

Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/03AUG10.b/RG51F.d  
 Lab Smp Id: RG51F Client Smp ID: PSB12-14-17-072810  
 Inj Date : 04-AUG-2010 00:41  
 Operator : PB Inst ID: finn5.i  
 Smp Info : RG51F,5,9.318,0  
 Misc Info : 10-18188  
 Comment :  
 Method : /chem1/finn5.i/03AUG10.b/s8260b.m  
 Meth Date : 05-Aug-2010 16:40 patrickb Quant Type: ISTD  
 Cal Date : 23-JUL-2010 17:18 Cal File: 2000723.d  
 Als bottle: 1  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: voa.sub  
 Target Version: 3.50  
 Processing Host: cserv3

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Concentration Formula:  $Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria$

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	5.00000	Purge Volume
Sa	9.31800	Sample Amount
M	0.00000	Moisture (%)

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1 Dichlorodifluoromethane	85						
2 Chloromethane	50						
3 Vinyl Chloride	62						
4 Bromomethane	94						
5 Chloroethane	64						
6 Trichlorofluoromethane	101						
7 Acrolein	56						
8 112Trichloro122Trifluoroethane	101						
9 Acetone	43	4.663	4.683	(0.705)	30650	54.1472	29.055 <i>nl</i>
10 1,1-Dichloroethene	96						
11 Bromoethane	108						
12 Iodomethane	142						
13 Methylene Chloride	84						
14 Acrylonitrile	53						

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/Kg)	(ug/Kg)
=====	=====		==	=====	=====	=====	=====	=====
16 Methyl tert-Butyl Ether	73					Compound Not Detected.		
15 Carbon Disulfide	76		5.367	5.387	(0.812)	36520	6.14558	3.298
17 Trans-1,2-Dichloroethene	96					Compound Not Detected.		
18 Vinyl Acetate	43					Compound Not Detected.		
19 1,1-Dichloroethane	63					Compound Not Detected.		
20 2-Butanone	43		6.271	6.281	(0.948)	2823	4.43224	2.378 (Q)
21 2,2-Dichloropropane	77					Compound Not Detected.		
22 Cis-1,2-Dichloroethene	96					Compound Not Detected.		
* 23 Pentafluorobenzene	168		6.613	6.633	(1.000)	101147	50.0000	
24 Chloroform	83					Compound Not Detected.		
26 Bromochloromethane	128					Compound Not Detected.		
\$ 25 Dibromofluoromethane	111		6.834	6.844	(1.033)	70371	58.3737	31.323 (Q)
27 1,1,1-Trichloroethane	97					Compound Not Detected.		
29 1,1-Dichloropropene	75					Compound Not Detected.		
30 Carbon Tetrachloride	117					Compound Not Detected.		
\$ 31 d4-1,2-Dichloroethane	65		7.296	7.316	(1.103)	87900	66.6357	35.756
32 1,2-Dichloroethane	62					Compound Not Detected.		
33 Benzene	78					Compound Not Detected.		
* 34 1,4-Difluorobenzene	114		7.628	7.638	(1.000)	155868	50.0000	
35 Trichloroethene	95					Compound Not Detected.		
36 1,2-Dichloropropane	63					Compound Not Detected.		
37 Bromodichloromethane	83					Compound Not Detected.		
39 Dibromomethane	93					Compound Not Detected.		
40 2-Chloroethyl Vinyl Ether	63					Compound Not Detected.		
41 4-Methyl-2-Pentanone	58					Compound Not Detected.		
42 Cis 1,3-dichloropropene	75					Compound Not Detected.		
\$ 43 d8-Toluene	98		9.176	9.196	(1.203)	179641	52.4522	28.146
44 Toluene	92					Compound Not Detected.		
45 Trans 1,3-Dichloropropene	75					Compound Not Detected.		
46 2-Hexanone	43					Compound Not Detected.		
47 1,1,2-Trichloroethane	97					Compound Not Detected.		
48 1,3-Dichloropropane	76					Compound Not Detected.		
49 Tetrachloroethene	166					Compound Not Detected.		
50 Chlorodibromomethane	129					Compound Not Detected.		
51 1,2-Dibromoethane	107					Compound Not Detected.		
* 52 d5-Chlorobenzene	117		10.774	10.794	(1.000)	140121	50.0000	
53 Chlorobenzene	112					Compound Not Detected.		
54 Ethyl Benzene	91					Compound Not Detected.		
55 1,1,1,2-Tetrachloroethane	131					Compound Not Detected.		
56 m,p-xylene	106					Compound Not Detected.		
57 o-Xylene	106					Compound Not Detected.		
58 Styrene	104					Compound Not Detected.		
59 Isopropyl Benzene	105					Compound Not Detected.		
60 Bromoform	173					Compound Not Detected.		
61 1,1,2,2-Tetrachloroethane	83					Compound Not Detected.		
\$ 62 4-Bromofluorobenzene	95		12.090	12.110	(1.122)	79992	48.7789	26.174
63 1,2,3-Trichloropropane	110					Compound Not Detected.		

*uq*  
*uq*

Compounds	QUANT	SIG	RT	EXP	RT	REL	RT	RESPONSE	CONCENTRATIONS	
									ON-COLUMN	FINAL
	MASS								(ug/Kg)	(ug/Kg)
=====	====		==	=====	=====		=====		=====	=====
65 Trans-1,4-Dichloro 2-Butene	53			Compound	Not	Detected.				
66 N-Propyl Benzene	91			Compound	Not	Detected.				
67 Bromobenzene	156			Compound	Not	Detected.				
68 1,3,5-Trimethyl Benzene	105			Compound	Not	Detected.				
69 2-Chloro Toluene	91			Compound	Not	Detected.				
70 4-Chloro Toluene	91			Compound	Not	Detected.				
71 T-Butyl Benzene	119			Compound	Not	Detected.				
72 1,2,4-Trimethylbenzene	105			Compound	Not	Detected.				
73 S-Butyl Benzene	105			Compound	Not	Detected.				
74 4-Isopropyl Toluene	119			Compound	Not	Detected.				
75 1,3-Dichlorobenzene	146			Compound	Not	Detected.				
* 76 d4-1,4-Dichlorobenzene	152		13.457	13.467	(1.000)		70324	50.0000		
77 1,4-Dichlorobenzene	146			Compound	Not	Detected.				
78 N-Butyl Benzene	91			Compound	Not	Detected.				
\$ 79 d4-1,2-Dichlorobenzene	152		13.899	13.919	(1.033)		67522	52.7868	28.325 (Q)	
80 1,2-Dichlorobenzene	146			Compound	Not	Detected.				
81 1,2-Dibromo 3-Chloropropane	75			Compound	Not	Detected.				
82 1,2,4-Trichlorobenzene	180			Compound	Not	Detected.				
83 Hexachloro 1,3-Butadiene	225			Compound	Not	Detected.				
84 Naphthalene	128			Compound	Not	Detected.				
85 1,2,3-Trichlorobenzene	180			Compound	Not	Detected.				

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS  
 AREA AND RT SUMMARY

Instrument ID: finn5.i  
 Lab File ID: RG51F.d  
 Lab Smp Id: RG51F  
 Analysis Type: VOA  
 Quant Type: ISTD  
 Operator: PB  
 Method File: /chem1/finn5.i/03AUG10.b/s8260b.m  
 Misc Info: 10-18188

Calibration Date: 03-AUG-2010  
 Calibration Time: 17:32  
 Client Smp ID: PSB12-14-17-072810  
 Level: LOW  
 Sample Type: Soil

Test Mode:

Use Initial Calibration Level 5.  
 If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
23 Pentafluorobenzen	131115	65558	262230	101147	-22.86
34 1,4-Difluorobenze	191559	95780	383118	155868	-18.63
52 d5-Chlorobenzene	161199	80600	322398	140121	-13.08
76 d4-1,4-Dichlorobe	88279	44140	176558	70324	-20.34

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
23 Pentafluorobenzen	6.63	6.13	7.13	6.61	-0.30
34 1,4-Difluorobenze	7.64	7.14	8.14	7.63	-0.13
52 d5-Chlorobenzene	10.79	10.29	11.29	10.77	-0.19
76 d4-1,4-Dichlorobe	13.47	12.97	13.97	13.46	-0.07

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = - 50% of internal standard area.  
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd/Snider  
Sample Matrix: SOLID  
Lab Smp Id: RG51F  
Level: LOW  
Data Type: MS DATA  
SpikeList File: all.spk  
Sublist File: voa.sub  
Method File: /chem1/finn5.i/03AUG10.b/s8260b.m  
Misc Info: 10-18188

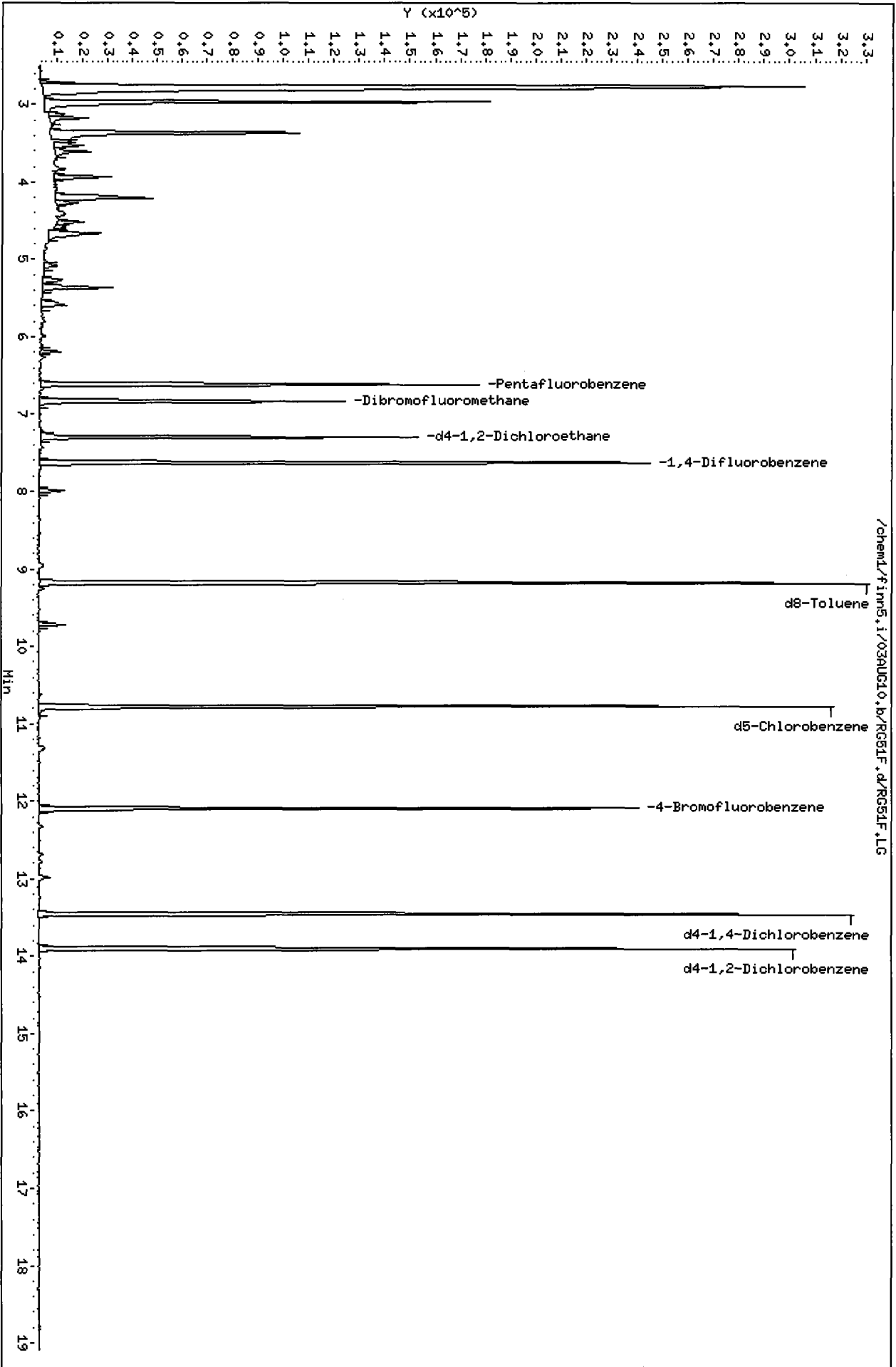
Client SDG: RG51  
Fraction: VOA  
Client Smp ID: PSB12-14-17-072810  
Operator: PB  
SampleType: SAMPLE  
Quant Type: ISTD

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
\$ 25 Dibromofluorometha	50.000	58.374	116.75	30-160
\$ 31 d4-1,2-Dichloroeth	50.000	66.636	133.27	75-152
\$ 43 d8-Toluene	50.000	52.452	104.90	82-115
\$ 62 4-Bromofluorobenze	50.000	48.779	97.56	64-120
\$ 79 d4-1,2-Dichloroben	50.000	52.787	105.57	80-120

Data File: /chem1/firm5.i/03AUG10.b/RG5LF.d  
Date: 04-AUG-2010 00:41  
Client ID: PSB12-14-17-072810  
Sample Info: RG5LF,5,9,318,0

Column phase: Rtx502.2

Instrument: firm5.i  
Operator: PB  
Column diameter: 0.18



Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/03AUG10.b/RG51G.d  
 Lab Smp Id: RG51G Client Smp ID: PSB12-4-6-072810  
 Inj Date : 04-AUG-2010 01:08  
 Operator : PB Inst ID: finn5.i  
 Smp Info : RG51G,5,9.849,0  
 Misc Info : 10-18189  
 Comment :  
 Method : /chem1/finn5.i/03AUG10.b/s8260b.m  
 Meth Date : 05-Aug-2010 16:40 patrickb Quant Type: ISTD  
 Cal Date : 23-JUL-2010 17:18 Cal File: 2000723.d  
 Als bottle: 1  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: voa.sub  
 Target Version: 3.50  
 Processing Host: cserv3

*Handwritten signature*

Concentration Formula:  $Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria$

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	5.00000	Purge Volume
Sa	9.84900	Sample Amount
M	0.00000	Moisture (%)

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1 Dichlorodifluoromethane	85						
2 Chloromethane	50						
3 Vinyl Chloride	62						
4 Bromomethane	94						
5 Chloroethane	64						
6 Trichlorofluoromethane	101						
7 Acrolein	56						
8 112Trichloro122Trifluoroethane	101						
9 Acetone	43	4.663	4.683	(0.705)	81124	140.942	71.551
10 1,1-Dichloroethene	96						
11 Bromoethane	108						
12 Iodomethane	142						
13 Methylene Chloride	84						
14 Acrylonitrile	53						

*Handwritten mark*

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
16 Methyl tert-Butyl Ether	73						
15 Carbon Disulfide	76						
17 Trans-1,2-Dichloroethene	96						
18 Vinyl Acetate	43						
19 1,1-Dichloroethane	63						
20 2-Butanone	43	6.261	6.281	(0.947)	8098	12.5036	6.348
21 2,2-Dichloropropane	77						
22 Cis-1,2-Dichloroethene	96						
* 23 Pentafluorobenzene	168	6.613	6.633	(1.000)	102851	50.0000	
24 Chloroform	83						
26 Bromochloromethane	128						
\$ 25 Dibromofluoromethane	111	6.824	6.844	(1.032)	71774	58.5511	29.724 (Q)
27 1,1,1-Trichloroethane	97						
29 1,1-Dichloropropene	75						
30 Carbon Tetrachloride	117						
\$ 31 d4-1,2-Dichloroethane	65	7.296	7.316	(1.103)	91760	68.4094	34.729
32 1,2-Dichloroethane	62						
33 Benzene	78						
* 34 1,4-Difluorobenzene	114	7.618	7.638	(1.000)	158461	50.0000	
35 Trichloroethene	95						
36 1,2-Dichloropropane	63						
37 Bromodichloromethane	83						
39 Dibromomethane	93						
40 2-Chloroethyl Vinyl Ether	63						
41 4-Methyl-2-Pentanone	58						
42 Cis 1,3-dichloropropene	75						
\$ 43 d8-Toluene	98	9.176	9.196	(1.204)	184068	52.8654	26.838
44 Toluene	92						
45 Trans 1,3-Dichloropropene	75						
46 2-Hexanone	43						
47 1,1,2-Trichloroethane	97						
48 1,3-Dichloropropane	76						
49 Tetrachloroethene	166						
50 Chlorodibromomethane	129						
51 1,2-Dibromoethane	107						
* 52 d5-Chlorobenzene	117	10.774	10.794	(1.000)	135053	50.0000	
53 Chlorobenzene	112						
54 Ethyl Benzene	91						
55 1,1,1,2-Tetrachloroethane	131						
56 m,p-xylene	106						
57 o-Xylene	106						
58 Styrene	104						
59 Isopropyl Benzene	105						
60 Bromoform	173						
61 1,1,2,2-Tetrachloroethane	83						
\$ 62 4-Bromofluorobenzene	95	12.090	12.110	(1.122)	75640	47.8560	24.295
63 1,2,3-Trichloropropane	110						

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Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
65 Trans-1,4-Dichloro 2-Butene	53				Compound Not Detected.		
66 N-Propyl Benzene	91				Compound Not Detected.		
67 Bromobenzene	156				Compound Not Detected.		
68 1,3,5-Trimethyl Benzene	105				Compound Not Detected.		
69 2-Chloro Toluene	91				Compound Not Detected.		
70 4-Chloro Toluene	91				Compound Not Detected.		
71 T-Butyl Benzene	119				Compound Not Detected.		
72 1,2,4-Trimethylbenzene	105				Compound Not Detected.		
73 S-Butyl Benzene	105				Compound Not Detected.		
74 4-Isopropyl Toluene	119				Compound Not Detected.		
75 1,3-Dichlorobenzene	146				Compound Not Detected.		
* 76 d4-1,4-Dichlorobenzene	152	13.447	13.467	(1.000)	64952	50.0000	
77 1,4-Dichlorobenzene	146				Compound Not Detected.		
78 N-Butyl Benzene	91				Compound Not Detected.		
\$ 79 d4-1,2-Dichlorobenzene	152	13.899	13.919	(1.034)	61346	51.9251	26.360
80 1,2-Dichlorobenzene	146				Compound Not Detected.		
81 1,2-Dibromo 3-Chloropropane	75				Compound Not Detected.		
82 1,2,4-Trichlorobenzene	180				Compound Not Detected.		
83 Hexachloro 1,3-Butadiene	225				Compound Not Detected.		
84 Naphthalene	128				Compound Not Detected.		
85 1,2,3-Trichlorobenzene	180				Compound Not Detected.		

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS  
 AREA AND RT SUMMARY

Instrument ID: finn5.i  
 Lab File ID: RG51G.d  
 Lab Smp Id: RG51G  
 Analysis Type: VOA  
 Quant Type: ISTD  
 Operator: PB  
 Method File: /chem1/finn5.i/03AUG10.b/s8260b.m  
 Misc Info: 10-18189

Calibration Date: 03-AUG-2010  
 Calibration Time: 17:32  
 Client Smp ID: PSB12-4-6-072810  
 Level: LOW  
 Sample Type: Soil

Test Mode:

Use Initial Calibration Level 5.  
 If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
23 Pentafluorobenzen	131115	65558	262230	102851	-21.56
34 1,4-Difluorobenze	191559	95780	383118	158461	-17.28
52 d5-Chlorobenzene	161199	80600	322398	135053	-16.22
76 d4-1,4-Dichlorobe	88279	44140	176558	64952	-26.42

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
23 Pentafluorobenzen	6.63	6.13	7.13	6.61	-0.30
34 1,4-Difluorobenze	7.64	7.14	8.14	7.62	-0.26
52 d5-Chlorobenzene	10.79	10.29	11.29	10.77	-0.19
76 d4-1,4-Dichlorobe	13.47	12.97	13.97	13.45	-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

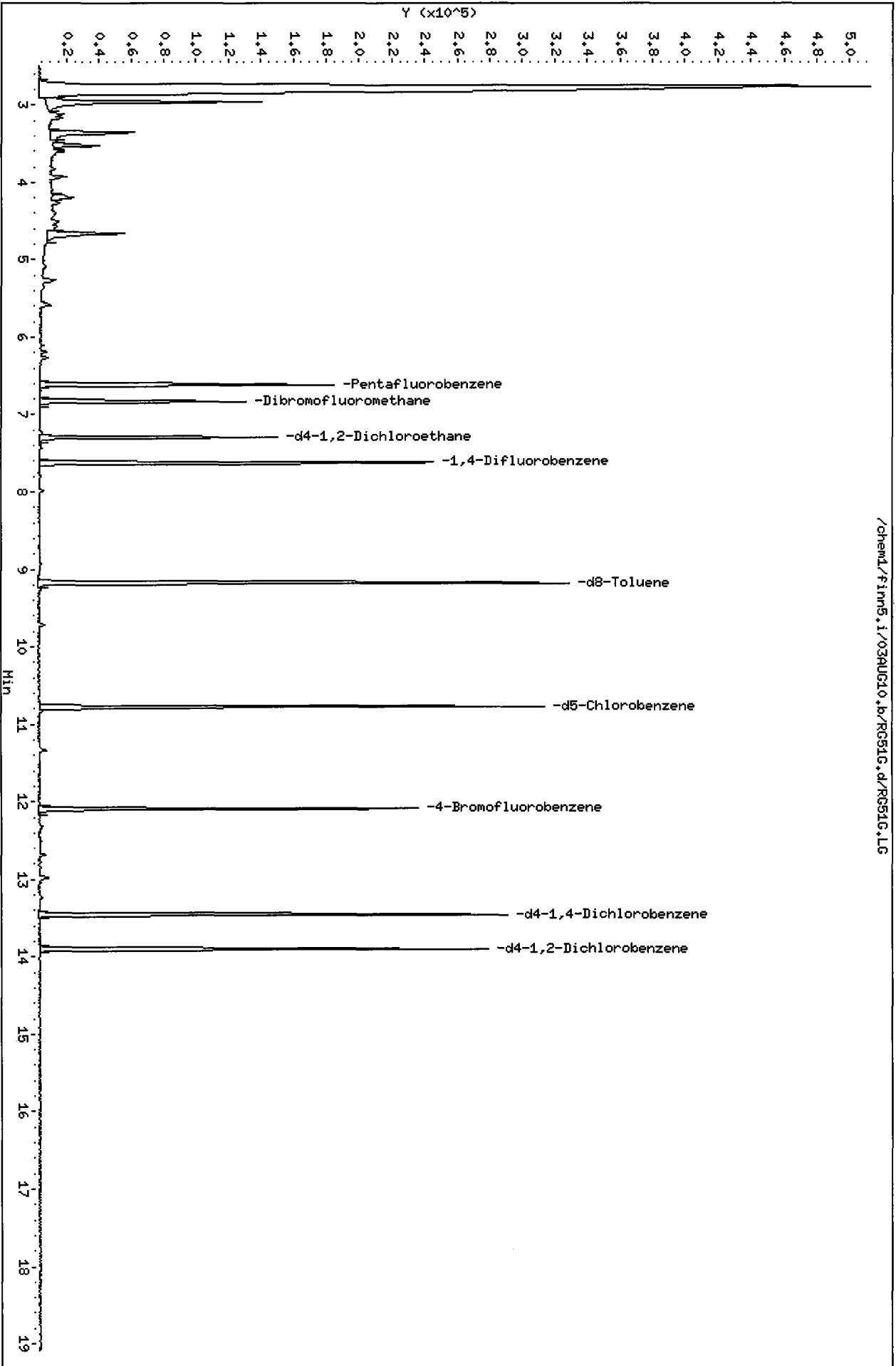
Client Name: Floyd/Snider  
Sample Matrix: SOLID  
Lab Smp Id: RG51G  
Level: LOW  
Data Type: MS DATA  
SpikeList File: all.spk  
Sublist File: voa.sub  
Method File: /chem1/finn5.i/03AUG10.b/s8260b.m  
Misc Info: 10-18189

Client SDG: RG51  
Fraction: VOA  
Client Smp ID: PSB12-4-6-072810  
Operator: PB  
SampleType: SAMPLE  
Quant Type: ISTD

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
\$ 25 Dibromofluorometha	50.000	58.551	117.10	30-160
\$ 31 d4-1,2-Dichloroeth	50.000	68.409	136.82	75-152
\$ 43 d8-Toluene	50.000	52.865	105.73	82-115
\$ 62 4-Bromofluorobenze	50.000	47.856	95.71	64-120
\$ 79 d4-1,2-Dichloroben	50.000	51.925	103.85	80-120

Data File: /chem1/finn5.i/03AUG10.b/RG51G.d  
Date : 04-AUG-2010 01:08  
Client ID: PSB12-4-6-072810  
Sample Info: RG51G,5,9,849,0  
Column phase: Rtx502.2

Instrument: finn5.i  
Operator: PB  
Column diameter: 0.18



/chem1/finn5.i/03AUG10.b/RG51G.d/RG51G.LG

Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/03AUG10.b/RG51H.d  
 Lab Smp Id: RG51H Client Smp ID: PSB12-TB  
 Inj Date : 04-AUG-2010 01:34  
 Operator : PB Inst ID: finn5.i  
 Smp Info : RG51H,5,5,0  
 Misc Info : 10-18190  
 Comment :  
 Method : /chem1/finn5.i/03AUG10.b/s8260b.m  
 Meth Date : 05-Aug-2010 16:40 patrickb Quant Type: ISTD  
 Cal Date : 23-JUL-2010 17:18 Cal File: 2000723.d  
 Als bottle: 1  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: voa.sub  
 Target Version: 3.50  
 Processing Host: cserv3

*h 8/5/10*

Concentration Formula: Amt \* DF \* Pv / Sa \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	5.00000	PurgeVolume (mL)
Sa	0.00000	SampleAmount (mL)

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/Kg)	FINAL (ug/L)
1 Dichlorodifluoromethane	85						
2 Chloromethane	50						
3 Vinyl Chloride	62						
4 Bromomethane	94						
5 Chloroethane	64						
6 Trichlorofluoromethane	101						
7 Acrolein	56						
8 112Trichloro122Trifluoroethane	101						
9 Acetone	43	4.673	4.683	(0.706)	3665	6.73277	6.733 <i>ny</i>
10 1,1-Dichloroethene	96						
11 Bromoethane	108						
12 Iodomethane	142						
13 Methylene Chloride	84						
14 Acrylonitrile	53						
16 Methyl tert-Butyl Ether	73						

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/Kg)	FINAL ( ug/L)
=====	=====	==	=====	=====	=====	=====	=====
15 Carbon Disulfide	76				Compound Not Detected.		
17 Trans-1,2-Dichloroethene	96				Compound Not Detected.		
18 Vinyl Acetate	43				Compound Not Detected.		
19 1,1-Dichloroethane	63				Compound Not Detected.		
20 2-Butanone	43				Compound Not Detected.		
21 2,2-Dichloropropane	77				Compound Not Detected.		
22 Cis-1,2-Dichloroethene	96				Compound Not Detected.		
* 23 Pentafluorobenzene	168	6.623	6.633	(1.000)	97270	50.0000	
24 Chloroform	83				Compound Not Detected.		
26 Bromochloromethane	128				Compound Not Detected.		
\$ 25 Dibromofluoromethane	111	6.834	6.844	(1.032)	65230	56.2659	56.266 (Q)
27 1,1,1-Trichloroethane	97				Compound Not Detected.		
29 1,1-Dichloropropene	75				Compound Not Detected.		
30 Carbon Tetrachloride	117				Compound Not Detected.		
\$ 31 d4-1,2-Dichloroethane	65	7.296	7.316	(1.102)	76170	60.0449	60.045
32 1,2-Dichloroethane	62				Compound Not Detected.		
33 Benzene	78				Compound Not Detected.		
* 34 1,4-Difluorobenzene	114	7.628	7.638	(1.000)	150952	50.0000	
35 Trichloroethene	95				Compound Not Detected.		
36 1,2-Dichloropropane	63				Compound Not Detected.		
37 Bromodichloromethane	83				Compound Not Detected.		
39 Dibromomethane	93				Compound Not Detected.		
40 2-Chloroethyl Vinyl Ether	63				Compound Not Detected.		
41 4-Methyl-2-Pentanone	58				Compound Not Detected.		
42 Cis 1,3-dichloropropene	75				Compound Not Detected.		
\$ 43 d8-Toluene	98	9.176	9.196	(1.203)	176539	53.2252	53.225
44 Toluene	92				Compound Not Detected.		
45 Trans 1,3-Dichloropropene	75				Compound Not Detected.		
46 2-Hexanone	43				Compound Not Detected.		
47 1,1,2-Trichloroethane	97				Compound Not Detected.		
48 1,3-Dichloropropane	76				Compound Not Detected.		
49 Tetrachloroethene	166				Compound Not Detected.		
50 Chlorodibromomethane	129				Compound Not Detected.		
51 1,2-Dibromoethane	107				Compound Not Detected.		
* 52 d5-Chlorobenzene	117	10.784	10.794	(1.000)	133384	50.0000	
53 Chlorobenzene	112				Compound Not Detected.		
54 Ethyl Benzene	91				Compound Not Detected.		
55 1,1,1,2-Tetrachloroethane	131				Compound Not Detected.		
56 m,p-xylene	106				Compound Not Detected.		
57 o-Xylene	106				Compound Not Detected.		
58 Styrene	104				Compound Not Detected.		
59 Isopropyl Benzene	105				Compound Not Detected.		
60 Bromoform	173				Compound Not Detected.		
61 1,1,2,2-Tetrachloroethane	83				Compound Not Detected.		
\$ 62 4-Bromofluorobenzene	95	12.100	12.110	(1.122)	72603	46.5093	46.509
63 1,2,3-Trichloropropane	110				Compound Not Detected.		
65 Trans-1,4-Dichloro 2-Butene	53				Compound Not Detected.		

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/Kg)	FINAL ( ug/L)
66 N-Propyl Benzene	91						
67 Bromobenzene	156						
68 1,3,5-Trimethyl Benzene	105						
69 2-Chloro Toluene	91						
70 4-Chloro Toluene	91						
71 T-Butyl Benzene	119						
72 1,2,4-Trimethylbenzene	105						
73 S-Butyl Benzene	105						
74 4-Isopropyl Toluene	119						
75 1,3-Dichlorobenzene	146						
* 76 d4-1,4-Dichlorobenzene	152	13.457	13.467	(1.000)	64254	50.0000	
77 1,4-Dichlorobenzene	146						
78 N-Butyl Benzene	91						
\$ 79 d4-1,2-Dichlorobenzene	152	13.909	13.919	(1.034)	60485	51.7525	51.752
80 1,2-Dichlorobenzene	146						
81 1,2-Dibromo 3-Chloropropane	75						
82 1,2,4-Trichlorobenzene	180						
83 Hexachloro 1,3-Butadiene	225						
84 Naphthalene	128						
85 1,2,3-Trichlorobenzene	180						

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS  
AREA AND RT SUMMARY

Instrument ID: finn5.i  
Lab File ID: RG51H.d  
Lab Smp Id: RG51H  
Analysis Type: VOA  
Quant Type: ISTD  
Operator: PB  
Method File: /chem1/finn5.i/03AUG10.b/s8260b.m  
Misc Info: 10-18190

Calibration Date: 03-AUG-2010  
Calibration Time: 17:32  
Client Smp ID: PSB12-TB  
Level: LOW  
Sample Type: Water

Test Mode:

Use Initial Calibration Level 5.  
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
23 Pentafluorobenzen	131115	65558	262230	97270	-25.81
34 1,4-Difluorobenze	191559	95780	383118	150952	-21.20
52 d5-Chlorobenzene	161199	80600	322398	133384	-17.26
76 d4-1,4-Dichlorobe	88279	44140	176558	64254	-27.21

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
23 Pentafluorobenzen	6.63	6.13	7.13	6.62	-0.15
34 1,4-Difluorobenze	7.64	7.14	8.14	7.63	-0.13
52 d5-Chlorobenzene	10.79	10.29	11.29	10.78	-0.09
76 d4-1,4-Dichlorobe	13.47	12.97	13.97	13.46	-0.07

AREA UPPER LIMIT = +100% of internal standard area.  
AREA LOWER LIMIT = - 50% of internal standard area.  
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



Analytical Resources, Inc.

RECOVERY REPORT

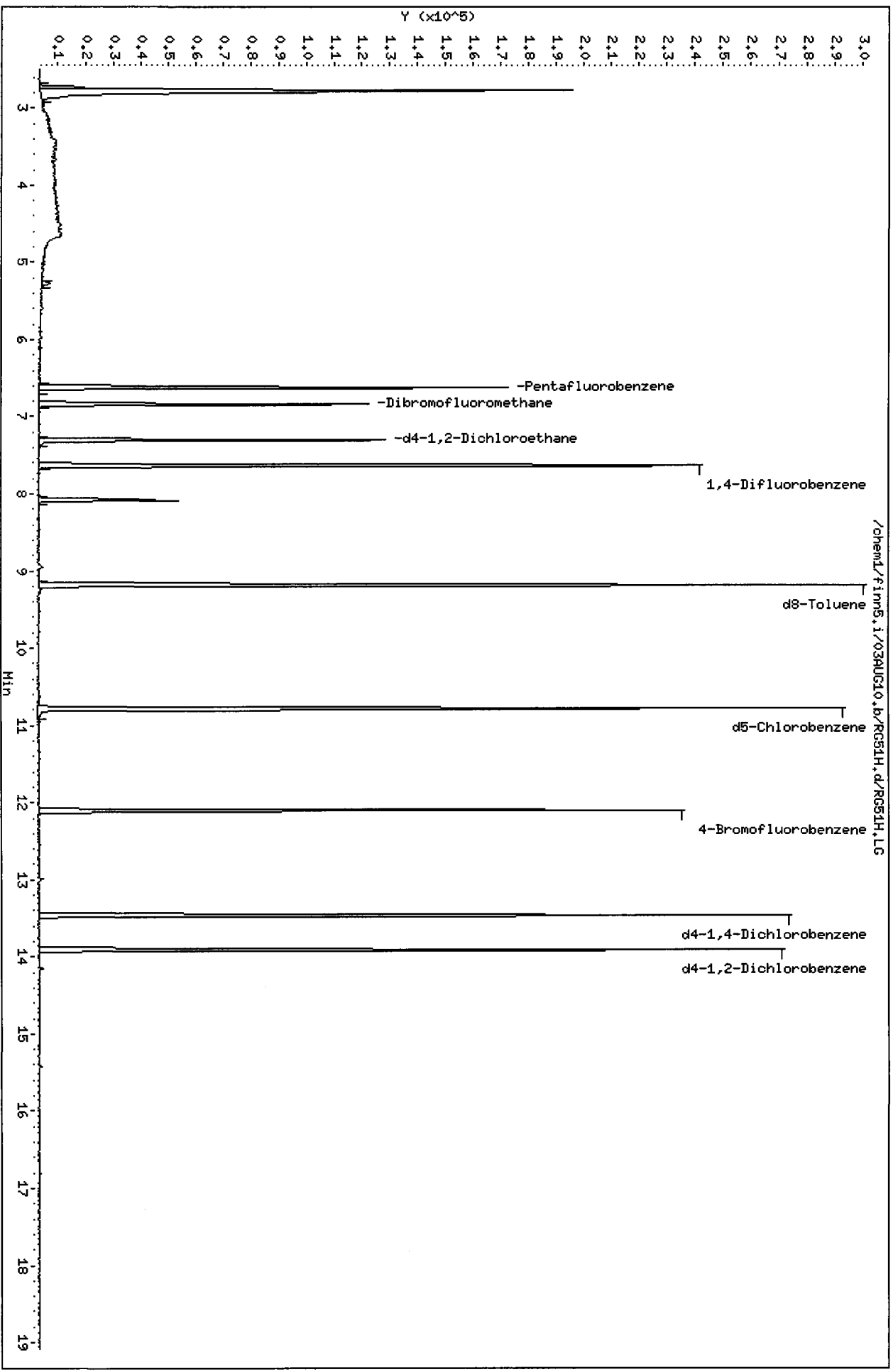
Client Name: Floyd/Snider  
Sample Matrix: LIQUID  
Lab Smp Id: RG51H  
Level: LOW  
Data Type: MS DATA  
SpikeList File: all.spk  
Sublist File: voa.sub  
Method File: /chem1/finn5.i/03AUG10.b/s8260b.m  
Misc Info: 10-18190

Client SDG: RG51  
Fraction: VOA  
Client Smp ID: PSB12-TB  
Operator: PB  
SampleType: SAMPLE  
Quant Type: ISTD

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
\$ 25 Dibromofluorometha	50.000	56.266	112.53	30-160
\$ 31 d4-1,2-Dichloroeth	50.000	60.045	120.09	75-152
\$ 43 d8-Toluene	50.000	53.225	106.45	82-115
\$ 62 4-Bromofluorobenze	50.000	46.509	93.02	71-120
\$ 79 d4-1,2-Dichloroben	50.000	51.752	103.50	80-121

Data File: /chem1/finn5.1/03AUG10.b/RGS1H.d  
Date: 04-AUG-2010 01:34  
Client ID: PSB12-TB  
Sample Info: RGS1H,5,5,0  
Column phase: RtX502.2

Instrument: finn5.1  
Operator: PB  
Column diameter: 0.18



Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/03AUG10.b/RG51FMS.d  
 Lab Smp Id: RG51FMS Client Smp ID: PSB12-14-17-072 MS  
 Inj Date : 04-AUG-2010 03:46  
 Operator : PB Inst ID: finn5.i  
 Smp Info : RG51FMS,5,9.56,0  
 Misc Info : 10-18188  
 Comment :  
 Method : /chem1/finn5.i/03AUG10.b/s8260b.m  
 Meth Date : 05-Aug-2010 16:40 patrickb Quant Type: ISTD  
 Cal Date : 23-JUL-2010 17:18 Cal File: 2000723.d  
 Als bottle: 1 QC Sample: MS  
 Dil Factor: 1.00000 Compound Sublist: voa.sub  
 Integrator: HP RTE  
 Target Version: 3.50  
 Processing Host: cserv3

*Handwritten signature*

Concentration Formula:  $Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria$

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	5.00000	Purge Volume
Sa	9.56000	Sample Amount
M	0.00000	Moisture (%)

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1 Dichlorodifluoromethane	85	3.005	3.015	(0.454)	65020	41.2311	21.564	
2 Chloromethane	50	3.316	3.316	(0.501)	164426	38.7535	20.268	
3 Vinyl Chloride	62	3.417	3.427	(0.516)	152411	45.4255	23.758	
4 Bromomethane	94	3.909	3.919	(0.590)	104610	57.4113	30.027	
5 Chloroethane	64	3.980	3.990	(0.601)	100165	45.7144	23.909	
6 Trichlorofluoromethane	101	4.241	4.251	(0.640)	125939	38.8372	20.312	
7 Acrolein	56	4.623	4.633	(0.698)	39501	97.6533	51.074 (R)	
8 112Trichloro122Trifluoroethane	101	4.643	4.643	(0.701)	103942	40.9428	21.414	
9 Acetone	43	4.683	4.683	(0.707)	188023	276.265	144.49	
10 1,1-Dichloroethene	96	4.834	4.844	(0.730)	96668	41.9615	21.946	
11 Bromoethane	108	5.055	5.065	(0.763)	60500	35.4628	18.547 (R)	
12 Iodomethane	142	5.156	5.166	(0.778)	78549	28.8380	15.083 (R)	
13 Methylene Chloride	84	5.276	5.276	(0.797)	107751	41.5388	21.725	
14 Acrylonitrile	53	5.357	5.357	(0.809)	28916	48.1213	25.168 (Q)	

Compounds	QUANT SIG				RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT		ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
16 Methyl tert-Butyl Ether	73	5.397	5.397	(0.815)	148200	41.8327	21.879 (Q)
15 Carbon Disulfide	76	5.377	5.387	(0.812)	261045	36.5356	19.109
17 Trans-1,2-Dichloroethene	96	5.558	5.568	(0.839)	82158	41.8475	21.887
18 Vinyl Acetate	43	5.879	5.889	(0.888)	115963	33.7244	17.638
19 1,1-Dichloroethane	63	5.940	5.940	(0.897)	154381	42.7441	22.356
20 2-Butanone	43	6.281	6.281	(0.948)	220066	287.366	150.30
21 2,2-Dichloropropane	77	6.462	6.462	(0.976)	75452	34.1404	17.856 (R)
22 Cis-1,2-Dichloroethene	96	6.492	6.502	(0.980)	73343	42.3857	22.168 (Q)
* 23 Pentafluorobenzene	168	6.623	6.633	(1.000)	121614	50.0000	
24 Chloroform	83	6.643	6.653	(1.003)	120955	41.2290	21.563
26 Bromochloromethane	128	6.804	6.814	(1.027)	28477	34.6627	18.129 (R)
\$ 25 Dibromofluoromethane	111	6.844	6.844	(1.033)	78853	54.4015	28.453 (Q)
27 1,1,1-Trichloroethane	97	7.035	7.035	(1.062)	82068	35.9664	18.811 (R)
29 1,1-Dichloropropene	75	7.176	7.186	(0.939)	90622	35.8903	18.771 (R)
30 Carbon Tetrachloride	117	7.296	7.296	(0.955)	73859	33.6383	17.593 (R)
\$ 31 d4-1,2-Dichloroethane	65	7.306	7.316	(1.103)	94557	59.6185	31.181
32 1,2-Dichloroethane	62	7.397	7.397	(0.968)	91699	41.3690	21.636
33 Benzene	78	7.447	7.447	(0.975)	244007	39.9641	20.902 (R)
* 34 1,4-Difluorobenzene	114	7.638	7.638	(1.000)	185937	50.0000	
35 Trichloroethene	95	8.010	8.010	(1.049)	61500	34.3792	17.981 (R)
36 1,2-Dichloropropane	63	8.171	8.171	(1.070)	72545	37.6921	19.713 (R)
37 Bromodichloromethane	83	8.402	8.412	(1.100)	76743	37.2940	19.505 (R)
39 Dibromomethane	93	8.472	8.482	(1.109)	39597	41.4449	21.676
40 2-Chloroethyl Vinyl Ether	63	8.653	8.623	(1.133)	358	0.53113	0.2778 (QR)
41 4-Methyl-2-Pentanone	58	8.653	8.663	(1.133)	127419	259.232	135.58 (Q)
42 Cis 1,3-dichloropropene	75	8.904	8.914	(1.166)	86488	38.4960	20.134
\$ 43 d8-Toluene	98	9.186	9.196	(1.203)	208903	51.1322	26.743
44 Toluene	92	9.266	9.276	(1.213)	121500	33.5397	17.542 (R)
45 Trans 1,3-Dichloropropene	75	9.397	9.407	(1.230)	67539	35.7643	18.705
46 2-Hexanone	43	9.527	9.537	(0.884)	300058	232.734	121.72
47 1,1,2-Trichloroethane	97	9.578	9.588	(1.254)	46715	41.4223	21.664
48 1,3-Dichloropropane	76	9.839	9.849	(0.912)	88109	39.6918	20.759 (R)
49 Tetrachloroethene	166	9.960	9.960	(0.924)	45634	26.0427	13.621 (R)
50 Chlorodibromomethane	129	10.171	10.171	(0.943)	53715	35.9701	18.813
51 1,2-Dibromoethane	107	10.392	10.392	(1.361)	47637	39.4350	20.625
* 52 d5-Chlorobenzene	117	10.784	10.794	(1.000)	157720	50.0000	
53 Chlorobenzene	112	10.834	10.834	(1.005)	106367	28.7532	15.038 (R)
54 Ethyl Benzene	91	10.864	10.864	(1.007)	189531	30.2969	15.846 (R)
55 1,1,1,2-Tetrachloroethane	131	10.854	10.864	(1.007)	40556	28.6449	14.982 (R)
56 m,p-xylene	106	10.944	10.944	(1.015)	137761	60.2499	31.511 (R)
57 o-Xylene	106	11.427	11.437	(1.060)	67909	28.5768	14.946 (R)
58 Styrene	104	11.457	11.467	(1.062)	105230	28.6393	14.979 (R)
59 Isopropyl Benzene	105	11.809	11.819	(0.877)	150154	26.1432	13.673 (R)
60 Bromoform	173	11.869	11.879	(0.881)	32130	34.7931	18.197
61 1,1,2,2-Tetrachloroethane	83	11.990	11.990	(0.890)	60386	36.3920	19.033 (R)
\$ 62 4-Bromofluorobenzene	95	12.110	12.110	(1.123)	91896	49.7850	26.038
63 1,2,3-Trichloropropane	110	12.160	12.160	(0.903)	12778	38.8712	20.330 (Q)

Compounds	QUANT SIG				RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT		ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
65 Trans-1,4-Dichloro 2-Butene	53	12.211	12.211	(0.907)	20130	39.4712	20.644
66 N-Propyl Benzene	91	12.261	12.271	(0.910)	168427	22.7161	11.881 (R)
67 Bromobenzene	156	12.351	12.361	(0.917)	39503	24.6719	12.904 (R)
68 1,3,5-Trimethyl Benzene	105	12.432	12.442	(0.923)	104783	22.4746	11.754 (R)
69 2-Chloro Toluene	91	12.492	12.502	(0.928)	122136	25.0700	13.112 (R)
70 4-Chloro Toluene	91	12.542	12.542	(0.931)	107069	22.9276	11.991 (R)
71 T-Butyl Benzene	119	12.844	12.854	(0.954)	85253	21.3741	11.179 (R)
72 1,2,4-Trimethylbenzene	105	12.894	12.904	(0.957)	100965	21.9981	11.505 (R)
73 S-Butyl Benzene	105	13.095	13.095	(0.972)	114519	17.4520	9.128 (R)
74 4-Isopropyl Toluene	119	13.236	13.246	(0.983)	81339	18.0651	9.448 (R)
75 1,3-Dichlorobenzene	146	13.387	13.397	(0.994)	53618	19.6010	10.252 (R)
* 76 d4-1,4-Dichlorobenzene	152	13.467	13.467	(1.000)	85323	50.0000	
77 1,4-Dichlorobenzene	146	13.507	13.507	(1.003)	53601	19.5817	10.241 (R)
78 N-Butyl Benzene	91	13.718	13.718	(1.019)	72440	14.8989	7.792 (R)
\$ 79 d4-1,2-Dichlorobenzene	152	13.909	13.919	(1.033)	80876	52.1119	27.255
80 1,2-Dichlorobenzene	146	13.939	13.949	(1.035)	50726	19.5117	10.205 (R)
81 1,2-Dibromo 3-Chloropropane	75	14.844	14.854	(1.102)	9127	31.7877	16.625
82 1,2,4-Trichlorobenzene	180	15.889	15.899	(1.180)	13471	8.51485	4.453 (R)
83 Hexachloro 1,3-Butadiene	225	16.050	16.060	(1.192)	7643	7.17293	3.752 (R)
84 Naphthalene	128	16.221	16.231	(1.204)	29718	10.3564	5.416 (R)
85 1,2,3-Trichlorobenzene	180	16.512	16.522	(1.226)	11586	7.65999	4.006 (R)

QC Flag Legend

Q - Qualifier signal failed the ratio test.  
R - Spike/Surrogate failed recovery limits.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS  
 AREA AND RT SUMMARY

Instrument ID: finn5.i	Calibration Date: 03-AUG-2010
Lab File ID: RG51FMS.d	Calibration Time: 17:32
Lab Smp Id: RG51FMS	Client Smp ID: PSB12-14-17-072 MS
Analysis Type: VOA	Level: LOW
Quant Type: ISTD	Sample Type: Soil
Operator: PB	
Method File: /chem1/finn5.i/03AUG10.b/s8260b.m	
Misc Info: 10-18188	

Test Mode:

Use Initial Calibration Level 5.  
 If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
23 Pentafluorobenzen	131115	65558	262230	121614	-7.25
34 1,4-Difluorobenze	191559	95780	383118	185937	-2.93
52 d5-Chlorobenzene	161199	80600	322398	157720	-2.16
76 d4-1,4-Dichlorobe	88279	44140	176558	85323	-3.35

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
23 Pentafluorobenzen	6.63	6.13	7.13	6.62	-0.15
34 1,4-Difluorobenze	7.64	7.14	8.14	7.64	0.00
52 d5-Chlorobenzene	10.79	10.29	11.29	10.78	-0.09
76 d4-1,4-Dichlorobe	13.47	12.97	13.97	13.47	0.00

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = - 50% of internal standard area.  
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd/Snider  
 Sample Matrix: SOLID  
 Lab Smp Id: RG51FMS  
 Level: LOW  
 Data Type: MS DATA  
 SpikeList File: all.spk  
 Sublist File: voa.sub  
 Method File: /chem1/finn5.i/03AUG10.b/s8260b.m  
 Misc Info: 10-18188

Client SDG: RG51  
 Fraction: VOA  
 Client Smp ID: PSB12-14-17-072 MS  
 Operator: PB  
 SampleType: MS  
 Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
1 Dichlorodifluorome	26.151	21.564	82.46	53-148
2 Chloromethane	26.151	20.268	77.51	64-125
3 Vinyl Chloride	26.151	23.758	90.85	63-137
4 Bromomethane	26.151	30.027	114.82	57-136
5 Chloroethane	26.151	23.909	91.43	64-131
6 Trichlorofluoromet	26.151	20.312	77.67	69-132
7 Acrolein	130.75	51.074	39.06*	54-137
8 112Trichloro122Tri	26.151	21.414	81.89	74-130
9 Acetone	130.75	144.49	110.51	60-131
10 1,1-Dichloroethene	26.151	21.946	83.92	75-126
11 Bromoethane	26.151	18.547	70.93*	76-126
12 Iodomethane	26.151	15.083	57.68*	65-139
13 Methylene Chloride	26.151	21.725	83.08	70-123
15 Carbon Disulfide	26.151	19.109	73.07	71-129
14 Acrylonitrile	26.151	25.168	96.24	67-125
16 Methyl tert-Butyl	26.151	21.879	83.67	70-120
17 Trans-1,2-Dichloro	26.151	21.887	83.69	80-120
18 Vinyl Acetate	26.151	17.638	67.45	60-136
19 1,1-Dichloroethane	26.151	22.356	85.49	80-120
20 2-Butanone	130.75	150.30	114.95	70-120
21 2,2-Dichloropropan	26.151	17.856	68.28*	74-123
22 Cis-1,2-Dichloroet	26.151	22.168	84.77	80-120
24 Chloroform	26.151	21.563	82.46	80-120
26 Bromochloromethane	26.151	18.129	69.33*	80-120
27 1,1,1-Trichloroeth	26.151	18.811	71.93*	77-121
29 1,1-Dichloropropen	26.151	18.771	71.78*	80-120
30 Carbon Tetrachlori	26.151	17.593	67.28*	77-122
32 1,2-Dichloroethane	26.151	21.636	82.74	76-120
33 Benzene	26.151	20.902	79.93*	80-120
35 Trichloroethene	26.151	17.981	68.76*	80-120
36 1,2-Dichloropropan	26.151	19.713	75.38*	80-120
37 Bromodichlorometha	26.151	19.505	74.59*	77-121
39 Dibromomethane	26.151	21.676	82.89	80-120

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
40 2-Chloroethyl Viny	26.151	0.2778	1.06*	10-191
41 4-Methyl-2-Pentano	130.75	135.58	103.69	67-120
42 Cis 1,3-dichloropr	26.151	20.134	76.99	74-120
44 Toluene	26.151	17.542	67.08*	80-120
45 Trans 1,3-Dichloro	26.151	18.705	71.53	65-120
46 2-Hexanone	130.75	121.72	93.09	65-130
47 1,1,2-Trichloroeth	26.151	21.664	82.84	80-120
48 1,3-Dichloropropan	26.151	20.759	79.38*	80-120
49 Tetrachloroethene	26.151	13.621	52.09*	80-121
50 Chlorodibromometha	26.151	18.813	71.94	64-120
51 1,2-Dibromoethane	26.151	20.625	78.87	75-120
53 Chlorobenzene	26.151	15.038	57.51*	80-120
55 1,1,1,2-Tetrachlor	26.151	14.982	57.29*	69-121
54 Ethyl Benzene	26.151	15.846	60.59*	80-127
56 m,p-xylene	52.301	31.511	60.25*	80-125
57 o-Xylene	26.151	14.946	57.15*	78-120
58 Styrene	26.151	14.979	57.28*	80-123
59 Isopropyl Benzene	26.151	13.673	52.29*	80-127
60 Bromoform	26.151	18.197	69.59	60-120
61 1,1,2,2-Tetrachlor	26.151	19.033	72.78*	74-120
63 1,2,3-Trichloropro	26.151	20.330	77.74	72-121
65 Trans-1,4-Dichloro	26.151	20.644	78.94	65-126
66 N-Propyl Benzene	26.151	11.881	45.43*	80-132
67 Bromobenzene	26.151	12.904	49.34*	80-120
68 1,3,5-Trimethyl Be	26.151	11.754	44.95*	80-125
69 2-Chloro Toluene	26.151	13.112	50.14*	80-125
70 4-Chloro Toluene	26.151	11.991	45.86*	80-127
71 T-Butyl Benzene	26.151	11.179	42.75*	87-122
72 1,2,4-Trimethylben	26.151	11.505	44.00*	80-126
73 S-Butyl Benzene	26.151	9.128	34.90*	80-134
74 4-Isopropyl Toluen	26.151	9.448	36.13*	80-131
75 1,3-Dichlorobenzen	26.151	10.252	39.20*	80-120
77 1,4-Dichlorobenzen	26.151	10.241	39.16*	80-120
78 N-Butyl Benzene	26.151	7.792	29.80*	80-138
80 1,2-Dichlorobenzen	26.151	10.205	39.02*	80-120
81 1,2-Dibromo 3-Chlo	26.151	16.625	63.58	59-120
82 1,2,4-Trichloroben	26.151	4.453	17.03*	78-130
83 Hexachloro 1,3-But	26.151	3.752	14.35*	76-129
84 Naphthalene	26.151	5.416	20.71*	66-120
85 1,2,3-Trichloroben	26.151	4.006	15.32*	73-123

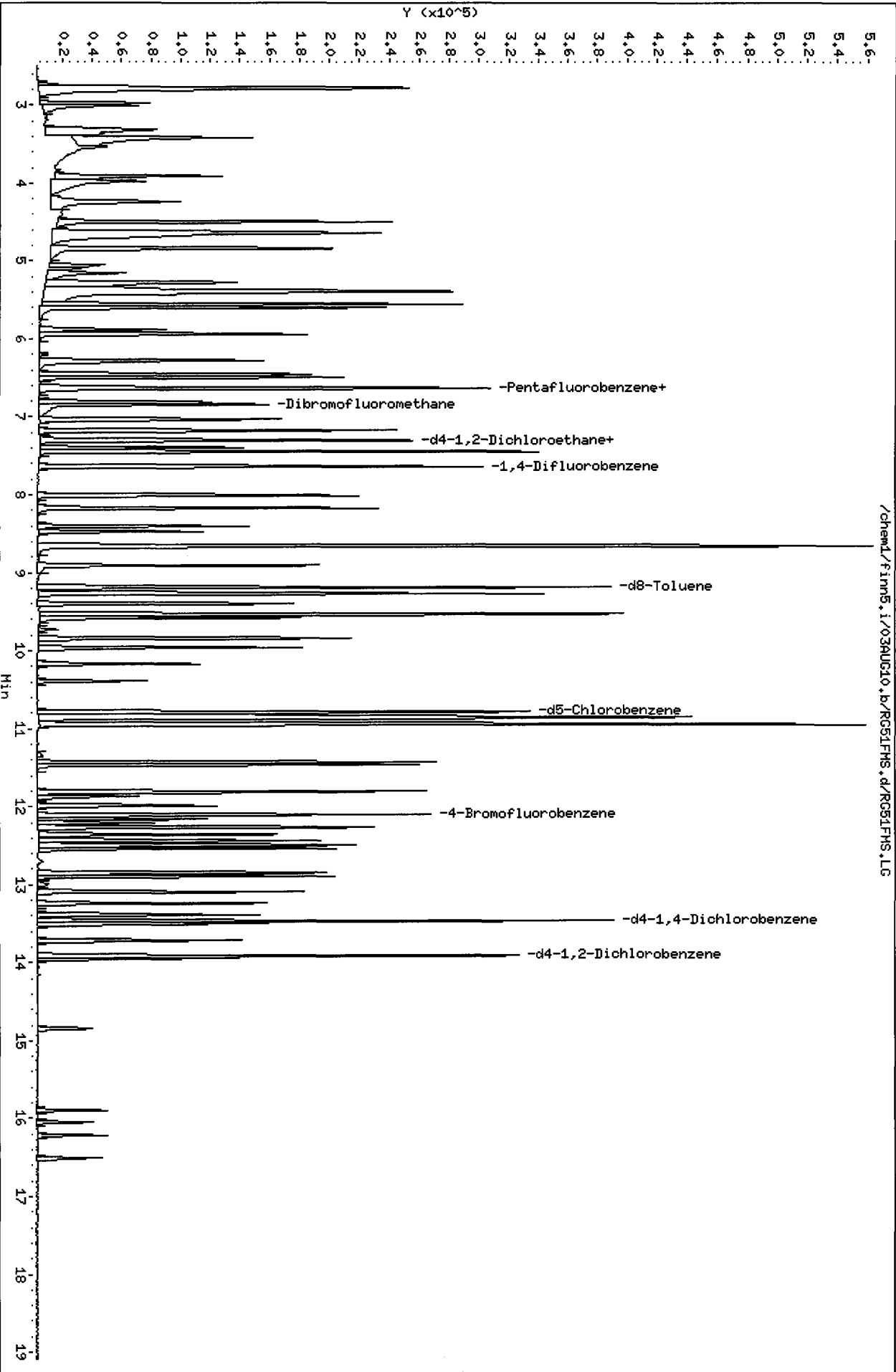
SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
\$ 25 Dibromofluorometha	50.000	54.402	108.80	30-160



SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
\$ 31 d4-1,2-Dichloroeth	50.000	59.618	119.24	75-152
\$ 43 d8-Toluene	50.000	51.132	102.26	82-115
\$ 62 4-Bromofluorobenze	50.000	49.785	99.57	64-120
\$ 79 d4-1,2-Dichloroben	50.000	52.112	104.22	80-120

Data File: /chem1/finn5.i/03AUG10.b/RG51FHS.d  
Date : 04-AUG-2010 03:46  
Client ID: PSB12-14-17-072 MS  
Sample Info: RG51FHS,5,9,56,0  
Column phase: RtX502.2

Instrument: finn5.i  
Operator: PB  
Column diameter: 0.18



Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/03AUG10.b/RG51FMSD.d  
 Lab Smp Id: RG51FMSD Client Smp ID: PSB12-14-17-072 MSD  
 Inj Date : 04-AUG-2010 04:12  
 Operator : PB Inst ID: finn5.i  
 Smp Info : RG51FMSD,5,9.65,0  
 Misc Info : 10-18188  
 Comment :  
 Method : /chem1/finn5.i/03AUG10.b/s8260b.m  
 Meth Date : 05-Aug-2010 16:40 patrickb Quant Type: ISTD  
 Cal Date : 23-JUL-2010 17:18 Cal File: 2000723.d  
 Als bottle: 1 QC Sample: MSD  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: voa.sub  
 Target Version: 3.50  
 Processing Host: cserv3

*holsko*

Concentration Formula:  $Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria$

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	5.00000	Purge Volume
Sa	9.65000	Sample Amount
M	0.00000	Moisture (%)

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1 Dichlorodifluoromethane	85	2.995	3.015	(0.453)	77938	49.4752	25.635	
2 Chloromethane	50	3.306	3.316	(0.500)	193309	45.6093	23.632	
3 Vinyl Chloride	62	3.407	3.427	(0.515)	173923	51.8921	26.887	
4 Bromomethane	94	3.899	3.919	(0.590)	122475	67.2872	34.864	
5 Chloroethane	64	3.970	3.990	(0.600)	111998	51.1691	26.512	
6 Trichlorofluoromethane	101	4.231	4.251	(0.640)	145323	44.8624	23.245 (Q)	
7 Acrolein	56	4.613	4.633	(0.698)	42255	104.573	54.183 (R)	
8 1,1,1-Trichloro-2,2,2-Trifluoroethane	101	4.623	4.643	(0.699)	139475	54.9976	28.496	
9 Acetone	43	4.673	4.683	(0.707)	242107	356.109	184.51 (R)	
10 1,1-Dichloroethene	96	4.824	4.844	(0.729)	113248	49.2108	25.498	
11 Bromoethane	108	5.045	5.065	(0.763)	69054	40.5198	20.995	
12 Iodomethane	142	5.146	5.166	(0.778)	95943	35.2613	18.270	
13 Methylene Chloride	84	5.266	5.276	(0.796)	131526	50.7581	26.300	
14 Acrylonitrile	53	5.347	5.357	(0.808)	39951	66.5560	34.485 (QR)	

Compounds	QUANT SIG		CONCENTRATIONS				
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
16 Methyl tert-Butyl Ether	73	5.387	5.397	(0.815)	188478	53.2585	27.595 (Q)
15 Carbon Disulfide	76	5.367	5.387	(0.812)	300421	42.0913	21.809
17 Trans-1,2-Dichloroethene	96	5.548	5.568	(0.839)	99470	50.7192	26.279
18 Vinyl Acetate	43	5.869	5.889	(0.888)	127447	37.1036	19.225
19 1,1-Dichloroethane	63	5.929	5.940	(0.897)	187565	51.9871	26.936
20 2-Butanone	43	6.271	6.281	(0.948)	295705	386.547	200.28 (R)
21 2,2-Dichloropropane	77	6.452	6.462	(0.976)	92754	42.0138	21.769
22 Cis-1,2-Dichloroethene	96	6.482	6.502	(0.980)	91096	52.7012	27.306 (Q)
* 23 Pentafluorobenzene	168	6.613	6.633	(1.000)	121485	50.0000	
24 Chloroform	83	6.633	6.653	(1.003)	149022	50.8499	26.347
26 Bromochloromethane	128	6.794	6.814	(1.027)	35728	43.5349	22.557
\$ 25 Dibromofluoromethane	111	6.834	6.844	(1.033)	77267	53.3639	27.650 (Q)
27 1,1,1-Trichloroethane	97	7.025	7.035	(1.062)	103678	45.4852	23.567
29 1,1-Dichloropropene	75	7.166	7.186	(0.939)	118110	47.6149	24.671
30 Carbon Tetrachloride	117	7.276	7.296	(0.954)	95748	44.3887	22.999
\$ 31 d4-1,2-Dichloroethane	65	7.296	7.316	(1.103)	88596	55.9194	28.974
32 1,2-Dichloroethane	62	7.387	7.397	(0.968)	114032	52.3660	27.133
33 Benzene	78	7.427	7.447	(0.974)	305415	50.9179	26.382
* 34 1,4-Difluorobenzene	114	7.628	7.638	(1.000)	182664	50.0000	
35 Trichloroethene	95	8.000	8.010	(1.049)	82471	46.9283	24.315
36 1,2-Dichloropropane	63	8.161	8.171	(1.070)	92304	48.8176	25.294
37 Bromodichloromethane	83	8.392	8.412	(1.100)	100004	49.4687	25.631
39 Dibromomethane	93	8.462	8.482	(1.109)	50715	54.0329	27.996
40 2-Chloroethyl Vinyl Ether	63	8.653	8.623	(1.134)	398	0.60106	0.3114 (QR)
41 4-Methyl-2-Pentanone	58	8.643	8.663	(1.133)	175037	362.491	187.82 (QR)
42 Cis 1,3-dichloropropene	75	8.894	8.914	(1.166)	113040	51.2159	26.537
\$ 43 d8-Toluene	98	9.176	9.196	(1.203)	207763	51.7643	26.821
44 Toluene	92	9.256	9.276	(1.213)	166841	46.8811	24.291
45 Trans 1,3-Dichloropropene	75	9.387	9.407	(1.231)	90814	48.9509	25.363
46 2-Hexanone	43	9.517	9.537	(0.883)	418111	329.775	170.87 (R)
47 1,1,2-Trichloroethane	97	9.568	9.588	(1.254)	62523	56.4327	29.240
48 1,3-Dichloropropane	76	9.829	9.849	(0.912)	117484	53.8185	27.885
49 Tetrachloroethene	166	9.949	9.960	(0.924)	71670	41.5917	21.550
50 Chlorodibromomethane	129	10.150	10.171	(0.942)	72397	49.2991	25.544
51 1,2-Dibromoethane	107	10.382	10.392	(1.361)	65725	55.3835	28.696
* 52 d5-Chlorobenzene	117	10.774	10.794	(1.000)	155101	50.0000	
53 Chlorobenzene	112	10.814	10.834	(1.004)	158532	43.5781	22.579
54 Ethyl Benzene	91	10.854	10.864	(1.007)	291615	47.4024	24.561
55 1,1,1,2-Tetrachloroethane	131	10.844	10.864	(1.007)	57432	41.2494	21.373
56 m,p-xylene	106	10.934	10.944	(1.015)	220812	98.2031	50.882
57 o-Xylene	106	11.417	11.437	(1.060)	108916	46.6068	24.149
58 Styrene	104	11.447	11.467	(1.062)	165559	45.8193	23.740
59 Isopropyl Benzene	105	11.799	11.819	(0.877)	275151	51.1335	26.494
60 Bromoform	173	11.859	11.879	(0.881)	47008	54.3334	28.152
61 1,1,2,2-Tetrachloroethane	83	11.980	11.990	(0.890)	90068	57.9367	30.019
\$ 62 4-Bromofluorobenzene	95	12.100	12.110	(1.123)	87859	48.4017	25.079
63 1,2,3-Trichloropropane	110	12.150	12.160	(0.903)	18650	60.5559	31.376 (R)

Compounds	QUANT SIG		CONCENTRATIONS				
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
65 Trans-1,4-Dichloro 2-Butene	53	12.201	12.211	(0.907)	30198	63.2015	32.747 (R)
66 N-Propyl Benzene	91	12.251	12.271	(0.910)	332353	47.8449	24.790
67 Bromobenzene	156	12.341	12.361	(0.917)	66409	44.2702	22.938
68 1,3,5-Trimethyl Benzene	105	12.422	12.442	(0.923)	219174	50.1768	25.998
69 2-Chloro Toluene	91	12.482	12.502	(0.928)	208080	45.5883	23.621
70 4-Chloro Toluene	91	12.532	12.542	(0.931)	220957	50.5028	26.167
71 T-Butyl Benzene	119	12.834	12.854	(0.954)	191094	51.1373	26.496
72 1,2,4-Trimethylbenzene	105	12.884	12.904	(0.957)	213507	49.6523	25.726
73 S-Butyl Benzene	105	13.085	13.095	(0.972)	290187	47.2017	24.457
74 4-Isopropyl Toluene	119	13.226	13.246	(0.983)	213945	50.7173	26.278
75 1,3-Dichlorobenzene	146	13.377	13.397	(0.994)	112161	43.7645	22.676
* 76 d4-1,4-Dichlorobenzene	152	13.457	13.467	(1.000)	79938	50.0000	
77 1,4-Dichlorobenzene	146	13.497	13.507	(1.003)	109686	42.7702	22.161
78 N-Butyl Benzene	91	13.708	13.718	(1.019)	216668	47.5646	24.645
\$ 79 d4-1,2-Dichlorobenzene	152	13.899	13.919	(1.033)	73995	50.8900	26.368
80 1,2-Dichlorobenzene	146	13.929	13.949	(1.035)	102716	42.1711	21.850
81 1,2-Dibromo 3-Chloropropane	75	14.834	14.854	(1.102)	14867	55.2672	28.636
82 1,2,4-Trichlorobenzene	180	15.879	15.899	(1.180)	40917	27.6054	14.303 (R)
83 Hexachloro 1,3-Butadiene	225	16.040	16.060	(1.192)	30078	30.1297	15.611 (R)
84 Naphthalene	128	16.211	16.231	(1.205)	80034	29.7699	15.425 (R)
85 1,2,3-Trichlorobenzene	180	16.502	16.522	(1.226)	35428	25.0008	12.954 (R)

QC Flag Legend

Q - Qualifier signal failed the ratio test.  
 R - Spike/Surrogate failed recovery limits.



Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd/Snider  
Sample Matrix: SOLID  
Lab Smp Id: RG51FMSD  
Level: LOW  
Data Type: MS DATA  
SpikeList File: all.spk  
Sublist File: voa.sub  
Method File: /chem1/finn5.i/03AUG10.b/s8260b.m  
Misc Info: 10-18188

Client SDG: RG51  
Fraction: VOA  
Client Smp ID: PSB12-14-17-072 MSD  
Operator: PB  
SampleType: MSD  
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
1 Dichlorodifluorome	25.907	25.635	98.95	53-148
2 Chloromethane	25.907	23.632	91.22	64-125
3 Vinyl Chloride	25.907	26.887	103.78	63-137
4 Bromomethane	25.907	34.864	134.57	57-136
5 Chloroethane	25.907	26.512	102.34	64-131
6 Trichlorofluoromet	25.907	23.245	89.73	69-132
7 Acrolein	129.53	54.183	41.83*	54-137
8 112Trichloro122Tri	25.907	28.496	110.00	74-130
9 Acetone	129.53	184.51	142.44*	60-131
10 1,1-Dichloroethene	25.907	25.498	98.42	75-126
11 Bromoethane	25.907	20.995	81.04	76-126
12 Iodomethane	25.907	18.270	70.52	65-139
13 Methylene Chloride	25.907	26.300	101.52	70-123
15 Carbon Disulfide	25.907	21.809	84.18	71-129
14 Acrylonitrile	25.907	34.485	133.11*	67-125
16 Methyl tert-Butyl	25.907	27.595	106.52	70-120
17 Trans-1,2-Dichloro	25.907	26.279	101.44	80-120
18 Vinyl Acetate	25.907	19.225	74.21	60-136
19 1,1-Dichloroethane	25.907	26.936	103.97	80-120
20 2-Butanone	129.53	200.28	154.62*	70-120
21 2,2-Dichloropropan	25.907	21.769	84.03	74-123
22 Cis-1,2-Dichloroet	25.907	27.306	105.40	80-120
24 Chloroform	25.907	26.347	101.70	80-120
26 Bromochloromethane	25.907	22.557	87.07	80-120
27 1,1,1-Trichloroeth	25.907	23.567	90.97	77-121
29 1,1-Dichloropropen	25.907	24.671	95.23	80-120
30 Carbon Tetrachlori	25.907	22.999	88.78	77-122
32 1,2-Dichloroethane	25.907	27.133	104.73	76-120
33 Benzene	25.907	26.382	101.84	80-120
35 Trichloroethene	25.907	24.315	93.86	80-120
36 1,2-Dichloropropan	25.907	25.294	97.64	80-120
37 Bromodichlorometha	25.907	25.631	98.94	77-121
39 Dibromomethane	25.907	27.996	108.07	80-120

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
40 2-Chloroethyl Viny	25.907	0.3114	1.20*	10-191
41 4-Methyl-2-Pentano	129.53	187.82	145.00*	67-120
42 Cis 1,3-dichloropr	25.907	26.537	102.43	74-120
44 Toluene	25.907	24.291	93.76	80-120
45 Trans 1,3-Dichloro	25.907	25.363	97.90	65-120
46 2-Hexanone	129.53	170.87	131.91*	65-130
47 1,1,2-Trichloroeth	25.907	29.240	112.87	80-120
48 1,3-Dichloropropan	25.907	27.885	107.64	80-120
49 Tetrachloroethene	25.907	21.550	83.18	80-121
50 Chlorodibromometha	25.907	25.544	98.60	64-120
51 1,2-Dibromoethane	25.907	28.696	110.77	75-120
53 Chlorobenzene	25.907	22.579	87.16	80-120
55 1,1,1,2-Tetrachlor	25.907	21.373	82.50	69-121
54 Ethyl Benzene	25.907	24.561	94.80	80-127
56 m,p-xylene	51.813	50.882	98.20	80-125
57 o-Xylene	25.907	24.149	93.21	78-120
58 Styrene	25.907	23.740	91.64	80-123
59 Isopropyl Benzene	25.907	26.494	102.27	80-127
60 Bromoform	25.907	28.152	108.67	60-120
61 1,1,2,2-Tetrachlor	25.907	30.019	115.87	74-120
63 1,2,3-Trichloropro	25.907	31.376	121.11*	72-121
65 Trans-1,4-Dichloro	25.907	32.747	126.40*	65-126
66 N-Propyl Benzene	25.907	24.790	95.69	80-132
67 Bromobenzene	25.907	22.938	88.54	80-120
68 1,3,5-Trimethyl Be	25.907	25.998	100.35	80-125
69 2-Chloro Toluene	25.907	23.621	91.18	80-125
70 4-Chloro Toluene	25.907	26.167	101.01	80-127
71 T-Butyl Benzene	25.907	26.496	102.27	87-122
72 1,2,4-Trimethylben	25.907	25.726	99.30	80-126
73 S-Butyl Benzene	25.907	24.457	94.40	80-134
74 4-Isopropyl Toluen	25.907	26.278	101.43	80-131
75 1,3-Dichlorobenzen	25.907	22.676	87.53	80-120
77 1,4-Dichlorobenzen	25.907	22.161	85.54	80-120
78 N-Butyl Benzene	25.907	24.645	95.13	80-138
80 1,2-Dichlorobenzen	25.907	21.850	84.34	80-120
81 1,2-Dibromo 3-Chlo	25.907	28.636	110.53	59-120
82 1,2,4-Trichloroben	25.907	14.303	55.21*	78-130
83 Hexachloro 1,3-But	25.907	15.611	60.26*	76-129
84 Naphthalene	25.907	15.425	59.54*	66-120
85 1,2,3-Trichloroben	25.907	12.954	50.00*	73-123

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
\$ 25 Dibromofluorometha	50.000	53.364	106.73	30-160

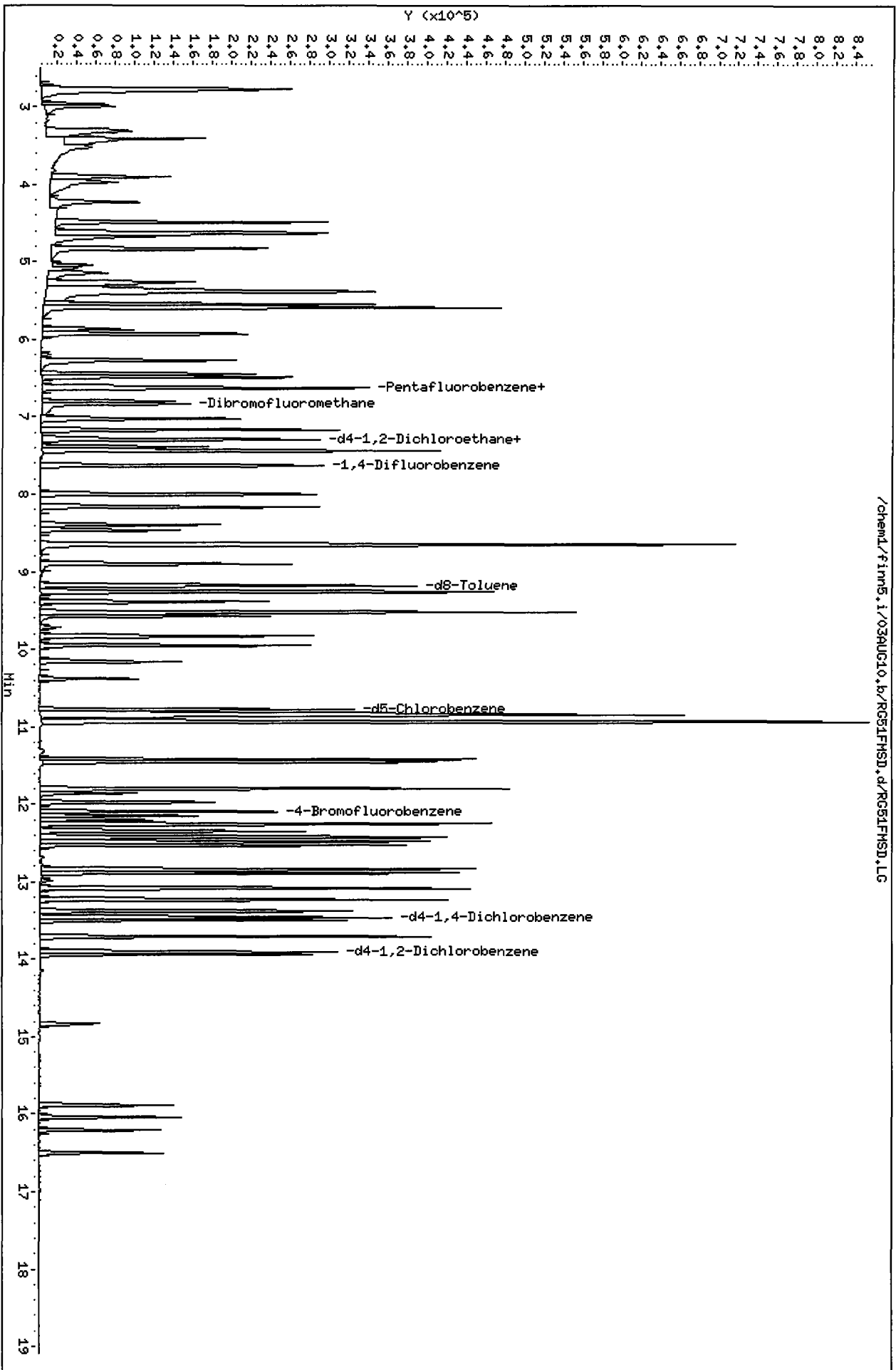


SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
\$ 31 d4-1,2-Dichloroeth	50.000	55.919	111.84	75-152
\$ 43 d8-Toluene	50.000	51.764	103.53	82-115
\$ 62 4-Bromofluorobenze	50.000	48.402	96.80	64-120
\$ 79 d4-1,2-Dichloroben	50.000	50.890	101.78	80-120

Data File: /chem1/finn5.i/03AUG10.b/RGS1FHSD.d  
Date : 04-AUG-2010 04:12  
Client ID: PSB12-14-17-072 HSD  
Sample Info: RGS1FHSD.5.9.65.0

Column phase: RtxB02.2

Instrument: finn5.i  
Operator: PB  
Column diameter: 0.18



/chem1/finn5.i/03AUG10.b/RGS1FHSD.d/RGS1FHSD.LG

**Semivolatile PAH Raw Data  
Extraction Bench Sheets and Notes**

**ARI Job ID: RG51**



Analytical Resources,  
Incorporated  
Analytical Chemists and  
Consultants

Organic Extractions Benchsheet

(8270) PNA Soil/ Sediment  
Sonication (3550B) (SOP # 3304S)

P500A (20 ppb)  
In-house (67ppb)

Batch set up by: JH

Preparation Test PNA # 1

ARI Job No(s) RG51, RG54, RGG6

Bottle #	Extraction Requirements	Verify Client ID	Volume Extracted (dry wt)	Sonic Horn ID	KD	TurboVap (1 2 3)	(Opt) SilicaGel Clean (1:1) (Y/N)	TurboVap (1 2 3)	Final Effective Volume	Volume to Lab	Comments	
	RG51 MBS	Date 08/19/10	7.50g	12					0.5mL	0.5mL	16g Actual	
	↓ SBS	↓	↓	11	↓				↓	↓	↓	
	SBS Dup.											
2	RG51 A	checked	28.46	10								
2	B		27.03	9								
2	C		27.02	8								
1	E		27.02	7								
2	F		27.36	6								
2	Fms		27.12	5								
2	↓ Fmsd		27.08	4								
8	RG54 A		28.84	3							See Notes	
8	B		28.12	2							↓	
8	C		28.64	1								
8	E		29.33	12							See Notes	
8	F		29.15	11								
8	H		27.00	10							See Notes	
8	I		27.60	9								
8	J		27.25	8								
8	↓ L		28.68	7								
6	RGG6 A		27.29	6							See Notes	
6	B		27.20	5							↓	
6	C		28.16	4								
6	D		28.63	3								
6	E		28.20	2								
6	↓ F		28.02	1								
Analyst/Date		AR 08/10/10		PP/DAS		mm 8/11/10						

Standard	Standard ID	Volume	Expiration Date	Analyst	Witness
BAN Surrogate	A	125µL	6/2/11	AR	AR 08/10/10
8270 PNA Spike	20	125µL	6/19/14	AR	AR 08/10/10

Extraction Time: 11:35 Balance ID: 24

- SPECIAL INSTRUCTIONS: 1. Weigh into 100mL beakers. 2. Extract 2X with 1:1 DCM/Acetone. Plus 1 X DCM only. 3. Collect into 150mL beaker with 5-10g sodium sulfate in the bottom + small funnel with pre-rinsed neutral glasswool. NO SODIUM SULFATE. 4. KD (small drying column) to 8mL at 85-90°. Exchange (2 X with 10mL) to Hexane at 100°. 6. TurboVap. 7. Silica Clean-up-Root Beer Color? (All or none) Y/N. 8. TurboVap (if Silica Clean). 9. Vial in DCM. A. Need Total Solids Y/N B. Archival



**Semivolatile PAH Raw Data  
Initial Calibration**

**ARI Job ID: RG51**



**GC/MS SVOA Analyst Notes / Corrective Action Log**

ARI Project ID:          Client ID:         

ARI SOP: 801S(SIM-PNA) 802S(Butyl Tins) 804S(SVOA-8270D) 805S(op-Pest)

Parameter(s): 8270

Instrument: NT-2 NT-4 NT-6 NT-8 NT11

Curve Date: 7/23/10 Analysis Start Date: 7/23/10

DFTPP Tune Meets Criteria?	<u>YES</u> / NO	Internal Standard Meets Criteria?	<u>YES</u> / NO
DDT Breakdown <20%?	<u>YES</u> / NO / NA	Method Blank In Control?	YES / NO / <u>NA</u>
Peak Tailing Factor ≤2?	<u>YES</u> / NO / NA	LCS / LCSD Recovery In Control?	<u>YES</u> / NO
ICal acceptable?	<u>YES</u> / NO	CCal acceptable?	YES / NO / <u>NA</u>
Q flag applied?	YES / NO	Q flag applied?	YES / NO
Surrogate Recovery in Control?	<u>YES</u> / NO	Special Analysis Criteria Met?	YES / NO / <u>NA</u>
Manual Integrations for ICal?	<u>YES</u> / NO	Manual Integrations for Samples?	Yes / NO / <u>NA</u>

**Detail problems, corrective actions and/or other pertinent information below (use reverse side when necessary):**

*Two compounds @ linear curve fit.*

**Additional Details on Reverse: Yes / No**

Analyst: *[Signature]* Date: 07/26/10  
 Reviewer: *[Signature]* Date: 7/26/10

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 23-JUL-2010 15:01  
 End Cal Date : 23-JUL-2010 18:38  
 Quant Method : ISTD  
 Origin : Disabled  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem1/nt6.i/20100723.b/SW846072310.m  
 Cal Date : 26-Jul-2010 11:29 jianqing  
 Curve Type : Average

Calibration File Names:

Level 1: /chem1/nt6.i/20100723.b/07231002.D  
 Level 2: /chem1/nt6.i/20100723.b/07231003.D  
 Level 3: /chem1/nt6.i/20100723.b/07231004.D  
 Level 4: /chem1/nt6.i/20100723.b/07231001.D  
 Level 5: /chem1/nt6.i/20100723.b/07231005.D  
 Level 6: /chem1/nt6.i/20100723.b/07231006.D  
 Level 7: /chem1/nt6.i/20100723.b/07231007.D

*B 07/26/10*

Compound	1.000	5.000	10.000	25.000	40.000	60.000	RRF	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		
	80.000							
	Level 7							
186 Carbaryl	0.52977 0.56361	0.47325	0.61814	0.60108	0.60183	0.56738	0.56501	8.893
179 n-Decane	1.30295 1.01836	1.13144	1.17576	1.12634	1.10387	1.04830	1.12957	8.229
180 n-Octadecane	0.46718 0.32003	0.42555	0.43641	0.39738	0.36784	0.33613	0.39293	13.806
169 4-tert-Butylphenol	++++ ++++	++++	++++	++++	++++	++++	++++	++++
170 N,N-Dimethylaniline	++++ ++++	++++	++++	++++	++++	++++	++++	++++
171 2,3-Dimethylaniline	++++ ++++	++++	++++	++++	++++	++++	++++	++++



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Compound	1.000	5.000	10.000	25.000	40.000	60.000	RRF	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		
	80.000							
	Level 7							
172 2,4-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
173 2,5-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
174 2,6-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
175 3,4-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
176 3,5-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
177 p-Benzoquinone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
168 Pentachlorobenzene	0.60186 0.53253	0.53250	0.55894	0.54825	0.55050	0.53139	0.55085	4.523
145 4,4'-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
146 4,4'-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Compound	1.000	5.000	10.000	25.000	40.000	60.000	RRF	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		
	80.000							
	Level 7							
135 2,3,5,6-Tetrachlorophenol	++++	++++	++++	++++	++++	++++	++++	++++
136 2,3,4,5-tetrachlorophenol	++++	++++	++++	++++	++++	++++	++++	++++
133 Butylatedhydroxytoluene	1.30909 0.95110	1.21610	1.18712	1.11886	1.06955	1.02859	1.12577	10.800
132 3,6-Dimethylphenanthrene	++++	++++	++++	++++	++++	++++	++++	++++
131 1-Methylphenanthrene	++++	++++	++++	++++	++++	++++	++++	++++
130 Dibenzothiophene	++++	++++	++++	++++	++++	++++	++++	++++
129 1-Methylfluorene	++++	++++	++++	++++	++++	++++	++++	++++
128 N-Hexadecane	++++	++++	++++	++++	++++	++++	++++	++++
127 2-Isopropylaphthalene	++++	++++	++++	++++	++++	++++	++++	++++

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Compound	1.000	5.000	10.000	25.000	40.000	60.000	RRF	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		
	80.000							
	Level 7							
126 N-Tetradecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
144 alpha-Terpineol	0.25182 0.22750	0.24104	0.24573	0.23829	0.24115	0.23457	0.24001	3.244
125 Safrole	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
124 3,4-Dimethylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
123 Acetophenone	1.84319 1.61433	1.73378	1.77490	1.74051	1.72755	1.65306	1.72676	4.371
122 Furfuraldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
143 1,4-Dioxane	0.59514 0.56023	0.55269	0.57759	0.57316	0.57745	0.55960	0.57084	2.532
121 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
120 2,3,4,6-Tetrachlorophenol	0.36744 0.44511	0.39880	0.41626	0.43155	0.44579	0.45431	0.42275	7.341

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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	RRF	% RSD
178 2-Benzyl-4-Chlorophenol	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
119 7,12-Dimethylbenz(a)anthracen	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
118 Triphenyl Phosphate	0.22270 0.23491	0.18490	0.19777	0.23461	0.21824	0.23636		0.21850	9.200
117 Butyl Diphenyl Phosphate	0.23132 0.21525	0.20255	0.20803	0.23443	0.21391	0.22397		0.21849	5.428
116 Dibutyl Phenyl Phosphate	0.68627 0.67452	0.76192	0.76950	0.75246	0.74004	0.71386		0.72837	5.142
115 Tributyl Phosphate	1.12856 0.91681	1.13872	1.13497	1.07164	1.03189	0.98475		1.05819	8.054
114 Beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
113 Diphenyl Oxide	1.53546 1.12652	1.31951	1.36647	1.28948	1.22753	1.16194		1.28956	10.689
112 Biphenyl	+++++ 1.19789	1.59664	1.63155	1.49389	1.39001	1.27465		1.43077	12.189

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Compound	1.000	5.000	10.000	25.000	40.000	60.000	RRF	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		
	80.000							
	Level 7							
111 Azobenzene (1,2-DP-Hydrazine)	1.57438 1.32256	1.43424	1.49821	1.42379	1.37937	1.27319	1.41510	7.224
110 Tetrachloroguaiacol	++++ 0.14766	0.14646	0.16171	0.16055	0.15529	0.15347	0.15419	4.112
109 3,4,5-Trichloroguaiacol	++++ 0.15358	0.14975	0.16112	0.15998	0.15730	0.15863	0.15673	2.744
181 3,4,6-Trichloroguaiacol	++++ 0.55567	0.46068	0.51059	0.53282	0.55514	0.56584	0.53012	7.434
108 4,5,6-Trichloroguaiacol	++++ 0.25789	0.22564	0.25405	0.25473	0.25582	0.25861	0.25112	5.020
184 3,4-Dichloroguaiacol	++++ 0.48416	0.41063	0.45682	0.46408	0.48450	0.49162	0.46530	6.433
107 4,5-Dichloroguaiacol	++++ 0.30860	0.29660	0.32878	0.32291	0.31726	0.31810	0.31537	3.604
182 4,6-Dichloroguaiacol	++++ 0.56693	0.51548	0.57045	0.56609	0.57861	0.58642	0.56399	4.433
185 4-Chloroguaiacol	++++ 0.58799	0.53454	0.56196	0.59394	0.59906	0.60299	0.58008	4.588

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Compound	1.000	5.000	10.000	25.000	40.000	60.000	RRF	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		
	80.000 Level 7							
106 Guaiacol	1.31655 1.12217	1.24004	1.23299	1.18332	1.18795	1.16704	1.20715	5.183
105 1-methylnaphthalene	0.74149 0.55698	0.66501	0.67894	0.64252	0.61983	0.58074	0.64079	9.715
151 1,2,4,5-Tetrachlorobenzene	0.80474 0.65422	0.73406	0.71934	0.70252	0.69462	0.68639	0.71370	6.648
152 Benzo(e)pyrene	++++ ++++	++++	++++	++++	++++	++++	++++	++++
153 Chlorpyrifos	++++ ++++	++++	++++	++++	++++	++++	++++	++++
154 Diazinon	++++ ++++	++++	++++	++++	++++	++++	++++	++++
155 Kelthane	++++ ++++	++++	++++	++++	++++	++++	++++	++++
156 Methyl Parathion	++++ ++++	++++	++++	++++	++++	++++	++++	++++
157 Ethyl Parathion	++++ ++++	++++	++++	++++	++++	++++	++++	++++

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Compound	1.000	5.000	10.000	25.000	40.000	60.000	RRF	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		
	80.000							
	Level 7							
167 2,2',4,4',5-Pentabromobiphenyl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
3 Phenol	1.89881 1.53020	1.92806	1.75475	1.69716	1.59437	1.52833	1.70453	9.695
4 Bis(2-Chloroethyl) ether	1.50887 1.19962	1.36105	1.31022	1.31066	1.26776	1.18856	1.30667	8.313
6 2-Chlorophenol	1.65200 1.32343	1.61864	1.51267	1.47180	1.38752	1.35040	1.47378	8.739
7 1,3-Dichlorobenzene	1.94687 1.52440	1.78065	1.78276	1.72433	1.67465	1.58381	1.71678	8.165
9 1,4-Dichlorobenzene	1.86926 1.51292	1.70537	1.74943	1.70915	1.66135	1.56577	1.68189	7.011
11 Benzyl alcohol	0.77509 0.79833	0.79840	0.85212	0.82991	0.81569	0.77911	0.80695	3.424
12 1,2-Dichlorobenzene	1.81140 1.40328	1.64005	1.63637	1.54853	1.50623	1.40215	1.56400	9.333
13 2-Methylphenol	1.38158 1.12503	1.39693	1.30099	1.28263	1.22315	1.18744	1.27111	7.847

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Compound	1.000	5.000	10.000	25.000	40.000	60.000	RRF	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		
	80.000							
	Level 7							
14 2,2'-oxybis(1-Chloropropane)	1.56111 1.24232	1.45840	1.45760	1.39900	1.35796	1.27681	1.39331	7.980
15 4-Methylphenol	1.33792 1.07044	1.43605	1.32248	1.26810	1.21133	1.13770	1.25486	9.980
16 N-Nitroso-di-n-propylamine	0.96975 0.79055	0.90964	0.92513	0.89191	0.88013	0.81864	0.88368	6.974
17 Hexachloroethane	0.69156 0.53161	0.62895	0.62970	0.61801	0.59719	0.55598	0.60757	8.670
19 Nitrobenzene	0.49447 0.38832	0.44806	0.45461	0.43234	0.41483	0.38265	0.43075	9.139
20 Isophorone	0.74620 0.63503	0.69226	0.71744	0.69327	0.67659	0.64123	0.68600	5.768
21 2-Nitrophenol	0.24226 0.24453	0.25813	0.25659	0.26172	0.25436	0.25160	0.25274	2.824
22 2,4-Dimethylphenol	0.45174 0.36884	0.45432	0.43299	0.42026	0.39913	0.38380	0.41587	7.975
23 Bis(2-Chloroethoxy)methane	0.52038 0.43564	0.47785	0.50468	0.47961	0.46835	0.44098	0.47536	6.495



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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							
24 Benzoic acid	++++ 0.33426	0.25353	0.27552	0.32032	0.32546	0.33540	0.30742	11.190
25 2,4-Dichlorophenol	0.37024 0.33685	0.39379	0.37568	0.36588	0.35534	0.35112	0.36413	5.069
26 1,2,4-Trichlorobenzene	0.45200 0.35612	0.40330	0.41475	0.40421	0.39011	0.36396	0.39778	8.106
28 Naphthalene	1.34365 0.92143	1.20046	1.23378	1.14951	1.08605	0.97778	1.13038	13.040
29 4-Chloroaniline	0.50552 0.38655	0.47709	0.49634	0.45962	0.44170	0.40294	0.45282	10.003
30 Hexachlorobutadiene	0.25638 0.22014	0.22668	0.23442	0.23404	0.22968	0.22252	0.23198	5.186
31 4-Chloro-3-methylphenol	0.36042 0.32412	0.36903	0.36214	0.35815	0.34753	0.33596	0.35105	4.578
32 2-Methylnaphthalene	0.72760 0.53653	0.63815	0.66651	0.61721	0.59789	0.55861	0.62036	10.468
33 Hexachlorocyclopentadiene	0.20062 0.41693	0.29421	0.36461	0.40146	0.41997	0.41627	0.35915	23.148

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Compound	1.000	5.000	10.000	25.000	40.000	60.000	RRF	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		
	80.000							
	Level 7							
34 2,4,6-Trichlorophenol	0.43015 0.45431	0.47052	0.46116	0.47882	0.45477	0.45554	0.45790	3.343
35 2,4,5-Trichlorophenol	0.47628 0.46652	0.47205	0.46476	0.48592	0.46888	0.47285	0.47246	1.505
37 2-Chloronaphthalene	1.54535 1.13390	1.40750	1.43034	1.34606	1.26852	1.17397	1.32938	11.042
38 2-Nitroaniline	0.31929 0.32675	0.32596	0.34177	0.33767	0.33711	0.32812	0.33095	2.425
39 Dimethylphthalate	1.63732 1.37278	1.49856	1.57686	1.53153	1.48535	1.40593	1.50119	6.141
40 Acenaphthylene	2.38812 1.67677	2.20629	2.26228	2.11737	1.97889	1.77863	2.05833	12.636
41 2,6-Dinitrotoluene	0.32513 0.36762	0.34390	0.36822	0.36347	0.36531	0.36325	0.35670	4.543
43 3-Nitroaniline	0.32531 0.24663	0.33792	0.35741	0.33779	0.31058	0.26898	0.31209	12.886
44 Acenaphthene	1.44933 1.13988	1.31145	1.35758	1.30569	1.26041	1.17354	1.28541	8.251

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Compound	1.000	5.000	10.000	25.000	40.000	60.000	RRF	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		
	80.000 Level 7							
45 2,4-Dinitrophenol	+++++ 0.29677	0.15972	0.20982	0.26548	0.28518	0.29643	0.25223	22.113 <-
46 Dibenzofuran	1.97073 1.49208	1.74217	1.82392	1.71558	1.65479	1.55243	1.70738	9.485
47 4-Nitrophenol	0.14465 0.18556	0.19170	0.19502	0.19549	0.19673	0.18950	0.18552	9.937
48 2,4-Dinitrotoluene	0.41495 0.47542	0.43227	0.46723	0.47394	0.48074	0.47156	0.45944	5.510
49 Fluorene	1.72499 1.23768	1.50935	1.55160	1.46516	1.39788	1.29602	1.45467	11.263
50 Diethylphthalate	1.65609 1.24820	1.44115	1.46874	1.35703	1.30203	1.29409	1.39533	10.031
51 4-Chlorophenyl-phenylether	0.77786 0.68535	0.71006	0.72927	0.72419	0.71697	0.69184	0.71936	4.228
52 4-Nitroaniline	0.31952 0.35598	0.34487	0.36113	0.34628	0.35407	0.35027	0.34745	3.896
53 4,6-Dinitro-2-methylphenol	+++++ 0.20459	0.17800	0.18906	0.20650	0.20336	0.20685	0.19806	5.985

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 23-JUL-2010 15:01  
 End Cal Date : 23-JUL-2010 18:38  
 Quant Method : ISTD  
 Origin : Disabled  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem1/nt6.i/20100723.b/SW846072310.m  
 Cal Date : 26-Jul-2010 11:29 jianqing  
 Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	80.000 Level 7	RRF	% RSD
54 N-Nitrosodiphenylamine	0.76057 0.60826	0.71351	0.72399	0.68723	0.66721	0.63370		0.68493	7.745
56 4-Bromophenyl-phenylether	0.30519 0.28366	0.28523	0.29802	0.29933	0.29604	0.28568		0.29331	2.865
57 Hexachlorobenzene	0.32868 0.29438	0.30770	0.31766	0.31238	0.30543	0.29668		0.30899	3.861
58 Pentachlorophenol	0.11687 0.20910	0.16065	0.17900	0.20167	0.20189	0.20915		0.18262	18.647
60 Phenanthrene	1.45576 1.04929	1.29440	1.34343	1.25583	1.19585	1.10163		1.24231	11.283
61 Anthracene	1.47639 1.06711	1.34925	1.39267	1.32351	1.24238	1.13218		1.28336	11.313
62 Carbazole	1.36692 1.00778	1.28291	1.30155	1.20074	1.12860	1.04899		1.19107	11.334
63 Di-n-butylphthalate	1.55627 1.21295	1.55895	1.61948	1.54279	1.42773	1.30015		1.45976	10.426
64 Fluoranthene	1.46938 1.11705	1.43951	1.47419	1.40730	1.31885	1.19659		1.34612	10.490

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

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 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem1/nt6.i/20100723.b/SW846072310.m  
 Cal Date : 26-Jul-2010 11:29 jianqing  
 Curve Type : Average

Compound	1.000	5.000	10.000	25.000	40.000	60.000	RRF	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		
	80.000							
	Level 7							
65 Pyrene	1.49138 1.05243	1.14703	1.19893	1.29849	1.13413	1.10935	1.20453	12.295
67 Butylbenzylphthalate	0.59487 0.57376	0.51715	0.56810	0.65458	0.58263	0.58548	0.58237	6.979
68 Benzo(a)anthracene	1.39098 1.06749	1.06661	1.10750	1.25843	1.10391	1.09815	1.15615	10.590
70 3,3'-Dichlorobenzidine	0.44402 0.35158	0.35360	0.36752	0.40197	0.35390	0.35362	0.37517	9.396
71 Chrysene	1.33967 0.98576	1.00093	1.04247	1.16040	1.03078	1.01541	1.08220	11.749
72 bis(2-Ethylhexyl)phthalate	0.62188 0.59845	0.63105	0.67615	0.66016	0.63926	0.61152	0.63407	4.277
73 Di-n-octylphthalate	1.27928 0.93556	1.13221	1.13885	1.09382	1.03609	0.97292	1.08410	10.667
74 Benzo(b)fluoranthene	1.49258 1.21188	1.30818	1.42583	1.36294	1.34299	1.22771	1.33887	7.544
75 Benzo(k)fluoranthene	1.69142 1.04777	1.56076	1.49557	1.43389	1.27991	1.16420	1.38193	16.524

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 23-JUL-2010 15:01  
 End Cal Date : 23-JUL-2010 18:38  
 Quant Method : ISTD  
 Origin : Disabled  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem1/nt6.i/20100723.b/SW846072310.m  
 Cal Date : 26-Jul-2010 11:29 jianqing  
 Curve Type : Average

Compound	1.000	5.000	10.000	25.000	40.000	60.000	RRF	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		
	80.000 Level 7							
76 Benzo (a) pyrene	1.39809 1.10139	1.28696	1.36282	1.28220	1.24651	1.15033	1.26119	8.455
78 Indeno (1,2,3-cd) pyrene	1.85894 1.52926	1.70038	1.76063	1.70804	1.67153	1.58151	1.68718	6.486
79 Dibenzo (a,h) anthracene	1.37073 1.14185	1.33009	1.38098	1.33329	1.29862	1.21997	1.29650	6.673
80 Benzo (g,h,i) perylene	1.72129 1.36024	1.54055	1.57913	1.53478	1.50241	1.41521	1.52194	7.655
90 N-Nitrosodimethylamine	0.88469 0.84254	0.84172	0.89111	0.87943	0.86425	0.83117	0.86213	2.766
91 Aniline	2.06700 1.76492	2.01319	2.07738	1.99420	1.93682	1.81178	1.95218	6.251
92 1,2-Diphenylhydrazine	++++ ++++	++++	++++	++++	++++	++++	++++	++++
93 Benzidine	0.45260 0.32392	0.44131	0.41100	0.39901	0.33246	0.33127	0.38451	14.241
96 p-Cymene	++++ ++++	++++	++++	++++	++++	++++	++++	++++

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 23-JUL-2010 15:01  
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 Cal Date : 26-Jul-2010 11:29 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							
97 Caffeine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
98 Retene	0.44717 0.41808	0.37047	0.39056	0.44711	0.41452	0.43343	0.41733	6.887
99 Perylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
100 3-beta-Coprostanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
101 Cholesterol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
102 beta-Sitosterol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
103 Pyridine	1.33649 1.53311	1.51578	1.62048	1.61940	1.61272	1.55018	1.54116	6.500
187 Total Benzofluoranthenes	1.54483 1.06285	1.34994	1.36948	1.31896	1.23716	1.13146	1.28781	12.488
\$ 1 2-Fluorophenol	1.32504 +++++	1.31481	1.36463	1.36344	1.32946	1.27501	1.32873	2.516

## Analytical Resources, Inc.

## INITIAL CALIBRATION DATA

Start Cal Date : 23-JUL-2010 15:01  
 End Cal Date : 23-JUL-2010 18:38  
 Quant Method : ISTD  
 Origin : Disabled  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem1/nt6.i/20100723.b/SW846072310.m  
 Cal Date : 26-Jul-2010 11:29 jianqing  
 Curve Type : Average

Compound	1.000	5.000	10.000	25.000	40.000	60.000	RRF	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		
	80.000							
	Level 7							
\$ 137 d8-1,4-Dioxane	0.56856	0.53848	0.55643	0.58008	0.57549	0.56934		
	0.56922						0.56537	2.462
\$ 2 Phenol-d5	1.69382	1.55249	1.59277	1.52515	1.45467	1.38972		
	++++						1.53477	6.928
\$ 5 2-Chlorophenol-d4	1.47973	1.30309	1.34183	1.27103	1.21380	1.16836		
	++++						1.29631	8.421
\$ 10 1,2-Dichlorobenzene-d4	0.96853	0.89668	0.93034	0.89435	0.87040	0.83604		
	++++						0.89939	5.125
\$ 18 Nitrobenzene-d5	0.42483	0.37416	0.39663	0.39082	0.38152	0.36335		
	++++						0.38855	5.494
\$ 36 2-Fluorobiphenyl	1.65520	1.41789	1.44387	1.37047	1.29517	1.21808		
	++++						1.40011	10.705
\$ 55 2,4,6-Tribromophenol	0.16694	0.16130	0.18415	0.19150	0.19308	0.19643		
	++++						0.18223	8.067
\$ 66 Terphenyl-d14	0.84857	0.61959	0.66571	0.76006	0.67516	0.68193		
	++++						0.70850	11.610
\$ 85 p-Cresol-d4	++++	++++	++++	++++	++++	++++		
	++++						++++	++++



Analytical Resources, Inc.  
INITIAL CALIBRATION DATA

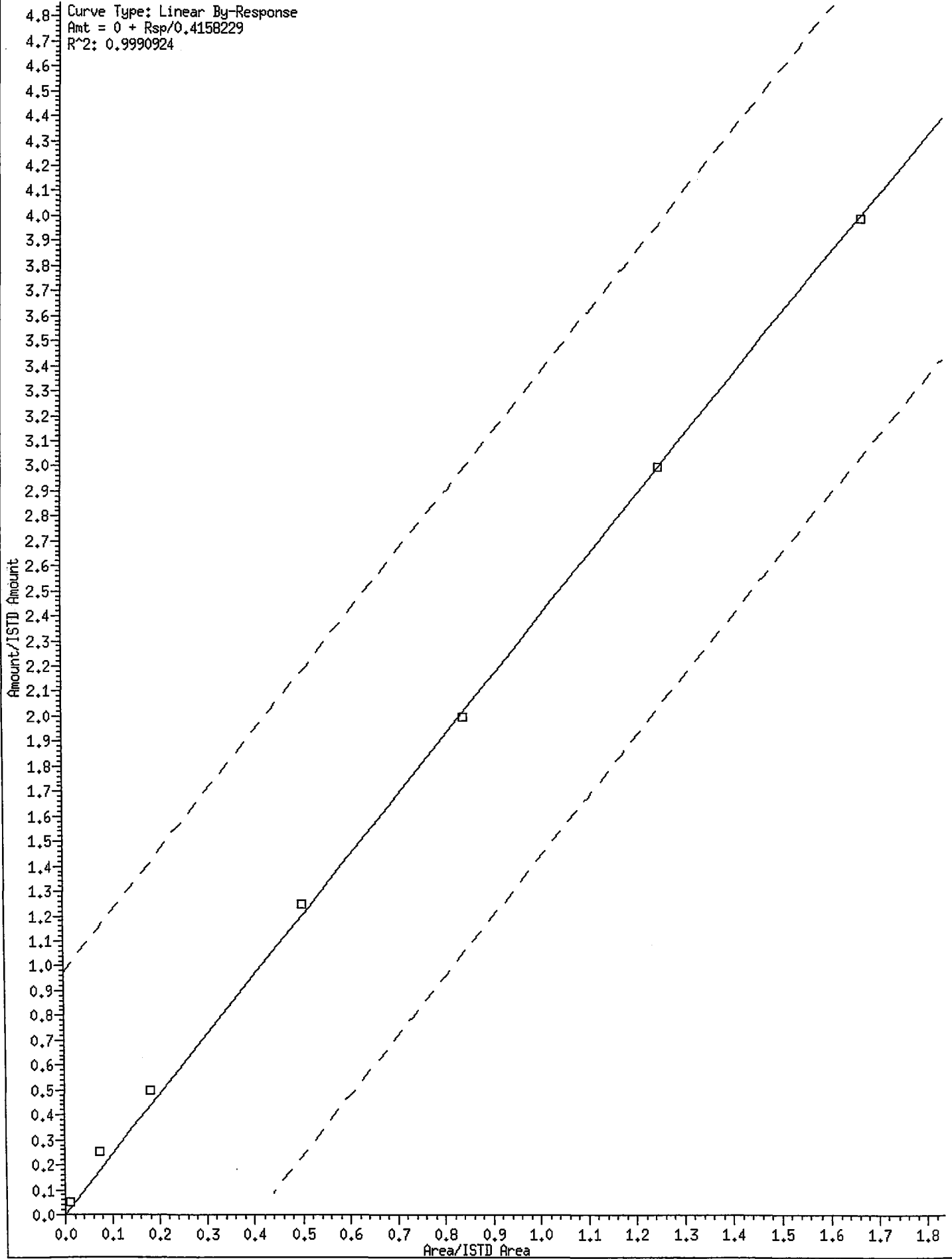
Start Cal Date : 23-JUL-2010 15:01  
 End Cal Date : 23-JUL-2010 18:38  
 Quant Method : ISTD  
 Origin : Force  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method File : /chem1/nt6.i/20100723.b/SW846072310.m  
 Cal Date : 26-Jul-2010 11:29 jiangqing

*Handwritten:* 07/26/10

Compound	Level							Curve	b	Coefficients		R <sup>2</sup> or R <sup>2</sup>
	1	5	10	25	40	60	m1			m2		
31 4-Chloro-3-methylphenol	0.36042 0.32412 Level 7	0.36903	0.36214	0.35815	0.34753	0.33596	AVRG		0.35105		4.57798	
32 2-Methylnaphthalene	0.72760 0.53653	0.63815	0.66651	0.61721	0.59789	0.55861	AVRG		0.62036		10.46774	
33 Hexachlorocyclopentadiene	3366 562487	24140	58996	160807	275445	425348	LINR	0.000e+00	0.41582		0.99909	
34 2,4,6-Trichlorophenol	0.43015 0.45431	0.47052	0.46116	0.47882	0.45477	0.45554	AVRG		0.45790		3.34343	
35 2,4,5-Trichlorophenol	0.47628 0.46652	0.47205	0.46476	0.48592	0.46888	0.47285	AVRG		0.47246		1.50508	
37 2-Chloronaphthalene	1.54535 1.13390	1.40750	1.43034	1.34606	1.26852	1.17397	AVRG		1.32938		11.04215	
38 2-Nitroaniline	0.31929 0.32675	0.32596	0.34177	0.33767	0.33711	0.32812	AVRG		0.33095		2.42548	

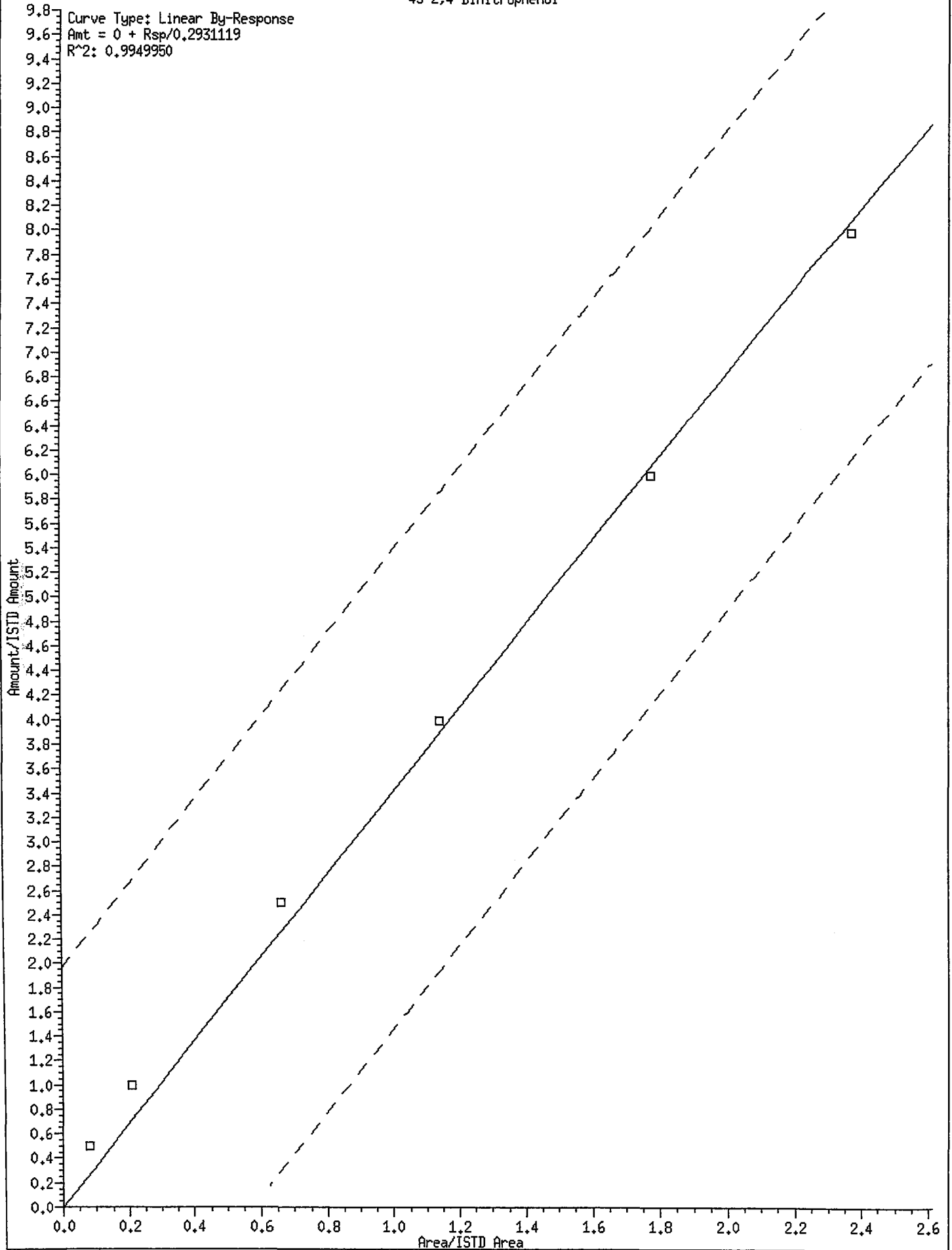
07/26/10

33 Hexachlorocyclopentadiene





45 2,4-Dinitrophenol





Analytical Resources, Inc.  
RETENTION TIME SUMMARY REPORT

Method File: /chem1/nt6.i/20100723.b/SW846072310.m  
Batch File: /chem1/nt6.i/20100723.b  
Inst ID: nt6.i

ID: RT01 RT02 RT03 RT04 RT05 RT06 RT07  
 IIRNAME: 07231001 07231002 07231003 07231004 07231005 07231006 07231007  
 NJ.DATE: 23-JUL-2010 23-JUL-2010 23-JUL-2010 23-JUL-2010 23-JUL-2010 23-JUL-2010 23-JUL-2010  
 NJ.TIME: 15:01 15:38 16:16 16:52 17:29 18:01 18:38

*AE 07/26/10*

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
\$ 1 2-Fluorophenol	5.605	5.602	5.601	5.605	5.605	5.610	5.605	5.605	2.605-8.605	5.605	0.003
186 Carbaryl	15.689	15.686	15.680	15.684	15.689	15.694	15.702	15.689	12.689-18.689	15.689	0.007
179 n-Decane	7.448	7.440	7.444	7.443	7.448	7.453	7.450	7.448	4.448-10.448	7.447	0.005
180 n-Octadecane	14.829	14.826	14.825	14.824	14.829	14.829	14.832	14.829	11.829-17.829	14.828	0.003
169 4-tert-Butylphenol	14.829	14.826	14.825	14.824	14.829	14.829	14.832	14.829	11.829-17.829	14.828	0.003
170 N,N-Dimethylaniline	14.829	14.826	14.825	14.824	14.829	14.829	14.832	14.829	11.829-17.829	14.828	0.003
171 2,3-Dimethylaniline	14.829	14.826	14.825	14.824	14.829	14.829	14.832	14.829	11.829-17.829	14.828	0.003
172 2,4-Dimethylaniline	14.829	14.826	14.825	14.824	14.829	14.829	14.832	14.829	11.829-17.829	14.828	0.003
173 2,5-Dimethylaniline	14.829	14.826	14.825	14.824	14.829	14.829	14.832	14.829	11.829-17.829	14.828	0.003
174 2,6-Dimethylaniline	14.829	14.826	14.825	14.824	14.829	14.829	14.832	14.829	11.829-17.829	14.828	0.003
175 3,4-Dimethylaniline	14.829	14.826	14.825	14.824	14.829	14.829	14.832	14.829	11.829-17.829	14.828	0.003
176 3,5-Dimethylaniline	14.829	14.826	14.825	14.824	14.829	14.829	14.832	14.829	11.829-17.829	14.828	0.003
177 p-Benzquinone	14.829	14.826	14.825	14.824	14.829	14.829	14.832	14.829	11.829-17.829	14.828	0.003
168 Pentachlorobenzene	12.853	12.850	12.849	12.853	12.858	12.863	12.866	12.853	9.853-15.853	12.856	0.007
145 4,4'-DDE	47.212	47.212	47.212	47.212	47.212	47.212	47.212	47.212	44.212-50.212	47.212	0.007
146 4,4'-DDD	44.746	44.746	44.746	44.746	44.746	44.746	44.746	44.746	44.746-50.746	44.746	0.007
147 4,4'-DDT	45.216	45.216	45.216	45.216	45.216	45.216	45.216	45.216	45.216-51.216	45.216	0.007

Reviewer 1 \_\_\_\_\_  
 Reviewer 2 \_\_\_\_\_

Date: 7/26/10

10 09 08 07 06 05 04 03 02 01

Analytical Resources, Inc.  
RETENTION TIME SUMMARY REPORT

Method File: /chem1/nt6.i/20100723.b/SW846072310.m  
 Batch File: /chem1/nt6.i/20100723.b  
 Inst ID: nt6.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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	39.269	36.269-42.269	+++++	+++++
136 2,3,4,5-tetrachlorophe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	39.317	36.317-42.317	+++++	+++++
\$ 137 d8-1,4-Dioxane	2.107	2.109	2.103	2.107	2.112	2.122	2.125	2.107	0.000-5.107	2.112	0.008
* 134 Di-n-octylphthalate-d4	20.346	20.344	20.343	20.347	20.347	20.346	20.354	20.346	17.346-23.346	20.347	0.004
133 Butylatedhydroxytoluen	12.698	12.695	12.694	12.698	12.698	12.703	12.706	12.698	9.698-15.698	12.699	0.004
132 3,6-Dimethylphenanthre	+++++	+++++	+++++	+++++	+++++	+++++	+++++	65.450	62.450-68.450	+++++	+++++
131 1-Methylphenanthrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	64.400	61.400-67.400	+++++	+++++
130 Dibenzochlophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	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-Isopropylphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	57.650	54.650-60.650	+++++	+++++
126 N-Tetradecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	56.750	53.750-59.750	+++++	+++++
144 alpha-Terpinol	9.718	9.715	9.714	9.718	9.723	9.728	9.731	9.718	6.718-12.718	9.721	0.007
125 Saffrole	+++++	+++++	+++++	+++++	+++++	+++++	+++++	52.166	49.166-55.166	+++++	+++++

12 09 49 11 20 07





Analytical Resources, Inc.  
RETENTION TIME SUMMARY REPORT

Method File: /chem1/nt6.i/20100723.b/SW846072310.m  
Batch File: /chem1/nt6.i/20100723.b  
Inst ID: nt6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
106 Guaiacol	8.575	8.572	8.571	8.575	8.580	8.585	8.588	8.575	5.575-11.575	8.578	0.007
105 1-methylnaphthalene	10.968	10.965	10.964	10.968	10.968	10.973	10.975	10.968	7.968-13.968	10.969	0.004
151 1,2,4,5-Tetrachloroben	11.138	11.136	11.135	11.133	11.139	11.138	11.141	11.138	8.138-14.138	11.137	0.003
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	7.207	7.205	7.204	7.202	7.213	7.218	0.000	7.207	4.207-10.207	6.178	2.724
3 Phenol	7.229	7.221	7.220	7.224	7.229	7.239	7.237	7.229	4.229-10.229	7.228	0.008
4 Bis(2-Chloroethyl)ethe	7.282	7.274	7.273	7.277	7.282	7.287	7.290	7.282	4.282-10.282	7.281	0.006
5 2-Chlorophenol-d4	7.293	7.296	7.295	7.293	7.298	7.303	7.293	7.293	4.293-10.293	7.296	0.004

10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50





Analytical Resources, Inc.  
RETENTION TIME SUMMARY REPORT

Method File: /chem1/nt6.i/20100723.b/SW846072310.m  
Batch File: /chem1/nt6.i/20100723.b  
Inst ID: nt6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
54 N-Nitrosodiphenylamine	13.611	13.609	13.608	13.612	13.617	13.622	13.630	13.611	10.611-16.611	13.615	0.008
\$ 55 2,4,6-Tribromophenol	13.793	13.785	13.784	13.788	13.793	13.798	13.798	13.793	10.793-16.793	13.790	0.005
56 4-Bromophenyl-phenylet	14.183	14.175	14.179	14.178	14.183	14.183	14.185	14.183	11.183-17.183	14.181	0.004
57 Hexachlorobenzene	14.386	14.389	14.382	14.386	14.391	14.391	14.399	14.386	11.386-17.386	14.389	0.005
58 Pentachlorophenol	14.696	14.693	14.692	14.691	14.696	14.701	14.704	14.696	11.696-17.696	14.696	0.005
* 59 Phenanthrene-d10	14.861	14.859	14.858	14.861	14.867	14.866	14.869	14.861	11.861-17.861	14.863	0.004
60 Phenanthrene	14.899	14.896	14.895	14.893	14.904	14.909	14.912	14.899	11.899-17.899	14.901	0.007
61 Anthracene	14.973	14.965	14.964	14.968	14.974	14.978	14.987	14.973	11.973-17.973	14.973	0.008
62 Carbazole	15.267	15.264	15.263	15.267	15.273	15.272	15.280	15.267	12.267-18.267	15.270	0.006
63 Di-n-butylphthalate	16.004	16.002	16.001	16.004	16.004	16.009	16.012	16.004	13.004-19.004	16.005	0.004
64 Fluoranthene	16.827	16.824	16.823	16.822	16.827	16.832	16.835	16.827	13.827-19.827	16.827	0.005
65 Pyrene	17.179	17.171	17.176	17.174	17.179	17.184	17.187	17.179	14.179-20.179	17.179	0.006
\$ 66 Terphenyl-d14	17.510	17.508	17.512	17.511	17.516	17.515	0.000	17.510	14.510-20.510	15.010	6.619
67 Butylbenzylphthalate	18.413	18.410	18.404	18.408	18.413	18.413	18.421	18.413	15.413-21.413	18.412	0.005
68 Benzo(a) anthracene	19.134	19.131	19.130	19.134	19.140	19.144	19.147	19.134	16.134-22.134	19.137	0.007
* 69 Chrysene-d12	19.161	19.153	19.157	19.156	19.166	19.166	19.169	19.161	16.161-22.161	19.161	0.006
70 3,3'-Dichlorobenzidine	19.166	19.158	19.162	19.161	19.166	19.166	19.174	19.166	16.166-22.166	19.165	0.005
71 Chrysene	19.198	19.190	19.194	19.198	19.204	19.209	19.217	19.198	16.198-22.198	19.201	0.009
72 bis(2-Ethylhexyl)phtha	19.417	19.414	19.413	19.417	19.417	19.417	19.420	19.417	16.417-22.417	19.417	0.002
73 Di-n-octylphthalate	20.357	20.354	20.354	20.357	20.357	20.362	20.360	20.357	17.357-23.357	20.357	0.003
74 Benzo(b) fluoranthene	20.784	20.776	20.781	20.779	20.790	20.795	20.803	20.784	17.784-23.784	20.787	0.010
75 Benzo(k) fluoranthene	20.816	20.808	20.813	20.811	20.822	20.832	20.840	20.816	17.816-23.816	20.821	0.012
76 Benzo(a) pyrene	21.228	21.220	21.224	21.223	21.233	21.238	21.246	21.228	18.228-24.228	21.230	0.010
* 77 perylene-d12	21.308	21.305	21.304	21.303	21.308	21.308	21.316	21.308	18.308-24.308	21.307	0.004

2007-08-11 10:52

Analytical Resources, Inc.  
RETENTION TIME SUMMARY REPORT

Method File: /chem1/nt6.i/20100723.b/SW846072310.m  
 Batch File: /chem1/nt6.i/20100723.b  
 Inst ID: nt6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
78 Indeno(1,2,3-cd)pyrene	22.697	22.689	22.688	22.686	22.707	22.712	22.720	22.697	19.697-25.697	22.700	0.014
79 Dibenzo(a,h)anthracene	22.723	22.710	22.714	22.718	22.729	22.739	22.747	22.723	19.723-25.723	22.726	0.013
80 Benzo(g,h,i)perylene	23.054	23.036	23.040	23.044	23.065	23.075	23.089	23.054	20.054-26.054	23.058	0.020
\$ 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	2.721	2.718	2.717	2.716	2.732	2.742	2.750	2.721	0.000-5.721	2.728	0.014
91 Aniline	7.154	7.151	7.150	7.149	7.154	7.159	7.157	7.154	4.154-10.154	7.154	0.004
92 1,2-Diphenylhydrazine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	56.160	53.160-59.160	+++++	+++++
93 Benzidine	17.099	17.102	17.095	17.099	17.099	17.104	17.107	17.099	14.099-20.099	17.101	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	17.751	17.753	17.747	17.751	17.751	17.756	17.759	17.751	14.751-20.751	17.752	0.004
99 Perylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	31.125	28.125-34.125	+++++	+++++
100 3-beta-Coprostanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.717	15.717-21.717	+++++	+++++
101 Cholesterol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.964	19.964-25.964	+++++	+++++
102 beta-Sitosterol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	79.550	76.550-82.550	+++++	+++++
103 Pyridine	2.689	2.713	2.696	2.694	2.694	2.705	2.702	2.689	0.000-5.689	2.699	0.008
187 Total BenzoFluoranthen	20.816	20.808	20.813	20.811	20.822	20.832	20.840	20.816	17.816-23.816	20.821	0.012

11 07 2010 11:29

**Analytical Resources Inc.: Organics Instrument Log**  
**NT-6 Serial No.: GC=US00036167, MS=US81221575**

Date: 7/23/10 Analysis: 8270 Analyst: B  
 GC Program: ANAL Column No: 172127 Column Type: 2B-FMS;  
 Instrument Tune (.U or .CT.): 100629 EM Voltage: 1588  
 Calibration File: 0723/001 Curve Date: 7/23/10  
 IS/SS \_\_\_\_\_

IS/SS	Ical/Ccal	LCS/ICV
<u>1752-1</u>	<u>1747-3, 1733-1</u>	<u>1751-3, 1713-1</u>
_____	<u>1736-1, 1736-1</u>	<u>1721-2, 1720-1</u>
_____	<u>16019 1753-1</u>	<u>16019 1713-1</u>
_____	<u>1754-1 (Carbaryl)</u>	<u>1754-1</u>

**INTERNAL STANDARD SUMMARY FOR DATABATCH - /chem1/nt6.1/20100723.b**

Time	Filename	LabID	ClientID	DF
1 1501	07231001.D	IC250723	IC250723	1   7.59 182786   9.64 584137   12.50 320442   14.86 503793   19.16 532343   21.31 517269   20.35 719428
2 1538	07231002.D	IC010723	IC010723	1   7.59 195617   9.64 619162   12.50 335561   14.86 502252   19.15 533625   21.31 501426   20.34 671548
3 1616	07231003.D	IC050723	IC050723	1   7.59 188843   9.64 605649   12.50 328204   14.86 492773   19.16 623042   21.30 509773   20.34 685489
4 1652	07231004.D	IC100723	IC100723	1   7.59 185943   9.64 593293   12.50 323613   14.86 496900   19.16 608888   21.30 502175   20.35 694500
5 1729	07231005.D	IC400723	IC400723	1   7.59 179813   9.65 584978   12.50 327933   14.87 525468   19.17 593530   21.31 534102   20.35 734023
6 1801	07231006.D	IC600723	IC600723	1   7.60 184946   9.65 607475   12.50 340603   14.87 548107   19.17 578965   21.31 572566   20.35 744081
7 1838	07231007.D	IC800723	IC800723	1   7.59 184081   9.65 604045   12.50 337280   14.87 549184   19.17 574045   21.32 593718   20.35 737424
8 2017	07231008.D	ICV0723	ICV0723	1   7.59 176582   9.65 582262   12.50 323945   14.86 516976   19.16 544051   21.30 522945   20.35 731609
9 2053	07231009.D	RE80M2W1	RE80M2W1	1   7.59 151409   9.64 626705   12.49 340804   14.86 511015   19.16 542517   20.35 680199   21.30 530348
10 2129	07231010.D	RE80LCSW1	RE80LCSW1	1   7.59 186065   9.64 600768   12.50 336459   14.86 542160   19.16 543756   20.34 743452   21.31 536707
11 2206	07231011.D	RE80LCSDW1	RE80LCSDW1	1   7.59 193224   9.64 618733   12.50 346038   14.86 562142   19.16 552203   20.35 754902   21.31 547020
12 2242	07231012.D	RE80A	EB-01-0710	1   7.59 202174   9.64 668869   12.50 358572   14.86 537356   19.16 568871   20.34 711184   21.30 552466

*B* 07/26/10

**Maintenance / Comments**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Maintenance Verification** (Identify ICal or CCal that demonstrates the instrument is in control):  
 Every line must contain information or be lined out. Make all entries legible. Start a new page for each QC period.



Date : 23-JUL-2010 15:01

Client ID: DFTPP0723

Instrument: nt6.i

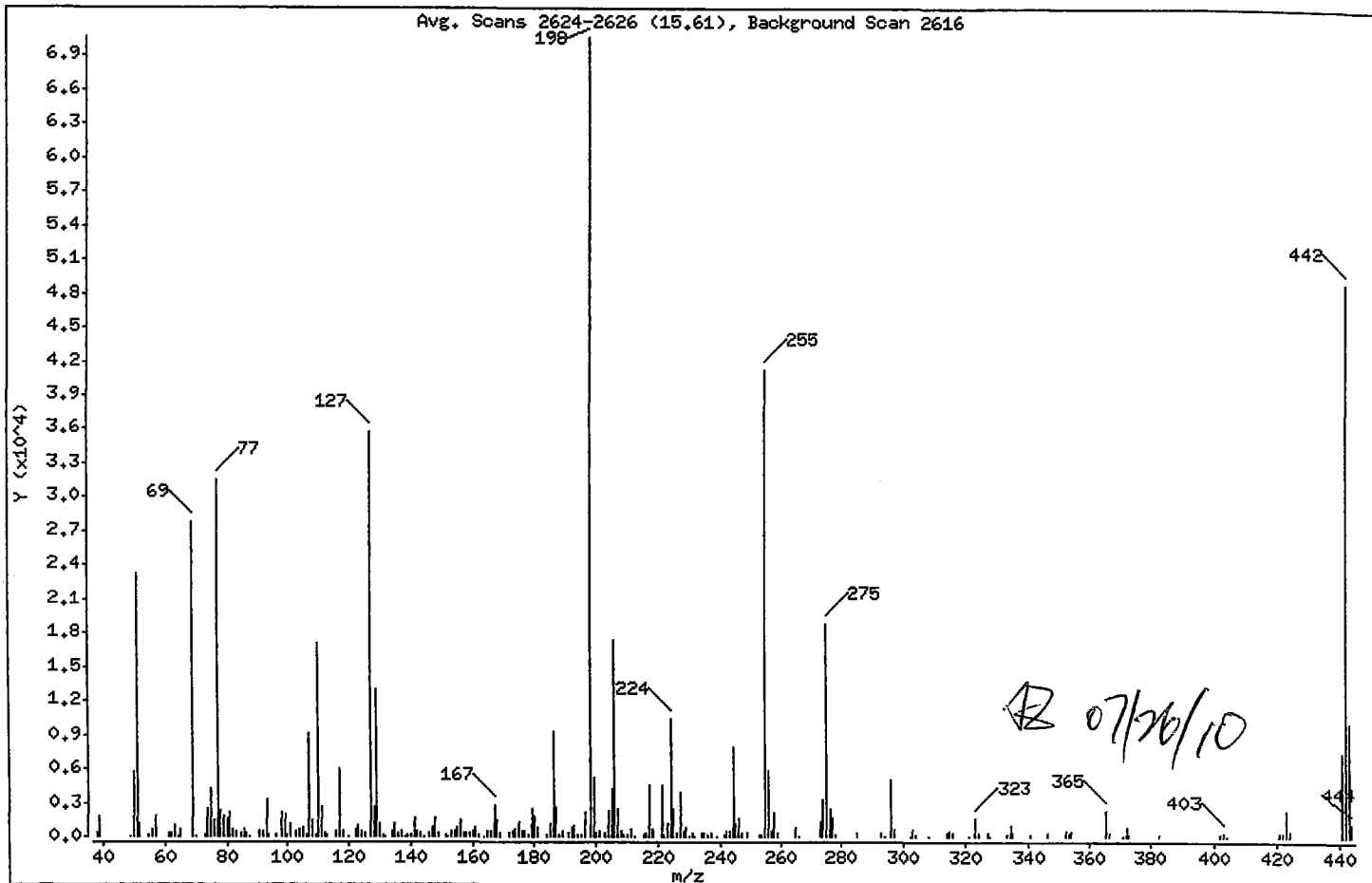
Sample Info: DFTPP0723

Operator: JZ

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	32.79
68	Less than 2.00% of mass 69	0.00 ( 0.00)
69	Mass 69 relative abundance	39.43
70	Less than 2.00% of mass 69	0.11 ( 0.27)
127	10.00 - 80.00% of mass 198	50.48
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	7.37
275	10.00 - 60.00% of mass 198	26.75
365	Greater than 1.00% of mass 198	3.26
441	0.01 - 24.00% of mass 442	10.46 ( 15.05)
442	50.00 - 200.00% of mass 198	69.53
443	15.00 - 24.00% of mass 442	14.36 ( 20.66)



Date : 23-JUL-2010 15:01

Client ID: DFTPP0723

Instrument: nt6.i

Sample Info: DFTPP0723

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.25

Data File: 07231001.D

Spectrum: Avg. Scans 2624-2626 (15.61), Background Scan 2616

Location of Maximum: 198.00

Number of points: 220

m/z	Y	m/z	Y	m/z	Y	m/z	Y
38.00	387	123.00	922	188.00	228	258.00	2047
39.00	1825	124.00	480	189.00	470	259.00	339
49.00	65	125.00	365	191.00	272	265.00	871
50.00	5640	127.00	35688	192.00	768	266.00	70
51.00	23184	128.00	2664	193.00	910	273.00	1286
52.00	1188	129.00	13060	194.00	205	274.00	3278
55.00	117	130.00	1185	195.00	108	275.00	18912
56.00	724	131.00	199	196.00	2168	276.00	2417
57.00	1783	132.00	53	198.00	70696	277.00	1549
61.00	268	134.00	417	199.00	5207	278.00	225
62.00	303	135.00	1057	200.00	352	285.00	281
63.00	1001	136.00	403	201.00	473	293.00	310
64.00	57	137.00	530	203.00	399	294.00	55
65.00	603	138.00	53	204.00	2330	296.00	5042
69.00	27872	139.00	133	205.00	4267	297.00	617
70.00	76	140.00	157	206.00	17352	302.00	51
73.00	239	141.00	1557	207.00	2460	303.00	684
74.00	2447	142.00	527	208.00	547	304.00	121
75.00	4272	143.00	334	209.00	224	308.00	56
76.00	1504	144.00	51	210.00	220	314.00	246
77.00	31608	146.00	256	211.00	719	315.00	557
78.00	2353	147.00	794	212.00	72	316.00	334
79.00	1859	148.00	1619	215.00	138	321.00	61
80.00	1551	149.00	391	216.00	402	323.00	1624
81.00	2087	151.00	243	217.00	4593	324.00	284
82.00	569	152.00	55	218.00	656	327.00	303
83.00	501	153.00	556	221.00	4555	328.00	54
85.00	371	154.00	413	222.00	212	333.00	133
86.00	612	155.00	876	223.00	1131	334.00	1046
87.00	283	156.00	1402	224.00	10419	335.00	247
88.00	58	157.00	248	225.00	2454	341.00	195
91.00	565	158.00	315	226.00	302	346.00	381
92.00	460	159.00	248	227.00	3948	352.00	507
93.00	3213	160.00	524	228.00	566	353.00	296
94.00	196	161.00	761	229.00	863	354.00	512

Date : 23-JUL-2010 15:01

Client ID: DFTPP0723

Instrument: nt6.i

Sample Info: DFTPP0723

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0,25

Data File: 07231001.D

Spectrum: Avg. Scans 2624-2626 (15,61), Background Scan 2616

Location of Maximum: 198,00

Number of points: 220

m/z	Y	m/z	Y	m/z	Y	m/z	Y
96,00	222	162,00	236	230,00	56	365,00	2305
98,00	2141	164,00	52	231,00	395	366,00	343
99,00	1893	165,00	557	232,00	58	371,00	53
100,00	125	166,00	524	234,00	262	372,00	781
101,00	1206	167,00	2749	235,00	263	373,00	223
103,00	429	168,00	1464	236,00	143	383,00	219
104,00	718	169,00	273	237,00	373	402,00	207
105,00	891	172,00	270	239,00	65	403,00	390
106,00	85	173,00	422	241,00	228	404,00	51
107,00	9053	174,00	680	242,00	541	421,00	350
108,00	1452	175,00	1231	243,00	516	422,00	291
109,00	101	176,00	512	244,00	7897	423,00	2348
110,00	17112	177,00	488	245,00	1132	424,00	560
111,00	2583	178,00	162	246,00	1556	441,00	7398
112,00	346	179,00	2424	247,00	296	442,00	49152
113,00	127	180,00	1708	249,00	252	443,00	10155
116,00	407	181,00	748	253,00	143	444,00	1103
117,00	6032	184,00	213	254,00	104		
118,00	485	185,00	1151	255,00	41248		
120,00	62	186,00	9244	256,00	5893		
122,00	623	187,00	2603	257,00	528		

Date : 23-JUL-2010 15:01

Client ID: DFTPP0723

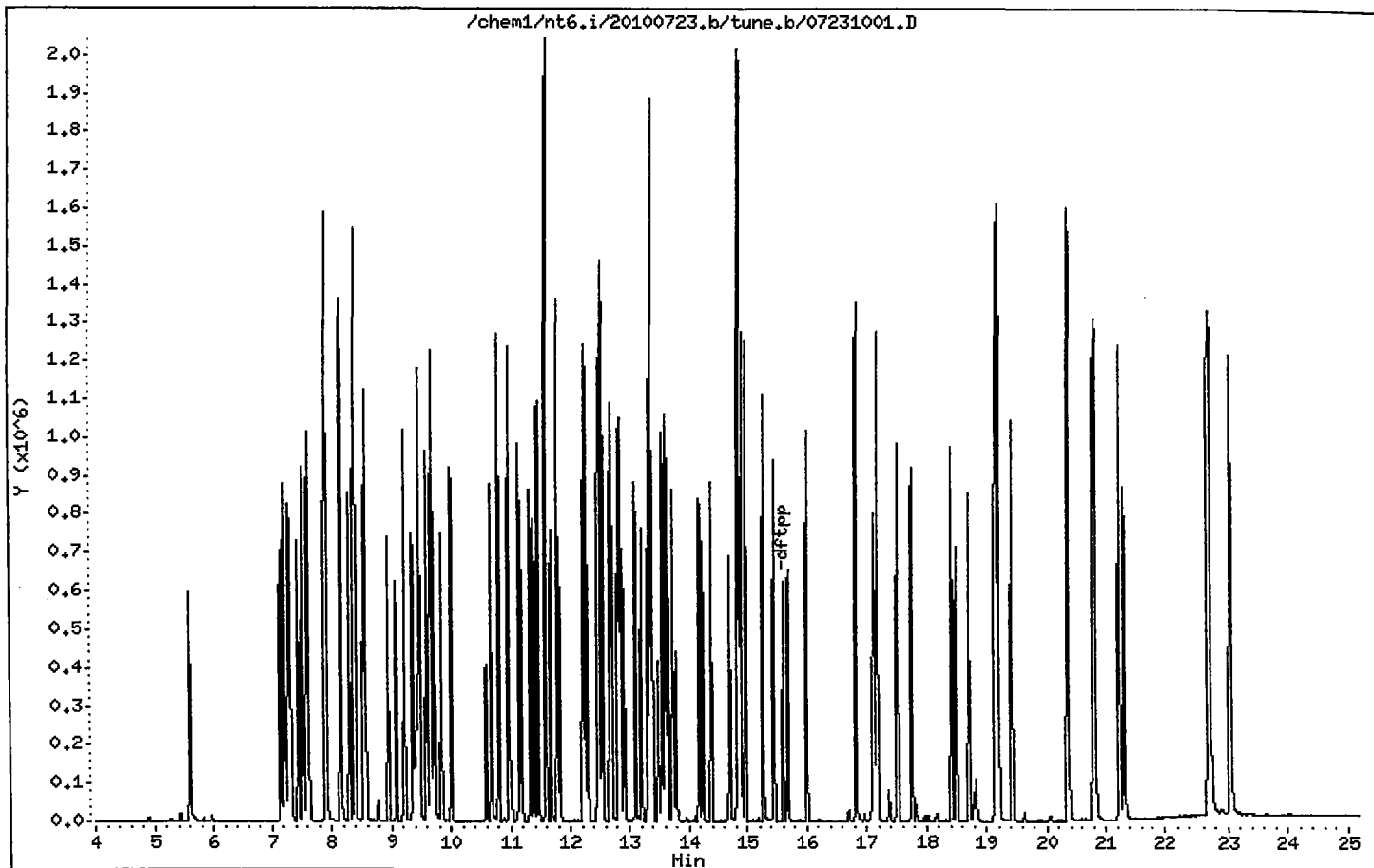
Instrument: nt6.i

Sample Info: DFTPP0723

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.25



Analytical Resources Inc.  
ABN by sw846 8270C  
DDT Breakdown Report

Data file: /chem1/nt6.i/20100723.b/ddt.b/07231001.D    ARI ID: IC250723  
Method: /chem1/nt6.i/20100723.b/ddt.b/sw846ddt.m    Misc: 10-  
Analysis Date: 23-JUL-2010 15:01    Instrument: nt6.i

COMPOUND	RT	AREA
Pentachlorophenol	14.696	127003
Benzidine	17.099	261375
4,4'-DDE	----	----
4,4'-DDD	18.023	5204
4,4'-DDT	18.493	237032

$$\text{DDT Percent Breakdown} = \frac{(\text{DDE Area} + \text{DDD Area}) * 100}{(\text{DDE Area} + \text{DDD Area} + \text{DDT Area})}$$

$$\text{DDT Percent Breakdown} = \frac{(0 + 5204) * 100}{(0 + 5204 + 237032)}$$

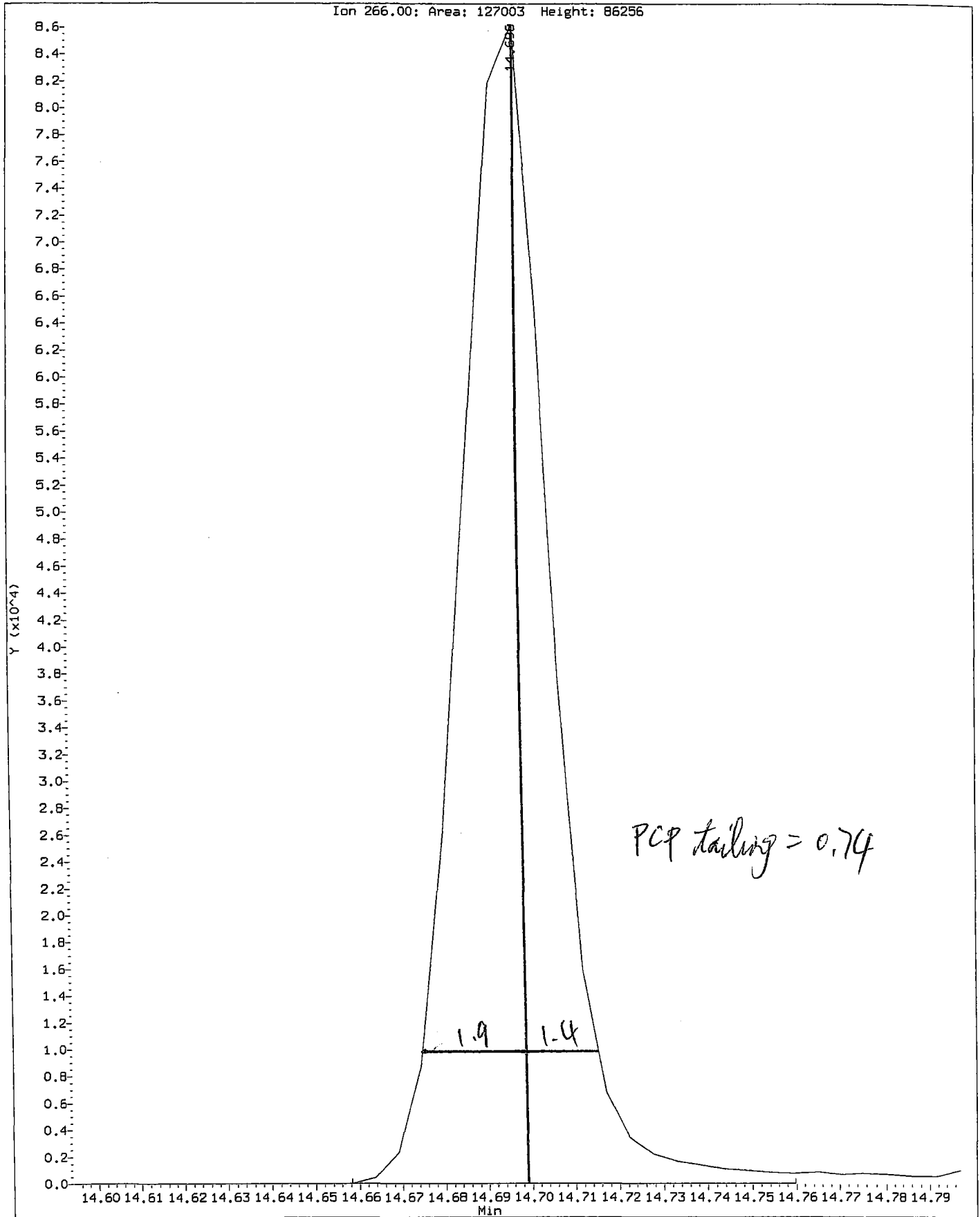
$$\text{DDT Percent Breakdown} = 2.1 \%$$

OK

AB 07/26/10

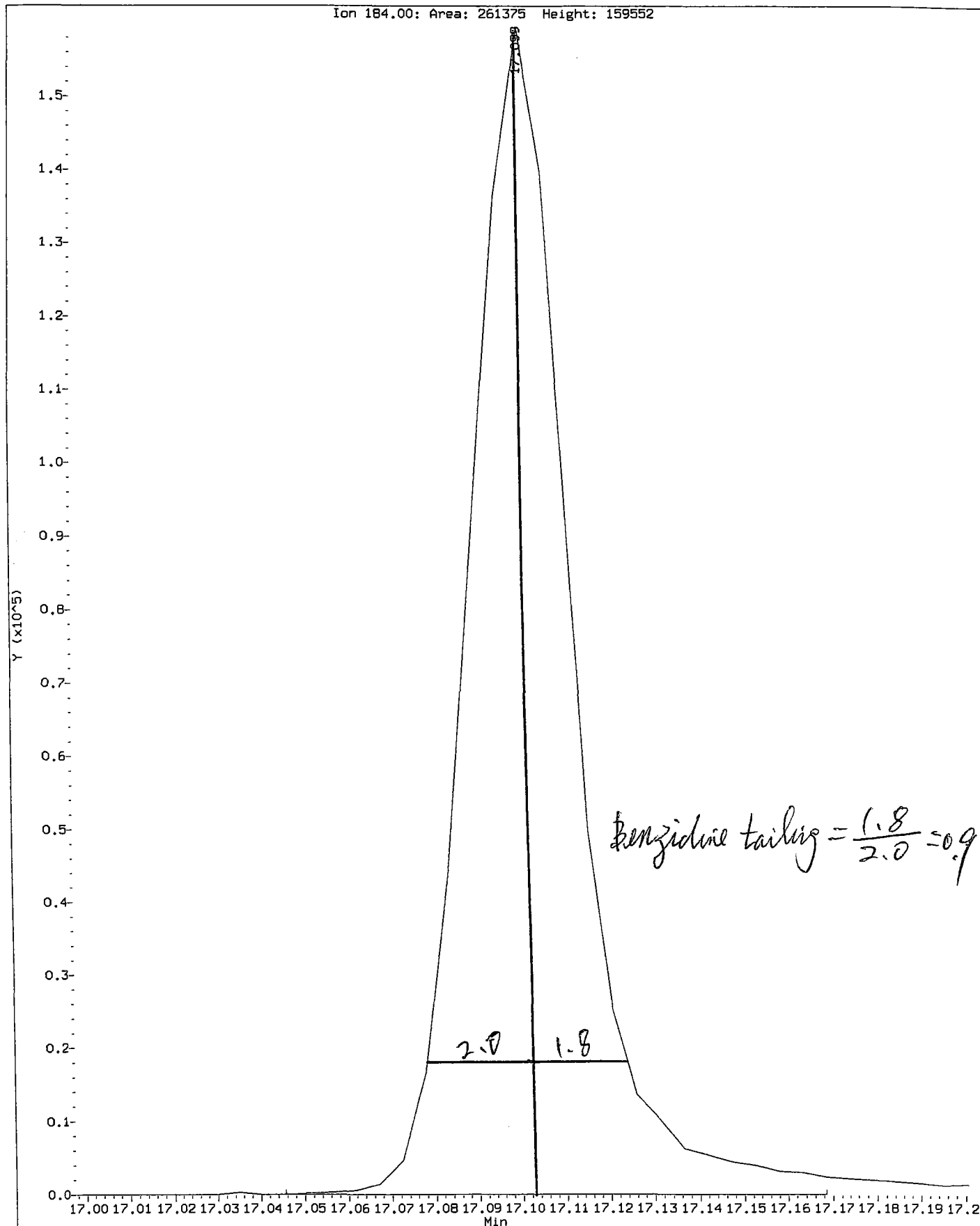
Data File: /chem1/nt6.i/20100723.b/ddt.b/07231001.D  
Injection Date: 23-JUL-2010 15:01  
Instrument: nt6.i  
Client Sample ID: IC250723

Compound: Pentachlorophenol  
CAS Number: 87-86-5



Data File: /chem1/nt6.i/20100723.b/ddt.b/07231001.D  
Injection Date: 23-JUL-2010 15:01  
Instrument: nt6.i  
Client Sample ID: IC250723

Compound: Benzidine  
CAS Number:



Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt6.i/20100723.b/07231002.D  
Lab Smp Id: IC010723 Client Smp ID: IC010723  
Inj Date : 23-JUL-2010 15:38  
Operator : JZ Inst ID: nt6.i  
Smp Info : IC010723,  
Misc Info : 10-  
Comment : lul Injection  
Method : /chem1/nt6.i/20100723.b/SW846072310.m  
Meth Date : 26-Jul-2010 11:33 jianqing Quant Type: ISTD  
Cal Date : 23-JUL-2010 15:38 Cal File: 07231002.D  
Als bottle: 2 Calibration Sample, Level: 1  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: ICAL.sub  
Target Version: 3.50

*07/26/10*  
AMOUNTS

Compounds	QUANT	SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
\$ 1 2-Fluorophenol	112		5.602	5.610	(0.738)	12960	1.00000	1.000	
\$ 2 Phenol-d5	99		7.205	7.218	(0.949)	16567	1.00000	1.000	
3 Phenol	94		7.221	7.237	(0.951)	18572	1.00000	1.000	
\$ 5 2-Chlorophenol-d4	132		7.296	7.303	(0.961)	14473	1.00000	1.000	
4 Bis(2-Chloroethyl)ether	93		7.274	7.290	(0.958)	14758	1.00000	1.000	
6 2-Chlorophenol	128		7.317	7.327	(0.964)	16158	1.00000	1.000	
7 1,3-Dichlorobenzene	146		7.525	7.530	(0.992)	19042	1.00000	1.000	
* 8 1,4-Dichlorobenzene-d4	152		7.589	7.595	(1.000)	195617	20.0000		
9 1,4-Dichlorobenzene	146		7.616	7.621	(1.004)	18283	1.00000	1.000	
\$ 10 1,2-Dichlorobenzene-d4	152		7.888	7.896	(1.039)	9473	1.00000	1.000 (M)	
12 1,2-Dichlorobenzene	146		7.910	7.915	(1.042)	17717	1.00000	1.000	
11 Benzyl alcohol	108		7.894	7.910	(1.040)	7581	1.00000	1.000	
14 2,2'-oxybis(1-Chloropropane)	45		8.155	8.161	(1.075)	15269	1.00000	1.000	
13 2-Methylphenol	108		8.150	8.166	(1.074)	13513	1.00000	1.000	
17 Hexachloroethane	117		8.396	8.406	(1.106)	6764	1.00000	1.000	
16 N-Nitroso-di-n-propylamine	70		8.369	8.390	(1.103)	9485	1.00000	1.000	
15 4-Methylphenol	108		8.385	8.406	(1.105)	13086	1.00000	1.000	
\$ 18 Nitrobenzene-d5	82		8.529	8.542	(0.885)	13152	1.00000	1.000	
19 Nitrobenzene	77		8.556	8.572	(0.888)	15308	1.00000	1.000	
20 Isophorone	82		8.941	8.967	(0.927)	23101	1.00000	1.000	
21 2-Nitrophenol	139		9.079	9.090	(0.942)	7500	1.00000	1.000	
22 2,4-Dimethylphenol	107		9.218	9.234	(0.956)	13985	1.00000	1.000	
23 Bis(2-Chloroethoxy)methane	93		9.357	9.373	(0.971)	16110	1.00000	1.000	
25 2,4-Dichlorophenol	162		9.475	9.485	(0.983)	11462	1.00000	1.000	
26 1,2,4-Trichlorobenzene	180		9.587	9.597	(0.994)	13993	1.00000	1.000	
* 27 Naphthalene-d8	136		9.640	9.651	(1.000)	619162	20.0000		
28 Naphthalene	128		9.672	9.683	(1.003)	41597	1.00000	1.000	

Compounds	QUANT SIG			RESPONSE	AMOUNTS	
	MASS	RT	EXP RT REL RT		CAL-AMT (ug/mL)	ON-COL (ug/mL)
29 4-Chloroaniline	127	9.838	9.843 (1.020)	15650	1.00000	1.000
30 Hexachlorobutadiene	225	10.003	10.009 (1.038)	7937	1.00000	1.000
31 4-Chloro-3-methylphenol	107	10.671	10.682 (1.107)	11158	1.00000	1.000 (M)
32 2-Methylnaphthalene	141	10.794	10.805 (1.120)	22525	1.00000	1.000
33 Hexachlorocyclopentadiene	237	11.179	11.184 (0.894)	3366	1.00000	1.000
34 2,4,6-Trichlorophenol	196	11.323	11.333 (0.906)	7217	1.00000	1.000
35 2,4,5-Trichlorophenol	196	11.387	11.392 (0.911)	7991	1.00000	1.000
\$ 36 2-Fluorobiphenyl	172	11.446	11.453 (0.916)	27771	1.00000	1.000
37 2-Chloronaphthalene	162	11.568	11.579 (0.926)	25928	1.00000	1.000
38 2-Nitroaniline	65	11.819	11.835 (0.946)	5357	1.00000	1.000
39 Dimethylphthalate	163	12.199	12.220 (0.976)	27471	1.00000	1.000
40 Acenaphthylene	152	12.241	12.252 (0.979)	40068	1.00000	1.000
41 2,6-Dinitrotoluene	165	12.289	12.305 (0.983)	5455	1.00000	1.000
* 42 Acenaphthene-d10	164	12.498	12.503 (1.000)	335561	20.0000	
43 3-Nitroaniline	138	12.498	12.519 (1.000)	5458	1.00000	1.000
44 Acenaphthene	153	12.546	12.562 (1.004)	24317	1.00000	1.000
46 Dibenzofuran	168	12.808	12.823 (1.025)	33065	1.00000	1.000
47 4-Nitrophenol	109	12.845	12.861 (1.028)	2427	1.00000	1.000 (M)
48 2,4-Dinitrotoluene	165	12.909	12.930 (1.033)	6962	1.00000	1.000
50 Diethylphthalate	149	13.347	13.368 (1.068)	27786	1.00000	1.000
49 Fluorene	166	13.363	13.379 (1.069)	28942	1.00000	1.000
51 4-Chlorophenyl-phenylether	204	13.400	13.411 (1.072)	13051	1.00000	1.000
52 4-Nitroaniline	138	13.486	13.523 (1.079)	5361	1.00000	1.000
54 N-Nitrosodiphenylamine	169	13.609	13.630 (0.916)	19100	1.00000	1.000
\$ 55 2,4,6-Tribromophenol	330	13.785	13.798 (1.103)	2801	1.00000	1.000
56 4-Bromophenyl-phenylether	248	14.175	14.185 (0.954)	7664	1.00000	1.000
57 Hexachlorobenzene	284	14.389	14.399 (0.968)	8254	1.00000	1.000
58 Pentachlorophenol	266	14.693	14.704 (0.989)	2935	1.00000	1.000
* 59 Phenanthrene-d10	188	14.859	14.869 (1.000)	502252	20.0000	
60 Phenanthrene	178	14.896	14.912 (1.002)	36558	1.00000	1.000
61 Anthracene	178	14.965	14.987 (1.007)	37076	1.00000	1.000
62 Carbazole	167	15.264	15.280 (1.027)	34327	1.00000	1.000
63 Di-n-butylphthalate	149	16.002	16.012 (1.077)	39082	1.00000	1.000
64 Fluoranthene	202	16.824	16.835 (1.132)	36900	1.00000	1.000
65 Pyrene	202	17.171	17.187 (0.897)	39792	1.00000	1.000
\$ 66 Terphenyl-d14	244	17.508	17.515 (0.914)	22641	1.00000	1.000
67 Butylbenzylphthalate	149	18.410	18.421 (0.961)	15872	1.00000	1.000
68 Benzo (a) anthracene	228	19.131	19.147 (0.999)	37113	1.00000	1.000
* 69 Chrysene-d12	240	19.153	19.169 (1.000)	533625	20.0000	
70 3,3'-Dichlorobenzidine	252	19.158	19.174 (1.000)	11847	1.00000	1.000
71 Chrysene	228	19.190	19.217 (1.002)	35744	1.00000	1.000
72 bis(2-Ethylhexyl)phthalate	149	19.414	19.420 (0.954)	20881	1.00000	1.000
* 134 Di-n-octylphthalate-d4	153	20.344	20.354 (1.000)	671548	20.0000	
73 Di-n-octylphthalate	149	20.354	20.360 (1.001)	42955	1.00000	1.000
74 Benzo (b) fluoranthene	252	20.776	20.803 (0.975)	37421	1.00000	1.000
75 Benzo (k) fluoranthene	252	20.808	20.840 (0.977)	42406	1.00000	1.000
187 Total Benzofluoranthenes	252	20.808	20.840 (0.977)	77462	2.00000	2.000 (M)



Compounds	QUANT SIG			AMOUNTS			
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
=====	====	==	=====	=====	=====	=====	=====
76 Benzo(a)pyrene	252	21.220	21.246	(0.996)	35052	1.00000	1.000
* 77 Perylene-d12	264	21.305	21.316	(1.000)	501426	20.00000	
78 Indeno(1,2,3-cd)pyrene	276	22.689	22.720	(1.065)	46606	1.00000	1.000
79 Dibenzo(a,h)anthracene	278	22.710	22.747	(1.066)	34366	1.00000	1.000
80 Benzo(g,h,i)perylene	276	23.036	23.089	(1.081)	43155	1.00000	1.000
90 N-Nitrosodimethylamine	74	2.718	2.750	(0.358)	8653	1.00000	1.000
103 Pyridine	79	2.713	2.702	(0.357)	13072	1.00000	1.000 (M)
91 Aniline	93	7.151	7.157	(0.942)	20217	1.00000	1.000
105 1-methylnaphthalene	141	10.965	10.975	(1.137)	22955	1.00000	1.000
93 Benzidine	184	17.102	17.107	(0.893)	12076	1.00000	1.000
111 Azobenzene (1,2-DP-Hydrazine)	77	13.646	13.667	(1.092)	26415	1.00000	1.000
143 1,4-Dioxane	88	2.152	2.168	(0.284)	5821	1.00000	1.000
\$ 137 d8-1,4-Dioxane	96	2.109	2.125	(0.278)	5561	1.00000	1.000
144 alpha-Terpineol	59	9.715	9.731	(1.008)	7796	1.00000	1.000
98 Retene	219	17.753	17.759	(0.927)	11931	1.00000	1.000
133 Butylatedhydroxytoluene	205	12.695	12.706	(1.016)	21964	1.00000	1.000
115 Tributyl Phosphate	99	13.726	13.763	(0.924)	28341	1.00000	1.000
116 Dibutyl Phenyl Phosphate	175	15.446	15.457	(1.040)	17234	1.00000	1.000
117 Butyl Diphenyl Phosphate	94	17.123	17.134	(0.894)	6172	1.00000	1.000
118 Triphenyl Phosphate	326	18.720	18.731	(0.977)	5942	1.00000	1.000
123 Acetophenone	105	8.300	8.316	(1.094)	18028	1.00000	1.000
179 n-Decane	57	7.440	7.450	(0.980)	12744	1.00000	1.000
180 n-Octadecane	57	14.826	14.832	(0.998)	11732	1.00000	1.000
168 Pentachlorobenzene	250	12.850	12.866	(1.028)	10098	1.00000	1.000
113 Diphenyl Oxide	170	11.777	11.782	(0.942)	25762	1.00000	1.000
112 Biphenyl	154	11.579	11.590	(0.926)	31556	1.00000	
120 2,3,4,6-Tetrachlorophenol	232	13.107	13.112	(1.049)	6165	1.00000	1.000
151 1,2,4,5-Tetrachlorobenzene	216	11.136	11.141	(0.891)	13502	1.00000	1.000
110 Tetrachloroguaiacol	247	14.821	14.842	(0.997)	3748	2.00000	
109 3,4,5-Trichloroguaiacol	213	13.203	13.219	(0.889)	2088	1.00000	
181 3,4,6-Trichloroguaiacol	211	13.320	13.331	(1.755)	2419	1.00000	
108 4,5,6-Trichloroguaiacol	213	14.239	14.250	(1.139)	1998	1.00000	
184 3,4-Dichloroguaiacol	192	11.670	11.675	(1.538)	2055	1.00000	
107 4,5-Dichloroguaiacol	192	12.460	12.476	(0.997)	5561	2.00000	
182 4,6-Dichloroguaiacol	192	12.460	12.476	(1.642)	5561	2.00000	
185 4-Chloroguaiacol	115	10.586	10.596	(1.395)	1238	0.50000	
186 Carbaryl	144	15.686	15.702	(1.056)	13304	1.00000	1.000
106 Guaiacol	124	8.572	8.588	(1.129)	12877	1.00000	1.000

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: 07231002.D  
 Lab Smp Id: IC010723  
 Analysis Type: SV  
 Quant Type: ISTD  
 Operator: JZ  
 Method File: /chem1/nt6.i/20100723.b/SW846072310.m  
 Misc Info: 10-

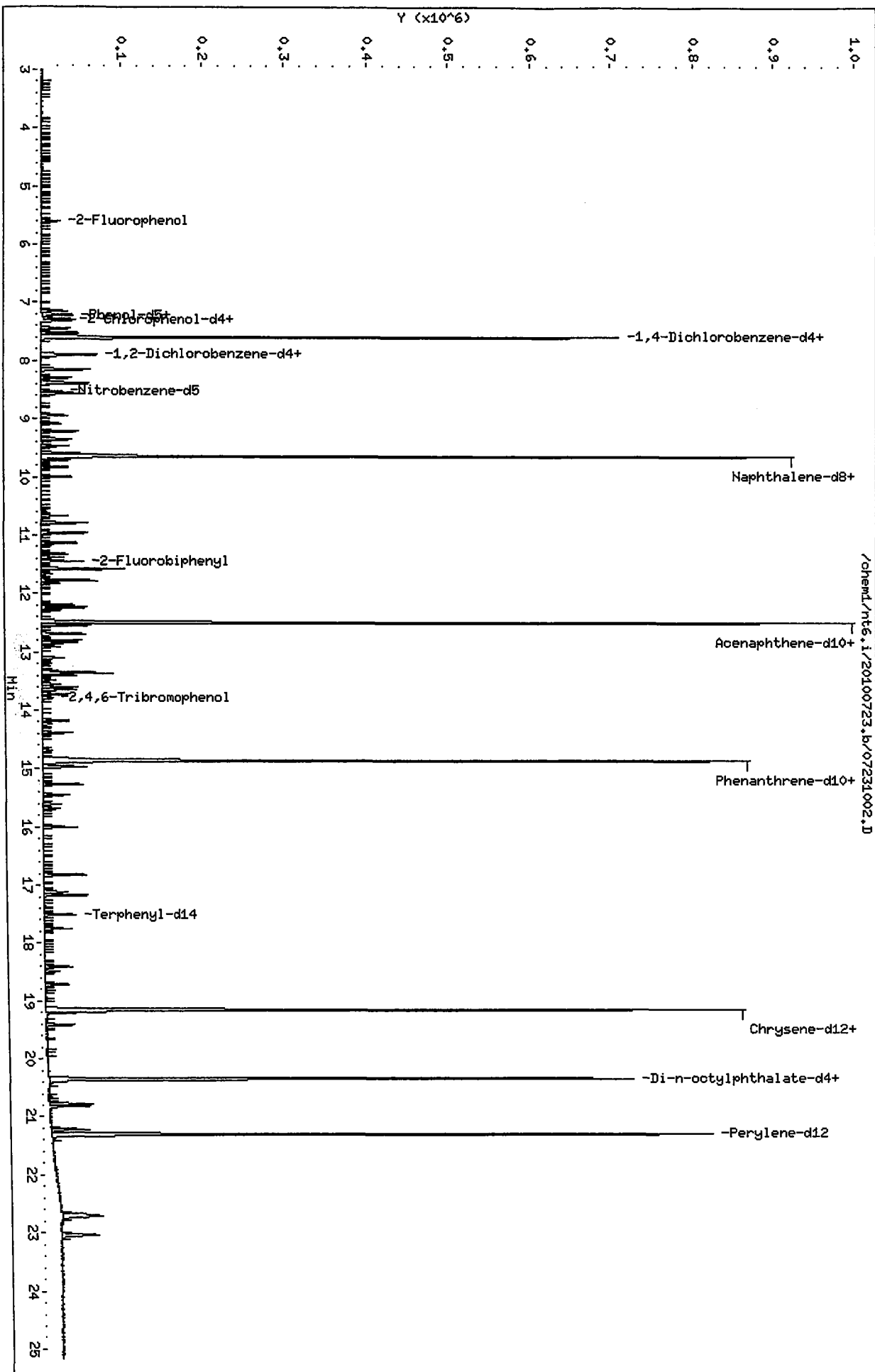
Calibration Date: 23-JUL-2010  
 Calibration Time: 15:01  
 Client Smp ID: IC010723  
 Level:  
 Sample Type:

Test Mode:  
 Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	182786	91393	365572	195617	7.02
27 Naphthalene-d8	584137	292068	1168274	619162	6.00
42 Acenaphthene-d10	320442	160221	640884	335561	4.72
59 Phenanthrene-d10	503793	251896	1007586	502252	-0.31
69 Chrysene-d12	532343	266172	1064686	533625	0.24
134 Di-n-octylphthala	719428	359714	1438856	671548	-6.66
77 Perylene-d12	517269	258634	1034538	501426	-3.06

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	7.59	7.09	8.09	7.59	-0.03
27 Naphthalene-d8	9.64	9.14	10.14	9.64	-0.03
42 Acenaphthene-d10	12.50	12.00	13.00	12.50	-0.02
59 Phenanthrene-d10	14.86	14.36	15.36	14.86	-0.02
69 Chrysene-d12	19.16	18.66	19.66	19.15	-0.04
134 Di-n-octylphthala	20.35	19.85	20.85	20.34	-0.01
77 Perylene-d12	21.31	20.81	21.81	21.31	-0.01

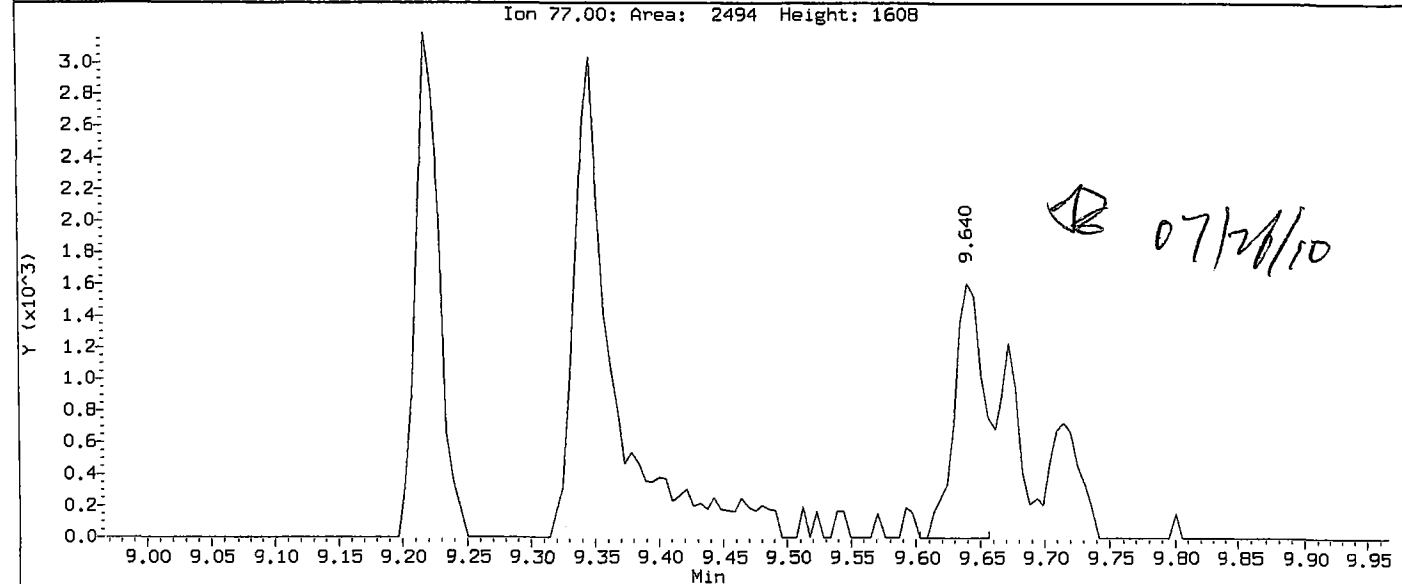
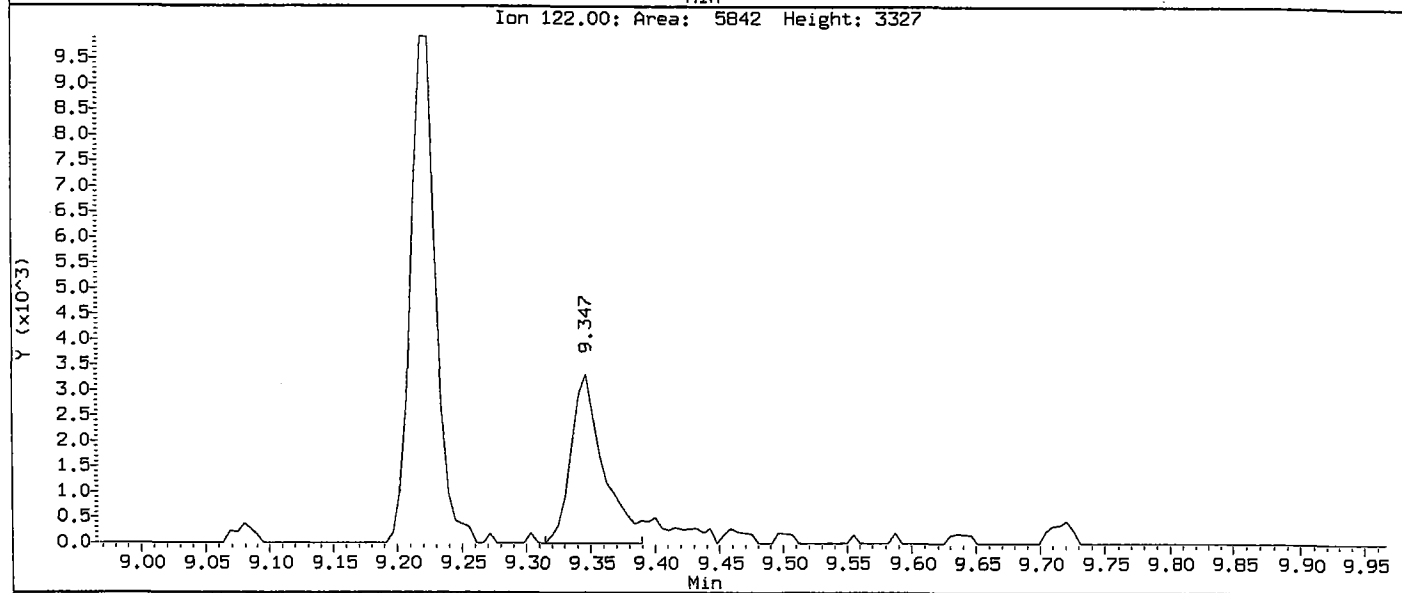
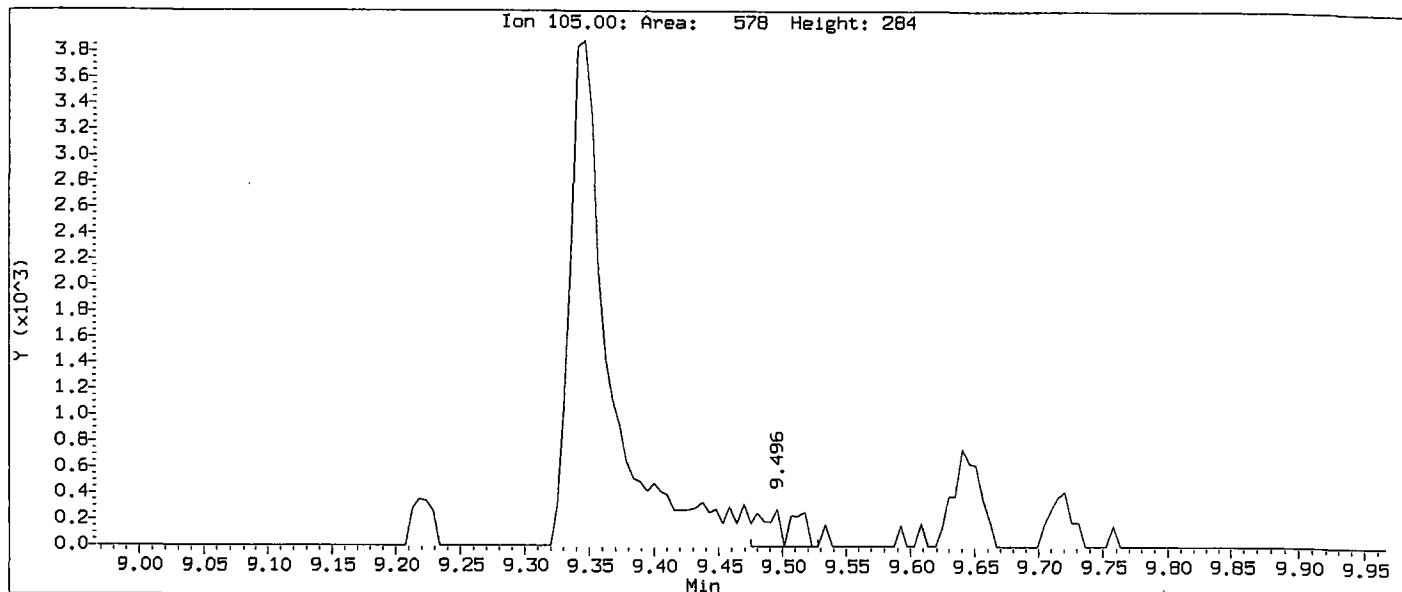
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 AREA LOWER LIMIT = - 50% of internal standard area.  
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
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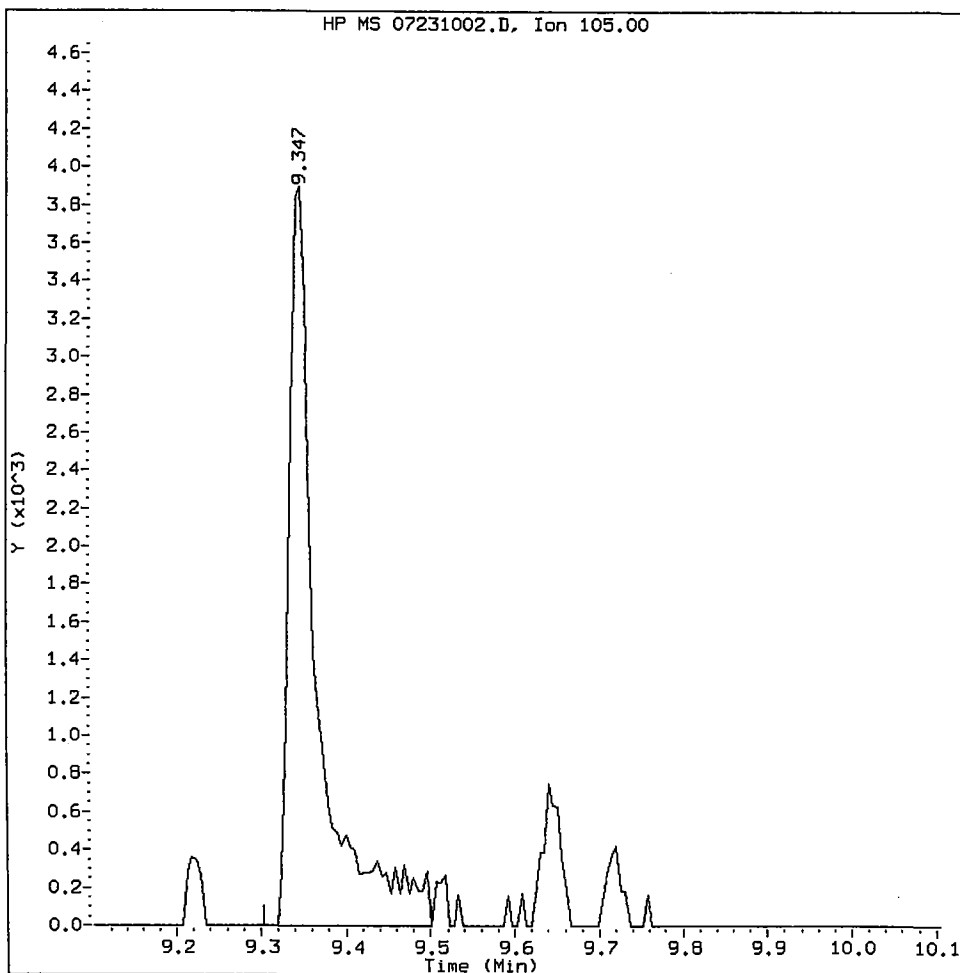
20100723

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Injection Date: 23-JUL-2010 15:38  
Instrument: nt6.i  
Client Sample ID: IC010723

Compound: Benzoic acid  
CAS Number: 65-85-0



Benzoic acid Amount: 0.00 Area: 8860



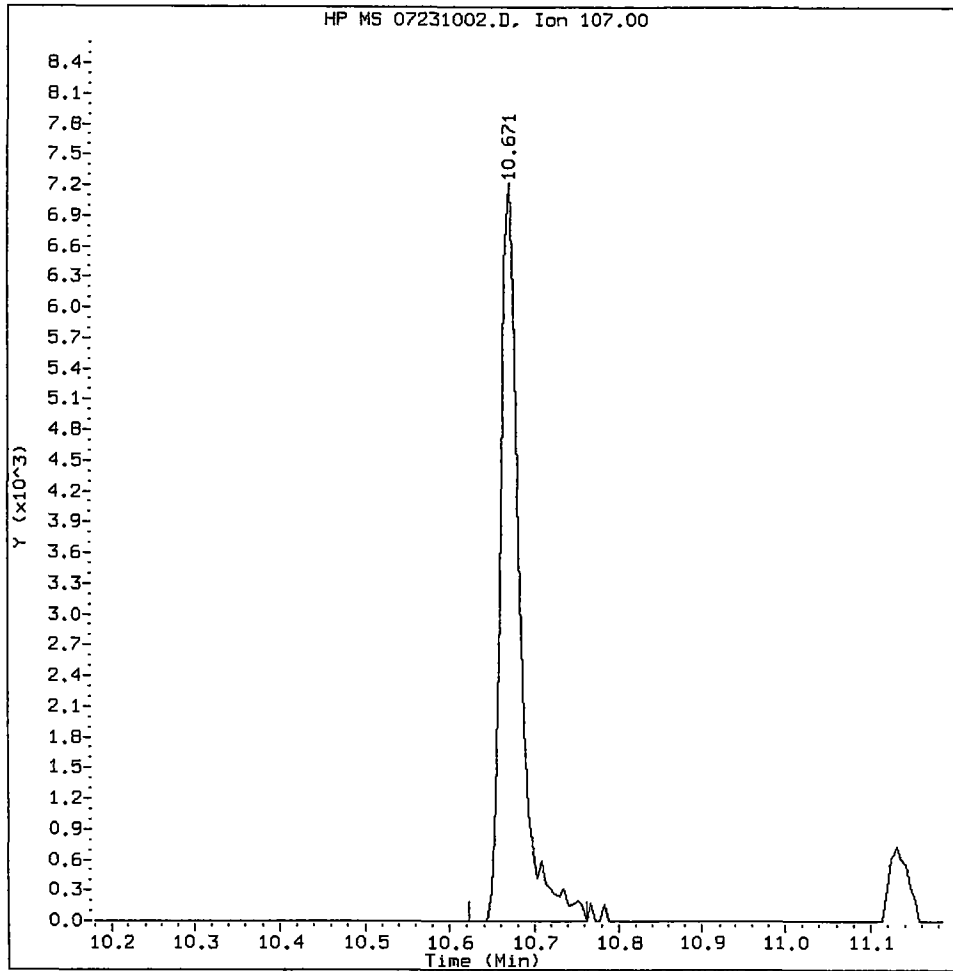
MANUAL INTEGRATION for Benzoic acid

- 1. Baseline correction
- 2. Poor chromatography
- 3. Peak not found
- 4. Totals calculation
- 5. Other \_\_\_\_\_

Analyst: AD

Date 07/26/10

4-Chloro-3-methylphenol Amount: 1.00 Area: 11158



MANUAL INTEGRATION for 4-Chloro-3-methylphenol

- 1. Baseline correction
- ②. Poor chromatography
- 3. Peak not found
- 4. Totals calculation

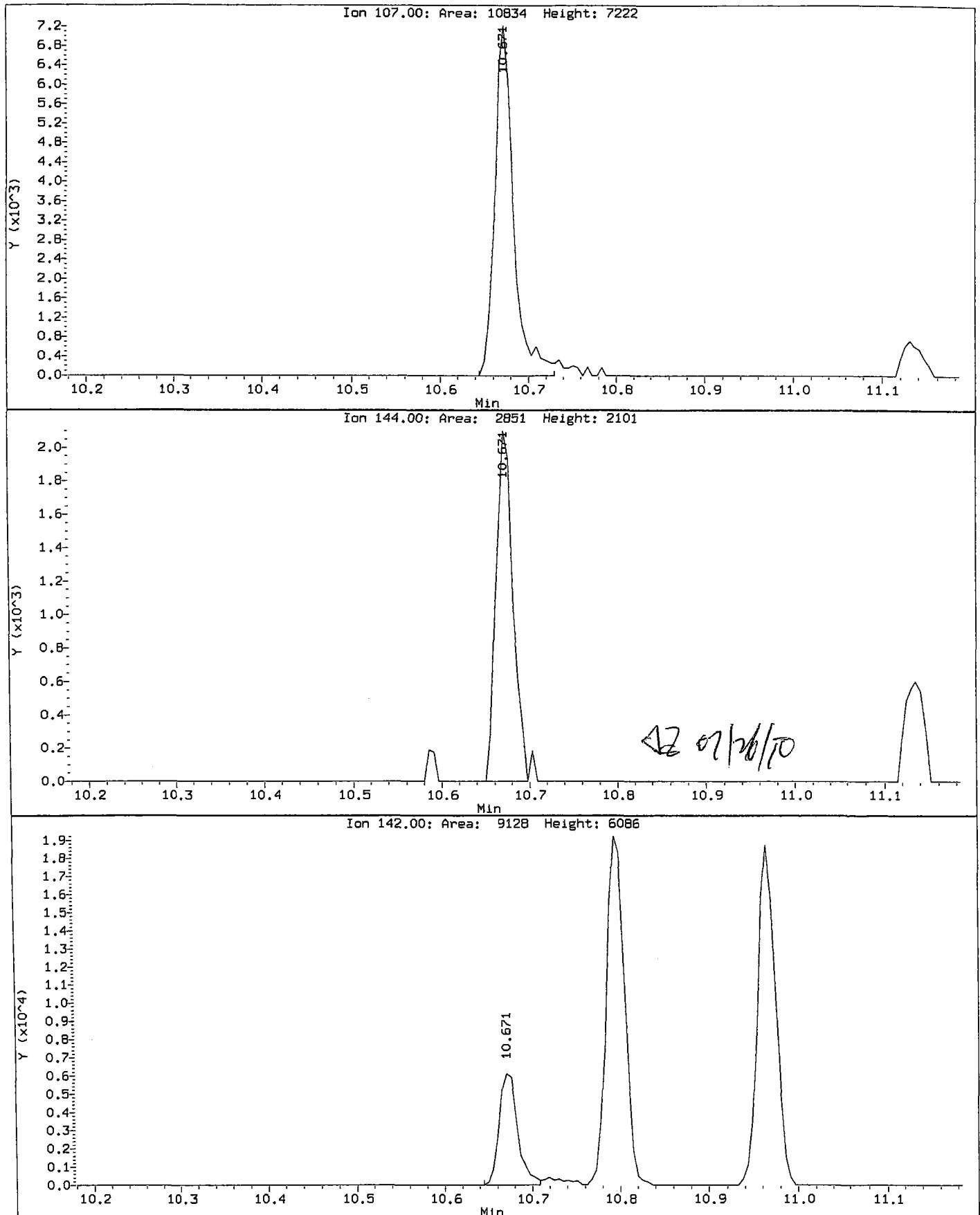
5. Other \_\_\_\_\_

Analyst: AS

Date: 07/26/10

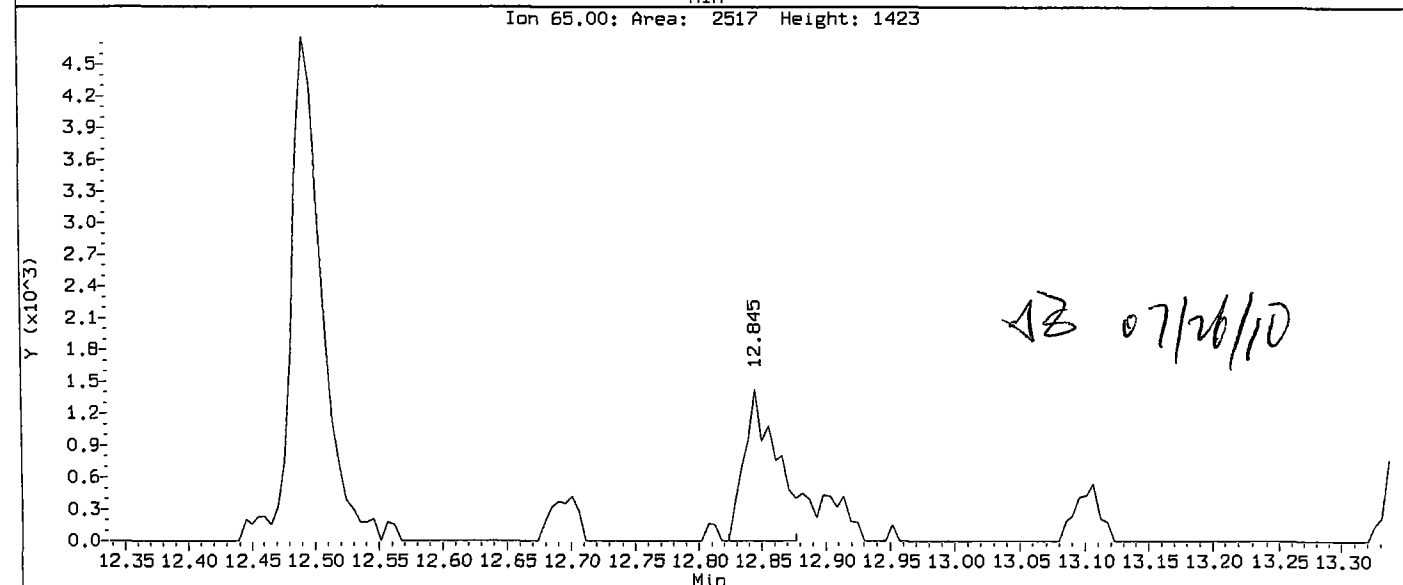
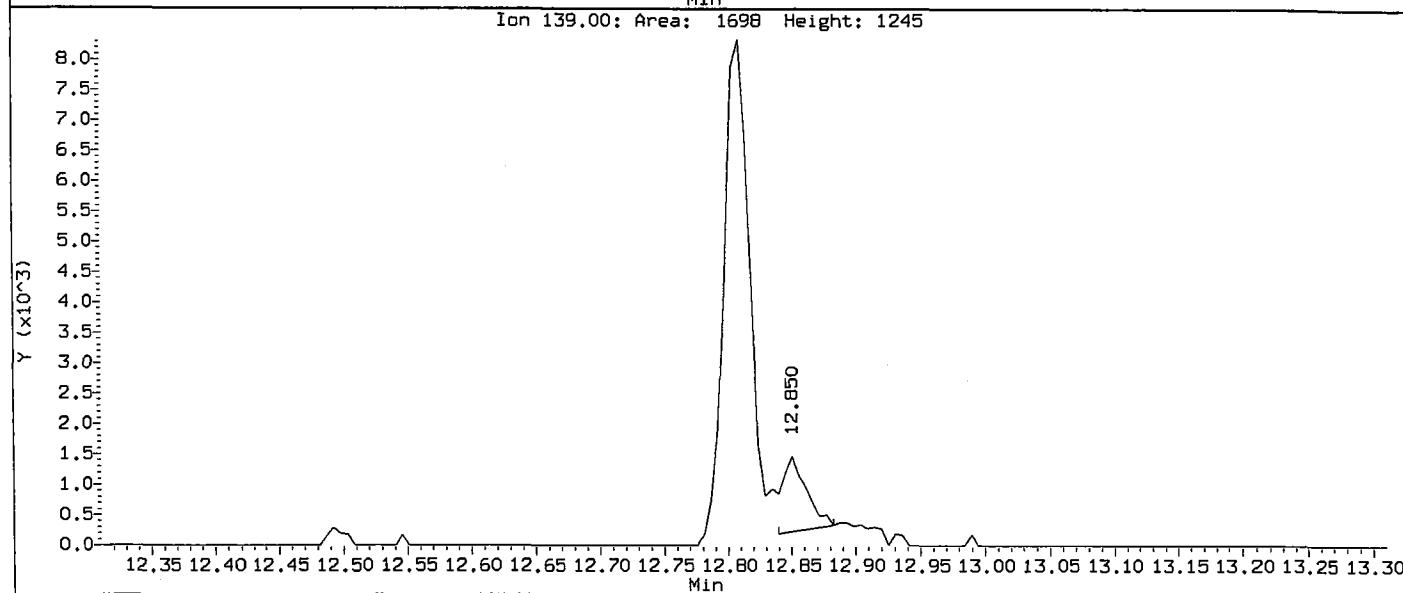
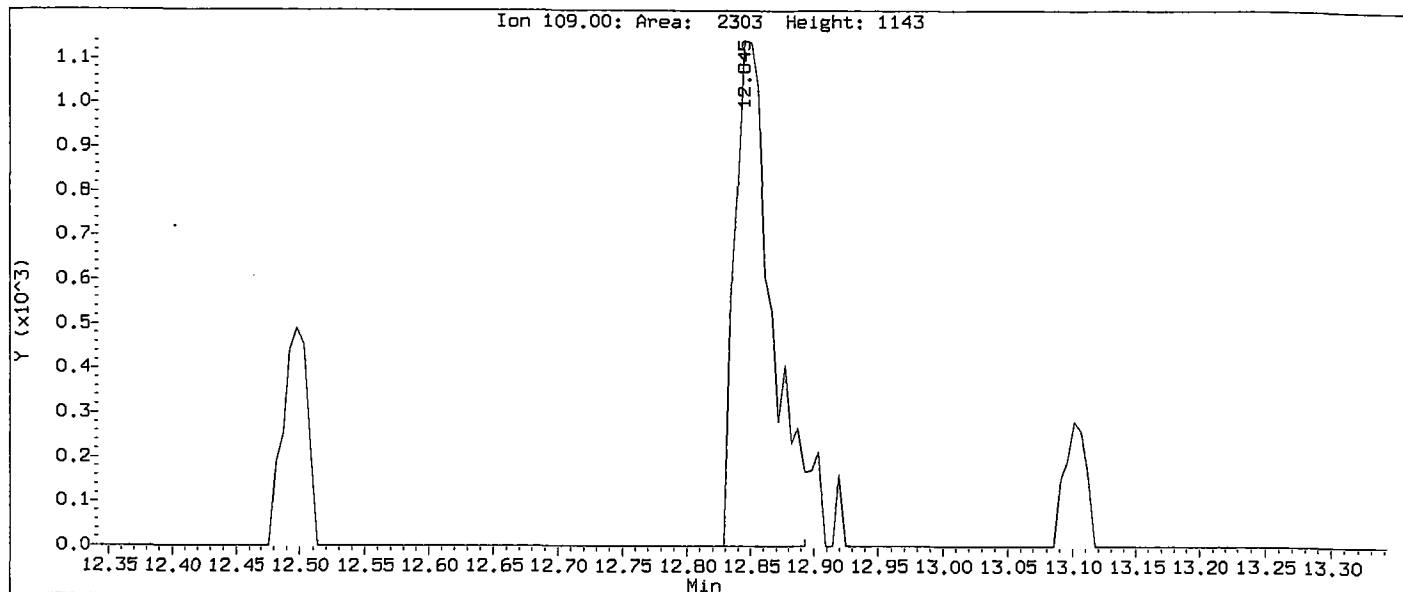
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Injection Date: 23-JUL-2010 15:38  
Instrument: nt6.1  
Client Sample ID: IC010723

Compound: 4-Chloro-3-methylphenol  
CAS Number: 59-50-7



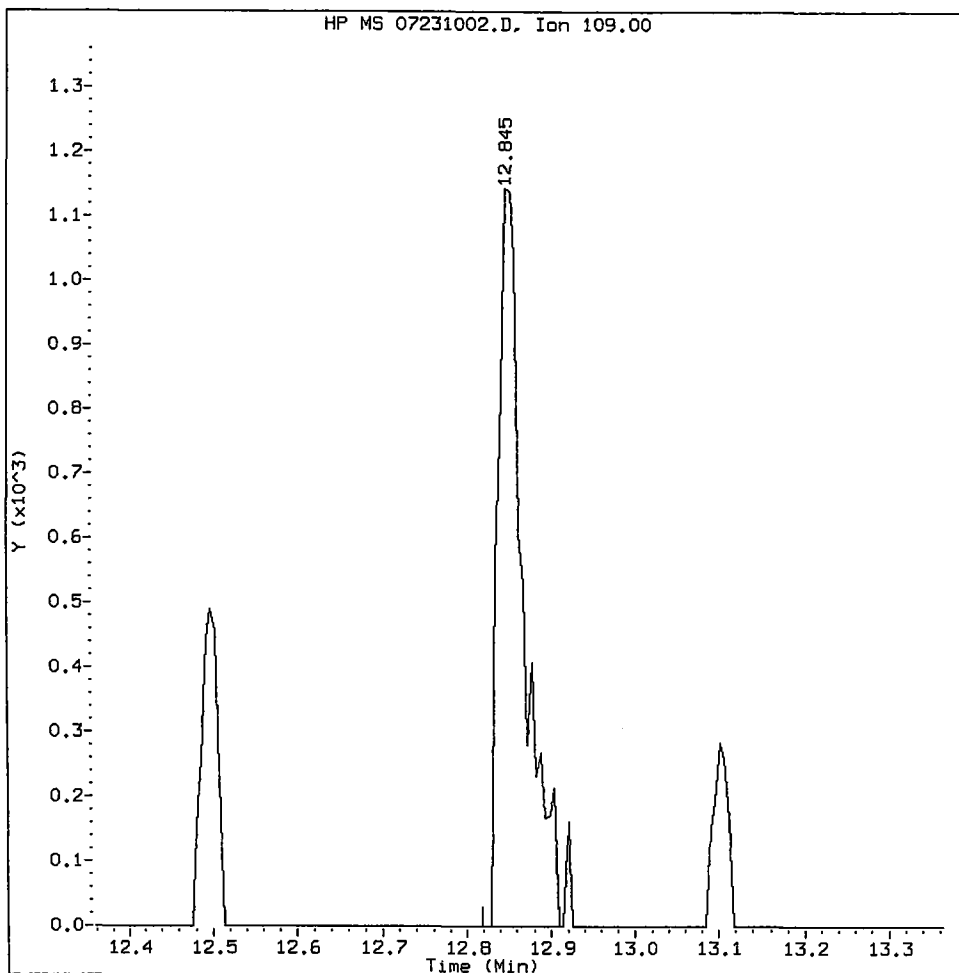
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Injection Date: 23-JUL-2010 15:38  
Instrument: nt6.1  
Client Sample ID: IC010723

Compound: 4-Nitrophenol  
CAS Number: 100-02-7





4-Nitrophenol Amount: 1.00 Area: 2427



MANUAL INTEGRATION for 4-Nitrophenol

- 1) Baseline correction
- 2) Poor chromatography
- 3. Peak not found
- 4. Totals calculation

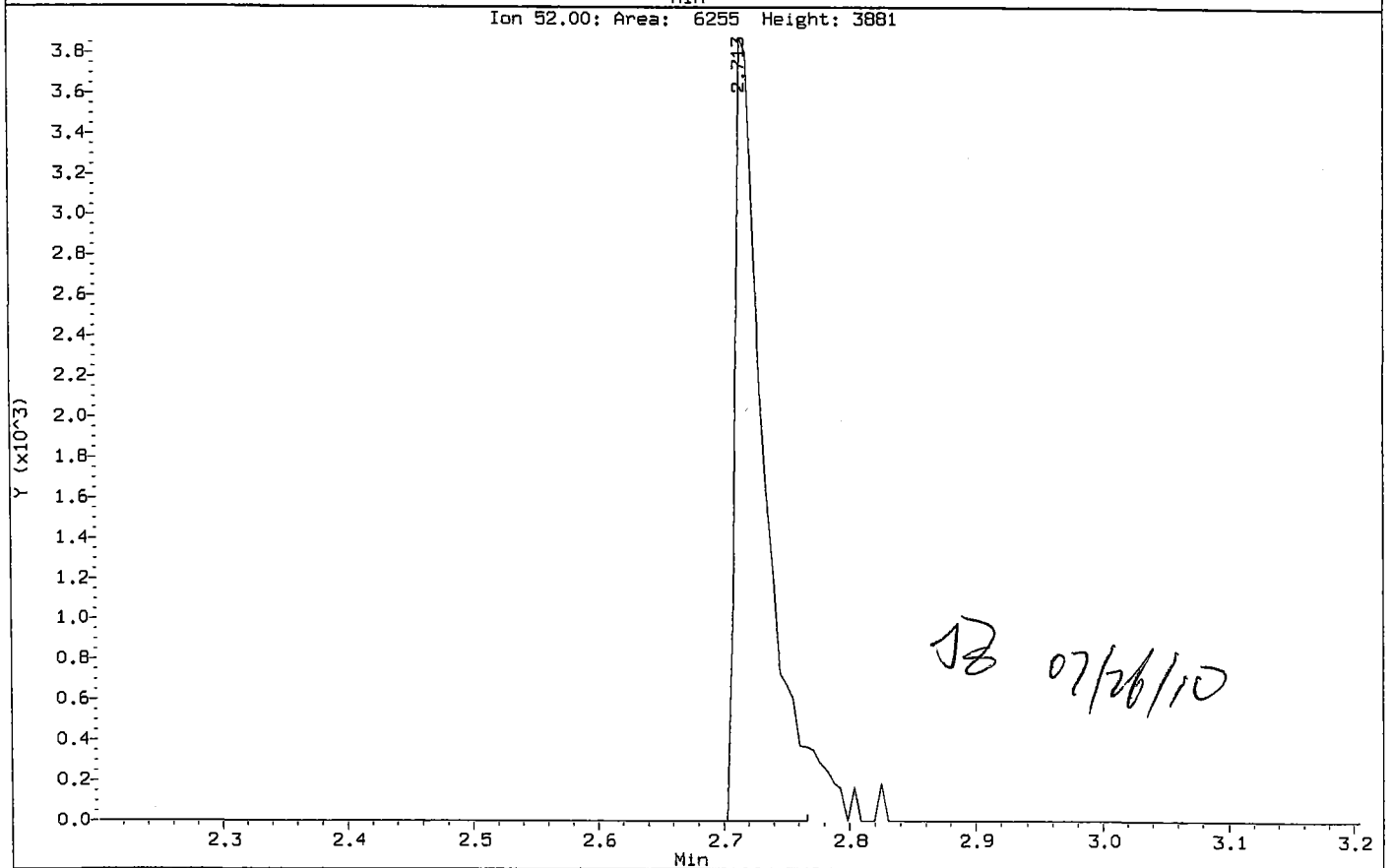
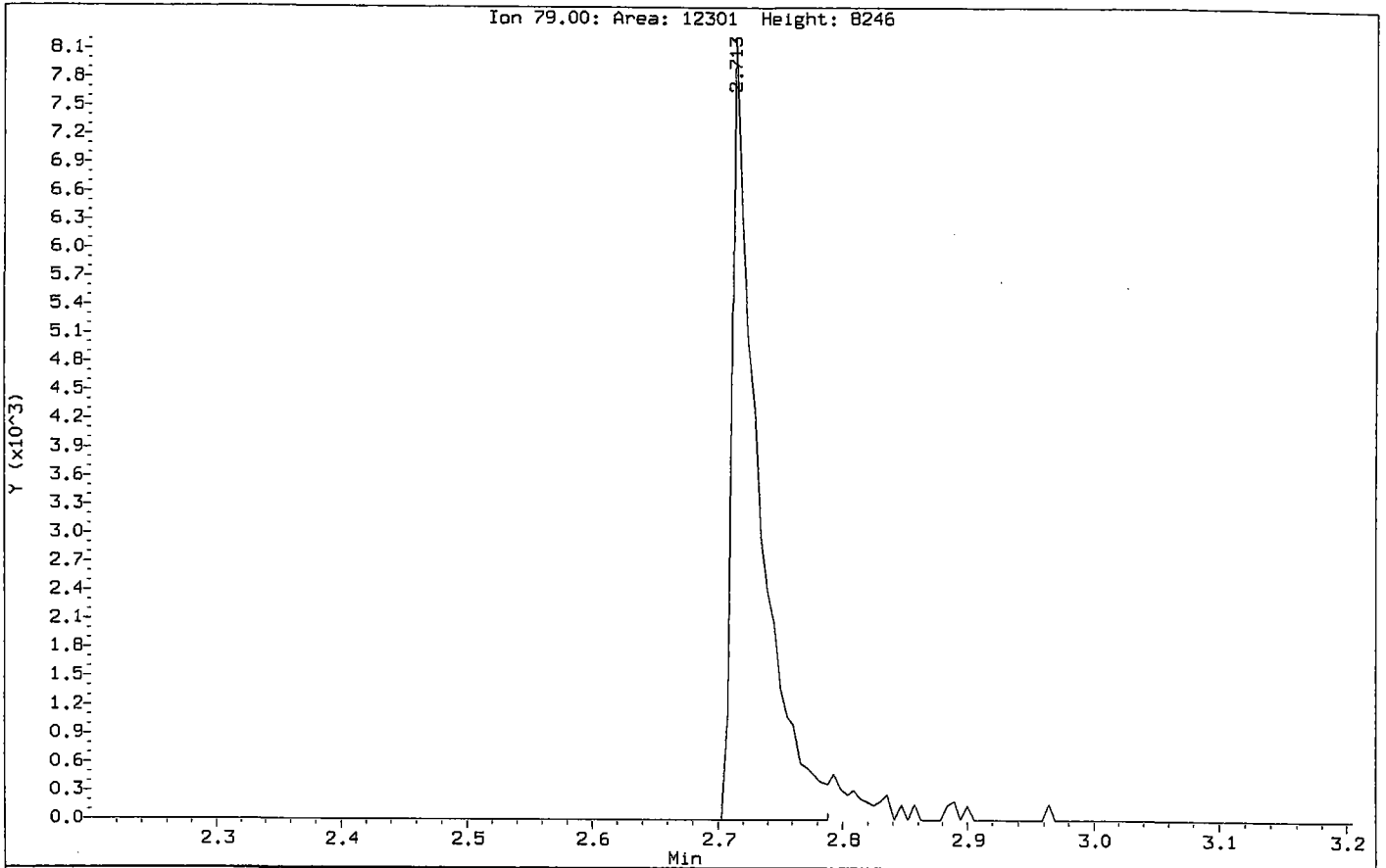
5. Other \_\_\_\_\_

Analyst: AZ

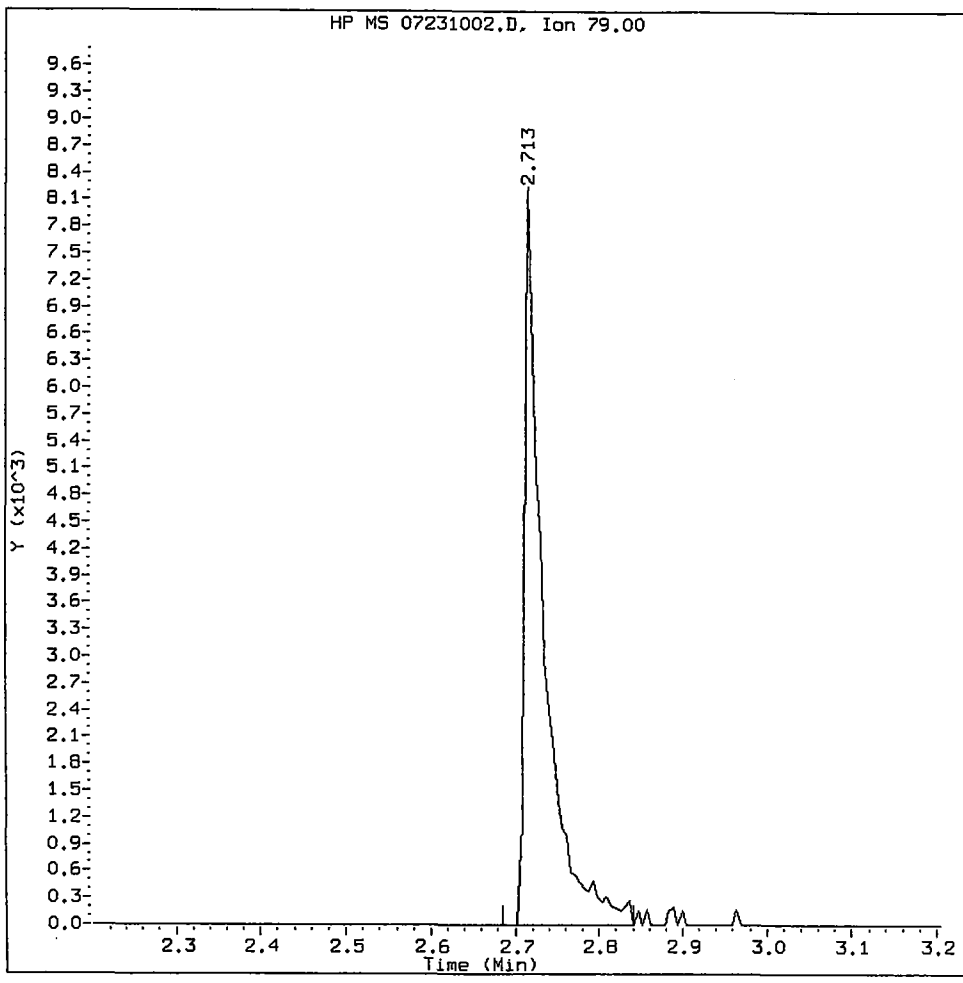
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Injection Date: 23-JUL-2010 15:38  
Instrument: nt6.1  
Client Sample ID: IC010723

Compound: Pyridine  
CAS Number:



Pyridine Amount: 1.00 Area: 13072



MANUAL INTEGRATION for Pyridine

- 1. Baseline correction
- 2. Poor chromatography
- 3. Peak not found
- 4. Totals calculation

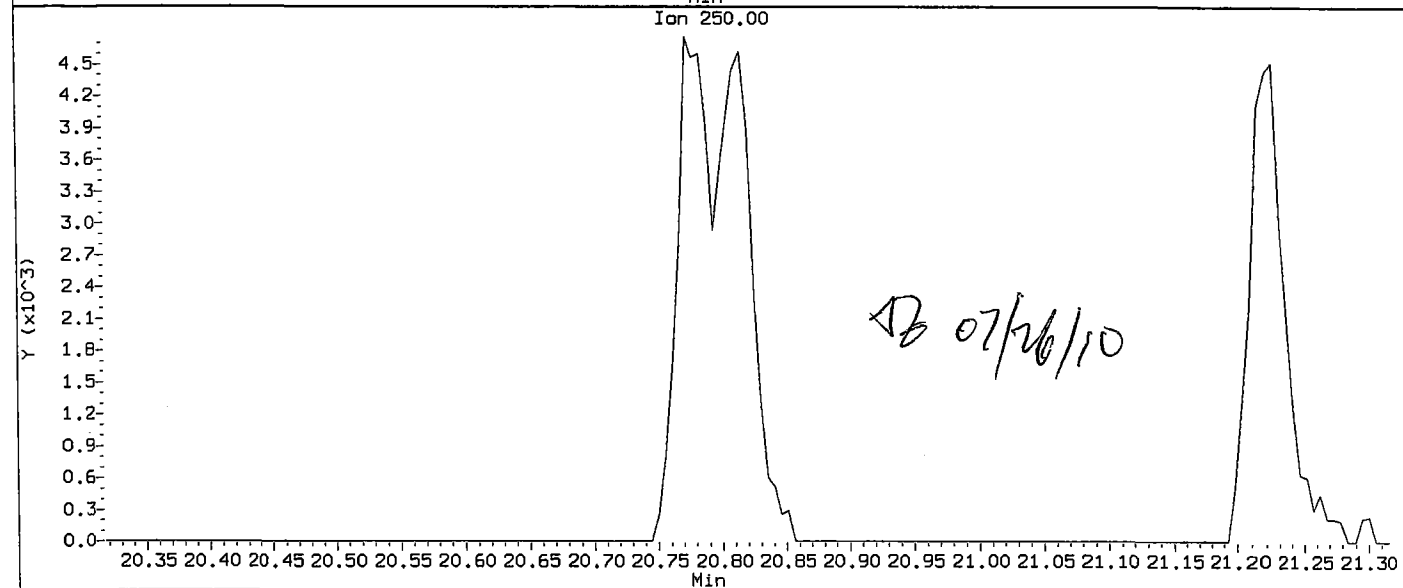
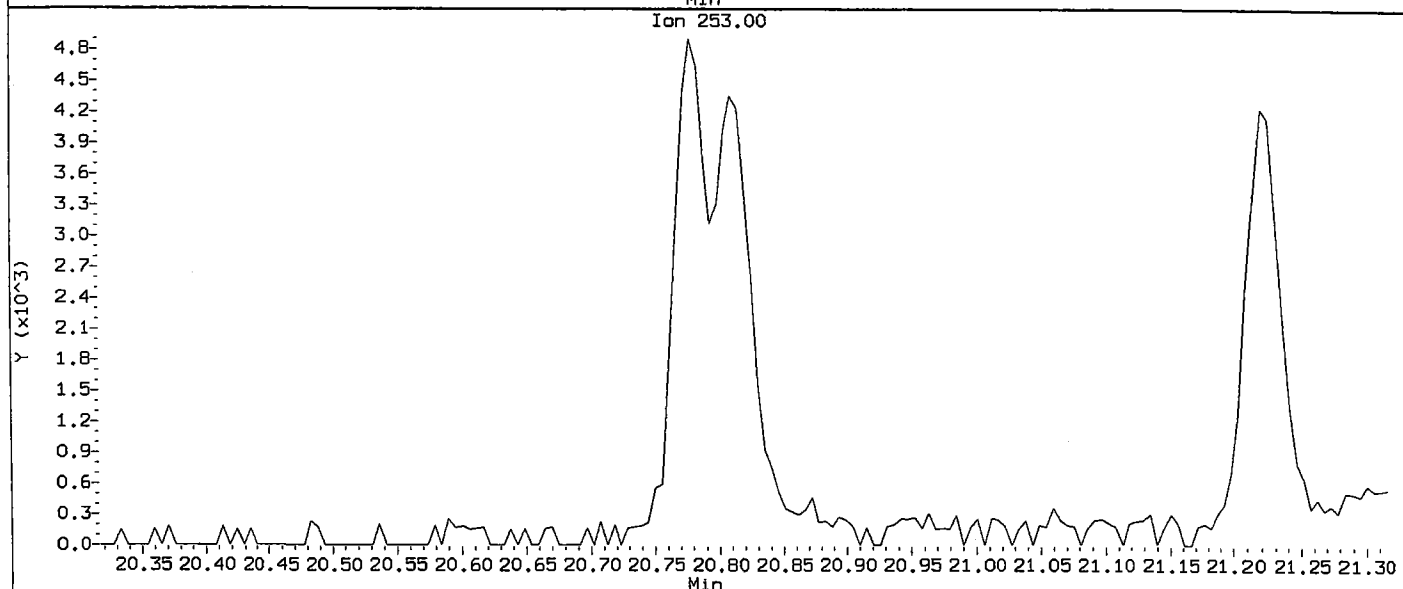
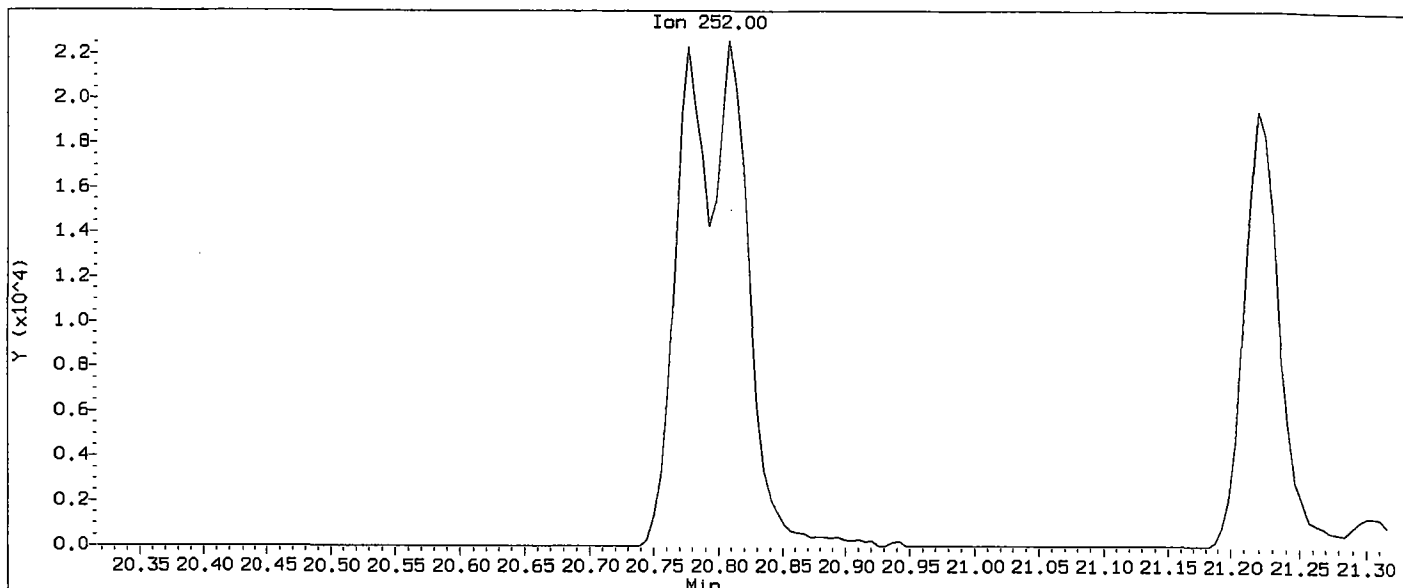
5. Other \_\_\_\_\_

Analyst: AB

Date: 07/26/10

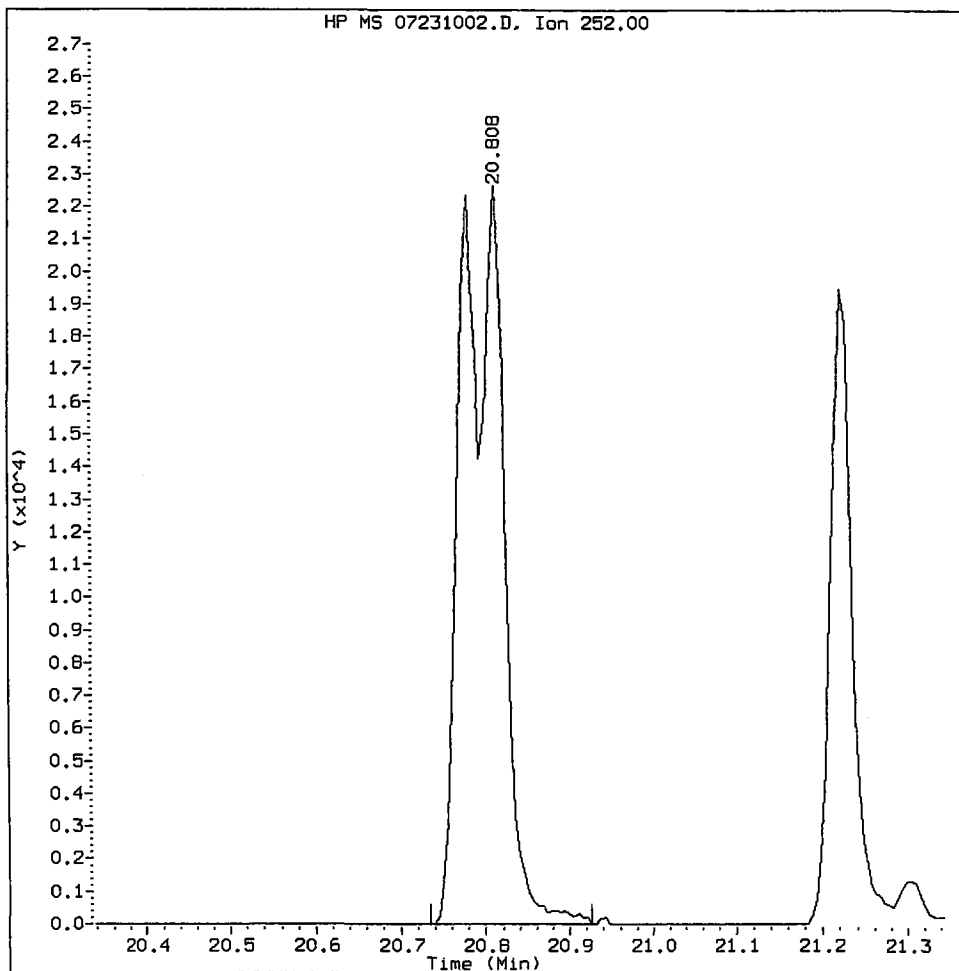
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Injection Date: 23-JUL-2010 15:38  
Instrument: nt6.1  
Client Sample ID: IC010723

Compound: Total Benzofluoranthenes  
CAS Number:



IC010723, /chem1/nt6.i/20100723.b/07231002.D

Total Benzofluoranthenes Amount: 2.00 Area: 77462



MANUAL INTEGRATION for Total Benzofluoranthenes

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

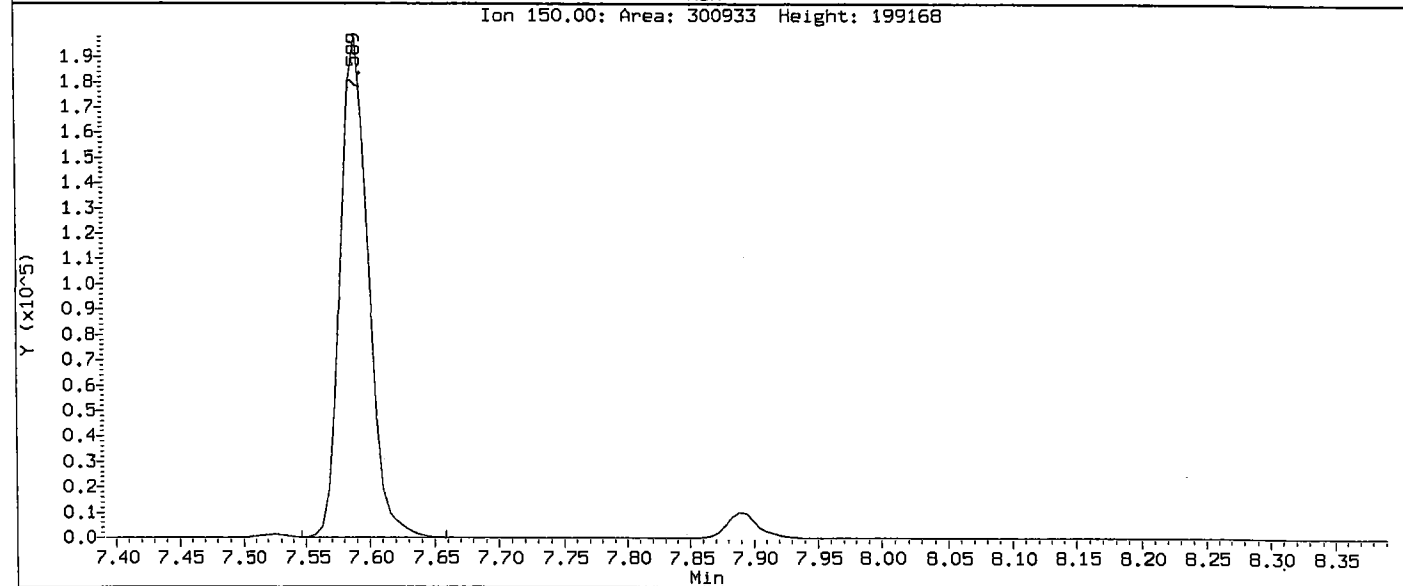
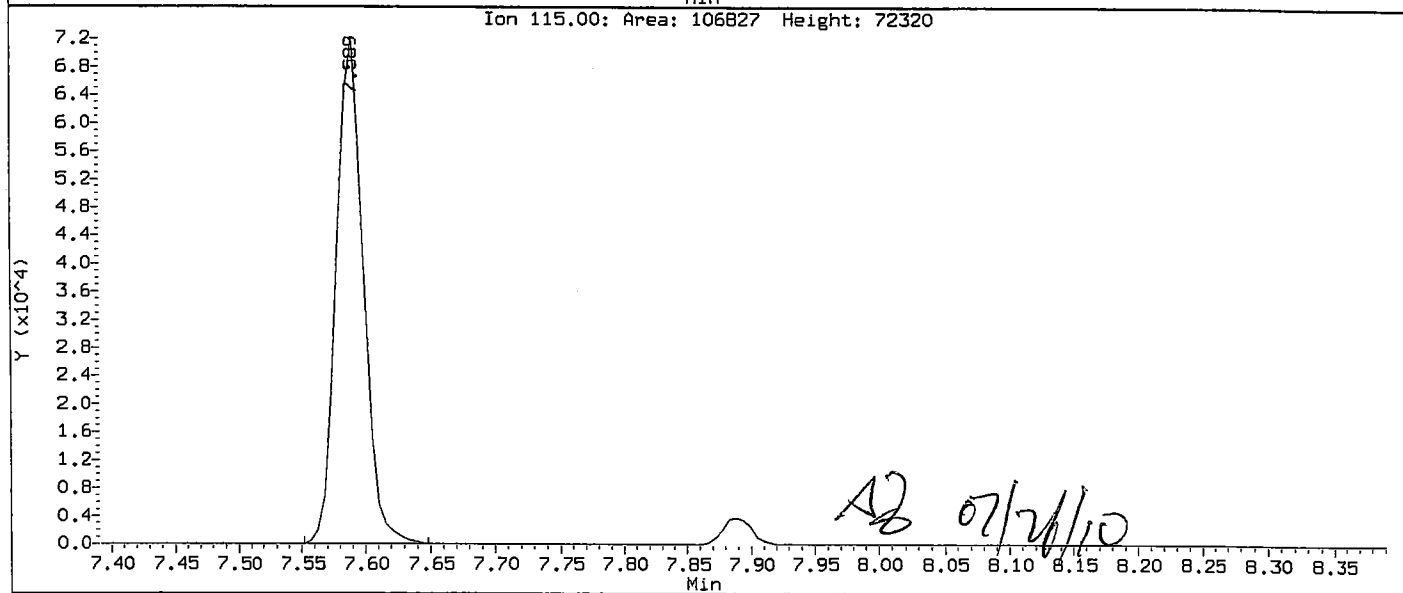
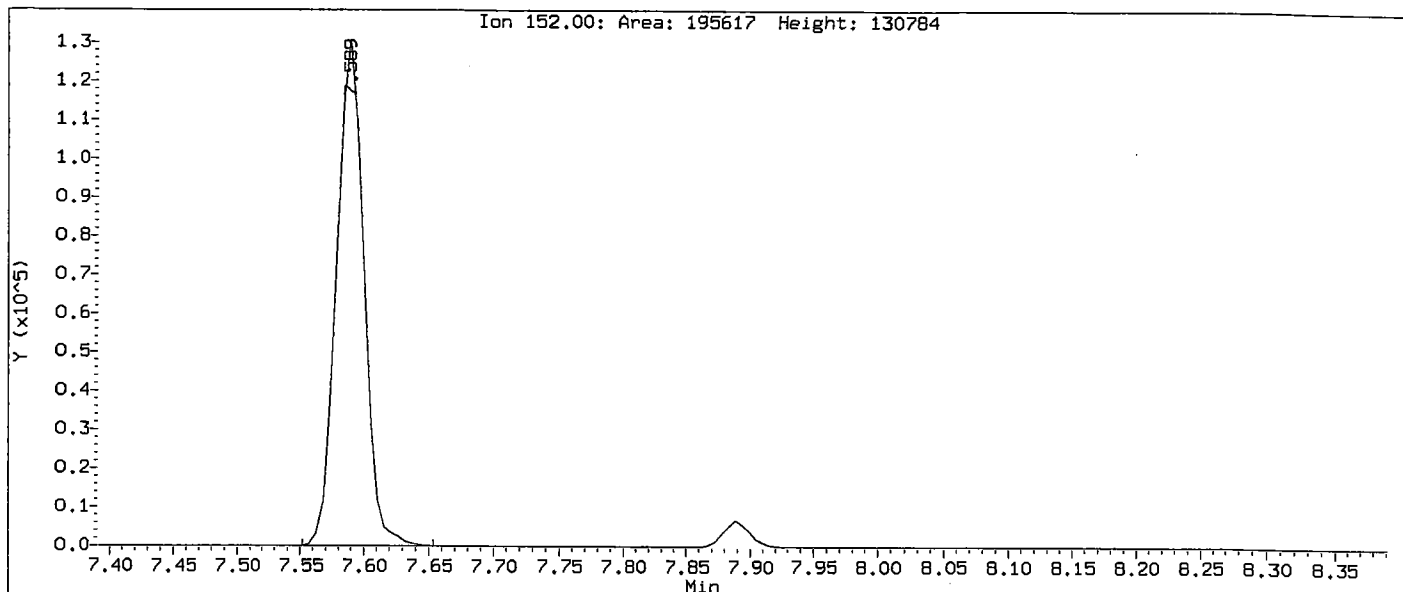
5. Other \_\_\_\_\_

Analyst: AD

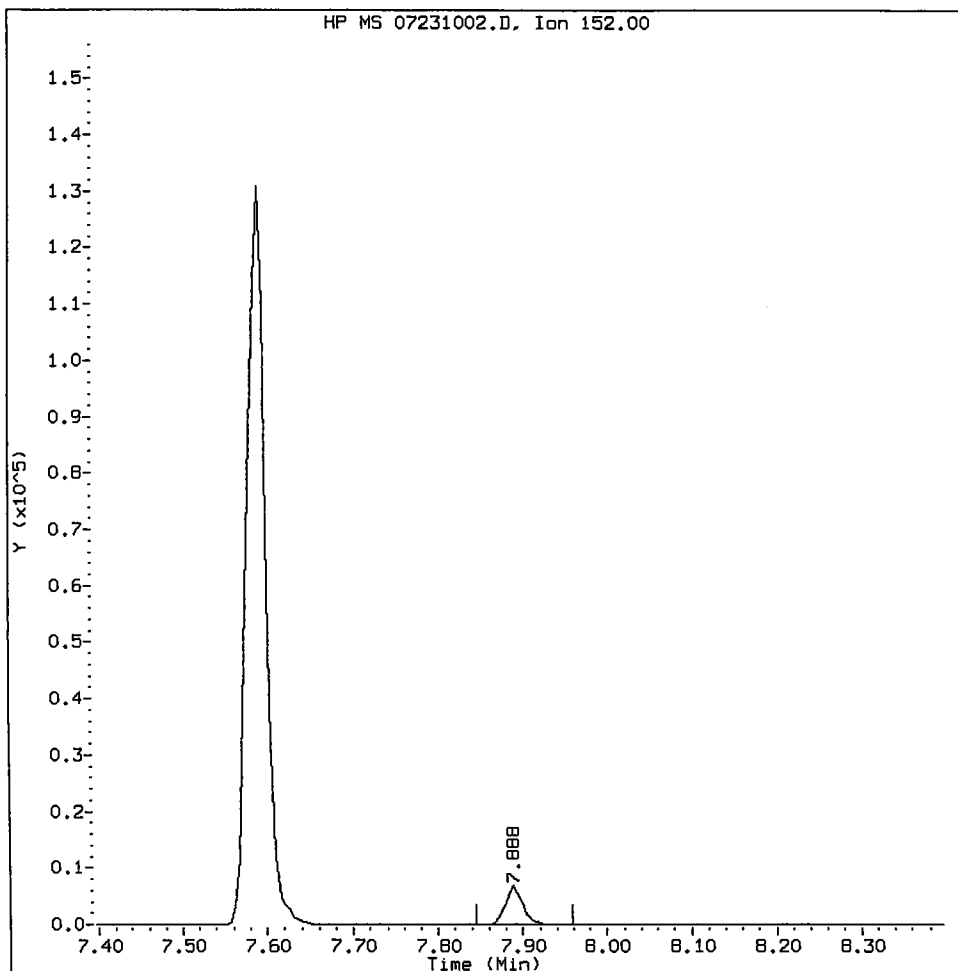
Date: 07/26/10

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Injection Date: 23-JUL-2010 15:38  
Instrument: nt6.i  
Client Sample ID: IC010723

Compound: 1,2-Dichlorobenzene-d4  
CAS Number: 2199-69-1



1,2-Dichlorobenzene-d4 Amount: 1.00 Area: 9473



MANUAL INTEGRATION for 1,2-Dichlorobenzene-d4

- 1. Baseline correction
- 2. Poor chromatography
- 3. Peak not found
- 4. Totals calculation

5. Other R7 corrected

Analyst: [Signature]

Date: 07/26/10

Analytical Resources, Inc.

