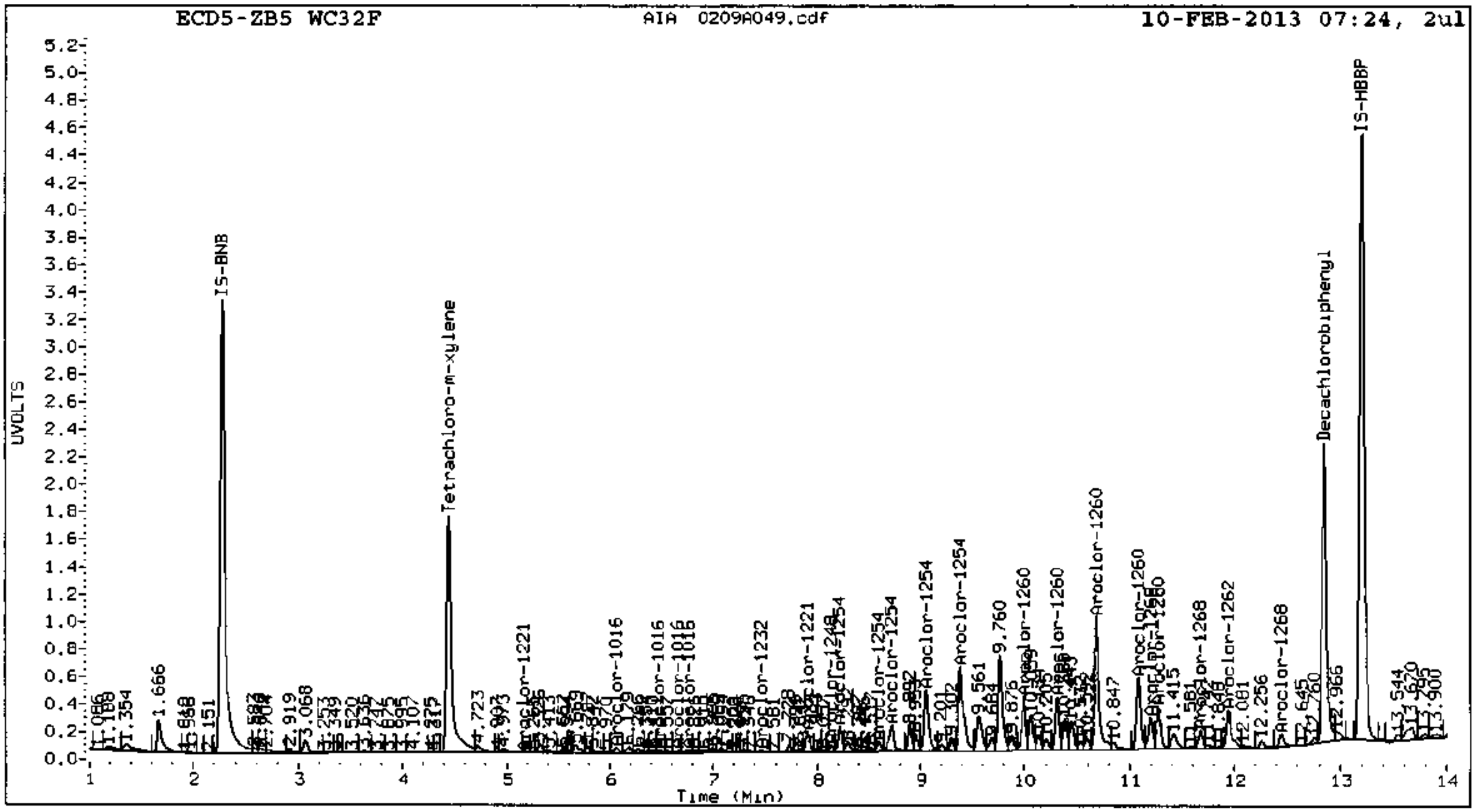
Corrected Ave (3 peaks): 14.9   Corrected Ave: < 3 Peaks

Total PCB Area Col1 (4.541 - 12.748) = 134387045   Col1 Total PCB = 0.2 ppm*

Total PCB Area Col2 (4.547 - 13.139) = 27229565   Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.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10-FEB-2013 07:24, 2ul
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Decachlorobiphenyl
IS-HBBP
Aroclor-1221
Aroclor-1016
Aroclor-1232
Aroclor-1248
Aroclor-1254
Aroclor-1260
Aroclor-1262
Aroclor-1268
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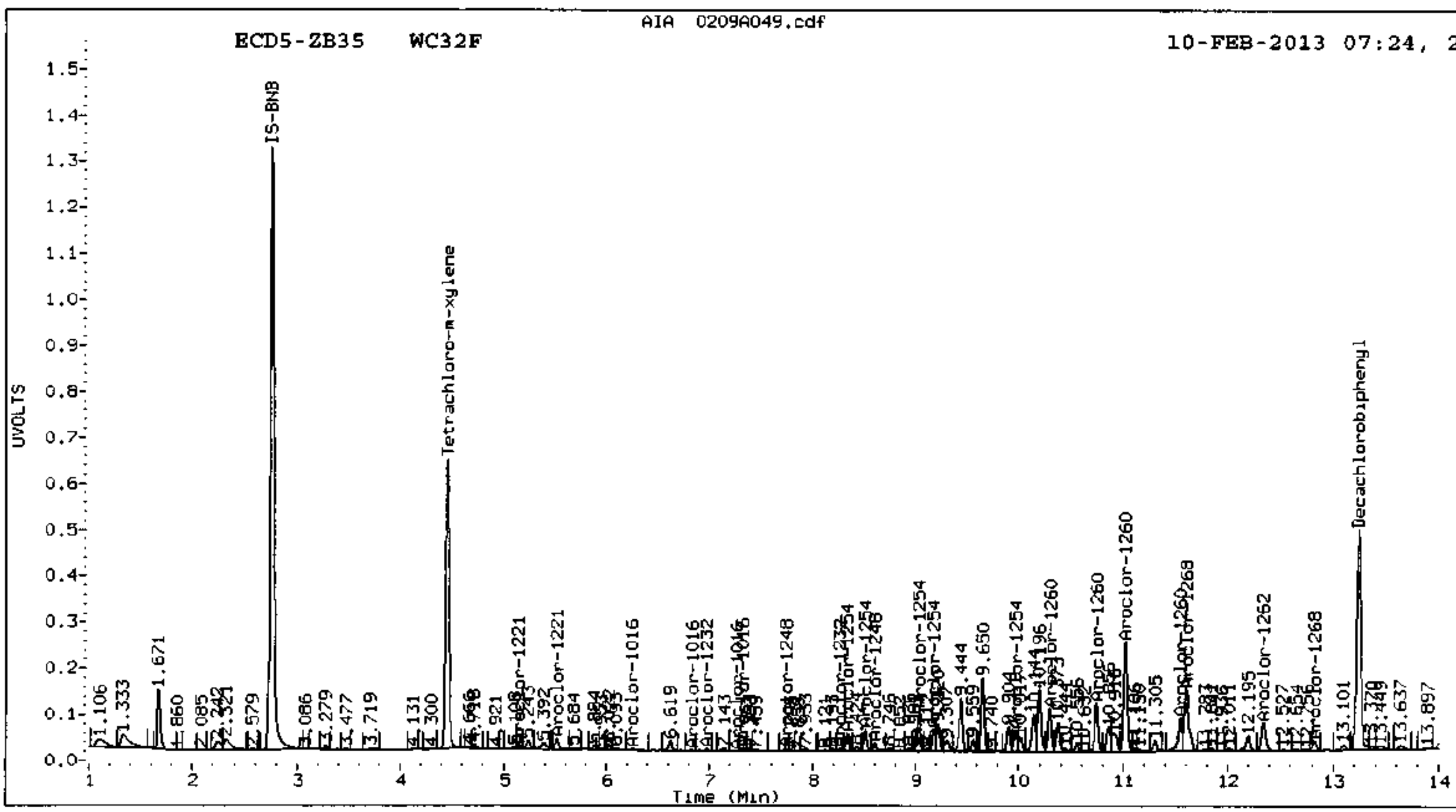
12.081
12.256
12.966
13.544
13.900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UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Decachlorobiphenyl
Aroclor-1221
Aroclor-1016
Aroclor-1232
Aroclor-1248
Aroclor-1254
Aroclor-1260
Aroclor-1262
Aroclor-1268
1.671
1.106
1.333
3.086
3.279
3.477
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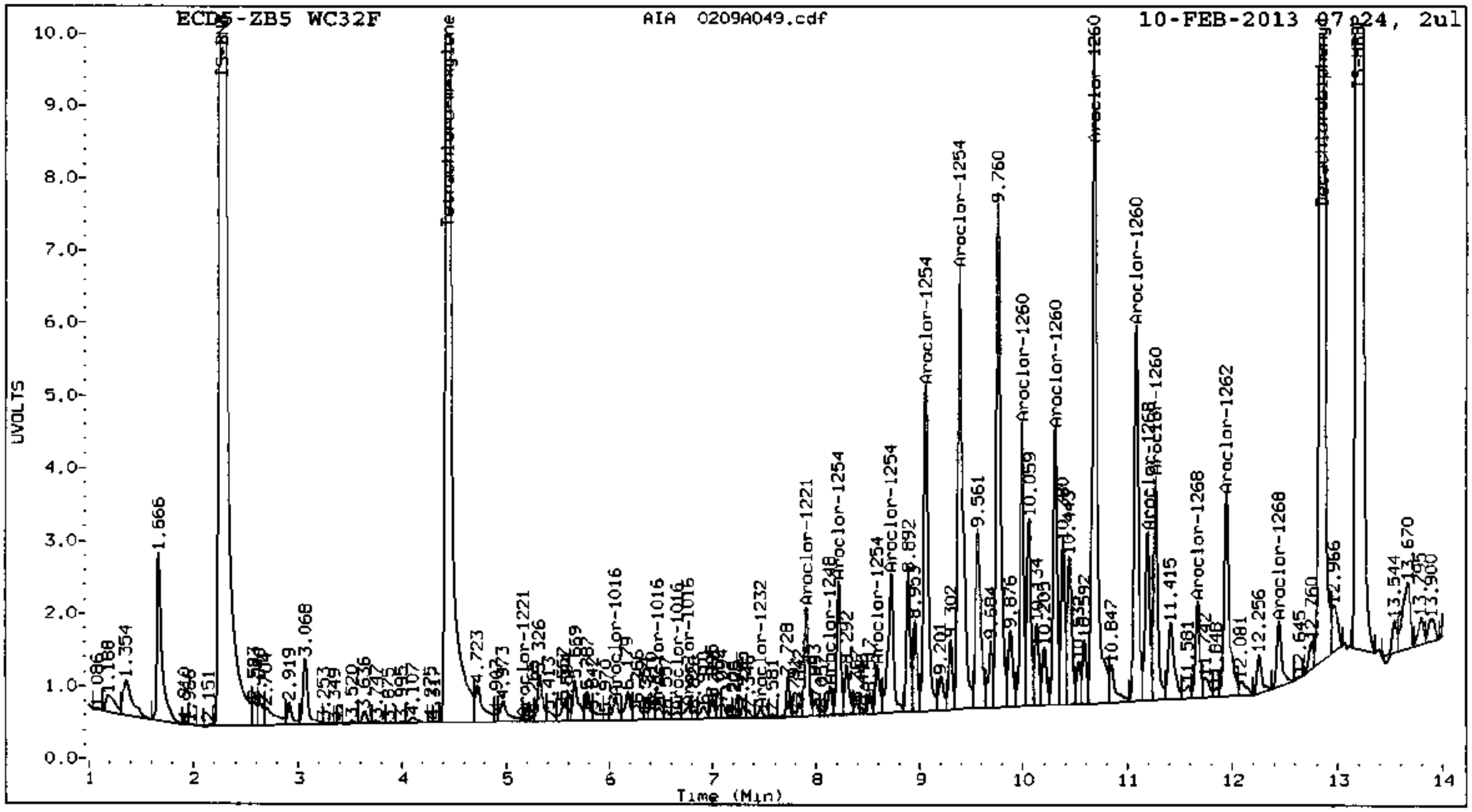
13.101
13.637
13.897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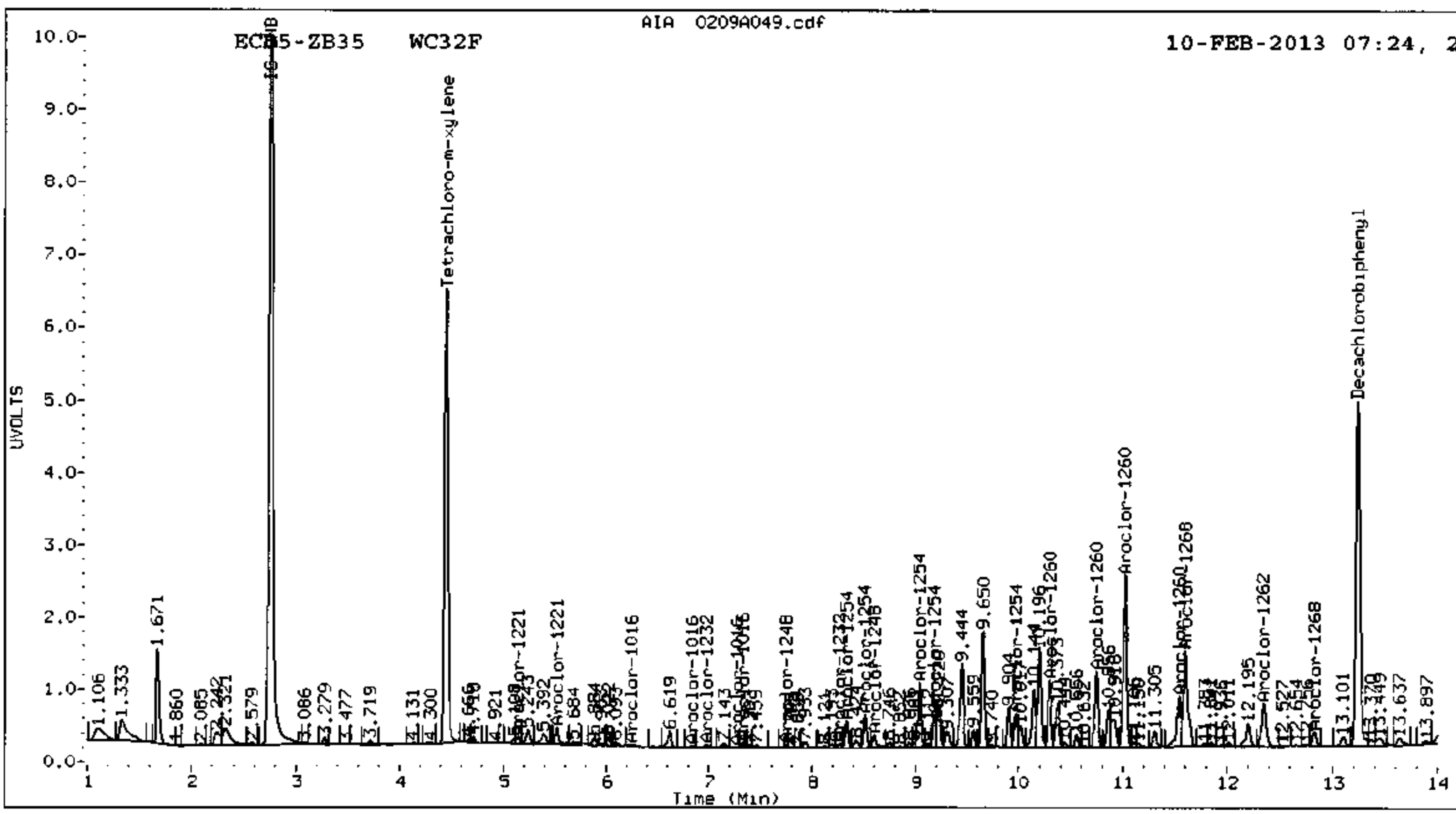
UVOLTS
Time (Min)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10-FEB-2013 07:24, 2u
UVOLTS
Time (Min)

Analytical Resources Inc.
Dual Column PCBs by SW8082

Data file 1: 20130128.b/0209-1.b/0209A050.d
Data file 2: 20130128.b/0209-2.b/0209A050.d
Method: /chem2/ecd5.i/20130128.b/PCB1.m
Compound Sublist: AR1660
Instrument, Inj. Vol.: ecd5.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660
Client ID:
Injection Date: 10-FEB-2013 07:44
Ical Date: 28-JAN-2013
Matrix: NONE
Dilution Factor: 1.000

ZB5 Col RT	ZB5 Col Shift	ZB5 Col Response	ZB35 Col RT	ZB35 Col Shift	ZB35 Col Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
4.443	0.002	19903598	4.449	0.002	5022845	19.2	19.4	1.1	Tetrachloro-m-xylen
12.849	0.000	22121206	13.239	0.000	4745361	17.3	19.8	13.5	Decachlorobiphenyl

* Indicates RPD > 40%
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE PERCENT RECOVERY

SURROGATE	Col1	Col2
Tetrachloro-m-xylene	48.0	48.6
Decachlorobiphenyl	43.2	49.5

JR 02/12/13

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	44738954	58451051	30.6
Hexabromobiphenyl	59848867	73834164	23.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	14899855	17623495	18.3
Hexabromobiphenyl	12307480	14273055	16.0

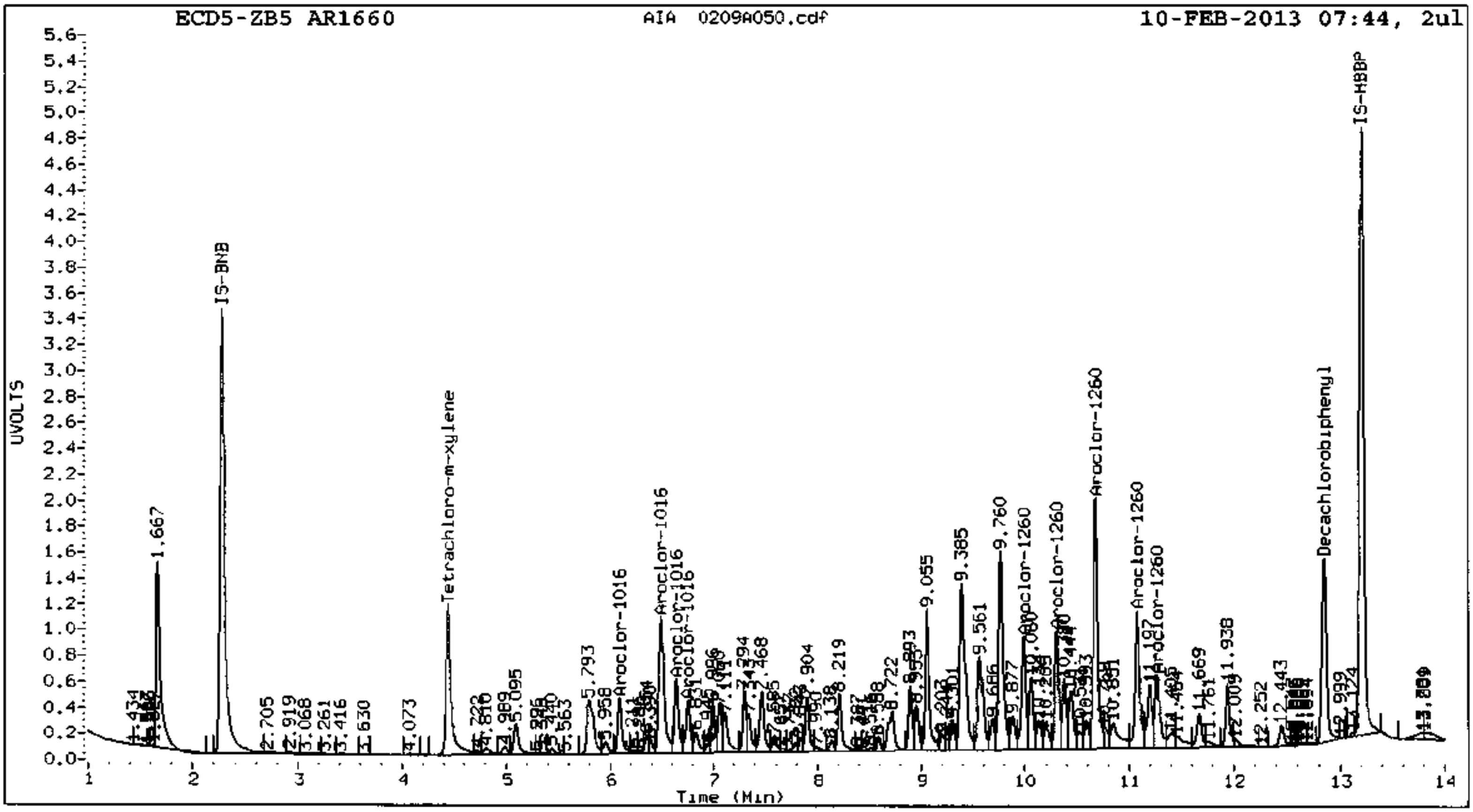
* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 28-JAN-2013
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	6.089	0.001	6140522	226.7	1	6.202	0.001	2309060	228.7
Aroclor-1016	2	6.494	0.002	19280515	223.8	2	6.835	0.002	4936853	229.9
Aroclor-1016	3	6.643	0.001	8310851	226.8	3	7.219	0.001	1273715	227.7
Aroclor-1016	4	6.755	0.002	6005180	233.5	4	7.328	0.001	1470722	231.7
	Total Col1Ave (4 peaks):			227.7		Total Col2Ave (4 peaks):			229.5	RPD = 1
	Corrected Ave (3 peaks):			225.8		Corrected Ave (3 peaks):			228.7	RPD = 1
Aroclor-1260	1	9.991	0.002	12455510	224.0	1	10.294	0.001	2427390	227.3
Aroclor-1260	2	10.307	0.002	12354421	219.5	2	10.744	0.002	3047037	232.1
Aroclor-1260	3	10.681	0.001	28850336	221.2	3	11.018	0.000	5993604	227.7
Aroclor-1260	4	11.080	0.001	17276087	236.6	4	11.540	0.002	1702618	219.7
Aroclor-1260	5	11.271	0.002	9430742	263.0	NS	---			----
	Total Col1Ave (5 peaks):			232.8		Total Col2Ave (4 peaks):			226.7	RPD = 3
	Corrected Ave (4 peaks):			225.3		Corrected Ave (3 peaks):			224.9	RPD = 0

Total PCB Area Col1 (4.541 - 12.748) = 377933844   Col1 Total PCB = 0.5 ppm*

Total PCB Area Col2 (4.547 - 13.139) = 77567561   Col2 Total PCB = 0.6 ppm*

* Quantitated against AR1660 0.25ppm in Ical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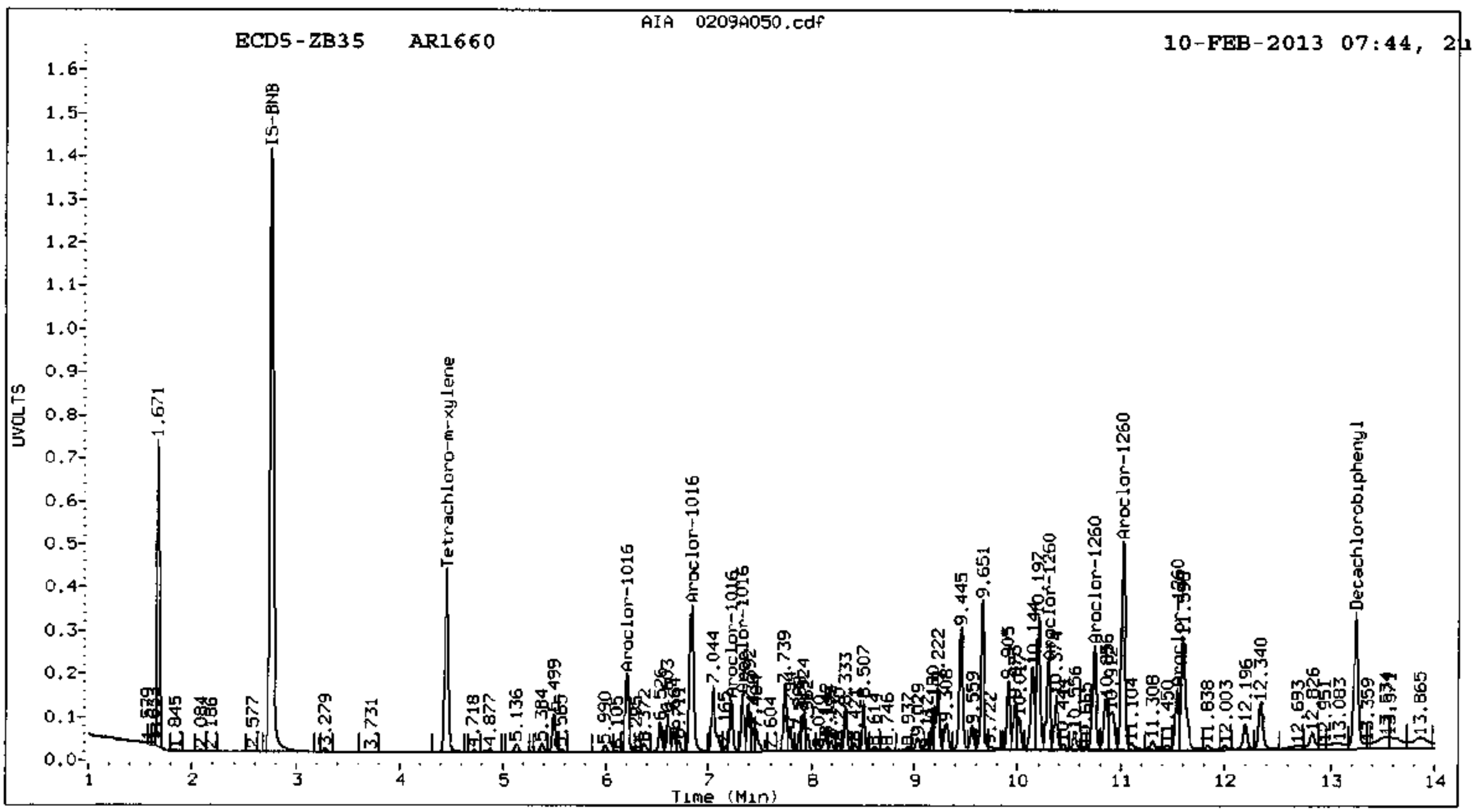
10-FEB-2013 07:44, 2ul
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Aroclor-1016
Aroclor-1260
Decachlorobiphenyl
IS-HBBP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AIA 0209A050.cdf
10-FEB-2013 07:44, 2u
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Aroclor-1016
Aroclor-1260
Decachlorobiphenyl

WC32:01098

Analytical Resources Inc.
Dual Column PCBs by SW8082

Data file 1: 20130128.b/0209-1.b/0209A051.d	ARI ID: AR1254
Data file 2: 20130128.b/0209-2.b/0209A051.d	Client ID:
Method: /chem2/ecd5.i/20130128.b/PCB1.m	Injection Date: 10-FEB-2013 08:04
Compound Sublist: AR1254	Ical Date: 28-JAN-2013
Instrument, Inj. Vol.: ecd5.i, 2ul	Matrix: NONE
Quant Method: Internal Std	Dilution Factor: 1.000

ZB5 Col RT	ZB5 Col Shift	ZB5 Col Response	ZB35 Col RT	ZB35 Col Shift	ZB35 Col Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
4.443	0.002	19300238	4.449	0.002	4910524	19.0	19.4	1.9	Tetrachloro-m-xylen
12.850	0.002	22659597	13.240	0.001	4245897	17.4	17.7	1.5	Decachlorobiphenyl

* Indicates RPD > 40%
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE PERCENT RECOVERY

SURROGATE	Col1	Col2
Tetrachloro-m-xylene	47.5	48.4
Decachlorobiphenyl	43.5	44.2

JM 02/08/13 12
JM02/12/13

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	44738954	57357908	28.2
Hexabromobiphenyl	59848867	75108968	25.5

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	14899855	17292854	16.1
Hexabromobiphenyl	12307480	14313077	16.3

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 28-JAN-2013
<- Indicates standard response outside Limits (-50 to +100%)

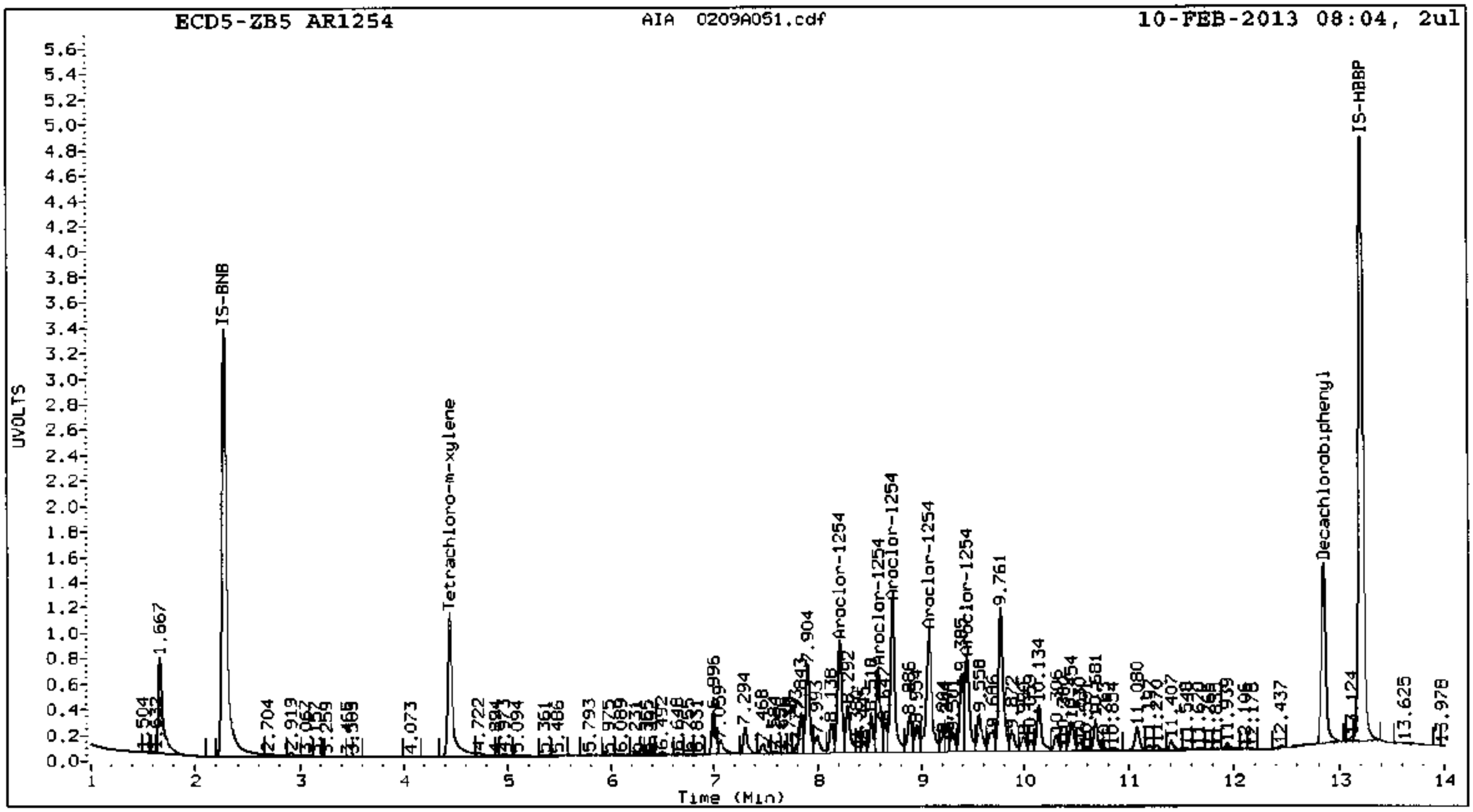
		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1254	1	8.217	0.000	12552282	223.5	1	8.333	0.000	1818012	240.6
Aroclor-1254	2	8.588	0.000	8503270	226.8	2	8.507	0.000	2339148	241.1
Aroclor-1254	3	8.724	0.000	17369944	238.8	3	9.029	0.000	1802557	239.7
Aroclor-1254	4	9.074	0.000	18794271	234.1	4	9.180	0.000	3855434	235.7
Aroclor-1254	5	9.433	0.000	11917529	236.8	5	9.964	0.000	2340498	234.4

Total Col1Ave (5 peaks): 232.0 Total Col2Ave (5 peaks): 238.3 RPD = 3
Corrected Ave (4 peaks): 230.3 Corrected Ave (4 peaks): 237.6 RPD = 3

Total PCB Area Col1 (4.541 - 12.748) = 189712461 Col1 Total PCB = 0.3 ppm*

Total PCB Area Col2 (4.547 - 13.139) = 37876346 Col2 Total PCB = 0.3 ppm*

* Quantitated against AR1660 0.25ppm in Ical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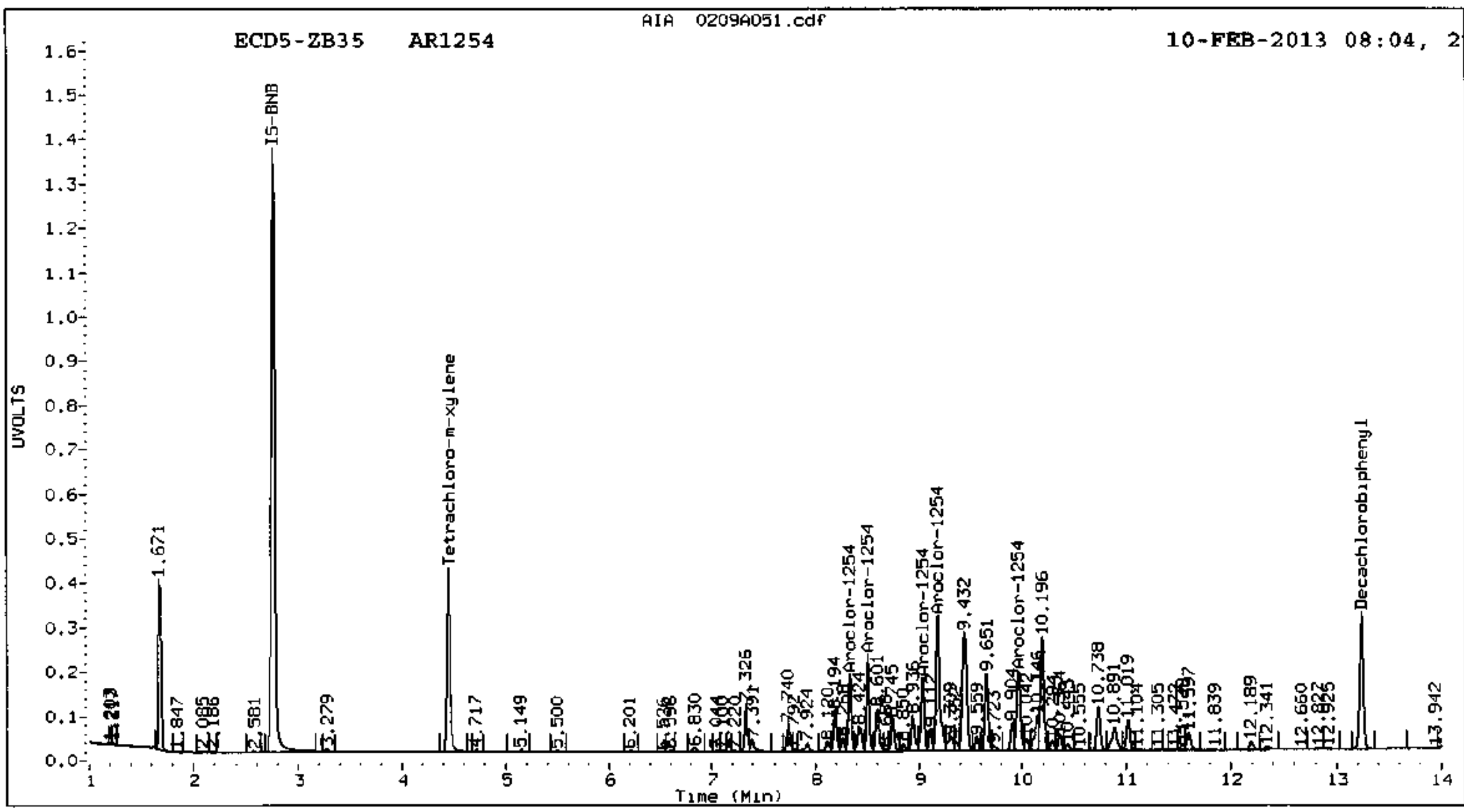
10-FEB-2013 08:04, 2ul
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Aroclor-1254
Decachlorobiphenyl
IS-HBBP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Time (Min)
IS-BNB
Tetrachloro-m-xylene
Aroclor-1254
Decachlorobiphenyl

Analytical Resources Inc.
Dual Column PCBs by SW8082

Data file 1: 20130128.b/0209-1.b/0209A052.d
Data file 2: 20130128.b/0209-2.b/0209A052.d
Method: /chem2/ecd5.i/20130128.b/PCB1.m
Compound Sublist: PCB
Instrument, Inj. Vol.: ecd5.i, 2ul
Quant Method: Internal Std

ARI ID: WC32G
Client ID: SG-08-0-10-013113
Injection Date: 10-FEB-2013 08:24
Ical Date: 28-JAN-2013
Matrix: SOIL
Dilution Factor: 1.000

ZB5 Col RT	ZB5 Col Shift	ZB5 Col Response	ZB35 Col RT	ZB35 Col Shift	ZB35 Col Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
4.441	0.000	27470249	4.448	0.001	6804741	28.7	29.5	2.5	Tetrachloro-m-xylen
12.850	0.001	32288480	13.239	0.000	6749861	27.5	26.8	2.7	Decachlorobiphenyl

* Indicates RPD > 40%
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE PERCENT RECOVERY

SURROGATE	Col1	Col2
Tetrachloro-m-xylene	71.9	73.7
Decachlorobiphenyl	68.8	67.0

JR 02/12/13

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	44738954	53921243	20.5
Hexabromobiphenyl	59848867	67708948	13.1

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	14899855	15734968	5.6
Hexabromobiphenyl	12307480	15002956	21.9

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 28-JAN-2013
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	ZB5 Col RT	Shift	Area	Amount	Peak#	ZB35 Col RT	Shift	Area	Amount
Aroclor-1016	1	6.060	-0.028	1317583	52.7	1	6.157	-0.044	897728	99.6
Aroclor-1016	2	6.469	-0.023	5191192	65.3	2	6.835	0.003	214938	11.2
Aroclor-1016	3	6.624	-0.018	1362941	40.3	3	7.140	-0.078	3168641	634.5
Aroclor-1016	4	6.756	0.003	5175857	218.2	4	7.324	-0.002	224585	39.6
	Total Col1Ave (4 peaks):			94.1		Total Col2Ave (4 peaks):			196.2	RPD = 70*
	Corrected Ave (3 peaks):			52.8		Corrected Ave (3 peaks):			50.1	RPD = 5
Aroclor-1221	1	5.094	-0.004	211186	9.5	1	1.097	0.097	194028	119.2
Aroclor-1221	2	6.469	-0.026	5191192	737.7	2	5.146	-0.002	122895	48.1
Aroclor-1221	3	7.924	0.020	12571082	1335.6	3	---			0.0
Aroclor-1221	NS	---			----	4	5.513	0.026	666573	139.9
	Total Col1Ave (3 peaks):			694.2		Total Col2Ave (3 peaks):			102.4	RPD = 149*
	Corrected Ave: < 3 Peaks					Corrected Ave: < 3 Peaks				
Aroclor-1232	1	6.060	-0.030	1317583	130.9	1	6.157	-0.043	897728	226.7
Aroclor-1232	2	6.469	-0.024	5191192	163.9	2	6.835	0.006	214938	27.8
Aroclor-1232	3	7.449	-0.018	1355361	90.0	3	7.042	-0.001	88276	27.7
Aroclor-1232	4	7.924	0.027	12571082	722.2	4	8.249	-0.019	646286	236.7
	Total Col1Ave (4 peaks):			276.7		Total Col2Ave (4 peaks):			129.7	RPD = 72*
	Corrected Ave (3 peaks):			128.3		Corrected Ave (3 peaks):			94.1	RPD = 31
Aroclor-1242	1	6.060	-0.029	1317583	70.0	1	6.157	-0.045	897728	135.4
Aroclor-1242	2	6.469	-0.025	5191192	88.4	2	6.835	0.001	214938	15.1
Aroclor-1242	3	6.624	-0.019	1362941	53.7	3	7.042	-0.002	88276	15.0
Aroclor-1242	4	7.924	0.028	12571082	413.3	4	8.249	-0.020	646286	126.9
	Total Col1Ave (4 peaks):			156.3		Total Col2Ave (4 peaks):			73.1	RPD = 73*
	Corrected Ave (3 peaks):			70.7		Corrected Ave (3 peaks):			52.3	RPD = 30
Aroclor-1248	1	6.469	-0.020	5191192	135.0	1	6.835	0.005	214938	23.2
Aroclor-1248	2	7.449	-0.017	1355361	33.2	2	7.732	-0.006	357109	45.9
Aroclor-1248	3	7.924	0.028	12571082	244.8	3	8.249	-0.019	646286	80.0
Aroclor-1248	4	8.130	-0.002	1138782	28.4	4	8.600	-0.014	610423	61.0
	Total Col1Ave (4 peaks):			~~110.4~~		Total Col2Ave (4 peaks):			52.5	RPD = 71*
	Corrected Ave (3 peaks):			~~65.6~~ 60		Corrected Ave (3 peaks):			~~43.4~~ 60	RPD = 41*
Aroclor-1254	1	8.215	-0.001	2795084	52.9	1	8.331	-0.001	432297	62.9
Aroclor-1254	2	8.603	0.016	3536727	100.3	2	8.507	-0.001	622743	70.5
Aroclor-1254	3	8.723	-0.001	4848052	70.9	3	9.032	0.002	874068	127.7
Aroclor-1254	4	9.061	-0.012	8670060	114.9	4	9.179	-0.001	692183	46.5
Aroclor-1254	5	9.384	-0.049	10077404	~~213.0~~	5	9.969	0.005	713071	78.5
	Total Col1Ave (5 peaks):			~~110.4~~		Total Col2Ave (5 peaks):			77.2	RPD = 35
	Corrected Ave (4 peaks):			84.8		Corrected Ave (4 peaks):			64.6	RPD = 27
Aroclor-1260	1	9.990	0.001	7622997	149.5	1	10.294	0.001	1503722	134.0
Aroclor-1260	2	10.302	-0.003	6295044	121.9	2	10.743	0.000	1571247	113.9
Aroclor-1260	3	10.681	0.001	16472731	137.7	3	11.018	0.000	2957118	106.9
Aroclor-1260	4	11.079	0.000	5462176	81.6	4	11.540	0.002	1902363	~~233.5~~
Aroclor-1260	5	11.270	0.000	11252523	~~342.1~~	NS	---			----
	Total Col1Ave (5 peaks):			~~166.6~~		Total Col2Ave (4 peaks):			~~147.1~~	RPD = 12
	Corrected Ave (4 peaks):			122.7		Corrected Ave (3 peaks):			~~[illegible].2~~	RPD = 4
Aroclor-1262	1	10.302	-0.004	6295044	113.0	1	10.294	0.002	1503722	85.6
Aroclor-1262	2	10.681	0.000	16472731	115.4	2	10.743	0.006	1571247	104.5
Aroclor-1262	3	11.079	0.000	5462176	107.8	3	11.018	0.002	2957118	87.1
Aroclor-1262	4	11.270	0.001	11252523	196.0	4	11.540	0.003	1902363	138.3
Aroclor-1262	5	11.938	-0.001	10258692	204.0	5	12.340	0.001	1910966	153.7
	Total Col1Ave (5 peaks):			147.2		Total Col2Ave (5 peaks):			113.8	RPD = 26
	Corrected Ave (4 peaks):			133.1		Corrected Ave (4 peaks):			103.9	RPD = 25
Aroclor-1268	1	11.196	-0.001	30076439	208.6	1	11.540	0.003	1902363	53.3

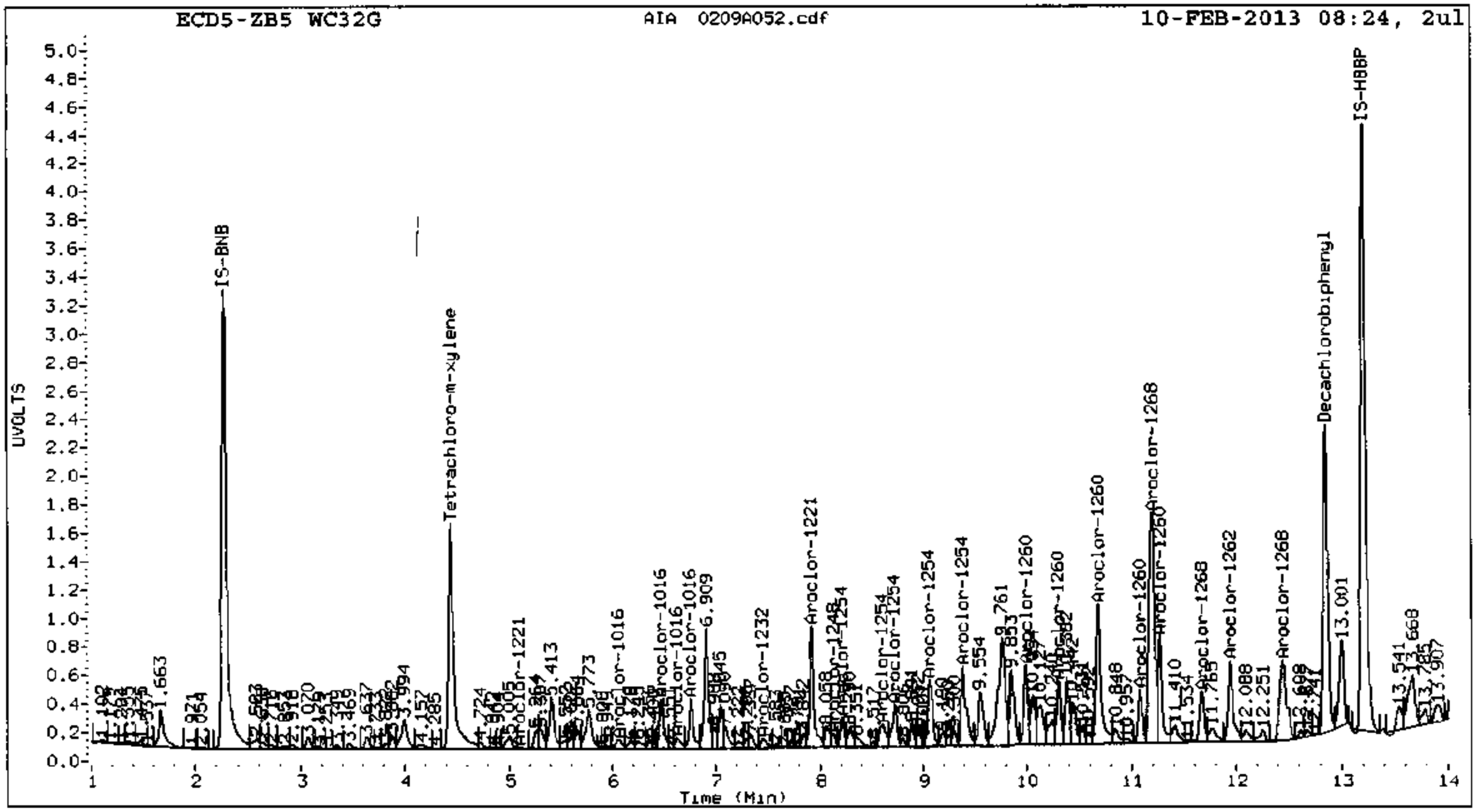
Aroclor-1268 2	11.270	0.001	11252523	80.7	2	11.614	0.018	5723038	165.7
Aroclor-1268 3	11.666	0.012	5702203	47.6	3	1.097	0.097	194028	6.7
Aroclor-1268 4	12.441	-0.002	12293043	37.7	4	12.826	0.004	1531515	19.5
Total Col1Ave (4 peaks):				93.6	Total Col2Ave (4 peaks):			61.3	RPD = 42*
Corrected Ave (3 peaks):				55.3	Corrected Ave (3 peaks):			26.5	RPD = 70*

Total PCB Area Col1 (4.541 - 12.748) = 304996046 Col1 Total PCB = 0.4 ppm*

Total PCB Area Col2 (4.547 - 13.139) = 69041256 Col2 Total PCB = 0.6 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.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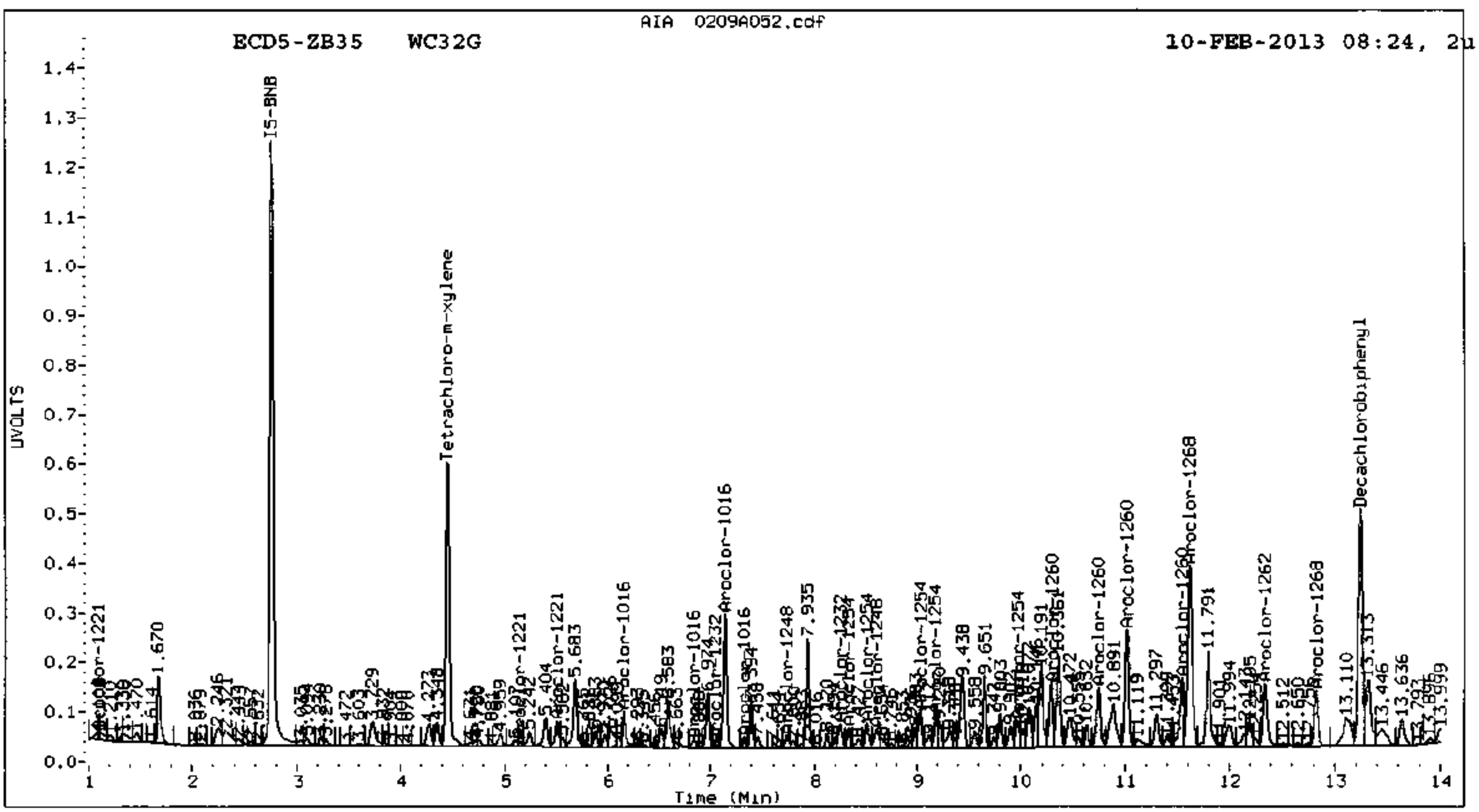
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Decachlorobiphenyl
IS-HBBP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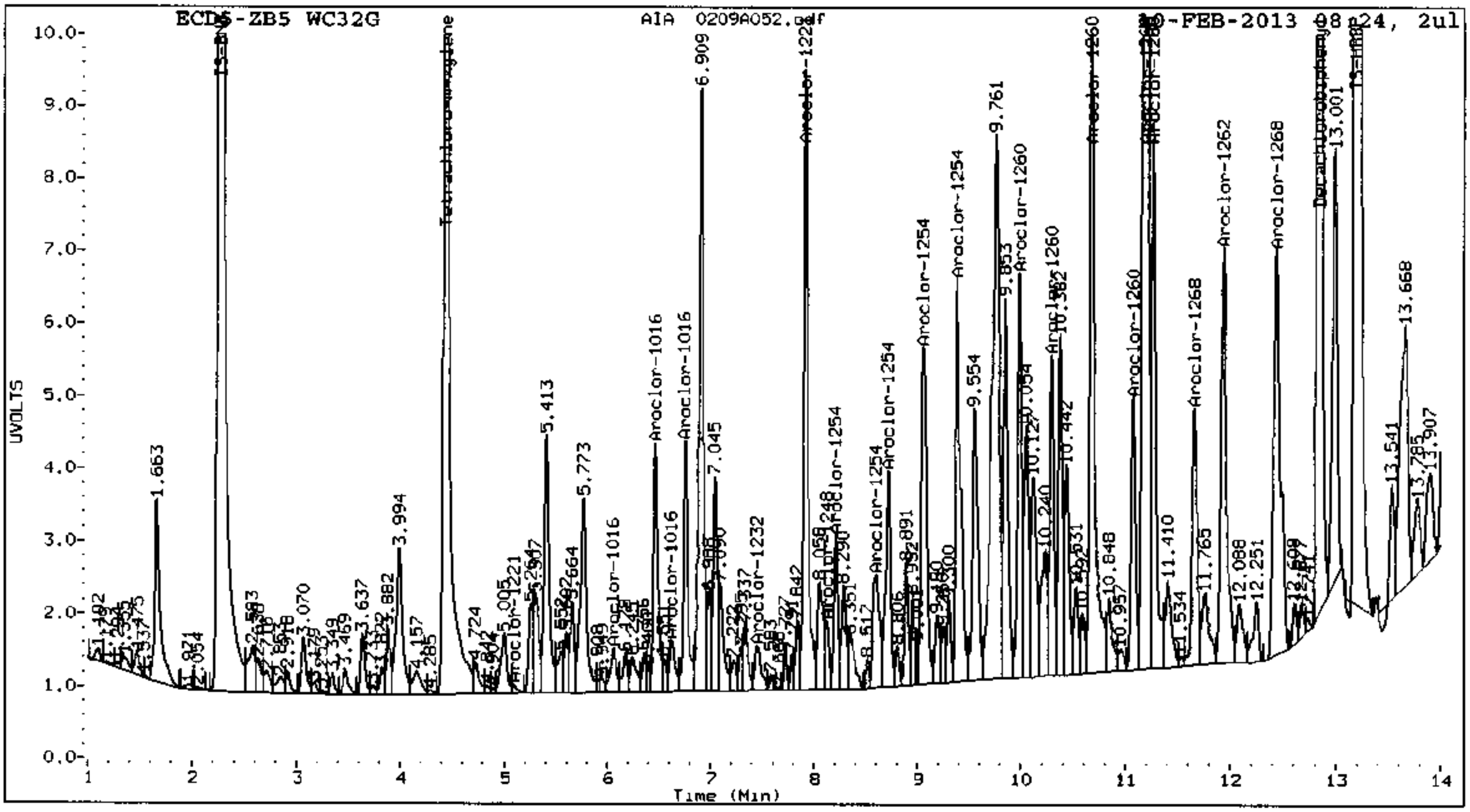
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Decachlorobiphenyl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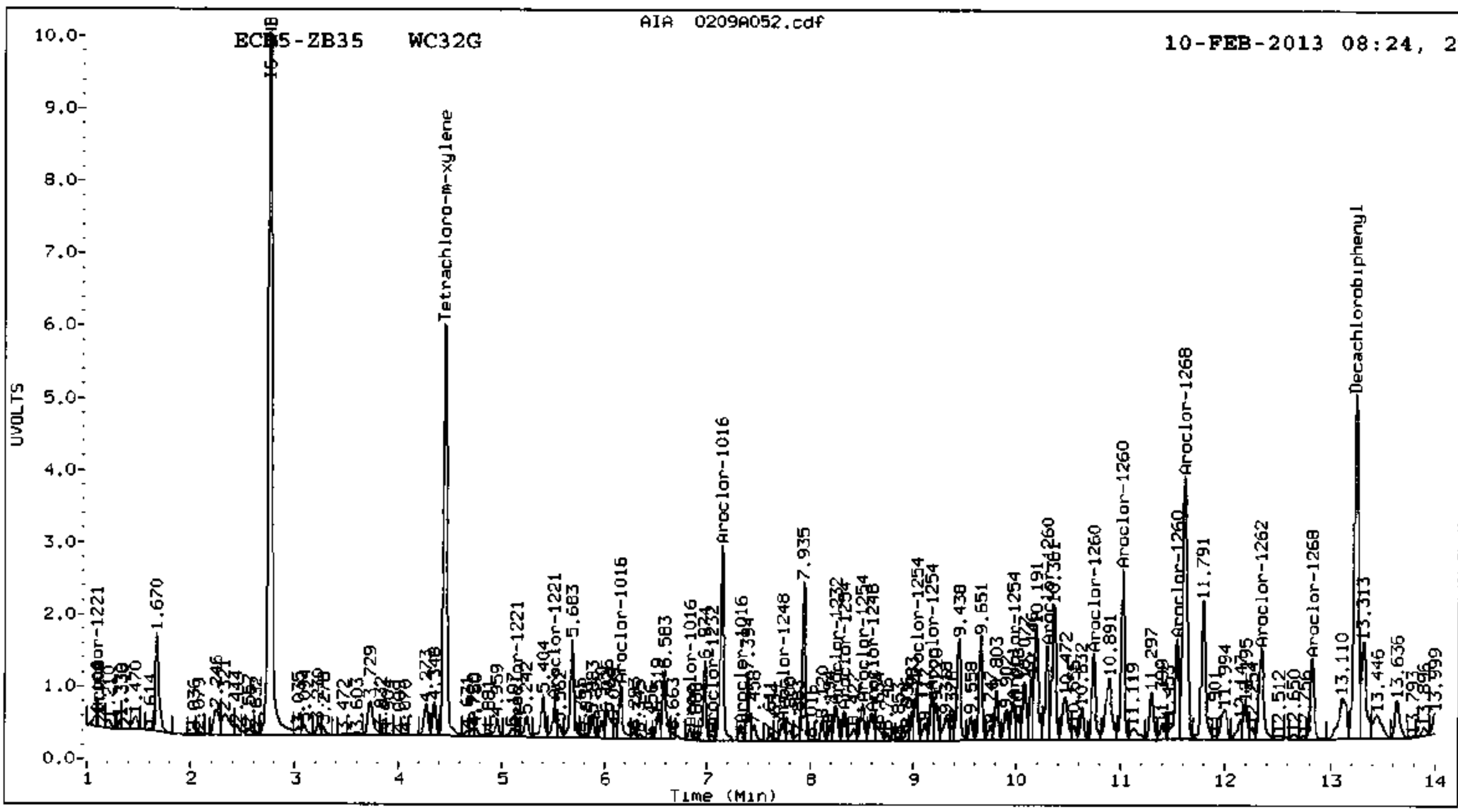
Time (Min)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UVOLTS
Time (Min)

WC02 01996

Analytical Resources Inc.
Dual Column PCBs by SW8082

Data file 1: 20130128.b/0209-1.b/0209A053.d
Data file 2: 20130128.b/0209-2.b/0209A053.d
Method: /chem2/ecd5.i/20130128.b/PCB1.m
Compound Sublist: PCB
Instrument, Inj. Vol.: ecd5.i, 2ul
Quant Method: Internal Std

ARI ID: WC32GMS
Client ID: SG-08-0-10-0131 MS
Injection Date: 10-FEB-2013 08:45
Ical Date: 28-JAN-2013
Matrix: SOIL
Dilution Factor: 1.000

ZB5 Col RT	ZB5 Col Shift	ZB5 Col Response	ZB35 Col RT	ZB35 Col Shift	ZB35 Col Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
4.442	0.001	24970205	4.449	0.001	7563918	24.9	31.0	21.8	Tetrachloro-m-xylen
12.850	0.002	41402133	13.238	-0.001	10222927	27.4	46.4	51.6*	Decachlorobiphenyl

* Indicates RPD > 40%
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE PERCENT RECOVERY

SURROGATE	Col1	Col2
Tetrachloro-m-xylene	62.2	77.4
Decachlorobiphenyl	68.4	116.0

R 02/12/13
R 02/12/13

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	44738954	56669468	26.7
Hexabromobiphenyl	59848867	87326423	45.9

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	14899855	16650919	11.8
Hexabromobiphenyl	12307480	13120572	6.6

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 28-JAN-2013
<- Indicates standard response outside Limits (-50 to +100%)

			ZB5 Col					ZB35 Col		
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	6.085	-0.003	22234138	846.5	1	6.157	-0.043	76427423	~~8010.5~~
Aroclor-1016	2	6.468	-0.025	312255827	3738.4	2	6.832	0.000	7145454	352.1
Aroclor-1016	3	6.640	-0.002	22721714	639.5	3	7.149	-0.068	317620213	60099.6
Aroclor-1016	4	6.768	0.015	368770417	~~14789.3~~	4	7.327	0.001	2330100	388.6
	Total Col1Ave (4 peaks):			~~5003.4~~		Total Col2Ave (4 peaks):			~~17212.7~~	RPD = 110*
	Corrected Ave (3 peaks):			1741.5		Corrected Ave (3 peaks):			2917.1	RPD = 50*
Aroclor-1221	1	5.094	-0.004	4798002	204.4	1	---			0.0
Aroclor-1221	2	6.468	-0.027	312255827	42222.7	2	5.106	-0.042	2426848	897.2
Aroclor-1221	3	7.917	0.013	29202961	2952.1	3	---			0.0
Aroclor-1221	NS	---			----	4	5.511	0.013	29327142	5817.5
	Total Col1Ave (3 peaks):			15126.4		Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	6.085	-0.005	22234138	2101.6	1	6.157	-0.043	76427423	18236.1
Aroclor-1232	2	6.468	-0.026	312255827	9381.6	2	6.832	0.003	7145454	872.6
Aroclor-1232	3	7.460	-0.007	34024292	2149.2	3	7.040	-0.003	3273571	971.6
Aroclor-1232	4	7.917	0.020	29202961	1596.3	4	8.246	-0.021	55212008	19105.2
	Total Col1Ave (4 peaks):			3807.2		Total Col2Ave (4 peaks):			9796.4	RPD = 88*
	Corrected Ave (3 peaks):			1949.0		Corrected Ave (3 peaks):			6693.4	RPD = 110*
Aroclor-1242	1	6.085	-0.004	22234138	1124.2	1	6.157	-0.044	76427423	10890.0
Aroclor-1242	2	6.468	-0.027	312255827	5057.2	2	6.832	-0.002	7145454	474.1
Aroclor-1242	3	6.640	-0.003	22721714	851.3	3	7.040	-0.004	3273571	526.7
Aroclor-1242	4	7.917	0.020	29202961	913.6	4	8.246	-0.022	55212008	10245.3
	Total Col1Ave (4 peaks):			1986.6		Total Col2Ave (4 peaks):			5534.0	RPD = 94*
	Corrected Ave (3 peaks):			963.0		Corrected Ave (3 peaks):			3748.7	RPD = 118*
Aroclor-1248	1	6.468	-0.022	312255827	~~7728.7~~	1	6.832	0.002	7145454	~~727.8~~
Aroclor-1248	2	7.460	-0.006	34024292	794.2	2	7.726	-0.012	24631467	~~2994.6~~
Aroclor-1248	3	7.917	0.021	29202961	541.1	3	8.246	-0.022	55212008	~~6457.7~~
Aroclor-1248	4	8.058	-0.074	204902935	~~4867.4~~	4	8.581	-0.033	5236339	494.5
	Total Col1Ave (4 peaks):			~~3482.8~~		Total Col2Ave (4 peaks):			~~2668.7~~	RPD = 26
	Corrected Ave (3 peaks):			~~2067.6~~ 600		Corrected Ave (3 peaks):			~~1405.6~~ 600	RPD = 38
Aroclor-1254	1	8.212	-0.004	40788840	735.1	1	8.331	-0.002	2350681	323.1
Aroclor-1254	2	8.580	-0.008	50749196	1370.0	2	8.492	-0.015	8738501	935.3
Aroclor-1254	3	8.689	-0.035	52109539	725.0	3	9.010	-0.019	10902351	~~1505.4~~
Aroclor-1254	4	9.055	-0.019	44526700	~~561.3~~	4	9.178	-0.002	1547741	98.3
Aroclor-1254	5	9.384	-0.049	64353753	~~1294.1~~	5	9.973	0.009	2561831	266.5
	Total Col1Ave (5 peaks):			~~937.1~~		Total Col2Ave (5 peaks):			~~625.7~~	RPD = 40
	Corrected Ave (4 peaks):			828.9		Corrected Ave (4 peaks):			405.8	RPD = 69*
Aroclor-1260	1	9.991	0.001	89385458	1359.0	1	10.293	0.000	14889093	1516.6
Aroclor-1260	2	10.304	-0.001	57562520	864.5	2	10.744	0.002	14901248	1234.8
Aroclor-1260	3	10.682	0.002	190262683	1233.4	3	11.017	0.000	36880838	1524.4
Aroclor-1260	4	11.079	-0.001	53351236	617.7	4	11.540	0.002	27581833	~~3871.7~~
Aroclor-1260	5	11.277	0.008	1037857977	~~24467.4~~	NS	---			----
	Total Col1Ave (5 peaks):			~~5708.4~~		Total Col2Ave (4 peaks):			~~2036.9~~	RPD = 95*
	Corrected Ave (4 peaks):			1018.7		Corrected Ave (3 peaks):			1425.3	RPD = 33
Aroclor-1262	1	10.304	-0.002	57562520	801.0	1	10.293	0.001	14889093	969.0
Aroclor-1262	2	10.682	0.002	190262683	1033.6	2	10.744	0.008	14901248	1132.8
Aroclor-1262	3	11.079	-0.001	53351236	816.7	3	11.017	0.001	36880838	1242.5
Aroclor-1262	4	11.277	0.008	1037857977	14015.9	4	11.540	0.003	27581833	2292.8
Aroclor-1262	5	11.940	0.001	152464367	2350.9	5	12.339	-0.001	30057449	2763.9
	Total Col1Ave (5 peaks):			3803.6		Total Col2Ave (5 peaks):			1680.2	RPD = 77*
	Corrected Ave (4 peaks):			1250.6		Corrected Ave (4 peaks):			1409.3	RPD = 12
Aroclor-1268	1	11.277	0.080	1037857977	5580.1	1	11.540	0.003	27581833	882.8
Aroclor-1268	2	---			0.0	2	11.627	0.031	338660428	11213.2

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Aroclor-1268	3	11.664	0.009	75289500	486.9	3	---			0.0
Aroclor-1268	4	12.436	-0.007	333449335	793.4	4	12.826	0.004	39830769	580.1

Total Col1Ave (3 peaks): 2286.8 Total Col2Ave (3 peaks): 4225.4 RPD = 60*

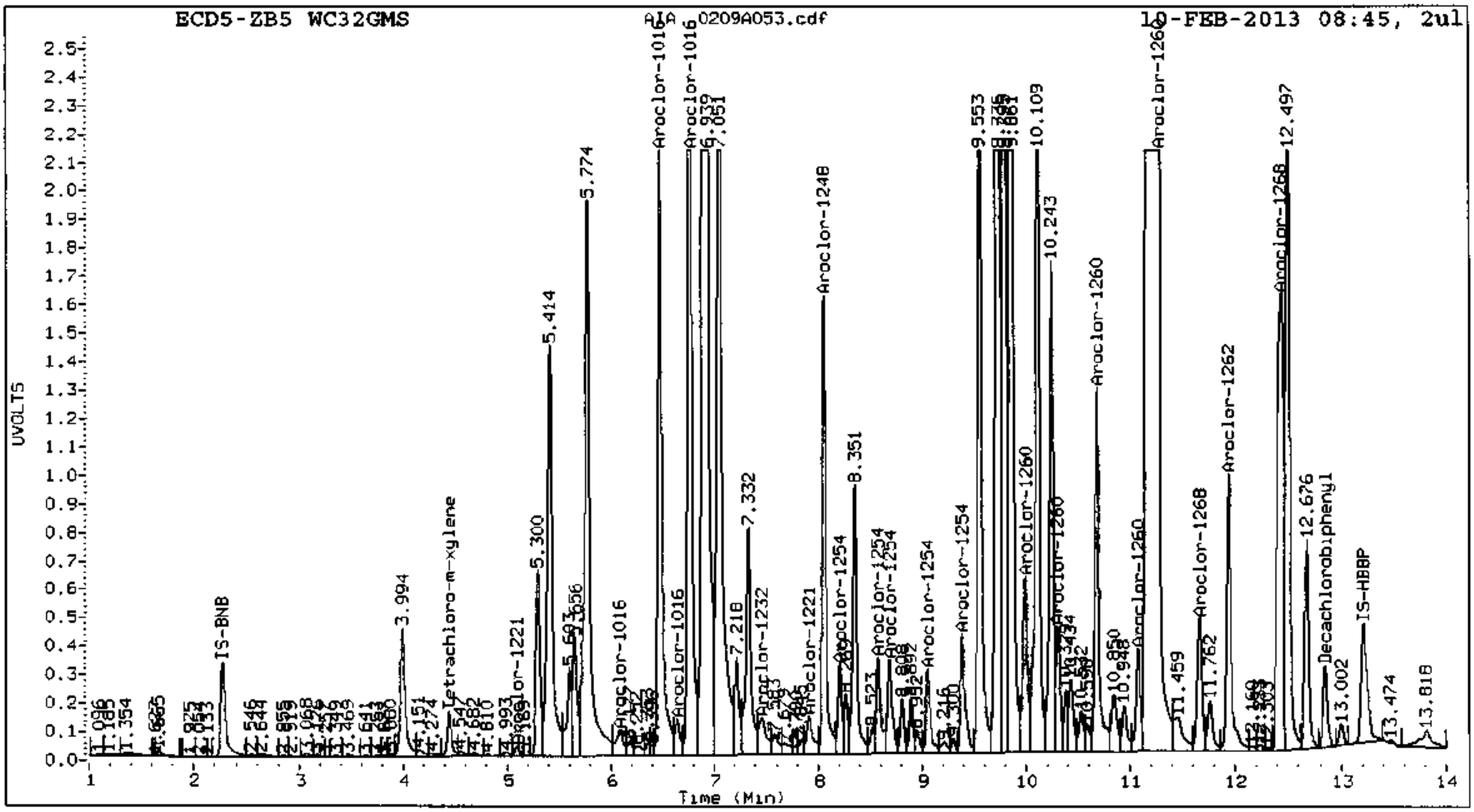
Corrected Ave: < 3 Peaks Corrected Ave: < 3 Peaks

Total PCB Area Col1 (4.541 - 12.748) = 8443215657 Col1 Total PCB = 11.3 ppm*

Total PCB Area Col2 (4.547 - 13.139) = 2564154683 Col2 Total PCB = 20.0 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.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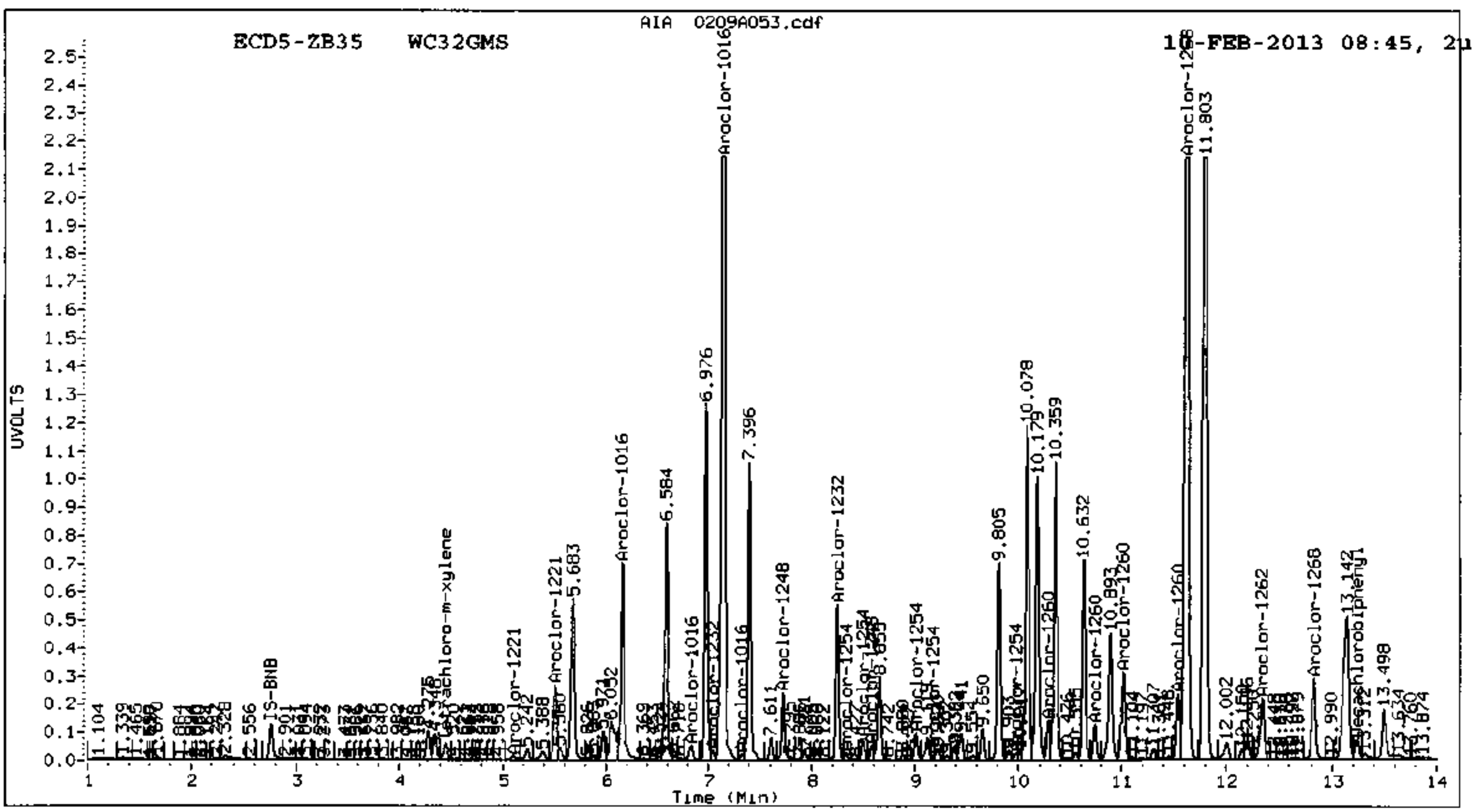
AIA 0209A053.cdf
10-FEB-2013 08:45, 2ul
UVOLTS
Time (Min)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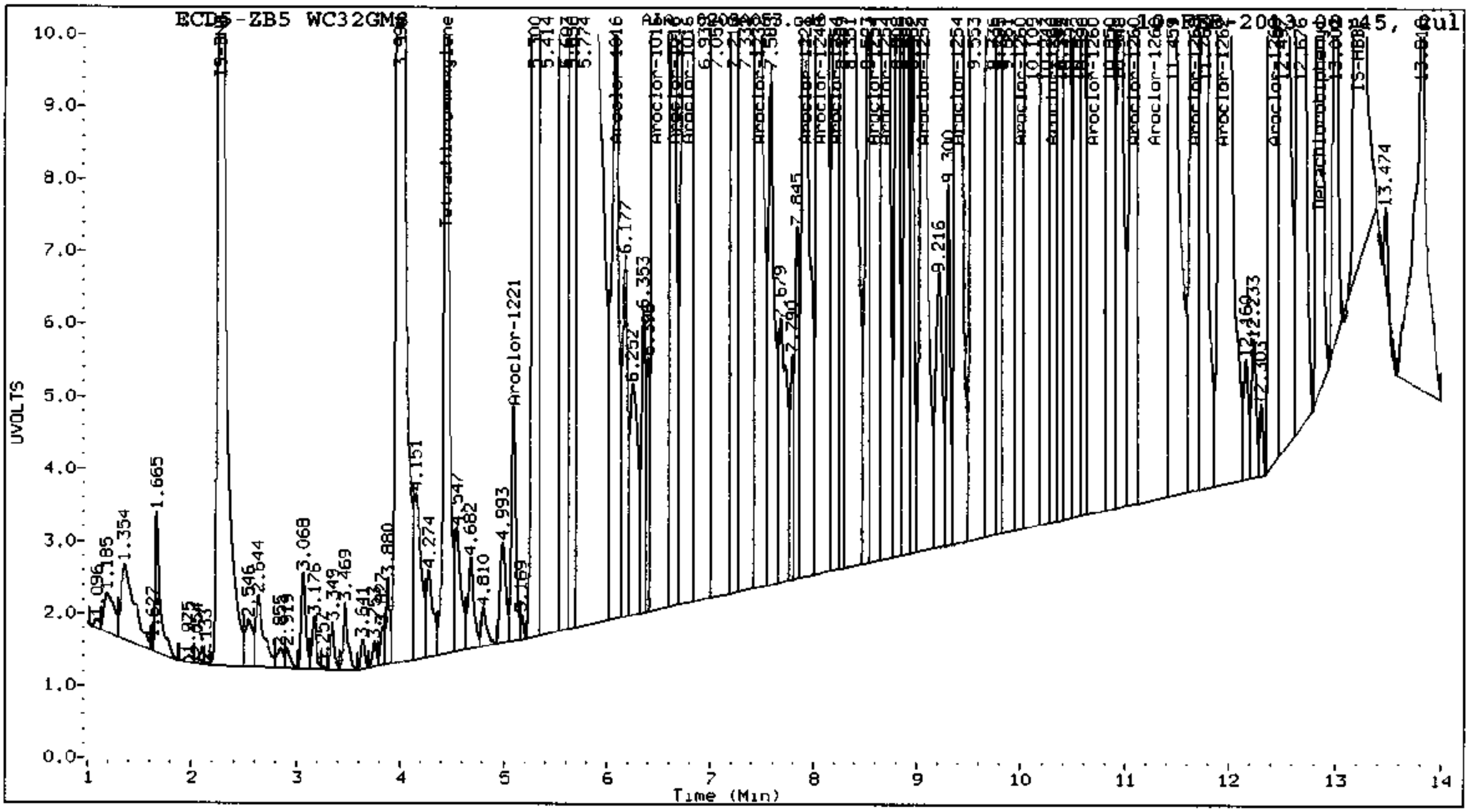
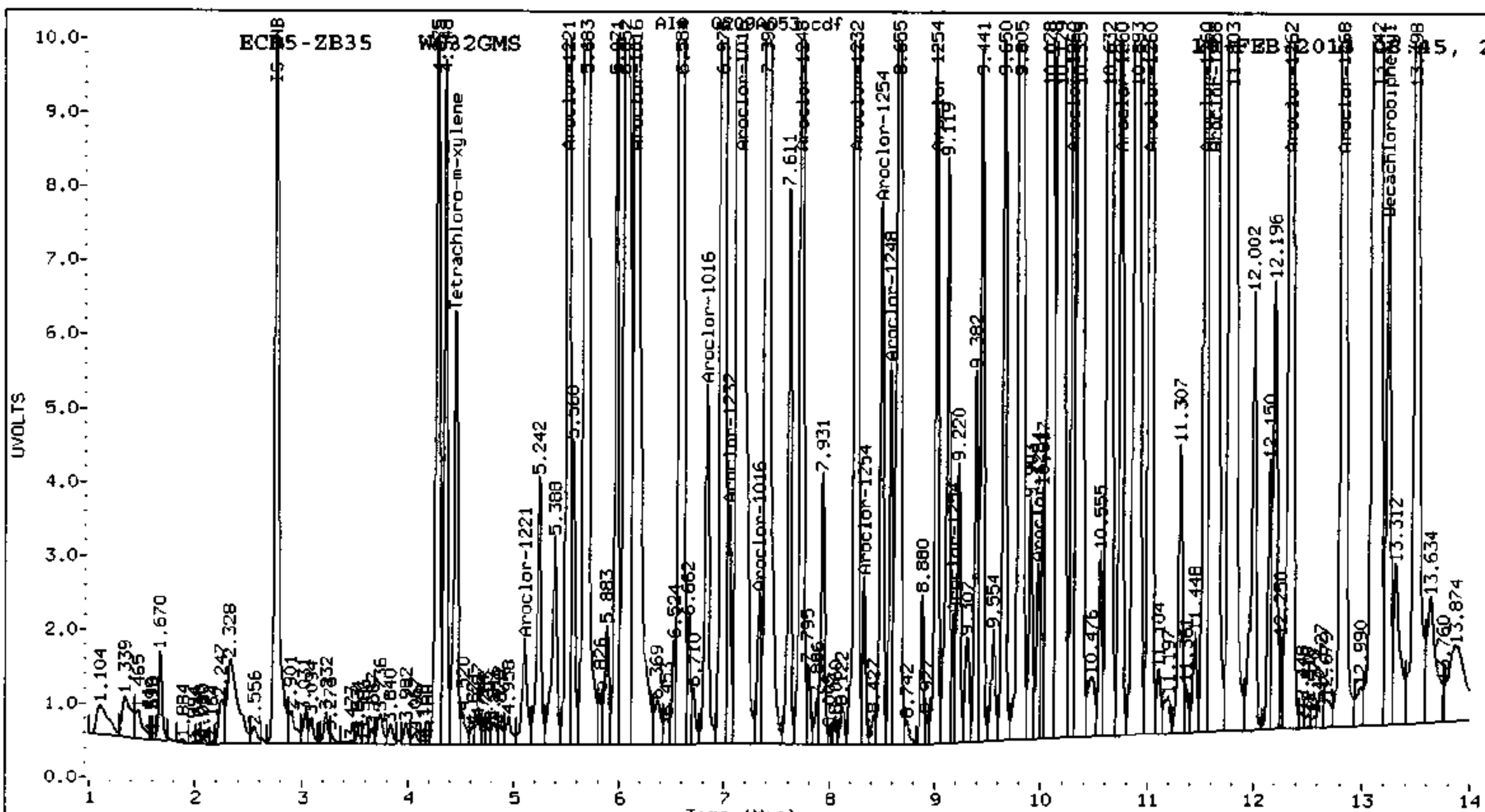
UVOLTS
Time (Min)


ECD5-ZB5 WC32GMS
UVOLTS
Time (Min)
Aroclor-1221
Tetrachloro-m-xylene
Decachlorobiphenyl


ECD5-ZB35 WC32GMS
UVOLTS
Time (Min)
Tetrachloro-m-xylene
Aroclor-1221
Aroclor-1016
Aroclor-1254
Aroclor-1248
Decachlorobiphenyl

WC32 : 02003

Analytical Resources Inc.
Dual Column PCBs by SW8082

Data file 1: 20130128.b/0209-1.b/0209A054.d
Data file 2: 20130128.b/0209-2.b/0209A054.d
Method: /chem2/ecd5.i/20130128.b/PCB1.m
Compound Sublist: PCB
Instrument, Inj. Vol.: ecd5.i, 2ul
Quant Method: Internal Std

ARI ID: WC32GMSD
Client ID: SG-08-0-10-0131 MSD
Injection Date: 10-FEB-2013 09:05
Ical Date: 28-JAN-2013
Matrix: SOIL
Dilution Factor: 1.000

ZB5 Col RT	ZB5 Col Shift	ZB5 Col Response	ZB35 Col RT	ZB35 Col Shift	ZB35 Col Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
4.441	-0.001	24700536	4.448	0.000	6985991	24.1	28.4	16.1	Tetrachloro-m-xylen
12.849	0.001	33703485	13.239	0.000	6606694	31.3	29.3	6.7	Decachlorobiphenyl

* Indicates RPD > 40%
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE PERCENT RECOVERY

SURROGATE	Col1	Col2
Tetrachloro-m-xylene	60.3	70.9
Decachlorobiphenyl	78.4	73.3

JK 02/12/13

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	44738954	57747943	29.1
Hexabromobiphenyl	59848867	62049521	3.7

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	14899855	16791864	12.7
Hexabromobiphenyl	12307480	13428551	9.1

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 28-JAN-2013
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	6.086	-0.002	12491636	466.7	1	6.200	-0.001	5229861	543.6
Aroclor-1016	2	6.488	-0.004	35740815	419.9	2	6.831	-0.001	7007005	342.4
Aroclor-1016	3	6.641	-0.001	13589027	375.3	3	7.217	-0.001	1720557	322.8
Aroclor-1016	4	6.754	0.001	15699361	617.9	4	7.326	0.000	1957324	323.7
Total Col1Ave (4 peaks):				470.0		Total Col2Ave (4 peaks):			383.1	RPD = 20
Corrected Ave (3 peaks):				420.7		Corrected Ave (3 peaks):			329.6	RPD = 24
Aroclor-1221	1	5.093	-0.005	5448360	227.8	1	1.096	0.096	399059	229.8
Aroclor-1221	2	6.488	-0.007	35740815	4742.6	2	5.106	-0.042	2346567	860.2
Aroclor-1221	3	7.918	0.014	17199658	1706.2	3	---			0.0
Aroclor-1221	NS	---			----	4	5.502	0.004	2739574	538.9
Total Col1Ave (3 peaks):				2225.5		Total Col2Ave (3 peaks):			543.0	RPD = 122*
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1232	1	6.086	-0.004	12491636	1158.7	1	6.200	0.000	5229861	1237.4
Aroclor-1232	2	6.488	-0.006	35740815	1053.8	2	6.831	0.002	7007005	848.5
Aroclor-1232	3	7.466	-0.002	10801075	669.5	3	7.042	-0.001	2316000	681.6
Aroclor-1232	4	7.918	0.021	17199658	922.6	4	8.248	-0.019	954339	327.5
Total Col1Ave (4 peaks):				951.1		Total Col2Ave (4 peaks):			773.8	RPD = 21
Corrected Ave (3 peaks):				882.0		Corrected Ave (3 peaks):			619.2	RPD = 35
Aroclor-1242	1	6.086	-0.003	12491636	619.8	1	6.200	-0.002	5229861	738.9
Aroclor-1242	2	6.488	-0.006	35740815	568.0	2	6.831	-0.003	7007005	461.1
Aroclor-1242	3	6.641	-0.003	13589027	499.6	3	7.042	-0.002	2316000	369.5
Aroclor-1242	4	7.918	0.022	17199658	528.0	4	8.248	-0.020	954339	175.6
Total Col1Ave (4 peaks):				553.9		Total Col2Ave (4 peaks):			436.3	RPD = 24
Corrected Ave (3 peaks):				531.9		Corrected Ave (3 peaks):			335.4	RPD = 45*
Aroclor-1248	1	6.488	-0.001	35740815	868.1	1	6.831	0.001	7007005	707.7
Aroclor-1248	2	7.466	-0.001	10801075	247.4	2	7.737	-0.001	2404623	289.9
Aroclor-1248	3	7.918	0.022	17199658	312.7	3	8.248	-0.020	954339	110.7
Aroclor-1248	4	8.133	0.002	1981093	46.2	4	8.605	-0.009	592182	55.5
Total Col1Ave (4 peaks):				368.6		Total Col2Ave (4 peaks):			290.9	RPD = 24
Corrected Ave (3 peaks):				202.1		Corrected Ave (3 peaks):			152.0	RPD = 28
				300					300	
Aroclor-1254	1	8.216	0.000	8897399	157.4	1	8.331	-0.001	1560823	212.7
Aroclor-1254	2	8.586	-0.001	4142386	109.7	2	8.505	-0.002	2077987	220.5
Aroclor-1254	3	8.720	-0.003	9842977	134.4	3	9.028	-0.001	964721	132.1
Aroclor-1254	4	9.054	-0.019	24928692	308.4	4	9.179	-0.001	1106443	69.6
Aroclor-1254	5	9.383	-0.050	33885484	~~668.7~~	5	9.971	0.007	1874863	193.4
Total Col1Ave (5 peaks):				~~275.7~~		Total Col2Ave (5 peaks):			165.7	RPD = 50*
Corrected Ave (4 peaks):				177.5		Corrected Ave (4 peaks):			152.0	RPD = 15
Aroclor-1260	1	9.990	0.000	20479470	438.2	1	10.293	0.000	4337195	431.7
Aroclor-1260	2	10.304	-0.001	19208623	406.0	2	10.743	0.001	4738012	383.6
Aroclor-1260	3	10.680	0.000	53804943	490.9	3	11.018	0.000	10445872	421.8
Aroclor-1260	4	11.078	-0.001	24466802	398.7	4	11.539	0.001	3649240	500.5
Aroclor-1260	5	11.269	0.000	19566371	649.2	NS	---			----
Total Col1Ave (5 peaks):				476.6		Total Col2Ave (4 peaks):			434.4	RPD = 9
Corrected Ave (4 peaks):				433.4		Corrected Ave (3 peaks):			412.4	RPD = 5
Aroclor-1262	1	10.304	-0.002	19208623	376.2	1	10.293	0.001	4337195	275.8
Aroclor-1262	2	10.680	0.000	53804943	411.4	2	10.743	0.007	4738012	351.9
Aroclor-1262	3	11.078	-0.002	24466802	527.1	3	11.018	0.002	10445872	343.9
Aroclor-1262	4	11.269	0.000	19566371	371.9	4	11.539	0.002	3649240	296.4
Aroclor-1262	5	11.938	-0.001	21945628	476.2	5	12.339	-0.001	3482988	312.9
Total Col1Ave (5 peaks):				432.6		Total Col2Ave (5 peaks):			316.2	RPD = 31
Corrected Ave (4 peaks):				408.9		Corrected Ave (4 peaks):			307.2	RPD = 28
Aroclor-1268	1	11.198	0.001	34289206	259.5	1	11.539	0.002	3649240	114.1

Aroclor-1268 2	11.269	0.000	19566371	153.1	2	11.603	0.007	9563345	309.4
Aroclor-1268 3	11.667	0.013	9825498	89.4	3	1.096	0.096	399059	15.5
Aroclor-1268 4	12.441	-0.002	14518718	48.6	4	12.825	0.004	2011371	28.6

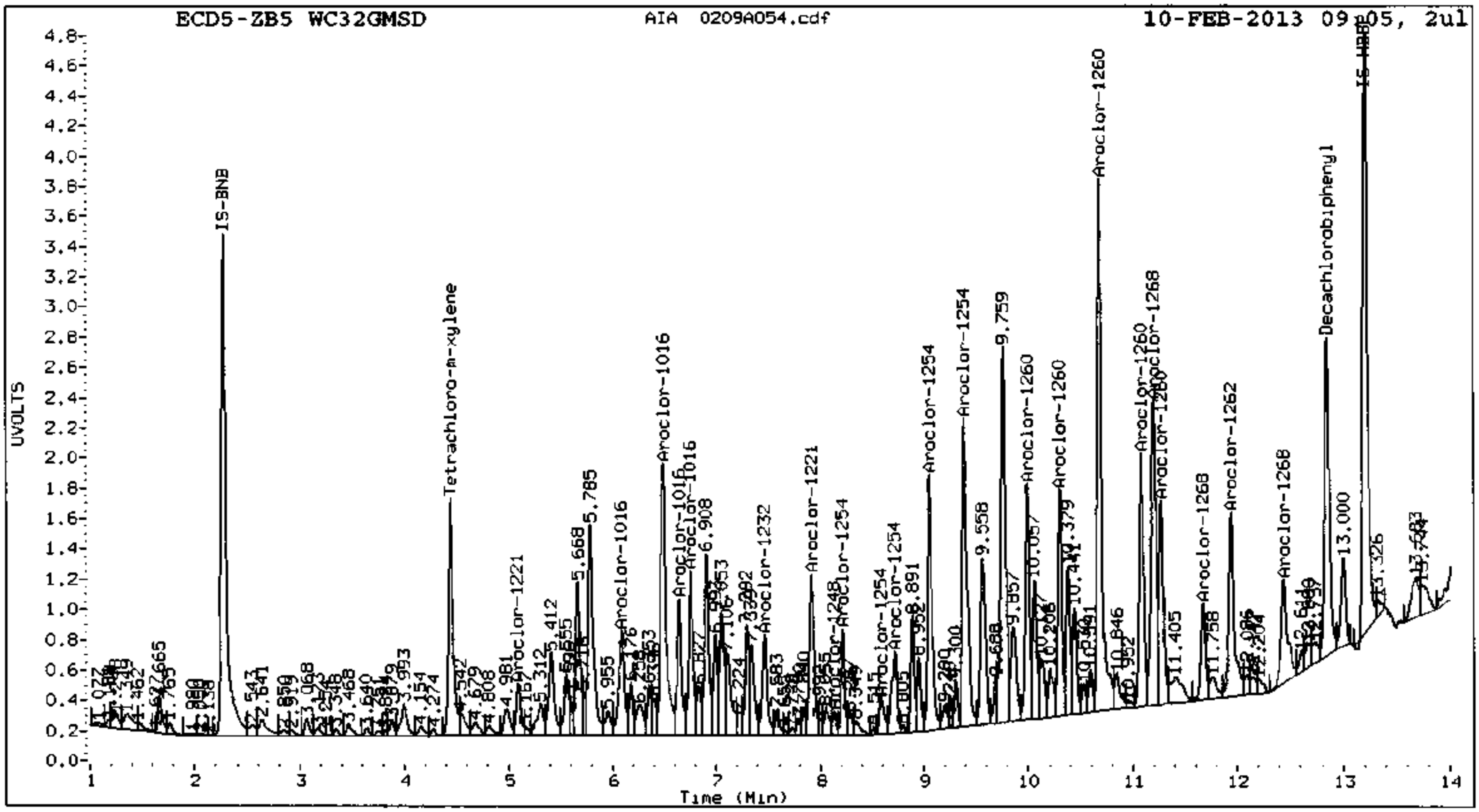
Total Col1Ave (4 peaks): 137.6 Total Col2Ave (4 peaks): 116.9 RPD = 16
Corrected Ave (3 peaks): 97.0 Corrected Ave (3 peaks): 52.7 RPD = 59*

Total PCB Area Col1 (4.541 - 12.748) = 782346441 Col1 Total PCB = 1.0 ppm*

Total PCB Area Col2 (4.547 - 13.139) = 178327194 Col2 Total PCB = 1.4 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.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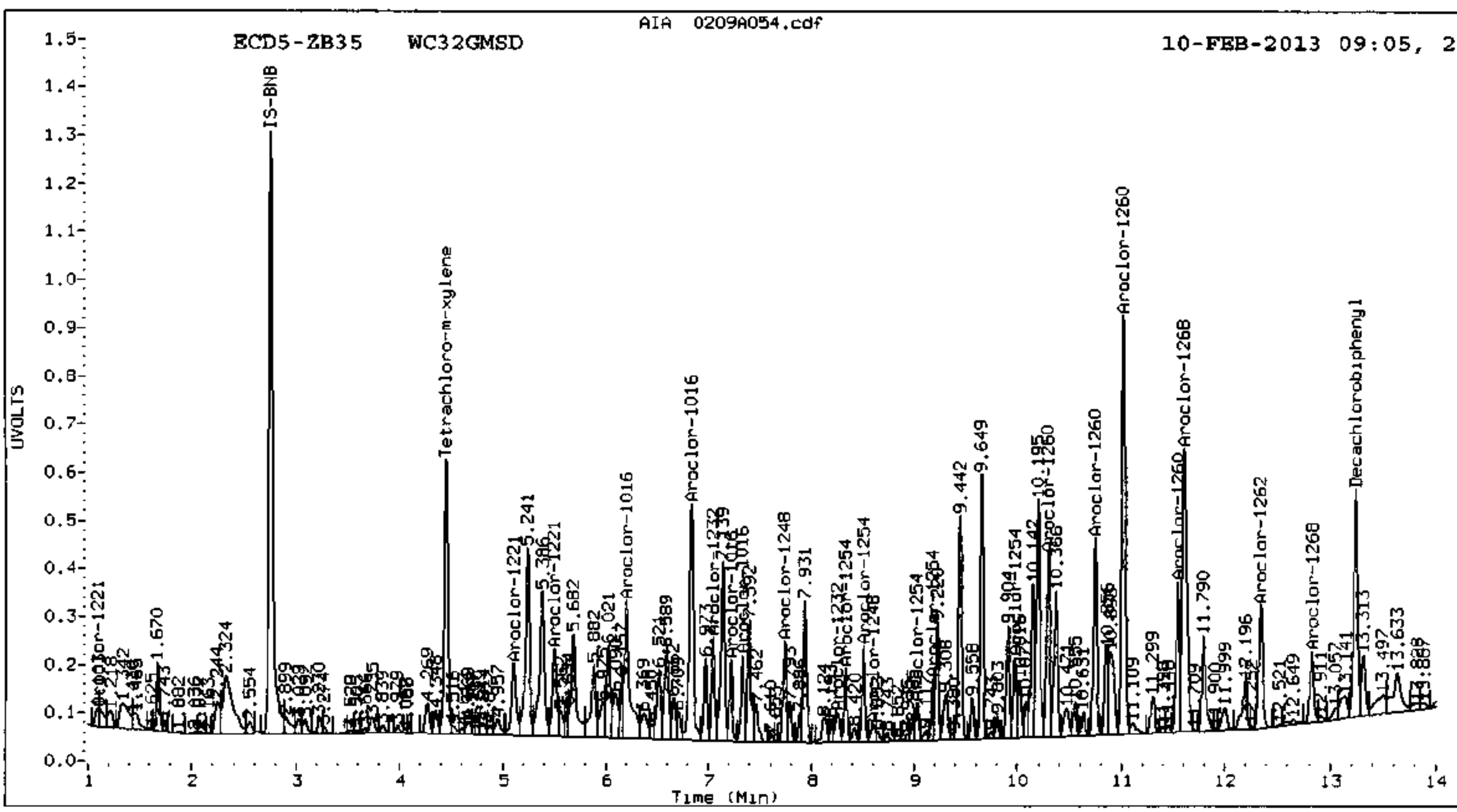
10-FEB-2013 09:05, 2ul
UVOLTS
Time (Min)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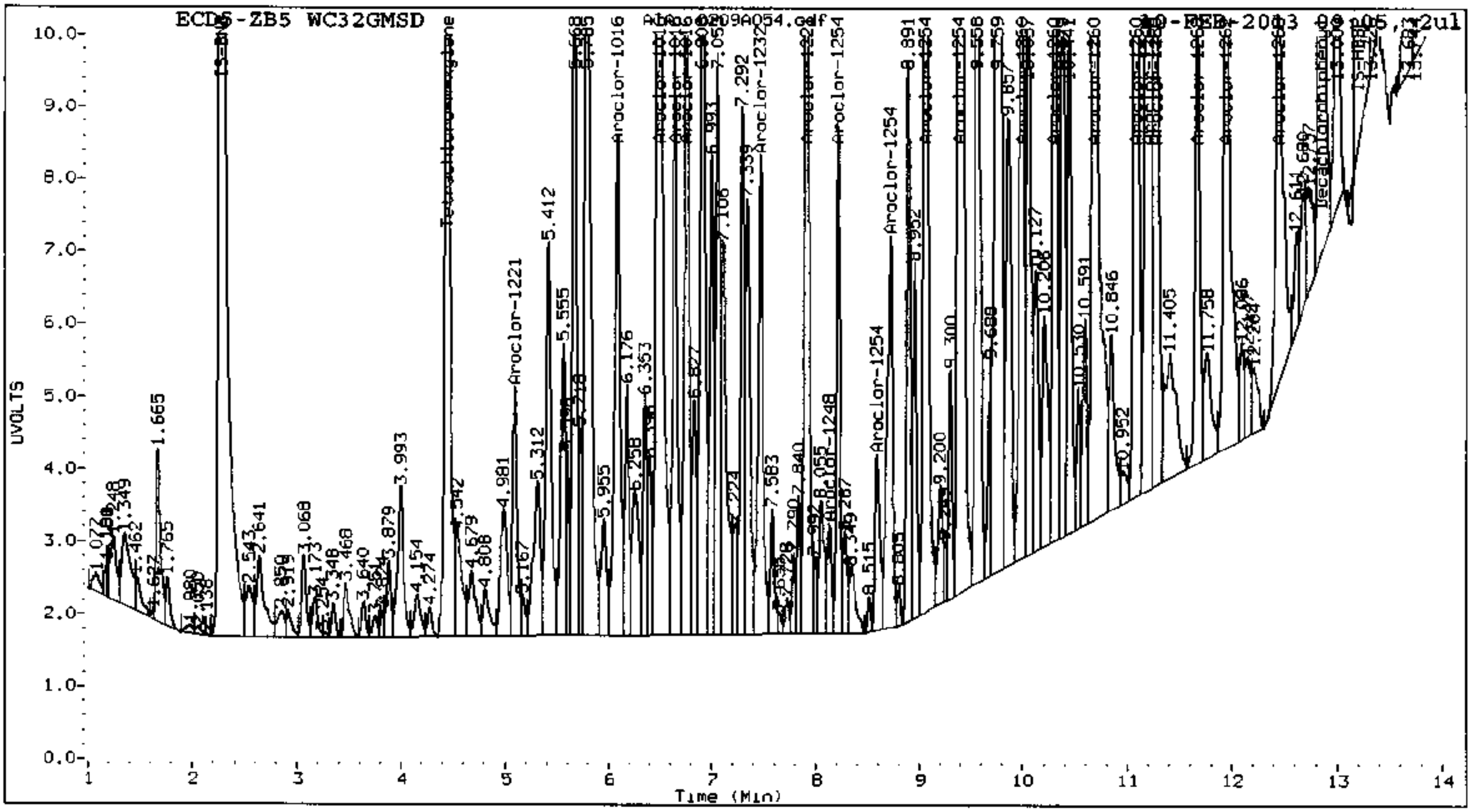
UVOLTS
Time (Min)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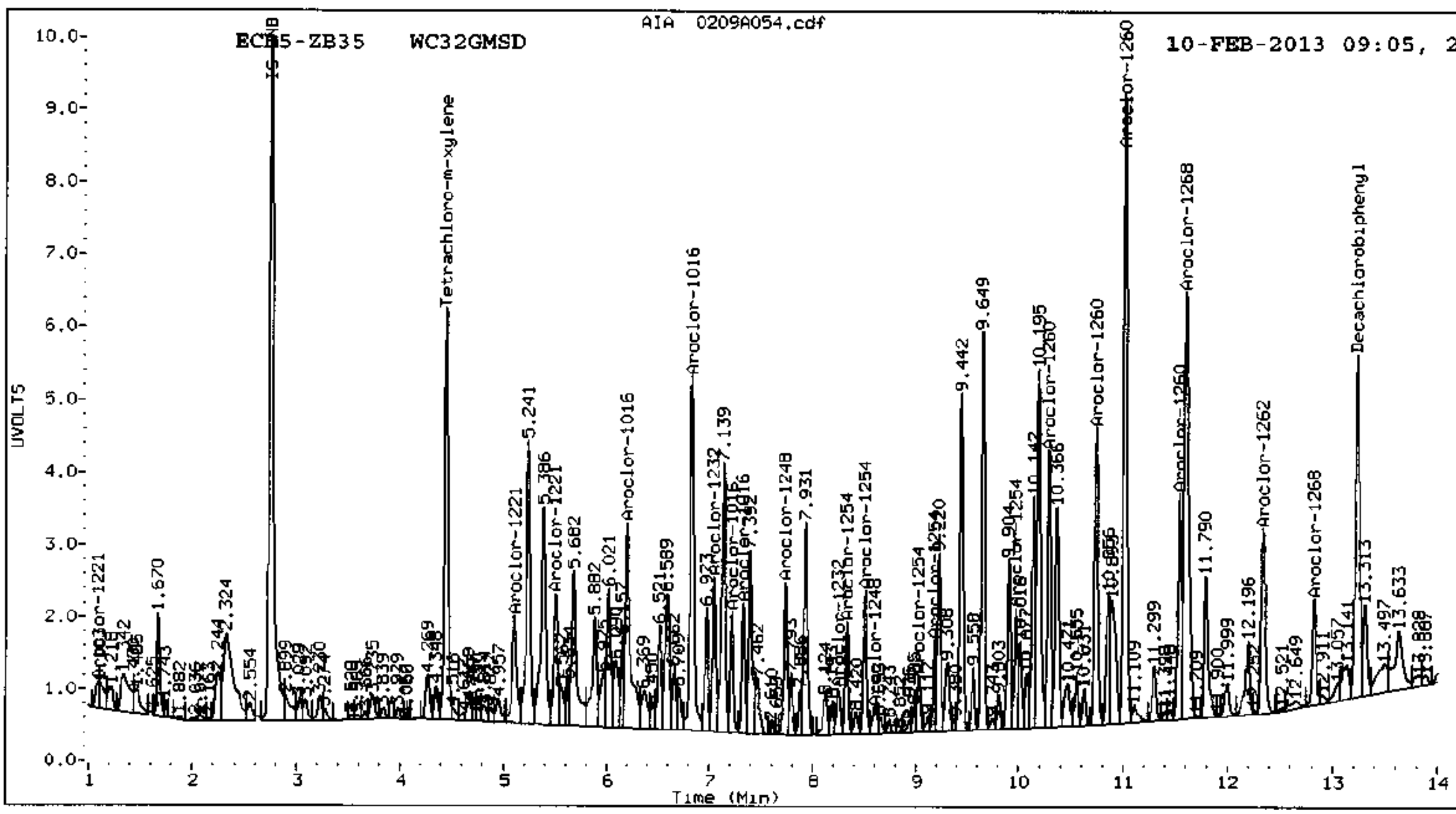
UVOLTS
Time (Min)
Tetrachloro-m-xylene
Aroclor-1221
Aroclor-1016
Aroclor-1232
Aroclor-1254
Aroclor-1248
Aroclor-1260
Decachlorobiphenyl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UVOLTS
Time (Min)
Tetrachloro-m-xylene
Aroclor-1221
Aroclor-1016
Aroclor-1232
Aroclor-1248
Aroclor-1254
Aroclor-1260
Aroclor-1268
Aroclor-1262
Decachlorobiphenyl

WC32 : 02006

Analytical Resources Inc.
Dual Column PCBs by SW8082

Data file 1: 20130128.b/0209-1.b/0209A055.d
Data file 2: 20130128.b/0209-2.b/0209A055.d
Method: /chem2/ecd5.i/20130128.b/PCB1.m
Compound Sublist: PCB
Instrument, Inj. Vol.: ecd5.i, 2ul
Quant Method: Internal Std

ARI ID: WC32H
Client ID: SG-09-0-10-013113
Injection Date: 10-FEB-2013 09:24
Ical Date: 28-JAN-2013
Matrix: SOIL
Dilution Factor: 1.000

ZB5 Col RT	ZB5 Col Shift	ZB5 Col Response	ZB35 Col RT	ZB35 Col Shift	ZB35 Col Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
4.440	-0.001	26355282	4.450	0.003	6314648	26.1	28.0	7.1	Tetrachloro-m-xylen
12.849	0.001	24854932	13.239	0.000	4892835	21.3	21.0	1.1	Decachlorobiphenyl

* Indicates RPD > 40%
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE PERCENT RECOVERY

SURROGATE	Col1	Col2
Tetrachloro-m-xylene	65.3	70.1
Decachlorobiphenyl	53.2	52.6

JK 02/17/13

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	44738954	56964897	27.3
Hexabromobiphenyl	59848867	67424606	12.7

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	14899855	15353589	3.0
Hexabromobiphenyl	12307480	13844160	12.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 28-JAN-2013
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
			ZB5 Col					ZB35 Col			
Aroclor-1016	1	6.055	-0.033	1385017	52.5	1	6.155	-0.045	295953	33.6	
Aroclor-1016	2	6.473	-0.019	7068424	84.2	2	6.837	0.005	170427	9.1	
Aroclor-1016	3	6.619	-0.023	4097196	114.7	3	7.217	-0.001	38689	7.9	
Aroclor-1016	4	6.753	0.000	2646089	105.6	4	7.324	-0.003	430251	77.8	
	Total Col1Ave (4 peaks):			89.2		Total Col2Ave (4 peaks):			32.1		RPD = 94*
	Corrected Ave (3 peaks):			80.7		Corrected Ave (3 peaks):			16.9		RPD = 131*
Aroclor-1221	1	5.092	-0.006	585907	24.8	1	---			0.0	
Aroclor-1221	2	6.473	-0.022	7068424	950.8	2	5.147	-0.001	151821	60.9	
Aroclor-1221	3	7.924	0.020	46223946	4648.5	3	---			0.0	
Aroclor-1221	NS	---			----	4	5.480	-0.018	235744	50.7	
	Total Col1Ave (3 peaks):			1874.7		Col2Ave: <3 Quant Peaks					
Aroclor-1232	1	6.055	-0.035	1385017	130.2	1	6.155	-0.045	295953	76.6	
Aroclor-1232	2	6.473	-0.020	7068424	211.3	2	6.837	0.008	170427	22.6	
Aroclor-1232	3	7.447	-0.021	2184173	137.3	3	6.950	-0.093	791955	254.9	
Aroclor-1232	4	7.924	0.027	46223946	2513.5	4	8.252	-0.016	485091	182.0	
	Total Col1Ave (4 peaks):			748.1		Total Col2Ave (4 peaks):			134.0		RPD = 139*
	Corrected Ave (3 peaks):			159.6		Corrected Ave (3 peaks):			93.7		RPD = 52*
Aroclor-1242	1	6.055	-0.034	1385017	69.7	1	6.155	-0.046	295953	45.7	
Aroclor-1242	2	6.473	-0.021	7068424	113.9	2	6.837	0.003	170427	12.3	
Aroclor-1242	3	6.619	-0.025	4097196	152.7	3	6.950	-0.094	791955	138.2	
Aroclor-1242	4	7.924	0.027	46223946	~~1438.5~~	4	8.252	-0.017	485091	97.6	
	Total Col1Ave (4 peaks):			~~443.7~~		Total Col2Ave (4 peaks):			73.5		RPD = 143*
	Corrected Ave (3 peaks):			112.1		Corrected Ave (3 peaks):			51.9		RPD = 73*
Aroclor-1248	1	6.473	-0.016	7068424	174.0	1	6.837	0.007	170427	18.8	
Aroclor-1248	2	7.447	-0.020	2184173	50.7	2	7.748	0.010	447523	59.0	
Aroclor-1248	3	7.924	0.028	46223946	~~852.0~~	3	8.252	-0.016	485091	61.5	
Aroclor-1248	4	8.088	-0.044	8439809	199.4	4	8.600	-0.014	835689	85.6	
	Total Col1Ave (4 peaks):			~~319.1~~		Total Col2Ave (4 peaks):			56.2		RPD = 140*
	Corrected Ave (3 peaks):			141.4 100		Corrected Ave (3 peaks):			46.5 100		RPD = 101*
Aroclor-1254	1	8.212	-0.005	5408902	97.0	1	8.331	-0.002	874492	130.3	
Aroclor-1254	2	8.587	0.000	5309421	142.6	2	8.506	-0.001	940004	109.1	
Aroclor-1254	3	8.720	-0.003	6293867	87.1	3	9.030	0.000	993043	148.7	
Aroclor-1254	4	9.075	0.001	12137381	152.2	4	9.178	-0.001	910696	62.7	
Aroclor-1254	5	9.427	-0.006	3575210	71.5	5	9.963	-0.001	819885	92.5	
	Total Col1Ave (5 peaks):			110.1		Total Col2Ave (5 peaks):			~~100.7~~		RPD = 1
	Corrected Ave (4 peaks):			99.5 100		Corrected Ave (4 peaks):			98.7 100		RPD = 1
Aroclor-1260	1	9.989	0.000	15686545	308.9	1	10.293	0.001	3426492	330.8	
Aroclor-1260	2	10.299	-0.007	17055484	331.8	2	10.743	0.001	2873138	225.6	
Aroclor-1260	3	10.679	-0.001	34170310	286.9	3	11.017	0.000	5874484	230.1	
Aroclor-1260	4	11.079	0.000	7978756	119.7	4	11.539	0.001	4644187	~~617.8~~	
Aroclor-1260	5	11.269	-0.001	27141431	~~820.7~~	NS	---			----	
	Total Col1Ave (5 peaks):			~~375.2~~		Total Col2Ave (4 peaks):			~~351.2~~		RPD = 7
	Corrected Ave (4 peaks):			261.8		Corrected Ave (3 peaks):			262.2		RPD = 0
Aroclor-1262	1	10.299	-0.008	17055484	307.4	1	10.293	0.001	3426492	211.4	
Aroclor-1262	2	10.679	-0.001	34170310	240.4	2	10.743	0.007	2873138	207.0	
Aroclor-1262	3	11.079	-0.001	7978756	158.2	3	11.017	0.001	5874484	187.6	
Aroclor-1262	4	11.269	0.000	27141431	474.7	4	11.539	0.002	4644187	365.9	
Aroclor-1262	5	11.938	-0.001	19213149	383.7	5	12.340	0.000	4418269	385.0	
	Total Col1Ave (5 peaks):			312.9		Total Col2Ave (5 peaks):			271.4		RPD = 14
	Corrected Ave (4 peaks):			272.4		Corrected Ave (4 peaks):			243.0		RPD = 11
Aroclor-1268	1	11.197	0.000	25754543	179.3	1	11.539	0.002	4644187	140.9	
Aroclor-1268	2	11.269	0.000	27141431	195.4	2	11.604	0.008	6245814	196.0	

Aroclor-1268	3	11.664	0.010	9312244	78.0	3	---			0.0
Aroclor-1268	4	12.441	-0.002	14382211	44.3	4	12.825	0.003	4063068	56.1

Total Col1Ave (4 peaks): 124.3 Total Col2Ave (3 peaks): 131.0 RPD = 5

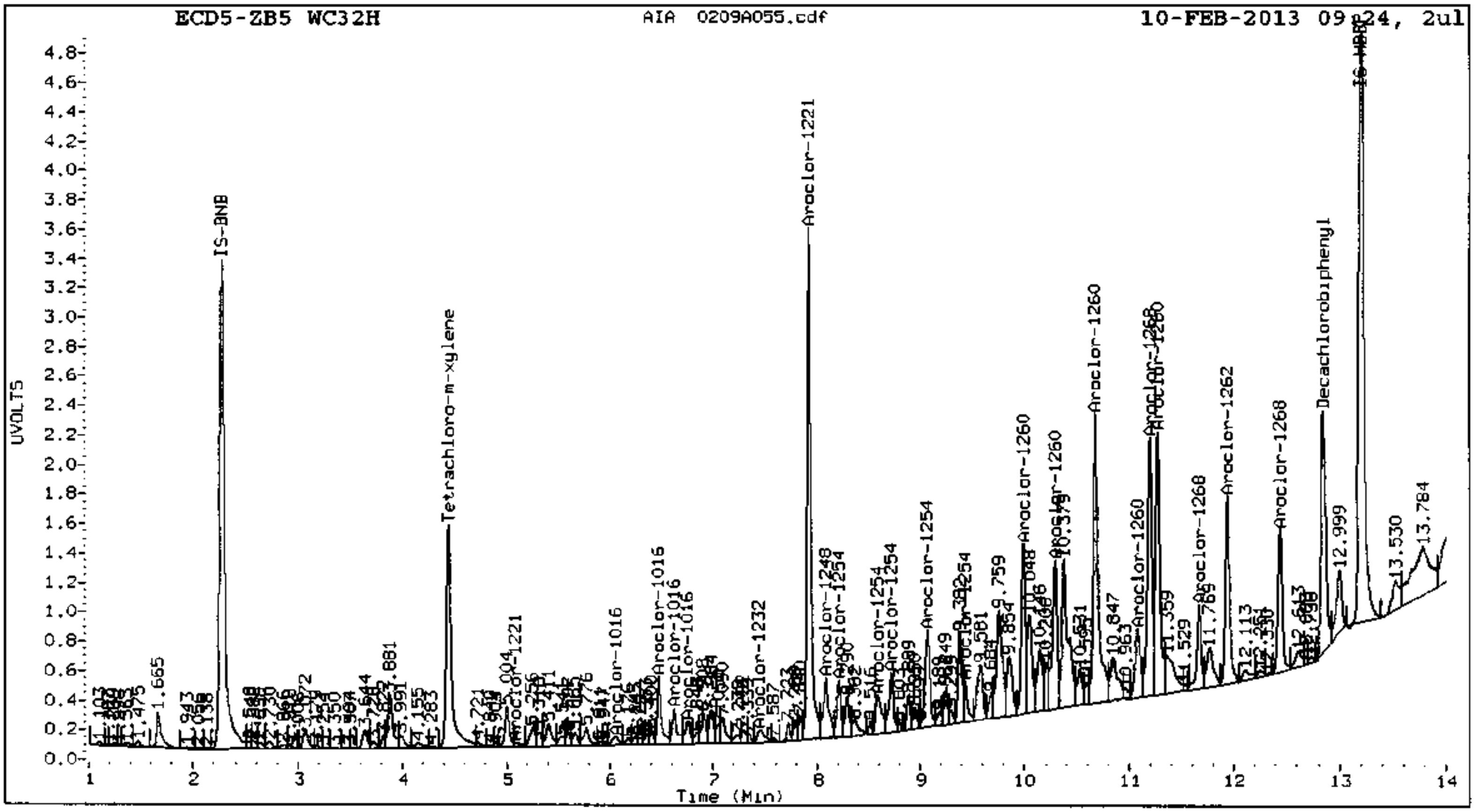
Corrected Ave (3 peaks): 100.6 Corrected Ave: < 3 Peaks

Total PCB Area Col1 (4.541 - 12.748) = 456016582 Col1 Total PCB = 0.6 ppm*

Total PCB Area Col2 (4.547 - 13.139) = 95995112 Col2 Total PCB = 0.8 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.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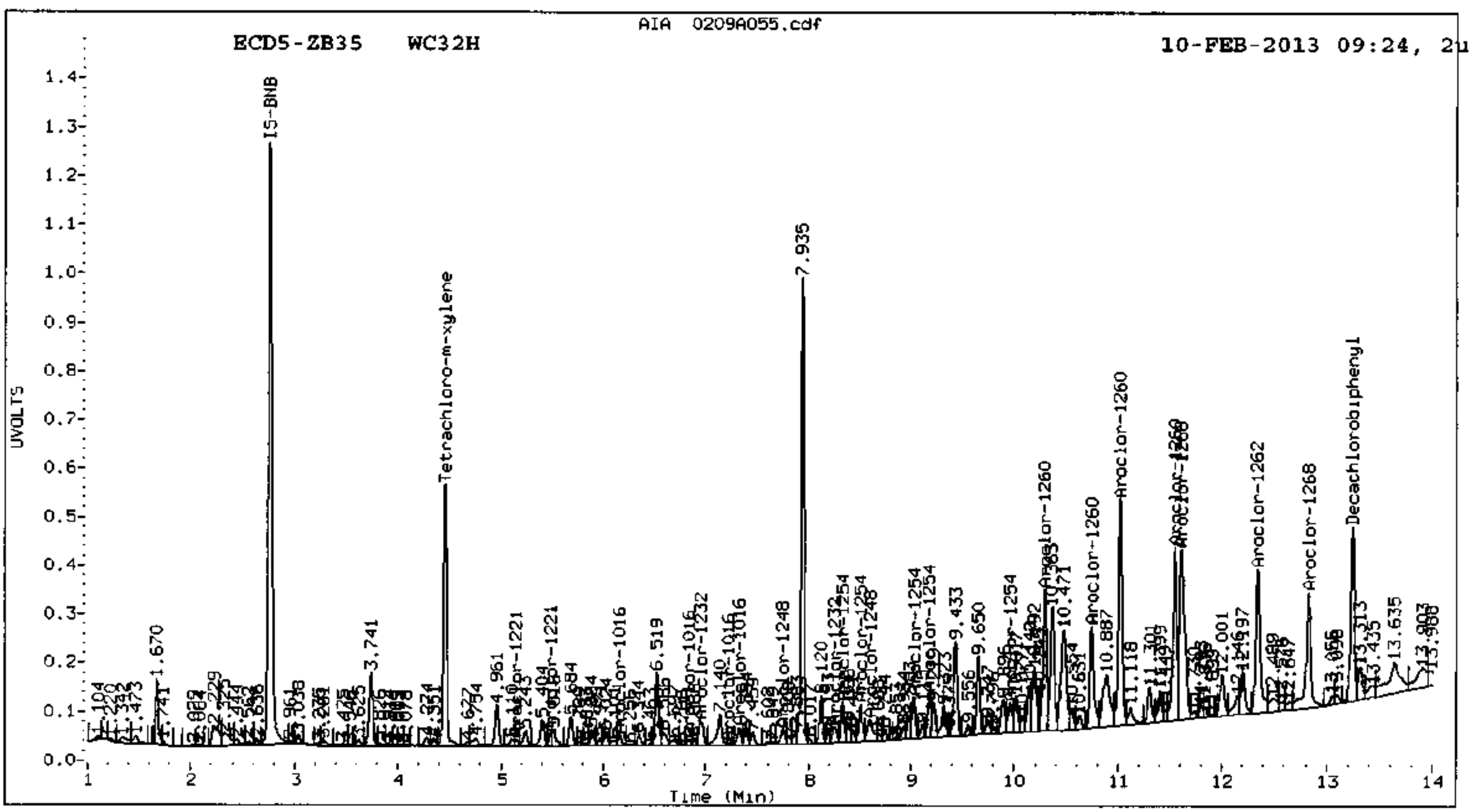
AIA 0209A055.cdf
10-FEB-2013 09:24, 2ul
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Aroclor-1221
Aroclor-1260
Aroclor-1262
Aroclor-1268
Decachlorobiphenyl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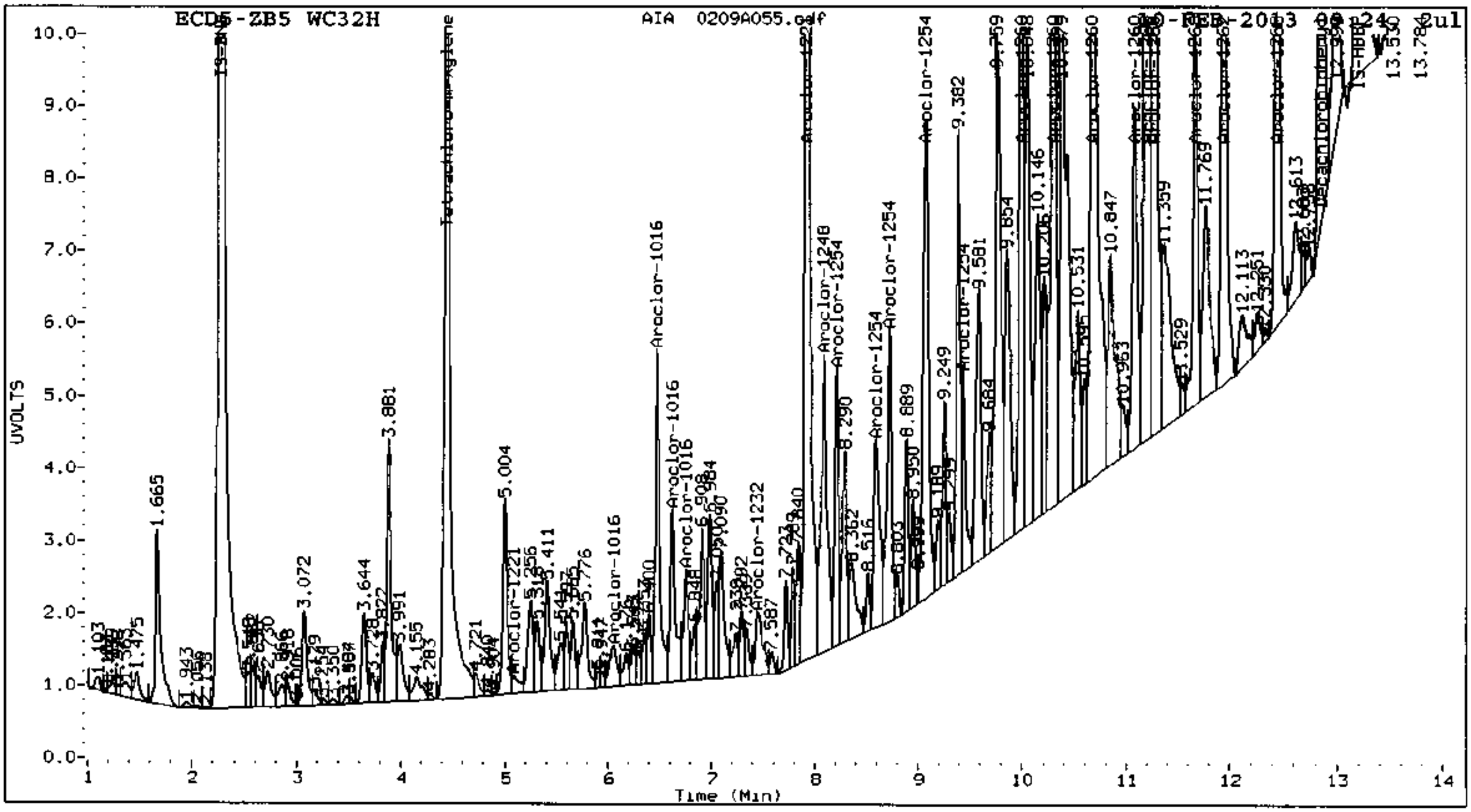
AIA 0209A055.cdf
10-FEB-2013 09:24, 2u
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
7.935
Aroclor-1260
Aroclor-1262
Aroclor-1268
Decachlorobiphenyl

WC32 02012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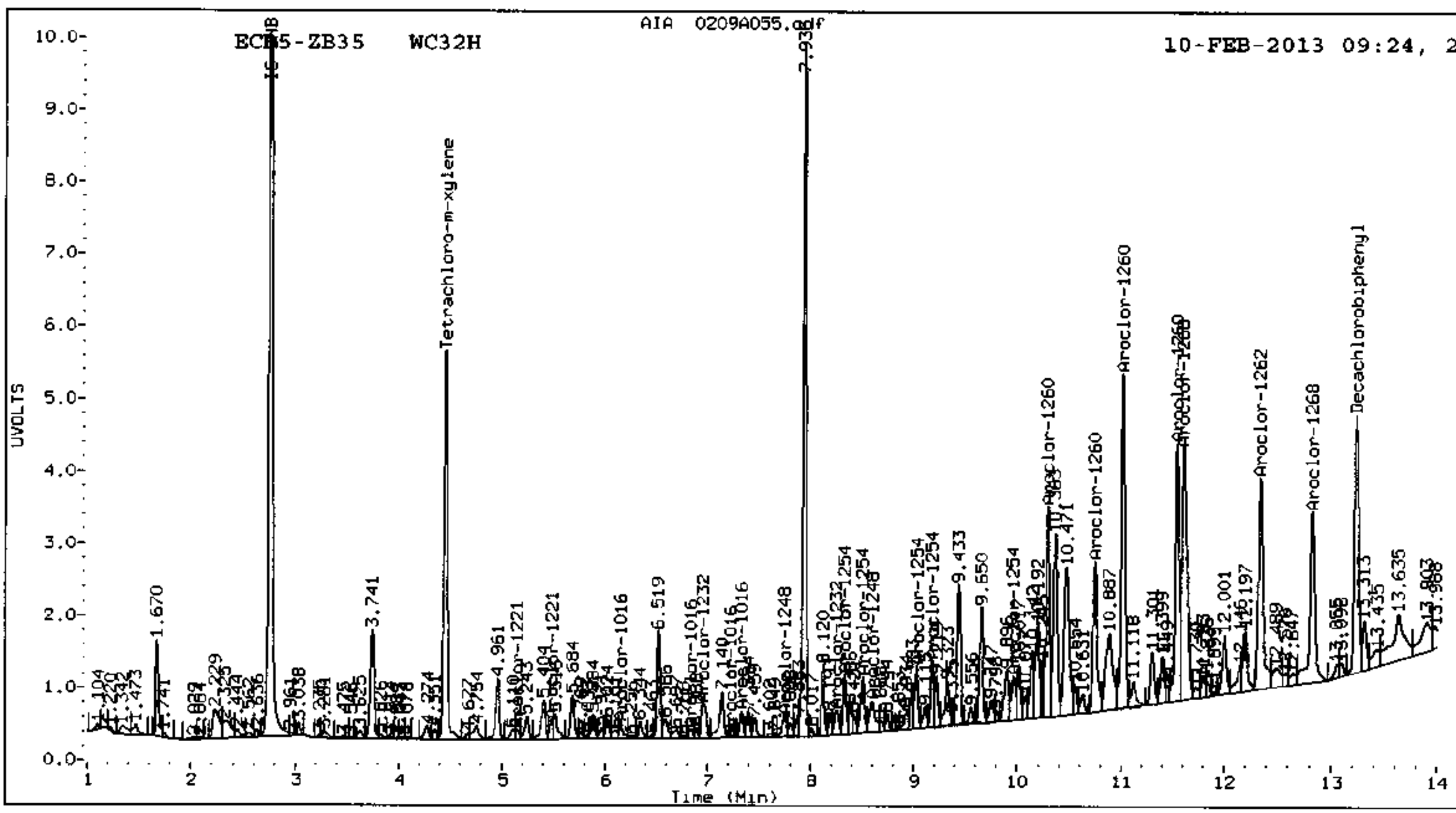
AIA 0209A055.qdf
UVOLTS
Time (Min)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AIA 0209A055.qdf
10-FEB-2013 09:24,
UVOLTS
Time (Min)

VC32 : 02013

Analytical Resources Inc.
Dual Column PCBs by SW8082

Data file 1: 20130128.b/0209-1.b/0209A056.d
Data file 2: 20130128.b/0209-2.b/0209A056.d
Method: /chem2/ecd5.i/20130128.b/PCB1.m
Compound Sublist: PCB
Instrument, Inj. Vol.: ecd5.i, 2ul
Quant Method: Internal Std

ARI ID: WC33G
Client ID: HA-09-0-10-013013
Injection Date: 10-FEB-2013 09:45
Ical Date: 28-JAN-2013
Matrix: SOIL
Dilution Factor: 1.000

ZB5 Col RT	ZB5 Col Shift	ZB5 Col Response	ZB35 Col RT	ZB35 Col Shift	ZB35 Col Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
4.441	0.000	30992352	4.448	0.000	7684755	30.8	31.9	3.7	Tetrachloro-m-xylen
12.847	-0.001	32711282	13.240	0.001	7539645	26.7	32.8	20.6	Decachlorobiphenyl

* Indicates RPD > 40%
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE PERCENT RECOVERY

SURROGATE	Col1	Col2
Tetrachloro-m-xylene	76.9	79.8
Decachlorobiphenyl	66.7	82.1

[initials] 02/12/13

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	44738954	56816926	27.0
Hexabromobiphenyl	59848867	70708716	18.1

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	14899855	16400263	10.1
Hexabromobiphenyl	12307480	13677486	11.1

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 28-JAN-2013
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	6.059	-0.029	135798	5.2	1	6.247	0.046	15673	1.7
Aroclor-1016	2	6.473	-0.020	123491	1.5	2	6.833	0.000	12633	0.6
Aroclor-1016	3	6.659	0.017	50375	1.4	3	7.259	0.041	8268	1.6
Aroclor-1016	4	6.759	0.007	228598	9.1	4	7.328	0.001	23527	4.0
	Total Col1Ave (4 peaks):			4.3		Total Col2Ave (4 peaks):			2.0	RPD = 74*
	Corrected Ave (3 peaks):			2.7		Corrected Ave (3 peaks):			1.3	RPD = 70*
Aroclor-1221	1	5.093	-0.005	81079	3.4	1	1.097	0.097	94618	55.8
Aroclor-1221	2	6.473	-0.022	123491	16.7	2	5.148	0.000	141298	53.0
Aroclor-1221	3	7.906	0.002	823887	83.1	3	---			0.0
Aroclor-1221	NS	---			----	4	5.519	0.021	721821	145.4
	Total Col1Ave (3 peaks):			34.4		Total Col2Ave (3 peaks):			84.7	RPD = 85*
	Corrected Ave: < 3 Peaks					Corrected Ave: < 3 Peaks				
Aroclor-1232	1	6.059	-0.031	135798	12.8	1	6.247	0.047	15673	3.8
Aroclor-1232	2	6.473	-0.021	123491	3.7	2	6.833	0.003	12633	1.6
Aroclor-1232	3	7.460	-0.007	62450	3.9	3	7.049	0.006	1798	0.5
Aroclor-1232	4	7.906	0.009	823887	44.9	4	8.259	-0.009	35393	12.4
	Total Col1Ave (4 peaks):			16.3		Total Col2Ave (4 peaks):			4.6	RPD = 112*
	Corrected Ave (3 peaks):			6.8		Corrected Ave (3 peaks):			2.0	RPD = 110*
Aroclor-1242	1	6.059	-0.030	135798	6.8	1	6.247	0.046	15673	2.3
Aroclor-1242	2	6.473	-0.022	123491	2.0	2	6.833	-0.002	12633	0.9
Aroclor-1242	3	6.659	0.016	50375	1.9	3	7.049	0.005	1798	0.3
Aroclor-1242	4	7.906	0.010	823887	25.7	4	8.259	-0.010	35393	6.7
	Total Col1Ave (4 peaks):			9.1		Total Col2Ave (4 peaks):			2.5	RPD = 113*
	Corrected Ave (3 peaks):			3.6		Corrected Ave (3 peaks):			1.1	RPD = 103*
Aroclor-1248	1	6.473	-0.017	123491	3.0	1	6.833	0.003	12633	1.3
Aroclor-1248	2	7.460	-0.006	62450	1.5	2	7.740	0.002	34533	4.3
Aroclor-1248	3	7.906	0.010	823887	15.2	3	8.259	-0.010	35393	4.2
Aroclor-1248	4	8.132	0.001	154545	3.7	4	8.601	-0.013	72761	7.0
	Total Col1Ave (4 peaks):			5.8		Total Col2Ave (4 peaks):			4.2	RPD = 33
	Corrected Ave (3 peaks):			2.7		Corrected Ave (3 peaks):			3.3	RPD = 18
Aroclor-1254	1	8.213	-0.003	562723	10.1	1	8.333	0.000	123122	17.2
Aroclor-1254	2	8.589	0.002	327211	8.8	2	8.507	0.000	91952	10.0
Aroclor-1254	3	8.723	-0.001	1009992	14.0	3	9.030	0.001	131798	18.5
Aroclor-1254	4	9.054	-0.019	1459507	18.3	4	9.180	0.000	203182	13.1
Aroclor-1254	5	9.425	-0.007	541461	10.9	5	9.969	0.005	106409	11.2
	Total Col1Ave (5 peaks):			12.4		Total Col2Ave (5 peaks):			14.0	RPD = 12
	Corrected Ave (4 peaks):			11.0		Corrected Ave (4 peaks):			12.9	RPD = 16
Aroclor-1260	1	9.989	0.000	625126	11.7	1	10.293	0.000	118636	11.6
Aroclor-1260	2	10.307	0.002	459177	8.5	2	10.743	0.001	284741	22.6
Aroclor-1260	3	10.681	0.001	1371131	11.0	3	11.022	0.005	373533	14.8
Aroclor-1260	4	11.077	-0.002	1212409	17.3	4	11.538	0.000	76158	10.3
Aroclor-1260	5	11.267	-0.002	1286800	37.5	NS	---			----
	Total Col1Ave (5 peaks):			17.2		Total Col2Ave (4 peaks):			14.8	RPD = 15
	Corrected Ave (4 peaks):			12.1		Corrected Ave (3 peaks):			12.2	RPD = 1
Aroclor-1262	1	10.307	0.001	459177	7.9	1	10.293	0.001	118636	7.4
Aroclor-1262	2	10.681	0.001	1371131	9.2	2	10.743	0.007	284741	20.8
Aroclor-1262	3	11.077	-0.002	1212409	22.9	3	11.022	0.006	373533	12.1
Aroclor-1262	4	11.267	-0.001	1286800	21.5	4	11.538	0.000	76158	6.1
Aroclor-1262	5	11.936	-0.003	709423	13.5	5	12.367	0.028	639684	56.4
	Total Col1Ave (5 peaks):			15.0		Total Col2Ave (5 peaks):			20.5	RPD = 31
	Corrected Ave (4 peaks):			13.0		Corrected Ave (4 peaks):			11.6	RPD = 12
Aroclor-1268	1	11.197	0.000	1525232	10.1	1	11.538	0.000	76158	2.3

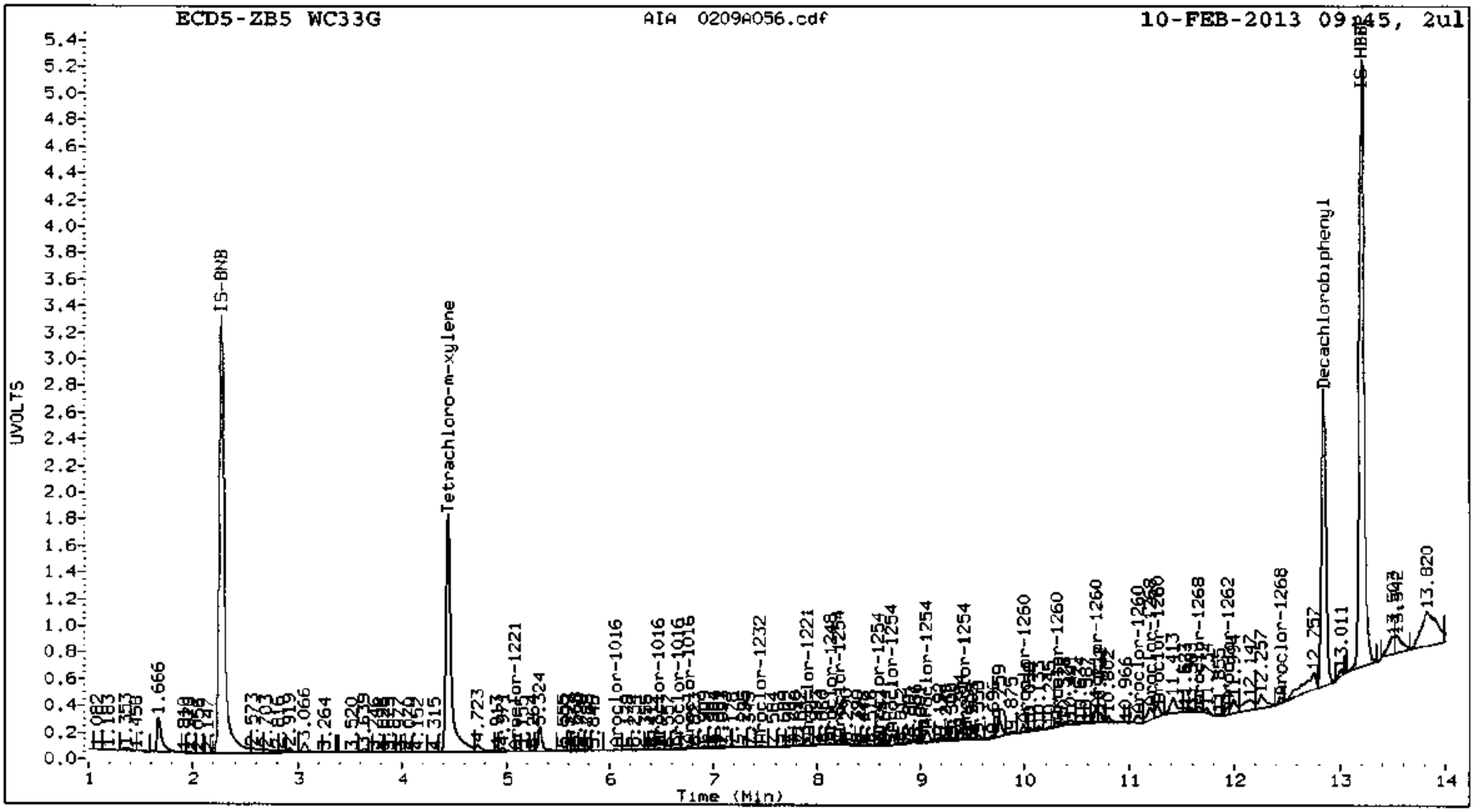
Aroclor-1268 2	11.267	-0.002	1286800	8.8	2	11.605	0.009	155603	4.9
Aroclor-1268 3	11.660	0.006	509804	4.1	3	1.097	0.097	94618	3.6
Aroclor-1268 4	12.443	0.001	544308	1.6	4	12.833	0.011	1367010	19.1
	Total Col1Ave (4 peaks):		6.2	Total Col2Ave (4 peaks):				7.5	RPD = 20
	Corrected Ave (3 peaks):		4.8	Corrected Ave (3 peaks):				3.6	RPD = 29

Total PCB Area Col1 (4.541 - 12.748) = 42838454 Col1 Total PCB = 0.1 ppm*

Total PCB Area Col2 (4.547 - 13.139) = 9584664 Col2 Total PCB = 0.1 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.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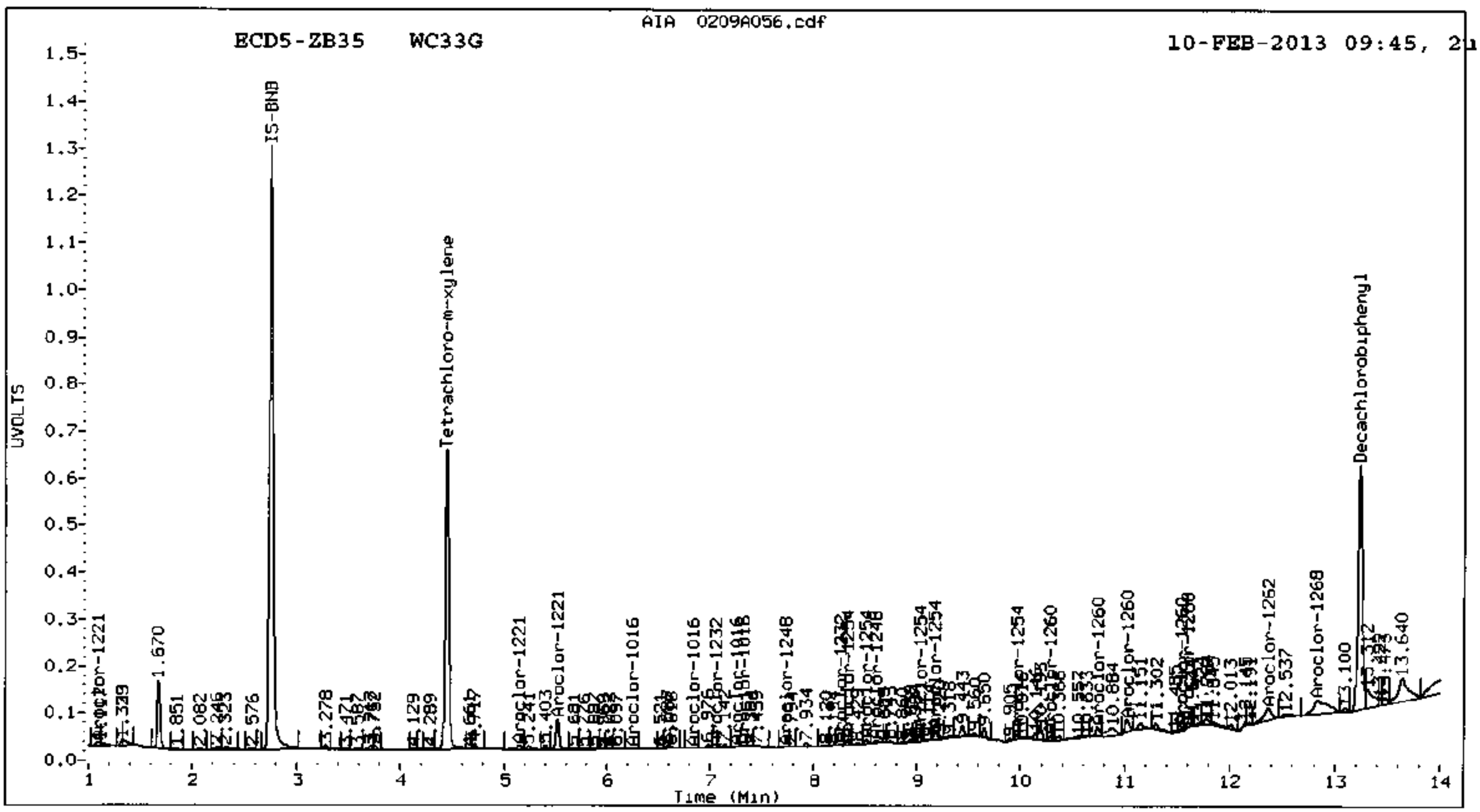
10-FEB-2013 09:45, 2ul
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Decachlorobiphenyl
IS-HBB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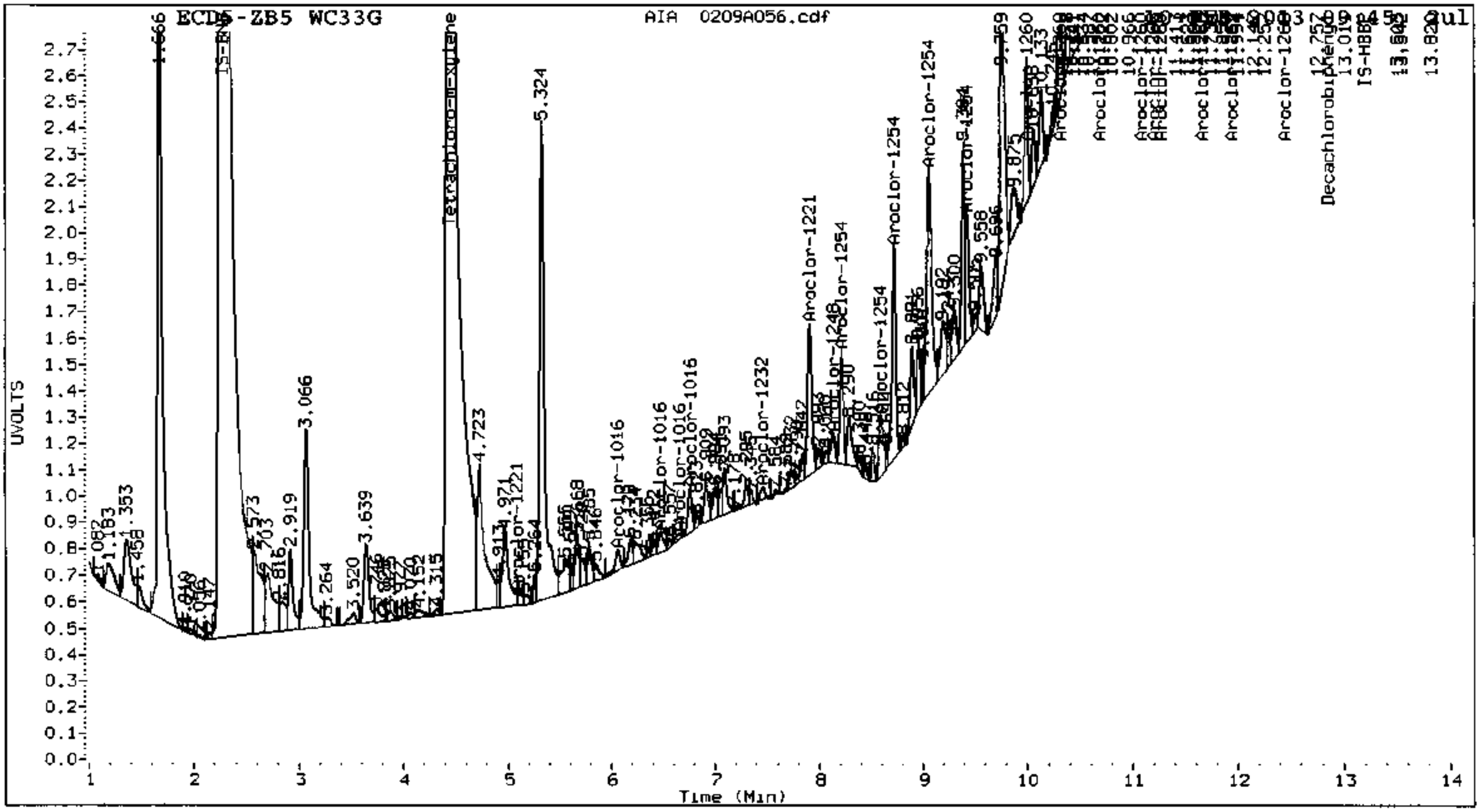
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Decachlorobiphenyl

WC32 : 02817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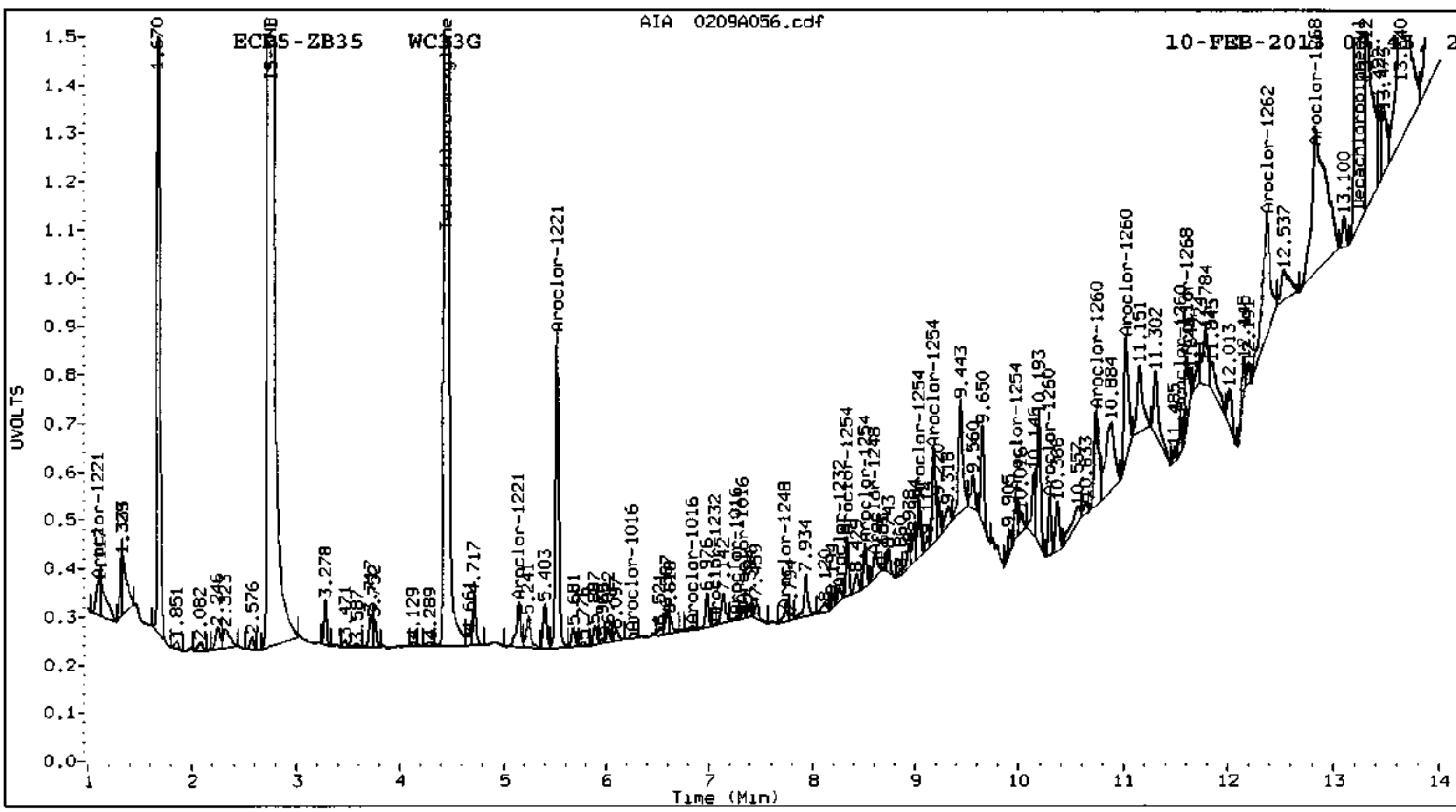
UVOLTS
Time (Min)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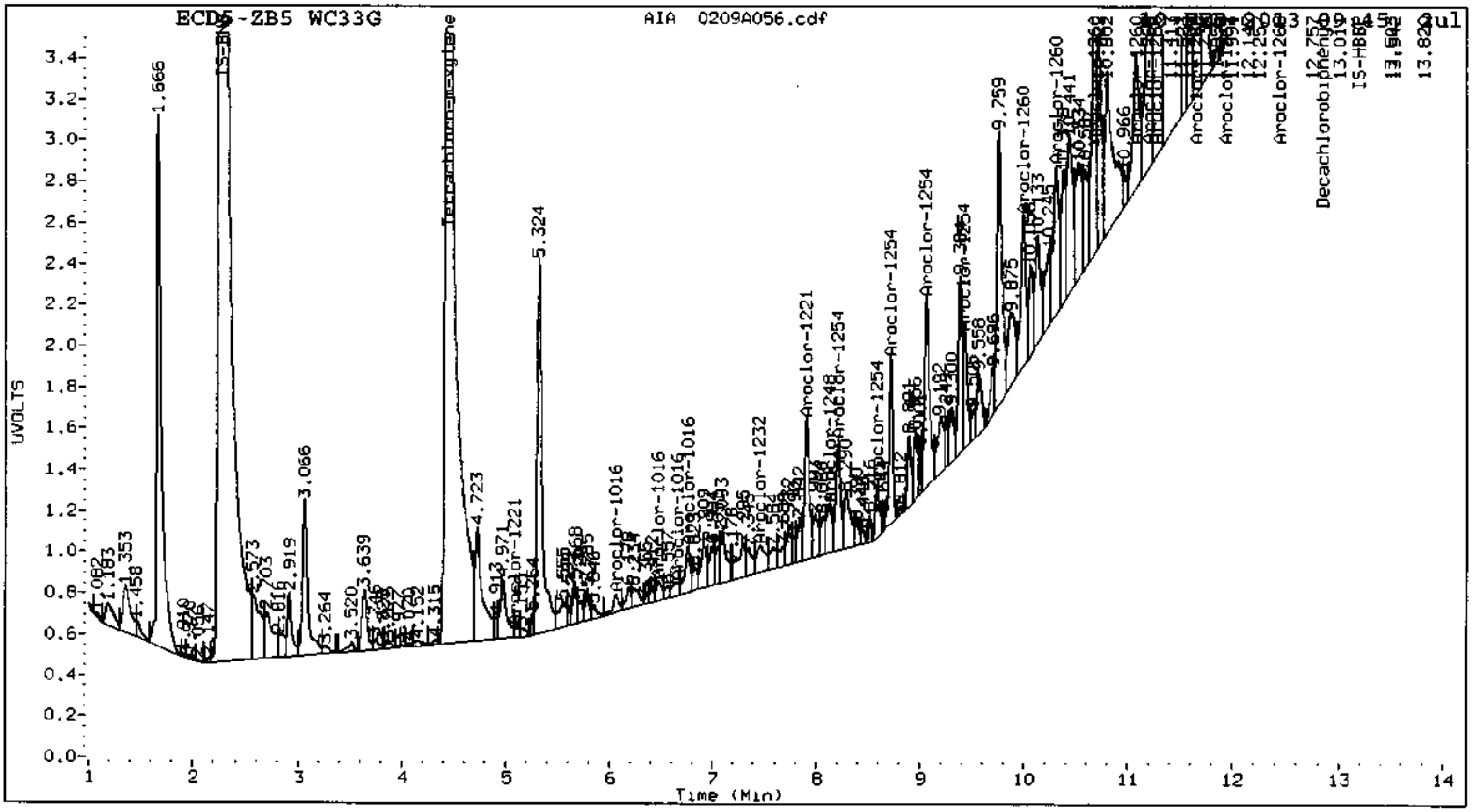
UVOLTS
Time (Min)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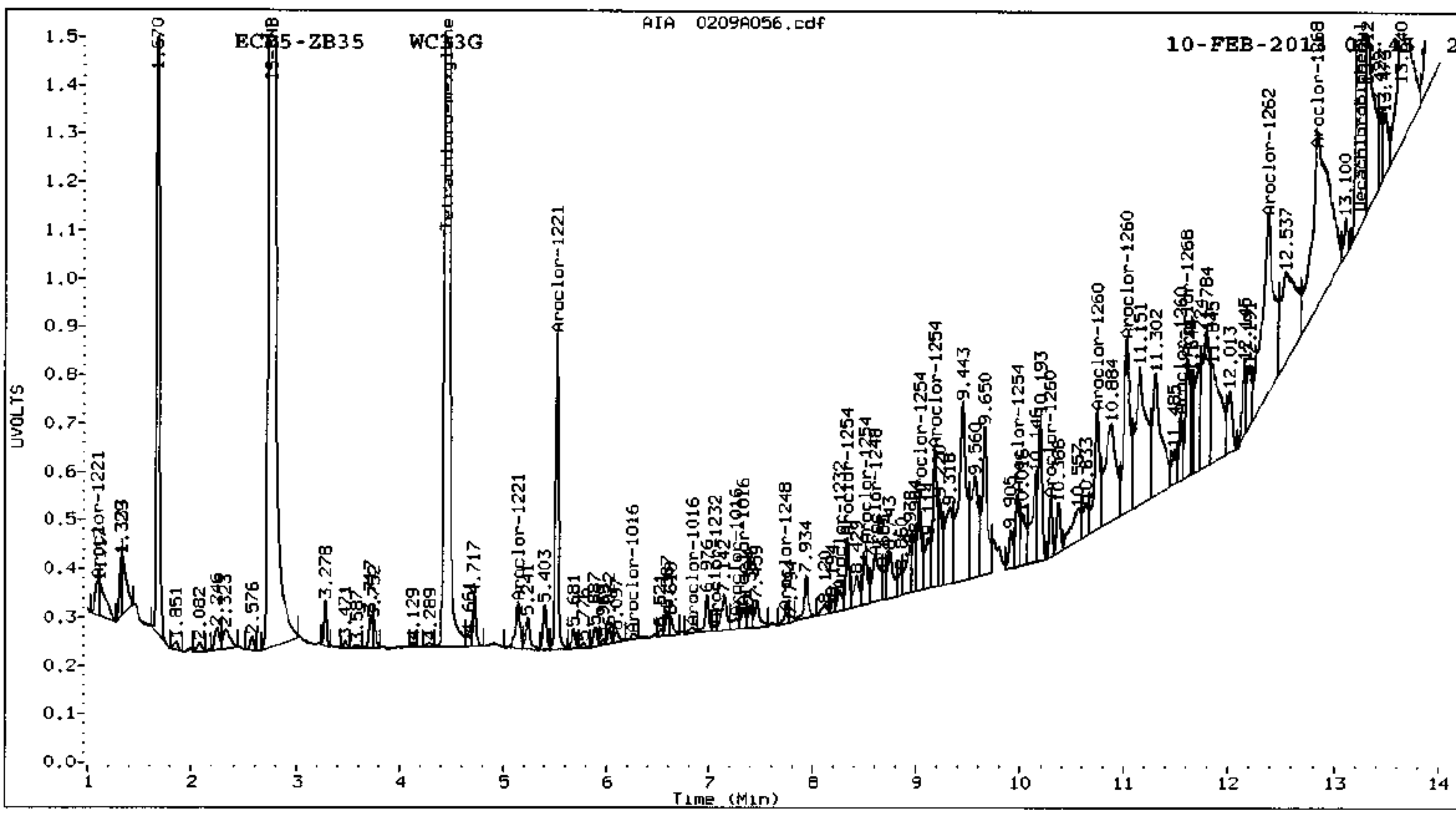
UVOLTS
Time (Min)


ECD5-ZB35 WC33G
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UVOLTS
Time (Min)

Analytical Resources Inc.
Dual Column PCBs by SW8082

Data file 1: 20130128.b/0209-1.b/0209A057.d
Data file 2: 20130128.b/0209-2.b/0209A057.d
Method: /chem2/ecd5.i/20130128.b/PCB1.m
Compound Sublist: AR1660
Instrument, Inj. Vol.: ecd5.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660
Client ID:
Injection Date: 10-FEB-2013 10:05
Ical Date: 28-JAN-2013
Matrix: NONE
Dilution Factor: 1.000

ZB5 Col RT	ZB5 Col Shift	ZB5 Col Response	ZB35 Col RT	ZB35 Col Shift	ZB35 Col Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
4.441	0.000	20533487	4.448	0.000	5119211	19.2	19.6	1.9	Tetrachloro-m-xylen
12.848	0.000	25094145	13.238	-0.001	4525289	18.0	17.3	4.0	Decachlorobiphenyl

* Indicates RPD > 40%
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE PERCENT RECOVERY

SURROGATE	Col1	Col2
Tetrachloro-m-xylene	48.1	49.0
Decachlorobiphenyl	45.0	43.3

JK 02/12/13

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	44738954	60197967	34.6
Hexabromobiphenyl	59848867	80395279	34.3

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	14899855	17780491	19.3
Hexabromobiphenyl	12307480	15576551	26.6

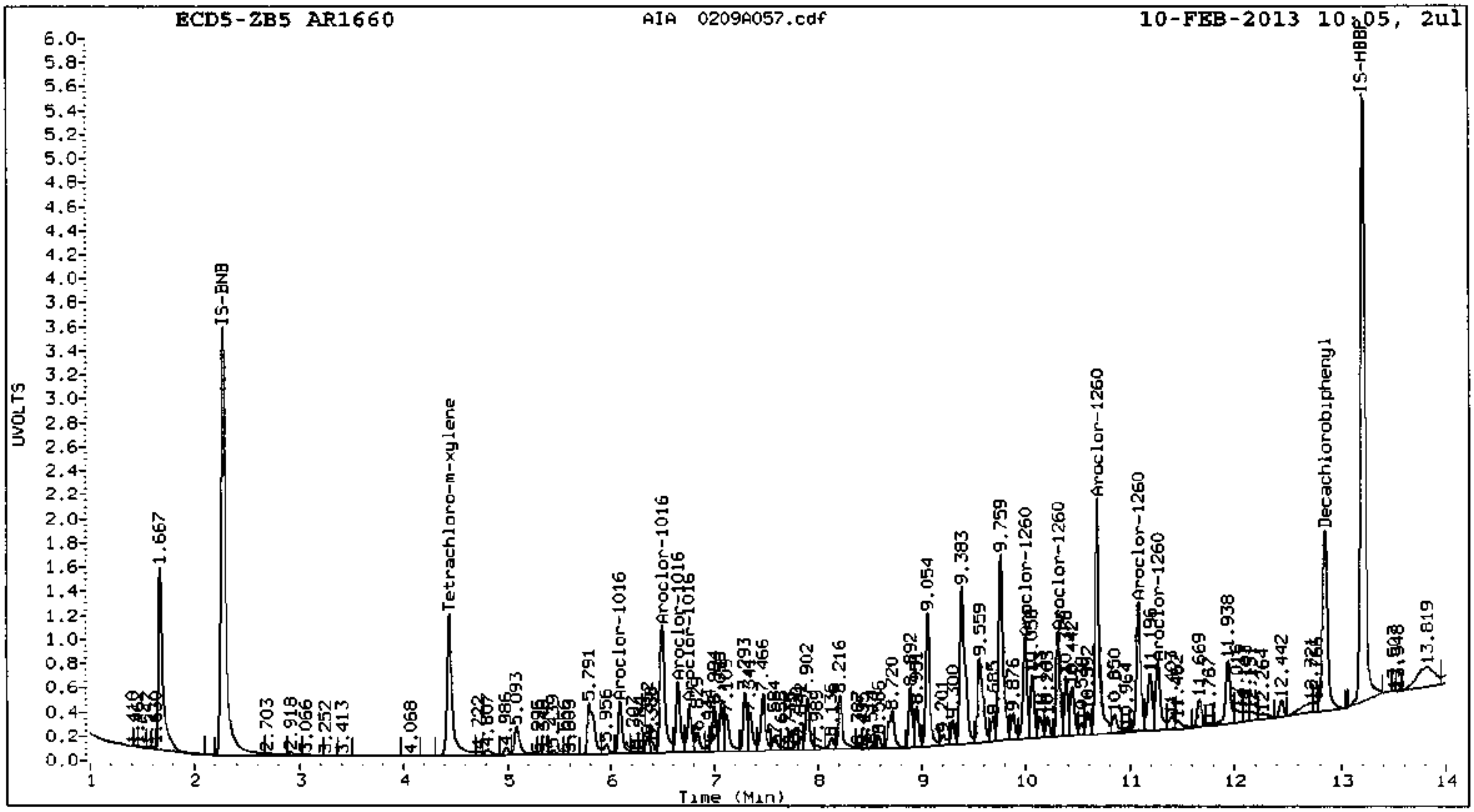
* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 28-JAN-2013
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	6.088	0.000	6201907	222.3	1	6.201	0.000	2320596	227.8
Aroclor-1016	2	6.492	0.000	19634254	221.3	2	6.832	0.000	4983558	230.0
Aroclor-1016	3	6.642	0.000	8409899	222.8	3	7.218	0.000	1261083	223.5
Aroclor-1016	4	6.753	0.000	6077100	229.4	4	7.327	0.000	1466412	229.0
	Total Col1Ave (4 peaks):			224.0		Total Col2Ave (4 peaks):			227.6	RPD = 2
	Corrected Ave (3 peaks):			222.1		Corrected Ave (3 peaks):			226.7	RPD = 2
Aroclor-1260	1	9.989	0.000	11148139	184.1	1	10.293	0.000	2352016	201.8
Aroclor-1260	2	10.305	0.000	11095426	181.0	2	10.742	0.000	2815663	196.5
Aroclor-1260	3	10.680	0.000	29402515	207.0	3	11.017	0.000	5909007	205.7
Aroclor-1260	4	11.079	0.000	16389061	206.1	4	11.538	0.000	1781245	210.6
Aroclor-1260	5	11.269	0.000	9148127	234.3	NS	---			----
	Total Col1Ave (5 peaks):			202.5		Total Col2Ave (4 peaks):			203.7	RPD = 1
	Corrected Ave (4 peaks):			194.6		Corrected Ave (3 peaks):			201.4	RPD = 3

Total PCB Area Col1 (4.541 - 12.748) = 359454819 Col1 Total PCB = 0.5 ppm*

Total PCB Area Col2 (4.547 - 13.139) = 81787696 Col2 Total PCB = 0.6 ppm*

* Quantitated against AR1660 0.25ppm in Ical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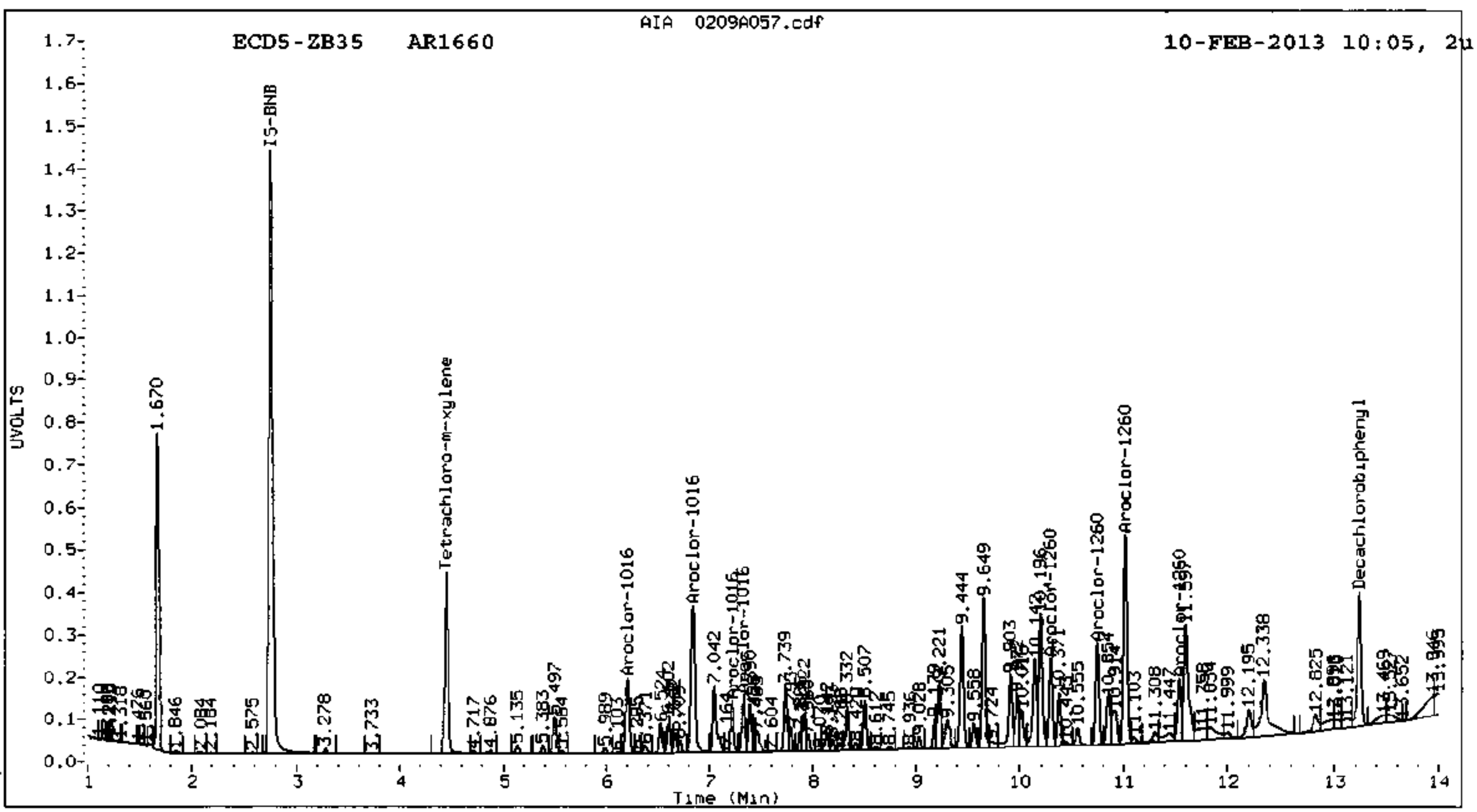
AIA 0209A057.cdf
10-FEB-2013 10:05, 2ul
UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Aroclor-1016
Aroclor-1260
Decachlorobiphenyl
IS-HBBP


ECD5-ZB35 AR1660
AIA 0209A057.cdf
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UVOLTS
Time (Min)
IS-BNB
Tetrachloro-m-xylene
Aroclor-1016
Aroclor-1260
Decachlorobiphenyl

Analytical Resources Inc.
Dual Column PCBs by SW8082

Data file 1: 20130128.b/0209-1.b/0209A058.d
Data file 2: 20130128.b/0209-2.b/0209A058.d
Method: /chem2/ecd5.i/20130128.b/PCB1.m
Compound Sublist: AR1248
Instrument, Inj. Vol.: ecd5.i, 2ul
Quant Method: Internal Std

ARI ID: AR1248
Client ID:
Injection Date: 10-FEB-2013 10:25
Ical Date: 28-JAN-2013
Matrix: NONE
Dilution Factor: 1.000

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.441	0.000	18649767	4.447	0.000	4719094	18.8	19.4	3.3	Tetrachloro-m-xylen
12.848	0.000	21345325	13.239	0.000	4004473	17.0	17.8	4.4	Decachlorobiphenyl

* Indicates RPD > 40%
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE PERCENT RECOVERY

SURROGATE	Col1	Col2
Tetrachloro-m-xylene	47.0	48.5
Decachlorobiphenyl	42.6	44.5

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	44738954	55997247	25.2
Hexabromobiphenyl	59848867	72355492	20.9

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	14899855	16564343	11.2
Hexabromobiphenyl	12307480	13406953	8.9

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 28-JAN-2013
<- Indicates standard response outside Limits (-50 to +100%)

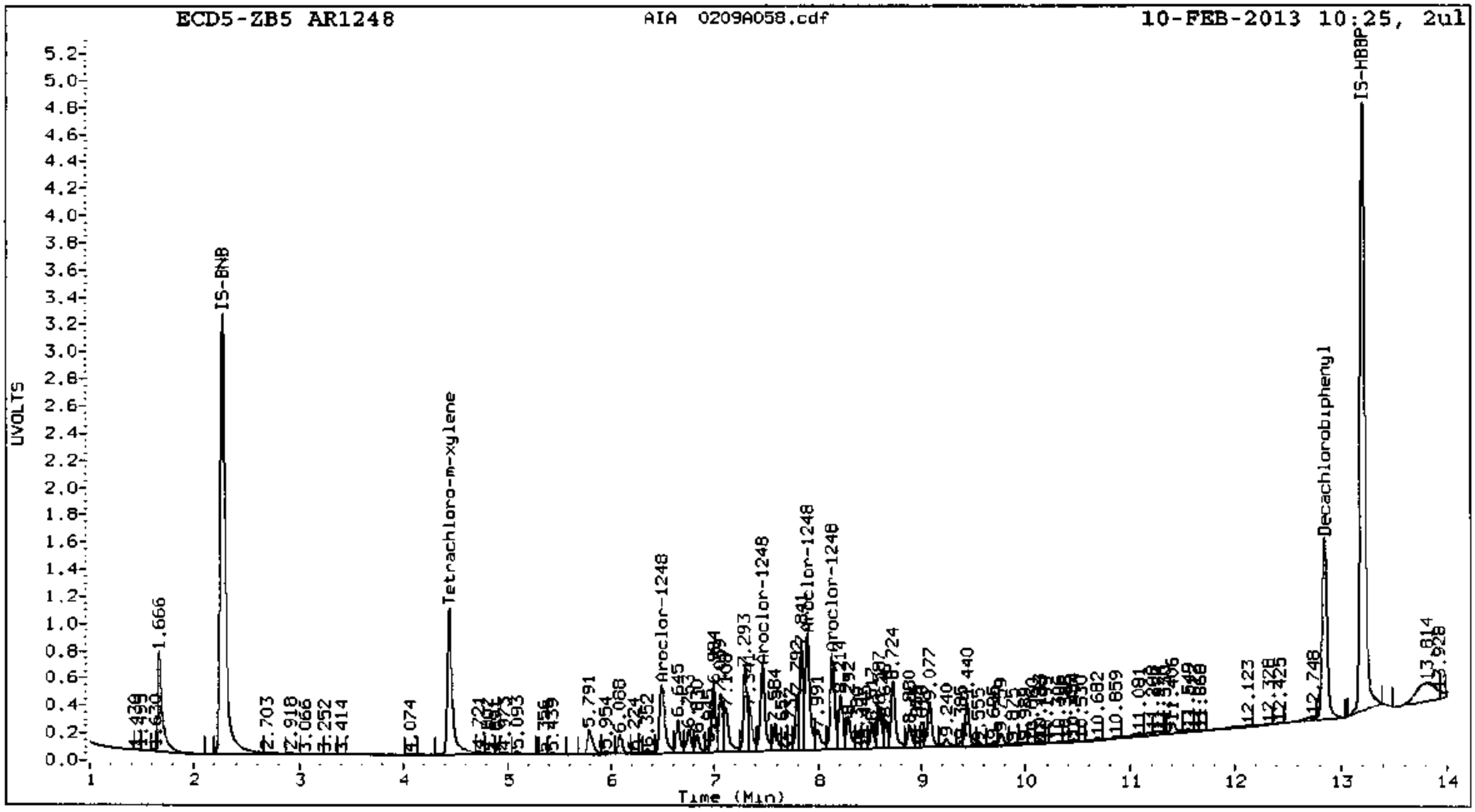
		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1248	1	6.489	0.000	9401765	235.5	1	6.830	0.000	2383659	244.0
Aroclor-1248	2	7.466	0.000	9867259	233.1	2	7.738	0.000	1977030	241.6
Aroclor-1248	3	7.896	0.000	12653915	237.3	3	8.268	0.000	2037100	239.5
Aroclor-1248	4	8.132	0.000	9525933	229.0	4	8.614	0.000	2517465	239.0

Total Col1Ave (4 peaks): 233.7 Total Col2Ave (4 peaks): 241.0 RPD = 3
Corrected Ave (3 peaks): 232.5 Corrected Ave (3 peaks): 240.0 RPD = 3

Total PCB Area Col1 (4.541 - 12.748) = 159535463 Col1 Total PCB = 0.2 ppm*

Total PCB Area Col2 (4.547 - 13.139) = 44219196 Col2 Total PCB = 0.3 ppm*

* Quantitated against AR1660 0.25ppm in Ical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AIA 0209A058.cdf
10-FEB-2013 10:25, 2ul
UVOLTS
Time (Min)
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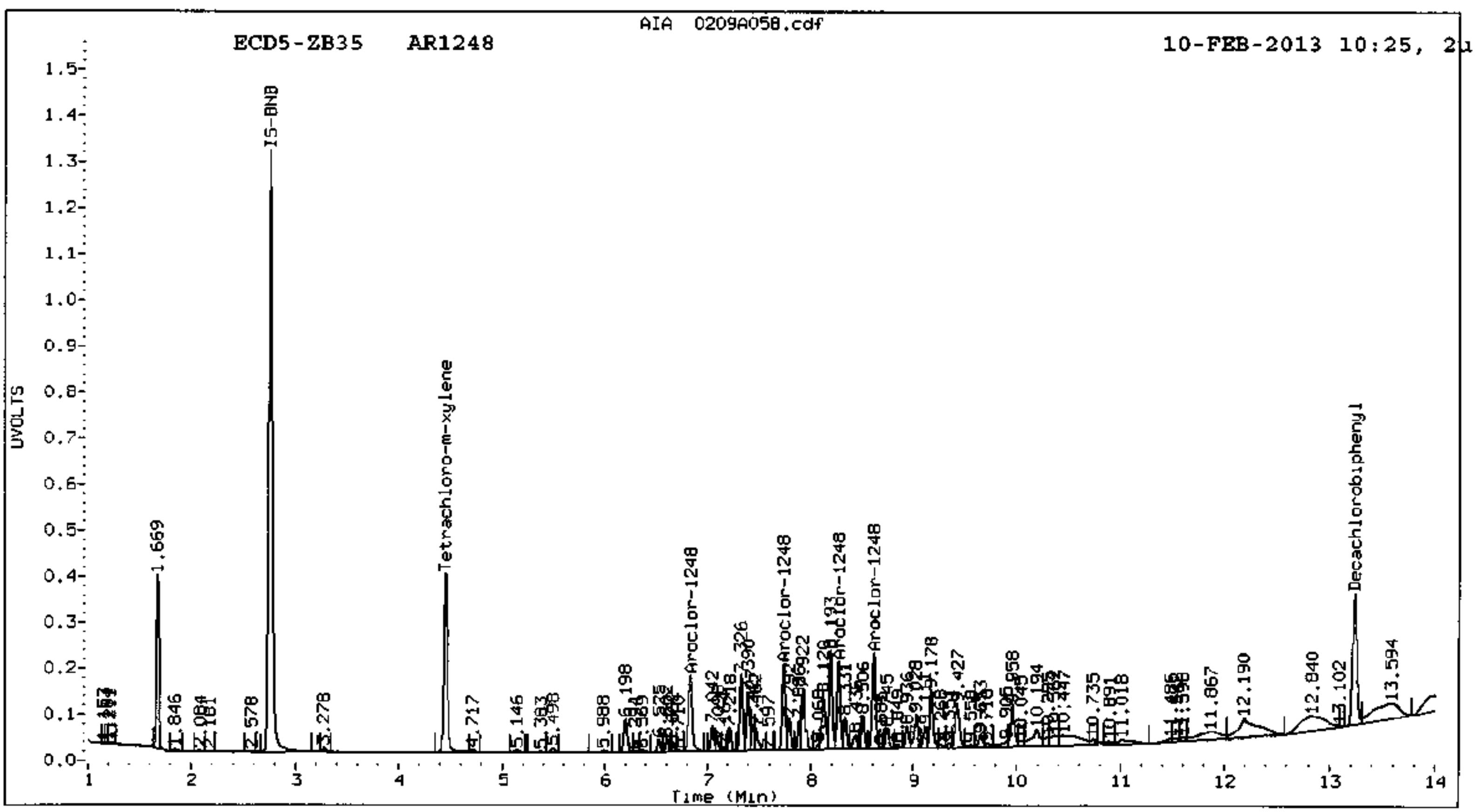
IS-BNB
Tetrachloro-m-xylene
Aroclor-1248
Aroclor-1248
Aroclor-1248
Aroclor-1248
Decachlorobiphenyl
IS-HBBP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ECD5-ZB35 AR1248
10-FEB-2013 10:25, 2u
UVOLTS
Time (Min)
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IS-BNB
Tetrachloro-m-xylene
Aroclor-1248
Aroclor-1248
Aroclor-1248
Aroclor-1248
Decachlorobiphenyl

Metals Raw Data
Preparation Bench Sheets and Notes

ARI Job ID: WC32, WC33

Analytical Resources, Incorporated
Analytical Chemists and Consultants

SPIKING LOG

Analyst: om

Date: 2.05.13

Final Volume 50

Final Volume (Hg): 50

Sample ID WC33 GSPK, MBSPK

	Prepcode:	SWL		
	Spike Solution:	ICP Routine	ICP No GFA	GFA
	Standard No.:	3001-10		
	Vol Added (mL):	1.0		
STOCK CONCENTRATION	Ag	50 ✓		2.0
	Al	200	200	
	As	200 ✓		10
	Ba	200	200	
	Be	50	50	
	Ca	1000	1000	
	Cd	50 ✓		2.0
	Co	50	50	
	Cr	50 ✓	50	
	Cu	50 ✓	50	
	Fe	200	200	
	K	1000	1000	
	Mg	1000	1000	
	Mn	50	50	
	Na	1000	1000	
	Ni	50	50	
	Pb	200 ✓		10
	Se	200		10
	Sr	50	50	
	Tl	200		10
	V	50	50	
	Zn	50 ✓	50	

	ICP-MS #1	ICP-MS #2	ICP-MS Minerals
Ag	25		
Al			500
As	25		
Ba	25		
Be	25		
Ca			500
Cd	25		
Co	25		
Cr	25		
Cu	25		
Fe			500
K			500
Mg			500
Mn	25		
Mo		25	
Na			500
Ni	25		
Pb	25		
Sb		25	
Se	80		
Tl	25		
U	25		
V	25		
Zn	80		

Element	Prepcode	Analysis	Stock Conc.	Stock Added	Std No
Hg	SMM	CVA	1.0	005	3001-13
Hg MBSPK	↓	CVA	1.0	0.1	↓
Sb		ICP	2000		
Sb		GFA	100		
B		ICP	500		
Mo		ICP	500		
Si		ICP	10000		
Sn		ICP	500		
Ti		ICP	2000		

Additional Elements:

Element	Prepcode	Analysis	Stock Conc.	Stock Added	Std. No.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Digestion Log

Analyst: DM Date: 02-05-13 Time: 0830
Matrix: Soil Block ID: #2 Block Temp: 94°C Thermometer: MP30

ARI Sample ID	Btl #	pH<2	Prep Code: SWC Initial Wt (g) ~~Vol (mL)~~	Final Vol (mL)	Prep Code: Initial Wt (g) Vol (mL)	Final Vol (mL)	Comments
WC32 E	1	—	1.056	50.0			
" F	1	—	1.080				
" G	1	—	1.001				
" H	1	—	1.093				
WC33 G	1	—	1.034				
" GDUP	1	—	1.032				
" GSPK	1	—	1.032				BATCH
" H	1	—	1.039				
" I	1	—	1.056				
" REF1	0058	—	1.003				
" MB1	—	—	—				
" MB1SPK	—	—	—	50.0			

02-05-13 DM

Chemical/Reagent ID:
HNO3: MP2428 / I7970 HCl: I7971 H2O2: I7845 Tube Lot #: 1208057

UC02 02028

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Mercury Digestion Log

Prep Code: SMM
Analyst: DM
Bath Temp: 95°C
Matrix: Soil
Date: 02-05-13
Start Time: 0844
End Time: 0914

ARI Sample ID	Sample Bottle #	pH<2	Initial Weight (g) ~~Volume (mL)~~	Final Volume (mL)	# $KMnO_4$ Aliquots	CLP	Comments
WC32 E	1	—	0.802	50.0	2/12 1	Y	
" F	1	—	0.796		1		
" G	1	—	0.918		1		
" H	1	—	0.805		1		
WC33 G	1	—	0.796		2/12 1		
" GDUP	1	—	0.796		1		BATCH
" GSPK	1	—	0.795		1		
" H	1	—	0.991		1		
" I	1	—	0.848		1		
" REF1	0053	—	0.204		1		
" MB1	—	—	—		1		
" MB1SPK	—	—	—	50.0	1	Y	
			02-05-13 DM				

Chemical/Reagent ID:

HNO_3: I7070
H_2SO_4: I7577
HCl: —
5% $K_2S_2O_8$: MP2418
5% $KMnO_4$: MP2426
Digest Tube Lot: MF06LKK01

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Corrective Actions
Inorganic Analyses

Criteria Flagged:

Unacceptable Blank:	☐	ARI Job No.:	WC33
Unacceptable Duplicate:	☑	Date of Event:	2-6-13
Unacceptable Spike:	☐	Client ID:	Floyd-Snider
Unacceptable Reference:	☐	Method/Element:	ICP
		Prep Code:	SWC

Details of Problem/Recommended Corrective Action:

G/GDUP RPD ↑ for Pb.
(0.4875 mg/L / 0.6877 mg/L)

Samples Affected:

Corrective Action Taken:

Seen [signature] 2/7/13

Analyst Initials: BA

Date: 2-6-13

Supervisor:

Date:

5049F

Revision 007
6/11/10

WC02 : 02006

MATRIX DUPLICATE AND MATRIX SPIKE WORKSHEET (FOR SAMPLES >5 IDL)										
DUPLICATION:				SPIKE RECOVERY:						
	DUP	BKGD			SPIKE	BKGD				
VOLUME	100	100		VOLUME	100	100				
SAMP WT	1.032	1.034		SAMP WT	1.032	1.0340				
ELEMENT	DUP	BKGD	% RPD	ELEMENT	SPIKE	BKGD	SPK'D CONC	% RECOV		
	mg/L				mg/L	mg/L	mg/L			
Ag	0.00091	0.00107	15.97	Ag	0.2085	0.00107	0.2	103.7		
Al			#DIV/0!	Al			2	0.0		
As	0.3932	0.3903	0.93	As	1.185	0.3903	0.8	99.4		
B			#DIV/0!	B			0.5	0.0		
Ba			#DIV/0!	Ba			2	0.0		
Be			#DIV/0!	Be			0.5	0.0		
Ca			#DIV/0!	Ca			10	0.0		
Cd	0.00441	0.0048	8.28	Cd	0.2184	0.0048	0.2	106.8		
Co			#DIV/0!	Co			0.5	0.0		
Cr	0.09436	0.1056	11.05	Cr	0.3151	0.1056	0.2	104.9		
Cu	2.455	2.654	7.60	Cu	2.762	2.654	0.20	56.6	(STL)	
Fe			#DIV/0!	Fe			2	0.0		
K			#DIV/0!	K			10	0.0		
Mg			#DIV/0!	Mg			10	0.0		
Mn			#DIV/0!	Mn			0.5	0.0		
Mo			#DIV/0!	Mo			0.5	0.0		
Na			#DIV/0!	Na			10	0.0		
Ni			#DIV/0!	Ni			0.5	0.0		
Pb	0.6877	0.4875	34.26	Pb	1.345	0.4875	0.8	107.3		
Sb			#DIV/0!	Sb			2	0.0		
Se			#DIV/0!	Se			2	0.0		
Si			#DIV/0!	Si			10	0.0		
Sn			#DIV/0!	Sn			0.5	0.0		
Sr			#DIV/0!	Sr			0.5	0.0		
Ti			#DIV/0!	Ti			2	0.0		
Tl			#DIV/0!	Tl			2	0.0		
V			#DIV/0!	V			0.5	0.0		
Zn	5.697	5.588	2.13	Zn	5.565	5.588	0.2	-6.1	(STL)	

TABLE 6

Metals Raw Data
Run Logs, Calibrations, and Raw Data

ARI Job ID: WC32, WC33

Analytical Resources, Incorporated
Analytical Chemists and Consultants

SAMPLE RUN LOG-ICP-OES-02
Perkin Elmer OPTIMA 7500
Serial No. – 077C8121202

IEC Date: 1-22-13 **Analysis Date:** 2-6-13 **Analyst:** BA

LR Date: 1-22-13 **Page:** 1 **of** 4

All corrections made by analyst unless otherwise noted. BA 2-6-13

Edit Label	Delete Data	ARI Sample ID	Prep. Code	Dilution	Comments
		STD 0			3011-14
		↓ 2			↓ -3
		3			-4
		4			-5
		5			-6
		ICV			3004-11
		ICB			
		CRI			
		ICSA			
		ICSAB			
		CCV1			
		CCB1			
		WC33 MB1	SWC	2	
		↓ H	↓	↓	
	✓	I			Ca > LR
zzz	✓	zzzzzz ~~GL~~		10	
	✓	G		2	Fe > LR
	✓	GDUP		↓	
Diln		GSPK		5	Cu, Zn STL
↓		GPOST		↓	0.08 mL ICP Spk 2977-9 ↓
		REF1		2	
		MB1SPK		↓	
		CCV2			
		CCB2			

Analytical Resources, Incorporated
Analytical Chemists and Consultants

SAMPLE RUN LOG-ICP-OES-02
Perkin Elmer OPTIMA 7500
Serial No. – 077C8121202

IEC Date: — Analysis Date: 2-6-13 Analyst: BA

LR Date: — Page: 2 of 4

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep. Code	Dilution	Comments
		WC43 MBI	SWC	2	
		WC33 I	↓	5	
		↓ G-L		25	
		G		5	
		↓ GDUP		↓	Pb 6PD ↑ - CAF
	✓	WC32 E		2	Ca, Fe > LR
	✓	↓ F		↓	↓
	✓	G			Ca > LR
		↓ H			
		WC43 REF1	↓	↓	
		CCV3			
		CCB3			
		WC32 E	SWC	5	
		↓ F	↓	↓	
		↓ G	↓	↓	
		CCV4			
		CCB4			
		CRI			
		ICSA			
		ICSAB			
		CCV5			
		CCB5			End WC32, WC33
		~~WC40 MBI~~	~~SWC~~	~~2~~	BA 2/7/13
		~~↓ B~~	~~↓~~	~~↓~~	

ANALYTICAL RESOURCES INCORPORATED

Metals Data Review Checklist

Method: ICP ICP-MS GFA CVA **Analysis Date:** 2-6-13

ICP 2	Analyst BA 2-6-13	Peer 2-6-13	Comment
Analyst, Date, Method info	✓	✓	
Sample ID's	✓	✓	
Standard/QC solution ID's recorded	✓	✓	
Prep codes	✓	✓	
Dilution factors	✓	✓	
Crossouts/Corrections/Deletions	✓	✓	
Blank & Standard intensities	✓	✓	
Standard deviations	✓	✓	
Curve fit	✓	✓	
ICV/CCV	✓	✓	
ICB/CCB	✓	✓	
RSD's & SD's	✓	✓	
Internal Standards	✓	✓	
Carry-over	✓	✓	
CRI/CRA	✓	✓	
ICSA/ICSAB	✓	✓	
Post Spikes/Serial Dilutions	✓	✓	
Analytic Spikes	—	—	
SRM/LCS	✓	✓	
Matrix Spikes	✓	✓	
Matrix Duplicates	✓	✓	WC33
Method Blanks	✓	✓	
Requested elements/isotope identified	✓	✓	
Correct samples identified for distribution	✓	✓	
Raw data match distributed data	✓	✓	
Data filename correct	✓	✓	
	✓	✓	CAF - WC33

Nebulizer Parameters: Hg_ReAlign

Analyte	Back Pressure	Flow
All	217.0 kPa	0.75 L/min

2/6/2013 7:57:00 AM Hg ReAlign... Actual peak offset (nm): 0.003
Drift (nm): 0.000 Slit adjustment: 2

Analysis Begun

Start Time: 2/6/2013 8:00:57 AM
Plasma On Time: 2/6/2013 7:07:29 AM
Logged In Analyst: Metals
Technique: ICP Continuous
Spectrometer: Optima 7300 DV, S/N 077C8121202
Autosampler: ESI

Sample Information File: C:\pe\metals\Sample Information\BLKS.sif
Batch ID:
Results Data Set: blanks
Results Library: C:\Documents and Settings\All Users\PerkinElmer\ICP\Data\Results\Results.mdb

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Method Loaded
Method Name: 7300bcESI2FAST
Method Last Saved: 8/13/2012 7:13:22 AM
IEC File: 012213.iec
MSF File:
Method Description: 12Axial Elements

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	ScA 357.253	Yes
Al 308.215	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	ScA 357.253	Yes
B 249.677	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
Be 313.042	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
Ca 317.933	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
Cd 228.802	Lin Thru 0	Peak Area	Axial	ScA 357.253	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	ScA 357.253	Yes
Cr 267.716	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	ScA 357.253	Yes
Fe 273.955	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
K 766.490	Lin Thru 0	Peak Area	Radial	ScR 361.383	No
Mg 279.077	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
Mn 257.610	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	ScA 357.253	Yes
Na 589.592	Lin Thru 0	Peak Area	Radial	ScR 361.383	No
Na 330.237	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
Ni 231.604	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	ScA 357.253	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	ScA 357.253	Yes
Se 196.026	Lin Thru 0	Peak Area	Axial	ScA 357.253	Yes
Si 288.158	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	ScA 357.253	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	ScR 361.383	No
Ti 334.903	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	ScA 357.253	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	ScA 357.253	Yes
Zn 206.200	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
ScA 357.253	Lin, Calc Int	Peak Area	Axial	n/a	n/a
ScR 361.383	Lin, Calc Int	Peak Area	Radial	n/a	n/a

Sequence No.: 1
Autosampler Location: 1
Sample ID: B1
Date Collected: 2/6/2013 8:01:04 AM
Data Type: Original

Dilution: 1.000000X

BA
2/6/13

Nebulizer Parameters: B1

Analyte	Back Pressure	Flow
All	217.0 kPa	0.75 L/min

Analysis Begun

Start Time: 2/6/2013 8:27:11 AM
Logged In Analyst: Metals
Spectrometer: Optima 7300 DV, S/N 077C8121202

Plasma On Time: 2/6/2013 7:07:29 AM
Technique: ICP Continuous
Autosampler: ESI

Sample Information File: C:\pe\metals\Sample Information\CRISETb.sif
Batch ID:
Results Data Set: I2130206
Results Library: C:\Documents and Settings\All Users\PerkinElmer\ICP\Data\Results\Results.mdb

Sequence No.: 1
Sample ID: Calib Blank 1

Autosampler Location: 1
Date Collected: 2/6/2013 8:27:12 AM
Data Type: Original

Nebulizer Parameters: Calib Blank 1

Analyte	Back Pressure	Flow
All	216.0 kPa	0.75 L/min

Mean Data: Calib Blank 1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
ScA 357.253	3032782.5	4039.79	0.13%	100.0	%
ScR 361.383	398468.2	2258.46	0.57%	100.0	%
Ag 328.068†	-60.2	28.67	47.64%	[0.00]	mg/L
Al 308.215†	228.8	5.97	2.61%	[0.00]	mg/L
As 188.979†	-15.4	3.18	20.68%	[0.00]	mg/L
B 249.677†	47.7	13.22	27.71%	[0.00]	mg/L
Ba 233.527†	42.1	4.41	10.48%	[0.00]	mg/L
Be 313.042†	802.5	10.86	1.35%	[0.00]	mg/L
Ca 317.933†	121.9	9.70	7.96%	[0.00]	mg/L
Cd 228.802†	277.7	3.25	1.17%	[0.00]	mg/L
Co 228.616†	-98.0	0.87	0.88%	[0.00]	mg/L
Cr 267.716†	-189.0	3.38	1.79%	[0.00]	mg/L
Cu 324.752†	3534.5	51.69	1.46%	[0.00]	mg/L
Fe 273.955†	23.7	1.37	5.80%	[0.00]	mg/L
K 766.490†	484.8	39.14	8.07%	[0.00]	mg/L
Mg 279.077†	64.7	2.55	3.95%	[0.00]	mg/L
Mn 257.610†	224.3	3.34	1.49%	[0.00]	mg/L
Mo 202.031†	76.7	0.56	0.73%	[0.00]	mg/L
Na 589.592†	660.5	51.70	7.83%	[0.00]	mg/L
Na 330.237†	-165.4	8.00	4.84%	[0.00]	mg/L
Ni 231.604†	4.1	1.93	47.15%	[0.00]	mg/L
Pb 220.353†	10.8	3.94	36.37%	[0.00]	mg/L
Sb 206.836†	61.3	4.00	6.52%	[0.00]	mg/L
Se 196.026†	-46.6	5.54	11.90%	[0.00]	mg/L
Si 288.158†	57.6	6.29	10.92%	[0.00]	mg/L
Sn 189.927†	-9.0	0.79	8.78%	[0.00]	mg/L
Sr 421.552†	382.9	19.83	5.18%	[0.00]	mg/L
Ti 334.903†	-84.5	21.49	25.43%	[0.00]	mg/L
Tl 190.801†	-38.8	5.40	13.93%	[0.00]	mg/L
V 292.402†	144.1	19.84	13.77%	[0.00]	mg/L
Zn 206.200†	-2.2	0.40	17.97%	[0.00]	mg/L

Sequence No.: 2
Sample ID: STD2

Autosampler Location: 2
Date Collected: 2/6/2013 8:31:28 AM
Data Type: Original

Nebulizer Parameters: STD2

Analyte	Back Pressure	Flow
All	218.0 kPa	0.75 L/min

Mean Data: STD2

Mean Corrected Calib

Analyte	Intensity	Std.Dev.	RSD	Conc.	Units
ScA 357.253	3062751.0	9202.46	0.30%	101.0	%
ScR 361.383	406743.9	822.24	0.20%	102.1	%
Ba 233.527†	55800.3	318.17	0.57%	[10]	mg/L
Cd 228.802†	302752.6	648.18	0.21%	[10]	mg/L
Co 228.616†	454586.5	1063.39	0.23%	[10]	mg/L
Cr 267.716†	82979.4	52.24	0.06%	[10]	mg/L
Cu 324.752†	3007169.8	4161.84	0.14%	[10]	mg/L
Mn 257.610†	501436.2	1730.82	0.35%	[10]	mg/L
V 292.402†	1410955.2	4686.81	0.33%	[10]	mg/L

Sequence No.: 3
Sample ID: STD3

Autosampler Location: 3
Date Collected: 2/6/2013 8:33:16 AM
Data Type: Original

Nebulizer Parameters: STD3

Analyte	Back Pressure	Flow
All	217.0 kPa	0.75 L/min

Mean Data: STD3

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
ScA 357.253	2978537.4	22025.45	0.74%	98.21	%
ScR 361.383	397961.7	4992.71	1.25%	99.87	%
Ag 328.068†	226911.3	565.11	0.25%	[1.0]	mg/L
As 188.979†	19820.7	226.87	1.14%	[10]	mg/L
B 249.677†	86855.9	556.55	0.64%	[10]	mg/L
Be 313.042†	3517505.6	45175.45	1.28%	[5.0]	mg/L
Na 589.592†	660825.0	5913.88	0.89%	[50]	mg/L
Ni 231.604†	51470.9	505.83	0.98%	[10]	mg/L
Pb 220.353†	99158.6	498.96	0.50%	[10]	mg/L
Se 196.026†	18931.2	284.64	1.50%	[10]	mg/L
Sr 421.552†	5096976.1	65498.23	1.29%	[5]	mg/L
Tl 190.801†	26226.3	320.08	1.22%	[10]	mg/L
Zn 206.200†	46749.3	254.04	0.54%	[10]	mg/L

Sequence No.: 4
Sample ID: STD4

Autosampler Location: 4
Date Collected: 2/6/2013 8:35:51 AM
Data Type: Original

Nebulizer Parameters: STD4

Analyte	Back Pressure	Flow
All	218.0 kPa	0.75 L/min

Mean Data: STD4

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
ScA 357.253	3040259.6	32792.72	1.08%	100.2	%
ScR 361.383	402494.7	4069.94	1.01%	101.0	%
Mo 202.031†	241533.0	304.23	0.13%	[10]	mg/L
Sb 206.836†	38899.2	116.77	0.30%	[10]	mg/L
Si 288.158†	22176.5	403.05	1.82%	[10]	mg/L
Sn 189.927†	49628.2	56.54	0.11%	[10]	mg/L
Ti 334.903†	263003.8	2996.72	1.14%	[10]	mg/L

Sequence No.: 5
Sample ID: STD5

Autosampler Location: 5
Date Collected: 2/6/2013 8:38:07 AM
Data Type: Original

Nebulizer Parameters: STD5

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: STD5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
ScA 357.253	2881446.5	2760.86	0.10%	95.01	%
ScR 361.383	402490.7	6107.59	1.52%	101.0	%
Al 308.215†	50786.5	1025.05	2.02%	[30]	mg/L
Ca 317.933†	471070.1	5539.87	1.18%	[30]	mg/L
Fe 273.955†	180246.6	1719.68	0.95%	[100]	mg/L
K 766.490†	248703.3	2426.60	0.98%	[100]	mg/L
Mg 279.077†	40587.9	775.75	1.91%	[30]	mg/L
Na 330.237†	3508.8	64.89	1.85%	[100]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	1	Lin Thru 0	0.0	226900	0.00000	1.000000	
Al 308.215	1	Lin Thru 0	0.0	1693	0.00000	1.000000	
As 188.979	1	Lin Thru 0	0.0	1982	0.00000	1.000000	
B 249.677	1	Lin Thru 0	0.0	8686	0.00000	1.000000	
Ba 233.527	1	Lin Thru 0	0.0	5580	0.00000	1.000000	
Be 313.042	1	Lin Thru 0	0.0	703500	0.00000	1.000000	
Ca 317.933	1	Lin Thru 0	0.0	15700	0.00000	1.000000	
Cd 228.802	1	Lin Thru 0	0.0	30280	0.00000	1.000000	
Co 228.616	1	Lin Thru 0	0.0	45460	0.00000	1.000000	
Cr 267.716	1	Lin Thru 0	0.0	8298	0.00000	1.000000	
Cu 324.752	1	Lin Thru 0	0.0	300700	0.00000	1.000000	
Fe 273.955	1	Lin Thru 0	0.0	1802	0.00000	1.000000	
K 766.490	1	Lin Thru 0	0.0	2487	0.00000	1.000000	
Mg 279.077	1	Lin Thru 0	0.0	1353	0.00000	1.000000	
Mn 257.610	1	Lin Thru 0	0.0	50140	0.00000	1.000000	
Mo 202.031	1	Lin Thru 0	0.0	24150	0.00000	1.000000	
Na 589.592	1	Lin Thru 0	0.0	13220	0.00000	1.000000	
Na 330.237	1	Lin Thru 0	0.0	35.09	0.00000	1.000000	
Ni 231.604	1	Lin Thru 0	0.0	5147	0.00000	1.000000	
Pb 220.353	1	Lin Thru 0	0.0	9916	0.00000	1.000000	
Sb 206.836	1	Lin Thru 0	0.0	3890	0.00000	1.000000	
Se 196.026	1	Lin Thru 0	0.0	1893	0.00000	1.000000	
Si 288.158	1	Lin Thru 0	0.0	2218	0.00000	1.000000	
Sn 189.927	1	Lin Thru 0	0.0	4963	0.00000	1.000000	
Sr 421.552	1	Lin Thru 0	0.0	1019000	0.00000	1.000000	
Ti 334.903	1	Lin Thru 0	0.0	26300	0.00000	1.000000	
Tl 190.801	1	Lin Thru 0	0.0	2623	0.00000	1.000000	
V 292.402	1	Lin Thru 0	0.0	141100	0.00000	1.000000	
Zn 206.200	1	Lin Thru 0	0.0	4675	0.00000	1.000000	

==

Analysis Begun

Start Time: 2/6/2013 8:40:59 AM
Plasma On Time: 2/6/2013 7:07:29 AM
Logged In Analyst: Metals
Technique: ICP Continuous
Spectrometer: Optima 7300 DV, S/N 077C8121202
Autosampler: ESI

Sample Information File: C:\pe\metals\Sample Information\CRISETb.sif
Batch ID:
Results Data Set: I2130206
Results Library: C:\Documents and Settings\All Users\PerkinElmer\ICP\Data\Results\Results.mdb

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Sequence No.: 1
Sample ID: ICV
Autosampler Location: 7
Date Collected: 2/6/2013 8:41:00 AM
Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: CV

Analyte	Back Pressure	Flow
All	217.0 kPa	0.75 L/min

Mean Data: CV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	3021700.9	99.63	%	0.210				0.21%
ScR 361.383	394008.6	98.88	%	0.736				0.74%
Ag 328.068†	235758.5	1.039	mg/L	0.0086	1.039	mg/L	0.0086	0.82%
Al 308.215†	3445.0	2.001	mg/L	0.0067	2.001	mg/L	0.0067	0.34%
As 188.979†	3897.8	1.998	mg/L	0.0031	1.998	mg/L	0.0031	0.16%
B 249.677†	8783.8	1.010	mg/L	0.0078	1.010	mg/L	0.0078	0.78%
Ba 233.527†	5673.4	1.016	mg/L	0.0125	1.016	mg/L	0.0125	1.23%
Be 313.042†	703345.6	0.9995	mg/L	0.01084	0.9995	mg/L	0.01084	1.08%
Ca 317.933†	32018.3	2.039	mg/L	0.0151	2.039	mg/L	0.0151	0.74%
Cd 228.802†	31510.5	1.031	mg/L	0.0099	1.031	mg/L	0.0099	0.96%
Co 228.616†	45385.4	0.9965	mg/L	0.00739	0.9965	mg/L	0.00739	0.74%
Cr 267.716†	8415.3	1.013	mg/L	0.0062	1.013	mg/L	0.0062	0.61%
Cu 324.752†	308810.3	1.027	mg/L	0.0093	1.027	mg/L	0.0093	0.91%
Fe 273.955†	3667.2	2.029	mg/L	0.0164	2.029	mg/L	0.0164	0.81%
K 766.490†	50238.7	20.20	mg/L	0.117	20.20	mg/L	0.117	0.58%
Mg 279.077†	2703.5	2.004	mg/L	0.0078	2.004	mg/L	0.0078	0.39%
Mn 257.610†	51146.3	1.020	mg/L	0.0052	1.020	mg/L	0.0052	0.51%
Mo 202.031†	23765.9	0.9839	mg/L	0.00182	0.9839	mg/L	0.00182	0.19%
Na 589.592†	678147.5	51.31	mg/L	0.205	51.31	mg/L	0.205	0.40%
Na 330.237†	1815.5	51.71	mg/L	0.415	51.71	mg/L	0.415	0.80%
Ni 231.604†	5227.5	1.016	mg/L	0.0065	1.016	mg/L	0.0065	0.64%
Pb 220.353†	20252.2	2.043	mg/L	0.0020	2.043	mg/L	0.0020	0.10%
Sb 206.836†	7896.9	2.028	mg/L	0.0050	2.028	mg/L	0.0050	0.25%
Se 196.026†	3721.5	1.965	mg/L	0.0066	1.965	mg/L	0.0066	0.34%
Si 288.158†	4481.3	2.016	mg/L	0.0099	2.016	mg/L	0.0099	0.49%
Sn 189.927†	4831.1	0.9749	mg/L	0.00254	0.9749	mg/L	0.00254	0.26%
Sr 421.552†	1022584.8	1.003	mg/L	0.0058	1.003	mg/L	0.0058	0.57%
Ti 334.903†	26557.4	1.008	mg/L	0.0081	1.008	mg/L	0.0081	0.80%
Tl 190.801†	5162.9	1.960	mg/L	0.0090	1.960	mg/L	0.0090	0.46%
V 292.402†	143023.9	1.018	mg/L	0.0073	1.018	mg/L	0.0073	0.72%
Zn 206.200†	4907.9	1.050	mg/L	0.0081	1.050	mg/L	0.0081	0.77%

Sequence No.: 2
Sample ID: ICB
Dilution: 1.000000X

Autosampler Location: 1
Date Collected: 2/6/2013 8:44:18 AM
Data Type: Original

Nebulizer Parameters: CB

Analyte	Back Pressure	Flow
All	218.0 kPa	0.75 L/min

Mean Data: CB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	3040885.5	100.3	%	0.36				0.36%
ScR 361.383	403693.3	101.3	%	0.83				0.82%
Ag 328.068†	14.8	0.00007	mg/L	0.000265	0.00007	mg/L	0.000265	404.25%
Al 308.215†	-0.4	-0.00028	mg/L	0.000535	-0.00028	mg/L	0.000535	192.91%
As 188.979†	-1.4	-0.00071	mg/L	0.002311	-0.00071	mg/L	0.002311	326.45%
B 249.677†	23.5	0.00271	mg/L	0.001103	0.00271	mg/L	0.001103	40.67%
Ba 233.527†	-3.3	-0.00059	mg/L	0.000401	-0.00059	mg/L	0.000401	68.44%
Be 313.042†	16.9	0.00002	mg/L	0.000039	0.00002	mg/L	0.000039	163.13%
Ca 317.933†	6.3	0.00040	mg/L	0.000300	0.00040	mg/L	0.000300	74.71%
Cd 228.802†	4.1	0.00014	mg/L	0.000025	0.00014	mg/L	0.000025	17.68%
Co 228.616†	2.5	0.00006	mg/L	0.000053	0.00006	mg/L	0.000053	94.62%
Cr 267.716†	1.7	0.00020	mg/L	0.000344	0.00020	mg/L	0.000344	169.12%
Cu 324.752†	10.8	0.00004	mg/L	0.000025	0.00004	mg/L	0.000025	70.27%
Fe 273.955†	1.2	0.00065	mg/L	0.001017	0.00065	mg/L	0.001017	155.49%
K 766.490†	5.0	0.00200	mg/L	0.015007	0.00200	mg/L	0.015007	748.77%
Mg 279.077†	1.1	0.00084	mg/L	0.001142	0.00084	mg/L	0.001142	135.59%
Mn 257.610†	3.8	0.00008	mg/L	0.000182	0.00008	mg/L	0.000182	243.00%
Mo 202.031†	46.9	0.00194	mg/L	0.000444	0.00194	mg/L	0.000444	22.90%
Na 589.592†	253.0	0.01914	mg/L	0.000800	0.01914	mg/L	0.000800	4.18%
Na 330.237†	-5.4	-0.1535	mg/L	0.45073	-0.1535	mg/L	0.45073	293.62%
Ni 231.604†	1.6	0.00030	mg/L	0.000500	0.00030	mg/L	0.000500	165.25%
Pb 220.353†	3.3	0.00033	mg/L	0.000383	0.00033	mg/L	0.000383	114.29%
Sb 206.836†	9.7	0.00250	mg/L	0.000390	0.00250	mg/L	0.000390	15.57%
Se 196.026†	2.7	0.00144	mg/L	0.002214	0.00144	mg/L	0.002214	153.50%
Si 288.158†	1.8	0.00079	mg/L	0.002705	0.00079	mg/L	0.002705	342.80%
Sn 189.927†	6.0	0.00121	mg/L	0.000072	0.00121	mg/L	0.000072	5.94%
Sr 421.552†	49.4	0.00005	mg/L	0.000030	0.00005	mg/L	0.000030	61.96%
Ti 334.903†	7.0	0.00026	mg/L	0.000345	0.00026	mg/L	0.000345	131.36%
Tl 190.801†	1.8	0.00070	mg/L	0.000335	0.00070	mg/L	0.000335	47.64%
V 292.402†	8.0	0.00006	mg/L	0.000167	0.00006	mg/L	0.000167	284.11%
Zn 206.200†	-3.6	-0.00078	mg/L	0.000176	-0.00078	mg/L	0.000176	22.69%

Sequence No.: 3
Sample ID: CRI

Autosampler Location: 301
Date Collected: 2/6/2013 8:48:34 AM
Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: CRI

Analyte	Back Pressure	Flow
All	217.0 kPa	0.75 L/min

Mean Data: CRI

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	3061313.9	100.9	%	0.48				0.47%
ScR 361.383	405483.6	101.8	%	0.50				0.49%
Ag 328.068†	718.5	0.00317	mg/L	0.000096	0.00317	mg/L	0.000096	3.02%
Al 308.215†	80.9	0.04765	mg/L	0.004058	0.04765	mg/L	0.004058	8.52%
As 188.979†	95.3	0.04825	mg/L	0.000440	0.04825	mg/L	0.000440	0.91%
B 249.677†	179.2	0.02063	mg/L	0.000157	0.02063	mg/L	0.000157	0.76%
Ba 233.527†	14.5	0.00259	mg/L	0.000612	0.00259	mg/L	0.000612	23.59%
Be 313.042†	688.4	0.00098	mg/L	0.000022	0.00098	mg/L	0.000022	2.25%
Ca 317.933†	741.3	0.04721	mg/L	0.000604	0.04721	mg/L	0.000604	1.28%
Cd 228.802†	70.5	0.00207	mg/L	0.000075	0.00207	mg/L	0.000075	3.64%
Co 228.616†	162.9	0.00357	mg/L	0.000016	0.00357	mg/L	0.000016	0.46%
Cr 267.716†	44.6	0.00537	mg/L	0.000969	0.00537	mg/L	0.000969	18.04%
Cu 324.752†	515.7	0.00172	mg/L	0.000033	0.00172	mg/L	0.000033	1.91%
Fe 273.955†	87.1	0.04831	mg/L	0.001274	0.04831	mg/L	0.001274	2.64%
K 766.490†	1197.8	0.4816	mg/L	0.00238	0.4816	mg/L	0.00238	0.49%
Mg 279.077†	70.6	0.05222	mg/L	0.003039	0.05222	mg/L	0.003039	5.82%
Mn 257.610†	53.7	0.00107	mg/L	0.000014	0.00107	mg/L	0.000014	1.29%
Mo 202.031†	130.5	0.00540	mg/L	0.000088	0.00540	mg/L	0.000088	1.63%
Na 589.592†	6585.7	0.4983	mg/L	0.00575	0.4983	mg/L	0.00575	1.15%
Na 330.237†	30.5	0.8677	mg/L	0.35519	0.8677	mg/L	0.35519	40.93%
Ni 231.604†	56.6	0.01100	mg/L	0.000752	0.01100	mg/L	0.000752	6.84%
Pb 220.353†	204.5	0.02064	mg/L	0.000639	0.02064	mg/L	0.000639	3.10%
Sb 206.836†	197.5	0.05078	mg/L	0.001202	0.05078	mg/L	0.001202	2.37%
Se 196.026†	95.0	0.05017	mg/L	0.000645	0.05017	mg/L	0.000645	1.29%
Si 288.158†	132.6	0.05971	mg/L	0.002435	0.05971	mg/L	0.002435	4.08%
Sn 189.927†	51.4	0.01038	mg/L	0.000386	0.01038	mg/L	0.000386	3.72%
Sr 421.552†	1055.2	0.00104	mg/L	0.000018	0.00104	mg/L	0.000018	1.76%
Ti 334.903†	139.3	0.00529	mg/L	0.000382	0.00529	mg/L	0.000382	7.23%
Tl 190.801†	127.6	0.04865	mg/L	0.000454	0.04865	mg/L	0.000454	0.93%
V 292.402†	399.8	0.00285	mg/L	0.000207	0.00285	mg/L	0.000207	7.26%
Zn 206.200†	43.6	0.00934	mg/L	0.000149	0.00934	mg/L	0.000149	1.59%

Sequence No.: 4
Sample ID: ICSA

Autosampler Location: 302
Date Collected: 2/6/2013 8:52:51 AM
Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: ICSA

Analyte	Back Pressure	Flow
All	218.0 kPa	0.75 L/min

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2948137.3	97.21	%	0.184				0.19%
ScR 361.383	394020.2	98.88	%	0.782				0.79%
Ag 328.068†	-251.7	-0.00046	mg/L	0.000069	-0.00046	mg/L	0.000069	14.87%
Al 308.215†	338088.3	199.7	mg/L	0.48	199.7	mg/L	0.48	0.24%
As 188.979†	41.7	0.01224	mg/L	0.003372	0.01224	mg/L	0.003372	27.55%
B 249.677†	-49.5	-0.00570	mg/L	0.001140	-0.00570	mg/L	0.001140	19.99%
Ba 233.527†	166.3	0.00128	mg/L	0.000466	0.00128	mg/L	0.000466	36.38%
Be 313.042†	93.3	0.00013	mg/L	0.000026	0.00013	mg/L	0.000026	20.16%
Ca 317.933†	1557760.1	99.21	mg/L	0.590	99.21	mg/L	0.590	0.59%
Cd 228.802†	58.3	0.00181	mg/L	0.000206	0.00181	mg/L	0.000206	11.42%
Co 228.616†	81.7	0.00178	mg/L	0.000247	0.00178	mg/L	0.000247	13.88%
Cr 267.716†	11.6	-0.00341	mg/L	0.001082	-0.00341	mg/L	0.001082	31.78%
Cu 324.752†	-2404.6	0.00100	mg/L	0.000028	0.00100	mg/L	0.000028	2.76%
Fe 273.955†	349844.3	194.1	mg/L	2.15	194.1	mg/L	2.15	1.11%
K 766.490†	31.2	0.01255	mg/L	0.013309	0.01255	mg/L	0.013309	106.02%
Mg 279.077†	137744.5	101.7	mg/L	1.41	101.7	mg/L	1.41	1.39%
Mn 257.610†	87.5	0.00036	mg/L	0.000072	0.00036	mg/L	0.000072	19.92%
Mo 202.031†	94.8	0.00276	mg/L	0.000172	0.00276	mg/L	0.000172	6.23%
Na 589.592†	488.9	0.03699	mg/L	0.006114	0.03699	mg/L	0.006114	16.53%
Na 330.237†	5.0	0.1441	mg/L	0.12973	0.1441	mg/L	0.12973	90.03%
Ni 231.604†	-1.4	-0.00026	mg/L	0.000508	-0.00026	mg/L	0.000508	198.41%
Pb 220.353†	-456.2	-0.00233	mg/L	0.000513	-0.00233	mg/L	0.000513	21.97%
Sb 206.836†	48.2	0.01229	mg/L	0.000846	0.01229	mg/L	0.000846	6.88%
Se 196.026†	18.1	-0.01341	mg/L	0.003076	-0.01341	mg/L	0.003076	22.94%
Si 288.158†	-37.2	-0.00518	mg/L	0.004191	-0.00518	mg/L	0.004191	80.98%
Sn 189.927†	-94.5	-0.01073	mg/L	0.000250	-0.01073	mg/L	0.000250	2.33%
Sr 421.552†	4136.7	0.00406	mg/L Cont.	0.000058	0.00406	mg/L	0.000058	1.42%
Ti 334.903†	197.4	0.00161	mg/L	0.000552	0.00161	mg/L	0.000552	34.42%
Tl 190.801†	-53.2	0.00543	mg/L	0.004134	0.00543	mg/L	0.004134	76.09%
V 292.402†	1620.2	0.00175	mg/L	0.000040	0.00175	mg/L	0.000040	2.31%
Zn 206.200†	-3.0	-0.00065	mg/L	0.000831	-0.00065	mg/L	0.000831	128.84%

Sequence No.: 5
Sample ID: ICSAB

Autosampler Location: 303
Date Collected: 2/6/2013 8:56:53 AM
Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: ICSAB

Analyte	Back Pressure	Flow
All	217.0 kPa	0.75 L/min

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2969643.5	97.92	%	0.218				0.22%
ScR 361.383	389385.6	97.72	%	0.511				0.52%
Ag 328.068†	240452.3	1.061	mg/L	0.0074	1.061	mg/L	0.0074	0.70%
Al 308.215†	340087.5	200.9	mg/L	1.81	200.9	mg/L	1.81	0.90%
As 188.979†	2024.2	1.012	mg/L	0.0016	1.012	mg/L	0.0016	0.16%
B 249.677†	-52.8	-0.00832	mg/L	0.000802	-0.00832	mg/L	0.000802	9.64%
Ba 233.527†	5846.7	1.019	mg/L	0.0075	1.019	mg/L	0.0075	0.74%
Be 313.042†	705762.0	1.003	mg/L	0.0141	1.003	mg/L	0.0141	1.40%
Ca 317.933†	1555163.8	99.04	mg/L	0.975	99.04	mg/L	0.975	0.98%
Cd 228.802†	31423.3	1.033	mg/L	0.0030	1.033	mg/L	0.0030	0.29%
Co 228.616†	43596.4	0.9588	mg/L	0.00378	0.9588	mg/L	0.00378	0.39%
Cr 267.716†	8486.2	1.018	mg/L	0.0078	1.018	mg/L	0.0078	0.77%
Cu 324.752†	316319.7	1.061	mg/L	0.0055	1.061	mg/L	0.0055	0.52%
Fe 273.955†	352240.7	195.4	mg/L	2.08	195.4	mg/L	2.08	1.06%
K 766.490†	-46.0	-0.01849	mg/L	0.004639	-0.01849	mg/L	0.004639	25.08%
Mg 279.077†	133537.1	98.59	mg/L	0.917	98.59	mg/L	0.917	0.93%
Mn 257.610†	48606.3	0.9681	mg/L	0.01102	0.9681	mg/L	0.01102	1.14%
Mo 202.031†	92.6	0.00262	mg/L	0.000200	0.00262	mg/L	0.000200	7.63%
Na 589.592†	496.6	0.03758	mg/L	0.002390	0.03758	mg/L	0.002390	6.36%
Na 330.237†	15.7	0.1606	mg/L	0.06558	0.1606	mg/L	0.06558	40.84%
Ni 231.604†	5078.1	0.9867	mg/L	0.00947	0.9867	mg/L	0.00947	0.96%
Pb 220.353†	9377.2	0.9901	mg/L	0.00402	0.9901	mg/L	0.00402	0.41%
Sb 206.836†	3943.3	1.003	mg/L	0.0041	1.003	mg/L	0.0041	0.41%
Se 196.026†	1903.1	0.9811	mg/L	0.00551	0.9811	mg/L	0.00551	0.56%
Si 288.158†	-45.5	-0.00586	mg/L	0.001641	-0.00586	mg/L	0.001641	27.99%
Sn 189.927†	-93.8	-0.01008	mg/L	0.000939	-0.01008	mg/L	0.000939	9.32%
Sr 421.552†	4154.5	0.00408	mg/L Cont,	0.000031	0.00408	mg/L	0.000031	0.77%
Ti 334.903†	193.8	0.00128	mg/L	0.000234	0.00128	mg/L	0.000234	18.26%
Tl 190.801†	2411.9	0.9358	mg/L	0.00339	0.9358	mg/L	0.00339	0.36%
V 292.402†	141564.0	0.9981	mg/L	0.00559	0.9981	mg/L	0.00559	0.56%
Zn 206.200†	4548.8	0.9733	mg/L	0.00673	0.9733	mg/L	0.00673	0.69%

Sequence No.: 6
Sample ID: CV
Dilution: 1.000000X

Autosampler Location: 7
Date Collected: 2/6/2013 9:00:56 AM
Data Type: Original

Nebulizer Parameters: CV

Analyte	Back Pressure	Flow
All	217.0 kPa	0.75 L/min

Mean Data: CV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	3022092.3	99.65	%	0.497				0.50%
ScR 361.383	399243.3	100.2	%	0.63				0.63%
Ag 328.068†	235890.0	1.040	mg/L	0.0098	1.040	mg/L	0.0098	0.94%
Al 308.215†	3376.7	1.961	mg/L	0.0160	1.961	mg/L	0.0160	0.81%
As 188.979†	3884.6	1.991	mg/L	0.0132	1.991	mg/L	0.0132	0.66%
B 249.677†	8552.2	0.9836	mg/L	0.00782	0.9836	mg/L	0.00782	0.79%
Ba 233.527†	5602.8	1.004	mg/L	0.0087	1.004	mg/L	0.0087	0.87%
Be 313.042†	694332.6	0.9867	mg/L	0.01211	0.9867	mg/L	0.01211	1.23%
Ca 317.933†	31499.6	2.006	mg/L	0.0218	2.006	mg/L	0.0218	1.09%
Cd 228.802†	31491.5	1.030	mg/L	0.0099	1.030	mg/L	0.0099	0.96%
Co 228.616†	45258.6	0.9937	mg/L	0.01093	0.9937	mg/L	0.01093	1.10%
Cr 267.716†	8280.9	0.9973	mg/L	0.00902	0.9973	mg/L	0.00902	0.90%
Cu 324.752†	307843.9	1.023	mg/L	0.0111	1.023	mg/L	0.0111	1.09%
Fe 273.955†	3614.1	1.999	mg/L	0.0246	1.999	mg/L	0.0246	1.23%
K 766.490†	49567.6	19.93	mg/L	0.138	19.93	mg/L	0.138	0.69%
Mg 279.077†	2659.4	1.972	mg/L	0.0177	1.972	mg/L	0.0177	0.90%
Mn 257.610†	50138.5	1.000	mg/L	0.0102	1.000	mg/L	0.0102	1.02%
Mo 202.031†	23688.1	0.9807	mg/L	0.00645	0.9807	mg/L	0.00645	0.66%
Na 589.592†	671001.5	50.77	mg/L	0.386	50.77	mg/L	0.386	0.76%
Na 330.237†	1781.0	50.73	mg/L	0.503	50.73	mg/L	0.503	0.99%
Ni 231.604†	5117.0	0.9942	mg/L	0.00919	0.9942	mg/L	0.00919	0.92%
Pb 220.353†	20205.2	2.039	mg/L	0.0124	2.039	mg/L	0.0124	0.61%
Sb 206.836†	7902.0	2.030	mg/L	0.0118	2.030	mg/L	0.0118	0.58%
Se 196.026†	3704.8	1.956	mg/L	0.0121	1.956	mg/L	0.0121	0.62%
Si 288.158†	4401.1	1.980	mg/L	0.0128	1.980	mg/L	0.0128	0.64%
Sn 189.927†	4807.4	0.9701	mg/L	0.00618	0.9701	mg/L	0.00618	0.64%
Sr 421.552†	1009610.2	0.9904	mg/L	0.00731	0.9904	mg/L	0.00731	0.74%
Ti 334.903†	26242.0	0.9964	mg/L	0.00762	0.9964	mg/L	0.00762	0.76%
Tl 190.801†	5188.4	1.970	mg/L	0.0123	1.970	mg/L	0.0123	0.63%
V 292.402†	143198.0	1.019	mg/L	0.0098	1.019	mg/L	0.0098	0.96%
Zn 206.200†	4813.1	1.030	mg/L	0.0104	1.030	mg/L	0.0104	1.01%

Sequence No.: 7
Sample ID: CB
Dilution: 1.000000X

Autosampler Location: 1
Date Collected: 2/6/2013 9:04:15 AM
Data Type: Original

Nebulizer Parameters: CB

Analyte	Back Pressure	Flow
All	217.0 kPa	0.75 L/min

Mean Data: CB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	3034207.3	100.0	%	0.23				0.23%
ScR 361.383	397523.4	99.76	%	0.961				0.96%
Ag 328.068†	16.3	0.00007	mg/L	0.000335	0.00007	mg/L	0.000335	467.53%
Al 308.215†	-0.5	-0.00032	mg/L	0.004013	-0.00032	mg/L	0.004013	>999.9%
As 188.979†	0.9	0.00042	mg/L	0.000624	0.00042	mg/L	0.000624	148.66%
B 249.677†	7.5	0.00086	mg/L	0.000617	0.00086	mg/L	0.000617	71.61%
Ba 233.527†	-1.4	-0.00026	mg/L	0.000191	-0.00026	mg/L	0.000191	73.78%
Be 313.042†	26.9	0.00004	mg/L	0.000051	0.00004	mg/L	0.000051	134.47%
Ca 317.933†	13.8	0.00088	mg/L	0.000272	0.00088	mg/L	0.000272	30.92%
Cd 228.802†	-1.1	-0.00004	mg/L	0.000101	-0.00004	mg/L	0.000101	268.93%
Co 228.616†	1.3	0.00003	mg/L	0.000146	0.00003	mg/L	0.000146	491.40%
Cr 267.716†	1.6	0.00019	mg/L	0.000606	0.00019	mg/L	0.000606	318.78%
Cu 324.752†	14.9	0.00005	mg/L	0.000143	0.00005	mg/L	0.000143	290.10%
Fe 273.955†	3.3	0.00185	mg/L	0.001723	0.00185	mg/L	0.001723	93.07%
K 766.490†	-1.7	-0.00070	mg/L	0.006556	-0.00070	mg/L	0.006556	932.27%
Mg 279.077†	3.5	0.00262	mg/L	0.002349	0.00262	mg/L	0.002349	89.70%
Mn 257.610†	3.2	0.00006	mg/L	0.000061	0.00006	mg/L	0.000061	97.03%
Mo 202.031†	38.5	0.00160	mg/L	0.000162	0.00160	mg/L	0.000162	10.17%
Na 589.592†	193.4	0.01463	mg/L	0.000983	0.01463	mg/L	0.000983	6.71%
Na 330.237†	-0.4	-0.01189	mg/L	0.095232	-0.01189	mg/L	0.095232	800.91%
Ni 231.604†	4.6	0.00089	mg/L	0.001081	0.00089	mg/L	0.001081	121.54%
Pb 220.353†	7.3	0.00074	mg/L	0.000450	0.00074	mg/L	0.000450	61.15%
Sb 206.836†	15.0	0.00386	mg/L	0.000685	0.00386	mg/L	0.000685	17.77%
Se 196.026†	1.4	0.00072	mg/L	0.002648	0.00072	mg/L	0.002648	369.25%
Si 288.158†	0.1	0.00005	mg/L	0.001673	0.00005	mg/L	0.001673	>999.9%
Sn 189.927†	5.3	0.00108	mg/L	0.000741	0.00108	mg/L	0.000741	68.78%
Sr 421.552†	24.3	0.00002	mg/L	0.000028	0.00002	mg/L	0.000028	115.84%
Ti 334.903†	-3.7	-0.00014	mg/L	0.000224	-0.00014	mg/L	0.000224	156.76%
Tl 190.801†	1.9	0.00073	mg/L	0.002614	0.00073	mg/L	0.002614	356.78%
V 292.402†	1.2	0.00001	mg/L	0.000039	0.00001	mg/L	0.000039	376.04%
Zn 206.200†	-1.7	-0.00037	mg/L	0.000256	-0.00037	mg/L	0.000256	69.05%

Sequence No.: 8
Sample ID: WC33 MB1 SWC

Dilution: 2.000000X

Autosampler Location: 304
Date Collected: 2/6/2013 9:08:31 AM
Data Type: Original

Nebulizer Parameters: WC33 MB1 SWC

Analyte	Back Pressure	Flow
All	217.0 kPa	0.75 L/min

Mean Data: WC33 MB1 SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	3047731.2	100.5	%	0.59				0.59%
ScR 361.383	403352.8	101.2	%	0.39				0.39%
Ag 328.068†	10.3	0.00005	mg/L	0.000165	0.00009	mg/L	0.000329	360.87%
Al 308.215†	-1.0	-0.00062	mg/L	0.006095	-0.00123	mg/L	0.012191	988.01%
As 188.979†	1.0	0.00050	mg/L	0.001067	0.00101	mg/L	0.002134	212.04%
B 249.677†	3.6	0.00042	mg/L	0.000705	0.00083	mg/L	0.001410	169.39%
Ba 233.527†	-4.4	-0.00080	mg/L	0.000578	-0.00159	mg/L	0.001155	72.47%
Be 313.042†	4.5	0.00001	mg/L	0.000036	0.00001	mg/L	0.000072	564.75%
Ca 317.933†	149.2	0.00950	mg/L	0.000309	0.01901	mg/L	0.000618	3.25%
Cd 228.802†	-2.0	-0.00007	mg/L	0.000160	-0.00013	mg/L	0.000320	237.37%
Co 228.616†	3.8	0.00008	mg/L	0.000033	0.00016	mg/L	0.000066	40.18%
Cr 267.716†	4.7	0.00056	mg/L	0.000673	0.00113	mg/L	0.001345	119.04%
Cu 324.752†	51.2	0.00017	mg/L	0.000191	0.00034	mg/L	0.000382	112.13%
Fe 273.955†	6.8	0.00378	mg/L	0.000820	0.00756	mg/L	0.001640	21.69%
K 766.490†	15.1	0.00608	mg/L	0.012755	0.01215	mg/L	0.025509	209.91%
Mg 279.077†	-1.1	-0.00083	mg/L	0.002481	-0.00167	mg/L	0.004962	297.31%
Mn 257.610†	-0.1	-0.00000	mg/L	0.000023	-0.00001	mg/L	0.000045	841.76%
Mo 202.031†	4.5	0.00019	mg/L	0.000155	0.00037	mg/L	0.000311	83.25%
Na 589.592†	285.9	0.02163	mg/L	0.002539	0.04326	mg/L	0.005077	11.74%
Na 330.237†	-7.6	-0.2174	mg/L	0.26583	-0.4348	mg/L	0.53165	122.27%
Ni 231.604†	0.9	0.00017	mg/L	0.000200	0.00035	mg/L	0.000400	115.22%
Pb 220.353†	3.5	0.00035	mg/L	0.000695	0.00070	mg/L	0.001389	198.08%
Sb 206.836†	3.8	0.00096	mg/L	0.001482	0.00193	mg/L	0.002963	153.63%
Se 196.026†	1.5	0.00079	mg/L	0.005477	0.00157	mg/L	0.010954	697.56%
Si 288.158†	2.7	0.00119	mg/L	0.002250	0.00239	mg/L	0.004501	188.46%
Sn 189.927†	4.0	0.00081	mg/L	0.000268	0.00162	mg/L	0.000535	33.09%
Sr 421.552†	59.6	0.00006	mg/L	0.000029	0.00012	mg/L	0.000059	50.27%
Ti 334.903†	19.8	0.00075	mg/L	0.001132	0.00150	mg/L	0.002265	150.78%
Tl 190.801†	3.3	0.00126	mg/L	0.000464	0.00251	mg/L	0.000927	36.94%
V 292.402†	-6.5	-0.00004	mg/L	0.000183	-0.00009	mg/L	0.000366	415.50%
Zn 206.200†	5.0	0.00106	mg/L	0.000402	0.00213	mg/L	0.000804	37.74%

Sequence No.: 9
Sample ID: WC33 H SWC
Dilution: 2.000000X

Autosampler Location: 305
Date Collected: 2/6/2013 9:12:48 AM
Data Type: Original

Nebulizer Parameters: WC33 H SWC

Analyte	Back Pressure	Flow
All	218.0 kPa	0.75 L/min

Mean Data: WC33 H SWC

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2941521.7	96.99	%	0.183				0.19%
ScR 361.383	399304.1	100.2	%	0.19				0.19%
Ag 328.068†	-587.7	0.00055	mg/L	0.000049	0.00109	mg/L	0.000098	8.99%
Al 308.215†	180253.0	106.5	mg/L	0.48	212.9	mg/L	0.96	0.45%
As 188.979†	-147.4	0.06043	mg/L	0.002631	0.1209	mg/L	0.00526	4.35%
B 249.677†	896.0	0.1030	mg/L	0.00139	0.2060	mg/L	0.00278	1.35%
Ba 233.527†	2073.2	0.3445	mg/L	0.00207	0.6891	mg/L	0.00413	0.60%
Be 313.042†	1290.7	0.00170	mg/L	0.000003	0.00341	mg/L	0.000005	0.16%
Ca 317.933†	7363797.5	469.0	mg/L	3.00	937.9	mg/L	6.00	0.64%
Cd 228.802†	95.1	0.00372	mg/L	0.000213	0.00744	mg/L	0.000425	5.72%
Co 228.616†	3158.2	0.06038	mg/L	0.000055	0.1208	mg/L	0.00011	0.09%
Cr 267.716†	1771.5	0.2067	mg/L	0.00093	0.4133	mg/L	0.00186	0.45%
Cu 324.752†	148947.6	0.5030	mg/L	0.00154	1.006	mg/L	0.0031	0.31%
Fe 273.955†	330302.6	183.2	mg/L	0.40	366.5	mg/L	0.79	0.22%
K 766.490†	18883.5	7.593	mg/L	0.0310	15.19	mg/L	0.062	0.41%
Mg 279.077†	90098.3	66.44	mg/L	0.280	132.9	mg/L	0.56	0.42%
Mn 257.610†	156740.7	3.124	mg/L	0.0070	6.247	mg/L	0.0140	0.22%
Mo 202.031†	260.0	0.00523	mg/L	0.000464	0.01046	mg/L	0.000927	8.87%
Na 589.592†	269992.5	20.43	mg/L	0.081	40.86	mg/L	0.161	0.40%
Na 330.237†	726.7	21.78	mg/L	0.246	43.56	mg/L	0.492	1.13%
Ni 231.604†	1068.5	0.2076	mg/L	0.00102	0.4152	mg/L	0.00203	0.49%
Pb 220.353†	3882.3	0.4103	mg/L	0.00099	0.8206	mg/L	0.00199	0.24%
Sb 206.836†	41.2	0.01267	mg/L	0.001712	0.02534	mg/L	0.003424	13.51%
Se 196.026†	12.4	-0.00591	mg/L	0.005091	-0.01183	mg/L	0.010182	86.11%
Si 288.158†	3045.0	1.381	mg/L	0.0063	2.762	mg/L	0.0126	0.45%
Sn 189.927†	-142.0	0.01163	mg/L	0.000515	0.02326	mg/L	0.001030	4.43%
Sr 421.552†	4166436.6	4.087	mg/L	0.0167	8.174	mg/L	0.0334	0.41%
Ti 334.903†	135075.7	5.108	mg/L	0.0172	10.22	mg/L	0.034	0.34%
Tl 190.801†	-29.8	0.01124	mg/L	0.002779	0.02248	mg/L	0.005558	24.72%
V 292.402†	47090.7	0.3230	mg/L	0.00100	0.6460	mg/L	0.00199	0.31%
Zn 206.200†	5682.9	1.216	mg/L	0.0045	2.432	mg/L	0.0090	0.37%

Sequence No.: 10
Sample ID: WC33 I SWC

Dilution: 2.000000X

Del

Autosampler Location: 306
Date Collected: 2/6/2013 9:17:08 AM
Data Type: Original

Nebulizer Parameters: WC33 I SWC

Analyte	Back Pressure	Flow
All	217.0 kPa	0.75 L/min

Mean Data: WC33 I SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2963101.7	97.70	%	0.079				0.08%
ScR 361.383	401630.7	100.8	%	0.10				0.10%
Ag 328.068†	-816.5	0.00020	mg/L	0.000073	0.00040	mg/L	0.000146	36.62%
Al 308.215†	161513.5	95.39	mg/L	0.164	190.8	mg/L	0.33	0.17%
As 188.979†	-282.8	0.01186	mg/L	0.000435	0.02372	mg/L	0.000869	3.67%
B 249.677†	545.8	0.06268	mg/L	0.000450	0.1254	mg/L	0.00090	0.72%
Ba 233.527†	1862.3	0.3113	mg/L	0.00078	0.6226	mg/L	0.00156	0.25%
Be 313.042†	1121.5	0.00146	mg/L	0.000011	0.00291	mg/L	0.000021	0.73%
Ca 317.933†	8984055.7	572.1	mg/L	0.91	1144	mg/L	1.82	0.16%
Cd 228.802†	78.4	0.00354	mg/L	0.000158	0.00708	mg/L	0.000316	4.46%
Co 228.616†	3123.9	0.05816	mg/L	0.000068	0.1163	mg/L	0.00014	0.12%
Cr 267.716†	1291.8	0.1474	mg/L	0.00076	0.2949	mg/L	0.00151	0.51%
Cu 324.752†	61200.1	0.2096	mg/L	0.00064	0.4191	mg/L	0.00129	0.31%
Fe 273.955†	274628.0	152.4	mg/L	0.83	304.7	mg/L	1.66	0.55%
K 766.490†	20251.1	8.143	mg/L	0.0578	16.29	mg/L	0.116	0.71%
Mg 279.077†	78078.3	57.57	mg/L	0.093	115.1	mg/L	0.19	0.16%
Mn 257.610†	160651.8	3.201	mg/L	0.0100	6.402	mg/L	0.0200	0.31%
Mo 202.031†	222.9	0.00248	mg/L	0.000175	0.00495	mg/L	0.000350	7.08%
Na 589.592†	319907.0	24.21	mg/L	0.060	48.41	mg/L	0.119	0.25%
Na 330.237†	854.3	25.87	mg/L	0.164	51.74	mg/L	0.329	0.64%
Ni 231.604†	1013.2	0.1968	mg/L	0.00114	0.3937	mg/L	0.00228	0.58%
Pb 220.353†	527.6	0.07090	mg/L	0.000335	0.1418	mg/L	0.00067	0.47%
Sb 206.836†	22.4	0.00925	mg/L	0.002123	0.01849	mg/L	0.004246	22.96%
Se 196.026†	5.1	-0.00850	mg/L	0.005185	-0.01699	mg/L	0.010369	61.03%
Si 288.158†	4193.8	1.898	mg/L	0.0080	3.796	mg/L	0.0161	0.42%
Sn 189.927†	-115.1	0.02583	mg/L	0.000824	0.05166	mg/L	0.001649	3.19%
Sr 421.552†	4596803.5	4.509	mg/L	0.0222	9.019	mg/L	0.0445	0.49%
Ti 334.903†	157159.4	5.942	mg/L	0.0081	11.88	mg/L	0.016	0.14%
Tl 190.801†	-17.7	0.01183	mg/L	0.003352	0.02365	mg/L	0.006703	28.34%
V 292.402†	45589.1	0.3132	mg/L	0.00151	0.6264	mg/L	0.00301	0.48%
Zn 206.200†	2276.8	0.4874	mg/L	0.00093	0.9747	mg/L	0.00185	0.19%

Sequence No.: 11
Sample ID: WC33 G-L SWC
Dilution: 10.000000X

DJ

Autosampler Location: 307
Date Collected: 2/6/2013 9:21:28 AM
Data Type: Original

Nebulizer Parameters: WC33 G-L SWC

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: WC33 G-L SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	3056605.1	100.8	%	0.14				0.14%
ScR 361.383	406703.2	102.1	%	0.42				0.41%
Ag 328.068†	-8.2	0.00063	mg/L	0.000155	0.00633	mg/L	0.001545	24.43%
Al 308.215†	31350.9	18.52	mg/L	0.103	185.2	mg/L	1.03	0.56%
As 188.979†	347.3	0.2054	mg/L	0.00099	2.054	mg/L	0.0099	0.48%
B 249.677†	81.1	0.00929	mg/L	0.000704	0.09295	mg/L	0.007040	7.57%
Ba 233.527†	1660.2	0.2851	mg/L	0.00172	2.851	mg/L	0.0172	0.60%
Be 313.042†	330.0	0.00044	mg/L	0.000009	0.00440	mg/L	0.000086	1.95%
Ca 317.933†	1567665.5	99.84	mg/L	0.060	998.4	mg/L	0.60	0.06%
Cd 228.802†	106.3	0.00256	mg/L	0.000030	0.02561	mg/L	0.000297	1.16%
Co 228.616†	1242.0	0.02528	mg/L	0.000174	0.2528	mg/L	0.00174	0.69%
Cr 267.716†	451.6	0.05455	mg/L	0.000508	0.5455	mg/L	0.00508	0.93%
Cu 324.752†	386647.1	1.290	mg/L	0.0044	12.90	mg/L	0.044	0.34%
Fe 273.955†	151938.1	84.29	mg/L	0.502	842.9	mg/L	5.02	0.60%
K 766.490†	5915.8	2.379	mg/L	0.0096	23.79	mg/L	0.096	0.40%
Mg 279.077†	16189.1	11.91	mg/L	0.070	119.1	mg/L	0.70	0.59%
Mn 257.610†	45972.4	0.9164	mg/L	0.00529	9.164	mg/L	0.0529	0.58%
Mo 202.031†	550.4	0.02161	mg/L	0.000233	0.2161	mg/L	0.00233	1.08%
Na 589.592†	19769.2	1.496	mg/L	0.0027	14.96	mg/L	0.027	0.18%
Na 330.237†	84.4	1.868	mg/L	0.1077	18.68	mg/L	1.077	5.77%
Ni 231.604†	207.9	0.04041	mg/L	0.001115	0.4041	mg/L	0.01115	2.76%
Pb 220.353†	2466.5	0.2477	mg/L	0.00070	2.477	mg/L	0.0070	0.28%
Sb 206.836†	70.1	0.01847	mg/L	0.000891	0.1847	mg/L	0.00891	4.83%
Se 196.026†	-12.2	-0.00864	mg/L	0.000854	-0.08643	mg/L	0.008538	9.88%
Si 288.158†	318.9	0.1451	mg/L	0.00396	1.451	mg/L	0.0396	2.73%
Sn 189.927†	11.9	0.01097	mg/L	0.001298	0.1097	mg/L	0.01298	11.83%
Sr 421.552†	619715.2	0.6079	mg/L	0.00104	6.079	mg/L	0.0104	0.17%
Ti 334.903†	29976.2	1.134	mg/L	0.0042	11.34	mg/L	0.042	0.37%
Tl 190.801†	-1.1	0.01035	mg/L	0.003334	0.1035	mg/L	0.03334	32.21%
V 292.402†	10667.3	0.07111	mg/L	0.000407	0.7111	mg/L	0.00407	0.57%
Zn 206.200†	13456.9	2.879	mg/L	0.0052	28.79	mg/L	0.052	0.18%

Sequence No.: 12
Sample ID: WC33 G SWC
Dilution: 2.000000X

Del

Autosampler Location: 308
Date Collected: 2/6/2013 9:25:45 AM
Data Type: Original

Nebulizer Parameters: WC33 G SWC

Analyte	Back Pressure	Flow
All	217.0 kPa	0.75 L/min

Mean Data: WC33 G SWC

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2975226.7	98.10	%	0.223				0.23%
ScR 361.383	401319.0	100.7	%	0.66				0.65%
Ag 328.068†	-152.6	0.00250	mg/L	0.000092	0.00500	mg/L	0.000184	3.68%
Al 308.215†	156269.0	92.29	mg/L	0.359	184.6	mg/L	0.72	0.39%
As 188.979†	1546.2	0.9258	mg/L	0.00444	1.852	mg/L	0.0089	0.48%
B 249.677†	448.0	0.05139	mg/L	0.000231	0.1028	mg/L	0.00046	0.45%
Ba 233.527†	7942.7	1.365	mg/L	0.0102	2.730	mg/L	0.0204	0.75%
Be 313.042†	1385.9	0.00183	mg/L	0.000029	0.00366	mg/L	0.000057	1.56%
Ca 317.933†	7435943.3	473.6	mg/L	5.93	947.1	mg/L	11.86	1.25%
Cd 228.802†	487.9	0.01188	mg/L	0.000250	0.02376	mg/L	0.000500	2.11%
Co 228.616†	5636.7	0.1142	mg/L	0.00052	0.2284	mg/L	0.00105	0.46%
Cr 267.716†	2096.8	0.2531	mg/L	0.00200	0.5063	mg/L	0.00400	0.79%
Cu 324.752†	2004888.8	6.685	mg/L	0.0246	13.37	mg/L	0.049	0.37%
Fe 273.955†	715448.8	396.9	mg/L	4.75	793.9	mg/L	9.50	1.20%
K 766.490†	29683.7	11.94	mg/L	0.091	23.87	mg/L	0.181	0.76%
Mg 279.077†	78061.1	57.43	mg/L	0.463	114.9	mg/L	0.93	0.81%
Mn 257.610†	219115.7	4.368	mg/L	0.0444	8.735	mg/L	0.0887	1.02%
Mo 202.031†	2327.3	0.09076	mg/L	0.000393	0.1815	mg/L	0.00079	0.43%
Na 589.592†	98278.4	7.436	mg/L	0.0312	14.87	mg/L	0.062	0.42%
Na 330.237†	380.8	8.506	mg/L	0.0727	17.01	mg/L	0.145	0.85%
Ni 231.604†	946.6	0.1840	mg/L	0.00218	0.3679	mg/L	0.00437	1.19%
Pb 220.353†	11543.8	1.160	mg/L	0.0030	2.320	mg/L	0.0061	0.26%
Sb 206.836†	342.7	0.09067	mg/L	0.001469	0.1813	mg/L	0.00294	1.62%
Se 196.026†	4.6	-0.00844	mg/L	0.005022	-0.01689	mg/L	0.010044	59.48%
Si 288.158†	1506.4	0.6853	mg/L	0.00800	1.371	mg/L	0.0160	1.17%
Sn 189.927†	305.9	0.1024	mg/L	0.00061	0.2047	mg/L	0.00122	0.59%
Sr 421.552†	2991794.6	2.935	mg/L	0.0289	5.870	mg/L	0.0579	0.99%
Ti 334.903†	143884.2	5.443	mg/L	0.0282	10.89	mg/L	0.056	0.52%
Tl 190.801†	-104.4	0.01084	mg/L	0.000864	0.02168	mg/L	0.001728	7.97%
V 292.402†	51398.5	0.3430	mg/L	0.00181	0.6861	mg/L	0.00362	0.53%
Zn 206.200†	60892.1	13.03	mg/L	0.133	26.05	mg/L	0.267	1.02%

Sequence No.: 13
Sample ID: WC33 GDUP SWC
Dilution: 2.000000X

Del

Autosampler Location: 309
Date Collected: 2/6/2013 9:30:05 AM
Data Type: Original

Nebulizer Parameters: WC33 GDUP SWC

Analyte	Back Pressure	Flow
All	217.0 kPa	0.75 L/min

Mean Data: WC33 GDUP SWC

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2942831.4	97.03	%	0.320				0.33%
ScR 361.383	397274.1	99.70	%	0.851				0.85%
Ag 328.068†	-339.9	0.00209	mg/L	0.000115	0.00418	mg/L	0.000230	5.49%
Al 308.215†	161833.5	95.58	mg/L	0.743	191.2	mg/L	1.49	0.78%
As 188.979†	1592.3	0.9605	mg/L	0.00786	1.921	mg/L	0.0157	0.82%
B 249.677†	428.4	0.04914	mg/L	0.000609	0.09828	mg/L	0.001217	1.24%
Ba 233.527†	8072.3	1.387	mg/L	0.0028	2.775	mg/L	0.0055	0.20%
Be 313.042†	1511.9	0.00200	mg/L	0.000008	0.00400	mg/L	0.000016	0.40%
Ca 317.933†	8430323.4	536.9	mg/L	3.70	1074	mg/L	7.40	0.69%
Cd 228.802†	463.2	0.01094	mg/L	0.000298	0.02187	mg/L	0.000597	2.73%
Co 228.616†	5987.2	0.1210	mg/L	0.00105	0.2421	mg/L	0.00211	0.87%
Cr 267.716†	1866.6	0.2245	mg/L	0.00100	0.4491	mg/L	0.00199	0.44%
Cu 324.752†	1910474.2	6.371	mg/L	0.0153	12.74	mg/L	0.031	0.24%
Fe 273.955†	725253.2	402.4	mg/L	5.11	804.7	mg/L	10.22	1.27%
K 766.490†	30838.5	~~12.40~~	~~mg/L~~	0.074	24.80	mg/L	0.147	0.59%
Mg 279.077†	80789.4	59.44	mg/L	0.585	118.9	mg/L	1.17	0.98%
Mn 257.610†	228224.6	4.549	mg/L	0.0591	9.098	mg/L	0.1182	1.30%
Mo 202.031†	2756.3	0.1078	mg/L	0.00143	0.2156	mg/L	0.00286	1.33%
Na 589.592†	102630.2	7.765	mg/L	0.0755	15.53	mg/L	0.151	0.97%
Na 330.237†	399.2	9.117	mg/L	0.1882	18.23	mg/L	0.376	2.06%
Ni 231.604†	968.7	0.1883	mg/L	0.00180	0.3765	mg/L	0.00360	0.96%
Pb 220.353†	16870.6	1.698	mg/L	0.0071	3.396	mg/L	0.0141	0.42%
Sb 206.836†	342.3	0.09137	mg/L	0.003610	0.1827	mg/L	0.00722	3.95%
Se 196.026†	6.3	-0.00795	mg/L	0.007648	-0.01589	mg/L	0.015297	96.25%
Si 288.158†	1347.6	0.6140	mg/L	0.00350	1.228	mg/L	0.0070	0.57%
Sn 189.927†	279.0	0.1023	mg/L	0.00176	0.2047	mg/L	0.00352	1.72%
Sr 421.552†	3320774.6	3.258	mg/L	0.0092	6.515	mg/L	0.0184	0.28%
Ti 334.903†	156981.3	5.937	mg/L	0.0551	11.87	mg/L	0.110	0.93%
Tl 190.801†	-111.8	0.00867	mg/L	0.003325	0.01734	mg/L	0.006650	38.35%
V 292.402†	54345.1	0.3633	mg/L	0.00193	0.7266	mg/L	0.00386	0.53%
Zn 206.200†	61732.7	13.21	mg/L	0.131	26.41	mg/L	0.263	0.99%

User canceled analysis.

Analysis Begun

Start Time: 2/6/2013 9:42:31 AM
Logged In Analyst: Metals
Spectrometer: Optima 7300 DV, S/N 077C8121202

Plasma On Time: 2/6/2013 7:07:29 AM
Technique: ICP Continuous
Autosampler: ESI

Sample Information File: C:\pe\metals\Sample Information\0206.sif
Batch ID:
Results Data Set: I2130206
Results Library: C:\Documents and Settings\All Users\PerkinElmer\ICP\Data\Results\Results.mdb

Sequence No.: 14
Sample ID: WC33 GSPK SWC

Autosampler Location: 310
Date Collected: 2/6/2013 9:42:33 AM
Data Type: Original

Dilution: ~~1~~.000000X
5 ZA 2/6/13

Nebulizer Parameters: WC33 GSPK SWC

Analyte	**Back Pressure**	**Flow**
All	219.0 kPa	0.75 L/min

Mean Data: WC33 GSPK SWC

Analyte	**Mean Corrected Intensity**	**Conc.**	**Calib. Units**	**Std.Dev.**	**Conc.**	**Sample Units**	**Std.Dev.**	**RSD**
ScA 357.253	2960744.7	97.62	%	0.833				0.85%
ScR 361.383	401625.1	100.8	%	0.73				0.72%
Ag 328.068†	46878.5	0.2085	mg/L	0.00090	0.4170	mg/L	0.00180	0.43%
Al 308.215†	66231.6	39.11	mg/L	0.315	78.23	mg/L	0.630	0.81%
As 188.979†	2232.5	1.185	mg/L	0.0041	2.370	mg/L	0.0082	0.35%
B 249.677†	167.3	0.01872	mg/L	0.000912	0.03745	mg/L	0.001825	4.87%
Ba 233.527†	7821.5	1.378	mg/L	0.0098	2.756	mg/L	0.0196	0.71%
Be 313.042†	142043.4	0.2018	mg/L	0.00226	0.4036	mg/L	0.00451	1.12%
Ca 317.933†	4340710.5	276.4	mg/L	1.61	552.9	mg/L	3.22	0.58%
Cd 228.802†	6797.2	0.2184	mg/L	0.00146	0.4368	mg/L	0.00293	0.67%
Co 228.616†	11343.3	0.2451	mg/L	0.00236	0.4901	mg/L	0.00473	0.96%
Cr 267.716†	2625.8	0.3151	mg/L	0.00251	0.6302	mg/L	0.00503	0.80%
Cu 324.752†	828239.7	2.762	mg/L	0.0250	5.523	mg/L	0.0499	0.90%
Fe 273.955†	290918.2	161.4	mg/L	2.50	322.8	mg/L	4.99	1.55%
K 766.490†	22574.5	9.077	mg/L	0.0434	18.15	mg/L	0.087	0.48%
Mg 279.077†	37357.4	27.49	mg/L	0.258	54.99	mg/L	0.516	0.94%
Mn 257.610†	103442.1	2.062	mg/L	0.0296	4.124	mg/L	0.0591	1.43%
Mo 202.031†	1042.1	0.03987	mg/L	0.000179	0.07974	mg/L	0.000359	0.45%
Na 589.592†	106774.6	8.079	mg/L	0.0619	16.16	mg/L	0.124	0.77%
Na 330.237†	347.2	8.919	mg/L	0.1107	17.84	mg/L	0.221	1.24%
Ni 231.604†	1400.0	0.2717	mg/L	0.00290	0.5434	mg/L	0.00579	1.07%
Pb 220.353†	13345.5	1.345	mg/L	0.0088	2.690	mg/L	0.0175	0.65%
Sb 206.836†	151.7	0.03795	mg/L	0.001259	0.07590	mg/L	0.002517	3.32%
Se 196.026†	1500.2	0.7876	mg/L	0.00415	1.575	mg/L	0.0083	0.53%
Si 288.158†	605.7	0.2768	mg/L	0.00148	0.5536	mg/L	0.00295	0.53%
Sn 189.927†	70.2	0.03777	mg/L	0.000802	0.07554	mg/L	0.001605	2.12%
Sr 421.552†	2017342.4	1.979	mg/L	0.0187	3.958	mg/L	0.0373	0.94%
Ti 334.903†	63991.0	2.417	mg/L	0.0242	4.833	mg/L	0.0484	1.00%
Tl 190.801†	1967.2	0.7687	mg/L	0.00573	1.537	mg/L	0.0115	0.75%
V 292.402†	49045.7	0.3398	mg/L	0.00066	0.6796	mg/L	0.00133	0.20%
Zn 206.200†	26016.9	5.565	mg/L	0.0577	11.13	mg/L	0.115	1.04%

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Sequence No.: 15
Sample ID: WC33 GPOST SWC

Autosampler Location: 311
Date Collected: 2/6/2013 9:46:51 AM
Data Type: Original

Dilution: ~~1~~.000000X
5 BA 2/6/13

Nebulizer Parameters: WC33 GPOST SWC

Analyte	Back Pressure	Flow
All	218.0 kPa	0.75 L/min

Mean Data: WC33 GPOST SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2976736.8	98.15	%	0.123				0.13%
ScR 361.383	396922.0	99.61	%	0.336				0.34%
Ag 328.068†	108811.6	0.4811	mg/L	0.00398	0.9622	mg/L	0.00797	0.83%
Al 308.215†	66775.8	39.43	mg/L	0.265	78.86	mg/L	0.529	0.67%
As 188.979†	4711.5	2.436	mg/L	0.0153	4.872	mg/L	0.0307	0.63%
B 249.677†	160.3	0.01719	mg/L	0.001179	0.03437	mg/L	0.002358	6.86%
Ba 233.527†	14908.1	2.647	mg/L	0.0136	5.294	mg/L	0.0271	0.51%
Be 313.042†	364729.9	0.5183	mg/L	0.00035	1.037	mg/L	0.0007	0.07%
Ca 317.933†	3275446.8	208.6	mg/L	1.10	417.2	mg/L	2.20	0.53%
Cd 228.802†	17201.1	0.5553	mg/L	0.00308	1.111	mg/L	0.0062	0.55%
Co 228.616†	25520.9	0.5571	mg/L	0.00286	1.114	mg/L	0.0057	0.51%
Cr 267.716†	5182.0	0.6235	mg/L	0.00266	1.247	mg/L	0.0053	0.43%
Cu 324.752†	945631.0	3.152	mg/L	0.0325	6.305	mg/L	0.0650	1.03%
Fe 273.955†	303388.4	168.3	mg/L	0.71	336.6	mg/L	1.42	0.42%
K 766.490†	37872.2	15.23	mg/L	0.078	30.46	mg/L	0.156	0.51%
Mg 279.077†	45680.7	33.65	mg/L	0.109	67.30	mg/L	0.217	0.32%
Mn 257.610†	116114.1	2.315	mg/L	0.0107	4.630	mg/L	0.0214	0.46%
Mo 202.031†	1003.2	0.03904	mg/L	0.000635	0.07809	mg/L	0.001269	1.63%
Na 589.592†	177042.3	13.40	mg/L	0.066	26.79	mg/L	0.133	0.50%
Na 330.237†	540.8	14.22	mg/L	0.107	28.43	mg/L	0.215	0.76%
Ni 231.604†	3009.2	0.5838	mg/L	0.00209	1.168	mg/L	0.0042	0.36%
Pb 220.353†	24958.9	2.516	mg/L	0.0162	5.032	mg/L	0.0324	0.64%
Sb 206.836†	160.9	0.03719	mg/L	0.002546	0.07438	mg/L	0.005091	6.85%
Se 196.026†	3880.4	2.045	mg/L	0.0142	4.089	mg/L	0.0283	0.69%
Si 288.158†	634.4	0.2916	mg/L	0.00488	0.5831	mg/L	0.00977	1.68%
Sn 189.927†	83.0	0.03464	mg/L	0.000583	0.06928	mg/L	0.001165	1.68%
Sr 421.552†	1773778.3	1.740	mg/L	0.0122	3.480	mg/L	0.0245	0.70%
Ti 334.903†	59512.8	2.250	mg/L	0.0126	4.501	mg/L	0.0252	0.56%
Tl 190.801†	5020.9	1.931	mg/L	0.0052	3.862	mg/L	0.0104	0.27%
V 292.402†	92795.9	0.6510	mg/L	0.00760	1.302	mg/L	0.0152	1.17%
Zn 206.200†	28780.4	6.157	mg/L	0.0431	12.31	mg/L	0.086	0.70%

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Sequence No.: 16
Sample ID: WC33 REF1 SWC

Dilution: 2.000000X

Autosampler Location: 312
Date Collected: 2/6/2013 9:51:09 AM
Data Type: Original

Nebulizer Parameters: WC33 REF1 SWC

Analyte	Back Pressure	Flow
All	217.0 kPa	0.75 L/min

Mean Data: WC33 REF1 SWC

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	3040382.7	100.3	%	0.40				0.40%
ScR 361.383	404168.1	101.4	%	0.39				0.38%
Ag 328.068†	252746.9	1.114	mg/L	0.0050	2.229	mg/L	0.0100	0.45%
Al 308.215†	166914.3	98.57	mg/L	0.398	197.1	mg/L	0.80	0.40%
As 188.979†	2509.8	1.348	mg/L	0.0018	2.697	mg/L	0.0036	0.13%
B 249.677†	9744.1	1.121	mg/L	0.0018	2.241	mg/L	0.0036	0.16%
Ba 233.527†	18679.3	3.325	mg/L	0.0329	6.650	mg/L	0.0658	0.99%
Be 313.042†	633542.4	0.9003	mg/L	0.00351	1.801	mg/L	0.0070	0.39%
Ca 317.933†	629598.2	40.10	mg/L	0.135	80.19	mg/L	0.270	0.34%
Cd 228.802†	22797.2	0.7463	mg/L	0.00172	1.493	mg/L	0.0034	0.23%
Co 228.616†	34650.1	0.7574	mg/L	0.00135	1.515	mg/L	0.0027	0.18%
Cr 267.716†	6216.6	0.7500	mg/L	0.00128	1.500	mg/L	0.0026	0.17%
Cu 324.752†	215180.8	0.7224	mg/L	0.00515	1.445	mg/L	0.0103	0.71%
Fe 273.955†	275360.4	152.8	mg/L	0.92	305.5	mg/L	1.84	0.60%
K 766.490†	91345.9	36.73	mg/L	0.103	73.46	mg/L	0.206	0.28%
Mg 279.077†	38403.6	28.30	mg/L	0.044	56.60	mg/L	0.089	0.16%
Mn 257.610†	228416.6	4.555	mg/L	0.0201	9.110	mg/L	0.0401	0.44%
Mo 202.031†	11182.3	0.4625	mg/L	0.00088	0.9249	mg/L	0.00175	0.19%
Na 589.592†	75882.4	5.741	mg/L	0.0354	11.48	mg/L	0.071	0.62%
Na 330.237†	187.8	5.516	mg/L	0.1285	11.03	mg/L	0.257	2.33%
Ni 231.604†	2859.3	0.5552	mg/L	0.00136	1.110	mg/L	0.0027	0.25%
Pb 220.353†	13037.5	1.334	mg/L	0.0013	2.668	mg/L	0.0025	0.09%
Sb 206.836†	1922.6	0.5017	mg/L	0.00111	1.003	mg/L	0.0022	0.22%
Se 196.026†	3180.6	1.668	mg/L	0.0017	3.336	mg/L	0.0033	0.10%
Si 288.158†	8353.6	3.758	mg/L	0.0658	7.517	mg/L	0.1315	1.75%
Sn 189.927†	8199.3	1.656	mg/L	0.0020	3.312	mg/L	0.0040	0.12%
Sr 421.552†	570560.4	0.5597	mg/L	0.00191	1.119	mg/L	0.0038	0.34%
Ti 334.903†	66516.3	2.526	mg/L	0.0055	5.052	mg/L	0.0110	0.22%
Tl 190.801†	3473.2	1.337	mg/L	0.0036	2.675	mg/L	0.0072	0.27%
V 292.402†	123459.6	0.8701	mg/L	0.00479	1.740	mg/L	0.0096	0.55%
Zn 206.200†	8516.5	1.822	mg/L	0.0027	3.645	mg/L	0.0055	0.15%

Sequence No.: 17
Sample ID: WC33 MB1SPK SWC

Autosampler Location: 313
Date Collected: 2/6/2013 9:54:26 AM
Data Type: Original

Dilution: 2.000000X

Nebulizer Parameters: WC33 MB1SPK SWC

Analyte	Back Pressure	Flow
All	218.0 kPa	0.75 L/min

Mean Data: WC33 MB1SPK SWC

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	3083999.3	101.7	%	0.48				0.47%
ScR 361.383	402301.6	101.0	%	0.34				0.34%
Ag 328.068†	119080.2	0.5250	mg/L	0.01073	1.050	mg/L	0.0215	2.04%
Al 308.215†	3596.2	2.117	mg/L	0.0202	4.234	mg/L	0.0404	0.95%
As 188.979†	4017.1	2.026	mg/L	0.0330	4.051	mg/L	0.0659	1.63%
B 249.677†	13.0	0.00032	mg/L	0.000214	0.00063	mg/L	0.000429	67.65%
Ba 233.527†	11796.4	2.114	mg/L	0.0210	4.227	mg/L	0.0419	0.99%
Be 313.042†	360810.0	0.5128	mg/L	0.00364	1.026	mg/L	0.0073	0.71%
Ca 317.933†	158834.3	10.12	mg/L	0.047	20.23	mg/L	0.094	0.47%
Cd 228.802†	16144.5	0.5223	mg/L	0.00895	1.045	mg/L	0.0179	1.71%
Co 228.616†	22994.2	0.5055	mg/L	0.00806	1.011	mg/L	0.0161	1.59%
Cr 267.716†	4386.0	0.5273	mg/L	0.00463	1.055	mg/L	0.0093	0.88%
Cu 324.752†	152881.3	0.5085	mg/L	0.00903	1.017	mg/L	0.0181	1.78%
Fe 273.955†	3775.3	2.092	mg/L	0.0207	4.183	mg/L	0.0414	0.99%
K 766.490†	25401.1	10.21	mg/L	0.082	20.43	mg/L	0.165	0.81%
Mg 279.077†	14184.7	10.48	mg/L	0.116	20.97	mg/L	0.231	1.10%
Mn 257.610†	26169.4	0.5222	mg/L	0.00573	1.044	mg/L	0.0115	1.10%
Mo 202.031†	39.3	0.00148	mg/L	0.000091	0.00296	mg/L	0.000182	6.16%
Na 589.592†	136052.7	10.29	mg/L	0.038	20.59	mg/L	0.076	0.37%
Na 330.237†	371.5	10.43	mg/L	0.232	20.87	mg/L	0.465	2.23%
Ni 231.604†	2687.6	0.5213	mg/L	0.00549	1.043	mg/L	0.0110	1.05%
Pb 220.353†	20150.7	2.033	mg/L	0.0297	4.066	mg/L	0.0594	1.46%
Sb 206.836†	24.7	0.00101	mg/L	0.001380	0.00202	mg/L	0.002760	136.51%
Se 196.026†	3822.6	2.018	mg/L	0.0328	4.037	mg/L	0.0657	1.63%
Si 288.158†	-5.5	0.00049	mg/L	0.001167	0.00098	mg/L	0.002335	238.85%
Sn 189.927†	-19.3	-0.00304	mg/L	0.000368	-0.00608	mg/L	0.000737	12.11%
Sr 421.552†	519219.7	0.5093	mg/L	0.00294	1.019	mg/L	0.0059	0.58%
Ti 334.903†	58.2	0.00151	mg/L	0.000351	0.00302	mg/L	0.000702	23.26%
Tl 190.801†	5258.5	2.000	mg/L	0.0284	4.001	mg/L	0.0569	1.42%
V 292.402†	71573.7	0.5095	mg/L	0.00966	1.019	mg/L	0.0193	1.90%
Zn 206.200†	2420.1	0.5179	mg/L	0.00489	1.036	mg/L	0.0098	0.94%

Sequence No.: 18
Sample ID: CV 2
Dilution: 1.000000X

Autosampler Location: 7
Date Collected: 2/6/2013 9:58:27 AM
Data Type: Original

Nebulizer Parameters: CV

Analyte	Back Pressure	Flow
All	217.0 kPa	0.75 L/min

Mean Data: CV

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	3027988.6	99.84	%	0.178				0.18%
ScR 361.383	396412.6	99.48	%	0.984				0.99%
Ag 328.068†	237911.4	1.049	mg/L	0.0054	1.049	mg/L	0.0054	0.52%
Al 308.215†	3449.6	2.003	mg/L	0.0325	2.003	mg/L	0.0325	1.62%
As 188.979†	3972.0	2.035	mg/L	0.0078	2.035	mg/L	0.0078	0.38%
B 249.677†	8698.8	1.000	mg/L	0.0160	1.000	mg/L	0.0160	1.60%
Ba 233.527†	5753.0	1.031	mg/L	0.0258	1.031	mg/L	0.0258	2.51%
Be 313.042†	702115.2	0.9978	mg/L	0.00735	0.9978	mg/L	0.00735	0.74%
Ca 317.933†	32107.9	2.045	mg/L	0.0267	2.045	mg/L	0.0267	1.31%
Cd 228.802†	31832.3	1.041	mg/L	0.0029	1.041	mg/L	0.0029	0.28%
Co 228.616†	46112.2	1.013	mg/L	0.0023	1.013	mg/L	0.0023	0.22%
Cr 267.716†	8444.4	1.017	mg/L	0.0145	1.017	mg/L	0.0145	1.43%
Cu 324.752†	311817.5	1.037	mg/L	0.0020	1.037	mg/L	0.0020	0.19%
Fe 273.955†	3652.2	2.020	mg/L	0.0201	2.020	mg/L	0.0201	1.00%
K 766.490†	50194.3	20.18	mg/L	0.027	20.18	mg/L	0.027	0.13%
Mg 279.077†	2705.8	2.006	mg/L	0.0238	2.006	mg/L	0.0238	1.18%
Mn 257.610†	50919.4	1.016	mg/L	0.0090	1.016	mg/L	0.0090	0.89%
Mo 202.031†	24175.9	1.001	mg/L	0.0039	1.001	mg/L	0.0039	0.39%
Na 589.592†	681250.7	51.55	mg/L	0.366	51.55	mg/L	0.366	0.71%
Na 330.237†	1823.5	51.94	mg/L	0.620	51.94	mg/L	0.620	1.19%
Ni 231.604†	5220.2	1.014	mg/L	0.0225	1.014	mg/L	0.0225	2.22%
Pb 220.353†	20636.7	2.082	mg/L	0.0103	2.082	mg/L	0.0103	0.50%
Sb 206.836†	8020.4	2.060	mg/L	0.0079	2.060	mg/L	0.0079	0.38%
Se 196.026†	3774.0	1.992	mg/L	0.0082	1.992	mg/L	0.0082	0.41%
Si 288.158†	4461.6	2.007	mg/L	0.0357	2.007	mg/L	0.0357	1.78%
Sn 189.927†	4935.0	0.9958	mg/L	0.00564	0.9958	mg/L	0.00564	0.57%
Sr 421.552†	1023453.7	1.004	mg/L	0.0048	1.004	mg/L	0.0048	0.48%
Ti 334.903†	26593.7	1.010	mg/L	0.0060	1.010	mg/L	0.0060	0.59%
Tl 190.801†	5288.5	2.008	mg/L	0.0097	2.008	mg/L	0.0097	0.48%
V 292.402†	144543.9	1.029	mg/L	0.0022	1.029	mg/L	0.0022	0.21%
Zn 206.200†	4934.5	1.056	mg/L	0.0149	1.056	mg/L	0.0149	1.42%

Sequence No.: 19
Sample ID: CB 2
Dilution: 1.000000X

Autosampler Location: 1
Date Collected: 2/6/2013 10:01:45 AM
Data Type: Original

Nebulizer Parameters: CB

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: CB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	3105847.0	102.4	%	0.26				0.26%
ScR 361.383	411094.0	103.2	%	0.42				0.41%
Ag 328.068†	25.2	0.00011	mg/L	0.000160	0.00011	mg/L	0.000160	144.51%
Al 308.215†	-2.6	-0.00154	mg/L	0.003853	-0.00154	mg/L	0.003853	249.63%
As 188.979†	-0.1	-0.00006	mg/L	0.000505	-0.00006	mg/L	0.000505	777.63%
B 249.677†	9.0	0.00103	mg/L	0.001206	0.00103	mg/L	0.001206	116.62%
Ba 233.527†	-3.4	-0.00061	mg/L	0.000727	-0.00061	mg/L	0.000727	119.81%
Be 313.042†	9.0	0.00001	mg/L	0.000014	0.00001	mg/L	0.000014	108.35%
Ca 317.933†	13.7	0.00087	mg/L	0.000195	0.00087	mg/L	0.000195	22.27%
Cd 228.802†	2.0	0.00007	mg/L	0.000106	0.00007	mg/L	0.000106	160.45%
Co 228.616†	0.1	0.00000	mg/L	0.000116	0.00000	mg/L	0.000116	>999.9%
Cr 267.716†	1.0	0.00012	mg/L	0.000170	0.00012	mg/L	0.000170	147.12%
Cu 324.752†	0.6	0.00000	mg/L	0.000116	0.00000	mg/L	0.000116	>999.9%
Fe 273.955†	-0.1	-0.00008	mg/L	0.001557	-0.00008	mg/L	0.001557	>999.9%
K 766.490†	11.1	0.00446	mg/L	0.005288	0.00446	mg/L	0.005288	118.57%
Mg 279.077†	-1.5	-0.00113	mg/L	0.003144	-0.00113	mg/L	0.003144	277.43%
Mn 257.610†	-1.7	-0.00003	mg/L	0.000040	-0.00003	mg/L	0.000040	115.86%
Mo 202.031†	37.4	0.00155	mg/L	0.000152	0.00155	mg/L	0.000152	9.81%
Na 589.592†	-70.6	-0.00534	mg/L	0.003514	-0.00534	mg/L	0.003514	65.79%
Na 330.237†	10.5	0.2990	mg/L	0.39961	0.2990	mg/L	0.39961	133.66%
Ni 231.604†	7.7	0.00150	mg/L	0.001066	0.00150	mg/L	0.001066	70.91%
Pb 220.353†	5.4	0.00054	mg/L	0.000730	0.00054	mg/L	0.000730	134.22%
Sb 206.836†	12.4	0.00320	mg/L	0.001087	0.00320	mg/L	0.001087	34.01%
Se 196.026†	1.0	0.00055	mg/L	0.002018	0.00055	mg/L	0.002018	367.91%
Si 288.158†	-1.7	-0.00075	mg/L	0.004211	-0.00075	mg/L	0.004211	558.17%
Sn 189.927†	4.4	0.00089	mg/L	0.000685	0.00089	mg/L	0.000685	77.23%
Sr 421.552†	16.1	0.00002	mg/L	0.000058	0.00002	mg/L	0.000058	366.16%
Ti 334.903†	-6.3	-0.00024	mg/L	0.000596	-0.00024	mg/L	0.000596	246.61%
Tl 190.801†	2.5	0.00094	mg/L	0.000805	0.00094	mg/L	0.000805	85.63%
V 292.402†	15.7	0.00011	mg/L	0.000057	0.00011	mg/L	0.000057	50.52%
Zn 206.200†	-0.3	-0.00006	mg/L	0.000107	-0.00006	mg/L	0.000107	189.21%

Sequence No.: 20
Sample ID: WC43 MB1 SWC

Autosampler Location: 314
Date Collected: 2/6/2013 10:06:01 AM
Data Type: Original

Dilution: 2.000000X

Nebulizer Parameters: WC43 MB1 SWC

Analyte	Back Pressure	Flow
All	217.0 kPa	0.75 L/min

Mean Data: WC43 MB1 SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	3083339.7	101.7	%	0.29				0.29%
ScR 361.383	405682.7	101.8	%	0.63				0.62%
Ag 328.068†	32.3	0.00014	mg/L	0.000100	0.00028	mg/L	0.000200	70.16%
Al 308.215†	21.4	0.01262	mg/L	0.001498	0.02524	mg/L	0.002996	11.87%
As 188.979†	4.4	0.00226	mg/L	0.001478	0.00451	mg/L	0.002956	65.47%
B 249.677†	-8.0	-0.00092	mg/L	0.000419	-0.00185	mg/L	0.000838	45.42%
Ba 233.527†	-2.7	-0.00048	mg/L	0.000607	-0.00096	mg/L	0.001214	127.09%
Be 313.042†	21.3	0.00003	mg/L	0.000036	0.00006	mg/L	0.000071	118.04%
Ca 317.933†	364.9	0.02324	mg/L	0.000627	0.04647	mg/L	0.001253	2.70%
Cd 228.802†	-3.1	-0.00011	mg/L	0.000141	-0.00023	mg/L	0.000283	123.48%
Co 228.616†	5.6	0.00012	mg/L	0.000034	0.00024	mg/L	0.000067	27.61%
Cr 267.716†	-0.4	-0.00005	mg/L	0.000599	-0.00010	mg/L	0.001199	>999.9%
Cu 324.752†	53.5	0.00018	mg/L	0.000086	0.00036	mg/L	0.000171	48.22%
Fe 273.955†	6.3	0.00351	mg/L	0.001102	0.00702	mg/L	0.002204	31.39%
K 766.490†	14.6	0.00589	mg/L	0.012051	0.01178	mg/L	0.024103	204.68%
Mg 279.077†	6.1	0.00452	mg/L	0.001568	0.00904	mg/L	0.003136	34.68%
Mn 257.610†	3.7	0.00007	mg/L	0.000061	0.00015	mg/L	0.000122	83.62%
Mo 202.031†	8.0	0.00033	mg/L	0.000124	0.00066	mg/L	0.000248	37.56%
Na 589.592†	-32.2	-0.00244	mg/L	0.003246	-0.00488	mg/L	0.006492	133.11%
Na 330.237†	4.9	0.1398	mg/L	0.26436	0.2796	mg/L	0.52873	189.11%
Ni 231.604†	0.1	0.00002	mg/L	0.000279	0.00003	mg/L	0.000558	>999.9%
Pb 220.353†	6.5	0.00066	mg/L	0.000354	0.00133	mg/L	0.000709	53.48%
Sb 206.836†	-0.5	-0.00013	mg/L	0.000299	-0.00026	mg/L	0.000598	228.50%
Se 196.026†	3.5	0.00185	mg/L	0.001947	0.00370	mg/L	0.003894	105.25%
Si 288.158†	-1.3	-0.00057	mg/L	0.000943	-0.00115	mg/L	0.001886	164.48%
Sn 189.927†	4.6	0.00092	mg/L	0.000994	0.00184	mg/L	0.001988	107.81%
Sr 421.552†	40.5	0.00004	mg/L	0.000005	0.00008	mg/L	0.000011	13.47%
Ti 334.903†	39.3	0.00149	mg/L	0.000473	0.00299	mg/L	0.000946	31.68%
Tl 190.801†	3.0	0.00113	mg/L	0.000849	0.00226	mg/L	0.001698	75.01%
V 292.402†	-3.1	-0.00002	mg/L	0.000137	-0.00005	mg/L	0.000274	599.68%
Zn 206.200†	15.8	0.00337	mg/L	0.000238	0.00675	mg/L	0.000477	7.06%

Sequence No.: 21
Sample ID: WC33 I SWC

Dilution: 5.000000X

Autosampler Location: 339
Date Collected: 2/6/2013 10:10:18 AM
Data Type: Original

Nebulizer Parameters: WC33 I SWC

Analyte	Back Pressure	Flow
All	218.0 kPa	0.75 L/min

Mean Data: WC33 I SWC

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2952275.6	97.35	%	0.081				0.08%
ScR 361.383	390439.6	97.99	%	0.129				0.13%
Ag 328.068†	-307.8	0.00031	mg/L	0.000107	0.00155	mg/L	0.000534	34.42%
Al 308.215†	70060.9	41.38	mg/L	0.292	206.9	mg/L	1.46	0.71%
As 188.979†	-86.1	0.02559	mg/L	0.004250	0.1279	mg/L	0.02125	16.61%
B 249.677†	219.9	0.02524	mg/L	0.000149	0.1262	mg/L	0.00075	0.59%
Ba 233.527†	829.7	0.1386	mg/L	0.00156	0.6928	mg/L	0.00782	1.13%
Be 313.042†	560.4	0.00074	mg/L	0.000003	0.00369	mg/L	0.000016	0.44%
Ca 317.933†	3947816.4	251.4	mg/L	1.21	1257	mg/L	6.04	0.48%
Cd 228.802†	36.9	0.00153	mg/L	0.000170	0.00766	mg/L	0.000849	11.08%
Co 228.616†	1351.9	0.02504	mg/L	0.000689	0.1252	mg/L	0.00344	2.75%
Cr 267.716†	582.3	0.06661	mg/L	0.000919	0.3330	mg/L	0.00459	1.38%
Cu 324.752†	25019.1	0.08593	mg/L	0.001430	0.4296	mg/L	0.00715	1.66%
Fe 273.955†	123777.5	68.67	mg/L	0.247	343.4	mg/L	1.24	0.36%
K 766.490†	8763.0	3.523	mg/L	0.0182	17.62	mg/L	0.091	0.52%
Mg 279.077†	34413.7	25.37	mg/L	0.121	126.9	mg/L	0.61	0.48%
Mn 257.610†	72222.7	1.439	mg/L	0.0035	7.196	mg/L	0.0173	0.24%
Mo 202.031†	150.4	0.00326	mg/L	0.000081	0.01631	mg/L	0.000407	2.49%
Na 589.592†	137599.9	10.41	mg/L	0.067	52.06	mg/L	0.333	0.64%
Na 330.237†	372.1	11.28	mg/L	0.223	56.41	mg/L	1.114	1.97%
Ni 231.604†	462.9	0.08994	mg/L	0.001535	0.4497	mg/L	0.00768	1.71%
Pb 220.353†	215.9	0.02931	mg/L	0.000520	0.1466	mg/L	0.00260	1.77%
Sb 206.836†	7.2	0.00331	mg/L	0.001745	0.01653	mg/L	0.008725	52.79%
Se 196.026†	-6.3	-0.00817	mg/L	0.003569	-0.04085	mg/L	0.017844	43.68%
Si 288.158†	1711.7	0.7749	mg/L	0.01020	3.874	mg/L	0.0510	1.32%
Sn 189.927†	-85.6	0.00430	mg/L	0.001734	0.02150	mg/L	0.008671	40.33%
Sr 421.552†	2023491.0	1.985	mg/L	0.0105	9.925	mg/L	0.0524	0.53%
Ti 334.903†	69925.4	2.644	mg/L	0.0120	13.22	mg/L	0.060	0.45%
Tl 190.801†	8.9	0.01182	mg/L	0.000738	0.05912	mg/L	0.003690	6.24%
V 292.402†	19083.1	0.1308	mg/L	0.00235	0.6540	mg/L	0.01174	1.80%
Zn 206.200†	1020.5	0.2184	mg/L	0.00149	1.092	mg/L	0.0075	0.68%

Sequence No.: 22
Sample ID: WC33 G-L SWC
Dilution: 25.000000X

Autosampler Location: 340
Date Collected: 2/6/2013 10:14:37 AM
Data Type: Original

Nebulizer Parameters: WC33 G-L SWC

Analyte	Back Pressure	Flow
All	218.0 kPa	0.75 L/min

Mean Data: WC33 G-L SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	3043841.8	100.4	%	0.45				0.45%
ScR 361.383	403043.4	101.1	%	0.56				0.56%
Ag 328.068†	5.7	0.00029	mg/L	0.000109	0.00727	mg/L	0.002733	37.58%
Al 308.215†	12935.7	7.640	mg/L	0.0577	191.0	mg/L	1.44	0.76%
As 188.979†	150.0	0.08765	mg/L	0.001420	2.191	mg/L	0.0355	1.62%
B 249.677†	20.5	0.00234	mg/L	0.001374	0.05860	mg/L	0.034342	58.60%
Ba 233.527†	665.2	0.1144	mg/L	0.00156	2.859	mg/L	0.0389	1.36%
Be 313.042†	187.1	0.00025	mg/L	0.000008	0.00635	mg/L	0.000204	3.21%
Ca 317.933†	621058.1	39.55	mg/L	0.109	988.8	mg/L	2.72	0.28%
Cd 228.802†	42.7	0.00100	mg/L	0.000049	0.02496	mg/L	0.001213	4.86%
Co 228.616†	506.9	0.01034	mg/L	0.000138	0.2586	mg/L	0.00345	1.33%
Cr 267.716†	185.4	0.02236	mg/L	0.000562	0.5590	mg/L	0.01406	2.51%
Cu 324.752†	158299.6	0.5279	mg/L	0.00094	13.20	mg/L	0.023	0.18%
Fe 273.955†	59441.8	32.98	mg/L	0.103	824.4	mg/L	2.59	0.31%
K 766.490†	2365.3	0.9510	mg/L	0.00544	23.78	mg/L	0.136	0.57%
Mg 279.077†	6731.0	4.953	mg/L	0.0337	123.8	mg/L	0.84	0.68%
Mn 257.610†	18125.6	0.3613	mg/L	0.00096	9.033	mg/L	0.0239	0.26%
Mo 202.031†	244.6	0.00966	mg/L	0.000124	0.2415	mg/L	0.00311	1.29%
Na 589.592†	7905.7	0.5982	mg/L	0.00131	14.95	mg/L	0.033	0.22%
Na 330.237†	32.6	0.7155	mg/L	0.13879	17.89	mg/L	3.470	19.40%
Ni 231.604†	79.4	0.01543	mg/L	0.000496	0.3858	mg/L	0.01239	3.21%
Pb 220.353†	1002.0	0.1007	mg/L	0.00148	2.518	mg/L	0.0370	1.47%
Sb 206.836†	29.5	0.00772	mg/L	0.001999	0.1930	mg/L	0.04996	25.89%
Se 196.026†	-4.2	-0.00314	mg/L	0.002371	-0.07846	mg/L	0.059268	75.54%
Si 288.158†	129.2	0.05885	mg/L	0.001434	1.471	mg/L	0.0359	2.44%
Sn 189.927†	-21.7	-0.00098	mg/L	0.000197	-0.02446	mg/L	0.004929	20.15%
Sr 421.552†	246971.2	0.2423	mg/L	0.00069	6.057	mg/L	0.0174	0.29%
Ti 334.903†	11861.7	0.4486	mg/L	0.00156	11.22	mg/L	0.039	0.35%
Tl 190.801†	2.7	0.00523	mg/L	0.002421	0.1306	mg/L	0.06053	46.34%
V 292.402†	4485.8	0.03004	mg/L	0.000227	0.7509	mg/L	0.00566	0.75%
Zn 206.200†	5345.3	1.143	mg/L	0.0058	28.59	mg/L	0.144	0.51%

Sequence No.: 23
Sample ID: WC33 G SWC

Autosampler Location: 341
Date Collected: 2/6/2013 10:18:38 AM
Data Type: Original

Dilution: 5.000000X

Nebulizer Parameters: WC33 G SWC

Analyte	Back Pressure	Flow
All	218.0 kPa	0.75 L/min

Mean Data: WC33 G SWC

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2982591.8	98.35	%	0.762				0.77%
ScR 361.383	399042.7	100.1	%	0.36				0.35%
Ag 328.068†	-54.9	0.00107	mg/L	0.000028	0.00535	mg/L	0.000139	2.61%
Al 308.215†	62750.2	37.06	mg/L	0.082	185.3	mg/L	0.41	0.22%
As 188.979†	655.6	0.3903	mg/L	0.00368	1.951	mg/L	0.0184	0.94%
B 249.677†	158.0	0.01811	mg/L	0.000231	0.09056	mg/L	0.001154	1.27%
Ba 233.527†	3260.1	0.5602	mg/L	0.00122	2.801	mg/L	0.0061	0.22%
Be 313.042†	618.4	0.00082	mg/L	0.000004	0.00410	mg/L	0.000020	0.48%
Ca 317.933†	3069572.9	195.5	mg/L	1.69	977.4	mg/L	8.44	0.86%
Cd 228.802†	199.9	0.00480	mg/L	0.000298	0.02402	mg/L	0.001488	6.20%
Co 228.616†	2389.4	0.04856	mg/L	0.000302	0.2428	mg/L	0.00151	0.62%
Cr 267.716†	875.5	0.1056	mg/L	0.00041	0.5280	mg/L	0.00204	0.39%
Cu 324.752†	795856.7	2.654	mg/L	0.0034	13.27	mg/L	0.017	0.13%
Fe 273.955†	294260.1	163.3	mg/L	0.58	816.3	mg/L	2.89	0.35%
K 766.490†	11838.4	4.760	mg/L	0.0250	23.80	mg/L	0.125	0.52%
Mg 279.077†	33327.9	24.52	mg/L	0.074	122.6	mg/L	0.37	0.30%
Mn 257.610†	89595.2	1.786	mg/L	0.0028	8.930	mg/L	0.0142	0.16%
Mo 202.031†	1016.5	0.03978	mg/L	0.000293	0.1989	mg/L	0.00146	0.74%
Na 589.592†	39403.4	2.981	mg/L	0.0057	14.91	mg/L	0.028	0.19%
Na 330.237†	163.6	3.627	mg/L	0.2028	18.14	mg/L	1.014	5.59%
Ni 231.604†	400.2	0.07778	mg/L	0.000961	0.3889	mg/L	0.00480	1.23%
Pb 220.353†	4852.0	0.4875	mg/L	0.00389	2.437	mg/L	0.0194	0.80%
Sb 206.836†	139.4	0.03683	mg/L	0.001109	0.1842	mg/L	0.00554	3.01%
Se 196.026†	-8.5	-0.00884	mg/L	0.002865	-0.04420	mg/L	0.014327	32.41%
Si 288.158†	639.3	0.2909	mg/L	0.00412	1.455	mg/L	0.0206	1.42%
Sn 189.927†	88.0	0.03453	mg/L	0.000276	0.1727	mg/L	0.00138	0.80%
Sr 421.552†	1225495.1	1.202	mg/L	0.0122	6.011	mg/L	0.0612	1.02%
Ti 334.903†	58900.9	2.228	mg/L	0.0030	11.14	mg/L	0.015	0.13%
Tl 190.801†	-36.8	0.00677	mg/L	0.002693	0.03387	mg/L	0.013466	39.75%
V 292.402†	22101.6	0.1479	mg/L	0.00133	0.7396	mg/L	0.00663	0.90%
Zn 206.200†	26121.6	5.588	mg/L	0.0262	27.94	mg/L	0.131	0.47%

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Sequence No.: 24 **Autosampler Location: 342**
Sample ID: WC33 GDUP SWC **Date Collected: 2/6/2013 10:22:41 AM**
Data Type: Original
Dilution: 5.000000X

Nebulizer Parameters: WC33 GDUP SWC

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: WC33 GDUP SWC

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2973883.0	98.06	%	0.120				0.12%
ScR 361.383	401571.7	100.8	%	0.48				0.48%
Ag 328.068†	-134.0	0.00091	mg/L	0.000051	0.00454	mg/L	0.000255	5.61%
Al 308.215†	65781.7	38.85	mg/L	0.573	194.2	mg/L	2.87	1.48%
As 188.979†	650.3	0.3932	mg/L	0.00738	1.966	mg/L	0.0369	1.88%
B 249.677†	147.1	0.01686	mg/L	0.000383	0.08431	mg/L	0.001915	2.27%
Ba 233.527†	3339.1	0.5737	mg/L	0.01136	2.868	mg/L	0.0568	1.98%
Be 313.042†	645.8	0.00086	mg/L	0.000022	0.00428	mg/L	0.000108	2.53%
Ca 317.933†	3522046.3	224.3	mg/L	2.71	1122	mg/L	13.57	1.21%
Cd 228.802†	187.5	0.00441	mg/L	0.000184	0.02206	mg/L	0.000920	4.17%
Co 228.616†	2465.0	0.04980	mg/L	0.000860	0.2490	mg/L	0.00430	1.73%
Cr 267.716†	784.8	0.09436	mg/L	0.001079	0.4718	mg/L	0.00540	1.14%
Cu 324.752†	735985.6	2.455	mg/L	0.0489	12.28	mg/L	0.244	1.99%
Fe 273.955†	303202.6	168.2	mg/L	1.54	841.1	mg/L	7.71	0.92%
K 766.490†	12458.3	5.009	mg/L	0.0726	25.05	mg/L	0.363	1.45%
Mg 279.077†	34700.8	25.53	mg/L	0.493	127.7	mg/L	2.47	1.93%
Mn 257.610†	94826.9	1.890	mg/L	0.0202	9.451	mg/L	0.1012	1.07%
Mo 202.031†	1159.2	0.04535	mg/L	0.000746	0.2267	mg/L	0.00373	1.64%
Na 589.592†	41749.8	3.159	mg/L	0.0403	15.79	mg/L	0.202	1.28%
Na 330.237†	170.1	3.846	mg/L	0.2222	19.23	mg/L	1.111	5.78%
Ni 231.604†	407.7	0.07923	mg/L	0.001788	0.3961	mg/L	0.00894	2.26%
Pb 220.353†	6832.7	0.6877	mg/L	0.01301	3.438	mg/L	0.0650	1.89%
Sb 206.836†	136.5	0.03640	mg/L	0.001845	0.1820	mg/L	0.00922	5.07%
Se 196.026†	-15.1	-0.01254	mg/L	0.002129	-0.06270	mg/L	0.010646	16.98%
Si 288.158†	547.1	0.2495	mg/L	0.00399	1.247	mg/L	0.0200	1.60%
Sn 189.927†	76.7	0.03472	mg/L	0.000700	0.1736	mg/L	0.00350	2.02%
Sr 421.552†	1381760.3	1.355	mg/L	0.0217	6.777	mg/L	0.1085	1.60%
Ti 334.903†	65213.1	2.466	mg/L	0.0317	12.33	mg/L	0.159	1.29%
Tl 190.801†	-22.6	0.01286	mg/L	0.000390	0.06428	mg/L	0.001951	3.03%
V 292.402†	21630.6	0.1442	mg/L	0.00269	0.7208	mg/L	0.01345	1.87%
Zn 206.200†	26632.7	5.697	mg/L	0.1015	28.49	mg/L	0.507	1.78%

Sequence No.: 25
Sample ID: WC32 E SWC
Dilution: 2.000000X

Del

Autosampler Location: 315
Date Collected: 2/6/2013 10:26:44 AM
Data Type: Original

Nebulizer Parameters: WC32 E SWC

Analyte	Back Pressure	Flow
All	217.0 kPa	0.75 L/min

Mean Data: WC32 E SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2904477.4	95.77	%	0.137				0.14%
ScR 361.383	395219.3	99.18	%	0.193				0.19%
Ag 328.068†	-922.0	0.00010	mg/L	0.000406	0.00020	mg/L	0.000812	413.93%
Al 308.215†	169822.4	100.3	mg/L	0.04	200.6	mg/L	0.09	0.04%
As 188.979†	334.3	0.2993	mg/L	0.00177	0.5986	mg/L	0.00355	0.59%
B 249.677†	859.0	0.09868	mg/L	0.000532	0.1974	mg/L	0.00106	0.54%
Ba 233.527†	4215.9	0.6897	mg/L	0.00399	1.379	mg/L	0.0080	0.58%
Be 313.042†	1316.3	0.00172	mg/L	0.000013	0.00344	mg/L	0.000026	0.76%
Ca 317.933†	9799303.5	624.1	mg/L	4.86	1248	mg/L	9.73	0.78%
Cd 228.802†	238.4	0.00704	mg/L	0.000153	0.01407	mg/L	0.000306	2.17%
Co 228.616†	4529.3	0.09000	mg/L	0.000301	0.1800	mg/L	0.00060	0.33%
Cr 267.716†	2167.3	0.2610	mg/L	0.00071	0.5220	mg/L	0.00141	0.27%
Cu 324.752†	865072.7	2.897	mg/L	0.0001	5.795	mg/L	0.0001	0.00%
Fe 273.955†	806684.5	447.5	mg/L	1.73	895.1	mg/L	3.46	0.39%
K 766.490†	21545.3	8.663	mg/L	0.0332	17.33	mg/L	0.066	0.38%
Mg 279.077†	83400.1	61.33	mg/L	0.117	122.7	mg/L	0.23	0.19%
Mn 257.610†	194204.3	3.870	mg/L	0.0109	7.740	mg/L	0.0218	0.28%
Mo 202.031†	747.6	0.02358	mg/L	0.000011	0.04717	mg/L	0.000022	0.05%
Na 589.592†	215314.4	16.29	mg/L	0.003	32.58	mg/L	0.006	0.02%
Na 330.237†	608.8	17.34	mg/L	0.302	34.68	mg/L	0.604	1.74%
Ni 231.604†	811.0	0.1576	mg/L	0.00011	0.3152	mg/L	0.00021	0.07%
Pb 220.353†	4227.5	0.4264	mg/L	0.00053	0.8527	mg/L	0.00106	0.12%
Sb 206.836†	166.0	0.04483	mg/L	0.002250	0.08966	mg/L	0.004499	5.02%
Se 196.026†	2.2	-0.01063	mg/L	0.006599	-0.02127	mg/L	0.013198	62.06%
Si 288.158†	1711.8	0.7788	mg/L	0.00641	1.558	mg/L	0.0128	0.82%
Sn 189.927†	-1.7	0.05296	mg/L	0.001098	0.1059	mg/L	0.00220	2.07%
Sr 421.552†	4856734.4	4.764	mg/L	0.0437	9.529	mg/L	0.0874	0.92%
Ti 334.903†	142776.5	5.392	mg/L	0.0060	10.78	mg/L	0.012	0.11%
Tl 190.801†	-121.5	0.01091	mg/L	0.003768	0.02181	mg/L	0.007536	34.55%
V 292.402†	57939.3	0.3868	mg/L	0.00142	0.7736	mg/L	0.00283	0.37%
Zn 206.200†	23961.3	5.126	mg/L	0.0119	10.25	mg/L	0.024	0.23%

Sequence No.: 26
Sample ID: WC32 F SWC
Dilution: 2.000000X

Dal

Autosampler Location: 316
Date Collected: 2/6/2013 10:31:05 AM
Data Type: Original

Nebulizer Parameters: WC32 F SWC

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: WC32 F SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2895350.9	95.47	%	0.442				0.46%
ScR 361.383	395203.6	99.18	%	0.531				0.54%
Ag 328.068†	-982.7	0.00034	mg/L	0.000498	0.00067	mg/L	0.000997	148.32%
Al 308.215†	180745.9	106.7	mg/L	0.22	213.5	mg/L	0.44	0.20%
As 188.979†	607.8	0.4509	mg/L	0.00619	0.9019	mg/L	0.01238	1.37%
B 249.677†	412.2	0.04722	mg/L	0.001034	0.09445	mg/L	0.002069	2.19%
Ba 233.527†	4007.5	0.6651	mg/L	0.00672	1.330	mg/L	0.0134	1.01%
Be 313.042†	1281.3	0.00166	mg/L	0.000024	0.00332	mg/L	0.000049	1.46%
Ca 317.933†	11020472.1	701.8	mg/L	5.75	1404	mg/L	11.50	0.82%
Cd 228.802†	336.1	0.00962	mg/L	0.000133	0.01924	mg/L	0.000266	1.38%
Co 228.616†	4054.8	0.07848	mg/L	0.000328	0.1570	mg/L	0.00066	0.42%
Cr 267.716†	4779.8	0.5715	mg/L	0.00289	1.143	mg/L	0.0058	0.51%
Cu 324.752†	895718.1	2.995	mg/L	0.0046	5.990	mg/L	0.0092	0.15%
Fe 273.955†	649177.6	360.2	mg/L	1.58	720.3	mg/L	3.16	0.44%
K 766.490†	25006.2	10.05	mg/L	0.046	20.11	mg/L	0.091	0.45%
Mg 279.077†	91035.8	67.01	mg/L	0.226	134.0	mg/L	0.45	0.34%
Mn 257.610†	259340.9	5.169	mg/L	0.0212	10.34	mg/L	0.042	0.41%
Mo 202.031†	1285.4	0.04492	mg/L	0.000065	0.08983	mg/L	0.000129	0.14%
Na 589.592†	199052.9	15.06	mg/L	0.032	30.12	mg/L	0.063	0.21%
Na 330.237†	586.0	16.64	mg/L	0.209	33.27	mg/L	0.417	1.25%
Ni 231.604†	1521.1	0.2956	mg/L	0.00190	0.5911	mg/L	0.00379	0.64%
Pb 220.353†	5649.4	0.5766	mg/L	0.00172	1.153	mg/L	0.0034	0.30%
Sb 206.836†	168.8	0.04184	mg/L	0.001625	0.08369	mg/L	0.003250	3.88%
Se 196.026†	-4.8	-0.01508	mg/L	0.006052	-0.03016	mg/L	0.012105	40.14%
Si 288.158†	2112.3	0.9600	mg/L	0.00926	1.920	mg/L	0.0185	0.96%
Sn 189.927†	63.9	0.07279	mg/L	0.001338	0.1456	mg/L	0.00268	1.84%
Sr 421.552†	4257854.6	4.177	mg/L	0.0283	8.354	mg/L	0.0566	0.68%
Ti 334.903†	158912.5	6.000	mg/L	0.0149	12.00	mg/L	0.030	0.25%
Tl 190.801†	-96.1	0.00893	mg/L	0.004186	0.01786	mg/L	0.008371	46.87%
V 292.402†	59388.6	0.4027	mg/L	0.00230	0.8054	mg/L	0.00461	0.57%
Zn 206.200†	27527.1	5.889	mg/L	0.0321	11.78	mg/L	0.064	0.55%

Sequence No.: 27
Sample ID: WC32 G SWC
Dilution: 2.000000X

Del

Autosampler Location: 317
Date Collected: 2/6/2013 10:35:30 AM
Data Type: Original

Nebulizer Parameters: WC32 G SWC

Analyte	Back Pressure	Flow
All	218.0 kPa	0.75 L/min

Mean Data: WC32 G SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2906708.8	95.84	%	0.458				0.48%
ScR 361.383	389046.4	97.64	%	0.267				0.27%
Ag 328.068†	-1095.7	0.00033	mg/L	0.000214	0.00067	mg/L	0.000428	64.38%
Al 308.215†	92329.8	54.53	mg/L	0.114	109.1	mg/L	0.23	0.21%
As 188.979†	22.3	0.03427	mg/L	0.000411	0.06853	mg/L	0.000822	1.20%
B 249.677†	891.1	0.1025	mg/L	0.00028	0.2050	mg/L	0.00057	0.28%
Ba 233.527†	1686.5	0.2869	mg/L	0.00317	0.5738	mg/L	0.00635	1.11%
Be 313.042†	784.2	0.00104	mg/L	0.000008	0.00208	mg/L	0.000017	0.81%
Ca 317.933†	12405074.4	790.0	mg/L	3.29	1580	mg/L	6.57	0.42%
Cd 228.802†	187.4	0.00631	mg/L	0.000073	0.01262	mg/L	0.000146	1.16%
Co 228.616†	1853.3	0.03587	mg/L	0.000375	0.07175	mg/L	0.000750	1.05%
Cr 267.716†	1560.2	0.1770	mg/L	0.00070	0.3541	mg/L	0.00140	0.39%
Cu 324.752†	213191.7	0.7133	mg/L	0.00274	1.427	mg/L	0.0055	0.38%
Fe 273.955†	187469.9	104.0	mg/L	0.78	208.0	mg/L	1.55	0.75%
K 766.490†	23447.2	9.428	mg/L	0.0404	18.86	mg/L	0.081	0.43%
Mg 279.077†	60064.1	44.25	mg/L	0.046	88.51	mg/L	0.092	0.10%
Mn 257.610†	52715.3	1.048	mg/L	0.0053	2.096	mg/L	0.0107	0.51%
Mo 202.031†	400.9	0.00728	mg/L	0.000276	0.01456	mg/L	0.000551	3.79%
Na 589.592†	909658.2	68.83	mg/L	0.223	137.7	mg/L	0.45	0.32%
Na 330.237†	2472.5	71.02	mg/L	0.355	142.0	mg/L	0.71	0.50%
Ni 231.604†	1124.4	0.2185	mg/L	0.00215	0.4369	mg/L	0.00430	0.98%
Pb 220.353†	1135.6	0.1232	mg/L	0.00068	0.2463	mg/L	0.00137	0.55%
Sb 206.836†	23.8	0.00684	mg/L	0.002767	0.01367	mg/L	0.005533	40.47%
Se 196.026†	-8.1	-0.01069	mg/L	0.002845	-0.02139	mg/L	0.005689	26.60%
Si 288.158†	10727.7	4.842	mg/L	0.0517	9.684	mg/L	0.1033	1.07%
Sn 189.927†	305.4	0.1282	mg/L	0.00159	0.2564	mg/L	0.00318	1.24%
Sr 421.552†	6020249.8	5.906	mg/L	0.0229	11.81	mg/L	0.046	0.39%
Ti 334.903†	72402.1	2.706	mg/L	0.0053	5.412	mg/L	0.0106	0.19%
Tl 190.801†	3.4	0.01413	mg/L	0.002687	0.02826	mg/L	0.005374	19.01%
V 292.402†	26472.7	0.1818	mg/L	0.00130	0.3636	mg/L	0.00260	0.72%
Zn 206.200†	3369.4	0.7216	mg/L	0.00398	1.443	mg/L	0.0080	0.55%

Sequence No.: 28
Sample ID: WC32 H SWC
Autosampler Location: 318
Date Collected: 2/6/2013 10:39:56 AM
Data Type: Original

Dilution: 2.000000X

Nebulizer Parameters: WC32 H SWC

Analyte	Back Pressure	Flow
All	217.0 kPa	0.75 L/min

Mean Data: WC32 H SWC

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	3019250.6	99.55	%	0.655				0.66%
ScR 361.383	410764.6	103.1	%	0.78				0.75%
Ag 328.068†	-377.8	-0.00014	mg/L	0.000029	-0.00027	mg/L	0.000059	21.54%
Al 308.215†	170537.9	100.7	mg/L	0.12	201.4	mg/L	0.25	0.12%
As 188.979†	-162.0	0.07280	mg/L	0.001785	0.1456	mg/L	0.00357	2.45%
B 249.677†	1141.2	0.1312	mg/L	0.00043	0.2624	mg/L	0.00085	0.33%
Ba 233.527†	2041.8	0.3428	mg/L	0.00182	0.6856	mg/L	0.00364	0.53%
Be 313.042†	1240.8	0.00164	mg/L	0.000024	0.00328	mg/L	0.000048	1.46%
Ca 317.933†	3473476.5	221.2	mg/L	1.34	442.4	mg/L	2.69	0.61%
Cd 228.802†	239.3	0.00867	mg/L	0.000362	0.01734	mg/L	0.000724	4.17%
Co 228.616†	3268.7	0.06293	mg/L	0.000623	0.1259	mg/L	0.00125	0.99%
Cr 267.716†	2473.6	0.2932	mg/L	0.00316	0.5864	mg/L	0.00632	1.08%
Cu 324.752†	128478.0	0.4336	mg/L	0.00520	0.8672	mg/L	0.01040	1.20%
Fe 273.955†	282552.4	156.8	mg/L	0.30	313.5	mg/L	0.60	0.19%
K 766.490†	34487.5	13.87	mg/L	0.015	27.73	mg/L	0.030	0.11%
Mg 279.077†	97290.6	71.80	mg/L	0.084	143.6	mg/L	0.17	0.12%
Mn 257.610†	87658.7	1.747	mg/L	0.0016	3.494	mg/L	0.0031	0.09%
Mo 202.031†	344.4	0.01164	mg/L	0.000262	0.02327	mg/L	0.000525	2.25%
Na 589.592†	826668.6	62.55	mg/L	0.278	125.1	mg/L	0.56	0.44%
Na 330.237†	2213.2	64.29	mg/L	0.413	128.6	mg/L	0.83	0.64%
Ni 231.604†	1912.0	0.3715	mg/L	0.00413	0.7430	mg/L	0.00825	1.11%
Pb 220.353†	2044.9	0.2251	mg/L	0.00246	0.4502	mg/L	0.00492	1.09%
Sb 206.836†	28.1	0.00828	mg/L	0.000598	0.01656	mg/L	0.001196	7.22%
Se 196.026†	15.0	-0.00386	mg/L	0.001338	-0.00772	mg/L	0.002675	34.63%
Si 288.158†	9734.7	4.398	mg/L	0.0211	8.795	mg/L	0.0422	0.48%
Sn 189.927†	55.0	0.03056	mg/L	0.000724	0.06112	mg/L	0.001447	2.37%
Sr 421.552†	1985607.9	1.948	mg/L	0.0126	3.896	mg/L	0.0253	0.65%
Ti 334.903†	133020.3	5.045	mg/L	0.0029	10.09	mg/L	0.006	0.06%
Tl 190.801†	-17.7	0.01239	mg/L	0.002521	0.02479	mg/L	0.005042	20.34%
V 292.402†	43886.5	0.3018	mg/L	0.00408	0.6037	mg/L	0.00817	1.35%
Zn 206.200†	3137.1	0.6719	mg/L	0.00395	1.344	mg/L	0.0079	0.59%

Sequence No.: 29
Sample ID: WC43 REF1 SWC

Autosampler Location: 319
Date Collected: 2/6/2013 10:44:14 AM
Data Type: Original

Dilution: 2.000000X

Nebulizer Parameters: WC43 REF1 SWC

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: WC43 REF1 SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	3146859.8	103.8	%	0.53				0.51%
ScR 361.383	417436.8	104.8	%	0.42				0.40%
Ag 328.068†	254802.9	1.123	mg/L	0.0063	2.247	mg/L	0.0126	0.56%
Al 308.215†	166550.9	98.36	mg/L	0.506	196.7	mg/L	1.01	0.51%
As 188.979†	2541.5	1.364	mg/L	0.0085	2.729	mg/L	0.0170	0.62%
B 249.677†	9741.4	1.120	mg/L	0.0108	2.241	mg/L	0.0215	0.96%
Ba 233.527†	18902.4	3.364	mg/L	0.0691	6.729	mg/L	0.1383	2.05%
Be 313.042†	630262.3	0.8957	mg/L	0.00695	1.791	mg/L	0.0139	0.78%
Ca 317.933†	638243.1	40.65	mg/L	0.221	81.29	mg/L	0.442	0.54%
Cd 228.802†	22056.6	0.7217	mg/L	0.00374	1.443	mg/L	0.0075	0.52%
Co 228.616†	34010.8	0.7433	mg/L	0.00277	1.487	mg/L	0.0055	0.37%
Cr 267.716†	6325.3	0.7632	mg/L	0.00431	1.526	mg/L	0.0086	0.56%
Cu 324.752†	215466.4	0.7235	mg/L	0.00111	1.447	mg/L	0.0022	0.15%
Fe 273.955†	280948.5	155.9	mg/L	0.50	311.7	mg/L	1.00	0.32%
K 766.490†	92106.0	37.03	mg/L	0.058	74.07	mg/L	0.116	0.16%
Mg 279.077†	38807.4	28.60	mg/L	0.206	57.19	mg/L	0.412	0.72%
Mn 257.610†	227140.9	4.529	mg/L	0.0138	9.059	mg/L	0.0275	0.30%
Mo 202.031†	11044.0	0.4567	mg/L	0.00258	0.9135	mg/L	0.00515	0.56%
Na 589.592†	76442.1	5.784	mg/L	0.0199	11.57	mg/L	0.040	0.34%
Na 330.237†	185.8	5.452	mg/L	0.1493	10.90	mg/L	0.299	2.74%
Ni 231.604†	2904.4	0.5639	mg/L	0.00317	1.128	mg/L	0.0063	0.56%
Pb 220.353†	12994.5	1.329	mg/L	0.0072	2.658	mg/L	0.0144	0.54%
Sb 206.836†	1792.3	0.4680	mg/L	0.00380	0.9361	mg/L	0.00760	0.81%
Se 196.026†	3151.4	1.653	mg/L	0.0111	3.305	mg/L	0.0221	0.67%
Si 288.158†	6531.4	2.937	mg/L	0.0227	5.873	mg/L	0.0454	0.77%
Sn 189.927†	8189.5	1.654	mg/L	0.0105	3.309	mg/L	0.0210	0.63%
Sr 421.552†	583356.9	0.5723	mg/L	0.00165	1.145	mg/L	0.0033	0.29%
Ti 334.903†	66631.2	2.530	mg/L	0.0110	5.061	mg/L	0.0219	0.43%
Tl 190.801†	3367.3	1.297	mg/L	0.0066	2.595	mg/L	0.0133	0.51%
V 292.402†	125309.6	0.8831	mg/L	0.00391	1.766	mg/L	0.0078	0.44%
Zn 206.200†	8635.0	1.848	mg/L	0.0134	3.695	mg/L	0.0269	0.73%

Sequence No.: 30
Sample ID: CV 3
Dilution: 1.000000X

Autosampler Location: 7
Date Collected: 2/6/2013 10:47:31 AM
Data Type: Original

Nebulizer Parameters: CV

Analyte	Back Pressure	Flow
All	218.0 kPa	0.75 L/min

Mean Data: CV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	3099877.7	102.2	%	0.51				0.50%
ScR 361.383	402525.0	101.0	%	0.21				0.21%
Ag 328.068†	234016.4	1.032	mg/L	0.0013	1.032	mg/L	0.0013	0.13%
Al 308.215†	3413.6	1.982	mg/L	0.0199	1.982	mg/L	0.0199	1.00%
As 188.979†	3902.0	1.999	mg/L	0.0149	1.999	mg/L	0.0149	0.74%
B 249.677†	8640.6	0.9937	mg/L	0.00925	0.9937	mg/L	0.00925	0.93%
Ba 233.527†	5689.9	1.019	mg/L	0.0094	1.019	mg/L	0.0094	0.93%
Be 313.042†	679630.8	0.9658	mg/L	0.00595	0.9658	mg/L	0.00595	0.62%
Ca 317.933†	32131.3	2.046	mg/L	0.0109	2.046	mg/L	0.0109	0.53%
Cd 228.802†	31195.9	1.020	mg/L	0.0025	1.020	mg/L	0.0025	0.24%
Co 228.616†	45289.6	0.9944	mg/L	0.00329	0.9944	mg/L	0.00329	0.33%
Cr 267.716†	8415.5	1.014	mg/L	0.0071	1.014	mg/L	0.0071	0.70%
Cu 324.752†	304704.9	1.013	mg/L	0.0030	1.013	mg/L	0.0030	0.29%
Fe 273.955†	3645.7	2.017	mg/L	0.0134	2.017	mg/L	0.0134	0.67%
K 766.490†	49467.3	19.89	mg/L	0.103	19.89	mg/L	0.103	0.52%
Mg 279.077†	2696.0	1.999	mg/L	0.0127	1.999	mg/L	0.0127	0.64%
Mn 257.610†	50453.9	1.007	mg/L	0.0093	1.007	mg/L	0.0093	0.92%
Mo 202.031†	23755.6	0.9835	mg/L	0.00675	0.9835	mg/L	0.00675	0.69%
Na 589.592†	668865.0	50.61	mg/L	0.259	50.61	mg/L	0.259	0.51%
Na 330.237†	1799.0	51.23	mg/L	0.625	51.23	mg/L	0.625	1.22%
Ni 231.604†	5216.8	1.014	mg/L	0.0141	1.014	mg/L	0.0141	1.39%
Pb 220.353†	20301.5	2.048	mg/L	0.0147	2.048	mg/L	0.0147	0.72%
Sb 206.836†	7891.0	2.027	mg/L	0.0105	2.027	mg/L	0.0105	0.52%
Se 196.026†	3717.3	1.962	mg/L	0.0102	1.962	mg/L	0.0102	0.52%
Si 288.158†	4408.4	1.983	mg/L	0.0145	1.983	mg/L	0.0145	0.73%
Sn 189.927†	4849.4	0.9786	mg/L	0.00642	0.9786	mg/L	0.00642	0.66%
Sr 421.552†	998122.5	0.9791	mg/L	0.00344	0.9791	mg/L	0.00344	0.35%
Ti 334.903†	25941.8	0.9850	mg/L	0.00158	0.9850	mg/L	0.00158	0.16%
Tl 190.801†	5190.4	1.971	mg/L	0.0139	1.971	mg/L	0.0139	0.70%
V 292.402†	142237.7	1.013	mg/L	0.0021	1.013	mg/L	0.0021	0.21%
Zn 206.200†	4924.1	1.054	mg/L	0.0054	1.054	mg/L	0.0054	0.52%

Sequence No.: 31
Sample ID: CB 3
Dilution: 1.000000X

Autosampler Location: 1
Date Collected: 2/6/2013 10:50:50 AM
Data Type: Original

Nebulizer Parameters: CB

Analyte	Back Pressure	Flow
All	218.0 kPa	0.75 L/min

Mean Data: CB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	3176328.1	104.7	%	0.46				0.44%
ScR 361.383	417016.1	104.7	%	0.73				0.70%
Ag 328.068†	40.4	0.00018	mg/L	0.000079	0.00018	mg/L	0.000079	44.64%
Al 308.215†	-3.2	-0.00191	mg/L	0.005056	-0.00191	mg/L	0.005056	265.42%
As 188.979†	1.9	0.00097	mg/L	0.000789	0.00097	mg/L	0.000789	81.57%
B 249.677†	-3.1	-0.00035	mg/L	0.000227	-0.00035	mg/L	0.000227	64.51%
Ba 233.527†	-4.3	-0.00076	mg/L	0.000336	-0.00076	mg/L	0.000336	43.92%
Be 313.042†	15.0	0.00002	mg/L	0.000039	0.00002	mg/L	0.000039	182.59%
Ca 317.933†	55.5	0.00354	mg/L	0.001359	0.00354	mg/L	0.001359	38.45%
Cd 228.802†	-2.2	-0.00008	mg/L	0.000089	-0.00008	mg/L	0.000089	115.01%
Co 228.616†	6.9	0.00015	mg/L	0.000029	0.00015	mg/L	0.000029	19.05%
Cr 267.716†	7.0	0.00084	mg/L	0.000537	0.00084	mg/L	0.000537	63.57%
Cu 324.752†	4.9	0.00002	mg/L	0.000096	0.00002	mg/L	0.000096	599.98%
Fe 273.955†	3.9	0.00218	mg/L	0.001800	0.00218	mg/L	0.001800	82.62%
K 766.490†	-8.1	-0.00326	mg/L	0.005632	-0.00326	mg/L	0.005632	172.98%
Mg 279.077†	2.0	0.00151	mg/L	0.005503	0.00151	mg/L	0.005503	365.32%
Mn 257.610†	1.0	0.00002	mg/L	0.000059	0.00002	mg/L	0.000059	290.99%
Mo 202.031†	32.6	0.00135	mg/L	0.000190	0.00135	mg/L	0.000190	14.11%
Na 589.592†	-313.4	-0.02371	mg/L	0.001093	-0.02371	mg/L	0.001093	4.61%
Na 330.237†	-0.6	-0.01761	mg/L	0.243197	-0.01761	mg/L	0.243197	>999.9%
Ni 231.604†	0.1	0.00003	mg/L	0.000277	0.00003	mg/L	0.000277	>999.9%
Pb 220.353†	4.9	0.00049	mg/L	0.000131	0.00049	mg/L	0.000131	26.59%
Sb 206.836†	12.7	0.00325	mg/L	0.001192	0.00325	mg/L	0.001192	36.63%
Se 196.026†	6.4	0.00340	mg/L	0.001658	0.00340	mg/L	0.001658	48.76%
Si 288.158†	4.0	0.00178	mg/L	0.002659	0.00178	mg/L	0.002659	149.22%
Sn 189.927†	4.5	0.00090	mg/L	0.000435	0.00090	mg/L	0.000435	48.39%
Sr 421.552†	48.7	0.00005	mg/L	0.000040	0.00005	mg/L	0.000040	84.03%
Ti 334.903†	15.3	0.00058	mg/L	0.000155	0.00058	mg/L	0.000155	26.77%
Tl 190.801†	2.7	0.00104	mg/L	0.001684	0.00104	mg/L	0.001684	162.29%
V 292.402†	-13.8	-0.00009	mg/L	0.000056	-0.00009	mg/L	0.000056	59.32%
Zn 206.200†	-1.6	-0.00035	mg/L	0.000346	-0.00035	mg/L	0.000346	98.61%

Sequence No.: 32
Sample ID: WC32 E SWC

Dilution: 5.000000X

Autosampler Location: 343
Date Collected: 2/6/2013 10:55:06 AM
Data Type: Original

Nebulizer Parameters: WC32 E SWC

Analyte	Back Pressure	Flow
All	217.0 kPa	0.75 L/min

Mean Data: WC32 E SWC

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	3068800.0	101.2	%	0.25				0.25%
ScR 361.383	412441.6	103.5	%	0.51				0.49%
Ag 328.068†	-373.1	0.00007	mg/L	0.000273	0.00035	mg/L	0.001365	386.89%
Al 308.215†	67388.8	39.80	mg/L	0.559	199.0	mg/L	2.80	1.40%
As 188.979†	162.7	0.1349	mg/L	0.00236	0.6745	mg/L	0.01181	1.75%
B 249.677†	319.8	0.03673	mg/L	0.000669	0.1836	mg/L	0.00334	1.82%
Ba 233.527†	1711.6	0.2797	mg/L	0.00328	1.398	mg/L	0.0164	1.17%
Be 313.042†	537.4	0.00070	mg/L	0.000025	0.00351	mg/L	0.000127	3.62%
Ca 317.933†	4041135.9	257.4	mg/L	2.07	1287	mg/L	10.35	0.80%
Cd 228.802†	92.9	0.00265	mg/L	0.000103	0.01326	mg/L	0.000513	3.87%
Co 228.616†	1824.4	0.03621	mg/L	0.000788	0.1811	mg/L	0.00394	2.18%
Cr 267.716†	899.5	0.1082	mg/L	0.00180	0.5412	mg/L	0.00899	1.66%
Cu 324.752†	331738.4	1.112	mg/L	0.0140	5.558	mg/L	0.0701	1.26%
Fe 273.955†	331697.3	184.0	mg/L	1.26	920.1	mg/L	6.28	0.68%
K 766.490†	8498.2	3.417	mg/L	0.0185	17.08	mg/L	0.092	0.54%
Mg 279.077†	35244.7	25.92	mg/L	0.355	129.6	mg/L	1.78	1.37%
Mn 257.610†	79220.4	1.579	mg/L	0.0139	7.894	mg/L	0.0695	0.88%
Mo 202.031†	344.8	0.01124	mg/L	0.000232	0.05618	mg/L	0.001162	2.07%
Na 589.592†	85386.6	6.461	mg/L	0.0709	32.30	mg/L	0.355	1.10%
Na 330.237†	250.1	7.113	mg/L	0.1878	35.56	mg/L	0.939	2.64%
Ni 231.604†	339.1	0.06590	mg/L	0.001492	0.3295	mg/L	0.00746	2.26%
Pb 220.353†	1663.0	0.1674	mg/L	0.00401	0.8372	mg/L	0.02004	2.39%
Sb 206.836†	61.0	0.01646	mg/L	0.000411	0.08229	mg/L	0.002055	2.50%
Se 196.026†	-1.5	-0.00550	mg/L	0.003675	-0.02752	mg/L	0.018373	66.76%
Si 288.158†	698.2	0.3178	mg/L	0.00162	1.589	mg/L	0.0081	0.51%
Sn 189.927†	-32.7	0.01537	mg/L	0.001057	0.07687	mg/L	0.005283	6.87%
Sr 421.552†	1972587.0	1.935	mg/L	0.0188	9.675	mg/L	0.0940	0.97%
Ti 334.903†	58061.5	2.192	mg/L	0.0241	10.96	mg/L	0.121	1.10%
Tl 190.801†	-23.7	0.01452	mg/L	0.001715	0.07259	mg/L	0.008577	11.82%
V 292.402†	23318.2	0.1555	mg/L	0.00323	0.7774	mg/L	0.01613	2.07%
Zn 206.200†	9930.7	2.124	mg/L	0.0271	10.62	mg/L	0.135	1.27%

Sequence No.: 33
Sample ID: WC32 F SWC
Autosampler Location: 344
Date Collected: 2/6/2013 10:59:25 AM
Data Type: Original

Dilution: 5.000000X

Nebulizer Parameters: WC32 F SWC

Analyte	Back Pressure	Flow
All	218.0 kPa	0.75 L/min

Mean Data: WC32 F SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	3060743.4	100.9	%	0.37				0.37%
ScR 361.383	413878.9	103.9	%	0.32				0.30%
Ag 328.068†	-435.6	-0.00004	mg/L	0.000066	-0.00018	mg/L	0.000328	186.54%
Al 308.215†	69944.0	41.31	mg/L	0.119	206.5	mg/L	0.60	0.29%
As 188.979†	275.9	0.1963	mg/L	0.00391	0.9814	mg/L	0.01953	1.99%
B 249.677†	128.2	0.01466	mg/L	0.000794	0.07332	mg/L	0.003971	5.42%
Ba 233.527†	1591.8	0.2637	mg/L	0.00059	1.319	mg/L	0.0029	0.22%
Be 313.042†	505.1	0.00065	mg/L	0.000013	0.00326	mg/L	0.000066	2.01%
Ca 317.933†	4446231.2	283.2	mg/L	1.56	1416	mg/L	7.78	0.55%
Cd 228.802†	128.5	0.00356	mg/L	0.000037	0.01781	mg/L	0.000187	1.05%
Co 228.616†	1672.1	0.03252	mg/L	0.000125	0.1626	mg/L	0.00063	0.39%
Cr 267.716†	1929.2	0.2307	mg/L	0.00059	1.154	mg/L	0.0029	0.26%
Cu 324.752†	351814.7	1.177	mg/L	0.0026	5.883	mg/L	0.0129	0.22%
Fe 273.955†	263717.6	146.3	mg/L	0.42	731.5	mg/L	2.11	0.29%
K 766.490†	9550.6	3.840	mg/L	0.0077	19.20	mg/L	0.038	0.20%
Mg 279.077†	36119.9	26.59	mg/L	0.107	132.9	mg/L	0.54	0.40%
Mn 257.610†	104144.5	2.076	mg/L	0.0068	10.38	mg/L	0.034	0.33%
Mo 202.031†	577.0	0.02054	mg/L	0.000075	0.1027	mg/L	0.00038	0.37%
Na 589.592†	76715.2	5.804	mg/L	0.0040	29.02	mg/L	0.020	0.07%
Na 330.237†	237.1	6.718	mg/L	0.0849	33.59	mg/L	0.424	1.26%
Ni 231.604†	620.8	0.1206	mg/L	0.00048	0.6031	mg/L	0.00241	0.40%
Pb 220.353†	2297.2	0.2340	mg/L	0.00172	1.170	mg/L	0.0086	0.73%
Sb 206.836†	68.2	0.01682	mg/L	0.002038	0.08410	mg/L	0.010192	12.12%
Se 196.026†	-7.5	-0.00881	mg/L	0.005107	-0.04405	mg/L	0.025533	57.96%
Si 288.158†	834.4	0.3793	mg/L	0.00254	1.896	mg/L	0.0127	0.67%
Sn 189.927†	-18.1	0.02052	mg/L	0.001293	0.1026	mg/L	0.00647	6.30%
Sr 421.552†	1658029.8	1.626	mg/L	0.0026	8.132	mg/L	0.0129	0.16%
Ti 334.903†	63255.7	2.388	mg/L	0.0047	11.94	mg/L	0.023	0.20%
Tl 190.801†	-24.0	0.00934	mg/L	0.000810	0.04672	mg/L	0.004049	8.67%
V 292.402†	24573.6	0.1668	mg/L	0.00095	0.8339	mg/L	0.00476	0.57%
Zn 206.200†	11178.0	2.391	mg/L	0.0152	11.96	mg/L	0.076	0.63%

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Sequence No.: 34
Sample ID: WC32 G SWC

Dilution: 5.000000X

Autosampler Location: 345
Date Collected: 2/6/2013 11:03:42 AM
Data Type: Original

Nebulizer Parameters: WC32 G SWC

Analyte	Back Pressure	Flow
All	218.0 kPa	0.75 L/min

Mean Data: WC32 G SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	3055160.2	100.7	%	0.24				0.23%
ScR 361.383	409436.3	102.8	%	0.41				0.40%
Ag 328.068†	-472.9	0.00002	mg/L	0.000138	0.00010	mg/L	0.000689	714.39%
Al 308.215†	36029.1	21.28	mg/L	0.120	106.4	mg/L	0.60	0.56%
As 188.979†	45.6	0.03175	mg/L	0.000837	0.1588	mg/L	0.00419	2.64%
B 249.677†	319.9	0.03679	mg/L	0.000943	0.1840	mg/L	0.00472	2.56%
Ba 233.527†	669.5	0.1137	mg/L	0.00148	0.5686	mg/L	0.00742	1.31%
Be 313.042†	311.2	0.00041	mg/L	0.000014	0.00207	mg/L	0.000072	3.47%
Ca 317.933†	5058882.2	322.2	mg/L	4.70	1611	mg/L	23.50	1.46%
Cd 228.802†	75.1	0.00243	mg/L	0.000113	0.01213	mg/L	0.000566	4.67%
Co 228.616†	782.1	0.01524	mg/L	0.000107	0.07620	mg/L	0.000535	0.70%
Cr 267.716†	643.6	0.07303	mg/L	0.000702	0.3651	mg/L	0.00351	0.96%
Cu 324.752†	82179.1	0.2751	mg/L	0.00337	1.375	mg/L	0.0169	1.23%
Fe 273.955†	76454.6	42.42	mg/L	0.137	212.1	mg/L	0.69	0.32%
K 766.490†	9123.8	3.669	mg/L	0.0287	18.34	mg/L	0.143	0.78%
Mg 279.077†	25296.3	18.64	mg/L	0.134	93.20	mg/L	0.670	0.72%
Mn 257.610†	22171.3	0.4408	mg/L	0.00321	2.204	mg/L	0.0160	0.73%
Mo 202.031†	211.4	0.00495	mg/L	0.000283	0.02475	mg/L	0.001416	5.72%
Na 589.592†	356024.6	26.94	mg/L	0.081	134.7	mg/L	0.41	0.30%
Na 330.237†	994.0	28.55	mg/L	0.209	142.7	mg/L	1.05	0.73%
Ni 231.604†	459.3	0.08923	mg/L	0.001380	0.4462	mg/L	0.00690	1.55%
Pb 220.353†	463.7	0.05005	mg/L	0.000726	0.2502	mg/L	0.00363	1.45%
Sb 206.836†	4.6	0.00138	mg/L	0.001543	0.00692	mg/L	0.007714	111.46%
Se 196.026†	-2.3	-0.00372	mg/L	0.002625	-0.01859	mg/L	0.013126	70.60%
Si 288.158†	4060.8	1.833	mg/L	0.0273	9.165	mg/L	0.1367	1.49%
Sn 189.927†	90.8	0.04547	mg/L	0.000365	0.2274	mg/L	0.00183	0.80%
Sr 421.552†	2402439.6	2.357	mg/L	0.0432	11.78	mg/L	0.216	1.83%
Ti 334.903†	29051.7	1.085	mg/L	0.0059	5.427	mg/L	0.0295	0.54%
Tl 190.801†	22.0	0.01362	mg/L	0.000653	0.06811	mg/L	0.003266	4.79%
V 292.402†	10157.0	0.06963	mg/L	0.000865	0.3482	mg/L	0.00433	1.24%
Zn 206.200†	1378.5	0.2952	mg/L	0.00276	1.476	mg/L	0.0138	0.93%

Sequence No.: 35
Sample ID: CV 4
Dilution: 1.000000X

Autosampler Location: 7
Date Collected: 2/6/2013 11:08:01 AM
Data Type: Original

Nebulizer Parameters: CV

Analyte	Back Pressure	Flow
All	217.0 kPa	0.75 L/min

Mean Data: CV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	3134742.5	103.4	%	0.19				0.18%
ScR 361.383	412710.3	103.6	%	0.31				0.30%
Ag 328.068†	231780.4	1.022	mg/L	0.0021	1.022	mg/L	0.0021	0.20%
Al 308.215†	3331.4	1.934	mg/L	0.0092	1.934	mg/L	0.0092	0.48%
As 188.979†	3862.5	1.979	mg/L	0.0124	1.979	mg/L	0.0124	0.63%
B 249.677†	8456.8	0.9726	mg/L	0.00323	0.9726	mg/L	0.00323	0.33%
Ba 233.527†	5580.0	0.9996	mg/L	0.00817	0.9996	mg/L	0.00817	0.82%
Be 313.042†	677546.5	0.9629	mg/L	0.00182	0.9629	mg/L	0.00182	0.19%
Ca 317.933†	31535.6	2.008	mg/L	0.0046	2.008	mg/L	0.0046	0.23%
Cd 228.802†	30793.7	1.007	mg/L	0.0018	1.007	mg/L	0.0018	0.18%
Co 228.616†	44813.2	0.9840	mg/L	0.00174	0.9840	mg/L	0.00174	0.18%
Cr 267.716†	8218.8	0.9898	mg/L	0.00356	0.9898	mg/L	0.00356	0.36%
Cu 324.752†	301124.6	1.001	mg/L	0.0015	1.001	mg/L	0.0015	0.15%
Fe 273.955†	3571.3	1.976	mg/L	0.0172	1.976	mg/L	0.0172	0.87%
K 766.490†	48697.3	19.58	mg/L	0.090	19.58	mg/L	0.090	0.46%
Mg 279.077†	2641.2	1.958	mg/L	0.0102	1.958	mg/L	0.0102	0.52%
Mn 257.610†	49701.3	0.9915	mg/L	0.00712	0.9915	mg/L	0.00712	0.72%
Mo 202.031†	23443.3	0.9705	mg/L	0.00427	0.9705	mg/L	0.00427	0.44%
Na 589.592†	658616.7	49.83	mg/L	0.106	49.83	mg/L	0.106	0.21%
Na 330.237†	1780.8	50.72	mg/L	0.522	50.72	mg/L	0.522	1.03%
Ni 231.604†	5087.1	0.9884	mg/L	0.00209	0.9884	mg/L	0.00209	0.21%
Pb 220.353†	20063.6	2.024	mg/L	0.0071	2.024	mg/L	0.0071	0.35%
Sb 206.836†	7788.8	2.001	mg/L	0.0019	2.001	mg/L	0.0019	0.09%
Se 196.026†	3664.1	1.934	mg/L	0.0076	1.934	mg/L	0.0076	0.39%
Si 288.158†	4332.6	1.949	mg/L	0.0148	1.949	mg/L	0.0148	0.76%
Sn 189.927†	4770.7	0.9627	mg/L	0.00177	0.9627	mg/L	0.00177	0.18%
Sr 421.552†	985344.2	0.9666	mg/L	0.00243	0.9666	mg/L	0.00243	0.25%
Ti 334.903†	25624.2	0.9730	mg/L	0.00272	0.9730	mg/L	0.00272	0.28%
Tl 190.801†	5132.8	1.949	mg/L	0.0073	1.949	mg/L	0.0073	0.37%
V 292.402†	140841.5	1.003	mg/L	0.0024	1.003	mg/L	0.0024	0.24%
Zn 206.200†	4840.1	1.036	mg/L	0.0052	1.036	mg/L	0.0052	0.50%

Sequence No.: 36
Sample ID: CB 4
Dilution: 1.000000X

Autosampler Location: 1
Date Collected: 2/6/2013 11:11:19 AM
Data Type: Original

Nebulizer Parameters: CB

Analyte	Back Pressure	Flow
All	218.0 kPa	0.75 L/min

Mean Data: CB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	3180869.8	104.9	%	0.65				0.62%
ScR 361.383	416321.3	104.5	%	0.19				0.18%
Ag 328.068†	-14.9	-0.00007	mg/L	0.000106	-0.00007	mg/L	0.000106	161.53%
Al 308.215†	7.6	0.00444	mg/L	0.003612	0.00444	mg/L	0.003612	81.27%
As 188.979†	2.7	0.00141	mg/L	0.001417	0.00141	mg/L	0.001417	100.67%
B 249.677†	-12.0	-0.00138	mg/L	0.000408	-0.00138	mg/L	0.000408	29.55%
Ba 233.527†	-2.8	-0.00050	mg/L	0.000847	-0.00050	mg/L	0.000847	167.78%
Be 313.042†	8.0	0.00001	mg/L	0.000014	0.00001	mg/L	0.000014	121.97%
Ca 317.933†	55.0	0.00350	mg/L	0.001014	0.00350	mg/L	0.001014	28.95%
Cd 228.802†	-0.5	-0.00002	mg/L	0.000058	-0.00002	mg/L	0.000058	236.92%
Co 228.616†	8.1	0.00018	mg/L	0.000208	0.00018	mg/L	0.000208	118.02%
Cr 267.716†	3.5	0.00042	mg/L	0.000223	0.00042	mg/L	0.000223	53.09%
Cu 324.752†	-90.3	-0.00030	mg/L	0.000114	-0.00030	mg/L	0.000114	37.90%
Fe 273.955†	1.6	0.00086	mg/L	0.001282	0.00086	mg/L	0.001282	149.02%
K 766.490†	-28.0	-0.01125	mg/L	0.001462	-0.01125	mg/L	0.001462	12.99%
Mg 279.077†	3.0	0.00224	mg/L	0.002239	0.00224	mg/L	0.002239	100.01%
Mn 257.610†	0.6	0.00001	mg/L	0.000141	0.00001	mg/L	0.000141	>999.9%
Mo 202.031†	28.2	0.00117	mg/L	0.000169	0.00117	mg/L	0.000169	14.52%
Na 589.592†	-282.9	-0.02141	mg/L	0.002608	-0.02141	mg/L	0.002608	12.18%
Na 330.237†	7.2	0.2059	mg/L	0.22190	0.2059	mg/L	0.22190	107.75%
Ni 231.604†	1.2	0.00024	mg/L	0.000486	0.00024	mg/L	0.000486	203.66%
Pb 220.353†	8.3	0.00084	mg/L	0.000650	0.00084	mg/L	0.000650	77.39%
Sb 206.836†	7.5	0.00193	mg/L	0.001057	0.00193	mg/L	0.001057	54.72%
Se 196.026†	4.7	0.00248	mg/L	0.001627	0.00248	mg/L	0.001627	65.54%
Si 288.158†	2.3	0.00105	mg/L	0.003120	0.00105	mg/L	0.003120	298.34%
Sn 189.927†	6.4	0.00130	mg/L	0.000141	0.00130	mg/L	0.000141	10.86%
Sr 421.552†	42.7	0.00004	mg/L	0.000028	0.00004	mg/L	0.000028	65.84%
Ti 334.903†	20.0	0.00076	mg/L	0.000875	0.00076	mg/L	0.000875	115.45%
Tl 190.801†	1.7	0.00065	mg/L	0.000712	0.00065	mg/L	0.000712	108.86%
V 292.402†	3.5	0.00003	mg/L	0.000069	0.00003	mg/L	0.000069	254.94%
Zn 206.200†	0.4	0.00008	mg/L	0.000441	0.00008	mg/L	0.000441	584.98%

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Sequence No.: 37
Sample ID: CRI

Dilution: 1.000000X

Autosampler Location: 301
Date Collected: 2/6/2013 11:15:35 AM
Data Type: Original

Nebulizer Parameters: CRI

Analyte	Back Pressure	Flow
All	218.0 kPa	0.75 L/min

Mean Data: CRI

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	3154101.1	104.0	%	0.17				0.16%
ScR 361.383	417685.4	104.8	%	0.50				0.48%
Ag 328.068†	719.8	0.00317	mg/L	0.000082	0.00317	mg/L	0.000082	2.60%
Al 308.215†	78.7	0.04635	mg/L	0.002919	0.04635	mg/L	0.002919	6.30%
As 188.979†	95.2	0.04818	mg/L	0.001646	0.04818	mg/L	0.001646	3.42%
B 249.677†	159.3	0.01833	mg/L	0.000727	0.01833	mg/L	0.000727	3.97%
Ba 233.527†	13.8	0.00246	mg/L	0.000523	0.00246	mg/L	0.000523	21.25%
Be 313.042†	667.0	0.00095	mg/L	0.000032	0.00095	mg/L	0.000032	3.38%
Ca 317.933†	745.9	0.04750	mg/L	0.000363	0.04750	mg/L	0.000363	0.76%
Cd 228.802†	66.6	0.00194	mg/L	0.000045	0.00194	mg/L	0.000045	2.30%
Co 228.616†	159.4	0.00350	mg/L	0.000100	0.00350	mg/L	0.000100	2.86%
Cr 267.716†	47.5	0.00571	mg/L	0.000354	0.00571	mg/L	0.000354	6.19%
Cu 324.752†	536.2	0.00178	mg/L	0.000180	0.00178	mg/L	0.000180	10.10%
Fe 273.955†	87.1	0.04830	mg/L	0.000659	0.04830	mg/L	0.000659	1.37%
K 766.490†	1148.8	0.4619	mg/L	0.01630	0.4619	mg/L	0.01630	3.53%
Mg 279.077†	69.1	0.05108	mg/L	0.000437	0.05108	mg/L	0.000437	0.86%
Mn 257.610†	48.6	0.00097	mg/L	0.000063	0.00097	mg/L	0.000063	6.47%
Mo 202.031†	117.8	0.00488	mg/L	0.000371	0.00488	mg/L	0.000371	7.62%
Na 589.592†	5941.7	0.4496	mg/L	0.00660	0.4496	mg/L	0.00660	1.47%
Na 330.237†	20.2	0.5728	mg/L	0.07675	0.5728	mg/L	0.07675	13.40%
Ni 231.604†	54.6	0.01060	mg/L	0.000724	0.01060	mg/L	0.000724	6.83%
Pb 220.353†	207.8	0.02097	mg/L	0.000737	0.02097	mg/L	0.000737	3.51%
Sb 206.836†	191.6	0.04927	mg/L	0.000901	0.04927	mg/L	0.000901	1.83%
Se 196.026†	90.1	0.04758	mg/L	0.001406	0.04758	mg/L	0.001406	2.96%
Si 288.158†	129.6	0.05836	mg/L	0.000829	0.05836	mg/L	0.000829	1.42%
Sn 189.927†	51.5	0.01041	mg/L	0.000383	0.01041	mg/L	0.000383	3.68%
Sr 421.552†	1031.0	0.00101	mg/L	0.000034	0.00101	mg/L	0.000034	3.33%
Ti 334.903†	124.8	0.00474	mg/L	0.000428	0.00474	mg/L	0.000428	9.04%
Tl 190.801†	127.1	0.04843	mg/L	0.001555	0.04843	mg/L	0.001555	3.21%
V 292.402†	401.9	0.00287	mg/L	0.000225	0.00287	mg/L	0.000225	7.83%
Zn 206.200†	44.8	0.00959	mg/L	0.000125	0.00959	mg/L	0.000125	1.31%

Sequence No.: 38
Sample ID: ICSA

Autosampler Location: 302
Date Collected: 2/6/2013 11:19:52 AM
Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: ICSA

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	3056668.2	100.8	%	0.38				0.38%
ScR 361.383	405961.3	101.9	%	0.36				0.35%
Ag 328.068†	-253.1	-0.00048	mg/L	0.000064	-0.00048	mg/L	0.000064	13.31%
Al 308.215†	330558.0	195.3	mg/L	0.11	195.3	mg/L	0.11	0.06%
As 188.979†	48.1	0.01561	mg/L	0.002543	0.01561	mg/L	0.002543	16.30%
B 249.677†	-82.4	-0.00948	mg/L	0.000271	-0.00948	mg/L	0.000271	2.86%
Ba 233.527†	161.6	0.00094	mg/L	0.000254	0.00094	mg/L	0.000254	27.03%
Be 313.042†	46.0	0.00006	mg/L	0.000015	0.00006	mg/L	0.000015	24.40%
Ca 317.933†	1536655.0	97.86	mg/L	0.124	97.86	mg/L	0.124	0.13%
Cd 228.802†	56.4	0.00173	mg/L	0.000025	0.00173	mg/L	0.000025	1.44%
Co 228.616†	78.3	0.00171	mg/L	0.000113	0.00171	mg/L	0.000113	6.63%
Cr 267.716†	16.6	-0.00283	mg/L	0.000702	-0.00283	mg/L	0.000702	24.75%
Cu 324.752†	-2386.4	0.00090	mg/L	0.000132	0.00090	mg/L	0.000132	14.69%
Fe 273.955†	343726.5	190.7	mg/L	0.54	190.7	mg/L	0.54	0.28%
K 766.490†	-7.2	-0.00288	mg/L	0.002791	-0.00288	mg/L	0.002791	97.06%
Mg 279.077†	137040.1	101.2	mg/L	1.26	101.2	mg/L	1.26	1.25%
Mn 257.610†	85.9	0.00036	mg/L	0.000113	0.00036	mg/L	0.000113	31.81%
Mo 202.031†	86.5	0.00243	mg/L	0.000347	0.00243	mg/L	0.000347	14.30%
Na 589.592†	-145.6	-0.01102	mg/L	0.002987	-0.01102	mg/L	0.002987	27.12%
Na 330.237†	6.0	0.1724	mg/L	0.18745	0.1724	mg/L	0.18745	108.75%
Ni 231.604†	-2.9	-0.00055	mg/L	0.000165	-0.00055	mg/L	0.000165	30.08%
Pb 220.353†	-448.5	-0.00258	mg/L	0.001089	-0.00258	mg/L	0.001089	42.26%
Sb 206.836†	35.3	0.00897	mg/L	0.001615	0.00897	mg/L	0.001615	18.00%
Se 196.026†	28.3	-0.00753	mg/L	0.003174	-0.00753	mg/L	0.003174	42.15%
Si 288.158†	-47.3	-0.00978	mg/L	0.003076	-0.00978	mg/L	0.003076	31.45%
Sn 189.927†	-90.0	-0.00993	mg/L	0.000567	-0.00993	mg/L	0.000567	5.71%
Sr 421.552†	4098.2	0.00402	mg/L Cont.	0.000053	0.00402	mg/L	0.000053	1.32%
Ti 334.903†	190.7	0.00143	mg/L	0.000914	0.00143	mg/L	0.000914	63.86%
Tl 190.801†	-55.1	0.00426	mg/L	0.001467	0.00426	mg/L	0.001467	34.43%
V 292.402†	1513.0	0.00116	mg/L	0.000308	0.00116	mg/L	0.000308	26.54%
Zn 206.200†	1.0	0.00021	mg/L	0.000821	0.00021	mg/L	0.000821	384.06%

Sequence No.: 39
Sample ID: ICSAB

Autosampler Location: 303
Date Collected: 2/6/2013 11:23:54 AM
Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: ICSAB

Analyte	Back Pressure	Flow
All	218.0 kPa	0.75 L/min

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	3068046.4	101.2	%	0.65				0.65%
ScR 361.383	405207.4	101.7	%	0.50				0.49%
Ag 328.068†	236685.5	1.044	mg/L	0.0076	1.044	mg/L	0.0076	0.73%
Al 308.215†	330075.5	195.0	mg/L	0.47	195.0	mg/L	0.47	0.24%
As 188.979†	1990.3	0.9952	mg/L	0.00606	0.9952	mg/L	0.00606	0.61%
B 249.677†	-68.2	-0.01006	mg/L	0.000359	-0.01006	mg/L	0.000359	3.57%
Ba 233.527†	5730.2	0.9988	mg/L	0.00487	0.9988	mg/L	0.00487	0.49%
Be 313.042†	687659.8	0.9772	mg/L	0.00850	0.9772	mg/L	0.00850	0.87%
Ca 317.933†	1521142.7	96.87	mg/L	0.179	96.87	mg/L	0.179	0.18%
Cd 228.802†	30985.7	1.019	mg/L	0.0054	1.019	mg/L	0.0054	0.53%
Co 228.616†	43023.3	0.9462	mg/L	0.00473	0.9462	mg/L	0.00473	0.50%
Cr 267.716†	8289.9	0.9942	mg/L	0.00931	0.9942	mg/L	0.00931	0.94%
Cu 324.752†	311301.0	1.044	mg/L	0.0063	1.044	mg/L	0.0063	0.61%
Fe 273.955†	343109.8	190.4	mg/L	0.28	190.4	mg/L	0.28	0.15%
K 766.490†	-56.3	-0.02264	mg/L	0.022305	-0.02264	mg/L	0.022305	98.54%
Mg 279.077†	130518.5	96.36	mg/L	0.114	96.36	mg/L	0.114	0.12%
Mn 257.610†	47271.6	0.9415	mg/L	0.00035	0.9415	mg/L	0.00035	0.04%
Mo 202.031†	88.8	0.00248	mg/L	0.000186	0.00248	mg/L	0.000186	7.50%
Na 589.592†	-181.5	-0.01373	mg/L	0.001828	-0.01373	mg/L	0.001828	13.31%
Na 330.237†	23.8	0.3956	mg/L	0.23317	0.3956	mg/L	0.23317	58.94%
Ni 231.604†	4968.0	0.9653	mg/L	0.00917	0.9653	mg/L	0.00917	0.95%
Pb 220.353†	9261.5	0.9771	mg/L	0.00097	0.9771	mg/L	0.00097	0.10%
Sb 206.836†	3871.8	0.9853	mg/L	0.00056	0.9853	mg/L	0.00056	0.06%
Se 196.026†	1871.1	0.9649	mg/L	0.00379	0.9649	mg/L	0.00379	0.39%
Si 288.158†	-48.3	-0.00742	mg/L	0.002256	-0.00742	mg/L	0.002256	30.40%
Sn 189.927†	-92.0	-0.00991	mg/L	0.000398	-0.00991	mg/L	0.000398	4.02%
Sr 421.552†	4015.8	0.00394	mg/L Cont.	0.000015	0.00394	mg/L	0.000015	0.39%
Ti 334.903†	195.6	0.00149	mg/L	0.000442	0.00149	mg/L	0.000442	29.73%
Tl 190.801†	2369.2	0.9190	mg/L	0.00481	0.9190	mg/L	0.00481	0.52%
V 292.402†	139603.0	0.9843	mg/L	0.00711	0.9843	mg/L	0.00711	0.72%
Zn 206.200†	4479.9	0.9585	mg/L	0.01105	0.9585	mg/L	0.01105	1.15%

Sequence No.: 40
Sample ID: CV 5
Dilution: 1.000000X

Autosampler Location: 7
Date Collected: 2/6/2013 11:27:57 AM
Data Type: Original

Nebulizer Parameters: CV

Analyte	Back Pressure	Flow
All	218.0 kPa	0.75 L/min

Mean Data: CV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	3121279.6	102.9	%	0.62				0.60%
ScR 361.383	410902.3	103.1	%	0.53				0.51%
Ag 328.068†	231620.0	1.021	mg/L	0.0068	1.021	mg/L	0.0068	0.67%
Al 308.215†	3297.2	1.914	mg/L	0.0052	1.914	mg/L	0.0052	0.27%
As 188.979†	3853.7	1.974	mg/L	0.0158	1.974	mg/L	0.0158	0.80%
B 249.677†	8384.6	0.9643	mg/L	0.00511	0.9643	mg/L	0.00511	0.53%
Ba 233.527†	5485.0	0.9825	mg/L	0.00176	0.9825	mg/L	0.00176	0.18%
Be 313.042†	674683.8	0.9588	mg/L	0.00119	0.9588	mg/L	0.00119	0.12%
Ca 317.933†	30989.6	1.974	mg/L	0.0202	1.974	mg/L	0.0202	1.02%
Cd 228.802†	30974.1	1.013	mg/L	0.0087	1.013	mg/L	0.0087	0.86%
Co 228.616†	44743.4	0.9825	mg/L	0.00783	0.9825	mg/L	0.00783	0.80%
Cr 267.716†	8156.4	0.9823	mg/L	0.00756	0.9823	mg/L	0.00756	0.77%
Cu 324.752†	302060.6	1.004	mg/L	0.0073	1.004	mg/L	0.0073	0.73%
Fe 273.955†	3551.4	1.965	mg/L	0.0245	1.965	mg/L	0.0245	1.25%
K 766.490†	48859.2	19.65	mg/L	0.062	19.65	mg/L	0.062	0.32%
Mg 279.077†	2628.2	1.949	mg/L	0.0100	1.949	mg/L	0.0100	0.51%
Mn 257.610†	49222.9	0.9820	mg/L	0.00936	0.9820	mg/L	0.00936	0.95%
Mo 202.031†	23404.9	0.9689	mg/L	0.00666	0.9689	mg/L	0.00666	0.69%
Na 589.592†	656119.3	49.64	mg/L	0.119	49.64	mg/L	0.119	0.24%
Na 330.237†	1751.1	49.87	mg/L	0.352	49.87	mg/L	0.352	0.71%
Ni 231.604†	5054.4	0.9820	mg/L	0.01181	0.9820	mg/L	0.01181	1.20%
Pb 220.353†	20001.5	2.018	mg/L	0.0165	2.018	mg/L	0.0165	0.82%
Sb 206.836†	7764.5	1.994	mg/L	0.0139	1.994	mg/L	0.0139	0.70%
Se 196.026†	3666.8	1.936	mg/L	0.0176	1.936	mg/L	0.0176	0.91%
Si 288.158†	4291.2	1.930	mg/L	0.0046	1.930	mg/L	0.0046	0.24%
Sn 189.927†	4771.5	0.9628	mg/L	0.00746	0.9628	mg/L	0.00746	0.77%
Sr 421.552†	983262.3	0.9646	mg/L	0.00145	0.9646	mg/L	0.00145	0.15%
Ti 334.903†	25555.6	0.9704	mg/L	0.00134	0.9704	mg/L	0.00134	0.14%
Tl 190.801†	5114.8	1.942	mg/L	0.0121	1.942	mg/L	0.0121	0.62%
V 292.402†	141015.1	1.004	mg/L	0.0072	1.004	mg/L	0.0072	0.72%
Zn 206.200†	4784.7	1.024	mg/L	0.0079	1.024	mg/L	0.0079	0.77%

Sequence No.: 41
Sample ID: CB 5

Autosampler Location: 1
Date Collected: 2/6/2013 11:31:16 AM
Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: CB

Analyte	Back Pressure	Flow
All	218.0 kPa	0.75 L/min

Mean Data: CB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	3158021.6	104.1	%	0.33				0.32%
ScR 361.383	417838.4	104.9	%	1.03				0.98%
Ag 328.068†	-22.4	-0.00010	mg/L	0.000102	-0.00010	mg/L	0.000102	102.89%
Al 308.215†	-2.7	-0.00164	mg/L	0.004874	-0.00164	mg/L	0.004874	297.16%
As 188.979†	0.1	0.00005	mg/L	0.002033	0.00005	mg/L	0.002033	>999.9%
B 249.677†	-10.5	-0.00120	mg/L	0.000293	-0.00120	mg/L	0.000293	24.33%
Ba 233.527†	1.2	0.00022	mg/L	0.000762	0.00022	mg/L	0.000762	349.18%
Be 313.042†	-5.8	-0.00001	mg/L	0.000020	-0.00001	mg/L	0.000020	239.18%
Ca 317.933†	0.9	0.00006	mg/L	0.000530	0.00006	mg/L	0.000530	917.57%
Cd 228.802†	-7.3	-0.00024	mg/L	0.000171	-0.00024	mg/L	0.000171	71.31%
Co 228.616†	4.7	0.00010	mg/L	0.000094	0.00010	mg/L	0.000094	92.28%
Cr 267.716†	-0.3	-0.00004	mg/L	0.000515	-0.00004	mg/L	0.000515	>999.9%
Cu 324.752†	-79.5	-0.00026	mg/L	0.000113	-0.00026	mg/L	0.000113	42.53%
Fe 273.955†	-1.2	-0.00064	mg/L	0.002106	-0.00064	mg/L	0.002106	326.70%
K 766.490†	-12.2	-0.00489	mg/L	0.005700	-0.00489	mg/L	0.005700	116.57%
Mg 279.077†	3.4	0.00252	mg/L	0.002524	0.00252	mg/L	0.002524	100.31%
Mn 257.610†	0.8	0.00002	mg/L	0.000087	0.00002	mg/L	0.000087	518.34%
Mo 202.031†	27.0	0.00112	mg/L	0.000252	0.00112	mg/L	0.000252	22.55%
Na 589.592†	-440.0	-0.03329	mg/L	0.001999	-0.03329	mg/L	0.001999	6.00%
Na 330.237†	-0.5	-0.01286	mg/L	0.197448	-0.01286	mg/L	0.197448	>999.9%
Ni 231.604†	5.7	0.00110	mg/L	0.000568	0.00110	mg/L	0.000568	51.59%
Pb 220.353†	4.1	0.00041	mg/L	0.000667	0.00041	mg/L	0.000667	160.70%
Sb 206.836†	8.8	0.00227	mg/L	0.001072	0.00227	mg/L	0.001072	47.26%
Se 196.026†	3.5	0.00186	mg/L	0.001329	0.00186	mg/L	0.001329	71.56%
Si 288.158†	4.9	0.00218	mg/L	0.000993	0.00218	mg/L	0.000993	45.44%
Sn 189.927†	2.3	0.00046	mg/L	0.000520	0.00046	mg/L	0.000520	114.11%
Sr 421.552†	38.3	0.00004	mg/L	0.000020	0.00004	mg/L	0.000020	53.40%
Ti 334.903†	6.5	0.00025	mg/L	0.000562	0.00025	mg/L	0.000562	228.32%
Tl 190.801†	4.1	0.00158	mg/L	0.001016	0.00158	mg/L	0.001016	64.23%
V 292.402†	-3.3	-0.00002	mg/L	0.000043	-0.00002	mg/L	0.000043	182.53%
Zn 206.200†	-3.0	-0.00065	mg/L	0.000246	-0.00065	mg/L	0.000246	37.91%

Mercury Analysis Log

Analyst: DM

Instrument: CETAC

Date: 02-06-13

Page: 1 of 4

ARI Sample ID	Prep Code	Dilution	QC Data (ppb)	Comments
STD 0.0	SMM	1X		
" 0.1				
" 0.5				
" 1.0				
" 2.0				
" 5.0				
" 10.0				
ICV			8.18	Begin CLP %R=102 ✓
ICB			-0.03	✓
CCV1			4.02	%R=101 ✓
CCB1			-0.01	✓
CRA			0.10	✓
WC53 MB1			-0.01	✓
" MB1SPK			1.09	%R=100 ✓
" REF1		5X	6.45	7.90 mg/kg ✓
WC32 E		1X		
" F				
" G			19.21	Satd X
" H				
WC35 G			0.29	✓
" GDUP			0.27	
CCV2			4.00	%R=100 ✓
CCB2			-0.03	✓
WC33 GSPK			1.36	%R=106 ✓
" H				
" I				
WC26 MB1			-0.00	✓
" MB1SPK			2.12	%R=106 ✓
" REF1		5X	5.99	7.41 mg/kg ✓
" A		1X	0.61	

Chemical/Reagent ID:
10% $SnCl_2$: NP2454

14% $NH_2OH/NaCl$: NP2306

Standard ID:
Standard: S91-11

ICV/CCV: S9-6

Mercury Analysis Log

Analyst: DM
Instrument: CETAC

Date: 02-06-13
Page: 2 of 4

ARI Sample ID	Prep Code	Dilution	QC Data (ppb)	Comments
WC26 ADUP	SWM	1X	0.70	RPD=15.7 ✓
" ASPK	↓	↓	5.37	%R=476 High %R X
" B				
CCV3			4.01	%R=100 ✓
CCB3			-0.01	✓
WC26 C				
" D				
" E				
" F				
" G				
" H				
" I				
CCV4			4.02	%R=101 ✓
CCB4		↓	-0.02	✓
WC32 G		10X	10.45	High X
" G		20X		
WC26 A		1X	0.60	
" ADUP			0.71	RPD=16.7 ✓
" ASPK			5.47	%R=487 High X
CCV5			4.05	%R=101 ✓
CCB5			-0.03	✓
~~WC06 MB1~~			-0.00	✓
~~" MBSPK~~		↓	2.16	%R=108 ✓
~~" REF1~~		5X	7.56	9.45 mg/kg ✓
~~" A~~		1X	0.24	
~~" ADUP~~			0.26	✓
~~" ASPK~~		2-7-13	1.57	%R=113 ✓
~~" B~~				
~~" C~~				
~~" D~~	↓	↓		

Chemical/Reagent ID:
10% $SnCl_2$: MP2484
14% $NH_2OH/NaCl$: MP2398

Standard ID:
Standard: 3011-11
ICV/CCV: 59-6

ANALYTICAL RESOURCES INCORPORATED

Metals Data Review Checklist

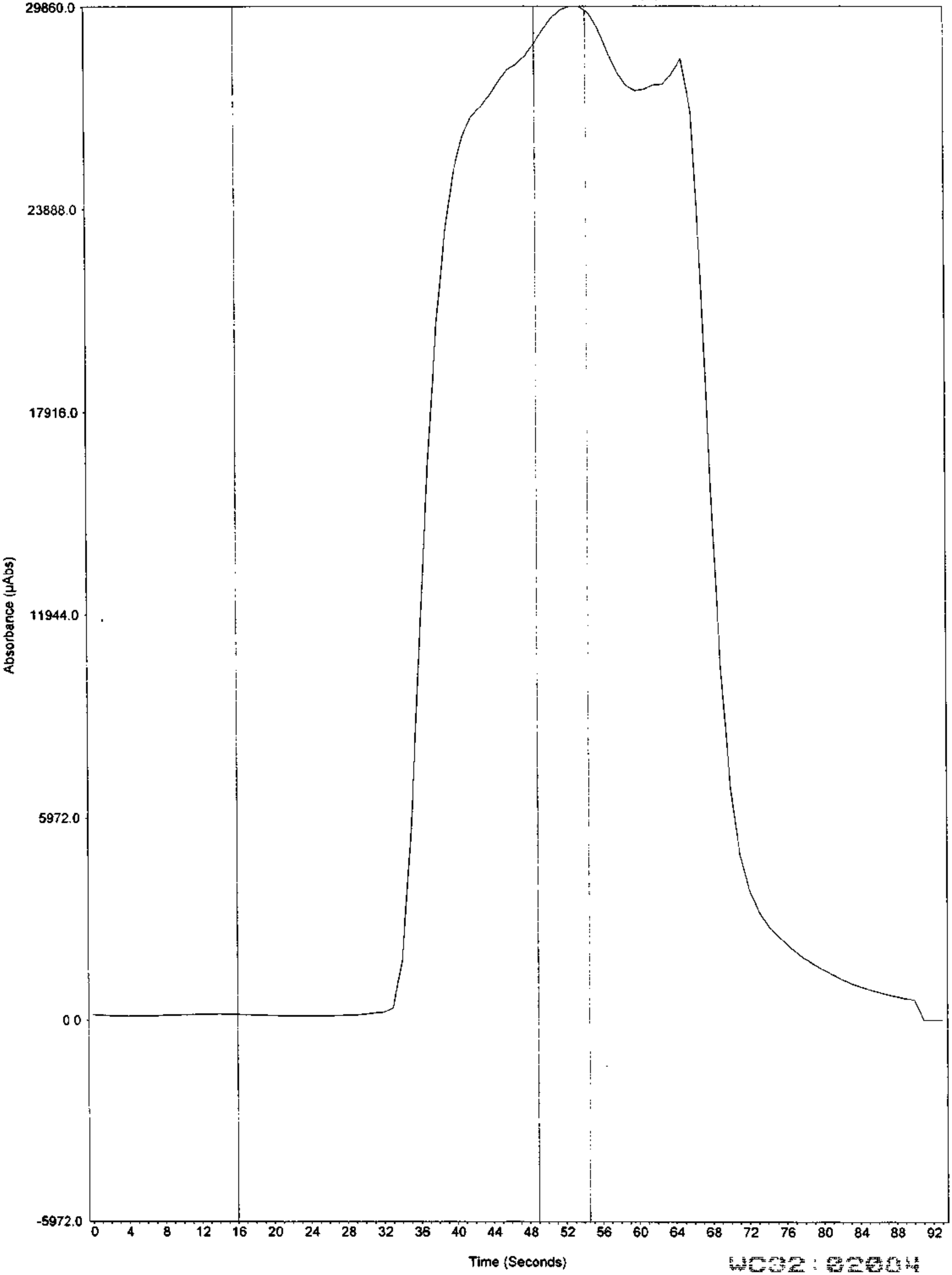
Method: ICP ICP-MS GFA CVA

Analysis Date: 2-06-13

	Analyst 2-6 DM	Peer [illegible] 2-6-13	Comment
Analyst, Date, Method info	✓	✓	
Sample ID's	✓	✓	
Standard/QC solution ID's recorded	✓	✓	
Prep codes	✓	✓	
Dilution factors	✓	✓	
Crossouts/Corrections/Deletions	✓	✓	
Blank & Standard intensities	✓	✓	
Standard deviations	✓	✓	
Curve fit	✓	✓	
ICV/CCV	✓	✓	
ICB/CCB	✓	✓	
RSD's & SD's	✓	✓	
Internal Standards	–	–	
Carry-over	–	–	
CRI/CRA	✓	✓	
ICSA/ICSAB	–	–	
Post Spikes/Serial Dilutions	–	–	
Analytic Spikes	–	–	
SRM/LCS	✓	✓	
Matrix Spikes	✓	✓	See RUN LOG
Matrix Duplicates	✓	✓	See RUN LOG
Method Blanks	✓	✓	
Requested elements/isotope identified	✓	✓	
Correct samples identified for distribution	✓	✓	
Raw data match distributed data	✓	✓	
Data filename correct	✓	✓	
	✓	✓	See CAFS WC26 WC55

Std Tube 6 02/06/2013, 9:49 AM

29,402 uAbs 2-6-13 DM



WC32:02004

CETAC Hg Analysis Report - 13020600.DB - Wednesday, February 06, 2013, 1:30:59 PM

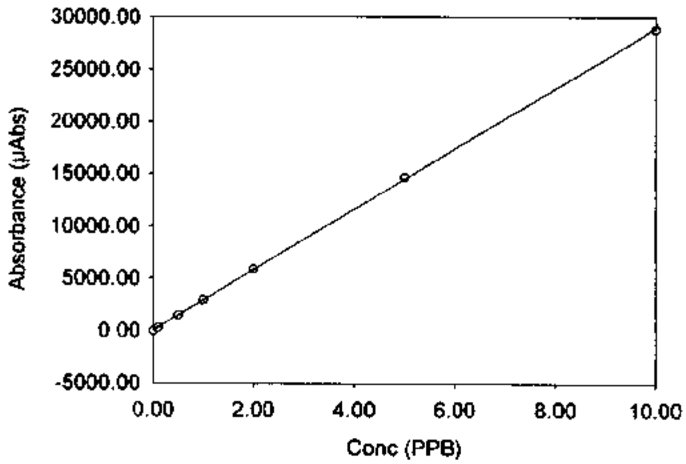
Analyst	
Date Started	Wednesday, February 06, 2013, 09:48:48
Worksheet	ARI 10ppb CALIB
Comment	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
Std Tube 6	06-Feb-2013, 09:48	10.00	1.25	29400.00	1.00	

Information about this calibration could not be retrieved from the Master File.

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
Calibration Zero	06-Feb-2013, 09:51	0.00	13.00	-24.70	1.00	
Standard #1	06-Feb-2013, 09:53	0.10	0.91	288.00	1.00	
Standard #2	06-Feb-2013, 09:54	0.50	1.25	1450.00	1.00	
Standard #3	06-Feb-2013, 09:56	1.00	0.44	2920.00	1.00	
Standard #4	06-Feb-2013, 09:57	2.00	0.64	5880.00	1.00	
Standard #5	06-Feb-2013, 09:59	5.00	0.51	14700.00	1.00	
Standard #6	06-Feb-2013, 10:01	10.00	0.64	28900.00	1.00	

Calibration Data



Int.	0.000
Slope	2899.672
Correlation	0.99996

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
ICV	06-Feb-2013, 10:04	8.13	0.72	23600.00	1.00	
ICB	06-Feb-2013, 10:05	-0.03	8.67	-84.80	1.00	

Begin CLP

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	06-Feb-2013, 10:07	4.02	0.08	11700.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	06-Feb-2013, 10:09	-0.01	32.10	-25.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
CRA	06-Feb-2013, 10:10	0.10	1.00	287.00	1.00	
WC33 MB1 SMM	06-Feb-2013, 10:12	-0.01	8.61	-16.30	1.00	
WC33 MB1SPK SMM	06-Feb-2013, 10:13	1.99	0.20	5760.00	1.00	
WC33 REF1 SMM	06-Feb-2013, 10:15	6.45	0.59	18700.00	5.00	
WC32 E SMM	06-Feb-2013, 10:17	0.29	0.15	836.00	1.00	
WC32 F SMM	06-Feb-2013, 10:18	0.25	1.98	731.00	1.00	
WC32 G SMM	06-Feb-2013, 10:20	Sat'd.	0.00	55700.00	1.00	SO
WC32 H SMM	06-Feb-2013, 10:23	1.61	0.52	4660.00	1.00	
WC33 G SMM	06-Feb-2013, 10:25	0.29	0.24	853.00	1.00	
WC33 GDUP SMM	06-Feb-2013, 10:26	0.27	0.58	787.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	06-Feb-2013, 10:28	4.00	0.19	11600.00	1.00	

CETAC Hg Analysis Report - 13020600.DB - Wednesday, February 06, 2013, 1:30:59 PM

Analyst
Date Started Wednesday, February 06, 2013, 10:30:18
Worksheet ARI 10ppb CALIB
Comment

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	06-Feb-2013, 10:30	-0.03	1.08	-92.30	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
WC33 GSPK SMM	06-Feb-2013, 10:31	1.35	1.22	3920.00	1.00	
WC33 H SMM	06-Feb-2013, 10:33	0.28	0.54	817.00	1.00	
WC33 I SMM	06-Feb-2013, 10:35	0.20	1.72	577.00	1.00	
WC26 MB1 SMM	06-Feb-2013, 10:36	-0.00	337.00	-3.56	1.00	
WC26 MB1SPK SMM	06-Feb-2013, 10:38	2.12	0.49	6160.00	1.00	
WC26 REF1 SMM	06-Feb-2013, 10:39	5.99	0.56	17400.00	5.00	
WC26 A SMM	06-Feb-2013, 10:41	0.61	1.09	1780.00	1.00	
WC26 ADUP SMM	06-Feb-2013, 10:43	0.70	0.54	2030.00	1.00	
WC26 ASPK SMM	06-Feb-2013, 10:44	5.37	0.54	15600.00	1.00	- Hi %R
WC26 B SMM	06-Feb-2013, 10:46	0.15	0.84	439.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	06-Feb-2013, 10:48	4.01	0.55	11600.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	06-Feb-2013, 10:49	-0.01	22.70	-20.70	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
WC26 C SMM	06-Feb-2013, 10:51	0.35	1.18	1020.00	1.00	
WC26 D SMM	06-Feb-2013, 10:53	0.40	0.24	1160.00	1.00	
WC26 E SMM	06-Feb-2013, 10:54	0.51	0.14	1490.00	1.00	
WC26 F SMM	06-Feb-2013, 10:56	0.29	0.90	831.00	1.00	
WC26 G SMM	06-Feb-2013, 10:57	1.09	0.90	3170.00	1.00	
WC26 H SMM	06-Feb-2013, 10:59	0.97	0.44	2820.00	1.00	
WC26 I SMM	06-Feb-2013, 11:01	3.03	0.59	8780.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	06-Feb-2013, 11:02	4.02	0.13	11700.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	06-Feb-2013, 11:04	-0.02	14.40	-63.60	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
WC32 G SMM	06-Feb-2013, 11:07	10.40	0.43	30200.00	10.00	o - High
WC32 G SMM	06-Feb-2013, 11:08	5.49	0.74	15900.00	20.00	
WC26 A SMM	06-Feb-2013, 11:10	0.60	0.80	1750.00	1.00	
WC26 ADUP SMM	06-Feb-2013, 11:11	0.71	0.29	2060.00	1.00	
WC26 ASPK SMM	06-Feb-2013, 11:13	5.47	0.78	15900.00	1.00	- High

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	06-Feb-2013, 11:15	4.03	0.30	11700.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	06-Feb-2013, 11:16	-0.03	8.42	-78.90	1.00	

WC03 DM 26B

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
~~WC03~~ MB1 SMM	06-Feb-2013, 11:18	-0.00	109.00	-7.22	1.00	
WC03 MB1SPK SMM	06-Feb-2013, 11:20	2.16	0.56	6260.00	1.00	
WC03 REF1 SMM	06-Feb-2013, 11:22	7.56	0.07	21900.00	5.00	
~~WC-03~~ A SMM	06-Feb-2013, 11:23	0.24	1.64	706.00	1.00	
WC03 ADUP SMM	06-Feb-2013, 11:25	0.26	0.18	754.00	1.00	
WC03 ASPK SMM	06-Feb-2013, 11:26	1.37	0.60	3960.00	1.00	
WC03 B SMM	06-Feb-2013, 11:28	0.55	0.48	1600.00	1.00	
WC03 C SMM	06-Feb-2013, 11:30	8.73	0.32	25300.00	1.00	
WC03 D SMM	06-Feb-2013, 11:31	0.50	1.57	1450.00	1.00	
WC03 E SMM	06-Feb-2013, 11:33	1.61	0.30	4660.00	1.00	

2-7-13

Analyst	
Date Created:	Thursday, July 13, 2000
Worksheet	ARI 10ppb CALIB
Comment	
Sip Duration (Sec.):	30
Rinse Duration (Sec.):	60
Read Delay:	49
Integration Time/Replicate:	1.40
# of Replicates:	4
# of Repeats:	1
Baseline Correction Enabled:	True
Baseline Point 1 Start Time:	10
Baseline Point 1 End Time:	16
2-Point Baseline Corr. Enabled:	False
Baseline Point 2 Start Time:	
Baseline Point 2 End Time:	
Gas Flow (ml/min):	180
Calibration Algorithm:	Linear, Zero Intercept
Recalibration Frequency:	0
Reslope Frequency:	0
Reslope Standard:	5
Calibration Standard #1 Conc.:	0.10 PPB
Calibration Standard #2 Conc.:	0.50 PPB
Calibration Standard #3 Conc.:	1.00 PPB
Calibration Standard #4 Conc.:	2.00 PPB
Calibration Standard #5 Conc.:	5.00 PPB
Calibration Standard #6 Conc.:	10.00 PPB
QC Enabled:	True
QC-RSD Enabled:	True
Limit Condition & Error Action:	If %RSD > 5.0%, if µAbs. > 1500, Flag and Continue
QC-Std Enabled:	True
Limit Condition & Error Action:	If outside 80% .. 120%,Stop
QC-Blank Enabled:	True
Limit Condition & Error Action:	If outside -100 .. 100,Stop

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Mercury Standard Prep Log

Prep Code: 3LM   Digested 20.0ml   Instrument: CETAC
Analyst: CB   Date: 2-4-13
Bath Temp: 95°C   Start Time: 1000   End Time: 1200

Standard ID	Stock ID	Volume Added (mL)	Final Volume (mL)	Standard Conc. (µg/L)	Number Made
STD0	–	0.00	100.0	0.0	1
STD1	3011-7	0.02		0.02	1
STD2		0.05		0.05	1
STD3		0.10		0.1	1
STD4		0.20		0.2	1
STD5		~~0.50~~ 0.4		0.4	1
STD6		1.00		1.00	1
CRA		0.02		0.02	1
ICB/CCB	–	0.00		0.0	1
ICV/LCS	3011-8	1.0		0.5	1
CCV		1.0	100.0	0.5	1

Chemical/Reagent ID:

HNO₃: I7970 H_2SO_4: I7672   HCl:

5% $K_2S_2O_8$: MP2418   5% $KMnO_4$: MP2425

Prep Code: 3MM   Instrument: CETAC
Analyst: CB   Date: 2-5-13
Bath Temp: 90°C   Start Time: 1040   End Time: 1110

Standard ID	Stock ID	Volume Added (mL)	Final Volume (mL)	Standard Conc. (µg/L)	Number Made
STD0	–	0.00	50.0	0.0	3
STD1	3011-11	0.01		0.1	2
STD2		0.05		0.5	2
STD3		0.10		1.0	2
STD4		0.20		2.0	2
STD5		0.50		5.0	2
STD6		1.00		10.0	2
CRA		0.01		0.1	1
ICB/CCB	–	0.00		0.0	3
ICV/LCS	59-6	0.08		4.0	2
CCV		0.04	50.0	4.0	3

Chemical/Reagent ID:

HNO_3: I7970 H_2SO_4: I7672   HCl: –

5% $K_2S_2O_8$: MP2418   5% $KMnO_4$: MP2425

WC02 : 02006

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Mercury Digestion Log

Prep Code: SMA
Analyst: DM
Bath Temp: 95°C
Matrix: Soil
Date: 02-05-13
Start Time: 0844
End Time: 0914

ARI Sample ID	Sample Bottle #	pH<2	Initial Weight (g) ~~Volume (mL)~~	Final Volume (mL)	# $KMnO_4$ Aliquots	CLP	Comments
WC82 E	1	—	0.802	50.0	2/12 1	9	
" F	1	—	0.796		1		
" G	1	—	0.918		1		
" H	1	—	0.805		1		
WC83 G	1	—	0.796		2/12 1		
" GDUP	1	—	0.796		1		BATCH
" GSPK	1	—	0.795		1		
" H	1	—	0.991		1		
" I	1	—	0.848		1		
" REF1	0063	—	0.204		1		
" MB1	—	—	—		1		
" MB1SPK	—	—	—	50.0	1	9	
				02-05-13 DM			

Chemical/Reagent ID:

HNO_3: I7970
H_2SO_4: I7677
HCl: —
5% $K_2S_2O_8$: MP2418
5% $KMnO_4$: MP2426
Digest Tube Lot: MF06LKK01

General Chemistry Raw Data
Analyst Notes and Raw Data

ARI Job ID: WC32, WC33

TOTAL SOLIDS/VOLATILE SOLIDS (TS / TVS) BENCHSHEET		DATE:	2/4/2013
SOLIDS (dry at 104 (12-24 hr) then combust at 550 (30 min))		ANALYST:	KE 13:24 (A)
Instrumentation	**Drying Ovens:** 12	**Analytical Balance:**	1123230597
	Muffle Furnace: 62790918520		

Batch drying time			TS (%) calculated as:	TVS (mg/kg dry wt) calculated as:
record times as mm/dd/yy hh:mm			Final dry wt (g) = (Dry Wt - Tare Wt)	Final ash wt (g) = (min ash wt - tare wt)
2/4/2013 13:24	date/time in oven	KE	TS = (Final Dry Wt)/ (grams Sample-Tare)	TVS (mg/kg) = [(Dry wt-Ash wt)/ (dry weight)] *1,000,000
2/5/2013 5:56	date/time out	KE		if ash wt > dry wt, "Chk for Err"
elapsed hrs =	16.5			if dry wt-ash wt < 0.001 g, "< (1/dry wt)*1,000,000

Cal Weight ID		CV-02	CV-02	CV-02	CV-02		CV-02	CV-02
Date & Time		2/4/13 13:02 KE	2/4/13 12:52 KE	2/5/13 6:12 KE				
Cal Wt (g)	10.0000	10.0000	10.0000	10.0000				
record weights to 4 places		Cal OK!	Cal OK!	Cal OK!				

SAMPLE ID	DISH #	SAMPLE (grams)	TARE WT (grams)	DRY WT 104C (grams) 1			dry Wt (g)	TS (%)	ASH WT 550C (grams) 1	2		Ash Wt (g)	TVS (mg/kg)	(%)
Blank			1.1061	1.1060			0.00							
WC32 A1		7.3997	1.1116	3.6288			2.52	[illegible]						
WC32 B1		6.8397	1.0994	3.0487			1.95	[illegible]						
WC32 C1		7.3620	1.0744	5.8832			4.81	[illegible]						
WC32 D1		8.0924	1.0742	5.1287			4.05	[illegible]						
WC32 E1		7.9744	1.1046	7.6147			6.51	[illegible]						
WC32 F1		7.8851	1.0917	7.3763			6.28	[illegible]						
WC32 G1		6.9821	1.0716	4.1726			3.10	[illegible]						
WC32 G1 dup		6.9660	1.0879	4.2830			3.20	54.4%						
							RPD =	3.54%				RPD =	NA	
WC32 G1 trp		6.7222	1.0908	4.0205			2.93	52.0%						
							RSD =	2.34%				RSD =	NA	
WC32 H1		7.6165	1.1035	4.3921			3.29	50.5%						
WC33 G1		6.9536	1.1021	6.6182			5.52	94.3%						
WC33 H1		8.8325	1.0990	8.1159			7.02	90.7%						
WC33 I 1		7.7269	1.0909	6.8383			5.75	86.6%						

V 2-5-13

WC32 : 62801

TOTAL / VOLATILE SOLIDS (TS/TVS) BENCHSHEET

Analytical Resources, Incorporated
Analytical Chemists and Consultants

(1) 2-4-13 (W)

(2) 12:52 (D) 2-4-13

Analyst: W	Date: 2-4-13	Oven ID: 12	Balance ID:	1123230597
Time in Oven: 13:24	Time Out of Oven: 5:56		Elapsed Time (> 12 Hrs):	

Dry at 104 °C (12-24 hrs) then combust at 550 °C for 30 min. Record Weights to 4 places

TS (%) calculated as:
Final Dry Weight (g) = (Dry Weight – Tare Weight)
TS = (Final Dry Weight) / (Grams Sample – Tare Weight)

TVS (mg/kg dry weight) calculated as:
Final Ash Weight (g) = (Minimum Ash Weight – Tare Weight)
TVS (mg/kg) = [(Dry Weight – Ash Weight) / (Dry Weight) * 1,000,000
If Ash Weight > Dry Weight then "Check for Error"
If Dry Weight – Ash Weight < 0.001 < (1/Dry Weight) * 1,000,000

Sample ID	Dish #	Sample	Tare	Dry Weight 104°C 1	Dry Weight 104°C 2	Dry Weight 104°C 3	Dry Weight grams	Ash Weight 550°C 1	Ash Weight 550°C 2	Ash Weight 550°C 3
Cal Weight ID		CV-02	CV-02 (2)	CV-02	CV-02	CV-02		CV-02	CV-02	CV-02
Date & Time:		2-4-13 13:02	2-4-13	2-5-13 6:12						
Cal Weight (10.0000):		10.0000 (W)	10.0000 (W)	10.0000 (D)						
BLANK	1	Ø	1.1061	1.1060						
WC32 A1	2	7.3997	1.1116	3.6288						
B1	3	6.8397	1.0994	3.0487						
C1	4	7.3620	1.0744	5.8832						
D1	5	8.0924	1.0742	5.1287						
E1	6	7.9744	1.1046	7.6147						
F1	7	7.8851	1.0917	7.3763						
G1	8	6.9821	1.0716	4.1726						
MG1	9	6.9660	1.0879	4.2830						
DG1	10	6.7222	1.0908	4.0205						
H1	11	7.6165	1.1035	4.3921						
WC33 G1	12	6.9536	1.1021	~~4.2921~~ (1)	6.6182					
H1	13	8.8325	1.0990	~~6.6183~~ (1)	8.1159					
I1	14	7.7269	1.0909	6.8383						

2-5-13 (W)

w

2-12-13

TOC Solids Prep Log

acid purging to remove IC and drying at 70°C for TOC analysis

General notes regarding prep method and samples (identify the acid used)

DATE:	2/8/2013
ANALYST:	KE 11:18

HCL 10% ID:

Balance ID: Mettler Toledo (XS205 DU) SN 123230597

HCL ID:

make no entry to shaded cells, they are calculated

Sample ID		IC Test	Gravimetric Data (grams)			%	*Sample description & notes*
ARI #	Client	+ / -	Tare Wt.	Wet wt.	70°C dry wt	Solids	*(homogeneity and exclusions)*
Blank			13.1737		13.1736	-0.1 mg	
WC69 A2		-	13.0571	18.6384	15.2258	38.86%	
WC69 A2 dup		-	13.1442	19.8903	15.7310	38.35%	RPD = 1.32%
WC69 A2 trip		-	13.0895	18.8174	15.2851	38.33%	RSD = 0.78%
WC69 B2		-	13.1702	20.3516	16.7316	49.59%	
WC69 C2		-	13.0767	21.6234	19.5931	76.24%	
WC83 A2		-	13.0907	19.6474	15.2457	32.87%	
WC83 B2		-	13.1521	20.4251	15.7163	35.26%	
WC83 C2		++-	13.0803	19.3888	14.5201	22.82%	
WC78 A1		+-	13.1016	19.2614	14.5175	22.99%	
WC78 B1		-	13.0777	21.1612	16.6419	44.09%	
WC78 B1 dup		-	13.1317	20.6796	16.2136	40.83%	RPD = 7.68%
WC78 B1 trip		-	13.0966	22.8759	17.1755	41.71%	RSD = 4.00%
WC78 C1		-	13.0821	19.6272	16.6545	54.58%	
WC78 D1		+-	13.0533	22.0200	20.2215	79.94%	
WC78 E1		-	13.1707	20.5391	18.6601	74.50%	
WC78 F1		-	13.1863	22.0594	17.9619	53.82%	
WC78 G1		-	13.1004	21.8835	17.9727	55.47%	
WC32 D1	NO ACID		13.1065	21.5490	17.9823	57.75%	
WC32 G1	NO ACID		13.1900	19.1159	16.2865	52.25%	
WC32 B1		++-	13.1962	19.8436	16.0184	42.46%	
WC32 B1 dup		++-	13.1202	20.1595	16.0226	41.23%	RPD = 2.93%
WC32 B1 trip		++-	13.1578	19.7338	15.7780	39.84%	RSD = 3.17%

Analytical Resources, Incorporated
Analytical Chemists and Consultants

TOC Solids Preparation Log

Acid purge to remove IC and drying 70 °C for TOC analysis
Add general notes regarding samples and preparation and identify the acid used

① 2-8-13 ⓦ

Analyst ⓦ 11:18 Date 2-8-13

Sample Idenification		IC	Gravimetric Data			% Solids	Sample description & notes
ARI #	Client ID	Test	Tare	Wet	70 °C		
Blank			13.1737	~~0~~	13.1736		
WC69 A2		–	13.0571	18.6384	15.2258		Sed
dA2		–	13.1442	19.8903	15.7310		
tA2		–	13.0895	18.8174	15.2851		
B2		–	13.1202	20.3516	16.7316		Sed + Roots/wood
C2		–	13.0767	21.6234	19.5431		Sandy Silt
WC83 A2		–	13.0907	19.6474	15.2457		Silty Silt + Rocks
B2		–	13.1521	20.4251	15.7163		Sed + Roots
C2		+–	13.0803	19.3888	14.5201		Wood + Sed
WC78 A1		+–	13.1016	~~21.1612~~	19.2614	14.5175	Black Very Wet Sed + Lo
B1		–	13.0777	~~20.6796~~	21.1612	16.6419	
dB1		–	13.1317	~~22.8759~~	20.6796	16.2136	
tB1		–	13.0966	22.8759	17.1755		Thick Debris
C1		–	13.0821	19.6272	16.6545		
D1		+–	13.0533	22.0200	20.2215		Sandy Silt + Rocks
E1		–	13.1707	20.5391	18.6601		Sand Rocks + Roots
F1		–	13.1863	22.0594	17.9619		Roots + Sand
G1		–	13.1004	21.8835	17.9727		Sandy Sed + Rocks
WC32 D1	No Acid	X	① ~~13.0899~~	~~20.6732~~	21.5490	17.9823	
~~E1~~		X	~~13.1471~~	~~21.0678~~	~~20.8563~~		Run twice 2-11-13 ⓦ
G1		X	④ ~~13.0641~~	~~21.6219~~	19.1159	16.2865	
B1		+–	⑤ ~~13.0208~~	~~20.5904~~	19.8436	~~16.0185~~	~~16.0184~~ 16.0184
dB1		+–	⑥ ~~13.0627~~	~~21.3755~~	20.1595	~~16.0420~~	~~15.9376~~ 16.0226
tB1		+–	⑦ ~~13.1394~~	~~21.2208~~	19.7338	15.7780	
~~WC33 G1~~	No Acid	X	13.0989	19.5809	19.1910		Run 2 times 2-12-13 ⓦ

2-8-13 ⓦ

② 13.1065 2-8-13 ⓦ
~~③ 13.1394~~
④ 13.1900
⑤ 13.1962
⑥ 13.1202
⑦ 13.1578

W
2-12-13

TOC Solids Prep Log

DATE:	2/4/2013
ANALYST:	KE 13:42

acid purging to remove IC and drying at 70°C for TOC analysis

General notes regarding prep method and samples (identify the acid used)

HCL 10% ID: ____________

Balance ID: Mettler Toledo (XS205 DU) SN 123230597

HCL ID: ____________

make no entry to shaded cells, they are calculated

Sample ID		IC Test	Gravimetric Data (grams)			%	*Sample description & notes*
ARI #	Client	+ / -	Tare Wt.	Wet wt.	70°C dry wt	Solids	*(homogeneity and exclusions)*
Blank			13.0855		13.0855	0 mg	
WC32 A1		+-	13.1329	17.4222	15.0388	44.43%	
WC32 H1		++-	13.1530	21.1276	17.3953	53.20%	
WC32 C1	NO ACID		13.0648	21.5507	19.5455	76.37%	
WC32 E1	NO ACID		12.9742	21.2943	20.6975	92.83%	
WC32 F1	NO ACID		13.1188	21.5172	21.0145	94.01%	
WC33 G1	NO ACID		13.0620	18.5096	18.1989	94.30%	

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TOC Solids Preparation Log

Acid purge to remove IC and drying 70 °C for TOC analysis
Add general notes regarding samples and preparation and identify the acid used

2-4-13

Analyst ______ 13:42 Date 2-4-13

Sample Identification		IC	Gravimetric Data			% Solids	Sample description & notes
ARI #	Client ID	Test	Tare	Wet	70 °C		
Blank		0	13.0855	Ø	13.0855		
WC32 A'		++	13.1329	17.4222	15.0388		Sedimt
~~B'~~		~~++~~	~~13.1309~~	~~21.2180~~	~~16.3313~~	[illegible]	~~Sediment + Rocks~~
~~C'~~		~~++~~	~~13.0098~~	~~21.0866~~	~~*~~	19.5453	~~Sand + shells~~
~~D'~~		~~++~~	~~13.1155~~	~~22.9911~~	~~*~~		~~Rocks Sedimt~~
~~E'~~		~~++~~	~~13.0625~~	~~20.4138~~	~~*~~	Rerun	~~Rock/Sand + Shells~~
~~F'~~		~~++~~	~~13.2599~~	~~20.2419~~	~~*~~		
~~G'~~		~~++~~	~~13.1659~~	~~21.1153~~	~~*~~		~~wet Sedimt Rocks + [illegible]~~
~~G' mp~~		~~++~~	~~13.1015~~	~~18.8487~~	~~*~~		
~~G' sp~~		~~++~~	~~13.1760~~	~~19.4220~~	~~17.6218~~		
H'		++	13.1530	21.1276	17.3953		Sealed + Shell
~~WC39 G'~~		~~++~~	~~13.0571~~	~~19.1334~~	~~*~~		
WC32 C'		Ø	13.0648	21.5507	19.5455		
E'		Ø	12.9742	21.2943	20.1475		
F'		Ø	13.1188	21.5172	21.0145		
WC33 G'		Ø	13.0620	18.5096	18.1989		

2-4-13

*- Samples were resetup without Acid 2-4-13

WC32 02006

J
2-15-13

TOC, Solids Data Analysis

DATE: 2/13/2013
ANALYST: KE 6:14

Instrument: Apollo 1
Mode: NPOC *Inlet:* Boat
Spike Std = 2,500 *ppm C*
Balance ID:

Calibration Data

Cal Curve ID: **1/14/2013** *Conc:* 5,000 *ppm*
Calibration Curve Standard: **00130-01** *Curve Date:* **01/14/03**
CalFact: **1.044E+05** *intercept:* **302437** *r2 :* **0.99651**
Curve Range (ppm) 200 *to* 2,500
Curve Range (µgC): **8** *to* **100** *40 µL injections of designated standard*

Verification Standard Source: ***ERA# 0409-12-01*** *Conc:* **5,000** *ppm*
dilution : 10 *mL to* 50 **1,000** *ppm*

Standard Reference Material Source: ***NIST 8704*** *Conc:* **33,510** *ppm*
Source: ***NIST 1941B*** *Conc:* **29,900** *ppm*

Silica Blanks

	Replicate determinations						Mean	RSD	condition

Sample Data
*"C corr" (with dilution) = ("C obs" - (Mean silica Blank * %Silica)) * Dilution Factor*

Sample ID	Dilution Data					Combustion Data			
	Sample wt (mg)	Final wt. (mg)	Silica (%)	Dilution Factor	Spike (µL Std)	Burn wt. (mg)	C obs (ppm C)	C corr (ppm C)	*comments*
ICV				1.00		40.0	960	960	*96.00%*
Blank				1.00		40.0	-56.79	-57	*Blank OK*
NIST 1941B				1.00		1.4	31729	31,729	*106.12%*
WC78 B1				1.00		1.4	37673	37,673	*Range OK!*
WC78 B1 dup				1.00		1.5	35765	35,765	*RPD=5.2%*
WC78 B1 trp				1.00		1.3	33333	33,333	*RSD=6.1%*
~~WC78 B1 ms~~				~~1.00~~	~~20~~	~~1.0~~	~~74452~~	~~74,452~~	~~*Range OK!*~~
~~Spike =~~	*~~0.05~~*	*~~mg C to~~*	*~~1.0~~*	*~~mg samp=~~*	*~~50,000~~*	*~~ppm~~*		*~~74%~~*	~~LATE INJECT~~
WC78 B1 ms				1.00	20	1.0	83872	83,872	*Range OK!*
Spike =	*0.05*	*mg C to*	*1.0*	*mg samp=*	*50,000*	*ppm*		*92%*	
WC78 C1				1.00		1.6	40763	40,763	*Range OK!*
WC78 D1				1.00		1.0	23578	23,578	*Range OK!*
WC78 E1				1.00		1.1	19052	19,052	*Range OK!*
WC78 F1				1.00		0.8	44068	44,068	*Range OK!*

Sample Data										
*"C corr" (with dilution) = ("C obs" - (Mean silica Blank * %Silica)) * Dilution Factor*										
Sample ID	Dilution Data				Spike	Combustion Data				
	Sample wt (mg)	Final wt. (mg)	Silica (%)	Dilution Factor	(µL Std)	Burn wt. (mg)	C obs (ppm C)	C corr (ppm C)	*comments*	
CCV				1.00		40.0	1073	1,073	*107.30%*	
Blank				1.00		40.0	-58.58	-59	*Blank OK*	
WC78 G1				1.00		0.7	82990	82,990	*Range OK!*	
WC40 A1				1.00		1.6	6272	6,272	*Range OK!*	
WC40 A1 dup				1.00		1.8	6939	6,939	*RPD=10.1%*	
WC40 A1 trp				1.00		1.6	7214	7,214	*RSD=7.1%*	
WC40 A1 ms				1.00	10	1.8	21791	21,791	*Range OK!*	
Spike =	*0.025*	*mg C to*	*1.8*	*mg samp=*	*13,889*	*ppm*		*112%*		
WC40 B1				1.00		1.9	4043	4,043	*Low Scale*	
WC32 A1				1.00		1.2	25374	25,374	*Range OK!*	
Samples WC32 C1,D1,E1,F1,G1,& WC33 G1 Had 10% O-Phosphoric Acid added to samples in the boat pryer to combustion. Amount (how many drops) shown after condition of each run.										
WC32 C1				1.00		1.4	34444	34,444	*Range OK!*	**6 Drops Acid**
WC32 D1				1.00		1.8	32029	32,029	*Range OK!*	**8 Drops Acid**
WC32 E1				1.00		2.7	12221	12,221	*Range OK!*	**7 Drops Acid**
CCV				1.00		40.0	1057	1,057	*105.70%*	
Blank				1.00		40.0	-42.67	-43	*Blank OK*	
WC32 F1				1.00		2.1	16168	16,168	*Range OK!*	**6 Drops Acid**
WC32 G1				1.00		1.3	54617	54,617	*Range OK!*	**9 Drops Acid**
WC33 G1				1.00		2.2	18182	18,182	*Range OK!*	**6 Drops Acid**
WC32 H1				1.00		1.0	27892	27,892	*Range OK!*	
~~WC32 B1~~				~~1.00~~		~~1.2~~	~~31049~~	~~31,049~~	~~*Range OK!*~~	
WC32 B1				1.00		1.3	15656	15,656	*Range OK!*	
WC32 B1 dup				1.00		1.3	16256	16,256	*RPD=3.8%*	
WC32 B1 trp				1.00		1.3	19674	19,674	*RSD=12.6%*	
WC32 B1 ms				1.00	20	1.2	49535	49,535	*Range OK!*	
Spike =	*0.05*	*mg C to*	*1.2*	*mg samp=*	*41,667*	*ppm*		*81%*		
~~WD45 C1~~				~~1.00~~		~~2.0~~	~~8893~~	~~8,893~~	~~*Range OK!*~~	~~**1 Drop Acid**~~
NIST 1941B				1.00		1.5	30183	30,183	*100.95%*	
~~CCV~~				~~1.00~~		~~40.0~~	~~825~~	~~825~~	~~*82.50%*~~	
CCV				1.00		40.0	914	914	*91.40%*	
Blank				1.00		40.0	-44.69	-45	*Blank OK*	

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① 2-13-13 (initials)

TOC Solids Sample Run Log
Apollo 9000

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Set-Up Parameters MODE: NPOC			INLET: Boat Sampler	
Standards:	Source	Conc (ppm)	Analyst:	(initials)
Calibration:	ARI – 00128-03	5000	Date:	2-13-13
Verification:	ERA – 0409-1201	5000 to 1000 for CVS	Time:	6:14
SRM:	NBS – 1941b or 8704	Method: PSEP 1986-MOD	Balance ID	B 146454/45
Sample Sequence:				

Sample ID	Dilution Data (mg) Sample	+ Silica Gel	Burn Wt mg	Matrix Spike Data mg/L	µL added	Comments
ICV			40			
ICB			40			
NBS 1941 B			1.4			
WC78 B'			1.4			
dB'			1.5			
tB'			1.3			
MS B'			1.0	2500	20	(Late inject Rerun)
MS B'			1.0	2500	20	
C'			1.6			
D'			1.0			
E'			1.1			
F'			0.8			
CCV			40			
CCB			40			
WC78 G'			0.7			
WC40 A1			1.6			
dA1			1.8			
tA1			1.6			
MS A1			1.8	2500	10	
B'			1.9			
WC32 A'	~~Drops~~	~~Acid~~ ①	1.2			
C'	6-Drops	Acid	1.4			Acidify in Boat
D'	8-Drops	Acid	1.8			
E'	7 "	"	2.7			
CCV			40			
CCB			40			
WC32 F'	6 Drops	Acid	2.1			Acidify in Boat
G'	9 "	"	1.3			
WC33 G'	6 "	"	2.2			
WC32 H'			1.0			
① B'			1.2			Wrong Sample ①
① B'			1.3			

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TOC Solids Sample Run Log
Apollo 9000

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Set-Up Parameters MODE: NPOC			INLET: Boat Sampler	
Standards:	Source	Conc (ppm)	Analyst:	(N)
Calibration:	ARI - 00128-03	5000	Date:	2-13-13
Verification:	ERA -0409-12-01	5000 to 1000 for CVS	Time:	6:14
SRM:	NBS – 1941b or 8704	Method: PSEP 1986-MOD	Balance ID	B 14645445
Sample Sequence:				

Sample ID	Dilution Data (mg)		Burn Wt	Matrix Spike Data		Comments
	Sample	+ Silica Gel	mg	mg/L	µL added	
WC32 MB'			1.3			
DB'			1.3			
MSB'			1.2	2500	20	
WD45 C1	1 Drop	Acid	2.0			Acidify in Boat
NBS1941B			1.5			
CCV			40/40			
CCB			40			

2-13-13 (N)

2-13-13 D

Detailed Analysis Report   Print Date/Time: 2013/02/13 15:35:13

Sample ID: ICV/CCV BOAT
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA
Mode: TOC
Filename: 02130611
Timestamp: 2013/02/13 06:14
Sample Type: Cal. Verification

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	960.0685	38.4027	4309965	12.530	13.528	109

Sample ID: ICB/CCB BOAT
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA
Mode: TOC
Filename: 02130638
Timestamp: 2013/02/13 06:40
Sample Type: Cal. Verification

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	-56.7868	-2.2715	65397	12.469	13.464	49

Sample ID: NBS 1941B
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA
Mode: TOC
Filename: 02130703
Timestamp: 2013/02/13 07:08
Sample Type: Cal. Verification

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	31729.2383	44.4209	4937995	12.454	13.450	198

Sample ID: WC78 B1
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA
Mode: TOC
Filename: 02130721
Timestamp: 2013/02/13 07:30
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	37672.8906	52.7420	5503909	13.014	14.012	138

Sample ID: WC78 B1 DP
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA
Mode: TOC
Filename: 02130732
Timestamp: 2013/02/13 07:36
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	35764.5195	53.6468	5598323	13.052	14.049	137

Sample ID: WC78 B1 TRIP
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA
Mode: TOC
Filename: 02130744
Timestamp: 2013/02/13 07:47
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	33332.8086	43.3327	4521989	13.033	14.032	129

Sample ID: WC78 B1 MS
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA
Mode: TOC
Filename: 02130804
Timestamp: 2013/02/13 08:08
Sample Type: Sample

2-13-13 D

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	74451.9531	74.4520	7769452	13.466	14.461	138

Sample ID: WC78 B1 MS
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02130814
Timestamp: 2013/02/13 08:18
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	83871.7656	83.8718	8752458	13.477	14.476	156

Sample ID: WC78 C1
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02130826
Timestamp: 2013/02/13 08:37
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	40762.7539	65.2204	6806091	13.356	14.356	146

Sample ID: WC78 D1
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02130844
Timestamp: 2013/02/13 08:47
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	23577.9570	23.5780	2460483	13.270	14.267	106

Sample ID: WC78 E1
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02130850
Timestamp: 2013/02/13 08:53
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	19051.5176	20.9567	2186938	13.189	14.183	98

Sample ID: WC78 F1
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02130857
Timestamp: 2013/02/13 09:02
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	44067.5156	35.2540	3678941	13.145	14.143	117

Sample ID: ICV/CCV BOAT
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02130904
Timestamp: 2013/02/13 09:07
Sample Type: Cal. Verification

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1072.8595	42.9144	4780778	13.240	14.238	120

Sample ID: ICB/CCB BOAT
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02130915
Timestamp: 2013/02/13 09:17
Sample Type: Cal. Verification

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	-58.5766	-2.3431	57926	13.395	14.395	49

Sample ID: WC78 G1
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02130932
Timestamp: 2013/02/13 09:35
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	82990.3984	58.0933	6062338	13.672	14.670	142

Sample ID: WC40 A1
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02131000
Timestamp: 2013/02/13 10:04
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	6271.6396	10.0346	1047166	14.139	15.137	88

Sample ID: WC40 A1 DUP
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02131010
Timestamp: 2013/02/13 10:13
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	6939.2451	12.4906	1303464	14.559	15.553	91

Sample ID: WC40 A1
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02131022
Timestamp: 2013/02/13 10:25
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	7214.1694	11.5427	1204538	15.101	16.094	101

Sample ID: WC40 A1 MS
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02131028
Timestamp: 2013/02/13 10:30
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	21790.5645	39.2230	4093127	15.653	16.653	96

Sample ID: WC40 B1
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02131040
Timestamp: 2013/02/13 10:44
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	4042.9663	7.6816	801619	15.452	16.449	74

Sample ID: WC32 A1
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02131047
Timestamp: 2013/02/13 10:50
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	25373.9023	30.4487	3177480	15.299	16.298	105

Sample ID: WC32 C1 Acid in Boat
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02131129
Timestamp: 2013/02/13 11:35
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	34444.1523	46.2218	5032199	13.761	17.028	300

Last Message: Max Integration Time Reached

Sample ID: WC32 D1 Acid in Boat
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02131141
Timestamp: 2013/02/13 11:55
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	32029.1777	57.6525	6016343	13.450	16.582	300

Last Message: Max Integration Time Reached

Sample ID: WC32 E1 Acid in Boat
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02131202
Timestamp: 2013/02/13 12:09
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	12221.3711	32.9977	3443483	13.174	17.007	300

Last Message: Max Integration Time Reached

Sample ID: ICV/CCV BOAT
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02131222
Timestamp: 2013/02/13 12:29
Sample Type: Cal. Verification

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1057.3726	42.2949	4716132	13.280	14.278	119

Sample ID: ICB/CCB BOAT
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02131235
Timestamp: 2013/02/13 12:39
Sample Type: Cal. Verification

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	-42.6681	-1.7067	124332	13.442	14.440	52

Sample ID: WC32 F1
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02131246
Timestamp: 2013/02/13 12:53
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	16168.4316	33.9537	3543247	13.381	17.760	300

Last Message: Max Integration Time Reached

Sample ID: WC32 G1
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02131306
Timestamp: 2013/02/13 13:24
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	54616.7188	71.0017	7409403	14.189	23.106	301

Last Message: Max Integration Time Reached

Sample ID: WC33 G1
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02131332
Timestamp: 2013/02/13 13:39
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	18182.1074	40.0006	4174276	17.193	26.459	300

Last Message: Max Integration Time Reached

Sample ID: WC32 H1
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02131345
Timestamp: 2013/02/13 13:48
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	27891.8672	27.8919	2910663	20.237	21.237	122

Sample ID: WC32 B1
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

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Mode: TOC
Filename: 02131352
Timestamp: 2013/02/13 13:55
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	31048.6133	37.2583	3888103	20.309	21.309	130

Sample ID: WC32 B1
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02131358
Timestamp: 2013/02/13 14:01
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	15655.7998	20.3525	2123894	20.585	21.584	108

Sample ID: WC32 B1 DUP
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02131403
Timestamp: 2013/02/13 14:06
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	16255.9834	21.1328	2205316	20.743	21.740	103

Sample ID: WC32 B1 ~~DUP~~ TRIP
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02131416
Timestamp: 2013/02/13 14:22
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	19673.8574	25.5760	2668991	20.553	21.551	116

Sample ID: WC32 B1 MS

Mode: TOC

Method: Boat Sampler | Filename: 02131424
Cal. Curve: 01142013 BOAT CAL | Timestamp: 2013/02/13 14:29
Operator ID: TRINA | Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	49535.0703	59.4421	6203093	20.392	21.392	191

Sample ID: WD45 C1 | Mode: TOC
Method: Boat Sampler | Filename: 02131433
Cal. Curve: 01142013 BOAT CAL | Timestamp: 2013/02/13 14:35
Operator ID: TRINA | Sample Type: Sample

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Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	176.6949	7.0678	737562	20.386	21.377	78

Sample ID: WD45 C1 | Mode: TOC
Method: Boat Sampler | Filename: 02131436
Cal. Curve: 01142013 BOAT CAL | Timestamp: 2013/02/13 14:43
Operator ID: TRINA | Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	8892.7910	17.7856	1856019	20.287	23.058	300

Last Message: Max Integration Time Reached

Sample ID: NBS 1941B | Mode: TOC
Method: Boat Sampler | Filename: 02131504
Cal. Curve: 01142013 BOAT CAL | Timestamp: 2013/02/13 15:09
Operator ID: TRINA | Sample Type: Cal. Verification

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	30182.7148	45.2741	5027024	18.844	19.842	223

Sample ID: ICV/CCV BOAT | Mode: TOC
Method: Boat Sampler | Filename: 02131513
Cal. Curve: 01142013 BOAT CAL | Timestamp: 2013/02/13 15:16
Operator ID: TRINA | Sample Type: Cal. Verification

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Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	825.1590	33.0064	3746824	18.790	19.789	113

Last Message: Out of Calibration

Sample ID: ICV/CCV BOAT | Mode: TOC
Method: Boat Sampler | Filename: 02131520
Cal. Curve: 01142013 BOAT CAL | Timestamp: 2013/02/13 15:23
Operator ID: TRINA | Sample Type: Cal. Verification

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	914.2907	36.5716	4118879	18.109	19.108	114

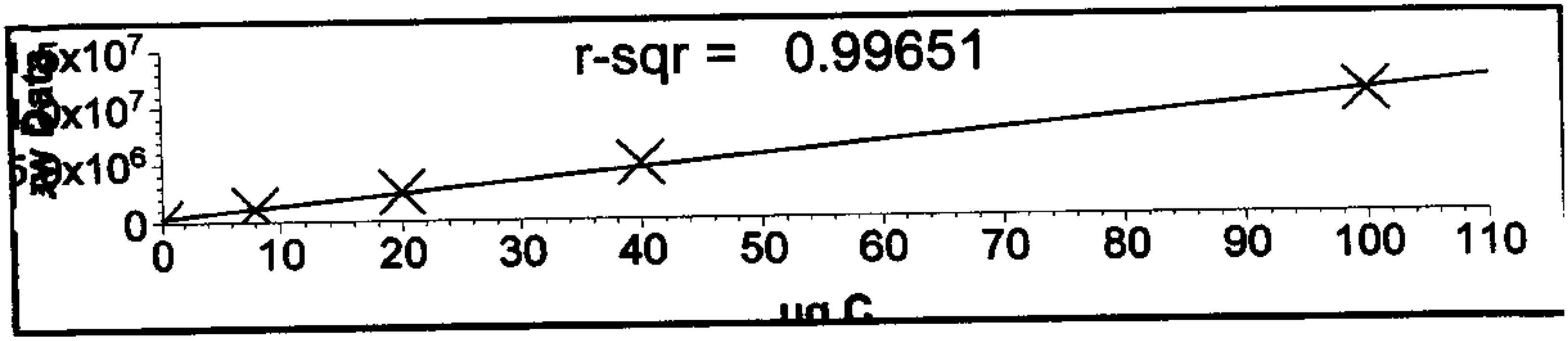
Sample ID: ICB/CCB BOAT | Mode: TOC
Method: Boat Sampler | Filename: 02131526
Cal. Curve: 01142013 BOAT CAL | Timestamp: 2013/02/13 15:27
Operator ID: TRINA | Sample Type: Cal. Verification

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	-44.6886	-1.7875	115898	17.990	18.984	52

Calibration Report   Print Date/Time: 2013/01/14 8:30:01

Cal. Curve ID: 01142013 BOAT CAL
Created: 2013/01/14 08:17
Calibration Factor (m): 1.044e+05
Y Intercept (b): 302437
r-squared: 0.99651

Standard ID	Y Raw Data	X Expected ug C	Measured ug C	Message	Date & Time
DI Water	33318	0.000	-2.579	Low Sample De	2013/01/14 06:14
200 ppm	1081664	8.000	7.467		2013/01/14 06:48
500 ppm	2525630	20.000	21.304		2013/01/14 07:16
1000 ppm	4829004	40.000	43.377		2013/01/14 07:39
2500 ppm	10574251	100.000	98.431		2013/01/14 08:14



WC02:02190

Detailed Analysis Report   Print Date/Time: 2013/01/14 8:30:55

Sample ID: DI Water
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: CDE

Mode: TOC
Filename: 01140539
Timestamp: 2013/01/14 05:52
Sample Type: TOC Standard

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Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			-14711	26.643	26.301	120

Last Message: Low Sample Detected

Sample ID: DI Water
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: CDE

Mode: TOC
Filename: 01140600
Timestamp: 2013/01/14 06:14
Sample Type: TOC Standard

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			73700	25.034	26.033	56
2			28393	24.556	24.301	120
3			-2140	24.039	23.717	120

Last Message: Low Sample Detected
<<<Statistics>>> Mean: 33318 Std Dev: 38159 RSD: 114.53

Sample ID: 200 ppm
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: CDE

Mode: TOC
Filename: 01140618
Timestamp: 2013/01/14 06:25
Sample Type: TOC Standard

1-14-13

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			844250	23.240	24.238	69
2			1151875	23.093	24.078	73

<<<Statistics>>> Mean: 998062 Std Dev: 217524 RSD: 21.79

Sample ID: 200 ppm
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: CDE

Mode: TOC
Filename: 01140628
Timestamp: 2013/01/14 06:37
Sample Type: TOC Standard

1-14-13

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			1147087	22.512	23.503	73
2			3432	22.098	22.064	99

Last Message: Canceled
<<<Statistics>>> Mean: 575260 Std Dev: 808686 RSD: 140.58

Sample ID: 200 ppm
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: CDE

Mode: TOC
Filename: 01140638
Timestamp: 2013/01/14 06:48
Sample Type: TOC Standard

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			1093164	22.200	23.200	71
2			1062241	21.888	22.886	87
3			1089589	21.582	22.582	81

<<<Statistics>>> Mean: 1081665 Std Dev: 16916 RSD: 1.56

Sample ID: 500 ppm
Method: Boat Sampler

Mode: TOC
Filename: 01140655

Cal. Curve: 01142013 BOAT CAL
Operator ID: CDE

Timestamp: 2013/01/14 07:16
Sample Type: TOC Standard

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			2429789	20.890	21.888	115
2			2571578	20.382	21.379	114
3			2575524	20.198	21.197	110

<<<Statistics>>> Mean: 2525630 Std Dev: 83024 RSD: 3.29

Sample ID: 1000 ppm
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: CDE

Mode: TOC
Filename: 01140718
Timestamp: 2013/01/14 07:39
Sample Type: TOC Standard

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			4824518	20.211	21.211	159
2			4665355	20.220	21.220	129
3			4997139	20.091	21.089	120

<<<Statistics>>> Mean: 4829004 Std Dev: 165937 RSD: 3.44

Sample ID: 2500 ppm
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: CDE

Mode: TOC
Filename: 01140748
Timestamp: 2013/01/14 08:14
Sample Type: TOC Standard

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			9546361	20.661	21.660	190
2			10940150	22.300	23.297	281
3			11236244	23.583	24.581	262

<<<Statistics>>> Mean: 10574252 Std Dev: 902406 RSD: 8.53

Sample ID: ICV/CCV BOAT
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: CDE

Mode: TOC
Filename: 01140820
Timestamp: 2013/01/14 08:25
Sample Type: Cal. Verification

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	996.3702	39.8548	4461496	25.435	26.434	191

ICB/CCB
Sample ID: ~~ICV/CCV~~ BOAT
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: CDE

Mode: TOC
Filename: 01140827
Timestamp: 2013/01/14 08:29
Sample Type: Cal. Verification

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	-43.8919	-1.7557	119223	26.411	27.407	63

Last Message: Out of Calibration

2-5-13

TOTAL SOLIDS/VOLATILE SOLIDS (TS / TVS) BENCHSHEET

SOLIDS *(dry at 104 (12-24 hr) then combust at 550 (30 min))*

DATE: 2/4/2013

ANALYST: KE 13:24 (A)

Instrumentation

Drying Ovens: 12

Muffle Furnace: 62790918520

Analytical Balance: 1123230597

Batch drying time

record times as mm/dd/yy hh:mm

2/4/2013 13:24	date/time in oven	KE
2/5/2013 5:56	date/time out	KE
elapsed hrs =	16.5	

TS (%) calculated as:
Final dry wt (g) = (Dry Wt - Tare Wt)
TS = (Final Dry Wt)/ (grams Sample-Tare)

TVS (mg/kg dry wt) calculated as:
Final ash wt (g) = (min ash wt - tare wt)
*TVS (mg/kg) = [(Dry wt-Ash wt)/ (dry weight)] *1,000,000*
if ash wt > dry wt, "Chk for Err"
*if dry wt-ash wt < 0.001 g, "< (1/dry wt)*1,000,000*

Cal Weight ID	CV-02	CV-02	CV-02	CV-02	CV-02	CV-02
Date & Time	2/4/13 13:02 KE	2/4/13 12:52 KE	2/5/13 6:12 KE			
Cal Wt (g) 10.0000	10.0000	10.0000	10.0000			
record weights to 4 places	Cal OK!	Cal OK!	Cal OK!			

SAMPLE ID	DISH #	SAMPLE (grams)	TARE WT (grams)	DRY WT 104C (grams) 1			dry Wt (g)	TS (%)	ASH WT 550C (grams) 1	2		Ash Wt (g)	TVS (mg/kg)	(%)
Blank			1.1061	1.1060			0.00							
WC32 A1		7.3997	1.1116	3.6288			2.52	40.0%						
WC32 B1		6.8397	1.0994	3.0487			1.95	[illegible]						
WC32 C1		7.3620	1.0744	5.8832			4.81	[illegible]						
WC32 D1		8.0924	1.0742	5.1287			4.05	[illegible]						
WC32 E1		7.9744	1.1046	7.6147			6.51	[illegible]						
WC32 F1		7.8851	1.0917	7.3763			6.28	92.5%						
WC32 G1		6.9821	1.0716	4.1726			3.10	52.5%						
WC32 G1 dup		6.9660	1.0879	4.2830			3.20	54.4%						
							RPD =	3.54%				RPD =	NA	
WC32 G1 trp		6.7222	1.0908	4.0205			2.93	52.0%						
							RSD =	2.34%				RSD =	NA	
WC32 H1		7.6165	1.1035	4.3921			3.29	50.5%						
WC33 G1		6.9536	1.1021	6.6182			5.52	[illegible]						
WC33 H1		8.8325	1.0990	8.1159			7.02	90.7%						
WC33 I 1		7.7269	1.0909	6.8383			5.75	86.6%						

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TOTAL / VOLATILE SOLIDS (TS/TVS) BENCHSHEET

Analytical Resources, Incorporated
Analytical Chemists and Consultants

① 2-4-13 (W)
② 12:52 (R) 2-4-13

Analyst: W	Date: 2-4-13	Oven ID: 12	Balance ID: 1123230597
Time in Oven: 13:24	Time Out of Oven: 5:56	Elapsed Time (> 12 Hrs):	

Dry at 104 °C (12-24 hrs) then combust at 550 °C for 30 min. Record Weights to 4 places

TS (%) calculated as:
Final Dry Weight (g) = (Dry Weight – Tare Weight)
TS = (Final Dry Weight) / (Grams Sample – Tare Weight)

TVS (mg/kg dry weight) calculated as:
Final Ash Weight (g) = (Minimum Ash Weight – Tare Weight)
TVS (mg/kg) = [(Dry Weight – Ash Weight) / (Dry Weight) * 1,000,000
If Ash Weight > Dry Weight then "Check for Error"
If Dry Weight – Ash Weight < 0.001 < (1/Dry Weight) * 1,000,000

Cal Weight ID		CV-02	CV-02 (2)	CV-02	CV-02	CV-02		CV-02	CV-02	CV-02
Date & Time:		2-4-13 13:02	2-4-13	2-5-13 6:12						
Cal Weight (10.0000):		10.0002 (W)	10.0000 (R)	10.0000 (W)						
Sample ID	Dish #	Sample	Tare	Dry Weight 104°C 1	2	3	Dry Weight grams	Ash Weight 550°C 1	2	3
BLANK	1	Ø	1.1061	1.1060						
WC32 A1	2	7.3997	1.1116	3.6288						
B1	3	6.8397	1.0994	3.0487						
C1	4	7.3620	1.0744	5.8832						
D1	5	8.0924	1.0742	5.1287						
E1	6	7.9744	1.1046	7.6147						
F1	7	7.8851	1.0917	7.3763						
G1	8	6.9821	1.0716	4.1726						
DG1	9	6.9660	1.0879	4.2830						
PG1	10	6.7222	1.0908	4.0205						
H1	11	7.6165	1.1035	4.3921						
WC33 G1	12	6.9536	1.1021	~~4.3921~~ (1)	6.6182					
H1	13	8.8325	1.0990	~~6.6183~~ (1)	8.1159					
I1	14	7.7269	1.0909	6.8383						

2-5-13 (R)

WCG2 02110

ω
2-12-13

TOC Solids Prep Log

TOC Solids Prep Log						DATE:	2/4/2013
acid purging to remove IC and drying at 70°C for TOC analysis						ANALYST:	KE 13:42
General notes regarding prep method and samples (identify the acid used)							
						HCL 10% ID:	
Balance ID:	Mettler Toledo (XS205 DU) SN 123230597					HCL ID:	

make no entry to shaded cells, they are calculated

Sample ID		IC Test	Gravimetric Data (grams)			%	*Sample description & notes*
ARI #	Client	+ / -	Tare Wt.	Wet wt.	70°C dry wt	Solids	*(homogeneity and exclusions)*
Blank			13.0855		13.0855	0 mg	
WC32 A1		+-	13.1329	17.4222	15.0388	44.43%	
WC32 H1		++-	13.1530	21.1276	17.3953	53.20%	
WC32 C1	NO ACID		13.0648	21.5507	19.5455	76.37%	
WC32 E1	NO ACID		12.9742	21.2943	20.6975	92.83%	
WC32 F1	NO ACID		13.1188	21.5172	21.0145	94.01%	
WC33 G1	NO ACID		13.0620	18.5096	18.1989	94.30%	

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2-4-13

TOC Solids Preparation Log

Acid purge to remove IC and drying 70 °C for TOC analysis
Add general notes regarding samples and preparation and identify the acid used

Analyst 13:42 Date 2-4-13

Sample Idenification		IC	Gravimetric Data			% Solids	Sample description & notes
ARI #	Client ID	Test	Tare	Wet	70 °C		
Blank			13.0855	0	13.0855		
WC32 A'		+-	13.1329	17.4292	15.0388		Sediment
~~B'~~		~~+~~	~~13.1309~~	~~21.2180~~	~~16.3313~~	~~[illegible]~~	~~Sediment + Rocks~~
~~C'~~		~~+~~	~~13.0098~~	~~21.0866~~	~~[illegible]~~ *	~~19.5453~~	~~Sand + shells~~
~~D'~~		~~+~~	~~13.1155~~	~~22.9911~~	*		~~Rocks, Sediment~~
~~E'~~		~~+-~~	~~13.0605~~	~~20.4130~~	*	Rerun	~~Rock/Sand + Shells~~
~~F'~~		~~+~~	~~13.2599~~	~~20.2419~~	*		
~~G'~~		~~+~~	~~13.1654~~	~~21.1153~~	*		~~wet Sediment Rocks + [illegible]~~
~~G'mP~~		~~+~~	~~13.1015~~	~~18.8487~~	*		
~~G'[illegible]~~		~~+~~	~~13.1760~~	~~19.4220~~	~~17.6218~~		
H'		+-	13.1530	21.1276	17.3953		Sand + Shell
~~WC33 G'~~		~~+~~	~~13.0571~~	~~19.1334~~	*		
WC32 C'		0	13.0648	21.5507	19.5455		
E'		0	12.9742	21.2943	20.1975		
F'		0	13.1188	21.5172	21.0145		
WC33 G'		0	13.0620	18.5096	18.1984		

NO 2-4-13

2-4-13

*- Samples were reset up without Acid 2-6-13

WC32 : 02115

W
2-15-13

TOC, Solids Data Analysis

Instrument: Apollo 1
Mode: NPOC *Inlet:* Boat
Spike Std = 2,500 *ppm C*

DATE: 2/13/2013
ANALYST: KE 6:14
Balance ID:

Calibration Data

Cal Curve ID: **1/14/2013** *Conc:* 5,000 *ppm*
Calibration Curve Standard: **00130-01** *Curve Date:* **01/14/03**
CalFact: ***1.044E+05*** *intercept:* **302437** *r2 :* **0.99651**
Curve Range (ppm) 200 *to* 2,500
Curve Range (µgC): **8** *to* **100** *40 µL injections of designated standard*

Verification Standard

Source: ***ERA# 0409-12-01*** *Conc:* **5,000** *ppm*
dilution : 10 *mL to* 50 **1,000** *ppm*

Standard Reference Material

Source: ***NIST 8704*** *Conc:* **33,510** *ppm*
Source: ***NIST 1941B*** *Conc:* **29,900** *ppm*

Silica Blanks

Replicate determinations						Mean	RSD	condition

Sample Data

*"C corr" (with dilution) = ("C obs" - (Mean silica Blank * %Silica)) * Dilution Factor*

Sample ID	Dilution Data				Spike	Combustion Data			
	Sample wt (mg)	Final wt. (mg)	Silica (%)	Dilution Factor	Spike (µL Std)	Burn wt. (mg)	C obs (ppm C)	C corr (ppm C)	*comments*
ICV				1.00		40.0	960	960	*96.00%*
Blank				1.00		40.0	-56.79	-57	*Blank OK*
NIST 1941B				1.00		1.4	31729	31,729	*106.12%*
WC78 B1				1.00		1.4	37673	37,673	*Range OK!*
WC78 B1 dup				1.00		1.5	35765	35,765	*RPD=5.2%*
WC78 B1 trp				1.00		1.3	33333	33,333	*RSD=6.1%*
~~WC78 B1 ms~~				~~1.00~~	~~20~~	~~1.0~~	~~74452~~	~~74,452~~	~~*Range OK!*~~
~~*Spike =*~~	~~*0.05*~~	~~*mg C to*~~	~~*1.0*~~	~~*mg Samp=*~~	~~*50,000*~~	*ppm*		*74%*	~~LATE INJECT~~
WC78 B1 ms				1.00	20	1.0	83872	83,872	*Range OK!*
Spike =	*0.05*	*mg C to*	*1.0*	*mg Samp=*	*50,000*	*ppm*		*92%*	
WC78 C1				1.00		1.6	40763	40,763	*Range OK!*
WC78 D1				1.00		1.0	23578	23,578	*Range OK!*
WC78 E1				1.00		1.1	19052	19,052	*Range OK!*
WC78 F1				1.00		0.8	44068	44,068	*Range OK!*

Sample Data										
*"C corr" (with dilution) = ("C obs" - (Mean silica Blank * %Silica)) * Dilution Factor*										
	Dilution Data					Combustion Data				
Sample ID	Sample wt (mg)	Final wt. (mg)	Silica (%)	Dilution Factor	Spike (µL Std)	Burn wt. (mg)	C obs (ppm C)	C corr (ppm C)	*comments*	
CCV				1.00		40.0	1073	1,073	*107.30%*	
Blank				1.00		40.0	-58.58	-59	*Blank OK*	
WC78 G1				1.00		0.7	82990	82,990	*Range OK!*	
WC40 A1				1.00		1.6	6272	6,272	*Range OK!*	
WC40 A1 dup				1.00		1.8	6939	6,939	*RPD=10.1%*	
WC40 A1 trp				1.00		1.6	7214	7,214	*RSD=7.1%*	
WC40 A1 ms				1.00	10	1.8	21791	21,791	*Range OK!*	
Spike =	*0.025*	*mg C to*	*1.8*	*mg samp=*	*13,889*	*ppm*		*112%*		
WC40 B1				1.00		1.9	4043	4,043	*Low Scale*	
WC32 A1				1.00		1.2	25374	25,374	*Range OK!*	
Samples WC32 C1,D1,E1,F1,G1,& WC33 G1 Had 10% O-Phosphoric Acid added to samples in the boat pryer to combustion. Amount (how many drops) shown after condition of each run.										
WC32 C1				1.00		1.4	34444	34,444	*Range OK!*	**6 Drops Acid**
WC32 D1				1.00		1.8	32029	32,029	*Range OK!*	**8 Drops Acid**
WC32 E1				1.00		2.7	12221	12,221	*Range OK!*	**7 Drops Acid**
CCV				1.00		40.0	1057	1,057	*105.70%*	
Blank				1.00		40.0	-42.67	-43	*Blank OK*	
WC32 F1				1.00		2.1	16168	16,168	*Range OK!*	**6 Drops Acid**
WC32 G1				1.00		1.3	54617	54,617	*Range OK!*	**9 Drops Acid**
WC33 G1				1.00		2.2	18182	18,182	*Range OK!*	**6 Drops Acid**
WC32 H1				1.00		1.0	27892	27,892	*Range OK!*	
~~WC32 B1~~				~~1.00~~		~~1.2~~	~~31049~~	~~31,049~~	~~*Range OK!*~~	
WC32 B1				1.00		1.3	15656	15,656	*Range OK!*	
WC32 B1 dup				1.00		1.3	16256	16,256	*RPD=3.6%*	
WC32 B1 trp				1.00		1.3	19674	19,674	*RSD=12.6%*	
WC32 B1 ms				1.00	20	1.2	49535	49,535	*Range OK!*	
Spike =	*0.05*	*mg C to*	*1.2*	*mg samp=*	*41,667*	*ppm*		*87%*		
~~WD45 C1~~				~~1.00~~		~~2.0~~	~~8893~~	~~8,893~~	~~*Range OK!*~~	~~**1 Drop Acid**~~
NIST 1941B				1.00		1.5	30183	30,183	*100.95%*	
~~CCV~~				~~1.00~~		~~40.0~~	~~825~~	~~825~~	[illegible]	
CCV				1.00		40.0	914	914	*91.40%*	
Blank				1.00		40.0	-44.69	-45	*Blank OK*	

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(1) 2-13-13 (initials)

TOC Solids Sample Run Log
Apollo 9000

Page 1 of 2

Set-Up Parameters MODE: NPOC			INLET: Boat Sampler	
Standards:	**Source**	**Conc (ppm)**	**Analyst:**	(initials)
Calibration:	ARI – 00128-03	5000	**Date:**	2-13-13
Verification:	ERA – 0409-1201	5000 to 1000 for CVS	**Time:**	6:14
SRM:	NBS – 1941b or 8704	Method: PSEP 1986-MOD	**Balance ID**	B 146454145
Sample Sequence:				

Sample ID	Dilution Data (mg)		Burn Wt	Matrix Spike Data		Comments
	Sample	+ Silica Gel	mg	mg/L	µL added	
ICV			40			
ICB			40			
NBS 1941 B			1.4			
WC78 B'			1.4			
d B'			1.5			
tP B'			1.3			
MS B'			1.0	2500	20	(Late inject Rerun)
MS B'			1.0	2500	20	
C'			1.6			
D'			1.0			
E'			1.1			
F'			0.8			
CCV			40			
CCB			40			
WC78 G'			0.7			
WC40 A1			1.6			
d A1			1.8			
tP A1			1.6			
MS A1			1.8	2500	10	
B'			1.9			
WC32 A1	~~Drops~~	~~Acid~~ (initials)	1.2			
C'	6-Drops	Acid	1.4			Acidify in Boat
D'	8-Drops	Acid	1.8			
E'	7 "	"	2.7			
CCV			40			
CCB			40			
WC32 F'	6 Drops	Acid	2.1			Acidify in Boat
G'	9 "	"	1.3			
WC33 G'	6 "	"	2.2			
WC32 H'			1.0			
D B'			1.2			wrong Sample (initials)
B'			1.3			

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TOC Solids Sample Run Log
Apollo 9000

Set-Up Parameters MODE: NPOC			INLET: Boat Sampler	
Standards:	Source	Conc (ppm)	Analyst:	(initials)
Calibration:	ARI - 00128-03	5000	Date:	2-13-13
Verification:	ERA - 0409-12-01	5000 to 1000 for CVS	Time:	6:14
SRM:	NBS – 1941b or 8704	Method: PSEP 1986-MOD	Balance ID	B 14454445
Sample Sequence:				

Sample ID	Dilution Data (mg) Sample	+ Silica Gel	Burn Wt mg	Matrix Spike Data mg/L	µL added	Comments
WC32 #B'			1.3			
↓ +DB'			1.3			
MS B'			1.2	2500	20	
WD45 C1	1 Drop	Acid	2.0			Acidify in Boat
NBS1941B			1.5			
CCV			40/1.0			
CCB			40			

2-13-13 (initials)

2-13-13 1

Detailed Analysis Report   Print Date/Time: 2013/02/13 15:35:13

Sample ID: ICV/CCV BOAT
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA
Mode: TOC
Filename: 02130611
Timestamp: 2013/02/13 06:14
Sample Type: Cal. Verification

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	960.0685	38.4027	4309965	12.530	13.528	109

Sample ID: ICB/CCB BOAT
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA
Mode: TOC
Filename: 02130638
Timestamp: 2013/02/13 06:40
Sample Type: Cal. Verification

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	-56.7868	-2.2715	65397	12.469	13.464	49

Sample ID: NBS 1941B
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA
Mode: TOC
Filename: 02130703
Timestamp: 2013/02/13 07:08
Sample Type: Cal. Verification

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	31729.2383	44.4209	4937995	12.454	13.450	198

Sample ID: WC78 B1
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA
Mode: TOC
Filename: 02130721
Timestamp: 2013/02/13 07:30
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	37672.8906	52.7420	5503909	13.014	14.012	138

Sample ID: WC78 B1 DP
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA
Mode: TOC
Filename: 02130732
Timestamp: 2013/02/13 07:36
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	35764.5195	53.6468	5598323	13.052	14.049	137

Sample ID: WC78 B1 TRIP
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA
Mode: TOC
Filename: 02130744
Timestamp: 2013/02/13 07:47
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	33332.8086	43.3327	4521989	13.033	14.032	129

Sample ID: WC78 B1 MS
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA
Mode: TOC
Filename: 02130804
Timestamp: 2013/02/13 08:08
Sample Type: Sample

2-13-13 1

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	74451.9531	74.4520	7769452	13.466	14.461	138

Sample ID: WC78 B1 MS
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02130814
Timestamp: 2013/02/13 08:18
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	83871.7656	83.8718	8752458	13.477	14.476	156

Sample ID: WC78 C1
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02130826
Timestamp: 2013/02/13 08:37
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	40762.7539	65.2204	6806091	13.356	14.356	146

Sample ID: WC78 D1
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02130844
Timestamp: 2013/02/13 08:47
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	23577.9570	23.5780	2460483	13.270	14.267	106

Sample ID: WC78 E1
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02130850
Timestamp: 2013/02/13 08:53
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	19051.5176	20.9567	2186938	13.189	14.183	98

Sample ID: WC78 F1
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02130857
Timestamp: 2013/02/13 09:02
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	44067.5156	35.2540	3678941	13.145	14.143	117

Sample ID: ICV/CCV BOAT
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02130904
Timestamp: 2013/02/13 09:07
Sample Type: Cal. Verification

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1072.8595	42.9144	4780778	13.240	14.238	120

Sample ID: ICB/CCB BOAT
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02130915
Timestamp: 2013/02/13 09:17
Sample Type: Cal. Verification

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	-58.5766	-2.3431	57926	13.395	14.395	49

Sample ID: WC78 G1
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02130932
Timestamp: 2013/02/13 09:35
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	82990.3984	58.0933	6062338	13.672	14.670	142

Sample ID: WC40 A1
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02131000
Timestamp: 2013/02/13 10:04
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	6271.6396	10.0346	1047166	14.139	15.137	88

Sample ID: WC40 A1 DUP
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02131010
Timestamp: 2013/02/13 10:13
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	6939.2451	12.4906	1303464	14.559	15.553	91

Sample ID: WC40 A1
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02131022
Timestamp: 2013/02/13 10:25
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	7214.1694	11.5427	1204538	15.101	16.094	101

Sample ID: WC40 A1 MS
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02131028
Timestamp: 2013/02/13 10:30
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	21790.5645	39.2230	4093127	15.653	16.653	96

Sample ID: WC40 B1
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02131040
Timestamp: 2013/02/13 10:44
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	4042.9663	7.6816	801619	15.452	16.449	74

Sample ID: WC32 A1
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02131047
Timestamp: 2013/02/13 10:50
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	25373.9023	30.4487	3177480	15.299	16.298	105

Sample ID: WC32 C1 Acid in Boat
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02131129
Timestamp: 2013/02/13 11:35
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	34444.1523	48.2218	5032199	13.761	17.028	300

Last Message: Max Integration Time Reached

Sample ID: WC32 D1 Acid in Boat
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02131141
Timestamp: 2013/02/13 11:55
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	32029.1777	57.6525	6016343	13.450	16.582	300

Last Message: Max Integration Time Reached

Sample ID: WC32 E1 Acid in Boat
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02131202
Timestamp: 2013/02/13 12:09
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	12221.3711	32.9977	3443483	13.174	17.007	300

Last Message: Max Integration Time Reached

Sample ID: ICV/CCV BOAT
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02131222
Timestamp: 2013/02/13 12:29
Sample Type: Cal. Verification

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1057.3726	42.2949	4716132	13.280	14.278	119

Sample ID: ICB/CCB BOAT
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02131235
Timestamp: 2013/02/13 12:39
Sample Type: Cal. Verification

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	-42.6681	-1.7067	124332	13.442	14.440	52

Sample ID: WC32 F1
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02131246
Timestamp: 2013/02/13 12:53
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	16168.4316	33.9537	3543247	13.381	17.760	300

Last Message: Max Integration Time Reached

Sample ID: WC32 G1
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02131306
Timestamp: 2013/02/13 13:24
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	54616.7188	71.0017	7409403	14.189	23.106	301

Last Message: Max Integration Time Reached

Sample ID: WC33 G1
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02131332
Timestamp: 2013/02/13 13:39
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	18182.1074	40.0006	4174276	17.193	26.459	300

Last Message: Max Integration Time Reached

Sample ID: WC32 H1
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02131345
Timestamp: 2013/02/13 13:48
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	27891.8672	27.8919	2910663	20.237	21.237	122

~~Sample ID: WC32 B1~~
~~Method: Boat Sampler~~
~~Cal. Curve: 01142013 BOAT CAL~~
~~Operator ID: TRINA~~

Late inject 2-13-13 (initials)

Mode: TOC
Filename: 02131352
Timestamp: 2013/02/13 13:55
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	31048.6133	37.2583	3888103	20.309	21.309	130

Sample ID: WC32 B1
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02131358
Timestamp: 2013/02/13 14:01
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	15655.7998	20.3525	2123894	20.585	21.584	108

Sample ID: WC32 B1 DUP
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02131403
Timestamp: 2013/02/13 14:06
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	16255.9834	21.1328	2205316	20.743	21.740	103

Sample ID: WC32 B1 ~~Dup~~ Trip
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02131416
Timestamp: 2013/02/13 14:22
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	19673.8574	25.5760	2668991	20.553	21.551	116

Sample ID: WC32 B1 MS

Mode: TOC

Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Filename: 02131424
Timestamp: 2013/02/13 14:29
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	49535.0703	59.4421	6203093	20.392	21.392	191

Sample ID: WD45 C1
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02131433
Timestamp: 2013/02/13 14:35
Sample Type: Sample

Cancelled 2-13-13

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	176.6949	7.0678	737562	20.386	21.377	78

Sample ID: WD45 C1
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02131436
Timestamp: 2013/02/13 14:43
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	8892.7910	17.7856	1856019	20.287	23.058	300

Last Message: Max Integration Time Reached

Sample ID: NBS 1941B
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02131504
Timestamp: 2013/02/13 15:09
Sample Type: Cal. Verification

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	30182.7148	45.2741	5027024	18.844	19.842	223

Sample ID: ICV/CCV BOAT
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02131513
Timestamp: 2013/02/13 15:16
Sample Type: Cal. Verification

2-13-13

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	825.1590	33.0064	3746824	18.790	19.789	113

Last Message: Out of Calibration

Sample ID: ICV/CCV BOAT
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

Mode: TOC
Filename: 02131520
Timestamp: 2013/02/13 15:23
Sample Type: Cal. Verification

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	914.2907	36.5716	4118879	18.109	19.108	114

Sample ID: ICB/CCB BOAT
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: TRINA

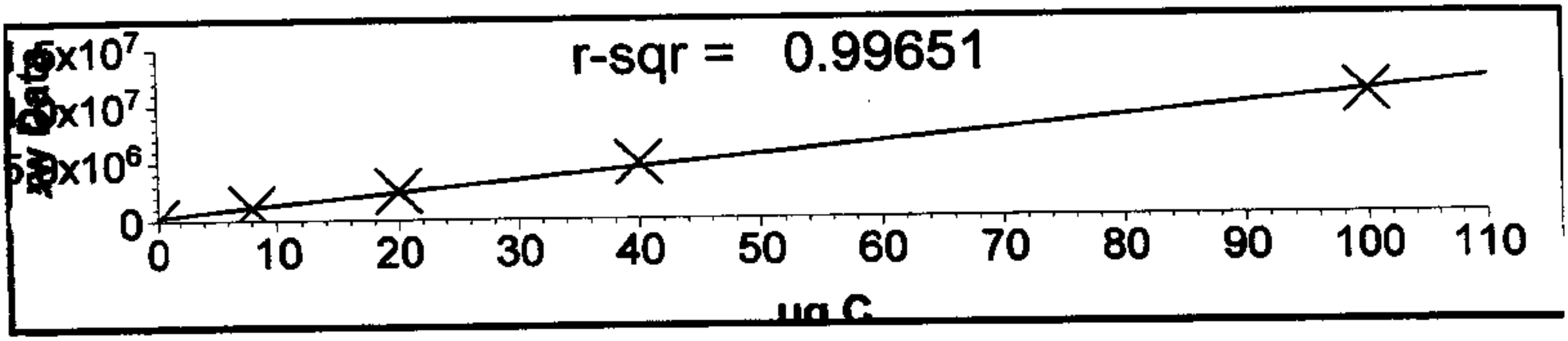
Mode: TOC
Filename: 02131526
Timestamp: 2013/02/13 15:27
Sample Type: Cal. Verification

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	-44.6886	-1.7875	115898	17.990	18.984	52

Calibration Report Print Date/Time: 2013/01/14 8:30:01

Cal. Curve ID: 01142013 BOAT CAL
Created: 2013/01/14 08:17
Calibration Factor (m): 1.044e+05
Y Intercept (b): 302437
r-squared: 0.99651

Standard ID	Y Raw Data	X Expected ug C	Measured ug C	Message	Date & Time
DI Water	33318	0.000	-2.579	Low Sample De	2013/01/14 06:14
200 ppm	1081664	8.000	7.467		2013/01/14 06:48
500 ppm	2525630	20.000	21.304		2013/01/14 07:16
1000 ppm	4829004	40.000	43.377		2013/01/14 07:39
2500 ppm	10574251	100.000	98.431		2013/01/14 08:14


r-sqr = 0.99651
0 10 20 30 40 50 60 70 80 90 100 110
ug C

Detailed Analysis Report   Print Date/Time: 2013/01/14 8:30:55

Sample ID: DI Water
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: CDE

Mode: TOC
Filename: 01140539
Timestamp: 2013/01/14 05:52
Sample Type: TOC Standard

1-14-13 (R)

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			-14711	26.643	26.301	120

Last Message: Low Sample Detected

Sample ID: DI Water
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: CDE

Mode: TOC
Filename: 01140600
Timestamp: 2013/01/14 06:14
Sample Type: TOC Standard

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			73700	25.034	26.033	56
2			28393	24.556	24.301	120
3			-2140	24.039	23.717	120

Last Message: Low Sample Detected
<<<Statistics>>> Mean: 33318 Std Dev: 38159 RSD: 114.53

Sample ID: 200 ppm
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: CDE

Mode: TOC
Filename: 01140618
Timestamp: 2013/01/14 06:25
Sample Type: TOC Standard

1-14-13 (R)

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			844250	23.240	24.238	69
2			1151875	23.093	24.078	73

<<<Statistics>>> Mean: 998062 Std Dev: 217524 RSD: 21.79

Sample ID: 200 ppm
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: CDE

Mode: TOC
Filename: 01140628
Timestamp: 2013/01/14 06:37
Sample Type: TOC Standard

1-14-13 (R)

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			1147087	22.512	23.503	73
2			3432	22.098	22.064	99

Last Message: Canceled
<<<Statistics>>> Mean: 575260 Std Dev: 808686 RSD: 140.58

Sample ID: 200 ppm
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: CDE

Mode: TOC
Filename: 01140638
Timestamp: 2013/01/14 06:48
Sample Type: TOC Standard

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			1093164	22.200	23.200	71
2			1062241	21.888	22.886	87
3			1089589	21.582	22.582	81

<<<Statistics>>> Mean: 1081665 Std Dev: 16916 RSD: 1.56

Sample ID: 500 ppm
Method: Boat Sampler

Mode: TOC
Filename: 01140655

Cal. Curve: 01142013 BOAT CAL
Operator ID: CDE

Timestamp: 2013/01/14 07:16
Sample Type: TOC Standard

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			2429789	20.890	21.888	115
2			2571578	20.382	21.379	114
3			2575524	20.198	21.197	110

<<<Statistics>>> Mean: 2525630 Std Dev: 83024 RSD: 3.29

Sample ID: 1000 ppm
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: CDE

Mode: TOC
Filename: 01140718
Timestamp: 2013/01/14 07:39
Sample Type: TOC Standard

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			4824518	20.211	21.211	159
2			4665355	20.220	21.220	129
3			4997139	20.091	21.089	120

<<<Statistics>>> Mean: 4829004 Std Dev: 165937 RSD: 3.44

Sample ID: 2500 ppm
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: CDE

Mode: TOC
Filename: 01140748
Timestamp: 2013/01/14 08:14
Sample Type: TOC Standard

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			9546361	20.661	21.660	190
2			10940150	22.300	23.297	281
3			11236244	23.583	24.581	262

<<<Statistics>>> Mean: 10574252 Std Dev: 902406 RSD: 8.53

Sample ID: ICV/CCV BOAT
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: CDE

Mode: TOC
Filename: 01140820
Timestamp: 2013/01/14 08:25
Sample Type: Cal. Verification

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	996.3702	39.8548	4461496	25.435	26.434	191

ICB/CCB
Sample ID: ~~ICV/CCV~~ BOAT
Method: Boat Sampler
Cal. Curve: 01142013 BOAT CAL
Operator ID: CDE

Mode: TOC
Filename: 01140827
Timestamp: 2013/01/14 08:29
Sample Type: Cal. Verification

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	-43.8919	-1.7557	119223	26.411	27.407	63

Last Message: Out of Calibration

Geotechnical Raw Data
Analyst Notes and Raw Data

ARI Job ID: WC32, WC33

PSEP GRAIN SIZE ANALYSIS

ARI Job No.: WC32 ARI Sample Letter: A-1 Client Sample No.: SG-12-0-10-013113

Set-up Date: 2-6-2013 Sample Description: SANDY, SILTY CLAY

SOLIDS CONTENT

Moisture Content	Initials: lg
Container No.	159
Tare Weight	1.4788
Wet Weight + Tare	48.4854
Dry Weight + Tare	20.4697

Test Sample	Initials: lg
Container No.	159
Tare Weight	49.3796
Wet Weight + Tare	80.5728
Dry Weight + Tare	51.5615

Calgon Batch #: 280

SIEVE ANALYSIS

Sieve Date: 2-10-2013

Sieve Set #: 1 Initials: CBL

Sieve Size	Weight Retained
Tare	49.3893
4	49.3893
10	49.4087
18	49.5310
35	49.8485
60	50.2817
120	51.0947
230	51.4918
PAN	0.0661

2/11/2013

Temp:23

PIPETTE ANALYSIS

Initials: kb

TIME	Tare ID	Tare Wt	Dry Wt & Tare
9.45:00			
9:45:20	A1-1	1.5183	1.7405
9:46:46	A1-2	1.5005	1.7153
9:52.05	A1-3	1.4963	1.6902
10:13:18	A1-4	1.4882	1.6475
11:38:00	A1-5	1.4925	1.6131
15:11:00	A1-6	1.4984	1.5852
8:21:00	A1-7	1.5015	1.5595

SALT CORRECTION

Date: ________ Initials: ____

Tare Weight	
Dry Weight + Tare	

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PSEP GRAIN SIZE ANALYSIS

ARI Job No.: WC32 ARI Sample Letter: A-2 Client Sample No.: SG-12-0-10-013113

Set-up Date: 2-6-2013 Sample Description: SANDY, SILTY CLAY

SOLIDS CONTENT

Moisture Content	Initials: ej
Container No.	166
Tare Weight	1.4787
Wet Weight + Tare	42.9460
Dry Weight + Tare	18.1762

Test Sample	Initials: ej
Container No.	166
Tare Weight	50.8220
Wet Weight + Tare	80.0608
Dry Weight + Tare	53.3520

Calgon Batch #: 280

SIEVE ANALYSIS

Sieve Date: 2.10.2013

Sieve Set #: 2 Initials: SG

Sieve Size	Weight Retained
Tare	50.8331
4	50.8805
10	50.9532
18	51.2919
35	51.6746
60	52.0713
120	52.8539
230	53.2239
PAN	0.0981

2/11/2013

PIPETTE ANALYSIS

Temp:23

Initials: kb

TIME	Tare ID	Tare Wt	Dry Wt & Tare
9:49:00			
9:49:20	A2-1	1.4939	1.6930
9:50:46	A2-2	1.4847	1.6771
9:56.05	A2-3	1.4872	1.6614
10:17 18	A2-4	1.5466	1.6890
11:42:00	A2-5	1.5514	1.6609
15:15:00	A2-6	1.5498	1.6289
8:25:00	A2-7	1.5441	1.5966

SALT CORRECTION

Date: ________ Initials: ____

Tare Weight	
Dry Weight + Tare	

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Rev. 01

PSEP GRAIN SIZE ANALYSIS

ARI Job No.: WC32 ARI Sample Letter: A-3 Client Sample No.: SG-12-D-10-013113

Set-up Date: 2-6-2013 Sample Description: SANDY, SILTY CLAY

SOLIDS CONTENT

Moisture Content	Initials: eg
Container No.	167
Tare Weight	1.5244
Wet Weight + Tare	54.4745
Dry Weight + Tare	22.8527

Test Sample	Initials: eg
Container No.	167
Tare Weight	50.2088
Wet Weight + Tare	80.6499
Dry Weight + Tare	52.3117

Calgon Batch #: 280

SIEVE ANALYSIS

Sieve Date: 2-10-2013

Sieve Set #: 1 Initials: BBL

Sieve Size	Weight Retained
Tare	50.2170
4	50.2170
10	50.2472
18	50.4112
35	50.6975
60	51.1181
120	51.8846
230	52.2576
PAN	0.0458

2/11/2013

Temp:23

PIPETTE ANALYSIS

Initials: kb

TIME	Tare ID	Tare Wt	Dry Wt & Tare
9:53:00			
9:53:20	A3-1	1.5444	1.7610
9:54:46	A3-2	1.5418	1.7525
10:00:05	A3-3	1.4902	1.6801
10:21:18	A3-4	1.4844	1.6400
11:46:00	A3-5	1.4776	1.5961
15:19:00	A3-6	1.4822	1.5677
8:29:00	A3-7	1.4825	1.5384

SALT CORRECTION

Date: ______ Initials: ____

Tare Weight	
Dry Weight + Tare	

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PSEP GRAIN SIZE ANALYSIS

ARI Job No.: WC32 ARI Sample Letter: B Client Sample No.: SG-13-0-10-013113

Set-up Date: 2-6-2013 Sample Description: SILT, ORGANIC DEBRIS

SOLIDS CONTENT

Moisture Content	Initials: eg
Container No.	183
Tare Weight	1.4745
Wet Weight + Tare	40.9034
Dry Weight + Tare	14.4083

Test Sample	Initials: eg
Container No.	183
Tare Weight	50.1025
Wet Weight + Tare	93.7526
Dry Weight + Tare	57.0995

Calgon Batch #: 280

SIEVE ANALYSIS

Sieve Date: 2-10-2013

Sieve Set #: 2 Initials: BL

Sieve Size	Weight Retained
Tare	50.1094
4	50.1094
10	50.1284
18	50.5633
35	50.9029
60	51.3497
120	54.4138
230	56.8600
PAN	0.2222

2/11/2013

PIPETTE ANALYSIS

Temp:23

Initials: kb

TIME	Tare ID	Tare Wt	Dry Wt & Tare
9.57:00			
9:57:20	B1	1.4771	1.6403
9:58:46	B2	1.4803	1.6377
10:04:05	B3	1.4880	1.6212
10:25:18	B4	1.4967	1.5936
11.50:00	B5	1.4940	1.5718
15:23:00	B6	1.4858	1.5462
8:33:00	B7	1.4921	1.5336

SALT CORRECTION

Date: ______ Initials: ____

Tare Weight	
Dry Weight + Tare	

1115F-A
Rev. 01

PSEP GRAIN SIZE ANALYSIS

ARI Job No.: WC32 ARI Sample Letter: C Client Sample No.: SG-07-0-10-013113

Set-up Date: 2-6-2013 Sample Description: SANDY, SILTY GRAVEL & SHELL FRAGMENTS

SOLIDS CONTENT

Moisture Content	Initials: eg
Container No.	186
Tare Weight	1.4874
Wet Weight + Tare	101.7654
Dry Weight + Tare	76.8445

Test Sample	Initials: eg
Container No.	186
Tare Weight	49.5848
Wet Weight + Tare	151.8871
Dry Weight + Tare	120.0138

Calgon Batch #: 280

SIEVE ANALYSIS

Sieve Date: 2·10·2013

Sieve Set #: 1 Initials: CSL

Sieve Size	Weight Retained
Tare	49.5883
4	59.5917
10	80.4040
18	93.3257
35	~~1~~102.1045
60	109.2546
120	116.8397
230	119.6218
PAN	0.2188

2/11/2013

Temp:23

PIPETTE ANALYSIS

Initials: kb

TIME	Tare ID	Tare Wt	Dry Wt & Tare
10:01:00			
10:01:20	C1	1.4822	1.6152
10:02:46	C2	1.4885	1.6135
10:08:05	C3	1.4921	1.6098
10:29:18	C4	1.4887	1.5912
11:54:00	C5	1.4844	1.5670
15:27:00	C6	1.4907	1.5525
8:37:00	C7	1.4890	1.5250

SALT CORRECTION

Date: __________ Initials: ____

Tare Weight	
Dry Weight + Tare	

1115F-A
Rev. 01

PSEP GRAIN SIZE ANALYSIS

ARI Job No.: WC32 AR Sample Letter: D Client Sample No.: SG-06-0-10-013113

Set-up Date: 2-6-2013 Sample Description: SANDY SILT, GRAVEL, ORGANIC DEBRIS

S... ...TENT

Moisture Conter...	Initials: eg
Container No.	187
Tare Weight	1.5468
Wet Weight + Tare	71.3742
Dry Weight + Tare	44.1886

Test Sample	Initials: eg
Container No.	187
Tare Weight	51.6035
Wet Weight + Tare	126.1275
Dry Weight + Tare	89.0286

Calgon Ba... # 280

SIEVE ANALYSIS

Sieve Date: 2-10-2013

Sieve Set #: 2 Initials: CBL

Sieve Size	Weight Retained
Tare	51.6090
4	54.4309
10	56.5041
18	58.8629
35	61.5433
60	69.6639
120	84.1621
230	88.6587
PAN	0.3065

2/11/2013

PIPETTE ANALYSIS

Temp:23

Initials kb

TIME	Tare ID	Tare Wt	Dry Wt & Tare
10:05:00			
10:05:20	D1	1.4858	1.6229
10:06:46	D2	1.4848	1.6135
10:12.05	D3	1.4786	1.5971
10:33:18	D4	1.4805	1.5753
11:58:00	D5	1.4831	1.5639
15:31:00	D6	1.4743	1.5383
8:41:00	D7	1.4758	1.5176

SALT CORRECTION

Date: ________ Initials: ____

Tare Weight	
Dry Weight + Tare	

1115F-A
Rev. 01

PSEP GRAIN SIZE ANALYSIS

ARI Job No.: WC32 ARI Sample Letter: E Client Sample No.: SG-05-0-10-013113

Set-up Date: 2.6.2013 Sample Description: SANDY GRAVEL, SHELL FRAGMENTS

SOLIDS CONTENT

Moisture Content	Initials: lg
Container No.	188
Tare Weight	1.5525
Wet Weight + Tare	94.1601
Dry Weight + Tare	89.1490

Test Sample	Initials: lg
Container No.	188
Tare Weight	50.3400
Wet Weight + Tare	204.4595
Dry Weight + Tare	196.1104

Calgon Batch #: 280

SIEVE ANALYSIS

Sieve Date: 2.10.2013

Sieve Set #: 1 Initials: CBL

Sieve Size	Weight Retained
Tare	50.3420
4	126.8356
10	160.4089
18	174.8756
35	184.3480
60	192.2526
120	195.5991
230	195.9987
PAN	0.0736

0.1g

PIPETTE ANALYSIS

2/11/2013

Initials: kb

Temp:23

TIME	Tare ID	Tare Wt	Dry Wt & Tare
10:17:00	E1	~~1.5276~~	1.5486
10:17:20		1.5301	

SALT CORRECTION

Date: ______ Initials: ____

Tare Weight	
Dry Weight + Tare	

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Rev. 01

PSEP GRAIN SIZE ANALYSIS

ARI Job No.: WC32 ARI Sample Letter: F Client Sample No.: SG-95-0-10-013113

Set-up Date: 2-6-2013 Sample Description: SANDY GRAVEL, SHELL FRAGMENTS

SOLIDS CONTENT

Moisture Content	Initials: eg
Container No.	190
Tare Weight	1.5572
Wet Weight + Tare	103.0500
Dry Weight + Tare	97.2144

Test Sample	Initials: eg
Container No.	190
Tare Weight	51.4442
Wet Weight + Tare	200.0458
Dry Weight + Tare	190.8031

Calgon Batch #: 2580

SIEVE ANALYSIS

Sieve Date: 2-10-2013

Sieve Set #: 2 Initials: CBL

Sieve Size	Weight Retained
Tare	51.4485
4	116.26710
10	152.2472
18	166.9524
35	177.9838
60	186.6847
120	190.2743
230	190.6912
PAN	0.0927

0.8g

2/11/2013

Temp:23

PIPETTE ANALYSIS

Initials: kb

TIME	Tare ID	Tare Wt	Dry Wt & Tare
10:21:00			
10:21:20	F1	1.5276	1.5473

SALT CORRECTION

Date: ________ Initials: ____

Tare Weight	
Dry Weight + Tare	

1115F-A
Rev. 01

PSEP GRAIN SIZE ANALYSIS

ARI Job No.: WC32 ARI Sample Letter: G Client Sample No.: SG-08-0-10-013113

Set-up Date: 2-6-2013 Sample Description: SILT, SHELL FRAGMENTS,

SOLIDS CONTENT

Moisture Content	Initials: eg
Container No.	191
Tare Weight	1.5481
Wet Weight + Tare	65.8330
Dry Weight + Tare	37.0030

Test Sample	Initials: eg
Container No.	191
Tare Weight	49.6087
Wet Weight + Tare	138.1390
Dry Weight + Tare	82.8812

Calgon Batch #: 280

SIEVE ANALYSIS

Sieve Date: 2.10.2013

Sieve Set #: 1 Initials: SR

Sieve Size	Weight Retained
Tare	49.6196
4	58.0523
10	69.1556
18	74.4727
35	77.0576
60	79.2746
120	81.4226
230	82.4550
PAN	0.2921

2/11/2013

PIPETTE ANALYSIS

Temp:23

Initials: kb

TIME	Tare ID	Tare Wt	Dry Wt & Tare
10:09:00			
10:09:20	G1	1.4811	1.7724
10:10:46	G2	1.4724	1.7429
10:16:05	G3	1.4840	1.5996
10:37.18	G4	1.5266	1.6137
12:02:00	G5	1.5152	1.5901
15:35:00	G6	1.5216	1.5858
8:45:00	G7	1.4779	1.5250

SALT CORRECTION

Date: ______ Initials: ____

Tare Weight	
Dry Weight + Tare	

1115F-A
Rev. 01

WC32 02140

PSEP GRAIN SIZE ANALYSIS

ARI Job No.: WC32 ARI Sample Letter: H Client Sample No.: SG-09-0-10-013113

Set-up Date: 2·6·2013 Sample Description: SILTY CLAY, ORGANIC DEBRIS

SOLIDS CONTENT

Moisture Content	Initials: lg
Container No.	198
Tare Weight	1.5494
Wet Weight + Tare	47.7967
Dry Weight + Tare	25.2617

Test Sample	Initials: lg
Container No.	198
Tare Weight	50.6182
Wet Weight + Tare	84.5612
Dry Weight + Tare	57.8511

Calgon Batch #: 280

SIEVE ANALYSIS

Sieve Date: 2.10.2013

Sieve Set #: 2 Initials: RL

Sieve Size	Weight Retained
Tare	50.6222
4	51.0844
10	51.4946
18	52.0491
35	52.9077
60	54.8347
120	56.9324
230	57.7450
PAN	0.0750

2/11/2013

PIPETTE ANALYSIS

Temp:23

Initials: lef

TIME	Tare ID	Tare Wt	Dry Wt & Tare
10:13:00			
10:13:20	H1	1.5064	1.7137
10:14:46	H2	1.4962	1.6947
10:20:05	H3	1.4982	1.6741
10:41:18	H4	1.5425	1.6886
12:06:00	H5	1.5482	1.6627
15:39:00	H6	1.5390	1.6232
8:49:00	H7	1.5269	1.5835

SALT CORRECTION

Date: ________ Initials: ____

Tare Weight	
Dry Weight + Tare	

1115F-A
Rev. 01

ANALYTICAL RESOURCES INCORPORATED

SPECIFIC GRAVITY DETERMINATION ASTM D 854

ARI Job No.: WC33 Tested by: kb
Set-Up Date: 02/04/2013

Method A (moist) ✓ Method B (oven-dried)

Sample ID	* B	* DB-2	* K+4	~~K-2~~ 4	D			
Beaker ID	—	—	—	—	—			
Flask No.	1	3	5		8			
Flask Wt. (g)	180.32	183.96	187.63		170.86			
Soil Wt. (g)	113.37	113.36	115.47		112.41			
Vacuum: Start Time	02/07/13 14:35	02/07/13 14:35	02/07/13 14:35		02/07/13 14:35			
End Time	16:40	16:40	16:40		16:40			
Insulated Cooler: Date In	02/07/13 16:55	02/07/13 16:55	02/07/13 16:55		02/07/13 16:55			
Date Out	2.8.2013	2.8.2013	2.8.2013		2.8.2013			
Flask, Soil, Water Wt. (g)	742.57	746.44	750.19		730.72			
Temperature (° C)	19.4	19.6	19.6		19.3			
Tare No.	59	43	77		70			
Tare Wt. (g)	107.67	107.31	168.24		111.51			
Tare + Dry Soil Wt. (g)	207.646 eg	207.447 eg	268.44		208.57			
Initials	eg	eg	eg		eg			
Specific Gravity	2.747	2.751	2.767		2.726			

* EXCLUDED PARTICLES LARGER THAN ½"

Recommended Dry Mass for Test Specimen: 500 mL Pycnometer

Poorly Graded Sand-Silty Sand	100 ± 10 g
Silty or Clayey Sand	75 ± 10 g
Silt or Clay	50 ± 10 g

1106F
Rev. 1, 09/03

WC02 : 02142

Total Organic Matter by Ignition

Loss on Ignition, ASTM D2974 ☑ Temp. = 440°C

Total Volatile Solids, PSEP Method ☐ Temp. = 550°C

ARI Job No.: WC33

Tested by: [signature]

Sample ID	A	Date/Time	C	Date/Time	J	Date/Time
Tare ID	B·1		KATHY		ROME	
Tare Weight	99.69		100.94		113.18	
Wet Wt + Tare	377.04	02/04/13 11:15	322.62	02/04/13, 11:15	375.36	02/04/13, 11:15
Dry Wt. + Tare	346.29	2/5/13 7:55	294.32	2/5/13 7:53	345.21	2/5/13 7:54
Burned Wt. + Tare	343.54	2·6·13 16:49	293.03	2·6·13 16:51	343.82	2·6·13 16:52

Sample ID	L	Date/Time		Date/Time		Date/Time
Tare ID	WHAM					
Tare Weight	103.12					
Wet Wt + Tare	380.02	02/04/13, 11:15				
Dry Wt. + Tare	351.71	2/5/13 7:53				
Burned Wt. + Tare	350.75	2·6·13 16:55				

Sample ID		Date/Time		Date/Time		Date/Time
Tare ID						
Tare Weight						
Wet Wt + Tare						
Dry Wt. + Tare						
Burned Wt. + Tare						

Sample ID		Date/Time		Date/Time		Date/Time
Tare ID						
Tare Weight						
Wet Wt + Tare						
Dry Wt. + Tare						
Burned Wt. + Tare						

Sample ID		Date/Time		Date/Time		Date/Time
Tare ID						
Tare Weight						
Wet Wt + Tare						
Dry Wt. + Tare						
Burned Wt. + Tare						

ANALYTICAL RESOURCES INCORPORATED

Density, Moisture Content, and Porosity

ARI Job No.: WC33

Date: 02/04/2013

Tested By: kef

	1	2	3	4	5	6	7	8	9	10
Sample ID	B	D	K							
Wet wt. soil & tube	132.36	129.13	139.35							
Length 1	2.108	2.107	2.109							
Length 2	2.110	2.112	2.112							
Length 3	2.111	2.119	2.109							
Diameter 1	1.242	1.255	1.249							
Diameter 2	1.251	1.238	1.249							
Diameter 3	1.229	1.249	1.247							
Weight tube	45.27	45.27	45.28							
Tare No	B	~~9.99~~ D	~~10.51~~ K							
Tare Weight	10.04	9.99	10.51							
Wet Weight	96.88	93.78	102.84							
Dry Weight	86.37	84.59	91.57							
Moisture Content %	13.74	12.32	13.90							
Specific Gravity	2.747	2.724	2.767							

ANALYTICAL RESOURCES INCORPORATED

MOISTURE CONTENT DETERMINATION – ASTM D-2216

ARI Job No.: WC33

Set-up Date: 02/04/2013

Tested by: kf

ARI Sample ID	Tare #	Wt. Tare (g)	Wt. Wet Soil + Tare (g)	Wt. Dry Soil + Tare (g)	MC %
B	B	10.04	96.88	86.39	13.74
D	D	9.99	93.78	84.59	12.32
K	K	10.51	102.84	91.57	13.90

1103F
Rev 0

PSEP GRAIN SIZE ANALYSIS

ARI Job No.: WC33 ARI Sample Letter: G Client Sample No.: HA-09-0-10-013013

Set-up Date: 2-6-2013 Sample Description: SAND, SHELL FRAGMENTS

SOLIDS CONTENT

Moisture Content	Initials: lg
Container No.	201
Tare Weight	1.5592
Wet Weight + Tare	70.2174
Dry Weight + Tare	65.7955

Test Sample	Initials: lg
Container No.	201
Tare Weight	50.1005
Wet Weight + Tare	204.0245
Dry Weight + Tare	194.1815

Calgon Batch #: 280

SIEVE ANALYSIS

Sieve Date: 2-10-2013

Sieve Set #: 1 Initials: SR

Sieve Size	Weight Retained
Tare	~~50.0988~~ 50.0965
4	51.7583
10	60.7583
18	64.4613
35	80.9731
60	168.9061
120	193.5283
230	193.6650
PAN	0.0297

0.4g

2/11/2013 PIPETTE ANALYSIS

Temp:23

Initials: kb

TIME	Tare ID	Tare Wt	Dry Wt & Tare
10:25:00			
10:25:20	G1	1.5298	~~1.5682~~
			1.5406

SALT CORRECTION

Date: ____ Initials: ____

Tare Weight	
Dry Weight + Tare	

1115F-A
Rev. 01

PSEP GRAIN SIZE ANALYSIS

ARI Job No.: WC33 ARI Sample Letter: H Client Sample No.: HA-10-0-10-013013

Set-up Date: 2-6-2013 Sample Description: GRAVEL, SHELLFRAGMENTS, SOME FINES

SOLIDS CONTENT

Moisture Content	Initials: eg
Container No.	203
Tare Weight	1.5621
Wet Weight + Tare	113.7836
Dry Weight + Tare	108.3348

Test Sample	Initials: eg
Container No.	203
Tare Weight	49.8234
Wet Weight + Tare	199.1892
Dry Weight + Tare	189.2567

Calgon Batch #: 280

SIEVE ANALYSIS

Sieve Date: 2-10-2013

Sieve Set #: 2 Initials: SBC

Sieve Size	Weight Retained
Tare	49.8307
4	1463017
10	166.5467
18	178.1424
35	184.8470
60	187.4819
120	188.5747
230	189.0138
PAN	0.1602

2.9g

2/11/2013

Temp.23

PIPETTE ANALYSIS

Initials: kb

TIME	Tare ID	Tare Wt	Dry Wt & Tare
10:29:00			
10:29:20	H1	1.5250	1.5684

SALT CORRECTION

Date: ________ Initials: ____

Tare Weight	
Dry Weight + Tare	

1115F-A
Rev. 01

PSEP GRAIN SIZE ANALYSIS

ARI Job No.: WC33 ARI Sample Letter: I Client Sample No.: HA-11-IB-10-013613

Set-up Date: 2-6-2013 Sample Description: GRAVEL, SHELL FRAGMENTS, SOME FINES

SOLIDS CONTENT

Moisture Content	Initials: eg
Container No.	204
Tare Weight	1.5566
Wet Weight + Tare	93.2750
Dry Weight + Tare	85.5812

Test Sample	Initials: eg
Container No.	204
Tare Weight	49.8459
Wet Weight + Tare	200.7193
Dry Weight + Tare	184.3638

Calgon Batch #: 280

SIEVE ANALYSIS

Sieve Date: 2.10.2013

Sieve Set #: 1 Initials: CBL

Sieve Size	Weight Retained
Tare	49.8506
4	125.0143
10	134.2239
18	145.2195
35	168.5397
60	180.5374
120	183.2210
230	184.2071
PAN	0.2622

3.9g

2/11/2013

Temp:23

PIPETTE ANALYSIS

Initials: leb

TIME	Tare ID	Tare Wt	Dry Wt & Tare
10:33:00			
10:33:20	I1	1.5052	~~1.5407~~ eg
			1.5643

SALT CORRECTION

Date: ________ Initials: ____

Tare Weight	
Dry Weight + Tare	

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Rev. 01

Calgon Batch #280

2.8.2013 BK

	Tare Weight (g)	Dry+Tare Weight (g)	Calgon Weight (g)
1)	1.5303	2.0227	0.4924
2)	1.5314	2.0221	0.4907
3)	1.5360	2.0274	0.4914
4)	1.5337	2.0252	0.4915
5)	1.5177	2.0092	0.4915

AVERAGE = 0.4915

Table of Contents: ARI Job WE03

Client: Floyd-Snider

Project: POB-Harris T.4030 POB-Harris

AV

Signature

February-28-2013

Date

Analytical Resources, Incorporated
Analytical Chemists and Consultants

February 28, 2013

Stephen Bentsen
Floyd-Snider Inc.
601 Union Street, Suite 600
Seattle, WA 98101-2341

RE: Client Project: POB Harris T. 4030
ARI Job No.: WE03

Dear Stephen:

Please find enclosed the original Chain-of-Custody record (COC), sample receipt documentation, and the final data package for samples from the project referenced above.