Semivolatle Report SW846 Method 8270D

Data file : /chem1/nt6.i/20100723.b/07231003.D  
 Lab Smp Id: IC050723 Client Smp ID: IC050723  
 Inj Date : 23-JUL-2010 16:16  
 Operator : JZ Inst ID: nt6.i  
 Smp Info : IC050723,  
 Misc Info : 10-  
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 Method : /chem1/nt6.i/20100723.b/SW846072310.m  
 Meth Date : 26-Jul-2010 11:33 jianqing Quant Type: ISTD  
 Cal Date : 23-JUL-2010 16:16 Cal File: 07231003.D  
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 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: ICAL.sub  
 Target Version: 3.50

*B 7/26/10*

Compounds	QUANT	SIG	AMOUNTS					
			MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)
\$ 1 2-Fluorophenol	112		5.601	5.610	(0.738)	62073	5.00000	4.981
\$ 2 Phenol-d5	99		7.204	7.218	(0.949)	73294	5.00000	4.782
3 Phenol	94		7.220	7.237	(0.951)	91025	5.00000	5.038
\$ 5 2-Chlorophenol-d4	132		7.295	7.303	(0.961)	61520	5.00000	4.683
4 Bis(2-Chloroethyl) ether	93		7.273	7.290	(0.958)	64256	5.00000	4.742
6 2-Chlorophenol	128		7.316	7.327	(0.964)	76417	5.00000	4.949
7 1,3-Dichlorobenzene	146		7.524	7.530	(0.992)	84066	5.00000	4.777
* 8 1,4-Dichlorobenzene-d4	152		7.588	7.595	(1.000)	188843	20.0000	
9 1,4-Dichlorobenzene	146		7.615	7.621	(1.004)	80512	5.00000	4.771
\$ 10 1,2-Dichlorobenzene-d4	152		7.887	7.896	(1.039)	42333	5.00000	4.807
12 1,2-Dichlorobenzene	146		7.909	7.915	(1.042)	77428	5.00000	4.752
11 Benzyl alcohol	108		7.893	7.910	(1.040)	37693	5.00000	5.074
14 2,2'-oxybis(1-Chloropropane)	45		8.160	8.161	(1.075)	68852	5.00000	4.830
13 2-Methylphenol	108		8.155	8.166	(1.075)	65950	5.00000	5.028
17 Hexachloroethane	117		8.400	8.406	(1.107)	29693	5.00000	4.763
16 N-Nitroso-di-n-propylamine	70		8.368	8.390	(1.103)	42945	5.00000	4.840
15 4-Methylphenol	108		8.389	8.406	(1.106)	67797	5.00000	5.177
\$ 18 Nitrobenzene-d5	82		8.528	8.542	(0.885)	56653	5.00000	4.683
19 Nitrobenzene	77		8.560	8.572	(0.888)	67842	5.00000	4.754
20 Isophorone	82		8.945	8.967	(0.928)	104816	5.00000	4.812
21 2-Nitrophenol	139		9.079	9.090	(0.942)	39084	5.00000	5.159
22 2,4-Dimethylphenol	107		9.217	9.234	(0.956)	68790	5.00000	5.014
23 Bis(2-Chloroethoxy)methane	93		9.356	9.373	(0.971)	72352	5.00000	4.787
24 Benzoic acid	105		9.383	9.603	(0.973)	76776	10.0000	10.00
25 2,4-Dichlorophenol	162		9.474	9.485	(0.983)	59625	5.00000	5.154
26 1,2,4-Trichlorobenzene	180		9.591	9.597	(0.995)	61064	5.00000	4.715
* 27 Naphthalene-d8	136		9.639	9.651	(1.000)	605649	20.0000	



Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
=====	=====	==	=====	=====	=====	=====	=====
28 Naphthalene	128	9.671	9.683	(1.003)	181764	5.00000	4.719
29 4-Chloroaniline	127	9.837	9.843	(1.020)	72237	5.00000	4.855
30 Hexachlorobutadiene	225	10.003	10.009	(1.038)	34322	5.00000	4.693
31 4-Chloro-3-methylphenol	107	10.670	10.682	(1.107)	55875	5.00000	5.059
32 2-Methylnaphthalene	141	10.798	10.805	(1.120)	96623	5.00000	4.673
33 Hexachlorocyclopentadiene	237	11.183	11.184	(0.895)	24140	5.00000	5.946
34 2,4,6-Trichlorophenol	196	11.322	11.333	(0.906)	38607	5.00000	5.224
35 2,4,5-Trichlorophenol	196	11.380	11.392	(0.911)	38732	5.00000	4.978
\$ 36 2-Fluorobiphenyl	172	11.450	11.453	(0.916)	116339	5.00000	4.614
37 2-Chloronaphthalene	162	11.567	11.579	(0.926)	115487	5.00000	4.767
38 2-Nitroaniline	65	11.818	11.835	(0.946)	26745	5.00000	5.052
39 Dimethylphthalate	163	12.198	12.220	(0.976)	122958	5.00000	4.779
40 Acenaphthylene	152	12.246	12.252	(0.980)	181028	5.00000	4.802
41 2,6-Dinitrotoluene	165	12.288	12.305	(0.983)	28217	5.00000	5.140
* 42 Acenaphthene-d10	164	12.497	12.503	(1.000)	328204	20.0000	
43 3-Nitroaniline	138	12.497	12.519	(1.000)	27727	5.00000	5.095
44 Acenaphthene	153	12.545	12.562	(1.004)	107606	5.00000	4.750
45 2,4-Dinitrophenol	184	12.662	12.690	(1.013)	26211	10.0000	10.00
46 Dibenzofuran	168	12.807	12.823	(1.025)	142947	5.00000	4.692
47 4-Nitrophenol	109	12.839	12.861	(1.027)	15729	5.00000	5.699 (M)
48 2,4-Dinitrotoluene	165	12.908	12.930	(1.033)	35468	5.00000	5.102
50 Diethylphthalate	149	13.351	13.368	(1.068)	118248	5.00000	4.653
49 Fluorene	166	13.362	13.379	(1.069)	123844	5.00000	4.667
51 4-Chlorophenyl-phenylether	204	13.399	13.411	(1.072)	58261	5.00000	4.772
52 4-Nitroaniline	138	13.485	13.523	(1.079)	28297	5.00000	5.191
53 4,6-Dinitro-2-methylphenol	198	13.554	13.593	(0.912)	43858	10.0000	10.00
54 N-Nitrosodiphenylamine	169	13.608	13.630	(0.916)	87899	5.00000	4.840
\$ 55 2,4,6-Tribromophenol	330	13.784	13.798	(1.103)	13235	5.00000	4.914
56 4-Bromophenyl-phenylether	248	14.179	14.185	(0.954)	35138	5.00000	4.831
57 Hexachlorobenzene	284	14.382	14.399	(0.968)	37907	5.00000	4.835
58 Pentachlorophenol	266	14.692	14.704	(0.989)	19791	5.00000	5.789
* 59 Phenanthrene-d10	188	14.858	14.869	(1.000)	492773	20.0000	
60 Phenanthrene	178	14.895	14.912	(1.003)	159461	5.00000	4.707
61 Anthracene	178	14.964	14.987	(1.007)	166219	5.00000	4.775
62 Carbazole	167	15.263	15.280	(1.027)	158046	5.00000	4.841
63 Di-n-butylphthalate	149	16.001	16.012	(1.077)	192052	5.00000	5.004
64 Fluoranthene	202	16.823	16.835	(1.132)	177338	5.00000	4.949
65 Pyrene	202	17.176	17.187	(0.897)	178662	5.00000	4.347
\$ 66 Terphenyl-d14	244	17.512	17.515	(0.914)	96507	5.00000	4.220
67 Butylbenzylphthalate	149	18.404	18.421	(0.961)	80552	5.00000	4.651
68 Benzo (a) anthracene	228	19.130	19.147	(0.999)	166136	5.00000	4.340
* 69 Chrysene-d12	240	19.157	19.169	(1.000)	623042	20.0000	
70 3,3'-Dichlorobenzidine	252	19.162	19.174	(1.000)	55077	5.00000	4.433
71 Chrysene	228	19.194	19.217	(1.002)	155906	5.00000	4.276
72 bis(2-Ethylhexyl)phthalate	149	19.413	19.420	(0.954)	108145	5.00000	5.037
* 134 Di-n-octylphthalate-d4	153	20.343	20.354	(1.000)	685489	20.0000	
73 Di-n-octylphthalate	149	20.354	20.360	(1.001)	194029	5.00000	4.695

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
74 Benzo(b) fluoranthene	252	20.781	20.803	(0.975)	166719	5.00000	4.671
75 Benzo(k) fluoranthene	252	20.813	20.840	(0.977)	198908	5.00000	4.799
187 Total Benzofluoranthenes	252	20.813	20.840	(0.977)	344081	10.0000	9.327 (M)
76 Benzo(a)pyrene	252	21.224	21.246	(0.996)	164015	5.00000	4.793
* 77 Perylene-d12	264	21.304	21.316	(1.000)	509773	20.0000	
78 Indeno(1,2,3-cd)pyrene	276	22.688	22.720	(1.065)	216702	5.00000	4.777
79 Dibenzo(a,h)anthracene	278	22.714	22.747	(1.066)	169511	5.00000	4.925
80 Benzo(g,h,i)perylene	276	23.040	23.089	(1.081)	196333	5.00000	4.723
90 N-Nitrosodimethylamine	74	2.717	2.750	(0.358)	39738	5.00000	4.876
103 Pyridine	79	2.696	2.702	(0.355)	71561	5.00000	5.314
91 Aniline	93	7.150	7.157	(0.942)	95044	5.00000	4.934
105 1-methylnaphthalene	141	10.964	10.975	(1.137)	100691	5.00000	4.728
93 Benzidine	184	17.095	17.107	(0.892)	68739	5.00000	4.937
111 Azobenzene (1,2-DP-Hydrazine)	77	13.650	13.667	(1.092)	117681	5.00000	4.767
143 1,4-Dioxane	88	2.146	2.168	(0.283)	26093	5.00000	4.815
\$ 137 d8-1,4-Dioxane	96	2.103	2.125	(0.277)	25422	5.00000	4.864
144 alpha-Terpineol	59	9.714	9.731	(1.008)	36496	5.00000	4.891
98 Retene	219	17.747	17.759	(0.926)	57705	5.00000	4.531
133 Butylatedhydroxytoluene	205	12.694	12.706	(1.016)	99782	5.00000	4.816
115 Tributyl Phosphate	99	13.731	13.763	(0.924)	140283	5.00000	5.022
116 Dibutyl Phenyl Phosphate	175	15.445	15.457	(1.040)	93863	5.00000	5.261
117 Butyl Diphenyl Phosphate	94	17.122	17.134	(0.894)	31549	5.00000	4.668
118 Triphenyl Phosphate	326	18.714	18.731	(0.977)	28800	5.00000	4.536
123 Acetophenone	105	8.299	8.316	(1.094)	81853	5.00000	4.847
179 n-Decane	57	7.444	7.450	(0.981)	53416	5.00000	4.648
180 n-Octadecane	57	14.825	14.832	(0.998)	52425	5.00000	4.767
168 Pentachlorobenzene	250	12.849	12.866	(1.028)	43692	5.00000	4.694
113 Diphenyl Oxide	170	11.776	11.782	(0.942)	108267	5.00000	4.622
112 Biphenyl	154	11.578	11.590	(0.926)	131006	5.00000	5.000
120 2,3,4,6-Tetrachlorophenol	232	13.100	13.112	(1.048)	32722	5.00000	5.205
151 1,2,4,5-Tetrachlorobenzene	216	11.135	11.141	(0.891)	60230	5.00000	4.770
110 Tetrachloroguaiacol	247	14.820	14.842	(0.997)	36086	10.0000	10.00
109 3,4,5-Trichloroguaiacol	213	13.202	13.219	(0.889)	18448	5.00000	5.000
181 3,4,6-Trichloroguaiacol	211	13.314	13.331	(1.755)	21749	5.00000	5.000
108 4,5,6-Trichloroguaiacol	213	14.238	14.250	(1.139)	18514	5.00000	5.000
184 3,4-Dichloroguaiacol	192	11.669	11.675	(1.538)	19386	5.00000	5.000
107 4,5-Dichloroguaiacol	192	12.459	12.476	(0.997)	48672	10.0000	10.00
182 4,6-Dichloroguaiacol	192	12.459	12.476	(1.642)	48672	10.0000	10.00
185 4-Chloroguaiacol	115	10.590	10.596	(1.396)	12618	2.50000	2.500
186 Carbaryl	144	15.680	15.702	(1.055)	58301	5.00000	4.718
106 Guaiacol	124	8.571	8.588	(1.129)	58543	5.00000	4.850

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: 07231003.D  
 Lab Smp Id: IC050723  
 Analysis Type: SV  
 Quant Type: ISTD  
 Operator: JZ  
 Method File: /chem1/nt6.i/20100723.b/SW846072310.m  
 Misc Info: 10-

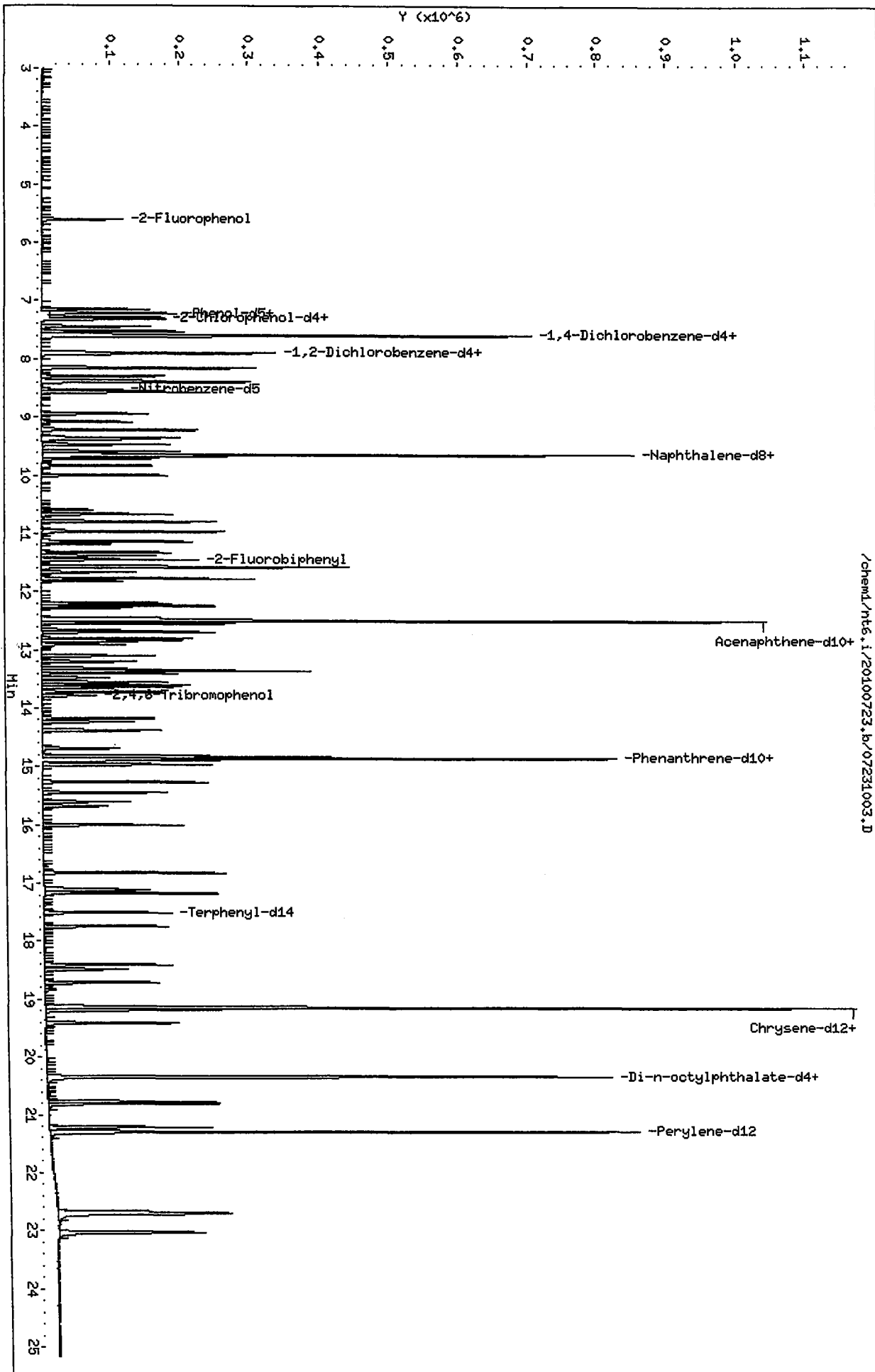
Calibration Date: 23-JUL-2010  
 Calibration Time: 15:01  
 Client Smp ID: IC050723  
 Level:  
 Sample Type:

Test Mode:  
 Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	182786	91393	365572	188843	3.31
27 Naphthalene-d8	584137	292068	1168274	605649	3.68
42 Acenaphthene-d10	320442	160221	640884	328204	2.42
59 Phenanthrene-d10	503793	251896	1007586	492773	-2.19
69 Chrysene-d12	532343	266172	1064686	623042	17.04
134 Di-n-octylphthala	719428	359714	1438856	685489	-4.72
77 Perylene-d12	517269	258634	1034538	509773	-1.45

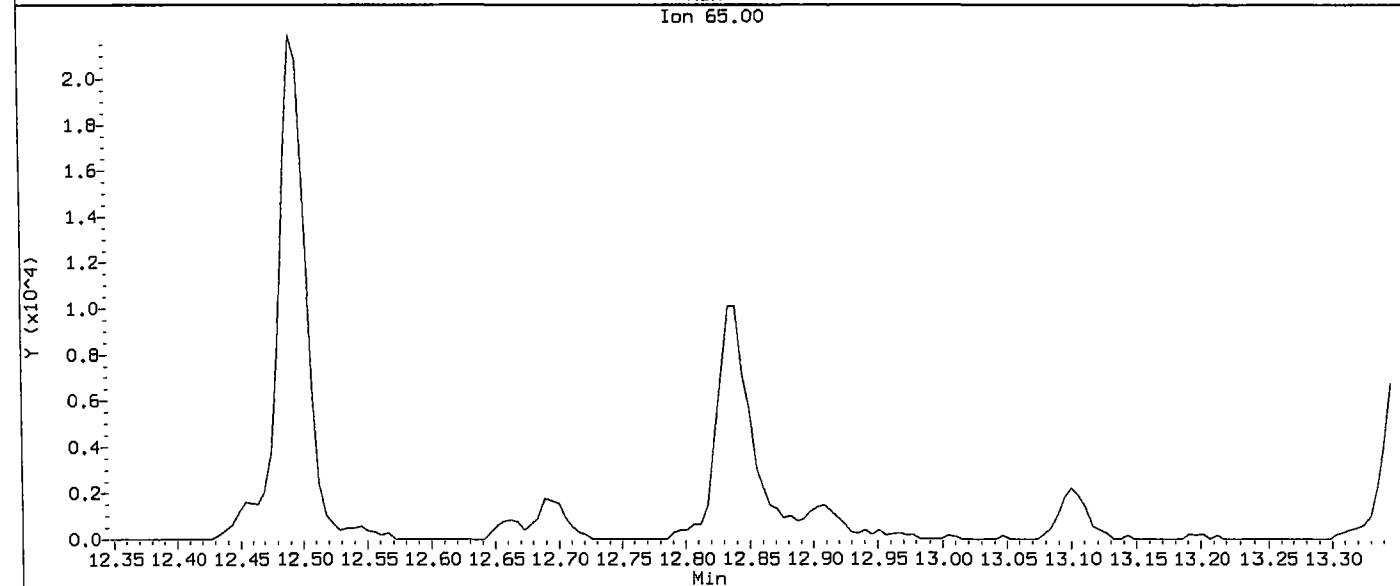
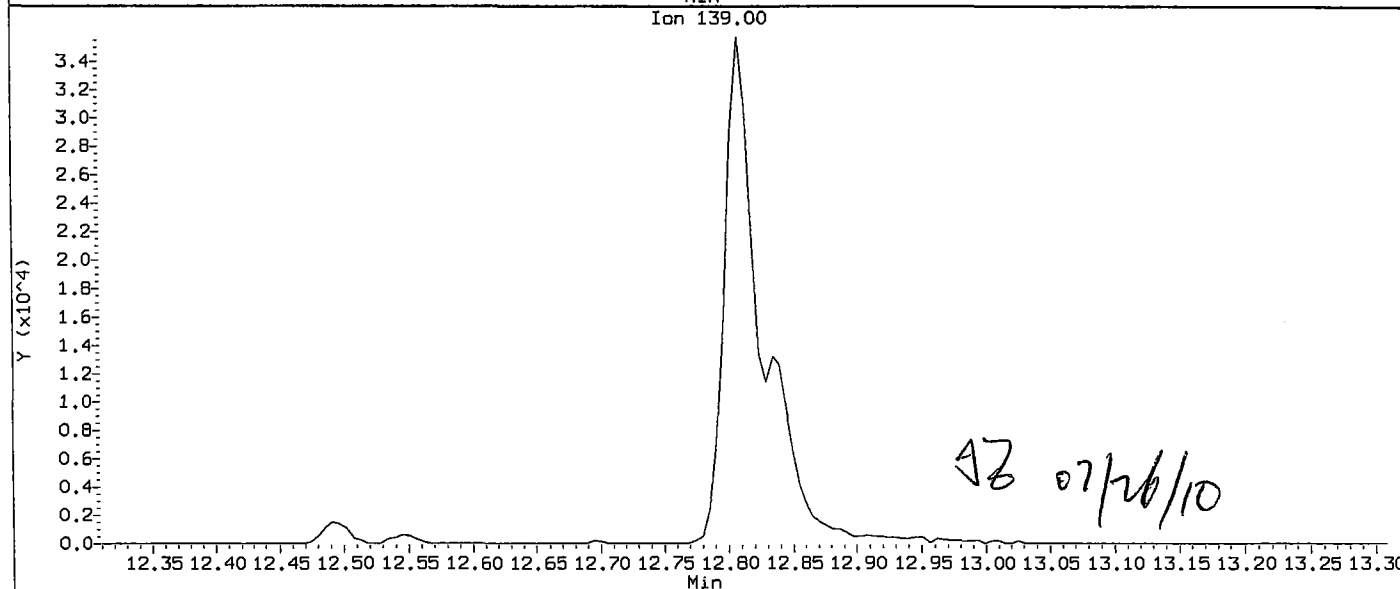
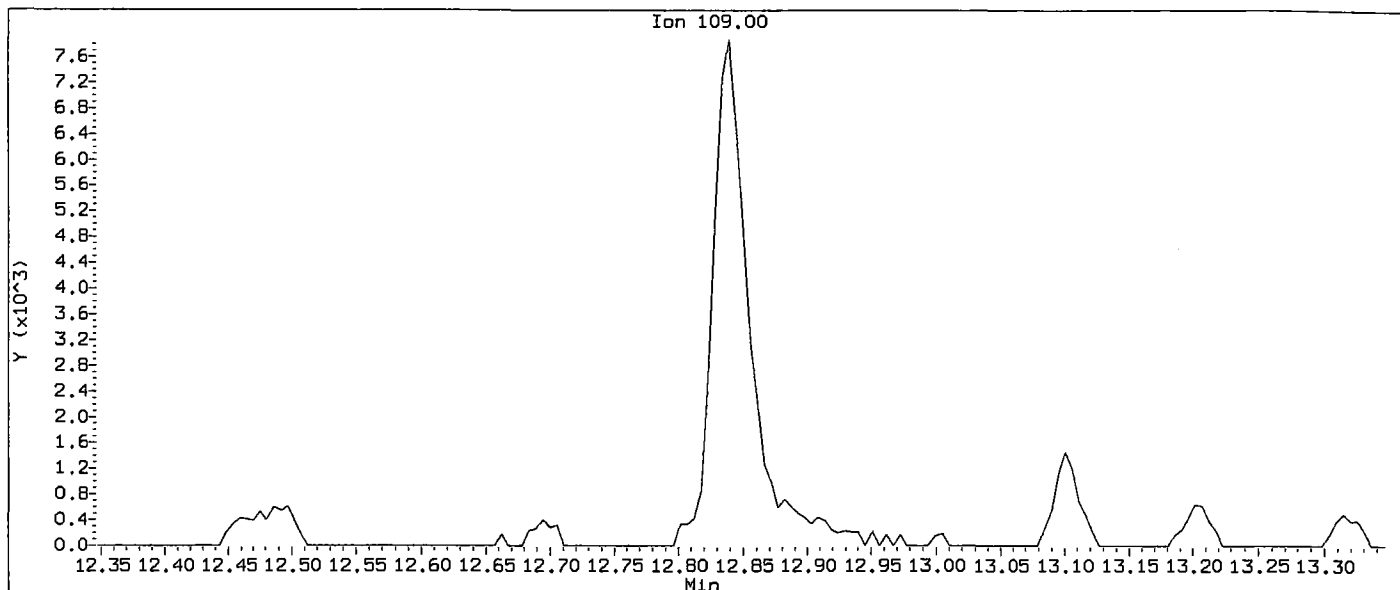
COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	7.59	7.09	8.09	7.59	-0.05
27 Naphthalene-d8	9.64	9.14	10.14	9.64	-0.04
42 Acenaphthene-d10	12.50	12.00	13.00	12.50	-0.03
59 Phenanthrene-d10	14.86	14.36	15.36	14.86	-0.02
69 Chrysene-d12	19.16	18.66	19.66	19.16	-0.02
134 Di-n-octylphthala	20.35	19.85	20.85	20.34	-0.02
77 Perylene-d12	21.31	20.81	21.81	21.30	-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.

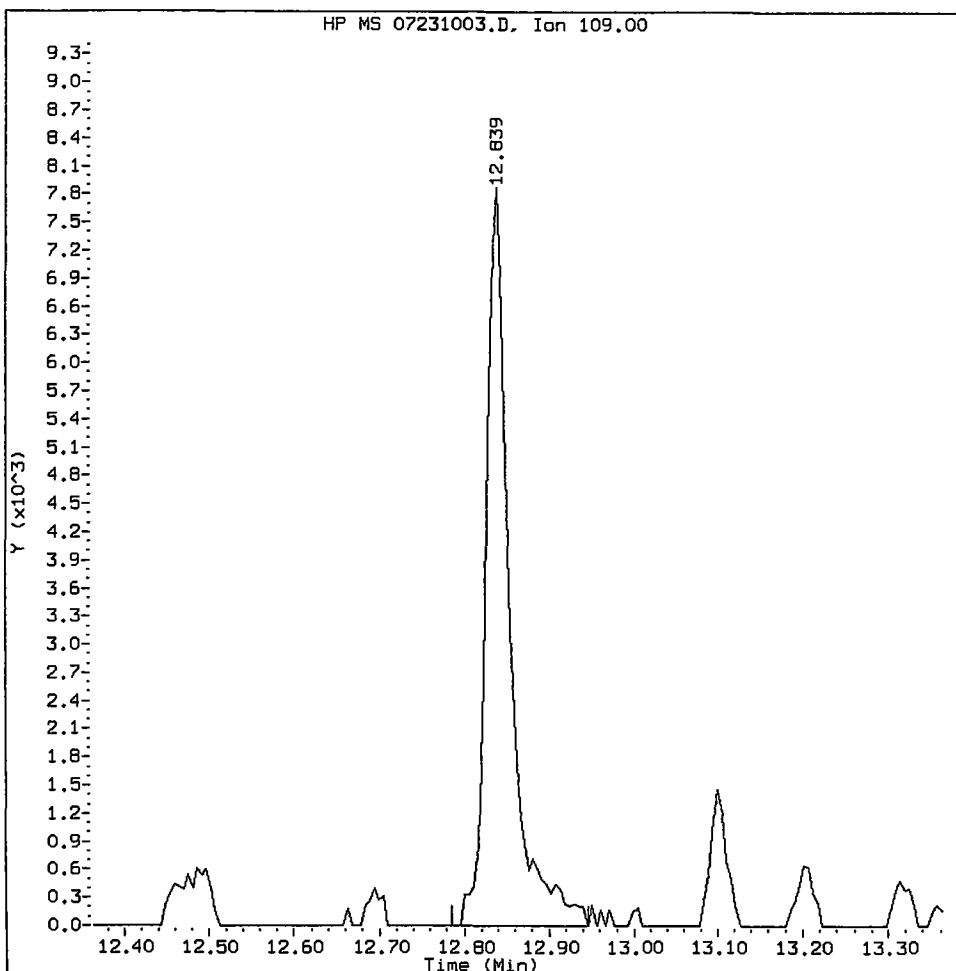


Data File: /chem1/nt6.1/20100723.b/07231003.D  
Injection Date: 23-JUL-2010 16:16  
Instrument: nt6.1  
Client Sample ID: IC050723

Compound: 4-Nitrophenol  
CAS Number: 100-02-7



4-Nitrophenol Amount: 5.70 Area: 15729



MANUAL INTEGRATION for 4-Nitrophenol

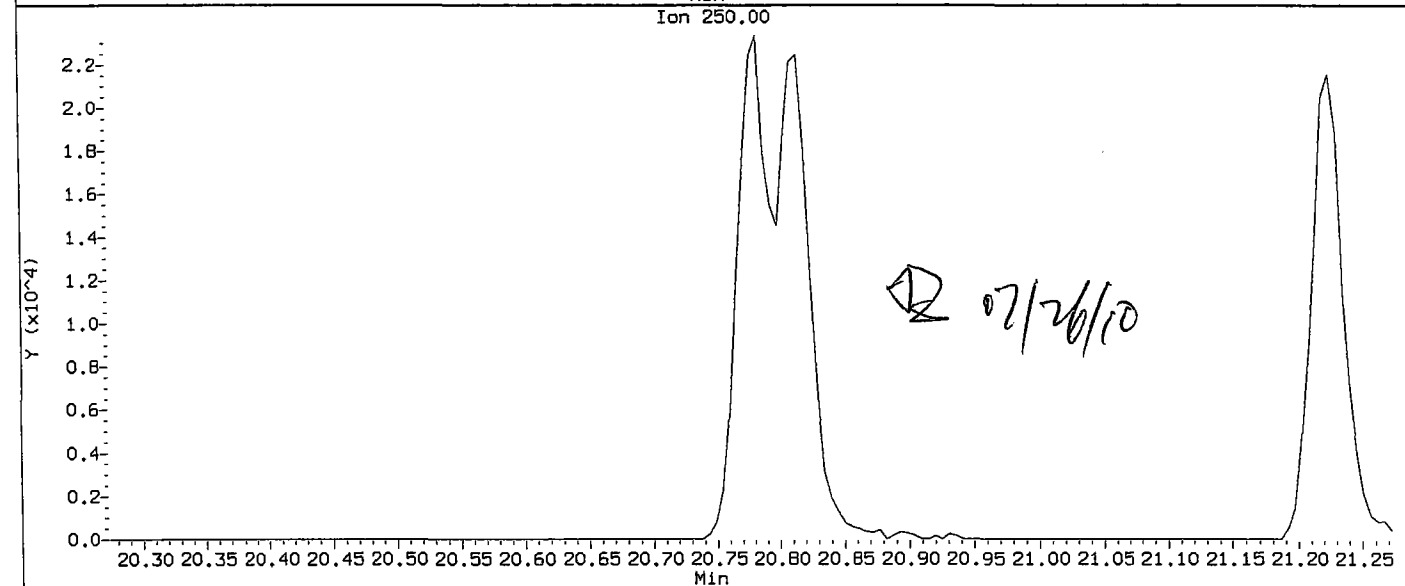
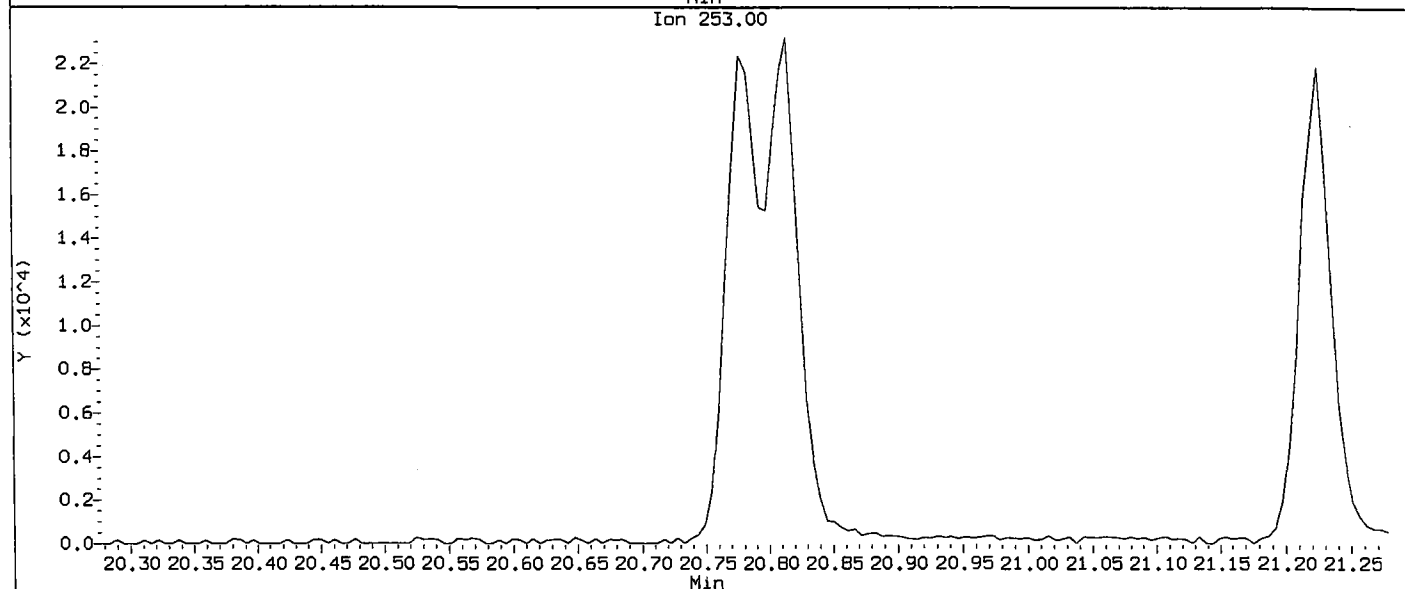
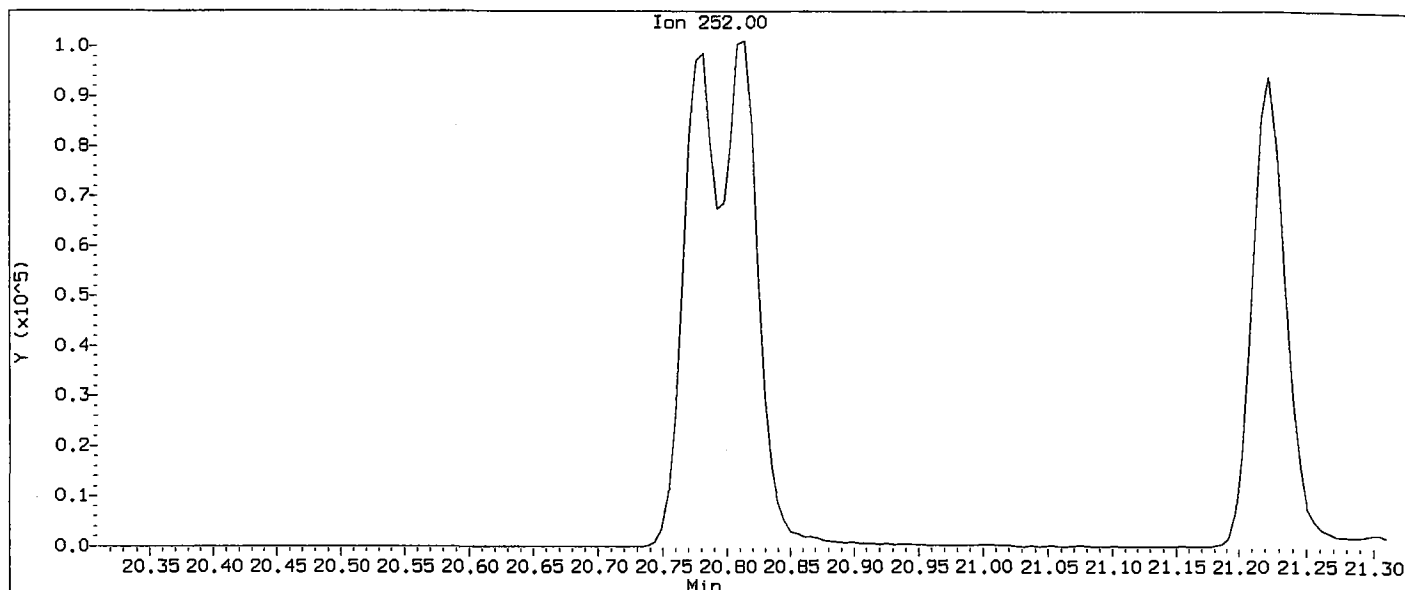
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation
5. Other \_\_\_\_\_

Analyst:   AZ  

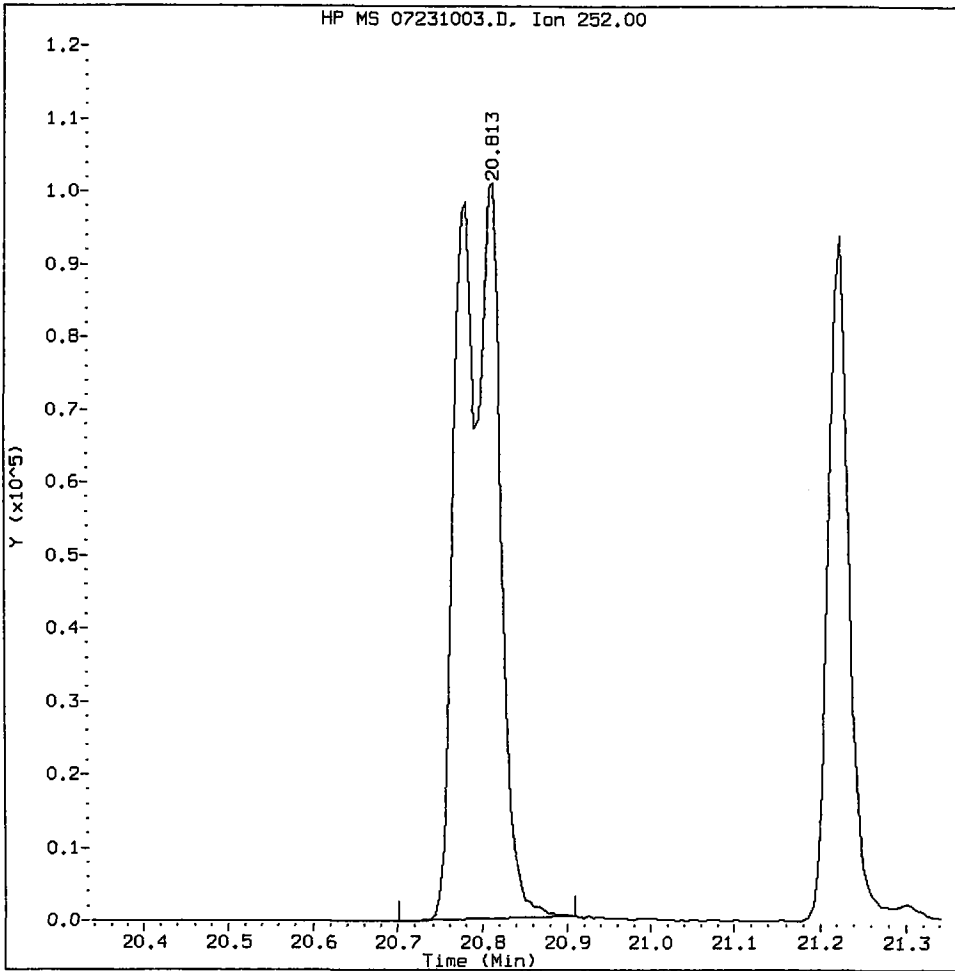
Date:   07/26/10

Data File: /chem1/nt6.i/20100723.b/07231003.D  
Injection Date: 23-JUL-2010 16:16  
Instrument: nt6.i  
Client Sample ID: IC050723

Compound: Total Benzofluoranthenes  
CAS Number:



Total Benzofluoranthenes Amount: 9.33 Area: 344081



MANUAL INTEGRATION for Total Benzofluoranthenes

- 1. Baseline correction
- 2. Poor chromatography
- 3. Peak not found
- 4. Totals calculation

5. Other \_\_\_\_\_

Analyst: AZ

Date: 07/26/10



Analytical Resources, Inc.

Semivolatiles Report SW846 Method 8270D

Data file : /chem1/nt6.i/20100723.b/07231004.D  
 Lab Smp Id: IC100723 Client Smp ID: IC100723  
 Inj Date : 23-JUL-2010 16:52  
 Operator : JZ Inst ID: nt6.i  
 Smp Info : IC100723,  
 Misc Info : 10-  
 Comment : lul Injection  
 Method : /chem1/nt6.i/20100723.b/SW846072310.m  
 Meth Date : 26-Jul-2010 11:33 jianqing Quant Type: ISTD  
 Cal Date : 23-JUL-2010 16:52 Cal File: 07231004.D  
 Als bottle: 4 Calibration Sample, Level: 3  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: ICAL.sub  
 Target Version: 3.50

*12 07/26/10*

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT (ug/mL)	ON-COL (ug/mL)
\$ 1 2-Fluorophenol	112		5.605	5.610	(0.738)	126872	10.0000	10.22
\$ 2 Phenol-d5	99		7.202	7.218	(0.949)	148082	10.0000	9.874
3 Phenol	94		7.224	7.237	(0.951)	163142	10.0000	9.431
\$ 5 2-Chlorophenol-d4	132		7.293	7.303	(0.961)	124752	10.0000	9.760
4 Bis(2-Chloroethyl) ether	93		7.277	7.290	(0.958)	121813	10.0000	9.403
6 2-Chlorophenol	128		7.320	7.327	(0.964)	140635	10.0000	9.487
7 1,3-Dichlorobenzene	146		7.523	7.530	(0.991)	165746	10.0000	9.706
* 8 1,4-Dichlorobenzene-d4	152		7.592	7.595	(1.000)	185943	20.0000	
9 1,4-Dichlorobenzene	146		7.614	7.621	(1.003)	162647	10.0000	9.858
\$ 10 1,2-Dichlorobenzene-d4	152		7.891	7.896	(1.039)	86495	10.0000	9.984
12 1,2-Dichlorobenzene	146		7.913	7.915	(1.042)	152136	10.0000	9.649
11 Benzyl alcohol	108		7.897	7.910	(1.040)	79223	10.0000	10.54
14 2,2'-oxybis(1-Chloropropane)	45		8.158	8.161	(1.075)	135515	10.0000	9.767
13 2-Methylphenol	108		8.153	8.166	(1.074)	120955	10.0000	9.567
17 Hexachloroethane	117		8.399	8.406	(1.106)	58544	10.0000	9.687
16 N-Nitroso-di-n-propylamine	70		8.367	8.390	(1.102)	86011	10.0000	9.896
15 4-Methylphenol	108		8.388	8.406	(1.105)	122953	10.0000	9.685
\$ 18 Nitrobenzene-d5	82		8.532	8.542	(0.885)	117660	10.0000	9.952
19 Nitrobenzene	77		8.559	8.572	(0.888)	134857	10.0000	9.761
20 Isophorone	82		8.944	8.967	(0.927)	212825	10.0000	9.983
21 2-Nitrophenol	139		9.082	9.090	(0.942)	76116	10.0000	10.17
22 2,4-Dimethylphenol	107		9.221	9.234	(0.956)	128445	10.0000	9.701
23 Bis(2-Chloroethoxy)methane	93		9.360	9.373	(0.971)	149711	10.0000	10.07
24 Benzoic acid	105		9.419	9.603	(0.977)	163463	20.0000	20.83
25 2,4-Dichlorophenol	162		9.472	9.485	(0.982)	111444	10.0000	9.889
26 1,2,4-Trichlorobenzene	180		9.590	9.597	(0.994)	123035	10.0000	9.797
* 27 Naphthalene-d8	136		9.643	9.651	(1.000)	593293	20.0000	

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ug/mL)	ON-COL (ug/mL)
28 Naphthalene	128	9.670	9.683	(1.003)	365998	10.0000	9.797
29 4-Chloroaniline	127	9.835	9.843	(1.020)	147238	10.0000	10.07
30 Hexachlorobutadiene	225	10.001	10.009	(1.037)	69541	10.0000	9.802
31 4-Chloro-3-methylphenol	107	10.669	10.682	(1.106)	107429	10.0000	9.953
32 2-Methylnaphthalene	141	10.797	10.805	(1.120)	197718	10.0000	9.839
33 Hexachlorocyclopentadiene	237	11.181	11.184	(0.895)	58996	10.0000	12.73
34 2,4,6-Trichlorophenol	196	11.320	11.333	(0.906)	74618	10.0000	10.16
35 2,4,5-Trichlorophenol	196	11.379	11.392	(0.911)	75201	10.0000	9.867
\$ 36 2-Fluorobiphenyl	172	11.448	11.453	(0.916)	233627	10.0000	9.590
37 2-Chloronaphthalene	162	11.571	11.579	(0.926)	231438	10.0000	9.790
38 2-Nitroaniline	65	11.817	11.835	(0.946)	55300	10.0000	10.39
39 Dimethylphthalate	163	12.202	12.220	(0.976)	255146	10.0000	10.04
40 Acenaphthylene	152	12.244	12.252	(0.980)	366052	10.0000	9.898
41 2,6-Dinitrotoluene	165	12.287	12.305	(0.983)	59580	10.0000	10.65
* 42 Acenaphthene-d10	164	12.495	12.503	(1.000)	323613	20.0000	
43 3-Nitroaniline	138	12.495	12.519	(1.000)	57832	10.0000	10.51
44 Acenaphthene	153	12.549	12.562	(1.004)	219666	10.0000	9.889
45 2,4-Dinitrophenol	184	12.661	12.690	(1.013)	67900	20.0000	22.71
46 Dibenzofuran	168	12.810	12.823	(1.025)	295122	10.0000	9.882
47 4-Nitrophenol	109	12.837	12.861	(1.027)	31555	10.0000	11.01 (M)
48 2,4-Dinitrotoluene	165	12.912	12.930	(1.033)	75601	10.0000	10.66
50 Diethylphthalate	149	13.355	13.368	(1.069)	237651	10.0000	9.650
49 Fluorene	166	13.366	13.379	(1.070)	251059	10.0000	9.726
51 4-Chlorophenyl-phenylether	204	13.403	13.411	(1.073)	118001	10.0000	9.868
52 4-Nitroaniline	138	13.489	13.523	(1.079)	58433	10.0000	10.56
53 4,6-Dinitro-2-methylphenol	198	13.558	13.593	(0.912)	93942	20.0000	20.60
54 N-Nitrosodiphenylamine	169	13.612	13.630	(0.916)	179875	10.0000	9.881
\$ 55 2,4,6-Tribromophenol	330	13.788	13.798	(1.103)	29796	10.0000	10.78
56 4-Bromophenyl-phenylether	248	14.178	14.185	(0.954)	74043	10.0000	10.06
57 Hexachlorobenzene	284	14.386	14.399	(0.968)	78922	10.0000	9.989
58 Pentachlorophenol	266	14.691	14.704	(0.988)	44473	10.0000	11.76
* 59 Phenanthrene-d10	188	14.861	14.869	(1.000)	496900	20.0000	
60 Phenanthrene	178	14.893	14.912	(1.002)	333776	10.0000	9.845
61 Anthracene	178	14.968	14.987	(1.007)	346010	10.0000	9.904
62 Carbazole	167	15.267	15.280	(1.027)	323370	10.0000	9.882
63 Di-n-butylphthalate	149	16.004	16.012	(1.077)	402360	10.0000	10.26
64 Fluoranthene	202	16.822	16.835	(1.132)	366262	10.0000	10.09
65 Pyrene	202	17.174	17.187	(0.897)	365007	10.0000	9.373
\$ 66 Terphenyl-d14	244	17.511	17.515	(0.914)	202672	10.0000	9.359
67 Butylbenzylphthalate	149	18.408	18.421	(0.961)	172956	10.0000	10.14
68 Benzo (a) anthracene	228	19.134	19.147	(0.999)	337172	10.0000	9.320
* 69 Chrysene-d12	240	19.156	19.169	(1.000)	608888	20.0000	
70 3,3'-Dichlorobenzidine	252	19.161	19.174	(1.000)	111890	10.0000	9.463
71 Chrysene	228	19.198	19.217	(1.002)	317375	10.0000	9.244
72 bis(2-Ethylhexyl)phthalate	149	19.417	19.420	(0.954)	234792	10.0000	10.52
* 134 Di-n-octylphthalate-d4	153	20.347	20.354	(1.000)	694500	20.0000	
73 Di-n-octylphthalate	149	20.357	20.360	(1.001)	395465	10.0000	9.623

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ug/mL)	ON-COL (ug/mL)
=====	====	==	=====	=====	=====	=====	
74 Benzo (b) fluoranthene	252	20.779	20.803	(0.975)	358007	10.0000	10.12
75 Benzo (k) fluoranthene	252	20.811	20.840	(0.977)	375520	10.0000	9.450
187 Total Benzofluoranthenes	252	20.811	20.840	(0.977)	687719	20.0000	19.27 (M)
76 Benzo (a) pyrene	252	21.223	21.246	(0.996)	342186	10.0000	10.10
* 77 Perylene-d12	264	21.303	21.316	(1.000)	502175	20.0000	
78 Indeno (1,2,3-cd) pyrene	276	22.686	22.720	(1.065)	442073	10.0000	9.928
79 Dibenzo (a,h) anthracene	278	22.718	22.747	(1.066)	346747	10.0000	10.15
80 Benzo (g,h,i) perylene	276	23.044	23.089	(1.082)	396501	10.0000	9.786
90 N-Nitrosodimethylamine	74	2.716	2.750	(0.358)	82848	10.0000	10.21
103 Pyridine	79	2.694	2.702	(0.355)	150658	10.0000	10.87
91 Aniline	93	7.149	7.157	(0.942)	193137	10.0000	10.12
105 1-methylnaphthalene	141	10.968	10.975	(1.137)	201404	10.0000	9.767
93 Benzidine	184	17.099	17.107	(0.893)	125128	10.0000	9.449
111 Azobenzene (1,2-DP-Hydrazine)	77	13.649	13.667	(1.092)	242420	10.0000	9.973
143 1,4-Dioxane	88	2.150	2.168	(0.283)	53699	10.0000	10.04
\$ 137 d8-1,4-Dioxane	96	2.107	2.125	(0.278)	51732	10.0000	10.03
144 alpha-Terpineol	59	9.718	9.731	(1.008)	72894	10.0000	9.981
98 Retene	219	17.751	17.759	(0.927)	118903	10.0000	9.698
133 Butylatedhydroxytoluene	205	12.698	12.706	(1.016)	192083	10.0000	9.593
115 Tributyl Phosphate	99	13.729	13.763	(0.924)	281983	10.0000	10.01
116 Dibutyl Phenyl Phosphate	175	15.449	15.457	(1.040)	191183	10.0000	10.41
117 Butyl Diphenyl Phosphate	94	17.126	17.134	(0.894)	63332	10.0000	9.722
118 Triphenyl Phosphate	326	18.718	18.731	(0.977)	60209	10.0000	9.801
123 Acetophenone	105	8.303	8.316	(1.094)	165015	10.0000	9.949
179 n-Decane	57	7.443	7.450	(0.980)	109312	10.0000	9.770
180 n-Octadecane	57	14.824	14.832	(0.997)	108426	10.0000	9.850
168 Pentachlorobenzene	250	12.853	12.866	(1.029)	90440	10.0000	9.903
113 Diphenyl Oxide	170	11.774	11.782	(0.942)	221103	10.0000	9.711
112 Biphenyl	154	11.577	11.590	(0.926)	263995	10.0000	10.11
120 2,3,4,6-Tetrachlorophenol	232	13.104	13.112	(1.049)	67353	10.0000	10.56
151 1,2,4,5-Tetrachlorobenzene	216	11.133	11.141	(0.891)	116394	10.0000	9.557
110 Tetrachloroguaiacol	247	14.824	14.842	(0.997)	80353	20.0000	20.99
109 3,4,5-Trichloroguaiacol	213	13.206	13.219	(0.889)	40031	10.0000	10.37
181 3,4,6-Trichloroguaiacol	211	13.318	13.331	(1.754)	47470	10.0000	10.51
108 4,5,6-Trichloroguaiacol	213	14.237	14.250	(1.139)	41107	10.0000	10.59
184 3,4-Dichloroguaiacol	192	11.667	11.675	(1.537)	42471	10.0000	10.53
107 4,5-Dichloroguaiacol	192	12.458	12.476	(0.997)	106396	20.0000	21.03
182 4,6-Dichloroguaiacol	192	12.458	12.476	(1.641)	106071	20.0000	21.01
185 4-Chloroguaiacol	115	10.594	10.596	(1.395)	26123	5.00000	5.125
186 Carbaryl	144	15.684	15.702	(1.055)	153576	10.0000	11.44
106 Guaiacol	124	8.575	8.588	(1.129)	114633	10.0000	9.761

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS  
 AREA AND RT SUMMARY

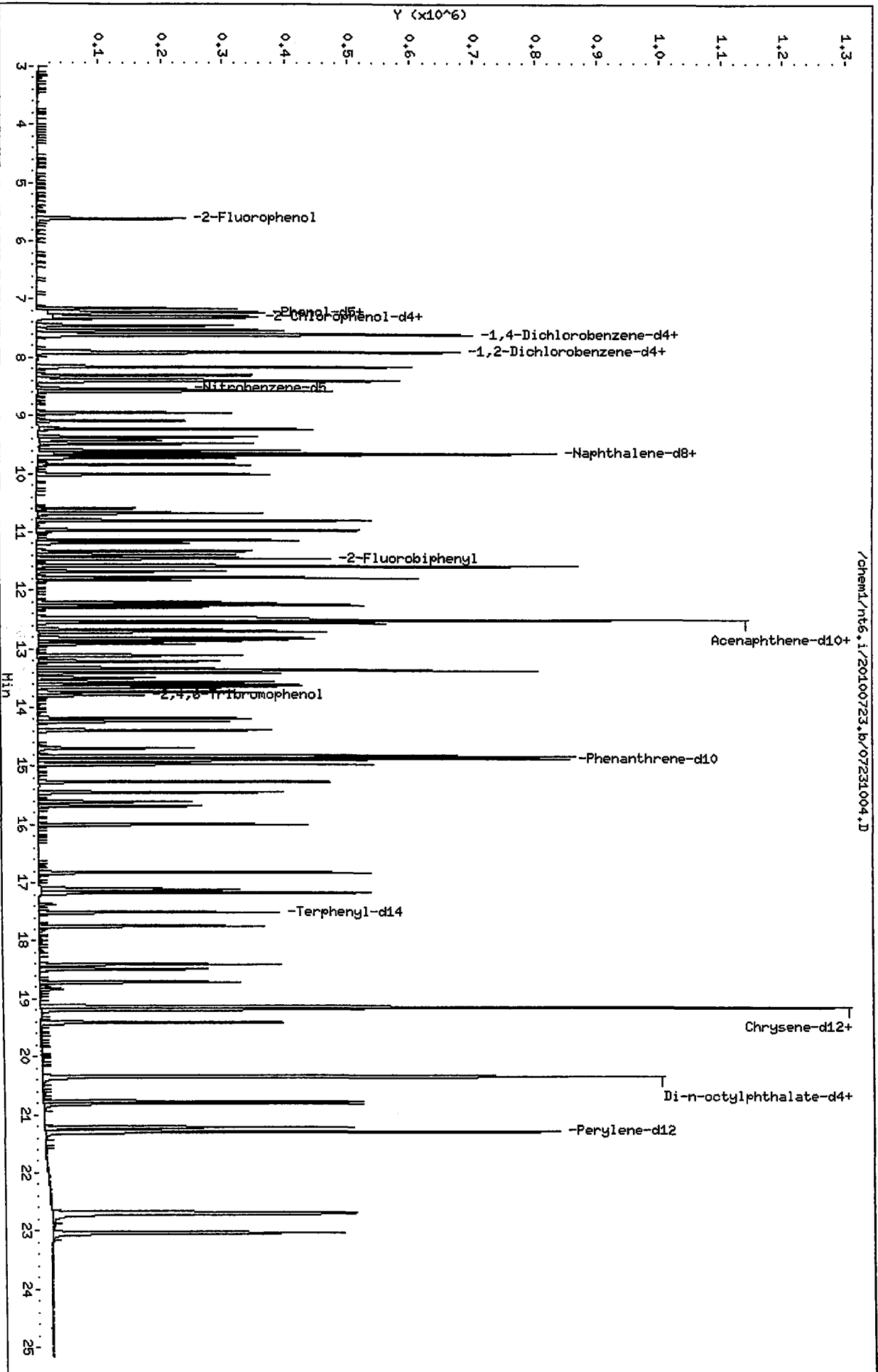
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Lab File ID: 07231004.D	Calibration Time: 15:01
Lab Smp Id: IC100723	Client Smp ID: IC100723
Analysis Type: SV	Level:
Quant Type: ISTD	Sample Type:
Operator: JZ	
Method File: /chem1/nt6.i/20100723.b/SW846072310.m	
Misc Info: 10-	

Test Mode:  
 Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	182786	91393	365572	185943	1.73
27 Naphthalene-d8	584137	292068	1168274	593293	1.57
42 Acenaphthene-d10	320442	160221	640884	323613	0.99
59 Phenanthrene-d10	503793	251896	1007586	496900	-1.37
69 Chrysene-d12	532343	266172	1064686	608888	14.38
134 Di-n-octylphthala	719428	359714	1438856	694500	-3.46
77 Perylene-d12	517269	258634	1034538	502175	-2.92

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	7.59	7.09	8.09	7.59	0.00
27 Naphthalene-d8	9.64	9.14	10.14	9.64	0.00
42 Acenaphthene-d10	12.50	12.00	13.00	12.50	-0.04
59 Phenanthrene-d10	14.86	14.36	15.36	14.86	0.00
69 Chrysene-d12	19.16	18.66	19.66	19.16	-0.03
134 Di-n-octylphthala	20.35	19.85	20.85	20.35	0.00
77 Perylene-d12	21.31	20.81	21.81	21.30	-0.02

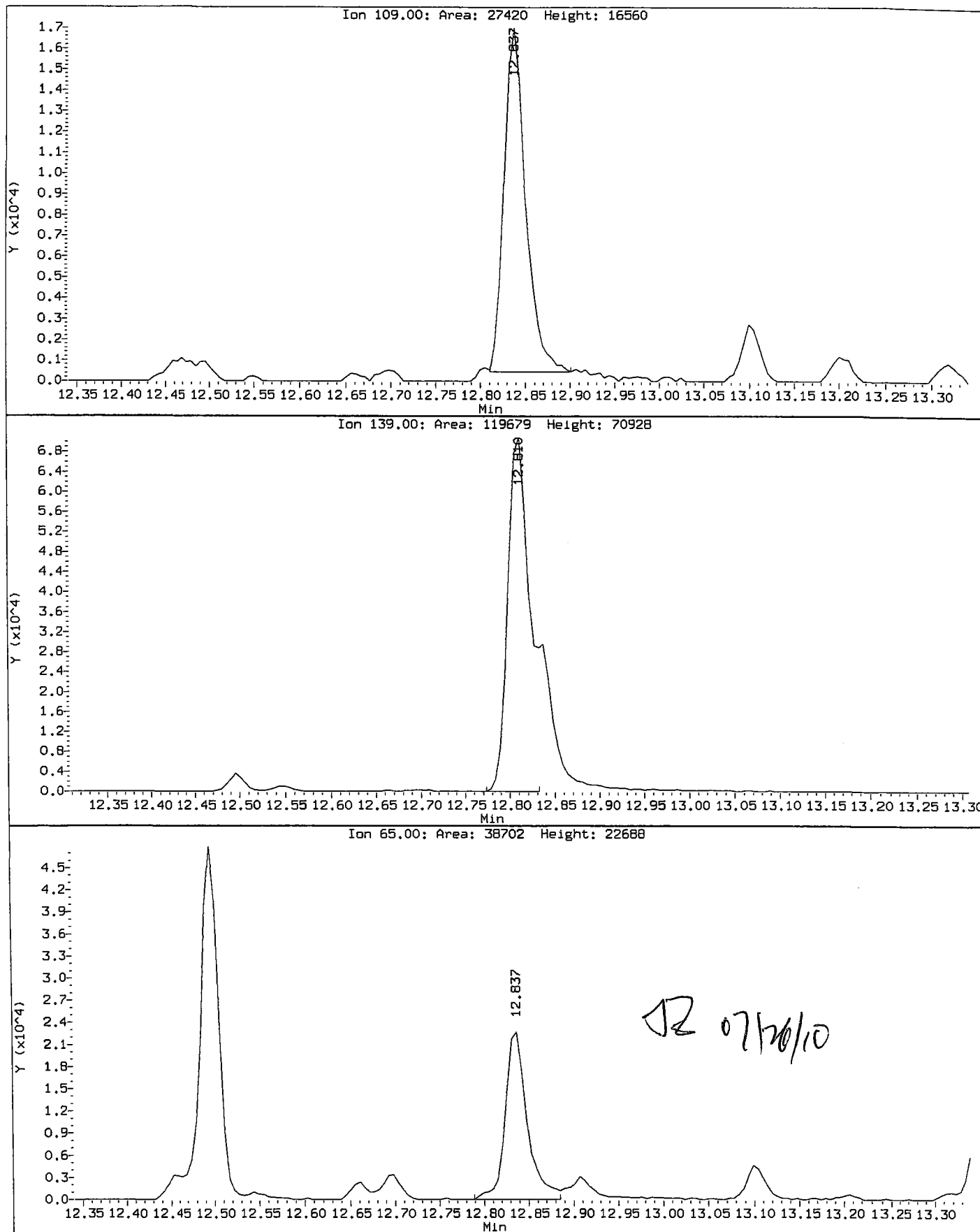
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 AREA LOWER LIMIT = - 50% of internal standard area.  
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
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/chem1/nt6.i/20100723.b/07231004.D

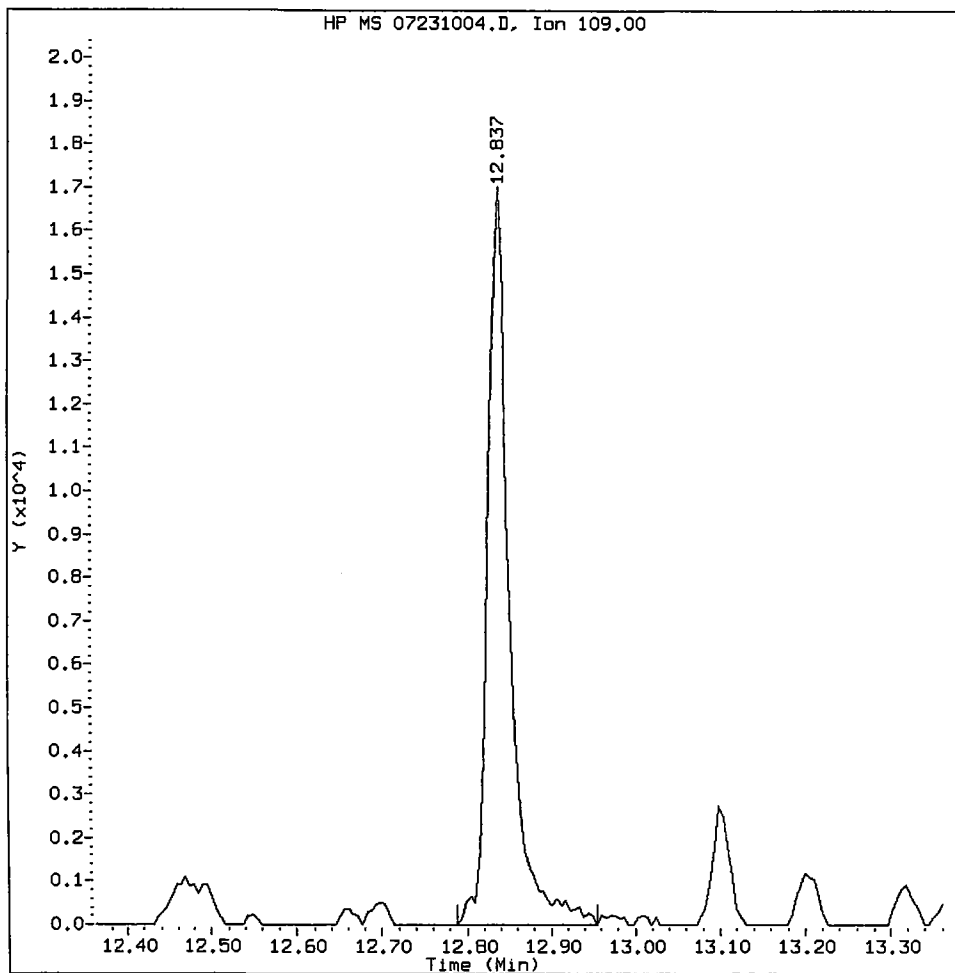
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Injection Date: 23-JUL-2010 16:52  
Instrument: nt6.1  
Client Sample ID: IC100723

Compound: 4-Nitrophenol  
CAS Number: 100-02-7



IC100723, /chem1/nt6.i/20100723.b/07231004.D

4-Nitrophenol Amount: 11.01 Area: 31555



MANUAL INTEGRATION for 4-Nitrophenol

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

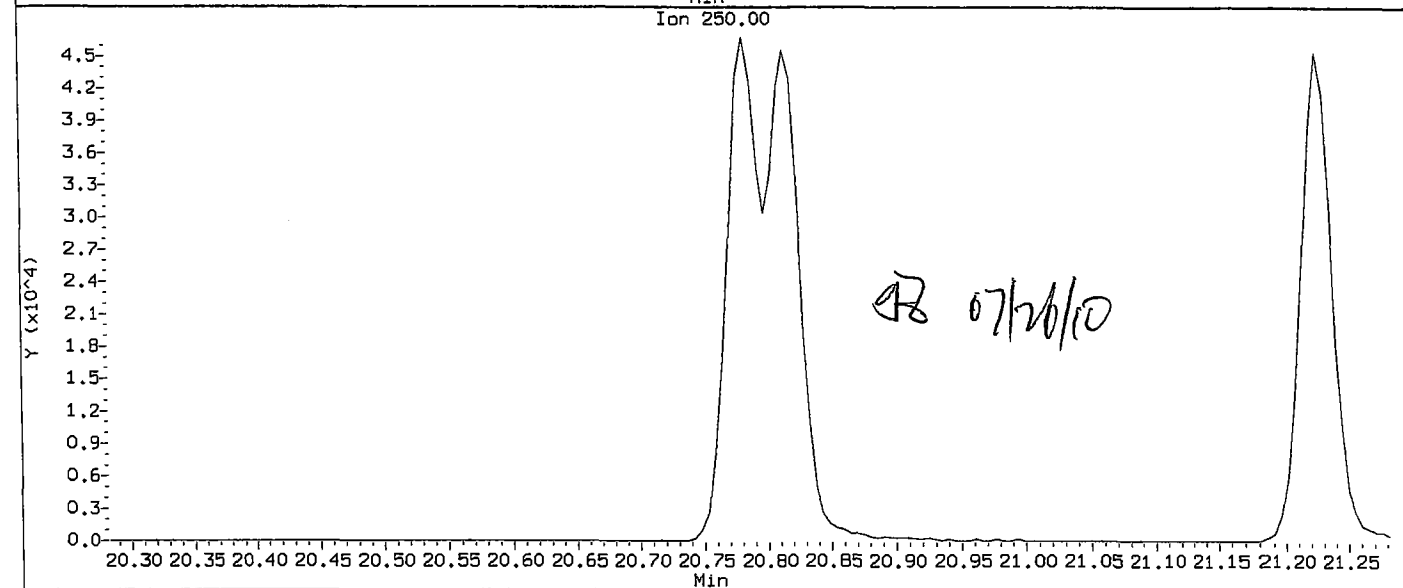
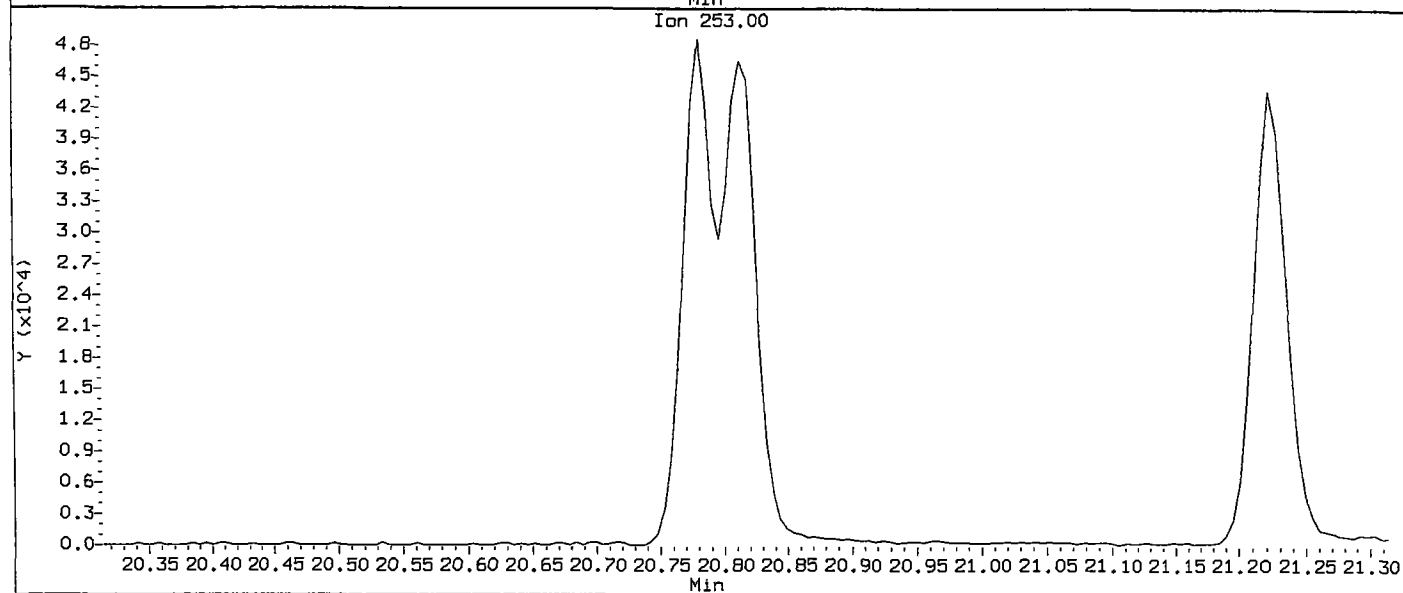
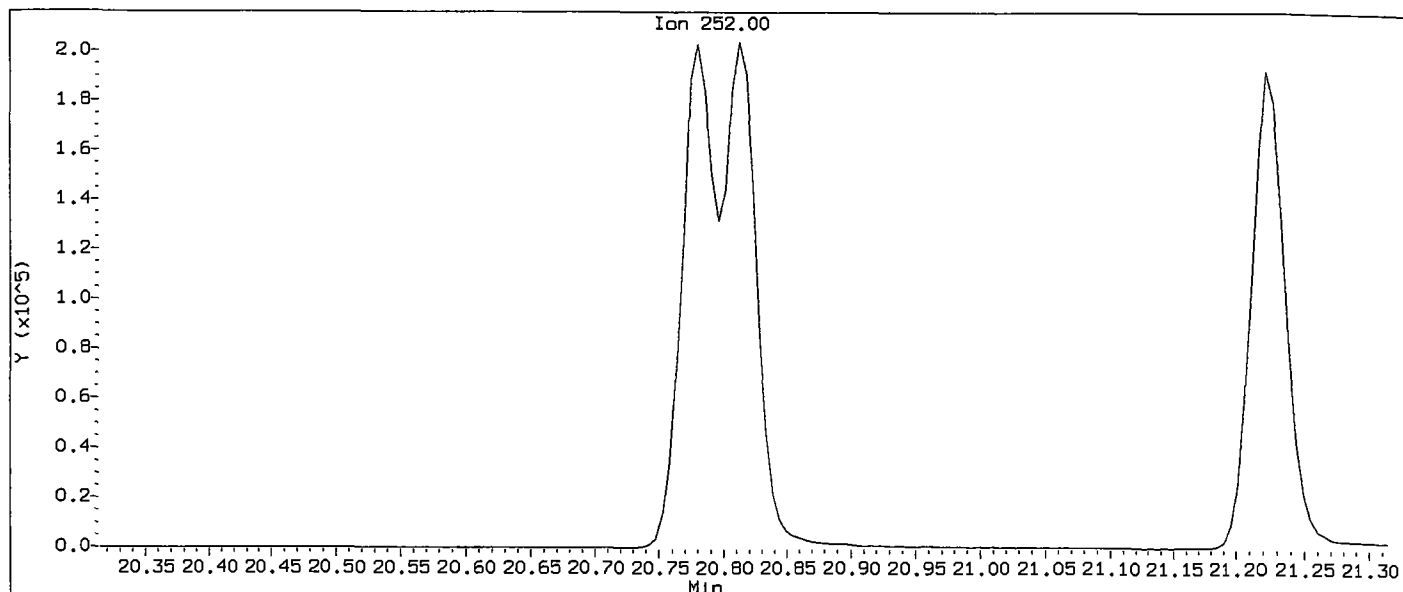
5. Other \_\_\_\_\_

Analyst: ALZ

Date: 07/26/10

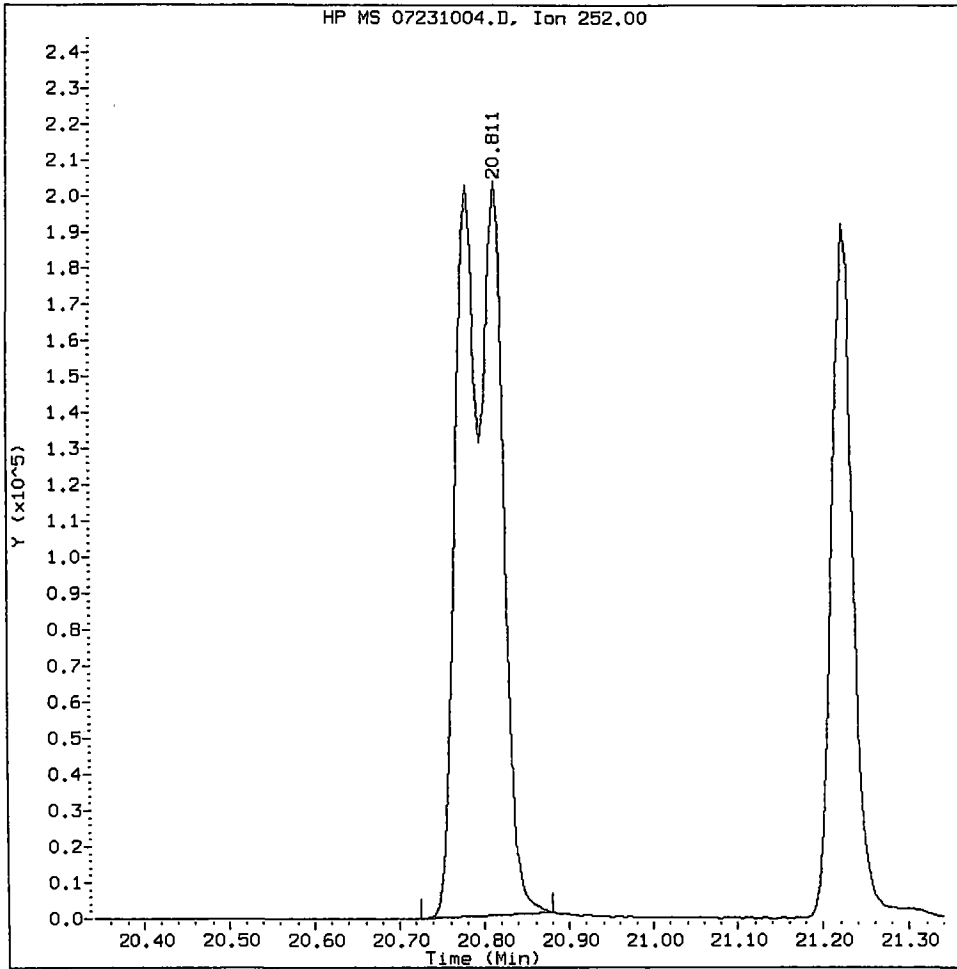
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Injection Date: 23-JUL-2010 16:52  
Instrument: nt6.i  
Client Sample ID: IC100723

Compound: Total Benzofluoranthenes  
CAS Number:





Total Benzofluoranthenes Amount: 19.27 Area: 687719



MANUAL INTEGRATION for Total Benzofluoranthenes

- 1. Baseline correction
- 2. Poor chromatography
- 3. Peak not found
- 4. Totals calculation

5. Other \_\_\_\_\_

Analyst: AB

Date: 07/26/10

Analytical Resources, Inc.

Semivolatle Report SW846 Method 8270D

Data file : /chem1/nt6.i/20100723.b/07231001.D  
 Lab Smp Id: IC250723 Client Smp ID: IC250723  
 Inj Date : 23-JUL-2010 15:01  
 Operator : JZ Inst ID: nt6.i  
 Smp Info : IC250723  
 Misc Info : 10-  
 Comment : 1ul Injection  
 Method : /chem1/nt6.i/20100723.b/SW846072310.m  
 Meth Date : 26-Jul-2010 11:33 jianqing Quant Type: ISTD  
 Cal Date : 23-JUL-2010 15:01 Cal File: 07231001.D  
 Als bottle: 1 Calibration Sample, Level: 4  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: ICAL.sub  
 Target Version: 3.50

*R* 07/26/10  
 AMOUNTS

Compounds	QUANT	SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
\$ 1 2-Fluorophenol	112		5.605	5.610	(0.738)	311522	25.0000	25.40	
\$ 2 Phenol-d5	99		7.207	7.218	(0.949)	348471	25.0000	23.96	
3 Phenol	94		7.229	7.237	(0.952)	387771	25.0000	23.32	
\$ 5 2-Chlorophenol-d4	132		7.293	7.303	(0.961)	290409	25.0000	23.56	
4 Bis(2-Chloroethyl)ether	93		7.282	7.290	(0.959)	299463	25.0000	23.87	
6 2-Chlorophenol	128		7.320	7.327	(0.964)	336281	25.0000	23.53	
7 1,3-Dichlorobenzene	146		7.523	7.530	(0.991)	393980	25.0000	23.83	
* 8 1,4-Dichlorobenzene-d4	152		7.592	7.595	(1.000)	182786	20.0000		
9 1,4-Dichlorobenzene	146		7.619	7.621	(1.004)	390510	25.0000	24.30	
\$ 10 1,2-Dichlorobenzene-d4	152		7.891	7.896	(1.039)	204344	25.0000	24.24	
12 1,2-Dichlorobenzene	146		7.912	7.915	(1.042)	353813	25.0000	23.33	
11 Benzyl alcohol	108		7.896	7.910	(1.040)	189620	25.0000	25.49	
14 2,2'-oxybis(1-Chloropropane)	45		8.158	8.161	(1.075)	319647	25.0000	23.81	
13 2-Methylphenol	108		8.158	8.166	(1.075)	293058	25.0000	23.92	
17 Hexachloroethane	117		8.398	8.406	(1.106)	141205	25.0000	24.06	
16 N-Nitroso-di-n-propylamine	70		8.377	8.390	(1.103)	203786	25.0000	24.13	
15 4-Methylphenol	108		8.393	8.406	(1.106)	289738	25.0000	23.64	
\$ 18 Nitrobenzene-d5	82		8.537	8.542	(0.885)	285365	25.0000	24.63	
19 Nitrobenzene	77		8.564	8.572	(0.888)	315680	25.0000	23.63	
20 Isophorone	82		8.949	8.967	(0.928)	506209	25.0000	24.33	
21 2-Nitrophenol	139		9.082	9.090	(0.942)	191103	25.0000	25.69	
22 2,4-Dimethylphenol	107		9.226	9.234	(0.957)	306864	25.0000	23.89	
23 Bis(2-Chloroethoxy)methane	93		9.360	9.373	(0.971)	350199	25.0000	24.19	
24 Benzoic acid	105		9.477	9.603	(0.983)	467782	50.0000	56.57	
25 2,4-Dichlorophenol	162		9.477	9.485	(0.983)	267155	25.0000	24.30	
26 1,2,4-Trichlorobenzene	180		9.590	9.597	(0.994)	295139	25.0000	24.14	
* 27 Naphthalene-d8	136		9.643	9.651	(1.000)	584137	20.0000		

Compounds	QUANT SIG			AMOUNTS		
	MASS	RT	EXP RT REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
=====	====	==	=====	=====	=====	=====
28 Naphthalene	128	9.675	9.683 (1.003)	839339	25.0000	23.33
29 4-Chloroaniline	127	9.835	9.843 (1.020)	335598	25.0000	23.71
30 Hexachlorobutadiene	225	10.006	10.009 (1.038)	170886	25.0000	24.60
31 4-Chloro-3-methylphenol	107	10.674	10.682 (1.107)	261511	25.0000	24.70
32 2-Methylnaphthalene	141	10.797	10.805 (1.120)	450667	25.0000	23.30
33 Hexachlorocyclopentadiene	237	11.181	11.184 (0.894)	160807	25.0000	31.84
34 2,4,6-Trichlorophenol	196	11.325	11.333 (0.906)	191794	25.0000	26.01
35 2,4,5-Trichlorophenol	196	11.384	11.392 (0.911)	194635	25.0000	25.59
\$ 36 2-Fluorobiphenyl	172	11.454	11.453 (0.916)	548947	25.0000	23.28
37 2-Chloronaphthalene	162	11.571	11.579 (0.926)	539169	25.0000	23.49
38 2-Nitroaniline	65	11.822	11.835 (0.946)	135253	25.0000	25.49
39 Dimethylphthalate	163	12.207	12.220 (0.976)	613460	25.0000	24.53
40 Acenaphthylene	152	12.244	12.252 (0.979)	848116	25.0000	23.59
41 2,6-Dinitrotoluene	165	12.292	12.305 (0.983)	145587	25.0000	25.95
* 42 Acenaphthene-d10	164	12.500	12.503 (1.000)	320442	20.0000	
43 3-Nitroaniline	138	12.500	12.519 (1.000)	135304	25.0000	24.87
44 Acenaphthene	153	12.548	12.562 (1.004)	522996	25.0000	24.07
45 2,4-Dinitrophenol	184	12.666	12.690 (1.013)	212676	50.0000	62.71
46 Dibenzofuran	168	12.810	12.823 (1.025)	687180	25.0000	23.66
47 4-Nitrophenol	109	12.842	12.861 (1.027)	78303	25.0000	26.89 (M)
48 2,4-Dinitrotoluene	165	12.917	12.930 (1.033)	189836	25.0000	26.50
50 Diethylphthalate	149	13.360	13.368 (1.069)	543562	25.0000	22.91
49 Fluorene	166	13.366	13.379 (1.069)	586873	25.0000	23.44
51 4-Chlorophenyl-phenylether	204	13.403	13.411 (1.072)	290075	25.0000	24.62
52 4-Nitroaniline	138	13.494	13.523 (1.079)	138704	25.0000	25.24
53 4,6-Dinitro-2-methylphenol	198	13.563	13.593 (0.913)	260085	50.0000	54.00
54 N-Nitrosodiphenylamine	169	13.611	13.630 (0.916)	432780	25.0000	23.82
\$ 55 2,4,6-Tribromophenol	330	13.793	13.798 (1.103)	76705	25.0000	27.21
56 4-Bromophenyl-phenylether	248	14.183	14.185 (0.954)	188502	25.0000	25.20
57 Hexachlorobenzene	284	14.386	14.399 (0.968)	196721	25.0000	24.67
58 Pentachlorophenol	266	14.696	14.704 (0.989)	127003	25.0000	30.64
* 59 Phenanthrene-d10	188	14.861	14.869 (1.000)	503793	20.0000	
60 Phenanthrene	178	14.899	14.912 (1.002)	790845	25.0000	23.48
61 Anthracene	178	14.973	14.987 (1.008)	833467	25.0000	23.88
62 Carbazole	167	15.267	15.280 (1.027)	756153	25.0000	23.31
63 Di-n-butylphthalate	149	16.004	16.012 (1.077)	971559	25.0000	24.58
64 Fluoranthene	202	16.827	16.835 (1.132)	886233	25.0000	24.30
65 Pyrene	202	17.179	17.187 (0.897)	864054	25.0000	25.28
\$ 66 Terphenyl-d14	244	17.510	17.515 (0.914)	505765	25.0000	26.26
67 Butylbenzylphthalate	149	18.413	18.421 (0.961)	435577	25.0000	28.04
68 Benzo(a)anthracene	228	19.134	19.147 (0.999)	837394	25.0000	26.09
* 69 Chrysene-d12	240	19.161	19.169 (1.000)	532343	20.0000	
70 3,3'-Dichlorobenzidine	252	19.166	19.174 (1.000)	267484	25.0000	25.65
71 Chrysene	228	19.198	19.217 (1.002)	772165	25.0000	25.54
72 bis(2-Ethylhexyl)phthalate	149	19.417	19.420 (0.954)	593672	25.0000	25.50
* 134 Di-n-octylphthalate-d4	153	20.346	20.354 (1.000)	719428	20.0000	
73 Di-n-octylphthalate	149	20.357	20.360 (1.001)	983658	25.0000	23.55

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
74 Benzo (b) fluoranthene	252	20.784	20.803	(0.975)	881261	25.0000	24.38
75 Benzo (k) fluoranthene	252	20.816	20.840	(0.977)	927133	25.0000	23.20
187 Total Benzofluoranthenes	252	20.816	20.840	(0.977)	1705649	50.0000	47.25
76 Benzo (a) pyrene	252	21.228	21.246	(0.996)	829054	25.0000	24.06
* 77 Perylene-d12	264	21.308	21.316	(1.000)	517269	20.0000	
78 Indeno (1,2,3-cd) pyrene	276	22.697	22.720	(1.065)	1104393	25.0000	24.30
79 Dibenzo (a,h) anthracene	278	22.723	22.747	(1.066)	862084	25.0000	24.62
80 Benzo (g,h,i) perylene	276	23.054	23.089	(1.082)	992366	25.0000	24.07
90 N-Nitrosodimethylamine	74	2.721	2.750	(0.358)	200935	25.0000	25.15
103 Pyridine	79	2.689	2.702	(0.354)	370004	25.0000	26.58
91 Aniline	93	7.154	7.157	(0.942)	455640	25.0000	24.46
105 1-methylnaphthalene	141	10.968	10.975	(1.137)	469146	25.0000	23.55
93 Benzidine	184	17.099	17.107	(0.892)	265510	25.0000	23.42
111 Azobenzene (1,2-DP-Hydrazine)	77	13.654	13.667	(1.092)	570301	25.0000	24.01
143 1,4-Dioxane	88	2.149	2.168	(0.283)	130956	25.0000	24.94
§ 137 d8-1,4-Dioxane	96	2.107	2.125	(0.277)	132537	25.0000	25.86
144 alpha-Terpineol	59	9.718	9.731	(1.008)	173991	25.0000	24.39
98 Retene	219	17.751	17.759	(0.926)	297518	25.0000	27.01
133 Butylatedhydroxytoluene	205	12.698	12.706	(1.016)	448163	25.0000	23.16
115 Tributyl Phosphate	99	13.734	13.763	(0.924)	674856	25.0000	23.95
116 Dibutyl Phenyl Phosphate	175	15.449	15.457	(1.040)	473853	25.0000	25.33
117 Butyl Diphenyl Phosphate	94	17.126	17.134	(0.894)	155996	25.0000	26.75
118 Triphenyl Phosphate	326	18.723	18.731	(0.977)	156116	25.0000	27.93
123 Acetophenone	105	8.302	8.316	(1.094)	397677	25.0000	24.54
179 n-Decane	57	7.448	7.450	(0.981)	257349	25.0000	23.78
180 n-Octadecane	57	14.829	14.832	(0.998)	250246	25.0000	23.02
168 Pentachlorobenzene	250	12.853	12.866	(1.028)	219604	25.0000	24.46
113 Diphenyl Oxide	170	11.779	11.782	(0.942)	516503	25.0000	23.40
112 Biphenyl	154	11.582	11.590	(0.926)	598381	25.0000	23.73
120 2,3,4,6-Tetrachlorophenol	232	13.104	13.112	(1.048)	172859	25.0000	26.74
151 1,2,4,5-Tetrachlorobenzene	216	11.138	11.141	(0.891)	281398	25.0000	23.73
110 Tetrachloroguaiacol	247	14.824	14.842	(0.997)	202210	50.0000	51.38
109 3,4,5-Trichloroguaiacol	213	13.205	13.219	(0.889)	100748	25.0000	25.48
181 3,4,6-Trichloroguaiacol	211	13.323	13.331	(1.755)	121741	25.0000	26.57
108 4,5,6-Trichloroguaiacol	213	14.242	14.250	(1.139)	102033	25.0000	26.01
184 3,4-Dichloroguaiacol	192	11.667	11.675	(1.537)	106034	25.0000	26.14
107 4,5-Dichloroguaiacol	192	12.463	12.476	(0.997)	258682	50.0000	51.08
182 4,6-Dichloroguaiacol	192	12.463	12.476	(1.642)	258682	50.0000	51.40
185 4-Chloroguaiacol	115	10.594	10.596	(1.395)	67852	12.5000	13.18
186 Carbaryl	144	15.689	15.702	(1.056)	378522	25.0000	27.05
106 Guaiacol	124	8.575	8.588	(1.129)	270369	25.0000	23.80

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: 07231001.D  
 Lab Smp Id: IC250723  
 Analysis Type: SV  
 Quant Type: ISTD  
 Operator: JZ  
 Method File: /chem1/nt6.i/20100723.b/SW846072310.m  
 Misc Info: 10-

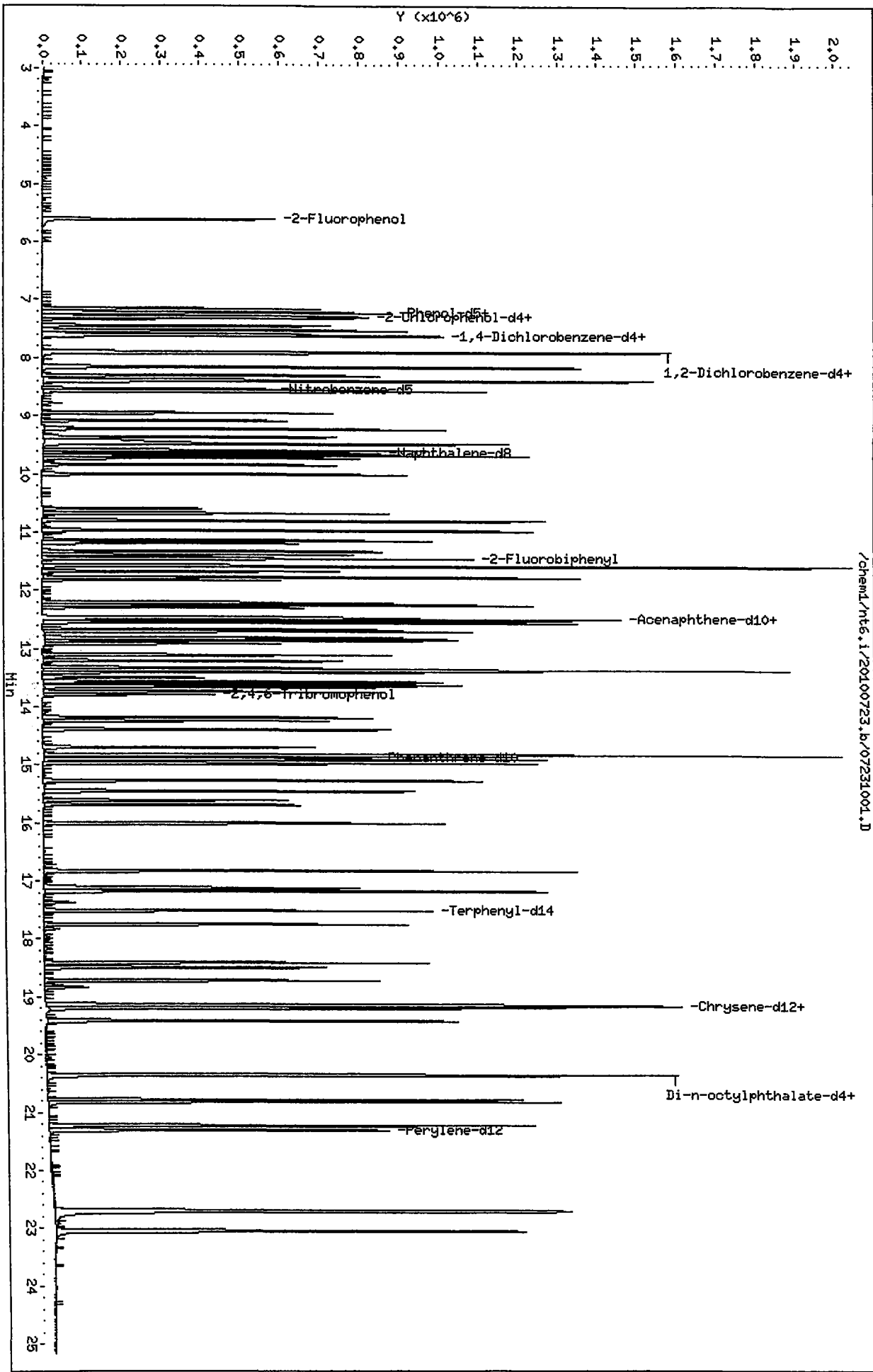
Calibration Date: 23-JUL-2010  
 Calibration Time: 15:01  
 Client Smp ID: IC250723  
 Level:  
 Sample Type:

Test Mode:  
 Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	182786	91393	365572	182786	0.00
27 Naphthalene-d8	584137	292068	1168274	584137	0.00
42 Acenaphthene-d10	320442	160221	640884	320442	0.00
59 Phenanthrene-d10	503793	251896	1007586	503793	0.00
69 Chrysene-d12	532343	266172	1064686	532343	0.00
134 Di-n-octylphthala	719428	359714	1438856	719428	0.00
77 Perylene-d12	517269	258634	1034538	517269	0.00

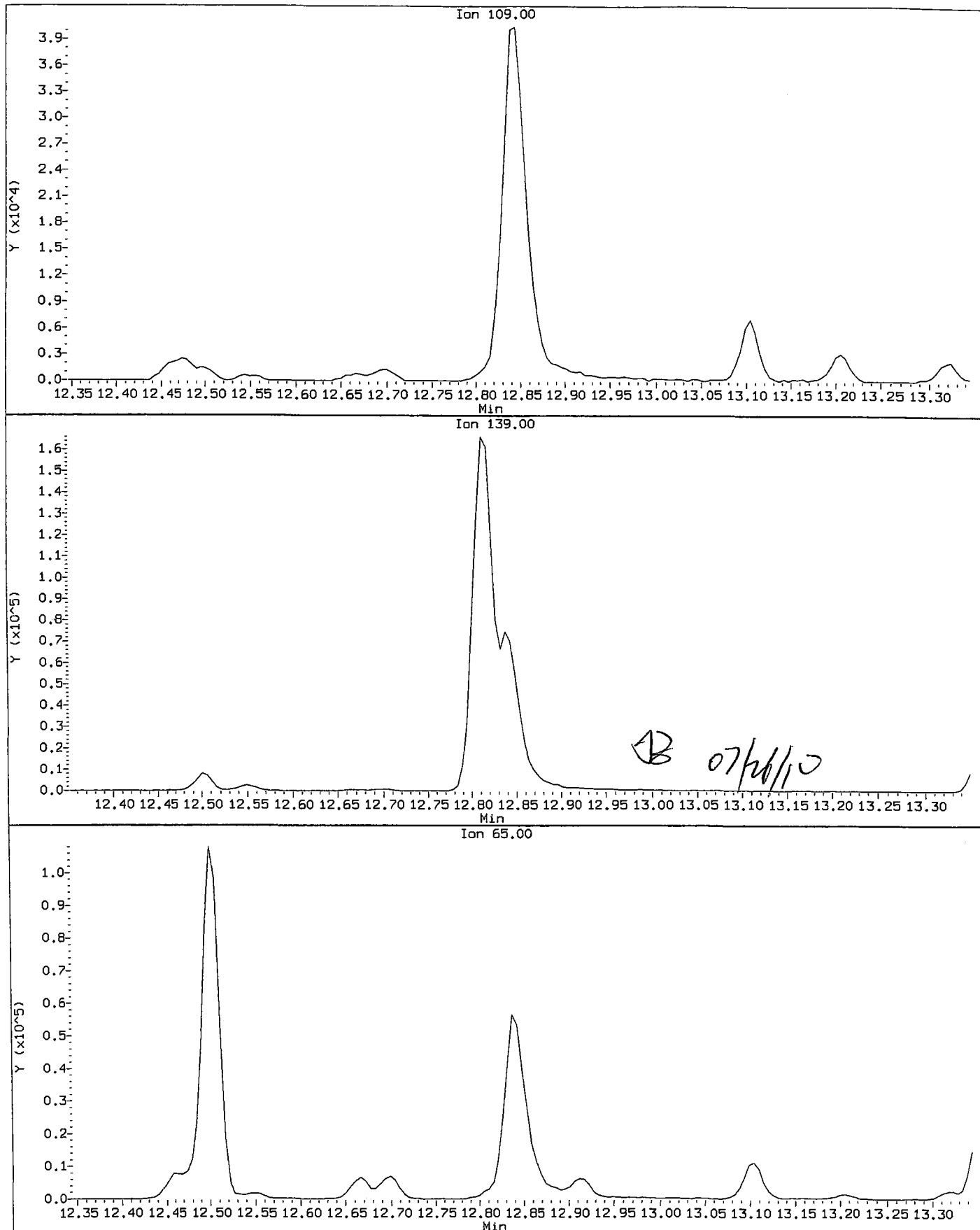
COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	7.59	7.09	8.09	7.59	0.00
27 Naphthalene-d8	9.64	9.14	10.14	9.64	0.00
42 Acenaphthene-d10	12.50	12.00	13.00	12.50	0.00
59 Phenanthrene-d10	14.86	14.36	15.36	14.86	0.00
69 Chrysene-d12	19.16	18.66	19.66	19.16	0.00
134 Di-n-octylphthala	20.35	19.85	20.85	20.35	0.00
77 Perylene-d12	21.31	20.81	21.81	21.31	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/nt6.i/20100723.b/07231001.D  
Injection Date: 23-JUL-2010 15:01  
Instrument: nt6.i  
Client Sample ID: IC250723

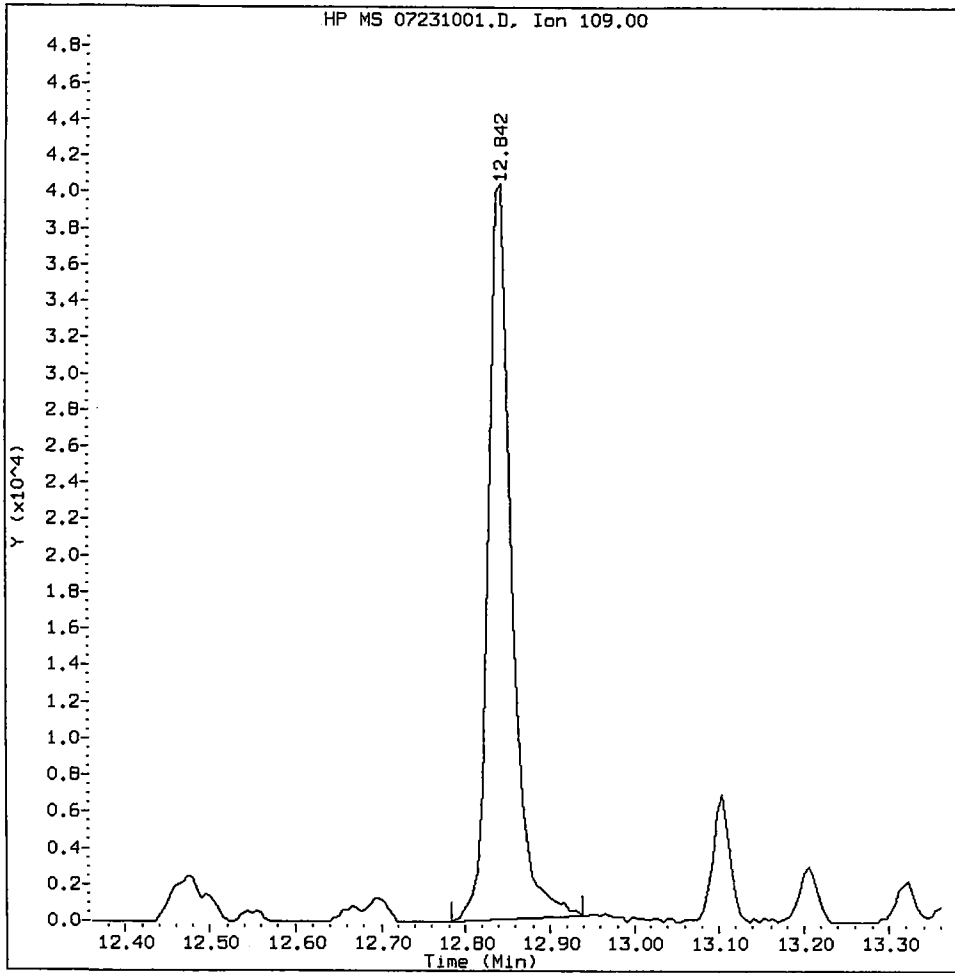
Compound: 4-Nitrophenol  
CAS Number: 100-02-7



B 07/23/10

IC250723, /chem1/nt6.i/20100723.b/07231001.D

4-Nitrophenol Amount: 26.89 Area: 78303



MANUAL INTEGRATION for 4-Nitrophenol

1. Baseline correction
2. Poor chromatography
- ③. Peak not found
4. Totals calculation

5. Other \_\_\_\_\_

Analyst: AB

Date: 07/26/10



Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt6.i/20100723.b/07231005.D  
 Lab Smp Id: IC400723 Client Smp ID: IC400723  
 Inj Date : 23-JUL-2010 17:29  
 Operator : JZ Inst ID: nt6.i  
 Smp Info : IC400723,  
 Misc Info : 10-  
 Comment : 1ul Injection  
 Method : /chem1/nt6.i/20100723.b/SW846072310.m  
 Meth Date : 26-Jul-2010 11:33 jianqing Quant Type: ISTD  
 Cal Date : 23-JUL-2010 17:29 Cal File: 07231005.D  
 Als bottle: 5 Calibration Sample, Level: 5  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: ICAL.sub  
 Target Version: 3.50

*AB 07/26/10*  
 AMOUNTS

Compounds	QUANT	SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
\$ 1 2-Fluorophenol	112			5.605	5.610	(0.738)	478107	40.0000	39.70
\$ 2 Phenol-d5	99			7.213	7.218	(0.950)	523138	40.0000	37.21
3 Phenol	94			7.229	7.237	(0.952)	573376	40.0000	35.94
\$ 5 2-Chlorophenol-d4	132			7.298	7.303	(0.961)	436515	40.0000	36.73
4 Bis(2-Chloroethyl)ether	93			7.282	7.290	(0.959)	455918	40.0000	37.52
6 2-Chlorophenol	128			7.320	7.327	(0.964)	498989	40.0000	36.31
7 1,3-Dichlorobenzene	146			7.528	7.530	(0.992)	602247	40.0000	37.59
* 8 1,4-Dichlorobenzene-d4	152			7.592	7.595	(1.000)	179813	20.0000	
9 1,4-Dichlorobenzene	146			7.619	7.621	(1.004)	597463	40.0000	38.22
\$ 10 1,2-Dichlorobenzene-d4	152			7.891	7.896	(1.039)	313019	40.0000	38.17
12 1,2-Dichlorobenzene	146			7.913	7.915	(1.042)	541681	40.0000	37.00
11 Benzyl alcohol	108			7.902	7.910	(1.041)	293342	40.0000	40.07
14 2,2'-oxybis(1-Chloropropane)	45			8.158	8.161	(1.075)	488359	40.0000	37.54
13 2-Methylphenol	108			8.158	8.166	(1.075)	439877	40.0000	37.15
17 Hexachloroethane	117			8.399	8.406	(1.106)	214765	40.0000	37.73
16 N-Nitroso-di-n-propylamine	70			8.383	8.390	(1.104)	316516	40.0000	38.46
15 4-Methylphenol	108			8.399	8.406	(1.106)	435625	40.0000	36.84
\$ 18 Nitrobenzene-d5	82			8.538	8.542	(0.885)	446362	40.0000	38.77
19 Nitrobenzene	77			8.570	8.572	(0.888)	485333	40.0000	36.97
20 Isophorone	82			8.954	8.967	(0.928)	791586	40.0000	38.38
21 2-Nitrophenol	139			9.082	9.090	(0.941)	297585	40.0000	39.96
22 2,4-Dimethylphenol	107			9.227	9.234	(0.956)	466959	40.0000	36.98
23 Bis(2-Chloroethoxy)methane	93			9.365	9.373	(0.971)	547954	40.0000	38.22
24 Benzoic acid	105			9.520	9.603	(0.987)	761553	80.0000	88.65
25 2,4-Dichlorophenol	162			9.478	9.485	(0.982)	415729	40.0000	38.19
26 1,2,4-Trichlorobenzene	180			9.595	9.597	(0.994)	456415	40.0000	37.79
* 27 Naphthalene-d8	136			9.649	9.651	(1.000)	584978	20.0000	

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
28 Naphthalene	128	9.675	9.683	(1.003)	1270631	40.0000	36.12
29 4-Chloroaniline	127	9.841	9.843	(1.020)	516764	40.0000	37.11
30 Hexachlorobutadiene	225	10.006	10.009	(1.037)	268712	40.0000	38.89
31 4-Chloro-3-methylphenol	107	10.674	10.682	(1.106)	406596	40.0000	38.67
32 2-Methylnaphthalene	141	10.797	10.805	(1.119)	699508	40.0000	36.82
33 Hexachlorocyclopentadiene	237	11.181	11.184	(0.894)	275445	40.0000	49.97
34 2,4,6-Trichlorophenol	196	11.326	11.333	(0.906)	298271	40.0000	39.62
35 2,4,5-Trichlorophenol	196	11.384	11.392	(0.911)	307523	40.0000	39.60
\$ 36 2-Fluorobiphenyl	172	11.454	11.453	(0.916)	849457	40.0000	36.06
37 2-Chloronaphthalene	162	11.577	11.579	(0.926)	831977	40.0000	36.25
38 2-Nitroaniline	65	11.828	11.835	(0.946)	221096	40.0000	40.57
39 Dimethylphthalate	163	12.207	12.220	(0.976)	974193	40.0000	38.43
40 Acenaphthylene	152	12.250	12.252	(0.980)	1297887	40.0000	36.13
41 2,6-Dinitrotoluene	165	12.298	12.305	(0.984)	239593	40.0000	41.37
* 42 Acenaphthene-d10	164	12.501	12.503	(1.000)	327933	20.0000	
43 3-Nitroaniline	138	12.506	12.519	(1.000)	203699	40.0000	37.22
44 Acenaphthene	153	12.554	12.562	(1.004)	826657	40.0000	37.71
45 2,4-Dinitrophenol	184	12.672	12.690	(1.014)	374074	80.0000	99.17
46 Dibenzofuran	168	12.816	12.823	(1.025)	1085318	40.0000	37.16
47 4-Nitrophenol	109	12.842	12.861	(1.027)	129026	40.0000	42.60
48 2,4-Dinitrotoluene	165	12.917	12.930	(1.033)	315304	40.0000	42.37
50 Diethylphthalate	149	13.366	13.368	(1.069)	853959	40.0000	36.04
49 Fluorene	166	13.371	13.379	(1.070)	916824	40.0000	36.55
51 4-Chlorophenyl-phenylether	204	13.409	13.411	(1.073)	470235	40.0000	39.20
52 4-Nitroaniline	138	13.505	13.523	(1.080)	232223	40.0000	41.03
53 4,6-Dinitro-2-methylphenol	198	13.574	13.593	(0.913)	427429	80.0000	83.76
54 N-Nitrosodiphenylamine	169	13.617	13.630	(0.916)	701173	40.0000	37.56
\$ 55 2,4,6-Tribromophenol	330	13.793	13.798	(1.103)	126637	40.0000	43.05
56 4-Bromophenyl-phenylether	248	14.183	14.185	(0.954)	311111	40.0000	39.90
57 Hexachlorobenzene	284	14.391	14.399	(0.968)	320970	40.0000	38.86
58 Pentachlorophenol	266	14.696	14.704	(0.988)	212167	40.0000	46.95
* 59 Phenanthrene-d10	188	14.867	14.869	(1.000)	525448	20.0000	
60 Phenanthrene	178	14.904	14.912	(1.002)	1256713	40.0000	36.54
61 Anthracene	178	14.974	14.987	(1.007)	1305609	40.0000	36.63
62 Carbazole	167	15.273	15.280	(1.027)	1186045	40.0000	35.94
63 Di-n-butylphthalate	149	16.004	16.012	(1.077)	1500393	40.0000	37.06
64 Fluoranthene	202	16.827	16.835	(1.132)	1385977	40.0000	37.10
65 Pyrene	202	17.179	17.187	(0.896)	1346276	40.0000	36.18
\$ 66 Terphenyl-d14	244	17.516	17.515	(0.914)	801457	40.0000	37.83
67 Butylbenzylphthalate	149	18.413	18.421	(0.961)	691617	40.0000	39.94
68 Benzo (a) anthracene	228	19.140	19.147	(0.999)	1310404	40.0000	37.25
* 69 Chrysene-d12	240	19.166	19.169	(1.000)	593530	20.0000	
70 3,3'-Dichlorobenzidine	252	19.166	19.174	(1.000)	420101	40.0000	36.85
71 Chrysene	228	19.204	19.217	(1.002)	1223597	40.0000	36.98
72 bis(2-Ethylhexyl)phthalate	149	19.417	19.420	(0.954)	938469	40.0000	39.60
* 134 Di-n-octylphthalate-d4	153	20.347	20.354	(1.000)	734023	20.0000	
73 Di-n-octylphthalate	149	20.357	20.360	(1.001)	1521034	40.0000	36.48

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
=====	====	==	=====	=====	=====	=====	=====
74 Benzo (b) fluoranthene	252	20.790	20.803	(0.976)	1434589	40.0000	38.74
75 Benzo (k) fluoranthene	252	20.822	20.840	(0.977)	1367201	40.0000	34.31
187 Total Benzofluoranthenes	252	20.822	20.840	(0.977)	2643068	80.0000	72.56
76 Benzo (a) pyrene	252	21.233	21.246	(0.996)	1331524	40.0000	37.91
* 77 Perylene-d12	264	21.308	21.316	(1.000)	534102	20.0000	
78 Indeno (1,2,3-cd)pyrene	276	22.707	22.720	(1.066)	1785536	40.0000	38.43
79 Dibenzo (a,h) anthracene	278	22.729	22.747	(1.067)	1387194	40.0000	38.69
80 Benzo (g,h,i) perylene	276	23.065	23.089	(1.082)	1604879	40.0000	38.14
90 N-Nitrosodimethylamine	74	2.732	2.750	(0.360)	310807	40.0000	39.63
103 Pyridine	79	2.694	2.702	(0.355)	579976	40.0000	41.86
91 Aniline	93	7.154	7.157	(0.942)	696532	40.0000	38.40
105 1-methylnaphthalene	141	10.968	10.975	(1.137)	725171	40.0000	37.03
93 Benzidine	184	17.099	17.107	(0.892)	394646	40.0000	32.65
111 Azobenzene (1,2-DP-Hydrazine)	77	13.654	13.667	(1.092)	904684	40.0000	37.74
143 1,4-Dioxane	88	2.155	2.168	(0.284)	207666	40.0000	40.16
\$ 137 d8-1,4-Dioxane	96	2.112	2.125	(0.278)	206960	40.0000	40.83
144 alpha-Terpineol	59	9.723	9.731	(1.008)	282130	40.0000	39.60
98 Retene	219	17.751	17.759	(0.926)	492059	40.0000	40.05
133 Butylatedhydroxytoluene	205	12.698	12.706	(1.016)	701480	40.0000	36.25
115 Tributyl Phosphate	99	13.745	13.763	(0.925)	1084412	40.0000	37.48
116 Dibutyl Phenyl Phosphate	175	15.454	15.457	(1.040)	777710	40.0000	39.89
117 Butyl Diphenyl Phosphate	94	17.126	17.134	(0.894)	253920	40.0000	39.24
118 Triphenyl Phosphate	326	18.723	18.731	(0.977)	259068	40.0000	41.25
123 Acetophenone	105	8.308	8.316	(1.094)	621273	40.0000	39.17
179 n-Decane	57	7.448	7.450	(0.981)	396980	40.0000	37.80
180 n-Octadecane	57	14.829	14.832	(0.997)	386562	40.0000	35.13
168 Pentachlorobenzene	250	12.858	12.866	(1.029)	361056	40.0000	39.43
113 Diphenyl Oxide	170	11.780	11.782	(0.942)	805094	40.0000	36.43
112 Biphenyl	154	11.582	11.590	(0.926)	911660	40.0000	36.39
120 2,3,4,6-Tetrachlorophenol	232	13.110	13.112	(1.049)	292380	40.0000	43.28
151 1,2,4,5-Tetrachlorobenzene	216	11.139	11.141	(0.891)	455577	40.0000	38.01
110 Tetrachloroguaiacol	247	14.829	14.842	(0.997)	326377	80.0000	79.63
109 3,4,5-Trichloroguaiacol	213	13.211	13.219	(0.889)	165311	40.0000	40.07
181 3,4,6-Trichloroguaiacol	211	13.323	13.331	(1.755)	199643	40.0000	43.13
108 4,5,6-Trichloroguaiacol	213	14.242	14.250	(1.139)	167783	40.0000	41.33
184 3,4-Dichloroguaiacol	192	11.673	11.675	(1.537)	174240	40.0000	42.69
107 4,5-Dichloroguaiacol	192	12.469	12.476	(0.997)	416165	80.0000	80.22
182 4,6-Dichloroguaiacol	192	12.469	12.476	(1.642)	416165	80.0000	83.01
185 4-Chloroguaiacol	115	10.594	10.596	(1.395)	107719	20.0000	20.93
186 Carbaryl	144	15.689	15.702	(1.055)	632465	40.0000	42.62
106 Guaiacol	124	8.580	8.588	(1.130)	427217	40.0000	38.56

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS  
 AREA AND RT SUMMARY

Instrument ID: nt6.i	Calibration Date: 23-JUL-2010
Lab File ID: 07231005.D	Calibration Time: 15:01
Lab Smp Id: IC400723	Client Smp ID: IC400723
Analysis Type: SV	Level:
Quant Type: ISTD	Sample Type:
Operator: JZ	
Method File: /chem1/nt6.i/20100723.b/SW846072310.m	
Misc Info: 10-	

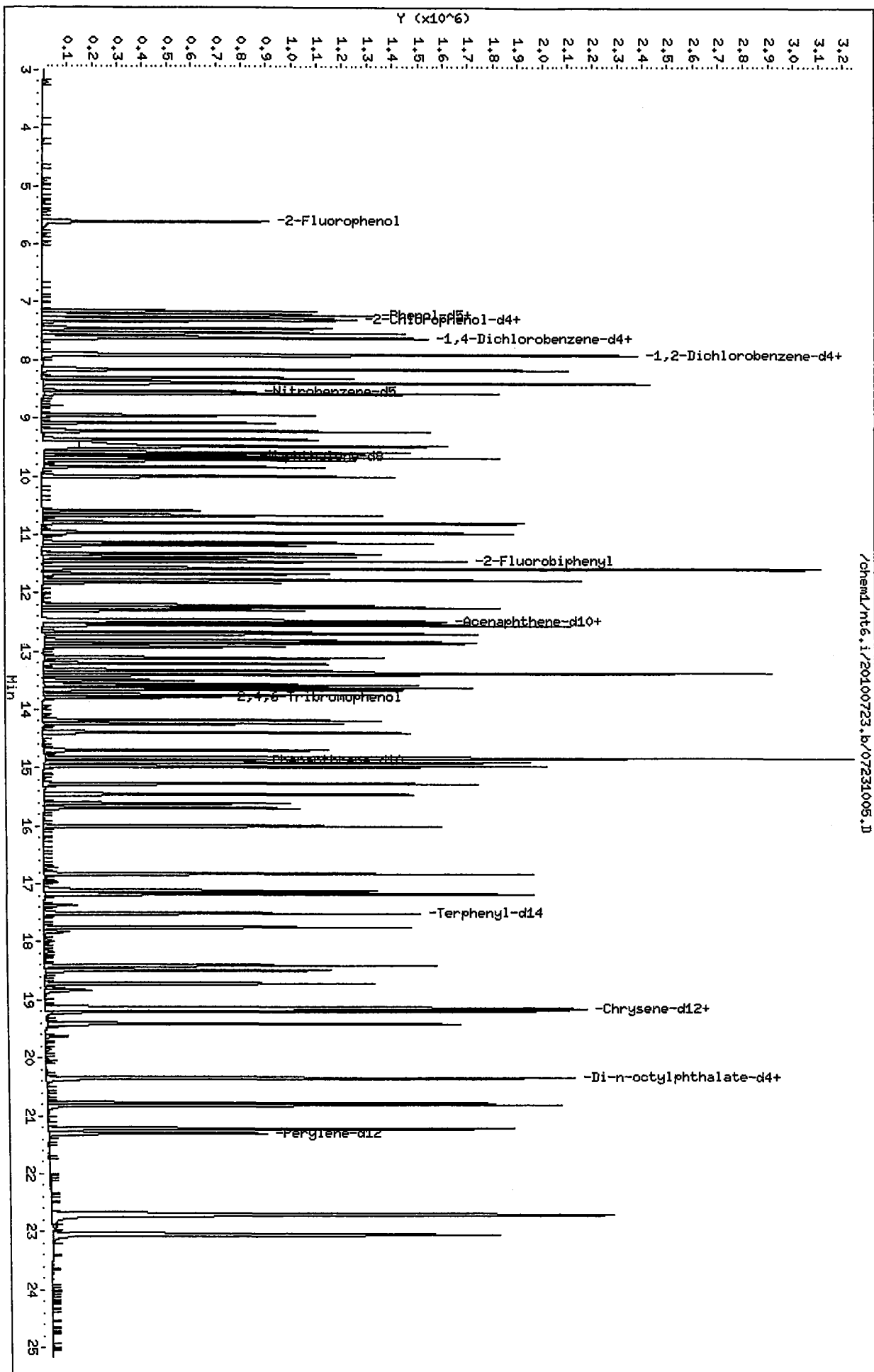
Test Mode:  
 Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	182786	91393	365572	179813	-1.63
27 Naphthalene-d8	584137	292068	1168274	584978	0.14
42 Acenaphthene-d10	320442	160221	640884	327933	2.34
59 Phenanthrene-d10	503793	251896	1007586	525448	4.30
69 Chrysene-d12	532343	266172	1064686	593530	11.49
134 Di-n-octylphthala	719428	359714	1438856	734023	2.03
77 Perylene-d12	517269	258634	1034538	534102	3.25

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	7.59	7.09	8.09	7.59	0.00
27 Naphthalene-d8	9.64	9.14	10.14	9.65	0.06
42 Acenaphthene-d10	12.50	12.00	13.00	12.50	0.00
59 Phenanthrene-d10	14.86	14.36	15.36	14.87	0.04
69 Chrysene-d12	19.16	18.66	19.66	19.17	0.03
134 Di-n-octylphthala	20.35	19.85	20.85	20.35	0.00
77 Perylene-d12	21.31	20.81	21.81	21.31	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.

/chem1/nt6.i/20100723.b/07231005.D



Analytical Resources, Inc.

Semivolatiles Report SW846 Method 8270D

Data file : /chem1/nt6.i/20100723.b/07231006.D  
 Lab Smp Id: IC600723 Client Smp ID: IC600723  
 Inj Date : 23-JUL-2010 18:01  
 Operator : JZ Inst ID: nt6.i  
 Smp Info : IC600723,  
 Misc Info : 10-  
 Comment : 1ul Injection  
 Method : /chem1/nt6.i/20100723.b/SW846072310.m  
 Meth Date : 26-Jul-2010 11:33 jianqing Quant Type: ISTD  
 Cal Date : 23-JUL-2010 18:01 Cal File: 07231006.D  
 Als bottle: 6 Calibration Sample, Level: 6  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: ICAL.sub  
 Target Version: 3.50

*Handwritten:* 07/26/10

Compounds	QUANT	SIG	AMOUNTS					
			CAL-AMT	ON-COL	MASS	RT	EXP RT	REL RT
\$ 1 2-Fluorophenol	112		5.610	5.610	(0.738)	707424	60.0000	57.57
\$ 2 Phenol-d5	99		7.218	7.218	(0.950)	771071	60.0000	54.33
3 Phenol	94		7.239	7.237	(0.953)	847974	60.0000	52.90
\$ 5 2-Chlorophenol-d4	132		7.303	7.303	(0.961)	648248	60.0000	54.08
4 Bis(2-Chloroethyl)ether	93		7.287	7.290	(0.959)	659456	60.0000	53.84
6 2-Chlorophenol	128		7.325	7.327	(0.964)	749255	60.0000	54.06
7 1,3-Dichlorobenzene	146		7.533	7.530	(0.992)	878759	60.0000	54.34
* 8 1,4-Dichlorobenzene-d4	152		7.597	7.595	(1.000)	184946	20.0000	
9 1,4-Dichlorobenzene	146		7.624	7.621	(1.004)	868746	60.0000	54.94
\$ 10 1,2-Dichlorobenzene-d4	152		7.896	7.896	(1.039)	463869	60.0000	55.77
12 1,2-Dichlorobenzene	146		7.918	7.915	(1.042)	777966	60.0000	52.89
11 Benzyl alcohol	108		7.907	7.910	(1.041)	432282	60.0000	57.83
14 2,2'-oxybis(1-Chloropropane)	45		8.163	8.161	(1.075)	708425	60.0000	54.01
13 2-Methylphenol	108		8.163	8.166	(1.075)	658836	60.0000	55.00
17 Hexachloroethane	117		8.404	8.406	(1.106)	308477	60.0000	53.78
16 N-Nitroso-di-n-propylamine	70		8.388	8.390	(1.104)	454211	60.0000	54.62
15 4-Methylphenol	108		8.404	8.406	(1.106)	631240	60.0000	53.10
\$ 18 Nitrobenzene-d5	82		8.542	8.542	(0.885)	662173	60.0000	56.11
19 Nitrobenzene	77		8.574	8.572	(0.889)	697353	60.0000	52.44
20 Isophorone	82		8.959	8.967	(0.929)	1168591	60.0000	55.40
21 2-Nitrophenol	139		9.087	9.090	(0.942)	458514	60.0000	59.41
22 2,4-Dimethylphenol	107		9.231	9.234	(0.957)	699441	60.0000	54.35
23 Bis(2-Chloroethoxy)methane	93		9.370	9.373	(0.971)	803647	60.0000	54.90
24 Benzoic acid	105		9.568	9.603	(0.992)	1222479	120.000	133.3 (M)
25 2,4-Dichlorophenol	162		9.482	9.485	(0.983)	639889	60.0000	57.14
26 1,2,4-Trichlorobenzene	180		9.595	9.597	(0.994)	663284	60.0000	53.96
* 27 Naphthalene-d8	136		9.648	9.651	(1.000)	607475	20.0000	

Compounds	QUANT SIG			AMOUNTS			
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
28 Naphthalene	128	9.680	9.683	(1.003)	1781924	60.0000	50.35
29 4-Chloroaniline	127	9.840	9.843	(1.020)	734328	60.0000	52.12
30 Hexachlorobutadiene	225	10.006	10.009	(1.037)	405523	60.0000	57.07
31 4-Chloro-3-methylphenol	107	10.679	10.682	(1.107)	612255	60.0000	56.70
32 2-Methylnaphthalene	141	10.802	10.805	(1.120)	1018025	60.0000	52.84
33 Hexachlorocyclopentadiene	237	11.181	11.184	(0.894)	425348	60.0000	71.46
34 2,4,6-Trichlorophenol	196	11.330	11.333	(0.906)	465479	60.0000	59.61
35 2,4,5-Trichlorophenol	196	11.389	11.392	(0.911)	483158	60.0000	59.92
\$ 36 2-Fluorobiphenyl	172	11.453	11.453	(0.916)	1244640	60.0000	52.20
37 2-Chloronaphthalene	162	11.576	11.579	(0.926)	1199578	60.0000	51.72
38 2-Nitroaniline	65	11.832	11.835	(0.947)	335276	60.0000	59.36
39 Dimethylphthalate	163	12.217	12.220	(0.977)	1436593	60.0000	55.40
40 Acenaphthylene	152	12.249	12.252	(0.980)	1817418	60.0000	50.29
41 2,6-Dinitrotoluene	165	12.303	12.305	(0.984)	371177	60.0000	61.42
* 42 Acenaphthene-d10	164	12.500	12.503	(1.000)	340603	20.0000	
43 3-Nitroaniline	138	12.516	12.519	(1.001)	274842	60.0000	49.96
44 Acenaphthene	153	12.559	12.562	(1.005)	1199130	60.0000	53.76
45 2,4-Dinitrophenol	184	12.682	12.690	(1.015)	605790	120.0000	146.2
46 Dibenzofuran	168	12.821	12.823	(1.026)	1586285	60.0000	53.43
47 4-Nitrophenol	109	12.853	12.861	(1.028)	193631	60.0000	61.29 (M)
48 2,4-Dinitrotoluene	165	12.927	12.930	(1.034)	481845	60.0000	61.94
50 Diethylphthalate	149	13.371	13.368	(1.070)	1322312	60.0000	54.69
49 Fluorene	166	13.376	13.379	(1.070)	1324287	60.0000	52.16
51 4-Chlorophenyl-phenylether	204	13.408	13.411	(1.073)	706929	60.0000	57.25
52 4-Nitroaniline	138	13.515	13.523	(1.081)	357914	60.0000	60.74
53 4,6-Dinitro-2-methylphenol	198	13.584	13.593	(0.914)	680240	120.0000	126.2
54 N-Nitrosodiphenylamine	169	13.622	13.630	(0.916)	1042005	60.0000	54.50
\$ 55 2,4,6-Tribromophenol	330	13.798	13.798	(1.104)	200710	60.0000	64.67
56 4-Bromophenyl-phenylether	248	14.183	14.185	(0.954)	469752	60.0000	58.12
57 Hexachlorobenzene	284	14.391	14.399	(0.968)	487833	60.0000	57.16
58 Pentachlorophenol	266	14.701	14.704	(0.989)	343904	60.0000	70.42
* 59 Phenanthrene-d10	188	14.866	14.869	(1.000)	548107	20.0000	
60 Phenanthrene	178	14.909	14.912	(1.003)	1811434	60.0000	51.86
61 Anthracene	178	14.978	14.987	(1.008)	1861671	60.0000	51.49
62 Carbazole	167	15.272	15.280	(1.027)	1724877	60.0000	51.52
63 Di-n-butylphthalate	149	16.009	16.012	(1.077)	2137856	60.0000	51.97
64 Fluoranthene	202	16.832	16.835	(1.132)	1967573	60.0000	51.86
65 Pyrene	202	17.184	17.187	(0.897)	1926828	60.0000	54.12
\$ 66 Terphenyl-d14	244	17.515	17.515	(0.914)	1184437	60.0000	57.75
67 Butylbenzylphthalate	149	18.413	18.421	(0.961)	1016920	60.0000	60.17
68 Benzo(a)anthracene	228	19.144	19.147	(0.999)	1907368	60.0000	56.27
* 69 Chrysene-d12	240	19.166	19.169	(1.000)	578965	20.0000	
70 3,3'-Dichlorobenzidine	252	19.166	19.174	(1.000)	614208	60.0000	55.97
71 Chrysene	228	19.209	19.217	(1.002)	1763657	60.0000	55.47
72 bis(2-Ethylhexyl)phthalate	149	19.417	19.420	(0.954)	1365056	60.0000	57.33
* 134 Di-n-octylphthalate-d4	153	20.346	20.354	(1.000)	744081	20.0000	
73 Di-n-octylphthalate	149	20.362	20.360	(1.001)	2171789	60.0000	52.64

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
74 Benzo(b) fluoranthene	252	20.795	20.803	(0.976)	2108839	60.0000	54.16
75 Benzo(k) fluoranthene	252	20.832	20.840	(0.978)	1999749	60.0000	48.59
187 Total Benzofluoranthenes	252	20.832	20.840	(0.978)	3887015	120.0000	102.4
76 Benzo(a) pyrene	252	21.238	21.246	(0.997)	1975913	60.0000	53.59
* 77 Perylene-d12	264	21.308	21.316	(1.000)	572566	20.0000	
78 Indeno(1,2,3-cd)pyrene	276	22.712	22.720	(1.066)	2716552	60.0000	55.38
79 Dibenzo(a,h)anthracene	278	22.739	22.747	(1.067)	2095539	60.0000	55.36
80 Benzo(g,h,i)perylene	276	23.075	23.089	(1.083)	2430911	60.0000	54.82
90 N-Nitrosodimethylamine	74	2.742	2.750	(0.361)	461166	60.0000	57.63
103 Pyridine	79	2.705	2.702	(0.356)	860099	60.0000	60.30
91 Aniline	93	7.159	7.157	(0.942)	1005247	60.0000	54.81
105 1-methylnaphthalene	141	10.973	10.975	(1.137)	1058350	60.0000	53.22
93 Benzidine	184	17.104	17.107	(0.892)	575385	60.0000	50.37
111 Azobenzene (1,2-DP-Hydrazine)	77	13.659	13.667	(1.093)	1300956	60.0000	53.40
143 1,4-Dioxane	88	2.165	2.168	(0.285)	310488	60.0000	58.64
\$ 137 d8-1,4-Dioxane	96	2.122	2.125	(0.279)	315891	60.0000	60.49
144 alpha-Terpineol	59	9.728	9.731	(1.008)	427485	60.0000	58.13
98 Retene	219	17.756	17.759	(0.926)	752823	60.0000	62.33
133 Butylatedhydroxytoluene	205	12.703	12.706	(1.016)	1051020	60.0000	53.44
115 Tributyl Phosphate	99	13.755	13.763	(0.925)	1619252	60.0000	54.62
116 Dibutyl Phenyl Phosphate	175	15.454	15.457	(1.040)	1173813	60.0000	58.09
117 Butyl Diphenyl Phosphate	94	17.131	17.134	(0.894)	389020	60.0000	61.35
118 Triphenyl Phosphate	326	18.722	18.731	(0.977)	410539	60.0000	65.73
123 Acetophenone	105	8.313	8.316	(1.094)	917180	60.0000	56.82
179 n-Decane	57	7.453	7.450	(0.981)	581639	60.0000	54.78
180 n-Octadecane	57	14.829	14.832	(0.997)	552713	60.0000	49.79
168 Pentachlorobenzene	250	12.863	12.866	(1.029)	542976	60.0000	57.56
113 Diphenyl Oxide	170	11.779	11.782	(0.942)	1187278	60.0000	52.95
112 Biphenyl	154	11.587	11.590	(0.927)	1302449	60.0000	51.77
120 2,3,4,6-Tetrachlorophenol	232	13.109	13.112	(1.049)	464221	60.0000	65.05
151 1,2,4,5-Tetrachlorobenzene	216	11.138	11.141	(0.891)	701362	60.0000	56.91
110 Tetrachloroguaiacol	247	14.834	14.842	(0.998)	504715	120.0000	118.4
109 3,4,5-Trichloroguaiacol	213	13.210	13.219	(0.889)	260835	60.0000	60.48
181 3,4,6-Trichloroguaiacol	211	13.328	13.331	(1.754)	313950	60.0000	64.67
108 4,5,6-Trichloroguaiacol	213	14.247	14.250	(1.140)	264245	60.0000	62.12
184 3,4-Dichloroguaiacol	192	11.672	11.675	(1.536)	272767	60.0000	63.91
107 4,5-Dichloroguaiacol	192	12.468	12.476	(0.997)	650083	120.0000	120.5
182 4,6-Dichloroguaiacol	192	12.468	12.476	(1.641)	650734	120.0000	124.9
185 4-Chloroguaiacol	115	10.593	10.596	(1.394)	167281	30.0000	31.27
186 Carbaryl	144	15.694	15.702	(1.056)	932958	60.0000	60.23
106 Guaiacol	124	8.585	8.588	(1.130)	647516	60.0000	57.33

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: 07231006.D  
 Lab Smp Id: IC600723  
 Analysis Type: SV  
 Quant Type: ISTD  
 Operator: JZ  
 Method File: /chem1/nt6.i/20100723.b/SW846072310.m  
 Misc Info: 10-

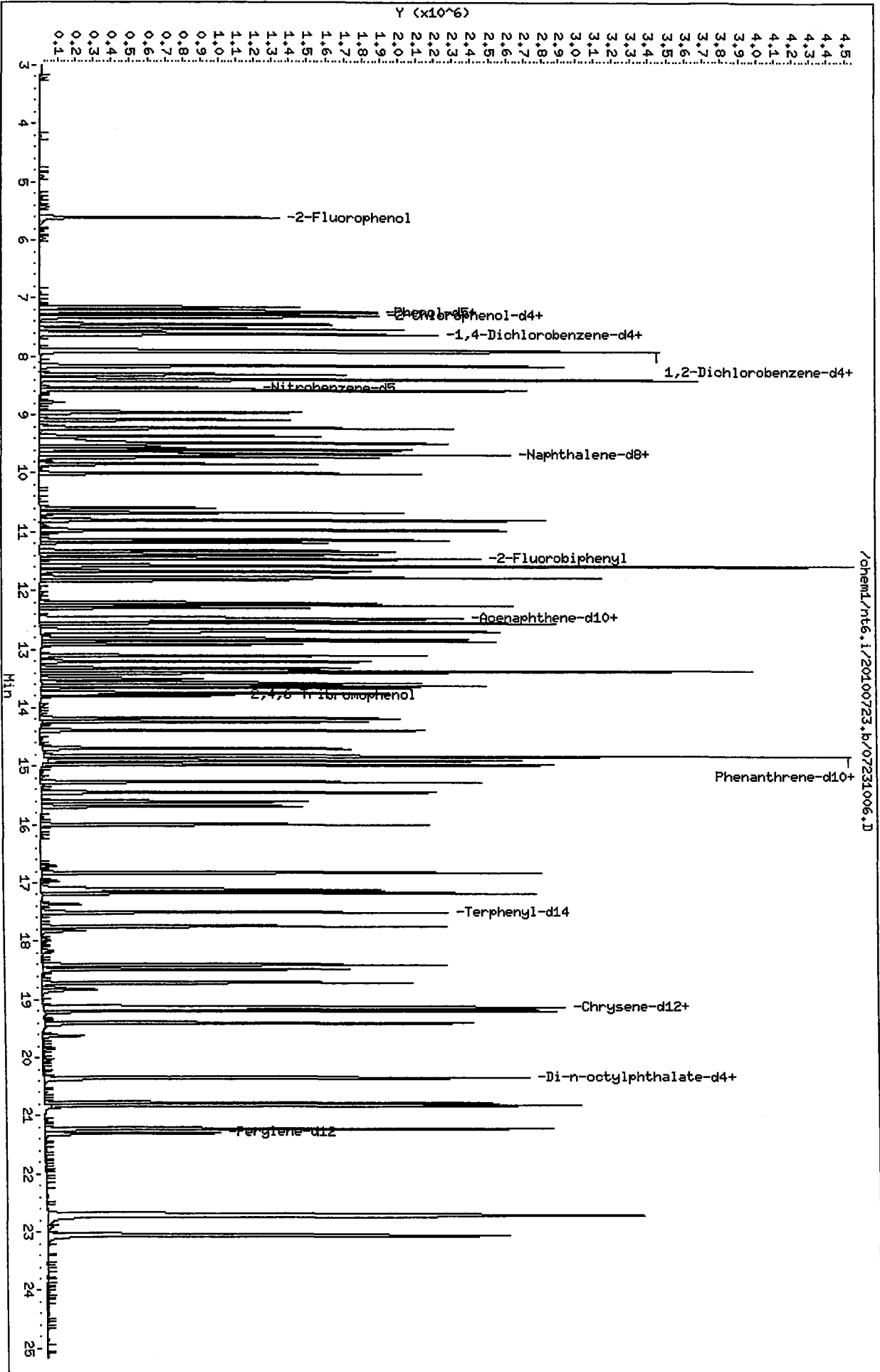
Calibration Date: 23-JUL-2010  
 Calibration Time: 15:01  
 Client Smp ID: IC600723  
 Level:  
 Sample Type:

Test Mode:  
 Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	182786	91393	365572	184946	1.18
27 Naphthalene-d8	584137	292068	1168274	607475	4.00
42 Acenaphthene-d10	320442	160221	640884	340603	6.29
59 Phenanthrene-d10	503793	251896	1007586	548107	8.80
69 Chrysene-d12	532343	266172	1064686	578965	8.76
134 Di-n-octylphthala	719428	359714	1438856	744081	3.43
77 Perylene-d12	517269	258634	1034538	572566	10.69

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	7.59	7.09	8.09	7.60	0.07
27 Naphthalene-d8	9.64	9.14	10.14	9.65	0.05
42 Acenaphthene-d10	12.50	12.00	13.00	12.50	0.00
59 Phenanthrene-d10	14.86	14.36	15.36	14.87	0.03
69 Chrysene-d12	19.16	18.66	19.66	19.17	0.03
134 Di-n-octylphthala	20.35	19.85	20.85	20.35	0.00
77 Perylene-d12	21.31	20.81	21.81	21.31	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/nt6.1/20100723.b/07231006.D

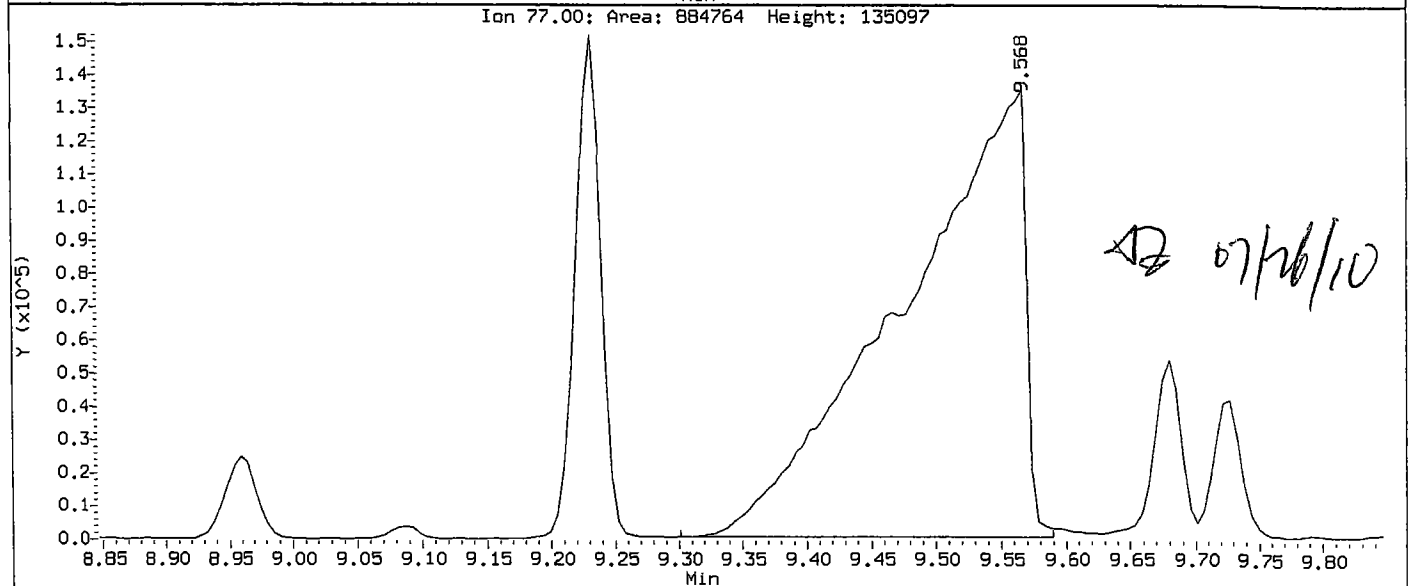
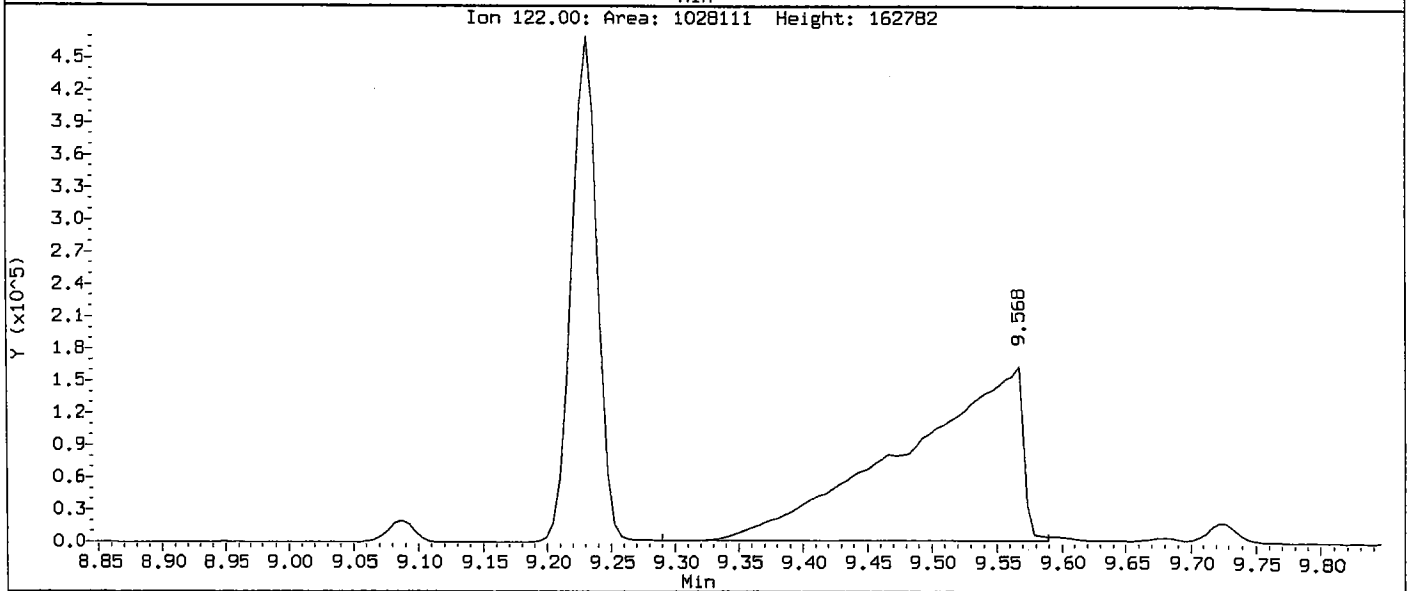
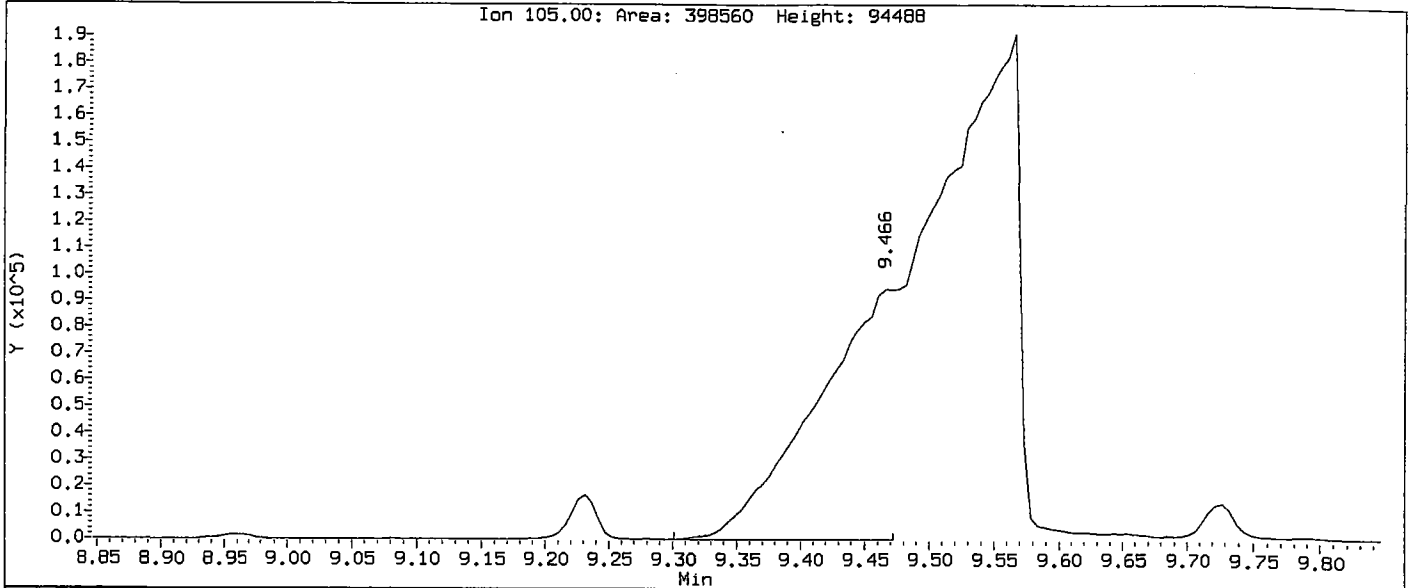
Injection Date: 23-JUL-2010 18:01

Instrument: nt6.1

Client Sample ID: IC600723

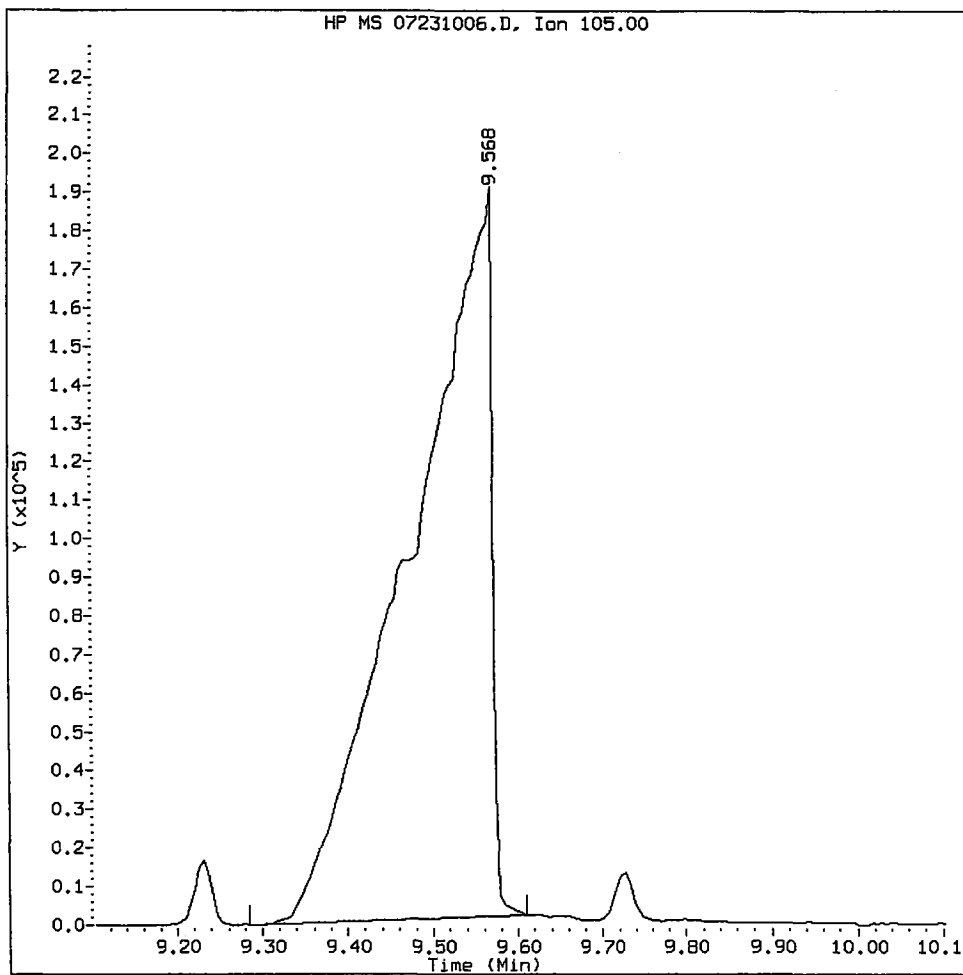
Compound: Benzoic acid

CAS Number: 65-85-0



IC600723, /chem1/nt6.i/20100723.b/07231006.D

Benzoic acid Amount: 133.25 Area: 1222479



MANUAL INTEGRATION for Benzoic acid

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other \_\_\_\_\_

Analyst: AD

Date: 07/26/10

Data File: /chem1/nt6.i/20100723.b/07231006.D

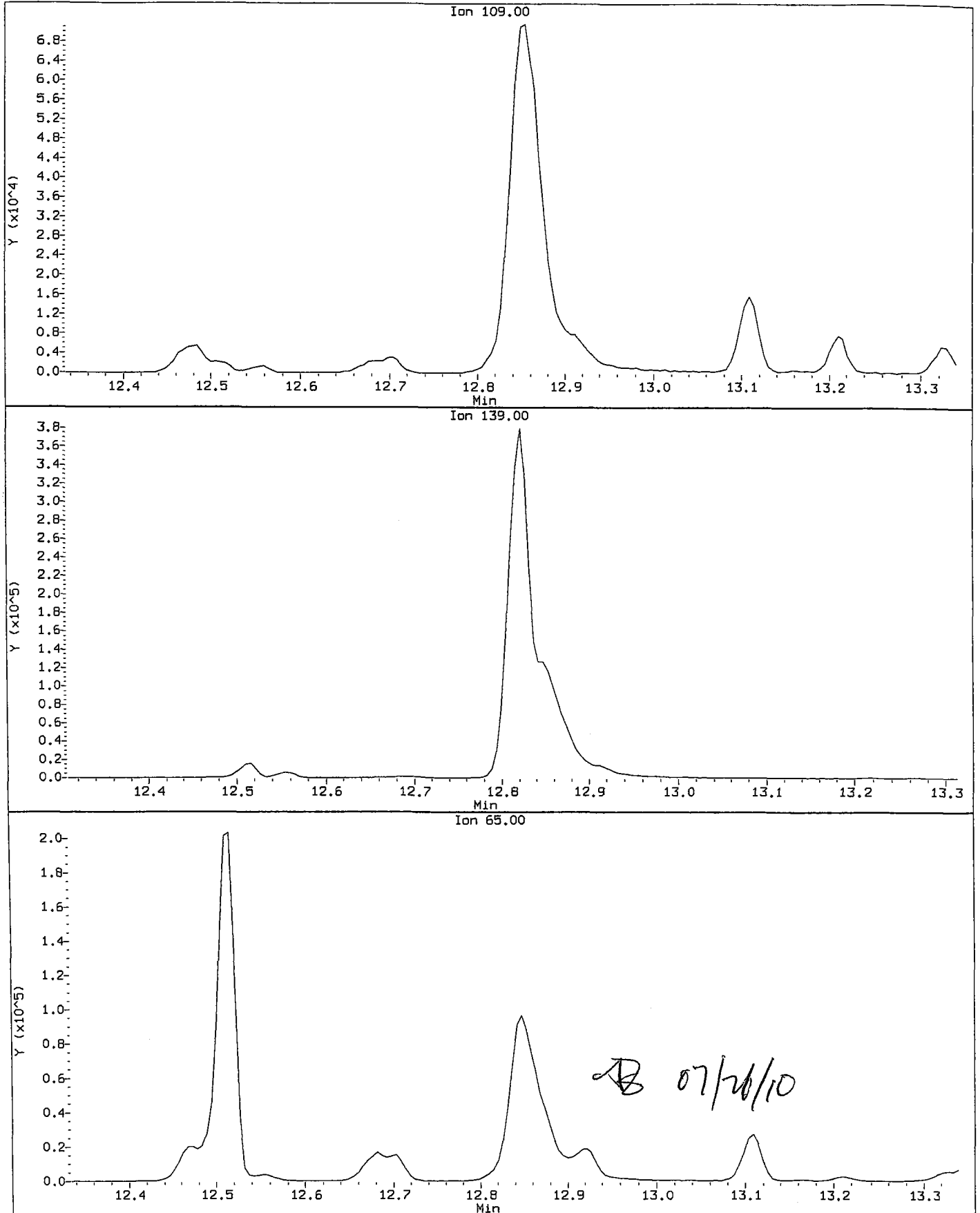
Injection Date: 23-JUL-2010 18:01

Instrument: nt6.i

Client Sample ID: IC600723

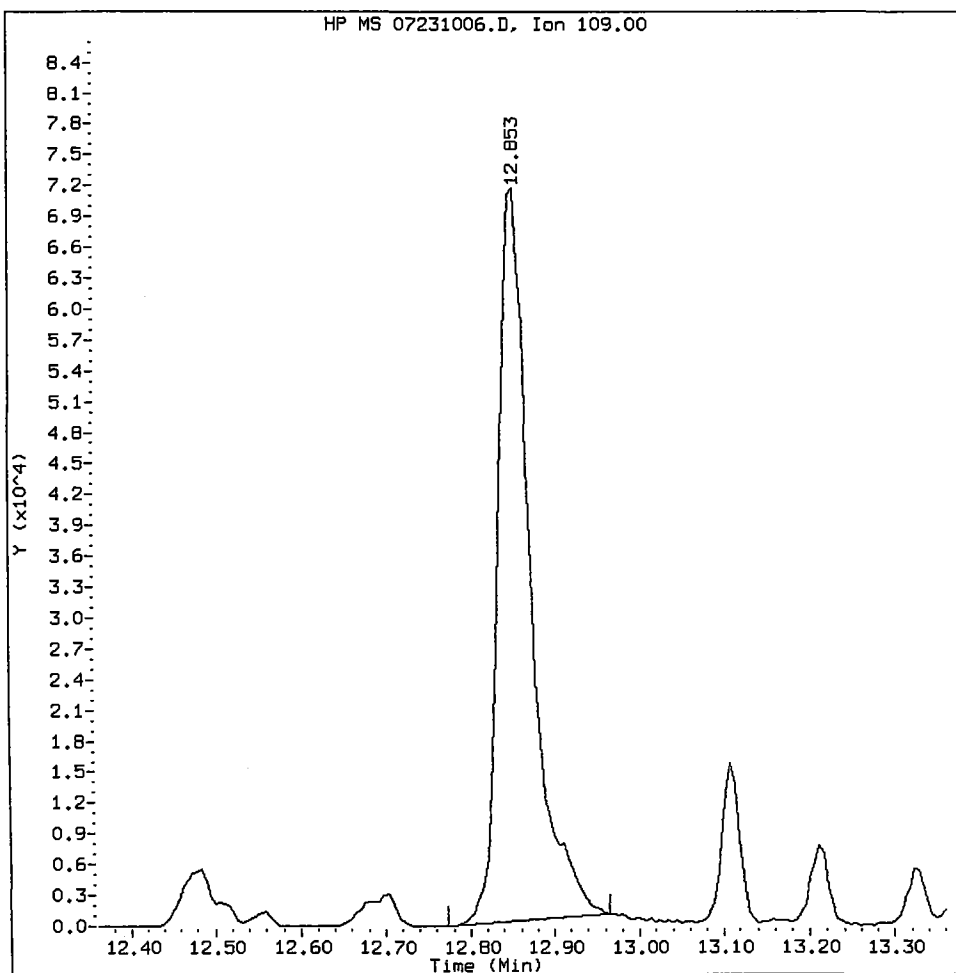
Compound: 4-Nitrophenol

CAS Number: 100-02-7



RG51 : 00555

4-Nitrophenol Amount: 61.29 Area: 193631



MANUAL INTEGRATION for 4-Nitrophenol

- 1. Baseline correction
- 2. Poor chromatography
- 3. Peak not found
- 4. Totals calculation

5. Other \_\_\_\_\_

Analyst: AB

Date: 07/26/10

Analytical Resources, Inc.

Semivolatiles Report SW846 Method 8270D

Data file : /chem1/nt6.i/20100723.b/07231007.D  
 Lab Smp Id: IC800723 Client Smp ID: IC800723  
 Inj Date : 23-JUL-2010 18:38  
 Operator : JZ Inst ID: nt6.i  
 Smp Info : IC800723,  
 Misc Info : 10-  
 Comment : lul Injection  
 Method : /chem1/nt6.i/20100723.b/SW846072310.m  
 Meth Date : 26-Jul-2010 11:33 jianqing Quant Type: ISTD  
 Cal Date : 23-JUL-2010 18:38 Cal File: 07231007.D  
 Als bottle: 7 Calibration Sample, Level: 7  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: ICAL.sub  
 Target Version: 3.50

*07/26/10*  
 AMOUNTS

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	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	7.237	7.237	(0.953)	1126724	80.0000	71.82
\$ 5 2-Chlorophenol-d4		132				Compound Not Detected.		
4 Bis(2-Chloroethyl) ether		93	7.290	7.290	(0.960)	883307	80.0000	73.45
6 2-Chlorophenol		128	7.327	7.327	(0.965)	974470	80.0000	71.84
7 1,3-Dichlorobenzene		146	7.530	7.530	(0.992)	1122451	80.0000	71.04
* 8 1,4-Dichlorobenzene-d4		152	7.595	7.595	(1.000)	184081	20.0000	
9 1,4-Dichlorobenzene		146	7.621	7.621	(1.004)	1114001	80.0000	71.96
\$ 10 1,2-Dichlorobenzene-d4		152				Compound Not Detected.		
12 1,2-Dichlorobenzene		146	7.915	7.915	(1.042)	1033272	80.0000	71.78
11 Benzyl alcohol		108	7.910	7.910	(1.041)	587828	80.0000	79.15
14 2,2'-oxybis(1-Chloropropane)		45	8.161	8.161	(1.075)	914751	80.0000	71.33
13 2-Methylphenol		108	8.166	8.166	(1.075)	828388	80.0000	70.81
17 Hexachloroethane		117	8.406	8.406	(1.107)	391434	80.0000	70.00
16 N-Nitroso-di-n-propylamine		70	8.390	8.390	(1.105)	582100	80.0000	71.57
15 4-Methylphenol		108	8.406	8.406	(1.107)	788189	80.0000	68.24
\$ 18 Nitrobenzene-d5		82				Compound Not Detected.		
19 Nitrobenzene		77	8.572	8.572	(0.888)	938257	80.0000	72.12
20 Isophorone		82	8.967	8.967	(0.929)	1534357	80.0000	74.06
21 2-Nitrophenol		139	9.090	9.090	(0.942)	590820	80.0000	77.40
22 2,4-Dimethylphenol		107	9.234	9.234	(0.957)	891173	80.0000	70.95
23 Bis(2-Chloroethoxy)methane		93	9.373	9.373	(0.971)	1052582	80.0000	73.32
24 Benzoic acid		105	9.603	9.603	(0.995)	1615248	160.000	174.0 (M)
25 2,4-Dichlorophenol		162	9.485	9.485	(0.983)	813900	80.0000	74.01
26 1,2,4-Trichlorobenzene		180	9.597	9.597	(0.994)	860458	80.0000	71.62
* 27 Naphthalene-d8		136	9.651	9.651	(1.000)	604045	20.0000	

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
28 Naphthalene	128	9.683	9.683	(1.003)	2226345	80.0000	65.21
29 4-Chloroaniline	127	9.843	9.843	(1.020)	933966	80.0000	68.29
30 Hexachlorobutadiene	225	10.009	10.009	(1.037)	531907	80.0000	75.92
31 4-Chloro-3-methylphenol	107	10.682	10.682	(1.107)	783143	80.0000	73.86
32 2-Methylnaphthalene	141	10.805	10.805	(1.120)	1296353	80.0000	69.19
33 Hexachlorocyclopentadiene	237	11.184	11.184	(0.894)	562487	80.0000	92.87
34 2,4,6-Trichlorophenol	196	11.333	11.333	(0.906)	612923	80.0000	79.37
35 2,4,5-Trichlorophenol	196	11.392	11.392	(0.911)	629388	80.0000	78.99
\$ 36 2-Fluorobiphenyl	172	Compound Not Detected.					
37 2-Chloronaphthalene	162	11.579	11.579	(0.926)	1529762	80.0000	68.24
38 2-Nitroaniline	65	11.835	11.835	(0.947)	440827	80.0000	78.99
39 Dimethylphthalate	163	12.220	12.220	(0.977)	1852039	80.0000	73.16
40 Acenaphthylene	152	12.252	12.252	(0.980)	2262161	80.0000	65.17
41 2,6-Dinitrotoluene	165	12.305	12.305	(0.984)	495961	80.0000	82.45
* 42 Acenaphthene-d10	164	12.503	12.503	(1.000)	337280	20.0000	
43 3-Nitroaniline	138	12.519	12.519	(1.001)	332728	80.0000	63.22
44 Acenaphthene	153	12.562	12.562	(1.005)	1537831	80.0000	70.94
45 2,4-Dinitrophenol	184	12.690	12.690	(1.015)	800753	160.0000	188.3
46 Dibenzofuran	168	12.823	12.823	(1.026)	2012989	80.0000	69.91
47 4-Nitrophenol	109	12.861	12.861	(1.029)	250336	80.0000	80.02 (M)
48 2,4-Dinitrotoluene	165	12.930	12.930	(1.034)	641395	80.0000	82.78
50 Diethylphthalate	149	13.368	13.368	(1.069)	1683972	80.0000	71.56
49 Fluorene	166	13.379	13.379	(1.070)	1669783	80.0000	68.07
51 4-Chlorophenyl-phenylether	204	13.411	13.411	(1.073)	924625	80.0000	76.22
52 4-Nitroaniline	138	13.523	13.523	(1.082)	480261	80.0000	81.96
53 4,6-Dinitro-2-methylphenol	198	13.593	13.593	(0.914)	898863	160.0000	165.3
54 N-Nitrosodiphenylamine	169	13.630	13.630	(0.917)	1336197	80.0000	71.05
\$ 55 2,4,6-Tribromophenol	330	Compound Not Detected.					
56 4-Bromophenyl-phenylether	248	14.185	14.185	(0.954)	623118	80.0000	77.37
57 Hexachlorobenzene	284	14.399	14.399	(0.968)	646668	80.0000	76.22
58 Pentachlorophenol	266	14.704	14.704	(0.989)	459345	80.0000	91.60
* 59 Phenanthrene-d10	188	14.869	14.869	(1.000)	549184	20.0000	
60 Phenanthrene	178	14.912	14.912	(1.003)	2305020	80.0000	67.57
61 Anthracene	178	14.987	14.987	(1.008)	2344156	80.0000	66.52
62 Carbazole	167	15.280	15.280	(1.028)	2213821	80.0000	67.69
63 Di-n-butylphthalate	149	16.012	16.012	(1.077)	2664538	80.0000	66.47
64 Fluoranthene	202	16.835	16.835	(1.132)	2453870	80.0000	66.39
65 Pyrene	202	17.187	17.187	(0.897)	2416567	80.0000	69.90
\$ 66 Terphenyl-d14	244	Compound Not Detected.					
67 Butylbenzylphthalate	149	18.421	18.421	(0.961)	1317448	80.0000	78.82
68 Benzo (a) anthracene	228	19.147	19.147	(0.999)	2451149	80.0000	73.87
* 69 Chrysene-d12	240	19.169	19.169	(1.000)	574045	20.0000	
70 3,3'-Dichlorobenzidine	252	19.174	19.174	(1.000)	807285	80.0000	74.97
71 Chrysene	228	19.217	19.217	(1.002)	2263478	80.0000	72.87
72 bis(2-Ethylhexyl) phthalate	149	19.420	19.420	(0.954)	1765240	80.0000	75.51
* 134 Di-n-octylphthalate-d4	153	20.354	20.354	(1.000)	737424	20.0000	
73 Di-n-octylphthalate	149	20.360	20.360	(1.000)	2759606	80.0000	69.04



Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
74 Benzo (b) fluoranthene	252	20.803	20.803	(0.976)	2878066	80.0000	72.41
75 Benzo (k) fluoranthene	252	20.840	20.840	(0.978)	2488308	80.0000	60.66
187 Total Benzofluoranthenes	252	20.840	20.840	(0.978)	5048243	160.0000	132.0
76 Benzo (a) pyrene	252	21.246	21.246	(0.997)	2615653	80.0000	69.86
* 77 Perylene-d12	264	21.316	21.316	(1.000)	593718	20.0000	
78 Indeno (1,2,3-cd) pyrene	276	22.720	22.720	(1.066)	3631800	80.0000	72.51
79 Dibenzo (a,h) anthracene	278	22.747	22.747	(1.067)	2711737	80.0000	70.46
80 Benzo (g,h,i) perylene	276	23.089	23.089	(1.083)	3230387	80.0000	71.50
90 N-Nitrosodimethylamine	74	2.750	2.750	(0.362)	620385	80.0000	78.18
103 Pyridine	79	2.702	2.702	(0.356)	1128868	80.0000	79.58
91 Aniline	93	7.157	7.157	(0.942)	1299555	80.0000	72.33
105 1-methylnaphthalene	141	10.975	10.975	(1.137)	1345774	80.0000	69.54
93 Benzidine	184	17.107	17.107	(0.892)	743780	80.0000	67.39
111 Azobenzene (1,2-DP-Hydrazine)	77	13.667	13.667	(1.093)	1784288	80.0000	74.77
143 1,4-Dioxane	88	2.168	2.168	(0.285)	412510	80.0000	78.51
§ 137 d8-1,4-Dioxane	96	2.125	2.125	(0.280)	419134	80.0000	80.55
144 alpha-Terpineol	59	9.731	9.731	(1.008)	549670	80.0000	75.83
98 Retene	219	17.759	17.759	(0.926)	959990	80.0000	80.14
133 Butylatedhydroxytoluene	205	12.706	12.706	(1.016)	1283146	80.0000	67.59
115 Tributyl Phosphate	99	13.763	13.763	(0.926)	2014000	80.0000	69.31
116 Dibutyl Phenyl Phosphate	175	15.457	15.457	(1.040)	1481750	80.0000	74.09
117 Butyl Diphenyl Phosphate	94	17.134	17.134	(0.894)	494257	80.0000	78.81
118 Triphenyl Phosphate	326	18.731	18.731	(0.977)	539388	80.0000	86.01
123 Acetophenone	105	8.316	8.316	(1.095)	1188668	80.0000	74.79
179 n-Decane	57	7.450	7.450	(0.981)	749840	80.0000	72.12
180 n-Octadecane	57	14.832	14.832	(0.997)	703022	80.0000	65.16
168 Pentachlorobenzene	250	12.866	12.866	(1.029)	718448	80.0000	77.34
113 Diphenyl Oxide	170	11.782	11.782	(0.942)	1519811	80.0000	69.89
112 Biphenyl	154	11.590	11.590	(0.927)	1616091	80.0000	66.98
120 2,3,4,6-Tetrachlorophenol	232	13.112	13.112	(1.049)	600513	80.0000	84.23
151 1,2,4,5-Tetrachlorobenzene	216	11.141	11.141	(0.891)	882626	80.0000	73.33
110 Tetrachloroguaiacol	247	14.842	14.842	(0.998)	648752	160.0000	153.2
109 3,4,5-Trichloroguaiacol	213	13.219	13.219	(0.889)	337376	80.0000	78.39
181 3,4,6-Trichloroguaiacol	211	13.331	13.331	(1.755)	409150	80.0000	83.85
108 4,5,6-Trichloroguaiacol	213	14.250	14.250	(1.140)	347921	80.0000	82.16
184 3,4-Dichloroguaiacol	192	11.675	11.675	(1.537)	356500	80.0000	83.24
107 4,5-Dichloroguaiacol	192	12.476	12.476	(0.998)	832681	160.0000	156.6
182 4,6-Dichloroguaiacol	192	12.476	12.476	(1.643)	834886	160.0000	160.8
185 4-Chloroguaiacol	115	10.596	10.596	(1.395)	216477	40.0000	40.55
186 Carbaryl	144	15.702	15.702	(1.056)	1238106	80.0000	79.80
106 Guaiacol	124	8.588	8.588	(1.131)	826280	80.0000	74.37

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: 07231007.D  
 Lab Smp Id: IC800723  
 Analysis Type: SV  
 Quant Type: ISTD  
 Operator: JZ  
 Method File: /chem1/nt6.i/20100723.b/SW846072310.m  
 Misc Info: 10-

Calibration Date: 23-JUL-2010  
 Calibration Time: 15:01  
 Client Smp ID: IC800723  
 Level:  
 Sample Type:

Test Mode:  
 Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	182786	91393	365572	184081	0.71
27 Naphthalene-d8	584137	292068	1168274	604045	3.41
42 Acenaphthene-d10	320442	160221	640884	337280	5.25
59 Phenanthrene-d10	503793	251896	1007586	549184	9.01
69 Chrysene-d12	532343	266172	1064686	574045	7.83
134 Di-n-octylphthala	719428	359714	1438856	737424	2.50
77 Perylene-d12	517269	258634	1034538	593718	14.78

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	7.59	7.09	8.09	7.59	0.03
27 Naphthalene-d8	9.64	9.14	10.14	9.65	0.08
42 Acenaphthene-d10	12.50	12.00	13.00	12.50	0.02
59 Phenanthrene-d10	14.86	14.36	15.36	14.87	0.05
69 Chrysene-d12	19.16	18.66	19.66	19.17	0.04
134 Di-n-octylphthala	20.35	19.85	20.85	20.35	0.04
77 Perylene-d12	21.31	20.81	21.81	21.32	0.04

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = - 50% of internal standard area.  
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/nt6.i/20100723.b/07231007.D

Date: 23-JUL-2010 18:38

Client ID: IC800723

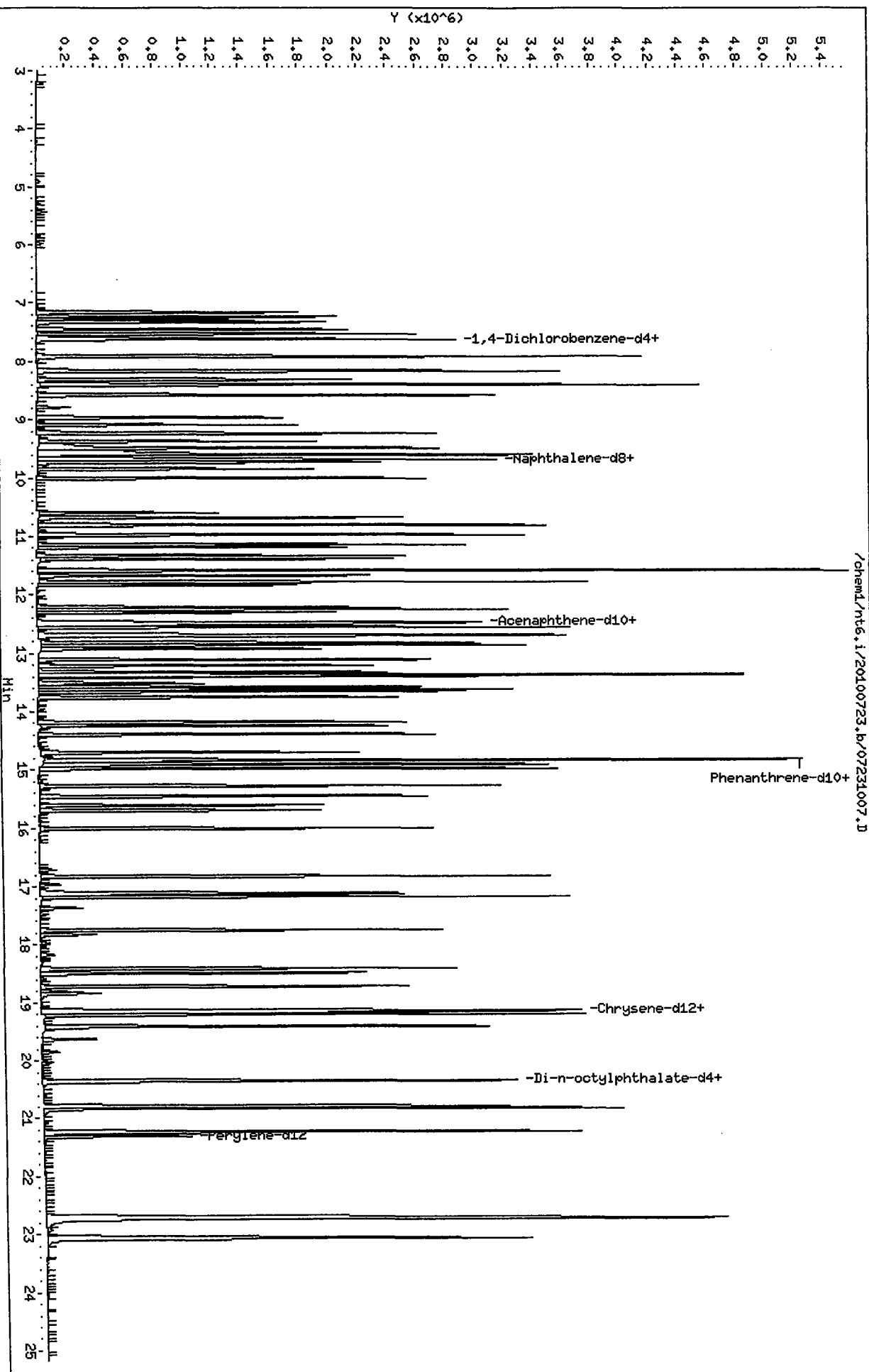
Sample Info: IC800723,

Column phase: ZB-5ms1

Instrument: nt6.i

Operator: JZ

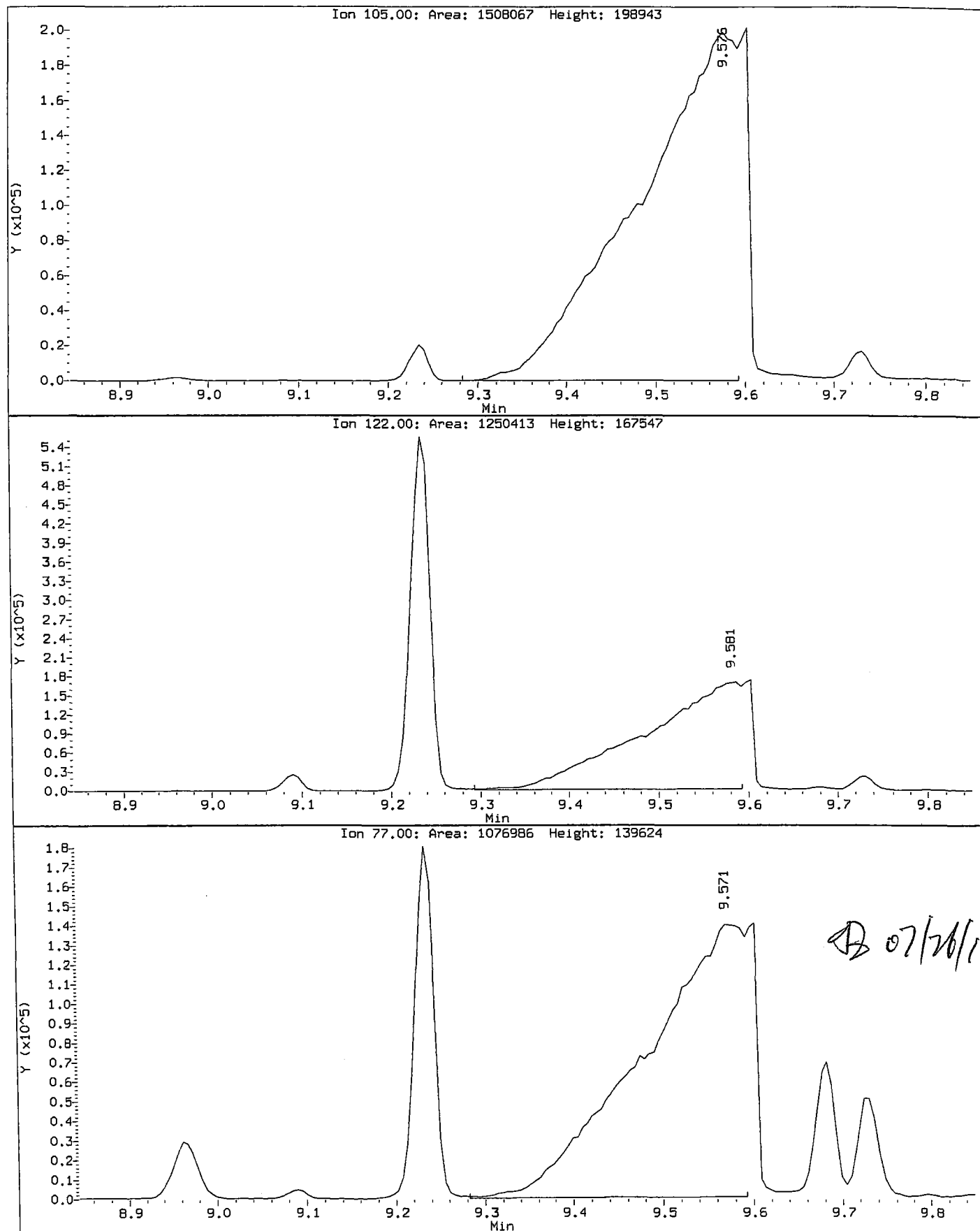
Column diameter: 0.32



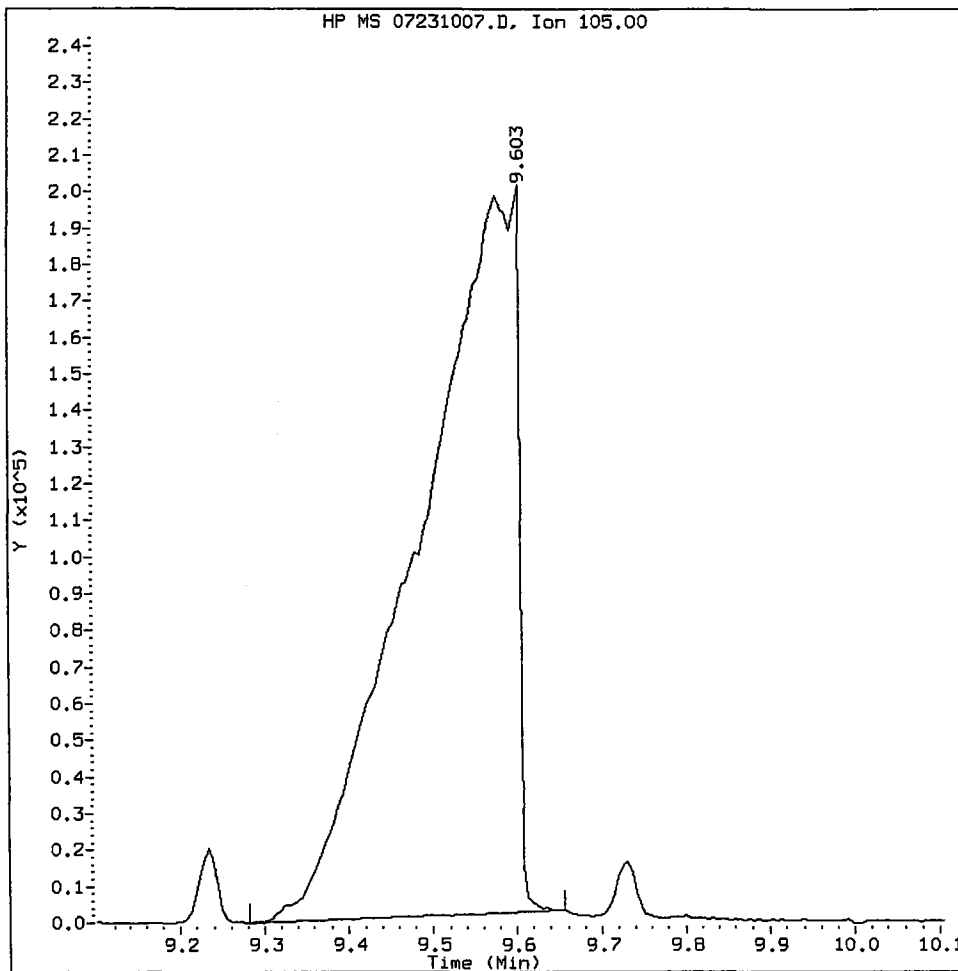
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Data File: /chem1/nt6.i/20100723.b/07231007.D  
Injection Date: 23-JUL-2010 18:38  
Instrument: nt6.1  
Client Sample ID: ICB00723

Compound: Benzoic acid  
CAS Number: 65-85-0



Benzoic acid Amount: 173.97 Area: 1615248



MANUAL INTEGRATION for Benzoic acid

- 1. Baseline correction
- 2. Poor chromatography
- 3. Peak not found
- 4. Totals calculation

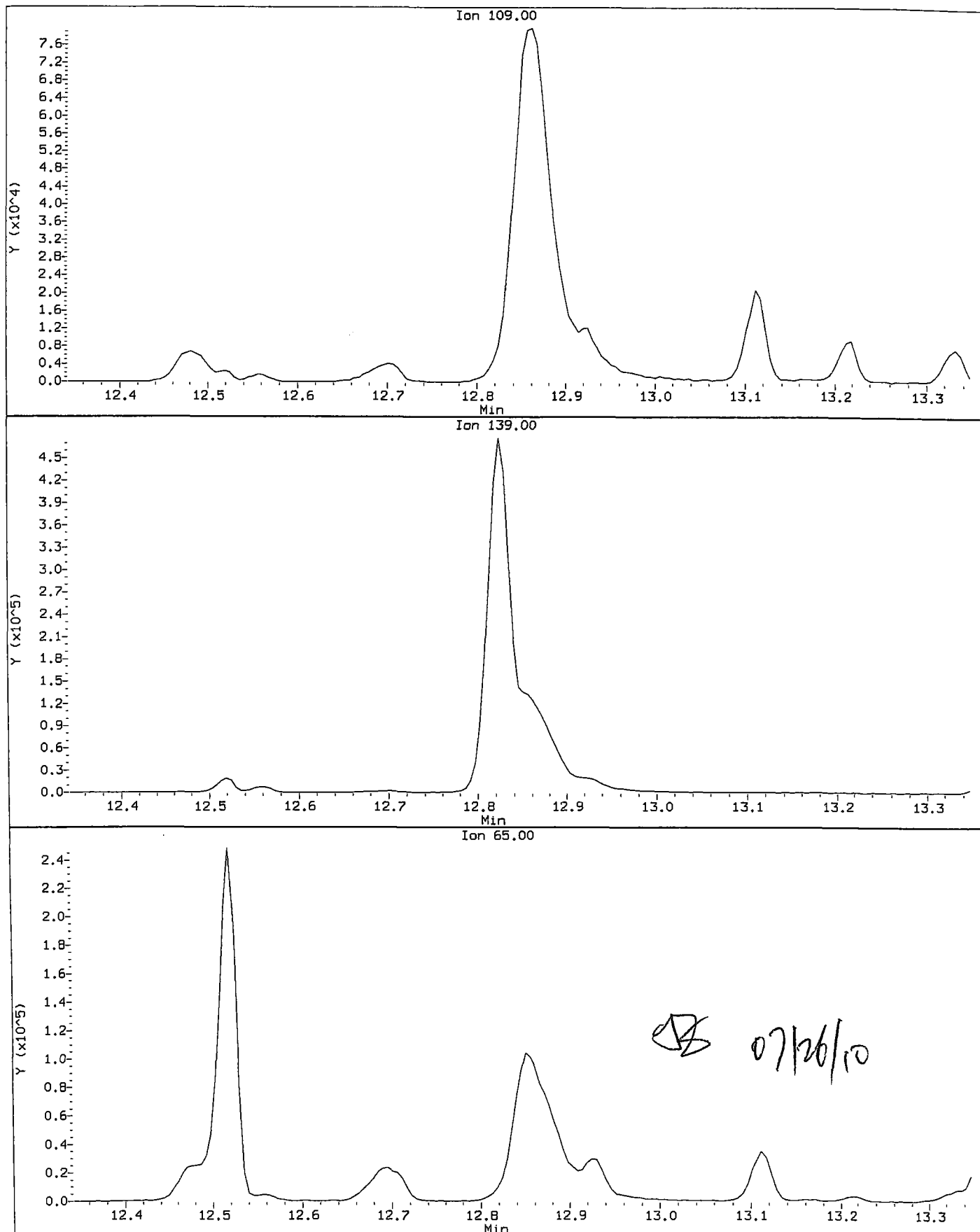
5. Other \_\_\_\_\_

Analyst: AR

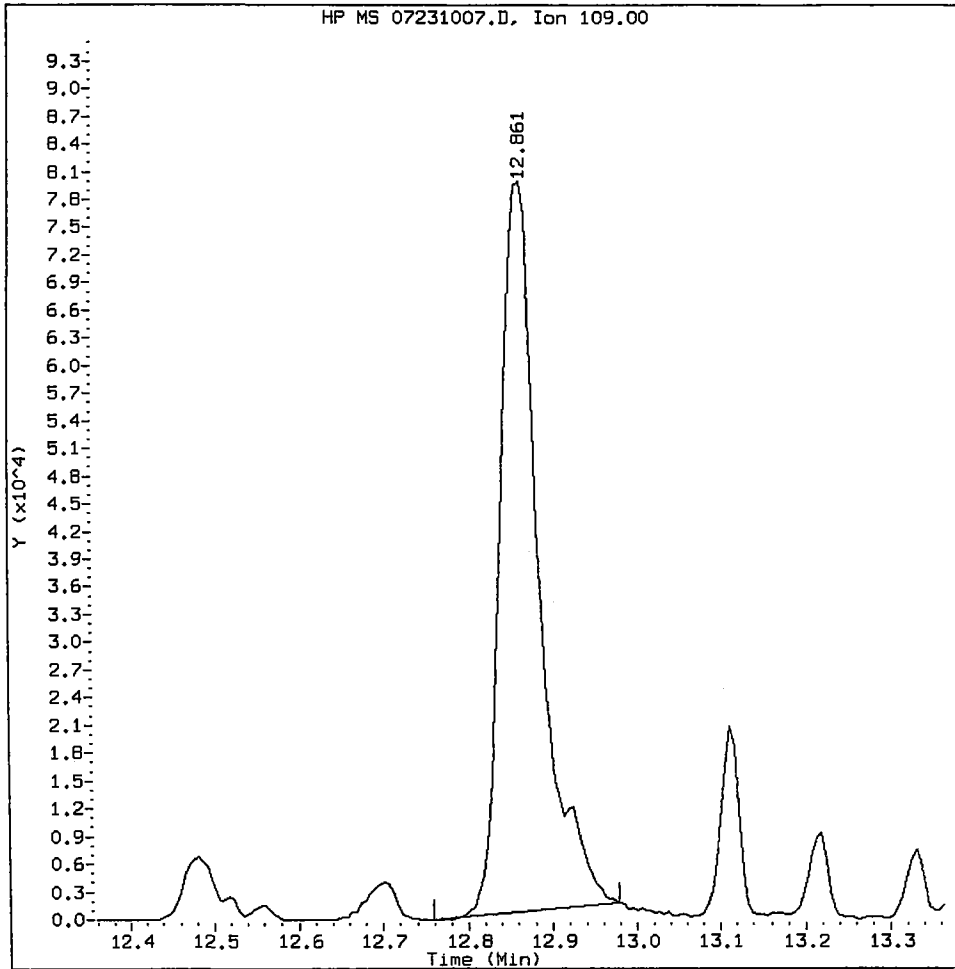
Date: 07/26/10

Data File: /chem1/nt6.1/20100723.b/07231007.D  
Injection Date: 23-JUL-2010 18:38  
Instrument: nt6.1  
Client Sample ID: IC800723

Compound: 4-Nitrophenol  
CAS Number: 100-02-7



4-Nitrophenol Amount: 80.02 Area: 250336



MANUAL INTEGRATION for 4-Nitrophenol

- 1. Baseline correction
- 2. Poor chromatography
- 3. Peak not found
- 4. Totals calculation

5. Other \_\_\_\_\_

Analyst: AD

Date: 07/26/10

Analytical Resources, Inc.

Semivolatiles Report SW846 Method 8270D

Data file : /chem1/nt6.i/20100723.b/07231008.D  
 Lab Smp Id: ICV0723 Client Smp ID: ICV0723  
 Inj Date : 23-JUL-2010 20:17  
 Operator : JZ Inst ID: nt6.i  
 Smp Info : ICV0723,  
 Misc Info : 10-  
 Comment : 1ul Injection  
 Method : /chem1/nt6.i/20100723.b/SW846072310.m  
 Meth Date : 26-Jul-2010 11:35 jianqing Quant Type: ISTD  
 Cal Date : 23-JUL-2010 18:38 Cal File: 07231007.D  
 Als bottle: 8 QC Sample: LCS  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: ICAL.sub  
 Target Version: 3.50

*ΔZ 07/26/10*

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/mL)	FINAL (ug/mL)
\$ 1 2-Fluorophenol		112	5.602	5.610	(0.738)	302142	25.7548	25.75 (R)
\$ 2 Phenol-d5		99	7.204	7.218	(0.949)	335463	24.7563	24.76 (R)
3 Phenol		94	7.226	7.237	(0.952)	339785	22.5779	22.58
\$ 5 2-Chlorophenol-d4		132	7.295	7.303	(0.961)	281753	24.6175	24.62 (R)
4 Bis(2-Chloroethyl) ether		93	7.279	7.290	(0.959)	304187	26.3668	26.37
6 2-Chlorophenol		128	7.316	7.327	(0.964)	291054	22.3679	22.37
7 1,3-Dichlorobenzene		146	7.525	7.530	(0.992)	378563	24.9751	24.98
* 8 1,4-Dichlorobenzene-d4		152	7.589	7.595	(1.000)	176582	20.0000	
9 1,4-Dichlorobenzene		146	7.616	7.621	(1.004)	373980	25.1845	25.18
\$ 10 1,2-Dichlorobenzene-d4		152	7.888	7.896	(1.039)	197842	24.9146	24.91 (R)
12 1,2-Dichlorobenzene		146	7.909	7.915	(1.042)	346390	25.0849	25.08
11 Benzyl alcohol		108	7.899	7.910	(1.041)	205971	28.9097	28.91
14 2,2'-oxybis(1-Chloropropane)		45	8.155	8.161	(1.075)	320212	26.0298	26.03
13 2-Methylphenol		108	8.155	8.166	(1.075)	260466	23.2089	23.21
17 Hexachloroethane		117	8.401	8.406	(1.107)	138110	25.7462	25.75
16 N-Nitroso-di-n-propylamine		70	8.374	8.390	(1.103)	210206	26.9423	26.94
15 4-Methylphenol		108	8.390	8.406	(1.106)	259863	23.4548	23.45
\$ 18 Nitrobenzene-d5		82	8.534	8.542	(0.885)	274740	24.2876	24.29 (R)
19 Nitrobenzene		77	8.561	8.572	(0.888)	317981	25.3562	25.36
20 Isophorone		82	8.945	8.967	(0.927)	556067	27.8428	27.84
21 2-Nitrophenol		139	9.079	9.090	(0.941)	165718	22.5221	22.52
22 2,4-Dimethylphenol		107	9.223	9.234	(0.956)	266385	22.0023	22.00
23 Bis(2-Chloroethoxy)methane		93	9.362	9.373	(0.971)	346047	25.0051	25.01
24 Benzoic acid		105	9.458	9.603	(0.981)	411600	45.9898	45.99
25 2,4-Dichlorophenol		162	9.474	9.485	(0.982)	229314	21.6315	21.63
26 1,2,4-Trichlorobenzene		180	9.592	9.597	(0.994)	290055	25.0468	25.05
* 27 Naphthalene-d8		136	9.645	9.651	(1.000)	582262	20.0000	



Compounds	QUANT SIG				RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT		ON-COLUMN (ug/mL)	FINAL (ug/mL)
28 Naphthalene	128	9.672	9.683	(1.003)	855843	26.0064	26.01
29 4-Chloroaniline	127	9.837	9.843	(1.020)	369626	28.0380	28.04
30 Hexachlorobutadiene	225	10.003	10.009	(1.037)	170071	25.1822	25.18
31 4-Chloro-3-methylphenol	107	10.671	10.682	(1.106)	226211	22.1338	22.13
32 2-Methylnaphthalene	141	10.799	10.805	(1.120)	485070	26.8581	26.86
33 Hexachlorocyclopentadiene	237	11.178	11.184	(0.894)	155013	23.0155	23.02
34 2,4,6-Trichlorophenol	196	11.322	11.333	(0.906)	163848	22.0919	22.09
35 2,4,5-Trichlorophenol	196	11.381	11.392	(0.911)	172363	22.5234	22.52
\$ 36 2-Fluorobiphenyl	172	11.450	11.453	(0.916)	546411	24.0943	24.09 (R)
37 2-Chloronaphthalene	162	11.573	11.579	(0.926)	532254	24.7189	24.72
38 2-Nitroaniline	65	11.824	11.835	(0.946)	149026	27.8009	27.80
39 Dimethylphthalate	163	12.204	12.220	(0.976)	629083	25.8720	25.87
40 Acenaphthylene	152	12.246	12.252	(0.980)	848021	25.4360	25.44
41 2,6-Dinitrotoluene	165	12.294	12.305	(0.984)	145173	25.1272	25.13
* 42 Acenaphthene-d10	164	12.497	12.503	(1.000)	323945	20.0000	
43 3-Nitroaniline	138	12.503	12.519	(1.000)	149842	29.6424	29.64
44 Acenaphthene	153	12.551	12.562	(1.004)	536105	25.7493	25.75
45 2,4-Dinitrophenol	184	12.668	12.690	(1.014)	201042	42.3460	42.35
46 Dibenzofuran	168	12.812	12.823	(1.025)	752607	27.2141	27.21
47 4-Nitrophenol	109	12.839	12.861	(1.027)	71518	23.8006	23.80
48 2,4-Dinitrotoluene	165	12.914	12.930	(1.033)	194901	26.1903	26.19
50 Diethylphthalate	149	13.357	13.368	(1.069)	572287	25.3218	25.32
49 Fluorene	166	13.368	13.379	(1.070)	602733	25.5811	25.58
51 4-Chlorophenyl-phenylether	204	13.405	13.411	(1.073)	292139	25.0726	25.07
52 4-Nitroaniline	138	13.496	13.523	(1.080)	152959	27.1798	27.18
53 4,6-Dinitro-2-methylphenol	198	13.566	13.593	(0.913)	223359	43.6280	43.63
54 N-Nitrosodiphenylamine	169	13.614	13.630	(0.916)	427806	24.1637	24.16
\$ 55 2,4,6-Tribromophenol	330	13.790	13.798	(1.103)	75610	25.6162	25.62 (R)
56 4-Bromophenyl-phenylether	248	14.180	14.185	(0.954)	191744	25.2907	25.29
57 Hexachlorobenzene	284	14.388	14.399	(0.968)	200104	25.0540	25.05
58 Pentachlorophenol	266	14.692	14.704	(0.988)	106284	22.5154	22.52
* 59 Phenanthrene-d10	188	14.863	14.869	(1.000)	516976	20.0000	
60 Phenanthrene	178	14.901	14.912	(1.002)	817896	25.4699	25.47
61 Anthracene	178	14.970	14.987	(1.007)	843835	25.4372	25.44
62 Carbazole	167	15.269	15.280	(1.027)	757904	24.6171	24.62
63 Di-n-butylphthalate	149	16.006	16.012	(1.077)	984901	26.1018	26.10
64 Fluoranthene	202	16.829	16.835	(1.132)	924404	26.5666	26.57
65 Pyrene	202	17.176	17.187	(0.896)	895541	27.3311	27.33
\$ 66 Terphenyl-d14	244	17.513	17.515	(0.914)	502221	26.0581	26.06 (R)
67 Butylbenzylphthalate	149	18.410	18.421	(0.961)	445853	28.1439	28.14
68 Benzo(a)anthracene	228	19.136	19.147	(0.999)	853493	27.1378	27.14
* 69 Chrysene-d12	240	19.163	19.169	(1.000)	544051	20.0000	
70 3,3'-Dichlorobenzidine	252	19.163	19.174	(1.000)	296160	29.0191	29.02
71 Chrysene	228	19.200	19.217	(1.002)	787876	26.7633	26.76
72 bis(2-Ethylhexyl)phthalate	149	19.414	19.420	(0.954)	606626	26.1539	26.15
* 134 Di-n-octylphthalate-d4	153	20.349	20.354	(1.000)	731609	20.0000	
73 Di-n-octylphthalate	149	20.359	20.360	(1.001)	983437	24.7985	24.80

Compounds	QUANT SIG				CONCENTRATIONS		
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
=====	====	==	=====	=====	=====	=====	=====
74 Benzo (b) fluoranthene	252	20.787	20.803	(0.976)	939291	26.8309	26.83
75 Benzo (k) fluoranthene	252	20.819	20.840	(0.977)	899448	24.8923	24.89
187 Total Benzofluoranthenes	252	20.819	20.840	(0.977)	1738917	51.6417	51.64
76 Benzo (a) pyrene	252	21.225	21.246	(0.996)	801751	24.3128	24.31
* 77 Perylene-d12	264	21.305	21.316	(1.000)	522945	20.0000	
78 Indeno(1,2,3-cd)pyrene	276	22.699	22.720	(1.065)	1164841	26.4045	26.40
79 Dibenzo(a,h)anthracene	278	22.725	22.747	(1.067)	891426	26.2958	26.30
80 Benzo(g,h,i)perylene	276	23.057	23.089	(1.082)	1016920	25.5542	25.55
90 N-Nitrosodimethylamine	74	2.718	2.750	(0.358)	203152	26.6890	26.69
103 Pyridine	79	2.686	2.702	(0.354)	386661	28.4162	28.42
91 Aniline	93	7.151	7.157	(0.942)	509239	29.5450	29.55
105 1-methylnaphthalene	141	10.964	10.975	(1.137)	465323	24.9433	24.94
93 Benzidine	184	17.101	17.107	(0.892)	330482	31.5959	31.60
111 Azobenzene (1,2-DP-Hydrazine)	77	13.651	13.667	(1.092)	566528	24.7167	24.72
143 1,4-Dioxane	88	2.146	2.168	(0.283)	134807	26.7477	26.75
\$ 137 d8-1,4-Dioxane	96	2.104	2.125	(0.277)	124707	24.9828	24.98 (R)
144 alpha-Terpineol	59	9.720	9.731	(1.008)	173894	24.8865	24.89
98 Retene	219	17.753	17.759	(0.926)	302825	26.6747	26.67
133 Butylatedhydroxytoluene	205	12.700	12.706	(1.016)	453731	24.8832	24.88
115 Tributyl Phosphate	99	13.736	13.763	(0.924)	694262	25.3816	25.38
116 Dibutyl Phenyl Phosphate	175	15.451	15.457	(1.040)	487084	25.8710	25.87
117 Butyl Diphenyl Phosphate	94	17.128	17.134	(0.894)	158542	26.6745	26.67
118 Triphenyl Phosphate	326	18.720	18.731	(0.977)	159074	26.7635	26.76
123 Acetophenone	105	8.299	8.316	(1.094)	420299	27.5683	27.57
179 n-Decane	57	7.445	7.450	(0.981)	271295	27.2026	27.20
180 n-Octadecane	57	14.826	14.832	(0.997)	288829	28.4370	28.44
168 Pentachlorobenzene	250	12.855	12.866	(1.029)	231893	25.9903	25.99
113 Diphenyl Oxide	170	11.776	11.782	(0.942)	374237	17.9170	17.92
112 Biphenyl	154	11.579	11.590	(0.926)	642598	27.7286	27.73
120 2,3,4,6-Tetrachlorophenol	232	13.106	13.112	(1.049)	176844	25.8264	25.83
151 1,2,4,5-Tetrachlorobenzene	216	11.135	11.141	(0.891)	282106	24.4037	24.40
110 Tetrachloroguaiacol	247	14.826	14.842	(0.997)	201384	50.5278	50.53
109 3,4,5-Trichloroguaiacol	213	13.208	13.219	(0.889)	99787	24.6313	24.63
181 3,4,6-Trichloroguaiacol	211	13.320	13.331	(1.755)	118646	25.3490	25.35
108 4,5,6-Trichloroguaiacol	213	14.238	14.250	(1.139)	102183	25.1219	25.12
184 3,4-Dichloroguaiacol	192	11.669	11.675	(1.538)	104314	25.3919	25.39
107 4,5-Dichloroguaiacol	192	12.465	12.476	(0.997)	254884	49.8970	49.90
182 4,6-Dichloroguaiacol	192	12.465	12.476	(1.643)	254884	51.1860	51.19
185 4-Chloroguaiacol	115	10.591	10.596	(1.396)	65963	12.8795	12.88
186 Carbaryl	144	15.686	15.702	(1.055)	383589	26.2646	26.26
106 Guaiacol	124	8.577	8.588	(1.130)	271343	25.4590	25.46

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS  
 AREA AND RT SUMMARY

Instrument ID: nt6.i  
 Lab File ID: 07231008.D  
 Lab Smp Id: ICV0723  
 Analysis Type: SV  
 Quant Type: ISTD  
 Operator: JZ  
 Method File: /chem1/nt6.i/20100723.b/SW846072310.m  
 Misc Info: 10-

Calibration Date: 23-JUL-2010  
 Calibration Time: 15:01  
 Client Smp ID: ICV0723  
 Level:  
 Sample Type:

Test Mode:  
 Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	182786	91393	365572	176582	-3.39
27 Naphthalene-d8	584137	292068	1168274	582262	-0.32
42 Acenaphthene-d10	320442	160221	640884	323945	1.09
59 Phenanthrene-d10	503793	251896	1007586	516976	2.62
69 Chrysene-d12	532343	266172	1064686	544051	2.20
134 Di-n-octylphthala	719428	359714	1438856	731609	1.69
77 Perylene-d12	517269	258634	1034538	522945	1.10

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	7.59	7.09	8.09	7.59	-0.04
27 Naphthalene-d8	9.64	9.14	10.14	9.65	0.02
42 Acenaphthene-d10	12.50	12.00	13.00	12.50	-0.02
59 Phenanthrene-d10	14.86	14.36	15.36	14.86	0.01
69 Chrysene-d12	19.16	18.66	19.66	19.16	0.01
134 Di-n-octylphthala	20.35	19.85	20.85	20.35	0.01
77 Perylene-d12	21.31	20.81	21.81	21.30	-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: Client SDG: 20100723  
 Sample Matrix: NONE Fraction: SV  
 Lab Smp Id: ICV0723 Client Smp ID: ICV0723  
 Level: Operator: JZ  
 Data Type: MS DATA SampleType: LCS  
 SpikeList File: ICVS.spk Quant Type: ISTD  
 Sublist File: ICAL.sub  
 Method File: /chem1/nt6.i/20100723.b/SW846072310.m  
 Misc Info: 10-

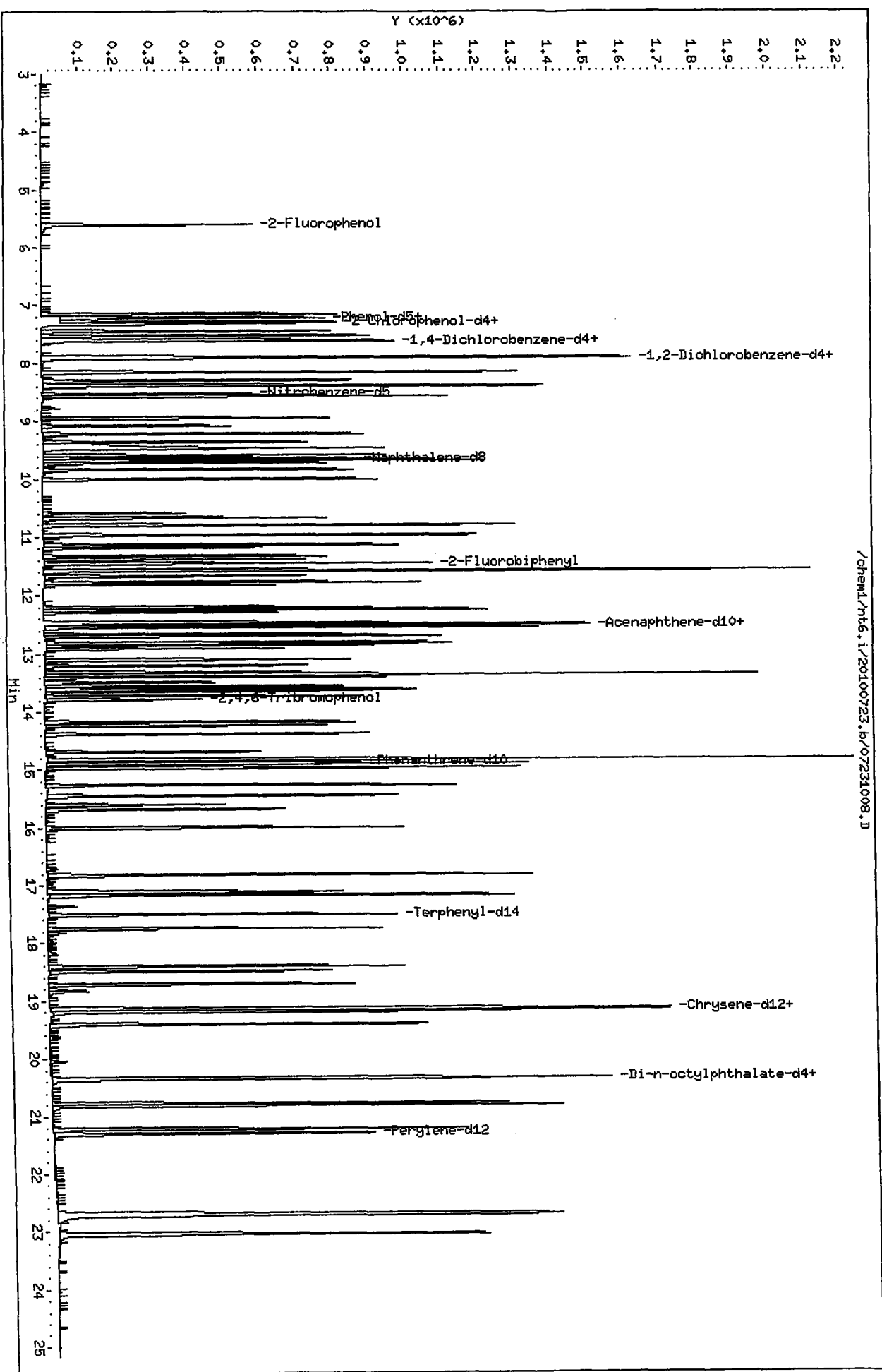
SPIKE COMPOUND	AMOUNT ADDED ug/mL	AMOUNT RECOVERED ug/mL	% RECOVERED	LIMITS
3 Phenol	25.00	22.58	90.31	
4 Bis(2-Chloroethyl)	25.00	26.37	105.47	
6 2-Chlorophenol	25.00	22.37	89.47	
7 1,3-Dichlorobenzen	25.00	24.98	99.90	
9 1,4-Dichlorobenzen	25.00	25.18	100.74	
11 Benzyl alcohol	25.00	28.91	115.64	
12 1,2-Dichlorobenzen	25.00	25.08	100.34	
13 2-Methylphenol	25.00	23.21	92.84	
14 2,2'-oxybis(1-Chlo	25.00	26.03	104.12	
15 4-Methylphenol	25.00	23.45	93.82	
16 N-Nitroso-di-n-pro	25.00	26.94	107.77	
17 Hexachloroethane	25.00	25.75	102.98	
19 Nitrobenzene	25.00	25.36	101.42	
20 Isophorone	25.00	27.84	111.37	
21 2-Nitrophenol	25.00	22.52	90.09	
22 2,4-Dimethylphenol	25.00	22.00	88.01	
23 Bis(2-Chloroethoxy	25.00	25.01	100.02	
24 Benzoic acid	50.00	45.99	91.98	
25 2,4-Dichlorophenol	25.00	21.63	86.53	
26 1,2,4-Trichloroben	25.00	25.05	100.19	
28 Naphthalene	25.00	26.01	104.03	
29 4-Chloroaniline	25.00	28.04	112.15	
30 Hexachlorobutadien	25.00	25.18	100.73	
31 4-Chloro-3-methylp	25.00	22.13	88.54	
32 2-Methylnaphthalen	25.00	26.86	107.43	
33 Hexachlorocyclopen	25.00	23.02	92.06	
34 2,4,6-Trichlorophe	25.00	22.09	88.37	
35 2,4,5-Trichlorophe	25.00	22.52	90.09	
37 2-Chloronaphthalen	25.00	24.72	98.88	
38 2-Nitroaniline	25.00	27.80	111.20	
39 Dimethylphthalate	25.00	25.87	103.49	
40 Acenaphthylene	25.00	25.44	101.74	
41 2,6-Dinitrotoluene	25.00	25.13	100.51	

SPIKE COMPOUND	AMOUNT ADDED ug/mL	AMOUNT RECOVERED ug/mL	% RECOVERED	LIMITS
43 3-Nitroaniline	25.00	29.64	118.57	
44 Acenaphthene	25.00	25.75	103.00	
45 2,4-Dinitrophenol	50.00	42.35	84.69	
46 Dibenzofuran	25.00	27.21	108.86	
47 4-Nitrophenol	25.00	23.80	95.20	
48 2,4-Dinitrotoluene	25.00	26.19	104.76	
49 Fluorene	25.00	25.58	102.32	
50 Diethylphthalate	25.00	25.32	101.29	
51 4-Chlorophenyl-phe	25.00	25.07	100.29	
52 4-Nitroaniline	25.00	27.18	108.72	
53 4,6-Dinitro-2-meth	50.00	43.63	87.26	
54 N-Nitrosodiphenyla	25.00	24.16	96.65	
56 4-Bromophenyl-phen	25.00	25.29	101.16	
57 Hexachlorobenzene	25.00	25.05	100.22	
58 Pentachlorophenol	25.00	22.52	90.06	
60 Phenanthrene	25.00	25.47	101.88	
61 Anthracene	25.00	25.44	101.75	
62 Carbazole	25.00	24.62	98.47	
63 Di-n-butylphthalat	25.00	26.10	104.41	
64 Fluoranthene	25.00	26.57	106.27	
65 Pyrene	25.00	27.33	109.32	
67 Butylbenzylphthala	25.00	28.14	112.58	
68 Benzo(a)anthracene	25.00	27.14	108.55	
70 3,3'-Dichlorobenzi	25.00	29.02	116.08	
71 Chrysene	25.00	26.76	107.05	
72 bis(2-Ethylhexyl)p	25.00	26.15	104.62	
73 Di-n-octylphthalat	25.00	24.80	99.19	
74 Benzo(b)fluoranthene	25.00	26.83	107.32	
75 Benzo(k)fluoranthene	25.00	24.89	99.57	
76 Benzo(a)pyrene	25.00	24.31	97.25	
78 Indeno(1,2,3-cd)py	25.00	26.40	105.62	
79 Dibenzo(a,h)anthra	25.00	26.30	105.18	
80 Benzo(g,h,i)perylene	25.00	25.55	102.22	
90 N-Nitrosodimethyla	25.00	26.69	106.76	
91 Aniline	25.00	29.55	118.18	
93 Benzidine	25.00	31.60	126.38	
103 Pyridine	25.00	28.42	113.66	
105 1-methylnaphthalene	25.00	24.94	99.77	
120 2,3,4,6-Tetrachlor	25.00	25.83	103.31	
151 1,2,4,5-Tetrachlor	25.00	24.40	97.61	
143 1,4-Dioxane	25.00	26.75	106.99	
110 Tetrachloroguaiac	50.00	50.53	101.06	
109 3,4,5-Trichlorogua	25.00	24.63	98.53	
181 3,4,6-Trichlorogua	25.00	25.35	101.40	
108 4,5,6-Trichlorogua	25.00	25.12	100.49	
184 3,4-Dichloroguaiac	25.00	25.39	101.57	
107 4,5-Dichloroguaiac	50.00	49.90	99.79	

SPIKE COMPOUND	AMOUNT ADDED ug/mL	AMOUNT RECOVERED ug/mL	% RECOVERED	LIMITS
182 4,6-Dichloroguaiac	50.00	51.19	102.37	
185 4-Chloroguaiacol	12.50	12.88	103.04	
106 Guaiacol	25.00	25.46	101.84	

SURROGATE COMPOUND	AMOUNT ADDED ug/mL	AMOUNT RECOVERED ug/mL	% RECOVERED	LIMITS
\$ 1 2-Fluorophenol	25.00	25.75	103.02	
\$ 2 Phenol-d5	25.00	24.76	99.03	
\$ 5 2-Chlorophenol-d4	25.00	24.62	98.47	
\$ 10 1,2-Dichlorobenzen	25.00	24.91	99.66	
\$ 18 Nitrobenzene-d5	25.00	24.29	97.15	
\$ 36 2-Fluorobiphenyl	25.00	24.09	96.38	
\$ 55 2,4,6-Tribromophen	25.00	25.62	102.46	
\$ 66 Terphenyl-d14	25.00	26.06	104.23	
\$ 137 d8-1,4-Dioxane	25.00	24.98	99.93	

/chem1/nt6.i/20100723.b/07231008.D



**Semivolatile PAH Raw Data  
Run Logs, Continuing Calibrations, and Raw Data**

**ARI Job ID: RG51**





### GC/MS SVOA Analyst Notes / Corrective Action Log

ARI Project ID: RGH; RGH4; RG60 Client ID: Floyd/Snyder

ARI SOP: **801S**(SIM-PNA) **802S**(Butyl Tins) **804S**(SVOA-8270D) **805S**(op-Pest)

Parameter(s): B270

Instrument: NT-2      NT-4      **NT-6**      NT-8      NT11

Curve Date: 7/23/10 Analysis Start Date: 8/12, 8/13/10

DFTPP Tune Meets Criteria?	<input checked="" type="radio"/> YES / NO	Internal Standard Meets Criteria?	<input checked="" type="radio"/> YES / NO
DDT Breakdown <20%?	<input checked="" type="radio"/> YES / NO / NA	Method Blank In Control?	<input checked="" type="radio"/> YES / NO
Peak Tailing Factor ≤2?	<input checked="" type="radio"/> YES / NO / NA	LCS / LCSD Recovery In Control?	<input checked="" type="radio"/> YES / NO
ICal acceptable?	<input checked="" type="radio"/> YES / NO	CCal acceptable?	<input checked="" type="radio"/> YES / NO
Q flag applied?	YES / NO	Q flag applied?	YES / NO
Surrogate Recovery in Control?	<input checked="" type="radio"/> YES <input checked="" type="radio"/> NO	Special Analysis Criteria Met?	YES / NO / <input checked="" type="radio"/> NA
Manual Integrations for ICal?	<input checked="" type="radio"/> YES / NO	Manual Integrations for Samples?	Yes / <input checked="" type="radio"/> NO

**Detail problems, corrective actions and/or other pertinent information below (use reverse side when necessary):**

8/12: Samples RGH/A-F, RGH4 A-F, I, J+D, RG60A-D + MB/LCSTNG/MSD.

8/13: Samples RG60D-F, QC + RGH4H + Dilution for RGH4E.

Sample RGH4A & RG60A-C will be re-extracted for SS recovery out of QC limit.

Batch QC: RGH, RGH4 & RG60

Forms included.

**Additional Details on Reverse: Yes / No**

Analyst: [Signature] Date: 8/16/10  
Reviewer: [Signature] Date: 8/16/10



MANUAL INTEGRATION SUMMARY FOR DATABATCH - /chem1/nt6.i/20100812.b

ARI Job No.: CC08 Method: SW846072310.m Instrument: nt6.i Date: 12-AUG-2010

*12 08/13/10*

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1142	08121001.D	CC0812	CC0812	1	NO MANUAL INTEGRATION
1214	08121002.D	RG51MBS1	RG51MBS1	1	NO MANUAL INTEGRATION
1247	08121003.D	RG51LCSS1	RG51LCSS1	1	NO MANUAL INTEGRATION
1319	08121004.D	RG51A	PSB12-0-0.	3	NO MANUAL INTEGRATION
1352	08121005.D	RG51A	PSB12-0-0.	1	NO MANUAL INTEGRATION
1425	08121006.D	RG51B	PSB12-1.5-	1	NO MANUAL INTEGRATION
1457	08121007.D	RG51C	PSB12-2-4-	1	NO MANUAL INTEGRATION
1530	08121008.D	RG51E	PSB12-8-10	1	NO MANUAL INTEGRATION
1603	08121009.D	RG51F	PSB12-14-1	1	NO MANUAL INTEGRATION
1636	08121010.D	RG51FMS	PSB12-14-1	1	NO MANUAL INTEGRATION
1708	08121011.D	RG51FMSD	PSB12-14-1	1	NO MANUAL INTEGRATION
1741	08121012.D	RG54A	PSB14-0-.5	1	NO MANUAL INTEGRATION
1814	08121013.D	RG54B	PSB14-1.5-	1	NO MANUAL INTEGRATION
1846	08121014.D	RG54C	PSB14-2-4-	1	NO MANUAL INTEGRATION
1919	08121015.D	RG54E	PSB14-7-9-	1	NO MANUAL INTEGRATION
1951	08121016.D	RG54F	PSB14-12-1	1	NO MANUAL INTEGRATION
2056	08121018.D	RG54I	PSB17-1.5-	1	NO MANUAL INTEGRATION
2129	08121019.D	RG54J	PSB17-2-4-	1	NO MANUAL INTEGRATION
2201	08121020.D	RG54L	PSB17-10-1	1	NO MANUAL INTEGRATION
2233	08121021.D	RG60A	PSB13-0-0.	1	NO MANUAL INTEGRATION
2306	08121022.D	RG60B	PSB13-1.5-	1	NO MANUAL INTEGRATION

Q-FLAG SUMMARY FOR DATABATCH - /chem1/nt6.i/20100812.b

Instrument: nt6.i Date: 12-AUG-2010 Method: SW846072310.m

INITIAL CAL: 23-JUL-2010

Compound	%RSD or R <sup>2</sup>
-----	-----
NO Q-FLAGS	-----
-----	-----

*D 08/12/10*

CONTINUING CAL: 12-AUG-2010

Compound	%D
-----	-----
4-Nitrophenol	-21.3
-----	-----

*NTC*

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt6.i                      Injection Date: 12-AUG-2010 11:42  
 Lab File ID: 08121001.D                Init. Cal. Date(s): 23-JUL-2010 23-JUL-2010  
 Analysis Type:                            Init. Cal. Times: 15:01 18:38  
 Lab Sample ID: CC0812                    Quant Type: ISTD  
 Method: /chem1/nt6.i/20100812.b/SW846072310.m

*12 08/17/10*

COMPOUND	RRF / AMOUNT	RF25	CCAL RRF25	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 2-Fluorophenol	1.32873	1.36015	1.36015	0.010	2.36473	20.00000	Averaged
2 Phenol-d5	1.53477	1.58504	1.58504	0.010	3.27538	20.00000	Averaged
3 Phenol	1.70453	1.81407	1.81407	0.010	6.42662	20.00000	Averaged
5 2-Chlorophenol-d4	1.29631	1.27373	1.27373	0.010	-1.74176	20.00000	Averaged
4 Bis(2-Chloroethyl)ether	1.30667	1.30646	1.30646	0.010	-0.01671	20.00000	Averaged
6 2-Chlorophenol	1.47378	1.47374	1.47374	0.010	-0.00240	20.00000	Averaged
7 1,3-Dichlorobenzene	1.71678	1.70605	1.70605	0.010	-0.62524	20.00000	Averaged
9 1,4-Dichlorobenzene	1.68189	1.68901	1.68901	0.010	0.42325	20.00000	Averaged
10 1,2-Dichlorobenzene-d4	0.89939	0.92374	0.92374	0.010	2.70681	20.00000	Averaged
12 1,2-Dichlorobenzene	1.56400	1.58891	1.58891	0.010	1.59249	20.00000	Averaged
11 Benzyl alcohol	0.80695	0.84277	0.84277	0.010	4.43854	20.00000	Averaged
14 2,2'-oxybis(1-Chloropropane	1.39331	1.53597	1.53597	0.010	10.23828	20.00000	Averaged
13 2-Methylphenol	1.27111	1.32428	1.32428	0.010	4.18307	20.00000	Averaged
17 Hexachloroethane	0.60757	0.61201	0.61201	0.010	0.73060	20.00000	Averaged
16 N-Nitroso-di-n-propylamine	0.88368	0.91516	0.91516	0.005	3.56199	20.00000	Averaged
15 4-Methylphenol	1.25486	1.37272	1.37272	0.010	9.39255	20.00000	Averaged
18 Nitrobenzene-d5	0.38855	0.37846	0.37846	0.010	-2.59690	20.00000	Averaged
19 Nitrobenzene	0.43075	0.42915	0.42915	0.010	-0.37266	20.00000	Averaged
20 Isophorone	0.68600	0.70045	0.70045	0.010	2.10607	20.00000	Averaged
21 2-Nitrophenol	0.25274	0.26485	0.26485	0.010	4.79093	20.00000	Averaged
22 2,4-Dimethylphenol	0.41587	0.41933	0.41933	0.010	0.83287	20.00000	Averaged
23 Bis(2-Chloroethoxy)methane	0.47536	0.48770	0.48770	0.010	2.59644	20.00000	Averaged
24 Benzoic acid	0.30742	0.27413	0.27413	0.010	-10.82800	20.00000	Averaged
25 2,4-Dichlorophenol	0.36413	0.38860	0.38860	0.010	6.71955	20.00000	Averaged
26 1,2,4-Trichlorobenzene	0.39778	0.39873	0.39873	0.010	0.24031	20.00000	Averaged
28 Naphthalene	1.13038	1.14383	1.14383	0.010	1.19007	20.00000	Averaged
29 4-Chloroaniline	0.45282	0.46190	0.46190	0.010	2.00520	20.00000	Averaged
30 Hexachlorobutadiene	0.23198	0.23756	0.23756	0.010	2.40773	20.00000	Averaged
31 4-Chloro-3-methylphenol	0.35105	0.37133	0.37133	0.010	5.77685	20.00000	Averaged
32 2-Methylnaphthalene	0.62036	0.63833	0.63833	0.010	2.89812	20.00000	Averaged
33 Hexachlorocyclopentadiene	21.80335	25.00000	0.36265	0.010	-12.78660	20.00000	Linear
34 2,4,6-Trichlorophenol	0.45790	0.47899	0.47899	0.010	4.60750	20.00000	Averaged
35 2,4,5-Trichlorophenol	0.47246	0.48815	0.48815	0.010	3.31919	20.00000	Averaged
36 2-Fluorobiphenyl	1.40011	1.34441	1.34441	0.010	-3.97837	20.00000	Averaged
37 2-Chloronaphthalene	1.32938	1.31645	1.31645	0.010	-0.97226	20.00000	Averaged

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt6.i                      Injection Date: 12-AUG-2010 11:42  
 Lab File ID: 08121001.D                Init. Cal. Date(s): 23-JUL-2010 23-JUL-2010  
 Analysis Type:                            Init. Cal. Times: 15:01 18:38  
 Lab Sample ID: CC0812                    Quant Type: ISTD  
 Method: /chem1/nt6.i/20100812.b/SW846072310.m

COMPOUND	RF25		CCAL	MIN	MAX		CURVE TYPE
	RRF / AMOUNT	RF25	RRF25	RRF	%D / %DRIFT	%D / %DRIFT	
38 2-Nitroaniline	0.33095	0.32311	0.32311	0.010	-2.36967	20.00000	Averaged
39 Dimethylphthalate	1.50119	1.47831	1.47831	0.010	-1.52393	20.00000	Averaged
40 Acenaphthylene	2.05833	2.06862	2.06862	0.010	0.49975	20.00000	Averaged
41 2,6-Dinitrotoluene	0.35670	0.36971	0.36971	0.010	3.64800	20.00000	Averaged
43 3-Nitroaniline	0.31209	0.31287	0.31287	0.010	0.25126	20.00000	Averaged
44 Acenaphthene	1.28541	1.26570	1.26570	0.010	-1.53360	20.00000	Averaged
45 2,4-Dinitrophenol	40.86929	50.00000	0.23959	0.010	-18.26143	20.00000	Linear
46 Dibenzofuran	1.70738	1.71222	1.71222	0.010	0.28303	20.00000	Averaged
47 4-Nitrophenol	0.18552	0.14592	0.14592	0.010	-21.34275	20.00000	Averaged
48 2,4-Dinitrotoluene	0.45944	0.47456	0.47456	0.010	3.29055	20.00000	Averaged
50 Diethylphthalate	1.39533	1.28474	1.28474	0.010	-7.92563	20.00000	Averaged
49 Fluorene	1.45467	1.50756	1.50756	0.010	3.63616	20.00000	Averaged
51 4-Chlorophenyl-phenylether	0.71936	0.72537	0.72537	0.010	0.83446	20.00000	Averaged
52 4-Nitroaniline	0.34745	0.28499	0.28499	0.010	-17.97675	20.00000	Averaged
53 4,6-Dinitro-2-methylphenol	0.19806	0.19928	0.19928	0.010	0.61766	20.00000	Averaged
54 N-Nitrosodiphenylamine	0.68493	0.69496	0.69496	0.010	1.46502	20.00000	Averaged
55 2,4,6-Tribromophenol	0.18223	0.20774	0.20774	0.010	13.99531	20.00000	Averaged
56 4-Bromophenyl-phenylether	0.29331	0.31410	0.31410	0.010	7.09053	20.00000	Averaged
57 Hexachlorobenzene	0.30899	0.34221	0.34221	0.010	10.75316	20.00000	Averaged
58 Pentachlorophenol	0.18262	0.16418	0.16418	0.010	-10.09774	20.00000	Averaged
60 Phenanthrene	1.24231	1.27488	1.27488	0.010	2.62167	20.00000	Averaged
61 Anthracene	1.28336	1.32078	1.32078	0.010	2.91608	20.00000	Averaged
62 Carbazole	1.19107	1.08977	1.08977	0.010	-8.50497	20.00000	Averaged
63 Di-n-butylphthalate	1.45976	1.49507	1.49507	0.010	2.41878	20.00000	Averaged
64 Fluoranthene	1.34612	1.46240	1.46240	0.010	8.63812	20.00000	Averaged
65 Pyrene	1.20453	1.24410	1.24410	0.010	3.28457	20.00000	Averaged
66 Terphenyl-d14	0.70850	0.76518	0.76518	0.010	7.99973	20.00000	Averaged
67 Butylbenzylphthalate	0.58237	0.60425	0.60425	0.010	3.75739	20.00000	Averaged
68 Benzo(a)anthracene	1.15615	1.24339	1.24339	0.010	7.54530	20.00000	Averaged
70 3,3'-Dichlorobenzidine	0.37517	0.39132	0.39132	0.010	4.30403	20.00000	Averaged
71 Chrysene	1.08220	1.10600	1.10600	0.010	2.19902	20.00000	Averaged
72 bis(2-Ethylhexyl)phthalate	0.63407	0.67038	0.67038	0.010	5.72735	20.00000	Averaged
73 Di-n-octylphthalate	1.08410	1.08234	1.08234	0.010	-0.16280	20.00000	Averaged
74 Benzo(b)fluoranthene	1.33887	1.36666	1.36666	0.010	2.07496	20.00000	Averaged
75 Benzo(k)fluoranthene	1.38193	1.45418	1.45418	0.010	5.22836	20.00000	Averaged

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt6.i                      Injection Date: 12-AUG-2010 11:42  
 Lab File ID: 08121001.D                Init. Cal. Date(s): 23-JUL-2010 23-JUL-2010  
 Analysis Type:                          Init. Cal. Times: 15:01 18:38  
 Lab Sample ID: CC0812                  Quant Type: ISTD  
 Method: /chem1/nt6.i/20100812.b/SW846072310.m

COMPOUND	CCAL		MIN	MAX		CURVE TYPE
	RRF / AMOUNT	RF25	RRF	%D / %DRIFT	%D / %DRIFT	
187 Total Benzofluoranthenes	1.28781	1.32168	1.32168 0.010	2.62966	20.00000	Averaged
76 Benzo(a)pyrene	1.26119	1.30073	1.30073 0.010	3.13588	20.00000	Averaged
78 Indeno(1,2,3-cd)pyrene	1.68718	1.63050	1.63050 0.010	-3.35982	20.00000	Averaged
79 Dibenzo(a,h)anthracene	1.29650	1.28305	1.28305 0.010	-1.03803	20.00000	Averaged
80 Benzo(g,h,i)perylene	1.52194	1.45557	1.45557 0.010	-4.36116	20.00000	Averaged
90 N-Nitrosodimethylamine	0.86213	0.86684	0.86684 0.010	0.54588	20.00000	Averaged
103 Pyridine	1.54116	1.60538	1.60538 0.010	4.16675	20.00000	Averaged
91 Aniline	1.95218	1.95946	1.95946 0.010	0.37263	20.00000	Averaged
105 1-methylnaphthalene	0.64079	0.66198	0.66198 0.010	3.30809	20.00000	Averaged

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt6.i/20100812.b/08121001.D  
 Lab Smp Id: CC0812 Client Smp ID: CC0812  
 Inj Date : 12-AUG-2010 11:42  
 Operator : JZ Inst ID: nt6.i  
 Smp Info : CC0812  
 Misc Info : 10-  
 Comment : 1ul Injection  
 Method : /chem1/nt6.i/20100812.b/SW846072310.m  
 Meth Date : 12-Aug-2010 14:01 jianqing Quant Type: ISTD  
 Cal Date : 23-JUL-2010 18:38 Cal File: 07231007.D  
 Als bottle: 1 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: ICALS.sub  
 Target Version: 3.50

*Handwritten:* 08/12/10

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
\$ 1 2-Fluorophenol	112	5.227	5.227	(0.721)	289165	25.0000	25.59
\$ 2 Phenol-d5	99	6.909	6.909	(0.953)	336976	25.0000	25.82
3 Phenol	94	6.931	6.931	(0.956)	385667	25.0000	26.61
\$ 5 2-Chlorophenol-d4	132	6.957	6.957	(0.959)	270792	25.0000	24.56
4 Bis(2-Chloroethyl) ether	93	6.947	6.947	(0.958)	277750	25.0000	25.00
6 2-Chlorophenol	128	6.984	6.984	(0.963)	313315	25.0000	25.00
7 1,3-Dichlorobenzene	146	7.182	7.182	(0.990)	362702	25.0000	24.84
* 8 1,4-Dichlorobenzene-d4	152	7.251	7.251	(1.000)	170078	20.0000	
9 1,4-Dichlorobenzene	146	7.273	7.273	(1.003)	359080	25.0000	25.11
\$ 10 1,2-Dichlorobenzene-d4	152	7.550	7.550	(1.041)	196384	25.0000	25.68
12 1,2-Dichlorobenzene	146	7.572	7.572	(1.044)	337799	25.0000	25.40
11 Benzyl alcohol	108	7.582	7.582	(1.046)	179170	25.0000	26.11
14 2,2'-oxybis(1-Chloropropane)	45	7.839	7.839	(1.081)	326543	25.0000	27.56
13 2-Methylphenol	108	7.865	7.865	(1.085)	281538	25.0000	26.05
17 Hexachloroethane	117	8.063	8.063	(1.112)	130111	25.0000	25.18
16 N-Nitroso-di-n-propylamine	70	8.068	8.068	(1.113)	194560	25.0000	25.89
15 4-Methylphenol	108	8.111	8.111	(1.119)	291838	25.0000	27.35
\$ 18 Nitrobenzene-d5	82	8.213	8.213	(0.880)	266653	25.0000	24.35
19 Nitrobenzene	77	8.239	8.239	(0.883)	302365	25.0000	24.91
20 Isophorone	82	8.635	8.635	(0.926)	493517	25.0000	25.53
21 2-Nitrophenol	139	8.768	8.768	(0.940)	186604	25.0000	26.20
22 2,4-Dimethylphenol	107	8.939	8.939	(0.958)	295448	25.0000	25.21
23 Bis(2-Chloroethoxy)methane	93	9.062	9.062	(0.971)	343617	25.0000	25.65
24 Benzoic acid	105	9.238	9.238	(0.990)	386285	50.0000	44.59
25 2,4-Dichlorophenol	162	9.174	9.174	(0.983)	273793	25.0000	26.68
26 1,2,4-Trichlorobenzene	180	9.275	9.275	(0.994)	280935	25.0000	25.06
* 27 Naphthalene-d8	136	9.329	9.329	(1.000)	563656	20.0000	



Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
=====	=====	==	=====	=====	=====	=====	=====
28 Naphthalene	128	9.356	9.356	(1.003)	805910	25.0000	25.30
29 4-Chloroaniline	127	9.537	9.537	(1.022)	325441	25.0000	25.50
30 Hexachlorobutadiene	225	9.692	9.692	(1.039)	167381	25.0000	25.60
31 4-Chloro-3-methylphenol	107	10.408	10.408	(1.116)	261628	25.0000	26.44
32 2-Methylnaphthalene	141	10.493	10.493	(1.125)	449751	25.0000	25.72
33 Hexachlorocyclopentadiene	237	10.878	10.878	(0.892)	150443	25.0000	21.80
34 2,4,6-Trichlorophenol	196	11.038	11.038	(0.905)	198707	25.0000	26.15
35 2,4,5-Trichlorophenol	196	11.102	11.102	(0.910)	202503	25.0000	25.83
\$ 36 2-Fluorobiphenyl	172	11.156	11.156	(0.915)	557717	25.0000	24.01
37 2-Chloronaphthalene	162	11.268	11.268	(0.924)	546119	25.0000	24.76
38 2-Nitroaniline	65	11.529	11.529	(0.945)	134038	25.0000	24.41
39 Dimethylphthalate	163	11.925	11.925	(0.978)	613266	25.0000	24.62
40 Acenaphthylene	152	11.941	11.941	(0.979)	858150	25.0000	25.12
41 2,6-Dinitrotoluene	165	12.010	12.010	(0.985)	153371	25.0000	25.91
* 42 Acenaphthene-d10	164	12.197	12.197	(1.000)	331873	20.0000	
43 3-Nitroaniline	138	12.218	12.218	(1.002)	129792	25.0000	25.06
44 Acenaphthene	153	12.250	12.250	(1.004)	525064	25.0000	24.62
45 2,4-Dinitrophenol	184	12.389	12.389	(1.016)	198780	50.0000	40.87
46 Dibenzofuran	168	12.512	12.512	(1.026)	710299	25.0000	25.07
47 4-Nitrophenol	109	12.598	12.598	(1.033)	60535	25.0000	19.66
48 2,4-Dinitrotoluene	165	12.635	12.635	(1.036)	196868	25.0000	25.82
50 Diethylphthalate	149	13.089	13.089	(1.073)	532965	25.0000	23.02
49 Fluorene	166	13.068	13.068	(1.071)	625401	25.0000	25.91
51 4-Chlorophenyl-phenylether	204	13.116	13.116	(1.075)	300912	25.0000	25.21
52 4-Nitroaniline	138	13.217	13.217	(1.084)	118224	25.0000	20.51
53 4,6-Dinitro-2-methylphenol	198	13.292	13.292	(0.912)	262071	50.0000	50.31
54 N-Nitrosodiphenylamine	169	13.335	13.335	(0.915)	456960	25.0000	25.37
\$ 55 2,4,6-Tribromophenol	330	13.500	13.500	(1.107)	86178	25.0000	28.50
56 4-Bromophenyl-phenylether	248	13.896	13.896	(0.954)	206533	25.0000	26.77
57 Hexachlorobenzene	284	14.093	14.093	(0.967)	225016	25.0000	27.69
58 Pentachlorophenol	266	14.414	14.414	(0.989)	107953	25.0000	22.48
* 59 Phenanthrene-d10	188	14.568	14.568	(1.000)	526027	20.0000	
60 Phenanthrene	178	14.606	14.606	(1.003)	838279	25.0000	25.66
61 Anthracene	178	14.681	14.681	(1.008)	868458	25.0000	25.73
62 Carbazole	167	14.990	14.990	(1.029)	716561	25.0000	22.87
63 Di-n-butylphthalate	149	15.749	15.749	(1.081)	983058	25.0000	25.60
64 Fluoranthene	202	16.539	16.539	(1.135)	961581	25.0000	27.16
65 Pyrene	202	16.892	16.892	(0.894)	928768	25.0000	25.82
\$ 66 Terphenyl-d14	244	17.244	17.244	(0.913)	571237	25.0000	27.00
67 Butylbenzylphthalate	149	18.158	18.158	(0.961)	451096	25.0000	25.94
68 Benzo(a)anthracene	228	18.863	18.863	(0.999)	928236	25.0000	26.89
* 69 Chrysene-d12	240	18.889	18.889	(1.000)	597231	20.0000	
70 3,3'-Dichlorobenzidine	252	18.905	18.905	(1.001)	292136	25.0000	26.08
71 Chrysene	228	18.927	18.927	(1.002)	825673	25.0000	25.55
72 bis(2-Ethylhexyl)phthalate	149	19.188	19.188	(0.953)	609906	25.0000	26.43
* 134 Di-n-octylphthalate-d4	153	20.129	20.129	(1.000)	727831	20.0000	
73 Di-n-octylphthalate	149	20.134	20.134	(1.000)	984701	25.0000	24.96

Compounds	QUANT SIG			AMOUNTS			
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
=====	====	==	=====	=====	=====	=====	=====
74 Benzo(b)fluoranthene	252	20.518	20.518	(0.975)	950719	25.0000	25.52
75 Benzo(k)fluoranthene	252	20.556	20.556	(0.977)	1011608	25.0000	26.31
187 Total Benzofluoranthenes	252	20.556	20.556	(0.977)	1838859	50.0000	51.31
76 Benzo(a)pyrene	252	20.962	20.962	(0.996)	904861	25.0000	25.78
* 77 Perylene-d12	264	21.042	21.042	(1.000)	556523	20.0000	
78 Indeno(1,2,3-cd)pyrene	276	22.414	22.414	(1.065)	1134262	25.0000	24.16
79 Dibenzo(a,h)anthracene	278	22.441	22.441	(1.066)	892556	25.0000	24.74
80 Benzo(g,h,i)perylene	276	22.740	22.740	(1.081)	1012573	25.0000	23.91
90 N-Nitrosodimethylamine	74	2.305	2.305	(0.318)	184287	25.0000	25.14
103 Pyridine	79	2.273	2.273	(0.314)	341300	25.0000	26.04
91 Aniline	93	6.808	6.808	(0.939)	416577	25.0000	25.09
105 1-methylnaphthalene	141	10.659	10.659	(1.143)	466413	25.0000	25.83

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS  
 AREA AND RT SUMMARY

Instrument ID: nt6.i  
 Lab File ID: 08121001.D  
 Lab Smp Id: CC0812  
 Analysis Type: SV  
 Quant Type: ISTD  
 Operator: JZ  
 Method File: /chem1/nt6.i/20100812.b/SW846072310.m  
 Misc Info: 10-

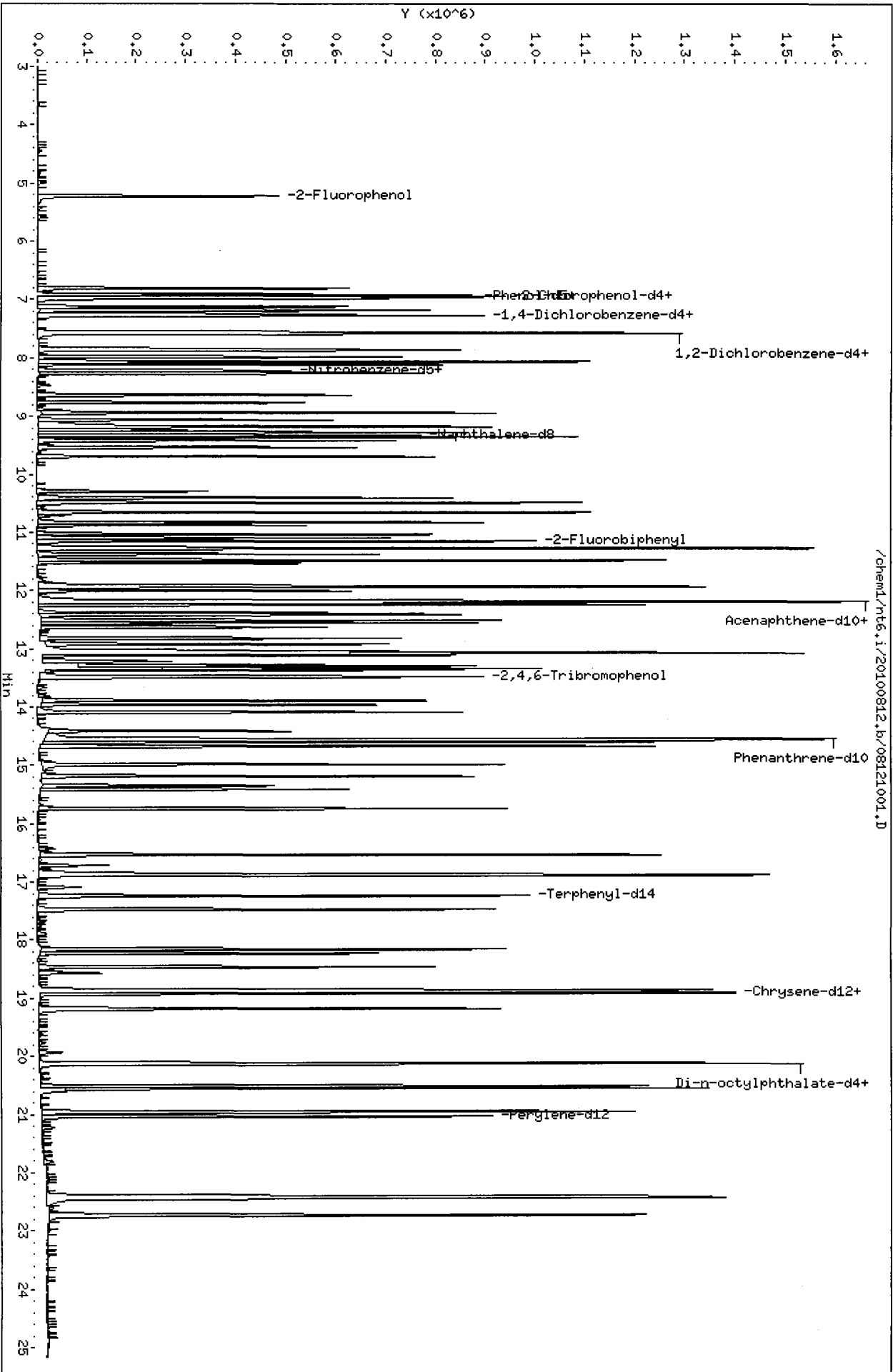
Calibration Date: 12-AUG-2010  
 Calibration Time: 11:42  
 Client Smp ID: CC0812  
 Level:  
 Sample Type:

Test Mode:  
 Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	182786	91393	365572	170078	-6.95
27 Naphthalene-d8	584137	292068	1168274	563656	-3.51
42 Acenaphthene-d10	320442	160221	640884	331873	3.57
59 Phenanthrene-d10	503793	251896	1007586	526027	4.41
69 Chrysene-d12	532343	266172	1064686	597231	12.19
134 Di-n-octylphthala	719428	359714	1438856	727831	1.17
77 Perylene-d12	517269	258634	1034538	556523	7.59

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	7.25	6.75	7.75	7.25	0.00
27 Naphthalene-d8	9.33	8.83	9.83	9.33	0.00
42 Acenaphthene-d10	12.20	11.70	12.70	12.20	0.00
59 Phenanthrene-d10	14.57	14.07	15.07	14.57	0.00
69 Chrysene-d12	18.89	18.39	19.39	18.89	0.00
134 Di-n-octylphthala	20.13	19.63	20.63	20.13	0.00
77 Perylene-d12	21.04	20.54	21.54	21.04	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.



Date : 12-AUG-2010 11:42

Client ID: DFTPP0812

Instrument: nt6.i

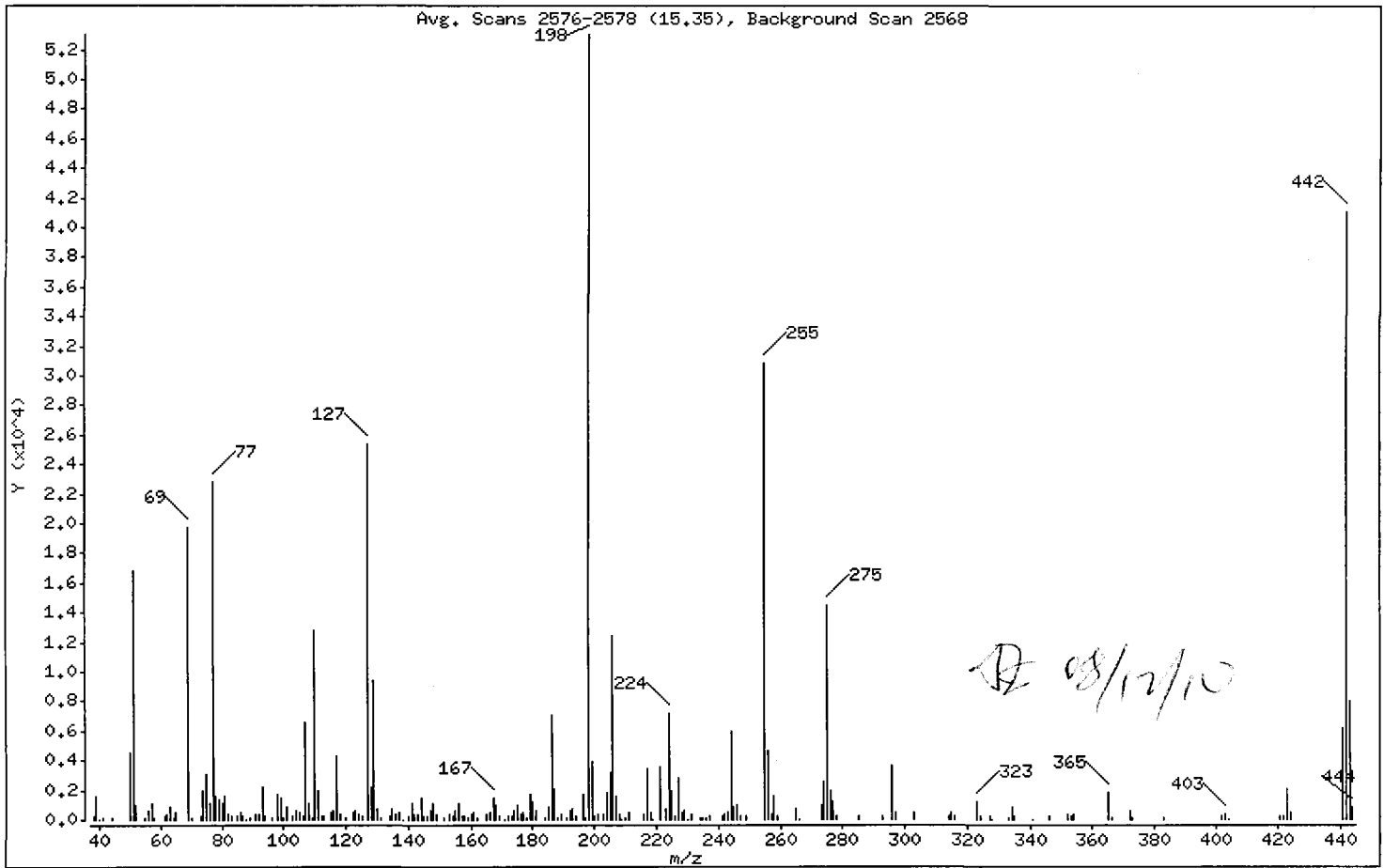
Sample Info: DFTPP0812

Operator: JZ

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	31.63
68	Less than 2.00% of mass 69	0.00 ( 0.00)
69	Mass 69 relative abundance	37.29
70	Less than 2.00% of mass 69	0.21 ( 0.57)
127	10.00 - 80.00% of mass 198	47.81
197	Less than 2.00% of mass 198	0.23
199	5.00 - 9.00% of mass 198	7.25
275	10.00 - 60.00% of mass 198	27.39
365	Greater than 1.00% of mass 198	3.34
441	0.01 - 24.00% of mass 442	11.80 ( 15.21)
442	50.00 - 200.00% of mass 198	77.57
443	15.00 - 24.00% of mass 442	15.28 ( 19.70)

Date : 12-AUG-2010 11:42

Client ID: DFTPP0812

Instrument: nt6.i

Sample Info: DFTPP0812

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.25

Data File: 08121001.D

Spectrum: Avg. Scans 2576-2578 (15.35), Background Scan 2568

Location of Maximum: 198.00

Number of points: 211

m/z	Y	m/z	Y	m/z	Y	m/z	Y
38.00	283	112.00	218	177.00	495	246.00	1015
39.00	1561	113.00	208	178.00	61	247.00	204
40.00	55	115.00	439	179.00	1733	249.00	265
41.00	140	116.00	556	180.00	1261	255.00	30808
44.00	104	117.00	4328	181.00	555	256.00	4663
50.00	4465	118.00	361	184.00	107	257.00	329
51.00	16776	120.00	67	185.00	894	258.00	1572
52.00	946	122.00	527	186.00	7045	259.00	210
55.00	106	123.00	626	187.00	2023	265.00	686
56.00	551	124.00	360	188.00	174	266.00	50
57.00	1095	125.00	293	189.00	375	273.00	979
58.00	168	127.00	25360	191.00	113	274.00	2614
61.00	249	128.00	2137	192.00	598	275.00	14527
62.00	338	129.00	9398	193.00	687	276.00	1963
63.00	846	130.00	755	194.00	184	277.00	1163
64.00	104	131.00	179	196.00	1758	278.00	226
65.00	468	134.00	273	197.00	121	285.00	227
69.00	19776	135.00	675	198.00	53040	293.00	300
70.00	113	136.00	328	199.00	3847	296.00	3655
73.00	220	137.00	480	200.00	279	297.00	529
74.00	1960	138.00	53	201.00	362	303.00	454
75.00	3109	140.00	231	203.00	379	314.00	214
76.00	1105	141.00	1101	204.00	1793	315.00	444
77.00	22784	142.00	381	205.00	3192	316.00	229
78.00	1631	143.00	306	206.00	12390	323.00	1273
79.00	1358	144.00	1405	207.00	1572	324.00	244
80.00	1090	145.00	286	208.00	425	327.00	231
81.00	1574	146.00	246	209.00	50	328.00	60
82.00	416	147.00	619	210.00	150	333.00	123
83.00	304	148.00	1116	211.00	532	334.00	803
85.00	264	149.00	331	216.00	305	335.00	226
86.00	463	151.00	70	217.00	3414	341.00	58
87.00	259	153.00	341	218.00	477	346.00	238
88.00	53	154.00	278	219.00	52	352.00	367
89.00	126	155.00	667	221.00	3491	353.00	210

Date : 12-AUG-2010 11:42

Client ID: DFTPP0812

Instrument: nt6.i

Sample Info: DFTPP0812

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.25

Data File: 08121001.D

Spectrum: Avg. Scans 2576-2578 (15.35), Background Scan 2568

Location of Maximum: 198.00

Number of points: 211

m/z	Y	m/z	Y	m/z	Y	m/z	Y
91.00	409	156.00	1121	223.00	695	354.00	342
92.00	371	157.00	225	224.00	7189	365.00	1774
93.00	2179	158.00	210	225.00	1936	366.00	152
94.00	223	159.00	71	226.00	215	372.00	633
96.00	169	160.00	333	227.00	2782	373.00	116
98.00	1736	161.00	450	228.00	454	383.00	130
99.00	1408	162.00	120	229.00	666	402.00	250
100.00	108	165.00	368	230.00	58	403.00	330
101.00	872	166.00	458	231.00	333	404.00	51
103.00	289	167.00	1505	234.00	128	421.00	252
104.00	563	168.00	1012	235.00	138	422.00	190
105.00	542	169.00	207	236.00	161	423.00	2025
106.00	211	171.00	53	237.00	223	424.00	496
107.00	6542	172.00	235	241.00	189	441.00	6258
108.00	1077	173.00	251	242.00	419	442.00	41144
109.00	67	174.00	557	243.00	449	443.00	8106
110.00	12827	175.00	982	244.00	6000	444.00	834
111.00	1932	176.00	324	245.00	861		

Date : 12-AUG-2010 11:42

Client ID: DFTPP0812

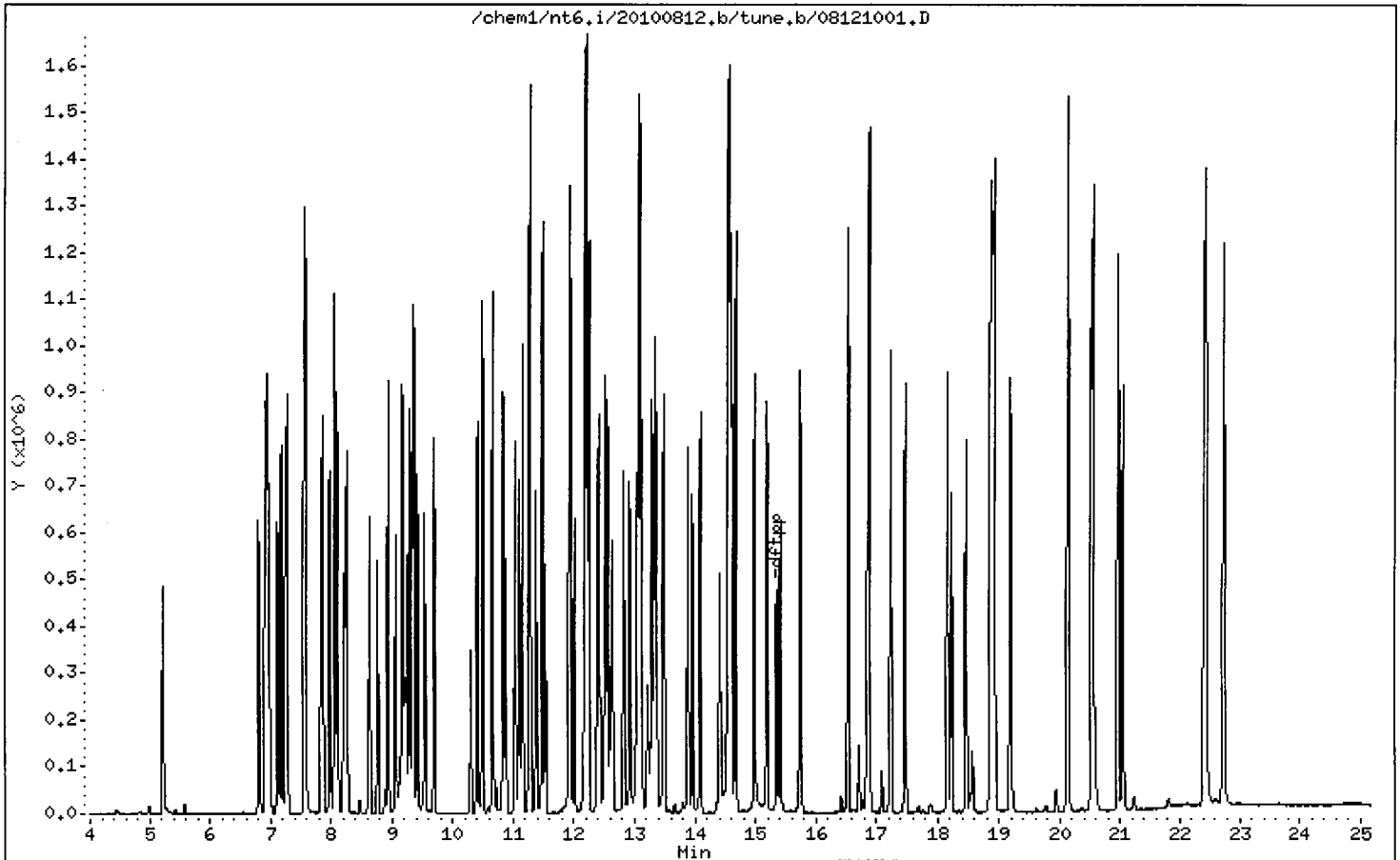
Instrument: nt6.i

Sample Info: DFTPP0812

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.25





Analytical Resources Inc.  
ABN by sw846 8270C  
DDT Breakdown Report

Data file: /chem1/nt6.i/20100812.b/ddt.b/08121001.D    ARI ID: CC0812  
Method: /chem1/nt6.i/20100812.b/ddt.b/sw846ddt.m    Misc: 10-  
Analysis Date: 12-AUG-2010 11:42    Instrument: nt6.i

COMPOUND	RT	AREA
Pentachlorophenol	14.414	107953
Benzidine	16.833	62486
4,4'-DDE	----	----
4,4'-DDD	17.762	4422
4,4'-DDT	18.232	263983

$$\text{DDT Percent Breakdown} = \frac{(\text{DDE Area} + \text{DDD Area}) * 100}{(\text{DDE Area} + \text{DDD Area} + \text{DDT Area})}$$

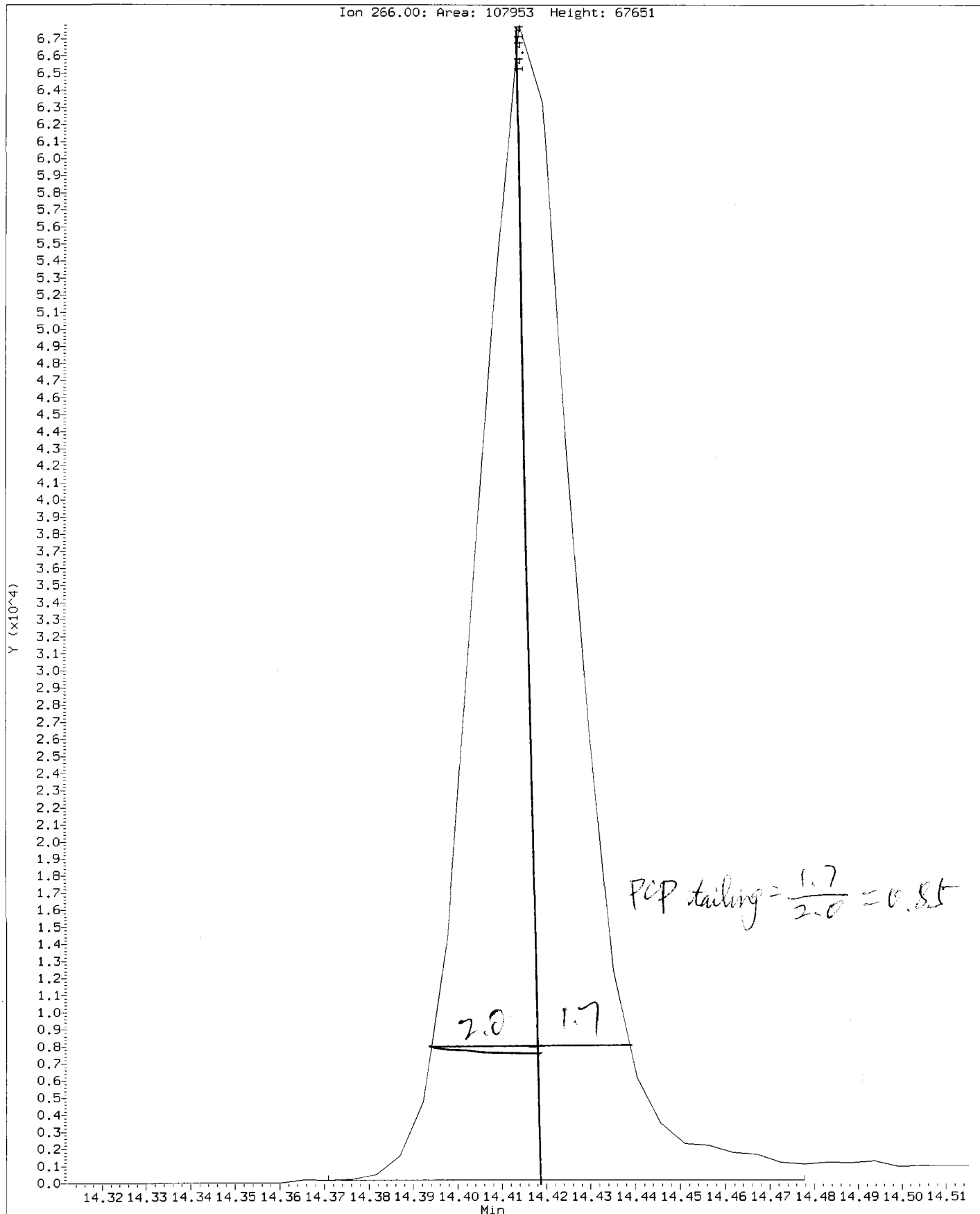
$$\text{DDT Percent Breakdown} = \frac{(0 + 4422) * 100}{(0 + 4422 + 263983)}$$

$$\text{DDT Percent Breakdown} = 1.6 \%$$

*ok* *12/08/10*

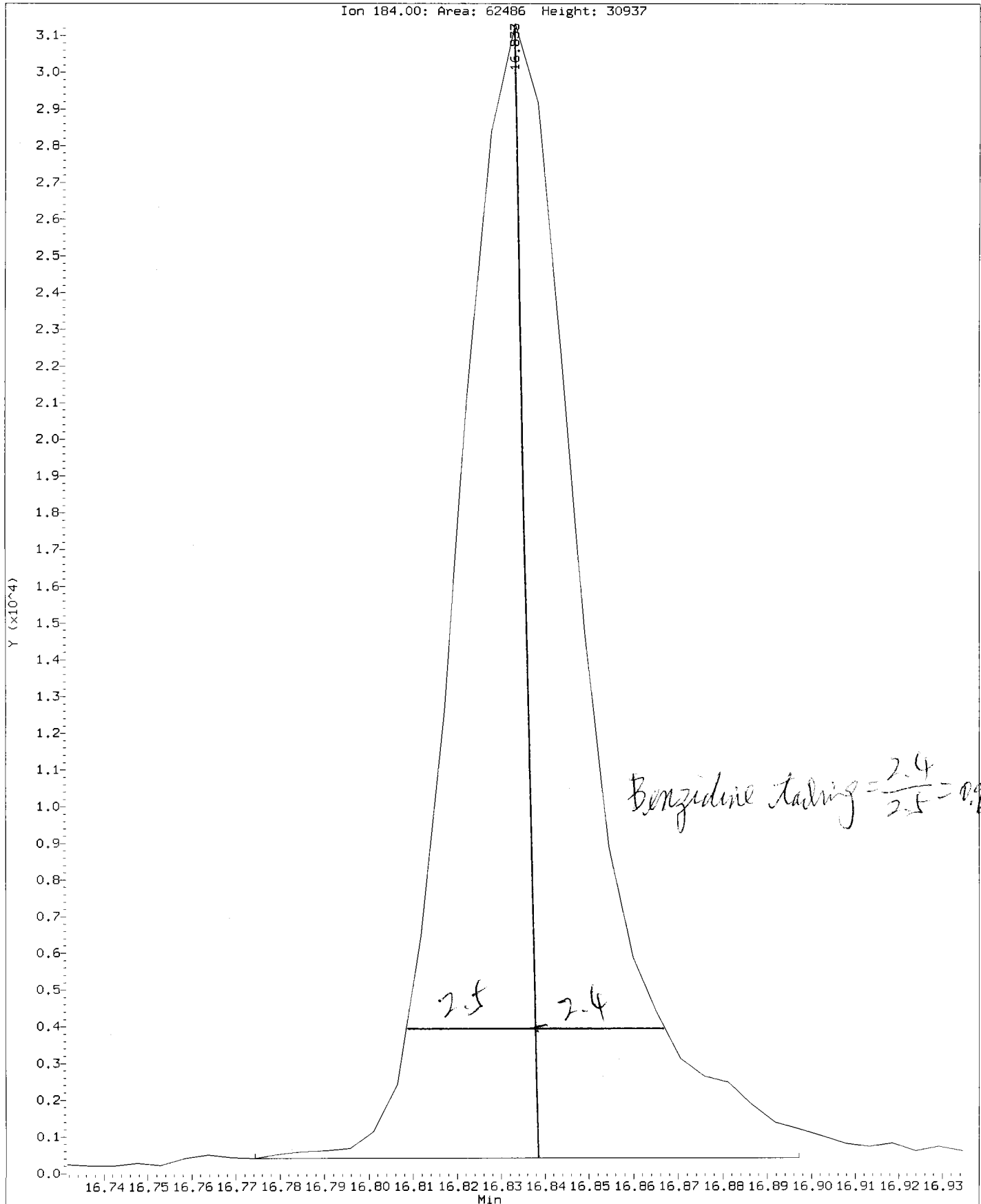
Data File: /chem1/nt6.i/20100812.b/ddt.b/08121001.D  
Injection Date: 12-AUG-2010 11:42  
Instrument: nt6.1  
Client Sample ID: CC0812

Compound: Pentachlorophenol  
CAS Number: 87-86-5



Data File: /chem1/nt6.i/20100812.b/ddt.b/08121001.D  
Injection Date: 12-AUG-2010 11:42  
Instrument: nt6.1  
Client Sample ID: CC0812

Compound: Benzidine  
CAS Number:



RG51 : 00593



### GC/MS SVOA Analyst Notes / Corrective Action Log

ARI Project ID: RG51; RG54; RG60 Client ID: Floyd/Snyder

ARI SOP: 801S(SIM-PNA) 802S(Butyl Tins) 804S(SVOA-8270D) 805S(op-Pest)

Parameter(s): B270

Instrument: NT-2 NT-4 NT-6 NT-8 NT11

Curve Date: 7/23/10 Analysis Start Date: 8/12; 8/13/10

DFTPP Tune Meets Criteria?	<u>YES</u> / NO	Internal Standard Meets Criteria?	<u>YES</u> / NO
DDT Breakdown <20%?	<u>YES</u> / NO / NA	Method Blank In Control?	<u>YES</u> / NO
Peak Tailing Factor ≤2?	<u>YES</u> / NO / NA	LCS / LCSD Recovery In Control?	<u>YES</u> / NO
ICal acceptable?	<u>YES</u> / NO	CCal acceptable?	<u>YES</u> / NO
Q flag applied?	YES / NO	Q flag applied?	YES / NO
Surrogate Recovery in Control?	YES <u>NO</u>	Special Analysis Criteria Met?	YES / NO / <u>NA</u>
Manual Integrations for ICal?	<u>YES</u> / NO	Manual Integrations for Samples?	Yes / <u>NO</u>

**Detail problems, corrective actions and/or other pertinent information below (use reverse side when necessary):**

8/12: samples RG51A-F, RG54 A-F, I, J & D, RG60A-D + MB/LCS+MS/MSD.

8/13: samples RG60D-F & C + RG54H + Dilution for RG54E.

Sample RG54A & RG60A-C will be re-extracted for SS recovery out of QC limit.

Batch QC: RG51, RG54 & RG60

Forms included.

**Additional Details on Reverse: Yes / No**

Analyst: [Signature] Date: 8/16/10

Reviewer: [Signature] Date: 8/16/10

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt6.i/20100812.b/08121002.D  
 Lab Smp Id: RG51MBS1 Client Smp ID: RG51MBS1  
 Inj Date : 12-AUG-2010 12:14  
 Operator : JZ Inst ID: nt6.i  
 Smp Info : RG51MBS1,  
 Misc Info : 10-18188  
 Comment : lul Injection  
 Method : /chem1/nt6.i/20100812.b/SW846072310.m  
 Meth Date : 12-Aug-2010 14:01 jianqing Quant Type: ISTD  
 Cal Date : 23-JUL-2010 18:38 Cal File: 07231007.D  
 Als bottle: 2 QC Sample: BLANK  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: pnas.sub  
 Target Version: 3.50

*BZ 18/12/10*

Concentration Formula:  $Amt * DF * Vt / (Ws * (100 - M) / 100) * CpndVariable$

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Ws	25.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS		
						ON-COLUMN (ug/mL)	FINAL (ug/kg)	
* 27 Naphthalene-d8	136	9.318	9.329	(1.000)	654011	20.0000		
28 Naphthalene	128	Compound Not Detected.						
32 2-Methylnaphthalene	141	Compound Not Detected.						
105 1-methylnaphthalene	141	Compound Not Detected.						
\$ 36 2-Fluorobiphenyl	172	11.150	11.156	(0.915)	368602	13.6289	272.6	
40 Acenaphthylene	152	Compound Not Detected.						
* 42 Acenaphthene-d10	164	12.191	12.197	(1.000)	386336	20.0000		
44 Acenaphthene	153	Compound Not Detected.						
46 Dibenzofuran	168	Compound Not Detected.						
49 Fluorene	166	Compound Not Detected.						
* 59 Phenanthrene-d10	188	14.563	14.568	(1.000)	624497	20.0000		
60 Phenanthrene	178	Compound Not Detected.						
61 Anthracene	178	Compound Not Detected.						
64 Fluoranthene	202	Compound Not Detected.						
65 Pyrene	202	Compound Not Detected.						

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/mL)	FINAL (ug/kg)
-----	----	==	-----	-----	-----	-----	-----
\$ 66 Terphenyl-d14	244	17.238	17.244	(0.913)	453484	18.5757	371.5
68 Benzo(a)anthracene	228				Compound Not Detected.		
* 69 Chrysene-d12	240	18.884	18.889	(1.000)	689136	20.0000	
71 Chrysene	228				Compound Not Detected.		
187 Total Benzofluoranthenes	252				Compound Not Detected.		
76 Benzo(a)pyrene	252				Compound Not Detected.		
* 77 Perylene-d12	264	21.036	21.042	(1.000)	618317	20.0000	
78 Indeno(1,2,3-cd)pyrene	276				Compound Not Detected.		
79 Dibenzo(a,h)anthracene	278				Compound Not Detected.		
80 Benzo(g,h,i)perylene	276				Compound Not Detected.		

Analytical Resources, Inc.  
 INTERNAL STANDARD COMPOUNDS  
 AREA AND RT SUMMARY

Instrument ID: nt6.i  
 Lab File ID: 08121002.D  
 Lab Smp Id: RG51MBS1  
 Analysis Type: SV  
 Quant Type: ISTD  
 Operator: JZ  
 Method File: /chem1/nt6.i/20100812.b/SW846072310.m  
 Misc Info: 10-18188

Calibration Date: 12-AUG-2010  
 Calibration Time: 11:42  
 Client Smp ID: RG51MBS1  
 Level: LOW  
 Sample Type: Solid

Test Mode:  
 Use Initial Calibration Level 4.

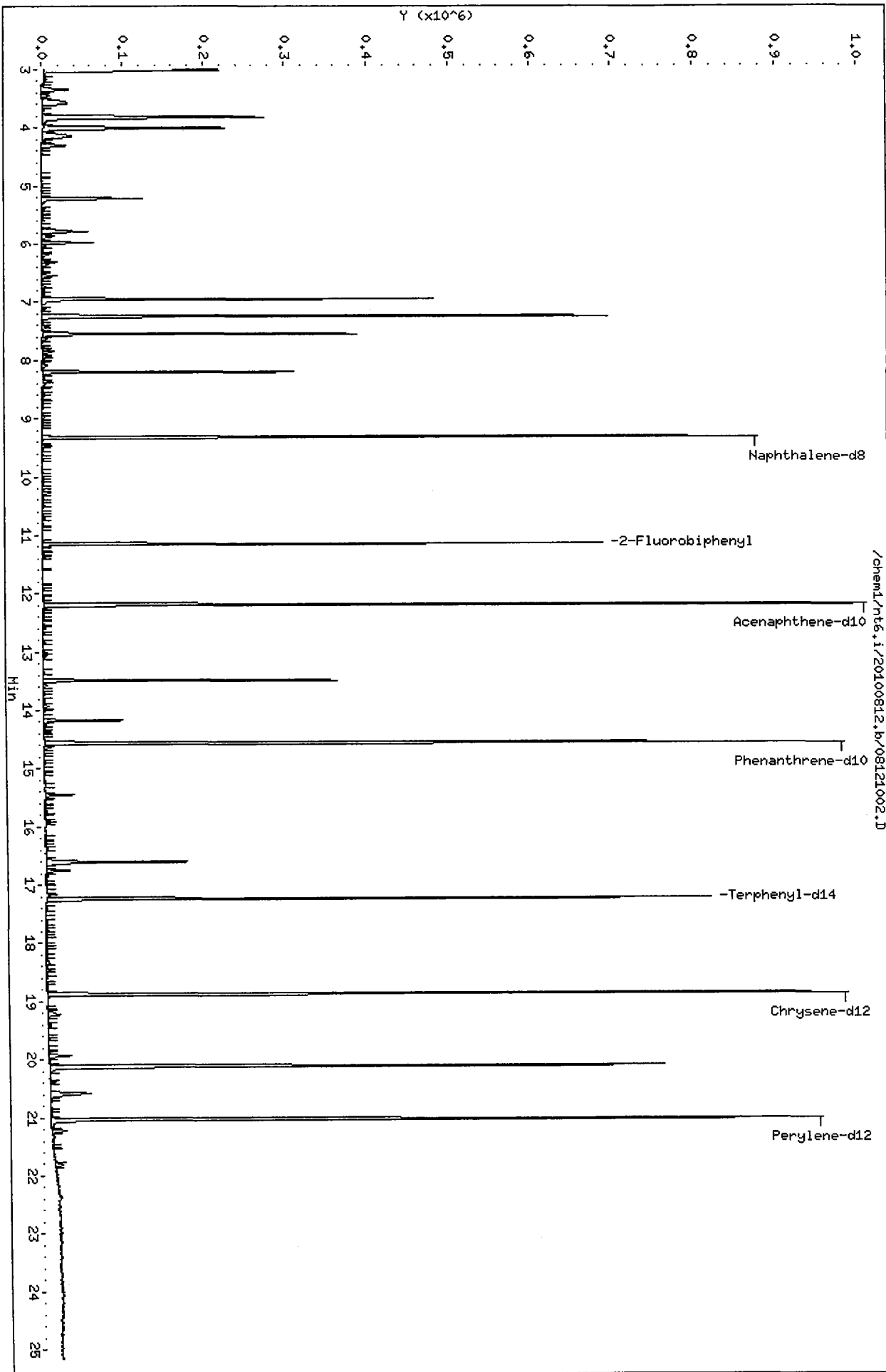
COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
27 Naphthalene-d8	584137	292068	1168274	654011	11.96
42 Acenaphthene-d10	320442	160221	640884	386336	20.56
59 Phenanthrene-d10	503793	251896	1007586	624497	23.96
69 Chrysene-d12	532343	266172	1064686	689136	29.45
77 Perylene-d12	517269	258634	1034538	618317	19.53

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
27 Naphthalene-d8	9.33	8.83	9.83	9.32	-0.12
42 Acenaphthene-d10	12.20	11.70	12.70	12.19	-0.05
59 Phenanthrene-d10	14.57	14.07	15.07	14.56	-0.04
69 Chrysene-d12	18.89	18.39	19.39	18.88	-0.03
77 Perylene-d12	21.04	20.54	21.54	21.04	-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.

Semivolatle Report SW846 Method 8270D

Data file : /chem1/nt6.i/20100812.b/08121003.D  
 Lab Smp Id: RG51LCSS1 Client Smp ID: RG51LCSS1  
 Inj Date : 12-AUG-2010 12:47  
 Operator : JZ Inst ID: nt6.i  
 Smp Info : RG51LCSS1,  
 Misc Info : 10-18188  
 Comment : 1ul Injection  
 Method : /chem1/nt6.i/20100812.b/SW846072310.m  
 Meth Date : 12-Aug-2010 14:01 jianqing Quant Type: ISTD  
 Cal Date : 23-JUL-2010 18:38 Cal File: 07231007.D  
 Als bottle: 3 QC Sample: LCS  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: pnas.sub  
 Target Version: 3.50

*08/12/10*

Concentration Formula:  $Amt * DF * Vt / (Ws * (100 - M) / 100) * CpndVariable$

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Ws	25.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG				CONCENTRATIONS		
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/kg)
* 27 Naphthalene-d8	136	9.325	9.329	(1.000)	659808	20.0000	
28 Naphthalene	128	9.351	9.356	(1.003)	493262	13.2271	264.5
32 2-Methylnaphthalene	141	10.489	10.493	(1.125)	297211	14.5223	290.4
105 1-methylnaphthalene	141	10.655	10.659	(1.143)	297531	14.0745	281.5
\$ 36 2-Fluorobiphenyl	172	11.151	11.156	(0.915)	426471	16.2000	324.0
40 Acenaphthylene	152	11.937	11.941	(0.979)	571973	14.7791	295.6
* 42 Acenaphthene-d10	164	12.193	12.197	(1.000)	376047	20.0000	
44 Acenaphthene	153	12.246	12.250	(1.004)	335803	13.8941	277.9
46 Dibenzofuran	168	12.508	12.512	(1.026)	514846	16.0374	320.7
49 Fluorene	166	13.064	13.068	(1.071)	435451	15.9207	318.4
* 59 Phenanthrene-d10	188	14.564	14.568	(1.000)	616996	20.0000	
60 Phenanthrene	178	14.602	14.606	(1.003)	625038	16.3088	326.2
61 Anthracene	178	14.677	14.681	(1.008)	634723	16.0319	320.6
64 Fluoranthene	202	16.541	16.539	(1.136)	775211	18.6674	373.3
65 Pyrene	202	16.888	16.892	(0.894)	759122	19.0722	381.4

Compounds	QUANT SIG		CONCENTRATIONS				
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/kg)
\$ 66 Terphenyl-d14	244	17.246	17.244	(0.913)	544259	23.2473	464.9
68 Benzo(a)anthracene	228	18.864	18.863	(0.999)	745858	19.5231	390.5
* 69 Chrysene-d12	240	18.885	18.889	(1.000)	660878	20.0000	
71 Chrysene	228	18.923	18.927	(1.002)	685246	19.1622	383.2
187 Total Benzofluoranthenes	252	20.552	20.556	(0.977)	1512520	37.6229	752.5
76 Benzo(a)pyrene	252	20.963	20.962	(0.996)	662784	16.8344	336.7
* 77 Perylene-d12	264	21.043	21.042	(1.000)	624348	20.0000	
78 Indeno(1,2,3-cd)pyrene	276	22.416	22.414	(1.065)	925807	17.5777	351.6
79 Dibenzo(a,h)anthracene	278	22.442	22.441	(1.066)	719851	17.7857	355.7
80 Benzo(g,h,i)perylene	276	22.742	22.740	(1.081)	808181	17.0103	340.2

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS  
 AREA AND RT SUMMARY

Instrument ID: nt6.i  
 Lab File ID: 08121003.D  
 Lab Smp Id: RG51LCSS1  
 Analysis Type: SV  
 Quant Type: ISTD  
 Operator: JZ  
 Method File: /chem1/nt6.i/20100812.b/SW846072310.m  
 Misc Info: 10-18188

Calibration Date: 12-AUG-2010  
 Calibration Time: 11:42  
 Client Smp ID: RG51LCSS1  
 Level: LOW  
 Sample Type: Solid

Test Mode:  
 Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
27 Naphthalene-d8	584137	292068	1168274	659808	12.95
42 Acenaphthene-d10	320442	160221	640884	376047	17.35
59 Phenanthrene-d10	503793	251896	1007586	616996	22.47
69 Chrysene-d12	532343	266172	1064686	660878	24.15
77 Perylene-d12	517269	258634	1034538	624348	20.70

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
27 Naphthalene-d8	9.33	8.83	9.83	9.32	-0.04
42 Acenaphthene-d10	12.20	11.70	12.70	12.19	-0.03
59 Phenanthrene-d10	14.57	14.07	15.07	14.56	-0.03
69 Chrysene-d12	18.89	18.39	19.39	18.89	-0.02
77 Perylene-d12	21.04	20.54	21.54	21.04	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

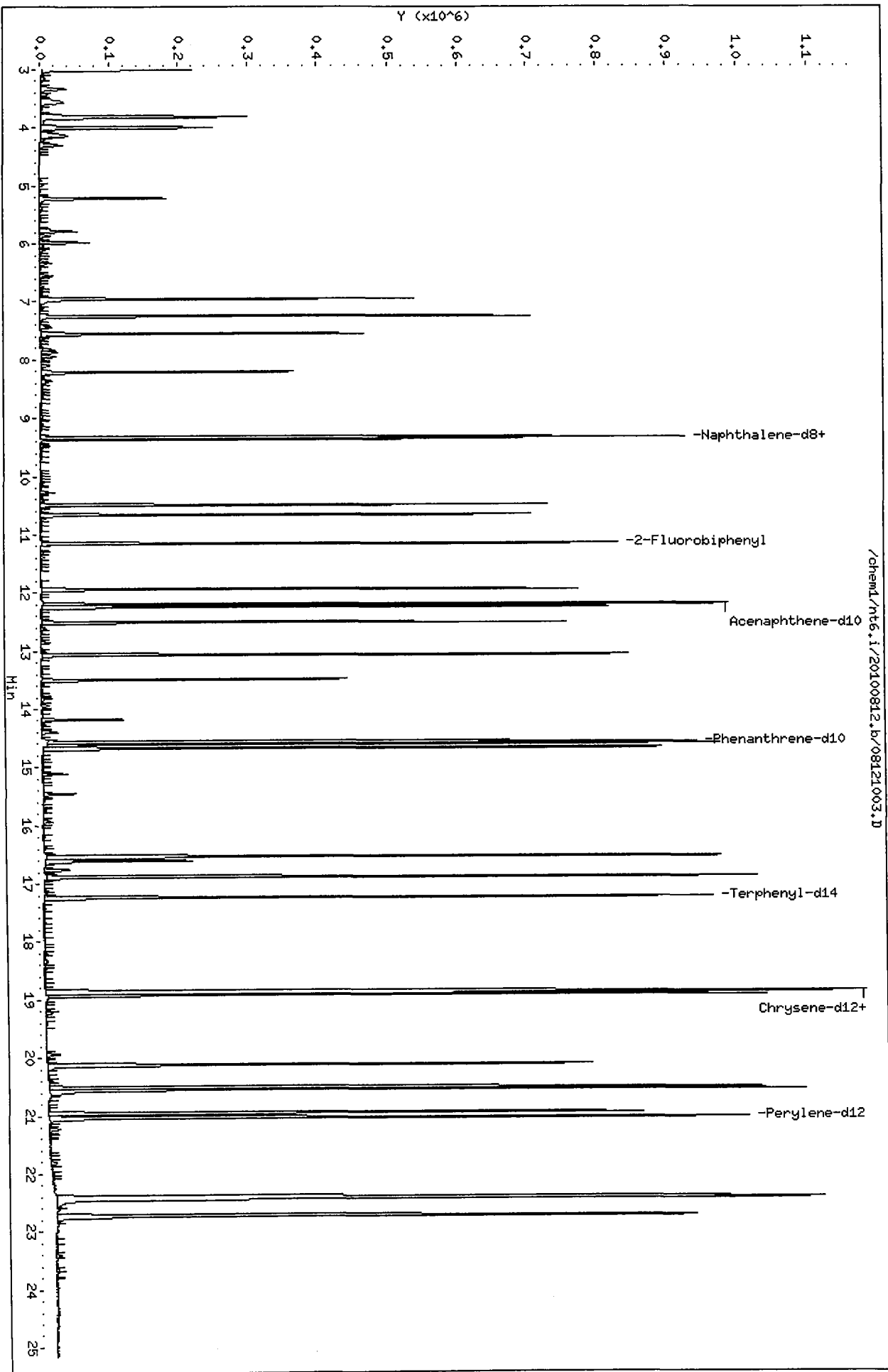
Client Name: Floyd/Snider Client SDG: RG51  
 Sample Matrix: SOLID Fraction: SV  
 Lab Smp Id: RG51LCSS1 Client Smp ID: RG51LCSS1  
 Level: LOW Operator: JZ  
 Data Type: MS DATA SampleType: LCS  
 SpikeList File: pnaslcss.spk Quant Type: ISTD  
 Sublist File: pnas.sub  
 Method File: /chem1/nt6.i/20100812.b/SW846072310.m  
 Misc Info: 10-18188

SPIKE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
28 Naphthalene	500.0	264.5	52.91	37-100
32 2-Methylnaphthalen	500.0	290.4	58.09	43-101
105 1-methylnaphthalen	500.0	281.5	56.30	39-100
40 Acenaphthylene	500.0	295.6	59.12	44-100
44 Acenaphthene	500.0	277.9	55.58	41-100
46 Dibenzofuran	500.0	320.7	64.15	44-100
49 Fluorene	500.0	318.4	63.68	49-100
60 Phenanthrene	500.0	326.2	65.24	48-100
61 Anthracene	500.0	320.6	64.13	50-100
64 Fluoranthene	500.0	373.3	74.67	54-100
65 Pyrene	500.0	381.4	76.29	41-105
68 Benzo(a)anthracene	500.0	390.5	78.09	49-100
71 Chrysene	500.0	383.2	76.65	50-100
187 Total Benzofluoran	1000	752.5	75.25	30-160
76 Benzo(a)pyrene	500.0	336.7	67.34	50-100
78 Indeno(1,2,3-cd)py	500.0	351.6	70.31	33-101
79 Dibenzo(a,h)anthra	500.0	355.7	71.14	37-104
80 Benzo(g,h,i)peryle	500.0	340.2	68.04	33-107

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
\$ 36 2-Fluorobiphenyl	500.0	324.0	64.80	34-100
\$ 66 Terphenyl-d14	500.0	464.9	92.99	35-112

Data File: /chem1/nt6.i/20100812.b/08121003.D  
Date: 12-AUG-2010 12:47  
Client ID: R051LCSS1  
Sample Info: R051LCSS1,  
Volume Injected (uL): 1.0  
Column phase: ZB-5msi

Instrument: nt6.i  
Operator: JZ  
Column diameter: 0.32



R051 : 0000

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt6.i/20100812.b/08121005.D  
 Lab Smp Id: RG51A Client Smp ID: PSB12-0-0.5-072810  
 Inj Date : 12-AUG-2010 13:52  
 Operator : JZ Inst ID: nt6.i  
 Smp Info : RG51A  
 Misc Info : 10-18183  
 Comment : 1ul Injection  
 Method : /chem1/nt6.i/20100812.b/SW846072310.m  
 Meth Date : 12-Aug-2010 18:14 jianqing Quant Type: ISTD  
 Cal Date : 23-JUL-2010 18:38 Cal File: 07231007.D  
 Als bottle: 5  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: pnas.sub  
 Target Version: 3.50

*12 08/12/10*

Concentration Formula:  $Amt * DF * Vt / (Ws * (100 - M) / 100) * CpndVariable$

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Ws	28.40000	Weight of sample extracted (g)
M	9.10000	% Moisture

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG						CONCENTRATIONS	
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/kg)
* 27 Naphthalene-d8	136		9.325	9.329	(1.000)	624298	20.0000	
28 Naphthalene	128							
32 2-Methylnaphthalene	141							
105 1-methylnaphthalene	141							
\$ 36 2-Fluorobiphenyl	172		11.151	11.156	(0.915)	519371	20.3989	395.1
40 Acenaphthylene	152							
* 42 Acenaphthene-d10	164		12.193	12.197	(1.000)	363695	20.0000	
44 Acenaphthene	153							
46 Dibenzofuran	168							
49 Fluorene	166							
* 59 Phenanthrene-d10	188		14.570	14.568	(1.000)	582400	20.0000	
60 Phenanthrene	178							
61 Anthracene	178							
64 Fluoranthene	202							
65 Pyrene	202							

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS		
						ON-COLUMN (ug/mL)	FINAL (ug/kg)	
\$ 66 Terphenyl-d14	244	17.251	17.244	(0.913)	567625	21.1325	409.3	
68 Benzo(a)anthracene	228	Compound Not Detected.						
* 69 Chrysene-d12	240	18.891	18.889	(1.000)	758225	20.0000		
71 Chrysene	228	18.923	18.927	(1.002)	36261	0.88382	17.12	
187 Total Benzofluoranthenes	252	Compound Not Detected.						
76 Benzo(a)pyrene	252	Compound Not Detected.						
* 77 Perylene-d12	264	21.064	21.042	(1.000)	752564	20.0000		
78 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.						
79 Dibenzo(a,h)anthracene	278	Compound Not Detected.						
80 Benzo(g,h,i)perylene	276	Compound Not Detected.						



Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS  
 AREA AND RT SUMMARY

Instrument ID: nt6.i	Calibration Date: 12-AUG-2010
Lab File ID: 08121005.D	Calibration Time: 11:42
Lab Smp Id: RG51A	Client Smp ID: PSB12-0-0.5-0728
Analysis Type: SV	Level: LOW
Quant Type: ISTD	Sample Type: Soil
Operator: JZ	
Method File: /chem1/nt6.i/20100812.b/SW846072310.m	
Misc Info: 10-18183	

Test Mode:  
 Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
27 Naphthalene-d8	584137	292068	1168274	624298	6.88
42 Acenaphthene-d10	320442	160221	640884	363695	13.50
59 Phenanthrene-d10	503793	251896	1007586	582400	15.60
69 Chrysene-d12	532343	266172	1064686	758225	42.43
77 Perylene-d12	517269	258634	1034538	752564	45.49

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
27 Naphthalene-d8	9.33	8.83	9.83	9.32	-0.04
42 Acenaphthene-d10	12.20	11.70	12.70	12.19	-0.03
59 Phenanthrene-d10	14.57	14.07	15.07	14.57	0.01
69 Chrysene-d12	18.89	18.39	19.39	18.89	0.01
77 Perylene-d12	21.04	20.54	21.54	21.06	0.11

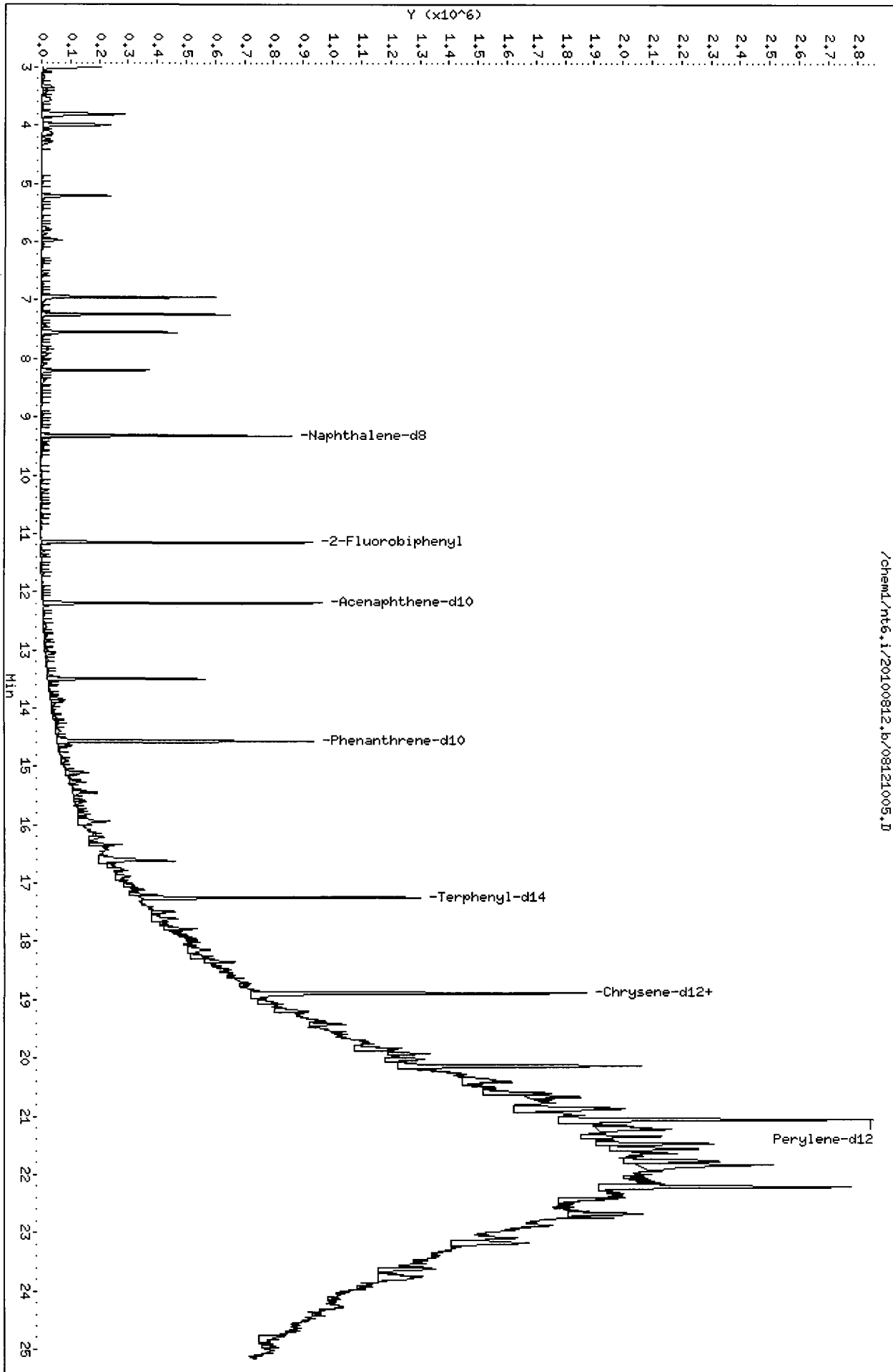
AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = - 50% of internal standard area.  
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



Data File: /chem1/nt6.i/20100812.b/08121005.D  
Date : 12-AUG-2010 13:52  
Client ID: PSB12-0-0.5-072810  
Sample Info: RG51A  
Volume Injected (uL): 1.0  
Column phase: ZB-5msi

Instrument: nt6.i  
Operator: JZ  
Column diameter: 0.32

/chem1/nt6.i/20100812.b/08121005.D



Date : 12-AUG-2010 13:52

Client ID: PSB12-0-0.5-072810

Instrument: nt6.i

Sample Info: RG51A

Volume Injected (uL): 1.0

Operator: JZ

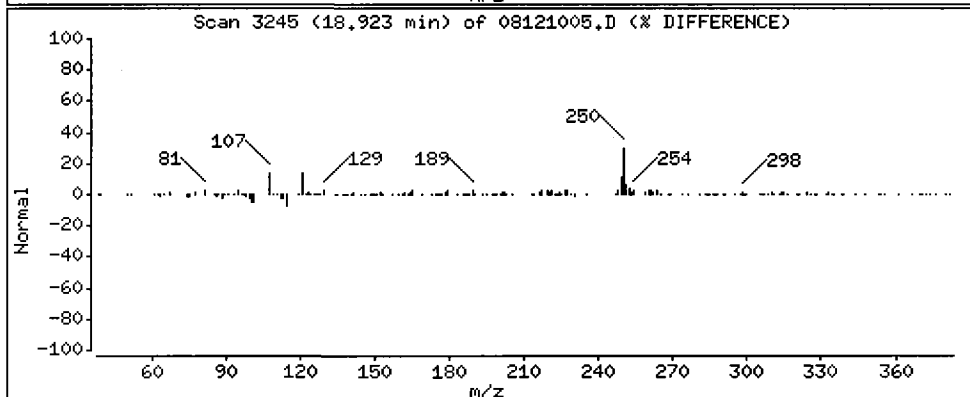
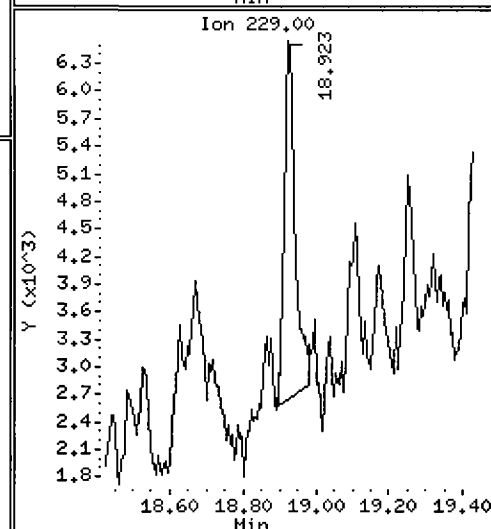
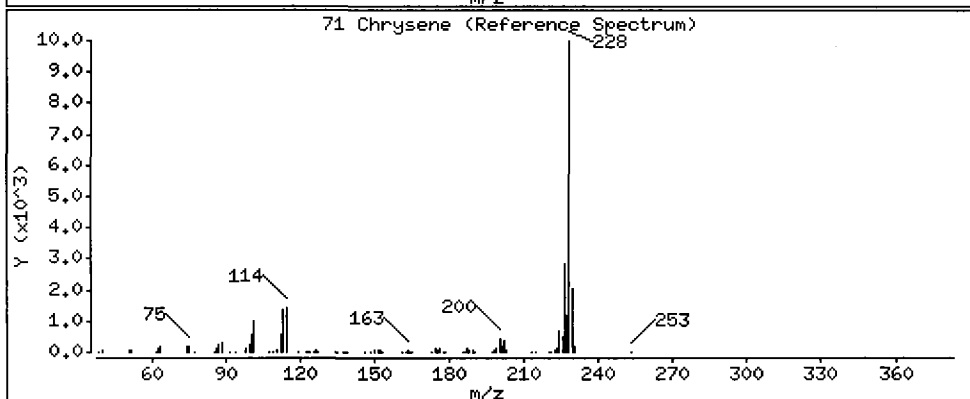
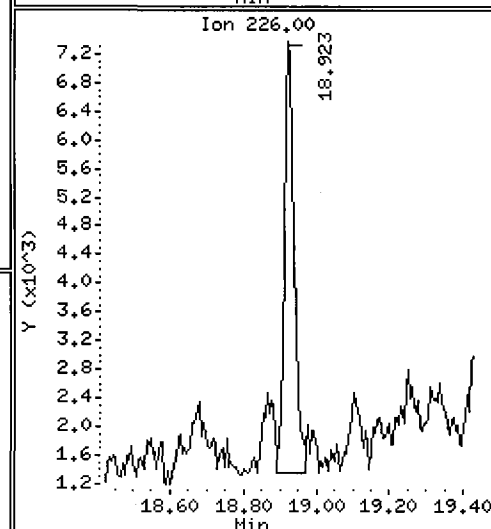
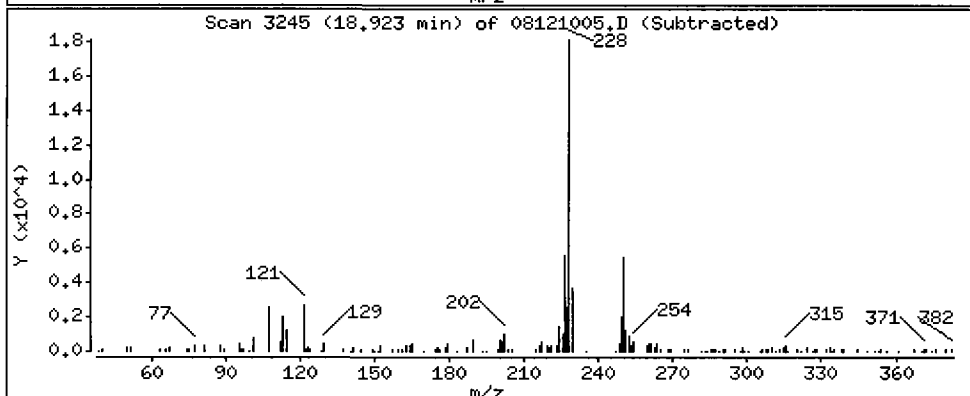
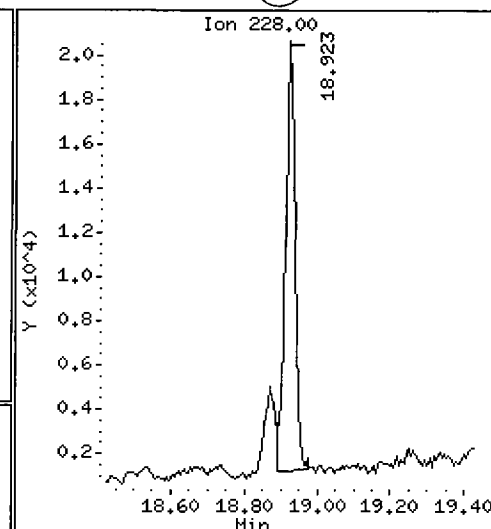
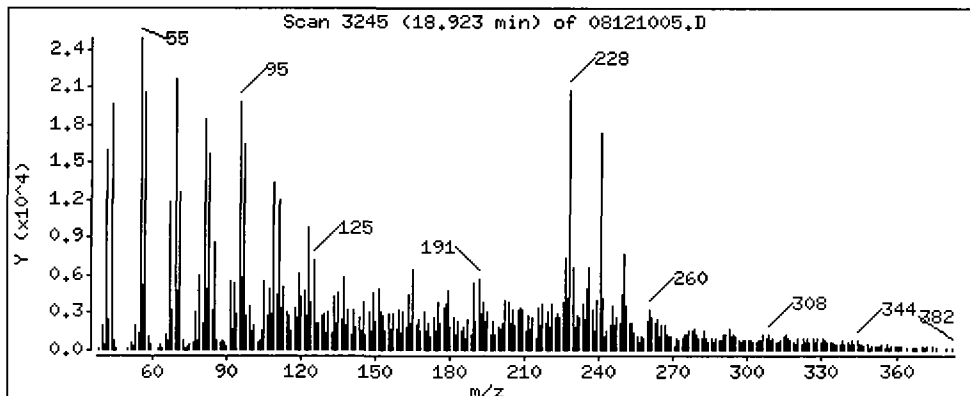
Column phase: ZB-5msi

Column diameter: 0.32

*JZ*

71 Chrysene

Concentration: 17.12 ug/kg



Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt6.i/20100812.b/08121006.D  
 Lab Smp Id: RG51B Client Smp ID: PSB12-1.5-2.0-07281  
 Inj Date : 12-AUG-2010 14:25  
 Operator : JZ Inst ID: nt6.i  
 Smp Info : RG51B  
 Misc Info : 10-18184  
 Comment : 1ul Injection  
 Method : /chem1/nt6.i/20100812.b/SW846072310.m  
 Meth Date : 12-Aug-2010 18:14 jianqing Quant Type: ISTD  
 Cal Date : 23-JUL-2010 18:38 Cal File: 07231007.D  
 Als bottle: 6  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: pnas.sub  
 Target Version: 3.50

*42 ug/12/10*

Concentration Formula:  $Amt * DF * Vt / (Ws * (100 - M) / 100) * CpndVariable$

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Ws	27.00000	Weight of sample extracted (g)
M	5.90000	% Moisture

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG	CONCENTRATIONS						
		RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/kg)	
* 27 Naphthalene-d8	136	9.325	9.329	(1.000)	644085	20.0000		
28 Naphthalene	128	Compound Not Detected.						
32 2-Methylnaphthalene	141	Compound Not Detected.						
105 1-methylnaphthalene	141	Compound Not Detected.						
\$ 36 2-Fluorobiphenyl	172	11.151	11.156	(0.914)	463219	17.5003	344.4	
40 Acenaphthylene	152	Compound Not Detected.						
* 42 Acenaphthene-d10	164	12.198	12.197	(1.000)	378101	20.0000		
44 Acenaphthene	153	Compound Not Detected.						
46 Dibenzofuran	168	Compound Not Detected.						
49 Fluorene	166	Compound Not Detected.						
* 59 Phenanthrene-d10	188	14.570	14.568	(1.000)	606153	20.0000		
60 Phenanthrene	178	Compound Not Detected.						
61 Anthracene	178	Compound Not Detected.						
64 Fluoranthene	202	Compound Not Detected.						
65 Pyrene	202	Compound Not Detected.						

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS		
						ON-COLUMN (ug/mL)	FINAL (ug/kg)	
\$ 66 Terphenyl-d14	244	17.245	17.244	(0.913)	544130	21.1235	415.7	
68 Benzo(a)anthracene	228	Compound Not Detected.						
* 69 Chrysene-d12	240	18.891	18.889	(1.000)	727151	20.0000		
71 Chrysene	228	Compound Not Detected.						
187 Total Benzofluoranthenes	252	Compound Not Detected.						
76 Benzo(a)pyrene	252	Compound Not Detected.						
* 77 Perylene-d12	264	21.054	21.042	(1.000)	726625	20.0000		
78 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.						
79 Dibenzo(a,h)anthracene	278	Compound Not Detected.						
80 Benzo(g,h,i)perylene	276	Compound Not Detected.						

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS  
 AREA AND RT SUMMARY

Instrument ID: nt6.i  
 Lab File ID: 08121006.D  
 Lab Smp Id: RG51B  
 Analysis Type: SV  
 Quant Type: ISTD  
 Operator: JZ  
 Method File: /chem1/nt6.i/20100812.b/SW846072310.m  
 Misc Info: 10-18184

Calibration Date: 12-AUG-2010  
 Calibration Time: 11:42  
 Client Smp ID: PSB12-1.5-2.0-07  
 Level: LOW  
 Sample Type: Soil

Test Mode:  
 Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
27 Naphthalene-d8	584137	292068	1168274	644085	10.26
42 Acenaphthene-d10	320442	160221	640884	378101	17.99
59 Phenanthrene-d10	503793	251896	1007586	606153	20.32
69 Chrysene-d12	532343	266172	1064686	727151	36.59
77 Perylene-d12	517269	258634	1034538	726625	40.47

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
27 Naphthalene-d8	9.33	8.83	9.83	9.32	-0.04
42 Acenaphthene-d10	12.20	11.70	12.70	12.20	0.01
59 Phenanthrene-d10	14.57	14.07	15.07	14.57	0.01
69 Chrysene-d12	18.89	18.39	19.39	18.89	0.01
77 Perylene-d12	21.04	20.54	21.54	21.05	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.

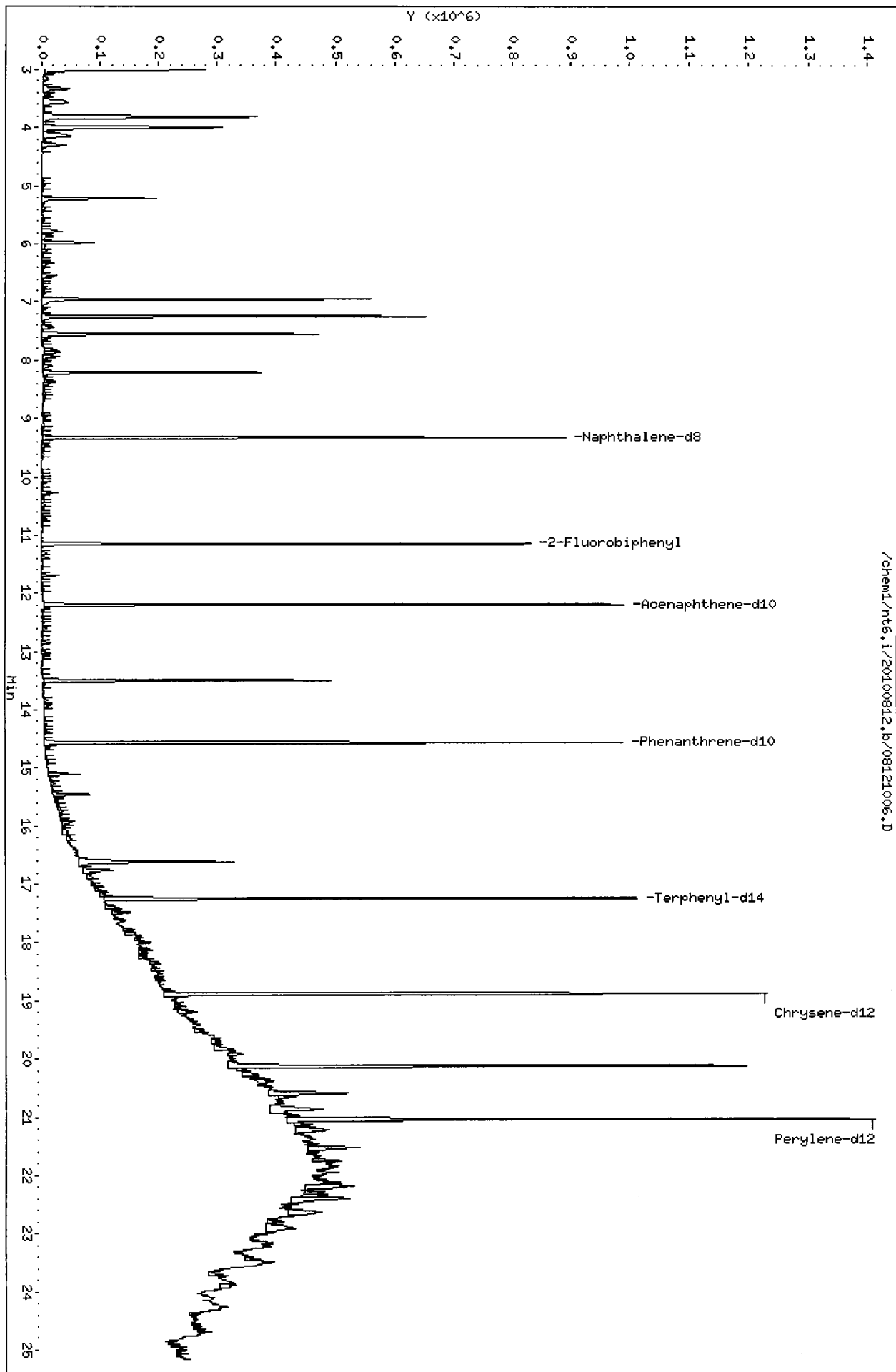




Data File: /chemd/nt6.i/20100812.b/08121006.D  
Date : 12-AUG-2010 14:25  
Client ID: PS812-1.5-2.0-07281  
Sample Info: RG51B  
Volume Injected (uL): 1.0  
Column phase: ZB-5msi

Instrument: nt6.i  
Operator: JZ  
Column diameter: 0.32

/chemd/nt6.i/20100812.b/08121006.D



Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt6.i/20100812.b/08121007.D  
 Lab Smp Id: RG51C Client Smp ID: PSB12-2-4-072810  
 Inj Date : 12-AUG-2010 14:57  
 Operator : JZ Inst ID: nt6.i  
 Smp Info : RG51C  
 Misc Info : 10-18185  
 Comment : 1ul Injection  
 Method : /chem1/nt6.i/20100812.b/SW846072310.m  
 Meth Date : 12-Aug-2010 18:14 jianqing Quant Type: ISTD  
 Cal Date : 23-JUL-2010 18:38 Cal File: 07231007.D  
 Als bottle: 7  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: pnas.sub  
 Target Version: 3.50

*AD 08/12/10*

Concentration Formula:  $Amt * DF * Vt / (Ws * (100 - M) / 100) * CpndVariable$

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Ws	27.00000	Weight of sample extracted (g)
M	6.70000	% Moisture

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG	CONCENTRATIONS						
		RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/kg)	
* 27 Naphthalene-d8	136	9.322	9.329	(1.000)	675619	20.0000		
28 Naphthalene	128	Compound Not Detected.						
32 2-Methylnaphthalene	141	Compound Not Detected.						
105 1-methylnaphthalene	141	Compound Not Detected.						
\$ 36 2-Fluorobiphenyl	172	11.154	11.156	(0.915)	471396	16.7341	332.1	
40 Acenaphthylene	152	Compound Not Detected.						
* 42 Acenaphthene-d10	164	12.195	12.197	(1.000)	402393	20.0000		
44 Acenaphthene	153	Compound Not Detected.						
46 Dibenzofuran	168	Compound Not Detected.						
49 Fluorene	166	Compound Not Detected.						
* 59 Phenanthrene-d10	188	14.572	14.568	(1.000)	645964	20.0000		
60 Phenanthrene	178	Compound Not Detected.						
61 Anthracene	178	Compound Not Detected.						
64 Fluoranthene	202	Compound Not Detected.						
65 Pyrene	202	Compound Not Detected.						

Compounds	QUANT SIG		CONCENTRATIONS					
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/kg)	
=====	====	==	=====	=====	=====	=====	=====	
\$ 66 Terphenyl-d14	244	17.253	17.244	(0.913)	488646	17.8544	354.4	
68 Benzo(a)anthracene	228	Compound Not Detected.						
* 69 Chrysene-d12	240	18.893	18.889	(1.000)	772569	20.0000		
71 Chrysene	228	Compound Not Detected.						
187 Total Benzofluoranthenes	252	Compound Not Detected.						
76 Benzo(a)pyrene	252	Compound Not Detected.						
* 77 Perylene-d12	264	21.056	21.042	(1.000)	779609	20.0000		
78 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.						
79 Dibenzo(a,h)anthracene	278	Compound Not Detected.						
80 Benzo(g,h,i)perylene	276	Compound Not Detected.						

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS  
 AREA AND RT SUMMARY

Instrument ID: nt6.i	Calibration Date: 12-AUG-2010
Lab File ID: 08121007.D	Calibration Time: 11:42
Lab Smp Id: RG51C	Client Smp ID: PSB12-2-4-072810
Analysis Type: SV	Level: LOW
Quant Type: ISTD	Sample Type: Soil
Operator: JZ	
Method File: /chem1/nt6.i/20100812.b/SW846072310.m	
Misc Info: 10-18185	

Test Mode:  
 Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
27 Naphthalene-d8	584137	292068	1168274	675619	15.66
42 Acenaphthene-d10	320442	160221	640884	402393	25.57
59 Phenanthrene-d10	503793	251896	1007586	645964	28.22
69 Chrysene-d12	532343	266172	1064686	772569	45.13
77 Perylene-d12	517269	258634	1034538	779609	50.72

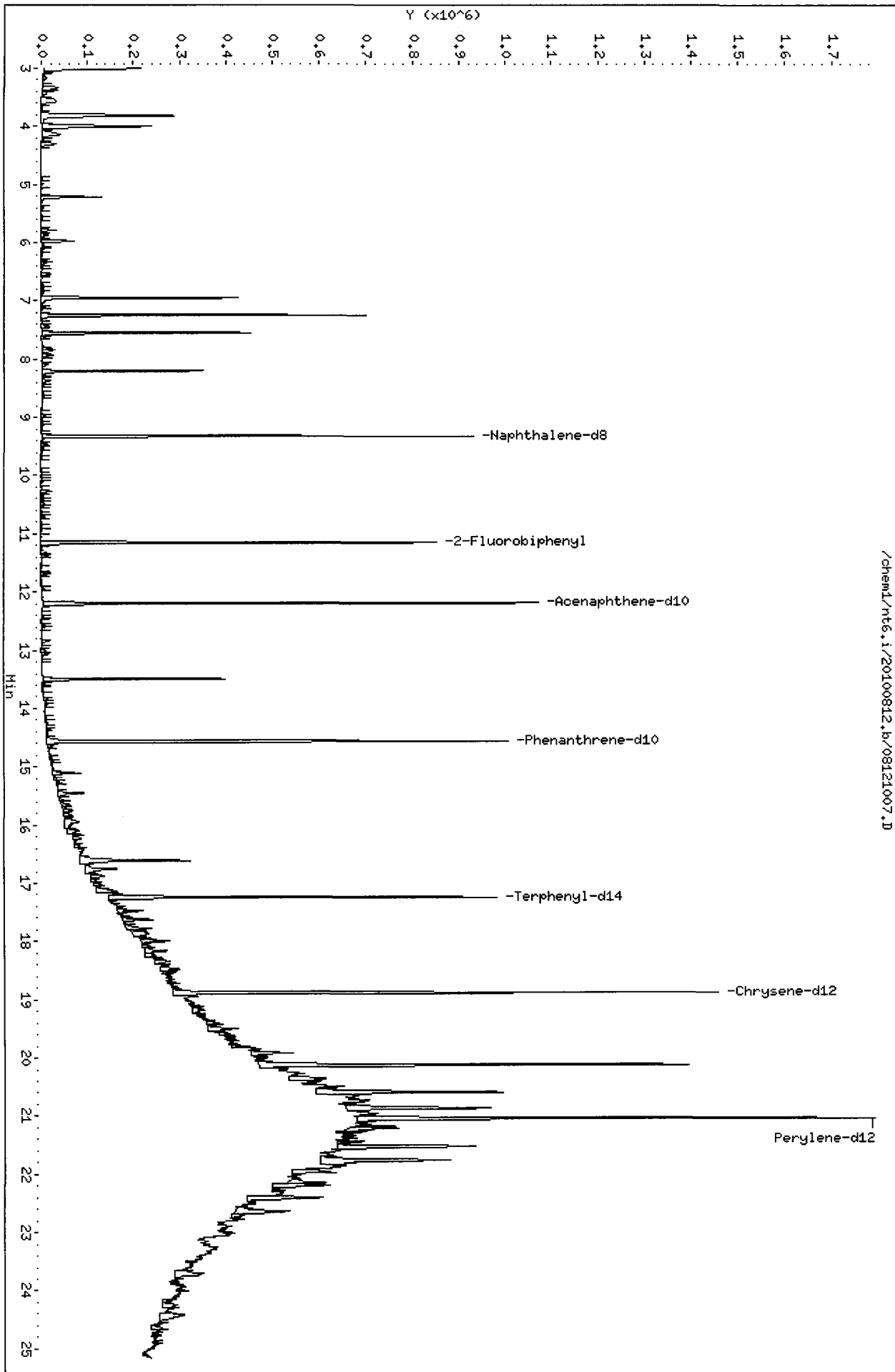
COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
27 Naphthalene-d8	9.33	8.83	9.83	9.32	-0.07
42 Acenaphthene-d10	12.20	11.70	12.70	12.20	-0.01
59 Phenanthrene-d10	14.57	14.07	15.07	14.57	0.03
69 Chrysene-d12	18.89	18.39	19.39	18.89	0.02
77 Perylene-d12	21.04	20.54	21.54	21.06	0.07

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = - 50% of internal standard area.  
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



Data File: /chem1/nt6.i/20100812.b/08121007.D  
Date : 12-AUG-2010 14:57  
Client ID: PSB12-2-4-072810  
Sample Infc: RG51C  
Volume Injected (uL): 1.0  
Column phase: ZB-5ms1

Instrument: nt6.i  
Operator: JZ  
Column diameter: 0.32



/chem1/nt6.i/20100812.b/08121007.D

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt6.i/20100812.b/08121008.D  
 Lab Smp Id: RG51E Client Smp ID: PSB12-8-10-072810-D  
 Inj Date : 12-AUG-2010 15:30  
 Operator : JZ Inst ID: nt6.i  
 Smp Info : RG51E  
 Misc Info : 10-18187  
 Comment : 1ul Injection  
 Method : /chem1/nt6.i/20100812.b/SW846072310.m  
 Meth Date : 12-Aug-2010 18:14 jianqing Quant Type: ISTD  
 Cal Date : 23-JUL-2010 18:38 Cal File: 07231007.D  
 Als bottle: 8  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: pnas.sub  
 Target Version: 3.50

*12 08/12/10*

Concentration Formula: Amt \* DF \* Vt / (Ws \* (100 - M) / 100) \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Ws	27.00000	Weight of sample extracted (g)
M	4.60000	% Moisture

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/mL)	FINAL (ug/kg)
* 27 Naphthalene-d8	136	9.327	9.329	(1.000)	690383	20.0000	
28 Naphthalene	128				Compound Not Detected.		
32 2-Methylnaphthalene	141				Compound Not Detected.		
105 1-methylnaphthalene	141				Compound Not Detected.		
\$ 36 2-Fluorobiphenyl	172	11.154	11.156	(0.914)	402634	14.3511	278.6
40 Acenaphthylene	152				Compound Not Detected.		
* 42 Acenaphthene-d10	164	12.200	12.197	(1.000)	400767	20.0000	
44 Acenaphthene	153				Compound Not Detected.		
46 Dibenzofuran	168				Compound Not Detected.		
49 Fluorene	166				Compound Not Detected.		
* 59 Phenanthrene-d10	188	14.566	14.568	(1.000)	655503	20.0000	
60 Phenanthrene	178				Compound Not Detected.		
61 Anthracene	178				Compound Not Detected.		
64 Fluoranthene	202				Compound Not Detected.		
65 Pyrene	202				Compound Not Detected.		

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/mL)	FINAL (ug/kg)
\$ 66 Terphenyl-d14	244	17.248	17.244	(0.913)	386243	14.3821	279.2
68 Benzo(a)anthracene	228	Compound Not Detected.					
* 69 Chrysene-d12	240	18.887	18.889	(1.000)	758101	20.0000	
71 Chrysene	228	Compound Not Detected.					
187 Total Benzo(a)fluoranthenes	252	Compound Not Detected.					
76 Benzo(a)pyrene	252	Compound Not Detected.					
* 77 Perylene-d12	264	21.045	21.042	(1.000)	745929	20.0000	
78 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
79 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
80 Benzo(g,h,i)perylene	276	Compound Not Detected.					



Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS  
 AREA AND RT SUMMARY

Instrument ID: nt6.i	Calibration Date: 12-AUG-2010
Lab File ID: 08121008.D	Calibration Time: 11:42
Lab Smp Id: RG51E	Client Smp ID: PSB12-8-10-07281
Analysis Type: SV	Level: LOW
Quant Type: ISTD	Sample Type: Soil
Operator: JZ	
Method File: /chem1/nt6.i/20100812.b/SW846072310.m	
Misc Info: 10-18187	

Test Mode:  
 Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
27 Naphthalene-d8	584137	292068	1168274	690383	18.19
42 Acenaphthene-d10	320442	160221	640884	400767	25.07
59 Phenanthrene-d10	503793	251896	1007586	655503	30.11
69 Chrysene-d12	532343	266172	1064686	758101	42.41
77 Perylene-d12	517269	258634	1034538	745929	44.21

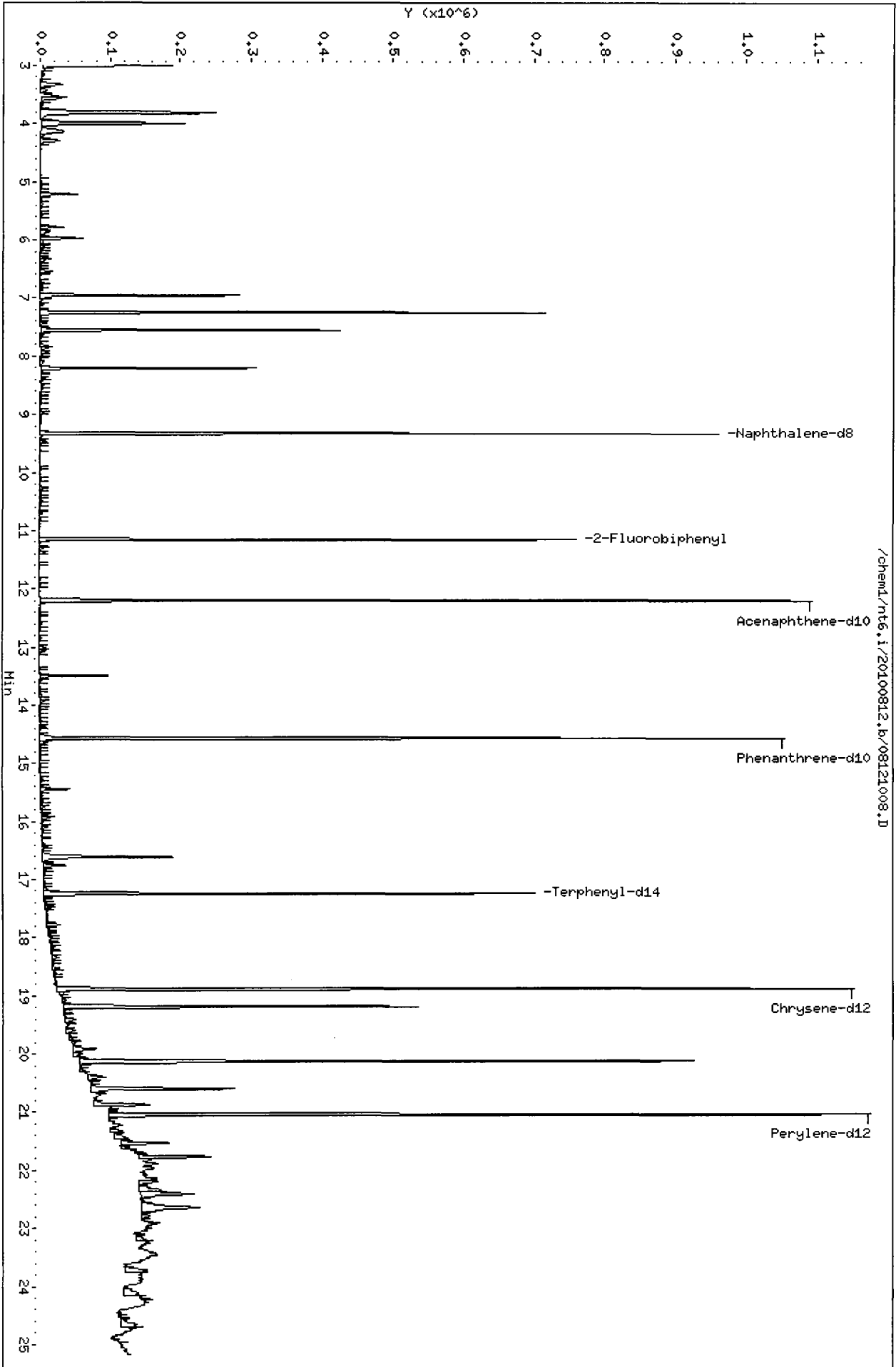
COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
27 Naphthalene-d8	9.33	8.83	9.83	9.33	-0.02
42 Acenaphthene-d10	12.20	11.70	12.70	12.20	0.03
59 Phenanthrene-d10	14.57	14.07	15.07	14.57	-0.01
69 Chrysene-d12	18.89	18.39	19.39	18.89	-0.01
77 Perylene-d12	21.04	20.54	21.54	21.05	0.02

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: /chem1/nt6.i/20100812.b/08121008.D  
Date: 12-AUG-2010 15:30  
Client ID: PSB12-8-10-072810-D  
Sample Info: RG51E  
Volume Injected (uL): 1.0  
Column phase: ZB-5ms1

Instrument: nt6.i  
Operator: JZ  
Column diameter: 0.32



Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt6.i/20100812.b/08121009.D  
 Lab Smp Id: RG51F Client Smp ID: PSB12-14-17-072810  
 Inj Date : 12-AUG-2010 16:03  
 Operator : JZ Inst ID: nt6.i  
 Smp Info : RG51F  
 Misc Info : 10-18188  
 Comment : 1ul Injection  
 Method : /chem1/nt6.i/20100812.b/SW846072310.m  
 Meth Date : 12-Aug-2010 18:14 jianqing Quant Type: ISTD  
 Cal Date : 23-JUL-2010 18:38 Cal File: 07231007.D  
 Als bottle: 9  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: pnas.sub  
 Target Version: 3.50

*D 08/12/10*

Concentration Formula:  $Amt * DF * Vt / (Ws * (100 - M) / 100) * CpndVariable$

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Ws	27.40000	Weight of sample extracted (g)
M	4.70000	% Moisture

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG	CONCENTRATIONS						
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/kg)
* 27 Naphthalene-d8	136	9.322	9.329	(1.000)	672234	20.0000		
28 Naphthalene	128	Compound Not Detected.						
32 2-Methylnaphthalene	141	Compound Not Detected.						
105 1-methylnaphthalene	141	Compound Not Detected.						
\$ 36 2-Fluorobiphenyl	172	11.154	11.156	(0.915)	472396	17.3220	331.7	
40 Acenaphthylene	152	Compound Not Detected.						
* 42 Acenaphthene-d10	164	12.195	12.197	(1.000)	389561	20.0000		
44 Acenaphthene	153	Compound Not Detected.						
46 Dibenzofuran	168	Compound Not Detected.						
49 Fluorene	166	Compound Not Detected.						
* 59 Phenanthrene-d10	188	14.567	14.568	(1.000)	623192	20.0000		
60 Phenanthrene	178	Compound Not Detected.						
61 Anthracene	178	Compound Not Detected.						
64 Fluoranthene	202	Compound Not Detected.						
65 Pyrene	202	Compound Not Detected.						

Compounds	QUANT SIG		CONCENTRATIONS					
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/kg)	
\$ 66 Terphenyl-d14	244	17.248	17.244	(0.913)	543415	19.8949	381.0	
68 Benzo(a)anthracene	228	Compound Not Detected.						
* 69 Chrysene-d12	240	18.887	18.889	(1.000)	771041	20.0000		
71 Chrysene	228	Compound Not Detected.						
187 Total Benzofluoranthenes	252	Compound Not Detected.						
76 Benzo(a)pyrene	252	Compound Not Detected.						
* 77 Perylene-d12	264	21.051	21.042	(1.000)	770890	20.0000		
78 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.						
79 Dibenzo(a,h)anthracene	278	Compound Not Detected.						
80 Benzo(g,h,i)perylene	276	Compound Not Detected.						

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS  
 AREA AND RT SUMMARY

Instrument ID: nt6.i  
 Lab File ID: 08121009.D  
 Lab Smp Id: RG51F  
 Analysis Type: SV  
 Quant Type: ISTD  
 Operator: JZ  
 Method File: /chem1/nt6.i/20100812.b/SW846072310.m  
 Misc Info: 10-18188

Calibration Date: 12-AUG-2010  
 Calibration Time: 11:42  
 Client Smp ID: PSB12-14-17-0728  
 Level: LOW  
 Sample Type: Soil

Test Mode:  
 Use Initial Calibration Level 4.

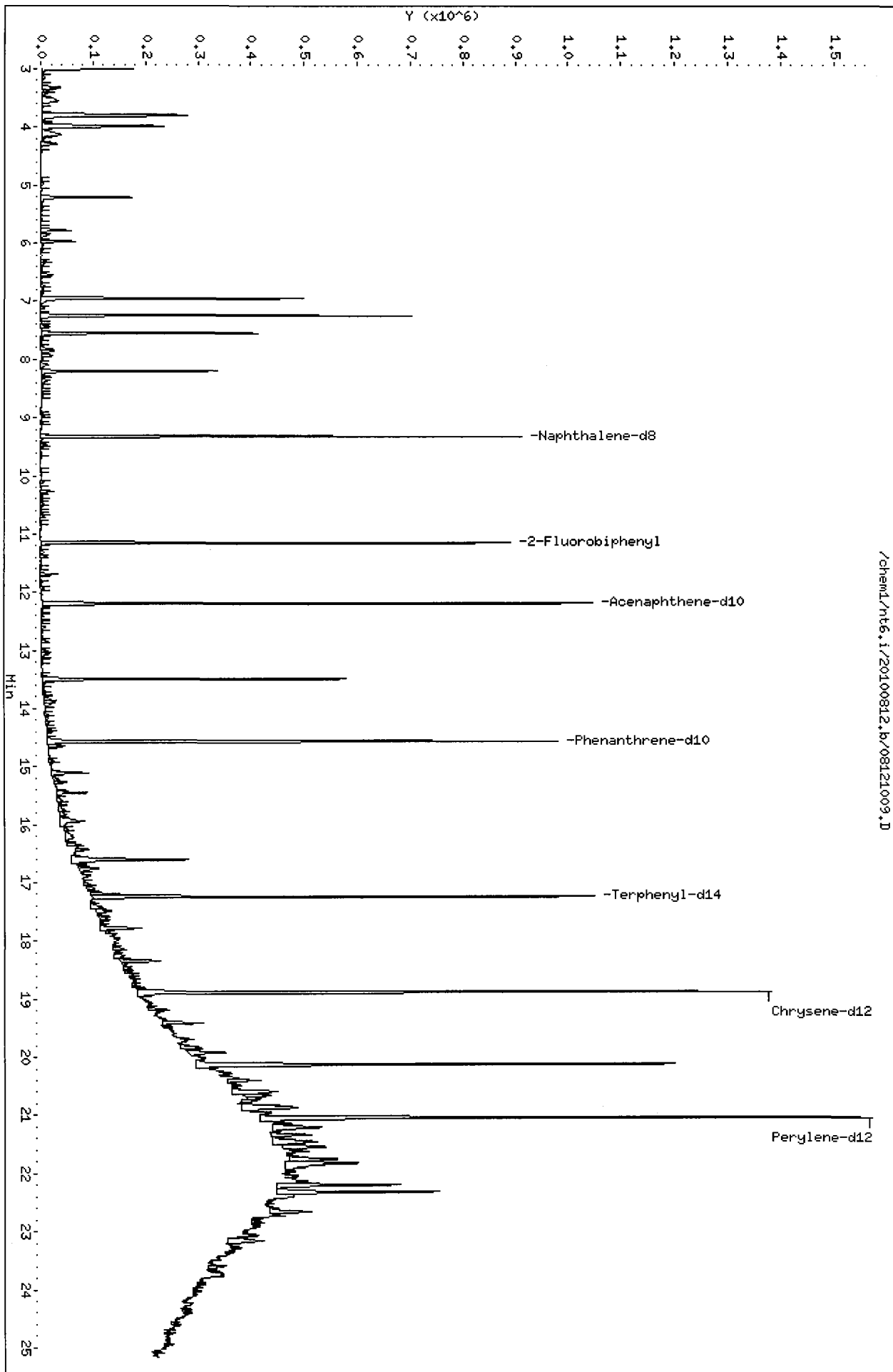
COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
27 Naphthalene-d8	584137	292068	1168274	672234	15.08
42 Acenaphthene-d10	320442	160221	640884	389561	21.57
59 Phenanthrene-d10	503793	251896	1007586	623192	23.70
69 Chrysene-d12	532343	266172	1064686	771041	44.84
77 Perylene-d12	517269	258634	1034538	770890	49.03

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
27 Naphthalene-d8	9.33	8.83	9.83	9.32	-0.08
42 Acenaphthene-d10	12.20	11.70	12.70	12.20	-0.02
59 Phenanthrene-d10	14.57	14.07	15.07	14.57	-0.01
69 Chrysene-d12	18.89	18.39	19.39	18.89	-0.01
77 Perylene-d12	21.04	20.54	21.54	21.05	0.04

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = - 50% of internal standard area.  
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



/chem1/nt6.i/20100812.b/08121009.D





Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt6.i/20100812.b/08121010.D  
 Lab Smp Id: RG51FMS Client Smp ID: PSB12-14-17-072 MS  
 Inj Date : 12-AUG-2010 16:36  
 Operator : JZ Inst ID: nt6.i  
 Smp Info : RG51FMS  
 Misc Info : 10-18188  
 Comment : 1ul Injection  
 Method : /chem1/nt6.i/20100812.b/SW846072310.m  
 Meth Date : 12-Aug-2010 18:11 jianqing Quant Type: ISTD  
 Cal Date : 23-JUL-2010 18:38 Cal File: 07231007.D  
 Als bottle: 10 QC Sample: MS  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: pnas.sub  
 Target Version: 3.50

*Handwritten:* 08/12/10

Concentration Formula:  $Amt * DF * Vt / (Ws * (100 - M) / 100) * CpndVariable$

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Ws	27.10000	Weight of sample extracted (g)
M	4.70000	% Moisture

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG	CONCENTRATIONS					
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)
* 27 Naphthalene-d8	136	9.323	9.329	(1.000)	647337	20.0000	
28 Naphthalene	128	9.355	9.356	(1.003)	500982	13.6929	265.1
32 2-Methylnaphthalene	141	10.492	10.493	(1.125)	316567	15.7661	305.2
105 1-methylnaphthalene	141	10.658	10.659	(1.143)	321926	15.5218	300.5
\$ 36 2-Fluorobiphenyl	172	11.155	11.156	(0.915)	475449	18.4171	356.6
40 Acenaphthylene	152	11.940	11.941	(0.979)	641890	16.9131	327.4
* 42 Acenaphthene-d10	164	12.196	12.197	(1.000)	368766	20.0000	
44 Acenaphthene	153	12.244	12.250	(1.004)	379182	15.9987	309.7
46 Dibenzofuran	168	12.511	12.512	(1.026)	575211	18.2715	353.7
49 Fluorene	166	13.067	13.068	(1.071)	483277	18.0182	348.8
* 59 Phenanthrene-d10	188	14.568	14.568	(1.000)	609818	20.0000	
60 Phenanthrene	178	14.605	14.606	(1.003)	666909	17.6062	340.9
61 Anthracene	178	14.674	14.681	(1.007)	675748	17.2690	334.3
64 Fluoranthene	202	16.544	16.539	(1.136)	783246	19.0828	369.4
65 Pyrene	202	16.891	16.892	(0.894)	805003	18.4550	357.3

Compounds	QUANT SIG		CONCENTRATIONS				
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/kg)
=====	====	==	=====	=====	=====	=====	=====
\$ 66 Terphenyl-d14	244	17.249	17.244	(0.913)	513563	20.0165	387.5
68 Benzo(a)anthracene	228	18.867	18.863	(0.999)	815375	19.4751	377.0
* 69 Chrysene-d12	240	18.894	18.889	(1.000)	724259	20.0000	
71 Chrysene	228	18.931	18.927	(1.002)	755231	19.2711	373.1
187 Total Benzofluoranthenes	252	20.560	20.556	(0.977)	1700904	35.4984	687.3
76 Benzo(a)pyrene	252	20.971	20.962	(0.996)	757453	16.1420	312.5
* 77 Perylene-d12	264	21.052	21.042	(1.000)	744130	20.0000	
78 Indeno(1,2,3-cd)pyrene	276	22.424	22.414	(1.065)	948105	15.1034	292.4
79 Dibenzo(a,h)anthracene	278	22.451	22.441	(1.066)	759211	15.7387	304.7
80 Benzo(g,h,i)perylene	276	22.755	22.740	(1.081)	769779	13.5940	263.2

Analytical Resources, Inc.  
 INTERNAL STANDARD COMPOUNDS  
 AREA AND RT SUMMARY

Instrument ID: nt6.i  
 Lab File ID: 08121010.D  
 Lab Smp Id: RG51FMS  
 Analysis Type: SV  
 Quant Type: ISTD  
 Operator: JZ  
 Method File: /chem1/nt6.i/20100812.b/SW846072310.m  
 Misc Info: 10-18188

Calibration Date: 12-AUG-2010  
 Calibration Time: 11:42  
 Client Smp ID: PSB12-14-17-072  
 Level: LOW  
 Sample Type: Soil

Test Mode:  
 Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
27 Naphthalene-d8	584137	292068	1168274	647337	10.82
42 Acenaphthene-d10	320442	160221	640884	368766	15.08
59 Phenanthrene-d10	503793	251896	1007586	609818	21.05
69 Chrysene-d12	532343	266172	1064686	724259	36.05
77 Perylene-d12	517269	258634	1034538	744130	43.86

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
27 Naphthalene-d8	9.33	8.83	9.83	9.32	-0.07
42 Acenaphthene-d10	12.20	11.70	12.70	12.20	-0.01
59 Phenanthrene-d10	14.57	14.07	15.07	14.57	-0.01
69 Chrysene-d12	18.89	18.39	19.39	18.89	0.02
77 Perylene-d12	21.04	20.54	21.54	21.05	0.05

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = - 50% of internal standard area.  
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

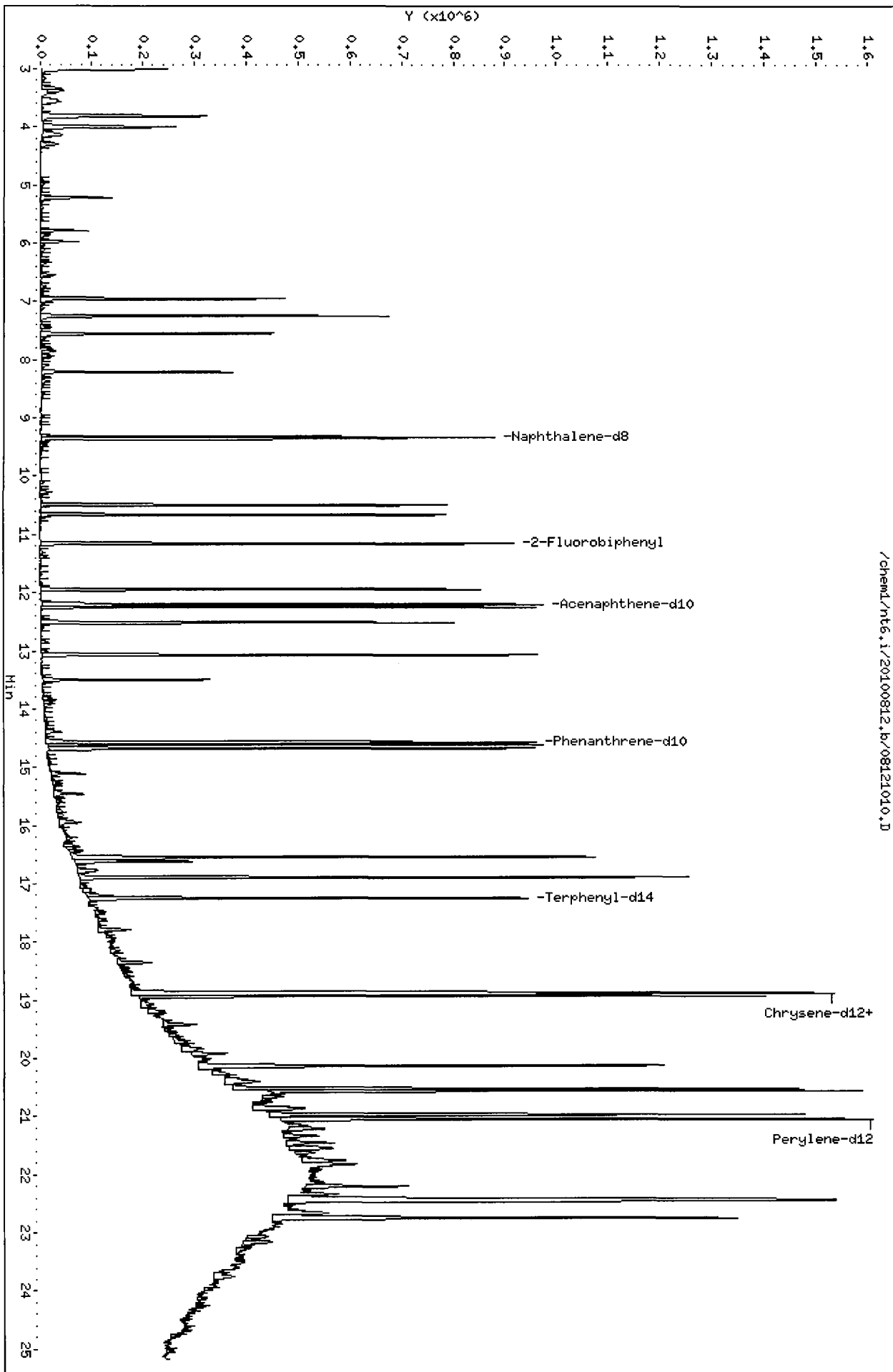
RECOVERY REPORT

Client Name: FSI	Client SDG: RG51
Sample Matrix: SOLID	Fraction: SV
Lab Smp Id: RG51FMS	Client Smp ID: PSB12-14-17-072 MS
Level: LOW	Operator: JZ
Data Type: MS DATA	SampleType: MS
SpikeList File: pnaslcss.spk	Quant Type: ISTD
Sublist File: pnas.sub	
Method File: /chem1/nt6.i/20100812.b/SW846072310.m	
Misc Info: 10-18188	

SPIKE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
28 Naphthalene	484.0	265.1	54.77	37-100
32 2-Methylnaphthalen	484.0	305.2	63.06	43-101
105 1-methylnaphthalen	484.0	300.5	62.09	39-100
40 Acenaphthylene	484.0	327.4	67.65	44-100
44 Acenaphthene	484.0	309.7	63.99	41-100
46 Dibenzofuran	484.0	353.7	73.09	44-100
49 Fluorene	484.0	348.8	72.07	49-100
60 Phenanthrene	484.0	340.9	70.42	48-100
61 Anthracene	484.0	334.3	69.08	50-100
64 Fluoranthene	484.0	369.4	76.33	54-100
65 Pyrene	484.0	357.3	73.82	41-105
68 Benzo(a)anthracene	484.0	377.0	77.90	49-100
71 Chrysene	484.0	373.1	77.08	50-100
187 Total Benzofluoran	968.0	687.3	71.00	30-160
76 Benzo(a)pyrene	484.0	312.5	64.57	50-100
78 Indeno(1,2,3-cd)py	484.0	292.4	60.41	33-101
79 Dibenzo(a,h)anthra	484.0	304.7	62.95	37-104
80 Benzo(g,h,i)peryle	484.0	263.2	54.38	33-107

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
\$ 36 2-Fluorobiphenyl	484.0	356.6	73.67	34-100
\$ 66 Terphenyl-d14	484.0	387.5	80.07	35-112

/chem/nt6.i/20100812.b/08121010.D



Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt6.i/20100812.b/08121011.D  
 Lab Smp Id: RG51FMSD Client Smp ID: PSB12-14-17-072 MSD  
 Inj Date : 12-AUG-2010 17:08  
 Operator : JZ Inst ID: nt6.i  
 Smp Info : RG51FMSD  
 Misc Info : 10-18188  
 Comment : lul Injection  
 Method : /chem1/nt6.i/20100812.b/SW846072310.m  
 Meth Date : 12-Aug-2010 18:11 jianqing Quant Type: ISTD  
 Cal Date : 23-JUL-2010 18:38 Cal File: 07231007.D  
 Als bottle: 11 QC Sample: MSD  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: pnas.sub  
 Target Version: 3.50

*B 08/12/10*

Concentration Formula:  $Amt * DF * Vt / (Ws * (100 - M) / 100) * CpndVariable$

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Ws	27.10000	Weight of sample extracted (g)
M	4.70000	% Moisture

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG	CONCENTRATIONS					
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)
* 27 Naphthalene-d8	136	9.323	9.329	(1.000)	684526	20.0000	
28 Naphthalene	128	9.355	9.356	(1.003)	494084	12.7707	247.2
32 2-Methylnaphthalene	141	10.492	10.493	(1.125)	310168	14.6082	282.8
105 1-methylnaphthalene	141	10.658	10.659	(1.143)	313801	14.3081	277.0
\$ 36 2-Fluorobiphenyl	172	11.155	11.156	(0.915)	457061	16.6788	322.9
40 Acenaphthylene	152	11.940	11.941	(0.979)	636369	15.7960	305.8
* 42 Acenaphthene-d10	164	12.196	12.197	(1.000)	391450	20.0000	
44 Acenaphthene	153	12.244	12.250	(1.004)	367896	14.6230	283.1
46 Dibenzofuran	168	12.511	12.512	(1.026)	558880	16.7240	323.8
49 Fluorene	166	13.067	13.068	(1.071)	466692	16.3915	317.3
* 59 Phenanthrene-d10	188	14.567	14.568	(1.000)	646825	20.0000	
60 Phenanthrene	178	14.605	14.606	(1.003)	654588	16.2922	315.4
61 Anthracene	178	14.680	14.681	(1.008)	662280	15.9565	308.9
64 Fluoranthene	202	16.544	16.539	(1.136)	788846	18.1197	350.8
65 Pyrene	202	16.891	16.892	(0.894)	799556	16.4914	319.3

Compounds	QUANT SIG		CONCENTRATIONS				
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/kg)
=====	====	==	=====	=====	=====	=====	=====
\$ 66 Terphenyl-d14	244	17.249	17.244	(0.913)	549109	19.2550	372.8
68 Benzo(a)anthracene	228	18.867	18.863	(0.999)	835171	17.9469	347.5
* 69 Chrysene-d12	240	18.894	18.889	(1.000)	805012	20.0000	
71 Chrysene	228	18.931	18.927	(1.002)	785525	18.0335	349.1
187 Total Benzofluoranthenes	252	20.555	20.556	(0.976)	1773125	33.9975	658.2
76 Benzo(a)pyrene	252	20.971	20.962	(0.996)	783876	15.3472	297.1
* 77 Perylene-d12	264	21.052	21.042	(1.000)	809972	20.0000	
78 Indeno(1,2,3-cd)pyrene	276	22.430	22.414	(1.065)	1000610	14.6441	283.5
79 Dibenzo(a,h)anthracene	278	22.451	22.441	(1.066)	799570	15.2280	294.8
80 Benzo(g,h,i)perylene	276	22.761	22.740	(1.081)	808686	13.1202	254.0

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS  
 AREA AND RT SUMMARY

Instrument ID: nt6.i	Calibration Date: 12-AUG-2010
Lab File ID: 08121011.D	Calibration Time: 11:42
Lab Smp Id: RG51FMSD	Client Smp ID: PSB12-14-17-072
Analysis Type: SV	Level: LOW
Quant Type: ISTD	Sample Type: Soil
Operator: JZ	
Method File: /chem1/nt6.i/20100812.b/SW846072310.m	
Misc Info: 10-18188	

Test Mode:  
 Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
27 Naphthalene-d8	584137	292068	1168274	684526	17.19
42 Acenaphthene-d10	320442	160221	640884	391450	22.16
59 Phenanthrene-d10	503793	251896	1007586	646825	28.39
69 Chrysene-d12	532343	266172	1064686	805012	51.22
77 Perylene-d12	517269	258634	1034538	809972	56.59

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
27 Naphthalene-d8	9.33	8.83	9.83	9.32	-0.07
42 Acenaphthene-d10	12.20	11.70	12.70	12.20	-0.01
59 Phenanthrene-d10	14.57	14.07	15.07	14.57	-0.01
69 Chrysene-d12	18.89	18.39	19.39	18.89	0.02
77 Perylene-d12	21.04	20.54	21.54	21.05	0.05

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = - 50% of internal standard area.  
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



Analytical Resources, Inc.

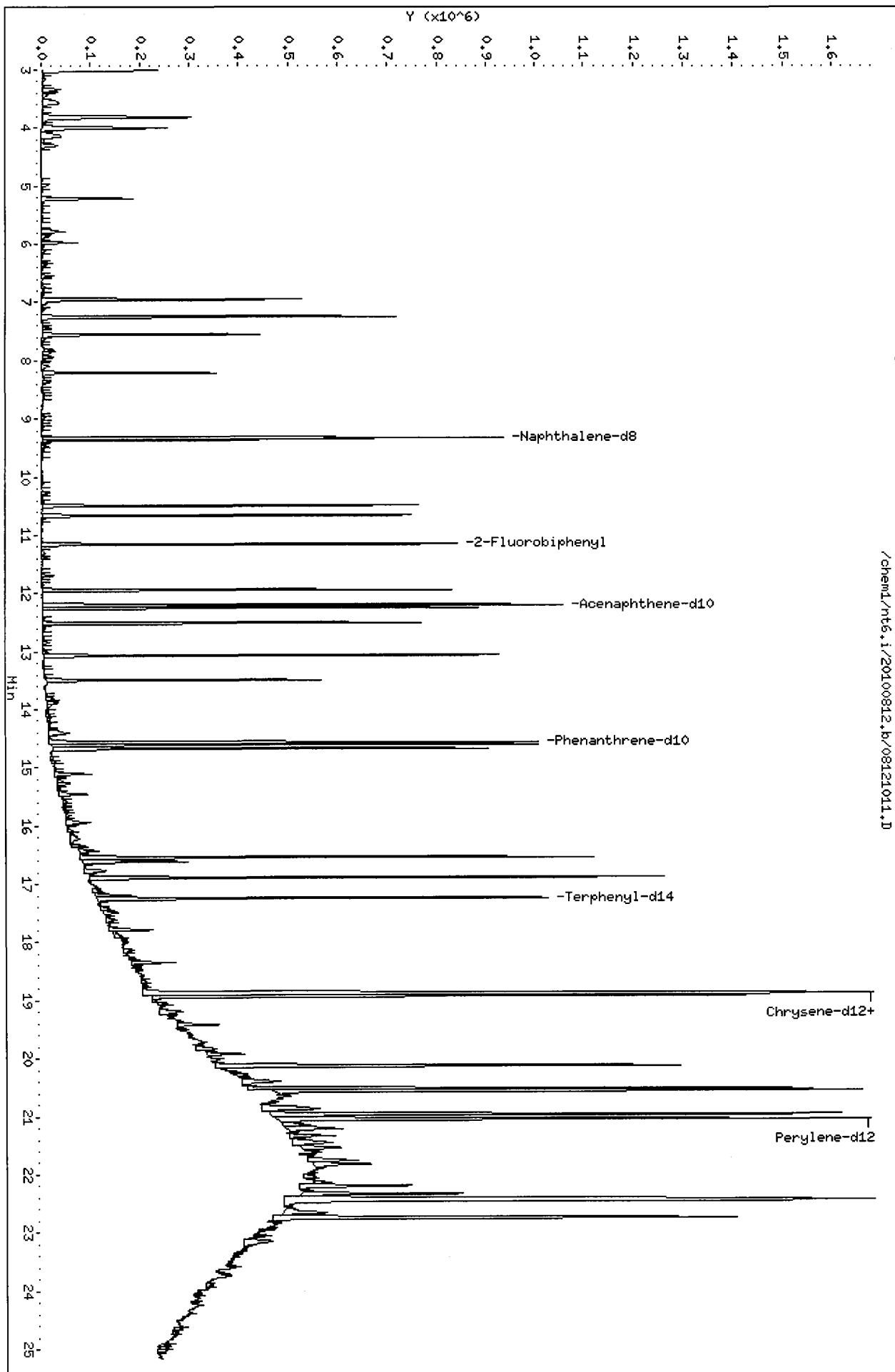
RECOVERY REPORT

Client Name: FSI Client SDG: RG51  
 Sample Matrix: SOLID Fraction: SV  
 Lab Smp Id: RG51FMSD Client Smp ID: PSB12-14-17-072 MSD  
 Level: LOW Operator: JZ  
 Data Type: MS DATA SampleType: MSD  
 SpikeList File: pnaslcss.spk Quant Type: ISTD  
 Sublist File: pnas.sub  
 Method File: /chem1/nt6.i/20100812.b/SW846072310.m  
 Misc Info: 10-18188

SPIKE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
28 Naphthalene	484.0	247.2	51.08	37-100
32 2-Methylnaphthalen	484.0	282.8	58.43	43-101
105 1-methylnaphthalen	484.0	277.0	57.23	39-100
40 Acenaphthylene	484.0	305.8	63.18	44-100
44 Acenaphthene	484.0	283.1	58.49	41-100
46 Dibenzofuran	484.0	323.8	66.90	44-100
49 Fluorene	484.0	317.3	65.57	49-100
60 Phenanthrene	484.0	315.4	65.17	48-100
61 Anthracene	484.0	308.9	63.83	50-100
64 Fluoranthene	484.0	350.8	72.48	54-100
65 Pyrene	484.0	319.3	65.97	41-105
68 Benzo(a)anthracene	484.0	347.5	71.79	49-100
71 Chrysene	484.0	349.1	72.13	50-100
187 Total Benzofluoran	968.0	658.2	67.99	30-160
76 Benzo(a)pyrene	484.0	297.1	61.39	50-100
78 Indeno(1,2,3-cd)py	484.0	283.5	58.58	33-101
79 Dibenzo(a,h)anthra	484.0	294.8	60.91	37-104
80 Benzo(g,h,i)peryle	484.0	254.0	52.48	33-107

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
\$ 36 2-Fluorobiphenyl	484.0	322.9	66.72	34-100
\$ 66 Terphenyl-d14	484.0	372.8	77.02	35-112

/chem1/nt6.i/20100812.b/08121011.D



**PCP/Chlorophenols Raw Data  
Extraction Bench Sheets and Notes**

**ARI Job ID: RG51**



Preparation Test PCP # 3

ARI Job No(s) RG 51

In-House (6.25ppb)  
Batch set up by: SP

Bottle #	Extraction Requirements	Verify Client ID	Volume Extracted (wet wt)	Sonic Horn ID	KD Exchange To Hexane (X 2)	Turbo Vap 12B	Final Effective Volume	Volume to Lab	Derivitize	Comments
	RG51 MB	Date 8/7/10	10.00g	12			25mL	1-2mL		
	SB	↓	↓	11						
2	A	checked	10.13	10						
1	B		10.70	9						
	C		10.28	8						
	D		10.51	7						
	E		10.43	6						
	F		10.08	5						
	Fms		10.26	4						
	Fms2		10.76	3						
	G		10.18	2						
Analyst/Date				AR 08/10/10	RR 08/10/10	WO 08/11/10	MO 08/11/10	VR 08/11/10		

Standard	Standard ID	Volume	Expiration Date	Analyst	Witness
Surrogate	F	50µL	12/9/10	WC	SP
Spike	6	50µL	2/18/11	WC	SP
Extraction Time: 1415		Balance ID: 24150193		Derivitized by:	
				Diazald ID:	

- SPECIAL INSTRUCTIONS: 1. Weigh into 100mL beakers. 2. Use neutral sulfate to dry samples.
3. Acidify all with ¼ pipet conc. Sulfuric Acid. 4. Add surr/spike. 5. Leave in DCM overnight. 6. Extract 3X DCM.
7. Pour directly into KD (NO Glasswool). 8. KD to 5mL at 80°. 9. Exchange (2 X with 20mL) Hexane at 100°.
10. \*Note: if filtering is necessary: Pre-rinse filter with 0.05% HCL in Acetone+Post Rinse with Hexane or centrifuge.
11. Turbo Vap to 1mL 11. Vial using a pipet into Herb Tubes with a Hexane rinse. 12. GC Analyst to Derivitize.

A. Need Total Solids Y (N) B. Archive / Freeze Y (N)



**PCP/Chlorophenols Raw Data  
Initial Calibration**

**ARI Job ID: RG51**



### GC Analyst Notes / Corrective Action Log

ARI Project ID: PCP Curve Client ID: ARI

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): \_\_\_\_\_

Instrument: FID-3A FID-3B FID-4A FID-4B FID-5 FID-7 FID-8  
FID-9 ECD-1 ECD-3 ECD-4 ECD-5 ECD-6 ECD-7

Dates: Curve: 8/9/2010 Analysis Start: 8/11/2010

Endrin/DDT Breakdown <15%?	YES / NO / <u>NA</u>	Method Blank In Control?	<u>YES</u> / NO / <u>NA</u>
ICal Meets RF & %RSD Criteria?	<u>YES</u> / NO	LCS/LCSD Recovery In Control?	<u>YES</u> / NO / <u>NA</u>
CCal Meets RF & %RSD Criteria?	<u>YES</u> / NO	Surrogate Recovery In Control?	<u>YES</u> / NO
Manual Integrations for ICal?	<u>YES</u> / NO	Manual Integrations for Samples?	<u>YES</u> / NO
Internal Standard Meets Criteria?	YES / NO / <u>NA</u>	Special Analysis Criteria Met?	YES / NO / <u>NA</u>

**Detail problems, corrective actions and/or other pertinent information below (use reverse side when necessary):**

2nd col: Quadratic - forced: 2,4-Dichlorophenol, 2,4,5-Trichlorophenol, 2,3,4-Trichlorophenol  
1st col: Quadratic - forced: 2,4-Dichlorophenol, 2,4,6-TCP, 2,3,6-TCP, 2,3,4,5-Tetrachlorophenol, Pentachlorophenol & 2,4,6-Tribromophenol.

Additional Details on Reverse: Yes / No (No)

Analyst: \_\_\_\_\_ Date: 8/12/2010

Reviewer: B Date: 8/11/10

## GC LOG SUMMARY FOR DATABATCH - /chem2/ecd1.i/FPCP20100809.b/ical-1.b

	Inject	Date/Time	Filename	DF	LabID	ClientID
1	09-AUG-2010	12:23	0809A005.d	1	PCPD	
2	09-AUG-2010	12:43	0809A006.d	1	PCPA	
3	09-AUG-2010	13:03	0809A007.d	1	PCPB	
4	09-AUG-2010	13:23	0809A008.d	1	PCPC	
5	09-AUG-2010	13:43	0809A009.d	1	PCPE	
6	09-AUG-2010	14:03	0809A010.d	1	PCPF	
7	09-AUG-2010	14:23	0809A011.d	1	PCP ICV	



Report Date : 12-Aug-2010 19:59

Analytical Resources, Inc.  
RETENTION TIME SUMMARY REPORT

Method File: /chem2/ecdl.i/FPCP20100809.b/FPCP.m  
Batch File: /chem2/ecdl.i/FPCP20100809.b/ical-1.b  
Inst ID: ecd1.i

ID	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
FILENAME: 0809A005	0809A006	0809A007	0809A008	0809A009	0809A010	0809A010	0809A011				
INJ DATE: 09-AUG-2010	09-AUG-2010	09-AUG-2010	09-AUG-2010	09-AUG-2010	09-AUG-2010	09-AUG-2010	09-AUG-2010				
INJ TIME: 12:23	12:43	13:03	13:23	13:43	14:03	14:23	14:23				
Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
1 2,4-Dichlorophenol	6.887	6.897	6.893	6.890	6.884	6.884	6.888	6.893	6.823-6.963	6.889	0.005
2 2,4,6-Trichlorophenol	7.261	7.263	7.264	7.263	7.259	7.260	7.262	7.264	7.194-7.334	7.262	0.002
3 2,3,6-Trichlorophenol	7.615	7.622	7.619	7.617	7.611	7.612	7.616	7.619	7.549-7.689	7.616	0.004
4 2,4,5-Trichlorophenol	8.221	8.253	8.242	8.232	8.212	8.209	8.230	8.242	8.172-8.312	8.228	0.016
5 2,3,4-Trichlorophenol	8.770	8.806	8.792	8.780	8.760	8.756	8.781	8.792	8.722-8.862	8.778	0.017
6 2,3,5,6-Tetrachlorophe	8.996	9.013	9.007	9.002	8.990	8.990	9.000	9.007	8.937-9.077	9.000	0.009
7 2,4,6-Tribromophenol (	9.990	10.010	10.002	9.996	9.984	9.983	9.997	10.002	9.932-10.072	9.995	0.010
8 2,3,4,5-Tetrachlorophe	10.397	10.421	10.413	10.406	10.389	10.387	10.405	10.413	10.343-10.483	10.402	0.012
9 Pentachlorophenol	11.212	11.225	11.219	11.215	11.206	11.206	11.215	11.219	11.149-11.289	11.214	0.007

Reviewer 1 AR Date: 8/12/2010  
 Reviewer 2 [Signature] Date: 8/12/10

Report Date : 12-Aug-2010 19:59

Analytical Resources, Inc.  
RETENTION TIME SUMMARY REPORT

Method File: /chem2/ecdl.i/FPCP20100809.b/FPCPB.m  
Batch File: /chem2/ecdl.i/FPCP20100809.b/ical-2.b  
Inst ID: ecd1.i

ID	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
FILENAME:	0809A005	0809A006	0809A007	0809A008	0809A009	0809A010	0809A011				
INJ DATE:	09-AUG-2010	09-AUG-2010	09-AUG-2010	09-AUG-2010	09-AUG-2010	09-AUG-2010	09-AUG-2010				
INJ TIME:	12:23	12:43	13:03	13:23	13:43	14:03	14:23				
Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
1 2,4-Dichlorophenol	7.156	7.166	7.163	7.160	7.153	7.153	7.158	7.166	7.096-7.236	7.158	0.005
2 2,4,6-Trichlorophenol	7.329	7.333	7.333	7.331	7.327	7.328	7.330	7.333	7.263-7.403	7.330	0.002
3 2,3,6-Trichlorophenol	7.858	7.864	7.862	7.860	7.855	7.856	7.859	7.864	7.794-7.934	7.859	0.003
4 2,4,5-Trichlorophenol	8.593	8.615	8.607	8.600	8.586	8.584	8.599	8.615	8.545-8.685	8.598	0.011
5 2,3,5,6-Tetrachlorophe	9.262	9.277	9.270	9.266	9.256	9.257	9.265	9.277	9.207-9.347	9.265	0.007
6 2,3,4-Trichlorophenol	9.359	9.380	9.373	9.365	9.351	9.349	9.365	9.380	9.310-9.450	9.363	0.011
7 2,4,6-Tribromophenol (	10.632	10.646	10.640	10.636	10.626	10.627	10.636	10.646	10.576-10.716	10.635	0.007
8 2,3,4,5-Tetrachlorophe	11.109	11.126	11.119	11.115	11.103	11.103	11.114	11.126	11.056-11.196	11.113	0.009
9 Pentachlorophenol	11.649	11.658	11.654	11.652	11.645	11.646	11.652	11.658	11.588-11.728	11.651	0.005

Reviewer 1 AR Date: 8/12/2010  
Reviewer 2 SP Date: 8/17/10

MANUAL INTEGRATION SUMMARY FOR DATABATCH - /chem2/ecdl.i/FPCP20100809.b/ical-1.b

ARI Job No.: PCPD Method: FPCP.m Instrument: ecd1.i Date: 09-AUG-2010

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1223	0809A005.d	PCPD		1	NO MANUAL INTEGRATION
1243	0809A006.d	PCPA		1	2,4,6-Trichlorophenol, 2,4,5-Trichlorophenol, 2,3,5,6-Tetrachlorophenol, 2,4-Dichlorophenol,
1303	0809A007.d	PCPB		1	2,3,5,6-Tetrachlorophenol, 2,4-Dichlorophenol,
1323	0809A008.d	PCPC		1	NO MANUAL INTEGRATION
1343	0809A009.d	PCPE		1	NO MANUAL INTEGRATION
1403	0809A010.d	PCPF		1	NO MANUAL INTEGRATION
1423	0809A011.d	PCP ICV		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - /chem2/ecdl.i/FPCP20100809.b/ical-2.b  
 ARI Job No.: PCPD Method: FPCPB.m Instrument: ecd1.i Date: 09-AUG-2010

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1223	0809A005.d	PCPD		1	NO MANUAL INTEGRATION
1243	0809A006.d	PCPA		1	2,4,6-Trichlorophenol, 2,3,5,6-Tetrachlorophenol,
1303	0809A007.d	PCPB		1	2,4,6-Trichlorophenol, 2,3,5,6-Tetrachlorophenol,
1323	0809A008.d	PCPC		1	NO MANUAL INTEGRATION
1343	0809A009.d	PCPE		1	NO MANUAL INTEGRATION
1403	0809A010.d	PCPF		1	NO MANUAL INTEGRATION
1423	0809A011.d	PCP ICV		1	2,3,4-Trichlorophenol,

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

AP 8/12/2010

Start Cal Date : 09-AUG-2010 12:23  
 End Cal Date : 09-AUG-2010 14:03  
 Quant Method : ESTD  
 Origin : Disabled  
 Target Version : 3.50  
 Integrator : HP Genie  
 Method file : /chem2/ecdl.i/FPCP20100809.b/FPCPB.m  
 Cal Date : 12-Aug-2010 18:59 aron  
 Curve Type : Average

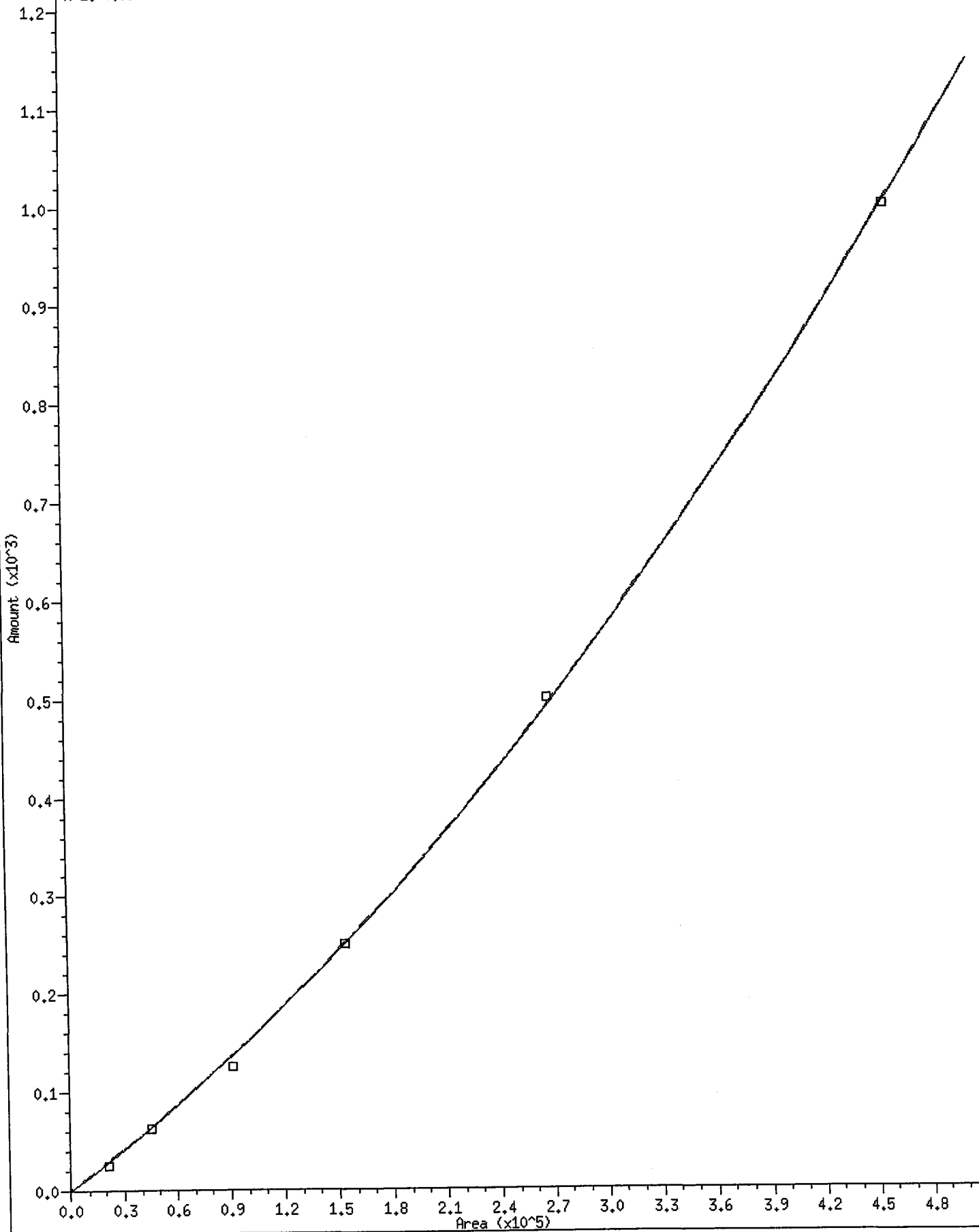
Calibration File Names:

Level 1: /chem2/ecdl.i/FPCP20100809.b/ical-2.b/0809A006.d/0809A006.cdf  
 Level 2: /chem2/ecdl.i/FPCP20100809.b/ical-2.b/0809A007.d/0809A007.cdf  
 Level 3: /chem2/ecdl.i/FPCP20100809.b/ical-2.b/0809A008.d  
 Level 4: /chem2/ecdl.i/FPCP20100809.b/ical-2.b/0809A005.d  
 Level 5: /chem2/ecdl.i/FPCP20100809.b/ical-2.b/0809A009.d  
 Level 6: /chem2/ecdl.i/FPCP20100809.b/ical-2.b/0809A010.d

Compound	2.500 Level 1	6.250 Level 2	12.500 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
1 2,4-Dichlorophenol	859	720	733	619	536	458	654	22.290 <-
2 2,4,6-Trichlorophenol	14811	12542	14020	12241	11222	10071	12485	13.991
3 2,3,6-Trichlorophenol	15358	13183	12610	12054	11138	10108	12409	14.584
4 2,4,5-Trichlorophenol	9451	7724	7152	6203	5568	4896	6832	24.049 <-
5 2,3,5,6-Tetrachlorophenol	22710	20100	18581	17733	16666	15298	18515	14.186
6 2,3,4-Trichlorophenol	13138	11714	9430	8408	7532	6669	9482	26.352 <-
8 2,3,4,5-Tetrachlorophenol	18414	16106	15136	13550	12798	11541	14591	17.013
9 Pentachlorophenol	28790	24995	23903	21206	20507	18368	22961	16.202
\$ 7 2,4,6-Tribromophenol (surr)	22648	19438	18816	17793	17226	16083	18667	12.211

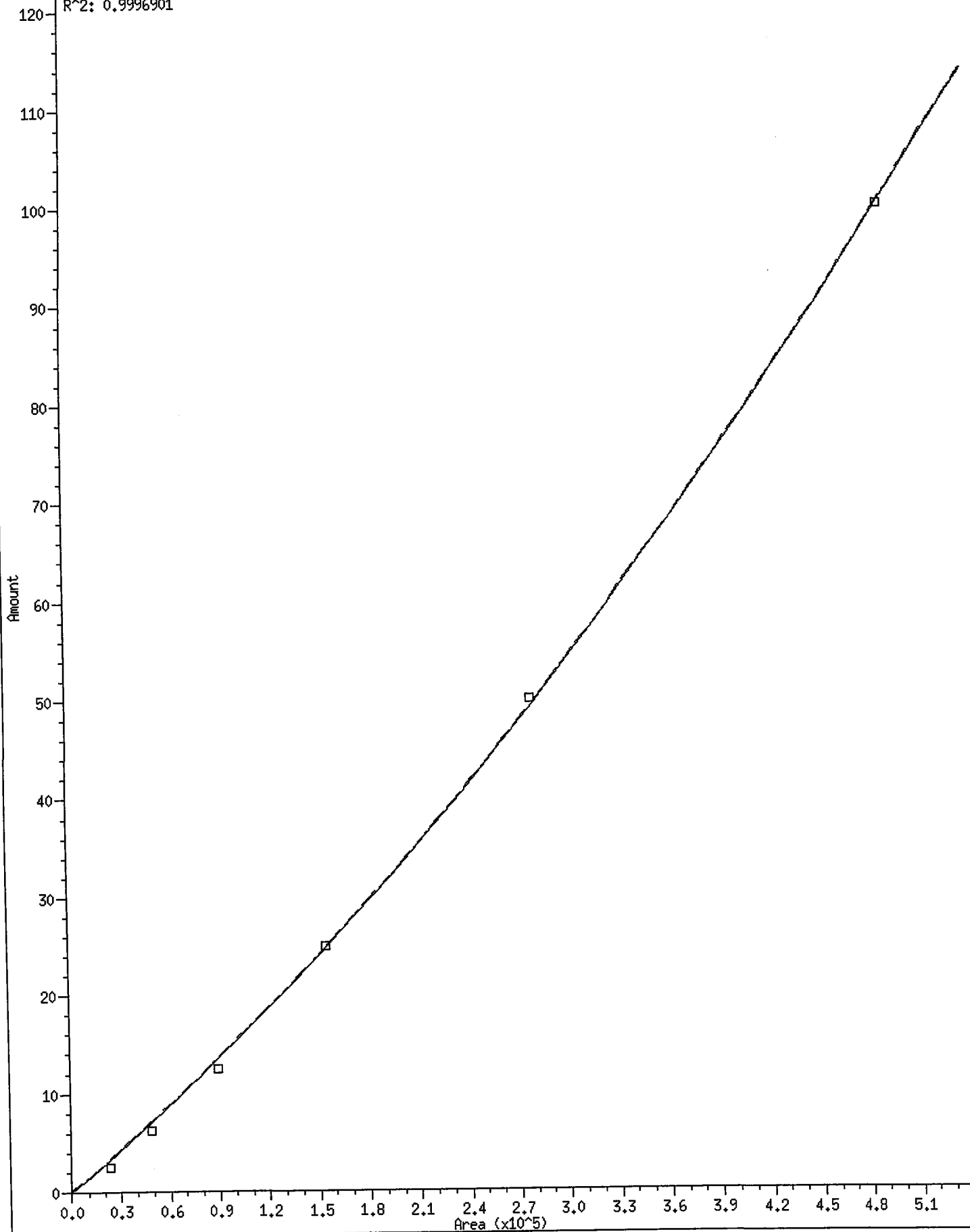
1 2,4-Dichlorophenol

Curve Type: Quadratic By-Response  
Amt = 0 + 0.001325809\*Rsp + 1.887688e-09\*Rsp^2  
R^2: 0.9996633



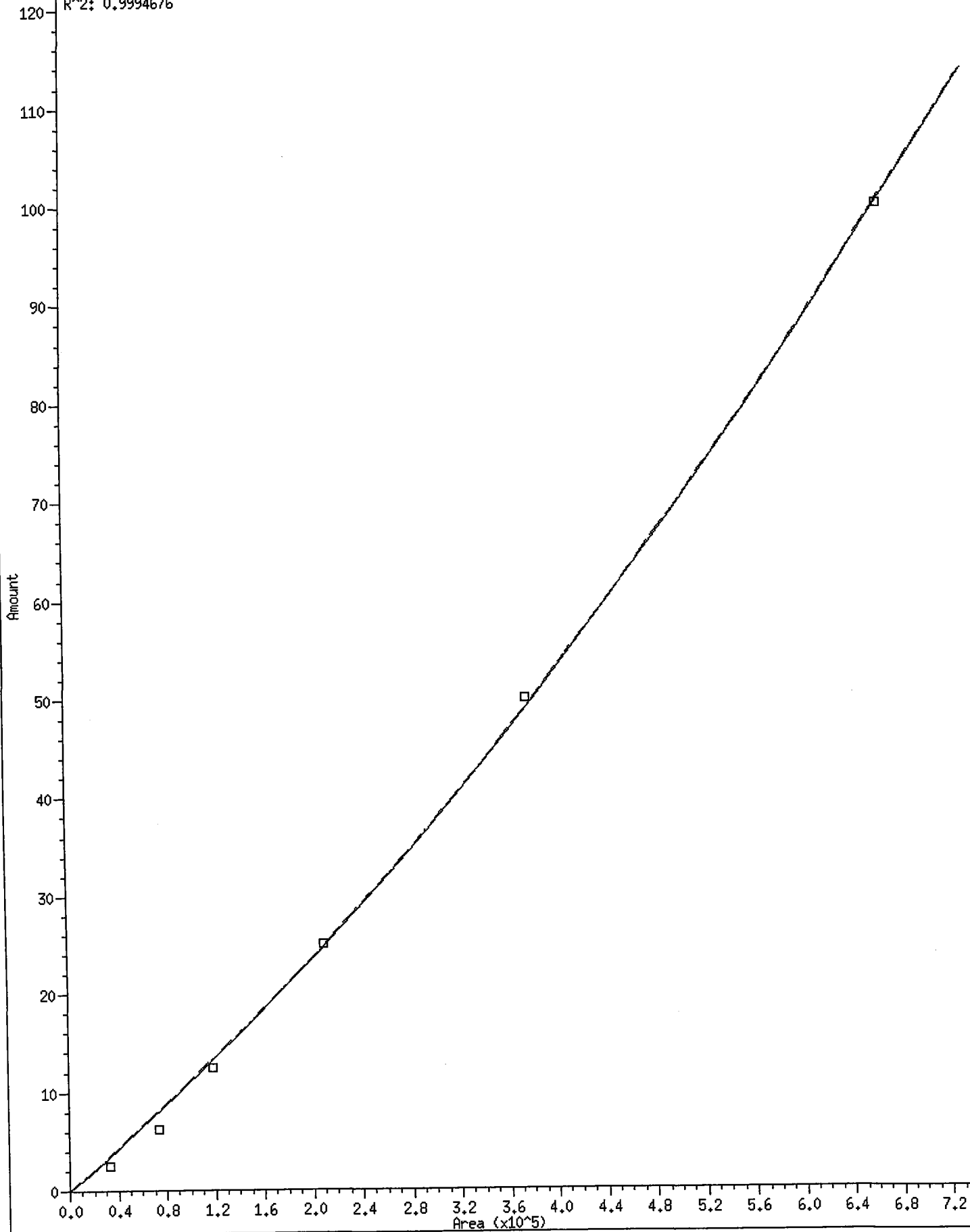
4 2,4,5-Trichlorophenol

Curve Type: Quadratic By-Response  
Amt = 0 + 0.0001390703\*Rsp + 1.342464e-10\*Rsp^2  
R^2: 0.9996901



6 2,3,4-Trichlorophenol

Curve Type: Quadratic By-Response  
Amt = 0 + 0.000103228\*Rsp + 7.075695e-11\*Rsp^2  
R^2: 0.9994676





Report Date : 12-Aug-2010 19:02

Analytical Resources, Inc.  
INITIAL CALIBRATION DATA

Start Cal Date : 09-AUG-2010 12:23  
 End Cal Date : 09-AUG-2010 14:03  
 Quant Method : ESTD  
 Origin : Force  
 Target Version : 3.50  
 Integrator : HP Genie  
 Method file : /chem2/ecdl.i/FPCP20100809.b/FPCPB.m  
 Cal Date : 12-Aug-2010 18:59 aron

Calibration File Names:  
 Level 1: /chem2/ecdl.i/FPCP20100809.b/ical-2.b/0809A006.d/0809A006.cdf  
 Level 2: /chem2/ecdl.i/FPCP20100809.b/ical-2.b/0809A007.d/0809A007.cdf  
 Level 3: /chem2/ecdl.i/FPCP20100809.b/ical-2.b/0809A008.d  
 Level 4: /chem2/ecdl.i/FPCP20100809.b/ical-2.b/0809A005.d  
 Level 5: /chem2/ecdl.i/FPCP20100809.b/ical-2.b/0809A009.d  
 Level 6: /chem2/ecdl.i/FPCP20100809.b/ical-2.b/0809A010.d

Compound	Level						Coefficients			or R <sup>2</sup>
	2	6	12	25	50	100	b	ml	m2	
1 2,4-Dichlorophenol	21466	45023	91643	154741	267768	457854	0.000e+00	0.00133	1.888e-09	0.99966
2 2,4,6-Trichlorophenol	14811	12542	14020	12241	11222	10071		12485		13.99132
3 2,3,6-Trichlorophenol	15358	13183	12610	12054	11138	10108		12409		14.58387
4 2,4,5-Trichlorophenol	23627	48273	89400	155087	278412	489569	0.000e+00	0.00014	1.342e-10	0.99969
5 2,3,5,6-Tetrachlorophenol	22710	20100	18581	17733	16666	15298		18515		14.18619
6 2,3,4-Trichlorophenol	32846	73211	117878	210189	376624	666942	0.000e+00	0.00010	7.076e-11	0.99947
8 2,3,4,5-Tetrachlorophenol	18414	16106	15136	13550	12798	11541		14591		17.01254
9 Pentachlorophenol	28790	24995	23903	21206	20507	18368		22961		16.20188
7 2,4,6-Tribromophenol (surr)	22648	19438	18816	17793	17226	16083		18667		12.21092

000000

Report Date : 12-Aug-2010 19:02

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-AUG-2010 12:23  
 End Cal Date : 09-AUG-2010 14:03  
 Quant Method : ESTD  
 Origin : Force  
 Target Version : 3.50  
 Integrator : HP Genie  
 Method file : /chem2/ecdl.i/FPCP20100809.b/FPCPB.m  
 Cal Date : 12-Aug-2010 18:59 aron

Curve	Formula	Units
Averaged	Amt = Resp/ml	Response
Quad	Amt = b + ml*Resp + m2*Resp^2	Response

2010 08 12 18:59

## Analytical Resources, Inc.

## INITIAL CALIBRATION DATA

Start Cal Date : 09-AUG-2010 12:23  
 End Cal Date : 09-AUG-2010 14:03  
 Quant Method : ESTD  
 Origin : Disabled  
 Target Version : 3.50  
 Integrator : HP Genie  
 Method file : /chem2/ecdl.i/FPCP20100809.b/FPCP.m  
 Cal Date : 12-Aug-2010 19:13 aron  
 Curve Type : Average

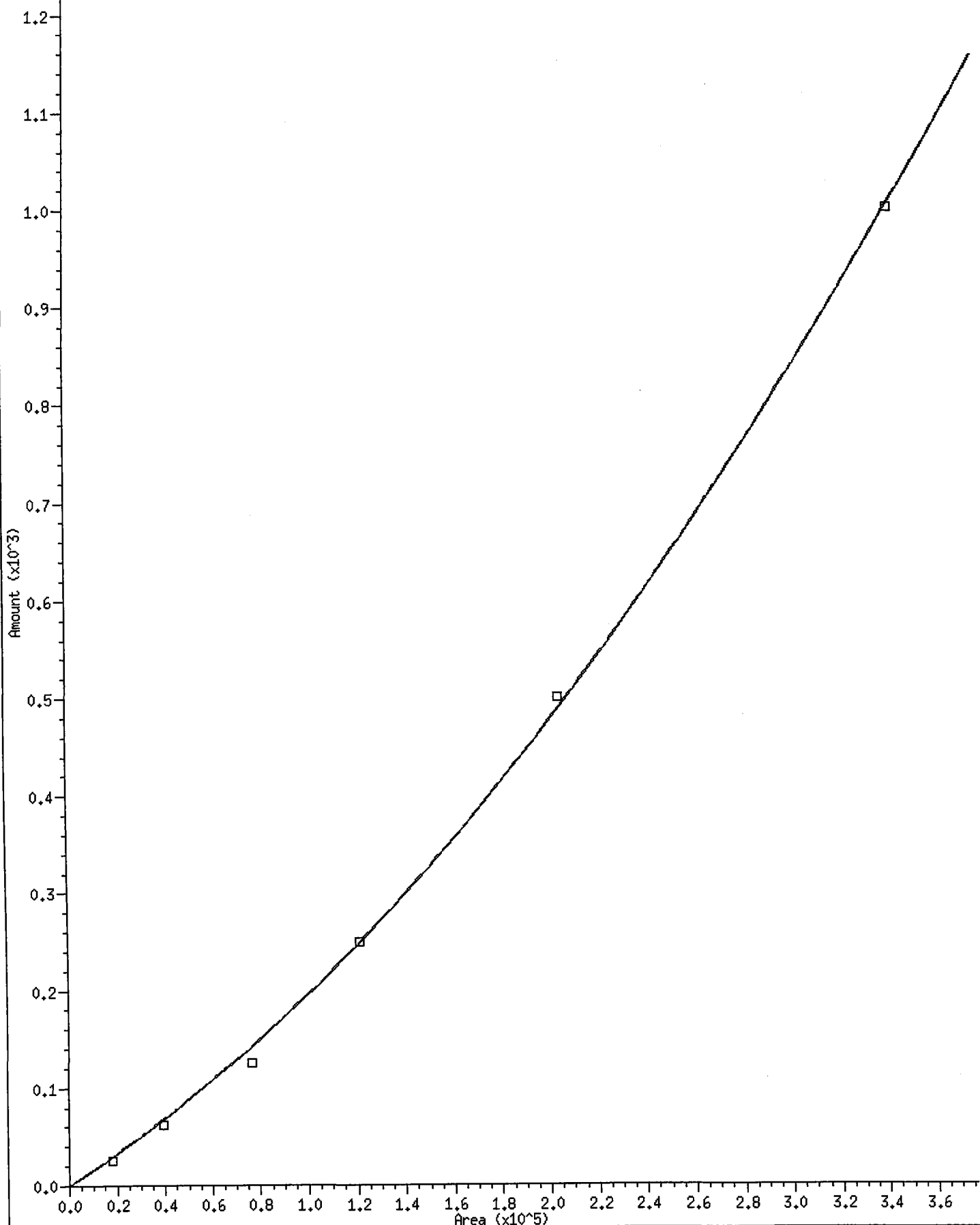
## Calibration File Names:

Level 1: /chem2/ecdl.i/FPCP20100809.b/ical-1.b/0809A006.d/0809A006.cdf  
 Level 2: /chem2/ecdl.i/FPCP20100809.b/ical-1.b/0809A007.d/0809A007.cdf  
 Level 3: /chem2/ecdl.i/FPCP20100809.b/ical-1.b/0809A008.d  
 Level 4: /chem2/ecdl.i/FPCP20100809.b/ical-1.b/0809A005.d/0809A005.cdf  
 Level 5: /chem2/ecdl.i/FPCP20100809.b/ical-1.b/0809A009.d  
 Level 6: /chem2/ecdl.i/FPCP20100809.b/ical-1.b/0809A010.d

Compound	2.500 Level 1	6.250 Level 2	12.500 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
1 2,4-Dichlorophenol	721	627	611	486	409	342	533	27.140 <-
2 2,4,6-Trichlorophenol	13540	10473	9560	8413	7539	6660	9364	26.271 <-
3 2,3,6-Trichlorophenol	12902	10500	9607	8801	8025	7161	9499	21.431 <-
4 2,4,5-Trichlorophenol	6404	5362	5688	4915	4290	3627	5048	19.727
5 2,3,4-Trichlorophenol	8393	7068	7135	7922	5475	5053	6841	19.373
6 2,3,5,6-Tetrachlorophenol	17905	15060	14996	14233	11882	10558	14106	18.400
8 2,3,4,5-Tetrachlorophenol	16324	13459	12294	10216	8895	7628	11469	27.892 <-
9 Pentachlorophenol	24528	19824	17830	15337	13686	11965	17195	26.550 <-
\$ 7 2,4,6-Tribromophenol (surr)	18561	14999	13969	12135	11200	9940	13467	22.982 <-

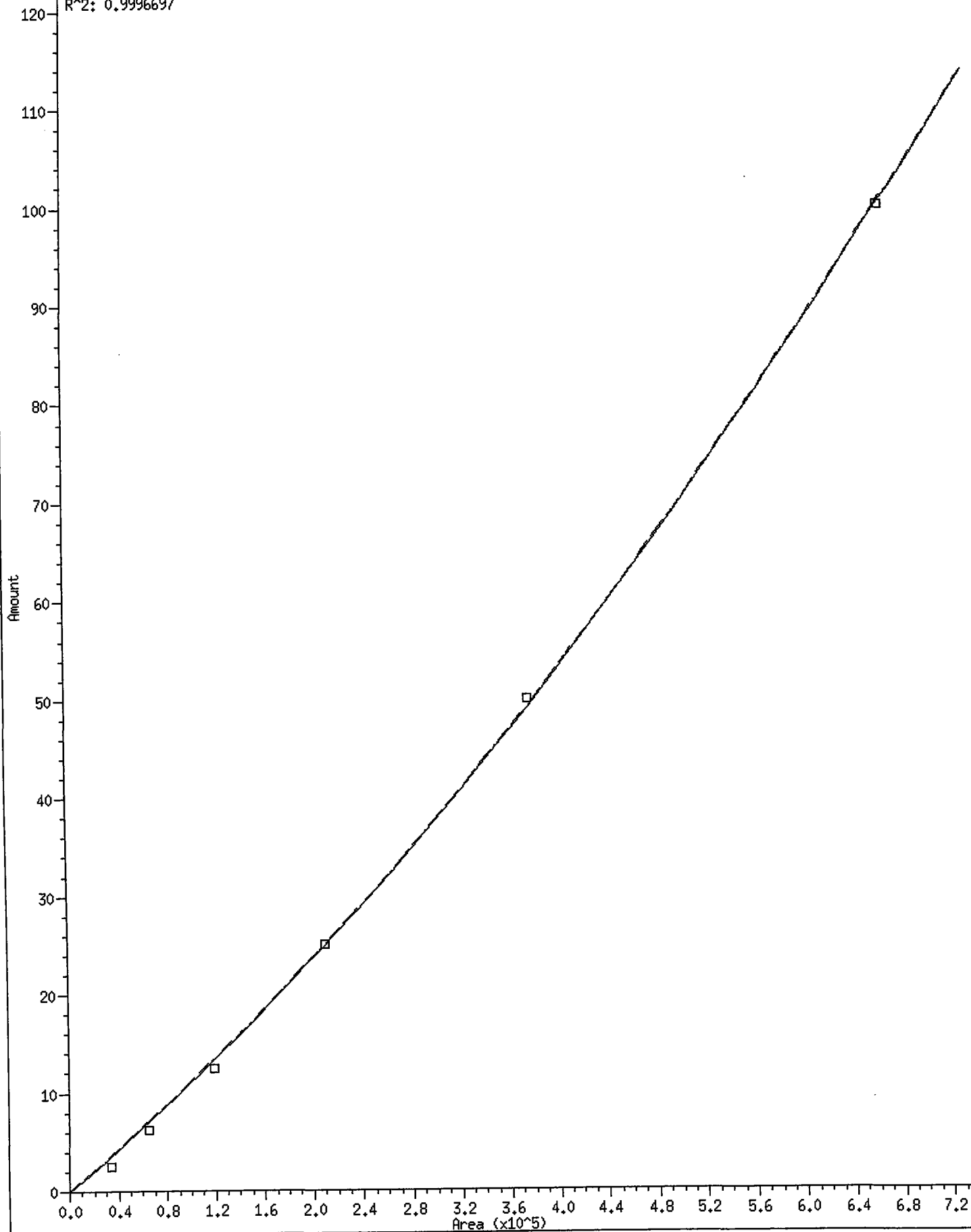
1 2,4-Dichlorophenol

Curve Type: Quadratic By-Response  
Amt = 0 + 0.00155001\*Rsp + 4.062816e-09\*Rsp^2  
R^2: 0.9993457



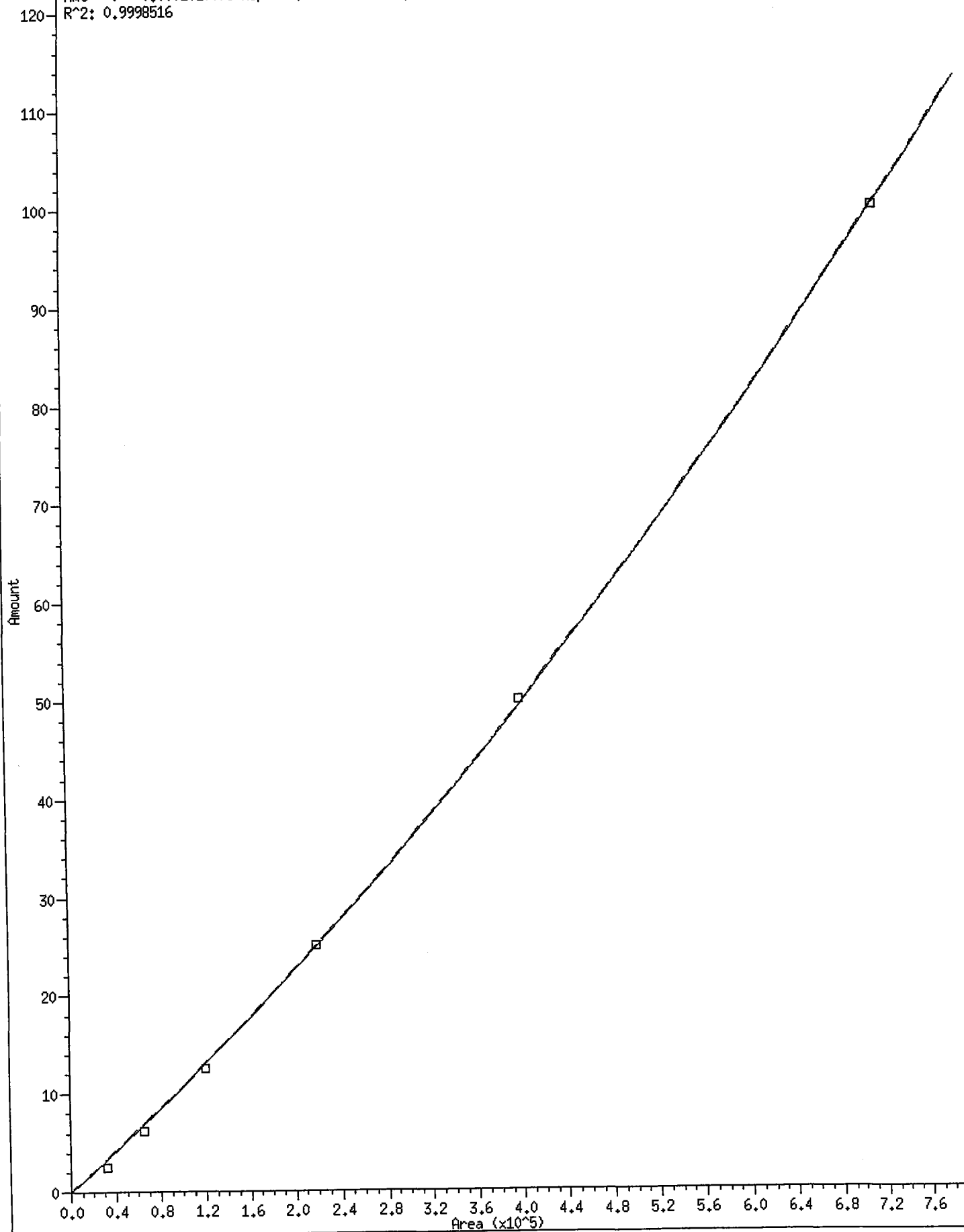
2 2,4,6-Trichlorophenol

Curve Type: Quadratic By-Response  
Amt = 0 + 0.0001034981\*Rsp + 7.067667e-11\*Rsp^2  
R^2: 0.9996697



3 2,3,6-Trichlorophenol

Curve Type: Quadratic By-Response  
Amt = 0 + 0.0001017075\*Resp + 5.332174e-11\*Resp^2  
R^2: 0.9998516

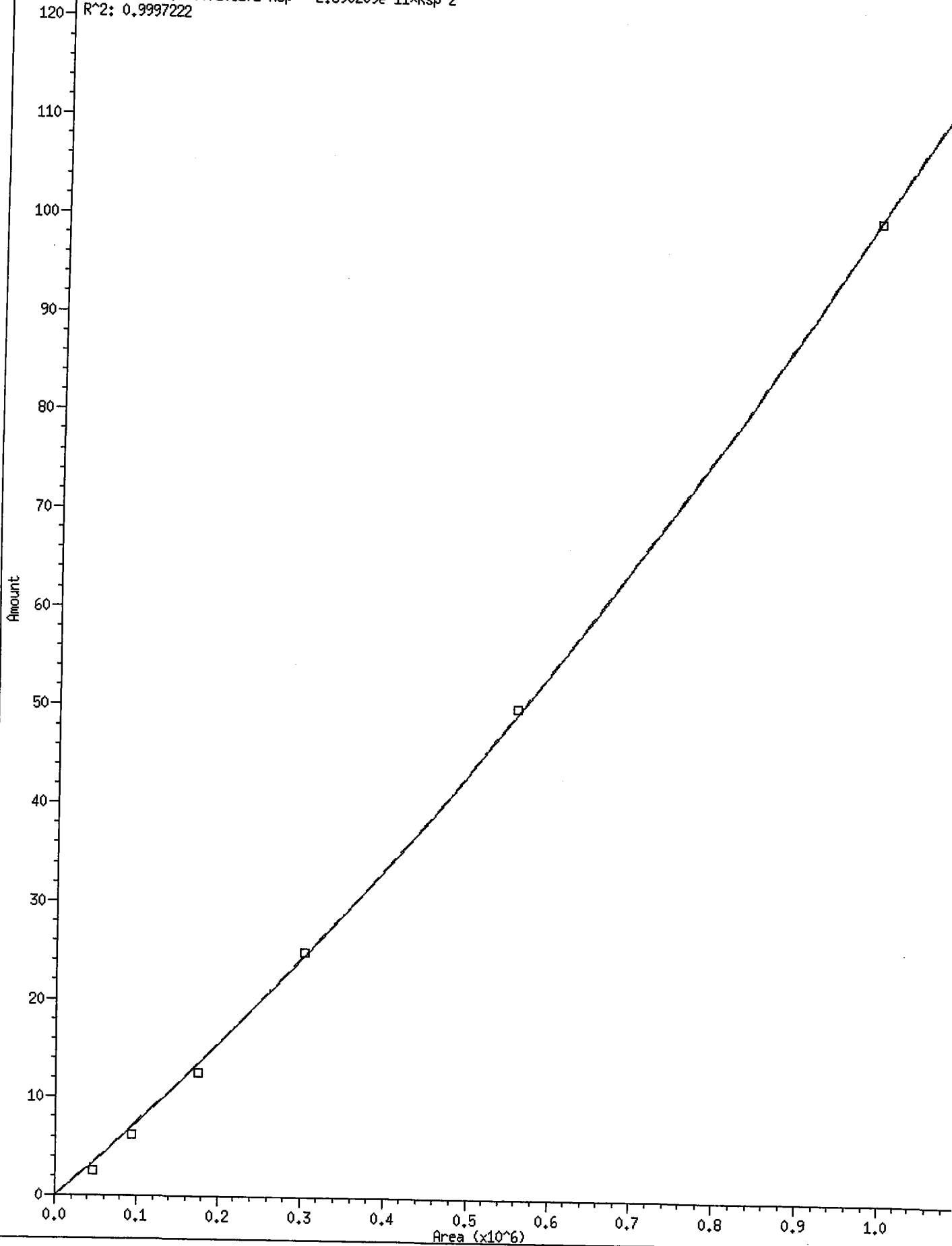


\* 7 2,4,6-Tribromophenol (surr)