Sample receipt and detail of these analyses are discussed in the Case Narrative.

An electronic copy of this package will remain on file with ARI. Should you have any questions or problems, please feel free to contact me at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.

Kelly Bottem
Client Services Manager
kellyb@arilabs.com
206-695-6211

Enclosures

cc: eFile WE03

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

Chain of Custody Documentation

ARI Job ID: WE03

Chain of Custody Record & Laboratory Analysis Request

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

ARI Assigned Number: WE03	Turn-around Requested: Standard	Page: 1	of 1
ARI Client Company: Floyd/Snider	Phone: 206-292-2078	Date: 2/14/13	Ice Present?
Client Contact: Stephen Bentsen		No. of Coolers:	Cooler Temps:
Client Project Name: PCB-Harris			
Client Project #: PCB-Harris T. 403D	Samplers: Erin Murray		

Sample ID	Date	Time	Matrix	No. Containers	Dioxins/Furans EPA 1613B								Notes/Comments
SFS-01-0-0.5-021413	2/14/13	1500	S	1	X								
SFS-99-0-0.5-021413	2/14/13	1700	S	1	X								

Comments/Special Instructions	Relinquished by:	Received by:	Relinquished by:	Received by:
	(Signature)	(Signature)	(Signature)	(Signature)
	Printed Name: Erin Murray	Printed Name: Rich Hudson	Printed Name:	Printed Name:
	Company: Floyd/Snider	Company: ARI	Company:	Company:
	Date & Time: 2/15/13 0955	Date & Time: 2/15/13 1230	Date & Time:	Date & Time:

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

WE03 : 00059

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: Floyd Snider

COC No(s): ______ NA

Assigned ARI Job No: WE03

Project Name: PCB-Harris

Delivered by: Fed-Ex UPS Courier Hand Delivered Other: ______

Tracking No: ______ NA

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler? YES NO

Were custody papers included with the cooler? .... YES NO

Were custody papers properly filled out (ink, signed, etc.) .... YES NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry)........ 8.2

If cooler temperature is out of compliance fill out form 00070F Temp Gun ID#: 90877952

Cooler Accepted by: ______ Date 2/15/13 Time: 1310

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler? .... YES NO

What kind of packing material was used? ... Bubble Wrap Wet Ice Gel Packs Baggies Foam Block Paper Other: ______

Was sufficient ice used (if appropriate)? .... NA YES NO

Were all bottles sealed in individual plastic bags? .... YES NO

Did all bottles arrive in good condition (unbroken)? .... YES NO

Were all bottle labels complete and legible? .... YES NO

Did the number of containers listed on COC match with the number of containers received? .... YES NO

Did all bottle labels and tags agree with custody papers? .... YES NO

Were all bottles used correct for the requested analyses? .... YES NO

Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)... NA YES NO

Were all VOC vials free of air bubbles? .... NA YES NO

Was sufficient amount of sample sent in each bottle? .... YES NO

Date VOC Trip Blank was made at ARI............ NA ______

Was Sample Split by ARI : NA YES Date/Time: ______ Equipment: ______ Split by: ______

Samples Logged by: AV Date: 2/15/13 Time: 1355

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

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

Additional Notes, Discrepancies, & Resolutions:

By: Date:

Small Air Bubbles ~2mm	Peabubbles 2-4 mm	LARGE Air Bubbles > 4 mm	
			Small → "sm"
			Peabubbles → "pb"
			Large → "lg"
			Headspace → "hs"

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Temperature Compliance Form

WE03

Cooler#: 1 Temperature(°C): 8.2

Sample ID	Bottle Count	Bottle Type
All Samples received		
above 6°C.		

Cooler#: Temperature(°C):

Sample ID	Bottle Count	Bottle Type

Cooler#: Temperature(°C):

Sample ID	Bottle Count	Bottle Type

Cooler#: Temperature(°C):

Sample ID	Bottle Count	Bottle Type

Completed by: AV Date: 2/15/13 Time: 1357

Case Narrative, Data Qualifiers, Control Limits

ARI Job ID: WE03

Case Narrative
Project: POB-Harris T.4030
ARI Job No.: WE03
February 28, 2013

Sample Receipt:

Please find enclosed the original Chain-of-Custody (COC) records, sample receipt documentation, and the analytical results for the project referenced above. Analytical Resources, Inc. (ARI) accepted two sediment samples in good condition on February 15, 2013. The samples were received with cooler temperature of 8.2°C. For further details regarding sample receipt, please refer to the Cooler Receipt Form.

Dioxin/Furans by EPA 1613B

The sample and associated laboratory QC were prepared and analyzed within the method recommended holding times.

Analysis was performed using the application specific RTX-Dioxin 2 column, which has a unique elution order and selectivity for the target compounds, as well as a unique isomer separation for the 2378-TCDF. A resolution test mixture was designed specifically for this column, consisting of 2348-TCDF, 2378-TCDF and 3467-TCDF to evaluate the method required minimum valley between isomer of 25%. Use of the RTX-Dioxin2 column eliminates the need for second column confirmation.

Initial and continuing calibration results were within method requirements.

The OPR (Ongoing Precision and Accuracy or LCS) sample percent recoveries were within control limits.

The percent recoveries for all preparation and cleanup surrogates were within established QC limits.

The TEQ was calculated with WHO2005 with both ND=0 for undetects (flagged "U") and ND= ½ EDL. The TEC includes EMPC values in the calculation.

Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: WE03
Client: Floyd-Snider
Project Event: POB-Harris T.4030
Project Name: POB-Harris

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	SFS-01-0-0.5-021413	WE03A	13-3229	Soil	02/14/13 15:00	02/15/13 12:30
2.	SFS-99-0-0.5-021413	WE03B	13-3230	Soil	02/14/13 17:00	02/15/13 12:30

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Data Reporting Qualifiers

Effective 2/14/2011

Inorganic Data

U Indicates that the target analyte was not detected at the reported concentration

* Duplicate RPD is not within established control limits

B Reported value is less than the CRDL but ≥ the Reporting Limit

N Matrix Spike recovery not within established control limits

NA Not Applicable, analyte not spiked

H The natural concentration of the spiked element is so much greater than the concentration spiked that an accurate determination of spike recovery is not possible

L Analyte concentration is ≤5 times the Reporting Limit and the replicate control limit defaults to ±1 RL instead of the normal 20% RPD

Organic Data

U Indicates that the target analyte was not detected at the reported concentration

* Flagged value is not within established control limits

B Analyte detected in an associated Method Blank at a concentration greater than one-half of ARI's Reporting Limit or 5% of the regulatory limit or 5% of the analyte concentration in the sample.

J Estimated concentration when the value is less than ARI's established reporting limits

D The spiked compound was not detected due to sample extract dilution

E Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

Q Indicates a detected analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20%Drift or minimum RRF).

S Indicates an analyte response that has saturated the detector. The calculated concentration is not valid; a dilution is required to obtain valid quantification of the analyte

NA The flagged analyte was not analyzed for

NR Spiked compound recovery is not reported due to chromatographic interference

NS The flagged analyte was not spiked into the sample

M Estimated value for an analyte detected and confirmed by an analyst but with low spectral match parameters. This flag is used only for GC-MS analyses

M2 The sample contains PCB congeners that do not match any standard Aroclor pattern. The PCBs are identified and quantified as the Aroclor whose pattern most closely matches that of the sample. The reported value is an estimate.

N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification"

Y The analyte is not detected at or above the reported concentration. The reporting limit is raised due to chromatographic interference. The Y flag is equivalent to the U flag with a raised reporting limit.

EMPC Estimated Maximum Possible Concentration (EMPC) defined in EPA Statement of Work DLM02.2 as a value "calculated for 2,3,7,8-substituted isomers for which the quantitation and /or confirmation ion(s) has signal to noise in excess of 2.5, but does not meet identification criteria" **(Dioxin/Furan analysis only)**

C The analyte was positively identified on only one of two chromatographic columns. Chromatographic interference prevented a positive identification on the second column

P The analyte was detected on both chromatographic columns but the quantified values differ by ≥40% RPD with no obvious chromatographic interference

X Analyte signal includes interference from polychlorinated diphenyl ethers. **(Dioxin/Furan analysis only)**

Z Analyte signal includes interference from the sample matrix or perfluorokerosene ions. **(Dioxin/Furan analysis only)**

Geotechnical Data

A The total of all fines fractions. This flag is used to report total fines when only sieve analysis is requested and balances total grain size with sample weight.

F Samples were frozen prior to particle size determination

SM Sample matrix was not appropriate for the requested analysis. This normally refers to samples contaminated with an organic product that interferes with the sieving process and/or moisture content, porosity and saturation calculations

SS Sample did not contain the proportion of "fines" required to perform the pipette portion of the grain size analysis

W Weight of sample in some pipette aliquots was below the level required for accurate weighting

DL[1], LOD[1], LOQ[1] and Control Limits Summary
Analysis of Soil Samples for Dioxins & Furans
EPA Method 1613B

Soxhlet (EPA Method 3540C) Extraction using 10 g sample with extract concentrated to 0.02 mL final volume. ARI Bench Sheet 3083F

LOD Spike level = LOQ = 0.1 ppt (ng/kg) = 1 pg/g

Analyte	DL[1] pg/g	LOD[1] pg/g	LOQ[1] pg/g	OPR Control Limit [2,3]	Sample Replicate RPD [3,4]
2,3,7,8-TCDF	0.230	**0.5**	**1**	75 – 158	≤ 25
2,3,7,8-TCDD	0.274	**0.5**	**1**	67 – 158	≤ 25
1,2,3,7,8-PeCDF	0.832	**2.5**	**5**	80 – 134	≤ 25
2,3,4,7,8-PeCDF	1.076	**2.5**	**5**	68 – 160	≤ 25
1,2,3,7,8-PeCDD	0.647	**2.5**	**5**	70 – 142	≤ 25
1,2,3,4,7,8-HxCDF	0.991	**2.5**	**5**	72 – 134	≤ 25
1,2,3,6,7,8-HxCDF	0.769	**2.5**	**5**	84 – 130	≤ 25
2,3,4,6,7,8-HxCDF	0.904	**2.5**	**5**	70 – 156	≤ 25
1,2,3,7,8,9-HxCDF	0.857	**2.5**	**5**	78 – 130	≤ 25
1,2,3,4,7,8-HxCDD	0.481	**2.5**	**5**	70 – 164	≤ 25
1,2,3,6,7,8-HxCDD	0.561	**2.5**	**5**	76 – 134	≤ 25
1,2,3,7,8,9-HxCDD	0.886	**2.5**	**5**	64 – 162	≤ 25
1,2,3,4,6,7,8-HpCDF	1.165	**2.5**	**5**	82 – 122	≤ 25
1,2,3,4,7,8,9-HpCDF	0.688	**2.5**	**5**	78 – 138	≤ 25
1,2,3,4,6,7,8-HpCDD	0.828	**2.5**	**5**	70 – 140	≤ 25
OCDF	2.176	**5.0**	**10**	63 – 170	≤ 25
OCDD	7.452	**5.0**	**10**	78 – 144	≤ 25

(1) Detection Limit (DL), Limit of Detection (LOD) and Limit of Quantitation (LOQ) are defined in ARI SOP 1018S
(2) Ongoing precision and recovery (OPR) analyzes as specified in the referenced method.
(3) Method specified control limits.
(4) Relative Percent Difference between analytes in replicate analyzes. If C_O and C_D are the concentrations of the original and duplicate respectively then

$$RPD = \frac{|C_O - C_D|}{\frac{C_O + C_D}{2}} x100$$

Dioxin Analysis
Report and Summary QC Forms

ARI Job ID: WE03

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Dioxins/Furans by EPA 1613B
Page 1 of 1

Sample ID: SFS-01-0-0.5-021413

Lab Sample ID: WE03A
LIMS ID: 13-3229
Matrix: Soil
Data Release Authorized: MW
Reported: 02/28/13

QC Report No: WE03-Floyd-Snider
Project: POB-Harris
POB-Harris T.4030
Date Sampled: 02/14/13
Date Received: 02/15/13

Date Extracted: 02/19/13
Date Analyzed: 02/27/13 14:34
Instrument/Analyst: AS1/PK
Acid Cleanup: Yes
Silica-Carbon Cleanup: No

Sample Amount: 10.1 g-dry-wt
Final Extract Volume: 20 uL
Dilution Factor: 1.00
Silica-Florisil Cleanup: Yes

Analyte	Ion Ratio	Ratio Limits	EDL	RL	Result	
2,3,7,8-TCDF	0.62	0.65-0.89		0.199	0.743	EMPC
2,3,7,8-TCDD	0.56	0.65-0.89		0.199	0.352	EMPC
1,2,3,7,8-PeCDF	1.28	1.32-1.78		0.993	0.790	JEMPC
2,3,4,7,8-PeCDF	1.88	1.32-1.78		0.993	1.59	EMPC
1,2,3,7,8-PeCDD	1.97	1.32-1.78		0.993	2.44	EMPC
1,2,3,4,7,8-HxCDF	1.21	1.05-1.43		0.993	4.79	
1,2,3,6,7,8-HxCDF	1.16	1.05-1.43		0.993	2.69	
2,3,4,6,7,8-HxCDF	1.22	1.05-1.43		0.993	2.53	
1,2,3,7,8,9-HxCDF	1.11	1.05-1.43		0.993	1.44	
1,2,3,4,7,8-HxCDD	1.30	1.05-1.43		0.993	3.41	
1,2,3,6,7,8-HxCDD	1.27	1.05-1.43		0.993	15.6	
1,2,3,7,8,9-HxCDD	1.26	1.05-1.43		0.993	7.23	
1,2,3,4,6,7,8-HpCDF	1.01	0.88-1.20		0.993	49.5	
1,2,3,4,7,8,9-HpCDF	1.00	0.88-1.20		0.993	3.24	
1,2,3,4,6,7,8-HpCDD	1.05	0.88-1.20		0.993	387	
OCDF	0.89	0.76-1.02		1.99	149	
OCDD	0.89	0.76-1.02		1.99	3,810	

Homologue Group	EDL	RL	Result	
Total TCDF		0.993	13.6	EMPC
Total TCDD		0.993	4.17	EMPC
Total PeCDF		1.99	41.8	EMPC
Total PeCDD		0.993	12.7	EMPC
Total HxCDF		1.99	86.5	EMPC
Total HxCDD		1.99	81.0	
Total HpCDF		1.99	175	
Total HpCDD		1.99	671	

Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=0, Including EMPC): 12.7

Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=1/2 EDL, Including EMPC): 12.7

Reported in pg/g

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Dioxins/Furans by EPA 1613B

Sample ID: SFS-01-0-0.5-021413

Lab Sample ID: WE03A
LIMS ID: 13-3229
Matrix: Soil
Data Release Authorized:
Reported: 02/28/13

QC Report No: WE03-Floyd-Snider
Project: POB-Harris
POB-Harris T.4030
Date Sampled: 02/14/13
Date Received: 02/15/13

Date Extracted: 02/19/13
Date Analyzed: 02/27/13 14:34
Instrument/Analyst: AS1/PK

Sample Amount: 10.1 g-dry-wt
Final Extract Volume: 20 uL
Dilution Factor: 1.00

Analyte	Ion Ratio	Ratio Limits	Result	Limits	Exceedance
13C-2,3,7,8-TCDF	0.76	0.65-0.89	48.8	24-169	
13C-2,3,7,8-TCDD	0.77	0.65-0.89	64.1	25-164	
13C-1,2,3,7,8-PeCDF	1.66	1.32-1.78	62.6	24-185	
13C-2,3,4,7,8-PeCDF	1.59	1.32-1.78	64.4	21-178	
13C-1,2,3,7,8-PeCDD	1.56	1.32-1.78	68.8	25-181	
13C-1,2,3,4,7,8-HxCDF	0.53	0.43-0.59	63.6	26-152	
13C-1,2,3,6,7,8-HxCDF	0.52	0.43-0.59	62.3	26-123	
13C-2,3,4,6,7,8-HxCDF	0.52	0.43-0.59	61.7	28-136	
13C-1,2,3,7,8,9-HxCDF	0.54	0.43-0.59	66.4	29-147	
13C-1,2,3,4,7,8-HxCDD	1.28	1.05-1.43	65.8	32-141	
13C-1,2,3,6,7,8-HxCDD	1.22	1.05-1.43	74.9	28-130	
13C-1,2,3,4,6,7,8-HpCDF	0.46	0.37-0.51	53.9	28-143	
13C-1,2,3,4,7,8,9-HpCDF	0.45	0.37-0.51	58.7	26-138	
13C-1,2,3,4,6,7,8-HpCDD	1.02	0.88-1.20	65.2	23-140	
13C-OCDD	0.87	0.76-1.02	45.8	17-157	
37Cl4-2,3,7,8-TCDD			67.4	35-197	

Reported in Percent Recovery

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Dioxins/Furans by EPA 1613B

Sample ID: SFS-99-0-0.5-021413

Lab Sample ID: WE03B
LIMS ID: 13-3230
Matrix: Soil
Data Release Authorized: Mw
Reported: 02/28/13

QC Report No: WE03-Floyd-Snider
Project: POB-Harris
POB-Harris T.4030
Date Sampled: 02/14/13
Date Received: 02/15/13

Date Extracted: 02/19/13
Date Analyzed: 02/27/13 15:25
Instrument/Analyst: AS1/PK
Acid Cleanup: Yes
Silica-Carbon Cleanup: No

Sample Amount: 9.58 g-dry-wt
Final Extract Volume: 20 uL
Dilution Factor: 1.00
Silica-Florisil Cleanup: Yes

Analyte	Ion Ratio	Ratio Limits	EDL	RL	Result	
2,3,7,8-TCDF	0.53	0.65-0.89		0.209	0.925	EMPC
2,3,7,8-TCDD	0.46	0.65-0.89		0.209	0.367	EMPC
1,2,3,7,8-PeCDF	1.87	1.32-1.78		1.04	1.22	EMPC
2,3,4,7,8-PeCDF	1.46	1.32-1.78		1.04	1.91	
1,2,3,7,8-PeCDD	1.41	1.32-1.78		1.04	2.82	
1,2,3,4,7,8-HxCDF	1.35	1.05-1.43		1.04	5.87	
1,2,3,6,7,8-HxCDF	1.11	1.05-1.43		1.04	3.37	
2,3,4,6,7,8-HxCDF	1.11	1.05-1.43		1.04	5.32	
1,2,3,7,8,9-HxCDF	1.23	1.05-1.43		1.04	1.53	
1,2,3,4,7,8-HxCDD	1.36	1.05-1.43		1.04	4.37	
1,2,3,6,7,8-HxCDD	1.23	1.05-1.43		1.04	19.9	
1,2,3,7,8,9-HxCDD	1.22	1.05-1.43		1.04	9.51	
1,2,3,4,6,7,8-HpCDF	0.96	0.88-1.20		1.04	61.5	
1,2,3,4,7,8,9-HpCDF	1.12	0.88-1.20		1.04	3.84	
1,2,3,4,6,7,8-HpCDD	1.02	0.88-1.20		1.04	472	
OCDF	0.83	0.76-1.02		2.09	181	
OCDD	0.88	0.76-1.02		2.09	4,650	E

Homologue Group	EDL	RL	Result	
Total TCDF		1.04	14.3	EMPC
Total TCDD		1.04	4.89	EMPC
Total PeCDF		2.09	49.3	EMPC
Total PeCDD		1.04	15.3	EMPC
Total HxCDF		2.09	102	EMPC
Total HxCDD		2.09	100	EMPC
Total HpCDF		2.09	209	
Total HpCDD		2.09	826	

Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=0, Including EMPC): 15.7

Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=1/2 EDL, Including EMPC): 15.7

Reported in pg/g

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Dioxins/Furans by EPA 1613B

Sample ID: SFS-99-0-0.5-021413

Lab Sample ID: WE03B
LIMS ID: 13-3230
Matrix: Soil
Data Release Authorized:
Reported: 02/28/13

QC Report No: WE03-Floyd-Snider
Project: POB-Harris
POB-Harris T.4030
Date Sampled: 02/14/13
Date Received: 02/15/13

Date Extracted: 02/19/13
Date Analyzed: 02/27/13 15:25
Instrument/Analyst: AS1/PK

Sample Amount: 9.58 g-dry-wt
Final Extract Volume: 20 uL
Dilution Factor: 1.00

Analyte	Ion Ratio	Ratio Limits	Result	Limits	Exceedance
13C-2,3,7,8-TCDF	0.76	0.65-0.89	44.0	24-169	
13C-2,3,7,8-TCDD	0.77	0.65-0.89	60.6	25-164	
13C-1,2,3,7,8-PeCDF	1.55	1.32-1.78	62.7	24-185	
13C-2,3,4,7,8-PeCDF	1.56	1.32-1.78	64.1	21-178	
13C-1,2,3,7,8-PeCDD	1.60	1.32-1.78	69.9	25-181	
13C-1,2,3,4,7,8-HxCDF	0.52	0.43-0.59	61.7	26-152	
13C-1,2,3,6,7,8-HxCDF	0.53	0.43-0.59	58.9	26-123	
13C-2,3,4,6,7,8-HxCDF	0.52	0.43-0.59	58.7	28-136	
13C-1,2,3,7,8,9-HxCDF	0.52	0.43-0.59	65.3	29-147	
13C-1,2,3,4,7,8-HxCDD	1.26	1.05-1.43	66.1	32-141	
13C-1,2,3,6,7,8-HxCDD	1.27	1.05-1.43	68.9	28-130	
13C-1,2,3,4,6,7,8-HpCDF	0.44	0.37-0.51	54.8	28-143	
13C-1,2,3,4,7,8,9-HpCDF	0.45	0.37-0.51	56.7	26-138	
13C-1,2,3,4,6,7,8-HpCDD	1.05	0.88-1.20	63.5	23-140	
13C-OCDD	0.90	0.76-1.02	46.8	17-157	
37Cl4-2,3,7,8-TCDD			63.1	35-197	

Reported in Percent Recovery

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Dioxins/Furans by EPA 1613B

Sample ID: OPR-021913

Lab Sample ID: OPR-021913
LIMS ID: 13-3229
Matrix: Soil
Data Release Authorized: MW
Reported: 02/28/13

QC Report No: WE03-Floyd-Snider
Project: POB-Harris
POB-Harris T.4030
Date Sampled: NA
Date Received: NA

Date Extracted: 02/19/13
Date Analyzed: 02/27/13 13:37
Instrument/Analyst: AS1/PK
Acid Cleanup: Yes
Silica-Carbon Cleanup: No

Sample Amount: 10.0 g-dry-wt
Final Extract Volume: 20 uL
Dilution Factor: 1.00
Silica-Florisil Cleanup: Yes

Analyte	Ion Ratio	Ratio Limits	RL	Result
2,3,7,8-TCDF	0.75	0.65-0.89	0.200	18.8
2,3,7,8-TCDD	0.80	0.65-0.89	0.200	18.5
1,2,3,7,8-PeCDF	1.52	1.32-1.78	1.00	99.3
2,3,4,7,8-PeCDF	1.48	1.32-1.78	1.00	94.6
1,2,3,7,8-PeCDD	1.52	1.32-1.78	1.00	96.6
1,2,3,4,7,8-HxCDF	1.20	1.05-1.43	1.00	95.5
1,2,3,6,7,8-HxCDF	1.22	1.05-1.43	1.00	99.0
2,3,4,6,7,8-HxCDF	1.19	1.05-1.43	1.00	101
1,2,3,7,8,9-HxCDF	1.16	1.05-1.43	1.00	96.8
1,2,3,4,7,8-HxCDD	1.24	1.05-1.43	1.00	93.5
1,2,3,6,7,8-HxCDD	1.23	1.05-1.43	1.00	97.8
1,2,3,7,8,9-HxCDD	1.31	1.05-1.43	1.00	86.9
1,2,3,4,6,7,8-HpCDF	0.98	0.88-1.20	1.00	123
1,2,3,4,7,8,9-HpCDF	1.06	0.88-1.20	1.00	104
1,2,3,4,6,7,8-HpCDD	1.07	0.88-1.20	1.00	90.3
OCDF	0.90	0.76-1.02	2.00	175
OCDD	0.84	0.76-1.02	2.00	204

Homologue Group	EDL	RL	Result	
Total TCDF		1.00	22.1	EMPC
Total TCDD		1.00	19.4	EMPC
Total PeCDF		2.00	206	EMPC
Total PeCDD		1.00	96.9	EMPC
Total HxCDF		2.00	400	EMPC
Total HxCDD		2.00	283	EMPC
Total HpCDF		2.00	234	EMPC
Total HpCDD		2.00	98.0	EMPC

Reported in pg/g

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Dioxins/Furans by EPA 1613B
Page 1 of 1

Sample ID: OPR-021913

Lab Sample ID: OPR-021913
LIMS ID: 13-3229
Matrix: Soil
Data Release Authorized: MW
Reported: 02/28/13

QC Report No: WE03-Floyd-Snider
Project: POB-Harris
POB-Harris T.4030
Date Sampled: NA
Date Received: NA

Date Extracted: 02/19/13
Date Analyzed: 02/27/13 13:37
Instrument/Analyst: AS1/PK

Sample Amount: 10.0 g-dry-wt
Final Extract Volume: 20 uL
Dilution Factor: 1.00

Analyte	Ion Ratio	Ratio Limits	Result	Limits	Exceedance
13C-2,3,7,8-TCDF	0.77	0.65-0.89	61.6	22-152	
13C-2,3,7,8-TCDD	0.78	0.65-0.89	76.5	20-175	
13C-1,2,3,7,8-PeCDF	1.63	1.32-1.78	75.0	21-192	
13C-2,3,4,7,8-PeCDF	1.51	1.32-1.78	67.3	13-328	
13C-1,2,3,7,8-PeCDD	1.55	1.32-1.78	76.4	21-227	
13C-1,2,3,4,7,8-HxCDF	0.51	0.43-0.59	88.6	19-202	
13C-1,2,3,6,7,8-HxCDF	0.53	0.43-0.59	103	21-159	
13C-2,3,4,6,7,8-HxCDF	0.51	0.43-0.59	83.9	22-176	
13C-1,2,3,7,8,9-HxCDF	0.50	0.43-0.59	73.3	17-205	
13C-1,2,3,4,7,8-HxCDD	1.30	1.05-1.43	94.5	21-193	
13C-1,2,3,6,7,8-HxCDD	1.20	1.05-1.43	110	25-163	
13C-1,2,3,4,6,7,8-HpCDF	0.44	0.37-0.51	71.0	21-158	
13C-1,2,3,4,7,8,9-HpCDF	0.44	0.37-0.51	60.2	20-186	
13C-1,2,3,4,6,7,8-HpCDD	0.99	0.88-1.20	77.0	26-166	
13C-OCDD	0.82	0.76-1.02	62.5	13-198	
37Cl4-2,3,7,8-TCDD			75.4	31-191	

Reported in Percent Recovery

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Dioxins/Furans by EPA 1613B
Page 1 of 1

Sample ID: OPR-021913

Lab Sample ID: OPR-021913
LIMS ID: 13-3229
Matrix: Soil
Data Release Authorized: MW
Reported: 02/28/13

QC Report No: WE03-Floyd-Snider
Project: POB-Harris
POB-Harris T.4030
Date Sampled: NA
Date Received: NA

Date Extracted: 02/19/13
Date Analyzed: 02/27/13 13:37
Instrument/Analyst: AS1/PK

Sample Amount: 10.0 g-dry-wt
Final Extract Volume: 20 uL
Dilution Factor: 1.00

Analyte	OPR	Spiked	Recovery	Limits
2,3,7,8-TCDF	18.8	20.0	94.0	75-158
2,3,7,8-TCDD	18.5	20.0	92.5	67-158
1,2,3,7,8-PeCDF	99.3	100	99.3	80-134
2,3,4,7,8-PeCDF	94.6	100	94.6	68-160
1,2,3,7,8-PeCDD	96.6	100	96.6	70-142
1,2,3,4,7,8-HxCDF	95.5	100	95.5	72-134
1,2,3,6,7,8-HxCDF	99.0	100	99.0	84-130
2,3,4,6,7,8-HxCDF	101	100	101	70-156
1,2,3,7,8,9-HxCDF	96.8	100	96.8	78-130
1,2,3,4,7,8-HxCDD	93.5	100	93.5	70-164
1,2,3,6,7,8-HxCDD	97.8	100	97.8	76-134
1,2,3,7,8,9-HxCDD	86.9	100	86.9	64-162
1,2,3,4,6,7,8-HpCDF	123	100	123	82-132
1,2,3,4,7,8,9-HpCDF	104	100	104	78-138
1,2,3,4,6,7,8-HpCDD	90.3	100	90.3	70-140
OCDF	175	200	87.5	63-170
OCDD	204	200	102	78-144

Reported in pg/g

4DF - FORM IV-HR CDD
CDD/CDF METHOD BLANK SUMMARY
HIGH RESOLUTION

Blank No.

WE03MB

Lab Name: ANALYTICAL RESOURCES, INC. Contract: FLOYD-SNIDER

Lab Code: WE03 Project: POB-HARRIS

Matrix:(Soil/Water/Ash/Tissue/Oil) SOIL Lab Sample ID: WE03MBS

Sample wt/vol: 10 (g/ml) g Lab File ID: 13022704

Water Sample Prep: (sep/spe) Date Received: 15-FEB-13

GC Column: RTX-DIOXIN2 ID: 0.25 mm Date Extracted: 19-FEB-13

Instrument ID: AUTOSPEC1 Date Analyzed: 27-FEB-13

Client Sample No.	Lab Sample ID	Lab File ID	Date Analyzed
WE03OPR	WE03OPR	13022705	02/27/13
SFS-01-0-0.5-021413	WE03A	13022706	02/27/13
SFS-99-0-0.5-021413	WE03B	13022707	02/27/13

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Dioxins/Furans by EPA 1613B

Sample ID: MB-021913

Lab Sample ID: MB-021913
LIMS ID: 13-3229
Matrix: Soil
Data Release Authorized: MW
Reported: 02/28/13

QC Report No: WE03-Floyd-Snider
Project: POB-Harris
POB-Harris T.4030
Date Sampled: NA
Date Received: NA

Date Extracted: 02/19/13
Date Analyzed: 02/27/13 12:45
Instrument/Analyst: AS1/PK
Acid Cleanup: Yes
Silica-Carbon Cleanup: No

Sample Amount: 10.0 g-dry-wt
Final Extract Volume: 20 uL
Dilution Factor: 1.00
Silica-Florisil Cleanup: Yes

Analyte	Ion Ratio	Ratio Limits	EDL	RL	Result	
2,3,7,8-TCDF		0.65-0.89	0.154	0.200	< 0.154	U
2,3,7,8-TCDD		0.65-0.89	0.0980	0.200	< 0.0980	U
1,2,3,7,8-PeCDF		1.32-1.78	0.136	1.00	< 0.136	U
2,3,4,7,8-PeCDF		1.32-1.78	0.148	1.00	< 0.148	U
1,2,3,7,8-PeCDD		1.32-1.78	0.120	1.00	< 0.120	U
1,2,3,4,7,8-HxCDF		1.05-1.43	0.106	1.00	< 0.106	U
1,2,3,6,7,8-HxCDF		1.05-1.43	0.0880	1.00	< 0.0880	U
2,3,4,6,7,8-HxCDF		1.05-1.43	0.116	1.00	< 0.116	U
1,2,3,7,8,9-HxCDF		1.05-1.43	0.154	1.00	< 0.154	U
1,2,3,4,7,8-HxCDD		1.05-1.43	0.148	1.00	< 0.148	U
1,2,3,6,7,8-HxCDD		1.05-1.43	0.144	1.00	< 0.144	U
1,2,3,7,8,9-HxCDD		1.05-1.43	0.154	1.00	< 0.154	U
1,2,3,4,6,7,8-HpCDF		0.88-1.20	0.166	1.00	< 0.166	U
1,2,3,4,7,8,9-HpCDF		0.88-1.20	0.300	1.00	< 0.300	U
1,2,3,4,6,7,8-HpCDD		0.88-1.20	0.300	1.00	< 0.300	U
OCDF		0.76-1.02	0.280	2.00	< 0.280	U
OCDD	1.23	0.76-1.02		2.00	0.682	JEMPC

Homologue Group	EDL	RL	Result	
Total TCDF	0.154	1.00	< 0.154	U
Total TCDD	0.0980	1.00	< 0.0980	U
Total PeCDF	0.148	2.00	< 0.148	U
Total PeCDD	0.120	1.00	< 0.120	U
Total HxCDF	0.154	2.00	< 0.154	U
Total HxCDD	0.154	2.00	0.0934	EMPC
Total HpCDF	0.300	2.00	< 0.300	U
Total HpCDD	0.300	2.00	< 0.300	U

Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=0, Including EMPC): 0.00

Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=1/2 EDL, Including EMPC): 0.19

Reported in pg/g

ORGANICS ANALYSIS DATA SHEET
Dioxins/Furans by EPA 1613B

Sample ID: MB-021913

Lab Sample ID: MB-021913
LIMS ID: 13-3229
Matrix: Soil
Data Release Authorized:
Reported: 02/28/13

QC Report No: WE03-Floyd-Snider
Project: POB-Harris
POB-Harris T.4030
Date Sampled: NA
Date Received: NA

Date Extracted: 02/19/13
Date Analyzed: 02/27/13 12:45
Instrument/Analyst: AS1/PK

Sample Amount: 10.0 g-dry-wt
Final Extract Volume: 20 uL
Dilution Factor: 1.00

Analyte	Ion Ratio	Ratio Limits	Result	Limits	Exceedance
13C-2,3,7,8-TCDF	0.78	0.65-0.89	76.1	24-169	
13C-2,3,7,8-TCDD	0.78	0.65-0.89	88.0	25-164	
13C-1,2,3,7,8-PeCDF	1.66	1.32-1.78	89.6	24-185	
13C-2,3,4,7,8-PeCDF	1.54	1.32-1.78	78.0	21-178	
13C-1,2,3,7,8-PeCDD	1.55	1.32-1.78	88.8	25-181	
13C-1,2,3,4,7,8-HxCDF	0.52	0.43-0.59	90.6	26-152	
13C-1,2,3,6,7,8-HxCDF	0.52	0.43-0.59	105	26-123	
13C-2,3,4,6,7,8-HxCDF	0.53	0.43-0.59	87.0	28-136	
13C-1,2,3,7,8,9-HxCDF	0.52	0.43-0.59	82.4	29-147	
13C-1,2,3,4,7,8-HxCDD	1.24	1.05-1.43	103	32-141	
13C-1,2,3,6,7,8-HxCDD	1.29	1.05-1.43	115	28-130	
13C-1,2,3,4,6,7,8-HpCDF	0.43	0.37-0.51	78.1	28-143	
13C-1,2,3,4,7,8,9-HpCDF	0.43	0.37-0.51	75.2	26-138	
13C-1,2,3,4,6,7,8-HpCDD	1.05	0.88-1.20	89.3	23-140	
13C-OCDD	0.90	0.76-1.02	85.6	17-157	
37Cl4-2,3,7,8-TCDD			91.5	35-197	

Reported in Percent Recovery

5DFA - FORM V-HR CDD-1
CDD/CDF WINDOW DEFINING MIX (WDM) SUMMARY
HIGH RESOLUTION

Standard No.
CS3

Lab Name: ANALYTICAL RESOURCES, INC. Contract: FLOYD-SNIDER
Lab Code: WE03 Project: POB-HARRIS
GC Column: RTX-DIOXIN2 ID: 0.25 mm Lab File ID: 13022702
Instrument ID: AUTOSPEC1 Date Analyzed: 27-FEB-13
Time Analyzed: 10:49

CDD/CDF	RT First Eluting	RT Last Eluting
TCDD	24.68	28.14
TCDF	23.37	28.41
PeCDD	29.95	33.07
PeCDF	28.24	33.45
HxCDD	35.17	37.86
HxCDF	34.38	38.30
HpCDD	41.03	42.36
HpCDF	40.45	43.30

5DFB - FORM V-HR CDD-2
CDD/CDF CHROMATOGRAPHIC RESOLUTION SUMMARY
HIGH RESOLUTION

Standard No.

TETRA ISC

Lab Name: ANALYTICAL RESOURCES, INC.
Lab Code: WE03
GC Column: RTX-DIOXIN2 ID: .25 mm
Instrument: AUTOSPEC1

Contract: FLOYD-SNIDER
Project: POB-HARRIS
Lab File ID: 13022703
Date Analyzed: 27-FEB-13
Time Analyzed: 11:40

Percent Valley determination for RTX-DIOXIN2 column -
For the column performance solution beginning 12-hour period:

1278-TCDD/2378-TCDD: 21.8

Quality Control (QC) Limits:
Percent Valley between the TCDD isomers must be less than or equal to 25%

Percent Valley determination for RTX-DIOXIN2 column -
For the column performance solution beginning 12-hour period:

3467-TCDF/2378-TCDF: 13.2

QC Limits:
Percent Valley between the TCDD/TCDF isomers must be less than or equal to 25%

5DFB - FORM V-HR CDD-3
CDD/CDF ANALTYICAL SEQUENCE SUMMARY
HIGH RESOLUTION

Lab Name: ANALYTICAL RESOURCES, INC. Contract: FLOYD-SNIDER

Lab Code: WE03 Project: POB-HARRIS

GC Column: RTX-DIOXIN2 ID: 0.25 mm Instrument ID: AUTOSPEC1

Init. Calib. Date(s): 11-FEB-13

Init: Calib. Times: 14:45 to 19:08

The Analytical Sequence of standards, samples, blanks, and Laboratory Control Samples (LCS) is as follows:

Client Sample No.	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
CS3	CS3	13022702	02/27/13	1049
ISC01	ISC01	13022703	02/27/13	1140
WE03MB	WE03MBS	13022704	02/27/13	1245
WE03OPR	WE03OPR	13022705	02/27/13	1337
SFS-01-0-0.5-021413	WE03A	13022706	02/27/13	1434
SFS-99-0-0.5-021413	WE03B	13022707	02/27/13	1525
CS3	CS3	13022710	02/27/13	1804

6DFA - Form VI-HR CDD-1
CDD/CDF INITIAL CALIBRATION RESPONSE FACTOR SUMMARY
HIGH RESOLUTION

Lab Name:	ANALYTICAL RESOURCES, INC.	Contract:	FLOYD-SNIDER
Lab Code:	WE03	Case No.:	POB-HARRIS
TO No.:		SDG No.:	
GC Column:	RTX-DIOXIN2	ID (mm):	0.25mm
Instrument ID:	AUTOSPEC1		
Init.Calib.Date CSL:	11-Feb-13	Init.Calib.Time CSL:	14:45:17
Init.Calib.Date CS1:	11-Feb-13	Init.Calib.Time CS1:	15:40:00
Init.Calib.Date CS2:	11-Feb-13	Init.Calib.Time CS2:	16:30:49
Init.Calib.Date CS3:	11-Feb-13	Init.Calib.Time CS3:	17:23:26
Init.Calib.Date CS4:	11-Feb-13	Init.Calib.Time CS4:	18:16:11
Init.Calib.Date CS5:	11-Feb-13	Init.Calib.Time CS5:	19:08:49

Target Analytes	RR/RRF						Mean RR/RRF	% RSD	Limits (% +/-)
	CSL	CS1	CS2	CS3	CS4	CS5			
2378-TCDD	1.37	1.07	1.03	1.03	1.06	1.08	1.11	11.7	20.0
2378-TCDF	1.12	0.87	0.85	0.86	0.89	0.91	0.92	10.6	20.0
12378-PeCDF	0.91	0.88	0.91	0.91	0.93	0.94	0.91	2.3	20.0
12378-PeCDD	0.99	0.99	0.98	1.00	1.01	1.02	1.00	1.5	20.0
23478-PeCDF	0.97	0.92	0.91	0.93	0.95	0.97	0.94	3.0	20.0
123478-HxCDF	1.14	1.07	1.08	1.09	1.10	1.13	1.10	2.4	20.0
123678-HxCDF	1.03	1.06	1.03	1.04	1.09	1.08	1.06	2.4	20.0
123478-HxCDD	0.92	1.02	0.95	0.97	0.99	1.02	0.98	4.1	20.0
123678-HxCDD	0.90	0.92	0.93	0.94	0.94	0.94	0.93	1.9	20.0
123789-HxCDD[2]	0.91	0.91	0.88	0.89	0.92	0.92	0.90	1.5	20.0
234678-HxCDF	1.09	1.04	1.05	1.07	1.09	1.10	1.07	2.3	20.0
123789-HxCDF	1.05	1.00	0.98	1.00	1.03	1.04	1.02	2.9	20.0
1234678-HpCDF	1.25	1.23	1.20	1.21	1.26	1.27	1.24	2.2	20.0
1234678-HpCDD	1.06	1.01	1.02	1.01	1.02	1.04	1.03	2.5	20.0
1234789-HpCDF	1.24	1.15	1.20	1.22	1.25	1.28	1.22	3.5	20.0
OCDD	1.09	0.97	0.98	1.00	1.00	1.02	1.01	4.2	20.0
OCDF[1]	1.15	1.12	1.12	1.17	1.19	1.24	1.16	4.0	20.0

(1) The Relative Response (RR) is calculated based on the labeled analogs of the other two HxCDDs.
(2) The RR is calculated based on the labeled analog of OCDD.

Labeled Compounds	RR/RRF						Mean RR/RRF	% RSD	Limits (% +/-)
	CSL	CS1	CS2	CS3	CS4	CS5			
13C-2378-TCDD	0.92	0.89	0.94	0.93	0.94	1.03	0.94	5.0	35.0
13C-12378-PeCDD	0.69	0.67	0.68	0.72	0.70	0.84	0.72	8.9	35.0
13C-123478-HxCDD	1.04	1.01	1.03	1.03	1.04	1.04	1.03	0.9	35.0
13C-123678-HxCDD	1.08	1.08	1.08	1.07	1.07	1.08	1.08	0.4	35.0
13C-1234678-HpCDD	0.84	0.89	0.80	0.83	0.83	0.83	0.84	3.4	35.0
13C-OCDD	0.65	0.70	0.62	0.68	0.69	0.71	0.68	4.7	35.0
13C-2378-TCDF	1.49	1.46	1.53	1.50	1.53	1.62	1.52	3.7	35.0
13C-12378-PeCDF	1.14	1.08	1.13	1.18	1.17	1.41	1.19	9.6	35.0
13C-23478-PeCDF	1.09	1.05	1.08	1.14	1.12	1.34	1.14	9.0	35.0
13C-123478-HxCDF	1.29	1.26	1.31	1.28	1.29	1.27	1.28	1.4	35.0
13C-123678-HxCDF	1.38	1.36	1.40	1.39	1.38	1.38	1.38	1.0	35.0
13C-234678-HxCDF	1.30	1.28	1.29	1.27	1.27	1.28	1.28	0.8	35.0
13C-123789-HxCDF	1.08	1.08	1.10	1.10	1.11	1.11	1.10	1.3	35.0
13C-1234678-HpCDF	1.07	1.10	1.04	1.07	1.07	1.07	1.07	1.8	35.0
13C-1234789-HpCDF	0.76	0.81	0.73	0.79	0.77	0.78	0.77	3.4	35.0

6DFB - Form VI-HR CDD-2
CDD/CDF INITIAL CALIBRATION ION ABUNDANCE RATIO SUMMARY
HIGH RESOLUTION

Lab Name:	ANALYTICAL RESOURCES, INC.	Contract:	FLOYD-SNIDER
Lab Code:	WE03	Case No.:	POB-HARRIS
TO No.:		SDG No.:	
GC Column:	RTX-DIOXIN2	ID (mm):	0.25mm
Instrument ID:	AUTOSPEC1		
Init.Calib.Date CSL:	11-Feb-13	Init.Calib.Time CSL:	14:45:17
Init.Calib.Date CS1:	11-Feb-13	Init.Calib.Time CS1:	15:40:00
Init.Calib.Date CS2:	11-Feb-13	Init.Calib.Time CS2:	16:30:49
Init.Calib.Date CS3:	11-Feb-13	Init.Calib.Time CS3:	17:23:26
Init.Calib.Date CS4:	11-Feb-13	Init.Calib.Time CS4:	18:16:11
Init.Calib.Date CS5:	11-Feb-13	Init.Calib.Time CS5:	19:08:49

Target Analytes	Selected Ions	Ion Abundance Ratio						Ratio Flag	Ratio QC Limits#
		CSL	CS1	CS2	CS3	CS4	CS5		
2378-TCDD	320/322	0.75	0.80	0.79	0.80	0.77	0.78		0.65 - 0.89
2378-TCDF	304/306	0.87	0.81	0.76	0.75	0.77	0.77		0.65 - 0.89
12378-PeCDF	340/342	1.57	1.51	1.50	1.55	1.54	1.52		1.32 - 1.78
12378-PeCDD	356/358	1.62	1.61	1.56	1.55	1.55	1.54		1.32 - 1.78
23478-PeCDF	340/342	1.48	1.44	1.48	1.51	1.52	1.53		1.32 - 1.78
123478-HxCDF	374/376	1.21	1.20	1.19	1.22	1.22	1.22		1.05 - 1.43
123678-HxCDF	374/376	1.27	1.24	1.19	1.23	1.22	1.23		1.05 - 1.43
123478-HxCDD	390/392	1.33	1.25	1.23	1.22	1.24	1.25		1.05 - 1.43
123678-HxCDD	390/392	1.23	1.23	1.27	1.21	1.24	1.24		1.05 - 1.43
123789-HxCDD	390/392	1.24	1.20	1.25	1.24	1.24	1.24		1.05 - 1.43
234678-HxCDF	374/376	1.35	1.16	1.22	1.20	1.22	1.19		1.05 - 1.43
123789-HxCDF	374/376	1.09	1.30	1.22	1.24	1.23	1.22		1.05 - 1.43
1234678-HpCDF	408/410	0.96	1.03	0.99	1.00	1.01	1.01		0.89 - 1.21
1234678-HpCDD	424/426	1.08	1.10	1.04	1.02	1.05	1.04		0.89 - 1.21
1234789-HpCDF	408/410	0.91	0.99	1.01	1.01	1.01	1.02		0.89 - 1.21
OCDD	458/460	0.93	0.84	0.91	0.90	0.89	0.89		0.76 - 1.02
OCDF	442/444	0.87	0.88	0.89	0.88	0.88	0.89		0.76 - 1.02

Labeled Compounds	Selected Ions	Ion Abundance Ratio						Ratio Flag	Ratio QC Limits
		CSL	CS1	CS2	CS3	CS4	CS5		
13C-2378-TCDD	332/334	0.78	0.78	0.78	0.78	0.78	0.78		0.65 - 0.89
13C-12378-PeCDD	368/370	1.57	1.58	1.58	1.59	1.60	1.57		1.32 - 1.78
13C-123478-HxCDD	402/404	1.26	1.25	1.26	1.27	1.27	1.27		1.05 - 1.43
13C-123678-HxCDD	402/404	1.25	1.24	1.23	1.26	1.26	1.25		1.05 - 1.43
13C-1234678-HpCDD	436/438	1.03	1.03	1.04	1.04	1.04	1.05		0.89 - 1.21
13C-OCDD	470/472	0.90	0.90	0.91	0.89	0.89	0.89		0.76 - 1.02
13C-2378-TCDF	316/318	0.78	0.76	0.78	0.77	0.79	0.79		0.65 - 0.89
13C-12378-PeCDF	352/354	1.56	1.58	1.56	1.58	1.56	1.57		1.32 - 1.78
13C-23478-PeCDF	352/354	1.57	1.58	1.57	1.56	1.57	1.57		1.32 - 1.78
13C-123478-HxCDF	384/386	0.52	0.52	0.52	0.51	0.52	0.52		0.43 - 0.59
13C-123678-HxCDF	384/386	0.52	0.52	0.52	0.51	0.52	0.53		0.43 - 0.59
13C-234678-HxCDF	384/386	0.52	0.52	0.52	0.52	0.53	0.53		0.43 - 0.59
13C-123789-HxCDF	384/386	0.53	0.52	0.50	0.53	0.52	0.53		0.43 - 0.59
13C-1234678-HpCDF	418/420	0.44	0.45	0.45	0.45	0.44	0.45		0.37 - 0.51
13C-1234789-HpCDF	418/420	0.45	0.46	0.45	0.43	0.44	0.45		0.37 - 0.51

Internal Standards	Selected Ions	Ion Abundance Ratio						Ratio Flag	Ion Ratio QC Limits
		CSL	CS1	CS2	CS3	CS4	CS5		
13C-1234-TCDD	332/334	0.79	0.79	0.79	0.79	0.79	0.79		0.65 - 0.89
13C-123789-HxCDD	402/404	1.24	1.24	1.24	1.26	1.25	1.24		1.05 - 1.43

(#) Quality Control (QC) limits represent ±15% window around the theoretical ion abundance ratio. The laboratory must flag any analyte in any calibration solution which does not meet the ion abundance ratio QC limit by placing an asterisk in the flag column.

7DFA - Form VII-HR CDD-1
CDD/CDF CONTINUING CALIBRATION SUMMARY
HIGH RESOLUTION

Lab Name:	ARI	Contract:	FLOYD-SNIDER
Lab Code:	WE03	Case No.:	POB-HARRIS
TO No.:		SDG No.:	
GC Column:	RTX-DIOXIN2	ID (mm):	.25
Instrument ID:	AUTOSPEC1	Lab File ID:	13022702
Date Analysed	27-Feb-13	Time Analysed	10:49:43
Init.Calib.Date:	11-FEB-13	Init.Calib.Time:	

Target Analytes	Selected Ions	RRF	Mean RRF	%D	%D Flag#	Ion Ratio	Ratio Flag#	Ratio QC Limits
2378-TCDD	320/322	1.00	1.11	-9.6		0.81		0.65 - 0.89
2378-TCDF	304/306	0.86	0.92	-6.4		0.73		0.65 - 0.89
12378-PeCDF	340/342	0.89	0.91	-2.5		1.52		1.32 - 1.78
12378-PeCDD	356/358	0.97	1.00	-3.0		1.54		1.32 - 1.78
23478-PeCDF	340/342	0.90	0.94	-4.8		1.53		1.32 - 1.78
123478-HxCDF	374/376	1.08	1.10	-2.2		1.21		1.05 - 1.43
123678-HxCDF	374/376	1.07	1.06	1.7		1.16		1.05 - 1.43
123478-HxCDD	390/392	0.95	0.98	-3.1		1.25		1.05 - 1.43
123678-HxCDD	390/392	0.89	0.93	-3.9		1.26		1.05 - 1.43
123789-HxCDD	390/392	0.87	0.90	-3.5		1.19		1.05 - 1.43
234678-HxCDF	374/376	1.08	1.07	0.5		1.19		1.05 - 1.43
123789-HxCDF	374/376	1.05	1.02	2.8		1.24		1.05 - 1.43
1234678-HpCDF	408/410	1.21	1.24	-2.4		1.00		0.89 - 1.21
1234678-HpCDD	424/426	1.00	1.03	-2.6		0.99		0.89 - 1.21
1234789-HpCDF	408/410	1.25	1.22	1.8		1.00		0.89 - 1.21
OCDD	458/460	0.99	1.01	-2.3		0.89		0.76 - 1.02
OCDF	442/444	1.11	1.16	-4.2		0.86		0.76 - 1.02

Labeled Compounds	Selected Ions	RRF	Mean RRF	%D	%D Flag#	Ion Ratio	Ratio Flag#	Ratio QC Limits
13C-2378-TCDD	332/334	0.91	0.94	-3.5		0.78		0.65 - 0.89
13C-12378-PeCDD	368/370	0.65	0.72	-9.1		1.56		1.32 - 1.78
13C-123478-HxCDD	402/404	1.01	1.03	-2.2		1.28		1.05 - 1.43
13C-123678-HxCDD	402/404	1.12	1.08	3.7		1.27		1.05 - 1.43
13C-1234678-HpCDD	436/438	0.83	0.84	-0.7		1.12		0.89 - 1.21
13C-OCDD	470/472	0.72	0.68	6.2		0.90		0.76 - 1.02
13C-2378-TCDF	316/318	1.34	1.52	-11.8		0.77		0.65 - 0.89
13C-12378-PeCDF	352/354	1.03	1.19	-13.4		1.54		1.32 - 1.78
13C-23478-PeCDF	352/354	0.96	1.14	-15.6		1.55		1.32 - 1.78
13C-123478-HxCDF	384/386	1.18	1.28	-7.8		0.51		0.43 - 0.59
13C-123678-HxCDF	384/386	1.28	1.38	-7.7		0.53		0.43 - 0.59
13C-234678-HxCDF	384/386	1.21	1.28	-5.4		0.52		0.43 - 0.59
13C-123789-HxCDF	384/386	1.03	1.10	-6.6		0.52		0.43 - 0.59
13C-1234678-HpCDF	418/420	0.98	1.07	-8.6		0.46		0.37 - 0.51
13C-1234789-HpCDF	418/420	0.75	0.77	-3.4		0.43		0.37 - 0.51

Clean-up	Selected Ions	RRF	Mean RRF	%D	%D Flag#	Ion Ratio	Ratio Flag#	Ratio QC Limits
37CL-2378-TCDD	328	0.98	1.05	-7.1		NA	NA	NA

Internal Standards	Selected Ions	RRF	Mean RRF	%D	%D Flag#	Ion Ratio	Ion Ratio Flag#	Ion Ratio QC Limits
13C-1234-TCDD	332/334	NA	NA	NA	NA	0.78		0.65 - 0.89
13C-123789-HxCDD	402/404	NA	NA	NA	NA	1.26		1.05 - 1.43

(#) The laboratory must flag any analyte which does not meet the criteria for Percentage Difference (%D) or ion abundance ratio by placing an asterisk in the appropriate flag column.

7DFB - Form VII-HR CDD-2
CDD/CDF CONTINUING CALIBRATION RETENTION TIME SUMMARY
HIGH RESOLUTION

Lab Name:	ARI	Contract:	FLOYD-SNIDER
Lab Code:	WE03	Case No.:	POB-HARRIS
TO No.:		SDG No.:	
GC Column:	RTX-DIOXIN2	ID (mm):	.25
Instrument ID:	AUTOSPEC1	Lab File ID:	13022702
Date Analysed	27-Feb-13	Time Analysed	10:49:43
Init.Calib.Date:	11-FEB-13	Init.Calib.Time:	

Target Analytes	RRT#	RT
2378-TCDD	1.00	27.54
2378-TCDF	1.00	26.90
12378-PeCDF	1.00	31.07
12378-PeCDD	1.00	32.68
23478-PeCDF	1.00	32.41
123478-HxCDF	1.00	36.11
123678-HxCDF	1.00	36.26
123478-HxCDD	1.00	37.33
123678-HxCDD	1.00	37.45
123789-HxCDD	1.01	37.86
234678-HxCDF	1.00	37.20
123789-HxCDF	1.00	38.30
1234678-HpCDF	1.00	40.45
1234678-HpCDD	1.00	42.35
1234789-HpCDF	1.00	43.30
OCDD	1.00	48.63
OCDF	1.01	48.94

Labeled Compounds	RRT#	RT
13C-2378-TCDD	1.03	27.53
13C-12378-PeCDD	1.22	32.65
13C-123478-HxCDD	0.99	37.32
13C-123678-HxCDD	0.99	37.44
13C-1234678-HpCDD	1.12	42.33
13C-OCDD	1.28	48.61
13C-2378-TCDF	1.01	26.88
13C-12378-PeCDF	1.16	31.05
13C-23478-PeCDF	1.21	32.40
13C-123478-HxCDF	0.95	36.09
13C-123678-HxCDF	0.96	36.25
13C-234678-HxCDF	0.98	37.19
13C-123789-HxCDF	1.01	38.28
13C-1234678-HpCDF	1.07	40.42
13C-1234789-HpCDF	1.14	43.27

Clean up Standard	RRT#	RT
37CL-2378-TCDD	1.03	27.54

Internal Standards	RRT#	RT
13C-1234-TCDD	0.00	26.71
13C-123789-HxCDD	0.00	37.85

(#) RRT = (RT of Analyte)/(RT of appropriate labeled compound).

7DFA - Form VII-HR CDD-1
CDD/CDF CONTINUING CALIBRATION SUMMARY
HIGH RESOLUTION

Lab Name:	ARI	Contract:	FLOYD-SNIDER
Lab Code:	WE03	Case No.:	POB-HARRIS
TO No.:		SDG No.:	
GC Column:	RTX-DIOXIN2	ID (mm):	.25
Instrument ID:	AUTOSPEC1	Lab File ID:	13022710
Date Analysed	27-Feb-13	Time Analysed	18:04:06
Init.Calib.Date:	11-FEB-13	Init.Calib.Time:	

Target Analytes	Selected Ions	RRF	Mean RRF	%D	%D Flag#	Ion Ratio	Ratio Flag#	Ratio QC Limits
2378-TCDD	320/322	1.03	1.11	-7.0		0.76		0.65 - 0.89
2378-TCDF	304/306	0.87	0.92	-5.9		0.73		0.65 - 0.89
12378-PeCDF	340/342	0.91	0.91	-0.8		1.53		1.32 - 1.78
12378-PeCDD	356/358	0.98	1.00	-1.8		1.56		1.32 - 1.78
23478-PeCDF	340/342	0.91	0.94	-3.7		1.52		1.32 - 1.78
123478-HxCDF	374/376	1.07	1.10	-2.4		1.19		1.05 - 1.43
123678-HxCDF	374/376	1.04	1.06	-1.2		1.22		1.05 - 1.43
123478-HxCDD	390/392	0.97	0.98	-1.1		1.23		1.05 - 1.43
123678-HxCDD	390/392	0.89	0.93	-4.4		1.26		1.05 - 1.43
123789-HxCDD	390/392	0.92	0.90	1.5		1.25		1.05 - 1.43
234678-HxCDF	374/376	1.06	1.07	-1.5		1.20		1.05 - 1.43
123789-HxCDF	374/376	1.01	1.02	-0.4		1.22		1.05 - 1.43
1234678-HpCDF	408/410	1.24	1.24	0.1		1.01		0.89 - 1.21
1234678-HpCDD	424/426	0.99	1.03	-4.0		1.01		0.89 - 1.21
1234789-HpCDF	408/410	1.24	1.22	1.0		0.97		0.89 - 1.21
OCDD	458/460	0.99	1.01	-2.3		0.88		0.76 - 1.02
OCDF	442/444	1.13	1.16	-2.4		0.89		0.76 - 1.02

Labeled Compounds	Selected Ions	RRF	Mean RRF	%D	%D Flag#	Ion Ratio	Ratio Flag#	Ratio QC Limits
13C-2378-TCDD	332/334	0.92	0.94	-2.5		0.78		0.65 - 0.89
13C-12378-PeCDD	368/370	0.71	0.72	-0.9		1.58		1.32 - 1.78
13C-123478-HxCDD	402/404	0.97	1.03	-6.1		1.29		1.05 - 1.43
13C-123678-HxCDD	402/404	1.03	1.08	-4.6		1.24		1.05 - 1.43
13C-1234678-HpCDD	436/438	0.81	0.84	-3.0		1.04		0.89 - 1.21
13C-OCDD	470/472	0.70	0.68	2.9		0.90		0.76 - 1.02
13C-2378-TCDF	316/318	1.40	1.52	-7.8		0.77		0.65 - 0.89
13C-12378-PeCDF	352/354	1.09	1.19	-8.3		1.55		1.32 - 1.78
13C-23478-PeCDF	352/354	1.07	1.14	-6.2		1.56		1.32 - 1.78
13C-123478-HxCDF	384/386	1.14	1.28	-11.2		0.51		0.43 - 0.59
13C-123678-HxCDF	384/386	1.23	1.38	-11.1		0.54		0.43 - 0.59
13C-234678-HxCDF	384/386	1.17	1.28	-8.8		0.54		0.43 - 0.59
13C-123789-HxCDF	384/386	1.05	1.10	-4.5		0.53		0.43 - 0.59
13C-1234678-HpCDF	418/420	0.94	1.07	-11.8		0.45		0.37 - 0.51
13C-1234789-HpCDF	418/420	0.75	0.77	-2.9		0.45		0.37 - 0.51

Clean-up	Selected Ions	RRF	Mean RRF	%D	%D Flag#	Ion Ratio	Ratio Flag#	Ratio QC Limits
37CL-2378-TCDD	328	0.98	1.05	-6.3		NA	NA	NA

Internal Standards	Selected Ions	RRF	Mean RRF	%D	%D Flag#	Ion Ratio	Ion Ratio Flag#	Ion Ratio QC Limits
13C-1234-TCDD	332/334	NA	NA	NA	NA	0.77		0.65 - 0.89
13C-123789-HxCDD	402/404	NA	NA	NA	NA	1.22		1.05 - 1.43

(#) The laboratory must flag any analyte which does not meet the criteria for Percentage Difference (%D) or ion abundance ratio by placing an asterisk in the appropriate flag column.

7DFB - Form VII-HR CDD-2
CDD/CDF CONTINUING CALIBRATION RETENTION TIME SUMMARY
HIGH RESOLUTION

Lab Name:	ARI	Contract:	FLOYD-SNIDER
Lab Code:	WE03	Case No.:	POB-HARRIS
TO No.:		SDG No.:	
GC Column:	RTX-DIOXIN2	ID (mm):	.25
Instrument ID:	AUTOSPEC1	Lab File ID:	13022710
Date Analysed	27-Feb-13	Time Analysed	18:04:06
Init.Calib.Date:	11-FEB-13	Init.Calib.Time:	

Target Analytes	RRT#	RT
2378-TCDD	1.00	27.51
2378-TCDF	1.00	26.87
12378-PeCDF	1.00	31.04
12378-PeCDD	1.00	32.65
23478-PeCDF	1.00	32.39
123478-HxCDF	1.00	36.09
123678-HxCDF	1.00	36.24
123478-HxCDD	1.00	37.31
123678-HxCDD	1.00	37.43
123789-HxCDD	1.01	37.84
234678-HxCDF	1.00	37.18
123789-HxCDF	1.00	38.28
1234678-HpCDF	1.00	40.42
1234678-HpCDD	1.00	42.33
1234789-HpCDF	1.00	43.27
OCDD	1.00	48.60
OCDF	1.01	48.90

Labeled Compounds	RRT#	RT
13C-2378-TCDD	1.03	27.50
13C-12378-PeCDD	1.22	32.63
13C-123478-HxCDD	0.99	37.30
13C-123678-HxCDD	0.99	37.42
13C-1234678-HpCDD	1.12	42.31
13C-OCDD	1.28	48.59
13C-2378-TCDF	1.01	26.85
13C-12378-PeCDF	1.16	31.03
13C-23478-PeCDF	1.21	32.38
13C-123478-HxCDF	0.95	36.07
13C-123678-HxCDF	0.96	36.23
13C-234678-HxCDF	0.98	37.17
13C-123789-HxCDF	1.01	38.25
13C-1234678-HpCDF	1.07	40.41
13C-1234789-HpCDF	1.14	43.26

Clean up Standard	RRT#	RT
37CL-2378-TCDD	1.03	27.51

Internal Standards	RRT#	RT
13C-1234-TCDD	0.00	26.68
13C-123789-HxCDD	0.00	37.83

(#) RRT = (RT of Analyte)/(RT of appropriate labeled compound).

Total Solids

ARI Job ID: WE03

Total Solids Targets-Extractions
Data By: Steve Potter
Created: 2/19/13

Worklist: 9597
Analyst: SDP
Comments:

	ARI ID	Target Dry Wt (g)	Total Solids	Min Wet Wt (g)
1.	WE03A	10.00	93.5	10.70
2.	WE03B	10.00	92.3	10.83

Extractions Total Solids-extts
Data By: Yen Luu
Created: 2/15/13

Worklist: 9100
Analyst: ALR
Comments:

Oven ID:____________

Balance ID:_______________

Samples In: Date:______ Time:______ Temp:______ Analyst:______

Samples Out: Date:______ Time:______ Temp:______ Analyst:______

	ARI ID CLIENT ID	Tare Wt (g)	Wet Wt (g)	Dry Wt (g)	% Solids	pH
1.	WE03A 13-3229 SFS-01-0-0.5-021413	1.12	12.40	11.67	93.5	NR
2.	WE03B 13-3230 SFS-99-0-0.5-021413	1.14	12.25	11.39	92.3	NR

Extractions Total Solids-extts
Data By: Yen Luu
Created: 2/15/13

Worklist: 9100
Analyst: YL
Comments:

Oven ID: Φ15

Balance ID: B14642614

Samples In: Date: 2/~~17~~ 18/13 Time: 16:37 Temp: 1Φ5 Analyst: YL

Samples Out: Date: ~~2/18/13~~ 02/19/13 Time: 07:45 Temp: 102°C Analyst: AR

ARI ID CLIENT ID	Tare Wt (g)	Wet Wt (g)	Dry Wt (g)	% Solids	pH
1. WE03A 13-3229 SFS-01-0-0.5-021413	1.12	12.40	11.67		NR
2. WE03B 13-3230 SFS-99-0-0.5-021413	1.14	12.25	11.39		NR

Dioxin Raw Data
Extraction Bench Sheets and Notes

ARI Job ID: WE03

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Dioxin / Furan Bench Sheet EPA Methods 8290A & 1613B
Solid Samples

ARI Job No(s) WE03			
Matrix (circle one)	Soil	Sediment	Oil Tissue
Extraction Method	Start Time/Date:	End Time/Date:	
Soxhlet	10:50 2/19/13	05:11 2/20/13	

Reagent / Standard	NA	ID / Lot Number	Initials	Date
Analytical Balance		SN 24650344	PD	2/19/13
Purified Sand		10/13/12	PD	2/19/13
Toluene		F8007	PD	2/19/13
Hexane		F8072	PD	2/20/13
CH_2Cl_2		F7946	PD	2/20/13
H_2SO_4		F8012	PD	2/20/13
Na_2SO_4		F7950	PD	2/20/13
Glasswool		5/18/12	PD	2/20/13
10 % $AgNO_3$	/			
Basic Silica		6933	PD	2/20/13
Acid Silica		H090	PD	2/20/13
0% Silica		F7968	PD	2/20/13
Activated Florisil		H013	PD	2/20/13
Dual Carbon Column	/			
Other ( )	/			
Nonane		IS167	JW	2/21/13

Bottle ID	ARI Sample ID	Sample Weight (eq to dry wt)	Roto Vap 45 °C	Final Vol.	H20 Trap Vol (mL)	Comments
2/19/13	WE03 MB	10.00g	1/2	10uL	0.9	
↓	OPR	10.00g	1/2	10uL	1.0	
↓	QLS	10.00g	1/2	10uL	0.9	
↓	A	10.77	1/2	10uL	0.8	
↓	B	10.88	1/2	10uL	1.0	
			1/2	10uL		
			1/2	10uL		
			1/2	10uL		
			1/2	10uL		
			1/2	10uL		
			1/2	10uL		
			1/2	10uL		
			1/2	10uL		
			1/2	10uL		
			1/2	10uL		
			1/2	10uL		
			1/2	10uL		
			1/2	10uL		
			1/2	10uL		
			1/2	10uL		
			1/2	10uL		
			1/2	10uL		
			1/2	10uL		
			1/2	10uL		
Prep Analyst/Date		PD 2/19/13	PD 2/20/13	JW 2/21/13	PD 2/20/13	

Reagent / Standard	Vol	ID / Lot Number	Solution Conc.	Expiration Date	Initials	Date	Witness
Recovery Standard	1.0 mL	2070-1	2/4ng/mL	2/6/14	PD	2/19/13	WW
Ongoing Precision /Recovery	20 µL	2069-3	10/50/100ng/mL	2/6/14	PD	2/19/13	WW
QLS Standard	10 µL	21/ 2069-4	0.5/2.5/5ng/mL	2/6/14	PD	2/19/13	WW
Clean-up Standard	1.0 mL	2070-2	0.8ng/mL	2/6/14	PDx2	2/20/13	PD
Internal Standard	10 µL		200ng/mL				

Verify Client ID
Analyst/Date PD 2/19/13

Acid Clean
Y/N
Analyst/Date PD 2/20/13

Silica-Florisil
Y/N
Analyst/Date PD 2/20/13

Supervisor Review: [signature] 2/21/13

Bench Sheet No.: 00020

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Dioxin Extraction Laboratory – Glassware Tracking

ARI Sample ID: WE03 **Client Sample ID:** Floyd-Snider **Client Project ID:** PBB-Harris T.4030 **ARI Analyst** TD

ARI Sample ID	300 mL Flat Bottom	Small Soxhlet	Large Soxhlet	250 mL Beaker	Funnel	Column	Florisil Column	Turbo Tube	Sep Funnel	Erlenmeyer Flask	Centrifuge Bottle	Turbo-Vap	Vortex Mixer	Heating Mantle
WE03 mb	27	2		13	62	103	45	99				4	4	C-6
OR	22	45		12	42	74	5	87				4	4	C-5
QLS	44	6		169	56	116	71	84				4	4	C-4
A	50		24	164	58	99	72	96				4	4	C-3
B	3		27	174	64	48	8	85				4	4	C-2
												4	4	
												4	4	
												4	4	
												4	4	
												4	4	
												4	4	
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												4	4	
												4	4	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

ARI Job No.: WEΦ3 Client ID: Floyd-Snider

Parameter: DIOXIN Client Project:

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☒ No Anomalies (standard soil/wet sediment/sand/gravel)= A, B	CT Φ2/15/13
☐ Standing Water Decanted (Not shared)=	
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay/Clumps (Difficult to homogenize)=	
☒ Rocks (%+size)? 10% small Rocks A, B	CT Φ2/15/13
☐ Organics (Leaves/sticks/grass)=	
☐ Oily, obvious fuel/sulfur odors=	
☑ Other (Details)= A & B split extracts in half for Acid wash to double amount of Acid	PD 2/20/13
because extracts are Black. Double Acid Silica for A & B due to yellow extracts	PD 2/20/13
post Acid wash.	PD 2/20/13
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Other (Details)=	
☐ Other Notes/Comments= (Note problems, concerns, corrective actions).	
(Centrifuge#1 used for all Centrifugations)	

3056F

Review: [signature] 2/21/13

Revision 009
08/14/12

Dioxin Raw Data
Initial Calibration

ARI Job ID: WE03

Analytical Resources, Incorporated
Analytical Chemists and Consultants

HR-GC/MS Analyst Notes / Corrective Action Log

ARI Project ID: ____________________ Client ID: ______________________________

ARI SOP: **806S** (Dioxins)

Parameter(s): Dioxin Curve 2/11/13

Instrument: **AutoSpec01**

Curve Date: 2/11/13 Analysis Start Date: ______________________

Internal Standard Meets Criteria?	YES / NO	Method Blank in Control?	YES / NO
Extraction Std Recovery in Control?	~~YES / NO~~	IPR / OPR Recovery in Control?	YES / NO
ICal acceptable?	YES / NO	CCal acceptable?	YES / NO
Manual Integrations for ICal?	YES / NO	Manual Integrations for Samples?	Yes /NO
Special Analysis Criteria Met?	YES / NO / NA		

Detail problems, corrective actions and/or other pertinent information below (use reverse side when necessary):

- All cpds < 20% RSD. All 6pts: CSL—CS5.
- Man Int. on CSL for TF, PF, PD, OCDD.

Additional Details on Reverse: Yes / No

Analyst: [signature] **Date:** 2/12/13

Reviewer: ______________________ **Date:** __________

Analytical Resources Inc.: Organics Instrument Log

AutoSpec01 Serial No.:GC=CN10921030, MS=P764

Date: 2/11/13 Analysis: Dioxins Analyst: [illegible]

GC Program: 8290C Column No: I7818 Column Type: RTX-Dioxin2

Inj Vol: 1ul Instrument Tune (IPR): 10K8290B Detector Voltage: 340

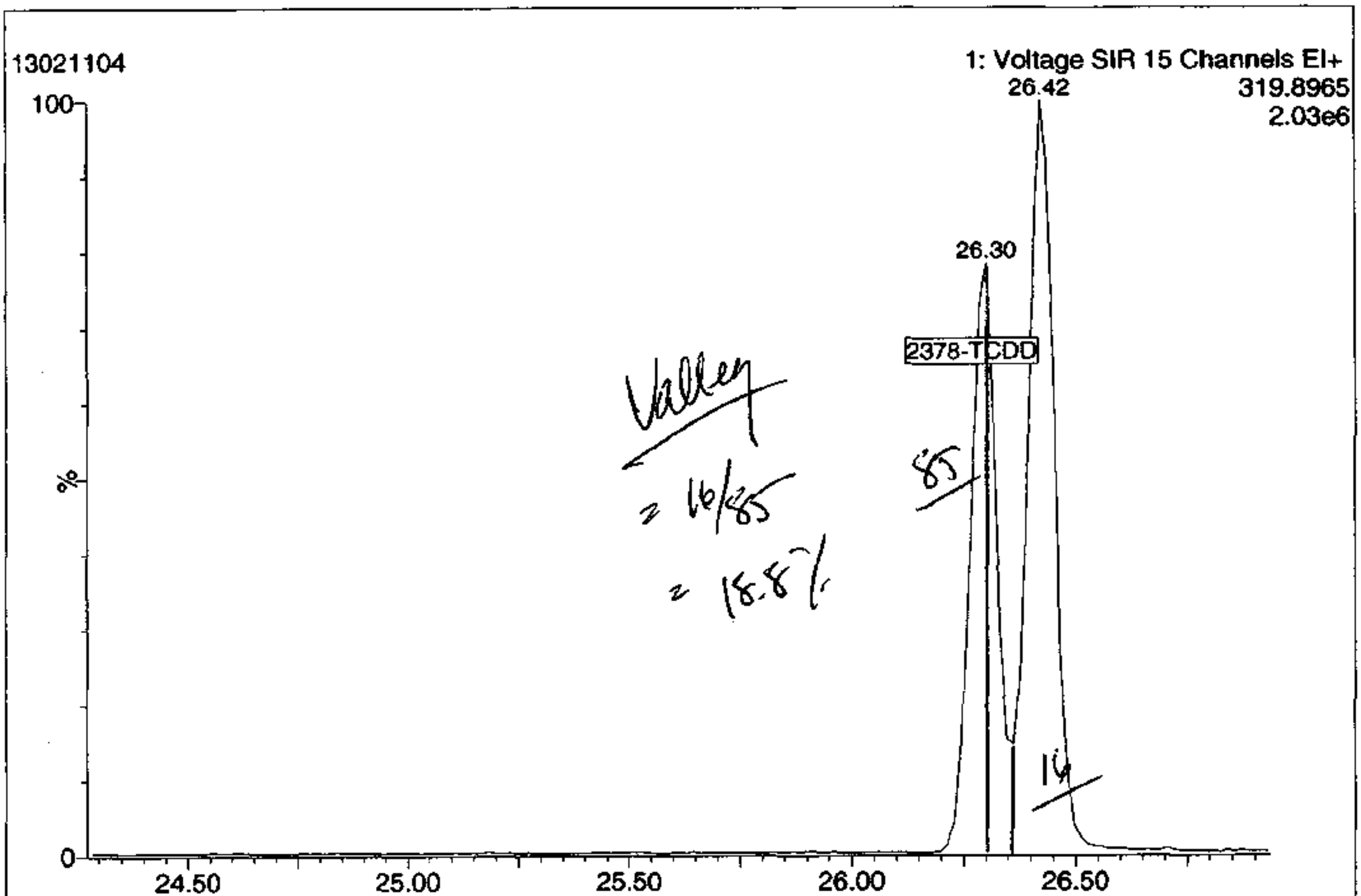
Resolution Check Files: Curve Date: 2/11/13

IS/SS	Ical/Ccal	LCS/ICV
I7908	I7333 - I7337	I7383
	I7214	
	1997-2	

1	11-Feb-13	12:04:12	13021102	PCDFS	
2	11-Feb-13	12:55:00	13021103	CS3	
3	11-Feb-13	13:54:29	13021104	ISC01	
4	11-Feb-13	14:45:17	13021105	CSL	
5	11-Feb-13	15:40:00	13021106	CS1	
6	11-Feb-13	16:30:49	13021107	CS2	
7	11-Feb-13	17:23:26	13021108	CS3	
8	11-Feb-13	18:16:11	13021109	CS4	
9	11-Feb-13	19:08:49	13021110	CS5	
10	11-Feb-13	20:01:34	13021111	ICV	
11	11-Feb-13	20:54:12	13021112	CS3	
12	11-Feb-13	21:55:09	13021113	ISC02	

[illegible] 2/12/13

Every line must contain information or be lined out. Make all entries legible.
Start a new page for each QC period. Document All Maintenance Tasks in StarLIMS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319.8965
2.03e6
26.42
26.30
2378-TCDD
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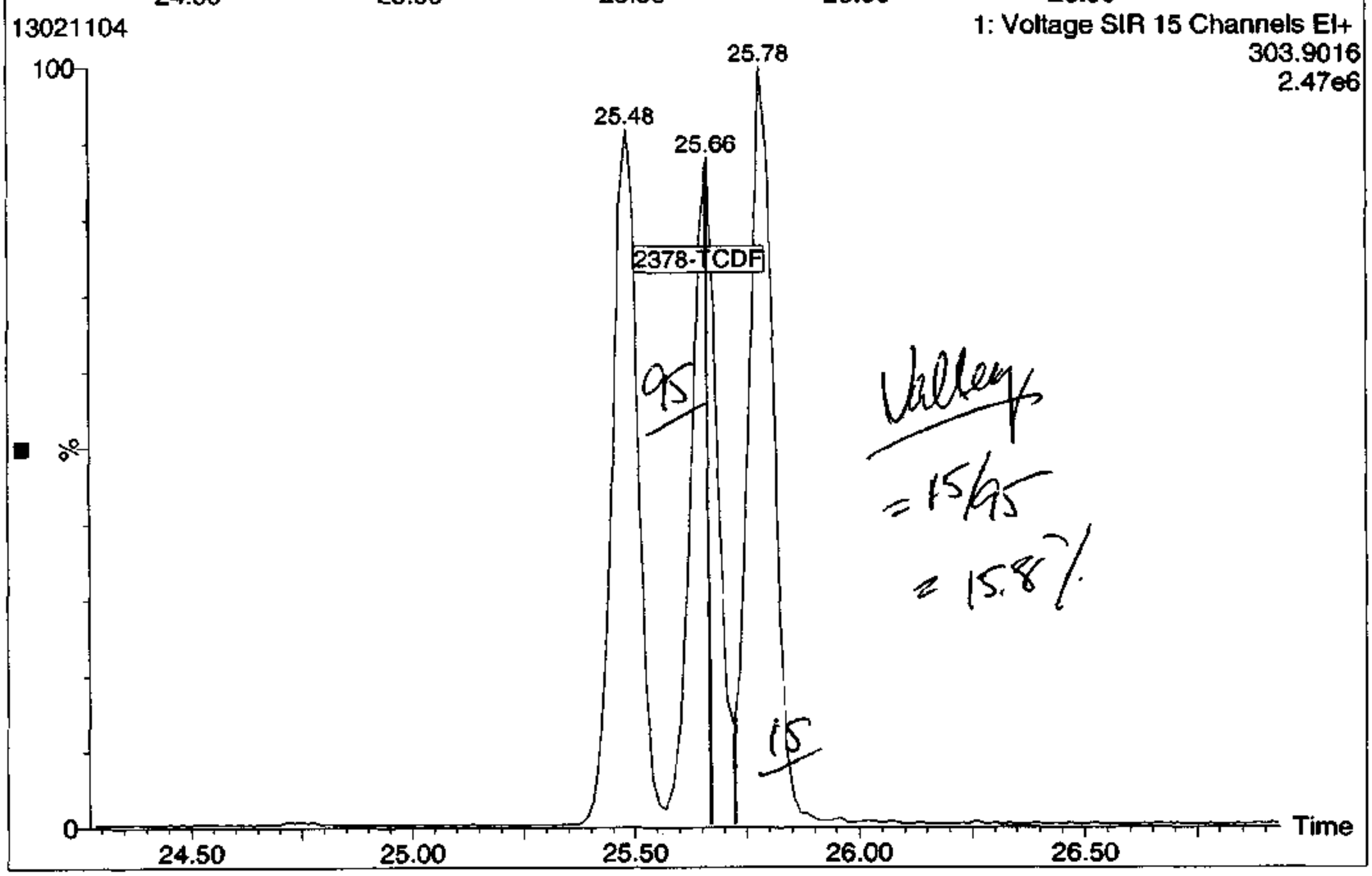
%
0
24.50
25.00
25.50
26.00
26.50
Valley
= 16/85
= 18.8%
85
14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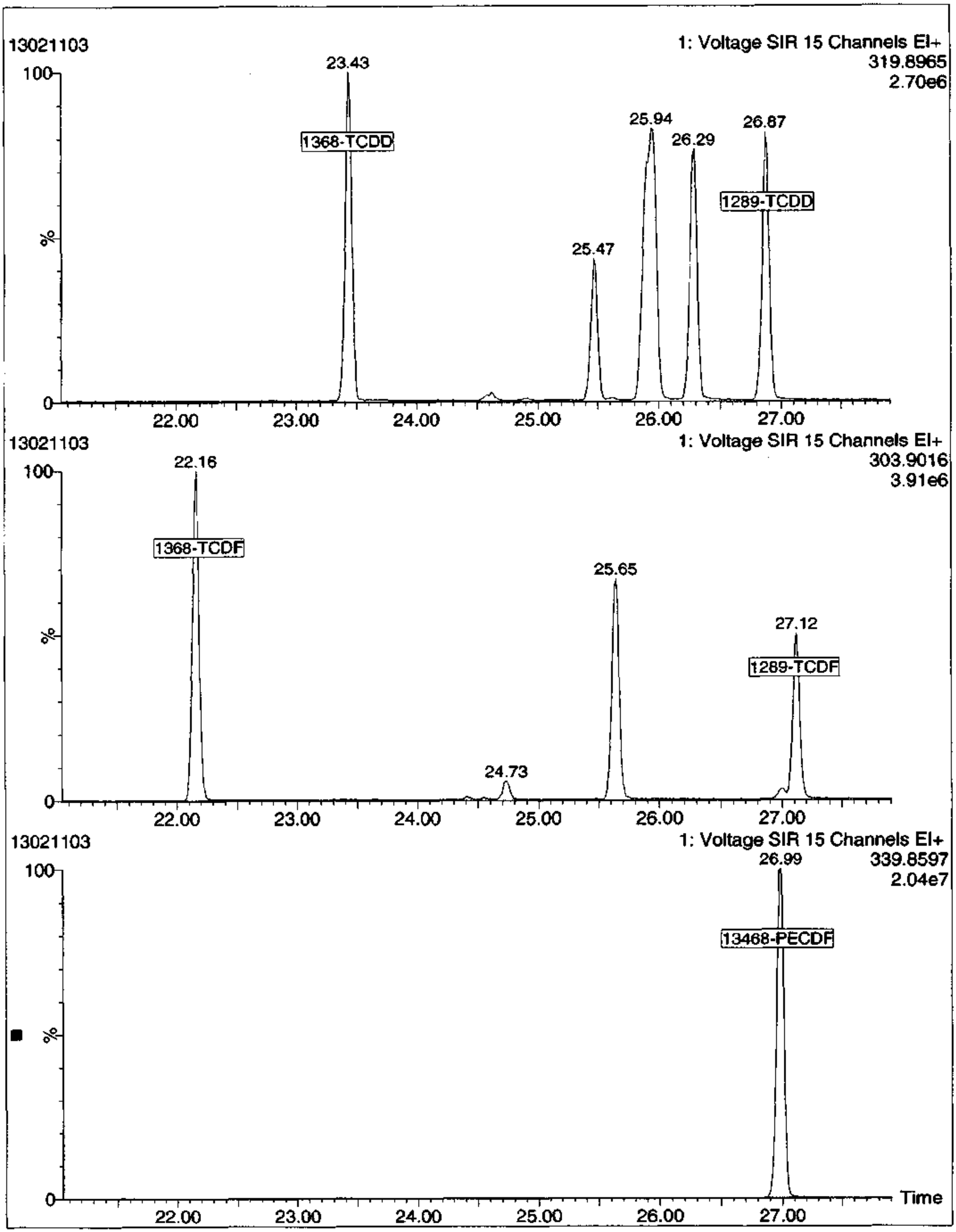
25.78
25.48
25.66
2378-TCDF
100
%
0
24.50
25.00
25.50
26.00
26.50
Time
Valley
= 15/95
= 15.8%
95
15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2.70e6
100
%
0
23.43
1368-TCDD
25.47
25.94
26.29
26.87
1289-TCDD
22.00
23.00
24.00
25.00
26.00
27.00
13021103
1: Voltage SIR 15 Channels EI+
303.9016
3.91e6
22.16
1368-TCDF
24.73
25.65
27.12
1289-TCDF
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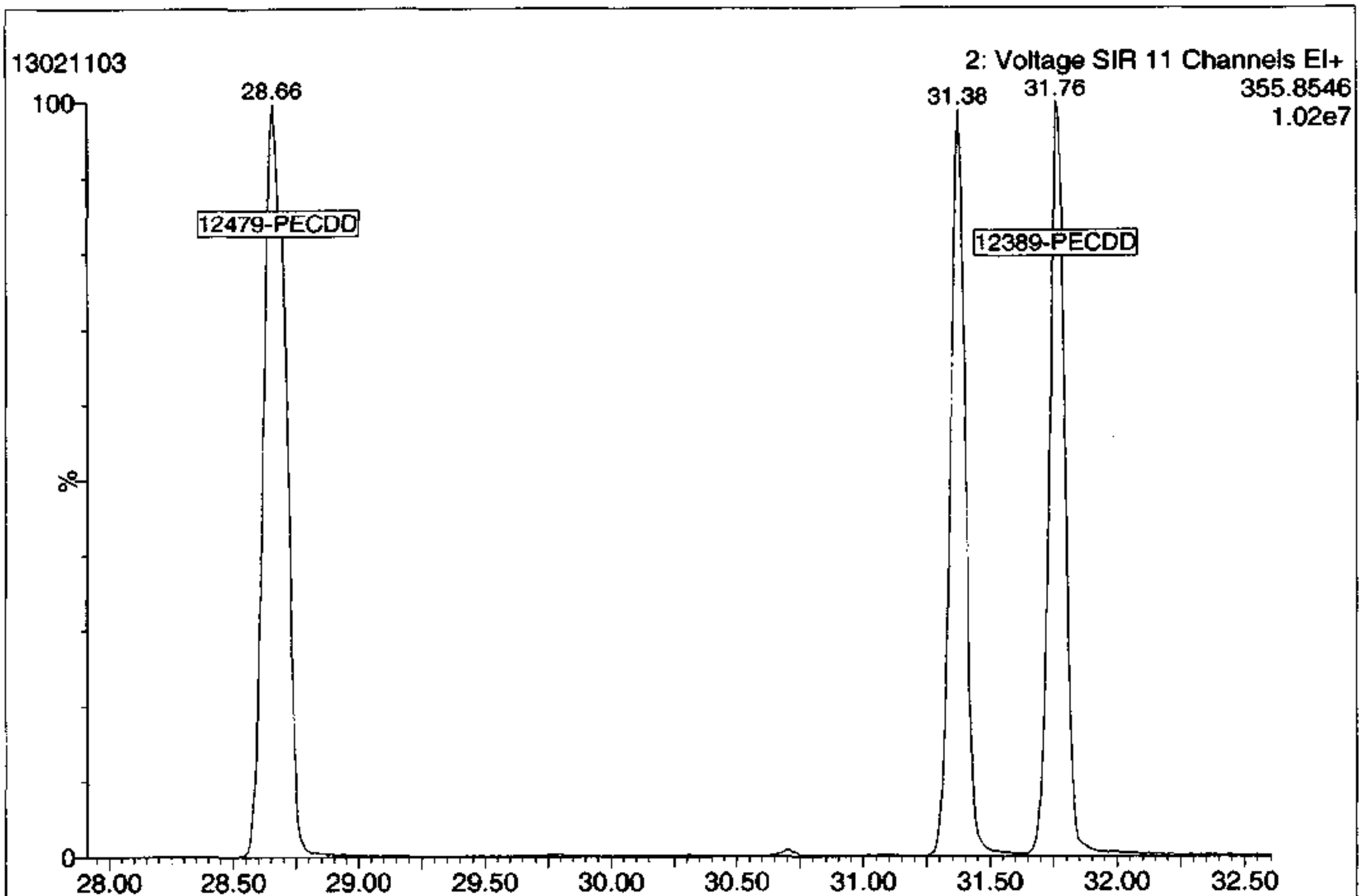
339.8597
2.04e7
26.99
13468-PECDF
Time

VE09 : 00045



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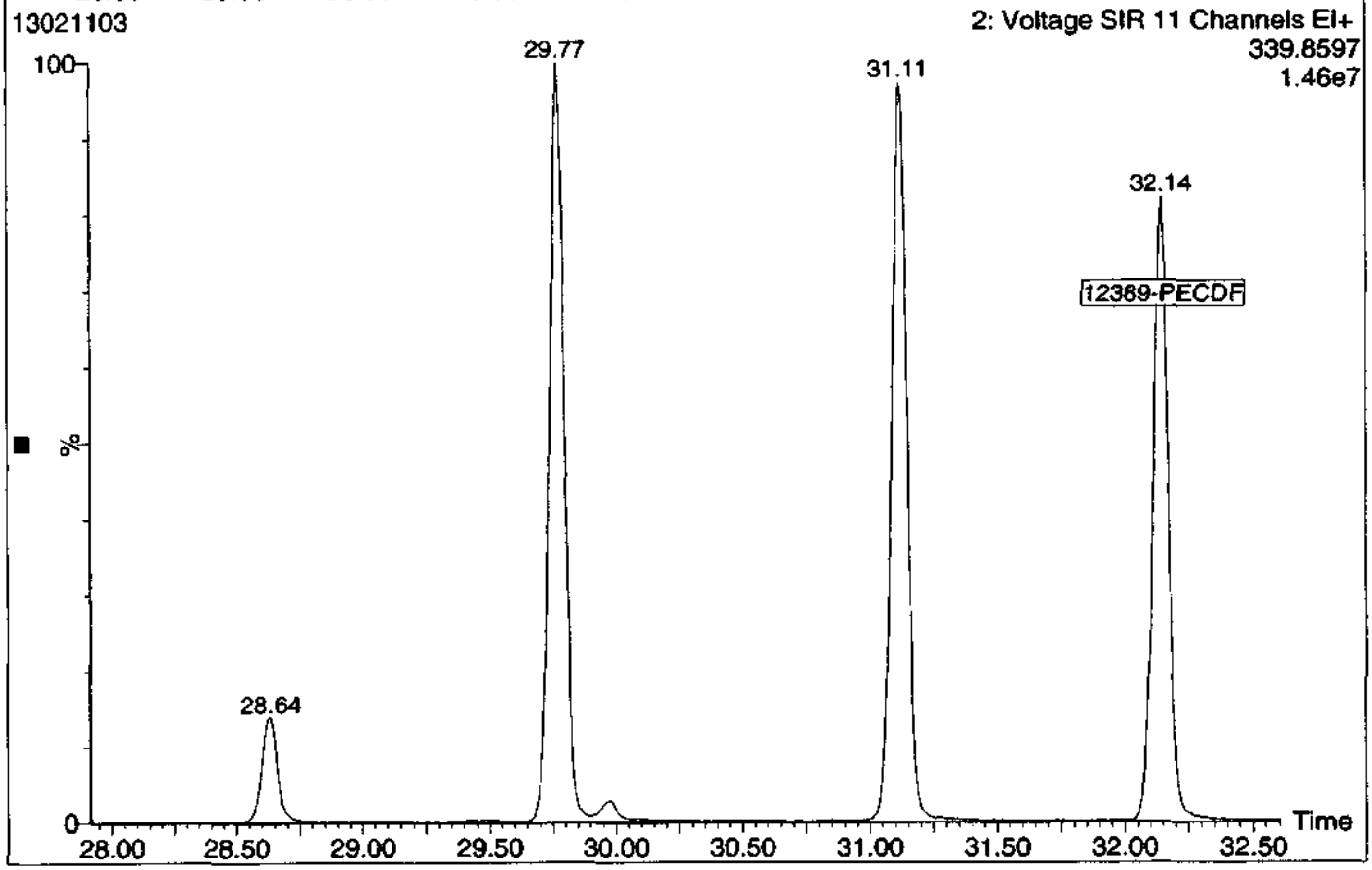
2: Voltage SIR 11 Channels EI+
355.8546
1.02e7
100
%
0
28.66
31.38
31.76
12479-PECDD
12389-PECDD
28.00
28.50
29.00
29.50
30.00
30.50
31.00
31.50
32.00
32.50



13021103
2: Voltage SIR 11 Channels EI+
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1.46e7
100
%
0
29.77
31.11
32.14
28.64
12389-PECDF
Time
28.00
28.50
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29.50
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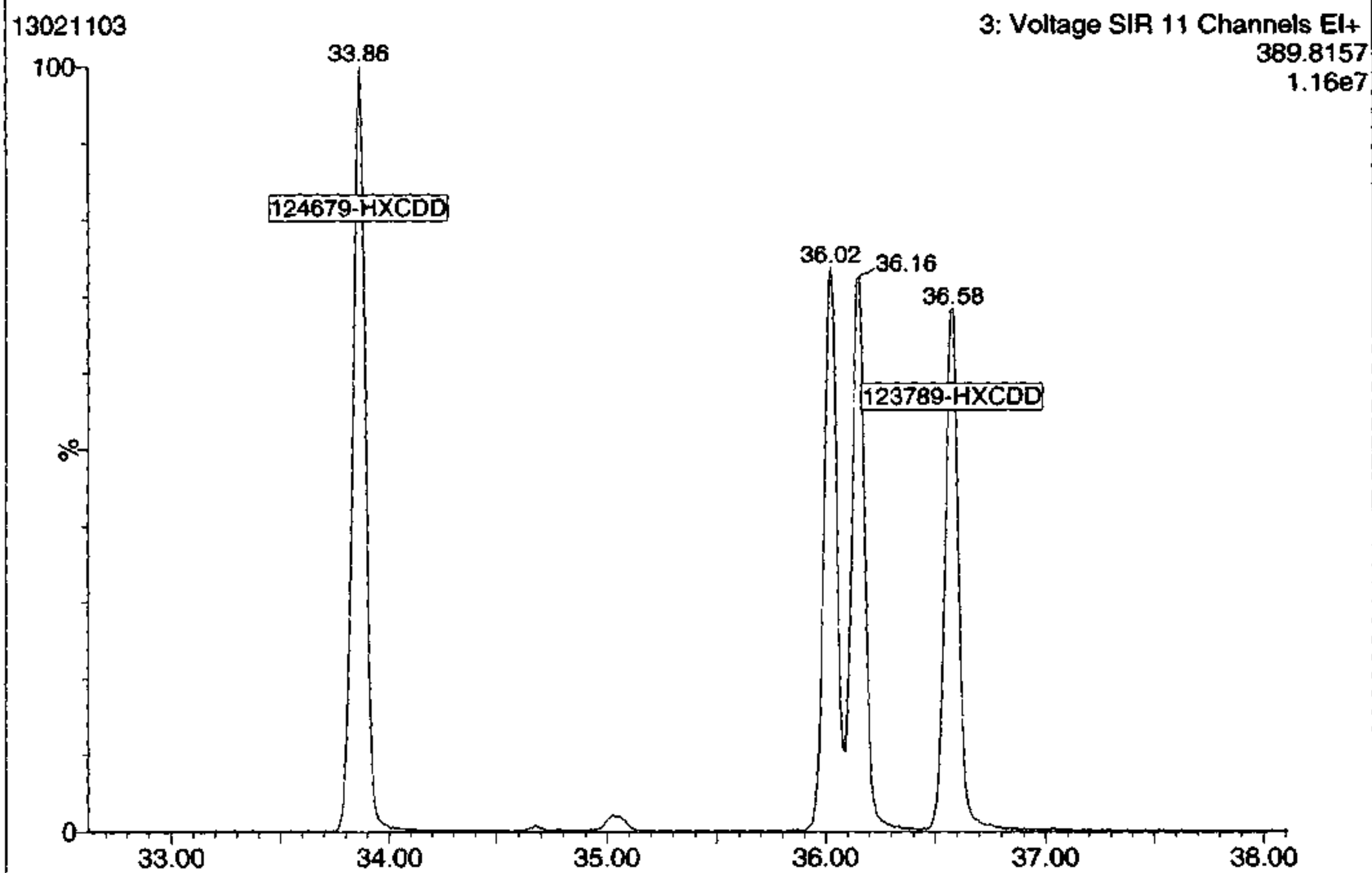
32.00
32.50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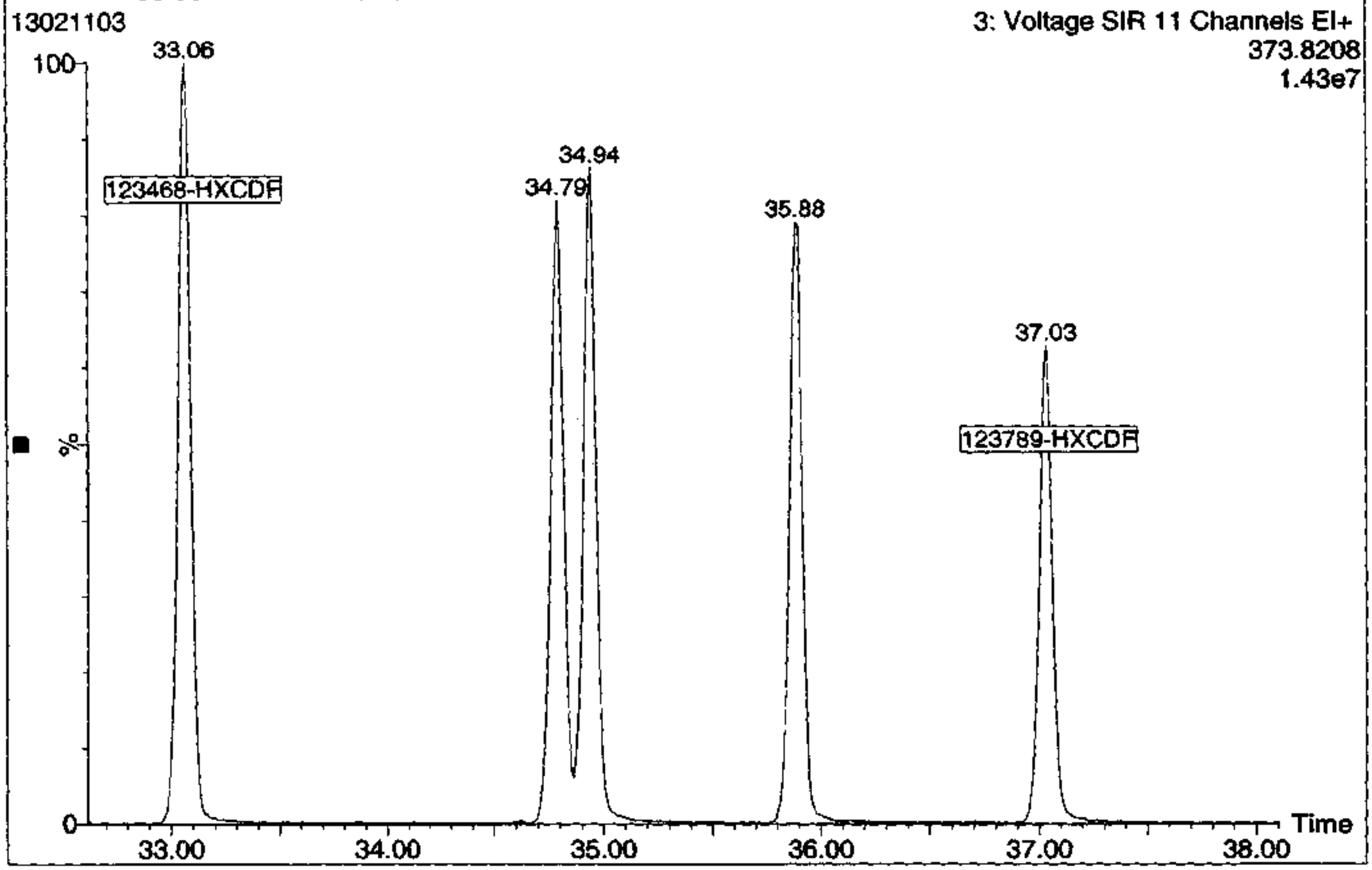
389.8157
1.16e7
33.86
124679-HXCDD
36.02
36.16
36.58
123789-HXCDD
100
%
0
33.00
34.00
35.00
36.00
37.00
38.00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3: Voltage SIR 11 Channels EI+
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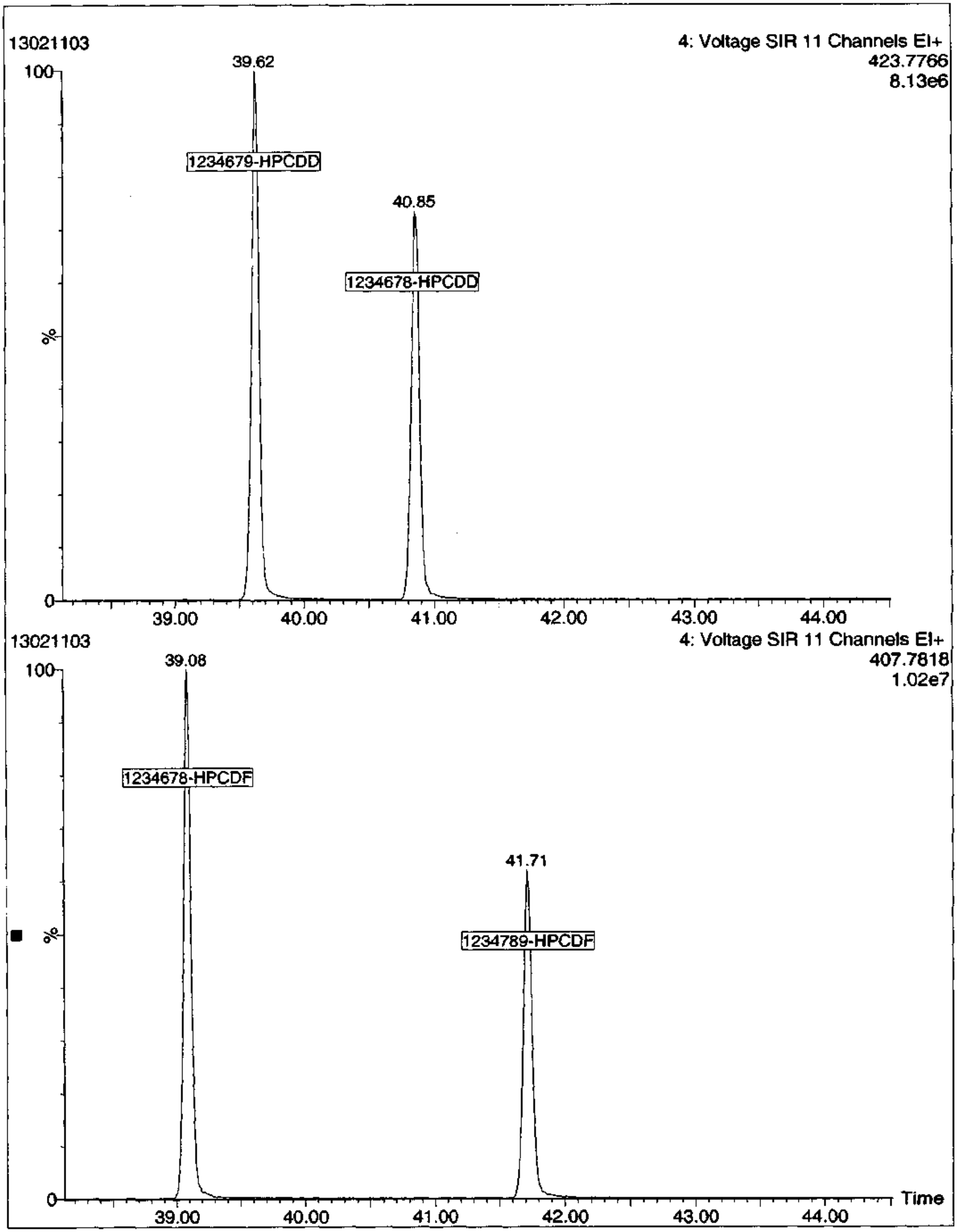
1.43e7
33.06
123468-HXCDF
34.94
34.79
35.88
37.03
123789-HXCDF
100
%
0
Time
33.00
34.00
35.00
36.00
37.00
38.00



13021103
4: Voltage SIR 11 Channels EI+
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8.13e6
100
%
0
39.62
1234679-HPCDD
40.85
1234678-HPCDD
39.00
40.00
41.00
42.00
43.00
44.00
13021103
4: Voltage SIR 11 Channels EI+
407.7818
1.02e7
39.08
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41.71
1234789-HPCDF
Time

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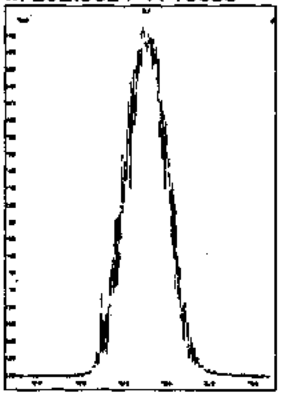
M 292.9824 R 13855



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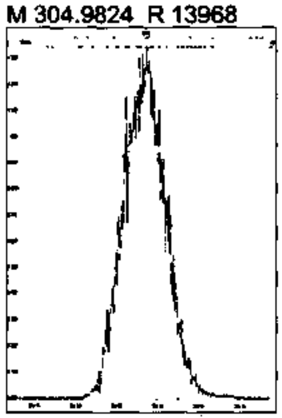
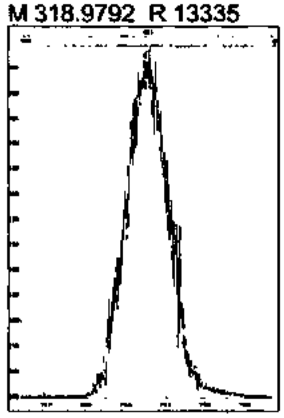


M 318.9792 R 13335



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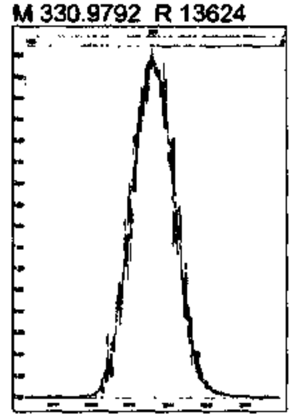

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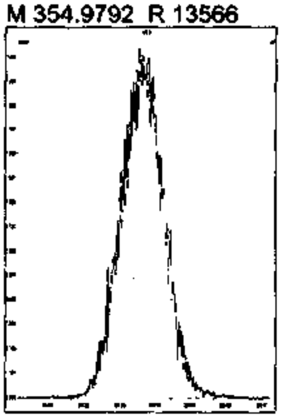

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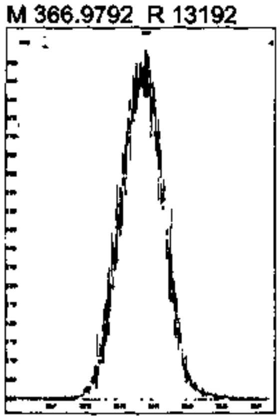

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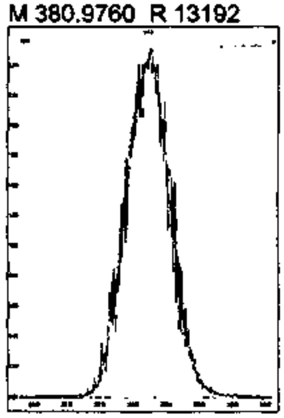

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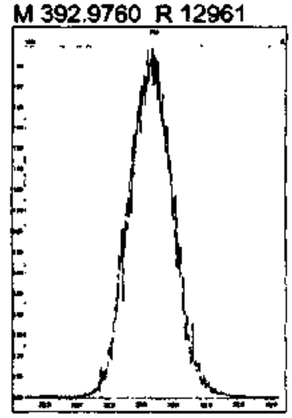

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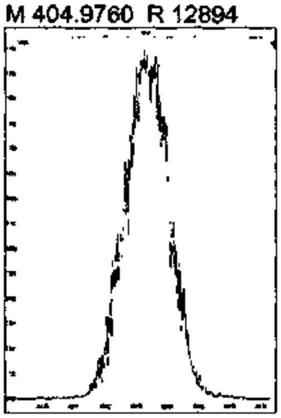

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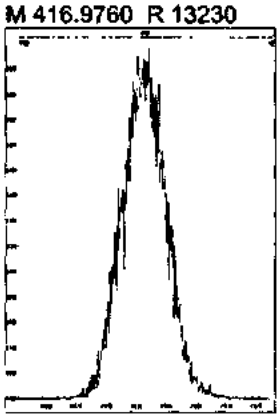

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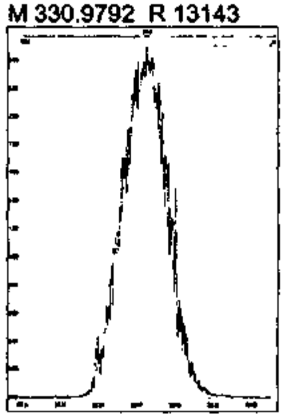

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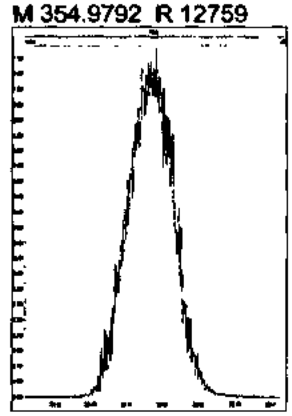

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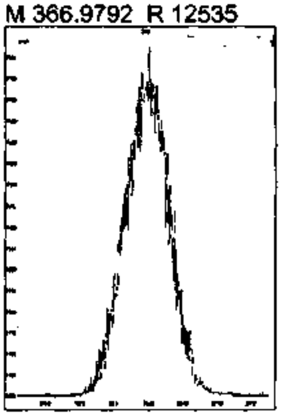

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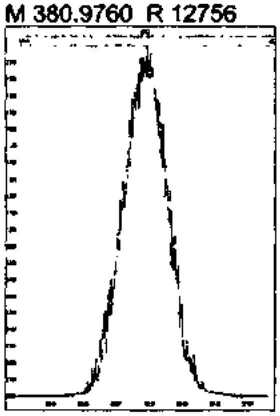

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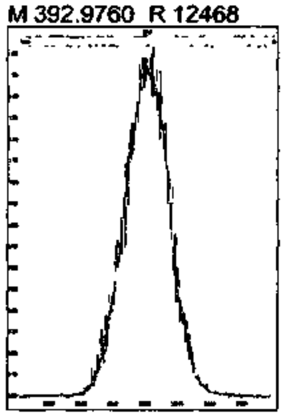

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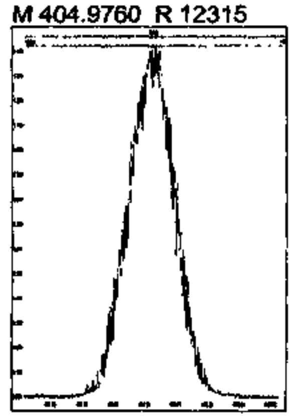

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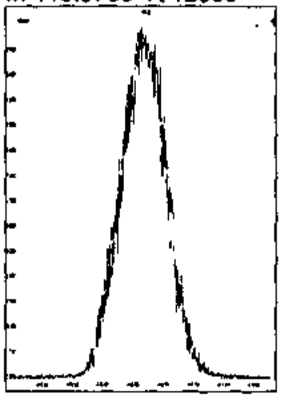

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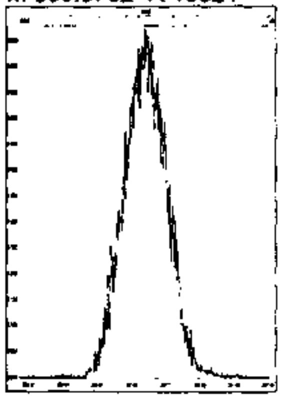

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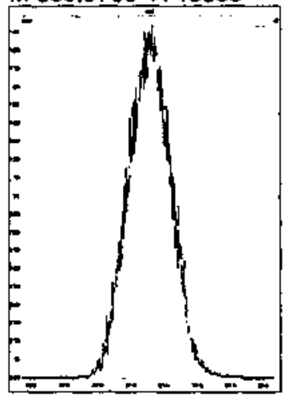

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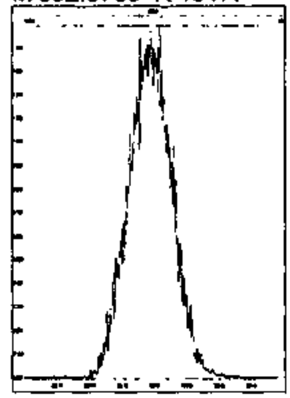

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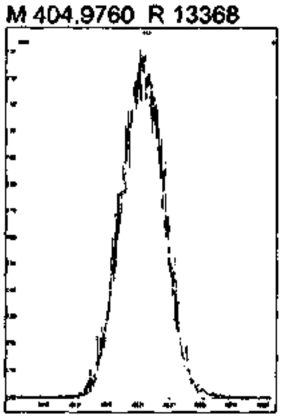

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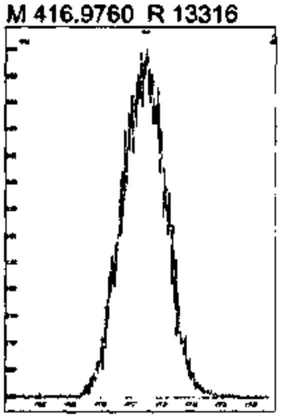

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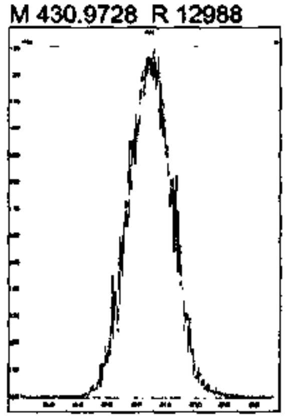

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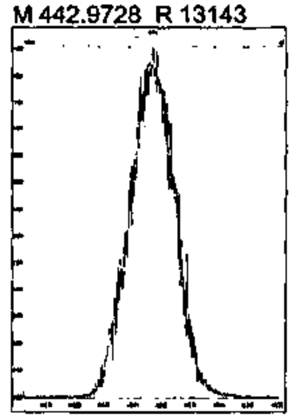

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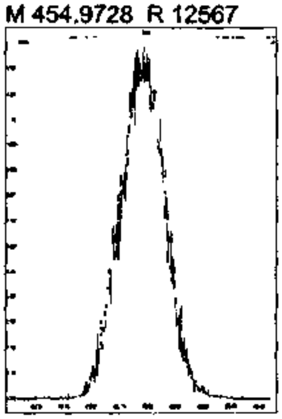

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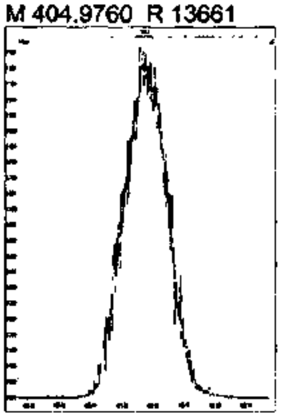

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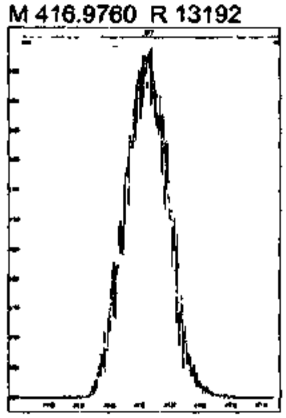

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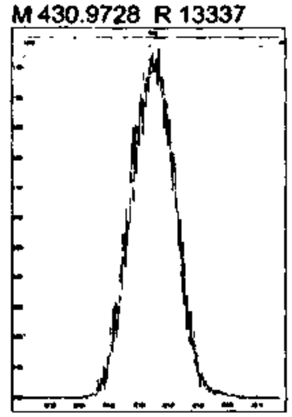

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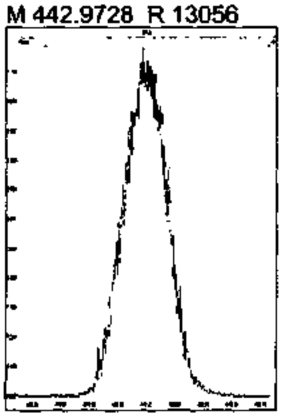

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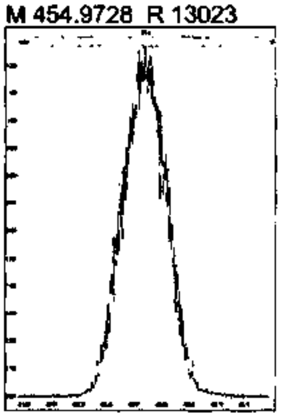

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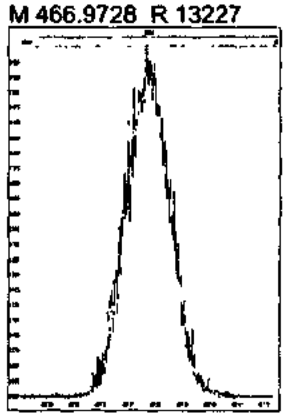

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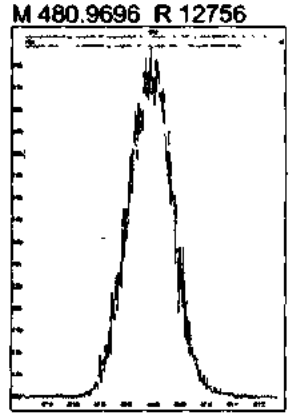

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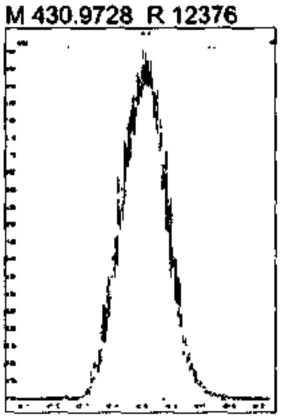

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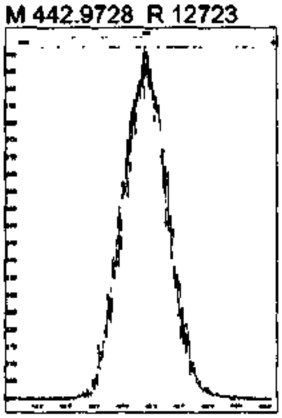

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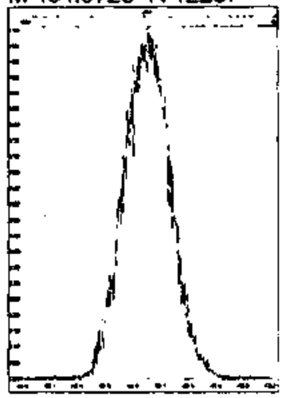

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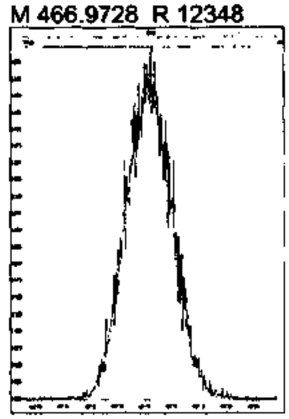

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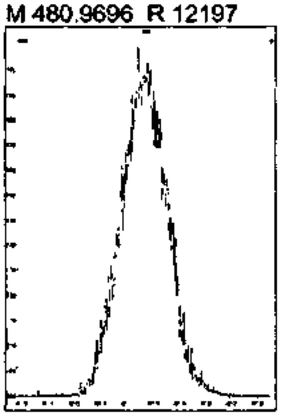

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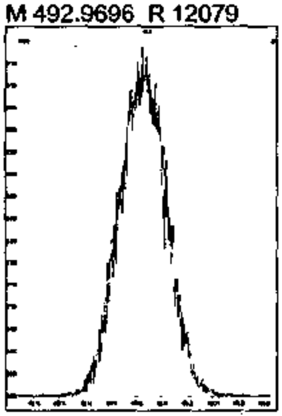

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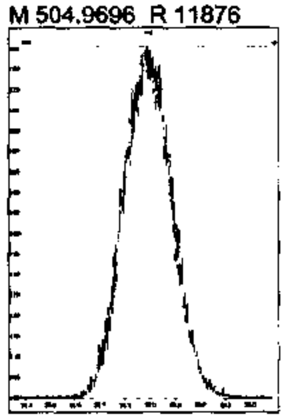

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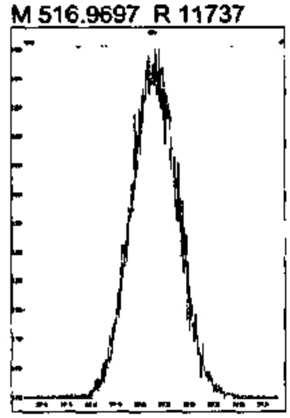

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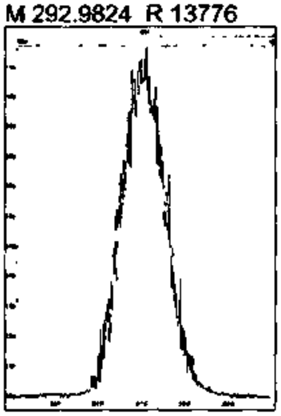

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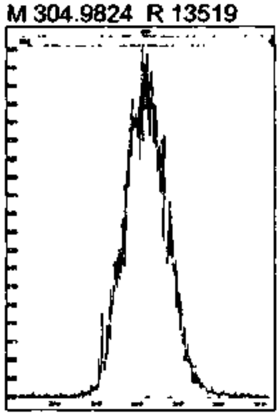

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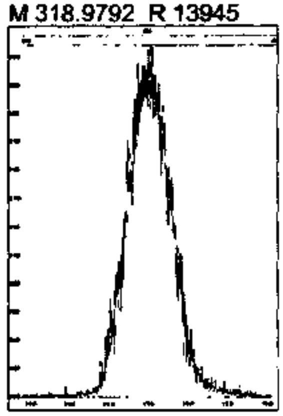

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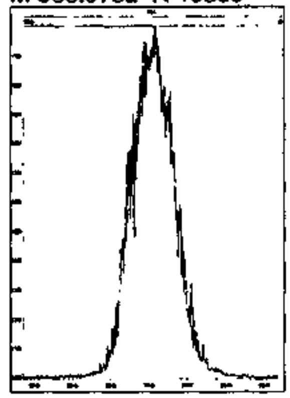

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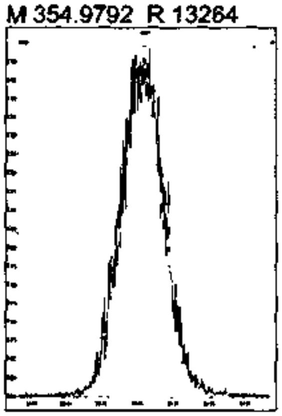
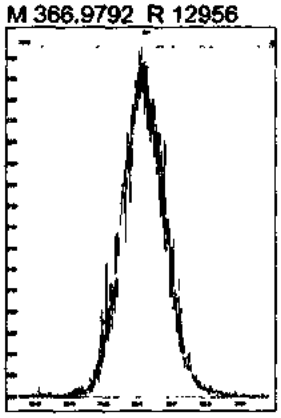
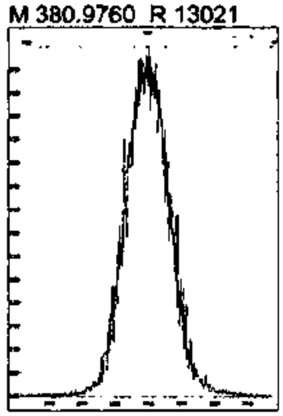


M 366.9792 R 12956



M 380.9760 R 13021



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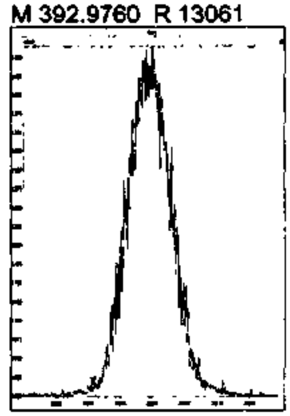

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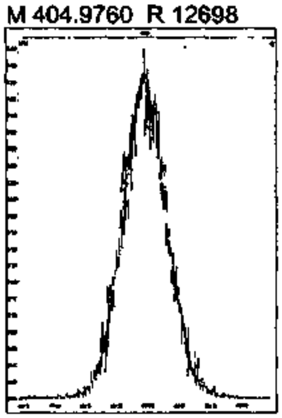
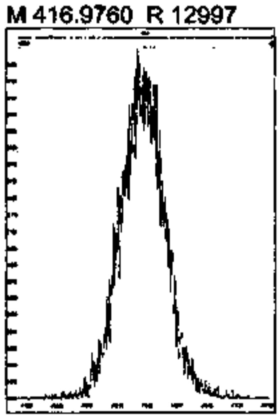
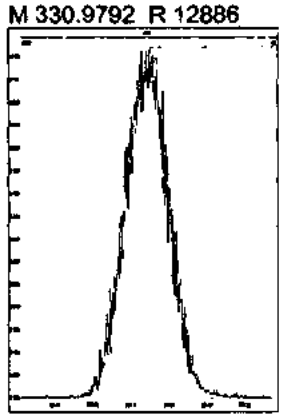


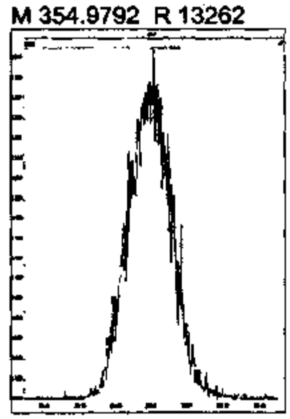
M 416.9760 R 12997



M 330.9792 R 12886



M 354.9792 R 13262



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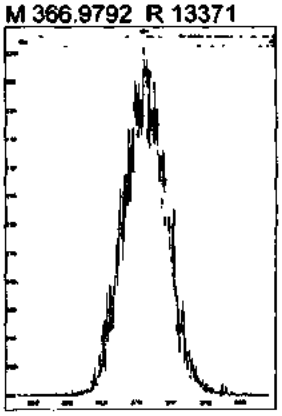
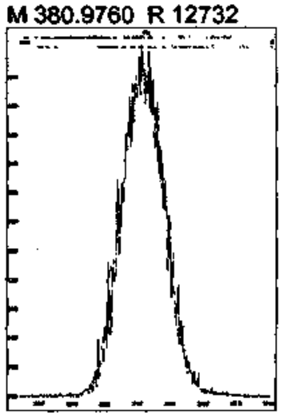
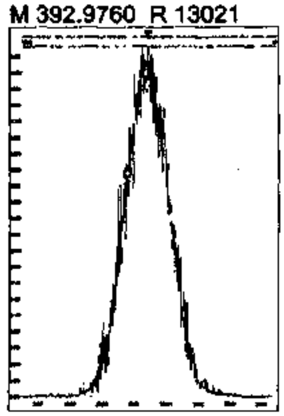


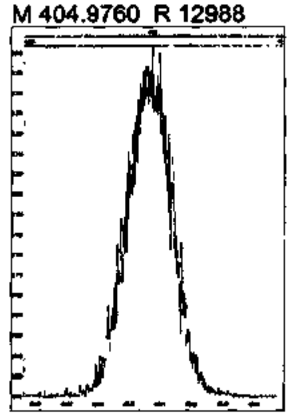
M 380.9760 R 12732



M 392.9760 R 13021



M 404.9760 R 12988



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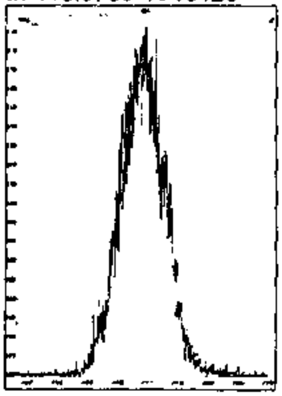
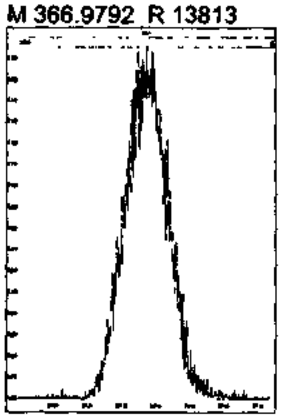
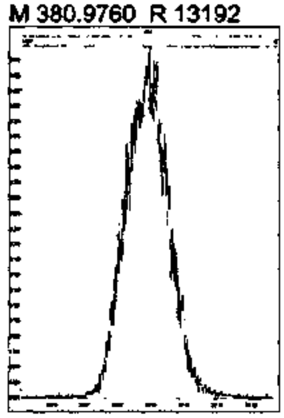
M 416.9760 R 13123



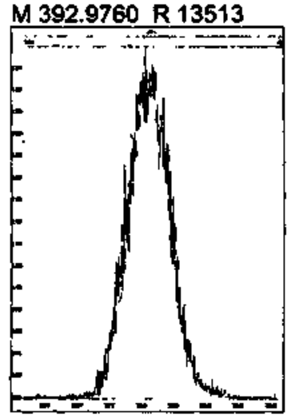
M 366.9792 R 13813



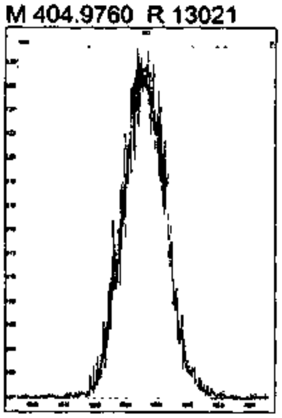
M 380.9760 R 13192



M 392.9760 R 13513



M 404.9760 R 13021



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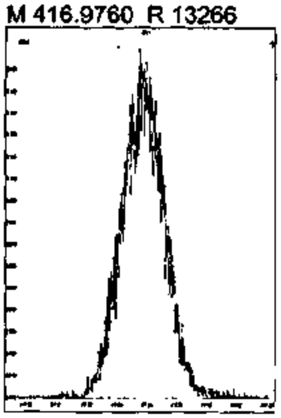

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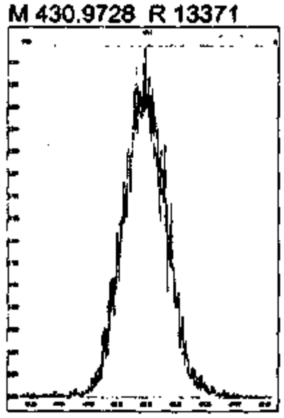

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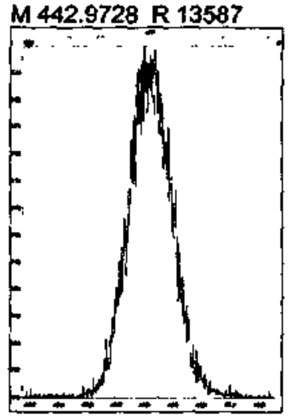

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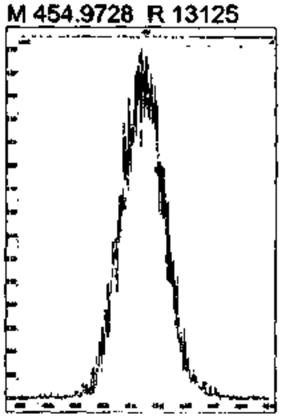

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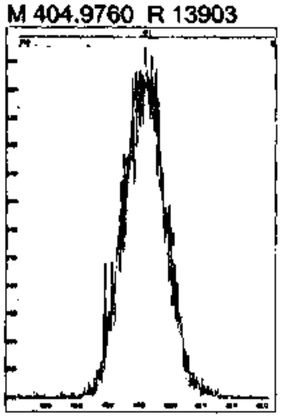
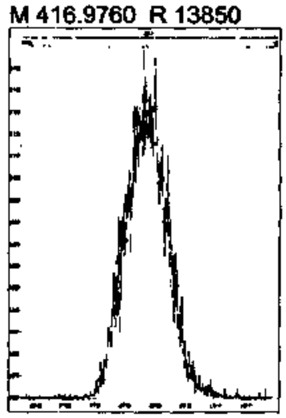


M 416.9760 R 13850



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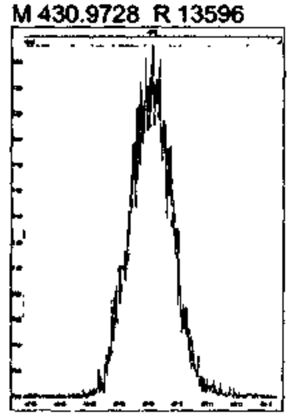

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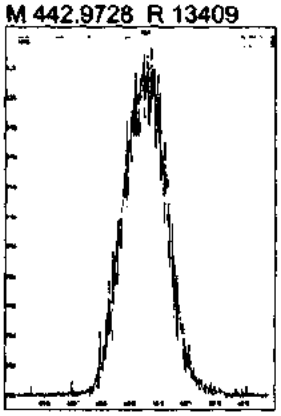

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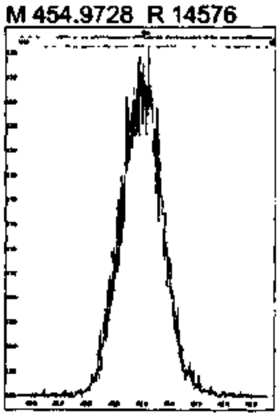

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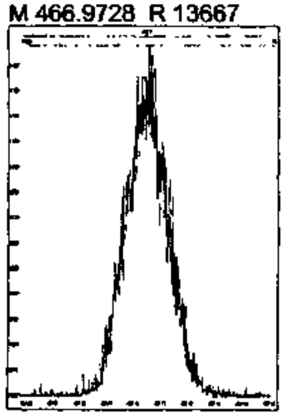
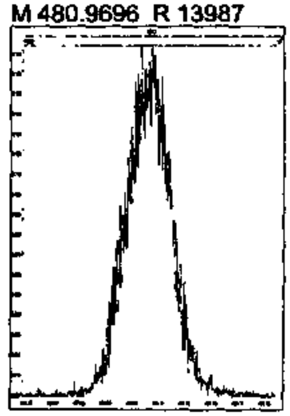


M 480.9696 R 13987



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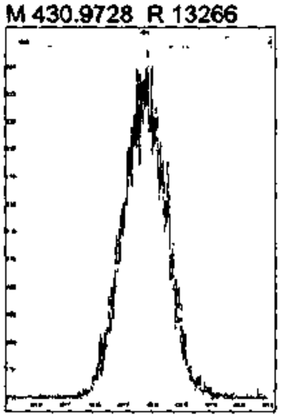
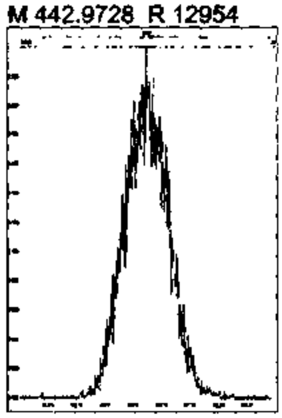
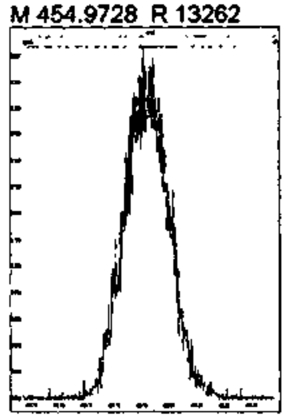
M 430.9728 R 13266



M 442.9728 R 12954



M 454.9728 R 13262



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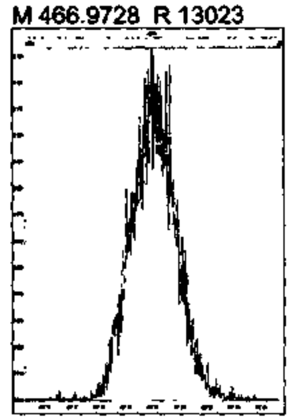

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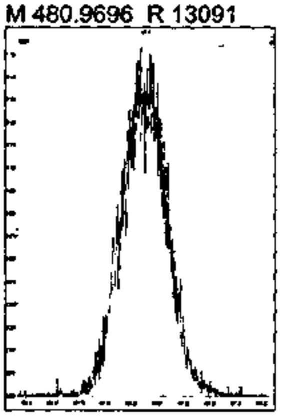

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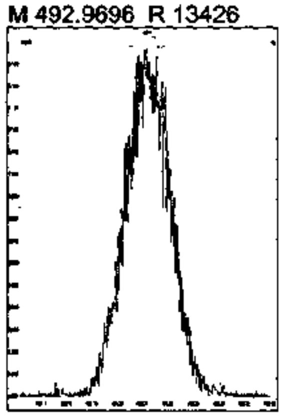

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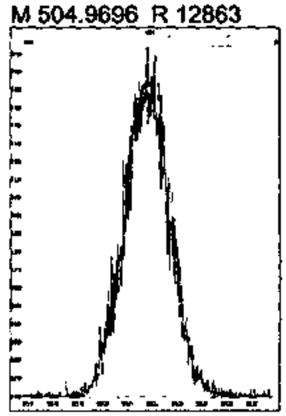

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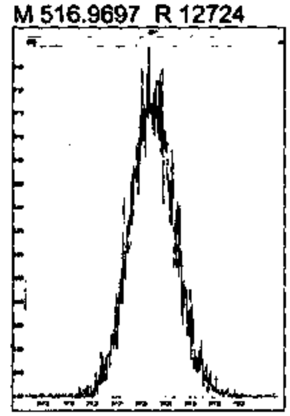

Quantify Audit Report MassLynx 4.1 SCN 714
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Monday, February 18, 2013 11:13:18 Pacific Standard Time
Printed: Monday, February 25, 2013 15:45:40 Pacific Standard Time

Process Extract		
Process Integrate		
Process Calibrate		
Process Quantify		
Dataset Created		
Pre modification peak	Sample:13021105, Compound:TF, RT:25.645	1
Peak modified	Sample:13021105, Compound:TF, RT:25.645	1
Pre modification peak	Sample:13021105, Compound:PF, RT:31.123	1
Peak modified	Sample:13021105, Compound:PF, RT:31.123	1
Pre modification peak	Sample:13021105, Compound:PD, RT:31.386	1
Peak modified	Sample:13021105, Compound:PD, RT:31.386	1
Peak modified	Sample:13021105, Compound:PD, RT:31 386	1
Pre modification peak	Sample:13021105, Compound:OD, RT:46.598	1
Peak modified	Sample:13021105, Compound:OD, RT:46.598	1
Dataset Saved	Saved to 'P:\DIOXIN8290.PRO\130211IC.qld'	
Calibration Saved	Saved to 'P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb'	
Dataset Saved	Saved to 'P:\DIOXIN8290.PRO\130211IC.qld'	
Custom Reporting	Custom data added to the dataset.	
Dataset Saved	Saved to 'P:\DIOXIN8290.PRO\130211IC.qld'	
Custom Reporting	Custom data added to the dataset.	
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Quantify Sample Summary Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:35:49 Pacific Standard Time

Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 04 Feb 2013 12:23:30
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: CSL, Name: 13021105, Date: 11-Feb-2013, Time: 14:45:17, Conditions: AUTOSPEC01, User: pk

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	2378-TCDF	25.645	1.001	2.40e3	2.75e3	0.921	0.871	0.770	35.4	NO	0.121	0.121
[redacted]	12378-PeCDF	29.775	1.000	9.86e3	6.27e3	0.912	1.572	1.550	139.5	NO	0.500	0.500
[redacted]	23478-PeCDF	31.123	1.000	9.83e3	6.64e3	0.943	1.479	1.550	135.6	NO	0.517	0.517
[redacted]	123478-HxCDF	34.795	1.001	8.10e3	6.71e3	1.101	1.207	1.240	120.1	NO	0.516	0.516
[redacted]	234678-HxCDF	35.891	1.001	8.17e3	6.07e3	1.073	1.346	1.240	131.8	NO	0.506	0.506
[redacted]	123678-HxCDF	34.949	1.001	8.01e3	6.30e3	1.056	1.270	1.240	123.3	NO	0.486	0.486
[redacted]	123789-HxCDF	37.042	1.001	6.00e3	5.49e3	1.017	1.092	1.240	87.8	NO	0.518	0.518
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[redacted]	2378-TCDD	26.287	1.001	1.67e3	2.24e3	1.106	0.745	0.770	22.1	NO	0.124	0.124
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Quantify Sample Summary Report **MassLynx 4.1 SCN 714**

Dataset: P:\DIOXIN8290.PRO\130211IC.qld

Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time

Printed: Tuesday, February 12, 2013 09:35:49 Pacific Standard Time

ID: CSL, Name: 13021105, Date: 11-Feb-2013, Time: 14:45:17, Conditions: AUTOSPEC01, User: pk

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[redacted]	Total-penta1			0.00e0								
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[redacted]	FUNCTION1 PFK			4.49e6								
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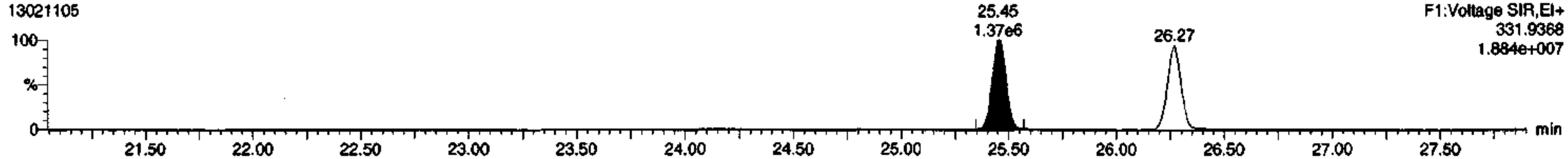
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:35:49 Pacific Standard Time

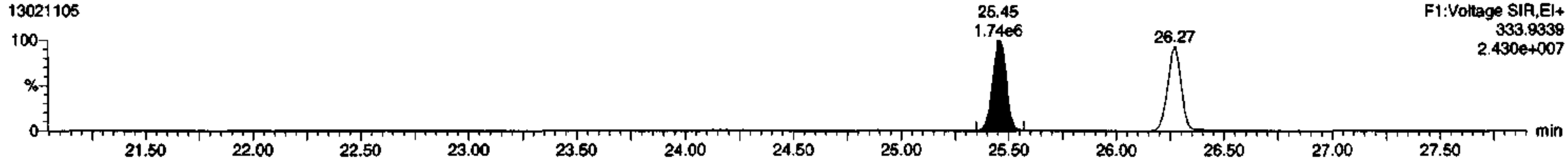
Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 04 Feb 2013 12:23:30
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: CSL, Name: 13021105, Date: 11-Feb-2013, Time: 14:45:17, Conditions: AUTOSPEC01, User: pk

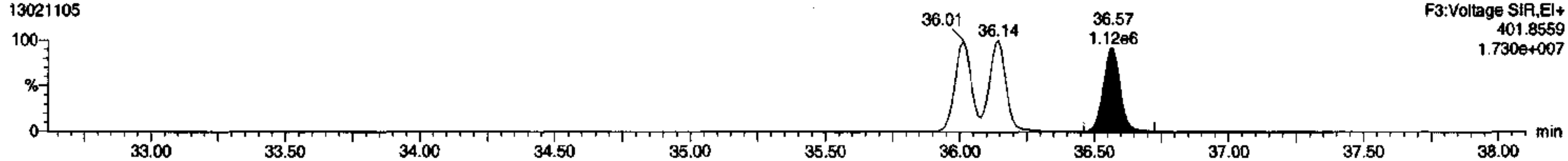
13C-1234-TCDD
13021105



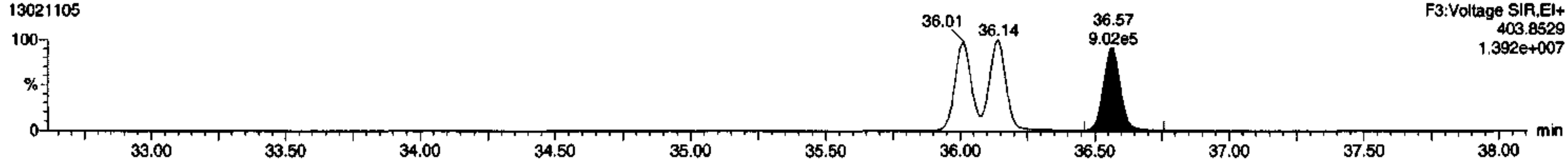
13C-1234-TCDD
13021105



13C-123789-HxCDD
13021105



13C-123789-HxCDD
13021105

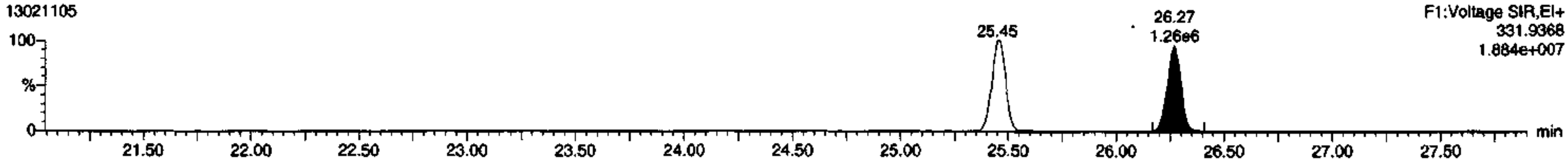


WE03 : 0056

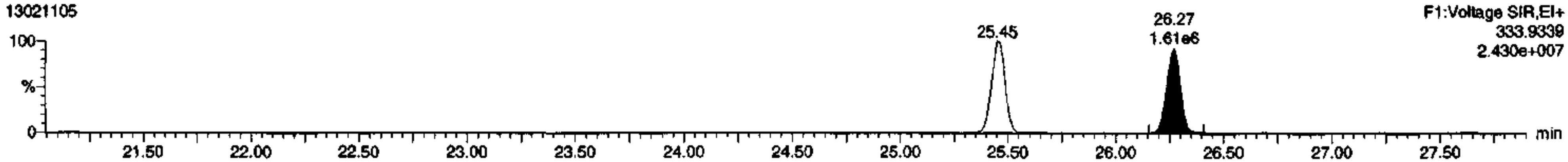
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:35:49 Pacific Standard Time

ID: CSL, Name: 13021105, Date: 11-Feb-2013, Time: 14:45:17, Conditions: AUTOSPEC01, User: pk

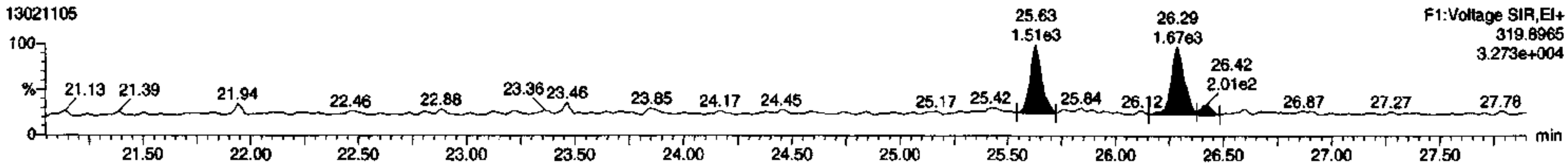
13C-2378-TCDD



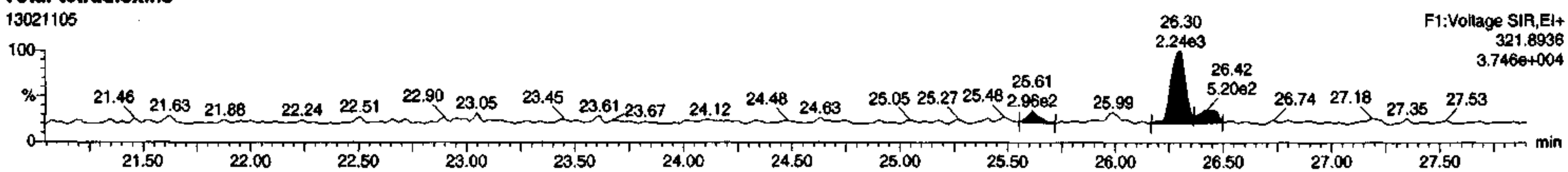
13C-2378-TCDD



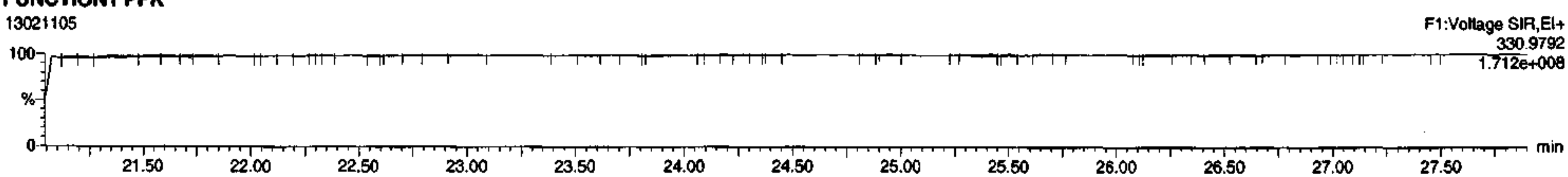
Total-tetradioxins



Total-tetradioxins



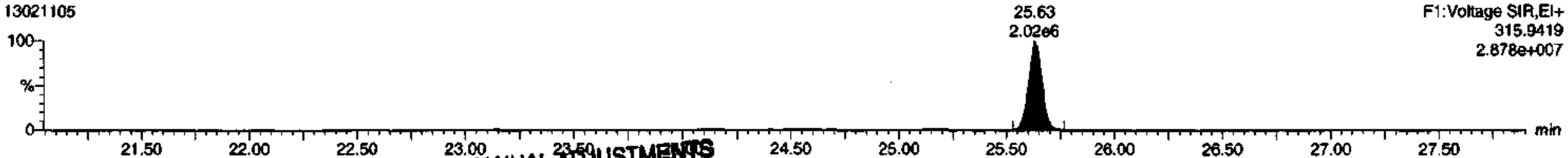
FUNCTION1 PFK



Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:35:49 Pacific Standard Time

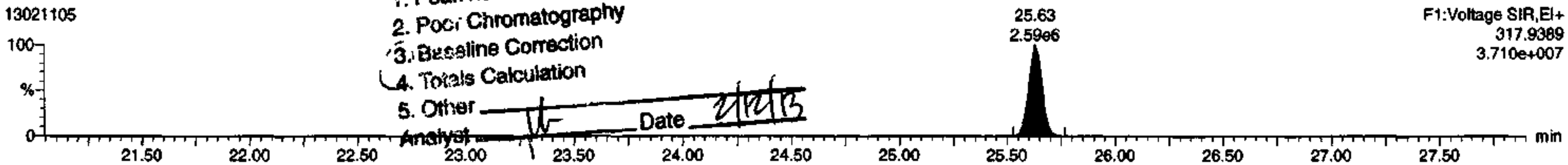
ID: CSL, Name: 13021105, Date: 11-Feb-2013, Time: 14:45:17, Conditions: AUTOSPEC01, User: pk

13C-2378-TCDF
13021105

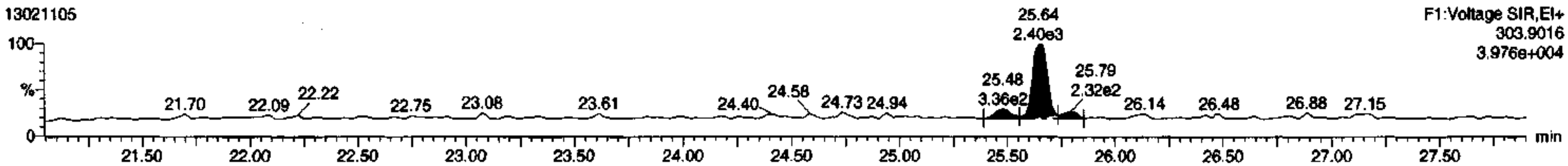


MANUAL ADJUSTMENTS
1. Peak not found
2. Poor Chromatography
3. Baseline Correction
4. Totals Calculation
5. Other
Analyst ___ Date 2/12/13

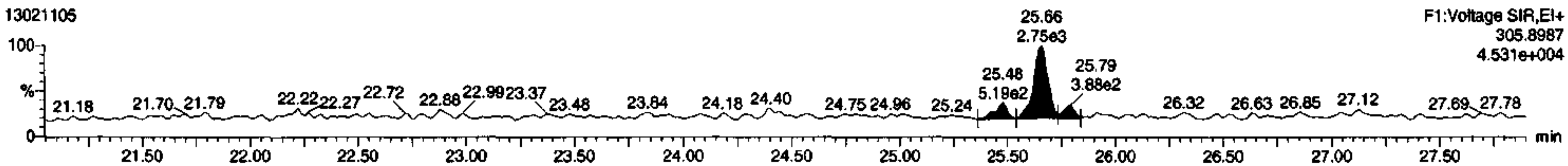
13C-2378-TCDF
13021105



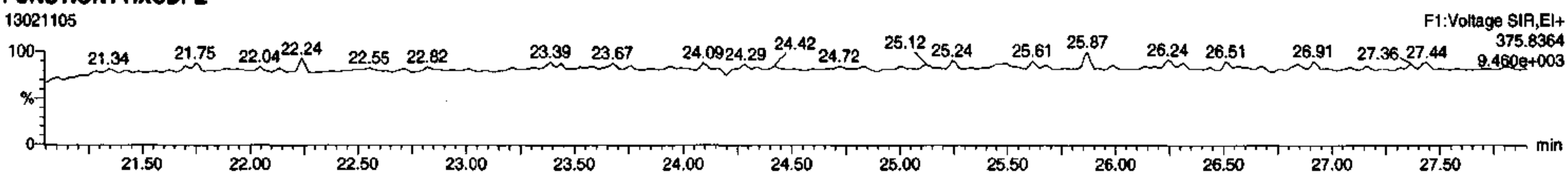
Total-tetrafurans
13021105



Total-tetrafurans
13021105



FUNCTION1 HXCDPE
13021105



Quantify Sample Report **MassLynx 4.1 SCN 714**

Dataset: P:\DIOXIN8290.PRO\130211IC.qld

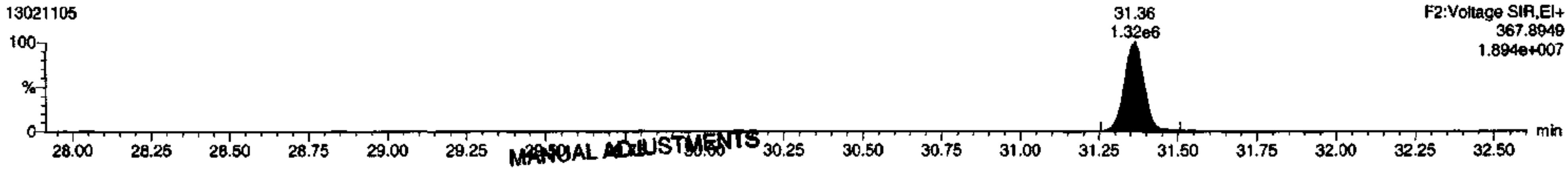
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time

Printed: Tuesday, February 12, 2013 09:35:49 Pacific Standard Time

ID: CSL, Name: 13021105, Date: 11-Feb-2013, Time: 14:45:17, Conditions: AUTOSPEC01, User: pk

13C-12378-PeCDD

13021105



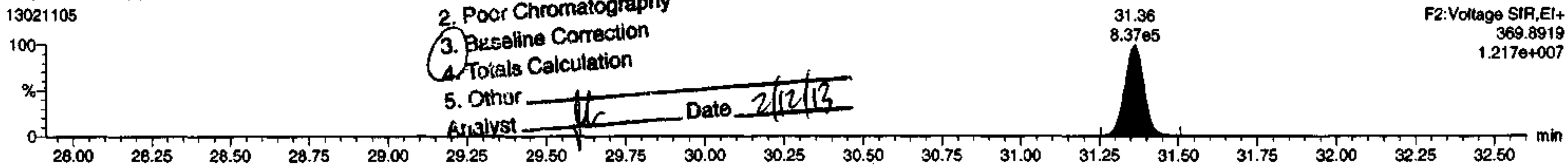
MANUAL ADJUSTMENTS

1. Peak not found
2. Poor Chromatography
3. Baseline Correction
4. Totals Calculation
5. Other

Analyst ____ Date 2/12/13

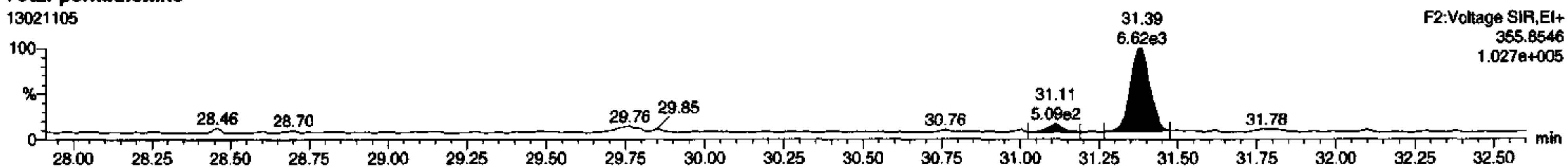
13C-12378-PeCDD

13021105



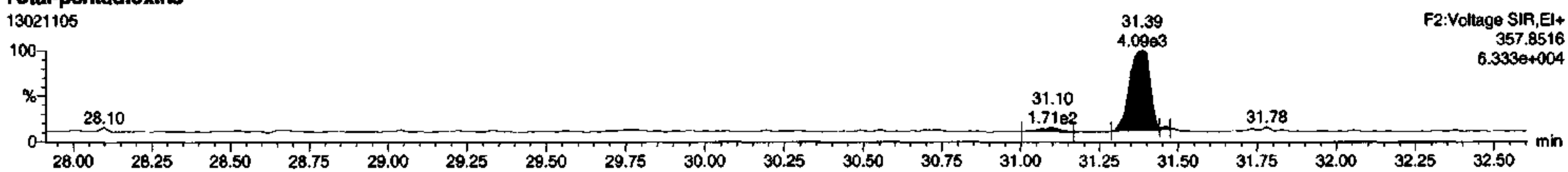
Total-pentadioxins

13021105



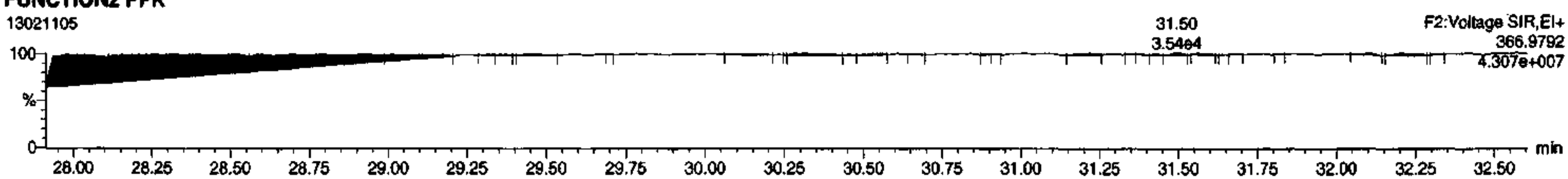
Total-pentadioxins

13021105



FUNCTION2 PFK

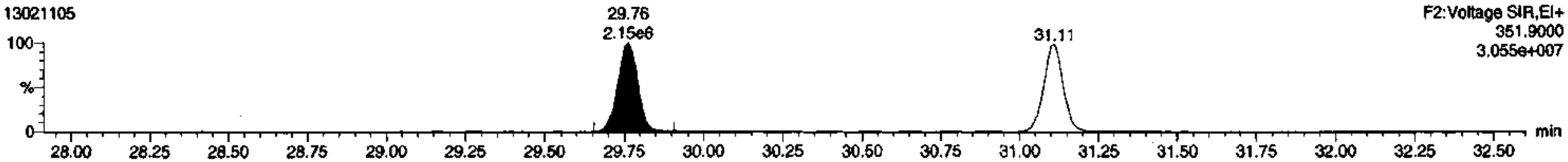
13021105



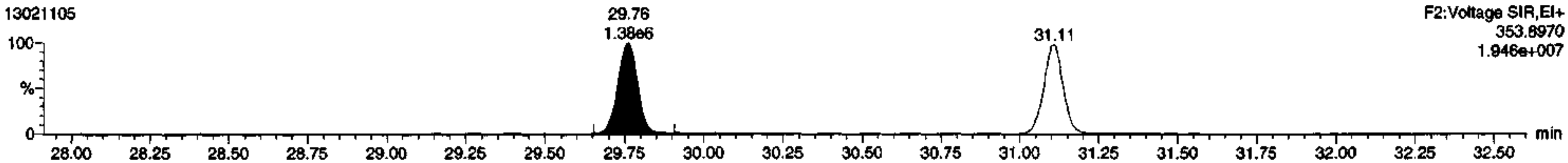
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:35:49 Pacific Standard Time

ID: CSL, Name: 13021105, Date: 11-Feb-2013, Time: 14:45:17, Conditions: AUTOSPEC01, User: pk

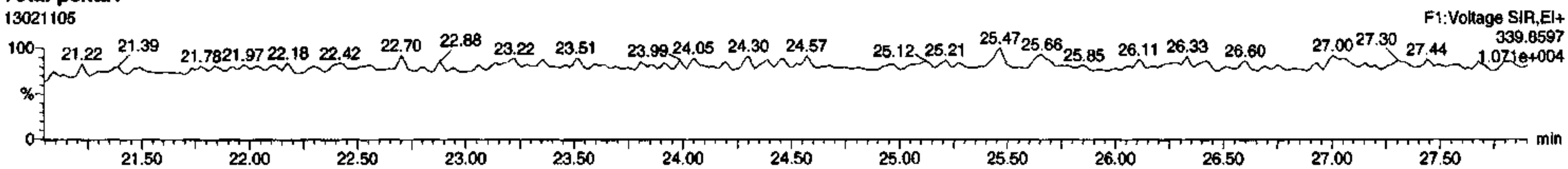
13C-12378-PeCDF



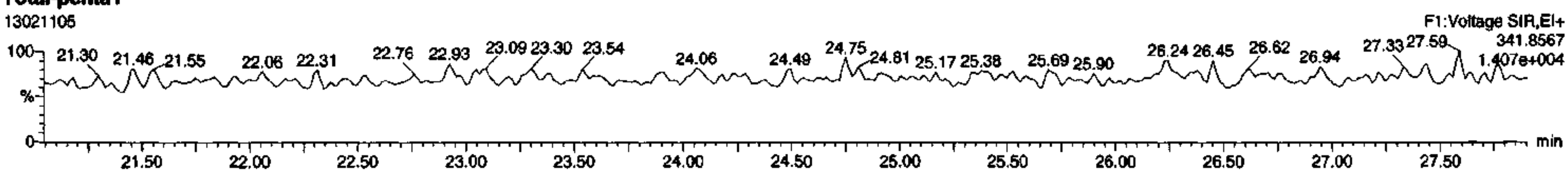
13C-12378-PeCDF



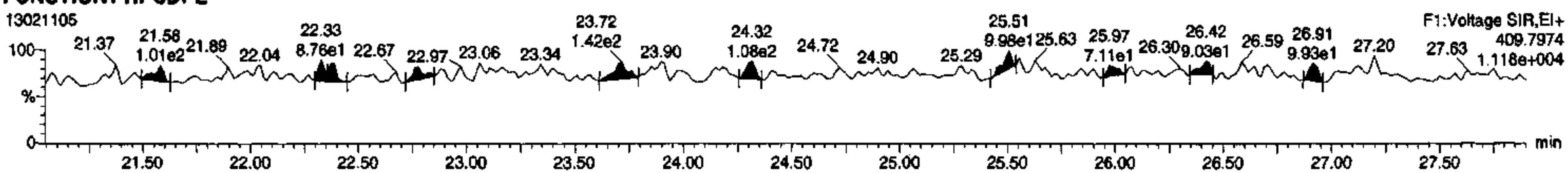
Total-penta1



Total-penta1



FUNCTION1 HPCDPE



Dataset: P:\DIOXIN8290.PRO\130211IC.qld

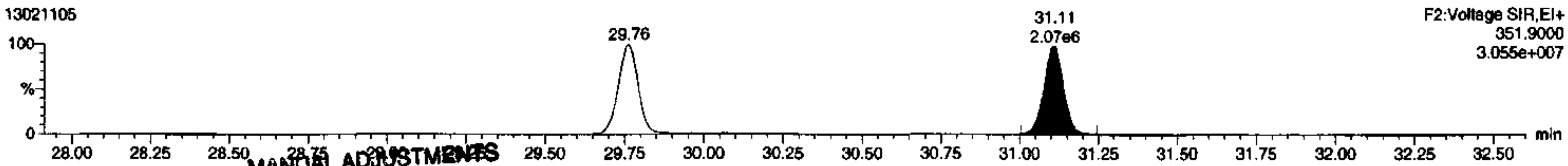
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time

Printed: Tuesday, February 12, 2013 09:35:49 Pacific Standard Time

ID: CSL, Name: 13021105, Date: 11-Feb-2013, Time: 14:45:17, Conditions: AUTOSPEC01, User: pk

13C-23478-PeCDF

13021105



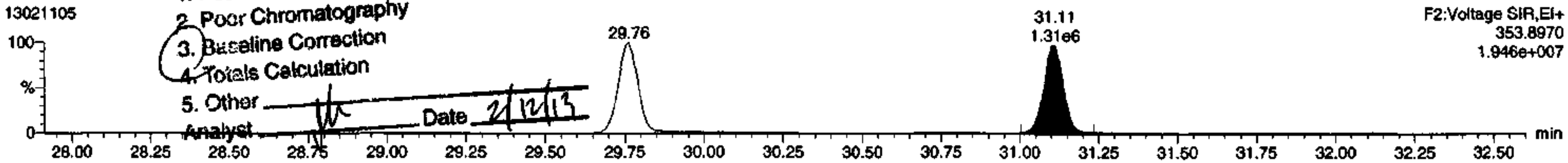
MANUAL ADJUSTMENTS

13C-23478-PeCDF

1. Peak not found
2. Poor Chromatography
3. Baseline Correction
4. Totals Calculation
5. Other

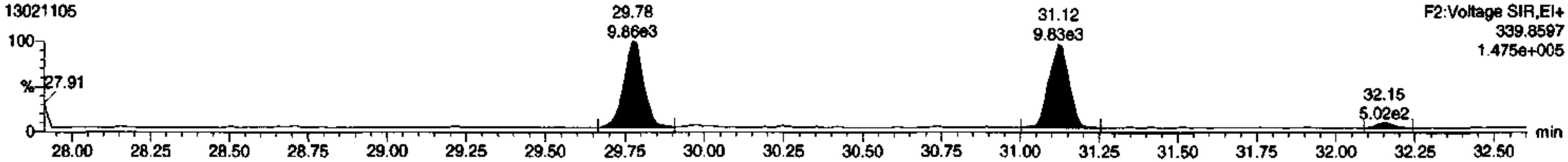
Analyst ______ Date 2/12/13

13021105



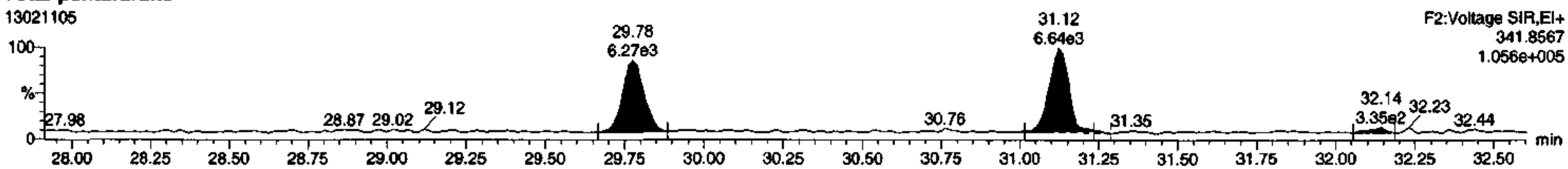
Total-pentafurans

13021105



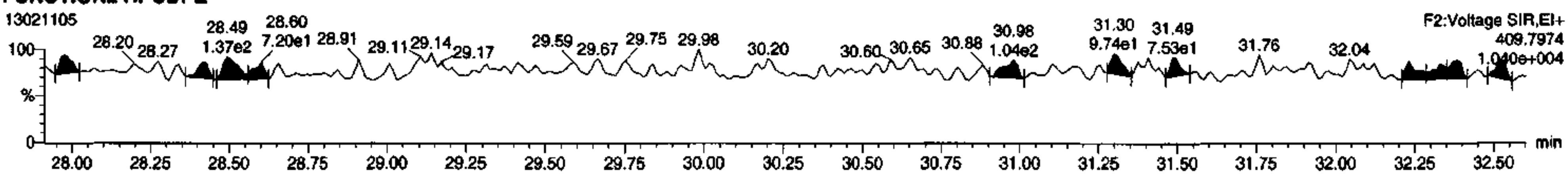
Total-pentafurans

13021105



FUNCTION2 HPCDPE

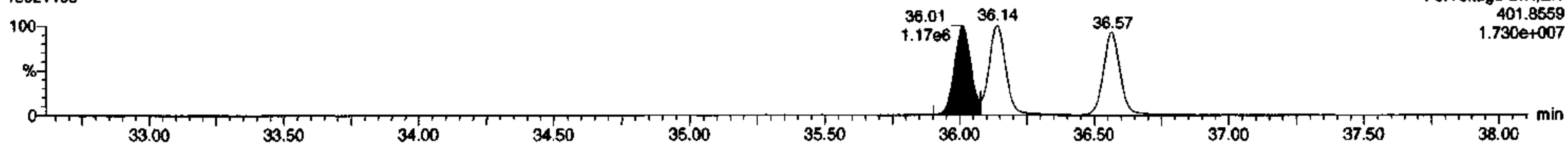
13021105



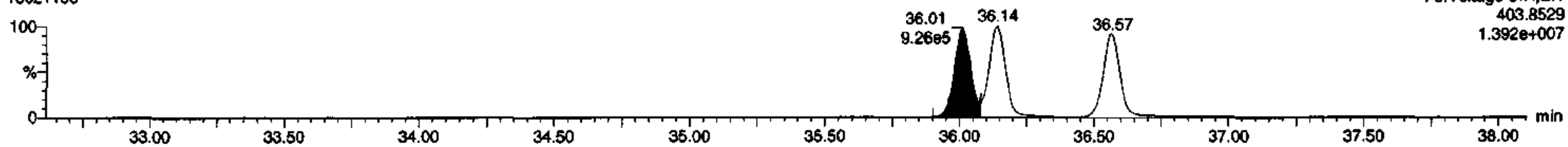
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:35:49 Pacific Standard Time

ID: CSL, Name: 13021105, Date: 11-Feb-2013, Time: 14:45:17, Conditions: AUTOSPEC01, User: pk

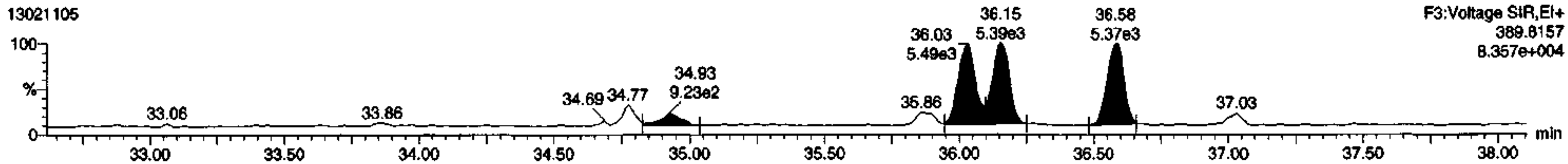
13C-123478-HxCDD
13021105



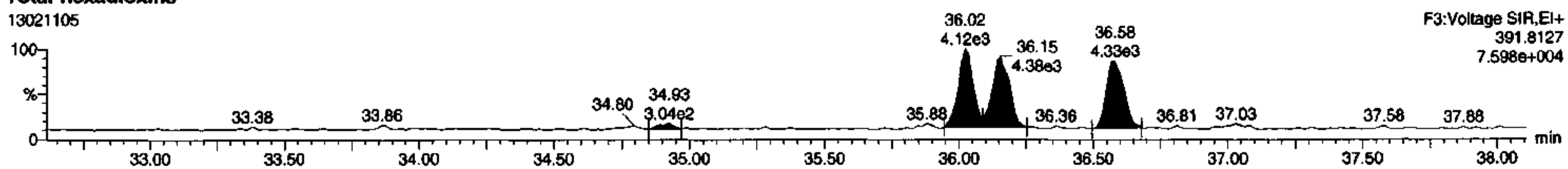
13C-123478-HxCDD
13021105



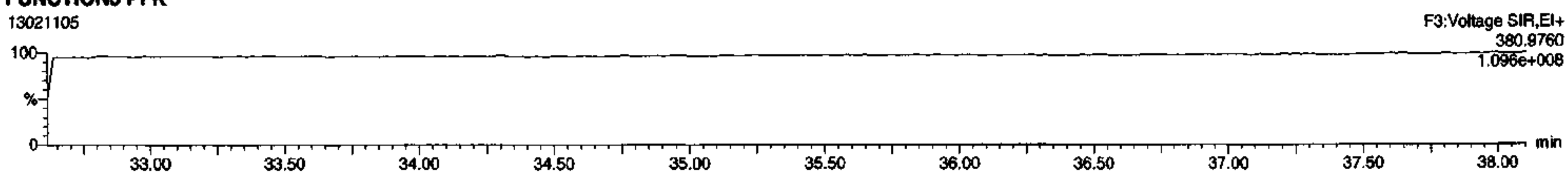
Total-hexadioxins
13021105



Total-hexadioxins
13021105



FUNCTION3 PFK
13021105



Quantify Sample Report **MassLynx 4.1 SCN 714**

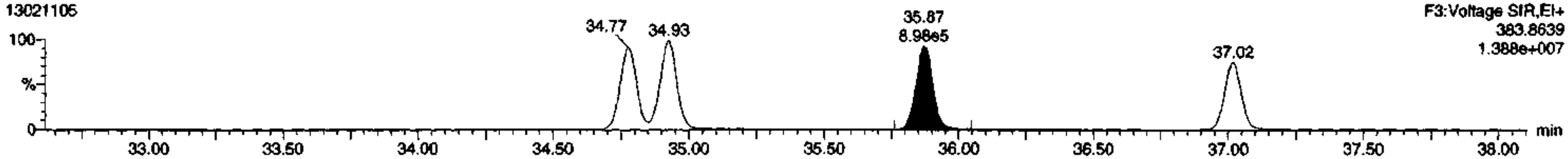
Dataset: P:\DIOXIN8290.PRO\130211IC.qld

Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time

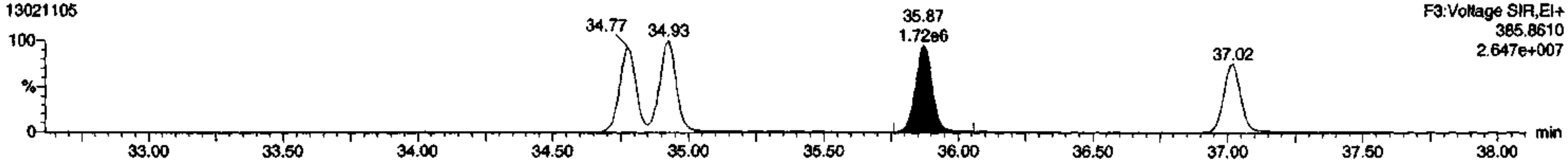
Printed: Tuesday, February 12, 2013 09:35:49 Pacific Standard Time

ID: CSL, Name: 13021105, Date: 11-Feb-2013, Time: 14:45:17, Conditions: AUTOSPEC01, User: pk

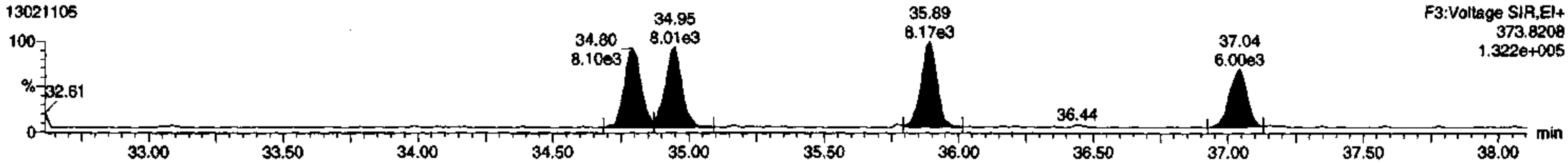
13C-234678-HxCDF



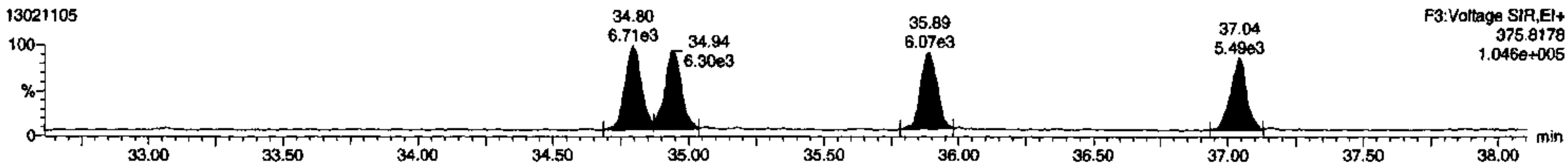
13C-234678-HxCDF



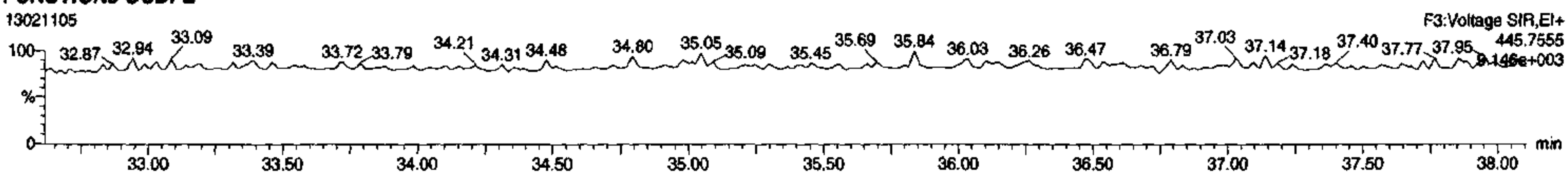
Total-hexafurans



Total-hexafurans



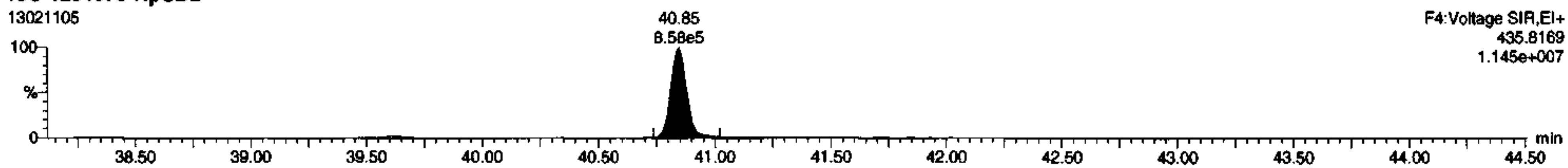
FUNCTION3 OCDPE



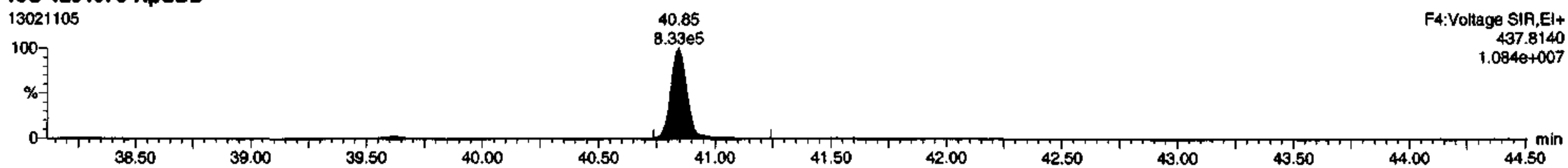
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:35:49 Pacific Standard Time

ID: CSL, Name: 13021105, Date: 11-Feb-2013, Time: 14:45:17, Conditions: AUTOSPEC01, User: pk

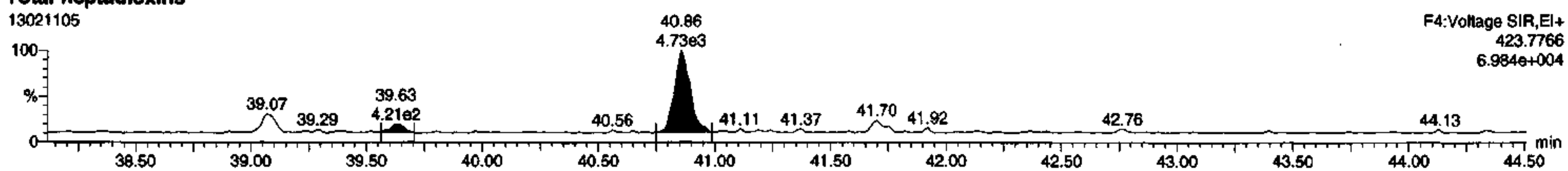
13C-1234678-HpCDD



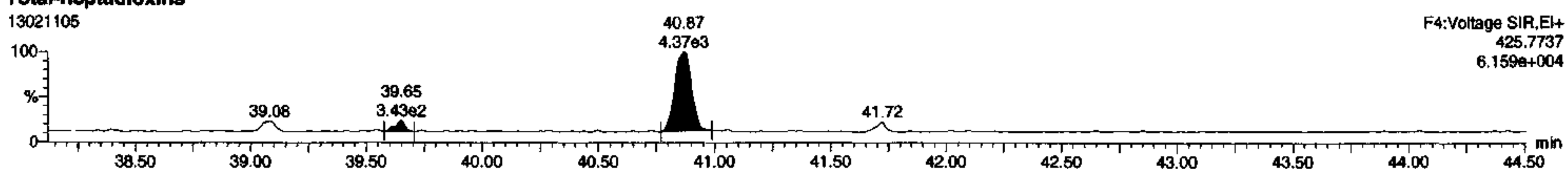
13C-1234678-HpCDD



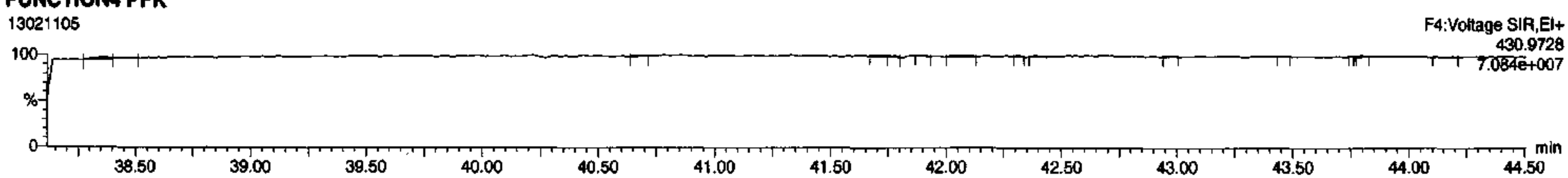
Total-heptadioxins



Total-heptadioxins



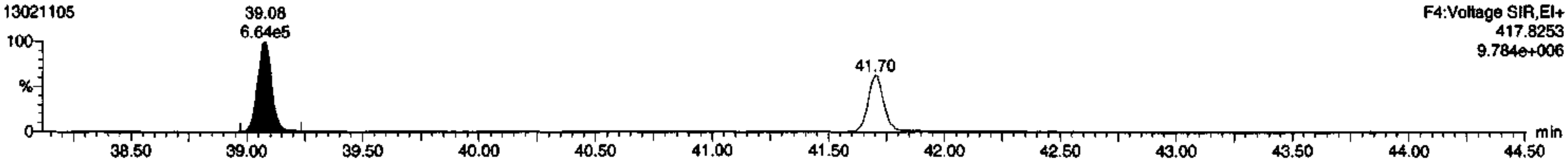
FUNCTION4 PFK



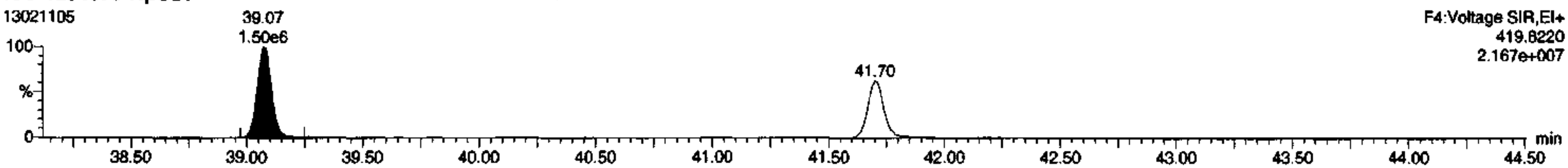
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:35:49 Pacific Standard Time

ID: CSL, Name: 13021105, Date: 11-Feb-2013, Time: 14:45:17, Conditions: AUTOSPEC01, User: pk

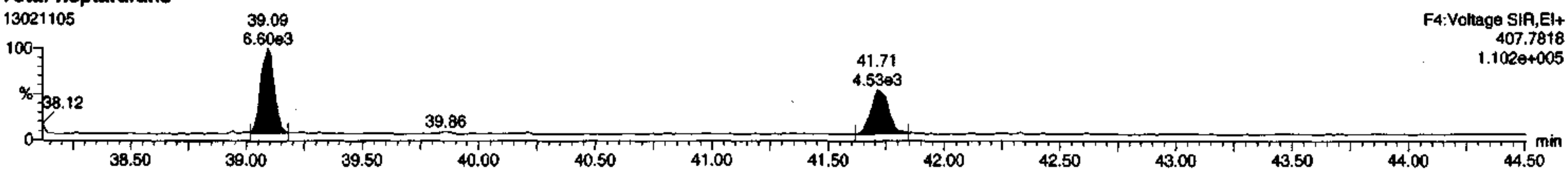
13C-1234678-HpCDF



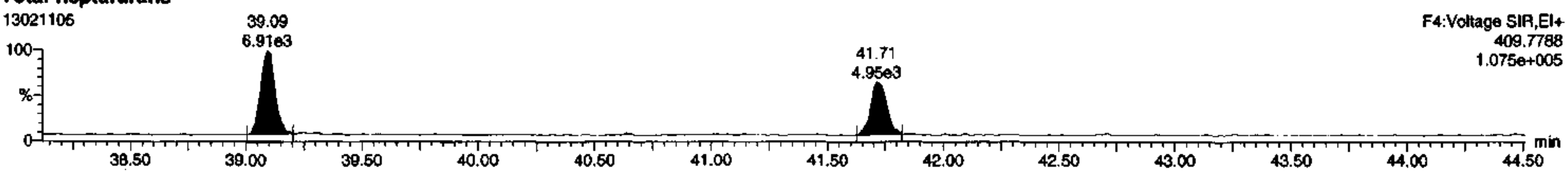
13C-1234678-HpCDF



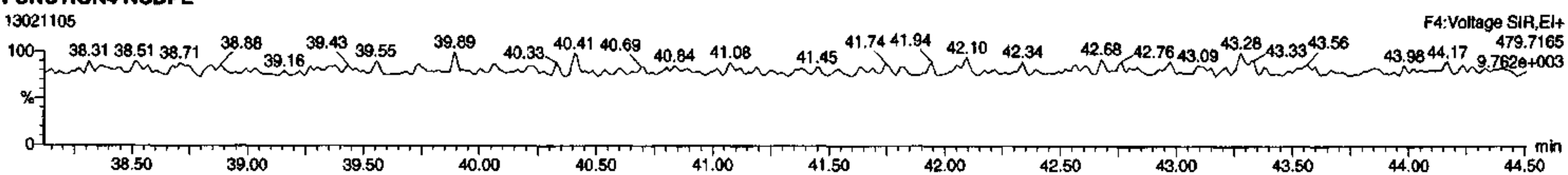
Total-heptafurans



Total-heptafurans



FUNCTION4 NCDPE

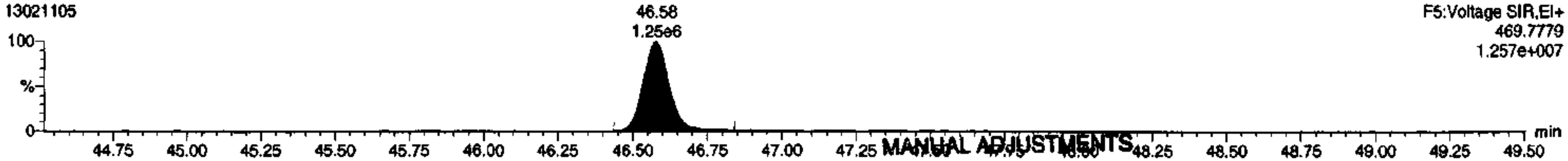


VE03 : 00067

Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:35:49 Pacific Standard Time

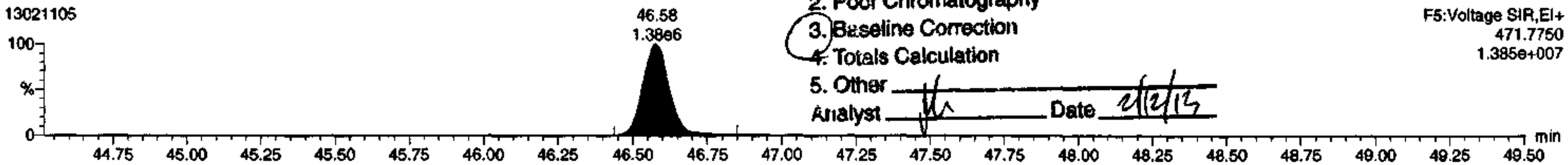
ID: CSL, Name: 13021105, Date: 11-Feb-2013, Time: 14:45:17, Conditions: AUTOSPEC01, User: pk

13C-OCDD
13021105

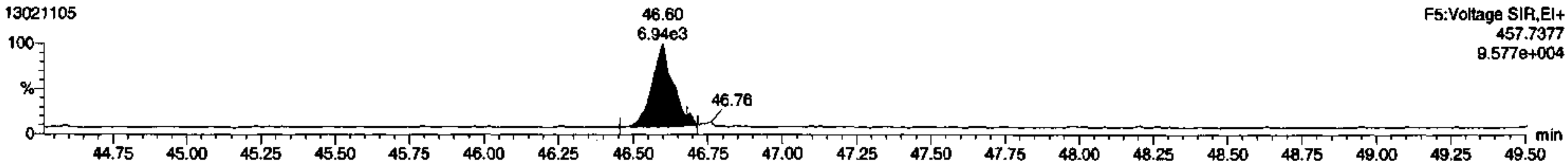


MANUAL ADJUSTMENTS
1. Peak not found
2. Poor Chromatography
3. Baseline Correction
4. Totals Calculation
5. Other
Analyst Date 2/12/13

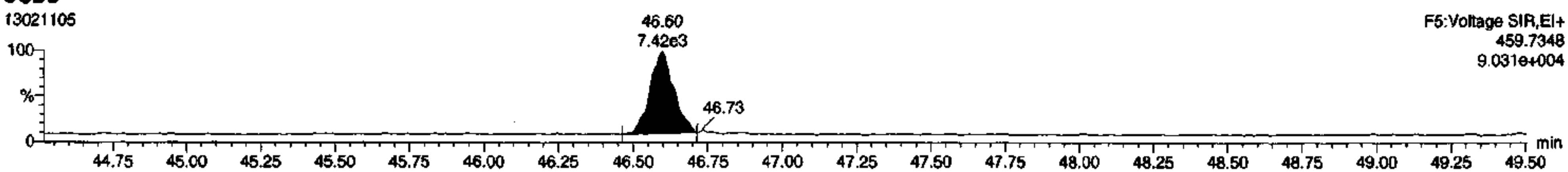
13C-OCDD
13021105



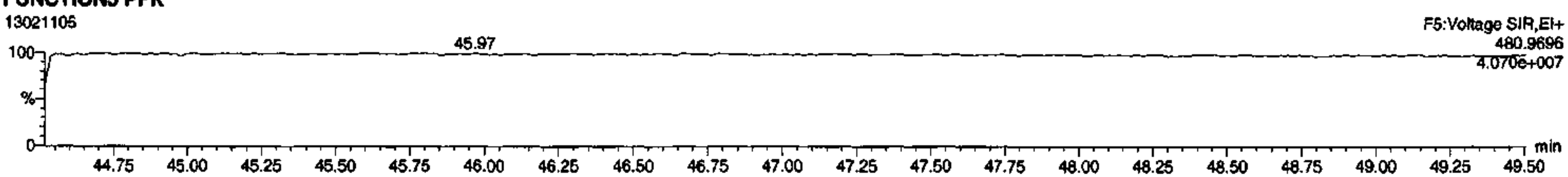
OCDD
13021105



OCDD
13021105



FUNCTION5 PFK
13021105



Quantify Sample Report **MassLynx 4.1 SCN 714**

Dataset: P:\DIOXIN8290.PRO\130211IC.qld

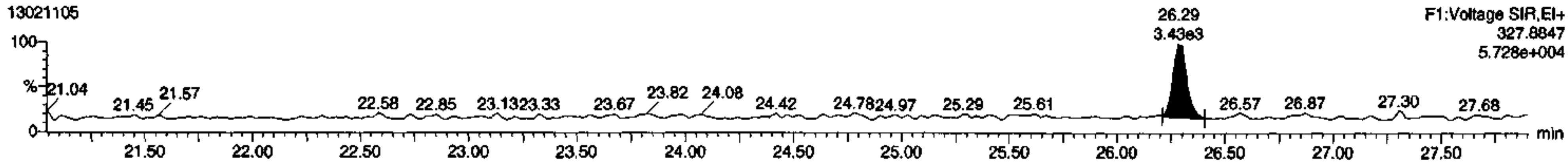
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time

Printed: Tuesday, February 12, 2013 09:35:49 Pacific Standard Time

ID: CSL, Name: 13021105, Date: 11-Feb-2013, Time: 14:45:17, Conditions: AUTOSPEC01, User: pk

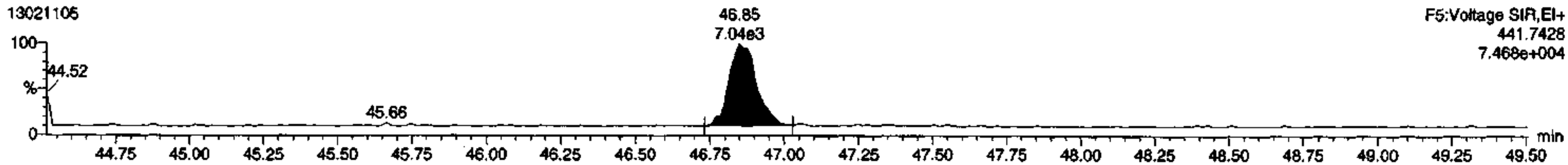
37CL-2378-TCDD

13021105



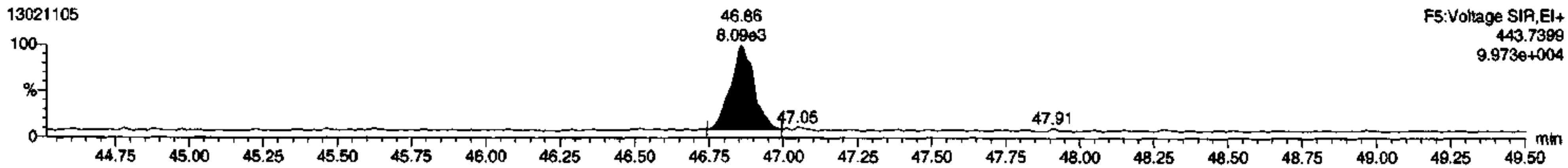
OCDF

13021105



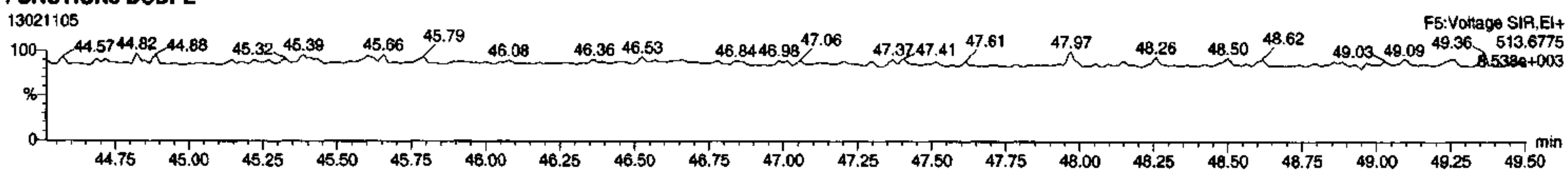
OCDF

13021105



FUNCTION5 DCDPE

13021105



Quantify Sample Summary Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:35:59 Pacific Standard Time

Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 04 Feb 2013 12:23:30
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: CS1, Name: 13021106, Date: 11-Feb-2013, Time: 15:40:00, Conditions: AUTOSPEC01, User: pk

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	2378-TCDF	25.660	1.001	8.24e3	1.02e4	0.921	0.809	0.770	128.5	NO	0.474	0.474
[redacted]	12378-PeCDF	29.775	1.001	4.15e4	2.75e4	0.912	1.510	1.550	394.3	NO	2.408	2.408
[redacted]	23478-PeCDF	31.124	1.001	4.16e4	2.88e4	0.943	1.445	1.550	430.5	NO	2.443	2.443
[redacted]	123478-HxCDF	34.796	1.001	3.51e4	2.91e4	1.101	1.204	1.240	506.2	NO	2.439	2.439
[redacted]	234678-HxCDF	35.892	1.001	3.37e4	2.91e4	1.073	1.161	1.240	475.7	NO	2.412	2.412
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[redacted]	123789-HxCDF	37.032	1.001	2.89e4	2.23e4	1.017	1.297	1.240	391.6	NO	2.451	2.451
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[redacted]	2378-TCDD	26.288	1.001	6.19e3	7.70e3	1.106	0.804	0.770	80.9	NO	0.485	0.485
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[redacted]	123478-HxCDD	36.024	1.000	2.72e4	2.17e4	0.978	1.253	1.240	396.2	NO	2.603	2.603
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[redacted]	13C-1234789-HpCDF	41.702	1.141	4.82e5	1.05e6	0.774	0.457	0.440	3315.3	NO		104.917
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[redacted]	13C-12378-PeCDD	31.365	1.232	1.18e6	7.48e5	0.715	1.581	1.550	9032.5	NO		93.125
[redacted]	13C-123478-HxCDD	36.013	0.985	1.07e6	8.54e5	1.032	1.248	1.240	6497.0	NO		98.322
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Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:35:59 Pacific Standard Time

ID: CS1, Name: 13021106, Date: 11-Feb-2013, Time: 15:40:00, Conditions: AUTOSPEC01, User: pk

[redacted]												
[redacted]	13C-123789-HxCDD	36.561	0.000	1.05e6	8.45e5	1.000	1.240	1.240	6332.6	NO		100.000
[redacted]	Total-tetrafurans			8.24e3		0.921						0.474
[redacted]	Total-penta1			0.00e0								
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[redacted]	FUNCTION1 PFK			1.51e8								
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[redacted]	FUNCTION5 PFK			6.08e5								
[redacted]	FUNCTION1 HXCDPE			0.00e0								
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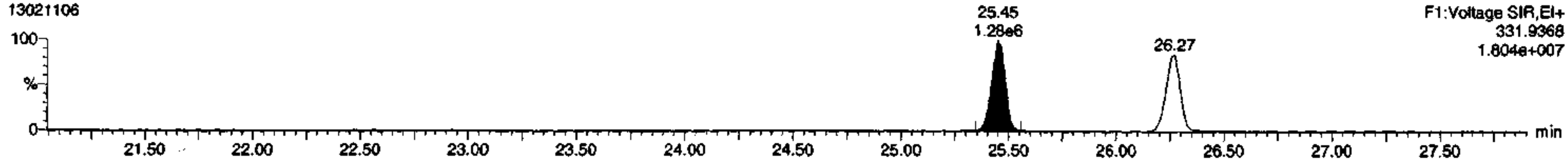
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:35:59 Pacific Standard Time

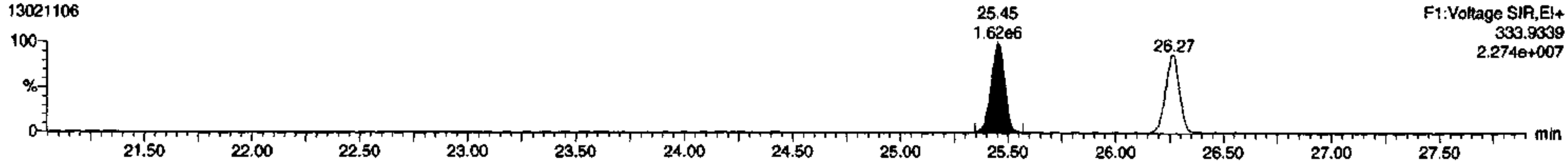
Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 04 Feb 2013 12:23:30
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: CS1, Name: 13021106, Date: 11-Feb-2013, Time: 15:40:00, Conditions: AUTOSPEC01, User: pk

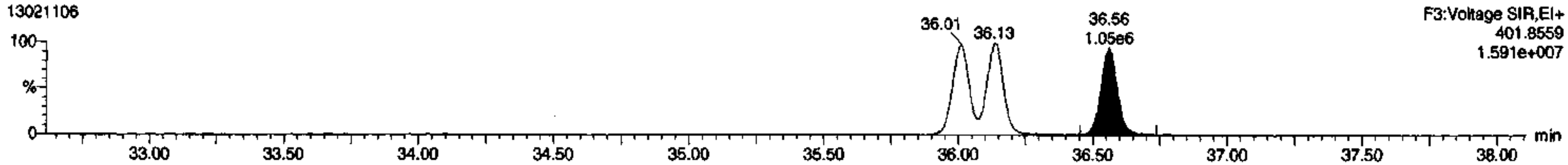
13C-1234-TCDD



13C-1234-TCDD



13C-123789-HxCDD



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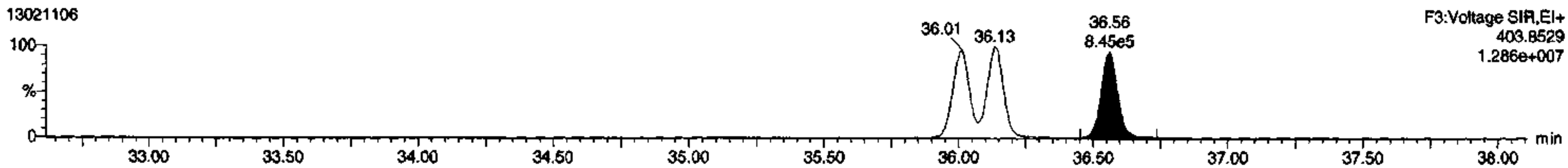
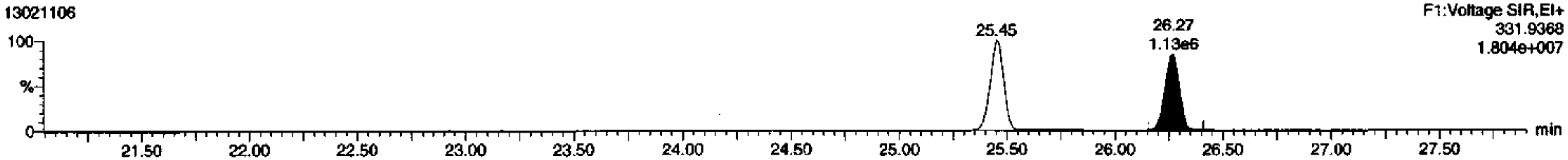


Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:35:59 Pacific Standard Time

ID: CS1, Name: 13021106, Date: 11-Feb-2013, Time: 15:40:00, Conditions: AUTOSPEC01, User: pk

13C-2378-TCDD



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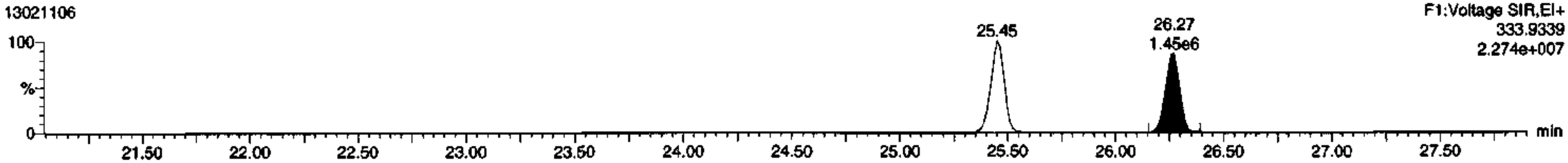
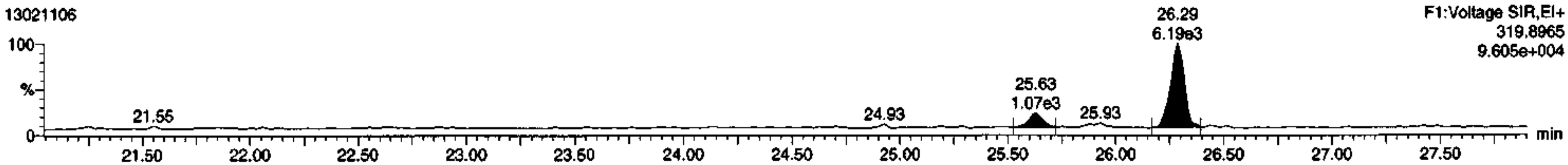
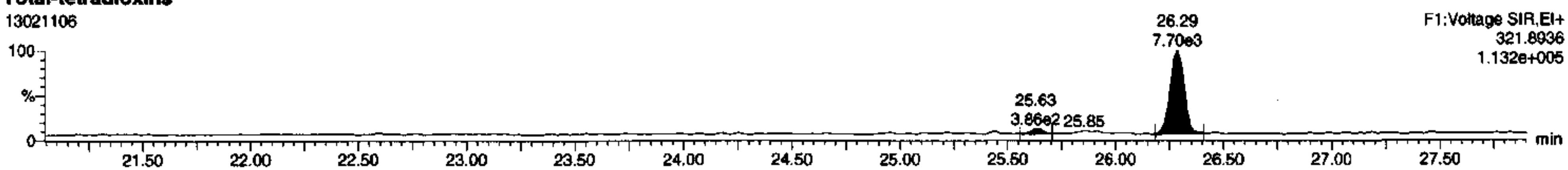


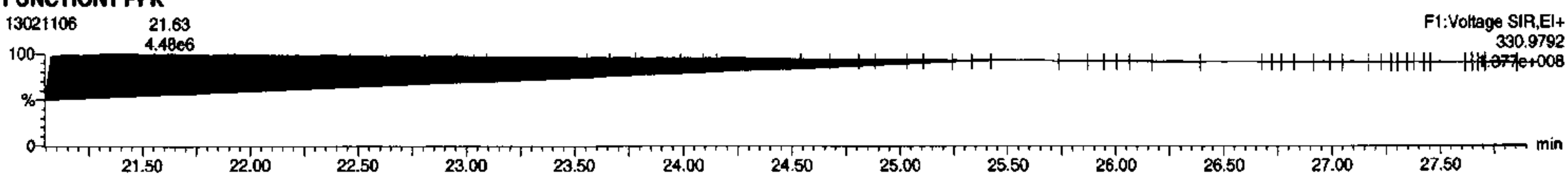
Total-tetradioxins



Total-tetradioxins



FUNCTION1 PFK



Dataset: P:\DIOXIN8290.PRO\130211IC.qld

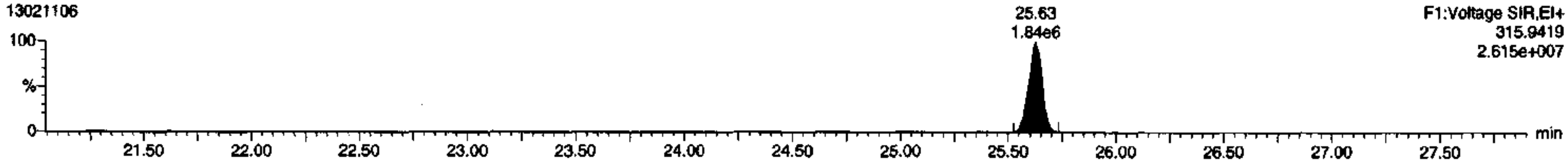
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time

Printed: Tuesday, February 12, 2013 09:35:59 Pacific Standard Time

ID: CS1, Name: 13021106, Date: 11-Feb-2013, Time: 15:40:00, Conditions: AUTOSPEC01, User: pk

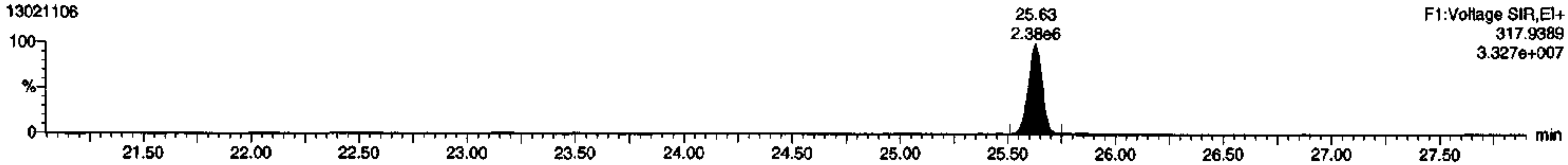
13C-2378-TCDF

13021106



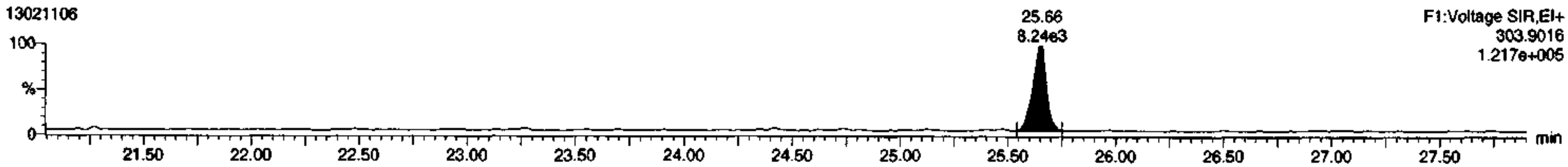
13C-2378-TCDF

13021106



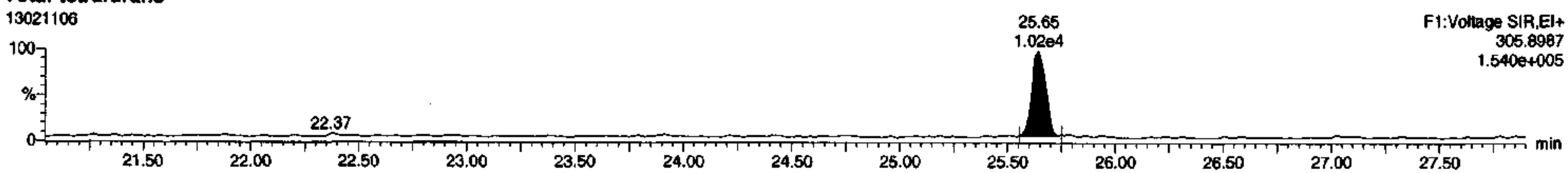
Total-tetrafurans

13021106



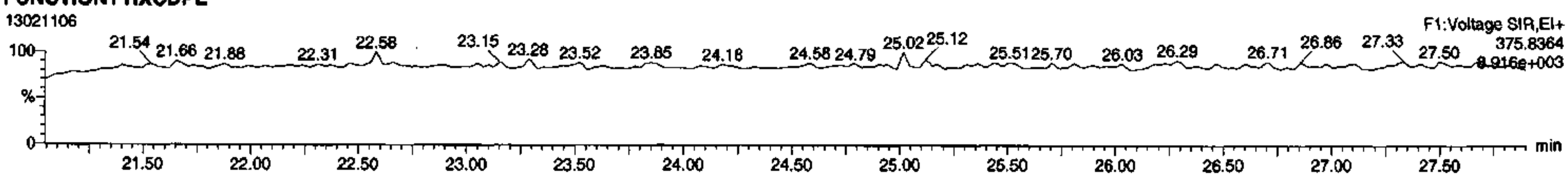
Total-tetrafurans

13021106



FUNCTION1 HXCDPE

13021106



VE03 : 00074

Quantify Sample Report **MassLynx 4.1 SCN 714**

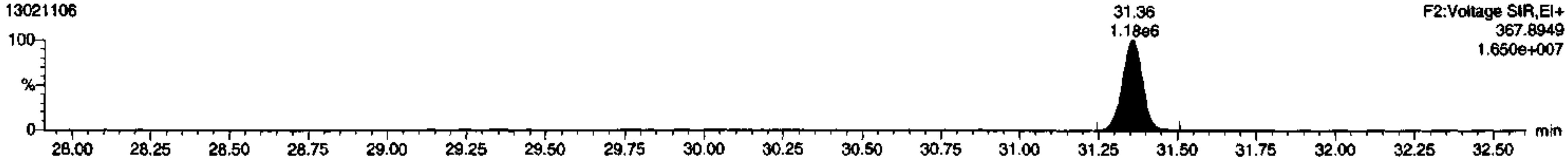
Dataset: P:\DIOXIN8290.PRO\130211IC.qld

Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time

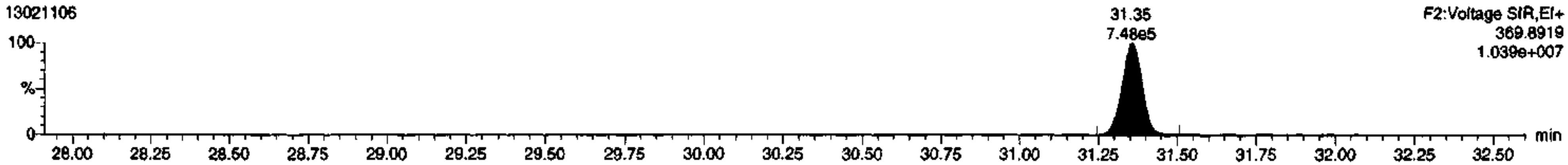
Printed: Tuesday, February 12, 2013 09:35:59 Pacific Standard Time

ID: CS1, Name: 13021106, Date: 11-Feb-2013, Time: 15:40:00, Conditions: AUTOSPEC01, User: pk

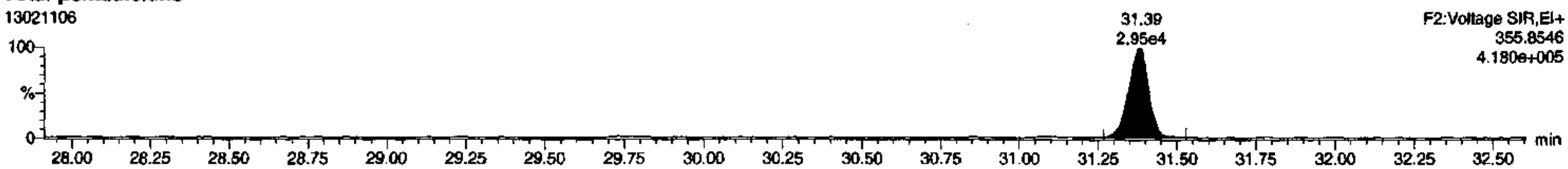
13C-12378-PeCDD



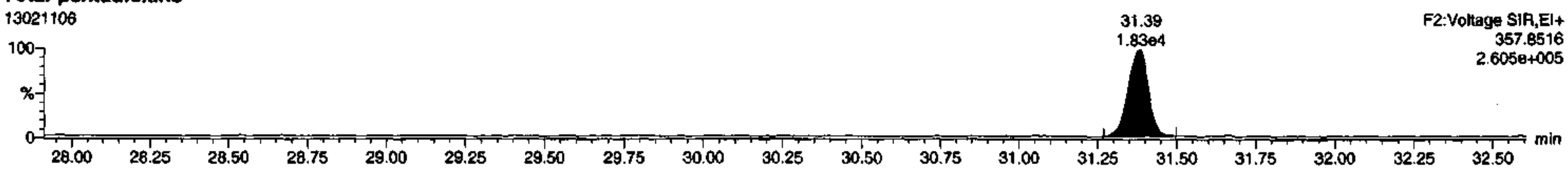
13C-12378-PeCDD



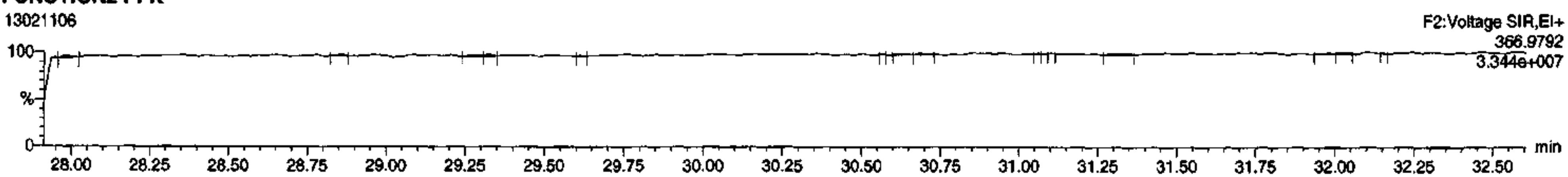
Total-pentadioxins



Total-pentadioxins



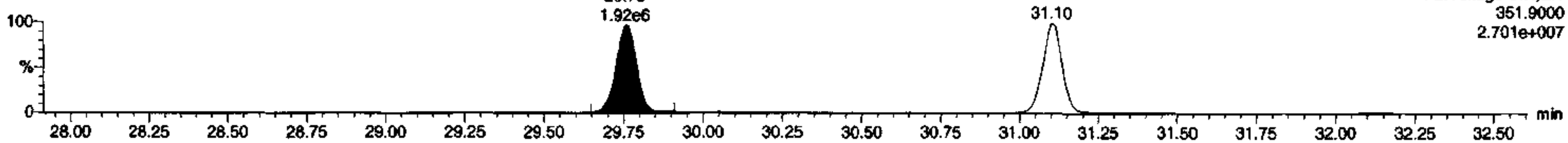
FUNCTION2 PFK



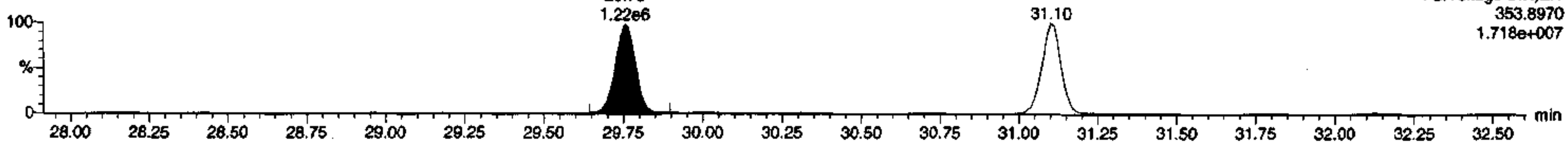
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:35:59 Pacific Standard Time

ID: CS1, Name: 13021106, Date: 11-Feb-2013, Time: 15:40:00, Conditions: AUTOSPEC01, User: pk