Curve Type: Quadratic By-Response

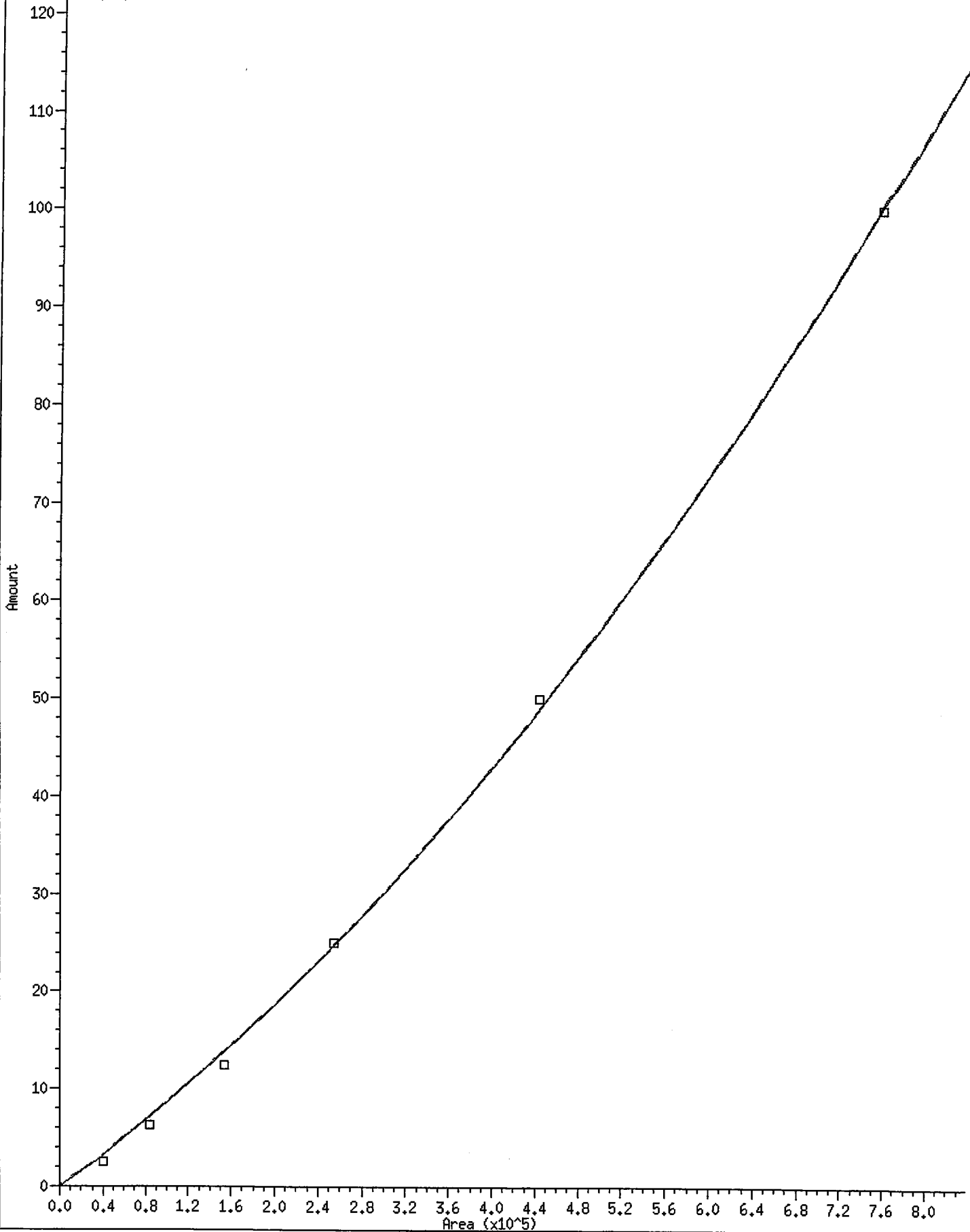
Amt = 0 + 0.00007206272\*Rsp + 2.890209e-11\*Rsp^2

R^2: 0.9997222



8 2,3,4,5-Tetrachlorophenol

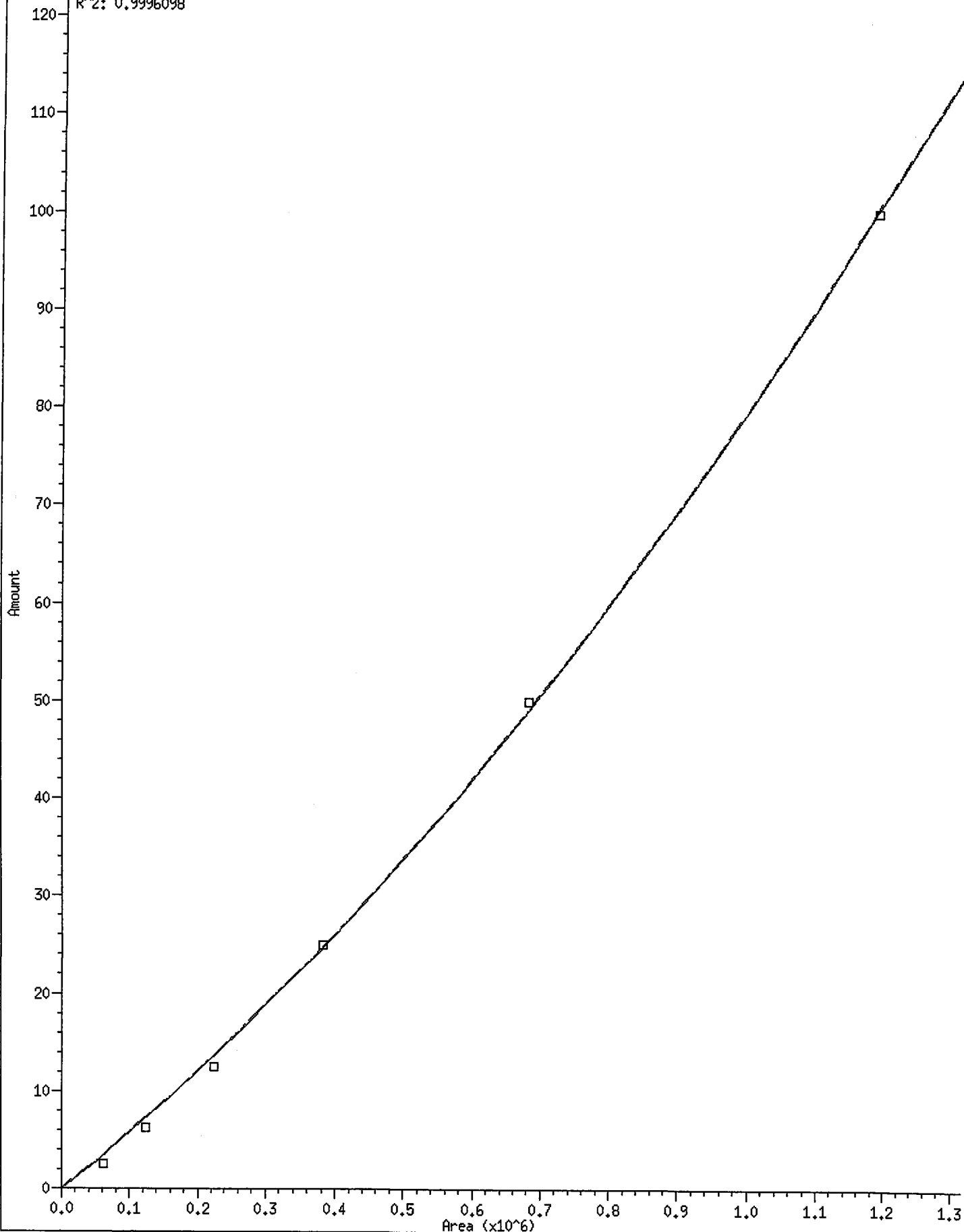
Curve Type: Quadratic By-Response  
Amt = 0 + 0.00007935554\*Rsp + 6.845903e-11\*Rsp^2  
R^2: 0.9994890





9 Pentachlorophenol

Curve Type: Quadratic By-Response  
Amt = 0 + 0.00005540325\*Rsp + 2.375022e-11\*Rsp^2  
R^2: 0.9996098



Report Date : 12-Aug-2010 19:15

Analytical Resources, Inc.  
INITIAL CALIBRATION DATA

Start Cal Date : 09-AUG-2010 12:23  
 End Cal Date : 09-AUG-2010 14:03  
 Quant Method : ESTD  
 Origin : Force  
 Target Version : 3.50  
 Integrator : HP Genie  
 Method file : /chem2/ecdl1.i/FPCP20100809.b/FPCP.m  
 Cal Date : 12-Aug-2010 19:13 aron

Calibration File Names:  
 Level 1: /chem2/ecdl1.i/FPCP20100809.b/ical-1.b/0809A006.d/0809A006.cdf  
 Level 2: /chem2/ecdl1.i/FPCP20100809.b/ical-1.b/0809A007.d/0809A007.cdf  
 Level 3: /chem2/ecdl1.i/FPCP20100809.b/ical-1.b/0809A008.d  
 Level 4: /chem2/ecdl1.i/FPCP20100809.b/ical-1.b/0809A005.d/0809A005.cdf  
 Level 5: /chem2/ecdl1.i/FPCP20100809.b/ical-1.b/0809A009.d  
 Level 6: /chem2/ecdl1.i/FPCP20100809.b/ical-1.b/0809A010.d

Compound	Level						Coefficients			or R <sup>2</sup>
	2	6	12	25	50	100	b	m1	m2	
1 2,4-Dichlorophenol	18020	39212	76337	121400	204471	341711	0.000e+00	0.00155	4.063e-09	0.99935
2 2,4,6-Trichlorophenol	33851	65457	119503	210327	376941	665977	0.000e+00	0.00010	7.068e-11	0.99967
3 2,3,6-Trichlorophenol	32256	65624	120087	220036	401238	716085	0.000e+00	0.00010	5.332e-11	0.99985
4 2,4,5-Trichlorophenol	6404	5362	5688	4915	4290	3627		5048		19.72715
5 2,3,4-Trichlorophenol	8393	7068	7135	7922	5475	5053		6841		19.37297
6 2,3,5,6-Tetrachlorophenol	17905	15060	14996	14233	11882	10558		14106		18.40050
8 2,3,4,5-Tetrachlorophenol	40811	84118	153678	255392	444734	762767	0.000e+00	0.00008	6.846e-11	0.99949
9 Pentachlorophenol	61320	123902	222874	383426	684285	1196534	0.000e+00	0.00006	2.375e-11	0.99961
7 2,4,6-Tribromophenol (surr)	46402	93741	174610	303374	553983	994034	0.000e+00	0.00007	2.890e-11	0.99972

70 60 50 40 30 20 10 0

Report Date : 12-Aug-2010 19:15

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-AUG-2010 12:23  
End Cal Date : 09-AUG-2010 14:03  
Quant Method : ESTD  
Origin : Force  
Target Version : 3.50  
Integrator : HP Genie  
Method file : /chem2/ecdl1.i/FPCP20100809.b/FPCP.m  
Cal Date : 12-Aug-2010 19:13 aron

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Quad	Amt = b + m1*Rsp + m2*Rsp^2	Response

Analytical Resources Inc.  
 Dual Column 8041 Chlorinated Phenols Quantitation Report

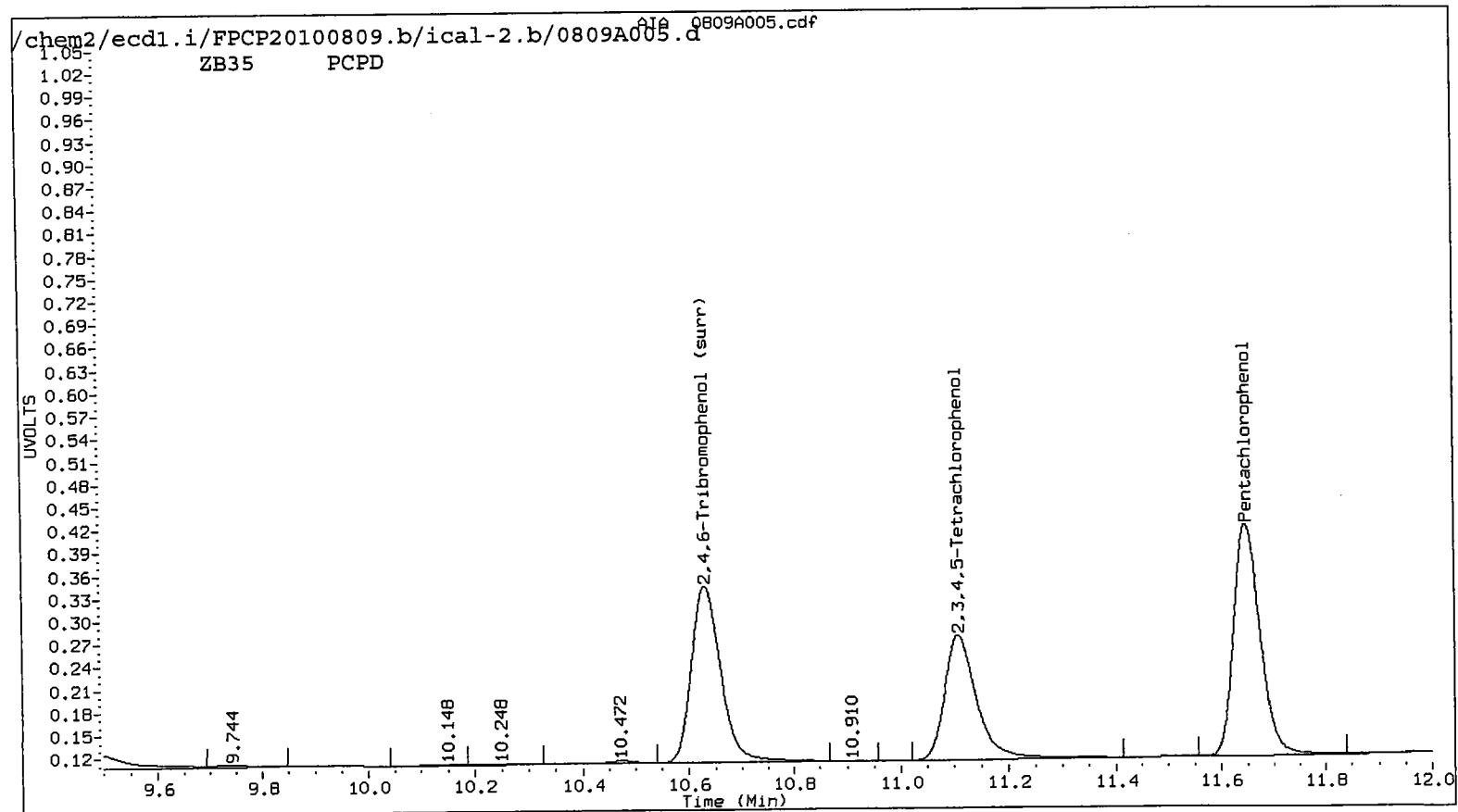
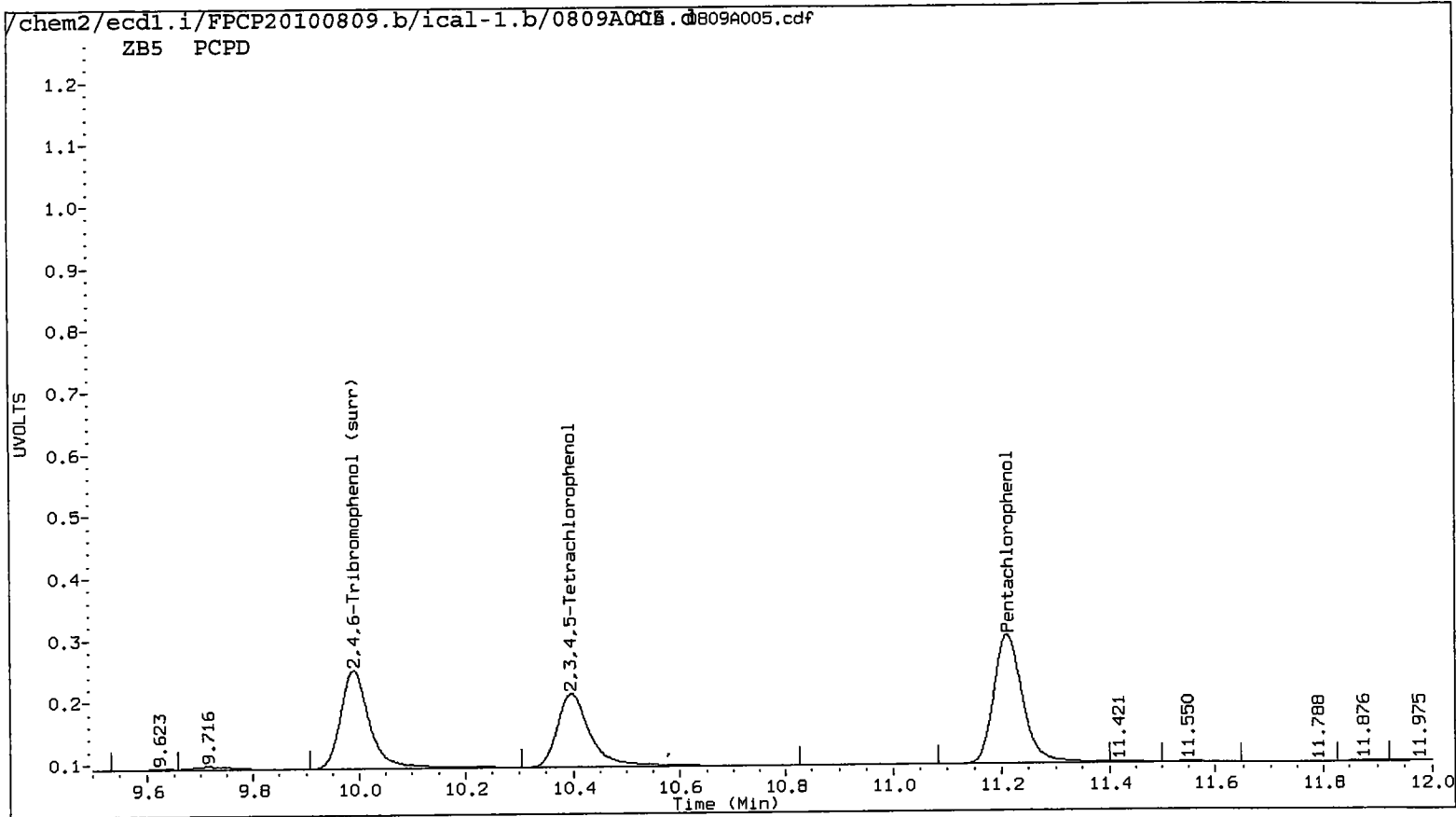
AR 8/12/2010

Data file 1: /chem2/ecdl.i/FPCP20100809.b/ical-1.b/0809A005.d ARI ID: PCPD  
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 Method: /chem2/ecdl.i/FPCP20100809.b/FPCP.m Injection Date: 09-AUG-2010 12:23  
 Compound Sublist: all Report Date: 08/12/2010 19:15  
 Instrument: ecdl.i Matrix: WATER  
 Operator: ar Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35	RPD	Compound
RT	Shift	Response	RT	Shift	Response	on col	on col		
11.212	-0.007	383426	11.649	-0.009	530145	24.7347	23.0885	6.9	Pentachlorophenol
7.261	-0.003	210327	7.329	-0.004	306027	24.8950	24.5124	1.5	2,4,6-Trichlorophenol
7.615	-0.004	220036	7.858	-0.006	301362	24.9609	24.2867	2.7	2,3,6-Trichlorophenol
8.221	-0.021	122872	8.593	-0.022	155087	24.3430	24.7969	1.8	2,4,5-Trichlorophenol
8.770	-0.022	198058	9.359	-0.021	210189	28.9512	24.8234	15.4	2,3,4-Trichlorophenol
8.996	-0.011	355822	9.262	-0.015	443336	25.2255	23.9449	5.2	2,3,5,6-Tetrachlorophenol
10.397	-0.016	255392	11.109	-0.017	338740	24.7320	23.2161	6.3	2,3,4,5-Tetrachlorophenol
6.887	-0.006	121400	7.156	-0.010	154741	248.0488	250.3573	0.9	2,4-Dichlorophenol
9.990	-0.012	303374	10.632	-0.014	444822	24.5	23.8	2.9	2,4,6-Tribromophenol (surr)

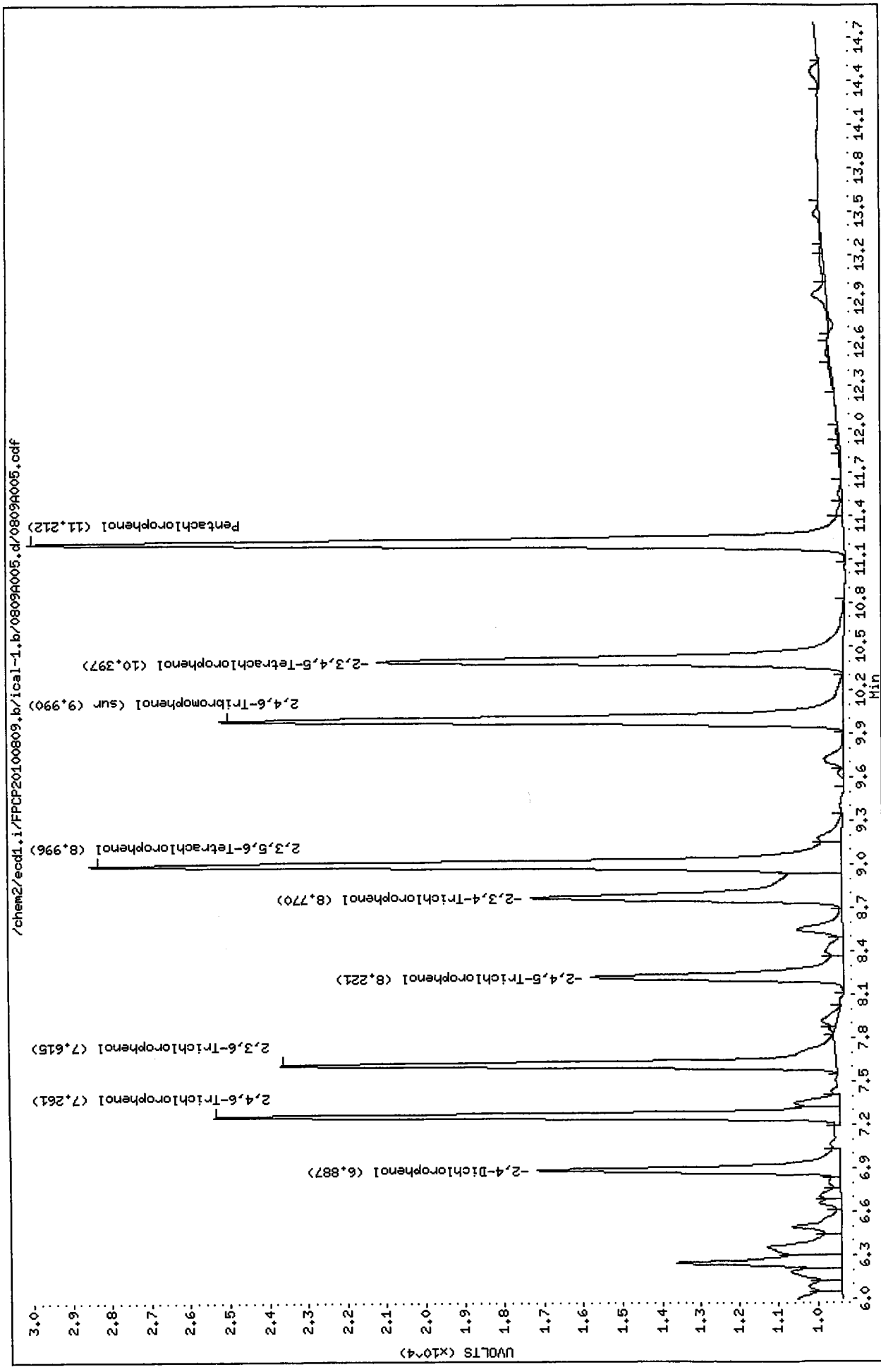
PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	98.1	95.3



Data File: /chem2/ecdl1.i/FPCP20100809.b/ical-1.b/0809A005.d  
Date : 09-AUG-2010 12:23  
Client ID:  
Sample Info: PCPD  
Purge Volume: 2.0  
Column phase: ZB5

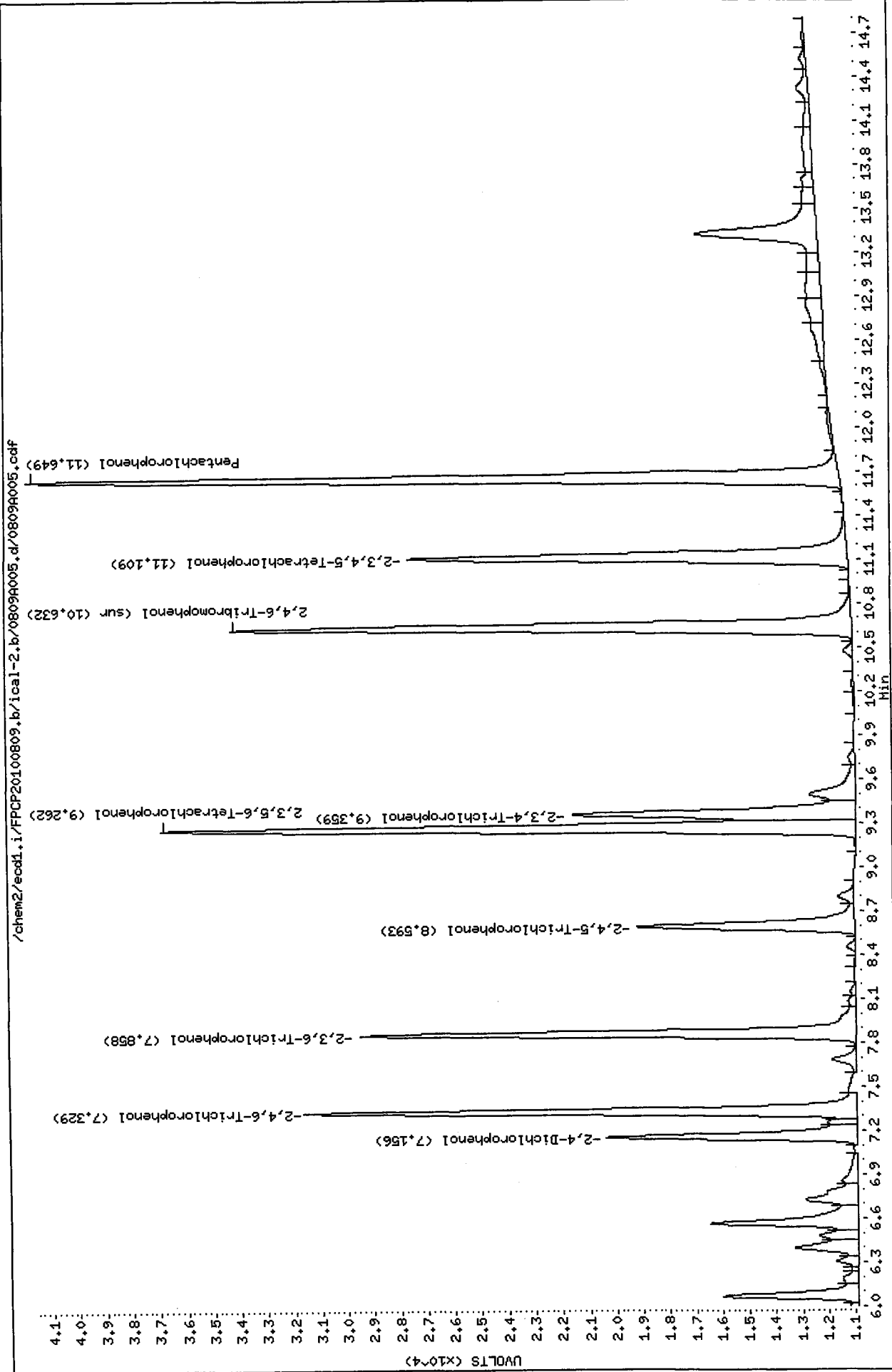
Instrument: ecdl1.i  
Operator: ar  
Column diameter: 0.53



Data File: /chem2/ecd1.i/FFCP20100809.b/ical-2.b/0809A005.d  
Date: 09-AUG-2010 12:23  
Client ID:  
Sample Info: PCPD  
Purge Volume: 2.0  
Column phase: ZB35

Instrument: ecd1.i

Operator: ar  
Column diameter: 0.53



Analytical Resources Inc.  
Dual Column 8041 Chlorinated Phenols Quantitation Report

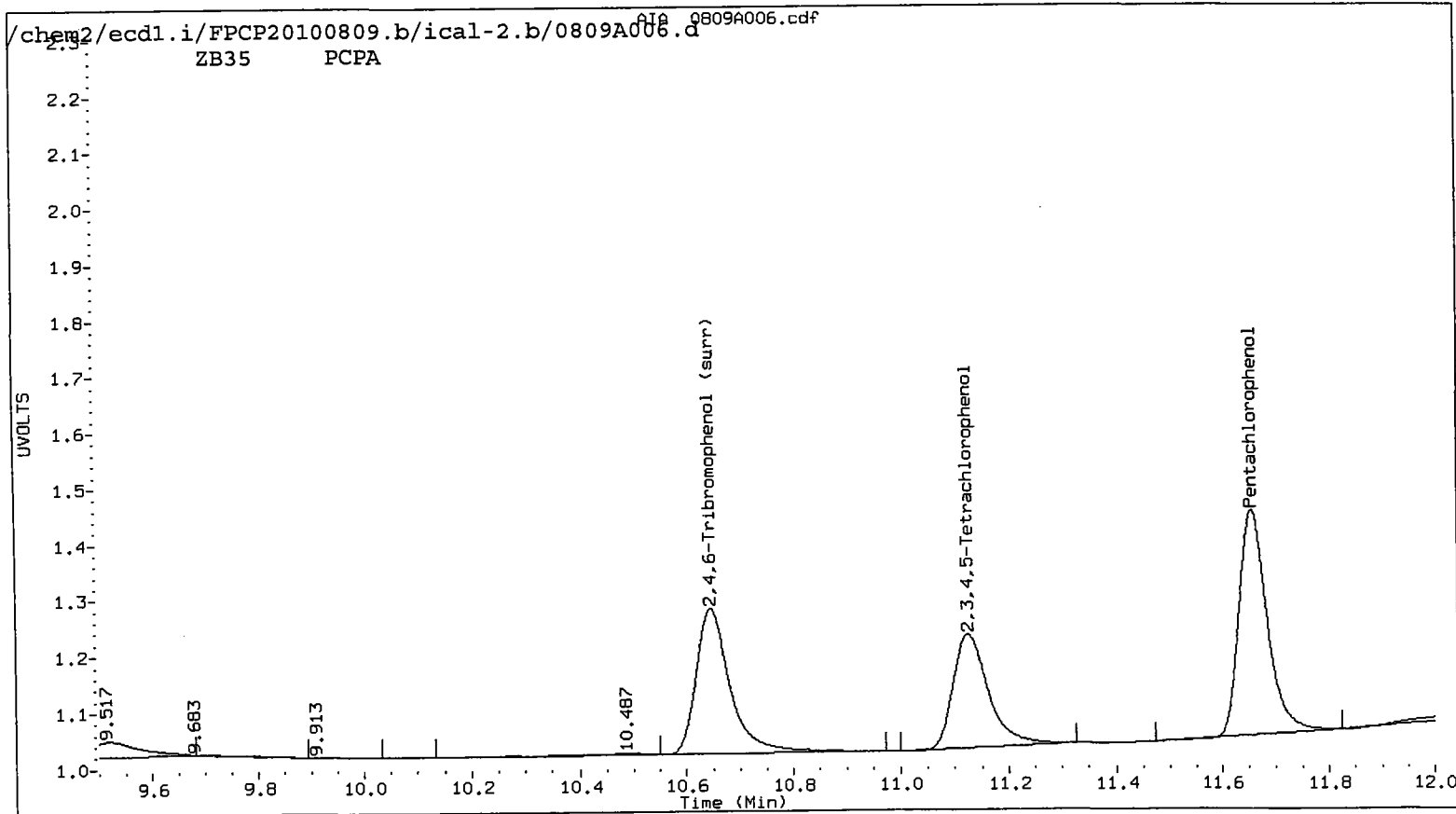
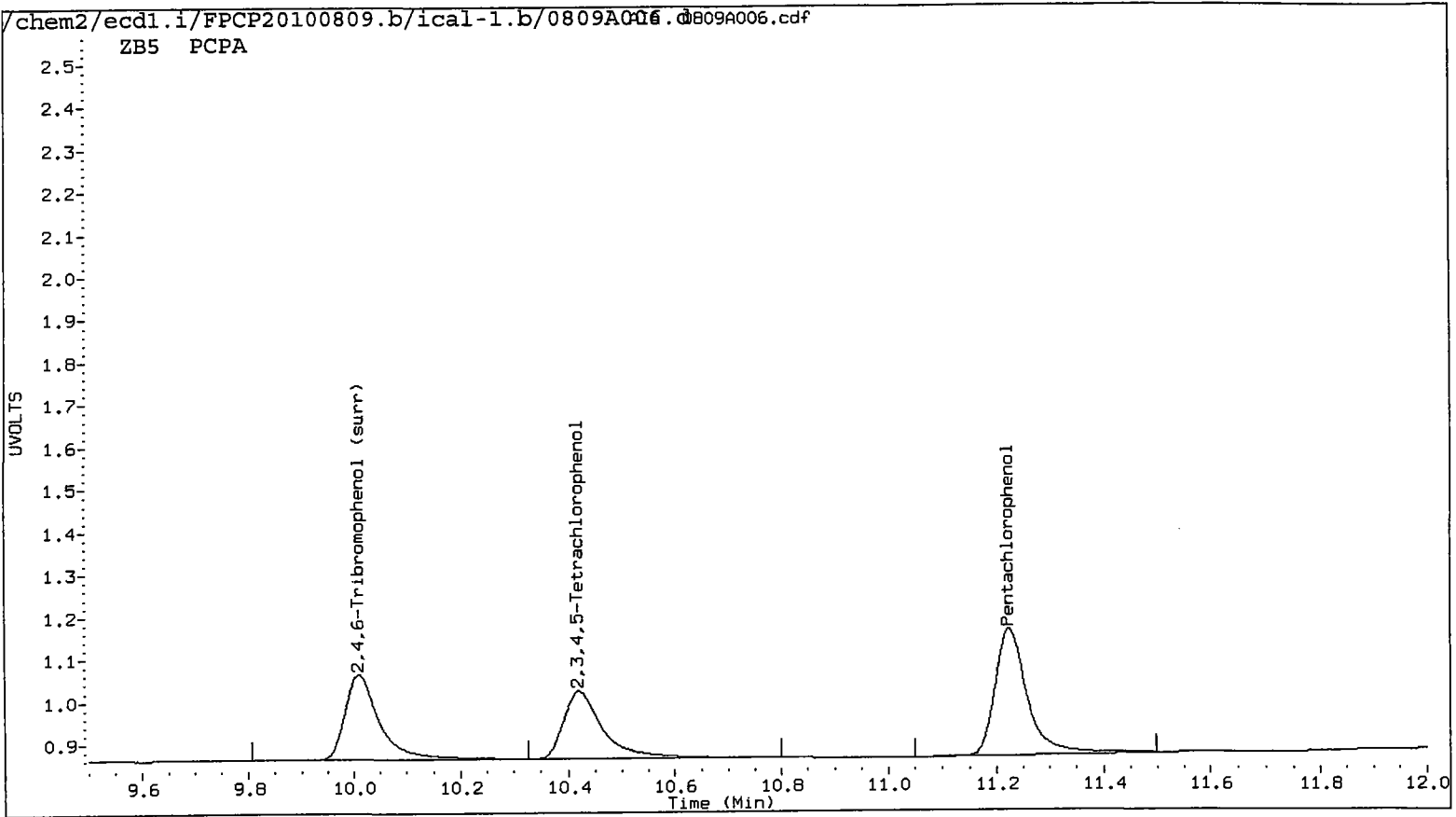
Data file 1: /chem2/ecdl.i/FPCP20100809.b/ical-1.b/0809A006.d    ARI ID: PCPA  
 Data file 2: /chem2/ecdl.i/FPCP20100809.b/ical-2.b/0809A006.d    Client ID:  
 Method: /chem2/ecdl.i/FPCP20100809.b/FPCP.m                      Injection Date: 09-AUG-2010 12:43  
 Compound Sublist: all    Report Date: 08/12/2010 19:15  
 Instrument: ecdl.i     Matrix: WATER  
 Operator: ar     Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35	RPD	Compound
RT	Shift	Response	RT	Shift	Response	on col	on col		
11.225	0.006	61320	11.658	0.000	71975	3.4866	3.1346	10.6	Pentachlorophenol
7.263	-0.001	33851	7.333	0.000	37028	3.5845	2.9659	18.9	2,4,6-Trichlorophenol
7.622	0.003	32256	7.864	0.000	38395	3.3362	3.0942	7.5	2,3,6-Trichlorophenol
8.253	0.011	16009	8.615	0.000	23627	3.1717	3.3608	5.8	2,4,5-Trichlorophenol
8.806	0.014	20983	9.380	0.000	32846	3.0672	3.4670	12.2	2,3,4-Trichlorophenol
9.013	0.006	44762	9.277	0.000	56775	3.1733	3.0665	3.4	2,3,5,6-Tetrachlorophenol
10.421	0.008	40811	11.126	0.000	46035	3.3526	3.1551	6.1	2,3,4,5-Tetrachlorophenol
6.897	0.004	18020	7.166	0.000	21466	29.2505	29.3296	0.3	2,4-Dichlorophenol
10.010	0.008	46402	10.646	0.000	56619	3.4	3.0	11.6	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	13.6	12.1



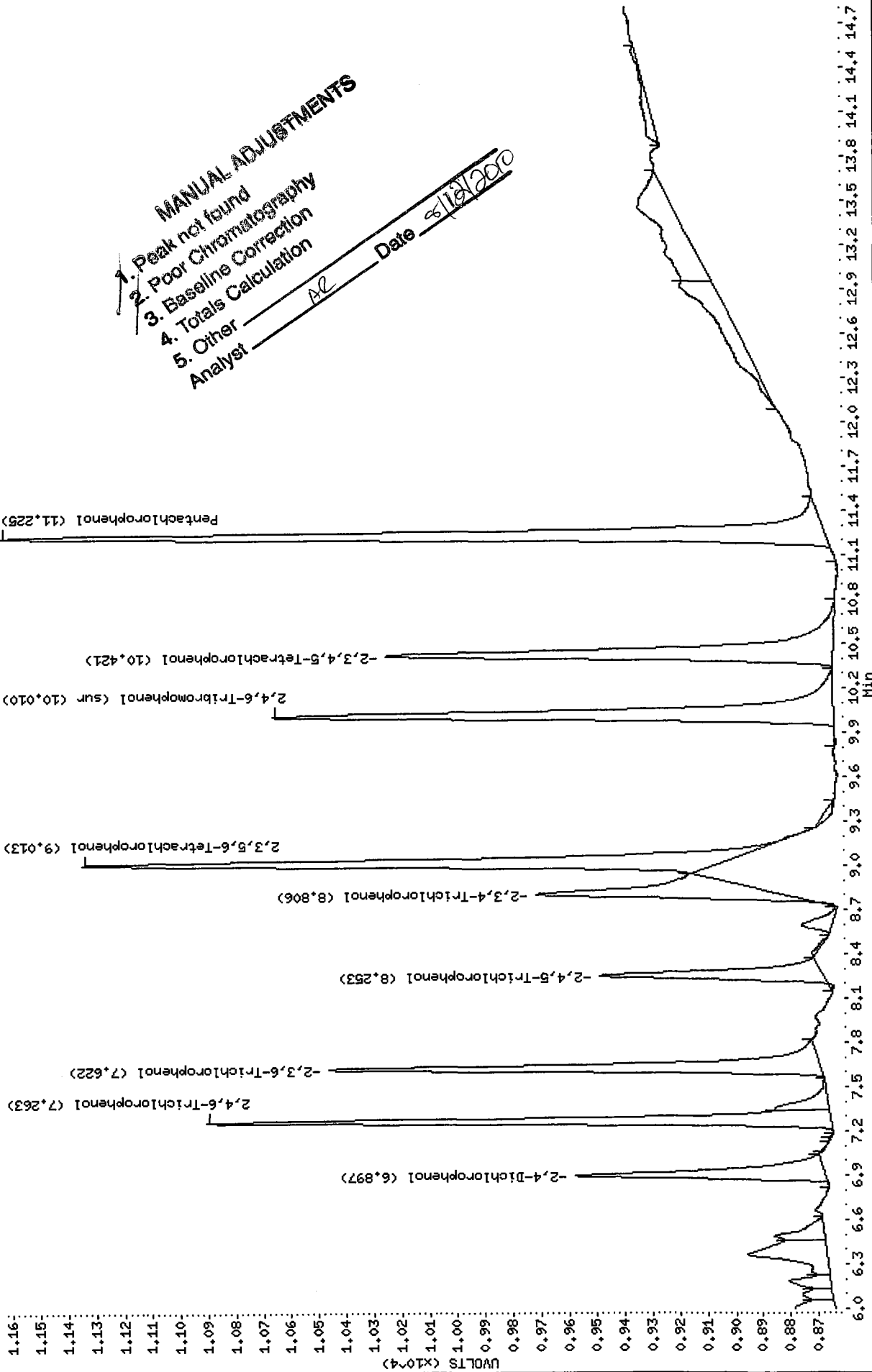


Data File: /chem2/ecdl.i/FPCP20100809.b/ical-1.b/0809A006.d  
Date : 09-AUG-2010 12:43  
Client ID:  
Sample Info: PCPA  
Purge Volume: 2.0  
Column phase: ZB5

Instrument: eccl.i

Operator: ar  
Column diameter: 0.53

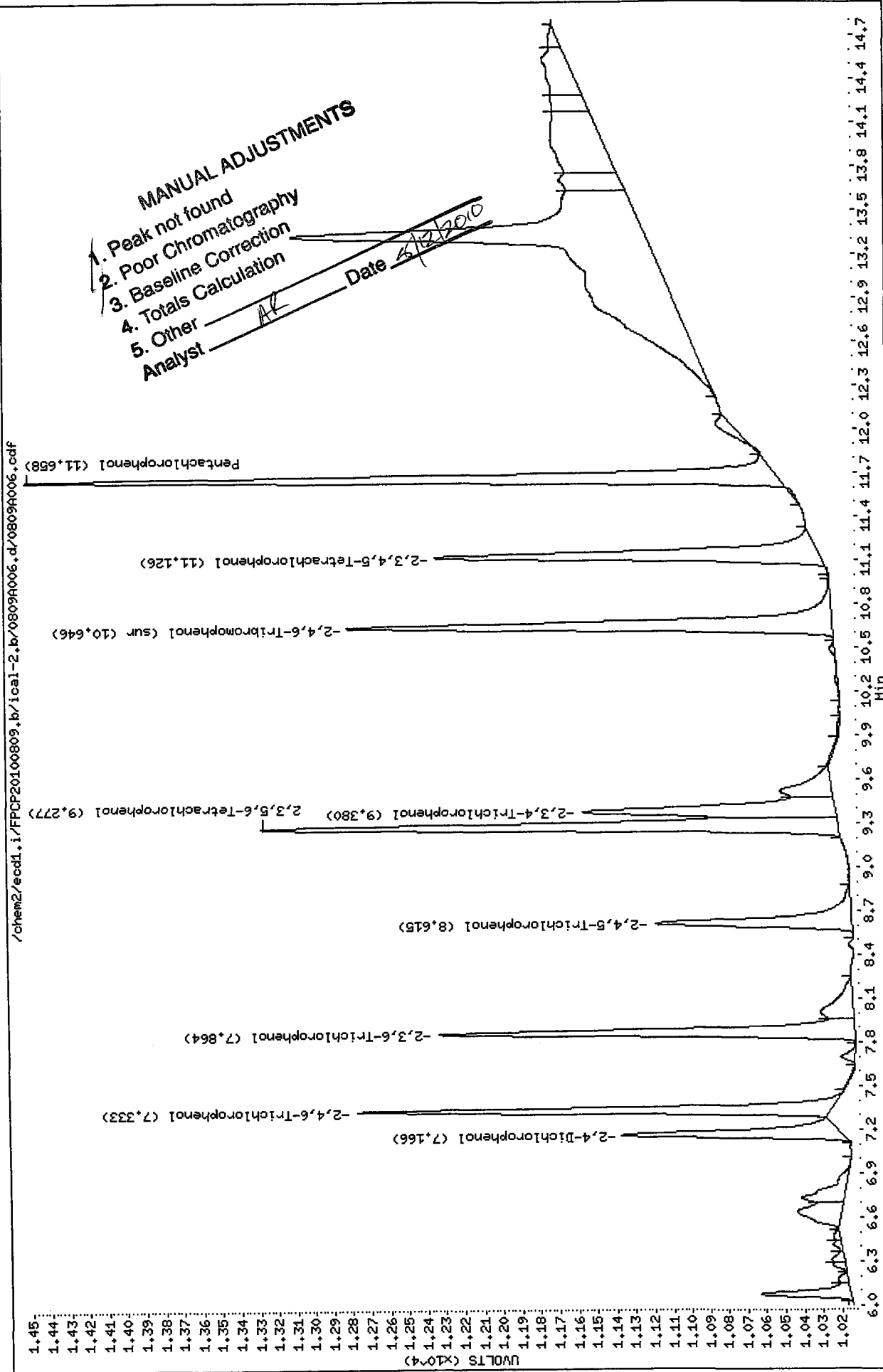
/chem2/ecdl.i/FPCP20100809.b/ical-1.b/0809A006.d/0809A006.cdf



Data File: /chem2/ecdl1.i/FPCP20100809.b/ical-2.b/0809A006.d  
Date : 09-AUG-2010 12:43  
Client ID:  
Sample Info: PCPA  
Purge Volume: 2.0  
Column phase: ZB35

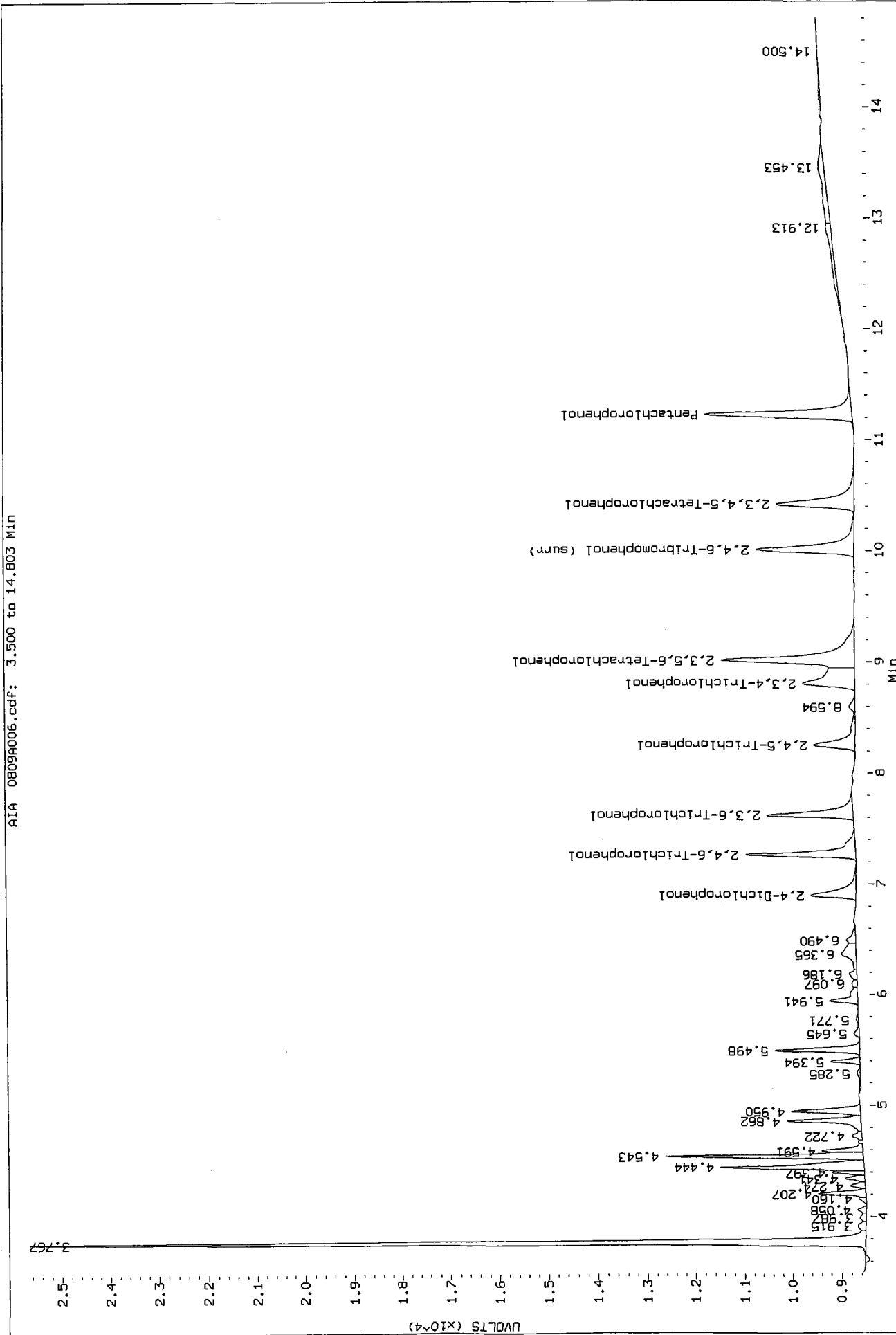
Instrument: ecdl1.i

Operator: ar  
Column diameter: 0.53



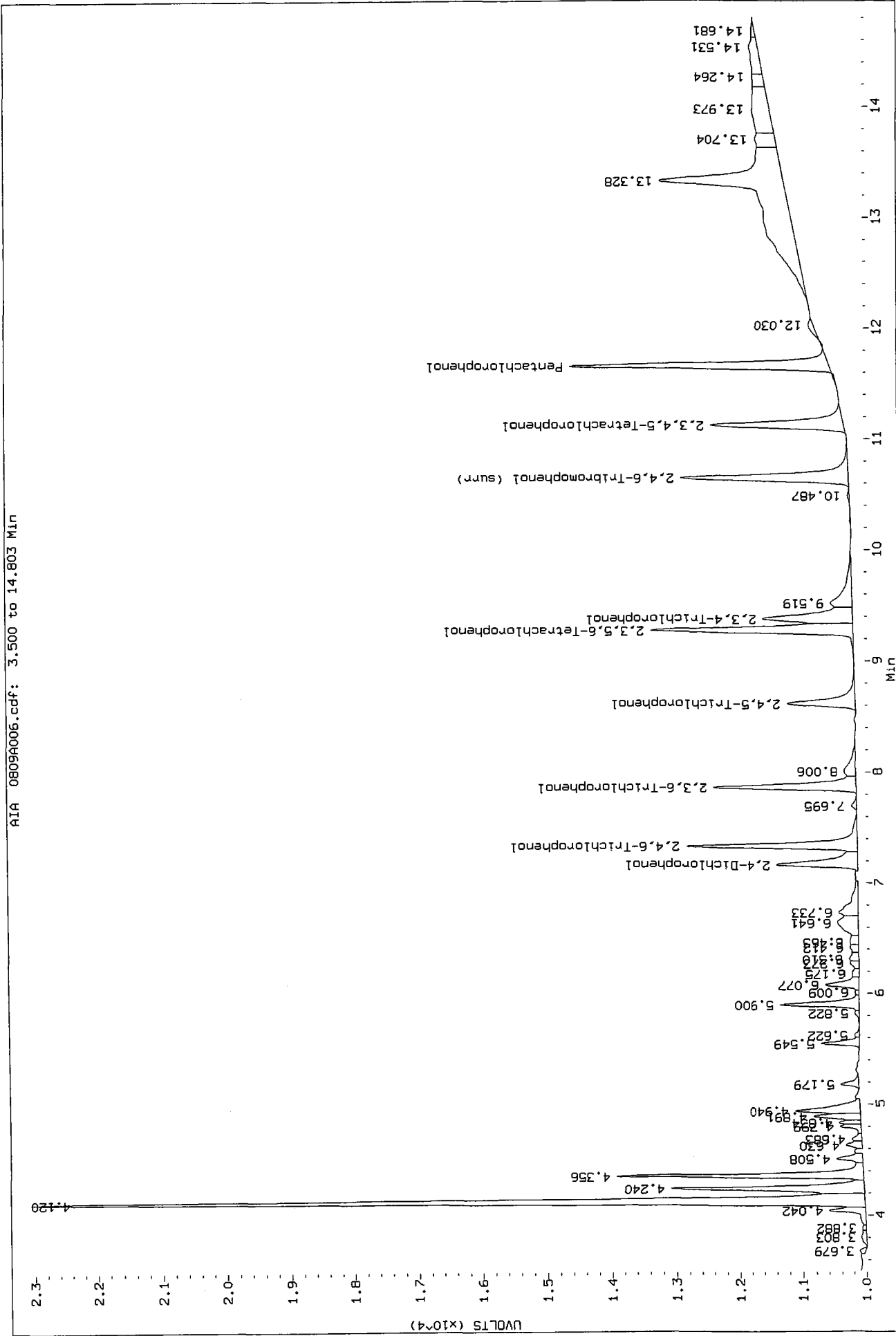
Before 08/12/2010

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Injection Date: 09-AUG-2010 12:43  
Instrument: ecdi.i  
Client Sample ID:



Data File: /chem2/eccd1.1/FPCP20100809.b/ical-2.b/0809A006.d/0809A006.cdf  
 Injection Date: 09-AUG-2010 12:43  
 Instrument: ecd1.1  
 Client Sample ID:

Before AP 8/19/2010



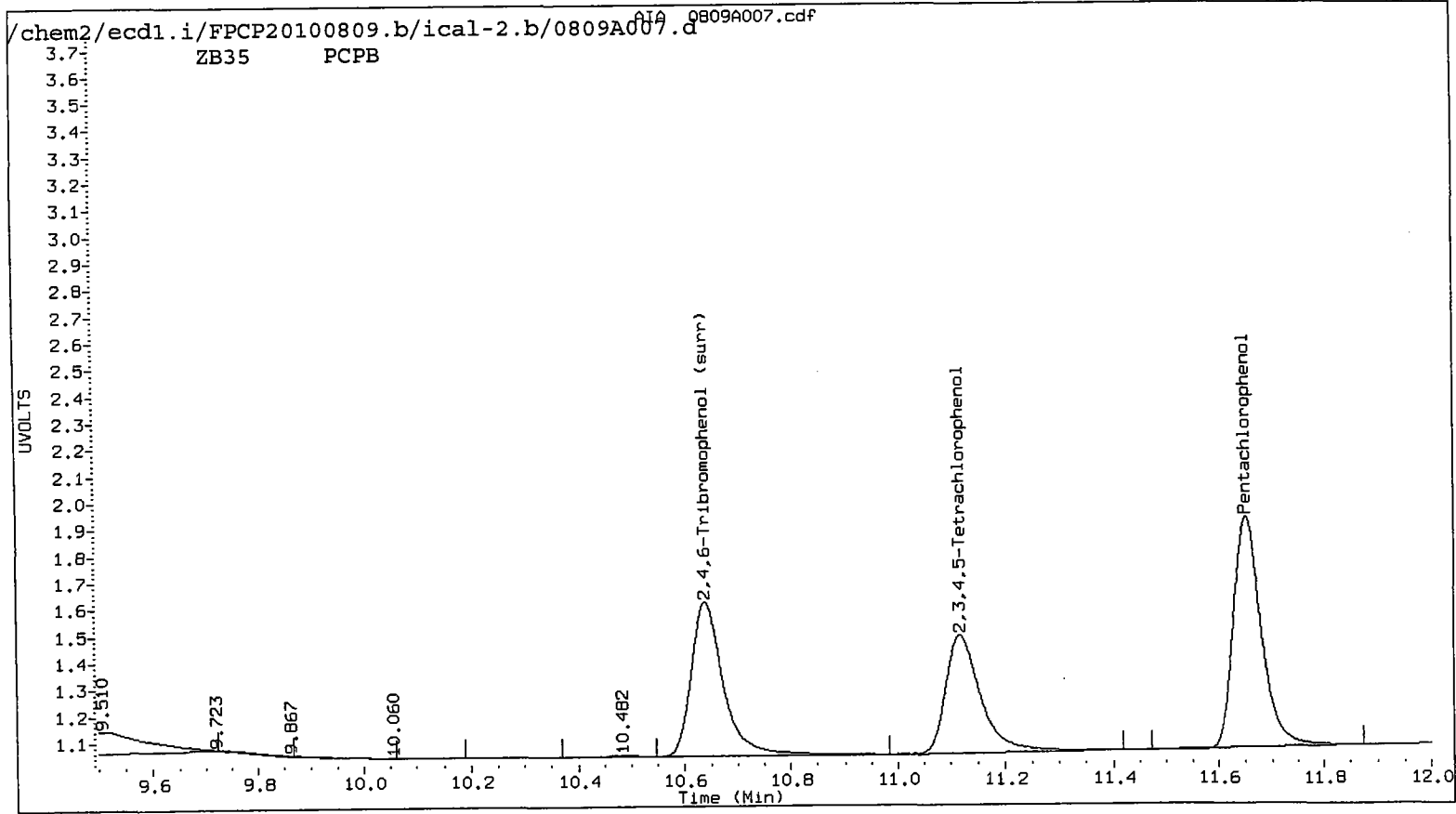
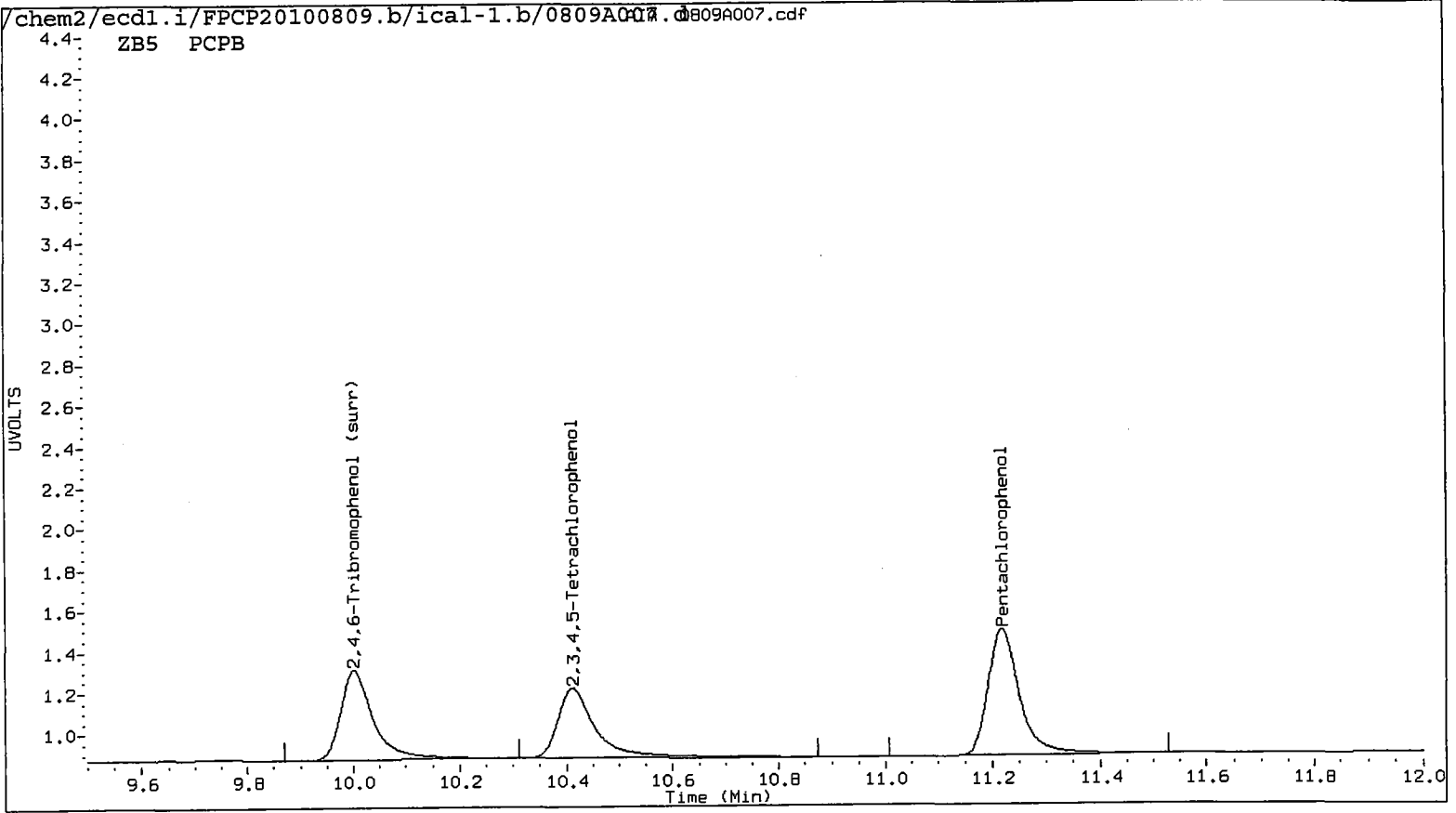
Analytical Resources Inc.  
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecdl.i/FPCP20100809.b/ical-1.b/0809A007.d    ARI ID: PCPB  
 Data file 2: /chem2/ecdl.i/FPCP20100809.b/ical-2.b/0809A007.d    Client ID:  
 Method: /chem2/ecdl.i/FPCP20100809.b/FPCP.m                      Injection Date: 09-AUG-2010 13:03  
 Compound Sublist: all    Report Date: 08/12/2010 19:15  
 Instrument: ecd1.i    Matrix: WATER  
 Operator: ar    Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35	RPD	Compound
RT	Shift	Response	RT	Shift	Response	on col	on col		
11.219	0.000	123902	11.654	-0.004	156217	7.2292	6.8035	6.1	Pentachlorophenol
7.264	0.000	65457	7.333	0.000	78390	7.0775	6.2789	12.0	2,4,6-Trichlorophenol
7.619	0.000	65624	7.862	-0.002	82392	6.9041	6.6399	3.9	2,3,6-Trichlorophenol
8.242	0.000	33512	8.607	-0.008	48273	6.6393	7.0262	5.7	2,4,5-Trichlorophenol
8.792	0.000	44178	9.373	-0.007	73211	6.4577	7.9367	20.5	2,3,4-Trichlorophenol
9.007	0.000	94127	9.270	-0.007	125627	6.6730	6.7852	1.7	2,3,5,6-Tetrachlorophenol
10.413	0.000	84118	11.119	-0.007	100660	7.1596	6.8989	3.7	2,3,4,5-Tetrachlorophenol
6.893	0.000	39212	7.163	-0.003	45023	67.0259	63.5184	5.4	2,4-Dichlorophenol
10.002	0.000	93741	10.640	-0.006	121487	7.0	6.5	7.4	2,4,6-Tribromophenol (surr)

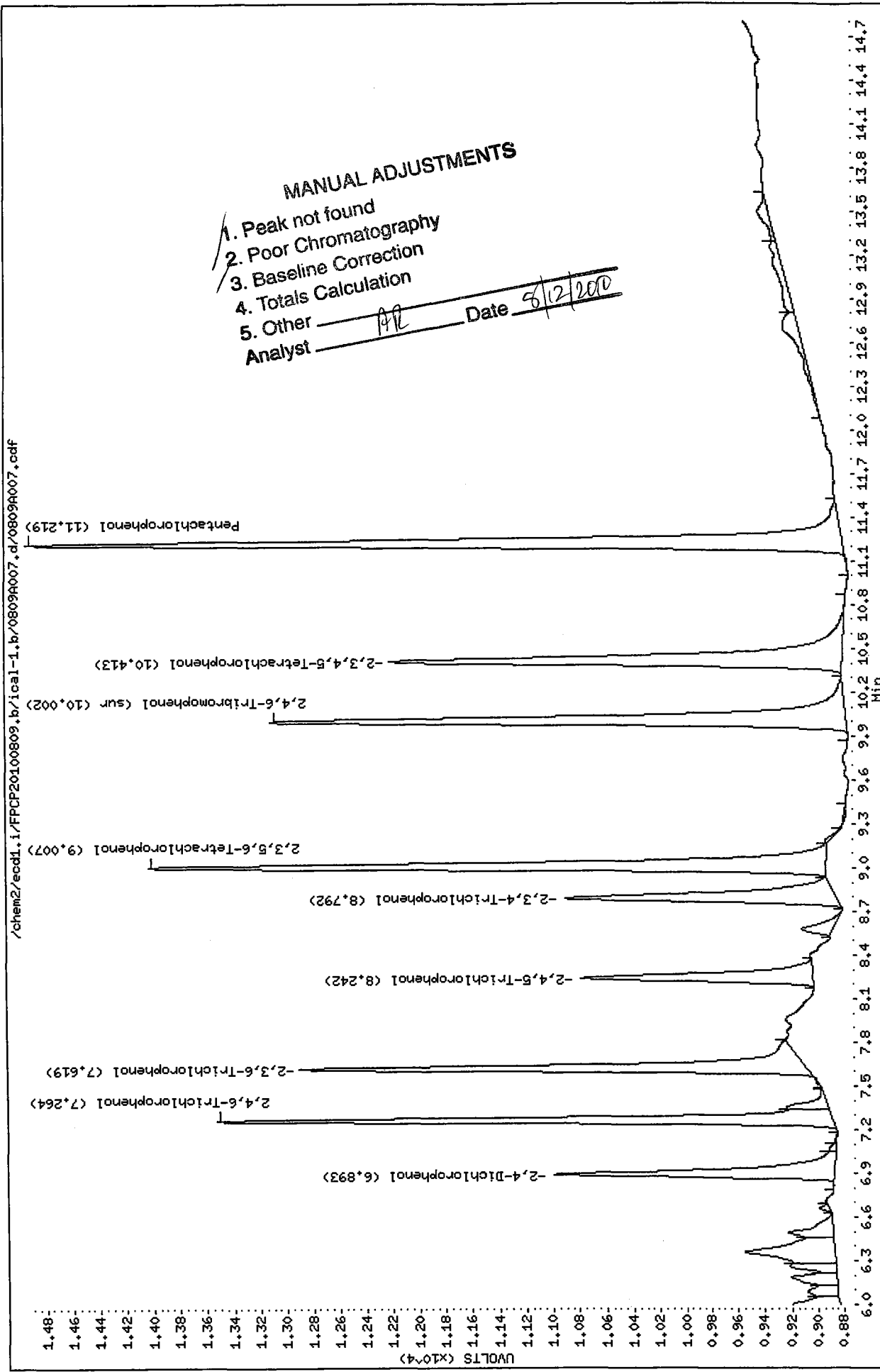
PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	28.0	26.0



Data File: /chem2/ecdl1.1/FPCP20100809.b/ical-1.b/0809A007.d  
 Date : 09-AUG-2010 13:03  
 Client ID:  
 Sample Info: PCPB  
 Purge Volume: 2.0  
 Column phase: ZB5

Instrument: ecdl1.i  
 Operator: ar  
 Column diameter: 0.53



**MANUAL ADJUSTMENTS**  
 1. Peak not found  
 2. Poor Chromatography  
 3. Baseline Correction  
 4. Totals Calculation  
 5. Other \_\_\_\_\_  
 Analyst AR Date 5/12/2010

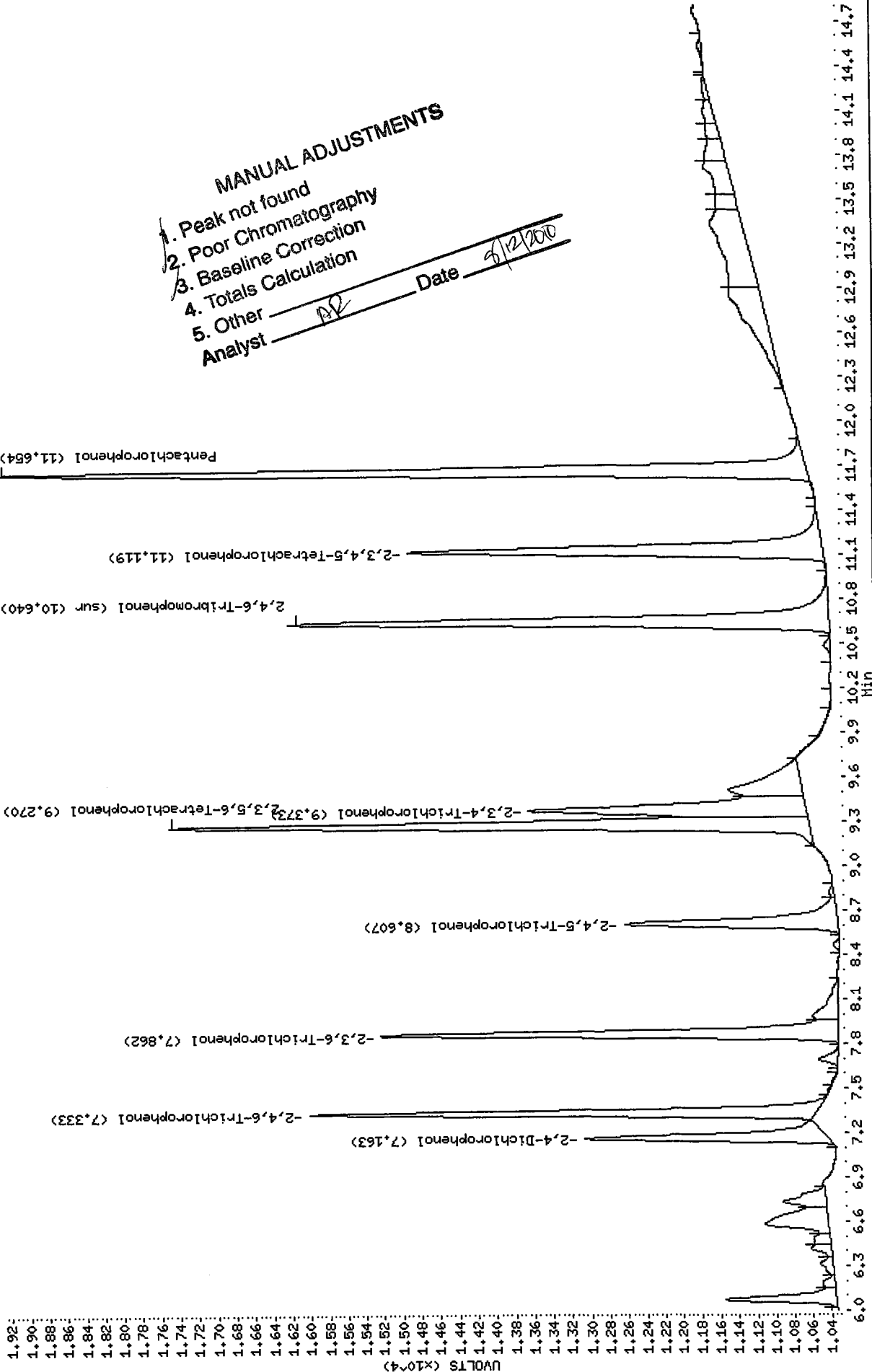


Data File: /chem2/ecdl1.i/FPCP20100809.b/ical-2.b/0809A007.d  
 Date : 09-AUG-2010 13:03  
 Client ID:  
 Sample Info: PCPB  
 Purge Volume: 2.0  
 Column phase: ZB35

Instrument: ecd1.i

Operator: ar  
 Column diameter: 0.53

/chem2/ecdl1.i/FPCP20100809.b/ical-2.b/0809A007.d/0809A007.cdf

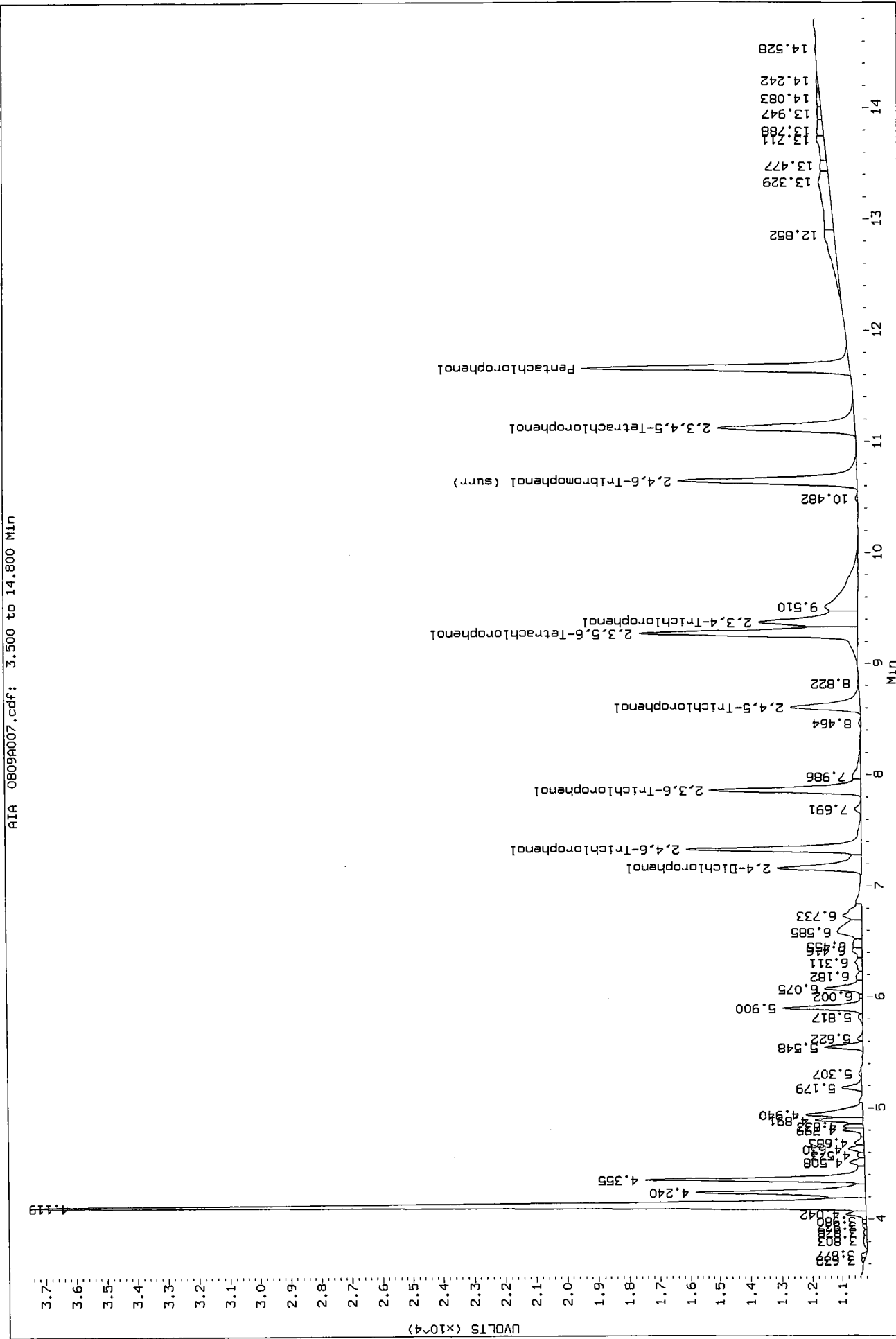


**MANUAL ADJUSTMENTS**  
 1. Peak not found  
 2. Poor Chromatography  
 3. Baseline Correction  
 4. Totals Calculation  
 5. Other  
 Analyst BR Date 8/12/2010



Data File: /chem2/ecdl1.1/FFCF20100809.b/ical-2.b/0809A007.d/0809A007.cdf  
 Injection Date: 09-AUG-2010 13:03  
 Instrument: ecdl1.i  
 Client Sample ID:

Before AR 8/12/2010



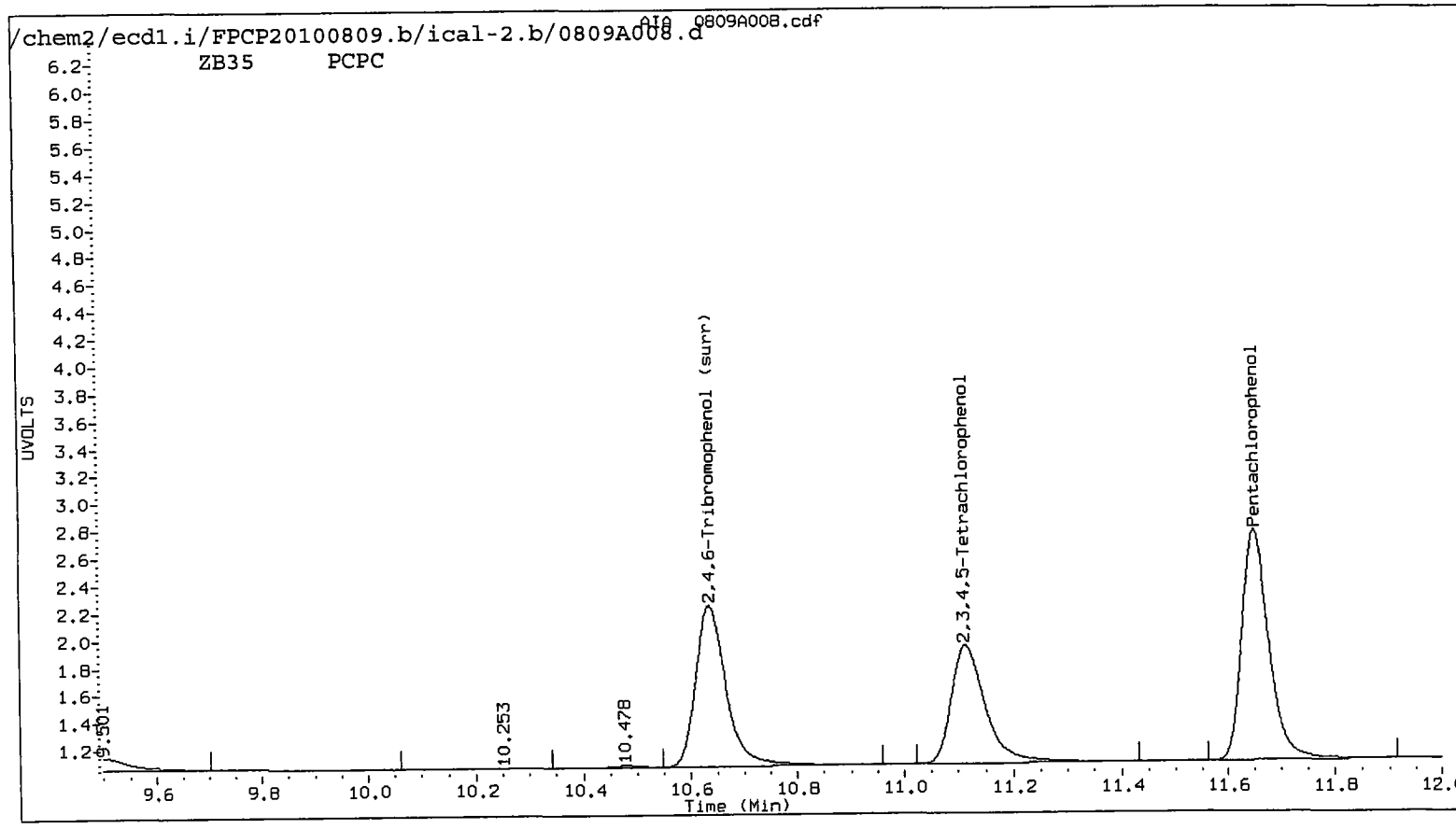
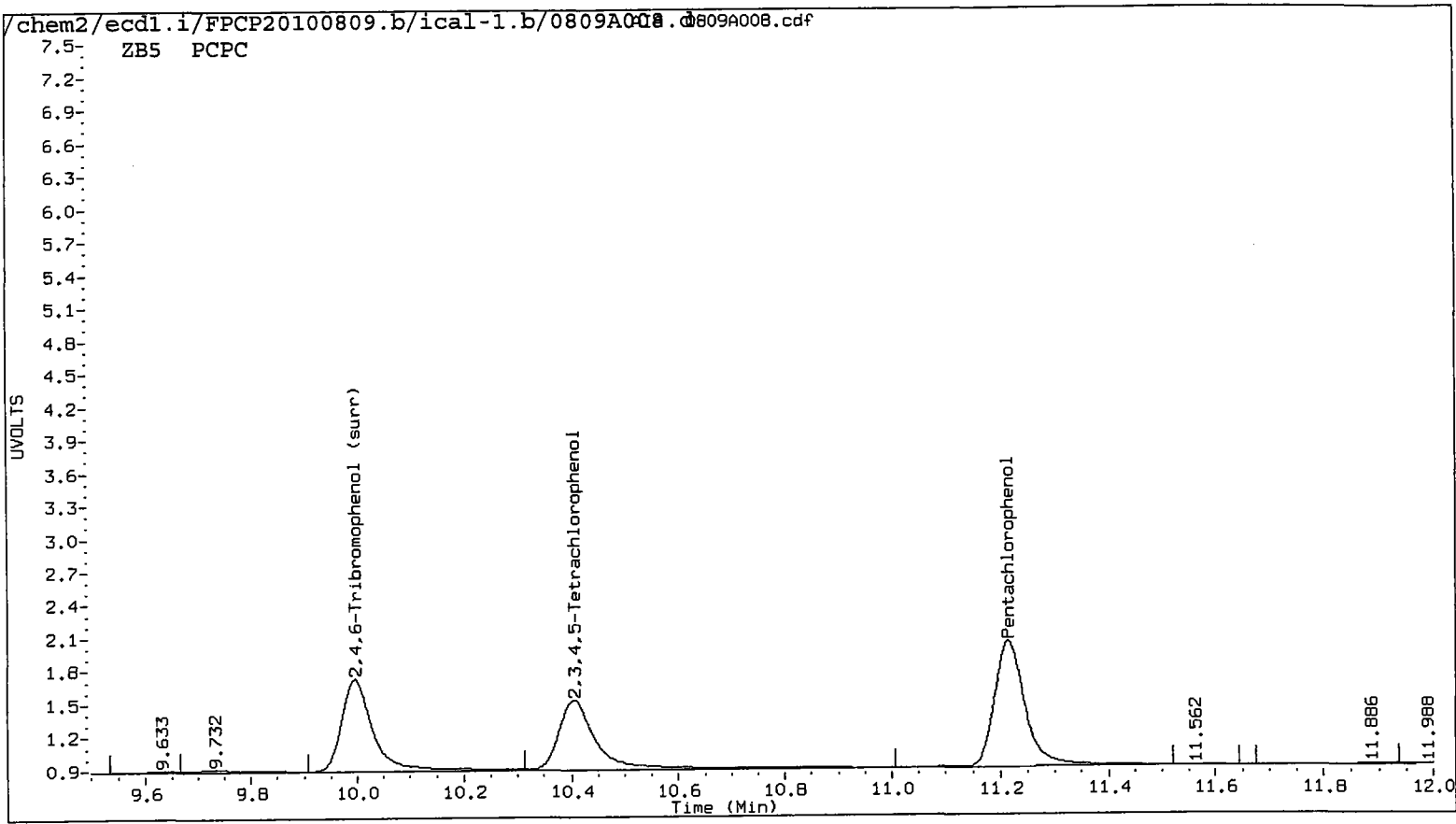
Analytical Resources Inc.  
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecdl.i/FPCP20100809.b/ical-1.b/0809A008.d   ARI ID: PCPC  
 Data file 2: /chem2/ecdl.i/FPCP20100809.b/ical-2.b/0809A008.d   Client ID:  
 Method: /chem2/ecdl.i/FPCP20100809.b/FPCP.m                   Injection Date: 09-AUG-2010 13:23  
 Compound Sublist: all    Report Date: 08/12/2010 19:15  
 Instrument: ecdl.i    Matrix: WATER  
 Operator: ar    Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35	RPD	Compound
RT	Shift	Response	RT	Shift	Response	on col	on col		
11.215	-0.004	222874	11.652	-0.006	298790	13.5277	13.0127	3.9	Pentachlorophenol
7.263	-0.001	119503	7.331	-0.002	175254	13.3777	14.0376	4.8	2,4,6-Trichlorophenol
7.617	-0.002	120087	7.860	-0.004	157630	12.9827	12.7034	2.2	2,3,6-Trichlorophenol
8.232	-0.010	71098	8.600	-0.015	89400	14.0857	13.5058	4.2	2,4,5-Trichlorophenol
8.780	-0.012	89192	9.365	-0.015	117878	13.0377	13.1515	0.9	2,3,4-Trichlorophenol
9.002	-0.005	187444	9.266	-0.011	232265	13.2886	12.5448	5.8	2,3,5,6-Tetrachlorophenol
10.406	-0.007	153678	11.115	-0.011	189199	13.8120	12.9671	6.3	2,3,4,5-Tetrachlorophenol
6.890	-0.003	76337	7.160	-0.006	91643	141.9985	137.3547	3.3	2,4-Dichlorophenol
9.996	-0.006	174610	10.636	-0.010	235194	13.5	12.6	6.6	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	53.9	50.4

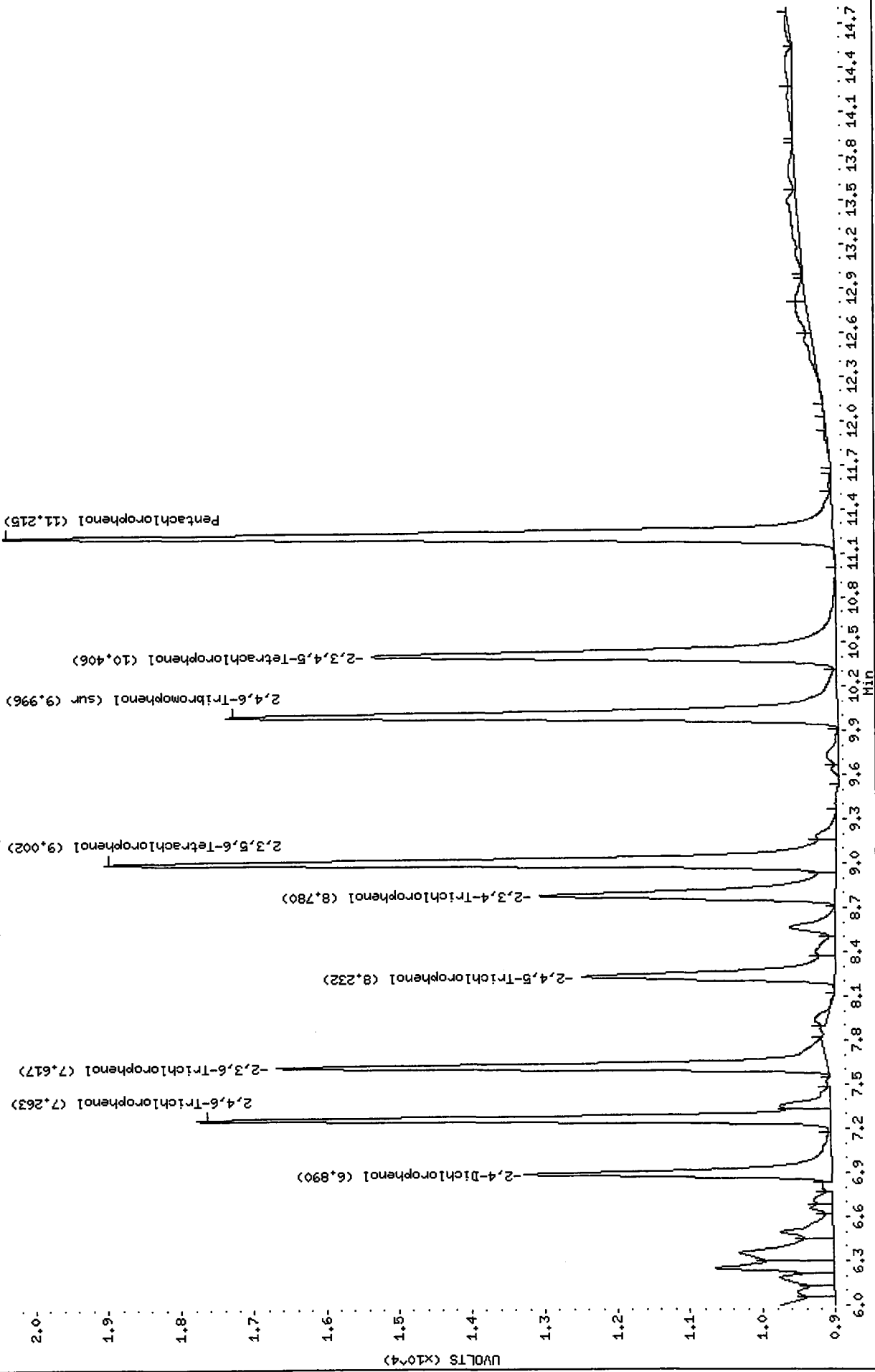


Data File: /chem2/ecd1.i/FPCP20100809.b/ical-1.b/0809A008.d  
Date: 09-AUG-2010 13:23  
Client ID:  
Sample Info: PCPC  
Purge Volume: 2.0  
Column phase: ZB5

Instrument: ecd1.i

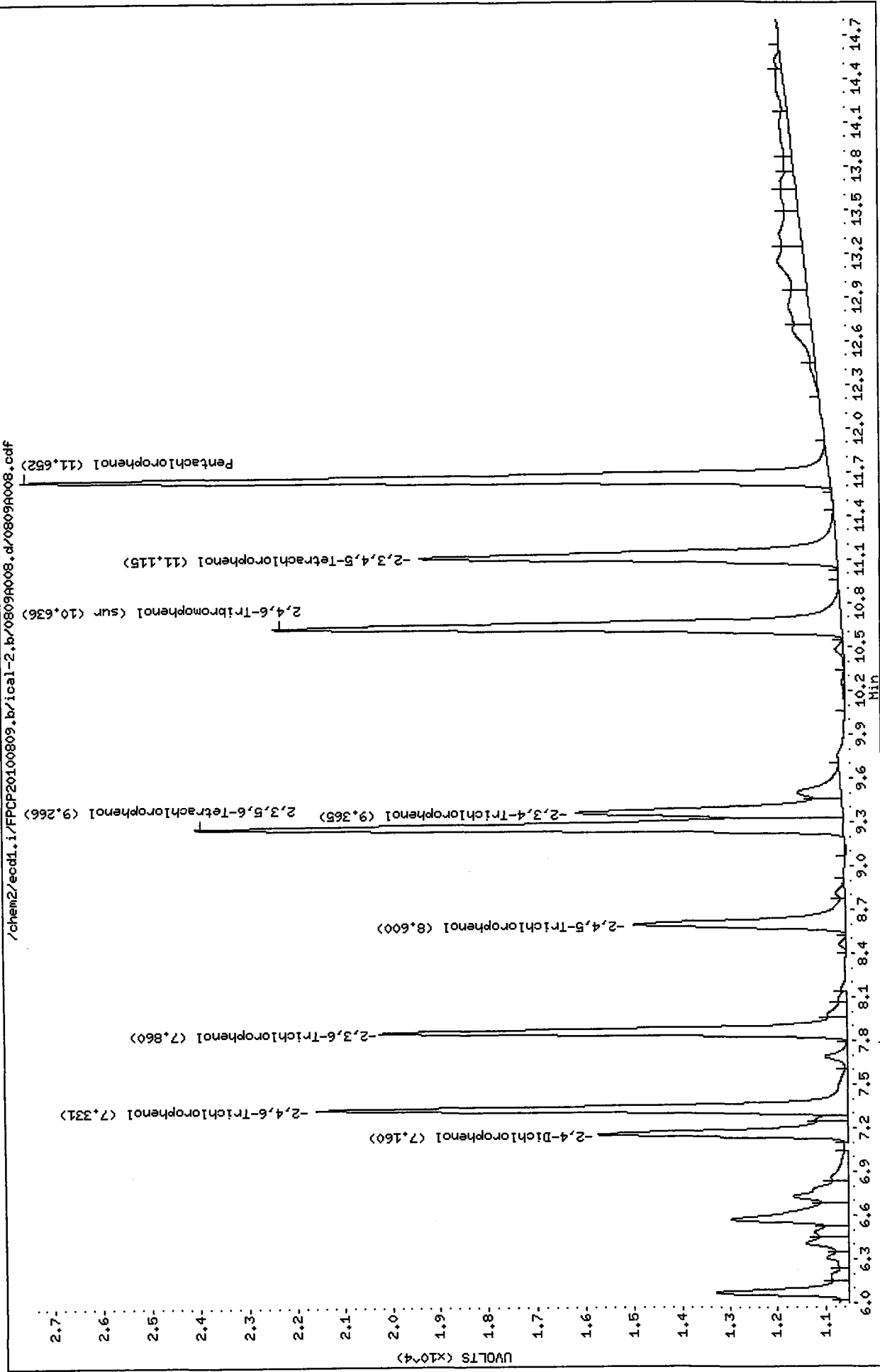
Operator: ar  
Column diameter: 0.53

/chem2/ecd1.i/FPCP20100809.b/ical-1.b/0809A008.d/0809A008.cdf



Data File: /chem2/eed1.i/FPCP20100809.b/ical-2.b/0809A008.d  
Date: 09-AUG-2010 13:23  
Client ID:  
Sample Info: PCPC  
Purge Volume: 2.0  
Column phase: ZB35

Instrument: eed1.i  
Operator: ar  
Column diameter: 0.53



Analytical Resources Inc.  
Dual Column 8041 Chlorinated Phenols Quantitation Report

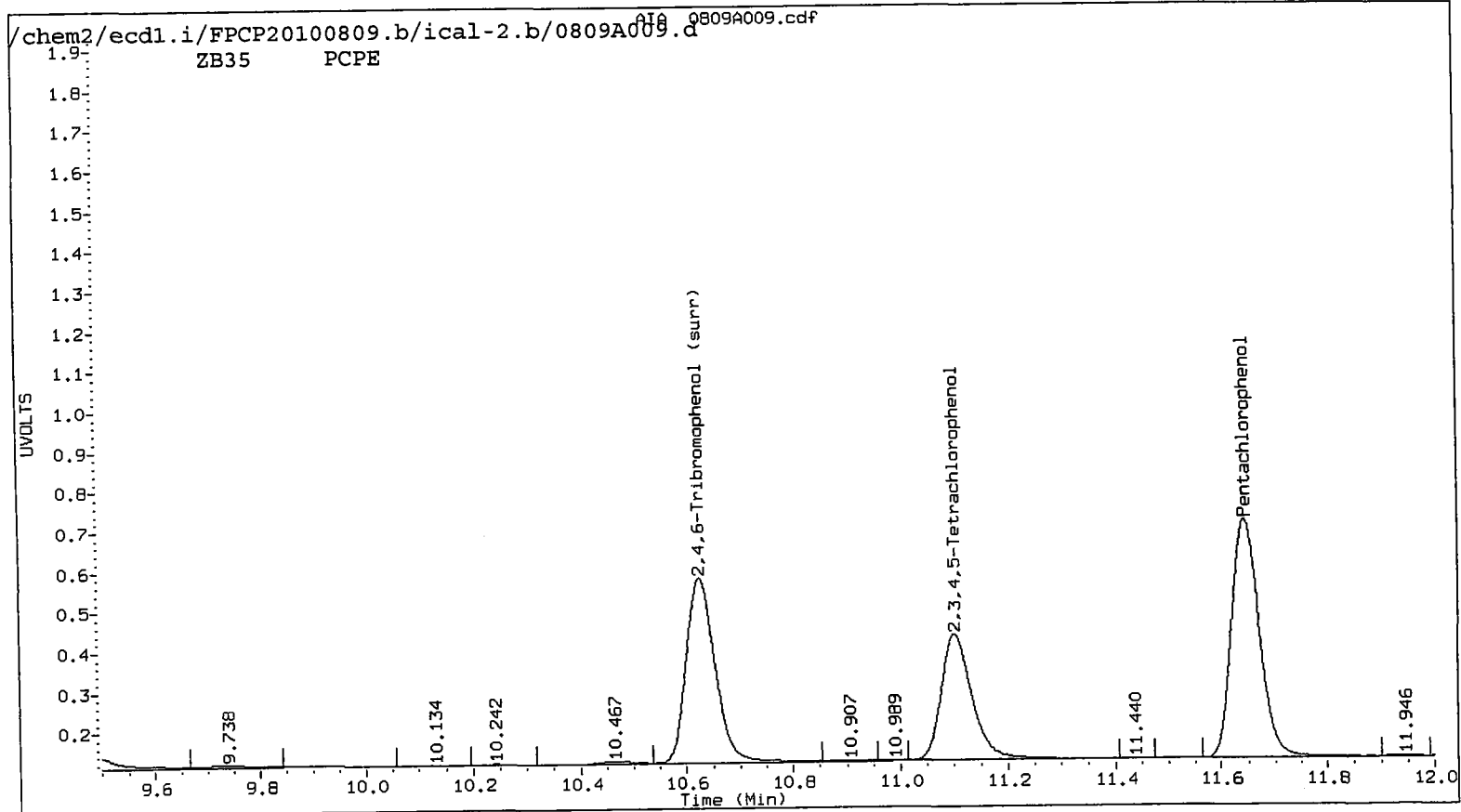
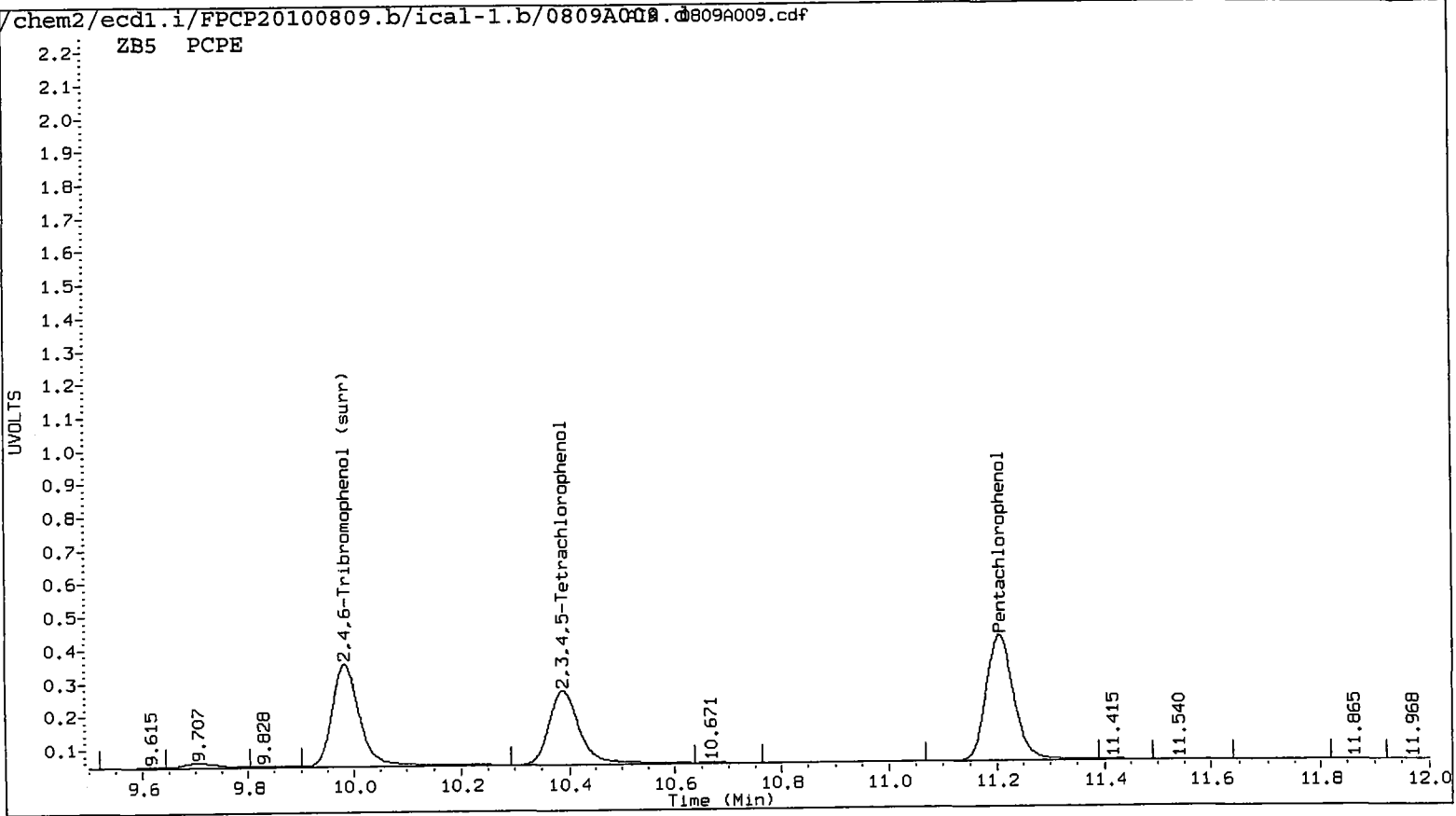
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 Data file 2: /chem2/ecdl.i/FPCP20100809.b/ical-2.b/0809A009.d    Client ID:  
 Method: /chem2/ecdl.i/FPCP20100809.b/FPCP.m                      Injection Date: 09-AUG-2010 13:43  
 Compound Sublist: all     Report Date: 08/12/2010 19:15  
 Instrument: ecd1.i     Matrix: WATER  
 Operator: ar     Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35	RPD	Compound
RT	Shift	Response	RT	Shift	Response	on col	on col		
11.206	-0.013	684285	11.645	-0.013	1025332	49.0326	44.6545	9.3	Pentachlorophenol
7.259	-0.005	376941	7.327	-0.006	561100	49.0547	44.9434	8.7	2,4,6-Trichlorophenol
7.611	-0.008	401238	7.855	-0.009	556890	49.3933	44.8796	9.6	2,3,6-Trichlorophenol
8.212	-0.030	214503	8.586	-0.029	278412	42.4967	49.1247	14.5	2,4,5-Trichlorophenol
8.760	-0.032	273728	9.351	-0.029	376624	40.0123	48.9147	20.0	2,3,4-Trichlorophenol
8.990	-0.017	594124	9.256	-0.021	833297	42.1197	45.0070	6.6	2,3,5,6-Tetrachlorophenol
10.389	-0.024	444734	11.103	-0.023	639912	48.8325	43.8575	10.7	2,3,4,5-Tetrachlorophenol
6.884	-0.009	204471	7.153	-0.013	267768	486.7918	490.3559	0.7	2,4-Dichlorophenol
9.984	-0.018	559983	10.626	-0.020	861309	49.4	46.1	6.9	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	197.7	184.6

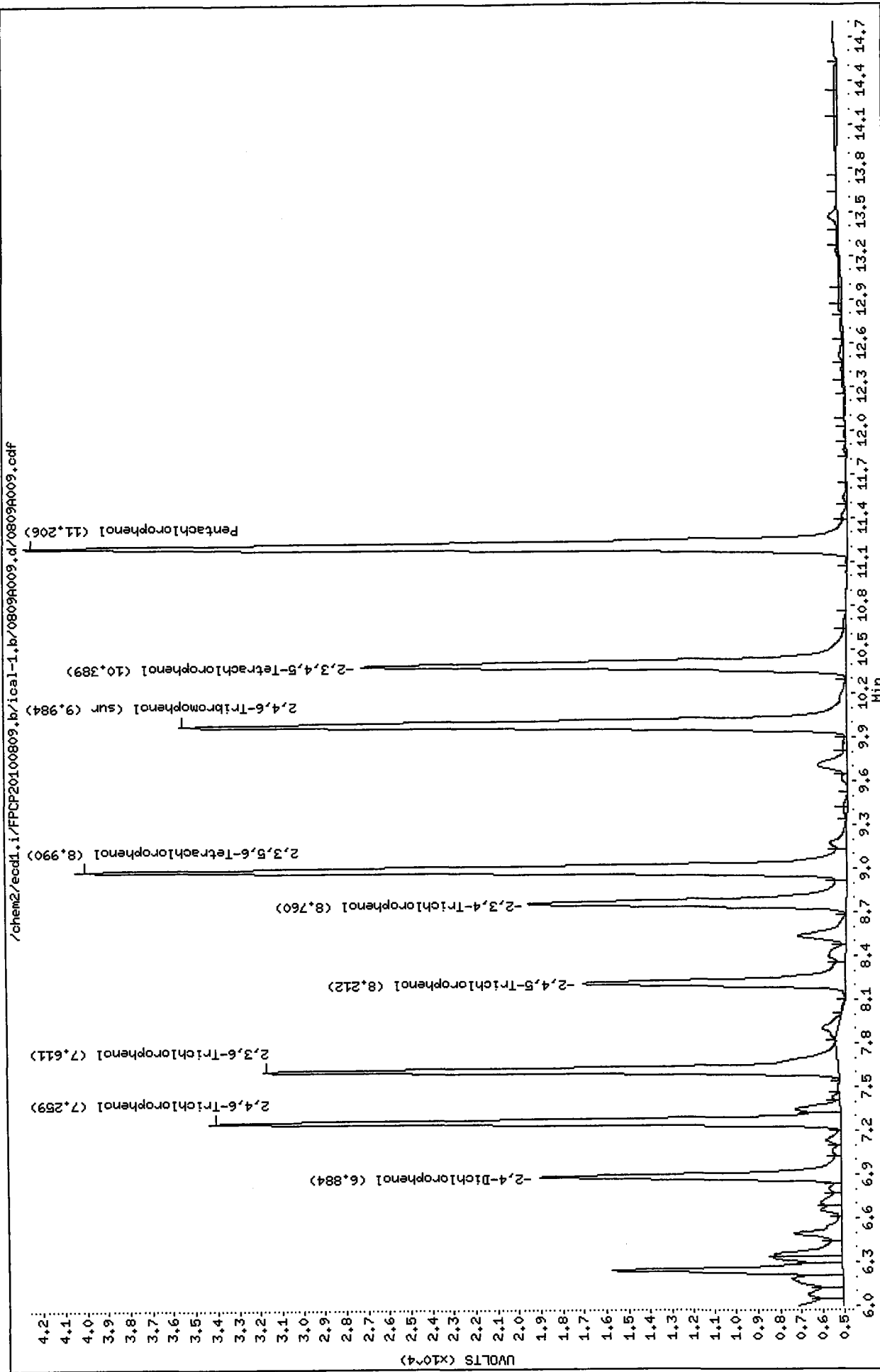




Data File: /chem2/ecdl1.i/FPCP20100809.b/ical-1.b/0809A009.d  
Date : 09-AUG-2010 13:43  
Client ID:  
Sample Info: PCPE  
Purge Volume: 2.0  
Column phase: ZB5

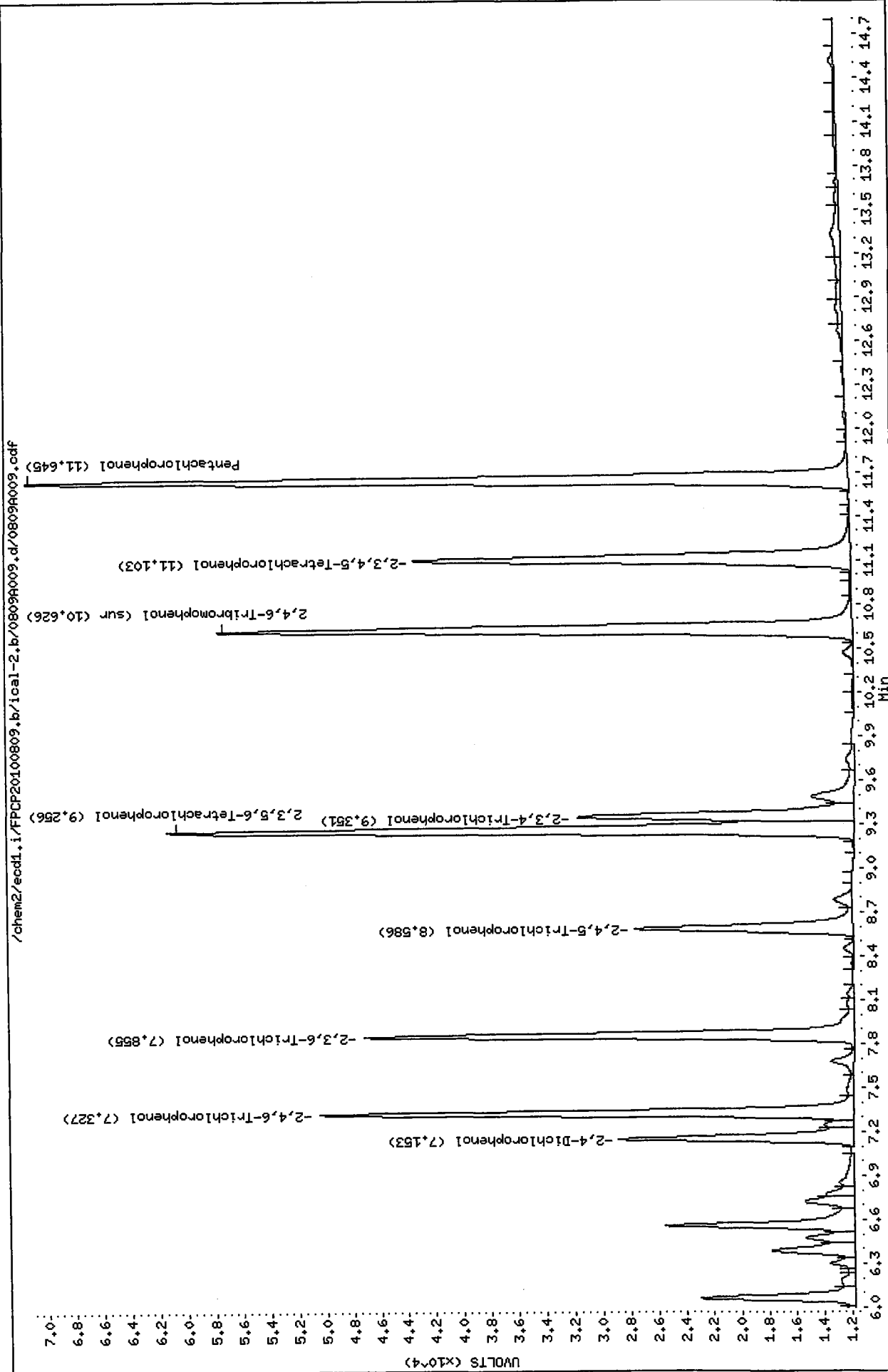
Instrument: ecdl1.i

Operator: ar  
Column diameter: 0.53



Data File: /chem2/ecd1.i/FFCP20100809.b/ical-2.b/0809A009.d  
Date : 09-AUG-2010 13:43  
Client ID:  
Sample Info: PCPE  
Purge Volume: 2.0  
Column phase: ZB35

Instrument: ecd1.i  
Operator: ar  
Column diameter: 0.53



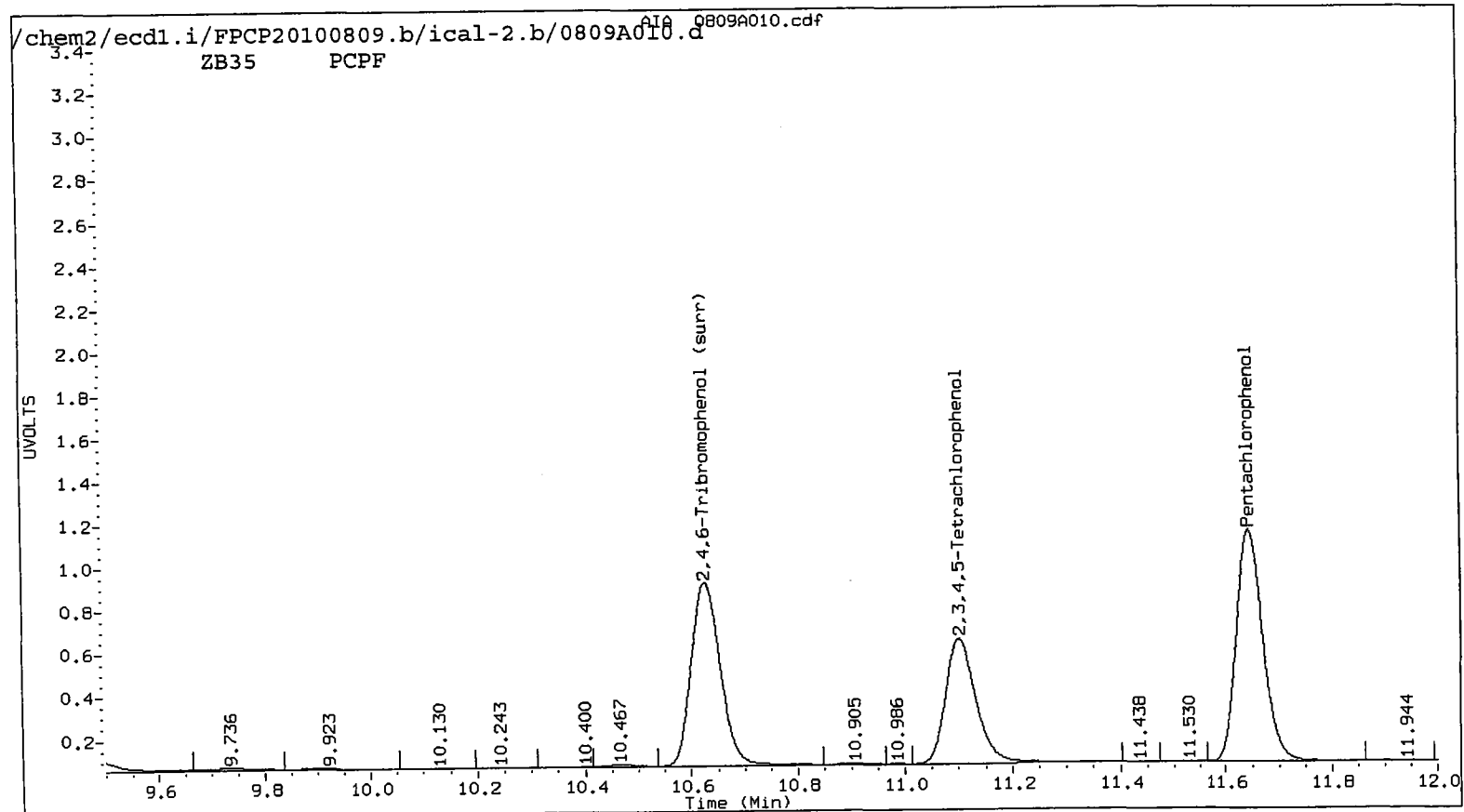
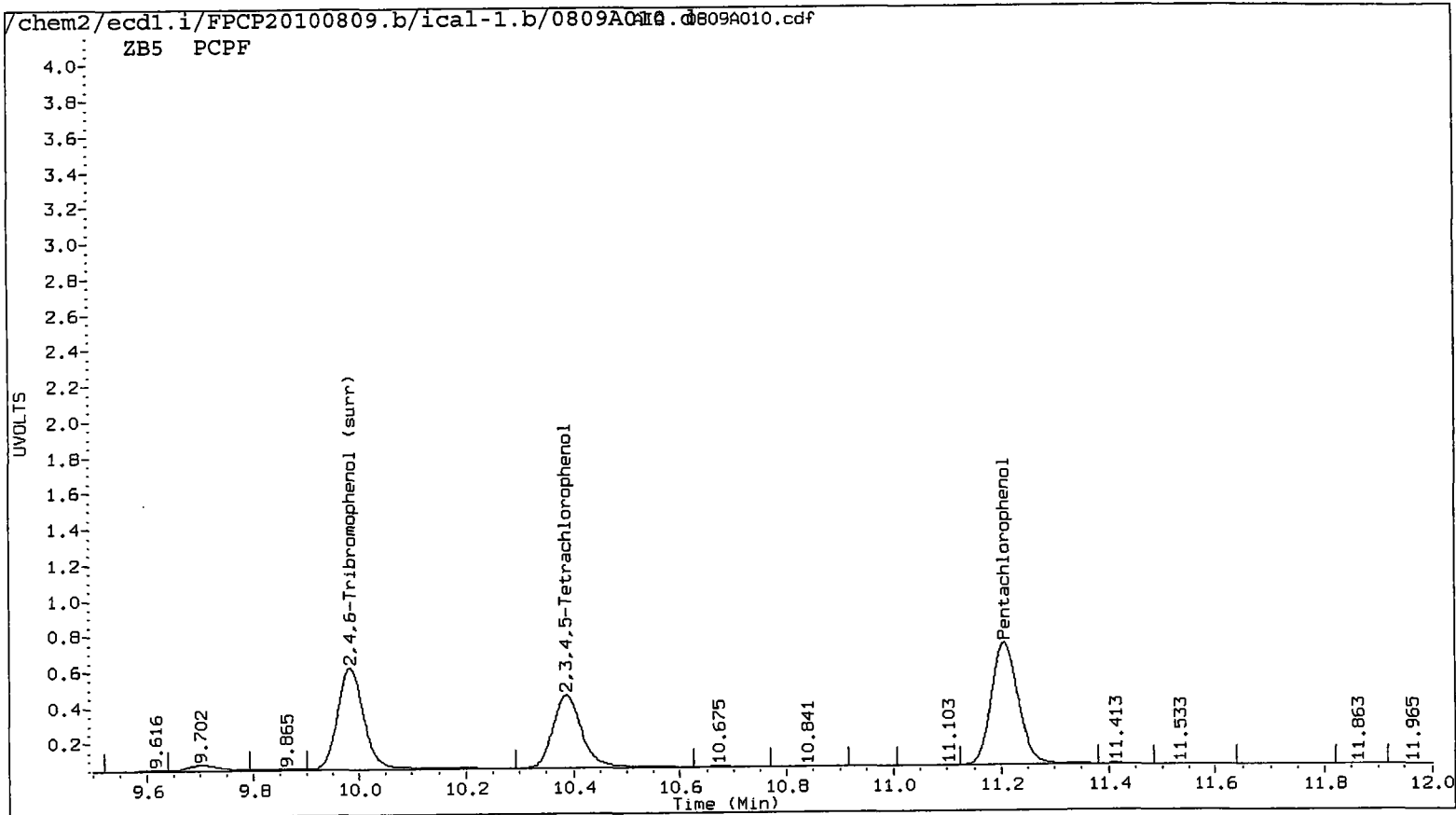
Analytical Resources Inc.  
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecdl.i/FPCP20100809.b/ical-1.b/0809A010.d ARI ID: PCPF  
 Data file 2: /chem2/ecdl.i/FPCP20100809.b/ical-2.b/0809A010.d Client ID:  
 Method: /chem2/ecdl.i/FPCP20100809.b/FPCP.m Injection Date: 09-AUG-2010 14:03  
 Compound Sublist: all Report Date: 08/12/2010 19:15  
 Instrument: ecdl.i Matrix: WATER  
 Operator: ar Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35	RPD	Compound
RT	Shift	Response	RT	Shift	Response	on col	on col		
11.206	-0.013	1196534	11.646	-0.012	1836826	100.2949	79.9961	22.5	Pentachlorophenol
7.260	-0.004	665977	7.328	-0.005	1007057	100.2742	80.6640	21.7	2,4,6-Trichlorophenol
7.612	-0.007	716085	7.856	-0.008	1010769	100.1734	81.4576	20.6	2,3,6-Trichlorophenol
8.209	-0.033	362686	8.584	-0.031	489569	71.8542	100.2604	33.0	2,4,5-Trichlorophenol
8.756	-0.036	505263	9.349	-0.031	666942	73.8571	100.3206	30.4	2,3,4-Trichlorophenol
8.990	-0.017	1055773	9.257	-0.020	1529812	74.8477	82.6263	9.9	2,3,5,6-Tetrachloropheno
10.387	-0.026	762767	11.103	-0.023	1154091	100.3602	79.0976	23.7	2,3,4,5-Tetrachlorophenol
6.884	-0.009	341711	7.153	-0.013	457854	1004.0557	1002.7434	0.1	2,4-Dichlorophenol
9.983	-0.019	994034	10.627	-0.019	1608339	100.2	86.2	15.1	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

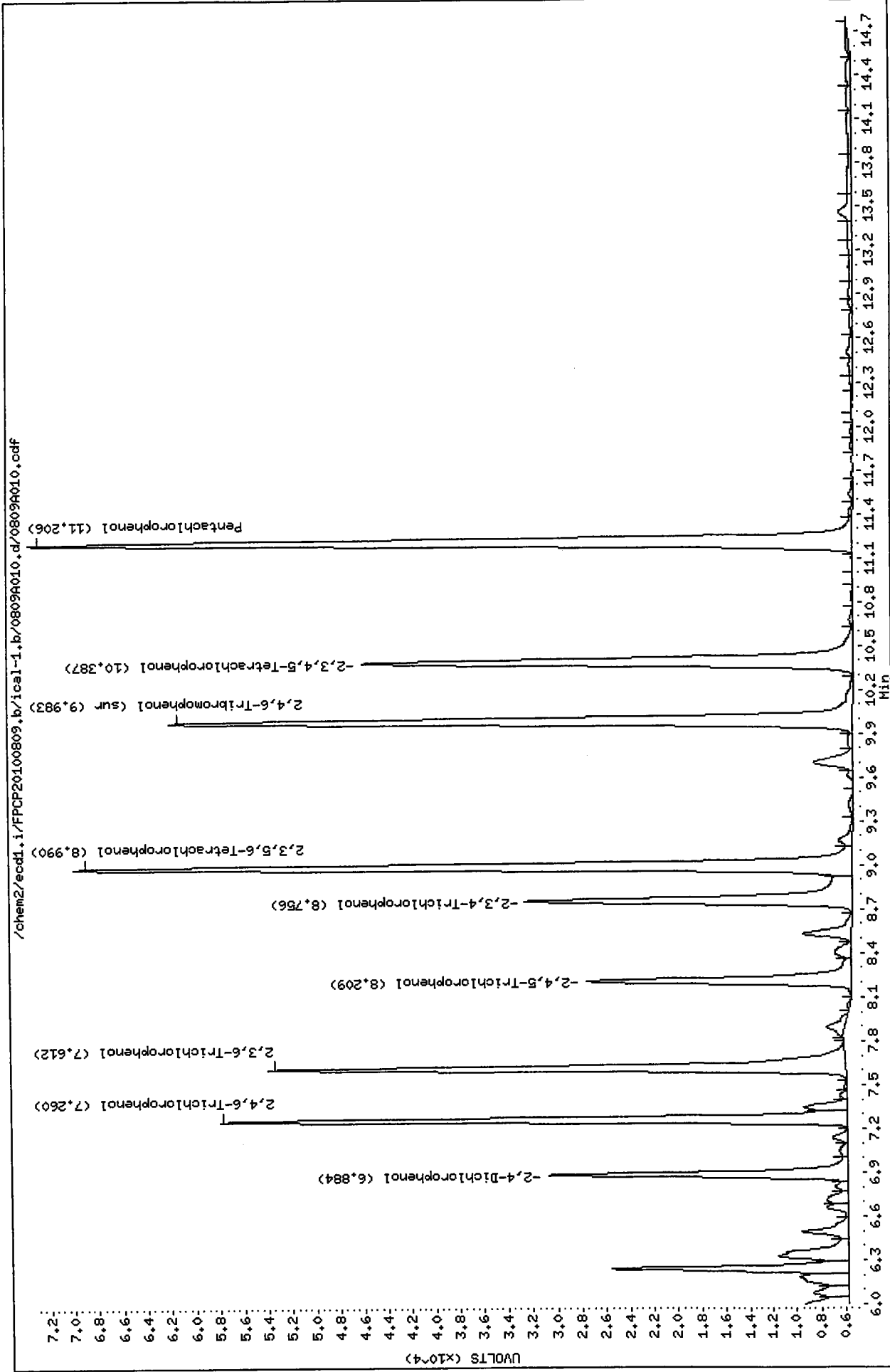
COMPOUND	Col1	Col2
2,4,6-TBP (surr)	400.8	344.6



Data File: /chem2/ecdl1.i/FPCP20100809,b/ical-1.b/0809A010.d  
Date : 09-AUG-2010 14:03  
Client ID:  
Sample Info: PCPF  
Purge Volume: 2.0  
Column phase: ZB5

Instrument: eccl1.i

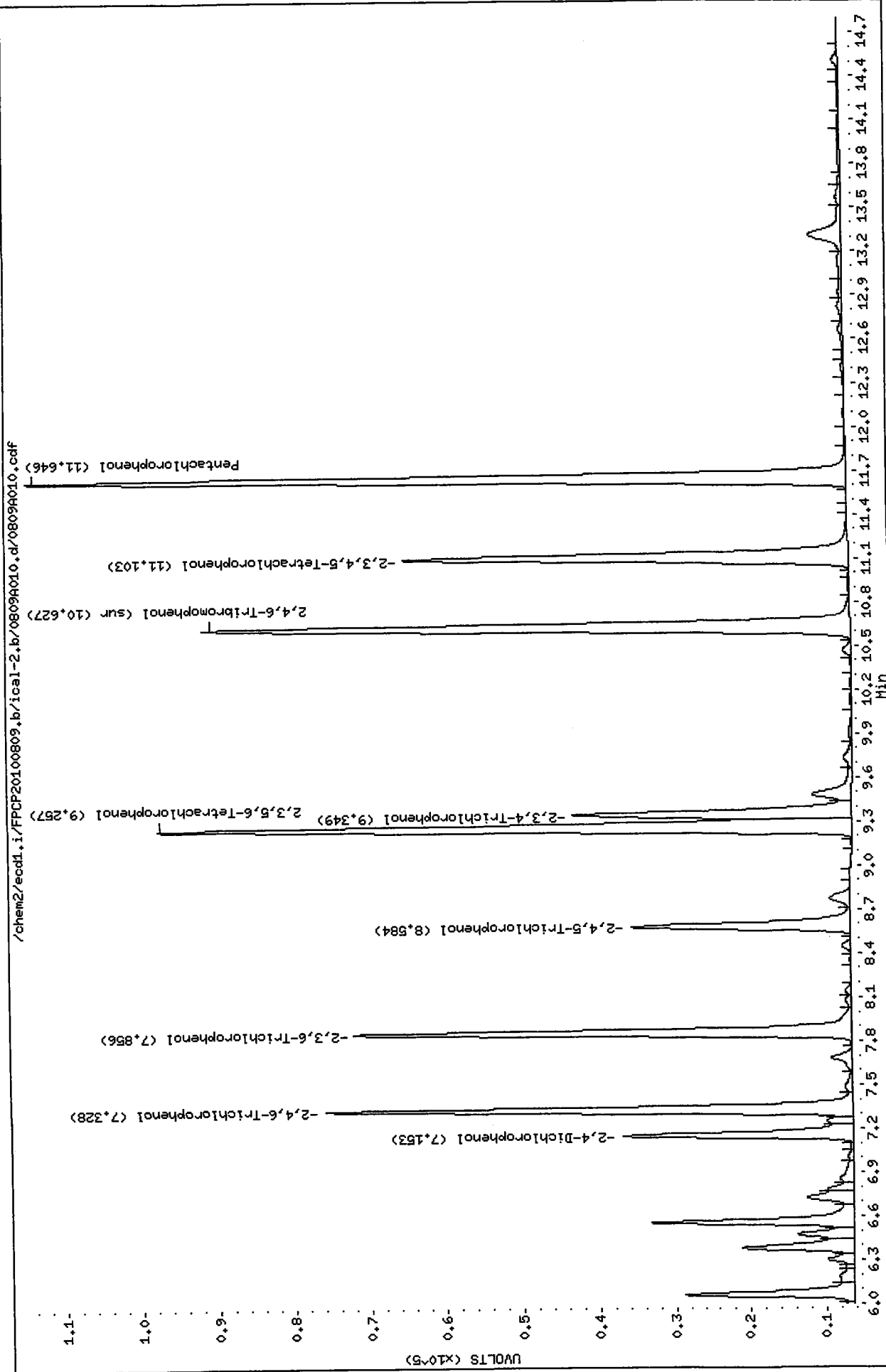
Operator: ar  
Column diameter: 0.53



Data File: /chem2/ecdl.i/FPCP20100809.b/ical-2.b/0809A010.d  
Date : 09-AUG-2010 14:03  
Client ID:  
Sample Info: PCPF  
Purge Volume: 2.0  
Column phase: ZB35

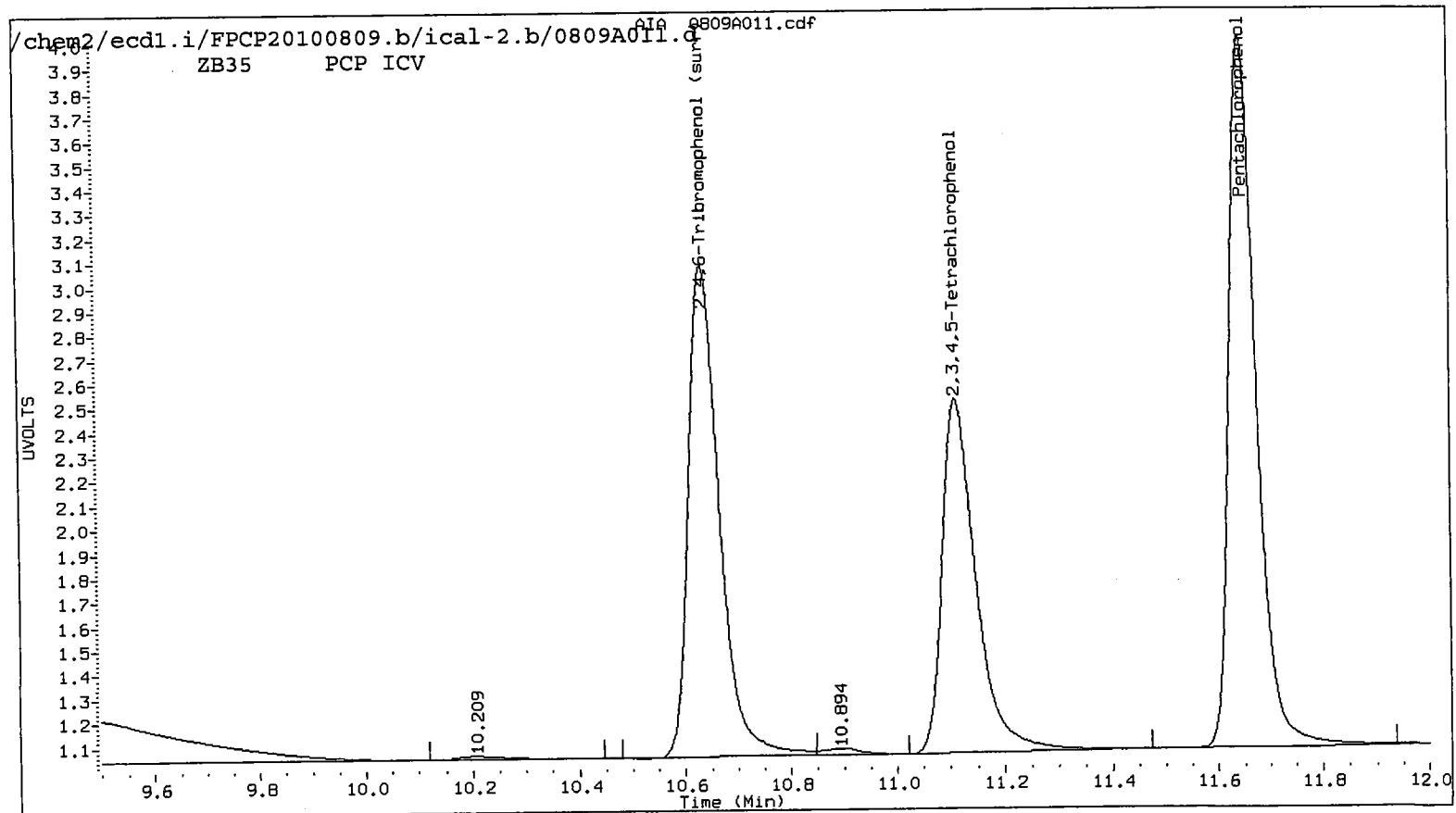
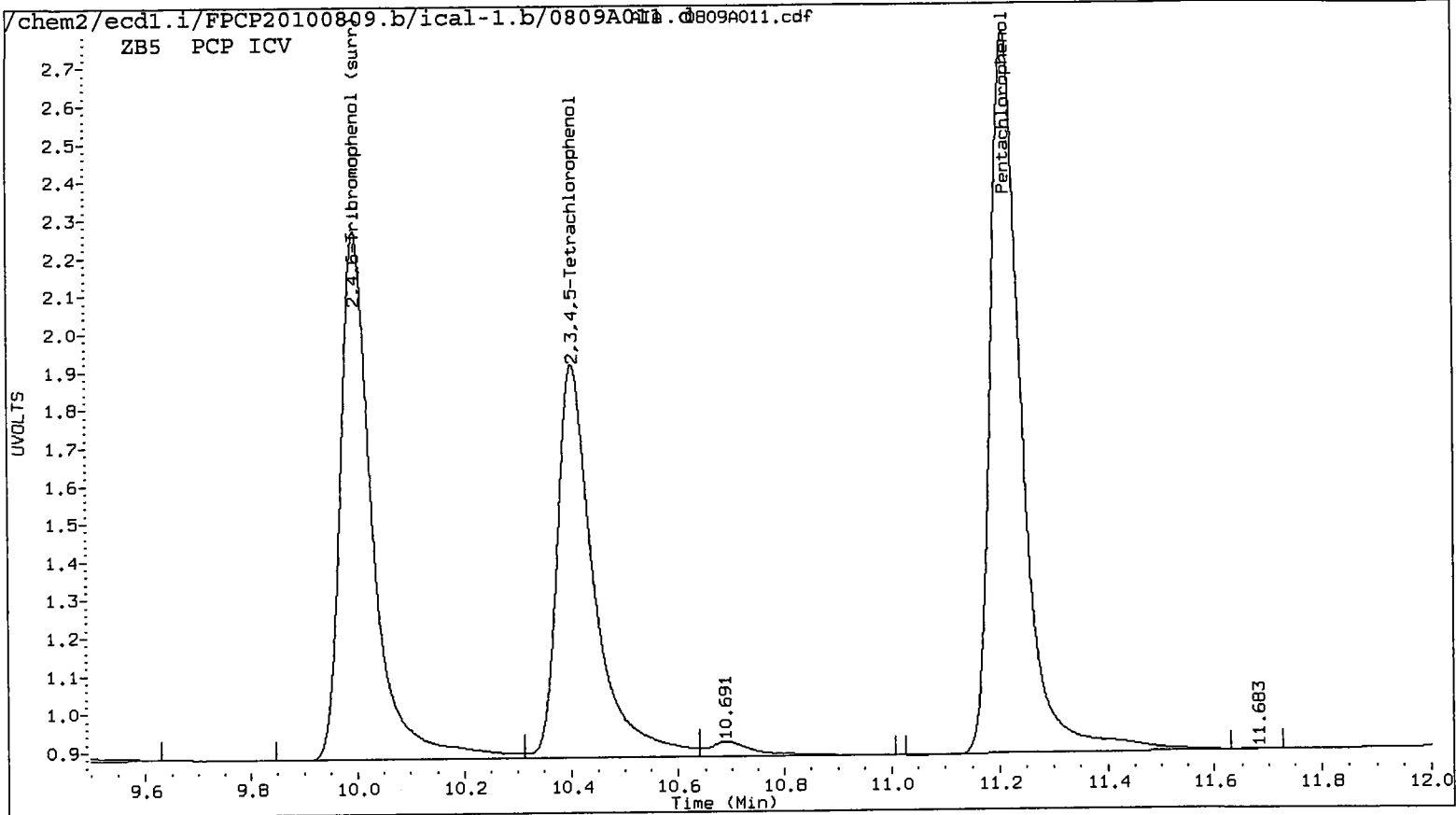
Instrument: eccl.i

Operator: ar  
Column diameter: 0.53





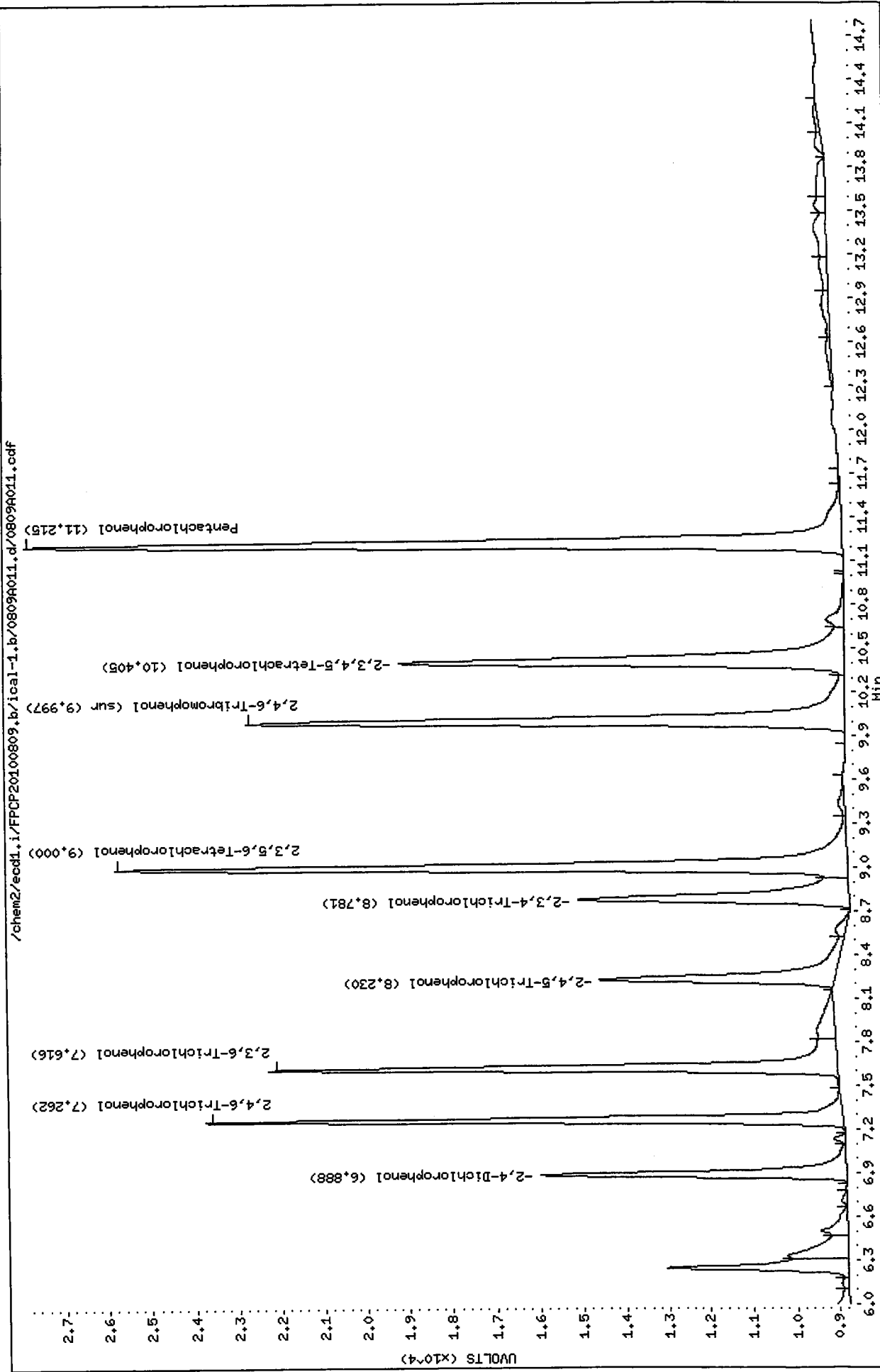




Data File: /chem2/ecdl1.i/FPCP20100809.b/ical-1.b/0809A011.d  
Date : 09-AUG-2010 14:23  
Client ID:  
Sample Info: PCP ICV  
Purge Volume: 2.0  
Column phase: ZB5

Instrument: ecd1.i

Operator: ar  
Column diameter: 0.53

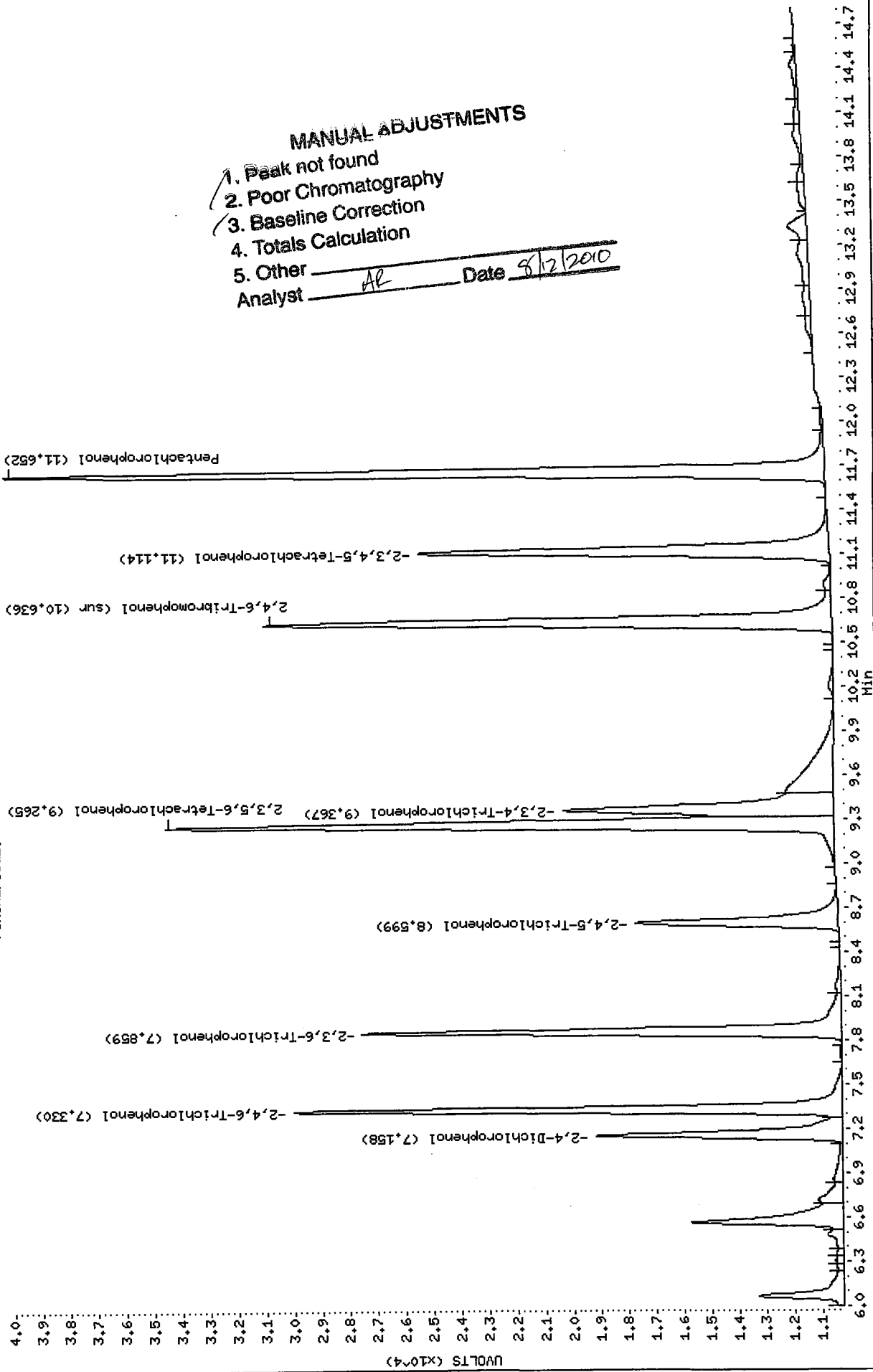


Data File: /chem2/ecd1.i/FPCP20100809,b/ical-2,b/0809A011.d  
Date : 09-AUG-2010 14:23  
Client ID:  
Sample Info: PCP ICV  
Purge Volume: 2.0  
Column phase: ZB35

Instrument: ecd1.i

Operator: ar  
Column diameter: 0.53

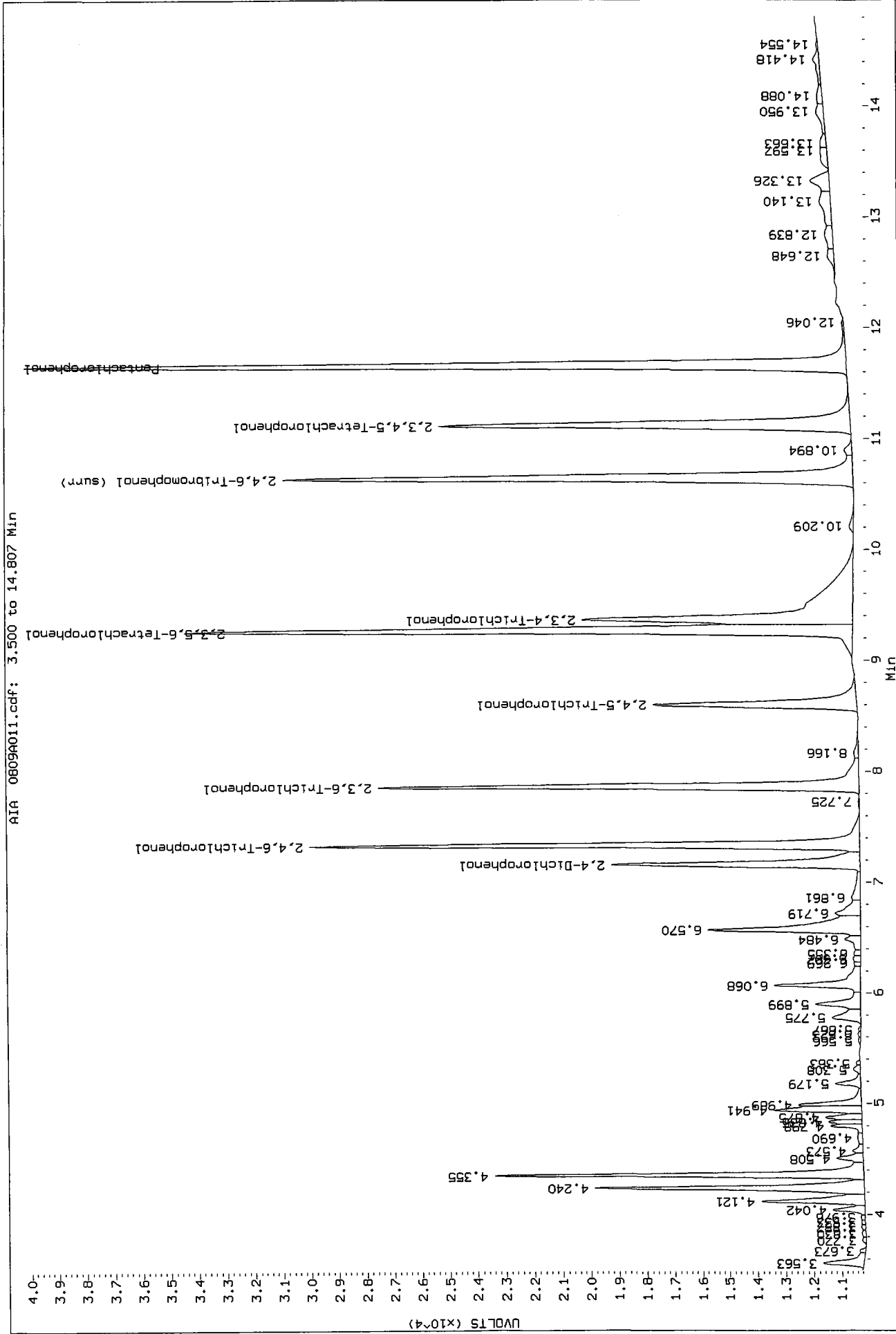
/chem2/ecd1.i/FPCP20100809,b/ical-2,b/0809A011.d/0809A011.cdf



MANUAL ADJUSTMENTS  
1. Peak not found  
2. Poor Chromatography  
3. Baseline Correction  
4. Totals Calculation  
5. Other \_\_\_\_\_  
Analyst AR Date 8/12/2010

Data File: /chem2/ecd1.1/FPCP20100809.b/ical-2.b/0609A011.d/0609A011.cdf  
 Injection Date: 09-AUG-2010 14:23  
 Instrument: ecd1.1  
 Client Sample ID:

Before AR 8/12/2010



**PCP/Chlorophenols Raw Data  
Run Logs, Continuing Calibrations, and Raw Data**

**ARI Job ID: RG51**



### GC Analyst Notes / Corrective Action Log

ARI Project ID: RG51 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): PCP

Instrument: FID-3A FID-3B FID-4A FID-4B FID-5 FID-7 FID-8  
FID-9 ECD-1 ECD-3 ECD-4 ECD-5 ECD-6 ECD-7

Dates: Curve: 08/09/10 Analysis Start: 08/12/10

Endrin/DDT Breakdown <15%? YES / NO / NA Method Blank In Control? YES / NO  
ICal Meets RF & %RSD Criteria? YES / NO LCS/LCSD Recovery In Control? YES / NO  
CCal Meets RF & %RSD Criteria? YES / NO Surrogate Recovery In Control? YES / NO  
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):

*Spartic Factor*

*mbs: surrogate recovery 47.2%, QA = 50%*

*Sample "G" - dark colour of the extract, it was run twice full strength & 10x dilution, both times surrogate recovery below QC limits, possibly due to matrix effect.*

*All samples were re-derivatized and re-run on 08/18/10. All surrogate recoveries OK. ✓*

*08/18/10 run reported.*

*YZ 8/19/10*

Additional Details on Reverse: Yes / No

Analyst: YZ Date: 8/17/10

Reviewer: [Signature] Date: 8/19/10

## GC LOG SUMMARY FOR DATABATCH - /chem2/ecdl.i/FPCP20100809.b/0818A-1.b

	Inject	Date/Time	Filename	DF	LabID	ClientID
1	18-AUG-2010	16:17	0818A001.d	1	PRIMER	
2	18-AUG-2010	16:37	0818A002.d	1	PRIMER	
3	18-AUG-2010	16:57	0818A003.d	1	PRIMER	
4	18-AUG-2010	17:17	0818A004.d	1	PCPCCAL	
5	18-AUG-2010	17:37	0818A005.d	1	RG51MBS1	RG51MBS1
6	18-AUG-2010	17:57	0818A006.d	1	RG51LCSS1	RG51LCSS1
7	18-AUG-2010	18:17	0818A007.d	1	RG51A	PSB12-0-0.5-072810
8	18-AUG-2010	18:37	0818A008.d	1	RG51B	PSB12-1.5-2.0-07281
9	18-AUG-2010	18:57	0818A009.d	1	RG51C	PSB12-2-4-072810
10	18-AUG-2010	19:17	0818A010.d	1	RG51D	PSB12-8-10-072810
11	18-AUG-2010	19:37	0818A011.d	1	RG51E	PSB12-8-10-072810-D
12	18-AUG-2010	19:57	0818A012.d	1	RG51F	PSB12-14-17-072810
13	18-AUG-2010	20:17	0818A013.d	1	RG51FMS	PSB12-14-17-072 MS
14	18-AUG-2010	20:37	0818A014.d	1	RG51FMSD	PSB12-14-17-072 MSD
15	18-AUG-2010	20:57	0818A015.d	1	RG51G	PSB12-4-6-072810
16	18-AUG-2010	21:17	0818A016.d	1	PCPCCAL	
17	18-AUG-2010	21:37	0818A017.d	1	PCPCCAL	

Analytical Resources Inc.  
Dual Column 8041 Chlorinated Phenols Quantitation Report

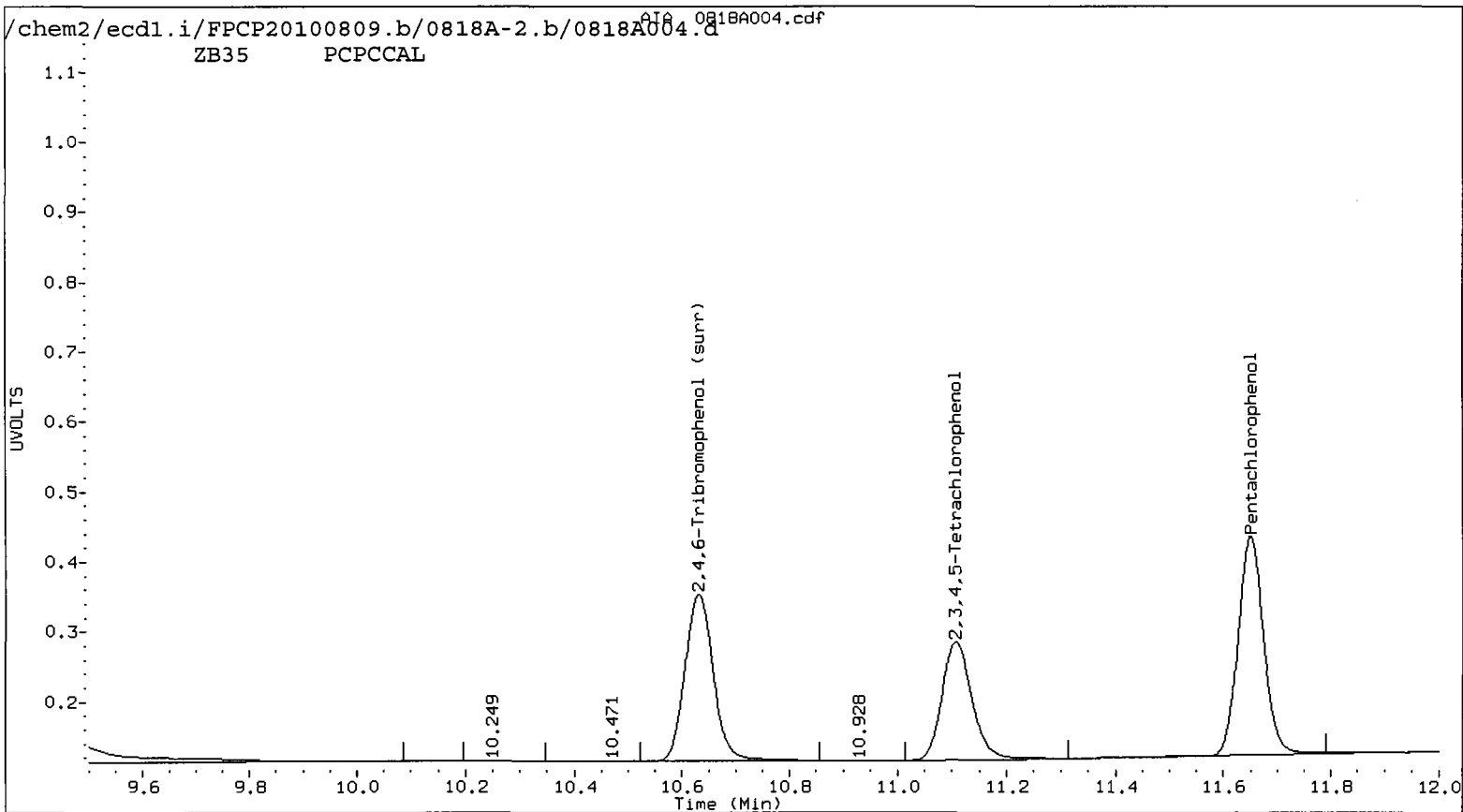
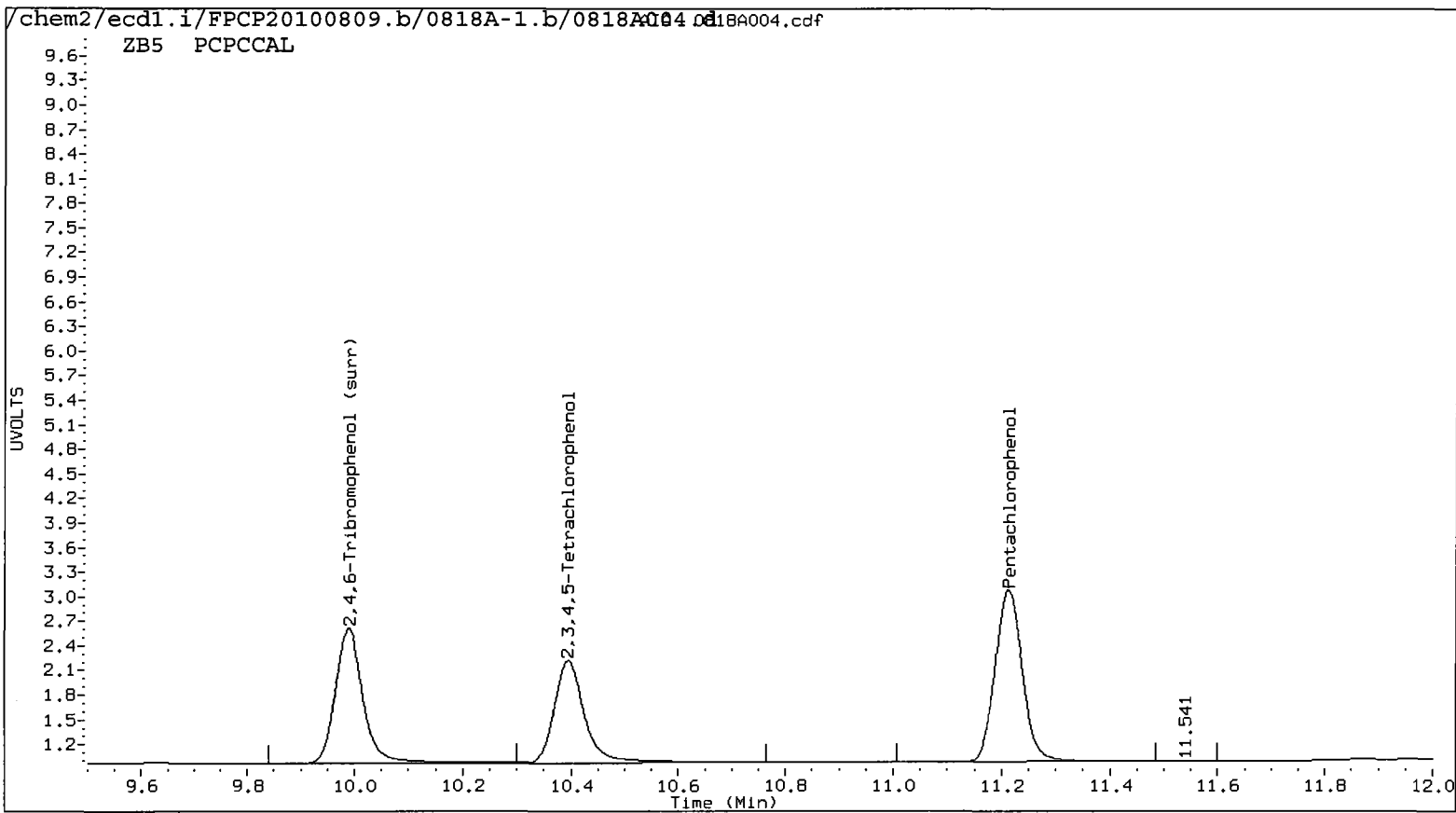
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 Data file 2: /chem2/ecdl.i/FPCP20100809.b/0818A-2.b/0818A004.d Client ID:  
 Method: /chem2/ecdl.i/FPCP20100809.b/FPCP.m Injection Date: 18-AUG-2010 17:17  
 Compound Sublist: all Report Date: 08/19/2010 11:23  
 Instrument: ecdl.i Matrix: NONE  
 Operator: ar Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35	RPD	Compound
RT	Shift	Response	RT	Shift	Response	on col	on col		
11.212	-0.007	370251	11.649	-0.009	515788	23.7689	22.4632	5.6	Pentachlorophenol
7.262	-0.002	209976	7.331	-0.002	305875	24.8482	24.5002	1.4	2,4,6-Trichlorophenol
7.615	-0.004	202668	7.859	-0.005	287227	22.8030	23.1475	1.5	2,3,6-Trichlorophenol
8.217	-0.025	121129	8.590	-0.025	153844	23.9977	24.5725	2.4	2,4,5-Trichlorophenol
8.765	-0.027	167924	9.356	-0.024	211129	24.5464	24.9484	1.6	2,3,4-Trichlorophenol
8.995	-0.012	338540	9.261	-0.016	455433	24.0004	24.5983	2.5	2,3,5,6-Tetrachlorophenol
10.394	-0.019	246669	11.107	-0.019	320342	23.7400	21.9552	7.8	2,3,4,5-Tetrachlorophenol
6.888	-0.005	109434	7.157	-0.009	146665	218.2792	235.0551	7.4	2,4-Dichlorophenol
9.989	-0.013	294480	10.631	-0.015	437390	23.7	23.4	1.3	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

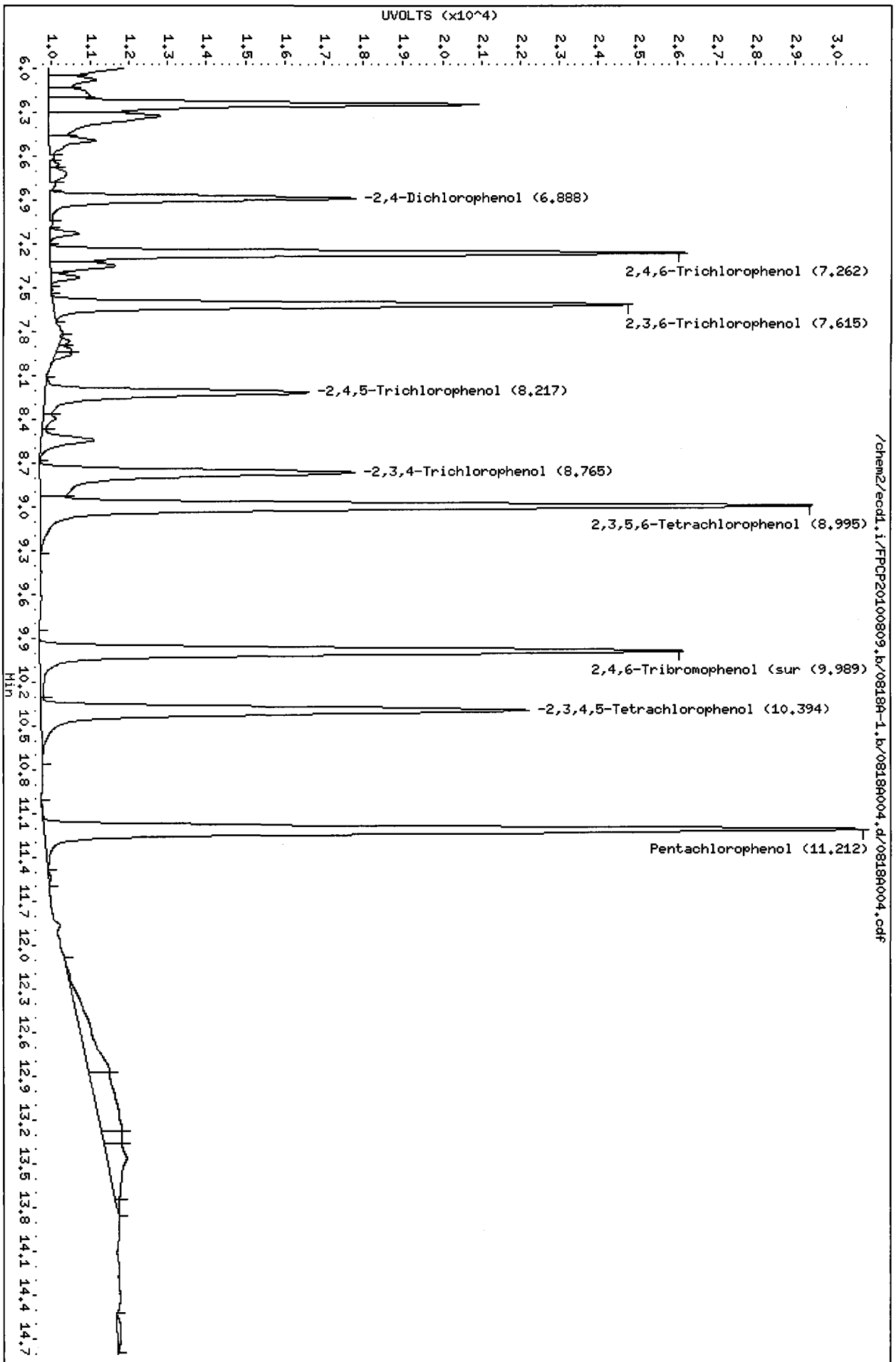
COMPOUND	Col1	Col2
Pentachlorophenol	95.1	89.9
2,4,6-Trichlorophenol	99.4	98.0
2,3,6-Trichlorophenol	91.2	92.6
2,4,5-Trichlorophenol	96.0	98.3
2,3,4-Trichlorophenol	98.2	99.8
2,3,5,6-Tetrachlorophenol	96.0	98.4
2,3,4,5-Tetrachlorophenol	95.0	87.8
2,4-Dichlorophenol	87.3	94.0
2,4,6-TBP (surr)	94.9	93.7





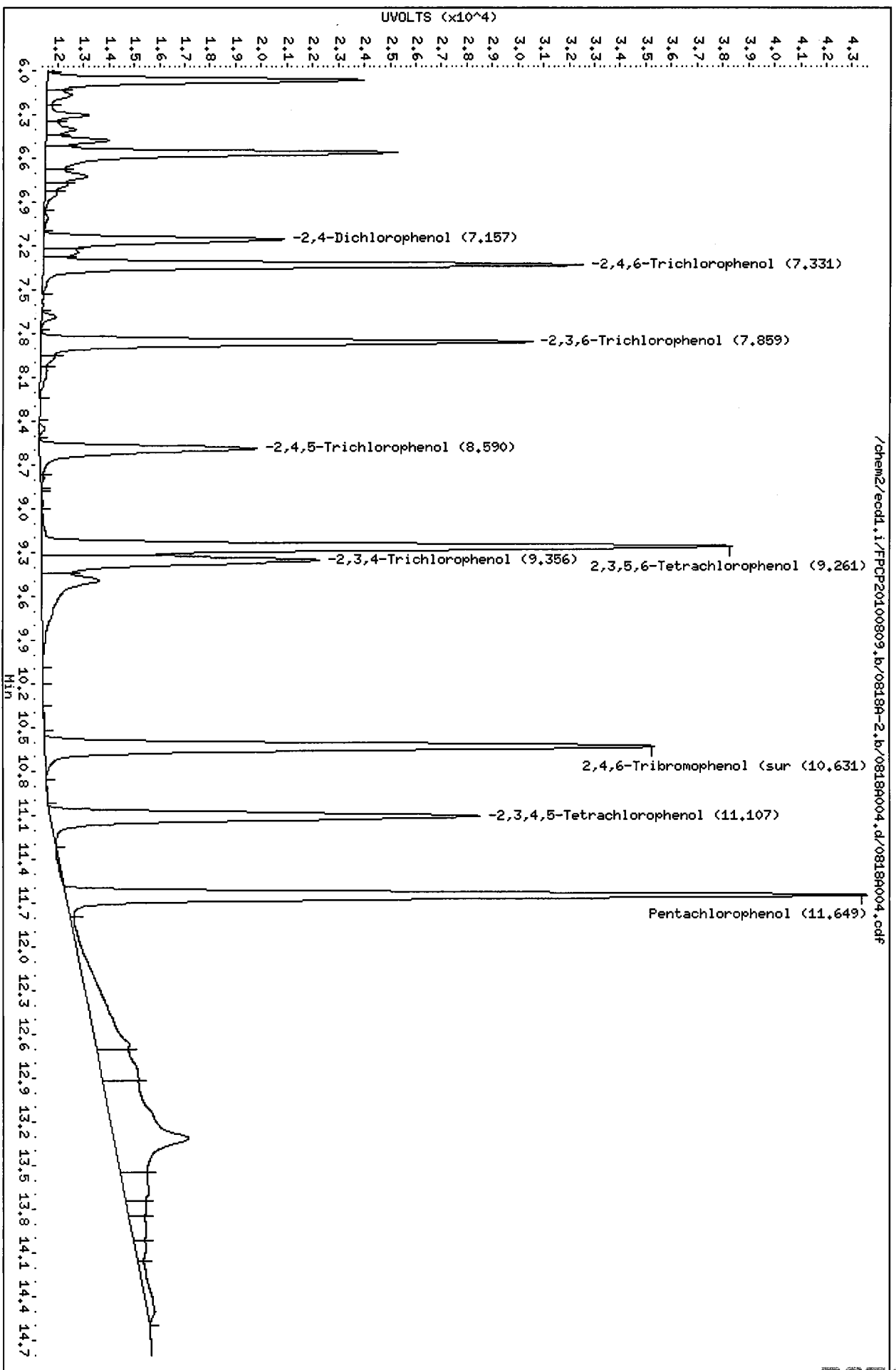
Data File: /chem2/ecdl.i/FPCP20100809.b/0818A-1.b/0818A004.d  
Date: 18-AUG-2010 17:17  
Client ID:  
Sample Info: POPCCAL  
Column phase: ZBS

Instrument: ecdl.i  
Operator: ar  
Column diameter: 0.53



Data File: /chem2/ecdd1.i/FP20100809.b/0818A-2.b/0818A004.d  
Date: 18-AUG-2010 17:17  
Client ID:  
Sample Info: PCPCAL  
Column phase: ZB35

Instrument: ecdd1.i  
Operator: an  
Column diameter: 0.53



Analytical Resources Inc.  
Dual Column 8041 Chlorinated Phenols Quantitation Report

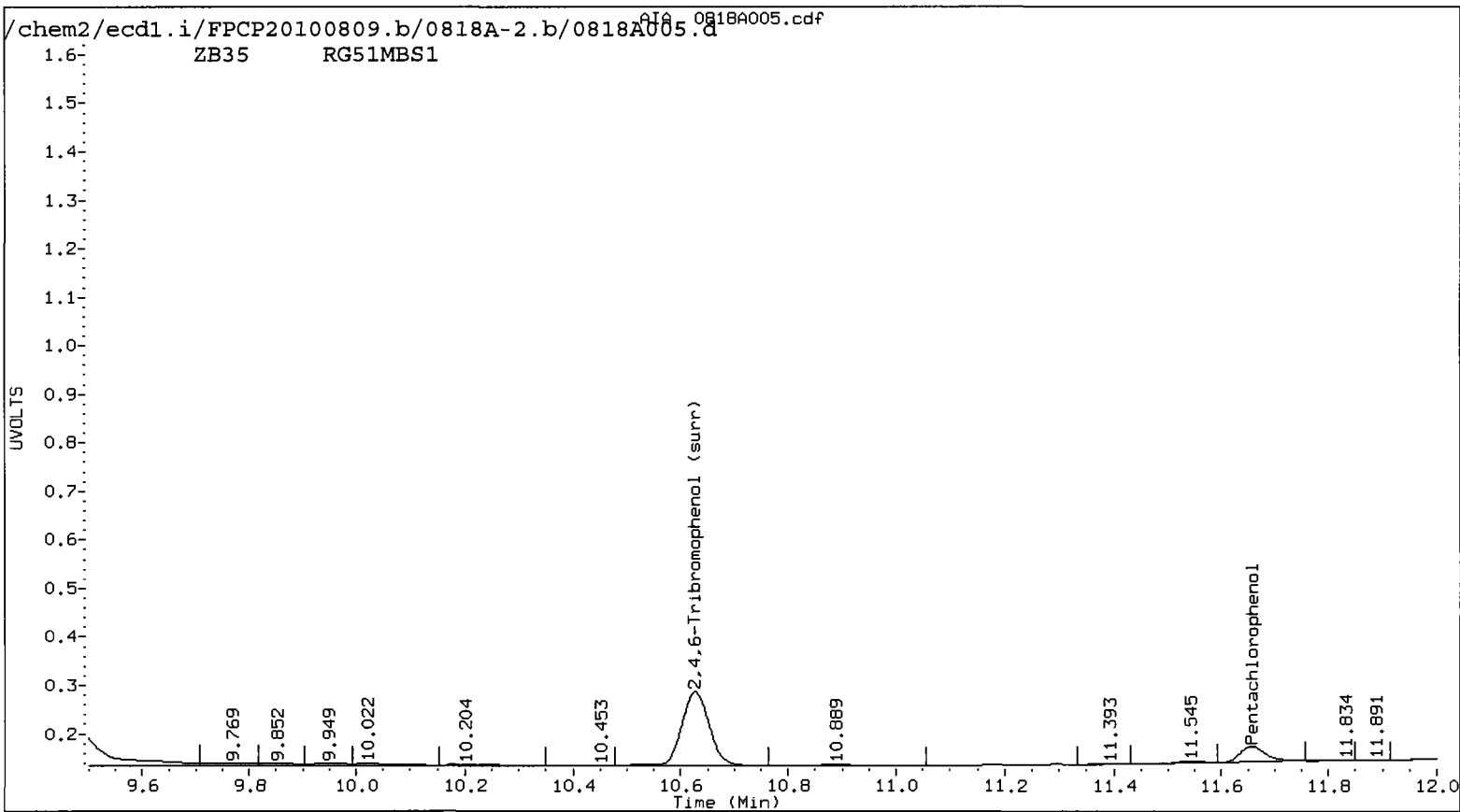
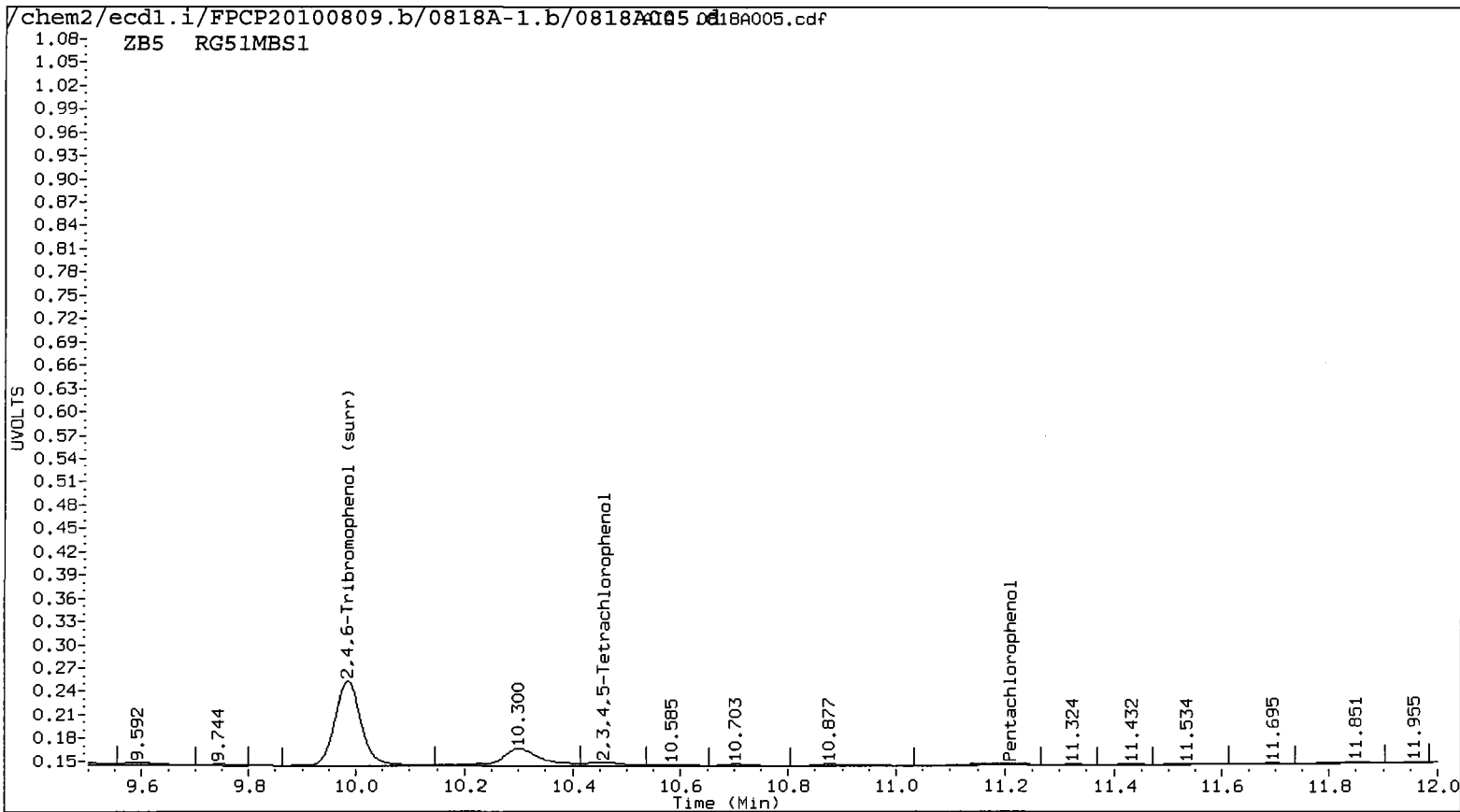
Data file 1: /chem2/ecdl.i/FPCP20100809.b/0818A-1.b/0818A005.d    ARI ID: RG51MBS1  
 Data file 2: /chem2/ecdl.i/FPCP20100809.b/0818A-2.b/0818A005.d    Client ID: RG51MBS1  
 Method: /chem2/ecdl.i/FPCP20100809.b/FPCP.m    Injection Date: 18-AUG-2010 17:37  
 Compound Sublist: all    Report Date: 08/19/2010 11:23  
 Instrument: ecdl.i    Matrix: SOIL  
 Operator: ar    Dilution Factor: 1.000

*YZ 8/19/10*

ZB-5 Col			ZB35 Col			ZB-5	ZB35	RPD	Compound
RT	Shift	Response	RT	Shift	Response	on col	on col		
11.210	-0.009	8251	11.656	-0.002	52635	<del>0.4587</del>	<del>2.2923</del>	133.3*	Pentachlorophenol
7.286	0.022	31878	7.366	0.033	42521	3.3711	3.4059	1.0	2,4,6-Trichlorophenol
7.594	-0.025	6276	7.836	-0.028	19329	0.6404	1.5577	83.5*	2,3,6-Trichlorophenol
8.208	-0.034	5865	8.622	0.007	1558	1.1620	0.2170	137.1*	2,4,5-Trichlorophenol
8.757	-0.035	4700	9.367	-0.013	12794	0.6870	1.3323	63.9*	2,3,4-Trichlorophenol
9.011	0.004	17418	9.254	-0.023	29194	1.2348	1.5768	24.3	2,3,5,6-Tetrachlorophenol
10.456	0.043	11362	----			0.9105	0.0000	---	2,3,4,5-Tetrachlorophenol
6.853	-0.040	11881	7.163	-0.003	18275	18.9892	24.8596	26.8	2,4-Dichlorophenol
9.985	-0.017	186574	10.627	-0.019	268418	14.5	14.4	0.5	2,4,6-Tribromophenol (surr)

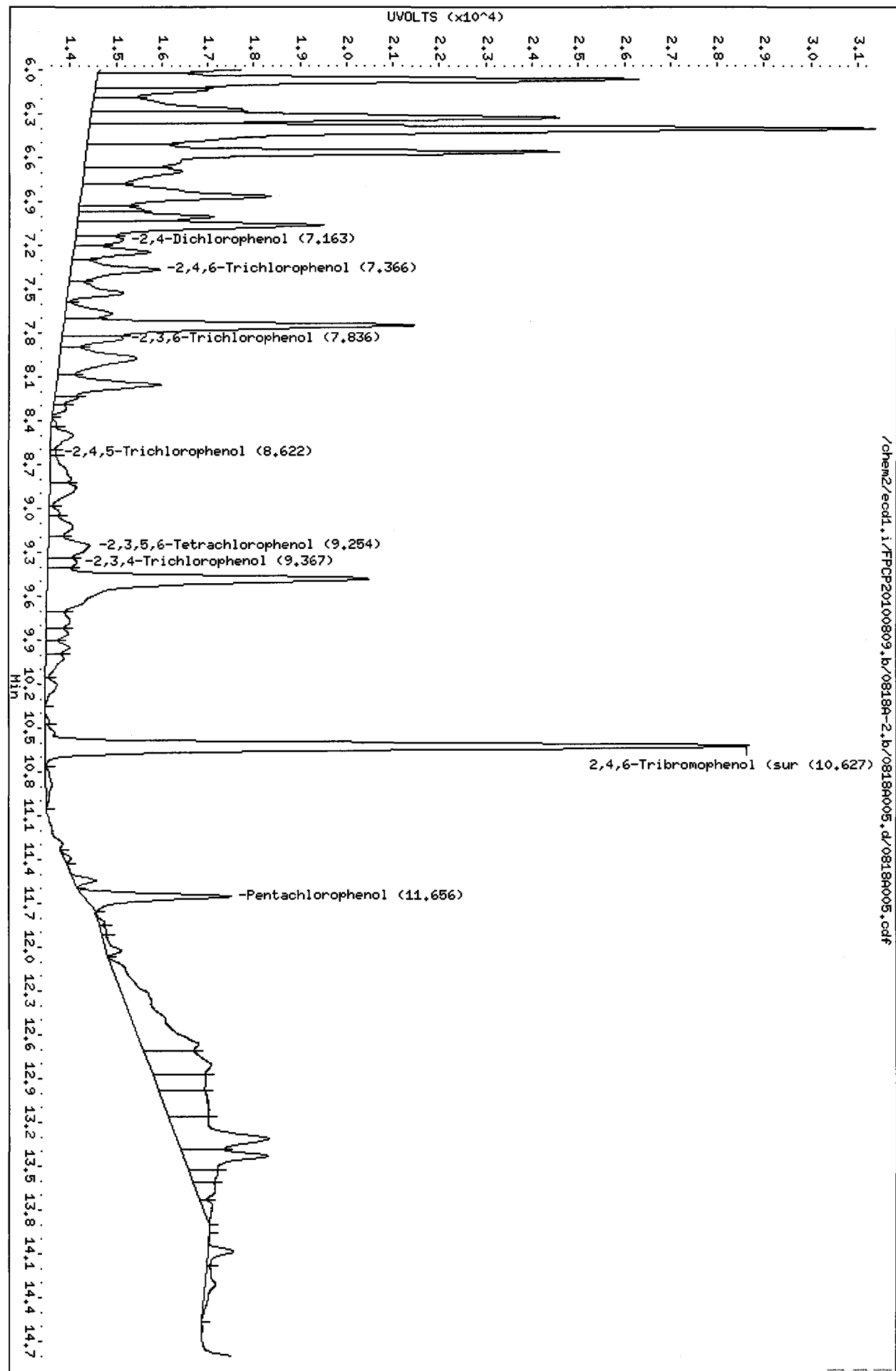
PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	57.8	57.5



Data File: /chem2/ecdd1.i/FPCP20100809.b/08184-2.b/08184005.d  
Date: 18-AUG-2010 17:37  
Client ID: R051MBS1  
Sample Info: R051MBS1  
Column phase: ZB35

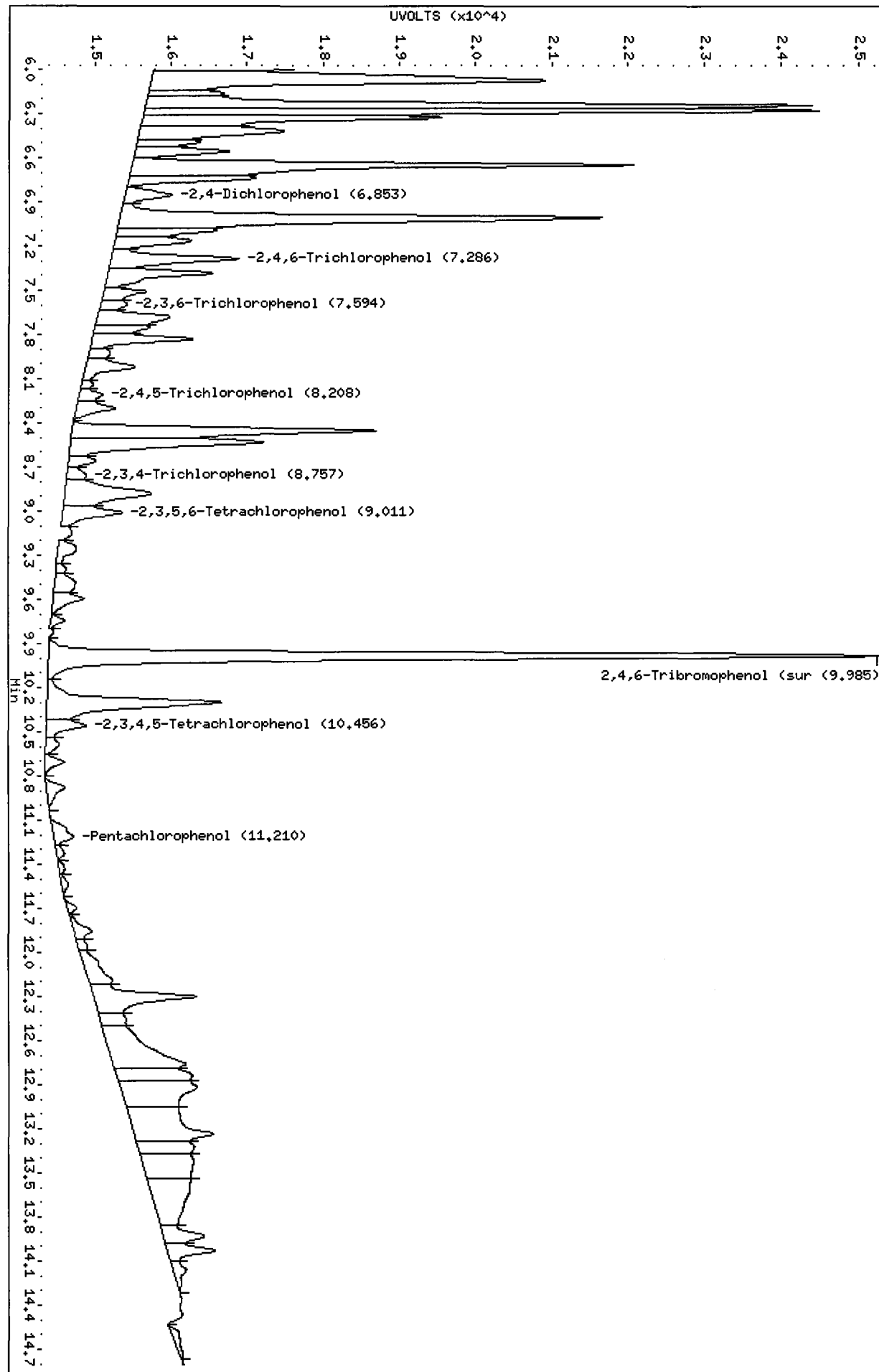
Instrument: ecdd1.i  
Operator: ar  
Column diameter: 0.53



Data File: /chem2/ecdl1/FPCP20100809.b/0818A-1.b/0818A005.d  
Date : 18-AUG-2010 17:37  
Client ID: R051MBS1  
Sample Info: R051MBS1  
Column phase: ZB5

Instrument: eccl1.1  
Operator: ar  
Column diameter: 0.53

/chem2/ecdl1/FPCP20100809.b/0818A-1.b/0818A005.d/0818A005.cdf



Analytical Resources Inc.  
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecdl.i/FPCP20100809.b/0818A-1.b/0818A006.d ARI ID: RG51LCSS1  
 Data file 2: /chem2/ecdl.i/FPCP20100809.b/0818A-2.b/0818A006.d Client ID: RG51LCSS1  
 Method: /chem2/ecdl.i/FPCP20100809.b/FPCP.m Injection Date: 18-AUG-2010 17:57  
 Compound Sublist: all Report Date: 08/19/2010 11:23  
 Instrument: ecdl.i Matrix: SOIL  
 Operator: ar Dilution Factor: 1.000

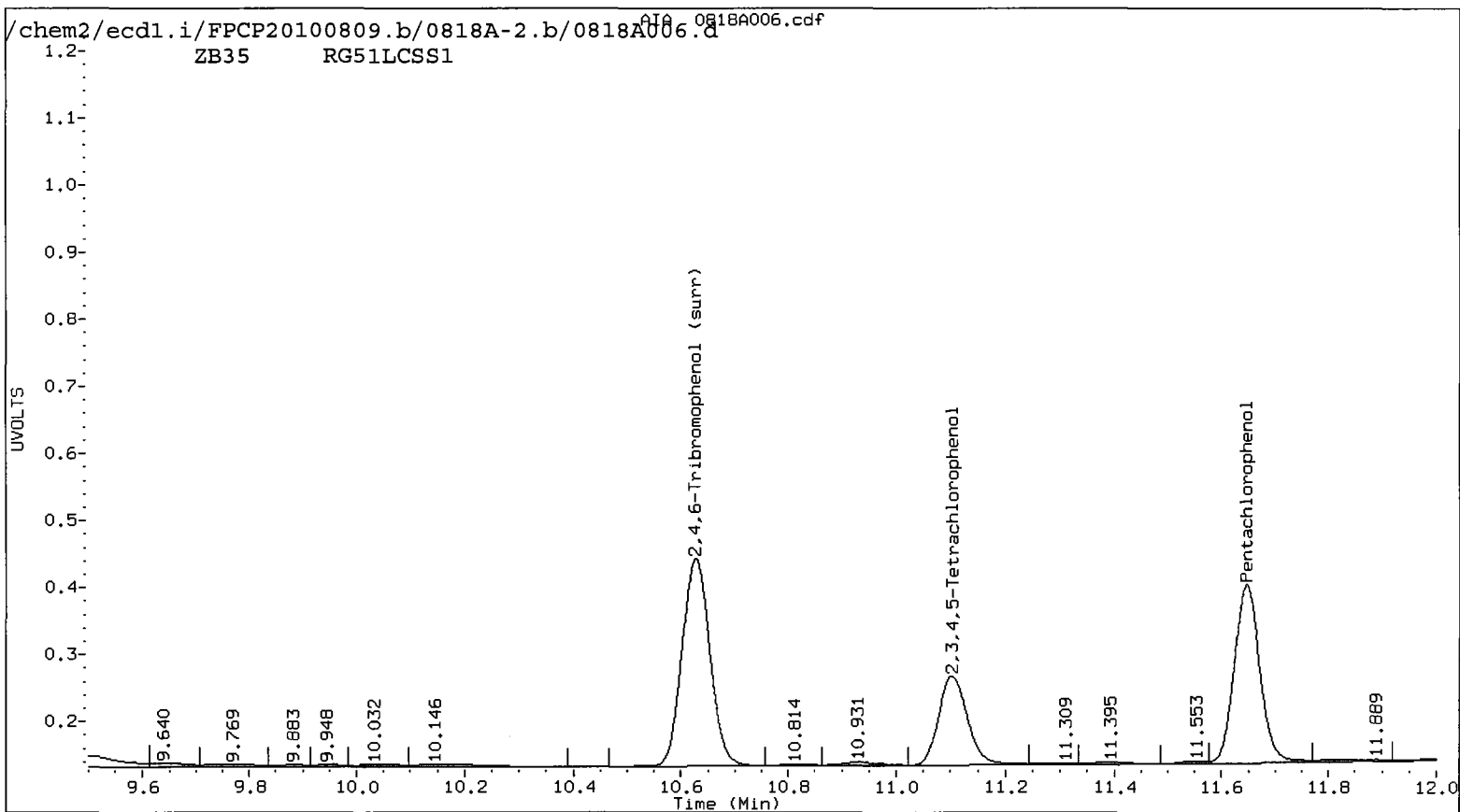
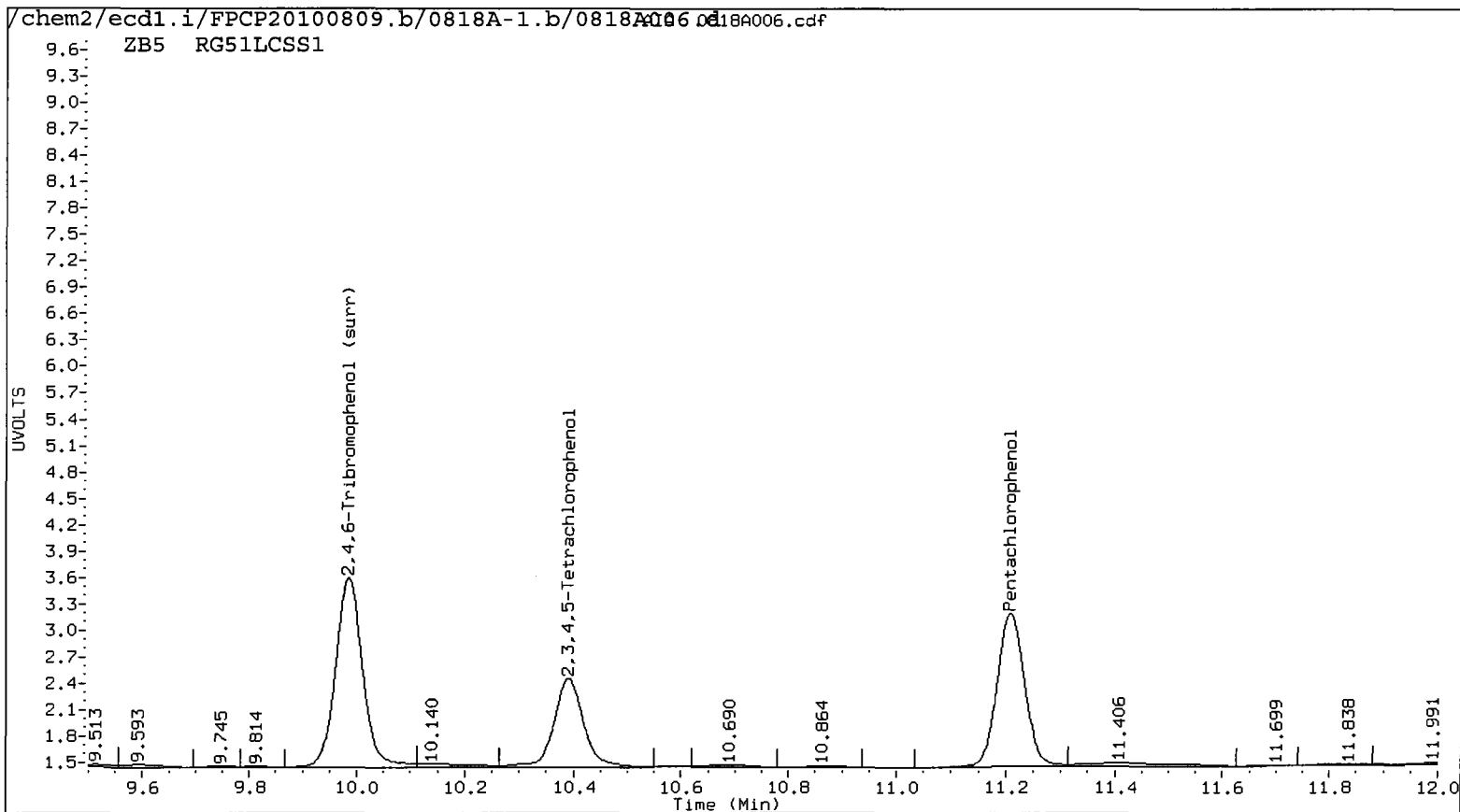
*Y2 8/19/10*

ZB-5 Col			ZB35 Col			ZB-5	ZB35	RPD	Compound
RT	Shift	Response	RT	Shift	Response	on col	on col		
11.208	-0.011	303423	11.646	-0.012	436673	18.9972	19.0177	0.1	Pentachlorophenol
7.262	-0.002	159936	7.329	-0.004	225754	18.3609	18.0826	1.5	2,4,6-Trichlorophenol
7.613	-0.006	161978	7.856	-0.008	212680	17.8734	17.1398	4.2	2,3,6-Trichlorophenol
8.213	-0.029	79875	8.587	-0.028	111376	15.8246	17.1544	8.1	2,4,5-Trichlorophenol
8.762	-0.030	103050	9.353	-0.027	148658	15.0634	16.9093	11.5	2,3,4-Trichlorophenol
8.992	-0.015	238147	9.258	-0.019	353852	16.8831	19.1118	12.4	2,3,5,6-Tetrachlorophenol
10.390	-0.023	195027	11.103	-0.023	245470	18.0803	16.8237	7.2	2,3,4,5-Tetrachlorophenol
6.887	-0.006	52348	7.156	-0.010	72320	92.2733	105.7555	13.6	2,4-Dichlorophenol
9.985	-0.017	376110	10.627	-0.019	553923	31.2	29.7	5.0	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

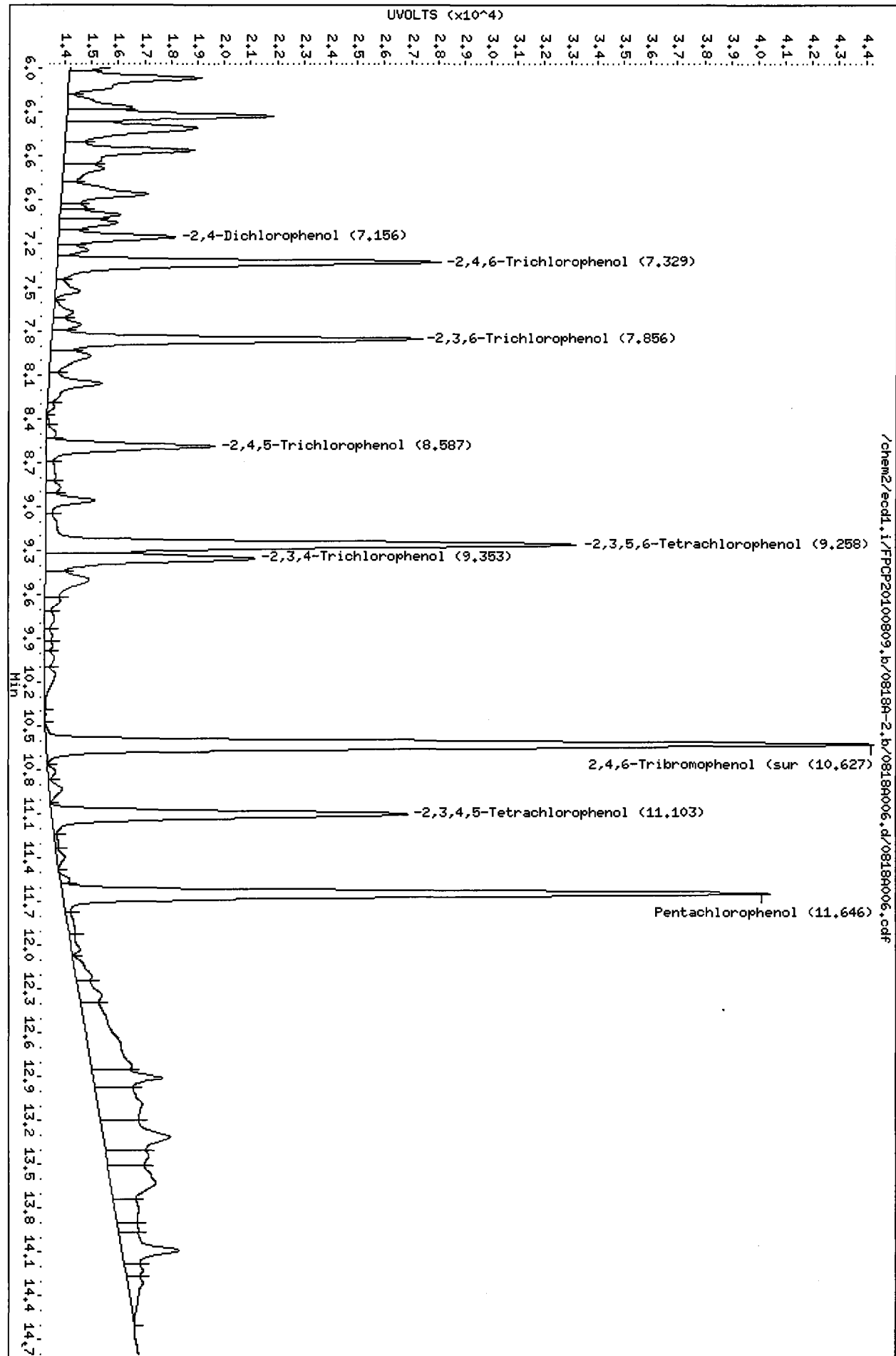
COMPOUND	Col1	Col2
Pentachlorophenol	76.0	76.1
2,4,6-Trichlorophenol	73.4	72.3
2,3,6-Trichlorophenol	71.5	68.6
2,4,5-Trichlorophenol	63.3	68.6
2,3,4-Trichlorophenol	60.3	67.6
2,3,5,6-Tetrachlorophenol	67.5	76.4
2,3,4,5-Tetrachlorophenol	72.3	67.3
2,4-Dichlorophenol	36.9	42.3
2,4,6-TBP (surr)	62.4	59.3





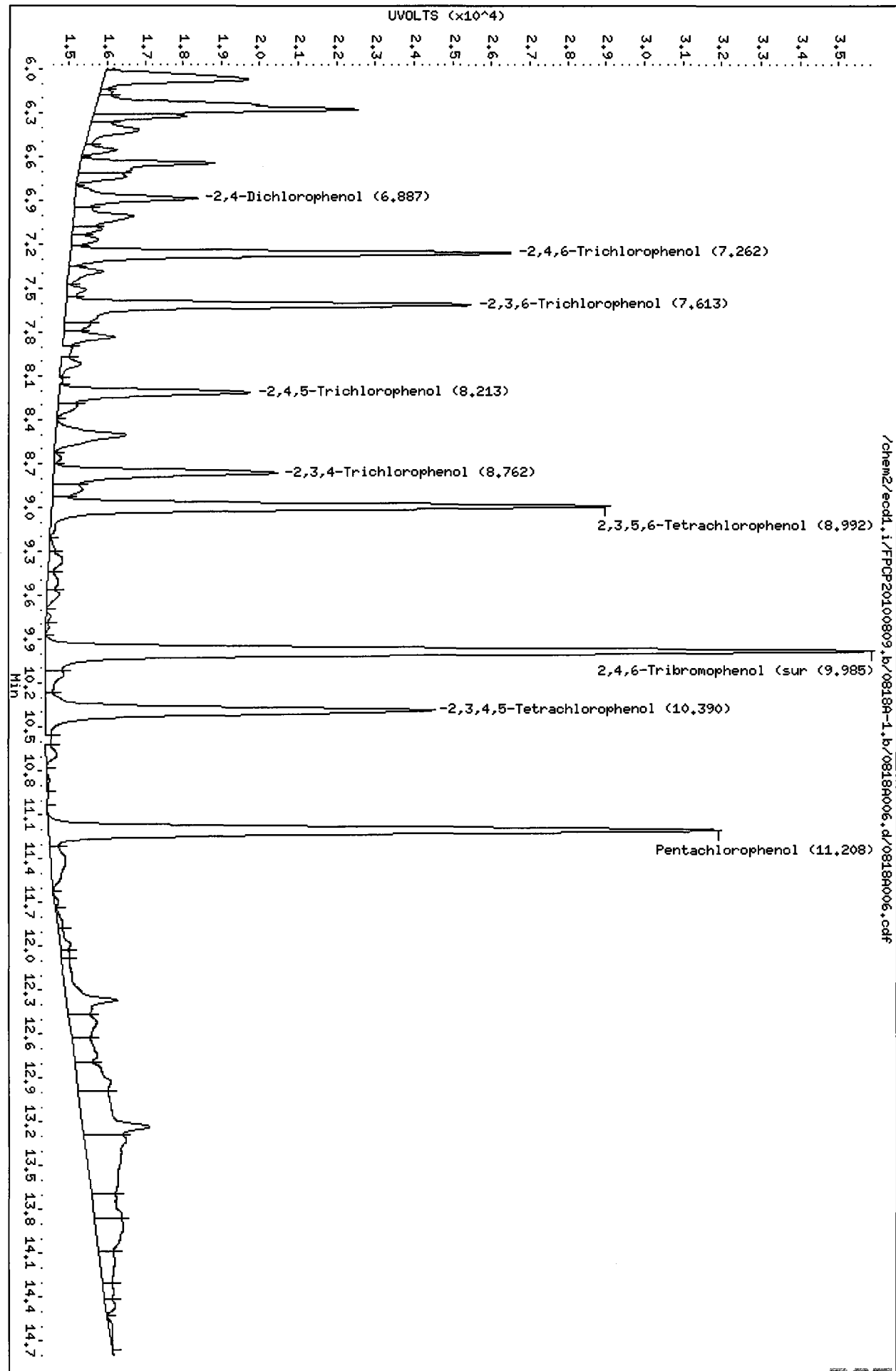
Data File: /chem2/ecdl.i/FPQP20100809.b/0818A-2.b/0818A006.d  
Date: 18-AUG-2010 17:57  
Client ID: RG51LCSS1  
Sample Info: RG51LCSS1  
Column phase: ZB35

Instrument: ecdl.i  
Operator: ar  
Column diameter: 0.53



Data File: /chem2/ecdl1.i/FPQP20100809.b/0818A-1.b/0818A006.d  
Date: 18-AUG-2010 17:57  
Client ID: RGSILCSS1  
Sample Info: RGSILCSS1  
Column phase: ZB5

Instrument: ecdl1.i  
Operator: ar  
Column diameter: 0.53



Analytical Resources Inc.  
Dual Column 8041 Chlorinated Phenols Quantitation Report

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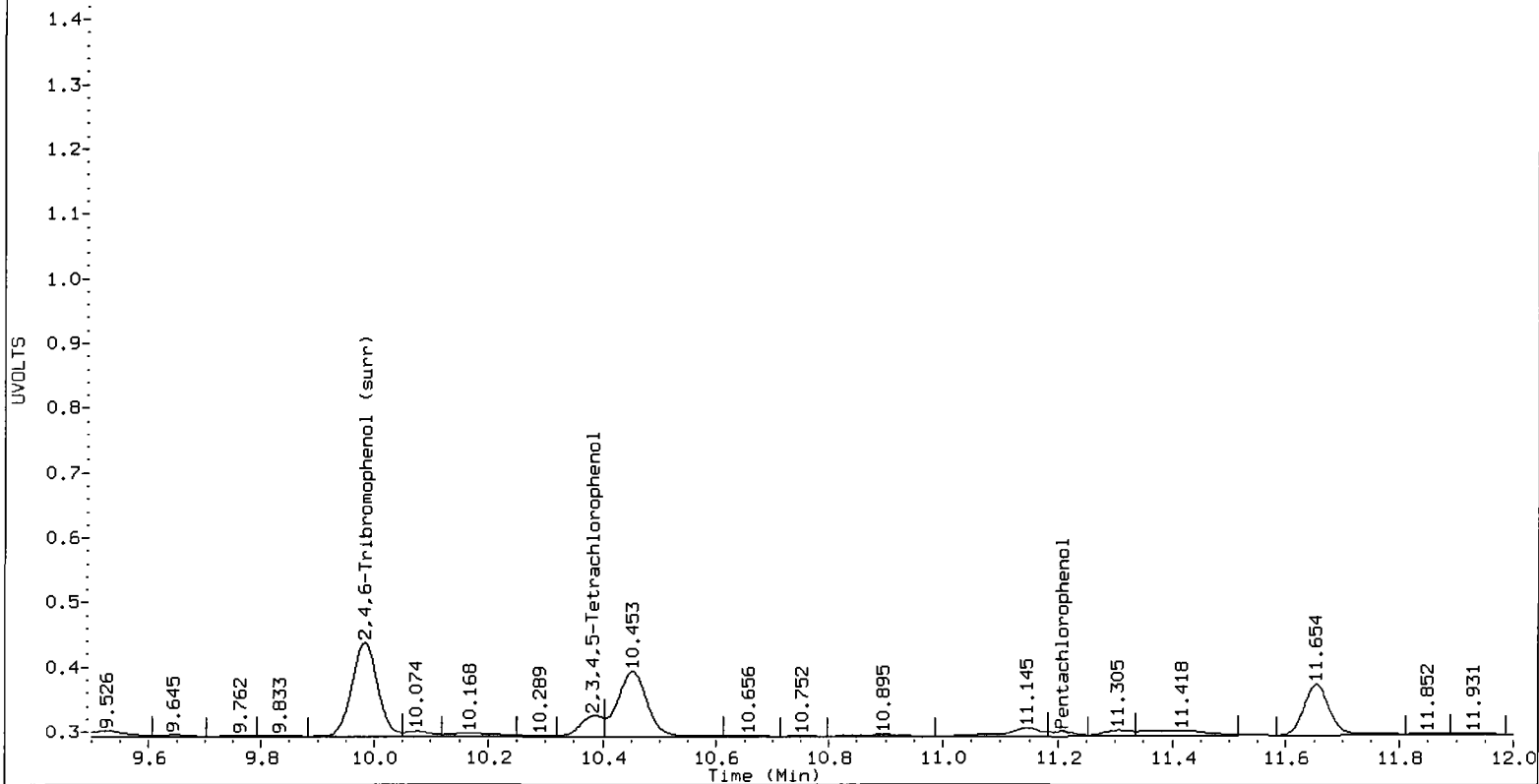
Data file 1: /chem2/ecdl.i/FPCP20100809.b/0818A-1.b/0818A007.d ARI ID: RG51A  
 Data file 2: /chem2/ecdl.i/FPCP20100809.b/0818A-2.b/0818A007.d Client ID: PSB12-0-0.5-072810  
 Method: /chem2/ecdl.i/FPCP20100809.b/FPCP.m Injection Date: 18-AUG-2010 18:17  
 Compound Sublist: all Report Date: 08/19/2010 11:23  
 Instrument: ecd1.i Matrix: SOIL  
 Operator: ar Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35	RPD	Compound
RT	Shift	Response	RT	Shift	Response	on col	on col		
11.205	-0.014	11816	11.544	-0.114	233634	<del>0.6580</del>	<del>10.1751</del>	175.7*	Pentachlorophenol
7.276	0.012	21896	7.301	-0.032	52848	2.3001	4.2331	59.2*	2,4,6-Trichlorophenol
7.595	-0.024	355591	7.839	-0.025	5178	42.9085	0.4173	196.1*	2,3,6-Trichlorophenol
8.258	0.016	1549	8.610	-0.005	22331	0.3069	3.1725	164.7*	2,4,5-Trichlorophenol
-----			9.347	-0.033	4769	0.0000	0.4939	---	2,3,4-Trichlorophenol
9.008	0.001	11665	9.254	-0.023	13396	0.8270	0.7235	13.3	2,3,5,6-Tetrachlorophenol
10.385	-0.028	44728	11.102	-0.024	3237	3.6864	0.2219	177.3*	2,3,4,5-Tetrachlorophenol
6.865	-0.028	50763	7.165	-0.001	11204	<del>89.1525</del>	15.0913	142.1*	2,4-Dichlorophenol
9.983	-0.019	232922	10.625	-0.021	410176	18.4	22.0	18.0	2,4,6-Tribromophenol (surr)

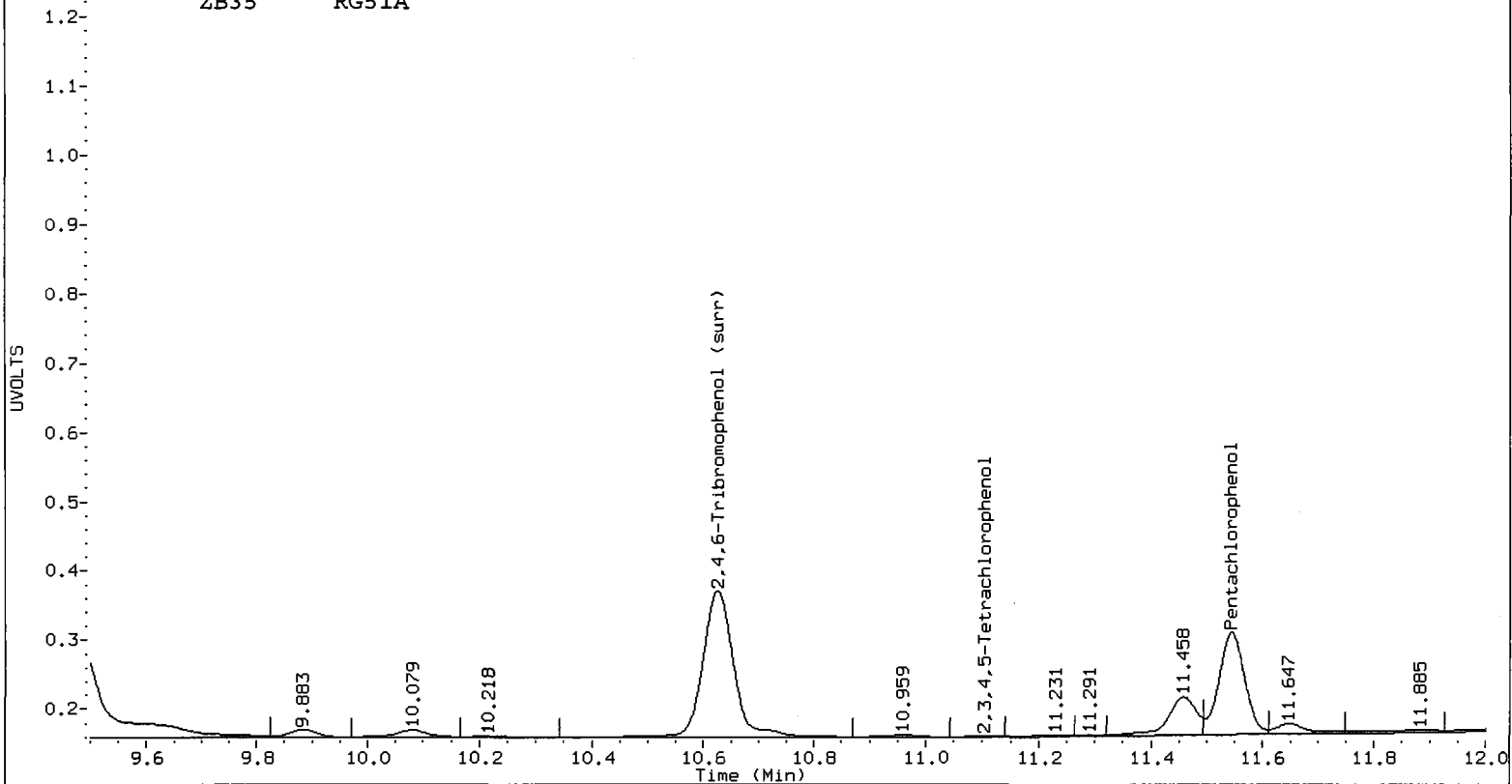
PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	73.4	87.9

chem2/ecdl.i/FPCP20100809.b/0818A-1.b/0818A007.d  
ZB5 RG51A



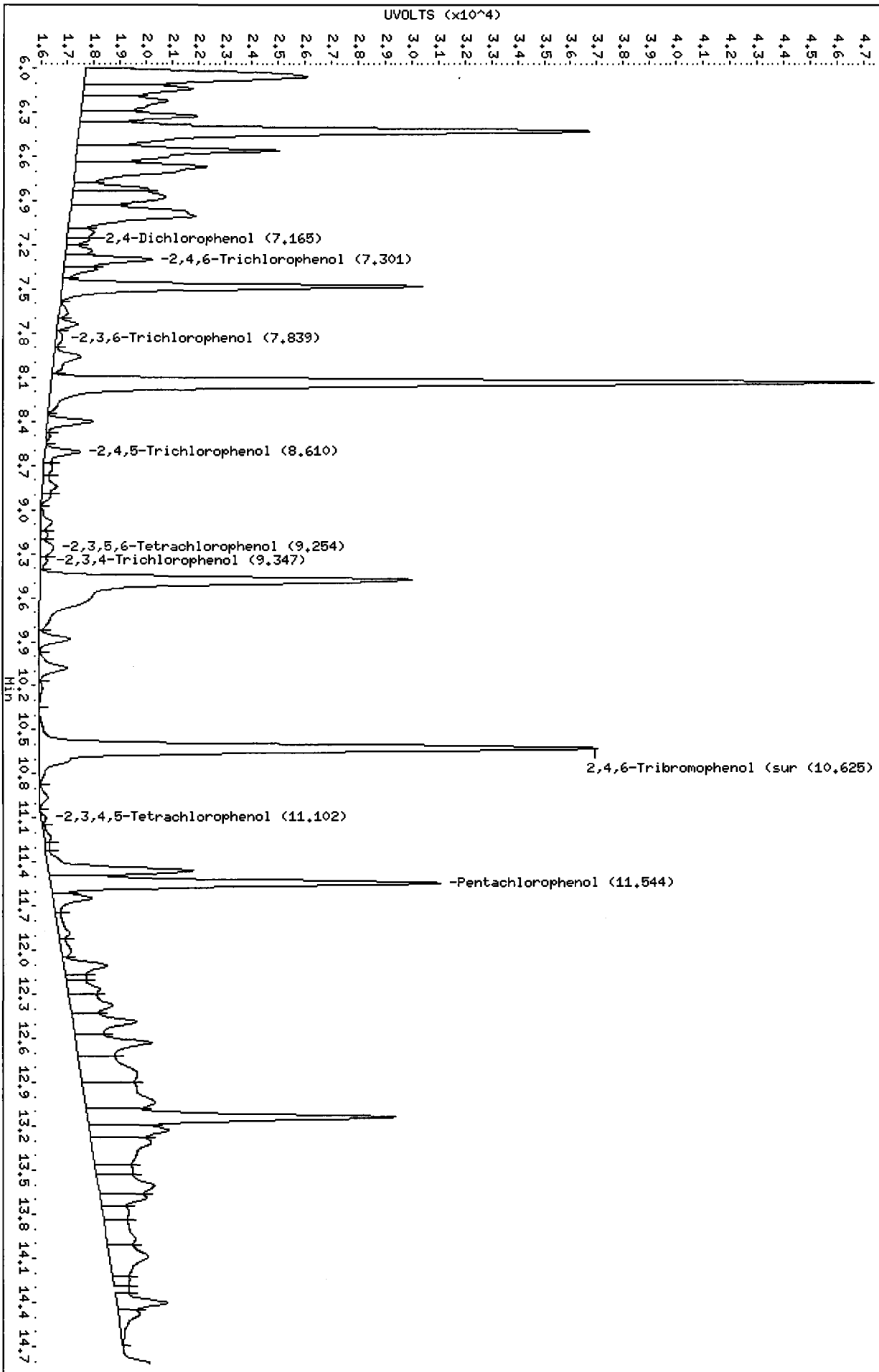
chem2/ecdl.i/FPCP20100809.b/0818A-2.b/0818A007.d  
ZB35 RG51A



Data File: /chem2/ecdl.i/FPDPP20100809.b/0818A-2.b/0818A007.d  
Date : 18-AUG-2010 18:17  
Client ID: PSB12-0-0.5-072810  
Sample Info: RGS1A  
Column phase: ZB35

Instrument: ecdl.i  
Operator: ar  
Column diameter: 0.53

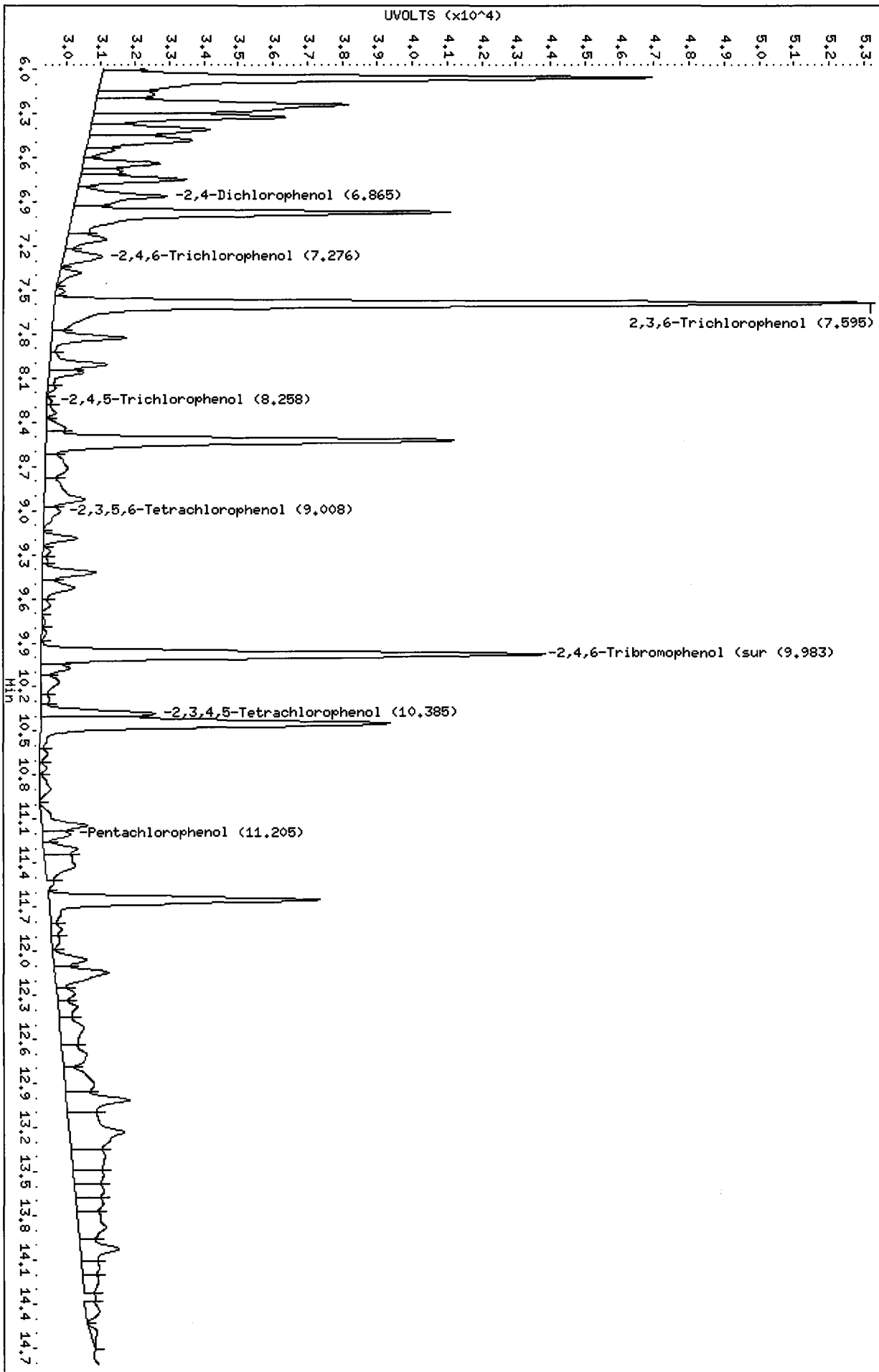
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Data File: /chem2/ecdl.i/FP020100809.b/0818A-1.b/0818A007.d  
Date: 18-AUG-2010 18:17  
Client ID: PSB12-0-0.5-072810  
Sample Info: RGS1A  
Column phase: ZBS

Instrument: ecdl.i  
Operator: ar  
Column diameter: 0.53

/chem2/ecdl.i/FP020100809.b/0818A-1.b/0818A007.d/0818A007.cdf



Analytical Resources Inc.  
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecdl.i/FPCP20100809.b/0818A-1.b/0818A008.d ARI ID: RG51B yz 8/19/10  
 Data file 2: /chem2/ecdl.i/FPCP20100809.b/0818A-2.b/0818A008.d Client ID: PSB12-1.5-2.0-07281  
 Method: /chem2/ecdl.i/FPCP20100809.b/FPCP.m Injection Date: 18-AUG-2010 18:37  
 Compound Sublist: all Report Date: 08/19/2010 11:23  
 Instrument: ecdl.i Matrix: SOIL  
 Operator: ar Dilution Factor: 1.000

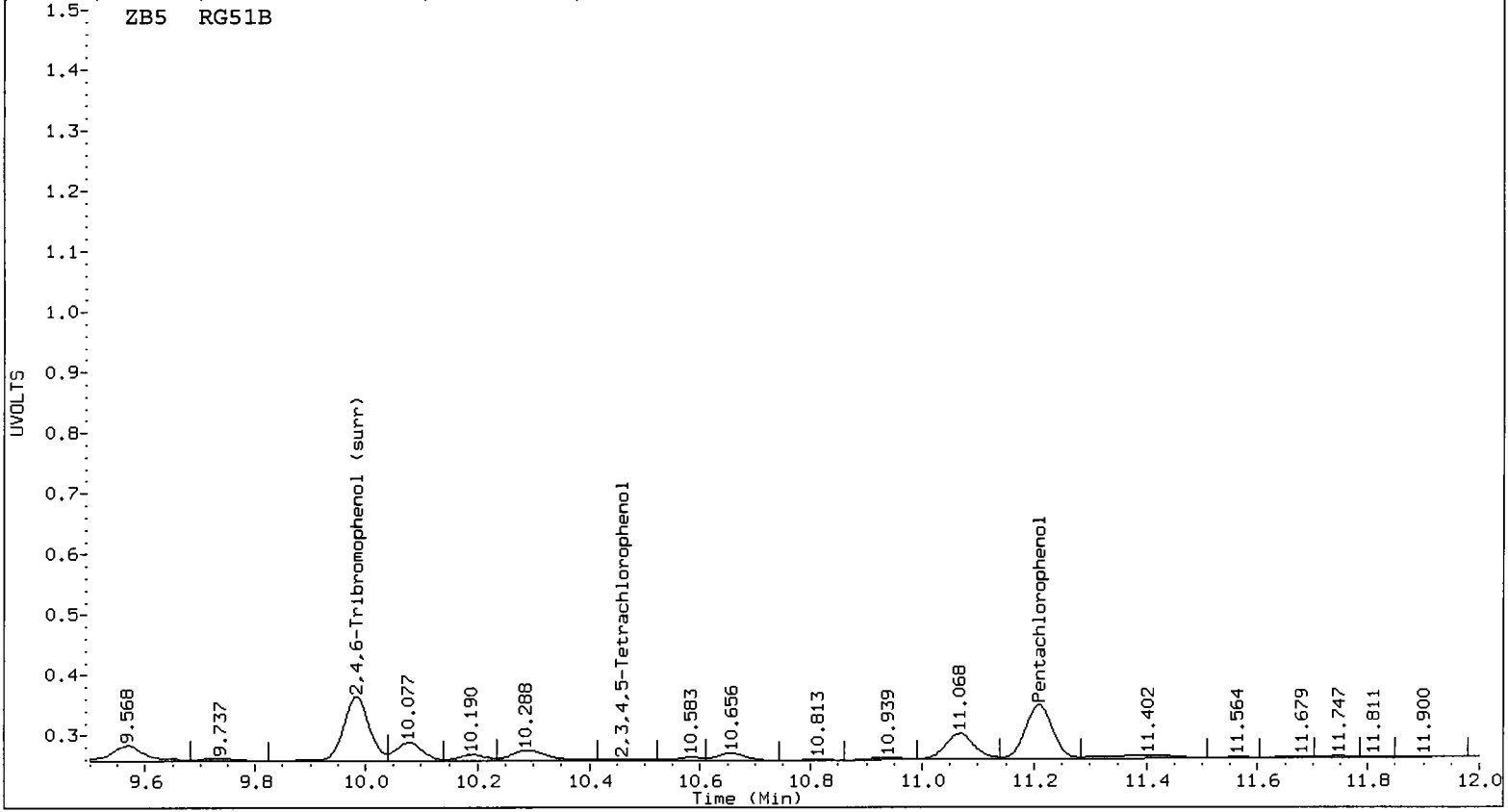
ZB-5 Col			ZB35 Col			ZB-5	ZB35	RPD	Compound
RT	Shift	Response	RT	Shift	Response	on col	on col		
11.209	-0.010	150156	11.648	-0.010	250666	8.8546	10.9168	20.9	Pentachlorophenol
7.274	0.010	25369	7.301	-0.032	52989	2.6711	4.2444	45.5*	2,4,6-Trichlorophenol
7.597	-0.022	5433	----			0.5542	0.0000	---	2,3,6-Trichlorophenol
8.257	0.015	5113	8.612	-0.003	12875	1.0130	1.8128	56.6*	2,4,5-Trichlorophenol
8.811	0.019	6136	9.375	-0.005	3699	0.8969	0.3828	80.3*	2,3,4-Trichlorophenol
9.011	0.004	26468	9.281	0.004	32702	1.8764	1.7663	6.0	2,3,5,6-Tetrachlorophenol
10.458	0.045	6118	11.112	-0.014	849	0.4881	0.0582	157.4*	2,3,4,5-Tetrachlorophenol
6.864	-0.029	56900	7.113	-0.053	25090	101.3494	34.4529	98.5*	2,4-Dichlorophenol
9.984	-0.018	172990	10.627	-0.019	255586	13.3	13.7	2.7	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

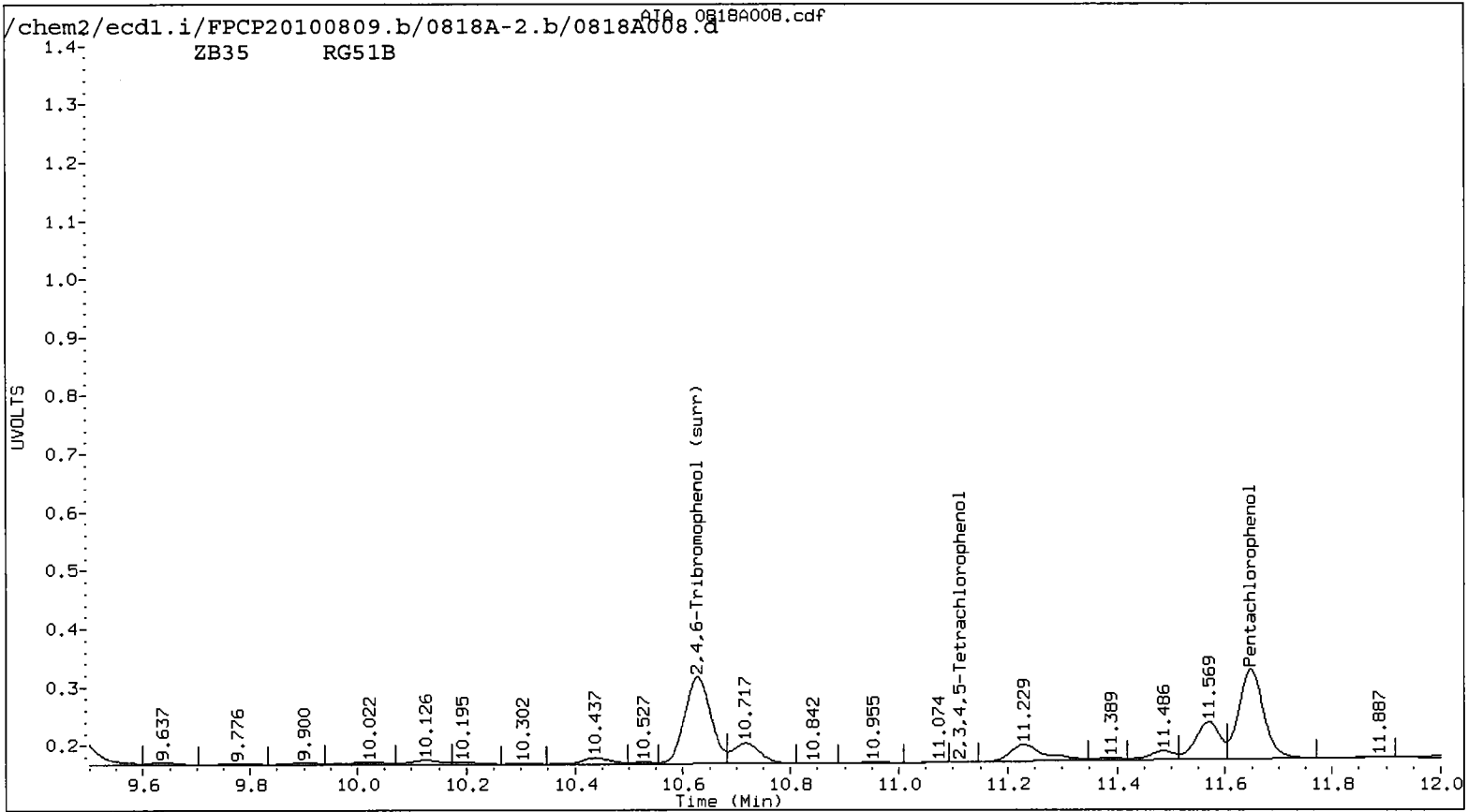
COMPOUND	Col1	Col2
2,4,6-TBP (surr)	53.3	54.8 ✓



ZB5 RG51B



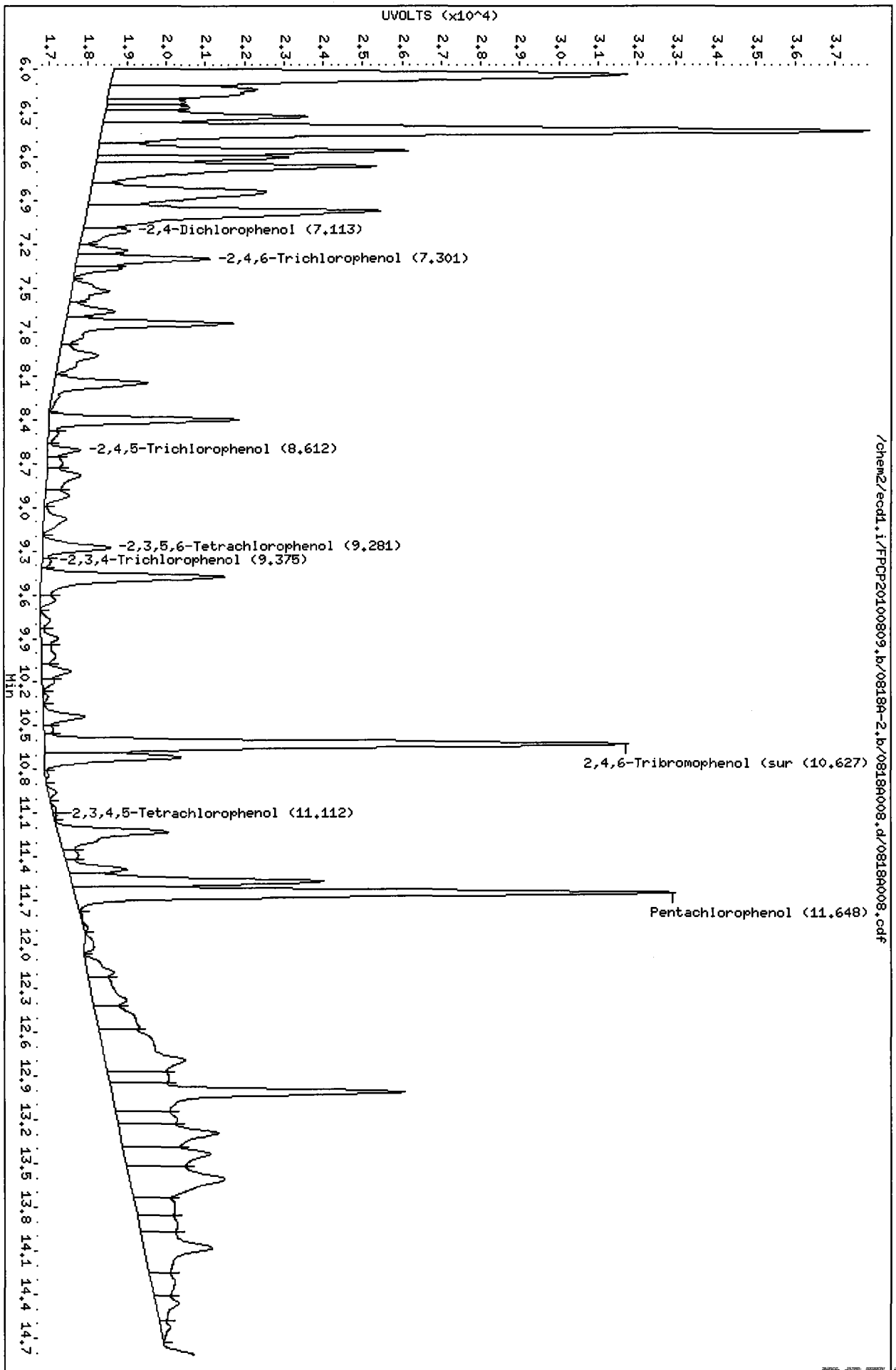
ZB35 RG51B



Data File: /chem2/ecdl.i/FPCP20100809.b/0818A-2.b/0818A008.d  
Date : 18-AUG-2010 18:37  
Client ID: PSB12-1,5-2,0-07281  
Sample Info: RGS1B  
Column phase: ZB35

Instrument: ecdl.i  
Operator: ar  
Column diameter: 0.53

/chem2/ecdl.i/FPCP20100809.b/0818A-2.b/0818A008.d/0818A008.cdf

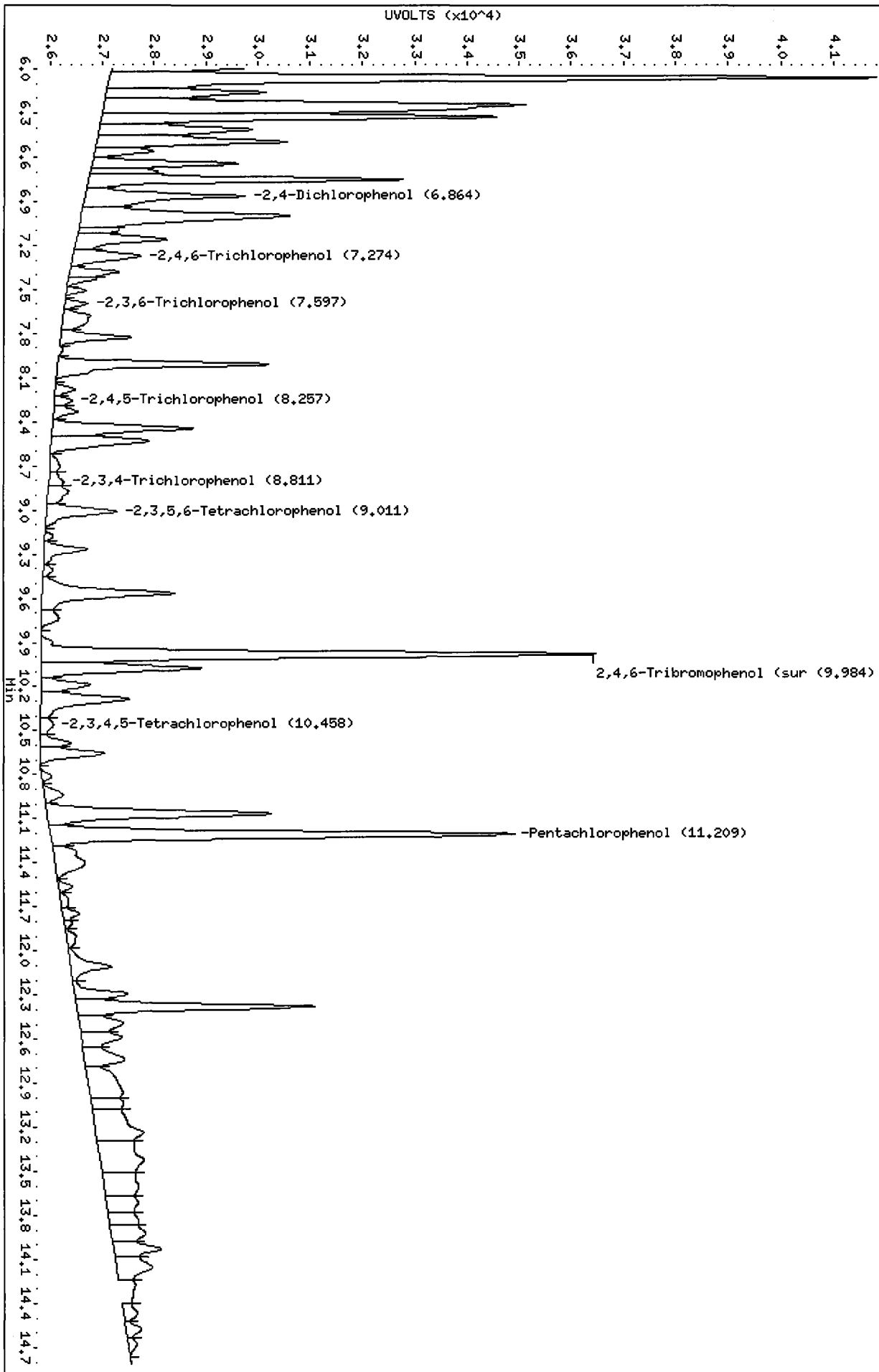


00720

Data File: /chem2/ecdl.i/FP0P20100809.b/0818A-1.b/0818A008.d  
Date: 18-AUG-2010 18:37  
Client ID: PSB12-1,5-2-0-07281  
Sample Info: RG51B  
Column phase: ZBS

Instrument: ecdl.i  
Operator: ar  
Column diameter: 0.53

/chem2/ecdl.i/FP0P20100809.b/0818A-1.b/0818A008.d/0818A008.cdf



Analytical Resources Inc.  
Dual Column 8041 Chlorinated Phenols Quantitation Report

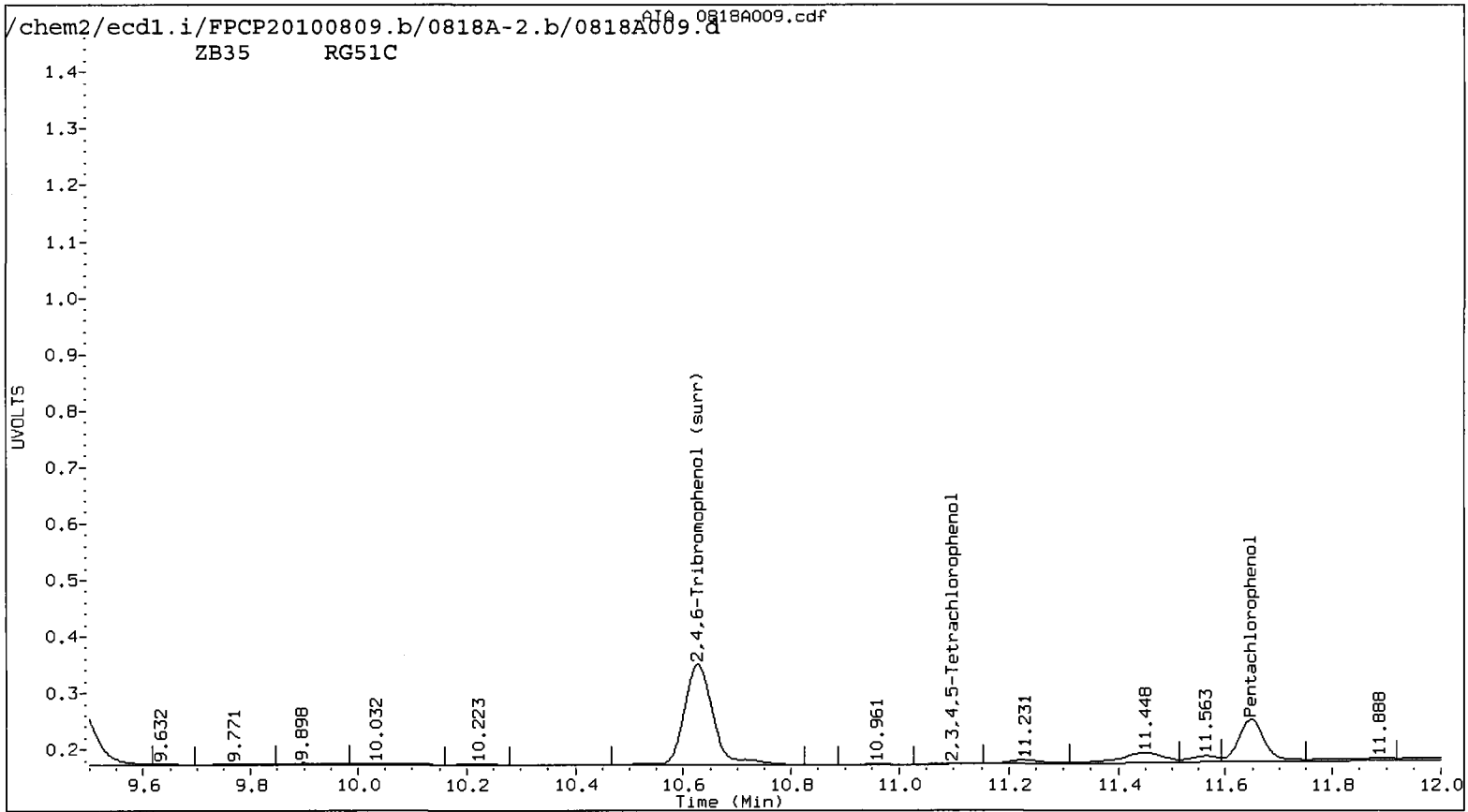
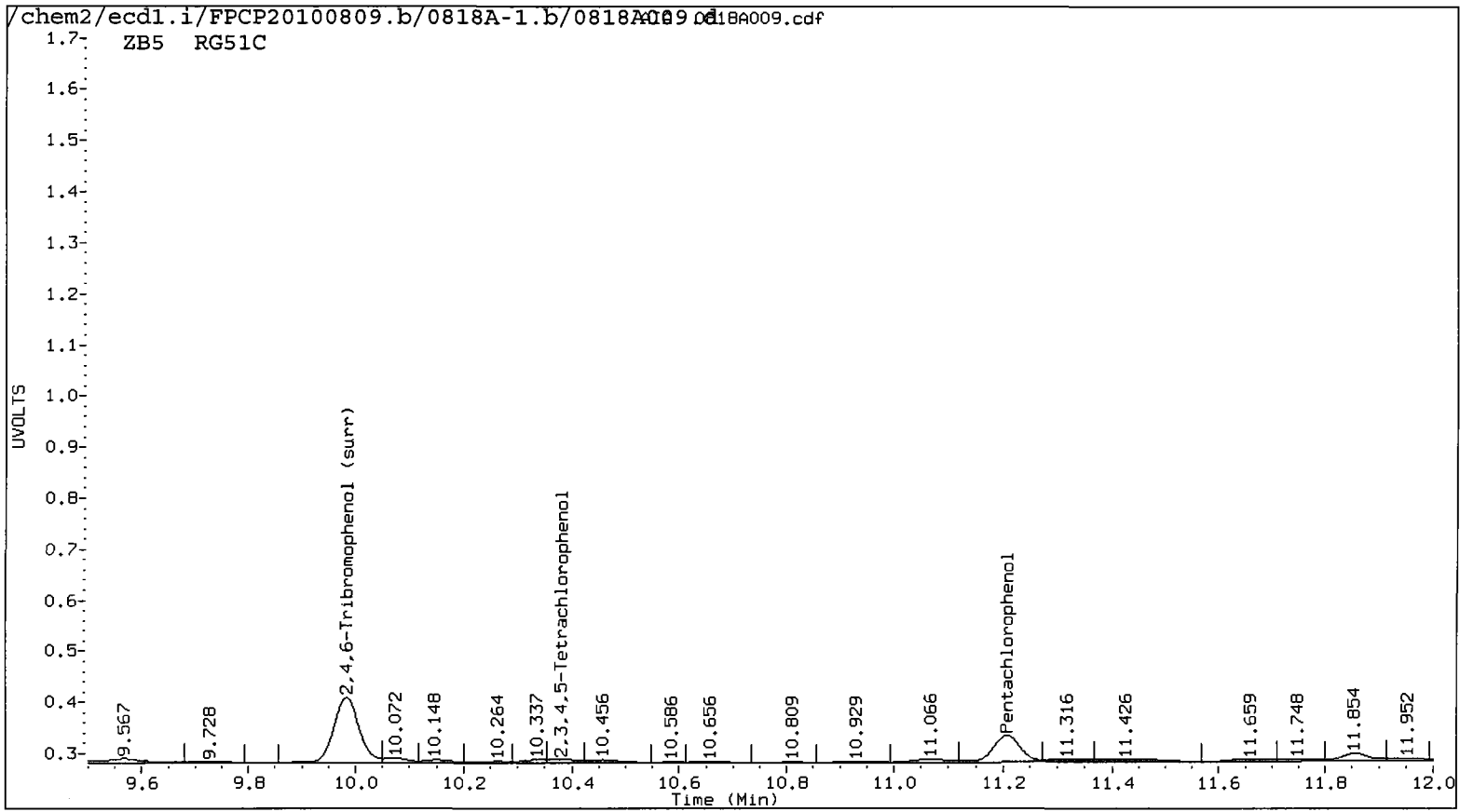
YZ 8/19/10

Data file 1: /chem2/ecdl.i/FPCP20100809.b/0818A-1.b/0818A009.d ARI ID: RG51C  
 Data file 2: /chem2/ecdl.i/FPCP20100809.b/0818A-2.b/0818A009.d Client ID: PSB12-2-4-072810  
 Method: /chem2/ecdl.i/FPCP20100809.b/FPCP.m Injection Date: 18-AUG-2010 18:57  
 Compound Sublist: all Report Date: 08/19/2010 11:23  
 Instrument: ecdl.i Matrix: SOIL  
 Operator: ar Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35	RPD	Compound
RT	Shift	Response	RT	Shift	Response	on col	on col		
11.208	-0.011	92302	11.647	-0.011	125665	5.3162	5.4729	2.9	Pentachlorophenol
7.276	0.012	29734	7.302	-0.031	80846	3.1399	6.4757	69.4*	2,4,6-Trichlorophenol
7.597	-0.022	27139	7.842	-0.022	9014	2.7995	0.7264	117.6*	2,3,6-Trichlorophenol
8.255	0.013	2965	8.612	-0.003	21545	0.5874	3.0586	135.6*	2,4,5-Trichlorophenol
----			9.390	0.010	3390	0.0000	0.3508	---	2,3,4-Trichlorophenol
9.013	0.006	12971	9.277	0.000	18967	0.9196	1.0244	10.8	2,3,5,6-Tetrachlorophenol
10.381	-0.032	12021	11.096	-0.030	2985	0.9638	0.2046	130.0*	2,3,4,5-Tetrachlorophenol
6.865	-0.028	68195	7.111	-0.055	33870	124.5973	47.0707	90.3*	2,4-Dichlorophenol
9.983	-0.019	208156	10.627	-0.019	326989	16.3	17.5	7.5	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

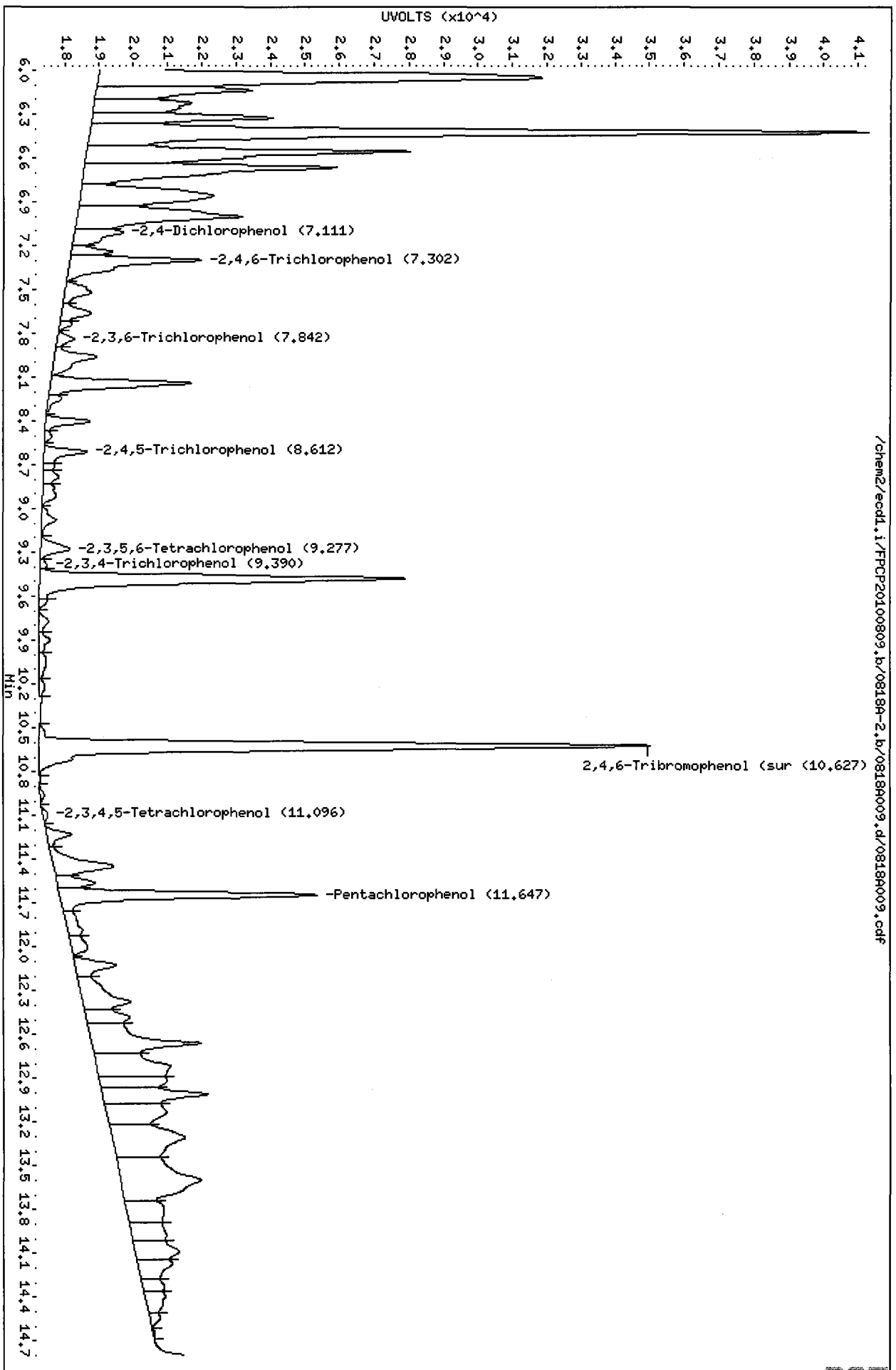
COMPOUND	Col1	Col2
2,4,6-TBP (surr)	65.0	70.1



Data File: /chem2/ecdd1.i/FPQP20100809.b/0818A-2.b/0818A009.d  
Date: 18-AUG-2010 18:57  
Client ID: PSB12-2-4-072810  
Sample Info: R051C  
Column phase: ZB35

Instrument: ecdd1.i  
Operator: ar  
Column diameter: 0.53

/chem2/ecdd1.i/FPQP20100809.b/0818A-2.b/0818A009.d/0818A009.cdf

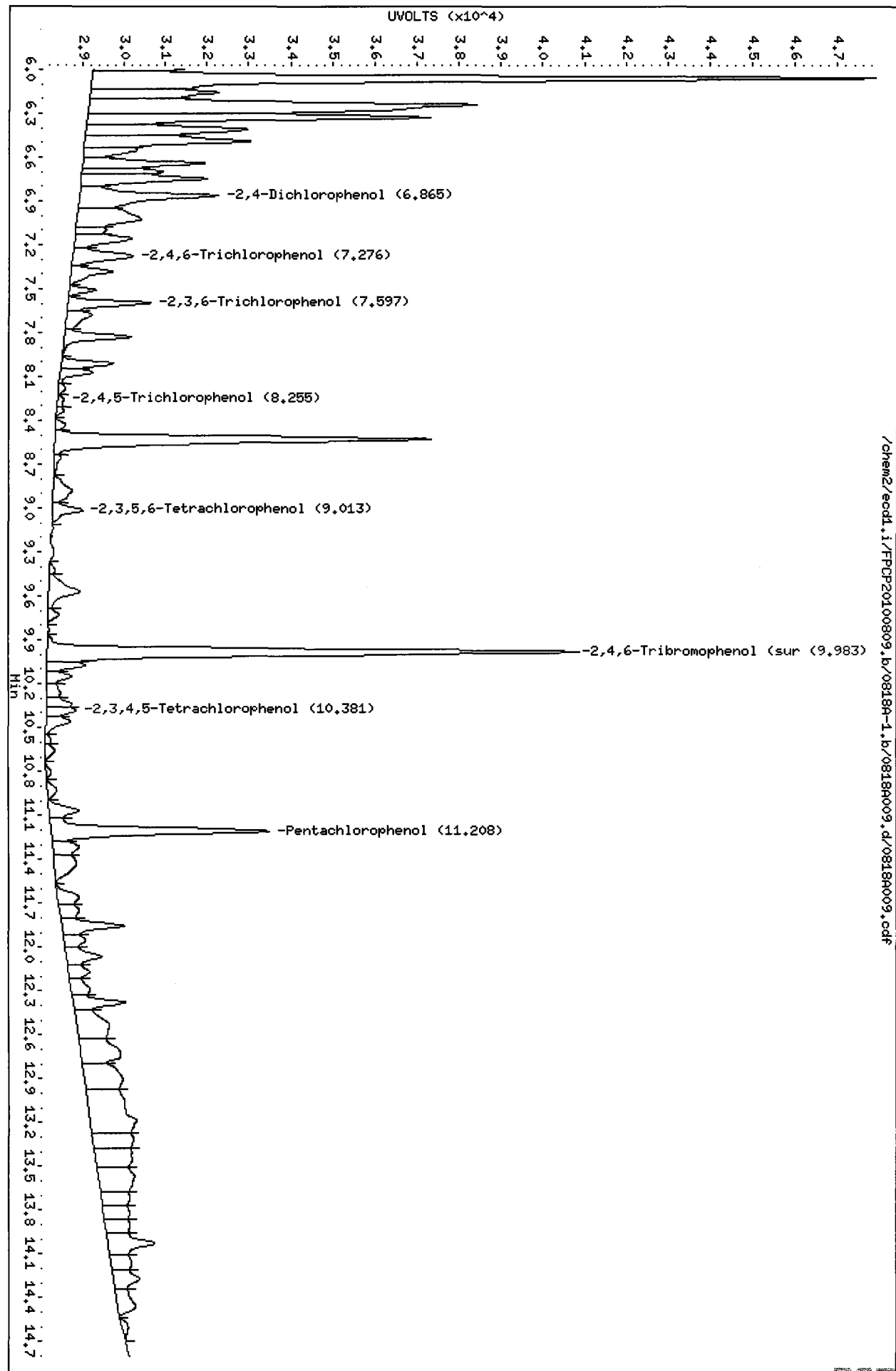


11 09 2010 12:09

Data File: /chem2/ecdd1.i/FPGP20100809.b/0818A-1.b/0818A009.d  
Date : 18-AUG-2010 18:57  
Client ID: PSB12-2-4-072810  
Sample Info: R051C  
Column phase: ZBS

Instrument: ecdd1.i  
Operator: ar  
Column diameter: 0.53

/chem2/ecdd1.i/FPGP20100809.b/0818A-1.b/0818A009.d/0818A009.cdf



Analytical Resources Inc.  
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecdl.i/FPCP20100809.b/0818A-1.b/0818A010.d ARI ID: RG51D  
 Data file 2: /chem2/ecdl.i/FPCP20100809.b/0818A-2.b/0818A010.d Client ID: PSB12-8-10-072810  
 Method: /chem2/ecdl.i/FPCP20100809.b/FPCP.m Injection Date: 18-AUG-2010 19:17  
 Compound Sublist: all Report Date: 08/19/2010 11:23  
 Instrument: ecdl.i Matrix: SOIL  
 Operator: ar Dilution Factor: 1.000

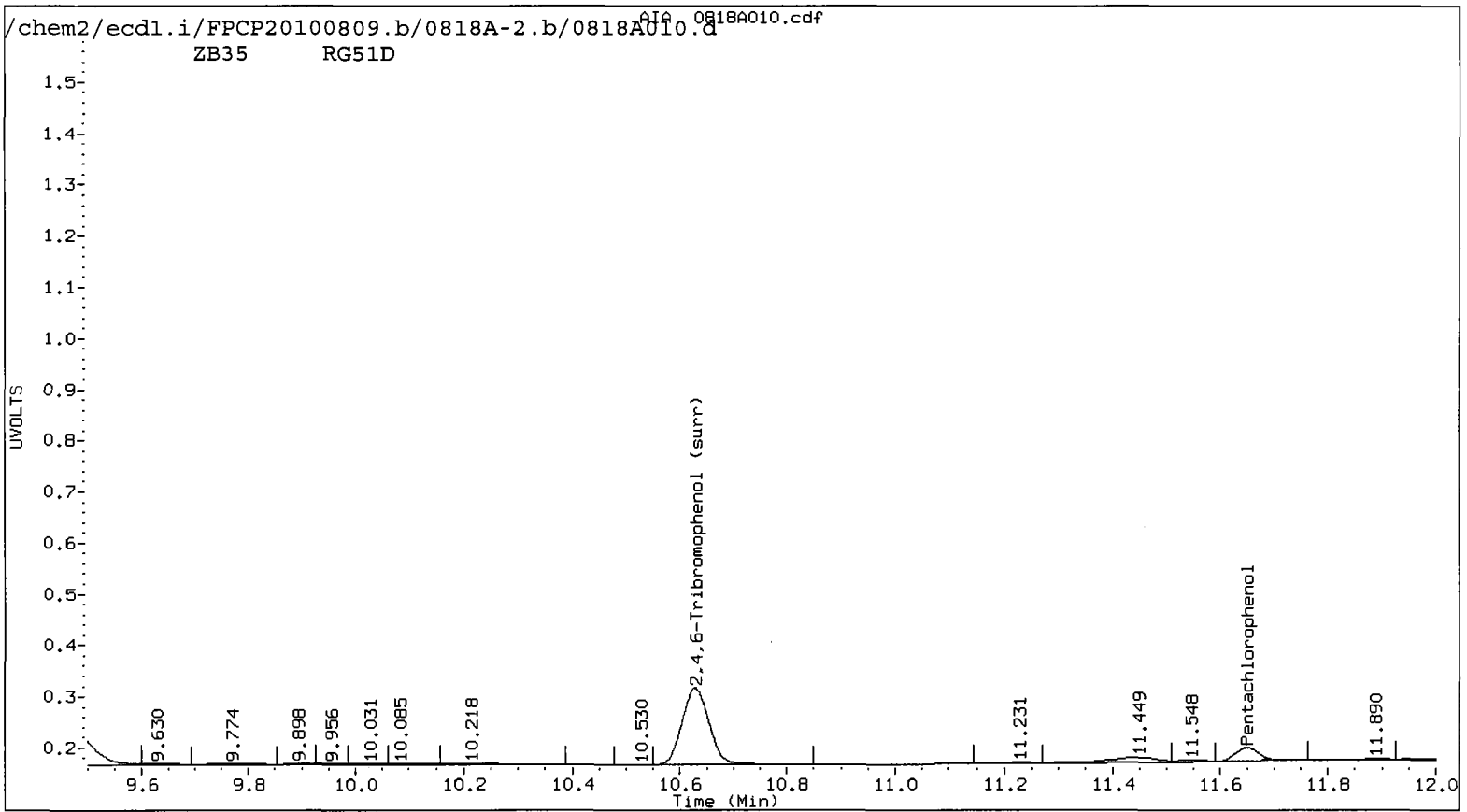
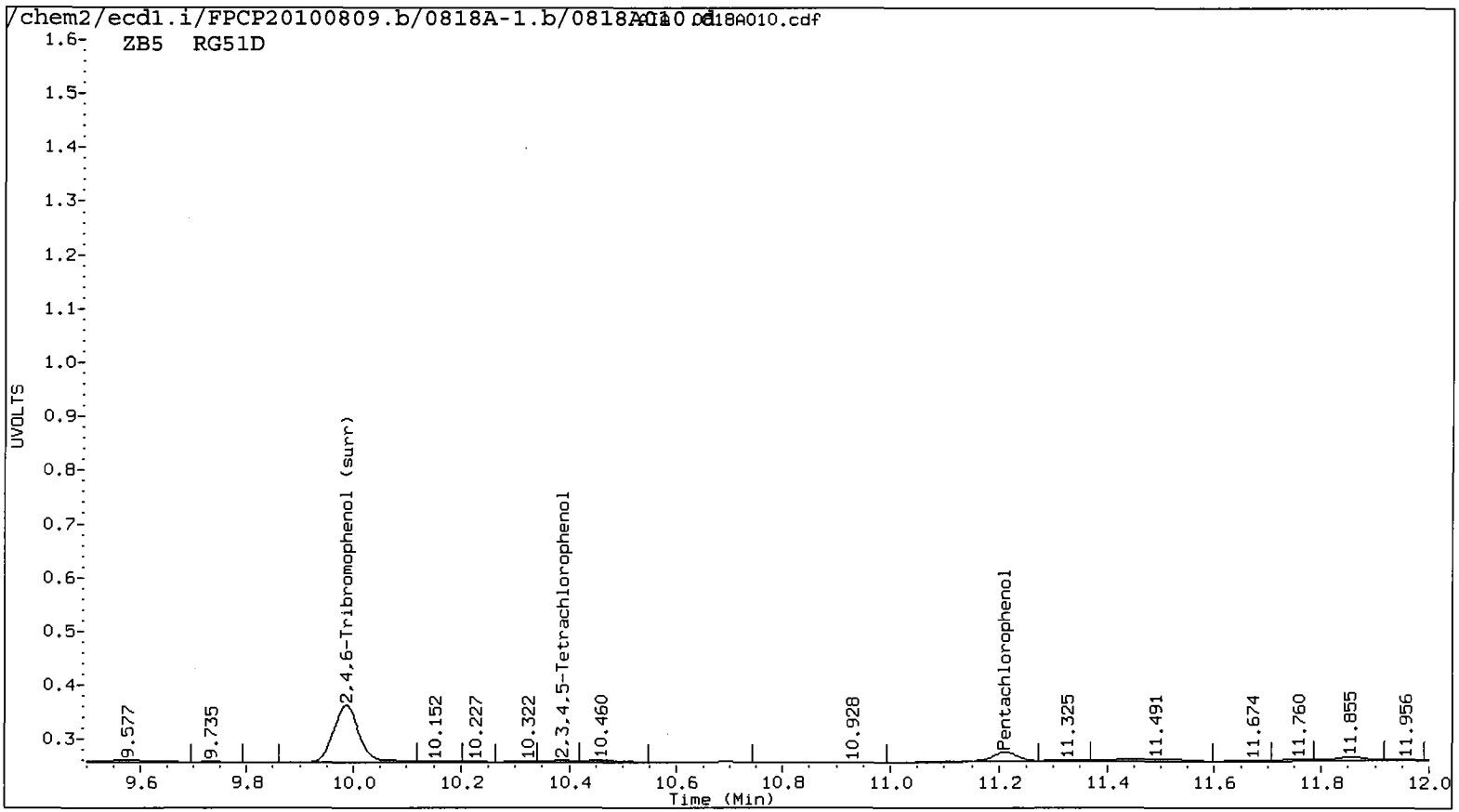
12 8/19/10

ZB-5 Col			ZB35 Col			ZB-5	ZB35	RPD	Compound
RT	Shift	Response	RT	Shift	Response	on col	on col		
11.211	-0.008	38044	11.649	-0.009	38464	2.1421	1.6752	24.5	Pentachlorophenol
7.284	0.020	22354	7.301	-0.032	40504	2.3489	3.2443	32.0	2,4,6-Trichlorophenol
7.599	-0.020	12557	7.841	-0.023	8945	1.2855	0.7209	56.3*	2,3,6-Trichlorophenol
8.300	0.058	5889	8.614	-0.001	18700	1.1667	2.6476	77.6*	2,4,5-Trichlorophenol
----			9.364	-0.016	1569	0.0000	0.1621	---	2,3,4-Trichlorophenol
9.014	0.007	15449	9.279	0.002	11164	1.0952	0.6030	58.0*	2,3,5,6-Tetrachlorophenol
10.385	-0.028	6818	----			0.5442	0.0000	---	2,3,4,5-Tetrachlorophenol
6.867	-0.026	54296	----			96.1367	0.0000	---	2,4-Dichlorophenol
9.986	-0.016	181036	10.628	-0.018	259148	14.0	13.9	0.8	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

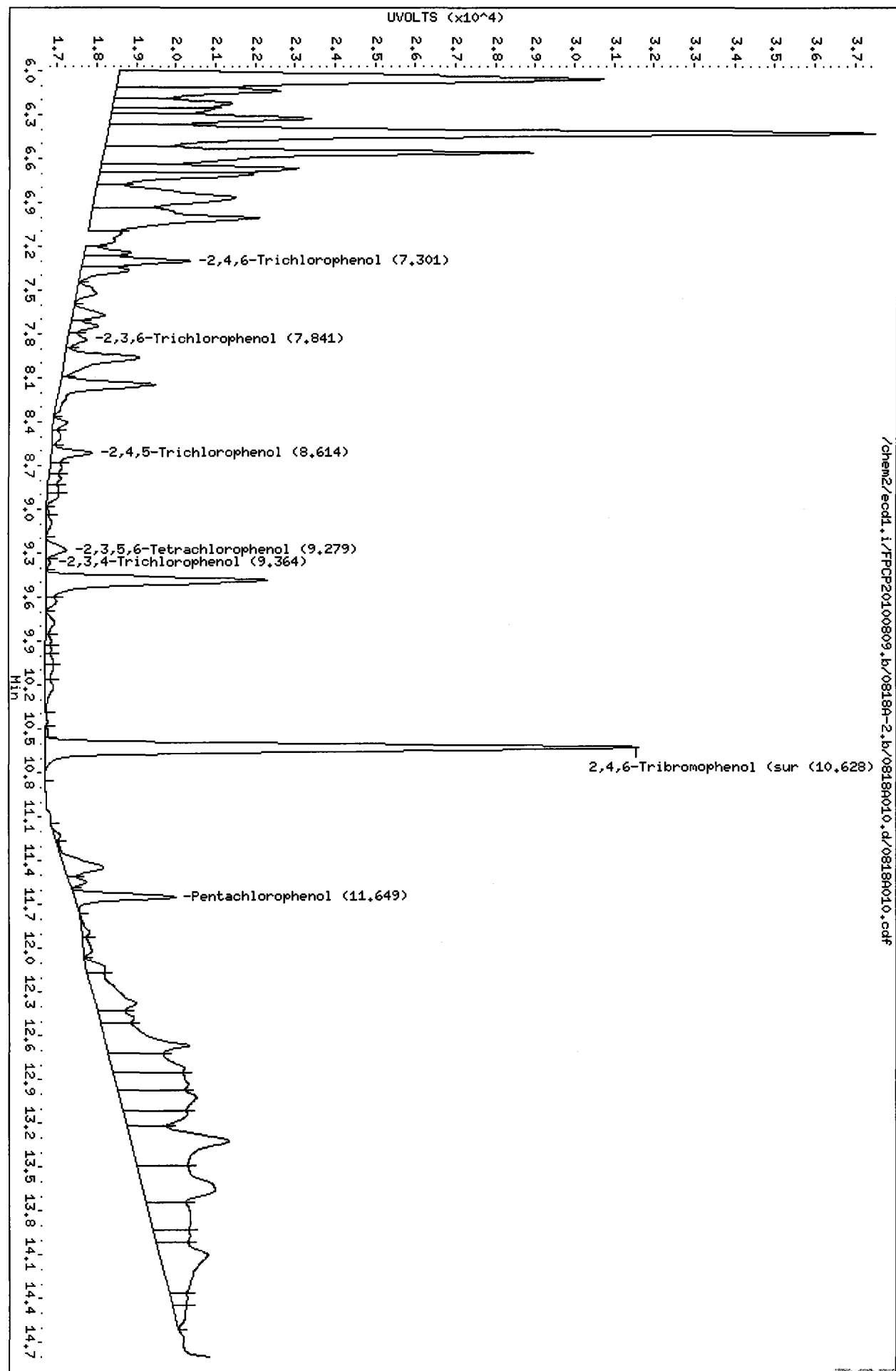
COMPOUND	Col1	Col2
2,4,6-TBP (surr)	56.0	55.5





Data File: /chem2/ecdd1.1/FPCP20100809.b/0818A-2.b/0818A010.d  
Date: 18-AUG-2010 19:17  
Client ID: PSB12-8-10-072810  
Sample Info: R051D  
Column phase: ZB35

Instrument: ecdd1.1  
Operator: an  
Column diameter: 0.53

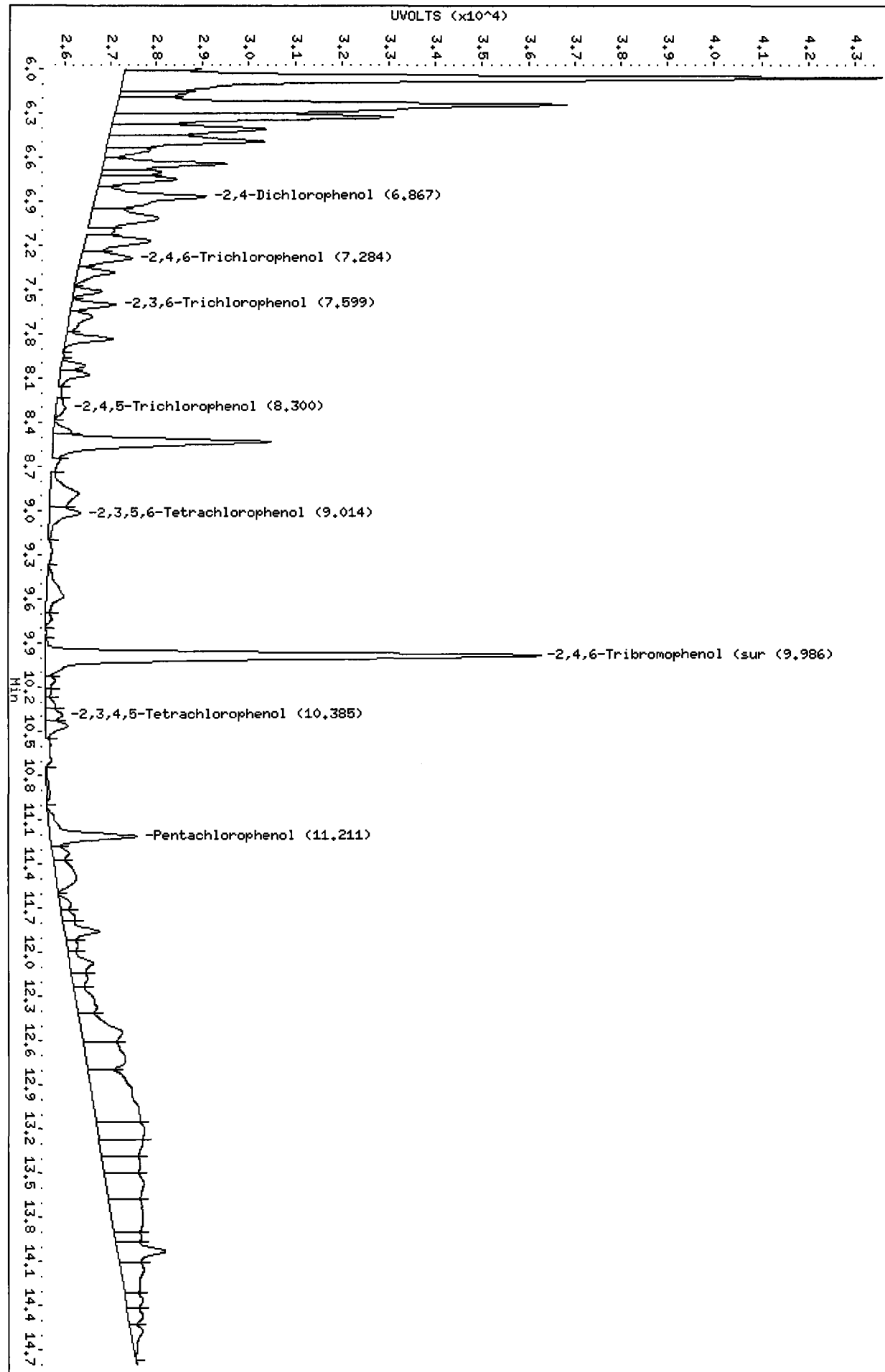


18 AUG 2010 19:17

Data File: /chem2/ecdl.i/FPQP20100809.b/0818A-1.b/0818A010.d  
Date: 18-AUG-2010 19:17  
Client ID: PSB12-8-10-072810  
Sample Info: ROS1D  
Column phase: ZBS

Instrument: ecdl.i  
Operator: ar  
Column diameter: 0.53

/chem2/ecdl.i/FPQP20100809.b/0818A-1.b/0818A010.d/0818A010.cdf



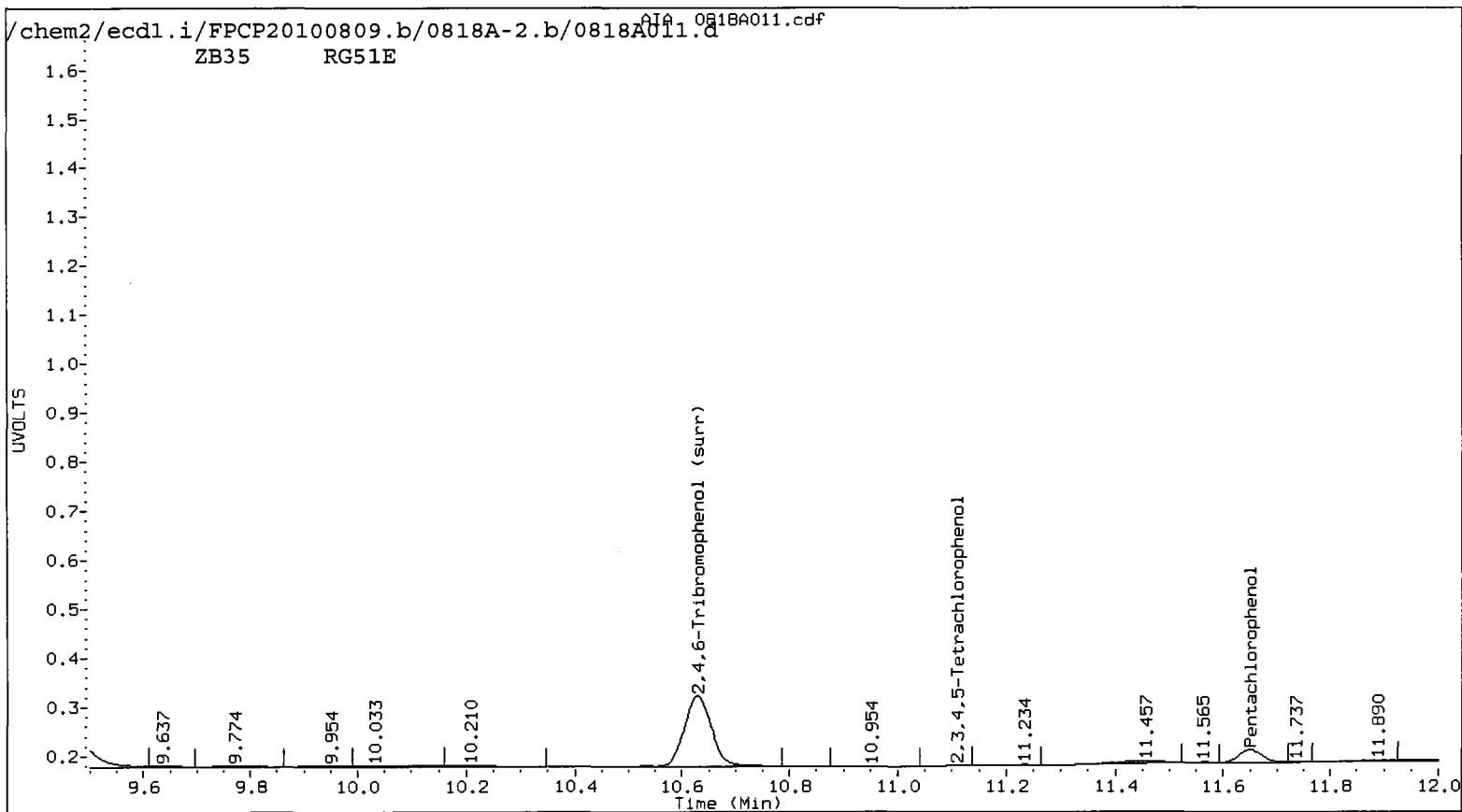
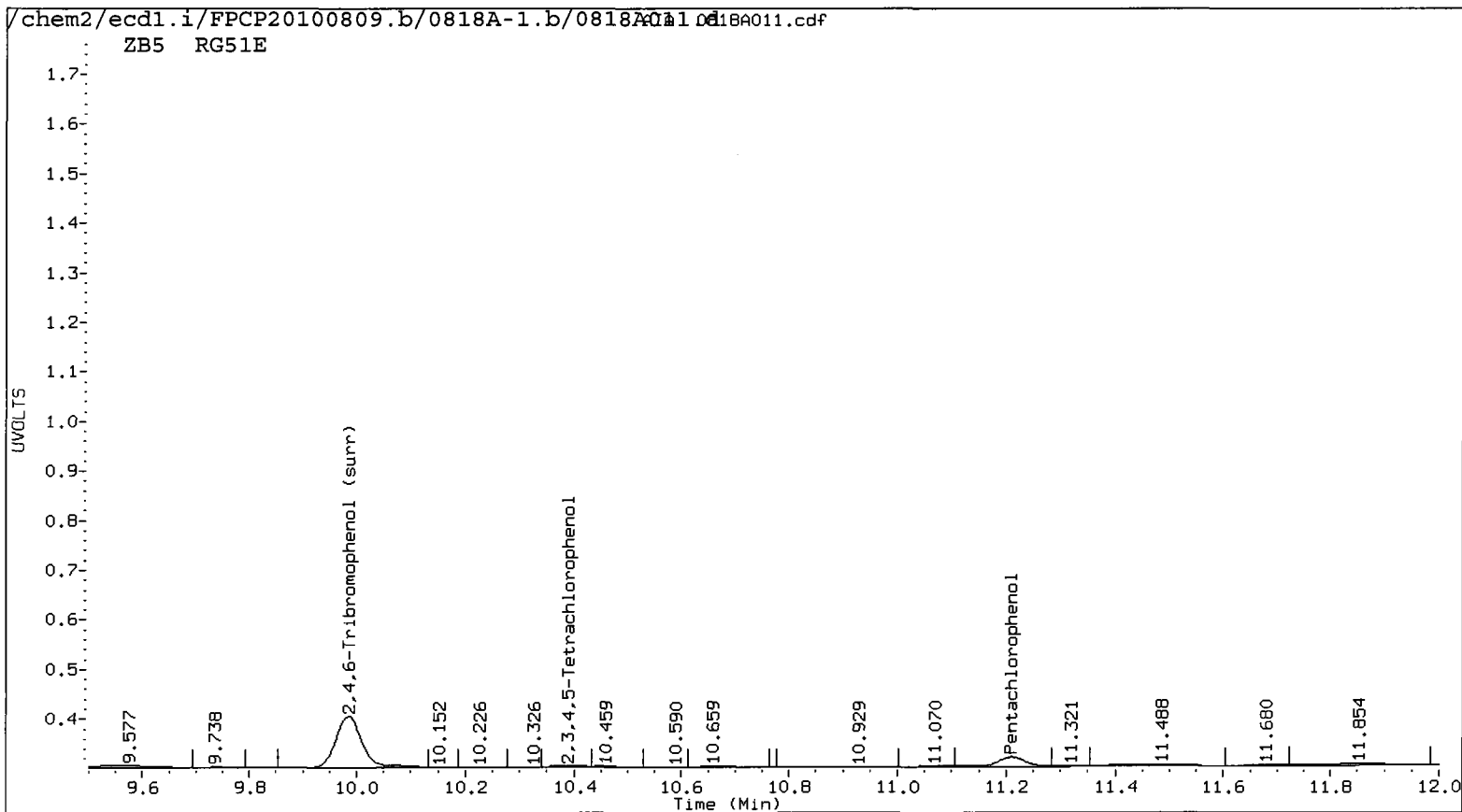
Analytical Resources Inc.  
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecdl.i/FPCP20100809.b/0818A-1.b/0818A011.d ARI ID: RG51E  
 Data file 2: /chem2/ecdl.i/FPCP20100809.b/0818A-2.b/0818A011.d Client ID: PSB12-8-10-072810-D  
 Method: /chem2/ecdl.i/FPCP20100809.b/FPCP.m Injection Date: 18-AUG-2010 19:37  
 Compound Sublist: all Report Date: 08/19/2010 11:23  
 Instrument: ecdl.i Matrix: SOIL  
 Operator: ar Dilution Factor: 1.000 yz 8/19/10

ZB-5 Col			ZB35 Col			ZB-5	ZB35	RPD	Compound
RT	Shift	Response	RT	Shift	Response	on col	on col		
11.210	-0.009	35749	11.649	-0.009	38672	<del>2.0110</del>	1.6842	17.7	Pentachlorophenol
7.286	0.022	22949	7.302	-0.031	60313	<del>2.4124</del>	<del>4.8310</del>	66.8*	2,4,6-Trichlorophenol
7.599	-0.020	7275	7.844	-0.020	11972	0.7427	0.9648	26.0	2,3,6-Trichlorophenol
8.293	0.051	4566	8.615	0.000	34715	0.9046	4.9896	138.6*	2,4,5-Trichlorophenol
----			9.372	-0.008	4142	0.0000	0.4288	---	2,3,4-Trichlorophenol
9.014	0.007	13520	9.278	0.001	14602	0.9585	0.7887	19.4	2,3,5,6-Tetrachlorophenol
10.389	-0.024	4567	11.109	-0.017	664	0.3638	0.0455	155.5*	2,3,4,5-Tetrachlorophenol
6.867	-0.026	66693	7.116	-0.050	29575	121.4460	40.8619	99.3*	2,4-Dichlorophenol
9.985	-0.017	177481	10.629	-0.018	256339	13.7	13.7	0.2	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

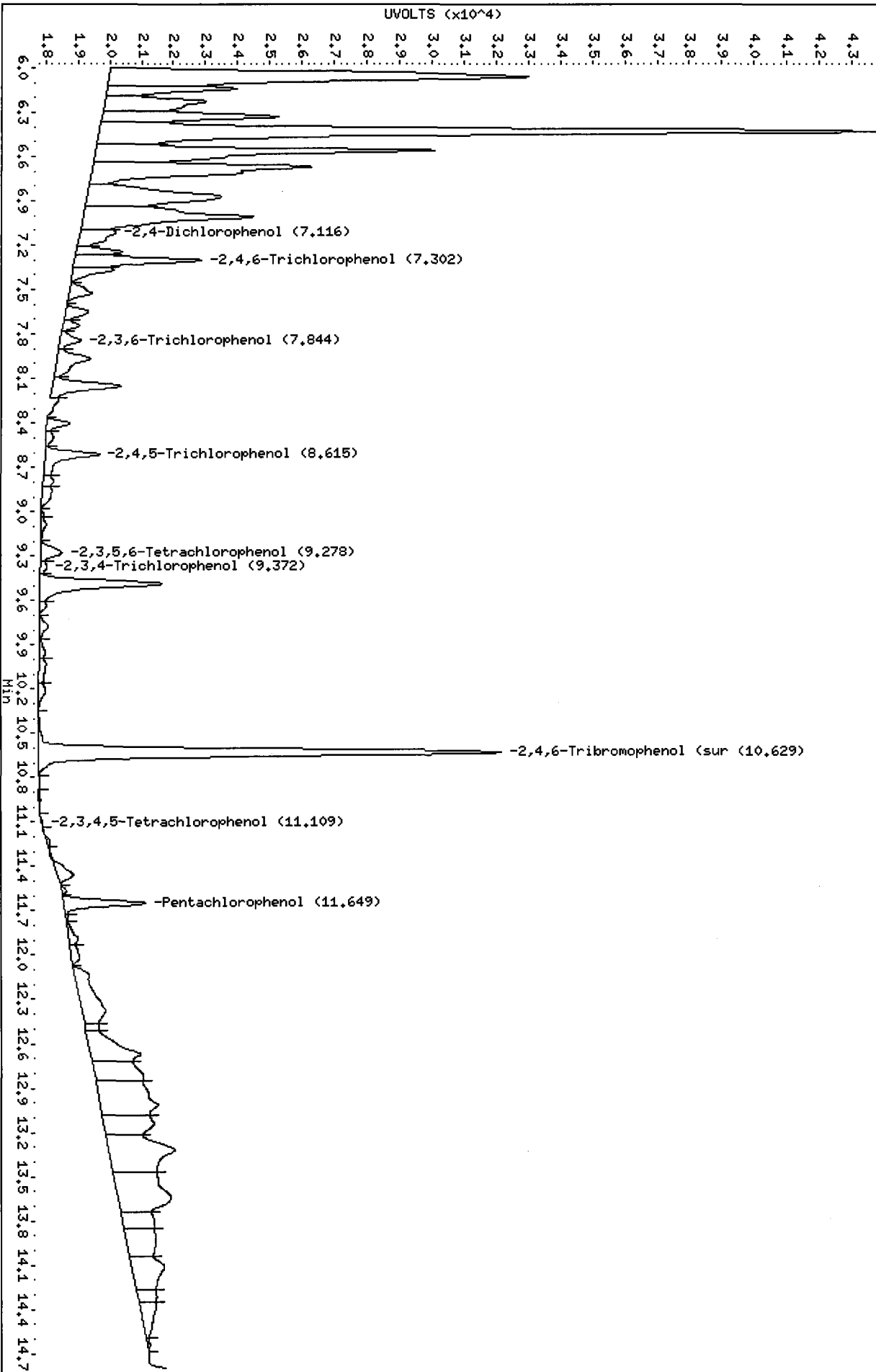
COMPOUND	Col1	Col2
2,4,6-TBP (surr)	54.8	54.9



Data File: /chem2/ecdl.i/FPGP20100809.b/0818A-2.b/0818A011.d  
Date: 18-AUG-2010 19:37  
Client ID: PSB12-8-10-072810-D  
Sample Info: RCSI E  
Column phase: ZB35

Instrument: ecdl.i  
Operator: ar  
Column diameter: 0.53

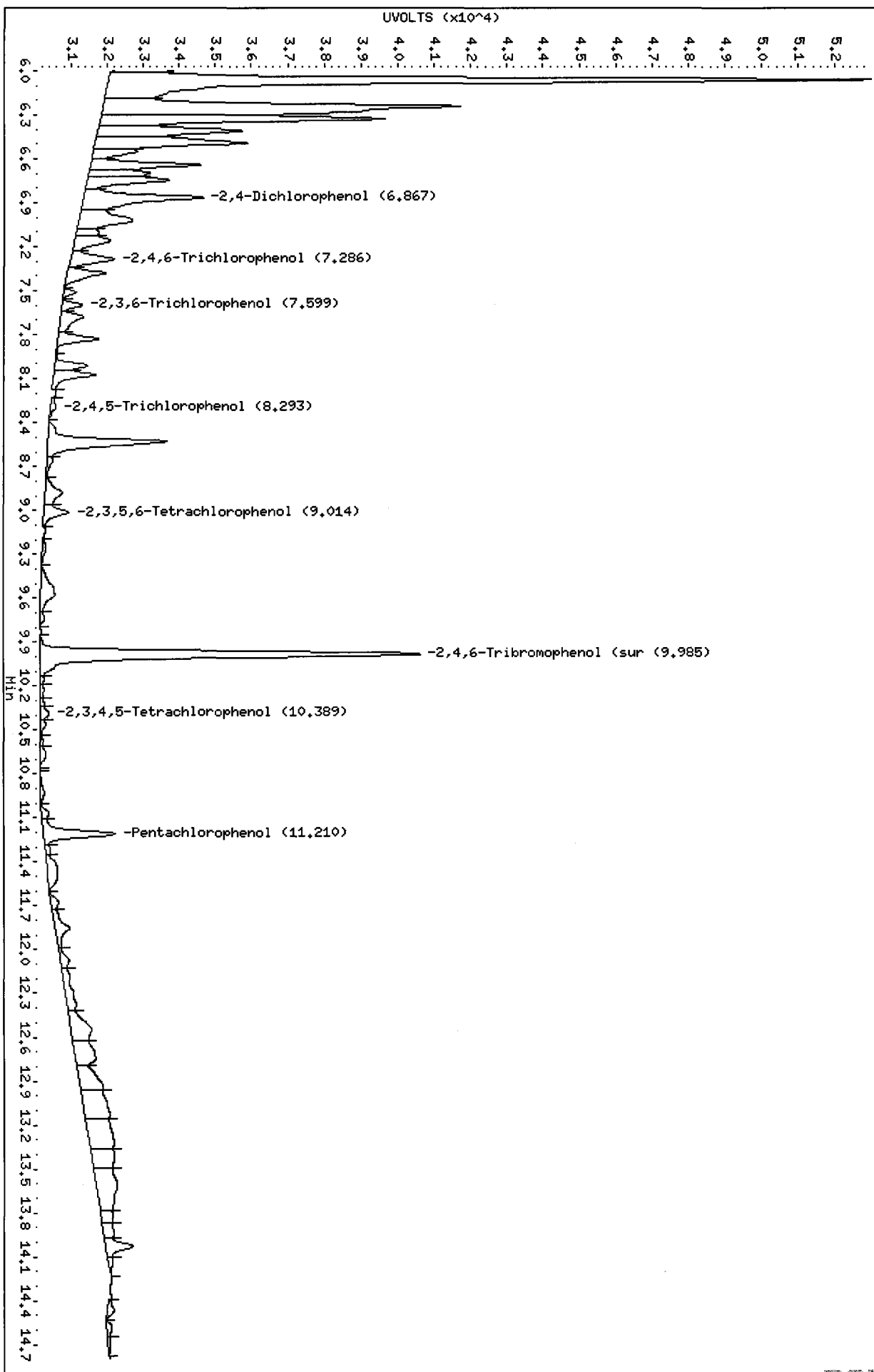
/chem2/ecdl.i/FPGP20100809.b/0818A-2.b/0818A011.d/0818A011.cdf



Data File: /chem2/ecdl.i/FQCP20100809.b/0818A-1.b/0818A011.d  
Date : 18-AUG-2010 19:37  
Client ID: PSB2-8-10-072810-D  
Sample Info: R051E  
Column phase: ZPS

Instrument: ecdl.i  
Operator: ar  
Column diameter: 0.53

/chem2/ecdl.i/FQCP20100809.b/0818A-1.b/0818A011.d/0818A011.cdf



00700  
1001

Analytical Resources Inc.  
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecdl.i/FPCP20100809.b/0818A-1.b/0818A012.d ARI ID: RG51F  
 Data file 2: /chem2/ecdl.i/FPCP20100809.b/0818A-2.b/0818A012.d Client ID: PSB12-14-17-072810  
 Method: /chem2/ecdl.i/FPCP20100809.b/FPCP.m Injection Date: 18-AUG-2010 19:57  
 Compound Sublist: all Report Date: 08/19/2010 11:23  
 Instrument: ecdl.i Matrix: SOIL  
 Operator: ar Dilution Factor: 1.000

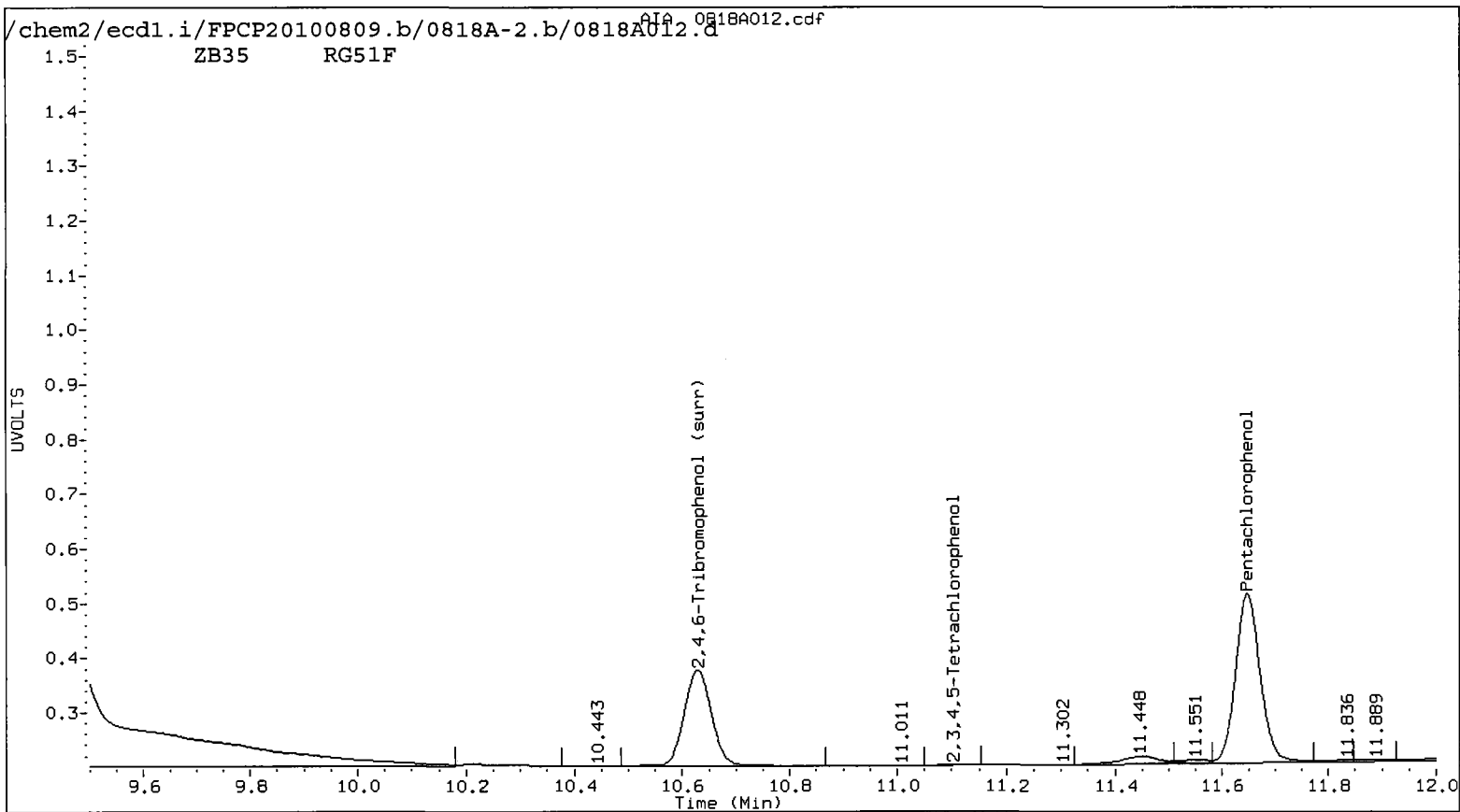
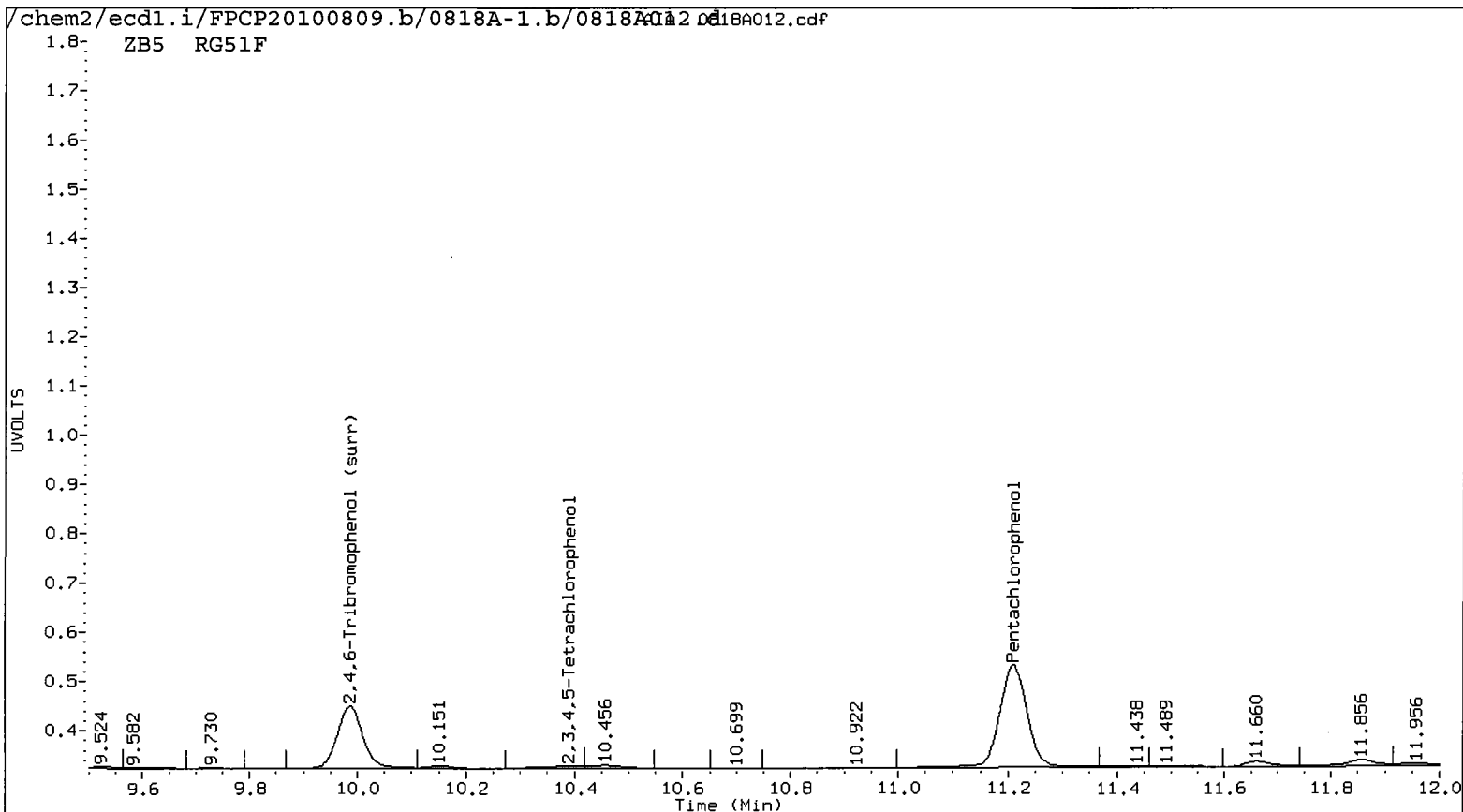
YZ 8/19/10

ZB-5 Col			ZB35 Col			ZB-5	ZB35	RPD	Compound
RT	Shift	Response	RT	Shift	Response	on col	on col		
11.210	-0.009	366364	11.647	-0.011	505464	23.4856	22.0136	6.5	Pentachlorophenol
7.277	0.013	24113	7.303	-0.030	94034	2.5367	7.5320	99.2*	2,4,6-Trichlorophenol
7.599	-0.020	45560	7.843	-0.021	11660	4.7445	0.9397	133.9*	2,3,6-Trichlorophenol
----			8.614	-0.001	46377	0.0000	6.7384	---	2,4,5-Trichlorophenol
----			----			0.0000	0.0000	---	2,3,4-Trichlorophenol
9.017	0.010	59014	9.280	0.003	239070	4.1837	12.9123	102.1*	2,3,5,6-Tetrachlorophenol
10.390	-0.023	12458	11.104	-0.022	2264	0.9992	0.1552	146.2*	2,3,4,5-Tetrachlorophenol
6.865	-0.028	62763	7.167	0.001	17900	113.2875	24.3368	129.3*	2,4-Dichlorophenol
9.986	-0.016	210877	10.629	-0.017	311533	16.5	16.7	1.2	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

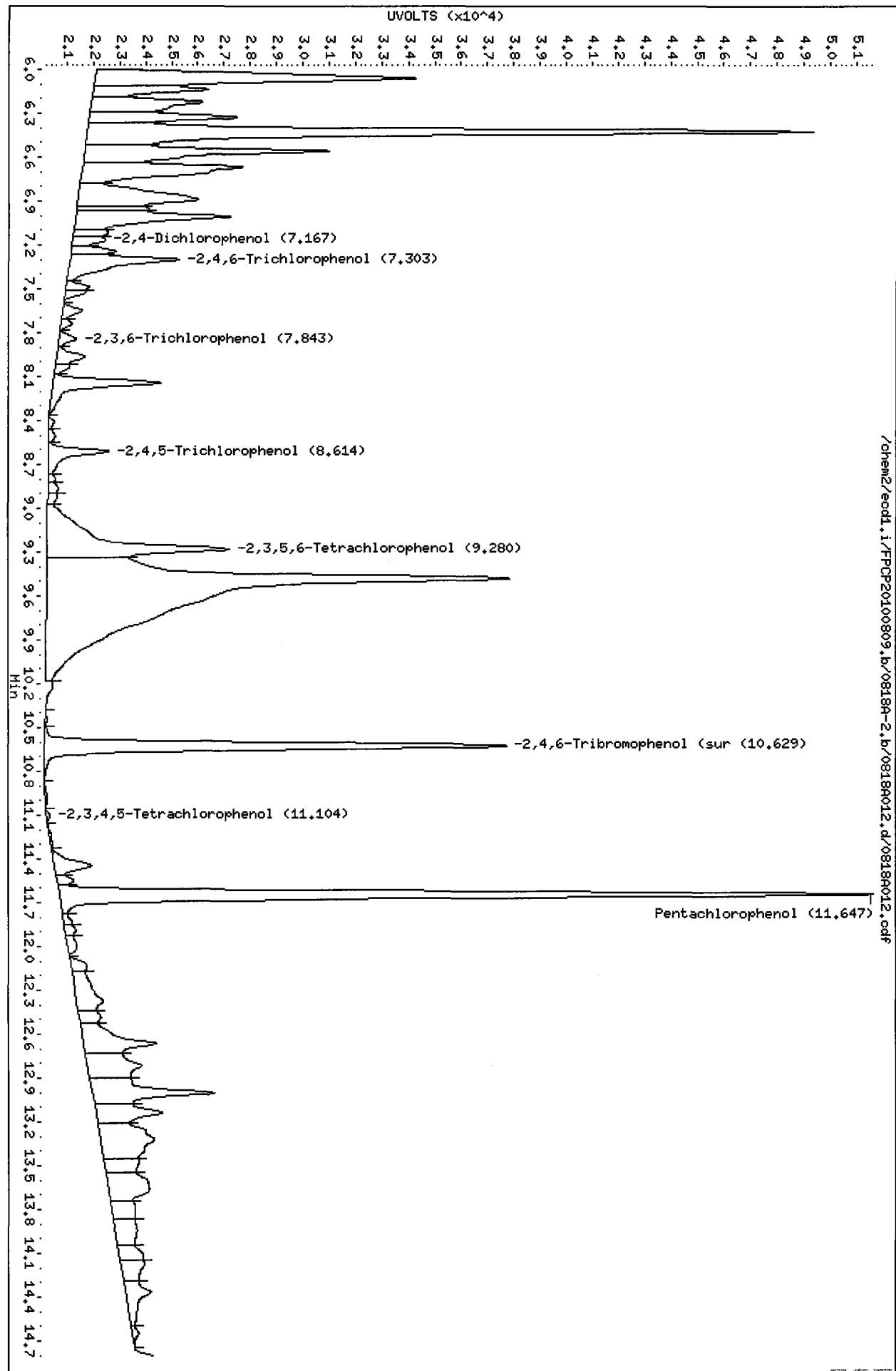
COMPOUND	Col1	Col2
2,4,6-TBP (surr)	65.9	66.8





Data File: /chem2/ecdd1.i/FPQP20100809.b/0818A-2.b/0818A012.d  
Date: 18-AUG-2010 19:57  
Client ID: PSB12-14-17-072810  
Sample Info: R051F  
Column phase: ZB35

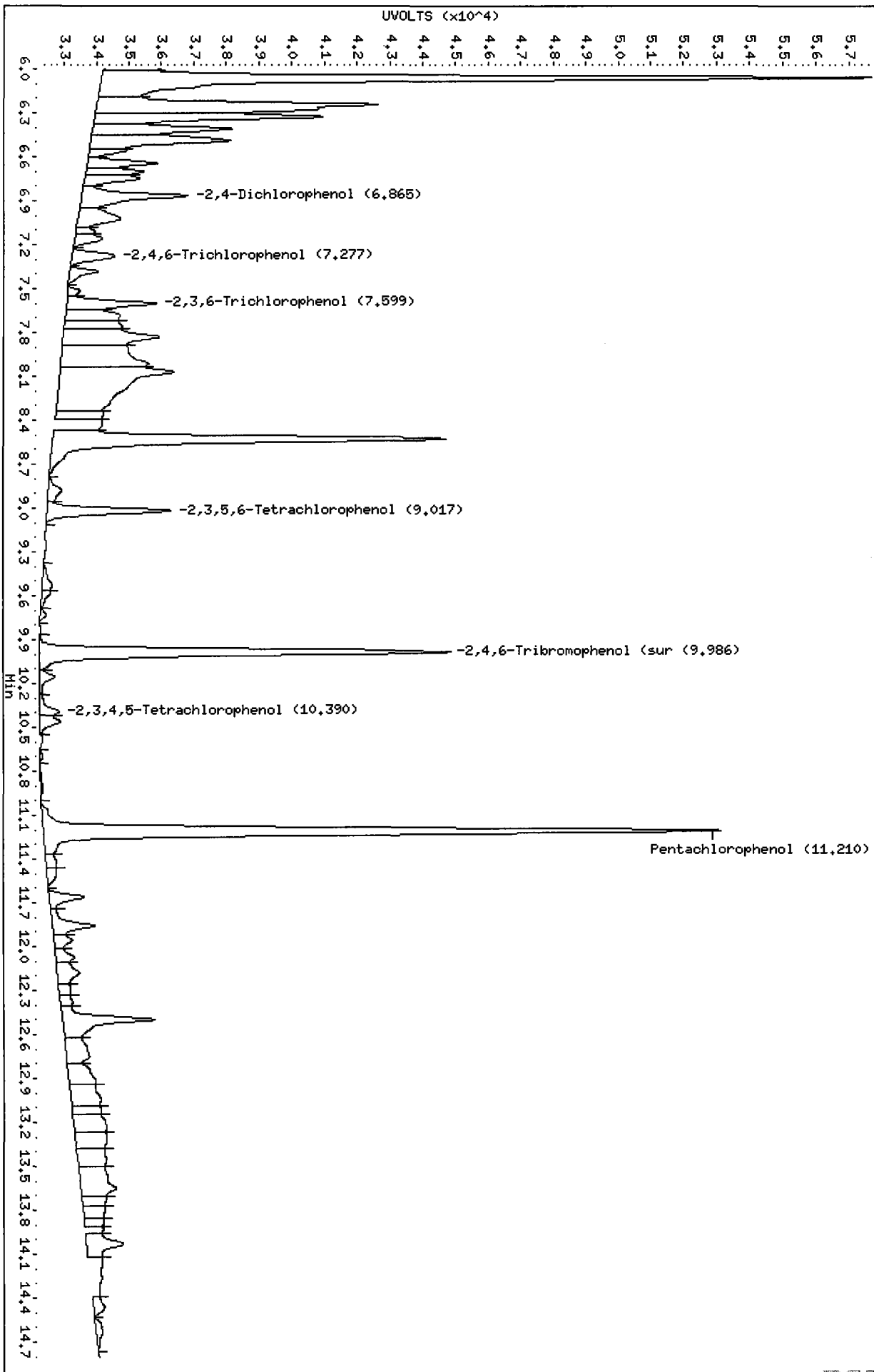
Instrument: ecdd1.i  
Operator: ar  
Column diameter: 0.53



Data File: /chem2/ecdl.i/FPCP20100809.b/0818A-1.b/0818A012.d  
Date: 18-AUG-2010 19:57  
Client ID: PSB12-14-17-072810  
Sample Info: RGS51F  
Column phase: ZBS

Instrument: ecdl.i  
Operator: ar  
Column diameter: 0.53

/chem2/ecdl.i/FPCP20100809.b/0818A-1.b/0818A012.d/0818A012.cdf



10 09 2010 10:53

Analytical Resources Inc.  
Dual Column 8041 Chlorinated Phenols Quantitation Report

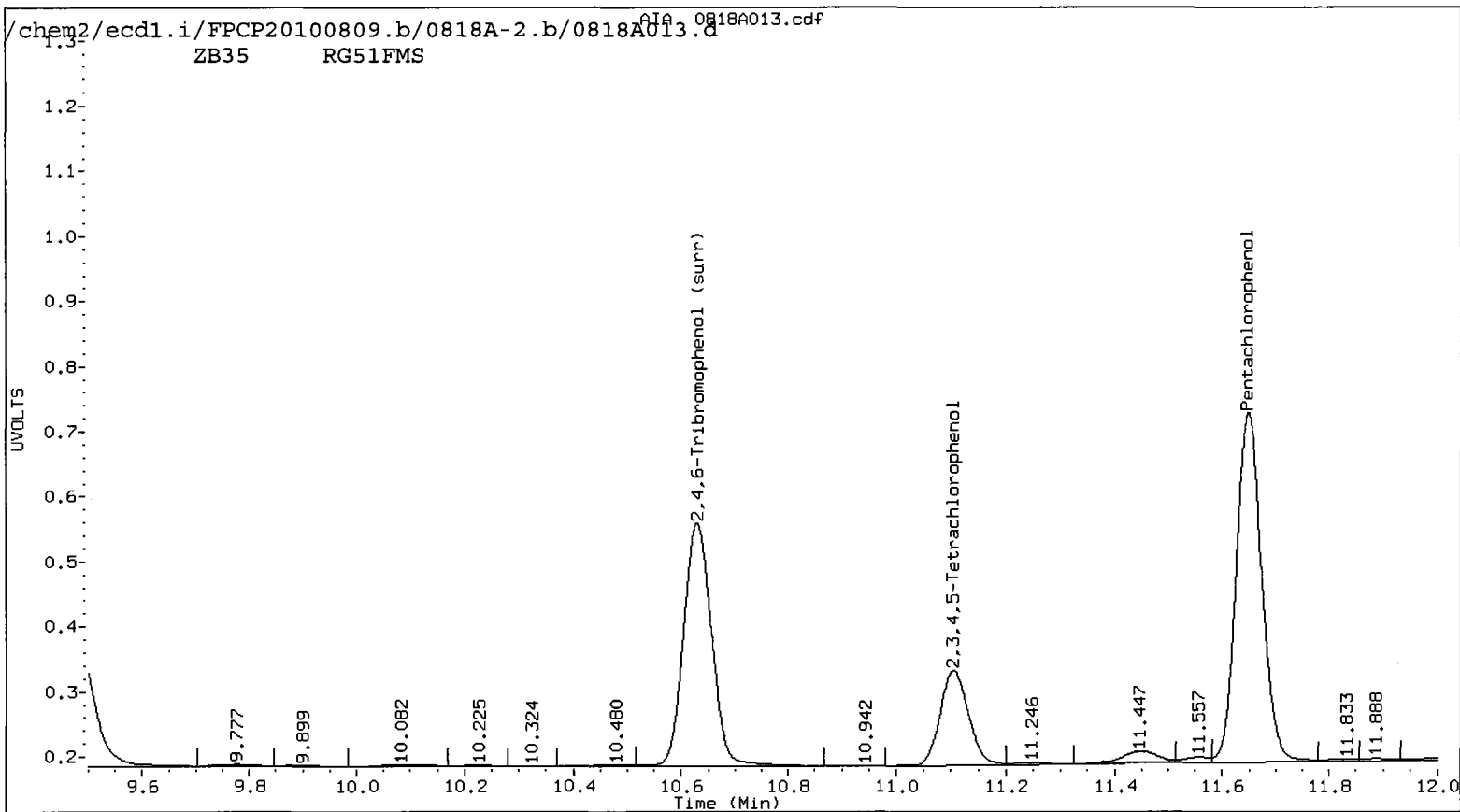
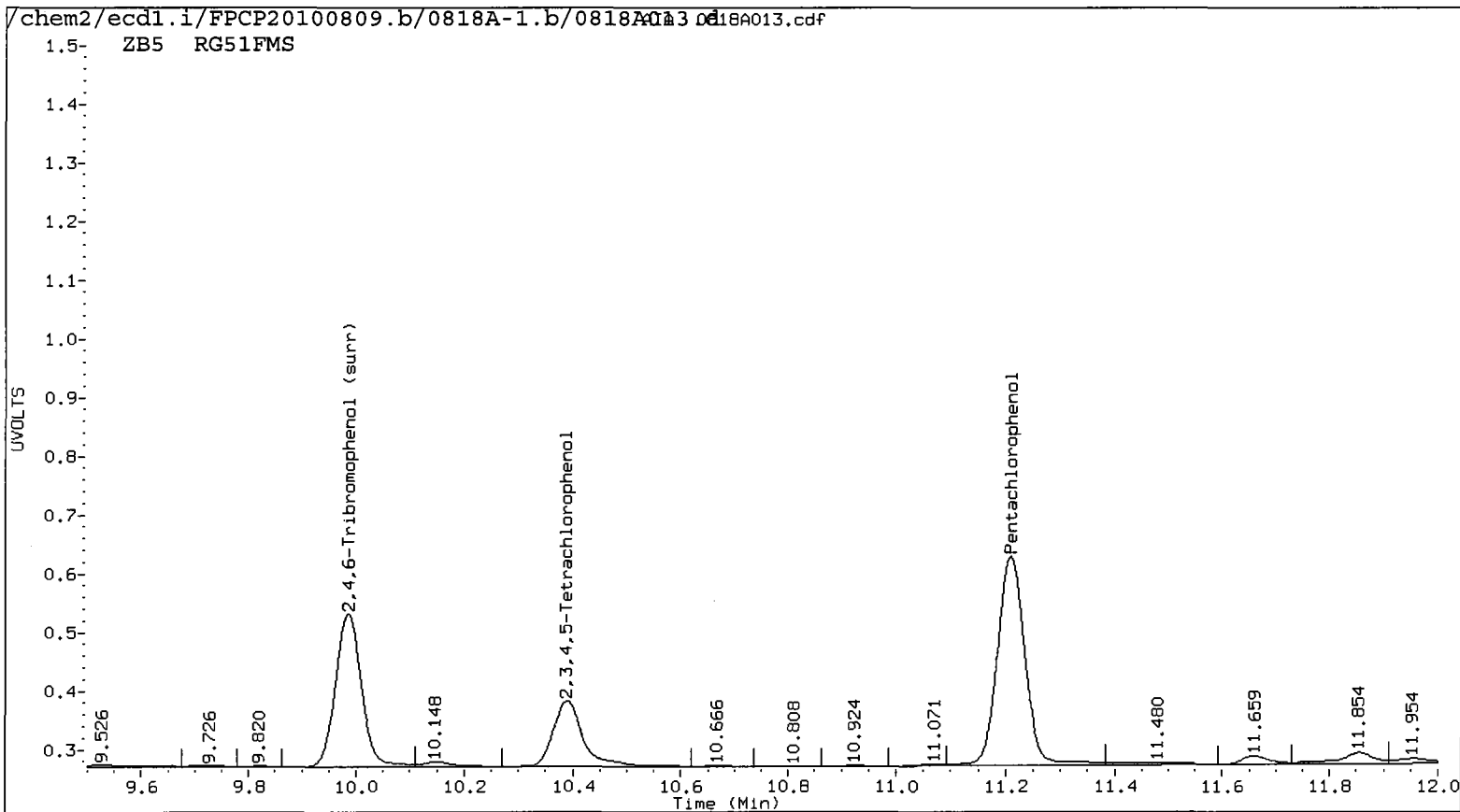
Data file 1: /chem2/ecdl.i/FPCP20100809.b/0818A-1.b/0818A013.d    ARI ID: RG51FMS  
 Data file 2: /chem2/ecdl.i/FPCP20100809.b/0818A-2.b/0818A013.d    Client ID: PSB12-14-17-072 MS  
 Method: /chem2/ecdl.i/FPCP20100809.b/FPCP.m    Injection Date: 18-AUG-2010 20:17  
 Compound Sublist: all    Report Date: 08/19/2010 11:23  
 Instrument: ecdl.i    Matrix: SOIL  
 Operator: ar    Dilution Factor: 1.000

*12/8/19/11*

ZB-5 Col			ZB35 Col			ZB-5	ZB35	RPD	Compound
RT	Shift	Response	RT	Shift	Response	on col	on col		
11.209	-0.010	623934	11.648	-0.010	886855	43.8138	38.6237	12.6	Pentachlorophenol
7.263	-0.001	191809	7.330	-0.003	304055	22.4521	24.3544	8.1	2,4,6-Trichlorophenol
7.613	-0.006	217430	7.859	-0.005	250218	24.6351	20.1650	20.0	2,3,6-Trichlorophenol
8.211	-0.031	95552	8.589	-0.026	153343	18.9305	24.4821	25.6	2,4,5-Trichlorophenol
8.757	-0.035	120951	9.352	-0.028	161950	17.6801	18.5736	4.9	2,3,4-Trichlorophenol
8.994	-0.013	325554	9.262	-0.015	457099	23.0797	24.6883	6.7	2,3,5,6-Tetrachlorophenol
10.388	-0.025	217198	11.104	-0.022	259086	20.4654	17.7569	14.2	2,3,4,5-Tetrachlorophenol
6.885	-0.008	119978	7.158	-0.008	126268	244.4502	197.5038	21.2	2,4-Dichlorophenol
9.985	-0.017	437676	10.629	-0.017	674857	37.1	36.2	2.5	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

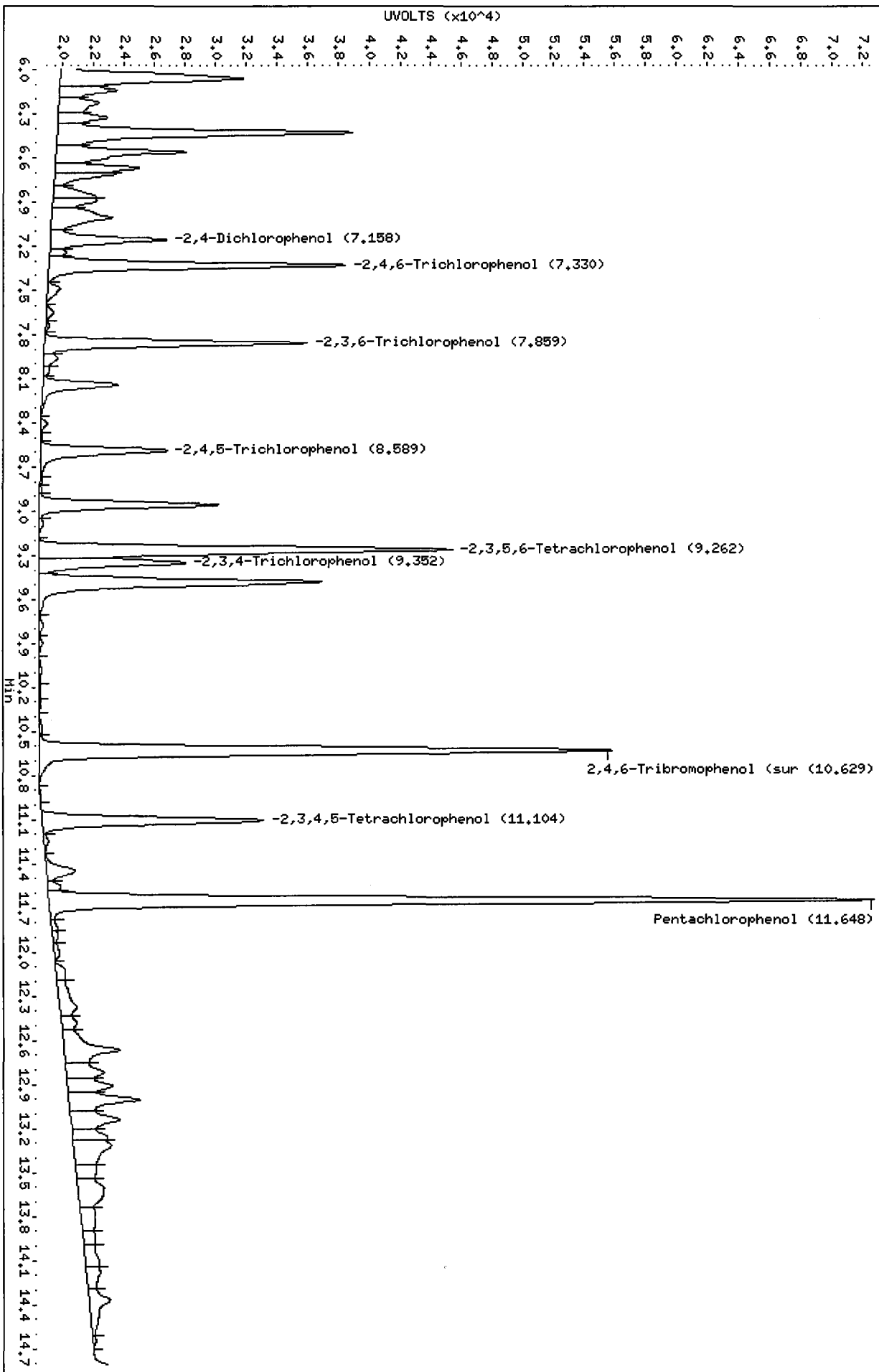
COMPOUND	Col1	Col2
Pentachlorophenol	175.3	154.5
2,4,6-Trichlorophenol	89.8	97.4
2,3,6-Trichlorophenol	98.5	80.7
2,4,5-Trichlorophenol	75.7	97.9
2,3,4-Trichlorophenol	70.7	74.3
2,3,5,6-Tetrachlorophenol	92.3	98.8
2,3,4,5-Tetrachlorophenol	81.9	71.0
2,4-Dichlorophenol	97.8	79.0
2,4,6-TBP (surr)	74.2	72.3



Data File: /chem2/ecdl.i/FPCP20100809.b/0818A-2.b/0818A013.d  
Date : 18-AUG-2010 20:17  
Client ID: PSB12-14-17-072 HS  
Sample Info: RGSIFMS  
Column phase: ZB35

Instrument: ecdl.i  
Operator: ar  
Column diameter: 0.53

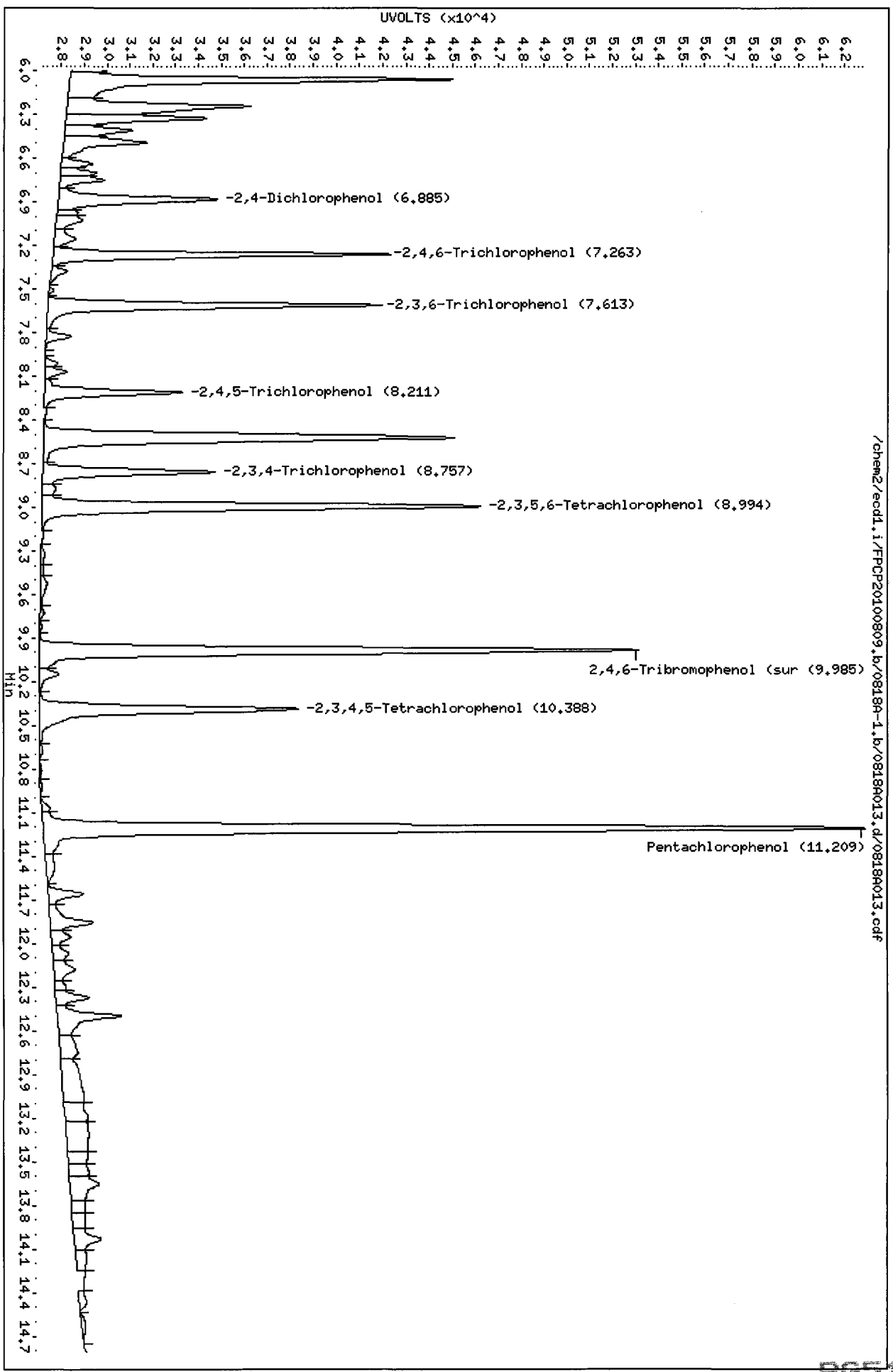
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0818A013.cdf

Data File: /chem2/ecdd1.i/PCP20100809.b/0818A-1.b/0818A013.d  
Date: 18-AUG-2010 20:17  
Client ID: PSB2-14-17-072 MS  
Sample Info: RO5IFMS  
Column phase: ZB5

Instrument: ecdd1.i  
Operator: ar  
Column diameter: 0.53



Analytical Resources Inc.  
Dual Column 8041 Chlorinated Phenols Quantitation Report

42 8/19/10

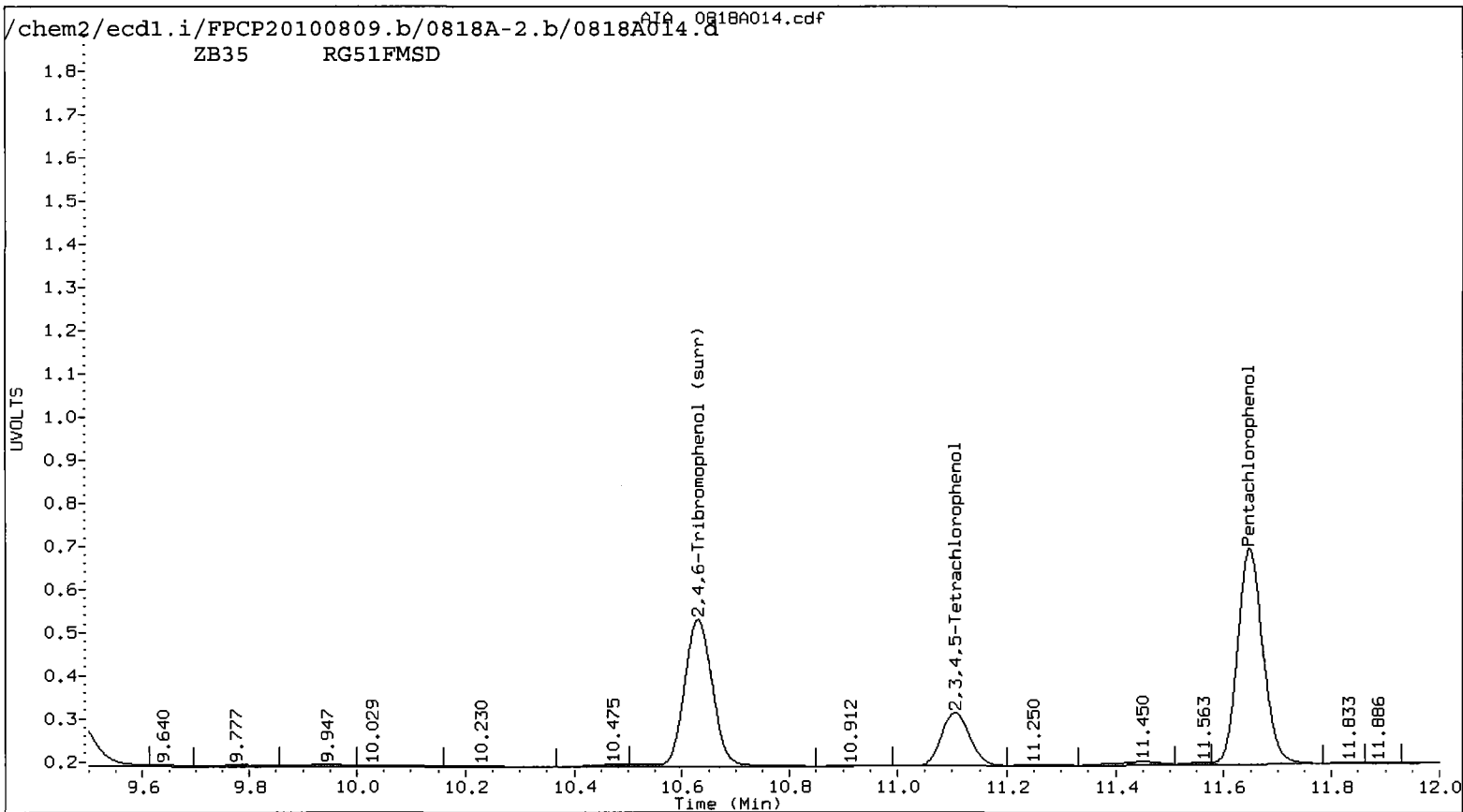
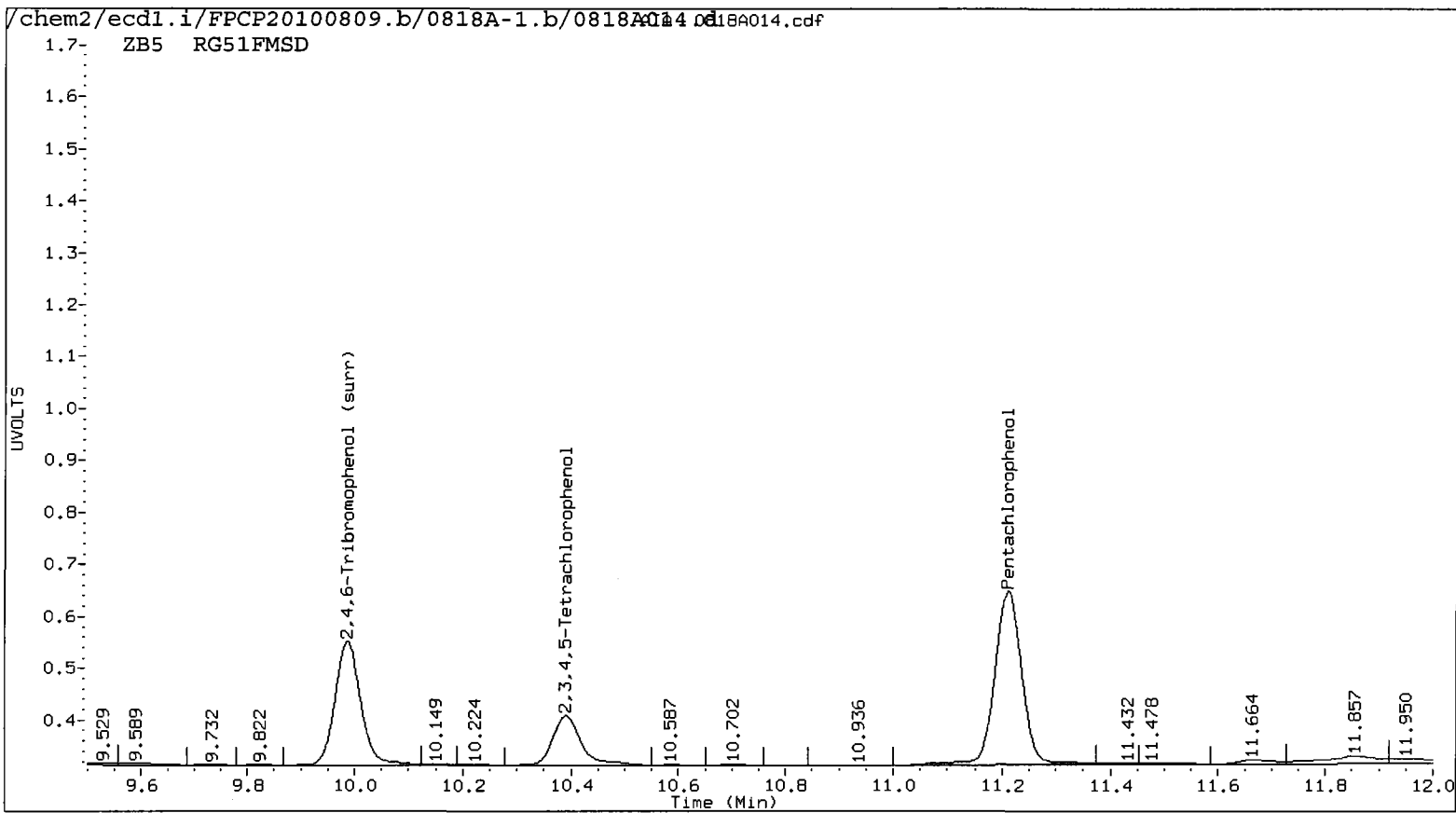
Data file 1: /chem2/ecdl.i/FPCP20100809.b/0818A-1.b/0818A014.d ARI ID: RG51FMSD  
 Data file 2: /chem2/ecdl.i/FPCP20100809.b/0818A-2.b/0818A014.d Client ID: PSB12-14-17-072 MSD  
 Method: /chem2/ecdl.i/FPCP20100809.b/FPCP.m Injection Date: 18-AUG-2010 20:37  
 Compound Sublist: all Report Date: 08/19/2010 11:23  
 Instrument: ecdl.i Matrix: SOIL  
 Operator: ar Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35	RPD	Compound
RT	Shift	Response	RT	Shift	Response	on col	on col		
11.211	-0.008	584530	11.648	-0.010	819449	40.4997	35.6881	12.6	Pentachlorophenol
7.264	0.000	189917	7.331	-0.002	302880	22.2052	24.2603	8.8	2,4,6-Trichlorophenol
7.615	-0.004	197292	7.858	-0.006	244599	22.1416	19.7122	11.6	2,3,6-Trichlorophenol
8.212	-0.030	86370	8.591	-0.024	149613	17.1114	23.8117	32.7	2,4,5-Trichlorophenol
8.760	-0.032	108849	9.352	-0.028	146515	15.9111	16.6434	4.5	2,3,4-Trichlorophenol
8.996	-0.011	304795	9.263	-0.014	437583	21.6081	23.6342	9.0	2,3,5,6-Tetrachlorophenol
10.390	-0.023	178350	11.105	-0.021	217402	16.3307	14.9000	9.2	2,3,4,5-Tetrachlorophenol
6.884	-0.009	138463	7.158	-0.008	111607	292.5113	171.4828	52.2*	2,4-Dichlorophenol
9.987	-0.015	401057	10.630	-0.016	616738	33.6	33.0	1.5	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

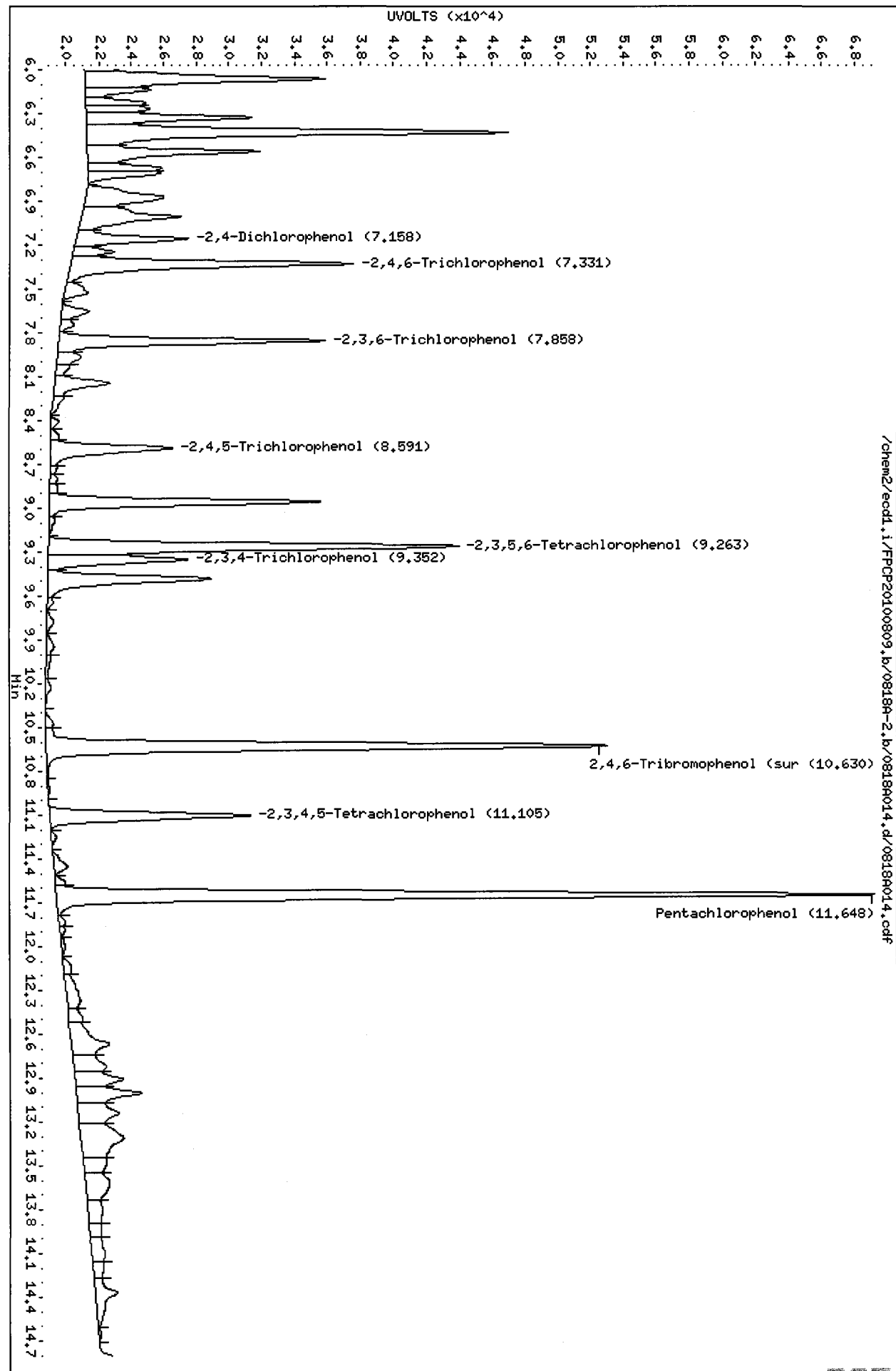
COMPOUND	Col1	Col2
Pentachlorophenol	162.0	142.8
2,4,6-Trichlorophenol	88.8	97.0
2,3,6-Trichlorophenol	88.6	78.8
2,4,5-Trichlorophenol	68.4	95.2
2,3,4-Trichlorophenol	63.6	66.6
2,3,5,6-Tetrachlorophenol	86.4	94.5
2,3,4,5-Tetrachlorophenol	65.3	59.6
2,4-Dichlorophenol	117.0	68.6
2,4,6-TBP (surr)	67.1	66.1





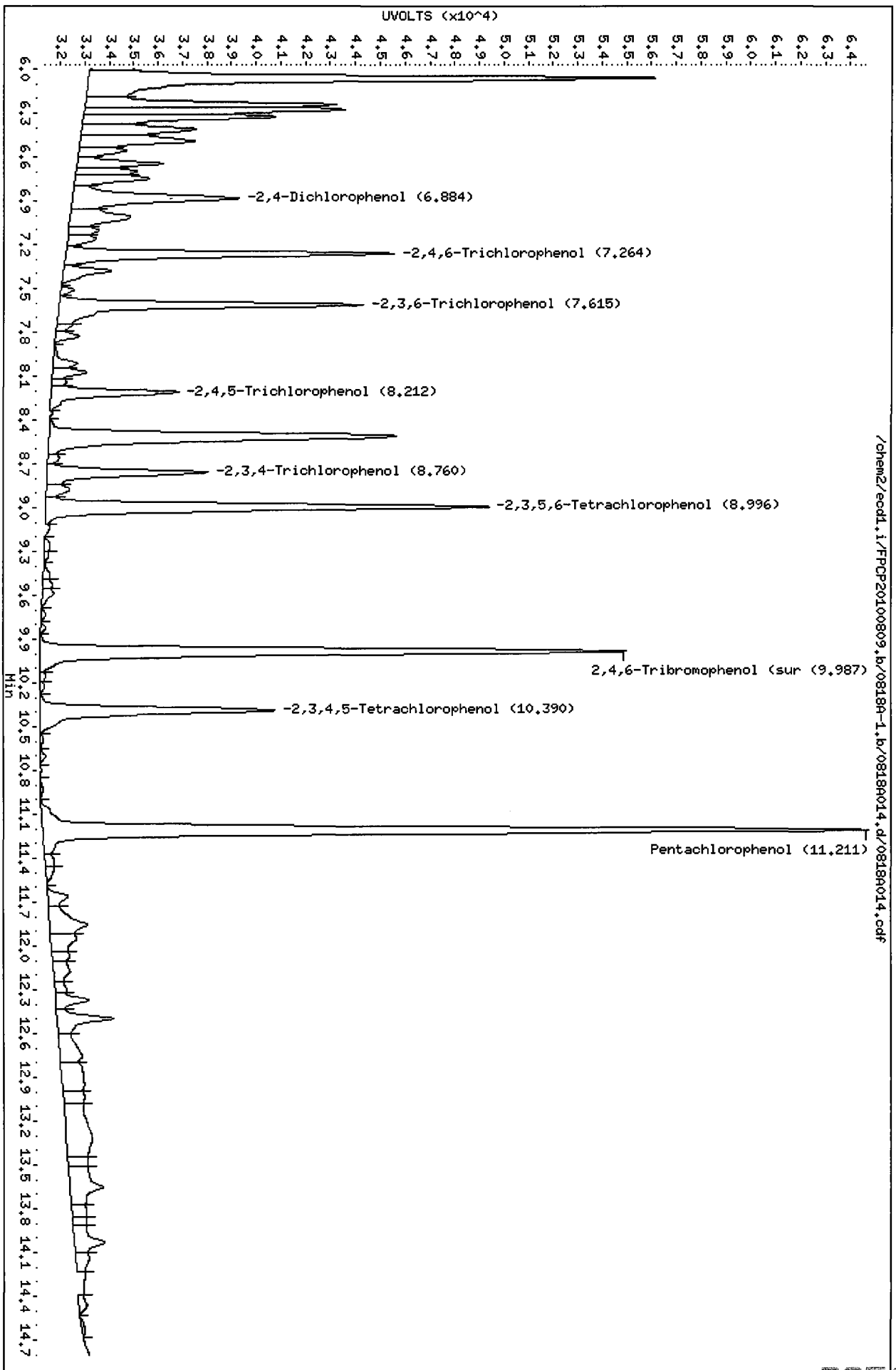
Data File: /chem2/ecdl.i/FPQP20100809.b/0818A-2.b/0818A014.d  
Date : 18-AUG-2010 20:37  
Client ID: PSB12-14-17-072 MSD  
Sample Info: R051FMSD  
Column phase: ZB35

Instrument: ecdl.i  
Operator: ar  
Column diameter: 0.53



Data File: /chem2/eod1.i/PCP20100809.b/0818A-1.b/0818A014.d  
Date: 18-AUG-2010 20:37  
Client ID: PSB12-14-17-072 MSD  
Sample Info: ROSIFMSD  
Column phase: ZBS

Instrument: eod1.i  
Operator: ar  
Column diameter: 0.53



Analytical Resources Inc.  
Dual Column 8041 Chlorinated Phenols Quantitation Report

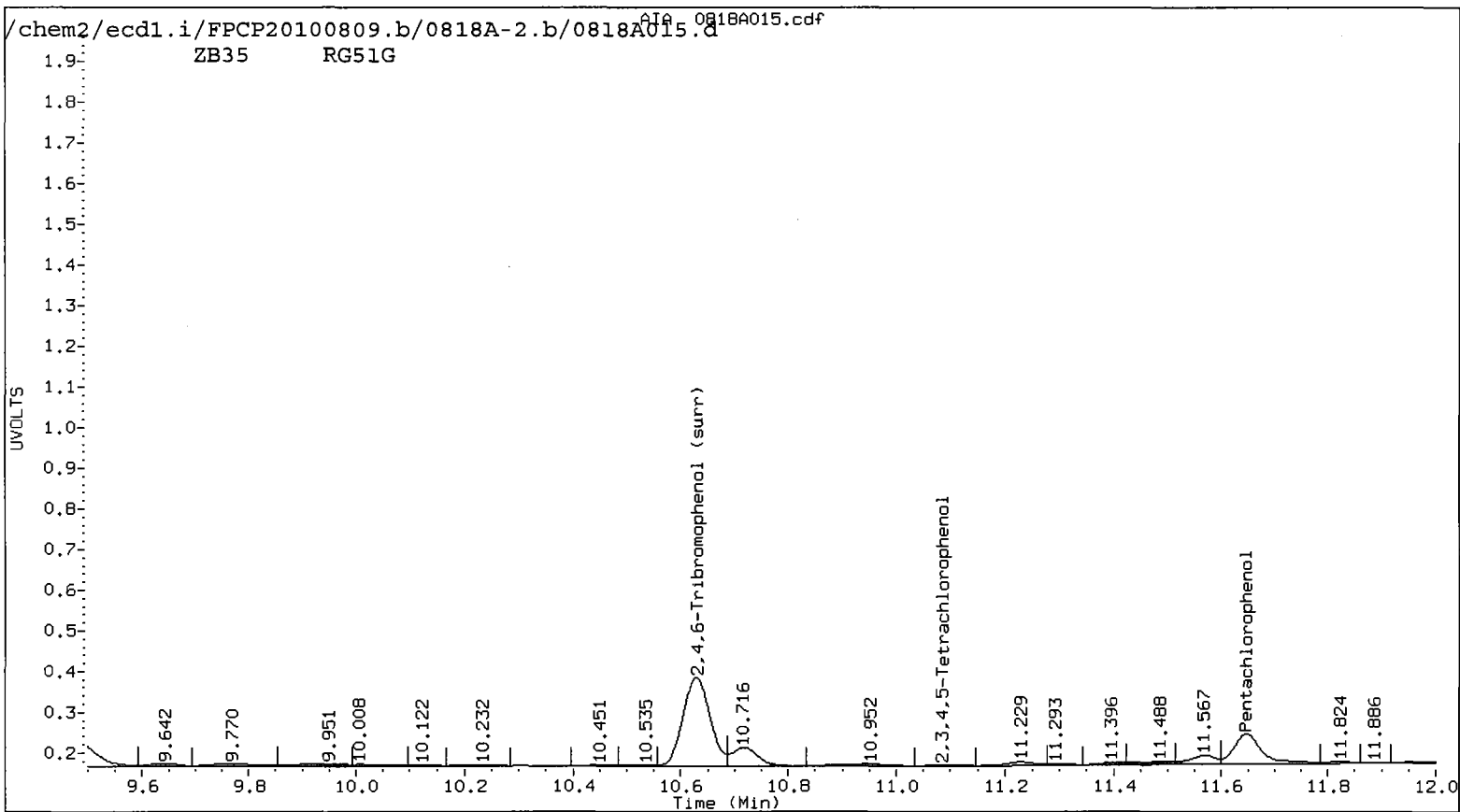
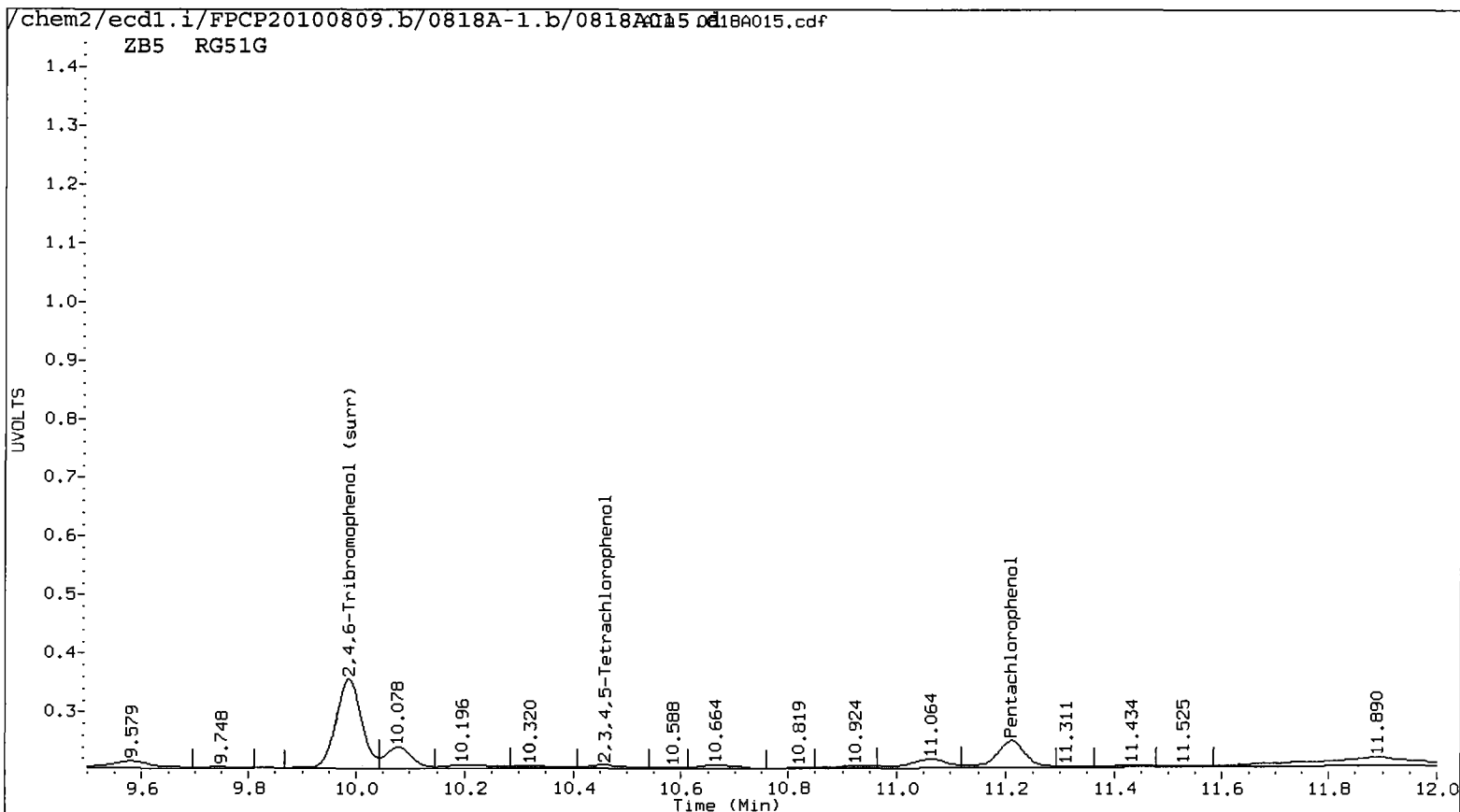
YZ 8/19/10

Data file 1: /chem2/ecdl.i/FPCP20100809.b/0818A-1.b/0818A015.d ARI ID: RG51G  
 Data file 2: /chem2/ecdl.i/FPCP20100809.b/0818A-2.b/0818A015.d Client ID: PSB12-4-6-072810  
 Method: /chem2/ecdl.i/FPCP20100809.b/FPCP.m Injection Date: 18-AUG-2010 20:57  
 Compound Sublist: all Report Date: 08/19/2010 11:23  
 Instrument: ecdl.i Matrix: SOIL  
 Operator: ar Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35	RPD	Compound
RT	Shift	Response	RT	Shift	Response	on col	on col		
11.211	-0.008	85385	11.648	-0.010	137560	4.9038	5.9909	20.0	Pentachlorophenol
7.283	0.019	62555	7.369	0.036	96285	6.7509	7.7123	13.3	2,4,6-Trichlorophenol
7.595	-0.024	12452	7.844	-0.020	30404	1.2747	2.4502	63.1*	2,3,6-Trichlorophenol
8.256	0.014	5067	8.622	0.007	8347	1.0039	1.1702	15.3	2,4,5-Trichlorophenol
-----			9.383	0.003	7296	0.0000	0.7569	---	2,3,4-Trichlorophenol
9.016	0.009	35521	9.282	0.005	56551	2.5182	3.0544	19.2	2,3,5,6-Tetrachlorophenol
10.458	0.045	12594	11.085	-0.041	2864	1.0103	0.1963	134.9*	2,3,4,5-Tetrachlorophenol
6.915	0.022	17928	7.166	0.000	29050	29.0944	40.1078	31.8	2,4-Dichlorophenol
9.986	-0.016	250820	10.629	-0.017	377575	19.9	20.2	1.7	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

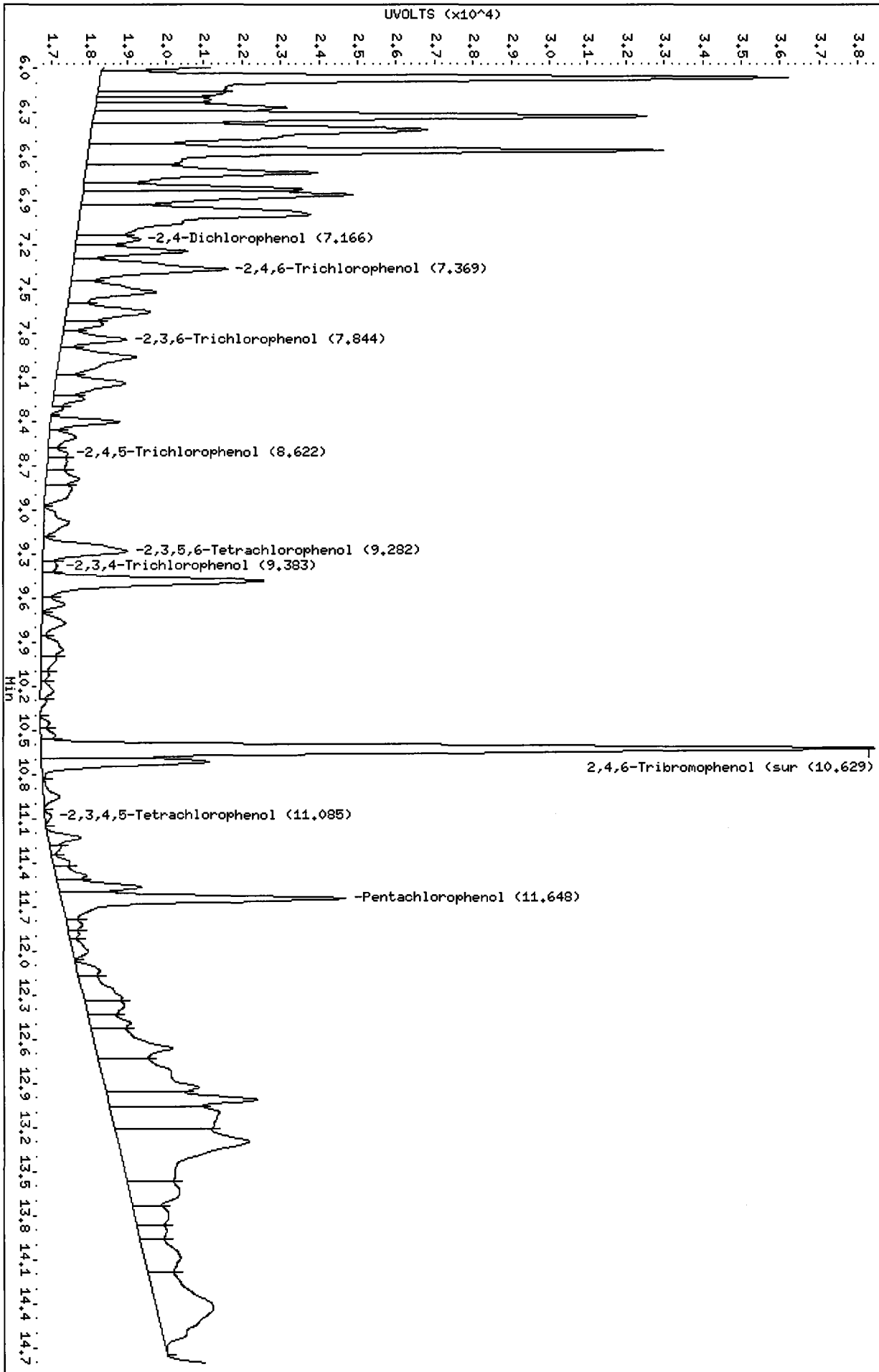
COMPOUND	Col1	Col2
2,4,6-TBP (surr)	79.6	80.9



Data File: /chem2/ecdl.i/FP/CP20100809.b/0818A-2.b/0818A015.d  
Date: 18-AUG-2010 20:57  
Client ID: PSB12-4-6-072810  
Sample Info: RGS1G  
Column phase: ZB35

Instrument: ecdl.i  
Operator: ar  
Column diameter: 0.53

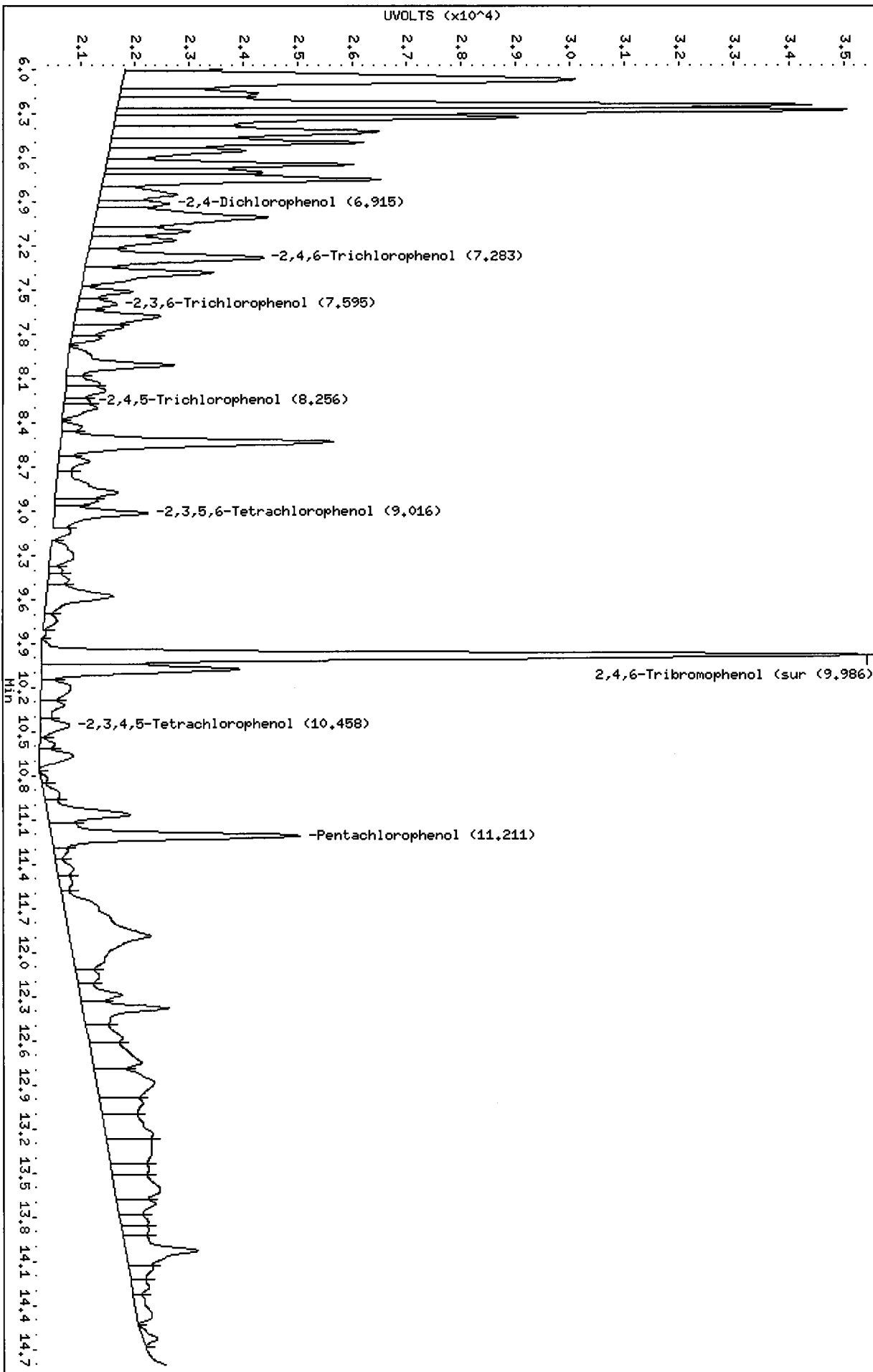
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Data File: /chem2/ecdl1.i/FP0P20100809.b/0818A-1.b/0818A015.d  
Date : 18-AUG-2010 20:57  
Client ID: PSB12-4-6-072810  
Sample Info: RGS1C  
Column phase: ZBS

Instrument: ecdl.1  
Operator: ar  
Column diameter: 0.53

/chem2/ecdl1.i/FP0P20100809.b/0818A-1.b/0818A015.d/0818A015.cdf



01 08 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100

Analytical Resources Inc.  
Dual Column 8041 Chlorinated Phenols Quantitation Report

YZ 8/19/10

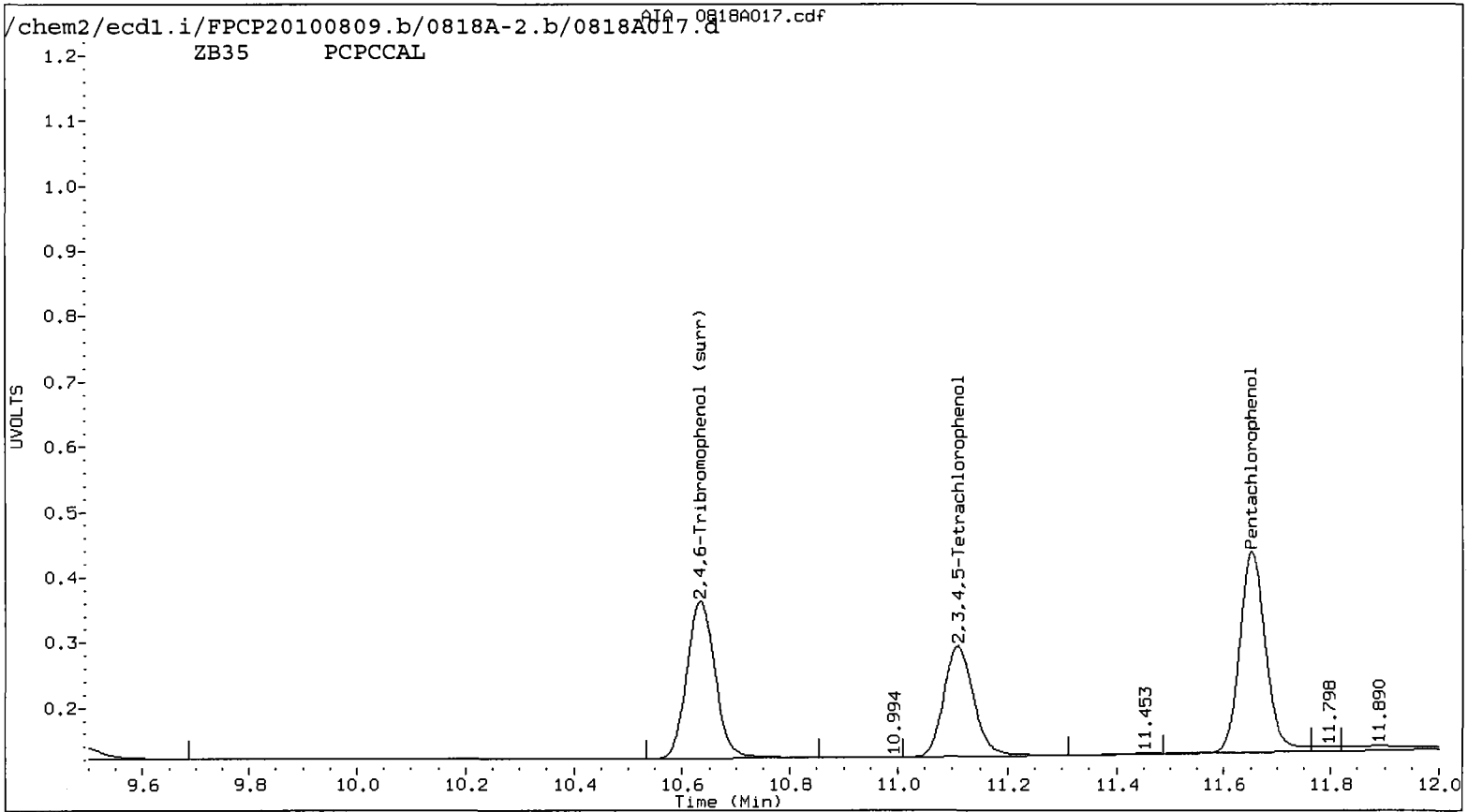
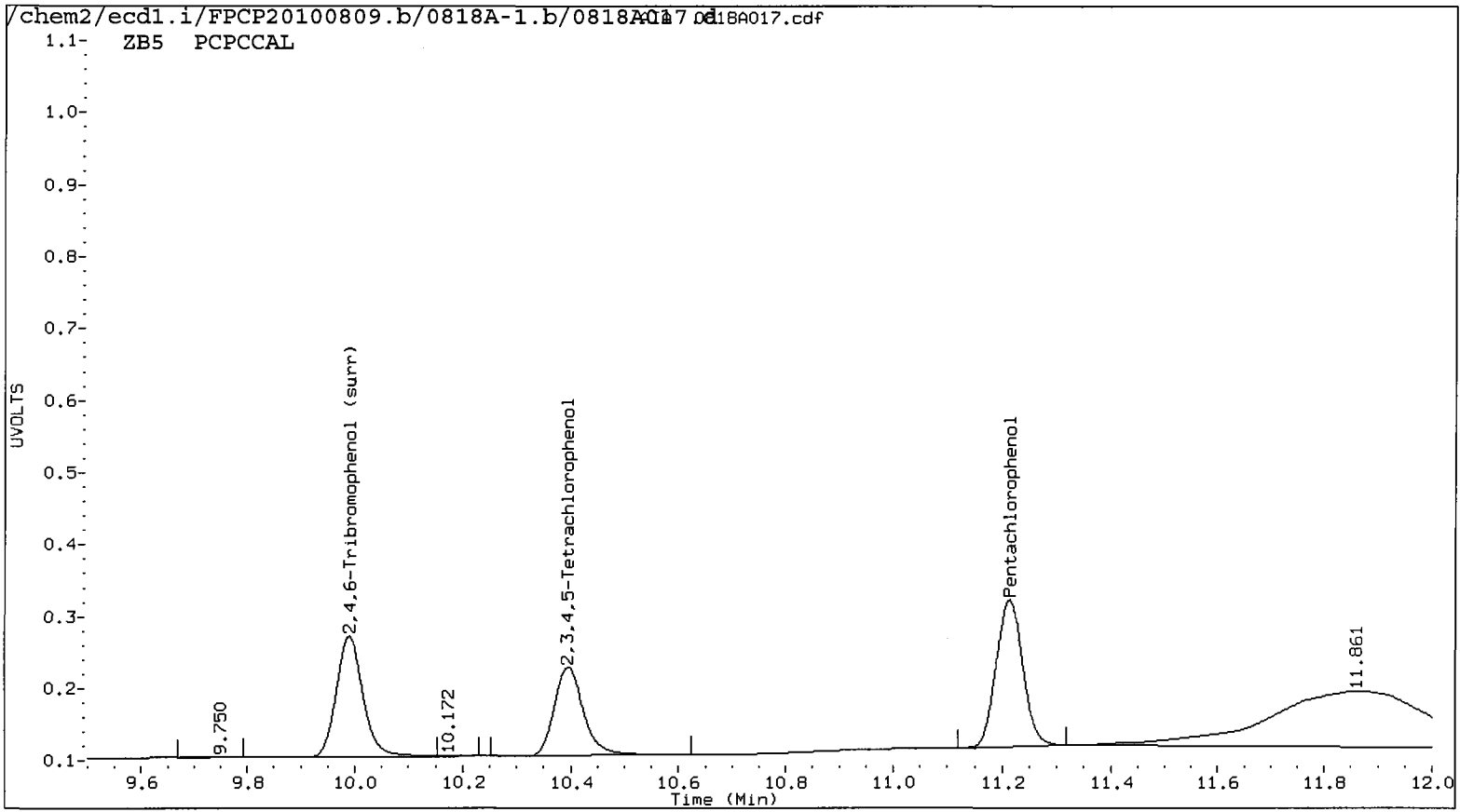
Data file 1: /chem2/ecdl.i/FPCP20100809.b/0818A-1.b/0818A017.d ARI ID: PCPCCAL  
 Data file 2: /chem2/ecdl.i/FPCP20100809.b/0818A-2.b/0818A017.d Client ID:  
 Method: /chem2/ecdl.i/FPCP20100809.b/FPCP.m Injection Date: 18-AUG-2010 21:37  
 Compound Sublist: all Report Date: 08/19/2010 11:23  
 Instrument: ecdl.i Matrix: NONE  
 Operator: ar Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35	RPD	Compound
RT	Shift	Response	RT	Shift	Response	on col	on col		
11.213	-0.006	344412	11.651	-0.007	525380	21.8988	22.8810	4.4	Pentachlorophenol
7.263	-0.001	213881	7.332	-0.001	315340	25.3694	25.2583	0.4	2,4,6-Trichlorophenol
7.616	-0.003	209767	7.860	-0.003	292161	23.6811	23.5452	0.6	2,3,6-Trichlorophenol
8.218	-0.024	119772	8.592	-0.023	154744	23.7288	24.7349	4.2	2,4,5-Trichlorophenol
8.766	-0.026	169270	9.357	-0.023	198761	24.7431	23.3130	6.0	2,3,4-Trichlorophenol
8.996	-0.011	343262	9.263	-0.014	446088	24.3351	24.0935	1.0	2,3,5,6-Tetrachlorophenol
10.395	-0.018	232334	11.109	-0.017	319720	22.1323	21.9126	1.0	2,3,4,5-Tetrachlorophenol
6.888	-0.005	106657	7.159	-0.007	149532	211.5368	240.4592	12.8	2,4-Dichlorophenol
9.990	-0.012	287610	10.633	-0.013	437077	23.1	23.4	1.3	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

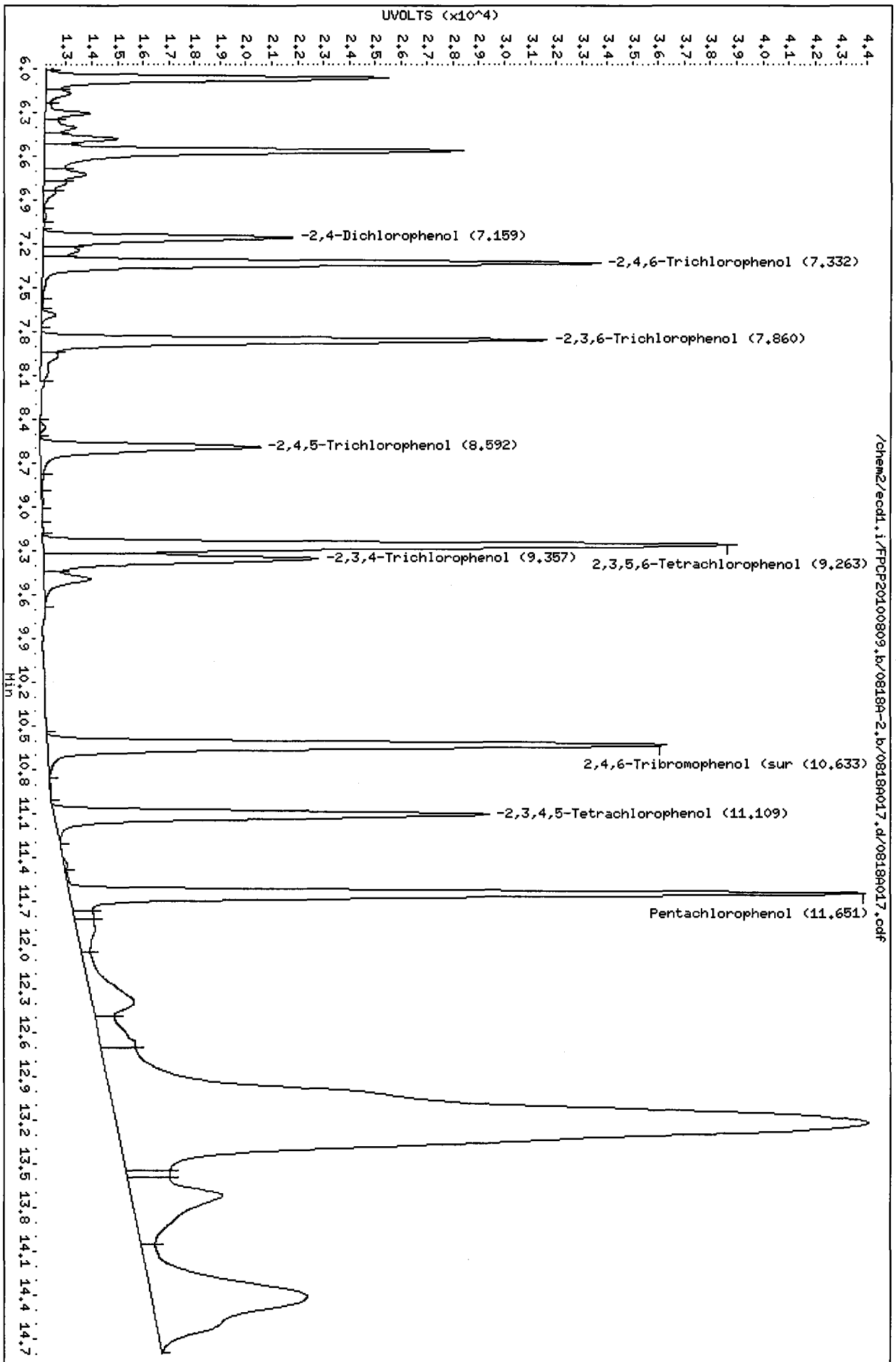
COMPOUND	Col1	Col2
Pentachlorophenol	87.6	91.5
2,4,6-Trichlorophenol	101.5	101.0
2,3,6-Trichlorophenol	94.7	94.2
2,4,5-Trichlorophenol	94.9	98.9
2,3,4-Trichlorophenol	99.0	93.3
2,3,5,6-Tetrachlorophenol	97.3	96.4
2,3,4,5-Tetrachlorophenol	88.5	87.7
2,4-Dichlorophenol	84.6	96.2
2,4,6-TBP (surr)	92.5	93.7





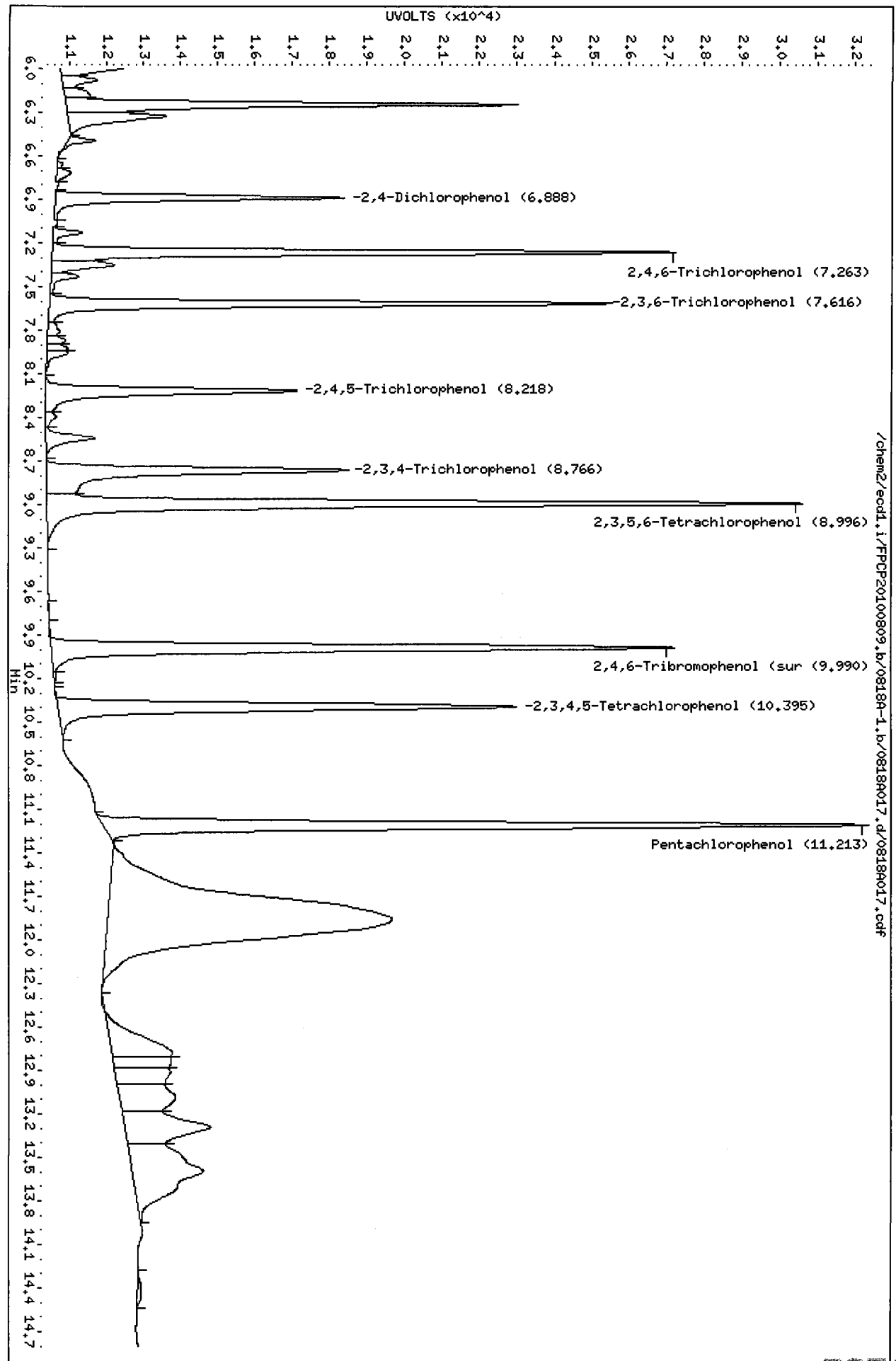
Data File: /chem2/ecdl.i/FP0P20100809.b/0818A-2.b/0818A017.d  
Date: 18-AUG-2010 21:37  
Client ID:  
Sample Info: POPCCAL  
Purge Volume: 2.0  
Column phase: ZB35

Instrument: ecdl.i  
Operator: ar  
Column diameter: 0.53



Data File: /chem2/ecdl.i/FPQP20100809.b/0818A-1.b/0818A017.d  
Date: 18-AUG-2010 21:37  
Client ID:  
Sample Info: POPCAL  
Column phase: ZBS

Instrument: ecdl.i  
Operator: ar  
Column diameter: 0.53



**TPHD Raw Data  
Extraction Bench Sheets and Notes**

**ARI Job ID: RG51**



RUSH

Preparation Test TPHD # 3

ARI Job No(s) RG66, RG51, RG54

In-House (5ppm)

Batch set up by: JH

Bottle #	Extraction Requirements	Verify Client ID	Volume Extracted (wet wt)	Transfer to Turbo Tube	TurboVap 123	Acid/Silica Clean (1:1) Y/N	TurboVap 123	Final Effective Volume	Volume to Lab	Comments
	RG66 MBS	Date 8/2/10	10.00g					1mL	1mL	
	SBS		↓							
	SBS Dup.		↓							
3	A	checked	10.00							
↓	B		10.50							
1	RG51 A		10.13							
	B		10.33							
	C		10.13							
	D		10.16							
	E		10.20							
	F		10.24							
	Fms		10.44							
↓	Fmsd		10.05							
1	G		10.09							
8	RG54 A		10.11							
	B		10.15							
	C		10.24							
	E		10.04							
	F		10.38							
	H		10.02							
	I		10.13							
	J		10.29							
	K		10.23							
	L		10.06							
Analyst/Date:		WC	8/2/10		8/2/10	8/2/10	8/2/10	8/2/10	8/2/10	

Standard	Standard ID	Volume	Expiration Date	Analyst	Witness
Surrogate	0	100µL	12/11/10	WC	WW
Spike	11	100µL	4/26/11	WC	WW

Extraction Time: 18:40

Balance ID: 24150347

- SPECIAL INSTRUCTIONS: 1. Weigh into 100mL beakers-dry with Sodium Sulfate. 2. Transfer to microwave vessel. 3. Add 20mL DCM to the vessel (if needed-Add 5mL increments until solvent is 1" above soil layer). 4. Add surr/spike. 5. Mix samples thoroughly before microwaving. 6. Microwave on appropriate power setting determined by # of samples. 7. After microwave-let cool 10-15 min. 8. Collect into turbo tube with sm. funnel containing glasswool and 1" sodium sulfate. 9. Add (2) 10mL DCM rinses to vessel and transfer to turbo tube. 10. TurboVap. 11. Acid/Silica Clean-up? = Y/N. 12. TurboVap (if Silica Clean). 13. Vial in DCM.

A. Need Total Solids Y/N

B. Archive/Freeze Y/N



**TPHD Raw Data  
Initial Calibration**

**ARI Job ID: RG51**

### GC Analyst Notes / Corrective Action Log

ARI Project ID: Diesel, MOil, AK102 Curve Client ID: ARI

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): Diesel, 30wt MOil, AK702, o-Terphenyl, n-Triacontane

Instrument: FID-3A FID-3B ~~FID-4A~~ FID-4B FID-5 FID-7 FID-8  
FID-9 ECD-1 ECD-3 ECD-4 ECD-5 ECD-6 ECD-7

Dates: Curve: 7/28/10 Analysis Start: 7/28/10

Endrin/DDT Breakdown <15%?	YES / NO / <u>NA</u>	Method Blank In Control?	YES / NO
ICal Meets RF & %RSD Criteria?	<u>YES</u> / NO	LCS/LCSD Recovery In Control?	YES / NO
CCal Meets RF & %RSD Criteria?	<u>YES</u> / NO	Surrogate Recovery In Control?	<u>YES</u> / NO
Manual Integrations for ICal?	<u>YES</u> / NO	Manual Integrations for Samples?	<u>YES</u> / NO
Internal Standard Meets Criteria?	YES / NO / <u>NA</u>	Special Analysis Criteria Met?	YES / NO / <u>NA</u>

Detail problems, corrective actions and/or other pertinent information below (use reverse side when necessary):

Additional Details on Reverse: Yes / No

Analyst: [Signature] Date: 7/30/10

Reviewer: [Signature] Date: 7/30/10



# Analytical Resources Inc.: Organics Instrument Log

FID-9 Agilent 6850 - Serial No.: US10404004

Date: 7/28/10 Analysis: NOTPXD Analyst: M  
 GC Program: TDH Column No: 802031 Column Type: HTX-1  
 Instrument Tune (.U or .CT.): \_\_\_\_\_ EM Voltage: \_\_\_\_\_  
 Calibration File: \_\_\_\_\_ Curve Date: 7/28/10

IS/SS	Ical/Ccal	LCS/ICV
	1700-1	
	1680-2	
	1730-3	
	1727-3	

me	Filename	LabID	ClientId	DF	Time	Filename	LabID	ClientId	DF
34	0728A001.D	RINSE		1	23 0018	0728A023.D	MOIL 2500		1
55	0728A002.D	RINSE		1	24 0040	0728A024.D	MOIL 5000		1
48	0728A003.D	RINSE		1	25 0101	0728A025.D	MOIL ICV		1
10	0728A004.D	RINSE		1	26 0122	0728A026.D	DIESEL#1		1
31	0728A005.D	RT		1	27 0144	0728A027.D	MOIL#1		1
53	0728A006.D	DIESEL#1		1	28 0205	0728A028.D	BUNKERC#1		1
15	0728A007.D	MOIL#1		1	29 0226	0728A029.D	RF99MBS1	RF99MBS1	1
36	0728A008.D	BUNKERC#1		1	30 0247	0728A030.D	RF99LCSS1	RF99LCSS1	1
20	0728A009.D	RINSE		1	31 0308	0728A031.D	RF99LCSDS1	RF99LCSDS1	1
41	0728A010.D	RT		1	32 0329	0728A032.D	RF99A	PL2C-DB-11-0	1
02	0728A011.D	IB		1	33 0351	0728A033.D	RF99B	PL2-DB-11-10	1
24	0728A012.D	DIESEL 50		1	34 0412	0728A034.D	RF99BMS	PL2-DB-11-10	1
45	0728A013.D	DIESEL 100		1	35 0433	0728A035.D	RF99BMSD	PL2-DB-11-10	1
07	0728A014.D	DIESEL 250		1	36 0454	0728A036.D	DIESEL#2		1
28	0728A015.D	DIESEL 500		1	37 0515	0728A037.D	MOIL#2		1
49	0728A016.D	DIESEL 1000		1	38 0537	0728A038.D	BUNKERC#2		1
11	0728A017.D	DIESEL 2500		1	39 1349	0728A039.D	RF99A	PL2C-DB-11-0	5
32	0728A018.D	DIESEL ICV		1	40 1410	0728A040.D	DIESEL#3		1
53	0728A019.D	MOIL 100		1	41 1432	0728A041.D	MOIL#3		1
15	0728A020.D	MOIL 250		1	42 1453	0728A042.D	BUNKERC#3		1
36	0728A021.D	MOIL 500		1					
57	0728A022.D	MOIL 1000		1					

**Maintenance / Comments**

**Maintenance Verification** (Identify ICal or CCal that demonstrates the instrument is in control):

Every line must contain information or be lined out. Make all entries legible. Start a new page for each QC period.

Report Date : 30-Jul-2010 17:02

Analytical Resources, Inc.  
RETENTION TIME SUMMARY REPORT

Method File: /chem2/fid9.i/20100728.B/ftphfid9a.m  
Batch File: /chem2/fid9.i/20100728.B  
Inst ID: fid9.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
1 Toluene	1.545	1.545	1.542	1.550	1.522	1.527	1.536	1.436-1.636	1.539	0.011
37 JET-A	1.621	1.620	1.617	1.625	1.631	1.619	1.624	1.574-1.674	1.622	0.005
2 C8	1.699	1.703	1.700	1.707	1.681	1.696	1.694	1.594-1.794	1.698	0.009
3 C10	2.459	2.452	2.450	2.453	2.453	2.446	2.455	2.405-2.505	2.452	0.004
4 C12	3.101	3.103	3.102	3.103	3.105	3.108	3.091	3.041-3.141	3.104	0.002
5 C14	3.623	3.659	3.657	3.658	3.660	3.623	3.641	3.591-3.691	3.647	0.018
6 C16	4.138	4.123	4.122	4.122	4.123	4.129	4.128	4.078-4.178	4.126	0.006
7 C18	4.565	4.567	4.567	4.564	4.571	4.575	4.569	4.519-4.619	4.568	0.004
8 o-terph	4.760	4.762	4.771	4.780	4.795	4.830	4.767	4.717-4.817	4.783	0.026
9 C20	5.072	5.075	5.073	5.074	5.075	5.065	5.072	5.022-5.122	5.072	0.004
10 C22	5.592	5.588	5.589	5.584	5.588	5.599	5.589	5.539-5.639	5.590	0.005
11 C24	6.019	6.023	6.028	6.031	6.012	6.014	6.020	5.970-6.070	6.021	0.008
12 C25	6.225	6.197	6.201	6.201	6.201	6.200	6.212	6.162-6.262	6.204	0.010
13 C26	6.395	6.406	6.387	6.392	6.390	6.393	6.392	6.342-6.442	6.394	0.007
14 C28	6.710	6.710	6.716	6.713	6.716	6.714	6.723	6.673-6.773	6.713	0.003
15 Triacon Surr	7.038	7.036	7.038	7.035	7.032	7.036	7.038	6.988-7.088	7.036	0.002
16 C32	7.303	7.307	7.308	7.307	7.302	7.300	7.309	7.259-7.359	7.304	0.003

Reviewer 1 MS Date: 7/30/10  
 Reviewer 2 AS Date: 7/30/10

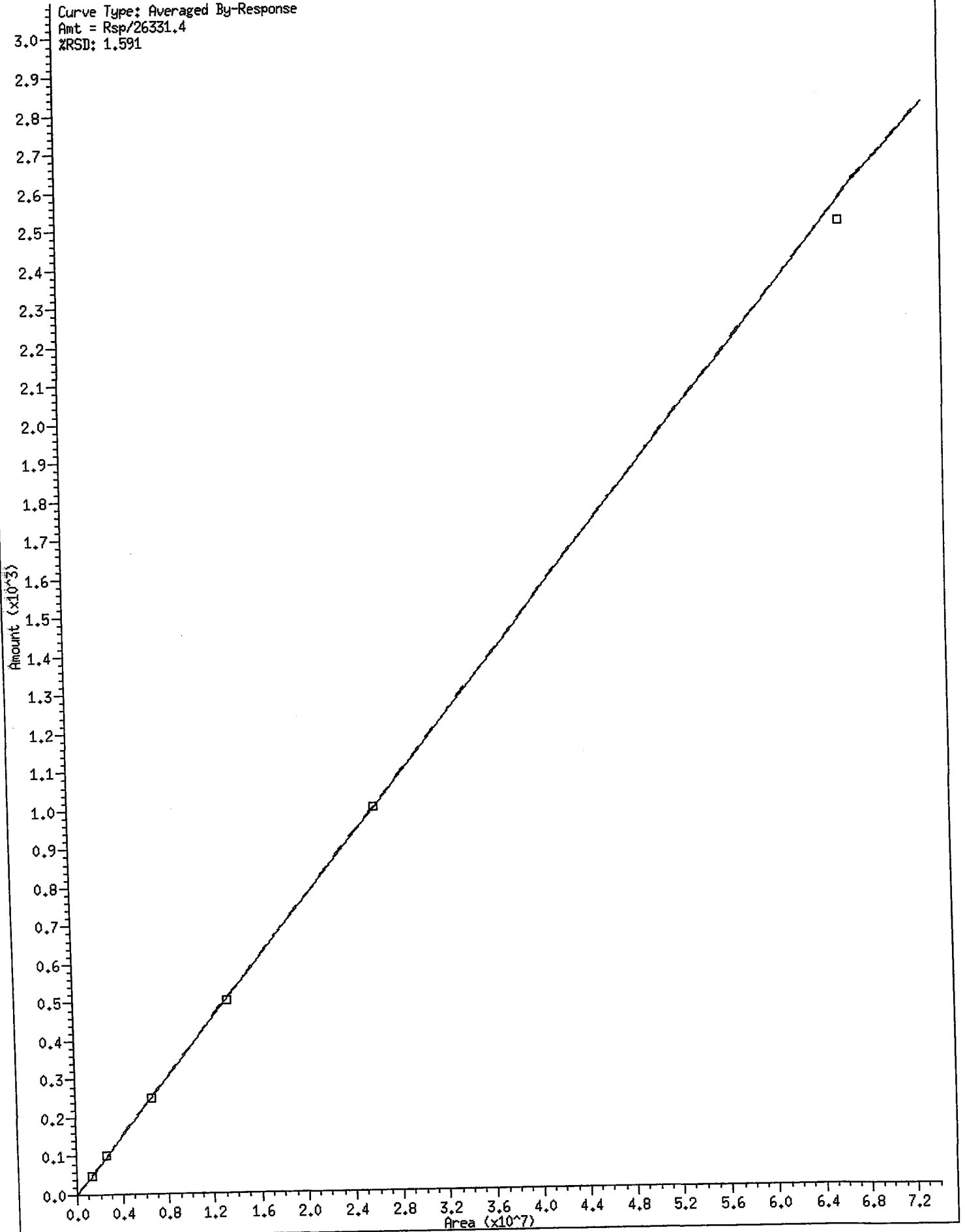
Report Date : 30-Jul-2010 17:02

Analytical Resources, Inc.  
RETENTION TIME SUMMARY REPORT

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Batch File: /chem2/fid9.i/20100728.B  
Inst ID: fid9.i

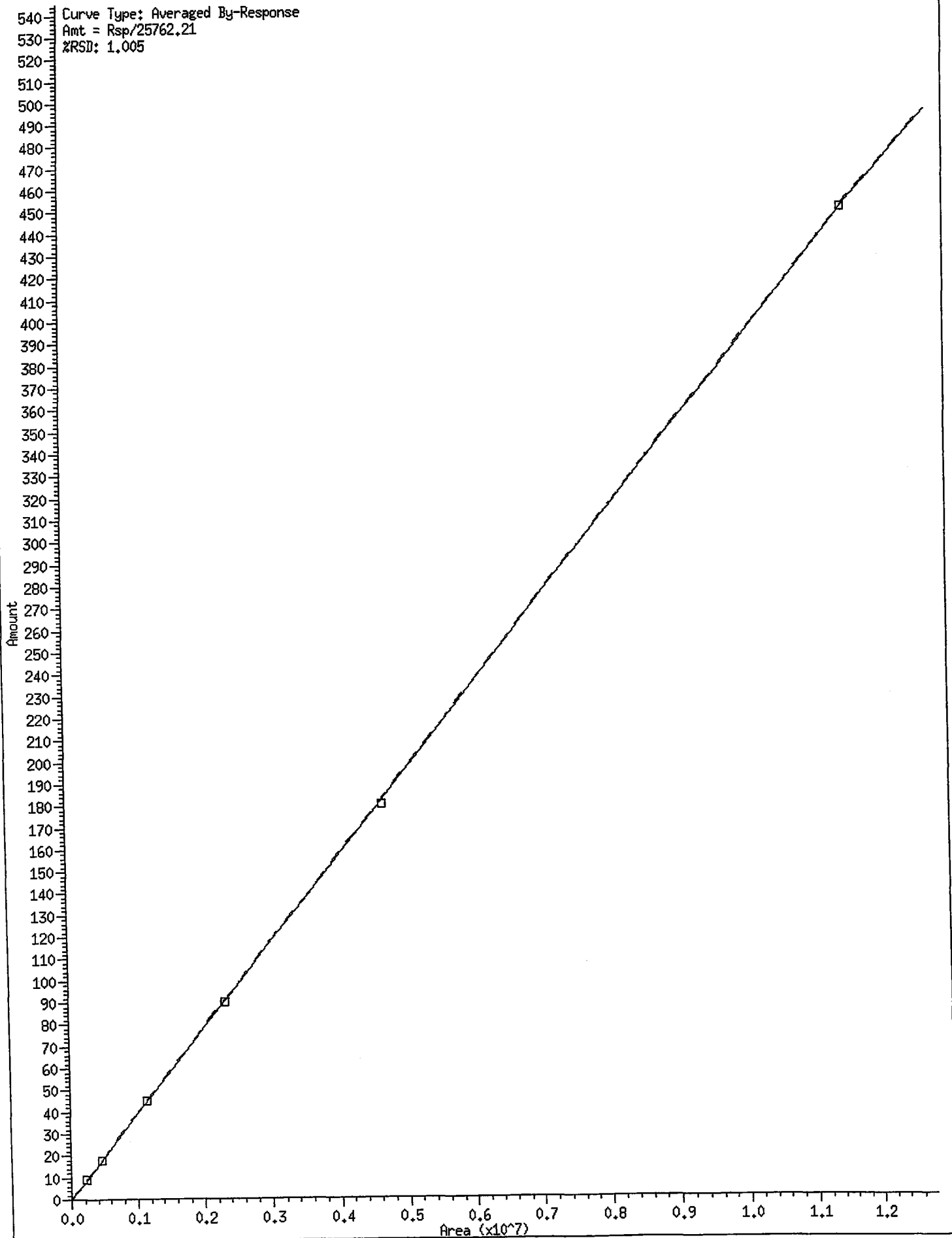
Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
17 C34	7.594	7.593	7.600	7.599	7.591	7.598	7.596	7.546-7.646	7.596	0.004
18 Filter Peak	8.346	8.338	8.344	8.347	8.345	8.352	8.343	8.243-8.443	8.345	0.004
19 C36	7.939	7.942	7.941	7.946	7.947	7.939	7.945	7.895-7.995	7.942	0.003
20 C38	8.383	8.378	8.377	8.380	8.386	8.372	8.380	8.330-8.430	8.379	0.005
21 C40	8.938	8.938	8.935	8.933	8.938	8.930	8.935	8.885-8.985	8.935	0.003
31 NW Diesel	+++++	+++++	+++++	+++++	+++++	+++++	0.513	0.463-0.563	+++++	+++++
32 OR Diesel	+++++	+++++	+++++	+++++	+++++	+++++	0.690	0.640-0.740	+++++	+++++
33 AK Dies 102	+++++	+++++	+++++	+++++	+++++	+++++	0.660	0.610-0.710	+++++	+++++
30 NW MOil	+++++	+++++	+++++	+++++	+++++	+++++	1.000	0.950-1.050	+++++	+++++
34 OR MOil	+++++	+++++	+++++	+++++	+++++	+++++	1.000	0.950-1.050	+++++	+++++
35 AK MOil 103	+++++	+++++	+++++	+++++	+++++	+++++	0.658	0.608-0.708	+++++	+++++
38 Bunker C	+++++	+++++	+++++	+++++	+++++	+++++	0.705	0.655-0.755	+++++	+++++
39 Creosote	+++++	+++++	+++++	+++++	+++++	+++++	0.550	0.500-0.600	+++++	+++++

31 NW Diesel



\* 8 o-terph

Curve Type: Averaged By-Response  
Amt = Rsp/25762.21  
%RSD: 1.005



Report Date : 30-Jul-2010 17:02

Analytical Resources, Inc.  
RETENTION TIME SUMMARY REPORT

Method File: /chem2/fid9.i/20100728.B/ftphfid9a.m  
Batch File: /chem2/fid9.i/20100728.B  
Inst ID: fid9.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXEC RT	RT WINDOW	AVG RT	STD DEV
1 Toluene	1.544	1.542	1.544	1.538	1.505	1.536	1.536	1.436-1.636	1.535	0.017
37 JET-A	1.598	1.620	1.621	1.654	1.654	1.624	1.624	1.574-1.674	1.624	0.023
2 C8	1.726	1.701	1.728	1.703	1.718	1.724	1.694	1.594-1.794	1.717	0.012
3 C10	2.453	2.453	2.454	2.453	2.459	2.462	2.455	2.405-2.505	2.456	0.004
4 C12	3.087	3.084	3.094	3.089	3.085	3.104	3.091	3.041-3.141	3.090	0.008
5 C14	3.638	3.641	3.642	3.639	3.640	3.646	3.641	3.591-3.691	3.641	0.003
6 C16	4.130	4.130	4.125	4.129	4.130	4.129	4.128	4.078-4.178	4.129	0.002
7 C18	4.564	4.564	4.561	4.560	4.559	4.560	4.569	4.519-4.619	4.561	0.002
8 o-terph	4.766	4.766	4.764	4.764	4.762	4.761	4.767	4.717-4.817	4.764	0.002
9 C20	5.075	5.076	5.072	5.072	5.069	5.070	5.072	5.022-5.122	5.072	0.003
10 C22	5.588	5.593	5.593	5.597	5.589	5.582	5.589	5.539-5.639	5.590	0.005
11 C24	6.024	6.019	6.019	6.018	6.020	6.023	6.020	5.970-6.070	6.020	0.003
12 C25	6.222	6.217	6.211	6.213	6.215	6.207	6.212	6.162-6.262	6.214	0.005
13 C26	6.393	6.394	6.394	6.389	6.388	6.393	6.392	6.342-6.442	6.392	0.003
14 C28	6.715	6.719	6.721	6.720	6.725	6.726	6.723	6.673-6.773	6.721	0.004
15 Triacon Surr	7.080	7.087	7.094	7.105	7.129	7.160	7.038	6.988-7.088	7.109	0.030
16 C32	7.310	7.310	7.312	7.310	7.308	7.305	7.309	7.259-7.359	7.309	0.002

\* Not in Mol range

Reviewer 1 Mr A Date: 7/30/10  
Reviewer 2 JS Date: 7/30/10

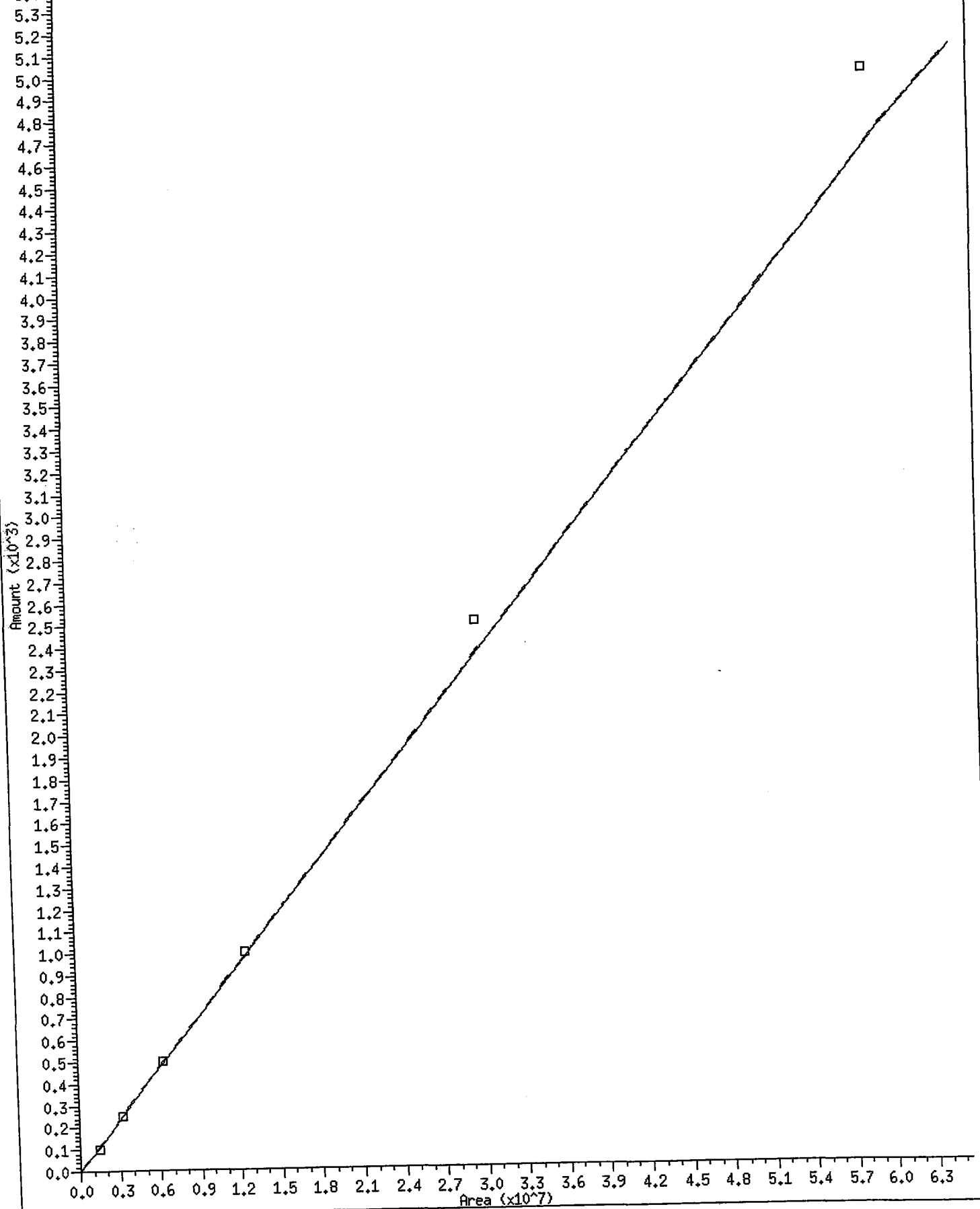
Report Date : 30-Jul-2010 17:02

Analytical Resources, Inc.  
RETENTION TIME SUMMARY REPORT

Method File: /chem2/fid9.i/20100728.B/ftphfid9a.m  
Batch File: /chem2/fid9.i/20100728.B  
Inst ID: fid9.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
17 C34	7.596	7.596	7.600	7.599	7.594	7.597	7.596	7.546-7.646	7.597	0.002
18 Filter Peak	8.344	8.341	8.350	8.345	8.350	8.346	8.343	8.243-8.443	8.346	0.003
19 C36	7.940	7.941	7.944	7.948	7.944	7.943	7.945	7.895-7.995	7.943	0.003
20 C38	8.385	8.372	8.382	8.376	8.379	8.379	8.380	8.330-8.430	8.379	0.005
21 C40	8.936	8.931	8.934	8.939	8.938	8.935	8.935	8.885-8.985	8.935	0.003
31 NW Diesel	+++++	+++++	+++++	+++++	+++++	+++++	0.513	0.463-0.563	+++++	+++++
32 OR Diesel	+++++	+++++	+++++	+++++	+++++	+++++	0.690	0.640-0.740	+++++	+++++
33 AK Dies 102	+++++	+++++	+++++	+++++	+++++	+++++	0.660	0.610-0.710	+++++	+++++
30 NW MOil	+++++	+++++	+++++	+++++	+++++	+++++	1.000	0.950-1.050	+++++	+++++
34 OR MOil	+++++	+++++	+++++	+++++	+++++	+++++	1.000	0.950-1.050	+++++	+++++
35 AK MOil 103	+++++	+++++	+++++	+++++	+++++	+++++	0.658	0.608-0.708	+++++	+++++
38 Bunker C	+++++	+++++	+++++	+++++	+++++	+++++	0.705	0.655-0.755	+++++	+++++
39 Creosote	+++++	+++++	+++++	+++++	+++++	+++++	0.550	0.500-0.600	+++++	+++++

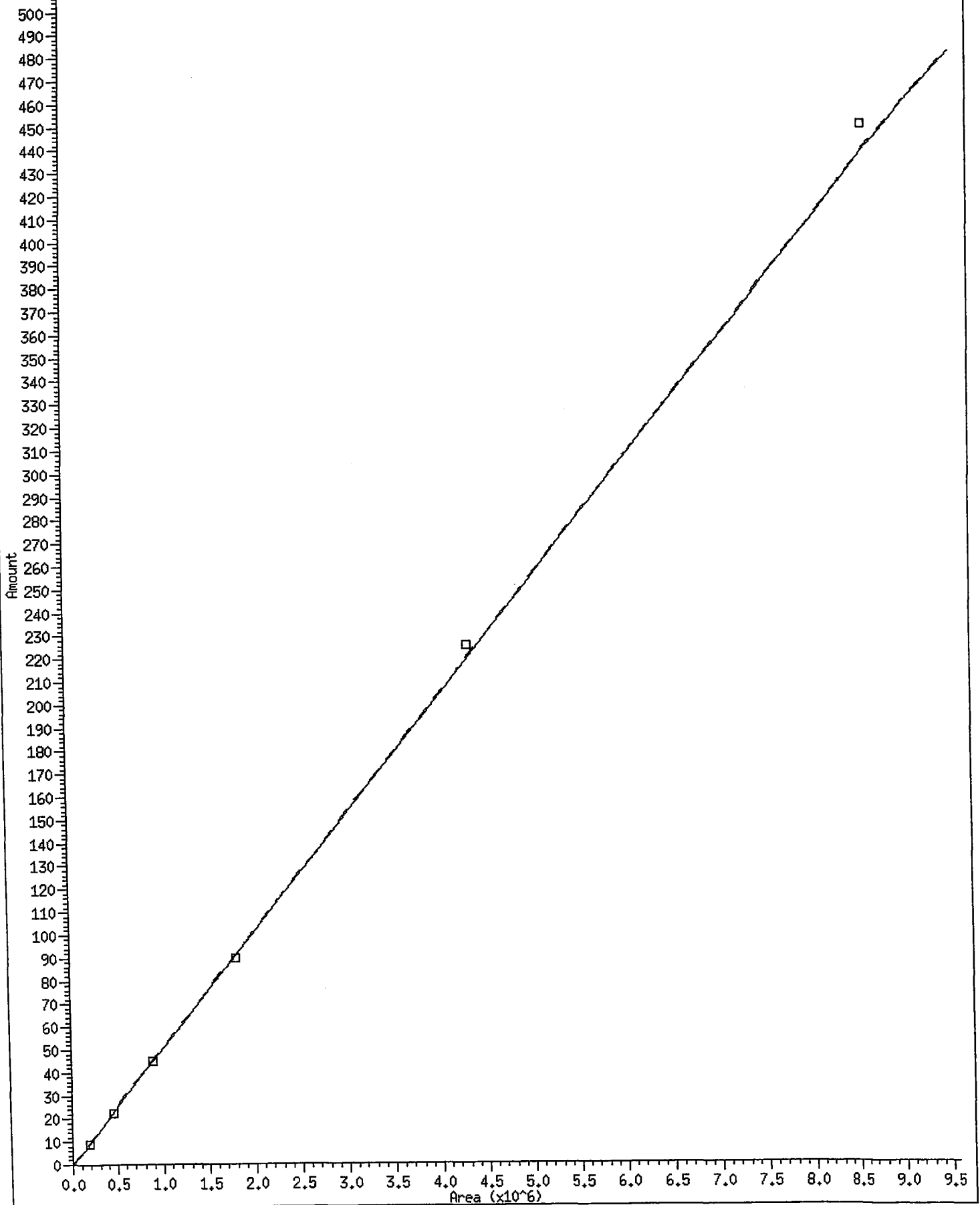
5.6 Curve Type: Averaged By-Response  
5.5 Amt = Rsp/12787.21  
5.4 %RSD: 7.943





◆ 15 Triacon Surr

Curve Type: Averaged By-Response  
Amt = Rsp/19832.14  
%RSD: 2.295



RG51 : 00767

Analytical Resources Inc.  
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100728.B/0728A010.D  
Method: /chem2/fid9.i/20100728.B/ftphfid9a.m  
Instrument: fid9.i  
Operator: MS  
Report Date: 07/30/2010

ARI ID: RT  
Client ID:  
Injection: 28-JUL-2010 19:41  
Dilution Factor: 1  
Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.517	-0.019	514141	368763	GAS (Tol-C12)	1598268	76
C8	1.679	-0.015	287076	219985	DIESEL (C12-C24)	2425733	92
C10	2.459	0.004	526070	361774	M.OIL (C24-C38)	2580605	202
C12	3.102	0.011	705102	359778	AK-102 (C10-C25)	3167879	109
C14	3.656	0.015	709667	369366	AK-103 (C25-C36)	2254193	450
C16	4.147	0.018	748678	378104			
C18	4.594	0.025	597504	389741			
C20	5.109	0.036	506632	399062			
C22	5.624	0.035	543393	407898			
C24	6.058	0.038	581384	415443			
C25	6.254	0.041	732950	574610			
C26	6.434	0.042	563052	414700			
C28	6.769	0.046	524645	402665			
C32	7.355	0.046	442076	355003	JP-4 (Tol-C14)	1979943	121
C34	7.657	0.060	305593	316465	BUNKERC (C10-C38)	5745980	655
Filter Peak	8.342	-0.001	1743	1072			
C36	8.026	0.081	206132	287767			
C38	8.492	0.112	129300	109189			
C40	9.087	0.151	90977	37584			
o-terph	4.767	0.000	1717828	1429326	JET-A (C10-C18)	1904617	138
Triacon Surr	7.082	0.044	1365216	1311650	JP8 (Tol-C16)	2365997	134

M Indicates manual integration within range.