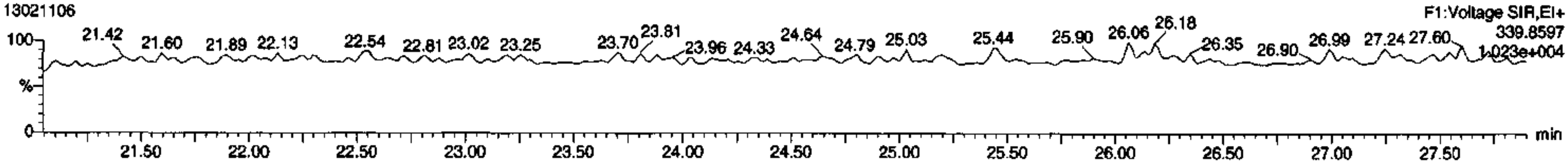
13C-12378-PeCDF
13021106



13C-12378-PeCDF
13021106



Total-penta1
13021106



Total-penta1
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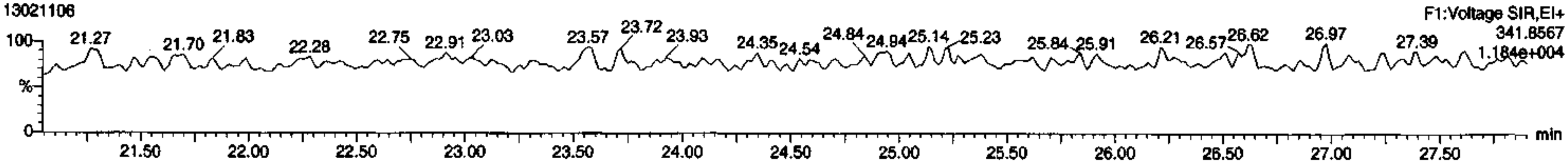
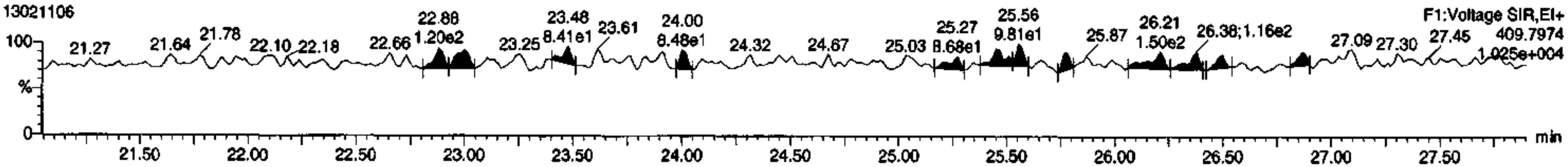


FUNCTION1 HPCDPE
13021106



UE03 : 00075

Quantify Sample Report **MassLynx 4.1 SCN 714**

Dataset: P:\DIOXIN8290.PRO\130211IC.qld

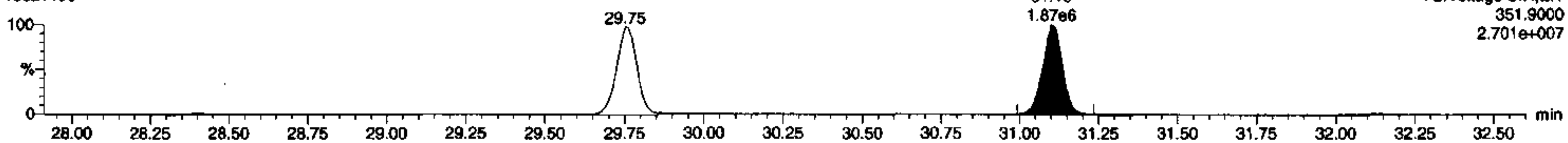
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time

Printed: Tuesday, February 12, 2013 09:35:59 Pacific Standard Time

ID: CS1, Name: 13021106, Date: 11-Feb-2013, Time: 15:40:00, Conditions: AUTOSPEC01, User: pk

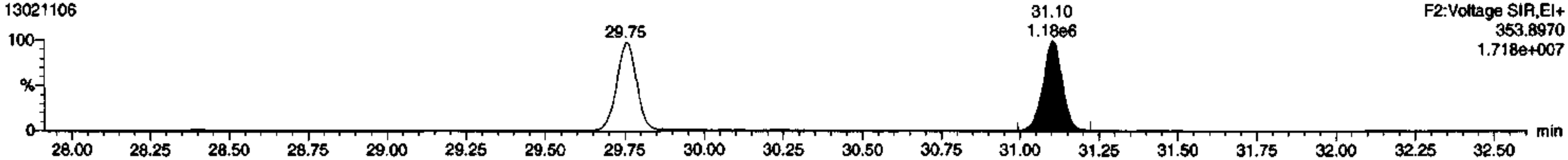
13C-23478-PeCDF

13021106



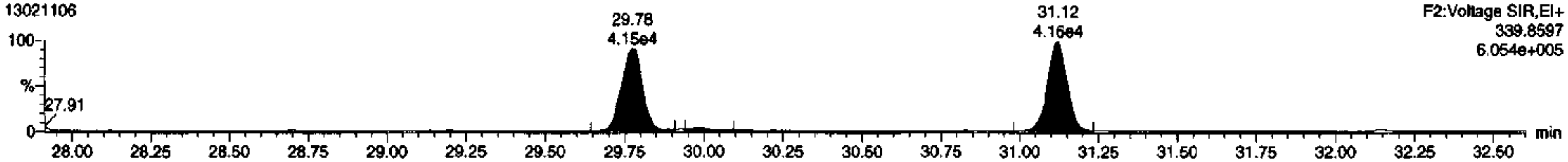
13C-23478-PeCDF

13021106



Total-pentafurans

13021106



Total-pentafurans

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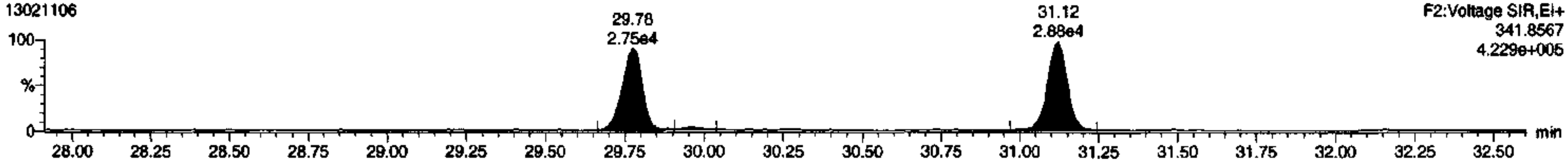
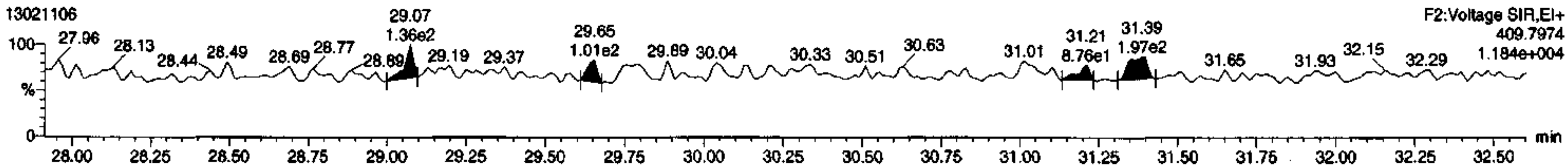


FUNCTION2 HPCDPE

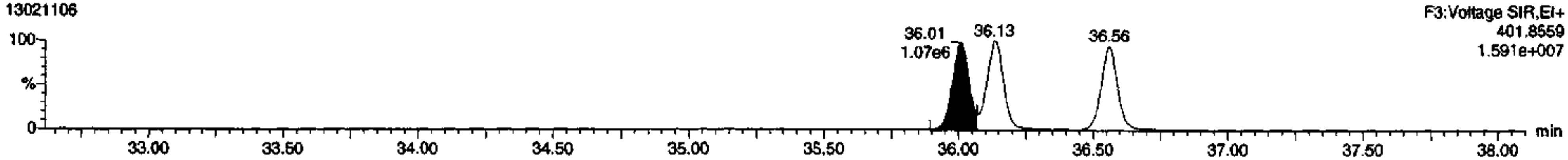
13021106



Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:35:59 Pacific Standard Time

ID: CS1, Name: 13021106, Date: 11-Feb-2013, Time: 15:40:00, Conditions: AUTOSPEC01, User: pk

13C-123478-HxCDD



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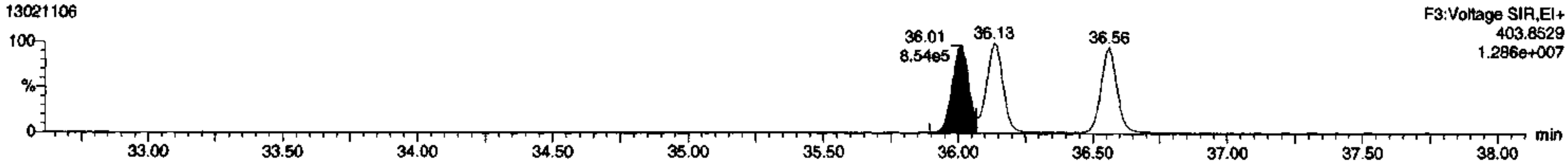
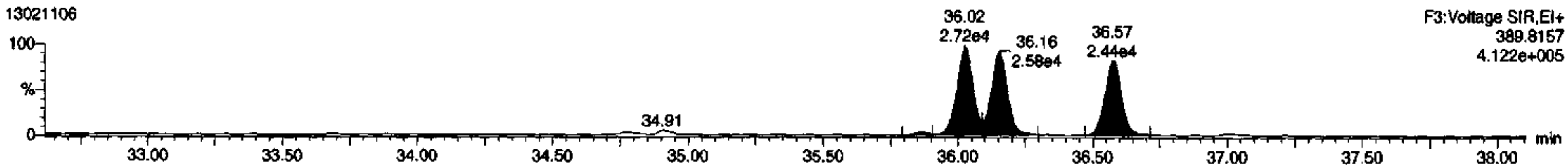
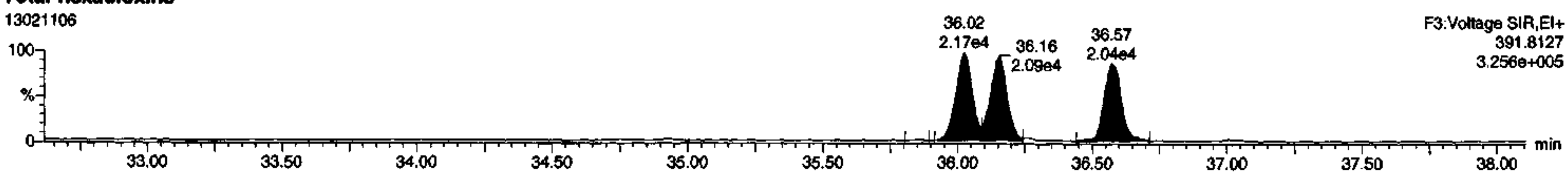


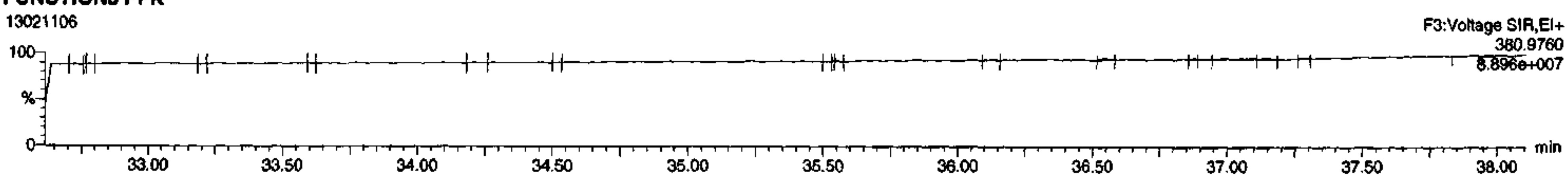
Total-hexadioxins



Total-hexadioxins



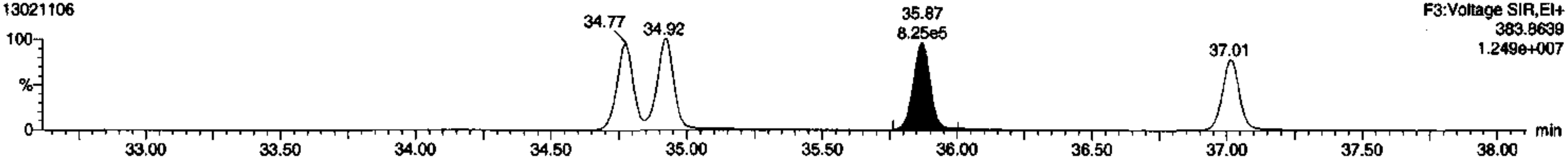
FUNCTION3 PFK



Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:35:59 Pacific Standard Time

ID: CS1, Name: 13021106, Date: 11-Feb-2013, Time: 15:40:00, Conditions: AUTOSPEC01, User: pk

13C-234678-HxCDF



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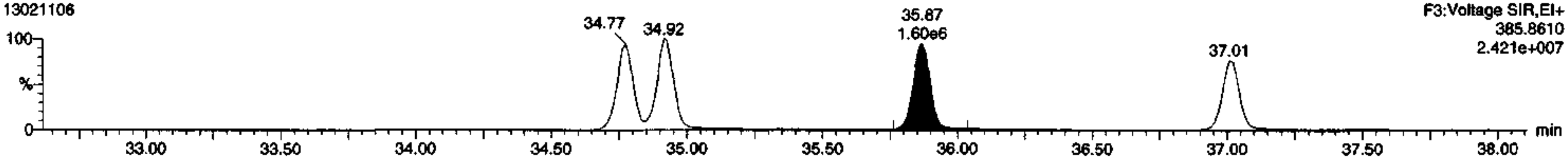
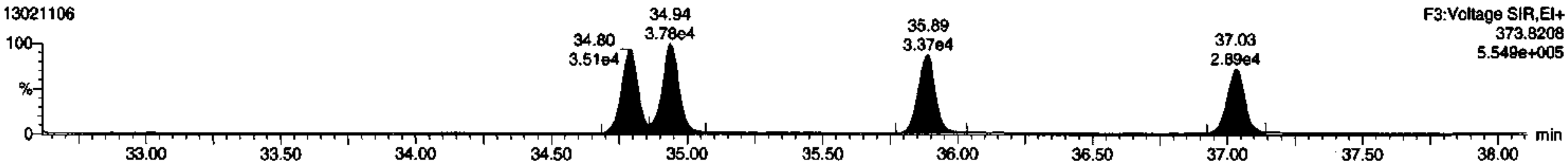
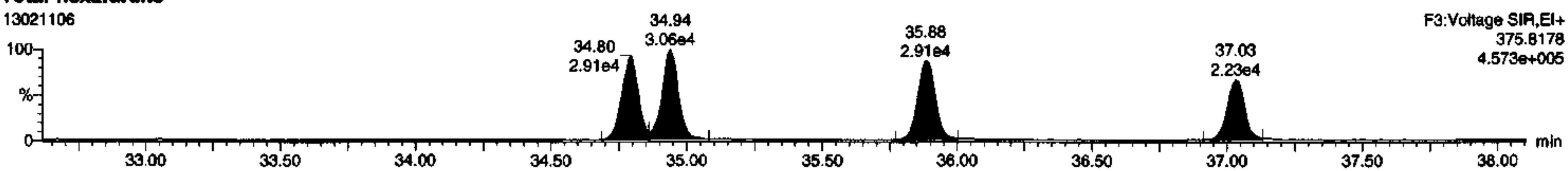


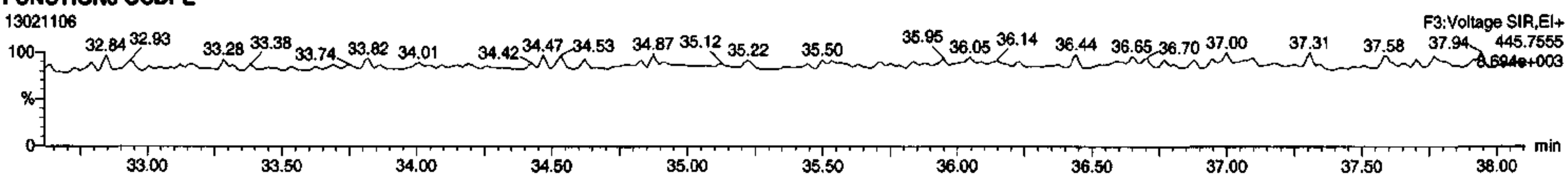
Total-hexafurans



Total-hexafurans



FUNCTION3 OCDPE

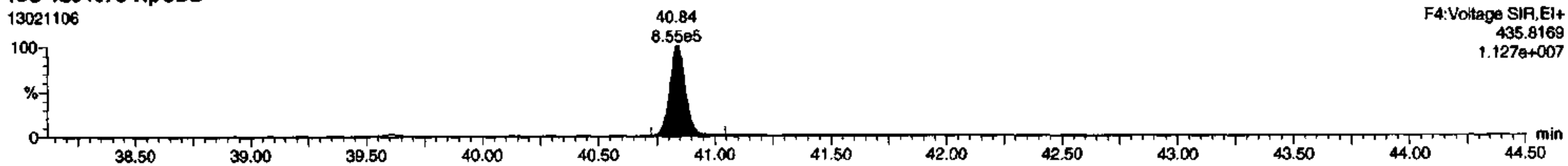


WEG9 : 00079

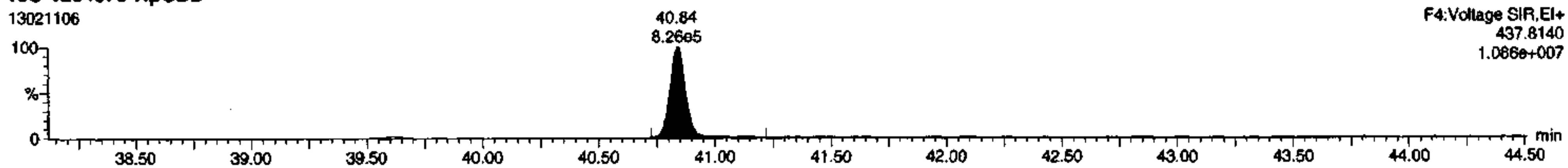
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:35:59 Pacific Standard Time

ID: CS1, Name: 13021106, Date: 11-Feb-2013, Time: 15:40:00, Conditions: AUTOSPEC01, User: pk

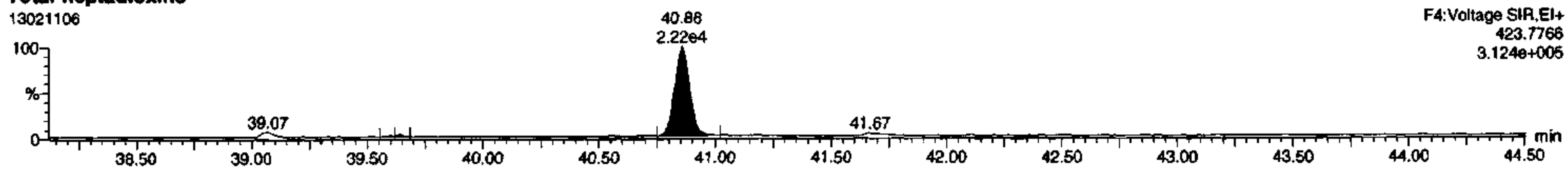
13C-1234678-HpCDD
13021106



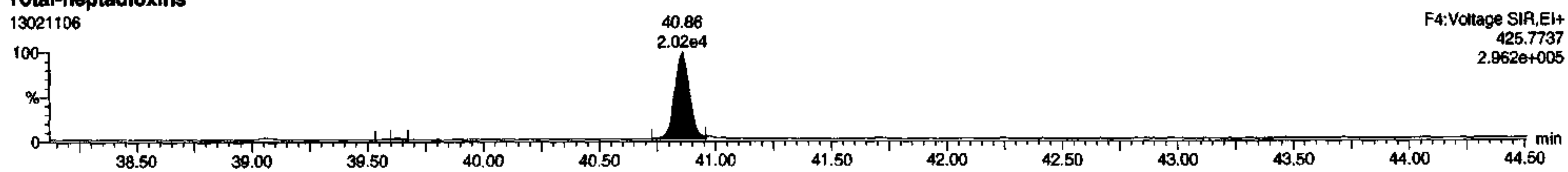
13C-1234678-HpCDD
13021106



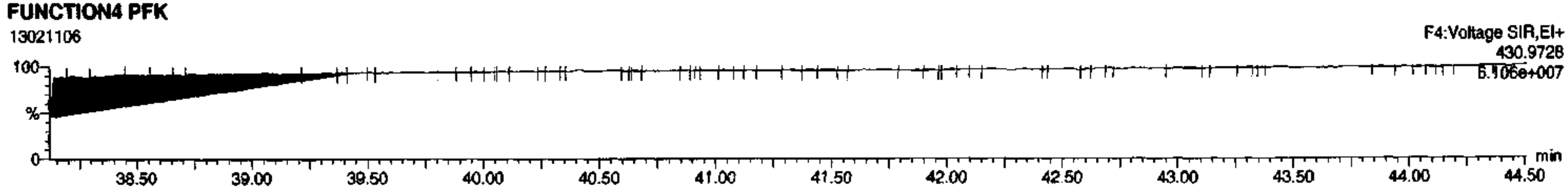
Total-heptadioxins
13021106



Total-heptadioxins
13021106



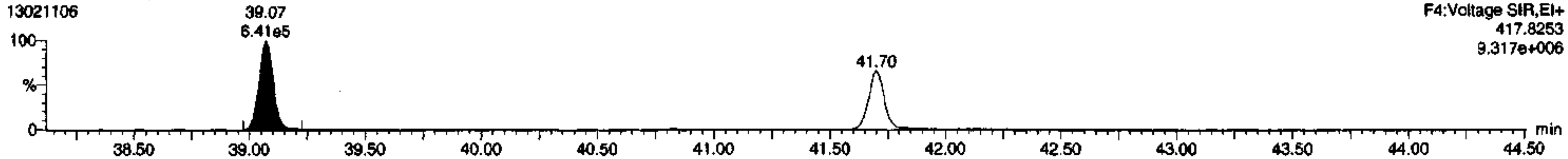
FUNCTION4 PFK
13021106



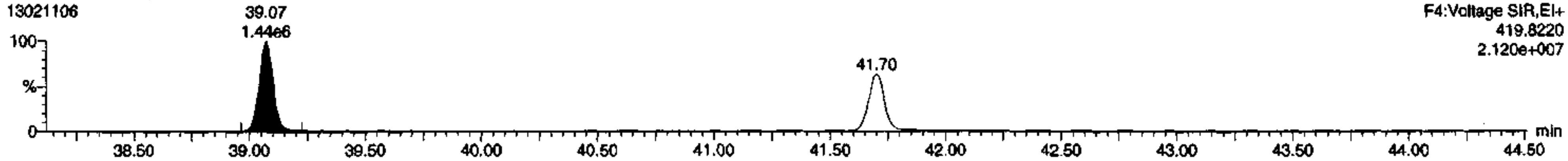
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:35:59 Pacific Standard Time

ID: CS1, Name: 13021106, Date: 11-Feb-2013, Time: 15:40:00, Conditions: AUTOSPEC01, User: pk

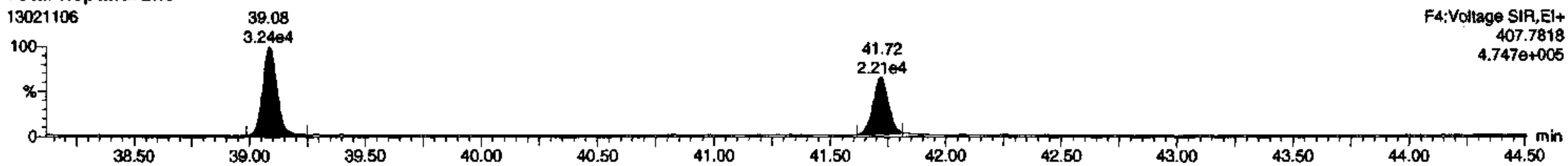
13C-1234678-HpCDF



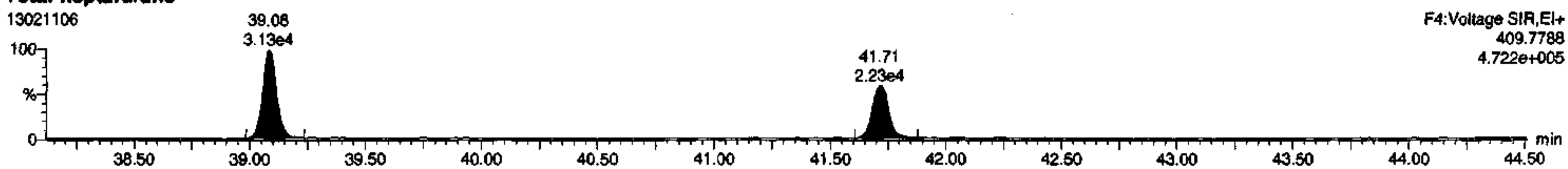
13C-1234678-HpCDF



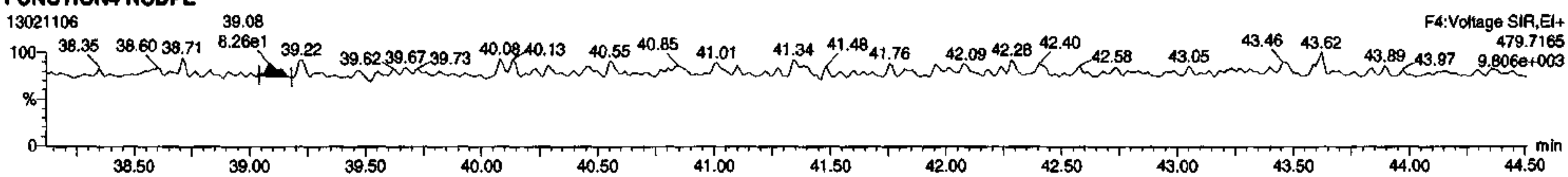
Total-heptafurans



Total-heptafurans



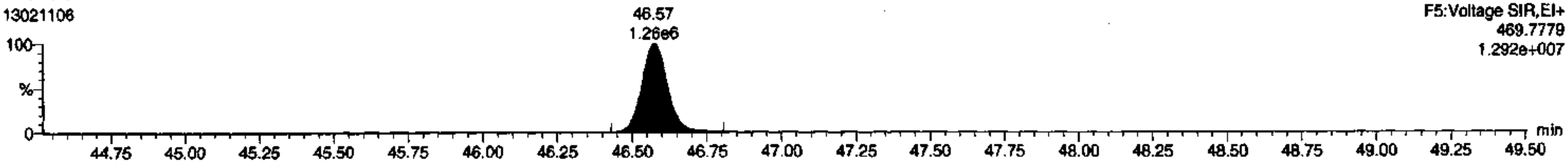
FUNCTION4 NCDPE



Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:35:59 Pacific Standard Time

ID: CS1, Name: 13021106, Date: 11-Feb-2013, Time: 15:40:00, Conditions: AUTOSPEC01, User: pk

13C-OCDD
13021106



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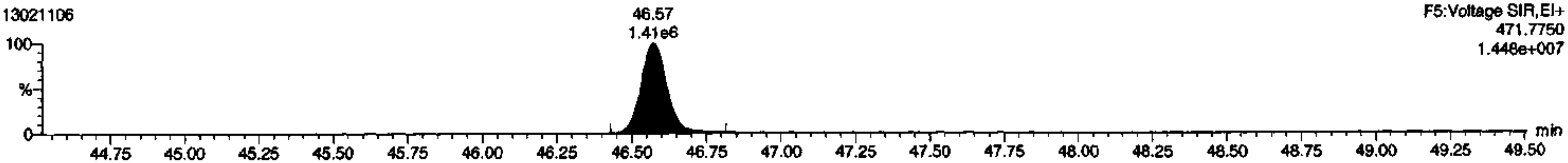
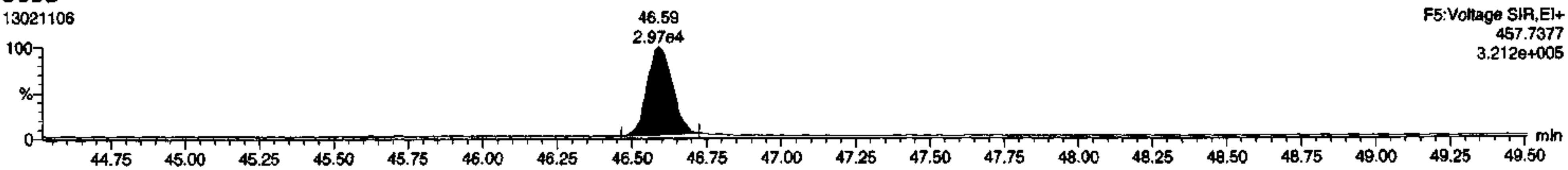
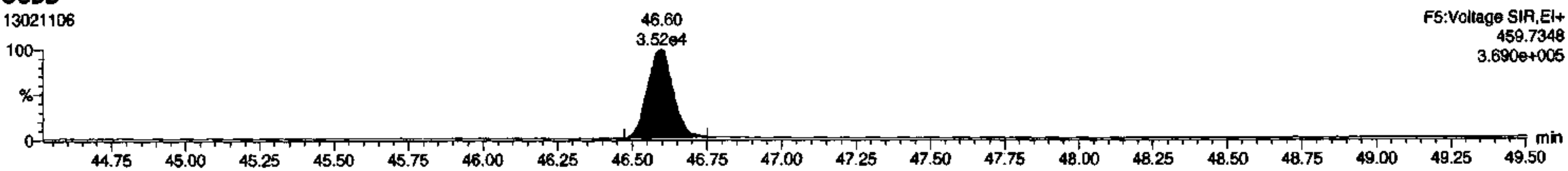
13021106



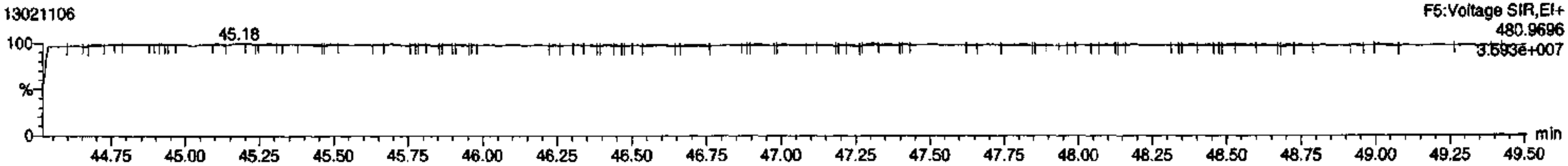
OCDD
13021106



OCDD
13021106



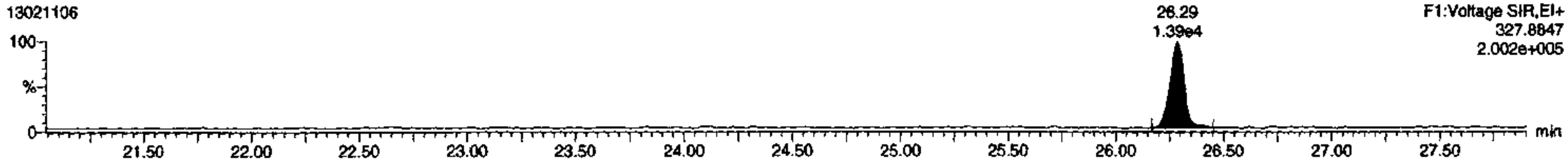
FUNCTION5 PFK
13021106



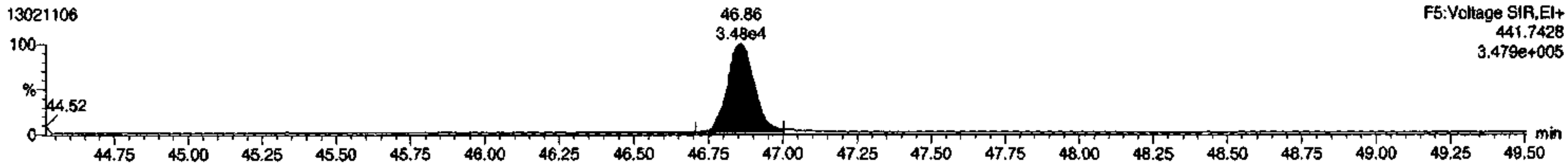
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:35:59 Pacific Standard Time

ID: CS1, Name: 13021106, Date: 11-Feb-2013, Time: 15:40:00, Conditions: AUTOSPEC01, User: pk

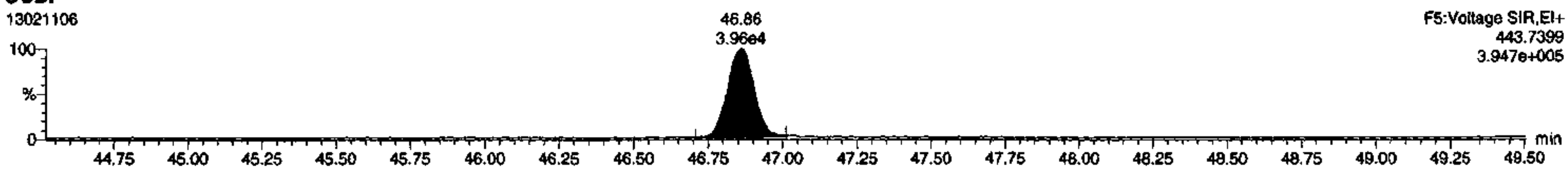
37CL-2378-TCDD



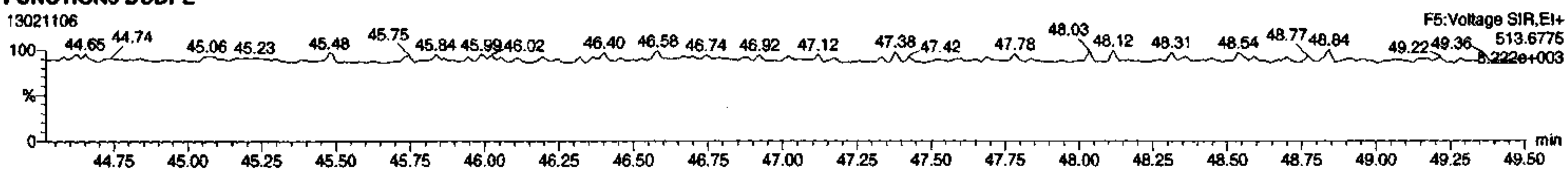
OCDF



OCDF



FUNCTION5 DCDPE



Quantify Sample Summary Report MassLynx 4.1 SCN 714

Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:09 Pacific Standard Time

Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 04 Feb 2013 12:23:30
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: CS2, Name: 13021107, Date: 11-Feb-2013, Time: 16:30:49, Conditions: AUTOSPEC01, User: pk

[redacted]												
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[redacted]	12378-PeCDF	29.775	1.000	2.13e5	1.42e5	0.912	1.496	1.550	2543.1	NO	9.930	9.930
[redacted]	23478-PeCDF	31.123	1.000	2.02e5	1.37e5	0.943	1.480	1.550	2526.8	NO	9.606	9.606
[redacted]	123478-HxCDF	34.795	1.001	1.64e5	1.38e5	1.101	1.185	1.240	1391.2	NO	9.803	9.803
[redacted]	234678-HxCDF	35.891	1.000	1.59e5	1.31e5	1.073	1.215	1.240	1352.1	NO	9.821	9.821
[redacted]	123678-HxCDF	34.949	1.001	1.68e5	1.41e5	1.056	1.192	1.240	1391.4	NO	9.788	9.788
[redacted]	123789-HxCDF	37.042	1.001	1.27e5	1.04e5	1.017	1.221	1.240	1049.4	NO	9.650	9.650
[redacted]	1234678-HpCDF	39.092	1.000	1.32e5	1.34e5	1.238	0.990	1.050	1682.4	NO	9.721	9.721
[redacted]	1234789-HpCDF	41.723	1.001	9.48e4	9.38e4	1.224	1.011	1.050	995.8	NO	9.843	9.843
[redacted]	OCDF	46.858	1.006	1.40e5	1.57e5	1.162	0.892	0.890	693.8	NO	19.220	19.220
[redacted]	2378-TCDD	26.287	1.001	2.97e4	3.75e4	1.106	0.792	0.770	302.5	NO	1.857	1.857
[redacted]	12378-PeCDD	31.386	1.001	1.40e5	8.99e4	1.001	1.561	1.550	1172.0	NO	9.809	9.809
[redacted]	123478-HxCDD	36.034	1.001	1.15e5	9.42e4	0.978	1.226	1.240	1609.7	NO	9.760	9.760
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[redacted]	123789-HxCDD	36.582	1.012	1.11e5	8.82e4	0.904	1.254	1.240	1486.1	NO	9.765	9.765
[redacted]	1234678-HpCDD	40.868	1.001	8.85e4	8.49e4	1.029	1.043	1.050	937.7	NO	9.874	9.874
[redacted]	OCDD	46.597	1.000	1.25e5	1.37e5	1.011	0.914	0.890	1488.4	NO	19.411	19.411
[redacted]	13C-2378-TCDF	25.630	1.006	2.33e6	2.99e6	1.522	0.780	0.770	10937.8	NO		100.611
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[redacted]	13C-123478-HxCDD	36.012	0.985	1.23e6	9.71e5	1.032	1.261	1.240	7646.5	NO		99.794
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Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:09 Pacific Standard Time

ID: CS2, Name: 13021107, Date: 11-Feb-2013, Time: 16:30:49, Conditions: AUTOSPEC01, User: pk

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[redacted]	Total-tetrafurans			3.97e4		0.921						1.879
[redacted]	Total-penta1			7.12e1								0.005
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[redacted]	FUNCTION1 PFK			2.70e6								
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[redacted]	FUNCTION3 OCDPE			0.00e0								
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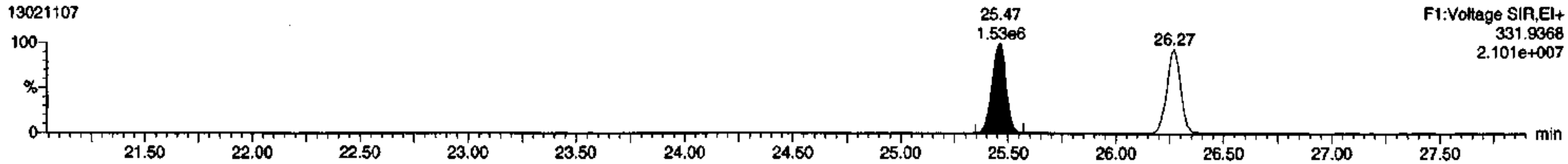
VE03:00085

Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:09 Pacific Standard Time

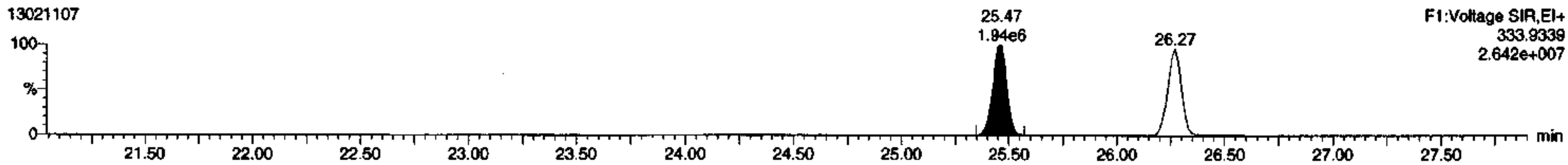
Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 04 Feb 2013 12:23:30
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: CS2, Name: 13021107, Date: 11-Feb-2013, Time: 16:30:49, Conditions: AUTOSPEC01, User: pk

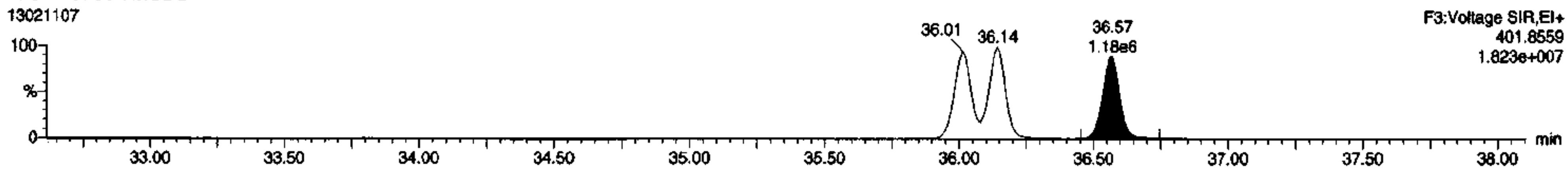
13C-1234-TCDD



13C-1234-TCDD



13C-123789-HxCDD



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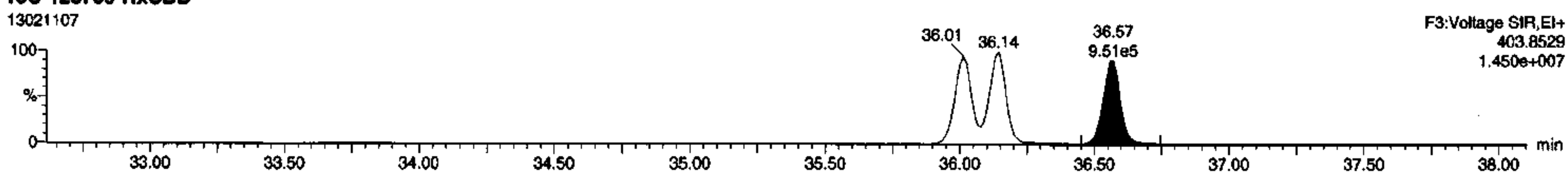
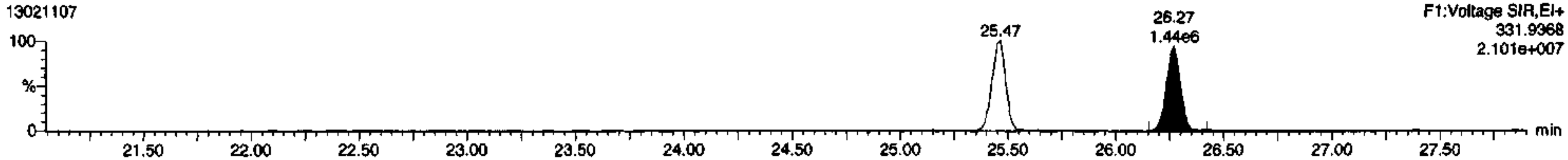


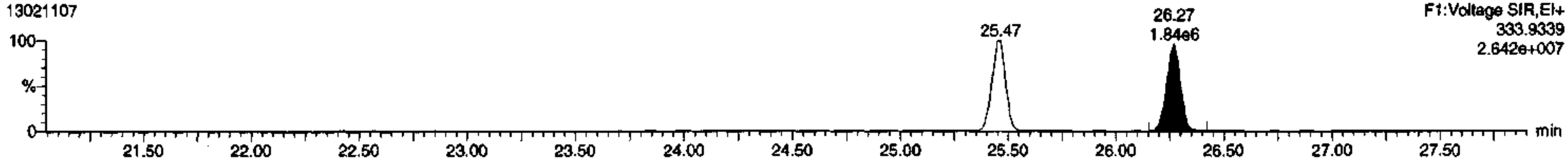
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:09 Pacific Standard Time

ID: CS2, Name: 13021107, Date: 11-Feb-2013, Time: 16:30:49, Conditions: AUTOSPEC01, User: pk

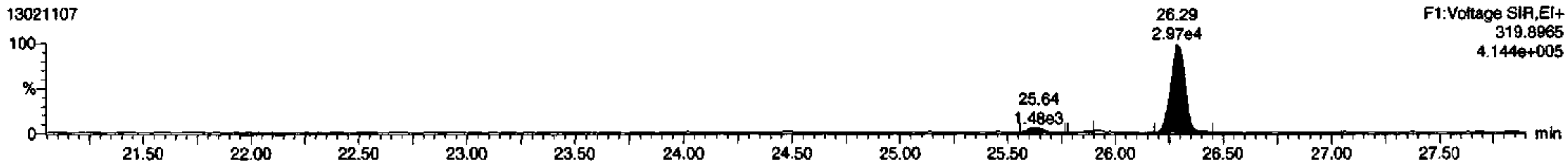
13C-2378-TCDD



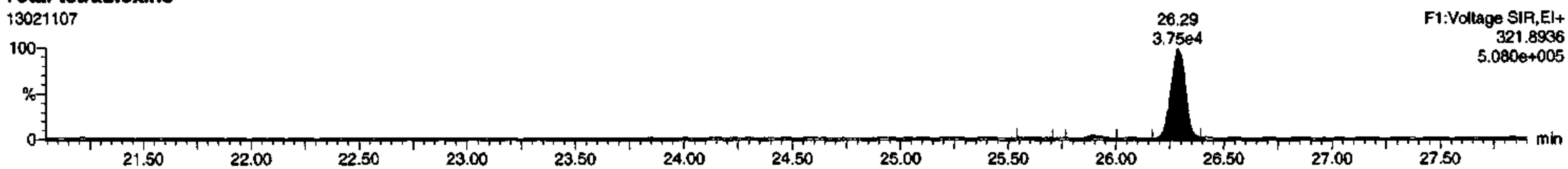
13C-2378-TCDD



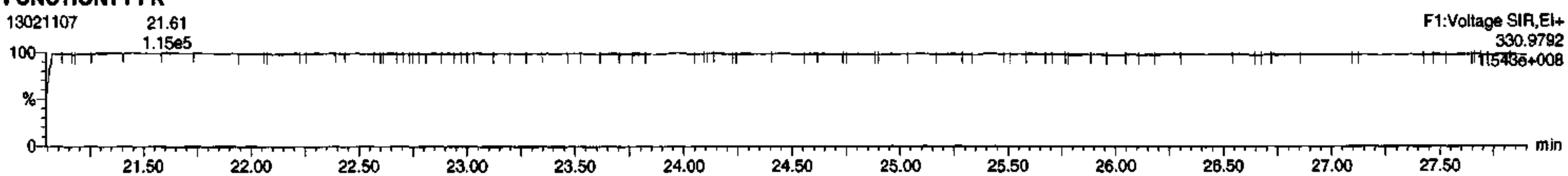
Total-tetradioxins



Total-tetradioxins



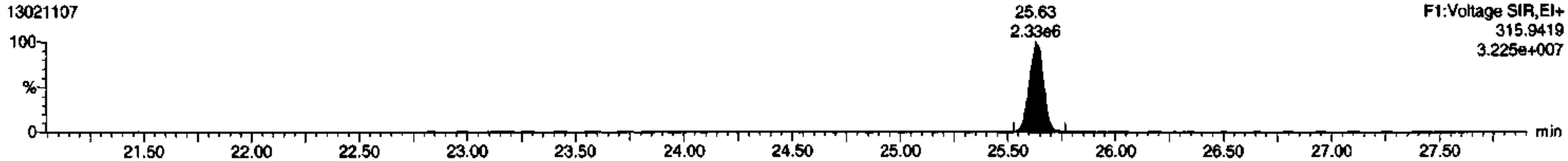
FUNCTION1 PFK



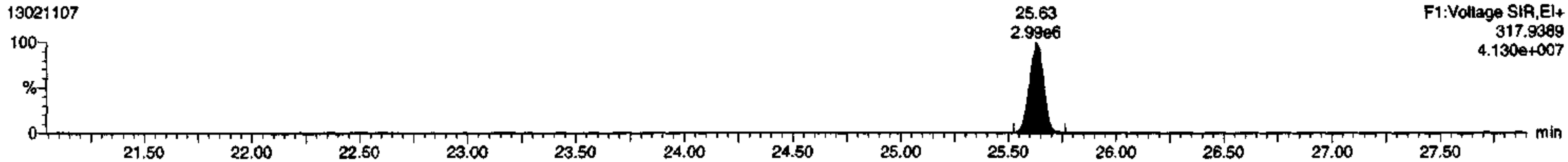
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:09 Pacific Standard Time

ID: CS2, Name: 13021107, Date: 11-Feb-2013, Time: 16:30:49, Conditions: AUTOSPEC01, User: pk

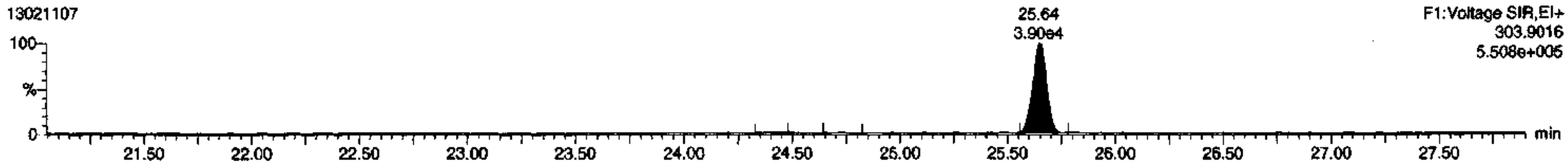
13C-2378-TCDF
13021107



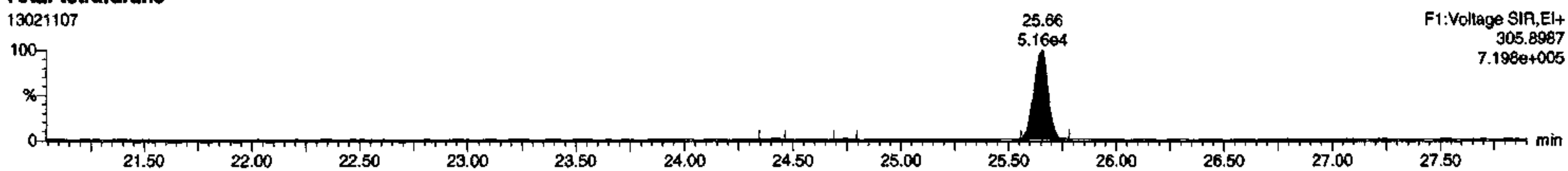
13C-2378-TCDF
13021107



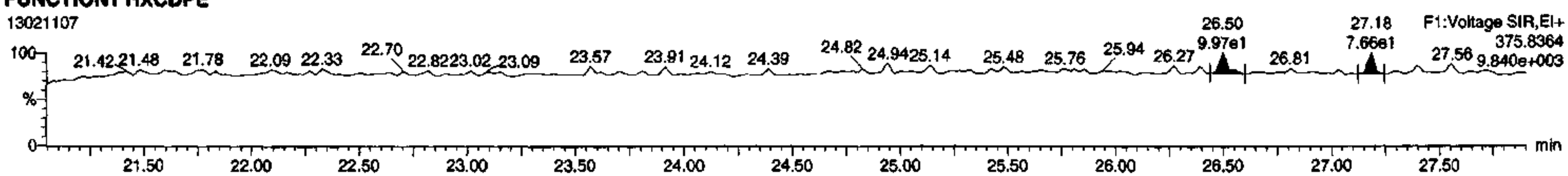
Total-tetrafurans
13021107



Total-tetrafurans
13021107



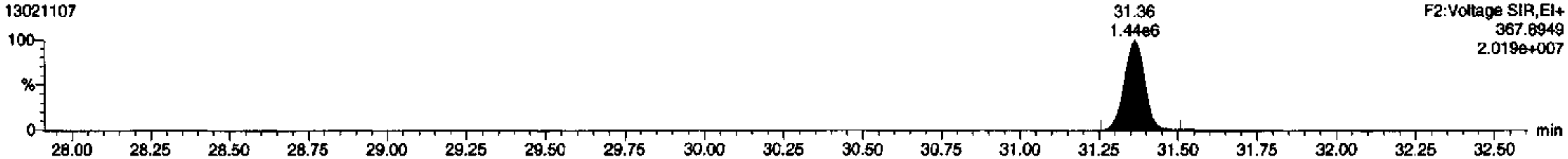
FUNCTION1 HXCDPE
13021107



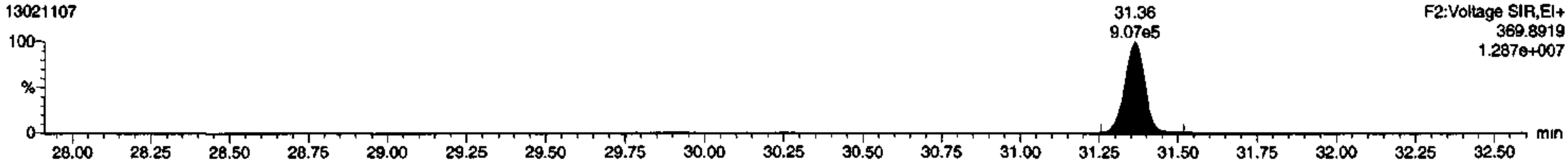
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:09 Pacific Standard Time

ID: CS2, Name: 13021107, Date: 11-Feb-2013, Time: 16:30:49, Conditions: AUTOSPEC01, User: pk

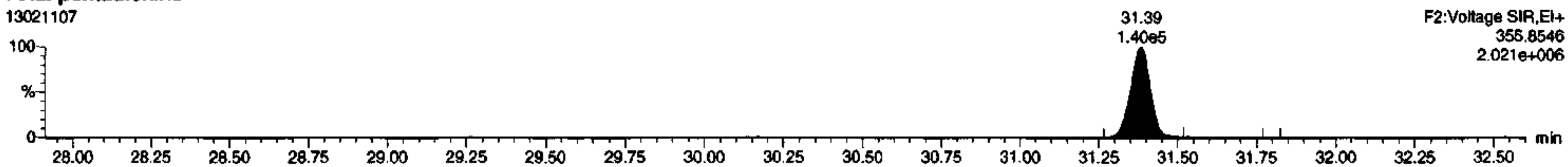
13C-12378-PeCDD



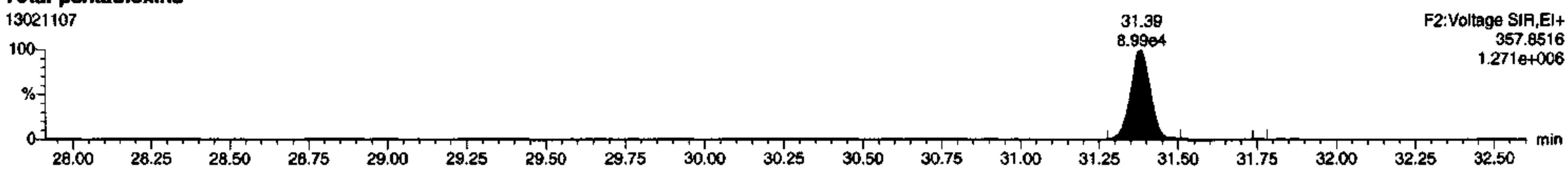
13C-12378-PeCDD



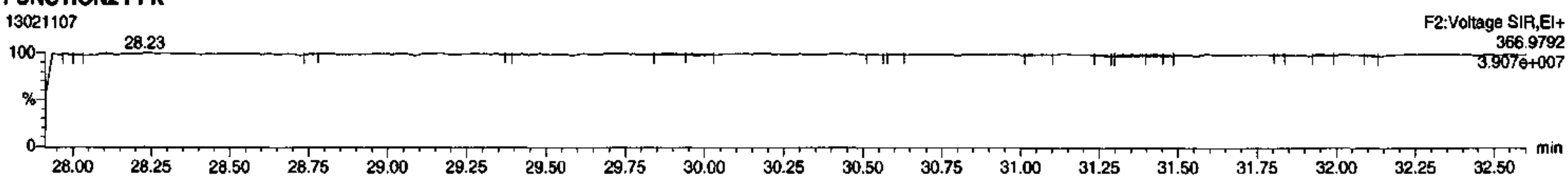
Total-pentadioxins



Total-pentadioxins



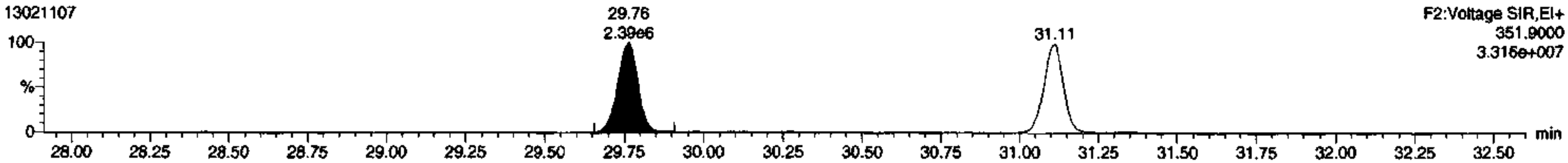
FUNCTION2 PFK



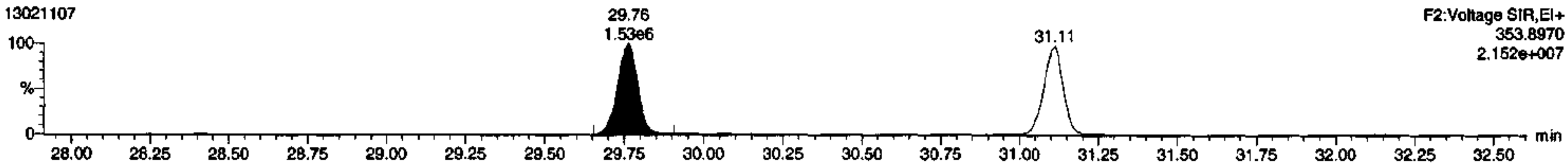
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:09 Pacific Standard Time

ID: CS2, Name: 13021107, Date: 11-Feb-2013, Time: 16:30:49, Conditions: AUTOSPEC01, User: pk

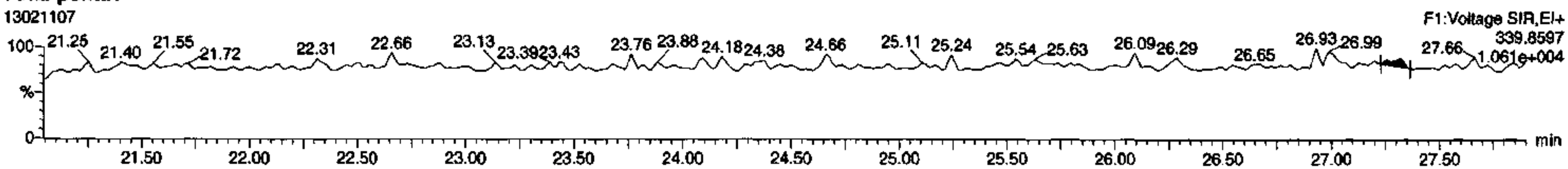
13C-12378-PeCDF



13C-12378-PeCDF



Total-penta1



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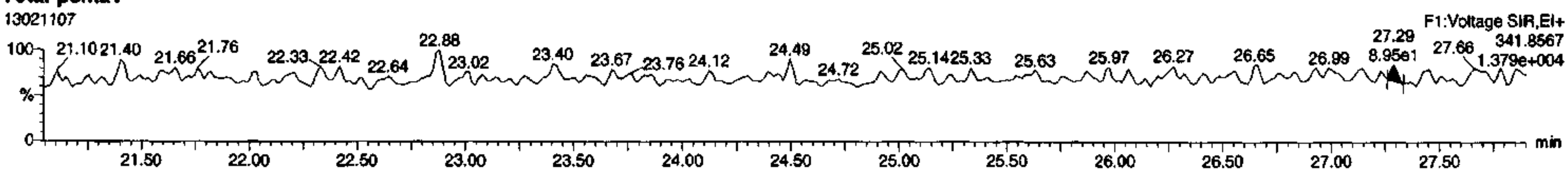
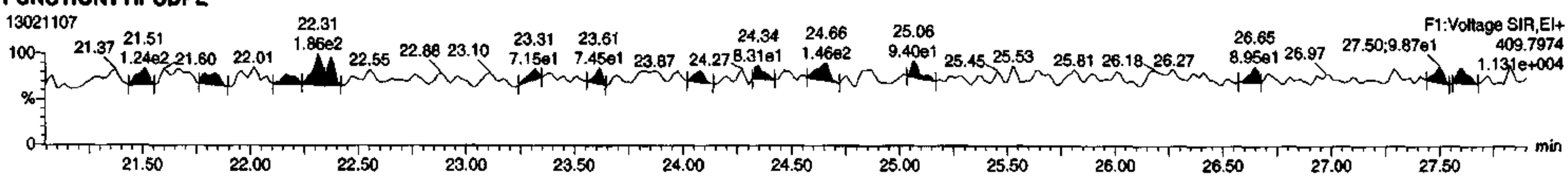


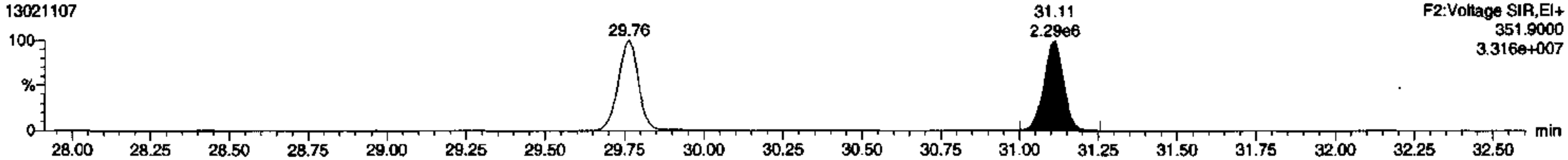
FUNCTION1 HPCDPE



Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:09 Pacific Standard Time

ID: CS2, Name: 13021107, Date: 11-Feb-2013, Time: 16:30:49, Conditions: AUTOSPEC01, User: pk

13C-23478-PeCDF



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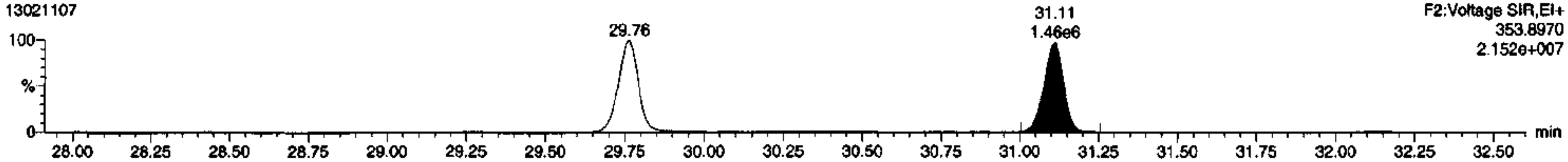
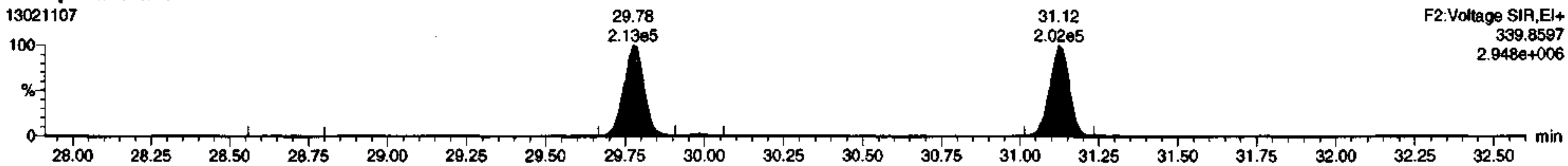
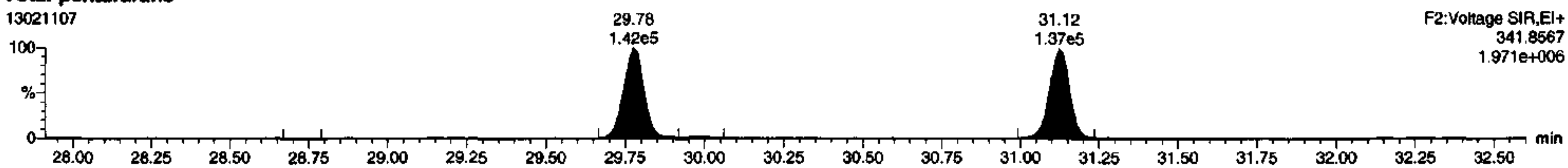


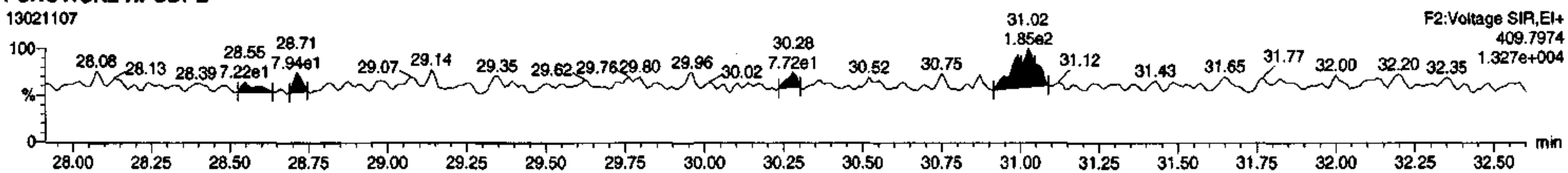
Total-pentafurans



Total-pentafurans



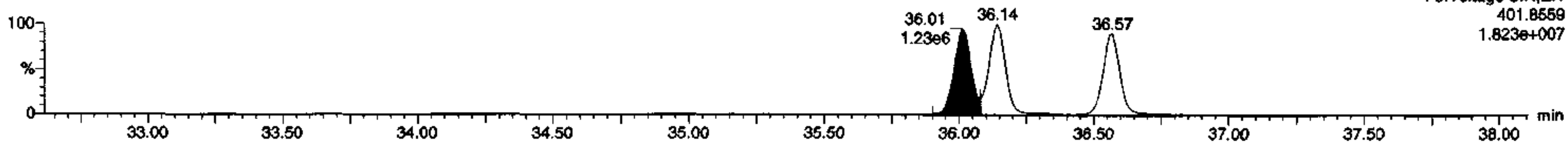
FUNCTION2 HPCDPE



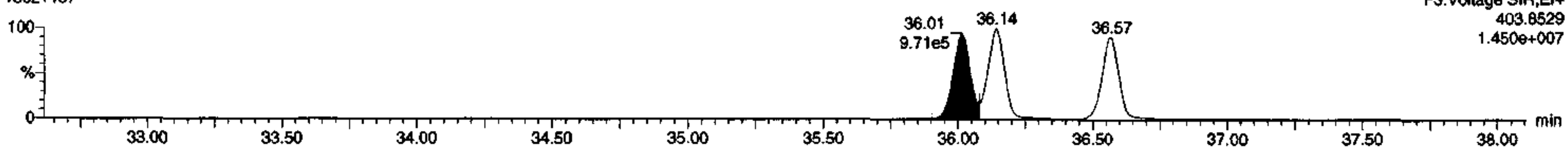
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:09 Pacific Standard Time

ID: CS2, Name: 13021107, Date: 11-Feb-2013, Time: 16:30:49, Conditions: AUTOSPEC01, User: pk

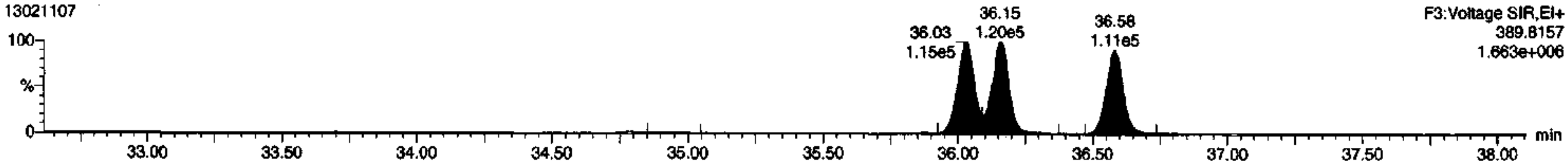
13C-123478-HxCDD
13021107



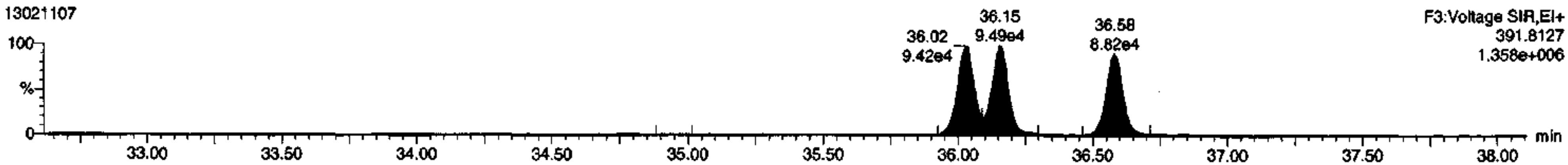
13C-123478-HxCDD
13021107



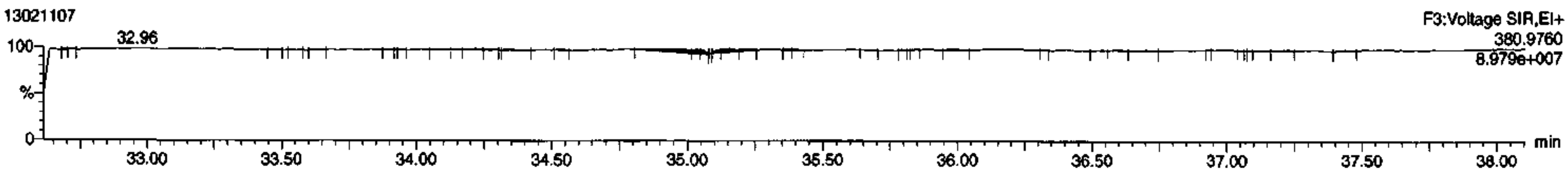
Total-hexadioxins
13021107



Total-hexadioxins
13021107



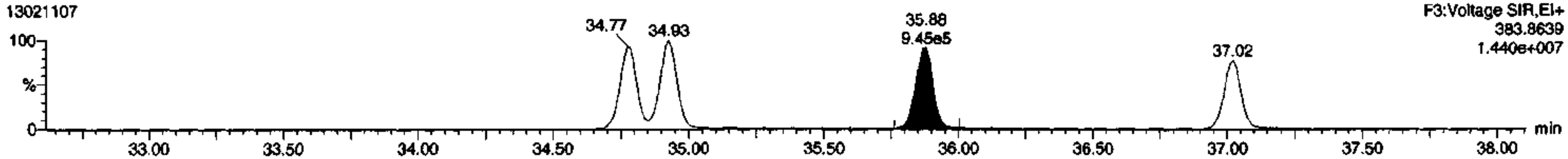
FUNCTION3 PFK
13021107



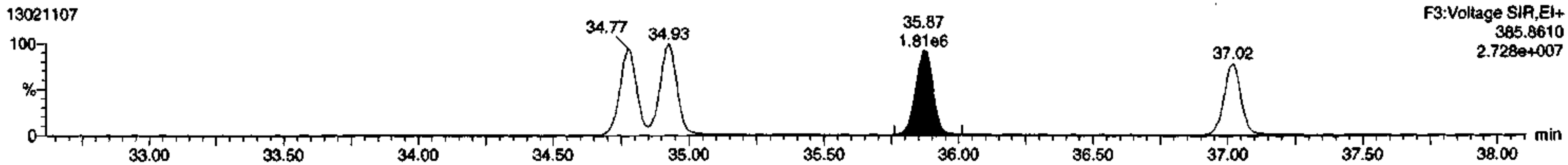
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:09 Pacific Standard Time

ID: CS2, Name: 13021107, Date: 11-Feb-2013, Time: 16:30:49, Conditions: AUTOSPEC01, User: pk

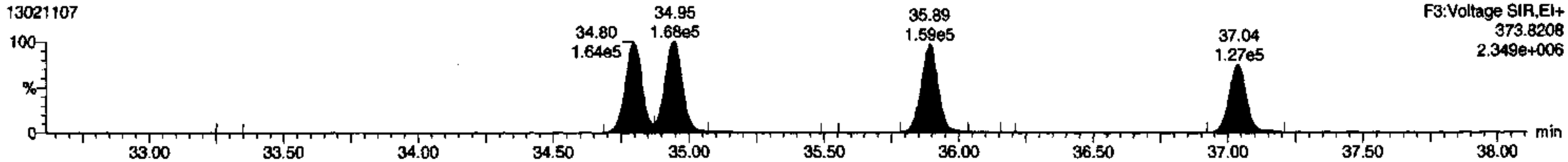
13C-234678-HxCDF



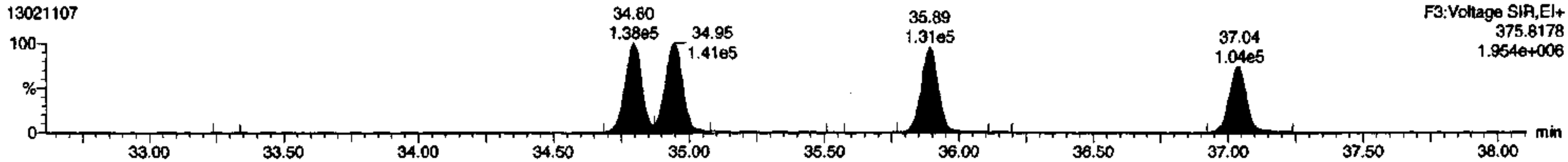
13C-234678-HxCDF



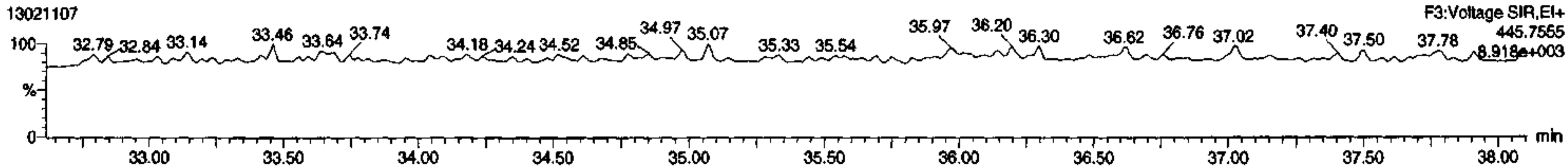
Total-hexafurans



Total-hexafurans



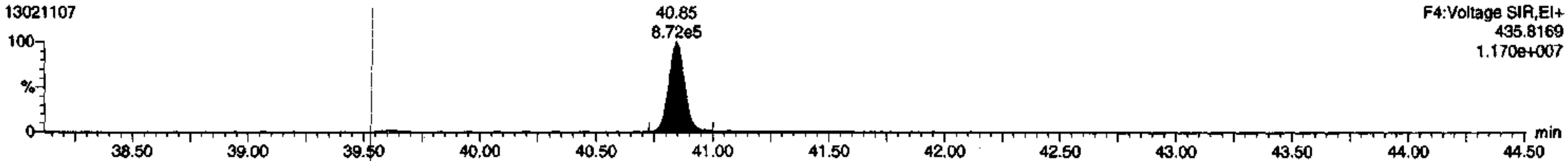
FUNCTION3 OCDPE



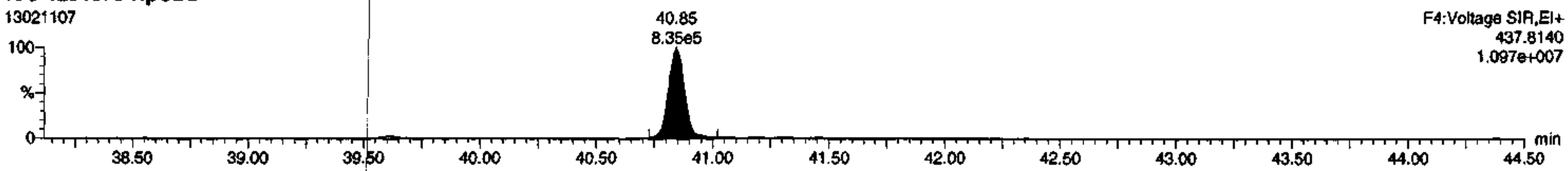
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:09 Pacific Standard Time

ID: CS2, Name: 13021107, Date: 11-Feb-2013, Time: 16:30:49, Conditions: AUTOSPEC01, User: pk

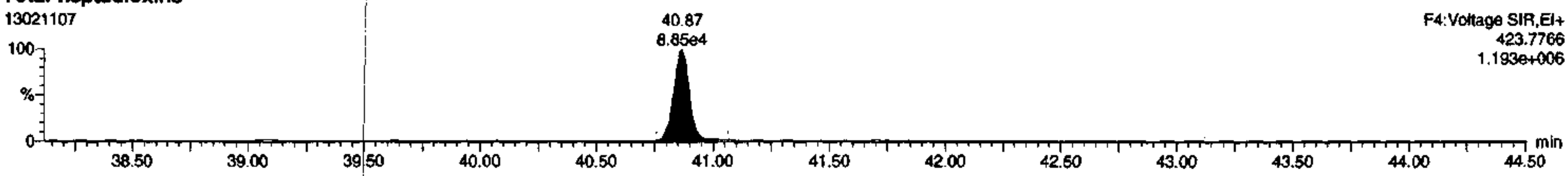
13C-1234678-HpCDD



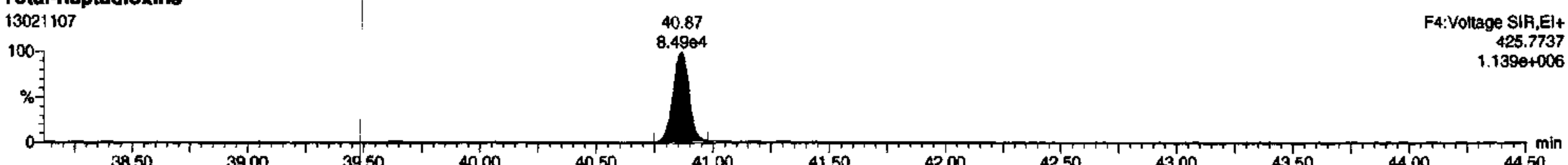
13C-1234678-HpCDD



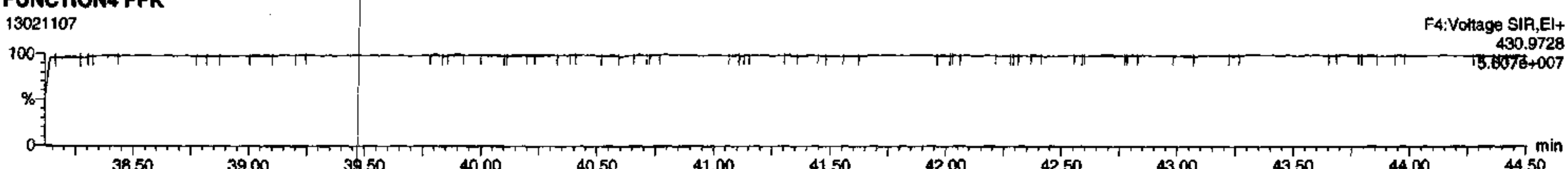
Total-heptadioxins



Total-heptadioxins



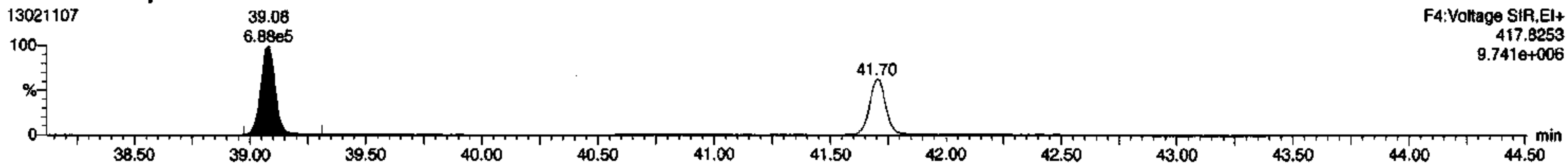
FUNCTION4 PFK



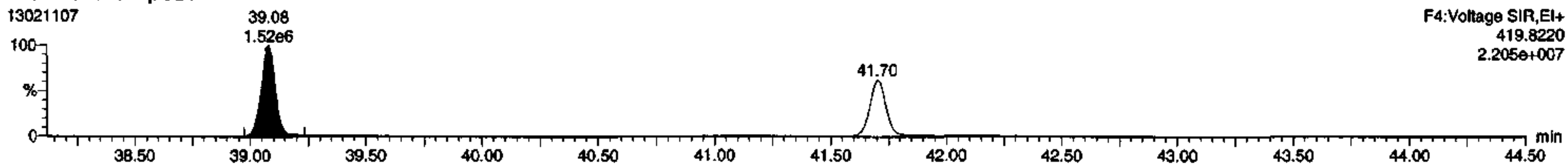
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:09 Pacific Standard Time

ID: CS2, Name: 13021107, Date: 11-Feb-2013, Time: 16:30:49, Conditions: AUTOSPEC01, User: pk

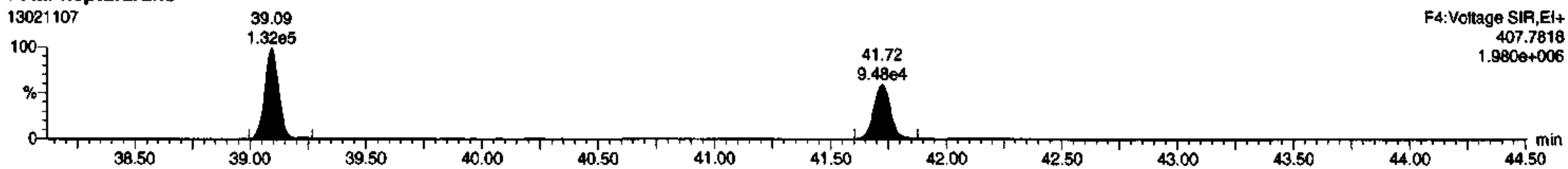
13C-1234678-HpCDF



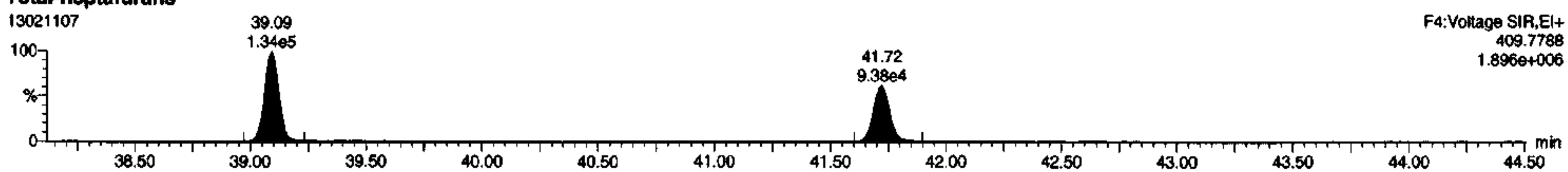
13C-1234678-HpCDF



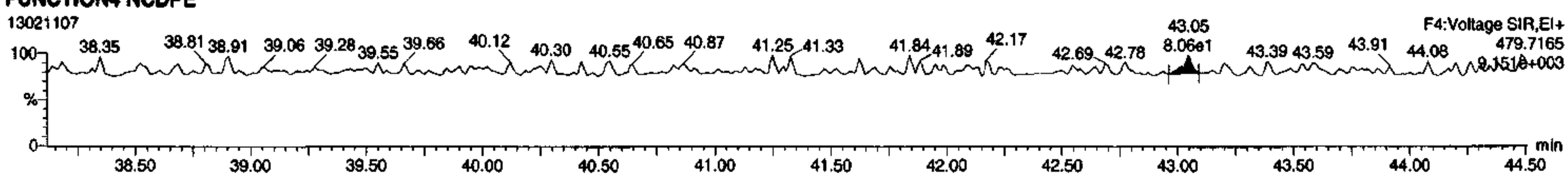
Total-heptafurans



Total-heptafurans



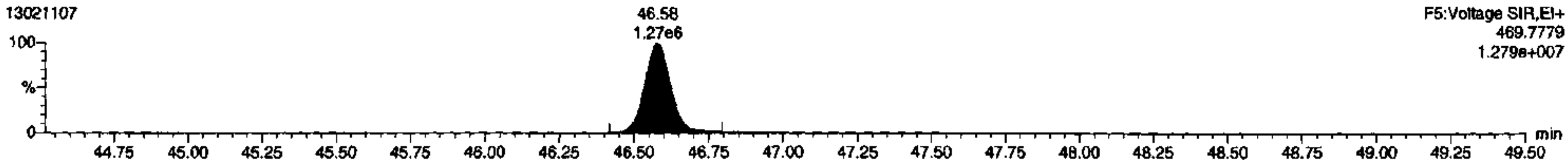
FUNCTION4 NCDPE



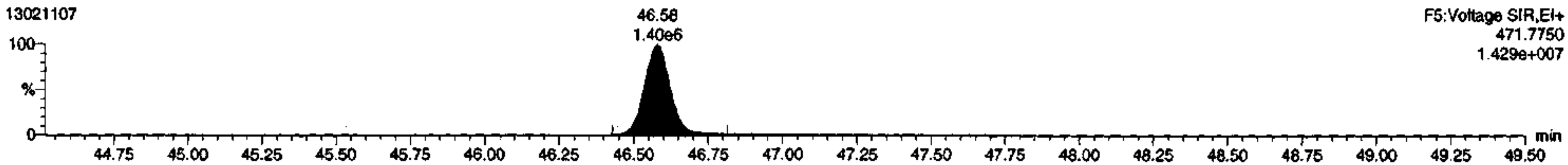
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:09 Pacific Standard Time

ID: CS2, Name: 13021107, Date: 11-Feb-2013, Time: 16:30:49, Conditions: AUTOSPEC01, User: pk

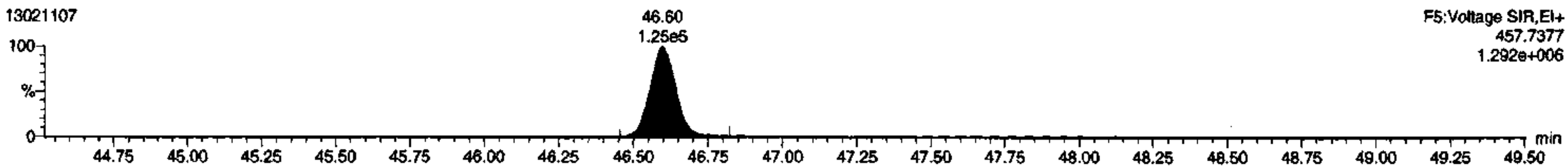
13C-OCDD
13021107



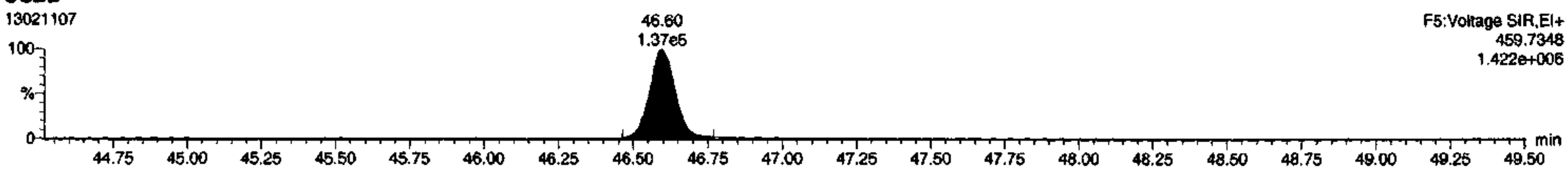
13C-OCDD
13021107



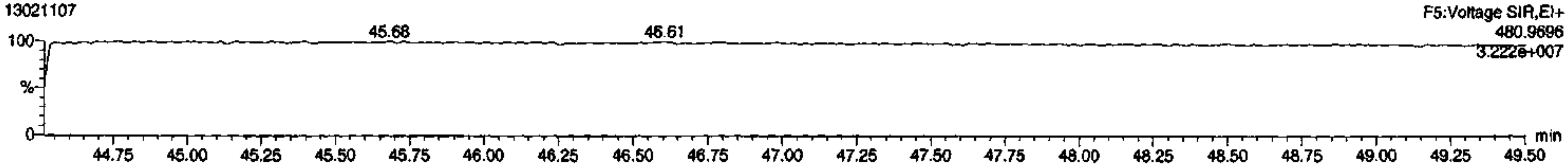
OCDD
13021107



OCDD
13021107



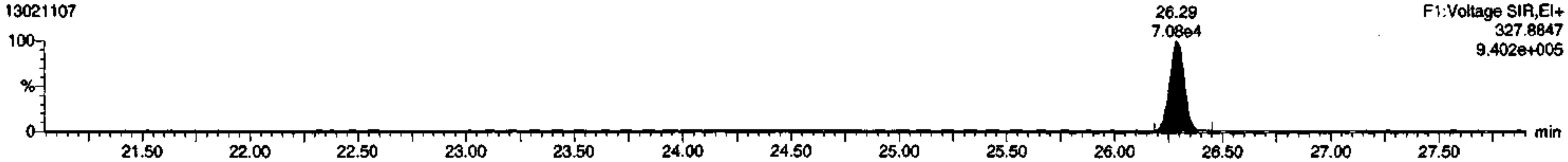
FUNCTION5 PFK
13021107



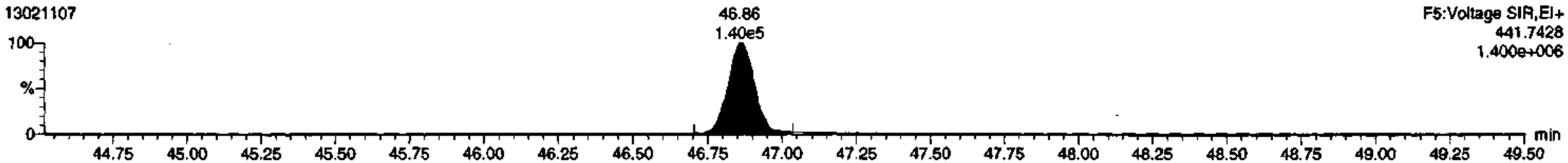
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:09 Pacific Standard Time

ID: CS2, Name: 13021107, Date: 11-Feb-2013, Time: 16:30:49, Conditions: AUTOSPEC01, User: pk

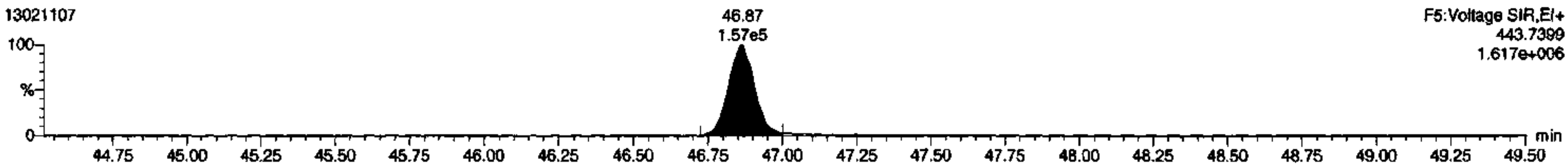
37CL-2378-TCDD
13021107



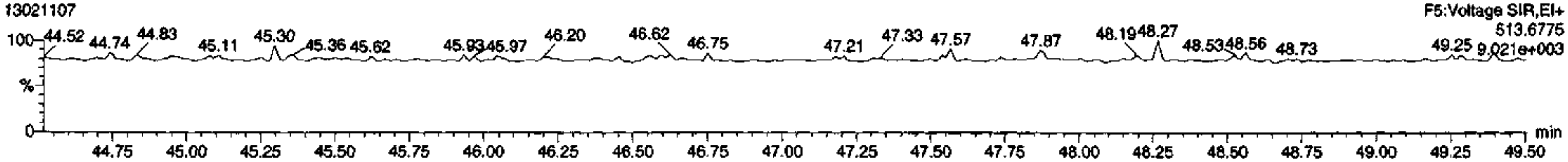
OCDF
13021107



OCDF
13021107



FUNCTION5 DCDPE
13021107



Quantify Sample Summary Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:19 Pacific Standard Time

Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 04 Feb 2013 12:23:30
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: CS3, Name: 13021108, Date: 11-Feb-2013, Time: 17:23:26, Conditions: AUTOSPEC01, User: pk

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[redacted]	13C-2378-TCDD	26.257	1.032	9.84e5	1.26e6	0.943	0.780	0.770	3661.1	NO		98.291
[redacted]	13C-12378-PeCDD	31.354	1.232	1.06e6	6.69e5	0.715	1.590	1.550	9642.2	NO		100.089
[redacted]	13C-123478-HxCDD	36.001	0.985	9.61e5	7.57e5	1.032	1.270	1.240	6467.6	NO		99.761
[redacted]	13C-123678-HxCDD	36.133	0.988	1.00e6	7.91e5	1.076	1.264	1.240	6604.1	NO		99.756
[redacted]	13C-1234678-HpCDD	40.835	1.117	7.10e5	6.80e5	0.838	1.044	1.050	5401.8	NO		99.440
[redacted]	13C-OCDD	46.571	1.274	1.06e6	1.20e6	0.675	0.887	0.890	4617.9	NO		200.935

Quantify Sample Summary Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:19 Pacific Standard Time

ID: CS3, Name: 13021108, Date: 11-Feb-2013, Time: 17:23:26, Conditions: AUTOSPEC01, User: pk

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	13C-123789-HxCDD	36.560	0.000	9.29e5	7.39e5	1.000	1.257	1.240	5943.8	NO		100.000
[redacted]	Total-tetrafurans			4.48e5		0.921						30.800
[redacted]	Total-penta1			1.04e6								66.870
[redacted]	Total-pentafurans			2.36e6		0.927						149.827
[redacted]	Total-hexafurans			3.20e6		1.062						259.881
[redacted]	Total-heptafurans			9.47e5		1.231						98.899
[redacted]	Total-Furans			8.61e6		1.065						706.641
[redacted]	Total-tetradioxins			5.93e5		1.106						53.966
[redacted]	Total-pentadioxins			1.87e6		1.001						176.945
[redacted]	Total-hexadioxins			1.99e6		0.937						219.171
[redacted]	Total-heptadioxins			7.99e5		1.029						109.572
[redacted]	Total-Dioxins			5.78e6		0.994						658.698
[redacted]	Total-TEQ			1.44e7								1365.339
[redacted]	37CL-2378-TCDD	26.287	1.033	2.41e5		1.051			1766.3			9.448
[redacted]	FUNCTION1 PFK			4.87e5								
[redacted]	FUNCTION2 PFK			5.21e5								0.000
[redacted]	FUNCTION3 PFK			2.60e5								0.000
[redacted]	FUNCTION4 PFK			1.45e6								
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[redacted]	FUNCTION1 HXCDPE			3.67e2								0.000
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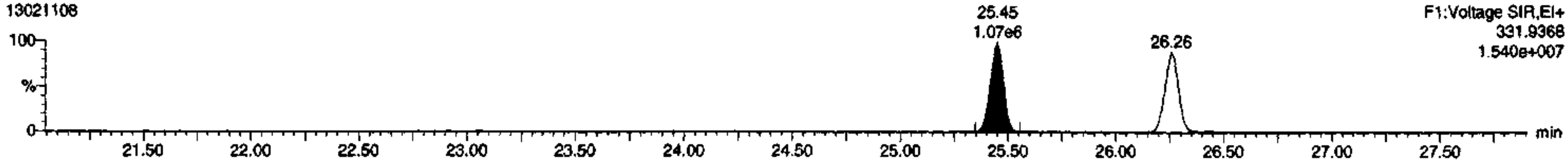
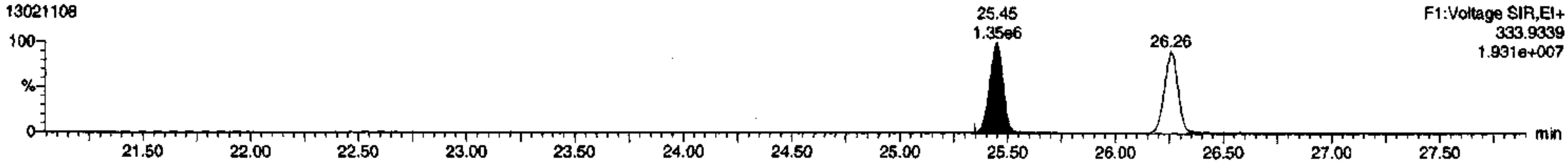
[redacted]	FUNCTION2 HPCDPE			1.88e3								0.000
[redacted]	FUNCTION3 OCDPE			0.00e0								
[redacted]	FUNCTION4 NCDPE			0.00e0								
[redacted]	FUNCTION5 DCDPE			0.00e0								

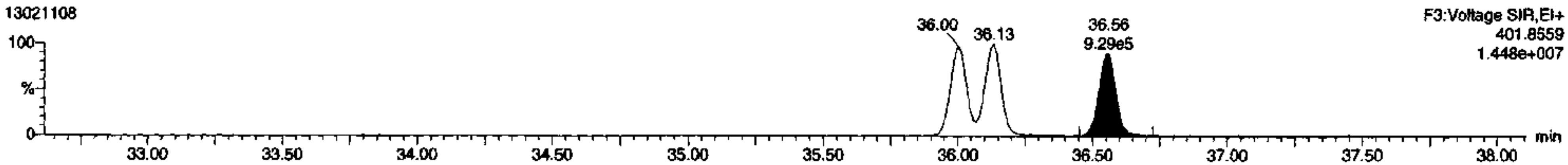
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:19 Pacific Standard Time

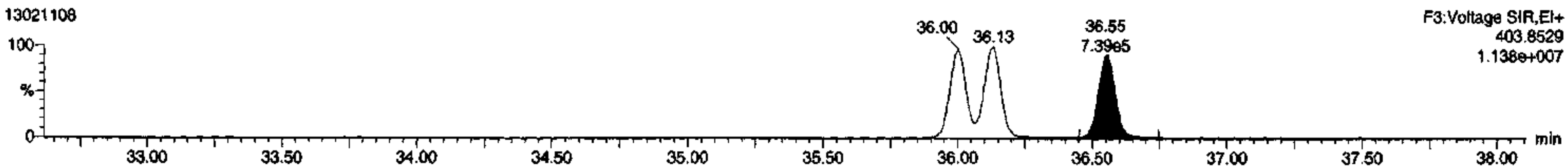
Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 04 Feb 2013 12:23:30
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: CS3, Name: 13021108, Date: 11-Feb-2013, Time: 17:23:26, Conditions: AUTOSPEC01, User: pk

13C-1234-TCDD
13021108


13C-1234-TCDD
13021108


13C-123789-HxCDD
13021108


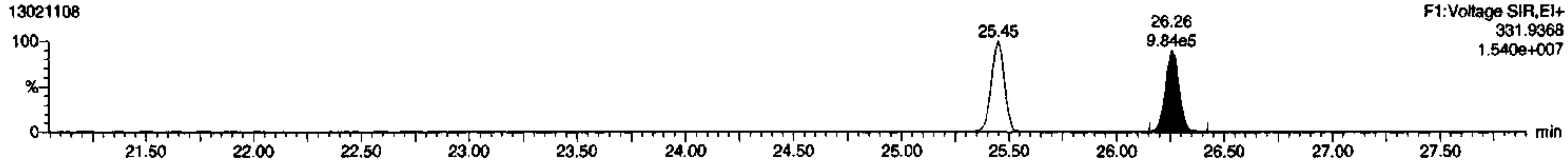
13C-123789-HxCDD
13021108


WE03 : 00100

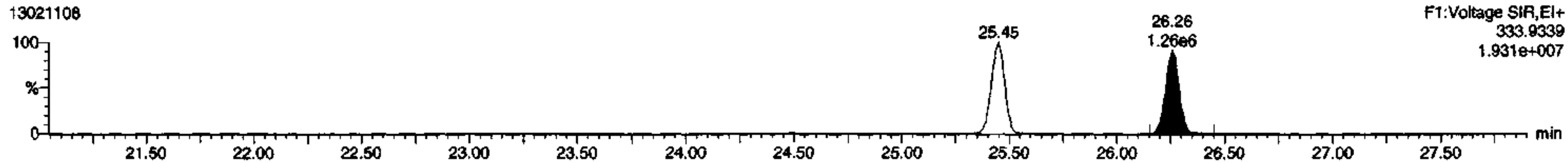
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:19 Pacific Standard Time

ID: CS3, Name: 13021108, Date: 11-Feb-2013, Time: 17:23:26, Conditions: AUTOSPEC01, User: pk

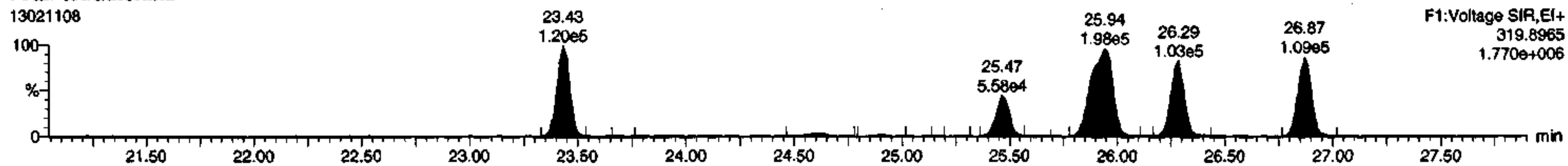
13C-2378-TCDD



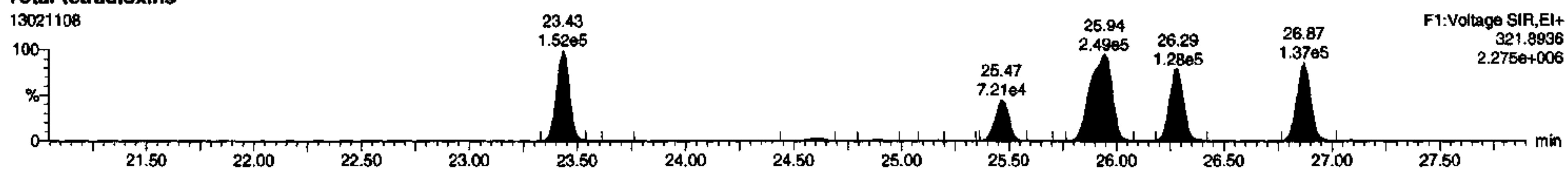
13C-2378-TCDD



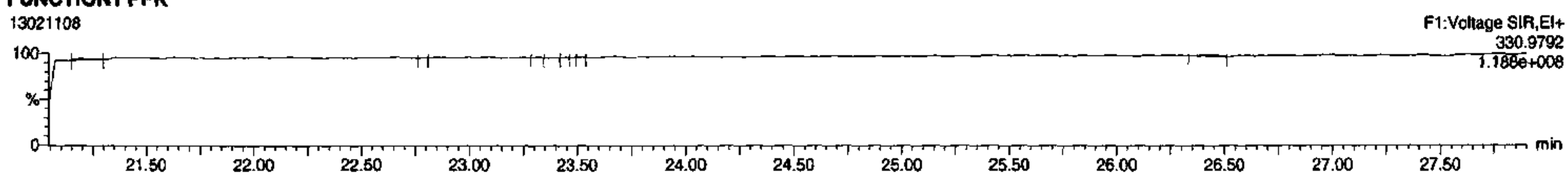
Total-tetradioxins



Total-tetradioxins



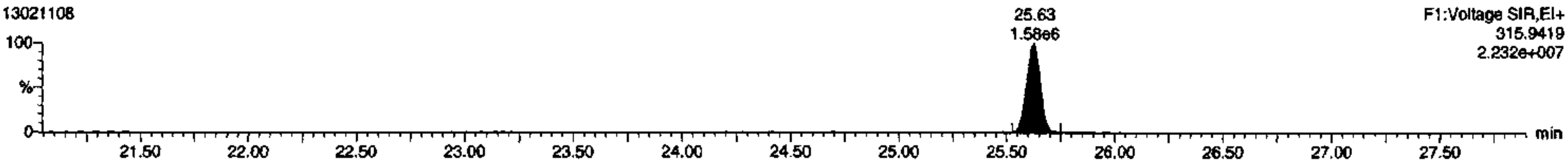
FUNCTION1 PFK



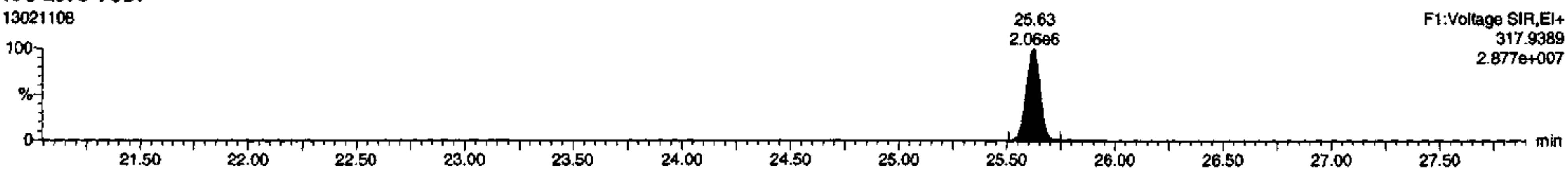
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:19 Pacific Standard Time

ID: CS3, Name: 13021108, Date: 11-Feb-2013, Time: 17:23:26, Conditions: AUTOSPEC01, User: pk

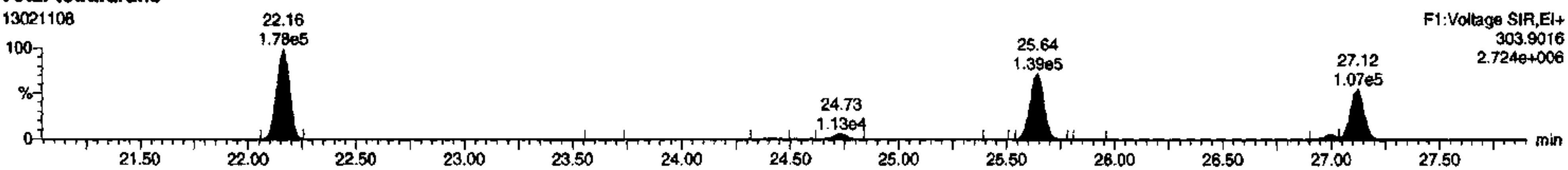
13C-2378-TCDF
13021108



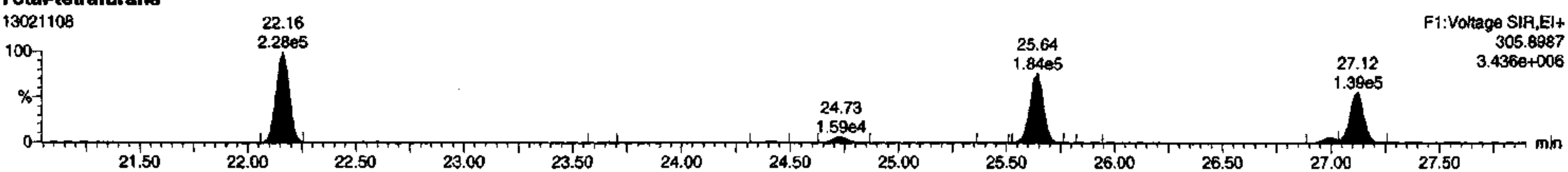
13C-2378-TCDF
13021108



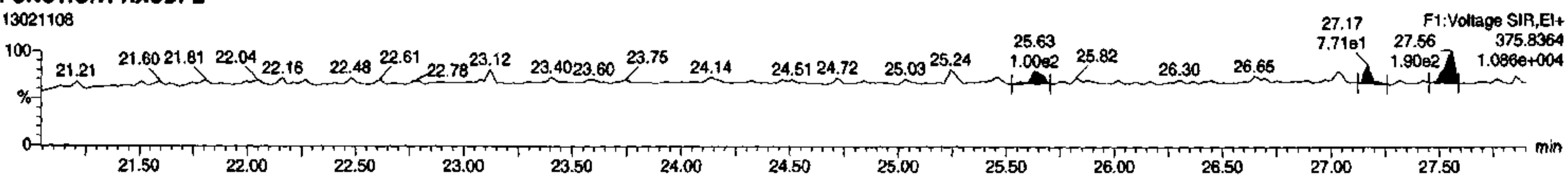
Total-tetrafurans
13021108



Total-tetrafurans
13021108



FUNCTION1 HXCDPE
13021108

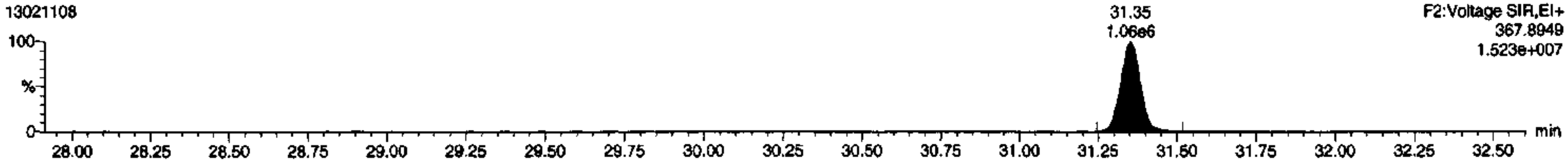


WE03 : 00102

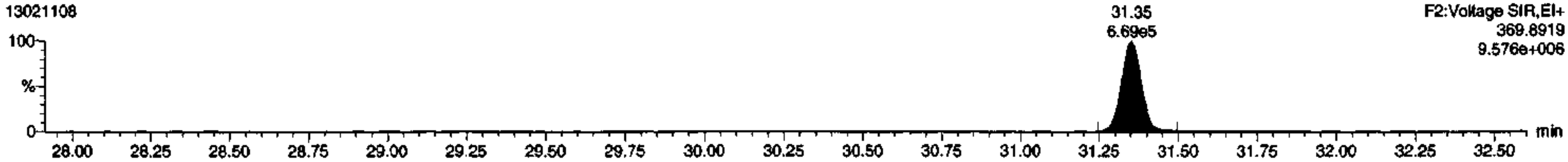
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:19 Pacific Standard Time

ID: CS3, Name: 13021108, Date: 11-Feb-2013, Time: 17:23:26, Conditions: AUTOSPEC01, User: pk

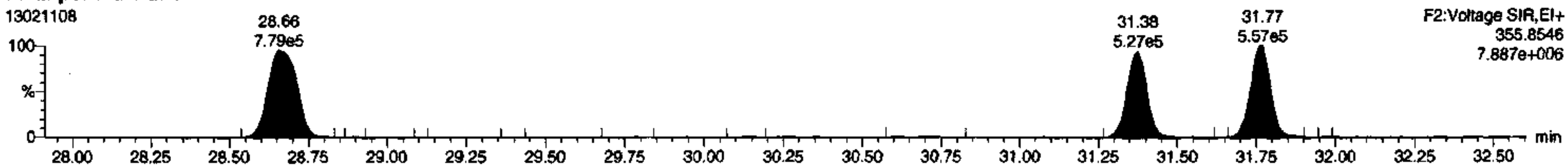
13C-12378-PeCDD



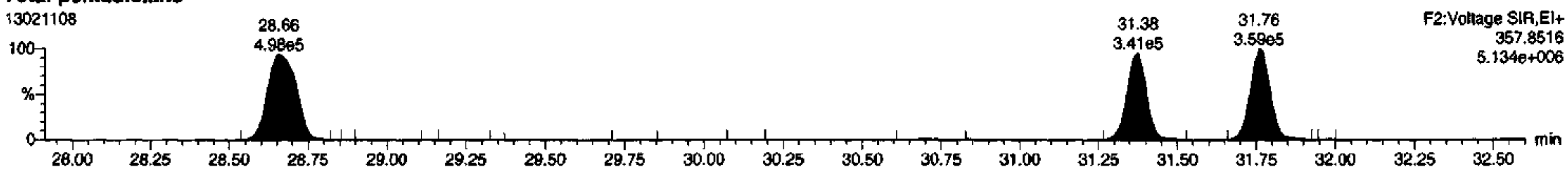
13C-12378-PeCDD



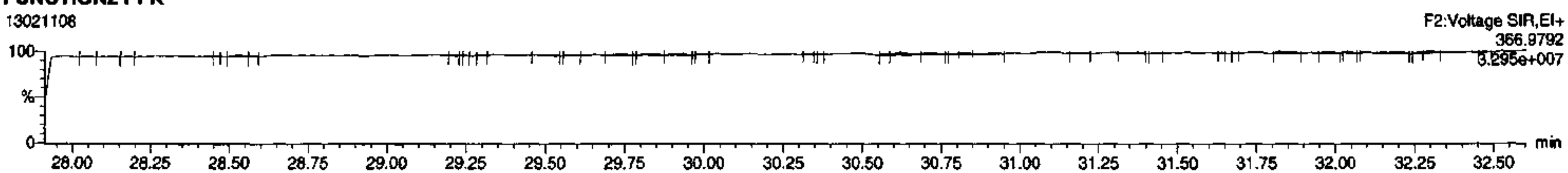
Total-pentadioxins



Total-pentadioxins



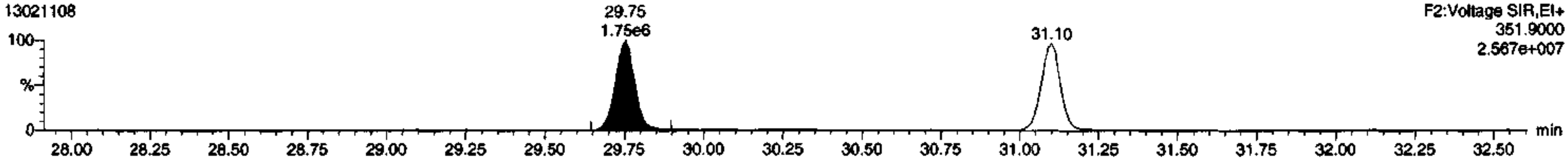
FUNCTION2 PFK



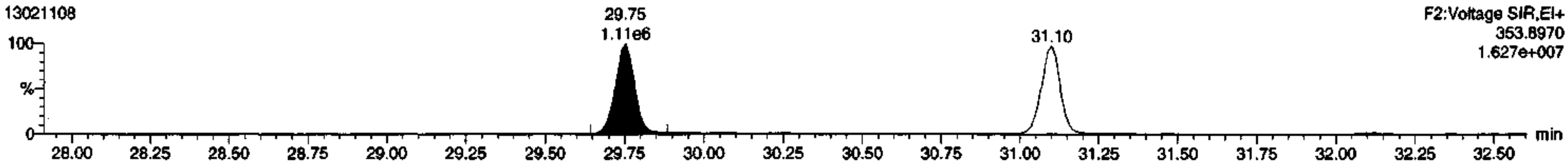
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:19 Pacific Standard Time

ID: CS3, Name: 13021108, Date: 11-Feb-2013, Time: 17:23:26, Conditions: AUTOSPEC01, User: pk

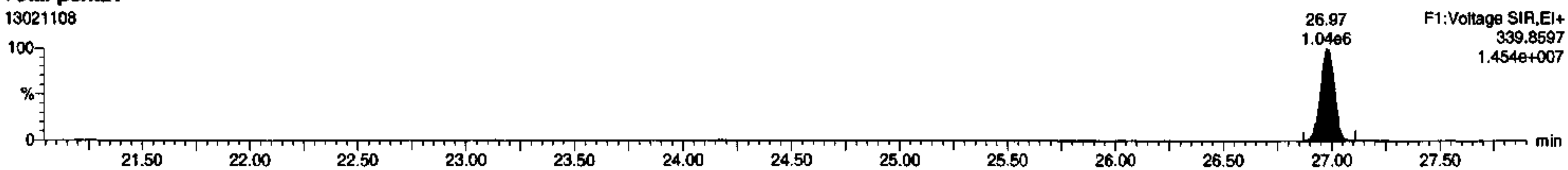
13C-12378-PeCDF



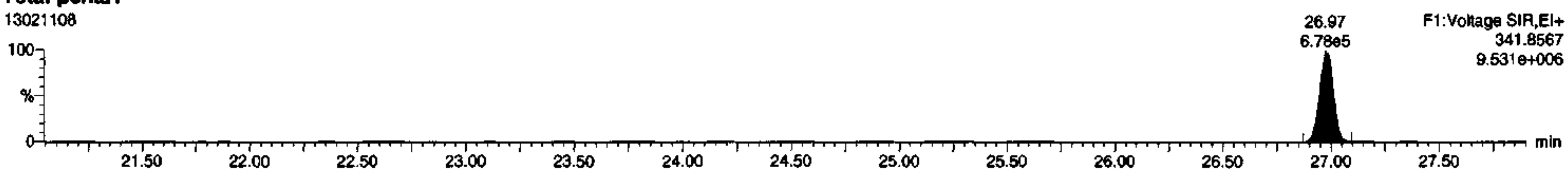
13C-12378-PeCDF



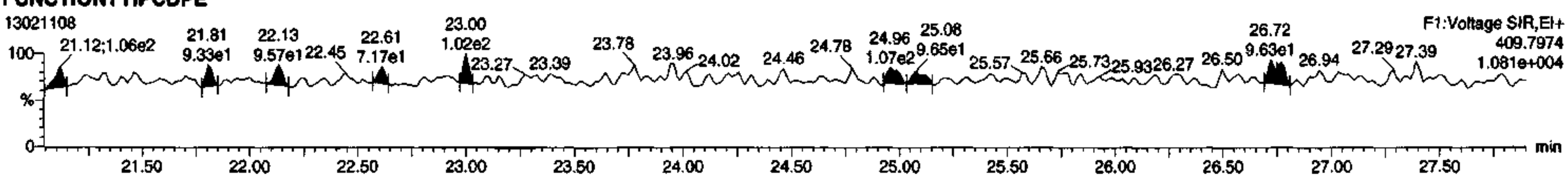
Total-penta1



Total-penta1



FUNCTION1 HPCDPE



Quantify Sample Report **MassLynx 4.1 SCN 714**

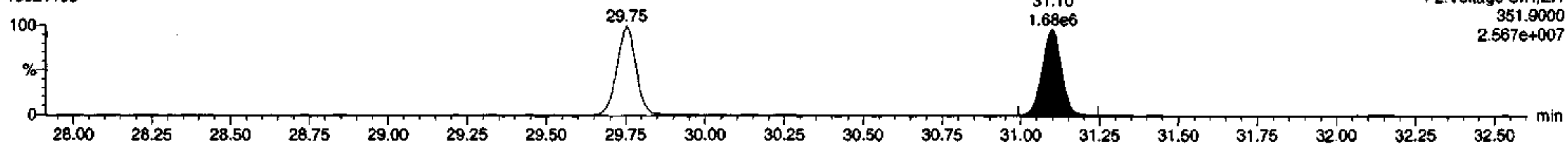
Dataset: P:\DIOXIN8290.PRO\130211IC.qld

Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time

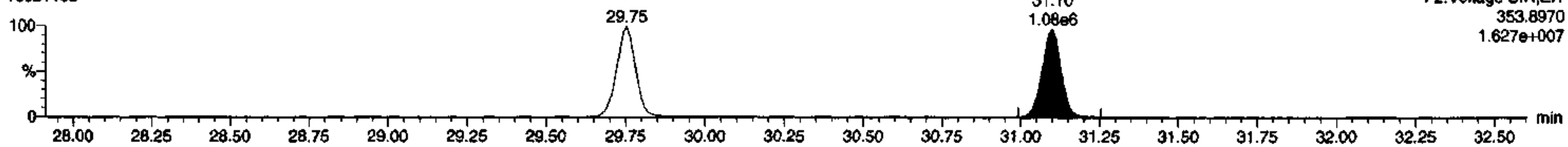
Printed: Tuesday, February 12, 2013 09:36:19 Pacific Standard Time

ID: CS3, Name: 13021108, Date: 11-Feb-2013, Time: 17:23:26, Conditions: AUTOSPEC01, User: pk

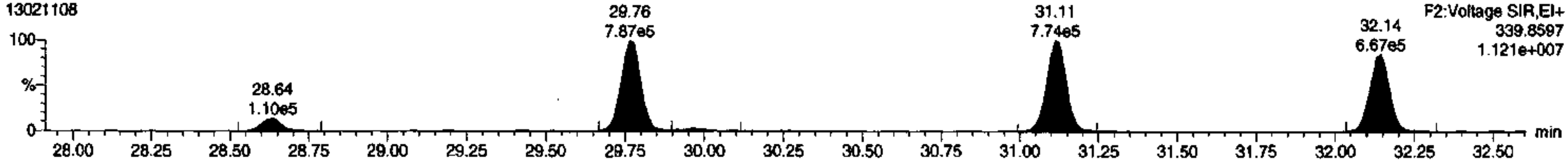
13C-23478-PeCDF



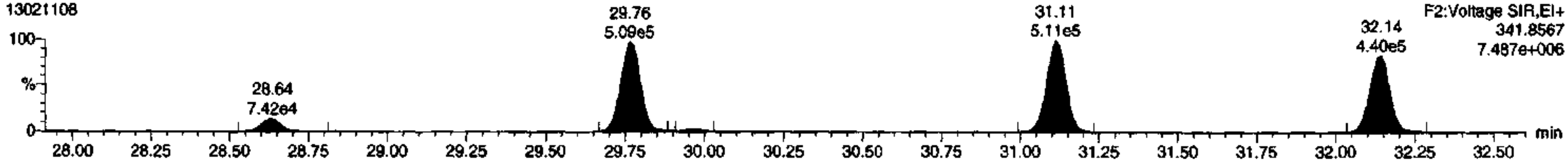
13C-23478-PeCDF



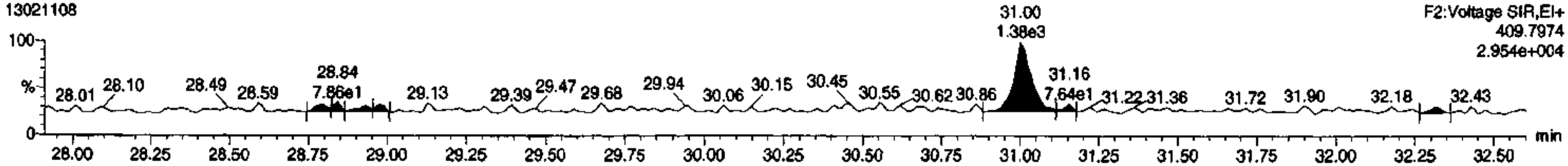
Total-pentafurans



Total-pentafurans



FUNCTION2 HPCDPE



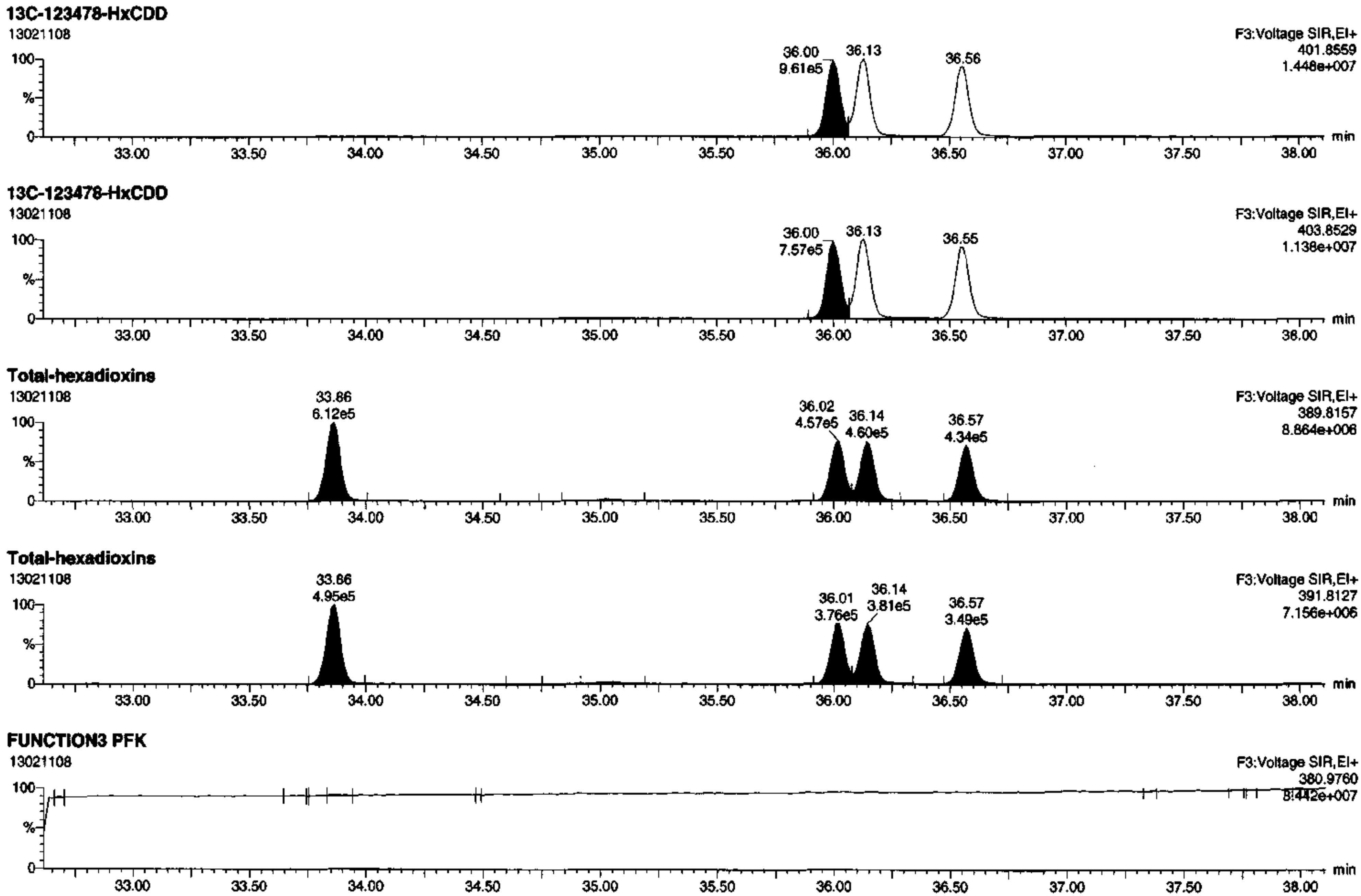
Quantify Sample Report **MassLynx 4.1 SCN 714**

Dataset: P:\DIOXIN8290.PRO\130211IC.qld

Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time

Printed: Tuesday, February 12, 2013 09:36:19 Pacific Standard Time

ID: CS3, Name: 13021108, Date: 11-Feb-2013, Time: 17:23:26, Conditions: AUTOSPEC01, User: pk



Quantify Sample Report **MassLynx 4.1 SCN 714**

Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
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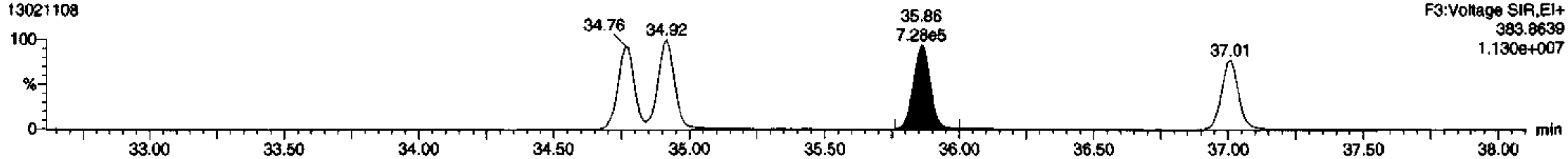
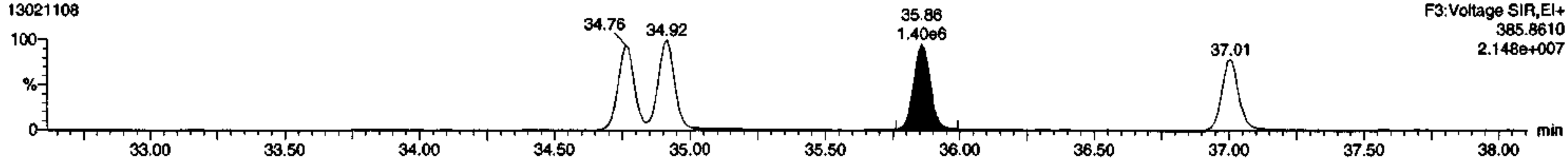
ID: CS3, Name: 13021108, Date: 11-Feb-2013, Time: 17:23:26, Conditions: AUTOSPEC01, User: pk

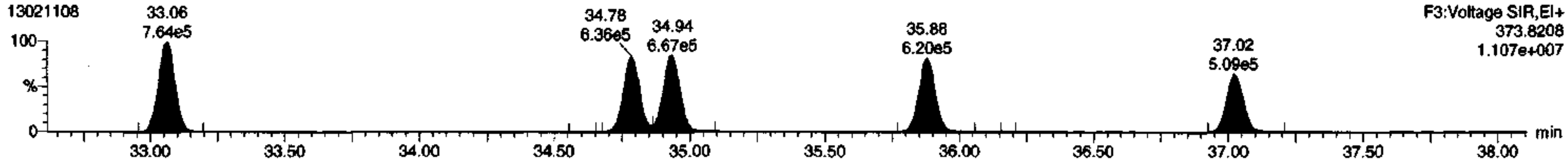
13C-234678-HxCDF



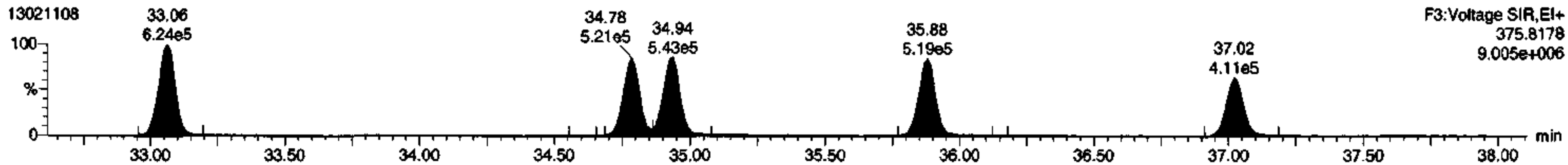
13C-234678-HxCDF



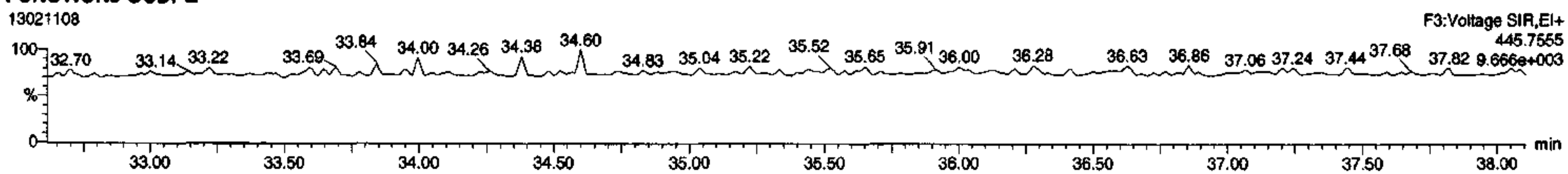
Total-hexafurans



Total-hexafurans



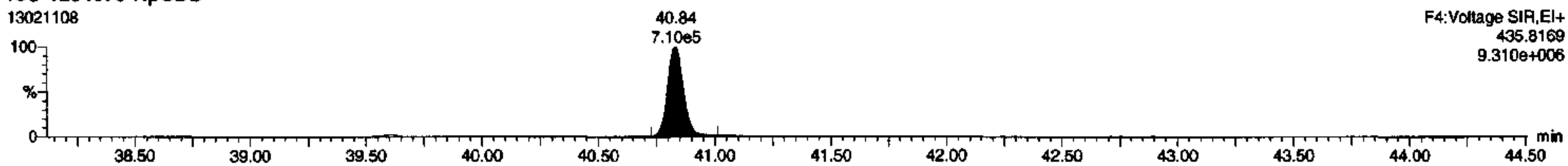
FUNCTION3 OCDPE



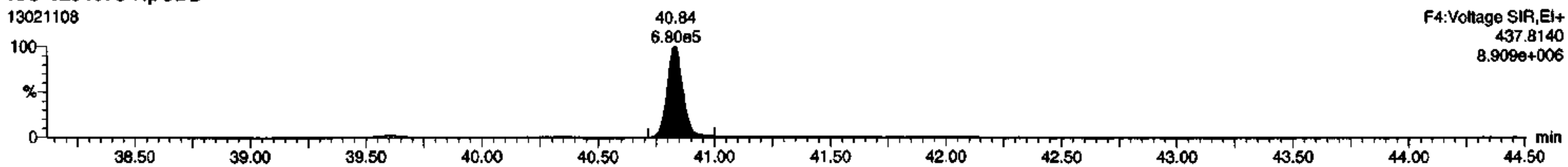
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:19 Pacific Standard Time

ID: CS3, Name: 13021108, Date: 11-Feb-2013, Time: 17:23:26, Conditions: AUTOSPEC01, User: pk

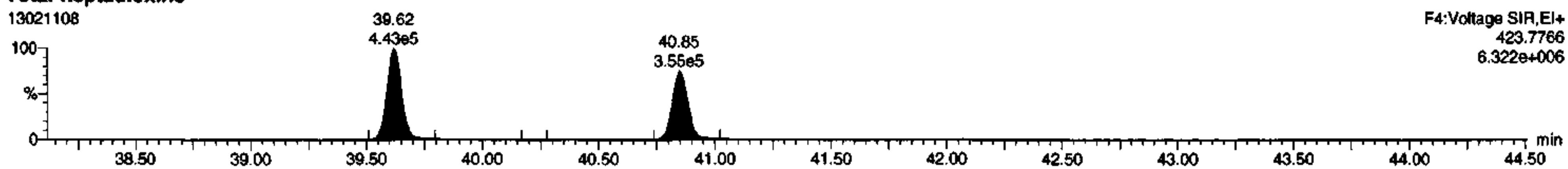
13C-1234678-HpCDD



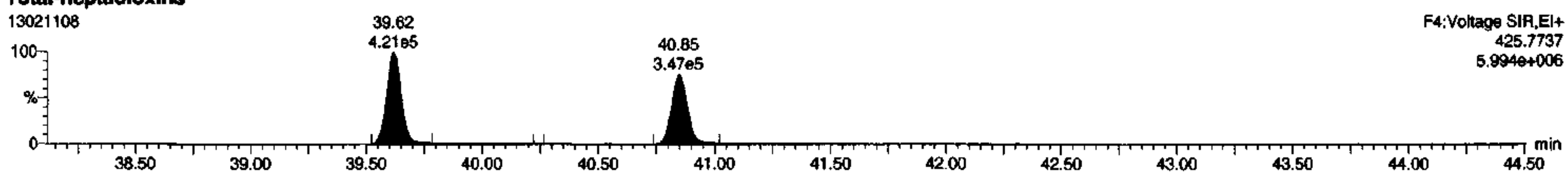
13C-1234678-HpCDD



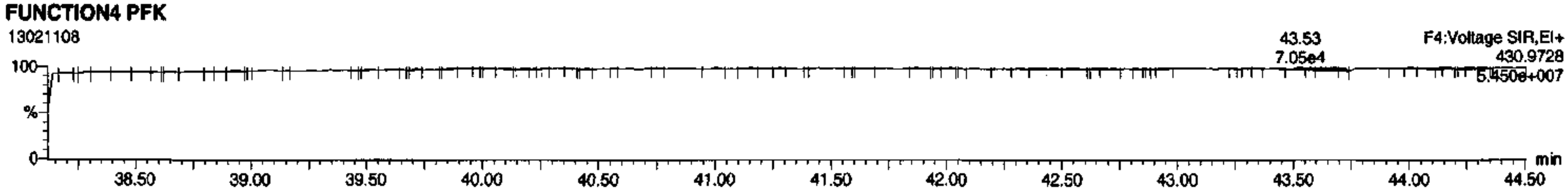
Total-heptadioxins



Total-heptadioxins



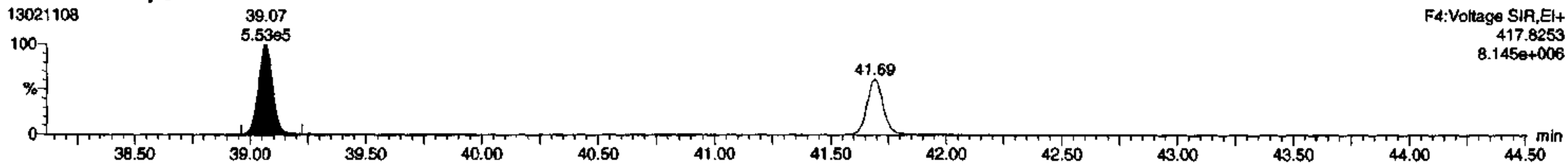
FUNCTION4 PFK



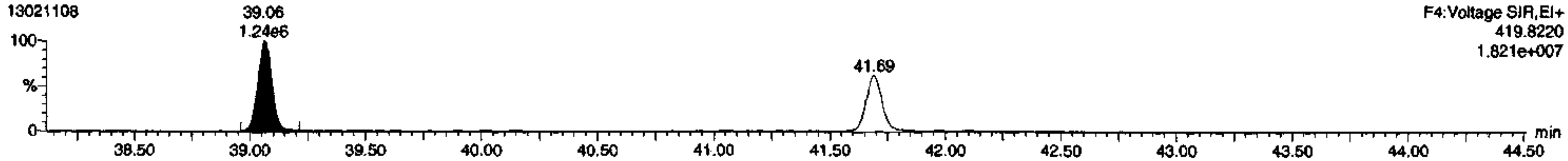
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:19 Pacific Standard Time

ID: CS3, Name: 13021108, Date: 11-Feb-2013, Time: 17:23:26, Conditions: AUTOSPEC01, User: pk

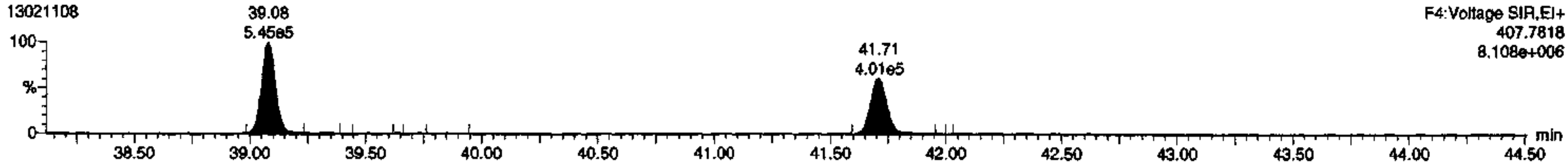
13C-1234678-HpCDF



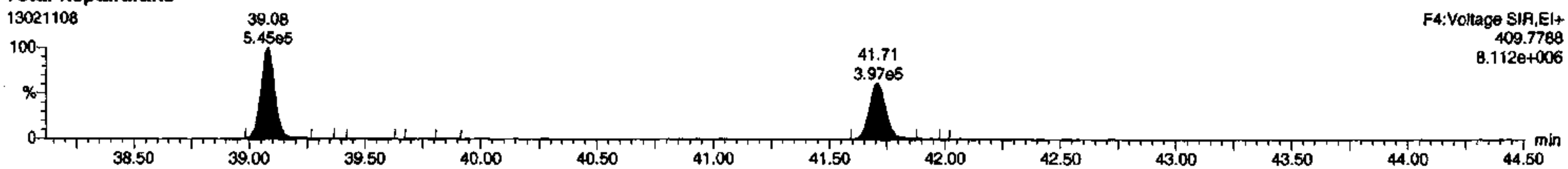
13C-1234678-HpCDF



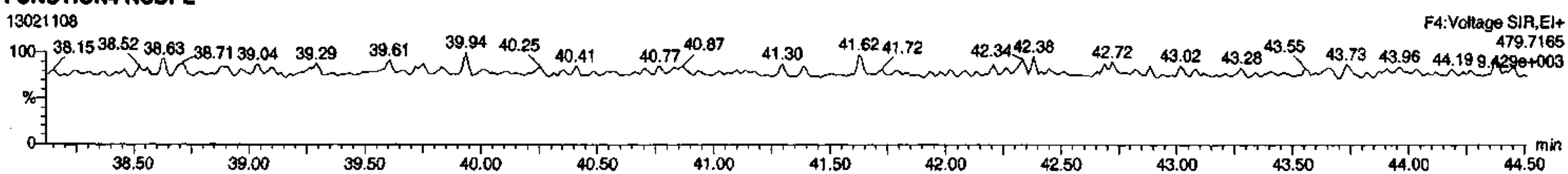
Total-heptafurans



Total-heptafurans



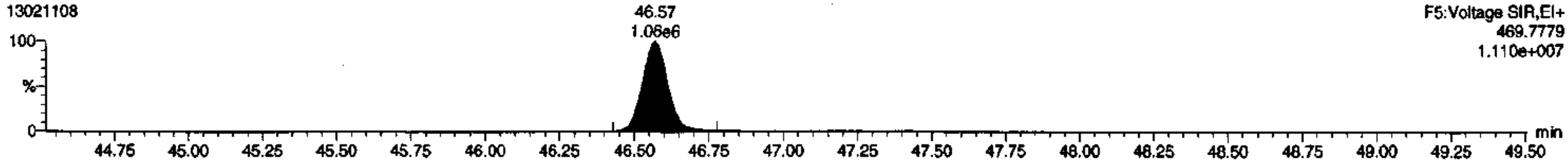
FUNCTION4 NCDPE



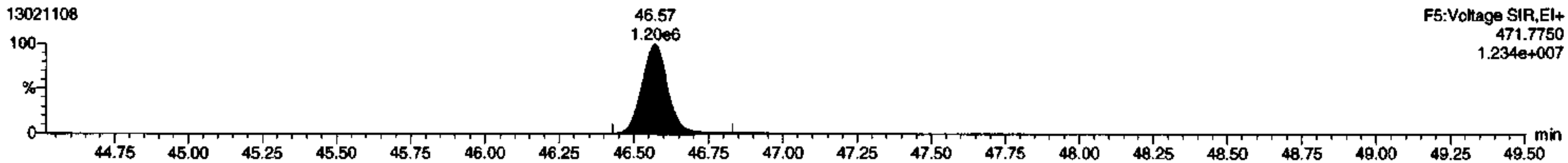
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:19 Pacific Standard Time

ID: CS3, Name: 13021108, Date: 11-Feb-2013, Time: 17:23:26, Conditions: AUTOSPEC01, User: pk

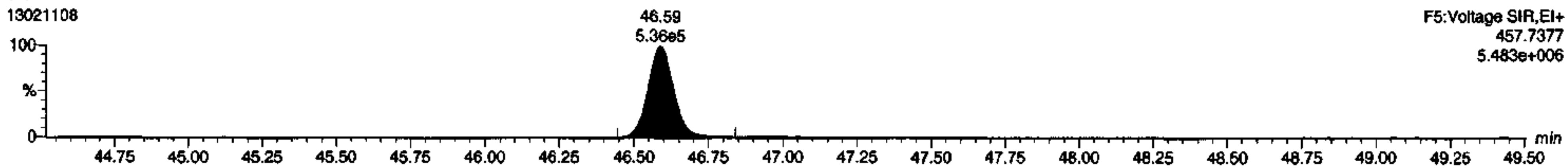
13C-OCDD



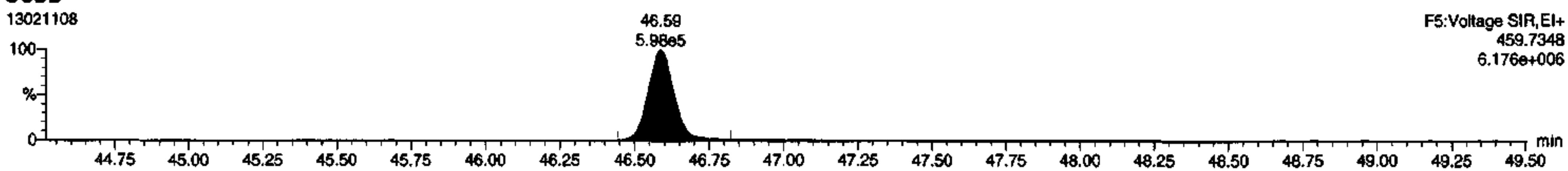
13C-OCDD



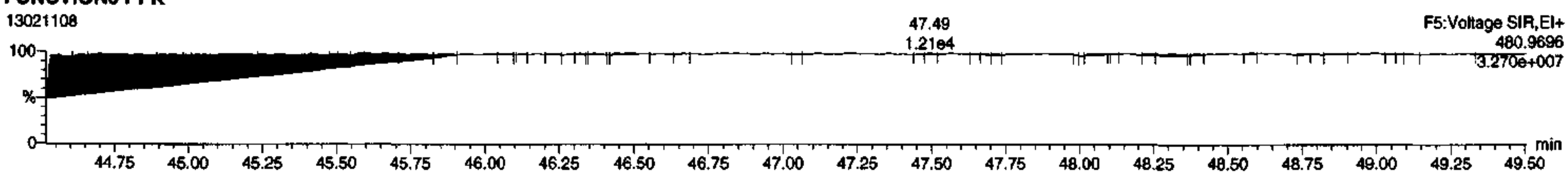
OCDD



OCDD



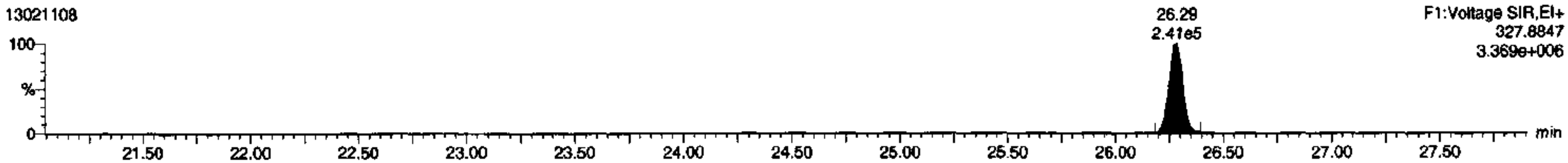
FUNCTION5 PFK



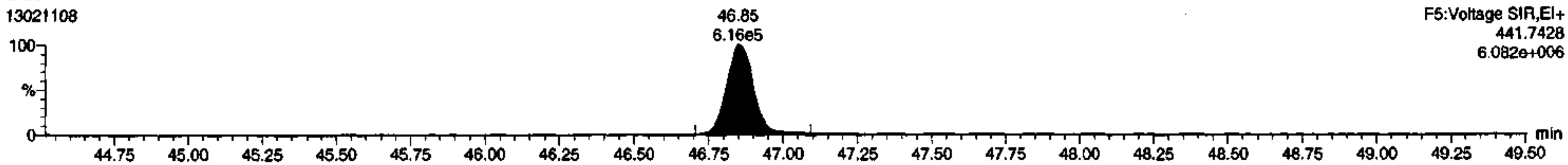
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:19 Pacific Standard Time

ID: CS3, Name: 13021108, Date: 11-Feb-2013, Time: 17:23:26, Conditions: AUTOSPEC01, User: pk

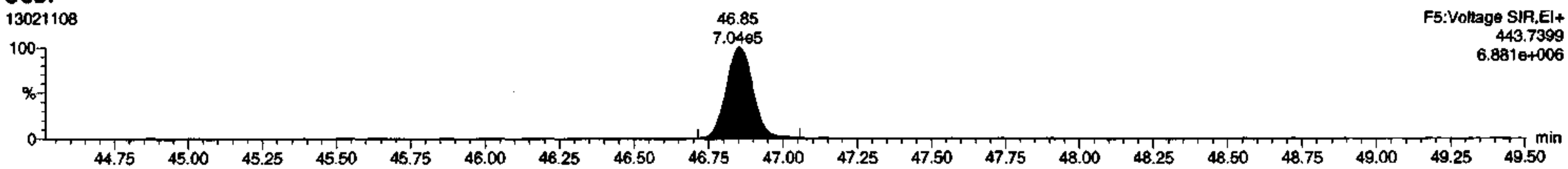
37CL-2378-TCDD



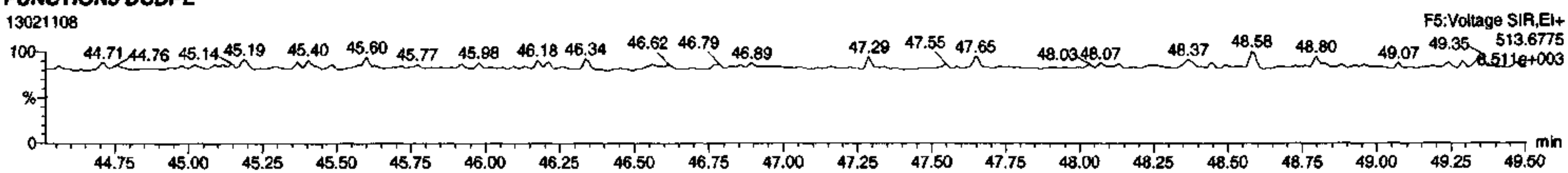
OCDF



OCDF



FUNCTION5 DCDPE



Quantify Sample Summary Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:29 Pacific Standard Time

Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 04 Feb 2013 12:23:30
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: CS4, Name: 13021109, Date: 11-Feb-2013, Time: 18:16:11, Conditions: AUTOSPEC01, User: pk

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[redacted]	23478-PeCDF	31.124	1.000	5.15e6	3.40e6	0.943	1.515	1.550	21879.3	NO	201.853	201.853
[redacted]	123478-HxCDF	34.796	1.001	4.01e6	3.29e6	1.101	1.219	1.240	10685.5	NO	199.678	199.678
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[redacted]	123678-HxCDF	34.939	1.000	4.25e6	3.47e6	1.056	1.224	1.240	10924.9	NO	205.904	205.904
[redacted]	123789-HxCDF	37.033	1.000	3.24e6	2.64e6	1.017	1.227	1.240	8357.5	NO	202.090	202.090
[redacted]	1234678-HpCDF	39.093	1.000	3.48e6	3.46e6	1.238	1.006	1.050	12120.2	NO	203.696	203.696
[redacted]	1234789-HpCDF	41.724	1.001	2.51e6	2.47e6	1.224	1.014	1.050	7530.0	NO	204.460	204.460
[redacted]	OCDF	46.859	1.006	3.95e6	4.48e6	1.162	0.882	0.890	17865.0	NO	408.614	408.614
[redacted]	2378-TCDD	26.288	1.001	7.01e5	9.08e5	1.106	0.772	0.770	10622.7	NO	38.483	38.483
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Quantify Sample Summary Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:29 Pacific Standard Time

ID: CS4, Name: 13021109, Date: 11-Feb-2013, Time: 18:16:11, Conditions: AUTOSPEC01, User: pk

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	13C-123789-HxCDD	38.561	0.000	1.43e6	1.15e6	1.000	1.247	1.240	9804.5	NO		100.000
[redacted]	Total-tetrafurans			9.80e5		0.921						39.546
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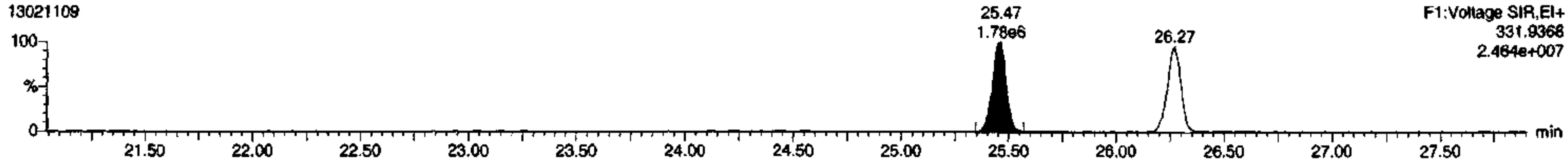
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:29 Pacific Standard Time

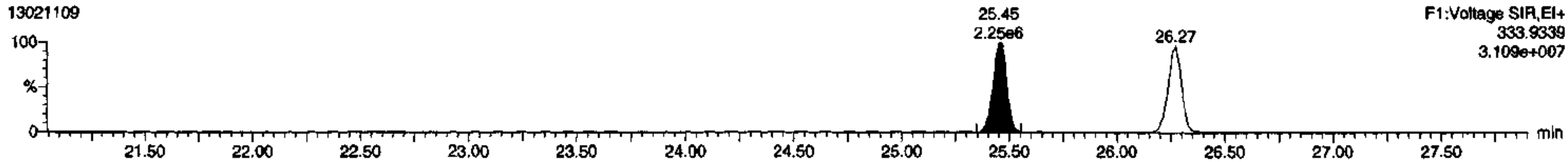
Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 04 Feb 2013 12:23:30
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: CS4, Name: 13021109, Date: 11-Feb-2013, Time: 18:16:11, Conditions: AUTOSPEC01, User: pk

13C-1234-TCDD
13021109



13C-1234-TCDD
13021109



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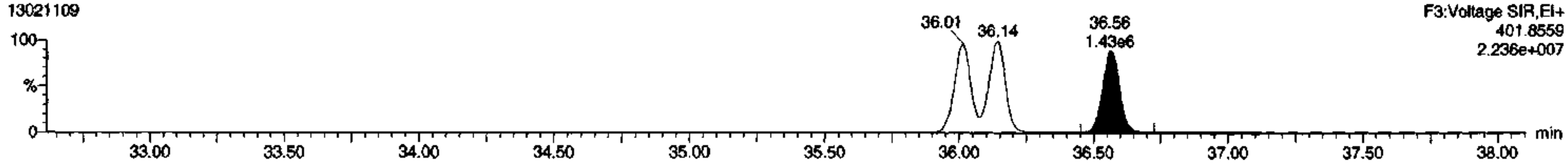
13021109



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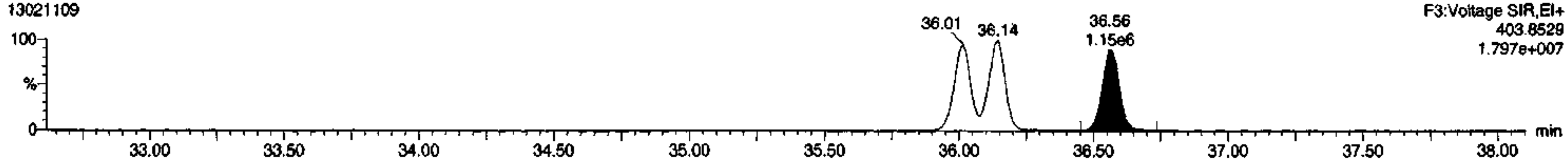
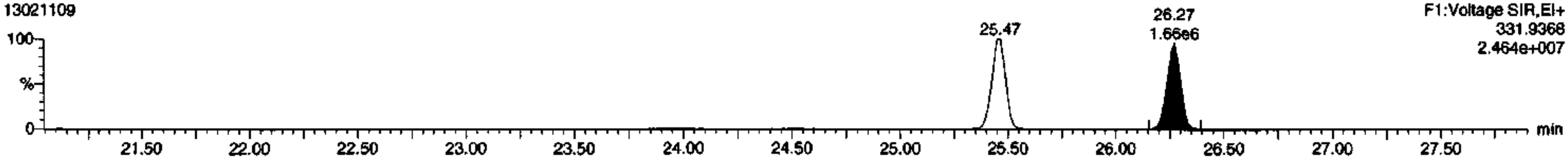
13021109



Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:29 Pacific Standard Time

ID: CS4, Name: 13021109, Date: 11-Feb-2013, Time: 18:16:11, Conditions: AUTOSPEC01, User: pk

13C-2378-TCDD



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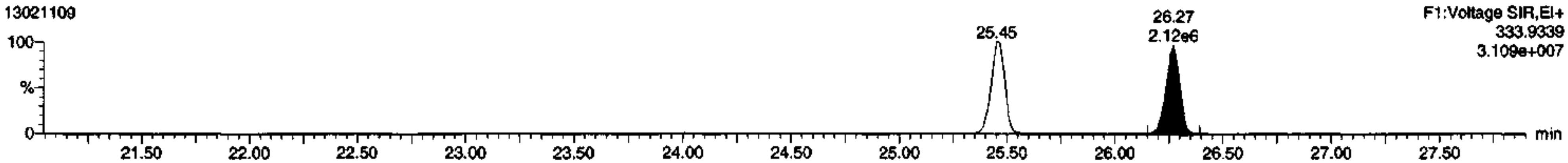
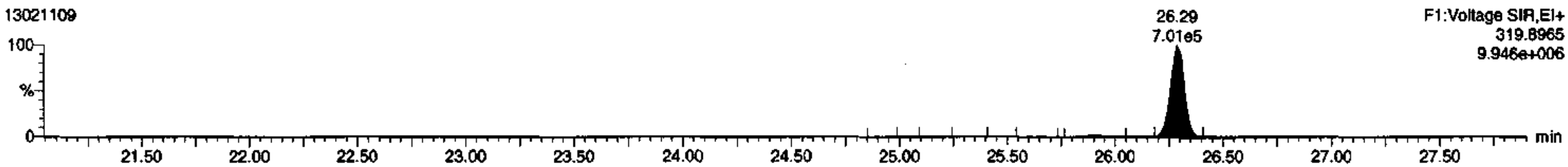
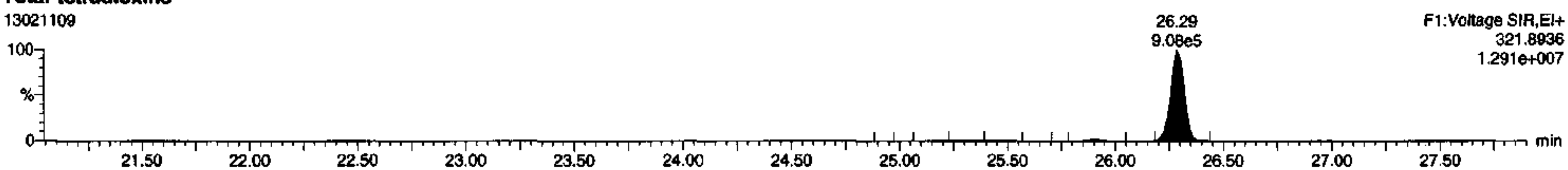


Total-tetradioxins



Total-tetradioxins



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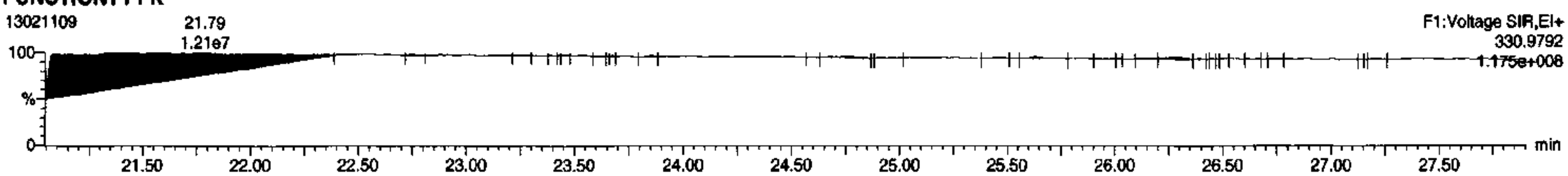
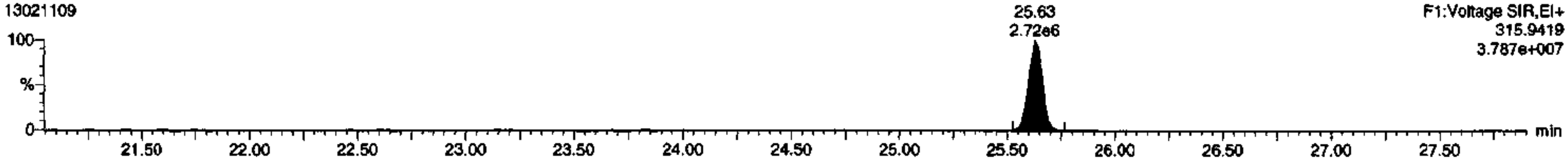


Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:29 Pacific Standard Time

ID: CS4, Name: 13021109, Date: 11-Feb-2013, Time: 18:16:11, Conditions: AUTOSPEC01, User: pk

13C-2378-TCDF



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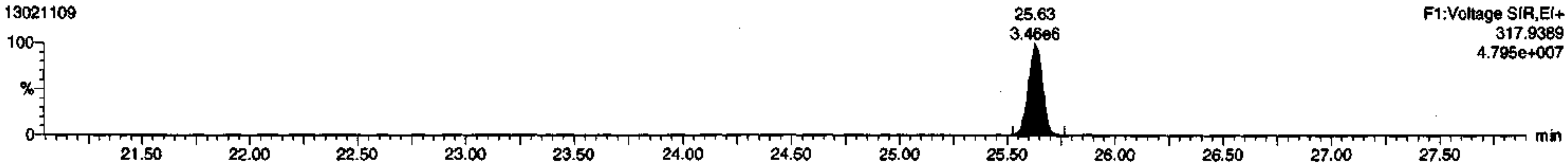
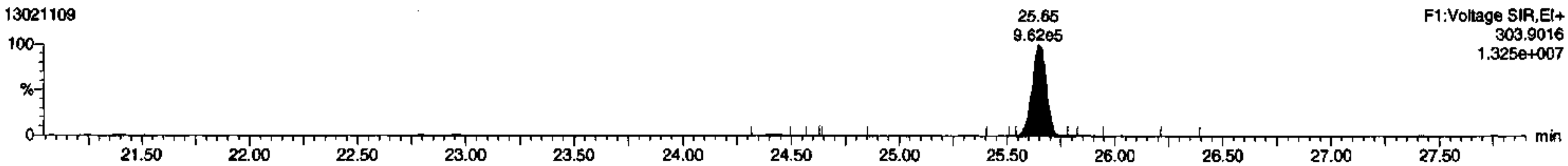
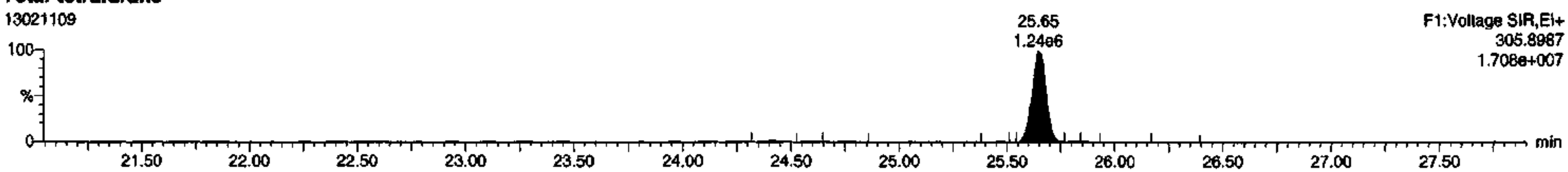


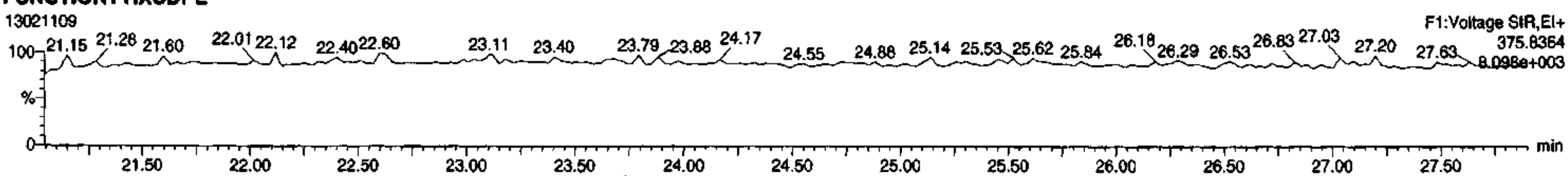
Total-tetrafurans



Total-tetrafurans



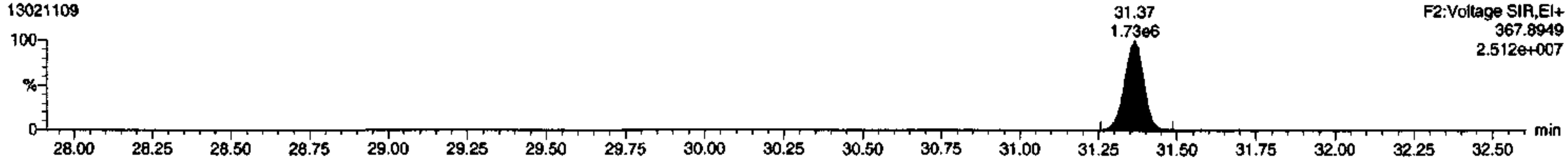
FUNCTION1 HXCDPE



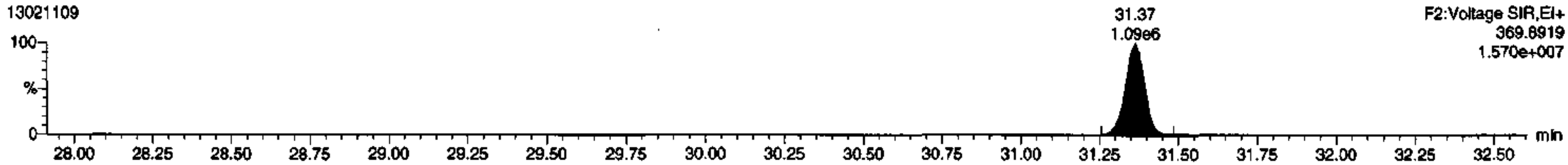
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:29 Pacific Standard Time

ID: CS4, Name: 13021109, Date: 11-Feb-2013, Time: 18:16:11, Conditions: AUTOSPEC01, User: pk

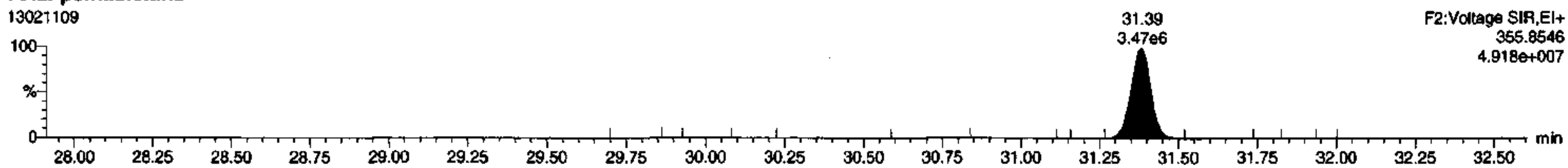
13C-12378-PeCDD



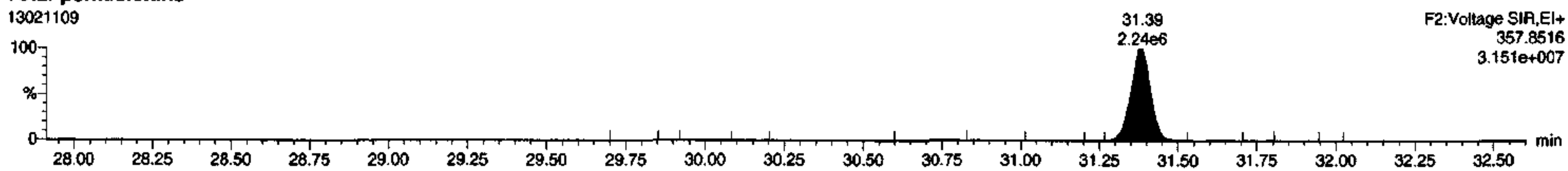
13C-12378-PeCDD



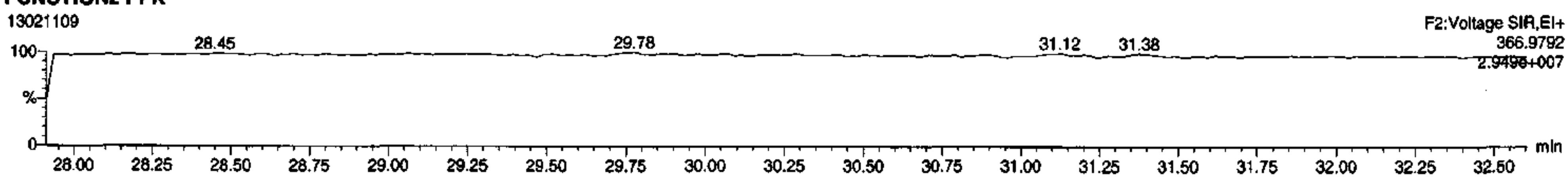
Total-pentadioxins



Total-pentadioxins



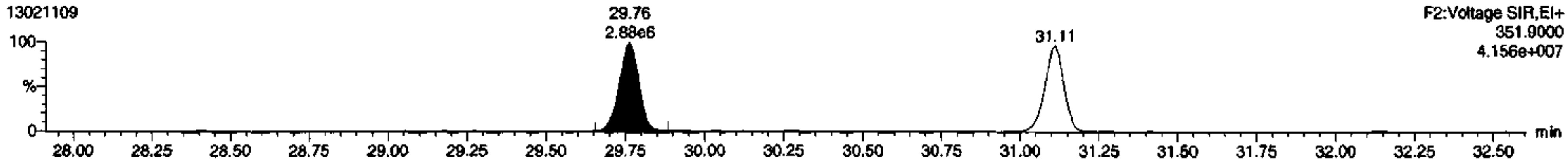
FUNCTION2 PFK



Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:29 Pacific Standard Time

ID: CS4, Name: 13021109, Date: 11-Feb-2013, Time: 18:16:11, Conditions: AUTOSPEC01, User: pk

13C-12378-PeCDF



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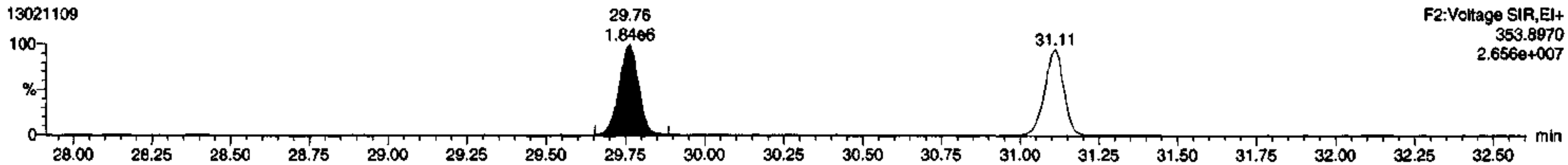
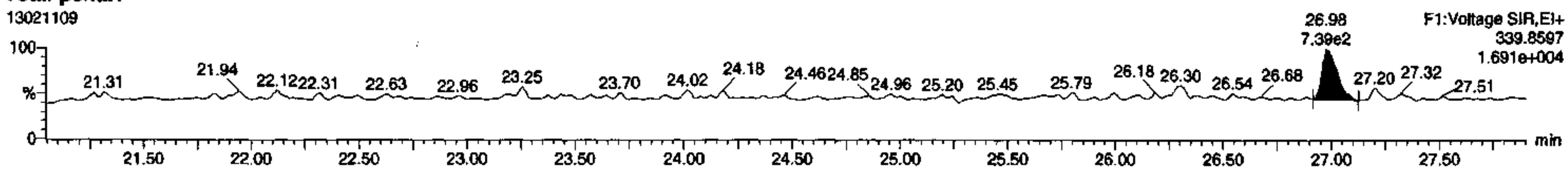
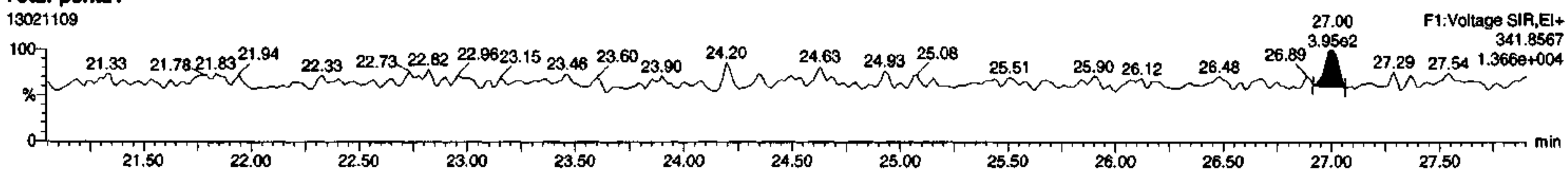


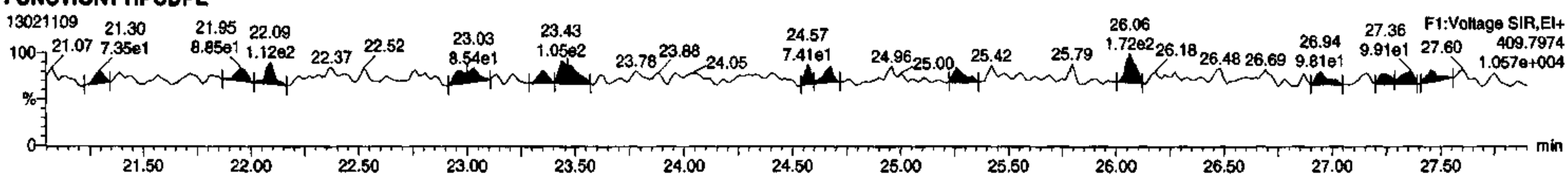
Total-penta1



Total-penta1



FUNCTION1 HPCDPE



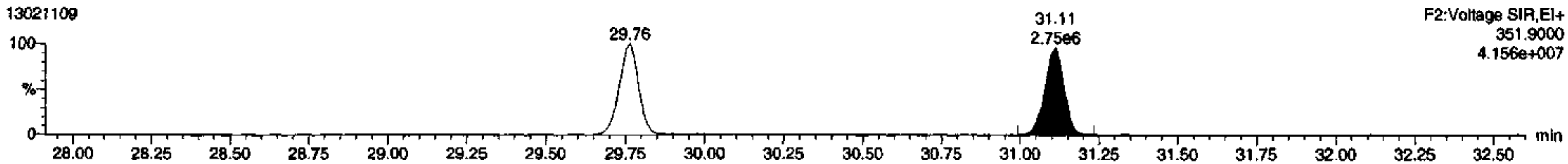
Dataset: P:\DIOXIN8290.PRO\130211IC.qld

Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time

Printed: Tuesday, February 12, 2013 09:36:29 Pacific Standard Time

ID: CS4, Name: 13021109, Date: 11-Feb-2013, Time: 18:16:11, Conditions: AUTOSPEC01, User: pk

13C-23478-PeCDF



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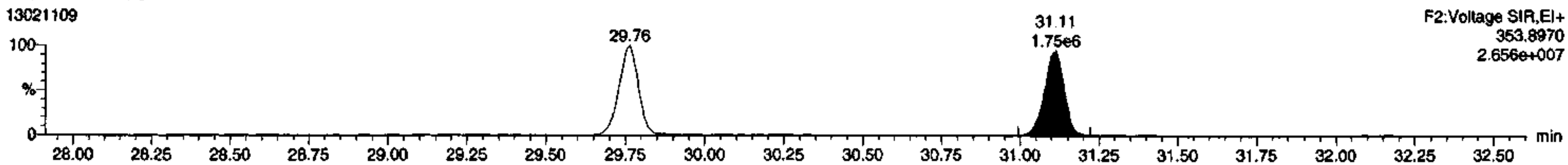
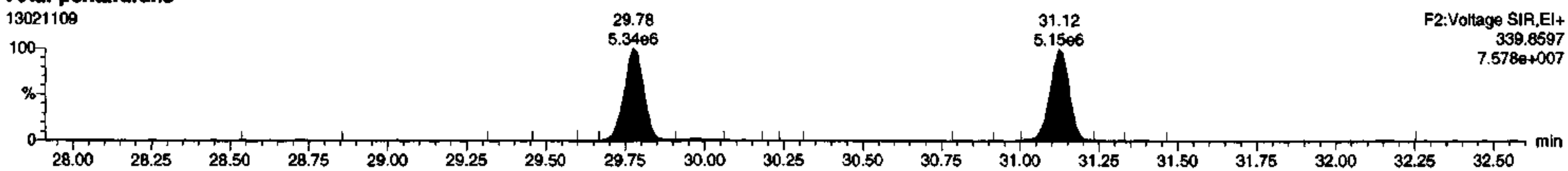
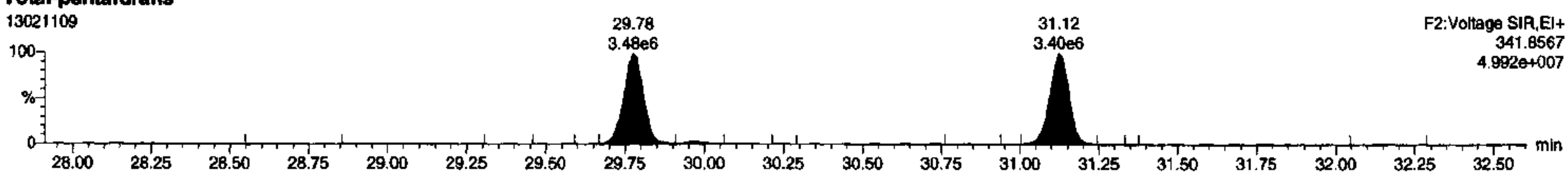


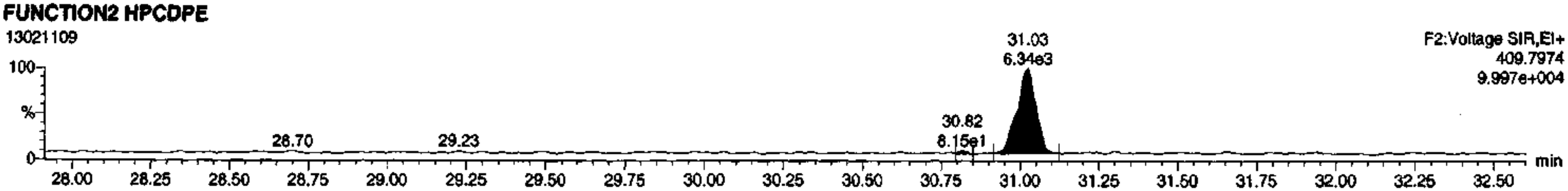
Total-pentafurans



Total-pentafurans



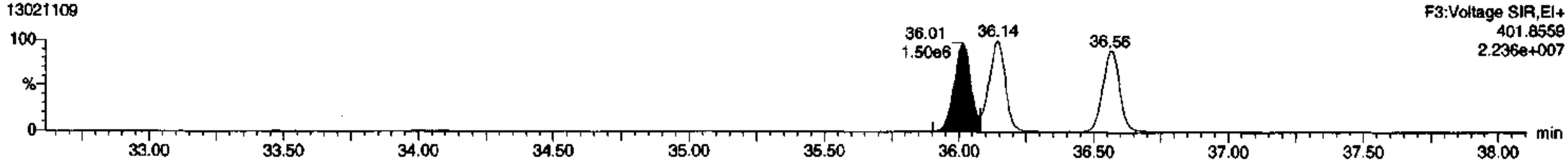
FUNCTION2 HPCDPE



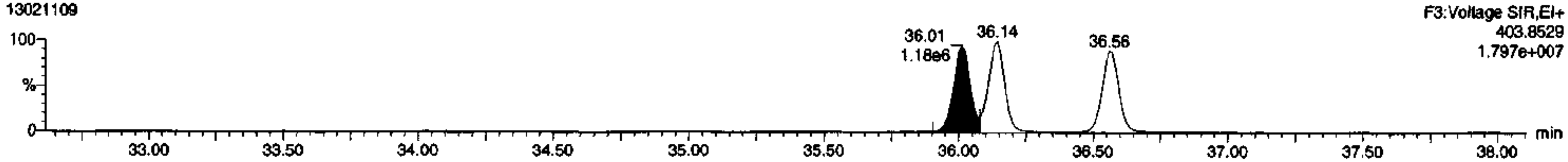
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:29 Pacific Standard Time

ID: CS4, Name: 13021109, Date: 11-Feb-2013, Time: 18:16:11, Conditions: AUTOSPEC01, User: pk

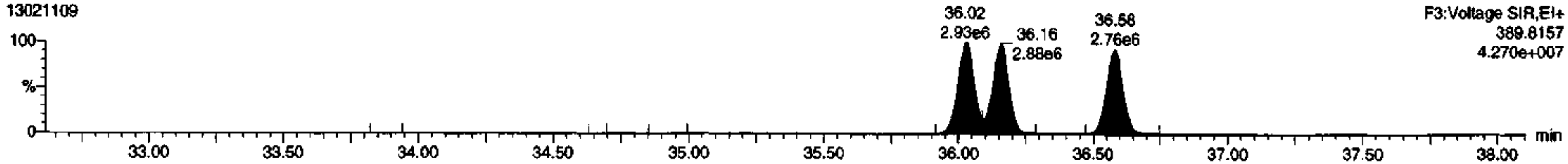
13C-123478-HxCDD
13021109



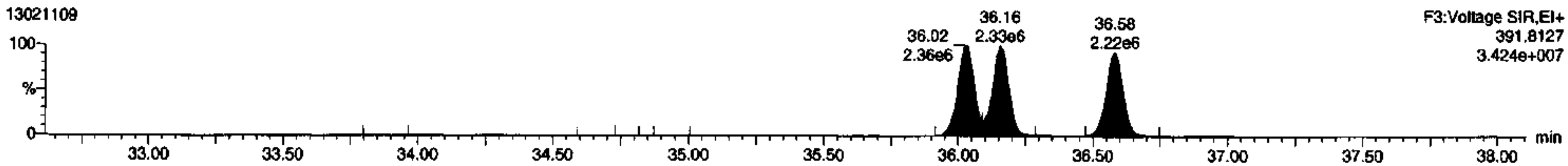
13C-123478-HxCDD
13021109



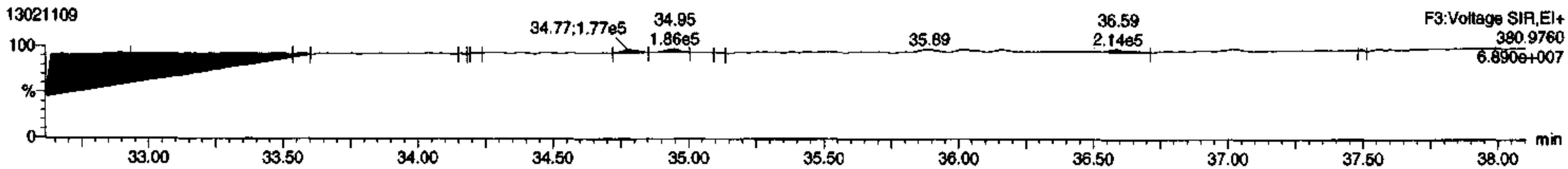
Total-hexadioxins
13021109



Total-hexadioxins
13021109



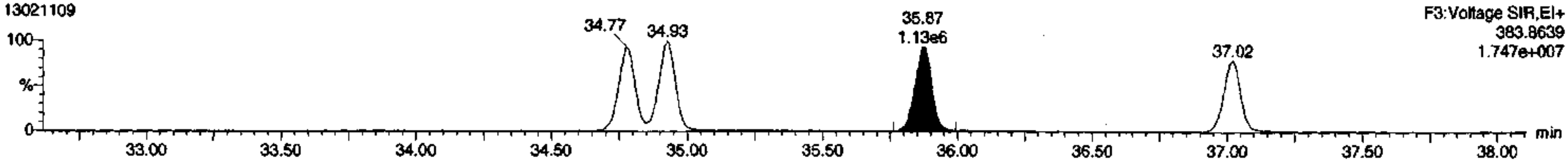
FUNCTION3 PFK
13021109



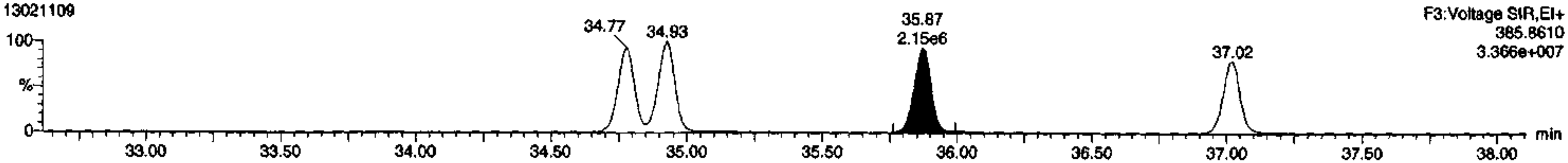
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:29 Pacific Standard Time

ID: CS4, Name: 13021109, Date: 11-Feb-2013, Time: 18:16:11, Conditions: AUTOSPEC01, User: pk

13C-234678-HxCDF
13021109



13C-234678-HxCDF
13021109



Total-hexafurans
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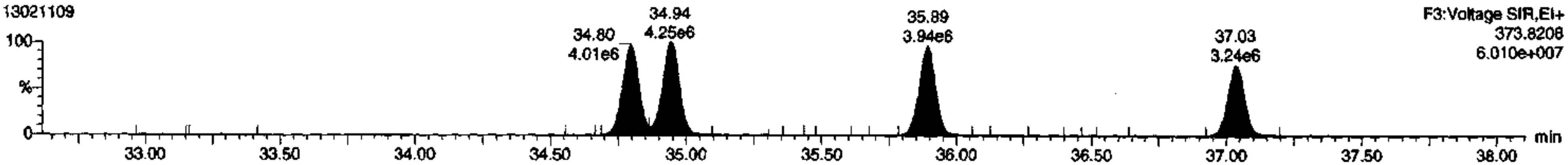

Total-hexafurans
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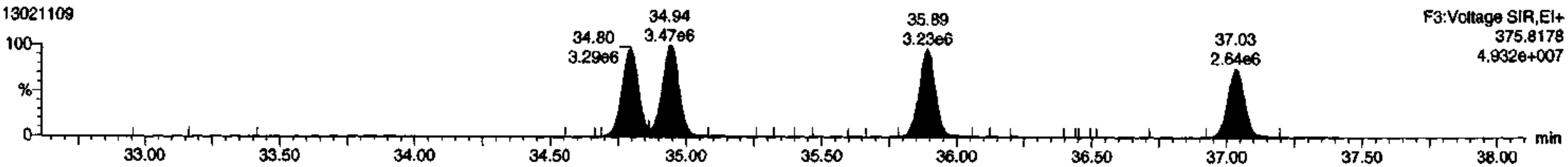
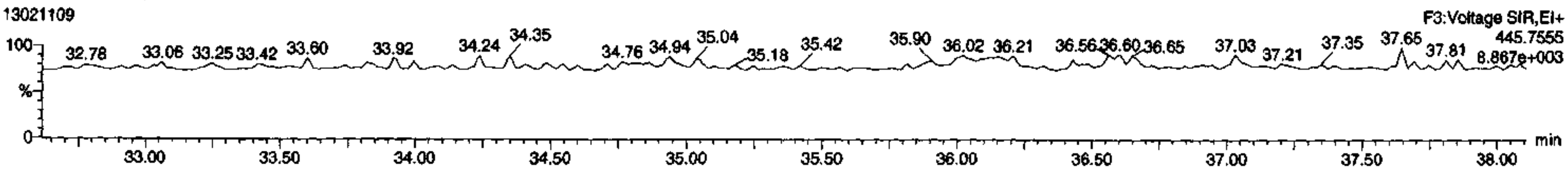


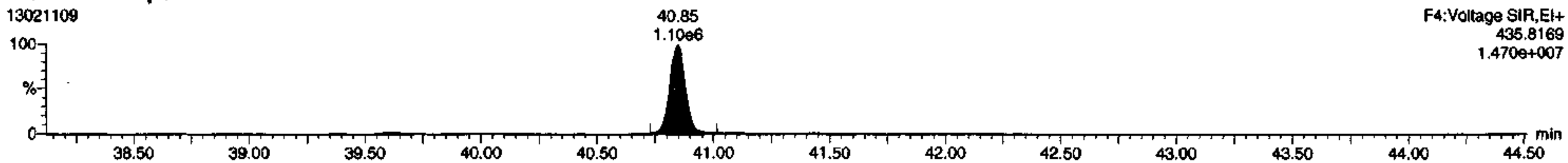
FUNCTION3 OCDPE
13021109



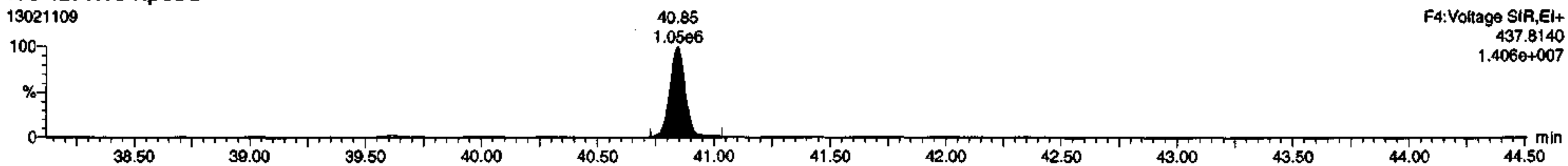
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:29 Pacific Standard Time

ID: CS4, Name: 13021109, Date: 11-Feb-2013, Time: 18:16:11, Conditions: AUTOSPEC01, User: pk

13C-1234678-HpCDD



13C-1234678-HpCDD



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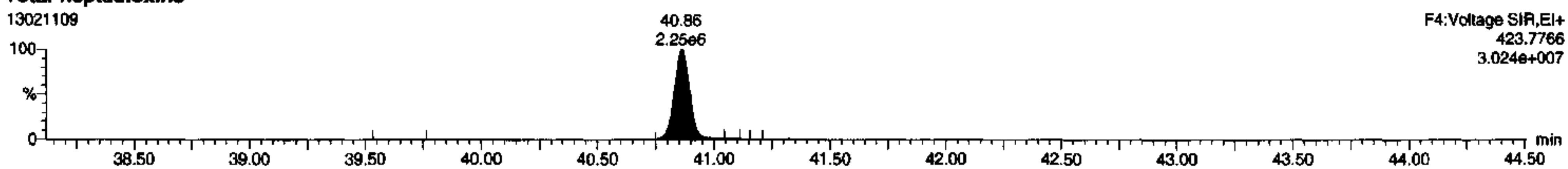
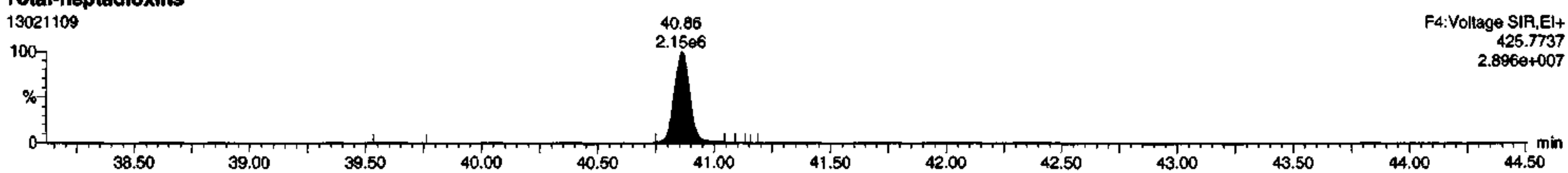
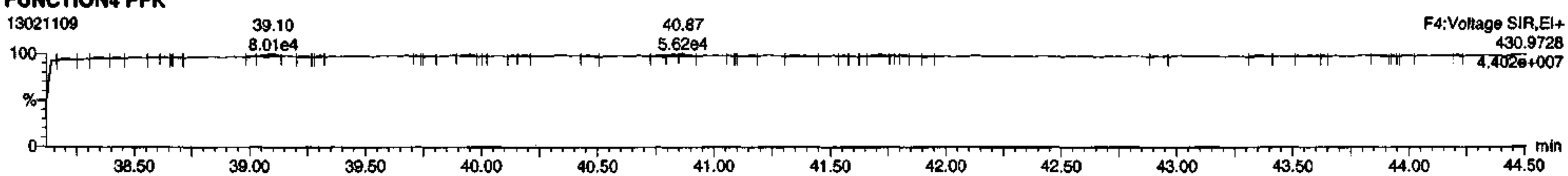


Total-heptadioxins



FUNCTION4 PFK



WE03 : 00122

Dataset: P:\DIOXIN8290.PRO\130211IC.qld
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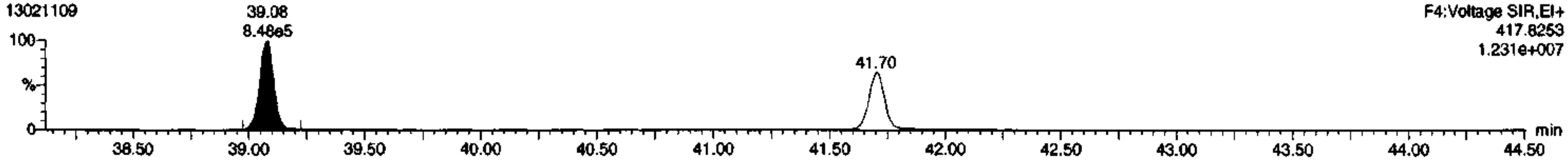
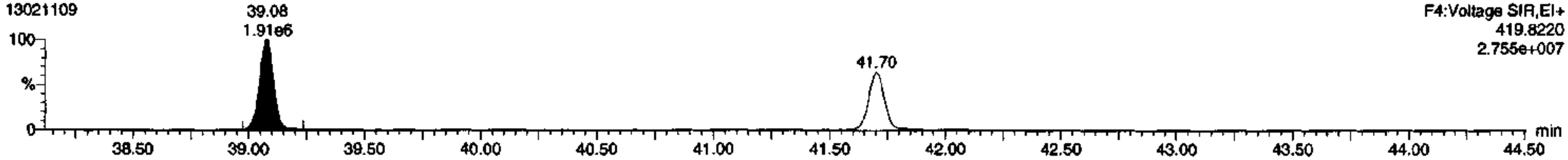
Printed: Tuesday, February 12, 2013 09:36:29 Pacific Standard Time

ID: CS4, Name: *13021109*, Date: *11-Feb-2013*, Time: *18:16:11*, Conditions: AUTOSPEC01, User: pk

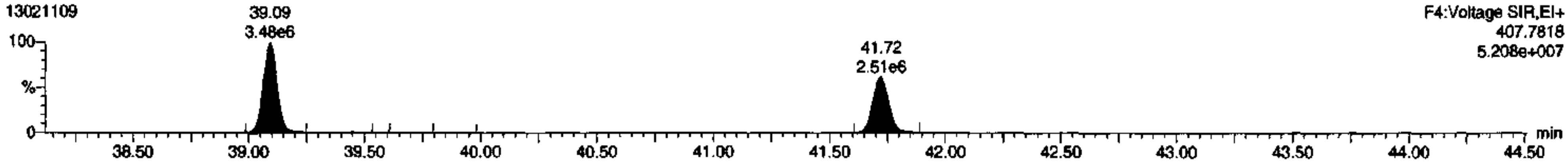
13C-1234678-HpCDF



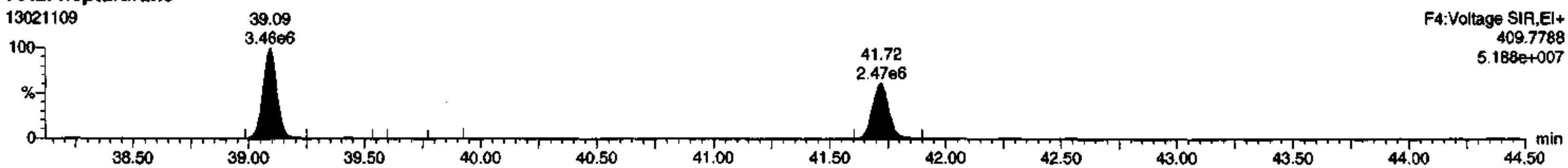
13C-1234678-HpCDF



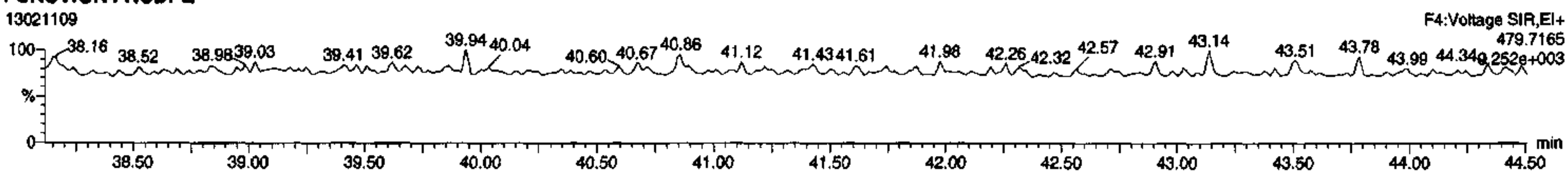
Total-heptafurans



Total-heptafurans



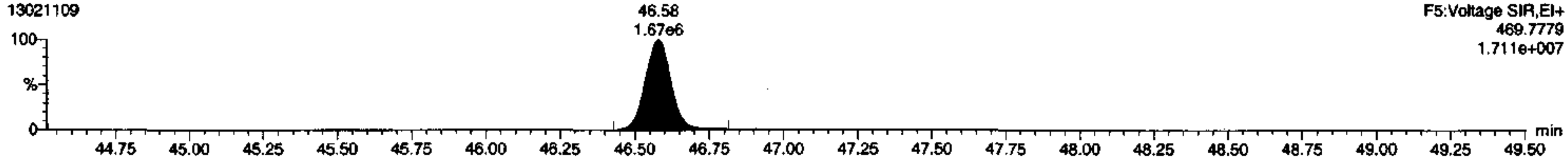
FUNCTION4 NCDPE



Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:29 Pacific Standard Time

ID: CS4, Name: 13021109, Date: 11-Feb-2013, Time: 18:16:11, Conditions: AUTOSPEC01, User: pk

13C-OCDD
13021109



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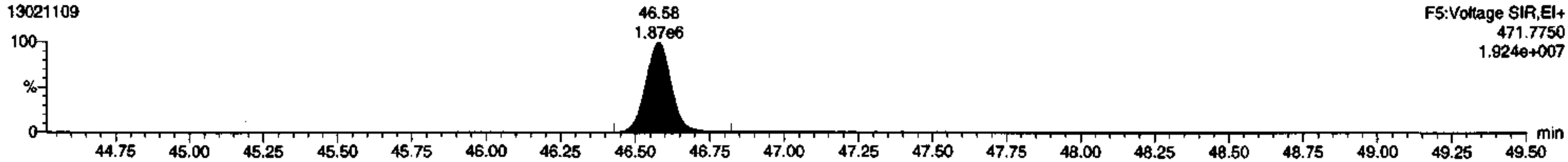
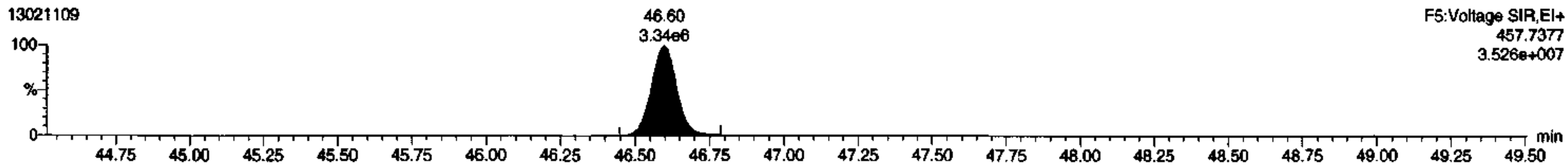
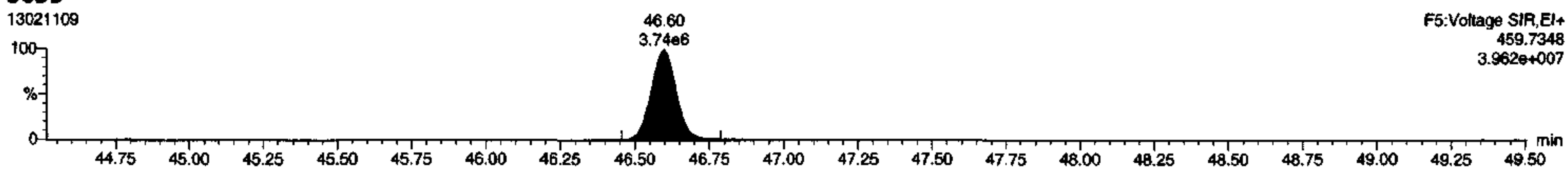
13021109



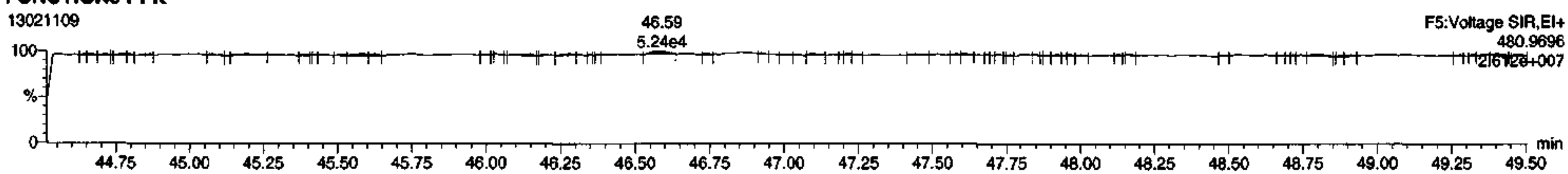
OCDD
13021109



OCDD
13021109



FUNCTION5 PFK
13021109

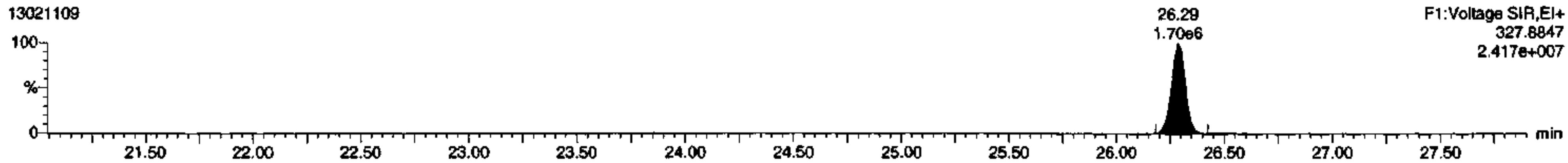


Quantify Sample Report **MassLynx 4.1 SCN 714**

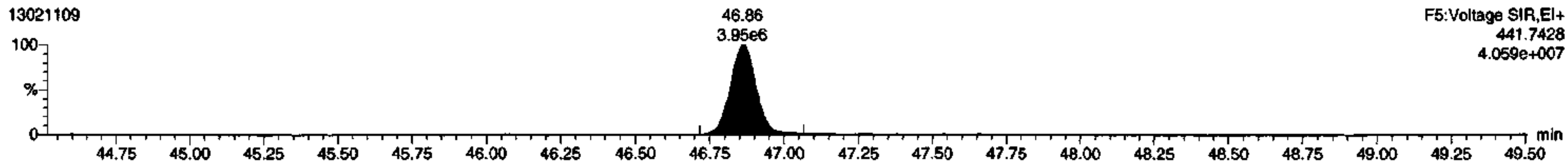
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:29 Pacific Standard Time

ID: CS4, Name: 13021109, Date: 11-Feb-2013, Time: 18:16:11, Conditions: AUTOSPEC01, User: pk

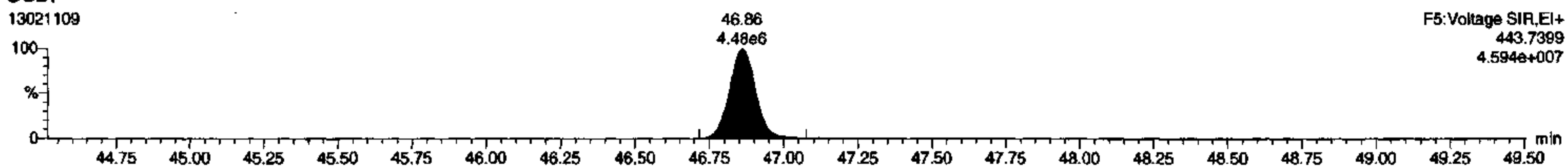
37CL-2378-TCDD



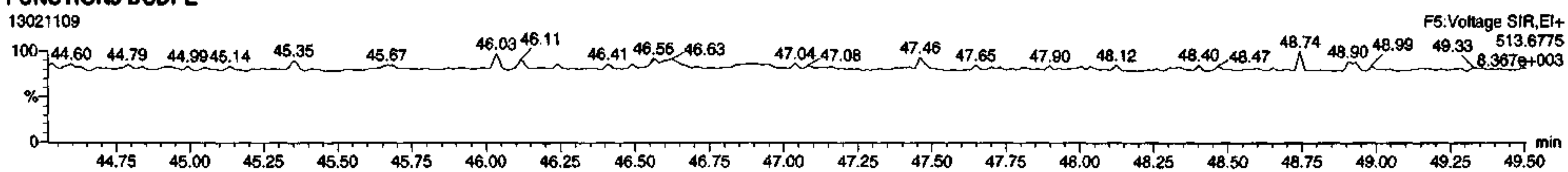
OCDF



OCDF



FUNCTION5 DCDPE



Quantify Sample Summary Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:39 Pacific Standard Time

Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 04 Feb 2013 12:23:30
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: CS5, Name: 13021110, Date: 11-Feb-2013, Time: 19:08:49, Conditions: AUTOSPEC01, User: pk

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[redacted]	12378-PeCDF	29.775	1.000	3.10e7	2.04e7	0.912	1.520	1.550	64495.7	NO	1026.092	1026.092
[redacted]	23478-PeCDF	31.124	1.001	3.07e7	2.00e7	0.943	1.530	1.550	63389.5	NO	1032.471	1032.471
[redacted]	123478-HxCDF	34.796	1.001	2.42e7	1.98e7	1.101	1.221	1.240	71520.7	NO	1027.727	1027.727
[redacted]	234678-HxCDF	35.892	1.001	2.34e7	1.96e7	1.073	1.194	1.240	69913.9	NO	1023.416	1023.416
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[redacted]	1234678-HpCDF	39.082	1.000	2.09e7	2.06e7	1.238	1.015	1.050	42171.4	NO	1028.841	1028.841
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[redacted]	12378-PeCDD	31.376	1.001	2.04e7	1.32e7	1.001	1.543	1.550	77832.3	NO	1023.432	1023.432
[redacted]	123478-HxCDD	36.024	1.000	1.80e7	1.44e7	0.978	1.247	1.240	42019.2	NO	1045.246	1045.246
[redacted]	123678-HxCDD	36.155	1.000	1.73e7	1.39e7	0.929	1.244	1.240	40968.6	NO	1013.349	1013.349
[redacted]	123789-HxCDD	36.583	1.012	1.65e7	1.33e7	0.904	1.238	1.240	38345.6	NO	1016.804	1016.804
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[redacted]	13C-12378-PeCDD	31.354	1.232	2.00e6	1.28e6	0.715	1.568	1.550	12301.7	NO		117.526
[redacted]	13C-123478-HxCDD	36.013	0.985	1.78e6	1.40e6	1.032	1.269	1.240	12257.1	NO		100.708
[redacted]	13C-123678-HxCDD	36.144	0.989	1.84e6	1.47e6	1.076	1.249	1.240	12264.2	NO		100.475
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[redacted]	13C-OCDD	46.581	1.274	2.03e6	2.28e6	0.675	0.891	0.890	11723.2	NO		208.975

Quantify Sample Summary Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:39 Pacific Standard Time

ID: CS5, Name: 13021110, Date: 11-Feb-2013, Time: 19:08:49, Conditions: AUTOSPEC01, User: pk

[redacted]												
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[redacted]	Total-tetrafurans			5.09e6		0.921						200.497
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[redacted]	Total-pentadioxins			2.04e7		1.001						1025.595
[redacted]	Total-hexadioxins			5.18e7		0.937						3075.698
[redacted]	Total-heptadioxins			1.35e7		1.029						1012.974
[redacted]	Total-Dioxins			1.10e8		0.994						7337.202
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[redacted]	FUNCTION1 PFK			8.14e5								
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Quantify Sample Report **MassLynx 4.1 SCN 714**

Dataset: P:\DIOXIN8290.PRO\130211IC.qld

Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time

Printed: Tuesday, February 12, 2013 09:36:39 Pacific Standard Time

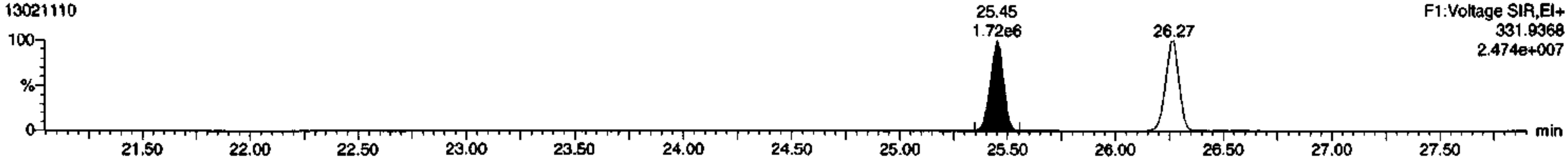
Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 04 Feb 2013 12:23:30

Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: CS5, Name: 13021110, Date: 11-Feb-2013, Time: 19:08:49, Conditions: AUTOSPEC01, User: pk

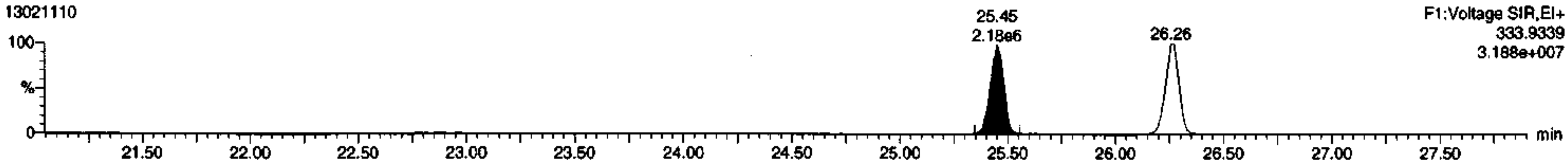
13C-1234-TCDD

13021110



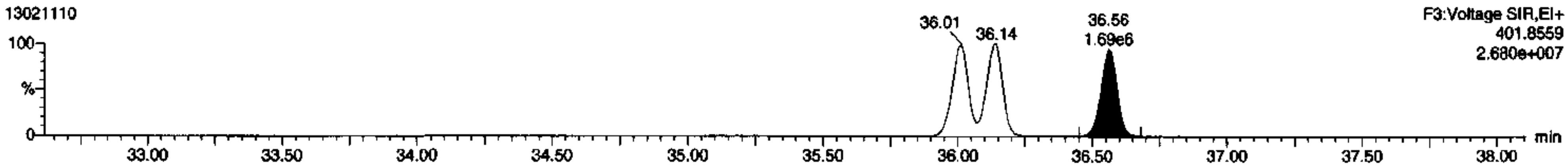
13C-1234-TCDD

13021110



13C-123789-HxCDD

13021110



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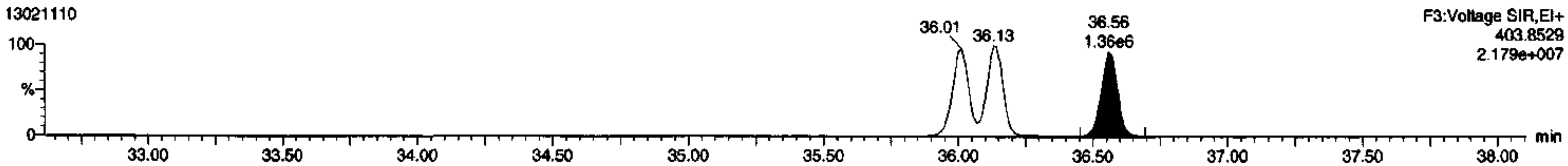
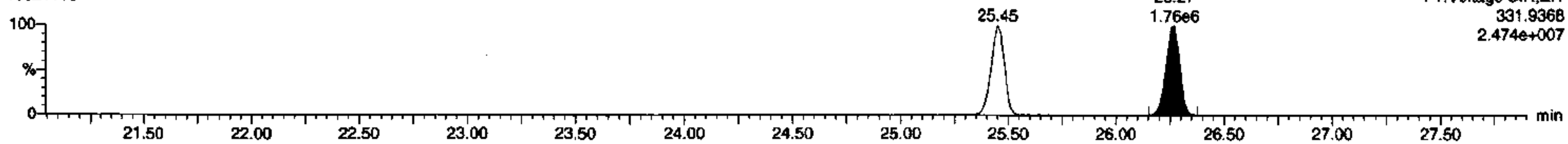
13021110



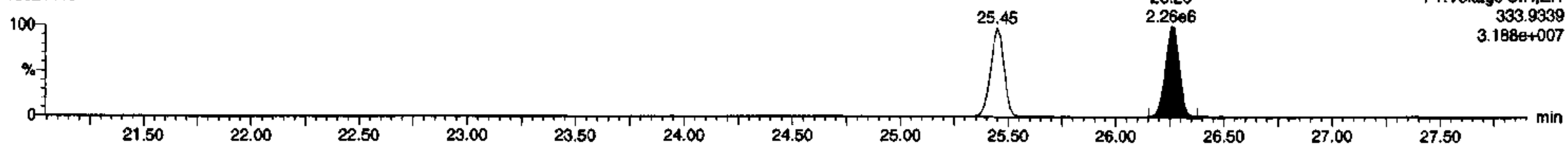
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:39 Pacific Standard Time

ID: CS5, Name: 13021110, Date: 11-Feb-2013, Time: 19:08:49, Conditions: AUTOSPEC01, User: pk

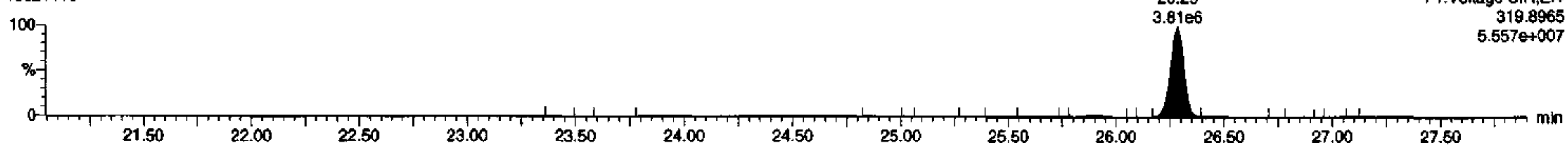
13C-2378-TCDD
13021110



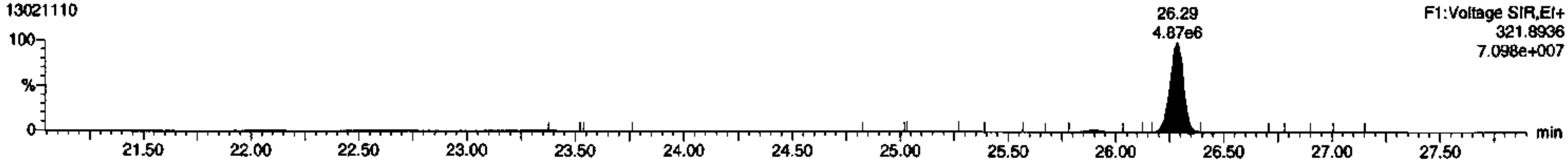
13C-2378-TCDD
13021110



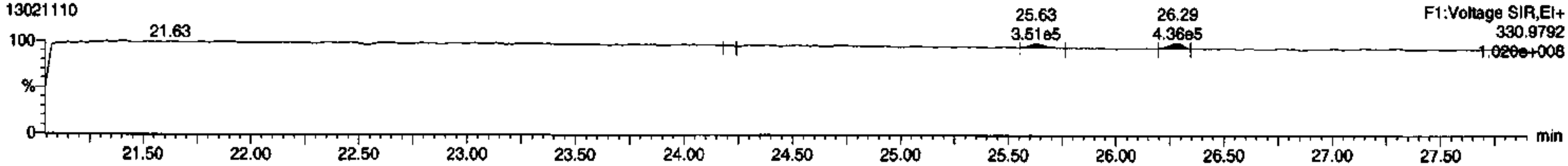
Total-tetradioxins
13021110



Total-tetradioxins
13021110



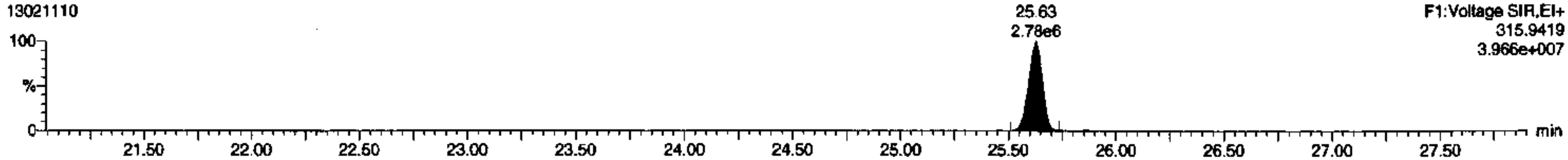
FUNCTION1 PFK
13021110



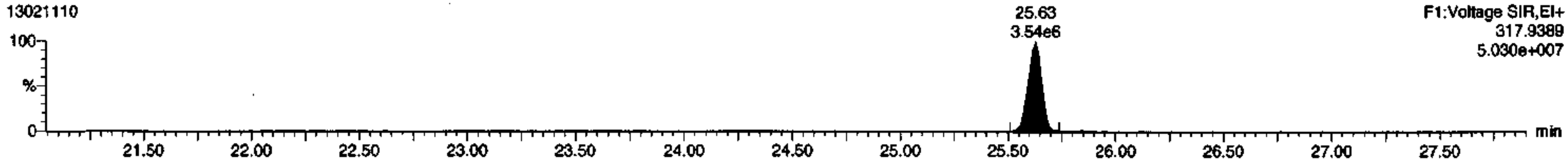
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:39 Pacific Standard Time

ID: CS5, Name: 13021110, Date: 11-Feb-2013, Time: 19:08:49, Conditions: AUTOSPEC01, User: pk

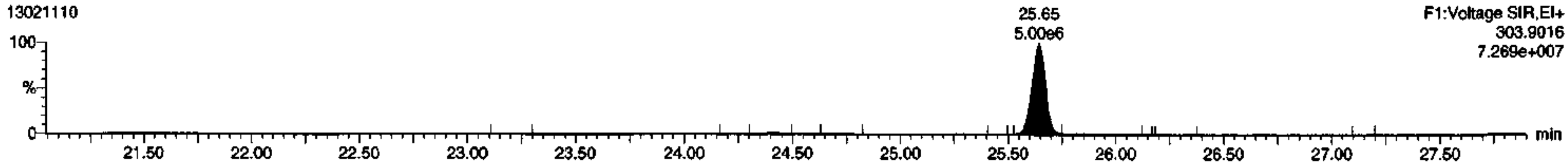
13C-2378-TCDF



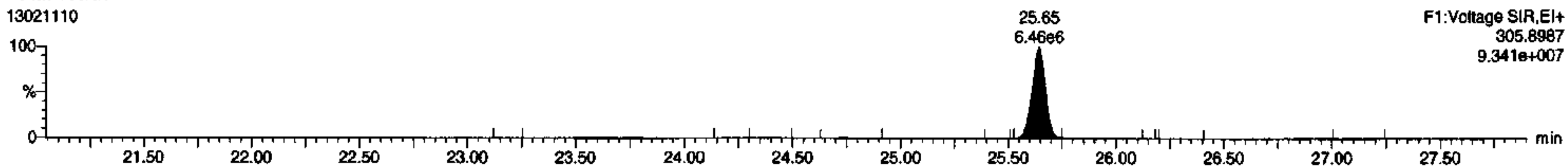
13C-2378-TCDF



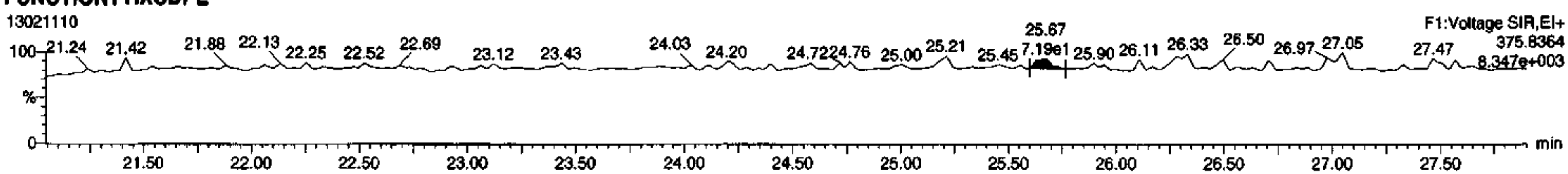
Total-tetrafurans



Total-tetrafurans



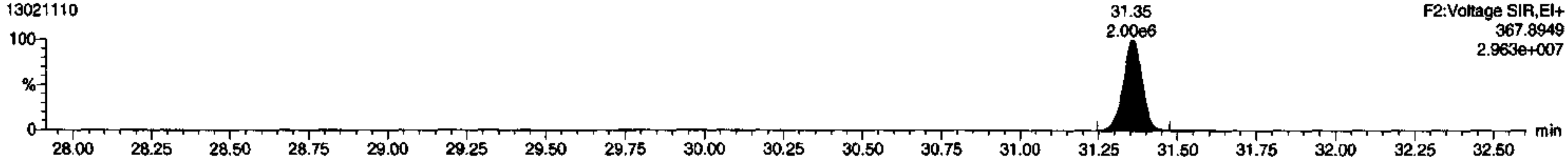
FUNCTION1 HXCDPE



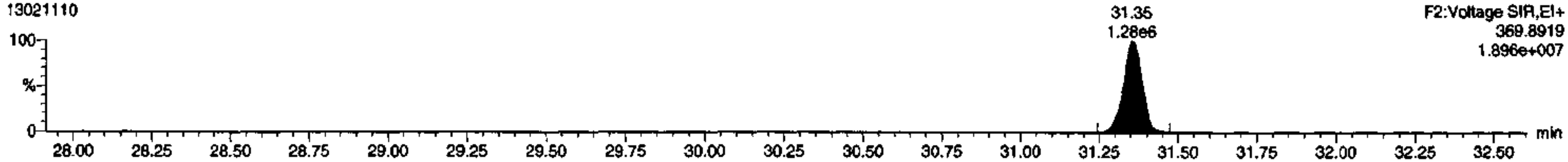
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:39 Pacific Standard Time

ID: CS5, Name: 13021110, Date: 11-Feb-2013, Time: 19:08:49, Conditions: AUTOSPEC01, User: pk

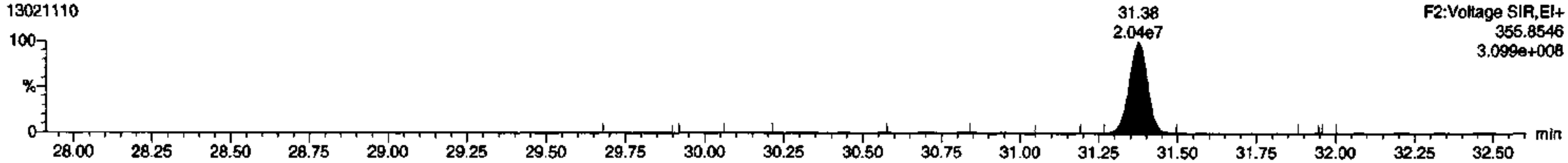
13C-12378-PeCDD
13021110



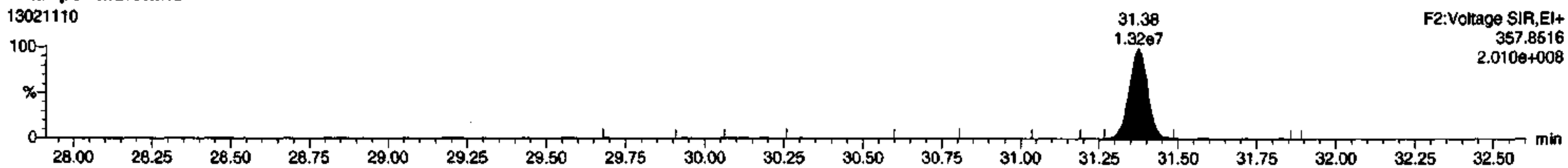
13C-12378-PeCDD
13021110



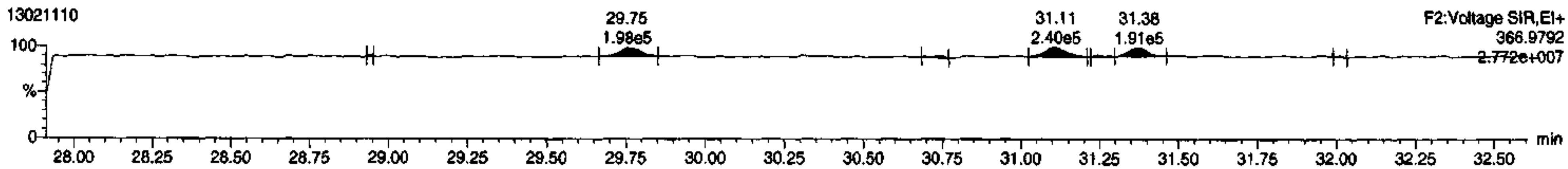
Total-pentadioxins
13021110



Total-pentadioxins
13021110



FUNCTION2 PFK
13021110

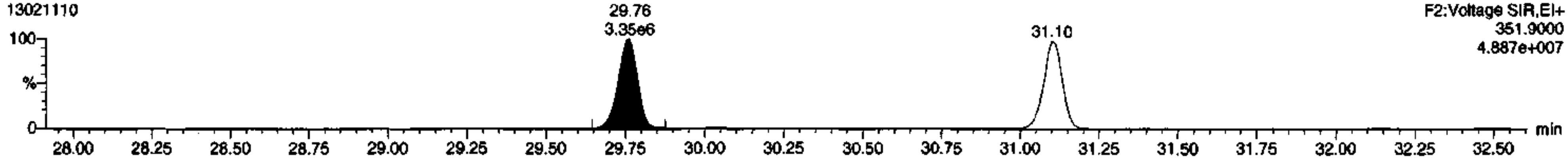


VE03 : 00131

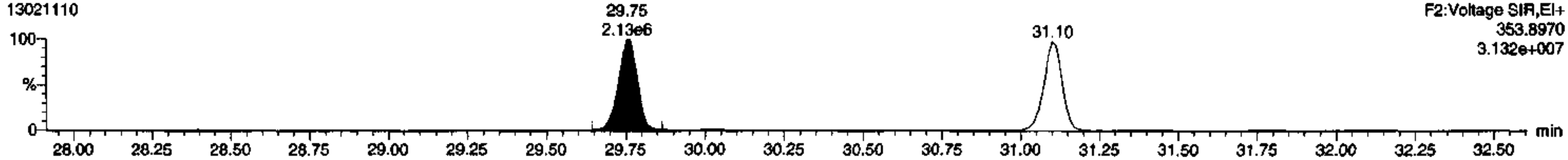
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:39 Pacific Standard Time

ID: CS5, Name: 13021110, Date: 11-Feb-2013, Time: 19:08:49, Conditions: AUTOSPEC01, User: pk

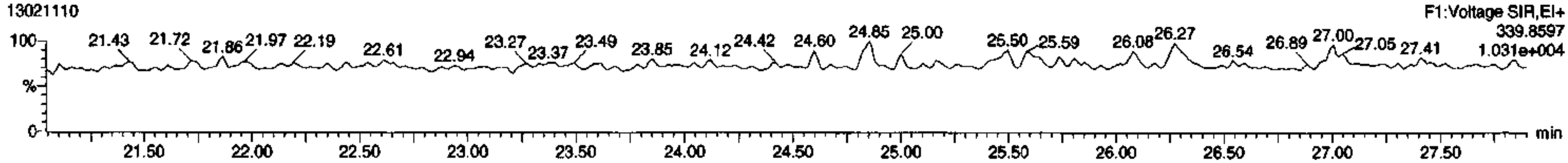
13C-12378-PeCDF



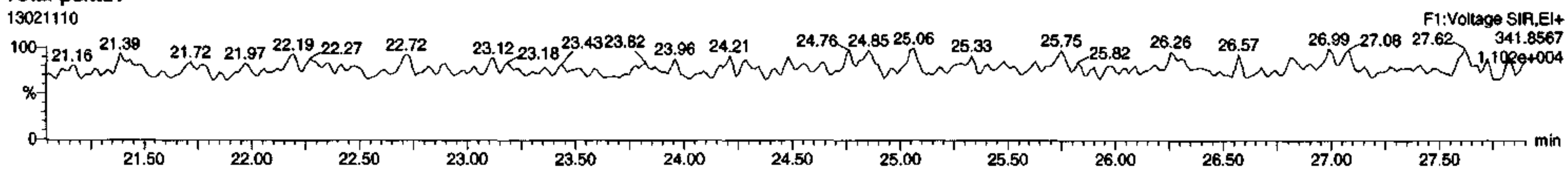
13C-12378-PeCDF



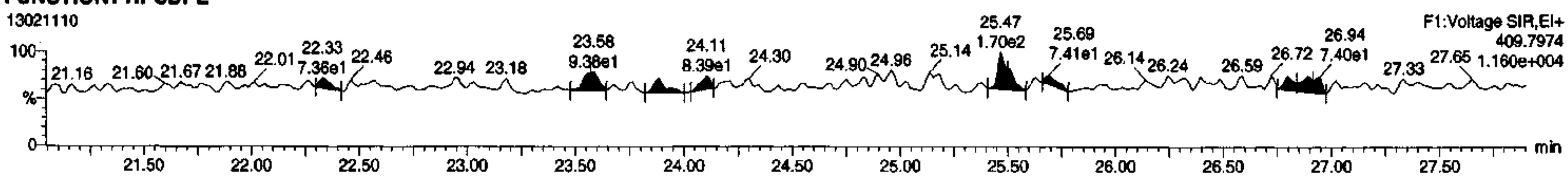
Total-penta1



Total-penta1



FUNCTION1 HPCDPE

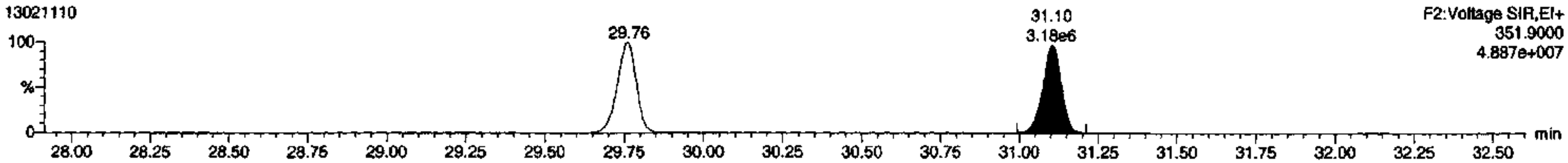


WE03 : 00132

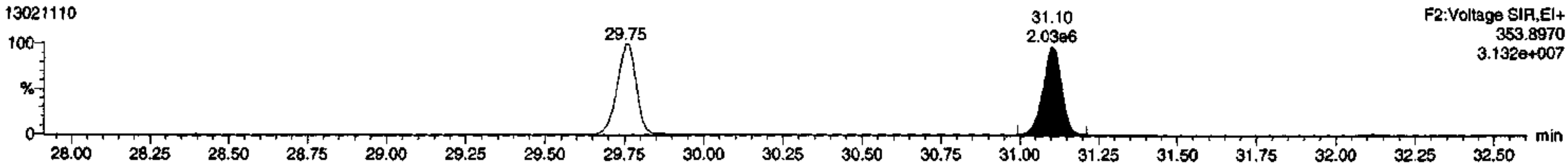
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:39 Pacific Standard Time