Range Times: NW Diesel(3.091 - 6.020) AK102(2.46 - 6.21) Jet A(2.46 - 4.57)  
NW M.Oil(6.02 - 8.38) AK103(6.21 - 7.94) OR Diesel(2.46 - 6.72)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1429326	55.5	123.3
Triacotane	1311650	66.1	147.0

*MS 7/30/10*

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

Data File: /chem2/fid9.i/20100728.B/0728A010.D

Date: 28-JUL-2010 19:41

Client ID:

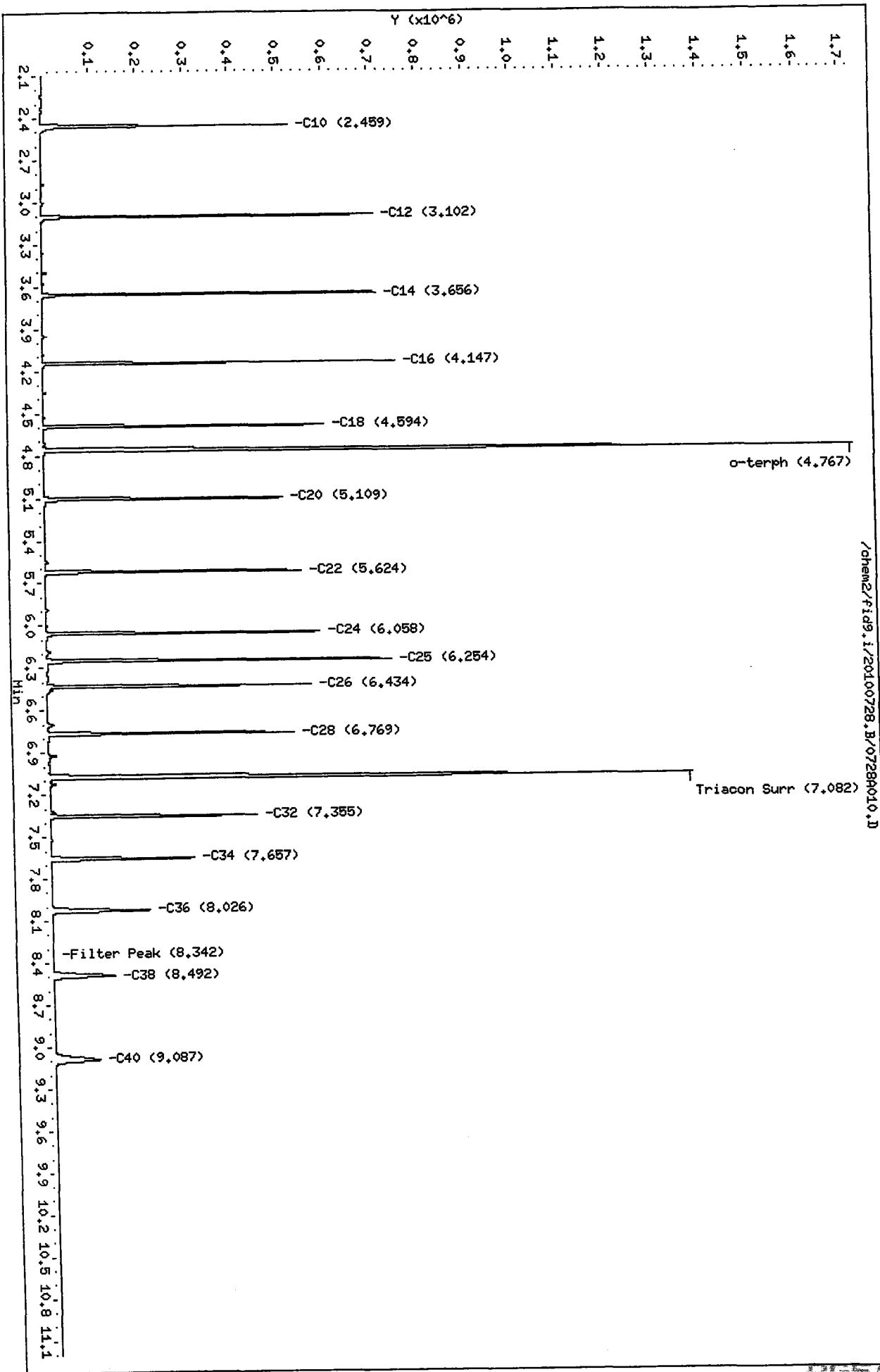
Sample Info: RT

Column phase: RTX-1

Instrument: fid9.i

Operator: HS

Column diameter: 0.25



Analytical Resources Inc.  
 NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100728.B/0728A011.D  
 Method: /chem2/fid9.i/20100728.B/ftphfid9a.m  
 Instrument: fid9.i  
 Operator: MS  
 Report Date: 07/30/2010

ARI ID: IB  
 Client ID:  
 Injection: 28-JUL-2010 20:02  
 Dilution Factor: 1  
 Macro: 28-JUN-2010

FID:9 RESULTS							
Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.530	-0.006	10941	17318	GAS (Tol-C12)	213324	10
C8	1.689	-0.004	6937	4554	DIESEL (C12-C24)	27462	1
C10	2.452	-0.003	2699	2277	M.OIL (C24-C38)	135692	11
C12	3.103	0.012	581	482	AK-102 (C10-C25)	59825	2
C14	3.647	0.006	145	62	AK-103 (C25-C36)	103591	21
C16	4.132	0.003	47	14			
C18	4.567	-0.002	71	44			
C20	5.077	0.005	81	41			
C22	5.586	-0.003	141	94			
C24	6.011	-0.009	520	631			
C25	6.214	0.002	168	71			
C26	6.389	-0.003	226	197			
C28	6.736	0.013	375	109			
C32	7.298	-0.011	1141	226	JP-4 (Tol-C14)	221641	14
C34	7.601	0.004	1286	813	BUNKERC (C10-C38)	194987	22
Filter Peak	8.344	0.001	1309	1007			
C36	7.945	0.001	1333	1009			
C38	8.378	-0.003	1295	257			
C40	8.936	0.001	1347	505			
o-terph	4.769	0.002	1793639	1571761	JET-A (C10-C18)	48714	4
Triacon Surr	7.081	0.043	1256163	1194769	JP8 (Tol-C16)	226922	13

M Indicates manual integration within range.  
 Range Times: NW Diesel(3.091 - 6.020) AK102(2.46 - 6.21) Jet A(2.46 - 4.57)  
 NW M.Oil(6.02 - 8.38) AK103(6.21 - 7.94) OR Diesel(2.46 - 6.72)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1571761	61.0	135.6
Triacontane	1194769	60.2	133.9

*MO 7/20/10*

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

Data File: /chem2/fid9.i/20100728.B/0728A011.D

Date: 28-JUL-2010 20:02

Client ID:

Sample Info: IB

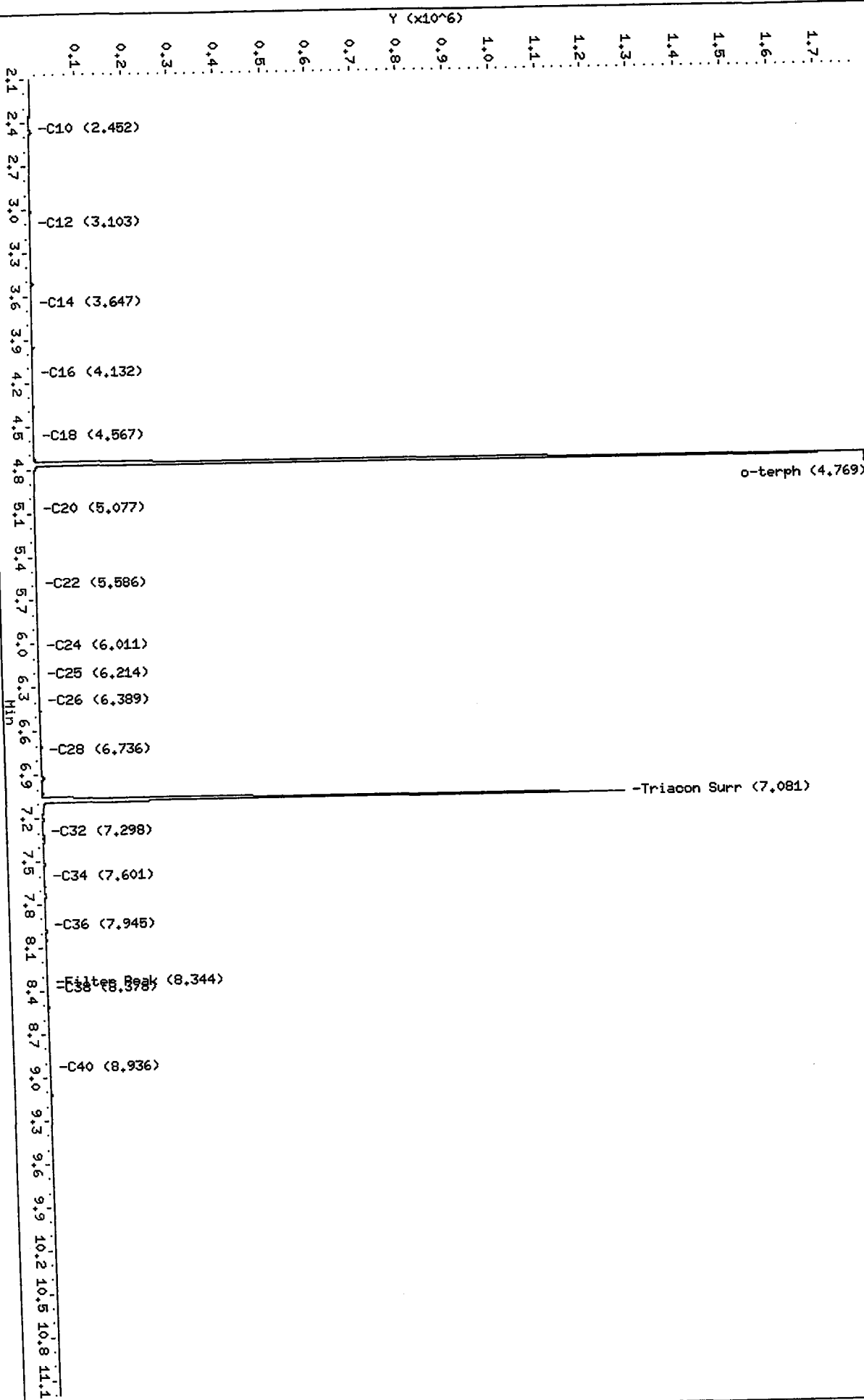
Column phase: RTX-1

Instrument: fid9.i

Operator: MS

Column diameter: 0.25

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Analytical Resources Inc.  
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100728.B/0728A012.D  
Method: /chem2/fid9.i/20100728.B/ftphfid9a.m  
Instrument: fid9.i  
Operator: MS  
Report Date: 07/30/2010

ARI ID: DIESEL 50  
Client ID:  
Injection: 28-JUL-2010 20:24  
Dilution Factor: 1  
Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.545	0.009	7102	15475	GAS (Tol-C12)	304122	14
C8	1.699	0.005	4935	5847	DIESEL (C12-C24)	1289892	49
C10	2.459	0.004	6197	8547	M.OIL (C24-C38)	72828	6
C12	3.101	0.010	13983	8220	AK-102 (C10-C25)	1422020	49 M
C14	3.623	-0.018	9291	10648	AK-103 (C25-C36)	50537	10
C16	4.138	0.009	11473	15225			
C18	4.565	-0.004	9397	11253			
C20	5.072	-0.001	4990	3711			
C22	5.592	0.004	2910	2637			
C24	6.019	-0.001	1136	455			
C25	6.225	0.013	442	364			
C26	6.395	0.003	185	147			
C28	6.710	-0.013	1703	1464			
C32	7.303	-0.006	467	137	JP-4 (Tol-C14)	499108	30
C34	7.594	-0.002	729	202	BUNKERC (C10-C38)	1491900	170 M
Filter Peak	8.346	0.003	768	227			
C36	7.939	-0.006	787	1098			
C38	8.383	0.003	750	640			
C40	8.938	0.003	800	514			
o-terph	4.760	-0.007	374938	229869	JET-A (C10-C18)	997196	72
Triacon Surr	7.038	0.000	197	80	JP8 (Tol-C16)	827113	47

M Indicates manual integration within range.

Range Times: NW Diesel(3.091 - 6.020) AK102(2.46 - 6.21) Jet A(2.46 - 4.57)  
NW M.Oil(6.02 - 8.38) AK103(6.21 - 7.94) OR Diesel(2.46 - 6.72)

Surrogate	Area	Amount	%Rec
o-Terphenyl	229869	8.9	19.8
Triacontane	80	0.0	0.0

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

Data File: /chem2/fid9.i/20100728.B/0728A012.D

Date: 28-JUL-2010 20:24

Client ID:

Sample Info: DIESEL 50

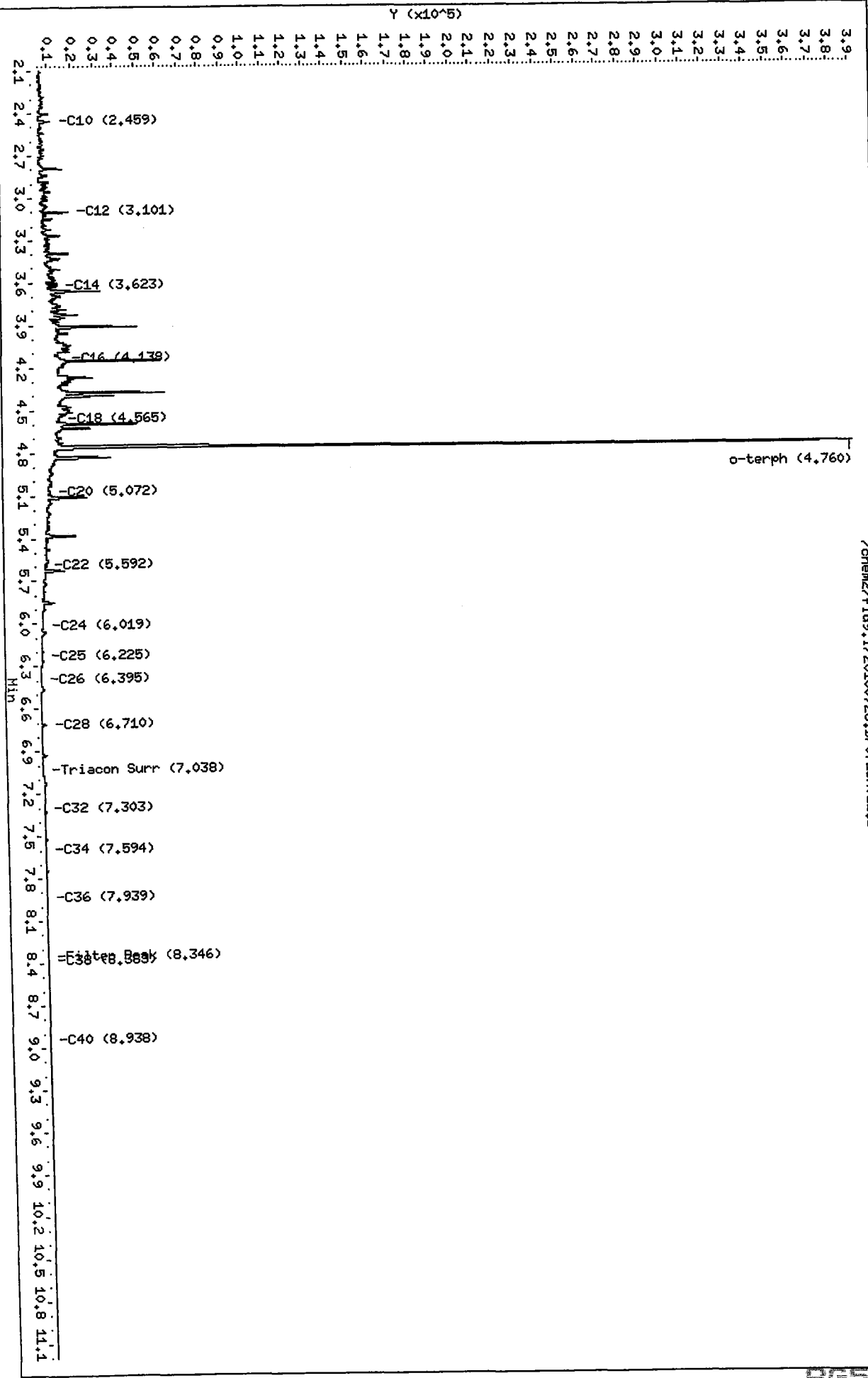
Column phase: RTX-1

Instrument: fid9.i

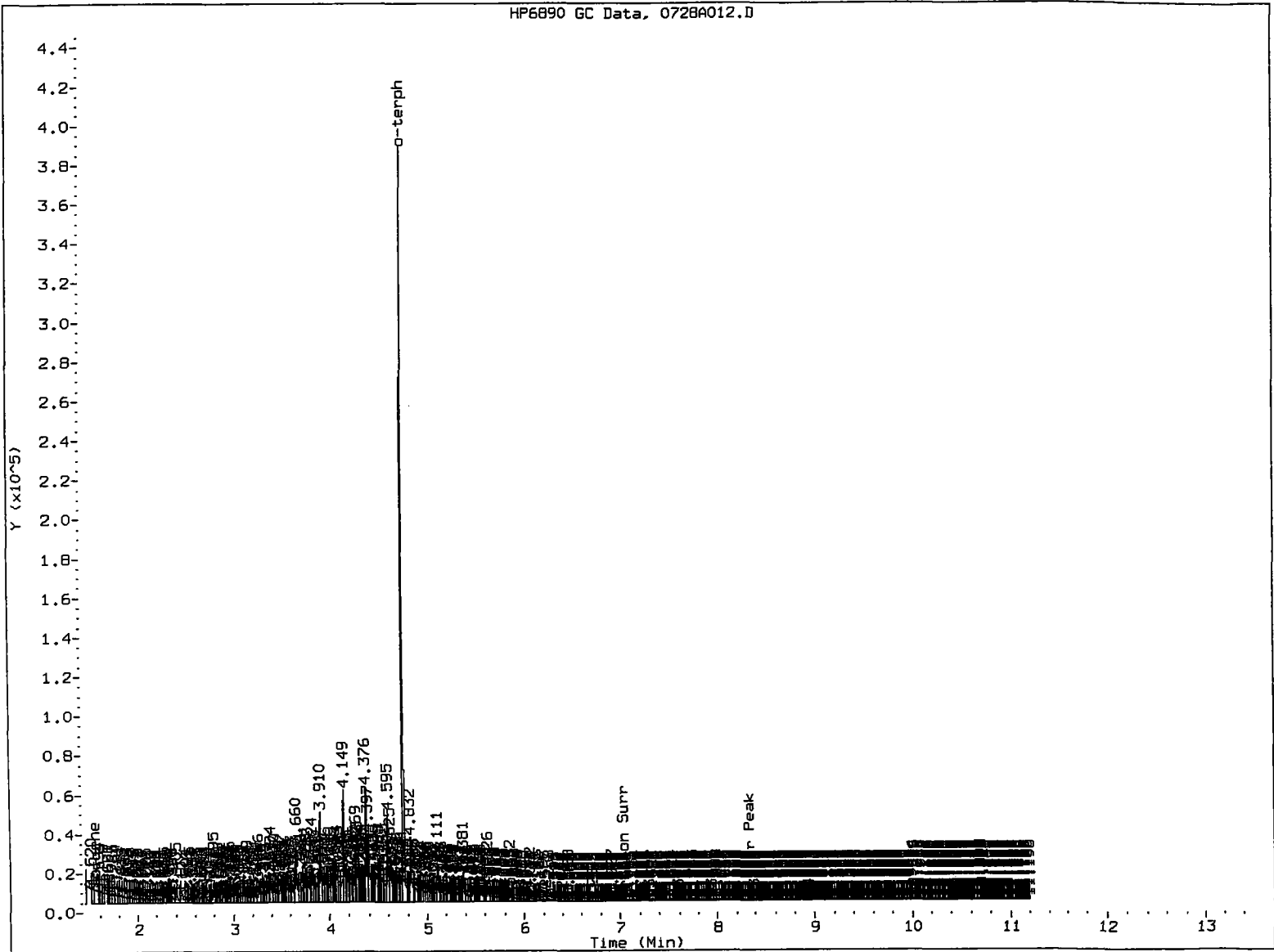
Operator: HS

Column diameter: 0.25

/chem2/fid9.i/20100728.B/0728A012.D



HP6890 GC Data, 0728A012.D



MANUAL INTEGRATION

- 1. Baseline correction
- 2. Poor chromatography
- 3. Peak not found
- 4. Totals calculation
- 5. Other \_\_\_\_\_

Analyst: MM

Date: 7/30/10



Analytical Resources Inc.  
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100728.B/0728A013.D  
Method: /chem2/fid9.i/20100728.B/ftphfid9a.m  
Instrument: fid9.i  
Operator: MS  
Report Date: 07/30/2010

ARI ID: DIESEL 100  
Client ID:  
Injection: 28-JUL-2010 20:45  
Dilution Factor: 1  
Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.545	0.009	9394	12882	GAS (Tol-C12)	449059	21
C8	1.703	0.009	5426	7074	DIESEL (C12-C24)	2602087	99
C10	2.452	-0.003	3226	2569	M.OIL (C24-C38)	87640	7
C12	3.103	0.012	29285	17940	AK-102 (C10-C25)	2864062	99 M
C14	3.659	0.018	59261	58165	AK-103 (C25-C36)	61637	12
C16	4.123	-0.005	19941	17906			
C18	4.567	-0.002	19222	19309			
C20	5.075	0.002	10542	10663			
C22	5.588	0.000	5975	5552			
C24	6.023	0.003	2217	1308			
C25	6.197	-0.015	2531	4056			
C26	6.406	0.015	394	352			
C28	6.710	-0.013	3648	2966			
C32	7.307	-0.002	362	195	JP-4 (Tol-C14)	845763	52
C34	7.593	-0.004	637	240	BUNKERC (C10-C38)	2943973	336 M
Filter Peak	8.338	-0.005	643	405			
C36	7.942	-0.002	671	500			
C38	8.378	-0.002	638	365			
C40	8.938	0.002	649	435			
o-terph	4.762	-0.005	704196	457301	JET-A (C10-C18)	2010708	146
Triacon Surr	7.036	-0.002	119	42	JP8 (Tol-C16)	1503559	85

M Indicates manual integration within range.  
Range Times: NW Diesel(3.091 - 6.020) AK102(2.46 - 6.21) Jet A(2.46 - 4.57)  
NW M.Oil(6.02 - 8.38) AK103(6.21 - 7.94) OR Diesel(2.46 - 6.72)

Surrogate	Area	Amount	%Rec
o-Terphenyl	457301	17.8	39.4
Triacotane	42	0.0	0.0

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

Data File: /chem2/fid9.1/20100728.B/0728R013.D

Date: 28-JUL-2010 20:45

Client ID:

Sample Info: DIESEL 100

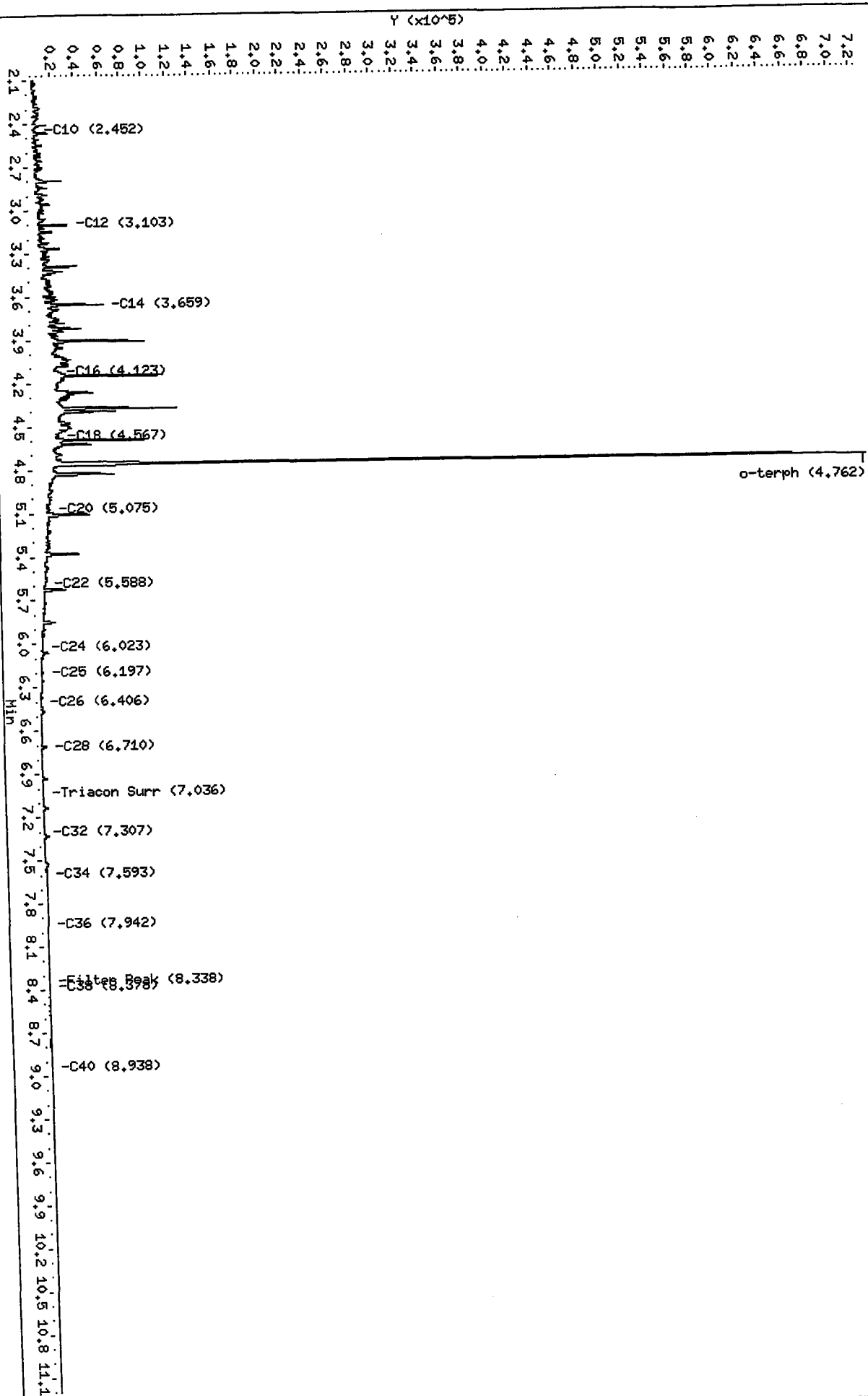
Column phase: RTX-1

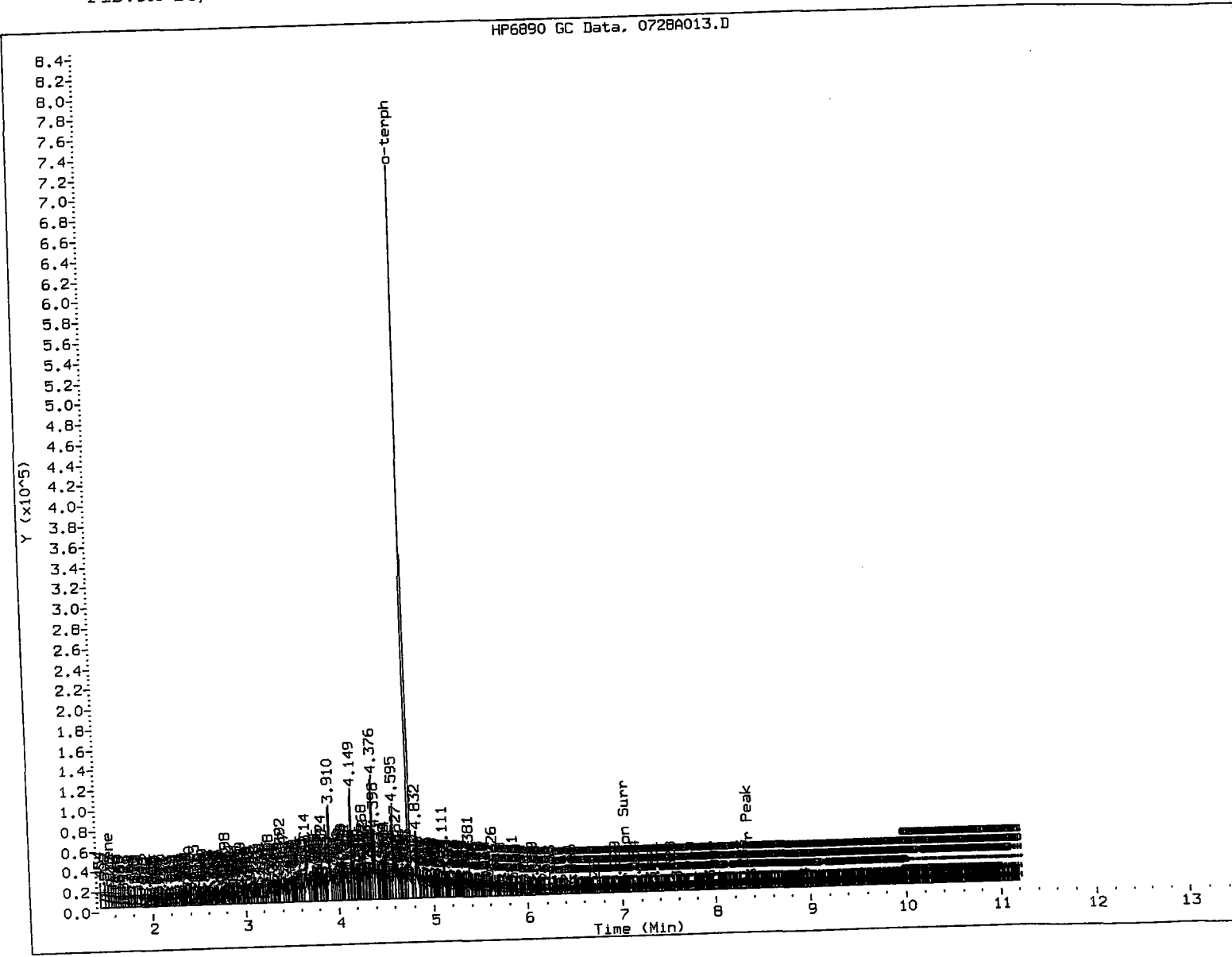
Instrument: fid9.1

Operator: MS

Column diameter: 0.25

/chem2/fid9.1/20100728.B/0728R013.D





MANUAL INTEGRATION

- 1. Baseline correction
- 2. Poor chromatography
- 3. Peak not found
- 4. Totals calculation
- 5. Other \_\_\_\_\_

Analyst: Mu

Date: 7/13/01

Analytical Resources Inc.  
 NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100728.B/0728A014.D  
 Method: /chem2/fid9.i/20100728.B/ftphfid9a.m  
 Instrument: fid9.i  
 Operator: MS  
 Report Date: 07/30/2010

ARI ID: DIESEL 250  
 Client ID:  
 Injection: 28-JUL-2010 21:07  
 Dilution Factor: 1  
 Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.542	0.006	14752	16460	GAS (Tol-C12)	999032	48
C8	1.700	0.006	8159	9848	DIESEL (C12-C24)	6571699	250
C10	2.450	-0.005	6508	5183	M.OIL (C24-C38)	128061	10
C12	3.102	0.011	80325	46536	AK-102 (C10-C25)	7261009	250 M
C14	3.657	0.016	148765	146845	AK-103 (C25-C36)	95793	19
C16	4.122	-0.007	48814	34422			
C18	4.567	-0.002	47241	38471			
C20	5.073	0.001	26043	28336			
C22	5.589	0.000	14890	4727			
C24	6.028	0.008	5981	4805			
C25	6.201	-0.012	6774	13133			
C26	6.387	-0.005	1514	1078			
C28	6.716	-0.007	5763	5256			
C32	7.308	-0.001	228	49	JP-4 (Tol-C14)	2097448	128
C34	7.600	0.003	463	110	BUNKERC (C10-C38)	7369358	840 M
Filter Peak	8.344	0.001	446	316			
C36	7.941	-0.004	482	433			
C38	8.377	-0.004	442	324			
C40	8.935	0.000	425	91			
o-terph	4.771	0.004	1353388	1159153	JET-A (C10-C18)	5066220	367
Triacon Surr	7.038	0.000	49	14	JP8 (Tol-C16)	3698235	210

M Indicates manual integration within range.

Range Times: NW Diesel(3.091 - 6.020) AK102(2.46 - 6.21) Jet A(2.46 - 4.57)  
 NW M.Oil(6.02 - 8.38) AK103(6.21 - 7.94) OR Diesel(2.46 - 6.72)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1159153	45.0	100.0
Triacontane	14	0.0	0.0

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

Data File: /chem2/fid9.i/20100728.B/0728R014.D

Date: 28-JUL-2010 21:07

Client ID:

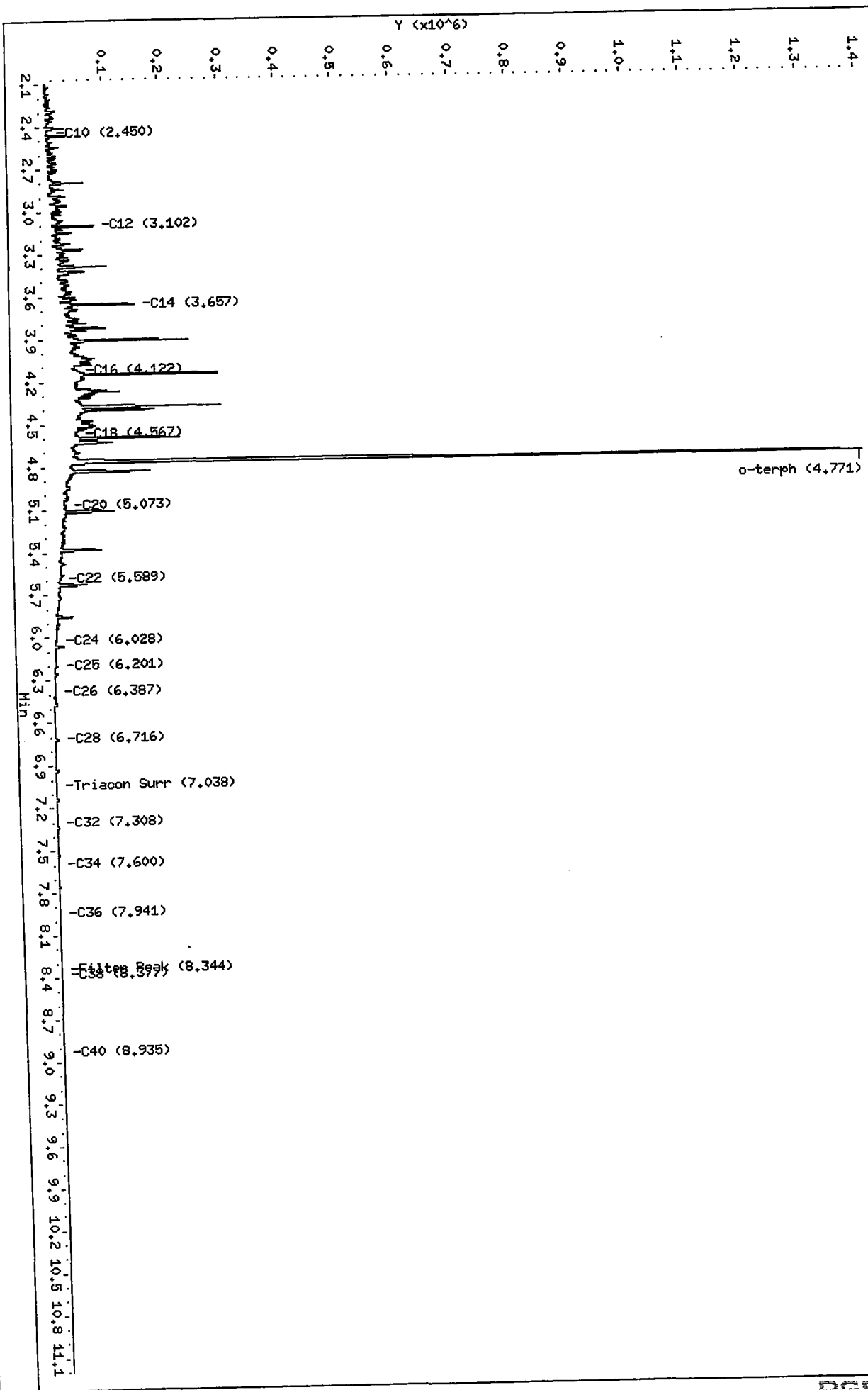
Sample Info: DIESEL 250

Column phase: RTX-1

Instrument: fid9.i

Operator: MS

Column diameter: 0.25



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Analytical Resources Inc.  
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100728.B/0728A015.D  
Method: /chem2/fid9.i/20100728.B/ftphfid9a.m  
Instrument: fid9.i  
Operator: MS  
Report Date: 07/30/2010

ARI ID: DIESEL 500  
Client ID:  
Injection: 28-JUL-2010 21:28  
Dilution Factor: 1  
Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.550	0.014	24092	21960	GAS (Tol-C12)	1901504	91
C8	1.707	0.013	12840	13683	DIESEL (C12-C24)	13349530	507
C10	2.453	-0.002	10841	4396	M.OIL (C24-C38)	182963	14
C12	3.103	0.012	165409	95735	AK-102 (C10-C25)	14740415	507 M
C14	3.658	0.017	311239	296922	AK-103 (C25-C36)	133392	27
C16	4.122	-0.006	99870	66038			
C18	4.564	-0.005	95431	110341			
C20	5.074	0.002	52479	17444			
C22	5.584	-0.004	30444	11329			
C24	6.031	0.011	12477	13304			
C25	6.201	-0.012	7950	11851			
C26	6.392	0.000	3328	3066			
C28	6.713	-0.010	2681	3159			
C32	7.307	-0.002	133	71	JP-4 (Tol-C14)	4128068	252
C34	7.599	0.003	311	54	BUNKERC (C10-C38)	14881360	1697 M
Filter Peak	8.347	0.003	266	158			
C36	7.946	0.002	325	199			
C38	8.380	0.000	252	200			
C40	8.933	-0.002	215	132			
o-terph	4.780	0.013	2231500	2341636	JET-A (C10-C18)	10357341	749
Triacon Surr	7.035	-0.003	24	5	JP8 (Tol-C16)	7327543	416

M Indicates manual integration within range.

Range Times: NW Diesel(3.091 - 6.020) AK102(2.46 - 6.21) Jet A(2.46 - 4.57)  
NW M.Oil(6.02 - 8.38) AK103(6.21 - 7.94) OR Diesel(2.46 - 6.72)

Surrogate	Area	Amount	%Rec
o-Terphenyl	2341636	90.9	202.0
Triacontane	5	0.0	0.0

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

Data File: /chem2/fid9.i/20100728.B/07280015.D

Date: 28-JUL-2010 21:28

Client ID:

Sample Info: DIESEL 500

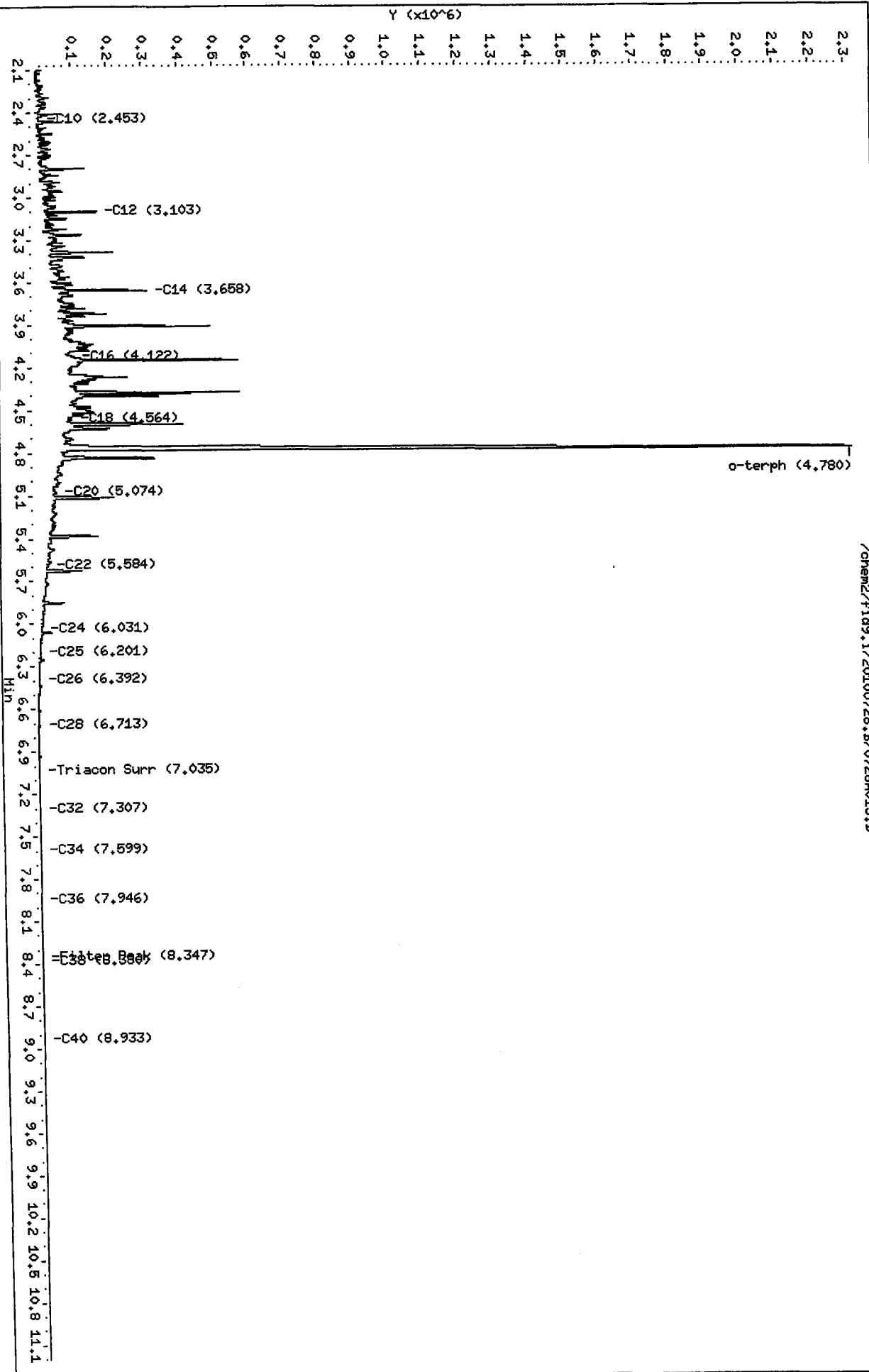
Column phase: RTX-1

Instrument: fid9.i

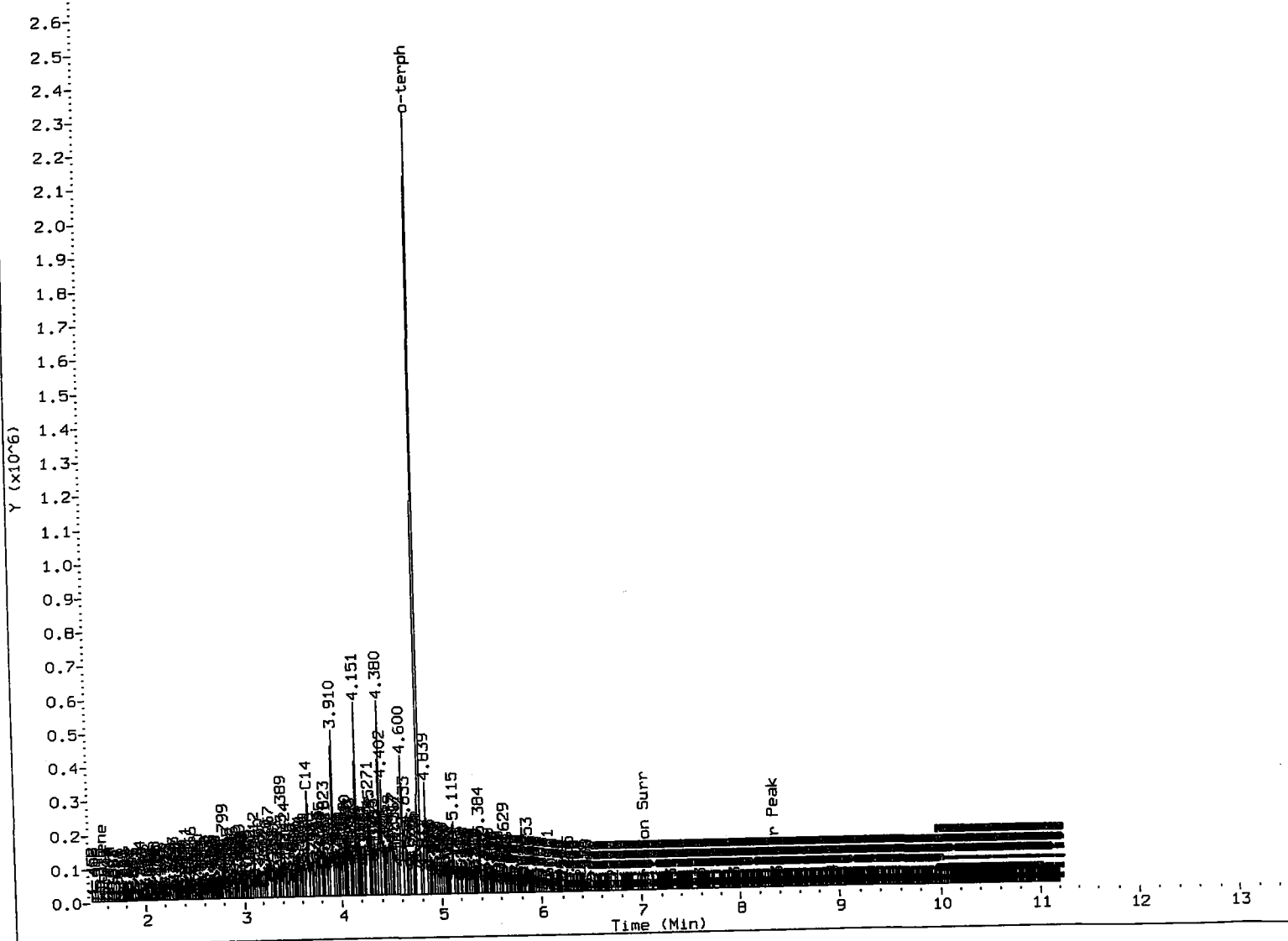
Operator: MS

Column diameter: 0.25

/chem2/fid9.i/20100728.B/07280015.D







MANUAL INTEGRATION

- 1. Baseline correction
- 2. Poor chromatography
- 3. Peak not found
- 4. Totals calculation
- 5. Other \_\_\_\_\_

Analyst: M

Date: 7/30/10

Analytical Resources Inc.  
 NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100728.B/0728A016.D  
 Method: /chem2/fid9.i/20100728.B/ftphfid9a.m  
 Instrument: fid9.i  
 Operator: MS  
 Report Date: 07/30/2010

ARI ID: DIESEL 1000  
 Client ID:  
 Injection: 28-JUL-2010 21:49  
 Dilution Factor: 1  
 Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.522	-0.014	10876	15528	GAS (Tol-C12)	3531545	168
C8	1.681	-0.013	9803	11090	DIESEL (C12-C24)	26257622	997
C10	2.453	-0.002	18978	7692	M.OIL (C24-C38)	394336	31
C12	3.105	0.014	327593	189038	AK-102 (C10-C25)	28983377	998 M
C14	3.660	0.019	587586	585940	AK-103 (C25-C36)	290957	58
C16	4.123	-0.005	194975	156606			
C18	4.571	0.002	188327	195568			
C20	5.075	0.003	102065	48020			
C22	5.588	-0.001	60397	13108			
C24	6.012	-0.008	28768	31861			
C25	6.201	-0.011	17610	33377			
C26	6.390	-0.002	7211	10254			
C28	6.716	-0.006	7614	9107			
C32	7.302	-0.007	202	83	JP-4 (Tol-C14)	7631157	465
C34	7.591	-0.005	294	192	BUNKERC (C10-C38)	29281417	3339 M
Filter Peak	8.345	0.002	161	90			
C36	7.947	0.002	235	162			
C38	8.386	0.006	146	81			
C40	8.938	0.002	67	15			
o-terph	4.795	0.028	3156698	4692065	JET-A (C10-C18)	20311515	1470
Triacon Surr	7.032	-0.006	267	242	JP8 (Tol-C16)	14220053	808

M Indicates manual integration within range.

Range Times: NW Diesel(3.091 - 6.020) AK102(2.46 - 6.21) Jet A(2.46 - 4.57)  
 NW M.Oil(6.02 - 8.38) AK103(6.21 - 7.94) OR Diesel(2.46 - 6.72)

Surrogate	Area	Amount	%Rec
o-Terphenyl	4692065	182.1	404.7
Triacontane	242	0.0	0.0

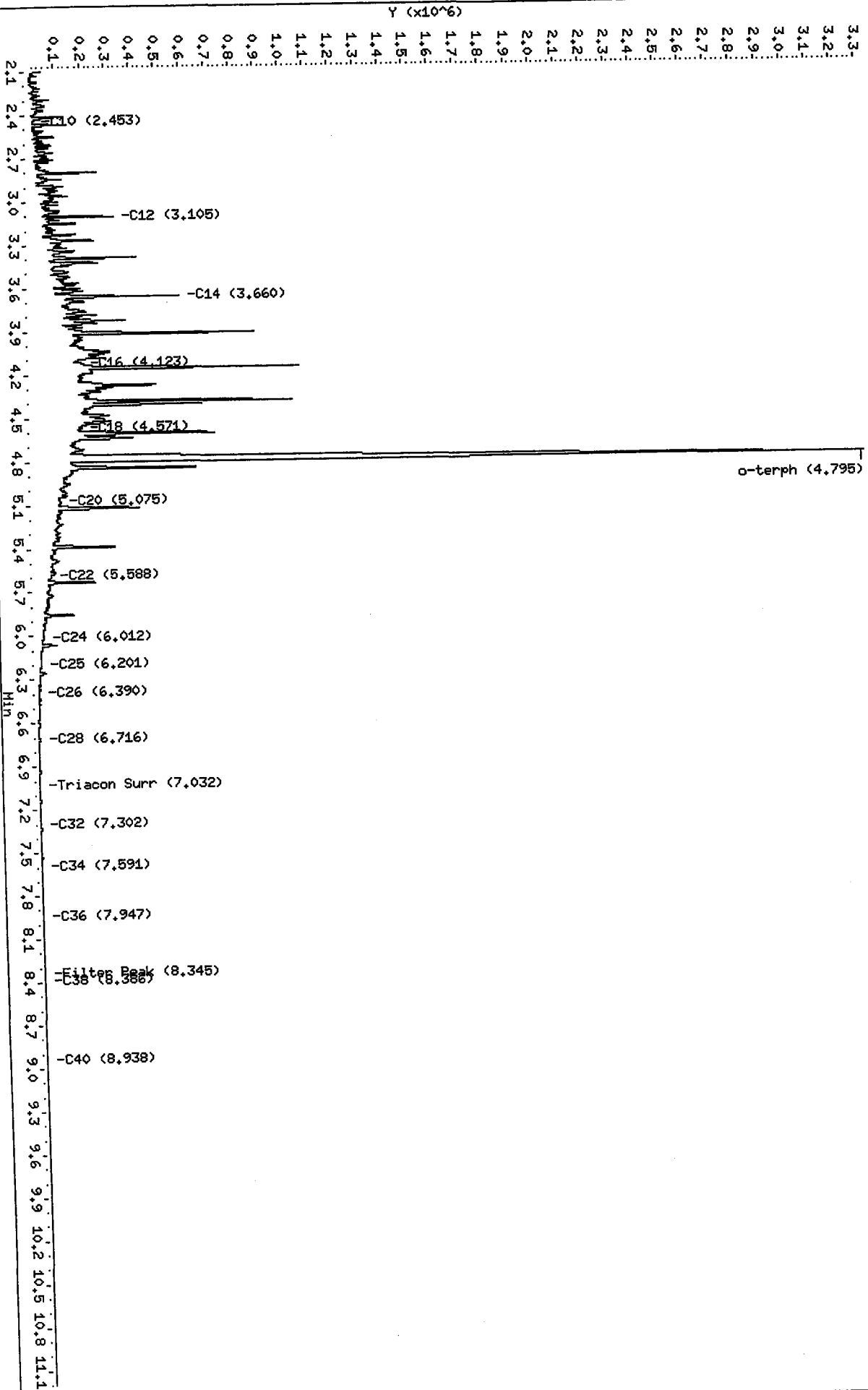
Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

Data File: /chem2/fid9.i/20100728.B/07280016.D  
Date: 28-JUL-2010 21:49  
Client ID:  
Sample Info: DIESEL 1000

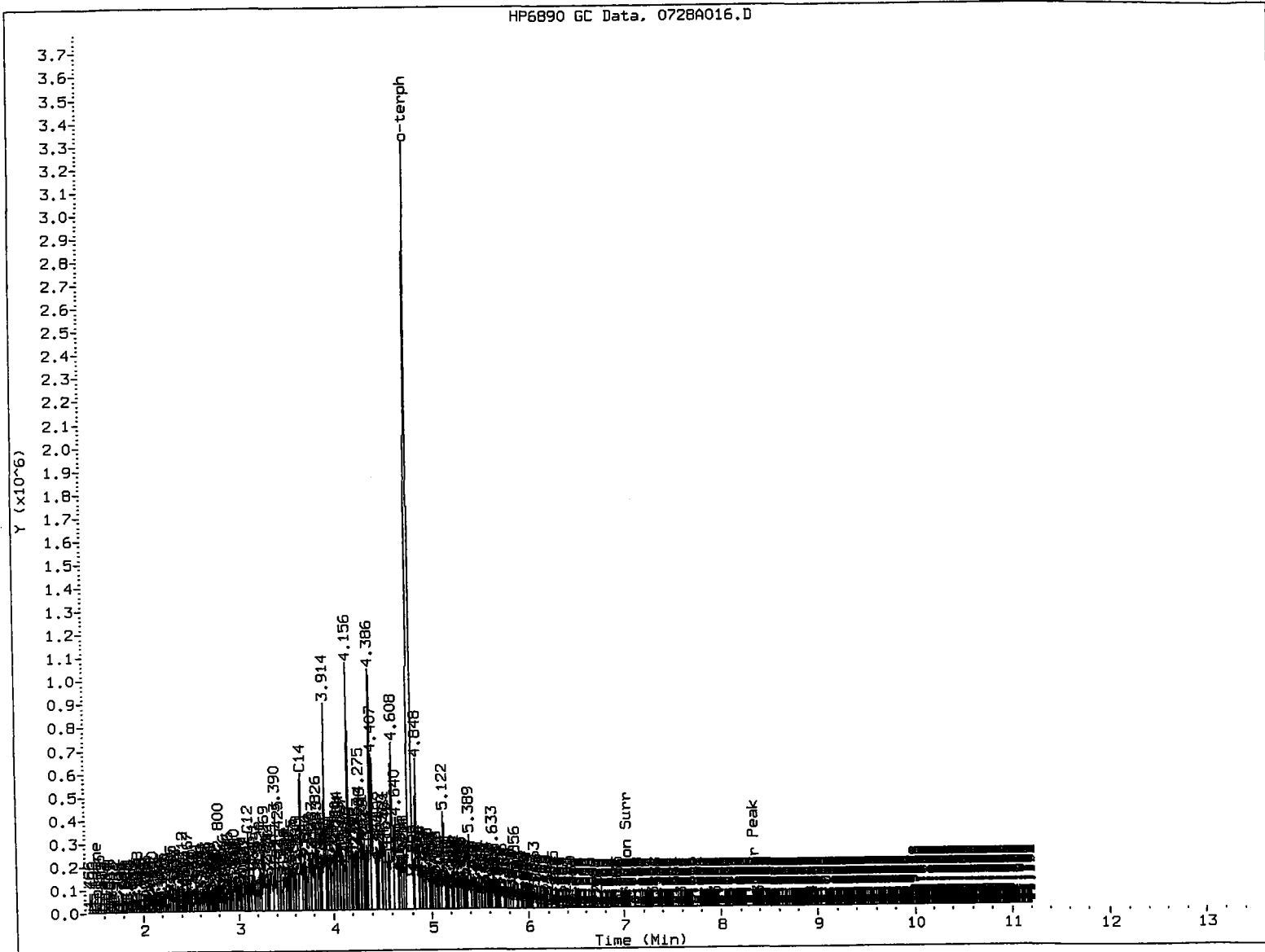
Column phase: RTX-1

Instrument: fid9.i  
Operator: MS  
Column diameter: 0.25

/chem2/fid9.i/20100728.B/07280016.D



HP6890 GC Data, 0728A016.D



MANUAL INTEGRATION

- 1. Baseline correction
- 2. Poor chromatography
- 3. Peak not found
- 4. Totals calculation
- 5. Other \_\_\_\_\_

Analyst: MM

Date: 7/30/10

Analytical Resources Inc.  
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100728.B/0728A017.D  
Method: /chem2/fid9.i/20100728.B/ftphfid9a.m  
Instrument: fid9.i  
Operator: MS  
Report Date: 07/30/2010

ARI ID: DIESEL 2500  
Client ID:  
Injection: 28-JUL-2010 22:11  
Dilution Factor: 1  
Macro: 28-JUN-2010

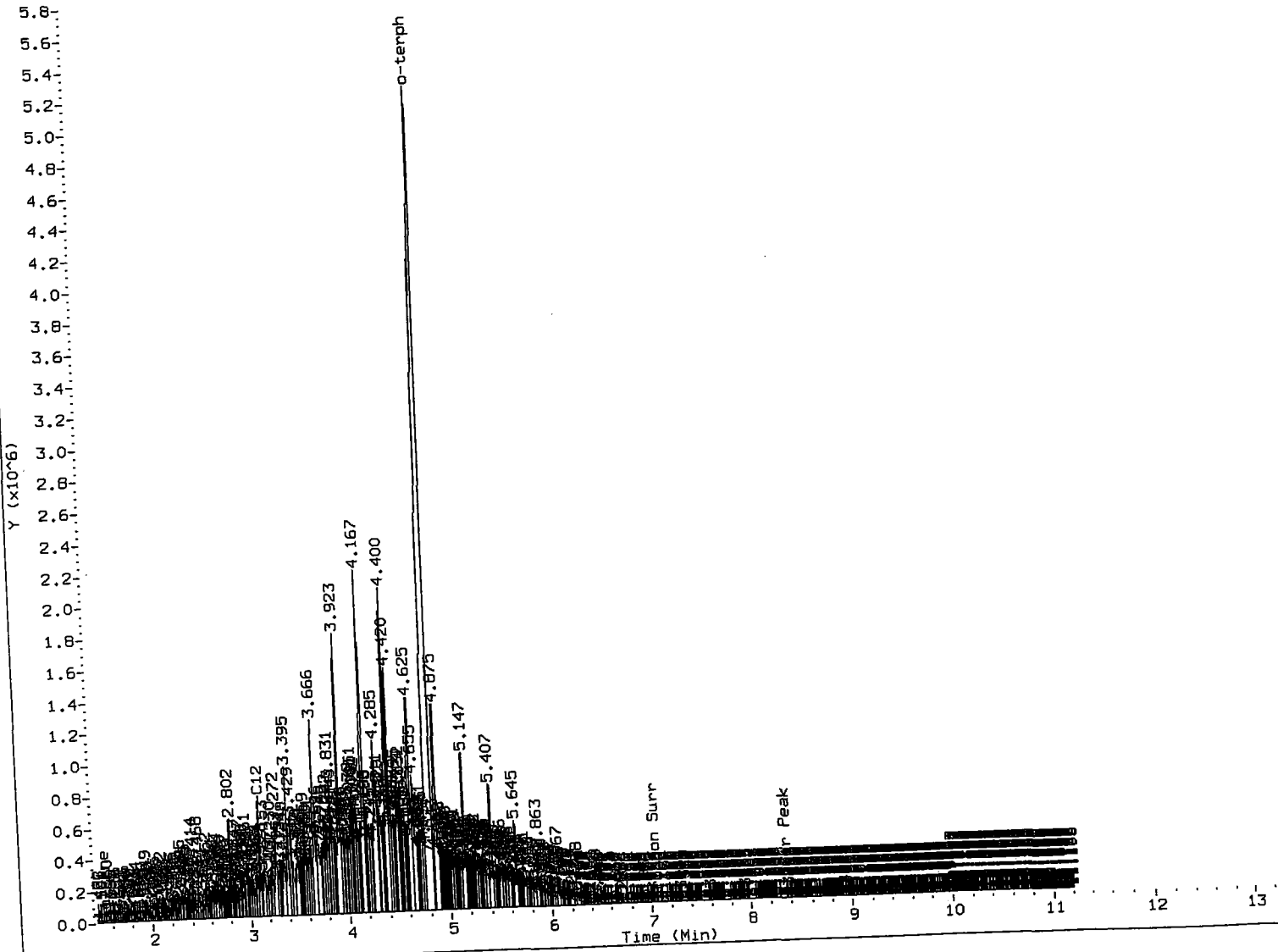
FID:9 RESULTS					Range	Total Area	Conc
Compound	RT	Shift	Height	Area			
Toluene	1.527	-0.009	13560	11562	GAS (Tol-C12)	8824002	420
C8	1.696	0.002	11080	4589	DIESEL (C12-C24)	67315582	2557
C10	2.446	-0.009	54486	45945	M.OIL (C24-C38)	1069546	84
C12	3.108	0.017	766741	530976	AK-102 (C10-C25)	74315545	2558 M
C14	3.623	-0.018	472383	536342	AK-103 (C25-C36)	814815	163
C16	4.129	0.001	485188	391044			
C18	4.575	0.006	464619	138288			
C20	5.065	-0.008	324441	293811			
C22	5.599	0.011	159352	44294			
C24	6.014	-0.006	74943	92274			
C25	6.200	-0.013	55517	125809			
C26	6.393	0.001	18866	27921			
C28	6.714	-0.009	18491	25629			
C32	7.300	-0.009	811	206	JP-4 (Tol-C14)	19257288	1174
C34	7.598	0.002	667	236	BUNKERC (C10-C38)	75143374	8568 M
Filter Peak	8.352	0.008	294	163			
C36	7.939	-0.006	456	454			
C38	8.372	-0.008	289	303			
C40	8.930	-0.005	144	37			
o-terph	4.830	0.063	4844941	11602111	JET-A (C10-C18)	49526362	3584
Triacon Surr	7.036	-0.002	1327	1487	JP8 (Tol-C16)	35611639	2024

M Indicates manual integration within range.  
Range Times: NW Diesel(3.091 - 6.020) AK102(2.46 - 6.21) Jet A(2.46 - 4.57)  
NW M.Oil(6.02 - 8.38) AK103(6.21 - 7.94) OR Diesel(2.46 - 6.72)

Surrogate	Area	Amount	%Rec
o-Terphenyl	11602111	450.4	1000.8
Triacantane	1487	0.1	0.2

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010





Analytical Resources Inc.  
 NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100728.B/0728A018.D  
 Method: /chem2/fid9.i/20100728.B/ftphfid9a.m  
 Instrument: fid9.i  
 Operator: MS  
 Report Date: 07/30/2010

ARI ID: DIESEL ICV  
 Client ID:  
 Injection: 28-JUL-2010 22:32  
 Dilution Factor: 1  
 Macro: 28-JUN-2010

FID:9 RESULTS							
Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.543	0.007	16954	20227	GAS (Tol-C12)	1113463	53
C8	1.701	0.007	9541	12338	DIESEL (C12-C24)	7079418	269
C10	2.452	-0.004	6974	6099	M.OIL (C24-C38)	125009	10
C12	3.103	0.012	84575	50749	AK-102 (C10-C25)	7832815	270 M
C14	3.659	0.018	161174	159868	AK-103 (C25-C36)	88819	18
C16	4.125	-0.003	53296	12670			
C18	4.566	-0.003	51560	65584			
C20	5.072	0.000	26951	15118			
C22	5.598	0.009	16514	25434			
C24	6.029	0.009	6302	1731			
C25	6.204	-0.009	6207	13796			
C26	6.389	-0.002	1666	1190			
C28	6.718	-0.005	4177	4021			
C32	7.309	0.000	191	45	JP-4 (Tol-C14)	2210824	135
C34	7.596	0.000	370	71	BUNKERC (C10-C38)	7932324	904 M
Filter Peak	8.339	-0.004	380	324			
C36	7.940	-0.004	379	284			
C38	8.380	0.000	338	298			
C40	8.940	0.005	284	190			
o-terph	4.774	0.007	1463888	1244864	JET-A (C10-C18)	5534317	400
Triacon Surr	7.045	0.007	34	10	JP8 (Tol-C16)	4004823	228

M Indicates manual integration within range.  
 Range Times: NW Diesel(3.091 - 6.020) AK102(2.46 - 6.21) Jet A(2.46 - 4.57)  
 NW M.Oil(6.02 - 8.38) AK103(6.21 - 7.94) OR Diesel(2.46 - 6.72)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1244864	48.3	107.4
Triacotane	10	0.0	0.0

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010



Data File: /chem2/fid9.i/20100728.B/07280018.D

Date: 28-JUL-2010 22:32

Client ID:

Sample Info: DIESEL ICV

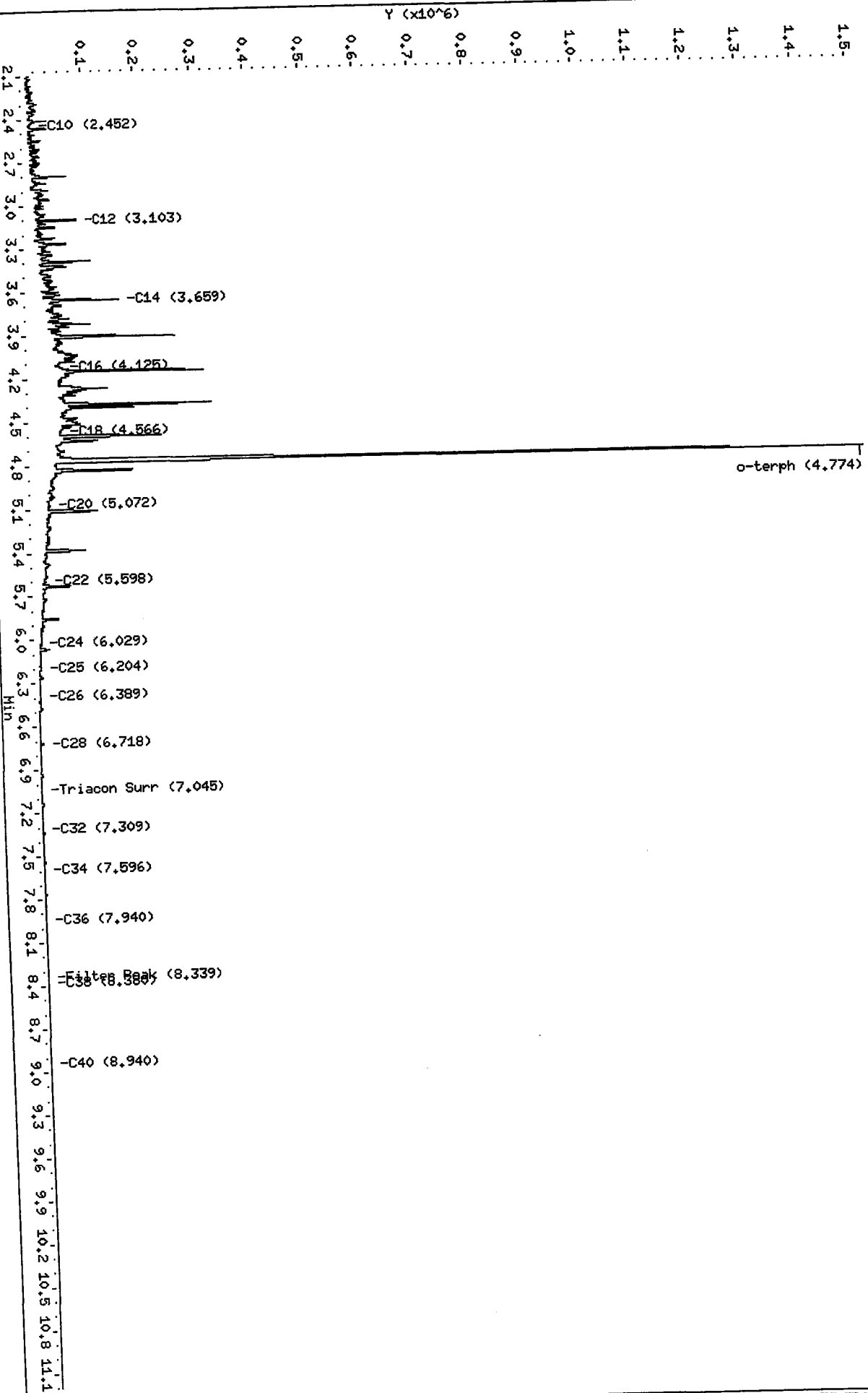
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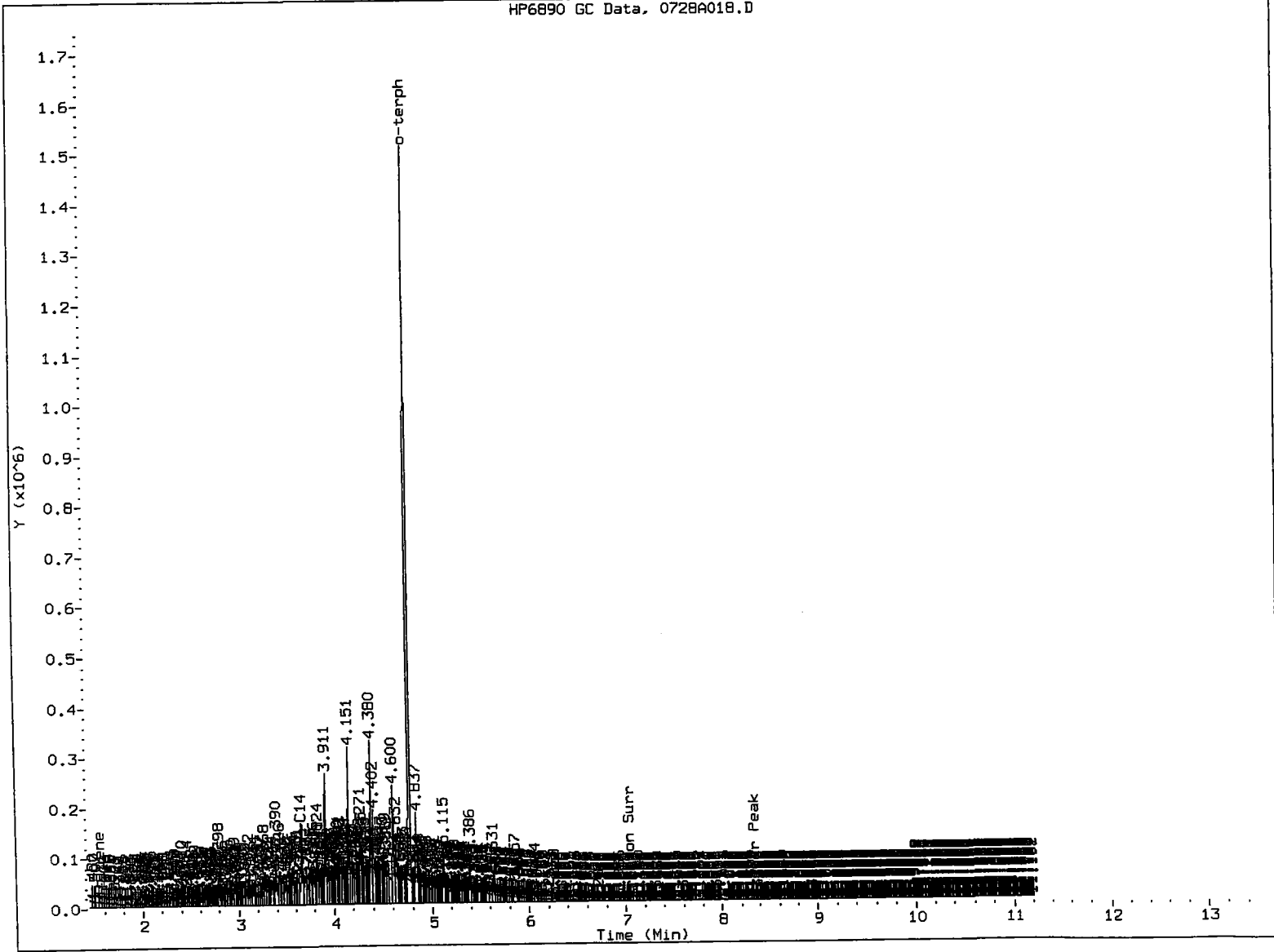
Instrument: fid9.i

Operator: NS

Column diameter: 0.25

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MANUAL INTEGRATION

- 1. Baseline correction
- 2. Poor chromatography
- 3. Peak not found
- 4. Totals calculation
- 5. Other \_\_\_\_\_

Analyst:                      Date: 7/30/10

Analytical Resources Inc.  
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100728.B/0728A019.D  
Method: /chem2/fid9.i/20100728.B/ftphfid9a.m  
Instrument: fid9.i  
Operator: MS  
Report Date: 07/30/2010

ARI ID: MOIL 100  
Client ID:  
Injection: 28-JUL-2010 22:53  
Dilution Factor: 1  
Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.544	0.008	7458	18695	GAS (Tol-C12)	141901	7
C8	1.726	0.033	5158	6296	DIESEL (C12-C24)	170722	6
C10	2.453	-0.002	2104	2277	M.OIL (C24-C38)	1466906	115
C12	3.087	-0.004	132	32	AK-102 (C10-C25)	227313	8
C14	3.638	-0.003	73	40	AK-103 (C25-C36)	1259769	251 M
C16	4.130	0.002	69	41			
C18	4.564	-0.005	811	866			
C20	5.075	0.003	500	282			
C22	5.588	-0.001	2108	500			
C24	6.024	0.004	5281	1867			
C25	6.222	0.010	6965	4086			
C26	6.393	0.001	8433	4859			
C28	6.715	-0.008	26196	37657			
C32	7.310	0.001	14515	3993	JP-4 (Tol-C14)	147735	9
C34	7.596	0.000	11767	4821	BUNKERC (C10-C38)	1662282	190 M
Filter Peak	8.344	0.001	6091	3946			
C36	7.940	-0.005	8533	7979			
C38	8.385	0.005	5855	2782			
C40	8.936	0.000	3917	1842			
o-terph	4.766	-0.001	1479	1425	JET-A (C10-C18)	40423	3
Triacon Surr	7.080	0.042	256627	183551	JP8 (Tol-C16)	151586	9

M Indicates manual integration within range.

Range Times: NW Diesel(3.091 - 6.020) AK102(2.46 - 6.21) Jet A(2.46 - 4.57)  
NW M.Oil(6.02 - 8.38) AK103(6.21 - 7.94) OR Diesel(2.46 - 6.72)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1425	0.1	0.1
Triacontane	183551	9.3	20.6

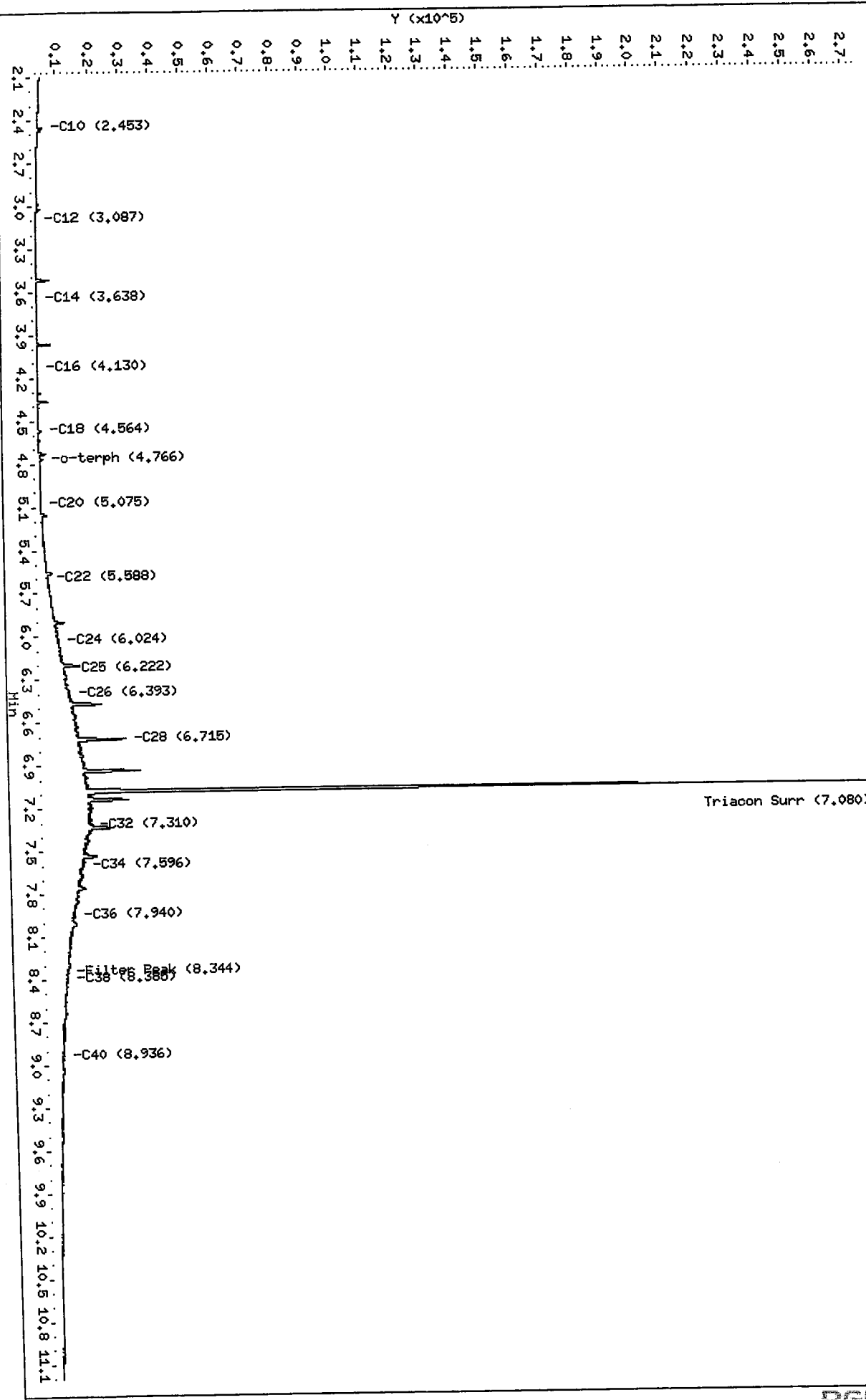
Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

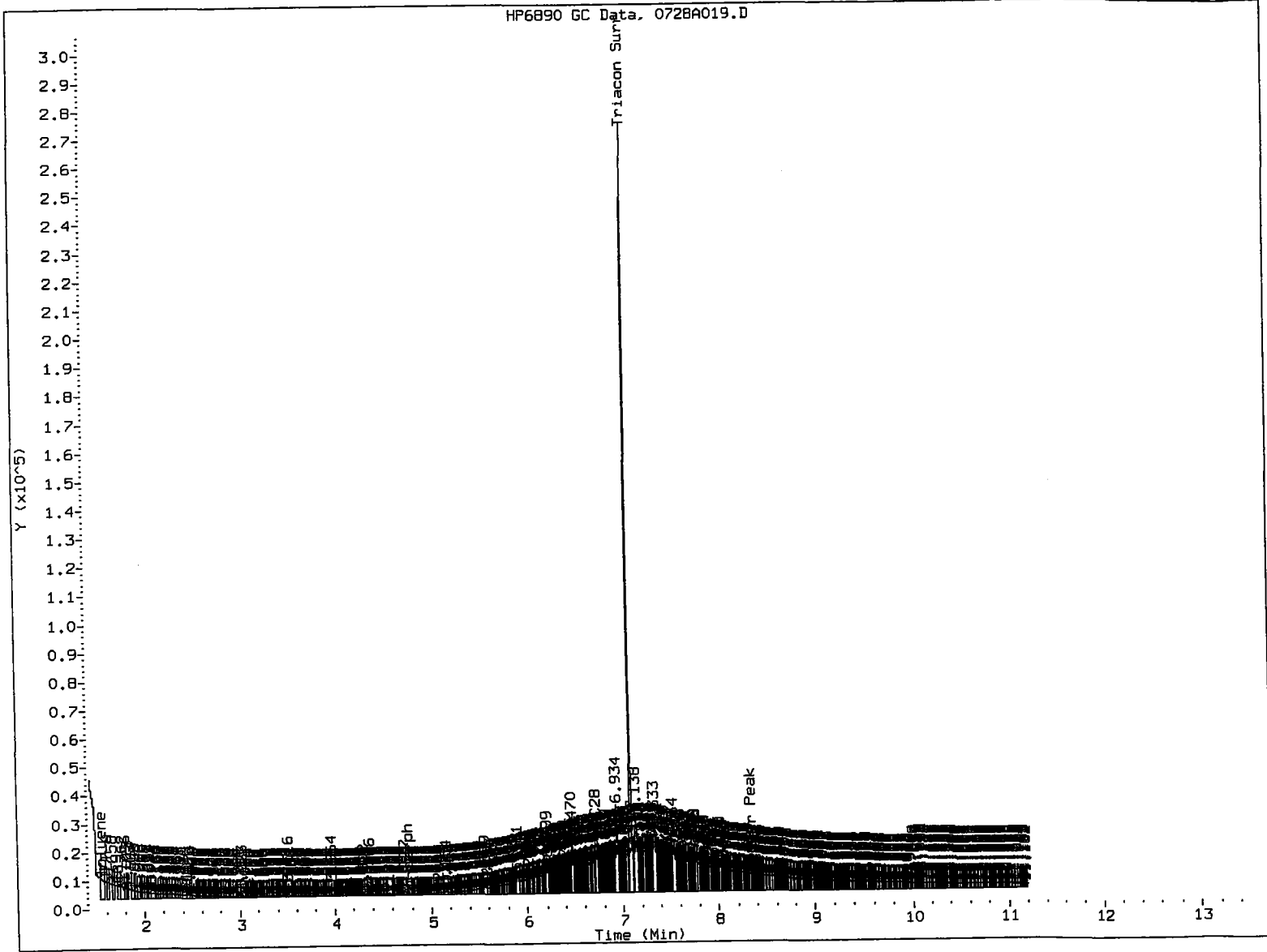
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Date: 28-JUL-2010 22:53  
Client ID:  
Sample Info: H01L 100

Instrument: fid9.i  
Operator: HS  
Column diameter: 0.25

Column phase: RTX-1

/chem2/fid9.i/20100728.B/0728R019.D





MANUAL INTEGRATION

- 1. Baseline correction
- 2. Poor chromatography
- 3. Peak not found
- 4. Totals calculation
- 5. Other \_\_\_\_\_

Analyst: Mr Date: 7/30/10

Analytical Resources Inc.  
 NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100728.B/0728A020.D  
 Method: /chem2/fid9.i/20100728.B/ftphfid9a.m  
 Instrument: fid9.i  
 Operator: MS  
 Report Date: 07/30/2010

ARI ID: MOIL 250  
 Client ID:  
 Injection: 28-JUL-2010 23:15  
 Dilution Factor: 1  
 Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.542	0.006	9497	26573	GAS (Tol-C12)	196853	9
C8	1.701	0.007	5948	3882	DIESEL (C12-C24)	365810	14
C10	2.453	-0.002	2442	3279	M.OIL (C24-C38)	3266021	255
C12	3.084	-0.007	295	172	AK-102 (C10-C25)	480434	17
C14	3.641	0.000	143	28	AK-103 (C25-C36)	2796307	558 M
C16	4.130	0.002	41	6			
C18	4.564	-0.005	1875	1532			
C20	5.076	0.003	1034	1260			
C22	5.593	0.005	5116	2268			
C24	6.019	-0.001	12501	3919			
C25	6.217	0.004	16132	5120			
C26	6.394	0.003	20541	11264			
C28	6.719	-0.004	29297	45978			
C32	7.310	0.001	33294	13189	JP-4 (Tol-C14)	205495	13
C34	7.596	0.000	26975	12175	BUNKERC (C10-C38)	3666421	418 M
Filter Peak	8.341	-0.002	13586	4242			
C36	7.941	-0.004	19049	9333			
C38	8.372	-0.008	13101	10702			
C40	8.931	-0.004	8356	5723			
o-terph	4.766	-0.001	970	1169	JET-A (C10-C18)	53412	4
Triacon Surr	7.087	0.049	578614	453460	JP8 (Tol-C16)	208886	12

M Indicates manual integration within range.

Range Times: NW Diesel(3.091 - 6.020) AK102(2.46 - 6.21) Jet A(2.46 - 4.57)  
 NW M.Oil(6.02 - 8.38) AK103(6.21 - 7.94) OR Diesel(2.46 - 6.72)

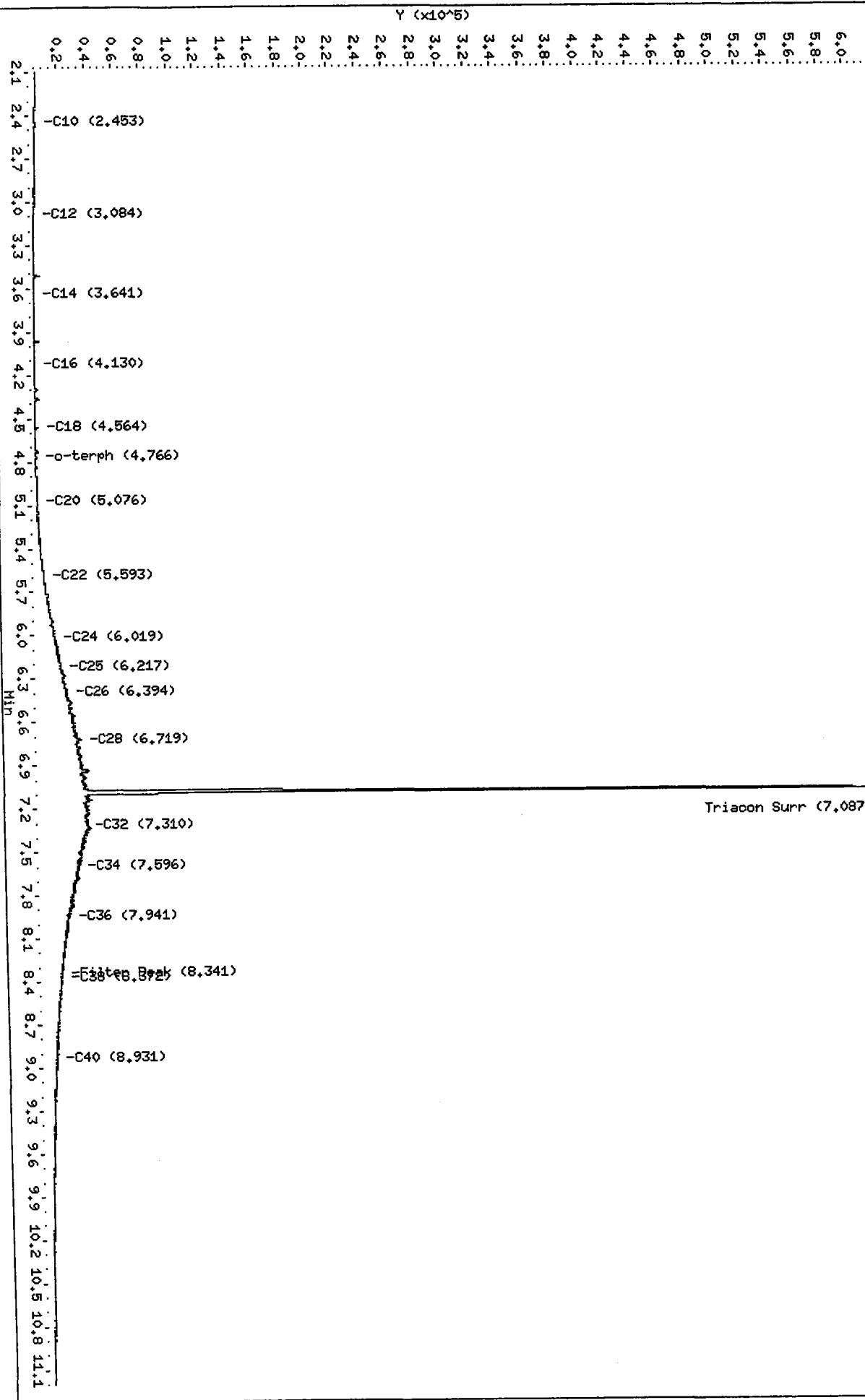
Surrogate	Area	Amount	%Rec
o-Terphenyl	1169	0.0	0.1
Triacontane	453460	22.9	50.8

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

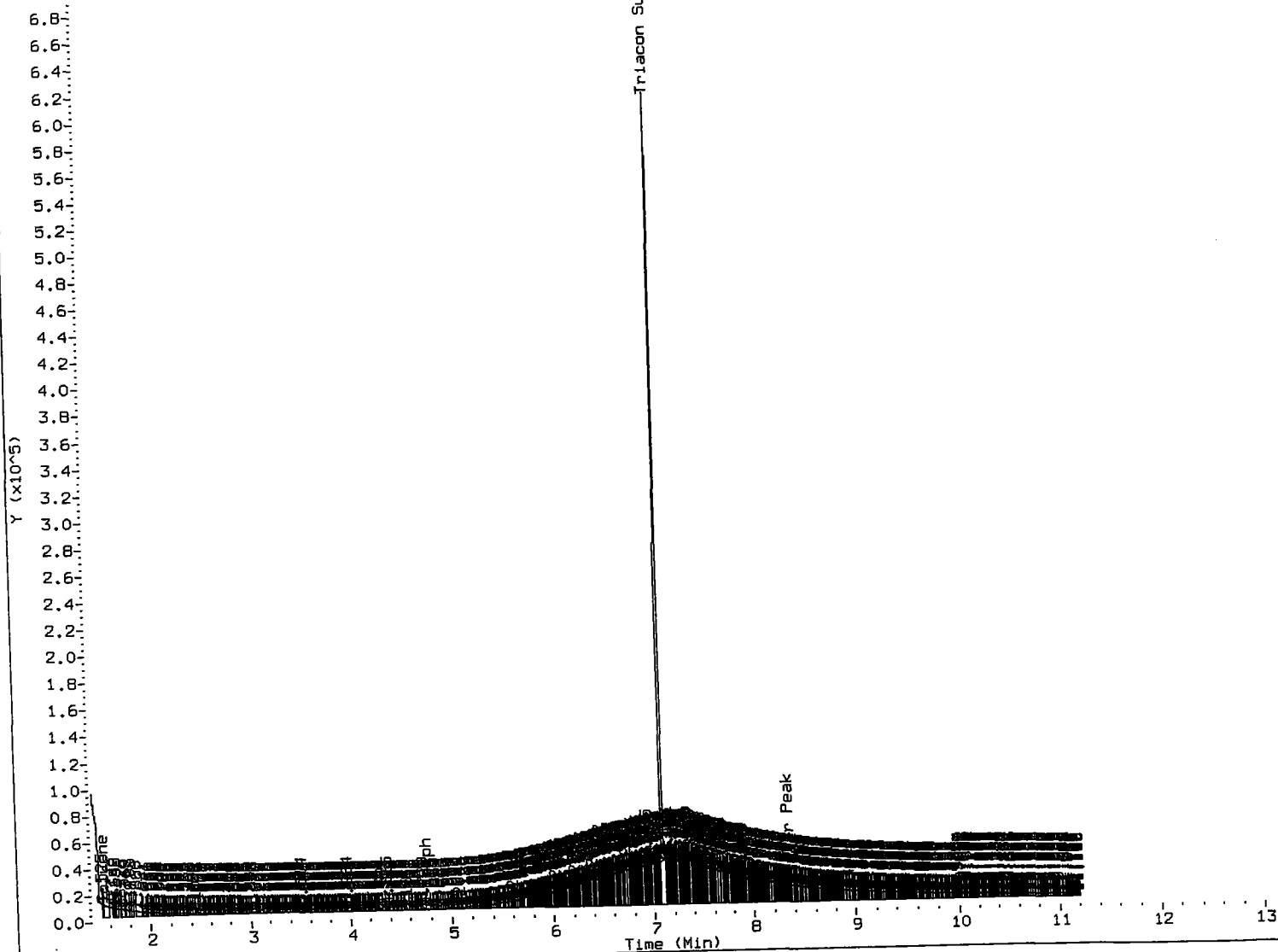
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Date: 28-JUL-2010 23:15  
Client ID:  
Sample Info: HD1L 250  
Column phase: RTX-1

Instrument: fid9.i  
Operator: HS  
Column diameter: 0.25

/chem2/fid9.i/20100728.B/0728A020.D



HP6890 GC Data. 0728A020.D



MANUAL INTEGRATION

- 1. Baseline correction
- 2. Poor chromatography
- 3. Peak not found
- 4. Totals calculation
- 5. Other \_\_\_\_\_

Analyst: MM

Date: 7/27/10



Analytical Resources Inc.  
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100728.B/0728A021.D  
Method: /chem2/fid9.i/20100728.B/ftphfid9a.m  
Instrument: fid9.i  
Operator: MS  
Report Date: 07/30/2010

ARI ID: MOIL 500  
Client ID:  
Injection: 28-JUL-2010 23:36  
Dilution Factor: 1  
Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.544	0.008	9179	20369	GAS (Tol-C12)	216239	10
C8	1.728	0.034	6026	8955	DIESEL (C12-C24)	681352	26
C10	2.454	-0.002	2354	2271	M.OIL (C24-C38)	6262414	490
C12	3.094	0.003	289	44	AK-102 (C10-C25)	866175	30
C14	3.642	0.001	195	126	AK-103 (C25-C36)	5350968	1068 M
C16	4.125	-0.003	40	9			
C18	4.561	-0.008	3657	2936			
C20	5.072	-0.001	2047	2188			
C22	5.593	0.004	10080	6940			
C24	6.019	-0.001	23765	7965			
C25	6.211	-0.002	31744	9374			
C26	6.394	0.003	39169	13151			
C28	6.721	-0.002	55036	30221			
C32	7.312	0.003	65826	24703	JP-4 (Tol-C14)	225770	14
C34	7.600	0.003	52438	20690	BUNKERC (C10-C38)	6976056	795 M
Filter Peak	8.350	0.007	26035	6689			
C36	7.944	-0.001	38444	12762			
C38	8.382	0.002	26485	18398			
C40	8.934	-0.002	15558	5694			
o-terph	4.764	-0.003	1139	1159	JET-A (C10-C18)	56856	4
Triacon Surr	7.094	0.056	990900	889470	JP8 (Tol-C16)	229628	13

M Indicates manual integration within range.

Range Times: NW Diesel(3.091 - 6.020) AK102(2.46 - 6.21) Jet A(2.46 - 4.57)  
NW M.Oil(6.02 - 8.38) AK103(6.21 - 7.94) OR Diesel(2.46 - 6.72)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1159	0.0	0.1
Triacontane	889470	44.8	99.7

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

Data File: /chem2/fid9.i/20100728.B/0728R021.D

Date: 28-JUL-2010 23:36

Client ID:

Sample Info: M01L 500

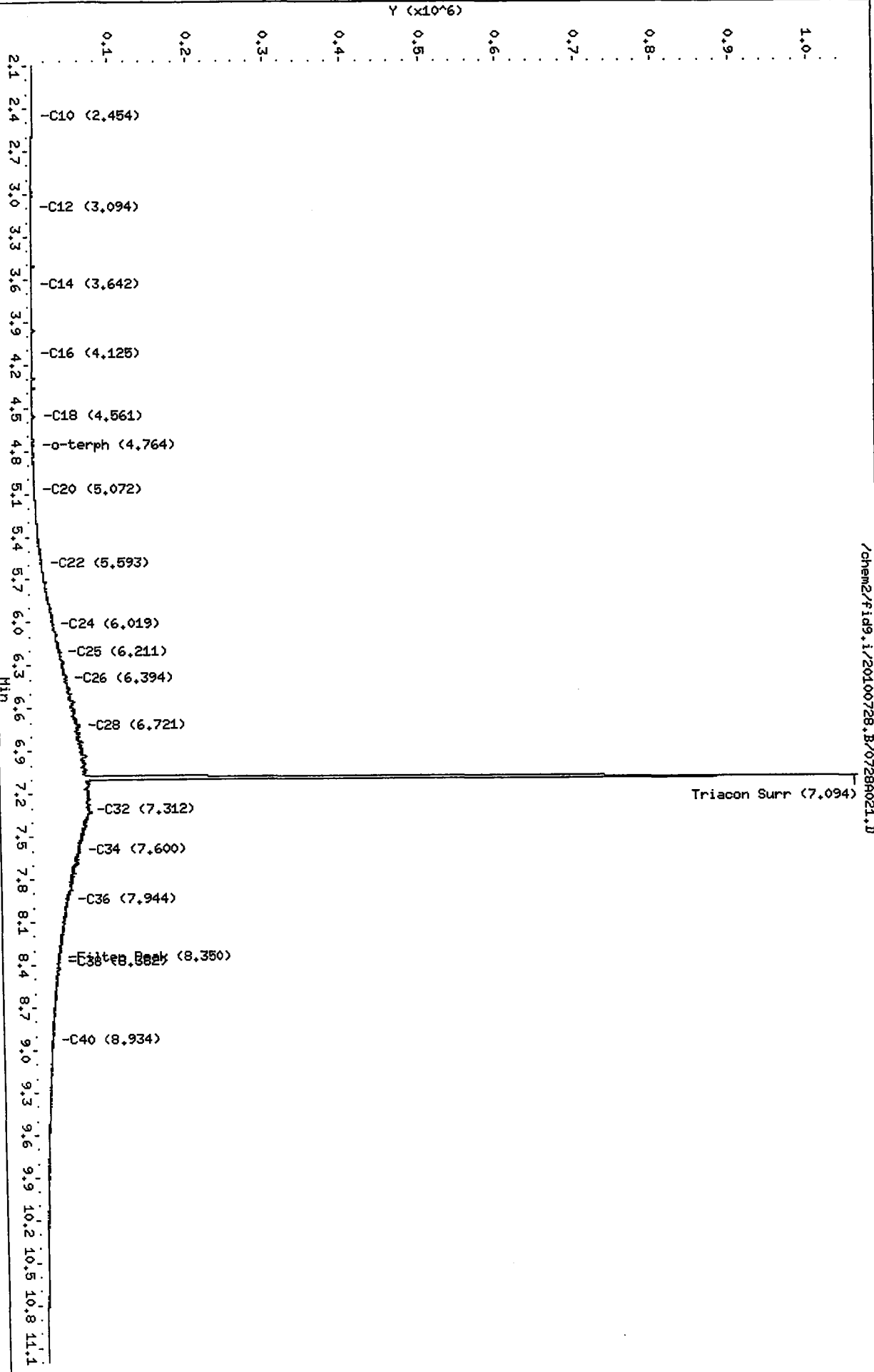
Column phase: RTX-1

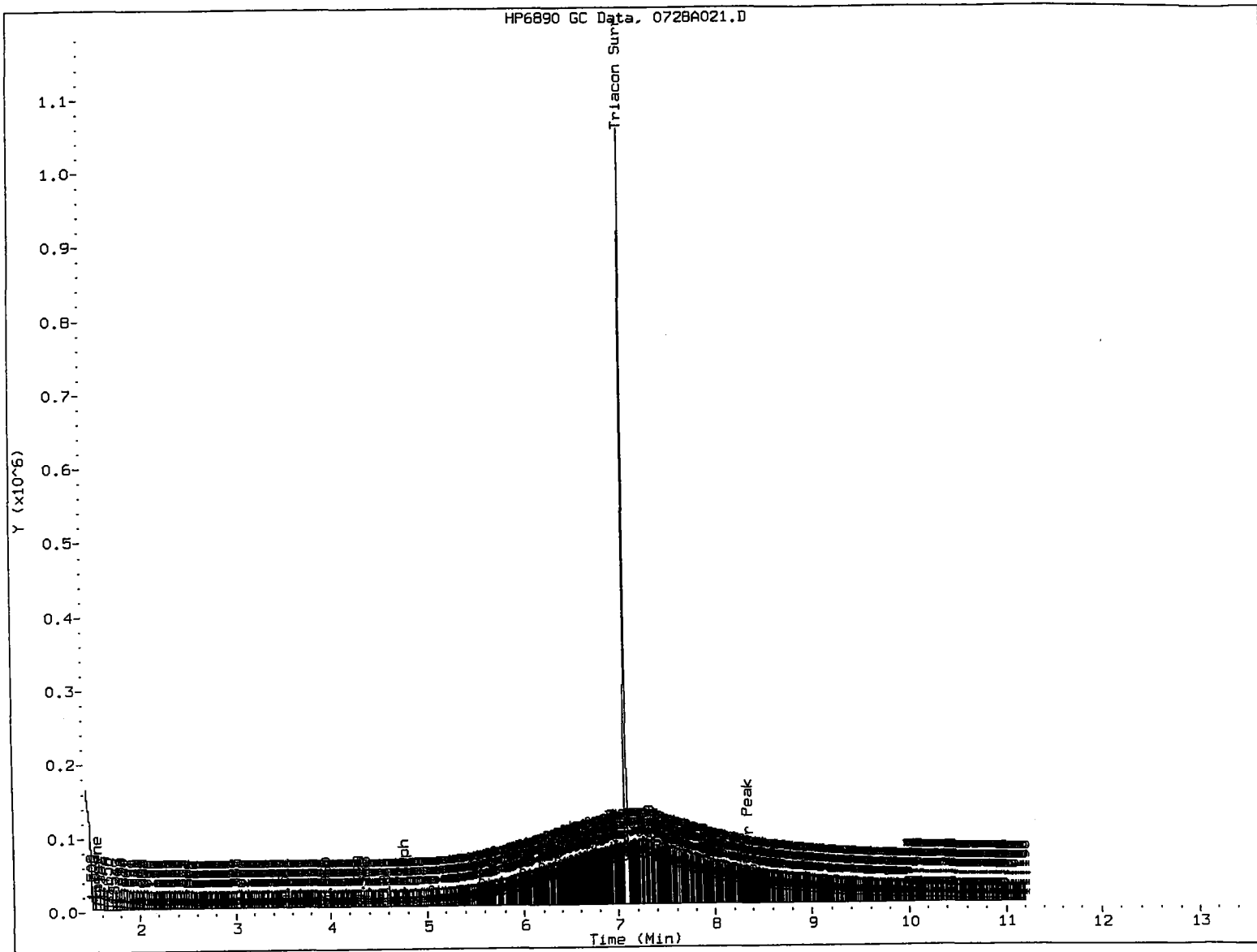
Instrument: fid9.i

Operator: MS

Column diameter: 0.25

/chem2/fid9.i/20100728.B/0728R021.D





MANUAL INTEGRATION

- 1. Baseline correction
- 2. Poor chromatography
- 3. Peak not found
- 4. Totals calculation
- 5. Other \_\_\_\_\_

Analyst: ML

Date: 2/20/10

Analytical Resources Inc.  
 NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100728.B/0728A022.D  
 Method: /chem2/fid9.i/20100728.B/ftphfid9a.m  
 Instrument: fid9.i  
 Operator: MS  
 Report Date: 07/30/2010

ARI ID: MOIL 1000  
 Client ID:  
 Injection: 28-JUL-2010 23:57  
 Dilution Factor: 1  
 Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.538	0.002	10649	63178	GAS (Tol-C12)	218627	10
C8	1.703	0.010	6083	4895	DIESEL (C12-C24)	1375330	52
C10	2.453	-0.003	2350	1902	M.OIL (C24-C38)	12575741	983
C12	3.089	-0.002	381	214	AK-102 (C10-C25)	1720432	59
C14	3.639	-0.002	299	246	AK-103 (C25-C36)	10794434	2155 M
C16	4.129	0.000	79	16			
C18	4.560	-0.009	7645	6024			
C20	5.072	0.000	4064	7040			
C22	5.597	0.008	20853	24416			
C24	6.018	-0.002	49376	52041			
C25	6.213	0.001	63610	16233			
C26	6.389	-0.002	79064	34283			
C28	6.720	-0.003	107910	42122			
C32	7.310	0.001	130942	41405	JP-4 (Tol-C14)	231895	14
C34	7.599	0.002	108281	136091	BUNKERC (C10-C38)	13985045	1595 M
Filter Peak	8.345	0.002	52029	25346			
C36	7.948	0.003	74855	16070			
C38	8.376	-0.004	51433	44591			
C40	8.939	0.003	30398	16046			
o-terph	4.764	-0.003	1794	1847	JET-A (C10-C18)	72341	5
Triacon Surr	7.105	0.067	1701872	1806179	JP8 (Tol-C16)	236928	13

M Indicates manual integration within range.

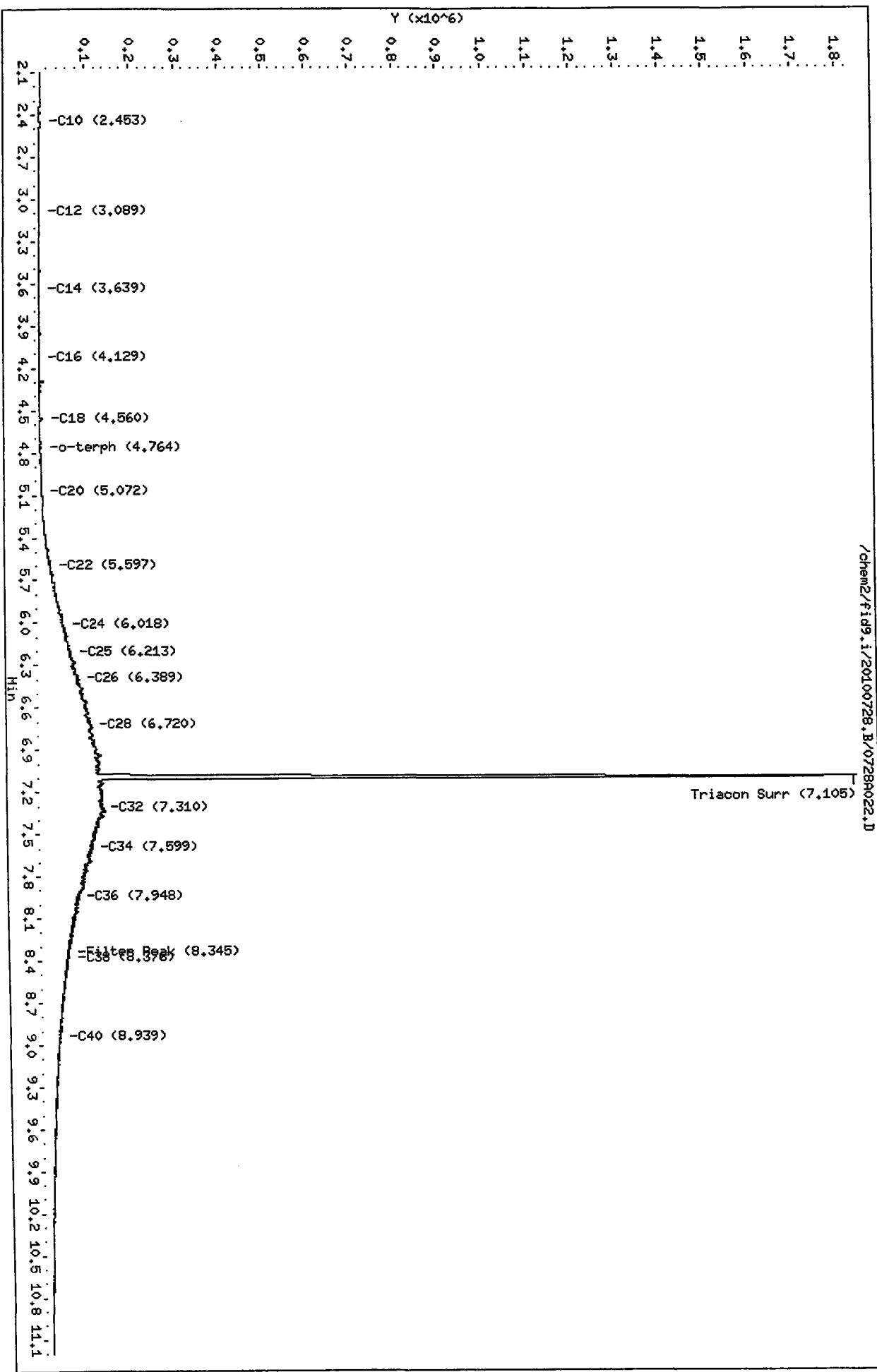
Range Times: NW Diesel(3.091 - 6.020) AK102(2.46 - 6.21) Jet A(2.46 - 4.57)  
 NW M.Oil(6.02 - 8.38) AK103(6.21 - 7.94) OR Diesel(2.46 - 6.72)

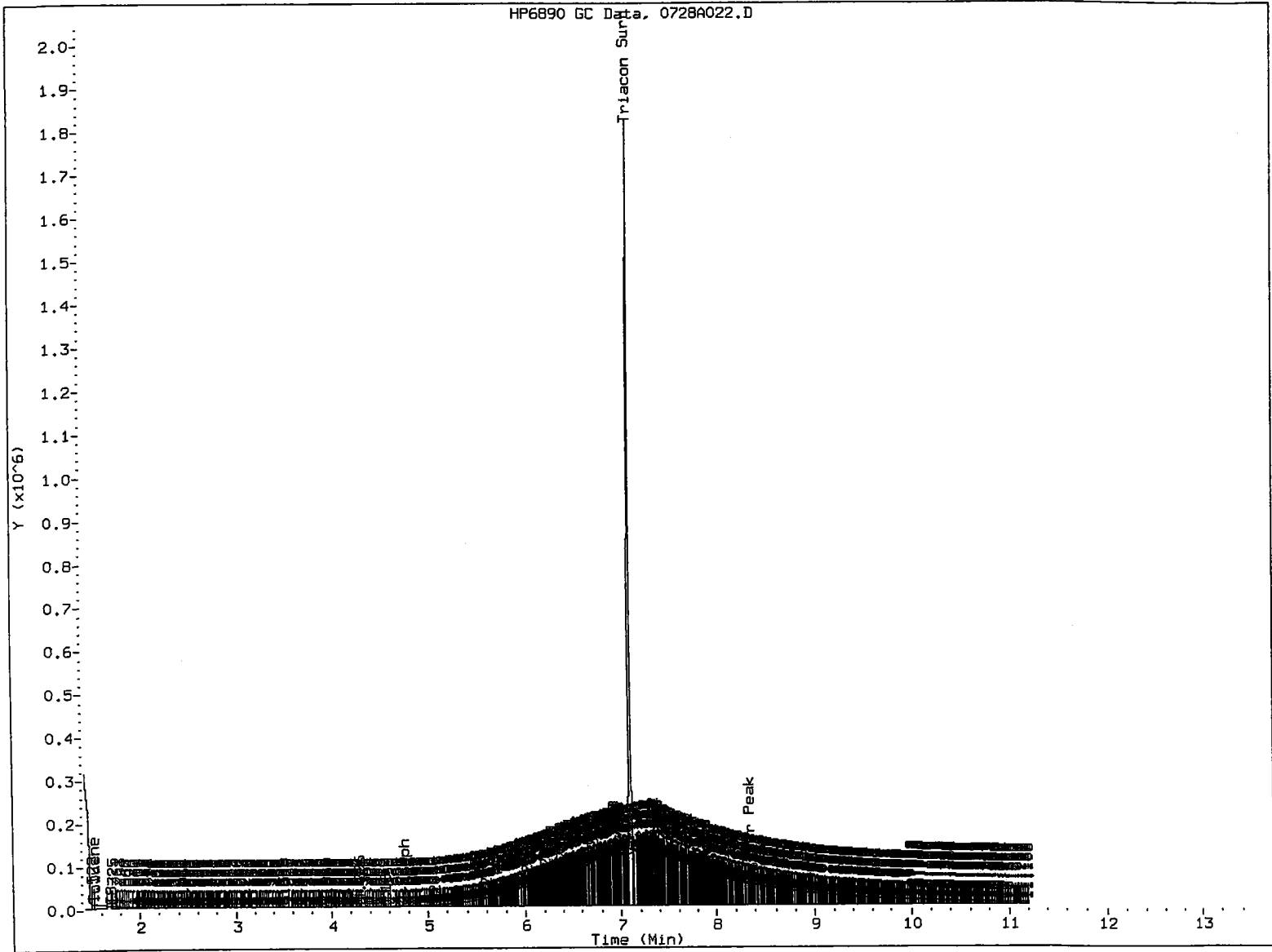
Surrogate	Area	Amount	%Rec
o-Terphenyl	1847	0.1	0.2
Triacontane	1806179	91.1	202.4

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

Data File: /chem2/fid9.i/20100728.B/0728A022.D  
 Date: 28-JUL-2010 23:57  
 Client ID:  
 Sample Info: M01L 1000  
 Column phase: RTX-1

Instrument: fid9.i  
 Operator: HS  
 Column diameter: 0.25





MANUAL INTEGRATION

- 1. Baseline correction
- 2. Poor chromatography
- 3. Peak not found
- 4. Totals calculation
- 5. Other \_\_\_\_\_

Analyst: Ma      Date: 9/30/10

Analytical Resources Inc.  
 NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100728.B/0728A023.D  
 Method: /chem2/fid9.i/20100728.B/ftphfid9a.m  
 Instrument: fid9.i  
 Operator: MS  
 Report Date: 07/30/2010

ARI ID: MOIL 2500  
 Client ID:  
 Injection: 29-JUL-2010 00:18  
 Dilution Factor: 1  
 Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	----				GAS (Tol-C12)	185483	9
C8	1.718	0.025	7199	4779	DIESEL (C12-C24)	3353157	127
C10	2.459	0.004	3767	6961	M.OIL (C24-C38)	30008483	2347
C12	3.085	-0.006	494	385	AK-102 (C10-C25)	4193453	144
C14	3.640	-0.001	498	323	AK-103 (C25-C36)	25718318	5134 M
C16	4.130	0.001	204	91			
C18	4.559	-0.010	20942	16266			
C20	5.069	-0.004	9741	14269			
C22	5.589	0.001	46953	16444			
C24	6.020	0.000	116155	30105			
C25	6.215	0.003	149541	35623			
C26	6.388	-0.003	192672	83538			
C28	6.725	0.002	249614	49500			
C32	7.308	-0.001	301815	83744	JP-4 (Tol-C14)	202516	12
C34	7.594	-0.002	255953	217957	BUNKERC (C10-C38)	33397372	3808 M
Filter Peak	8.350	0.006	124584	111418			
C36	7.944	-0.001	179229	56451			
C38	8.379	-0.001	117276	59781			
C40	8.938	0.003	70596	37072			
o-terph	4.762	-0.005	3843	4178	JET-A (C10-C18)	110588	8
Triacon Surr	7.129	0.091	2546702	4343398	JP8 (Tol-C16)	210004	12

M Indicates manual integration within range.

Range Times: NW Diesel(3.091 - 6.020) AK102(2.46 - 6.21) Jet A(2.46 - 4.57)  
 NW M.Oil(6.02 - 8.38) AK103(6.21 - 7.94) OR Diesel(2.46 - 6.72)

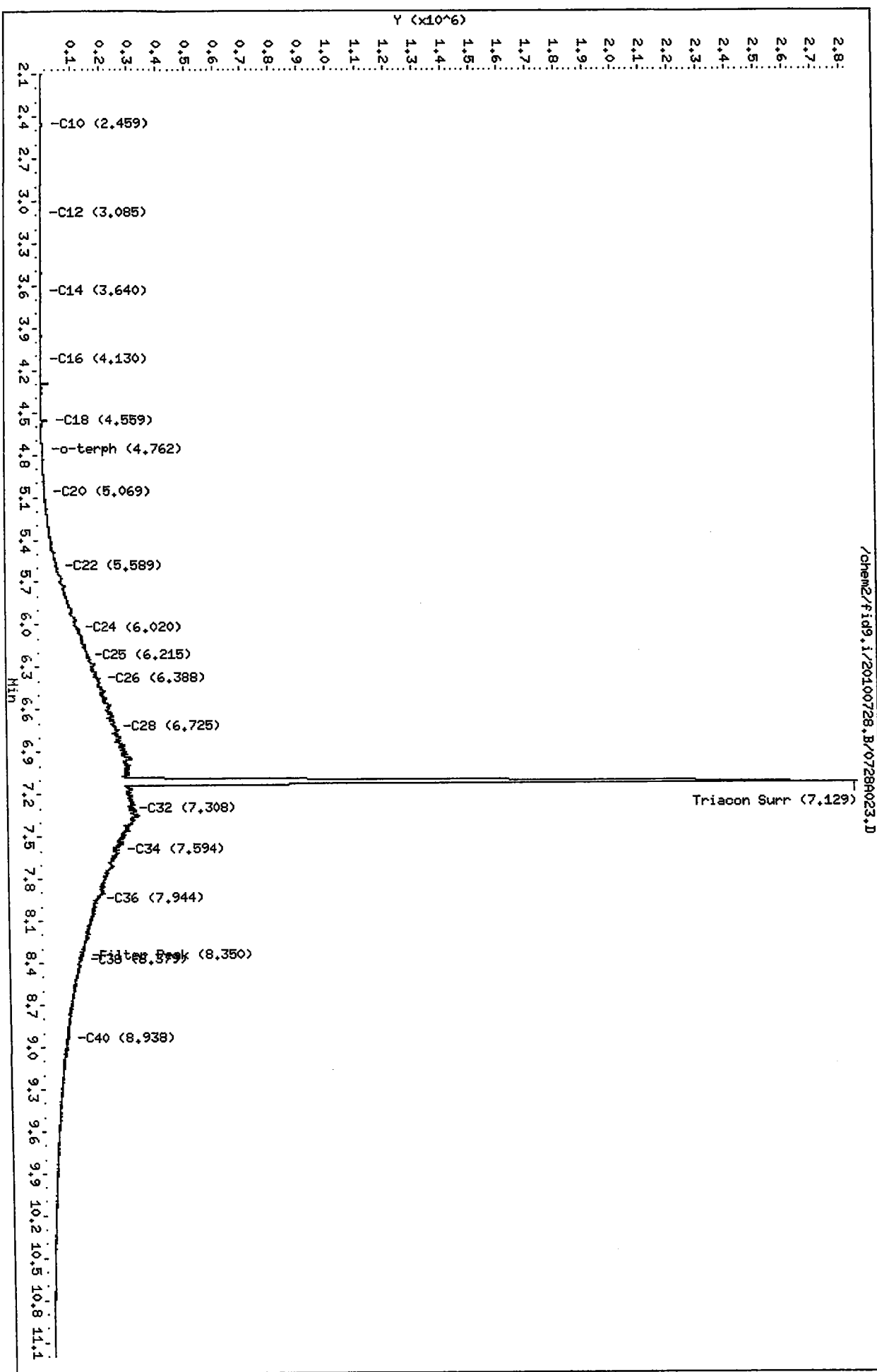
Surrogate	Area	Amount	%Rec
o-Terphenyl	4178	0.2	0.4
Triacontane	4343398	219.0	486.7

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

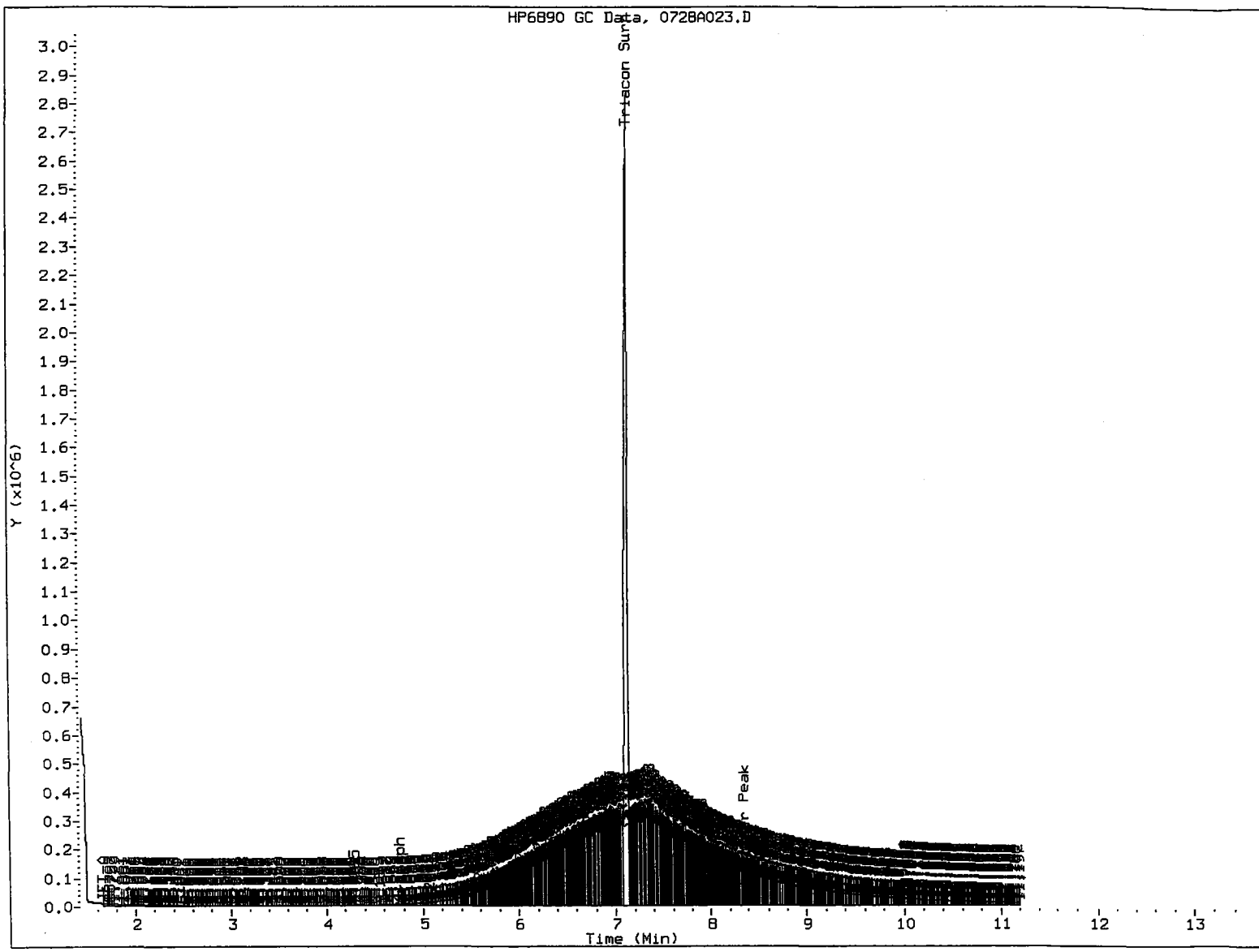
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 Client ID:  
 Sample Info: MOIL 2500  
 Column phase: RTX-1

Instrument: fid9.i  
 Operator: HS  
 Column diameter: 0.25

/chem2/fid9.i/20100728.B/07289023.D







MANUAL INTEGRATION

- 1. Baseline correction
- 2. Poor chromatography
- 3. Peak not found
- 4. Totals calculation
- 5. Other \_\_\_\_\_

Analyst: M

Date: 9/20/10

Analytical Resources Inc.  
 NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100728.B/0728A024.D  
 Method: /chem2/fid9.i/20100728.B/ftphfid9a.m  
 Instrument: fid9.i  
 Operator: MS  
 Report Date: 07/30/2010

ARI ID: MOIL 5000  
 Client ID:  
 Injection: 29-JUL-2010 00:40  
 Dilution Factor: 1  
 Macro: 28-JUN-2010

FID:9 RESULTS							
Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.505	-0.031	22596	103344	GAS (Tol-C12)	263209	13
C8	1.724	0.030	8164	11347	DIESEL (C12-C24)	6666776	253
C10	2.462	0.006	6166	7110	M.OIL (C24-C38)	59430781	4648
C12	3.104	0.013	3368	1784	AK-102 (C10-C25)	8147281	280
C14	3.646	0.005	615	350	AK-103 (C25-C36)	51523751	10286 M
C16	4.129	0.001	608	343			
C18	4.560	-0.009	37045	30543			
C20	5.070	-0.002	19428	26259			
C22	5.582	-0.007	96098	68803			
C24	6.023	0.003	234560	106000			
C25	6.207	-0.006	297700	255615			
C26	6.393	0.001	373459	230456			
C28	6.726	0.003	495735	196084			
C32	7.305	-0.004	602415	260738	JP-4 (Tol-C14)	285229	17
C34	7.597	0.000	510745	472002	BUNKERC (C10-C38)	66134433	7540 M
Filter Peak	8.346	0.002	226260	178664			
C36	7.943	-0.001	358012	278298			
C38	8.379	-0.001	210178	74132			
C40	8.935	0.000	96401	47669			
o-terph	4.761	-0.006	24528	21927	JET-A (C10-C18)	180059	13
Triacon Surr	7.160	0.122	3196100	8687632	JP8 (Tol-C16)	304722	17

M Indicates manual integration within range.

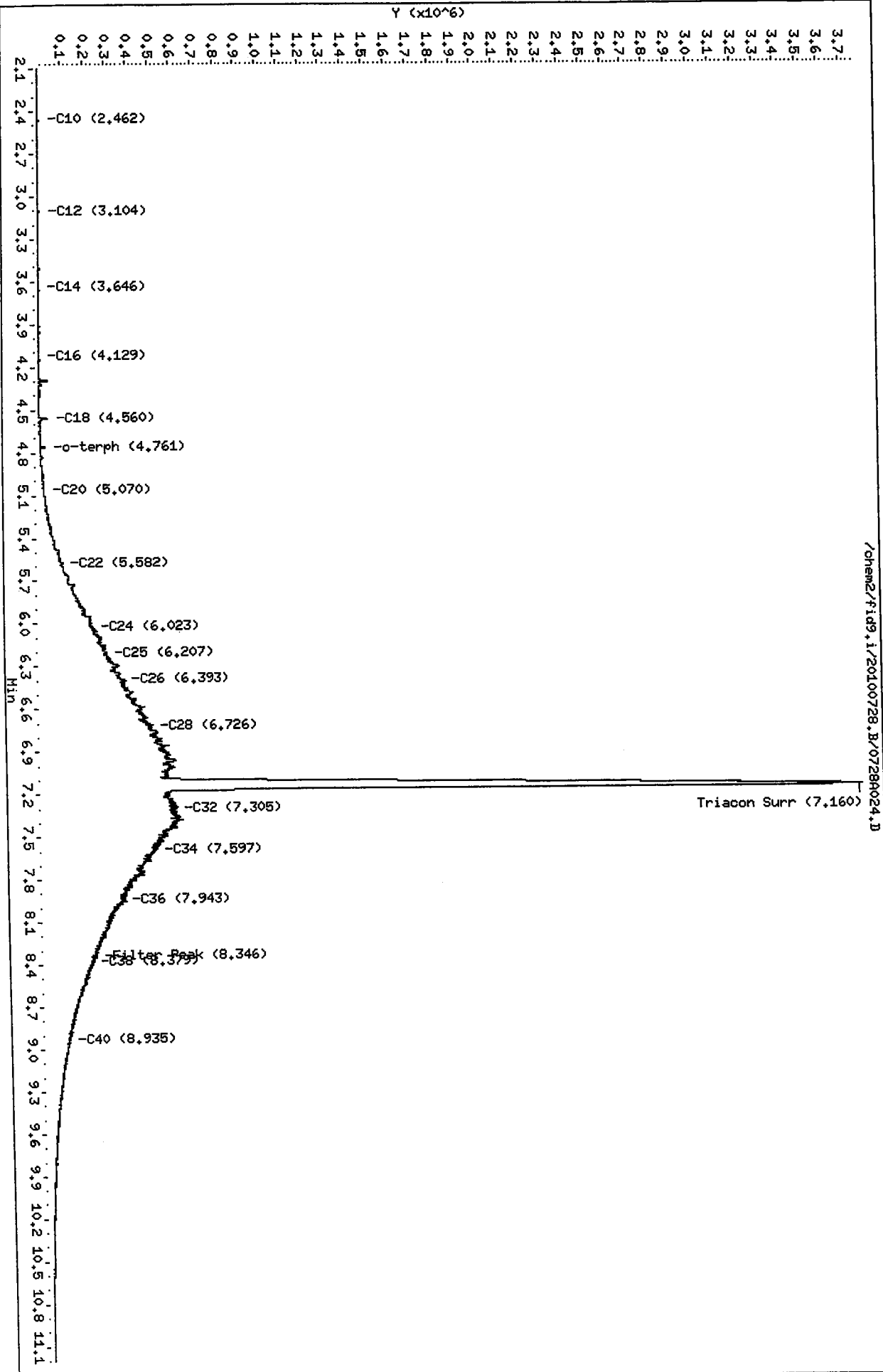
Range Times: NW Diesel(3.091 - 6.020) AK102(2.46 - 6.21) Jet A(2.46 - 4.57)  
 NW M.Oil(6.02 - 8.38) AK103(6.21 - 7.94) OR Diesel(2.46 - 6.72)

Surrogate	Area	Amount	%Rec
o-Terphenyl	21927	0.9	1.9
Triacontane	8687632	438.1	973.5

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

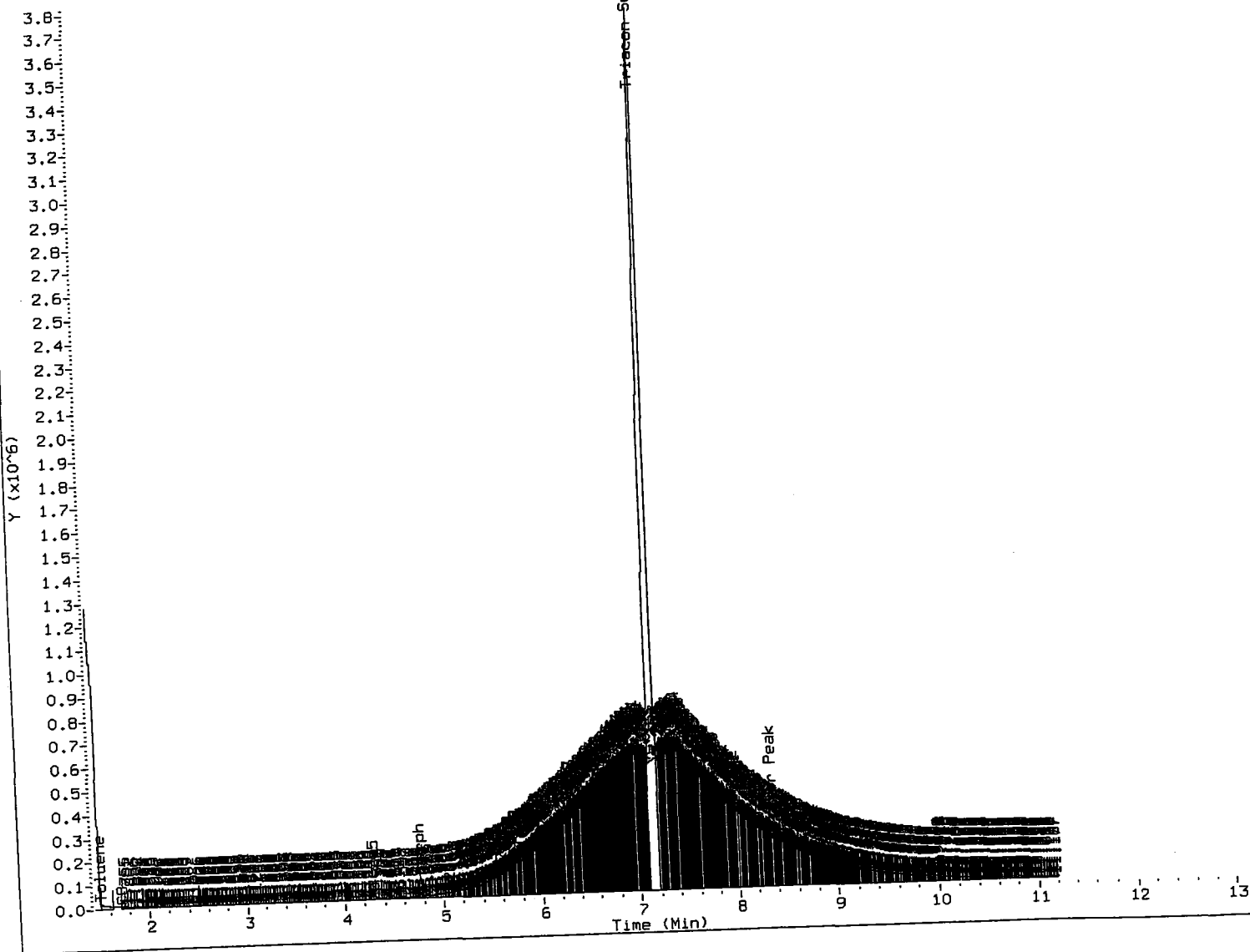
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Client ID:  
Sample Info: M01L 5000  
Column phase: RTX-1

Instrument: fid9.1  
Operator: HS  
Column diameter: 0.25



/chem2/fid9.1/20100728.B/0728024.D

HP6890 GC Data, 0728A024.D



MANUAL INTEGRATION

- 1. Baseline correction
- 2. Poor chromatography
- 3. Peak not found
- 4. Totals calculation
- 5. Other \_\_\_\_\_

Analyst: MA

Date: 7/30/12

Analytical Resources Inc.  
 NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100728.B/0728A025.D  
 Method: /chem2/fid9.i/20100728.B/ftphfid9a.m  
 Instrument: fid9.i  
 Operator: MS  
 Report Date: 07/30/2010

ARI ID: MOIL ICV  
 Client ID:  
 Injection: 29-JUL-2010 01:01  
 Dilution Factor: 1  
 Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.517	-0.019	9568	56363	GAS (Tol-C12)	190702	9
C8	1.697	0.003	5379	6116	DIESEL (C12-C24)	677543	26
C10	2.453	-0.003	2206	3494	M.OIL (C24-C38)	5773753	452
C12	3.084	-0.007	333	287	AK-102 (C10-C25)	857527	30
C14	3.646	0.005	183	82	AK-103 (C25-C36)	4998197	998 M
C16	4.126	-0.002	42	25			
C18	4.562	-0.007	4629	3455			
C20	5.075	0.002	1877	2081			
C22	5.592	0.004	9446	5227			
C24	6.020	0.000	22370	8391			
C25	6.201	-0.012	39707	65163			
C26	6.392	0.000	36721	13853			
C28	6.716	-0.007	75296	117760			
C32	7.311	0.002	59183	16220	JP-4 (Tol-C14)	199835	12
C34	7.599	0.003	44801	35701	BUNKERC (C10-C38)	6481420	739 M
Filter Peak	8.343	0.000	21659	10132			
C36	7.947	0.002	30815	9065			
C38	8.381	0.000	20938	14432			
C40	8.931	-0.004	13390	8876			
o-terph	4.764	-0.003	832	933	JET-A (C10-C18)	55969	4
Triacon Surr	7.090	0.052	914145	806969	JP8 (Tol-C16)	204147	12

M Indicates manual integration within range.

Range Times: NW Diesel(3.091 - 6.020) AK102(2.46 - 6.21) Jet A(2.46 - 4.57)  
 NW M.Oil(6.02 - 8.38) AK103(6.21 - 7.94) OR Diesel(2.46 - 6.72)

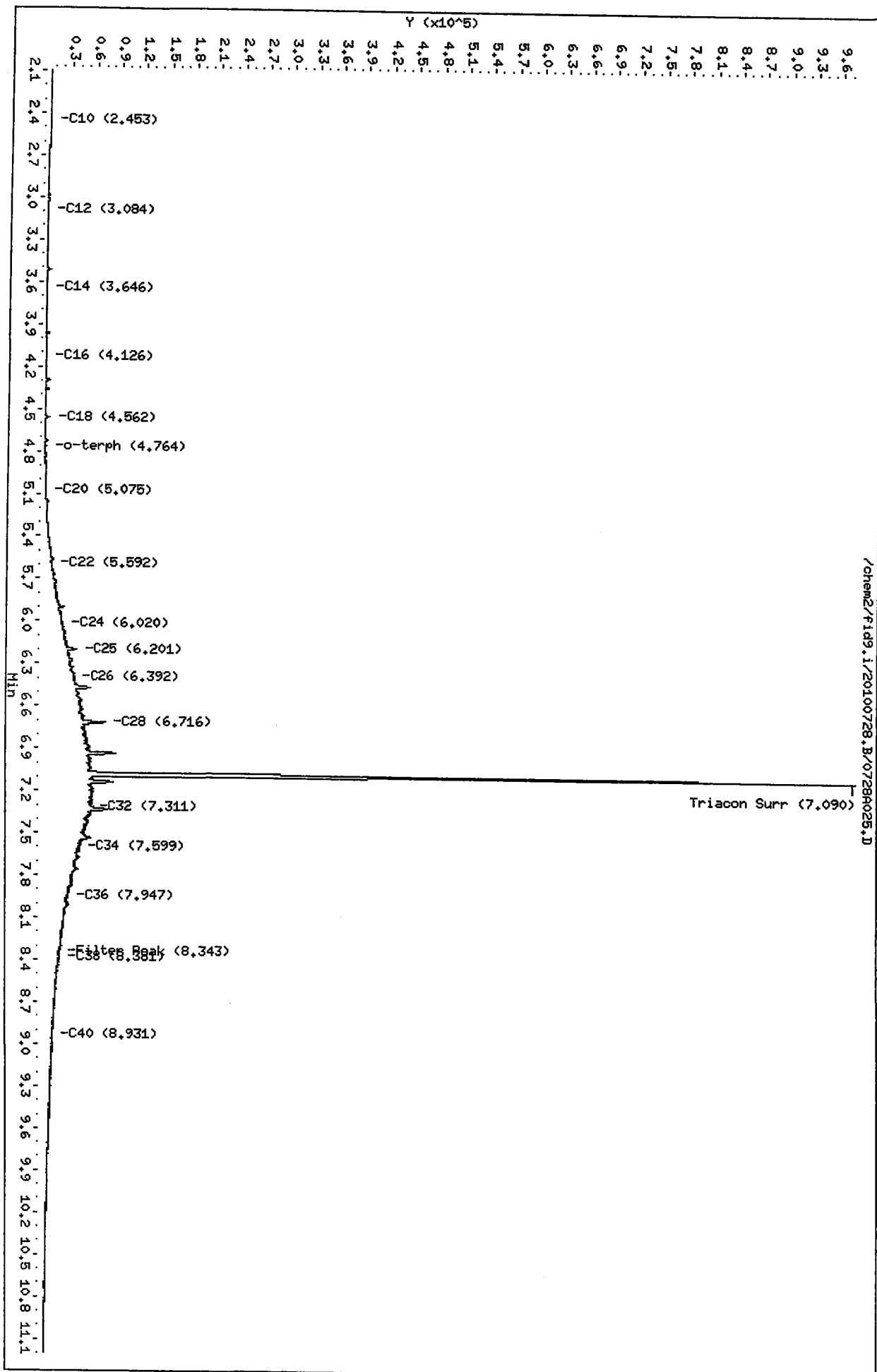
Surrogate	Area	Amount	%Rec
o-Terphenyl	933	0.0	0.1
Triacantane	806969	40.7	90.4

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

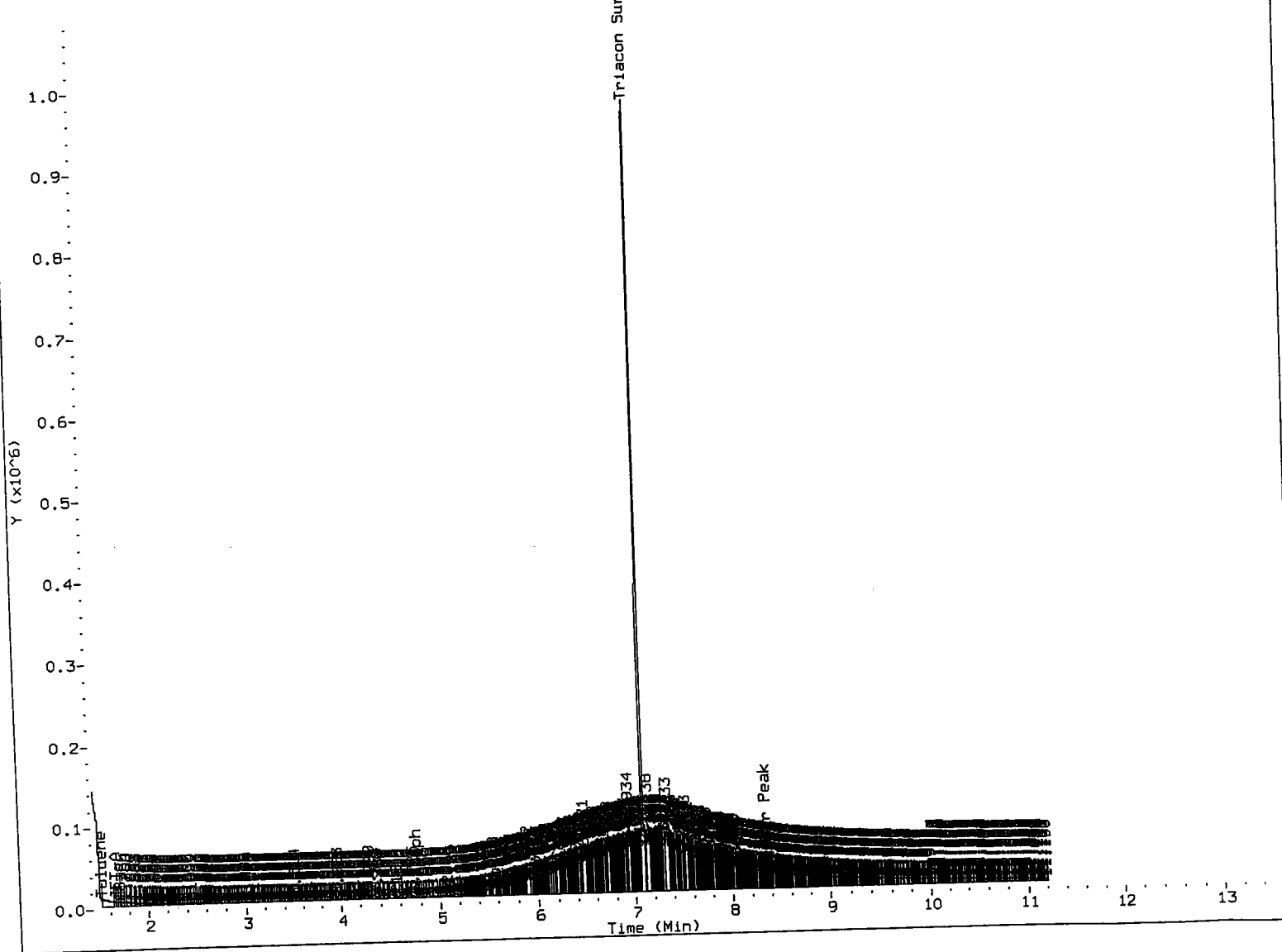
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 Date: 29-JUL-2010 01:01  
 Client ID:  
 Sample Info: M01L ICV  
 Column phase: RTX-1

Instrument: fid9.i  
 Operator: HS  
 Column diameter: 0.25

/chem2/fid9.i/20100728.B/0728A025.D



HP6890 GC Data, 0728A025.D



MANUAL INTEGRATION

- 1. Baseline correction
- 2. Poor chromatography
- 3. Peak not found
- 4. Totals calculation
- 5. Other \_\_\_\_\_

Analyst: M

Date: 2/20/02

ARI Job No. : DIES Method: ftpfid9a.m Instrument: fid9.i Date: 28-JUL-2010

Time	Filename	LabID	ClientID	DF	Manually Integrated Compounds
2024	0728A012.D	DIESEL	50	1	o-terph,
2045	0728A013.D	DIESEL	100	1	o-terph,
2107	0728A014.D	DIESEL	250	1	o-terph,
2128	0728A015.D	DIESEL	500	1	o-terph,
2149	0728A016.D	DIESEL	1000	1	o-terph,
2211	0728A017.D	DIESEL	2500	1	o-terph,
2232	0728A018.D	DIESEL	ICV	1	o-terph,
2253	0728A019.D	MOIL	100	1	Triacon Surr,
2315	0728A020.D	MOIL	250	1	Triacon Surr,
2336	0728A021.D	MOIL	500	1	Triacon Surr,
2357	0728A022.D	MOIL	1000	1	Triacon Surr,
0018	0728A023.D	MOIL	2500	1	Triacon Surr,
0040	0728A024.D	MOIL	5000	1	Triacon Surr,
0101	0728A025.D	MOIL	ICV	1	Triacon Surr,



Analytical Resources Inc.  
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100728.B/0728raw.b/0728A012.D ARI ID: DIESEL 50  
Method: /chem2/fid9.i/20100728.B/ftphfid9a.m Client ID:

Instrument: fid9.i

Injection: 28-JUL-2010 20:24  
Dilution Factor: 1

Operator: MS

Macro: 28-JUN-2010

Report Date: 07/30/2010

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.545	0.009	7102	15475	GAS (Tol-C12)	304122	14
C8	1.699	0.005	4935	5847	DIESEL (C12-C24)	1257340	48
C10	2.459	0.004	6197	8547	M.OIL (C24-C38)	72828	6
C12	3.101	0.010	13983	8220	AK-102 (C10-C25)	1389468	48
C14	3.623	-0.018	9291	10648	AK-103 (C25-C36)	50537	10
C16	4.138	0.009	11473	15225			
C18	4.565	-0.004	9397	11253			
C20	5.072	-0.001	4990	3711			
C22	5.592	0.004	2910	2637			
C24	6.019	-0.001	1136	455			
C25	6.225	0.013	442	364			
C26	6.395	0.003	185	147			
C28	6.710	-0.013	1703	1464			
C32	7.303	-0.006	467	137	JP-4 (Tol-C14)	499108	30
C34	7.594	-0.002	729	202	BUNKERC (C10-C38)	1459349	166
Filter Peak	8.346	0.003	768	227			
C36	7.939	-0.006	787	1098			
C38	8.383	0.003	750	640			
C40	8.938	0.003	800	514			
o-terph	4.760	-0.007	385436	262259	JET-A (C10-C18)	997196	72
Triacon Surr	7.038	0.000	197	80	JP8 (Tol-C16)	827113	47

M Indicates manual integration within range.

Range Times: NW Diesel(3.091 - 6.020) AK102(2.46 - 6.21) Jet A(2.46 - 4.57)  
NW M.Oil(6.02 - 8.38) AK103(6.21 - 7.94) OR Diesel(2.46 - 6.72)

Surrogate	Area	Amount	%Rec
o-Terphenyl	262259	10.2	22.6
Triacontane	80	0.0	0.0

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

*MS 7/30/10*



Analytical Resources Inc.  
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100728.B/0728raw.b/0728A013.D ARI ID: DIESEL 100  
 Method: /chem2/fid9.i/20100728.B/ftphfid9a.m Client ID:  
 Instrument: fid9.i Injection: 28-JUL-2010 20:45  
 Operator: MS Dilution Factor: 1  
 Report Date: 07/30/2010 Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.545	0.009	9394	12882	GAS (Tol-C12)	449059	21
C8	1.703	0.009	5426	7074	DIESEL (C12-C24)	2552776	97
C10	2.452	-0.003	3226	2569	M.OIL (C24-C38)	87640	7
C12	3.103	0.012	29285	17940	AK-102 (C10-C25)	2814752	97
C14	3.659	0.018	59261	58165	AK-103 (C25-C36)	61637	12
C16	4.123	-0.005	19941	17906			
C18	4.567	-0.002	19222	19309			
C20	5.075	0.002	10542	10663			
C22	5.588	0.000	5975	5552			
C24	6.023	0.003	2217	1308			
C25	6.197	-0.015	2531	4056			
C26	6.406	0.015	394	352			
C28	6.710	-0.013	3648	2966			
C32	7.307	-0.002	362	195	JP-4 (Tol-C14)	845763	52
C34	7.593	-0.004	637	240	BUNKERC (C10-C38)	2894663	330
Filter Peak	8.338	-0.005	643	405			
C36	7.942	-0.002	671	500			
C38	8.378	-0.002	638	365			
C40	8.938	0.002	649	435			
o-terph	4.762	-0.005	723348	506270	JET-A (C10-C18)	2010708	146
Triacon Surr	7.036	-0.002	119	42	JP8 (Tol-C16)	1503559	85

M Indicates manual integration within range.

Range Times: NW Diesel(3.091 - 6.020) AK102(2.46 - 6.21) Jet A(2.46 - 4.57)  
 NW M.Oil(6.02 - 8.38) AK103(6.21 - 7.94) OR Diesel(2.46 - 6.72)

Surrogate	Area	Amount	%Rec
o-Terphenyl	506270	19.7	43.7
Triacontane	42	0.0	0.0

*Max D/11*

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

Data File: /chem2/fid9.i/20100728.B/0728r-aw,b/0728A013.D

Date: 28-JUL-2010 20:45

Client ID:

Sample Info: DIESEL 100

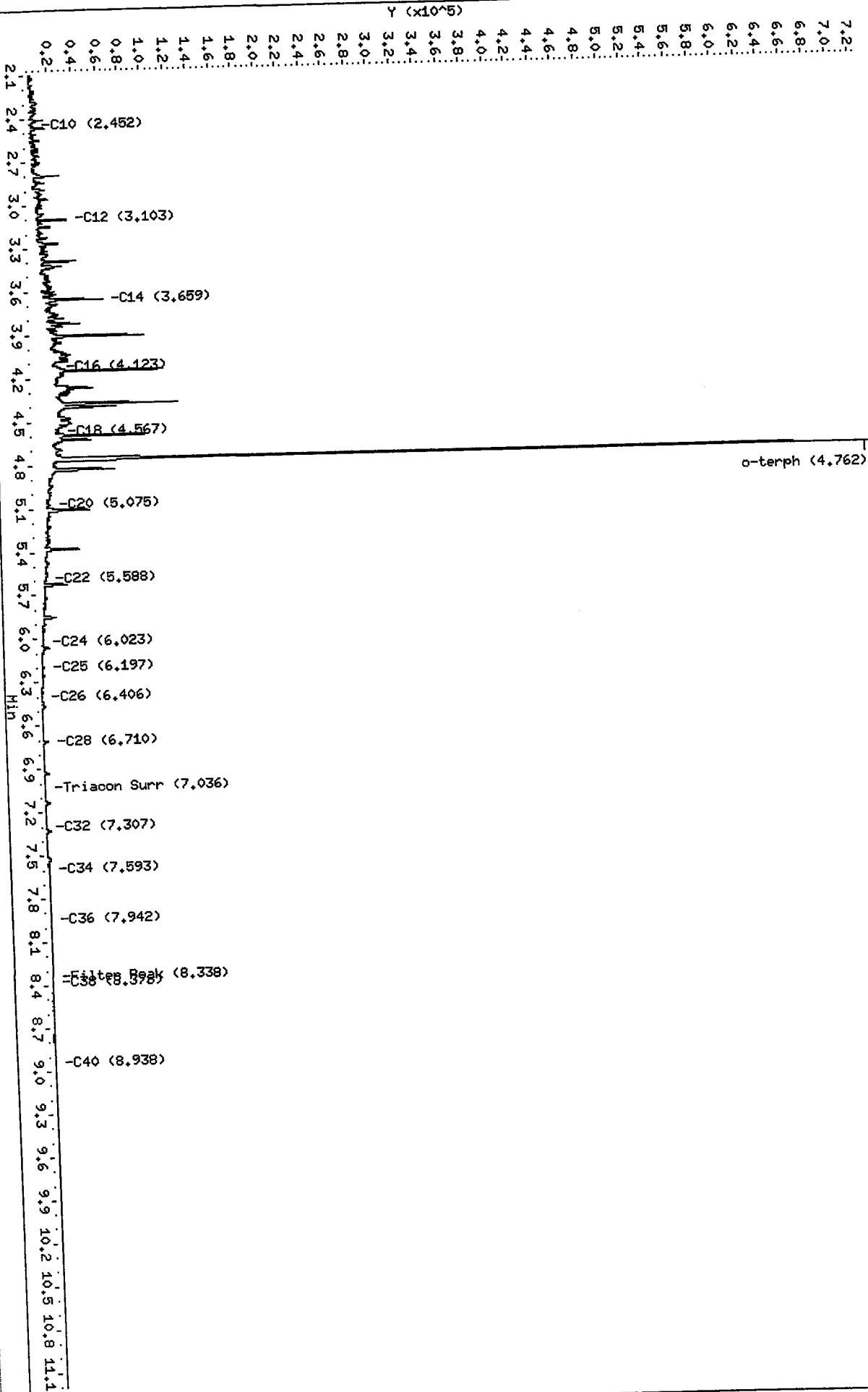
Column phase: RTX-1

Instrument: fid9.i

Operator: MS

Column diameter: 0.25

/chem2/fid9.i/20100728.B/0728r-aw,b/0728A013.D



Analytical Resources Inc.  
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100728.B/0728raw.b/0728A014.D ARI ID: DIESEL 250  
 Method: /chem2/fid9.i/20100728.B/ftphfid9a.m Client ID:  
 Instrument: fid9.i Injection: 28-JUL-2010 21:07  
 Operator: MS Dilution Factor: 1  
 Report Date: 07/30/2010 Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.542	0.006	14752	16460	GAS (Tol-C12)	999032	48
C8	1.700	0.006	8159	9848	DIESEL (C12-C24)	6436255	244
C10	2.450	-0.005	6508	5183	M.OIL (C24-C38)	128061	10
C12	3.102	0.011	80325	46536	AK-102 (C10-C25)	7125565	245
C14	3.657	0.016	148765	146845	AK-103 (C25-C36)	95793	19
C16	4.122	-0.007	48814	34422			
C18	4.567	-0.002	47241	38471			
C20	5.073	0.001	26043	28336			
C22	5.589	0.000	14890	4727			
C24	6.028	0.008	5981	4805			
C25	6.201	-0.012	6774	13133			
C26	6.387	-0.005	1514	1078			
C28	6.716	-0.007	5763	5256			
C32	7.308	-0.001	228	49	JP-4 (Tol-C14)	2097448	128
C34	7.600	0.003	463	110	BUNKERC (C10-C38)	7233913	825
Filter Peak	8.344	0.001	446	316			
C36	7.941	-0.004	482	433			
C38	8.377	-0.004	442	324			
C40	8.935	0.000	425	91			
o-terph	4.771	0.004	1395660	1293787	JET-A (C10-C18)	5066220	367
Triacon Surr	7.038	0.000	49	14	JP8 (Tol-C16)	3698235	210

M Indicates manual integration within range.

Range Times: NW Diesel(3.091 - 6.020) AK102(2.46 - 6.21) Jet A(2.46 - 4.57)  
 NW M.Oil(6.02 - 8.38) AK103(6.21 - 7.94) OR Diesel(2.46 - 6.72)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1293787	50.2	111.6
Triacotane	14	0.0	0.0

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

*M 7/30/10*

Data File: /chem2/fid9.i/20100728.B/0728raw.b/0728A014.D

Date: 28-JUL-2010 21:07

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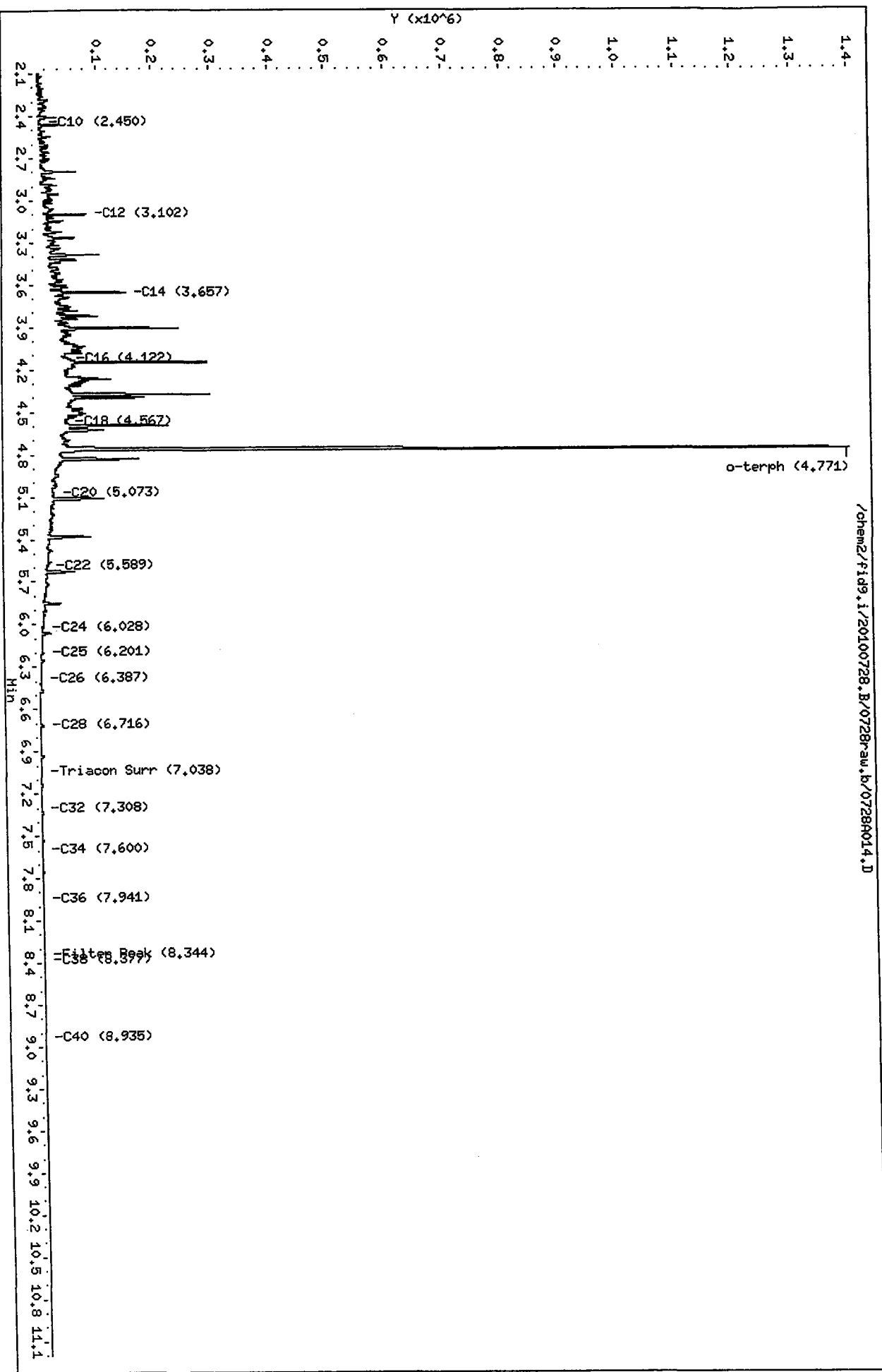
Sample Info: DIESEL 250

Column phase: RTX-1

Instrument: fid9.i

Operator: MS

Column diameter: 0.25



Analytical Resources Inc.  
 NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100728.B/0728raw.b/0728A015.D ARI ID: DIESEL 500  
 Method: /chem2/fid9.i/20100728.B/ftphfid9a.m Client ID:  
 Instrument: fid9.i Injection: 28-JUL-2010 21:28  
 Operator: MS Dilution Factor: 1  
 Report Date: 07/30/2010 Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.550	0.014	24092	21960	GAS (Tol-C12)	1901504	91
C8	1.707	0.013	12840	13683	DIESEL (C12-C24)	13073976	497
C10	2.453	-0.002	10841	4396	M.OIL (C24-C38)	182963	14
C12	3.103	0.012	165409	95735	AK-102 (C10-C25)	14464860	498
C14	3.658	0.017	311239	296922	AK-103 (C25-C36)	133392	27
C16	4.122	-0.006	99870	66038			
C18	4.564	-0.005	95431	110341			
C20	5.074	0.002	52479	17444			
C22	5.584	-0.004	30444	11329			
C24	6.031	0.011	12477	13304			
C25	6.201	-0.012	7950	11851			
C26	6.392	0.000	3328	3066			
C28	6.713	-0.010	2681	3159			
C32	7.307	-0.002	133	71	JP-4 (Tol-C14)	4128068	252
C34	7.599	0.003	311	54	BUNKERC (C10-C38)	14605806	1665
Filter Peak	8.347	0.003	266	158			
C36	7.946	0.002	325	199			
C38	8.380	0.000	252	200			
C40	8.933	-0.002	215	132			
o-terph	4.780	0.013	2312150	2615553	JET-A (C10-C18)	10357341	749
Triacon Surr	7.035	-0.003	24	5	JP8 (Tol-C16)	7327543	416

M Indicates manual integration within range.

Range Times: NW Diesel(3.091 - 6.020) AK102(2.46 - 6.21) Jet A(2.46 - 4.57)  
 NW M.Oil(6.02 - 8.38) AK103(6.21 - 7.94) OR Diesel(2.46 - 6.72)

Surrogate	Area	Amount	%Rec
o-Terphenyl	2615553	101.5	225.6
Triacontane	5	0.0	0.0

*Mu 7/27/10*

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

Data File: /chem2/fid9.i/20100728.B/0728raw.b/0728r015.D

Date: 28-JUL-2010 21:28

Client ID:

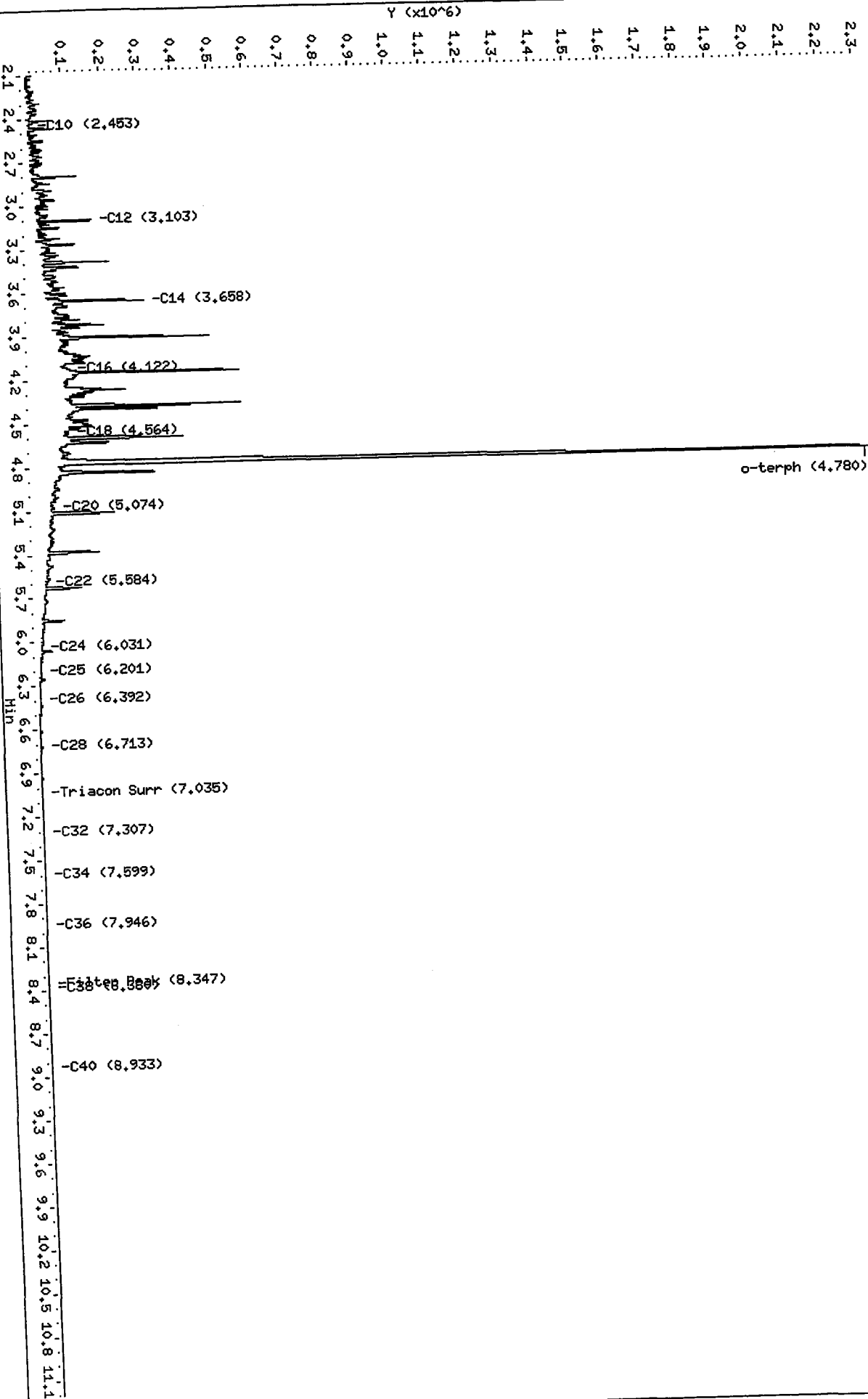
Sample Info: DIESEL 500

Column phase: RTX-1

Instrument: fid9.i

Operator: HS  
Column diameter: 0.25

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Analytical Resources Inc.  
 NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100728.B/0728raw.b/0728A016.D ARI ID: DIESEL 1000

Method: /chem2/fid9.i/20100728.B/ftphfid9a.m

Client ID:

Instrument: fid9.i

Injection: 28-JUL-2010 21:49

Operator: MS

Dilution Factor: 1

Report Date: 07/30/2010

Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.522	-0.014	10876	15528	GAS (Tol-C12)	3531545	168
C8	1.681	-0.013	9803	11090	DIESEL (C12-C24)	25634454	974
C10	2.453	-0.002	18978	7692	M.OIL (C24-C38)	394336	31
C12	3.105	0.014	327593	189038	AK-102 (C10-C25)	28360210	976
C14	3.660	0.019	587586	585940	AK-103 (C25-C36)	290957	58
C16	4.123	-0.005	194975	156606			
C18	4.571	0.002	188327	195568			
C20	5.075	0.003	102065	48020			
C22	5.588	-0.001	60397	13108			
C24	6.012	-0.008	28768	31861			
C25	6.201	-0.011	17610	33377			
C26	6.390	-0.002	7211	10254			
C28	6.716	-0.006	7614	9107			
C32	7.302	-0.007	202	83	JP-4 (Tol-C14)	7631157	465
C34	7.591	-0.005	294	192	BUNKERC (C10-C38)	28658250	3268
Filter Peak	8.345	0.002	161	90			
C36	7.947	0.002	235	162			
C38	8.386	0.006	146	81			
C40	8.938	0.002	67	15			
o-terph	4.795	0.028	3307229	5312362	JET-A (C10-C18)	20311515	1470
Triacon Surr	7.032	-0.006	267	242	JP8 (Tol-C16)	14220053	808

M Indicates manual integration within range.

Range Times: NW Diesel(3.091 - 6.020) AK102(2.46 - 6.21) Jet A(2.46 - 4.57)  
 NW M.Oil(6.02 - 8.38) AK103(6.21 - 7.94) OR Diesel(2.46 - 6.72)

Surrogate	Area	Amount	%Rec
o-Terphenyl	5312362	206.2	458.2
Triacotane	242	0.0	0.0

*Handwritten signature*

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

Data File: /chem2/fid9.i/20100728.B/0728r-aw.b/0728R016.D

Date: 28-JUL-2010 21:49

Client ID:

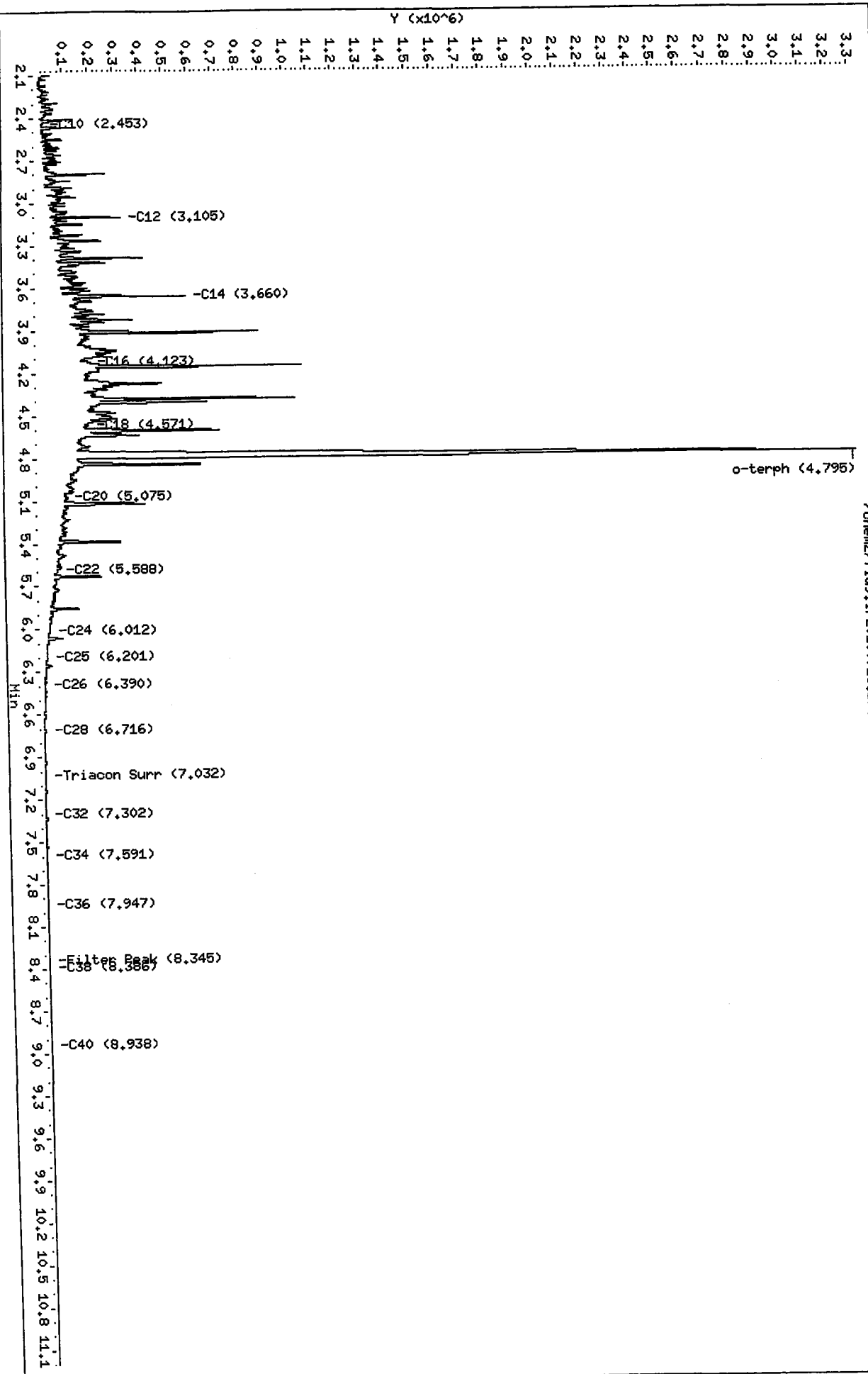
Sample Info: DIESEL 1000

Column phase: RTX-1

Instrument: fid9.i

Operator: MS

Column diameter: 0.25



Analytical Resources Inc.  
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100728.B/0728raw.b/0728A017.D ARI ID: DIESEL 2500  
 Method: /chem2/fid9.i/20100728.B/ftphfid9a.m Client ID:  
 Instrument: fid9.i Injection: 28-JUL-2010 22:11  
 Operator: MS Dilution Factor: 1  
 Report Date: 07/30/2010 Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.527	-0.009	13560	11562	GAS (Tol-C12)	8824002	420
C8	1.696	0.002	11080	4589	DIESEL (C12-C24)	78583836	2984
C10	2.446	-0.009	54486	45945	M.OIL (C24-C38)	1069546	84
C12	3.108	0.017	766741	530976	AK-102 (C10-C25)	85583799	2946
C14	3.623	-0.018	472383	536342	AK-103 (C25-C36)	814815	163
C16	4.129	0.001	485188	391044			
C18	4.575	0.006	464619	138288			
C20	5.065	-0.008	324441	293811			
C22	5.599	0.011	159352	44294			
C24	6.014	-0.006	74943	92274			
C25	6.200	-0.013	55517	125809			
C26	6.393	0.001	18866	27921			
C28	6.714	-0.009	18491	25629			
C32	7.300	-0.009	811	206	JP-4 (Tol-C14)	19257288	1174
C34	7.598	0.002	667	236	BUNKERC (C10-C38)	86411627	9852
Filter Peak	8.352	0.008	294	163			
C36	7.939	-0.006	456	454			
C38	8.372	-0.008	289	303			
C40	8.930	-0.005	144	37			
o-terph	4.745	-0.022	442051	349242	JET-A (C10-C18)	49526362	3584
Triacon Surr	7.036	-0.002	1327	1487	JP8 (Tol-C16)	35611639	2024

M Indicates manual integration within range.

Range Times: NW Diesel(3.091 - 6.020) AK102(2.46 - 6.21) Jet A(2.46 - 4.57)  
 NW M.Oil(6.02 - 8.38) AK103(6.21 - 7.94) OR Diesel(2.46 - 6.72)

Surrogate	Area	Amount	%Rec
o-Terphenyl	349242	13.6	30.1
Triacotane	1487	0.1	0.2

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

*Handwritten signature: M & P 874*

Data File: /chem2/fid9.i/20100728.B/0728r-au.b/0728A017.D

Date: 28-JUL-2010 22:11

Client ID:

Sample Info: DIESEL 2500

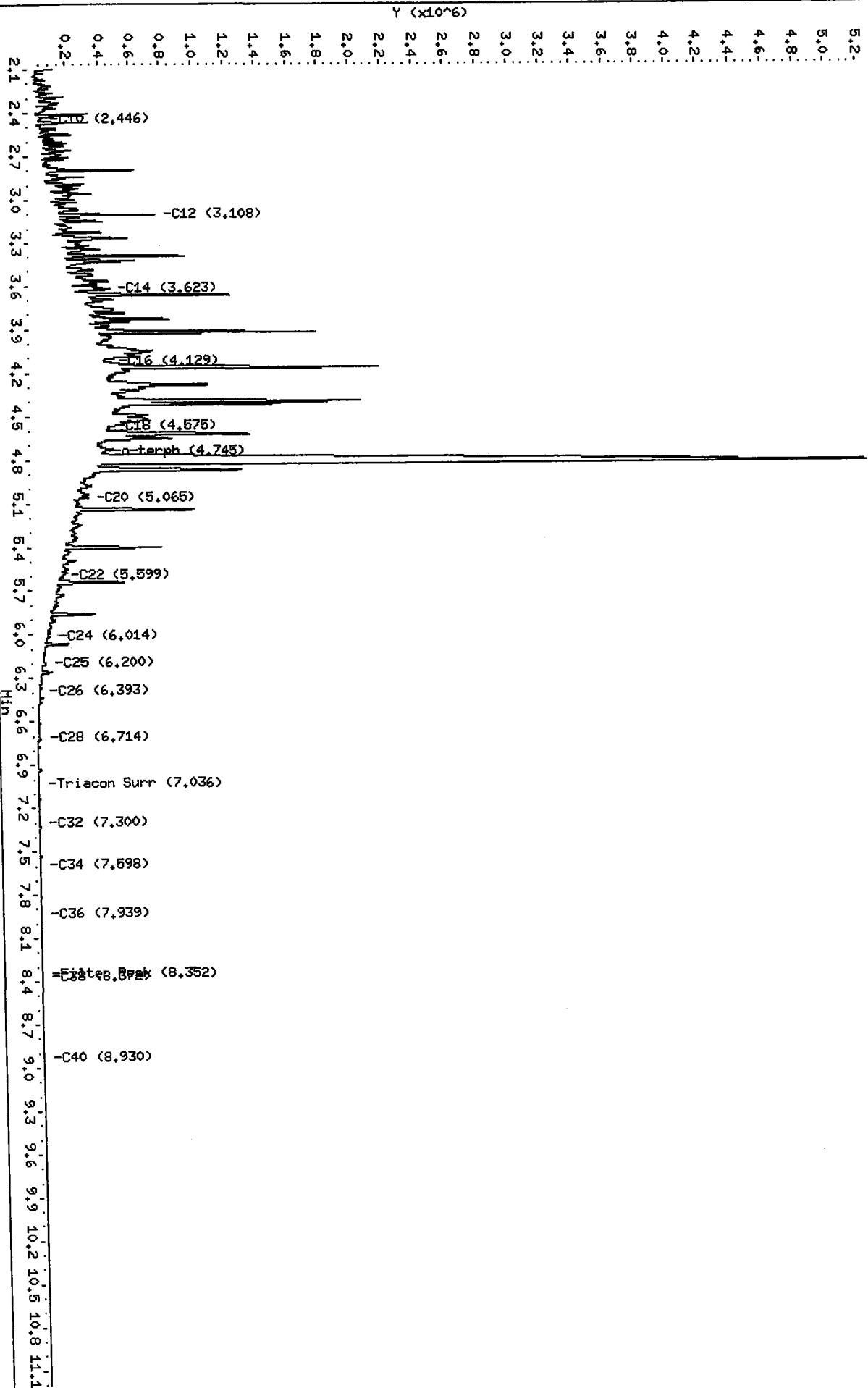
Column phase: RTX-1

Instrument: fid9.i

Operator: MS

Column diameter: 0.25

/chem2/fid9.i/20100728.B/0728r-au.b/0728A017.D



Analytical Resources Inc.  
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100728.B/0728raw.b/0728A019.D ARI ID: MOIL 100  
 Method: /chem2/fid9.i/20100728.B/ftphfid9a.m Client ID:  
 Instrument: fid9.i Injection: 28-JUL-2010 22:53  
 Operator: MS Dilution Factor: 1  
 Report Date: 07/30/2010 Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.544	0.008	7458	18695	GAS (Tol-C12)	141901	7
C8	1.726	0.033	5158	6296	DIESEL (C12-C24)	170722	6
C10	2.453	-0.002	2104	2277	M.OIL (C24-C38)	1637902	128
C12	3.087	-0.004	132	32	AK-102 (C10-C25)	227313	8
C14	3.638	-0.003	73	40	AK-103 (C25-C36)	1430764	286
C16	4.130	0.002	69	41			
C18	4.564	-0.005	811	866			
C20	5.075	0.003	500	282			
C22	5.588	-0.001	2108	500			
C24	6.024	0.004	5281	1867			
C25	6.222	0.010	6965	4086			
C26	6.393	0.001	8433	4859			
C28	6.715	-0.008	26196	37657			
C32	7.310	0.001	14515	3993	JP-4 (Tol-C14)	147735	9
C34	7.596	0.000	11767	4821	BUNKERC (C10-C38)	1833277	209
Filter Peak	8.344	0.001	6091	3946			
C36	7.940	-0.005	8533	7979			
C38	8.385	0.005	5855	2782			
C40	8.936	0.000	3917	1842			
o-terph	4.766	-0.001	1479	1425	JET-A (C10-C18)	40423	3
Triacon Surr	7.036	-0.002	13527	12287	JP8 (Tol-C16)	151586	9

M Indicates manual integration within range.

Range Times: NW Diesel(3.091 - 6.020) AK102(2.46 - 6.21) Jet A(2.46 - 4.57)  
 NW M.Oil(6.02 - 8.38) AK103(6.21 - 7.94) OR Diesel(2.46 - 6.72)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1425	0.1	0.1
Triacotane	12287	0.6	1.4

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

*M+1396*

Data File: /chem2/fid9.i/20100728.B/0728raw.b/0728R019.D

Date: 28-JUL-2010 22:53

Client ID:

Sample Info: MOIL 100

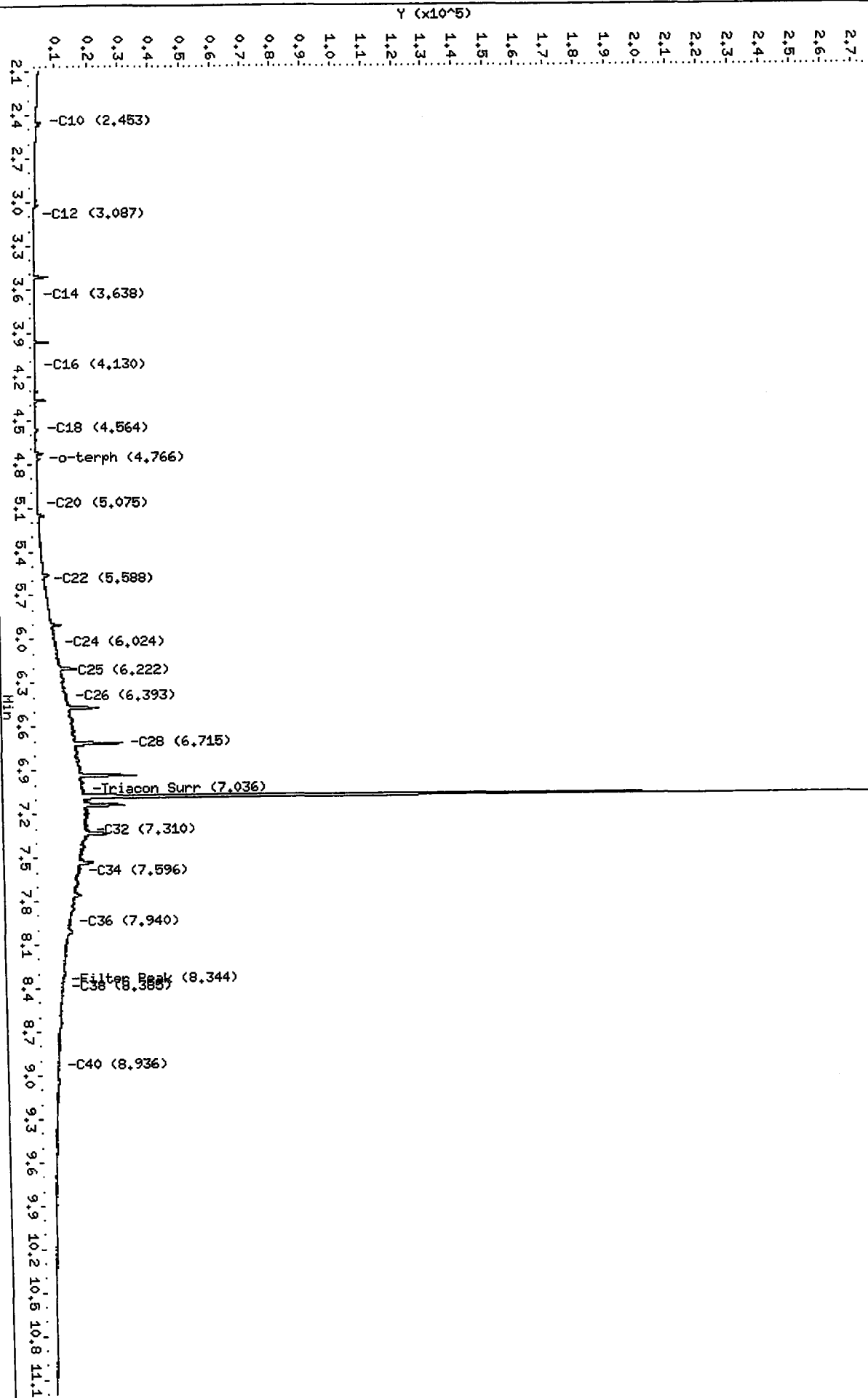
Column phase: RTX-1

Instrument: fid9.i

Operator: HS

Column diameter: 0.25

/chem2/fid9.i/20100728.B/0728raw.b/0728R019.D



Analytical Resources Inc.  
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100728.B/0728raw.b/0728A020.D ARI ID: MOIL 250  
 Method: /chem2/fid9.i/20100728.B/ftphfid9a.m Client ID:  
 Instrument: fid9.i Injection: 28-JUL-2010 23:15  
 Operator: MS Dilution Factor: 1  
 Report Date: 07/30/2010 Macro: 28-JUN-2010

FID:9 RESULTS							
Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.542	0.006	9497	26573	GAS (Tol-C12)	196853	9
C8	1.701	0.007	5948	3882	DIESEL (C12-C24)	365810	14
C10	2.453	-0.002	2442	3279	M.OIL (C24-C38)	3704698	290
C12	3.084	-0.007	295	172	AK-102 (C10-C25)	480434	17
C14	3.641	0.000	143	28	AK-103 (C25-C36)	3234984	646
C16	4.130	0.002	41	6			
C18	4.564	-0.005	1875	1532			
C20	5.076	0.003	1034	1260			
C22	5.593	0.005	5116	2268			
C24	6.019	-0.001	12501	3919			
C25	6.217	0.004	16132	5120			
C26	6.394	0.003	20541	11264			
C28	6.719	-0.004	29297	45978			
C32	7.310	0.001	33294	13189	JP-4 (Tol-C14)	205495	13
C34	7.596	0.000	26975	12175	BUNKERC (C10-C38)	4105098	468
Filter Peak	8.341	-0.002	13586	4242			
C36	7.941	-0.004	19049	9333			
C38	8.372	-0.008	13101	10702			
C40	8.931	-0.004	8356	5723			
o-terph	4.766	-0.001	970	1169	JET-A (C10-C18)	53412	4
Triacon Surr	7.041	0.003	32829	14153	JP8 (Tol-C16)	208886	12

M Indicates manual integration within range.  
 Range Times: NW Diesel(3.091 - 6.020) AK102(2.46 - 6.21) Jet A(2.46 - 4.57)  
 NW M.Oil(6.02 - 8.38) AK103(6.21 - 7.94) OR Diesel(2.46 - 6.72)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1169	0.0	0.1
Triacontane	14153	0.7	1.6

*Not 13070*

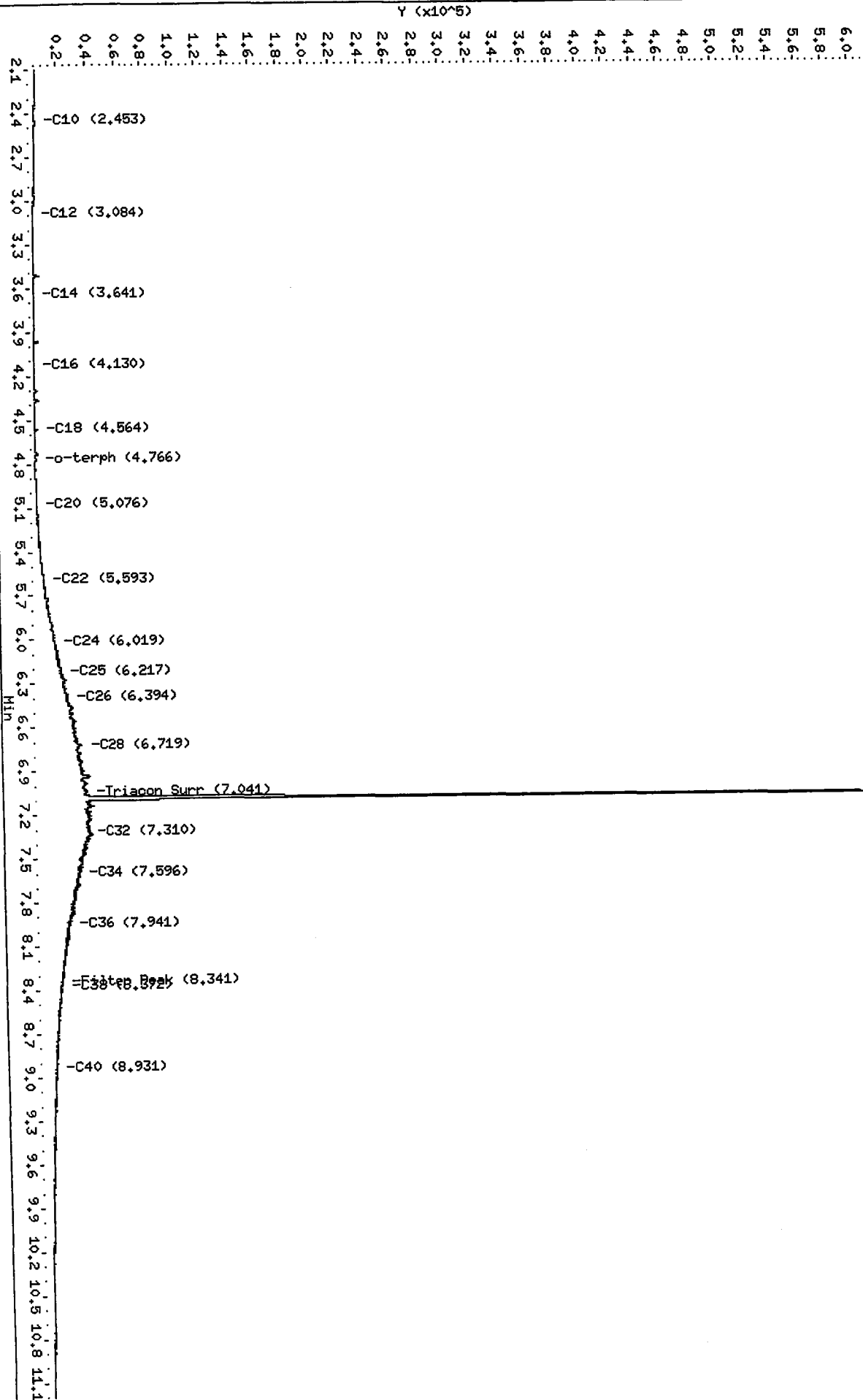
Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

Data File: /chem2/fid9.i/20100728.B/0728raw.b/0728A020.D  
Date: 28-JUL-2010 23:15  
Client ID:  
Sample Info: M01L 250

Column phase: RTX-1

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Instrument: fid9.i  
Operator: MS  
Column diameter: 0.25



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Analytical Resources Inc.  
 NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100728.B/0728raw.b/0728A021.D ARI ID: MOIL 500  
 Method: /chem2/fid9.i/20100728.B/ftphfid9a.m Client ID:  
 Instrument: fid9.i Injection: 28-JUL-2010 23:36  
 Operator: MS Dilution Factor: 1  
 Report Date: 07/30/2010 Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.544	0.008	9179	20369	GAS (Tol-C12)	216239	10
C8	1.728	0.034	6026	8955	DIESEL (C12-C24)	681352	26
C10	2.454	-0.002	2354	2271	M.OIL (C24-C38)	7090303	554
C12	3.094	0.003	289	44	AK-102 (C10-C25)	866175	30
C14	3.642	0.001	195	126	AK-103 (C25-C36)	6178857	1234
C16	4.125	-0.003	40	9			
C18	4.561	-0.008	3657	2936			
C20	5.072	-0.001	2047	2188			
C22	5.593	0.004	10080	6940			
C24	6.019	-0.001	23765	7965			
C25	6.211	-0.002	31744	9374			
C26	6.394	0.003	39169	13151			
C28	6.721	-0.002	55036	30221			
C32	7.312	0.003	65826	24703	JP-4 (Tol-C14)	225770	14
C34	7.600	0.003	52438	20690	BUNKERC (C10-C38)	7803945	890
Filter Peak	8.350	0.007	26035	6689			
C36	7.944	-0.001	38444	12762			
C38	8.382	0.002	26485	18398			
C40	8.934	-0.002	15558	5694			
o-terph	4.764	-0.003	1139	1159	JET-A (C10-C18)	56856	4
Triacon Surr	7.035	-0.003	64313	60373	JP8 (Tol-C16)	229628	13

M Indicates manual integration within range.

Range Times: NW Diesel(3.091 - 6.020) AK102(2.46 - 6.21) Jet A(2.46 - 4.57)  
 NW M.Oil(6.02 - 8.38) AK103(6.21 - 7.94) OR Diesel(2.46 - 6.72)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1159	0.0	0.1
Triacontane	60373	3.0	6.8

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

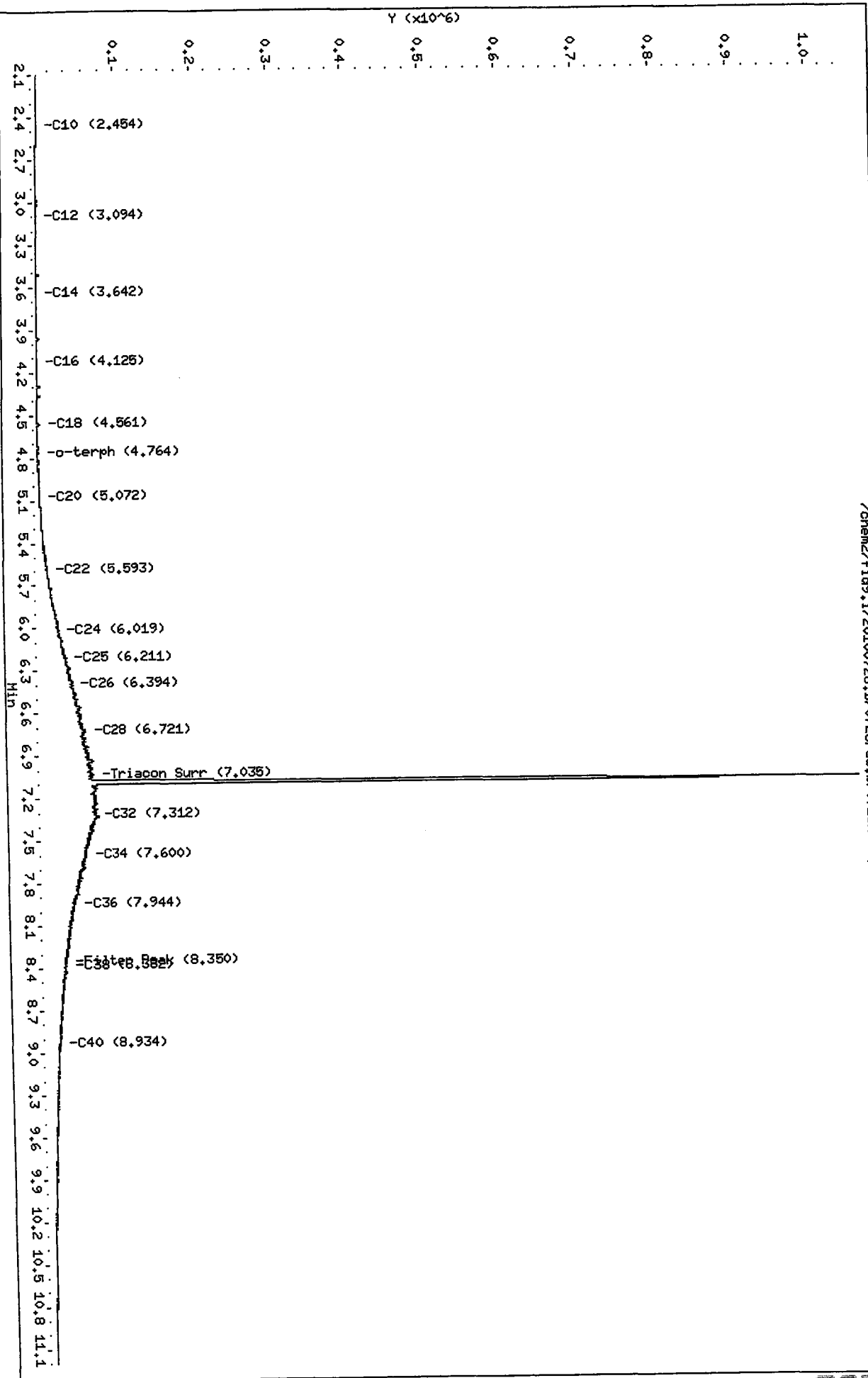
*M 7/30/10*

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Date: 28-JUL-2010 23:36  
Client ID:  
Sample Info: MOIL 500

Column phase: RTX-1

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Instrument: fid9.1  
Operator: HS  
Column diameter: 0.25



Analytical Resources Inc.  
 NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100728.B/0728raw.b/0728A022.D ARI ID: MOIL 1000  
 Method: /chem2/fid9.i/20100728.B/ftphfid9a.m Client ID:  
 Instrument: fid9.i Injection: 28-JUL-2010 23:57  
 Operator: MS Dilution Factor: 1  
 Report Date: 07/30/2010 Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.538	0.002	10649	63178	GAS (Tol-C12)	218627	10
C8	1.703	0.010	6083	4895	DIESEL (C12-C24)	1375330	52
C10	2.453	-0.003	2350	1902	M.OIL (C24-C38)	14305504	1119
C12	3.089	-0.002	381	214	AK-102 (C10-C25)	1720432	59
C14	3.639	-0.002	299	246	AK-103 (C25-C36)	12524196	2500
C16	4.129	0.000	79	16			
C18	4.560	-0.009	7645	6024			
C20	5.072	0.000	4064	7040			
C22	5.597	0.008	20853	24416			
C24	6.018	-0.002	49376	52041			
C25	6.213	0.001	63610	16233			
C26	6.389	-0.002	79064	34283			
C28	6.720	-0.003	107910	42122			
C32	7.310	0.001	130942	41405	JP-4 (Tol-C14)	231895	14
C34	7.599	0.002	108281	136091	BUNKERC (C10-C38)	15714808	1792
Filter Peak	8.345	0.002	52029	25346			
C36	7.948	0.003	74855	16070			
C38	8.376	-0.004	51433	44591			
C40	8.939	0.003	30398	16046			
o-terph	4.764	-0.003	1794	1847	JET-A (C10-C18)	72341	5
Triacon Surr	7.037	-0.001	127050	74010	JP8 (Tol-C16)	236928	13

M Indicates manual integration within range.  
 Range Times: NW Diesel(3.091 - 6.020) AK102(2.46 - 6.21) Jet A(2.46 - 4.57)  
 NW M.Oil(6.02 - 8.38) AK103(6.21 - 7.94) OR Diesel(2.46 - 6.72)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1847	0.1	0.2
Triacontane	74010	3.7	8.3

*MAY 2010*

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

Data File: /chem2/fid9,1/20100728,B/0728raw,b/0728a022.D

Date: 28-JUL-2010 23:57

Client ID:

Sample Info: M01L 1000

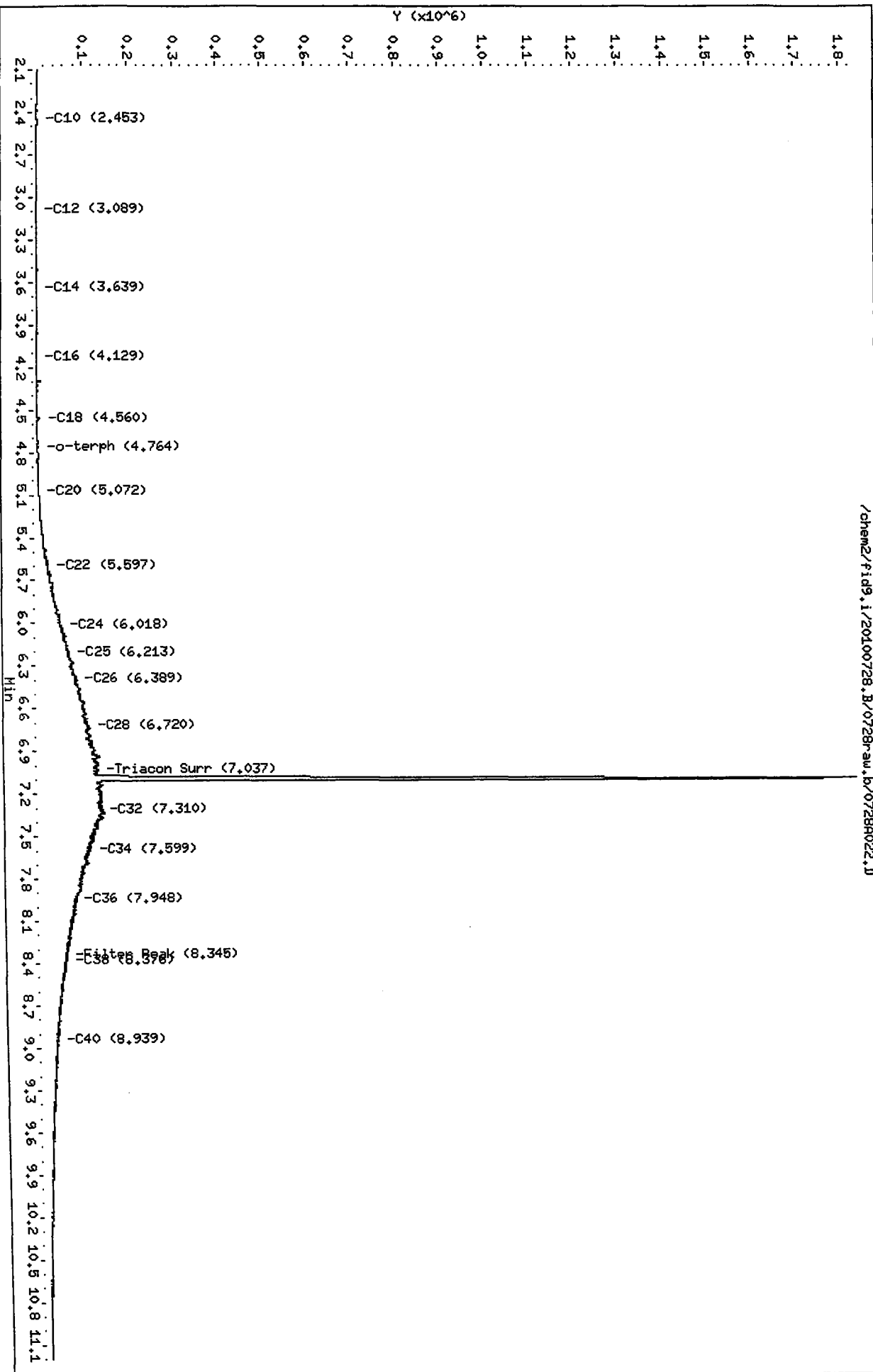
Column phase: RTX-1

Instrument: fid9,1

Operator: HS

Column diameter: 0.25

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Analytical Resources Inc.  
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100728.B/0728raw.b/0728A023.D ARI ID: MOIL 2500  
 Method: /chem2/fid9.i/20100728.B/ftphfid9a.m Client ID:  
 Instrument: fid9.i Injection: 29-JUL-2010 00:18  
 Operator: MS Dilution Factor: 1  
 Report Date: 07/30/2010 Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	----				GAS (Tol-C12)	185483	9
C8	1.718	0.025	7199	4779	DIESEL (C12-C24)	3353157	127
C10	2.459	0.004	3767	6961	M.OIL (C24-C38)	34124562	2669
C12	3.085	-0.006	494	385	AK-102 (C10-C25)	4193453	144
C14	3.640	-0.001	498	323	AK-103 (C25-C36)	29834397	5956
C16	4.130	0.001	204	91			
C18	4.559	-0.010	20942	16266			
C20	5.069	-0.004	9741	14269			
C22	5.589	0.001	46953	16444			
C24	6.020	0.000	116155	30105			
C25	6.215	0.003	149541	35623			
C26	6.388	-0.003	192672	83538			
C28	6.725	0.002	249614	49500			
C32	7.308	-0.001	301815	83744	JP-4 (Tol-C14)	202516	12
C34	7.594	-0.002	255953	217957	BUNKERC (C10-C38)	37513451	4277
Filter Peak	8.350	0.006	124584	111418			
C36	7.944	-0.001	179229	56451			
C38	8.379	-0.001	117276	59781			
C40	8.938	0.003	70596	37072			
o-terph	4.762	-0.005	3843	4178	JET-A (C10-C18)	110588	8
Triacon Surr	7.043	0.005	291768	230191	JP8 (Tol-C16)	210004	12

M Indicates manual integration within range.

Range Times: NW Diesel(3.091 - 6.020) AK102(2.46 - 6.21) Jet A(2.46 - 4.57)  
 NW M.Oil(6.02 - 8.38) AK103(6.21 - 7.94) OR Diesel(2.46 - 6.72)

Surrogate	Area	Amount	%Rec
o-Terphenyl	4178	0.2	0.4
Triacontane	230191	11.6	25.8

*MW/591*

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

Data File: /chem2/fid9.i/20100728.B/0728raw.b/0728A023.D

Date : 29-JUL-2010 00:18

Client ID:

Sample Info: M01L 2500

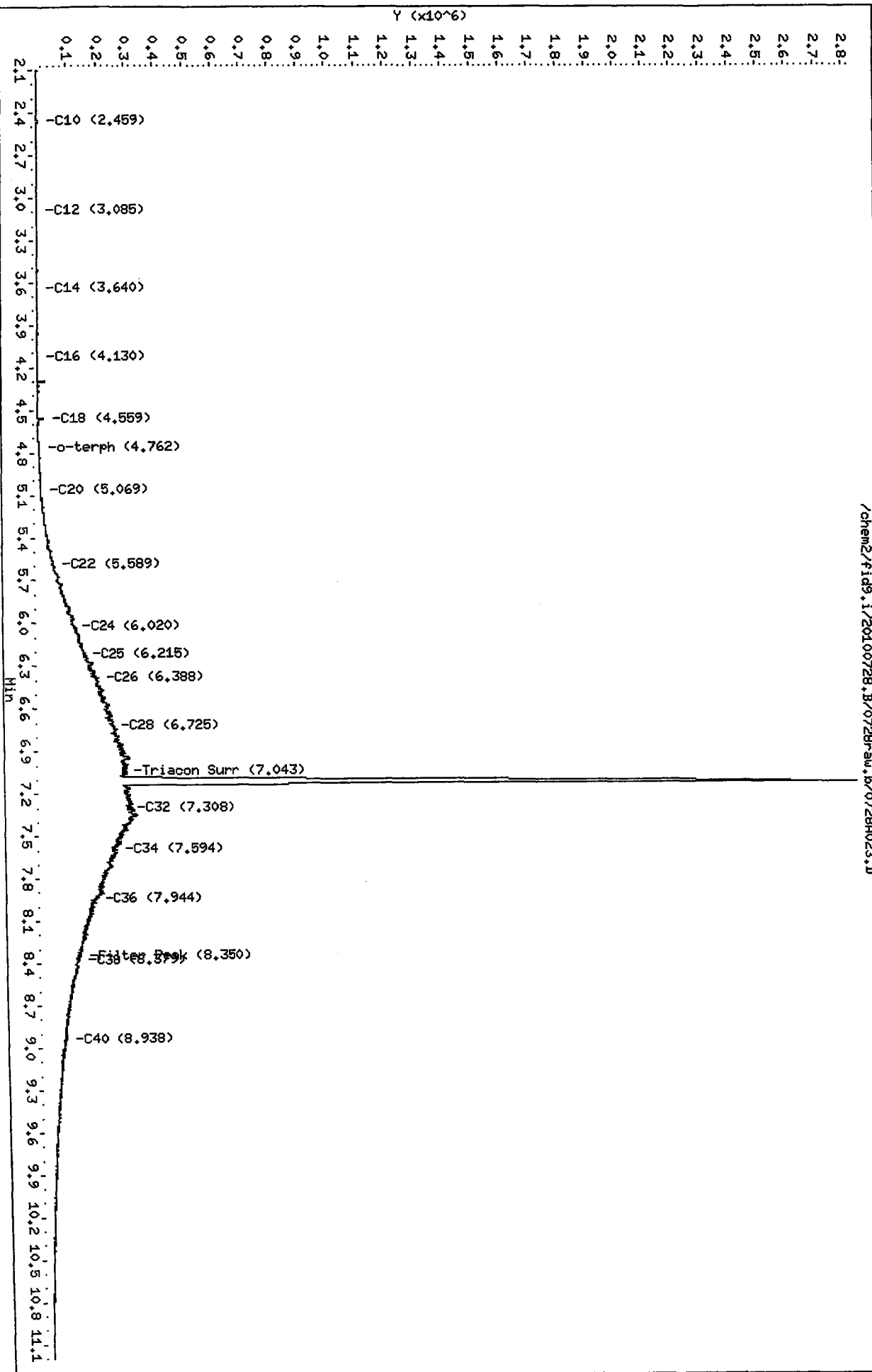
Column phase: RTX-1

Instrument: fid9.i

Operator: MS

Column diameter: 0.25

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Analytical Resources Inc.  
 NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100728.B/0728raw.b/0728A024.D ARI ID: MOIL 5000  
 Method: /chem2/fid9.i/20100728.B/ftphfid9a.m Client ID:  
 Instrument: fid9.i Injection: 29-JUL-2010 00:40  
 Operator: MS Dilution Factor: 1  
 Report Date: 07/30/2010 Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.505	-0.031	22596	103344	GAS (Tol-C12)	263209	13
C8	1.724	0.030	8164	11347	DIESEL (C12-C24)	6666776	253
C10	2.462	0.006	6166	7110	M.OIL (C24-C38)	67258151	5260
C12	3.104	0.013	3368	1784	AK-102 (C10-C25)	8147281	280
C14	3.646	0.005	615	350	AK-103 (C25-C36)	59351121	11849
C16	4.129	0.001	608	343			
C18	4.560	-0.009	37045	30543			
C20	5.070	-0.002	19428	26259			
C22	5.582	-0.007	96098	68803			
C24	6.023	0.003	234560	106000			
C25	6.207	-0.006	297700	255615			
C26	6.393	0.001	373459	230456			
C28	6.726	0.003	495735	196084			
C32	7.305	-0.004	602415	260738	JP-4 (Tol-C14)	285229	17
C34	7.597	0.000	510745	472002	BUNKERC (C10-C38)	73961804	8433
Filter Peak	8.346	0.002	226260	178664			
C36	7.943	-0.001	358012	278298			
C38	8.379	-0.001	210178	74132			
C40	8.935	0.000	96401	47669			
o-terph	4.761	-0.006	24528	21927	JET-A (C10-C18)	180059	13
Triacon Surr	7.043	0.005	564895	111509	JP8 (Tol-C16)	304722	17

M Indicates manual integration within range.