ID: CS5, Name: 13021110, Date: 11-Feb-2013, Time: 19:08:49, Conditions: AUTOSPEC01, User: pk

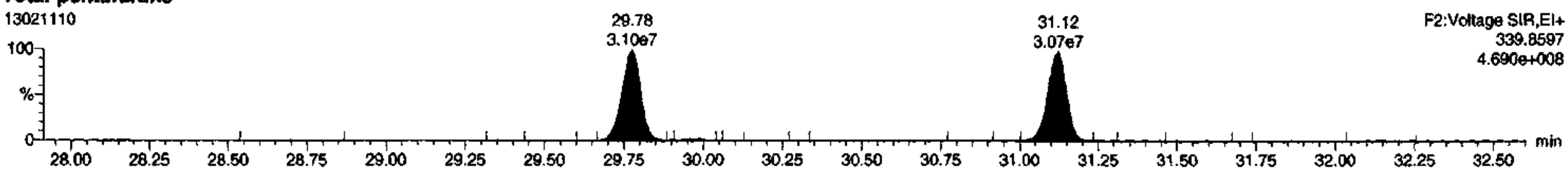
13C-23478-PeCDF



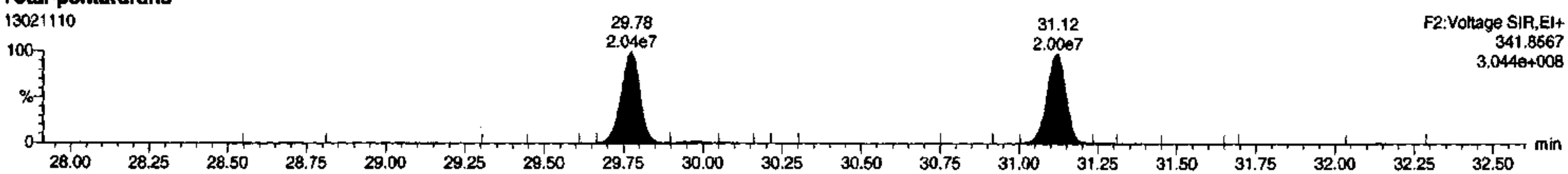
13C-23478-PeCDF



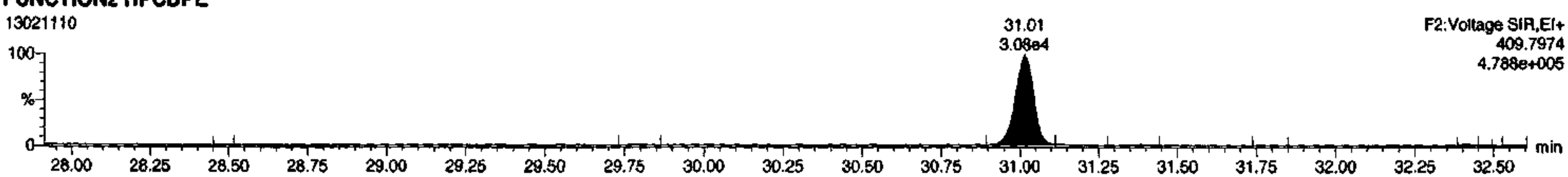
Total-pentafurans



Total-pentafurans



FUNCTION2 HPCDPE

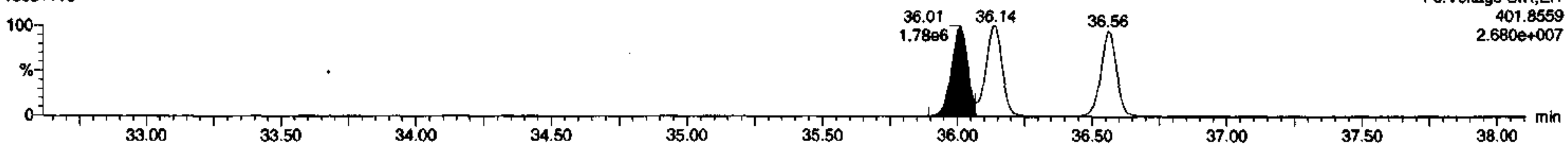


Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:39 Pacific Standard Time

ID: CS5, Name: 13021110, Date: 11-Feb-2013, Time: 19:08:49, Conditions: AUTOSPEC01, User: pk

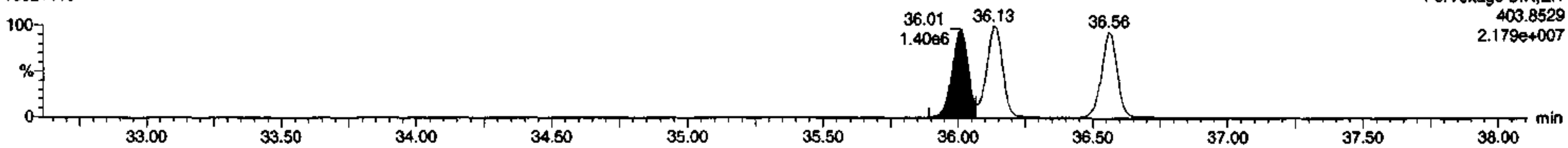
13C-123478-HxCDD

13021110



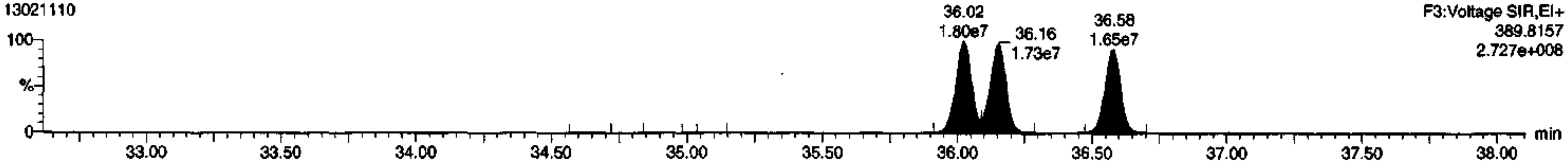
13C-123478-HxCDD

13021110



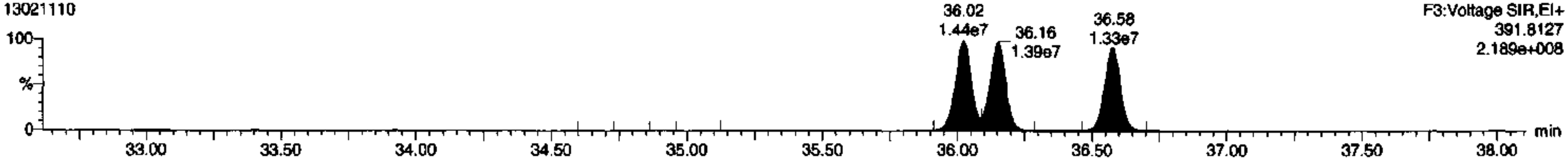
Total-hexadioxins

13021110



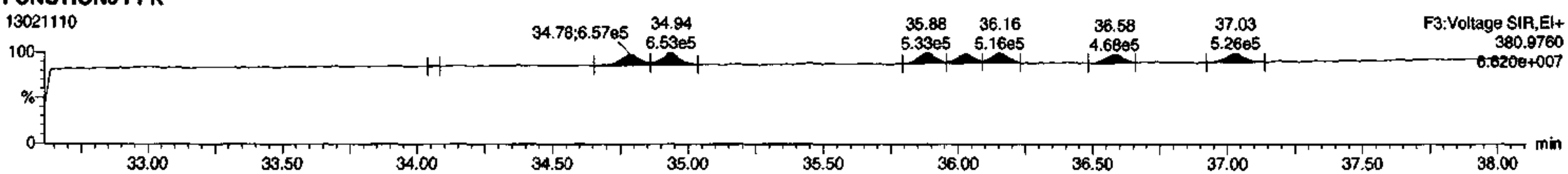
Total-hexadioxins

13021110



FUNCTION3 PFK

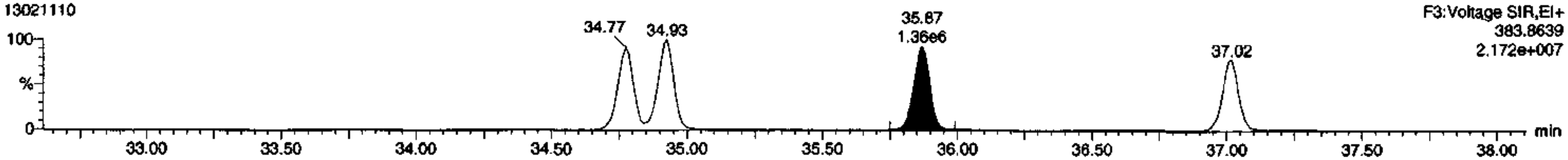
13021110



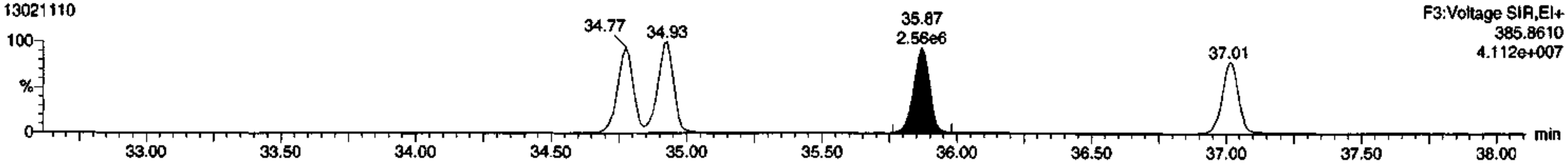
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:39 Pacific Standard Time

ID: CS5, Name: 13021110, Date: 11-Feb-2013, Time: 19:08:49, Conditions: AUTOSPEC01, User: pk

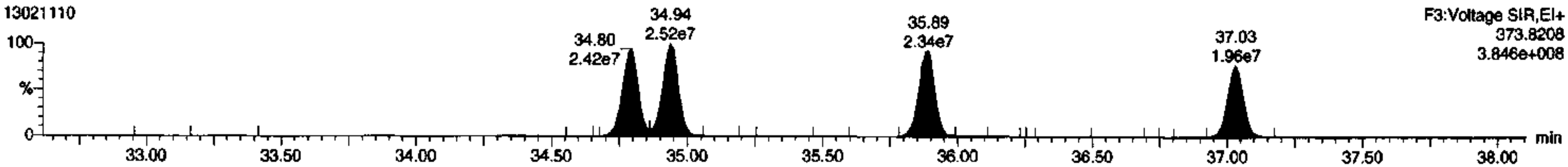
13C-234678-HxCDF
13021110



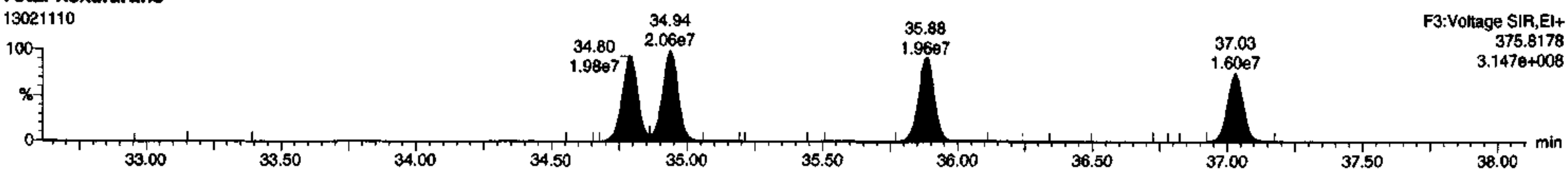
13C-234678-HxCDF
13021110



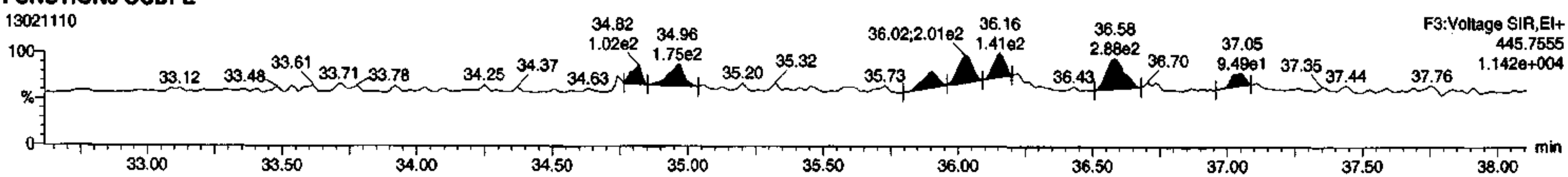
Total-hexafurans
13021110



Total-hexafurans
13021110



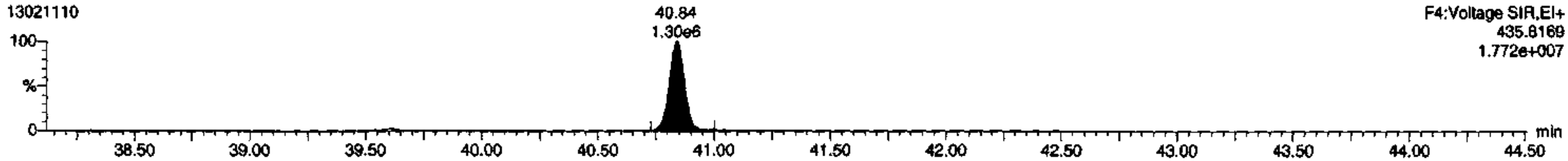
FUNCTION3 OCDPE
13021110



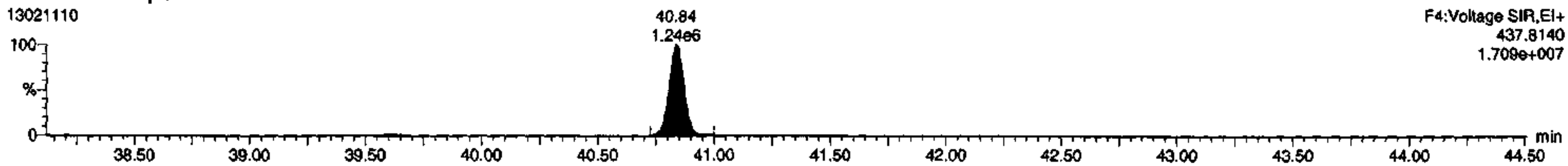
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:39 Pacific Standard Time

ID: CS5, Name: 13021110, Date: 11-Feb-2013, Time: 19:08:49, Conditions: AUTOSPEC01, User: pk

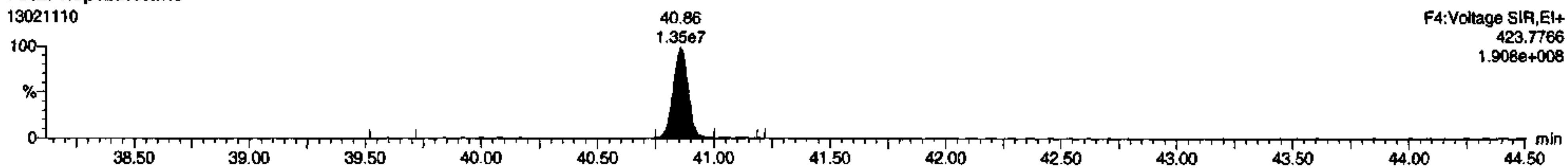
13C-1234678-HpCDD



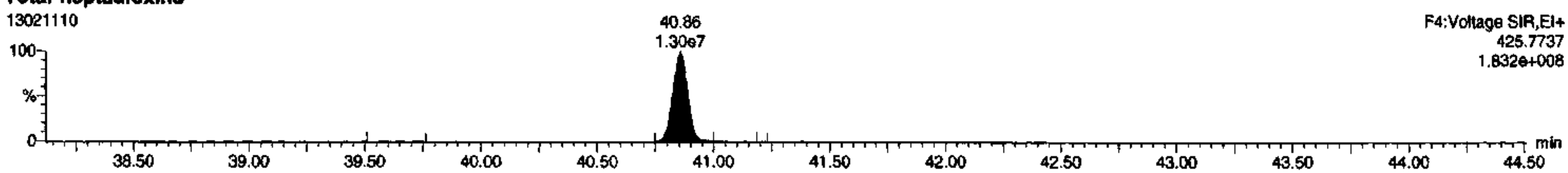
13C-1234678-HpCDD



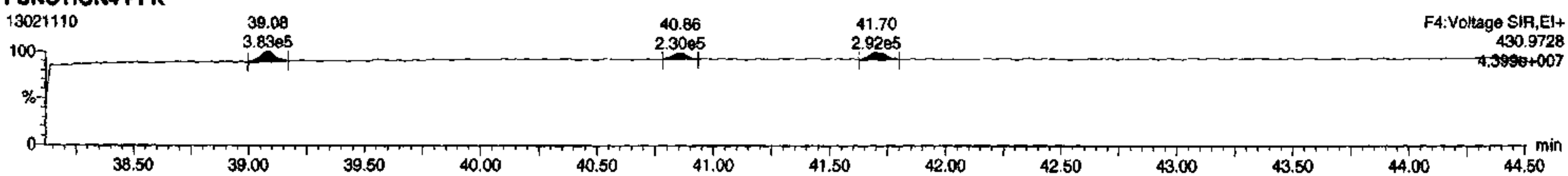
Total-heptadioxins



Total-heptadioxins



FUNCTION4 PFK

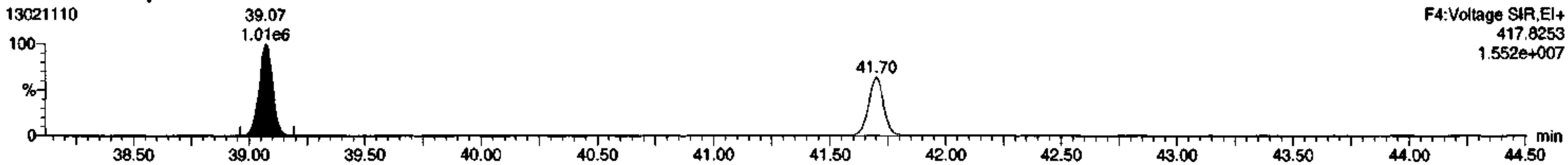


UE03 : 00136

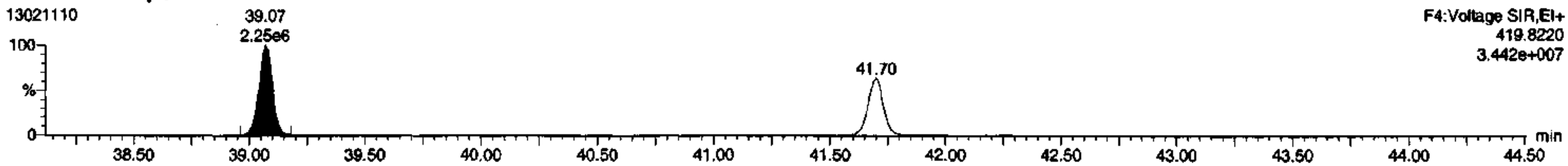
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:39 Pacific Standard Time

ID: CS5, Name: 13021110, Date: 11-Feb-2013, Time: 19:08:49, Conditions: AUTOSPEC01, User: pk

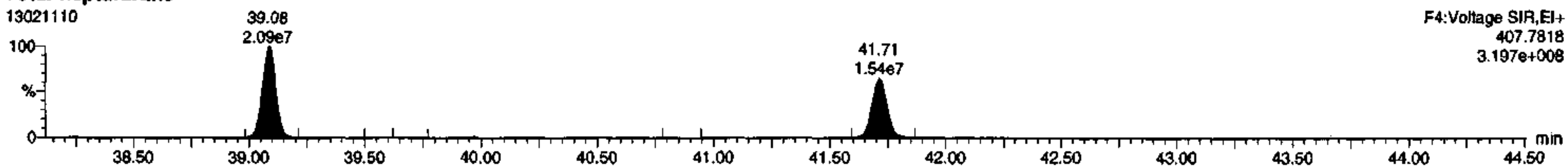
13C-1234678-HpCDF



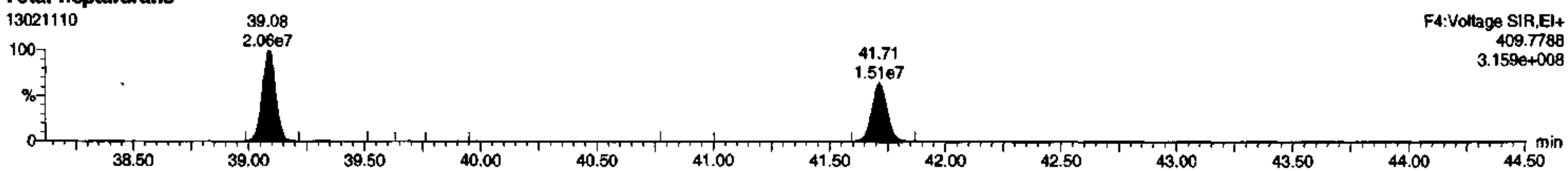
13C-1234678-HpCDF



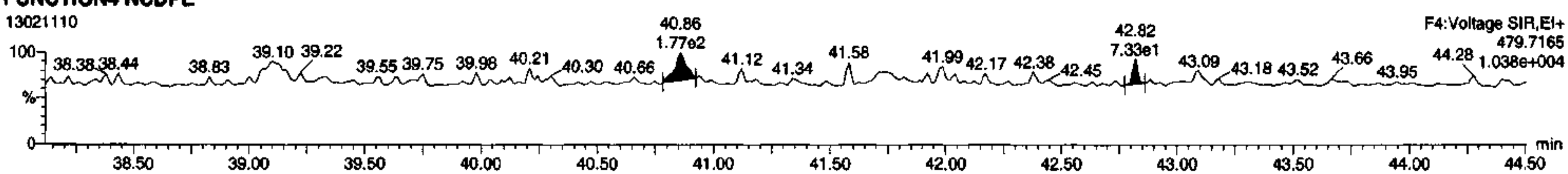
Total-heptafurans



Total-heptafurans



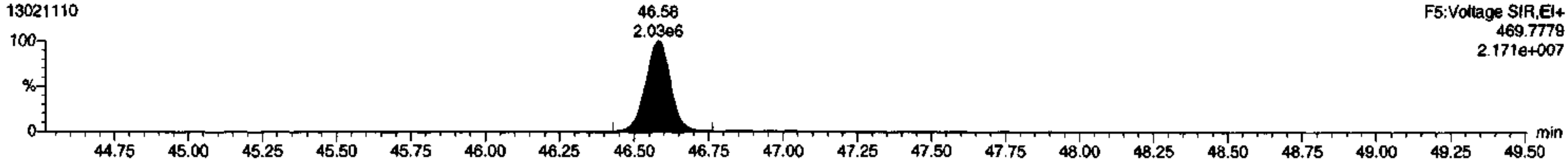
FUNCTION4 NCDPE



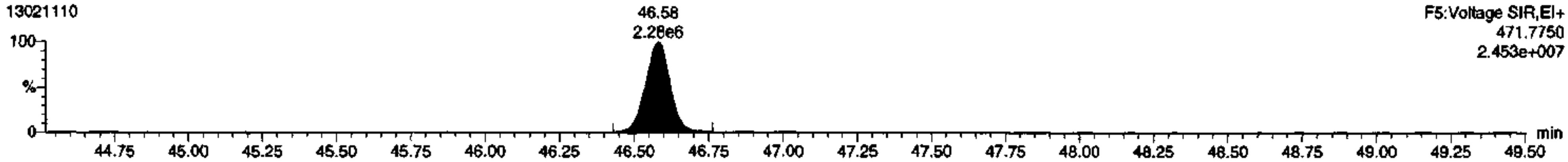
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:39 Pacific Standard Time

ID: CS5, Name: 13021110, Date: 11-Feb-2013, Time: 19:08:49, Conditions: AUTOSPEC01, User: pk

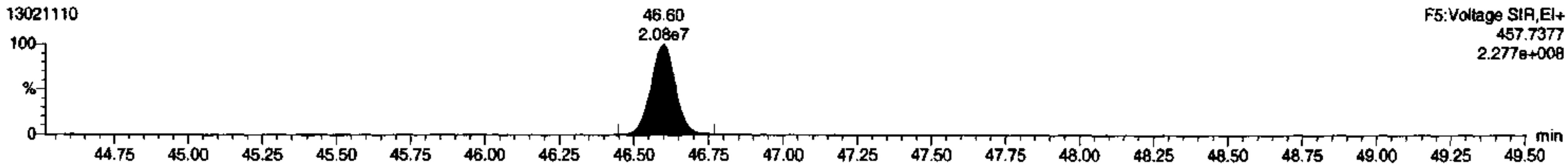
13C-OCDD



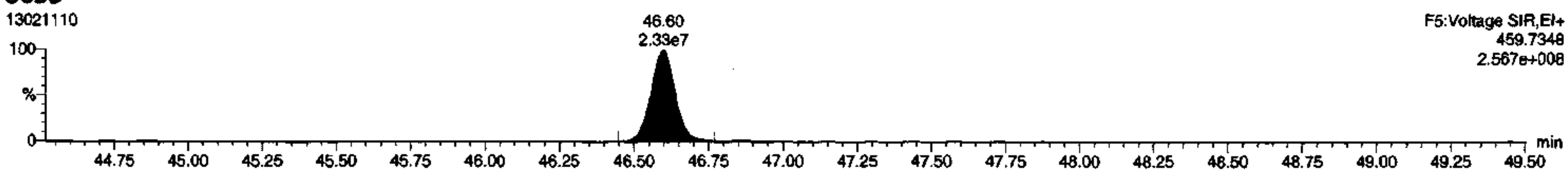
13C-OCDD



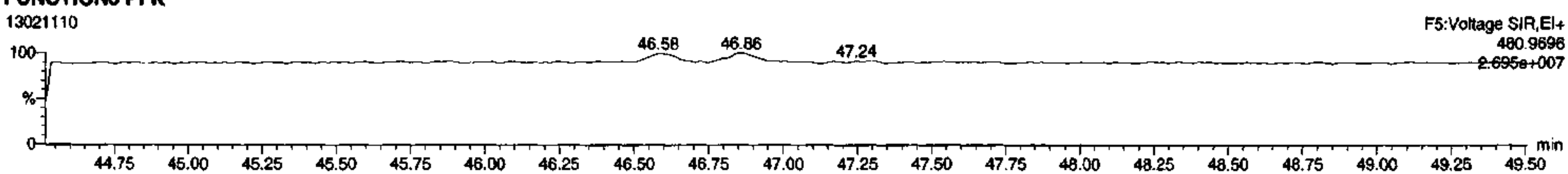
OCDD



OCDD



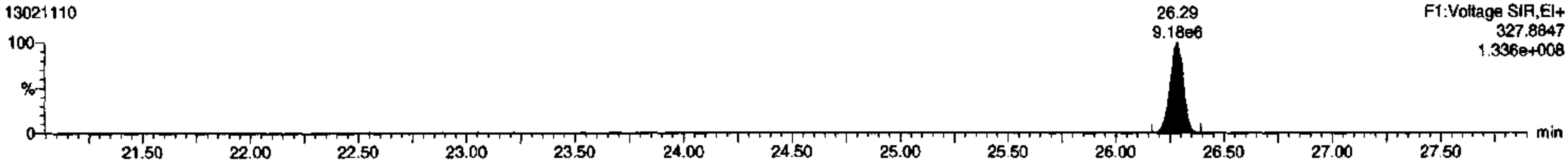
FUNCTION5 PFK



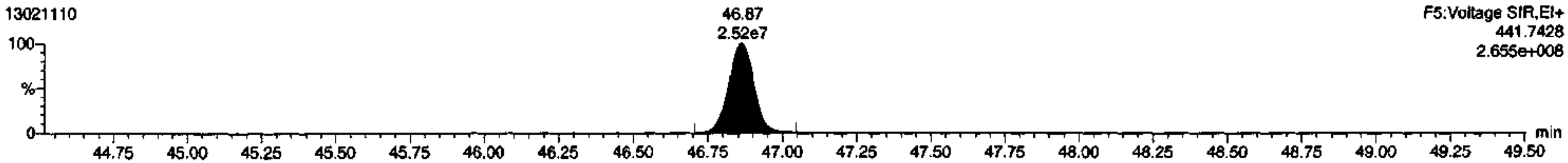
Dataset: P:\DIOXIN8290.PRO\130211IC.qld
Last Altered: Tuesday, February 12, 2013 09:29:24 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:36:39 Pacific Standard Time

ID: CS5, Name: 13021110, Date: 11-Feb-2013, Time: 19:08:49, Conditions: AUTOSPEC01, User: pk

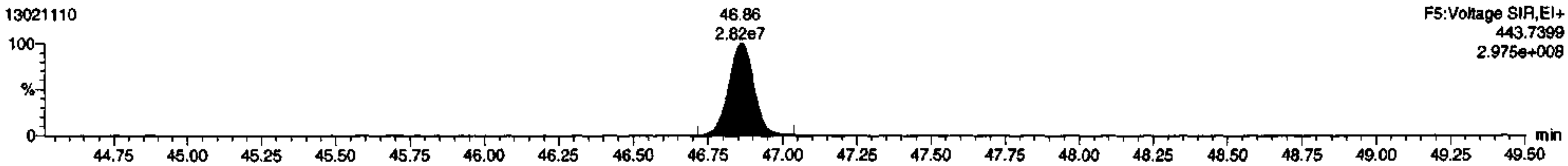
37CL-2378-TCDD



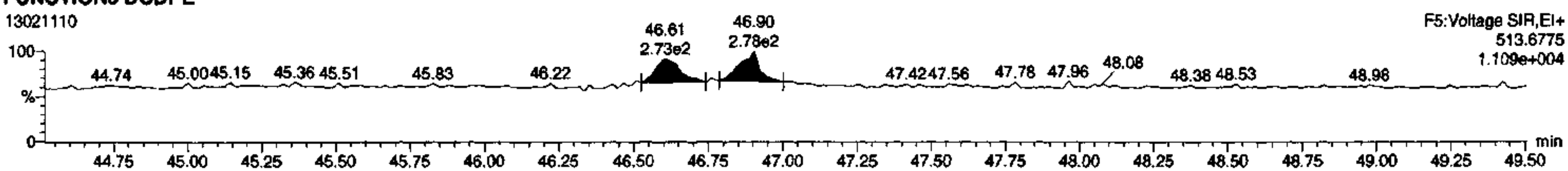
OCDF



OCDF



FUNCTION5 DCDPE



Quantify Sample Summary Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211DATA.qld
Last Altered: Tuesday, February 12, 2013 09:40:18 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:41:37 Pacific Standard Time

Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 04 Feb 2013 12:23:30
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: ICV, Name: 13021111, Date: 11-Feb-2013, Time: 20:01:34, Conditions: AUTOSPEC01, User: pk

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[redacted]	12378-PeCDF	29.775	1.001	1.06e6	6.95e5	0.912	1.519	1.550	7220.8	NO	55.455	55.455
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[redacted]	123678-HxCDF	34.939	1.001	9.12e5	7.42e5	1.056	1.229	1.240	4063.3	NO	53.103	53.103
[redacted]	123789-HxCDF	37.032	1.001	7.08e5	5.79e5	1.017	1.221	1.240	3055.9	NO	56.998	56.998
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[redacted]	123789-HxCDD	36.572	1.012	6.10e5	4.89e5	0.904	1.246	1.240	3626.4	NO	57.944	57.944
[redacted]	1234678-HpCDD	40.658	1.001	5.12e5	4.92e5	1.029	1.039	1.050	3899.0	NO	50.430	50.430
[redacted]	OCDD	46.590	1.000	7.20e5	8.22e5	1.011	0.876	0.890	5351.2	NO	110.720	110.720
[redacted]	13C-2378-TCDF	25.630	1.007	1.95e6	2.49e6	1.522	0.786	0.770	11416.2	NO		86.528
[redacted]	13C-12378-PeCDF	29.753	1.169	2.12e6	1.34e6	1.185	1.580	1.550	9514.8	NO		86.584
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[redacted]	13C-123478-HxCDF	34.774	0.951	8.94e5	1.70e6	1.284	0.526	0.510	2895.9	NO		93.022
[redacted]	13C-123678-HxCDF	34.917	0.955	1.01e6	1.94e6	1.383	0.523	0.510	3123.0	NO		98.202
[redacted]	13C-234678-HxCDF	35.870	0.981	9.08e5	1.77e6	1.283	0.514	0.510	2952.4	NO		95.953
[redacted]	13C-123789-HxCDF	37.011	1.012	7.58e5	1.46e6	1.099	0.519	0.510	2337.4	NO		92.994
[redacted]	13C-1234678-HpCDF	39.071	1.069	6.75e5	1.51e6	1.070	0.446	0.440	4311.9	NO		94.214
[redacted]	13C-1234789-HpCDF	41.691	1.140	5.29e5	1.21e6	0.774	0.438	0.440	2985.9	NO		103.310
[redacted]	13C-1234-TCDD	25.451	0.000	1.49e6	1.88e6	1.000	0.794	0.770	5617.6	NO		100.000
[redacted]	13C-2378-TCDD	26.272	1.032	1.36e6	1.73e6	0.943	0.787	0.770	4994.7	NO		97.251
[redacted]	13C-12378-PeCDD	31.354	1.232	1.46e6	9.20e5	0.715	1.588	1.550	11740.4	NO		98.753
[redacted]	13C-123478-HxCDD	36.013	0.985	1.19e6	9.41e5	1.032	1.269	1.240	3830.2	NO		95.208
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[redacted]	13C-1234678-HpCDD	40.836	1.117	9.87e5	9.50e5	0.838	1.039	1.050	5914.4	NO		106.431
[redacted]	13C-OCDD	46.572	1.274	1.30e6	1.46e6	0.675	0.888	0.890	7809.7	NO		187.770

Dataset: P:\DIOXIN8290.PRO\130211DATA.qld
Last Altered: Tuesday, February 12, 2013 09:40:18 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:41:37 Pacific Standard Time

ID: ICV, Name: 13021111, Date: 11-Feb-2013, Time: 20:01:34, Conditions: AUTOSPEC01, User: pk

[redacted]												
[redacted]	13C-123789-HxCDD	36.561	0.000	1.21e6	9.63e5	1.000	1.255	1.240	3800.5	NO		100.000
[redacted]	Total-tetrafurans			1.86e5		0.921						10.395
[redacted]	Total-penta1			0.00e0								
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[redacted]	Total-hexafurans			3.31e6		1.062						217.508
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[redacted]	Total-pentadioxins			6.86e5		1.001						47.450
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[redacted]	37CL-2378-TCDD	26.287	1.033	3.33e5		1.051			3469.6			9.392
[redacted]	FUNCTION1 PFK			5.85e7								
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[redacted]	FUNCTION3 PFK			1.31e6								0.000
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[redacted]	FUNCTION1 HXCDPE			0.00e0								
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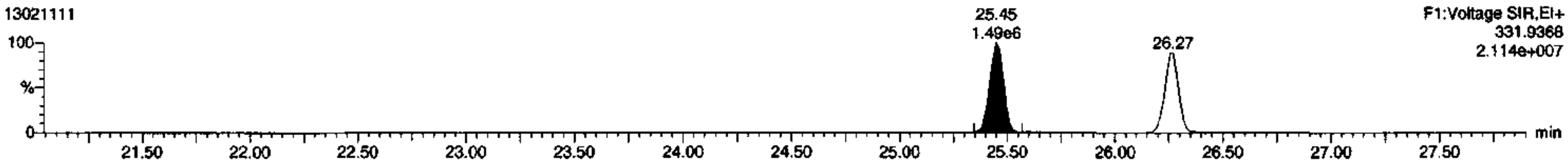
[redacted]	FUNCTION3 OCDPE			0.00e0								
[redacted]	FUNCTION4 NCDPE			7.81e1								0.000
[redacted]	FUNCTION5 DCDPE			0.00e0								

Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211DATA.qld
Last Altered: Tuesday, February 12, 2013 09:40:18 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:41:37 Pacific Standard Time

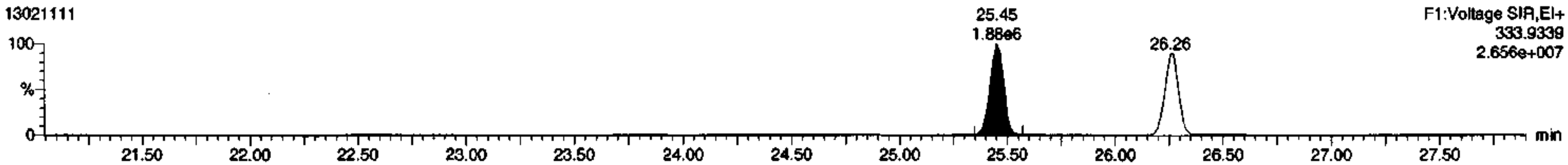
Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130204.mdb 04 Feb 2013 12:23:30
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: ICV, Name: 13021111, Date: 11-Feb-2013, Time: 20:01:34, Conditions: AUTOSPEC01, User: pk

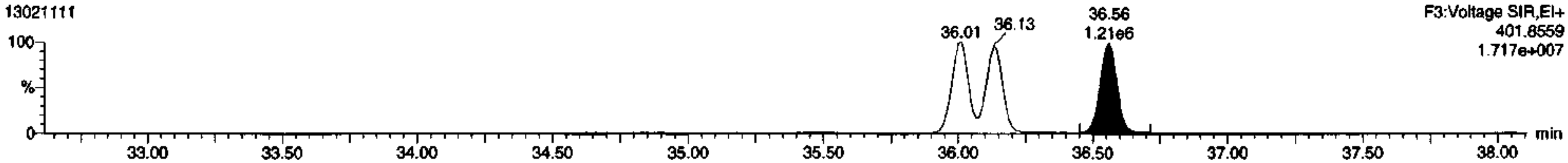
13C-1234-TCDD
13021111



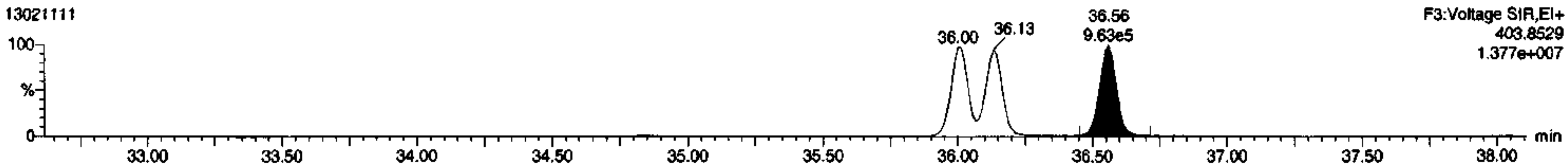
13C-1234-TCDD
13021111



13C-123789-HxCDD
13021111



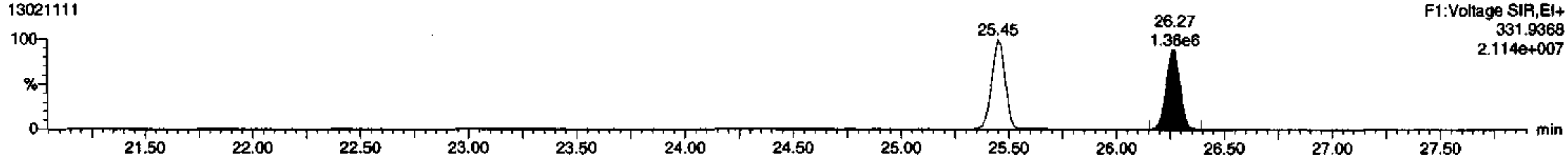
13C-123789-HxCDD
13021111



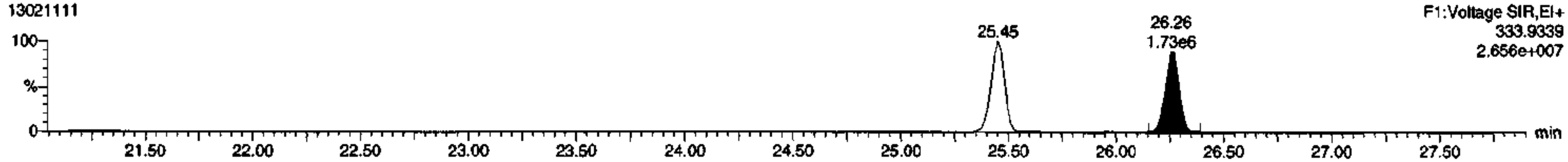
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211DATA.qld
Last Altered: Tuesday, February 12, 2013 09:40:18 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:41:37 Pacific Standard Time

ID: ICV, Name: 13021111, Date: 11-Feb-2013, Time: 20:01:34, Conditions: AUTOSPEC01, User: pk

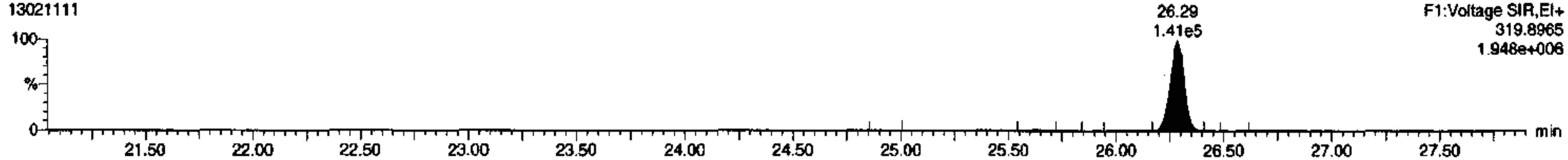
13C-2378-TCDD
13021111



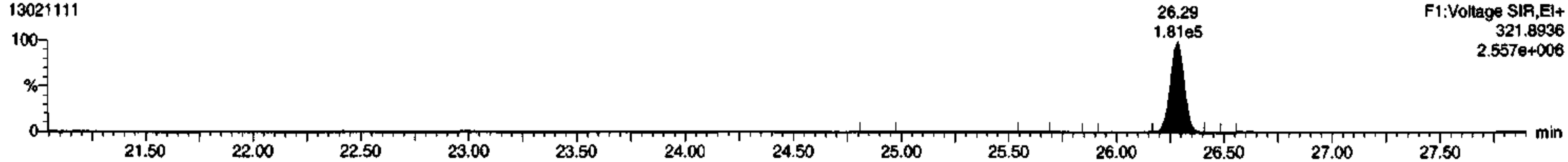
13C-2378-TCDD
13021111



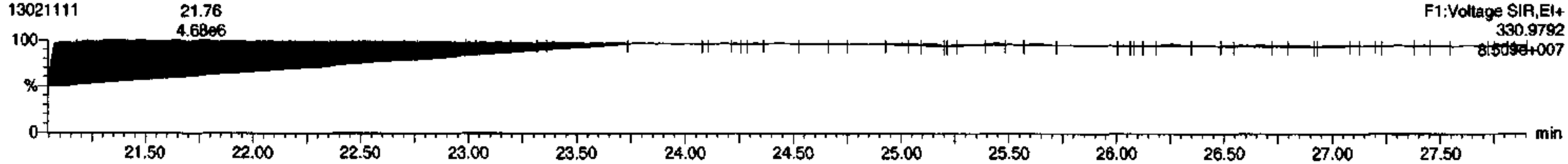
Total-tetradioxins
13021111



Total-tetradioxins
13021111



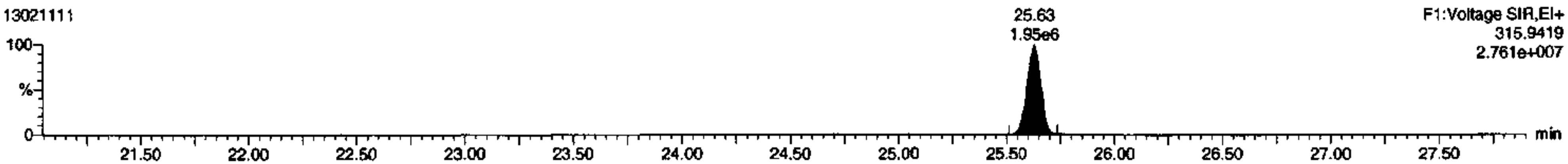
FUNCTION1 PFK
13021111



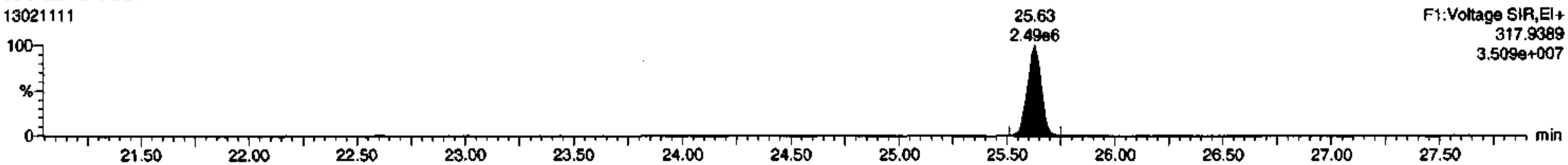
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211DATA.qld
Last Altered: Tuesday, February 12, 2013 09:40:18 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:41:37 Pacific Standard Time

ID: ICV, Name: 13021111, Date: 11-Feb-2013, Time: 20:01:34, Conditions: AUTOSPEC01, User: pk

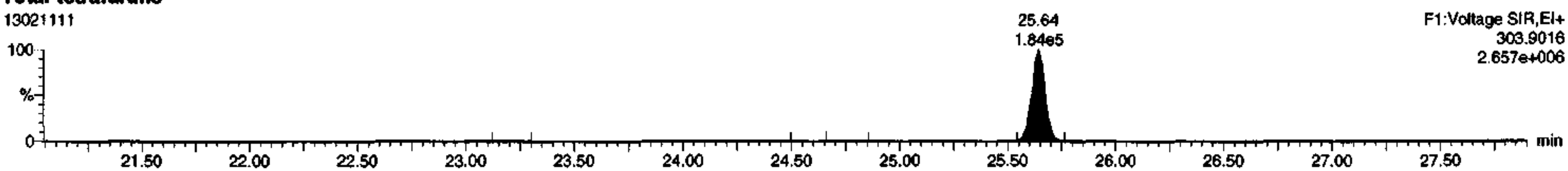
13C-2378-TCDF
13021111



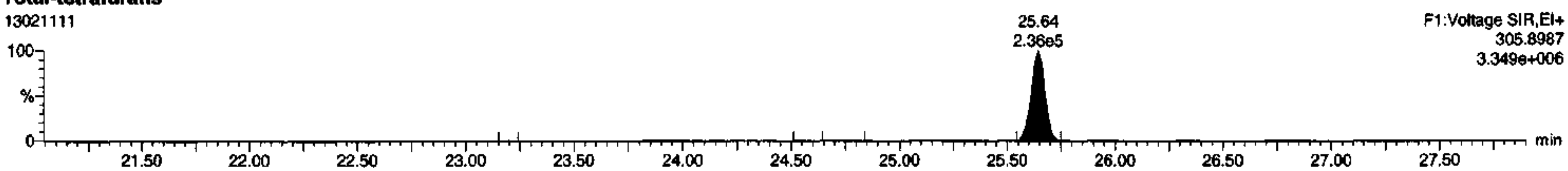
13C-2378-TCDF
13021111



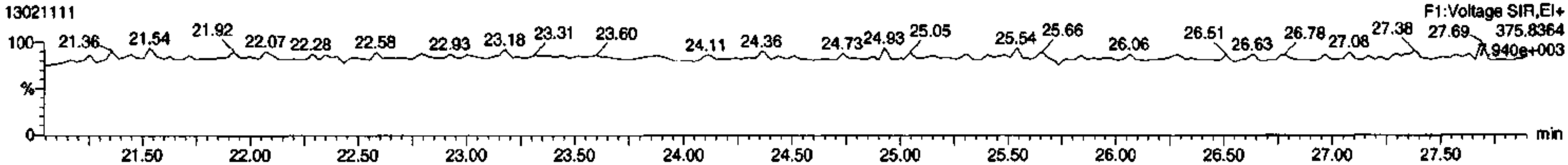
Total-tetrafurans
13021111



Total-tetrafurans
13021111



FUNCTION1 HXCDPE
13021111



Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211DATA.qld
Last Altered: Tuesday, February 12, 2013 09:40:18 Pacific Standard Time
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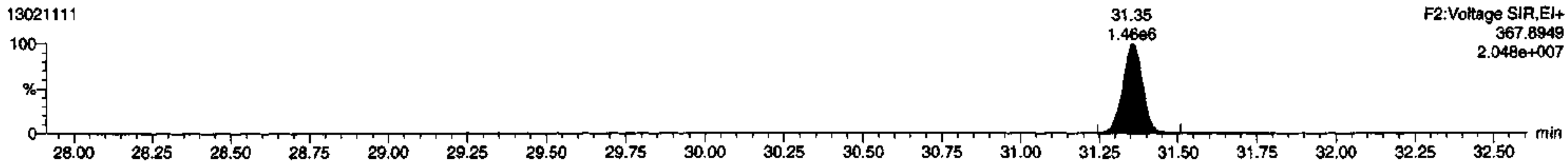
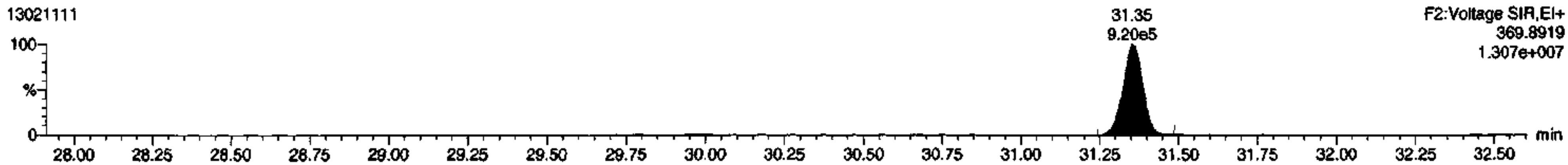
ID: ICV, Name: 13021111, Date: 11-Feb-2013, Time: 20:01:34, Conditions: AUTOSPEC01, User: pk

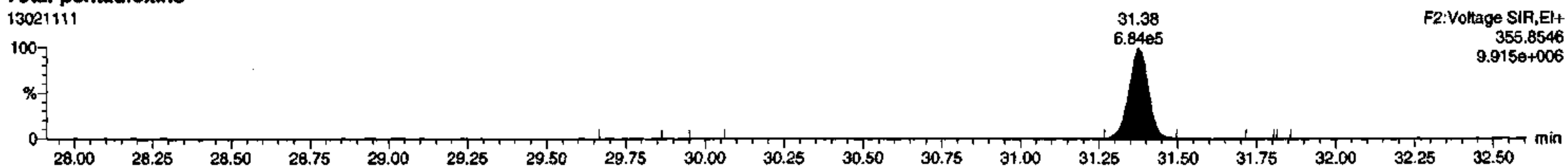
13C-12378-PeCDD
13021111



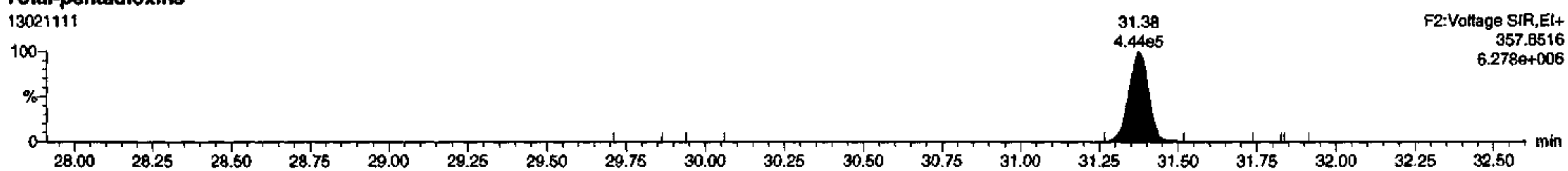
13C-12378-PeCDD
13021111



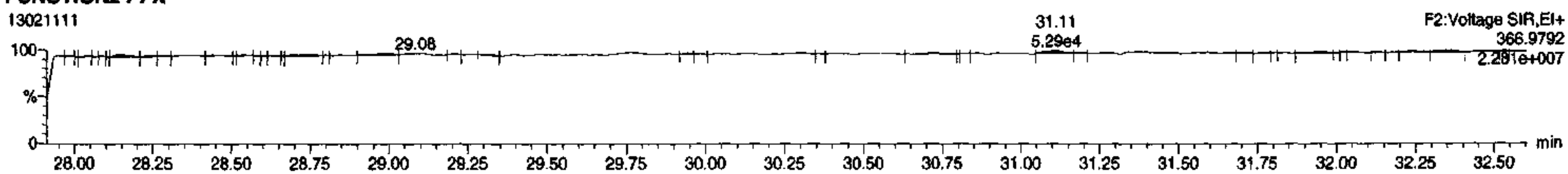
Total-pentadioxins
13021111



Total-pentadioxins
13021111



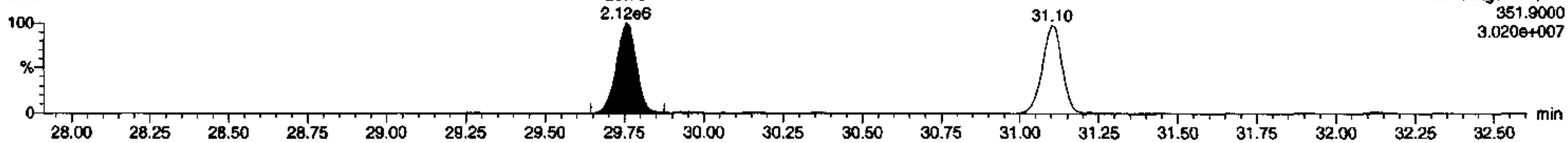
FUNCTION2 PFK
13021111



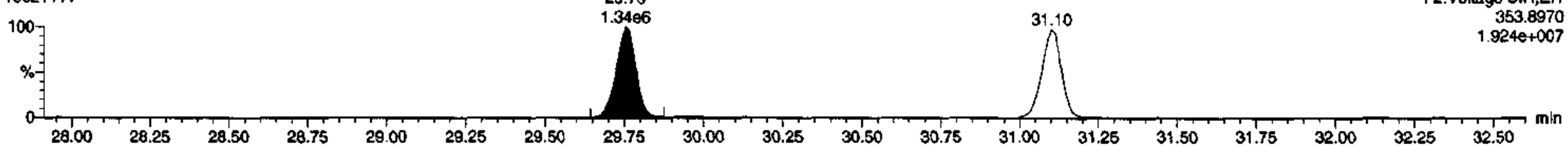
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211DATA.qld
Last Altered: Tuesday, February 12, 2013 09:40:18 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:41:37 Pacific Standard Time

ID: ICV, Name: 13021111, Date: 11-Feb-2013, Time: 20:01:34, Conditions: AUTOSPEC01, User: pk

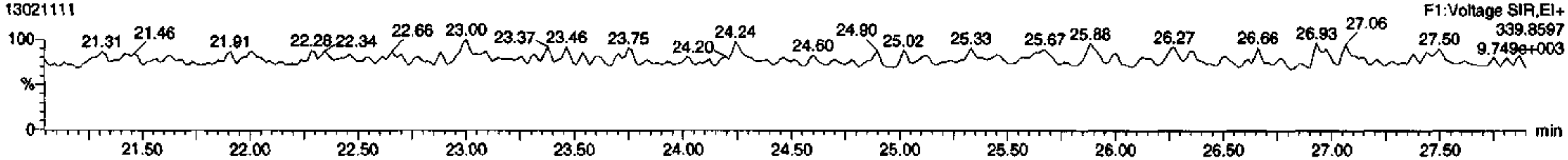
13C-12378-PeCDF
13021111



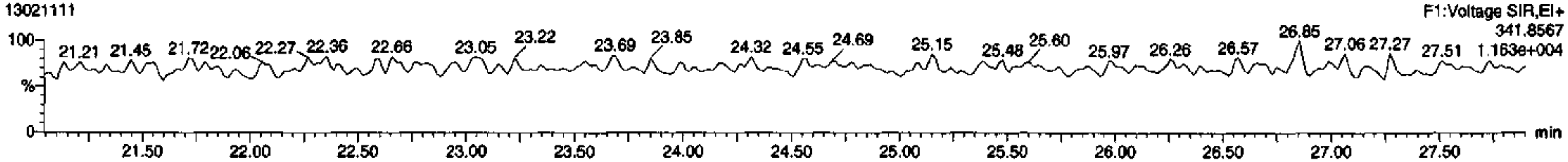
13C-12378-PeCDF
13021111



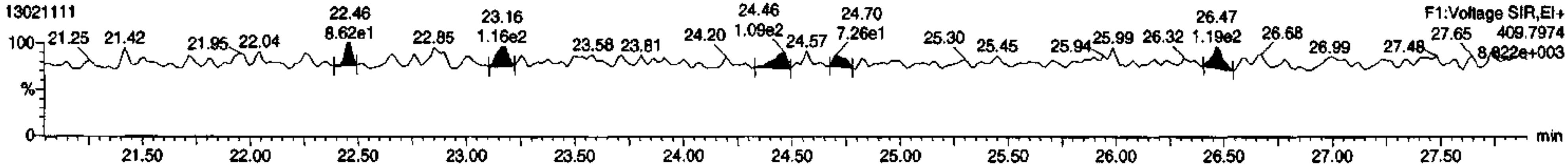
Total-penta1
13021111



Total-penta1
13021111



FUNCTION1 HPCDPE
13021111



Dataset: P:\DIOXIN8290.PRO\130211DATA.qld
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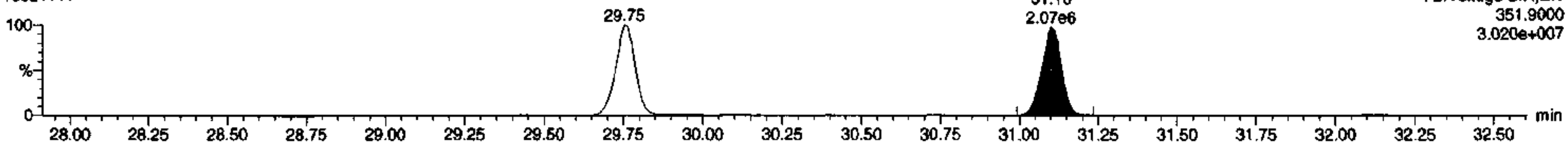
ID: ICV, Name: 13021111, Date: 11-Feb-2013, Time: 20:01:34, Conditions: AUTOSPEC01, User: pk

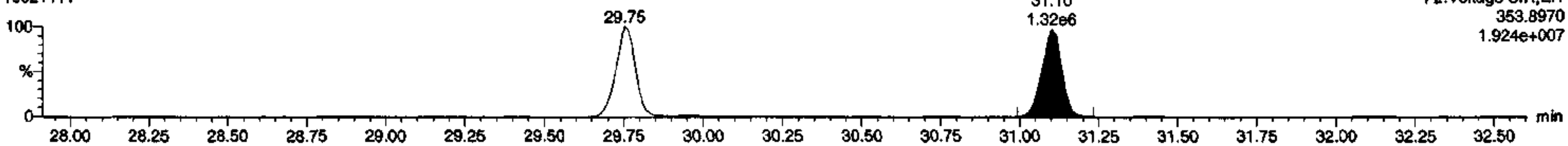
13C-23478-PeCDF

13021111



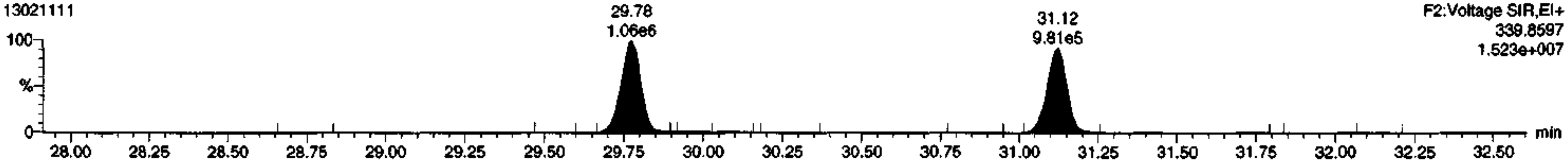
13C-23478-PeCDF

13021111



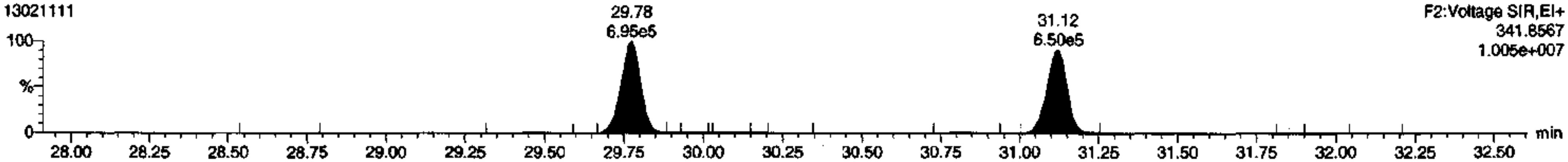
Total-pentafurans

13021111



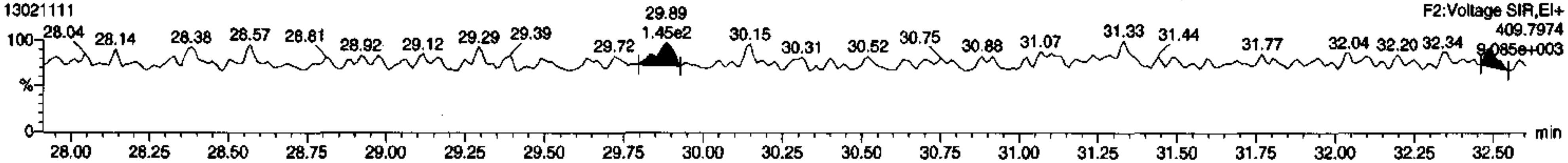
Total-pentafurans

13021111



FUNCTION2 HPCDPE

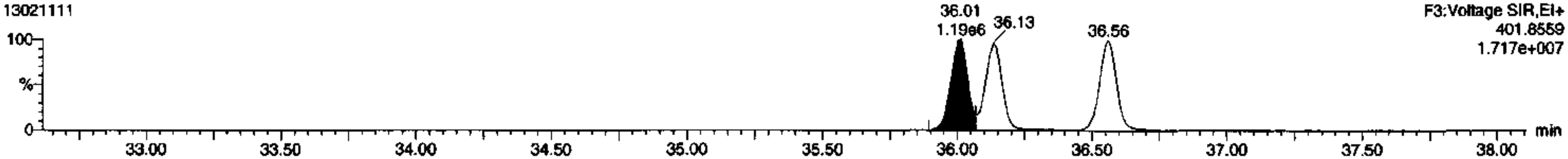
13021111



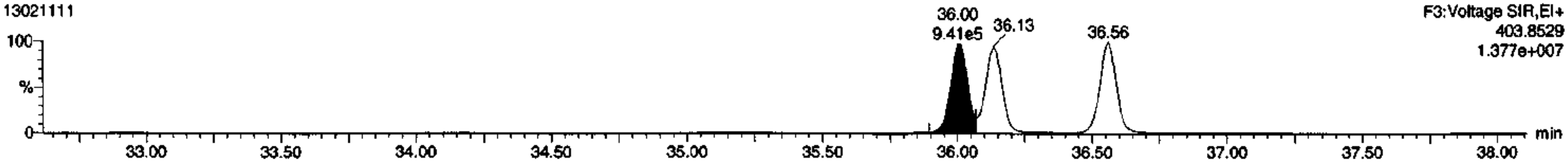
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130211DATA.qld
Last Altered: Tuesday, February 12, 2013 09:40:18 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:41:37 Pacific Standard Time

ID: ICV, Name: 13021111, Date: 11-Feb-2013, Time: 20:01:34, Conditions: AUTOSPEC01, User: pk

13C-123478-HxCDD
13021111



13C-123478-HxCDD
13021111



Total-hexadioxins
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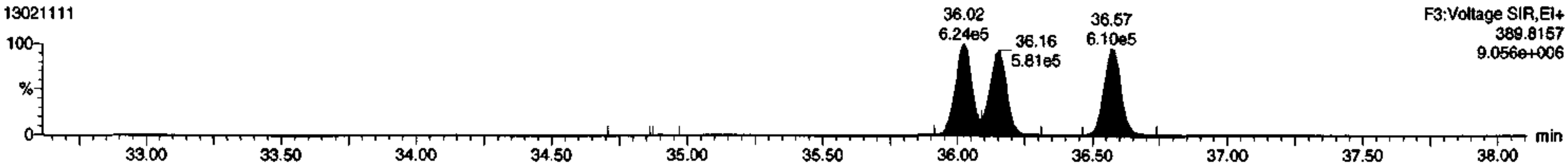
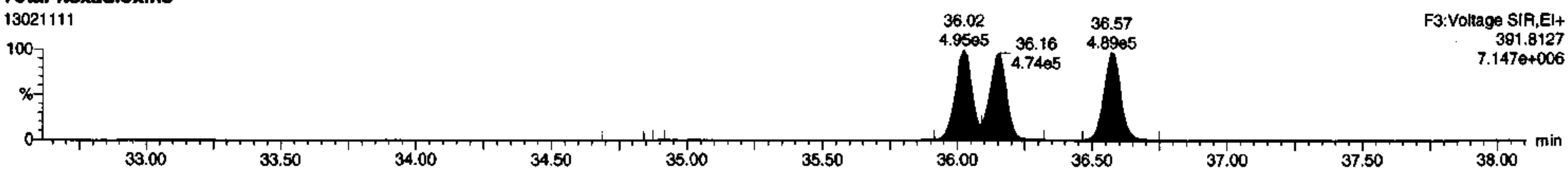
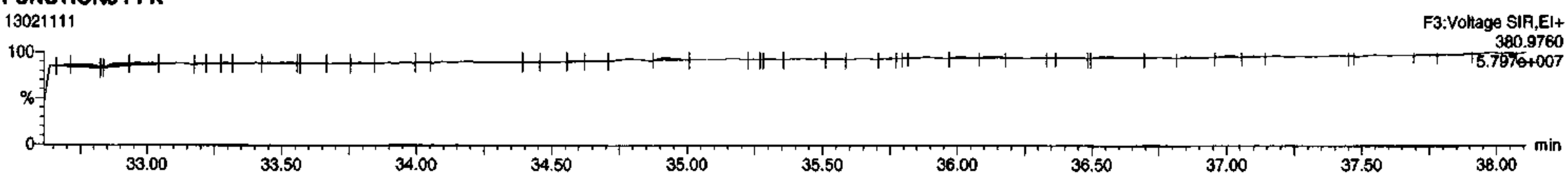


Total-hexadioxins
13021111



FUNCTION3 PFK
13021111



Dataset: P:\DIOXIN8290.PRO\130211DATA.qld
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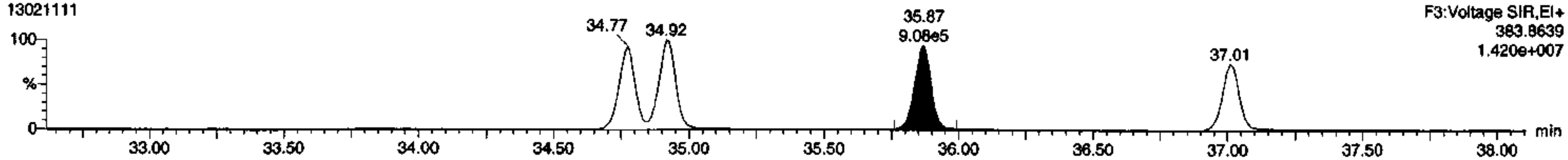
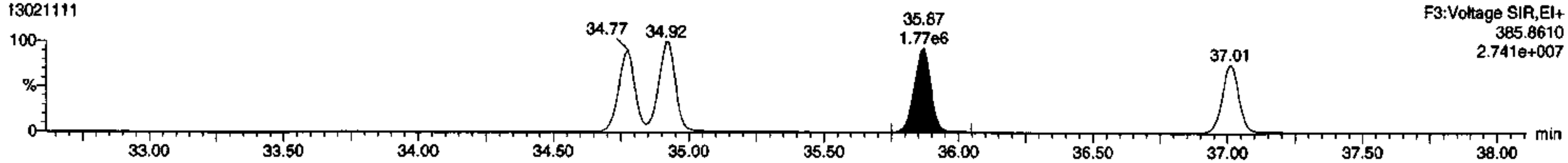
13C-234678-HxCDF
13021111



13C-234678-HxCDF
13021111



Total-hexafurans
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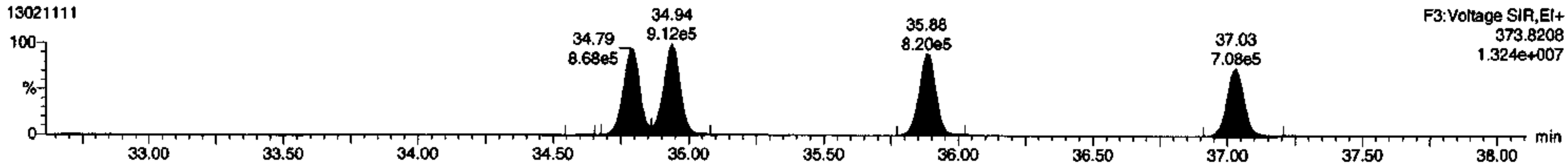

Total-hexafurans
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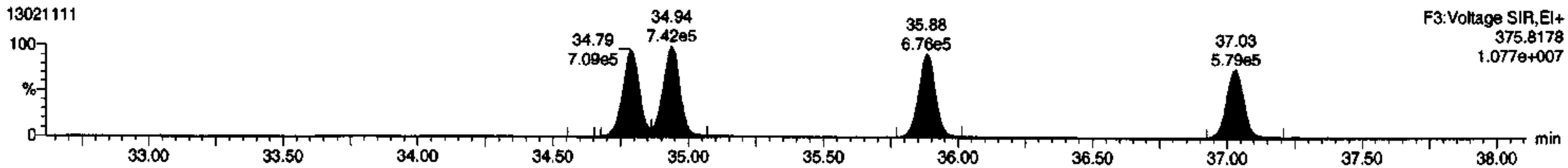
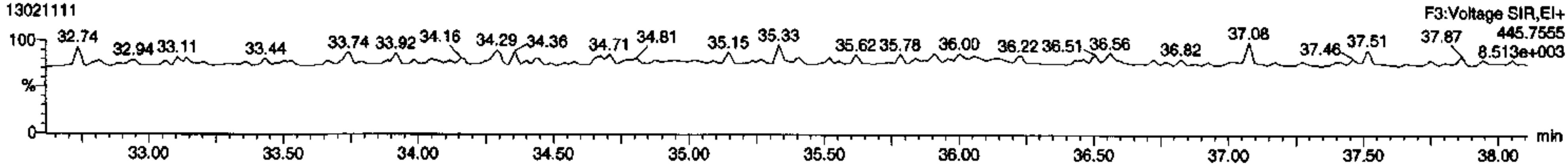


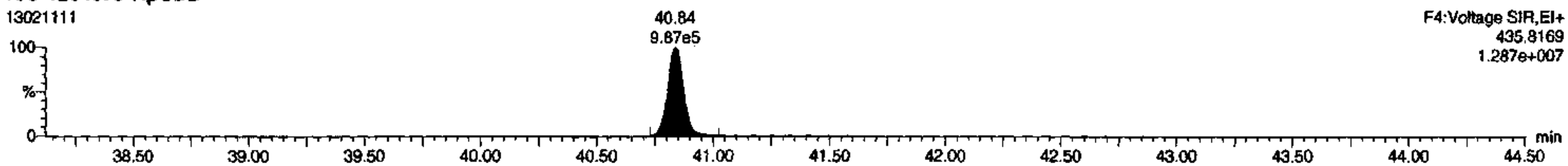
FUNCTION3 OCDPE
13021111



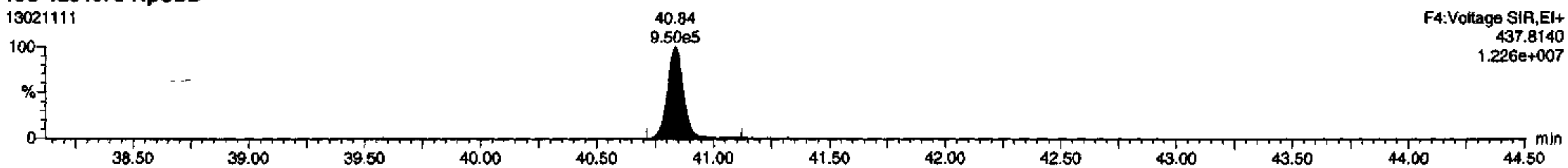
Dataset: P:\DIOXIN8290.PRO\130211DATA.qld
Last Altered: Tuesday, February 12, 2013 09:40:18 Pacific Standard Time
Printed: Tuesday, February 12, 2013 09:41:37 Pacific Standard Time

ID: ICV, Name: 13021111, Date: 11-Feb-2013, Time: 20:01:34, Conditions: AUTOSPEC01, User: pk

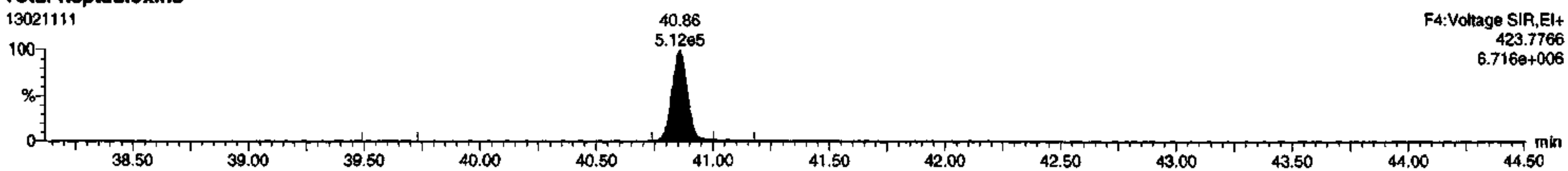
13C-1234678-HpCDD



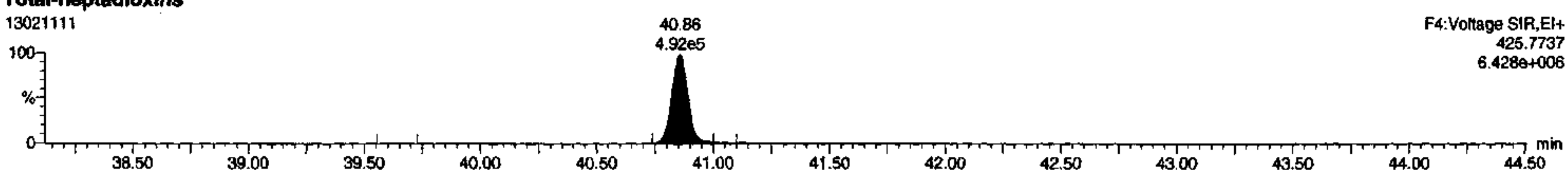
13C-1234678-HpCDD



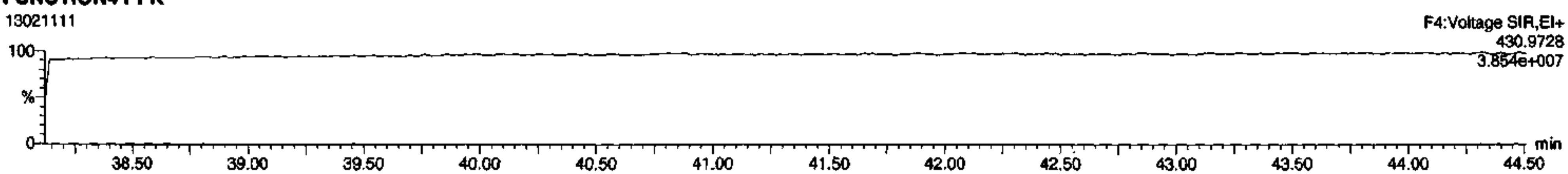
Total-heptadioxins



Total-heptadioxins



FUNCTION4 PFK



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Printed: Tuesday, February 12, 2013 09:41:37 Pacific Standard Time

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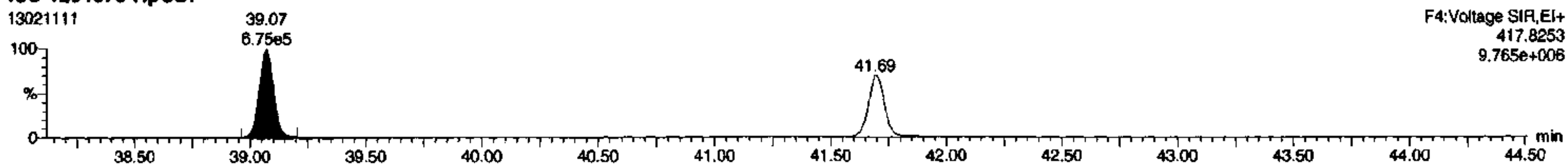

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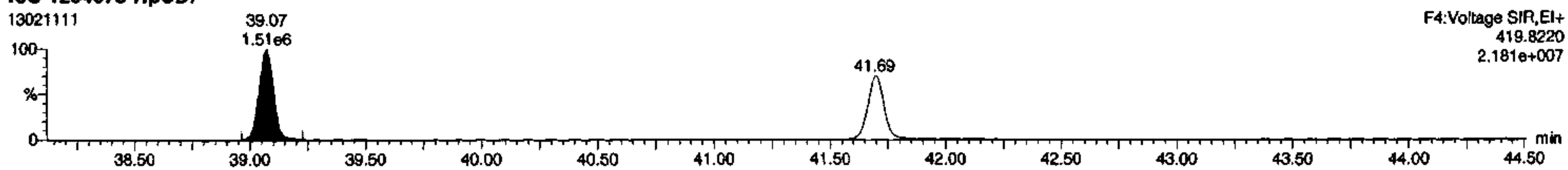

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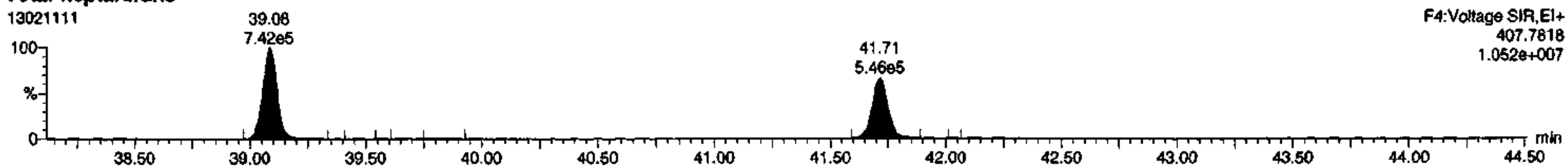

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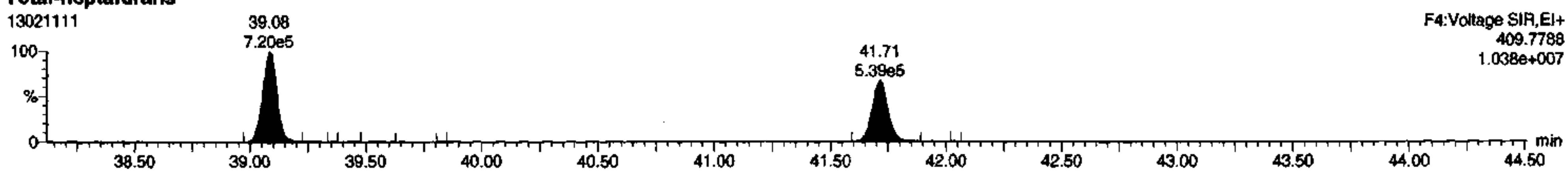

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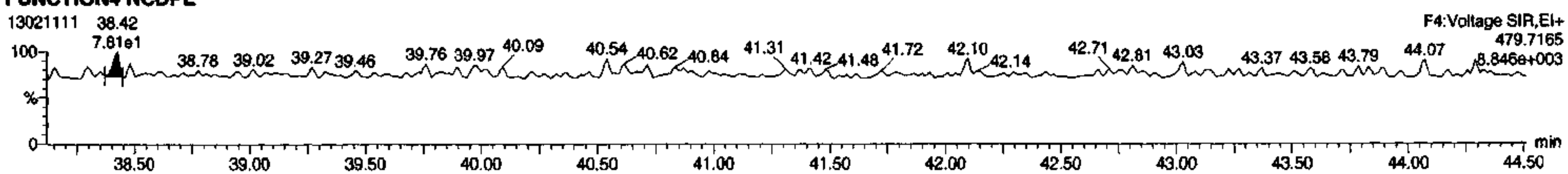

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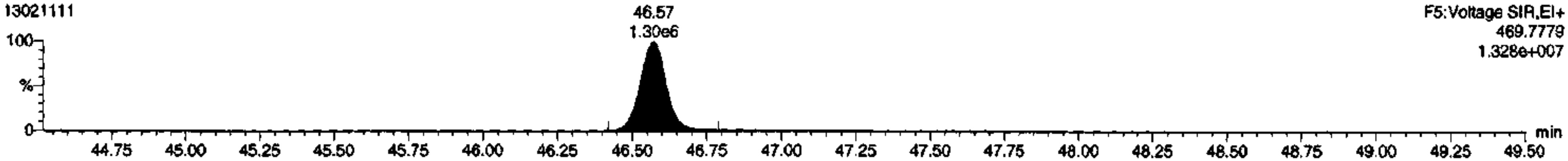

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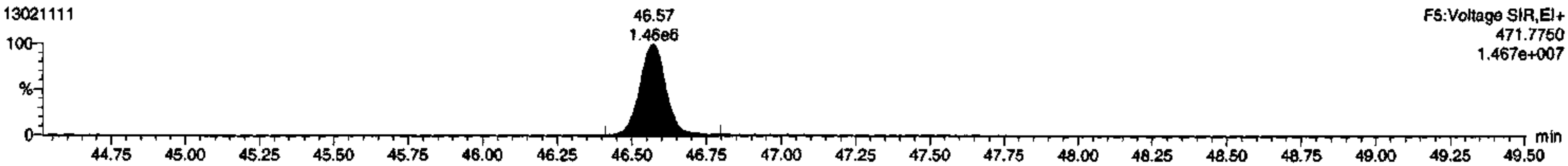

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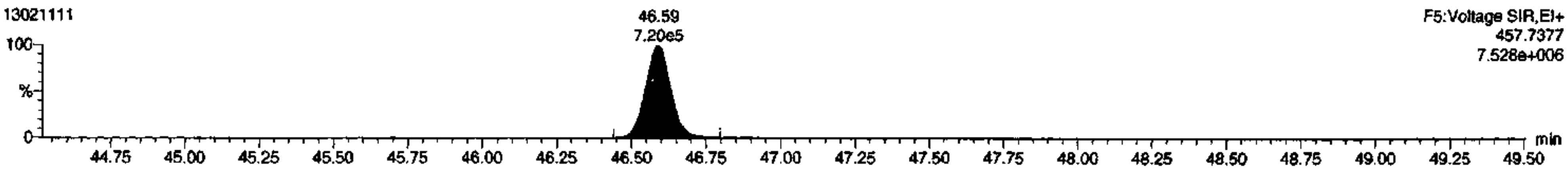

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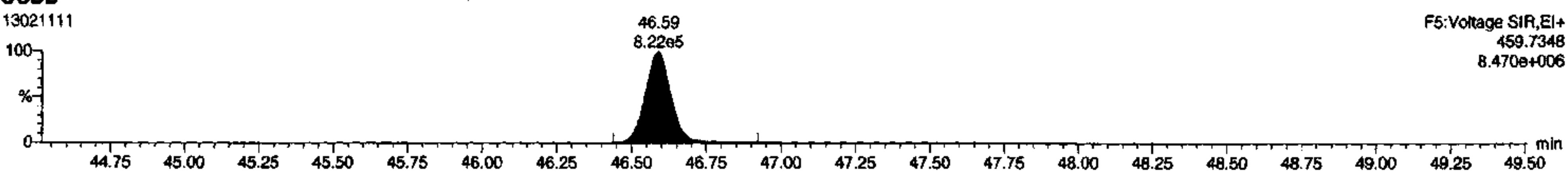

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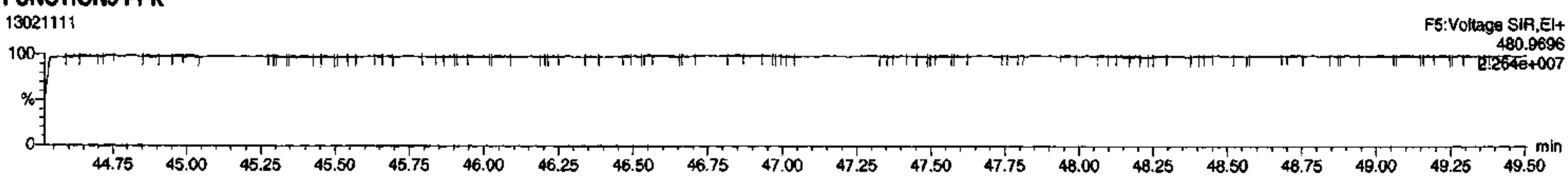

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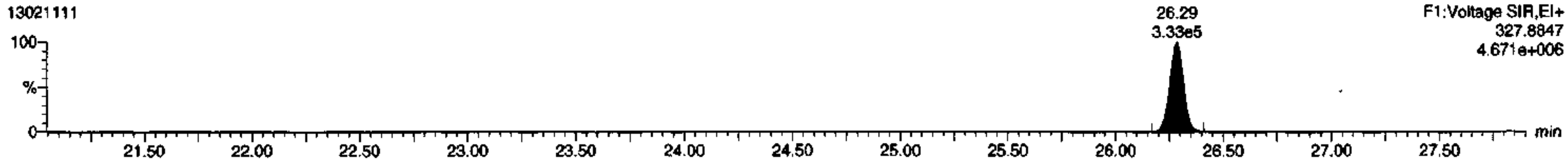
37CL-2378-TCDD



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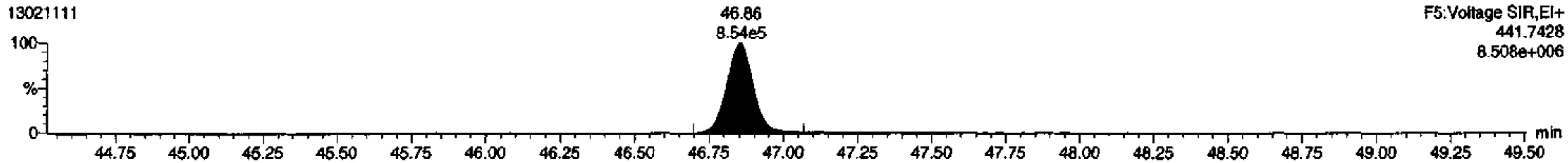

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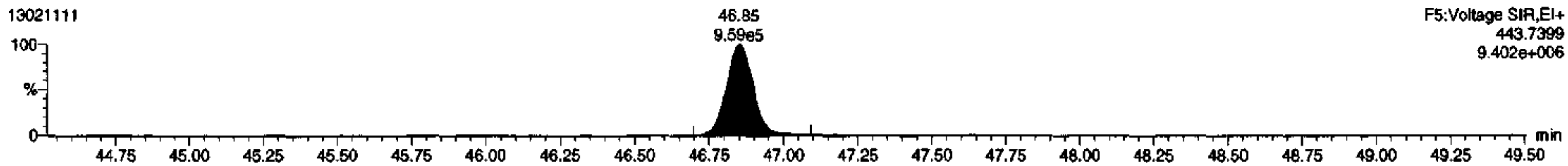

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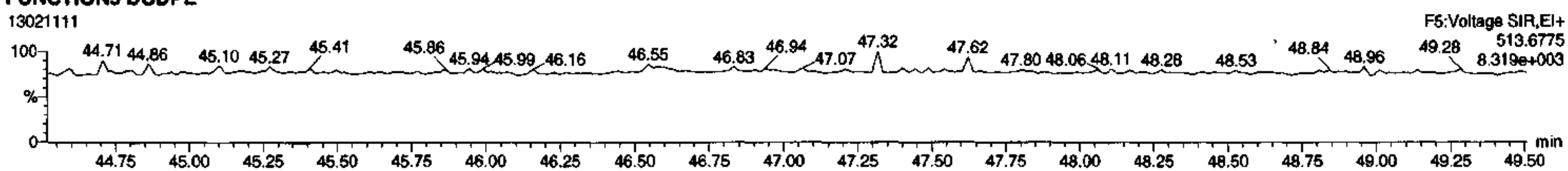

Dioxin Raw Data
Run Logs, Continuing Calibrations, and Raw Data

ARI Job ID: WE03

Analytical Chemists and Consultants

HR-GC/MS Analyst Notes / Corrective Action Log

ARI Project ID: WR03 Client ID: Floyd-Snider

ARI SOP: **806S** (Dioxins)

Parameter(s): 16B

Instrument: **AutoSpec01**

Curve Date: 2/11/13 Analysis Start Date: 2/27/13

Internal Standard Meets Criteria? YES / NO Method Blank in Control? YES / NO

Extraction Std Recovery in Control? YES / NO IPR / OPR Recovery in Control? YES / NO

iCal acceptable? YES / NO CCal acceptable? YES / NO

Manual Integrations for ICal? YES / NO Manual Integrations for Samples? Yes / NO

Special Analysis Criteria Met? YES / NO / NA

Detail problems, corrective actions and/or other pertinent information below (use reverse side when necessary):

- 2 samples appear to be dups. possibly PE.

Additional Details on Reverse: Yes / No

Analyst: [signature] **Date:** 2/28/13

Reviewer: MW **Date:** 2/28

Analytical Resources Inc.: Organics Instrument Log

AutoSpec01 Serial No.:GC=CN10921030, MS=P764

Date: 2/27/13 Analysis: Dioxins Analyst: JK

GC Program: 8290C Column No: I7819 Column Type: RTXDioxin 2

Inj Vol: 1ul Instrument Tune (IPR): Diox 130222 Detector Voltage: 350

Resolution Check Files: 10:45, 19:05, 02:19 Curve Date: 2/11/13

IS/SS	Ical/Ccal	LCS/ICV
I7908	I7214	
	1997-2	

1	27-Feb-13	10:49:43	13022702	CS3
2	27-Feb-13	11:40:38	13022703	ISC01
3	27-Feb-13	12:45:53	13022704	WE03MBS
4	27-Feb-13	13:37:00	13022705	WE03OPR
5	27-Feb-13	14:34:49	13022706	WE03A
6	27-Feb-13	15:25:41	13022707	WE03B
7	27-Feb-13	16:18:26	13022708	WE03QLS
8	27-Feb-13	17:11:19	13022709	WOOL
9	27-Feb-13	18:04:06	13022710	CS3
10	27-Feb-13	19:05:14	13022711	WE46MBS
11	27-Feb-13	20:01:16	13022712	WE46OPR
12	27-Feb-13	20:53:46	13022713	WE46SRM
13	27-Feb-13	21:46:38	13022714	WE46A
14	27-Feb-13	22:39:26	13022715	WE46ADUP
15	27-Feb-13	23:32:18	13022716	WE46B
16	28-Feb-13	00:25:06	13022717	WE46QLS
17	28-Feb-13	01:17:57	13022718	CS3

JK 2/28/13

Every line must contain information or be lined out. Make all entries legible.
Start a new page for each QC period. Document All Maintenance Tasks in StarLIMS

Printed: Wednesday, February 27, 2013 10:45:31 Pacific Standard Time

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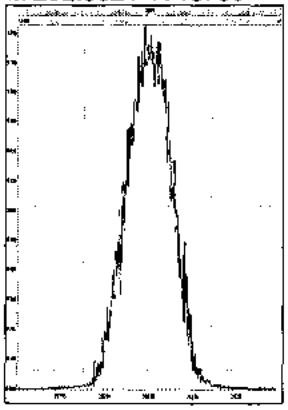

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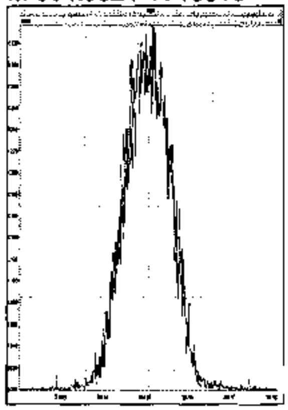

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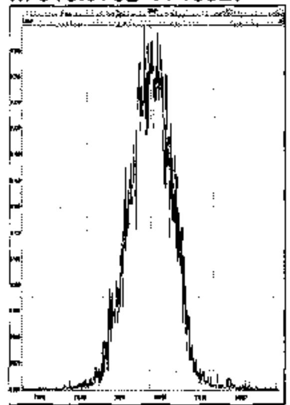

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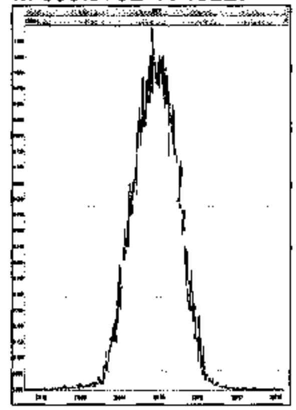

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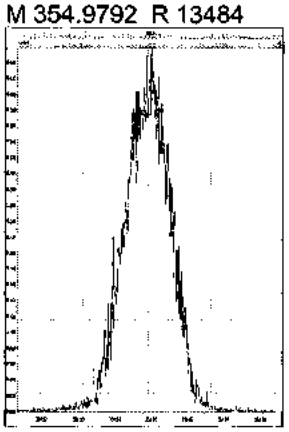

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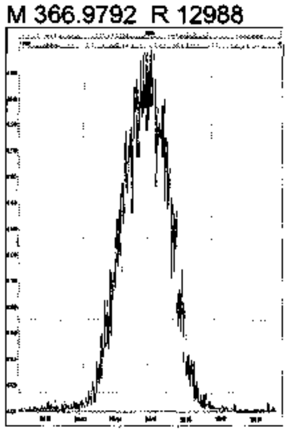

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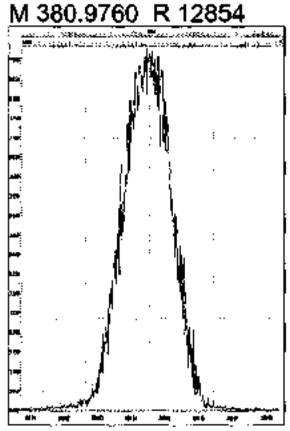

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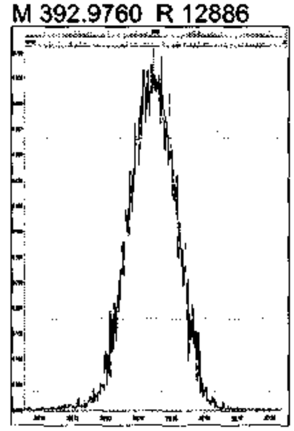

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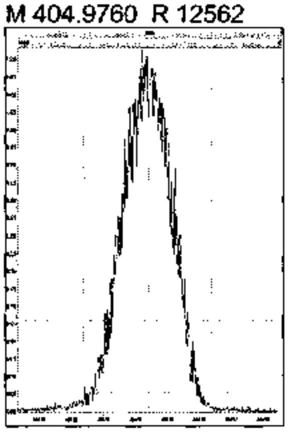

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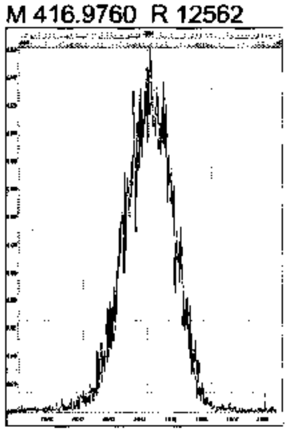

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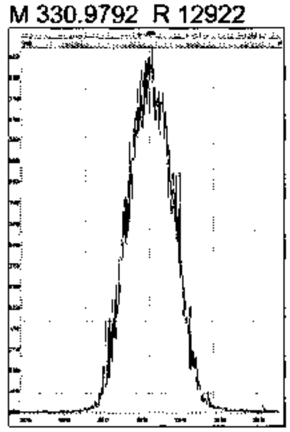

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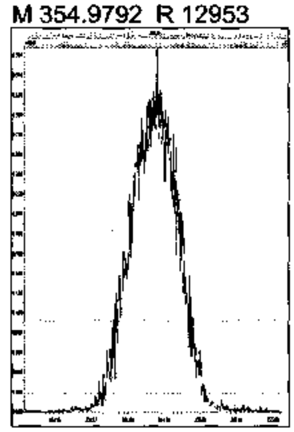

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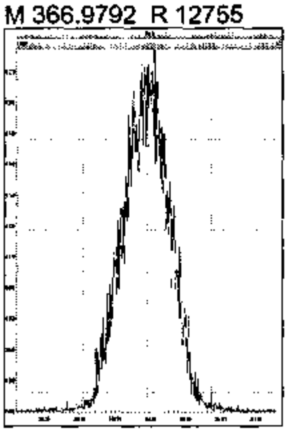

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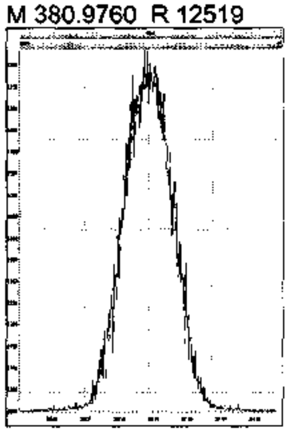

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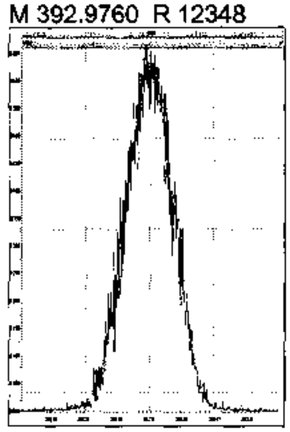

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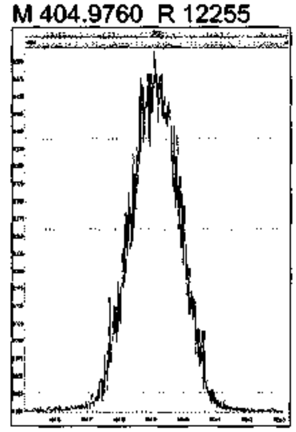

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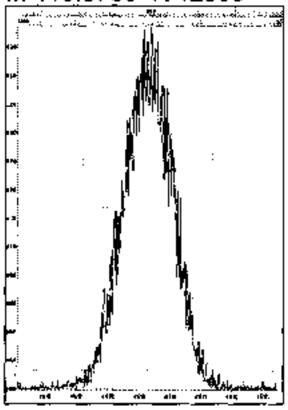

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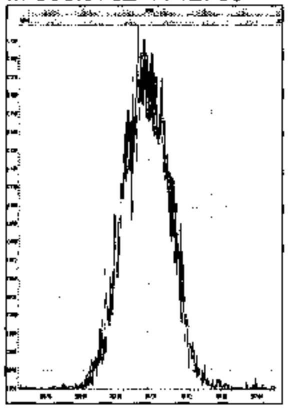

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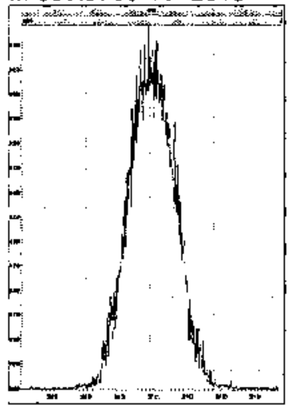

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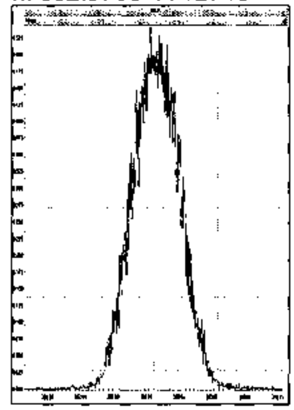

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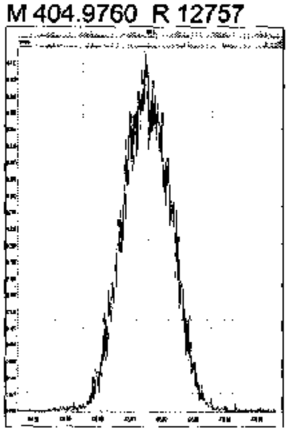

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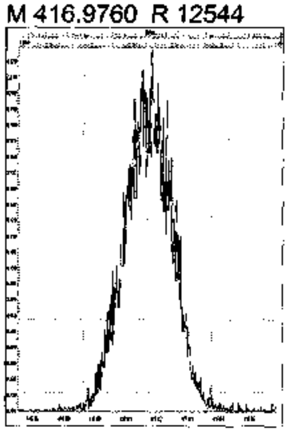

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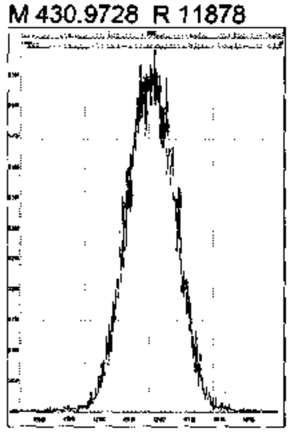

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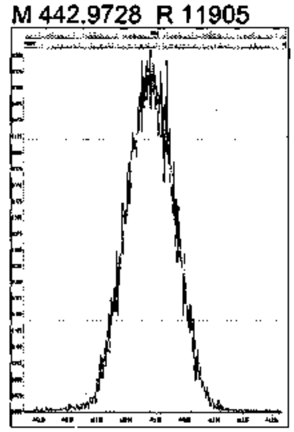

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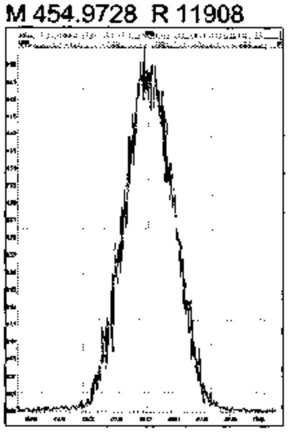

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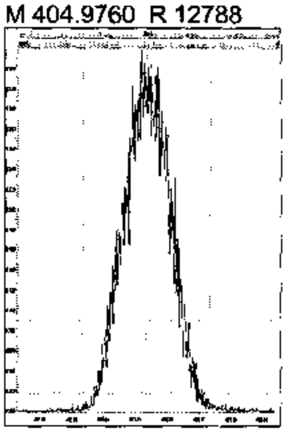

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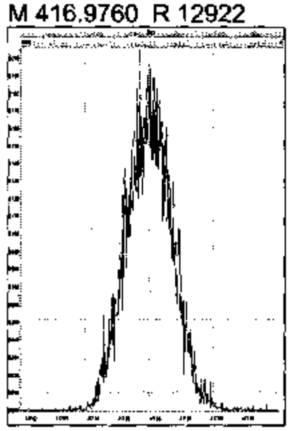

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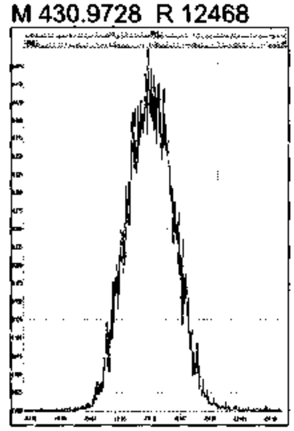

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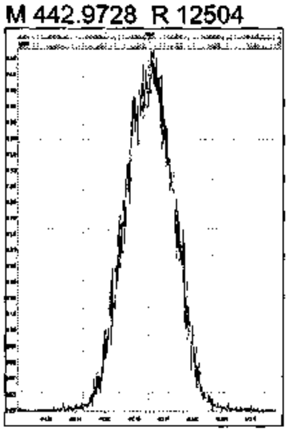

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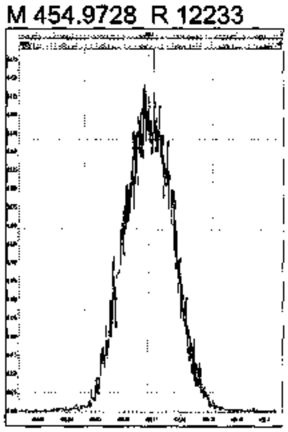

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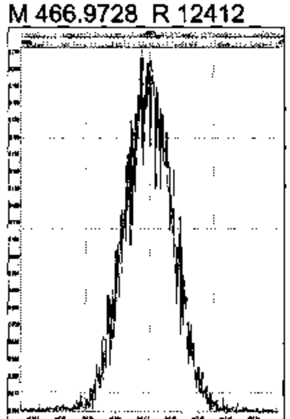

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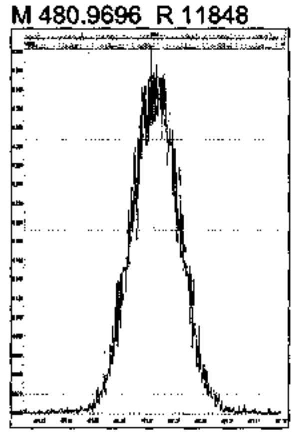

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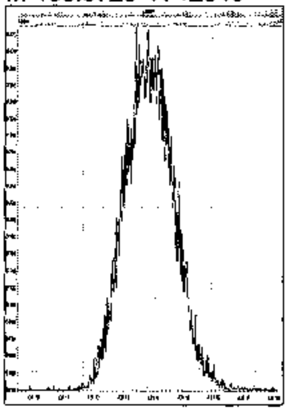

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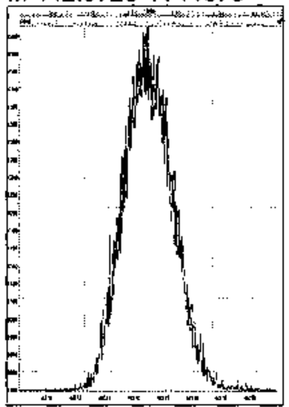

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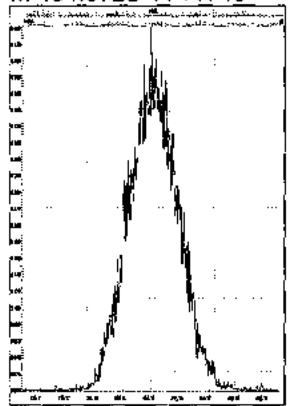

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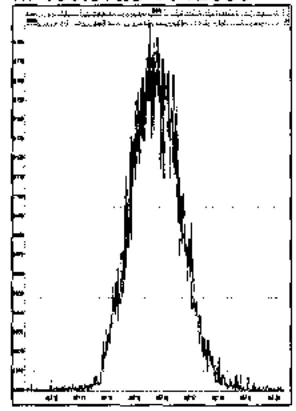

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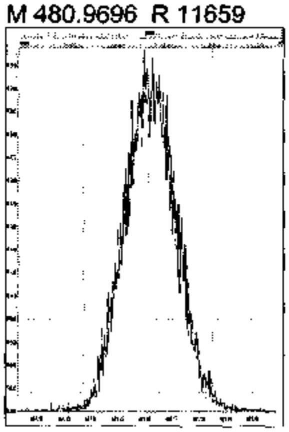

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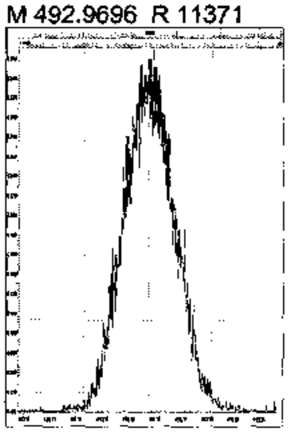

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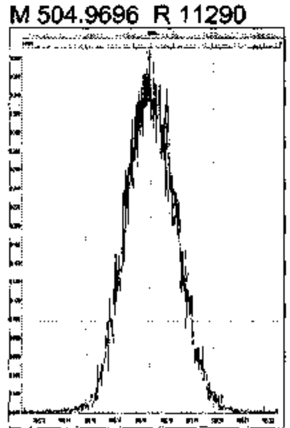

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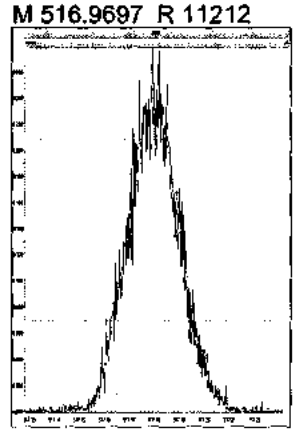

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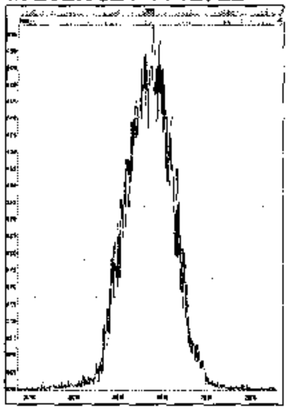

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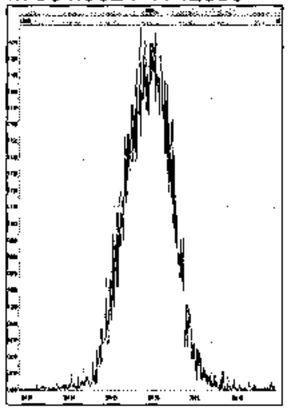

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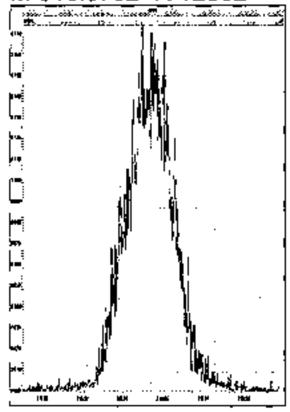

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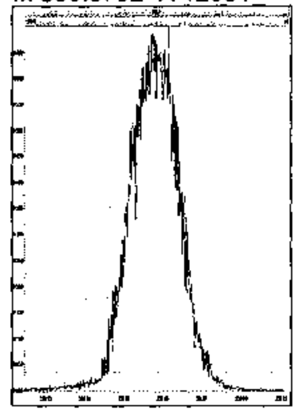

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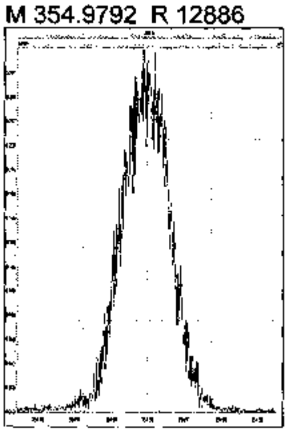

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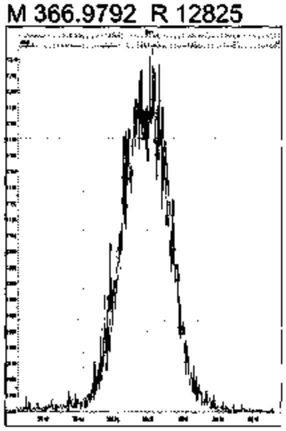
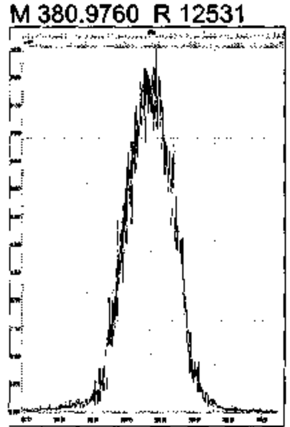
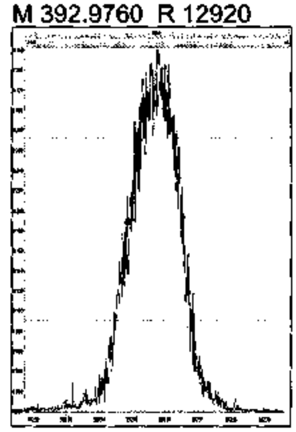


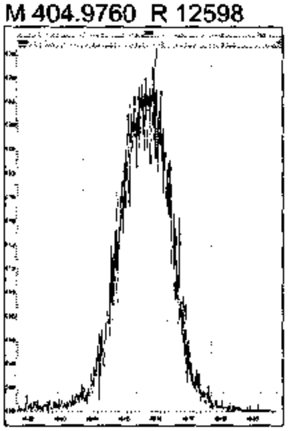
M 380.9760 R 12531



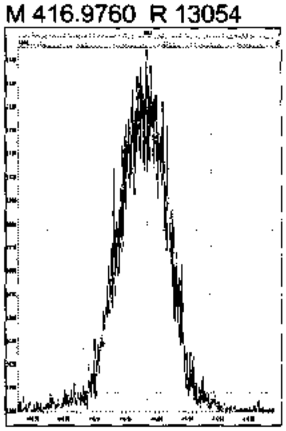
M 392.9760 R 12920



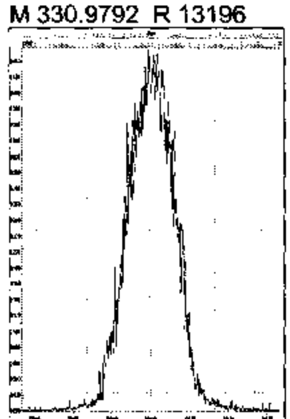
M 404.9760 R 12598



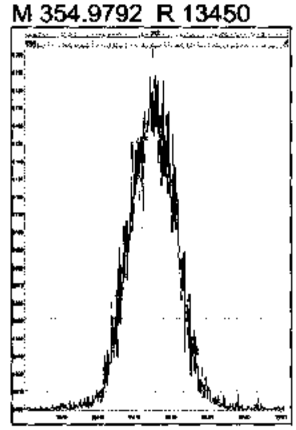
M 416.9760 R 13054



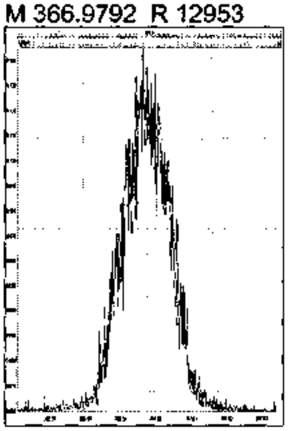
M 330.9792 R 13196



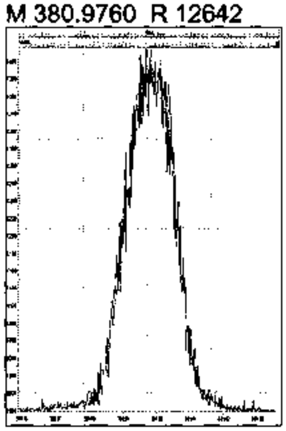
M 354.9792 R 13450



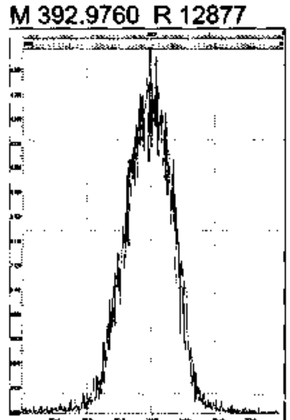
M 366.9792 R 12953



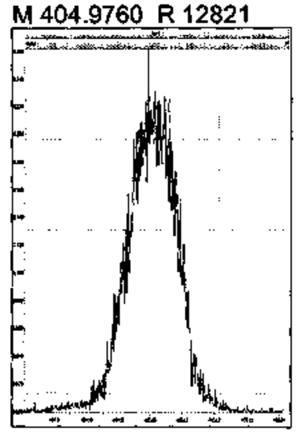
M 380.9760 R 12642



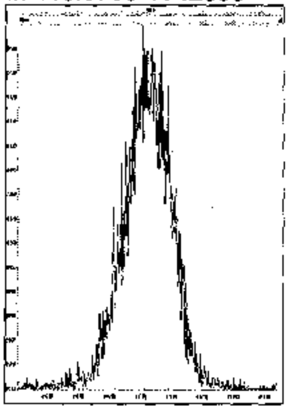
M 392.9760 R 12877



M 404.9760 R 12821



M 416.9760 R 12853



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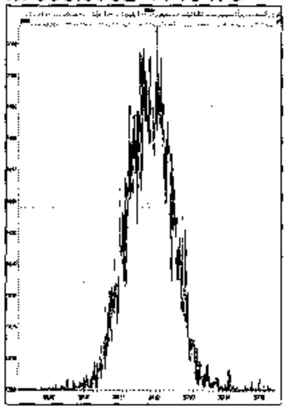
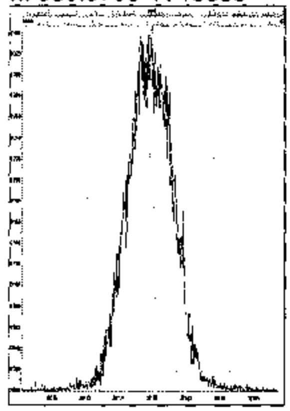
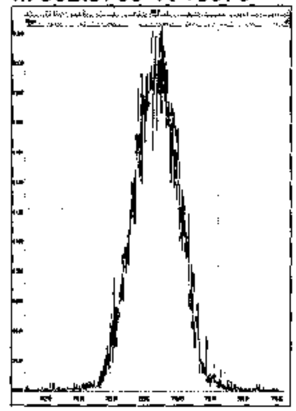


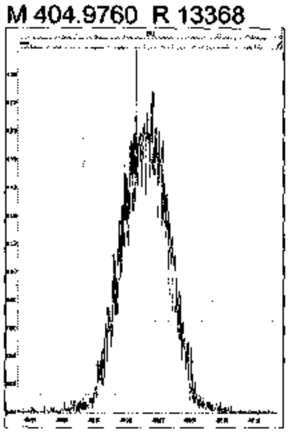
M 380.9760 R 13368



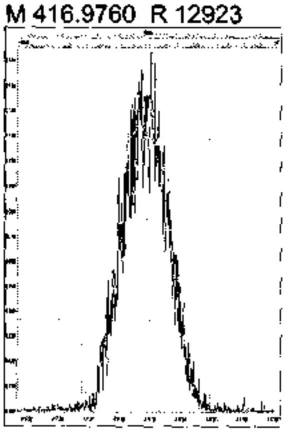
M 392.9760 R 13370



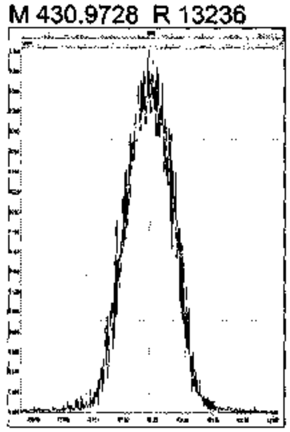
M 404.9760 R 13368



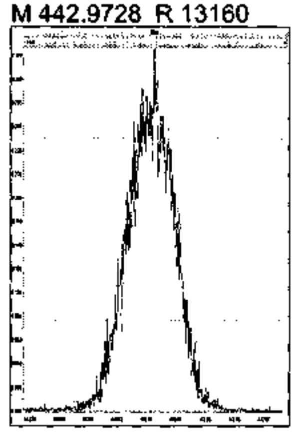
M 416.9760 R 12923



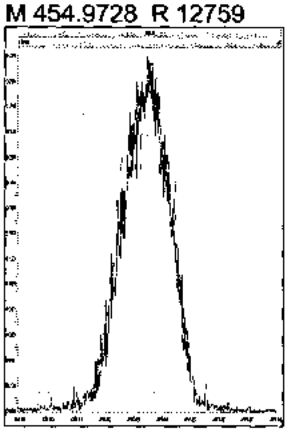
M 430.9728 R 13236



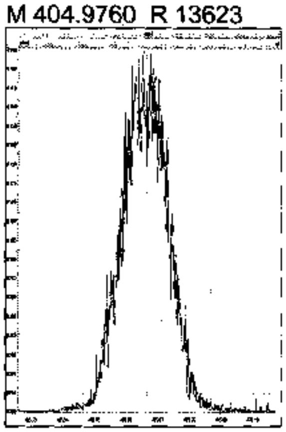
M 442.9728 R 13160



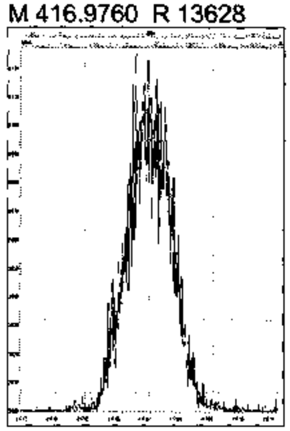
M 454.9728 R 12759



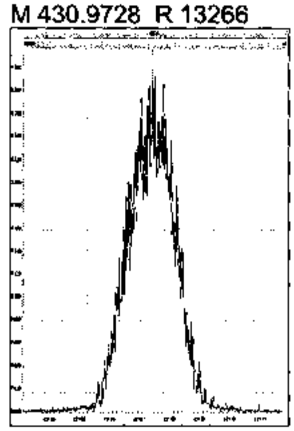
M 404.9760 R 13623



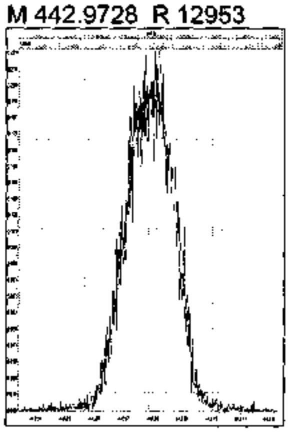
M 416.9760 R 13628



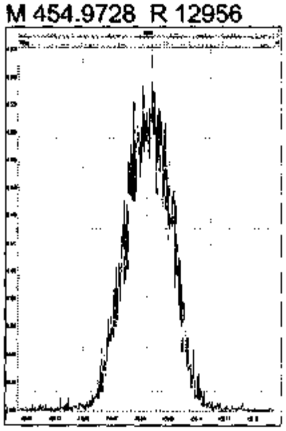
M 430.9728 R 13266



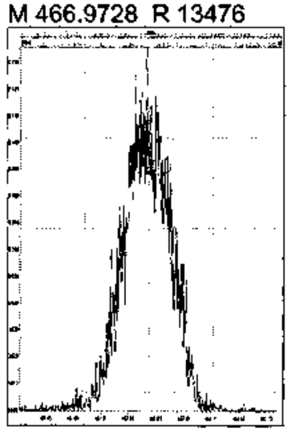
M 442.9728 R 12953



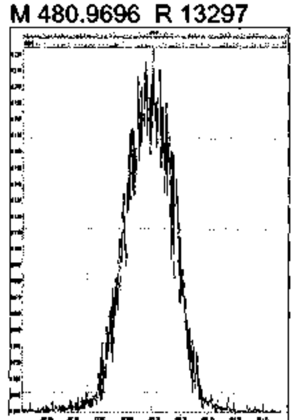
M 454.9728 R 12956



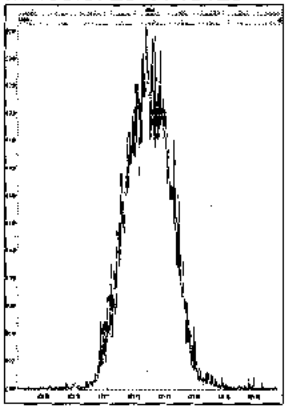
M 466.9728 R 13476



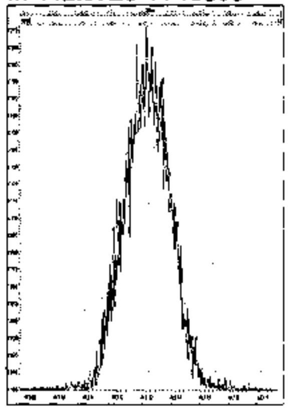
M 480.9696 R 13297



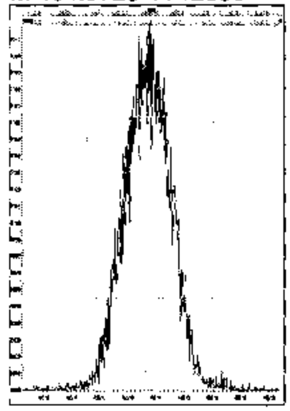
M 430.9728 R 13123



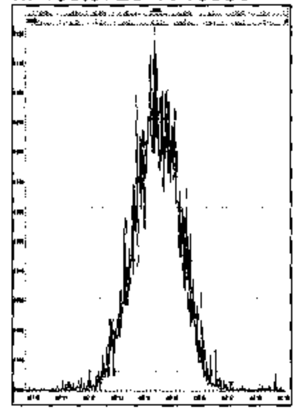
M 442.9728 R 13850



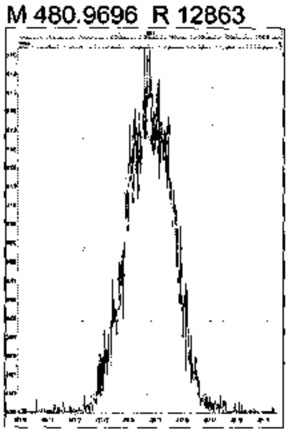
M 454.9728 R 12886



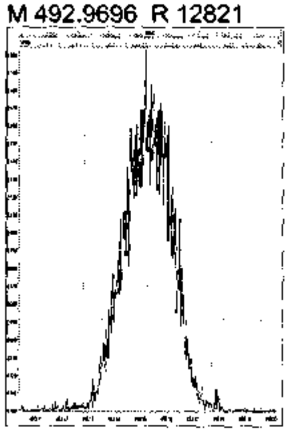
M 466.9728 R 13586



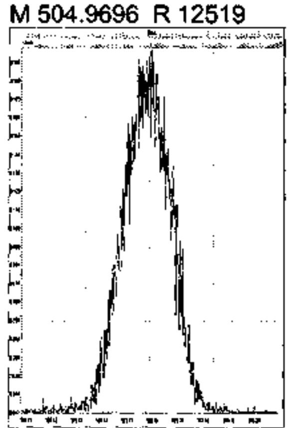
M 480.9696 R 12863



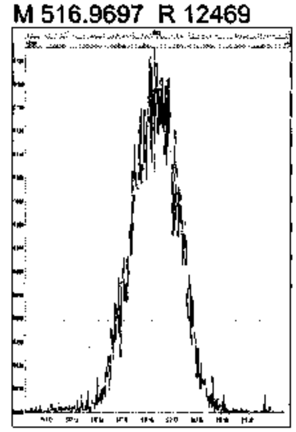
M 492.9696 R 12821

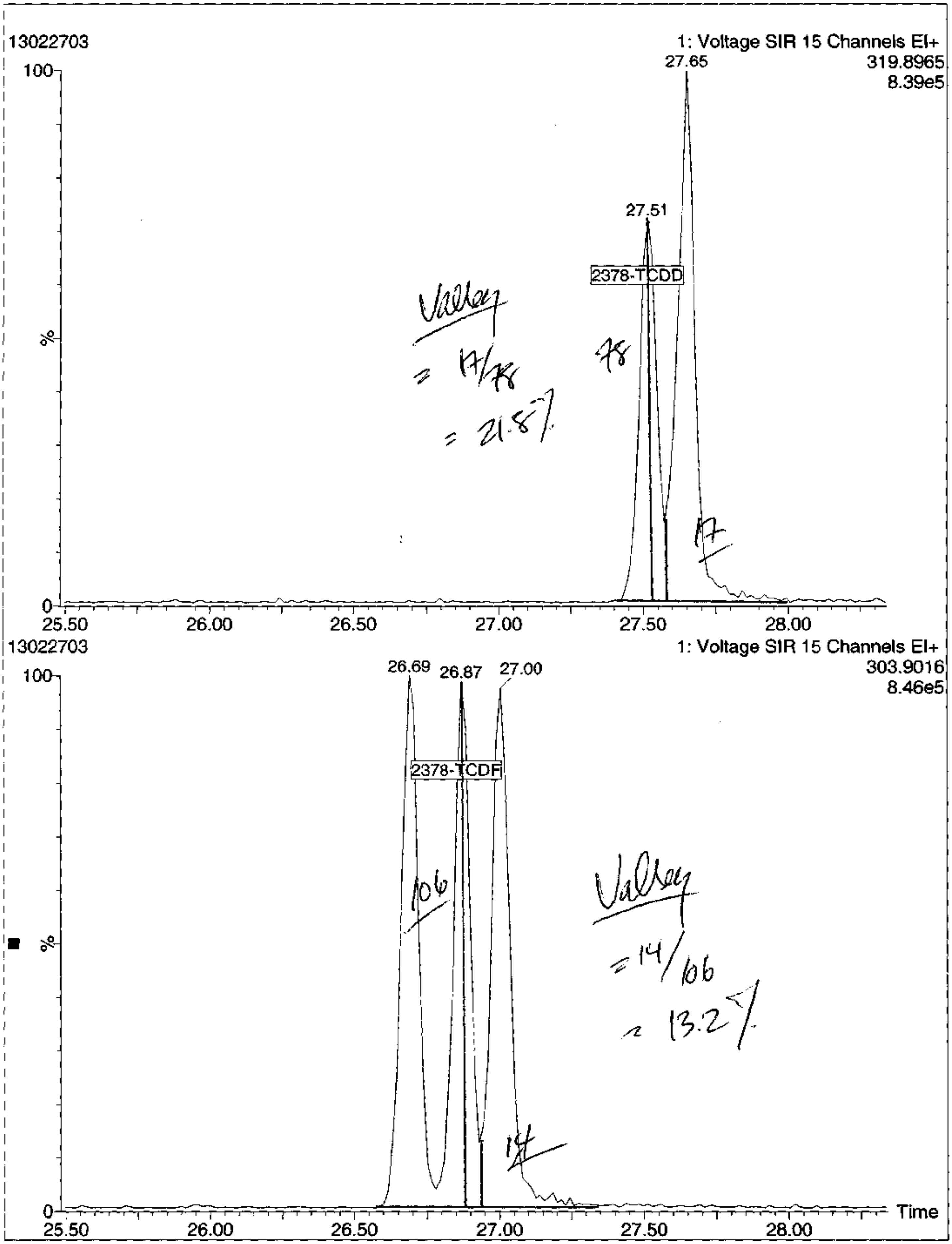


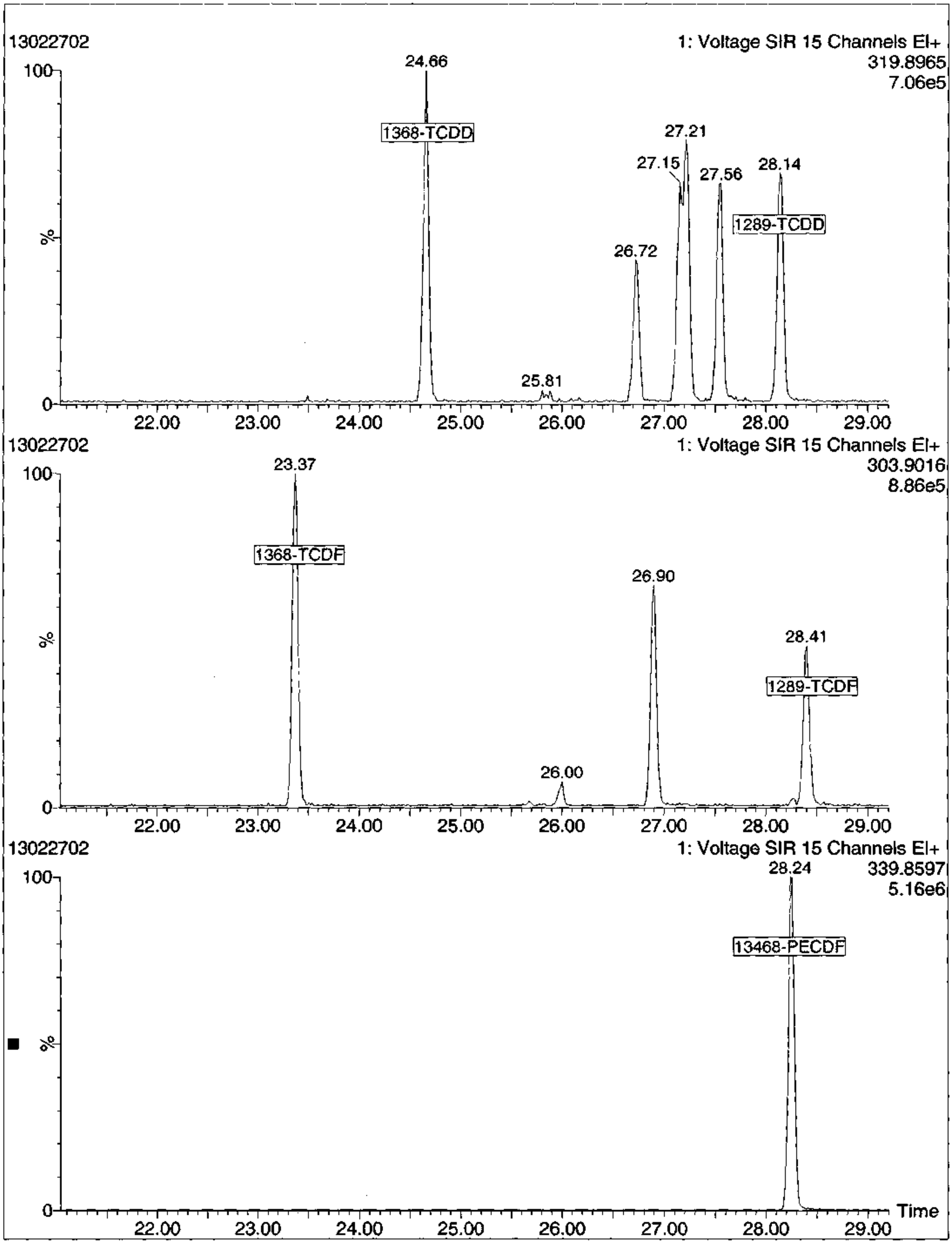
M 504.9696 R 12519



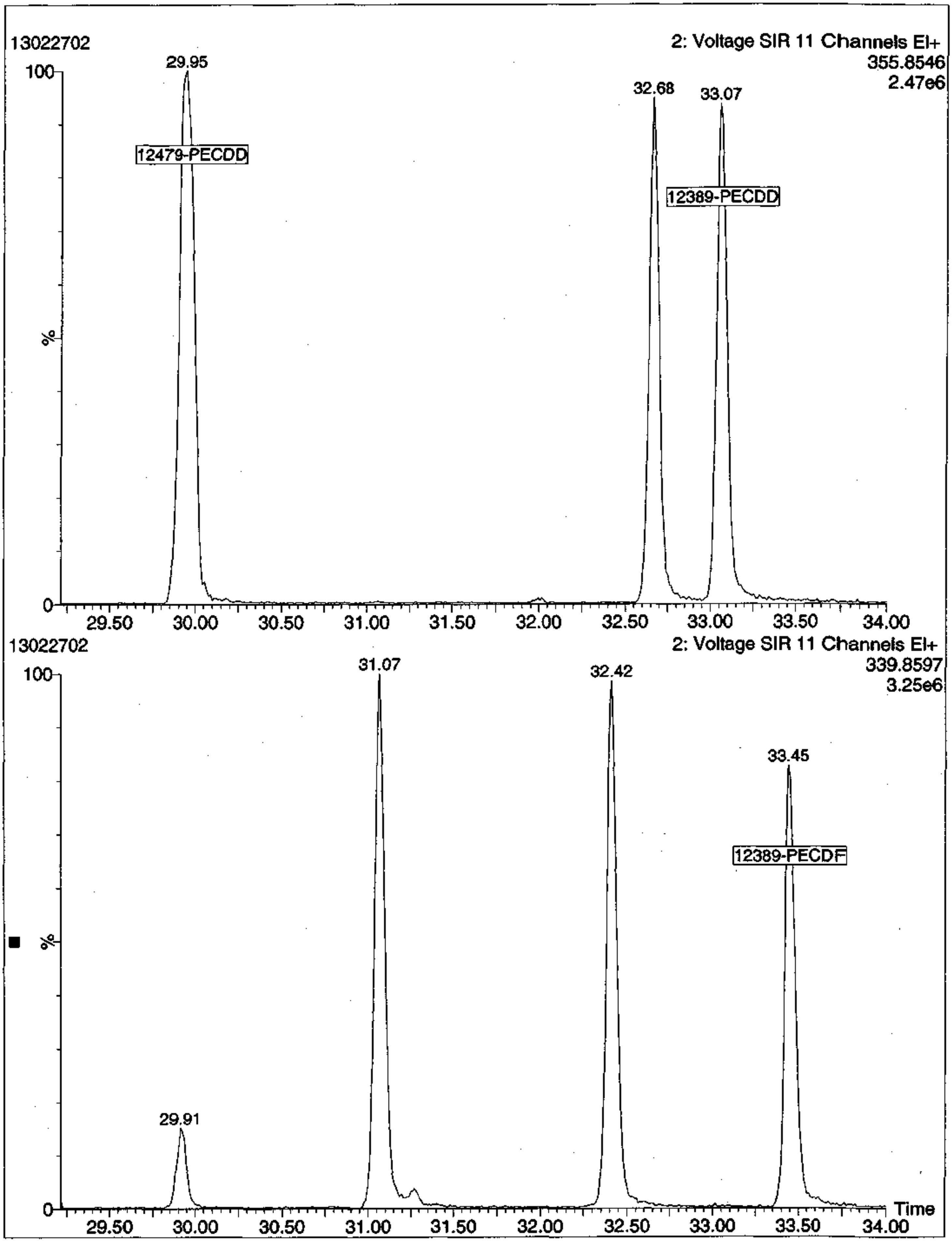
M 516.9697 R 12469



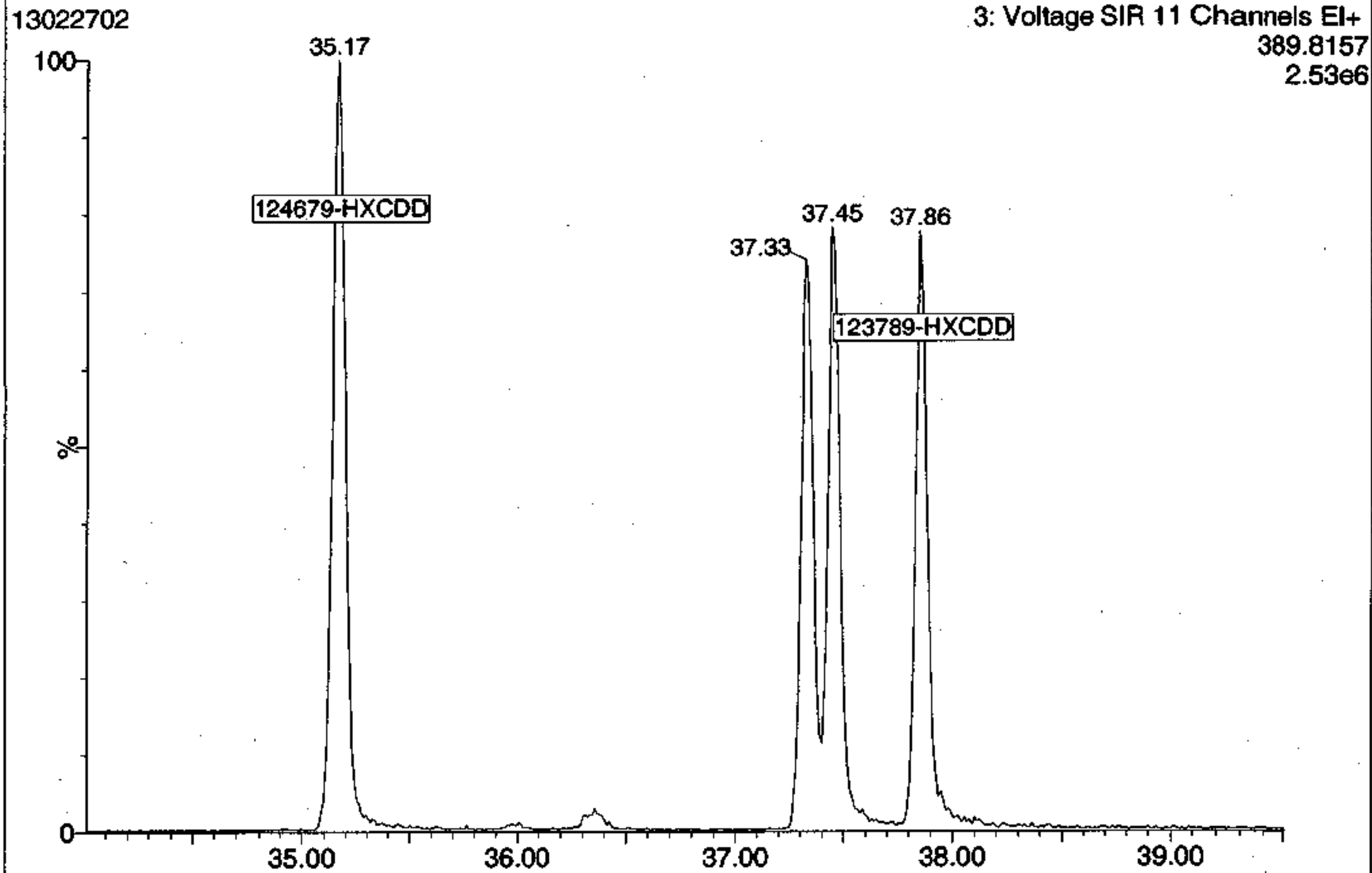

13022703
1: Voltage SIR 15 Channels EI+
319.8965
8.39e5
100
%
0
27.65
27.51
2378-TCDD
Valley
= 17/78
= 21.8%
78
17
25.50
26.00
26.50
27.00
27.50
28.00
13022703
1: Voltage SIR 15 Channels EI+
303.9016
8.46e5
100
%
0
26.69
26.87
27.00
2378-TCDF
106
Valley
= 14/106
= 13.2%
14
Time
25.50
26.00
26.50
27.00
27.50
28.00

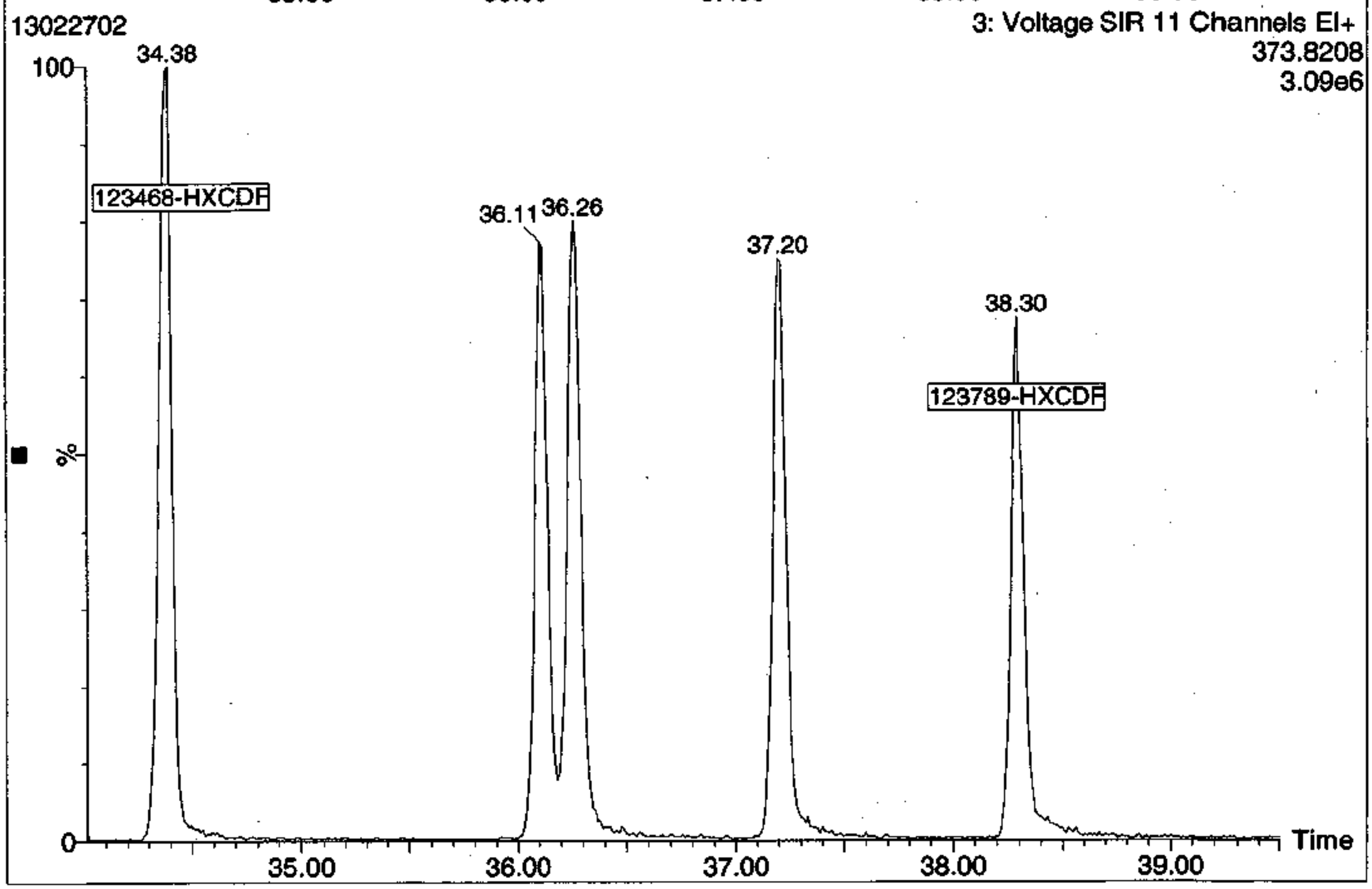


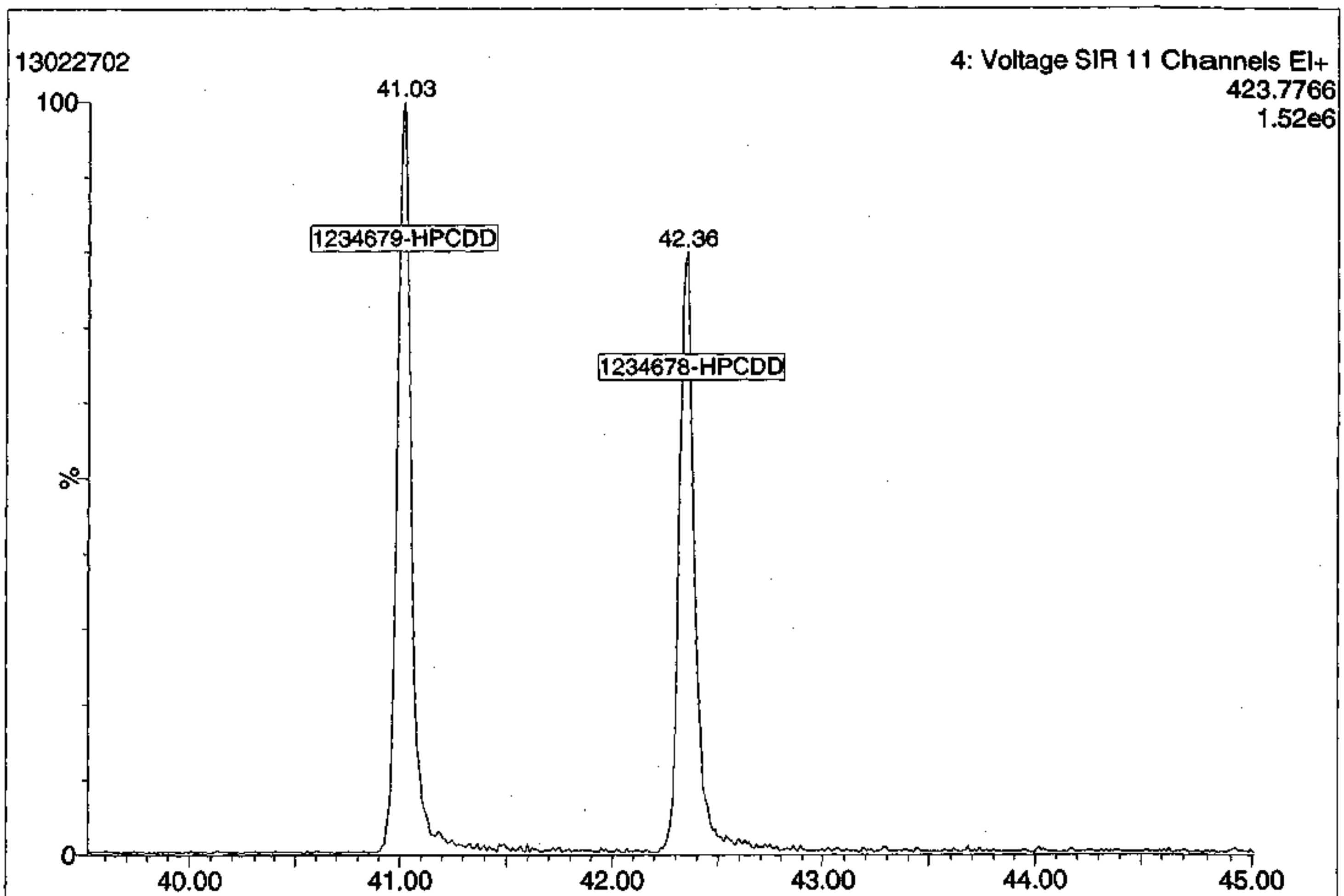
13022702
1: Voltage SIR 15 Channels EI+
319.8965
7.06e5
100
%
0
24.66
1368-TCDD
27.21
27.15
27.56
28.14
1289-TCDD
26.72
25.81
22.00
23.00
24.00
25.00
26.00
27.00
28.00
29.00
13022702
1: Voltage SIR 15 Channels EI+
303.9016
8.86e5
23.37
1368-TCDF
26.90
28.41
1289-TCDF
26.00
13022702
1: Voltage SIR 15 Channels EI+
339.8597
5.16e6
28.24
13468-PECDF
Time

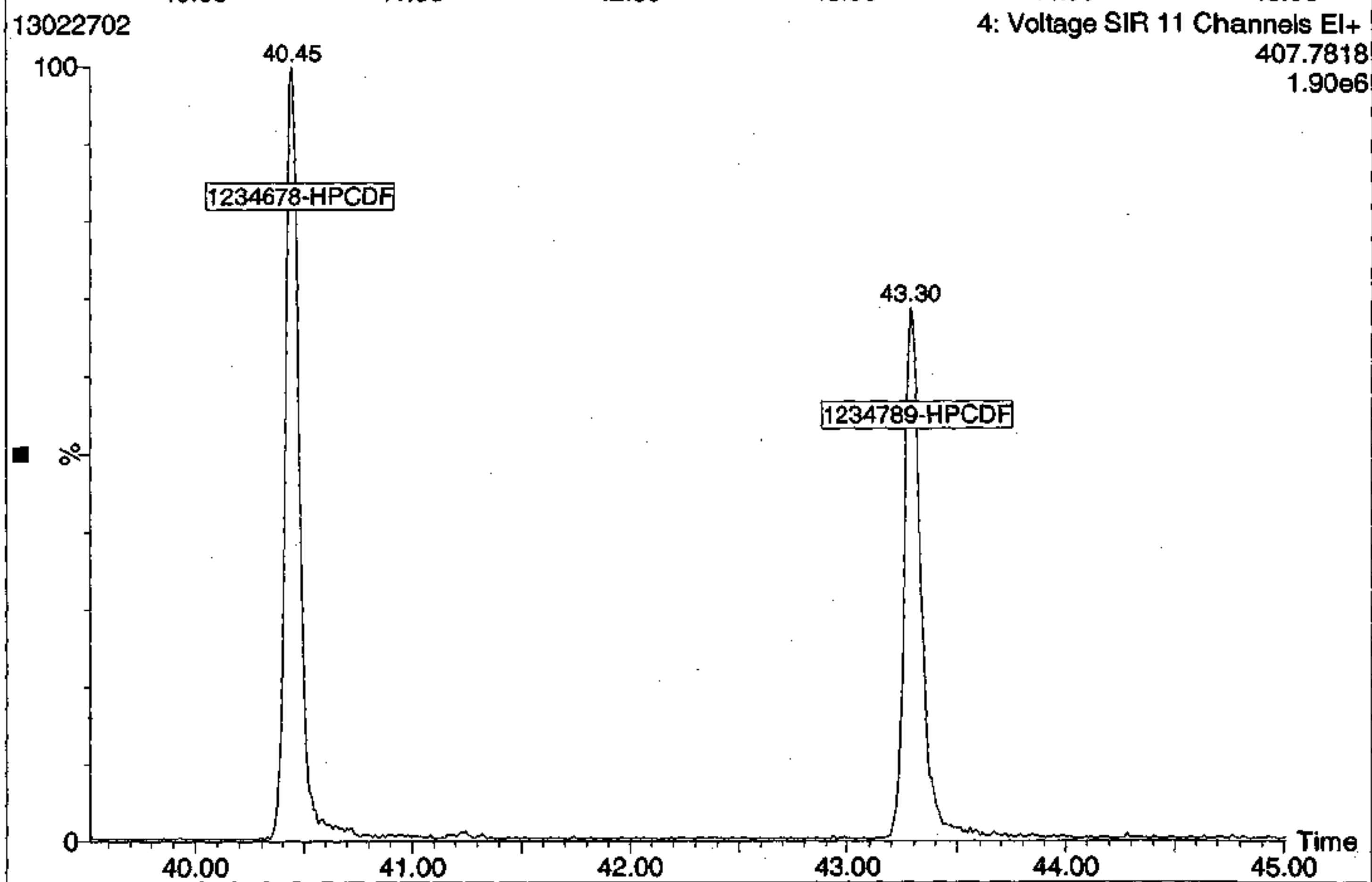

13022702
2: Voltage SIR 11 Channels EI+
355.8546
2.47e6
100
%
0
29.95
32.68
33.07
12479-PECDD
12389-PECDD
29.50
30.00
30.50
31.00
31.50
32.00
32.50
33.00
33.50
34.00
13022702
2: Voltage SIR 11 Channels EI+
339.8597
3.25e6
100
%
0
31.07
32.42
33.45
29.91
12389-PECDF
Time
29.50
30.00
30.50
31.00
31.50
32.00
32.50
33.00
33.50
34.00

UE03 : 00165


13022702
3: Voltage SIR 11 Channels EI+
389.8157
2.53e6
100
%
0
35.17
124679-HXCDD
37.33
37.45
37.86
123789-HXCDD
35.00
36.00
37.00
38.00
39.00


13022702
3: Voltage SIR 11 Channels EI+
373.8208
3.09e6
100
%
0
34.38
123468-HXCDF
36.11
36.26
37.20
38.30
123789-HXCDF
35.00
36.00
37.00
38.00
39.00
Time


13022702
4: Voltage SIR 11 Channels EI+
423.7766
1.52e6
100
%
0
41.03
1234679-HPCDD
42.36
1234678-HPCDD
40.00
41.00
42.00
43.00
44.00
45.00


13022702
4: Voltage SIR 11 Channels EI+
407.7818
1.90e6
100
%
0
40.45
1234678-HPCDF
43.30
1234789-HPCDF
Time
40.00
41.00
42.00
43.00
44.00
45.00

Quantify Sample Summary Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130227OPEN.qld
Last Altered: Wednesday, February 27, 2013 11:43:20 Pacific Standard Time
Printed: Thursday, February 28, 2013 10:11:44 Pacific Standard Time

Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130225.mdb 26 Feb 2013 09:49:11
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: CS3, Name: 13022702, Date: 27-Feb-2013, Time: 10:49:43, Conditions: AUTOSPEC01, User: pk

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[redacted]	12378-PeCDF	31.075	1.001	2.28e5	1.50e5	0.912	1.519	1.550	966.6	NO	48.737	48.737
[redacted]	23478-PeCDF	32.412	1.000	2.15e5	1.41e5	0.943	1.529	1.550	950.4	NO	47.597	47.597
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[redacted]	13C-OCDD	48.613	1.284	3.20e5	3.57e5	0.675	0.896	0.890	1102.3	NO		212.378

Quantify Sample Summary Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130227OPEN.qld
Last Altered: Wednesday, February 27, 2013 11:43:20 Pacific Standard Time
Printed: Thursday, February 28, 2013 10:11:44 Pacific Standard Time

ID: CS3, Name: 13022702, Date: 27-Feb-2013, Time: 10:49:43, Conditions: AUTOSPEC01, User: pk

[redacted]												
[redacted]	13C-123789-HxCDD	37.848	0.000	2.63e5	2.09e5	1.000	1.260	1.240	1426.3	NO		100.000
[redacted]	Total-tetrafurans			1.33e5		0.921						30.028
[redacted]	Total-penta1			3.55e5								76.314
[redacted]	Total-pentafurans			6.74e5		0.927						146.081
[redacted]	Total-hexafurans			8.62e5		1.062						268.760
[redacted]	Total-heptafurans			2.51e5		1.231						100.413
[redacted]	Total-Furans			2.45e6		1.065						719.380
[redacted]	Total-tetradioxins			1.98e5		1.106						54.469
[redacted]	Total-pentadioxins			5.83e5		1.001						178.918
[redacted]	Total-hexadioxins			5.55e5		0.937						213.790
[redacted]	Total-heptadioxins			2.15e5		1.029						107.004
[redacted]	Total-Dioxins			1.71e6		0.994						651.866
[redacted]	Total-TEQ			4.16e6								1371.247
[redacted]	37CL-2378-TCDD	27.542	1.031	8.08e4		1.051			650.4			9.287
[redacted]	FUNCTION1 PFK			1.07e6								
[redacted]	FUNCTION2 PFK			1.61e5								0.000
[redacted]	FUNCTION3 PFK			1.10e5								0.000
[redacted]	FUNCTION4 PFK			0.00e0								
[redacted]	FUNCTION5 PFK			1.72e5								
[redacted]	FUNCTION1 HXCDPE			0.00e0								
[redacted]	FUNCTION1 HPCDPE			2.51e3								0.000
[redacted]	FUNCTION2 HPCDPE			1.35e3								0.000
[redacted]	FUNCTION3 OCDPE			0.00e0								
[redacted]	FUNCTION4 NCDPE			4.03e2								0.000
[redacted]	FUNCTION5 DCDPE			0.00e0								

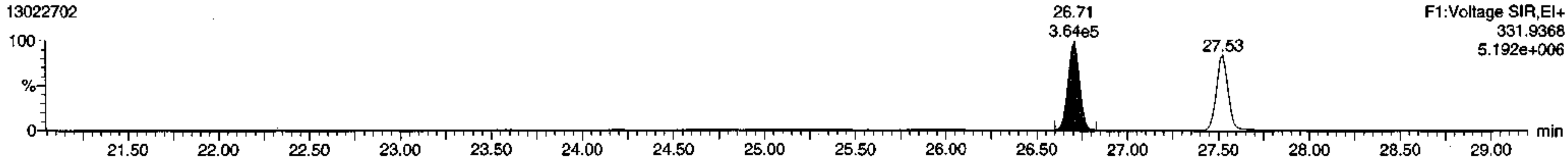
Quantify Sample Report **MassLynx 4.1 SCN 714**

Dataset: P:\DIOXIN8290.PRO\130227OPEN.qld
Last Altered: Wednesday, February 27, 2013 11:43:20 Pacific Standard Time
Printed: Thursday, February 28, 2013 10:11:44 Pacific Standard Time

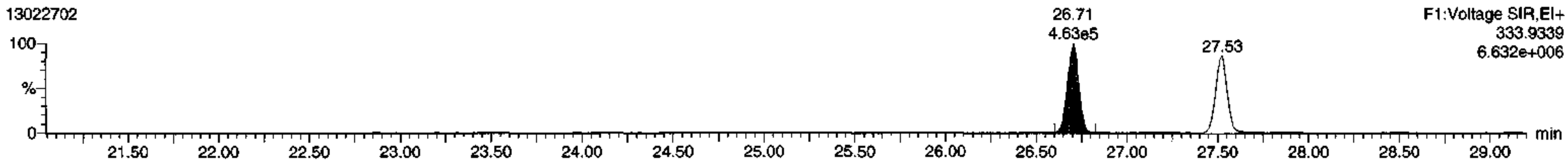
Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130225.mdb 26 Feb 2013 09:49:11
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: CS3, Name: 13022702, Date: 27-Feb-2013, Time: 10:49:43, Conditions: AUTOSPEC01, User: pk

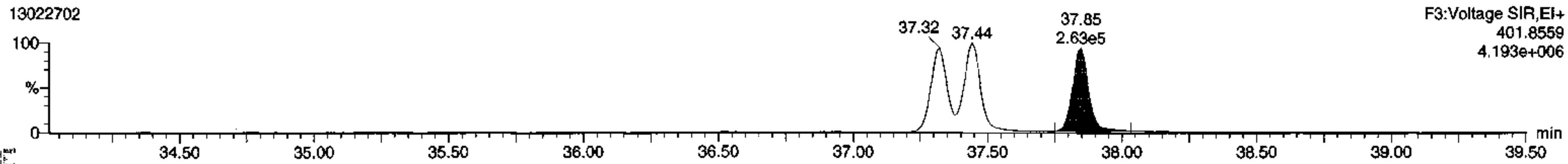
13C-1234-TCDD



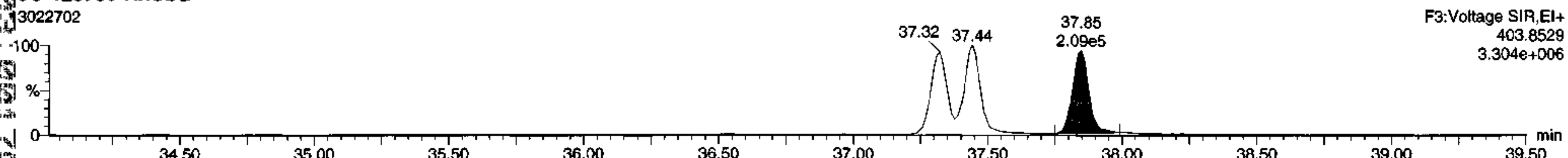
13C-1234-TCDD



13C-123789-HxCDD



13C-123789-HxCDD



Quantify Sample Report **MassLynx 4.1 SCN 714**

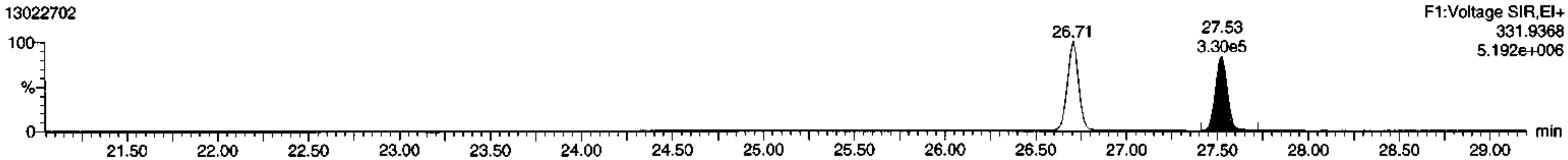
Dataset: P:\DIOXIN8290.PRO\130227OPEN.qld

Last Altered: Wednesday, February 27, 2013 11:43:20 Pacific Standard Time

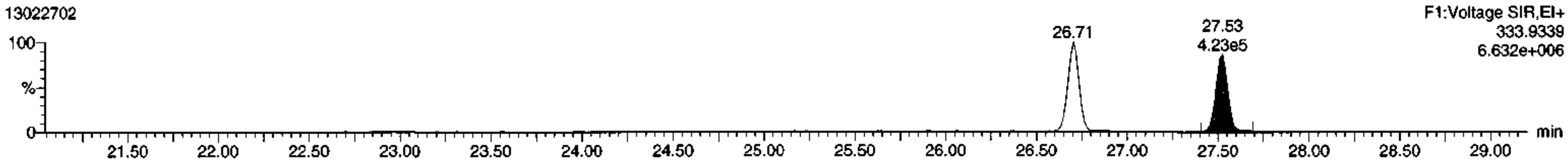
Printed: Thursday, February 28, 2013 10:11:44 Pacific Standard Time

ID: CS3, Name: 13022702, Date: 27-Feb-2013, Time: 10:49:43, Conditions: AUTOSPEC01, User: pk

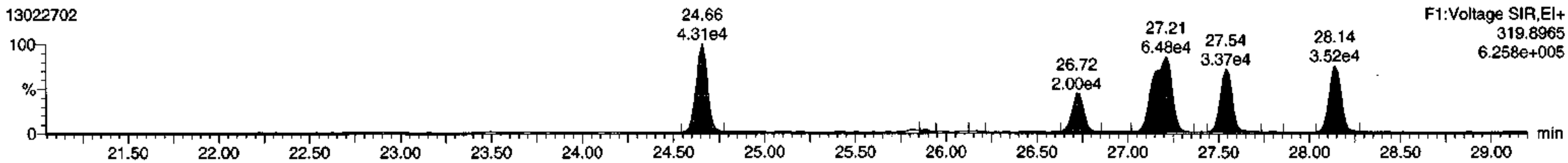
13C-2378-TCDD



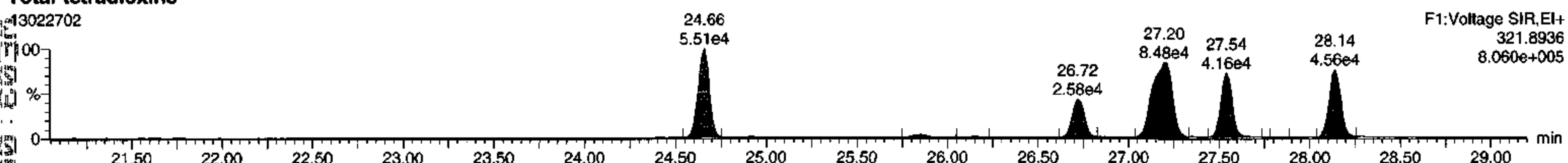
13C-2378-TCDD



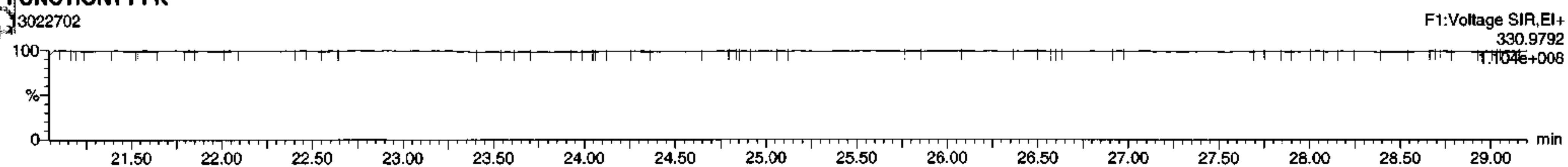
Total-tetradioxins



Total-tetradioxins



FUNCTION1 PFK



Dataset: P:\DIOXIN8290.PRO\130227OPEN.qld
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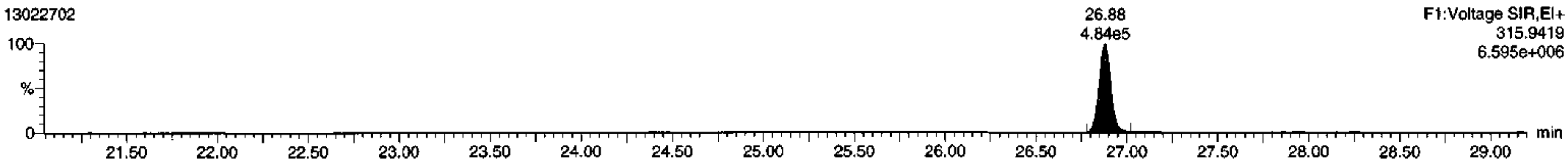
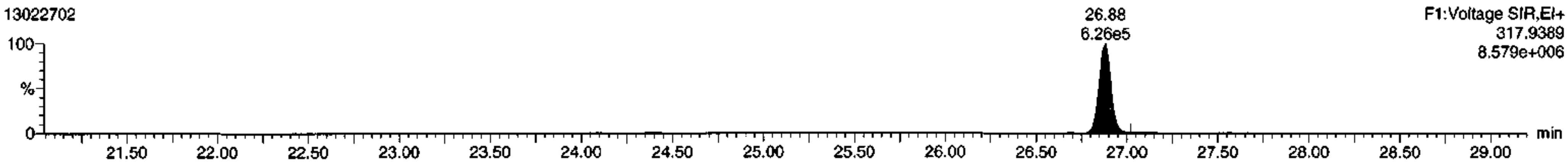
ID: CS3, Name: 13022702, Date: 27-Feb-2013, Time: 10:49:43, Conditions: AUTOSPEC01, User: pk

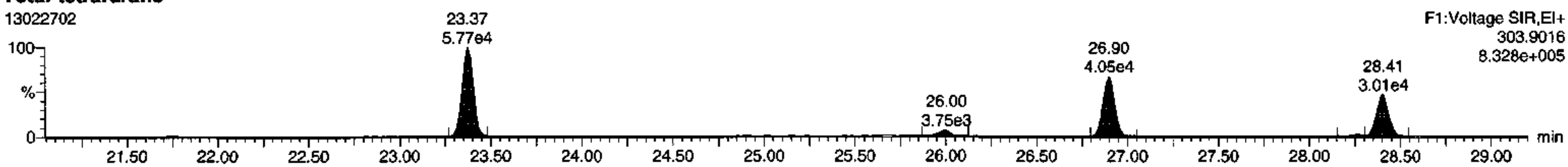
13C-2378-TCDF



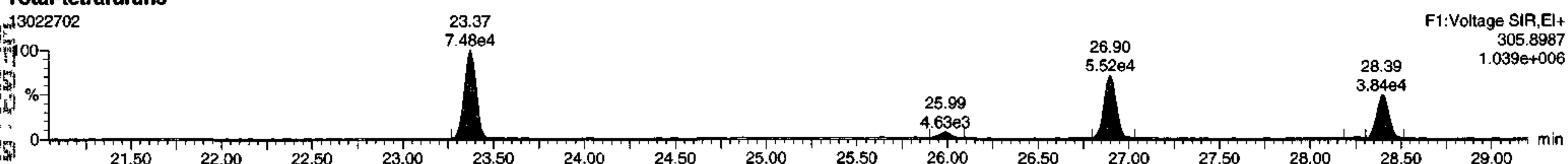
13C-2378-TCDF



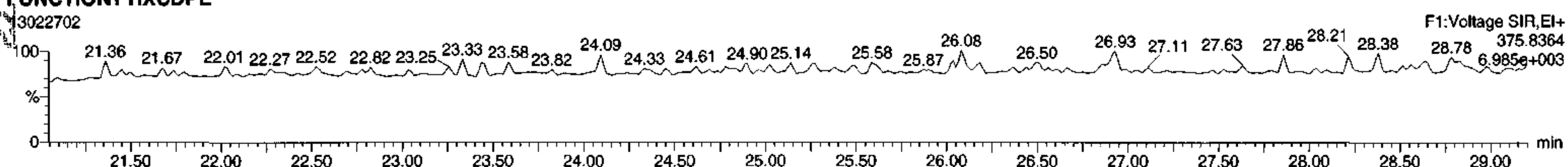
Total-tetrafurans



Total-tetrafurans



FUNCTION1 HXCDPE



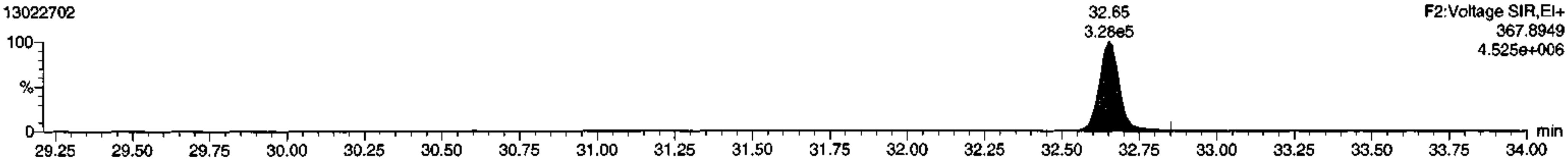
Dataset: P:\DIOXIN8290.PRO\130227OPEN.qld

Last Altered: Wednesday, February 27, 2013 11:43:20 Pacific Standard Time

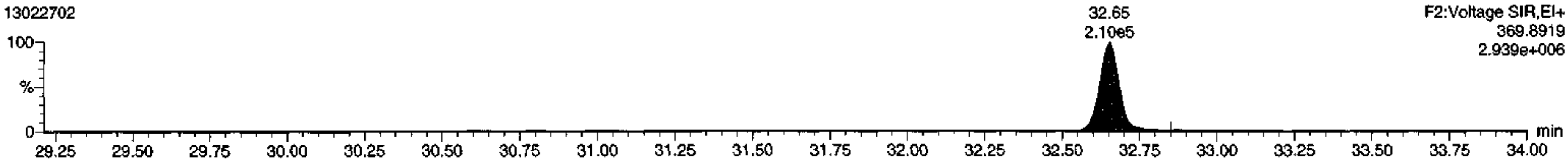
Printed: Thursday, February 28, 2013 10:11:44 Pacific Standard Time

ID: CS3, Name: 13022702, Date: 27-Feb-2013, Time: 10:49:43, Conditions: AUTOSPEC01, User: pk

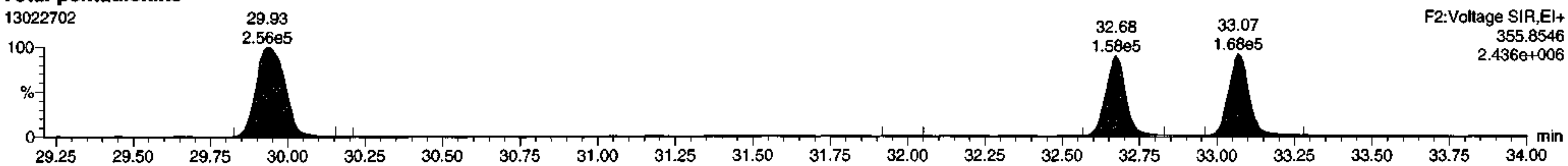
13C-12378-PeCDD



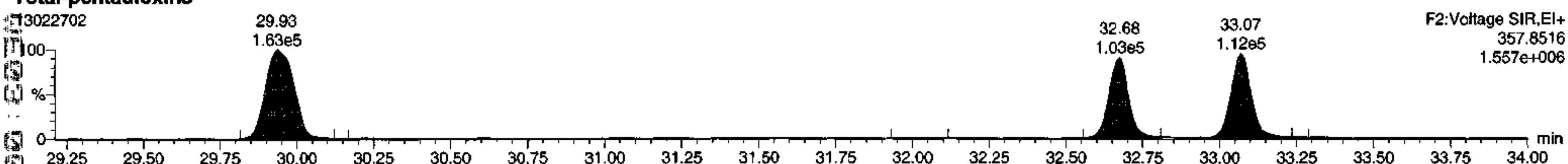
13C-12378-PeCDD



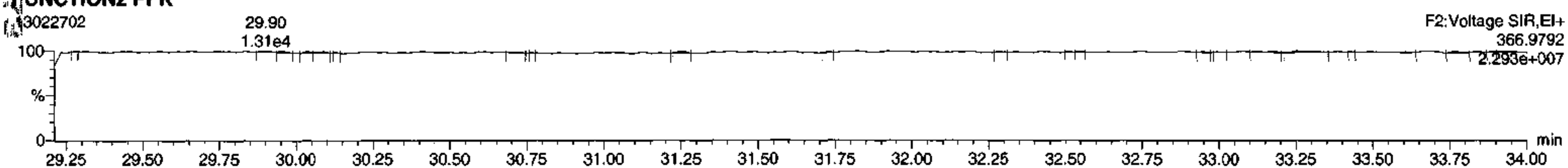
Total-pentadioxins



Total-pentadioxins



FUNCTION2 PFK



Quantify Sample Report **MassLynx 4.1 SCN 714**

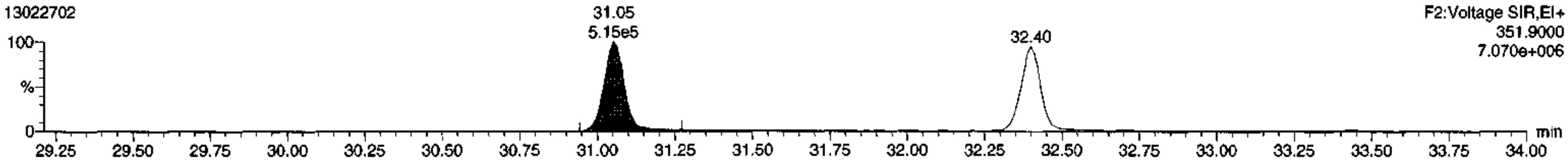
Dataset: P:\DIOXIN8290.PRO\130227OPEN.qld

Last Altered: Wednesday, February 27, 2013 11:43:20 Pacific Standard Time

Printed: Thursday, February 28, 2013 10:11:44 Pacific Standard Time

ID: CS3, Name: 13022702, Date: 27-Feb-2013, Time: 10:49:43, Conditions: AUTOSPEC01, User: pk

13C-12378-PeCDF



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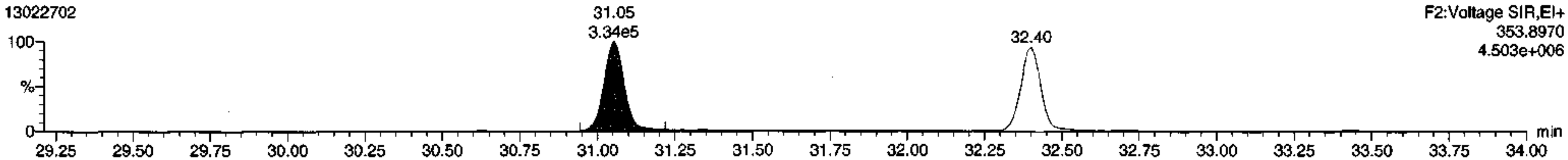
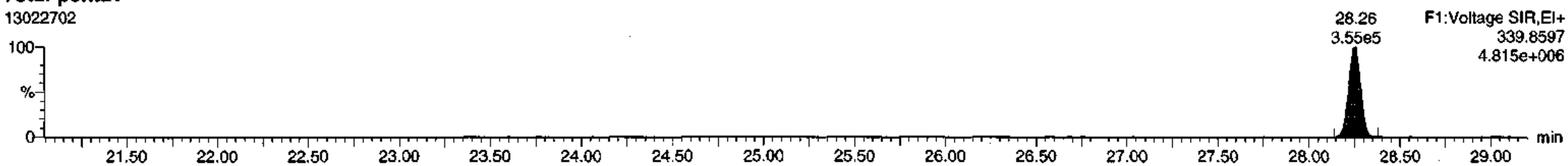
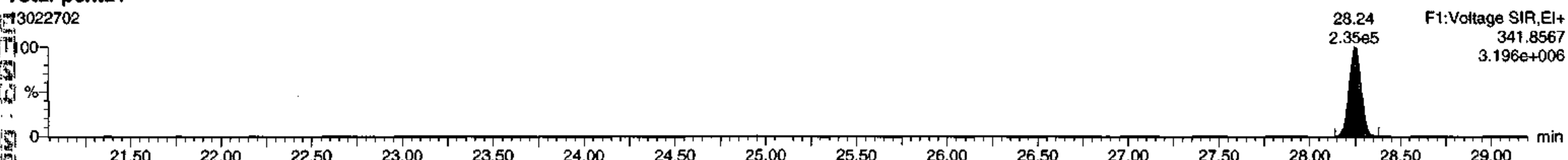


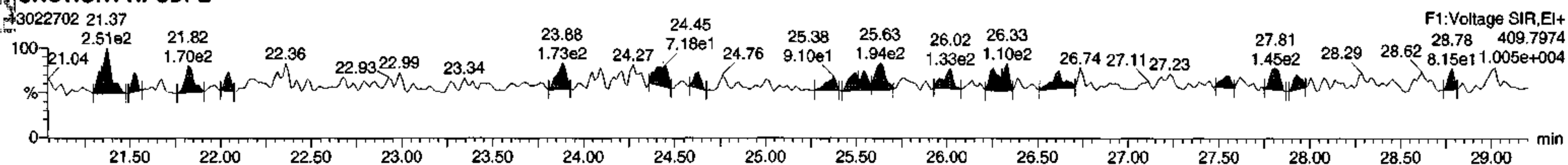
Total-penta1



Total-penta1



FUNCTION1 HPCDPE



Dataset: P:\DIOXIN8290.PRO\130227OPEN.qld

Last Altered: Wednesday, February 27, 2013 11:43:20 Pacific Standard Time

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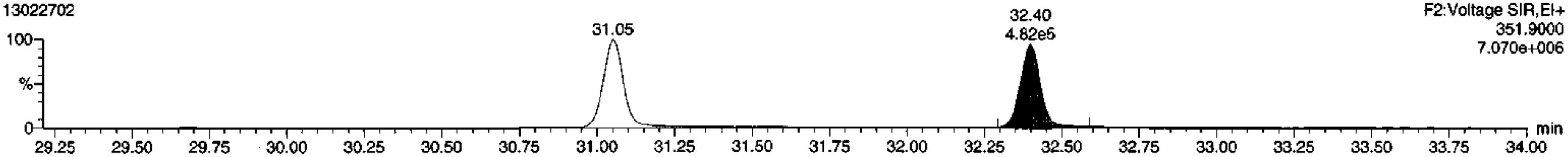
ID: CS3, Name: 13022702, Date: 27-Feb-2013, Time: 10:49:43, Conditions: AUTOSPEC01, User: pk

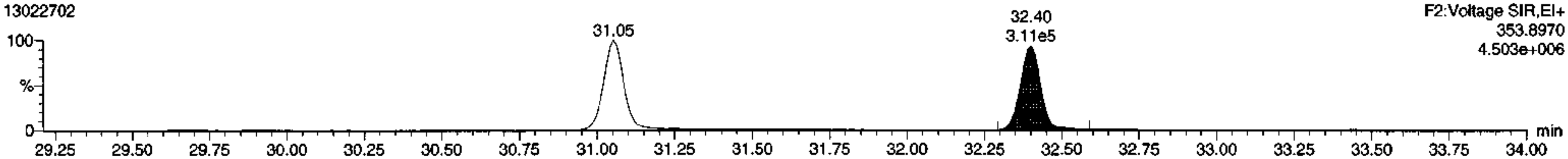
13C-23478-PeCDF

13022702



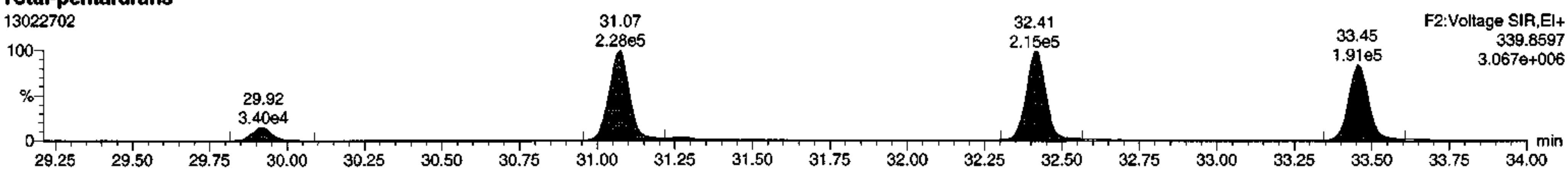
13C-23478-PeCDF

13022702



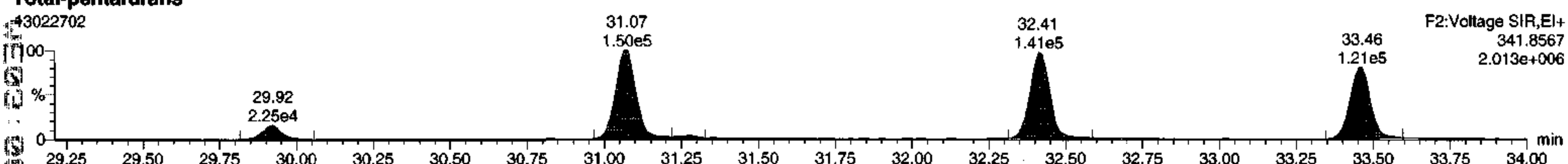
Total-pentafurans

13022702



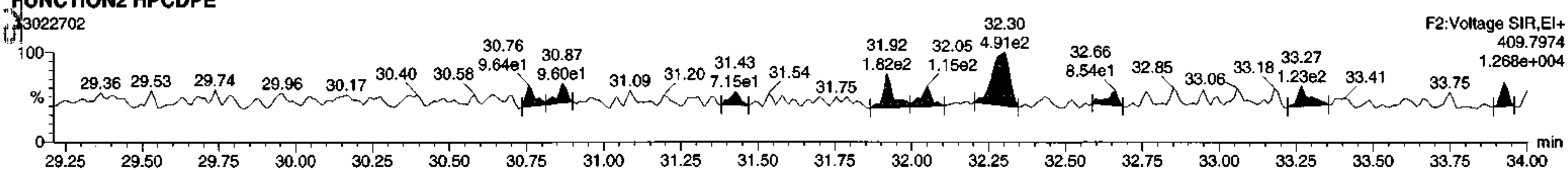
Total-pentafurans

13022702



FUNCTION2 HPCDPE

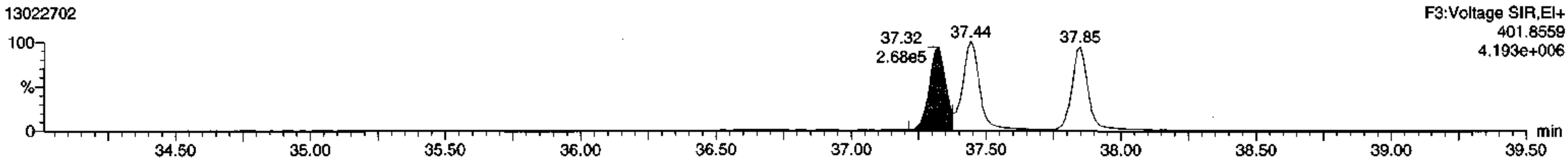
13022702



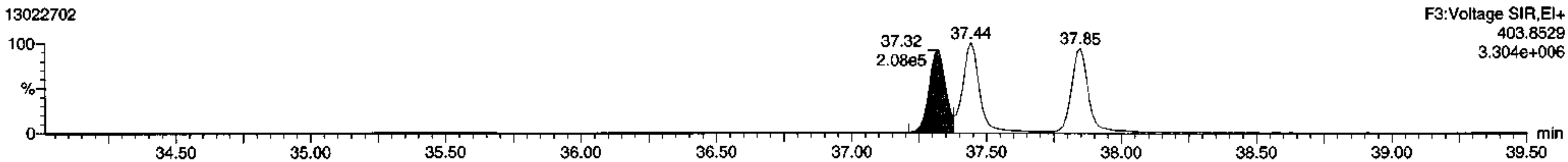
Dataset: P:\DIOXIN8290.PRO\130227OPEN.qld
Last Altered: Wednesday, February 27, 2013 11:43:20 Pacific Standard Time
Printed: Thursday, February 28, 2013 10:11:44 Pacific Standard Time

ID: CS3, Name: 13022702, Date: 27-Feb-2013, Time: 10:49:43, Conditions: AUTOSPEC01, User: pk

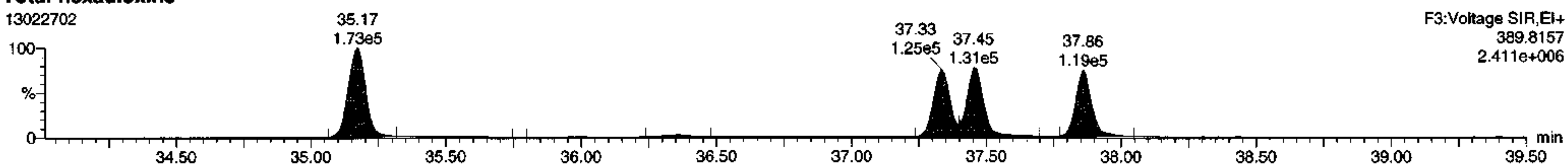
13C-123478-HxCDD



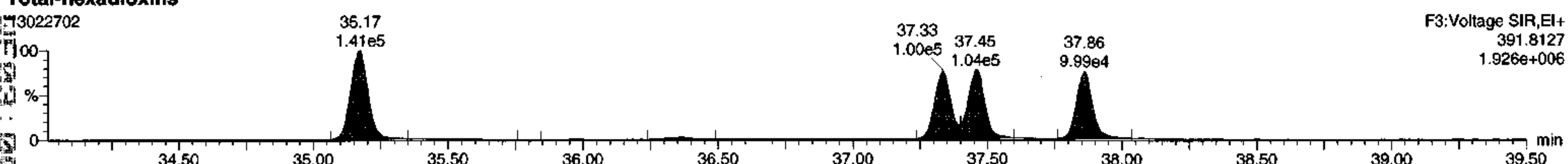
13C-123478-HxCDD



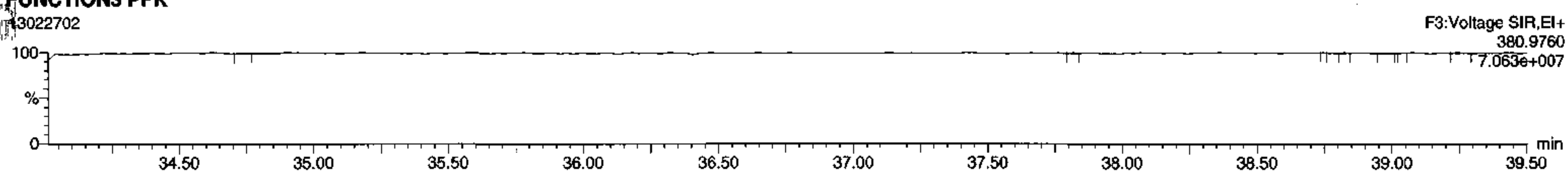
Total-hexadioxins



Total-hexadioxins



FUNCTION3 PFK



Quantify Sample Report **MassLynx 4.1 SCN 714**

Dataset: P:\DIOXIN8290.PRO\130227OPEN.qld

Last Altered: Wednesday, February 27, 2013 11:43:20 Pacific Standard Time

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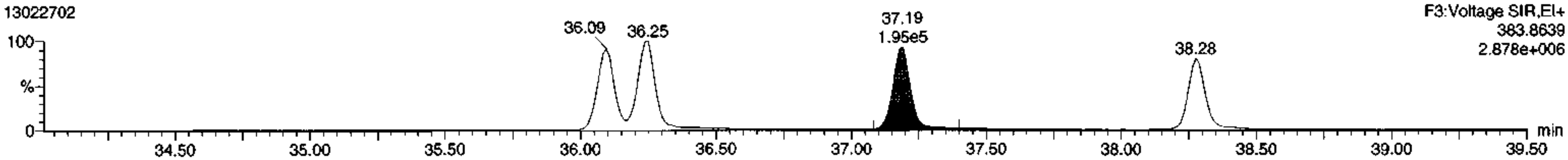
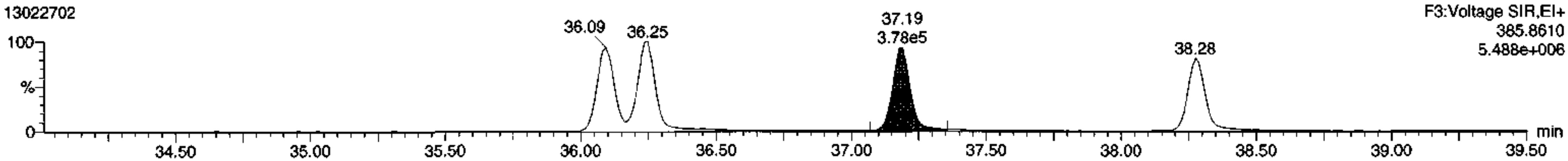
ID: CS3, Name: 13022702, Date: 27-Feb-2013, Time: 10:49:43, Conditions: AUTOSPEC01, User: pk

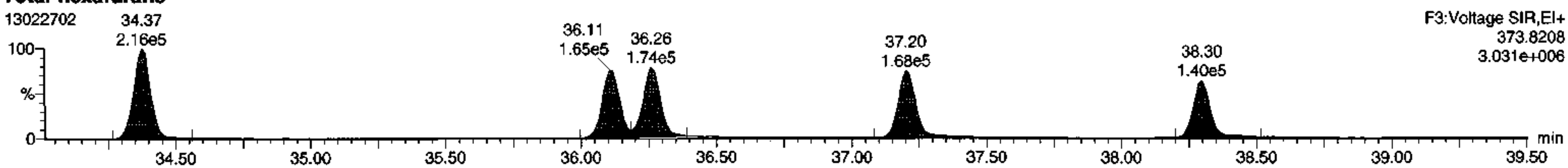
13C-234678-HxCDF



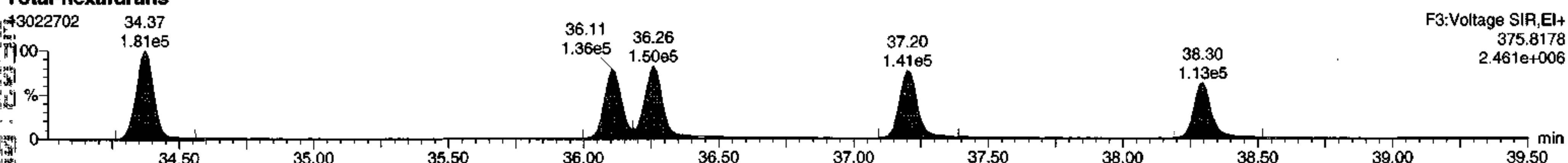
13C-234678-HxCDF



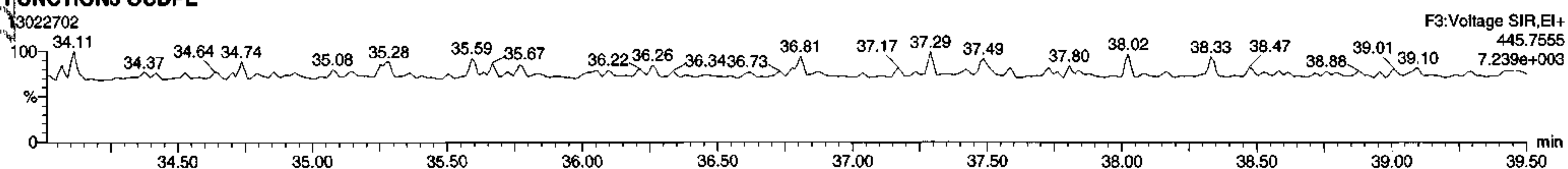
Total-hexafurans



Total-hexafurans



FUNCTION3 OCDPE



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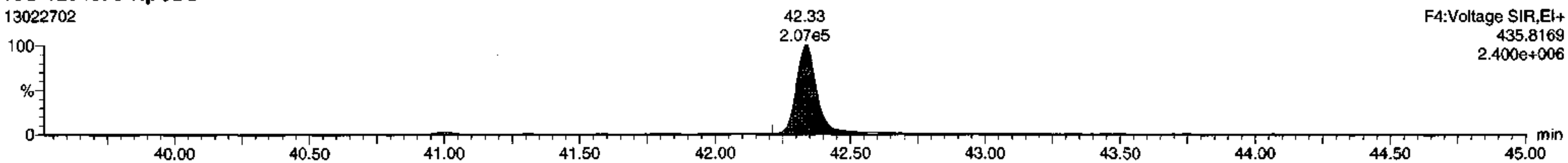
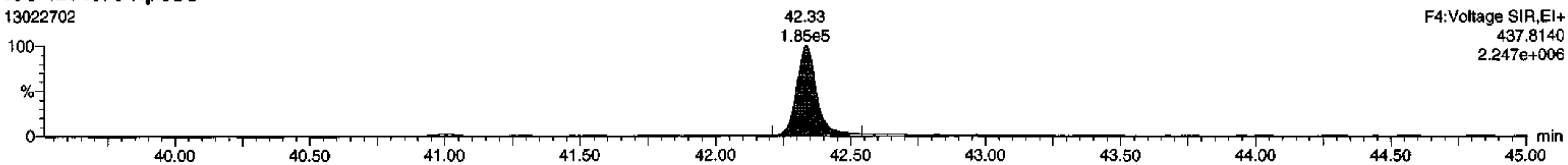
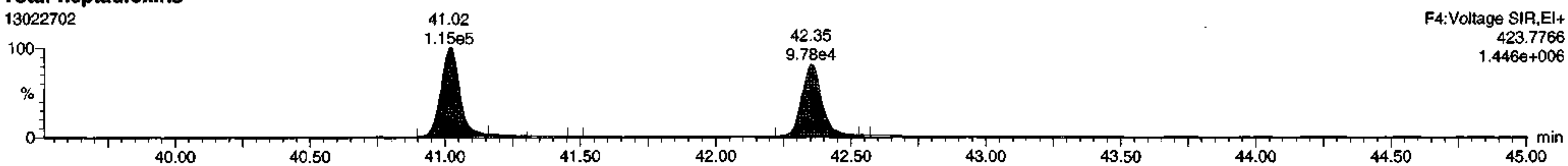
13C-1234678-HpCDD



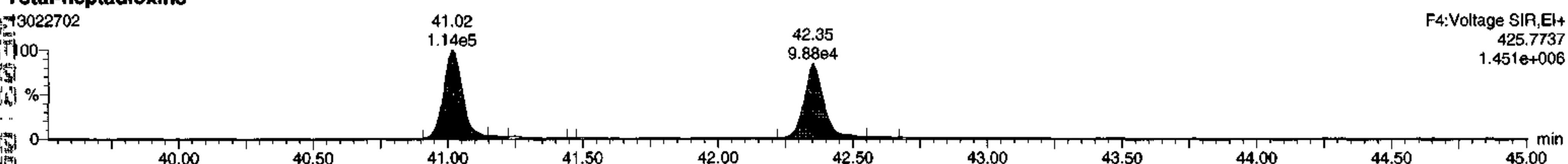
13C-1234678-HpCDD



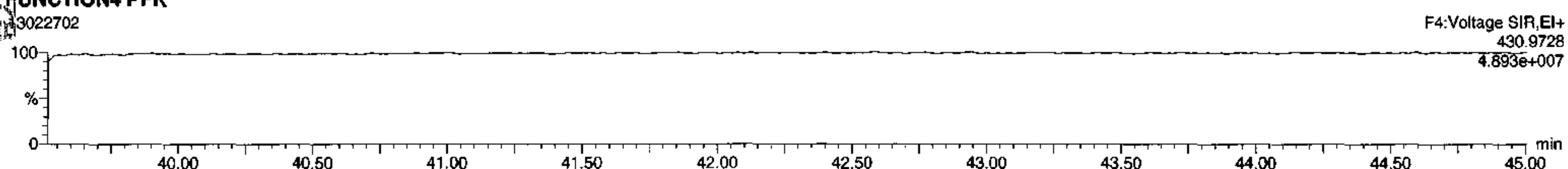
Total-heptadioxins



Total-heptadioxins



FUNCTION4 PFK



Dataset: P:\DIOXIN8290.PRO\130227OPEN.qld

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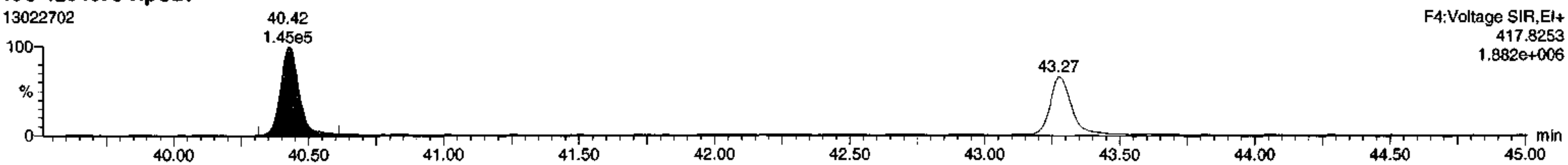
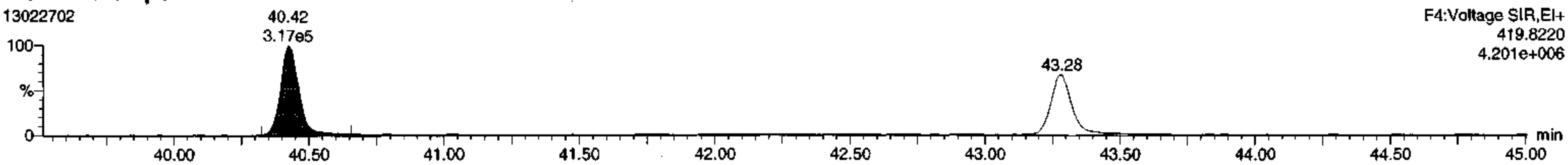
ID: CS3, Name: 13022702, Date: 27-Feb-2013, Time: 10:49:43, Conditions: AUTOSPEC01, User: pk

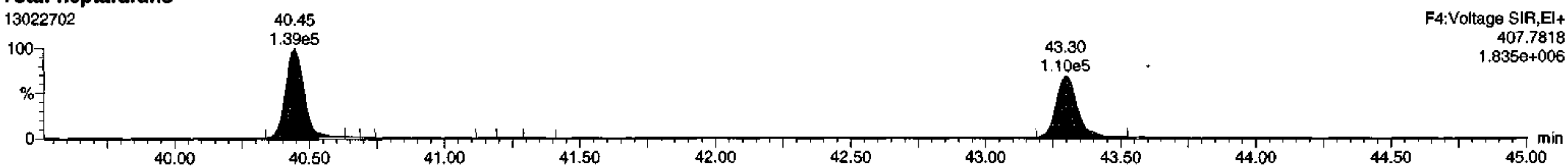
13C-1234678-HpCDF



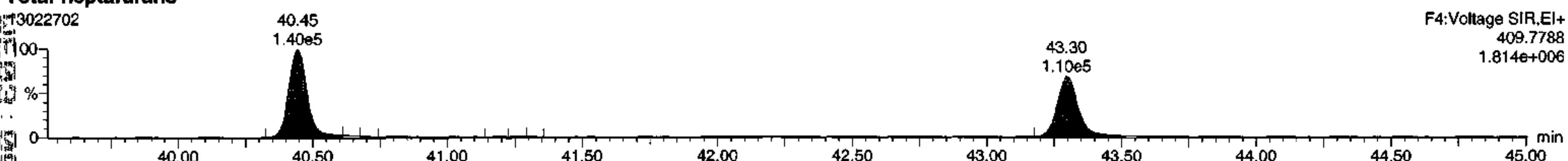
13C-1234678-HpCDF



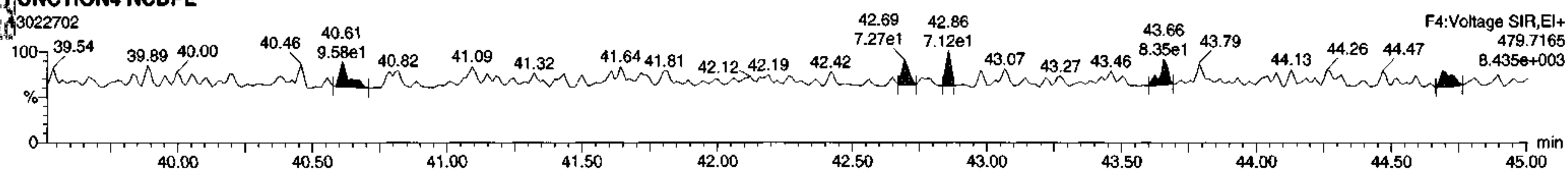
Total-heptafurans



Total-heptafurans



FUNCTION4 NCDPE



Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130227OPEN.qld
Last Altered: Wednesday, February 27, 2013 11:43:20 Pacific Standard Time
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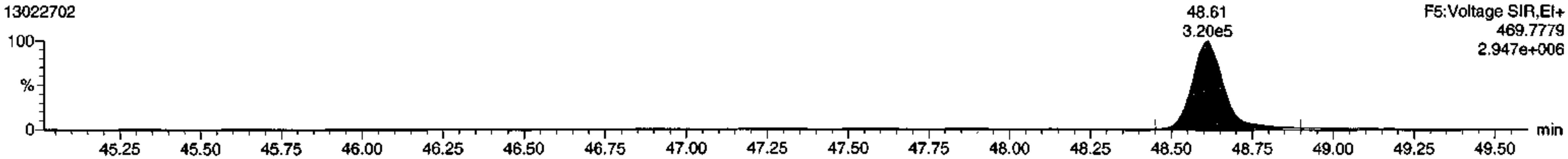
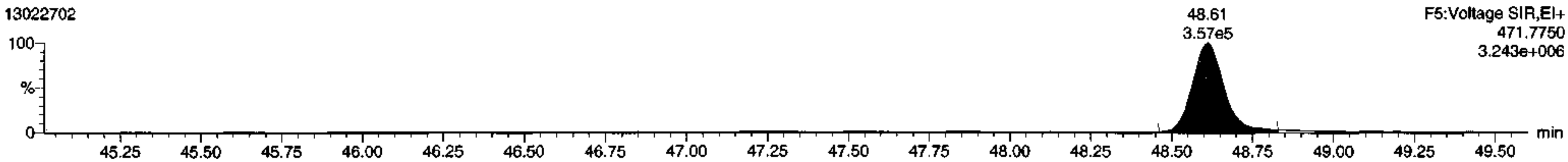
ID: CS3, Name: 13022702, Date: 27-Feb-2013, Time: 10:49:43, Conditions: AUTOSPEC01, User: pk

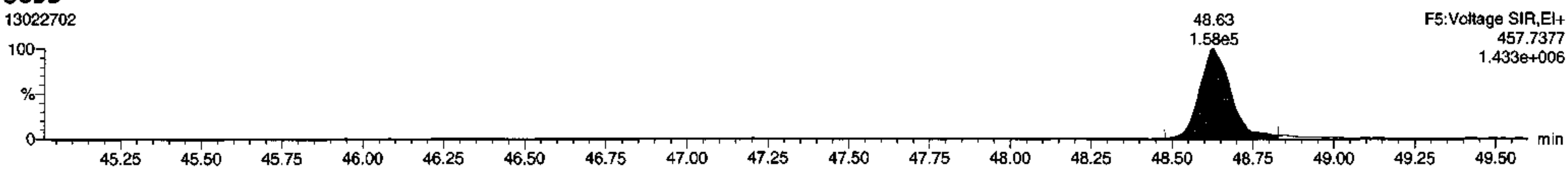
13C-OCDD



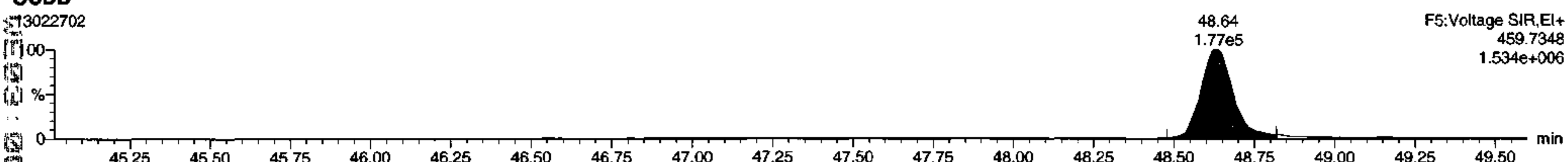
13C-OCDD



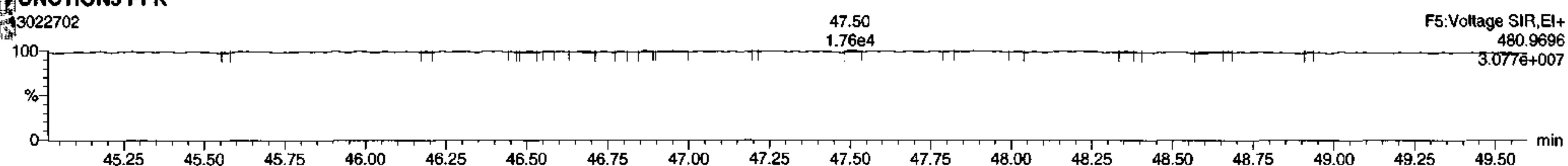
OCDD



OCDD



FUNCTION5 PFK



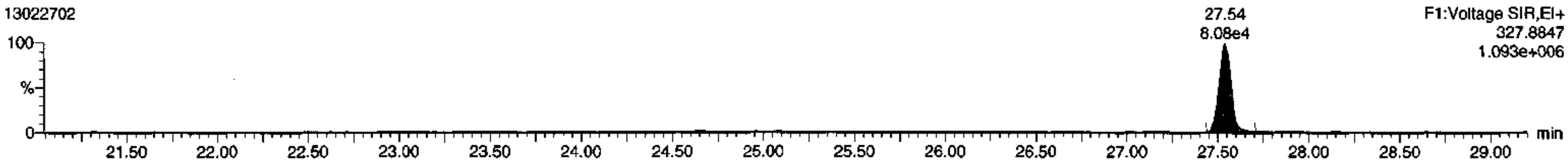
Dataset: P:\DIOXIN8290.PRO\130227OPEN.qld

Last Altered: Wednesday, February 27, 2013 11:43:20 Pacific Standard Time

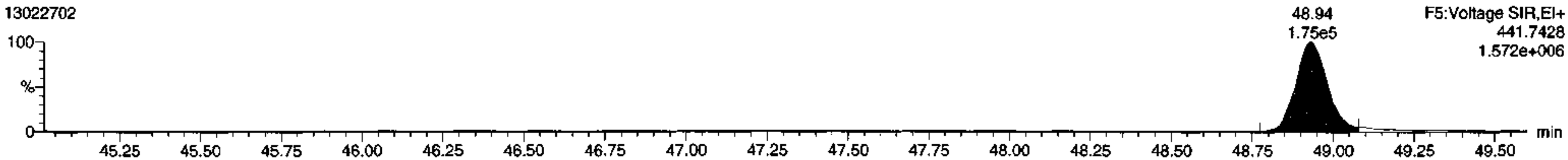
Printed: Thursday, February 28, 2013 10:11:44 Pacific Standard Time

ID: CS3, Name: 13022702, Date: 27-Feb-2013, Time: 10:49:43, Conditions: AUTOSPEC01, User: pk

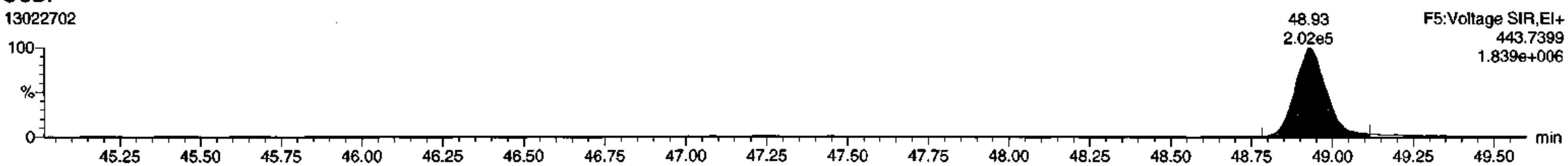
37CL-2378-TCDD



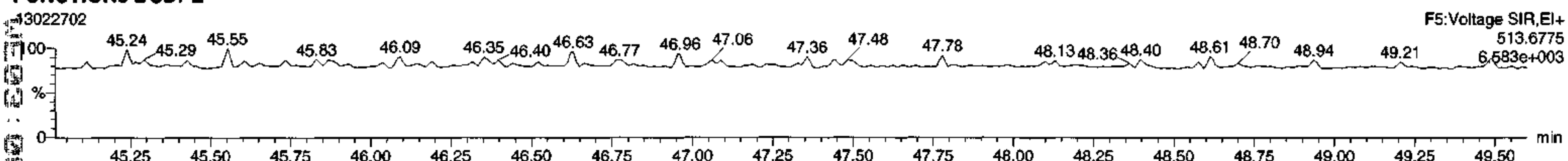
OCDF



OCDF



FUNCTION5 DCDPE



ARI
CDD/CDF EDL DATA
HIGH RESOLUTION

Lab.Sample ID: WE03MBS
Lab.File ID: 13022704
Date Analysed: 27-Feb-13

Target Analytes	Selected Ions	Peak RT	Conc	EMPC	EDL
2378-TCDD	320/322	0.00			0.049
12378-PeCDD	356/358	0.00			0.060
123478-HxCDD	390/392	0.00			0.074
123678-HxCDD	390/392	0.00			0.072
123789-HxCDD	390/392	0.00			0.077
1234678-HpCDD	424/426	0.00			0.15
OCDD	458/460	48.61	0.402	0.341	
2378-TCDF	304/306	0.00			0.077
12378-PeCDF	340/342	0.00			0.068
23478-PeCDF	340/342	0.00			0.074
123478-HxCDF	374/376	0.00			0.053
234678-HxCDF	374/376	0.00			0.058
123678-HxCDF	374/376	0.00			0.044
123789-HxCDF	374/376	0.00			0.077
1234678-HpCDF	408/410	0.00			0.083
1234789-HpCDF	408/410	0.00			0.15
OCDF	442/444	0.00			0.14

Note: EDLs are on column values. Final EDL values are corrected for final volume of the extract (normally 20ul) and amount of sample extracted.