Range Times: NW Diesel(3.091 - 6.020) AK102(2.46 - 6.21) Jet A(2.46 - 4.57)  
 NW M.Oil(6.02 - 8.38) AK103(6.21 - 7.94) OR Diesel(2.46 - 6.72)

Surrogate	Area	Amount	%Rec
o-Terphenyl	21927	0.9	1.9
Triacotane	111509	5.6	12.5

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

*M 7/30/10*

Data File: /chem2/fid9.i/20100728.B/0728r-aw.b/0728R024.D

Date: 29-JUL-2010 00:40

Client ID:

Sample Info: MOIL 5000

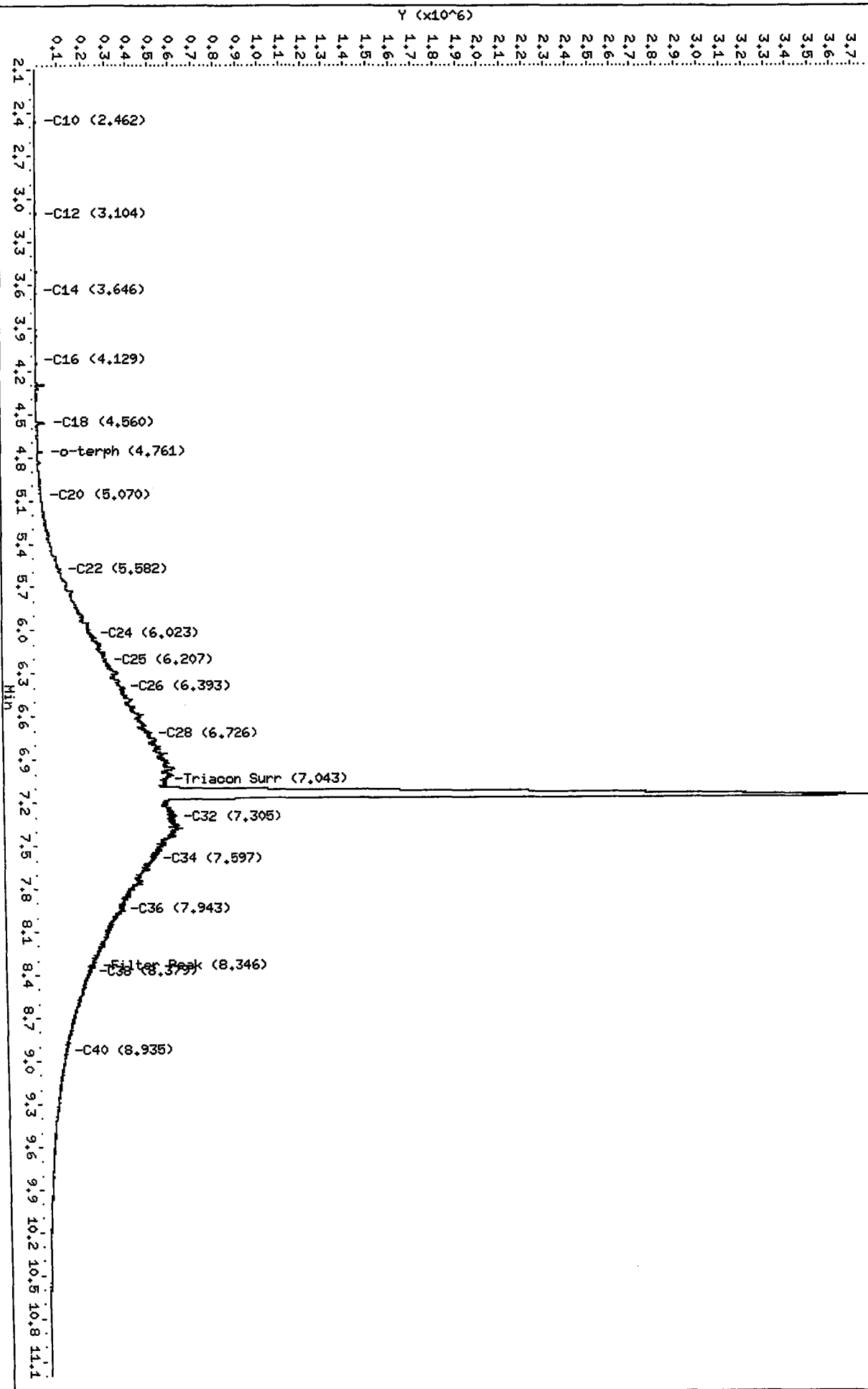
Column phase: RTX-1

Instrument: fid9.i

Operator: MS

Column diameter: 0.25

/chem2/fid9.i/20100728.B/0728r-aw.b/0728R024.D





**TPHD Raw Data**  
**Run Logs, Continuing Calibrations, and Raw Data**

**ARI Job ID: RG51**

GC Analyst Notes / Corrective Action Log

ARI Project ID: RY51, RY54 Client ID: FLOYD/SNIDER - LCA

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): Diesel, Motor, Graph

Instrument: FID-3A FID-3B FID-4A FID-4B FID-5 FID-7 FID-8  
FID-9 ECD-1 ECD-3 ECD-4 ECD-5 ECD-6 ECD-7

Dates: Curve: 7/28/10 Analysis Start: 8/3/10

Endrin/DDT Breakdown <15%? YES / NO / NA Method Blank In Control? YES / NO  
ICal Meets RF & %RSD Criteria? YES / NO LCS/LCSD Recovery In Control? YES / NO  
CCal Meets RF & %RSD Criteria? YES / NO Surrogate Recovery In Control? YES / NO  
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: [Signature] Date: 8/4/10

Reviewer: \_\_\_\_\_ Date: \_\_\_\_\_

# Analytical Resources Inc.: Organics Instrument Log

FID-9 Agilent 6850 - Serial No.: US10404004

Date: 8/3/10 Analysis: NUSTRAD Analyst: AM  
 GC Program: TOP Column No: F02031 Column Type: R+X1  
 Instrument Tune (.U or .CT.): \_\_\_\_\_ EM Voltage: \_\_\_\_\_  
 Calibration File: \_\_\_\_\_ Curve Date: 7/28/10

IS/SS \_\_\_\_\_ Ical/Ccal 1700-1  
1680-3  
1730-2  
1737-3 LCS/ICV \_\_\_\_\_

Time	Filename	LabID	ClientID	DF
1	1216	0803A001.D	RINSE	1
2	1238	0803A002.D	RT RT	1
3	1259	0803A003.D	DIESEL#1 GTSP	1
4	1321	0803A004.D	MOIL#1 GTSP	1
5	1342	0803A005.D	IB IB	1
6	1404	0803A006.D	RG18A KSC-DP-1-GW-	1
7	1426	0803A007.D	RG22A GTSP-RS-05	1
8	1447	0803A008.D	BUNKER#1	1
9	1509	0803A009.D	RG18LCSW1 RG18LCSW1	1
10	1531	0803A010.D	RG18LCSDW1 RG18LCSDW1	1
11	1553	0803A011.D	RG18MBW1 RG18MBW1	1
12	1615	0803A012.D	RG66A P2IM-DB-WC-0	1
13	1636	0803A013.D	RG66B P2IM-DB-WC-0	1
14	1658	0803A014.D	RG66MBS1 RG66MBS1	1
15	1720	0803A015.D	RG66LCS1 RG66LCS1	1
16	1742	0803A016.D	RG66LCS1 RG66LCS1	1
17	1803	0803A017.D	DIESEL#2 GTSP	1
18	1825	0803A018.D	MOIL#2 GTSP	1
19	1847	0803A019.D	BUNKER#2	1
20	1908	0803A020.D	RG51A	5
21	1930	0803A021.D	RG51F	1
22	1951	0803A022.D	RG51G	5

Time	Filename	LabID	ClientID	DF
23	2013	0803A023.D	RG54A	5
24	2035	0803A024.D	RG54E	5
25	2056	0803A025.D	RG54H	5
26	2117	0803A026.D	RG51B PSB12-1.5-2.	1
27	2139	0803A027.D	RG51A PSB12-0-0.5-	1
28	2200	0803A028.D	RG51C PSB12-2-4-07	1
29	2222	0803A029.D	RG51D PSB12-8-10-0	1
30	2243	0803A030.D	RG51E PSB12-8-10-0	1
31	2305	0803A031.D	RG51G PSB12-4-6-07	1
32	2326	0803A032.D	RG51FMS PSB12-14-17-	1
33	2347	0803A033.D	RG51FMSD PSB12-14-17-	1
34	0009	0803A034.D	RG66LCS1 RG66LCS1	1
35	0030	0803A035.D	RG66LCS1 RG66LCS1	1
36	0052	0803A036.D	RG66MBS1 RG66MBS1	1
37	0113	0803A037.D	DIESEL#3	1
38	0134	0803A038.D	MOIL#3	1
39	0156	0803A039.D	BUNKER#3	1
40	0217	0803A040.D	RG54A PSB14-0-5-0	1
41	0238	0803A041.D	RG54B PSB14-1.5-2.	1
42	0259	0803A042.D	RG54C PSB14-2-4-07	1
43	0321	0803A043.D	RG54E PSB14-7-9-07	1
44	0342	0803A044.D	RG54F PSB14-12-14-	1
45	0403	0803A045.D	RG54H PSB17-0-0.5-	1

Time	Filename	LabID	ClientID	DF
46	0424	0803A046.D	RG54I PSB17-1.5-2-	1
47	0446	0803A047.D	RG54J PSB17-2-4-07	1
48	0507	0803A048.D	RG54K PSB17-4-6-07	1
49	0528	0803A049.D	RG54L PSB17-10-13-	1
50	0549	0803A050.D	DIESEL#4	1
51	0611	0803A051.D	MOIL#4	1
52	0632	0803A052.D	BUNKER#4	1

*[Large handwritten signature/initials]*  
 8/4/10

Maintenance / Comments None

Maintenance Verification (Identify ICal or CCal that demonstrates the instrument is in control):  
 Every line must contain information or be lined out. Make all entries legible. Start a new page for each QC period.

RG51 : 00841

Analytical Resources Inc.  
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100803.B/0803A002.D  
Method: /chem2/fid9.i/20100803.B/ftphfid9a.m  
Instrument: fid9.i  
Operator: MS  
Report Date: 08/04/2010

ARI ID: RT  
Client ID: RT  
Injection: 03-AUG-2010 12:38  
Dilution Factor: 1  
Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.551	0.000	1280184	595277	GAS (Tol-C12)	1936099	92
C8	1.712	0.019	698823	351080	DIESEL (C12-C24)	2807735	107
C10	2.477	0.012	1003750	459615	M.OIL (C24-C38)	3328480	260
C12	3.116	0.010	975889	452245	AK-102 (C10-C25)	3742550	129
C14	3.673	0.010	872060	457705	AK-103 (C25-C36)	2878703	575
C16	4.166	0.011	843232	462765			
C18	4.617	0.010	618396	465541			
C20	5.146	0.018	521744	464454			
C22	5.659	0.015	570410	453872			
C24	6.096	0.017	523314	448554			
C25	6.293	0.017	678368	612307			
C26	6.477	0.001	505385	443586			
C28	6.815	0.019	520257	431464			
C32	7.417	-0.003	442931	431096	JP-4 (Tol-C14)	2406493	147
C34	7.742	-0.002	314160	437580	BUNKERC (C10-C38)	7066963	806
Filter Peak	8.365	0.021	2904	8683			
C36	8.148	0.000	231108	424982			
C38	8.650	0.000	167603	404301			
C40	9.306	0.000	128221	228327			
o-terph	4.794	0.001	1759263	1659961	JET-A (C10-C18)	2340115	169
Triacon Surr	7.137	0.017	1246800	1461344	JP8 (Tol-C16)	2875028	163

M Indicates manual integration within range.

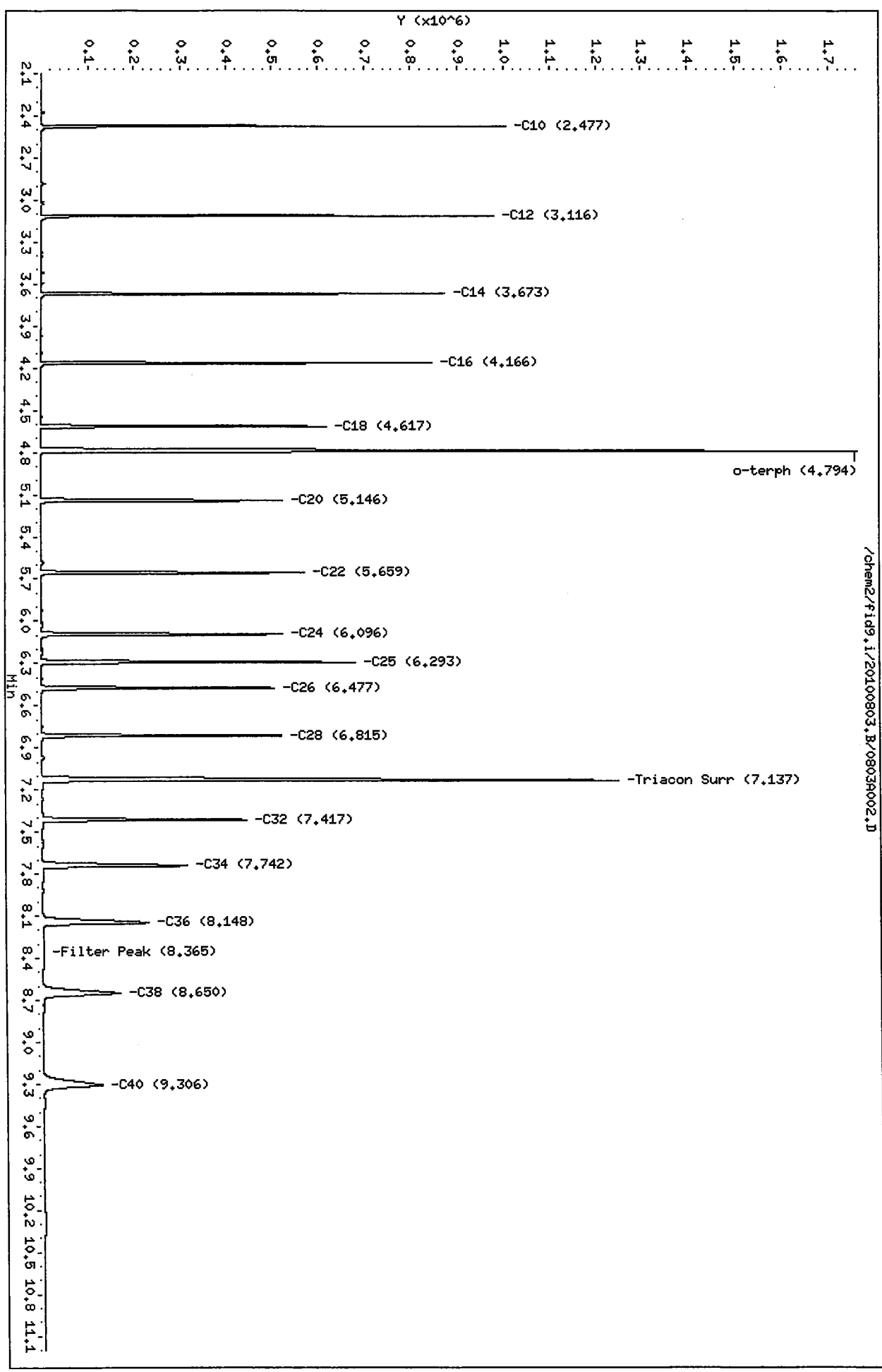
Range Times: NW Diesel (3.106 - 6.079) AK102 (2.47 - 6.28) Jet A (2.47 - 4.61)  
NW M.Oil (6.08 - 8.65) AK103 (6.28 - 8.15) OR Diesel (2.47 - 6.80)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1659961	64.4	143.2
Triacotane	1461344	73.7	163.7

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

Data File: /chem2/fid9.i/20100803.B/0803A002.D  
Date: 03-AUG-2010 12:38  
Client ID: RT  
Sample Info: RT  
Column phaset: RTX-1

Instrument: fid9.i  
Operator: HS  
Column diameter: 0.25



/chem2/fid9.i/20100803.B/0803A002.D

Analytical Resources Inc.  
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100803.B/0803A005.D  
Method: /chem2/fid9.i/20100803.B/ftphfid9a.m  
Instrument: fid9.i  
Operator: MS  
Report Date: 08/04/2010

ARI ID: IB  
Client ID: IB  
Injection: 03-AUG-2010 13:42  
Dilution Factor: 1  
Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.552	0.001	3173	3708	GAS (Tol-C12)	54895	3
C8	1.713	0.020	1380	2127	DIESEL (C12-C24)	26321	1
C10	2.448	-0.018	300	111	M.OIL (C24-C38)	130178	10
C12	3.103	-0.002	150	79	AK-102 (C10-C25)	45323	2
C14	3.661	-0.001	115	19	AK-103 (C25-C36)	99452	20
C16	4.156	0.000	72	20			
C18	4.613	0.007	1063	774			
C20	5.122	-0.006	46	19			
C22	5.659	0.015	942	1041			
C24	6.073	-0.006	145	86			
C25	6.269	-0.007	232	105			
C26	6.471	-0.005	1312	1485			
C28	6.786	-0.011	403	182			
C32	7.413	-0.007	4116	7332	JP-4 (Tol-C14)	63157	4
C34	7.736	-0.007	1528	2740	BUNKERC (C10-C38)	173276	20
Filter Peak	8.351	0.008	1079	638			
C36	8.139	-0.010	1524	2519			
C38	8.642	-0.008	1292	2853			
C40	9.305	-0.001	1135	1565			
o-terph	4.795	0.001	1868145	1907017	JET-A (C10-C18)	31549	2
Triacon Surr	7.139	0.019	1214494	1426944	JP8 (Tol-C16)	66921	4

M Indicates manual integration within range.

Range Times: NW Diesel(3.106 - 6.079) AK102(2.47 - 6.28) Jet A(2.47 - 4.61)  
NW M.Oil(6.08 - 8.65) AK103(6.28 - 8.15) OR Diesel(2.47 - 6.80)

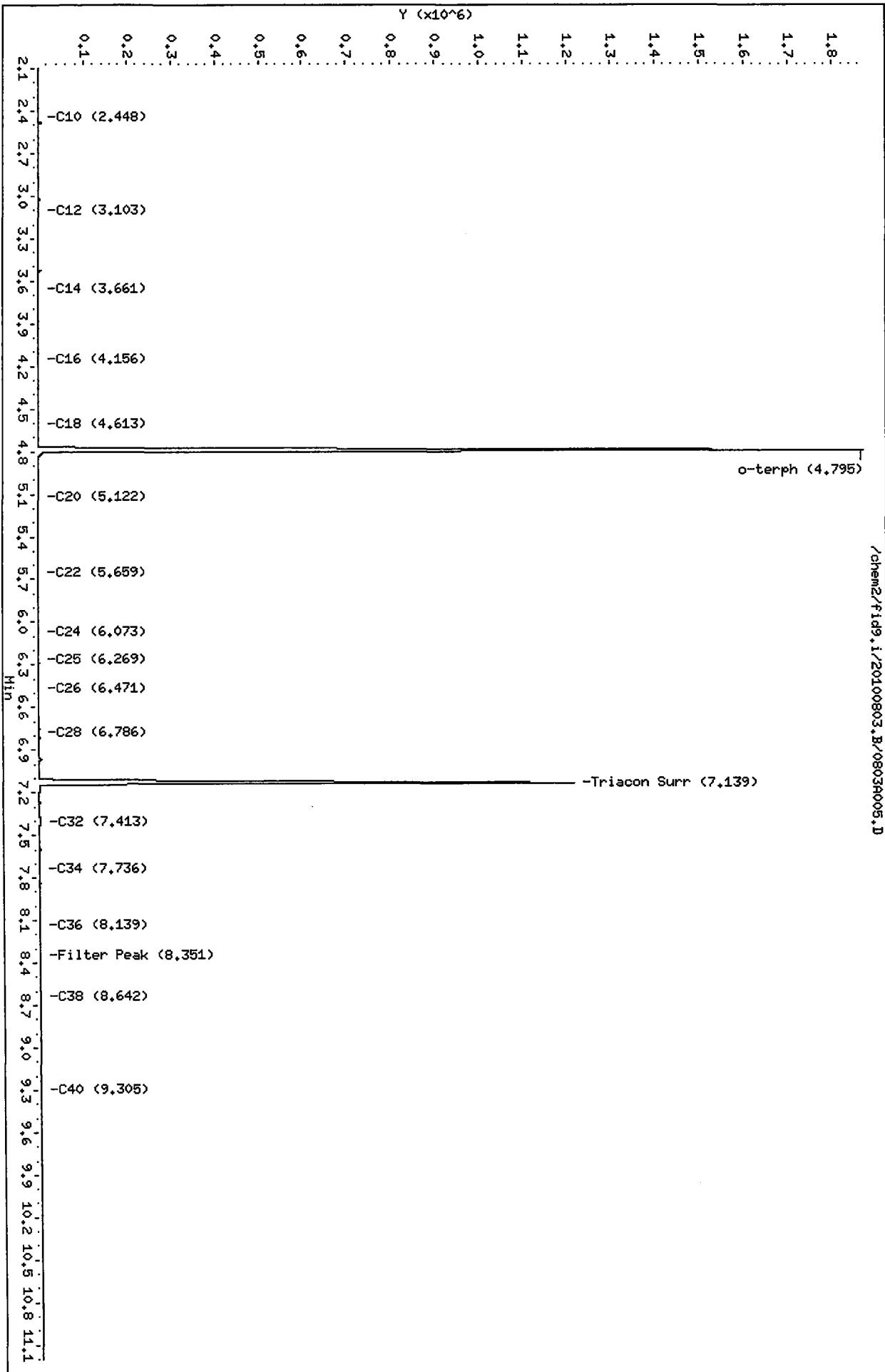
Surrogate	Area	Amount	%Rec
o-Terphenyl	1907017	74.0	164.5
Triacontane	1426944	72.0	159.9

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

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Data File: /chem2/fid9.i/20100803.B/0803A005.D  
 Date : 03-AUG-2010 13:42  
 Client ID: IB  
 Sample Info: IB  
 Column phase: RTX-1

Instrument: fid9.i  
 Operator: MS  
 Column diameter: 0.25



/chem2/fid9.i/20100803.B/0803A005.D

Analytical Resources Inc.  
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100803.B/0803A017.D  
Method: /chem2/fid9.i/20100803.B/ftphfid9a.m  
Instrument: fid9.i  
Operator: MS  
Report Date: 08/04/2010

ARI ID: DIESEL#2  
Client ID: DIESEL#2  
Injection: 03-AUG-2010 18:03  
Dilution Factor: 1  
Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.564	0.013	10393	5902	GAS (Tol-C12)	868100	41
C8	1.690	-0.003	1763	1581	DIESEL (C12-C24)	6132149	233
C10	2.466	0.000	3904	2537	M.OIL (C24-C38)	125272	10
C12	3.115	0.009	82030	44296	AK-102 (C10-C25)	6816350	235 M
C14	3.671	0.008	141683	142797	AK-103 (C25-C36)	98009	20
C16	4.150	-0.006	56420	41786			
C18	4.615	0.008	200377	189780			
C20	5.141	0.012	99273	109080			
C22	5.654	0.009	50642	52696			
C24	6.090	0.011	15723	21441			
C25	6.266	-0.010	2499	882			
C26	6.471	-0.005	2599	3618			
C28	6.787	-0.009	247	140			
C32	7.435	0.015	205	124	JP-4 (Tol-C14)	1917989	117
C34	7.746	0.003	290	206	BUNKERC (C10-C38)	6926152	790 M
Filter Peak	8.341	-0.002	551	682			
C36	8.155	0.006	179	116			
C38	8.647	-0.003	138	54			
C40	9.303	-0.003	116	78			
o-terph	4.790	-0.003	1252526	1064000	JET-A (C10-C18)	4966682	359
Triacon Surr	7.119	-0.001	3873	3638	JP8 (Tol-C16)	3477911	198

M Indicates manual integration within range.

Range Times: NW Diesel(3.106 - 6.079) AK102(2.47 - 6.28) Jet A(2.47 - 4.61)  
NW M.Oil(6.08 - 8.65) AK103(6.28 - 8.15) OR Diesel(2.47 - 6.80)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1064000	41.3	91.8
Triacontane	3638	0.2	0.4

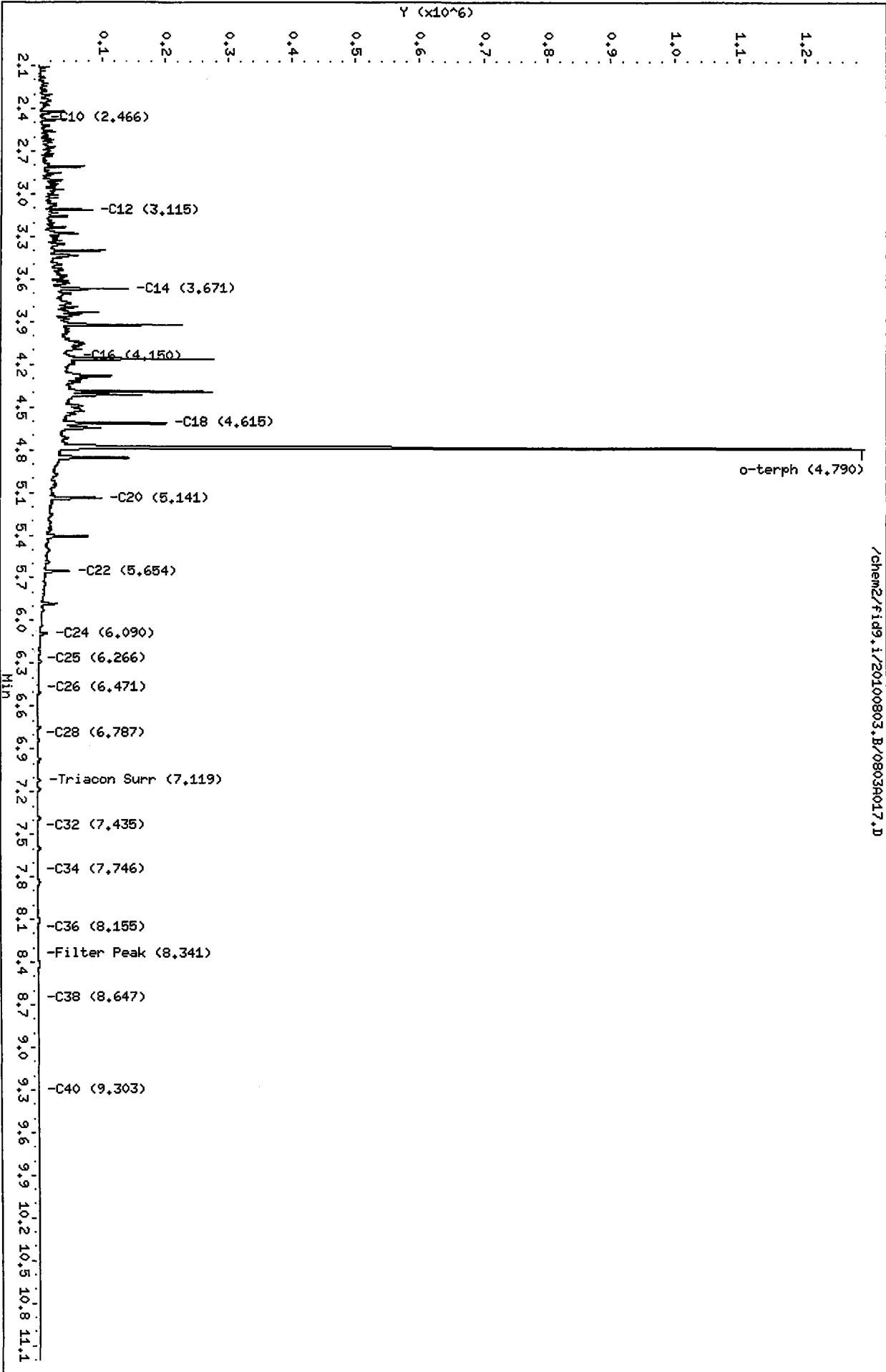
Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

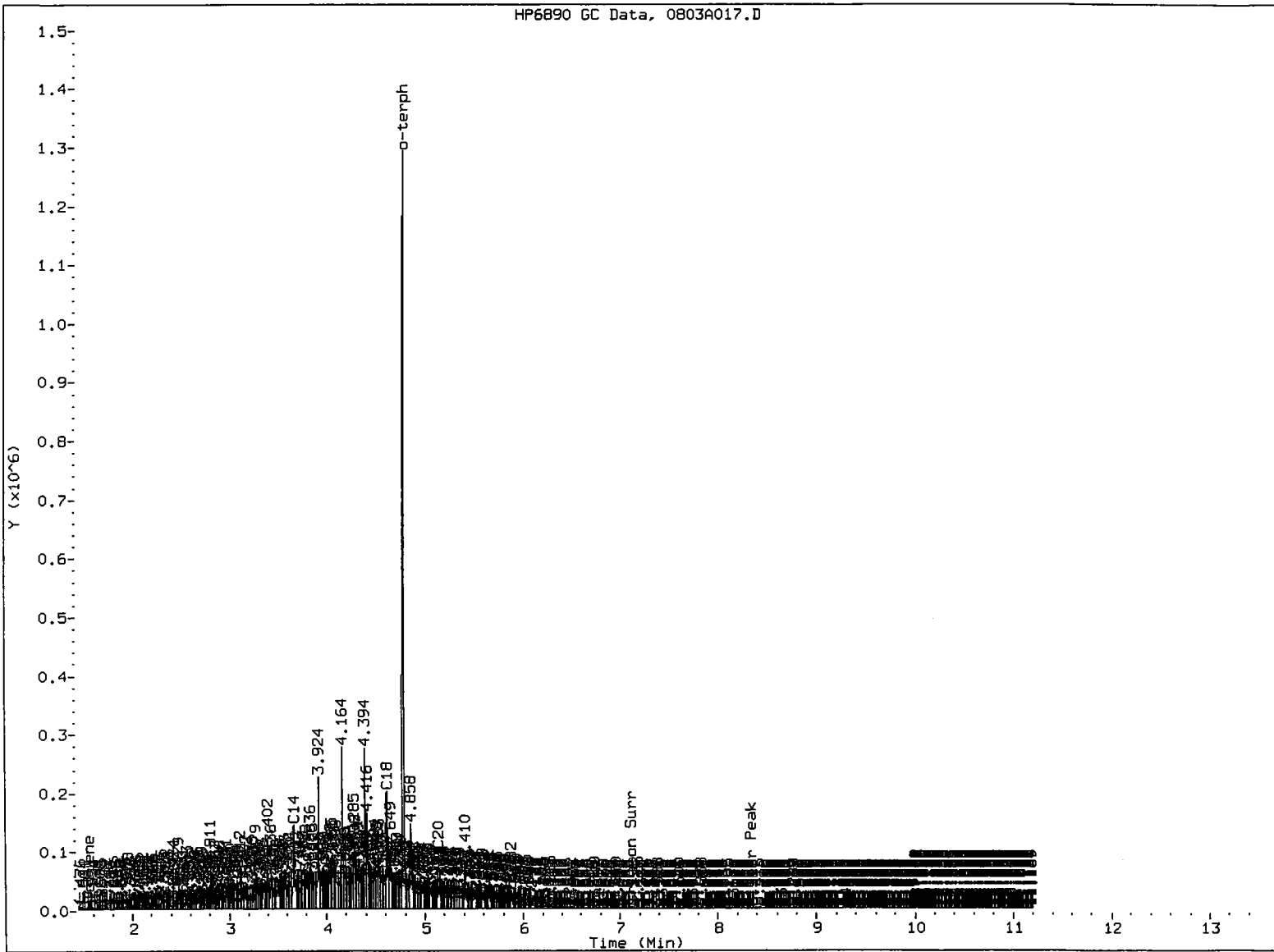


Data File: /chem2/fid9,1/20100803,B/0803A017.D  
Date: 03-AUG-2010 18:03  
Client ID: DIESEL#2  
Sample Info: DIESEL#2  
Column phase: RTX-1

Instrument: fid9,1  
Operator: HS  
Column diameter: 0.25

/chem2/fid9,1/20100803,B/0803A017.D





MANUAL INTEGRATION

- 1. Baseline correction
- 2. Poor chromatography
- 3. Peak not found
- 4. Totals calculation
- 5. Other \_\_\_\_\_

Analyst: M

Date: 8/4/10

Analytical Resources Inc.  
 NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100803.B/0803A018.D  
 Method: /chem2/fid9.i/20100803.B/ftphfid9a.m  
 Instrument: fid9.i  
 Operator: MS  
 Report Date: 08/04/2010

ARI ID: MOIL#2  
 Client ID: MOIL#2  
 Injection: 03-AUG-2010 18:25  
 Dilution Factor: 1  
 Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.559	0.008	2028	3173	GAS (Tol-C12)	51020	2
C8	1.708	0.014	890	228	DIESEL (C12-C24)	760073	29
C10	2.449	-0.017	210	71	M.OIL (C24-C38)	6588886	515
C12	3.097	-0.009	39	21	AK-102 (C10-C25)	936390	32
C14	3.663	0.000	83	42	AK-103 (C25-C36)	5607210	1119 M
C16	4.157	0.001	133	72			
C18	4.615	0.008	944	1036			
C20	5.139	0.011	2815	4723			
C22	5.640	-0.005	10527	8088			
C24	6.077	-0.002	24056	11825			
C25	6.271	-0.005	31143	25368			
C26	6.476	0.000	39417	15469			
C28	6.793	-0.004	49615	14656			
C32	7.422	0.002	63199	17292	JP-4 (Tol-C14)	55629	3
C34	7.742	-0.001	51005	50177	BUNKERC (C10-C38)	7361488	839 M
Filter Peak	8.344	0.000	30464	20735			
C36	8.153	0.004	35979	24306			
C38	8.655	0.005	23051	14014			
C40	9.309	0.003	13694	5844			
o-terph	4.806	0.013	704	219	JET-A (C10-C18)	38352	3
Triacon Surr	7.133	0.013	819511	881439	JP8 (Tol-C16)	60554	3

M Indicates manual integration within range.

Range Times: NW Diesel(3.106 - 6.079) AK102(2.47 - 6.28) Jet A(2.47 - 4.61)  
 NW M.Oil(6.08 - 8.65) AK103(6.28 - 8.15) OR Diesel(2.47 - 6.80)

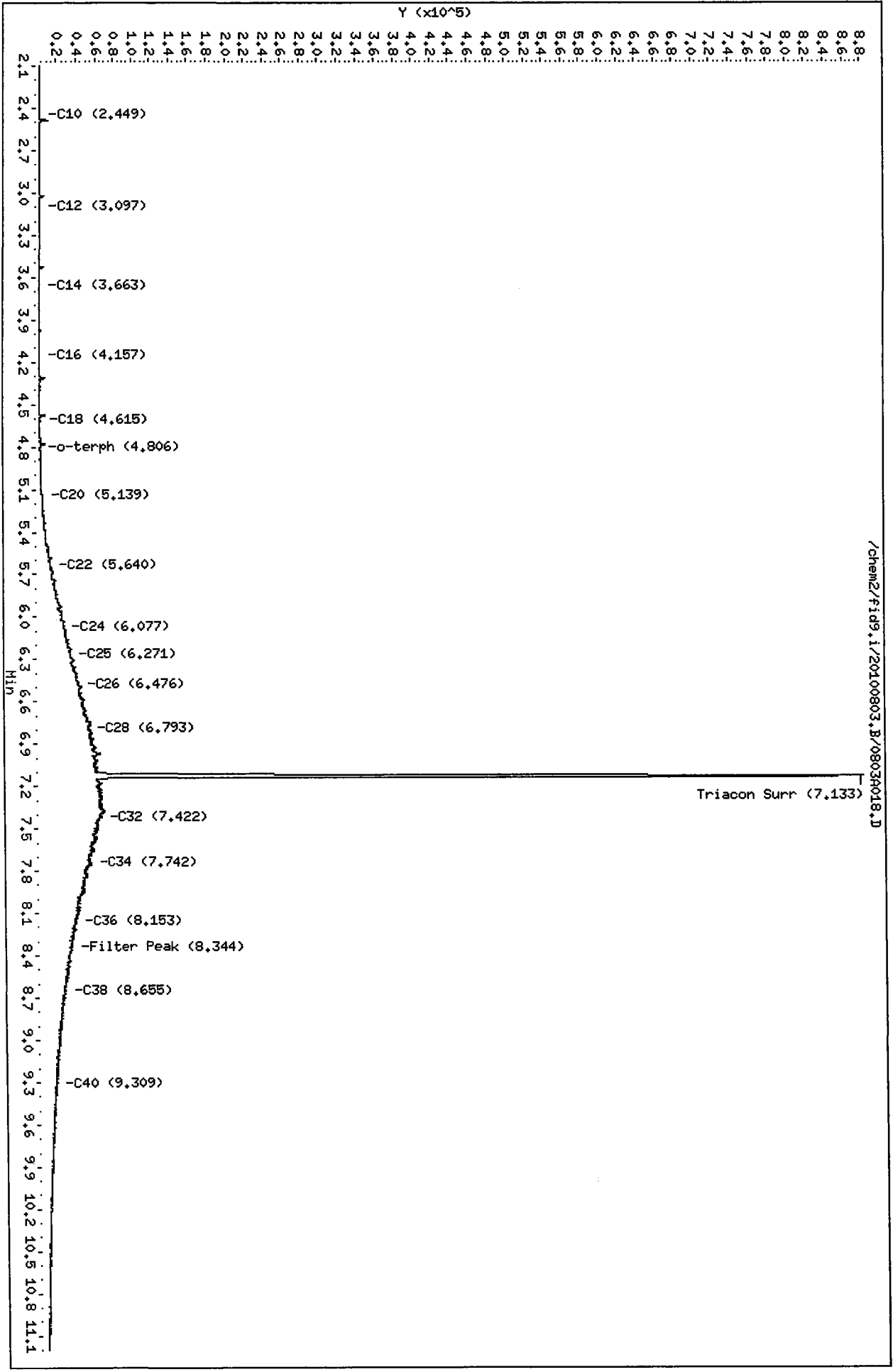
Surrogate	Area	Amount	%Rec
o-Terphenyl	219	0.0	0.0
Triacontane	881439	44.4	98.8

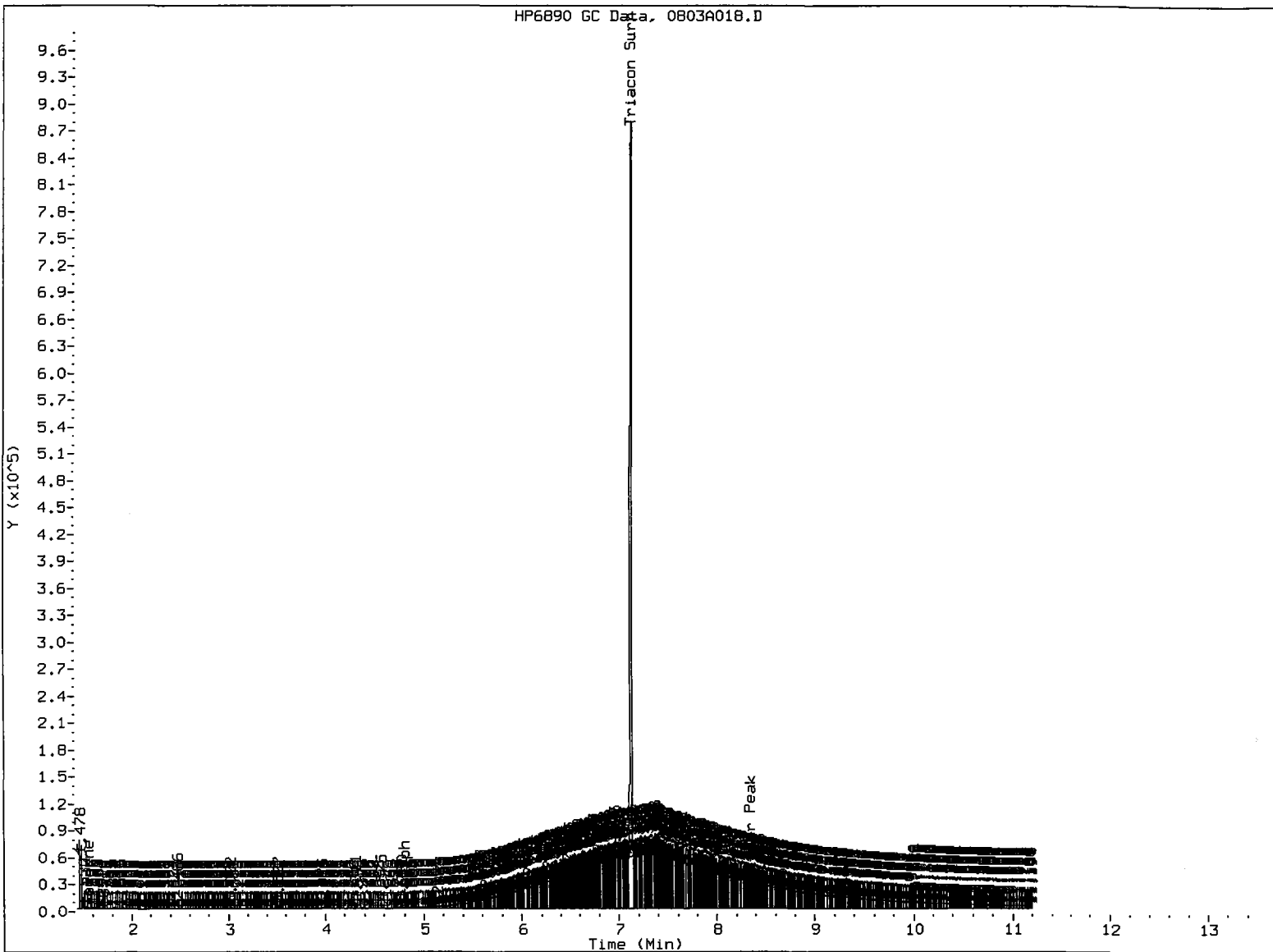
Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

Data File: /chem2/fid9.i/20100803.B/0803A018.D  
 Date: 03-AUG-2010 18:25  
 Client ID: HOIL#2  
 Sample Info: HOIL#2  
 Column phase: RTX-1

Instrument: fid9.i  
 Operator: MS  
 Column diameter: 0.25

/chem2/fid9.i/20100803.B/0803A018.D





MANUAL INTEGRATION

- ① Baseline correction
- 2. Poor chromatography
- 3. Peak not found
- 4. Totals calculation
- 5. Other \_\_\_\_\_

Analyst: Mc

Date: 8/24/10

Analytical Resources Inc.  
 NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100803.B/0803A021.D  
 Method: /chem2/fid9.i/20100803.B/ftphfid9a.m  
 Instrument: fid9.i  
 Operator: MS  
 Report Date: 08/04/2010

ARI ID: RG51F  
 Client ID:  
 Injection: 03-AUG-2010 19:30  
 Dilution Factor: 1  
 Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.559	0.008	27252	13733	GAS (Tol-C12)	277644	13
C8	1.699	0.005	2009	1581	DIESEL (C12-C24)	935218	36
C10	2.462	-0.004	3158	3667	M.OIL (C24-C38)	5269260	412
C12	3.106	0.000	494	384	AK-102 (C10-C25)	1126228	39 M
C14	3.654	-0.009	463	404	AK-103 (C25-C36)	4453488	889 M
C16	4.166	0.010	2789	2644			
C18	4.613	0.007	6010	7314			
C20	5.137	0.008	7607	11867			
C22	5.652	0.008	15514	27445			
C24	6.074	-0.005	16771	3341			
C25	6.268	-0.008	21512	13075			
C26	6.472	-0.004	31871	44220			
C28	6.799	0.002	39360	11635			
C32	7.420	0.000	48239	13340	JP-4 (Tol-C14)	293720	18
C34	7.744	0.000	39532	34107	BUNKERC (C10-C38)	6269272	715 M
Filter Peak	8.339	-0.004	26441	11964			
C36	8.152	0.003	27723	11506			
C38	8.640	-0.009	21977	31893			
C40	9.308	0.002	11637	4154			
o-terph	4.791	-0.003	1476926	1344955	JET-A (C10-C18)	189934	14
Triacon Surr	7.128	0.008	876307	958750	JP8 (Tol-C16)	325696	19

M Indicates manual integration within range.

Range Times: NW Diesel(3.106 - 6.079) AK102(2.47 - 6.28) Jet A(2.47 - 4.61)  
 NW M.Oil(6.08 - 8.65) AK103(6.28 - 8.15) OR Diesel(2.47 - 6.80)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1344955	52.2	116.0
Triacontane	958750	48.3	107.4

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

Data File: /chem2/fid9.i/20100803.B/0803A021.D

Date: 03-AUG-2010 19:30

Client ID:

Sample Info: R051F

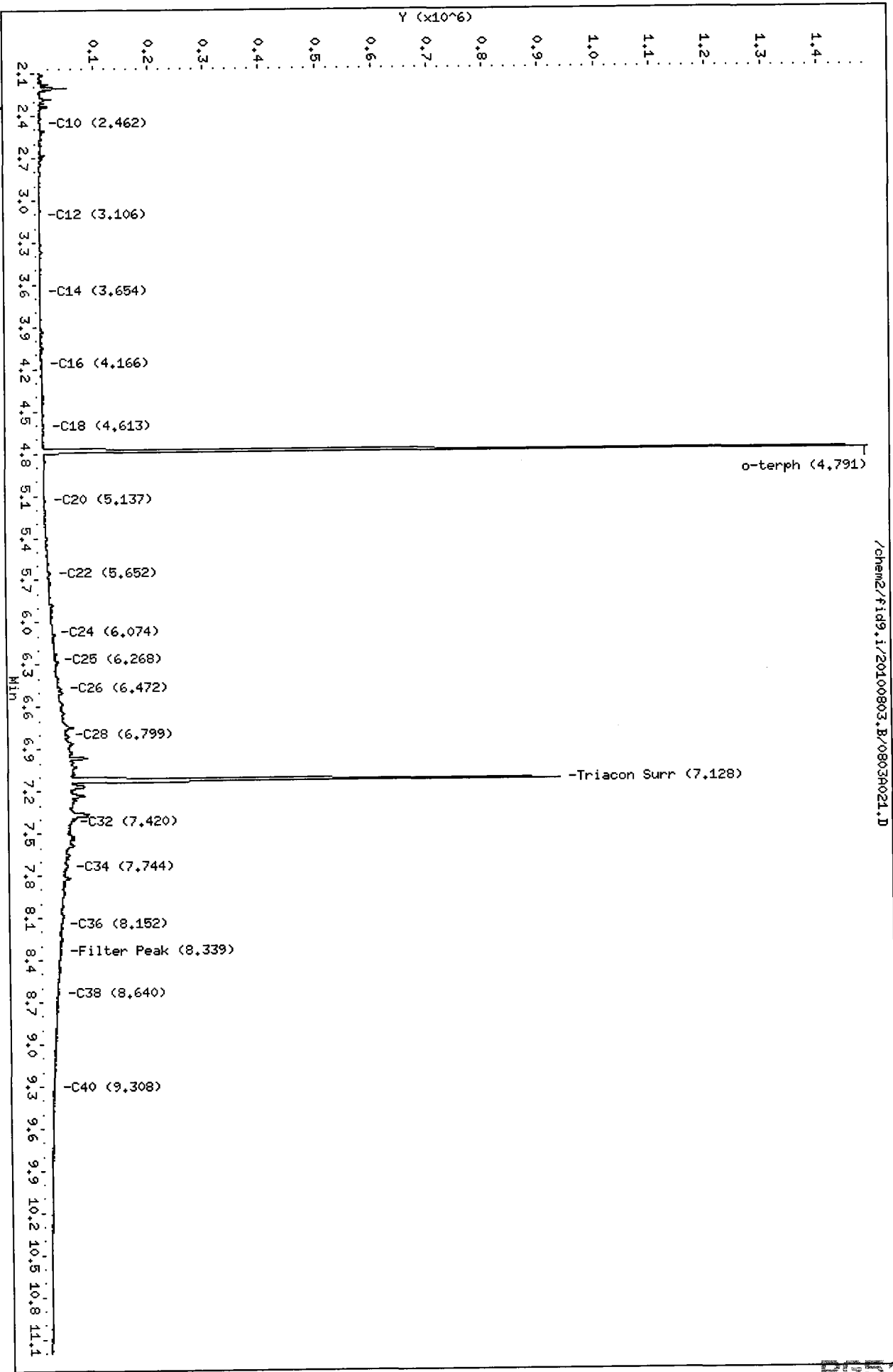
Column phase: RTX-1

Instrument: fid9.i

Operator: HS

Column diameter: 0.25

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Analytical Resources Inc.  
 NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100803.B/0803A026.D  
 Method: /chem2/fid9.i/20100803.B/ftphfid9a.m  
 Instrument: fid9.i  
 Operator: MS  
 Report Date: 08/04/2010

ARI ID: RG51B  
 Client ID: PSB12-1.5-2.0-07281  
 Injection: 03-AUG-2010 21:17  
 Dilution Factor: 1  
 Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.563	0.012	4603	2962	GAS (Tol-C12)	259410	12
C8	1.687	-0.006	518	261	DIESEL (C12-C24)	621320	24
C10	2.463	-0.003	3313	3165	M.OIL (C24-C38)	1528373	120
C12	3.107	0.002	718	581	AK-102 (C10-C25)	808617	28 M
C14	3.655	-0.007	907	953	AK-103 (C25-C36)	1353532	270 M
C16	4.156	0.000	1264	735			
C18	4.614	0.008	4238	3966			
C20	5.117	-0.011	3784	6081			
C22	5.636	-0.009	8226	5419			
C24	6.078	-0.001	12335	6805			
C25	6.271	-0.005	13044	2838			
C26	6.470	-0.006	15217	16425			
C28	6.790	-0.006	15609	8894			
C32	7.423	0.003	11055	8931	JP-4 (Tol-C14)	288114	18
C34	7.742	-0.001	7241	8613	BUNKERC (C10-C38)	2262166	258 M
Filter Peak	8.344	0.001	4043	2745			
C36	8.149	0.000	4437	3909			
C38	8.656	0.006	2853	907			
C40	9.310	0.004	1531	333			
o-terph	4.793	-0.001	1537679	1328053	JET-A (C10-C18)	208322	15
Triacon Surr	7.131	0.011	887679	959760	JP8 (Tol-C16)	317380	18

M Indicates manual integration within range.

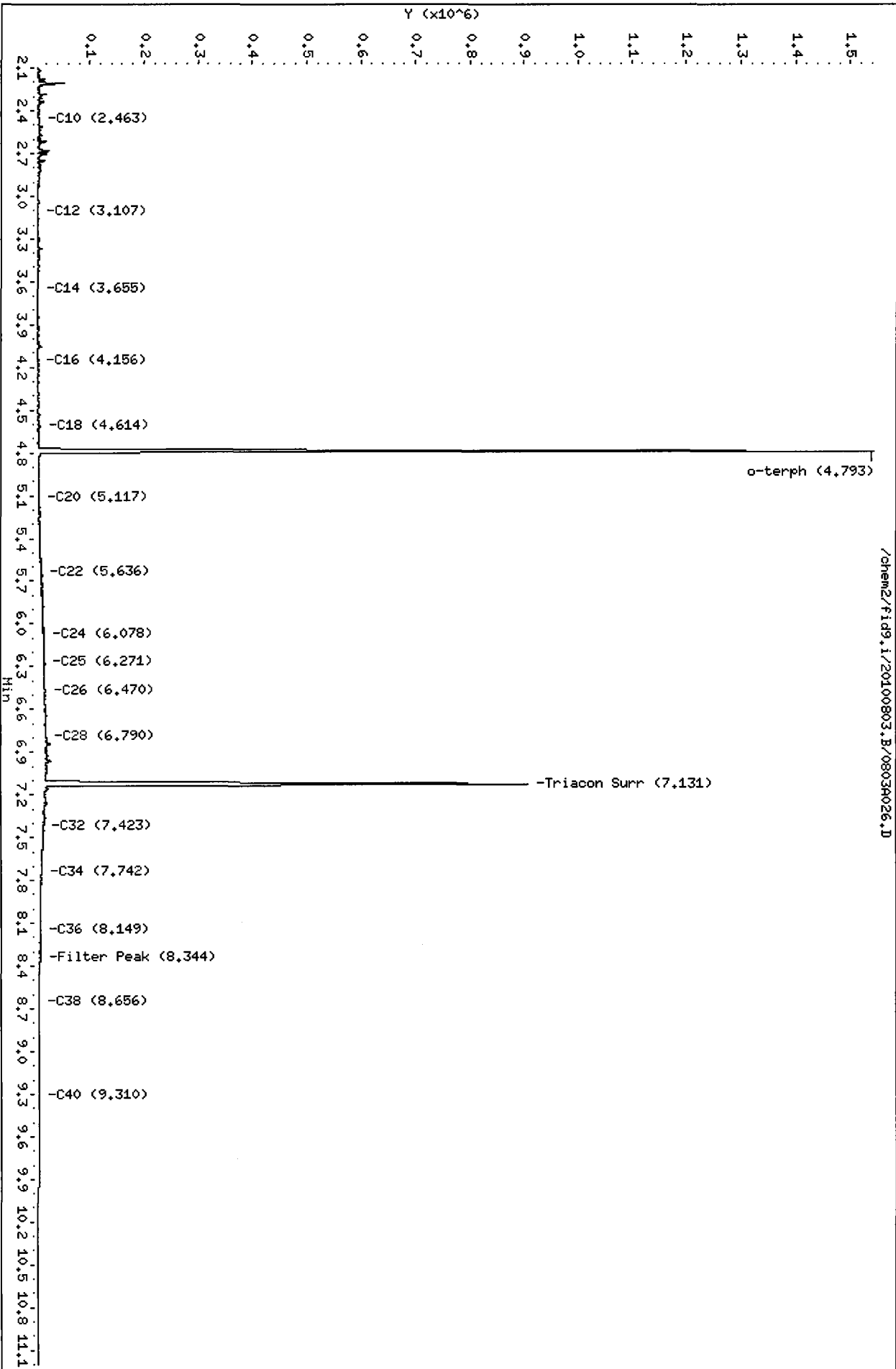
Range Times: NW Diesel(3.106 - 6.079) AK102(2.47 - 6.28) Jet A(2.47 - 4.61)  
 NW M.Oil(6.08 - 8.65) AK103(6.28 - 8.15) OR Diesel(2.47 - 6.80)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1328053	51.6	114.6
Triacotane	959760	48.4	107.5

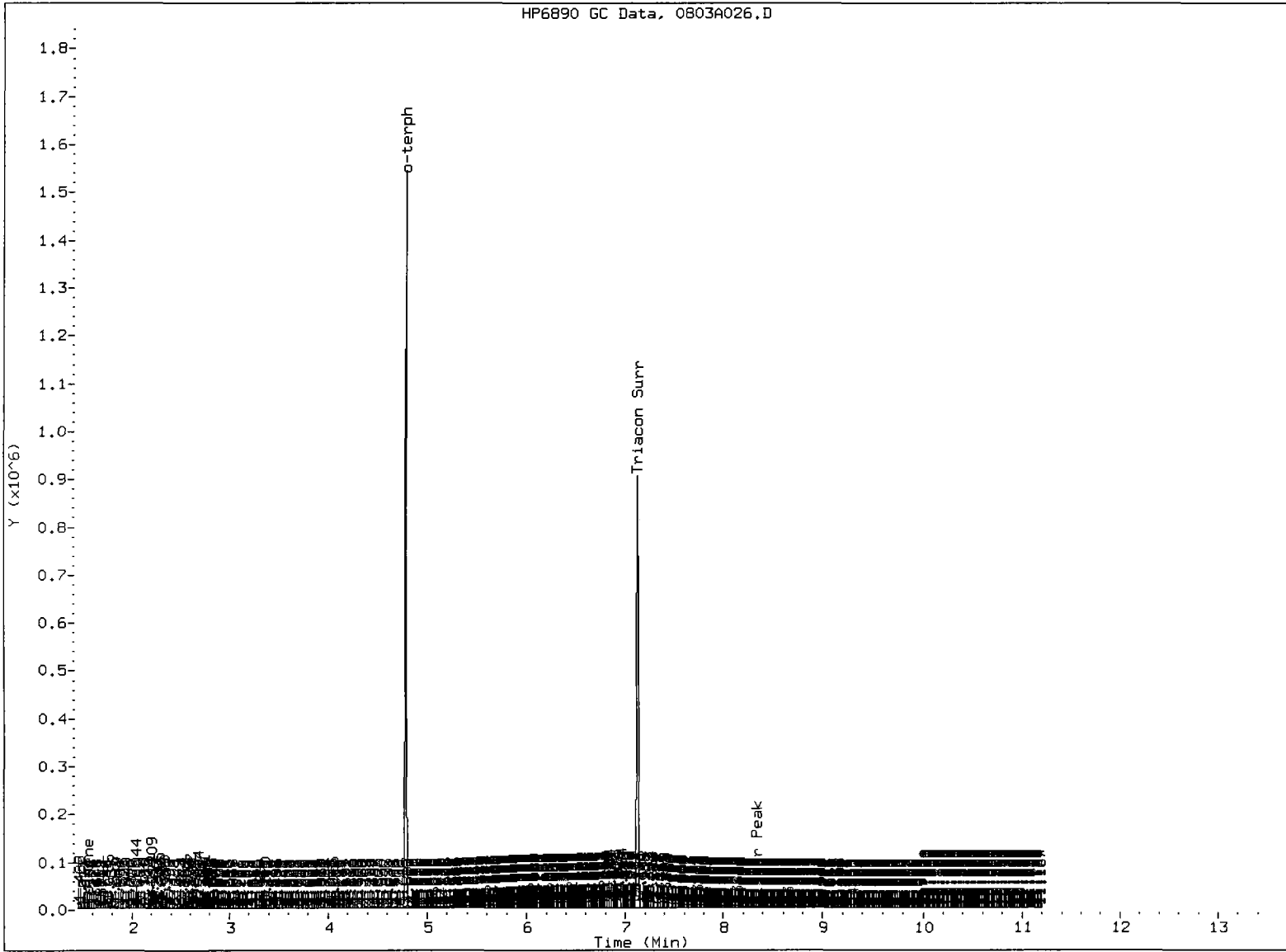
Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

Data File: /chem2/fid9.i/20100803.B/08034026.D  
Date : 03-AUG-2010 21:17  
Client ID: PSB12-1.5-2.0-07281  
Sample Info: RGS1B  
Column phase: RTX-1

Instrument: fid9.i  
Operator: MS  
Column diameter: 0.25



HP6890 GC Data, 0803A026.D



MANUAL INTEGRATION

- 1. Baseline correction
- 2. Poor chromatography
- 3. Peak not found
- 4. Totals calculation
- 5. Other \_\_\_\_\_

Analyst: Ma

Date: 8/4/00

Analytical Resources Inc.  
 NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100803.B/0803A027.D  
 Method: /chem2/fid9.i/20100803.B/ftphfid9a.m  
 Instrument: fid9.i  
 Operator: MS  
 Report Date: 08/04/2010

ARI ID: RG51A  
 Client ID: PSB12-0-0.5-072810  
 Injection: 03-AUG-2010 21:39  
 Dilution Factor: 1  
 Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.562	0.011	3513	2518	GAS (Tol-C12)	273493	13
C8	1.701	0.007	2037	1313	DIESEL (C12-C24)	3295582	125
C10	2.464	-0.002	2668	2974	M.OIL (C24-C38)	22944763	1794
C12	3.104	-0.002	1534	1050	AK-102 (C10-C25)	3779085	130 M
C14	3.649	-0.013	1315	1443	AK-103 (C25-C36)	19774870	3948 M
C16	4.165	0.010	8084	10171			
C18	4.612	0.006	17856	24156			
C20	5.124	-0.004	19511	5409			
C22	5.644	-0.001	38858	9180			
C24	6.071	-0.008	65915	43905			
C25	6.274	-0.002	82899	24346			
C26	6.476	0.000	110506	68767			
C28	6.792	-0.004	161544	69690			
C32	7.424	0.004	221466	74654	JP-4 (Tol-C14)	308477	19
C34	7.742	-0.002	162818	93275	BUNKERC (C10-C38)	26313802	3000 M
Filter Peak	8.341	-0.003	102492	50406			
C36	8.153	0.005	117826	37199			
C38	8.650	0.001	74391	20790			
C40	9.306	0.000	37823	16989			
o-terph	4.792	-0.002	1513659	1308844	JET-A (C10-C18)	496744	36
Triacon Surr	7.147	0.027	861848	957285	JP8 (Tol-C16)	418265	24

M Indicates manual integration within range.

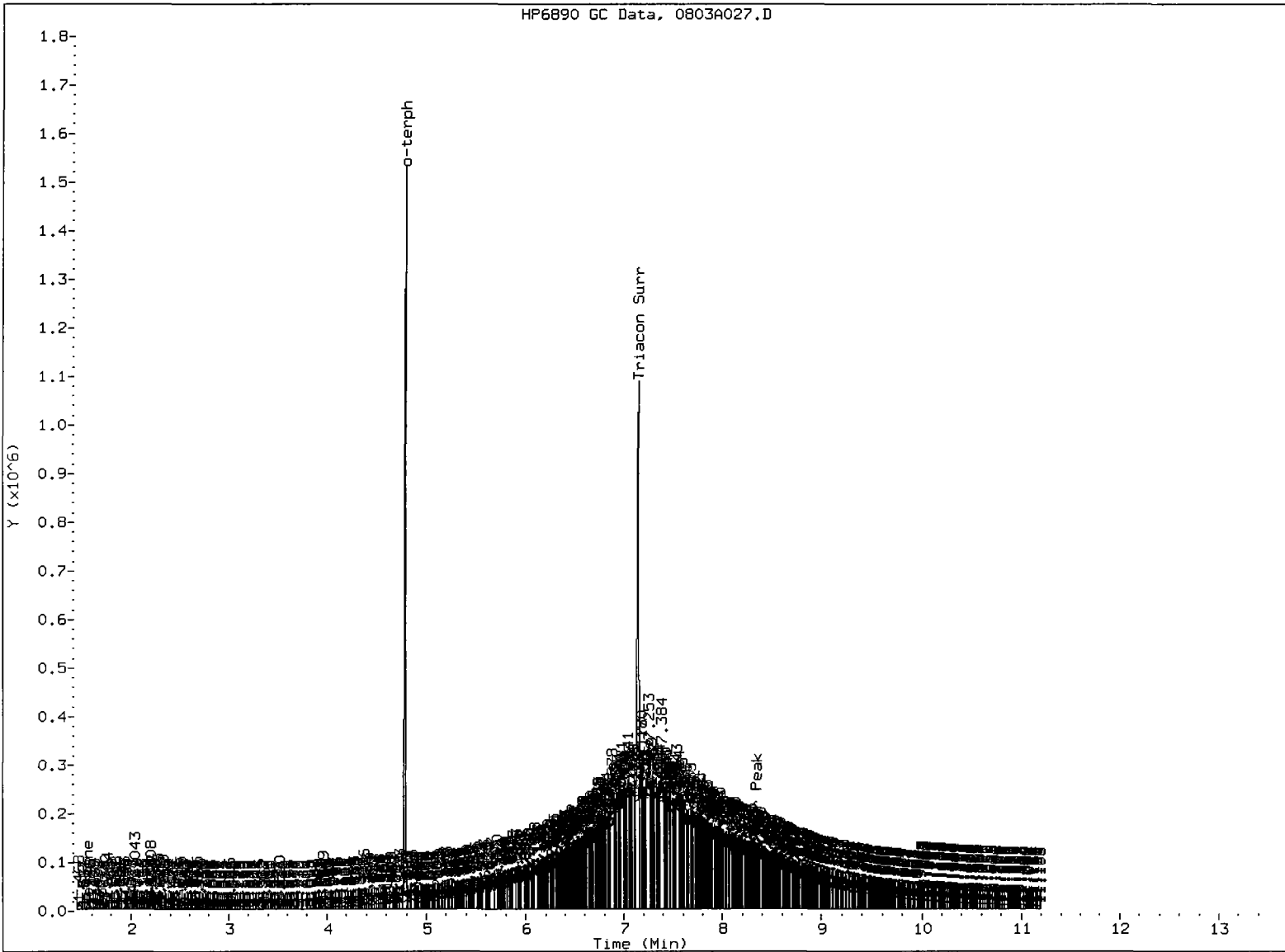
Range Times: NW Diesel(3.106 - 6.079) AK102(2.47 - 6.28) Jet A(2.47 - 4.61)  
 NW M.Oil(6.08 - 8.65) AK103(6.28 - 8.15) OR Diesel(2.47 - 6.80)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1308844	50.8	112.9
Triacontane	957285	48.3	107.3

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010



HP6890 GC Data, 0803A027.D



MANUAL INTEGRATION

- 1. Baseline correction
- 2. Poor chromatography
- 3. Peak not found
- 4. Totals calculation
- 5. Other \_\_\_\_\_

Analyst: Ma Date: 8/4/10

Analytical Resources Inc.  
 NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100803.B/0803A028.D  
 Method: /chem2/fid9.i/20100803.B/ftphfid9a.m  
 Instrument: fid9.i  
 Operator: MS  
 Report Date: 08/04/2010

ARI ID: RG51C  
 Client ID: PSB12-2-4-072810  
 Injection: 03-AUG-2010 22:00  
 Dilution Factor: 1  
 Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.563	0.012	5020	3542	GAS (Tol-C12)	422651	20
C8	1.688	-0.006	737	300	DIESEL (C12-C24)	1495970	57
C10	2.461	-0.004	3955	4013	M.OIL (C24-C38)	6074449	475
C12	3.104	-0.002	3781	2193	AK-102 (C10-C25)	1857714	64 M
C14	3.651	-0.012	1534	1560	AK-103 (C25-C36)	5283109	1055 M
C16	4.167	0.011	2506	1968			
C18	4.613	0.007	6865	7618			
C20	5.140	0.012	9966	14101			
C22	5.639	-0.006	20958	6677			
C24	6.071	-0.008	35299	15070			
C25	6.274	-0.002	38155	15722			
C26	6.473	-0.003	48513	37289			
C28	6.792	-0.004	67178	28981			
C32	7.417	-0.003	43747	39434	JP-4 (Tol-C14)	470883	29
C34	7.747	0.003	26498	13547	BUNKERC (C10-C38)	7720892	880 M
Filter Peak	8.342	-0.001	21065	7811			
C36	8.149	0.000	21238	18407			
C38	8.649	-0.001	19258	10060			
C40	9.311	0.005	13595	8013			
o-terph	4.791	-0.003	1475534	1354727	JET-A (C10-C18)	309715	22
Triacon Surr	7.133	0.014	938764	973968	JP8 (Tol-C16)	508680	29

M Indicates manual integration within range.

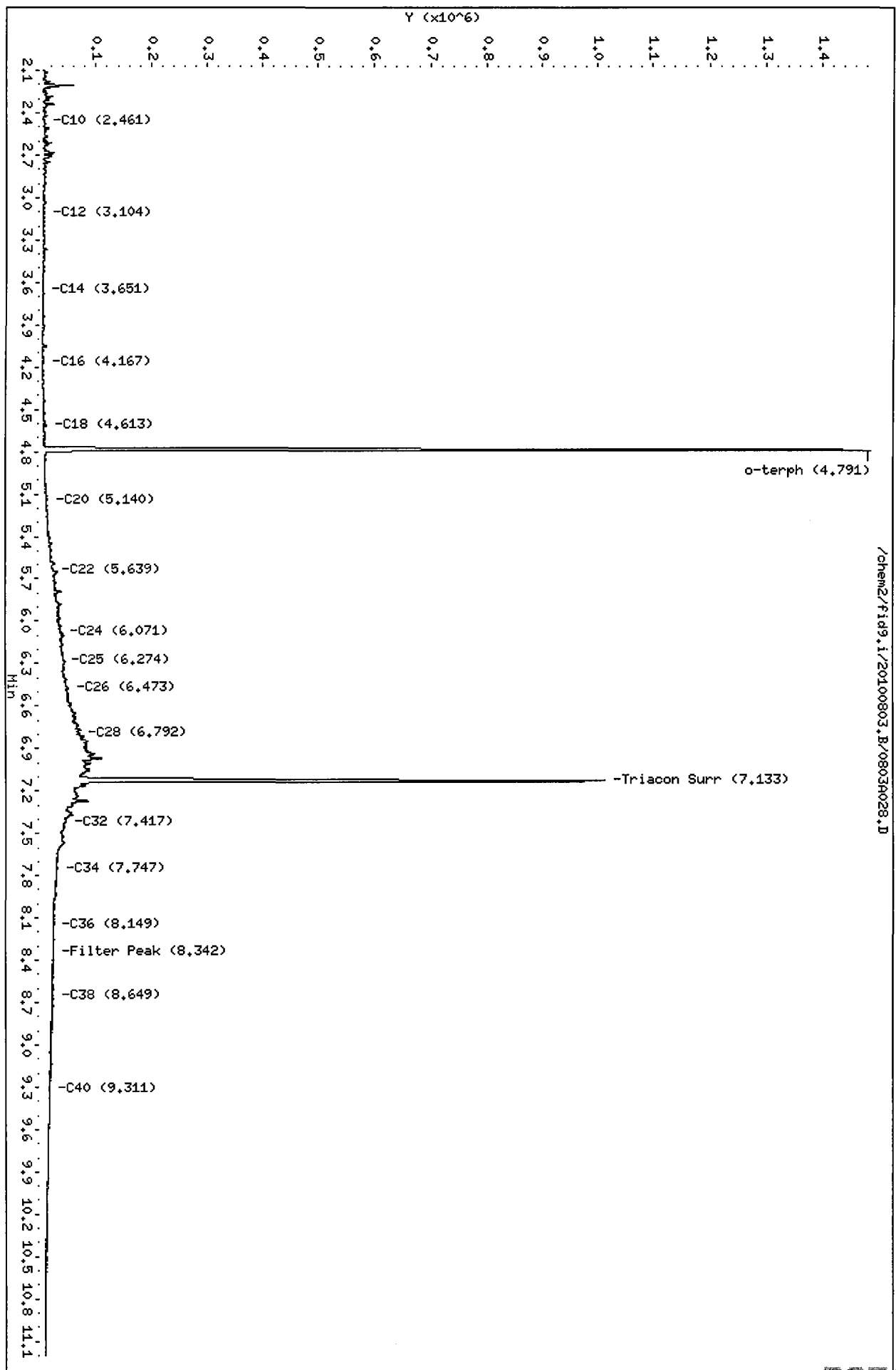
Range Times: NW Diesel(3.106 - 6.079) AK102(2.47 - 6.28) Jet A(2.47 - 4.61)  
 NW M.Oil(6.08 - 8.65) AK103(6.28 - 8.15) OR Diesel(2.47 - 6.80)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1354727	52.6	116.9
Triacontane	973968	49.1	109.1

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

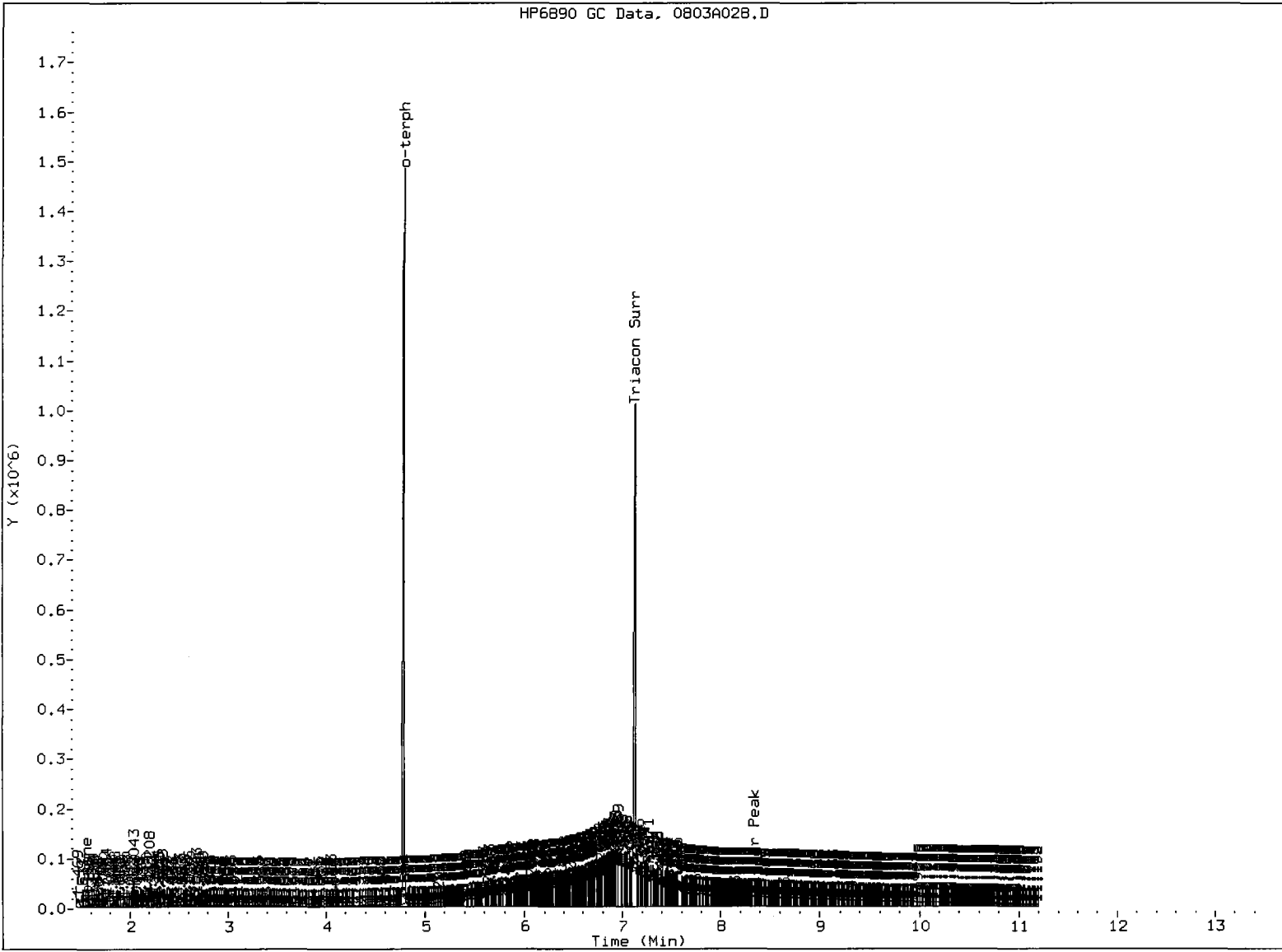
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Date : 03-AUG-2010 22:00  
Client ID: PSB12-2-4-072810  
Sample Info: RGS1C  
Column phase: RTX-1

Instrument: fid9.i  
Operator: HS  
Column diameter: 0.25





HP6890 GC Data, 0803A02B.D



MANUAL INTEGRATION

- ① Baseline correction
- 2. Poor chromatography
- 3. Peak not found
- 4. Totals calculation
- 5. Other \_\_\_\_\_

Analyst: M

Date: 8/4/10

Analytical Resources Inc.  
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100803.B/0803A029.D  
Method: /chem2/fid9.i/20100803.B/ftphfid9a.m  
Instrument: fid9.i  
Operator: MS  
Report Date: 08/04/2010

ARI ID: RG51D  
Client ID: PSB12-8-10-072810  
Injection: 03-AUG-2010 22:22  
Dilution Factor: 1  
Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.561	0.010	4011	2805	GAS (Tol-C12)	274856	13
C8	1.700	0.007	1788	1459	DIESEL (C12-C24)	190486	7
C10	2.462	-0.003	3363	3434	M.OIL (C24-C38)	561054	44
C12	3.109	0.003	928	715	AK-102 (C10-C25)	309552	11 M
C14	3.655	-0.007	1202	1642	AK-103 (C25-C36)	500834	100 M
C16	4.155	-0.001	1349	699			
C18	4.613	0.006	4436	3340			
C20	5.117	-0.011	937	968			
C22	5.637	-0.007	1238	1405			
C24	6.077	-0.002	1449	1353			
C25	6.285	0.009	4045	6162			
C26	6.467	-0.008	2853	4036			
C28	6.809	0.012	5411	8334			
C32	7.402	-0.018	6267	9233	JP-4 (Tol-C14)	309598	19
C34	7.736	-0.007	2787	2223	BUNKERC (C10-C38)	866672	99 M
Filter Peak	8.347	0.004	2387	895			
C36	8.148	0.000	2055	1338			
C38	8.640	-0.009	1667	2155			
C40	9.334	0.028	1253	420			
o-terph	4.791	-0.002	1523602	1346059	JET-A (C10-C18)	214862	16
Triacon Surr	7.127	0.007	898841	968794	JP8 (Tol-C16)	343542	20

M Indicates manual integration within range.

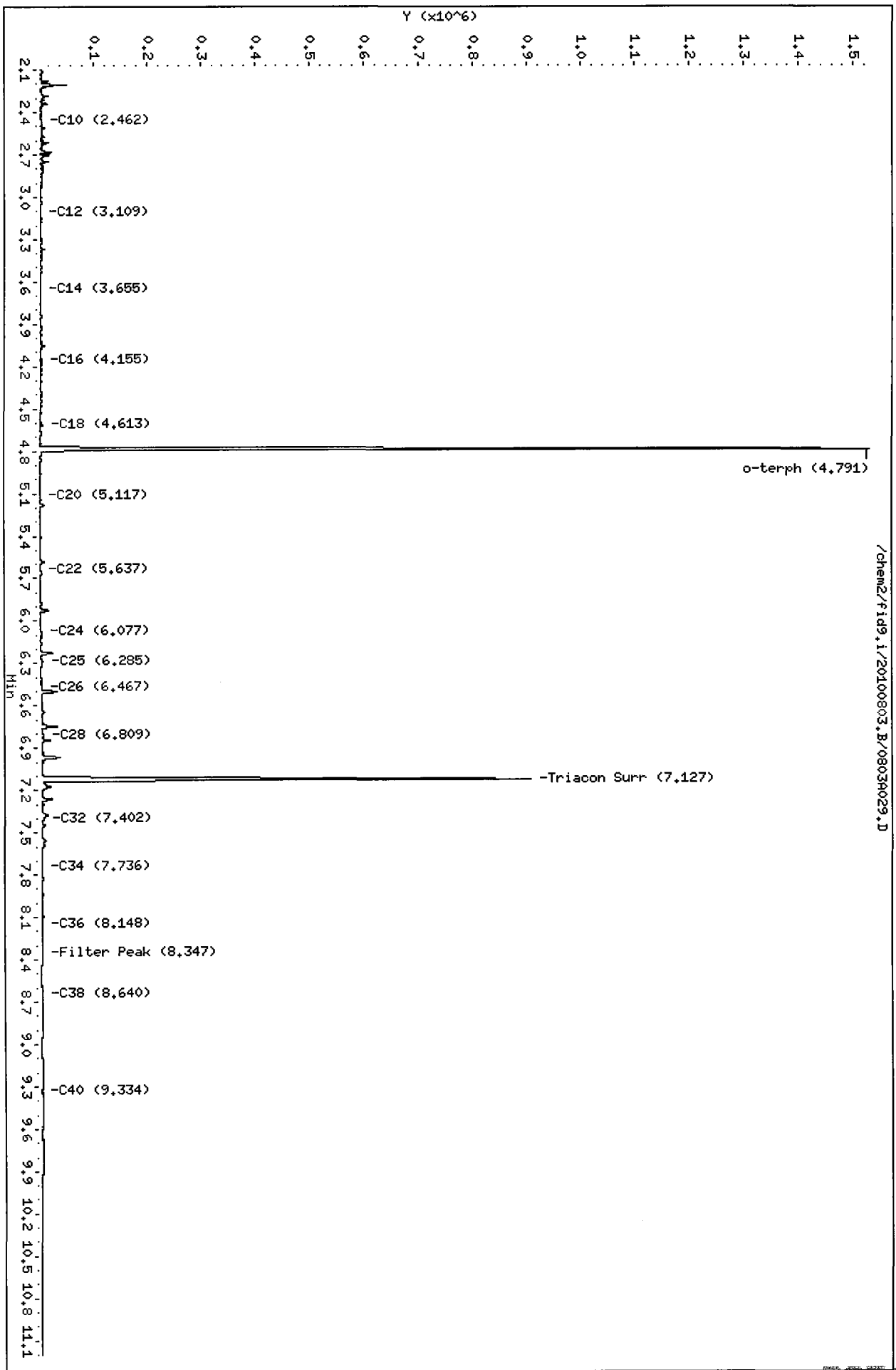
Range Times: NW Diesel(3.106 - 6.079) AK102(2.47 - 6.28) Jet A(2.47 - 4.61)  
NW M.Oil(6.08 - 8.65) AK103(6.28 - 8.15) OR Diesel(2.47 - 6.80)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1346059	52.2	116.1
Triacontane	968794	48.8	108.6

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

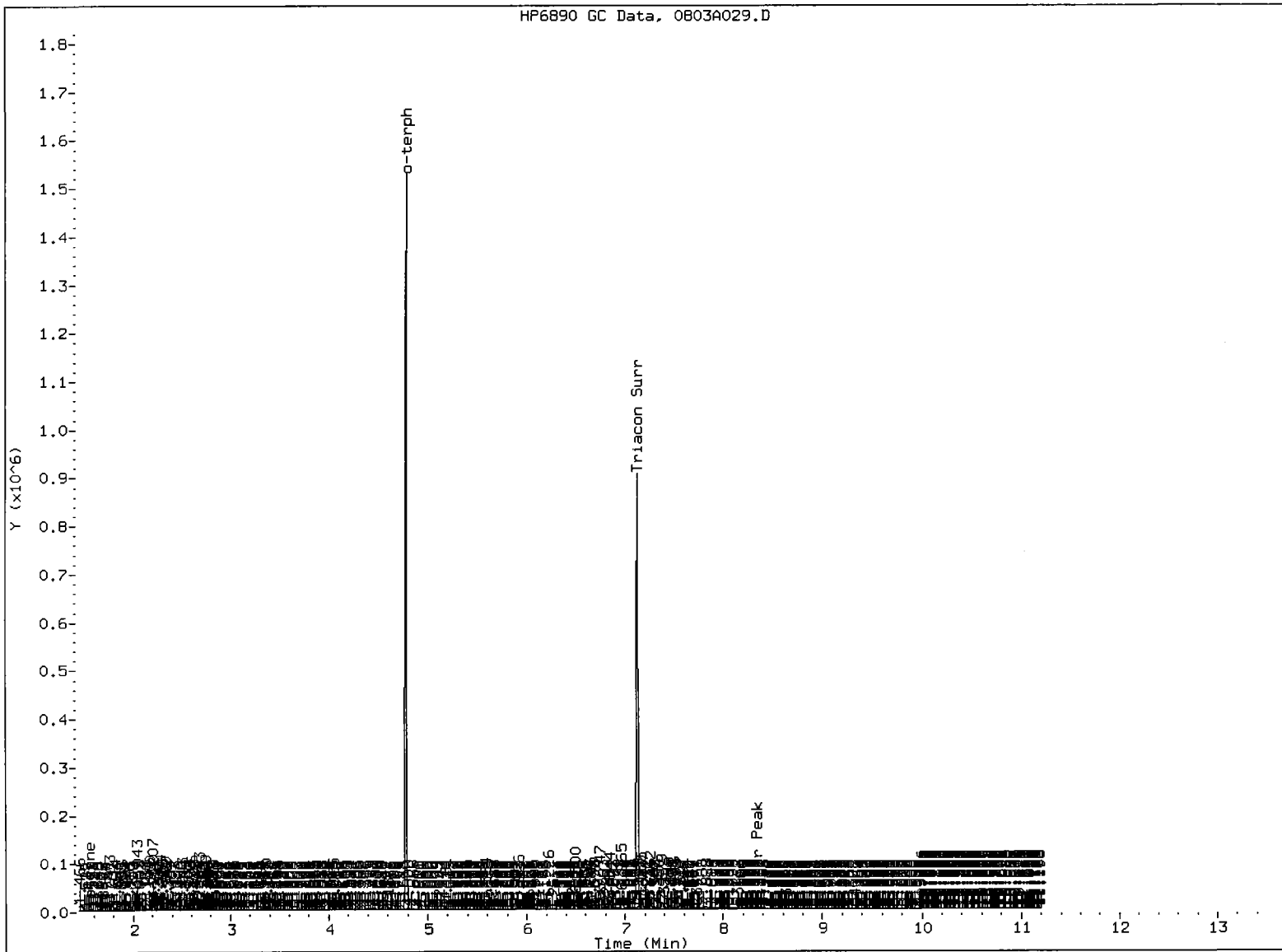
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Date: 03-AUG-2010 22:22  
Client ID: PSB12-8-10-072810  
Sample Info: RGS1D  
Column phase: RTX-1

Instrument: fid9.i  
Operator: MS  
Column diameter: 0.25



/chem2/fid9.i/20100803.B/08034029.D

HP6890 GC Data, 0803A029.D



MANUAL INTEGRATION

- ① Baseline correction
- 2. Poor chromatography
- 3. Peak not found
- 4. Totals calculation
- 5. Other \_\_\_\_\_

Analyst: Mr Date: 8/4/66

Analytical Resources Inc.  
 NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100803.B/0803A030.D  
 Method: /chem2/fid9.i/20100803.B/ftphfid9a.m  
 Instrument: fid9.i  
 Operator: MS  
 Report Date: 08/04/2010

ARI ID: RG51E  
 Client ID: PSB12-8-10-072810-D  
 Injection: 03-AUG-2010 22:43  
 Dilution Factor: 1  
 Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.561	0.010	5332	3399	GAS (Tol-C12)	325232	15
C8	1.700	0.006	2048	1581	DIESEL (C12-C24)	163414	6
C10	2.462	-0.004	4044	4277	M.OIL (C24-C38)	357038	28
C12	3.110	0.005	1061	602	AK-102 (C10-C25)	294784	10 M
C14	3.656	-0.006	1131	1469	AK-103 (C25-C36)	311489	62 M
C16	4.145	-0.011	1818	1883			
C18	4.613	0.007	3531	2827			
C20	5.118	-0.010	975	962			
C22	5.635	-0.009	1279	1523			
C24	6.076	-0.002	1313	1135			
C25	6.285	0.009	3264	4639			
C26	6.467	-0.009	2384	3902			
C28	6.804	0.008	3997	6476			
C32	7.403	-0.017	5541	9142	JP-4 (Tol-C14)	361175	22
C34	7.736	-0.007	2567	2907	BUNKERC (C10-C38)	645787	74 M
Filter Peak	8.352	0.009	1822	3542			
C36	8.153	0.005	1288	652			
C38	8.653	0.004	1366	1574			
C40	9.290	-0.015	856	1519			
o-terph	4.793	-0.001	1519566	1346183	JET-A (C10-C18)	222987	16
Triacon Surr	7.126	0.007	957668	979688	JP8 (Tol-C16)	393960	22

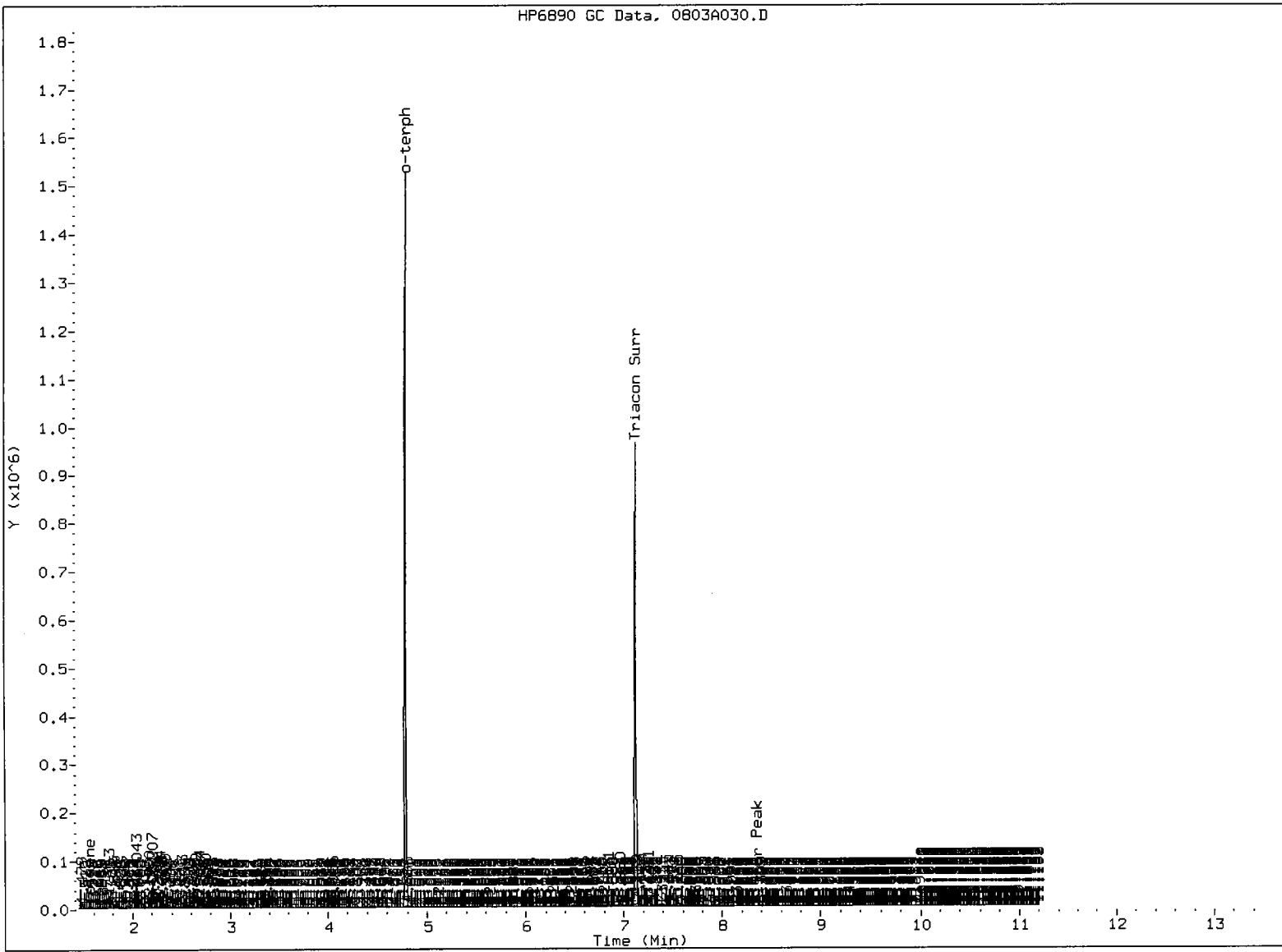
M Indicates manual integration within range.

Range Times: NW Diesel(3.106 - 6.079) AK102(2.47 - 6.28) Jet A(2.47 - 4.61)  
 NW M.Oil(6.08 - 8.65) AK103(6.28 - 8.15) OR Diesel(2.47 - 6.80)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1346183	52.3	116.1
Triacontane	979688	49.4	109.8

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010





MANUAL INTEGRATION

- 1. Baseline correction
- 2. Poor chromatography
- 3. Peak not found
- 4. Totals calculation
- 5. Other \_\_\_\_\_

Analyst: Me Date: 8/4/10

Analytical Resources Inc.  
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100803.B/0803A031.D  
Method: /chem2/fid9.i/20100803.B/ftphfid9a.m  
Instrument: fid9.i  
Operator: MS  
Report Date: 08/04/2010

ARI ID: RG51G  
Client ID: PSB12-4-6-072810  
Injection: 03-AUG-2010 23:05  
Dilution Factor: 1  
Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.536	-0.015	2111	2040	GAS (Tol-C12)	312297	15
C8	1.705	0.012	1465	955	DIESEL (C12-C24)	2455715	93
C10	2.464	-0.001	2868	2266	M.OIL (C24-C38)	13212036	1033
C12	3.105	-0.001	1908	1106	AK-102 (C10-C25)	2916197	100 M
C14	3.649	-0.014	1824	2265	AK-103 (C25-C36)	11409262	2278 M
C16	4.152	-0.004	3841	1452			
C18	4.614	0.007	13556	16708			
C20	5.139	0.011	18171	26193			
C22	5.639	-0.005	30832	10990			
C24	6.084	0.005	50739	18912			
C25	6.275	-0.002	60364	22494			
C26	6.475	-0.001	81133	105252			
C28	6.796	-0.001	100794	47491			
C32	7.414	-0.006	132594	147249	JP-4 (Tol-C14)	355903	22
C34	7.741	-0.002	93244	31074	BUNKERC (C10-C38)	15802343	1802 M
Filter Peak	8.347	0.003	54905	42061			
C36	8.148	-0.001	66501	23250			
C38	8.649	0.000	43738	13751			
C40	9.306	0.000	22408	12538			
o-terph	4.793	-0.001	1515323	1335712	JET-A (C10-C18)	419627	30
Triacon Surr	7.134	0.014	935451	992010	JP8 (Tol-C16)	427885	24

M Indicates manual integration within range.

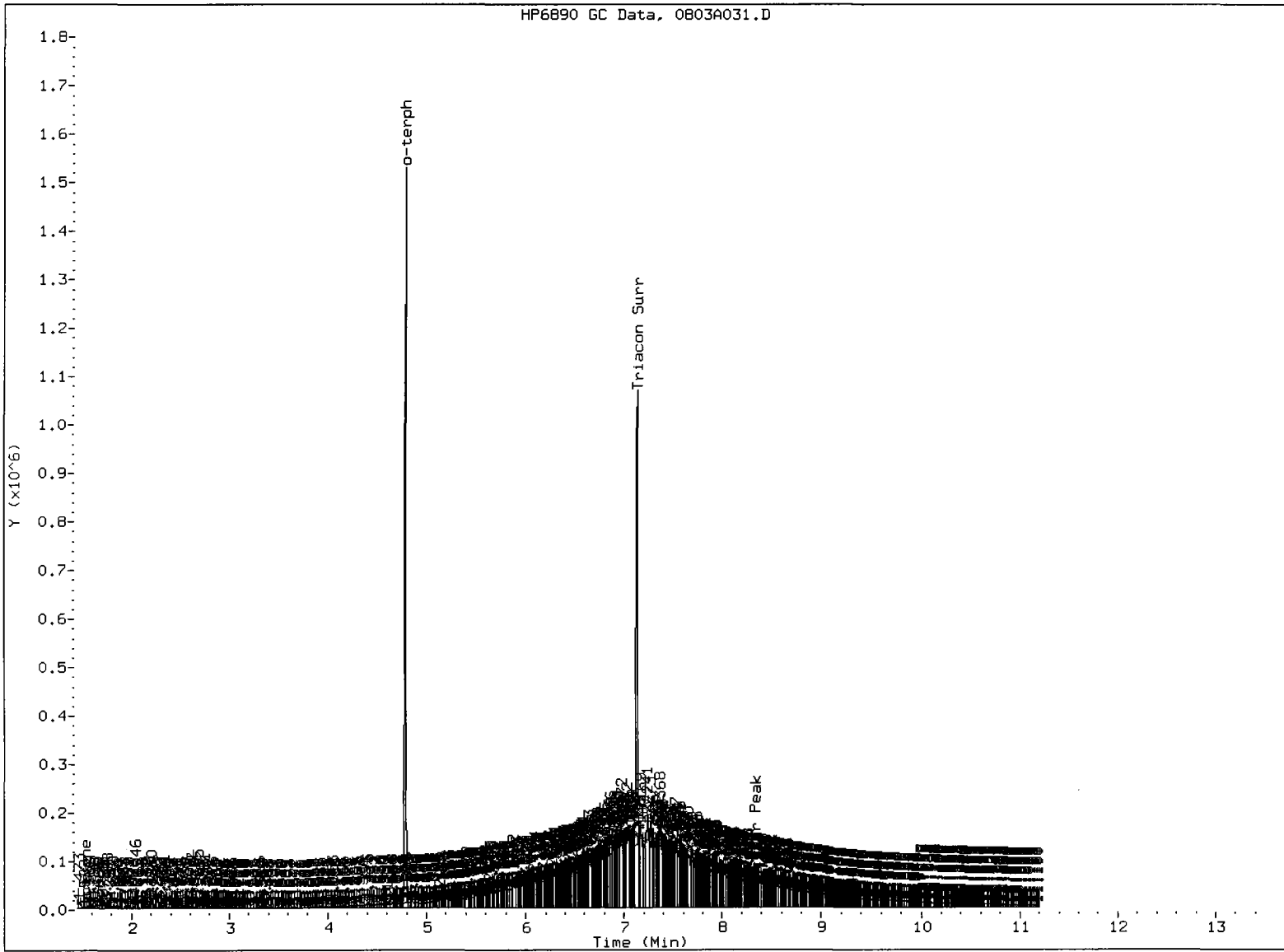
Range Times: NW Diesel(3.106 - 6.079) AK102(2.47 - 6.28) Jet A(2.47 - 4.61)  
NW M.Oil(6.08 - 8.65) AK103(6.28 - 8.15) OR Diesel(2.47 - 6.80)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1335712	51.8	115.2
Triacontane	992010	50.0	111.2

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010







MANUAL INTEGRATION

- 1. Baseline correction
- 2. Poor chromatography
- 3. Peak not found
- 4. Totals calculation
- 5. Other \_\_\_\_\_

Analyst: *Mr* Date: *8/4/6*

Analytical Resources Inc.  
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100803.B/0803A032.D  
Method: /chem2/fid9.i/20100803.B/ftphfid9a.m  
Instrument: fid9.i  
Operator: MS  
Report Date: 08/04/2010

ARI ID: RG51FMS  
Client ID: PSB12-14-17-072 MS  
Injection: 03-AUG-2010 23:26  
Dilution Factor: 1  
Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.560	0.009	28896	14186	GAS (Tol-C12)	4666101	222
C8	1.699	0.005	2285	1070	DIESEL (C12-C24)	34216607	1299
C10	2.465	-0.001	24546	18108	M.OIL (C24-C38)	3748276	293
C12	3.095	-0.010	99963	90766	AK-102 (C10-C25)	38077572	1311 M
C14	3.675	0.012	809229	718741	AK-103 (C25-C36)	3151097	629 M
C16	4.156	0.001	303409	254922			
C18	4.593	-0.013	239034	174716			
C20	5.129	0.001	120577	28432			
C22	5.629	-0.016	84626	68901			
C24	6.094	0.015	110475	134254			
C25	6.267	-0.009	29062	10824			
C26	6.472	-0.003	38224	72906			
C28	6.796	0.000	26820	8420			
C32	7.422	0.002	32302	28527	JP-4 (Tol-C14)	10206773	622
C34	7.739	-0.004	26149	19947	BUNKERC (C10-C38)	41630416	4747 M
Filter Peak	8.341	-0.002	15960	18074			
C36	8.150	0.002	17194	7694			
C38	8.652	0.002	11602	6394			
C40	9.306	0.000	6777	4563			
o-terph	4.798	0.005	1418476	1369032	JET-A (C10-C18)	26581933	1924
Triacon Surr	7.132	0.012	871529	960943	JP8 (Tol-C16)	18918617	1075

M Indicates manual integration within range.

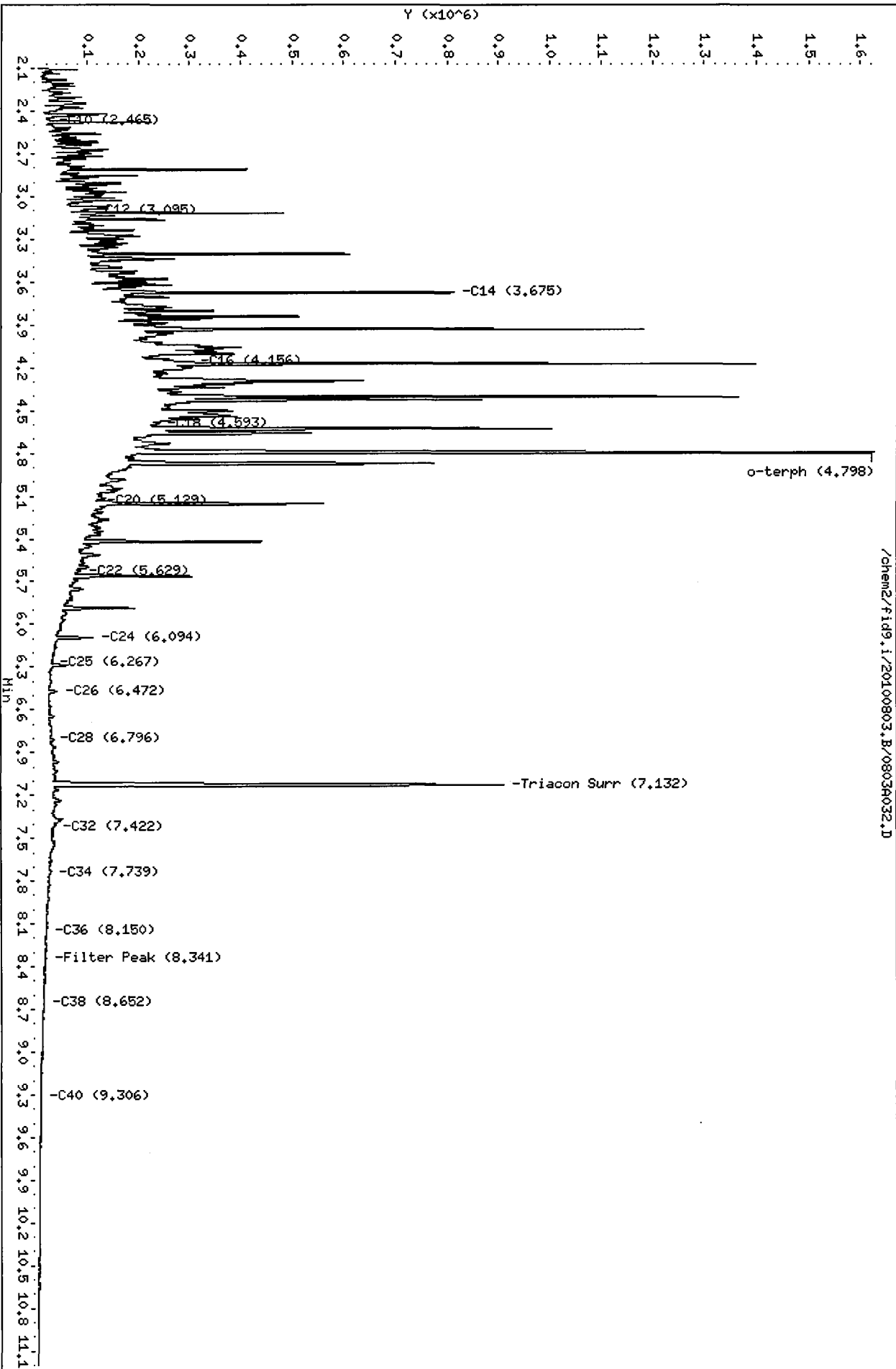
Range Times: NW Diesel(3.106 - 6.079) AK102(2.47 - 6.28) Jet A(2.47 - 4.61)  
NW M.Oil(6.08 - 8.65) AK103(6.28 - 8.15) OR Diesel(2.47 - 6.80)

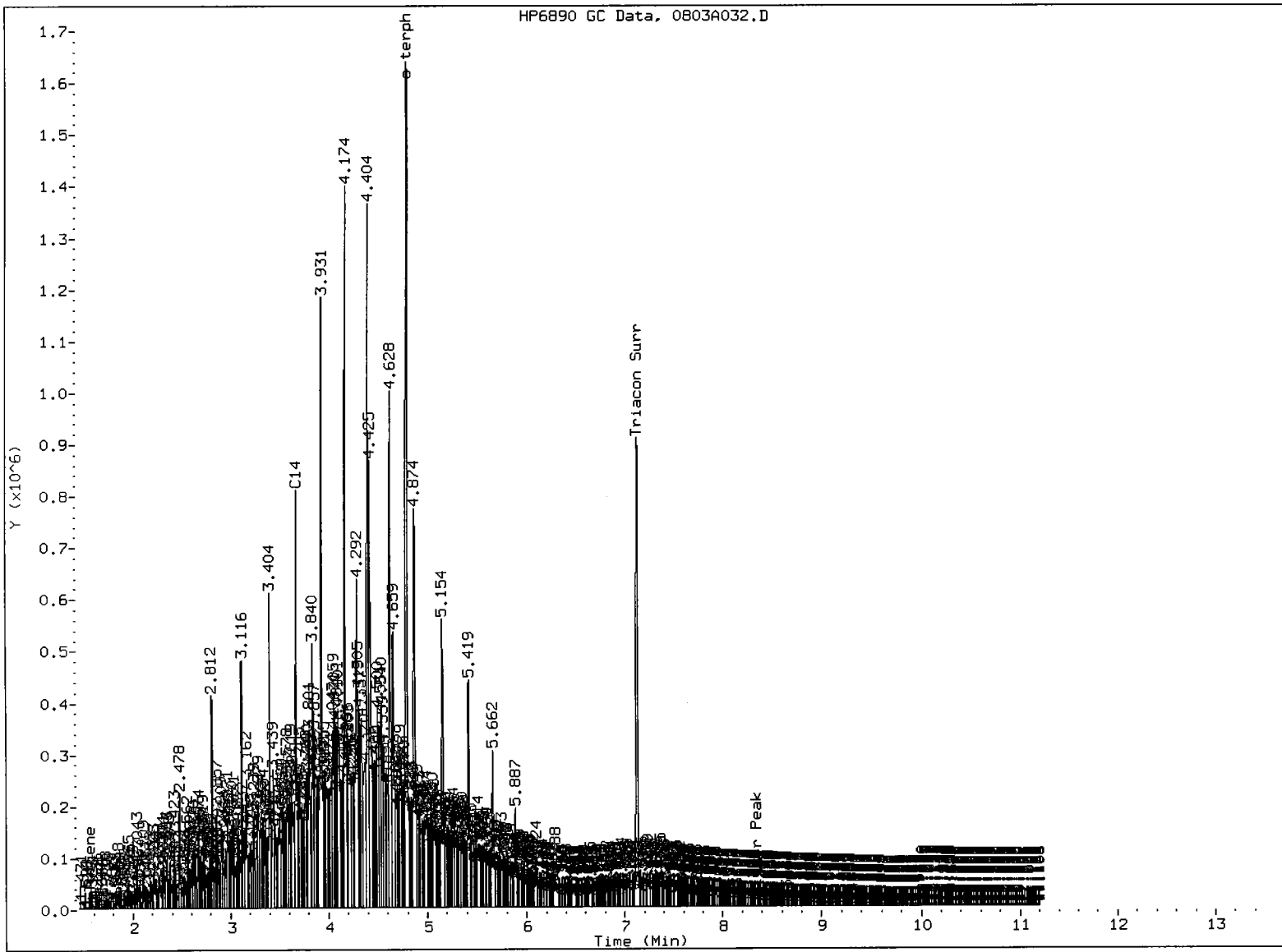
Surrogate	Area	Amount	%Rec
o-Terphenyl	1369032	53.1	118.1
Triacotane	960943	48.5	107.7

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

Data File: /chem2/fid9.i/20100803.B/0803R032.D  
Date : 03-AUG-2010 23:26  
Client ID: PSB12-14-17-072 HS  
Sample Info: R051FMS  
Column phase: RTX-1

Instrument: fid9.i  
Operator: HS  
Column diameter: 0.25





MANUAL INTEGRATION

- 1. Baseline correction
- 2. Poor chromatography
- 3. Peak not found
- 4. Totals calculation
- 5. Other \_\_\_\_\_

Analyst: M

Date: 8/4/10

Analytical Resources Inc.  
 NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100803.B/0803A033.D  
 Method: /chem2/fid9.i/20100803.B/ftphfid9a.m  
 Instrument: fid9.i  
 Operator: MS  
 Report Date: 08/04/2010

ARI ID: RG51FMSD  
 Client ID: PSB12-14-17-072 MSD  
 Injection: 03-AUG-2010 23:47  
 Dilution Factor: 1  
 Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.559	0.009	36453	17785	GAS (Tol-C12)	4631243	220
C8	1.699	0.005	1456	612	DIESEL (C12-C24)	35172691	1336
C10	2.465	0.000	23798	16749	M.OIL (C24-C38)	4028842	315
C12	3.096	-0.010	102973	89826	AK-102 (C10-C25)	39014891	1343 M
C14	3.674	0.012	796168	807986	AK-103 (C25-C36)	3410437	681 M
C16	4.154	-0.001	299736	185028			
C18	4.602	-0.005	225238	62211			
C20	5.118	-0.010	135515	139173			
C22	5.662	0.018	309626	367387			
C24	6.072	-0.007	38239	10618			
C25	6.288	0.012	61665	117002			
C26	6.470	-0.006	39282	74074			
C28	6.790	-0.006	27410	5412			
C32	7.414	-0.006	34994	30877	JP-4 (Tol-C14)	10124392	617
C34	7.735	-0.008	28124	20491	BUNKERC (C10-C38)	42866682	4888 M
Filter Peak	8.345	0.002	17285	7827			
C36	8.140	-0.008	19330	15946			
C38	8.653	0.004	12298	8875			
C40	9.307	0.001	7182	5146			
o-terph	4.800	0.006	1420892	1387655	JET-A (C10-C18)	27055065	1958
Triacon Surr	7.126	0.006	959677	966611	JP8 (Tol-C16)	19093729	1085

M Indicates manual integration within range.

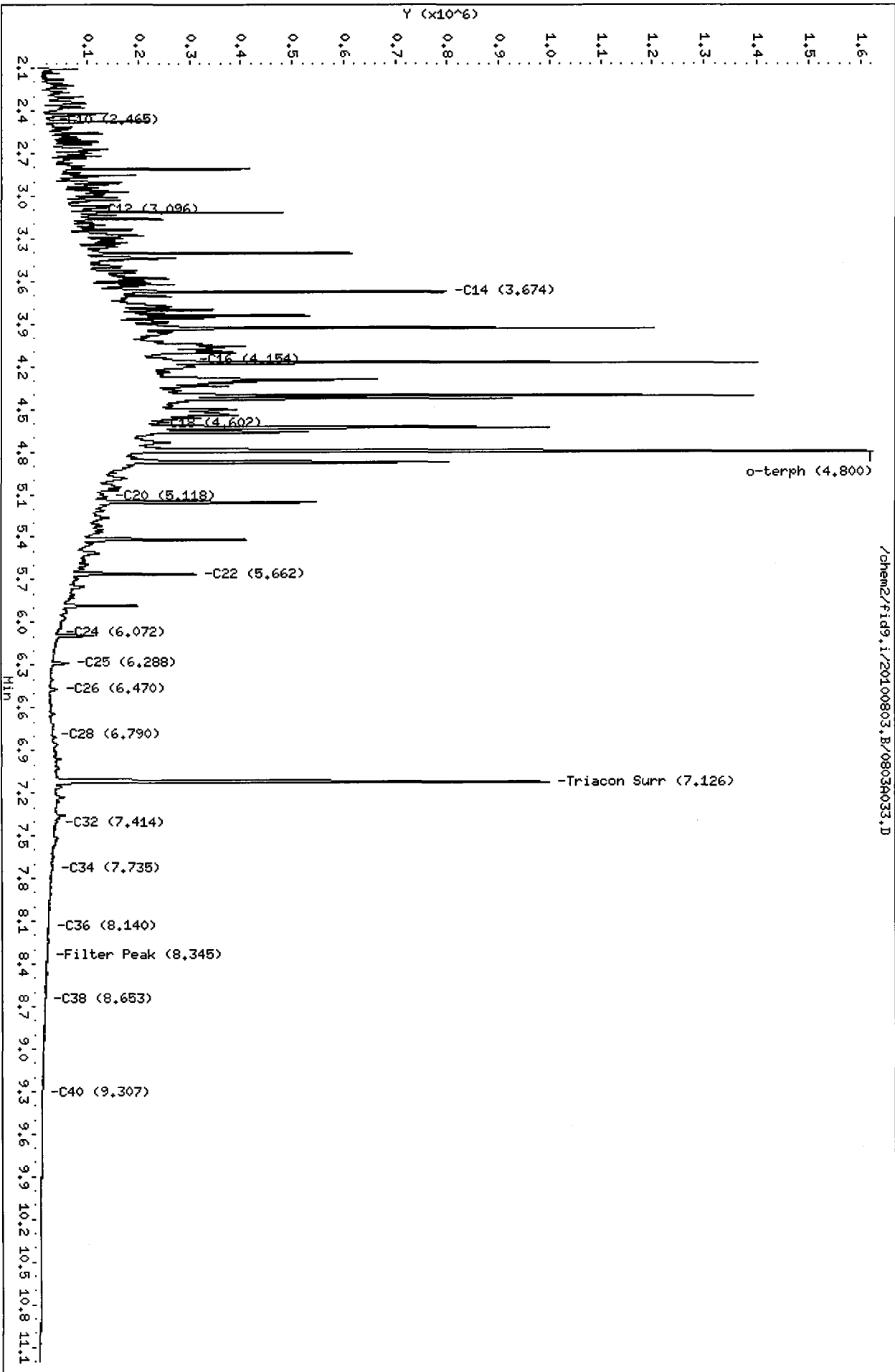
Range Times: NW Diesel(3.106 - 6.079) AK102(2.47 - 6.28) Jet A(2.47 - 4.61)  
 NW M.Oil(6.08 - 8.65) AK103(6.28 - 8.15) OR Diesel(2.47 - 6.80)

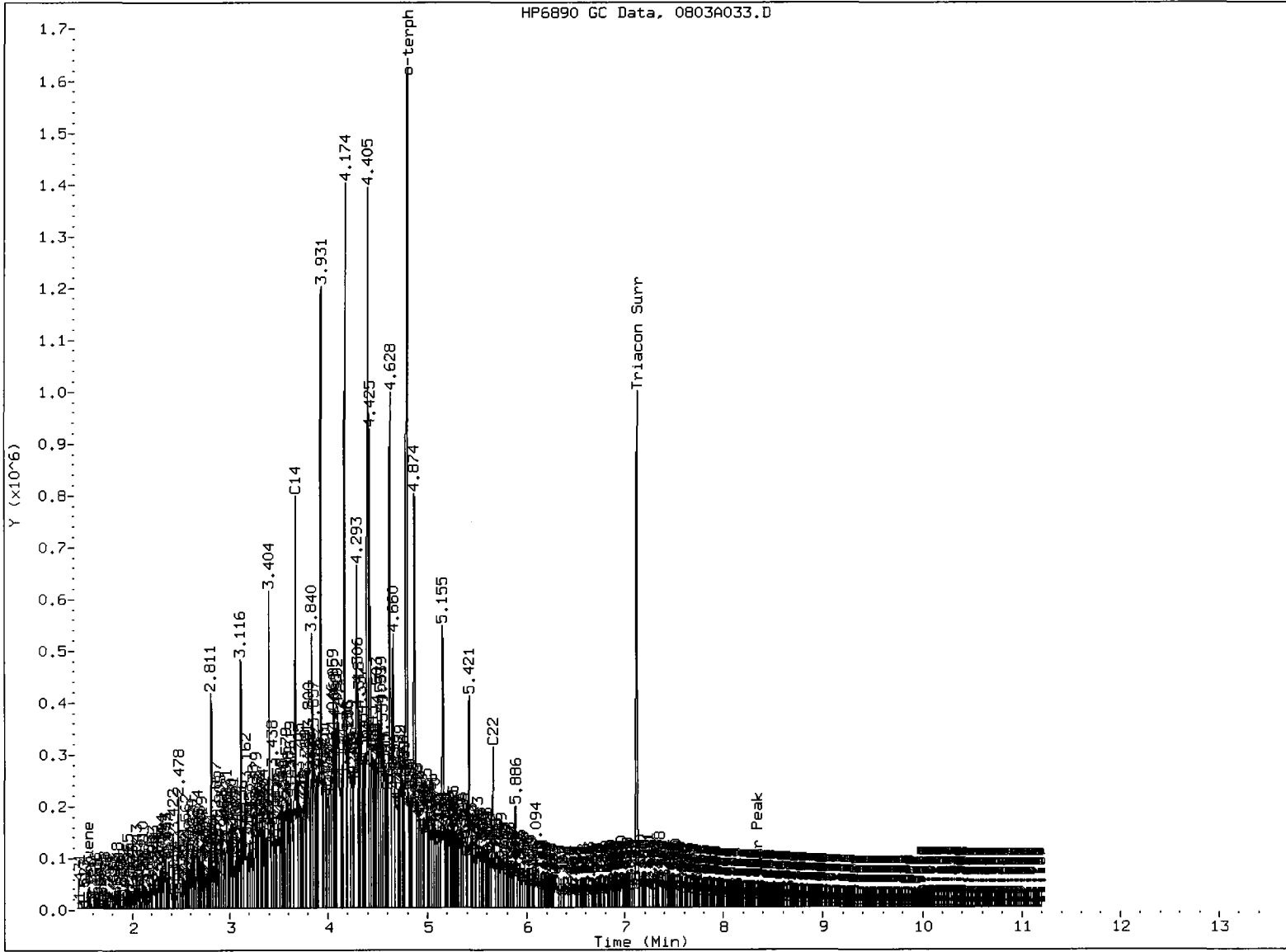
Surrogate	Area	Amount	%Rec
o-Terphenyl	1387655	53.9	119.7
Triacontane	966611	48.7	108.3

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

Data File: /chem2/fid9.i/20100803.B/08030033.D  
Date : 03-AUG-2010 23:47  
Client ID: PSB12-14-17-072 MSD  
Sample Info: ROSE1FMSD  
Column phase: RTX-1

Instrument: fid9.i  
Operator: MS  
Column diameter: 0.25





MANUAL INTEGRATION

- 1. Baseline correction
- 2. Poor chromatography
- 3. Peak not found
- 4. Totals calculation

5. Other \_\_\_\_\_

Analyst: me

Date: 8/9/10



Analytical Resources Inc.  
 NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100803.B/0803A034.D  
 Method: /chem2/fid9.i/20100803.B/ftphfid9a.m  
 Instrument: fid9.i  
 Operator: MS  
 Report Date: 08/04/2010

ARI ID: RG66LCSS1  
 Client ID: RG66LCSS1  
 Injection: 04-AUG-2010 00:09  
 Dilution Factor: 1  
 Macro: 28-JUN-2010

FID:9 RESULTS							
Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.561	0.010	45444	22631	GAS (Tol-C12)	4367241	208
C8	1.688	-0.005	3795	3249	DIESEL (C12-C24)	33131972	1258
C10	2.465	-0.001	20037	12686	M.OIL (C24-C38)	439925	34
C12	3.116	0.010	425385	229549	AK-102 (C10-C25)	36757421	1265 M
C14	3.661	-0.002	215931	142045	AK-103 (C25-C36)	307377	61
C16	4.144	-0.012	244493	82899			
C18	4.598	-0.008	227501	92499			
C20	5.115	-0.014	129664	144260			
C22	5.662	0.017	264021	306742			
C24	6.092	0.013	85041	101182			
C25	6.287	0.010	39786	53504			
C26	6.470	-0.006	16075	24819			
C28	6.806	0.010	3971	5420			
C32	7.398	-0.022	2524	3727	JP-4 (Tol-C14)	9904323	604
C34	7.733	-0.010	984	1909	BUNKERC (C10-C38)	37078464	4228 M
Filter Peak	8.344	0.001	654	347			
C36	8.153	0.005	473	309			
C38	8.662	0.012	728	880			
C40	9.307	0.002	70	38			
o-terph	4.799	0.005	1346787	1221723	JET-A (C10-C18)	25973731	1880
Triacon Surr	7.124	0.004	851372	879721	JP8 (Tol-C16)	18165765	1032

M Indicates manual integration within range.

Range Times: NW Diesel(3.106 - 6.079) AK102(2.47 - 6.28) Jet A(2.47 - 4.61)  
 NW M.Oil(6.08 - 8.65) AK103(6.28 - 8.15) OR Diesel(2.47 - 6.80)

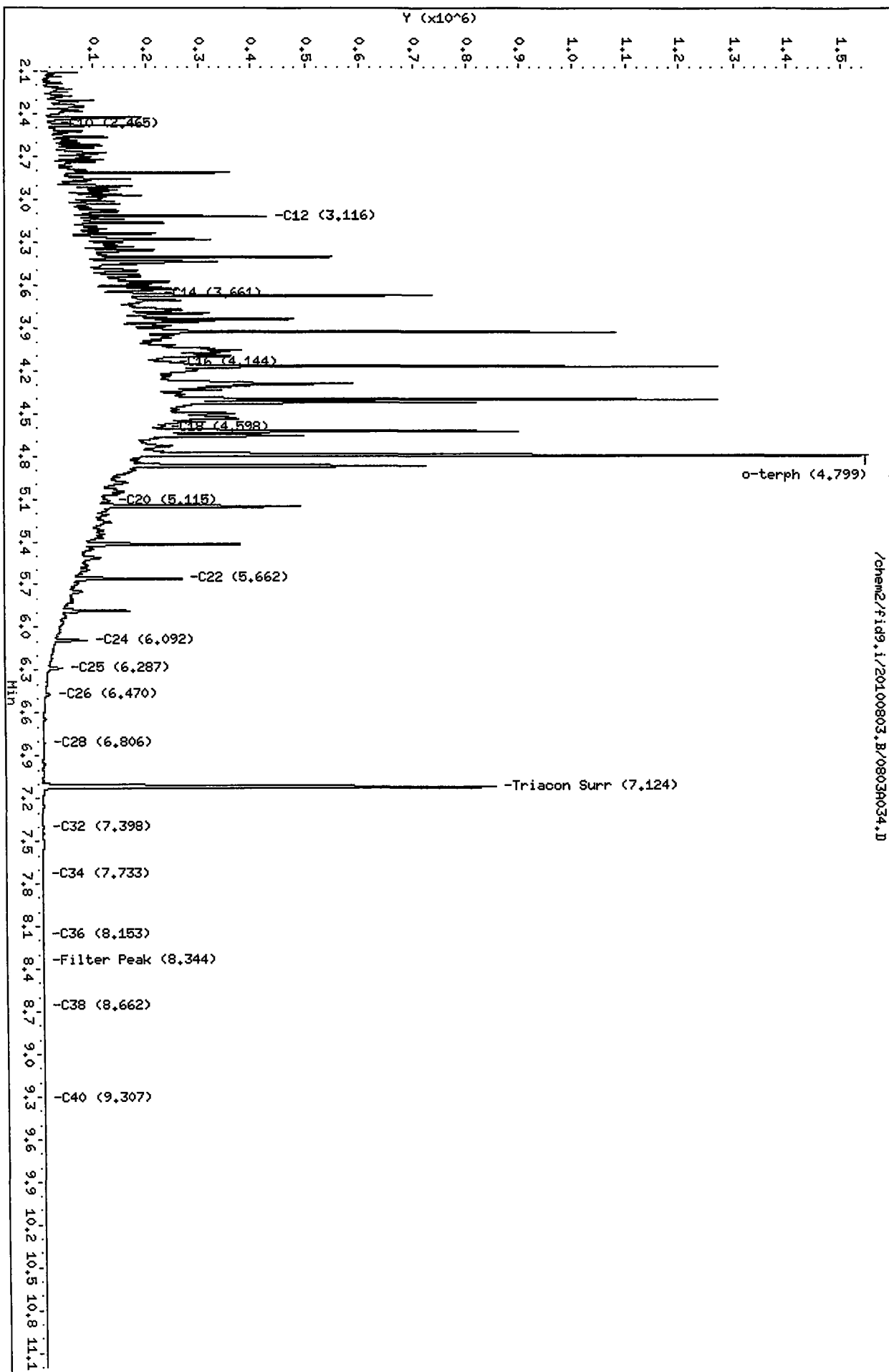
Surrogate	Area	Amount	%Rec
o-Terphenyl	1221723	47.4	105.4
Triacontane	879721	44.4	98.6

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

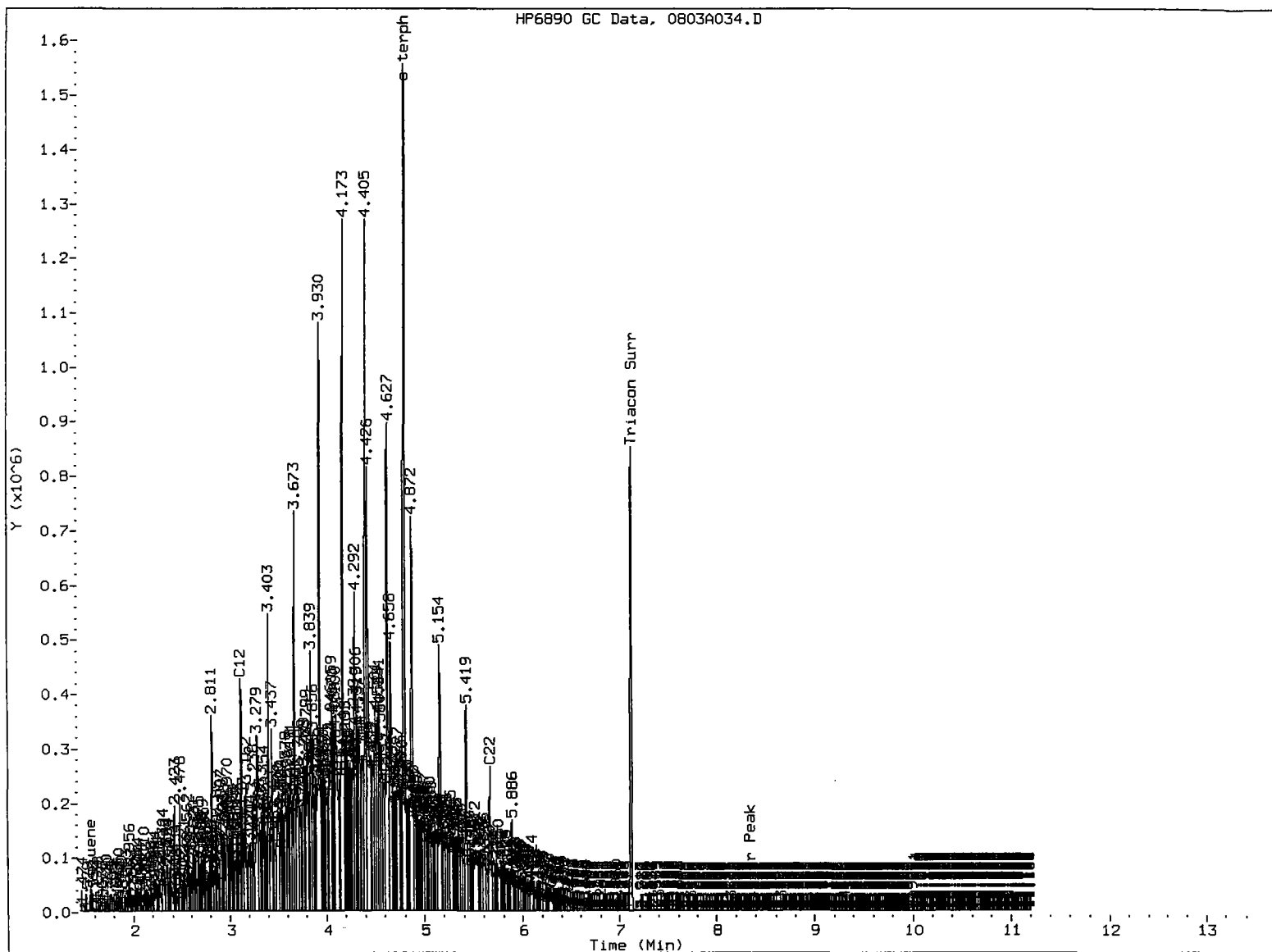
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Date: 04-AUG-2010 00:09  
Client ID: RG66LCSS1  
Sample Info: RG66LCSS1

Column phase: RTX-1

Instrument: fid9.i  
Operator: MS  
Column diameter: 0.25



/chem2/fid9.i/20100803.B/0803A034.D



MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation
5. Other \_\_\_\_\_

Analyst: MM Date: 8/4/10

Analytical Resources Inc.  
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100803.B/0803A035.D  
Method: /chem2/fid9.i/20100803.B/ftphfid9a.m  
Instrument: fid9.i  
Operator: MS  
Report Date: 08/04/2010

ARI ID: RG66LCSDS1  
Client ID: RG66LCSDS1  
Injection: 04-AUG-2010 00:30  
Dilution Factor: 1  
Macro: 28-JUN-2010

FID:9 RESULTS							
Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.561	0.010	45741	22514	GAS (Tol-C12)	4627205	220
C8	1.688	-0.006	4195	3475	DIESEL (C12-C24)	34501924	1310
C10	2.465	0.000	21303	14842	M.OIL (C24-C38)	441636	35
C12	3.116	0.010	450712	242006	AK-102 (C10-C25)	38317731	1319 M
C14	3.673	0.011	749634	709116	AK-103 (C25-C36)	341873	68
C16	4.139	-0.017	253177	213899			
C18	4.607	0.000	229314	50032			
C20	5.127	-0.001	125214	49186			
C22	5.661	0.017	280440	316118			
C24	6.091	0.012	88435	107642			
C25	6.286	0.010	43134	65522			
C26	6.470	-0.006	17036	25676			
C28	6.806	0.009	3924	6129			
C32	7.426	0.006	746	439	JP-4 (Tol-C14)	10480783	639
C34	7.732	-0.012	1030	1250	BUNKERC (C10-C38)	38667186	4409 M
Filter Peak	8.348	0.004	459	302			
C36	8.150	0.001	480	258			
C38	8.654	0.004	275	262			
C40	9.301	-0.005	169	92			
o-terph	4.800	0.007	1313369	1271700	JET-A (C10-C18)	27101997	1961
Triacon Surr	7.125	0.005	905045	917631	JP8 (Tol-C16)	19125161	1087

M Indicates manual integration within range.

Range Times: NW Diesel(3.106 - 6.079) AK102(2.47 - 6.28) Jet A(2.47 - 4.61)  
NW M.Oil(6.08 - 8.65) AK103(6.28 - 8.15) OR Diesel(2.47 - 6.80)

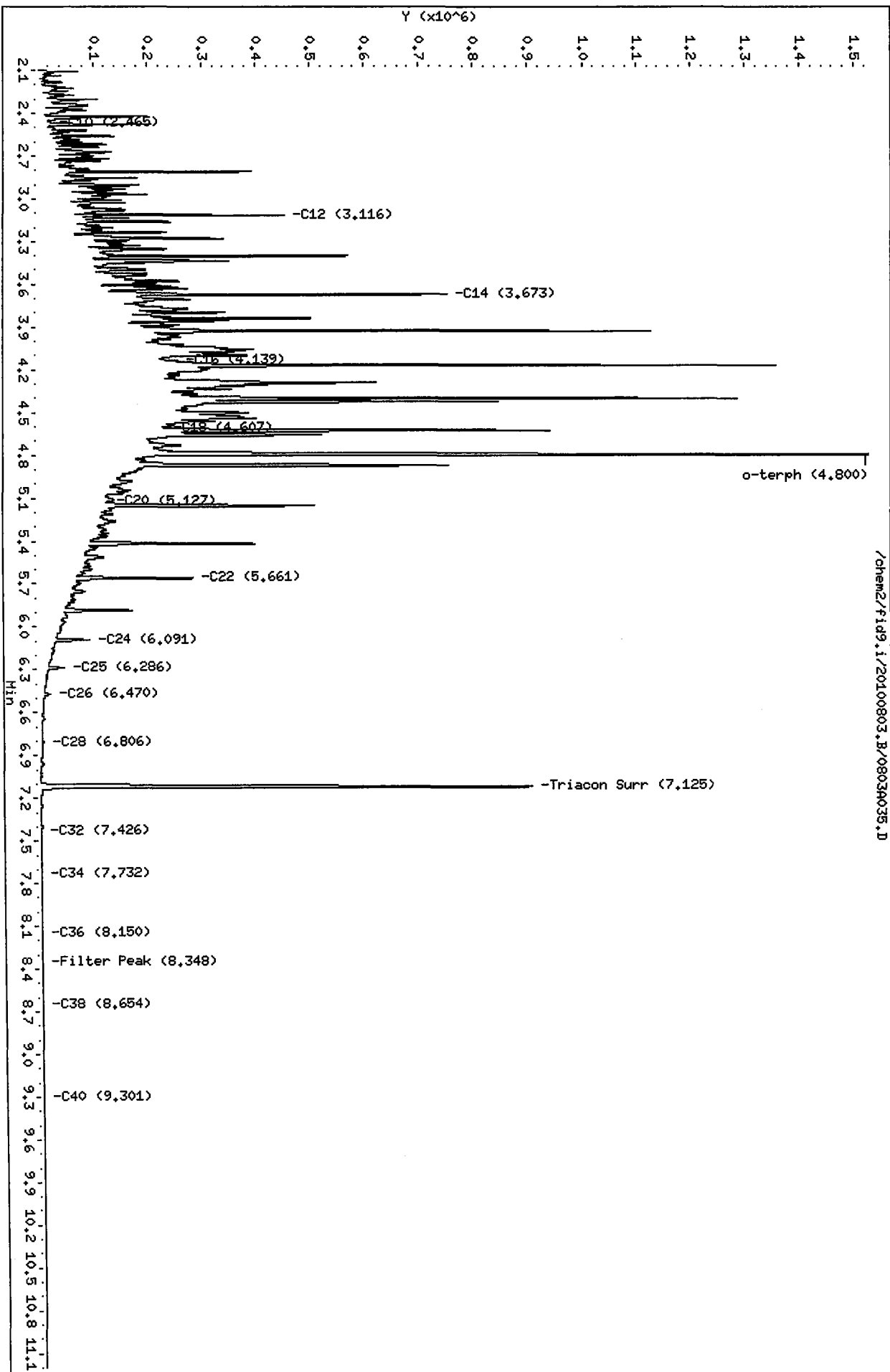
Surrogate	Area	Amount	%Rec
o-Terphenyl	1271700	49.4	109.7
Triacontane	917631	46.3	102.8

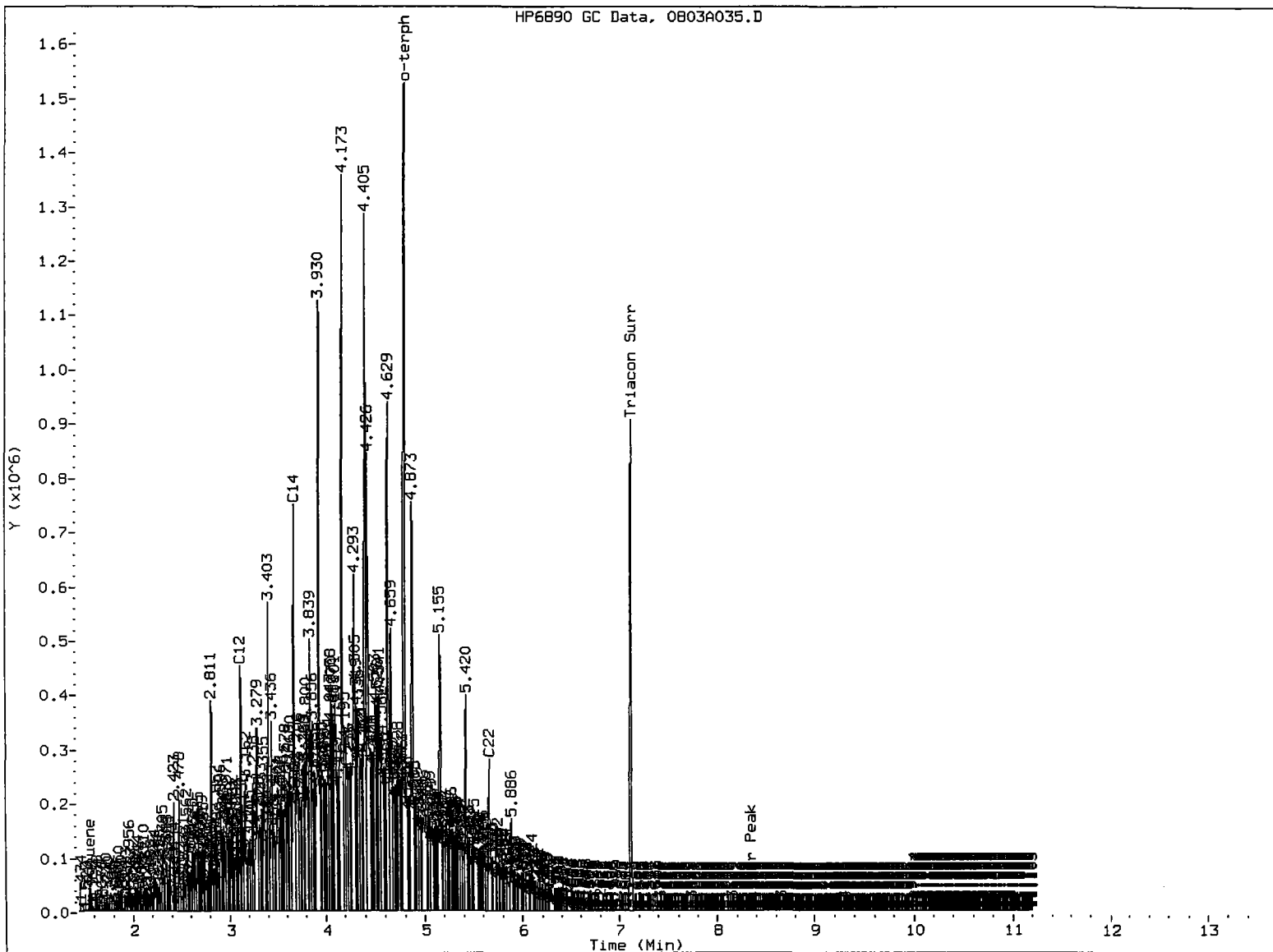
Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

Data File: /chem2/fid9.i/20100803.B/0803A035.D  
Date : 04-AUG-2010 00:30  
Client ID: R066LCSDS1  
Sample Info: R066LCSDS1

Column phase: RTX-1

Instrument: fid9.i  
Operator: HS  
Column diameter: 0.25





MANUAL INTEGRATION

- 1. Baseline correction
- 2. Poor chromatography
- 3. Peak not found
- 4. Totals calculation
- 5. Other \_\_\_\_\_

Analyst: M

Date: 5/4/16

Analytical Resources Inc.  
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100803.B/0803A036.D  
Method: /chem2/fid9.i/20100803.B/ftphfid9a.m  
Instrument: fid9.i  
Operator: MS  
Report Date: 08/04/2010

ARI ID: RG66MBS1  
Client ID: RG66MBS1  
Injection: 04-AUG-2010 00:52  
Dilution Factor: 1  
Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.562	0.011	3460	2793	GAS (Tol-C12)	247926	12
C8	1.688	-0.006	866	878	DIESEL (C12-C24)	134342	5
C10	2.463	-0.002	3403	4141	M.OIL (C24-C38)	86279	7
C12	3.112	0.006	922	574	AK-102 (C10-C25)	200305	7
C14	3.667	0.004	1130	870	AK-103 (C25-C36)	66545	13
C16	4.151	-0.005	1785	2131			
C18	4.613	0.006	2054	1958			
C20	5.117	-0.011	498	535			
C22	5.637	-0.008	547	588			
C24	6.077	-0.002	337	281			
C25	6.290	0.014	322	484			
C26	6.471	-0.005	312	320			
C28	6.807	0.011	826	1184			
C32	7.401	-0.019	2264	3507	JP-4 (Tol-C14)	286289	17
C34	7.744	0.001	1024	1005	BUNKERC (C10-C38)	285853	33
Filter Peak	8.344	0.001	698	310			
C36	8.154	0.006	842	577			
C38	8.655	0.005	685	485			
C40	9.306	0.000	617	146			
o-terph	4.791	-0.003	1320954	1195308	JET-A (C10-C18)	176496	13
Triacon Surr	7.125	0.005	855791	881766	JP8 (Tol-C16)	326829	19

M Indicates manual integration within range.

Range Times: NW Diesel(3.106 - 6.079) AK102(2.47 - 6.28) Jet A(2.47 - 4.61)  
NW M.Oil(6.08 - 8.65) AK103(6.28 - 8.15) OR Diesel(2.47 - 6.80)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1195308	46.4	103.1
Triacontane	881766	44.5	98.8

*MS/9/10*

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

Data File: /chem2/fid9.i/20100803.B/0803A036.D

Date : 04-AUG-2010 00:52

Client ID: RG66HBS1

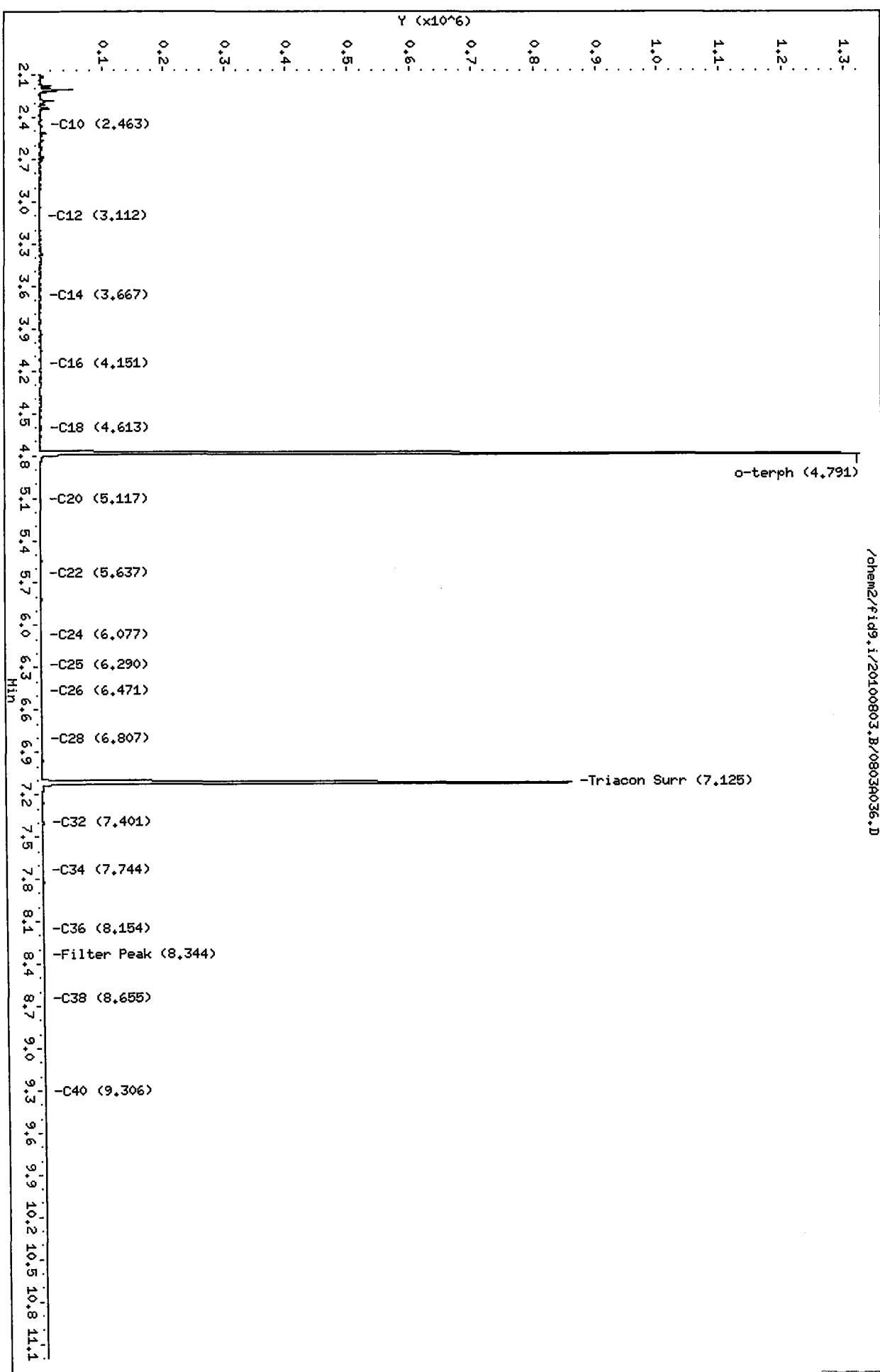
Sample Info: RG66HBS1

Column phase: RTX-1

Instrument: fid9.i

Operator: HS  
Column diameter: 0.25

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Analytical Resources Inc.  
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100803.B/0803A037.D  
Method: /chem2/fid9.i/20100803.B/ftphfid9a.m  
Instrument: fid9.i  
Operator: MS  
Report Date: 08/04/2010

ARI ID: DIESEL#3  
Client ID: DIESEL#3  
Injection: 04-AUG-2010 01:13  
Dilution Factor: 1  
Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.565	0.014	10338	5749	GAS (Tol-C12)	874035	42
C8	1.691	-0.003	1683	1476	DIESEL (C12-C24)	6231950	237
C10	2.479	0.014	38827	28367	M.OIL (C24-C38)	121785	10
C12	3.115	0.010	81645	44163	AK-102 (C10-C25)	6922487	238 M
C14	3.671	0.008	145970	143138	AK-103 (C25-C36)	94155	19
C16	4.149	-0.006	57049	51593			
C18	4.615	0.009	197501	198383			
C20	5.141	0.013	97919	113579			
C22	5.654	0.009	51554	55768			
C24	6.089	0.011	16347	21978			
C25	6.284	0.008	6809	12363			
C26	6.469	-0.007	2802	3667			
C28	6.809	0.012	618	740			
C32	7.416	-0.004	404	306	JP-4 (Tol-C14)	1939640	118
C34	7.744	0.001	503	185	BUNKERC (C10-C38)	7025862	801 M
Filter Peak	8.348	0.005	402	209			
C36	8.150	0.001	399	305			
C38	8.652	0.003	326	285			
C40	9.305	0.000	192	50			
o-terph	4.790	-0.004	1235368	1056576	JET-A (C10-C18)	5040268	365
Triacon Surr	7.109	-0.011	4021	3947	JP8 (Tol-C16)	3505374	199

M Indicates manual integration within range.

Range Times: NW Diesel(3.106 - 6.079) AK102(2.47 - 6.28) Jet A(2.47 - 4.61)  
NW M.Oil(6.08 - 8.65) AK103(6.28 - 8.15) OR Diesel(2.47 - 6.80)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1056576	41.0	91.1
Triacontane	3947	0.2	0.4

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

Data File: /chem2/fid9.i/20100803.B/0803A037.D

Date: 04-AUG-2010 01:13

Client ID: DIESEL#3

Sample Info: DIESEL#3

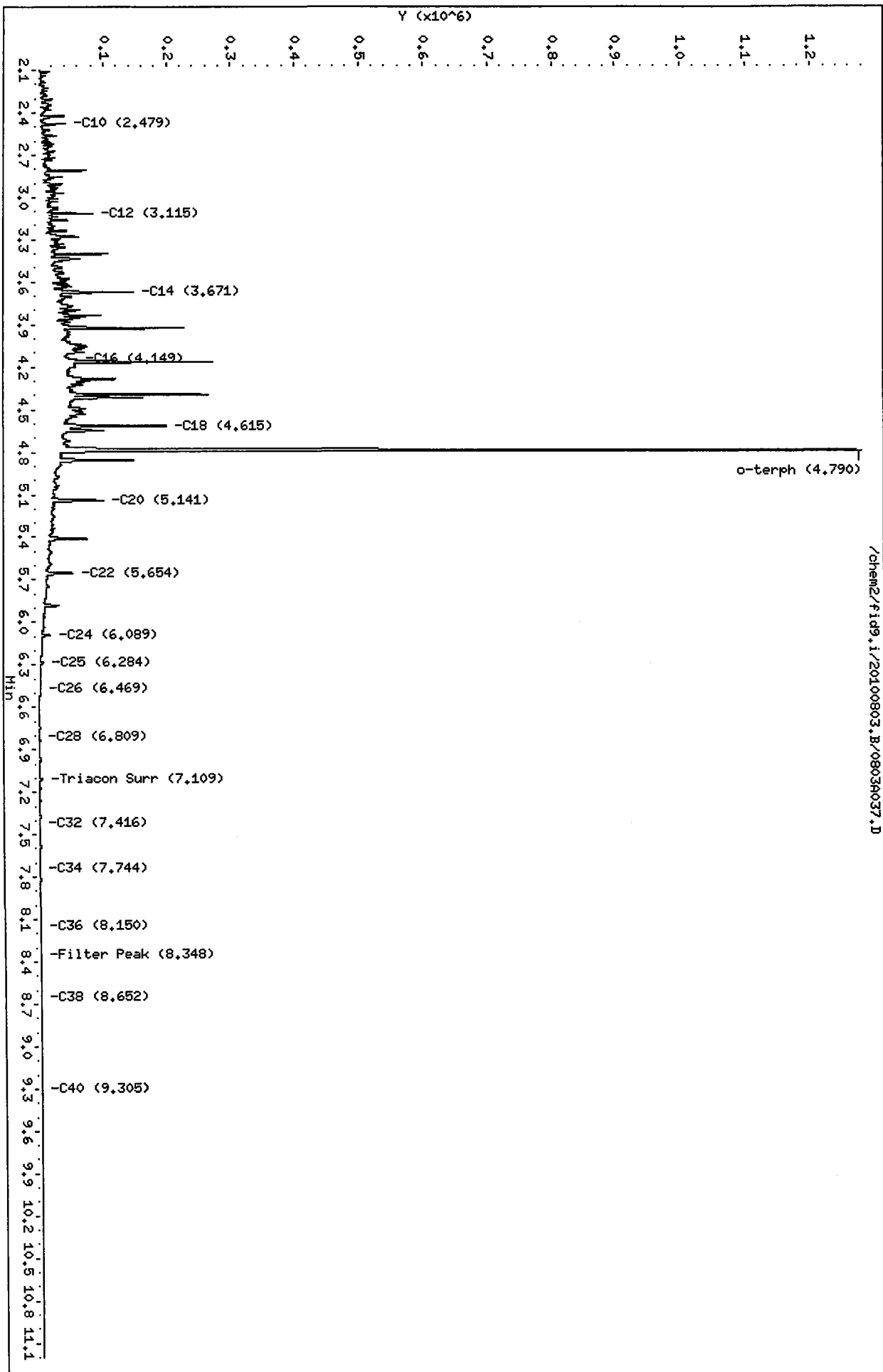
Column phase: RTX-1

Instrument: fid9.i

Operator: HS

Column diameter: 0.25

Page 1



RG51 : 00888



Analytical Resources Inc.  
 NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100803.B/0803A038.D  
 Method: /chem2/fid9.i/20100803.B/ftphfid9a.m  
 Instrument: fid9.i  
 Operator: MS  
 Report Date: 08/04/2010

ARI ID: MOIL#3  
 Client ID: MOIL#3  
 Injection: 04-AUG-2010 01:34  
 Dilution Factor: 1  
 Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.560	0.010	1672	2018	GAS (Tol-C12)	40627	2
C8	1.711	0.018	619	230	DIESEL (C12-C24)	768079	29
C10	2.463	-0.002	195	45	M.OIL (C24-C38)	6524419	510
C12	3.105	0.000	28	7	AK-102 (C10-C25)	945383	33
C14	3.659	-0.003	85	34	AK-103 (C25-C36)	5611144	1120 M
C16	4.155	-0.001	148	60			
C18	4.616	0.009	1000	1013			
C20	5.138	0.010	2828	4883			
C22	5.643	-0.002	10526	4538			
C24	6.079	0.000	24232	4320			
C25	6.274	-0.002	31716	15007			
C26	6.476	0.000	40623	23208			
C28	6.793	-0.003	50471	17992			
C32	7.420	0.000	64230	33803	JP-4 (Tol-C14)	45826	3
C34	7.743	0.000	51015	20963	BUNKERC (C10-C38)	7304087	833 M
Filter Peak	8.339	-0.004	29256	14771			
C36	8.151	0.003	34396	12815			
C38	8.644	-0.005	21012	13534			
C40	9.308	0.003	11336	7422			
o-terph	4.781	-0.012	5813	5451	JET-A (C10-C18)	37310	3
Triacon Surr	7.126	0.006	905171	903945	JP8 (Tol-C16)	50643	3

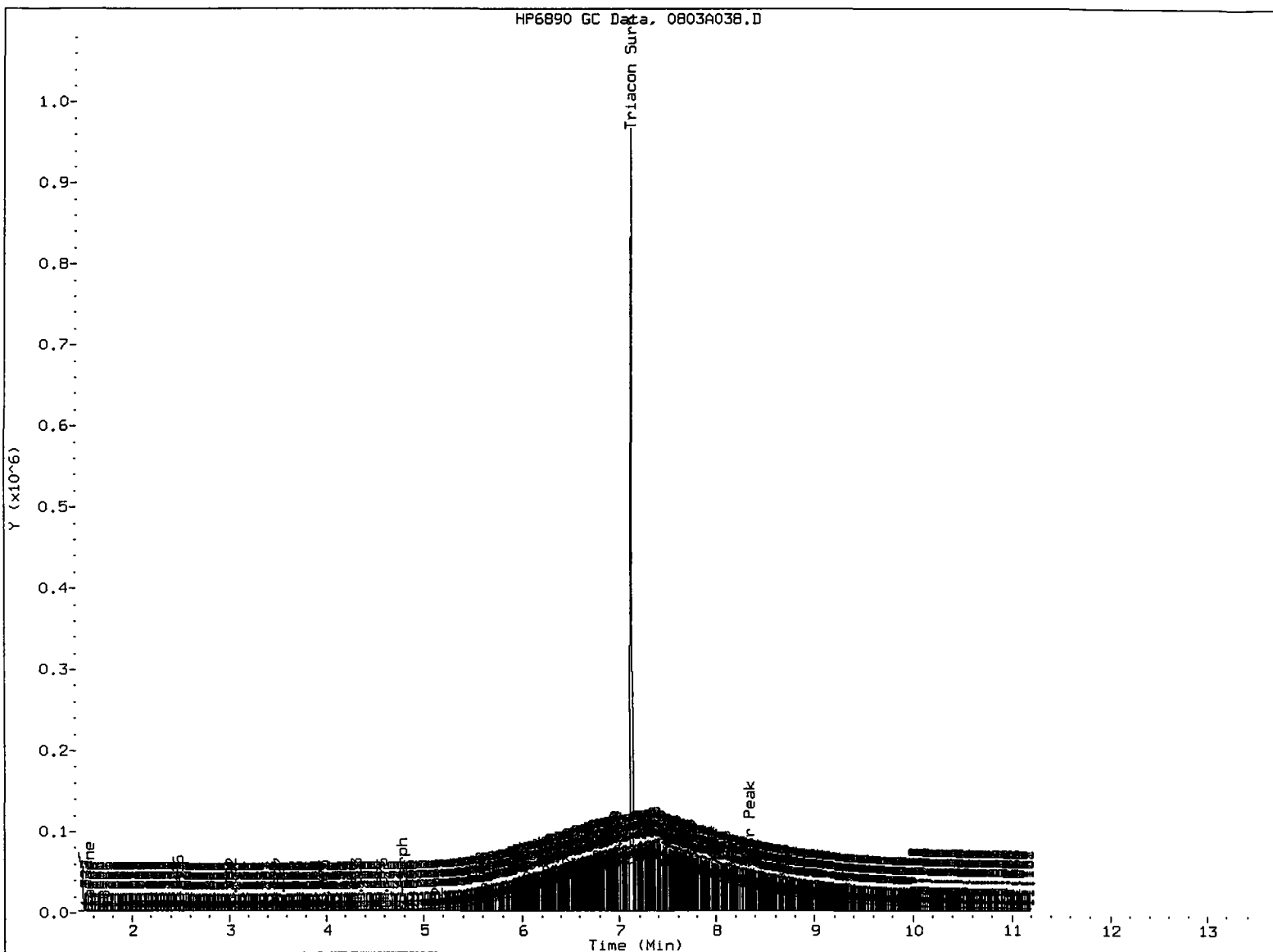
M Indicates manual integration within range.

Range Times: NW Diesel(3.106 - 6.079) AK102(2.47 - 6.28) Jet A(2.47 - 4.61)  
 NW M.Oil(6.08 - 8.65) AK103(6.28 - 8.15) OR Diesel(2.47 - 6.80)

Surrogate	Area	Amount	%Rec
o-Terphenyl	5451	0.2	0.5
Triacotane	903945	45.6	101.3

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010





MANUAL INTEGRATION

- 1. Baseline correction
- 2. Poor chromatography
- 3. Peak not found
- 4. Totals calculation
- 5. Other \_\_\_\_\_

Analyst: Mc Date: 8/7/10

Analytical Resources Inc.  
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100803.B/0803A050.D  
Method: /chem2/fid9.i/20100803.B/ftphfid9a.m  
Instrument: fid9.i  
Operator: MS  
Report Date: 08/04/2010

ARI ID: DIESEL#4  
Client ID: DIESEL#4  
Injection: 04-AUG-2010 05:49  
Dilution Factor: 1  
Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.535	-0.016	1227	1233	GAS (Tol-C12)	882637	42
C8	1.693	-0.001	1565	1290	DIESEL (C12-C24)	6276395	238
C10	2.468	0.002	4065	2581	M.OIL (C24-C38)	153093	12
C12	3.116	0.010	81990	47329	AK-102 (C10-C25)	6977114	240 M
C14	3.671	0.009	144635	144270	AK-103 (C25-C36)	117560	23
C16	4.153	-0.003	57359	43773			
C18	4.615	0.009	192897	201298			
C20	5.140	0.012	99459	112774			
C22	5.654	0.010	52430	57982			
C24	6.089	0.011	16575	19701			
C25	6.268	-0.008	2714	741			
C26	6.470	-0.006	2978	4502			
C28	6.786	-0.011	499	127			
C32	7.416	-0.004	969	764	JP-4 (Tol-C14)	1971454	120
C34	7.743	0.000	594	210	BUNKERC (C10-C38)	7114314	811 M
Filter Peak	8.345	0.001	862	374			
C36	8.145	-0.004	530	372			
C38	8.648	-0.001	562	212			
C40	9.304	-0.002	656	193			
o-terph	4.790	-0.004	1274427	1075829	JET-A (C10-C18)	5103703	369
Triacon Surr	7.109	-0.011	4319	4684	JP8 (Tol-C16)	3534643	201

M Indicates manual integration within range.

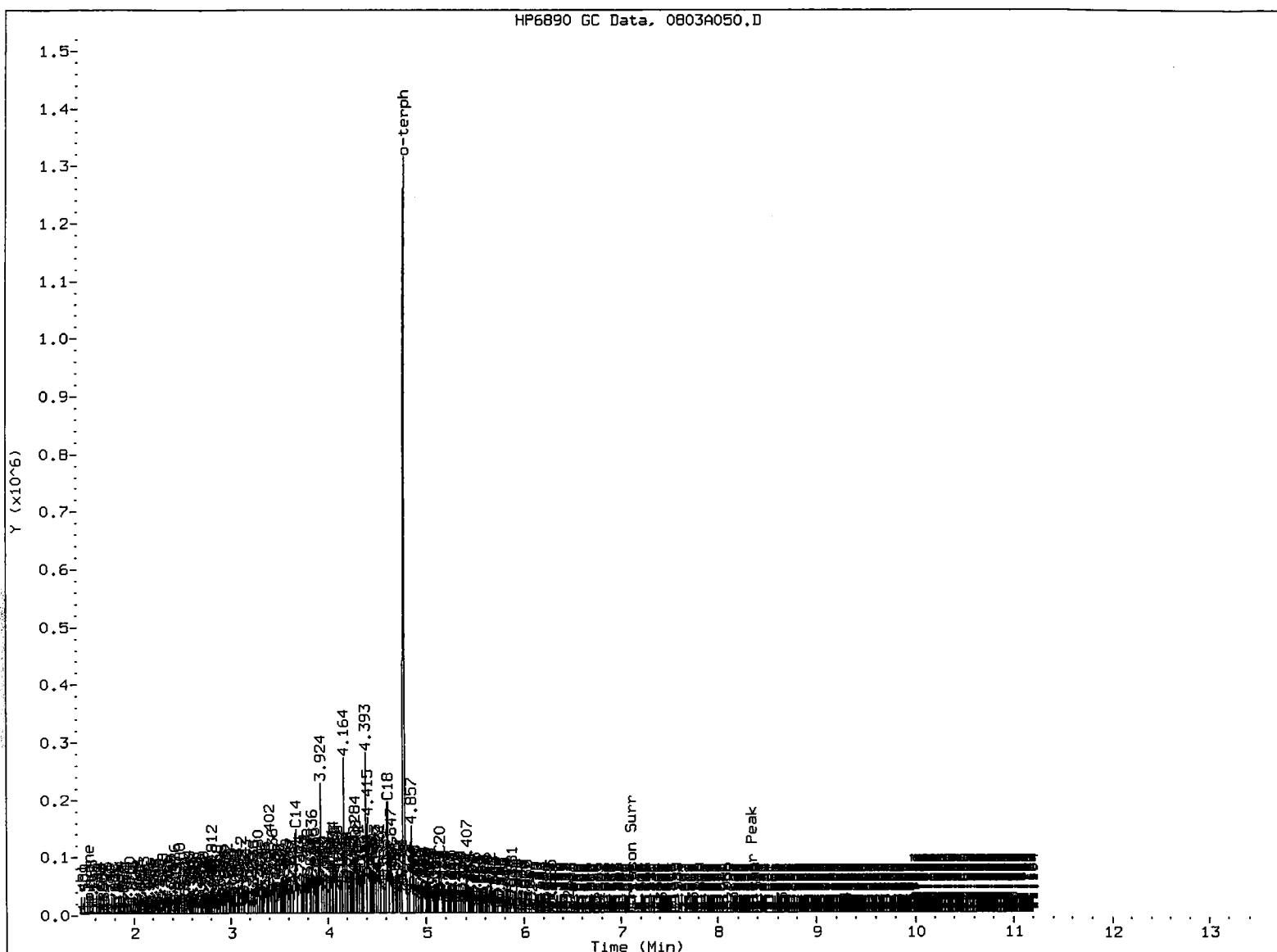
Range Times: NW Diesel(3.106 - 6.079) AK102(2.47 - 6.28) Jet A(2.47 - 4.61)  
NW M.Oil(6.08 - 8.65) AK103(6.28 - 8.15) OR Diesel(2.47 - 6.80)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1075829	41.8	92.8
Triacontane	4684	0.2	0.5

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010







MANUAL INTEGRATION

- 1. Baseline correction
- 2. Poor chromatography
- 3. Peak not found
- 4. Totals calculation
- 5. Other \_\_\_\_\_

Analyst: M Date: 8/9/10

Analytical Resources Inc.  
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100803.B/0803A051.D  
Method: /chem2/fid9.i/20100803.B/ftphfid9a.m  
Instrument: fid9.i  
Operator: MS  
Report Date: 08/04/2010

ARI ID: MOIL#4  
Client ID: MOIL#4  
Injection: 04-AUG-2010 06:11  
Dilution Factor: 1  
Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.561	0.010	1848	2488	GAS (Tol-C12)	42860	2
C8	1.695	0.002	799	1016	DIESEL (C12-C24)	762535	29
C10	2.446	-0.020	213	124	M.OIL (C24-C38)	6698090	524
C12	3.102	-0.004	25	13	AK-102 (C10-C25)	954799	33
C14	3.659	-0.003	104	49	AK-103 (C25-C36)	5786031	1155 M
C16	4.151	-0.005	164	156			
C18	4.617	0.010	1198	1118			
C20	5.118	-0.010	1870	371			
C22	5.654	0.009	11753	7531			
C24	6.081	0.002	24137	7660			
C25	6.281	0.005	33047	17246			
C26	6.475	-0.001	40143	16671			
C28	6.796	0.000	51789	17349			
C32	7.422	0.002	65114	36918	JP-4 (Tol-C14)	48160	3
C34	7.743	0.000	52464	50042	BUNKERC (C10-C38)	7472819	852 M
Filter Peak	8.345	0.002	26490	7333			
C36	8.146	-0.002	34492	14669			
C38	8.653	0.003	19011	9718			
C40	9.308	0.002	9543	7599			
o-terph	4.781	-0.013	6952	6457	JET-A (C10-C18)	39540	3
Triacon Surr	7.127	0.007	865535	925341	JP8 (Tol-C16)	54062	3

M Indicates manual integration within range.

Range Times: NW Diesel(3.106 - 6.079) AK102(2.47 - 6.28) Jet A(2.47 - 4.61)  
NW M.Oil(6.08 - 8.65) AK103(6.28 - 8.15) OR Diesel(2.47 - 6.80)

Surrogate	Area	Amount	%Rec
o-Terphenyl	6457	0.3	0.6
Triacotane	925341	46.7	103.7

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

Data File: /chem2/fid9.i/20100803.B/0803A051.D

Date: 04-AUG-2010 06:11

Client ID: MOIL#4

Sample Info: MOIL#4

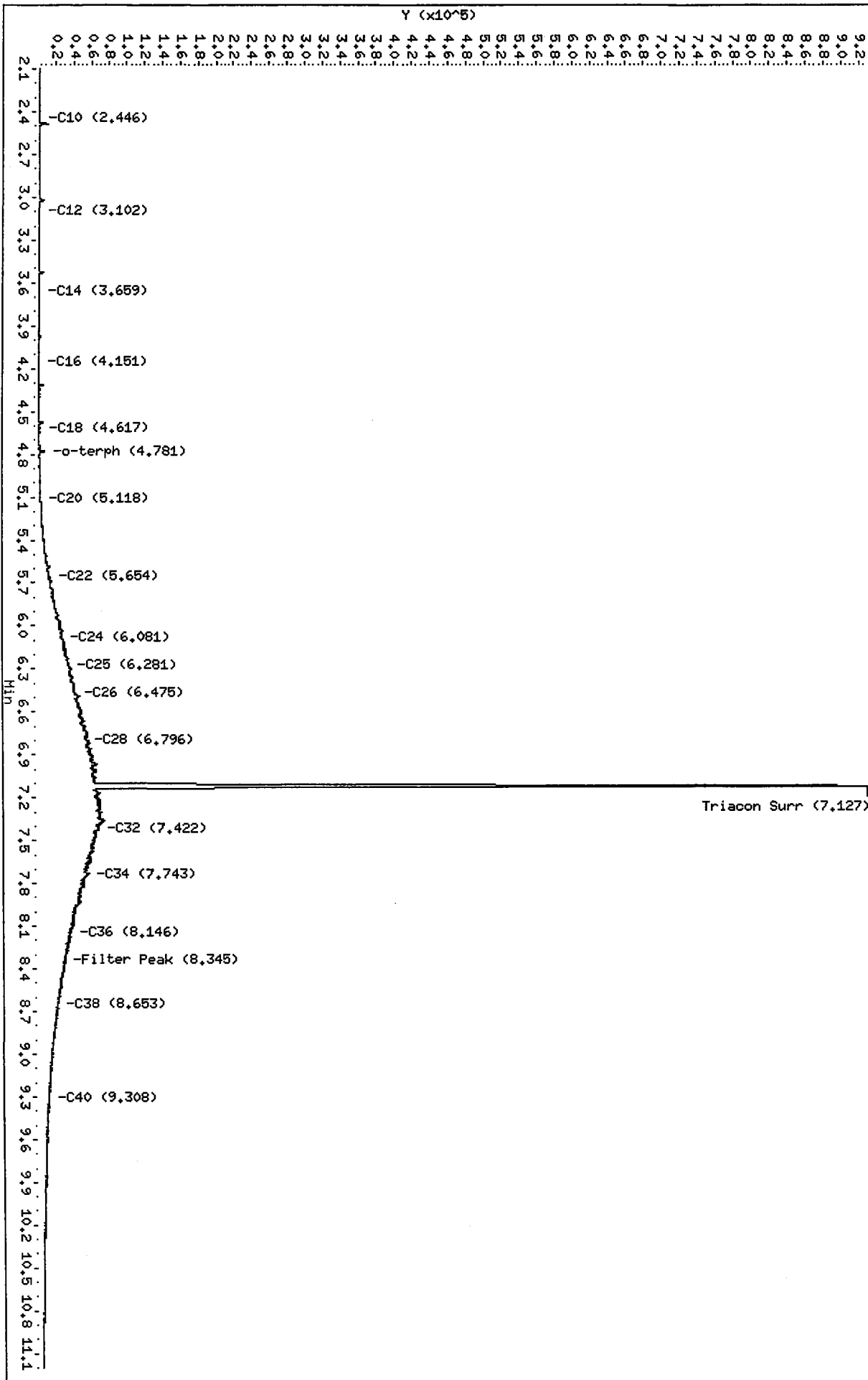
Column phase: RTX-1

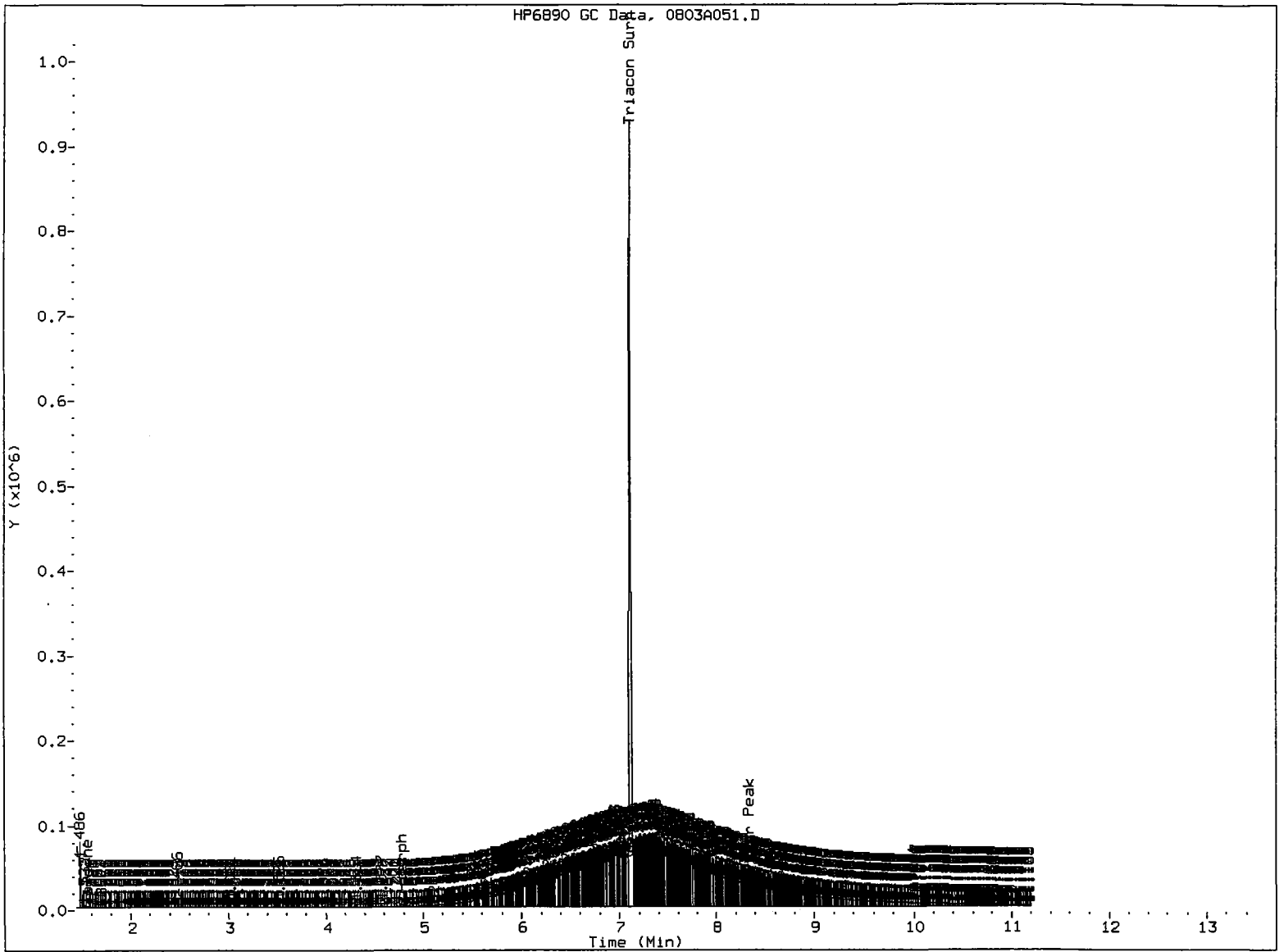
Instrument: fid9.i

Operator: MS

Column diameter: 0.25

/chem2/fid9.i/20100803.B/0803A051.D





MANUAL INTEGRATION

- 1. Baseline correction
- 2. Poor chromatography
- 3. Peak not found
- 4. Totals calculation
- 5. Other \_\_\_\_\_

Analyst: Mr      Date: 8/4/10

MANUAL INTEGRATION SUMMARY FOR DATABATCH - /chem2/fid9.i/20100803.B

ARI Job No.: DIES Method: ftphfid9a.m Instrument: fid9.i Date: 03-AUG-2010

Time	Filename	LabID	ClientID	DF	Manually Integrated Compounds
1803	0803A017.D	DIESEL#2	DIESEL#2	1	o-terph,
1825	0803A018.D	MOIL#2	MOIL#2	1	Triacon Surr,
1847	0803A019.D	BUNKER#2		1	Triacon Surr,
1908	0803A020.D	RG51A		5	NO MANUAL INTEGRATION
1930	0803A021.D	RG51F		1	NO MANUAL INTEGRATION
1951	0803A022.D	RG51G		5	NO MANUAL INTEGRATION
2013	0803A023.D	RG54A		5	NO MANUAL INTEGRATION
2035	0803A024.D	RG54E		5	NO MANUAL INTEGRATION
2056	0803A025.D	RG54H		5	NO MANUAL INTEGRATION
2117	0803A026.D	RG51B	PSB12-1-5-	1	o-terph,
2139	0803A027.D	RG51A	PSB12-0-0.	1	o-terph, Triacon Surr,
2200	0803A028.D	RG51C	PSB12-2-4-	1	o-terph, Triacon Surr,
2222	0803A029.D	RG51D	PSB12-8-10	1	o-terph, Triacon Surr,
2243	0803A030.D	RG51E	PSB12-8-10	1	o-terph, Triacon Surr,
2305	0803A031.D	RG51G	PSB12-4-6-	1	o-terph, Triacon Surr,
2326	0803A032.D	RG51FMS	PSB12-14-1	1	o-terph, Triacon Surr,
2347	0803A033.D	RG51FMSD	PSB12-14-1	1	o-terph, Triacon Surr,
2009	0803A034.D	RG66LCSS1	RG66LCSS1	1	o-terph,
0030	0803A035.D	RG66LCSDS1	RG66LCSDS1	1	o-terph,
0052	0803A036.D	RG66MBS1	RG66MBS1	1	NO MANUAL INTEGRATION
0113	0803A037.D	DIESEL#3	DIESEL#3	1	o-terph,
0134	0803A038.D	MOIL#3	MOIL#3	1	Triacon Surr,

MANUAL INTEGRATION SUMMARY FOR DATABATCH - /chem2/fid9.i/20100803.B

Time	Filename	LabID	Clientid	DF	Manually Integrated Compounds
0156	0803A039.D	BUNKER#3	1	NO MANUAL INTEGRATION	
0217	0803A040.D	RG54A	PSB14-0-15	1	o-terph, Triacon Surr,
0238	0803A041.D	RG54B	PSB14-1.5-1	1	o-terph, Triacon Surr,
0259	0803A042.D	RG54C	PSB14-2-4	1	o-terph, Triacon Surr,
0321	0803A043.D	RG54E	PSB14-7-9	1	o-terph, Triacon Surr,
0342	0803A044.D	RG54F	PSB14-12-1	1	o-terph, Triacon Surr,
0403	0803A045.D	RG54H	PSB17-0-0	1	o-terph, Triacon Surr,
0424	0803A046.D	RG54I	PSB17-1.5-	1	o-terph, Triacon Surr,
0446	0803A047.D	RG54J	PSB17-2-4	1	o-terph, Triacon Surr,
0507	0803A048.D	RG54K	PSB17-4-6	1	o-terph, Triacon Surr,
0528	0803A049.D	RG54L	PSB17-10-1	1	o-terph, Triacon Surr,
0549	0803A050.D	DIESEL#4	DIESEL#4	1	o-terph,
0611	0803A051.D	MOIL#4	MOIL#4	1	Triacon Surr,
0632	0803A052.D	BUNKER#4	1	NO MANUAL INTEGRATION	

Analytical Resources Inc.  
 NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100803.B/0803raw.b/0803A017.D ARI ID: DIESEL#2  
 Method: /chem2/fid9.i/20100803.B/ftphfid9a.m Client ID:  
 Instrument: fid9.i Injection: 03-AUG-2010 18:03  
 Operator: MS Dilution Factor: 1  
 Report Date: 08/04/2010 Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.564	0.013	10393	5902	GAS (Tol-C12)	868100	41
C8	1.690	-0.003	1763	1581	DIESEL (C12-C24)	6022741	229
C10	2.466	0.000	3904	2537	M.OIL (C24-C38)	125272	10
C12	3.115	0.009	82030	44296	AK-102 (C10-C25)	6706942	231
C14	3.671	0.008	141683	142797	AK-103 (C25-C36)	98009	20
C16	4.150	-0.006	56420	41786			
C18	4.615	0.008	200377	189780			
C20	5.141	0.012	99273	109080			
C22	5.654	0.009	50642	52696			
C24	6.090	0.011	15723	21441			
C25	6.266	-0.010	2499	882			
C26	6.471	-0.005	2599	3618			
C28	6.787	-0.009	247	140			
C32	7.435	0.015	205	124	JP-4 (Tol-C14)	1917989	117
C34	7.746	0.003	290	206	BUNKERC (C10-C38)	6816743	777
Filter Peak	8.341	-0.002	551	682			
C36	8.155	0.006	179	116			
C38	8.647	-0.003	138	54			
C40	9.303	-0.003	116	78			
o-terph	4.790	-0.003	1290250	1172653	JET-A (C10-C18)	4966682	359
Triacon Surr	7.119	-0.001	3873	3638	JP8 (Tol-C16)	3477911	198

M Indicates manual integration within range.  
 Range Times: NW Diesel(3.106 - 6.079) AK102(2.47 - 6.28) Jet A(2.47 - 4.61)  
 NW M.Oil(6.08 - 8.65) AK103(6.28 - 8.15) OR Diesel(2.47 - 6.80)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1172653	45.5	101.2
Triacotane	3638	0.2	0.4

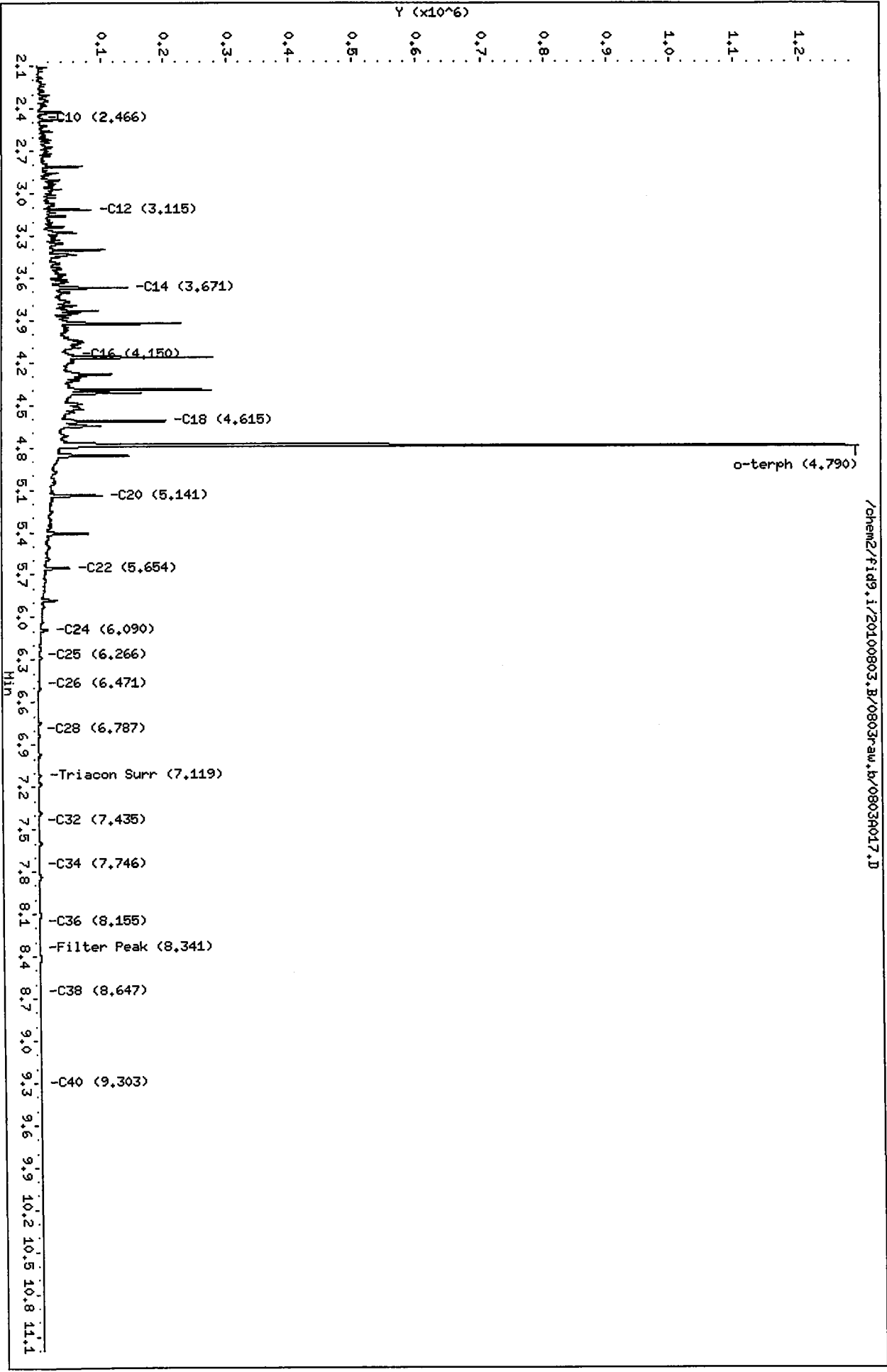
*28/7/10*

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

Data File: /chem2/fid9.i/20100803.B/0803raw.b/0803R017.D  
Date: 03-AUG-2010 18:03  
Client ID:  
Sample Info: DIESEL#2  
Column phase: RTX-1

Instrument: fid9.i  
Operator: HS  
Column diameter: 0.25

/chem2/fid9.i/20100803.B/0803raw.b/0803R017.D





Analytical Resources Inc.  
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100803.B/0803raw.b/0803A018.D ARI ID: MOIL#2  
 Method: /chem2/fid9.i/20100803.B/ftphfid9a.m Client ID:  
 Instrument: fid9.i Injection: 03-AUG-2010 18:25  
 Operator: MS Dilution Factor: 1  
 Report Date: 08/04/2010 Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.559	0.008	2028	3173	GAS (Tol-C12)	51020	2
C8	1.708	0.014	890	228	DIESEL (C12-C24)	760073	29
C10	2.449	-0.017	210	71	M.OIL (C24-C38)	6399739	500
C12	3.097	-0.009	39	21	AK-102 (C10-C25)	936390	32
C14	3.663	0.000	83	42	AK-103 (C25-C36)	5418063	1082
C16	4.157	0.001	133	72			
C18	4.615	0.008	944	1036			
C20	5.139	0.011	2815	4723			
C22	5.640	-0.005	10527	8088			
C24	6.077	-0.002	24056	11825			
C25	6.271	-0.005	31143	25368			
C26	6.476	0.000	39417	15469			
C28	6.793	-0.004	49615	14656			
C32	7.422	0.002	63199	17292	JP-4 (Tol-C14)	55629	3
C34	7.742	-0.001	51005	50177	BUNKERC (C10-C38)	7172341	818
Filter Peak	8.344	0.000	30464	20735			
C36	8.153	0.004	35979	24306			
C38	8.655	0.005	23051	14014			
C40	9.309	0.003	13694	5844			
o-terph	4.806	0.013	704	219	JET-A (C10-C18)	38352	3
Triacon Surr	7.133	0.013	878219	1069463	JP8 (Tol-C16)	60554	3

M Indicates manual integration within range.

Range Times: NW Diesel(3.106 - 6.079) AK102(2.47 - 6.28) Jet A(2.47 - 4.61)  
 NW M.Oil(6.08 - 8.65) AK103(6.28 - 8.15) OR Diesel(2.47 - 6.80)

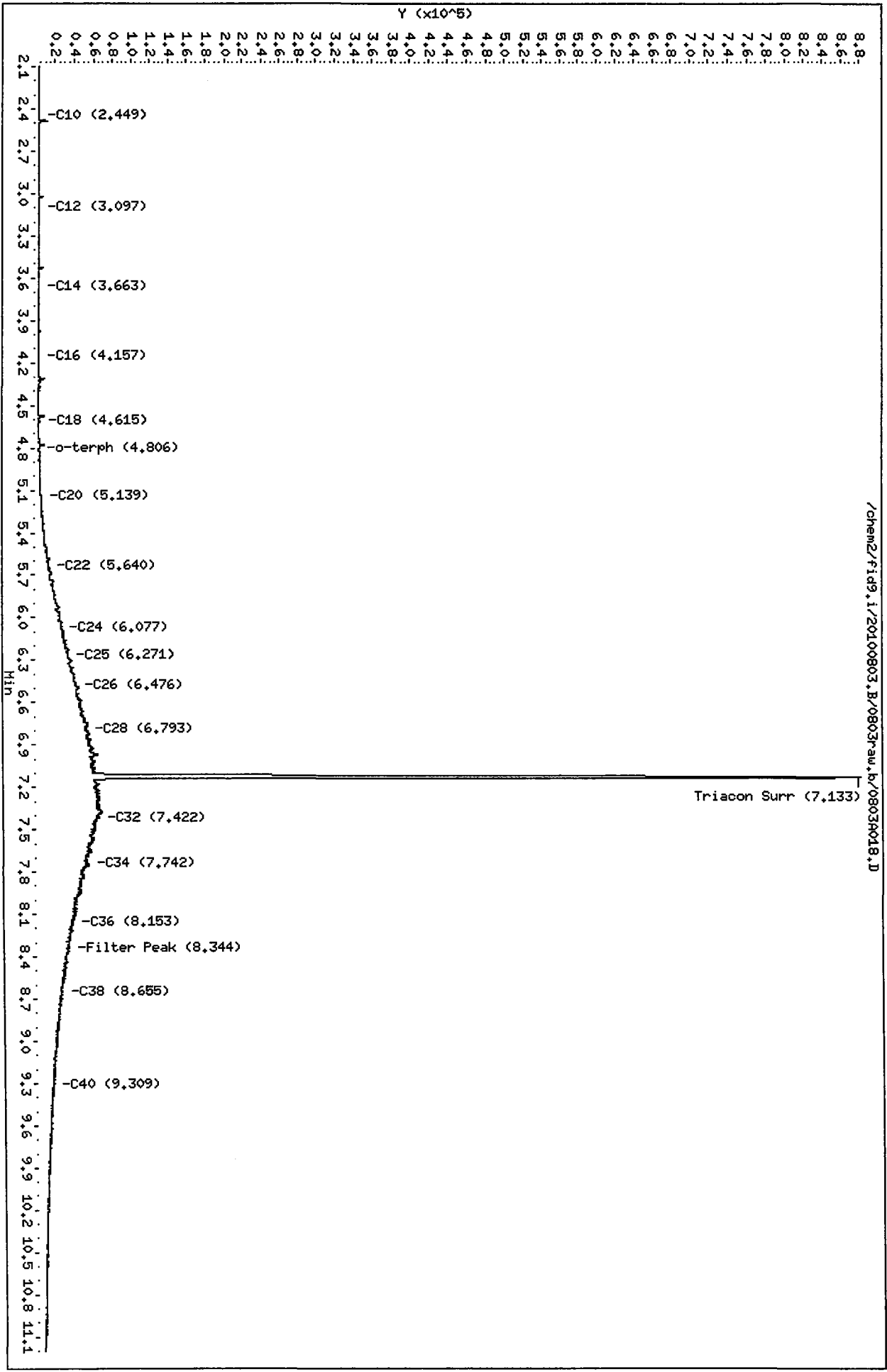
Surrogate	Area	Amount	%Rec
o-Terphenyl	219	0.0	0.0
Triacantane	1069463	53.9	119.8

*Handwritten signature*

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

Data File: /chem2/fid9.i/20100803.B/0803raw.k/0803A018.D  
 Date: 03-AUG-2010 18:25  
 Client ID:  
 Sample Info: M01L#2  
 Column phase: RTX-1

Instrument: fid9.i  
 Operator: MS  
 Column diameter: 0.25



Analytical Resources Inc.  
 NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100803.B/0803A021.D  
 Method: /chem2/fid9.i/20100803.B/ftphfid9a.m  
 Instrument: fid9.i  
 Operator: MS  
 Report Date: 08/04/2010

ARI ID: RG51F  
 Client ID:  
 Injection: 03-AUG-2010 19:30  
 Dilution Factor: 1  
 Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.559	0.008	27252	13733	GAS (Tol-C12)	277644	13
C8	1.699	0.005	2009	1581	DIESEL (C12-C24)	916597	35
C10	2.462	-0.004	3158	3667	M.OIL (C24-C38)	5104130	399
C12	3.106	0.000	494	384	AK-102 (C10-C25)	1107607	38
C14	3.654	-0.009	463	404	AK-103 (C25-C36)	4288357	856
C16	4.166	0.010	2789	2644			
C18	4.613	0.007	6010	7314			
C20	5.137	0.008	7607	11867			
C22	5.652	0.008	15514	27445			
C24	6.074	-0.005	16771	3341			
C25	6.268	-0.008	21512	13075			
C26	6.472	-0.004	31871	44220			
C28	6.799	0.002	39360	11635			
C32	7.420	0.000	48239	13340	JP-4 (Tol-C14)	293720	18
C34	7.744	0.000	39532	34107	BUNKERC (C10-C38)	6085521	694
Filter Peak	8.339	-0.004	26441	11964			
C36	8.152	0.003	27723	11506			
C38	8.640	-0.009	21977	31893			
C40	9.308	0.002	11637	4154			
o-terph	4.791	-0.003	1482275	1363486	JET-A (C10-C18)	189934	14
Triacon Surr	7.128	0.008	926437	1122913	JP8 (Tol-C16)	325696	19

M Indicates manual integration within range.

Range Times: NW Diesel(3.106 - 6.079) AK102(2.47 - 6.28) Jet A(2.47 - 4.61)  
 NW M.Oil(6.08 - 8.65) AK103(6.28 - 8.15) OR Diesel(2.47 - 6.80)

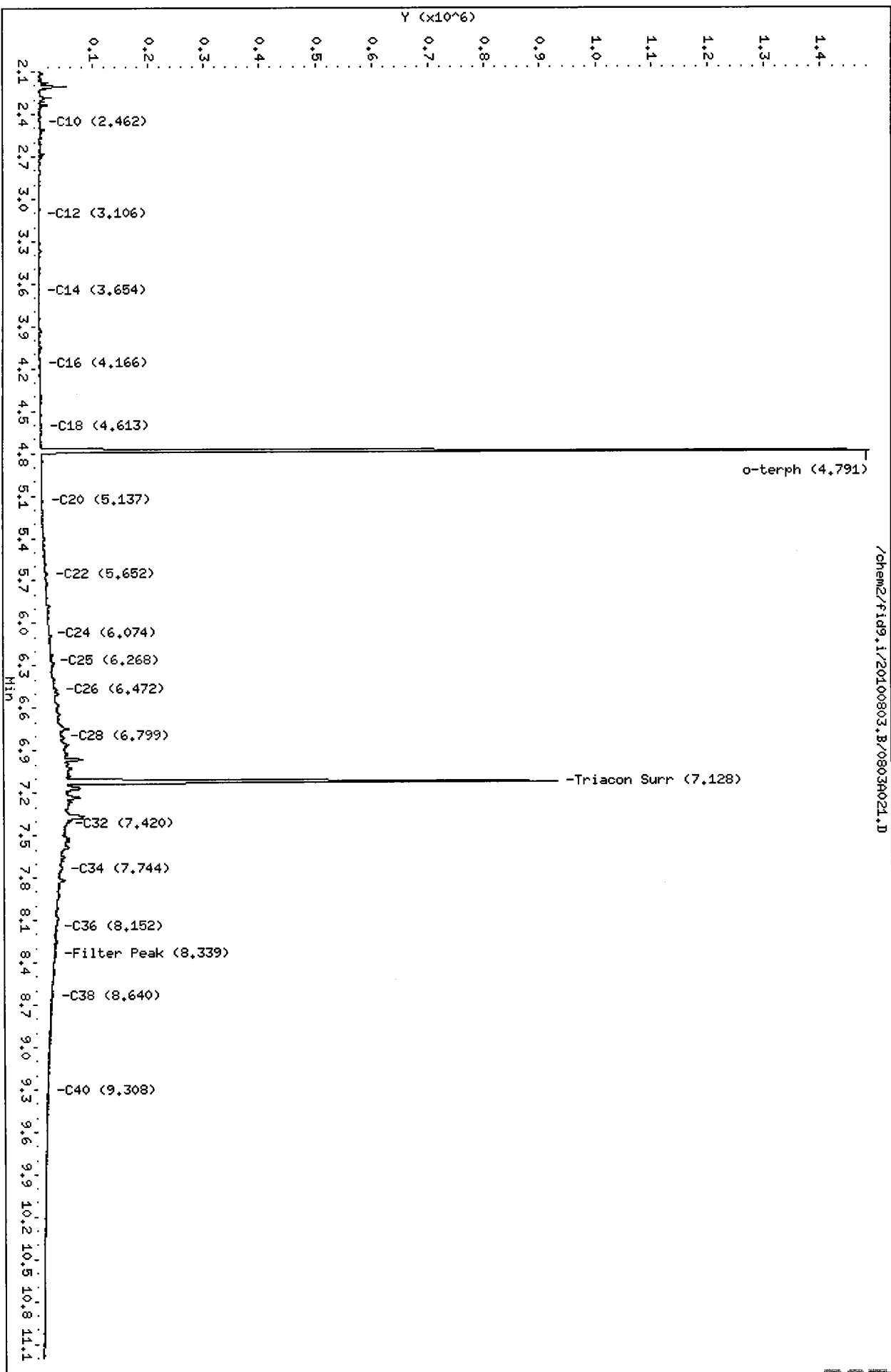
Surrogate	Area	Amount	%Rec
o-Terphenyl	1363486	52.9	117.6
Triacotane	1122913	56.6	125.8

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

*R 8/4/10*

Data File: /chem2/fid9.i/20100803.B/0803A021.D  
Date : 03-AUG-2010 19:30  
Client ID:  
Sample Info: RGS1F  
Column phase: RTX-1

Instrument: fid9.i  
Operator: MS  
Column diameter: 0.25



/chem2/fid9.i/20100803.B/0803A021.D

Analytical Resources Inc.  
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100803.B/0803A026.D  
Method: /chem2/fid9.i/20100803.B/ftphfid9a.m  
Instrument: fid9.i  
Operator: MS  
Report Date: 08/04/2010

ARI ID: RG51B  
Client ID: PSB12-1.5-2.0-07281  
Injection: 03-AUG-2010 21:17  
Dilution Factor: 1  
Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.563	0.012	4603	2962	GAS (Tol-C12)	259410	12
C8	1.687	-0.006	518	261	DIESEL (C12-C24)	601185	23
C10	2.463	-0.003	3313	3165	M.OIL (C24-C38)	1473134	115
C12	3.107	0.002	718	581	AK-102 (C10-C25)	788482	27
C14	3.655	-0.007	907	953	AK-103 (C25-C36)	1298294	259
C16	4.156	0.000	1264	735			
C18	4.614	0.008	4238	3966			
C20	5.117	-0.011	3784	6081			
C22	5.636	-0.009	8226	5419			
C24	6.078	-0.001	12335	6805			
C25	6.271	-0.005	13044	2838			
C26	6.470	-0.006	15217	16425			
C28	6.790	-0.006	15609	8894			
C32	7.423	0.003	11055	8931	JP-4 (Tol-C14)	288114	18
C34	7.742	-0.001	7241	8613	BUNKERC (C10-C38)	2186791	249
Filter Peak	8.344	0.001	4043	2745			
C36	8.149	0.000	4437	3909			
C38	8.656	0.006	2853	907			
C40	9.310	0.004	1531	333			
o-terph	4.793	-0.001	1542422	1348145	JET-A (C10-C18)	208322	15
Triacon Surr	7.131	0.011	904723	1014685	JP8 (Tol-C16)	317380	18

M Indicates manual integration within range.

Range Times: NW Diesel(3.106 - 6.079) AK102(2.47 - 6.28) Jet A(2.47 - 4.61)  
NW M.Oil(6.08 - 8.65) AK103(6.28 - 8.15) OR Diesel(2.47 - 6.80)

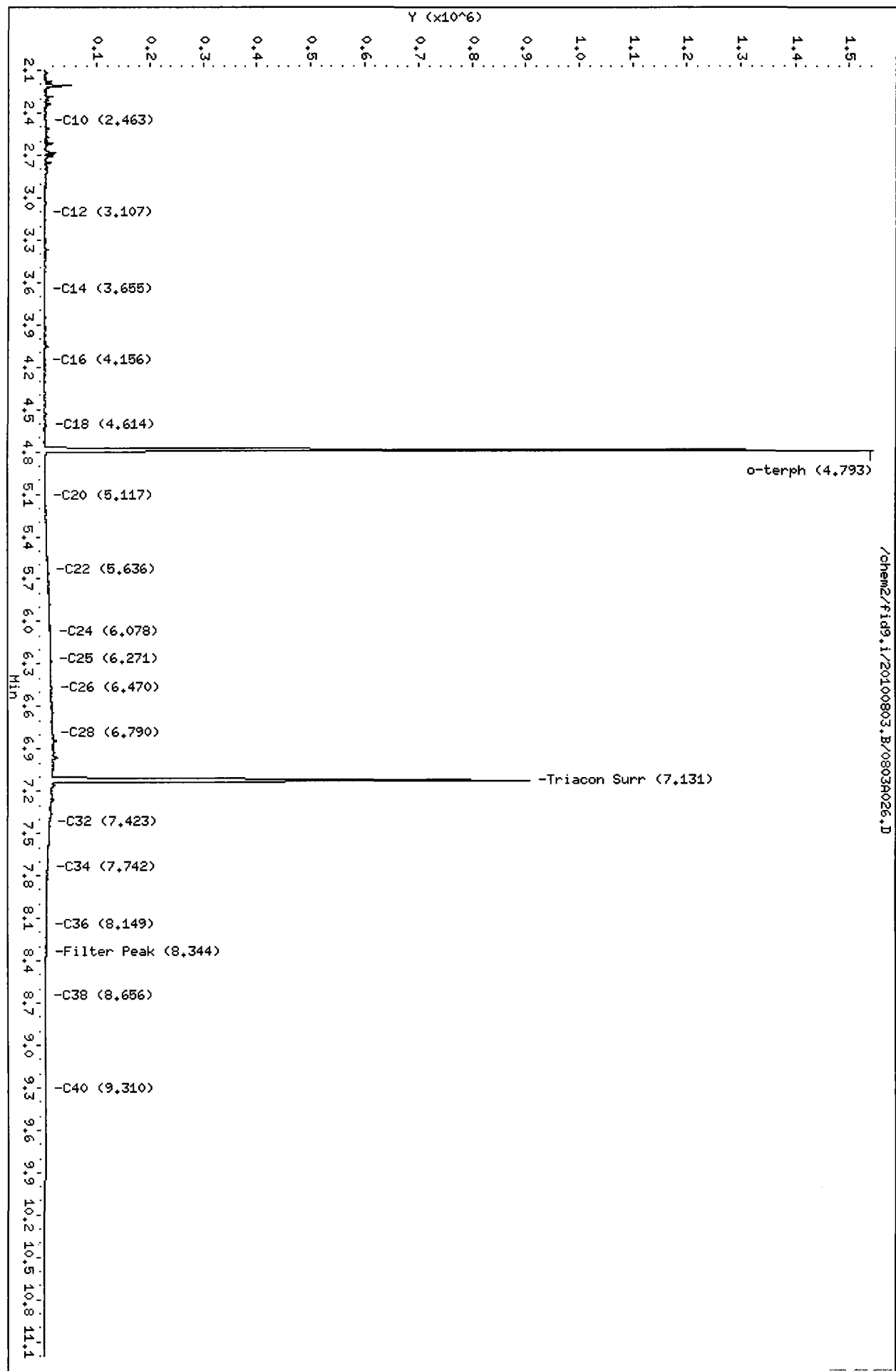
Surrogate	Area	Amount	%Rec
o-Terphenyl	1348145	52.3	116.3
Triacontane	1014685	51.2	113.7

*MS/4/10*

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

Data File: /chem2/fid9.i/20100803.B/0803h026.D  
Date : 03-AUG-2010 21:17  
Client ID: PSB12-1.5-2.0-07281  
Sample Info: R051B  
Column phase: RTX-1

Instrument: fid9.i  
Operator: MS  
Column diameter: 0.25



Analytical Resources Inc.  
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100803.B/0803A027.D  
Method: /chem2/fid9.i/20100803.B/ftphfid9a.m  
Instrument: fid9.i  
Operator: MS  
Report Date: 08/04/2010

ARI ID: RG51A  
Client ID: PSB12-0-0.5-072810  
Injection: 03-AUG-2010 21:39  
Dilution Factor: 1  
Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.562	0.011	3513	2518	GAS (Tol-C12)	273493	13
C8	1.701	0.007	2037	1313	DIESEL (C12-C24)	3244451	123
C10	2.464	-0.002	2668	2974	M.OIL (C24-C38)	23827141	1863
C12	3.104	-0.002	1534	1050	AK-102 (C10-C25)	3727954	128
C14	3.649	-0.013	1315	1443	AK-103 (C25-C36)	20657248	4124
C16	4.165	0.010	8084	10171			
C18	4.612	0.006	17856	24156			
C20	5.124	-0.004	19511	5409			
C22	5.644	-0.001	38858	9180			
C24	6.071	-0.008	65915	43905			
C25	6.274	-0.002	82899	24346			
C26	6.476	0.000	110506	68767			
C28	6.792	-0.004	161544	69690			
C32	7.424	0.004	221466	74654	JP-4 (Tol-C14)	308477	19
C34	7.742	-0.002	162818	93275	BUNKERC (C10-C38)	27145049	3095
Filter Peak	8.341	-0.003	102492	50406			
C36	8.153	0.005	117826	37199			
C38	8.650	0.001	74391	20790			
C40	9.306	0.000	37823	16989			
o-terph	4.792	-0.002	1530997	1359682	JET-A (C10-C18)	496744	36
Triacon Surr	7.114	-0.006	221427	70508	JP8 (Tol-C16)	418265	24

M Indicates manual integration within range.

Range Times: NW Diesel(3.106 - 6.079) AK102(2.47 - 6.28) Jet A(2.47 - 4.61)  
NW M.Oil(6.08 - 8.65) AK103(6.28 - 8.15) OR Diesel(2.47 - 6.80)

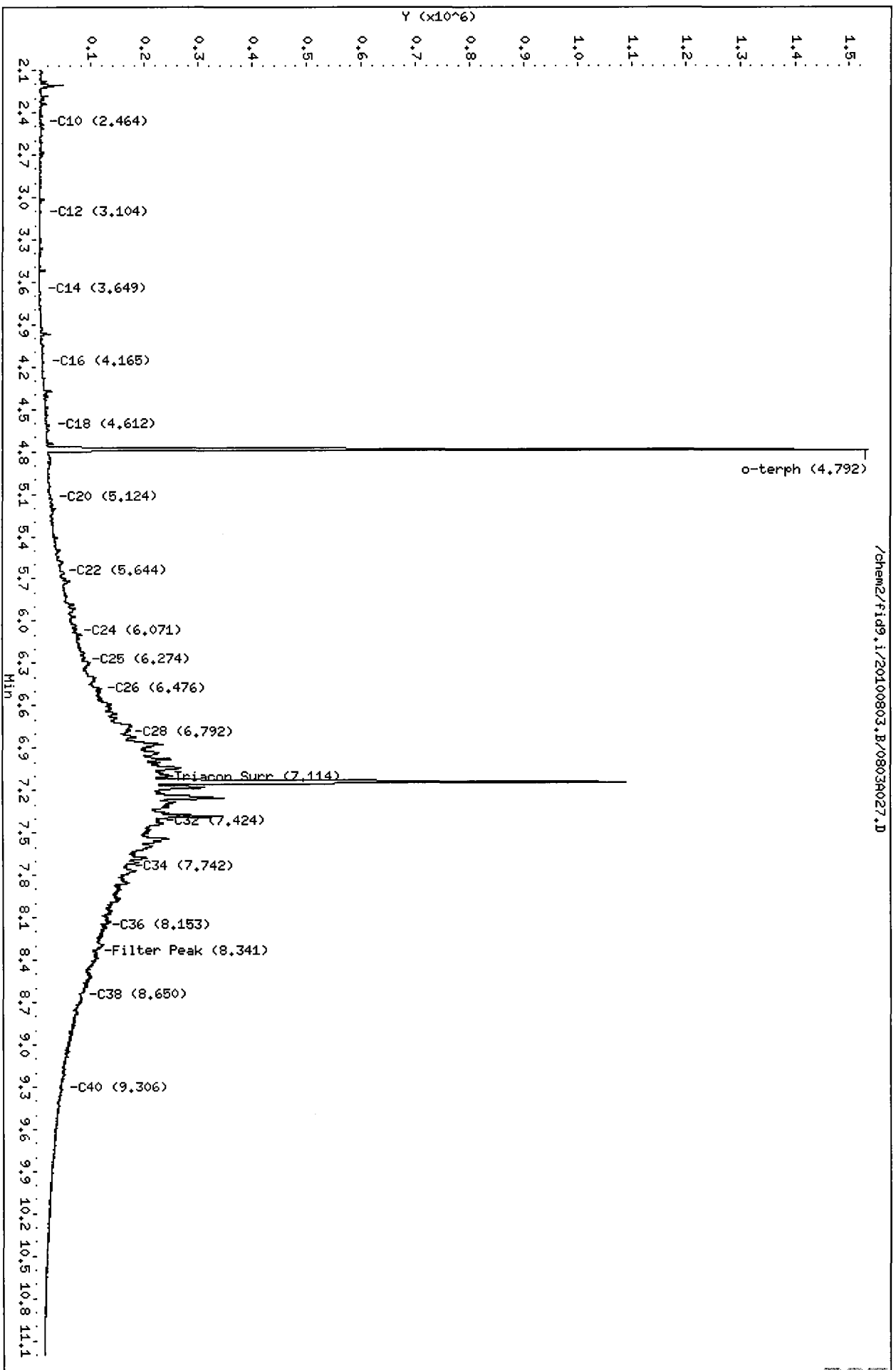
Surrogate	Area	Amount	%Rec
o-Terphenyl	1359682	52.8	117.3
Triacontane	70508	3.6	7.9

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

*MS/ET/CO*

Data File: /chem2/fid9.i/20100803.B/08036027.D  
Date : 03-AUG-2010 21:39  
Client ID: PS812-0-0.5-072810  
Sample Info: RCS1A  
Column phase: RTX-1

Instrument: fid9.1  
Operator: MS  
Column diameter: 0.25





Analytical Resources Inc.  
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100803.B/0803A028.D  
Method: /chem2/fid9.i/20100803.B/ftphfid9a.m  
Instrument: fid9.i  
Operator: MS  
Report Date: 08/04/2010

ARI ID: RG51C  
Client ID: PSB12-2-4-072810  
Injection: 03-AUG-2010 22:00  
Dilution Factor: 1  
Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.563	0.012	5020	3542	GAS (Tol-C12)	422651	20
C8	1.688	-0.006	737	300	DIESEL (C12-C24)	1464636	56
C10	2.461	-0.004	3955	4013	M.OIL (C24-C38)	5862416	458
C12	3.104	-0.002	3781	2193	AK-102 (C10-C25)	1826380	63
C14	3.651	-0.012	1534	1560	AK-103 (C25-C36)	5071076	1012
C16	4.167	0.011	2506	1968			
C18	4.613	0.007	6865	7618			
C20	5.140	0.012	9966	14101			
C22	5.639	-0.006	20958	6677			
C24	6.071	-0.008	35299	15070			
C25	6.274	-0.002	38155	15722			
C26	6.473	-0.003	48513	37289			
C28	6.792	-0.004	67178	28981			
C32	7.417	-0.003	43747	39434	JP-4 (Tol-C14)	470883	29
C34	7.747	0.003	26498	13547	BUNKERC (C10-C38)	7477526	853
Filter Peak	8.342	-0.001	21065	7811			
C36	8.149	0.000	21238	18407			
C38	8.649	-0.001	19258	10060			
C40	9.311	0.005	13595	8013			
o-terph	4.791	-0.003	1483334	1385962	JET-A (C10-C18)	309715	22
Triacon Surr	7.133	0.014	1010047	1184618	JP8 (Tol-C16)	508680	29

M Indicates manual integration within range.

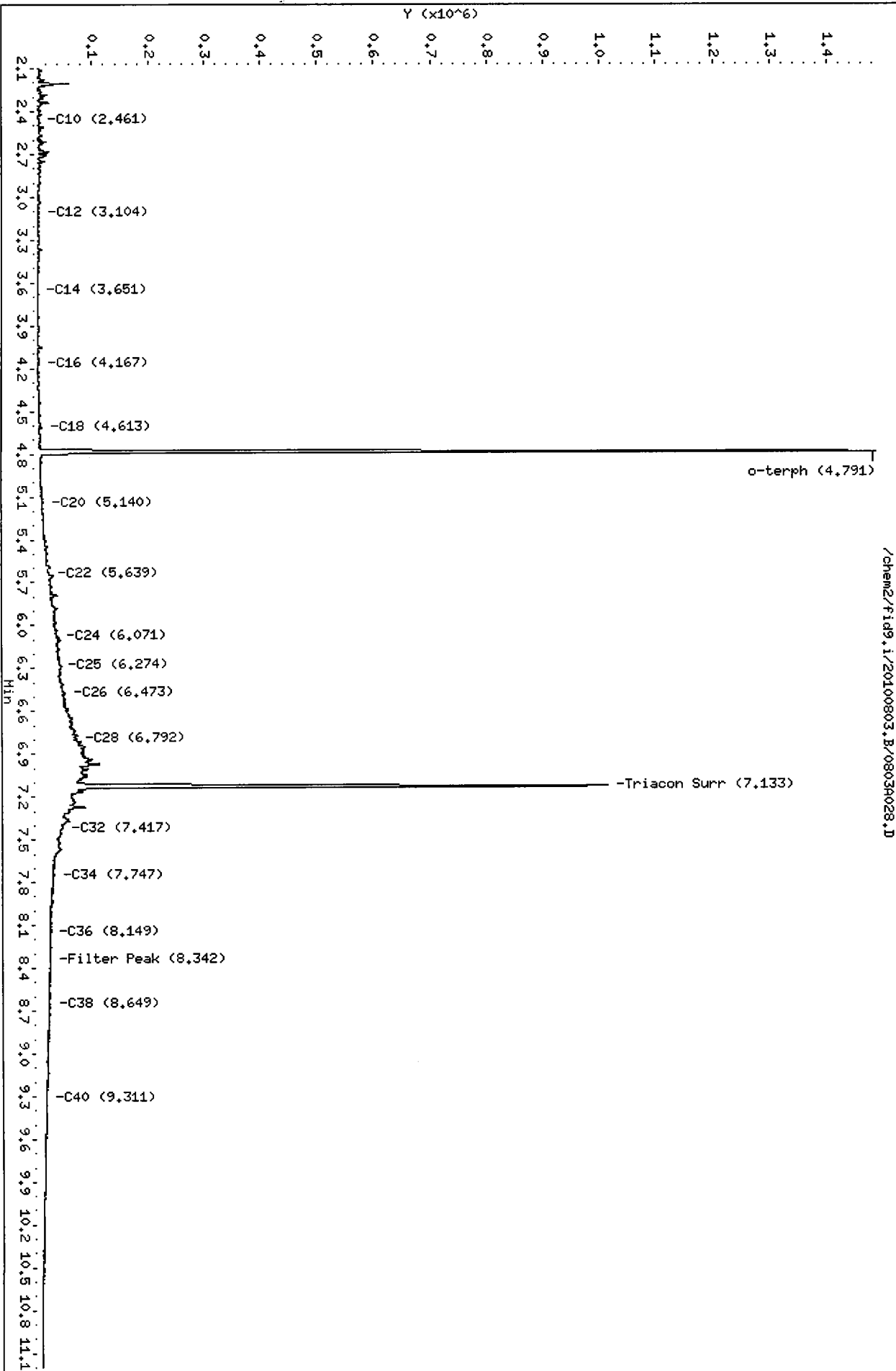
Range Times: NW Diesel(3.106 - 6.079) AK102(2.47 - 6.28) Jet A(2.47 - 4.61)  
NW M.Oil(6.08 - 8.65) AK103(6.28 - 8.15) OR Diesel(2.47 - 6.80)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1385962	53.8	119.6
Triacotane	1184618	59.7	132.7

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

Data File: /chem2/fid9.i/20100803.B/08034028.D  
Date : 03-AUG-2010 22:00  
Client ID: PSB12-2-4-072810  
Sample Info: R051C  
Column phase: RTX-1

Instrument: fid9.i  
Operator: MS  
Column diameter: 0.25



Analytical Resources Inc.  
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100803.B/0803A029.D  
Method: /chem2/fid9.i/20100803.B/ftphfid9a.m  
Instrument: fid9.i  
Operator: MS  
Report Date: 08/04/2010

ARI ID: RG51D  
Client ID: PSB12-8-10-072810  
Injection: 03-AUG-2010 22:22  
Dilution Factor: 1  
Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.561	0.010	4011	2805	GAS (Tol-C12)	274856	13
C8	1.700	0.007	1788	1459	DIESEL (C12-C24)	179449	7
C10	2.462	-0.003	3363	3434	M.OIL (C24-C38)	547565	43
C12	3.109	0.003	928	715	AK-102 (C10-C25)	298516	10
C14	3.655	-0.007	1202	1642	AK-103 (C25-C36)	487345	97
C16	4.155	-0.001	1349	699			
C18	4.613	0.006	4436	3340			
C20	5.117	-0.011	937	968			
C22	5.637	-0.007	1238	1405			
C24	6.077	-0.002	1449	1353			
C25	6.285	0.009	4045	6162			
C26	6.467	-0.008	2853	4036			
C28	6.809	0.012	5411	8334			
C32	7.402	-0.018	6267	9233	JP-4 (Tol-C14)	309598	19
C34	7.736	-0.007	2787	2223	BUNKERC (C10-C38)	842147	96
Filter Peak	8.347	0.004	2387	895			
C36	8.148	0.000	2055	1338			
C38	8.640	-0.009	1667	2155			
C40	9.334	0.028	1253	420			
o-terph	4.791	-0.002	1526577	1357081	JET-A (C10-C18)	214862	16
Triacon Surr	7.127	0.007	903300	982207	JP8 (Tol-C16)	343542	20

M Indicates manual integration within range.