Quantify Sample Summary Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130227QC.qld
Last Altered: Wednesday, February 27, 2013 16:14:55 Pacific Standard Time
Printed: Wednesday, February 27, 2013 16:15:32 Pacific Standard Time

lh 2/27/13

Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130225.mdb 26 Feb 2013 09:49:11
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: WE03MBS, Name: 13022704, Date: 27-Feb-2013, Time: 12:45:53, Conditions: AUTOSPEC01, User: pk

[redacted]																
[redacted]	2378-TCDF					0.921		0.770		629	3041					
[redacted]	12378-PeCDF					0.912		1.550		1050	1871					
[redacted]	23478-PeCDF					0.943		1.550		1050	1871					
[redacted]	123478-HxCDF					1.101		1.240		804	798					
[redacted]	234678-HxCDF					1.073		1.240		804	798					
[redacted]	123678-HxCDF					1.056		1.240		804	798					
[redacted]	123789-HxCDF					1.017		1.240		804	798					
[redacted]	1234678-HpCDF					1.238		1.050		845	1022					
[redacted]	1234789-HpCDF					1.224		1.050		845	1022					
[redacted]	OCDF					1.162		0.890		626	846					
[redacted]	2378-TCDD					1.106		0.770		1075	980					
[redacted]	12378-PeCDD					1.001		1.550		1199	525					
[redacted]	123478-HxCDD					0.978		1.240		924	983					
[redacted]	123678-HxCDD					0.929		1.240		924	983					
[redacted]	123789-HxCDD					0.904		1.240		924	983					
[redacted]	1234678-HpCDD					1.029		1.050		1081	1107					
[redacted]	OCDD	48.612	1.000	5.76e2	4.68e2	1.011	1.231	0.890	9.9	615	789	6.12e3	4.05e3	YES	0.341	0.402
[redacted]	13C-2378-TCDF	26.870	1.007	4.39e5	5.66e5	1.522	0.776	0.770	2939.2	1921	1569	5.65e6	7.43e6	NO		76.108
[redacted]	13C-12378-PeCDF	31.042	1.163	5.75e5	3.47e5	1.185	1.655	1.550	1685.3	4365	4050	7.36e6	4.65e6	NO		89.625
[redacted]	13C-23478-PeCDF	32.390	1.214	4.67e5	3.02e5	1.136	1.544	1.550	1455.4	4365	4050	6.35e6	3.95e6	NO		78.048
[redacted]	13C-123478-HxCDF	36.083	0.954	1.76e5	3.41e5	1.284	0.515	0.510	592.3	3938	4004	2.33e6	4.63e6	NO		90.643
[redacted]	13C-123678-HxCDF	36.237	0.958	2.21e5	4.23e5	1.383	0.523	0.510	749.2	3938	4004	2.95e6	5.57e6	NO		104.956
[redacted]	13C-234678-HxCDF	37.180	0.983	1.72e5	3.24e5	1.283	0.531	0.510	569.2	3938	4004	2.24e6	4.35e6	NO		86.974
[redacted]	13C-123789-HxCDF	38.276	1.012	1.38e5	2.65e5	1.099	0.521	0.510	445.7	3938	4004	1.76e6	3.30e6	NO		82.446
[redacted]	13C-1234678-HpCDF	40.413	1.068	1.11e5	2.60e5	1.070	0.429	0.440	579.0	2357	2846	1.36e6	3.13e6	NO		78.123
[redacted]	13C-1234789-HpCDF	43.274	1.144	7.73e4	1.81e5	0.774	0.427	0.440	325.5	2357	2846	7.67e5	1.76e6	NO		75.201
[redacted]	13C-1234-TCDD	26.690	0.000	3.76e5	4.92e5	1.000	0.763	0.770	1221.1	4153	2674	5.07e6	6.55e6	NO		100.000
[redacted]	13C-2378-TCDD	27.512	1.031	3.15e5	4.05e5	0.943	0.776	0.770	1005.1	4153	2674	4.17e6	5.31e6	NO		87.970
[redacted]	13C-12378-PeCDD	32.653	1.223	3.35e5	2.16e5	0.715	1.551	1.550	2576.0	1701	2028	4.38e6	2.80e6	NO		88.743
[redacted]	13C-123478-HxCDD	37.311	0.986	2.61e5	2.10e5	1.032	1.240	1.240	1093.1	3328	3275	3.64e6	3.00e6	NO		102.820
[redacted]	13C-123678-HxCDD	37.443	0.990	3.09e5	2.40e5	1.076	1.287	1.240	1199.8	3328	3275	3.99e6	3.08e6	NO		114.748
[redacted]	13C-1234678-HpCDD	42.331	1.119	1.70e5	1.62e5	0.838	1.049	1.050	603.0	3104	2401	1.87e6	1.75e6	NO		89.279
[redacted]	13C-OCDD	48.612	1.285	2.44e5	2.70e5	0.675	0.904	0.890	743.0	2799	2084	2.08e6	2.21e6	NO		171.271

Dataset: P:\DIOXIN8290.PRO\130227QC.qld
Last Altered: Wednesday, February 27, 2013 16:14:55 Pacific Standard Time
Printed: Wednesday, February 27, 2013 16:15:32 Pacific Standard Time

ID: WE03MBS, Name: 13022704, Date: 27-Feb-2013, Time: 12:45:53, Conditions: AUTOSPEC01, User: pk

[redacted]

[redacted]	13C-123789-HxCDD	37.837	0.000	2.45e5	1.99e5	1.000	1.234	1.240	963.7	3328	3275	3.21e6	2.68e6	NO		100.000
[redacted]	Total-tetrafurans			0.00e0		0.921				629		0.00e0				
[redacted]	Total-penta1			0.00e0						758		0.00e0				
[redacted]	Total-pentafurans			0.00e0		0.927				1050		0.00e0				
[redacted]	Total-hexafurans			0.00e0		1.062				804		0.00e0				
[redacted]	Total-heptafurans			0.00e0		1.231				845		0.00e0				
[redacted]	Total-Furans			0.00e0		1.065				629		0.00e0				
[redacted]	Total-tetradioxins			0.00e0		1.106				1075		0.00e0				
[redacted]	Total-pentadioxins			0.00e0		1.001				1199		0.00e0				
[redacted]	Total-hexadioxins			1.46e2		0.937				924		6.01e3				0.047
[redacted]	Total-heptadioxins			0.00e0		1.029				1081		0.00e0				
[redacted]	Total-Dioxins			9.09e2		0.994				1075		1.70e4				0.509
[redacted]	Total-TEQ			9.09e2						1075		1.70e4				0.509
[redacted]	37CL-2378-TCDD	27.542	1.032	3.34e5		1.051			2157.8	2013		4.34e6				36.601
[redacted]	FUNCTION1 PFK			4.37e6						602172		5.18e7				
[redacted]	FUNCTION2 PFK			1.09e5						212163		1.20e6				0.000
[redacted]	FUNCTION3 PFK			6.28e5						330417		1.84e7				0.000
[redacted]	FUNCTION4 PFK			4.75e4						320458		1.82e6				
[redacted]	FUNCTIONS5 PFK			4.08e5						222739		1.44e7				
[redacted]	FUNCTION1 HXCDPE			0.00e0						509		0.00e0				
[redacted]	FUNCTION1 HPCDPE			1.64e3						1372		3.92e4				0.000
[redacted]	FUNCTION2 HPCDPE			8.61e2						1482		2.40e4				0.000
[redacted]	FUNCTION3 OCDPE			8.02e1						499		3.51e3				0.000
[redacted]	FUNCTION4 NCDPE			3.04e2						645		8.64e3				0.000
[redacted]	FUNCTION5 DCDPE			0.00e0						383		0.00e0				

Quantify Totals Report MassLynx 4.1 SCN 714
Dataset: P:\DIOXIN8290.PRO\130227QC.qld
Last Altered: Wednesday, February 27, 2013 16:14:55 Pacific Standard Time
Printed: Wednesday, February 27, 2013 16:15:32 Pacific Standard Time

Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130225.mdb 26 Feb 2013 09:49:11
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: WE03MBS, Name: 13022704, Date: 27-Feb-2013, Time: 12:45:53, Conditions: AUTOSPEC01, User: pk

TF

[redacted]

PP

[redacted]

PF

[redacted]

HF

[redacted]

HPF

[redacted]

Furans,TF,PP,PF,HF,HPF,OF

[redacted]

TD

[redacted]

PD

[redacted]

HD

[redacted]												
[redacted]	43	Total-hexadioxins	389.8157	37.21	223.313	0.937	0.047		1.87	1.24	YES	6.5

HPD

[redacted]

Dataset: P:\DIOXIN8290.PRO\130227QC.qld
Last Altered: Wednesday, February 27, 2013 16:14:55 Pacific Standard Time
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ID: WE03MBS, Name: 13022704, Date: 27-Feb-2013, Time: 12:45:53, Conditions: AUTOSPEC01, User: pk

Dioxins,TD,PD,HD,HPD,OD

[redacted]												
[redacted]	45	Total-Dioxins	319.8965	23.94	183.931	0.994	0.026		0.91	0.77	YES	1.9
[redacted]	45	Total-Dioxins	319.8965	28.92	244.177	0.994	0.034		0.69	0.77	NO	2.6
[redacted]	43	Total-hexadioxins	389.8157	37.21	223.313	0.937	0.047		1.87	1.24	YES	6.5
[redacted]	17	OCDD	457.7377	48.61	1044.683	1.011	0.402	0.341	1.23	0.89	YES	9.9

TotalTEQ,Furans,Dioxins

[redacted]												
[redacted]												

ID: WE03MBS, Name: 13022704, Date: 27-Feb-2013, Time: 12:45:53, Conditions: AUTOSPEC01, User: pk

PFK1

[redacted]					
[redacted]	48 FUNCTION1 PFK	330.9792	21.42	0.000	2.0
[redacted]	48 FUNCTION1 PFK	330.9792	21.36	0.000	1.4
[redacted]	48 FUNCTION1 PFK	330.9792	24.45	0.000	1.1
[redacted]	48 FUNCTION1 PFK	330.9792	24.40	0.000	1.2
[redacted]	48 FUNCTION1 PFK	330.9792	24.27	0.000	0.5
[redacted]	48 FUNCTION1 PFK	330.9792	24.09	0.000	0.5
[redacted]	48 FUNCTION1 PFK	330.9792	23.81	0.000	0.8
[redacted]	48 FUNCTION1 PFK	330.9792	23.72	0.000	0.4
[redacted]	48 FUNCTION1 PFK	330.9792	23.46	0.000	1.4
[redacted]	48 FUNCTION1 PFK	330.9792	23.37	0.000	1.2
[redacted]	48 FUNCTION1 PFK	330.9792	23.09	0.000	1.3
[redacted]	48 FUNCTION1 PFK	330.9792	22.97	0.000	2.7
[redacted]	48 FUNCTION1 PFK	330.9792	22.85	0.000	1.7
[redacted]	48 FUNCTION1 PFK	330.9792	22.51	0.000	2.1
[redacted]	48 FUNCTION1 PFK	330.9792	22.33	0.000	2.1
[redacted]	48 FUNCTION1 PFK	330.9792	22.27	0.000	2.3
[redacted]	48 FUNCTION1 PFK	330.9792	22.12	0.000	2.6
[redacted]	48 FUNCTION1 PFK	330.9792	21.97	0.000	1.7
[redacted]	48 FUNCTION1 PFK	330.9792	26.66	0.000	1.6
[redacted]	48 FUNCTION1 PFK	330.9792	26.32	0.000	1.2
[redacted]	48 FUNCTION1 PFK	330.9792	26.21	0.000	1.1
[redacted]	48 FUNCTION1 PFK	330.9792	26.11	0.000	0.3
[redacted]	48 FUNCTION1 PFK	330.9792	26.05	0.000	1.0
[redacted]	48 FUNCTION1 PFK	330.9792	25.75	0.000	1.2
[redacted]	48 FUNCTION1 PFK	330.9792	25.69	0.000	0.9
[redacted]	48 FUNCTION1 PFK	330.9792	25.41	0.000	1.2
[redacted]	48 FUNCTION1 PFK	330.9792	25.29	0.000	1.4
[redacted]	48 FUNCTION1 PFK	330.9792	25.18	0.000	1.1
[redacted]	48 FUNCTION1 PFK	330.9792	25.12	0.000	0.9
[redacted]	48 FUNCTION1 PFK	330.9792	25.06	0.000	1.0
[redacted]	48 FUNCTION1 PFK	330.9792	24.99	0.000	1.5
[redacted]	48 FUNCTION1 PFK	330.9792	24.94	0.000	1.4
[redacted]	48 FUNCTION1 PFK	330.9792	24.84	0.000	0.8
[redacted]	48 FUNCTION1 PFK	330.9792	24.54	0.000	0.4
[redacted]	48 FUNCTION1 PFK	330.9792	29.02	0.000	3.0
[redacted]	48 FUNCTION1 PFK	330.9792	28.87	0.000	5.1
[redacted]	48 FUNCTION1 PFK	330.9792	28.63	0.000	4.4
[redacted]	48 FUNCTION1 PFK	330.9792	28.50	0.000	3.9
[redacted]	48 FUNCTION1 PFK	330.9792	28.32	0.000	2.7
[redacted]	48 FUNCTION1 PFK	330.9792	28.08	0.000	3.2
[redacted]	48 FUNCTION1 PFK	330.9792	27.99	0.000	2.4
[redacted]	48 FUNCTION1 PFK	330.9792	27.84	0.000	1.8
[redacted]	48 FUNCTION1 PFK	330.9792	27.53	0.000	2.3
[redacted]	48 FUNCTION1 PFK	330.9792	27.44	0.000	1.5
[redacted]	48 FUNCTION1 PFK	330.9792	27.30	0.000	0.9
[redacted]	48 FUNCTION1 PFK	330.9792	27.24	0.000	2.1
[redacted]	48 FUNCTION1 PFK	330.9792	27.12	0.000	3.0
[redacted]	48 FUNCTION1 PFK	330.9792	27.02	0.000	2.0
[redacted]	48 FUNCTION1 PFK	330.9792	26.91	0.000	1.9

Quantify Totals Report MassLynx 4.1 SCN 714
Dataset: P:\DIOXIN8290.PRO\130227QC.qld
Last Altered: Wednesday, February 27, 2013 16:14:55 Pacific Standard Time
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ID: WE03MBS, Name: 13022704, Date: 27-Feb-2013, Time: 12:45:53, Conditions: AUTOSPEC01, User: pk

PFK1

[redacted]						
[redacted]	48 FUNCTION1 PFK	330.9792	26.75	0.000		1.7

PFK2

[redacted]						
[redacted]	49 FUNCTION2 PFK	366.9792	29.39	0.000	0.000	5.6

PFK3

[redacted]						
[redacted]	50 FUNCTION3 PFK	380.9760	35.93	0.000	0.000	0.9
[redacted]	50 FUNCTION3 PFK	380.9760	35.39	0.000	0.000	0.9
[redacted]	50 FUNCTION3 PFK	380.9760	35.02	0.000	0.000	1.4
[redacted]	50 FUNCTION3 PFK	380.9760	34.98	0.000	0.000	2.2
[redacted]	50 FUNCTION3 PFK	380.9760	34.76	0.000	0.000	1.0
[redacted]	50 FUNCTION3 PFK	380.9760	34.70	0.000	0.000	1.0
[redacted]	50 FUNCTION3 PFK	380.9760	34.65	0.000	0.000	1.8
[redacted]	50 FUNCTION3 PFK	380.9760	34.60	0.000	0.000	1.3
[redacted]	50 FUNCTION3 PFK	380.9760	34.54	0.000	0.000	1.0
[redacted]	50 FUNCTION3 PFK	380.9760	34.48	0.000	0.000	0.7
[redacted]	50 FUNCTION3 PFK	380.9760	34.20	0.000	0.000	1.5
[redacted]	50 FUNCTION3 PFK	380.9760	34.10	0.000	0.000	4.3
[redacted]	50 FUNCTION3 PFK	380.9760	34.06	0.000	0.000	4.5
[redacted]	50 FUNCTION3 PFK	380.9760	37.83	0.000	0.000	1.9
[redacted]	50 FUNCTION3 PFK	380.9760	37.77	0.000	0.000	1.7
[redacted]	50 FUNCTION3 PFK	380.9760	37.64	0.000	0.000	1.2
[redacted]	50 FUNCTION3 PFK	380.9760	37.50	0.000	0.000	1.9
[redacted]	50 FUNCTION3 PFK	380.9760	37.41	0.000	0.000	1.2
[redacted]	50 FUNCTION3 PFK	380.9760	37.22	0.000	0.000	1.9
[redacted]	50 FUNCTION3 PFK	380.9760	37.14	0.000	0.000	1.4
[redacted]	50 FUNCTION3 PFK	380.9760	37.08	0.000	0.000	0.6
[redacted]	50 FUNCTION3 PFK	380.9760	36.82	0.000	0.000	0.8
[redacted]	50 FUNCTION3 PFK	380.9760	36.77	0.000	0.000	0.5
[redacted]	50 FUNCTION3 PFK	380.9760	36.61	0.000	0.000	0.8
[redacted]	50 FUNCTION3 PFK	380.9760	36.57	0.000	0.000	0.5
[redacted]	50 FUNCTION3 PFK	380.9760	36.52	0.000	0.000	1.6
[redacted]	50 FUNCTION3 PFK	380.9760	36.38	0.000	0.000	3.6
[redacted]	50 FUNCTION3 PFK	380.9760	36.32	0.000	0.000	0.8
[redacted]	50 FUNCTION3 PFK	380.9760	35.96	0.000	0.000	0.5
[redacted]	50 FUNCTION3 PFK	380.9760	39.45	0.000	0.000	1.5
[redacted]	50 FUNCTION3 PFK	380.9760	39.21	0.000	0.000	0.7
[redacted]	50 FUNCTION3 PFK	380.9760	39.17	0.000	0.000	0.8
[redacted]	50 FUNCTION3 PFK	380.9760	39.08	0.000	0.000	1.0
[redacted]	50 FUNCTION3 PFK	380.9760	38.93	0.000	0.000	1.4
[redacted]	50 FUNCTION3 PFK	380.9760	38.76	0.000	0.000	0.4
[redacted]	50 FUNCTION3 PFK	380.9760	38.68	0.000	0.000	1.1
[redacted]	50 FUNCTION3 PFK	380.9760	38.59	0.000	0.000	1.4
[redacted]	50 FUNCTION3 PFK	380.9760	38.07	0.000	0.000	0.8
[redacted]	50 FUNCTION3 PFK	380.9760	38.02	0.000	0.000	0.6
[redacted]	50 FUNCTION3 PFK	380.9760	37.89	0.000	0.000	2.4

ID: WE03MBS, Name: 13022704, Date: 27-Feb-2013, Time: 12:45:53, Conditions: AUTOSPEC01, User: pk

PFK4

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	51	FUNCTION4 PFK	430.9728	44.12	0.000							1.8
[illegible]	51	FUNCTION4 PFK	430.9728	43.75	0.000							1.5
[illegible]	51	FUNCTION4 PFK	430.9728	39.93	0.000							2.3

Dataset: P:\DIOXIN8290.PRO\130227QC.qld

Last Altered: Wednesday, February 27, 2013 16:14:55 Pacific Standard Time

Printed: Wednesday, February 27, 2013 16:15:32 Pacific Standard Time

ID: WE03MBS, Name: 13022704, Date: 27-Feb-2013, Time: 12:45:53, Conditions: AUTOSPEC01, User: pk

PFK5

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[redacted]	52 FUNCTION5 PFK	480.9696	46.54	0.000							1.8
[redacted]	52 FUNCTION5 PFK	480.9696	46.30	0.000							1.2
[redacted]	52 FUNCTION5 PFK	480.9696	46.16	0.000							1.1
[redacted]	52 FUNCTION5 PFK	480.9696	46.12	0.000							1.6
[redacted]	52 FUNCTION5 PFK	480.9696	46.05	0.000							1.5
[redacted]	52 FUNCTION5 PFK	480.9696	45.88	0.000							1.9
[redacted]	52 FUNCTION5 PFK	480.9696	45.63	0.000							1.0
[redacted]	52 FUNCTION5 PFK	480.9696	45.58	0.000							0.4
[redacted]	52 FUNCTION5 PFK	480.9696	45.43	0.000							1.0
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[redacted]	52 FUNCTION5 PFK	480.9696	45.33	0.000							1.6
[redacted]	52 FUNCTION5 PFK	480.9696	45.25	0.000							2.4
[redacted]	52 FUNCTION5 PFK	480.9696	45.22	0.000							1.6
[redacted]	52 FUNCTION5 PFK	480.9696	45.07	0.000							0.8
[redacted]	52 FUNCTION5 PFK	480.9696	47.86	0.000							2.2
[redacted]	52 FUNCTION5 PFK	480.9696	47.81	0.000							1.7
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ID: WE03MBS, Name: 13022704, Date: 27-Feb-2013, Time: 12:45:53, Conditions: AUTOSPEC01, User: pk

PFK5

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
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ETHERS1

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]												

ETHERS2

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
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[redacted]	54	FUNCTION1 HPCD...	409.7974	25.57	0.000		0.000					1.6
[redacted]	54	FUNCTION1 HPCD...	409.7974	24.67	0.000		0.000					2.6
[redacted]	54	FUNCTION1 HPCD...	409.7974	23.27	0.000		0.000					1.4
[redacted]	54	FUNCTION1 HPCD...	409.7974	22.42	0.000		0.000					2.0
[redacted]	54	FUNCTION1 HPCD...	409.7974	21.98	0.000		0.000					2.0
[redacted]	54	FUNCTION1 HPCD...	409.7974	21.89	0.000		0.000					1.6
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[redacted]	54	FUNCTION1 HPCD...	409.7974	28.86	0.000		0.000					1.7
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[redacted]	54	FUNCTION1 HPCD...	409.7974	27.96	0.000		0.000					2.7
[redacted]	54	FUNCTION1 HPCD...	409.7974	27.45	0.000		0.000					1.4

ETHERS3

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
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[redacted]	55	FUNCTION2 HPCD...	409.7974	30.56	0.000		0.000					1.6
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[redacted]	55	FUNCTION2 HPCD...	409.7974	29.57	0.000		0.000					2.1
[redacted]	55	FUNCTION2 HPCD...	409.7974	29.38	0.000		0.000					1.0
[redacted]	55	FUNCTION2 HPCD...	409.7974	29.33	0.000		0.000					2.1
[redacted]	55	FUNCTION2 HPCD...	409.7974	29.27	0.000		0.000					1.6

ETHERS4

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	56	FUNCTION3 OCDPE	445.7555	39.23	0.000		0.000					7.0

ID: WE03MBS, Name: 13022704, Date: 27-Feb-2013, Time: 12:45:53, Conditions: AUTOSPEC01, User: pk

ETHERS5

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	57	FUNCTION4 NCDPE	479.7165	44.45	0.000		0.000					3.4
[illegible]	57	FUNCTION4 NCDPE	479.7165	43.43	0.000		0.000					6.5
[illegible]	57	FUNCTION4 NCDPE	479.7165	39.76	0.000		0.000					3.4

ETHERS6

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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Quantify Sample Report MassLynx 4.1 SCN 714

Dataset: P:\DIOXIN8290.PRO\130227QC.qld

Last Altered: Wednesday, February 27, 2013 16:14:55 Pacific Standard Time

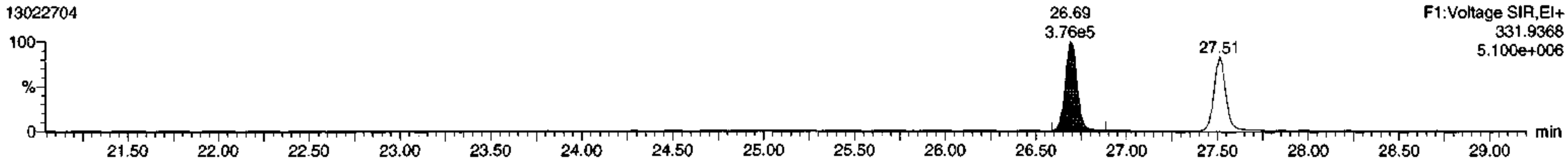
Printed: Wednesday, February 27, 2013 16:15:32 Pacific Standard Time

Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130225.mdb 26 Feb 2013 09:49:11

Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: WE03MBS, Name: 13022704, Date: 27-Feb-2013, Time: 12:45:53, Conditions: AUTOSPEC01, User: pk

13C-1234-TCDD



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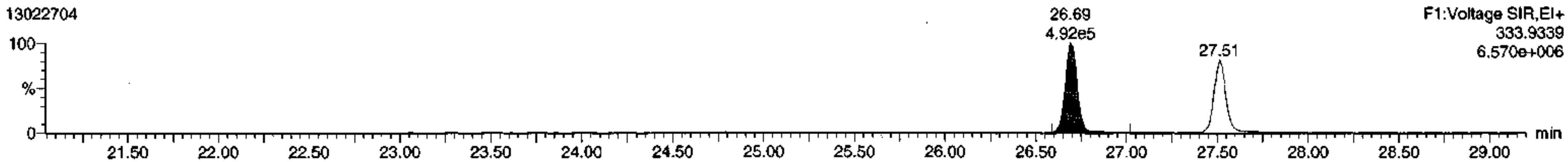

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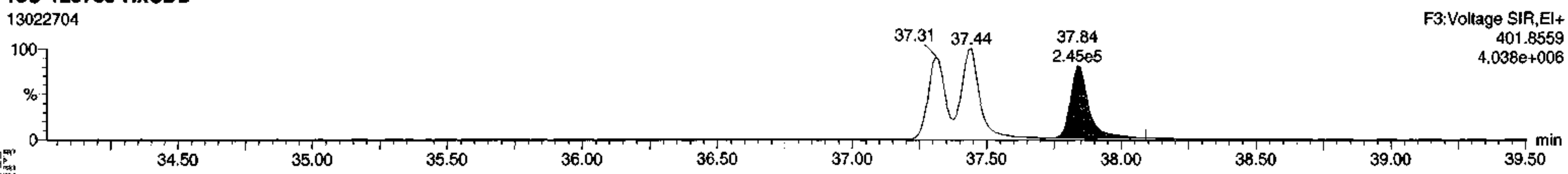

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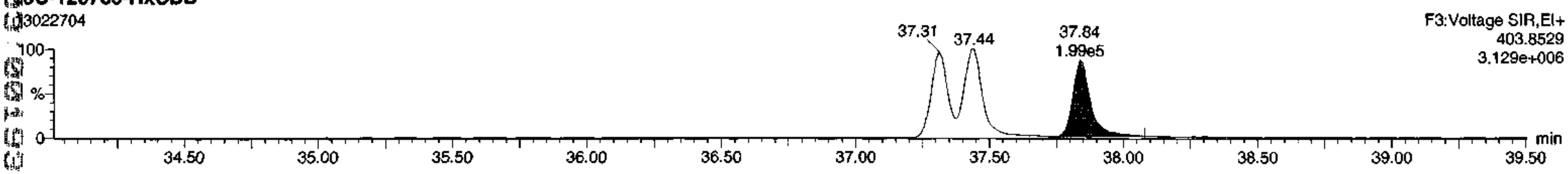

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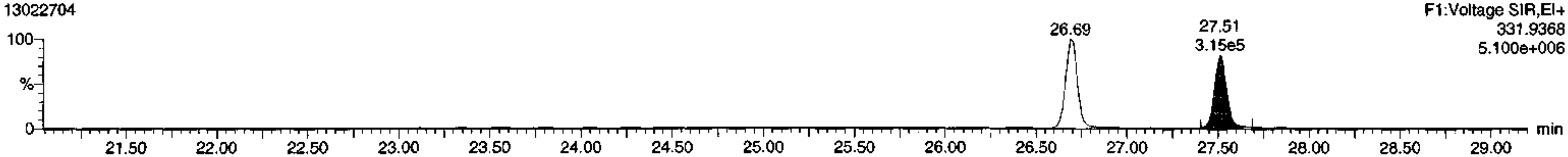
Last Altered: Wednesday, February 27, 2013 16:14:55 Pacific Standard Time

Printed: Wednesday, February 27, 2013 16:15:32 Pacific Standard Time

ID: WE03MBS, Name: 13022704, Date: 27-Feb-2013, Time: 12:45:53, Conditions: AUTOSPEC01, User: pk

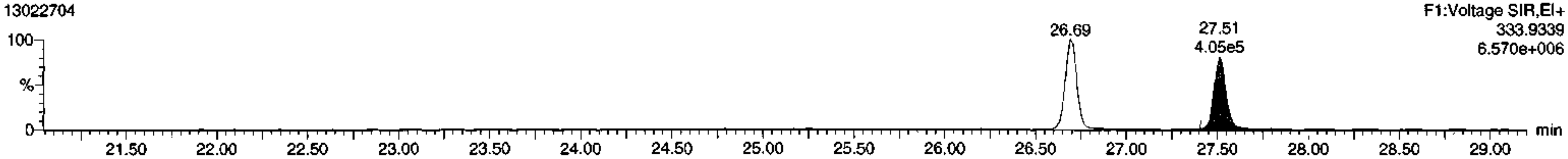
13C-2378-TCDD

13022704



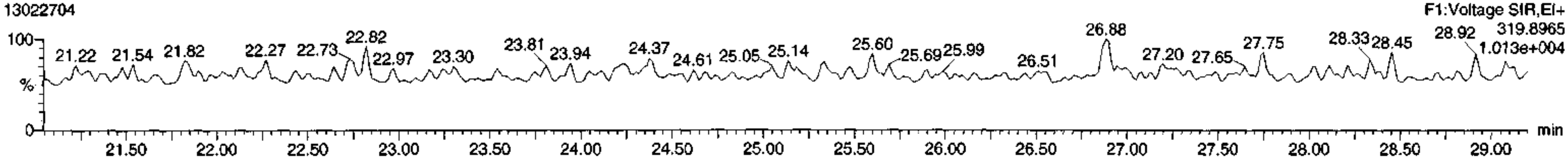
13C-2378-TCDD

13022704



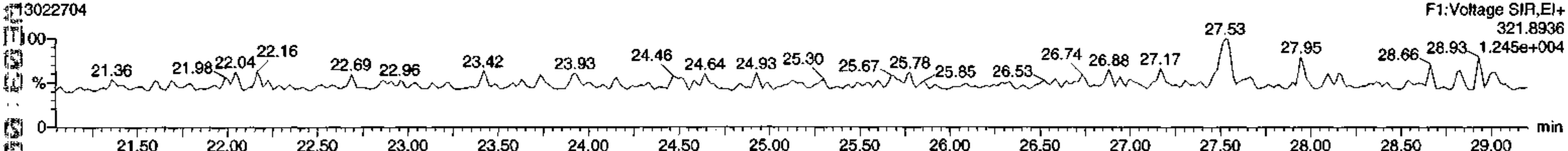
Total-tetradioxins

13022704



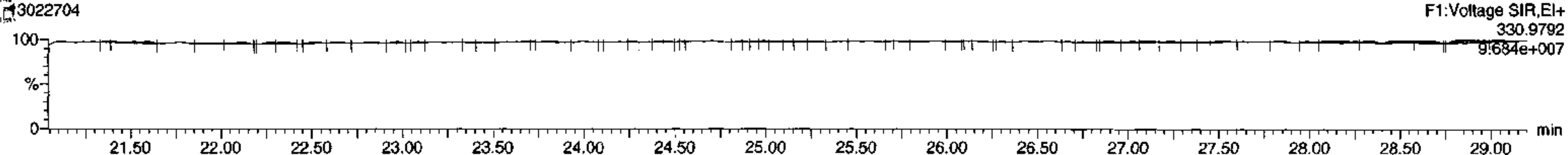
Total-tetradioxins

13022704



FUNCTION1 PFK

13022704



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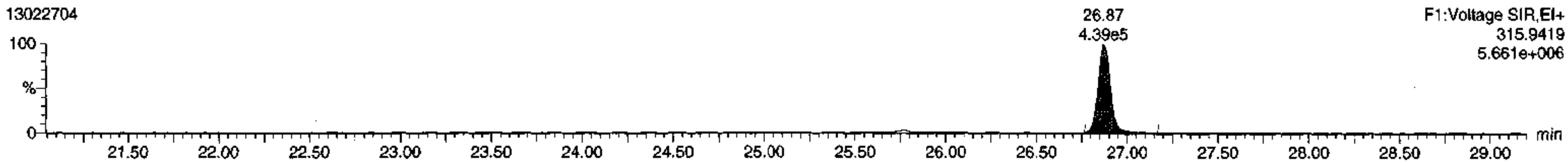
Last Altered: Wednesday, February 27, 2013 16:14:55 Pacific Standard Time

Printed: Wednesday, February 27, 2013 16:15:32 Pacific Standard Time

ID: WE03MBS, Name: 13022704, Date: 27-Feb-2013, Time: 12:45:53, Conditions: AUTOSPEC01, User: pk

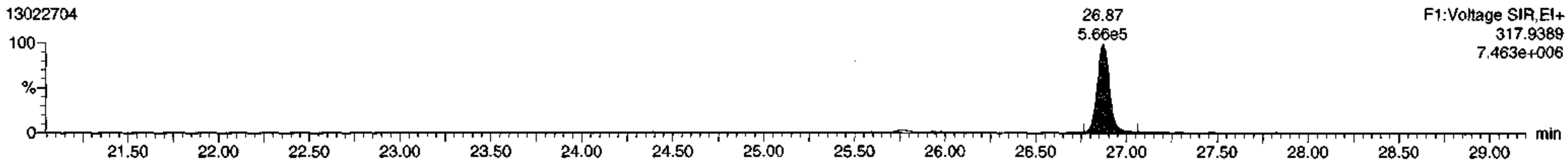
13C-2378-TCDF

13022704



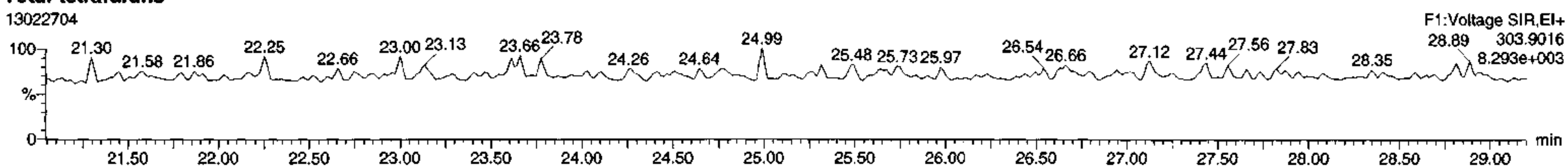
13C-2378-TCDF

13022704



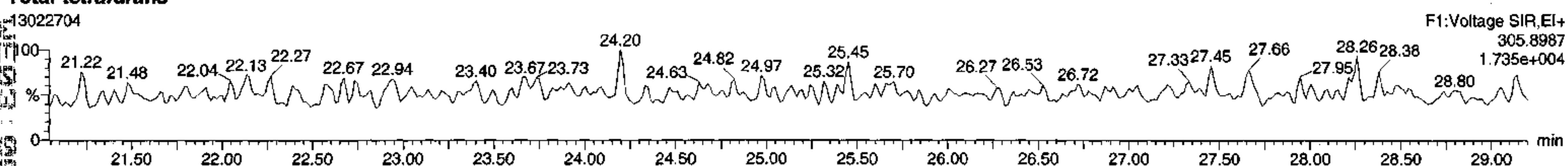
Total-tetrafurans

13022704



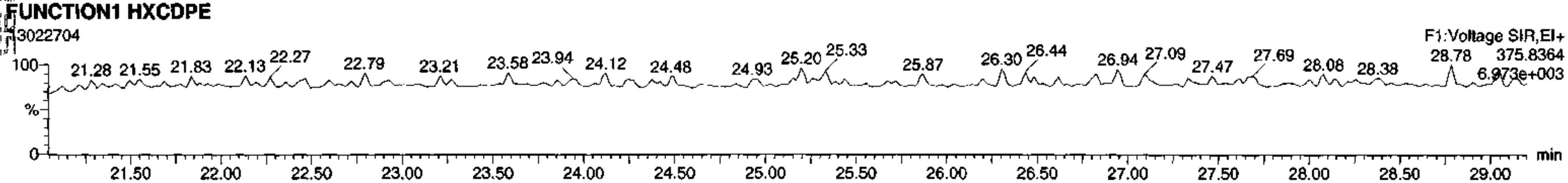
Total-tetrafurans

13022704



FUNCTION1 HXCDPE

13022704



Dataset: P:\DIOXIN8290.PRO\130227QC.qld

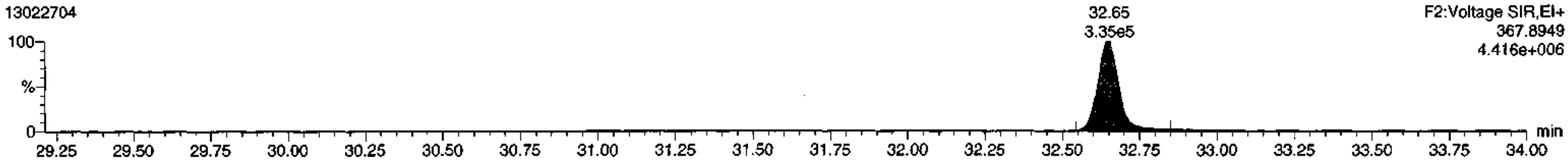
Last Altered: Wednesday, February 27, 2013 16:14:55 Pacific Standard Time

Printed: Wednesday, February 27, 2013 16:15:32 Pacific Standard Time

ID: WE03MBS, Name: 13022704, Date: 27-Feb-2013, Time: 12:45:53, Conditions: AUTOSPEC01, User: pk

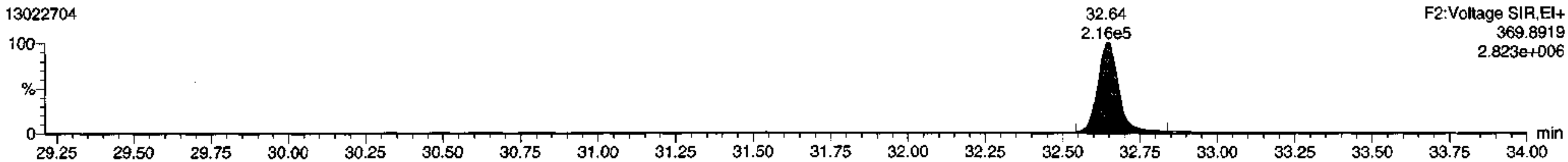
13C-12378-PeCDD

13022704



13C-12378-PeCDD

13022704



Total-pentadioxins

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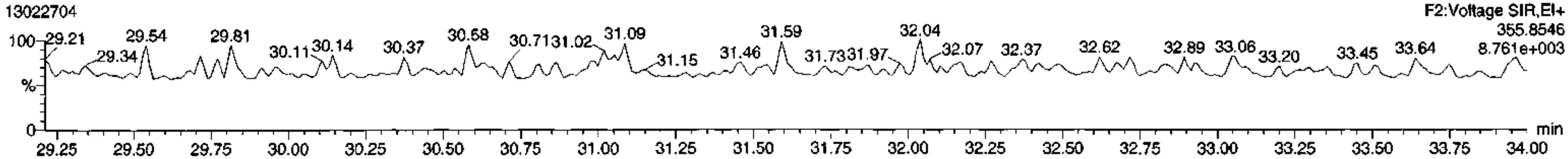
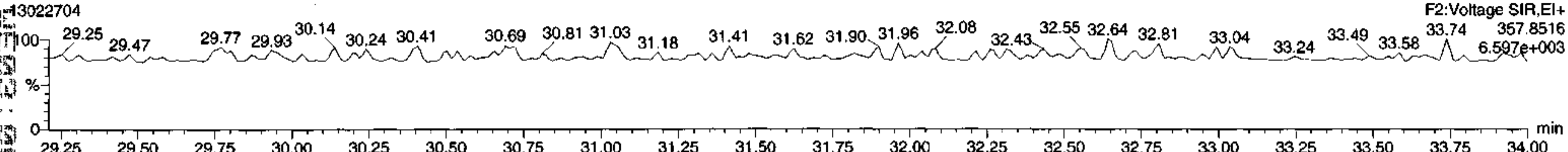


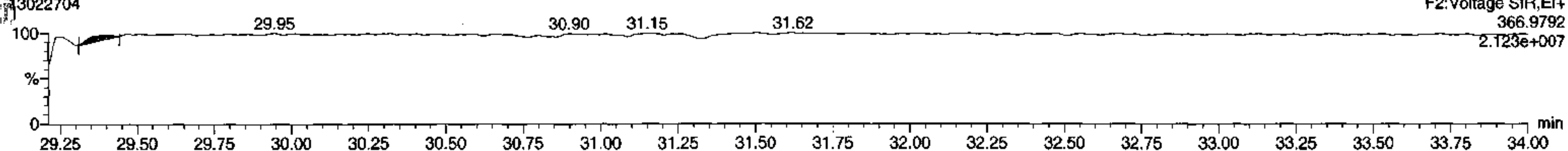
Total-pentadioxins

13022704



FUNCTION2 PFK

13022704

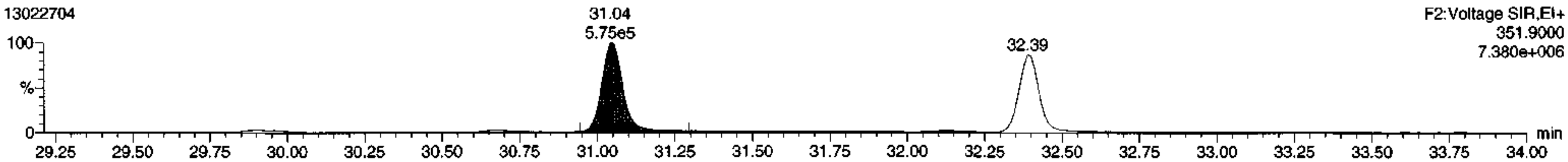


Quantify Sample Report **MassLynx 4.1 SCN 714**

Dataset: P:\DIOXIN8290.PRO\130227QC.qld
Last Altered: Wednesday, February 27, 2013 16:14:55 Pacific Standard Time
Printed: Wednesday, February 27, 2013 16:15:32 Pacific Standard Time

ID: WE03MBS, Name: 13022704, Date: 27-Feb-2013, Time: 12:45:53, Conditions: AUTOSPEC01, User: pk

13C-12378-PeCDF



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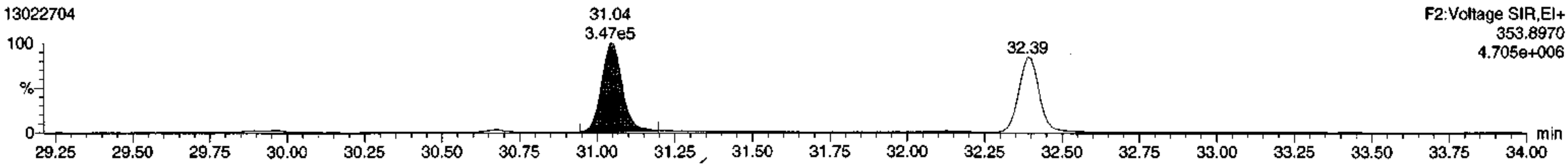
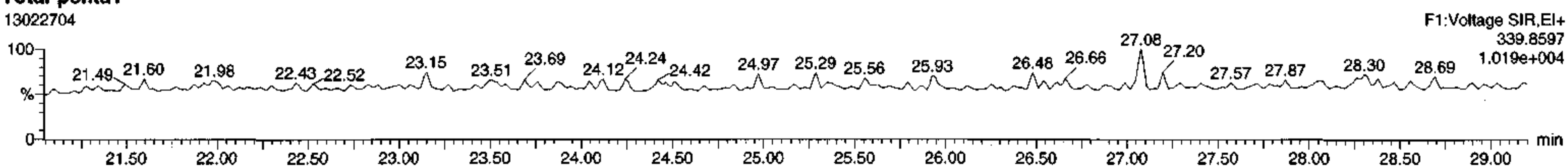
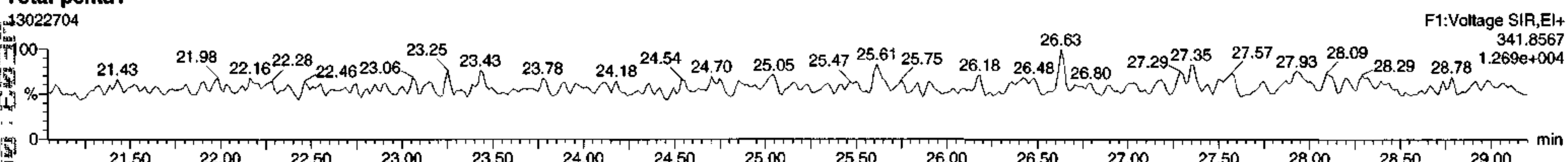


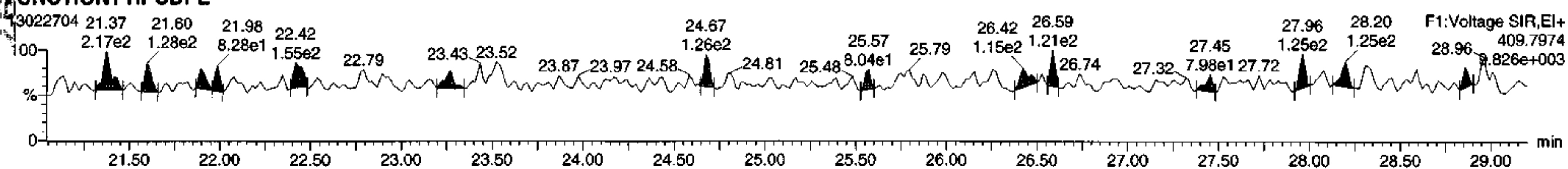
Total-penta1



Total-penta1



FUNCTION1 HPCDPE



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Last Altered: Wednesday, February 27, 2013 16:14:55 Pacific Standard Time

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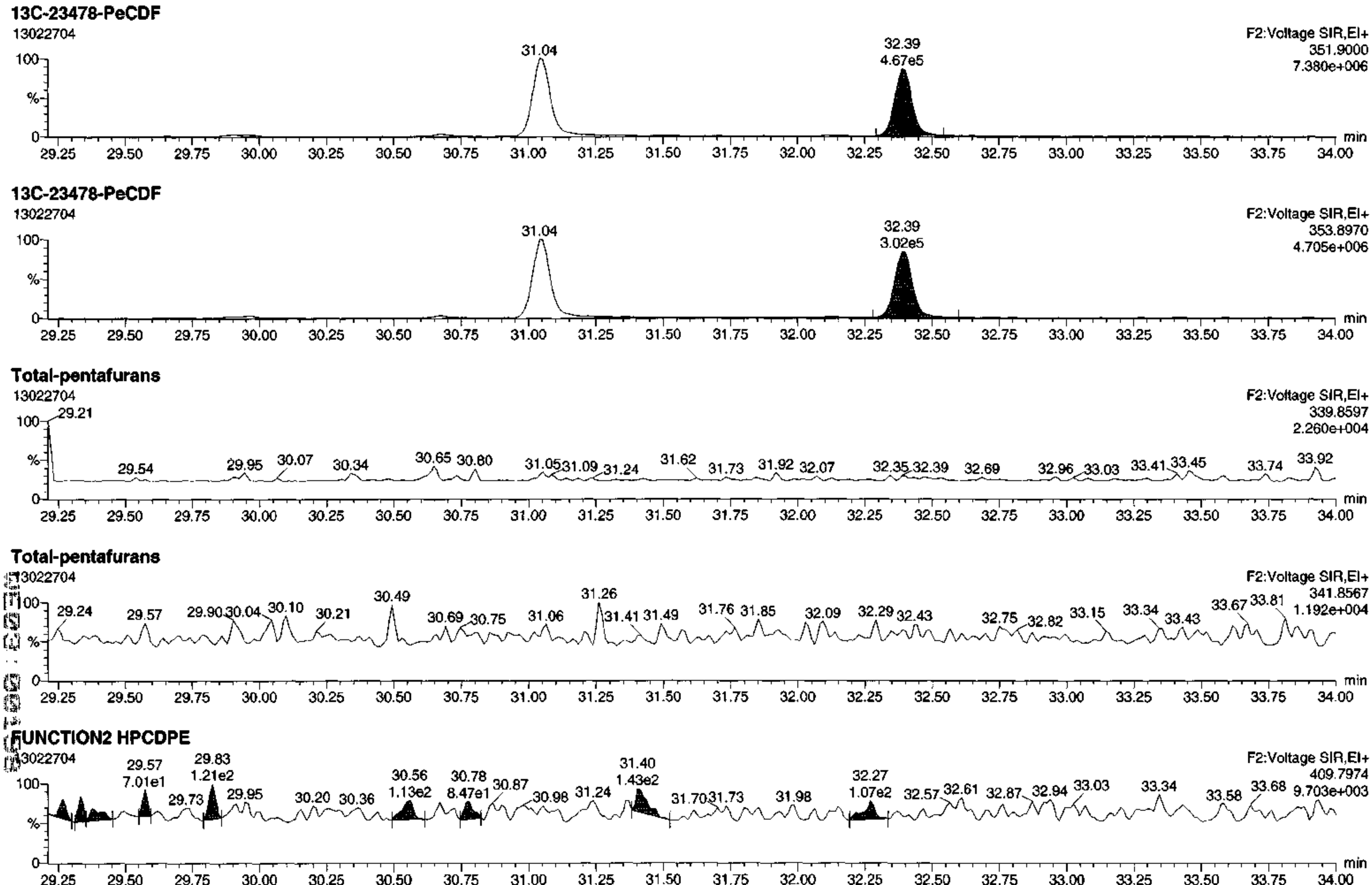


Quantify Sample Report **MassLynx 4.1 SCN 714**

Dataset: P:\DIOXIN8290.PRO\130227QC.qld

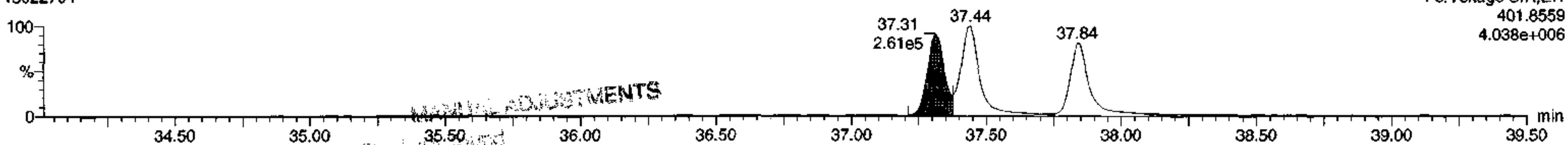
Last Altered: Wednesday, February 27, 2013 16:14:55 Pacific Standard Time

Printed: Wednesday, February 27, 2013 16:15:32 Pacific Standard Time

ID: WE03MBS, Name: 13022704, Date: 27-Feb-2013, Time: 12:45:53, Conditions: AUTOSPEC01, User: pk

13C-123478-HxCDD

13022704



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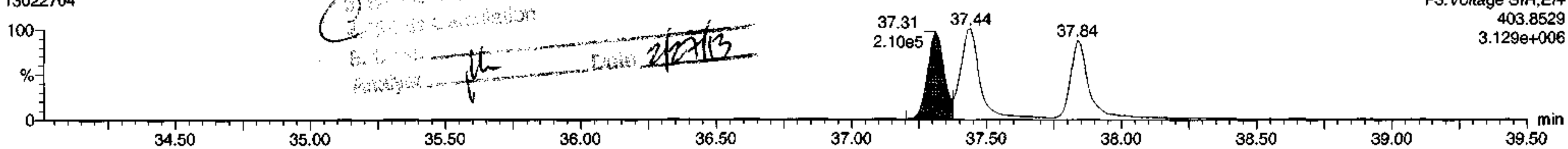
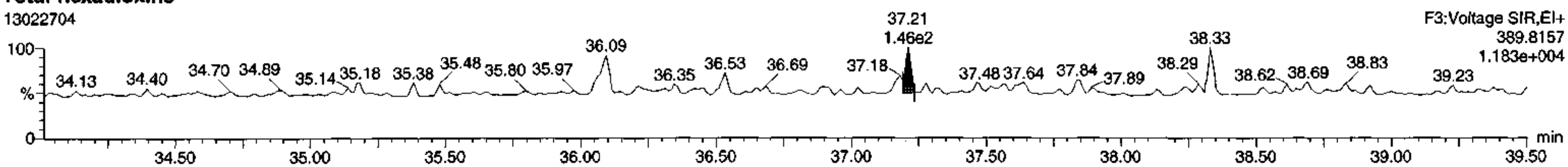
13022704



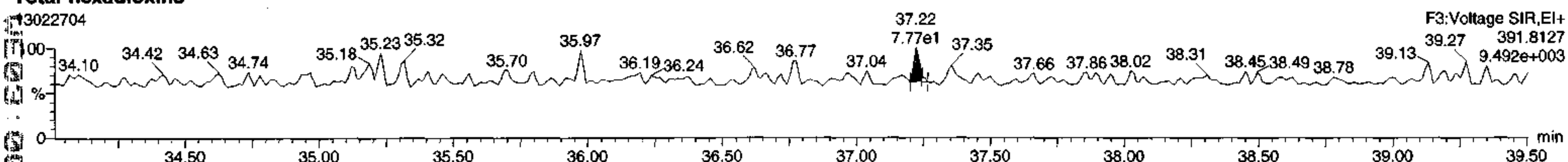
Total-hexadioxins

13022704



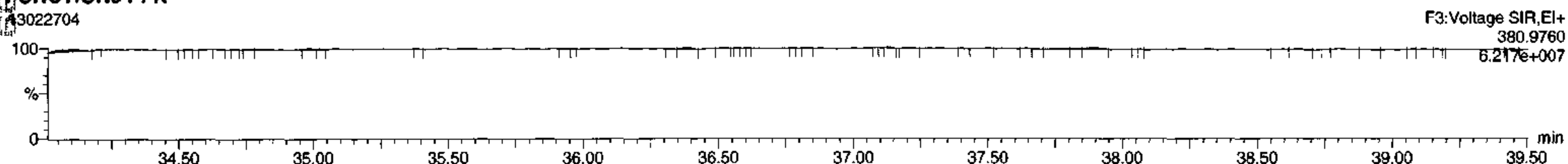
Total-hexadioxins

13022704



FUNCTION3 PFK

13022704



Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130227QC.qld
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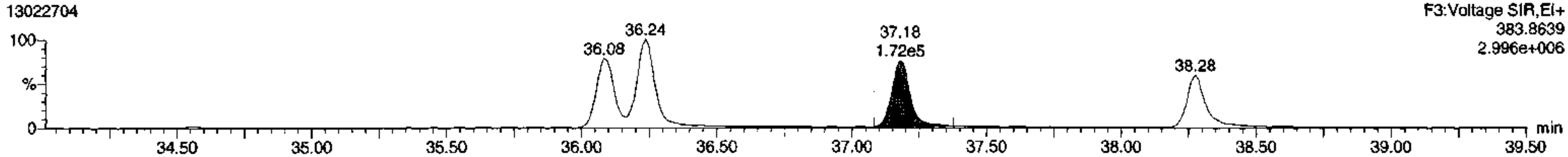
ID: WE03MBS, Name: 13022704, Date: 27-Feb-2013, Time: 12:45:53, Conditions: AUTOSPEC01, User: pk

13C-234678-HxCDF



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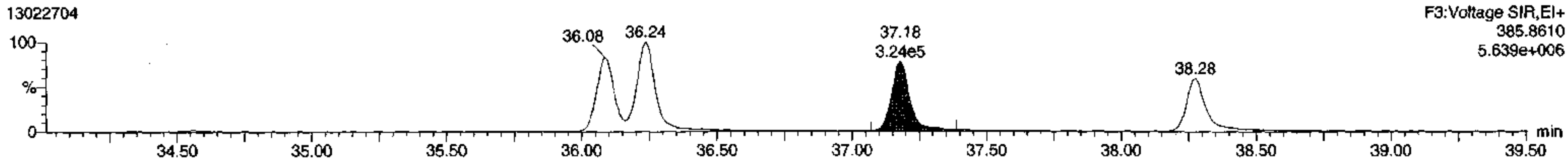
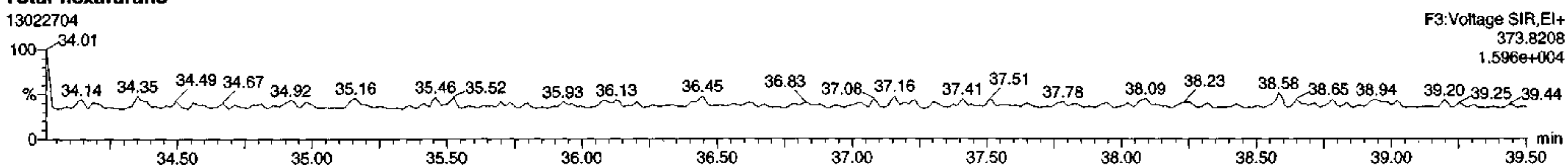
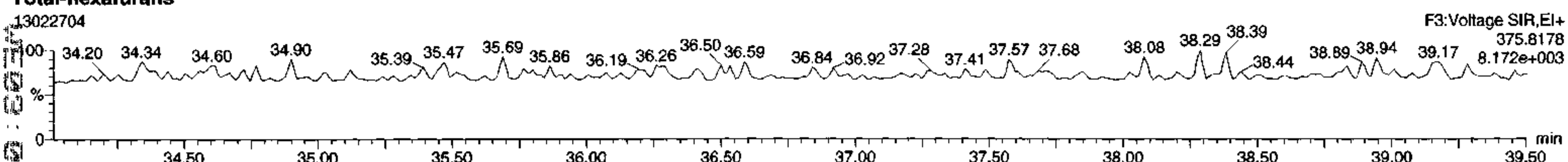


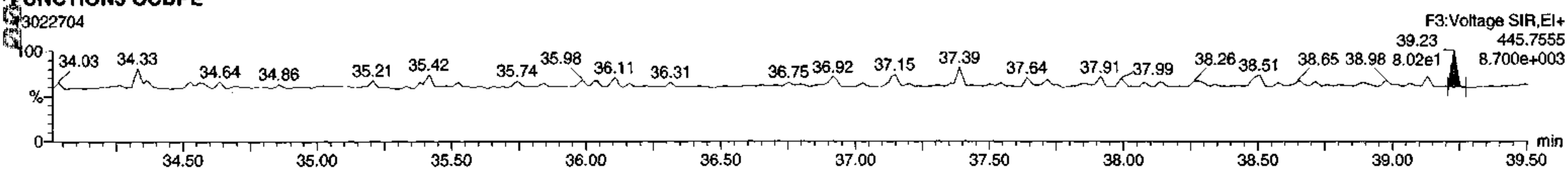
Total-hexafurans



Total-hexafurans



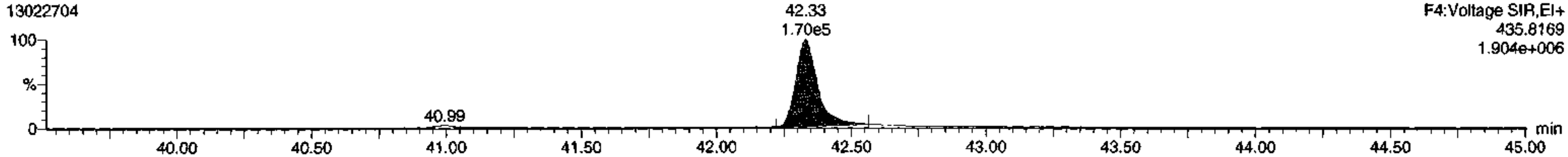
FUNCTION3 OCDPE



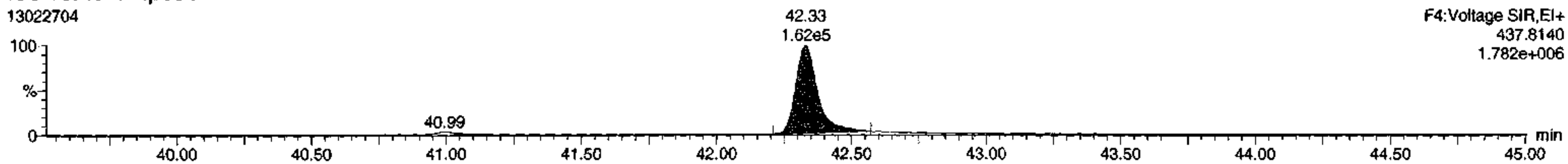
Dataset: P:\DIOXIN8290.PRO\130227QC.qld
Last Altered: Wednesday, February 27, 2013 16:14:55 Pacific Standard Time
Printed: Wednesday, February 27, 2013 16:15:32 Pacific Standard Time

ID: WE03MBS, Name: 13022704, Date: 27-Feb-2013, Time: 12:45:53, Conditions: AUTOSPEC01, User: pk

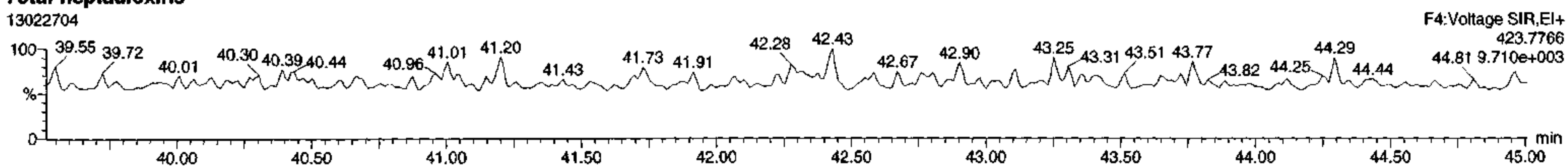
13C-1234678-HpCDD



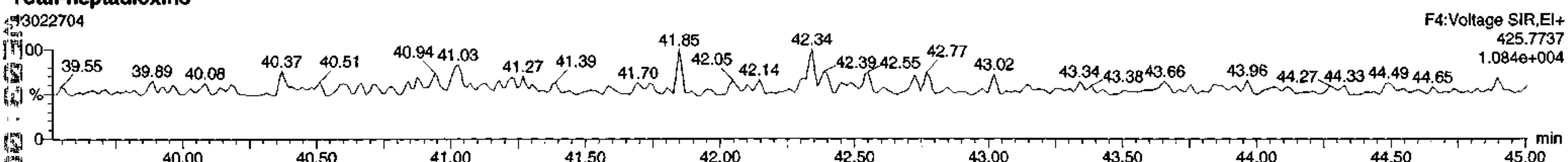
13C-1234678-HpCDD



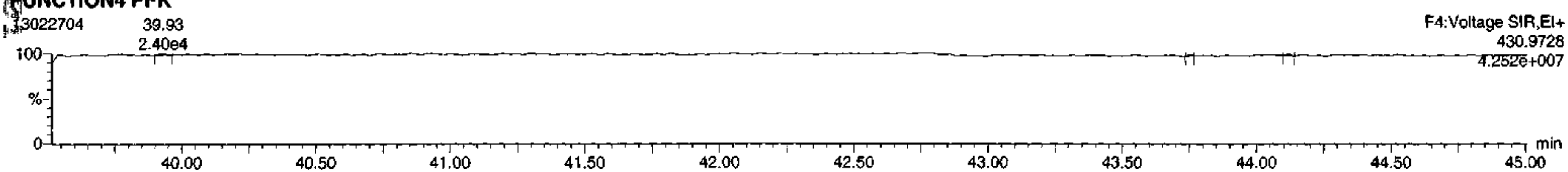
Total-heptadioxins



Total-heptadioxins



FUNCTION4 PFK



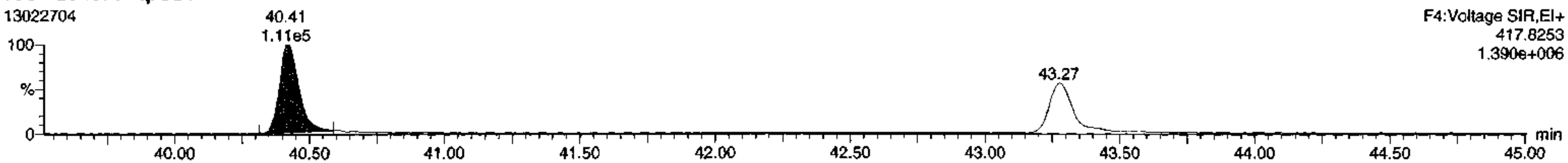
Dataset: P:\DIOXIN8290.PRO\130227QC.qld

Last Altered: Wednesday, February 27, 2013 16:14:55 Pacific Standard Time

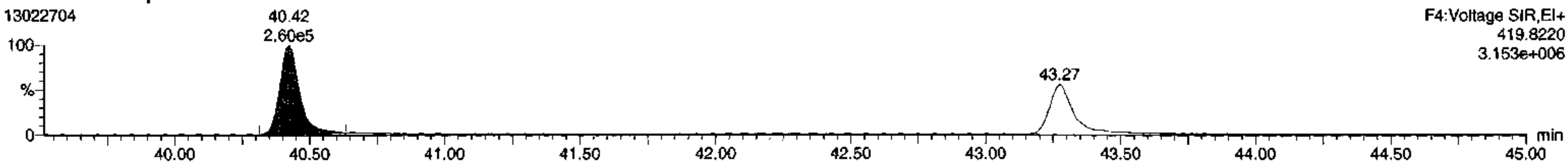
Printed: Wednesday, February 27, 2013 16:15:32 Pacific Standard Time

ID: WE03MBS, Name: 13022704, Date: 27-Feb-2013, Time: 12:45:53, Conditions: AUTOSPEC01, User: pk

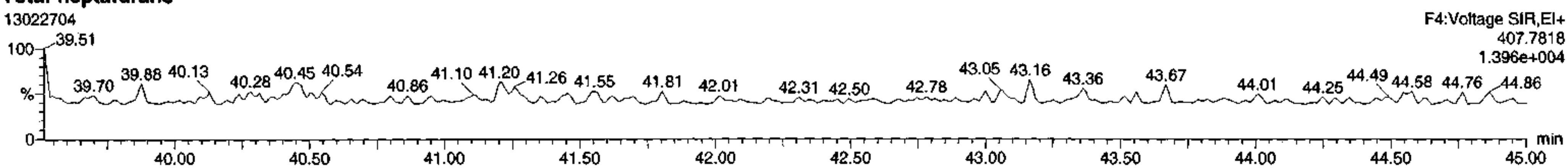
13C-1234678-HpCDF



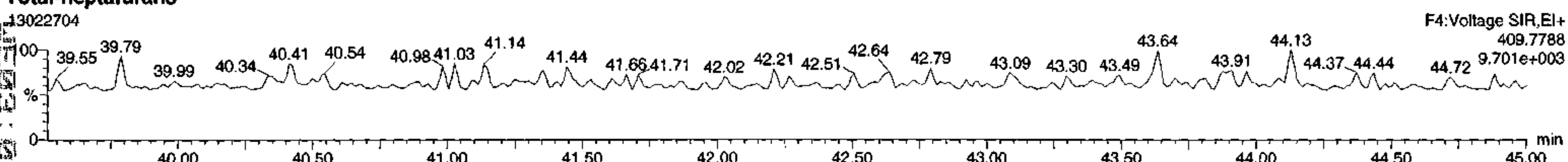
13C-1234678-HpCDF



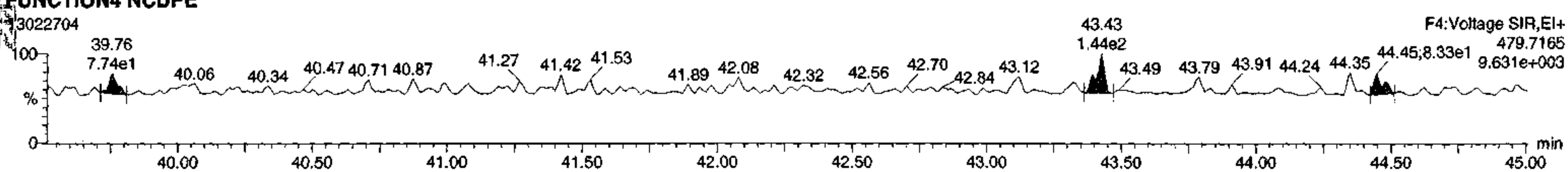
Total-heptafurans



Total-heptafurans



FUNCTION4 NCDPE



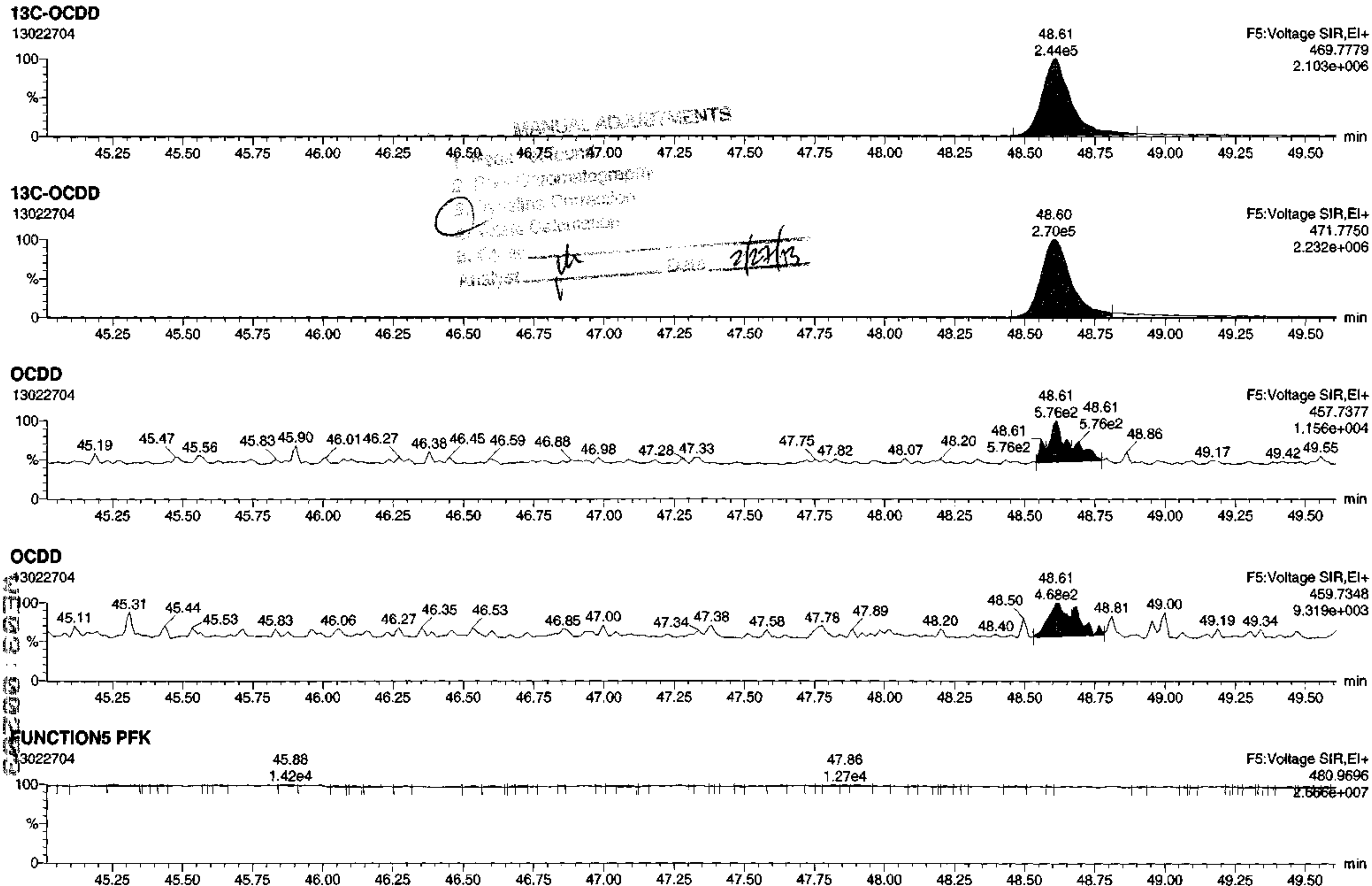
Quantify Sample Report **MassLynx 4.1 SCN 714**

Dataset: P:\DIOXIN8290.PRO\130227QC.qld

Last Altered: Wednesday, February 27, 2013 16:14:55 Pacific Standard Time

Printed: Wednesday, February 27, 2013 16:15:32 Pacific Standard Time

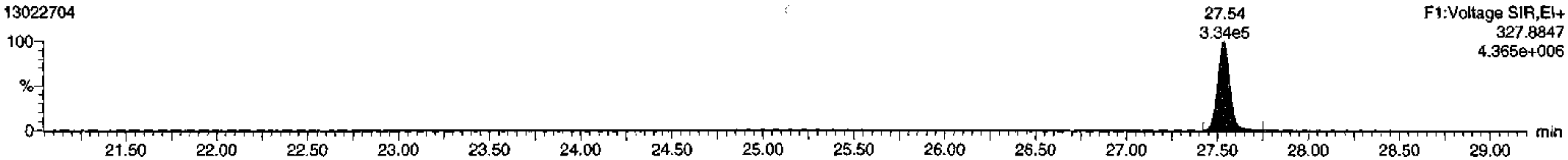
ID: WE03MBS, Name: 13022704, Date: 27-Feb-2013, Time: 12:45:53, Conditions: AUTOSPEC01, User: pk



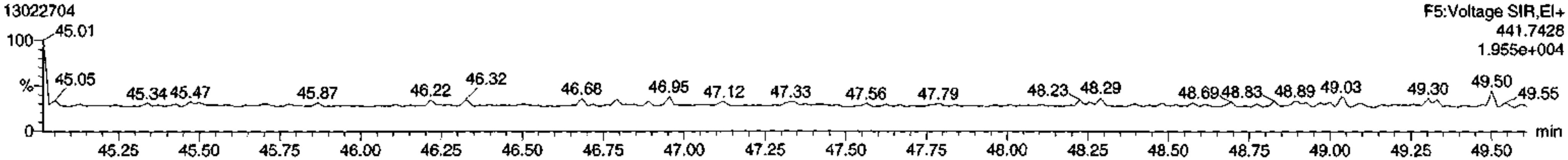
Dataset: P:\DIOXIN8290.PRO\130227QC.qld
Last Altered: Wednesday, February 27, 2013 16:14:55 Pacific Standard Time
Printed: Wednesday, February 27, 2013 16:15:32 Pacific Standard Time

ID: WE03MBS, Name: 13022704, Date: 27-Feb-2013, Time: 12:45:53, Conditions: AUTOSPEC01, User: pk

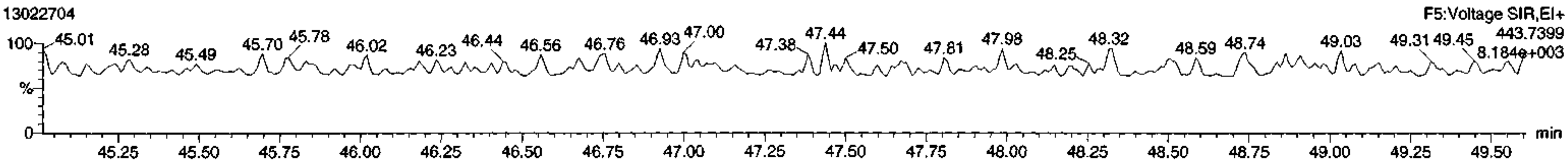
37CL-2378-TCDD



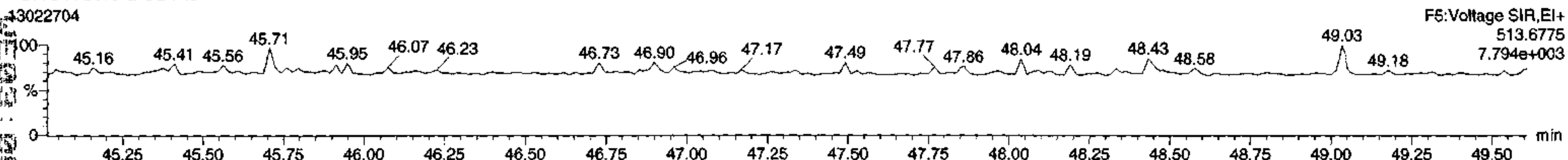
OCDF



OCDF



FUNCTION5 DCDPE



Quantify Sample Summary Report **MassLynx 4.1 SCN 714**

Dataset: P:\DIOXIN8290.PRO\130227QC.qld

Last Altered: Wednesday, February 27, 2013 16:14:55 Pacific Standard Time

Printed: Wednesday, February 27, 2013 16:15:51 Pacific Standard Time

pk 2/27/13

Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130225.mdb 26 Feb 2013 09:49:11
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: WE03OPR, Name: 13022705, Date: 27-Feb-2013, Time: 13:37:00, Conditions: AUTOSPEC01, User: pk

2378-TCDF	26.870	1.001	2.66e4	3.55e4	0.921	0.750	0.770	377.2	943	2839	3.56e5	5.01e5	NO	9.406	9.406
12378-PeCDF	31.053	1.001	1.86e5	1.22e5	0.912	1.518	1.550	486.8	5112	2925	2.49e6	1.66e6	NO	49.668	49.668
23478-PeCDF	32.402	1.001	1.56e5	1.05e5	0.943	1.480	1.550	415.8	5112	2925	2.13e6	1.44e6	NO	47.316	47.316
123478-HxCDF	36.096	1.001	1.07e5	8.91e4	1.101	1.198	1.240	294.7	4877	3144	1.44e6	1.22e6	NO	47.728	47.728
234678-HxCDF	37.181	1.000	1.03e5	8.69e4	1.073	1.190	1.240	277.0	4877	3144	1.35e6	1.13e6	NO	50.362	50.362
123678-HxCDF	36.238	1.000	1.35e5	1.10e5	1.056	1.225	1.240	340.4	4877	3144	1.66e6	1.37e6	NO	49.487	49.487
123789-HxCDF	38.277	1.000	6.96e4	6.03e4	1.017	1.155	1.240	165.8	4877	3144	8.09e5	7.12e5	NO	48.417	48.417
1234678-HpCDF	40.425	1.000	9.32e4	9.56e4	1.238	0.975	1.050	470.0	2339	2902	1.10e6	1.13e6	NO	61.363	61.363
1234789-HpCDF	43.275	1.000	4.98e4	4.70e4	1.224	1.060	1.050	210.6	2339	2902	4.93e5	4.55e5	NO	51.886	51.886
OCDF	48.910	1.006	6.65e4	7.42e4	1.162	0.895	0.890	399.4	1337	1988	5.34e5	6.09e5	NO	87.678	87.678
2378-TCDD	27.528	1.001	2.52e4	3.13e4	1.106	0.805	0.770	266.3	1183	1075	3.15e5	4.14e5	NO	9.253	9.253
12378-PeCDD	32.654	1.001	1.22e5	8.03e4	1.001	1.521	1.550	686.5	2388	1475	1.64e6	1.06e6	NO	48.318	48.318
123478-HxCDD	37.323	1.001	8.08e4	6.51e4	0.978	1.240	1.240	609.7	1840	3479	1.12e6	8.94e5	NO	46.752	46.752
123678-HxCDD	37.444	1.001	9.69e4	7.91e4	0.929	1.226	1.240	639.3	1840	3479	1.18e6	9.40e5	NO	48.893	48.893
123789-HxCDD	37.849	1.011	7.89e4	6.00e4	0.904	1.314	1.240	515.8	1840	3479	9.49e5	7.29e5	NO	43.465	43.465
1234678-HpCDD	42.344	1.001	5.06e4	4.74e4	1.029	1.067	1.050	221.1	2428	2544	5.37e5	4.96e5	NO	45.164	45.164
OCDD	48.614	1.000	6.51e4	7.77e4	1.011	0.837	0.890	604.0	870	2364	5.25e5	5.98e5	NO	102.243	102.243
13C-2378-TCDF	26.855	1.007	3.12e5	4.05e5	1.522	0.772	0.770	2264.8	1868	1803	4.23e6	5.41e6	NO		61.550
13C-12378-PeCDF	31.031	1.163	4.21e5	2.59e5	1.185	1.627	1.550	1341.3	4103	2956	5.50e6	3.44e6	NO		74.973
13C-23478-PeCDF	32.380	1.214	3.52e5	2.33e5	1.136	1.507	1.550	1200.0	4103	2956	4.92e6	3.17e6	NO		67.313
13C-123478-HxCDF	36.074	0.954	1.25e5	2.47e5	1.284	0.508	0.510	406.2	4246	5051	1.73e6	3.44e6	NO		88.664
13C-123678-HxCDF	36.227	0.958	1.62e5	3.06e5	1.383	0.528	0.510	465.5	4246	5051	1.98e6	3.84e6	NO		103.378
13C-234678-HxCDF	37.170	0.983	1.19e5	2.34e5	1.283	0.507	0.510	358.6	4246	5051	1.52e6	2.98e6	NO		83.909
13C-123789-HxCDF	38.266	1.012	8.80e4	1.76e5	1.099	0.501	0.510	254.6	4246	5051	1.08e6	2.14e6	NO		73.284
13C-1234678-HpCDF	40.414	1.068	7.61e4	1.73e5	1.070	0.441	0.440	372.0	2410	3457	8.96e5	2.06e6	NO		71.008
13C-1234789-HpCDF	43.264	1.144	4.66e4	1.06e5	0.774	0.441	0.440	195.4	2410	3457	4.71e5	1.01e6	NO		60.184
13C-1234-TCDD	26.676	0.000	3.33e5	4.32e5	1.000	0.772	0.770	1249.2	3727	2655	4.66e6	6.09e6	NO		100.000
13C-2378-TCDD	27.497	1.031	2.41e5	3.10e5	0.943	0.777	0.770	834.4	3727	2655	3.11e6	4.06e6	NO		76.513
13C-12378-PeCDD	32.632	1.223	2.54e5	1.64e5	0.715	1.549	1.550	1345.1	2381	2416	3.20e6	2.10e6	NO		76.429
13C-123478-HxCDD	37.301	0.986	1.81e5	1.39e5	1.032	1.302	1.240	875.5	2866	2406	2.51e6	1.95e6	NO		94.497
13C-123678-HxCDD	37.422	0.989	2.11e5	1.76e5	1.076	1.199	1.240	942.6	2866	2406	2.70e6	2.25e6	NO		109.966
13C-1234678-HpCDD	42.322	1.119	1.05e5	1.06e5	0.838	0.990	1.050	342.6	3199	2434	1.10e6	1.06e6	NO		76.970
13C-OCDD	48.596	1.285	1.24e5	1.52e5	0.675	0.820	0.890	323.9	3193	2001	1.03e6	1.17e6	NO		124.939

Quantify Sample Summary Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130227QC.qld
Last Altered: Wednesday, February 27, 2013 16:14:55 Pacific Standard Time
Printed: Wednesday, February 27, 2013 16:15:51 Pacific Standard Time

ID: WE03OPR, Name: 13022705, Date: 27-Feb-2013, Time: 13:37:00, Conditions: AUTOSPEC01, User: pk

	13C-123789-HxCDD	37.827	0.000	1.83e5	1.44e5	1.000	1.267	1.240	814.5	2866	2406	2.33e6	1.84e6	NO		100.000
	Total-tetrafurans			3.09e4		0.921				943		4.17e5				11.028
	Total-penta1			0.00e0						655		0.00e0				
	Total-pentafurans			3.60e5		0.927				5112		4.87e6				102.754
	Total-hexafurans			4.22e5		1.062				4877		5.40e6				200.085
	Total-heptafurans			1.47e5		1.231				2339		1.67e6				117.110
	Total-Furans			1.03e6		1.065				943		1.29e7				518.655
	Total-tetradioxins			2.63e4		1.106				1183		3.33e5				9.686
	Total-pentadioxins			1.22e5		1.001				2388		1.65e6				48.464
	Total-hexadioxins			2.62e5		0.937				1840		3.34e6				141.384
	Total-heptadioxins			5.49e4		1.029				2428		6.07e5				48.989
	Total-Dioxins			5.30e5		0.994				1183		6.45e6				350.767
	Total-TEQ			1.56e6						1183		1.93e7				869.422
	37CL-2378-TCDD	27.528	1.032	2.43e5		1.051			1145.0	2805		3.21e6				30.153
	FUNCTION1 PFK			1.90e6						711499		3.14e7				
	FUNCTION2 PFK			1.65e5						196271		6.97e5				0.000
	FUNCTION3 PFK			5.67e5						394111		1.62e7				0.000
	FUNCTION4 PFK			3.16e5						316954		8.10e6				
	FUNCTION5 PFK			2.46e5						203807		8.06e6				
	FUNCTION1 HXCDPE			2.02e2						477		5.74e3				0.000
	FUNCTION1 HPCDPE			3.56e3						1553		7.57e4				0.000
	FUNCTION2 HPCDPE			1.10e3						1319		2.95e4				0.000
	FUNCTION3 OCDPE			0.00e0						417		0.00e0				
	FUNCTION4 NCDPE			1.16e2						707		5.02e3				0.000
	FUNCTION5 DCDPE			0.00e0						308		0.00e0				

09:00205

Quantify Totals Report MassLynx 4.1 SCN 714
Dataset: P:\DIOXIN8290.PRO\130227QC.qld
Last Altered: Wednesday, February 27, 2013 16:14:55 Pacific Standard Time
Printed: Wednesday, February 27, 2013 16:15:51 Pacific Standard Time

Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130225.mdb 26 Feb 2013 09:49:11
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: WE03OPR, Name: 13022705, Date: 27-Feb-2013, Time: 13:37:00, Conditions: AUTOSPEC01, User: pk

TF

	1	2378-TCDF	303.9016	26.87	62102.347	0.921	9.406	9.406	0.75	0.77	NO	377.2
	35	Total-tetrafurans	303.9016	25.96	2257.305	0.921	0.342		0.70	0.77	NO	13.5
	35	Total-tetrafurans	303.9016	25.76	8454.389	0.921	1.281		0.64	0.77	YES	50.9

PP

PF

	3	23478-PeCDF	339.8597	32.40	260901.414	0.943	47.316	47.316	1.48	1.55	NO	415.8
	37	Total-pentafurans	339.8597	31.25	14566.841	0.927	2.483		1.11	1.55	YES	20.4
	2	12378-PeCDF	339.8597	31.05	308103.485	0.912	49.668	49.668	1.52	1.55	NO	486.8
	37	Total-pentafurans	339.8597	30.68	6909.316	0.927	1.178		1.53	1.55	NO	12.1
	37	Total-pentafurans	339.8597	29.96	10482.513	0.927	1.787		0.99	1.55	YES	14.7
	37	Total-pentafurans	339.8597	33.44	1889.946	0.927	0.322		2.08	1.55	YES	3.3

HF

	7	123789-HxCDF	373.8208	38.28	129843.071	1.017	48.417	48.417	1.15	1.24	NO	165.8
	38	Total-hexafurans	373.8208	37.33	5614.640	1.062	1.452		0.94	1.24	YES	10.6
	5	234678-HxCDF	373.8208	37.18	190423.797	1.073	50.362	50.362	1.19	1.24	NO	277.0
	6	123678-HxCDF	373.8208	36.24	244444.180	1.056	49.487	49.487	1.22	1.24	NO	340.4
	4	123478-HxCDF	373.8208	36.10	195842.750	1.101	47.728	47.728	1.20	1.24	NO	294.7
	38	Total-hexafurans	373.8208	34.56	5648.082	1.062	1.461		0.93	1.24	YES	8.6
	38	Total-hexafurans	373.8208	34.35	2698.088	1.062	0.698		1.35	1.24	NO	4.7
	38	Total-hexafurans	373.8208	38.49	1853.697	1.062	0.479		1.03	1.24	YES	5.4

HPF

	39	Total-heptafurans	407.7818	43.51	2568.763	1.231	1.041		0.82	1.05	YES	10.2
	9	1234789-HpCDF	407.7818	43.28	96742.066	1.224	51.886	51.886	1.06	1.05	NO	210.6
	39	Total-heptafurans	407.7818	41.27	3416.057	1.231	1.384		0.77	1.05	YES	10.1
	39	Total-heptafurans	407.7818	40.70	2112.495	1.231	0.856		1.10	1.05	NO	7.2
	8	1234678-HpCDF	407.7818	40.43	188825.531	1.238	61.363	61.363	0.98	1.05	NO	470.0
	39	Total-heptafurans	407.7818	43.55	1432.198	1.231	0.580					7.2

Dataset: P:\DIOXIN8290.PRO\130227QC.qld

Last Altered: Wednesday, February 27, 2013 16:14:55 Pacific Standard Time

Printed: Wednesday, February 27, 2013 16:15:51 Pacific Standard Time

ID: WE03OPR, Name: 13022705, Date: 27-Feb-2013, Time: 13:37:00, Conditions: AUTOSPEC01, User: pk

Furans,TF,PP,PF,HF,HPF,OF

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	1 2378-TCDF	303.9016	26.87	62102.347	0.921	9.406	9.406	0.75	0.77	NO	377.2
[redacted]	35 Total-tetrafurans	303.9016	25.96	2257.305	0.921	0.342		0.70	0.77	NO	13.5
[redacted]	35 Total-tetrafurans	303.9016	25.76	8454.389	0.921	1.281		0.64	0.77	YES	50.9
[redacted]	3 23478-PeCDF	339.8597	32.40	260901.414	0.943	47.316	47.316	1.48	1.55	NO	415.8
[redacted]	37 Total-pentafurans	339.8597	31.25	14566.841	0.927	2.483		1.11	1.55	YES	20.4
[redacted]	2 12378-PeCDF	339.8597	31.05	308103.485	0.912	49.668	49.668	1.52	1.55	NO	486.8
[redacted]	37 Total-pentafurans	339.8597	30.68	6909.316	0.927	1.178		1.53	1.55	NO	12.1
[redacted]	37 Total-pentafurans	339.8597	29.96	10482.513	0.927	1.787		0.99	1.55	YES	14.7
[redacted]	37 Total-pentafurans	339.8597	33.44	1889.946	0.927	0.322		2.08	1.55	YES	3.3
[redacted]	7 123789-HxCDF	373.8208	38.28	129843.071	1.017	48.417	48.417	1.15	1.24	NO	165.8
[redacted]	38 Total-hexafurans	373.8208	37.33	5614.640	1.062	1.452		0.94	1.24	YES	10.6
[redacted]	5 234678-HxCDF	373.8208	37.18	190423.797	1.073	50.362	50.362	1.19	1.24	NO	277.0
[redacted]	6 123678-HxCDF	373.8208	36.24	244444.180	1.056	49.487	49.487	1.22	1.24	NO	340.4
[redacted]	4 123478-HxCDF	373.8208	36.10	195842.750	1.101	47.728	47.728	1.20	1.24	NO	294.7
[redacted]	38 Total-hexafurans	373.8208	34.56	5648.082	1.062	1.461		0.93	1.24	YES	8.6
[redacted]	38 Total-hexafurans	373.8208	34.35	2698.088	1.062	0.698		1.35	1.24	NO	4.7
[redacted]	38 Total-hexafurans	373.8208	38.49	1853.697	1.062	0.479		1.03	1.24	YES	5.4
[redacted]	39 Total-heptafurans	407.7818	43.51	2568.763	1.231	1.041		0.82	1.05	YES	10.2
[redacted]	9 1234789-HpCDF	407.7818	43.28	96742.066	1.224	51.886	51.886	1.06	1.05	NO	210.6
[redacted]	39 Total-heptafurans	407.7818	41.27	3416.057	1.231	1.384		0.77	1.05	YES	10.1
[redacted]	39 Total-heptafurans	407.7818	40.70	2112.495	1.231	0.856		1.10	1.05	NO	7.2
[redacted]	8 1234678-HpCDF	407.7818	40.43	188825.531	1.238	61.363	61.363	0.98	1.05	NO	470.0
[redacted]	39 Total-heptafurans	407.7818	43.55	1432.198	1.231	0.580					7.2
[redacted]	10 OCDF	441.7428	48.91	140724.492	1.162	87.678	87.678	0.90	0.89	NO	399.4

TD

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	41 Total-tetradioxins	319.8965	27.74	886.198	1.106	0.145		0.40	0.77	YES	5.2
[redacted]	11 2378-TCDD	319.8965	27.53	56496.871	1.106	9.253	9.253	0.81	0.77	NO	266.3
[redacted]	41 Total-tetradioxins	319.8965	27.12	1761.871	1.106	0.289		0.90	0.77	YES	9.7

PD

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	42 Total-pentadioxins	355.8546	31.05	611.287	1.001	0.146		1.05	1.55	YES	2.7
[redacted]	12 12378-PeCDD	355.8546	32.65	202348.765	1.001	48.318	48.318	1.52	1.55	NO	686.5

HD

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	15 123789-HxCDD	389.8157	37.85	138882.781	0.904	43.465	43.465	1.31	1.24	NO	515.8
[redacted]	43 Total-hexadioxins	389.8157	37.71	2585.527	0.937	0.781		3.82	1.24	YES	17.0
[redacted]	14 123678-HxCDD	389.8157	37.44	176037.531	0.929	48.893	48.893	1.23	1.24	NO	639.3
[redacted]	13 123478-HxCDD	389.8157	37.32	145922.286	0.978	46.752	46.752	1.24	1.24	NO	609.7
[redacted]	43 Total-hexadioxins	389.8157	38.19	2553.355	0.937	0.771		3.56	1.24	YES	18.5
[redacted]	43 Total-hexadioxins	389.8157	38.12	2390.828	0.937	0.722		0.80	1.24	YES	14.8

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HPD

[redacted]	44	Total-heptadioxins	423.7766	42.49	4544.688	1.029	2.093		1.44	1.05	YES	20.3
[redacted]	16	1234678-HpCDD	423.7766	42.34	98048.191	1.029	45.164	45.164	1.07	1.05	NO	221.1
[redacted]	44	Total-heptadioxins	423.7766	41.01	3759.182	1.029	1.732		0.72	1.05	YES	8.4

Dioxins,TD,PD,HD,HPD,OD

[redacted]	41	Total-tetradioxins	319.8965	27.74	886.198	1.106	0.145		0.40	0.77	YES	5.2
[redacted]	11	2378-TCDD	319.8965	27.53	56496.871	1.106	9.253	9.253	0.81	0.77	NO	266.3
[redacted]	41	Total-tetradioxins	319.8965	27.12	1761.871	1.106	0.289		0.90	0.77	YES	9.7
[redacted]	42	Total-pentadioxins	355.8546	31.05	611.287	1.001	0.146		1.05	1.55	YES	2.7
[redacted]	12	12378-PeCDD	355.8546	32.65	202348.765	1.001	48.318	48.318	1.52	1.55	NO	686.5
[redacted]	15	123789-HxCDD	389.8157	37.85	138862.781	0.904	43.465	43.465	1.31	1.24	NO	515.8
[redacted]	43	Total-hexadioxins	389.8157	37.71	2585.527	0.937	0.781		3.82	1.24	YES	17.0
[redacted]	14	123678-HxCDD	389.8157	37.44	176037.531	0.929	48.893	48.893	1.23	1.24	NO	639.3
[redacted]	13	123478-HxCDD	389.8157	37.32	145922.286	0.978	46.752	46.752	1.24	1.24	NO	609.7
[redacted]	43	Total-hexadioxins	389.8157	38.19	2553.355	0.937	0.771		3.56	1.24	YES	18.5
[redacted]	43	Total-hexadioxins	389.8157	38.12	2390.828	0.937	0.722		0.80	1.24	YES	14.8
[redacted]	44	Total-heptadioxins	423.7766	42.49	4544.688	1.029	2.093		1.44	1.05	YES	20.3
[redacted]	16	1234678-HpCDD	423.7766	42.34	98048.191	1.029	45.164	45.164	1.07	1.05	NO	221.1
[redacted]	44	Total-heptadioxins	423.7766	41.01	3759.182	1.029	1.732		0.72	1.05	YES	8.4
[redacted]	17	OCDD	457.7377	48.61	142805.918	1.011	102.243	102....	0.84	0.89	NO	604.0

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TotalTEQ,Furans,Dioxins

[redacted]	1 2378-TCDF	303.9016	26.87	62102.347	0.921	9.406	9.406	0.75	0.77	NO	377.2
[redacted]	35 Total-tetrafurans	303.9016	25.96	2257.305	0.921	0.342		0.70	0.77	NO	13.5
[redacted]	35 Total-tetrafurans	303.9016	25.76	8454.389	0.921	1.281		0.64	0.77	YES	50.9
[redacted]	3 23478-PeCDF	339.8597	32.40	260901.414	0.943	47.316	47.316	1.48	1.55	NO	415.8
[redacted]	37 Total-pentafurans	339.8597	31.25	14566.841	0.927	2.483		1.11	1.55	YES	20.4
[redacted]	2 12378-PeCDF	339.8597	31.05	308103.485	0.912	49.668	49.668	1.52	1.55	NO	486.8
[redacted]	37 Total-pentafurans	339.8597	30.68	6909.316	0.927	1.178		1.53	1.55	NO	12.1
[redacted]	37 Total-pentafurans	339.8597	29.96	10482.513	0.927	1.787		0.99	1.55	YES	14.7
[redacted]	37 Total-pentafurans	339.8597	33.44	1889.946	0.927	0.322		2.08	1.55	YES	3.3
[redacted]	7 123789-HxCDF	373.8208	38.28	129843.071	1.017	48.417	48.417	1.15	1.24	NO	165.8
[redacted]	38 Total-hexafurans	373.8208	37.33	5614.640	1.062	1.452		0.94	1.24	YES	10.6
[redacted]	5 234678-HxCDF	373.8208	37.18	190423.797	1.073	50.362	50.362	1.19	1.24	NO	277.0
[redacted]	6 123678-HxCDF	373.8208	36.24	244444.180	1.056	49.487	49.487	1.22	1.24	NO	340.4
[redacted]	4 123478-HxCDF	373.8208	36.10	195842.750	1.101	47.728	47.728	1.20	1.24	NO	294.7
[redacted]	38 Total-hexafurans	373.8208	34.56	5648.082	1.062	1.461		0.93	1.24	YES	8.6
[redacted]	38 Total-hexafurans	373.8208	34.35	2698.088	1.062	0.698		1.35	1.24	NO	4.7
[redacted]	38 Total-hexafurans	373.8208	38.49	1853.697	1.062	0.479		1.03	1.24	YES	5.4
[redacted]	39 Total-heptafurans	407.7818	43.51	2568.763	1.231	1.041		0.82	1.05	YES	10.2
[redacted]	9 1234789-HpCDF	407.7818	43.28	96742.066	1.224	51.886	51.886	1.06	1.05	NO	210.6
[redacted]	39 Total-heptafurans	407.7818	41.27	3416.057	1.231	1.384		0.77	1.05	YES	10.1
[redacted]	39 Total-heptafurans	407.7818	40.70	2112.495	1.231	0.856		1.10	1.05	NO	7.2
[redacted]	8 1234678-HpCDF	407.7818	40.43	188825.531	1.238	61.363	61.363	0.98	1.05	NO	470.0
[redacted]	39 Total-heptafurans	407.7818	43.55	1432.198	1.231	0.580					7.2
[redacted]	10 OCDF	441.7428	48.91	140724.492	1.162	87.678	87.678	0.90	0.89	NO	399.4
[redacted]	41 Total-tetradioxins	319.8965	27.74	886.198	1.106	0.145		0.40	0.77	YES	5.2
[redacted]	11 2378-TCDD	319.8965	27.53	56496.871	1.106	9.253	9.253	0.81	0.77	NO	266.3
[redacted]	41 Total-tetradioxins	319.8965	27.12	1761.871	1.106	0.289		0.90	0.77	YES	9.7
[redacted]	42 Total-pentadioxins	355.8546	31.05	611.287	1.001	0.146		1.05	1.55	YES	2.7
[redacted]	12 12378-PeCDD	355.8546	32.65	202348.765	1.001	48.318	48.318	1.52	1.55	NO	686.5
[redacted]	15 123789-HxCDD	389.8157	37.85	138882.781	0.904	43.465	43.465	1.31	1.24	NO	515.8
[redacted]	43 Total-hexadioxins	389.8157	37.71	2585.527	0.937	0.781		3.82	1.24	YES	17.0
[redacted]	14 123678-HxCDD	389.8157	37.44	176037.531	0.929	48.893	48.893	1.23	1.24	NO	639.3
[redacted]	13 123478-HxCDD	389.8157	37.32	145922.286	0.978	46.752	46.752	1.24	1.24	NO	609.7
[redacted]	43 Total-hexadioxins	389.8157	38.19	2553.355	0.937	0.771		3.56	1.24	YES	18.5
[redacted]	43 Total-hexadioxins	389.8157	38.12	2390.828	0.937	0.722		0.80	1.24	YES	14.8
[redacted]	44 Total-heptadioxins	423.7766	42.49	4544.688	1.029	2.093		1.44	1.05	YES	20.3
[redacted]	16 1234678-HpCDD	423.7766	42.34	98048.191	1.029	45.164	45.164	1.07	1.05	NO	221.1
[redacted]	44 Total-heptadioxins	423.7766	41.01	3759.182	1.029	1.732		0.72	1.05	YES	8.4
[redacted]	17 OCDD	457.7377	48.61	142805.918	1.011	102.243	102....	0.84	0.89	NO	604.0

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PFK1

[redacted]	48	FUNCTION1 PFK	330.9792	23.87	0.000							1.7
[redacted]	48	FUNCTION1 PFK	330.9792	23.78	0.000							1.7
[redacted]	48	FUNCTION1 PFK	330.9792	23.25	0.000							0.3
[redacted]	48	FUNCTION1 PFK	330.9792	23.13	0.000							1.2
[redacted]	48	FUNCTION1 PFK	330.9792	23.05	0.000							0.6
[redacted]	48	FUNCTION1 PFK	330.9792	22.60	0.000							1.9
[redacted]	48	FUNCTION1 PFK	330.9792	22.46	0.000							3.9
[redacted]	48	FUNCTION1 PFK	330.9792	22.33	0.000							1.9
[redacted]	48	FUNCTION1 PFK	330.9792	21.98	0.000							1.1
[redacted]	48	FUNCTION1 PFK	330.9792	21.75	0.000							0.9
[redacted]	48	FUNCTION1 PFK	330.9792	21.69	0.000							1.0
[redacted]	48	FUNCTION1 PFK	330.9792	21.48	0.000							1.3
[redacted]	48	FUNCTION1 PFK	330.9792	21.36	0.000							1.9
[redacted]	48	FUNCTION1 PFK	330.9792	21.15	0.000							0.9
[redacted]	48	FUNCTION1 PFK	330.9792	27.35	0.000							0.5
[redacted]	48	FUNCTION1 PFK	330.9792	27.06	0.000							1.1
[redacted]	48	FUNCTION1 PFK	330.9792	26.72	0.000							0.4
[redacted]	48	FUNCTION1 PFK	330.9792	25.94	0.000							0.5
[redacted]	48	FUNCTION1 PFK	330.9792	25.90	0.000							1.2
[redacted]	48	FUNCTION1 PFK	330.9792	25.84	0.000							1.4
[redacted]	48	FUNCTION1 PFK	330.9792	25.39	0.000							1.2
[redacted]	48	FUNCTION1 PFK	330.9792	25.21	0.000							1.8
[redacted]	48	FUNCTION1 PFK	330.9792	25.11	0.000							1.6
[redacted]	48	FUNCTION1 PFK	330.9792	25.00	0.000							1.1
[redacted]	48	FUNCTION1 PFK	330.9792	24.90	0.000							0.4
[redacted]	48	FUNCTION1 PFK	330.9792	24.55	0.000							0.8
[redacted]	48	FUNCTION1 PFK	330.9792	24.26	0.000							0.4
[redacted]	48	FUNCTION1 PFK	330.9792	24.18	0.000							0.5
[redacted]	48	FUNCTION1 PFK	330.9792	24.02	0.000							0.4
[redacted]	48	FUNCTION1 PFK	330.9792	23.94	0.000							1.1
[redacted]	48	FUNCTION1 PFK	330.9792	29.04	0.000							0.8
[redacted]	48	FUNCTION1 PFK	330.9792	28.80	0.000							2.2
[redacted]	48	FUNCTION1 PFK	330.9792	28.65	0.000							2.2
[redacted]	48	FUNCTION1 PFK	330.9792	27.96	0.000							0.9
[redacted]	48	FUNCTION1 PFK	330.9792	27.86	0.000							1.3
[redacted]	48	FUNCTION1 PFK	330.9792	27.62	0.000							1.8

PFK2

[redacted]	49	FUNCTION2 PFK	366.9792	29.45	0.000		0.000					3.6

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PFK3

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	50 FUNCTION3 PFK	380.9760	34.77	0.000	0.000		1.8
[redacted]	50 FUNCTION3 PFK	380.9760	34.73	0.000	0.000		1.3
[redacted]	50 FUNCTION3 PFK	380.9760	34.68	0.000	0.000		0.9
[redacted]	50 FUNCTION3 PFK	380.9760	34.24	0.000	0.000		1.5
[redacted]	50 FUNCTION3 PFK	380.9760	34.18	0.000	0.000		1.2
[redacted]	50 FUNCTION3 PFK	380.9760	34.13	0.000	0.000		1.0
[redacted]	50 FUNCTION3 PFK	380.9760	34.10	0.000	0.000		1.4
[redacted]	50 FUNCTION3 PFK	380.9760	37.22	0.000	0.000		0.4
[redacted]	50 FUNCTION3 PFK	380.9760	36.69	0.000	0.000		1.7
[redacted]	50 FUNCTION3 PFK	380.9760	36.60	0.000	0.000		1.4
[redacted]	50 FUNCTION3 PFK	380.9760	36.23	0.000	0.000		0.7
[redacted]	50 FUNCTION3 PFK	380.9760	36.01	0.000	0.000		1.4
[redacted]	50 FUNCTION3 PFK	380.9760	35.94	0.000	0.000		2.2
[redacted]	50 FUNCTION3 PFK	380.9760	35.88	0.000	0.000		2.2
[redacted]	50 FUNCTION3 PFK	380.9760	35.48	0.000	0.000		1.2
[redacted]	50 FUNCTION3 PFK	380.9760	35.43	0.000	0.000		2.1
[redacted]	50 FUNCTION3 PFK	380.9760	35.35	0.000	0.000		1.3
[redacted]	50 FUNCTION3 PFK	380.9760	35.31	0.000	0.000		1.8
[redacted]	50 FUNCTION3 PFK	380.9760	35.20	0.000	0.000		1.4
[redacted]	50 FUNCTION3 PFK	380.9760	35.15	0.000	0.000		1.5
[redacted]	50 FUNCTION3 PFK	380.9760	35.12	0.000	0.000		1.6
[redacted]	50 FUNCTION3 PFK	380.9760	35.07	0.000	0.000		1.3
[redacted]	50 FUNCTION3 PFK	380.9760	35.01	0.000	0.000		0.8
[redacted]	50 FUNCTION3 PFK	380.9760	39.23	0.000	0.000		0.7
[redacted]	50 FUNCTION3 PFK	380.9760	39.06	0.000	0.000		0.4
[redacted]	50 FUNCTION3 PFK	380.9760	38.74	0.000	0.000		0.5
[redacted]	50 FUNCTION3 PFK	380.9760	38.38	0.000	0.000		1.0
[redacted]	50 FUNCTION3 PFK	380.9760	38.32	0.000	0.000		0.5
[redacted]	50 FUNCTION3 PFK	380.9760	38.19	0.000	0.000		1.3
[redacted]	50 FUNCTION3 PFK	380.9760	38.10	0.000	0.000		1.1
[redacted]	50 FUNCTION3 PFK	380.9760	37.97	0.000	0.000		0.9
[redacted]	50 FUNCTION3 PFK	380.9760	37.67	0.000	0.000		0.9
[redacted]	50 FUNCTION3 PFK	380.9760	37.50	0.000	0.000		0.8
[redacted]	50 FUNCTION3 PFK	380.9760	37.42	0.000	0.000		1.1

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PFK4

	51	FUNCTION4 PFK	430.9728	40.18	0.000							1.3
	51	FUNCTION4 PFK	430.9728	39.93	0.000							0.7
	51	FUNCTION4 PFK	430.9728	39.87	0.000							0.7
	51	FUNCTION4 PFK	430.9728	39.66	0.000							1.5
	51	FUNCTION4 PFK	430.9728	44.26	0.000							0.5
	51	FUNCTION4 PFK	430.9728	44.21	0.000							1.2
	51	FUNCTION4 PFK	430.9728	43.82	0.000							0.9
	51	FUNCTION4 PFK	430.9728	43.20	0.000							0.6
	51	FUNCTION4 PFK	430.9728	42.84	0.000							1.0
	51	FUNCTION4 PFK	430.9728	42.69	0.000							1.3
	51	FUNCTION4 PFK	430.9728	42.64	0.000							1.9
	51	FUNCTION4 PFK	430.9728	42.38	0.000							1.9
	51	FUNCTION4 PFK	430.9728	42.12	0.000							0.4
	51	FUNCTION4 PFK	430.9728	41.93	0.000							0.6
	51	FUNCTION4 PFK	430.9728	41.78	0.000							1.2
	51	FUNCTION4 PFK	430.9728	41.62	0.000							1.3
	51	FUNCTION4 PFK	430.9728	41.09	0.000							1.3
	51	FUNCTION4 PFK	430.9728	40.95	0.000							0.5
	51	FUNCTION4 PFK	430.9728	40.79	0.000							1.4
	51	FUNCTION4 PFK	430.9728	40.35	0.000							1.2
	51	FUNCTION4 PFK	430.9728	44.89	0.000							0.5
	51	FUNCTION4 PFK	430.9728	44.57	0.000							1.5
	51	FUNCTION4 PFK	430.9728	44.53	0.000							0.4
	51	FUNCTION4 PFK	430.9728	44.38	0.000							1.6

ID: WE03OPR, Name: 13022705, Date: 27-Feb-2013, Time: 13:37:00, Conditions: AUTOSPEC01, User: pk

PFK5

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	52	FUNCTION5 PFK	480.9696	46.31	0.000							0.7
[redacted]	52	FUNCTION5 PFK	480.9696	46.25	0.000							1.7
[redacted]	52	FUNCTION5 PFK	480.9696	46.21	0.000							1.3
[redacted]	52	FUNCTION5 PFK	480.9696	45.81	0.000							1.1
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[redacted]	52	FUNCTION5 PFK	480.9696	45.64	0.000							0.9
[redacted]	52	FUNCTION5 PFK	480.9696	45.50	0.000							2.3
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[redacted]	52	FUNCTION5 PFK	480.9696	45.12	0.000							1.3
[redacted]	52	FUNCTION5 PFK	480.9696	49.07	0.000							0.5
[redacted]	52	FUNCTION5 PFK	480.9696	48.91	0.000							0.8
[redacted]	52	FUNCTION5 PFK	480.9696	48.63	0.000							0.5
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[redacted]	52	FUNCTION5 PFK	480.9696	48.28	0.000							1.0
[redacted]	52	FUNCTION5 PFK	480.9696	47.97	0.000							1.4
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[redacted]	52	FUNCTION5 PFK	480.9696	46.70	0.000							1.6
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ETHERS1

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	53	FUNCTION1 HXCD...	375.8364	23.15	0.000		0.000					5.1
[redacted]	53	FUNCTION1 HXCD...	375.8364	22.72	0.000		0.000					6.9

ID: WE03OPR, Name: 13022705, Date: 27-Feb-2013, Time: 13:37:00, Conditions: AUTOSPEC01, User: pk

ETHERS2

	54	FUNCTION1 HPCD...	409.7974	24.70	0.000		0.000					1.7
	54	FUNCTION1 HPCD...	409.7974	24.49	0.000		0.000					1.5
	54	FUNCTION1 HPCD...	409.7974	24.30	0.000		0.000					2.5
	54	FUNCTION1 HPCD...	409.7974	24.11	0.000		0.000					1.4
	54	FUNCTION1 HPCD...	409.7974	23.19	0.000		0.000					1.2
	54	FUNCTION1 HPCD...	409.7974	23.13	0.000		0.000					1.1
	54	FUNCTION1 HPCD...	409.7974	23.02	0.000		0.000					1.3
	54	FUNCTION1 HPCD...	409.7974	22.84	0.000		0.000					1.5
	54	FUNCTION1 HPCD...	409.7974	22.63	0.000		0.000					1.6
	54	FUNCTION1 HPCD...	409.7974	22.10	0.000		0.000					1.5
	54	FUNCTION1 HPCD...	409.7974	21.70	0.000		0.000					1.1
	54	FUNCTION1 HPCD...	409.7974	28.51	0.000		0.000					1.2
	54	FUNCTION1 HPCD...	409.7974	28.24	0.000		0.000					1.4
	54	FUNCTION1 HPCD...	409.7974	28.13	0.000		0.000					1.2
	54	FUNCTION1 HPCD...	409.7974	27.93	0.000		0.000					1.2
	54	FUNCTION1 HPCD...	409.7974	27.72	0.000		0.000					2.2
	54	FUNCTION1 HPCD...	409.7974	27.65	0.000		0.000					2.3
	54	FUNCTION1 HPCD...	409.7974	27.11	0.000		0.000					1.9
	54	FUNCTION1 HPCD...	409.7974	27.00	0.000		0.000					1.8
	54	FUNCTION1 HPCD...	409.7974	26.71	0.000		0.000					2.1
	54	FUNCTION1 HPCD...	409.7974	26.17	0.000		0.000					1.6
	54	FUNCTION1 HPCD...	409.7974	25.88	0.000		0.000					2.1
	54	FUNCTION1 HPCD...	409.7974	25.57	0.000		0.000					1.5
	54	FUNCTION1 HPCD...	409.7974	25.35	0.000		0.000					2.1
	54	FUNCTION1 HPCD...	409.7974	25.23	0.000		0.000					1.4
	54	FUNCTION1 HPCD...	409.7974	25.11	0.000		0.000					1.8
	54	FUNCTION1 HPCD...	409.7974	25.05	0.000		0.000					1.9
	54	FUNCTION1 HPCD...	409.7974	29.01	0.000		0.000					1.6
	54	FUNCTION1 HPCD...	409.7974	28.86	0.000		0.000					1.3
	54	FUNCTION1 HPCD...	409.7974	28.69	0.000		0.000					1.8

ETHERS3

	55	FUNCTION2 HPCD...	409.7974	33.95	0.000		0.000					1.6
	55	FUNCTION2 HPCD...	409.7974	33.30	0.000		0.000					3.6
	55	FUNCTION2 HPCD...	409.7974	32.66	0.000		0.000					2.0
	55	FUNCTION2 HPCD...	409.7974	32.32	0.000		0.000					1.3
	55	FUNCTION2 HPCD...	409.7974	32.01	0.000		0.000					3.1
	55	FUNCTION2 HPCD...	409.7974	31.13	0.000		0.000					1.9
	55	FUNCTION2 HPCD...	409.7974	31.06	0.000		0.000					2.4
	55	FUNCTION2 HPCD...	409.7974	30.18	0.000		0.000					2.2
	55	FUNCTION2 HPCD...	409.7974	29.87	0.000		0.000					2.4
	55	FUNCTION2 HPCD...	409.7974	29.51	0.000		0.000					2.0

ETHERS4

ID: WE03OPR, Name: 13022705, Date: 27-Feb-2013, Time: 13:37:00, Conditions: AUTOSPEC01, User: pk

ETHERS5

[illegible]	57	FUNCTION4 NCDPE	479.7165	40.09	0.000		0.000					7.1

ETHERS6

[illegible]												

Quantify Sample Report **MassLynx 4.1 SCN 714**

Dataset: P:\DIOXIN8290.PRO\130227QC.qld
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Printed: Wednesday, February 27, 2013 16:15:51 Pacific Standard Time

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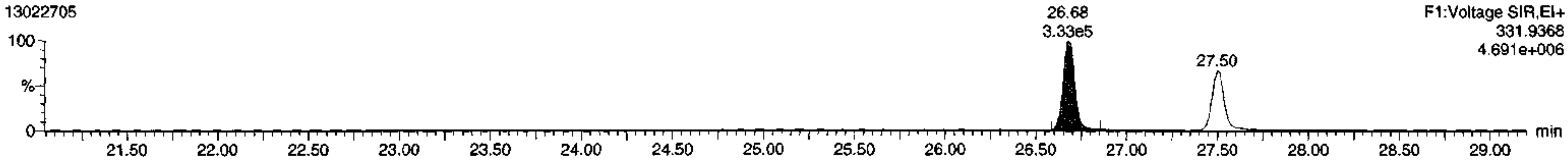
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: WE03OPR, Name: 13022705, Date: 27-Feb-2013, Time: 13:37:00, Conditions: AUTOSPEC01, User: pk

13C-1234-TCDD



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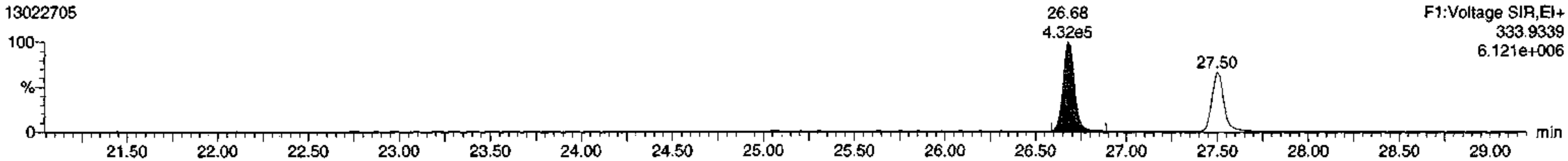
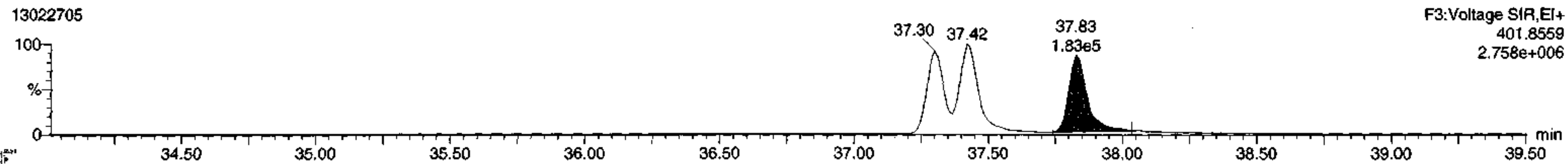


13C-123789-HxCDD



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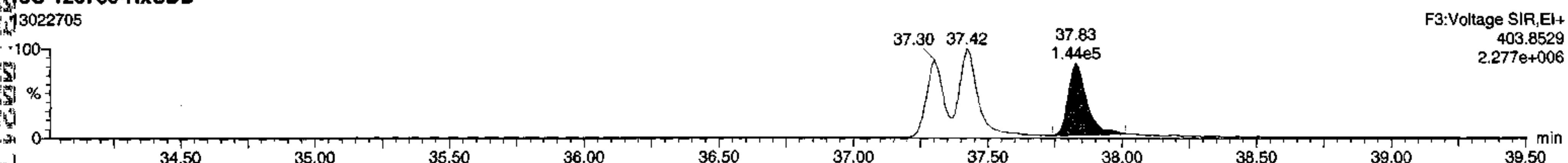

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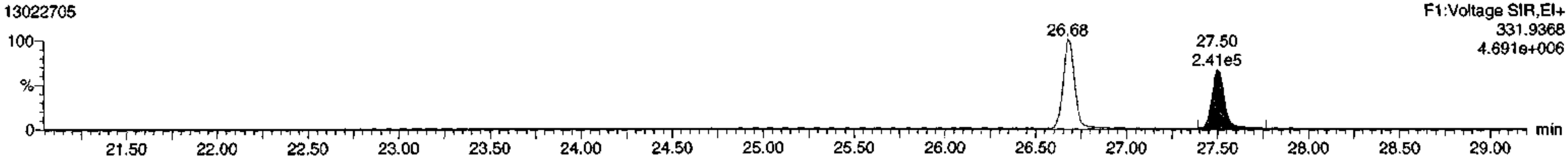
Last Altered: Wednesday, February 27, 2013 16:14:55 Pacific Standard Time
Printed: Wednesday, February 27, 2013 16:15:51 Pacific Standard Time

ID: WE03OPR, Name: 13022705, Date: 27-Feb-2013, Time: 13:37:00, Conditions: AUTOSPEC01, User: pk

13C-2378-TCDD



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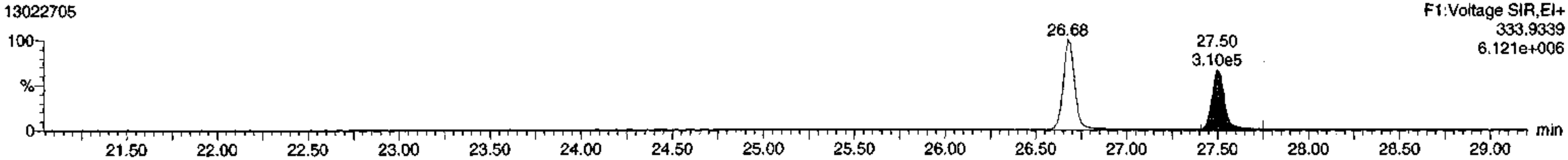
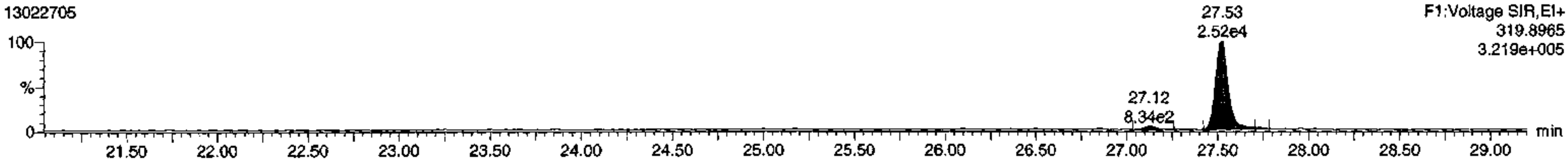
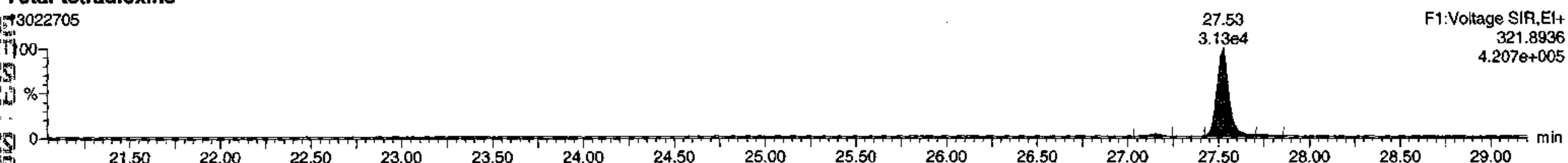


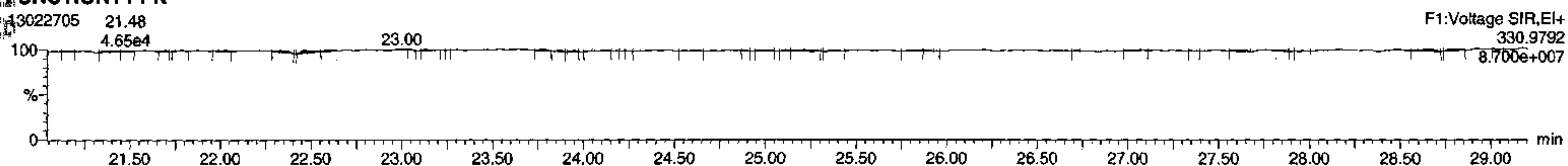
Total-tetradioxins



Total-tetradioxins



FUNCTION1 PFK



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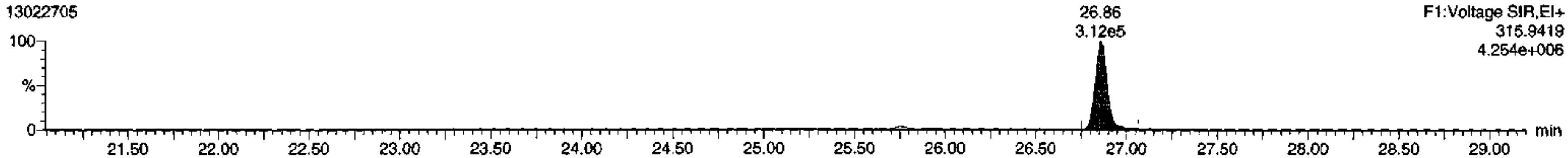
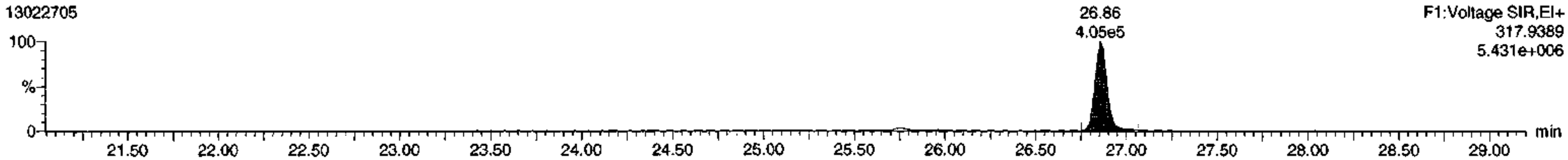
Last Altered: Wednesday, February 27, 2013 16:14:55 Pacific Standard Time
Printed: Wednesday, February 27, 2013 16:15:51 Pacific Standard Time

ID: WE03OPR, Name: 13022705, Date: 27-Feb-2013, Time: 13:37:00, Conditions: AUTOSPEC01, User: pk

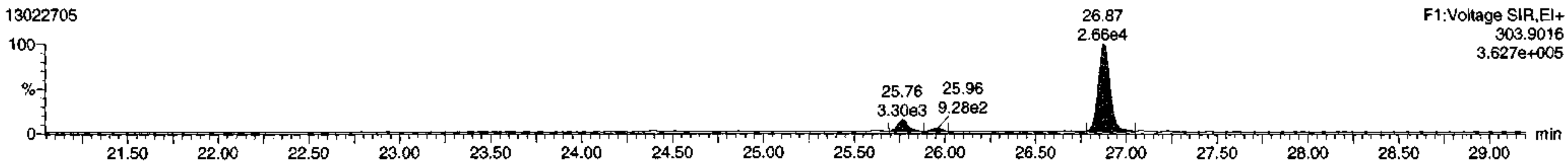
13C-2378-TCDF



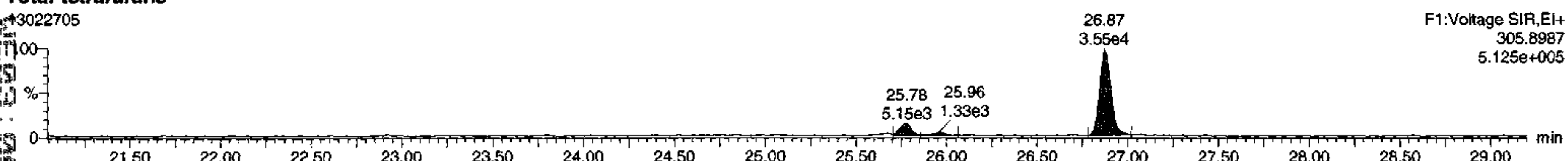
13C-2378-TCDF



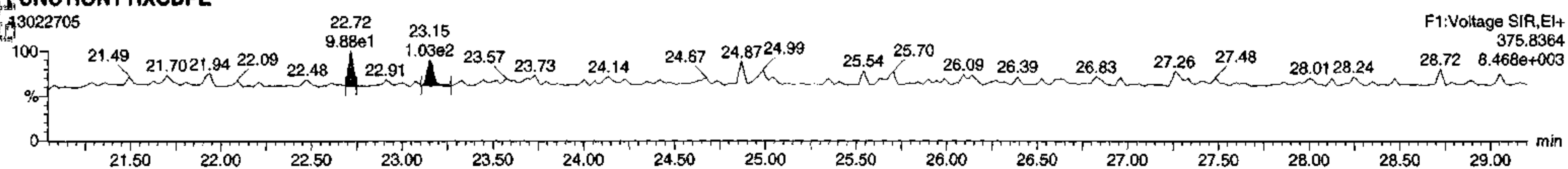
Total-tetrafurans



Total-tetrafurans



FUNCTION1 HXCDPE



Dataset: P:\DIOXIN8290.PRO\130227QC.qld

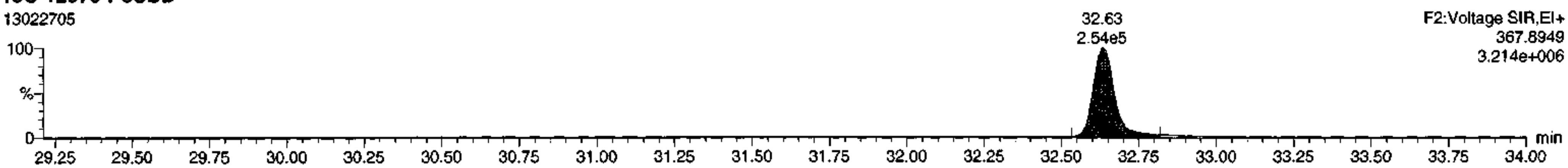
Last Altered: Wednesday, February 27, 2013 16:14:55 Pacific Standard Time

Printed: Wednesday, February 27, 2013 16:15:51 Pacific Standard Time

ID: WE03OPR, Name: 13022705, Date: 27-Feb-2013, Time: 13:37:00, Conditions: AUTOSPEC01, User: pk

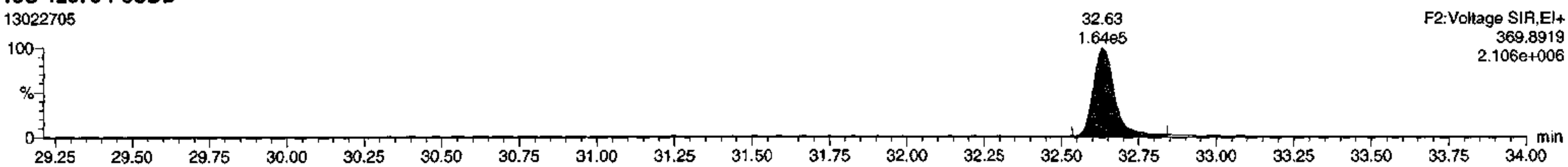
13C-12378-PeCDD

13022705



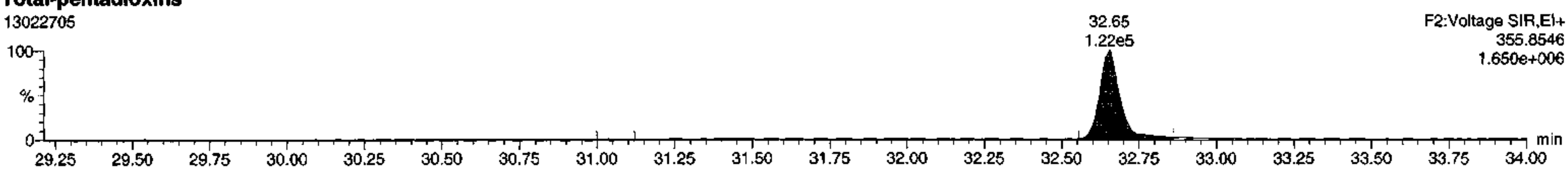
13C-12378-PeCDD

13022705



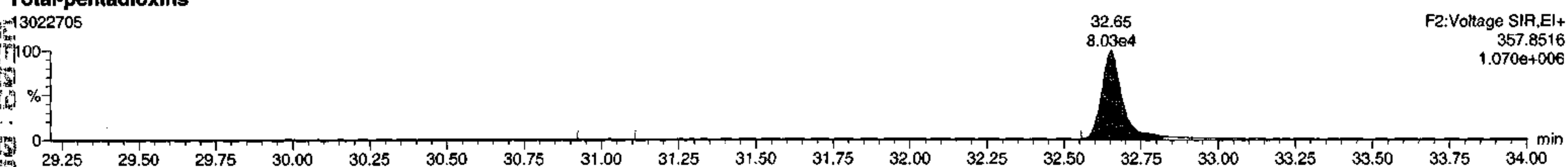
Total-pentadioxins

13022705



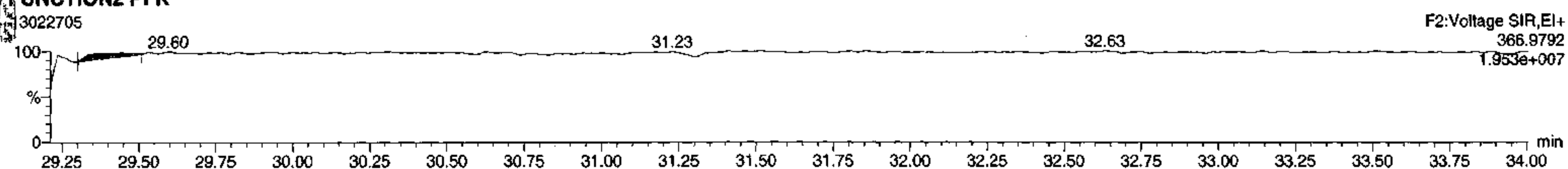
Total-pentadioxins

13022705



FUNCTION2 PFK

13022705



Quantify Sample Report **MassLynx 4.1 SCN 714**

Dataset: P:\DIOXIN8290.PRO\130227QC.qld

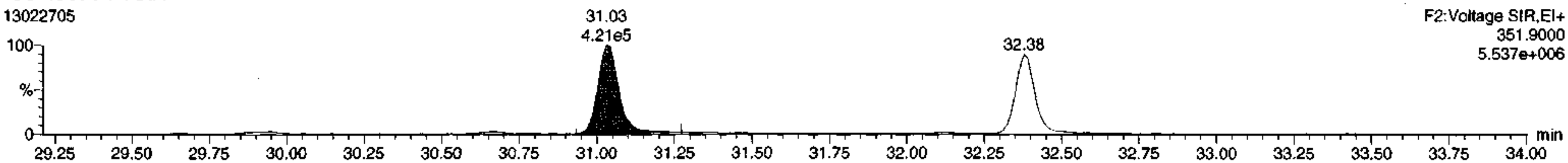
Last Altered: Wednesday, February 27, 2013 16:14:55 Pacific Standard Time

Printed: Wednesday, February 27, 2013 16:15:51 Pacific Standard Time

ID: WE03OPR, Name: 13022705, Date: 27-Feb-2013, Time: 13:37:00, Conditions: AUTOSPEC01, User: pk

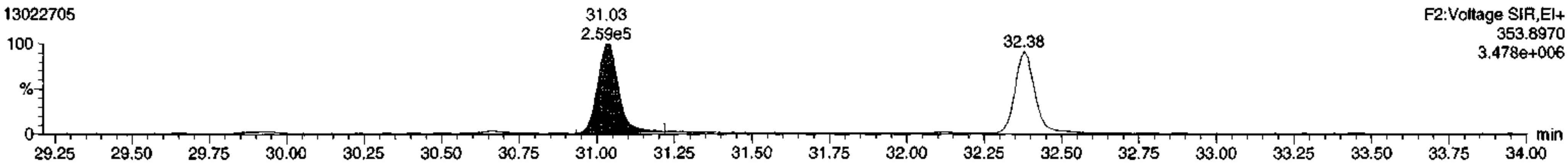
13C-12378-PeCDF

13022705



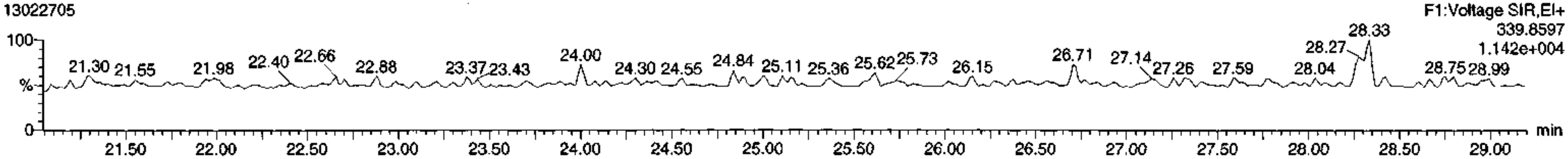
13C-12378-PeCDF

13022705



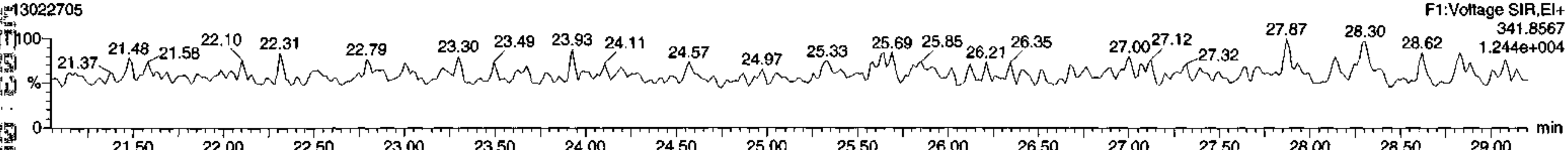
Total-penta1

13022705



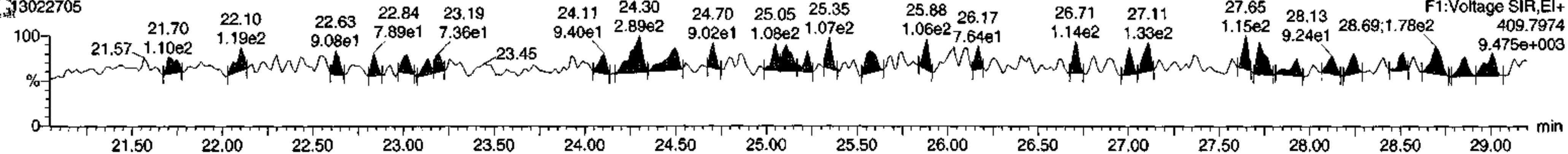
Total-penta1

13022705



FUNCTION1 HPCDPE

13022705



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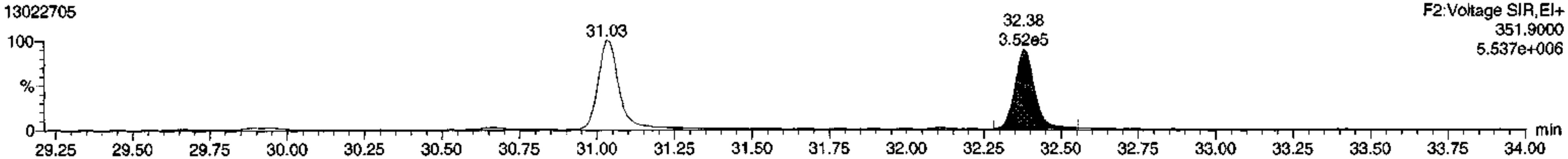
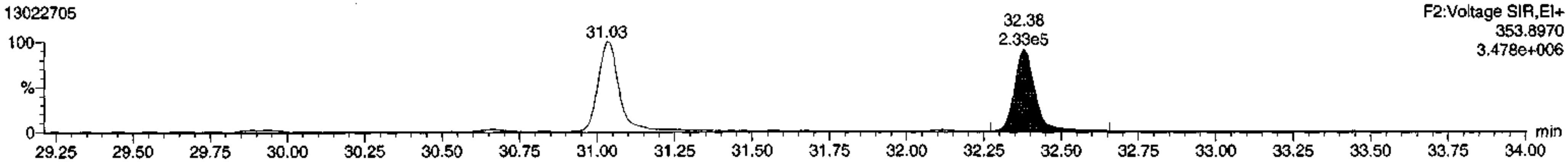
Printed: Wednesday, February 27, 2013 16:15:51 Pacific Standard Time

ID: WE03OPR, Name: 13022705, Date: 27-Feb-2013, Time: 13:37:00, Conditions: AUTOSPEC01, User: pk

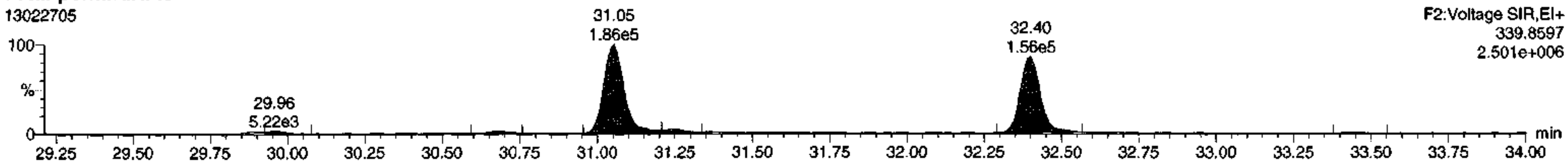
13C-23478-PeCDF



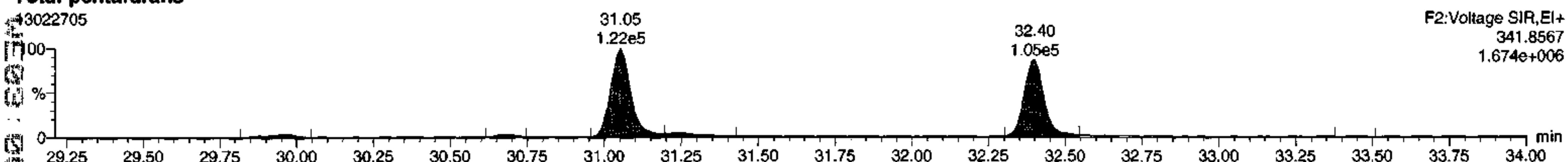
13C-23478-PeCDF



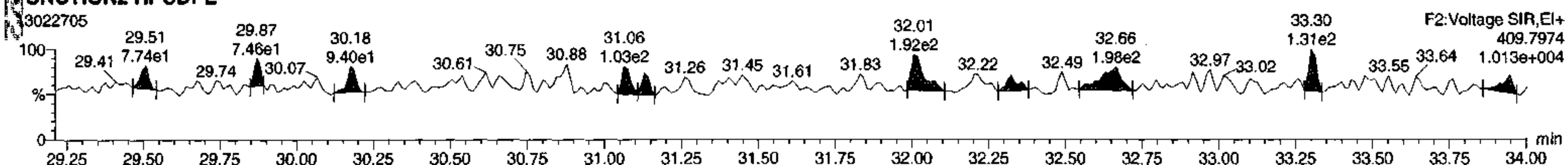
Total-pentafurans



Total-pentafurans



FUNCTION2 HPCDPE



Dataset: P:\DIOXIN8290.PRO\130227QC.qld

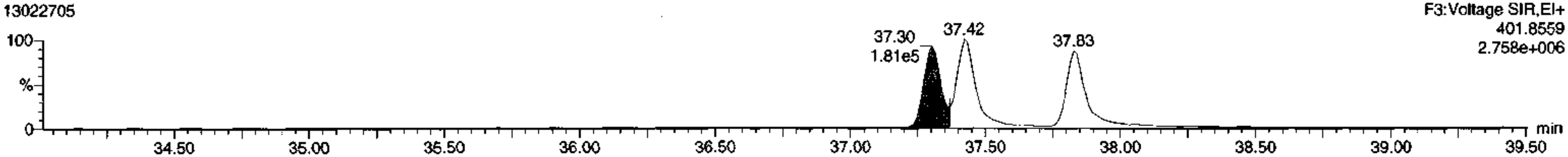
Last Altered: Wednesday, February 27, 2013 16:14:55 Pacific Standard Time

Printed: Wednesday, February 27, 2013 16:15:51 Pacific Standard Time

ID: WE03OPR, Name: 13022705, Date: 27-Feb-2013, Time: 13:37:00, Conditions: AUTOSPEC01, User: pk

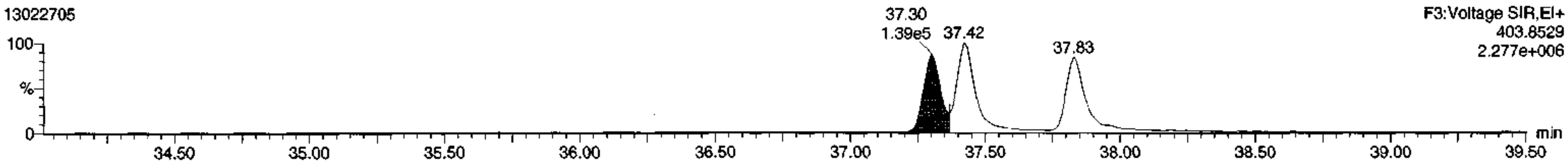
13C-123478-HxCDD

13022705



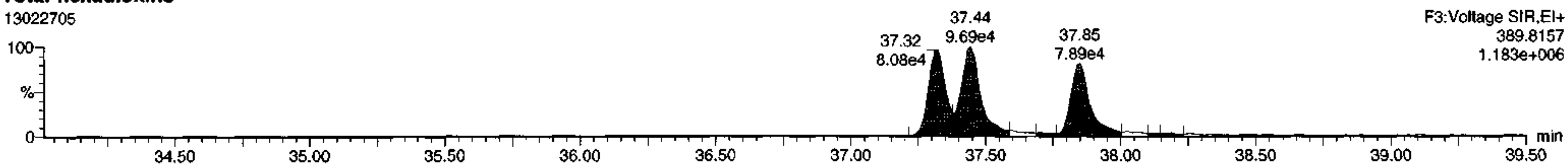
13C-123478-HxCDD

13022705



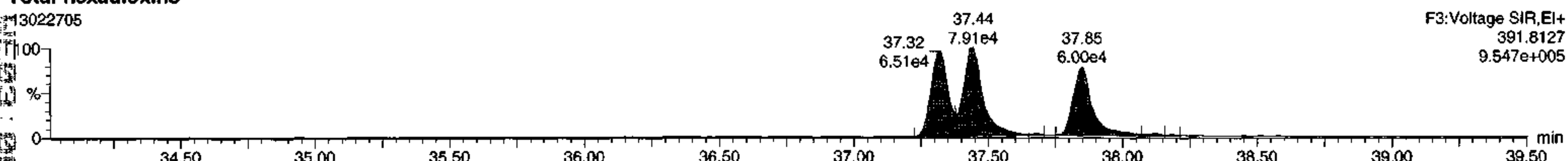
Total-hexadioxins

13022705



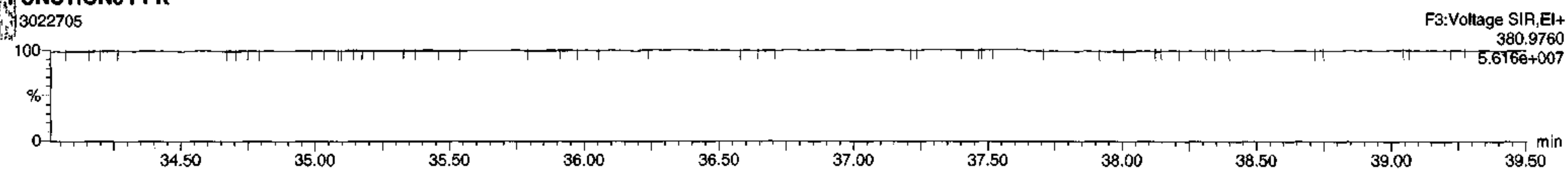
Total-hexadioxins

13022705



FUNCTION3 PFK

13022705



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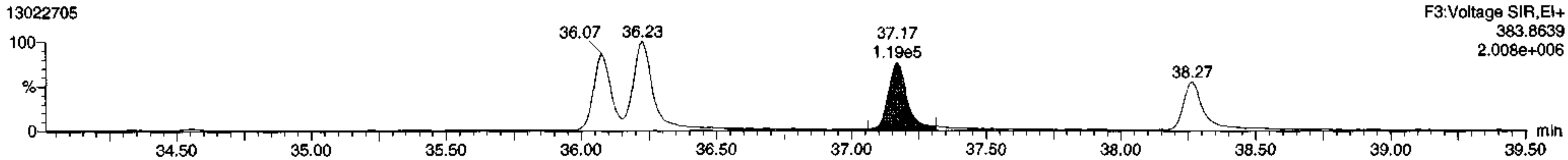
ID: WE03OPR, Name: 13022705, Date: 27-Feb-2013, Time: 13:37:00, Conditions: AUTOSPEC01, User: pk

13C-234678-HxCDF



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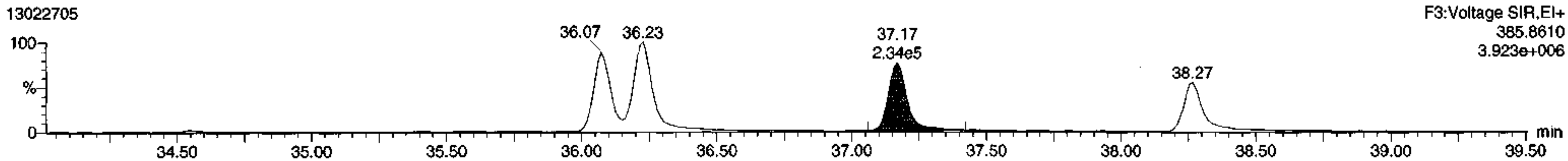
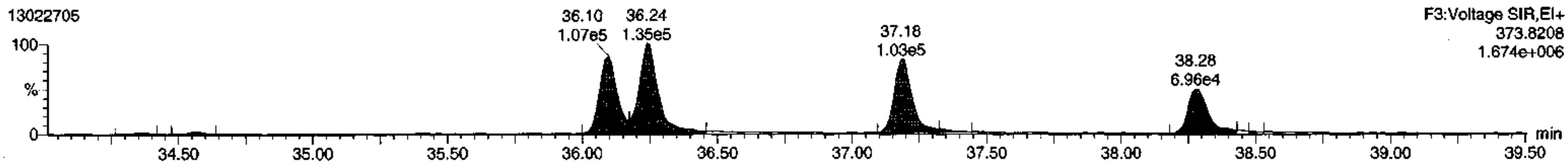
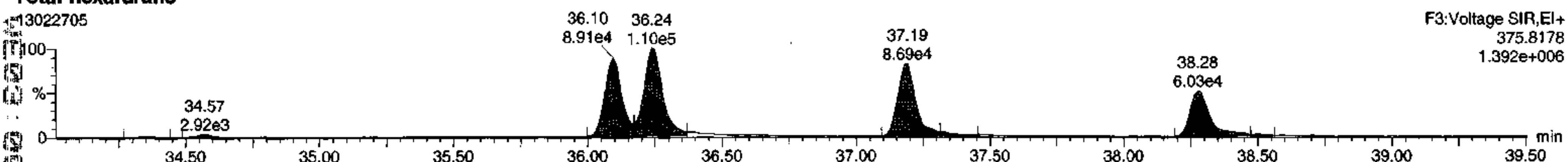


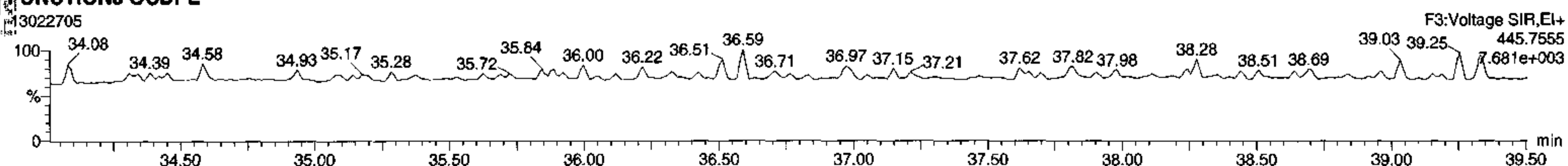
Total-hexafurans



Total-hexafurans



FUNCTION3 OCDPE



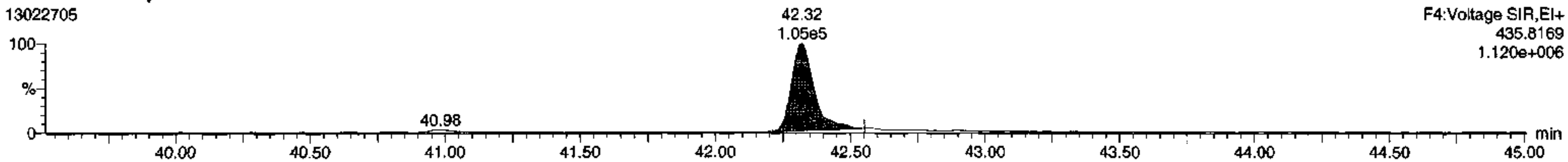
Dataset: P:\DIOXIN8290.PRO\130227QC.qld

Last Altered: Wednesday, February 27, 2013 16:14:55 Pacific Standard Time

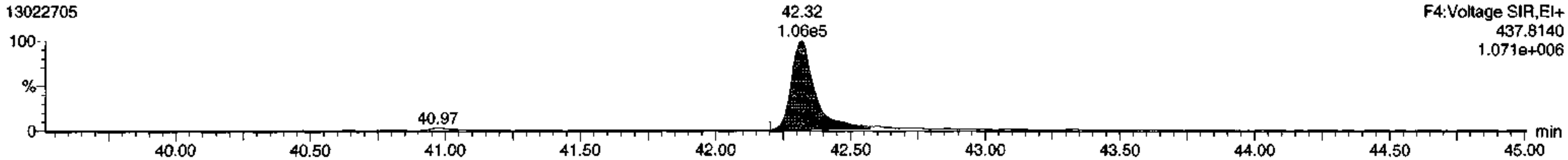
Printed: Wednesday, February 27, 2013 16:15:51 Pacific Standard Time

ID: WE03OPR, Name: 13022705, Date: 27-Feb-2013, Time: 13:37:00, Conditions: AUTOSPEC01, User: pk

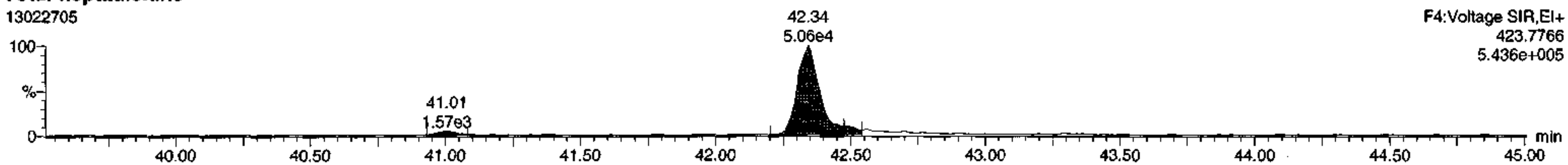
13C-1234678-HpCDD



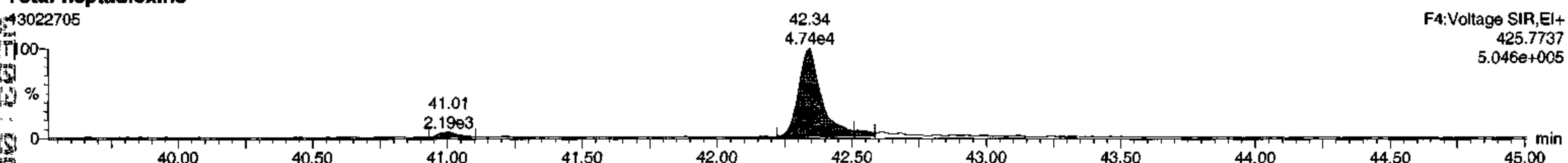
13C-1234678-HpCDD



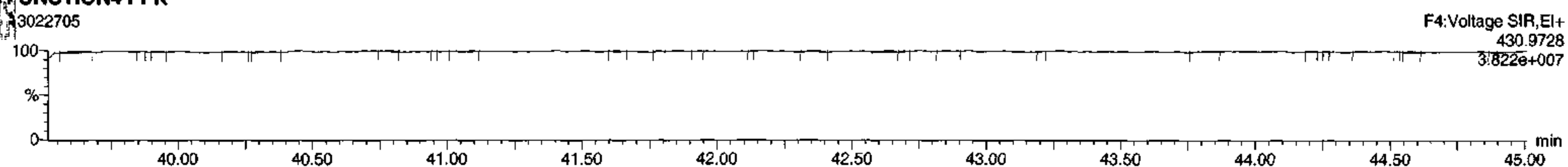
Total-heptadioxins



Total-heptadioxins



FUNCTION4 PFK



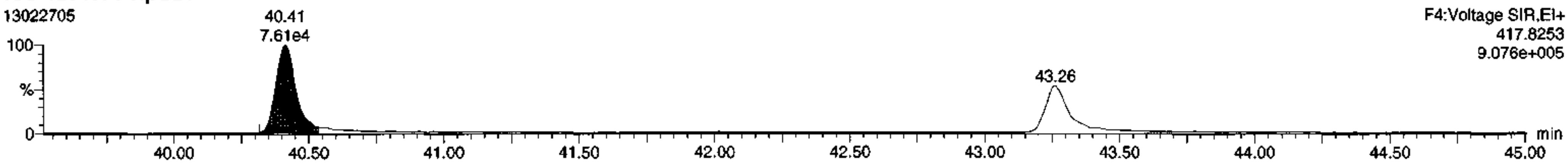
Dataset: P:\DIOXIN8290.PRO\130227QC.qld

Last Altered: Wednesday, February 27, 2013 16:14:55 Pacific Standard Time

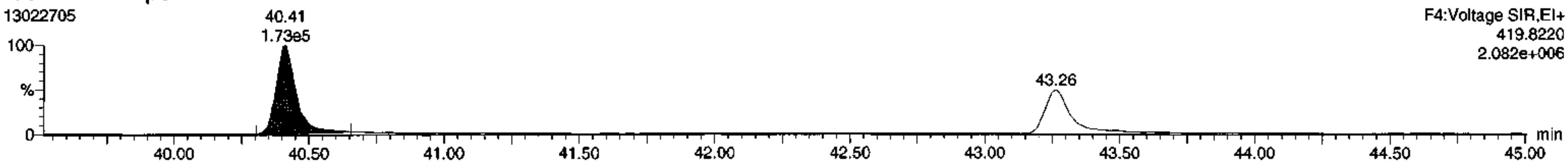
Printed: Wednesday, February 27, 2013 16:15:51 Pacific Standard Time

ID: WE03OPR, Name: 13022705, Date: 27-Feb-2013, Time: 13:37:00, Conditions: AUTOSPEC01, User: pk

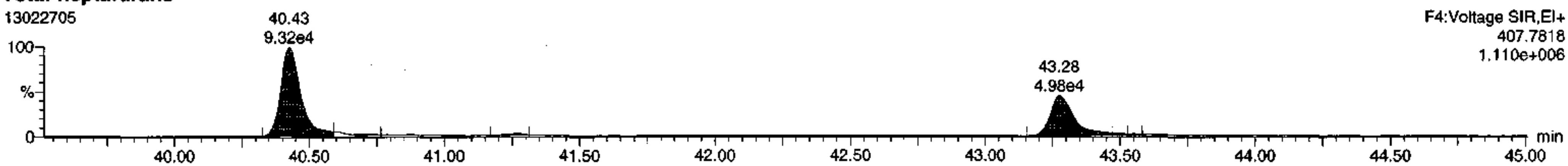
13C-1234678-HpCDF



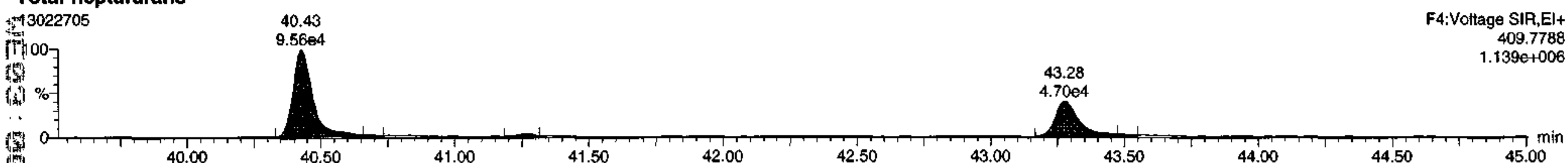
13C-1234678-HpCDF



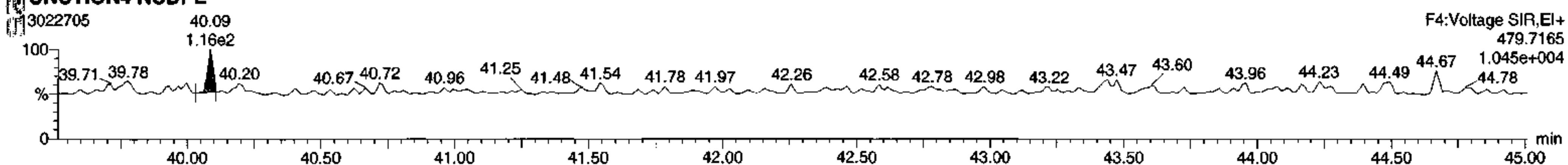
Total-heptafurans



Total-heptafurans

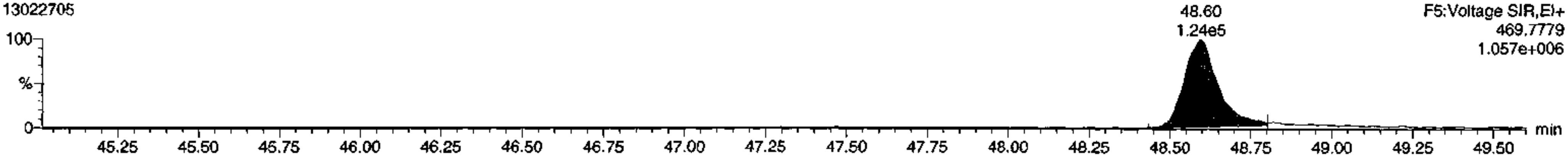


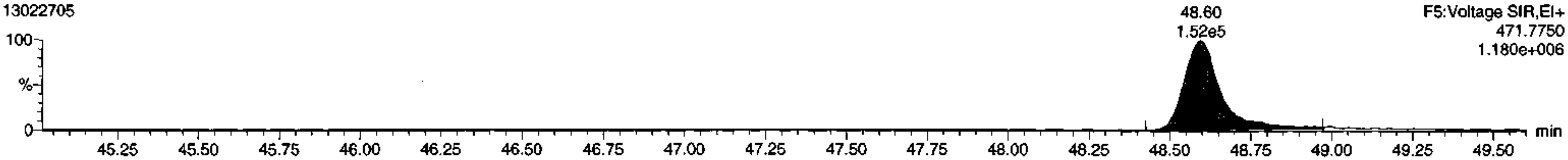
FUNCTION4 NCDPE



Dataset: P:\DIOXIN8290.PRO\130227QC.qld
Last Altered: Wednesday, February 27, 2013 16:14:55 Pacific Standard Time
Printed: Wednesday, February 27, 2013 16:15:51 Pacific Standard Time

ID: WE03OPR, Name: 13022705, Date: 27-Feb-2013, Time: 13:37:00, Conditions: AUTOSPEC01, User: pk

13C-OCDD
13022705


13C-OCDD
13022705


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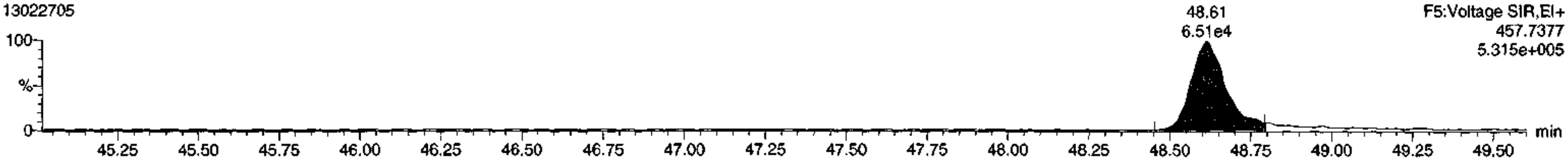
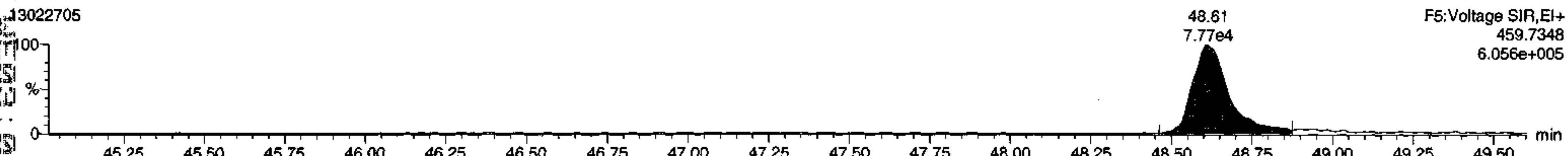
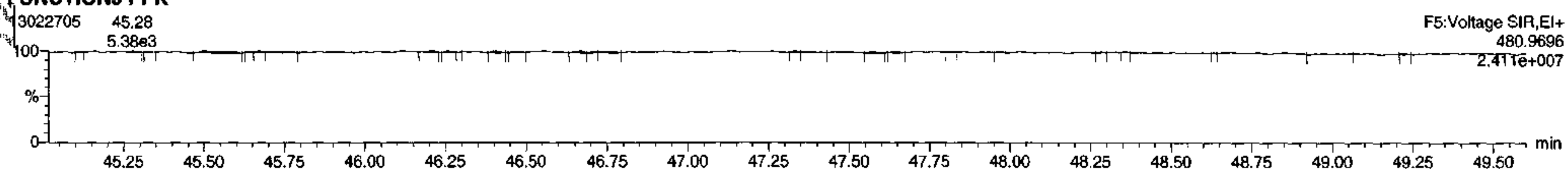
13022705


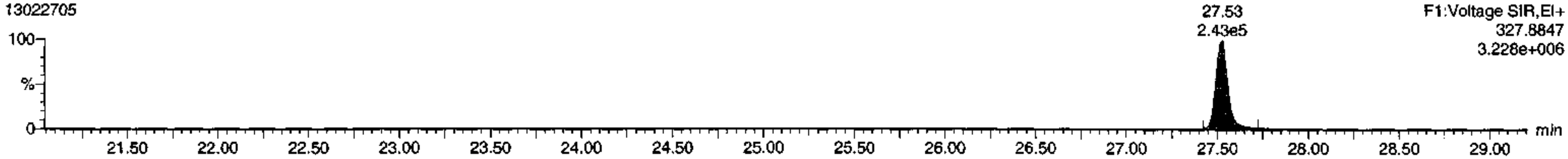
OCDD
13022705


FUNCTION5 PFK
13022705


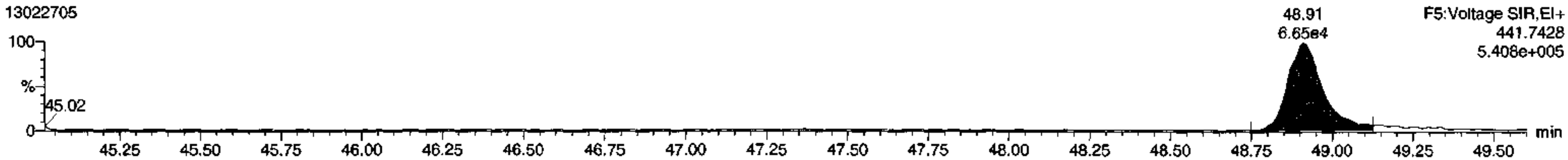
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130227QC.qld
Last Altered: Wednesday, February 27, 2013 16:14:55 Pacific Standard Time
Printed: Wednesday, February 27, 2013 16:15:51 Pacific Standard Time

ID: WE03OPR, Name: 13022705, Date: 27-Feb-2013, Time: 13:37:00, Conditions: AUTOSPEC01, User: pk

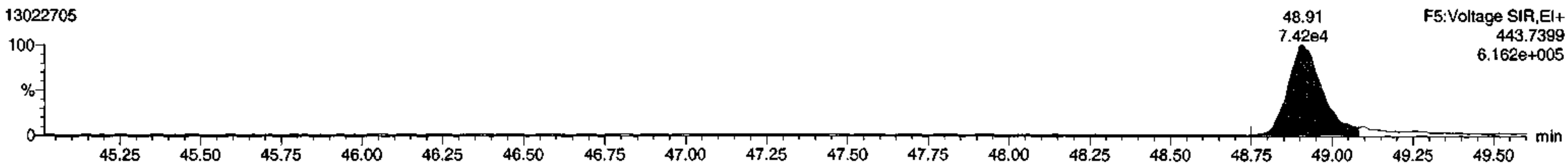
37CL-2378-TCDD



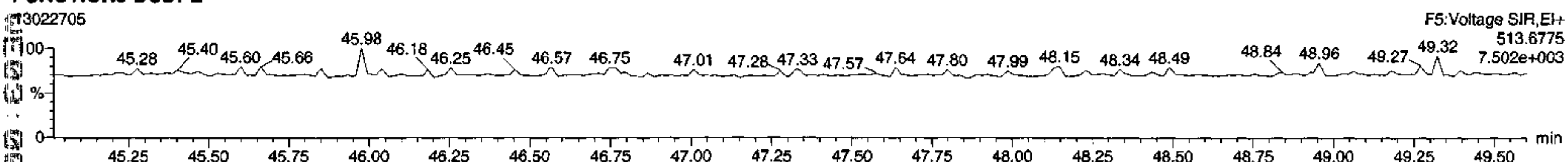
OCDF



OCDF



FUNCTION5 DCDPE



Quantify Sample Summary Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130227DATA1.qld
Last Altered: Thursday, February 28, 2013 09:49:31 Pacific Standard Time
Printed: Thursday, February 28, 2013 09:52:07 Pacific Standard Time

Nh 2/28/13

Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130225.mdb 26 Feb 2013 09:49:11
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: WE03A, Name: 13022706, Date: 27-Feb-2013, Time: 14:34:49, Conditions: AUTOSPEC01, User: pk

2378-TCDF	26.900	1.001	1.09e3	1.75e3	0.921	0.623	0.770	9.3	1610	2905	1.49e4	2.17e4	YES	0.330	0.374
12378-PeCDF	31.053	1.000	1.68e3	1.31e3	0.912	1.283	1.550	10.0	2550	3351	2.55e4	2.12e4	YES	0.368	0.398
23478-PeCDF	32.402	1.000	4.02e3	2.14e3	0.943	1.878	1.550	22.3	2550	3351	5.69e4	3.14e4	YES	0.710	0.801
123478-HxCDF	36.107	1.000	8.81e3	7.27e3	1.101	1.211	1.240	75.4	1634	1855	1.23e5	9.65e4	NO	2.414	2.414
234678-HxCDF	37.214	1.001	4.40e3	3.61e3	1.073	1.218	1.240	45.5	1634	1855	7.43e4	5.83e4	NO	1.272	1.272
123678-HxCDF	36.271	1.001	4.92e3	4.23e3	1.056	1.165	1.240	43.2	1634	1855	7.07e4	5.99e4	NO	1.357	1.357
123789-HxCDF	38.266	1.000	2.09e3	1.89e3	1.017	1.106	1.240	19.3	1634	1855	3.16e4	2.60e4	NO	0.724	0.724
1234678-HpCDF	40.458	1.000	6.61e4	6.57e4	1.238	1.006	1.050	635.3	1423	2055	9.04e5	9.18e5	NO	24.907	24.907
1234789-HpCDF	43.319	1.001	3.36e3	3.35e3	1.224	1.003	1.050	29.1	1423	2055	4.14e4	4.57e4	NO	1.631	1.631
OCDF	48.973	1.006	9.42e4	1.06e5	1.162	0.888	0.890	986.3	854	1045	8.43e5	9.40e5	NO	75.094	75.094
2378-TCDD	27.528	1.001	4.71e2	8.45e2	1.106	0.558	0.770	5.9	1162	1512	6.89e3	8.93e3	YES	0.145	0.177
12378-PeCDD	32.676	1.001	4.46e3	2.27e3	1.001	1.968	1.550	27.2	2109	1636	5.73e4	3.32e4	YES	1.055	1.227
123478-HxCDD	37.345	1.001	4.76e3	3.68e3	0.978	1.295	1.240	57.5	1438	3222	8.27e4	5.21e4	NO	1.715	1.715
123678-HxCDD	37.466	1.001	2.45e4	1.93e4	0.929	1.270	1.240	236.8	1438	3222	3.41e5	2.69e5	NO	7.871	7.871
123789-HxCDD	37.860	1.011	1.01e4	8.03e3	0.904	1.258	1.240	98.7	1438	3222	1.42e5	1.14e5	NO	3.642	3.642
1234678-HpCDD	42.365	1.001	4.15e5	3.96e5	1.029	1.046	1.050	1815.1	2790	2956	5.06e6	4.83e6	NO	194.932	194.932
OCDD	48.668	1.000	2.09e6	2.35e6	1.011	0.891	0.890	8495.1	2296	1210	1.95e7	2.19e7	NO	1916.555	1916.555
13C-2378-TCDF	26.870	1.007	3.57e5	4.69e5	1.522	0.760	0.770	2059.2	2320	2018	4.78e6	6.20e6	NO		48.758
13C-12378-PeCDF	31.042	1.163	5.16e5	3.11e5	1.185	1.659	1.550	2211.2	3159	3396	6.99e6	4.32e6	NO		62.645
13C-23478-PeCDF	32.391	1.214	5.00e5	3.15e5	1.136	1.586	1.550	2221.7	3159	3396	7.02e6	4.44e6	NO		64.441
13C-123478-HxCDF	36.096	0.954	2.11e5	3.94e5	1.284	0.534	0.510	729.6	4024	3661	2.94e6	5.58e6	NO		63.577
13C-123678-HxCDF	36.238	0.957	2.18e5	4.21e5	1.383	0.518	0.510	740.0	4024	3661	2.98e6	5.73e6	NO		62.347
13C-234678-HxCDF	37.192	0.983	2.02e5	3.85e5	1.283	0.525	0.510	720.0	4024	3661	2.90e6	5.61e6	NO		61.696
13C-123789-HxCDF	38.277	1.011	1.90e5	3.51e5	1.099	0.541	0.510	639.4	4024	3661	2.57e6	4.93e6	NO		66.410
13C-1234678-HpCDF	40.447	1.069	1.35e5	2.92e5	1.070	0.462	0.440	1536.7	1185	2074	1.82e6	3.88e6	NO		53.904
13C-1234789-HpCDF	43.286	1.144	1.05e5	2.32e5	0.774	0.454	0.440	976.7	1185	2074	1.16e6	2.63e6	NO		58.704
13C-1234-TCDD	26.691	0.000	4.85e5	6.28e5	1.000	0.774	0.770	1630.5	4194	2133	6.84e6	8.82e6	NO		100.000
13C-2378-TCDD	27.513	1.031	2.92e5	3.80e5	0.943	0.769	0.770	924.3	4194	2133	3.88e6	5.00e6	NO		64.084
13C-12378-PeCDD	32.643	1.223	3.34e5	2.14e5	0.715	1.564	1.550	2361.9	1839	1178	4.34e6	2.73e6	NO		68.824
13C-123478-HxCDD	37.323	0.986	2.83e5	2.21e5	1.032	1.282	1.240	2368.4	1753	2067	4.15e6	3.22e6	NO		65.799
13C-123678-HxCDD	37.444	0.989	3.29e5	2.69e5	1.076	1.221	1.240	2707.5	1753	2067	4.74e6	3.75e6	NO		74.902
13C-1234678-HpCDD	42.343	1.119	2.04e5	2.01e5	0.838	1.017	1.050	2578.1	959	1571	2.47e6	2.44e6	NO		65.138
13C-OCDD	48.659	1.286	2.14e5	2.45e5	0.675	0.871	0.890	1352.3	1507	1699	2.04e6	2.27e6	NO		91.628

Dataset: P:\DIOXIN8290.PRO\130227DATA1.qld

Last Altered: Thursday, February 28, 2013 09:49:31 Pacific Standard Time

Printed: Thursday, February 28, 2013 09:52:07 Pacific Standard Time

ID: WE03A, Name: 13022706, Date: 27-Feb-2013, Time: 14:34:49, Conditions: AUTOSPEC01, User: pk

[redacted]																
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[redacted]	Total-tetrafurans			2.12e4		0.921				1610		3.02e5				6.830
[redacted]	Total-penta1			5.61e4						700		7.53e5				12.366
[redacted]	Total-pentafurans			4.11e4		0.927				2550		6.15e5				8.689
[redacted]	Total-hexafurans			1.50e5		1.062				1634		2.15e6				43.568
[redacted]	Total-heptafurans			2.15e5		1.231				1423		2.86e6				88.167
[redacted]	Total-Furans			5.78e5		1.065				1610		7.53e6				234.714
[redacted]	Total-tetradioxins			6.39e3		1.106				1162		9.38e4				2.098
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[redacted]	Total-TEQ			3.53e6						1162		3.79e7				2538.255
[redacted]	37CL-2378-TCDD	27.528	1.031	3.16e5		1.051			669.0	6173		4.13e6				26.975
[redacted]	FUNCTION1 PFK			6.42e5						599108		1.47e7				
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[redacted]	FUNCTION3 OCDPE			1.52e2						554		6.56e3				0.000
[redacted]	FUNCTION4 NCDPE			1.99e2						938		6.61e3				0.000
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Dataset: P:\DIOXIN8290.PRO\130227DATA1.qld
Last Altered: Thursday, February 28, 2013 09:49:31 Pacific Standard Time
Printed: Thursday, February 28, 2013 09:52:07 Pacific Standard Time

Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130225.mdb 26 Feb 2013 09:49:11
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: WE03A, Name: 13022706, Date: 27-Feb-2013, Time: 14:34:49, Conditions: AUTOSPEC01, User: pk

TF

	35	Total-tetrafurans	303.9016	25.62	1506.718	0.921	0.198		0.98	0.77	YES	6.0
	35	Total-tetrafurans	303.9016	25.54	5067.066	0.921	0.666		0.61	0.77	YES	18.1
	35	Total-tetrafurans	303.9016	24.97	1091.154	0.921	0.143		0.73	0.77	NO	5.7
	35	Total-tetrafurans	303.9016	24.87	4221.739	0.921	0.555		0.71	0.77	NO	17.4
	35	Total-tetrafurans	303.9016	24.61	1128.935	0.921	0.148		0.62	0.77	YES	5.0
	35	Total-tetrafurans	303.9016	24.54	828.696	0.921	0.109		0.78	0.77	NO	4.3
	35	Total-tetrafurans	303.9016	24.20	11120.887	0.921	1.462		0.74	0.77	NO	41.4
	35	Total-tetrafurans	303.9016	23.60	2330.235	0.921	0.306		0.44	0.77	YES	6.2
	35	Total-tetrafurans	303.9016	23.36	1327.227	0.921	0.174		0.53	0.77	YES	5.4
	35	Total-tetrafurans	303.9016	27.11	3619.761	0.921	0.476		0.65	0.77	YES	13.3
	35	Total-tetrafurans	303.9016	27.00	2600.755	0.921	0.342		0.78	0.77	NO	9.6
	1	2378-TCDF	303.9016	26.90	2847.751	0.921	0.374	0.330	0.62	0.77	YES	9.3
	35	Total-tetrafurans	303.9016	26.39	1711.790	0.921	0.225		0.98	0.77	YES	7.1
	35	Total-tetrafurans	303.9016	26.20	1580.641	0.921	0.208		0.69	0.77	NO	5.7
	35	Total-tetrafurans	303.9016	25.97	3305.412	0.921	0.434		0.56	0.77	YES	9.4
	35	Total-tetrafurans	303.9016	25.78	7681.406	0.921	1.010		0.72	0.77	NO	23.7

fr

PP

	36	Total-penta1	339.8597	28.32	93053.711		12.366		1.52	1.55	NO	1076.2

PF

	37	Total-pentafurans	339.8597	31.25	4091.907	0.927	0.538		2.61	1.55	YES	15.6
	2	12378-PeCDF	339.8597	31.05	2997.693	0.912	0.398	0.368	1.28	1.55	YES	10.0
	37	Total-pentafurans	339.8597	30.76	2004.971	0.927	0.263		2.31	1.55	YES	12.1
	37	Total-pentafurans	339.8597	30.68	8962.456	0.927	1.178		1.72	1.55	NO	26.7
	37	Total-pentafurans	339.8597	30.08	695.847	0.927	0.091		0.56	1.55	YES	3.6
	37	Total-pentafurans	339.8597	29.98	18272.204	0.927	2.401		1.46	1.55	NO	63.8
	37	Total-pentafurans	339.8597	29.91	11124.989	0.927	1.462		1.44	1.55	NO	44.3
	37	Total-pentafurans	339.8597	29.78	3623.120	0.927	0.476		2.89	1.55	YES	11.6
	3	23478-PeCDF	339.8597	32.40	6153.624	0.943	0.801	0.710	1.88	1.55	YES	22.3
	37	Total-pentafurans	339.8597	32.26	5115.867	0.927	0.672		1.54	1.55	NO	21.0
	37	Total-pentafurans	339.8597	32.15	3115.912	0.927	0.409		1.70	1.55	NO	10.0

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Dataset: P:\DIOXIN8290.PRO\130227DATA1.qld
Last Altered: Thursday, February 28, 2013 09:49:31 Pacific Standard Time
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ID: WE03A, Name: 13022706, Date: 27-Feb-2013, Time: 14:34:49, Conditions: AUTOSPEC01, User: pk

HF

[redacted]	38 Total-hexafurans	373.8208	35.12	1526.008	1.062	0.242		0.99	1.24	YES	8.7
[redacted]	38 Total-hexafurans	373.8208	34.58	93368.696	1.062	14.830		1.25	1.24	NO	429.4
[redacted]	38 Total-hexafurans	373.8208	34.37	29098.253	1.062	4.622		1.26	1.24	NO	136.3
[redacted]	7 123789-HxCDF	373.8208	38.27	3985.491	1.017	0.724	0.724	1.11	1.24	NO	19.3
[redacted]	5 234678-HxCDF	373.8208	37.21	8005.402	1.073	1.272	1.272	1.22	1.24	NO	45.5
[redacted]	38 Total-hexafurans	373.8208	37.16	6327.503	1.062	1.005		1.25	1.24	NO	43.2
[redacted]	38 Total-hexafurans	373.8208	36.64	599.703	1.062	0.095		1.18	1.24	NO	4.5
[redacted]	6 123678-HxCDF	373.8208	36.27	9152.095	1.056	1.357	1.357	1.16	1.24	NO	43.2
[redacted]	4 123478-HxCDF	373.8208	36.11	16086.509	1.101	2.414	2.414	1.21	1.24	NO	75.4
[redacted]	38 Total-hexafurans	373.8208	35.95	3488.430	1.062	0.554		0.98	1.24	YES	18.0
[redacted]	38 Total-hexafurans	373.8208	35.45	103592.977	1.062	16.453		1.14	1.24	NO	495.0

fr

HPF

[redacted]	9 1234789-HpCDF	407.7818	43.32	6718.803	1.224	1.631	1.631	1.00	1.05	NO	29.1
[redacted]	39 Total-heptafurans	407.7818	41.29	287456.797	1.231	61.146		1.02	1.05	NO	1333.3
[redacted]	39 Total-heptafurans	407.7818	40.98	2274.616	1.231	0.484		1.13	1.05	NO	13.9
[redacted]	8 1234678-HpCDF	407.7818	40.46	131759.391	1.238	24.907	24.907	1.01	1.05	NO	635.3

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Furans,TF,PP,PF,HF,HPF,OF

[redacted]											
[redacted]	35 Total-tetrafurans	303.9016	25.62	1506.718	0.921	0.198		0.98	0.77	YES	6.0
[redacted]	35 Total-tetrafurans	303.9016	25.54	5067.066	0.921	0.666		0.61	0.77	YES	18.1
[redacted]	35 Total-tetrafurans	303.9016	24.97	1091.154	0.921	0.143		0.73	0.77	NO	5.7
[redacted]	35 Total-tetrafurans	303.9016	24.87	4221.739	0.921	0.555		0.71	0.77	NO	17.4
[redacted]	35 Total-tetrafurans	303.9016	24.61	1128.935	0.921	0.148		0.62	0.77	YES	5.0
[redacted]	35 Total-tetrafurans	303.9016	24.54	828.696	0.921	0.109		0.78	0.77	NO	4.3
[redacted]	35 Total-tetrafurans	303.9016	24.20	11120.887	0.921	1.462		0.74	0.77	NO	41.4
[redacted]	35 Total-tetrafurans	303.9016	23.60	2330.235	0.921	0.306		0.44	0.77	YES	6.2
[redacted]	35 Total-tetrafurans	303.9016	23.36	1327.227	0.921	0.174		0.53	0.77	YES	5.4
[redacted]	35 Total-tetrafurans	303.9016	27.11	3619.761	0.921	0.476		0.65	0.77	YES	13.3
[redacted]	35 Total-tetrafurans	303.9016	27.00	2600.755	0.921	0.342		0.78	0.77	NO	9.6
[redacted]	1 2378-TCDF	303.9016	26.90	2847.751	0.921	0.374	0.330	0.62	0.77	YES	9.3
[redacted]	35 Total-tetrafurans	303.9016	26.39	1711.790	0.921	0.225		0.98	0.77	YES	7.1
[redacted]	35 Total-tetrafurans	303.9016	26.20	1580.641	0.921	0.208		0.69	0.77	NO	5.7
[redacted]	35 Total-tetrafurans	303.9016	25.97	3305.412	0.921	0.434		0.56	0.77	YES	9.4
[redacted]	35 Total-tetrafurans	303.9016	25.78	7681.406	0.921	1.010		0.72	0.77	NO	23.7
[redacted]	37 Total-pentafurans	339.8597	31.25	4091.907	0.927	0.538		2.61	1.55	YES	15.6
[redacted]	2 12378-PeCDF	339.8597	31.05	2997.693	0.912	0.398	0.368	1.28	1.55	YES	10.0
[redacted]	37 Total-pentafurans	339.8597	30.76	2004.971	0.927	0.263		2.31	1.55	YES	12.1
[redacted]	37 Total-pentafurans	339.8597	30.68	8962.456	0.927	1.178		1.72	1.55	NO	26.7
[redacted]	37 Total-pentafurans	339.8597	30.08	695.847	0.927	0.091		0.56	1.55	YES	3.6
[redacted]	37 Total-pentafurans	339.8597	29.98	18272.204	0.927	2.401		1.46	1.55	NO	63.8
[redacted]	37 Total-pentafurans	339.8597	29.91	11124.989	0.927	1.462		1.44	1.55	NO	44.3
[redacted]	37 Total-pentafurans	339.8597	29.78	3623.120	0.927	0.476		2.89	1.55	YES	11.6
[redacted]	3 23478-PeCDF	339.8597	32.40	6153.624	0.943	0.801	0.710	1.88	1.55	YES	22.3
[redacted]	37 Total-pentafurans	339.8597	32.26	5115.867	0.927	0.672		1.54	1.55	NO	21.0
[redacted]	37 Total-pentafurans	339.8597	32.15	3115.912	0.927	0.409		1.70	1.55	NO	10.0
[redacted]	38 Total-hexafurans	373.8208	35.12	1526.008	1.062	0.242		0.99	1.24	YES	8.7
[redacted]	38 Total-hexafurans	373.8208	34.58	93368.696	1.062	14.830		1.25	1.24	NO	429.4
[redacted]	38 Total-hexafurans	373.8208	34.37	29098.253	1.062	4.622		1.26	1.24	NO	136.3
[redacted]	7 123789-HxCDF	373.8208	38.27	3985.491	1.017	0.724	0.724	1.11	1.24	NO	19.3
[redacted]	5 234678-HxCDF	373.8208	37.21	8005.402	1.073	1.272	1.272	1.22	1.24	NO	45.5
[redacted]	38 Total-hexafurans	373.8208	37.16	6327.503	1.062	1.005		1.25	1.24	NO	43.2
[redacted]	38 Total-hexafurans	373.8208	36.64	599.703	1.062	0.095		1.18	1.24	NO	4.5
[redacted]	6 123678-HxCDF	373.8208	36.27	9152.095	1.056	1.357	1.357	1.16	1.24	NO	43.2
[redacted]	4 123478-HxCDF	373.8208	36.11	16086.509	1.101	2.414	2.414	1.21	1.24	NO	75.4
[redacted]	38 Total-hexafurans	373.8208	35.95	3488.430	1.062	0.554		0.98	1.24	YES	18.0
[redacted]	38 Total-hexafurans	373.8208	35.45	103592.977	1.062	16.453		1.14	1.24	NO	495.0
[redacted]	9 1234789-HpCDF	407.7818	43.32	6718.803	1.224	1.631	1.631	1.00	1.05	NO	29.1
[redacted]	39 Total-heptafurans	407.7818	41.29	287456.797	1.231	61.146		1.02	1.05	NO	1333.3
[redacted]	39 Total-heptafurans	407.7818	40.98	2274.616	1.231	0.484		1.13	1.05	NO	13.9
[redacted]	8 1234678-HpCDF	407.7818	40.46	131759.391	1.238	24.907	24.907	1.01	1.05	NO	635.3
[redacted]	10 OCDF	441.7428	48.97	200175.282	1.162	75.094	75.094	0.89	0.89	NO	986.3
[redacted]	36 Total-penta1	339.8597	28.32	93053.711		12.366		1.52	1.55	NO	1076.2

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TD

	11	2378-TCDD	319.8965	27.53	1315.471	1.106	0.177	0.145	0.56	0.77	YES	5.9
	41	Total-tetradioxins	319.8965	27.11	1605.856	1.106	0.216		0.79	0.77	NO	6.8
	41	Total-tetradioxins	319.8965	26.71	1082.366	1.106	0.145		0.95	0.77	YES	6.4
	41	Total-tetradioxins	319.8965	26.14	2219.020	1.106	0.298		0.71	0.77	NO	9.6
	41	Total-tetradioxins	319.8965	25.85	1127.763	1.106	0.152		0.51	0.77	YES	6.1
	41	Total-tetradioxins	319.8965	25.14	626.634	1.106	0.084		1.47	0.77	YES	5.6
	41	Total-tetradioxins	319.8965	24.91	2569.482	1.106	0.345		0.67	0.77	NO	11.4
	41	Total-tetradioxins	319.8965	24.63	3728.775	1.106	0.501		0.70	0.77	NO	22.2
	41	Total-tetradioxins	319.8965	27.66	1332.482	1.106	0.179		0.48	0.77	YES	6.7

PD

	42	Total-pentadioxins	355.8546	33.05	1136.345	1.001	0.207		1.25	1.55	YES	4.9
	12	12378-PeCDD	355.8546	32.68	6733.546	1.001	1.227	1.055	1.97	1.55	YES	27.2
	42	Total-pentadioxins	355.8546	31.97	1014.057	1.001	0.185		1.73	1.55	NO	4.6
	42	Total-pentadioxins	355.8546	31.59	3702.650	1.001	0.675		1.44	1.55	NO	11.2
	42	Total-pentadioxins	355.8546	31.42	3765.793	1.001	0.686		1.73	1.55	NO	18.1
	42	Total-pentadioxins	355.8546	31.27	4888.496	1.001	0.891		1.71	1.55	NO	21.0
	42	Total-pentadioxins	355.8546	31.05	4393.950	1.001	0.801		1.38	1.55	NO	19.1
	42	Total-pentadioxins	355.8546	30.43	1892.595	1.001	0.345		1.57	1.55	NO	9.6
	42	Total-pentadioxins	355.8546	29.95	4308.091	1.001	0.785		1.74	1.55	NO	22.9
	42	Total-pentadioxins	355.8546	29.91	3193.903	1.001	0.582		1.26	1.55	YES	20.4

HD

	15	123789-HxCDD	389.8157	37.86	18129.077	0.904	3.642	3.642	1.26	1.24	NO	98.7
	43	Total-hexadioxins	389.8157	37.63	3879.625	0.937	0.752		1.34	1.24	NO	20.5
	14	123678-HxCDD	389.8157	37.47	43711.469	0.929	7.871	7.871	1.27	1.24	NO	236.8
	13	123478-HxCDD	389.8157	37.35	8439.709	0.978	1.715	1.715	1.30	1.24	NO	57.5
	43	Total-hexadioxins	389.8157	36.38	84159.113	0.937	16.313		1.33	1.24	NO	319.2
	43	Total-hexadioxins	389.8157	35.97	11128.943	0.937	2.157		1.20	1.24	NO	55.3
	43	Total-hexadioxins	389.8157	35.16	43003.971	0.937	8.336		1.25	1.24	NO	221.6

HPD

	16	1234678-HpCDD	423.7766	42.37	811032.062	1.029	194.932	194....	1.05	1.05	NO	1815.1
	44	Total-heptadioxins	423.7766	41.04	594066.313	1.029	142.784		1.01	1.05	NO	1404.6

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Dioxins,TD,PD,HD,HPD,OD

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	11 2378-TCDD	319.8965	27.53	1315.471	1.106	0.177	0.145	0.56	0.77	YES	5.9
[redacted]	41 Total-tetradioxins	319.8965	27.11	1605.856	1.106	0.216		0.79	0.77	NO	6.8
[redacted]	41 Total-tetradioxins	319.8965	26.71	1082.366	1.106	0.145		0.95	0.77	YES	6.4
[redacted]	41 Total-tetradioxins	319.8965	26.14	2219.020	1.106	0.298		0.71	0.77	NO	9.6
[redacted]	41 Total-tetradioxins	319.8965	25.85	1127.763	1.106	0.152		0.51	0.77	YES	6.1
[redacted]	41 Total-tetradioxins	319.8965	25.14	626.634	1.106	0.084		1.47	0.77	YES	5.6
[redacted]	41 Total-tetradioxins	319.8965	24.91	2569.482	1.106	0.345		0.67	0.77	NO	11.4
[redacted]	41 Total-tetradioxins	319.8965	24.63	3728.775	1.106	0.501		0.70	0.77	NO	22.2
[redacted]	41 Total-tetradioxins	319.8965	27.66	1332.482	1.106	0.179		0.48	0.77	YES	6.7
[redacted]	42 Total-pentadioxins	355.8546	33.05	1136.345	1.001	0.207		1.25	1.55	YES	4.9
[redacted]	12 12378-PeCDD	355.8546	32.68	6733.546	1.001	1.227	1.055	1.97	1.55	YES	27.2
[redacted]	42 Total-pentadioxins	355.8546	31.97	1014.057	1.001	0.185		1.73	1.55	NO	4.6
[redacted]	42 Total-pentadioxins	355.8546	31.59	3702.650	1.001	0.675		1.44	1.55	NO	11.2
[redacted]	42 Total-pentadioxins	355.8546	31.42	3765.793	1.001	0.686		1.73	1.55	NO	18.1
[redacted]	42 Total-pentadioxins	355.8546	31.27	4888.496	1.001	0.891		1.71	1.55	NO	21.0
[redacted]	42 Total-pentadioxins	355.8546	31.05	4393.950	1.001	0.801		1.38	1.55	NO	19.1
[redacted]	42 Total-pentadioxins	355.8546	30.43	1892.595	1.001	0.345		1.57	1.55	NO	9.6
[redacted]	42 Total-pentadioxins	355.8546	29.95	4308.091	1.001	0.785		1.74	1.55	NO	22.9
[redacted]	42 Total-pentadioxins	355.8546	29.91	3193.903	1.001	0.582		1.26	1.55	YES	20.4
[redacted]	15 123789-HxCDD	389.8157	37.86	18129.077	0.904	3.642	3.642	1.26	1.24	NO	98.7
[redacted]	43 Total-hexadioxins	389.8157	37.63	3879.625	0.937	0.752		1.34	1.24	NO	20.5
[redacted]	14 123678-HxCDD	389.8157	37.47	43711.469	0.929	7.871	7.871	1.27	1.24	NO	236.8
[redacted]	13 123478-HxCDD	389.8157	37.35	8439.709	0.978	1.715	1.715	1.30	1.24	NO	57.5
[redacted]	43 Total-hexadioxins	389.8157	36.38	84159.113	0.937	16.313		1.33	1.24	NO	319.2
[redacted]	43 Total-hexadioxins	389.8157	35.97	11128.943	0.937	2.157		1.20	1.24	NO	55.3
[redacted]	43 Total-hexadioxins	389.8157	35.16	43003.971	0.937	8.336		1.25	1.24	NO	221.6
[redacted]	16 1234678-HpCDD	423.7766	42.37	811032.062	1.029	194.932	194....	1.05	1.05	NO	1815.1
[redacted]	44 Total-heptadioxins	423.7766	41.04	594066.313	1.029	142.784		1.01	1.05	NO	1404.6
[redacted]	17 OCDD	457.7377	48.67	4445898.875	1.011	1916.5...	1916...	0.89	0.89	NO	8495.1

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TotalTEQ,Furans,Dioxins

[redacted]											
[redacted]	35 Total-tetrafurans	303.9016	25.62	1506.718	0.921	0.198		0.98	0.77	YES	6.0
[redacted]	35 Total-tetrafurans	303.9016	25.54	5067.066	0.921	0.666		0.61	0.77	YES	18.1
[redacted]	35 Total-tetrafurans	303.9016	24.97	1091.154	0.921	0.143		0.73	0.77	NO	5.7
[redacted]	35 Total-tetrafurans	303.9016	24.87	4221.739	0.921	0.555		0.71	0.77	NO	17.4
[redacted]	35 Total-tetrafurans	303.9016	24.61	1128.935	0.921	0.148		0.62	0.77	YES	5.0
[redacted]	35 Total-tetrafurans	303.9016	24.54	828.696	0.921	0.109		0.78	0.77	NO	4.3
[redacted]	35 Total-tetrafurans	303.9016	24.20	11120.887	0.921	1.462		0.74	0.77	NO	41.4
[redacted]	35 Total-tetrafurans	303.9016	23.60	2330.235	0.921	0.306		0.44	0.77	YES	6.2
[redacted]	35 Total-tetrafurans	303.9016	23.36	1327.227	0.921	0.174		0.53	0.77	YES	5.4
[redacted]	35 Total-tetrafurans	303.9016	27.11	3619.761	0.921	0.476		0.65	0.77	YES	13.3
[redacted]	35 Total-tetrafurans	303.9016	27.00	2600.755	0.921	0.342		0.78	0.77	NO	9.6
[redacted]	1 2378-TCDF	303.9016	26.90	2847.751	0.921	0.374	0.330	0.62	0.77	YES	9.3
[redacted]	35 Total-tetrafurans	303.9016	26.39	1711.790	0.921	0.225		0.98	0.77	YES	7.1
[redacted]	35 Total-tetrafurans	303.9016	26.20	1580.641	0.921	0.208		0.69	0.77	NO	5.7
[redacted]	35 Total-tetrafurans	303.9016	25.97	3305.412	0.921	0.434		0.56	0.77	YES	9.4
[redacted]	35 Total-tetrafurans	303.9016	25.78	7681.406	0.921	1.010		0.72	0.77	NO	23.7
[redacted]	37 Total-pentafurans	339.8597	31.25	4091.907	0.927	0.538		2.61	1.55	YES	15.6
[redacted]	2 12378-PeCDF	339.8597	31.05	2997.693	0.912	0.398	0.368	1.28	1.55	YES	10.0
[redacted]	37 Total-pentafurans	339.8597	30.76	2004.971	0.927	0.263		2.31	1.55	YES	12.1
[redacted]	37 Total-pentafurans	339.8597	30.66	8962.456	0.927	1.178		1.72	1.55	NO	26.7
[redacted]	37 Total-pentafurans	339.8597	30.08	695.847	0.927	0.091		0.56	1.55	YES	3.6
[redacted]	37 Total-pentafurans	339.8597	29.98	18272.204	0.927	2.401		1.46	1.55	NO	63.8
[redacted]	37 Total-pentafurans	339.8597	29.91	11124.989	0.927	1.462		1.44	1.55	NO	44.3
[redacted]	37 Total-pentafurans	339.8597	29.78	3623.120	0.927	0.476		2.89	1.55	YES	11.6
[redacted]	3 23478-PeCDF	339.8597	32.40	6153.624	0.943	0.801	0.710	1.88	1.55	YES	22.3
[redacted]	37 Total-pentafurans	339.8597	32.26	5115.867	0.927	0.672		1.54	1.55	NO	21.0
[redacted]	37 Total-pentafurans	339.8597	32.15	3115.912	0.927	0.409		1.70	1.55	NO	10.0
[redacted]	38 Total-hexafurans	373.8208	35.12	1526.008	1.062	0.242		0.99	1.24	YES	8.7
[redacted]	38 Total-hexafurans	373.8208	34.58	93368.696	1.062	14.830		1.25	1.24	NO	429.4
[redacted]	38 Total-hexafurans	373.8208	34.37	29098.253	1.062	4.622		1.26	1.24	NO	136.3
[redacted]	7 123789-HxCDF	373.8208	38.27	3985.491	1.017	0.724	0.724	1.11	1.24	NO	19.3
[redacted]	5 234678-HxCDF	373.8208	37.21	8005.402	1.073	1.272	1.272	1.22	1.24	NO	45.5
[redacted]	38 Total-hexafurans	373.8208	37.16	6327.503	1.062	1.005		1.25	1.24	NO	43.2
[redacted]	38 Total-hexafurans	373.8208	36.64	599.703	1.062	0.095		1.18	1.24	NO	4.5
[redacted]	6 123678-HxCDF	373.8208	36.27	9152.095	1.056	1.357	1.357	1.16	1.24	NO	43.2
[redacted]	4 123478-HxCDF	373.8208	36.11	16086.509	1.101	2.414	2.414	1.21	1.24	NO	75.4
[redacted]	38 Total-hexafurans	373.8208	35.95	3488.430	1.062	0.554		0.98	1.24	YES	18.0
[redacted]	38 Total-hexafurans	373.8208	35.45	103592.977	1.062	16.453		1.14	1.24	NO	495.0
[redacted]	9 1234789-HpCDF	407.7818	43.32	6718.803	1.224	1.631	1.631	1.00	1.05	NO	29.1
[redacted]	39 Total-heptafurans	407.7818	41.29	287456.797	1.231	61.146		1.02	1.05	NO	1333.3
[redacted]	39 Total-heptafurans	407.7818	40.98	2274.616	1.231	0.484		1.13	1.05	NO	13.9
[redacted]	8 1234678-HpCDF	407.7818	40.46	131759.391	1.238	24.907	24.907	1.01	1.05	NO	635.3
[redacted]	10 OCDF	441.7428	48.97	200175.282	1.162	75.094	75.094	0.89	0.89	NO	986.3
[redacted]	36 Total-penta1	339.8597	28.32	93053.711		12.366		1.52	1.55	NO	1076.2
[redacted]	11 2378-TCDD	319.8965	27.53	1315.471	1.106	0.177	0.145	0.56	0.77	YES	5.9
[redacted]	41 Total-tetradioxins	319.8965	27.11	1605.856	1.106	0.216		0.79	0.77	NO	6.8
[redacted]	41 Total-tetradioxins	319.8965	26.71	1082.366	1.106	0.145		0.95	0.77	YES	6.4
[redacted]	41 Total-tetradioxins	319.8965	26.14	2219.020	1.106	0.298		0.71	0.77	NO	9.6
[redacted]	41 Total-tetradioxins	319.8965	25.85	1127.763	1.106	0.152		0.51	0.77	YES	6.1

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TotalTEQ,Furans,Dioxins

	41 Total-tetradioxins	319.8965	25.14	626.634	1.106	0.084		1.47	0.77	YES	5.6
	41 Total-tetradioxins	319.8965	24.91	2569.482	1.106	0.345		0.67	0.77	NO	11.4
	41 Total-tetradioxins	319.8965	24.63	3728.775	1.106	0.501		0.70	0.77	NO	22.2
	41 Total-tetradioxins	319.8965	27.66	1332.482	1.106	0.179		0.48	0.77	YES	6.7
	42 Total-pentadioxins	355.8546	33.05	1136.345	1.001	0.207		1.25	1.55	YES	4.9
	12 12378-PeCDD	355.8546	32.68	6733.546	1.001	1.227	1.055	1.97	1.55	YES	27.2
	42 Total-pentadioxins	355.8546	31.97	1014.057	1.001	0.185		1.73	1.55	NO	4.6
	42 Total-pentadioxins	355.8546	31.59	3702.650	1.001	0.675		1.44	1.55	NO	11.2
	42 Total-pentadioxins	355.8546	31.42	3765.793	1.001	0.686		1.73	1.55	NO	18.1
	42 Total-pentadioxins	355.8546	31.27	4888.496	1.001	0.891		1.71	1.55	NO	21.0
	42 Total-pentadioxins	355.8546	31.05	4393.950	1.001	0.801		1.38	1.55	NO	19.1
	42 Total-pentadioxins	355.8546	30.43	1892.595	1.001	0.345		1.57	1.55	NO	9.6
	42 Total-pentadioxins	355.8546	29.95	4306.091	1.001	0.785		1.74	1.55	NO	22.9
	42 Total-pentadioxins	355.8546	29.91	3193.903	1.001	0.582		1.26	1.55	YES	20.4
	15 123789-HxCDD	389.8157	37.86	18129.077	0.904	3.642	3.642	1.26	1.24	NO	98.7
	43 Total-hexadioxins	389.8157	37.63	3879.625	0.937	0.752		1.34	1.24	NO	20.5
	14 123678-HxCDD	389.8157	37.47	43711.469	0.929	7.871	7.871	1.27	1.24	NO	236.8
	13 123478-HxCDD	389.8157	37.35	8439.709	0.978	1.715	1.715	1.30	1.24	NO	57.5
	43 Total-hexadioxins	389.8157	36.38	84159.113	0.937	16.313		1.33	1.24	NO	319.2
	43 Total-hexadioxins	389.8157	35.97	11128.943	0.937	2.157		1.20	1.24	NO	55.3
	43 Total-hexadioxins	389.8157	35.16	43003.971	0.937	8.336		1.25	1.24	NO	221.6
	16 1234678-HpCDD	423.7766	42.37	811032.062	1.029	194.932	194....	1.05	1.05	NO	1815.1
	44 Total-heptadioxins	423.7766	41.04	594066.313	1.029	142.784		1.01	1.05	NO	1404.6
	17 OCDD	457.7377	48.67	4445898.875	1.011	1916.5...	1916...	0.89	0.89	NO	8495.1

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PFK1

[redacted]					
[redacted]	48 FUNCTION1 PFK	330.9792	24.02	0.000	0.5
[redacted]	48 FUNCTION1 PFK	330.9792	23.55	0.000	0.6
[redacted]	48 FUNCTION1 PFK	330.9792	22.85	0.000	1.0
[redacted]	48 FUNCTION1 PFK	330.9792	22.76	0.000	0.6
[redacted]	48 FUNCTION1 PFK	330.9792	22.28	0.000	0.9
[redacted]	48 FUNCTION1 PFK	330.9792	22.04	0.000	0.4
[redacted]	48 FUNCTION1 PFK	330.9792	21.40	0.000	0.4
[redacted]	48 FUNCTION1 PFK	330.9792	21.13	0.000	2.3
[redacted]	48 FUNCTION1 PFK	330.9792	28.74	0.000	1.1
[redacted]	48 FUNCTION1 PFK	330.9792	28.63	0.000	1.5
[redacted]	48 FUNCTION1 PFK	330.9792	28.17	0.000	0.7
[redacted]	48 FUNCTION1 PFK	330.9792	27.71	0.000	1.6
[redacted]	48 FUNCTION1 PFK	330.9792	27.53	0.000	1.2
[redacted]	48 FUNCTION1 PFK	330.9792	27.23	0.000	0.5
[redacted]	48 FUNCTION1 PFK	330.9792	26.94	0.000	1.2
[redacted]	48 FUNCTION1 PFK	330.9792	26.59	0.000	0.9
[redacted]	48 FUNCTION1 PFK	330.9792	26.50	0.000	1.3
[redacted]	48 FUNCTION1 PFK	330.9792	26.06	0.000	0.9
[redacted]	48 FUNCTION1 PFK	330.9792	25.93	0.000	0.9
[redacted]	48 FUNCTION1 PFK	330.9792	25.87	0.000	1.3
[redacted]	48 FUNCTION1 PFK	330.9792	25.39	0.000	0.4
[redacted]	48 FUNCTION1 PFK	330.9792	24.99	0.000	1.1
[redacted]	48 FUNCTION1 PFK	330.9792	24.81	0.000	1.2
[redacted]	48 FUNCTION1 PFK	330.9792	24.63	0.000	0.8
[redacted]	48 FUNCTION1 PFK	330.9792	29.07	0.000	0.5
[redacted]	48 FUNCTION1 PFK	330.9792	28.96	0.000	0.8

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PFK2

[redacted]	49 FUNCTION2 PFK	366.9792	32.64	0.000	0.000	0.9
	49 FUNCTION2 PFK	366.9792	32.43	0.000	0.000	0.8
	49 FUNCTION2 PFK	366.9792	32.01	0.000	0.000	1.6
	49 FUNCTION2 PFK	366.9792	31.86	0.000	0.000	2.0
	49 FUNCTION2 PFK	366.9792	31.40	0.000	0.000	0.8
	49 FUNCTION2 PFK	366.9792	31.28	0.000	0.000	2.3
	49 FUNCTION2 PFK	366.9792	31.09	0.000	0.000	0.8
	49 FUNCTION2 PFK	366.9792	30.19	0.000	0.000	1.2
	49 FUNCTION2 PFK	366.9792	29.69	0.000	0.000	0.5
	49 FUNCTION2 PFK	366.9792	29.51	0.000	0.000	0.8
	49 FUNCTION2 PFK	366.9792	29.44	0.000	0.000	0.6
	49 FUNCTION2 PFK	366.9792	29.32	0.000	0.000	0.5
	49 FUNCTION2 PFK	366.9792	29.28	0.000	0.000	0.5
	49 FUNCTION2 PFK	366.9792	33.97	0.000	0.000	0.5
	49 FUNCTION2 PFK	366.9792	33.54	0.000	0.000	1.1
	49 FUNCTION2 PFK	366.9792	33.28	0.000	0.000	1.3
	49 FUNCTION2 PFK	366.9792	33.17	0.000	0.000	0.8
	49 FUNCTION2 PFK	366.9792	33.11	0.000	0.000	0.5
	49 FUNCTION2 PFK	366.9792	32.96	0.000	0.000	1.8
	49 FUNCTION2 PFK	366.9792	32.84	0.000	0.000	1.1
	49 FUNCTION2 PFK	366.9792	32.70	0.000	0.000	1.2

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PFK3

[redacted]						
[redacted]	50 FUNCTION3 PFK	380.9760	34.71	0.000	0.000	2.7
[redacted]	50 FUNCTION3 PFK	380.9760	34.64	0.000	0.000	2.4
[redacted]	50 FUNCTION3 PFK	380.9760	34.56	0.000	0.000	1.4
[redacted]	50 FUNCTION3 PFK	380.9760	34.51	0.000	0.000	1.2
[redacted]	50 FUNCTION3 PFK	380.9760	34.43	0.000	0.000	1.3
[redacted]	50 FUNCTION3 PFK	380.9760	34.24	0.000	0.000	0.6
[redacted]	50 FUNCTION3 PFK	380.9760	34.21	0.000	0.000	0.6
[redacted]	50 FUNCTION3 PFK	380.9760	37.21	0.000	0.000	3.1
[redacted]	50 FUNCTION3 PFK	380.9760	37.17	0.000	0.000	3.1
[redacted]	50 FUNCTION3 PFK	380.9760	37.07	0.000	0.000	1.3
[redacted]	50 FUNCTION3 PFK	380.9760	36.94	0.000	0.000	1.0
[redacted]	50 FUNCTION3 PFK	380.9760	36.68	0.000	0.000	0.6
[redacted]	50 FUNCTION3 PFK	380.9760	36.31	0.000	0.000	2.1
[redacted]	50 FUNCTION3 PFK	380.9760	36.23	0.000	0.000	1.0
[redacted]	50 FUNCTION3 PFK	380.9760	36.18	0.000	0.000	1.1
[redacted]	50 FUNCTION3 PFK	380.9760	36.10	0.000	0.000	1.7
[redacted]	50 FUNCTION3 PFK	380.9760	36.06	0.000	0.000	1.6
[redacted]	50 FUNCTION3 PFK	380.9760	35.42	0.000	0.000	0.7
[redacted]	50 FUNCTION3 PFK	380.9760	35.36	0.000	0.000	1.3
[redacted]	50 FUNCTION3 PFK	380.9760	35.14	0.000	0.000	0.7
[redacted]	50 FUNCTION3 PFK	380.9760	34.98	0.000	0.000	1.4
[redacted]	50 FUNCTION3 PFK	380.9760	34.86	0.000	0.000	2.2
[redacted]	50 FUNCTION3 PFK	380.9760	34.78	0.000	0.000	2.7
[redacted]	50 FUNCTION3 PFK	380.9760	39.43	0.000	0.000	1.1
[redacted]	50 FUNCTION3 PFK	380.9760	39.39	0.000	0.000	1.2
[redacted]	50 FUNCTION3 PFK	380.9760	39.33	0.000	0.000	1.8
[redacted]	50 FUNCTION3 PFK	380.9760	38.91	0.000	0.000	1.3
[redacted]	50 FUNCTION3 PFK	380.9760	38.62	0.000	0.000	0.7
[redacted]	50 FUNCTION3 PFK	380.9760	38.57	0.000	0.000	0.6
[redacted]	50 FUNCTION3 PFK	380.9760	38.49	0.000	0.000	1.3
[redacted]	50 FUNCTION3 PFK	380.9760	38.43	0.000	0.000	2.3
[redacted]	50 FUNCTION3 PFK	380.9760	38.24	0.000	0.000	1.0
[redacted]	50 FUNCTION3 PFK	380.9760	37.90	0.000	0.000	1.9
[redacted]	50 FUNCTION3 PFK	380.9760	37.76	0.000	0.000	2.0
[redacted]	50 FUNCTION3 PFK	380.9760	37.37	0.000	0.000	1.2

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PFK4

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	51 FUNCTION4 PFK	430.9728	39.77	0.000	0.7
[redacted]	51 FUNCTION4 PFK	430.9728	39.73	0.000	0.6
[redacted]	51 FUNCTION4 PFK	430.9728	39.61	0.000	0.7
[redacted]	51 FUNCTION4 PFK	430.9728	42.15	0.000	0.4
[redacted]	51 FUNCTION4 PFK	430.9728	41.99	0.000	1.4
[redacted]	51 FUNCTION4 PFK	430.9728	41.88	0.000	1.4
[redacted]	51 FUNCTION4 PFK	430.9728	41.82	0.000	2.1
[redacted]	51 FUNCTION4 PFK	430.9728	41.53	0.000	0.9
[redacted]	51 FUNCTION4 PFK	430.9728	41.47	0.000	1.0
[redacted]	51 FUNCTION4 PFK	430.9728	41.24	0.000	0.3
[redacted]	51 FUNCTION4 PFK	430.9728	41.12	0.000	0.7
[redacted]	51 FUNCTION4 PFK	430.9728	41.08	0.000	0.8
[redacted]	51 FUNCTION4 PFK	430.9728	40.94	0.000	0.8
[redacted]	51 FUNCTION4 PFK	430.9728	40.85	0.000	2.0
[redacted]	51 FUNCTION4 PFK	430.9728	40.75	0.000	0.8
[redacted]	51 FUNCTION4 PFK	430.9728	40.60	0.000	0.6
[redacted]	51 FUNCTION4 PFK	430.9728	40.41	0.000	0.9
[redacted]	51 FUNCTION4 PFK	430.9728	40.28	0.000	1.4
[redacted]	51 FUNCTION4 PFK	430.9728	40.04	0.000	1.2
[redacted]	51 FUNCTION4 PFK	430.9728	43.82	0.000	1.2
[redacted]	51 FUNCTION4 PFK	430.9728	43.78	0.000	1.1
[redacted]	51 FUNCTION4 PFK	430.9728	43.71	0.000	0.9
[redacted]	51 FUNCTION4 PFK	430.9728	43.42	0.000	1.8
[redacted]	51 FUNCTION4 PFK	430.9728	43.31	0.000	0.7
[redacted]	51 FUNCTION4 PFK	430.9728	43.13	0.000	1.0
[redacted]	51 FUNCTION4 PFK	430.9728	43.06	0.000	1.2
[redacted]	51 FUNCTION4 PFK	430.9728	43.01	0.000	1.1
[redacted]	51 FUNCTION4 PFK	430.9728	42.97	0.000	1.2
[redacted]	51 FUNCTION4 PFK	430.9728	42.91	0.000	0.7
[redacted]	51 FUNCTION4 PFK	430.9728	42.87	0.000	1.0
[redacted]	51 FUNCTION4 PFK	430.9728	42.72	0.000	1.2
[redacted]	51 FUNCTION4 PFK	430.9728	42.50	0.000	1.5
[redacted]	51 FUNCTION4 PFK	430.9728	42.41	0.000	1.3
[redacted]	51 FUNCTION4 PFK	430.9728	42.24	0.000	1.3
[redacted]	51 FUNCTION4 PFK	430.9728	42.19	0.000	0.6
[redacted]	51 FUNCTION4 PFK	430.9728	44.85	0.000	1.2
[redacted]	51 FUNCTION4 PFK	430.9728	44.80	0.000	1.4
[redacted]	51 FUNCTION4 PFK	430.9728	44.76	0.000	0.4
[redacted]	51 FUNCTION4 PFK	430.9728	44.66	0.000	0.5
[redacted]	51 FUNCTION4 PFK	430.9728	44.51	0.000	1.0
[redacted]	51 FUNCTION4 PFK	430.9728	44.09	0.000	1.4
[redacted]	51 FUNCTION4 PFK	430.9728	44.02	0.000	1.7
[redacted]	51 FUNCTION4 PFK	430.9728	43.94	0.000	0.6
[redacted]	51 FUNCTION4 PFK	430.9728	43.88	0.000	1.2

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PFK5

[redacted]						
[redacted]	52 FUNCTION5 PFK	480.9696	46.07	0.000		1.6
	52 FUNCTION5 PFK	480.9696	45.88	0.000		0.6
	52 FUNCTION5 PFK	480.9696	45.58	0.000		0.7
	52 FUNCTION5 PFK	480.9696	45.55	0.000		0.7
	52 FUNCTION5 PFK	480.9696	45.31	0.000		1.3
	52 FUNCTION5 PFK	480.9696	45.06	0.000		1.9
	52 FUNCTION5 PFK	480.9696	49.22	0.000		1.4
	52 FUNCTION5 PFK	480.9696	49.05	0.000		1.7
	52 FUNCTION5 PFK	480.9696	48.81	0.000		1.8
	52 FUNCTION5 PFK	480.9696	48.63	0.000		1.0
	52 FUNCTION5 PFK	480.9696	48.10	0.000		0.8
	52 FUNCTION5 PFK	480.9696	46.92	0.000		1.7
	52 FUNCTION5 PFK	480.9696	46.25	0.000		0.6

ETHERS1

[redacted]						
[redacted]	53 FUNCTION1 HXCD...	375.8364	28.93	0.000	0.000	4.8
	53 FUNCTION1 HXCD...	375.8364	26.83	0.000	0.000	6.2
	53 FUNCTION1 HXCD...	375.8364	23.49	0.000	0.000	5.5
	53 FUNCTION1 HXCD...	375.8364	22.19	0.000	0.000	4.3

ETHERS2

[redacted]						
[redacted]	54 FUNCTION1 HPCD...	409.7974	22.82	0.000	0.000	2.5
	54 FUNCTION1 HPCD...	409.7974	22.21	0.000	0.000	3.0
	54 FUNCTION1 HPCD...	409.7974	22.09	0.000	0.000	2.0
	54 FUNCTION1 HPCD...	409.7974	28.23	0.000	0.000	2.4
	54 FUNCTION1 HPCD...	409.7974	28.13	0.000	0.000	1.1
	54 FUNCTION1 HPCD...	409.7974	27.68	0.000	0.000	1.1
	54 FUNCTION1 HPCD...	409.7974	27.53	0.000	0.000	1.4
	54 FUNCTION1 HPCD...	409.7974	27.17	0.000	0.000	2.5
	54 FUNCTION1 HPCD...	409.7974	26.69	0.000	0.000	1.9
	54 FUNCTION1 HPCD...	409.7974	25.90	0.000	0.000	3.4
	54 FUNCTION1 HPCD...	409.7974	25.85	0.000	0.000	1.8
	54 FUNCTION1 HPCD...	409.7974	25.76	0.000	0.000	1.7
	54 FUNCTION1 HPCD...	409.7974	25.62	0.000	0.000	1.2
	54 FUNCTION1 HPCD...	409.7974	25.53	0.000	0.000	1.7
	54 FUNCTION1 HPCD...	409.7974	25.20	0.000	0.000	1.5
	54 FUNCTION1 HPCD...	409.7974	24.84	0.000	0.000	1.5
	54 FUNCTION1 HPCD...	409.7974	24.09	0.000	0.000	2.6
	54 FUNCTION1 HPCD...	409.7974	23.34	0.000	0.000	2.2
	54 FUNCTION1 HPCD...	409.7974	23.14	0.000	0.000	2.2
	54 FUNCTION1 HPCD...	409.7974	28.95	0.000	0.000	1.9
	54 FUNCTION1 HPCD...	409.7974	28.66	0.000	0.000	3.2
	54 FUNCTION1 HPCD...	409.7974	28.30	0.000	0.000	4.4

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ETHERS3

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	55	FUNCTION2 HPCD...	409.7974	33.37	0.000		0.000					2.1
[redacted]	55	FUNCTION2 HPCD...	409.7974	33.04	0.000		0.000					1.1
[redacted]	55	FUNCTION2 HPCD...	409.7974	32.83	0.000		0.000					1.6
[redacted]	55	FUNCTION2 HPCD...	409.7974	32.69	0.000		0.000					1.4
[redacted]	55	FUNCTION2 HPCD...	409.7974	32.59	0.000		0.000					2.7
[redacted]	55	FUNCTION2 HPCD...	409.7974	32.51	0.000		0.000					1.4
[redacted]	55	FUNCTION2 HPCD...	409.7974	32.22	0.000		0.000					1.8
[redacted]	55	FUNCTION2 HPCD...	409.7974	32.08	0.000		0.000					1.4
[redacted]	55	FUNCTION2 HPCD...	409.7974	31.88	0.000		0.000					2.3
[redacted]	55	FUNCTION2 HPCD...	409.7974	31.36	0.000		0.000					1.4
[redacted]	55	FUNCTION2 HPCD...	409.7974	31.03	0.000		0.000					2.8
[redacted]	55	FUNCTION2 HPCD...	409.7974	30.11	0.000		0.000					2.2
[redacted]	55	FUNCTION2 HPCD...	409.7974	33.59	0.000		0.000					1.8

ETHERS4

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	56	FUNCTION3 OCDPE	445.7555	36.25	0.000		0.000					5.5
[redacted]	56	FUNCTION3 OCDPE	445.7555	35.62	0.000		0.000					6.3

ETHERS5

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	57	FUNCTION4 NCDPE	479.7165	42.15	0.000		0.000					4.3
[redacted]	57	FUNCTION4 NCDPE	479.7165	39.58	0.000		0.000					2.8

ETHERS6

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]												

Dataset: P:\DIOXIN8290.PRO\130227DATA1.qld

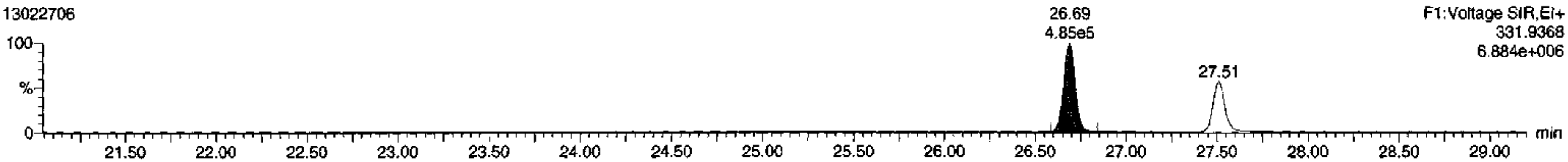
Last Altered: Thursday, February 28, 2013 09:49:31 Pacific Standard Time

Printed: Thursday, February 28, 2013 09:52:07 Pacific Standard Time

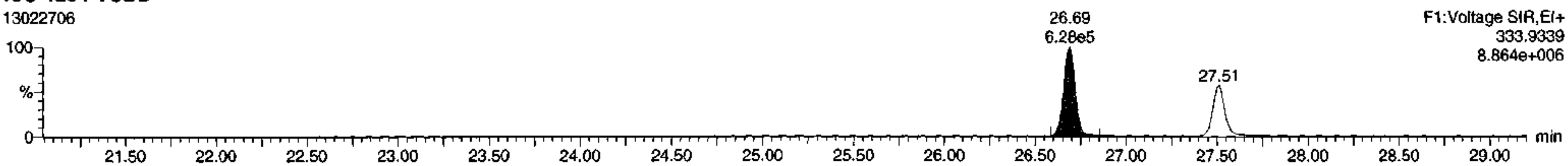
Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130225.mdb 26 Feb 2013 09:49:11
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: WE03A, Name: 13022706, Date: 27-Feb-2013, Time: 14:34:49, Conditions: AUTOSPEC01, User: pk

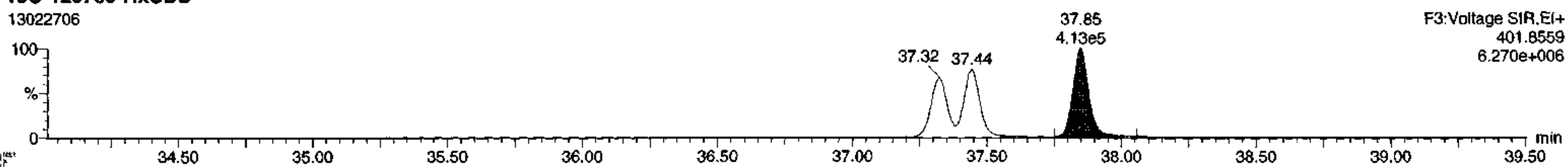
13C-1234-TCDD



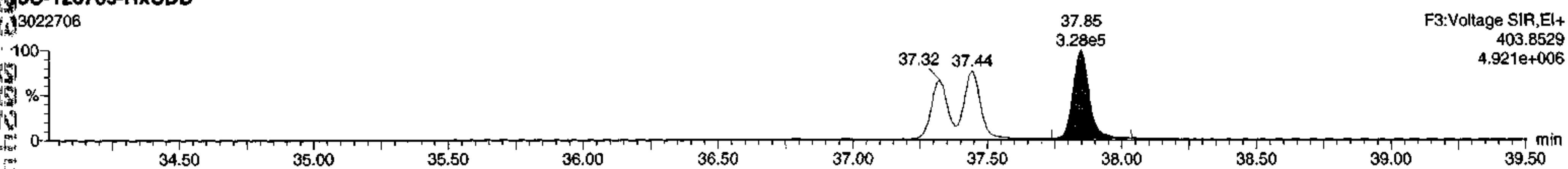
13C-1234-TCDD



13C-123789-HxCDD



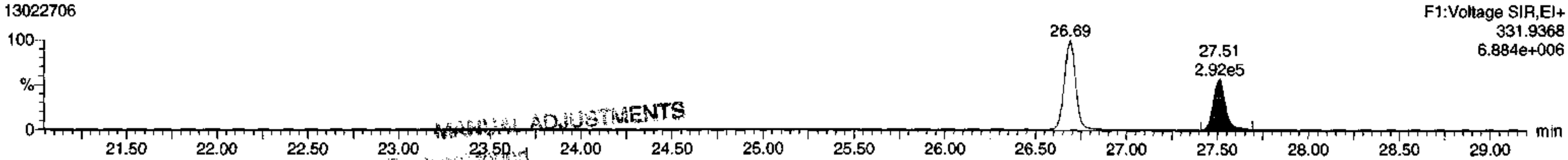
13C-123789-HxCDD



Dataset: P:\DIOXIN8290.PRO\130227DATA1.qld
Last Altered: Thursday, February 28, 2013 09:49:31 Pacific Standard Time
Printed: Thursday, February 28, 2013 09:52:07 Pacific Standard Time

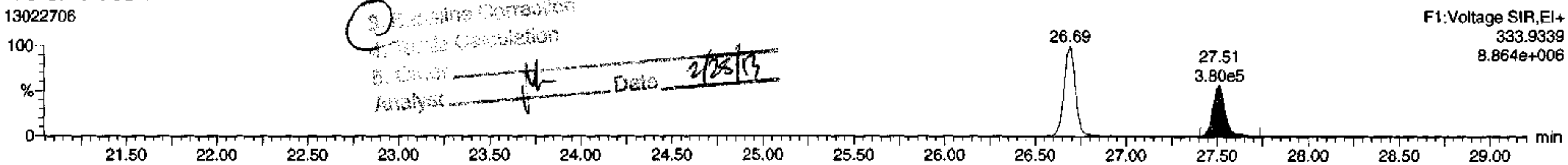
ID: WE03A, Name: 13022706, Date: 27-Feb-2013, Time: 14:34:49, Conditions: AUTOSPEC01, User: pk

13C-2378-TCDD

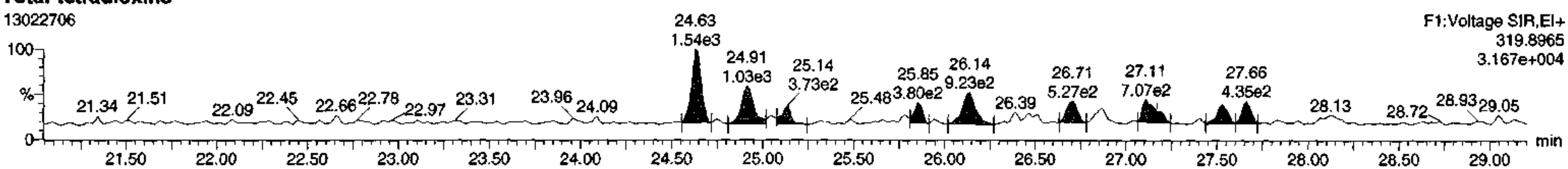


MANUAL ADJUSTMENTS
Chromatography
Correction
Calculation
Analyst Date 2/28/13

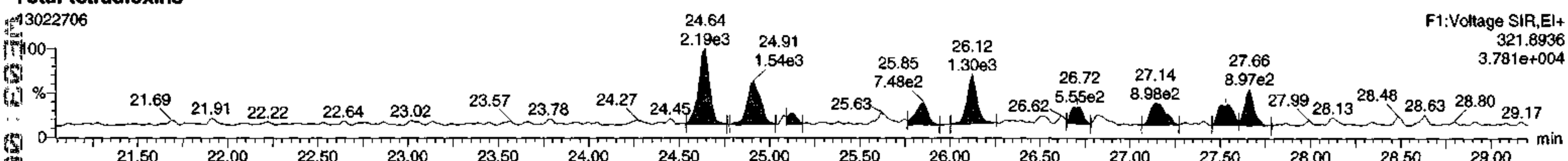
13C-2378-TCDD



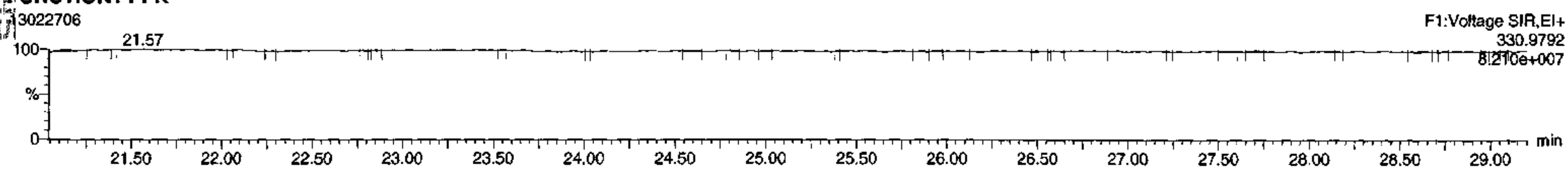
Total-tetradioxins



Total-tetradioxins



FUNCTION1 PFK



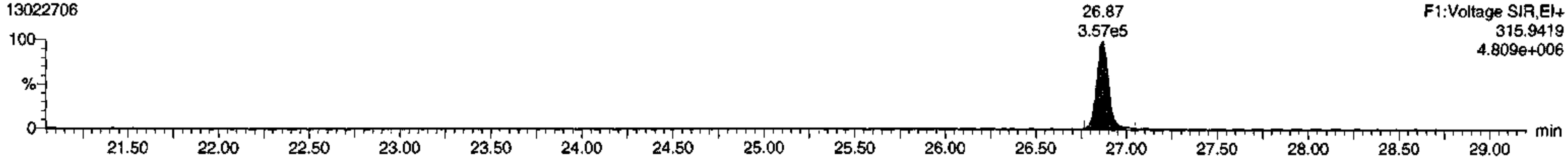
Dataset: P:\DIOXIN8290.PRO\130227DATA1.qld

Last Altered: Thursday, February 28, 2013 09:49:31 Pacific Standard Time

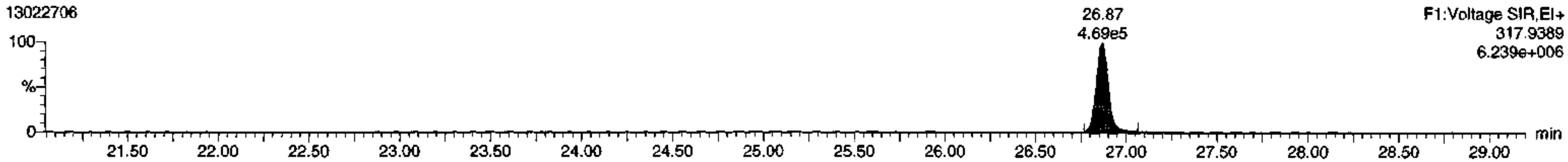
Printed: Thursday, February 28, 2013 09:52:07 Pacific Standard Time

ID: WE03A, Name: 13022706, Date: 27-Feb-2013, Time: 14:34:49, Conditions: AUTOSPEC01, User: pk

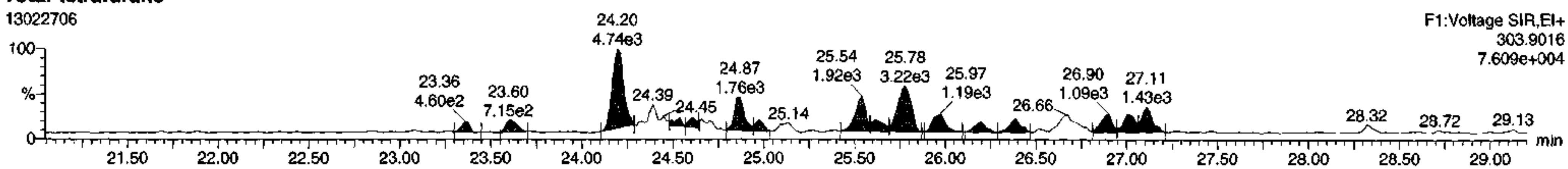
13C-2378-TCDF



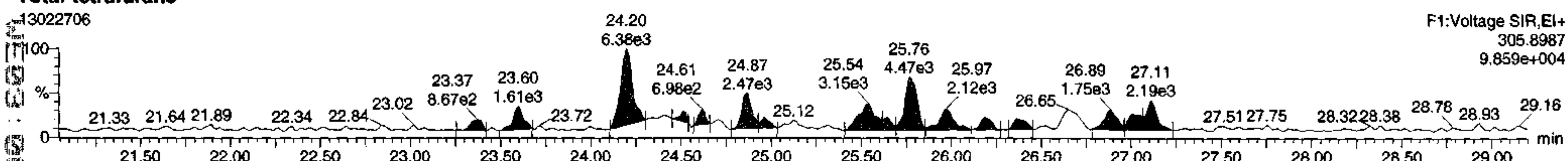
13C-2378-TCDF



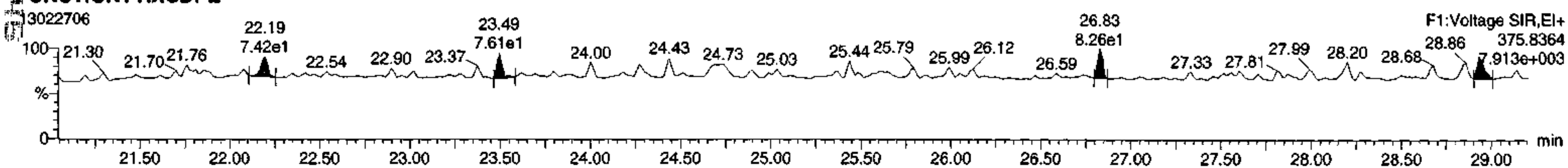
Total-tetrafurans



Total-tetrafurans



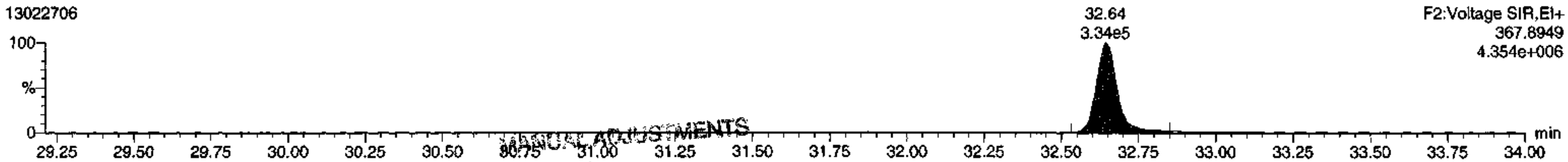
FUNCTION1 HXCDPE



Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130227DATA1.qld
Last Altered: Thursday, February 28, 2013 09:49:31 Pacific Standard Time
Printed: Thursday, February 28, 2013 09:52:07 Pacific Standard Time

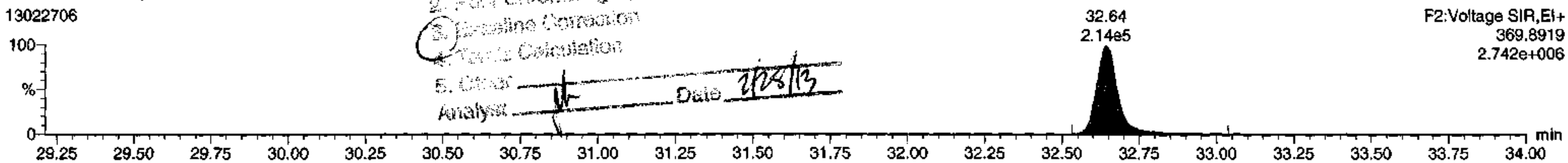
ID: WE03A, Name: 13022706, Date: 27-Feb-2013, Time: 14:34:49, Conditions: AUTOSPEC01, User: pk

13C-12378-PeCDD

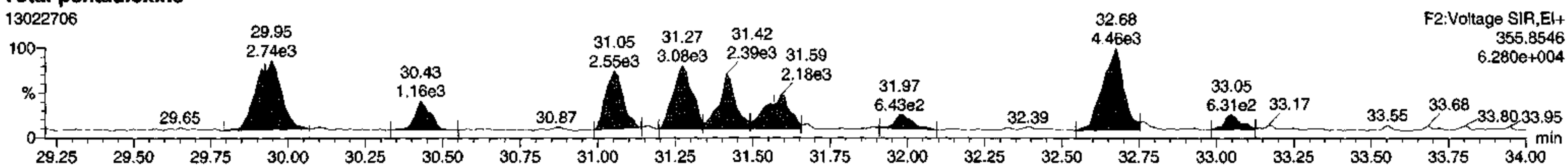


MANUAL ADJUSTMENTS
1. Peak not found
2. Poor Chromatography
3. Baseline Correction
4. Toxic Calculation
5. Other
Analyst
Date 2/28/13

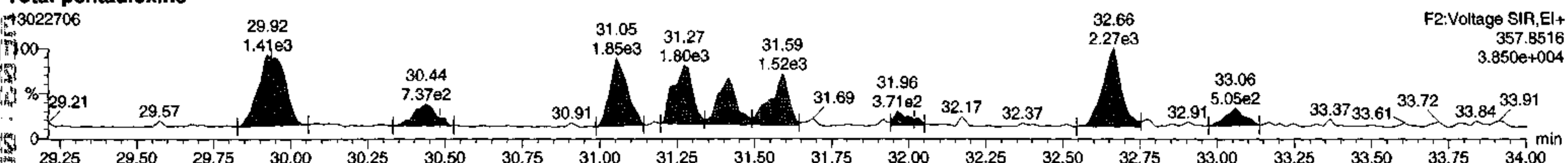
13C-12378-PeCDD



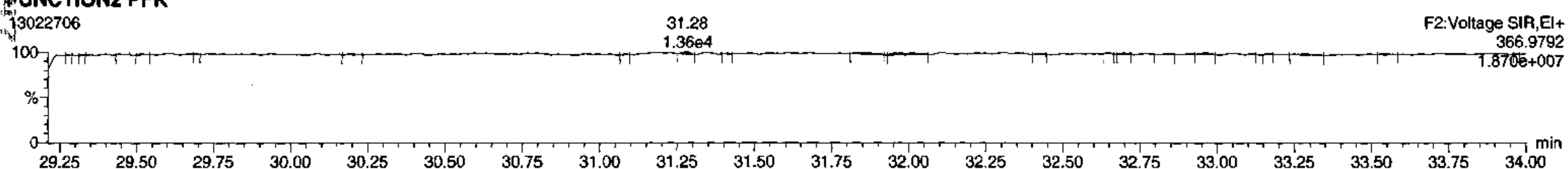
Total-pentadioxins



Total-pentadioxins



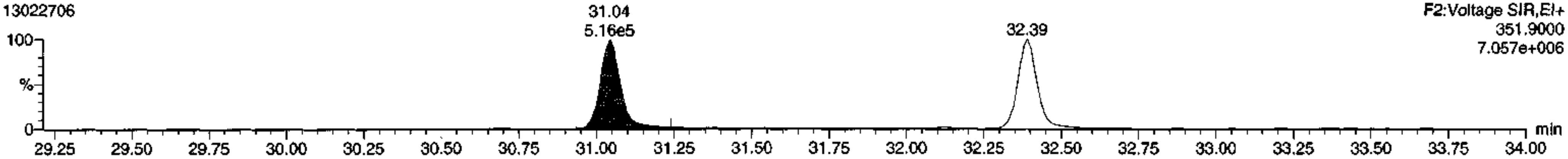
FUNCTION2 PFK



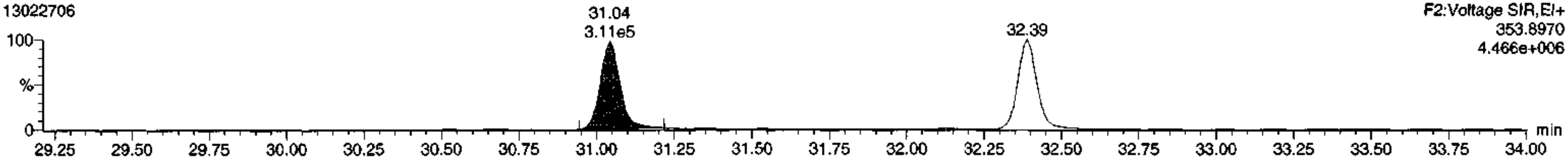
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130227DATA1.qld
Last Altered: Thursday, February 28, 2013 09:49:31 Pacific Standard Time
Printed: Thursday, February 28, 2013 09:52:07 Pacific Standard Time

ID: WE03A, Name: 13022706, Date: 27-Feb-2013, Time: 14:34:49, Conditions: AUTOSPEC01, User: pk

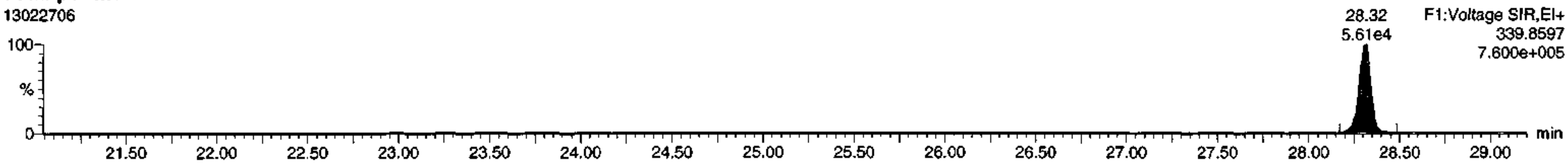
13C-12378-PeCDF



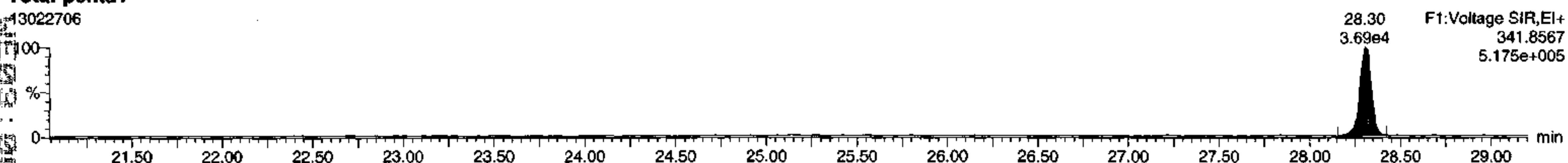
13C-12378-PeCDF



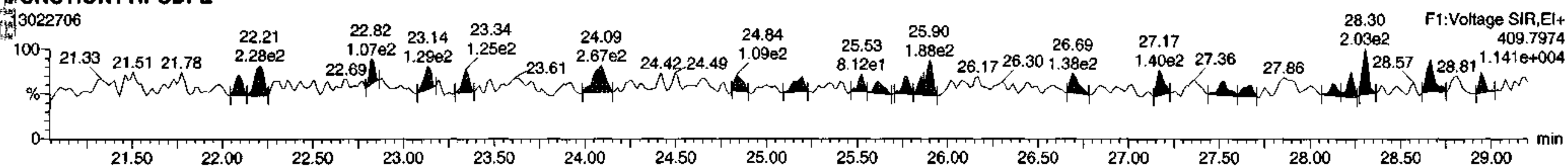
Total-penta1



Total-penta1



FUNCTION1 HPCDPE



Quantify Sample Report **MassLynx 4.1 SCN 714**

Dataset: P:\DIOXIN8290.PRO\130227DATA1.qld

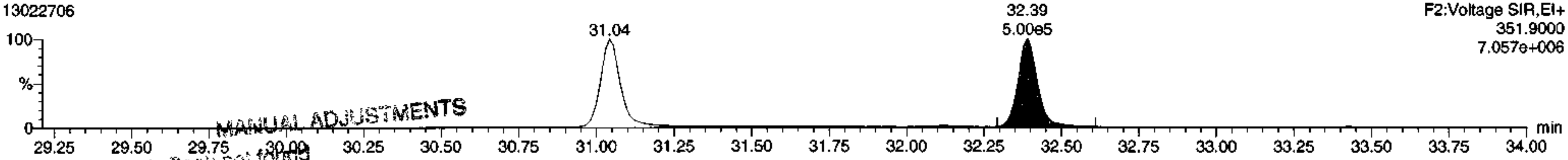
Last Altered: Thursday, February 28, 2013 09:49:31 Pacific Standard Time

Printed: Thursday, February 28, 2013 09:52:07 Pacific Standard Time

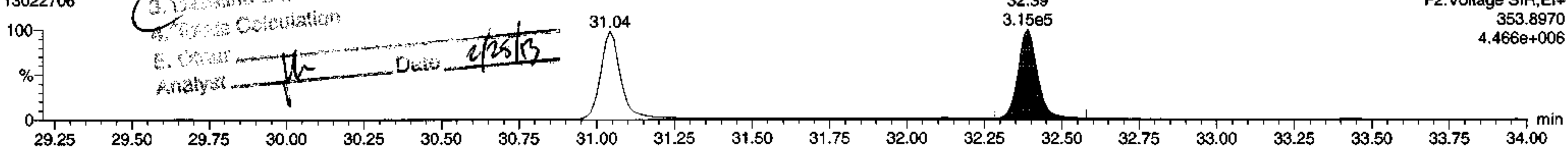
ID: WE03A, Name: 13022706, Date: 27-Feb-2013, Time: 14:34:49, Conditions: AUTOSPEC01, User: pk

MANUAL ADJUSTMENTS
1. Peak not found
2. Poor Chromatography
3. Baseline Correction
4. Totals Calculation
5. Other
Analyst ___ Date 2/28/13

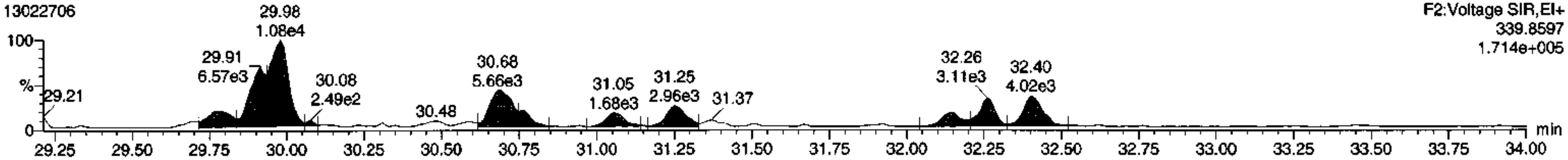
13C-23478-PeCDF



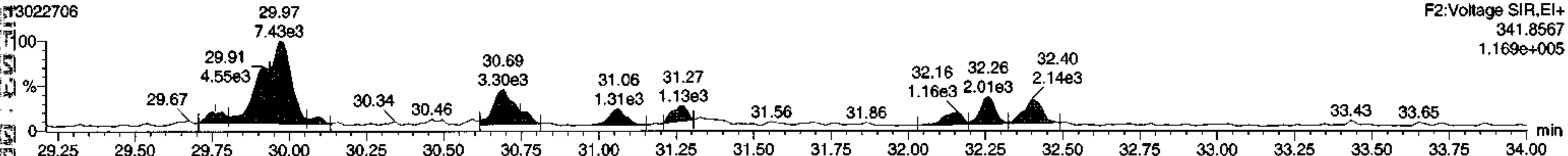
13C-23478-PeCDF



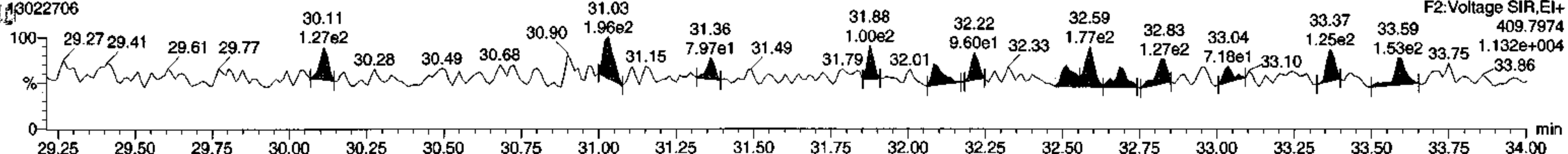
Total-pentafurans



Total-pentafurans



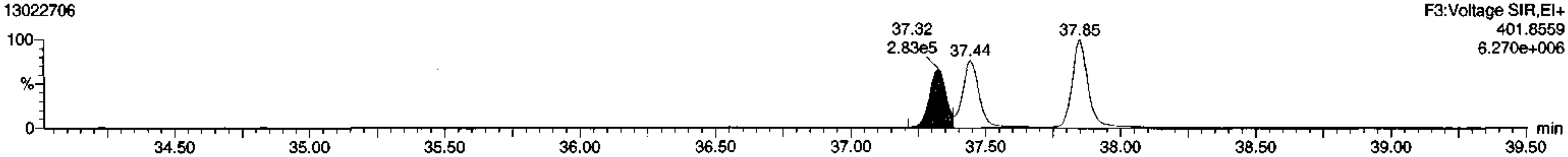
FUNCTION2 HPCDPE



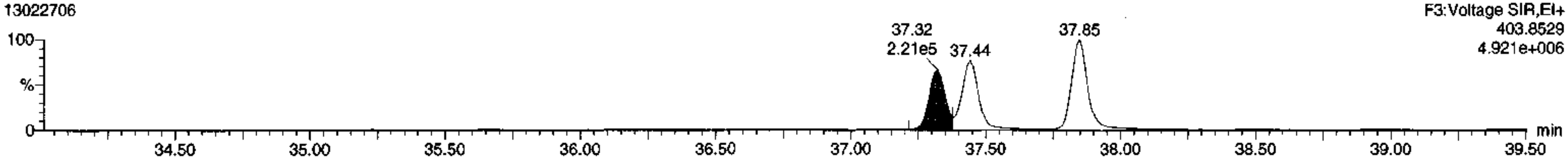
Dataset: P:\DIOXIN8290.PRO\130227DATA1.qld
Last Altered: Thursday, February 28, 2013 09:49:31 Pacific Standard Time
Printed: Thursday, February 28, 2013 09:52:07 Pacific Standard Time

ID: WE03A, Name: 13022706, Date: 27-Feb-2013, Time: 14:34:49, Conditions: AUTOSPEC01, User: pk

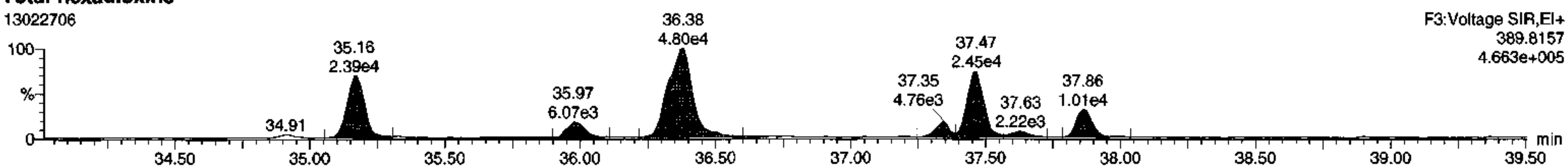
13C-123478-HxCDD
13022706



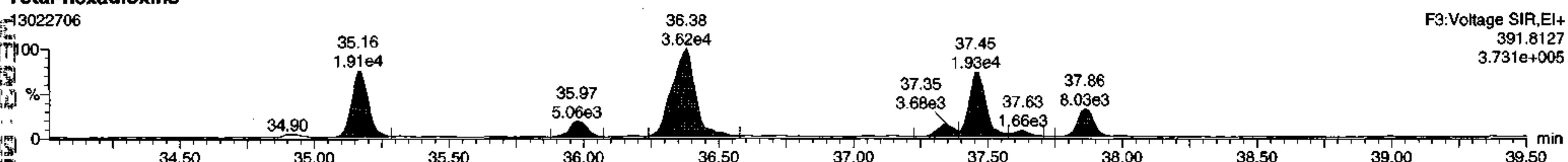
13C-123478-HxCDD
13022706



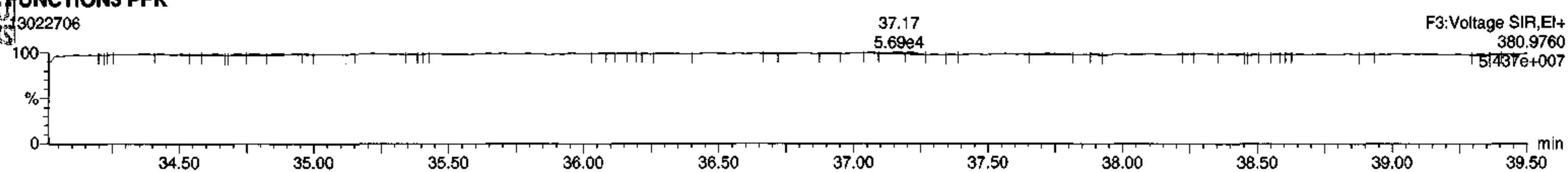
Total-hexadioxins
13022706



Total-hexadioxins
13022706



FUNCTION3 PFK
13022706

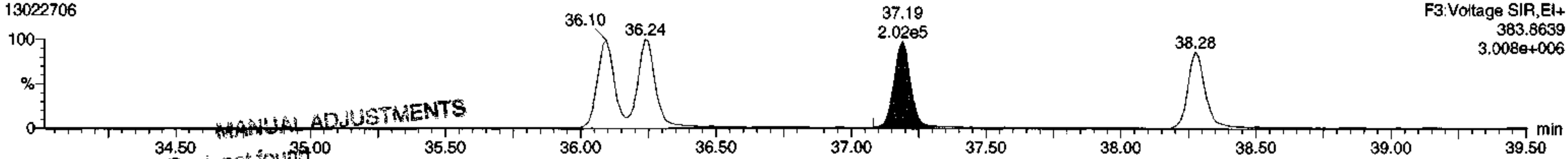


Dataset: P:\DIOXIN8290.PRO\130227DATA1.qld
Last Altered: Thursday, February 28, 2013 09:49:31 Pacific Standard Time
Printed: Thursday, February 28, 2013 09:52:07 Pacific Standard Time

ID: WE03A, Name: 13022706, Date: 27-Feb-2013, Time: 14:34:49, Conditions: AUTOSPEC01, User: pk

13C-234678-HxCDF

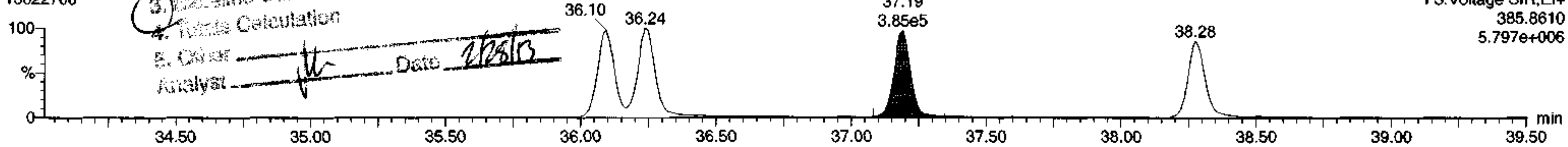
13022706 F3:Voltage SIR,EI+ 383.8639 3.008e+006



MANUAL ADJUSTMENTS
1. Peak not found
2. Poor Chromatography
3. Baseline Correction
4. Ratio Calculation
5. Other
Analyst ___ Date 2/28/13

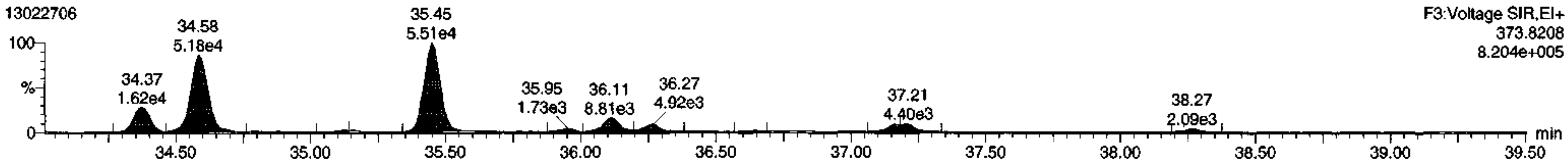
13C-234678-HxCDF

13022706 F3:Voltage SIR,EI+ 385.8610 5.797e+006



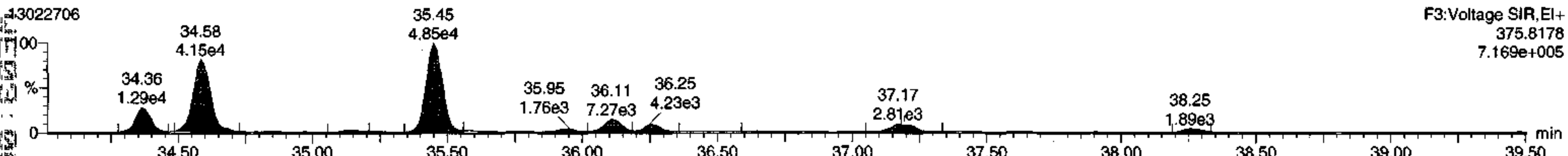
Total-hexafurans

13022706 F3:Voltage SIR,EI+ 373.8208 8.204e+005



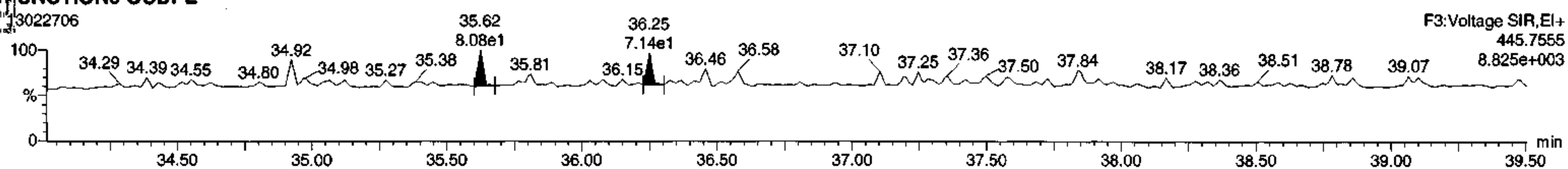
Total-hexafurans

13022706 F3:Voltage SIR,EI+ 375.8178 7.169e+005



FUNCTION3 OCDPE

13022706 F3:Voltage SIR,EI+ 445.7555 8.825e+003



WE03 : 00210

Quantify Sample Report **MassLynx 4.1 SCN 714**

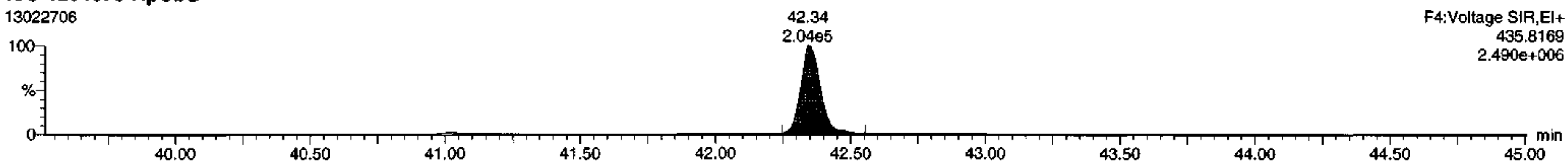
Dataset: P:\DIOXIN8290.PRO\130227DATA1.qld

Last Altered: Thursday, February 28, 2013 09:49:31 Pacific Standard Time

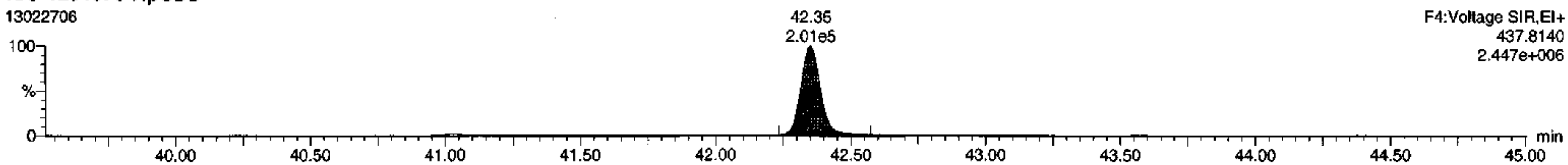
Printed: Thursday, February 28, 2013 09:52:07 Pacific Standard Time

ID: WE03A, Name: 13022706, Date: 27-Feb-2013, Time: 14:34:49, Conditions: AUTOSPEC01, User: pk

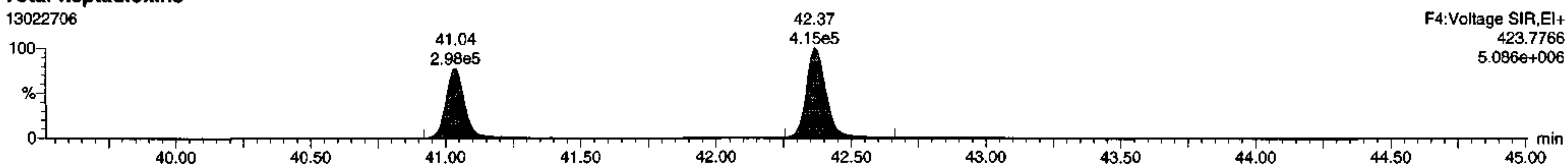
13C-1234678-HpCDD



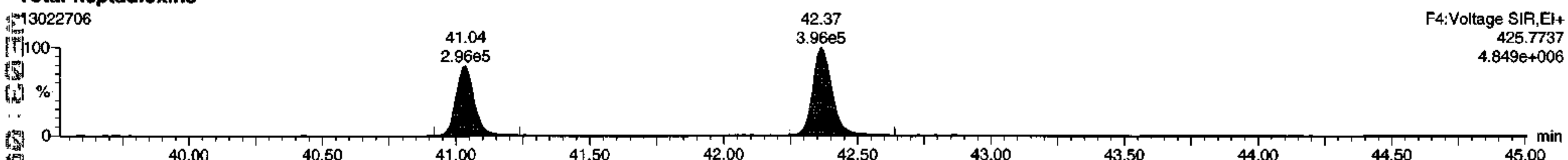
13C-1234678-HpCDD



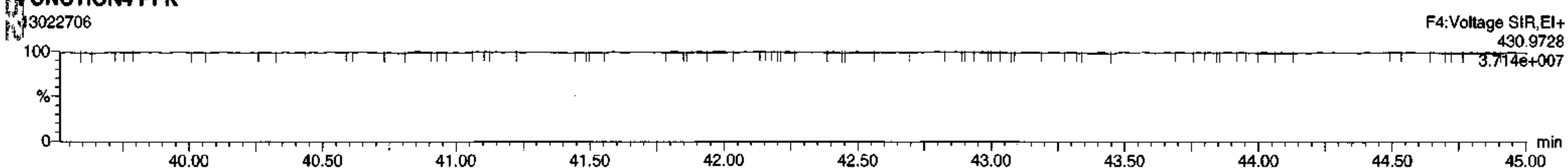
Total-heptadioxins



Total-heptadioxins



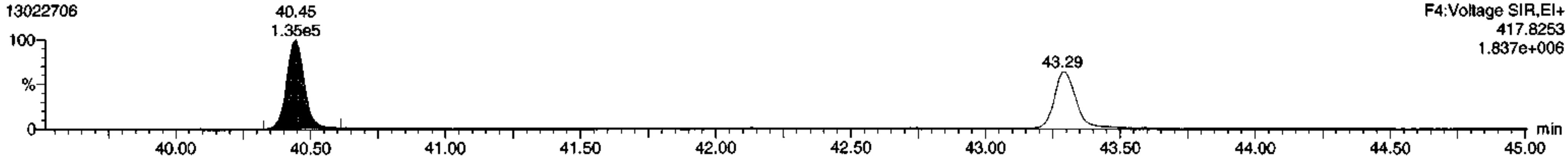
FUNCTION4 PFK



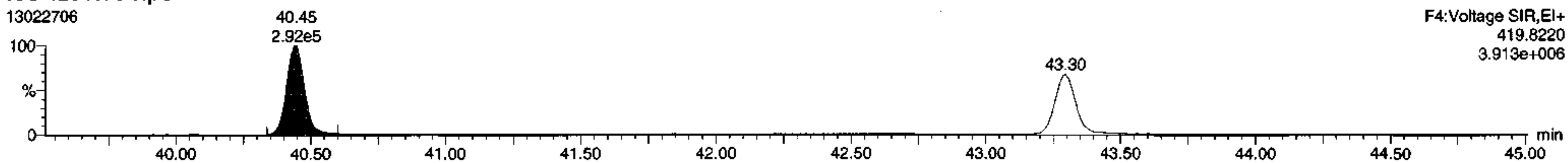
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130227DATA1.qld
Last Altered: Thursday, February 28, 2013 09:49:31 Pacific Standard Time
Printed: Thursday, February 28, 2013 09:52:07 Pacific Standard Time

ID: WE03A, Name: 13022706, Date: 27-Feb-2013, Time: 14:34:49, Conditions: AUTOSPEC01, User: pk

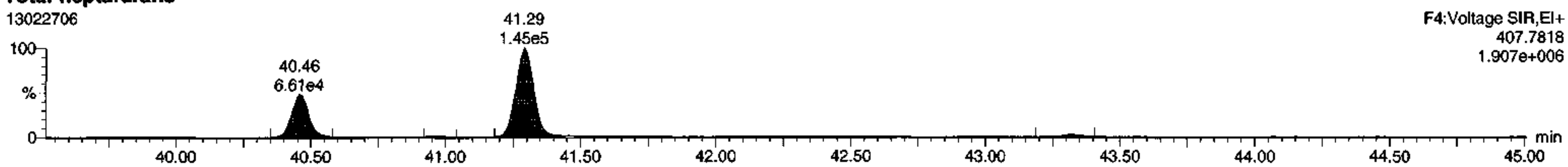
13C-1234678-HpCDF



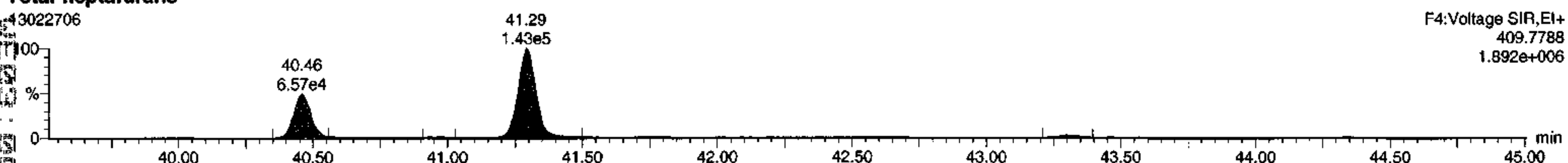
13C-1234678-HpCDF



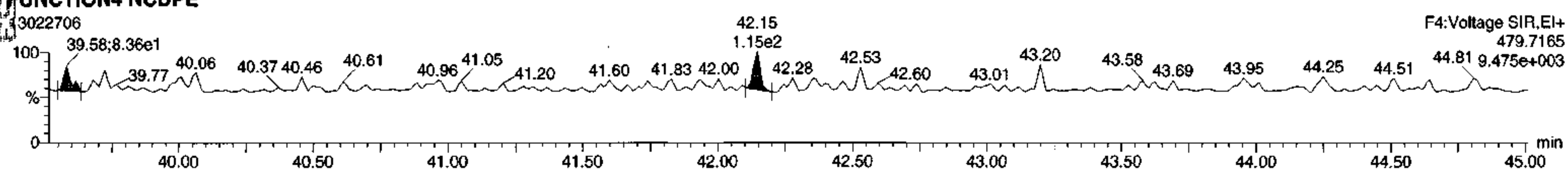
Total-heptafurans



Total-heptafurans



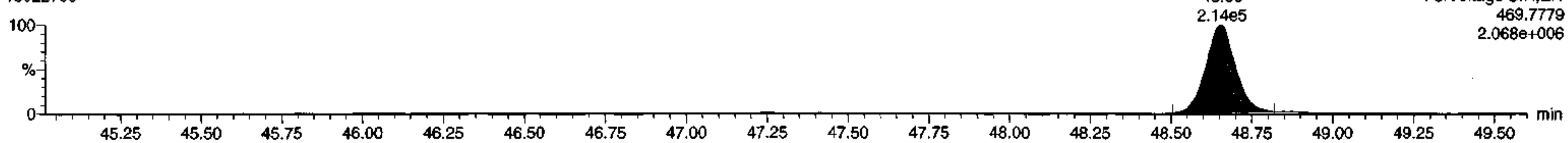
FUNCTION4 NCDPE



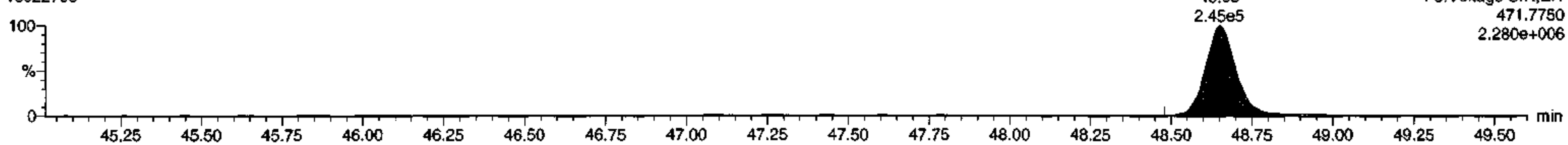
Dataset: P:\DIOXIN8290.PRO\130227DATA1.qld
Last Altered: Thursday, February 28, 2013 09:49:31 Pacific Standard Time
Printed: Thursday, February 28, 2013 09:52:07 Pacific Standard Time

ID: WE03A, Name: 13022706, Date: 27-Feb-2013, Time: 14:34:49, Conditions: AUTOSPEC01, User: pk

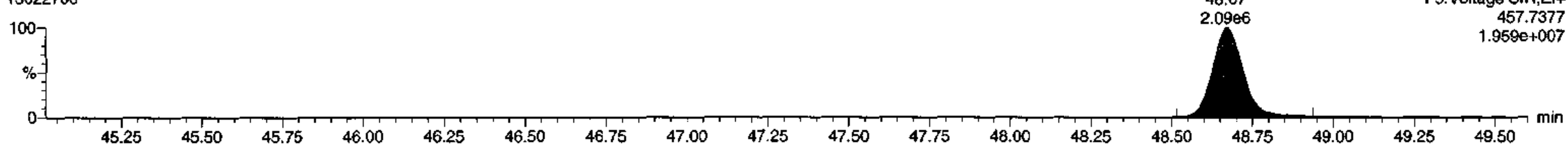
13C-OCDD
13022706



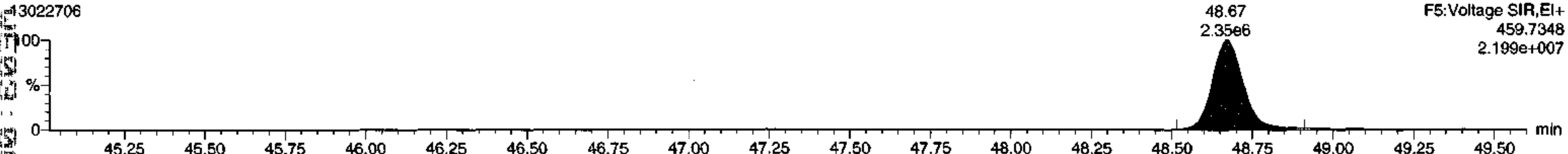
13C-OCDD
13022706



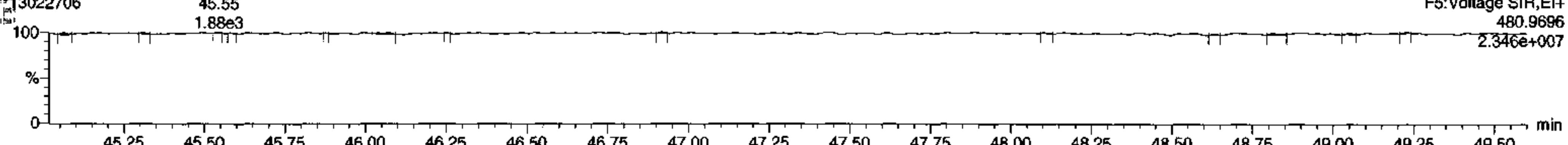
OCDD
13022706



OCDD
13022706



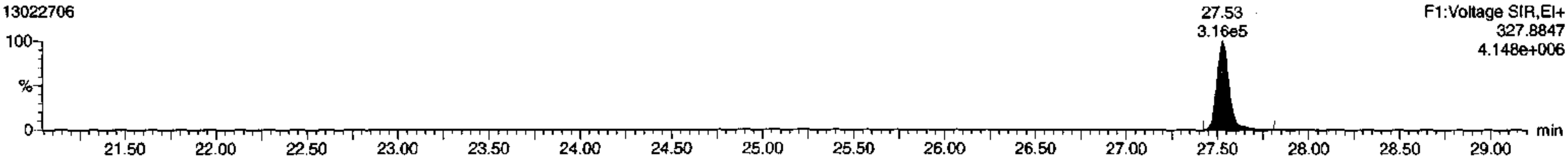
FUNCTION5 PFK
13022706



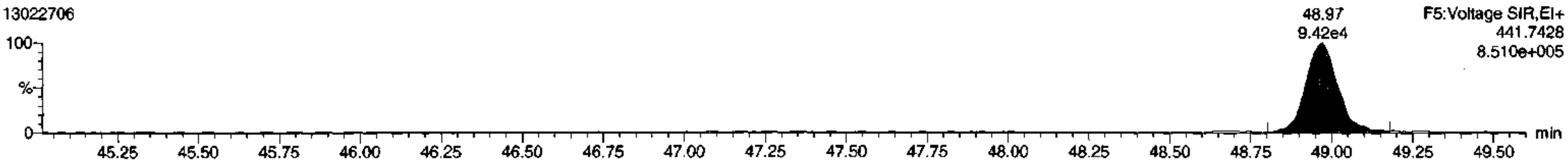
Dataset: P:\DIOXIN8290.PRO\130227DATA1.qld
Last Altered: Thursday, February 28, 2013 09:49:31 Pacific Standard Time
Printed: Thursday, February 28, 2013 09:52:07 Pacific Standard Time

ID: WE03A, Name: 13022706, Date: 27-Feb-2013, Time: 14:34:49, Conditions: AUTOSPEC01, User: pk

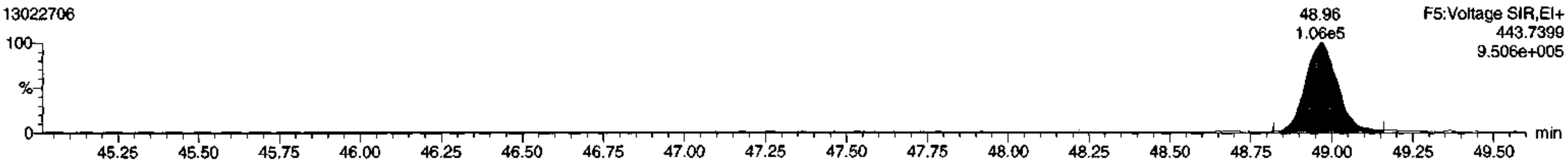
37CL-2378-TCDD



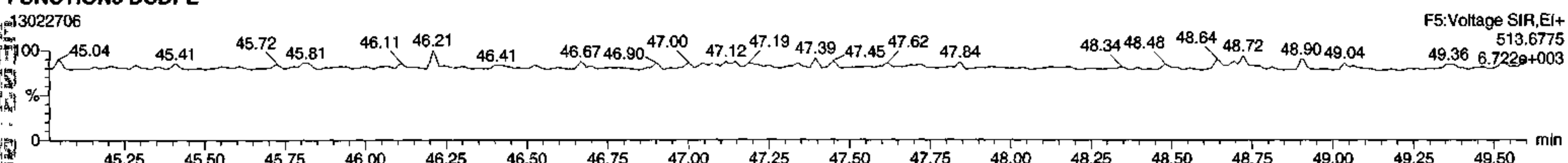
OCDF



OCDF



FUNCTION5 DCDPE



Quantify Sample Summary Report **MassLynx 4.1 SCN 714**

Dataset: P:\DIOXIN8290.PRO\130227DATA1.qld

Last Altered: Thursday, February 28, 2013 09:41:01 Pacific Standard Time

Printed: Thursday, February 28, 2013 09:42:24 Pacific Standard Time

pk 2/28/13

WE03 : 00255

Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130225.mdb 26 Feb 2013 09:49:11

Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: WE03B, Name: 13022707, Date: 27-Feb-2013, Time: 15:25:41, Conditions: AUTOSPEC01, User: pk

[redacted]																
[redacted]	2378-TCDF	26.870	1.000	1.10e3	2.06e3	0.921	0.533	0.770	7.2	2830	3240	2.05e4	3.00e4	YES	0.355	0.443
[redacted]	12378-PeCDF	31.064	1.001	2.99e3	1.60e3	0.912	1.874	1.550	47.1	931	2487	4.39e4	2.94e4	YES	0.520	0.586
[redacted]	23478-PeCDF	32.412	1.001	4.30e3	2.94e3	0.943	1.464	1.550	66.1	931	2487	6.15e4	4.64e4	NO	0.913	0.913
[redacted]	123478-HxCDF	36.117	1.001	1.16e4	8.60e3	1.101	1.349	1.240	136.0	1280	1593	1.74e5	1.21e5	NO	2.811	2.811
[redacted]	234678-HxCDF	37.202	1.000	8.90e3	8.04e3	1.073	1.107	1.240	74.0	1280	1593	9.48e4	7.59e4	NO	2.547	2.547
[redacted]	123678-HxCDF	36.271	1.001	6.01e3	5.40e3	1.056	1.113	1.240	66.3	1280	1593	8.49e4	7.04e4	NO	1.613	1.613
[redacted]	123789-HxCDF	38.265	0.999	2.43e3	1.97e3	1.017	1.232	1.240	25.0	1280	1593	3.20e4	2.81e4	NO	0.733	0.733
[redacted]	1234678-HpCDF	40.469	1.000	8.62e4	9.00e4	1.238	0.959	1.050	778.6	1537	1386	1.20e6	1.22e6	NO	29.470	29.470
[redacted]	1234789-HpCDF	43.319	1.000	4.29e3	3.83e3	1.224	1.121	1.050	32.9	1537	1386	5.06e4	4.08e4	NO	1.839	1.839
[redacted]	OCDF	48.982	1.006	1.19e5	1.44e5	1.162	0.830	0.890	741.1	1500	1567	1.11e6	1.35e6	NO	86.915	86.915
[redacted]	2378-TCDD	27.528	1.001	4.02e2	8.81e2	1.106	0.456	0.770	3.6	1677	1349	6.06e3	1.43e4	YES	0.127	0.176
[redacted]	12378-PeCDD	32.665	1.001	4.56e3	3.24e3	1.001	1.409	1.550	12.7	4596	1461	5.85e4	4.14e4	NO	1.350	1.350
[redacted]	123478-HxCDD	37.345	1.001	6.63e3	4.86e3	0.978	1.364	1.240	62.0	1613	1596	1.00e5	7.79e4	NO	2.093	2.093
[redacted]	123678-HxCDD	37.465	1.000	2.98e4	2.42e4	0.929	1.231	1.240	278.9	1613	1596	4.50e5	3.55e5	NO	9.530	9.530
[redacted]	123789-HxCDD	37.871	1.011	1.33e4	1.09e4	0.904	1.222	1.240	126.0	1613	1596	2.03e5	1.65e5	NO	4.557	4.557
[redacted]	1234678-HpCDD	42.376	1.000	5.13e5	5.04e5	1.029	1.018	1.050	2035.5	3107	3042	6.32e6	6.24e6	NO	225.886	225.886
[redacted]	OCDD	48.695	1.001	2.74e6	3.11e6	1.011	0.882	0.890	4457.1	5723	2941	2.55e7	2.87e7	NO	2225.271	2225.271 fr
[redacted]	13C-2378-TCDF	26.870	1.007	3.34e5	4.39e5	1.522	0.760	0.770	2642.0	1882	2206	4.97e6	6.50e6	NO		43.988
[redacted]	13C-12378-PeCDF	31.042	1.163	5.22e5	3.37e5	1.185	1.550	1.550	3436.3	2274	2406	7.81e6	5.04e6	NO		62.695
[redacted]	13C-23478-PeCDF	32.390	1.214	5.12e5	3.29e5	1.136	1.559	1.550	3338.5	2274	2406	7.59e6	4.89e6	NO		64.110
[redacted]	13C-123478-HxCDF	36.095	0.954	2.23e5	4.29e5	1.284	0.520	0.510	1035.1	3197	3300	3.31e6	6.34e6	NO		61.735
[redacted]	13C-123678-HxCDF	36.249	0.958	2.31e5	4.39e5	1.383	0.527	0.510	1069.7	3197	3300	3.42e6	6.42e6	NO		58.871
[redacted]	13C-234678-HxCDF	37.191	0.983	2.13e5	4.07e5	1.283	0.525	0.510	999.5	3197	3300	3.20e6	5.96e6	NO		58.685
[redacted]	13C-123789-HxCDF	38.287	1.012	2.03e5	3.88e5	1.099	0.523	0.510	942.8	3197	3300	3.01e6	5.70e6	NO		65.342
[redacted]	13C-1234678-HpCDF	40.458	1.069	1.47e5	3.36e5	1.070	0.437	0.440	1142.3	1775	2219	2.03e6	4.51e6	NO		54.854
[redacted]	13C-1234789-HpCDF	43.308	1.144	1.12e5	2.49e5	0.774	0.449	0.440	769.8	1775	2219	1.37e6	2.96e6	NO		56.688
[redacted]	13C-1234-TCDD	26.691	0.000	5.07e5	6.48e5	1.000	0.783	0.770	2025.9	3805	2100	7.71e6	9.93e6	NO		100.000
[redacted]	13C-2378-TCDD	27.513	1.031	2.87e5	3.73e5	0.943	0.769	0.770	1076.5	3805	2100	4.10e6	5.33e6	NO		60.641
[redacted]	13C-12378-PeCDD	32.643	1.223	3.55e5	2.22e5	0.715	1.601	1.550	3363.7	1547	1264	5.20e6	3.31e6	NO		69.864
[redacted]	13C-123478-HxCDD	37.323	0.986	3.13e5	2.49e5	1.032	1.258	1.240	2213.8	2119	1660	4.69e6	3.79e6	NO		66.083
[redacted]	13C-123678-HxCDD	37.454	0.990	3.41e5	2.69e5	1.076	1.267	1.240	2396.3	2119	1660	5.08e6	4.03e6	NO		68.888
[redacted]	13C-1234678-HpCDD	42.365	1.119	2.24e5	2.13e5	0.838	1.053	1.050	2100.9	1309	1227	2.75e6	2.63e6	NO		63.475
[redacted]	13C-OCDD	48.668	1.286	2.47e5	2.74e5	0.675	0.901	0.890	1374.0	1680	1362	2.31e6	2.55e6	NO		93.582

Quantify Sample Summary Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130227DATA1.qld
Last Altered: Thursday, February 28, 2013 09:41:01 Pacific Standard Time
Printed: Thursday, February 28, 2013 09:42:24 Pacific Standard Time

ID: WE03B, Name: 13022707, Date: 27-Feb-2013, Time: 15:25:41, Conditions: AUTOSPEC01, User: pk

[redacted]	13C-123789-HxCDD	37.849	0.000	4.61e5	3.63e5	1.000	1.270	1.240	3371.0	2119	1660	7.14e6	5.77e6	NO	100.000
[redacted]	Total-tetrafurans			2.17e4		0.921				2830		3.06e5			6.832
[redacted]	Total-penta1			6.20e4						827		8.61e5			13.375
[redacted]	Total-pentafurans			4.94e4		0.927				931		7.18e5			10.220
[redacted]	Total-hexafurans			1.81e5		1.062				1280		2.60e6			48.954
[redacted]	Total-heptafurans			2.72e5		1.231				1537		3.64e6			100.201
[redacted]	Total-Furans			7.05e5		1.065				2830		9.23e6			266.497
[redacted]	Total-tetradioxins			6.90e3		1.106				1677		1.07e5			2.340
[redacted]	Total-pentadioxins			2.56e4		1.001				4596		3.50e5			7.333
[redacted]	Total-hexadioxins			1.45e5		0.937				1613		1.95e6			48.037
[redacted]	Total-heptadioxins			9.03e5		1.029				3107		1.15e7			395.479
[redacted]	Total-Dioxins			3.82e6		0.994				1677		3.94e7			2678.460
[redacted]	Total-TEQ			4.53e6						1677		4.86e7			2944.957
[redacted]	37CL-2378-TCDD	27.528	1.031	3.06e5		1.051			2384.5	1887		4.50e6			25.241
[redacted]	FUNCTION1 PFK			2.00e6						578384		3.88e7			
[redacted]	FUNCTION2 PFK			1.57e5						222676		5.54e6			0.000
[redacted]	FUNCTION3 PFK			1.89e6						375106		2.68e7			0.000
[redacted]	FUNCTION4 PFK			8.92e4						286667		2.99e6			
[redacted]	FUNCTION5 PFK			1.63e5						225402		6.66e6			
[redacted]	FUNCTION1 HXCDPE			7.78e1						420		2.12e3			0.000
[redacted]	FUNCTION1 HPCDPE			2.31e3						1346		5.02e4			0.000
[redacted]	FUNCTION2 HPCDPE			1.06e3						1588		3.19e4			0.000
[redacted]	FUNCTION3 OCDPE			1.06e2						799		4.19e3			0.000
[redacted]	FUNCTION4 NCDPE			5.79e2						985		1.88e4			0.000
[redacted]	FUNCTION5 DCDPE			0.00e0						411		0.00e0			

WE03 : 00257

Quantify Totals Report MassLynx 4.1 SCN 714
Dataset: P:\DIOXIN8290.PRO\130227DATA1.qld
Last Altered: Thursday, February 28, 2013 09:41:01 Pacific Standard Time
Printed: Thursday, February 28, 2013 09:42:24 Pacific Standard Time

Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130225.mdb 26 Feb 2013 09:49:11
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: WE03B, Name: 13022707, Date: 27-Feb-2013, Time: 15:25:41, Conditions: AUTOSPEC01, User: pk

TF

35	Total-tetrafurans	303.9016	25.53	4914.842	0.921	0.690		0.71	0.77	NO	8.5
35	Total-tetrafurans	303.9016	24.87	3542.662	0.921	0.497		1.02	0.77	YES	10.2
35	Total-tetrafurans	303.9016	24.42	2338.240	0.921	0.328		1.76	0.77	YES	4.8
35	Total-tetrafurans	303.9016	24.20	12217.204	0.921	1.716		0.83	0.77	NO	24.1
35	Total-tetrafurans	303.9016	23.61	2224.431	0.921	0.312		0.75	0.77	NO	4.1
35	Total-tetrafurans	303.9016	27.12	4464.908	0.921	0.627		0.58	0.77	YES	8.2
35	Total-tetrafurans	303.9016	27.00	2825.056	0.921	0.397		0.73	0.77	NO	5.8
1	2378-TCDF	303.9016	26.87	3157.938	0.921	0.443	0.355	0.53	0.77	YES	7.2
35	Total-tetrafurans	303.9016	26.38	2884.960	0.921	0.405		0.80	0.77	NO	9.0
35	Total-tetrafurans	303.9016	25.97	2325.112	0.921	0.327		1.31	0.77	YES	8.0
35	Total-tetrafurans	303.9016	25.78	6321.157	0.921	0.888		0.79	0.77	NO	14.0
35	Total-tetrafurans	303.9016	25.64	1432.506	0.921	0.201		0.79	0.77	NO	4.1

PP

36	Total-penta1	339.8597	28.30	104183.753		13.375		1.47	1.55	NO	1040.0

PF

37	Total-pentafurans	339.8597	32.14	4899.541	0.927	0.622		1.39	1.55	NO	44.3
37	Total-pentafurans	339.8597	31.26	5356.519	0.927	0.680		1.65	1.55	NO	58.0
2	12378-PeCDF	339.8597	31.06	4590.828	0.912	0.586	0.520	1.87	1.55	YES	47.1
37	Total-pentafurans	339.8597	30.69	12456.547	0.927	1.581		1.56	1.55	NO	88.1
37	Total-pentafurans	339.8597	29.98	21101.477	0.927	2.678		1.53	1.55	NO	214.1
37	Total-pentafurans	339.8597	29.91	13027.344	0.927	1.654		1.54	1.55	NO	151.4
37	Total-pentafurans	339.8597	29.79	4950.517	0.927	0.628		1.81	1.55	YES	34.3
3	23478-PeCDF	339.8597	32.41	7238.049	0.943	0.913	0.913	1.48	1.55	NO	66.1
37	Total-pentafurans	339.8597	32.26	6022.952	0.927	0.764		1.80	1.55	YES	57.0
37	Total-pentafurans	339.8597	30.47	891.243	0.927	0.113		2.14	1.55	YES	10.6

HF

38	Total-hexafurans	373.8208	36.65	1051.931	1.062	0.156		0.67	1.24	YES	4.3
6	123678-HxCDF	373.8208	36.27	11412.653	1.056	1.613	1.613	1.11	1.24	NO	66.3
4	123478-HxCDF	373.8208	36.12	20199.417	1.101	2.811	2.811	1.35	1.24	NO	136.0
38	Total-hexafurans	373.8208	35.95	5119.699	1.062	0.761		1.09	1.24	NO	33.0
38	Total-hexafurans	373.8208	35.46	121760.172	1.062	18.104		1.19	1.24	NO	779.8
38	Total-hexafurans	373.8208	35.13	1999.998	1.062	0.297		1.27	1.24	NO	16.0
38	Total-hexafurans	373.8208	34.59	111811.250	1.062	16.625		1.27	1.24	NO	689.2
38	Total-hexafurans	373.8208	34.39	35694.688	1.062	5.307		1.15	1.24	NO	205.1
7	123789-HxCDF	373.8208	38.27	4407.423	1.017	0.733	0.733	1.23	1.24	NO	25.0
5	234678-HxCDF	373.8208	37.20	16936.629	1.073	2.547	2.547	1.11	1.24	NO	74.0

Dataset: P:\DIOXIN8290.PRO\130227DATA1.qld
Last Altered: Thursday, February 28, 2013 09:41:01 Pacific Standard Time
Printed: Thursday, February 28, 2013 09:42:24 Pacific Standard Time

ID: WE03B, Name: 13022707, Date: 27-Feb-2013, Time: 15:25:41, Conditions: AUTOSPEC01, User: pk

HPF

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	9 1234789-HpCDF	407.7818	43.32	8123.938	1.224	1.839	1.839	1.12	1.05	NO	32.9
[redacted]	39 Total-heptafurans	407.7818	41.60	276.864	1.231	0.053		1.13	1.05	NO	3.1
[redacted]	39 Total-heptafurans	407.7818	41.30	353979.688	1.231	68.157		1.03	1.05	NO	1538.2
[redacted]	39 Total-heptafurans	407.7818	40.99	3539.969	1.231	0.682		0.94	1.05	NO	13.4
[redacted]	8 1234678-HpCDF	407.7818	40.47	176192.383	1.238	29.470	29.470	0.96	1.05	NO	778.6

Furans,TF,PP,PF,HF,HPF,OF

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	35 Total-tetrafurans	303.9016	25.53	4914.842	0.921	0.690		0.71	0.77	NO	8.5
[redacted]	35 Total-tetrafurans	303.9016	24.87	3542.662	0.921	0.497		1.02	0.77	YES	10.2
[redacted]	35 Total-tetrafurans	303.9016	24.42	2338.240	0.921	0.328		1.76	0.77	YES	4.8
[redacted]	35 Total-tetrafurans	303.9016	24.20	12217.204	0.921	1.716		0.83	0.77	NO	24.1
[redacted]	35 Total-tetrafurans	303.9016	23.61	2224.431	0.921	0.312		0.75	0.77	NO	4.1
[redacted]	35 Total-tetrafurans	303.9016	27.12	4464.908	0.921	0.627		0.58	0.77	YES	8.2
[redacted]	35 Total-tetrafurans	303.9016	27.00	2825.056	0.921	0.397		0.73	0.77	NO	5.8
[redacted]	1 2378-TCDF	303.9016	26.87	3157.938	0.921	0.443	0.355	0.53	0.77	YES	7.2
[redacted]	35 Total-tetrafurans	303.9016	26.38	2884.960	0.921	0.405		0.80	0.77	NO	9.0
[redacted]	35 Total-tetrafurans	303.9016	25.97	2325.112	0.921	0.327		1.31	0.77	YES	8.0
[redacted]	35 Total-tetrafurans	303.9016	25.78	6321.157	0.921	0.888		0.79	0.77	NO	14.0
[redacted]	35 Total-tetrafurans	303.9016	25.64	1432.506	0.921	0.201		0.79	0.77	NO	4.1
[redacted]	37 Total-pentafurans	339.8597	32.14	4899.541	0.927	0.622		1.39	1.55	NO	44.3
[redacted]	37 Total-pentafurans	339.8597	31.26	5356.519	0.927	0.680		1.65	1.55	NO	58.0
[redacted]	2 12378-PeCDF	339.8597	31.06	4590.828	0.912	0.586	0.520	1.87	1.55	YES	47.1
[redacted]	37 Total-pentafurans	339.8597	30.69	12456.547	0.927	1.581		1.56	1.55	NO	88.1
[redacted]	37 Total-pentafurans	339.8597	29.98	21101.477	0.927	2.678		1.53	1.55	NO	214.1
[redacted]	37 Total-pentafurans	339.8597	29.91	13027.344	0.927	1.654		1.54	1.55	NO	151.4
[redacted]	37 Total-pentafurans	339.8597	29.79	4950.517	0.927	0.628		1.81	1.55	YES	34.3
[redacted]	3 23478-PeCDF	339.8597	32.41	7238.049	0.943	0.913	0.913	1.46	1.55	NO	66.1
[redacted]	37 Total-pentafurans	339.8597	32.26	6022.952	0.927	0.764		1.80	1.55	YES	57.0
[redacted]	38 Total-hexafurans	373.8208	36.65	1051.931	1.062	0.156		0.67	1.24	YES	4.3
[redacted]	6 123678-HxCDF	373.8208	36.27	11412.653	1.056	1.613	1.613	1.11	1.24	NO	66.3
[redacted]	4 123478-HxCDF	373.8208	36.12	20199.417	1.101	2.811	2.811	1.35	1.24	NO	136.0
[redacted]	38 Total-hexafurans	373.8208	35.95	5119.699	1.062	0.761		1.09	1.24	NO	33.0
[redacted]	38 Total-hexafurans	373.8208	35.46	121760.172	1.062	18.104		1.19	1.24	NO	779.8
[redacted]	38 Total-hexafurans	373.8208	35.13	1999.998	1.062	0.297		1.27	1.24	NO	16.0
[redacted]	38 Total-hexafurans	373.8208	34.59	111811.250	1.062	16.625		1.27	1.24	NO	689.2
[redacted]	38 Total-hexafurans	373.8208	34.39	35694.688	1.062	5.307		1.15	1.24	NO	205.1
[redacted]	7 123789-HxCDF	373.8208	38.27	4407.423	1.017	0.733	0.733	1.23	1.24	NO	25.0
[redacted]	5 234678-HxCDF	373.8208	37.20	16936.629	1.073	2.547	2.547	1.11	1.24	NO	74.0
[redacted]	9 1234789-HpCDF	407.7818	43.32	8123.938	1.224	1.839	1.839	1.12	1.05	NO	32.9
[redacted]	39 Total-heptafurans	407.7818	41.60	276.864	1.231	0.053		1.13	1.05	NO	3.1
[redacted]	39 Total-heptafurans	407.7818	41.30	353979.688	1.231	68.157		1.03	1.05	NO	1538.2
[redacted]	39 Total-heptafurans	407.7818	40.99	3539.969	1.231	0.682		0.94	1.05	NO	13.4
[redacted]	8 1234678-HpCDF	407.7818	40.47	176192.383	1.238	29.470	29.470	0.96	1.05	NO	778.6
[redacted]	10 OCDF	441.7428	48.98	262800.540	1.162	86.915	86.915	0.83	0.89	NO	741.1
[redacted]	36 Total-penta1	339.8597	28.30	104183.753		13.375		1.47	1.55	NO	1040.0
[redacted]	37 Total-pentafurans	339.8597	30.47	891.243	0.927	0.113		2.14	1.55	YES	10.6

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TD

[redacted]												
[redacted]	41	Total-tetradioxins	319.8965	27.15	1119.739	1.106	0.153		0.69	0.77	NO	5.0
[redacted]	41	Total-tetradioxins	319.8965	26.74	1508.374	1.106	0.207		0.66	0.77	NO	4.3
[redacted]	41	Total-tetradioxins	319.8965	26.50	814.479	1.106	0.112		0.68	0.77	NO	3.4
[redacted]	41	Total-tetradioxins	319.8965	26.12	2453.591	1.106	0.336		0.79	0.77	NO	8.4
[redacted]	41	Total-tetradioxins	319.8965	25.87	1002.451	1.106	0.137		0.90	0.77	YES	3.1
[redacted]	41	Total-tetradioxins	319.8965	24.91	2736.787	1.106	0.375		0.50	0.77	YES	9.8
[redacted]	41	Total-tetradioxins	319.8965	24.64	3849.521	1.106	0.527		0.83	0.77	NO	16.3
[redacted]	41	Total-tetradioxins	319.8965	27.66	1547.201	1.106	0.212		0.68	0.77	NO	6.0
[redacted]	11	2378-TCDD	319.8965	27.53	1282.599	1.106	0.176	0.127	0.46	0.77	YES	3.6
[redacted]	41	Total-tetradioxins	319.8965	27.14	776.579	1.106	0.106		0.55	0.77	YES	4.0

PD

[redacted]												
[redacted]	42	Total-pentadioxins	355.8546	31.27	6069.094	1.001	1.050		1.42	1.55	NO	12.8
[redacted]	42	Total-pentadioxins	355.8546	31.06	5487.499	1.001	0.950		1.27	1.55	YES	11.0
[redacted]	42	Total-pentadioxins	355.8546	30.44	2426.701	1.001	0.420		2.29	1.55	YES	5.2
[redacted]	42	Total-pentadioxins	355.8546	30.36	173.076	1.001	0.030		0.68	1.55	YES	0.8
[redacted]	42	Total-pentadioxins	355.8546	29.96	8776.583	1.001	1.519		1.58	1.55	NO	12.2
[redacted]	42	Total-pentadioxins	355.8546	33.06	1845.623	1.001	0.319		1.98	1.55	YES	3.9
[redacted]	12	12378-PeCDD	355.8546	32.66	7801.050	1.001	1.350	1.350	1.41	1.55	NO	12.7
[redacted]	42	Total-pentadioxins	355.8546	32.00	1677.028	1.001	0.290		1.46	1.55	NO	2.9
[redacted]	42	Total-pentadioxins	355.8546	31.56	3915.142	1.001	0.678		2.06	1.55	YES	6.6
[redacted]	42	Total-pentadioxins	355.8546	31.43	4192.248	1.001	0.726		1.33	1.55	NO	7.8

HD

[redacted]												
[redacted]	15	123789-HxCDD	389.8157	37.87	24148.026	0.904	4.557	4.557	1.22	1.24	NO	126.0
[redacted]	43	Total-hexadioxins	389.8157	37.64	4172.923	0.937	0.760		0.91	1.24	YES	22.8
[redacted]	14	123678-HxCDD	389.8157	37.47	54059.455	0.929	9.530	9.530	1.23	1.24	NO	278.9
[redacted]	13	123478-HxCDD	389.8157	37.34	11487.857	0.978	2.093	2.093	1.36	1.24	NO	62.0
[redacted]	43	Total-hexadioxins	389.8157	36.48	3310.562	0.937	0.603		1.09	1.24	NO	17.5
[redacted]	43	Total-hexadioxins	389.8157	36.38	101030.328	0.937	18.399		1.21	1.24	NO	362.5
[redacted]	43	Total-hexadioxins	389.8157	36.10	432.987	0.937	0.079		1.07	1.24	NO	3.3
[redacted]	43	Total-hexadioxins	389.8157	35.99	13437.712	0.937	2.447		1.32	1.24	NO	74.6
[redacted]	43	Total-hexadioxins	389.8157	35.17	52549.481	0.937	9.570		1.22	1.24	NO	259.8

HPD

[redacted]												
[redacted]	16	1234678-HpCDD	423.7766	42.38	1017114.938	1.029	225.886	225....	1.02	1.05	NO	2035.5
[redacted]	44	Total-heptadioxins	423.7766	41.05	763640.094	1.029	169.593		1.04	1.05	NO	1665.1

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Dioxins,TD,PD,HD,HPD,OD

[redacted]												
[redacted]	41	Total-tetradioxins	319.8965	27.15	1119.739	1.106	0.153		0.69	0.77	NO	5.0
[redacted]	41	Total-tetradioxins	319.8965	26.74	1508.374	1.106	0.207		0.66	0.77	NO	4.3
[redacted]	41	Total-tetradioxins	319.8965	26.50	814.479	1.106	0.112		0.68	0.77	NO	3.4
[redacted]	41	Total-tetradioxins	319.8965	26.12	2453.591	1.106	0.336		0.79	0.77	NO	8.4
[redacted]	41	Total-tetradioxins	319.8965	25.87	1002.451	1.106	0.137		0.90	0.77	YES	3.1
[redacted]	41	Total-tetradioxins	319.8965	24.91	2736.787	1.106	0.375		0.50	0.77	YES	9.8
[redacted]	41	Total-tetradioxins	319.8965	24.64	3849.521	1.106	0.527		0.83	0.77	NO	16.3
[redacted]	41	Total-tetradioxins	319.8965	27.66	1547.201	1.106	0.212		0.68	0.77	NO	6.0
[redacted]	11	2378-TCDD	319.8965	27.53	1282.599	1.106	0.176	0.127	0.46	0.77	YES	3.6
[redacted]	42	Total-pentadioxins	355.8546	31.27	6069.094	1.001	1.050		1.42	1.55	NO	12.8
[redacted]	42	Total-pentadioxins	355.8546	31.06	5487.499	1.001	0.950		1.27	1.55	YES	11.0
[redacted]	42	Total-pentadioxins	355.8546	30.44	2426.701	1.001	0.420		2.29	1.55	YES	5.2
[redacted]	42	Total-pentadioxins	355.8546	30.36	173.076	1.001	0.030		0.68	1.55	YES	0.8
[redacted]	42	Total-pentadioxins	355.8546	29.96	8776.583	1.001	1.519		1.58	1.55	NO	12.2
[redacted]	42	Total-pentadioxins	355.8546	33.06	1845.623	1.001	0.319		1.98	1.55	YES	3.9
[redacted]	12	12378-PeCDD	355.8546	32.66	7801.050	1.001	1.350	1.350	1.41	1.55	NO	12.7
[redacted]	42	Total-pentadioxins	355.8546	32.00	1677.028	1.001	0.290		1.46	1.55	NO	2.9
[redacted]	42	Total-pentadioxins	355.8546	31.56	3915.142	1.001	0.678		2.06	1.55	YES	6.6
[redacted]	42	Total-pentadioxins	355.8546	31.43	4192.248	1.001	0.726		1.33	1.55	NO	7.8
[redacted]	15	123789-HxCDD	389.8157	37.87	24148.026	0.904	4.557	4.557	1.22	1.24	NO	126.0
[redacted]	43	Total-hexadioxins	389.8157	37.64	4172.923	0.937	0.760		0.91	1.24	YES	22.8
[redacted]	14	123678-HxCDD	389.8157	37.47	54059.455	0.929	9.530	9.530	1.23	1.24	NO	278.9
[redacted]	13	123478-HxCDD	389.8157	37.34	11487.857	0.978	2.093	2.093	1.36	1.24	NO	62.0
[redacted]	43	Total-hexadioxins	389.8157	36.48	3310.562	0.937	0.603		1.09	1.24	NO	17.5
[redacted]	43	Total-hexadioxins	389.8157	36.38	101030.328	0.937	18.399		1.21	1.24	NO	362.5
[redacted]	43	Total-hexadioxins	389.8157	36.10	432.987	0.937	0.079		1.07	1.24	NO	3.3
[redacted]	43	Total-hexadioxins	389.8157	35.99	13437.712	0.937	2.447		1.32	1.24	NO	74.6
[redacted]	43	Total-hexadioxins	389.8157	35.17	52549.481	0.937	9.570		1.22	1.24	NO	259.8
[redacted]	16	1234678-HpCDD	423.7766	42.38	1017114.938	1.029	225.886	225....	1.02	1.05	NO	2035.5
[redacted]	44	Total-heptadioxins	423.7766	41.05	763640.094	1.029	169.593		1.04	1.05	NO	1665.1
[redacted]	17	OCDD	457.7377	48.69	5855226.250	1.011	2225.2...	2225...	0.88	0.89	NO	4457.1
[redacted]	41	Total-tetradioxins	319.8965	27.14	776.579	1.106	0.106		0.55	0.77	YES	4.0

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TotalTEQ,Furans,Dioxins

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	35 Total-tetrafurans	303.9016	25.53	4914.842	0.921	0.690		0.71	0.77	NO	8.5
[redacted]	35 Total-tetrafurans	303.9016	24.87	3542.662	0.921	0.497		1.02	0.77	YES	10.2
[redacted]	35 Total-tetrafurans	303.9016	24.42	2338.240	0.921	0.328		1.76	0.77	YES	4.8
[redacted]	35 Total-tetrafurans	303.9016	24.20	12217.204	0.921	1.716		0.83	0.77	NO	24.1
[redacted]	35 Total-tetrafurans	303.9016	23.61	2224.431	0.921	0.312		0.75	0.77	NO	4.1
[redacted]	35 Total-tetrafurans	303.9016	27.12	4464.908	0.921	0.627		0.58	0.77	YES	8.2
[redacted]	35 Total-tetrafurans	303.9016	27.00	2825.056	0.921	0.397		0.73	0.77	NO	5.8
[redacted]	1 2378-TCDF	303.9016	26.87	3157.938	0.921	0.443	0.355	0.53	0.77	YES	7.2
[redacted]	35 Total-tetrafurans	303.9016	26.38	2884.960	0.921	0.405		0.80	0.77	NO	9.0
[redacted]	35 Total-tetrafurans	303.9016	25.97	2325.112	0.921	0.327		1.31	0.77	YES	8.0
[redacted]	35 Total-tetrafurans	303.9016	25.78	6321.157	0.921	0.888		0.79	0.77	NO	14.0
[redacted]	35 Total-tetrafurans	303.9016	25.64	1432.506	0.921	0.201		0.79	0.77	NO	4.1
[redacted]	37 Total-pentafurans	339.8597	32.14	4899.541	0.927	0.622		1.39	1.55	NO	44.3
[redacted]	37 Total-pentafurans	339.8597	31.26	5356.519	0.927	0.680		1.65	1.55	NO	58.0
[redacted]	2 12378-PeCDF	339.8597	31.06	4590.828	0.912	0.586	0.520	1.87	1.55	YES	47.1
[redacted]	37 Total-pentafurans	339.8597	30.69	12456.547	0.927	1.581		1.56	1.55	NO	88.1
[redacted]	37 Total-pentafurans	339.8597	29.98	21101.477	0.927	2.678		1.53	1.55	NO	214.1
[redacted]	37 Total-pentafurans	339.8597	29.91	13027.344	0.927	1.654		1.54	1.55	NO	151.4
[redacted]	37 Total-pentafurans	339.8597	29.79	4950.517	0.927	0.628		1.81	1.55	YES	34.3
[redacted]	3 23478-PeCDF	339.8597	32.41	7238.049	0.943	0.913	0.913	1.46	1.55	NO	66.1
[redacted]	37 Total-pentafurans	339.8597	32.26	6022.952	0.927	0.764		1.80	1.55	YES	57.0
[redacted]	38 Total-hexafurans	373.8208	36.65	1051.931	1.062	0.156		0.67	1.24	YES	4.3
[redacted]	6 123678-HxCDF	373.8208	36.27	11412.653	1.056	1.613	1.613	1.11	1.24	NO	66.3
[redacted]	4 123478-HxCDF	373.8208	36.12	20199.417	1.101	2.811	2.811	1.35	1.24	NO	136.0
[redacted]	38 Total-hexafurans	373.8208	35.95	5119.699	1.062	0.761		1.09	1.24	NO	33.0
[redacted]	38 Total-hexafurans	373.8208	35.46	121760.172	1.062	18.104		1.19	1.24	NO	779.8
[redacted]	38 Total-hexafurans	373.8208	35.13	1999.998	1.062	0.297		1.27	1.24	NO	16.0
[redacted]	38 Total-hexafurans	373.8208	34.59	111811.250	1.062	16.625		1.27	1.24	NO	689.2
[redacted]	38 Total-hexafurans	373.8208	34.39	35694.688	1.062	5.307		1.15	1.24	NO	205.1
[redacted]	7 123789-HxCDF	373.8208	38.27	4407.423	1.017	0.733	0.733	1.23	1.24	NO	25.0
[redacted]	5 234678-HxCDF	373.8208	37.20	16936.629	1.073	2.547	2.547	1.11	1.24	NO	74.0
[redacted]	9 1234789-HpCDF	407.7818	43.32	8123.938	1.224	1.839	1.839	1.12	1.05	NO	32.9
[redacted]	39 Total-heptafurans	407.7818	41.60	276.864	1.231	0.053		1.13	1.05	NO	3.1
[redacted]	39 Total-heptafurans	407.7818	41.30	353979.688	1.231	68.157		1.03	1.05	NO	1538.2
[redacted]	39 Total-heptafurans	407.7818	40.99	3539.969	1.231	0.682		0.94	1.05	NO	13.4
[redacted]	8 1234678-HpCDF	407.7818	40.47	176192.383	1.238	29.470	29.470	0.96	1.05	NO	778.6
[redacted]	10 OCDF	441.7428	48.98	262800.540	1.162	86.915	86.915	0.83	0.89	NO	741.1
[redacted]	36 Total-penta1	339.8597	28.30	104183.753		13.375		1.47	1.55	NO	1040.0
[redacted]	37 Total-pentafurans	339.8597	30.47	891.243	0.927	0.113		2.14	1.55	YES	10.6
[redacted]	41 Total-tetradioxins	319.8965	27.15	1119.739	1.106	0.153		0.69	0.77	NO	5.0
[redacted]	41 Total-tetradioxins	319.8965	26.74	1508.374	1.106	0.207		0.66	0.77	NO	4.3
[redacted]	41 Total-tetradioxins	319.8965	26.50	814.479	1.106	0.112		0.68	0.77	NO	3.4
[redacted]	41 Total-tetradioxins	319.8965	26.12	2453.591	1.106	0.336		0.79	0.77	NO	8.4
[redacted]	41 Total-tetradioxins	319.8965	25.87	1002.451	1.106	0.137		0.90	0.77	YES	3.1
[redacted]	41 Total-tetradioxins	319.8965	24.91	2736.787	1.106	0.375		0.50	0.77	YES	9.8
[redacted]	41 Total-tetradioxins	319.8965	24.64	3849.521	1.106	0.527		0.83	0.77	NO	16.3
[redacted]	41 Total-tetradioxins	319.8965	27.66	1547.201	1.106	0.212		0.68	0.77	NO	6.0
[redacted]	11 2378-TCDD	319.8965	27.53	1282.599	1.106	0.176	0.127	0.46	0.77	YES	3.6
[redacted]	42 Total-pentadioxins	355.8546	31.27	6069.094	1.001	1.050		1.42	1.55	NO	12.8

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TotalTEQ,Furans,Dioxins

[redacted]	42	Total-pentadioxins	355.8546	31.06	5487.499	1.001	0.950		1.27	1.55	YES	11.0
	42	Total-pentadioxins	355.8546	30.44	2426.701	1.001	0.420		2.29	1.55	YES	5.2
	42	Total-pentadioxins	355.8546	30.36	173.076	1.001	0.030		0.68	1.55	YES	0.8
	42	Total-pentadioxins	355.8546	29.96	8776.583	1.001	1.519		1.58	1.55	NO	12.2
	42	Total-pentadioxins	355.8546	33.06	1845.623	1.001	0.319		1.98	1.55	YES	3.9
	12	12378-PeCDD	355.8546	32.66	7801.050	1.001	1.350	1.350	1.41	1.55	NO	12.7
	42	Total-pentadioxins	355.8546	32.00	1677.028	1.001	0.290		1.46	1.55	NO	2.9
	42	Total-pentadioxins	355.8546	31.56	3915.142	1.001	0.678		2.06	1.55	YES	6.6
	42	Total-pentadioxins	355.8546	31.43	4192.248	1.001	0.726		1.33	1.55	NO	7.8
	15	123789-HxCDD	389.8157	37.87	24148.026	0.904	4.557	4.557	1.22	1.24	NO	126.0
	43	Total-hexadioxins	389.8157	37.64	4172.923	0.937	0.760		0.91	1.24	YES	22.8
	14	123678-HxCDD	389.8157	37.47	54059.455	0.929	9.530	9.530	1.23	1.24	NO	278.9
	13	123478-HxCDD	389.8157	37.34	11487.857	0.978	2.093	2.093	1.36	1.24	NO	62.0
	43	Total-hexadioxins	389.8157	36.48	3310.562	0.937	0.603		1.09	1.24	NO	17.5
	43	Total-hexadioxins	389.8157	36.38	101030.328	0.937	18.399		1.21	1.24	NO	362.5
	43	Total-hexadioxins	389.8157	36.10	432.987	0.937	0.079		1.07	1.24	NO	3.3
	43	Total-hexadioxins	389.8157	35.99	13437.712	0.937	2.447		1.32	1.24	NO	74.6
	43	Total-hexadioxins	389.8157	35.17	52549.481	0.937	9.570		1.22	1.24	NO	259.8
	16	1234678-HpCDD	423.7766	42.38	1017114.938	1.029	225.886	225....	1.02	1.05	NO	2035.5
	44	Total-heptadioxins	423.7766	41.05	763640.094	1.029	169.593		1.04	1.05	NO	1665.1
	17	OCDD	457.7377	48.69	5855226.250	1.011	2225.2...	2225...	0.88	0.89	NO	4457.1
	41	Total-tetradioxins	319.8965	27.14	776.579	1.106	0.106		0.55	0.77	YES	4.0

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PFK1

[redacted]					
[redacted]	48 FUNCTION1 PFK	330.9792	23.25	0.000	1.2
[redacted]	48 FUNCTION1 PFK	330.9792	23.13	0.000	1.3
[redacted]	48 FUNCTION1 PFK	330.9792	23.09	0.000	0.5
[redacted]	48 FUNCTION1 PFK	330.9792	22.85	0.000	0.8
[redacted]	48 FUNCTION1 PFK	330.9792	22.78	0.000	1.5
[redacted]	48 FUNCTION1 PFK	330.9792	22.69	0.000	1.0
[redacted]	48 FUNCTION1 PFK	330.9792	22.46	0.000	1.0
[redacted]	48 FUNCTION1 PFK	330.9792	22.40	0.000	1.5
[redacted]	48 FUNCTION1 PFK	330.9792	22.34	0.000	0.6
[redacted]	48 FUNCTION1 PFK	330.9792	22.30	0.000	0.3
[redacted]	48 FUNCTION1 PFK	330.9792	22.25	0.000	0.5
[redacted]	48 FUNCTION1 PFK	330.9792	21.83	0.000	1.0
[redacted]	48 FUNCTION1 PFK	330.9792	21.72	0.000	1.6
[redacted]	48 FUNCTION1 PFK	330.9792	21.64	0.000	1.2
[redacted]	48 FUNCTION1 PFK	330.9792	21.19	0.000	1.3
[redacted]	48 FUNCTION1 PFK	330.9792	24.99	0.000	1.0
[redacted]	48 FUNCTION1 PFK	330.9792	24.93	0.000	0.8
[redacted]	48 FUNCTION1 PFK	330.9792	24.87	0.000	0.6
[redacted]	48 FUNCTION1 PFK	330.9792	24.69	0.000	1.8
[redacted]	48 FUNCTION1 PFK	330.9792	24.55	0.000	0.4
[redacted]	48 FUNCTION1 PFK	330.9792	24.40	0.000	1.2
[redacted]	48 FUNCTION1 PFK	330.9792	24.30	0.000	2.0
[redacted]	48 FUNCTION1 PFK	330.9792	24.24	0.000	2.1
[redacted]	48 FUNCTION1 PFK	330.9792	24.14	0.000	1.8
[redacted]	48 FUNCTION1 PFK	330.9792	24.09	0.000	0.9
[redacted]	48 FUNCTION1 PFK	330.9792	23.73	0.000	0.7
[redacted]	48 FUNCTION1 PFK	330.9792	23.61	0.000	1.2
[redacted]	48 FUNCTION1 PFK	330.9792	23.54	0.000	0.8
[redacted]	48 FUNCTION1 PFK	330.9792	23.49	0.000	0.9
[redacted]	48 FUNCTION1 PFK	330.9792	23.40	0.000	1.3
[redacted]	48 FUNCTION1 PFK	330.9792	23.33	0.000	1.6
[redacted]	48 FUNCTION1 PFK	330.9792	27.27	0.000	2.0
[redacted]	48 FUNCTION1 PFK	330.9792	27.20	0.000	1.9
[redacted]	48 FUNCTION1 PFK	330.9792	27.11	0.000	1.6
[redacted]	48 FUNCTION1 PFK	330.9792	27.02	0.000	1.8
[redacted]	48 FUNCTION1 PFK	330.9792	26.86	0.000	1.9
[redacted]	48 FUNCTION1 PFK	330.9792	26.38	0.000	1.2
[redacted]	48 FUNCTION1 PFK	330.9792	26.27	0.000	0.6
[redacted]	48 FUNCTION1 PFK	330.9792	26.14	0.000	0.8
[redacted]	48 FUNCTION1 PFK	330.9792	26.05	0.000	1.8
[redacted]	48 FUNCTION1 PFK	330.9792	25.96	0.000	0.7
[redacted]	48 FUNCTION1 PFK	330.9792	25.87	0.000	0.6
[redacted]	48 FUNCTION1 PFK	330.9792	25.73	0.000	0.3
[redacted]	48 FUNCTION1 PFK	330.9792	25.57	0.000	0.8
[redacted]	48 FUNCTION1 PFK	330.9792	25.48	0.000	1.0
[redacted]	48 FUNCTION1 PFK	330.9792	25.38	0.000	1.1
[redacted]	48 FUNCTION1 PFK	330.9792	25.09	0.000	1.0
[redacted]	48 FUNCTION1 PFK	330.9792	28.98	0.000	1.6
[redacted]	48 FUNCTION1 PFK	330.9792	28.87	0.000	1.6

ID: WE03B, Name: 13022707, Date: 27-Feb-2013, Time: 15:25:41, Conditions: AUTOSPEC01, User: pk

PFK1

[redacted]					
[redacted]	48 FUNCTION1 PFK	330.9792	28.77	0.000	2.4
[redacted]	48 FUNCTION1 PFK	330.9792	28.69	0.000	1.0
[redacted]	48 FUNCTION1 PFK	330.9792	27.93	0.000	1.5
[redacted]	48 FUNCTION1 PFK	330.9792	27.66	0.000	1.3
[redacted]	48 FUNCTION1 PFK	330.9792	27.54	0.000	1.6
[redacted]	48 FUNCTION1 PFK	330.9792	27.38	0.000	1.1
[redacted]	48 FUNCTION1 PFK	330.9792	27.30	0.000	1.6

PFK2

[redacted]						
[redacted]	49 FUNCTION2 PFK	366.9792	30.38	0.000	0.000	0.5
[redacted]	49 FUNCTION2 PFK	366.9792	30.22	0.000	0.000	1.0
[redacted]	49 FUNCTION2 PFK	366.9792	30.08	0.000	0.000	1.9
[redacted]	49 FUNCTION2 PFK	366.9792	29.87	0.000	0.000	0.5
[redacted]	49 FUNCTION2 PFK	366.9792	29.81	0.000	0.000	1.4
[redacted]	49 FUNCTION2 PFK	366.9792	29.57	0.000	0.000	1.1
[redacted]	49 FUNCTION2 PFK	366.9792	32.77	0.000	0.000	0.9
[redacted]	49 FUNCTION2 PFK	366.9792	32.64	0.000	0.000	0.8
[redacted]	49 FUNCTION2 PFK	366.9792	32.58	0.000	0.000	0.9
[redacted]	49 FUNCTION2 PFK	366.9792	32.53	0.000	0.000	1.5
[redacted]	49 FUNCTION2 PFK	366.9792	32.43	0.000	0.000	0.8
[redacted]	49 FUNCTION2 PFK	366.9792	32.32	0.000	0.000	1.0
[redacted]	49 FUNCTION2 PFK	366.9792	32.11	0.000	0.000	0.9
[redacted]	49 FUNCTION2 PFK	366.9792	31.77	0.000	0.000	1.4
[redacted]	49 FUNCTION2 PFK	366.9792	31.70	0.000	0.000	1.2
[redacted]	49 FUNCTION2 PFK	366.9792	31.52	0.000	0.000	1.0
[redacted]	49 FUNCTION2 PFK	366.9792	31.23	0.000	0.000	1.1
[redacted]	49 FUNCTION2 PFK	366.9792	31.20	0.000	0.000	0.8
[redacted]	49 FUNCTION2 PFK	366.9792	31.00	0.000	0.000	1.0
[redacted]	49 FUNCTION2 PFK	366.9792	30.81	0.000	0.000	1.1
[redacted]	49 FUNCTION2 PFK	366.9792	30.68	0.000	0.000	1.0
[redacted]	49 FUNCTION2 PFK	366.9792	30.59	0.000	0.000	0.9
[redacted]	49 FUNCTION2 PFK	366.9792	33.38	0.000	0.000	0.6
[redacted]	49 FUNCTION2 PFK	366.9792	33.22	0.000	0.000	0.8
[redacted]	49 FUNCTION2 PFK	366.9792	33.17	0.000	0.000	0.7

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PFK3

[redacted]												
[redacted]	50	FUNCTION3 PFK	380.9760	35.79	0.000		0.000					1.4
[redacted]	50	FUNCTION3 PFK	380.9760	35.63	0.000		0.000					1.0
[redacted]	50	FUNCTION3 PFK	380.9760	35.58	0.000		0.000					1.3
[redacted]	50	FUNCTION3 PFK	380.9760	35.44	0.000		0.000					1.2
[redacted]	50	FUNCTION3 PFK	380.9760	35.39	0.000		0.000					1.8
[redacted]	50	FUNCTION3 PFK	380.9760	35.34	0.000		0.000					1.7
[redacted]	50	FUNCTION3 PFK	380.9760	35.20	0.000		0.000					1.3
[redacted]	50	FUNCTION3 PFK	380.9760	34.80	0.000		0.000					1.9
[redacted]	50	FUNCTION3 PFK	380.9760	34.65	0.000		0.000					0.5
[redacted]	50	FUNCTION3 PFK	380.9760	34.25	0.000		0.000					9.5
[redacted]	50	FUNCTION3 PFK	380.9760	34.18	0.000		0.000					11.4
[redacted]	50	FUNCTION3 PFK	380.9760	34.09	0.000		0.000					13.6
[redacted]	50	FUNCTION3 PFK	380.9760	38.48	0.000		0.000					1.7
[redacted]	50	FUNCTION3 PFK	380.9760	38.20	0.000		0.000					1.7
[redacted]	50	FUNCTION3 PFK	380.9760	38.16	0.000		0.000					1.1
[redacted]	50	FUNCTION3 PFK	380.9760	38.00	0.000		0.000					0.7
[redacted]	50	FUNCTION3 PFK	380.9760	37.77	0.000		0.000					1.2
[redacted]	50	FUNCTION3 PFK	380.9760	37.56	0.000		0.000					1.2
[redacted]	50	FUNCTION3 PFK	380.9760	37.29	0.000		0.000					1.3
[redacted]	50	FUNCTION3 PFK	380.9760	36.87	0.000		0.000					1.2
[redacted]	50	FUNCTION3 PFK	380.9760	36.82	0.000		0.000					1.2
[redacted]	50	FUNCTION3 PFK	380.9760	36.71	0.000		0.000					1.1
[redacted]	50	FUNCTION3 PFK	380.9760	36.53	0.000		0.000					1.4
[redacted]	50	FUNCTION3 PFK	380.9760	36.46	0.000		0.000					1.2
[redacted]	50	FUNCTION3 PFK	380.9760	36.28	0.000		0.000					0.9
[redacted]	50	FUNCTION3 PFK	380.9760	36.22	0.000		0.000					1.3
[redacted]	50	FUNCTION3 PFK	380.9760	36.06	0.000		0.000					0.8
[redacted]	50	FUNCTION3 PFK	380.9760	35.89	0.000		0.000					1.3
[redacted]	50	FUNCTION3 PFK	380.9760	39.07	0.000		0.000					1.4
[redacted]	50	FUNCTION3 PFK	380.9760	39.00	0.000		0.000					1.4
[redacted]	50	FUNCTION3 PFK	380.9760	38.95	0.000		0.000					1.1
[redacted]	50	FUNCTION3 PFK	380.9760	38.91	0.000		0.000					1.0
[redacted]	50	FUNCTION3 PFK	380.9760	38.57	0.000		0.000					0.6

PFK4

[redacted]												
[redacted]	51	FUNCTION4 PFK	430.9728	44.90	0.000							1.1
[redacted]	51	FUNCTION4 PFK	430.9728	44.29	0.000							1.6
[redacted]	51	FUNCTION4 PFK	430.9728	43.45	0.000							1.9
[redacted]	51	FUNCTION4 PFK	430.9728	43.35	0.000							1.9
[redacted]	51	FUNCTION4 PFK	430.9728	41.27	0.000							1.1
[redacted]	51	FUNCTION4 PFK	430.9728	41.21	0.000							1.6
[redacted]	51	FUNCTION4 PFK	430.9728	39.65	0.000							1.4

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ID: WE03B, Name: 13022707, Date: 27-Feb-2013, Time: 15:25:41, Conditions: AUTOSPEC01, User: pk

PFK5

[redacted]											
[redacted]	52 FUNCTION5 PFK	480.9696	45.34	0.000							1.7
[redacted]	52 FUNCTION5 PFK	480.9696	45.22	0.000							0.4
[redacted]	52 FUNCTION5 PFK	480.9696	47.92	0.000							1.4
[redacted]	52 FUNCTION5 PFK	480.9696	47.75	0.000							0.5
[redacted]	52 FUNCTION5 PFK	480.9696	47.43	0.000							1.0
[redacted]	52 FUNCTION5 PFK	480.9696	47.31	0.000							0.7
[redacted]	52 FUNCTION5 PFK	480.9696	46.95	0.000							1.3
[redacted]	52 FUNCTION5 PFK	480.9696	46.91	0.000							1.0
[redacted]	52 FUNCTION5 PFK	480.9696	46.61	0.000							0.7
[redacted]	52 FUNCTION5 PFK	480.9696	46.57	0.000							1.8
[redacted]	52 FUNCTION5 PFK	480.9696	46.38	0.000							0.5
[redacted]	52 FUNCTION5 PFK	480.9696	46.30	0.000							0.7
[redacted]	52 FUNCTION5 PFK	480.9696	45.86	0.000							1.4
[redacted]	52 FUNCTION5 PFK	480.9696	45.81	0.000							0.7
[redacted]	52 FUNCTION5 PFK	480.9696	45.67	0.000							1.2
[redacted]	52 FUNCTION5 PFK	480.9696	45.62	0.000							1.6
[redacted]	52 FUNCTION5 PFK	480.9696	45.56	0.000							0.8
[redacted]	52 FUNCTION5 PFK	480.9696	45.43	0.000							1.2
[redacted]	52 FUNCTION5 PFK	480.9696	49.31	0.000							1.1
[redacted]	52 FUNCTION5 PFK	480.9696	49.22	0.000							0.5
[redacted]	52 FUNCTION5 PFK	480.9696	49.11	0.000							2.1
[redacted]	52 FUNCTION5 PFK	480.9696	48.94	0.000							1.1
[redacted]	52 FUNCTION5 PFK	480.9696	48.67	0.000							0.6
[redacted]	52 FUNCTION5 PFK	480.9696	48.53	0.000							0.5
[redacted]	52 FUNCTION5 PFK	480.9696	48.49	0.000							1.3
[redacted]	52 FUNCTION5 PFK	480.9696	48.43	0.000							1.5
[redacted]	52 FUNCTION5 PFK	480.9696	48.34	0.000							0.4
[redacted]	52 FUNCTION5 PFK	480.9696	48.15	0.000							1.0
[redacted]	52 FUNCTION5 PFK	480.9696	47.95	0.000							0.8

ETHERS1

[redacted]											
[redacted]	53 FUNCTION1 HXCD...	375.8364	21.67	0.000		0.000					5.0

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ETHERS2

[redacted]												
[redacted]	54	FUNCTION1 HPCD...	409.7974	21.39	0.000		0.000					2.0
[redacted]	54	FUNCTION1 HPCD...	409.7974	21.33	0.000		0.000					1.3
[redacted]	54	FUNCTION1 HPCD...	409.7974	27.75	0.000		0.000					3.1
[redacted]	54	FUNCTION1 HPCD...	409.7974	27.66	0.000		0.000					1.4
[redacted]	54	FUNCTION1 HPCD...	409.7974	27.44	0.000		0.000					1.5
[redacted]	54	FUNCTION1 HPCD...	409.7974	27.02	0.000		0.000					2.0
[redacted]	54	FUNCTION1 HPCD...	409.7974	26.45	0.000		0.000					2.5
[redacted]	54	FUNCTION1 HPCD...	409.7974	26.05	0.000		0.000					1.3
[redacted]	54	FUNCTION1 HPCD...	409.7974	25.45	0.000		0.000					3.5
[redacted]	54	FUNCTION1 HPCD...	409.7974	25.38	0.000		0.000					1.8
[redacted]	54	FUNCTION1 HPCD...	409.7974	25.23	0.000		0.000					1.2
[redacted]	54	FUNCTION1 HPCD...	409.7974	24.94	0.000		0.000					1.2
[redacted]	54	FUNCTION1 HPCD...	409.7974	24.82	0.000		0.000					1.5
[redacted]	54	FUNCTION1 HPCD...	409.7974	23.84	0.000		0.000					1.4
[redacted]	54	FUNCTION1 HPCD...	409.7974	23.64	0.000		0.000					1.6
[redacted]	54	FUNCTION1 HPCD...	409.7974	22.36	0.000		0.000					2.4
[redacted]	54	FUNCTION1 HPCD...	409.7974	22.10	0.000		0.000					1.2
[redacted]	54	FUNCTION1 HPCD...	409.7974	21.57	0.000		0.000					2.1
[redacted]	54	FUNCTION1 HPCD...	409.7974	28.81	0.000		0.000					1.6
[redacted]	54	FUNCTION1 HPCD...	409.7974	28.26	0.000		0.000					1.0
[redacted]	54	FUNCTION1 HPCD...	409.7974	28.04	0.000		0.000					1.5

ETHERS3

[redacted]												
[redacted]	55	FUNCTION2 HPCD...	409.7974	33.80	0.000		0.000					1.1
[redacted]	55	FUNCTION2 HPCD...	409.7974	33.21	0.000		0.000					1.6
[redacted]	55	FUNCTION2 HPCD...	409.7974	33.15	0.000		0.000					2.3
[redacted]	55	FUNCTION2 HPCD...	409.7974	33.00	0.000		0.000					2.3
[redacted]	55	FUNCTION2 HPCD...	409.7974	32.54	0.000		0.000					2.0
[redacted]	55	FUNCTION2 HPCD...	409.7974	31.69	0.000		0.000					1.6
[redacted]	55	FUNCTION2 HPCD...	409.7974	31.03	0.000		0.000					2.7
[redacted]	55	FUNCTION2 HPCD...	409.7974	30.82	0.000		0.000					2.8
[redacted]	55	FUNCTION2 HPCD...	409.7974	30.57	0.000		0.000					1.4
[redacted]	55	FUNCTION2 HPCD...	409.7974	29.95	0.000		0.000					2.4

ETHERS4

[redacted]												
[redacted]	56	FUNCTION3 OCDPE	445.7555	34.14	0.000		0.000					5.2

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ID: WE03B, Name: 13022707, Date: 27-Feb-2013, Time: 15:25:41, Conditions: AUTOSPEC01, User: pk

ETHERS5

[redacted]												
[redacted]	57	FUNCTION4 NCDPE	479.7165	43.72	0.000		0.000					2.9
[redacted]	57	FUNCTION4 NCDPE	479.7165	42.74	0.000		0.000					2.7
[redacted]	57	FUNCTION4 NCDPE	479.7165	40.06	0.000		0.000					4.4
[redacted]	57	FUNCTION4 NCDPE	479.7165	40.02	0.000		0.000					3.4
[redacted]	57	FUNCTION4 NCDPE	479.7165	39.95	0.000		0.000					2.4
[redacted]	57	FUNCTION4 NCDPE	479.7165	39.65	0.000		0.000					3.4

ETHERS6

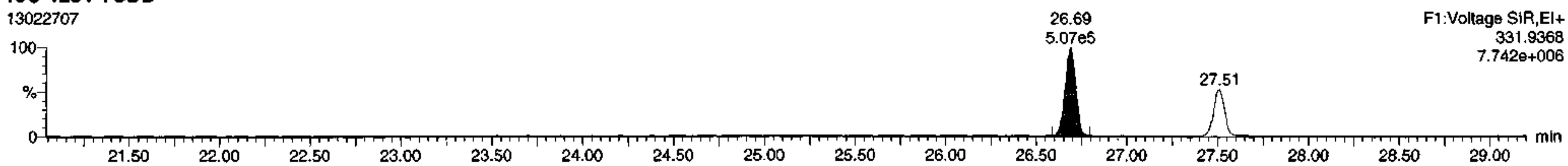
[redacted]												
[redacted]												

Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130227DATA1.qld
Last Altered: Thursday, February 28, 2013 09:41:01 Pacific Standard Time
Printed: Thursday, February 28, 2013 09:42:24 Pacific Standard Time

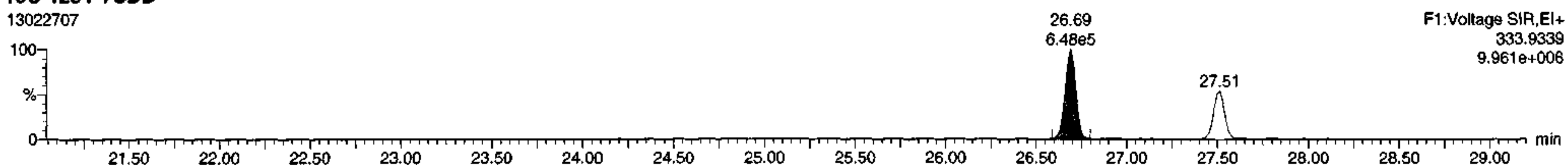
Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130225.mdb 26 Feb 2013 09:49:11
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: WE03B, Name: 13022707, Date: 27-Feb-2013, Time: 15:25:41, Conditions: AUTOSPEC01, User: pk

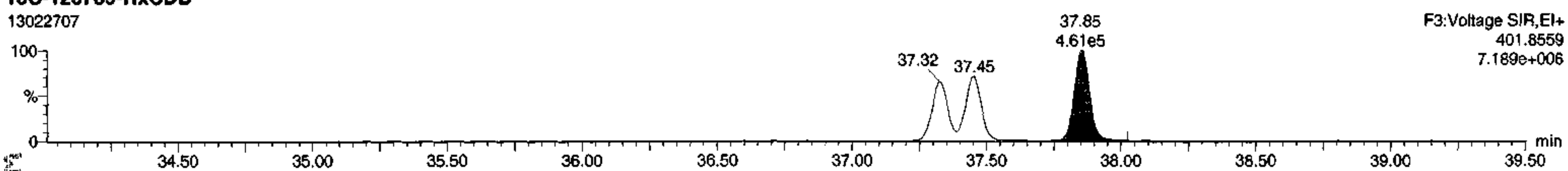
13C-1234-TCDD



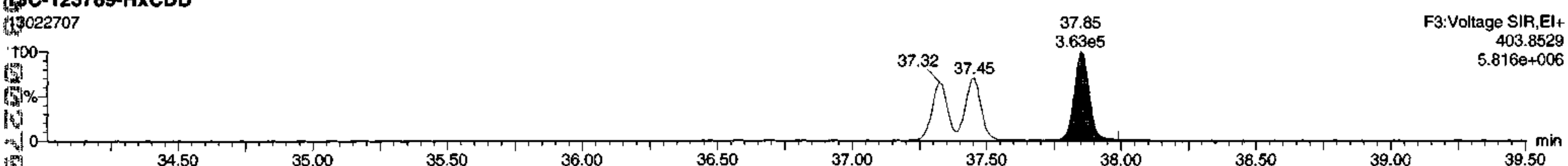
13C-1234-TCDD



13C-123789-HxCDD



13C-123789-HxCDD



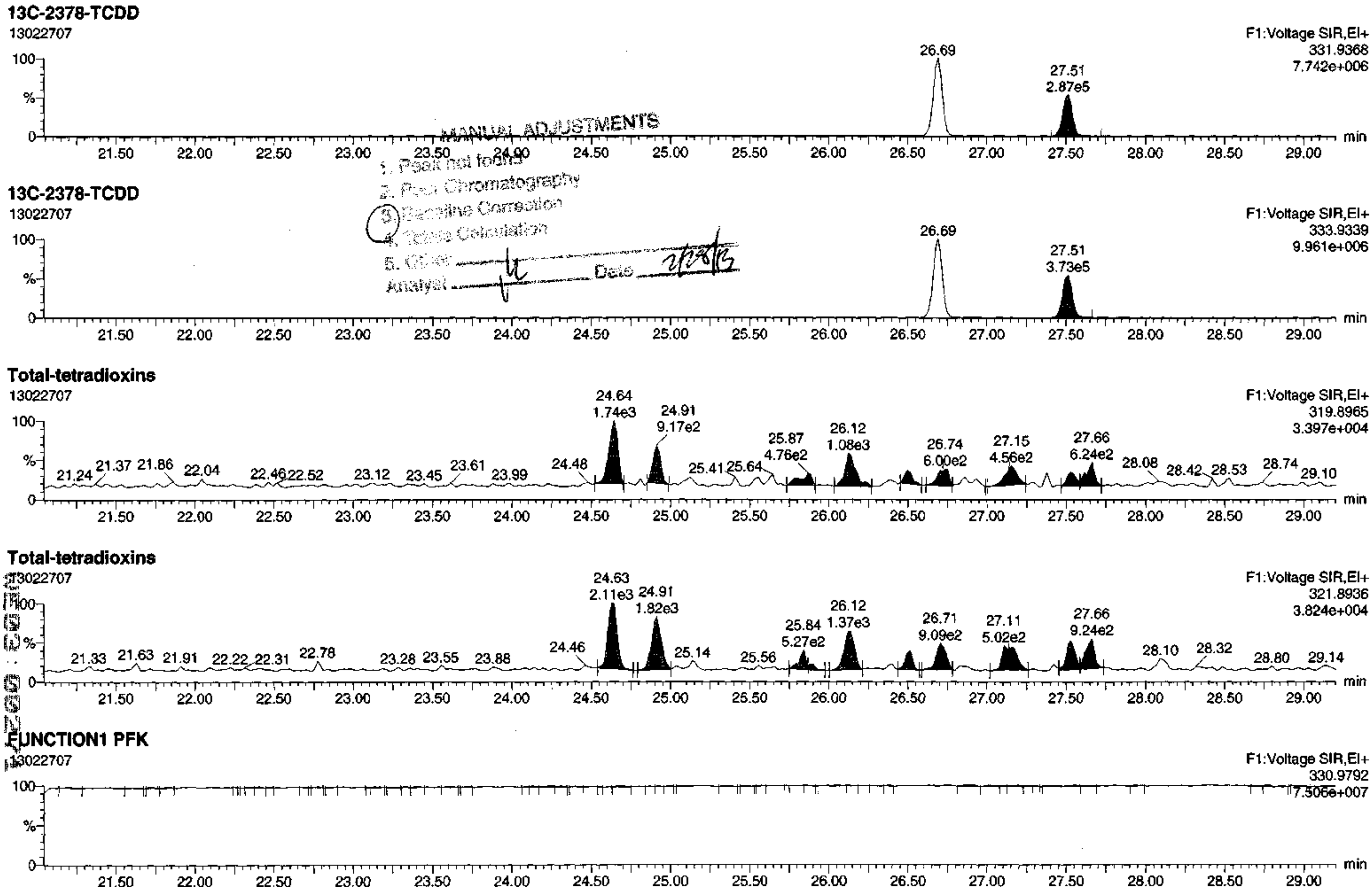
Quantify Sample Report **MassLynx 4.1 SCN 714**

Dataset: P:\DIOXIN8290.PRO\130227DATA1.qld

Last Altered: Thursday, February 28, 2013 09:41:01 Pacific Standard Time

Printed: Thursday, February 28, 2013 09:42:24 Pacific Standard Time

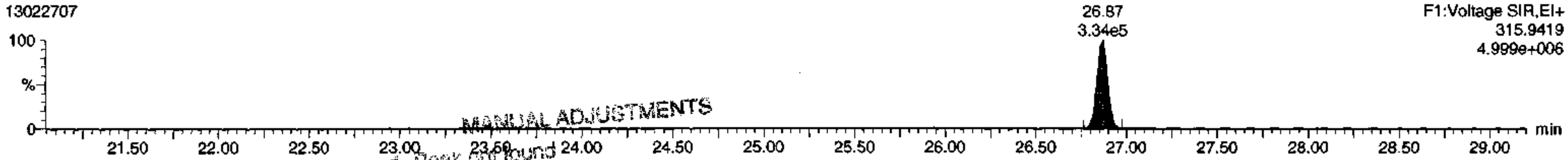
ID: WE03B, Name: 13022707, Date: 27-Feb-2013, Time: 15:25:41, Conditions: AUTOSPEC01, User: pk



Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130227DATA1.qld
Last Altered: Thursday, February 28, 2013 09:41:01 Pacific Standard Time
Printed: Thursday, February 28, 2013 09:42:24 Pacific Standard Time

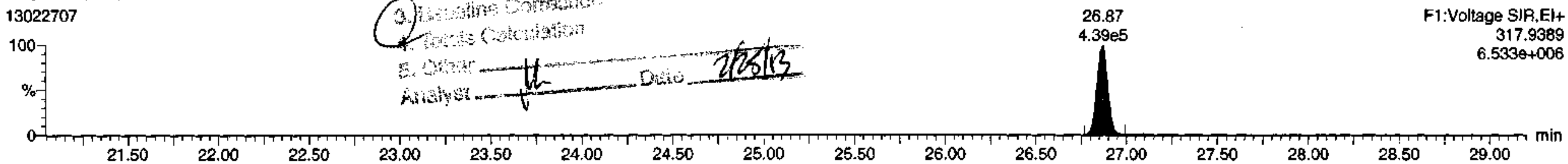
ID: WE03B, Name: 13022707, Date: 27-Feb-2013, Time: 15:25:41, Conditions: AUTOSPEC01, User: pk

13C-2378-TCDF

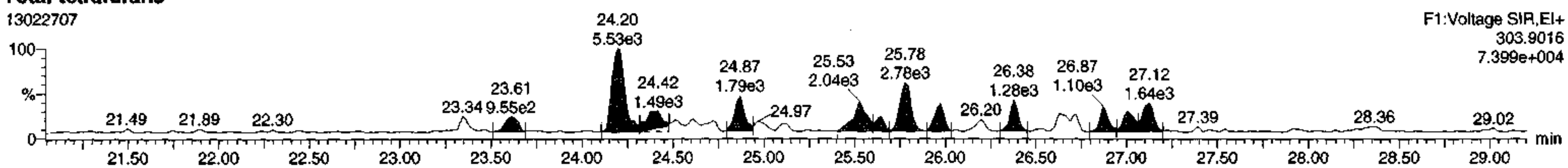


MANUAL ADJUSTMENTS
1. Peak not found
2. Poor Chromatography
3. Baseline Correction
4. Totals Calculation
5. Other
Analyst [signature] Date 2/28/13

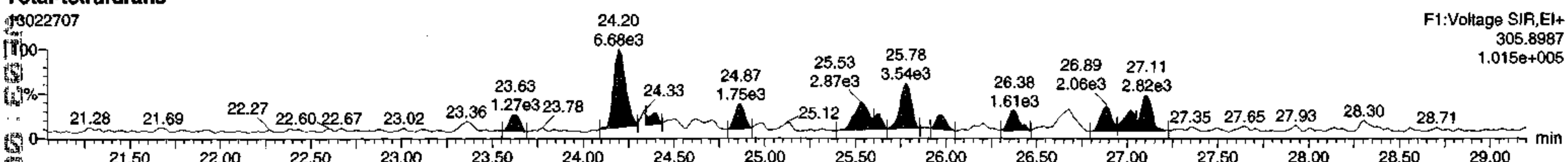
13C-2378-TCDF



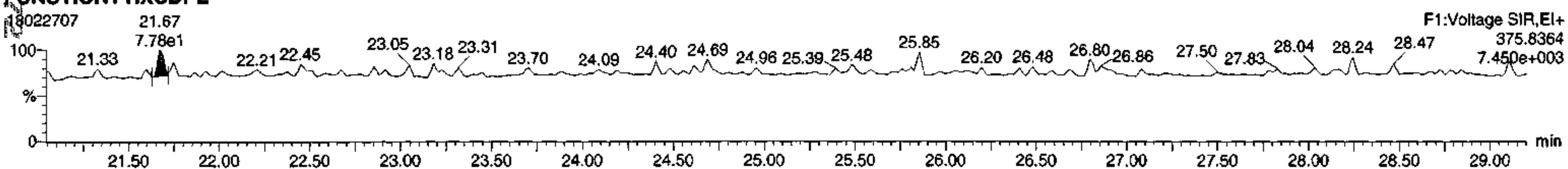
Total-tetrafurans



Total-tetrafurans



FUNCTION1 HXCDPE



Quantify Sample Report **MassLynx 4.1 SCN 714**

Dataset: P:\DIOXIN8290.PRO\130227DATA1.qld

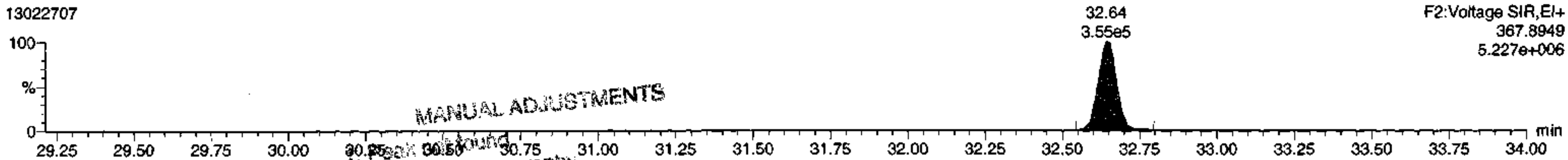
Last Altered: Thursday, February 28, 2013 09:41:01 Pacific Standard Time

Printed: Thursday, February 28, 2013 09:42:24 Pacific Standard Time

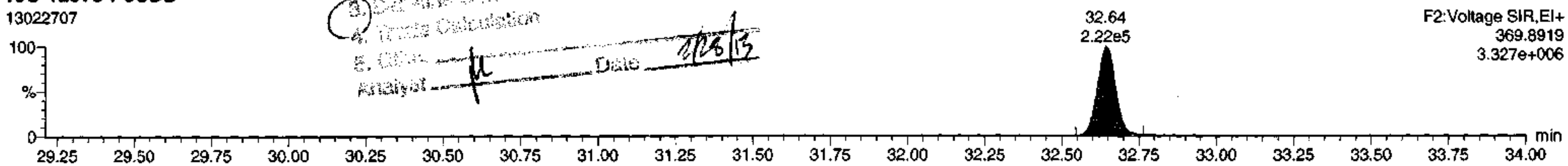
ID: WE03B, Name: 13022707, Date: 27-Feb-2013, Time: 15:25:41, Conditions: AUTOSPEC01, User: pk

MANUAL ADJUSTMENTS
1. Peak Not Found
2. Poor Chromatography
3. Baseline Correction
4. Trace Calculation
5. Other
Analyst pk Date 2/28/13

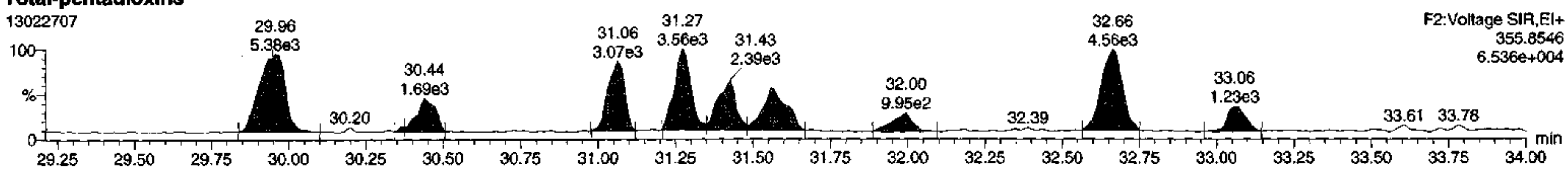
13C-12378-PeCDD



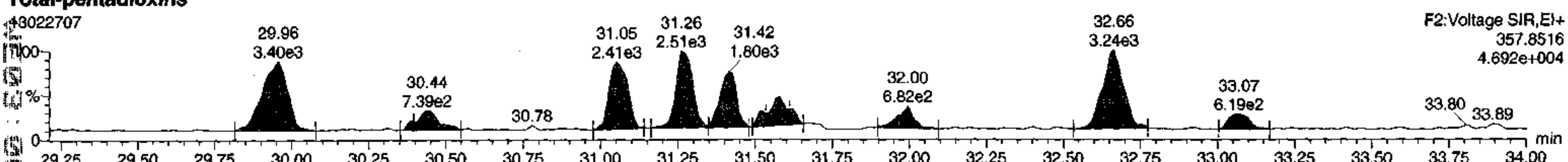
13C-12378-PeCDD



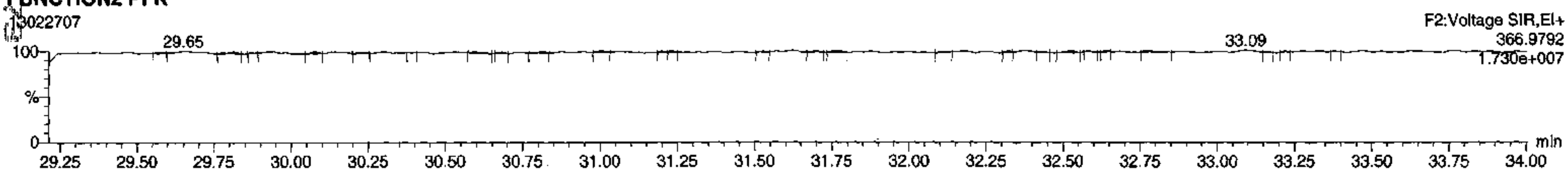
Total-pentadioxins



Total-pentadioxins



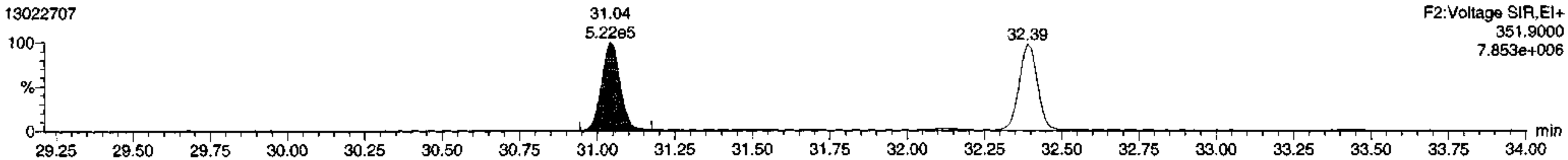
FUNCTION2 PFK



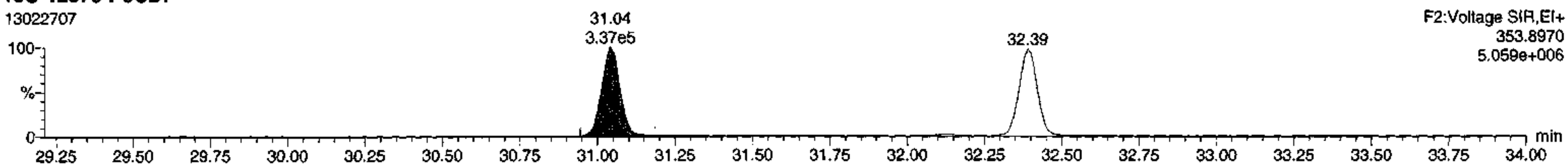
Dataset: P:\DIOXIN8290.PRO\130227DATA1.qld
Last Altered: Thursday, February 28, 2013 09:41:01 Pacific Standard Time
Printed: Thursday, February 28, 2013 09:42:24 Pacific Standard Time

ID: WE03B, Name: 13022707, Date: 27-Feb-2013, Time: 15:25:41, Conditions: AUTOSPEC01, User: pk

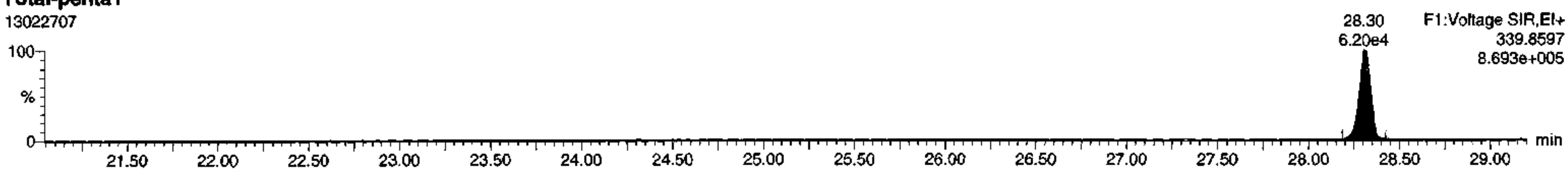
13C-12378-PeCDF



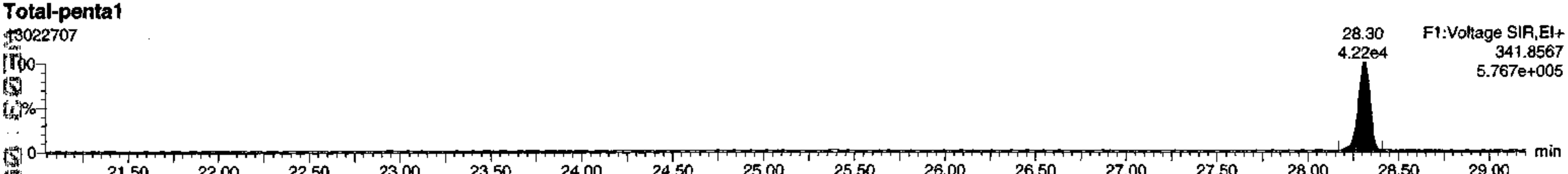
13C-12378-PeCDF



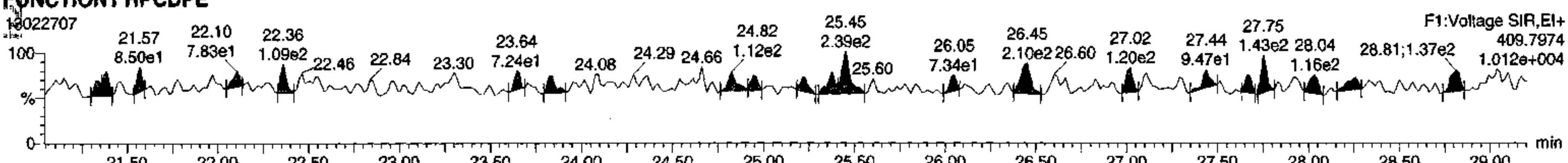
Total-penta1



Total-penta1



FUNCTION1 HPCDPE



Quantify Sample Report **MassLynx 4.1 SCN 714**

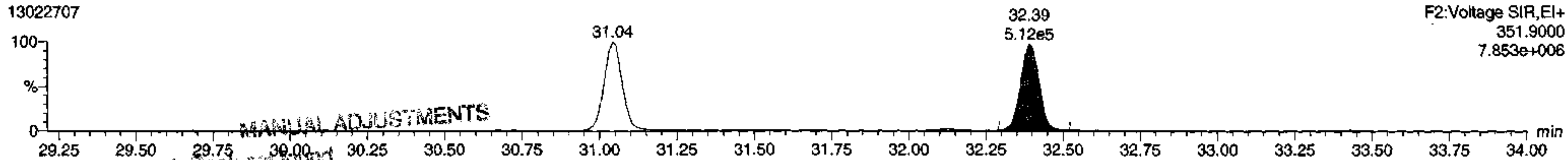
Dataset: P:\DIOXIN8290.PRO\130227DATA1.qld

Last Altered: Thursday, February 28, 2013 09:41:01 Pacific Standard Time

Printed: Thursday, February 28, 2013 09:42:24 Pacific Standard Time

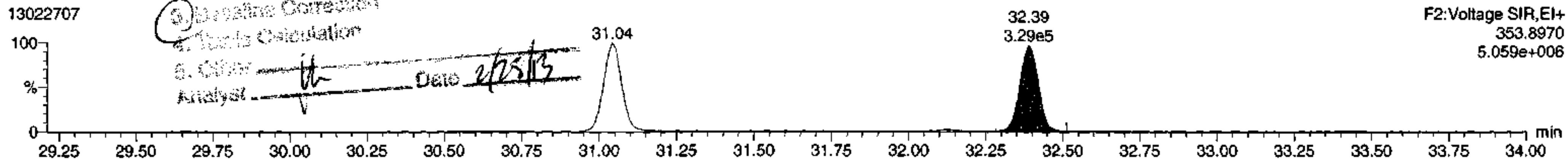
ID: WE03B, Name: 13022707, Date: 27-Feb-2013, Time: 15:25:41, Conditions: AUTOSPEC01, User: pk

13C-23478-PeCDF

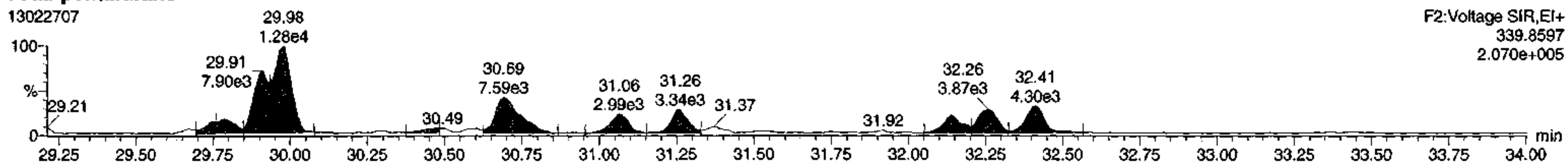


MANUAL ADJUSTMENTS
1. Peak not found
2. Poor Chromatography
3. Baseline Correction
4. Totals Calculation
5. Other
Analyst Date 2/25/13

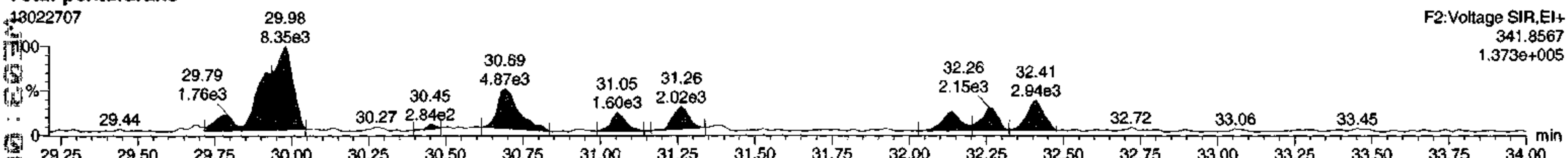
13C-23478-PeCDF



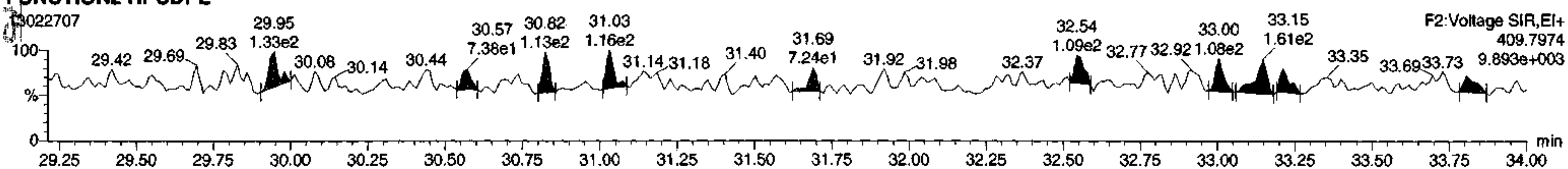
Total-pentafurans



Total-pentafurans



FUNCTION2 HPCDPE



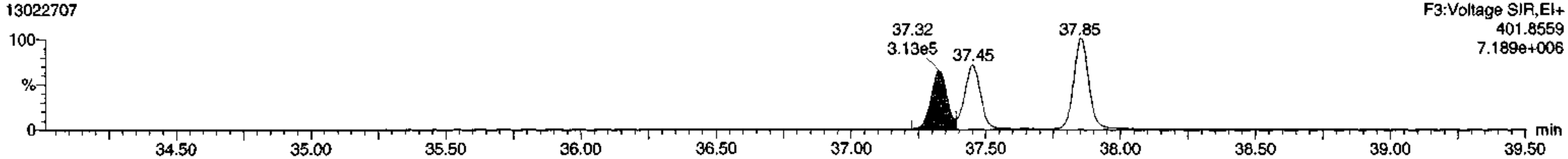
Dataset: P:\DIOXIN8290.PRO\130227DATA1.qld

Last Altered: Thursday, February 28, 2013 09:41:01 Pacific Standard Time

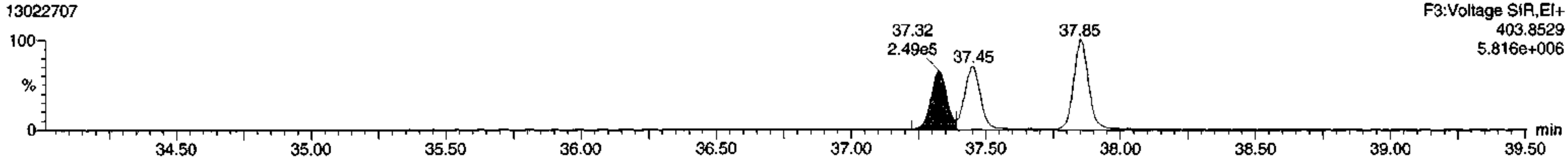
Printed: Thursday, February 28, 2013 09:42:24 Pacific Standard Time

ID: WE03B, Name: 13022707, Date: 27-Feb-2013, Time: 15:25:41, Conditions: AUTOSPEC01, User: pk

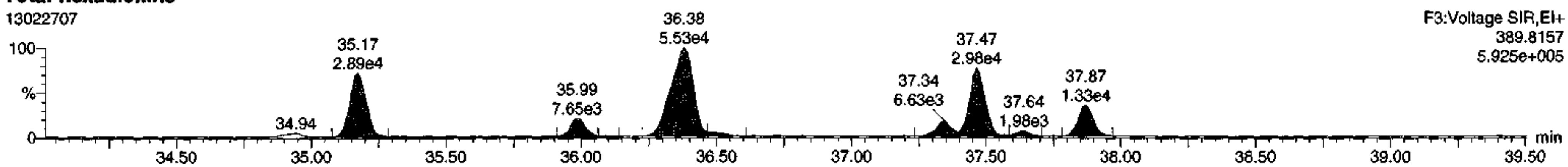
13C-123478-HxCDD



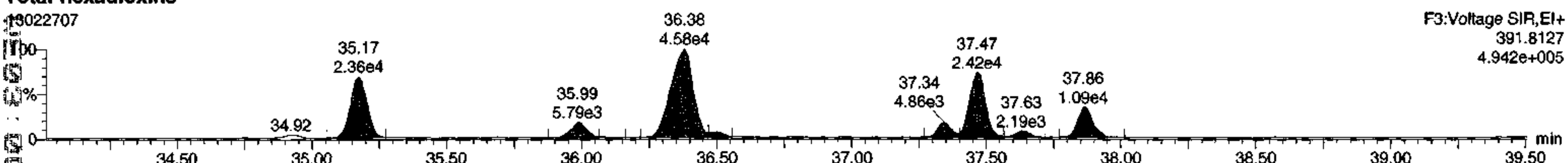
13C-123478-HxCDD



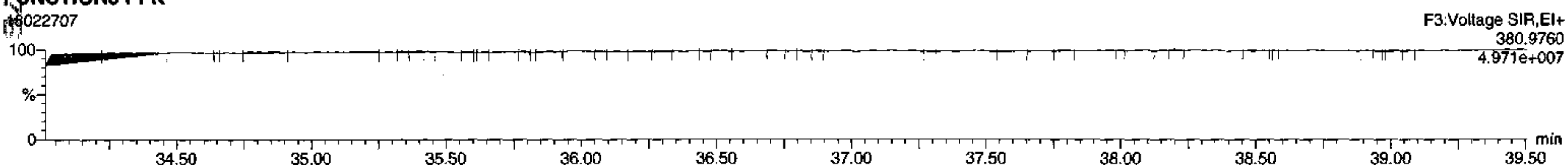
Total-hexadioxins



Total-hexadioxins



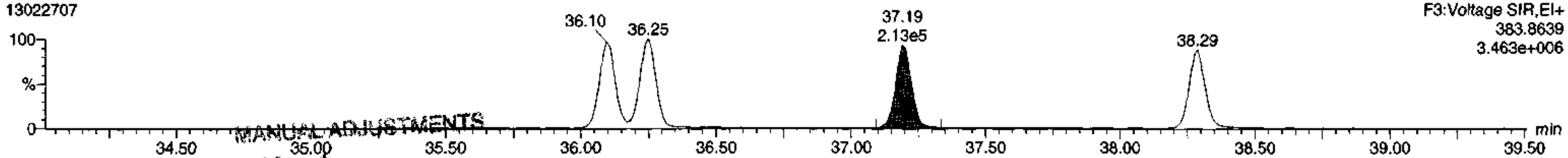
FUNCTION3 PFK



Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130227DATA1.qld
Last Altered: Thursday, February 28, 2013 09:41:01 Pacific Standard Time
Printed: Thursday, February 28, 2013 09:42:24 Pacific Standard Time

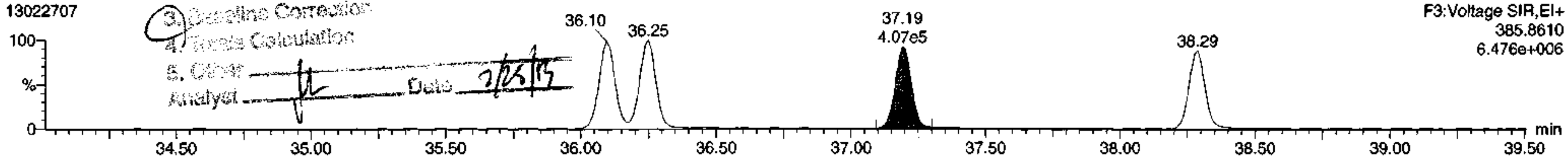
ID: WE03B, Name: 13022707, Date: 27-Feb-2013, Time: 15:25:41, Conditions: AUTOSPEC01, User: pk

13C-234678-HxCDF
13022707

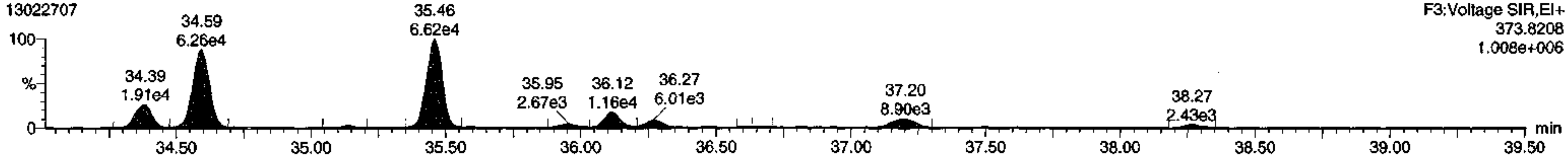


MANUAL ADJUSTMENTS
1. Peak not found
2. Poor Chromatography
3. Baseline Correction
4. Peak Calculation
5. Other
Analyst Date 2/28/13

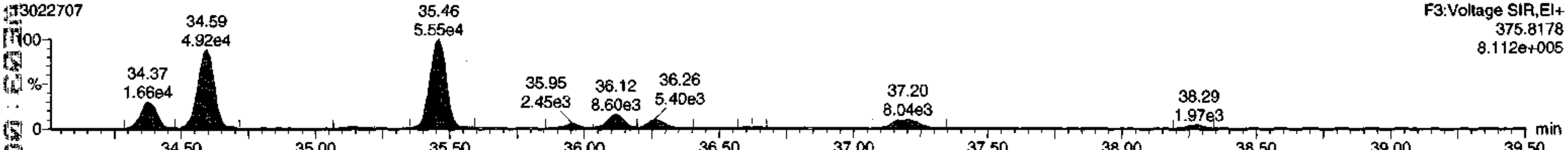
13C-234678-HxCDF
13022707



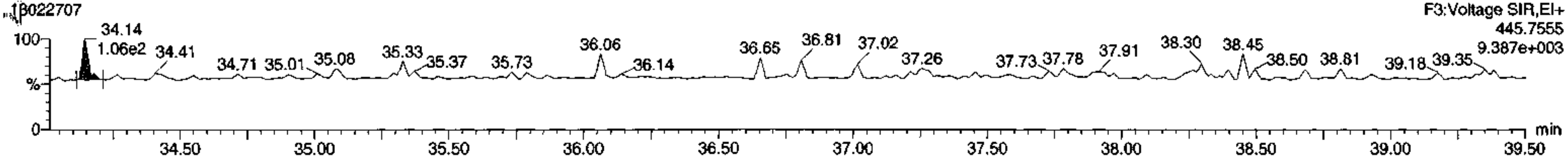
Total-hexafurans
13022707



Total-hexafurans
13022707



FUNCTION3 OCDPE
13022707

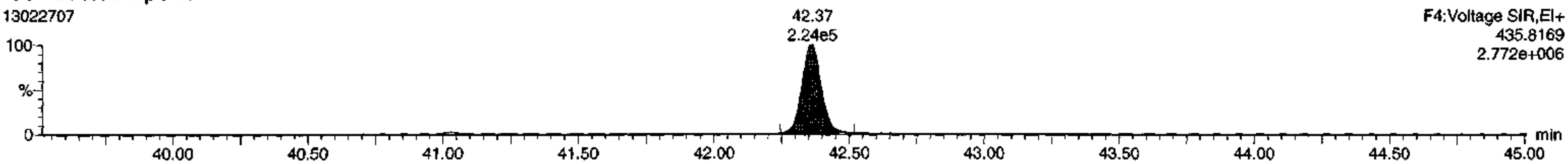


Dataset: P:\DIOXIN8290.PRO\130227DATA1.qld
Last Altered: Thursday, February 28, 2013 09:41:01 Pacific Standard Time
Printed: Thursday, February 28, 2013 09:42:24 Pacific Standard Time

ID: WE03B, Name: 13022707, Date: 27-Feb-2013, Time: 15:25:41, Conditions: AUTOSPEC01, User: pk

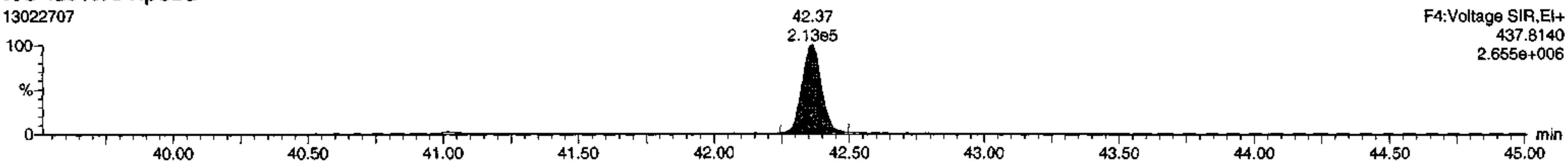
13C-1234678-HpCDD

13022707



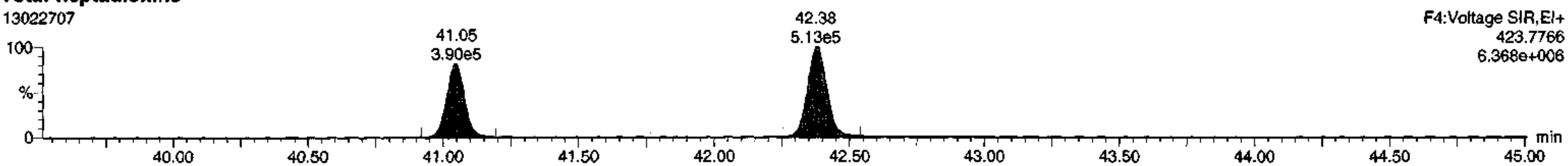
13C-1234678-HpCDD

13022707



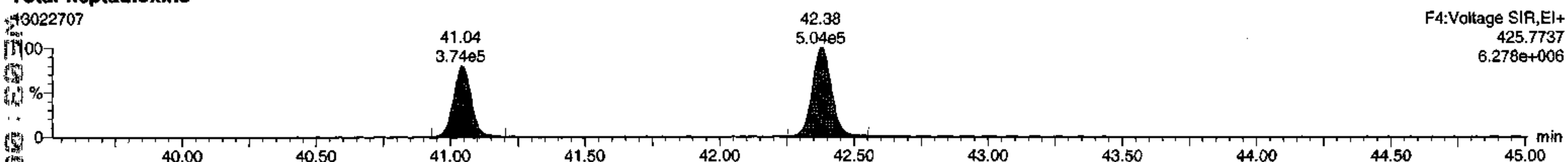
Total-heptadioxins

13022707



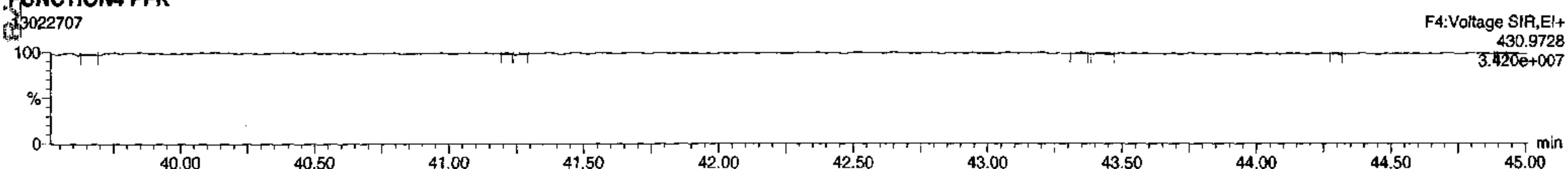
Total-heptadioxins

13022707



FUNCTION4 PFK

13022707



Quantify Sample Report **MassLynx 4.1 SCN 714**

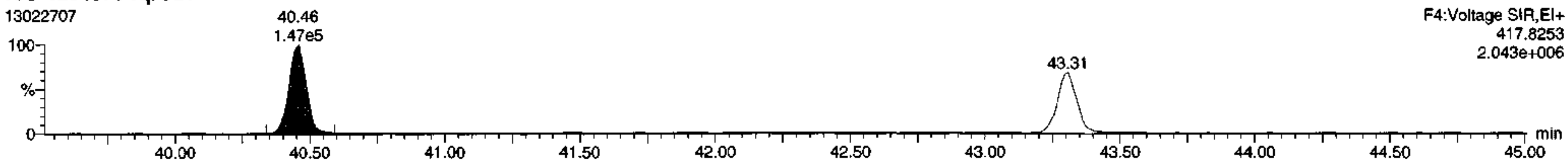
Dataset: P:\DIOXIN8290.PRO\130227DATA1.qld

Last Altered: Thursday, February 28, 2013 09:41:01 Pacific Standard Time

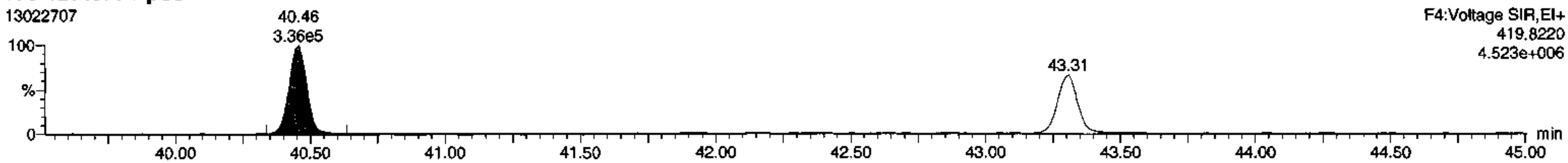
Printed: Thursday, February 28, 2013 09:42:24 Pacific Standard Time

ID: WE03B, Name: 13022707, Date: 27-Feb-2013, Time: 15:25:41, Conditions: AUTOSPEC01, User: pk

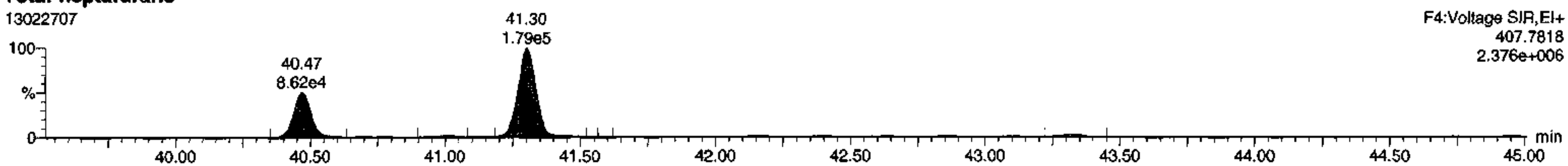
13C-1234678-HpCDF



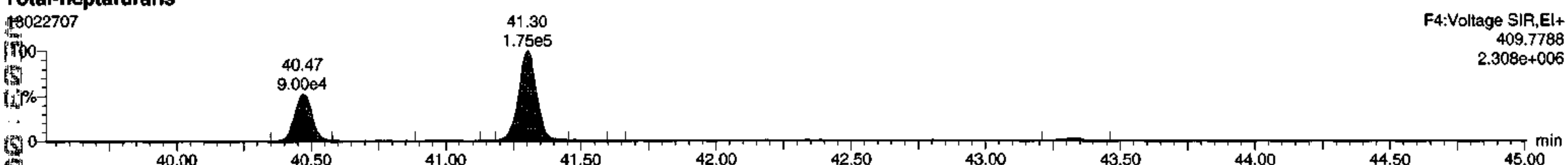
13C-1234678-HpCDF



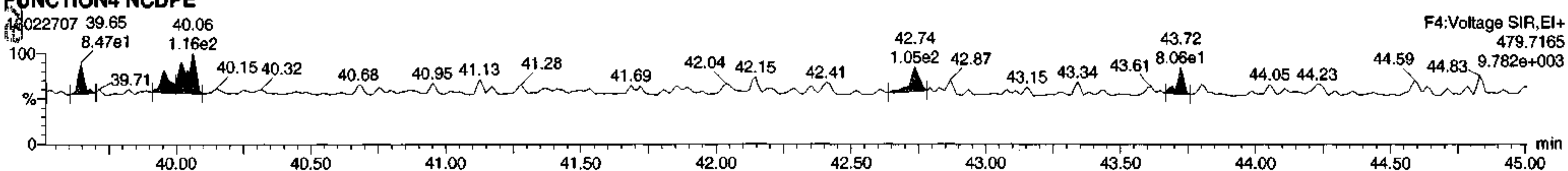
Total-heptafurans



Total-heptafurans



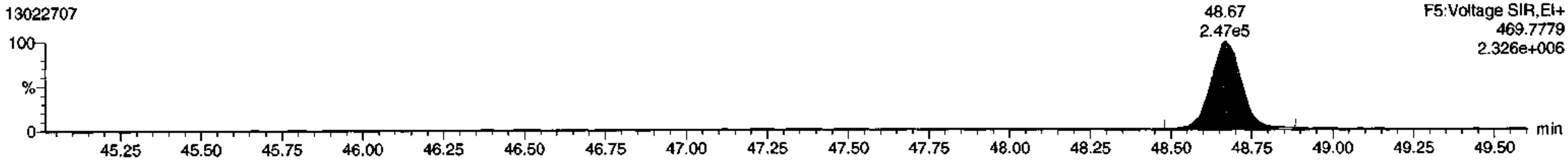
FUNCTION4 NCDPE



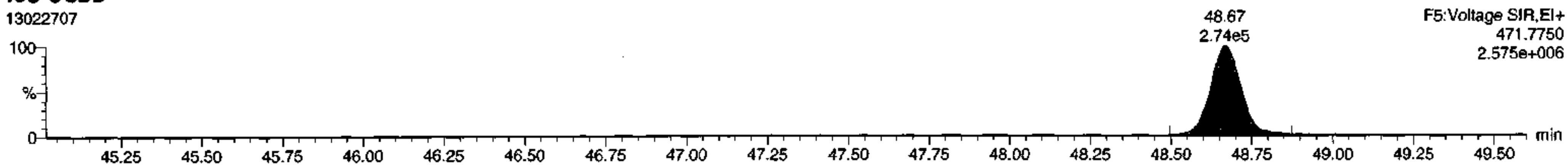
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130227DATA1.qld
Last Altered: Thursday, February 28, 2013 09:41:01 Pacific Standard Time
Printed: Thursday, February 28, 2013 09:42:24 Pacific Standard Time

ID: WE03B, Name: 13022707, Date: 27-Feb-2013, Time: 15:25:41, Conditions: AUTOSPEC01, User: pk

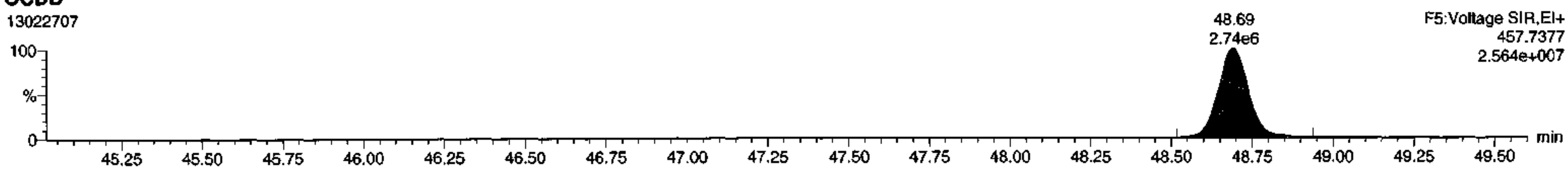
13C-OCDD
13022707



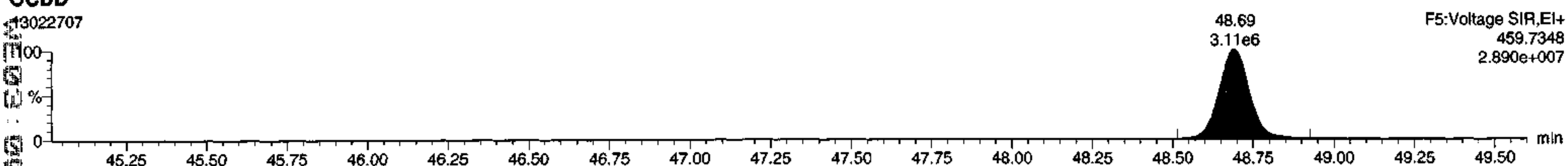
13C-OCDD
13022707



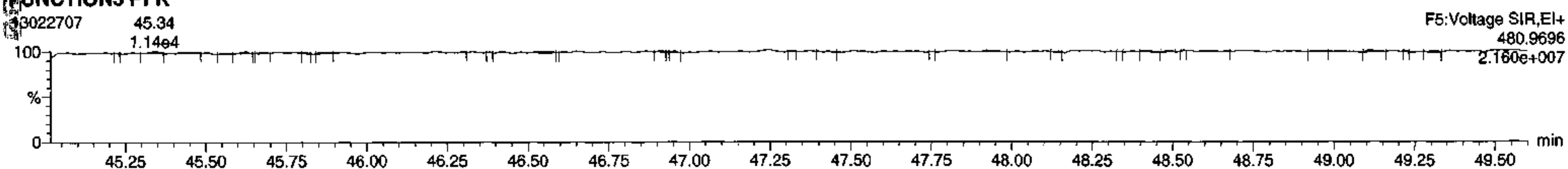
OCDD
13022707



OCDD
13022707



FUNCTION5 PFK
13022707



Quantify Sample Report **MassLynx 4.1 SCN 714**

Dataset: P:\DIOXIN8290.PRO\130227DATA1.qld

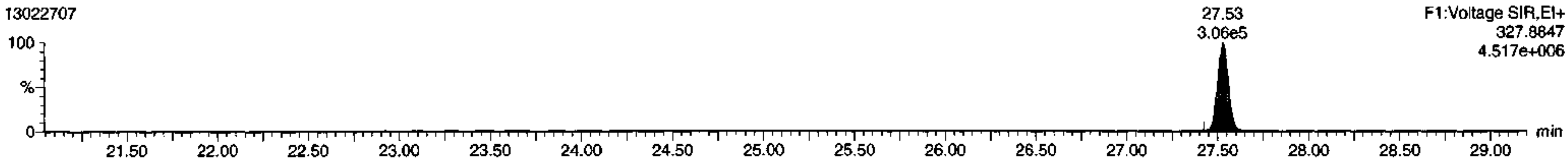
Last Altered: Thursday, February 28, 2013 09:41:01 Pacific Standard Time

Printed: Thursday, February 28, 2013 09:42:24 Pacific Standard Time

ID: WE03B, Name: 13022707, Date: 27-Feb-2013, Time: 15:25:41, Conditions: AUTOSPEC01, User: pk

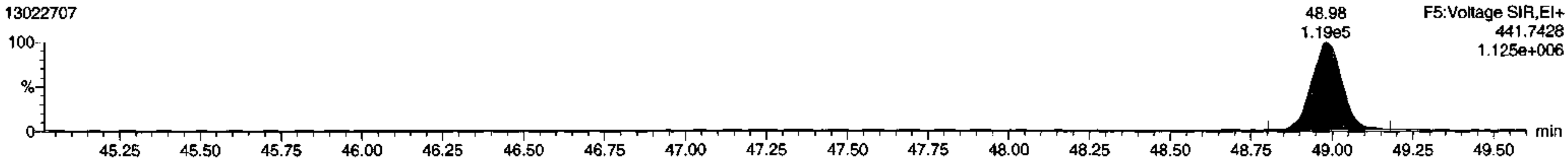
37CL-2378-TCDD

13022707



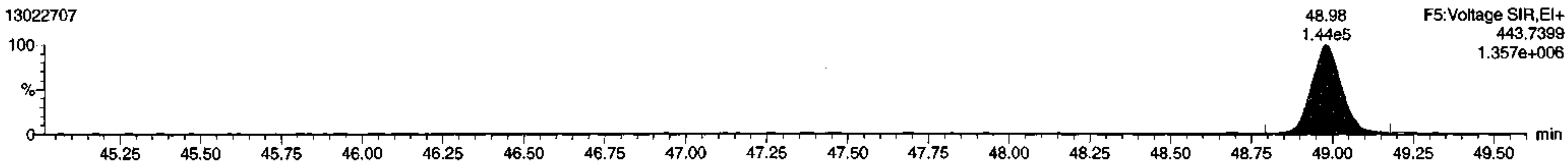
OCDF

13022707



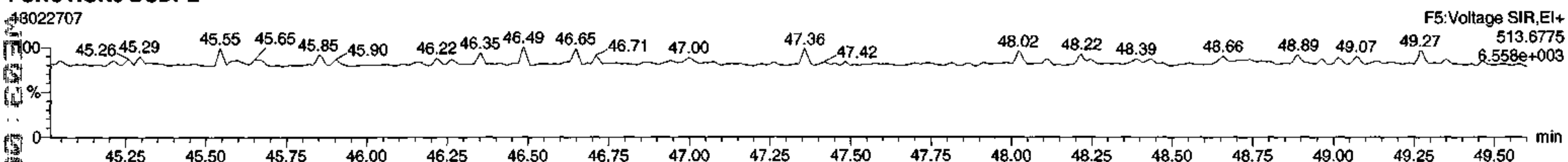
OCDF

13022707



FUNCTION5 DCDPE

13022707



WE03 : 00281

Quantify Sample Summary Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130227DATA1.qld
Last Altered: Thursday, February 28, 2013 09:41:01 Pacific Standard Time
Printed: Thursday, February 28, 2013 09:41:24 Pacific Standard Time

Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130225.mdb 26 Feb 2013 09:49:11
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: CS3, Name: 13022710, Date: 27-Feb-2013, Time: 18:04:06, Conditions: AUTOSPEC01, User: pk

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[redacted]	12378-PeCDF	31.042	1.000	3.28e5	2.14e5	0.912	1.532	1.550	1828.8	NO	49.610	49.610
[redacted]	23478-PeCDF	32.390	1.000	3.21e5	2.11e5	0.943	1.522	1.550	1903.6	NO	48.151	48.151
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[redacted]	234678-HxCDF	37.180	1.000	2.56e5	2.14e5	1.073	1.196	1.240	1122.4	NO	49.230	49.230
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[redacted]	12378-PeCDD	32.653	1.001	2.34e5	1.50e5	1.001	1.563	1.550	1615.8	NO	49.113	49.113
[redacted]	123478-HxCDD	37.311	1.000	1.96e5	1.60e5	0.978	1.225	1.240	1159.4	NO	49.447	49.447
[redacted]	123678-HxCDD	37.432	1.000	1.93e5	1.53e5	0.929	1.260	1.240	1116.5	NO	47.776	47.776
[redacted]	123789-HxCDD	37.837	1.011	1.93e5	1.55e5	0.904	1.250	1.240	1124.6	NO	50.746	50.746
[redacted]	1234678-HpCDD	42.331	1.001	1.54e5	1.51e5	1.029	1.014	1.050	1100.0	NO	48.022	48.022
[redacted]	OCDD	48.604	1.000	2.44e5	2.78e5	1.011	0.876	0.890	1861.8	NO	97.671	97.671
[redacted]	13C-2378-TCDF	26.855	1.007	6.74e5	8.71e5	1.522	0.774	0.770	4202.1	NO		92.196
[redacted]	13C-12378-PeCDF	31.031	1.163	7.27e5	4.70e5	1.185	1.548	1.550	3741.3	NO		91.719
[redacted]	13C-23478-PeCDF	32.379	1.214	7.16e5	4.57e5	1.136	1.565	1.550	3799.8	NO		93.807
[redacted]	13C-123478-HxCDF	36.073	0.954	2.94e5	5.72e5	1.284	0.514	0.510	1783.9	NO		88.753
[redacted]	13C-123678-HxCDF	36.226	0.958	3.27e5	6.07e5	1.383	0.539	0.510	1902.1	NO		88.925
[redacted]	13C-234678-HxCDF	37.169	0.983	3.10e5	5.79e5	1.283	0.535	0.510	1916.2	NO		91.221
[redacted]	13C-123789-HxCDF	38.254	1.011	2.75e5	5.22e5	1.099	0.528	0.510	1729.1	NO		95.482
[redacted]	13C-1234678-HpCDF	40.413	1.068	2.21e5	4.96e5	1.070	0.445	0.440	1897.1	NO		88.219
[redacted]	13C-1234789-HpCDF	43.263	1.144	1.76e5	3.95e5	0.774	0.445	0.440	1319.5	NO		97.100
[redacted]	13C-1234-TCDD	26.675	0.000	4.79e5	6.22e5	1.000	0.770	0.770	1748.4	NO		100.000
[redacted]	13C-2378-TCDD	27.497	1.031	4.44e5	5.68e5	0.943	0.781	0.770	1560.7	NO		97.512
[redacted]	13C-12378-PeCDD	32.631	1.223	4.76e5	3.05e5	0.715	1.563	1.550	4866.0	NO		99.121
[redacted]	13C-123478-HxCDD	37.300	0.986	4.14e5	3.22e5	1.032	1.287	1.240	2377.2	NO		93.880
[redacted]	13C-123678-HxCDD	37.421	0.989	4.32e5	3.48e5	1.076	1.244	1.240	2533.5	NO		95.390
[redacted]	13C-1234678-HpCDD	42.310	1.119	3.14e5	3.03e5	0.838	1.038	1.050	2682.6	NO		97.026
[redacted]	13C-OCDD	48.586	1.284	5.00e5	5.56e5	0.675	0.898	0.890	3201.2	NO		205.811

Quantify Sample Summary Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130227DATA1.qld
Last Altered: Thursday, February 28, 2013 09:41:01 Pacific Standard Time
Printed: Thursday, February 28, 2013 09:41:24 Pacific Standard Time

ID: CS3, Name: 13022710, Date: 27-Feb-2013, Time: 18:04:06, Conditions: AUTOSPEC01, User: pk

	13C-123789-HxCDD	37.826	0.000	4.17e5	3.42e5	1.000	1.218	1.240	2432.5	NO		100.000
	Total-tetrafurans			1.81e5		0.921						29.432
	Total-penta1			4.73e5								72.200
	Total-pentafurans			9.92e5		0.927						149.273
	Total-hexafurans			1.31e6		1.062						258.872
	Total-heptafurans			3.97e5		1.231						100.545
	Total-Furans			3.64e6		1.065						707.910
	Total-tetradioxins			2.65e5		1.106						54.041
	Total-pentadioxins			8.26e5		1.001						174.085
	Total-hexadioxins			8.44e5		0.937						215.074
	Total-heptadioxins			3.37e5		1.029						105.400
	Total-Dioxins			2.52e6		0.994						646.271
	Total-TEQ			6.15e6								1354.181
	37CL-2378-TCDD	27.512	1.031	1.08e5		1.051			881.5			9.368
	FUNCTION1 PFK			6.14e5								
	FUNCTION2 PFK			9.79e4								0.000
	FUNCTION3 PFK			2.97e5								0.000
	FUNCTION4 PFK			5.50e6								
	FUNCTION5 PFK			8.00e4								
	FUNCTION1 HXCDPE			3.19e2								0.000
	FUNCTION1 HPCDPE			2.87e3								0.000
	FUNCTION2 HPCDPE			1.42e3								0.000
	FUNCTION3 OCDPE			0.00e0								
	FUNCTION4 NCDPE			0.00e0								
	FUNCTION5 DCDPE			0.00e0								

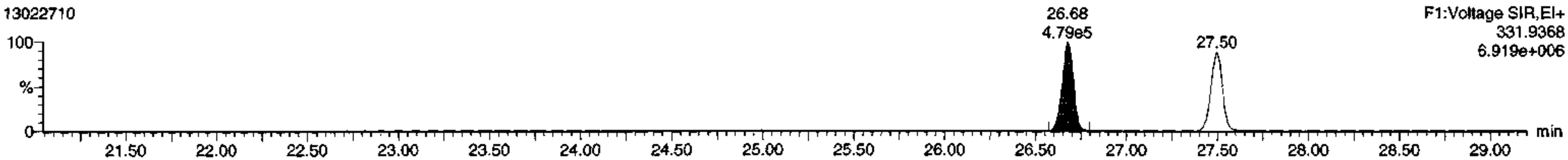
Quantify Sample Report **MassLynx 4.1 SCN 714**

Dataset: P:\DIOXIN8290.PRO\130227DATA1.qld
Last Altered: Thursday, February 28, 2013 09:41:01 Pacific Standard Time
Printed: Thursday, February 28, 2013 09:41:24 Pacific Standard Time

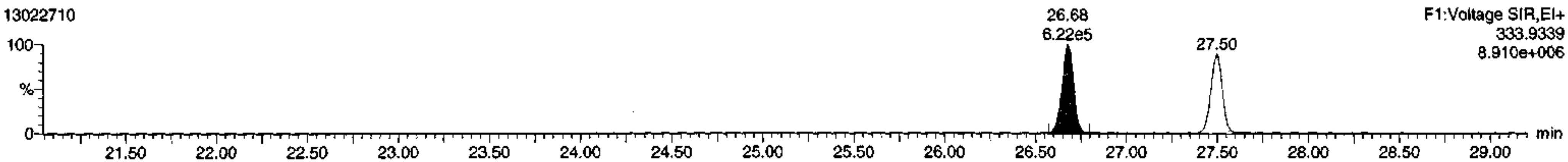
Method: P:\DIOXIN8290.PRO\MethDB\Dioxin130225.mdb 26 Feb 2013 09:49:11
Calibration: P:\DIOXIN8290.PRO\CurveDB\130211ICAL.cdb 12 Feb 2013 09:29:24

ID: CS3, Name: 13022710, Date: 27-Feb-2013, Time: 18:04:06, Conditions: AUTOSPEC01, User: pk

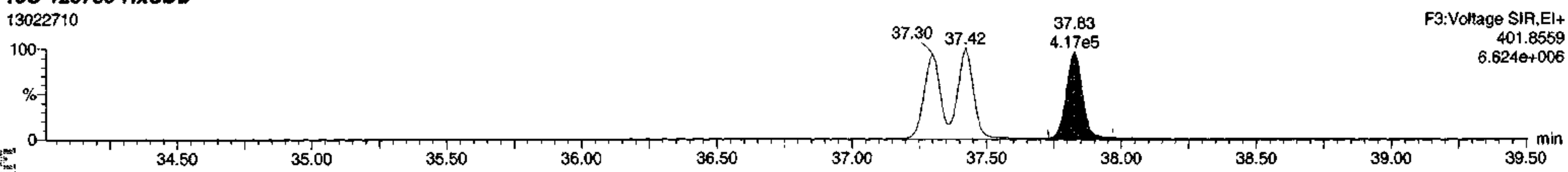
13C-1234-TCDD



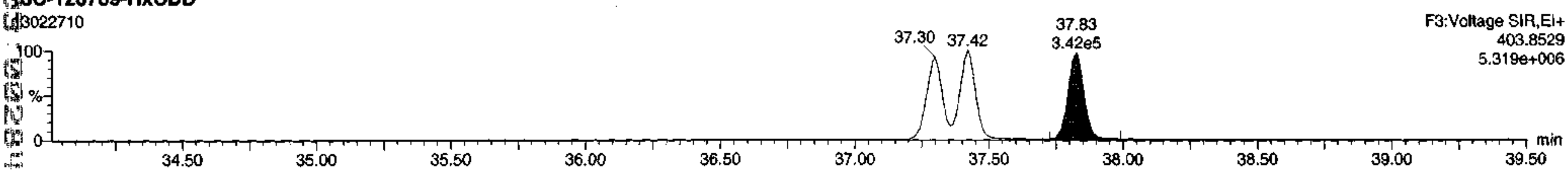
13C-1234-TCDD



13C-123789-HxCDD



13C-123789-HxCDD



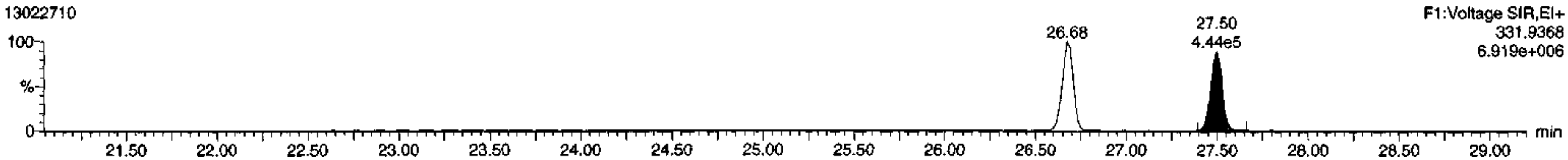
Dataset: P:\DIOXIN8290.PRO\130227DATA1.qld

Last Altered: Thursday, February 28, 2013 09:41:01 Pacific Standard Time

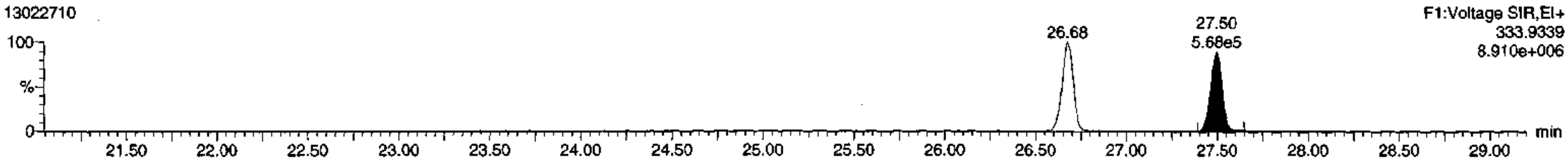
Printed: Thursday, February 28, 2013 09:41:24 Pacific Standard Time

ID: CS3, Name: 13022710, Date: 27-Feb-2013, Time: 18:04:06, Conditions: AUTOSPEC01, User: pk

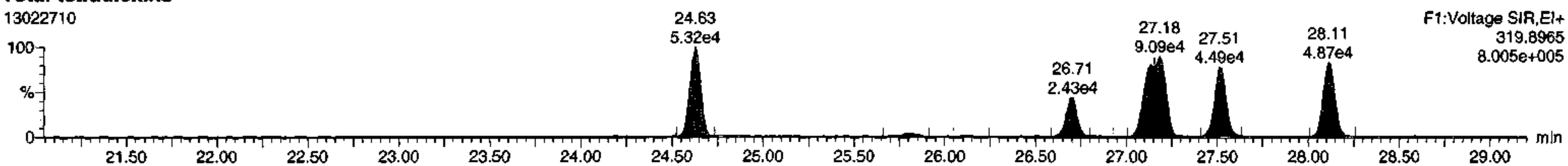
13C-2378-TCDD



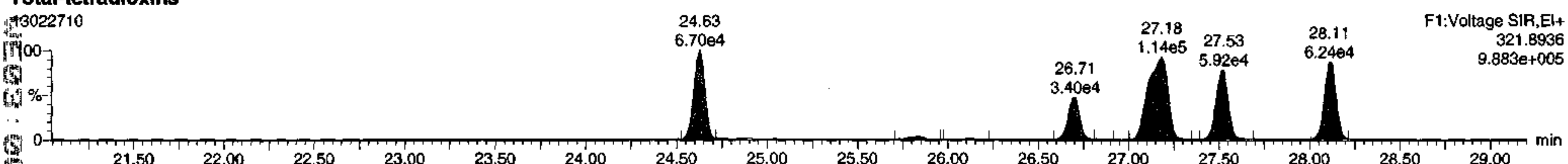
13C-2378-TCDD



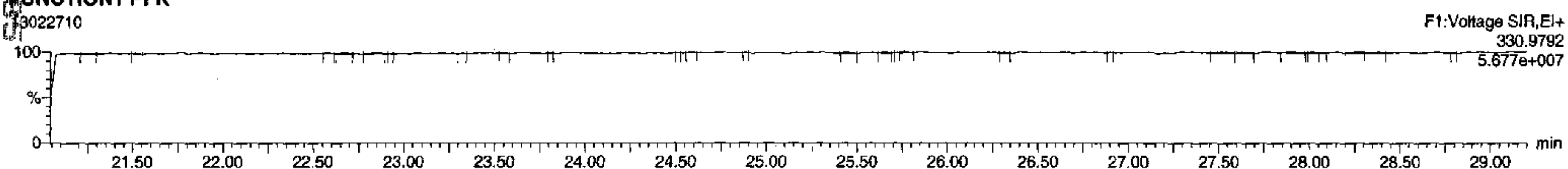
Total-tetradioxins



Total-tetradioxins



FUNCTION1 PFK



Quantify Sample Report **MassLynx 4.1 SCN 714**

Dataset: P:\DIOXIN8290.PRO\130227DATA1.qld

Last Altered: Thursday, February 28, 2013 09:41:01 Pacific Standard Time

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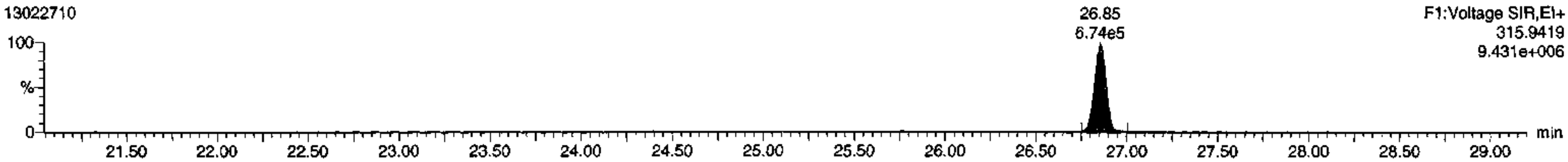
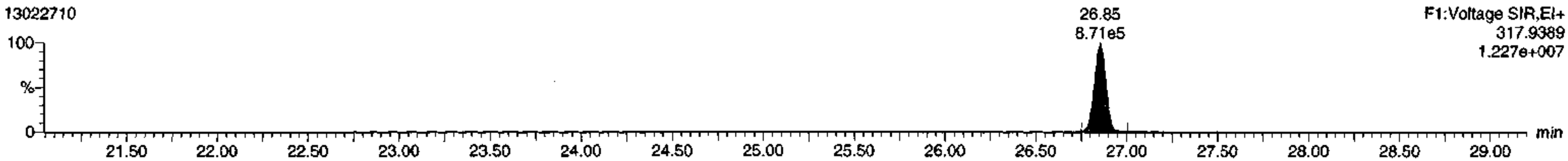
ID: CS3, Name: 13022710, Date: 27-Feb-2013, Time: 18:04:06, Conditions: AUTOSPEC01, User: pk

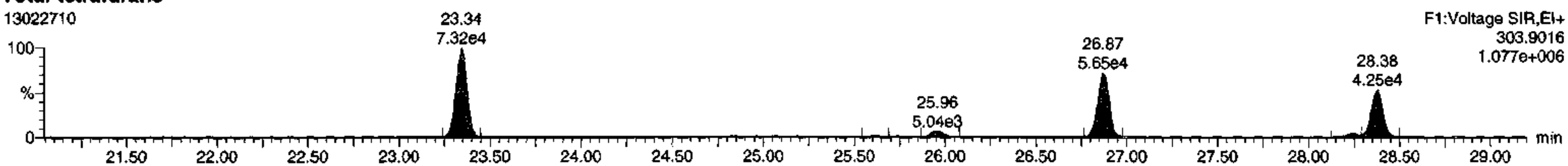
13C-2378-TCDF



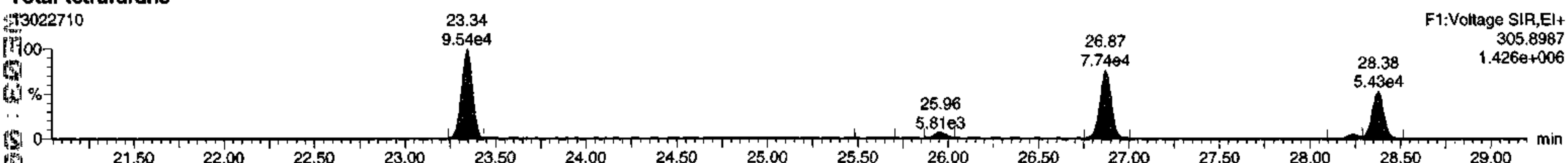
13C-2378-TCDF



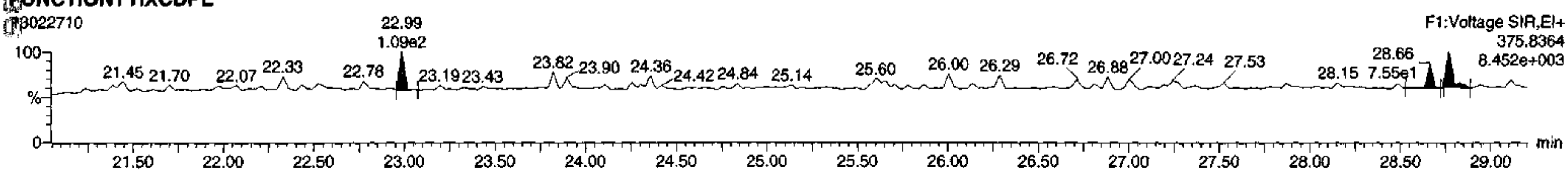
Total-tetrafurans



Total-tetrafurans



FUNCTION1 HXCDPE



Dataset: P:\DIOXIN8290.PRO\130227DATA1.qld
Last Altered: Thursday, February 28, 2013 09:41:01 Pacific Standard Time
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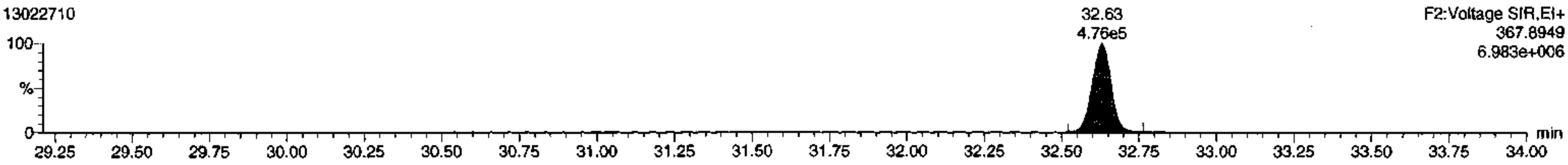
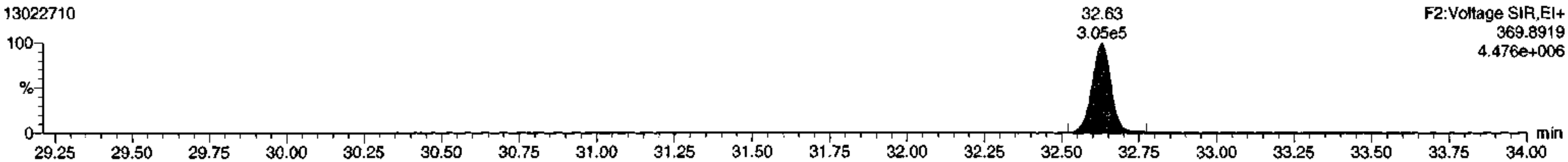
ID: CS3, Name: 13022710, Date: 27-Feb-2013, Time: 18:04:06, Conditions: AUTOSPEC01, User: pk

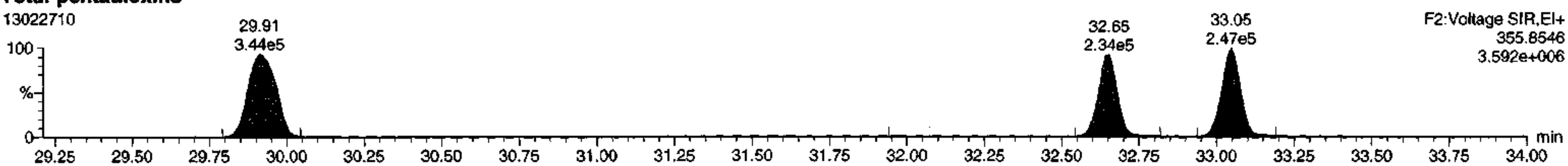
13C-12378-PeCDD



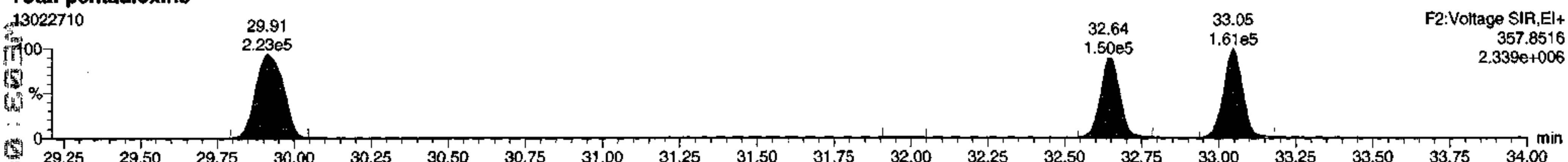
13C-12378-PeCDD



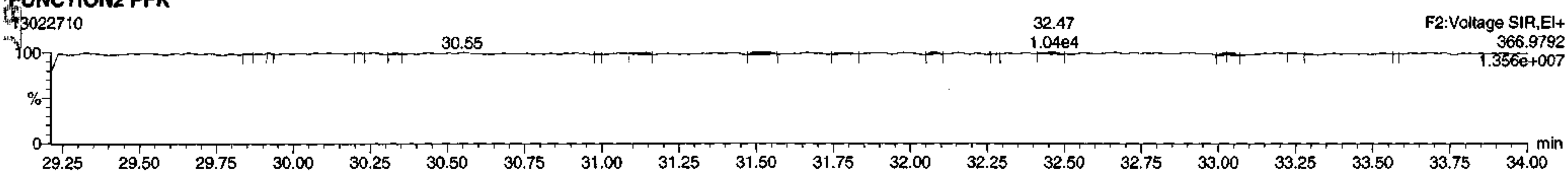
Total-pentadioxins



Total-pentadioxins



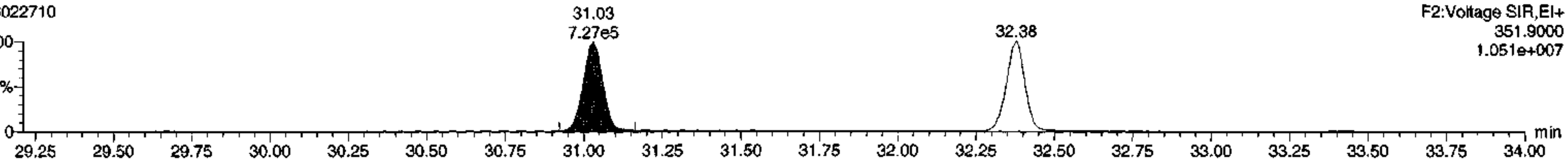
FUNCTION2 PFK



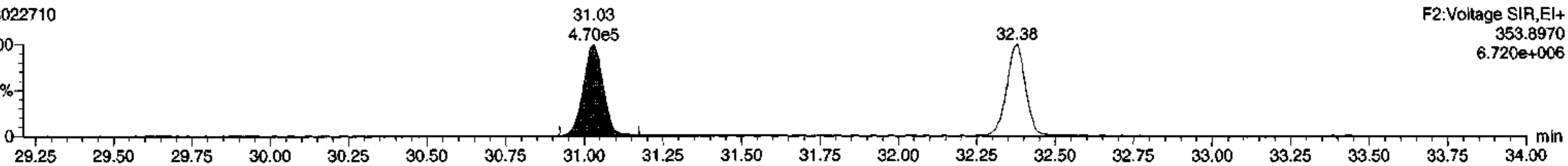
Quantify Sample Report **MassLynx 4.1 SCN 714**
Dataset: P:\DIOXIN8290.PRO\130227DATA1.qld
Last Altered: Thursday, February 28, 2013 09:41:01 Pacific Standard Time
Printed: Thursday, February 28, 2013 09:41:24 Pacific Standard Time

ID: CS3, Name: 13022710, Date: 27-Feb-2013, Time: 18:04:06, Conditions: AUTOSPEC01, User: pk

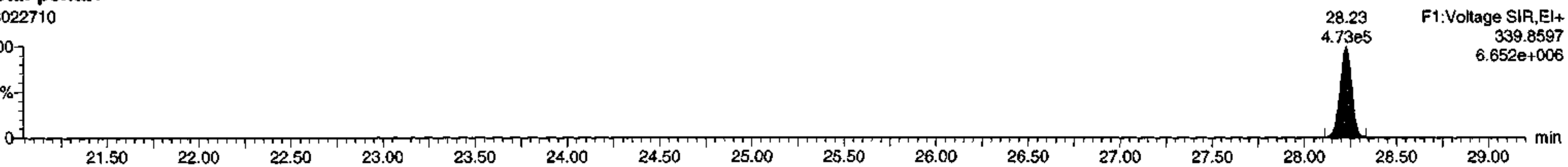
13C-12378-PeCDF
13022710



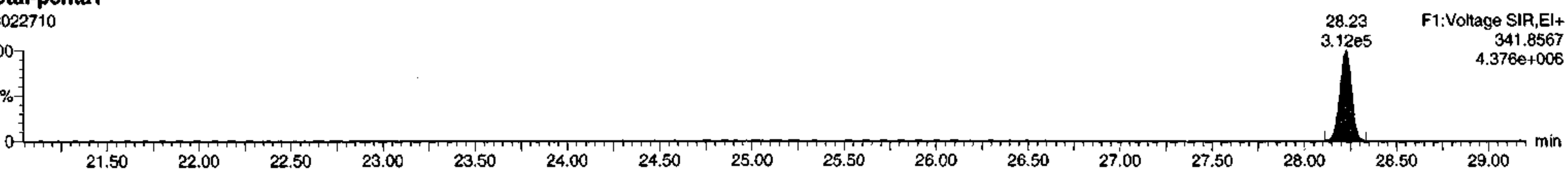
13C-12378-PeCDF
13022710



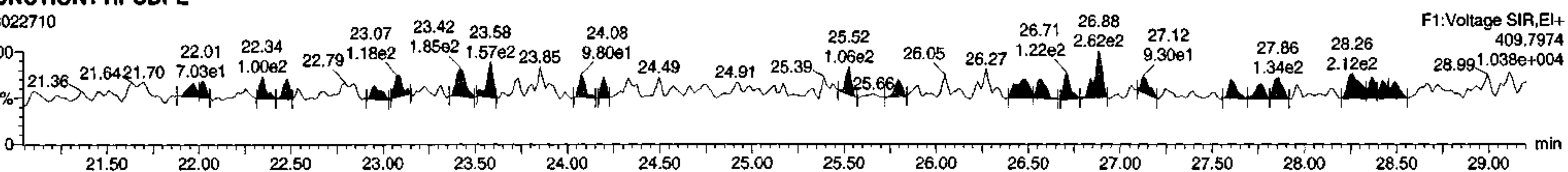
Total-penta1
13022710



Total-penta1
13022710



FUNCTION1 HPCDPE
13022710



Dataset: P:\DIOXIN8290.PRO\130227DATA1.qld
Last Altered: Thursday, February 28, 2013 09:41:01 Pacific Standard Time
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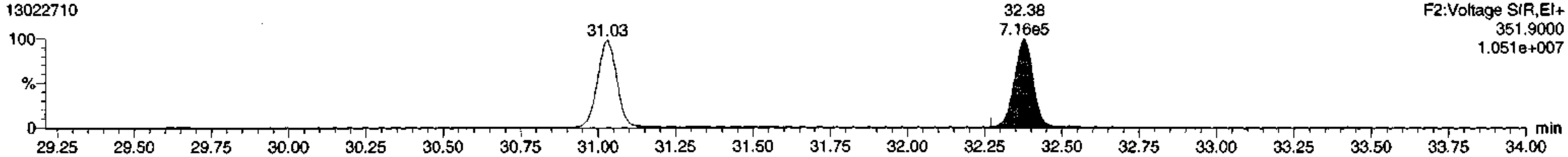
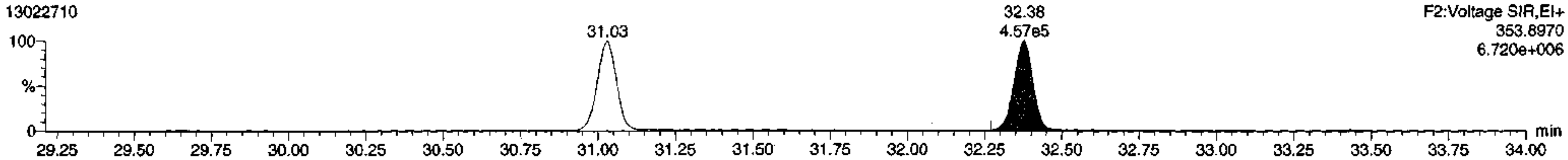
ID: CS3, Name: 13022710, Date: 27-Feb-2013, Time: 18:04:06, Conditions: AUTOSPEC01, User: pk

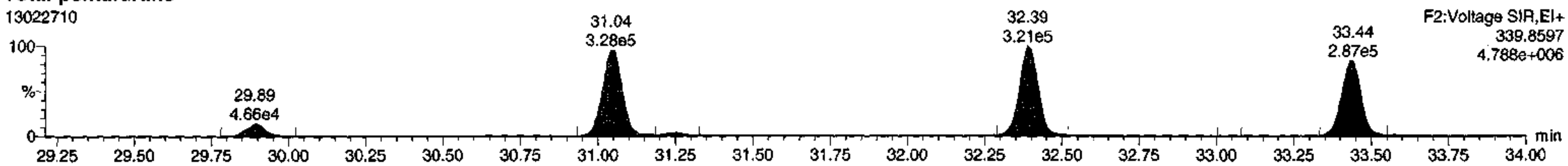
13C-23478-PeCDF



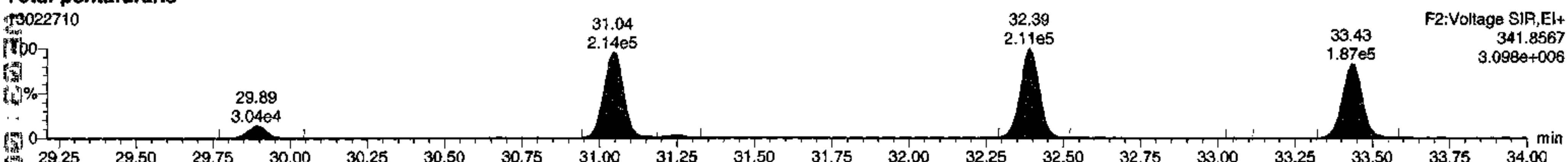
13C-23478-PeCDF



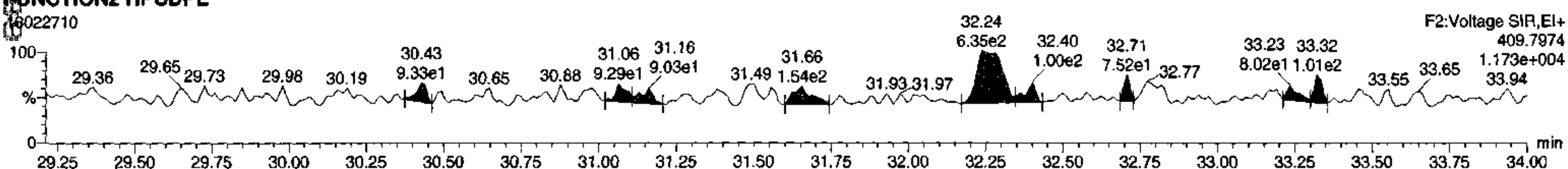
Total-pentafurans



Total-pentafurans



FUNCTION2 HPCDPE



Dataset: P:\DIOXIN8290.PRO\130227DATA1.qld

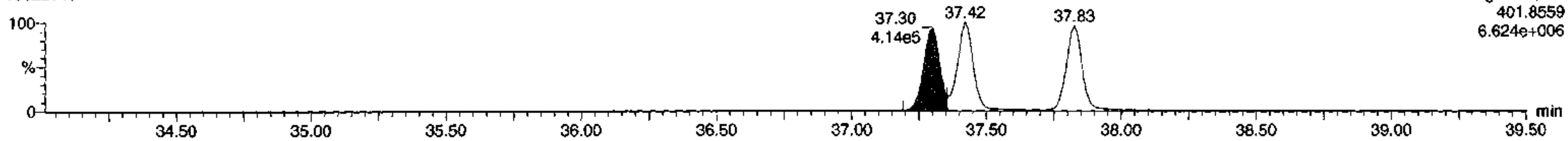
Last Altered: Thursday, February 28, 2013 09:41:01 Pacific Standard Time

Printed: Thursday, February 28, 2013 09:41:24 Pacific Standard Time

ID: CS3, Name: 13022710, Date: 27-Feb-2013, Time: 18:04:06, Conditions: AUTOSPEC01, User: pk

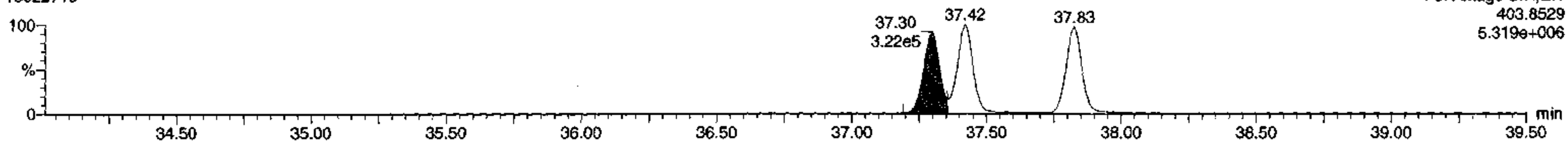
13C-123478-HxCDD

13022710



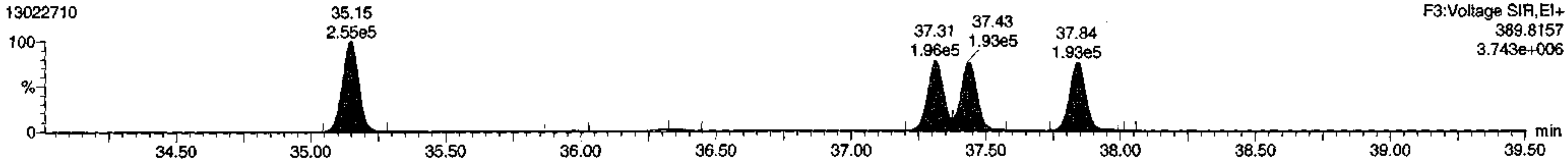
13C-123478-HxCDD

13022710



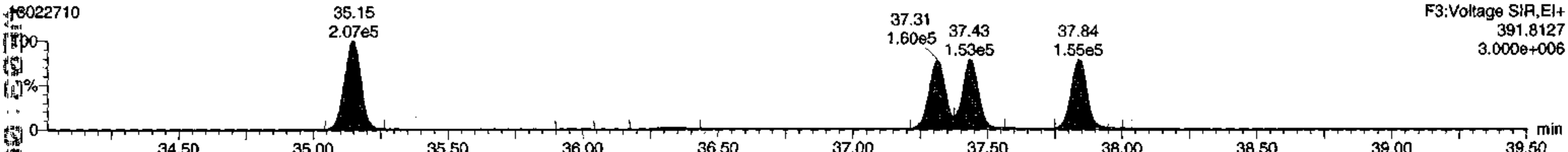
Total-hexadioxins

13022710



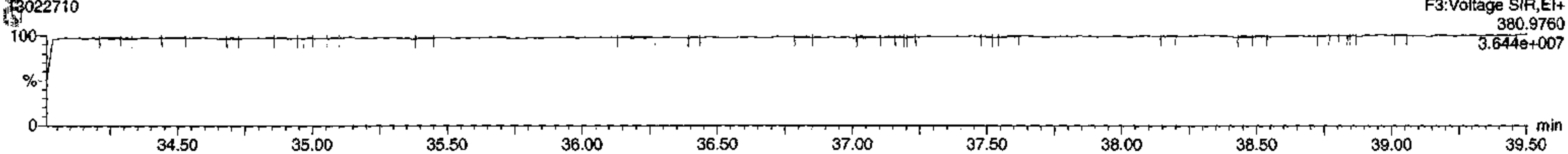
Total-hexadioxins

13022710



FUNCTION3 PFK

13022710



Quantify Sample Report **MassLynx 4.1 SCN 714**

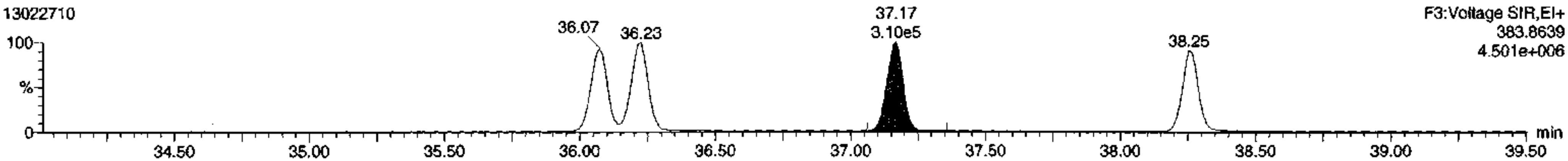
Dataset: P:\DIOXIN8290.PRO\130227DATA1.qld

Last Altered: Thursday, February 28, 2013 09:41:01 Pacific Standard Time

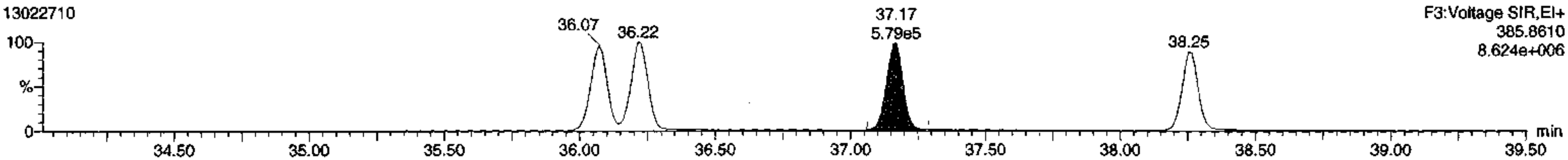
Printed: Thursday, February 28, 2013 09:41:24 Pacific Standard Time

ID: CS3, Name: 13022710, Date: 27-Feb-2013, Time: 18:04:06, Conditions: AUTOSPEC01, User: pk

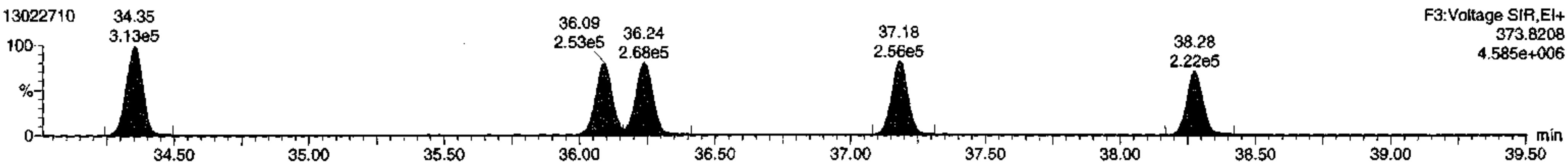
13C-234678-HxCDF



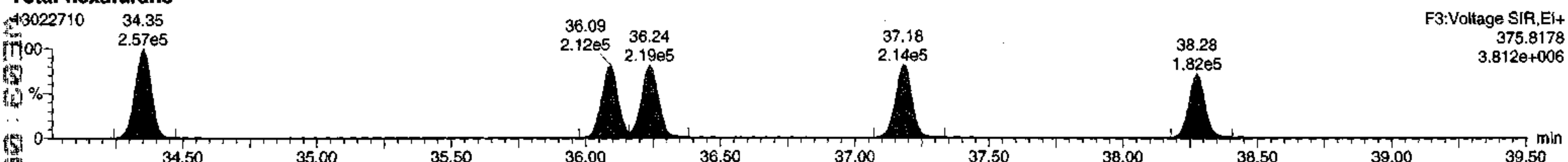
13C-234678-HxCDF



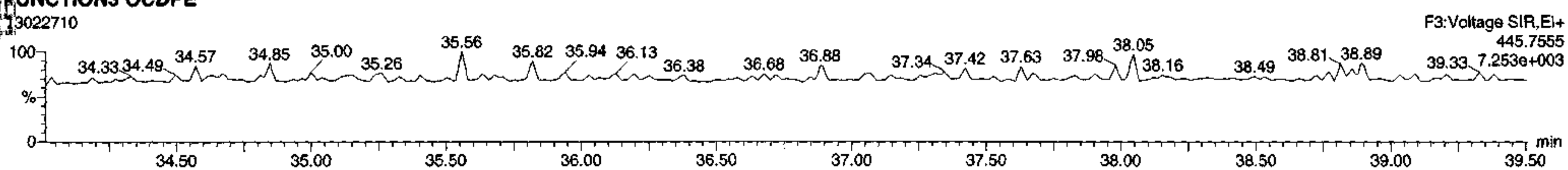
Total-hexafurans



Total-hexafurans



FUNCTION3 OCDPE



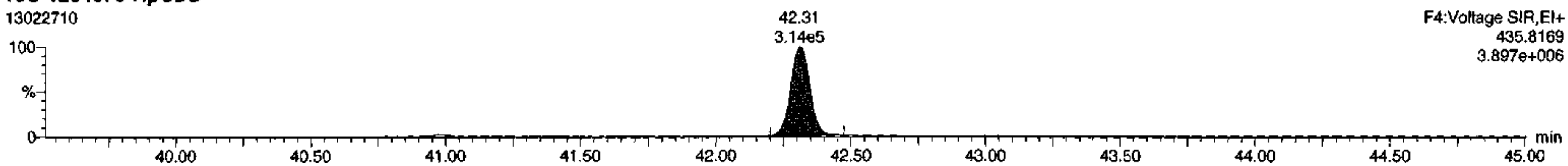
Dataset: P:\DIOXIN8290.PRO\130227DATA1.qld

Last Altered: Thursday, February 28, 2013 09:41:01 Pacific Standard Time

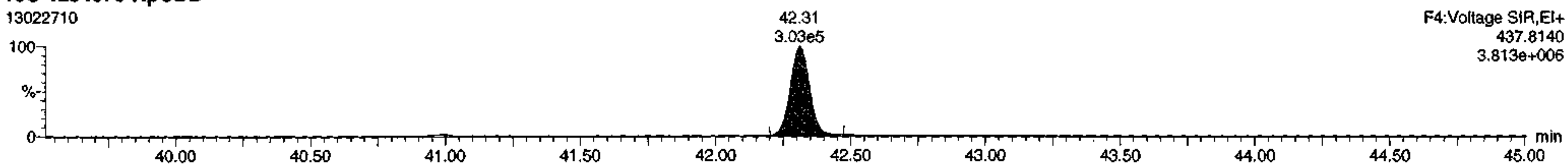
Printed: Thursday, February 28, 2013 09:41:24 Pacific Standard Time

ID: CS3, Name: 13022710, Date: 27-Feb-2013, Time: 18:04:06, Conditions: AUTOSPEC01, User: pk

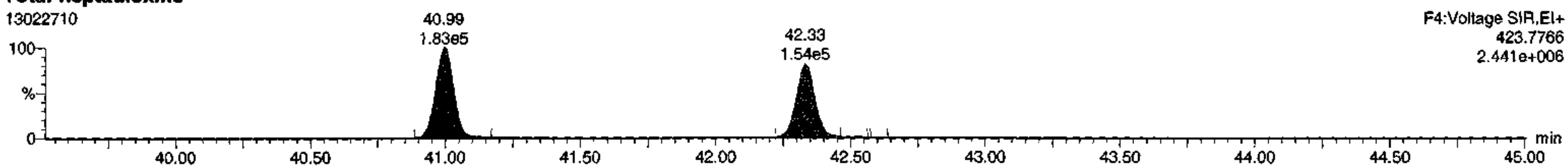
13C-1234678-HpCDD



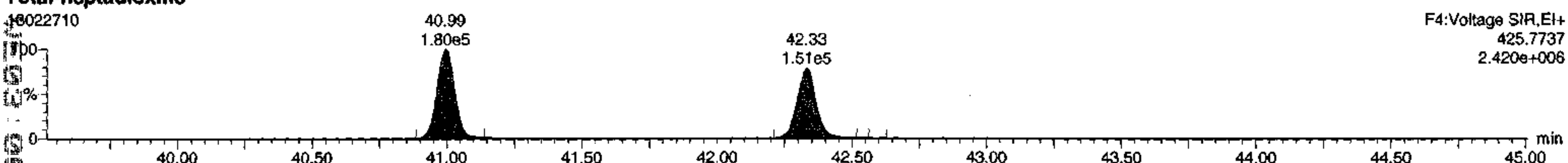
13C-1234678-HpCDD



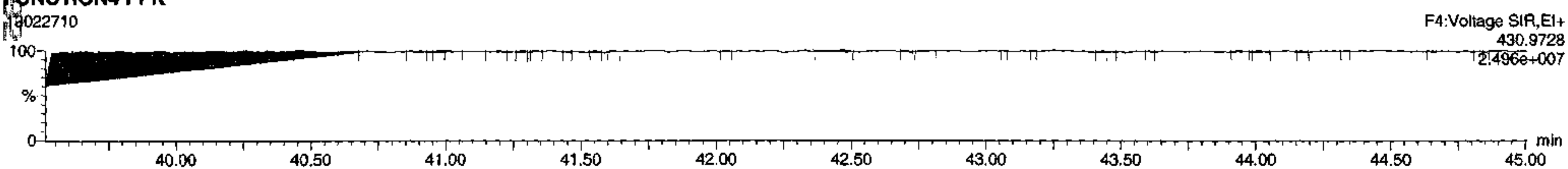
Total-heptadioxins



Total-heptadioxins



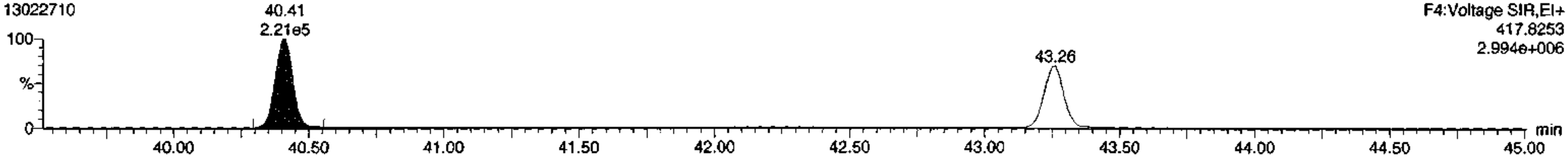
FUNCTION4 PFK



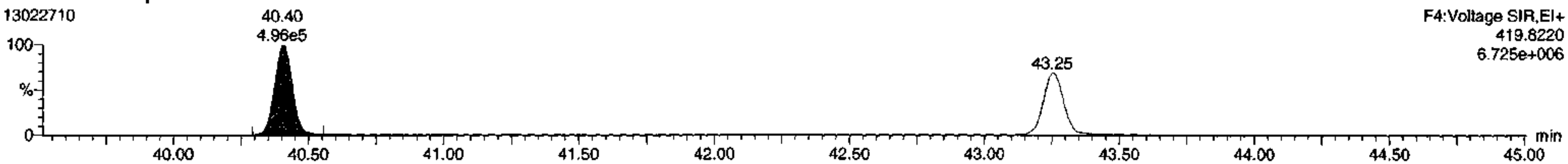
Dataset: P:\DIOXIN8290.PRO\130227DATA1.qld
Last Altered: Thursday, February 28, 2013 09:41:01 Pacific Standard Time
Printed: Thursday, February 28, 2013 09:41:24 Pacific Standard Time

ID: CS3, Name: 13022710, Date: 27-Feb-2013, Time: 18:04:06, Conditions: AUTOSPEC01, User: pk

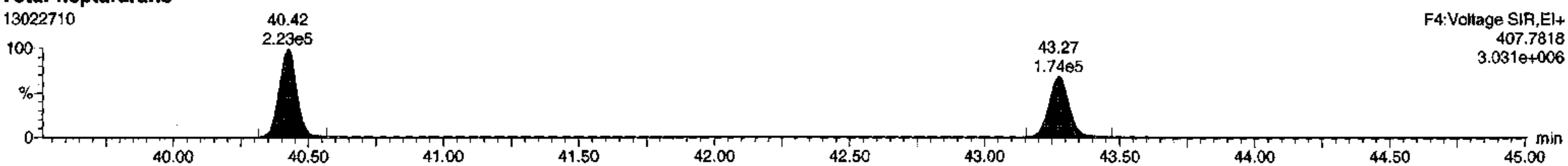
13C-1234678-HpCDF



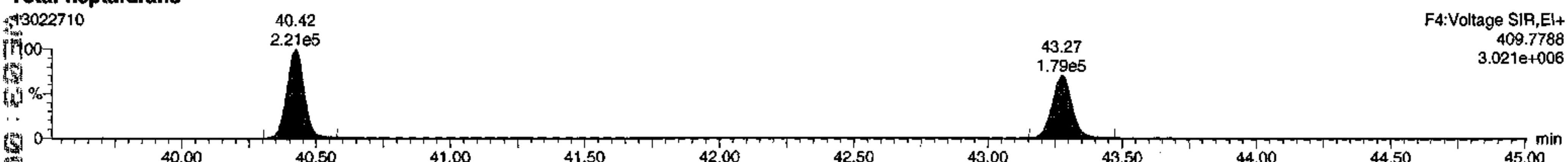
13C-1234678-HpCDF



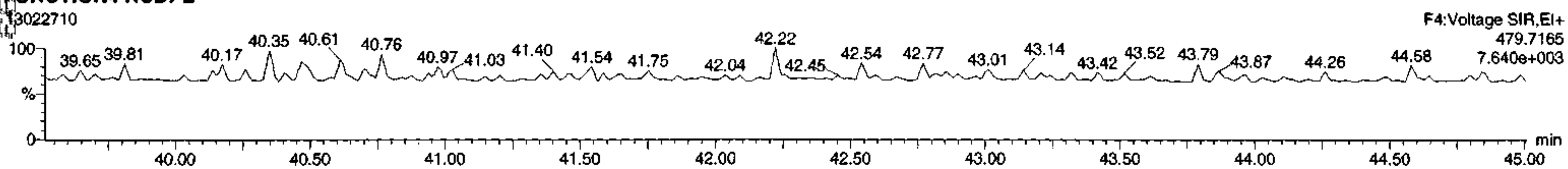
Total-heptafurans



Total-heptafurans



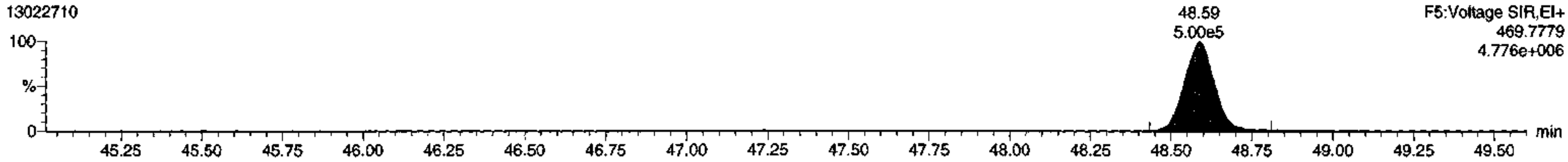
FUNCTION4 NCDPE



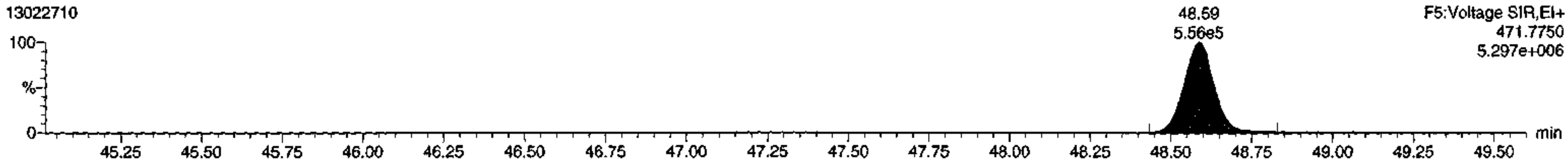
Dataset: P:\DIOXIN8290.PRO\130227DATA1.qld
Last Altered: Thursday, February 28, 2013 09:41:01 Pacific Standard Time
Printed: Thursday, February 28, 2013 09:41:24 Pacific Standard Time

ID: CS3, Name: 13022710, Date: 27-Feb-2013, Time: 18:04:06, Conditions: AUTOSPEC01, User: pk

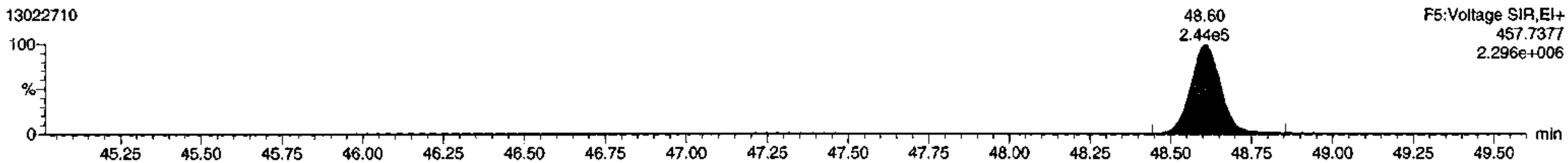
13C-OCDD
13022710



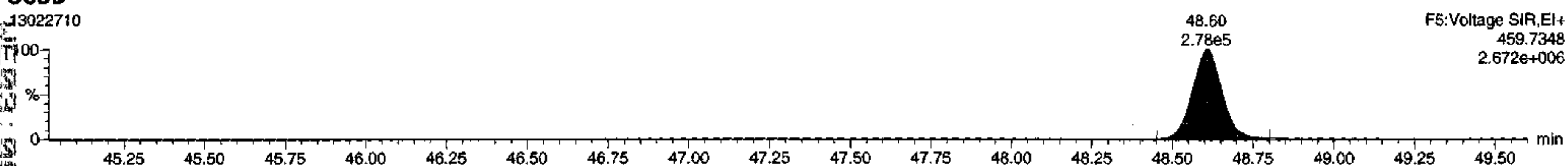
13C-OCDD
13022710



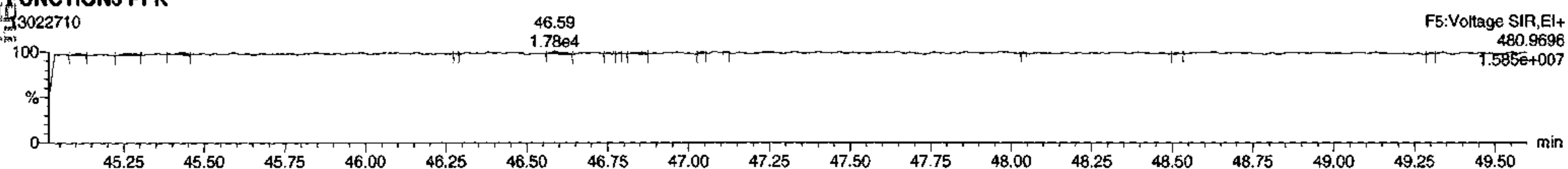
OCDD
13022710



OCDD
13022710



FUNCTION5 PFK
13022710



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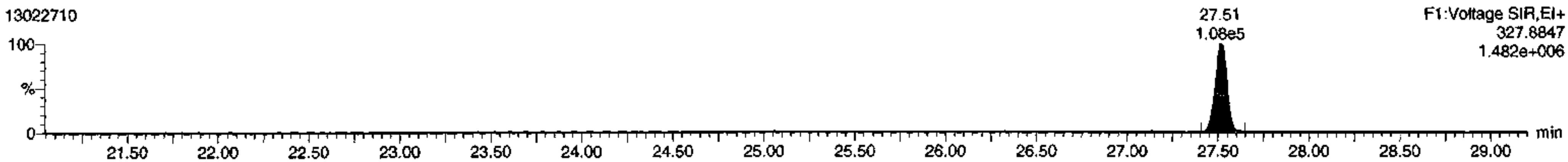
Last Altered: Thursday, February 28, 2013 09:41:01 Pacific Standard Time
Printed: Thursday, February 28, 2013 09:41:24 Pacific Standard Time

ID: CS3, Name: 13022710, Date: 27-Feb-2013, Time: 18:04:06, Conditions: AUTOSPEC01, User: pk

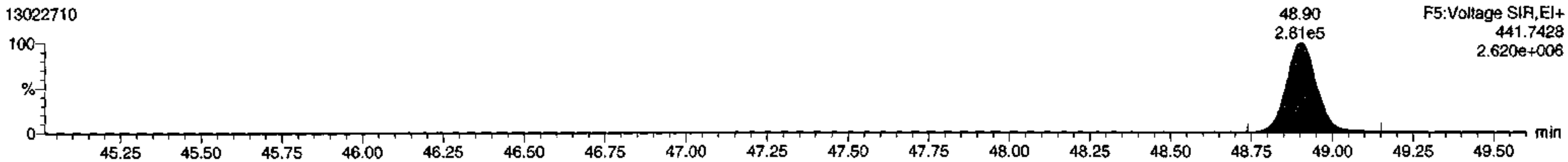
37CL-2378-TCDD

13022710



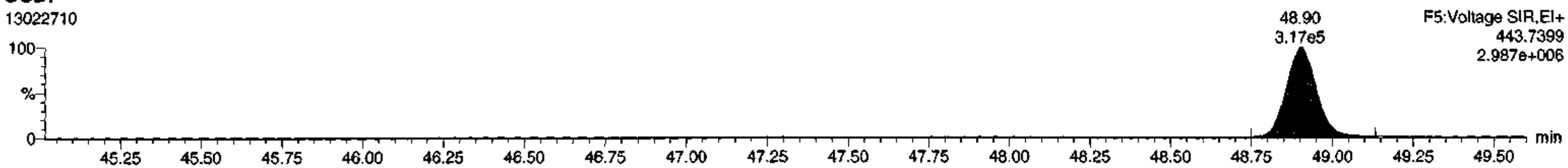
OCDF

13022710



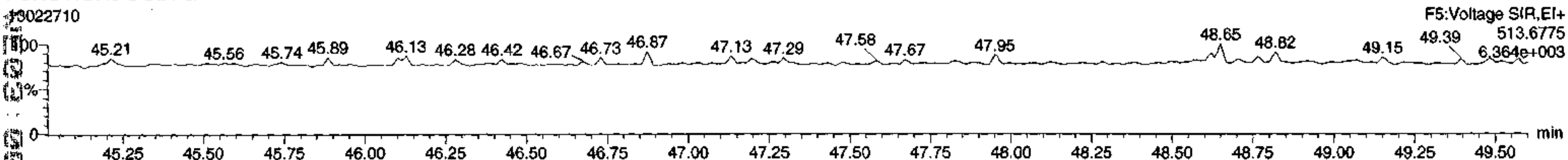
OCDF

13022710



FUNCTION5 DCDPE

13022710



Dataset: P:\DIOXIN8290.PRO\130227QC.qld
Last Altered: Wednesday, February 27, 2013 16:14:55 Pacific Standard Time
Printed: Wednesday, February 27, 2013 16:16:36 Pacific Standard Time

Process Extract		
Process Integrate		
Process Quantify		
Dataset Created		
Dataset Saved	Saved to 'P:\DIOXIN8290.PRO\130227QC.qld'	
Pre modification peak	Sample:13022704, Compound:OD, RT:48.612	1
Peak modified	Sample:13022704, Compound:OD, RT:48.612	1
Pre modification peak	Sample:13022704, Compound:OD, RT:48.612	1
Peak modified	Sample:13022704, Compound:OD, RT:48.612	1
Peak deleted	Sample:13022704, Compound:TF, RT:24.987	1
Peak deleted	Sample:13022704, Compound:HPF, RT:43.055	1
Peak deleted	Sample:13022704, Compound:Furans,TF,PP,PF,HF,HPF,OF, RT:22.253	1
Peak deleted	Sample:13022704, Compound:TD, RT:27.198	1
Peak deleted	Sample:13022704, Compound:TD, RT:26.885	1
Pre modification peak	Sample:13022704, Compound:HD, RT:37.223	1
Peak modified	Sample:13022704, Compound:HD, RT:37.223	1
Dataset Saved	Saved to 'P:\DIOXIN8290.PRO\130227QC.qld'	
Peak deleted	Sample:13022705, Compound:PP, RT:28.334	2
Peak deleted	Sample:13022705, Compound:PP, RT:28.274	2
Peak deleted	Sample:13022705, Compound:PF, RT:32.807	2
Peak deleted	Sample:13022705, Compound:HPF, RT:40.973	2
Peak deleted	Sample:13022705, Compound:PD, RT:31.974	2
Peak deleted	Sample:13022705, Compound:PD, RT:31.273	2
Peak deleted	Sample:13022705, Compound:PD, RT:31.240	2
Dataset Saved	Saved to 'P:\DIOXIN8290.PRO\130227QC.qld'	

Dataset: P:\DIOXIN8290.PRO\130227DATA1.qld
Last Altered: Thursday, February 28, 2013 09:49:31 Pacific Standard Time
Printed: Thursday, February 28, 2013 09:54:26 Pacific Standard Time

Process Extract		
Process Integrate		
Process Quantify		
Dataset Created		
Dataset Saved	Saved to 'P:\DIOXIN8290.PRO\130227DATA1.qld'	
Pre modification peak	Sample:13022706, Compound:HF, RT:37.181	1
Peak modified	Sample:13022706, Compound:HF, RT:37.181	1
Pre modification peak	Sample:13022706, Compound:TD, RT:27.542	1
Peak modified	Sample:13022706, Compound:TD, RT:27.542	1
Pre modification peak	Sample:13022706, Compound:PF, RT:29.749	1
Peak modified	Sample:13022706, Compound:PF, RT:29.749	1
Peak deleted	Sample:13022706, Compound:PF, RT:30.308	1
Pre modification peak	Sample:13022706, Compound:PF, RT:30.462	1
Peak modified	Sample:13022706, Compound:PF, RT:30.462	1
Peak deleted	Sample:13022706, Compound:PF, RT:30.483	1
Peak deleted	Sample:13022706, Compound:PF, RT:30.593	1
Pre modification peak	Sample:13022706, Compound:HF, RT:37.170	1
Peak modified	Sample:13022706, Compound:HF, RT:37.170	1
Peak deleted	Sample:13022706, Compound:TD, RT:25.048	1
Peak deleted	Sample:13022706, Compound:TD, RT:25.779	1
Peak deleted	Sample:13022706, Compound:TD, RT:26.512	1
Pre modification peak	Sample:13022706, Compound:TD, RT:26.721	1
Peak modified	Sample:13022706, Compound:TD, RT:26.721	1
Peak deleted	Sample:13022706, Compound:TD, RT:27.408	1
Pre modification peak	Sample:13022706, Compound:TD, RT:27.109	1
Peak modified	Sample:13022706, Compound:TD, RT:27.109	1
Pre modification peak	Sample:13022706, Compound:PD, RT:30.440	1
Peak modified	Sample:13022706, Compound:PD, RT:30.440	1
Pre modification peak	Sample:13022706, Compound:PD, RT:31.590	1
Peak modified	Sample:13022706, Compound:PD, RT:31.590	1
Peak deleted	Sample:13022706, Compound:PD, RT:31.678	1
Pre modification peak	Sample:13022706, Compound:PD, RT:31.963	1
Peak modified	Sample:13022706, Compound:PD, RT:31.963	1
Peak deleted	Sample:13022706, Compound:PD, RT:32.764	1
Peak deleted	Sample:13022706, Compound:HPD, RT:41.258	1
Dataset Saved	Saved to 'P:\DIOXIN8290.PRO\130227DATA1.qld'	
Pre modification peak	Sample:13022707, Compound:TF, RT:24.330	2
Peak modified	Sample:13022707, Compound:TF, RT:24.330	2
Peak added	Sample:13022707, Compound:TF, RT:24.405	2
Peak added	Sample:13022707, Compound:TF, RT:24.420	2
Pre modification peak	Sample:13022707, Compound:TF, RT:24.420 TD	2
Peak modified	Sample:13022707, Compound:TF, RT:24.420	2
Peak deleted	Sample:13022707, Compound:PF, RT:29.672 PD	2
Pre modification peak	Sample:13022707, Compound:PF, RT:29.793	2
Peak modified	Sample:13022707, Compound:PF, RT:29.793	2
Pre modification peak	Sample:13022707, Compound:PF, RT:30.494	2
Peak modified	Sample:13022707, Compound:PF, RT:30.494	2
Peak added	Sample:13022707, Compound:PF, RT:30.450	2
Peak added	Sample:13022707, Compound:PF, RT:30.472	2
Peak deleted	Sample:13022707, Compound:HF, RT:35.591	2
Pre modification peak	Sample:13022707, Compound:HF, RT:36.643	2
Peak modified	Sample:13022707, Compound:HF, RT:36.643	2
Pre modification peak	Sample:13022707, Compound:HF, RT:36.654	2

Peak modified	Sample:13022707, Compound:HF, RT:36.654	2
Peak deleted	Sample:13022707, Compound:TD, RT:25.122	2
Pre modification peak	Sample:13022707, Compound:TD, RT:25.839	2
Peak modified	Sample:13022707, Compound:TD, RT:25.839	2
Pre modification peak	Sample:13022707, Compound:TD, RT:26.736	2
Peak modified	Sample:13022707, Compound:TD, RT:26.736	2
Peak added	Sample:13022707, Compound:TD, RT:27.109	2
Pre modification peak	Sample:13022707, Compound:TD, RT:27.154	2
Peak modified	Sample:13022707, Compound:TD, RT:27.154	2
Peak added	Sample:13022707, Compound:TD, RT:27.139	2
Pre modification peak	Sample:13022707, Compound:PD, RT:29.957	2
Peak modified	Sample:13022707, Compound:PD, RT:29.957	2
Pre modification peak	Sample:13022707, Compound:PD, RT:31.579	2
Peak modified	Sample:13022707, Compound:PD, RT:31.579	2
Dataset Saved	Saved to 'P:\DIOXIN8290.PRO\130227DATA1.qld'	
Pre modification peak	Sample:13022708, Compound:OF, RT:48.893	3
Peak modified	Sample:13022708, Compound:OF, RT:48.893	3
Peak deleted	Sample:13022708, Compound:TF, RT:25.764	3
Peak deleted	Sample:13022708, Compound:TF, RT:24.659	3
Peak deleted	Sample:13022708, Compound:TF, RT:24.360	3
Peak deleted	Sample:13022708, Compound:TF, RT:28.379	3
Dataset Saved	Saved to 'P:\DIOXIN8290.PRO\130227DATA1.qld'	
Peak deleted	Sample:13022709, Compound:PD, RT:32.665	4
Peak deleted	Sample:13022709, Compound:PD, RT:32.653	4
Peak deleted	Sample:13022709, Compound:PD, RT:32.774	4
Peak deleted	Sample:13022709, Compound:PD, RT:32.774	4
Peak deleted	Sample:13022709, Compound:PD, RT:32.851	4
Peak deleted	Sample:13022709, Compound:PD, RT:32.829	4
Pre modification peak	Sample:13022710, Compound:TD, RT:27.183	5
Peak modified	Sample:13022710, Compound:TD, RT:27.183	5
Dataset Saved	Saved to 'P:\DIOXIN8290.PRO\130227DATA1.qld'	
Pre modification peak	Sample:13022706, Compound:HF, RT:38.266	1
Peak modified	Sample:13022706, Compound:HF, RT:38.266	1
Pre modification peak	Sample:13022706, Compound:PF, RT:31.053	1
Peak modified	Sample:13022706, Compound:PF, RT:31.053	1
Peak modified	Sample:13022706, Compound:PF, RT:31.053	1
Dataset Saved	Saved to 'P:\DIOXIN8290.PRO\130227DATA1.qld'	

Table of Contents: ARI Job WF78

Client: Floyd-Snider

Project: POCB HARRIS T.4030 POB-Harris

Signature

March-05-2013

Date

Analytical Resources, Incorporated
Analytical Chemists and Consultants

March 5, 2013

Stephen Bentsen
Floyd-Snider Inc.
601 Union Street, Suite 600
Seattle, WA 98101-2341

RE: Client Project: POB Harris T. 4030
ARI Job No.: WF78

Dear Stephen:

Please find enclosed the original Chain-of-Custody record (COC), sample receipt documentation, and the final data package for samples from the project referenced above.

Sample receipt and detail of these analyses are discussed in the Case Narrative.

An electronic copy of this package will remain on file with ARI. Should you have any questions or problems, please feel free to contact me at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.

Kelly Bottem
Client Services Manager
kellyb@arilabs.com
206-695-6211

Enclosures

cc: eFile WF78

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

Chain of Custody Documentation

ARI Job ID: WF78

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number:	Turn-around Requested: Standard	Page: 2 of 3
ARI Client Company: Floyd/Snider	Phone: 206-292-2078	Date: 1/31/13 — Ice Present?
Client Contact: Stephen Bentsen		No. of Coolers: — Cooler Temps:
Client Project Name: POB - Harris		
Client Project #: POB - Harris T.4030	Samplers: Erin Murray / Elena Ramirez	

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

Sample ID	Date	Time	Matrix	No Containers	Grainsize PSEP 1997	TOC EPA 9060	Total Solids SM 2540/PSEP	Metals (SMS) EPA 6010B Hg EPA 7471B	SVOCs (SMS) EPA 8270K/M DO/8081A	PCBs EPA 8082A	Dioxins/Furans EPA 1613B		Notes/Comments
SG-05-10-20-013113	1/31/13	1235	S	3									Archive
SG-95-0-10-013113		1215	S	3	X	X	X	X	X	X			
SG-08-0-10-013113		1255	S	5	X	X	X	X	X	X			MS/MSD on SVOCs and PCBs.
SG-08-10-20-013113		1300	S	3									Archive
SG-09-0-10-013113		1325	S	3	X	X	X	X	X	X			
SG-09-10-20-011313		1330	S	3									Archive
SG-10-0-10-013113		1400	S	3	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~ EM			Archive
SG-10-10-20-013113		1410	S	3									Archive
SG-11-0-10-013113		1425	S	3									Archive
SG-11-10-20-013113	↓	1435	S	3									Archive

Comments/Special Instructions	Relinquished by	Received by	Relinquished by	Received by
	(Signature) [signature]	(Signature) [signature]	(Signature)	(Signature)
	Printed Name: Erin Murray	Printed Name: A. Valgardsen	Printed Name:	Printed Name:
	Company: Floyd/Snider	Company: ARI	Company:	Company:
	Date & Time: 2/1/13 1010	Date & Time: 2/1/13 1201	Date & Time:	Date & Time:

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: Floyd Snider
COC No(s): NA
Assigned ARI Job No: WC32
Project Name: POB-Harris
Delivered by: Fed-Ex UPS Courier Hand Delivered Other
Tracking No.: NA

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler? YES NO
Were custody papers included with the cooler? YES NO
Were custody papers properly filled out (ink, signed, etc.) YES NO
Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry) 4.3 3.0 1.6 3.0
If cooler temperature is out of compliance fill out form 00070F Temp Gun ID# 90877952
Cooler Accepted by: AV Date: 2/1/13 Time: 1201

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler? YES NO
What kind of packing material was used? Bubble Wrap Wet Ice Gel Packs Baggies Foam Block Paper Other:
Was sufficient ice used (if appropriate)? NA YES NO
Were all bottles sealed in individual plastic bags? YES NO
Did all bottles arrive in good condition (unbroken)? YES NO
Were all bottle labels complete and legible? YES NO
Did the number of containers listed on COC match with the number of containers received? YES NO
Did all bottle labels and tags agree with custody papers? ~~YES~~ AV NO
Were all bottles used correct for the requested analyses? YES NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs) NA YES NO
Were all VOC vials free of air bubbles? NA YES NO
Was sufficient amount of sample sent in each bottle? YES NO
Date VOC Trip Blank was made at ARI NA
Was Sample Split by ARI: NA YES Date/Time: Equipment: Split by:

Samples Logged by: AV Date: 2/1/13 Time: 1600

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

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC
SG-69-10-20-013113	SG-69-10-20-013113		

Additional Notes, Discrepancies, & Resolutions:

By: Date:

Small Air Bubbles ~2mm	Peabubbles 2-4 mm	LARGE Air Bubbles > 4 mm	
			Small → "sm"
			Peabubbles → "pb"
			Large → "lg"
			Headspace → "hs"

WF78

Subject: RE: Sample Re-run
From: Erin Murray <Erin.Murray@floydsnider.com>
Date: 3/1/2013 1:35 PM
To: Kelly Bottem <kellyb@arilabs.com>

Hi there,

We would like to re-run **SG-08-0-10-013113** for mercury by method EPA 7471A for the 3-day TAT. Thanks and let me know if you have any questions.

WC32G 86 B6
13-2430

-Erin

From: Kelly Bottem [mailto:kellyb@arilabs.com]
Sent: Friday, March 01, 2013 12:37 PM
To: Erin Murray
Subject: Re: Sample Re-run

28 days holding time is correct. Even frozen.
K

On 3/1/2013 12:20 PM, Erin Murray wrote:

> Can you confirm for me if we are outside of our holding time? The QAPP says that it's 28 days for Mercury by that method.
>
> **From:** Kelly Bottem [mailto:kellyb@arilabs.com]
> **Sent:** Friday, March 01, 2013 12:18 PM
> **To:** Erin Murray
> **Subject:** Re: Sample Re-run
>
> Three day TAT would be a 75% mark up and the sample is frozen so I would need 24hrs to defrost. Hg only is $35.00.
>
> On 3/1/2013 12:14 PM, Erin Murray wrote:
>
>> HI Kelly,
>>
>> We would like to run one of our sediment samples again for total mercury by method 7471A. Can you tell me how much it would be to re-run the sample with a quick turnaround?

Case Narrative, Data Qualifiers, Control Limits

ARI Job ID: WF78

<u>Case Narrative</u>
Project: POB-Harris T.4030
ARI Job No.: WF78
March 5, 2013

<u>Sample Receipt:</u>

Please find enclosed the original Chain-of-Custody (COC) records, sample receipt documentation, and the analytical results for the project referenced above.

The sample was originally reported under ARI SDG WC32. At the request of the client the sample was removed from frozen hold and analyzed for mercury.

<u>Metals by Method 7471A:</u>

The samples were digested on 3/4/13 and analyzed on 3/4/13 outside of the recommended holding time.

Initial calibration (s): All analytes were within method acceptance criteria.

Continuing calibration (s): All analytes of interest were within method acceptance criteria.

Samples: There were no anomalies with these samples.

Method Blank(s): All method blanks were free of contamination.

Blank Spike: All percent recoveries and RPDs were in control.

Matrix spike/Duplicate RPDs: The matrix spike is out of control low with an RPD outside of the +/-0.04 % control limit in association with sample SG-08-0-10-011313. All other QC is in control and no further corrective action was taken.

Sample ID Cross Reference Report

ARI Job No: WF78
Client: Floyd-Snider
Project Event: POCB HARRIS T.4030
Project Name: POB-Harris

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	SG-08-0-10-013113	WF78A	13-4034	Sediment	01/31/13 12:55	02/01/13 12:01

Quality Control Parameters for Mercury Analysis using CVAA EPA Methods 7470A or 245.1 for Aqueous Samples EPA Methods 7471B or 245.5 for Solid Samples						
	Aqueous Samples[2]			Spike Recovery		RPD[5]
	DL[1] µg/L	LOD[1] µg/L	LOQ[1] µg/L	Matrix Spike	LCS	
Mercury	0.0069	0.05	**0.10**[2]	75 – 125	80 – 120	≤ 20
Mercury (low level)	0.0026	0.01	**0.02**[2]	75 – 125	80 – 120	≤ 20
	Soil / Sediment Samples			Spike Recovery		RPD[5]
	DL[1] mg/kg	LOD[1] mg/kg	LOQ[1] mg/kg	Matrix Spike	LCS	
Mercury	0.0021	0.0125	0.025[3]	75 – 125	80 – 120	≤ 20
	Tissue Samples			Spike Recovery		RPD[5]
	DL[1] mg/kg	LOD[1] mg/kg	LOQ[1] mg/kg	Matrix Spike	LCS	
Mercury	0.0021	0.0125	0.005[4]	75 – 125	80 – 120	≤ 20

(1) Detection Limit (DL), Limit of Detection Limit (LOD) and Limit of Quantitation (LOQ) as defined in ARI SOP 1018S
(2) 20 mL sample with 20 mL final volume
(3) 0.2 g sample with 50 mL final volume assuming 100% dry weight. Soil and sediment are reported on a dry weight basis.
(4) Tissue LOQ is 0.005 mg/kg as received (wet weight) based on 1 g sample with 50 mL final volume.
(5) Relative Percent Difference between analytes in replicate analyzes. If C_O and C_D are the concentrations of the original and duplicate respectively then $RPD = \frac{|C_O - C_D|}{\frac{C_O + C_D}{2}} x100$

Mercury Analysis
Report and Summary QC Forms

ARI Job ID: WF78

Cover Page

INORGANIC ANALYSIS DATA PACKAGE

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: POB-Harris

SDG: WF78

CLIENT ID	ARI ID	ARI LIMS ID	REPREP
SG-08-0-10-013113	WF78A	13-4034	
SG-08-0-10-013113D	WF78ADUP	13-4034	
SG-08-0-10-013113S	WF78ASPK	13-4034	
PBS	WF78MB1	13-4034	
LCSS	WF78MB1SPK	13-4034	

Were ICP interelement corrections applied ?	Yes/No	YES
Were ICP background corrections applied ? If yes - were raw data generated before application of background corrections ?	Yes/No Yes/No	YES NO

Comments: ______________________

THIS DATA PACKAGE HAS BEEN REVIEWED AND AUTHORIZED FOR RELEASE BY:

Signature: [signature] Name: Jay Kuhn

Date: 3/5/13 Title: Inorganics Director

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: SG-08-0-10-013113
SAMPLE

Lab Sample ID: WF78A
LIMS ID: 13-4034
Matrix: Sediment
Data Release Authorized:
Reported: 03/05/13

QC Report No: WF78-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Percent Total Solids: 51.1%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	LOQ	mg/kg-dry	Q
CLP	03/04/13	7471A	03/04/13	**7439-97-6**	**Mercury**	0.04	**0.31**	

U-Analyte undetected at given LOQ
LOQ-Limit of Quantitation

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: SG-08-0-10-013113
MATRIX SPIKE

Lab Sample ID: WF78A
LIMS ID: 13-4034
Matrix: Sediment
Data Release Authorized:
Reported: 03/05/13

QC Report No: WF78-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

MATRIX SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Spike	Spike Added	% Recovery	Q
Mercury	7471A	0.31	0.53	0.403	54.6%	N

Reported in mg/kg-dry

N-Control Limit Not Met
H-% Recovery Not Applicable, Sample Concentration Too High
NA-Not Applicable, Analyte Not Spiked

Percent Recovery Limits: 75-125%

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: SG-08-0-10-013113
DUPLICATE

Lab Sample ID: WF78A
LIMS ID: 13-4034
Matrix: Sediment
Data Release Authorized:
Reported: 03/05/13

QC Report No: WF78-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

MATRIX DUPLICATE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Duplicate	RPD	Control Limit	Q
Mercury	7471A	0.31	0.15	69.6%	+/- 0.04	L*

Reported in mg/kg-dry

*-Control Limit Not Met
L-RPD Invalid, Limit = Detection Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: LAB CONTROL

Lab Sample ID: WF78LCS
LIMS ID: 13-4034
Matrix: Sediment
Data Release Authorized:
Reported: 03/05/13

QC Report No: WF78-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: NA
Date Received: NA

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Mercury	7471A	0.51	0.50	102%	

Reported in mg/kg-dry

N-Control limit not met
NA-Not Applicable, Analyte Not Spiked
Control Limits: 80-120%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: METHOD BLANK

Lab Sample ID: WF78MB
LIMS ID: 13-4034
Matrix: Sediment
Data Release Authorized:
Reported: 03/05/13

QC Report No: WF78-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: NA
Date Received: NA

Percent Total Solids: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	LOQ	mg/kg-dry	Q
CLP	03/04/13	7471A	03/04/13	7439-97-6	Mercury	0.02	0.02	U

U-Analyte undetected at given LOQ
LOQ-Limit of Quantitation

Calibration Verification

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: POB-Harris

SDG: WF78

UNITS: ug/L

ANALYTE	EL	M	RUN	ICVTV	ICV	%R	CCVTV	CCV1	%R	CCV2	%R	CCV3	%R	CCV4	%R	CCV5	%R
Mercury	HG	CVA	HG030403	8.0	8.46	105.8	4.0	4.12	103.0	4.17	104.3	4.14	103.5	4.15	103.8	4.12	103.0

Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (1)

Calibration Verification

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: POB-Harris

SDG: WF78

UNITS: ug/L

ANALYTE	EL	M	RUN	CCVTV	CCV6	%R	CCV7	%R	CCV8	%R	CCV9	%R	CCV10	%R	CCV11	%R
Mercury	HG	CVA	HG030403	4.0	3.98	99.5	3.98	99.5	3.95	98.8	4.13	103.3	4.12	103.0	4.14	103.5

Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (1)

Calibration Verification

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: POB-Harris

SDG: WF78

UNITS: ug/L

ANALYTE	EL	M	RUN	CCVTV	CCV12	%R	CCV13	%R	CCV14	%R	CCV15	%R	CCV16	%R	CCV17	%R
Mercury	HG	CVA	HG030403	4.0	4.13	103.3	4.17	104.3	4.13	103.3	4.12	103.0	4.12	103.0	4.11	102.8

Control Limits: Mercury 80-120; Other Metals 90-110

CRDL Standard

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: POB-Harris

SDG: WF78

UNITS: ug/L

ANALYTE	EL	M	RUN	CRA/I TV	CR-1	%R	CR-2	%R	CR-3	%R	CR-4	%R	CR-5	%R	CR-6	%R
Mercury	HG	CVA	HG030403	0.1	0.09	90.0										

Control Limits: no control limits have been established by the EPA at this time.

FORM II (2)

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: POB-Harris

SDG: WF78

UNITS: ug/L

ANALYTE	EL	METH	RUN	CRDL	IDL	ICB	C	CCB1	C	CCB2	C	CCB3	C	CCB4	C	CCB5	C
Mercury	HG	CVA	HG030403	0.2	0.1	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: POB-Harris

SDG: WF78

UNITS:ug/L

ANALYTE	EL	METH	RUN	CRDL	IDL	CCB6	C	CCB7	C	CCB8	C	CCB9	C	CCB10	C	CCB11	C
Mercury	HG	CVA	HG030403	0.2	0.1	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: POB-Harris

SDG: WF78

UNITS: ug/L

ANALYTE	EL	METH	RUN	CRDL	IDL	CCB12	C	CCB13	C	CCB14	C	CCB15	C	CCB16	C	CCB17	C
Mercury	HG	CVA	HG030403	0.2	0.1	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U

IDLs and ICP Linear Ranges

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: POB-Harris

SDG: WF78

UNITS: ug/L

ANALYTE	EL	METH	INSTRUMENT	WAVELENTH (nm)	GFA BACK-GROUND	CLP CRDL	RL	RL DATE	ICP LINEAR RANGE (ug/L)	ICP LR DATE
Mercury	HG	CVA	CETAC MERCURY	253.70		0.2	0.1	4/1/2012		

Preparation Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: POB-Harris

SDG: WF78

ANALYSIS METHOD: CVA

ARI PREP CODE: SMM

PREPDATE: 3/4/2013

CLIENT ID	ARI ID	MASS (g)	INITIAL VOLUME (mL)	FINAL VOLUME (mL)
SG-08-0-10-013113	WF78A	0.246	0.0	50.0
SG-08-0-10-013113D	WF78ADUP	0.247	0.0	50.0
SG-08-0-10-013113S	WF78ASPK	0.243	0.0	50.0
PBS	WF78MB1	0.200	0.0	50.0
LCSW	WF78MB1SPK	0.200	0.0	50.0

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: POB-Harris | INSTRUMENT ID: CETAC MERCURY | START DATE: 3/4/2013

SDG: WF78 | RUNID: HG030403 | METHOD: CVA | END DATE: 3/4/2013

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
S0	S0	1.00	10424														X																
S0.1	S0.1	1.00	10442														X																
S0.5	S0.5	1.00	10460														X																
S1	S1	1.00	10473														X																
S2	S2	1.00	10491														X																
S5	S5	1.00	10505														X																
S10	S10	1.00	10523														X																
ICV	AICV	1.00	10562														X																
ICB	ICB	1.00	10580														X																
CCV	ACCV1	1.00	10593														X																
CCB	CCB1	1.00	11011														X																
CRA	CRA	1.00	11025														X																
ZZZZZZ	WE82MB1	1.00	11043																														
ZZZZZZ	WE82MB1SPK	1.00	11060																														
ZZZZZZ	WE82A	1.00	11074																														
ZZZZZZ	WE82ADUP	1.00	11091																														
ZZZZZZ	WE82ASPK	1.00	11105																														
ZZZZZZ	WE82B	1.00	11123																														
ZZZZZZ	WE82C	1.00	11141																														
ZZZZZZ	WE82D	1.00	11154																														
ZZZZZZ	WE82E	1.00	11172																														
CCV	ACCV2	1.00	11190														X																
CCB	CCB2	1.00	11204														X																
ZZZZZZ	WE82F	1.00	11222																														
ZZZZZZ	WE82G	1.00	11235																														
ZZZZZZ	WE82H	1.00	11253																														
ZZZZZZ	WE82I	1.00	11270																														
ZZZZZZ	WE82J	1.00	11284																														
ZZZZZZ	WE82K	1.00	11302																														
ZZZZZZ	WE82L	1.00	11315																														
ZZZZZZ	WE82M	1.00	11333																														
ZZZZZZ	WE82N	1.00	11351																														
ZZZZZZ	WE82O	1.00	11365																														
CCV	ACCV3	1.00	11383														X																
CCB	CCB3	1.00	11401														X																

FORM XIV

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: POB-Harris | INSTRUMENT ID: CETAC MERCURY | START DATE: 3/4/2013

SDG: WF78 | RUNID: HG030403 | METHOD: CVA | END DATE: 3/4/2013

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
ZZZZZZ	WE82P	1.00	11415																														
ZZZZZZ	WE82Q	1.00	11432																														
ZZZZZZ	WE82R	1.00	11450																														
ZZZZZZ	WE82S	1.00	11464																														
ZZZZZZ	WE82T	1.00	11481																														
ZZZZZZ	WE82MB2	1.00	11495																														
ZZZZZZ	WE82MB2SPK	1.00	11512																														
ZZZZZZ	WE82U	1.00	11530																														
ZZZZZZ	WE82V	1.00	11544																														
ZZZZZZ	WE82W	1.00	11562																														
CCV	ACCV4	1.00	11575														X																
CCB	CCB4	1.00	11593														X																
ZZZZZZ	WE81MB1	1.00	12014																														
ZZZZZZ	WE81MB1SPK	1.00	12032																														
ZZZZZZ	WE81A	1.00	12045																														
ZZZZZZ	WE81ADUP	1.00	12063																														
ZZZZZZ	WE81ASPK	1.00	12080																														
ZZZZZZ	WE81B	1.00	12094																														
ZZZZZZ	WE81C	1.00	12111																														
ZZZZZZ	WE81D	1.00	12125																														
ZZZZZZ	WE81E	1.00	12143																														
ZZZZZZ	WE81F	1.00	12161																														
CCV	ACCV5	1.00	12174														X																
CCB	CCB5	1.00	12193														X																
ZZZZZZ	WE81G	1.00	12210																														
ZZZZZZ	WE81H	1.00	12224																														
ZZZZZZ	WE81I	1.00	12242																														
ZZZZZZ	WE81J	1.00	12255																														
ZZZZZZ	WE81K	1.00	12335																														
ZZZZZZ	WE81L	1.00	12385																														
ZZZZZZ	WE81M	1.00	12452																														
ZZZZZZ	WE81N	1.00	12511																														
ZZZZZZ	WE81O	1.00	12564																														
ZZZZZZ	WE81P	1.00	13032																														
CCV	ACCV6	1.00	13071														X																

FORM XIV

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: POB-Harris | INSTRUMENT ID: CETAC MERCURY | START DATE: 3/4/2013

SDG: WF78 | RUNID: HG030403 | METHOD: CVA | END DATE: 3/4/2013

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
CCB	CCB6	1.00	13085														X																
ZZZZZZ	WE81Q	1.00	13103																														
ZZZZZZ	WE81R	1.00	13121																														
ZZZZZZ	WE81S	1.00	13145																														
ZZZZZZ	WE81T	1.00	13163																														
ZZZZZZ	WE81MB2	1.00	13181																														
ZZZZZZ	WE81MB2SPK	1.00	13194																														
ZZZZZZ	WE81U	1.00	13212																														
ZZZZZZ	WE81V	1.00	13225																														
ZZZZZZ	WE81W	1.00	13243																														
ZZZZZZ	WE81X	1.00	13261																														
CCV	ACCV7	1.00	13275														X																
CCB	CCB7	1.00	13293														X																
ZZZZZZ	WE81J	5.00	13315																														
ZZZZZZ	WE81K	5.00	13352																														
ZZZZZZ	WE81L	5.00	13382																														
ZZZZZZ	WE81M	5.00	13414																														
ZZZZZZ	WE81N	5.00	13451																														
ZZZZZZ	WE81O	5.00	13480																														
ZZZZZZ	WE81P	5.00	13520																														
ZZZZZZ	WE81R	2.00	13534																														
CCV	ACCV8	1.00	13552														X																
CCB	CCB8	1.00	13570														X																
ZZZZZZ	WE81J	10.00	13594																														
ZZZZZZ	WE81K	10.00	14023																														
ZZZZZZ	WE81L	10.00	14052																														
ZZZZZZ	WE81M	10.00	14081																														
ZZZZZZ	WE81N	10.00	14112																														
ZZZZZZ	WE81O	10.00	14140																														
ZZZZZZ	WE81P	10.00	14170																														
CCV	ACCV9	1.00	14183														X																
CCB	CCB9	1.00	14201														X																
ZZZZZZ	WE81J	20.00	14221																														
ZZZZZZ	WE81K	20.00	14251																														
ZZZZZZ	WE81L	20.00	14264																														

FORM XIV

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: POB-Harris | INSTRUMENT ID: CETAC MERCURY | START DATE: 3/4/2013

SDG: WF78 | RUNID: HG030403 | METHOD: CVA | END DATE: 3/4/2013

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
ZZZZZZ	WE81M	20.00	14291																														
ZZZZZZ	WE81N	20.00	14315																														
ZZZZZZ	WE81O	20.00	14332																														
CCV	ACCV10	1.00	14360														X																
CCB	CCB10	1.00	14374														X																
ZZZZZZ	WE81J	50.00	14412																														
ZZZZZZ	WE81L	40.00	14425																														
ZZZZZZ	WE81M	40.00	14443																														
ZZZZZZ	WE81O	40.00	14460																														
CCV	ACCV11	1.00	14474														X																
CCB	CCB11	1.00	14492														X																
ZZZZZZ	WF53MB1	1.00	14515																														
ZZZZZZ	WF53MB1SPK	1.00	14533																														
ZZZZZZ	WF53G	1.00	14550																														
ZZZZZZ	WF53GDUP	1.00	14564																														
ZZZZZZ	WF53GSPK	1.00	14581																														
ZZZZZZ	WF53H	1.00	14595																														
PBW	WF78MB1	1.00	15012														X																
LCSW	WF78MB1SPK	1.00	15030														X																
SG-08-0-10-013113	WF78A	1.00	15044														X																
SG-08-0-10-013113D	WF78ADUP	1.00	15062														X																
CCV	ACCV12	1.00	15080														X																
CCB	CCB12	1.00	15094														X																
SG-08-0-10-013113S	WF78ASPK	1.00	15111														X																
CCV	ACCV13	1.00	15125														X																
CCB	CCB13	1.00	15143														X																
ZZZZZZ	WF18MB	1.00	15161																														
ZZZZZZ	WF18MBSPK	1.00	15175																														
ZZZZZZ	WF18REF	5.00	15193																														
ZZZZZZ	WF18A	1.00	15210																														
ZZZZZZ	WF18ADUP	1.00	15224																														
ZZZZZZ	WF18ASPK	1.00	15241																														
ZZZZZZ	WF38A	1.00	15255																														
ZZZZZZ	WF00MB1	1.00	15273																														
ZZZZZZ	WF00MB1SPK	1.00	15290																														

FORM XIV

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: POB-Harris   INSTRUMENT ID: CETAC MERCURY   START DATE: 3/4/2013

SDG: WF78   RUNID: HG030403   METHOD: CVA   END DATE: 3/4/2013

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
ZZZZZZ	WF00A	1.00	15304																														
CCV	ACCV14	1.00	15322														X																
CCB	CCB14	1.00	15340														X																
ZZZZZZ	WF25MB	1.00	15354																														
ZZZZZZ	WF25MBSPK	1.00	15372																														
ZZZZZZ	WF25A	1.00	15390																														
ZZZZZZ	WF25ADUP	1.00	15403																														
ZZZZZZ	WF25ASPK	1.00	15421																														
ZZZZZZ	WE58MB1	1.00	15434																														
ZZZZZZ	WE58MB1SPK	1.00	15452																														
ZZZZZZ	WE58C	1.00	15470																														
ZZZZZZ	WE58CDUP	1.00	15483																														
ZZZZZZ	WE58CSPK	1.00	15501																														
CCV	ACCV15	1.00	15515														X																
CCB	CCB15	1.00	15533														X																
ZZZZZZ	WE58D	1.00	15551																														
ZZZZZZ	WE58E	1.00	15565																														
ZZZZZZ	WE58F	1.00	15582																														
CCV	ACCV16	1.00	16000														X																
CCB	CCB16	1.00	16014														X																
ZZZZZZ	WF53G	1.00	16034																														
ZZZZZZ	WF53GDUP	1.00	16052																														
ZZZZZZ	WF53GSPK	1.00	16065																														
SG-08-0-10-013113	WF78A	1.00	16083																														
SG-08-0-10-013113D	WF78ADUP	1.00	16100																														
SG-08-0-10-013113S	WF78ASPK	1.00	16114																														
ZZZZZZ	WF25A	1.00	16131																														
ZZZZZZ	WF25ADUP	1.00	16145																														
ZZZZZZ	WF25ASPK	1.00	16163																														
CCV	ACCV17	1.00	16181														X																
CCB	CCB17	1.00	16195														X																

Total Solids

ARI Job ID: WF78

Solids Data Entry Report   Checked by: CB   Date: 3/05/13
Date: 03/05/13   Data Analyst: DM

Solids Determination performed on 03/04/13 by DM

JOB	SAMPLE	CLIENTID	TAREWEIGHT	SAMPDISH	DRYWEIGHT	SOLIDS
WF78	A	SG-08-0-10-013113	0.989	10.202	5.693	51.06

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Total Solids Bench Sheet

Laboratory Section Metals

Oven Identification: 6

Balance ID: 068755

Samples In Oven: Date: 3-4-13 Time: 0745 Temp: 106°c Analyst: DM

Removed from Oven: Date: 3-05-13 Time: 0700 Temp: 102°c Analyst: DM

ARI Sample ID	Tare Weight (g)	Tare + Sample Wet (g)	Tare + Sample Dry (g)	Date & Time Last Weight	Final Weighting >12 hrs[1]
WF53 G	0.993	10.756	6.604	—	✓
" H	1.007	10.724	6.812	—	✓
WF78 A	0.989	10.202	5.693	—	✓

3-4-13 DM

1) Place a check mark in this column if samples have dried > 12 but < 24 hours. When samples have been at 104°C < 12 hours, constant weight must be verified as described in SOP 10023S. Use a 2nd bench sheet for additional weightings.

Mercury Raw Data
Preparation Bench Sheets and Notes

ARI Job ID: WF78

Analytical Resources, Incorporated
Analytical Chemists and Consultants

SPIKING LOG

Analyst: DM

Date: 3-04-13

Final Volume ______

Final Volume (Hg): 50

Sample ID WF78 ASPK, MBSPK

	Prepcode:			
	Spike Solution:	ICP Routine	ICP No GFA	GFA
	Standard No.:			
	Vol Added (mL):			
	Ag	50		2.0
S	Al	200	200	
T	As	200		10
O	Ba	200	200	
C	Be	50	50	
K	Ca	1000	1000	
	Cd	50		2.0
	Co	50	50	
C	Cr	50	50	
O	Cu	50	50	
N	Fe	200	200	
C	K	1000	1000	
E	Mg	1000	1000	
N	Mn	50	50	
T	Na	1000	1000	
R	Ni	50	50	
A	Pb	200		10
T	Se	200		10
I	Sr	50	50	
O	Tl	200		10
N	V	50	50	
	Zn	50	50	

	ICP-MS #1	ICP-MS #2	ICP-MS Minerals
Ag	25		
Al			500
As	25		
Ba	25		
Be	25		
Ca			500
Cd	25		
Co	25		
Cr	25		
Cu	25		
Fe			500
K			500
Mg			500
Mn	25		
Mo		25	
Na			500
Ni	25		
Pb	25		
Sb		25	
Se	80		
Tl	25		
U	25		
V	25		
Zn	80		

Element	Prepcode	Analysis	Stock Conc.	Stock Added	Std No.
Hg	SMM	CVA	1.0	0.05	3057-13
Hg MBSPK	↓	CVA	1.0	0.1	↓
Sb		ICP	2000		
Sb		GFA	100		
B		ICP	500		
Mo		ICP	500		
Si		ICP	10000		
Sn		ICP	500		
Ti		ICP	2000		

Additional Elements:

Element	Prepcode	Analysis	Stock Conc.	Stock Added	Std. No.

WF78 : 00035

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Mercury Digestion Log

Prep Code: SMM
Analyst: DM
Bath Temp: 95°c
Start Time: 0805
Matrix: Soil
Date: 3-04-13
End Time: 0835

ARI Sample ID	Sample Bottle #	pH<2	Initial Weight (g) ~~Volume (mL)~~	Final Volume (mL)	# $KMnO_4$ Aliquots	CLP	Comments
WF68 G	1	—	0.288	50.0	3/14 1	Y	
" GDUP	1	—	0.292		1		
" GSPK	1	—	0.290		1		
" H	1	—	0.246		1		
" MB1	—	—	—		1		
" MB1SPK	—	—	—		1		
WF78 A	1	—	0.246		3/5 1		
" ADUP	1	—	0.247		1		
" ASPK	1	—	0.243		1		
" MB1	—	—	—		1		
" MB1SPK	—	—	—	50.0	1	Y	

3-4-13 DM

Chemical/Reagent ID:

HNO_3: I8080
H_2SO_4: I7677
HCl: —
5% $K_2S_2O_8$: ~~MP2418~~ DM 3-4-13 MP2439
5% $KMnO_4$: MP2426
Digest Tube Lot: MF06LKK01

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Corrective Actions Inorganic Analyses

Criteria Flagged:

Unacceptable Blank: ☐

Unacceptable Duplicate: ☒

Unacceptable Spike: ☒

Unacceptable Reference: ☐

ARI Job No.: WF78

Date of Event: 03-04-13

Client ID:

Method/Element: Hg CVA

Prep Code: SMM

Details of Problem/Recommended Corrective Action:

1st Analysis: A = 0.79 ppb
Adup = 0.38 ppb Difference >0.1

Aspk = 1.31 ppb %R = 52 low

2nd Analysis A = 0.78 ppb
Adup = 0.38 ppb Difference >0.1

Aspk = 1.31 ppb %R = 53 low

Samples Affected: A, Adup, Aspk, MB, MBspk

Corrective Action Taken:

3/5/13

Analyst Initials: CB

Date: 3-04-13

Supervisor:

Date:

5049F

Revision 007
 11/10

Mercury Raw Data
Run Logs, Calibrations, and Raw Data

ARI Job ID: WF78

ANALYTICAL RESOURCES INCORPORATED

Metals Data Review Checklist

Method: ICP ICP-MS GFA CVA **Analysis Date:** 3-04-13

	Analyst CB 3-04-13	Peer BA 3-5-13	Comment
Analyst, Date, Method info	✓	✓	
Sample ID's	✓	✓	
Standard/QC solution ID's recorded	✓	✓	
Prep codes	✓	✓	
Dilution factors	✓	✓	
Crossouts/Corrections/Deletions	✓	✓	
Blank & Standard intensities	✓	✓	
Standard deviations	✓	✓	
Curve fit	✓	✓	
ICV/CCV	✓	✓	
ICB/CCB	✓	✓	
RSD's & SD's	✓	✓	
Internal Standards	—	—	
Carry-over	—	—	
CRI/CRA	✓	✓	
ICSA/ICSAB	—	—	
Post Spikes/Serial Dilutions	—	—	
Analytic Spikes		—	
SRM/LCS	✓	✓	
Matrix Spikes	✓	✓	See log
Matrix Duplicates	✓	✓	See log
Method Blanks	✓	✓	
Requested elements/isotope identified	✓	✓	
Correct samples identified for distribution	✓	✓	
Raw data match distributed data	✓	✓	
Data filename correct	✓	✓	
	✓	✓	See CAFS

Mercury Analysis Log

Analyst: CB　　　　Date: 3-04-13

Instrument: CETAC　　　　Page: 2 of 8

ARI Sample ID		Prep Code	Dilution	QC Data (ppb)	Comments	
WE59	ASPK	OMM	1x	1.12	% R= ~~113~~ 102 CB 3/04/13	✓
"	B					
"	C					
"	D					
"	J					
"	K	OMM				
WF09	MB2	LEM		0.01		✓
"	A1			0.01		
"	A1dup			0.01	No RPD: undetected	✓
"	A1spk	LEM		1.02	%R= 102	✓
CCV		TWM		4.11	%R= 103	✓
CCB		TWM		0.00		✓
WE58	MB2	SPM		0.00		✓
"	CA			0.01		
"	CAdup			0.01	No RPD: undetected	✓
"	CASPK			1.04	%R= 104	✓
"	DA					
"	EA					
"	FA	SPM				
CCV		TWM		4.13	%R= 103	✓
CCB		TWM		-0.00		✓
STD	0.0	SMM				
"	0.1					
"	0.5					
"	1.0					
"	2.0					
"	5.0					
"	10.0					
ICV				8.46	Begin CLP %R= 106	✓
ICB				~~0.00~~ -0.02	CB 3/5/13	✓

CB 3-5-13

Chemical/Reagent ID:

10% $SnCl_2$: MA2446　　　　14% NH_2OH/NaCl: MA2436

Standard ID:

Standard: 3019-5 (TWM)
3019-4 (SMM)　　　　ICV/CCV: 59-6

Mercury Analysis Log

Analyst: LB **Date:** 3-04-13

Instrument: CETAC **Page:** 3 of 4

ARI Sample ID	Prep Code	Dilution	QC Data (ppb)	Comments
CCV1	Smm	1X	4.12	%R: 103 ✓
CCB1	↓	↓	-0.01	✓
CRA			0.09	✓
WE82 MB1			0.00	✓
" MB1spk			2.19	%R= 110 ✓
" A			0.48	
" Adup			0.53	✓
" Aspk			1.65	%R= 117 ✓
" B				
" C				
" D				
" E				
CCV2			4.17	%R= 104 ✓
CCB2			-0.01	✓
WE82 F				
" G				
" H				
" I				
" J				
" K				
" L				
" M				
" N				
" O				
CCV3			4.14	%R= 104 ✓
CCB3			-0.00	✓
WE82 P				
" Q				
" R				
" S	↓	↓		

Chemical/Reagent ID:

10% $SnCl_2$: mp2446 **14% $NH_2OH/NaCl$:** mp2436

Standard ID:

Standard: 3019-4 **ICV/CCV:** 59-6

Mercury Analysis Log

Analyst: CB
Instrument: CETAC

Date: 3-04-13
Page: 4 of 8

ARI Sample ID	Prep Code	Dilution	QC Data (ppb)	Comments
WE82 T	SMM	1X		
" MB2			0.00	√
" MB2SPK			2.17	%R= 109 √
" U				
" V				
" W				
CCV4			4.15	%R=104 √
CCB4			-0.00	√
WE81 MB1			0.01	√
" MB1SPK			2.06	%R= 103 √
" A			3.31	
" Adup			3.49	RPD= 5.30 √
" ASPK			4.38	%R= 107 √
" B				
" C				
" D				
" E				
" F				
CCV5			4.12	%R= 103 √
CCB 5			-0.02	√
WE81 G				
" H				
" I				
" J			19.42	Sat'd X
" K			19.35	Sat'd X
" L			19.29	Sat'd X
" M			19.31	Sat'd X
" N			19.30	Sat'd X
" O			19.31	Sat'd X
" P			19.29	Sat'd X

Chemical/Reagent ID:
10% $SnCl_2$: MP2446
14% $NH_2OH/NaCl$: MP2436

Standard ID:
Standard: 3019-4
ICV/CCV: 59-6

WF78 : 00042

Mercury Analysis Log

Analyst: CB
Instrument: CETAC

Date: 3-04-13
Page: 5 of 9

ARI Sample ID	Prep Code	Dilution	QC Data (ppb)	Comments
CCV 6	Smm	1x	3.98	%R= 100 ✓
CCB 6			-0.07	✓
WE81 Q				
" R			13.72	High X
" S				
" T				
" mB2			-0.03	✓
" mB2spk			2.01	%R= 101 ✓
" U				
" V				
" W				
" X				
CCV 7			3.98	%R= 100 ✓
CCB 7			-0.05	✓
WE81 J		5x	19.44	Sat'd X
" K			19.38	Sat'd X
" L			19.38	Sat'd X
" M			19.38	Sat'd X
" N			19.40	Sat'd X
" O			19.40	Sat'd X
" P		5x	10.51	High X
" R		2x	6.68	
CCV8		1x	3.95	%R = 99 ✓
CCB8		1x	-0.05	✓
WE81 J		10x	19.44	Sat'd X
" K			19.25	Sat'd X
" L			19.41	Sat'd X
" M			19.40	Sat'd X
" N			15.37	High X
" O		10x	19.41	Sat'd X

Chemical/Reagent ID:
10% $SnCl_2$: mp2446

14% $NH_2OH/NaCl$: mp2436

Standard ID:
Standard: 3019-4

ICV/CCV: 59-6

Mercury Analysis Log

Analyst: CB
Instrument: CETAC

Date: 3-04-13
Page: 6 of 8

ARI Sample ID	Prep Code	Dilution	QC Data (ppb)	Comments
WE81 P	SMM	10x	5.20	
CCV9		1x	4.13	%R=103 ✓
CCB9		1x	-0.05	✓
WE81 J		20x	19.43	Sat'd X
" K			9.23	
" L			13.17	High X
" M			12.87	High X
" N			7.45	
" O		20x	15.00	High X
CCV10		1x	4.12	%R= 103 ✓
CCB10		1x	-0.05	✓
WE81 J		* ~~20x~~ 50x	16.30	*CB 3/04/13 Wrong test tube X
WE81 J		50x	8.36	
" L		40x	6.37	
" M			6.20	
" O		40x	7.84	
CCV11		1x	4.14	% R= 104 ✓
CCB11			-0.05	✓
WE53 MB1			-0.04	✓
" MB1SPK			2.04	%R= 102 ✓
" G			0.53	
" Gdup			0.69	RPD = 26.2 High X
" GSPK			1.59	%R= 106 ✓
" H				
WF78 MB1			-0.03	✓
" MB1SPK			2.05	%R= 103 ✓
" A			0.79	
" Adup			0.38	~~RPD: 70.1~~ 0.difference 70.1 ~~High~~ X CB 3/04/13
CCV12			4.13	%R= 103 ✓
CCB12			-0.04	✓

Chemical/Reagent ID:
10% $SnCl_2$: MP244b

14% $NH_2OH/NaCl$: MP243b

Standard ID:
Standard: 3019-4

ICV/CCV: 59-6

Mercury Analysis Log

All corrections
67
CB 3/4/13

Analyst: CB
Instrument: CETAC

Date: 3-04-13
Page: 7 of 9

ARI Sample ID	Prep Code	Dilution	QC Data (ppb)	Comments
WF78 ASPK	Smm	1x	1.31	%R = 52 low X
CCV13			4.17	%R= 104 ✓
CCB13			-0.04	End CLP ✓
WF15 MB			-0.02	✓
" MBSPK		~~5x~~ 1x	1.91	%R= 96 ✓
" REF		~~1x~~ 5x	6.69	8.00 mg/kg ✓
" A		1x	0.04	
" Adup			0.02	No RPD: undetected ✓
" Aspk			1.06	%R= 106 ✓
WF38 A				
WF00 MB1			-0.02	✓
" MB1SPK			1.91	%R= 96 ✓
" A				
CCV			4.13	%R= 103 ✓
CCB			-0.02	✓
WF25 MB			-0.03	✓
" MBSPK			1.86	%R= 93 ✓
" A			0.12	
" Adup			0.23	Difference > 0.1 X
" Aspk			1.17	%R= 105 ✓
WE58 MB1			-0.02	✓
" MB1SPK			1.92	%R= 96 ✓
" C			0.16	
" Cdup			0.19	✓
" Cspk			1.22	%R= 106 ✓
CCV			4.12	%R= 103 ✓
CCB			-0.03	✓
WE58 D				
" E				
" F				

Chemical/Reagent ID:
10% $SnCl_2$: mp2446
14% $NH_2OH/NaCl$: mp2436

Standard ID:
Standard: 3019-4
ICV/CCV: 59-6

Mercury Analysis Log

Analyst: CB **Date:** 3-04-13

Instrument: CETAC **Page:** 8 of 8

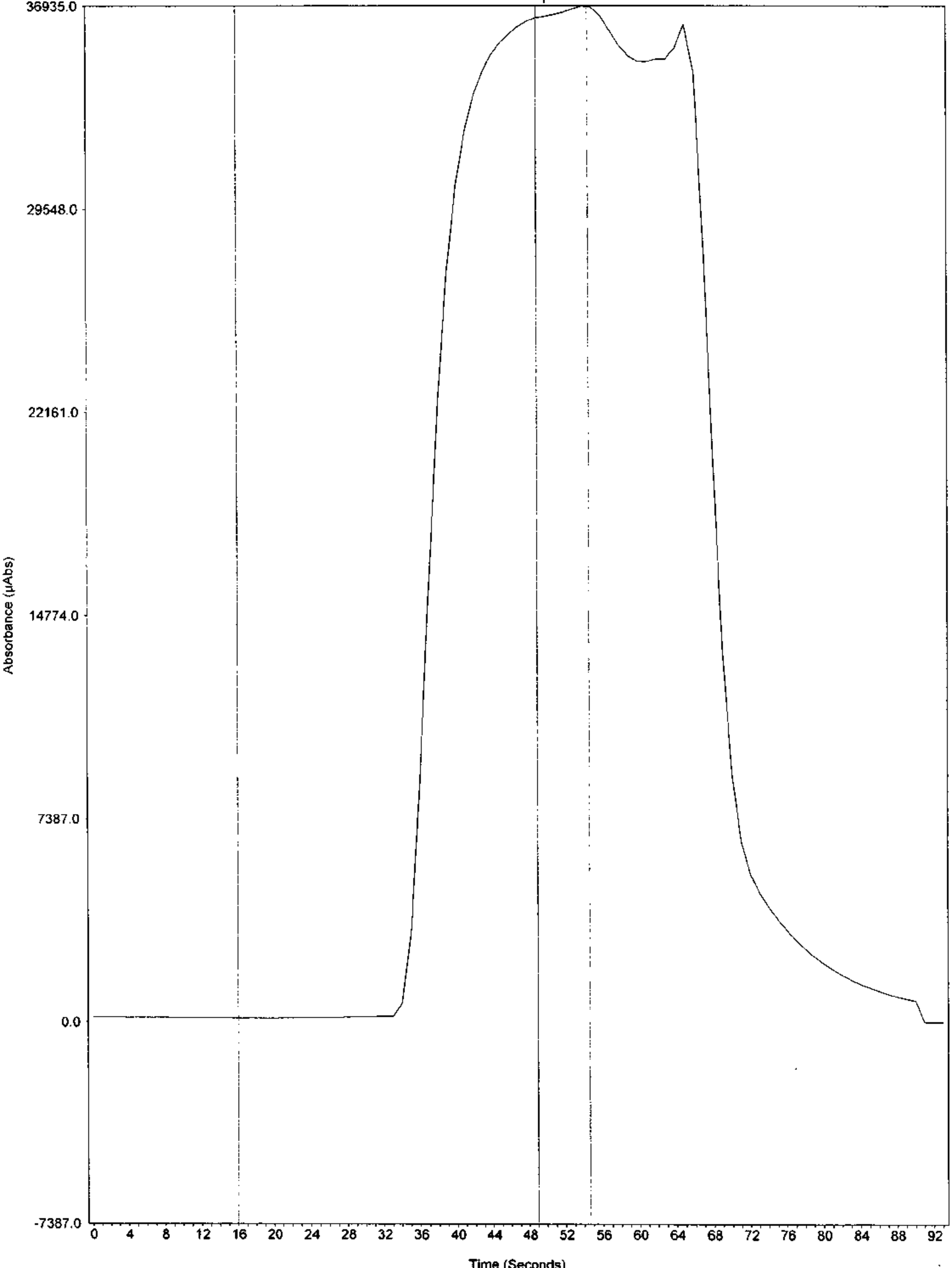
ARI Sample ID	Prep Code	Dilution	QC Data (ppb)	Comments
CCV	Smm	1X	4.12	%R= 103 ✓
CCB	↓	↓	-0.07	✓
WF53 G			0.54	
" Gdup			0.69	RPD = 24.3 High X
" Gspk			1.59	%R= 105 ✓
WF78 A			0.78	
" Adup			0.38	~~RPD = 69~~ ~~High~~ Difference 7RL X CB 3/04/13
" Aspk			1.31	%R=53 low X
WF25 A			0.12	
" Adup			0.24	Difference 7RL X
" Aspk			1.18	%R=106 ✓
CCV			4.11	%R= 103 ✓
CCB	↓	↓	-0.04	✓
			CB 3-04-13	

Chemical/Reagent ID:
10% $SnCl_2$: mp244b 14% $NH_2OH/NaCl$: mp243b

Standard ID:
Standard: 3019-4 ICV/CCV: 59-6

Std Tube 6 03/04/2013, 9:08 AM

36,556 uAbs   CB 3/04/13

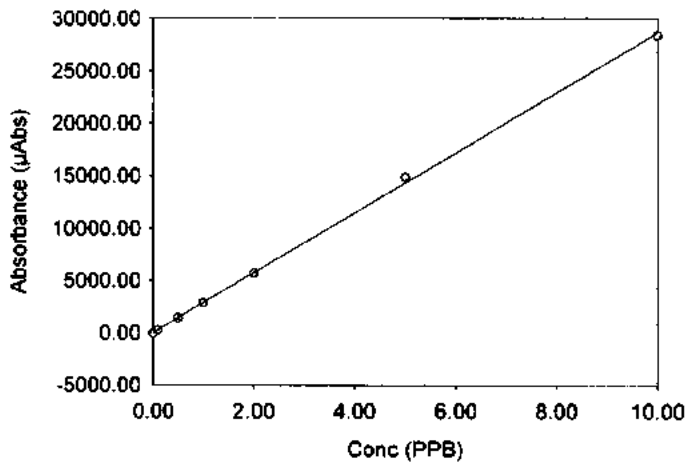


WF78 : 00047

Analyst	
Date Started	Monday, March 04, 2013, 10:42:49
Worksheet	ARI 10ppb CALIB
Comment	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
Calibration Zero	04-Mar-2013, 10:42	0.00	33.10	-26.50	1.00	
Standard #1	04-Mar-2013, 10:44	0.10	2.97	251.00	1.00	
Standard #2	04-Mar-2013, 10:46	0.50	0.72	1420.00	1.00	
Standard #3	04-Mar-2013, 10:47	1.00	0.49	2890.00	1.00	
Standard #4	04-Mar-2013, 10:49	2.00	0.47	5710.00	1.00	
Standard #5	04-Mar-2013, 10:50	5.00	0.53	14900.00	1.00	
Standard #6	04-Mar-2013, 10:52	10.00	0.45	28400.00	1.00	

Calibration Data



Int.	0.000
Slope	2867.918
Correlation	0.99972

SMM

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
ICV	04-Mar-2013, 10:56	8.46	0.69	24300.00	1.00	Begin CLP
ICB	04-Mar-2013, 10:58	-0.02	4.82	-63.40	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	04-Mar-2013, 10:59	4.12	0.63	11800.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	04-Mar-2013, 11:01	-0.01	4.78	-29.80	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
CRA	04-Mar-2013, 11:02	0.09	2.43	261.00	1.00	
WE82 MB1 SMM	04-Mar-2013, 11:04	0.00	27.60	11.50	1.00	
WE82 MB1SPK SMM	04-Mar-2013, 11:06	2.19	0.76	6280.00	1.00	
WE82 A SMM	04-Mar-2013, 11:07	0.48	1.17	1380.00	1.00	
WE82 ADUP SMM	04-Mar-2013, 11:09	0.53	1.84	1520.00	1.00	
WE82 ASPK SMM	04-Mar-2013, 11:10	1.65	0.79	4730.00	1.00	
WE82 B SMM	04-Mar-2013, 11:12	0.61	0.34	1750.00	1.00	
WE82 C SMM	04-Mar-2013, 11:14	2.26	0.76	6490.00	1.00	
WE82 D SMM	04-Mar-2013, 11:15	1.34	0.63	3860.00	1.00	
WE82 E SMM	04-Mar-2013, 11:17	0.81	0.83	2330.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	04-Mar-2013, 11:19	4.17	0.31	12000.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	04-Mar-2013, 11:20	-0.01	22.40	-37.40	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
WE82 F SMM	04-Mar-2013, 11:22	0.45	0.86	1300.00	1.00	
WE82 G SMM	04-Mar-2013, 11:23	0.77	0.83	2210.00	1.00	
WE82 H SMM	04-Mar-2013, 11:25	0.84	0.59	2400.00	1.00	
WE82 I SMM	04-Mar-2013, 11:27	1.02	0.58	2920.00	1.00	

Analyst
Date Started Monday, March 04, 2013, 11:28:45
Worksheet ARI 10ppb CALIB
Comment

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
WE82 J SMM	04-Mar-2013, 11:28	0.90	0.92	2590.00	1.00	
WE82 K SMM	04-Mar-2013, 11:30	1.65	0.79	4720.00	1.00	
WE82 L SMM	04-Mar-2013, 11:31	0.13	1.92	378.00	1.00	
WE82 M SMM	04-Mar-2013, 11:33	0.33	0.71	942.00	1.00	
WE82 N SMM	04-Mar-2013, 11:35	0.16	1.03	469.00	1.00	
WE82 O SMM	04-Mar-2013, 11:36	0.10	2.24	298.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	04-Mar-2013, 11:38	4.14	0.64	11900.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	04-Mar-2013, 11:40	-0.00	20.50	-8.70	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
WE82 P SMM	04-Mar-2013, 11:41	0.09	1.01	248.00	1.00	
WE82 Q SMM	04-Mar-2013, 11:43	0.13	0.63	368.00	1.00	
WE82 R SMM	04-Mar-2013, 11:45	0.15	0.48	443.00	1.00	
WE82 S SMM	04-Mar-2013, 11:46	0.68	0.69	1940.00	1.00	
WE82 T SMM	04-Mar-2013, 11:48	0.21	0.18	602.00	1.00	
WE82 MB2 SMM	04-Mar-2013, 11:49	0.00	161.00	1.53	1.00	
WE82 MB2SPK SMM	04-Mar-2013, 11:51	2.17	0.76	6230.00	1.00	
WE82 U SMM	04-Mar-2013, 11:53	0.52	1.13	1510.00	1.00	
WE82 V SMM	04-Mar-2013, 11:54	0.19	1.79	550.00	1.00	
WE82 W SMM	04-Mar-2013, 11:56	0.64	0.55	1850.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	04-Mar-2013, 11:57	4.15	0.49	11900.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	04-Mar-2013, 11:59	-0.00	14.30	-7.59	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
WE81 MB1 SMM	04-Mar-2013, 12:01	0.01	25.70	18.10	1.00	
WE81 MB1SPK SMM	04-Mar-2013, 12:03	2.06	0.21	5910.00	1.00	
WE81 A SMM	04-Mar-2013, 12:04	3.31	0.64	9480.00	1.00	
WE81 ADUP SMM	04-Mar-2013, 12:06	3.49	0.59	10000.00	1.00	
WE81 ASPK SMM	04-Mar-2013, 12:08	4.38	0.65	12600.00	1.00	
WE81 B SMM	04-Mar-2013, 12:09	0.37	0.50	1050.00	1.00	
WE81 C SMM	04-Mar-2013, 12:11	1.16	0.40	3330.00	1.00	
WE81 D SMM	04-Mar-2013, 12:12	1.51	0.35	4320.00	1.00	
WE81 E SMM	04-Mar-2013, 12:14	2.10	0.82	6030.00	1.00	
WE81 F SMM	04-Mar-2013, 12:16	3.16	0.50	9070.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	04-Mar-2013, 12:17	4.12	0.59	11800.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	04-Mar-2013, 12:19	-0.02	2.81	-54.70	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
WE81 G SMM	04-Mar-2013, 12:21	0.61	0.48	1740.00	1.00	
WE81 H SMM	04-Mar-2013, 12:22	0.52	0.93	1490.00	1.00	
WE81 I SMM	04-Mar-2013, 12:24	0.51	1.07	1460.00	1.00	
WE81 J SMM	04-Mar-2013, 12:25	Sat'd.	0.00	55700.00	1.00	SO
WE81 K SMM	04-Mar-2013, 12:33	Sat'd.	0.00	55500.00	1.00	SO
WE81 L SMM	04-Mar-2013, 12:38	Sat'd.	0.00	55300.00	1.00	SO
WE81 M SMM	04-Mar-2013, 12:45	Sat'd.	0.00	55400.00	1.00	SO
WE81 N SMM	04-Mar-2013, 12:51	Sat'd.	0.00	55300.00	1.00	SO
WE81 O SMM	04-Mar-2013, 12:56	Sat'd.	0.00	55400.00	1.00	SO
WE81 P SMM	04-Mar-2013, 13:03	Sat'd.	0.00	55300.00	1.00	SO

High
Sat'd

Analyst
Date Started Monday, March 04, 2013, 13:07:17
Worksheet ARI 10ppb CALIB
Comment

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	04-Mar-2013, 13:07	3.98	0.57	11400.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	04-Mar-2013, 13:08	-0.07	2.24	-193.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
WE81 Q SMM	04-Mar-2013, 13:10	2.10	0.84	6010.00	1.00	
WE81 R SMM	04-Mar-2013, 13:12	13.70	0.53	39400.00	1.00	O High
WE81 S SMM	04-Mar-2013, 13:14	0.58	0.65	1670.00	1.00	
WE81 T SMM	04-Mar-2013, 13:16	0.24	1.87	684.00	1.00	
WE81 MB2 SMM	04-Mar-2013, 13:18	-0.03	9.23	-97.20	1.00	
WE81 MB2SPK SMM	04-Mar-2013, 13:19	2.01	0.76	5760.00	1.00	
WE81 U SMM	04-Mar-2013, 13:21	0.37	1.43	1070.00	1.00	
WE81 V SMM	04-Mar-2013, 13:22	0.52	0.78	1500.00	1.00	
WE81 W SMM	04-Mar-2013, 13:24	0.67	0.85	1920.00	1.00	
WE81 X SMM	04-Mar-2013, 13:26	0.57	0.23	1650.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	04-Mar-2013, 13:27	3.98	0.45	11400.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	04-Mar-2013, 13:29	-0.05	2.12	-151.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
WE81 J SMM	04-Mar-2013, 13:31	Sat'd.	0.00	55800.00	5.00	SO
WE81 K SMM	04-Mar-2013, 13:35	Sat'd.	0.00	55600.00	5.00	SO
WE81 L SMM	04-Mar-2013, 13:38	Sat'd.	0.00	55600.00	5.00	SO
WE81 M SMM	04-Mar-2013, 13:41	Sat'd.	0.00	55600.00	5.00	SO High
WE81 N SMM	04-Mar-2013, 13:45	Sat'd.	0.00	55600.00	5.00	SO Sat'd
WE81 O SMM	04-Mar-2013, 13:48	Sat'd.	0.00	55700.00	5.00	SO
WE81 P SMM	04-Mar-2013, 13:52	10.50	0.54	30100.00	5.00	O High
WE81 R SMM	04-Mar-2013, 13:53	6.68	0.76	19200.00	2.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	04-Mar-2013, 13:55	3.95	0.56	11300.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	04-Mar-2013, 13:57	-0.05	4.45	-143.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
WE81 J SMM	04-Mar-2013, 13:59	Sat'd.	0.00	55700.00	10.00	SO
WE81 K SMM	04-Mar-2013, 14:02	Sat'd.	0.51	55200.00	10.00	SO High
WE81 L SMM	04-Mar-2013, 14:05	Sat'd.	0.00	55700.00	10.00	SO Sat'd
WE81 M SMM	04-Mar-2013, 14:08	Sat'd.	0.00	55600.00	10.00	SO
WE81 N SMM	04-Mar-2013, 14:11	15.40	0.64	44100.00	10.00	O High
WE81 O SMM	04-Mar-2013, 14:14	Sat'd.	0.00	55700.00	10.00	SO High Sat'd
WE81 P SMM	04-Mar-2013, 14:17	5.20	0.66	14900.00	10.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	04-Mar-2013, 14:18	4.13	0.60	11900.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	04-Mar-2013, 14:20	-0.05	2.24	-143.00	1.00	

Analyst
Date Started Monday, March 04, 2013, 14:22:17
Worksheet ARI 10ppb CALIB
Comment

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
WE81 J SMM	04-Mar-2013, 14:22	Sat'd.	0.00	55700.00	20.00	SO High Satrd
WE81 K SMM	04-Mar-2013, 14:25	9.23	0.73	26500.00	20.00	
WE81 L SMM	04-Mar-2013, 14:26	13.20	0.51	37800.00	20.00	O High
WE81 M SMM	04-Mar-2013, 14:29	12.90	0.50	36900.00	20.00	O High
WE81 N SMM	04-Mar-2013, 14:31	7.45	0.82	21400.00	20.00	
WE81 O SMM	04-Mar-2013, 14:33	15.00	0.90	43000.00	20.00	O High

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	04-Mar-2013, 14:36	4.12	0.55	11800.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	04-Mar-2013, 14:37	-0.05	1.47	-142.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
WE81 J SMM	04-Mar-2013, 14:41	8.36	0.09	24000.00	50.00	
WE81 L SMM	04-Mar-2013, 14:42	6.37	1.08	18300.00	40.00	
WE81 M SMM	04-Mar-2013, 14:44	6.20	0.84	17800.00	40.00	
WE81 O SMM	04-Mar-2013, 14:46	7.84	1.43	22500.00	40.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	04-Mar-2013, 14:47	4.14	0.51	11900.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	04-Mar-2013, 14:49	-0.05	2.73	-141.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
WF53 MB1 SMM	04-Mar-2013, 14:51	-0.04	2.25	-110.00	1.00	
WF53 MB1SPK SMM	04-Mar-2013, 14:53	2.04	0.76	5860.00	1.00	
WF53 G SMM	04-Mar-2013, 14:55	0.53	0.72	1530.00	1.00	
WF53 GDUP SMM	04-Mar-2013, 14:56	0.69	1.01	1980.00	1.00	RPD High
WF53 GSPK SMM	04-Mar-2013, 14:58	1.59	0.76	4570.00	1.00	
WF53 H SMM	04-Mar-2013, 14:59	0.43	0.49	1240.00	1.00	
WF78 MB1 SMM	04-Mar-2013, 15:01	-0.03	1.89	-75.40	1.00	
WF78 MB1SPK SMM	04-Mar-2013, 15:03	2.05	0.75	5890.00	1.00	
WF78 A SMM	04-Mar-2013, 15:04	0.79	0.78	2250.00	1.00	CB 3/04/13
WF78 ADUP SMM	04-Mar-2013, 15:06	0.38	0.42	1090.00	1.00	~~RPD High~~ difference > 0.1

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	04-Mar-2013, 15:08	4.13	0.48	11900.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	04-Mar-2013, 15:09	-0.04	3.42	-122.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
WF78 ASPK SMM	04-Mar-2013, 15:11	1.31	0.56	3760.00	1.00	%R low

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	04-Mar-2013, 15:12	4.17	0.40	12000.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	04-Mar-2013, 15:14	-0.04	2.79	-125.00	1.00	End CLP

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
WF18 MB SMM	04-Mar-2013, 15:16	-0.02	2.01	-68.10	1.00	
WF18 MBSPK SMM	04-Mar-2013, 15:17	1.91	0.45	5470.00	1.00	
WF18 REF SMM	04-Mar-2013, 15:19	6.69	0.69	19200.00	5.00	

CETAC Hg Analysis Report - 13030400.DB - Monday, March 04, 2013, 4:20:46 PM

Analyst
Date Started Monday, March 04, 2013, 15:21:05
Worksheet ARI 10ppb CALIB
Comment

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
WF18 A SMM	04-Mar-2013, 15:21	0.04	2.78	124.00	1.00	
WF18 ADUP SMM	04-Mar-2013, 15:22	0.02	4.50	52.90	1.00	
WF18 ASPK SMM	04-Mar-2013, 15:24	1.06	0.72	3050.00	1.00	
WF38 A SMM	04-Mar-2013, 15:25	0.02	3.76	63.60	1.00	
WF00 MB1 SMM	04-Mar-2013, 15:27	-0.02	6.51	-61.40	1.00	
WF00 MB1SPK SMM	04-Mar-2013, 15:29	1.91	0.66	5490.00	1.00	
WF00 A SMM	04-Mar-2013, 15:30	0.47	1.54	1330.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	04-Mar-2013, 15:32	4.13	0.65	11900.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	04-Mar-2013, 15:34	-0.02	5.78	-62.70	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
WF25 MB SMM	04-Mar-2013, 15:35	-0.03	5.33	-95.10	1.00	
WF25 MBSPK SMM	04-Mar-2013, 15:37	1.86	0.45	5330.00	1.00	
WF25 A SMM	04-Mar-2013, 15:39	0.12	2.34	346.00	1.00	
WF25 ADUP SMM	04-Mar-2013, 15:40	0.23	0.86	666.00	1.00	Difference >0.1
WF25 ASPK SMM	04-Mar-2013, 15:42	1.17	0.58	3360.00	1.00	
WE58 MB1 SMM	04-Mar-2013, 15:43	-0.02	1.65	-60.00	1.00	
WE58 MB1SPK SMM	04-Mar-2013, 15:45	1.92	0.59	5510.00	1.00	
WE58 C SMM	04-Mar-2013, 15:47	0.16	1.62	448.00	1.00	
WE58 CDUP SMM	04-Mar-2013, 15:48	0.18	1.48	528.00	1.00	
WE58 CSPK SMM	04-Mar-2013, 15:50	1.22	0.59	3490.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	04-Mar-2013, 15:51	4.12	0.59	11800.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	04-Mar-2013, 15:53	-0.03	8.32	-74.80	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
WE58 D SMM	04-Mar-2013, 15:55	0.07	2.73	193.00	1.00	
WE58 E SMM	04-Mar-2013, 15:56	0.17	0.99	491.00	1.00	
WE58 F SMM	04-Mar-2013, 15:58	0.03	3.76	96.30	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	04-Mar-2013, 16:00	4.12	0.58	11800.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	04-Mar-2013, 16:01	-0.03	5.45	-88.90	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
WF53 G SMM	04-Mar-2013, 16:03	0.54	0.81	1540.00	1.00	
WF53 GDUP SMM	04-Mar-2013, 16:05	0.69	0.90	1990.00	1.00	RPD High
WF53 GSPK SMM	04-Mar-2013, 16:06	1.59	0.76	4570.00	1.00	
WF78 A SMM	04-Mar-2013, 16:08	0.78	0.55	2230.00	1.00	CB 3/04/13
WF78 ADUP SMM	04-Mar-2013, 16:10	0.38	1.84	1090.00	1.00	~~RPD High~~ Difference >0.1
WF78 ASPK SMM	04-Mar-2013, 16:11	1.31	0.65	3770.00	1.00	low %R
WF25 A SMM	04-Mar-2013, 16:13	0.12	0.87	344.00	1.00	
WF25 ADUP SMM	04-Mar-2013, 16:14	0.24	0.36	677.00	1.00	Difference >0.1
WF25 ASPK SMM	04-Mar-2013, 16:16	1.18	0.22	3390.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	04-Mar-2013, 16:18	4.11	0.60	11800.00	1.00	

CETAC Hg Analysis Report - 13030400.DB - Monday, March 04, 2013, 4:20:46 PM

Analyst
Date Started Monday, March 04, 2013, 16:19:51
Worksheet ARI 10ppb CALIB
Comment

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	04-Mar-2013, 16:19	-0.04	3.62	-121.00	1.00	

Analyst	
Date Created:	Thursday, July 13, 2000
Worksheet	ARI 10ppb CALIB
Comment	
Sip Duration (Sec.):	30
Rinse Duration (Sec.):	60
Read Delay:	49
Integration Time/Replicate:	1.40
# of Replicates:	4
# of Repeats:	1
Baseline Correction Enabled:	True
Baseline Point 1 Start Time:	10
Baseline Point 1 End Time:	16
2-Point Baseline Corr. Enabled:	False
Baseline Point 2 Start Time:	
Baseline Point 2 End Time:	
Gas Flow (ml/min):	180
Calibration Algorithm:	Linear, Zero Intercept
Recalibration Frequency:	0
Reslope Frequency:	0
Reslope Standard:	5
Calibration Standard #1 Conc.:	0.10 PPB
Calibration Standard #2 Conc.:	0.50 PPB
Calibration Standard #3 Conc.:	1.00 PPB
Calibration Standard #4 Conc.:	2.00 PPB
Calibration Standard #5 Conc.:	5.00 PPB
Calibration Standard #6 Conc.:	10.00 PPB
QC Enabled:	True
QC-RSD Enabled:	True
Limit Condition & Error Action:	If %RSD > 5.0%, if µAbs. > 1500, Flag and Continue
QC-Std Enabled:	True
Limit Condition & Error Action:	If outside 80% .. 120%,Stop
QC-Blank Enabled:	True
Limit Condition & Error Action:	If outside -100 .. 100,Stop

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Mercury Standard Prep Log

Prep Code: SMM
Analyst: CB
Bath Temp: 40°C
Start Time: 0923
Instrument: CETAC
Date: 02-28-13
End Time: 0953

Standard ID	Stock ID	Volume Added (mL)	Final Volume (mL)	Standard Conc. (µg/L)	Number Made
STD0	–	0.00	50.0	0.0	3
STD1	3019-4	0.01		0.1	2
STD2		0.05		0.5	2
STD3		0.10		1.0	2
STD4		0.20		2.0	3
STD5		0.50		5.0	2
STD6		1.00		10.0	2
CRA		0.01		0.1	1
ICB/CCB	–	0.00		0.0	3
ICV/LCS	59-6	0.08		8.0	2
CCV		0.04	50.0	4.0	3

Chemical/Reagent ID:

HNO_3: 18022
H_2SO_4: 17673
HCl: –
5% $K_2S_2O_8$: MP2418
5% $KMnO_4$: MA2425

Prep Code:
Analyst:
Bath Temp:
Start Time:
Instrument:
Date:
End Time:

Standard ID	Stock ID	Volume Added (mL)	Final Volume (mL)	Standard Conc. (µg/L)	Number Made
STD0		0.00			
STD1					
STD2		0.05			
STD3		0.10			
STD4		0.20			
STD5		0.50			
STD6		1.00			
CRA					
ICB/CCB		0.00			
ICV/LCS					
CCV					

Chemical/Reagent ID:

HNO_3:
H_2SO_4:
HCl:
5% $K_2S_2O_8$:
5% $KMnO_4$:

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Mercury Digestion Log

Prep Code: SMM

Analyst: DM

Bath Temp: 95°c

Start Time: 0805

Matrix: Soil

Date: 3-04-13

End Time: 0835

ARI Sample ID	Sample Bottle #	pH<2	Initial Weight (g) ~~Volume (mL)~~	Final Volume (mL)	# KMnO4 Aliquots	CLP	Comments
WF53 G	1	—	0.288	50.0	1	Y	
" GDUP	1	—	0.292		1		
" GSPK	1	—	0.290		1		
" H	1	—	0.246		1		
" MB1	—	—	—		1		
" MB1SPK	—	—	—		1		
WF78 A	1	—	0.246		1		
" ADUP	1	—	0.247		1		
" ASPK	1	—	0.243		1		
" MB1	—	—	—		1		
" MB1SPK	—	—	—	50.0	1	Y	

3/4 3/4/13

3-4-13 DM

Chemical/Reagent ID:

HNO_3: I8022

H_2SO_4: J767

HCl: —

5% $K_2S_2O_8$: ~~MP2418~~ DM 3-4-13 MP2439

5% $KMnO_4$: MP2406

Digest Tube Lot: MF06LKK01

Table of Contents: ARI Job WH44

Client: Floyd-Snider

Project: POCB HARRIS T.4030 POB-Harris

BE

Signature

March-18-2013

Date

Analytical Resources, Incorporated
Analytical Chemists and Consultants

March 19, 2013

Stephen Bentsen
Floyd-Snider Inc.
601 Union Street, Suite 600
Seattle, WA 98101-2341

RE: Client Project: POB Harris T. 4030
ARI Job No.: WH44

Dear Stephen:

Please find enclosed the original Chain-of-Custody record (COC), sample receipt documentation, and the final data package for samples from the project referenced above.

Sample receipt and detail of these analyses are discussed in the Case Narrative.

An electronic copy of this package will remain on file with ARI. Should you have any questions or problems, please feel free to contact me at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.

Kelly Bottem
Client Services Manager
kellyb@arilabs.com
206-695-6211

Enclosures

cc: eFile WH44

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

Chain of Custody Documentation

ARI Job ID: WH44

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number:	Turn-around Requested: Standard	Page: 2 of 2	
ARI Client Company: Floyd/Snider	Phone: 206-292-2078	Date: 2/1/13	Ice Present?
Client Contact: Stephen Bentsen		No. of Coolers:	Cooler Temps:
Client Project Name: POB-Harris			
Client Project #: POB-Harris T.4030	Samplers: Erin M. / Elena R.		

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

Analysis Requested

Sample ID	Date	Time	Matrix	No Containers	Grainsize PSEP 1997	Metals (SMS) EPA 6010B Hg 7471B	TOC EPA 9060	Total Solids SM2540B/PSEP	Tot. Porosity ASTM 7263	Moisture Cont. ASTM 2216	Bulk Density ASTM 2937	Fractional Organic Carbon ASTM D-2974	Notes/Comments
HA-09-10-20-013013	1/30/13	1435	S	3									Archive
HA-10-0-10-013013	1/30/13	1645	S	2	X	X		X					
HA-11-0-10-013013	1/30/13	1620	S	2	X	X		X					
FS-22-11.5-12.0-013013	1/30/13	1540	S	1								X	
FS-22-12.0-12.5-013013	1/30/13	1540	S	1					X	X	X		
FS-78-11.5-12.0-013013	1/30/13	1540	S	1								X	

Comments/Special Instructions	Relinquished by:	Received by:	Relinquished by:	Received by:
	(Signature) [signature]	(Signature) [signature]	(Signature)	(Signature)
	Printed Name: Erin Murray	Printed Name: A. Volgardsen	Printed Name:	Printed Name:
	Company: Floyd/Snider	Company: ARI	Company:	Company:
	Date & Time: 2/1/13 1020	Date & Time: 2/1/13 1201	Date & Time:	Date & Time:

***Limits of Liability:** ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

WC32 : 00003
UF44 : 00003

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: WC32	Turn-around Requested: Standard
ARI Client Company: Floyd/Snider	Phone: 206-292-2078
Client Contact: Stephen Benton	
Client Project Name: POB-Harris	
Client Project #: POB Harris T. 4030	Samplers: Erin Murray/Elena Ramirez

Page: 1 of 3	
Date: 1/31/13	Ice Present?
No. of Coolers:	Cooler Temps:

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

Sample ID	Date	Time	Matrix	No. Containers	Grain size PSEP 1997	TOC EPA 9060	Total Solids SM2540/PSEP	Metals (SMS) EPA 6010B Hg EPA 7471B	SVOCs (SMS) EPA 8270/SIM DD/8081A	PCBs EPA 8082A	Dioxins/Furans EPA 1613B		Notes/Comments
SG-12-0-10-013113	1/31/13	0935	S	4	X	X	X		X		X		
SG-12-10-20-013113		0940		4									Archive
SG-13-0-10-013113		1010		4	X	X	X		X		X		
SG-13-10-20-013113		1020		4									Archive
SG-07 ~~10~~ 0-10-013113		1105		4	X	X	X		X		X		
SG-07-10-20-013113		1110		4									Archive
SG-06-0-10-013113		1140		4	X	X	X		X		X		
SG-06-10-20-013113		1150		4									Archive
SG-94-0-10-013113		1140		1							X		
SG-05-0-10-013113		1215		3	X	X	X	X	X	X			

Comments/Special Instructions	Relinquished by	Received by	Relinquished by	Received by
	(Signature) [signature]	(Signature) [signature]	(Signature)	(Signature)
	Printed Name: Erin Murray	Printed Name: A. Volgardsen	Printed Name:	Printed Name
	Company: Floyd/Snider	Company: ARI	Company:	Company
	Date & Time: 2/1/13 1010	Date & Time: 2/1/13 1201	Date & Time:	Date & Time

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number:	Turn-around Requested: Standard	Page: 2	of 3
ARI Client Company: Floyd/Snider	Phone: 206-292-2078	Date: 1/31/13	Ice Present?
Client Contact: Stephen Bentgen		No. of Coolers:	Cooler Temps:
Client Project Name: POB-Harris			
Client Project #: POB-Harris T.4030	Samplers: Erin Murray/Elvin Ramirez		

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

Sample ID	Date	Time	Matrix	No Containers	Grainsize PSEP 1997	TOC EPA 9060	Total Solids SM 2540/PSEP	Metals(SMS) EPA 6010B Hg EPA 7471B	SVOCs(SMS) EPA 8270HIM DD/8081A	PCBs EPA 8082A	Dioxins/Furans EPA 1613B		Notes/Comments
SG-05-10-20-013113	1/31/13	1235	S	3									Archive
SG-95-0-10-013113		1215	S	3	X	X	X	X	X	X			
SG-08-0-10-013113		1255	S	5	X	X	X	X	X	X			MS/MSD on SVOCs and PCBs.
SG-08-10-20-013113		1300	S	3									Archive
SG-09-0-10-013113		1325	S	3	X	X	X	X	X	X			
SG-09-10-20-013113		1330	S	3									Archive
SG-10-0-10-013113		1400	S	3	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~ EM			Archive
SG-10-10-20-013113		1410	S	3									Archive
SG-11-0-10-013113		1425	S	3									Archive
SG-11-10-20-013113	↓	1435	S	3									Archive

Comments/Special Instructions	Relinquished by	Received by	Relinquished by	Received by
	(Signature) [signature]	(Signature) [signature]	(Signature)	(Signature)
	Printed Name: Erin Murray	Printed Name: A. Valgardsen	Printed Name:	Printed Name:
	Company: Floyd/Snider	Company: ARI	Company:	Company:
	Date & Time: 2/1/13 1010	Date & Time: 2/1/13 1201	Date & Time:	Date & Time:

Chain of Custody Record & Laboratory Analysis Request

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

ARI Assigned Number:	Turn-around Requested: Standard
ARI Client Company: Floyd/Snider	Phone: 206-292-2078
Client Contact: Stephen Bentsen	
Client Project Name: POB-Harris	
Client Project #: POB-Harris T. 4130	Samplers: Erin Murray/Megan Rimes

Page: 3	of 3
Date: 1/31/13	Ice Present?
No. of Coolers:	Cooler Temps:

Sample ID	Date	Time	Matrix	No Containers	SVOCs (SIM) 8270	PCBs EPA 8082A							Notes/Comments
~~POW SG-~~ em													
SG-05-ER-013113	1/31/13	1455	W	2	X	X							
				EM									

Comments/Special Instructions	Relinquished by:	Received by:	Relinquished by:	Received by:
	(Signature) Emurray	(Signature) [signature]	(Signature)	(Signature)
	Printed Name: Erin Murray	Printed Name: A. Volgardsen	Printed Name:	Printed Name:
	Company: Floyd/Snider	Company: ARI	Company:	Company:
	Date & Time: 2/1/13 1070	Date & Time: 2/1/13 1201	Date & Time:	Date & Time:

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Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: FloydSnider
Project Name: POB-Harris
COC No(s): NA
Delivered by: Fed-Ex UPS Courier Hand Delivered Other
Assigned ARI Job No: WC32
Tracking No.: NA

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler?	YES	NO
Were custody papers included with the cooler?	YES	NO
Were custody papers properly filled out (ink, signed, etc.)	YES	NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry): 4.3 3.0 1.6 3.0
If cooler temperature is out of compliance fill out form 00070F
Temp Gun ID#: 90877952

Cooler Accepted by: AV Date: 2/1/13 Time: 1201

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		YES	NO
What kind of packing material was used? Bubble Wrap Wet Ice Gel Packs Baggies Foam Block Paper Other:			
Was sufficient ice used (if appropriate)?	NA	YES	NO
Were all bottles sealed in individual plastic bags?		YES	NO
Did all bottles arrive in good condition (unbroken)?		YES	NO
Were all bottle labels complete and legible?		YES	NO
Did the number of containers listed on COC match with the number of containers received?		YES	NO
Did all bottle labels and tags agree with custody papers?		YES AV	NO
Were all bottles used correct for the requested analyses?		YES	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)	NA	YES	NO
Were all VOC vials free of air bubbles?	NA	YES	NO
Was sufficient amount of sample sent in each bottle?		YES	NO
Date VOC Trip Blank was made at ARI	NA		

Was Sample Split by ARI: NA YES Date/Time: Equipment: Split by:

Samples Logged by: AV Date: 2/1/13 Time: 1600

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

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC
SG-09-10-20 013113	SG-09-10-20 013113		

Additional Notes, Discrepancies, & Resolutions:

By: Date:

Small Air Bubbles ~2mm	Small → "sm"
Peabubbles 2-4 mm	Peabubbles → "pb"
LARGE Air Bubbles > 4 mm	Large → "lg"
	Headspace → "hs"

Case Narrative, Data Qualifiers, Control Limits

ARI Job ID: WH44

ANALYTICAL
RESOURCES
INCORPORATED

Case Narrative
Project: POB-Harris T.4030
ARI Job No.: WH44
March 19, 2013

Sample Receipt:

Please find enclosed the original Chain-of-Custody (COC) records, sample receipt documentation, and the analytical results for the project referenced above. Analytical Resources, Inc. (ARI) accepted thirty five sediment samples and one water sample in good condition on February 1, 2013. The samples were received with cooler temperatures between 1.6 and 4.3°C and were originally analyzed under WC32 and WC33. For further details regarding sample receipt, please refer to the Cooler Receipt Form. Several samples have been placed on hold pending further instructions.

At the request of the client, select samples were removed from frozen hold and analyzed for mercury. Please find enclosed email documentation.

Metals by Method 7471A:

The samples were digested on 3/14/13 and analyzed on 3/15/13 within the recommended holding time.

Initial calibration (s): All analytes were within method acceptance criteria.

Continuing calibration (s): All analytes of interest were within method acceptance criteria.

Samples: There were no anomalies with these samples.

Method Blank(s): All method blanks were free of contamination.

Blank Spike: All percent recoveries and RPDs were in control.

Matrix spike/Duplicate RPDs: The matrix spike in association with sample SG-08-0-10-013113 is out of control high.

Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: WH44
Client: Floyd-Snider
Project Event: POCB HARRIS T.4030
Project Name: POB-Harris

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	SG-08-0-10-013113	WH44A	13-5280	Sediment	01/31/13 12:55	02/01/13 12:01
2.	SG-09-0-10-013113	WH44B	13-5281	Sediment	01/31/13 13:25	02/01/13 12:01
3.	SG-09-0-10-013113	WH44C	13-5282	Sediment	01/31/13 13:25	02/01/13 12:01
4.	SG-08-10-20-013113	WH44D	13-5283	Sediment	01/31/13 13:00	02/01/13 12:01
5.	SG-08-10-20-013113	WH44E	13-5284	Sediment	01/31/13 13:00	02/01/13 12:01
6.	SG-08-10-20-013113	WH44F	13-5285	Sediment	01/31/13 13:00	02/01/13 12:01
7.	SG-10-0-10-013113	WH44G	13-5286	Sediment	01/31/13 14:00	02/01/13 12:01
8.	SG-10-0-10-013113	WH44H	13-5287	Sediment	01/31/13 14:00	02/01/13 12:01
9.	SG-10-0-10-013113	WH44I	13-5288	Sediment	01/31/13 14:00	02/01/13 12:01
10.	SG-11-0-10-013113	WH44J	13-5289	Sediment	01/31/13 14:25	02/01/13 12:01
11.	SG-11-0-10-013113	WH44K	13-5290	Sediment	01/31/13 14:25	02/01/13 12:01
12.	SG-11-0-10-013113	WH44L	13-5291	Sediment	01/31/13 14:25	02/01/13 12:01

Subject: Floyd|Snider Harris
From: Erin Murray <Erin.Murray@floydsnider.com>
Date: 3/13/2013 6:06 PM
To: Kelly Bottem <kellyb@arilabs.com>
CC: Sue Dunnihoo <sue@arilabs.com>

Hi Kelly,
CC'ing Sue because she helped me last week on this a bit....

We would like to analyze some of our archived sediment samples for mercury (EPA 7471A) on a 3-day turnaround time. In addition we are wondering if you could, after thawing of each sample, spread out the material on a white sheet of paper and take a picture for us? I know this is not a standard request so please let me know if there would be an extra charge.

We need to document the uniformity of the sample material. About a week ago Sue thawed **SG-08-0-10-013113** to look at the composition of the material and said it was a silty sand mixed with gravels and maybe some small wood pieces. Our first Hg analysis of this sample was 12.4 mg/kg and the re-analysis was 0.31 mg/kg. The heterogeneity of the material may explain the different numbers. So, we are having you do triplicate analyses on some of the archived and/or remaining samples to delineate this mercury hit, if possible.

Please analyze the following:

Sample ID	# of Mercury Analyses	Comments
SG-08-0-10-013113	1	*This sample has now been analyzed twice so please let me know if there is not adequate sample volume to do this.* Take picture of material spread out on white piece of paper.
SG-08-10-20-013113	3	Take picture of material spread out on white piece of paper.
SG-09-0-10-013113	2	Take picture of material spread out on white piece of paper.
SG-10-0-10-013113	3	Take picture of material spread out on white piece of paper.
SG-11-0-10-013113	3	Take picture of material spread out on white piece of paper.
Total	*12*	

Thanks Kelly and please let me know if you have any questions!

Erin Murray
FLOYD|SNIDER
Two Union Square
601 Union Street, Suite 600
Seattle, WA 98101
tel: 206 292.2078
fax 206.682.7867
erin.murray@floydsnider.com

Data Reporting Qualifiers

Effective 2/14/2011

Inorganic Data

U Indicates that the target analyte was not detected at the reported concentration

* Duplicate RPD is not within established control limits

B Reported value is less than the CRDL but ≥ the Reporting Limit

N Matrix Spike recovery not within established control limits

NA Not Applicable, analyte not spiked

H The natural concentration of the spiked element is so much greater than the concentration spiked that an accurate determination of spike recovery is not possible

L Analyte concentration is ≤5 times the Reporting Limit and the replicate control limit defaults to ±1 RL instead of the normal 20% RPD

Organic Data

U Indicates that the target analyte was not detected at the reported concentration

* Flagged value is not within established control limits

B Analyte detected in an associated Method Blank at a concentration greater than one-half of ARI's Reporting Limit or 5% of the regulatory limit or 5% of the analyte concentration in the sample.

J Estimated concentration when the value is less than ARI's established reporting limits

D The spiked compound was not detected due to sample extract dilution

E Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

Q Indicates a detected analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20%Drift or minimum RRF).

S Indicates an analyte response that has saturated the detector. The calculated concentration is not valid; a dilution is required to obtain valid quantification of the analyte

NA The flagged analyte was not analyzed for

NR Spiked compound recovery is not reported due to chromatographic interference

NS The flagged analyte was not spiked into the sample

M Estimated value for an analyte detected and confirmed by an analyst but with low spectral match parameters. This flag is used only for GC-MS analyses

M2 The sample contains PCB congeners that do not match any standard Aroclor pattern. The PCBs are identified and quantified as the Aroclor whose pattern most closely matches that of the sample. The reported value is an estimate.

N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification"

Y The analyte is not detected at or above the reported concentration. The reporting limit is raised due to chromatographic interference. The Y flag is equivalent to the U flag with a raised reporting limit.

EMPC Estimated Maximum Possible Concentration (EMPC) defined in EPA Statement of Work DLM02.2 as a value "calculated for 2,3,7,8-substituted isomers for which the quantitation and /or confirmation ion(s) has signal to noise in excess of 2.5, but does not meet identification criteria" **(Dioxin/Furan analysis only)**

C The analyte was positively identified on only one of two chromatographic columns. Chromatographic interference prevented a positive identification on the second column

P The analyte was detected on both chromatographic columns but the quantified values differ by ≥40% RPD with no obvious chromatographic interference

X Analyte signal includes interference from polychlorinated diphenyl ethers. **(Dioxin/Furan analysis only)**

Z Analyte signal includes interference from the sample matrix or perfluorokerosene ions. **(Dioxin/Furan analysis only)**

Geotechnical Data

A The total of all fines fractions. This flag is used to report total fines when only sieve analysis is requested and balances total grain size with sample weight.

F Samples were frozen prior to particle size determination

SM Sample matrix was not appropriate for the requested analysis. This normally refers to samples contaminated with an organic product that interferes with the sieving process and/or moisture content, porosity and saturation calculations

SS Sample did not contain the proportion of "fines" required to perform the pipette portion of the grain size analysis

W Weight of sample in some pipette aliquots was below the level required for accurate weighting

Quality Control Parameters for Mercury Analysis using CVAA
EPA Methods 7470A or 245.1 for Aqueous Samples
EPA Methods 7471B or 245.5 for Solid Samples

	Aqueous Samples[2]			Spike Recovery		RPD[5]
	DL[1] µg/L	LOD[1] µg/L	LOQ[1] µg/L	Matrix Spike	LCS	
Mercury	0.0069	0.05	**0.10**[2]	75 – 125	80 – 120	≤ 20
Mercury (low level)	0.0026	0.01	**0.02**[2]	75 – 125	80 – 120	≤ 20
	Soil / Sediment Samples			**Spike Recovery**		**RPD**[5]
	DL[1] mg/kg	**LOD[1] mg/kg**	**LOQ[1] mg/kg**	**Matrix Spike**	**LCS**	
Mercury	0.0021	0.0125	0.025[3]	75 – 125	80 – 120	≤ 20
	Tissue Samples			**Spike Recovery**		**RPD**[5]
	DL[1] mg/kg	**LOD[1] mg/kg**	**LOQ[1] mg/kg**	**Matrix Spike**	**LCS**	
Mercury	0.0021	0.0125	0.005[4]	75 – 125	80 – 120	≤ 20

(1) Detection Limit (DL), Limit of Detection Limit (LOD) and Limit of Quantitation (LOQ) as defined in ARI SOP 1018S
(2) 20 mL sample with 20 mL final volume
(3) 0.2 g sample with 50 mL final volume assuming 100% dry weight. Soil and sediment are reported on a dry weight basis.
(4) Tissue LOQ is 0.005 mg/kg as received (wet weight) based on 1 g sample with 50 mL final volume.
(5) Relative Percent Difference between analytes in replicate analyzes. If C_O and C_D are the concentrations of the original and duplicate respectively then

$$RPD = \frac{|C_O - C_D|}{\frac{C_O + C_D}{2}} x100$$

Metals Analysis
Report and Summary QC Forms

ARI Job ID: WH44

Cover Page

INORGANIC ANALYSIS DATA PACKAGE

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: POB-Harris

SDG: WH44

CLIENT ID	ARI ID	ARI LIMS ID	REPREP
SG-08-0-10-013113	WH44A	13-5280	
SG-08-0-10-013113D	WH44ADUP	13-5280	
SG-08-0-10-013113S	WH44ASPK	13-5280	
SG-09-0-10-013113	WH44B	13-5281	
PBS	WH44MB1	13-5281	
LCSS	WH44MB1SPK	13-5281	
SG-09-0-10-013113	WH44C	13-5282	
SG-08-10-20-013113	WH44D	13-5283	
SG-08-10-20-013113	WH44E	13-5284	
SG-08-10-20-013113	WH44F	13-5285	
SG-10-0-10-013113	WH44G	13-5286	
SG-10-0-10-013113	WH44H	13-5287	
SG-10-0-10-013113	WH44I	13-5288	
SG-11-0-10-013113	WH44J	13-5289	
SG-11-0-10-013113	WH44K	13-5290	
SG-11-0-10-013113	WH44L	13-5291	

Were ICP interelement corrections applied ?	Yes/No	YES
Were ICP background corrections applied ?	Yes/No	YES
If yes - were raw data generated before application of background corrections ?	Yes/No	NO

Comments:

THIS DATA PACKAGE HAS BEEN REVIEWED AND AUTHORIZED FOR RELEASE BY:

Signature: [signature] Name: Jay Kuhn

Date: 3/10/13 Title: Inorganics Director

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: SG-08-0-10-013113
SAMPLE

Lab Sample ID: WH44A
LIMS ID: 13-5280
Matrix: Sediment
Data Release Authorized:
Reported: 03/18/13

QC Report No: WH44-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Percent Total Solids: 48.2%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	LOQ	mg/kg-dry	Q
CLP	03/14/13	7471A	03/15/13	**7439-97-6**	**Mercury**	0.05	**0.13**	

U-Analyte undetected at given LOQ
LOQ-Limit of Quantitation

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: SG-08-0-10-013113
DUPLICATE

Lab Sample ID: WH44A
LIMS ID: 13-5280
Matrix: Sediment
Data Release Authorized:
Reported: 03/18/13

QC Report No: WH44-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

MATRIX DUPLICATE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Duplicate	RPD	Control Limit	Q
Mercury	7471A	0.13	0.14	7.4%	+/- 0.05	L

Reported in mg/kg-dry

*-Control Limit Not Met
L-RPD Invalid, Limit = Detection Limit

FORM-VI

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: SG-08-0-10-013113
MATRIX SPIKE

Lab Sample ID: WH44A
LIMS ID: 13-5280
Matrix: Sediment
Data Release Authorized:
Reported: 03/18/13

QC Report No: WH44-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

MATRIX SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Spike	Spike Added	% Recovery	Q
Mercury	7471A	0.13	0.70	0.449	127%	N

Reported in mg/kg-dry

N-Control Limit Not Met
H-% Recovery Not Applicable, Sample Concentration Too High
NA-Not Applicable, Analyte Not Spiked

Percent Recovery Limits: 75-125%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: SG-09-0-10-013113
SAMPLE

Lab Sample ID: WH44B
LIMS ID: 13-5281
Matrix: Sediment
Data Release Authorized:
Reported: 03/18/13

QC Report No: WH44-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Percent Total Solids: 52.3%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	LOQ	mg/kg-dry	Q
CLP	03/14/13	7471A	03/15/13	**7439-97-6**	**Mercury**	0.04	**0.40**	

U-Analyte undetected at given LOQ
LOQ-Limit of Quantitation

FORM-I

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: SG-09-0-10-013113
SAMPLE

Lab Sample ID: WH44C
LIMS ID: 13-5282
Matrix: Sediment
Data Release Authorized:
Reported: 03/18/13

QC Report No: WH44-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Percent Total Solids: 52.0%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	LOQ	mg/kg-dry	Q
CLP	03/14/13	7471A	03/15/13	**7439-97-6**	**Mercury**	0.04	**0.23**	

U-Analyte undetected at given LOQ
LOQ-Limit of Quantitation

FORM-I

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: SG-08-10-20-013113
SAMPLE

Lab Sample ID: WH44D
LIMS ID: 13-5283
Matrix: Sediment
Data Release Authorized:
Reported: 03/18/13

QC Report No: WH44-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Percent Total Solids: 58.9%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	LOQ	mg/kg-dry	Q
CLP	03/14/13	7471A	03/15/13	**7439-97-6**	**Mercury**	0.04	**0.19**	

U-Analyte undetected at given LOQ
LOQ-Limit of Quantitation

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: SG-08-10-20-013113
SAMPLE

Lab Sample ID: WH44E
LIMS ID: 13-5284
Matrix: Sediment
Data Release Authorized:
Reported: 03/18/13

QC Report No: WH44-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Percent Total Solids: 58.3%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	LOQ	mg/kg-dry	Q
CLP	03/14/13	7471A	03/15/13	**7439-97-6**	**Mercury**	0.03	**0.33**	

U-Analyte undetected at given LOQ
LOQ-Limit of Quantitation

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: SG-08-10-20-013113
SAMPLE

Lab Sample ID: WH44F
LIMS ID: 13-5285
Matrix: Sediment
Data Release Authorized:
Reported: 03/18/13

QC Report No: WH44-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Percent Total Solids: 57.3%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	LOQ	mg/kg-dry	Q
CLP	03/14/13	7471A	03/15/13	**7439-97-6**	**Mercury**	0.03	**0.15**	

U-Analyte undetected at given LOQ
LOQ-Limit of Quantitation

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: SG-10-0-10-013113
SAMPLE

Lab Sample ID: WH44G
LIMS ID: 13-5286
Matrix: Sediment
Data Release Authorized:
Reported: 03/18/13

QC Report No: WH44-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Percent Total Solids: 48.4%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	LOQ	mg/kg-dry	Q
CLP	03/14/13	7471A	03/15/13	**7439-97-6**	**Mercury**	0.04	**0.47**	

U-Analyte undetected at given LOQ
LOQ-Limit of Quantitation

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: SG-10-0-10-013113
SAMPLE

Lab Sample ID: WH44H
LIMS ID: 13-5287
Matrix: Sediment
Data Release Authorized:
Reported: 03/18/13

QC Report No: WH44-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Percent Total Solids: 47.8%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	LOQ	mg/kg-dry	Q
CLP	03/14/13	7471A	03/15/13	**7439-97-6**	**Mercury**	0.05	**0.21**	

U-Analyte undetected at given LOQ
LOQ-Limit of Quantitation

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: SG-10-0-10-013113
SAMPLE

Lab Sample ID: WH44I
LIMS ID: 13-5288
Matrix: Sediment
Data Release Authorized:
Reported: 03/18/13

QC Report No: WH44-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Percent Total Solids: 47.9%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	LOQ	mg/kg-dry	Q
CLP	03/14/13	7471A	03/15/13	**7439-97-6**	**Mercury**	0.05	**0.22**	

U-Analyte undetected at given LOQ
LOQ-Limit of Quantitation

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: SG-11-0-10-013113
SAMPLE

Lab Sample ID: WH44J
LIMS ID: 13-5289
Matrix: Sediment
Data Release Authorized:
Reported: 03/18/13

QC Report No: WH44-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Percent Total Solids: 49.8%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	LOQ	mg/kg-dry	Q
CLP	03/14/13	7471A	03/15/13	**7439-97-6**	**Mercury**	0.04	**0.23**	

U-Analyte undetected at given LOQ
LOQ-Limit of Quantitation

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: SG-11-0-10-013113
SAMPLE

Lab Sample ID: WH44K
LIMS ID: 13-5290
Matrix: Sediment
Data Release Authorized:
Reported: 03/18/13

QC Report No: WH44-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Percent Total Solids: 49.7%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	LOQ	mg/kg-dry	Q
CLP	03/14/13	7471A	03/15/13	**7439-97-6**	**Mercury**	0.04	**0.23**	

U-Analyte undetected at given LOQ
LOQ-Limit of Quantitation

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: SG-11-0-10-013113
SAMPLE

Lab Sample ID: WH44L
LIMS ID: 13-5291
Matrix: Sediment
Data Release Authorized
Reported: 03/18/13

QC Report No: WH44-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: 01/31/13
Date Received: 02/01/13

Percent Total Solids: 49.5%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	LOQ	mg/kg-dry	Q
CLP	03/14/13	7471A	03/15/13	**7439-97-6**	**Mercury**	0.04	**0.24**	

U-Analyte undetected at given LOQ
LOQ-Limit of Quantitation

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: METHOD BLANK

Lab Sample ID: WH44MB
LIMS ID: 13-5281
Matrix: Sediment
Data Release Authorized:
Reported: 03/18/13

QC Report No: WH44-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: NA
Date Received: NA

Percent Total Solids: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	LOQ	mg/kg-dry	Q
CLP	03/14/13	7471A	03/15/13	7439-97-6	Mercury	0.02	0.02	U

U-Analyte undetected at given LOQ
LOQ-Limit of Quantitation

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: LAB CONTROL

Lab Sample ID: WH44LCS
LIMS ID: 13-5281
Matrix: Sediment
Data Release Authorized:
Reported: 03/18/13

QC Report No: WH44-Floyd-Snider
Project: POB-Harris
POCB HARRIS T.4030
Date Sampled: NA
Date Received: NA

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Mercury	7471A	0.60	0.50	120%	

Reported in mg/kg-dry

N-Control limit not met
NA-Not Applicable, Analyte Not Spiked
Control Limits: 80-120%

Calibration Verification

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: POB-Harris

SDG: WH44

UNITS: ug/L

ANALYTE	EL	M	RUN	ICVTV	ICV	%R	CCVTV	CCV1	%R	CCV2	%R	CCV3	%R	CCV4	%R	CCV5	%R
Mercury	HG	CVA	HG031502	8.0	8.73	109.1	4.0	4.14	103.5	4.14	103.5	4.10	102.5	4.23	105.8	4.13	103.3

Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (1)

Calibration Verification

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: POB-Harris

SDG: WH44

UNITS: ug/L

ANALYTE	EL	M	RUN	CCVTV	CCV6	%R	CCV7	%R	CCV8	%R	CCV9	%R	CCV10	%R	CCV11	%R
Mercury	HG	CVA	HG031502	4.0	4.14	103.5	4.15	103.8	4.21	105.3	4.21	105.3	4.19	104.8	4.14	103.5

Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (1)

Calibration Verification

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: POB-Harris

SDG: WH44

UNITS: ug/L

ANALYTE	EL	M	RUN	CCVTV	CCV12	%R	CCV13	%R	CCV14	%R	CCV15	%R	CCV16	%R	CCV17	%R
Mercury	HG	CVA	HG031502	4.0	4.16	104.0	4.15	103.8	4.18	104.5	4.20	105.0				

Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (1)

CRDL Standard

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: POB-Harris

SDG: WH44

UNITS: ug/L

ANALYTE	EL	M	RUN	CRA/I TV	CR-1	%R	CR-2	%R	CR-3	%R	CR-4	%R	CR-5	%R	CR-6	%R
Mercury	HG	CVA	HG031502	0.1	0.09	90.0										

Control Limits: no control limits have been established by the EPA at this time.

FORM II (2)

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: POB-Harris

SDG: WH44

UNITS:ug/L

ANALYTE	EL	METH	RUN	CRDL	IDL	ICB	C	CCB1	C	CCB2	C	CCB3	C	CCB4	C	CCB5	C
Mercury	HG	CVA	HG031502	0.2	0.1	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U

FORM III

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: POB-Harris

SDG: WH44

UNITS: ug/L

ANALYTE	EL	METH	RUN	CRDL	IDL	CCB6	C	CCB7	C	CCB8	C	CCB9	C	CCB10	C	CCB11	C
Mercury	HG	CVA	HG031502	0.2	0.1	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: POB-Harris

SDG: WH44

UNITS: ug/L

ANALYTE	EL	METH	RUN	CRDL	IDL	CCB12	C	CCB13	C	CCB14	C	CCB15	C	CCB16	C	CCB17	C
Mercury	HG	CVA	HG031502	0.2	0.1	0.1	U	0.1	U	0.1	U	0.1	U				

IDLs and ICP Linear Ranges

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: POB-Harris

SDG: WH44

UNITS: ug/L

ANALYTE	EL	METH	INSTRUMENT	WAVELENTH (nm)	GFA BACK-GROUND	CLP CRDL	RL	RL DATE	ICP LINEAR RANGE (ug/L)	ICP LR DATE
Mercury	HG	CVA	CETAC MERCURY	253.70		0.2	0.1	4/1/2012		

FORM X/XII

Preparation Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: POB-Harris

SDG: WH44

ANALYSIS METHOD: CVA

ARI PREP CODE: SMM

PREPDATE: 3/14/2013

CLIENT ID	ARI ID	MASS (g)	INITIAL VOLUME (mL)	FINAL VOLUME (mL)
SG-08-0-10-013113	WH44A	0.228	0.0	50.0
SG-08-0-10-013113D	WH44ADUP	0.225	0.0	50.0
SG-08-0-10-013113S	WH44ASPK	0.231	0.0	50.0
SG-09-0-10-013113	WH44B	0.264	0.0	50.0
SG-09-0-10-013113	WH44C	0.269	0.0	50.0
SG-08-10-20-013113	WH44D	0.210	0.0	50.0
SG-08-10-20-013113	WH44E	0.253	0.0	50.0
SG-08-10-20-013113	WH44F	0.260	0.0	50.0
SG-10-0-10-013113	WH44G	0.261	0.0	50.0
SG-10-0-10-013113	WH44H	0.214	0.0	50.0
SG-10-0-10-013113	WH44I	0.216	0.0	50.0
SG-11-0-10-013113	WH44J	0.237	0.0	50.0
SG-11-0-10-013113	WH44K	0.229	0.0	50.0
SG-11-0-10-013113	WH44L	0.233	0.0	50.0
PBS	WH44MB1	0.200	0.0	50.0
LCSW	WH44MB1SPK	0.200	0.0	50.0

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: POB-Harris INSTRUMENT ID: CETAC MERCURY START DATE: 3/15/2013

SDG: WH44 RUNID: HG031502 METHOD: CVA END DATE: 3/15/2013

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
S0	S0	1.00	10251														X																
S0.1	S0.1	1.00	10265														X																
S0.5	S0.5	1.00	10282														X																
S1	S1	1.00	10300														X																
S2	S2	1.00	10314														X																
S5	S5	1.00	10332														X																
S10	S10	1.00	10350														X																
ICV	AICV	1.00	10391														X																
ICB	ICB	1.00	10404														X																
CCV	ACCV1	1.00	10422														X																
CCB	CCB1	1.00	10440														X																
CRA	CRA	1.00	10454														X																
PBW	WH44MB1	1.00	10471														X																
LCSW	WH44MB1SPK	1.00	10485														X																
SG-08-0-10-013113	WH44A	1.00	10503														X																
SG-08-0-10-013113D	WH44ADUP	1.00	10520														X																
SG-08-0-10-013113S	WH44ASPK	1.00	10534														X																
SG-09-0-10-013113	WH44B	1.00	10552														X																
SG-09-0-10-013113	WH44C	1.00	10565														X																
SG-08-10-20-013113	WH44D	1.00	10583														X																
SG-08-10-20-013113	WH44E	1.00	11001														X																
CCV	ACCV2	1.00	11015														X																
CCB	CCB2	1.00	11033														X																
SG-08-10-20-013113	WH44F	1.00	11051														X																
SG-10-0-10-013113	WH44G	1.00	11064														X																
SG-10-0-10-013113	WH44H	1.00	11082														X																
SG-10-0-10-013113	WH44I	1.00	11095														X																
SG-11-0-10-013113	WH44J	1.00	11113														X																
SG-11-0-10-013113	WH44K	1.00	11131														X																
SG-11-0-10-013113	WH44L	1.00	11144														X																
ZZZZZZ	WG79MB1	1.00	11162																														
ZZZZZZ	WG79MB1SPK	1.00	11180																														
ZZZZZZ	WG79C	1.00	11193																														
CCV	ACCV3	1.00	11211														X																
CCB	CCB3	1.00	11225														X																

FORM XIV

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: POB-Harris — INSTRUMENT ID: CETAC MERCURY — START DATE: 3/15/2013

SDG: WH44 — RUNID: HG031502 — METHOD: CVA — END DATE: 3/15/2013

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
ZZZZZZ	WG79CDUP	1.00	11243																														
ZZZZZZ	WG79CSPK	1.00	11261																														
ZZZZZZ	WG79D	1.00	11275																														
ZZZZZZ	WG79I	1.00	11292																														
ZZZZZZ	WG79J	1.00	11310																														
ZZZZZZ	WG79K	1.00	11324																														
ZZZZZZ	WG79L	1.00	11341																														
ZZZZZZ	WG79M	1.00	11355																														
ZZZZZZ	WG79N	1.00	11373																														
ZZZZZZ	WG79O	1.00	11390																														
CCV	ACCV4	1.00	11404														X																
CCB	CCB4	1.00	11422														X																
ZZZZZZ	WH03MB1	1.00	11440																														
ZZZZZZ	WH03MB1SPK	1.00	11454																														
ZZZZZZ	WH03A	1.00	11472																														
ZZZZZZ	WH03ADUP	1.00	11490																														
ZZZZZZ	WH03ASPK	1.00	11504																														
ZZZZZZ	WH03B	1.00	11521																														
ZZZZZZ	WH03C	1.00	11535																														
ZZZZZZ	WH03M	1.00	11552																														
ZZZZZZ	WH18MB1	1.00	11570																														
ZZZZZZ	WH18MB1SPK	1.00	11584																														
CCV	ACCV5	1.00	12002														X																
CCB	CCB5	1.00	12020														X																
ZZZZZZ	WH18REF1	5.00	12034																														
ZZZZZZ	WH18A	1.00	12051																														
ZZZZZZ	WH18ADUP	1.00	12065																														
ZZZZZZ	WH18ASPK	1.00	12083																														
ZZZZZZ	WH18B	1.00	12101																														
ZZZZZZ	WH18C	1.00	12115																														
ZZZZZZ	WH18D	1.00	12133																														
ZZZZZZ	WH18E	1.00	12150																														
ZZZZZZ	WG88MB1	1.00	12164																														
ZZZZZZ	WG88MB1SPK	1.00	12182																														
CCV	ACCV6	1.00	12195														X																

FORM XIV

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: POB-Harris   INSTRUMENT ID: CETAC MERCURY   START DATE: 3/15/2013

SDG: WH44   RUNID: HG031502   METHOD: CVA   END DATE: 3/15/2013

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
CCB	CCB6	1.00	12213														X																
ZZZZZZ	WG88A	1.00	12231																														
ZZZZZZ	WG88ADUP	1.00	12245																														
ZZZZZZ	WG88ASPK	1.00	12263																														
CCV	ACCV7	1.00	12281														X																
CCB	CCB7	1.00	12295														X																
ZZZZZZ	WG58MB1	1.00	12322																														
ZZZZZZ	WG58MB1SPK	1.00	12335																														
ZZZZZZ	WG58REF1	5.00	12353																														
ZZZZZZ	WG58A	1.00	12371																														
ZZZZZZ	WG58ADUP	1.00	12384																														
ZZZZZZ	WG58ASPK	1.00	12402																														
ZZZZZZ	WG58B	1.00	12415																														
ZZZZZZ	WG58C	1.00	12433																														
ZZZZZZ	WG58D	1.00	12451																														
ZZZZZZ	WG58E	1.00	12464																														
CCV	ACCV8	1.00	12482														X																
CCB	CCB8	1.00	12500														X																
ZZZZZZ	WG85MB1	1.00	12514																														
ZZZZZZ	WG85MB1SPK	1.00	12532																														
ZZZZZZ	WG85REF1	5.00	12550																														
ZZZZZZ	WG85A	1.00	12563																														
ZZZZZZ	WG85ADUP	1.00	12581																														
ZZZZZZ	WG85ASPK	1.00	12594																														
ZZZZZZ	WG85B	1.00	13012																														
ZZZZZZ	WG85C	1.00	13030																														
ZZZZZZ	WG85D	1.00	13043																														
ZZZZZZ	WG85E	1.00	13061																														
CCV	ACCV9	1.00	13075														X																
CCB	CCB9	1.00	13093														X																
ZZZZZZ	WG85F	1.00	13111																														
ZZZZZZ	WH01MB1	1.00	13125																														
ZZZZZZ	WH01MB1SPK	1.00	13142																														
ZZZZZZ	WH01REF1	5.00	13160																														
ZZZZZZ	WH01A	1.00	13174																														

FORM XIV

Analysis Run Log

CLIENT: Floyd-Snider

PROJECT: POB-Harris

SDG: WH44

INSTRUMENT ID: CETAC MERCURY

RUNID: HG031502 METHOD: CVA

START DATE: 3/15/2013

END DATE: 3/15/2013

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
ZZZZZZ	WH01ADUP	1.00	13191																														
ZZZZZZ	WH01ASPK	1.00	13205																														
ZZZZZZ	WH01B	1.00	13223																														
ZZZZZZ	WH01C	1.00	13240																														
ZZZZZZ	WH01D	1.00	13254																														
CCV	ACCV10	1.00	13272														X																
CCB	CCB10	1.00	13290														X																
ZZZZZZ	WH01E	1.00	13304																														
ZZZZZZ	WH01F	1.00	13322																														
ZZZZZZ	WG60MB1	1.00	13335																														
ZZZZZZ	WG60MB1SPK	1.00	13353																														
ZZZZZZ	WG60A	1.00	13371																														
ZZZZZZ	WG60ADUP	1.00	13385																														
ZZZZZZ	WG60ASPK	1.00	13403																														
ZZZZZZ	WG60B	1.00	13420																														
CCV	ACCV11	1.00	13434														X																
CCB	CCB11	1.00	13452														X																
ZZZZZZ	WH33MB1	1.00	13475																														
ZZZZZZ	WH33MB1SPK	1.00	13492																														
ZZZZZZ	WH33REF1	5.00	13510																														
ZZZZZZ	WH33A	1.00	13523																														
ZZZZZZ	WH33ADUP	1.00	13541																														
ZZZZZZ	WH33ASPK	1.00	13554																														
ZZZZZZ	WH33B	1.00	13572																														
ZZZZZZ	WH33C	1.00	13590																														
ZZZZZZ	WH33D	1.00	14003																														
ZZZZZZ	WH33E	1.00	14021																														
CCV	ACCV12	1.00	14035														X																
CCB	CCB12	1.00	14053														X																
ZZZZZZ	WH33F	1.00	14071																														
ZZZZZZ	WH33G	1.00	14085																														
ZZZZZZ	WH43MB1	1.00	14102																														
ZZZZZZ	WH43MB1SPK	1.00	14120																														
ZZZZZZ	WH43A	1.00	14133																														
ZZZZZZ	WH43B	1.00	14151																														

FORM XIV

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: POB-Harris | INSTRUMENT ID: CETAC MERCURY | START DATE: 3/15/2013

SDG: WH44 | RUNID: HG031502 | METHOD: CVA | END DATE: 3/15/2013

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
ZZZZZZ	WH43C	1.00	14164																														
ZZZZZZ	WH43D	1.00	14182																														
ZZZZZZ	WH43DDUP	1.00	14200																														
ZZZZZZ	WH43DSPK	1.00	14214																														
CCV	ACCV13	1.00	14231														X																
CCB	CCB13	1.00	14245														X																
ZZZZZZ	WH43E	1.00	14263																														
ZZZZZZ	WH43F	1.00	14281																														
ZZZZZZ	WH43G	1.00	14295																														
CCV	ACCV14	1.00	14313														X																
CCB	CCB14	1.00	14331														X																
SG-08-0-10-013113	WH44A	1.00	14351																														
SG-08-0-10-013113D	WH44ADUP	1.00	14364																														
SG-08-0-10-013113S	WH44ASPK	1.00	14382																														
ZZZZZZ	WH18A	1.00	14395																														
ZZZZZZ	WH18ADUP	1.00	14413																														
ZZZZZZ	WH18ASPK	1.00	14431																														
ZZZZZZ	WG58A	1.00	14444																														
ZZZZZZ	WG58ADUP	1.00	14462																														
ZZZZZZ	WG58ASPK	1.00	14480																														
ZZZZZZ	WG85A	1.00	14493																														
CCV	ACCV15	1.00	14511														X																
CCB	CCB15	1.00	14525														X																

Total Solids

ARI Job ID: WH44

Solids Data Entry Report   Checked by: CB Date: 3/15/13
Date: 03/15/13   Data Analyst: DM

Solids Determination performed on 03/14/13 by CB

JOB	SAMPLE	CLIENTID	TAREWEIGHT	SAMPDISH	DRYWEIGHT	SOLIDS
WH44	A	SG-08-0-10-013113	1.008	10.635	5.644	48.16
WH44	B	SG-08-0-10-013113	0.973	10.893	6.157	52.26
WH44	C	SG-08-0-10-013113	0.975	10.761	6.067	52.03
WH44	D	SG-08-0-10-013113	0.988	10.392	6.524	58.87
WH44	E	SG-08-0-10-013113	0.998	10.774	6.697	58.30
WH44	F	SG-08-0-10-013113	0.983	10.699	6.551	57.31
WH44	G	SG-08-0-10-013113	0.970	10.024	5.356	48.44
WH44	H	SG-08-0-10-013113	0.963	10.550	5.543	47.77
WH44	I	SG-08-0-10-013113	0.988	10.636	5.610	47.91
WH44	J	SG-08-0-10-013113	0.968	10.478	5.707	49.83
WH44	K	SG-08-0-10-013113	0.959	10.664	5.785	49.73
WH44	L	SG-08-0-10-013113	0.984	10.428	5.657	49.48

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Total Solids Bench Sheet

Laboratory Section metals

Oven Identification: 07 **Balance ID:** 8116137369

Samples in Oven: Date: 03-14-13 Time: 1415 Temp: 104°C Analyst: CB

Removed from Oven: Date: 3-15-13 Time: 0735 Temp: 100°C Analyst: DM

ARI Sample ID	Tare Weight (g)	Tare + Sample Wet (g)	Tare + Sample Dry (g)	Date & Time Last Weight	Final Weighting >12 hrs[1]
WH44 A	1.008	10.635	5.614	—	✓
" B	0.973	10.893	6.157	—	✓
" C	0.975	10.761	6.067	—	✓
" D	0.988	10.392	6.524	—	✓
" E	0.998	10.774	6.697	—	✓
" F	0.983	10.679	6.551	—	✓
" G	0.970	10.024	5.356	—	✓
" H	0.963	10.550	5.543	—	✓
" I	0.988	10.636	5.610	—	✓
" J	0.968	10.478	5.707	—	✓
" K	0.959	10.664	5.785	—	✓
" L	0.984	10.428	5.657	—	✓
		CB			
		3-14-13			

1) Place a check mark in this column if samples have dried > 12 but < 24 hours. When samples have been at 104°C < 12 hours, constant weight must be verified as described in SOP 10023S. Use a 2nd bench sheet for additional weightings.

Metals Raw Data
Preparation Bench Sheets and Notes

ARI Job ID: WH44

Analytical Resources, Incorporated
Analytical Chemists and Consultants

SPIKING LOG

Analyst: CB

Date: 3-14-13

Final Volume: ø CB 3/14/13

Final Volume (Hg): 50.0

Sample ID: WH44 ASQK, MAISAH

	Prepcode:			
	Spike Solution:	ICP Routine	ICP No GFA	GFA
	Standard No.:			
	Vol Added (mL):			
STOCK CONCENTRATION	Ag	50		2.0
	Al	200	200	
	As	200		10
	Ba	200	200	
	Be	50	50	
	Ca	1000	1000	
	Cd	50		2.0
	Co	50	50	
	Cr	50	50	
	Cu	50	50	
	Fe	200	200	
	K	1000	1000	
	Mg	1000	1000	
	Mn	50	50	
	Na	1000	1000	
	Ni	50	50	
	Pb	200		10
	Se	200		10
	Sr	50	50	
	Tl	200		10
	V	50	50	
	Zn	50	50	

	ICP-MS #1	ICP-MS #2	ICP-MS Minerals
Ag	25		
Al			500
As	25		
Ba	25		
Be	25		
Ca			500
Cd	25		
Co	25		
Cr	25		
Cu	25		
Fe			500
K			500
Mg			500
Mn	25		
Mo		25	
Na			500
Ni	25		
Pb	25		
Sb		25	
Se	80		
Tl	25		
U	25		
V	25		
Zn	80		

Element	Prepcode	Analysis	Stock Conc.	Stock Added	Std No.
Hg	Smm	CVA	1.0	0.05	3007-13
Hg MBSPK	↓	CVA	1.0	0.10	↓
Sb		ICP	2000		
Sb		GFA	100		
B		ICP	500		
Mo		ICP	500		
Si		ICP	10000		
Sn		ICP	500		
Ti		ICP	2000		

Additional Elements:

Element	Prepcode	Analysis	Stock Conc.	Stock Added	Std. No.

UHUU : 00052

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Mercury Digestion Log

Prep Code: Smm
Analyst: CB
Bath Temp: 90°C
Start Time: 1440
Matrix: Soil
Date: 03-14-13
End Time: 1510

ARI Sample ID	Sample Bottle #	pH<2	Initial Weight (g) ~~Volume (mL)~~	Final Volume (mL)	# $KMnO_4$ Aliquots	CLP	Comments
WH44 A	1	–	0.228	50.0	3/18 1	Y	
" Adup	1	–	0.225		1		
" Aspk	1	–	0.231		1		
" B	1	–	0.264		1		
" C	1	–	0.269		1		
" D	1	–	0.210		1		
" E	1	–	0.253		1		
" F	1	–	0.260		1		
" G	1	–	0.261		1		
" H	1	–	0.214		1		
" I	1	–	0.216		1		
" J	1	–	0.237		1		
" K	1	–	0.229		1		
" L	1	–	0.233		1		
" mBl	–	–	–		1		
" mBlspk	–	–	–	50.0	1	Y	
			CB				
			3-14-13				

Chemical/Reagent ID:

HNO_3: I8022
H_2SO_4: 37677
HCl: –
5% $K_2S_2O_8$: MP2439
5% $KMnO_4$: MP2445
Digest Tube Lot: MFO6LKK01

Metals Raw Data
Run Logs, Calibrations, and Raw Data

ARI Job ID: WH44

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Corrective Actions
Inorganic Analyses

Criteria Flagged:

Unacceptable Blank:	☐	ARI Job No.:	WH44
Unacceptable Duplicate:	☐	Date of Event:	03-15-13
Unacceptable Spike:	☒	Client ID:	
Unacceptable Reference:	☐	Method/Element:	Hg CVA
		Prep Code:	SMM

Details of Problem/Recommended Corrective Action:

1st Analysis A = 0.28 ppb

Aspk = 1.55 ppb %R = 127 High

2nd Analysis. A = 0.27 ppb

Aspk = 1.53 ppb %R = 126 High

Samples Affected: A, Adup, Aspk, mB, mBspk

Corrective Action Taken:

Sent

Analyst Initials: CB

Date: 03-15-13

Supervisor: [signature]

Date: 3-18-13

ANALYTICAL RESOURCES INCORPORATED

Metals Data Review Checklist

Method: ICP ICP-MS GFA CVA

Analysis Date: 03-15-13

	Analyst CB 03-15-13	Peer [illegible] 3/18/13	Comment
Analyst, Date, Method info	✓	✓	
Sample ID's	✓	✓	
Standard/QC solution ID's recorded	✓	✓	
Prep codes	✓	✓	
Dilution factors	✓	✓	
Crossouts/Corrections/Deletions	✓	✓	
Blank & Standard intensities	✓	✓	
Standard deviations	✓	✓	
Curve fit	✓	✓	
ICV/CCV	✓	✓	
ICB/CCB	✓	✓	
RSD's & SD's	✓	✓	
Internal Standards	-	-	
Carry-over	-	-	
CRI/CRA	✓	✓	
ICSA/ICSAB	-	-	
Post Spikes/Serial Dilutions	-	-	
Analytic Spikes	-	-	
SRM/LCS	✓	✓	
Matrix Spikes	✓	✓	See log
Matrix Duplicates	✓	✓	See log
Method Blanks	✓	✓	
Requested elements/isotope identified	✓	✓	
Correct samples identified for distribution	✓	✓	
Raw data match distributed data	✓	✓	
Data filename correct	✓	✓	
	✓	✓	See CAF's

Mercury Analysis Log

Analyst: CB　　　　Date: 03-15-13
Instrument: CETAC　　　　Page: 3 of 9

ARI Sample ID		Prep Code	Dilution	QC Data (ppb)	Comments
STD	0.0	5mm	1x		
"	0.1				
"	0.5				
"	1.0				
"	2.0				
"	5.0				
"	10.0				
ICV				8.73	Begin CLP %R= 109 ✓
ICB				-0.04	✓
CCV1				4.14	%R= 104 ✓
CCB1				-0.02	✓
CRA				0.09	✓
WH44	MB1			-0.00	✓
"	MB1spk			2.38	%R= 119 ✓
"	A			0.28	
"	Adup			0.30	✓
"	Aspk			1.55	%R= 127 High X
"	B				
"	C				
"	D				
"	E				
CCV2				4.14	%R= 104 ✓
CCB2				-0.01	✓
WH44	F				
"	G				
"	H				
"	I				
"	J				
"	K				
"	L				

Chemical/Reagent ID:
10% $SnCl_2$: MP2451　　　　14% NH_2OH/NaCl: MP2436

Standard ID:
Standard: 3021-9　　　　ICV/CCV: 59-6

Mercury Analysis Log

Analyst: CB

Instrument: CETAC

Date: 03-15-13

Page: 4 of 9

ARI Sample ID	Prep Code	Dilution	QC Data (ppb)	Comments
W679 9: MB1 (CB31313)	3mm	1x	-0.01	
" MB1spk	↓	↓	2.26	%R= 113 ✓
" C			0.17	✓
CCV3			4.10	%R= 103
CCB3			-0.03	✓
W679 Cdup			0.15	✓
" Cspk			1.40	%R= 123 ✓
" D				✓
" I				
" J				
" K				
" L				
" M				
" N				
" O				
CCV4			4.23	%R=106
CCB4			-0.01	✓
WH03 MB1			-0.08	✓
" MB1spk			2.12	%R= 106 ✓
" A			0.19	✓
" Adup			0.19	
" Aspk			1.36	%R= 118 ✓
" B				✓
" C				
" M				
WH18 MB1			-0.01	
" MB1spk			2.20	%R= 110 ✓
CCV5			4.13	%R= 103 ✓
CCB5			-0.01	✓
WH18 REF1	✓	5x	7.16	8.77 mg/Kg ✓

Chemical/Reagent ID:

10% $SnCl_2$: MA2451

14% $NH_2OH/NaCl$: MA2436

Standard ID:

Standard: 3021-9

ICV/CCV: 59-6

5026F

Revision 4
1/26/01

Mercury Analysis Log

Analyst: CB

Instrument: CETAC

Date: 03-15-13

Page: 5 of 9

ARI Sample ID		Prep Code	Dilution	QC Data (ppb)	Comments
WH18	A	5mm	1x	0.24	
"	Adup			0.36	Difference > 0.1 X
"	Aspk			1.74	%R= 150 High X
"	B				
"	C				
"	D				
"	E				
WG59	MBI			-0.00	√
"	MBIspk			2.21	%R= 111 √
CCV6				4.14	%R= 104 √
CCB6				-0.00	√
WG98	A			0.22	
"	Adup			0.23	√
"	Aspk			1.42	%R= 120 √
CCV7				4.15	%R= 104 √
CCB7				-0.01	√
WG58	MBI			-0.00	√
"	MBIspk			2.18	%R = 109 √
"	REF1		5X	7.51	9.02 mg/kg √
"	A		1X	0.29	
"	Adup			0.38	√
"	Aspk			1.55	%R= 126 High X
"	B				
"	C				
"	D				
"	E				
CCV8				4.21	%R= 105 √
CCB8				-0.03	√
WG95	MBI			-0.00	√
"	MBIspk	√	√	2.08	%R= 104 √

Chemical/Reagent ID:

10% $SnCl_2$: MP2451

14% $NH_2OH/NaCl$: MP2436

Standard ID:

Standard: 3021-9

ICV/CCV: 59-6

Mercury Analysis Log

Analyst: CB

Instrument: CETAC

Date: 03-15-13

Page: 6 of 9

ARI Sample ID		Prep Code	CB 3/15/13 Dilution	QC Data (ppb)	Comments	
WG95	REF1	SMM	~~1x~~ 5x	6.93	8.45 ~~ug~~/Kg CB 3/15/13	√
"	A		1x	0.45		
"	Adup			0.34	Difference 70.1	X
"	Aspk			1.68	%R: 123	√
"	B					
"	C					
"	D					
"	E					
CCV9				4.21	% R=105	√
CCB9				-0.01		√
WG85	F					
WH01	MB1			-0.02		√
"	MB1spk			2.06	%R: 103	√
"	REF1		5x	6.62	8.28 mg/Kg	√
"	A		1x	0.36		
"	Adup			0.30		√
"	Aspk			1.70	% R: 134 High	X
"	B					
"	C					
"	D					
CCV10				4.19	%R: 105	√
CCB10				-0.01		√
WH01	E					
"	F					
WG60	MB1			-0.01		√
"	MB1spk			2.19	%R: 110	√
"	A			4.92		
"	Adup			3.91	RPD= 22.9 High	X
"	Aspk			6.12	% R: 120	√
"	B					

Chemical/Reagent ID:

10% $SnCl_2$: MP2451

14% $NH_2OH/NaCl$: MP2436

Standard ID:

Standard: 3021-9

ICV/CCV: 59-6

Mercury Analysis Log

Analyst: CB
Instrument: CETAC

Date: 03-15-13
Page: 7 of 9

ARI Sample ID	Prep Code	Dilution	QC Data (ppb)	Comments
CCV11	Sm	1X	4.14	%R= 104 ✓
CCB11			-0.02	✓
WH33 MB1			-0.03	✓
" MBSpk			2.24	%R=112 ✓
" REF1		5X	7.59	9.08 mg/Kg ✓
" A		1X	0.35	
" ADup			0.30	✓
" ASpk			1.54	%R= 119 ✓
" B				
" C				
" D				
" E				
CCV12			4.16	%R=104 ✓
CCB12			-0.02	✓
WH33 F				
" G				
WH43 MB1			-0.02	✓
" MB1Spk			2.33	%R=117 ✓
" A				
" B				
" C				
" D			0.13	
" DDup			0.12	✓
" DSpk			1.41	%R= 128 High X
CCV13			4.15	%R= 104 ✓
CCB13			-0.01	✓
WH43 E				
" F				
" G				
CCV14			4.18	%R= 105 ✓

Chemical/Reagent ID:
10% $SnCl_2$: MP2451

14% $NH_2OH/NaCl$: MP2436

Standard ID:
Standard: 3021-9

ICV/CCV: 59-6

Mercury Analysis Log

Analyst: CA
Instrument: CETAC

Date: 03-15-13
Page: 8 of 9

ARI Sample ID		Prep Code	Dilution	QC Data (ppb)	Comments	
CCB14		5mm	1x	~0.02		√
WH44	A			0.27		
"	Adup			0.28		√
"	Aspk			1.53	%R=126 High	X
WH18	A			0.23		
"	Adup			0.35	Difference 70.1	X
"	Aspk			1.75	%R=152 High	X
WG58	A			0.29		
"	Adup			0.38		√
"	Aspk			1.54	%R=125	√
WG85	A			0.44		
CCV15				4.20	%R=105	√
CCB15				-0.02		√
WG85	Adup			0.34		√
"	Aspk			1.69	%R=125	√
WH01	A			0.37		
"	Adup			0.31		√
"	Aspk			1.69	%R=132 High	X
WG60	A			4.99		
"	Adup			3.93	RPD =23.8 High	X
"	Aspk			6.17	%R=118	√
WH43	D			0.12		
"	Ddup			0.12		√
CCV16				4.16	%R=104	√
CCB16				-0.02		√
WH43	Dspk			1.40	%R=128 High	X
CCV17				4.17	%R=104	√
CCB17				-0.02	End CLP	√
WH05	MB			-0.02		√
"	MBspk			2.10	%R=105	√

CA 3-18-13

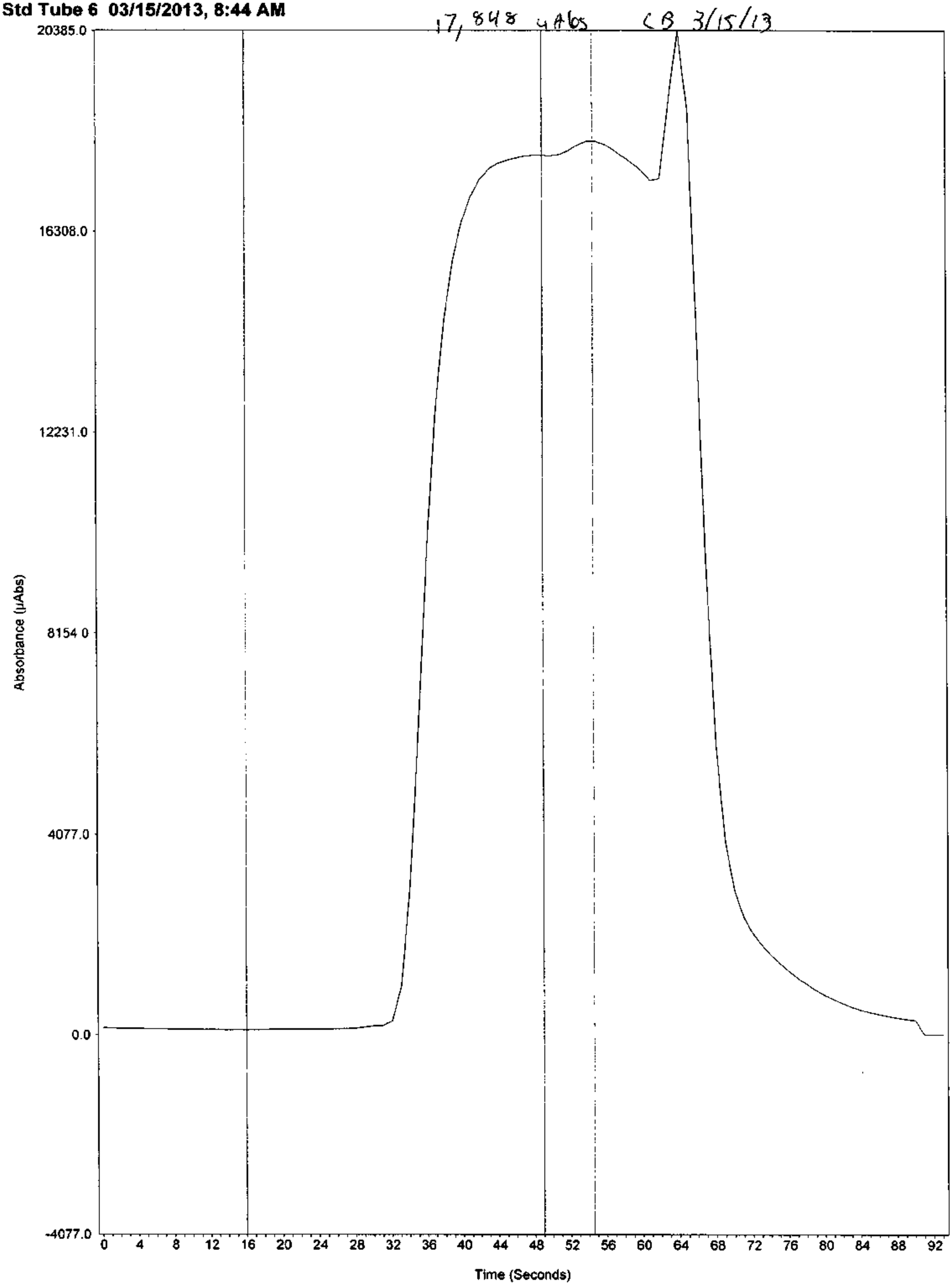
Chemical/Reagent ID:
10% $SnCl_2$: mp2451

14% $NH_2OH/NaCl$: mp2436

Standard ID:
Standard: 3021-9

ICV/CCV: 59-6

Std Tube 6 03/15/2013, 8:44 AM



WHHU : 00063

Analyst
Date Started Friday, March 15, 2013, 10:21:20
Worksheet ARI 10ppb CALIB
Comment

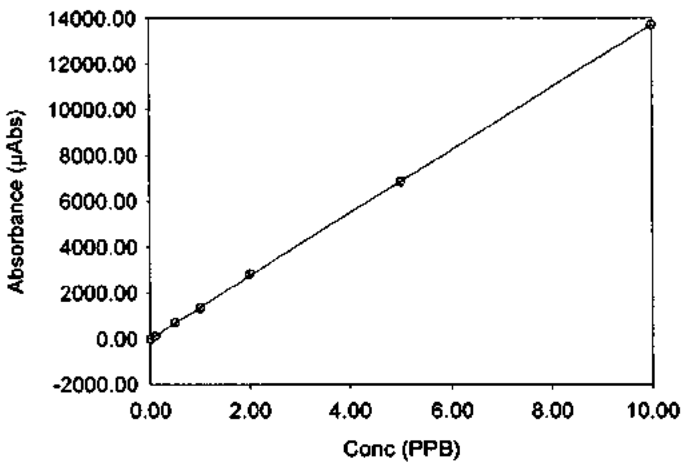
Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	15-Mar-2013, 10:21	4.23	0.09	7590.00	1.00	

W 3-18-13

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	15-Mar-2013, 10:23	-0.00	14.40	-8.81	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
Calibration Zero	15-Mar-2013, 10:25	0.00	63.20	-4.61	1.00	
Standard #1	15-Mar-2013, 10:26	0.10	2.79	121.00	1.00	
Standard #2	15-Mar-2013, 10:28	0.50	0.16	707.00	1.00	
Standard #3	15-Mar-2013, 10:30	1.00	0.18	1340.00	1.00	
Standard #4	15-Mar-2013, 10:31	2.00	0.35	2840.00	1.00	
Standard #5	15-Mar-2013, 10:33	5.00	0.21	6850.00	1.00	
Standard #6	15-Mar-2013, 10:35	10.00	0.85	13700.00	1.00	

Calibration Data



Int.	0.000
Slope	1374.169
Correlation	0 99996

SMM

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
ICV	15-Mar-2013, 10:39	8.73	0.08	12000.00	1.00	
ICB	15-Mar-2013, 10:40	-0.04	10.20	-52.60	1.00	Begin CLP

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	15-Mar-2013, 10:42	4.14	0.63	5690.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	15-Mar-2013, 10:44	-0.02	3.96	-30.50	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
CRA	15-Mar-2013, 10:45	0.09	1.50	127.00	1.00	
WH44 MB1 SMM	15-Mar-2013, 10:47	-0.00	65.50	-5.73	1.00	
WH44 MB1SPK SMM	15-Mar-2013, 10:48	2.38	0.34	3280.00	1.00	
WH44 A SMM	15-Mar-2013, 10:50	0.28	0.76	385.00	1.00	
WH44 ADUP SMM	15-Mar-2013, 10:52	0.30	0.19	408.00	1.00	
WH44 ASPK SMM	15-Mar-2013, 10:53	1.55	0.16	2120.00	1.00	%R High
WH44 B SMM	15-Mar-2013, 10:55	1.09	0.19	1500.00	1.00	
WH44 C SMM	15-Mar-2013, 10:56	0.64	0.21	878.00	1.00	
WH44 D SMM	15-Mar-2013, 10:58	0.46	0.11	639.00	1.00	
WH44 E SMM	15-Mar-2013, 11:00	0.96	1.02	1320.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	15-Mar-2013, 11:01	4.14	0.07	5690.00	1.00	

Analyst
Date Started Friday, March 15, 2013, 11:03:34
Worksheet ARI 10ppb CALIB
Comment

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	15-Mar-2013, 11:03	-0.01	8.30	-17.80	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
WH44 F SMM	15-Mar-2013, 11:05	0.45	0.76	622.00	1.00	
WH44 G SMM	15-Mar-2013, 11:06	1.19	0.76	1630.00	1.00	
WH44 H SMM	15-Mar-2013, 11:08	0.42	0.19	580.00	1.00	
WH44 I SMM	15-Mar-2013, 11:09	0.46	0.20	626.00	1.00	
WH44 J SMM	15-Mar-2013, 11:11	0.55	0.10	761.00	1.00	
WH44 K SMM	15-Mar-2013, 11:13	0.52	0.39	714.00	1.00	
WH44 L SMM	15-Mar-2013, 11:14	0.56	0.71	767.00	1.00	
WG79 MB1 SMM	15-Mar-2013, 11:16	-0.01	18.00	-16.60	1.00	
WG79 MB1SPK SMM	15-Mar-2013, 11:18	2.26	0.13	3110.00	1.00	
WG79 C SMM	15-Mar-2013, 11:19	0.17	0.73	229.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	15-Mar-2013, 11:21	4.10	0.11	5640.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	15-Mar-2013, 11:22	-0.03	3.51	-43.60	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
WG79 CDUP SMM	15-Mar-2013, 11:24	0.15	1.41	210.00	1.00	
WG79 CSPK SMM	15-Mar-2013, 11:26	1.40	0.34	1930.00	1.00	
WG79 D SMM	15-Mar-2013, 11:27	0.15	0.99	207.00	1.00	
WG79 I SMM	15-Mar-2013, 11:29	0.31	0.39	425.00	1.00	
WG79 J SMM	15-Mar-2013, 11:31	0.24	0.26	328.00	1.00	
WG79 K SMM	15-Mar-2013, 11:32	0.28	0.49	383.00	1.00	
WG79 L SMM	15-Mar-2013, 11:34	0.22	0.63	300.00	1.00	
WG79 M SMM	15-Mar-2013, 11:35	0.23	0.58	310.00	1.00	
WG79 N SMM	15-Mar-2013, 11:37	0.34	0.14	471.00	1.00	
WG79 O SMM	15-Mar-2013, 11:39	0.18	0.79	243.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	15-Mar-2013, 11:40	4.23	0.75	5820.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	15-Mar-2013, 11:42	-0.01	20.40	-8.03	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
WH03 MB1 SMM	15-Mar-2013, 11:44	-0.00	36.60	-4.69	1.00	
WH03 MB1SPK SMM	15-Mar-2013, 11:45	2.12	0.04	2920.00	1.00	
WH03 A SMM	15-Mar-2013, 11:47	0.18	1.30	241.00	1.00	
WH03 ADUP SMM	15-Mar-2013, 11:49	0.18	1.56	251.00	1.00	
WH03 ASPK SMM	15-Mar-2013, 11:50	1.36	0.35	1870.00	1.00	
WH03 B SMM	15-Mar-2013, 11:52	0.21	0.82	289.00	1.00	
WH03 C SMM	15-Mar-2013, 11:53	0.36	0.46	491.00	1.00	
WH03 M SMM	15-Mar-2013, 11:55	0.22	0.76	307.00	1.00	
WH18 MB1 SMM	15-Mar-2013, 11:57	-0.01	6.90	-15.00	1.00	
WH18 MB1SPK SMM	15-Mar-2013, 11:58	2.20	0.32	3020.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	15-Mar-2013, 12:00	4.13	0.23	5670.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	15-Mar-2013, 12:02	-0.01	39.90	-9.07	1.00	

Analyst
Date Started Friday, March 15, 2013, 12:03:40
Worksheet ARI 10ppb CALIB
Comment

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
WH18 REF1 SMM	15-Mar-2013, 12:03	7.16	0.06	9840.00	5.00	
WH18 A SMM	15-Mar-2013, 12:05	0.24	0.88	324.00	1.00	
WH18 ADUP SMM	15-Mar-2013, 12:06	0.36	0.35	494.00	1.00	Difference ≥0.1
WH18 ASPK SMM	15-Mar-2013, 12:08	1.74	0.23	2390.00	1.00	o/o A = High
WH18 B SMM	15-Mar-2013, 12:10	0.02	9.62	29.30	1.00	
WH18 C SMM	15-Mar-2013, 12:11	0.37	0.25	505.00	1.00	
WH18 D SMM	15-Mar-2013, 12:13	0.36	0.22	495.00	1.00	
WH18 E SMM	15-Mar-2013, 12:15	0.29	0.34	396.00	1.00	
WG88 MB1 SMM	15-Mar-2013, 12:16	-0.00	76.50	-5.28	1.00	
WG88 MB1SPK SMM	15-Mar-2013, 12:18	2.21	0.15	3040.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	15-Mar-2013, 12:19	4.14	0.15	5680.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	15-Mar-2013, 12:21	-0.00	46.90	-2.27	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
WG88 A SMM	15-Mar-2013, 12:23	0.22	0.57	298.00	1.00	
WG88 ADUP SMM	15-Mar-2013, 12:24	0.23	1.15	313.00	1.00	
WG88 ASPK SMM	15-Mar-2013, 12:26	1.42	0.07	1950.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	15-Mar-2013, 12:28	4.15	0.07	5700.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	15-Mar-2013, 12:29	-0.01	15.10	-13.10	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
WG58 MB1 SMM	15-Mar-2013, 12:32	-0.00	21.50	-3.84	1.00	
WG58 MB1SPK SMM	15-Mar-2013, 12:33	2.18	0.23	3000.00	1.00	
WG58 REF1 SMM	15-Mar-2013, 12:35	7.51	0.20	10300.00	5.00	
WG58 A SMM	15-Mar-2013, 12:37	0.29	0.95	397.00	1.00	
WG58 ADUP SMM	15-Mar-2013, 12:38	0.38	0.38	521.00	1.00	
WG58 ASPK SMM	15-Mar-2013, 12:40	1.55	0.37	2140.00	1.00	o/o A = High
WG58 B SMM	15-Mar-2013, 12:41	0.29	1.05	397.00	1.00	
WG58 C SMM	15-Mar-2013, 12:43	0.20	0.41	269.00	1.00	
WG58 D SMM	15-Mar-2013, 12:45	0.28	0.31	383.00	1.00	
WG58 E SMM	15-Mar-2013, 12:46	0.27	0.70	369.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	15-Mar-2013, 12:48	4.21	0.09	5790.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	15-Mar-2013, 12:50	-0.03	12.30	-41.90	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
WG85 MB1 SMM	15-Mar-2013, 12:51	-0.00	7.59	-6.70	1.00	
WG85 MB1SPK SMM	15-Mar-2013, 12:53	2.08	0.28	2860.00	1.00	
WG85 REF1 SMM	15-Mar-2013, 12:55	6.93	0.12	9530.00	5.00	
WG85 A SMM	15-Mar-2013, 12:56	0.45	0.41	615.00	1.00	Difference > 0.1
WG85 ADUP SMM	15-Mar-2013, 12:58	0.34	0.41	462.00	1.00	
WG85 ASPK SMM	15-Mar-2013, 12:59	1.68	0.10	2310.00	1.00	
WG85 B SMM	15-Mar-2013, 13:01	0.29	0.18	404.00	1.00	
WG85 C SMM	15-Mar-2013, 13:03	0.37	0.20	503.00	1.00	
WG85 D SMM	15-Mar-2013, 13:04	0.42	0.61	583.00	1.00	
WG85 E SMM	15-Mar-2013, 13:06	0.34	1.84	463.00	1.00	

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Date Started Friday, March 15, 2013, 13:07:53
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Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	15-Mar-2013, 13:07	4.21	0.16	5780.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	15-Mar-2013, 13:09	-0.01	5.80	-16.60	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
WG85 F SMM	15-Mar-2013, 13:11	0.19	0.70	265.00	1.00	
WH01 MB1 SMM	15-Mar-2013, 13:12	-0.02	12.90	-29.60	1.00	
WH01 MB1SPK SMM	15-Mar-2013, 13:14	2.06	0.32	2830.00	1.00	
WH01 REF1 SMM	15-Mar-2013, 13:16	6.62	0.41	9090.00	5.00	
WH01 A SMM	15-Mar-2013, 13:17	0.36	0.42	491.00	1.00	
WH01 ADUP SMM	15-Mar-2013, 13:19	0.30	0.32	418.00	1.00	
WH01 ASPK SMM	15-Mar-2013, 13:20	1.70	0.47	2340.00	1.00	%R = High
WH01 B SMM	15-Mar-2013, 13:22	0.28	1.56	391.00	1.00	
WH01 C SMM	15-Mar-2013, 13:24	0.46	0.27	633.00	1.00	
WH01 D SMM	15-Mar-2013, 13:25	0.35	0.73	483.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	15-Mar-2013, 13:27	4.19	0.23	5750.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	15-Mar-2013, 13:29	-0.01	7.66	-17.50	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
WH01 E SMM	15-Mar-2013, 13:30	0.43	1.14	585.00	1.00	
WH01 F SMM	15-Mar-2013, 13:32	0.43	0.13	585.00	1.00	
WG60 MB1 SMM	15-Mar-2013, 13:33	-0.01	13.80	-14.10	1.00	
WG60 MB1SPK SMM	15-Mar-2013, 13:35	2.19	0.04	3000.00	1.00	
WG60 A SMM	15-Mar-2013, 13:37	4.92	0.23	6760.00	1.00	
WG60 ADUP SMM	15-Mar-2013, 13:38	3.91	0.14	5370.00	1.00	RPD High
WG60 ASPK SMM	15-Mar-2013, 13:40	6.12	0.11	8420.00	1.00	
WG60 B SMM	15-Mar-2013, 13:42	1.76	0.49	2420.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	15-Mar-2013, 13:43	4.14	0.18	5680.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	15-Mar-2013, 13:45	-0.02	5.82	-26.50	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
WH33 MB1 SMM	15-Mar-2013, 13:47	-0.03	6.74	-39.50	1.00	
WH33 MB1SPK SMM	15-Mar-2013, 13:49	2.24	0.34	3080.00	1.00	
WH33 REF1 SMM	15-Mar-2013, 13:51	7.59	0.10	10400.00	5.00	
WH33 A SMM	15-Mar-2013, 13:52	0.35	0.60	479.00	1.00	
WH33 ADUP SMM	15-Mar-2013, 13:54	0.30	0.52	412.00	1.00	
WH33 ASPK SMM	15-Mar-2013, 13:55	1.54	0.11	2120.00	1.00	
WH33 B SMM	15-Mar-2013, 13:57	0.27	0.91	367.00	1.00	
WH33 C SMM	15-Mar-2013, 13:59	0.26	0.81	356.00	1.00	
WH33 D SMM	15-Mar-2013, 14:00	0.48	0.16	666.00	1.00	
WH33 E SMM	15-Mar-2013, 14:02	0.29	0.96	394.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	15-Mar-2013, 14:03	4.16	0.13	5720.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	15-Mar-2013, 14:05	-0.02	3.05	-30.90	1.00	

Analyst
Date Started Friday, March 15, 2013, 14:07:13
Worksheet ARI 10ppb CALIB
Comment

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
WH33 F SMM	15-Mar-2013, 14:07	0.19	0.92	256.00	1.00	
WH33 G SMM	15-Mar-2013, 14:08	0.31	0.51	421.00	1.00	
WH43 MB1 SMM	15-Mar-2013, 14:10	-0.02	11.60	-28.80	1.00	
WH43 MB1SPK SMM	15-Mar-2013, 14:12	2.33	0.57	3200.00	1.00	
WH43 A SMM	15-Mar-2013, 14:13	0.31	0.65	430.00	1.00	
WH43 B SMM	15-Mar-2013, 14:15	0.29	0.31	405.00	1.00	
WH43 C SMM	15-Mar-2013, 14:16	0.15	0.69	204.00	1.00	
WH43 D SMM	15-Mar-2013, 14:18	0.13	0.68	184.00	1.00	
WH43 DDUP SMM	15-Mar-2013, 14:20	0.12	1.33	164.00	1.00	
WH43 DSPK SMM	15-Mar-2013, 14:21	1.41	0.19	1940.00	1.00	%R = High

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	15-Mar-2013, 14:23	4.15	0.22	5710.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	15-Mar-2013, 14:24	-0.01	11.60	-20.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
WH43 E SMM	15-Mar-2013, 14:26	0.25	0.86	341.00	1.00	
WH43 F SMM	15-Mar-2013, 14:28	0.29	0.68	405.00	1.00	
WH43 G SMM	15-Mar-2013, 14:29	0.17	1.00	238.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	15-Mar-2013, 14:31	4.18	0.27	5740.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	15-Mar-2013, 14:33	-0.02	11.00	-22.10	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
WH44 A SMM	15-Mar-2013, 14:35	0.27	0.55	367.00	1.00	
WH44 ADUP SMM	15-Mar-2013, 14:36	0.28	0.68	380.00	1.00	
WH44 ASPK SMM	15-Mar-2013, 14:38	1.53	0.10	2100.00	1.00	%R = High
WH18 A SMM	15-Mar-2013, 14:39	0.23	1.31	323.00	1.00	
WH18 ADUP SMM	15-Mar-2013, 14:41	0.35	0.24	486.00	1.00	difference [illegible]
WH18 ASPK SMM	15-Mar-2013, 14:43	1.75	0.71	2400.00	1.00	%R = High
WG58 A SMM	15-Mar-2013, 14:44	0.29	0.88	393.00	1.00	
WG58 ADUP SMM	15-Mar-2013, 14:46	0.38	0.49	519.00	1.00	
WG58 ASPK SMM	15-Mar-2013, 14:48	1.54	1.13	2110.00	1.00	
WG85 A SMM	15-Mar-2013, 14:49	0.44	1.17	605.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	15-Mar-2013, 14:51	4.20	0.14	5770.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	15-Mar-2013, 14:52	-0.02	3.42	-28.70	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
WG85 ADUP SMM	15-Mar-2013, 14:54	0.34	1.25	462.00	1.00	
WG85 ASPK SMM	15-Mar-2013, 14:56	1.67	0.77	2300.00	1.00	
WH01 A SMM	15-Mar-2013, 14:57	0.37	0.29	507.00	1.00	
WH01 ADUP SMM	15-Mar-2013, 14:59	0.31	1.05	425.00	1.00	
WH01 ASPK SMM	15-Mar-2013, 15:01	1.69	0.22	2330.00	1.00	%R = High
WG60 A SMM	15-Mar-2013, 15:02	4.99	0.45	6850.00	1.00	
WG60 ADUP SMM	15-Mar-2013, 15:04	3.93	0.49	5400.00	1.00	RPD High
WG60 ASPK SMM	15-Mar-2013, 15:05	6.17	0.96	8480.00	1.00	
WH43 D SMM	15-Mar-2013, 15:07	0.12	2.38	163.00	1.00	
WH43 DDUP SMM	15-Mar-2013, 15:09	0.12	1.46	169.00	1.00	

3-15-13

Analyst	
Date Created:	Thursday, July 13, 2000
Worksheet	ARI 10ppb CALIB
Comment	
Sip Duration (Sec.):	30
Rinse Duration (Sec.):	60
Read Delay:	49
Integration Time/Replicate:	1.40
# of Replicates:	4
# of Repeats:	1
Baseline Correction Enabled:	True
Baseline Point 1 Start Time:	10
Baseline Point 1 End Time:	16
2-Point Baseline Corr. Enabled:	False
Baseline Point 2 Start Time:	
Baseline Point 2 End Time:	
Gas Flow (ml/min):	180
Calibration Algorithm:	Linear, Zero Intercept
Recalibration Frequency:	0
Reslope Frequency:	0
Reslope Standard:	5
Calibration Standard #1 Conc.:	0.10 PPB
Calibration Standard #2 Conc.:	0.50 PPB
Calibration Standard #3 Conc.:	1.00 PPB
Calibration Standard #4 Conc.:	2.00 PPB
Calibration Standard #5 Conc.:	5.00 PPB
Calibration Standard #6 Conc.:	10.00 PPB
QC Enabled:	True
QC-RSD Enabled:	True
Limit Condition & Error Action:	If %RSD > 5.0%, if µAbs. > 1500, Flag and Continue
QC-Std Enabled:	True
Limit Condition & Error Action:	If outside 80% .. 120%,Stop
QC-Blank Enabled:	True
Limit Condition & Error Action:	If outside -100 .. 100,Stop

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Mercury Standard Prep Log

Prep Code: SMM **Instrument:** LETAC

Analyst: CB **Date:** 03-11-13

Bath Temp: 95°C **Start Time:** 1405 **End Time:** 1435

Standard ID	Stock ID CB 3/11/13	Volume Added (mL)	Final Volume (mL)	Standard Conc. (µg/L)	Number Made
STD0	~~309~~ —	0.00	50.0	0.0	3
STD1	3021-9	0.01		0.1	2
STD2		0.05		0.5	2
STD3		0.10		1.0	2
STD4		0.20		2.0	2
STD5		0.50		5.0	2
STD6		1.00		10.0	2
CRA		0.01		0.1	1
ICB/CCB	—	0.00		0.0	3
ICV/LCS	59-6	0.08		8.0	2
CCV		0.04	50.0	4.0	3

Chemical/Reagent ID:

HNO_3: 38022 **H_2SO_4:** 37622 **HCl:**

5% $K_2S_2O_8$: MP2439 **5% $KMnO_4$:** MP2445

Prep Code: **Instrument:**

Analyst: **Date:**

Bath Temp: **Start Time:** **End Time:**

Standard ID	Stock ID	Volume Added (mL)	Final Volume (mL)	Standard Conc. (µg/L)	Number Made
STD0		0.00			
STD1					
STD2		0.05			
STD3		0.10			
STD4		0.20			
STD5		0.50			
STD6		1.00			
CRA					
ICB/CCB		0.00			
ICV/LCS					
CCV					

Chemical/Reagent ID:

HNO_3: **H_2SO_4:** **HCl:**

5% $K_2S_2O_8$: **5% $KMnO_4$:**

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Mercury Digestion Log

Prep Code: SMM
Matrix: Soil
Analyst: CB
Date: 03-14-13
Bath Temp: 90°C
Start Time: 1440
End Time: 1510

ARI Sample ID	Sample Bottle #	pH<2	Initial Weight (g) ~~Volume (mL)~~	Final Volume (mL)	# $KMnO_4$ Aliquots	CLP	Comments
WH44 A	1	-	0.228	50.0	3/18 1	Y	
" Adup	1	-	0.225		1		
" Asok	1	-	0.231		1		
" B	1	-	0.264		1		
" C	1	-	0.269		1		
" D	1	-	0.210		1		
" E	1	-	0.253		1		
" F	1	-	0.260		1		
" G	1	-	0.261		1		
" H	1	-	0.214		1		
" I	1	-	0.216		1		
" J	1	-	0.237		1		
" K	1	-	0.229		1		
" L	1	-	0.233		1		
" mBl	-	-	-		1		
" mBlspk	-	-	-	50.0	1	Y	
			CB				
			3-14-13				

Chemical/Reagent ID:

HNO_3: I8022 **H_2SO_4:** I7677 **HCl:** -

5% $K_2S_2O_8$: MP2439 **5% $KMnO_4$:** MP2445 **Digest Tube Lot:** MF06LKK01

APPLIED SPECIATION AND CONSULTING, LLC

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Tel: (425) 483-3300 Fax: (425) 483-9818
www.appliedspeciation.com

February 21, 2013

Elena Ramirez
Floyd Snider
601 Union St., Suite 600
Seattle, WA 98101
(206) 292-2078

Re: Pob-Harris

Ms. Ramirez,

Attached is the report associated with the eight (8) aqueous samples submitted for dissolved metals (Ag, As, Be, Cd, Cr, Cu, Ni, Pb, Sb, Se, Tl, and Zn), and total mercury analyses on February 1, 2013. The samples were received on February 1, 2013 in a sealed package at 3.4°C. Total metals analyses were performed via inductively coupled plasma collision reaction cell mass spectrometry (ICP-CRC-MS). Mercury quantitation was performed via cold vapor inductively coupled plasma mass spectrometry (CV-ICP-MS).

Any issues associated with the analyses are addressed in the following report. If you have any questions, please feel free to contact me at your convenience.

Sincerely,

Russell Gerads
Vice President
Applied Speciation and Consulting, LLC

Applied Speciation and Consulting, LLC

Report Prepared for:

Elena Ramirez
Floyd Snider
601 Union St., Suite 600
Seattle, WA 98101

February 21, 2013

1. Sample Reception

Eight (8) aqueous samples were submitted and received on February 1, 2013. The samples were received in acceptable condition in a sealed package at 3.4°C. As recorded on the attached chain of custody (COC) form, dissolved metals (Ag, As, Be, Cd, Cr, Cu, Ni, Pb, Sb, Se, Tl, and Zn) quantitation was requested on (4) samples, and the remaining four (4) samples required total mercury analysis.

Each sample was received in a laminar flow clean hood, void of trace metals contamination and ultra-violet radiation, and designated a discrete sample identifier. All samples were field filtered and preserved prior to reception at Applied Speciation and Consulting. The pH of each sample was measured to verify the samples were properly preserved.

The containers submitted for dissolved mercury quantitation were preserved with 10% (v/v) bromine monochloride (BrCl) solution. All samples were then stored in a secure polyethylene container, known to be free from trace metals contamination, until the analyses could be performed.

2. Sample Preparation

All sample preparation is performed in laminar flow clean hoods known to be free from trace metals contamination. All applied water for dilutions and sample preservatives are monitored for contamination to account for any biases associated with the sample results.

Dissolved Trace Element Quantification by ICP-CRC-MS (EPA Method 200.8) All samples were filtered and preserved prior to reception at Applied Speciation and Consulting. No additional sample preparation was applied in accordance with EPA Method 200.8. All samples were analyzed via inductively coupled plasma collision reaction cell mass spectrometry (ICP-CRC-MS).

Total Mercury Quantitation by CV-ICP-MS (EPA Method 200.8) All samples and preparation blanks for total mercury quantitation were preserved with 10% (v/v) BrCl. The resulting samples were analyzed for mercury via cold vapor inductively coupled plasma mass spectrometry (CV-ICP-MS).

3. Sample Analysis

All sample analysis is preceded by a minimum of a five-point calibration curve spanning the entire concentration range of interest. Calibration curves are performed at the beginning of each analytical day. All calibration curves, associated with each species of interest, are standardized by linear regression resulting in a response factor. All sample results are **instrument blank corrected** to account for any operational biases associated with the analytical platform.

Prior to sample analysis, all calibration curves are verified using second source standards which are identified as initial calibration verification standards (ICV).

Ongoing instrument performance for metals analysis is identified by the analysis of continuing calibration verification standards (CCV) and continuing calibration blanks (CCB) at a minimum interval of every ten analytical runs.

Dissolved Trace Element Quantification by ICP-CRC-MS (EPA Method 200.8) All samples for metals (Ag, As, Be, Cd, Cr, Cu, Ni, Pb, Sb, Se, Tl, and Zn) quantitation were analyzed by inductively coupled plasma collision reaction cell mass spectrometry (ICP-CRC-MS) on February 7-8, 2013. Aliquots of each sample are introduced into a radio frequency (RF) plasma where energy-transfer processes cause desolvation, atomization, and ionization. The ions are extracted from the plasma through a differentially-pumped vacuum interface and travel through a pressurized chamber (CRC) containing a specific reactive gas which preferentially reacts with interfering ions of the same target mass to charge ratios (m/z). A solid-state detector detects ions transmitted through the mass analyzer, on the basis of their mass-to-charge ratio (m/z), and the resulting current is processed by a data handling system.

Total Mercury Quantitation by CV-ICP-MS (EPA Method 200.8) The sample fractions for total mercury quantitation were analyzed by cold vapor inductively coupled plasma mass spectrometry (CV-ICP-MS) on February 15, 2013. Aliquots of each sample are reacted with a reductant in-line and transported to a gas-liquid separator. The volatile elemental mercury that is formed is then swept by a stream of argon gas into a radio frequency (RF) plasma where energy-transfer processes cause desolvation, atomization, and ionization. The ions are extracted from the plasma through a differentially-pumped vacuum interface and separated on the basis of their mass-to-charge ratio (m/z) by a mass spectrometer. A solid-state detector detects ions transmitted through the mass analyzer and the resulting current is processed by a data handling system.

4. Analytical Issues

The overall analyses went well and no significant analytical issues were encountered. All quality control parameters associated with these samples were within acceptance limits.

The eMDLs for all analyses have been calculated using the standard deviation of the associated method blanks that were prepared and analyzed concurrently with the submitted samples.

If you have any questions or concerns regarding this report, please feel free to contact me.

Sincerely,

Russell Gerads
Vice President
Applied Speciation and Consulting, LLC

Dissolved Metals Results for Floyd Snider
Project Name: Pob-Harris
Contact: Elena Ramirez

Date: February 21, 2013
Report Generated by: Russell Gerads
Applied Speciation and Consulting, LLC

Sample Results

Sample ID	Date Collected	Diss Ag	Diss As	Diss Be	Diss Cd	Diss Cr	Diss Cu	Diss Ni	Diss Pb	Diss Sb	Diss Se	Diss Tl	Diss Zn
FS-19-GWF-012913	1/29/2013	0.003	3.17	0.048	0.074	16.4	27.4	26.2	13.7	0.247	< 0.015 U	< 0.008 U	26.3
FS-21-GWF-013013	1/30/2013	< 0.002 U	1.09	< 0.013 U	0.121	0.199	1.85	39.6	0.041	0.410	0.023	0.042	3.79
FS-22-GWF-013013	1/30/2013	0.002	1.02	< 0.013 U	0.040	0.528	0.934	10.0	0.154	0.146	< 0.015 U	< 0.008 U	1.18
FS-79-GWF-013013	1/30/2013	< 0.002 U	1.15	< 0.013 U	0.104	0.211	2.19	39.2	0.070	0.391	0.067	0.045	4.37

All results reflect the applied dilution and are reported in µg/L
U = Not detected at the applied dilution

Dissolved Mercury Results for Floyd Snider
Project Name: Pob-Harris
Contact: Elena Ramirez

Date: February 21, 2013
Report Generated by: Russell Gerads
Applied Speciation and Consulting, LLC

Sample Results

Sample ID	Date Collected	Total Hg
FS-19-GW-012913	1/29/2013	0.875
FS-21-GW-013013	1/30/2013	0.0031
FS-22-GW-013013	1/30/2013	0.0013
FS-79-GW-013013	1/30/2013	0.0029

All results are reported in µg/L

Dissolved Metals Results for Floyd Snider
Project Name: Pob-Harris
Contact: Elena Ramirez

Date: February 21, 2013
Report Generated by: Russell Gerads
Applied Speciation and Consulting, LLC

Quality Control Summary - Preparation Blank Summary

Analyte	Units	IB-1	IB-2	IB-3	IB-4	Mean	StdDev	eMDL 5x	RL 5x
Diss Ag	µg/L	0.001	0.000	-0.001	-0.001	0.000	0.001	0.002	0.020
Diss As	µg/L	-0.219	-0.222	-0.226	-0.235	-0.225	0.007	0.021	0.50
Diss Be	µg/L	0.008	0.005	0.014	0.004	0.008	0.004	0.013	0.20
Diss Cd	µg/L	0.002	0.002	0.019	0.000	0.006	0.009	0.027	0.050
Diss Cr	µg/L	-0.049	-0.072	-0.056	-0.074	-0.060	0.012	0.036	0.50
Diss Cu	µg/L	0.002	-0.007	0.012	-0.006	0.000	0.009	0.026	0.50
Diss Ni	µg/L	0.08	-0.01	0.00	-0.02	0.01	0.04	0.13	0.20
Diss Pb	µg/L	-0.003	0.002	-0.005	-0.006	-0.003	0.003	0.010	0.20
Diss Sb	µg/L	-0.001	0.000	0.001	0.000	0.000	0.001	0.003	0.020
Diss Se	µg/L	-0.020	-0.030	-0.029	-0.030	-0.027	0.005	0.015	0.20
Diss Tl	µg/L	-0.009	-0.011	-0.014	-0.015	-0.012	0.003	0.008	0.020
Diss Zn	µg/L	0.08	0.04	0.13	0.04	0.07	0.04	0.13	0.50

eMDL = Estimated Method Detection Limit; please see narrative regarding eMDL calculations

RL = Reporting Limit

Dissolved Metals Results for Floyd Snider

Project Name: Pob-Harris

Contact: Elena Ramirez

Date: February 21, 2013

Report Generated by: Russell Gerads

Applied Speciation and Consulting, LLC

<u>Quality Control Summary - Certified Reference Materials</u>

Analyte	Units	CRM	True Value	Result	Recovery
Diss Ag	µg/L	TI91	1.40	1.40	99.7
Diss As	µg/L	TI91	4.08	3.77	92.5
Diss Be	µg/L	TI91	1.83	1.81	99.1
Diss Cd	µg/L	TI91	0.240	0.261	108.9
Diss Cr	µg/L	TI91	3.81	3.42	89.9
Diss Cu	µg/L	TI91	2.07	1.90	91.8
Diss Ni	µg/L	TI91	1.79	1.57	87.6
Diss Pb	µg/L	TI91	1.34	1.34	100.0
Diss Sb	µg/L	TI91	1.86	1.80	96.8
Diss Se	µg/L	TI91	0.916	0.774	84.5
Diss Tl	µg/L	TI91	2.80	2.61	93.2
Diss Zn	µg/L	TI91	48.5	46.4	95.7

Dissolved Metals Results for Floyd Snider
Project Name: Pob-Harris
Contact: Elena Ramirez

Date: February 21, 2013
Report Generated by: Russell Gerads
Applied Speciation and Consulting, LLC

Quality Control Summary - Matrix Duplicates

Analyte	Units	Sample ID	Rep 1	Rep 2	Mean	RPD
Diss Ag	µg/L	FS-22-GWF-013013	0.002	0.002	0.002	13.0
Diss As	µg/L	FS-22-GWF-013013	1.020	0.986	1.003	3.4
Diss Be	µg/L	FS-22-GWF-013013	< 0.013 U	< 0.013 U	NC	NC
Diss Cd	µg/L	FS-22-GWF-013013	0.040	0.054	0.047	29.6 *
Diss Cr	µg/L	FS-22-GWF-013013	0.528	0.516	0.522	2.3
Diss Cu	µg/L	FS-22-GWF-013013	0.934	0.928	0.931	0.6
Diss Ni	µg/L	FS-22-GWF-013013	10.00	9.83	9.91	1.8
Diss Pb	µg/L	FS-22-GWF-013013	0.154	0.148	0.151	3.7
Diss Sb	µg/L	FS-22-GWF-013013	0.146	0.146	0.146	0.1
Diss Se	µg/L	FS-22-GWF-013013	< 0.015 U	< 0.015 U	NC	NC
Diss Tl	µg/L	FS-22-GWF-013013	< 0.008 U	< 0.008 U	NC	NC
Diss Zn	µg/L	FS-22-GWF-013013	1.18	1.12	1.15	4.5

ND = Not detected at the applied dilution

NC = Not calculated due to one or more concentrations below the eMDL

* Associated results were less than the RL

Dissolved Metals Results for Floyd Snider
Project Name: Pob-Harris
Contact: Elena Ramirez

Date: February 21, 2013
Report Generated by: Russell Gerads
Applied Speciation and Consulting, LLC

Quality Control Summary - Matrix Spike/ Matrix Spike Duplicate

Analyte	Units	Sample ID	Spike Conc	MS Result	Recovery	Spike Conc	MSD Result	Recovery	RPD
Diss Ag	µg/L	FS-79-GWF-013013	5.00	4.58	91.6	5.00	4.54	90.8	0.9
Diss As	µg/L	FS-79-GWF-013013	50.00	53.10	103.9	50.00	53.07	103.8	0.0
Diss Be	µg/L	FS-79-GWF-013013	50.00	50.83	101.7	50.00	50.15	100.3	1.3
Diss Cd	µg/L	FS-79-GWF-013013	5.000	4.743	92.8	5.000	4.631	90.5	2.4
Diss Cr	µg/L	FS-79-GWF-013013	50.00	45.88	91.3	50.0	45.97	91.5	0.2
Diss Cu	µg/L	FS-79-GWF-013013	50.00	48.52	92.7	50.00	48.56	92.7	0.1
Diss Ni	µg/L	FS-79-GWF-013013	50.00	85.35	92.3	50.00	86.67	94.9	1.5
Diss Pb	µg/L	FS-79-GWF-013013	5.000	4.693	92.5	5.000	4.642	91.4	1.1
Diss Sb	µg/L	FS-79-GWF-013013	5.000	5.284	97.9	5.000	5.261	97.4	0.4
Diss Se	µg/L	FS-79-GWF-013013	50.00	52.47	104.8	50.00	51.67	103.2	1.5
Diss Tl	µg/L	FS-79-GWF-013013	5.000	4.639	91.9	5.000	4.616	91.4	0.5
Diss Zn	µg/L	FS-79-GWF-013013	50.00	50.55	92.4	50.00	50.84	92.9	0.6

Dissolved Mercury Results for Floyd Snider
Project Name: Pob-Harris
Contact: Elena Ramirez

Date: February 21, 2013
Report Generated by: Russell Gerads
Applied Speciation and Consulting, LLC

Quality Control Summary - Preparation Blank Summary

Analyte	Units	PBW1	PBW2	PBW3	PBW4	Mean	StdDev	eMDL 2x	RL 2x
Total Hg	µg/L	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	0.0002	0.0022

eMDL = Estimated Method Detection Limit; please see narrative regarding eMDL calculations
RL = Reporting Limit

Quality Control Summary - Certified Reference Materials

Analyte	Units	CRM	True Value	Result	Recovery
Total Hg	µg/L	NIST 1641d	1568	1599	102.0

Dissolved Mercury Results for Floyd Snider
Project Name: Pob-Harris
Contact: Elena Ramirez

Date: February 21, 2013
Report Generated by: Russell Gerads
Applied Speciation and Consulting, LLC

Quality Control Summary - Matrix Duplicates

Analyte	Units	Sample ID	Rep 1	Rep 2	Mean	RPD
Total Hg	µg/L	FS-79-GW-013013	0.0029	0.0030	0.0029	3.8

Quality Control Summary - Matrix Spike/ Matrix Spike Duplicate

Analyte	Units	Sample ID	Spike Conc	MS Result	Recovery	Spike Conc	MSD Result	Recovery	RPD
Total Hg	µg/L	FS-79-GW-013013	0.8800	0.9981	113.1	0.8800	1.0038	113.7	0.6

Applied Speciation

Chain of Custody Record & Laboratory Analysis Request

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

ARI Assigned Number:	Turn-around Requested: Standard	Page: 1	of 1
ARI Client Company: Floyd/Snider	Phone: 206-292-2078	Date: 1/29/13	Ice Present?
Client Contact: Stephen Bentsen		No. of Coolers:	Cooler Temps:
Client Project Name: Pob-Harris			
Client Project #: POB-Harris T-4030	Samplers: Erin M./Elena R.		

Sample ID	Date	Time	Matrix	No. Containers	Metals (no Hg) Diss.* (EPA 200.8)	Tot. Hg (EPA 245.1)							Notes/Comments
													* field filtered (FF) * See proj. spec. list. Contact Elena at Floyd/S
FS-19-GW-012913	1/29/13	1315	W	1		X							~~Hold samp~~ for poss. further anal.
FS-19-GWF-012913	1/29/13	1315	W	1	X								Field filtered/Hold for poss. fut. an
FS-21-GW-013013	1/30/13	1050	W	1		X							
FS-21-GWF-013013	1/30/13	1050	W	1	X								FF/Hold after anal. for possible future analysis
FS-22-GW-013013	1/30/13	1550	W	1		X							
FS-22-GWF-013013	1/30/13	1550	W	1	X								F/F/Hold for poss. future anal.
FS-79-GW-013013	1/30/13	1130	W	1		X							
FS-79-GWF-013013	1/30/13	1130	W	W	X								FF/Hold for poss. future analysis
				EMh									

Comments/Special Instructions	Relinquished by:	Received by:	Relinquished by:	Received by:
	(Signature) [signature]	(Signature) To Fleetfort	(Signature)	(Signature) [signature]
	Printed Name: Erin Murray	Printed Name: Courier	Printed Name:	Printed Name: Alex Dupler
	Company: Floyd/Snider	Company:	Company:	Company: ASC 3.4°C
	Date & Time: 2/1/2013 1110	Date & Time:	Date & Time:	Date & Time: 2/1/13 1600

APPLIED SPECIATION AND CONSULTING, LLC

18804 Northcreek Parkway Bothell, WA, 98011
Tel: (425) 483-3300 Fax: (425) 483-9818
www.appliedspeciation.com

March 5, 2013

Elena Ramirez
Floyd Snider
601 Union St., Suite 600
Seattle, WA 98101
(206) 292-2078

Re: Pob-Harris

Ms. Ramirez,

Attached is the report associated with the twenty two (22) aqueous samples submitted for dissolved metals (Ag, As, Be, Cd, Cr, Cu, Ni, Pb, Sb, Se, Tl, and Zn), and total mercury analyses on February 16, 2013. The samples were received on February 16, 2013 in a sealed package at -0.1°C. Total metals analyses were performed via inductively coupled plasma collision reaction cell mass spectrometry (ICP-CRC-MS). Mercury quantitation was performed via cold vapor inductively coupled plasma mass spectrometry (CV-ICP-MS).

Any issues associated with the analyses are addressed in the following report. If you have any questions, please feel free to contact me at your convenience.

Sincerely,

Russell Gerads
Vice President
Applied Speciation and Consulting, LLC

Applied Speciation and Consulting, LLC

Report Prepared for:

Elena Ramirez
Floyd Snider
601 Union St., Suite 600
Seattle, WA 98101

March 5, 2013

1. Sample Reception

Twenty two (22) aqueous samples were submitted and received on February 16, 2013. The samples were received in acceptable condition in a sealed package at -0.1°C. As recorded on the attached chain of custody (COC) form, dissolved metals (Ag, As, Be, Cd, Cr, Cu, Ni, Pb, Sb, Se, Tl, and Zn) quantitation was requested on eleven (11) samples, and the remaining eleven (11) samples required total mercury analysis. An aliquot from each of the samples requested for total mercury analysis was filtered and the filtrates were placed on hold for possible future dissolved mercury analysis.

For all samples requested for total mercury, the sample IDs listed on the containers did not match the corresponding sample IDs on the COC form. In each case the letter "F" in the "GW(F)" term of the sample ID was missing on the sample container label, although the remaining attributes of the sample IDs matched. The samples were logged in under the sample IDs listed on the COC form.

Each sample was received in a laminar flow clean hood, void of trace metals contamination and ultra-violet radiation, and designated a discrete sample identifier. Immediately upon reception an aliquot of each sample requested for dissolved metals was filtered, using 0.45μm syringe filters. The filtrates for dissolved metals were then preserved to $pH < 1$ for dissolved metals quantification.

An aliquot from each of the samples requested for total mercury analysis was filtered and the filtrates were placed on hold for possible future dissolved mercury analysis. The original containers submitted for mercury quantitation were preserved with 10% (v/v) bromine monochloride (BrCl) solution.

All samples were then stored in a secure polyethylene container, known to be free from trace metals contamination, until the analyses could be performed.

2. Sample Preparation

All sample preparation is performed in laminar flow clean hoods known to be free from trace metals contamination. All applied water for dilutions and sample preservatives are monitored for contamination to account for any biases associated with the sample results.

Dissolved Trace Element Quantification by ICP-CRC-MS (EPA Method 200.8) All samples were filtered and preserved prior upon sample reception at Applied Speciation and Consulting. No additional sample preparation was applied in accordance with EPA Method 200.8. All samples were analyzed via inductively coupled plasma collision reaction cell mass spectrometry (ICP-CRC-MS).

Total Mercury Quantitation by CV-ICP-MS (EPA Method 200.8) All samples and preparation blanks for total mercury quantitation were preserved with 1% (v/v) BrCl. The resulting samples were analyzed for mercury via cold vapor inductively coupled plasma mass spectrometry (CV-ICP-MS).

3. Sample Analysis

All sample analysis is preceded by a minimum of a five-point calibration curve spanning the entire concentration range of interest. Calibration curves are performed at the beginning of each analytical day. All calibration curves, associated with each species of interest, are standardized by linear regression resulting in a response factor. All sample results are **instrument blank corrected** to account for any operational biases associated with the analytical platform.

Prior to sample analysis, all calibration curves are verified using second source standards which are identified as initial calibration verification standards (ICV).

Ongoing instrument performance for metals analysis is identified by the analysis of continuing calibration verification standards (CCV) and continuing calibration blanks (CCB) at a minimum interval of every ten analytical runs.

Dissolved Trace Element Quantification by ICP-CRC-MS (EPA Method 200.8) All samples for metals (Ag, As, Be, Cd, Cr, Cu, Ni, Pb, Sb, Se, Tl, and Zn) quantitation were analyzed by inductively coupled plasma collision reaction cell mass spectrometry (ICP-CRC-MS) on February 7-8, 2013. Aliquots of each sample are introduced into a radio frequency (RF) plasma where energy-transfer processes cause desolvation, atomization, and ionization. The ions are extracted from the plasma through a differentially-pumped vacuum interface and travel through a pressurized chamber (CRC) containing a specific reactive gas which preferentially reacts with interfering ions of the same target mass to charge ratios (m/z). A solid-state detector detects ions transmitted through the mass analyzer, on the basis of their mass-to-charge ratio (m/z), and the resulting current is processed by a data handling system.

Total Mercury Quantitation by CV-ICP-MS (EPA Method 200.8) The sample fractions for total mercury quantitation were analyzed by cold vapor inductively coupled plasma mass spectrometry (CV-ICP-MS) on February 26, 2013. Aliquots of each sample are reacted with a reductant in-line and transported to a gas-liquid separator. The volatile elemental mercury that is formed is then swept by a stream of argon gas into a radio frequency (RF) plasma where energy-transfer processes cause desolvation, atomization, and ionization. The ions are extracted from the plasma through a differentially-pumped vacuum interface and separated on the basis of their mass-to-charge ratio (m/z) by a mass spectrometer. A solid-state detector detects ions transmitted through the mass analyzer and the resulting current is processed by a data handling system.

4. Analytical Issues

The overall analyses went well and no significant analytical issues were encountered. All quality control parameters associated with these samples were within acceptance limits with the following exception:

The dissolved copper result for the preparation blank identified as IB-1 was determined to be a statistical outlier upon application of the Grubbs test. No copper contamination was detected in any of the other blanks (*i.e.*, preparation blanks and continuing calibration blanks) associated with this sample batch. The dissolved copper result for IB-1 has therefore been excluded from all calculations since it is deemed to be unrepresentative of the preparation blanks and the submitted samples.

The eMDLs for all analyses have been calculated using the standard deviation of the associated method blanks that were prepared and analyzed concurrently with the submitted samples.

If you have any questions or concerns regarding this report, please feel free to contact me.

Sincerely,

Russell Gerads
Vice President
Applied Speciation and Consulting, LLC

Dissolved Metals Results for Floyd Snider
Project Name: Pob-Harris
Contact: Elena Ramirez

Date: March 5, 2013
Report Generated by: Russell Gerads
Applied Speciation and Consulting, LLC

Sample Results

Sample ID	Date Collected	Diss Ag	Diss As	Diss Be	Diss Cd	Diss Cr	Diss Cu	Diss Ni	Diss Pb	Diss Sb	Diss Se	Diss Tl	Diss Zn
MW-10-GW(F)-021413	2/14/2013	0.006	3.89	< 0.006 U	0.147	< 0.19 U	0.44	8.97	0.041	0.305	< 0.082 U	0.007	< 8.3 U
MW-06-GW(F)-021413	2/14/2013	< 0.003 U	4.23	< 0.006 U	0.022	< 0.19 U	1.60	1.14	< 0.018 U	0.290	< 0.082 U	0.001	< 8.3 U
MW-94-GW(F)-021413	2/14/2013	< 0.003 U	4.34	< 0.006 U	0.014	< 0.19 U	1.51	1.21	< 0.018 U	0.309	< 0.082 U	0.002	< 8.3 U
MW-04-GW(F)-021413	2/14/2013	0.003	1.81	< 0.006 U	0.012	< 0.19 U	2.07	1.92	0.029	0.257	0.396	0.004	< 8.3 U
MW-05-GW(F)-021413	2/14/2013	< 0.003 U	0.382	< 0.006 U	< 0.011U	0.45	0.84	1.62	< 0.018 U	0.069	0.175	< 0.001 U	< 8.3 U
MW-07-GW -021413	2/14/2013	< 0.003 U	0.834	< 0.006 U	0.065	< 0.19 U	1.47	7.09	0.032	0.176	< 0.082 U	0.004	10.8
MW-08-GW(F)-021413	2/14/2013	0.004	0.919	< 0.006 U	0.058	< 0.19 U	1.22	1.41	< 0.018 U	0.324	0.154	0.007	< 8.3 U
MW-06-GW(F)-021513	2/15/2013	< 0.003 U	3.50	< 0.006 U	0.016	< 0.19 U	1.55	1.20	< 0.018 U	0.295	< 0.082 U	0.001	< 8.3 U
MW-01-GW(F)-021513	2/15/2013	< 0.003 U	14.4	< 0.006 U	0.015	< 0.19 U	< 0.24 U	4.19	< 0.018 U	0.280	0.103	< 0.001 U	< 8.3 U
MW-02A-GW(F)-021513	2/15/2013	0.016	1.48	< 0.006 U	0.276	< 0.19 U	9.09	4.71	0.023	1.99	< 0.082 U	0.015	71.0
MW-09-GW(F)-021513	2/15/2013	< 0.003 U	4.58	< 0.006 U	< 0.011U	< 0.19 U	< 0.24 U	1.38	< 0.018 U	0.214	< 0.082 U	< 0.001 U	< 8.3 U

All results reflect the applied dilution and are reported in µg/L
U = Not detected at the applied dilution

Dissolved Mercury Results for Floyd Snider
Project Name: Pob-Harris
Contact: Elena Ramirez

Date: March 5, 2013
Report Generated by: Russell Gerads
Applied Speciation and Consulting, LLC

Sample Results

Sample ID	Date Collected	Total Hg
MW-10-GW(F)-021413	2/14/2013	0.0045
MW-06-GW(F)-021413	2/14/2013	< 0.0014 U
MW-94-GW(F)-021413	2/14/2013	< 0.0014 U
MW-04-GW(F)-021413	2/14/2013	0.0025
MW-05-GW(F)-021413	2/14/2013	0.0350
MW-07-GW -021413	2/14/2013	0.0021
MW-08-GW(F)-021413	2/14/2013	< 0.0014 U
MW-06-GW(F)-021513	2/15/2013	0.0017
MW-01-GW(F)-021513	2/15/2013	0.0053
MW-02A-GW(F)-021513	2/15/2013	0.0058
MW-09-GW(F)-021513	2/15/2013	0.0088

All results are reported in µg/L

U = Not detected at the applied dilution

Dissolved Metals Results for Floyd Snider
Project Name: Pob-Harris
Contact: Elena Ramirez

Date: March 5, 2013
Report Generated by: Russell Gerads
Applied Speciation and Consulting, LLC

Quality Control Summary - Preparation Blank Summary

Analyte	Units	IB-1	IB-2	IB-3	IB-4	Mean	StdDev	eMDL 5x	RL 5x
Diss Ag	µg/L	0.004	0.002	0.002	0.003	0.003	0.001	0.003	0.050
Diss As	µg/L	-0.105	-0.132	-0.133	-0.121	-0.123	0.013	0.040	0.20
Diss Be	µg/L	0.002	0.003	-0.001	-0.002	0.000	0.002	0.006	0.20
Diss Cd	µg/L	0.005	-0.001	0.000	0.007	0.003	0.004	0.011	0.020
Diss Cr	µg/L	-1.45	-1.37	-1.30	-1.33	-1.36	0.06	0.19	2.0
Diss Cu	µg/L	27.02 *	-0.09	-0.10	0.05	-0.05	0.08	0.24	0.50
Diss Ni	µg/L	0.073	0.055	0.067	0.054	0.062	0.009	0.028	0.50
Diss Pb	µg/L	0.016	0.004	0.009	0.002	0.007	0.006	0.018	0.020
Diss Sb	µg/L	0.001	-0.004	0.003	0.006	0.001	0.004	0.013	0.020
Diss Se	µg/L	-0.055	0.010	-0.027	-0.008	-0.020	0.027	0.082	0.50
Diss Tl	µg/L	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.050
Diss Zn	µg/L	5.7	0.2	0.1	3.6	2.4	2.8	8.3	20

eMDL = Estimated Method Detection Limit; please see narrative regarding eMDL calculations

RL = Reporting Limit

*Preparation blank is a statistical outlier according to the Grubbs Test

Dissolved Metals Results for Floyd Snider
Project Name: Pob-Harris
Contact: Elena Ramirez

Date: March 5, 2013
Report Generated by: Russell Gerads
Applied Speciation and Consulting, LLC

Quality Control Summary - Certified Reference Materials

Analyte	Units	CRM	True Value	Result	Recovery
Diss Ag	µg/L	TI91	1.40	1.53	109.4
Diss As	µg/L	TI91	4.08	4.72	115.6
Diss Be	µg/L	TI91	1.83	1.87	102.3
Diss Cd	µg/L	TI91	0.240	0.270	112.6
Diss Cr	µg/L	TI91	3.81	3.44	90.2
Diss Cu	µg/L	TI91	2.07	2.35	113.7
Diss Ni	µg/L	TI91	1.79	1.85	103.6
Diss Pb	µg/L	TI91	1.34	1.45	108.3
Diss Sb	µg/L	TI91	1.86	2.01	108.1
Diss Se	µg/L	TI91	0.916	0.874	95.4
Diss Tl	µg/L	TI91	2.80	2.79	99.5
Diss Zn	µg/L	TI91	48.5	52.4	108.1

Dissolved Metals Results for Floyd Snider
Project Name: Pob-Harris
Contact: Elena Ramirez

Date: March 5, 2013
Report Generated by: Russell Gerads
Applied Speciation and Consulting, LLC

Quality Control Summary - Matrix Duplicates

Analyte	Units	Sample ID	Rep 1	Rep 2	Mean	RPD
Diss Ag	µg/L	MW-94-GW(F)-021413	< 0.003 U	0.005	NC	NC
Diss As	µg/L	MW-94-GW(F)-021413	4.340	4.143	4.241	4.6
Diss Be	µg/L	MW-94-GW(F)-021413	< 0.006 U	< 0.006 U	NC	NC
Diss Cd	µg/L	MW-94-GW(F)-021413	0.014	0.024	0.019	53.1 *
Diss Cr	µg/L	MW-94-GW(F)-021413	< 0.19 U	< 0.19 U	NC	NC
Diss Cu	µg/L	MW-94-GW(F)-021413	1.51	1.51	1.51	0.1
Diss Ni	µg/L	MW-94-GW(F)-021413	1.206	1.219	1.212	1.1
Diss Pb	µg/L	MW-94-GW(F)-021413	< 0.018 U	< 0.018 U	NC	NC
Diss Sb	µg/L	MW-94-GW(F)-021413	0.309	0.301	0.305	2.7
Diss Se	µg/L	MW-94-GW(F)-021413	< 0.082 U	< 0.082 U	NC	NC
Diss Tl	µg/L	MW-94-GW(F)-021413	0.002	0.002	0.002	12.5
Diss Zn	µg/L	MW-94-GW(F)-021413	< 8.3 U	< 8.3 U	NC	NC

U = Not detected at the applied dilution
NC = Not calculated due to one or more concentrations below the eMDL
* Associated results were less than the RL

Dissolved Metals Results for Floyd Snider
Project Name: Pob-Harris
Contact: Elena Ramirez

Date: March 5, 2013
Report Generated by: Russell Gerads
Applied Speciation and Consulting, LLC

Quality Control Summary - Matrix Spike/ Matrix Spike Duplicate

Analyte	Units	Sample ID	Spike Conc	MS Result	Recovery	Spike Conc	MSD Result	Recovery	RPD
Diss Ag	µg/L	MW-94-GW(F)-021413	5.00	5.18	103.6	5.00	5.27	105.3	1.6
Diss As	µg/L	MW-94-GW(F)-021413	50.00	61.96	115.4	50.00	60.48	112.5	2.4
Diss Be	µg/L	MW-94-GW(F)-021413	50.00	49.54	99.1	50.00	49.91	99.8	0.7
Diss Cd	µg/L	MW-94-GW(F)-021413	5.000	4.800	95.6	5.000	4.828	96.2	0.6
Diss Cr	µg/L	MW-94-GW(F)-021413	50.00	56.56	113.1	50.0	55.95	111.9	1.1
Diss Cu	µg/L	MW-94-GW(F)-021413	50.00	53.32	103.6	50.00	53.99	105.0	1.3
Diss Ni	µg/L	MW-94-GW(F)-021413	50.00	55.05	107.7	50.00	54.75	107.1	0.6
Diss Pb	µg/L	MW-94-GW(F)-021413	5.000	5.039	100.8	5.000	5.090	101.8	1.0
Diss Sb	µg/L	MW-94-GW(F)-021413	5.000	5.523	104.4	5.000	5.676	107.4	2.7
Diss Se	µg/L	MW-94-GW(F)-021413	50.00	48.74	97.5	50.00	49.49	99.0	1.5
Diss Tl	µg/L	MW-94-GW(F)-021413	5.000	4.770	95.4	5.000	4.856	97.1	1.8
Diss Zn	µg/L	MW-94-GW(F)-021413	50.00	56.46	112.9	50.00	58.88	117.8	4.2

Dissolved Mercury Results for Floyd Snider
Project Name: Pob-Harris
Contact: Elena Ramirez

Date: March 5, 2013
Report Generated by: Russell Gerads
Applied Speciation and Consulting, LLC

Quality Control Summary - Preparation Blank Summary

Analyte	Units	PBW1	PBW2	PBW3	PBW4	Mean	StdDev	eMDL 5x	RL 5x
Total Hg	µg/L	0.0009	0.0008	0.0018	0.0011	0.0012	0.0005	0.0014	0.0050

eMDL = Estimated Method Detection Limit; please see narrative regarding eMDL calculations
RL = Reporting Limit

Quality Control Summary - Certified Reference Materials

Analyte	Units	CRM	True Value	Result	Recovery
Total Hg	µg/L	NIST 1641d	1568	1594	101.6

Dissolved Mercury Results for Floyd Snider
Project Name: Pob-Harris
Contact: Elena Ramirez

Date: March 5, 2013
Report Generated by: Russell Gerads
Applied Speciation and Consulting, LLC

Quality Control Summary - Matrix Duplicates

Analyte	Units	Sample ID	Rep 1	Rep 2	Mean	RPD
Total Hg	µg/L	MW-94-GW(F)-021413	< 0.0014 U	0.0014	NC	NC

U = Not detected at the applied dilution

NC = Not calculated due to one or more concentrations below the eMDL

Quality Control Summary - Matrix Spike/ Matrix Spike Duplicate

Analyte	Units	Sample ID	Spike Conc	MS Result	Recovery	Spike Conc	MSD Result	Recovery	RPD
Total Hg	µg/L	MW-94-GW(F)-021413	2.000	1.996	99.8	2.000	1.992	99.6	0.2

APPLIED SPECIATION AND CONSULTING, LLC

18804 Northcreek Parkway
Bothell, WA 98011

Phone (425) 483-3300
Fax (425) 483-9818

Company Name: Floyd | Snider Inc.	ASC Project Manager: Russ Gerads
Contact Person: Stephen Bentsen	By submitting of samples the client agrees to all terms and conditions set forth in the quotation provided by the ASC project manager. If you are not familiar with the term and conditions associated with your project, please contact your ASC representative as soon as possible (425) 483-3300.
Address: 601 Union Street, Suite 103	
Phone Number: (206) 292-2078	
Fax Number:	Requested Turn Around Time: Standard
Email Address: stephen.bentsen@floydsnider.com	Method of Sample Delivery: Delivery/Courier
Project Name: Harris Ave Shipyard	Courier Tracking Number:
Project Number: POB-Harris	Confirmation of Sample Reception: ☐ Yes ☐ No
PO Number: POB-Harris Task 4030	

Sample ID	Bottle ID	Date and Time	Matrix*	Volume	Preservative	Initials	Requested Analytes and Methods	Comments
MW-10-GW(F)-021413	N/A	2/14/13 1505	GW	2x40ml/125ml	None	RER	Diss Metals (site specific list) (200.8) / Tot Hg (245.1)	Hold Diss Hg
MW-06-GW(F)-021413	↓	1630	↓	↓	↓	↓	↓	↓
MW-94-GW(F)-021413	↓	1640	↓	↓	↓	↓	↓	↓
MW-04-GW(F)-021413	↓	1610	↓	↓	↓	↓	↓	↓
MW-05-GW(F)-021413	↓	1310	↓	↓	↓	↓	↓	↓
MW-07-GW(F)-021413	↓	1725	↓	↓	↓	↓	↓	↓
MW-08-GW(F)-021413	↓	1440	↓	↓	↓	↓	↓	↓
MW-06-GW(F)-021513 RER	↓	2/15/13 1150	↓	↓	↓	↓	↓	↓
MW-01-GW(F)-021513	↓	1305	↓	↓	↓	↓	↓	↓
MW-32A-GW(F)-021513	↓	1450	↓	↓	↓	↓	↓	↓
MW-09-GW(F)-021513	↓	1630	↓	↓	↓	↓	↓	↓

RER

Please call Contact Person w/ questions.
• filter (new) included for filter blank

Relinquished by: (sign)	(print) Rachel E. Ramirez	Date/Time: 16 Feb 2013 11:15a	Comments:
Received by: (sign)	(print) Jacki Ford	Date/Time: 16 Feb 13 11:15	Temp: -0.1°C
Relinquished by: (sign)	(print)	Date/Time:	Comments:
Received by: (sign)	(print)	Date/Time:	Temp:

Please account for each sample bottle as a seperate line item for verification purposes.

*Matrix: Air, Freshwater (FW), seawater (SW), groundwater (GW), wastewater (WW), soil (SL), sediment (SD), tissue (TS), product (P), other (O)

Rev 1.1 (April 2005)

✱ Tot Hg sample ID's exclude the "F" in sample ID ✱
1: Diss Hg sample + tot Hg sample exclude "F" in sample ID

APPLIED SPECIATION AND CONSULTING, LLC

18804 Northcreek Parkway
Bothell, WA 98011

Phone (425) 483-3300
Fax (425) 483-9818

Company Name: Floyd Snider	ASC Project Manager: Russ Gerads
Contact Person:	By submitting of samples the client agrees to all terms and conditions set forth in the quotation provided by the ASC project manager. If you are not familiar with the term and conditions associated with your project, please contact your ASC representative as soon as possible (425) 483-3300.
Address:	
Phone Number:	
Fax Number:	Requested Turn Around Time:
Email Address:	Method of Sample Delivery:
Project Name:	Currier Tracking Number:
Project Number:	Confirmation of Sample Reception: ☐ Yes ☐ No
PO Number:	

Sample ID	Bottle ID	Date and Time	Matrix*	Volume	Preservative	Initials	Requested Analytes and Methods	Comments
MW-10-GWF-021413			GW	125mL			Diss Metals	
MW-06-GWF-021413								
MW-94-GWF-021413								
MW-04-GWF-021413								
MW-05-GWF-021413								
MW-07-GWF-021413								
MW-08-GWF-021413								
MW-06-GWF-021513								
MW-01-GWF-021513								
MW-02A-GWF-021513					JMF 2/22/13			
MW-09-GWF-021513			GW	~~40mL~~ 125mL				
MW-10-GWF-021413				40mL			Diss Hg	Hold
MW-06-GWF-021413								
MW-94-GWF-021413								
MW-04-GWF-021413								
MW-05-GWF-021413								
MW-07-GW-021413								

Relinquished by: (sign)______ (print)______ Date/Time:______
Received by: (sign) [signature] (print) Jacki Ford Date/Time: 2/16/13 1115
Comments:
Temp: -0.1°C

Relinquished by: (sign)______ (print)______ Date/Time:______
Received by: (sign)______ (print)______ Date/Time:______
Comments:
Temp:

Please account for each sample bottle as a seperate line item for verification purposes.

*Matrix: Air, Freshwater (FW), seawater (SW), groundwater (GW), wastewater (WW), soil (SL), sediment (SD), tissue (TS), product (P), other (O)

APPLIED SPECIATION AND CONSULTING, LLC

18804 Northcreek Parkway
Bothell, WA 98011

Phone (425) 483-3300
Fax (425) 483-9818

Company Name: Floyd Snider	ASC Project Manager: Russ Gerads
Contact Person:	By submitting of samples the client agrees to all terms and conditions set forth in the quotation provided by the ASC project manager. If you are not familiar with the term and conditions associated with your project, please contact your ASC representative as soon as possible (425) 483-3300.
Address:	
Phone Number:	
Fax Number:	Requested Turn Around Time:
Email Address:	Method of Sample Delivery:
Project Name:	Currier Tracking Number:
Project Number:	Confirmation of Sample Reception: ☐ Yes ☐ No
PO Number:	

Sample ID	Bottle ID	Date and Time	Matrix*	Volume	Preservative	Initials	Requested Analytes and Methods	Comments
MW-08-GWF-021413			GW	40 mL			Diss Hg	Hold
MW-06-GWF-021513								
MW-01-GWF-021513								
MW-02A-GWF-021513								
MW-09-GWF-021513								
MW-10-GW-021413							Tot Hg	
MW-06-GW-021413								
MW-Q4-GW-021413								
MW-04-GW-021413								
MW-05-GW-021413								
MW-07-GW-021413								
MW-08-GW-021413								
MW-06-GW-021513								
MW-01-GW-021513								
MW-02A-GW-021513								
MW-09-GW-021513								
Field Filter (for field blank)								

Relinquished by: (sign)________ (print)________ Date/Time:________

Received by: (sign) [signature] (print) Jacki Ford Date/Time: 2/16/13 1115

Comments:

Temp: -0.1°C

Relinquished by: (sign)________ (print)________ Date/Time:________

Received by: (sign)________ (print)________ Date/Time:________

Comments:

Temp:

Please account for each sample bottle as a seperate line item for verification purposes.

*Matrix: Air, Freshwater (FW), seawater (SW), groundwater (GW), wastewater (WW), soil (SL), sediment (SD), tissue (TS), product (P), other (O)

EcoChem, INC.
Environmental Data Quality

DATA VALIDATION REPORT

Port of Bellingham
Harris Avenue Shipyard Data Gaps Investigation
Soil and Sediment Sampling

Prepared for:

Floyd/Snider
601 Union Street, Suite 600
Seattle, WA 98101

Prepared by:

EcoChem, Inc.
1011 Western Ave, Suite 1011
Seattle, Washington 98104

EcoChem Project: C15214-1

March 13, 2013

Approved for Release:

Christine Ransom
Project Manager
EcoChem, Inc.

PROJECT NARRATIVE

Basis for the Data Validation

This report summarizes the results of data validation performed on soil, sediment, and quality control (QC) sample data for the Port of Bellingham - Harris Avenue Shipyard Data Gaps Investigation. The extractable and volatile petroleum hydrocarbon data received a summary (EPA Stage 2B) validation. All dioxin/furan data received a full validation (EPA Stage 4). A complete list of samples is provided in the **Sample Index**.

ALS Environmental, Everett, Washington performed the EPH and VPH analyses. Analytical Resources, Inc. (Tukwila, Washington) performed the dioxin/furan analyses. The analytical methods and EcoChem project chemists are listed in the table below.

Analysis	Method	Primary Review	Secondary Review
Extractable Petroleum Hydrocarbons	NWEPH	J. Holder	C. Ransom
Volatile Petroleum Hydrocarbons	NWVPH	J. Holder	C. Ransom
Dioxin/Furans	EPA 1613	M. Swanson	C. Ransom

The data were reviewed using guidance and quality control criteria documented in the analytical methods; the *Harris Avenue Shipyard, Data Gaps Investigation, Sampling Analysis Plan and Quality Assurance Project Plan* (Floyd|Snider, January 4, 2013); *USEPA National Functional Guidelines for Organic Data Review* (USEPA, 2008); and *National Functional Guidelines for Chlorinated Dibenzo-p-Dioxins (CDDs) and Chlorinated Dibenzofurans (CDFs) Data Review* (USEPA, 2010).

EcoChem's goal in assigning data assessment qualifiers is to assist in proper data interpretation. If values are estimated (J or UJ), data may be used for site evaluation and risk assessment purposes but reasons for data qualification should be taken into consideration when interpreting sample concentrations. If values are assigned an R, the data are to be rejected and should not be used for any site evaluation purposes. If values have no data qualifier assigned, then the data meet the data quality objectives as stated in the documents and methods referenced above.

Data qualifier definitions, reason codes, and validation criteria are included as **APPENDIX A**. A Qualified Data Summary Table is included in **APPENDIX B.** Communication Records are presented in **APPENDIX C**. Data Validation Worksheets will be kept on file at EcoChem, Inc. A qualified laboratory electronic data deliverable (EDD) is also submitted with this report.

PROJECT NARRATIVE

Basis for the Data Validation

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Sample Index
Port of Bellingham - Harris Avenue Shipyard

SDG	Sample ID	Laboratory ID	Dioxins	EPH	VPH
WC32	SG-12-0-10-013113	13-2424-WC32A	✓		
WC32	SG-13-0-10-013113	13-2425-WC32B	✓		
WC32	SG-07-0-10-013113	13-2426-WC32C	✓		
WC32	SG-06-0-10-013113	13-2427-WC32D	✓		
WC32	SG-94-0-10-013113	13-2437-WC32N	✓		
WC33	SFS-02-012913	13-2449-WC33E	✓		
WC33	FS-21-0-0.5-013013	13-2450WC33F	✓		
WE03	SFS-01-0-0.5-021413	13-3229-WE03A	✓		
WE03	SFS-99-0-0.5-021413	13-3230-WE03B	✓		
EV13010138	FS-19-7.0-7.5-012913	EV13010138-02		✓	✓
EV13010138	FS-19-27.0-27.5-012913	EV13010138-04		✓	✓
EV13010138	FS-20-10.5-11.0-012913	EV13010138-06		✓	✓
EV13010138	FS-21-8.0-9.0-013013	EV13010138-13		✓	✓

DATA VALIDATION REPORT
Port of Bellingham – Harris Avenue Shipyard
Dioxin/Furan Compounds by Method 1613

This report documents the review of analytical data from the analysis of soil and sediment samples and the associated laboratory quality control (QC) samples. Samples were analyzed by Analytical Resources, Inc., Tukwila, Washington. Full validation (EPA Stage 4) was performed on all data. See the **Sample Index** for a complete list of samples.

SDG	Number of Samples
WC32	5 Sediment
WC33	2 Soil
WE03	2 Soil

I. DATA PACKAGE COMPLETENESS

The laboratory submitted all required deliverables. The laboratory followed adequate corrective action processes and all anomalies were discussed in the case narrative.

II. TECHNICAL DATA VALIDATION

The quality control (QC) requirements reviewed are summarized in the following table:

1	Sample Receipt, Preservation, and Holding Times	1	Matrix Spike/Matrix Spike Duplicates (MS/MSD)
√	System Performance and Resolution Checks	2	Ongoing Precision and Recovery (OPR)
√	Initial Calibration (ICAL)	1	Field Duplicates
√	Calibration Verification (CVER)	√	Target Analyte List
1	Method Blanks	2	Reported Results
1	Field Blanks	2	Compound Identification
√	Labeled Compound Recovery	1	Calculation Verification

√ Stated method quality objectives (MQO) and QC criteria have been met. No outliers are noted or discussed.
[1] Quality control results are discussed below, but no data were qualified.
[2] Quality control outliers that impact the reported data were noted. Data qualifiers were issued as discussed below.

Sample Receipt, Preservation, and Holding Times

SDGs WC32 and WC33: One cooler was received with a temperature less than the advisory control limit of 2°C, at 1.6°C. The temperature outlier did not impact data quality; therefore no action was taken.

SDG WE03: The samples were received at the laboratory at a temperature greater than the upper advisory limit of 6°C, at 8.2°C. The temperature outlier did not impact data quality; therefore no action was taken.

Method Blanks

In order to assess the impact of blank contamination on the reported sample results, action levels were established at five times the blank concentrations.

The laboratory assigned an "EMPC" flag to an analyte result when a peak was detected but did not meet identification criteria. These values cannot be considered as positive identifications, but are “estimated maximum possible concentrations”. When a result in the method blank had an “EMPC” flag, the result was treated as a non-detect at an elevated detection limit; therefore no action level was established for these analytes.

SDGs WC32 and WC33: The target analytes 1,2,3,4,6,7,8-HpCDD, 1,2,3,4,6,7,8-HpCDF, and OCDD were detected in the method blank. All results for these compounds in the associated samples were greater than the action levels; no qualification of data was necessary.

Field Blanks

No equipment rinsate samples were submitted.

Matrix Spike/Matrix Spike Duplicates

Matrix spike/matrix spike duplicate analyses were not performed. Accuracy was evaluated using the labeled compound and ongoing precision and recovery (OPR) standard recoveries. Precision within the analytical batch could not be evaluated.

Ongoing Precision and Accuracy

SDGs WC32 and WC33: The OPR percent recovery (%R) value for 1,2,3,4,6,7,8-HpCDF was greater than the Quality Assurance Project Plan (QAPP) specified upper control limit of 130%, at 143%. All positive results for this analyte were estimated (J-10) to indicate a potential high bias.

Field Duplicates

No field duplicate samples were submitted.

Reported Results

SDG WC32: Diphenyl ether interferences were present in several samples. The laboratory assigned an "X" flag to the affected compounds. The results listed below were estimated (J-14) to indicate a potential high bias.

Sample ID	Compound
SG-12-0-10-013113	1,2,3,7,8-PeCDF
	1,2,3,4,7,8-HxCDF
	2,3,4,6,7,8-HxCDF
SG-13-0-10-013113	1,2,3,4,7,8-HxCDF
SG-07-0-10-013113	1,2,3,7,8-PeCDF

The OCDD results in Samples SG-06-0-10-013113 and SG-94-0-10-013113 exceeded the calibration range of the instrument. The laboratory assigned an “E” flag to these results. The OCDD results for these two samples were estimated (J-20).

SDG WC33: A diphenyl ether interference was indicated for the 1,2,3,7,8-PeCDF result for Sample FS-21-0-0.5-013013. This result was estimated (J-14) to indicate a potential high bias.

The OCDD results for Samples SFS-02-012913 and FS-21-0-0.5-013013 and were estimated (J-20).

SDG WE03: The OCDD result for Sample SFS-99-0-0.5-021413 exceeded the calibration range of the instrument and was estimated (J-20).

Compound Identification

The method requires the confirmation of 2,3,7,8-TCDF using an alternate GC column as the DB5 column that is typically used cannot fully separate 2,3,7,8-TCDF from closely eluting non-target TCDF isomers. The laboratory did not perform a second column confirmation; however the laboratory uses an RTX-Dioxin2 column. This column provides adequate resolution of the TCDF isomers as indicated by the acceptable peak to valley ratios. Since the 2,3,7,8-TCDF resolution was acceptable, no action was necessary.

The laboratory assigned an "EMPC" flag to one or more analytes to indicate that the ion ratio criterion for positive identification was not met. Since the ion abundance ratio is the primary identification criterion for high resolution mass spectroscopy, an outlier indicates that the reported result may be a false positive. These “EMPC” flagged results were qualified as not detected (U-22) at the reported concentration.

Calculation Verification

Several results were verified by recalculation from the raw data. No calculation or transcription errors were found.

III. OVERALL ASSESSMENT

As determined by this evaluation, the laboratory followed the specified analytical method. With the exception noted above, accuracy was acceptable as demonstrated by the labeled compound and OPR recoveries. Precision could not be assessed.

Detection limits were elevated based on ion ratio outliers. Data were estimated based on an OPR recovery outlier, interference from diphenyl ether, and for exceeding the linear calibration range.

All data, as qualified, are acceptable for use.

DATA VALIDATION REPORT
Port of Bellingham - Harris Avenue Shipyard
Volatile Petroleum Hydrocarbons by Method NWVPH

This report documents the review of analytical data from the analysis of soil samples and the associated laboratory quality control (QC) samples. Samples were analyzed by ALS Environmental, Everett, Washington. Summary validation (EPA Stage 2B) was performed on all data. See the **Sample Index** for a complete list of samples.

SDG	Number of Samples
EV13010138	4 Soil

I. DATA PACKAGE COMPLETENESS

With the exceptions noted below, the laboratory submitted all required deliverables. The laboratory followed adequate corrective action processes and all anomalies were discussed in the case narrative.

No summary forms were included for the matrix spike and laboratory duplicate QC analyses. Results were evaluated from the raw data.

II. TECHNICAL DATA VALIDATION

The QC requirements that were reviewed are listed below.

√	Sample Receipt, Preservation, and Holding Times	√	Laboratory Control Samples (LCS/LCSD)
√	Initial Calibration (ICAL)	√	Matrix Spikes (MS)
√	Continuing Calibration (CCAL)	**1**	Field Duplicates
√	Laboratory Blanks	√	Target Analyte List
1	Field Blanks	√	Reporting Limits
√	Surrogate Compounds	√	Reported Results
√	Laboratory Duplicates		

√ Stated method quality objectives (MQO) and QC criteria have been met. No outliers are noted or discussed.
[1] Quality control results are discussed below, but no data were qualified.
[2] Quality control outliers that impact the reported data were noted. Data qualifiers were issued as discussed below.

Field Blanks

No field blanks were submitted.

Field Duplicates

No field duplicates were submitted.

IV. OVERALL ASSESSMENT

As determined by this evaluation, the laboratory followed the specified analytical method. Accuracy was acceptable, as demonstrated by the surrogate, matrix spike, and laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries. Precision was acceptable as demonstrated by the LCS/LCSD and laboratory duplicate relative percent difference (RPD) values.

No data were qualified for any reason.

All data, as reported, are acceptable for use.

DATA VALIDATION REPORT
Port of Bellingham - Harris Avenue Shipyard
Extractable Petroleum Hydrocarbons by NWEPH

This report documents the review of analytical data from the analysis of soil samples and the associated laboratory quality control (QC) samples. Samples were analyzed by ALS Environmental, Everett, Washington. Summary validation (EPA Stage 2B) was performed on all data. See the **Sample Index** for a complete list of samples.

SDG	Number of Samples
EV13010138	4 Soil

I. DATA PACKAGE COMPLETENESS

With the exceptions noted below, the laboratory submitted all required deliverables. The laboratory followed adequate corrective action processes and all anomalies were discussed in the case narrative.

There was no summary form for the method blank associated with the samples. The continuing calibration associated with laboratory control sample/laboratory control sample duplicate (LCS/LCSD) samples was not in the raw data. The laboratory was contacted and provided the missing information.

II. TECHNICAL DATA VALIDATION

The QC requirements that were reviewed are listed below.

√	Sample Receipt, Preservation, and Holding Times	√	Laboratory Control Samples (LCS/LCSD)
√	Initial Calibration (ICAL)	√	Matrix Spikes (MS)
√	Continuing Calibration (CCAL)	**1**	Field Duplicates
√	Laboratory Blanks	√	Target Analyte List
1	Field Blanks	√	Reporting Limits
2	Surrogate Compounds	√	Reported Results
√	Laboratory Duplicates		

√ Stated method quality objectives (MQO) and QC criteria have been met. No outliers are noted or discussed.
[1] Quality control results are discussed below, but no data were qualified.
[2] Quality control outliers that impact the reported data were noted. Data qualifiers were issued as discussed below.

Field Blanks

No field blanks were submitted.

Surrogate Compounds

The percent recovery (%R) of the surrogate p-terphenyl was greater than the upper control limit in Sample FS-21-8.0-9.0-013013. All positive results for the associated aromatic compounds were estimated (J-13) to indicate a potential high bias.

Field Duplicates

No field duplicates were submitted.

III. OVERALL ASSESSMENT

As determined by this evaluation, the laboratory followed the specified analytical method. With the exception noted above, accuracy was acceptable as demonstrated by the surrogate, matrix spike, and LCS/LCSD recoveries. Precision was also acceptable as demonstrated by the LCS/LCSD and laboratory duplicate relative percent difference (RPD) values.

Data were estimated based on a surrogate recovery outlier.

All data, as qualified, are acceptable for use.

EcoChem, INC.
Environmental Data Quality

APPENDIX A

DATA QUALIFIER DEFINITIONS
REASON CODES
AND CRITERIA TABLES

DATA VALIDATION QUALIFIER CODES
National Functional Guidelines

The following definitions provide brief explanations of the qualifiers assigned to results in the data review process.

U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification".
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents the approximate concentration.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

The following is an EcoChem qualifier that may also be assigned during the data review process:

DNR	Do not report; a more appropriate result is reported from another analysis or dilution.

DATA QUALIFIER REASON CODES

1	Holding Time/Sample Preservation
2	Chromatographic pattern in sample does not match pattern of calibration standard.
3	Compound Confirmation
4	Tentatively Identified Compound (TIC) (associated with NJ only)
5A	Calibration (initial)
5B	Calibration (continuing)
6	Field Blank Contamination
7	Lab Blank Contamination (e.g., method blank, instrument, etc.)
8	Matrix Spike(MS & MSD) Recoveries
9	Precision (all replicates)
10	Laboratory Control Sample Recoveries
11	A more appropriate result is reported (associated with "R" and "DNR" only)
12	Reference Material
13	Surrogate Spike Recoveries (a.k.a., labeled compounds & recovery standards)
14	Other (define in validation report)
15	GFAA Post Digestion Spike Recoveries
16	ICP Serial Dilution % Difference
17	ICP Interference Check Standard Recovery
18	Trip Blank Contamination
19	Internal Standard Performance (e.g., area, retention time, recovery)
20	Linear Range Exceeded
21	Potential False Positives
22	Elevated Detection Limit Due to Interference (i.e., laboratory, chemical and/or matrix)

EcoChem Validation Guidelines for Dioxin/Furan Analysis by HRMS
(Based on EPA Reg. 10 SOP, Rev. 2, 1996 & EPA SW-846, Methods 1613b and 8290)

VALIDATION QC ELEMENT	ACCEPTANCE CRITERIA	ACTION	REASON CODE
Cooler/Storage Temperature	Waters/Solids < 4°C Tissues <-10°C	EcoChem PJ, see TM-05	1
Holding Time	Extraction - Water: 30 days from collection *Note:* Under CWA, SDWA, and RCRA the HT for H_2O is 7 days* Extraction - Soil: 30 days from collection Analysis: 40 days from extraction	J(+)/UJ(-) if ext > 30 days J(+)/UJ(-) if analysis > 40 Days EcoChem PJ, see TM-05	1
Mass Resolution	>=10,000 resolving power at m/z 304.9824 Exact mass of m/z 380.9760 w/in 5 ppm of theoretical value (380.97410 to 380.97790) . Analyzed prior to ICAL and at the start and end of each 12 hr. shift	R(+/-) if not met	14
Window Defining Mix and Column Performance Mix	Window defining mixture/Isomer specificity std run before ICAL and CCAL Valley < 25% (valley = (x/y)*100%) x = ht. of TCDD y = baseline to bottom of valley For all isomers eluting near 2378-TCDD/TCDF isomers (TCDD only for 8290)	J(+) if valley > 25%	5A (ICAL) 5B (CCAL
Initial Calibration	Minimum of five standards %RSD < 20% for native compounds %RSD <30% for labeled compounds (%RSD <35% for labeled compounds under 1613b)	J(+) natives if %RSD > 20%	5A
	Abs. RT of $^{13}C_{12}$-1234-TCDD >25 min on DB5 >15 min on DB-225	EcoChem PJ, see TM-05	
	Ion Abundance ratios within QC limits (Table 8 of method 8290) (Table 9 of method 1613B)	EcoChem PJ, see TM-05	
	S/N ratio > 10 for all native and labeled compounds in CS1 std.	If <10, elevate Det. Limit or R(-)	

EcoChem Validation Guidelines for Dioxin/Furan Analysis by HRMS
(Based on EPA Reg. 10 SOP, Rev. 2, 1996 & EPA SW-846, Methods 1613b and 8290)

VALIDATION QC ELEMENT	ACCEPTANCE CRITERIA	ACTION	REASON CODE
Continuing Calibration	Analyzed at the start and end of each 12 hour shift. %D+/-20% for native compounds %D +/-30% for labeled compounds (Must meet limits in Table 6, Method 1613B) (If %Ds in the closing CCAL are w/in 25%/35% the avg RF from the two CCAL may be used to calculate samples per Method 8290, Section 8.3.2.4)	Do not qualify labeled compounds. Narrate in report for labeled compound %D outliers. For native compound %D outliers: 8290: J(+)/UJ(-) if %D = 20% - 75% J(+)/R(-) if %D > 75% 1613: J(+)/UJ(-) if %D is outside Table 6 limits J(+)/R(-) if %D is +/- 75% of Table 6 limit	5B
	Abs. RT of $^{13}C_{12}$-1234-TCDD and ^{13}C12-123789-HxCDD +/- 15 sec of ICAL.	EcoChem PJ, see ICAL section of TM-05	
	RRT of all other compounds must meet Table 2 of 1613B.	EcoChem PJ, see TM-05	
	Ion Abundance ratios within QC limits (Table 8 of method 8290) (Table 9 of method 1613B)	EcoChem PJ, see TM-05	
	S/N ratio > 10	If <10, elevate Det. Limit or R(-)	
Method Blank	One per matrix per batch No positive results	If sample result <5X action level, qualify U at reported value.	7
Field Blanks (Not Required)	No positive results	If sample result <5X action level, qualify U at reported value.	6
LCS / OPR	Concentrations must meet limits in Table 6, Method 1613B or lab limits.	J(+) if %R > UCL J(+)/UJ(-) if %R < LCL J(+)/R(-) using PJ if %R <<LCL (< 10%)	10
MS/MSD (recovery)	May not analyze MS/MSD %R should meet lab limits.	Qualify parent only unless other QC indicates systematic problems: J(+) if both %R > UCL J(+)/UJ(-) if both %R < LCL J(+)/R(-) if both %R < 10% PJ if only one %R outlier	8
MS/MSD (RPD)	May not analyze MS/MSD RPD < 20%	J(+) in parent sample if RPD > CL	9

EcoChem Validation Guidelines for Dioxin/Furan Analysis by HRMS
(Based on EPA Reg. 10 SOP, Rev. 2, 1996 & EPA SW-846, Methods 1613b and 8290)

VALIDATION QC ELEMENT	ACCEPTANCE CRITERIA	ACTION	REASON CODE
Lab Duplicate	RPD <25% if present.	J(+)/UJ(-) if outside limts	9
Labeled Compounds / Internal Standards	*Method 8290:* %R = 40% - 135% in all samples ------ *Method 1613B:* %R must meet limits specified in Table 7, Method 1613	J(+)/UJ(-) if %R = 10% to LCL J(+) if %R > UCL J(+)/R(-) if %R < 10%	13
Quantitation/ Identification	Ions for analyte, IS, and rec. std. must max w/in 2 sec. S/N >2.5 IA ratios meet limits in Table 9 of 1613B or Table 8 of 8290 RRTs w/in limits in Table 2 of 1613B	If RT criteria not met, use PJ (see TM-05) If S/N criteria not met, J(+). if unlabelled ion abundance not met, change to EMPC If labelled ion abundance not met, J(+).	21
EMPC (estimated maximum possible concentration)	If quantitation idenfication criteria are not met, laboratory should report an EMPC value.	If laboratory correctly reported an EMPC value, qualify with U to indicate that the value is a detection limit.	14
Interferences	PCDF interferences from PCDPE	If both detected, change PCDF result to EMPC	14
Second Column Confirmation	All 2378-TCDF hits must be confirmed on a DB-225 (or equiv) column. All QC specs in this table must be met for the confirmation analysis.	Report lower of the two values. If not performed use PJ (see TM-05).	3
Field Duplicates	Use QAPP limits. If no QAPP: Solids: RPD <50% OR absolute diff. < 2X RL (for results < 5X RL) Aqueous: RPD <35% OR absolute diff. < 1X RL (for results < 5X RL)	Narrate and qualify if required by project (EcoChem PJ)	9
Two analyses for one sample	Report only one result per analyte	"DNR" results that should not be used	11

EcoChem Validation Guidelines for Total Petroleum Hydrocarbons
(Based on EPA National Functional Guidelines as applied to Method 8015B)

VALIDATION QC ELEMENT	ACCEPTANCE CRITERIA	ACTION	REASON CODE
Cooler Temperature & Preservation	4°C ±2°C Water: HCl to pH < 2	J(+)/UJ(-) if greater than 6°C for volatiles (use EcoChem PJ for semi-volatiles)	1
Holding Time	Waters: 14 days preserved 7 days unpreserved Solids: 14 Days Analysis: 40 days from extraction	J(+)/UJ(-) if hold times exceeded J(+)/R(-) if exceeded by > 2X (EcoChem PJ)	1
Retention Time Windows	Volatile Range: Lower limit of 2-methylpentane and Upper limit of 1,2,4-Trimethylbenzene Extractable Range : Lower limit of C10 and Upper limit of C28	J(+)/UJ(-) (EcoChem PJ)	N/A
Initial Calibration	Minimum 5 calibration levels Linear regression: $R^2 \geq 0.990$ RSD of response factors: $\leq$20%	J(+)/UJ(-) if R^2 <0.990 J(+)/UJ(-) if %RSD > 20%	5A
Continuing Calibration Verification (CCV)	Prior to analysis and after max. 20 samples or 12 hours, whichever comes first. %D <15%	Narrate if frequency criteria not met. J(+) If %R > 115% J(+)/UJ(-) If %R < 85% J(+)R(-) if %D > 90% (EcoChem PJ)	5B
Method Blank	One per matrix per batch (max. 20 samples) No results $\geq$RL	U (at RL) if sample result is less than RL and less than 5X blank result	7
		U (at reported sample value) if sample result is greater than or equal to RL and less than 5X blank result	7
Field Blank (Not Required)	Not addressed by NFG or SW-846 No results > RL	Same as method blank for positive results remaining in field blank after method blank qualifiers are assigned	6
MS/MSD	One per matrix per batch Lab limits or QAPP criteria	Narrate if frequency not met. Qualify parent only unless other QC indicates systematic problems. J(+) if both %R > UCL; J(+)/UJ(-) if both %R < LCL EcoChem PJ if only one %R outlier No action if parent conc. > 5x the amount spiked.	8

EcoChem Validation Guidelines for Total Petroleum Hydrocarbons
(Based on EPA National Functional Guidelines as applied to Method 8015B)

VALIDATION QC ELEMENT	ACCEPTANCE CRITERIA	ACTION	REASON CODE
Precision: MS/MSD or LCS/LCSD or Sample/Duplicate	One per matrix per batch Lab limits or QAPP criteria	J(+) if RPD > laboratory CL	9
LCS or LCS/LCSD	One per matrix per batch Lab limits or QAPP criteria	J(+)/UJ(-) If %R < LCL J(+) If > UCL J(+)/R(-) If any %R <10%	10
Surrogates	Added to all samples (inc. QC samples) Lab limits or QAPP criteria	J(+)/UJ(-) If %R < LCL J(+) If > UCL J(+)/R(-) If any %R <10% No action if 2 or more surrogates are used and only one is <LCL or >UCL (EcoChem PJ)	13
Pattern Identification	Compare sample chromatograms with standards to ensure that range and pattern are a reasonable match. Laboratory may flag results which have a poor match.	J (+)	3
Field Duplicate	Water: RPD < 35% Soil: RPD < 50%	Narrate (J/UJ if required by project instructions)	9
Two analyses for one sample (e.g. dilution)	Report only one result per analyte	"DNR" results that should not be used to avoid reporting multiple results for one sample. Refer to Tech. Memo TM-04	11

EcoChem, INC.
Environmental Data Quality

APPENDIX B
QUALIFIED DATA SUMMARY TABLE

Qualified Data Summary Table
Port of Bellingham - Harris Avenue Shipyard

Sample ID	Laboratory ID	Method	Analyte	Result	Units	Lab Qualifier	Validation Qualifier	Validation Reason
SG-12-0-10-013113	13-2424-WC32A	EPA 1613B	1,2,3,4,6,7,8-HpCDF	38.0	pg/g		J	10
SG-12-0-10-013113	13-2424-WC32A	EPA 1613B	1,2,3,4,7,8-HxCDF	3.69	pg/g	X	J	14
SG-12-0-10-013113	13-2424-WC32A	EPA 1613B	1,2,3,7,8-PeCDF	2.63	pg/g	X	J	14
SG-12-0-10-013113	13-2424-WC32A	EPA 1613B	2,3,4,6,7,8-HxCDF	3.40	pg/g	X	J	14
SG-12-0-10-013113	13-2424-WC32A	EPA 1613B	Total HxCDF	71.2	pg/g	EMPC	U	22
SG-12-0-10-013113	13-2424-WC32A	EPA 1613B	Total PeCDD	1270	pg/g	EMPC	U	22
SG-12-0-10-013113	13-2424-WC32A	EPA 1613B	Total PeCDF	45.9	pg/g	EMPC	U	22
SG-12-0-10-013113	13-2424-WC32A	EPA 1613B	Total TCDD	1380	pg/g	EMPC	U	22
SG-12-0-10-013113	13-2424-WC32A	EPA 1613B	Total TCDF	101	pg/g	EMPC	U	22
SG-13-0-10-013113	13-2425-WC32B	EPA 1613B	1,2,3,4,6,7,8-HpCDF	43.3	pg/g		J	10
SG-13-0-10-013113	13-2425-WC32B	EPA 1613B	1,2,3,4,7,8-HxCDF	3.75	pg/g	X	J	14
SG-13-0-10-013113	13-2425-WC32B	EPA 1613B	1,2,3,7,8,9-HxCDF	1.90	pg/g	JEMPC	U	22
SG-13-0-10-013113	13-2425-WC32B	EPA 1613B	2,3,4,6,7,8-HxCDF	1.98	pg/g	JXEMPC	U	22
SG-13-0-10-013113	13-2425-WC32B	EPA 1613B	2,3,7,8-TCDD	0.431	pg/g	EMPC	U	22
SG-13-0-10-013113	13-2425-WC32B	EPA 1613B	Total HpCDF	148	pg/g	EMPC	U	22
SG-13-0-10-013113	13-2425-WC32B	EPA 1613B	Total HxCDF	86.0	pg/g	EMPC	U	22
SG-13-0-10-013113	13-2425-WC32B	EPA 1613B	Total PeCDF	31.7	pg/g	EMPC	U	22
SG-13-0-10-013113	13-2425-WC32B	EPA 1613B	Total TCDD	181	pg/g	EMPC	U	22
SG-13-0-10-013113	13-2425-WC32B	EPA 1613B	Total TCDF	27.6	pg/g	EMPC	U	22
SG-07-0-10-013113	13-2426-WC32C	EPA 1613B	1,2,3,4,6,7,8-HpCDF	24.1	pg/g		J	10
SG-07-0-10-013113	13-2426-WC32C	EPA 1613B	1,2,3,7,8-PeCDF	0.893	pg/g	JX	J	14
SG-07-0-10-013113	13-2426-WC32C	EPA 1613B	2,3,7,8-TCDD	0.353	pg/g	EMPC	U	22
SG-07-0-10-013113	13-2426-WC32C	EPA 1613B	Total HxCDF	47.4	pg/g	EMPC	U	22
SG-07-0-10-013113	13-2426-WC32C	EPA 1613B	Total PeCDD	23.0	pg/g	EMPC	U	22
SG-07-0-10-013113	13-2426-WC32C	EPA 1613B	Total PeCDF	19.6	pg/g	EMPC	U	22
SG-07-0-10-013113	13-2426-WC32C	EPA 1613B	Total TCDD	20.7	pg/g	EMPC	U	22
SG-07-0-10-013113	13-2426-WC32C	EPA 1613B	Total TCDF	19.4	pg/g	EMPC	U	22
SG-06-0-10-013113	13-2427-WC32D	EPA 1613B	1,2,3,4,6,7,8-HpCDF	155	pg/g		J	10
SG-06-0-10-013113	13-2427-WC32D	EPA 1613B	2,3,7,8-TCDD	0.467	pg/g	EMPC	U	22
SG-06-0-10-013113	13-2427-WC32D	EPA 1613B	OCDD	10000	pg/g	E	J	20

Qualified Data Summary Table
Port of Bellingham - Harris Avenue Shipyard

SG-06-0-10-013113	13-2427-WC32D	EPA 1613B	Total HpCDF	548	pg/g	EMPC	U	22
SG-06-0-10-013113	13-2427-WC32D	EPA 1613B	Total HxCDD	304	pg/g	EMPC	U	22
SG-06-0-10-013113	13-2427-WC32D	EPA 1613B	Total HxCDF	416	pg/g	EMPC	U	22
SG-06-0-10-013113	13-2427-WC32D	EPA 1613B	Total PeCDF	97.9	pg/g	EMPC	U	22
SG-06-0-10-013113	13-2427-WC32D	EPA 1613B	Total TCDD	19.3	pg/g	EMPC	U	22
SG-06-0-10-013113	13-2427-WC32D	EPA 1613B	Total TCDF	20.5	pg/g	EMPC	U	22
SG-94-0-10-013113	13-2437-WC32N	EPA 1613B	1,2,3,4,6,7,8-HpCDF	139	pg/g		J	10
SG-94-0-10-013113	13-2437-WC32N	EPA 1613B	2,3,7,8-TCDD	0.475	pg/g	EMPC	U	22
SG-94-0-10-013113	13-2437-WC32N	EPA 1613B	OCDD	9450	pg/g	E	J	20
SG-94-0-10-013113	13-2437-WC32N	EPA 1613B	Total HxCDF	368	pg/g	EMPC	U	22
SG-94-0-10-013113	13-2437-WC32N	EPA 1613B	Total PeCDD	39.9	pg/g	EMPC	U	22
SG-94-0-10-013113	13-2437-WC32N	EPA 1613B	Total PeCDF	96.4	pg/g	EMPC	U	22
SG-94-0-10-013113	13-2437-WC32N	EPA 1613B	Total TCDD	22.9	pg/g	EMPC	U	22
SG-94-0-10-013113	13-2437-WC32N	EPA 1613B	Total TCDF	24.7	pg/g	EMPC	U	22
SFS-02-012913	13-2449-WC33E	EPA 1613B	1,2,3,4,6,7,8-HpCDF	286	pg/g		J	10
SFS-02-012913	13-2449-WC33E	EPA 1613B	2,3,7,8-TCDD	0.770	pg/g	EMPC	U	22
SFS-02-012913	13-2449-WC33E	EPA 1613B	OCDD	31900	pg/g	E	J	20
SFS-02-012913	13-2449-WC33E	EPA 1613B	Total HxCDF	329	pg/g	EMPC	U	22
SFS-02-012913	13-2449-WC33E	EPA 1613B	Total PeCDF	77.2	pg/g	EMPC	U	22
SFS-02-012913	13-2449-WC33E	EPA 1613B	Total TCDD	9.56	pg/g	EMPC	U	22
SFS-02-012913	13-2449-WC33E	EPA 1613B	Total TCDF	17.4	pg/g	EMPC	U	22
FS-21-0-0.5-013013	13-2450-WC33F	EPA 1613B	1,2,3,4,6,7,8-HpCDF	195	pg/g		J	10
FS-21-0-0.5-013013	13-2450-WC33F	EPA 1613B	1,2,3,7,8,9-HxCDF	1.64	pg/g	JEMPC	U	22
FS-21-0-0.5-013013	13-2450-WC33F	EPA 1613B	1,2,3,7,8-PeCDF	1.52	pg/g	JX	J	14
FS-21-0-0.5-013013	13-2450-WC33F	EPA 1613B	2,3,7,8-TCDD	0.678	pg/g	EMPC	U	22
FS-21-0-0.5-013013	13-2450-WC33F	EPA 1613B	OCDD	9600	pg/g	E	J	20
FS-21-0-0.5-013013	13-2450-WC33F	EPA 1613B	Total HxCDF	212	pg/g	EMPC	U	22
FS-21-0-0.5-013013	13-2450-WC33F	EPA 1613B	Total PeCDD	33.9	pg/g	EMPC	U	22
FS-21-0-0.5-013013	13-2450-WC33F	EPA 1613B	Total PeCDF	70.9	pg/g	EMPC	U	22
FS-21-0-0.5-013013	13-2450-WC33F	EPA 1613B	Total TCDD	16.4	pg/g	EMPC	U	22
FS-21-0-0.5-013013	13-2450-WC33F	EPA 1613B	Total TCDF	26.6	pg/g	EMPC	U	22
SFS-01-0-0.5-021413	13-3229-WE03A	EPA 1613B	1,2,3,7,8-PeCDD	2.44	pg/g	EMPC	U	22
SFS-01-0-0.5-021413	13-3229-WE03A	EPA 1613B	1,2,3,7,8-PeCDF	0.79	pg/g	JEMPC	U	22

Qualified Data Summary Table
Port of Bellingham - Harris Avenue Shipyard

SFS-01-0-0.5-021413	13-3229-WE03A	EPA 1613B	2,3,4,7,8-PeCDF	1.59	pg/g	EMPC	U	22
SFS-01-0-0.5-021413	13-3229-WE03A	EPA 1613B	2,3,7,8-TCDD	0.352	pg/g	EMPC	U	22
SFS-01-0-0.5-021413	13-3229-WE03A	EPA 1613B	2,3,7,8-TCDF	0.743	pg/g	EMPC	U	22
SFS-01-0-0.5-021413	13-3229-WE03A	EPA 1613B	Total HxCDF	86.5	pg/g	EMPC	U	22
SFS-01-0-0.5-021413	13-3229-WE03A	EPA 1613B	Total PeCDD	12.7	pg/g	EMPC	U	22
SFS-01-0-0.5-021413	13-3229-WE03A	EPA 1613B	Total PeCDF	41.8	pg/g	EMPC	U	22
SFS-01-0-0.5-021413	13-3229-WE03A	EPA 1613B	Total TCDD	4.17	pg/g	EMPC	U	22
SFS-01-0-0.5-021413	13-3229-WE03A	EPA 1613B	Total TCDF	13.6	pg/g	EMPC	U	22
SFS-99-0-0.5-021413	13-3230-WE03B	EPA 1613B	1,2,3,7,8-PeCDF	1.22	pg/g	EMPC	U	22
SFS-99-0-0.5-021413	13-3230-WE03B	EPA 1613B	2,3,7,8-TCDD	0.367	pg/g	EMPC	U	22
SFS-99-0-0.5-021413	13-3230-WE03B	EPA 1613B	2,3,7,8-TCDF	0.925	pg/g	EMPC	U	22
SFS-99-0-0.5-021413	13-3230-WE03B	EPA 1613B	OCDD	4650	pg/g	E	J	20
SFS-99-0-0.5-021413	13-3230-WE03B	EPA 1613B	Total HxCDD	100	pg/g	EMPC	U	22
SFS-99-0-0.5-021413	13-3230-WE03B	EPA 1613B	Total HxCDF	102	pg/g	EMPC	U	22
SFS-99-0-0.5-021413	13-3230-WE03B	EPA 1613B	Total PeCDD	15.3	pg/g	EMPC	U	22
SFS-99-0-0.5-021413	13-3230-WE03B	EPA 1613B	Total PeCDF	49.3	pg/g	EMPC	U	22
SFS-99-0-0.5-021413	13-3230-WE03B	EPA 1613B	Total TCDD	4.89	pg/g	EMPC	U	22
SFS-99-0-0.5-021413	13-3230-WE03B	EPA 1613B	Total TCDF	14.3	pg/g	EMPC	U	22
FS-21-8.0-9.0-013013	EV13010138-13	NWEPH	EPH, >C10-C12 Aromatic	330	MG/KG		J	13
FS-21-8.0-9.0-013013	EV13010138-13	NWEPH	EPH, >C12-C16 Aromatic	640	MG/KG		J	13
FS-21-8.0-9.0-013013	EV13010138-13	NWEPH	EPH, >C16-C21 Aromatic	2300	MG/KG		J	13
FS-21-8.0-9.0-013013	EV13010138-13	NWEPH	EPH, >C21-C34 Aromatic	1000	MG/KG		J	13
FS-21-8.0-9.0-013013	EV13010138-13	NWEPH	EPH, C8-C10 Aromatic	10	MG/KG		J	13

EcoChem, INC.
Environmental Data Quality

APPENDIX C
COMMUNICATION RECORDS

Chris Ransom

From: Rick Bagan <Rick.Bagan@alsglobal.com>
Sent: Wednesday, March 06, 2013 2:26 PM
To: Chris Ransom
Subject: RE: VPH carbon range question

Hi Chris, yes that is correct.

Rick Bagan
LABORATORY DIRECTOR

ALS | Environmental

Address
8620 Holly Drive, Suite 100
Everett, Washington 98208

PHONE +1 425 356 2600
MOBILE +1 425 478 2240
FAX +1 425 356 2626

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From: Chris Ransom [mailto:cransom@ecochem.net]
Sent: Wednesday, March 06, 2013 12:03 PM
To: Rick Bagan
Subject: VPH carbon range question

Hi Rick,

One last quick question for you regarding VPH. The method specifies and upper carbon range of C10-C12 for aliphatics, however this range was not reported. Is it part of your SOP to only report C10-C12 aliphatics from the EPH analysis?

Thanks

Chris

Christine Ransom

EcoChem, Inc.
Senior Project Chemist

1011 Western Ave, Suite 1011, Seattle, WA 98104
PHONE: 206.233.9332 x109

Chris Ransom

From:	Rick Bagan <Rick.Bagan@alsglobal.com>
Sent:	Tuesday, March 05, 2013 12:59 PM
To:	Chris Ransom
Cc:	erin.murray@floydsnider.com; 'elena.ramirez@floydsnider.com'
Subject:	RE: Harris Ave Shipyard EPH/VPH questions
Attachments:	EV13010138 CCAL1-25-13.pdf; EV13010138-QC.xls; EV13010138-CHEM.xls; EV13010138v2.pdf

Hi Chris, outlined below in blue are my responses to your questions. please let me know if you have further questions.

Rick Bagan
LABORATORY DIRECTOR

ALS | Environmental

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MOBILE +1 425 478 2240
FAX +1 425 356 2626

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From: Chris Ransom [mailto:cransom@ecochem.net]
Sent: Monday, March 04, 2013 4:55 PM
To: Rick Bagan
Cc: erin.murray@floydsnider.com; 'elena.ramirez@floydsnider.com'
Subject: Harris Ave Shipyard EPH/VPH questions

Hi Rick,

I have a couple of questions/comments regarding the EPH and VPH data packages:

SDG EV13020091

1. The method blank for the EPH Aromatic fraction has an analysis date of 2/22/2013 on the summary forms, but pg. 2 of the EPH pdf has an analysis date of 2/21/13 for the MB. All we need is confirmation from you that the analysis date is 2/21. The analysis date is in fact 2/21/13.
2. There were both a matrix spike and lab duplicate analyzed for VPH on a client sample, but these were not summarized. We evaluated the results using the raw data, but just wanted to know if this is lab policy when QC analyses are not specifically requested by the client on the COC? The same applies to the VPH analyses in SDG EV13010138. Yes our policy is to report batch QC unless requested on the COC or otherwise discussed.

1. For the EPH analyses, the BS/BSD samples were not extracted with the field samples (1/23/13 versus 1/30/13). The samples did have a method blank extracted on the same day. Do you keep a batch "open" until 20 samples are extracted even if they are not extracted the same day? Yes, we define a batch as 20 samples or seven days which ever comes first.
2. Also for the EPH analyses - the only method blank summarized was the MB extracted with the BS/BSD on 1/23. The MB for 1/30 was not summarized. Could you provide a summary form for this MB? Yes, please see revised reports with additional EPH blank summary included on page 57.
3. The CCAL associated with the EPH BS/BSD analyses was not provided. Could you send a pdf of the EPH Alk and Aro CCAL for 1/25/13? Please see attached- I apologize for the omission.

Thanks

Chris

Christine Ransom

EcoChem, Inc.
Senior Project Chemist

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PHONE: 206.233.9332 x109
FAX: 206.233.0114
EMAIL: cransom@ecochem.net

EcoChem, INC.
Environmental Data Quality

DATA VALIDATION REPORT

Port of Bellingham
Harris Avenue Shipyard Data Gaps Analysis
Groundwater Sampling

Prepared for:

Floyd/Snider
601 Union Street, Suite 600
Seattle, WA 98101

Prepared by:

EcoChem, Inc.
1011 Western Ave, Suite 1011
Seattle, Washington 98104

EcoChem Project: C15214-1

March 6, 2013

Approved for Release:

Christine Ransom
Project Manager
EcoChem, Inc.

PROJECT NARRATIVE

Basis for the Data Validation

This report summarizes the results of data validation performed on groundwater and quality control (QC) sample data for the Port of Bellingham - Harris Avenue Shipyard Data Gaps Investigation. The data received a summary level validation (EPA Stage 2B). A complete list of samples is provided in the **Sample Index**.

ALS Environmental, Everett, Washington performed the analysis. The analytical methods and EcoChem project chemists are listed in the table below.

Analysis	Method	Primary Review	Secondary Review
Extractable Petroleum Hydrocarbons	NWEPH	J. Holder	C. Ransom
Volatile Petroleum Hydrocarbons	NWVPH	J. Holder	C. Ransom

The data were reviewed using guidance and quality control criteria documented in the analytical methods; the *Harris Avenue Shipyard, Data Gaps Investigation, Sampling Analysis Plan and Quality Assurance Project Plan* (Floyd|Snider, January 4, 2013); and *USEPA National Functional Guidelines for Organic Data Review* (USEPA, 2005).

EcoChem's goal in assigning data assessment qualifiers is to assist in proper data interpretation. If values are estimated (J or UJ), data may be used for site evaluation and risk assessment purposes but reasons for data qualification should be taken into consideration when interpreting sample concentrations. If values are assigned an R, the data are to be rejected and should not be used for any site evaluation purposes. If values have no data qualifier assigned, then the data meet the data quality objectives as stated in the documents and methods referenced above.

No data were qualified for any reason. All data are acceptable for use.

Communication Records are presented in **APPENDIX A**. Data Validation Worksheets will be kept on file at EcoChem, Inc. A qualified laboratory electronic data deliverable (EDD) is also submitted with this report.

Sample Index
Port of Bellingham - Harris Avenue Shipyard

Sample ID	Laboratory ID	EPH	VPH
MW-06-GW-021413	EV13020091-02	✓	✓
MW-94-GW-021413	EV13020091-03	✓	✓
MW-01-GW-021513	EV13020091-10	✓	✓
MW-09-GW-021513	EV13020091-12	✓	✓

DATA VALIDATION REPORT
Port of Bellingham - Harris Avenue Shipyard
Volatile Petroleum Hydrocarbons by Method NWVPH

This report documents the review of analytical data from the analysis of groundwater samples and the associated laboratory quality control (QC) samples. Samples were analyzed by ALS Environmental, Everett, Washington. Summary validation (EPA Stage 2B) was performed on all data. The **Sample Index** contains a complete list of samples.

SDG	Number of Samples
EV13020091	4 Groundwater

I. DATA PACKAGE COMPLETENESS

With the exceptions noted below, the laboratory submitted all required deliverables. The laboratory followed adequate corrective action processes and all anomalies were discussed in the case narrative.

No summary forms were included for the matrix spike and laboratory duplicate QC analyses. Results were evaluated from the raw data.

II. TECHNICAL DATA VALIDATION

The QC requirements that were reviewed are listed below.

1	Sample Receipt, Preservation, and Holding Times	√	Laboratory Control Samples (LCS/LCSD)
√	Initial Calibration (ICAL)	√	Matrix Spikes/Matrix Spike Duplicates (MS/MSD)
√	Continuing Calibration (CCAL)	1	Field Duplicates
√	Laboratory Blanks	√	Target Analyte List
1	Field Blanks	√	Reporting Limits
√	Surrogate Compounds	√	Reported Results
√	Laboratory Duplicates		

√ Stated method quality objectives (MQO) and QC criteria have been met. No outliers are noted or discussed.
[1] Quality control results are discussed below, but no data were qualified.
[2] Quality control outliers that impact the reported data were noted. Data qualifiers were issued as discussed below.

Sample Receipt, Preservation, and Holding Times

As stated in validation guidance documents, sample coolers should arrive at the laboratory within the advisory temperature range of 2°C to 6°C. One of the coolers was received with a temperature less than the lower limit, at 0.5°C. The temperature outlier did not impact data quality; therefore no action was taken.

Field Blanks

No field blanks were submitted.

Field Duplicates

No field duplicates were submitted.

IV. OVERALL ASSESSMENT

As determined by this evaluation, the laboratory followed the specified analytical method. Accuracy was acceptable, as demonstrated by the surrogate, matrix spike, and laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries. Precision was acceptable as demonstrated by the LCS/LCSD and laboratory duplicate relative percent difference (RPD) values.

No data were qualified for any reason.

All data, as reported, are acceptable for use.

DATA VALIDATION REPORT
Port of Bellingham - Harris Avenue Shipyard
Extractable Petroleum Hydrocarbons by NWEPH

This report documents the review of analytical data from the analysis of groundwater samples and the associated laboratory quality control (QC) samples. Samples were analyzed by ALS Environmental, Everett, Washington. Summary validation (EPA Stage 2B) was performed on all data. See the **Sample Index** for a complete list of samples.

SDG	Number of Samples
EV13020091	4 Groundwater

I. DATA PACKAGE COMPLETENESS

The laboratory submitted all required deliverables. The laboratory followed adequate corrective action processes and all anomalies were discussed in the case narrative.

II. TECHNICAL DATA VALIDATION

The QC requirements that were reviewed are listed below.

1	Sample Receipt, Preservation, and Holding Times	√	Laboratory Control Samples (LCS/LCSD)
√	Initial Calibration (ICAL)	**1**	Matrix Spikes/Matrix Spike Duplicates (MS/MSD)
√	Continuing Calibration (CCAL)	**1**	Field Duplicates
√	Laboratory Blanks	√	Target Analyte List
1	Field Blanks	√	Reporting Limits
√	Surrogate Compounds	√	Reported Results

√ ***Stated method quality objectives (MQO) and QC criteria have been met. No outliers are noted or discussed.***
[1] ***Quality control results are discussed below, but no data were qualified.***
[2] ***Quality control outliers that impact the reported data were noted. Data qualifiers were issued as discussed below.***

Sample Receipt, Preservation, and Holding Times

As stated in validation guidance documents, sample coolers should arrive at the laboratory within the advisory temperature range of 2°C to 6°C. One of the coolers was received with a temperature less than the lower limit, at 0.5°C. The temperature outlier did not impact data quality; therefore no action was taken.

Field Blanks

No field blanks were submitted.

Matrix Spike/Matrix Spike Duplicates

Matrix spike/matrix spike duplicate analyses were not performed. Laboratory precision and accuracy were evaluated using the results from the laboratory control sample/laboratory control sample duplicate (LCS/LCSD) analyses.

Field Duplicates

No field duplicates were submitted.

III. OVERALL ASSESSMENT

As determined by this evaluation, the laboratory followed the specified analytical method. Accuracy was acceptable, as demonstrated by the surrogate and LCS/LCSD recoveries. Precision was also acceptable as demonstrated by the LCS/LCSD relative percent difference (RPD) values.

No data were qualified for any reason.

All data, as reported, are acceptable for use.

EcoChem, INC.
Environmental Data Quality

APPENDIX A
COMMUNICATIONS

Chris Ransom

From: Rick Bagan <Rick.Bagan@alsglobal.com>
Sent: Tuesday, March 05, 2013 12:59 PM
To: Chris Ransom
Cc: erin.murray@floydsnider.com; 'elena.ramirez@floydsnider.com'
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Thanks

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