Range Times: NW Diesel(3.106 - 6.079) AK102(2.47 - 6.28) Jet A(2.47 - 4.61)  
NW M.Oil(6.08 - 8.65) AK103(6.28 - 8.15) OR Diesel(2.47 - 6.80)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1357081	52.7	117.1
Triacontane	982207	49.5	110.1

*MS 8/4/10*

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

Data File: /chem2/fid9.i/20100803.B/08034029.D

Date: 03-AUG-2010 22:22

Client ID: PSM2-8-10-072810

Sample Info: RC51D

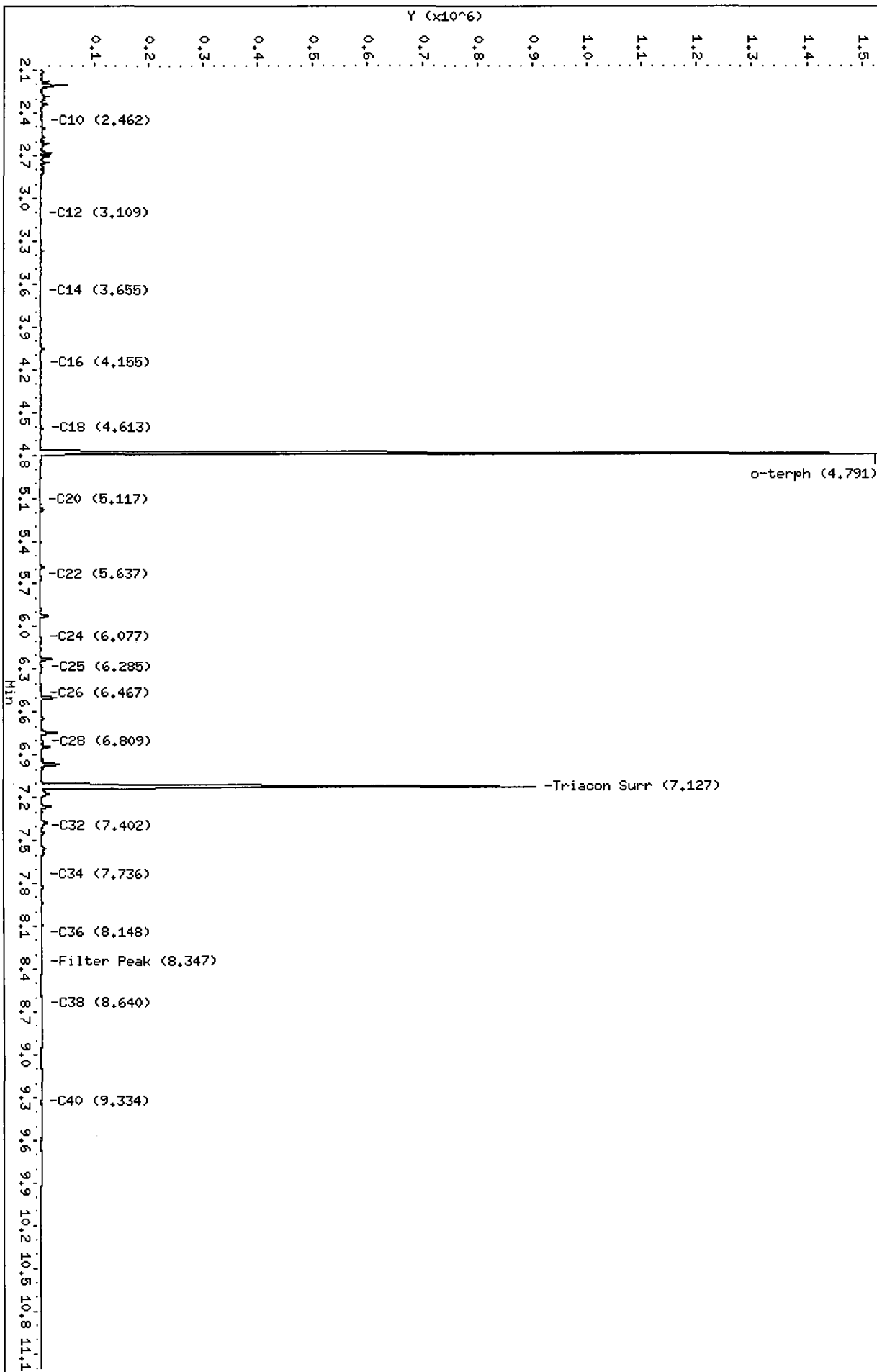
Column phase: RTX-1

Instrument: fid9.i

Operator: HS

Column diameter: 0.25

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Analytical Resources Inc.  
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100803.B/0803A030.D  
Method: /chem2/fid9.i/20100803.B/ftphfid9a.m  
Instrument: fid9.i  
Operator: MS  
Report Date: 08/04/2010

ARI ID: RG51E  
Client ID: PSB12-8-10-072810-D  
Injection: 03-AUG-2010 22:43  
Dilution Factor: 1  
Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.561	0.010	5332	3399	GAS (Tol-C12)	325232	15
C8	1.700	0.006	2048	1581	DIESEL (C12-C24)	151698	6
C10	2.462	-0.004	4044	4277	M.OIL (C24-C38)	340549	27
C12	3.110	0.005	1061	602	AK-102 (C10-C25)	283068	10
C14	3.656	-0.006	1131	1469	AK-103 (C25-C36)	295000	59
C16	4.145	-0.011	1818	1883			
C18	4.613	0.007	3531	2827			
C20	5.118	-0.010	975	962			
C22	5.635	-0.009	1279	1523			
C24	6.076	-0.002	1313	1135			
C25	6.285	0.009	3264	4639			
C26	6.467	-0.009	2384	3902			
C28	6.804	0.008	3997	6476			
C32	7.403	-0.017	5541	9142	JP-4 (Tol-C14)	361175	22
C34	7.736	-0.007	2567	2907	BUNKERC (C10-C38)	617582	70
Filter Peak	8.352	0.009	1822	3542			
C36	8.153	0.005	1288	652			
C38	8.653	0.004	1366	1574			
C40	9.290	-0.015	856	1519			
o-terph	4.793	-0.001	1523155	1357885	JET-A (C10-C18)	222987	16
Triacon Surr	7.126	0.007	962934	996100	JP8 (Tol-C16)	393960	22

M Indicates manual integration within range.

Range Times: NW Diesel(3.106 - 6.079) AK102(2.47 - 6.28) Jet A(2.47 - 4.61)  
NW M.Oil(6.08 - 8.65) AK103(6.28 - 8.15) OR Diesel(2.47 - 6.80)

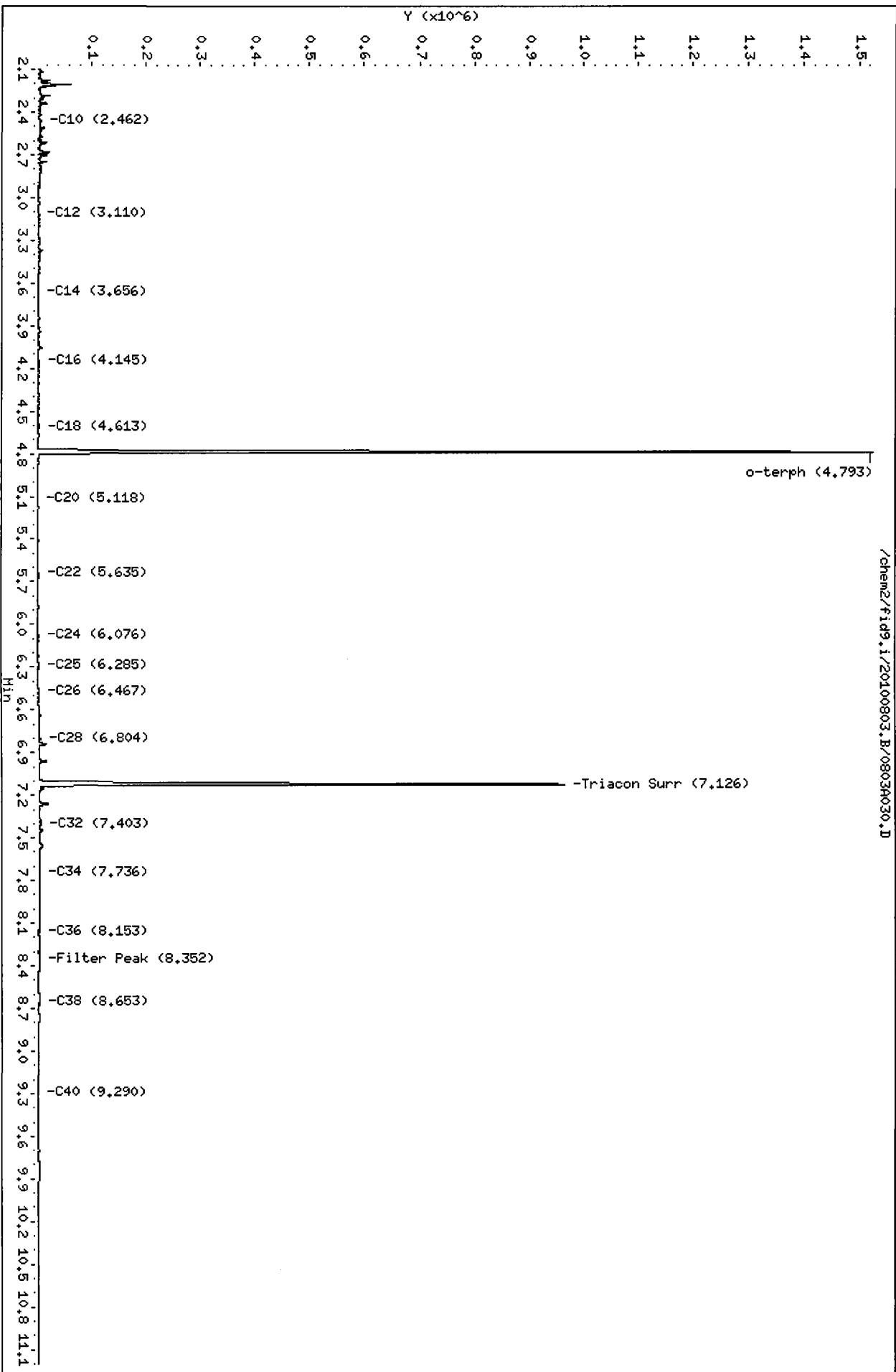
Surrogate	Area	Amount	%Rec
o-Terphenyl	1357885	52.7	117.1
Triacontane	996100	50.2	111.6

*MS 8/4/10*

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

Data File: /chem2/fid9.1/20100803.B/08034030.D  
Date : 03-AUG-2010 22:43  
Client ID: PSB12-8-10-072810-D  
Sample Info: RG51E  
Column phase: RTX-1

Instrument: fid9.1  
Operator: MS  
Column diameter: 0.25



/chem2/fid9.1/20100803.B/08034030.D

Analytical Resources Inc.  
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100803.B/0803A031.D  
Method: /chem2/fid9.i/20100803.B/ftphfid9a.m  
Instrument: fid9.i  
Operator: MS  
Report Date: 08/04/2010

ARI ID: RG51G  
Client ID: PSB12-4-6-072810  
Injection: 03-AUG-2010 23:05  
Dilution Factor: 1  
Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.536	-0.015	2111	2040	GAS (Tol-C12)	312297	15
C8	1.705	0.012	1465	955	DIESEL (C12-C24)	2419399	92
C10	2.464	-0.001	2868	2266	M.OIL (C24-C38)	12853395	1005
C12	3.105	-0.001	1908	1106	AK-102 (C10-C25)	2879881	99
C14	3.649	-0.014	1824	2265	AK-103 (C25-C36)	11050622	2206
C16	4.152	-0.004	3841	1452			
C18	4.614	0.007	13556	16708			
C20	5.139	0.011	18171	26193			
C22	5.639	-0.005	30832	10990			
C24	6.084	0.005	50739	18912			
C25	6.275	-0.002	60364	22494			
C26	6.475	-0.001	81133	105252			
C28	6.796	-0.001	100794	47491			
C32	7.414	-0.006	132594	147249	JP-4 (Tol-C14)	355903	22
C34	7.741	-0.002	93244	31074	BUNKERC (C10-C38)	15407386	1757
Filter Peak	8.347	0.003	54905	42061			
C36	8.148	-0.001	66501	23250			
C38	8.649	0.000	43738	13751			
C40	9.306	0.000	22408	12538			
o-terph	4.793	-0.001	1528075	1371842	JET-A (C10-C18)	419627	30
Triacon Surr	7.134	0.014	1067424	1348097	JP8 (Tol-C16)	427885	24

M Indicates manual integration within range.

Range Times: NW Diesel(3.106 - 6.079) AK102(2.47 - 6.28) Jet A(2.47 - 4.61)  
NW M.Oil(6.08 - 8.65) AK103(6.28 - 8.15) OR Diesel(2.47 - 6.80)

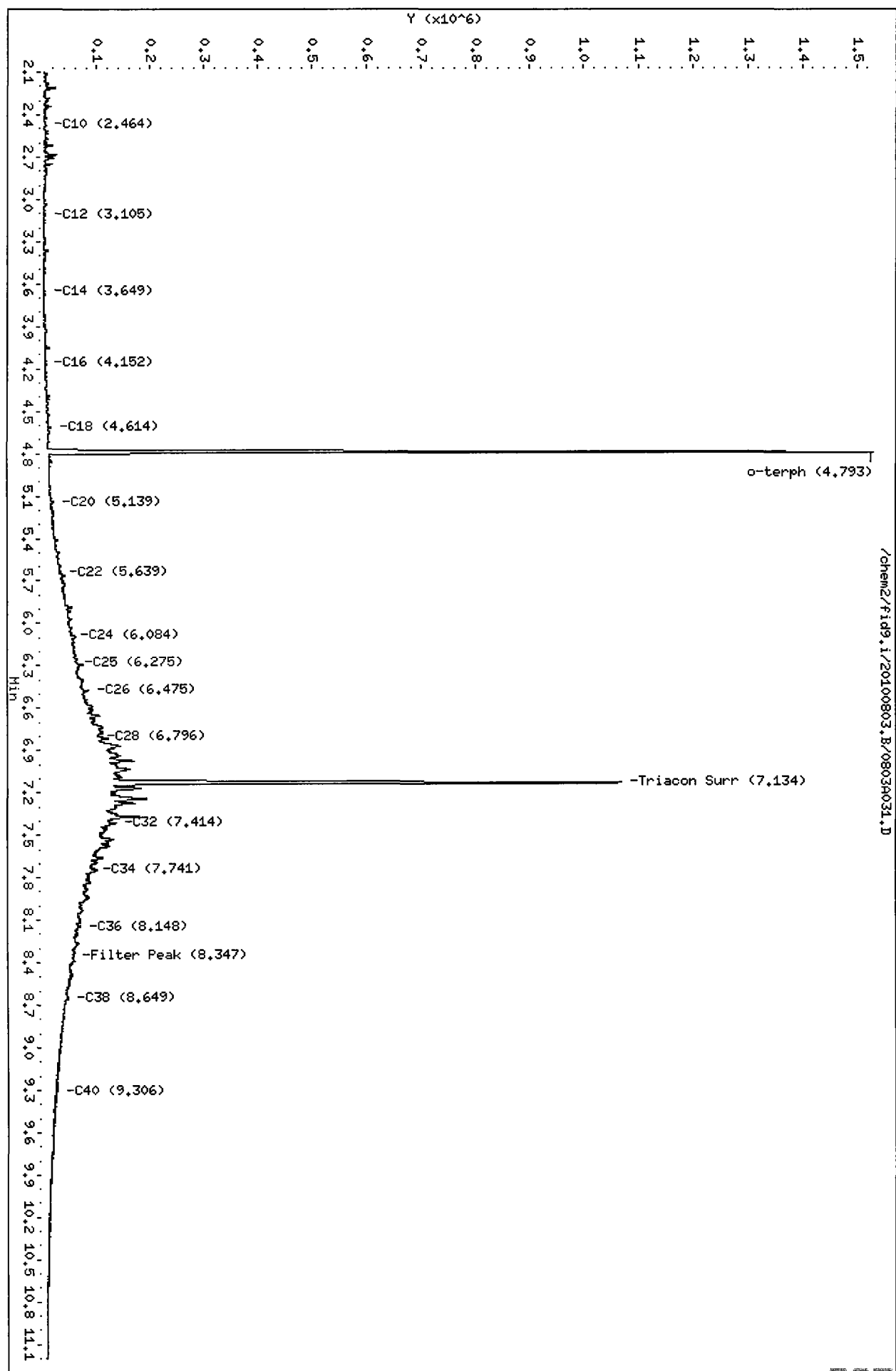
Surrogate	Area	Amount	%Rec
o-Terphenyl	1371842	53.3	118.3
Triacontane	1348097	68.0	151.1

*MSD 8/7/10*

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

Data File: /chem2/fid9.i/20100803.B/0803A031.D  
Date: 03-AUG-2010 23:05  
Client ID: PSB12-4-6-072810  
Sample Info: RCS1G  
Column phase: RTX-1

Instrument: fid9.i  
Operator: HS  
Column diameter: 0.25



/chem2/fid9.i/20100803.B/0803A031.D



Analytical Resources Inc.  
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100803.B/0803A032.D  
Method: /chem2/fid9.i/20100803.B/ftphfid9a.m  
Instrument: fid9.i  
Operator: MS  
Report Date: 08/04/2010

ARI ID: RG51FMS  
Client ID: PSB12-14-17-072 MS  
Injection: 03-AUG-2010 23:26  
Dilution Factor: 1  
Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.560	0.009	28896	14186	GAS (Tol-C12)	4666101	222
C8	1.699	0.005	2285	1070	DIESEL (C12-C24)	33659492	1278
C10	2.465	-0.001	24546	18108	M.OIL (C24-C38)	3645970	285
C12	3.095	-0.010	99963	90766	AK-102 (C10-C25)	37520457	1291
C14	3.675	0.012	809229	718741	AK-103 (C25-C36)	3048791	609
C16	4.156	0.001	303409	254922			
C18	4.593	-0.013	239034	174716			
C20	5.129	0.001	120577	28432			
C22	5.629	-0.016	84626	68901			
C24	6.094	0.015	110475	134254			
C25	6.267	-0.009	29062	10824			
C26	6.472	-0.003	38224	72906			
C28	6.796	0.000	26820	8420			
C32	7.422	0.002	32302	28527	JP-4 (Tol-C14)	10206773	622
C34	7.739	-0.004	26149	19947	BUNKERC (C10-C38)	40970995	4671
Filter Peak	8.341	-0.002	15960	18074			
C36	8.150	0.002	17194	7694			
C38	8.652	0.002	11602	6394			
C40	9.306	0.000	6777	4563			
o-terph	4.798	0.005	1625036	1922071	JET-A (C10-C18)	26581933	1924
Triacon Surr	7.132	0.012	908236	1062606	JP8 (Tol-C16)	18918617	1075

M Indicates manual integration within range.

Range Times: NW Diesel(3.106 - 6.079) AK102(2.47 - 6.28) Jet A(2.47 - 4.61)  
NW M.Oil(6.08 - 8.65) AK103(6.28 - 8.15) OR Diesel(2.47 - 6.80)

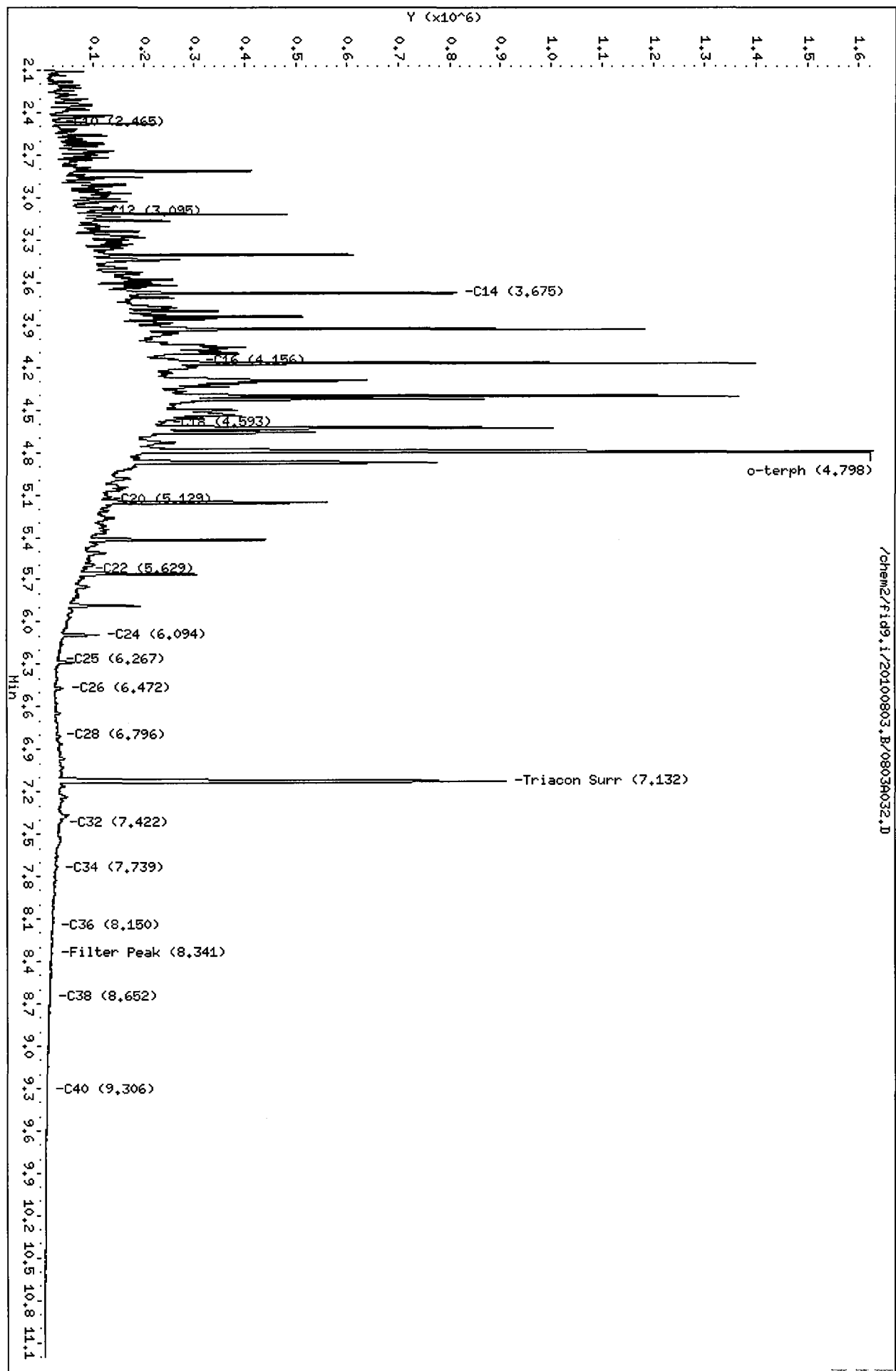
Surrogate	Area	Amount	%Rec
o-Terphenyl	1922071	74.6	165.8
Triacontane	1062606	53.6	119.1

*Mc 8/4/10*

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

Data File: /chem2/fid9.i/20100803.B/08034032.D  
Date : 03-AUG-2010 23:26  
Client ID: PSB12-14-17-072 MS  
Sample Info: R051FMS  
Column phase: RTX-1

Instrument: fid9.i  
Operator: MS  
Column diameter: 0.25



Analytical Resources Inc.  
 NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100803.B/0803A033.D  
 Method: /chem2/fid9.i/20100803.B/ftphfid9a.m  
 Instrument: fid9.i  
 Operator: MS  
 Report Date: 08/04/2010

ARI ID: RG51FMSD  
 Client ID: PSB12-14-17-072 MSD  
 Injection: 03-AUG-2010 23:47  
 Dilution Factor: 1  
 Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.559	0.009	36453	17785	GAS (Tol-C12)	4631243	220
C8	1.699	0.005	1456	612	DIESEL (C12-C24)	34631374	1315
C10	2.465	0.000	23798	16749	M.OIL (C24-C38)	3917804	306
C12	3.096	-0.010	102973	89826	AK-102 (C10-C25)	38473575	1324
C14	3.674	0.012	796168	807986	AK-103 (C25-C36)	3299399	659
C16	4.154	-0.001	299736	185028			
C18	4.602	-0.005	225238	62211			
C20	5.118	-0.010	135515	139173			
C22	5.662	0.018	309626	367387			
C24	6.072	-0.007	38239	10618			
C25	6.288	0.012	61665	117002			
C26	6.470	-0.006	39282	74074			
C28	6.790	-0.006	27410	5412			
C32	7.414	-0.006	34994	30877	JP-4 (Tol-C14)	10124392	617
C34	7.735	-0.008	28124	20491	BUNKERC (C10-C38)	42214327	4813
Filter Peak	8.345	0.002	17285	7827			
C36	8.140	-0.008	19330	15946			
C38	8.653	0.004	12298	8875			
C40	9.307	0.001	7182	5146			
o-terph	4.800	0.006	1621872	1924826	JET-A (C10-C18)	27055065	1958
Triacon Surr	7.126	0.006	996586	1076945	JP8 (Tol-C16)	19093729	1085

M Indicates manual integration within range.

Range Times: NW Diesel(3.106 - 6.079) AK102(2.47 - 6.28) Jet A(2.47 - 4.61)  
 NW M.Oil(6.08 - 8.65) AK103(6.28 - 8.15) OR Diesel(2.47 - 6.80)

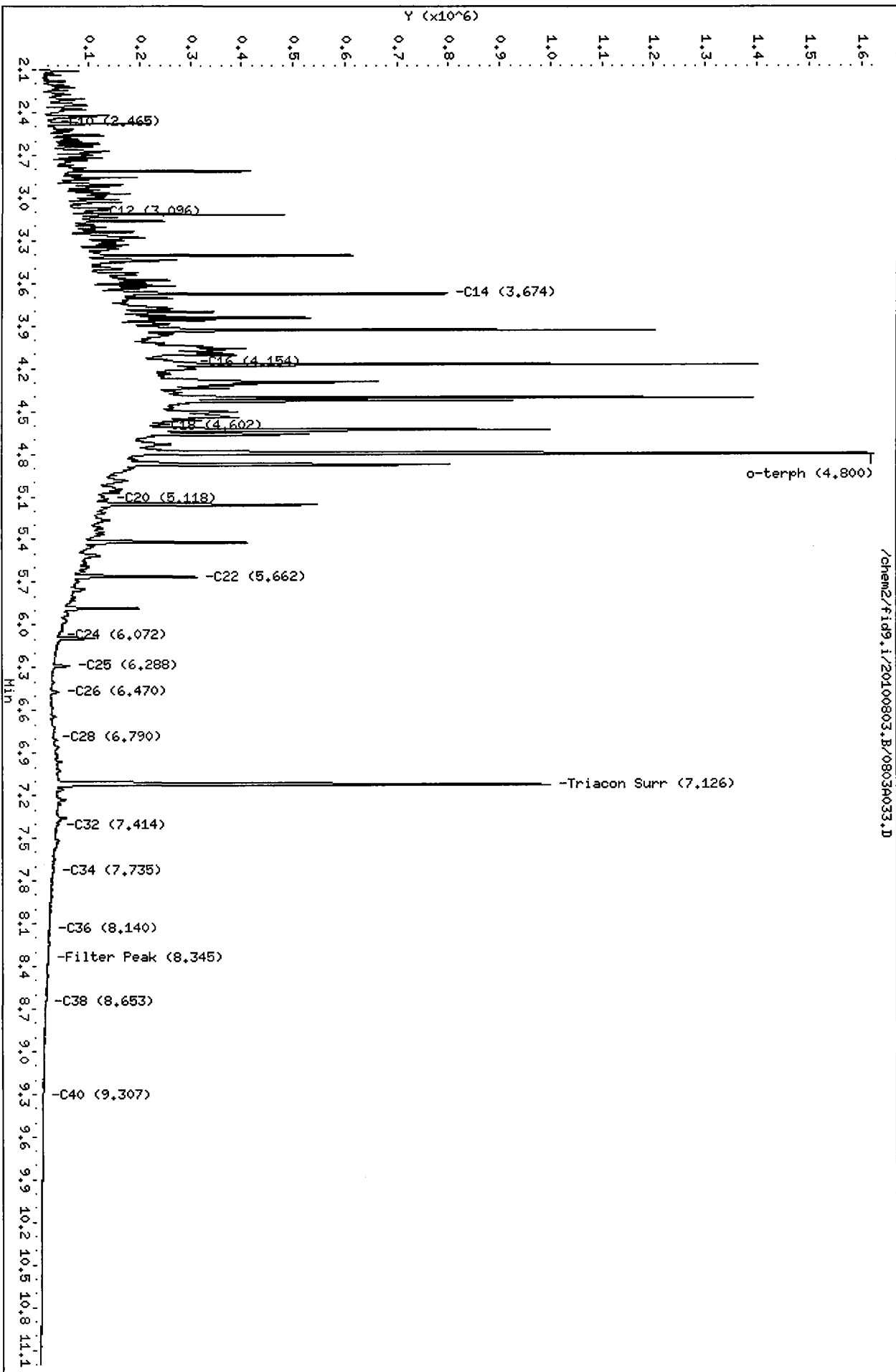
Surrogate	Area	Amount	%Rec
o-Terphenyl	1924826	74.7	166.0
Triacotane	1076945	54.3	120.7

*MS 8/4/10*

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

Data File: /chem2/fid9.i/20100803.B/0803A033.D  
Date : 03-AUG-2010 23:47  
Client ID: PSB12-14-17-072 MSD  
Sample Info: RGS1FMSD  
Column phase: RTX-1

Instrument: fid9.i  
Operator: MS  
Column diameter: 0.25



/chem2/fid9.i/20100803.B/0803A033.D

Analytical Resources Inc.  
 NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100803.B/0803A034.D  
 Method: /chem2/fid9.i/20100803.B/ftphfid9a.m  
 Instrument: fid9.i  
 Operator: MS  
 Report Date: 08/04/2010

ARI ID: RG66LCSS1  
 Client ID: RG66LCSS1  
 Injection: 04-AUG-2010 00:09  
 Dilution Factor: 1  
 Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.561	0.010	45444	22631	GAS (Tol-C12)	4367241	208
C8	1.688	-0.005	3795	3249	DIESEL (C12-C24)	32562178	1237
C10	2.465	-0.001	20037	12686	M.OIL (C24-C38)	439925	34
C12	3.116	0.010	425385	229549	AK-102 (C10-C25)	36187627	1246
C14	3.661	-0.002	215931	142045	AK-103 (C25-C36)	307377	61
C16	4.144	-0.012	244493	82899			
C18	4.598	-0.008	227501	92499			
C20	5.115	-0.014	129664	144260			
C22	5.662	0.017	264021	306742			
C24	6.092	0.013	85041	101182			
C25	6.287	0.010	39786	53504			
C26	6.470	-0.006	16075	24819			
C28	6.806	0.010	3971	5420			
C32	7.398	-0.022	2524	3727	JP-4 (Tol-C14)	9904323	604
C34	7.733	-0.010	984	1909	BUNKERC (C10-C38)	36508670	4163
Filter Peak	8.344	0.001	654	347			
C36	8.153	0.005	473	309			
C38	8.662	0.012	728	880			
C40	9.307	0.002	70	38			
o-terph	4.799	0.005	1548553	1787531	JET-A (C10-C18)	25973731	1880
Triacon Surr	7.124	0.004	851372	879721	JP8 (Tol-C16)	18165765	1032

M Indicates manual integration within range.

Range Times: NW Diesel(3.106 - 6.079) AK102(2.47 - 6.28) Jet A(2.47 - 4.61)  
 NW M.Oil(6.08 - 8.65) AK103(6.28 - 8.15) OR Diesel(2.47 - 6.80)

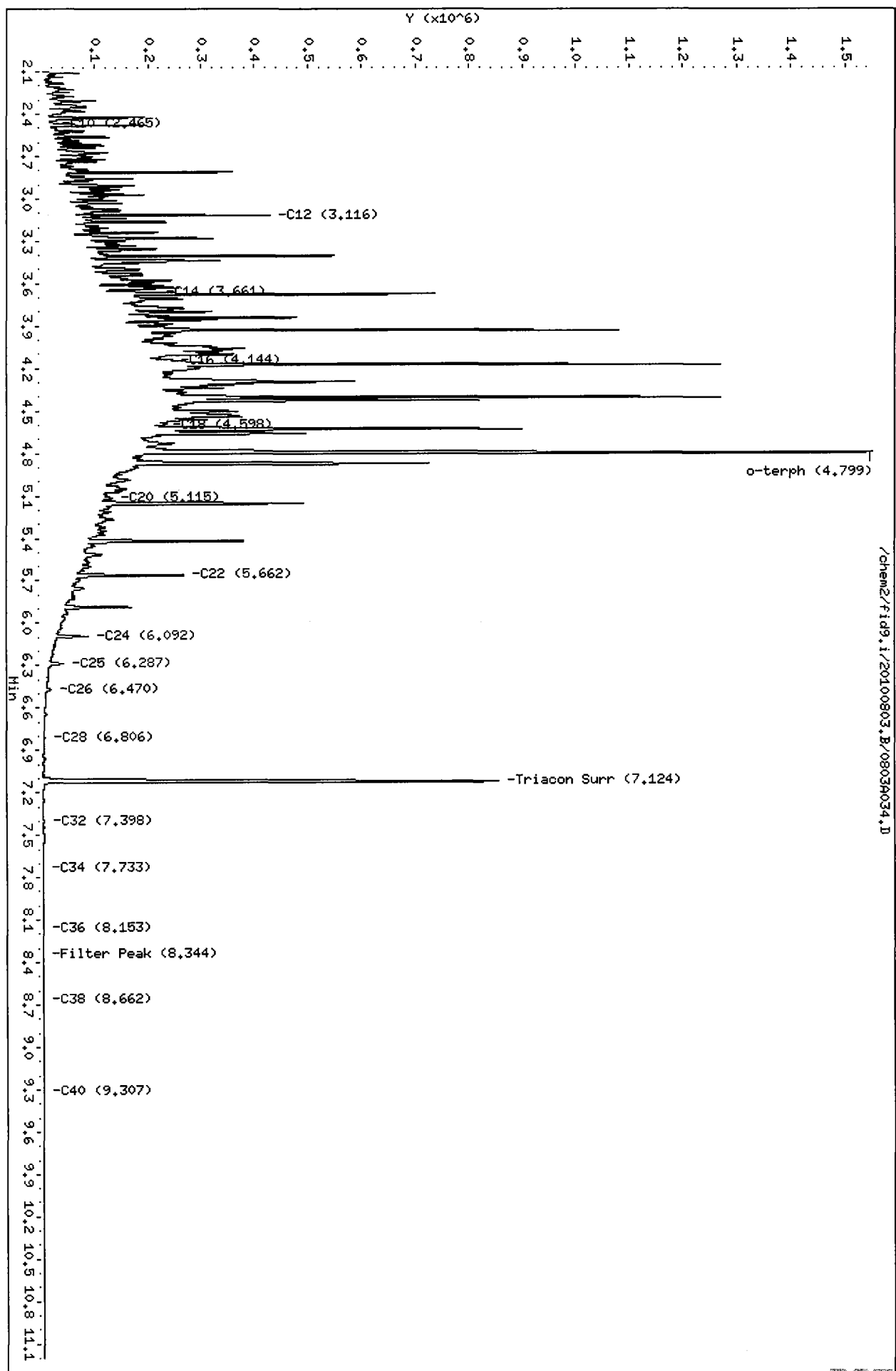
Surrogate	Area	Amount	%Rec
o-Terphenyl	1787531	69.4	154.2
Triacontane	879721	44.4	98.6

*MS F/4/10*

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

Data File: /chem2/fid9.i/20100803.B/08036034.D  
Date: 04-AUG-2010 00:09  
Client ID: RC66LCSS1  
Sample Info: RC66LCSS1  
Column phase: RTX-1

Instrument: fid9.i  
Operator: NS  
Column diameter: 0.25



/chem2/fid9.i/20100803.B/08036034.D

RG51 : 0002F

Analytical Resources Inc.  
 NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100803.B/0803A035.D  
 Method: /chem2/fid9.i/20100803.B/ftphfid9a.m  
 Instrument: fid9.i  
 Operator: MS  
 Report Date: 08/04/2010

ARI ID: RG66LCSDS1  
 Client ID: RG66LCSDS1  
 Injection: 04-AUG-2010 00:30  
 Dilution Factor: 1  
 Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.561	0.010	45741	22514	GAS (Tol-C12)	4627205	220
C8	1.688	-0.006	4195	3475	DIESEL (C12-C24)	33775584	1283
C10	2.465	0.000	21303	14842	M.OIL (C24-C38)	441636	35
C12	3.116	0.010	450712	242006	AK-102 (C10-C25)	37591391	1294
C14	3.673	0.011	749634	709116	AK-103 (C25-C36)	341873	68
C16	4.139	-0.017	253177	213899			
C18	4.607	0.000	229314	50032			
C20	5.127	-0.001	125214	49186			
C22	5.661	0.017	280440	316118			
C24	6.091	0.012	88435	107642			
C25	6.286	0.010	43134	65522			
C26	6.470	-0.006	17036	25676			
C28	6.806	0.009	3924	6129			
C32	7.426	0.006	746	439	JP-4 (Tol-C14)	10480783	639
C34	7.732	-0.012	1030	1250	BUNKERC (C10-C38)	37940847	4326
Filter Peak	8.348	0.004	459	302			
C36	8.150	0.001	480	258			
C38	8.654	0.004	275	262			
C40	9.301	-0.005	169	92			
o-terph	4.800	0.006	1524020	1993903	JET-A (C10-C18)	27101997	1961
Triacon Surr	7.125	0.005	905045	917631	JP8 (Tol-C16)	19125161	1087

M Indicates manual integration within range.

Range Times: NW Diesel(3.106 - 6.079) AK102(2.47 - 6.28) Jet A(2.47 - 4.61)  
 NW M.Oil(6.08 - 8.65) AK103(6.28 - 8.15) OR Diesel(2.47 - 6.80)

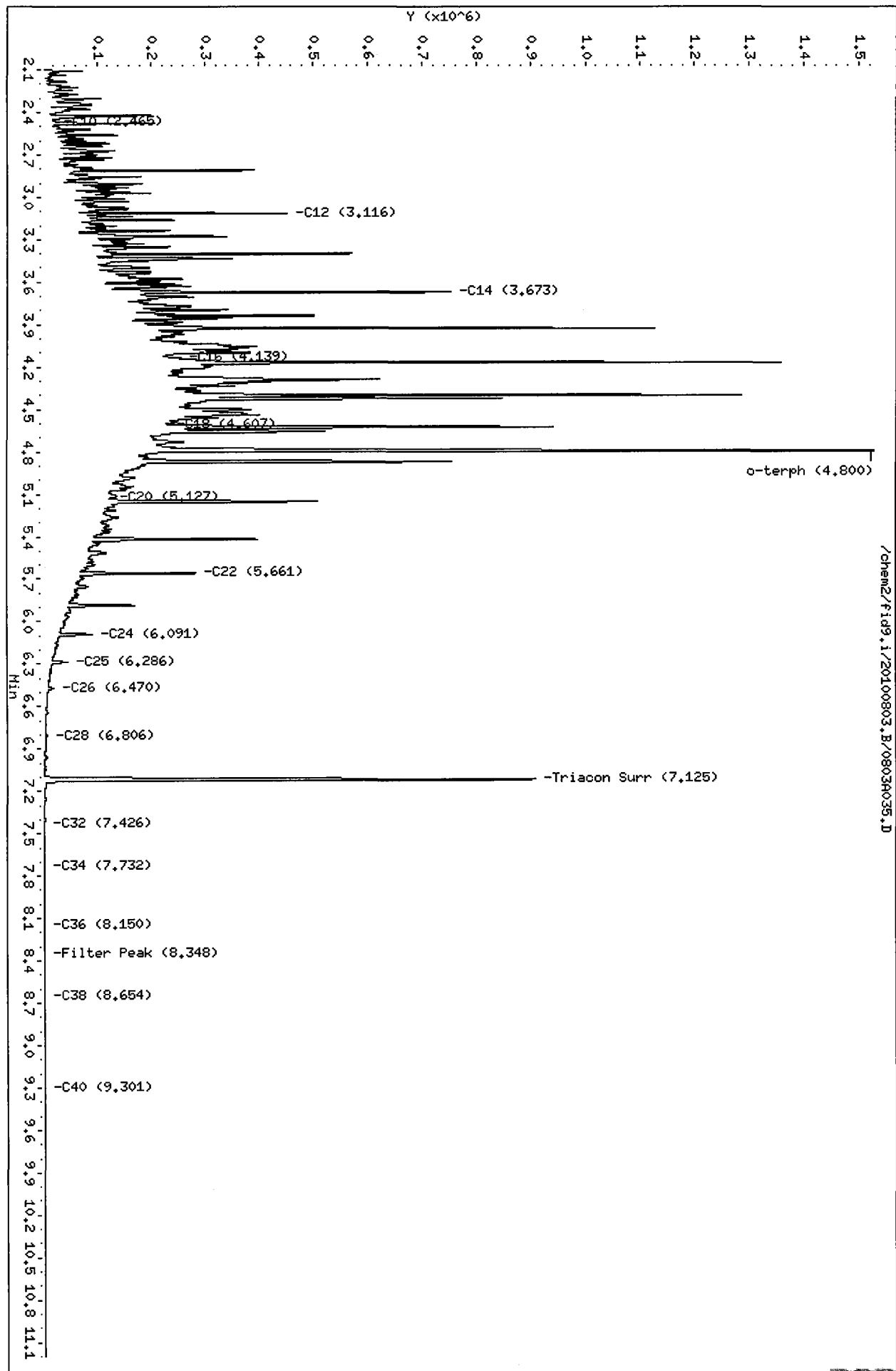
Surrogate	Area	Amount	%Rec
o-Terphenyl	1993903	77.4	172.0
Triacontane	917631	46.3	102.8

*M=8/4/10*

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

Data File: /chem2/fid9.i/20100803.B/08034035.D  
Date : 04-AUG-2010 00:30  
Client ID: RG66LCSDS1  
Sample Info: RG66LCSDS1  
Column phase: RTX-1

Instrument: fid9.i  
Operator: MS  
Column diameter: 0.25



/chem2/fid9.i/20100803.B/08034035.D



Analytical Resources Inc.  
 NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100803.B/0803raw.b/0803A037.D ARI ID: DIESEL#3  
 Method: /chem2/fid9.i/20100803.B/ftphfid9a.m Client ID: DIESEL#3  
 Instrument: fid9.i Injection: 04-AUG-2010 01:13  
 Operator: MS Dilution Factor: 1  
 Report Date: 08/04/2010 Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.565	0.014	10338	5749	GAS (Tol-C12)	874035	42
C8	1.691	-0.003	1683	1476	DIESEL (C12-C24)	6090473	231
C10	2.479	0.014	38827	28367	M.OIL (C24-C38)	121785	10
C12	3.115	0.010	81645	44163	AK-102 (C10-C25)	6781010	233
C14	3.671	0.008	145970	143138	AK-103 (C25-C36)	94155	19
C16	4.149	-0.006	57049	51593			
C18	4.615	0.009	197501	198383			
C20	5.141	0.013	97919	113579			
C22	5.654	0.009	51554	55768			
C24	6.089	0.011	16347	21978			
C25	6.284	0.008	6809	12363			
C26	6.469	-0.007	2802	3667			
C28	6.809	0.012	618	740			
C32	7.416	-0.004	404	306	JP-4 (Tol-C14)	1939640	118
C34	7.744	0.001	503	185	BUNKERC (C10-C38)	6884385	785
Filter Peak	8.348	0.005	402	209			
C36	8.150	0.001	399	305			
C38	8.652	0.003	326	285			
C40	9.305	0.000	192	50			
o-terph	4.790	-0.004	1276815	1197332	JET-A (C10-C18)	5040268	365
Triacon Surr	7.109	-0.011	4021	3947	JP8 (Tol-C16)	3505374	199

M Indicates manual integration within range.

Range Times: NW Diesel(3.106 - 6.079) AK102(2.47 - 6.28) Jet A(2.47 - 4.61)  
 NW M.Oil(6.08 - 8.65) AK103(6.28 - 8.15) OR Diesel(2.47 - 6.80)

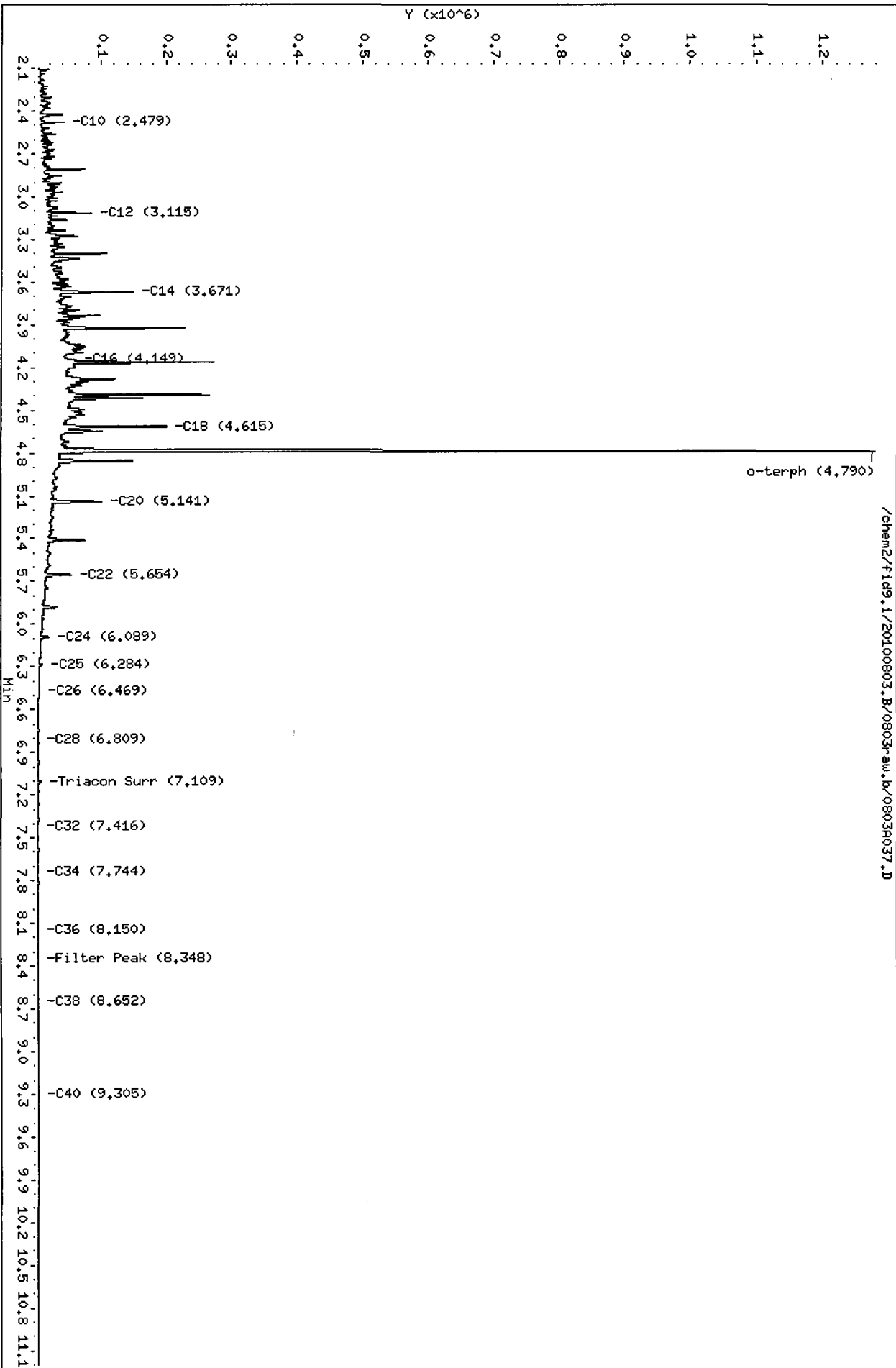
Surrogate	Area	Amount	%Rec
o-Terphenyl	1197332	46.5	103.3
Triacotane	3947	0.2	0.4

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Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

Data File: /chem2/fid9.i/20100803.B/0803-rau.b/0803R037.D  
Date : 04-AUG-2010 01:13  
Client ID: DIESEL#3  
Sample Info: DIESEL#3  
Column phase: RTX-1

Instrument: fid9.i  
Operator: MS  
Column diameter: 0.25



Analytical Resources Inc.  
 NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100803.B/0803raw.b/0803A038.D ARI ID: MOIL#3  
 Method: /chem2/fid9.i/20100803.B/ftphfid9a.m Client ID: MOIL#3  
 Instrument: fid9.i Injection: 04-AUG-2010 01:34  
 Operator: MS Dilution Factor: 1  
 Report Date: 08/04/2010 Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.560	0.010	1672	2018	GAS (Tol-C12)	40627	2
C8	1.711	0.018	619	230	DIESEL (C12-C24)	768079	29
C10	2.463	-0.002	195	45	M.OIL (C24-C38)	6353271	497
C12	3.105	0.000	28	7	AK-102 (C10-C25)	945383	33
C14	3.659	-0.003	85	34	AK-103 (C25-C36)	5439996	1086
C16	4.155	-0.001	148	60			
C18	4.616	0.009	1000	1013			
C20	5.138	0.010	2828	4883			
C22	5.643	-0.002	10526	4538			
C24	6.079	0.000	24232	4320			
C25	6.274	-0.002	31716	15007			
C26	6.476	0.000	40623	23208			
C28	6.793	-0.003	50471	17992			
C32	7.420	0.000	64230	33803	JP-4 (Tol-C14)	45826	3
C34	7.743	0.000	51015	20963	BUNKERC (C10-C38)	7132939	813
Filter Peak	8.339	-0.004	29256	14771			
C36	8.151	0.003	34396	12815			
C38	8.644	-0.005	21012	13534			
C40	9.308	0.003	11336	7422			
o-terph	4.781	-0.012	5813	5451	JET-A (C10-C18)	37310	3
Triacon Surr	7.126	0.006	964571	1073927	JP8 (Tol-C16)	50643	3

M Indicates manual integration within range.

Range Times: NW Diesel(3.106 - 6.079) AK102(2.47 - 6.28) Jet A(2.47 - 4.61)  
 NW M.Oil(6.08 - 8.65) AK103(6.28 - 8.15) OR Diesel(2.47 - 6.80)

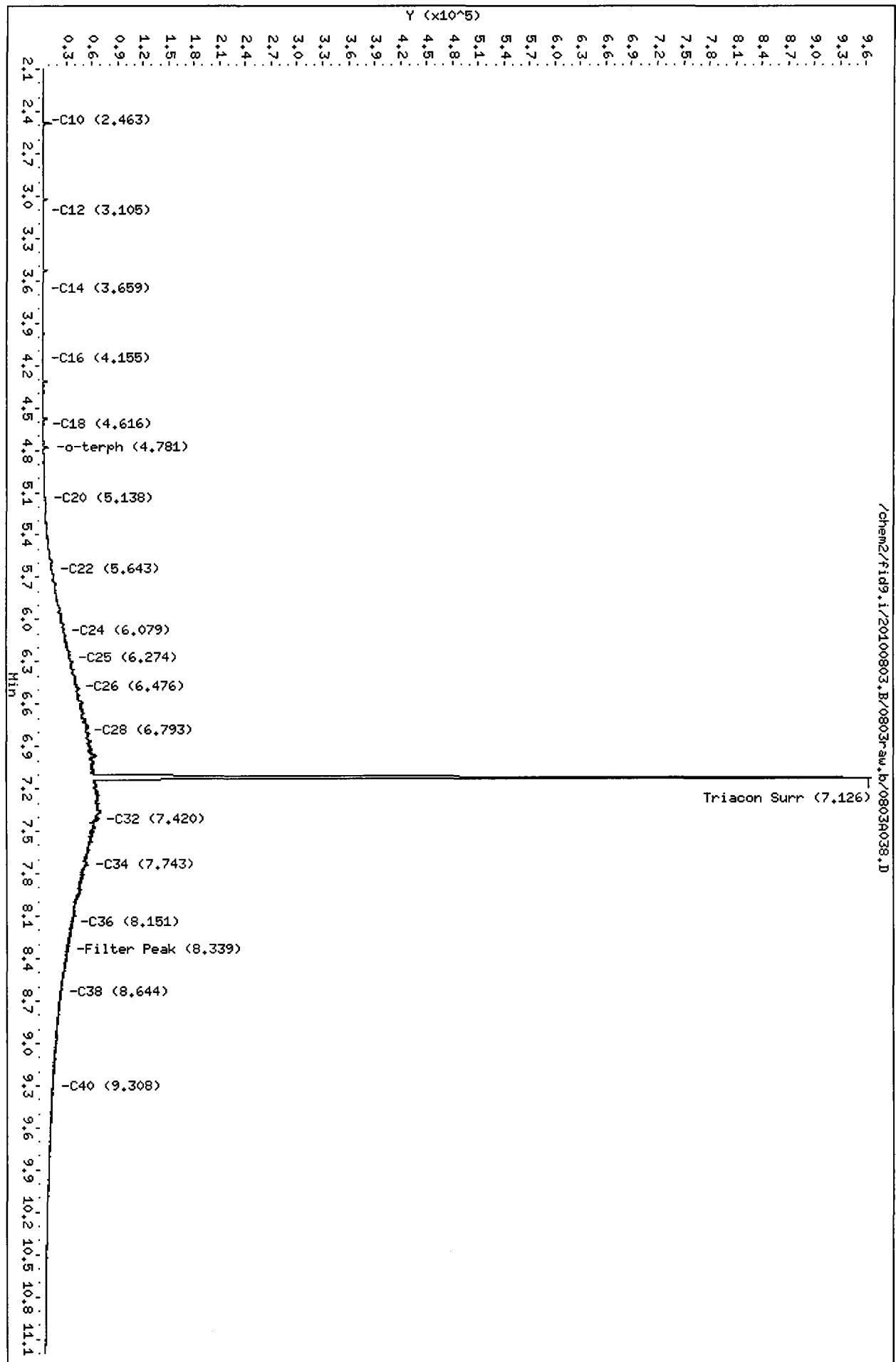
Surrogate	Area	Amount	%Rec
o-Terphenyl	5451	0.2	0.5
Triacontane	1073927	54.2	120.3

*Handwritten signature*  
 8/4/10

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

Data File: /chem2/fid9.i/20100803.B/0803rsw.b/0803R038.D  
Date : 04-AUG-2010 01:34  
Client ID: M01L#3  
Sample Info: M01L#3  
Column phase: RTX-1

Instrument: fid9.i  
Operator: MS  
Column diameter: 0.25



Analytical Resources Inc.  
 NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100803.B/0803raw.b/0803A050.D ARI ID: DIESEL#4  
 Method: /chem2/fid9.i/20100803.B/ftphfid9a.m Client ID: DIESEL#4  
 Instrument: fid9.i Injection: 04-AUG-2010 05:49  
 Operator: MS Dilution Factor: 1  
 Report Date: 08/04/2010 Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.535	-0.016	1227	1233	GAS (Tol-C12)	882637	42
C8	1.693	-0.001	1565	1290	DIESEL (C12-C24)	6142841	233
C10	2.468	0.002	4065	2581	M.OIL (C24-C38)	153093	12
C12	3.116	0.010	81990	47329	AK-102 (C10-C25)	6843560	236
C14	3.671	0.009	144635	144270	AK-103 (C25-C36)	117560	23
C16	4.153	-0.003	57359	43773			
C18	4.615	0.009	192897	201298			
C20	5.140	0.012	99459	112774			
C22	5.654	0.010	52430	57982			
C24	6.089	0.011	16575	19701			
C25	6.268	-0.008	2714	741			
C26	6.470	-0.006	2978	4502			
C28	6.786	-0.011	499	127			
C32	7.416	-0.004	969	764	JP-4 (Tol-C14)	1971454	120
C34	7.743	0.000	594	210	BUNKERC (C10-C38)	6980760	796
Filter Peak	8.345	0.001	862	374			
C36	8.145	-0.004	530	372			
C38	8.648	-0.001	562	212			
C40	9.304	-0.002	656	193			
o-terph	4.790	-0.004	1314240	1208655	JET-A (C10-C18)	5103703	369
Triacon Surr	7.109	-0.011	4319	4684	JP8 (Tol-C16)	3534643	201

M Indicates manual integration within range.

Range Times: NW Diesel(3.106 - 6.079) AK102(2.47 - 6.28) Jet A(2.47 - 4.61)  
 NW M.Oil(6.08 - 8.65) AK103(6.28 - 8.15) OR Diesel(2.47 - 6.80)

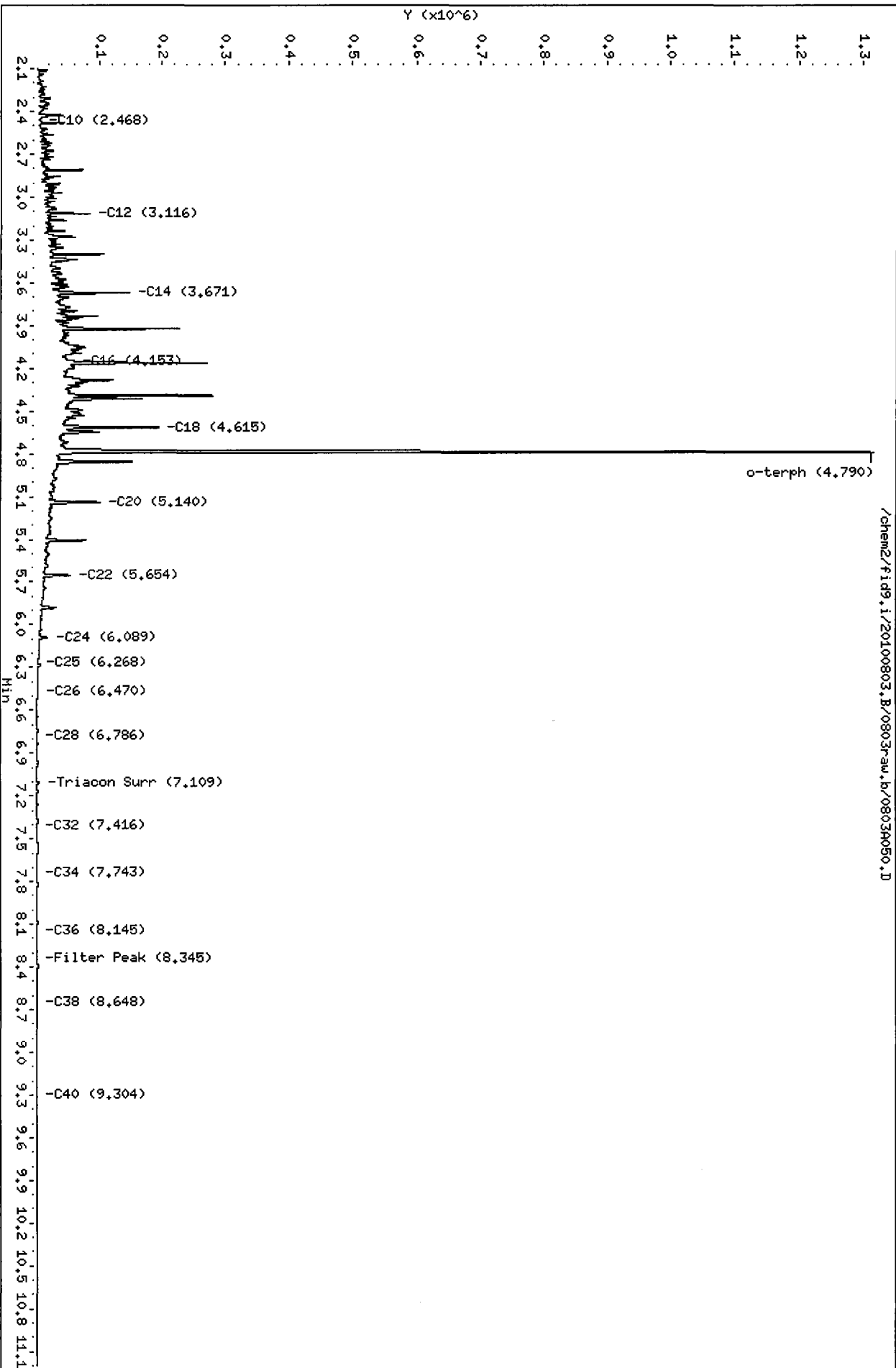
Surrogate	Area	Amount	%Rec
o-Terphenyl	1208655	46.9	104.3
Triacontane	4684	0.2	0.5

*Handwritten signature/initials*

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

Data File: /chem2/fid9.i/20100803.B/0803raw.b/0803A050.D  
Date: 04-AUG-2010 05:49  
Client ID: DIESEL#4  
Sample Info: DIESEL#4  
Column phase: RTX-1

Instrument: fid9.i  
Operator: HS  
Column diameter: 0.25



Analytical Resources Inc.  
 NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100803.B/0803raw.b/0803A051.D ARI ID: MOIL#4  
 Method: /chem2/fid9.i/20100803.B/ftphfid9a.m Client ID: MOIL#4  
 Instrument: fid9.i Injection: 04-AUG-2010 06:11  
 Operator: MS Dilution Factor: 1  
 Report Date: 08/04/2010 Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.561	0.010	1848	2488	GAS (Tol-C12)	42860	2
C8	1.695	0.002	799	1016	DIESEL (C12-C24)	762535	29
C10	2.446	-0.020	213	124	M.OIL (C24-C38)	6498951	508
C12	3.102	-0.004	25	13	AK-102 (C10-C25)	954799	33
C14	3.659	-0.003	104	49	AK-103 (C25-C36)	5586891	1115
C16	4.151	-0.005	164	156			
C18	4.617	0.010	1198	1118			
C20	5.118	-0.010	1870	371			
C22	5.654	0.009	11753	7531			
C24	6.081	0.002	24137	7660			
C25	6.281	0.005	33047	17246			
C26	6.475	-0.001	40143	16671			
C28	6.796	0.000	51789	17349			
C32	7.422	0.002	65114	36918	JP-4 (Tol-C14)	48160	3
C34	7.743	0.000	52464	50042	BUNKERC (C10-C38)	7273680	829
Filter Peak	8.345	0.002	26490	7333			
C36	8.146	-0.002	34492	14669			
C38	8.653	0.003	19011	9718			
C40	9.308	0.002	9543	7599			
o-terph	4.781	-0.013	6952	6457	JET-A (C10-C18)	39540	3
Triacon Surr	7.127	0.007	926759	1123284	JP8 (Tol-C16)	54062	3

M Indicates manual integration within range.

Range Times: NW Diesel(3.106 - 6.079) AK102(2.47 - 6.28) Jet A(2.47 - 4.61)  
 NW M.Oil(6.08 - 8.65) AK103(6.28 - 8.15) OR Diesel(2.47 - 6.80)

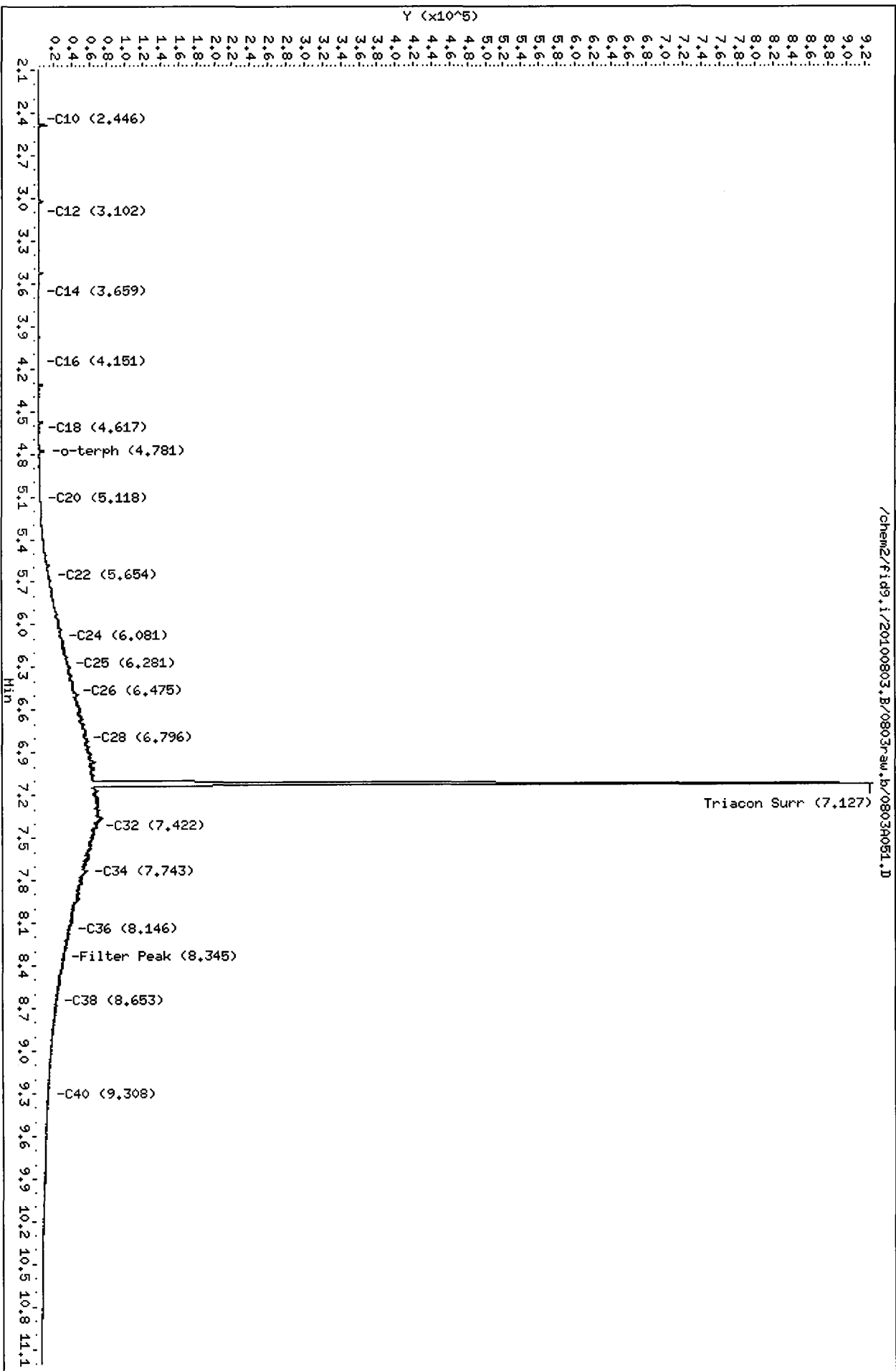
Surrogate	Area	Amount	%Rec
o-Terphenyl	6457	0.3	0.6
Triacotane	1123284	56.6	125.9

*Handwritten signature: 28/7/10*

Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8	17594.0	25-MAY-2010

Data File: /chem2/fid9.i/20100803.B/0803raw.b/0803H051.D  
Date : 04-AUG-2010 06:11  
Client ID: MOIL#4  
Sample Info: MOIL#4  
Column phase: RTX-1

Instrument: fid9.i  
Operator: MS  
Column diameter: 0.25





**TPHG/BETX Raw Data  
Preparation Log**

**ARI Job ID: RG51**



Analytical Resources, Incorporated  
Analytical Chemists and Consultants

# Volatile Organics Extraction Bench Sheet

(8260B, 8260B-SIM, 8021, NWTPH-GX, AK-101, TPH-G, VPH, TCLP-ZHE)

ARI Project No. \_\_\_\_\_

Client ID/Project \_\_\_\_\_

Extraction Date \_\_\_\_\_

MeOH Lot No. \_\_\_\_\_

Analyst RT

1<sup>st</sup> Extraction: 6/4/10

2<sup>nd</sup> Extraction: \_\_\_\_\_

Lab ID	Vial No.	Preservative		Method 5035 Sample Weight				MeOH-Spilt Volume	Comments
		NaHSO <sub>3</sub>	CH <sub>3</sub> OH	Vial Weight	Tare (from vial)	Sample Weight <small>EXTRACT VOLUME</small>	Extract Volume <small>MeOH Spilt Volume</small>		
1									
2	6		X	37.77	28.097	5	900	9.673	
3	6			36.36	28.081			8.279	
4	6			38.66	28.142			10.518	
5	7			34.01	28.215			5.795	
6	3			36.79	28.171			8.619	
7	9			39.50	28.116			11.384	
8	5			36.73	28.178			8.552	
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
<b>Balance ID:</b>									

Surrogate: \_\_\_\_\_

Solution ID \_\_\_\_\_

Concentration \_\_\_\_\_

Amount Spiked \_\_\_\_\_

Analyst \_\_\_\_\_

Witness \_\_\_\_\_

Spike: \_\_\_\_\_

2001 : 000000

**TPHG/BETX Raw Data  
Initial Calibration Notes and Raw Data**

**ARI Job ID: RG51**



### VOA Analyst Notes / Corrective Action Log

ARI Project ID: Gas Curve Client ID: \_\_\_\_\_

ARI SOP: 404S(Gas) 410S(BTEX) 430S(VPH) 700S(8260C) 703S(SIM) 706S(524.2) 710S(RSK-175)

Parameter(s): Gas

Instrument: NT-3 NT-5 NT-7 NT-9 NT-10 PID-1 PID-2 PID-3 FID-6 FINN-5

Purge Volume (mL) 5 Curve Date: 7/28/10 Analysis Start Date: 7/28/10

pH ≤ 2.0	YES / NO <u>(NA)</u>	Method Blank In Control?	<u>YES</u> / NO
BFB Tune Meets Criteria?	YES / NO <u>(NA)</u>	LCS / LCSD Recovery In Control?	<u>YES</u> / NO
Internal Standard Meets Criteria?	YES / NO <u>(NA)</u>	Surrogate Recovery In Control?	<u>YES</u> / NO
ICal acceptable?	<u>YES</u> / NO	CCal acceptable?	<u>YES</u> / NO
Q flag applied?	YES / NO <u>(NA)</u>	Q flag applied?	YES / NO <u>(NA)</u>
Manual Integrations for ICal?	<u>YES</u> / NO	Manual Integrations for Samples?	<u>Yes</u> / NO
Special Analysis Criteria Met?	YES / NO <u>(NA)</u>		

Bubbles/Headspace: None SM (≤ 2mm ●) PB (2-4mm) LG (> 4mm ●) Head Space

Detail problems, corrective actions and/or other pertinent information below (use reverse side when necessary):

Gas ICU Targeted 2.5

Additional Details on Reverse: Yes / No

Analyst: [Signature] Date: 7/29/10

Reviewer: [Signature] Date: 7/29/10

MH  
7/29/10

Analytical Resources Inc.  
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100728-2.b/0728a012.d      ARI ID: GAS .1  
Data file 2: /chem3/pid3.i/20100728-1.b/0728a012.d      Client ID:  
Method: /chem3/pid3.i/20100728-1.b/PIDB.m              Injection Date: 28-JUL-2010 11:42  
Instrument: pid3.i    Matrix: WATER  
Gas Ical Date: 28-JUL-2010                                  Dilution Factor: 1.000  
BETX Ical Date: 29-JUN-2010

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.425	0.017	7873	93810	109.4	TFT (Surr)
14.901	0.013	4596	37219	106.7	BB (Surr)

PETROLEUM HYDROCARBONS (FID)

Range	RF	Total Area*	Amount
WAGas Tol-C12 (10.17 to 17.11)	827807	100925	0.122 M
8015B 2MP-TMB ( 4.92 to 15.58)	1664107	195939	0.118 M
AK101 nC6-nC10 ( 5.41 to 14.53)	1131784	134256	0.119 M
NWTPHG Tol-Nap (10.17 to 18.18)	882029	110221	0.125 M

M Indicates manual integration within range

\* Surrogate areas are subtracted from Total Area  
Range marker RT's are set by daily RT standard

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.424	0.017	23728	107.9	TFT (Surr)
14.900	0.013	47912	105.1	BB (Surr)

SW8021 (PID)

RT	Shift	Response	Amount	Compound
ND	---	---	---	Benzene
10.290	0.018	4229	3.20	Toluene
12.825	0.020	1325	1.07	Ethylbenzene
12.964	0.022	4623	3.43	M/P-Xylene
13.742	0.018	1960	1.53	O-Xylene
5.294	0.007	3815	10.72	MTBE

A Indicates Peak Area was used for quantitation instead of Height  
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20100728-2.b/0728a010.d

Date: 28-JUL-2010 10:34

Client ID:

Sample Info: GAS ICV

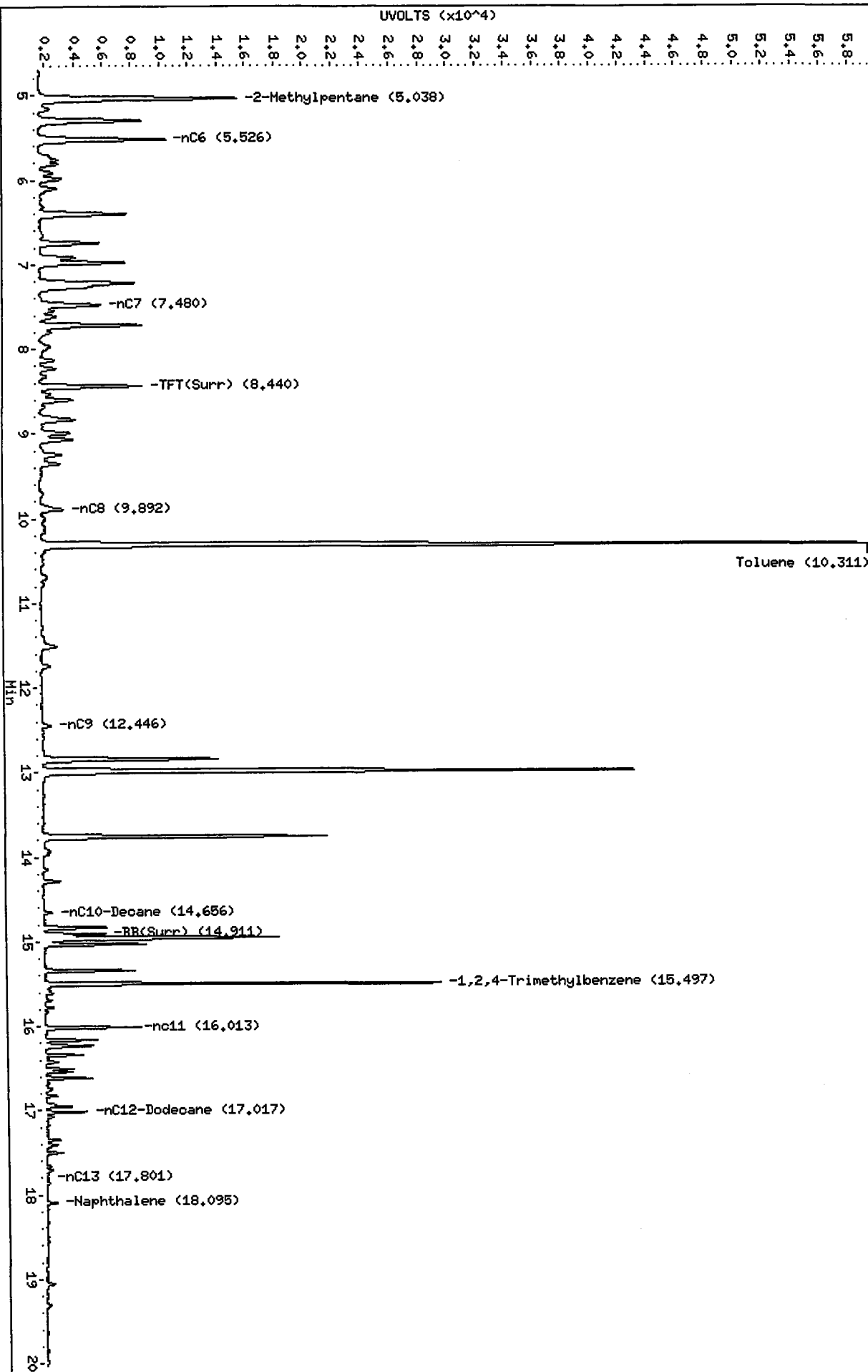
Column Phase: RTX 502-2 FID

Instrument: pid3.i

Operator: MH

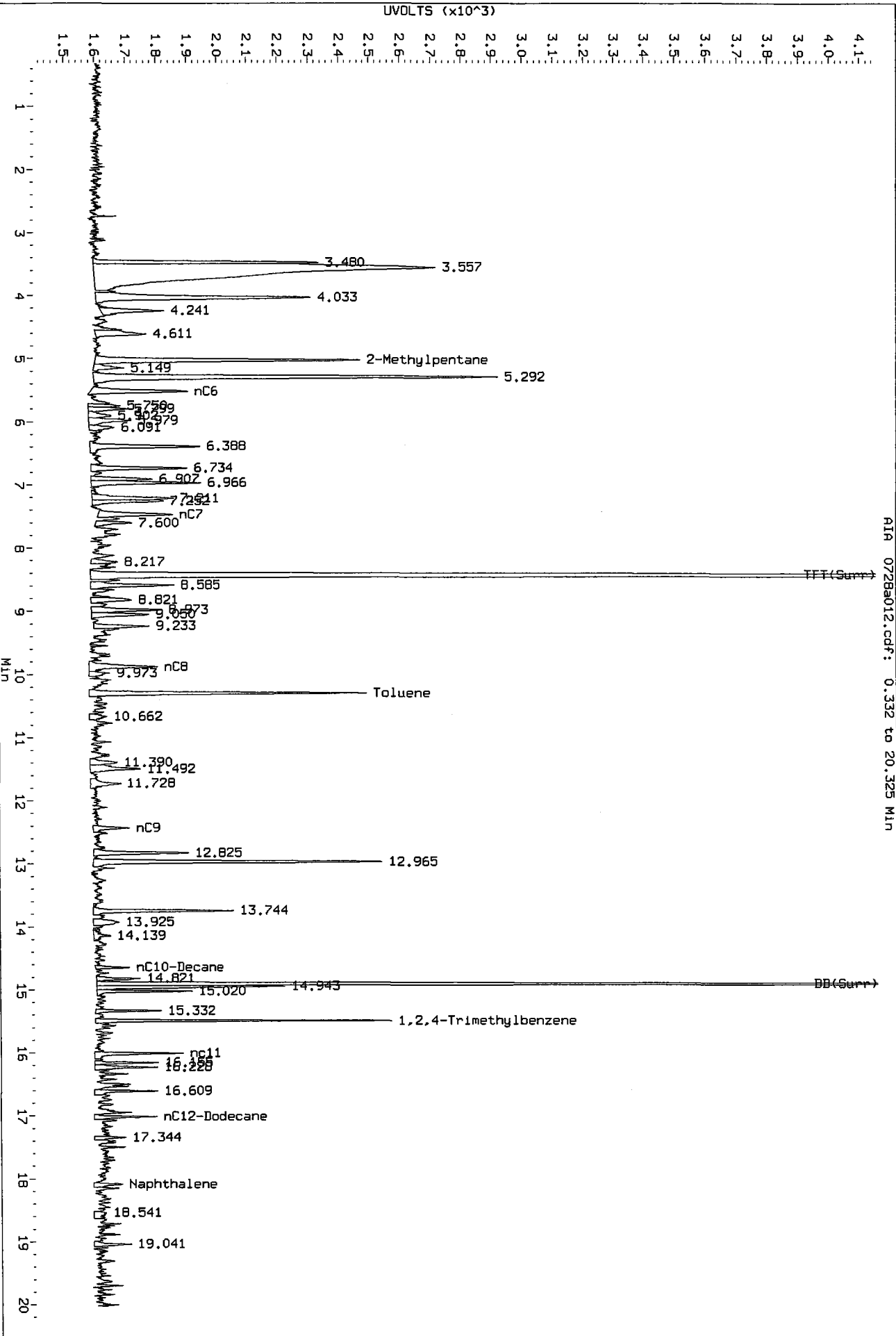
Column diameter: 0.18

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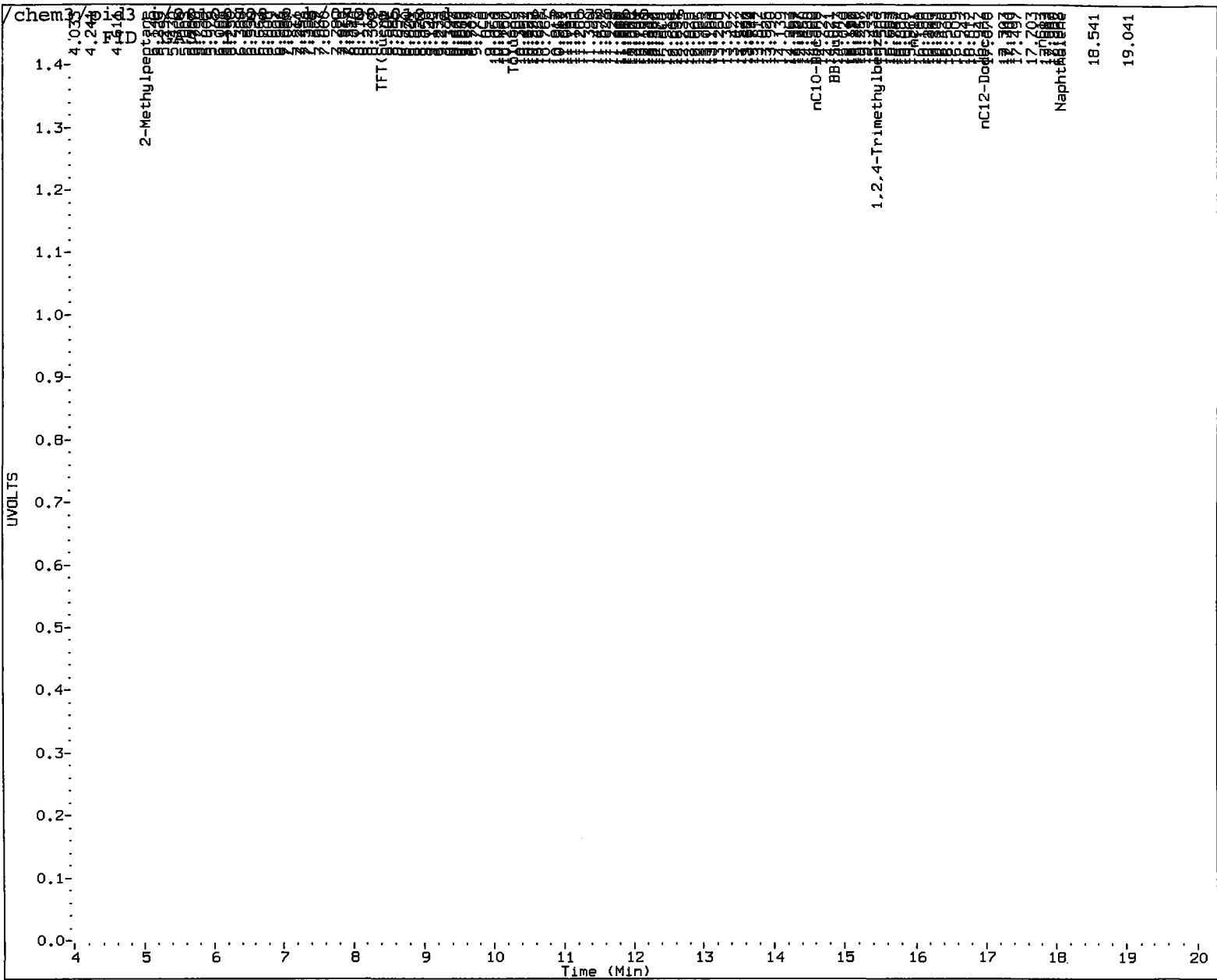


MH  
7/16/10

Data File: /chem3/pid3.1/20100728-2.b/0728a012.d/0728a012.cdf  
Injection Date: 28-JUL-2010 11:42  
Instrument: pid3.1  
Client Sample ID:



AIA 0728a012.cdf: 0.332 to 20.325 Min



MANUAL INTEGRATION

- 1. Baseline correction
- 2. Poor chromatography
- 3. Peak not found
- 4. Totals calculation
- 5. Other \_\_\_\_\_

Analyst: MH

Date: 7/29/10



MT  
7/29/10

Analytical Resources Inc.  
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100728-2.b/0728a004.d      ARI ID: GAS .25  
Data file 2: /chem3/pid3.i/20100728-1.b/0728a004.d      Client ID:  
Method: /chem3/pid3.i/20100728-1.b/PIDB.m              Injection Date: 28-JUL-2010 08:07  
Instrument: pid3.i    Matrix: WATER  
Gas Ical Date: 28-JUL-2010                                  Dilution Factor: 1.000  
BETX Ical Date: 29-JUN-2010

=====

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
--	-----	-----	-----	-----	-----
8.435	0.027	7186	84666	99.8	TFT(Surr)
14.907	0.019	4308	34905	100.0	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

-----

Range	RF	Total Area*	Amount
-----	----	-----	-----
WAGas Tol-C12 (10.17 to 17.11)	827807	193174	0.233 M
8015B 2MP-TMB ( 4.92 to 15.58)	1664107	400040	0.240 M
AK101 nC6-nC10 ( 5.41 to 14.53)	1131784	266719	0.236 M
NWTPHG Tol-Nap (10.17 to 18.18)	882029	207460	0.235 M

M Indicates manual integration within range

\* Surrogate areas are subtracted from Total Area  
Range marker RT's are set by daily RT standard

=====

PID Surrogates

RT	Shift	Response	%Rec	Compound
--	-----	-----	----	-----
8.434	0.027	21029	95.7	TFT(Surr)
14.906	0.020	44130	96.8	BB(Surr)

SW8021 (PID)

-----

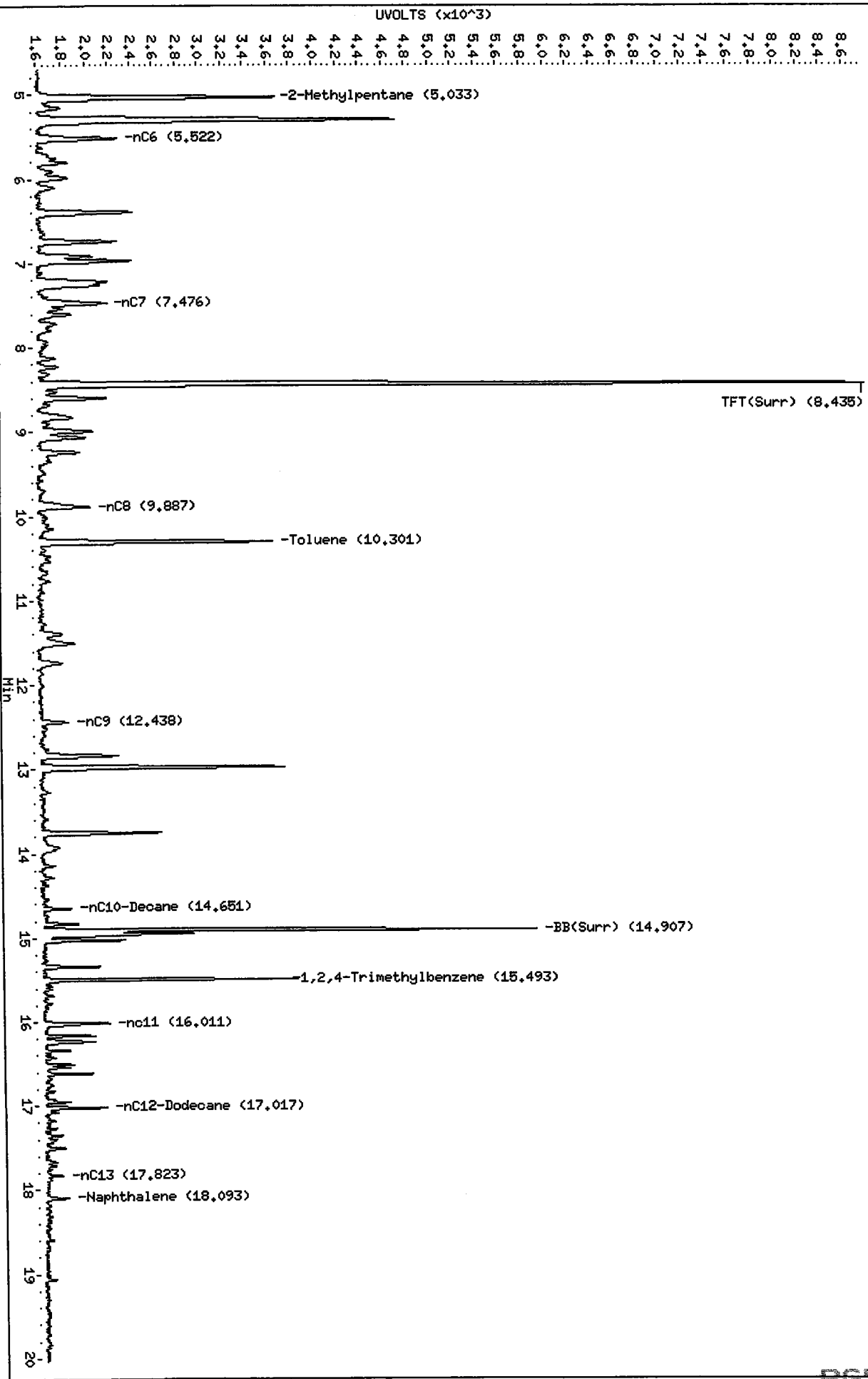
RT	Shift	Response	Amount	Compound
--	-----	-----	-----	-----
7.711	0.024	617	0.47	Benzene
10.300	0.029	9631	7.30	Toluene
12.835	0.030	2739	2.20	Ethylbenzene
12.974	0.032	10740	7.98	M/P-Xylene
13.751	0.027	4547	3.54	O-Xylene
5.301	0.013	9271	26.06	MTBE

A Indicates Peak Area was used for quantitation instead of Height  
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20100728-2.b/0728a004.d  
Date : 28-JUL-2010 08:07  
Client ID:  
Sample Info: GAS .25  
Column phase: RTX 502-2 FID

Instrument: pid3.i  
Operator: MH  
Column diameter: 0.18

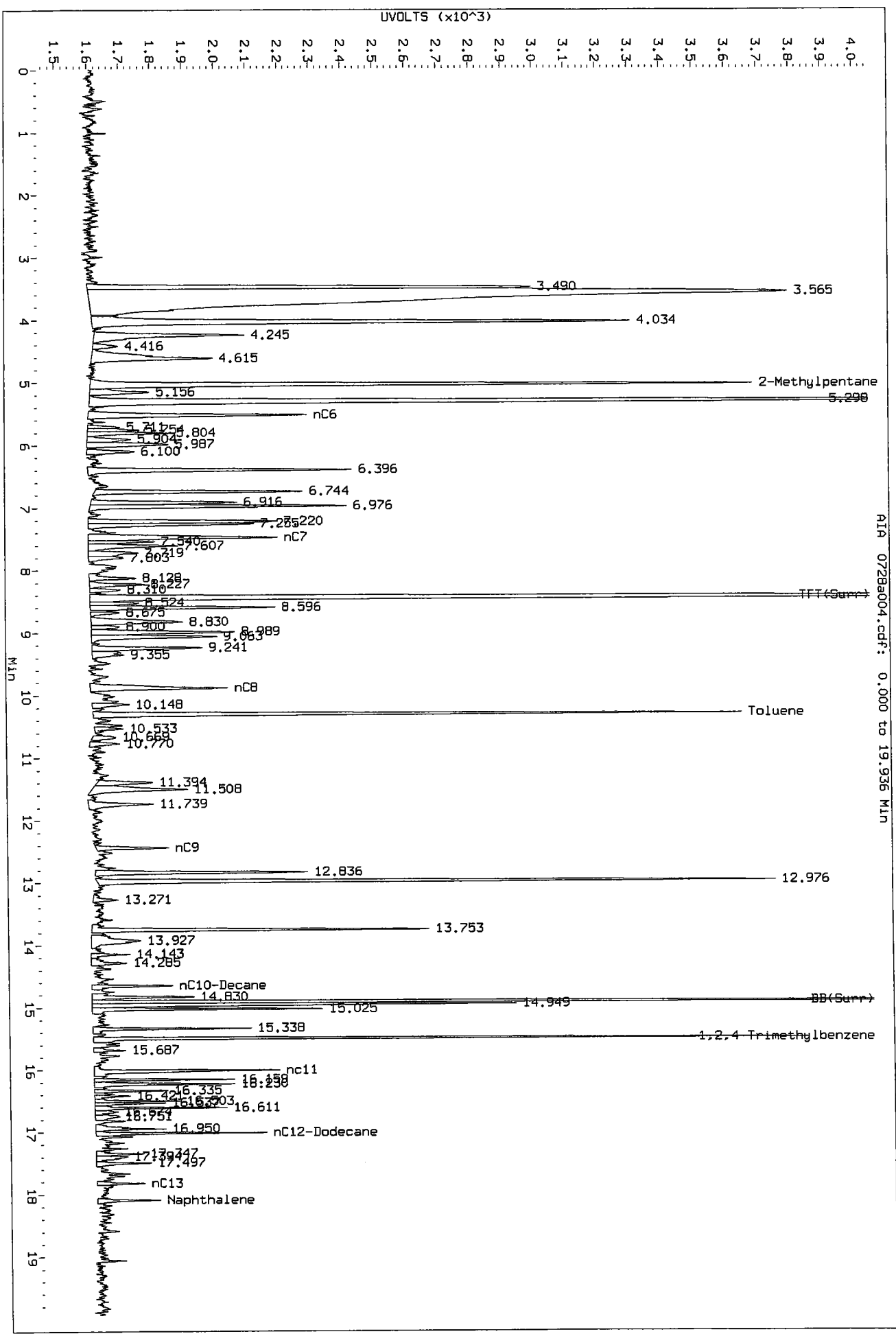
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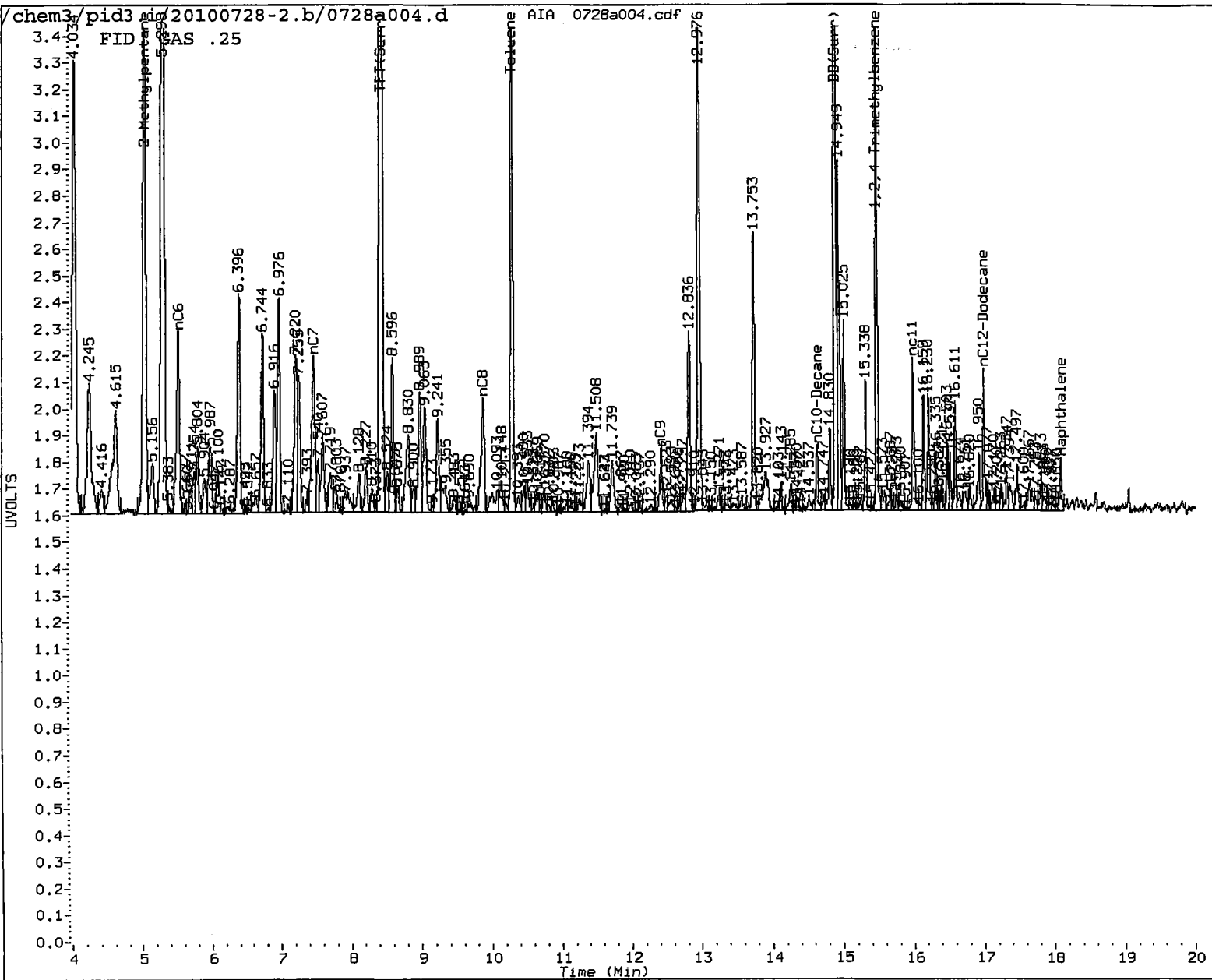
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12 0000  
13 0000

MW  
01/12/10

Data File: /chem3/pid3.1/20100728-2.b/0728a004.d/0728a004.cdf  
Injection Date: 28-JUL-2010 08:07  
Instrument: pid3.1  
Client Sample ID:



AIA 0728a004.cdf: 0.000 to 19.936 MIN



MANUAL INTEGRATION

- 1. Baseline correction
- 2. Poor chromatography
- 3. Peak not found
- 4. Totals calculation
- 5. Other \_\_\_\_\_

Analyst: MH Date: 7/29/10

M  
7/29/10

Analytical Resources Inc.  
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100728-2.b/0728a005.d      ARI ID: GAS 1  
Data file 2: /chem3/pid3.i/20100728-1.b/0728a005.d      Client ID:  
Method: /chem3/pid3.i/20100728-1.b/PIDB.m              Injection Date: 28-JUL-2010 08:31  
Instrument: pid3.i    Matrix: WATER  
Gas Ical Date: 28-JUL-2010                                  Dilution Factor: 1.000  
BETX Ical Date: 29-JUN-2010

=====

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.437	0.029	7240	85071	100.6	TFT(Surr)
14.910	0.022	4266	35061	99.1	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

-----

Range	RF	Total Area*	Amount
WAGas Tol-C12 (10.17 to 17.11)	827807	761867	0.920 M
8015B 2MP-TMB ( 4.92 to 15.58)	1664107	1564234	0.940 M
AK101 nC6-nC10 ( 5.41 to 14.53)	1131784	1050254	0.928 M
NWTPHG Tol-Nap (10.17 to 18.18)	882029	811111	0.920 M

M Indicates manual integration within range

\* Surrogate areas are subtracted from Total Area  
Range marker RT's are set by daily RT standard

=====

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.436	0.029	21131	96.1	TFT(Surr)
14.908	0.022	43950	96.4	BB(Surr)

SW8021 (PID)

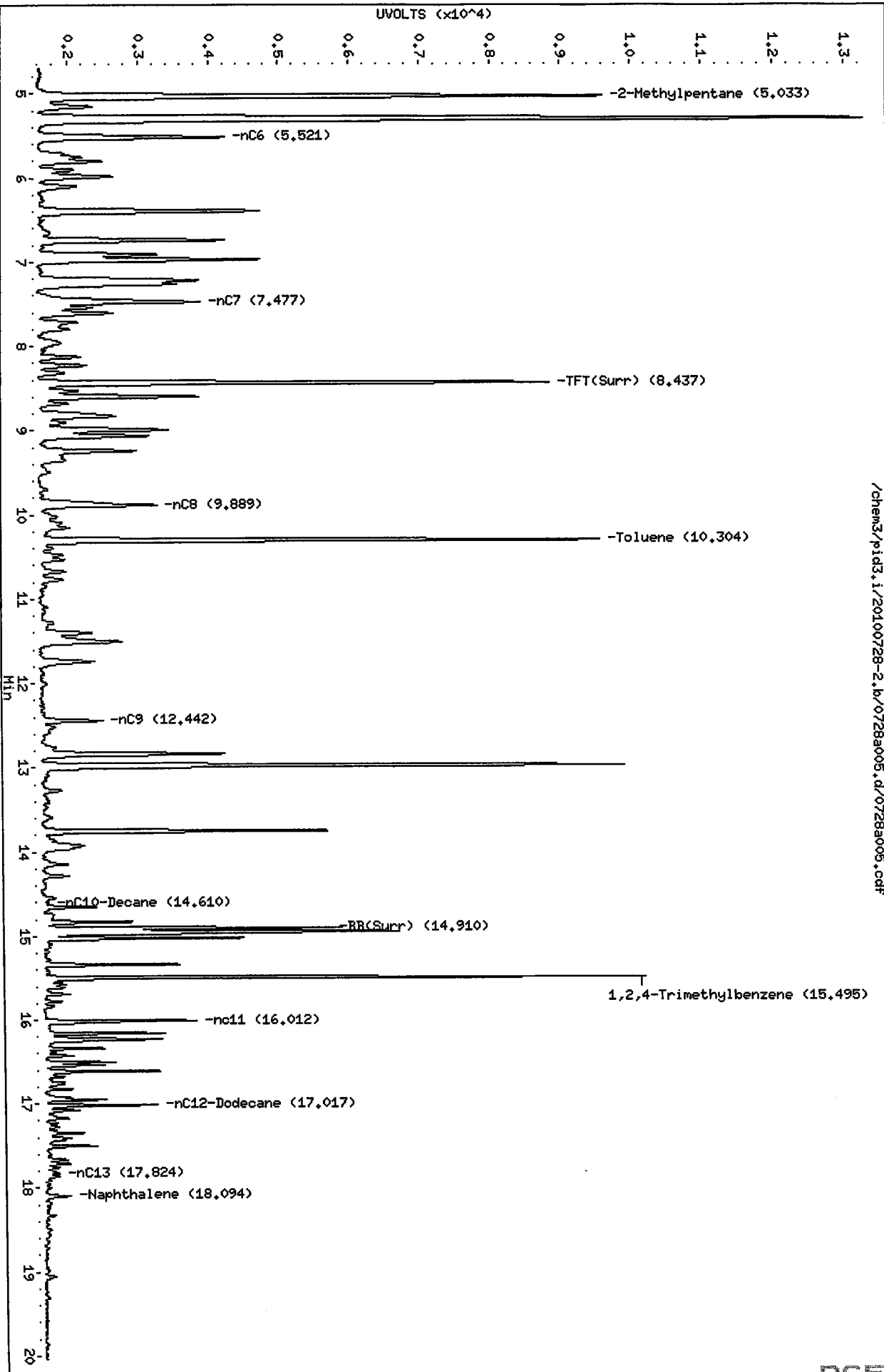
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RT	Shift	Response	Amount	Compound
7.713	0.026	2868	2.17	Benzene
10.303	0.032	37994	28.79	Toluene
12.838	0.033	10898	8.77	Ethylbenzene
12.978	0.036	42543	31.59	M/P-Xylene
13.754	0.029	17526	13.64	O-Xylene
5.302	0.015	35267	99.12	MTBE

A Indicates Peak Area was used for quantitation instead of Height  
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20100728-2.b/0728a005.d  
Date : 28-JUL-2010 08:31  
Client ID:  
Sample Info: GAS 1  
Column phase: RTX 502-2 FID

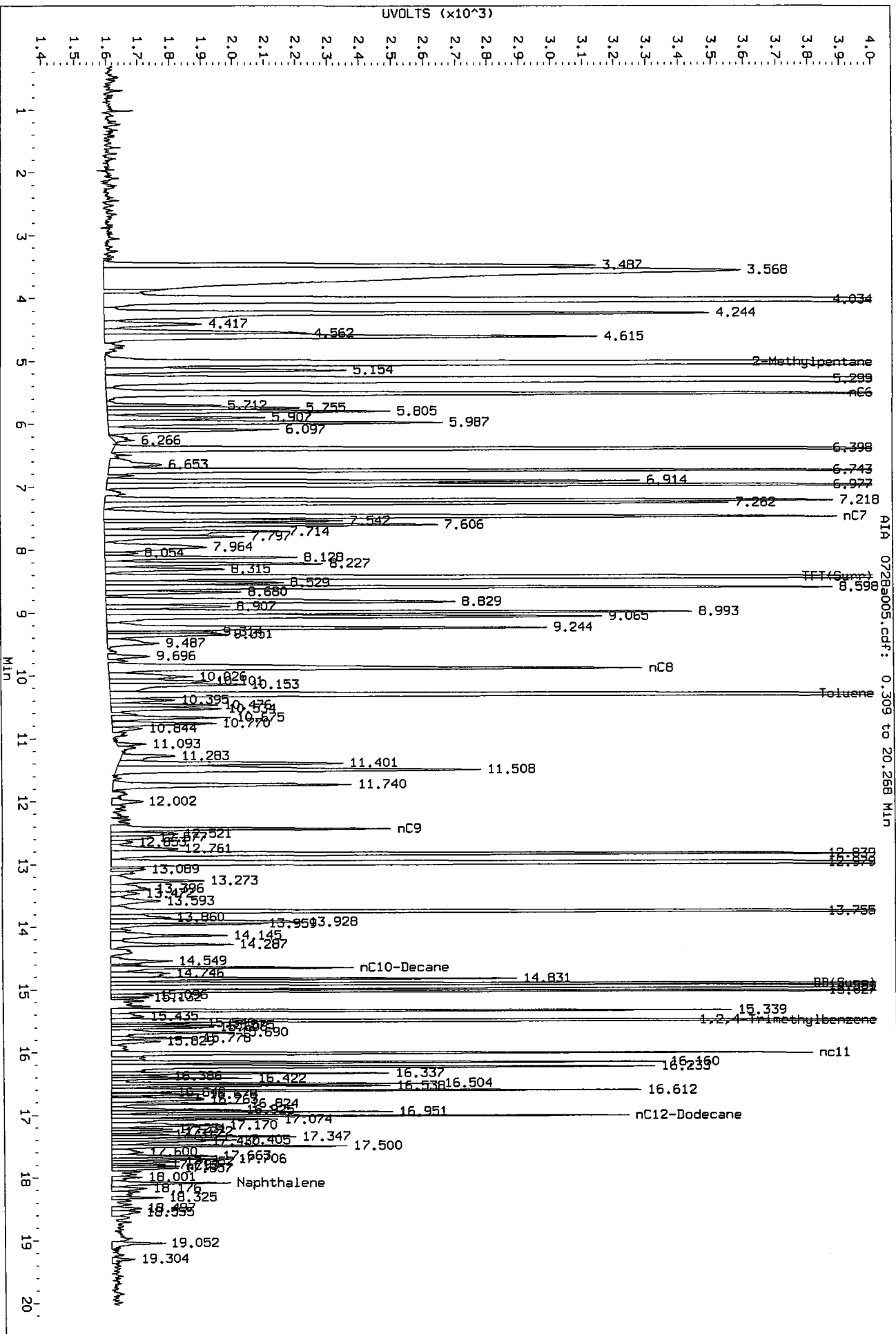
Instrument: pid3.i  
Operator: MH  
Column diameter: 0.18



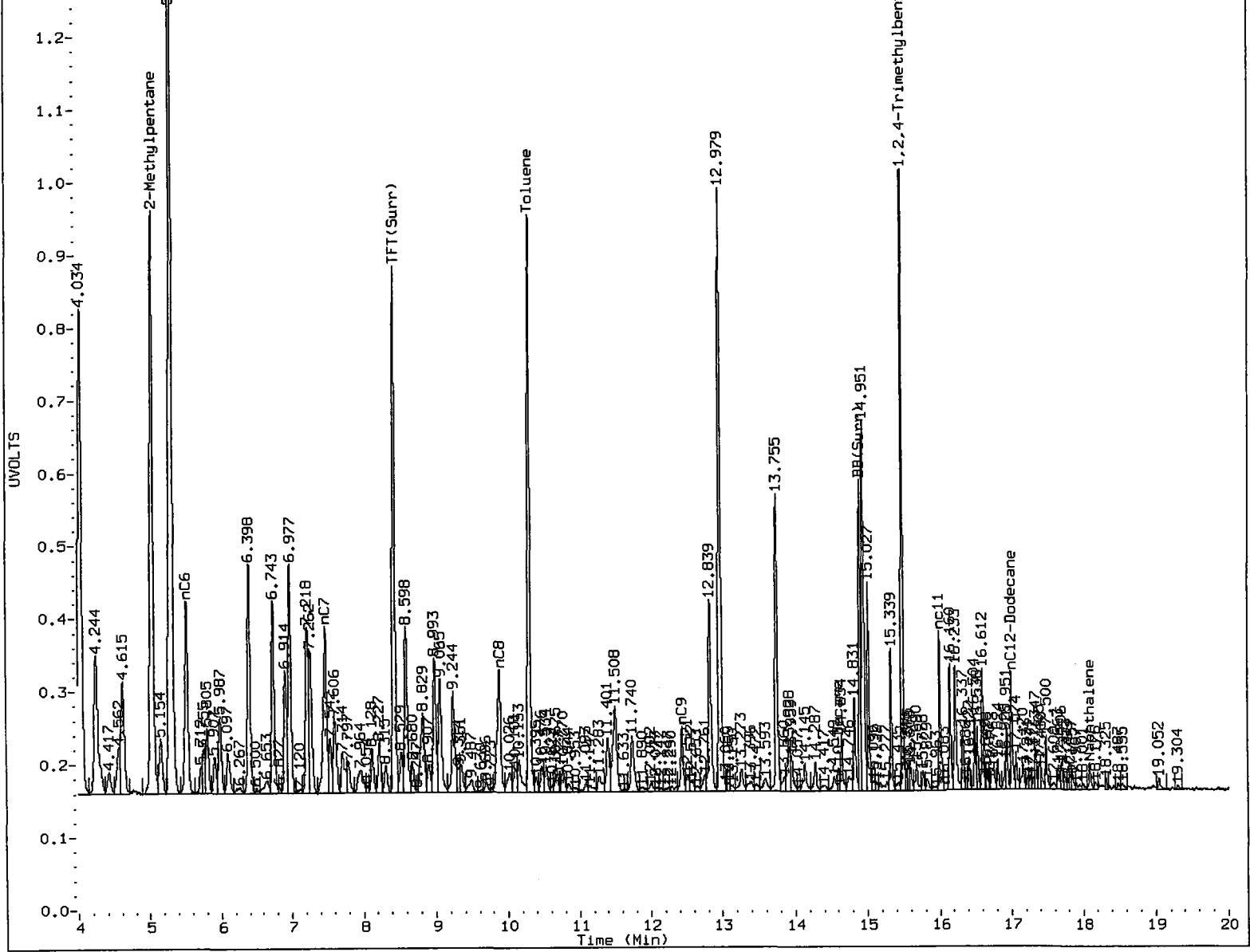
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MH  
7/21/10

Data File: /chem3/pid3.1/20100728-2.b/0728a005.d/0728a005.cdf  
Injection Date: 28-JUL-2010 08:31  
Instrument: pid3.1  
Client Sample ID:



FID GAS 1



MANUAL INTEGRATION

- Baseline correction
- 2. Poor chromatography
- 3. Peak not found
- 4. Totals calculation
- 5. Other \_\_\_\_\_

Analyst: MH

Date: 7/29/10



7/29/10  
MH

Analytical Resources Inc.  
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100728-2.b/0728a006.d      ARI ID: GAS 2.5  
Data file 2: /chem3/pid3.i/20100728-1.b/0728a006.d      Client ID:  
Method: /chem3/pid3.i/20100728-1.b/PIDB.m              Injection Date: 28-JUL-2010 08:56  
Instrument: pid3.i    Matrix: WATER  
Gas Ical Date: 28-JUL-2010                                  Dilution Factor: 1.000  
BETX Ical Date: 29-JUN-2010

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.439	0.031	7507	89299	104.3	TFT(Surr)
14.911	0.023	4475	36770	103.9	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range	RF	Total Area*	Amount
WAGas Tol-C12 (10.17 to 17.11)	827807	1957108	2.364 M
8015B 2MP-TMB ( 4.92 to 15.58)	1664107	3879004	2.331 M
AK101 nC6-nC10 ( 5.41 to 14.53)	1131784	2606200	2.303 M
NWTFHG Tol-Nap (10.17 to 18.18)	882029	2072468	2.350 M

M Indicates manual integration within range

\* Surrogate areas are subtracted from Total Area  
Range marker RT's are set by daily RT standard

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.438	0.031	21902	99.6	TFT(Surr)
14.909	0.023	45851	100.6	BB(Surr)

SW8021 (PID)

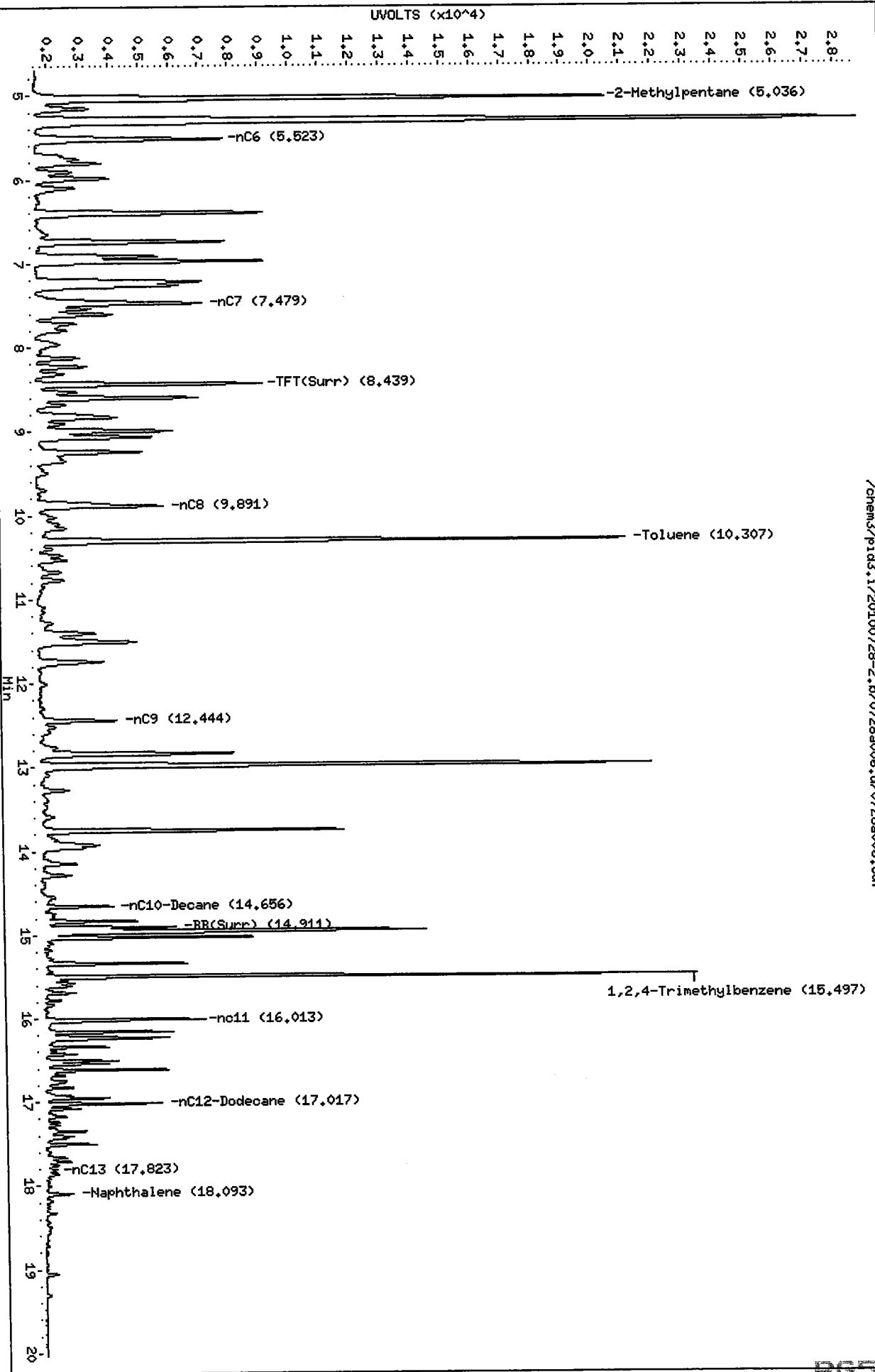
RT	Shift	Response	Amount	Compound
7.715	0.028	7095	5.37	Benzene
10.306	0.034	94086	71.29	Toluene
12.840	0.036	27296	21.97	Ethylbenzene
12.981	0.039	105425	78.29	M/P-Xylene
13.756	0.032	43640	33.97	O-Xylene
5.306	0.019	82935	233.09	MTBE

A Indicates Peak Area was used for quantitation instead of Height  
N Indicates peak peak was manually integrated

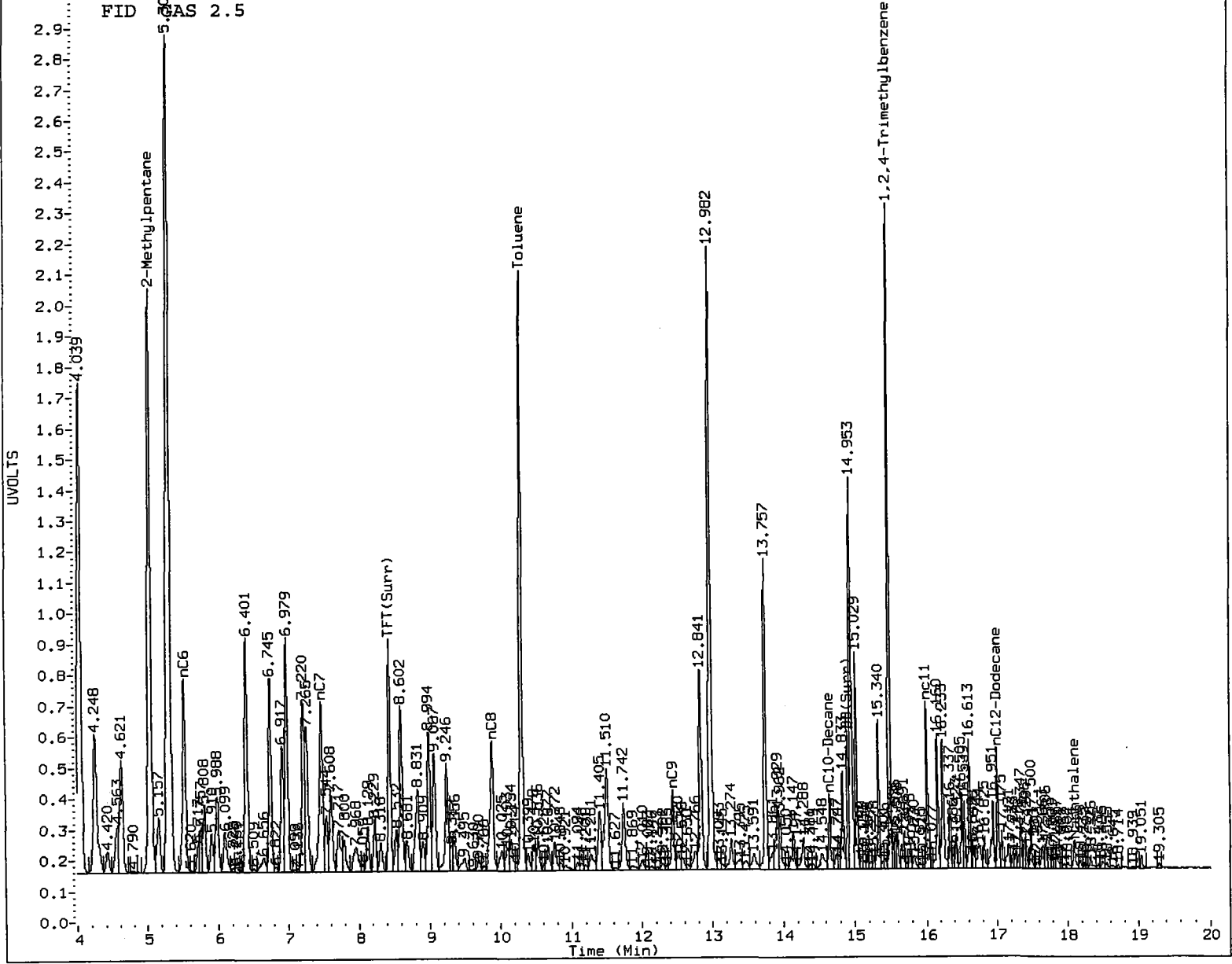
Data File: /chem3/pid3.i/20100728-2.b/0728a006.d  
Date : 28-JUL-2010 08:56  
Client ID:  
Sample Info: GAS 2.5  
Column phase: RTX 502-2 FID

Instrument: pid3.i  
Operator: MH  
Column diameter: 0.18

/chem3/pid3.i/20100728-2.b/0728a006.d/0728a006.cdf







MANUAL INTEGRATION

- Baseline correction
- 2. Poor chromatography
- 3. Peak not found
- 4. Totals calculation
- 5. Other \_\_\_\_\_

Analyst: MH

Date: 7/29/10

MH  
7/29/10

Analytical Resources Inc.  
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100728-2.b/0728a007.d  
Data file 2: /chem3/pid3.i/20100728-1.b/0728a007.d  
Method: /chem3/pid3.i/20100728-1.b/PIDB.m  
Instrument: pid3.i  
Gas Ical Date: 28-JUL-2010  
BETX Ical Date: 29-JUN-2010

ARI ID: GAS 5  
Client ID:  
Injection Date: 28-JUL-2010 09:20  
Matrix: WATER  
Dilution Factor: 1.000

=====

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.440	0.031	7878	94697	109.5	TFT (Surr)
14.912	0.024	4741	41421	110.1	BB (Surr)

PETROLEUM HYDROCARBONS (FID)

-----

Range	RF	Total Area*	Amount
WAGas Tol-C12 (10.17 to 17.11)	827807	4003725	4.837
8015B 2MP-TMB ( 4.92 to 15.58)	1664107	7856270	4.721 M
AK101 nC6-nC10 ( 5.41 to 14.53)	1131784	5316980	4.698 M
NWTPHG Tol-Nap (10.17 to 18.18)	882029	4221581	4.786

M Indicates manual integration within range

\* Surrogate areas are subtracted from Total Area  
Range marker RT's are set by daily RT standard

=====

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.438	0.031	23349	106.2	TFT (Surr)
14.910	0.023	47815	104.9	BB (Surr)

SW8021 (PID)

-----

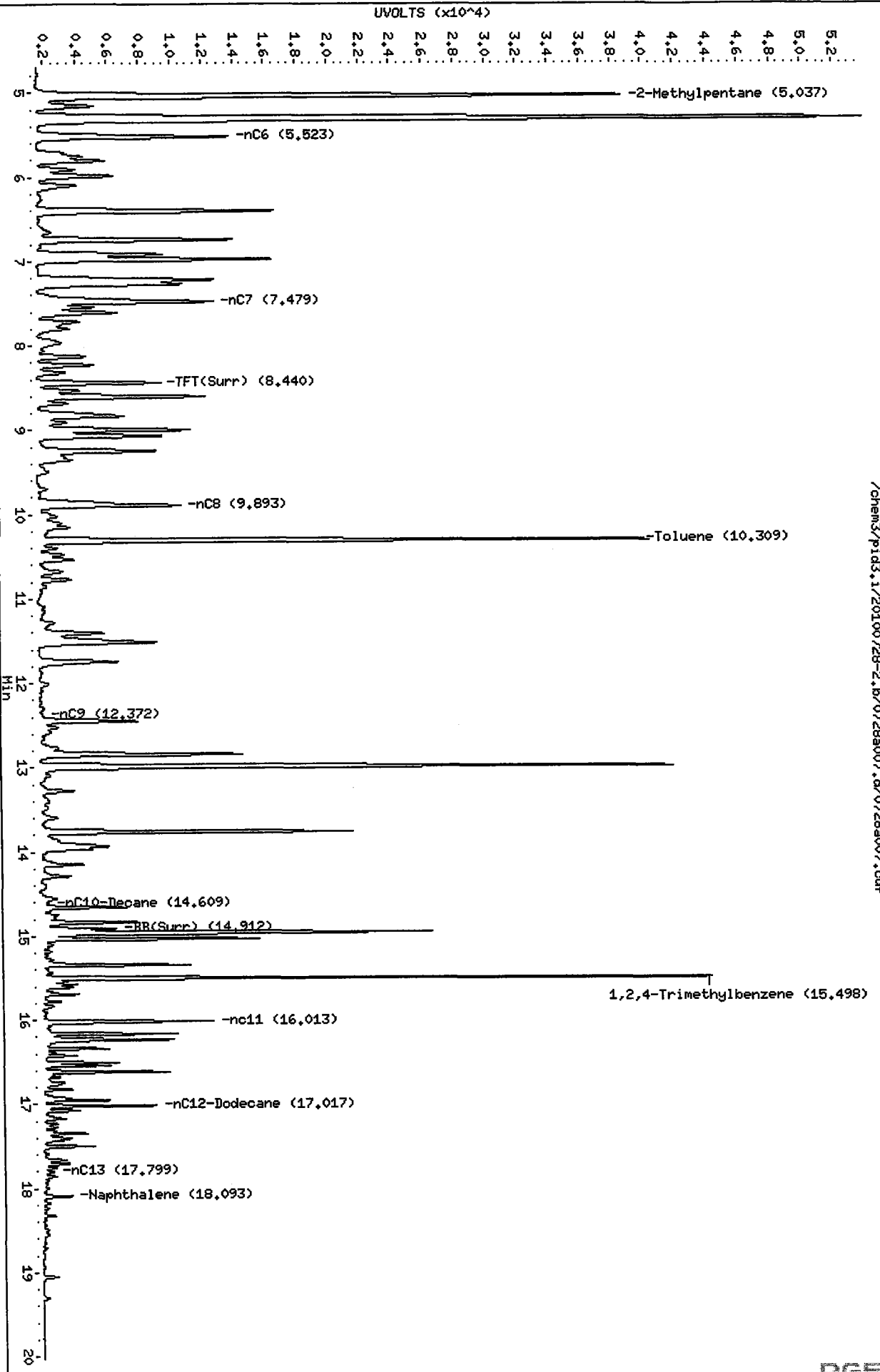
RT	Shift	Response	Amount	Compound
7.716	0.029	14610	11.05	Benzene
10.308	0.037	191522	145.11	Toluene
12.842	0.038	56084	45.13	Ethylbenzene
12.985	0.043	209817	155.81	M/P-Xylene
13.758	0.033	88195	68.64	O-Xylene
5.308	0.021	162558	456.88	MTBE

A Indicates Peak Area was used for quantitation instead of Height  
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20100728-2.b/0728a007.d  
Date : 28-JUL-2010 09:20  
Client ID:  
Sample Info: GAS 5  
Column Phase: RTX 502-2 FID

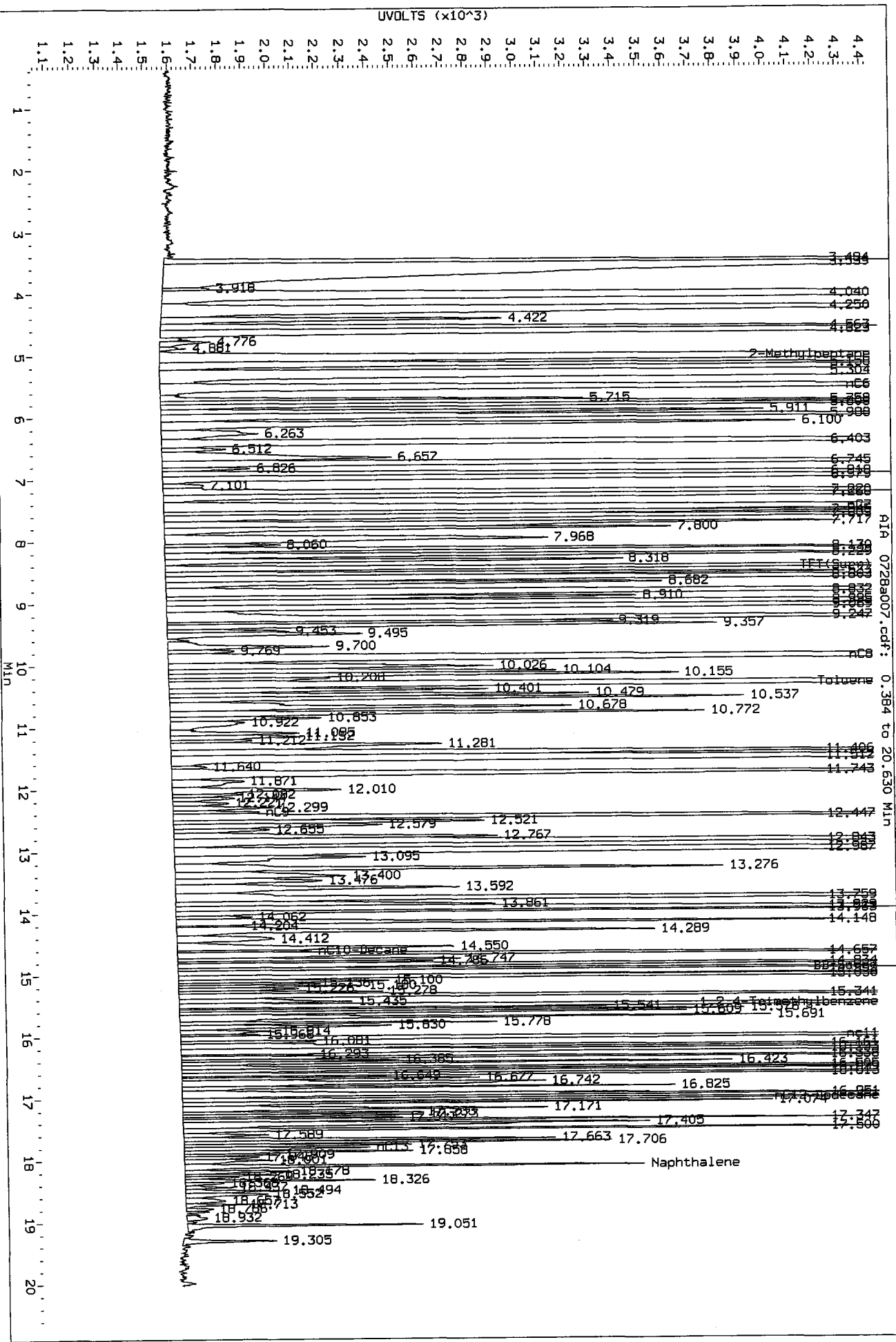
Instrument: pid3.i  
Operator: MH  
Column diameter: 0.18

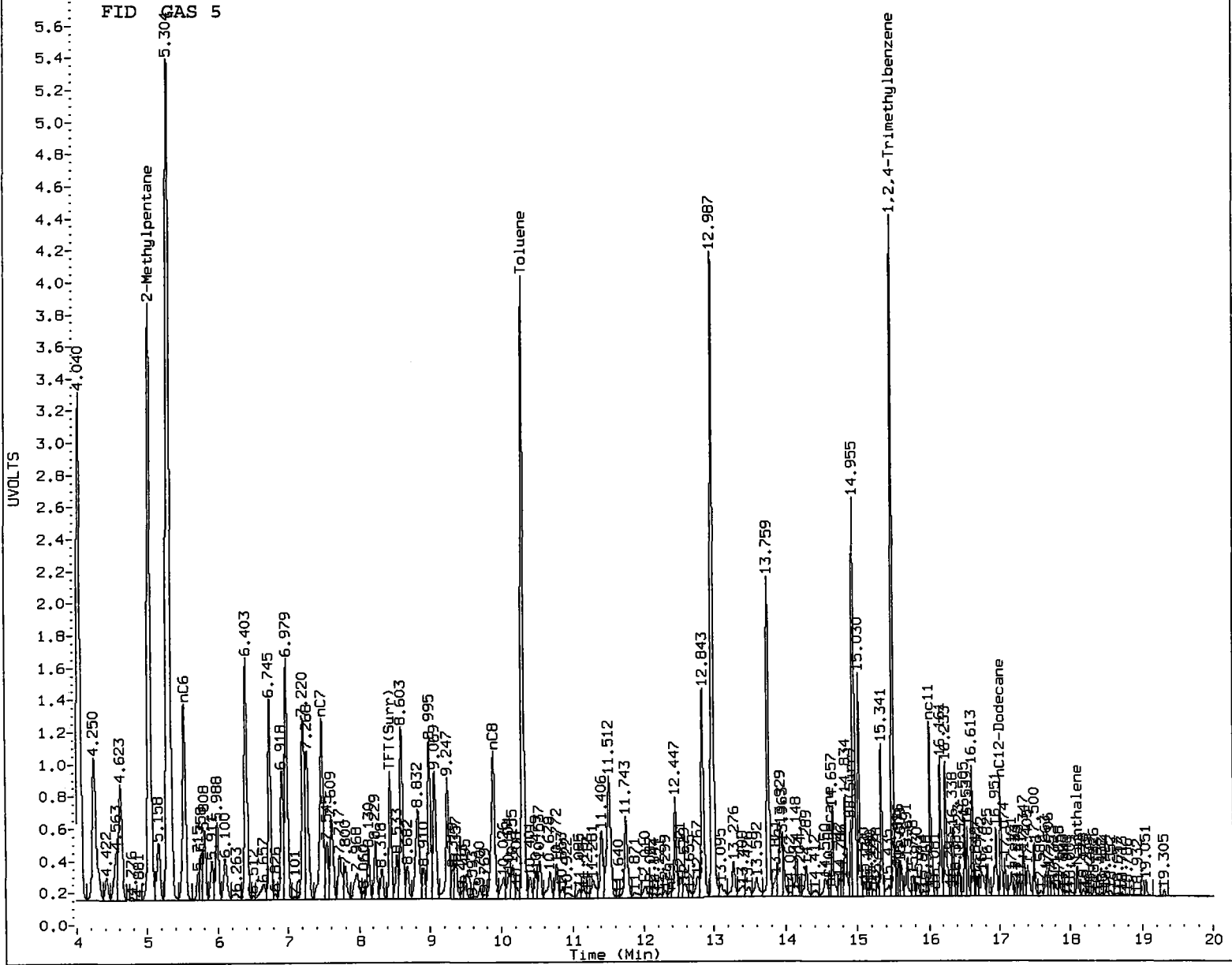
/chem3/pid3.i/20100728-2.b/0728a007.d/0728a007.cdf



HW  
7/16/10

Data File: /chem3/p1d3.1/20100728-2.l/0728a007.d/0728a007.cdf  
Injection Date: 28-JUL-2010 09:20  
Instrument: p1d3.1  
Client Sample ID:





MANUAL INTEGRATION

- 1.  Baseline correction
- 2.  Poor chromatography
- 3.  Peak not found
- 4.  Totals calculation
- 5.  Other \_\_\_\_\_

Analyst: MTT

Date: 7/29/10



7/29/10

Analytical Resources Inc.  
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100728-2.b/0728a008.d  
Data file 2: /chem3/pid3.i/20100728-1.b/0728a008.d  
Method: /chem3/pid3.i/20100728-1.b/PIDB.m  
Instrument: pid3.i  
Gas Ical Date: 28-JUL-2010  
BETX Ical Date: 29-JUN-2010

ARI ID: GAS 20  
Client ID:  
Injection Date: 28-JUL-2010 09:45  
Matrix: WATER  
Dilution Factor: 1.000

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.440	0.032	10794	142846	150.0	TFT(Surr)
14.914	0.026	6397	57315	148.5	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range	RF	Total Area*	Amount
WAGas Tol-C12 (10.17 to 17.11)	827807	16788832	20.281
8015B 2MP-TMB ( 4.92 to 15.58)	1664107	34760005	20.888
AK101 nC6-nC10 ( 5.41 to 14.53)	1131784	24502732	21.650
NWTPHG Tol-Nap (10.17 to 18.18)	882029	17514258	19.857

M Indicates manual integration within range

\* Surrogate areas are subtracted from Total Area  
Range marker RT's are set by daily RT standard

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.439	0.032	28146	128.0	TFT(Surr)
14.834	-0.052	109465	240.1	BB(Surr)

SW8021 (PID)

RT	Shift	Response	Amount	Compound
7.719	0.032	57953	43.83	Benzene
10.317	0.046	742279	562.41	Toluene
12.772	-0.032	18288	14.72	Ethylbenzene
13.001	0.059	811732	602.78	M/P-Xylene
13.765	0.041	355553	276.74	O-Xylene
5.321	0.033	530538	1491.10	MTBE

A Indicates Peak Area was used for quantitation instead of Height  
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20100728-2.b/0728a008.d

Date : 28-JUL-2010 09:45

Client ID:

Sample Info: GAS 20

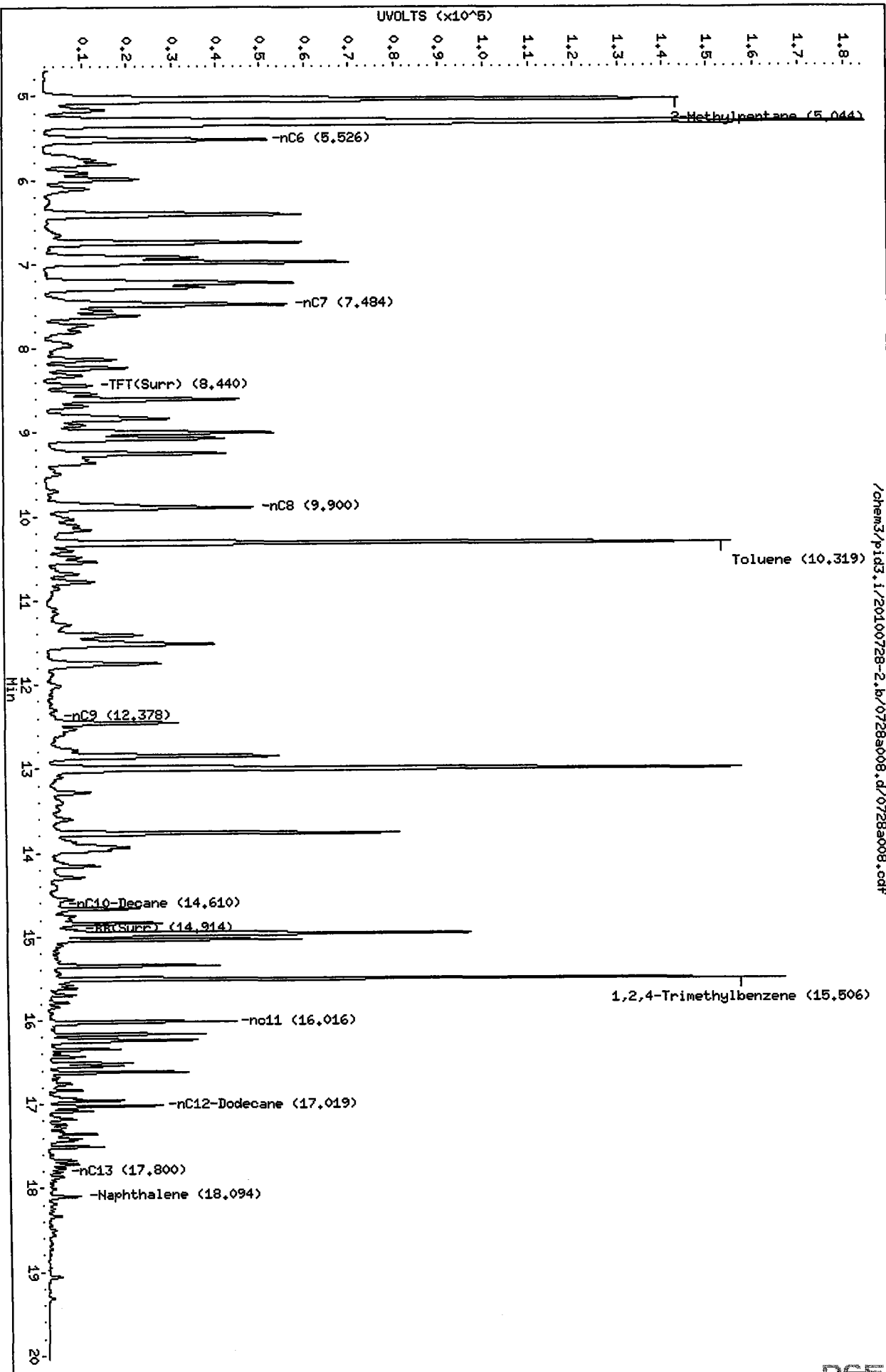
Column phase: RTX 502-2 FID

Instrument: pid3.i

Operator: HH

Column diameter: 0.18

/chem3/pid3.i/20100728-2.b/0728a008.d/0728a008.cdf



M.  
7/29/10

Analytical Resources Inc.  
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100728-2.b/0728a010.d  
Data file 2: /chem3/pid3.i/20100728-1.b/0728a010.d  
Method: /chem3/pid3.i/20100728-1.b/PIDB.m  
Instrument: pid3.i  
Gas Ical Date: 28-JUL-2010  
BETX Ical Date: 29-JUN-2010

ARI ID: GAS ICV  
Client ID:  
Injection Date: 28-JUL-2010 10:34  
Matrix: WATER  
Dilution Factor: 1.000

=====

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
--	----	-----	-----	----	-----
8.440	0.032	7179	85915	99.7	TFT (Surr)
14.911	0.023	4354	33856	101.1	BB (Surr)

PETROLEUM HYDROCARBONS (FID)

-----

Range	RF	Total Area*	Amount
-----	----	-----	-----
WAGas Tol-C12 (10.17 to 17.11)	827807	2492293	3.011 M
8015B 2MP-TMB ( 4.92 to 15.58)	1664107	3736060	2.245 M
AK101 nC6-nC10 ( 5.41 to 14.53)	1131784	2858584	2.526 M
NWTPHG Tol-Nap (10.17 to 18.18)	882029	2556570	2.899 M

M Indicates manual integration within range

\* Surrogate areas are subtracted from Total Area  
Range marker RT's are set by daily RT standard

=====

PID Surrogates

RT	Shift	Response	%Rec	Compound
--	----	-----	----	-----
8.439	0.032	21749	98.9	TFT (Surr)
14.909	0.023	46674	102.4	BB (Surr)

SW8021 (PID)

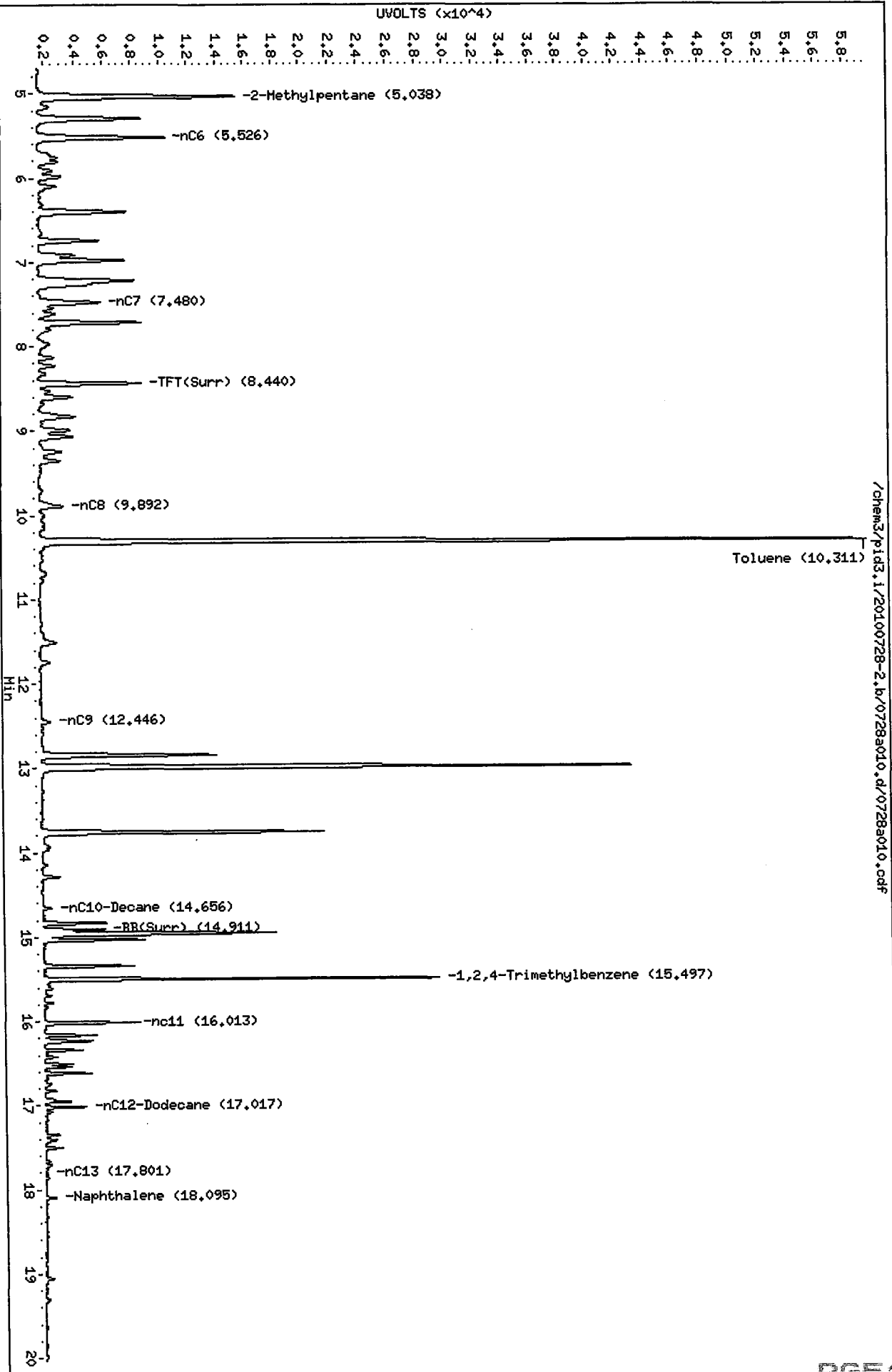
-----

RT	Shift	Response	Amount	Compound
--	----	-----	-----	-----
7.715	0.029	38928	29.44	Benzene
10.309	0.037	288200	218.36	Toluene
12.842	0.037	55963	45.04	Ethylbenzene
12.983	0.041	219824	163.24	M/P-Xylene
13.757	0.033	89384	69.57	O-Xylene
5.294	0.007	2620	7.36	MTBE

A Indicates Peak Area was used for quantitation instead of Height  
N Indicates peak peak was manually integrated

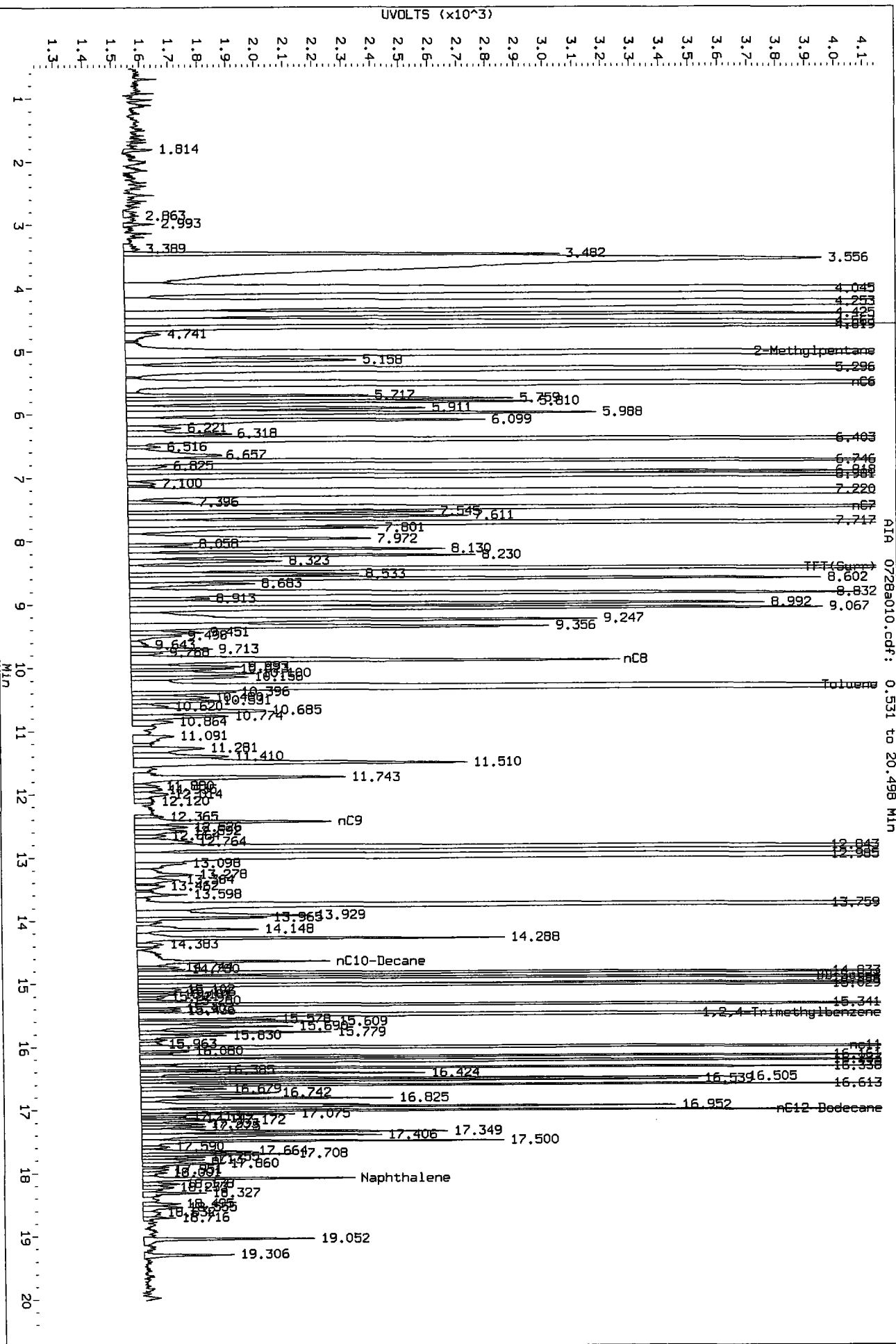
Data File: /chem3/pid3.i/20100728-2.k/0728a010.d  
Date: 28-JUL-2010 10:34  
Client ID:  
Sample Info: GAS ICV  
Column phase: RTX 502-2 FID

Instrument: pid3.i  
Operator: HH  
Column diameter: 0.18



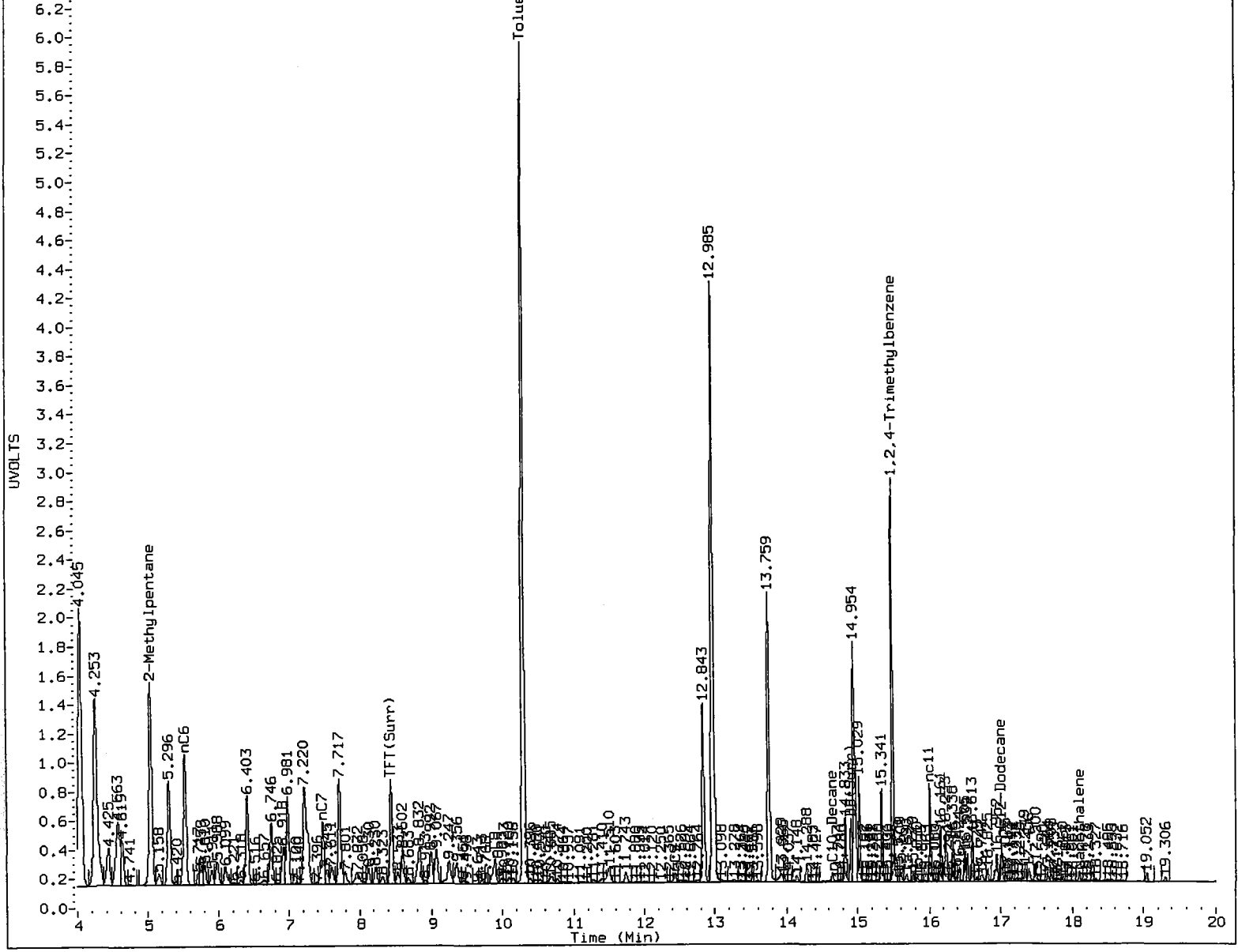
11/27/77  
MH

Data File: /chem3/pid3.1/20100728-2.b/0728a010.d/0728a010.cdf  
Injection Date: 28-JUL-2010 10:34  
Instrument: pid3.1  
Client Sample ID:



IR 0728a010.cdf: 0.531 to 20.498 MIN

FID GAS ICV



MANUAL INTEGRATION

- 1. Baseline correction
- 2. Poor chromatography
- 3. Peak not found
- 4. Totals calculation
- 5. Other \_\_\_\_\_

Analyst: MH

Date: 7/29/10

Analytical Resources, Inc.  
RETENTION TIME SUMMARY REPORT

Method File: /chem3/pid3.i/20100728-2.b/FID.m  
Batch File: /chem3/pid3.i/20100728-2.b  
Inst ID: pid3.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
FILENAME: 0728a004	0728a005	0728a006	0728a007	0728a008	0728a012					
INJ. DATE: 28-JUL-2010	28-JUL-2010	28-JUL-2010	28-JUL-2010	28-JUL-2010	28-JUL-2010	28-JUL-2010				
INJ. TIME: 08:07	08:31	08:56	09:20	09:45	09:45	11:42				
Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
1 2-Methylpentane	5.033	5.033	5.036	5.037	5.044	5.028	5.022	4.952-5.092	5.035	0.005
18 WAGAS	+++++	+++++	+++++	+++++	+++++	+++++	1.097	1.027-1.167	+++++	+++++
19 8015B	+++++	+++++	+++++	+++++	+++++	+++++	0.833	0.763-0.903	+++++	+++++
20 AK101	+++++	+++++	+++++	+++++	+++++	+++++	0.989	0.919-1.059	+++++	+++++
21 NWGAS	+++++	+++++	+++++	+++++	+++++	+++++	1.000	0.930-1.070	+++++	+++++
2 nC6	5.522	5.521	5.523	5.523	5.526	5.520	5.507	5.437-5.577	5.523	0.002
3 nC7	7.476	7.477	7.479	7.479	7.484	7.469	7.454	7.384-7.524	7.477	0.005
4 TPT (Surr)	8.435	8.437	8.439	8.440	8.440	8.425	8.408	8.338-8.478	8.436	0.006
5 nC8	9.887	9.889	9.891	9.893	9.900	9.874	9.858	9.788-9.928	9.889	0.009
6 Toluene	10.301	10.304	10.307	10.309	10.319	10.292	10.273	10.203-10.343	10.306	0.009
7 nC9	12.438	12.442	12.444	12.447	12.456	12.430	12.409	12.339-12.479	12.443	0.009
8 nC10-Decane	14.651	14.610	14.656	14.609	14.663	14.644	14.632	14.562-14.702	14.639	0.024
9 BB (Surr)	14.907	14.910	14.911	14.912	14.914	14.901	14.888	14.818-14.958	14.909	0.005
10 1,2,4-Trimethylbenzene	15.493	15.495	15.497	15.498	15.506	15.488	15.477	15.407-15.547	15.496	0.006
11 nC11	16.011	16.012	16.013	16.013	16.016	16.007	16.020	15.950-16.090	16.012	0.003
12 nC12-Dodecane	17.017	17.017	17.017	17.017	17.019	17.014	17.008	16.938-17.078	17.017	0.002
13 nC13	17.823	17.824	17.823	17.799	17.860	17.823	17.814	17.744-17.884	17.825	0.019

Reviewer 1 MH Date: 7/29/10  
 Reviewer 2 [Signature] Date: 7/29/10

Report Date : 29-Jul-2010 06:41

Analytical Resources, Inc.  
RETENTION TIME SUMMARY REPORT

Method File: /chem3/pid3.i/20100728-2.b/FID.m  
Batch File: /chem3/pid3.i/20100728-2.b  
Inst ID: pid3.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
14 Naphthalene	18.093	18.094	18.093	18.093	18.094	18.089	18.082	18.012-18.152	18.093	0.002





### VOA Analyst Notes / Corrective Action Log

ARI Project ID: BETX Curve Client ID: \_\_\_\_\_

ARI SOP: ~~404S~~(Gas) ~~410S(BTEX)~~ ~~430S~~(VPH) ~~700S~~(8260C) ~~703S~~(SIM) ~~706S~~(524.2) ~~710S~~(RSK-175)

Parameter(s): BETX

Instrument: NT-3 NT-5 NT-7 NT-9 NT-10 PID-1 PID-2 PID-3 FID-6 FINN-5

Purge Volume (mL) 5 Curve Date: 6/29/10 Analysis Start Date: 6/29/10

pH ≤ 2.0	YES / NO <u>NA</u>	Method Blank In Control?	<u>YES</u> / NO
BFB Tune Meets Criteria?	YES / NO <u>NA</u>	LCS / LCSD Recovery In Control?	<u>YES</u> / NO
Internal Standard Meets Criteria?	YES / NO <u>NA</u>	Surrogate Recovery In Control?	<u>YES</u> / NO
ICal acceptable?	<u>YES</u> / NO	CCal acceptable?	<u>YES</u> / NO
Q flag applied?	YES / NO <u>NA</u>	Q flag applied?	YES / NO <u>NA</u>
Manual Integrations for ICal?	YES / NO	Manual Integrations for Samples?	Yes / NO
Special Analysis Criteria Met?	YES / NO / NA		

Bubbles/Headspace: None SM (≤ 2mm ●) PB (2-4mm) LG (> 4mm ●) Head Space

**Detail problems, corrective actions and/or other pertinent information below (use reverse side when necessary):**

*BETX ICW Targeted 25*

**Additional Details on Reverse: Yes / No**

Analyst: *[Signature]* Date: 7/10/10

Reviewer: *[Signature]* Date: 7-10-10

# Analytical Resources Inc.: Organics Instrument Log

PID-3 HP 5890 Series II - Serial No.: 2728A-13336

Date: 6/29/10 <sup>MH 7/1/10</sup> Analysis: NWTPHG/BETX Analyst: MH

GC Program: BETX Column No: 837213 Column Type: RTX502-Z

Instrument Tune (.U or .CT.): \_\_\_\_\_ EM Voltage: \_\_\_\_\_

Calibration File: \_\_\_\_\_ Curve Date: 2/2/10 6:5  
6/29/10 BETX

IS/SS	Ical/Ccal	LCS/ICV
<u>JW632-2</u>	<u>VW607-1</u>	<u>VW629-4</u>
	<u>VW630-4</u>	
	<u>VW629-4</u>	

Time	Filename	LabID	ClientID	Vial#	pH	DF			
1	0548	0629a001.d				1			
2	0613	0629a002.d				1			
3	0637	0629a003.d				1			
4	0735	0629a004.d				1			
5	0759	0629a005.d				1			
6	0824	0629a006.d				1			
7	0848	0629a007.d				1			
8	0912	0629a008.d				1			
9	0937	0629a009.d				1			
10	1001	0629a010.d				1			
11	1026	0629a011.d				1			
12	1050	0629a012.d				1			
13	1145	0629a013.d				1			
14	1210	0629a014.d				1			
15	1234	0629a015.d				1			
16	1259	0629a016.d				1			
17	1344	0629a017.d				1			
18	1408	0629a018.d				1			
19	1433	0629a019.d				1			
20	1458	0629a020.d				1			
21	1522	0629a021.d				1			
22	1547	0629a022.d				1			
			Trip Blank			2	1		
			Sample 1			2	1		
						8	1		
						4	1		
						4	1		
						3	1		

23 1611 0629a023.d RB54H 02-1 4 1 1  
 24 1636 0629a024.d RINSE 1  
 25 1700 0629a025.d BCAL 3 1  
 26 1725 0629a026.d GCAL 2 1

MH  
7/1/10

## Maintenance / Comments

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Maintenance Verification** (Identify ICal or CCal that demonstrates the instrument is in control):  
 Every line must contain information or be lined out. Make all entries legible. Start a new page for each QC period

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 29-JUN-2010 07:59  
 End Cal Date : 29-JUN-2010 10:26  
 Quant Method : ESTD  
 Origin : Disabled  
 Target Version : 3.50  
 Integrator : HP Genie  
 Method file : /chem3/pid3.i/20100629-1.b/PIDB.m  
 Cal Date : 29-Jun-2010 11:12 monicah  
 Curve Type : Average

Calibration File Names:

Level 1: /chem3/pid3.i/20100629-1.b/0629a005.d/0629a005.cdf  
 Level 2: /chem3/pid3.i/20100629-1.b/0629a006.d/0629a006.cdf  
 Level 3: /chem3/pid3.i/20100629-1.b/0629a007.d  
 Level 4: /chem3/pid3.i/20100629-1.b/0629a008.d  
 Level 5: /chem3/pid3.i/20100629-1.b/0629a009.d  
 Level 6: /chem3/pid3.i/20100629-1.b/0629a010.d  
 Level 7: /chem3/pid3.i/20100629-1.b/0629a011.d

Compound	0.25000	0.50000	5.000	25.000	50.000	100.000	RRF	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		
	200.000							
	Level 7							
1 MTBE	464 343	288	367	346	348	334	356	15.046
2 Benzene	1564 1254	1462	1257	1240	1256	1221	1322	10.156
4 Toluene	1608 1294	1252	1288	1275	1275	1247	1320	9.717
15 Chlorobenzene	++++ ++++	++++	++++	++++	++++	++++	++++	++++ <-
5 Ethylbenzene	1404 1183	1420	1164	1185	1190	1152	1243	9.380
6 M/P-Xylene	1614 1268	1381	1314	1300	1302	1247	1347	9.293

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 29-JUN-2010 07:59  
 End Cal Date : 29-JUN-2010 10:26  
 Quant Method : ESTD  
 Origin : Disabled  
 Target Version : 3.50  
 Integrator : HP Genie  
 Method file : /chem3/pid3.i/20100629-1.b/PIDB.m  
 Cal Date : 29-Jun-2010 11:12 monicah  
 Curve Type : Average

Compound	0.25000 Level 1	0.50000 Level 2	5.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	200.000 Level 7	RRF	% RSD
7 O-Xylene	1352 1307	1232	1295	1269	1282	1256		1285	3.016
13 1,3,5 Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++ <-
14 1,2,4 Trimethyl benzene	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++ <-
16 1,3 Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++ <-
17 1,4 Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++ <-
18 1,2 Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++ <-
\$ 3 TFT(Surr)	243 219	220	213	214	217	212		220	4.943
\$ 8 BB(Surr)	496 463	451	434	440	456	450		456	4.411

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 29-JUN-2010 07:59  
 End Cal Date : 29-JUN-2010 10:26  
 Quant Method : ESTD  
 Origin : Disabled  
 Target Version : 3.50  
 Integrator : HP Genie  
 Method file : /chem3/pid3.i/20100629-2.b/FID.m  
 Cal Date : 29-Jun-2010 11:13 monicah  
 Curve Type : Average

Compound	0.000e+00	0.000e+00	0.000e+00	0.000e+00	0.000e+00	0.000e+00	RRF	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		
	0.000e+00							
	Level 7							
14 Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	+++++							
\$ 4 TFT(Surr)	78.13636	73.54545	71.97015	70.36000	70.48120	69.03933		
	70.30000						71.97607	4.271
\$ 9 BB(Surr)	48.72727	43.22727	42.49254	41.18000	42.06767	41.53933		
	42.23000						43.06630	5.994

7/10/10

Analytical Resources Inc.  
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100629-2.b/0629a005.d      ARI ID: BETX .25  
Data file 2: /chem3/pid3.i/20100629-1.b/0629a005.d      Client ID:  
Method: /chem3/pid3.i/20100629-1.b/PIDB.m              Injection Date: 29-JUN-2010 07:59  
Instrument: pid3.i    Matrix: WATER  
Gas Ical Date: 02-FEB-2010                                  Dilution Factor: 1.000  
BETX Ical Date: 29-JUN-2010

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.418	-0.021	1719	20323	23.9	TFT (Surr)
14.897	-0.015	1072	10075	24.9	BB (Surr)

PETROLEUM HYDROCARBONS (FID)

Range	Total Area*	Amount
WAGas Tol-C12 (10.21 to 17.13)	23668	0.034
8015B 2MP-TMB ( 4.93 to 15.54)	22061	0.016
AK101 nC6-nC10 ( 5.50 to 14.63)	15306	0.014
NWTPHG Tol-Nap (10.21 to 18.23)	24708	0.033

\* Surrogate areas are subtracted from Total Area  
Range marker RT's are set by daily RT standard

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.417	-0.021	5356	24.4	TFT (Surr)
14.893	-0.016	10910	23.9	BB (Surr)

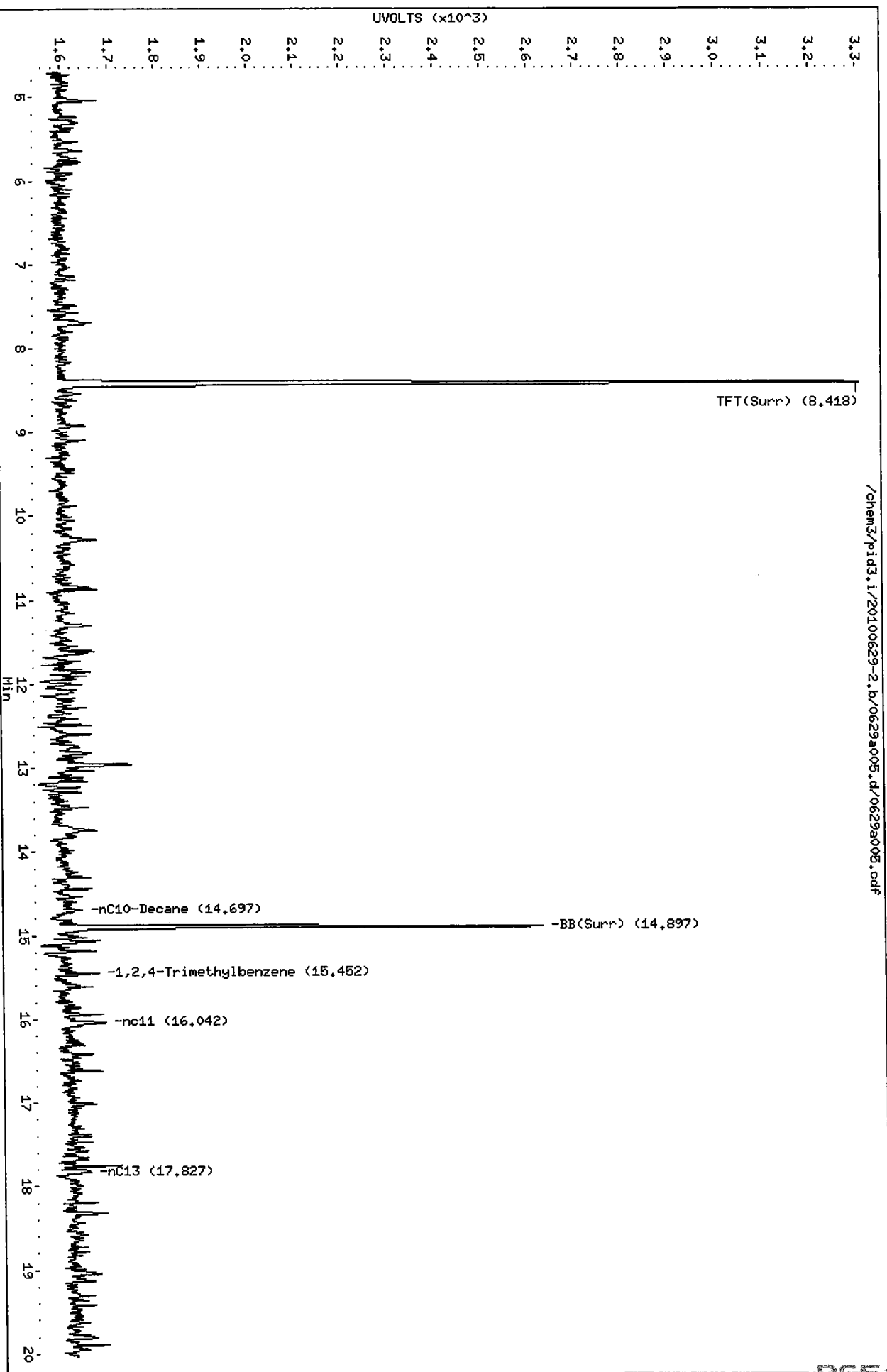
SW8021 (PID)

RT	Shift	Response	Amount	Compound
7.694	-0.019	391	0.30	Benzene
10.287	-0.021	402	0.30N	Toluene
12.817	-0.030	351	0.28N	Ethylbenzene
12.955	-0.034	807	0.60	M/P-Xylene
13.737	-0.025	338	0.26N	O-Xylene
5.283	-0.017	116	0.33N	MTBE

A Indicates Peak Area was used for quantitation instead of Height  
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20100629-2.b/0629a005.d  
Date : 29-JUN-2010 07:59  
Client ID:  
Sample Info: BETX .25  
Column phase: RTX 502-2 FID

Instrument: pid3.i  
Operator: MH  
Column diameter: 0.18



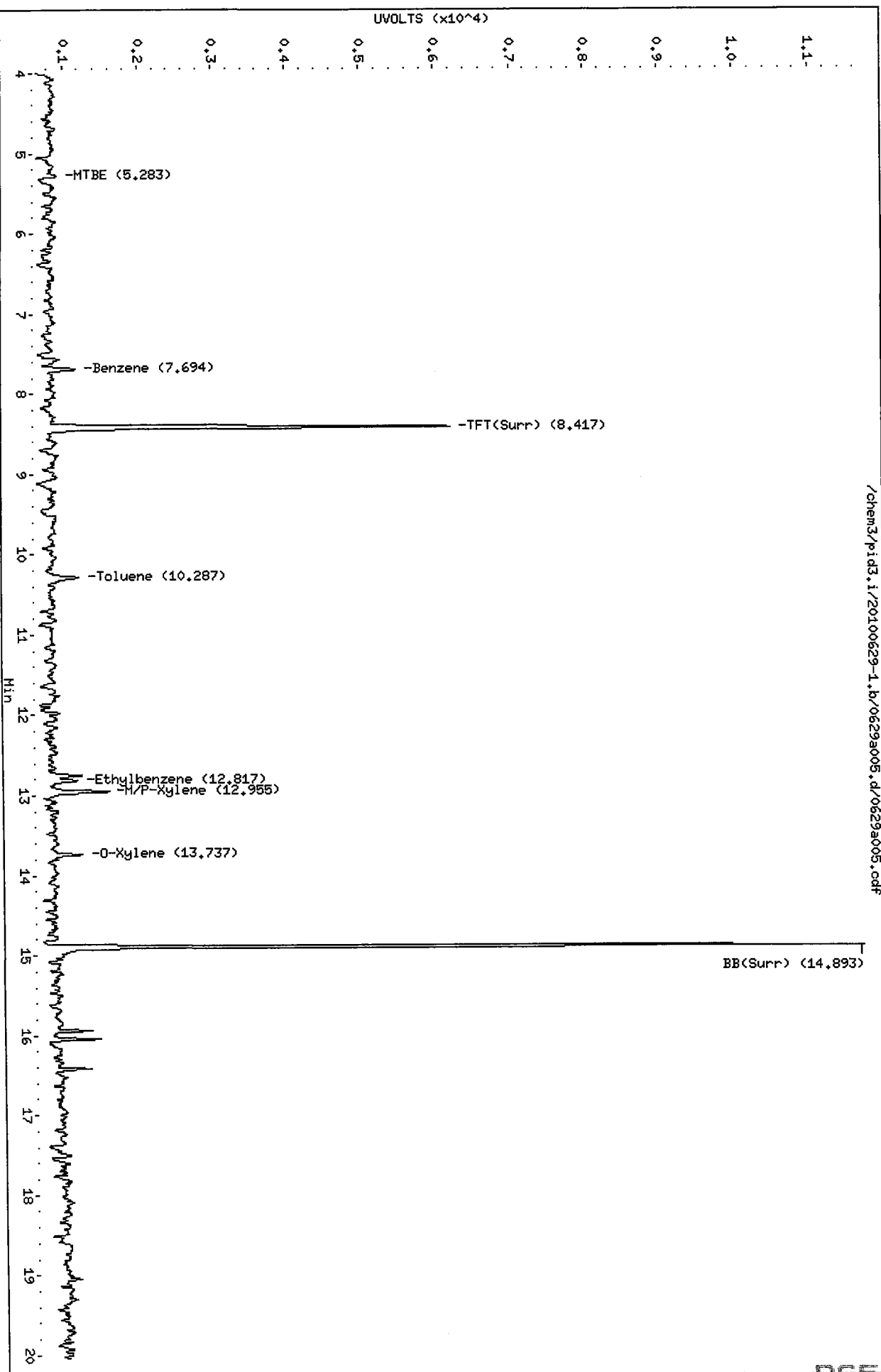
/chem3/pid3.i/20100629-2.b/0629a005.d/0629a005.cdf

0007001

Data File: /chem3/pid3.i/20100629-1.b/0629a005.d  
Date : 29-JUN-2010 07:59  
Client ID:  
Sample Info: BETX .25  
Column phase: RTX 502-2 PID

Instrument: pid3.i  
Operator: MH  
Column diameter: 0.18

/chem3/pid3.i/20100629-1.b/0629a005.d/0629a005.cdf

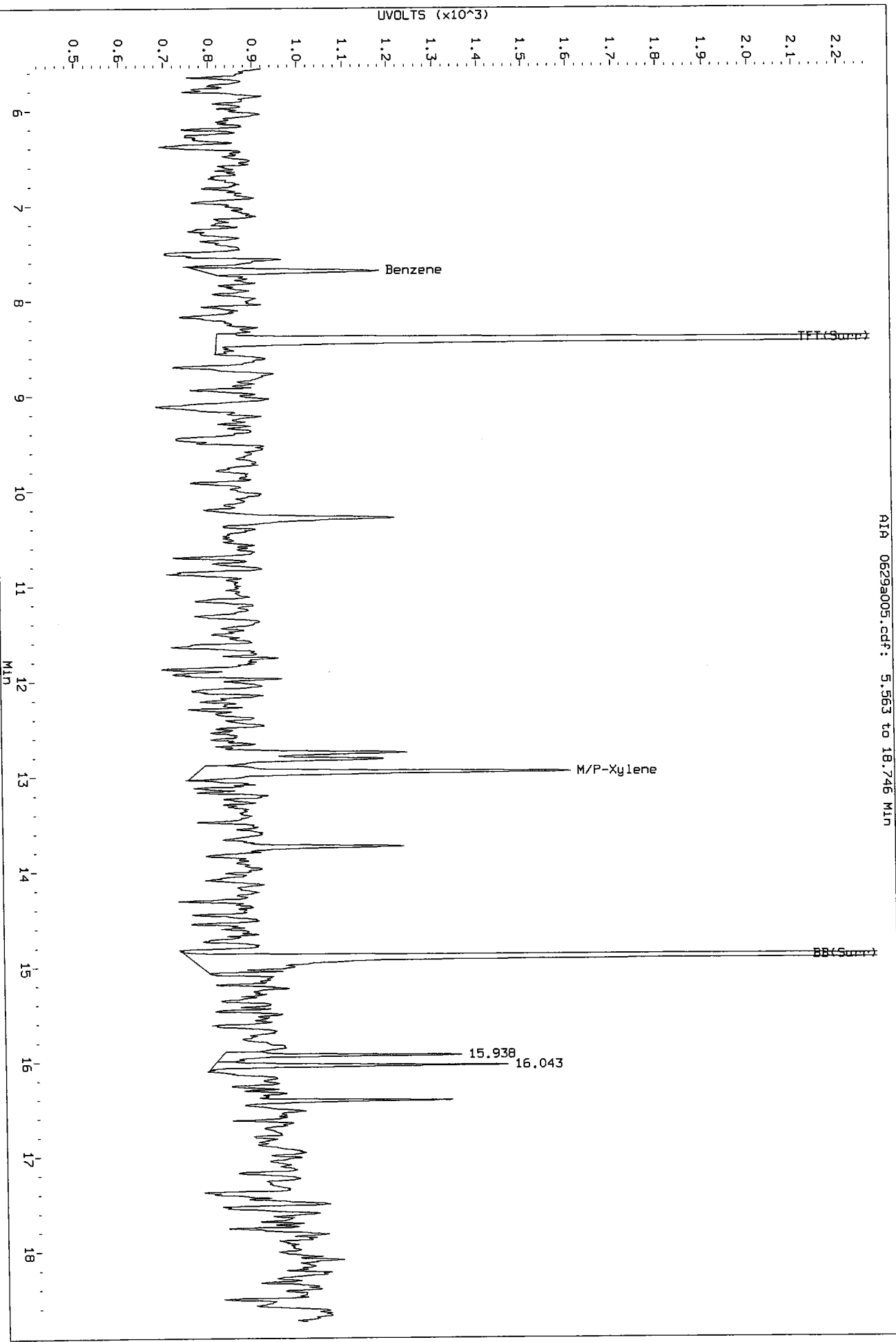




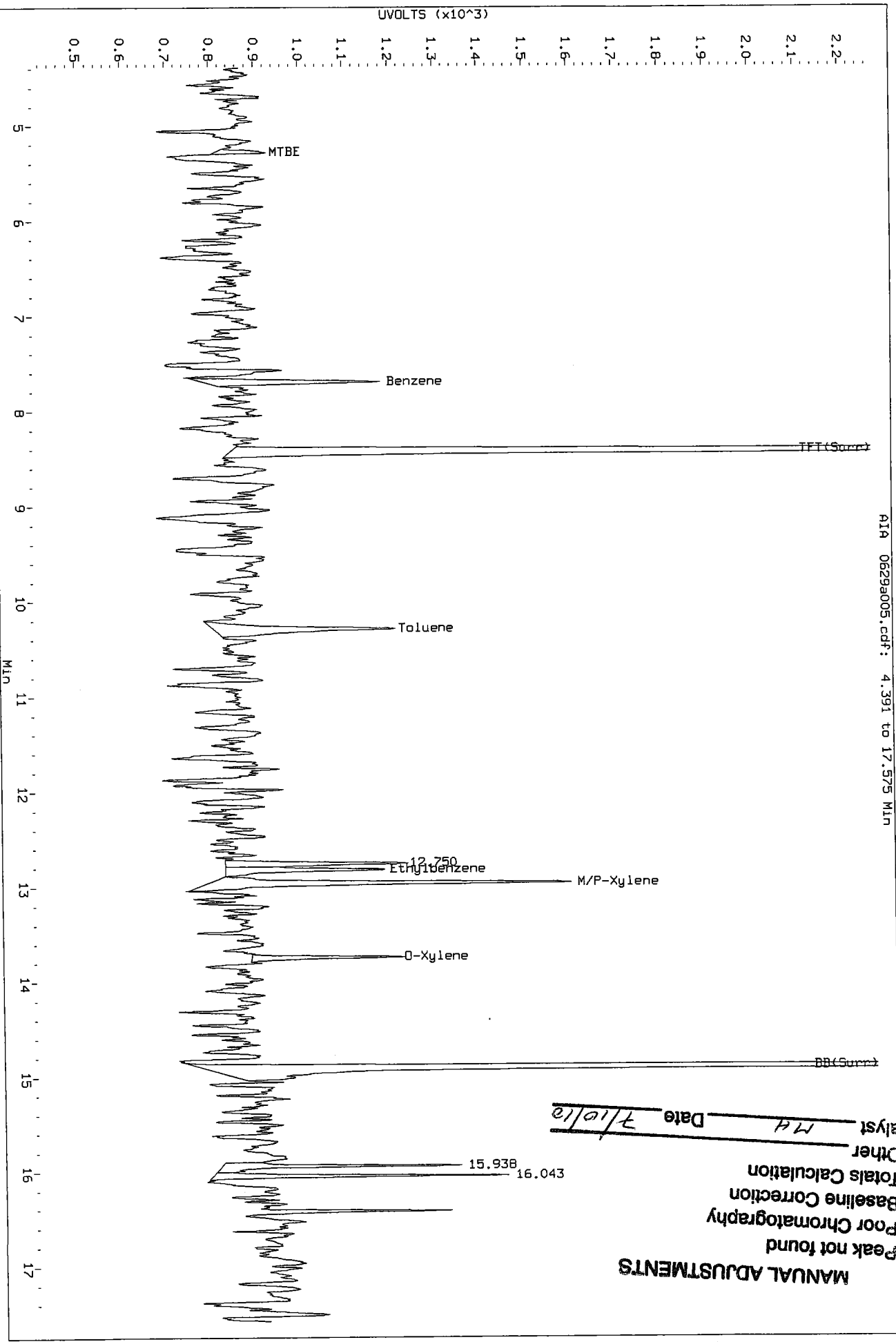
MM  
7/10/09

Data File: /chem3/pid3.1/20100629-1.b/0629a005.d/0629a005.cdf  
Injection Date: 29-JUN-2010 07:59  
Instrument: pid3.1  
Client Sample ID:

AIA 0629a005.cdf: 5.563 to 18.746 Min



Data File: /chem3/pid3.1/20100629-1.b/0629a005.d/0629a005.cdf  
 Injection Date: 29-JUN-2010 07:59  
 Instrument: pid3.1  
 Client Sample ID:



AIA 0629a005.cdf: 4.391 to 17.575 Min

**MANUAL ADJUSTMENTS**

Peak not found  
 Poor Chromatography  
 Baseline Correction  
 Totals Calculation  
 Other  
 Analyst: ML Date: 7/10/10

Mr. Hilda

Analytical Resources Inc.  
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100629-2.b/0629a006.d      ARI ID: BETX .5  
Data file 2: /chem3/pid3.i/20100629-1.b/0629a006.d      Client ID:  
Method: /chem3/pid3.i/20100629-1.b/PIDB.m              Injection Date: 29-JUN-2010 08:24  
Instrument: pid3.i    Matrix: WATER  
Gas Ical Date: 02-FEB-2010                                  Dilution Factor: 1.000  
BETX Ical Date: 29-JUN-2010

=====

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.430	-0.008	3236	38151	45.0	TFT(Surr)
14.906	-0.006	1902	15702	44.2	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range	Total Area*	Amount
WAGas Tol-C12 (10.21 to 17.13)	29425	0.042
8015B 2MP-TMB ( 4.93 to 15.54)	33980	0.025
AK101 nC6-nC10 ( 5.50 to 14.63)	33979	0.031
NWTPHG Tol-Nap (10.21 to 18.23)	34396	0.046

\* Surrogate areas are subtracted from Total Area  
Range marker RT's are set by daily RT standard

=====

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.429	-0.008	9683	44.0	TFT(Surr)
14.904	-0.006	19865	43.6	BB(Surr)

SW8021 (PID)

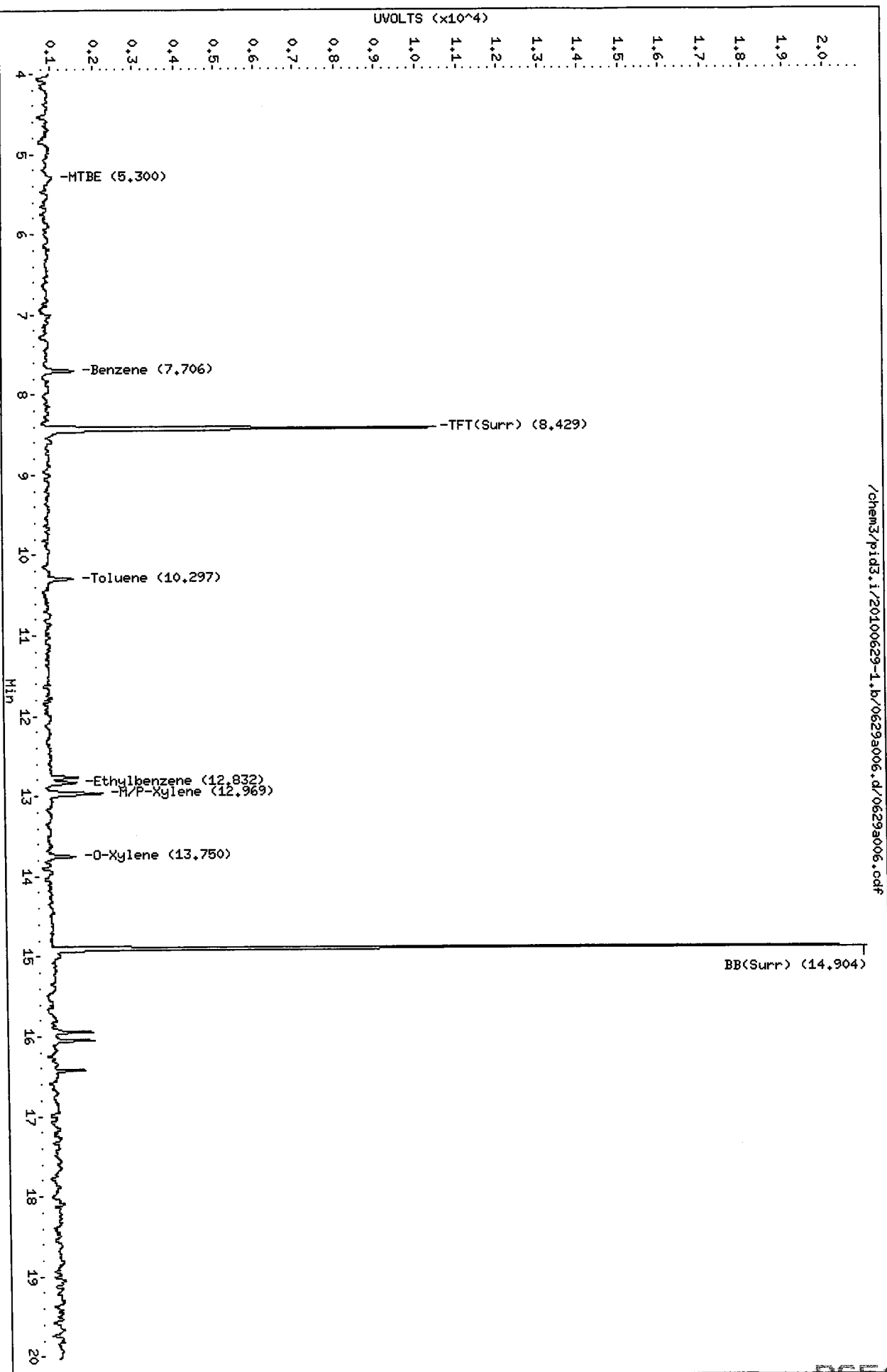
RT	Shift	Response	Amount	Compound
7.706	-0.007	731	0.55	Benzene
10.297	-0.011	626	0.47N	Toluene
12.832	-0.015	710	0.57	Ethylbenzene
12.969	-0.020	1381	1.03	M/P-Xylene
13.750	-0.012	616	0.48N	O-Xylene
5.300	-0.001	144	0.40N	MTBE

A Indicates Peak Area was used for quantitation instead of Height  
N Indicates peak peak was manually integrated



Data File: /chem3/pid3.i/20100629-1.b/0629a006.d  
Date : 29-JUN-2010 08:24  
Client ID:  
Sample Info: BETX .5  
Column phase: RTX 502-2 PID

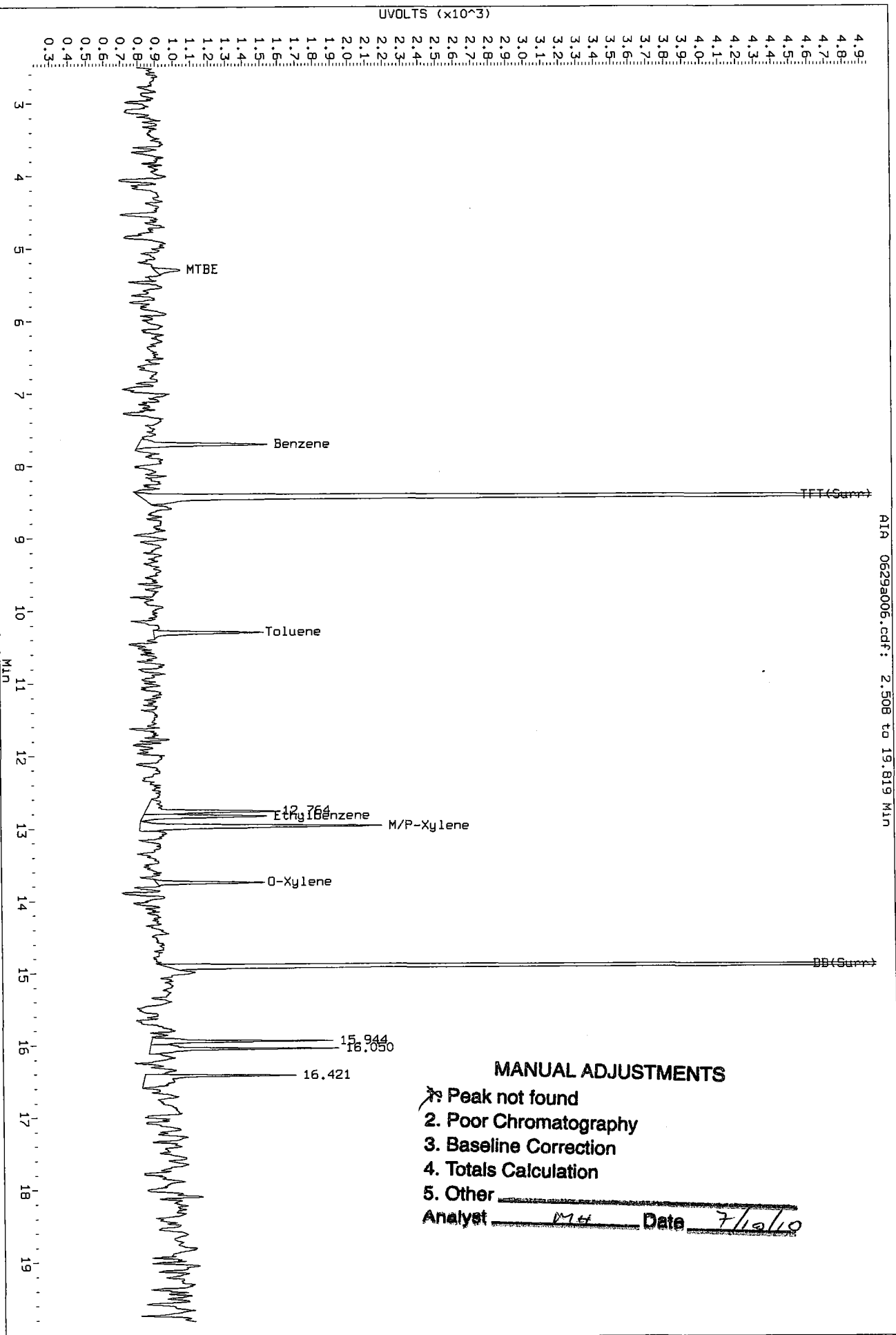
Instrument: pid3.i  
Operator: HH  
Column diameter: 0.18



/chem3/pid3.i/20100629-1.b/0629a006.d/0629a006.cdf

000700 : 0001

Data File: /chem3/pid3\_1/20100629-1.b/0629a006.d/0629a006.cdf  
 Injection Date: 29-JUN-2010 08:24  
 Instrument: pid3.1  
 Client Sample ID:



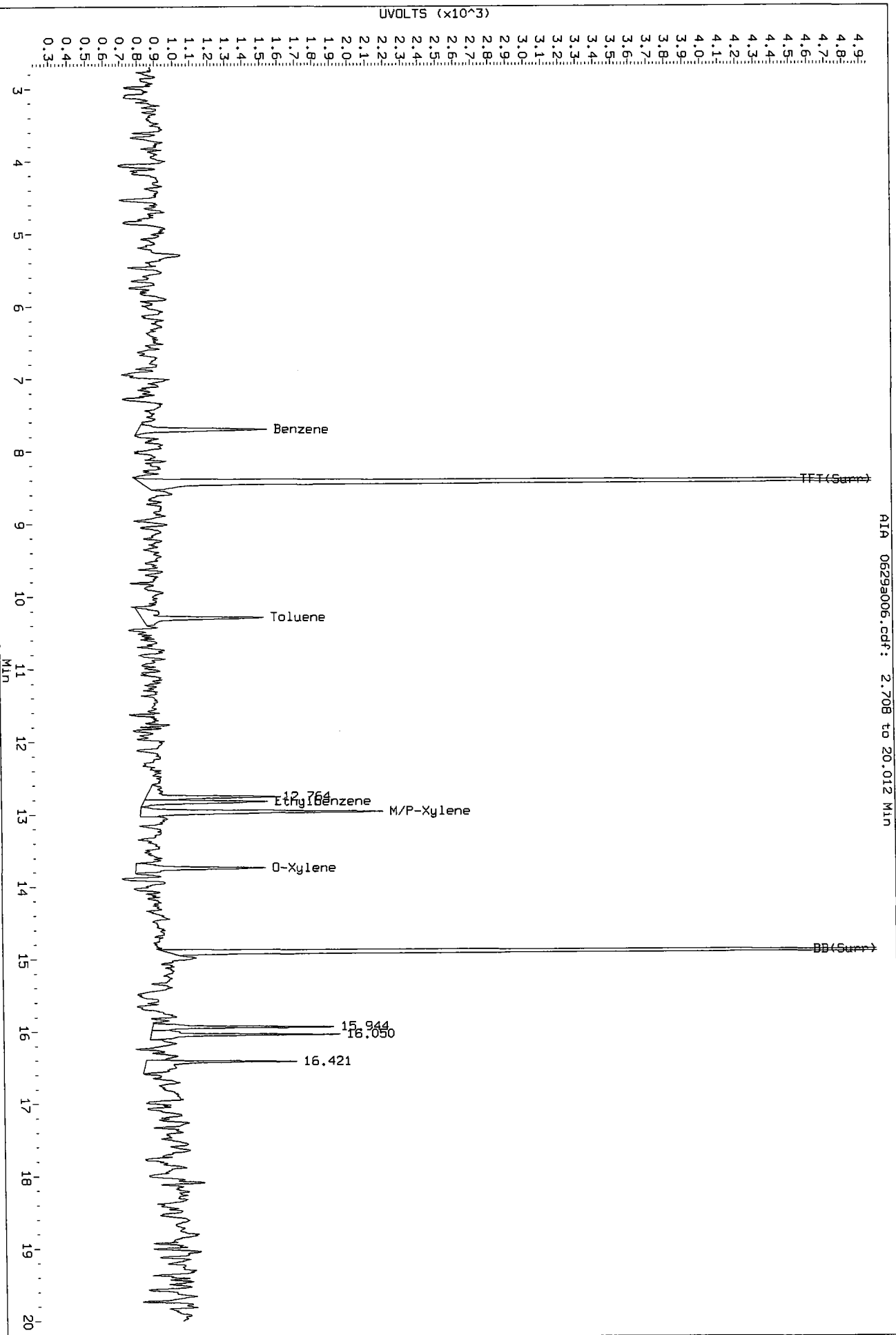
**MANUAL ADJUSTMENTS**

- 1. Peak not found
- 2. Poor Chromatography
- 3. Baseline Correction
- 4. Totals Calculation
- 5. Other

Analyst: MLH Date: 7/10/10

ML  
K/10/10

Data File: /chem3/pid3.1/20100629-1.b/0629a006.d/0629a006.cdf  
Injection Date: 29-JUN-2010 08:24  
Instrument: pid3.1  
Client Sample ID:



AIA 0629a006.cdf: 2.708 to 20.012 Min

MH  
7/10/10

Analytical Resources Inc.  
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100629-2.b/0629a007.d      ARI ID: BETX 5  
Data file 2: /chem3/pid3.i/20100629-1.b/0629a007.d      Client ID:  
Method: /chem3/pid3.i/20100629-1.b/PIDB.m              Injection Date: 29-JUN-2010 08:48  
Instrument: pid3.i    Matrix: WATER  
Gas Ical Date: 02-FEB-2010                                  Dilution Factor: 1.000  
BETX Ical Date: 29-JUN-2010

=====

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.435	-0.003	4822	56817	67.0	TFT(Surr)
14.908	-0.003	2847	24157	66.1	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

-----

Range	Total Area*	Amount
WAGas Tol-C12 (10.21 to 17.13)	137046	0.197
8015B 2MP-TMB ( 4.93 to 15.54)	118984	0.088
AK101 nC6-nC10 ( 5.50 to 14.63)	107982	0.100
NWTPHG Tol-Nap (10.21 to 18.23)	152307	0.206

\* Surrogate areas are subtracted from Total Area  
Range marker RT's are set by daily RT standard

=====

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.434	-0.003	14296	65.0	TFT(Surr)
14.907	-0.003	29105	63.8	BB(Surr)

SW8021 (PID)

-----

RT	Shift	Response	Amount	Compound
7.709	-0.004	6287	4.76	Benzene
10.302	-0.006	6442	4.88	Toluene
12.837	-0.010	5819	4.68	Ethylbenzene
12.974	-0.015	13142	9.76	M/P-Xylene
13.753	-0.009	6477	5.04	O-Xylene
5.297	-0.003	1833	5.15	MTBE

A Indicates Peak Area was used for quantitation instead of Height  
N Indicates peak peak was manually integrated







Mt  
7/10/10

Analytical Resources Inc.  
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100629-2.b/0629a008.d      ARI ID: BETX 25  
Data file 2: /chem3/pid3.i/20100629-1.b/0629a008.d      Client ID:  
Method: /chem3/pid3.i/20100629-1.b/PIDB.m              Injection Date: 29-JUN-2010 09:12  
Instrument: pid3.i    Matrix: WATER  
Gas Ical Date: 02-FEB-2010                                  Dilution Factor: 1.000  
BETX Ical Date: 29-JUN-2010

=====

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.439	0.000	7036	82252	97.8	TFT(Surr)
14.911	-0.001	4118	35649	95.6	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

-----

Range	Total Area*	Amount
WAGas Tol-C12 (10.21 to 17.13)	554289	0.797
8015B 2MP-TMB ( 4.93 to 15.54)	539482	0.398
AK101 nC6-nC10 ( 5.50 to 14.63)	505710	0.468
NWTPHG Tol-Nap (10.21 to 18.23)	562868	0.760

\* Surrogate areas are subtracted from Total Area  
Range marker RT's are set by daily RT standard

=====

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.436	-0.001	21401	97.4	TFT(Surr)
14.908	-0.002	44020	96.6	BB(Surr)

SW8021 (PID)

-----

RT	Shift	Response	Amount	Compound
7.712	-0.001	31003	23.45	Benzene
10.304	-0.004	31867	24.14	Toluene
12.840	-0.007	29632	23.85	Ethylbenzene
12.977	-0.012	65022	48.28	M/P-Xylene
13.755	-0.007	31715	24.68	O-Xylene
5.300	-0.001	8658	24.33	MTBE

A Indicates Peak Area was used for quantitation instead of Height  
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20100629-2.b/0629a008.d

Date : 29-JUN-2010 09:12

Client ID:

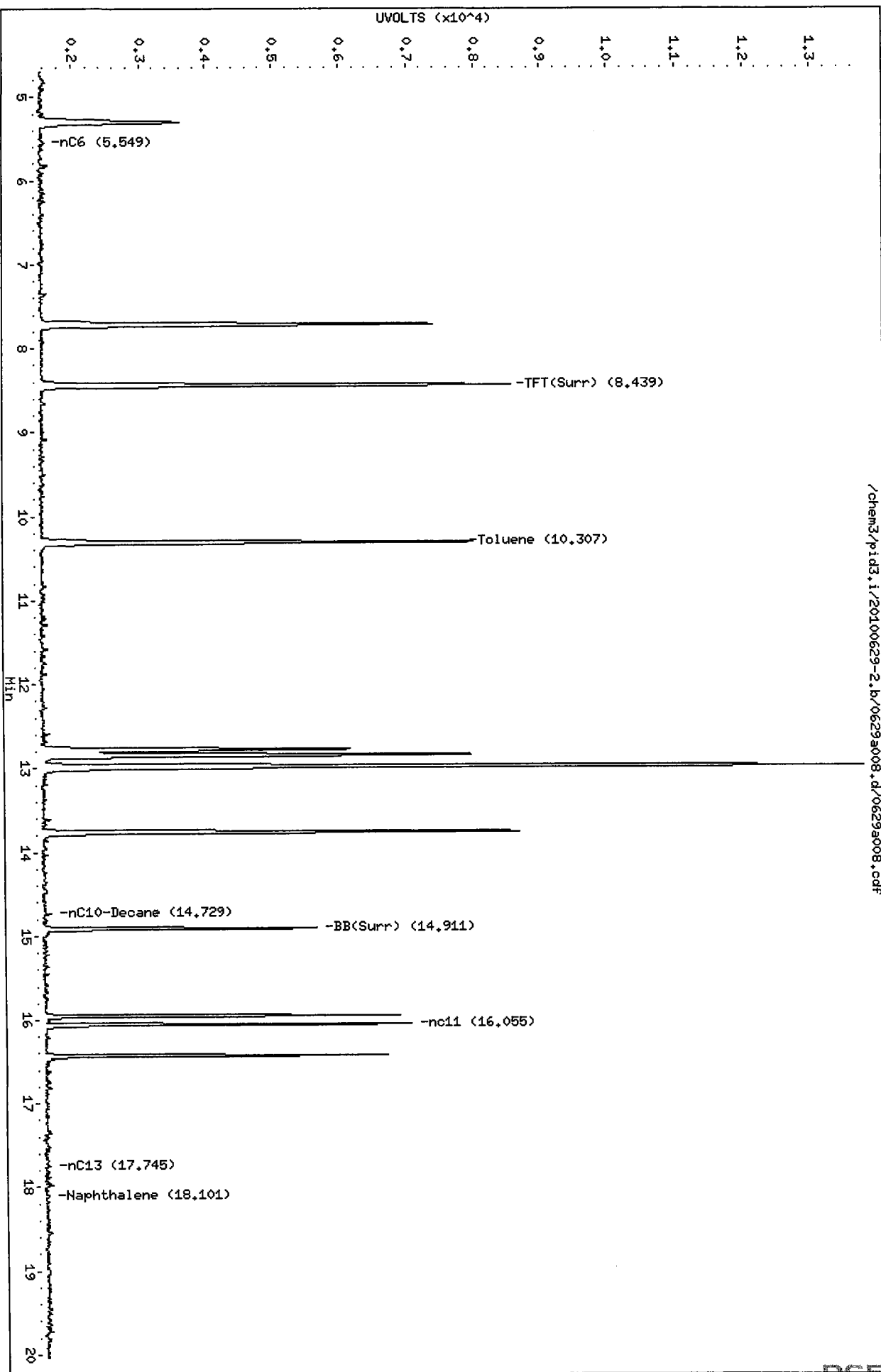
Sample Info: BETX 25

Column phase: RTX 502-2 FID

Instrument: pid3.i

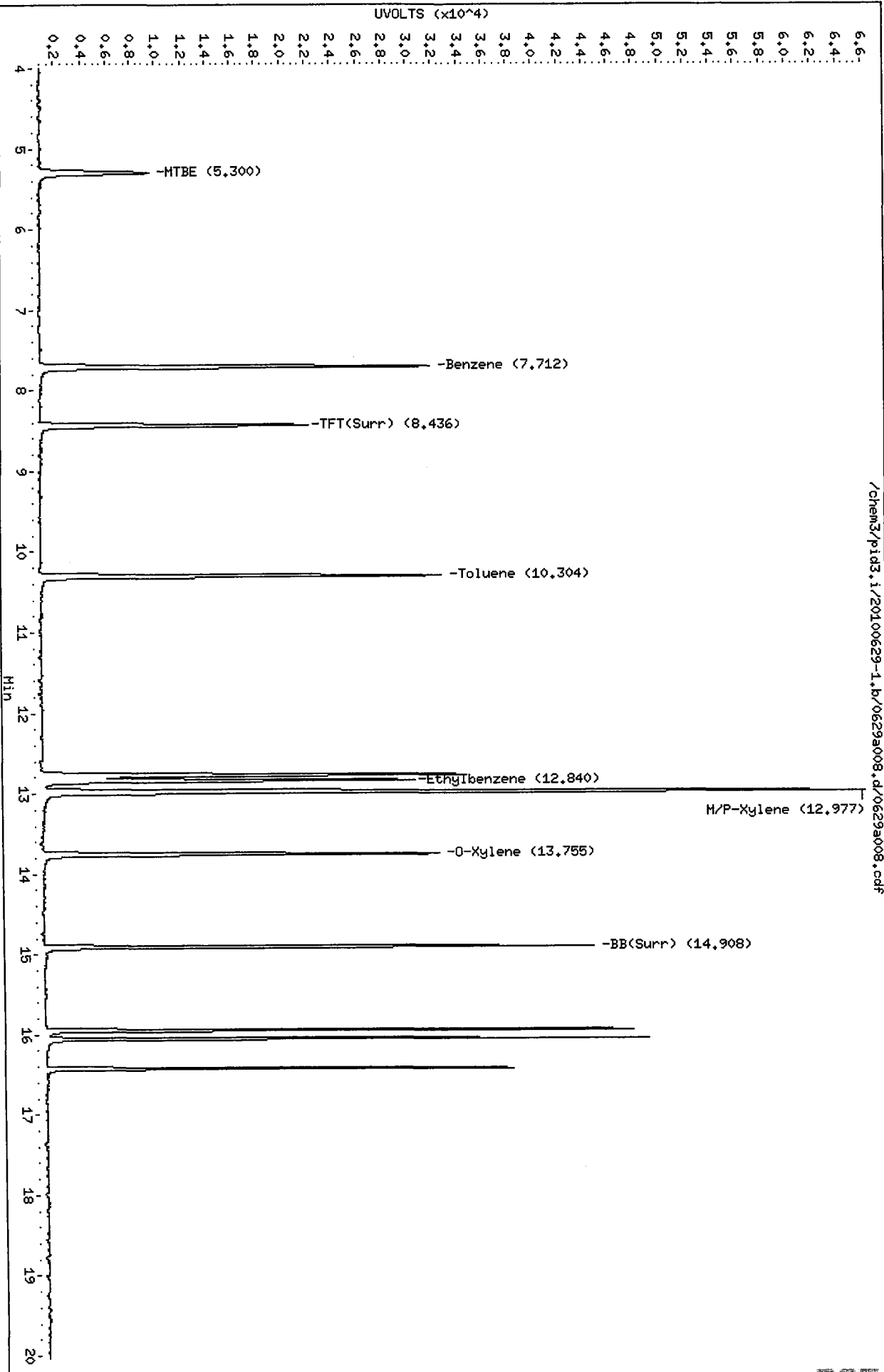
Operator: HH  
Column diameter: 0.18

/chem3/pid3.i/20100629-2.b/0629a008.d/0629a008.cdf



Data File: /chem3/pid3.i/20100629-1.b/0629a008.d  
Date : 29-JUN-2010 09:12  
Client ID:  
Sample Info: BETX 25  
Column phase: RTX 502-2 PID

Instrument: pid3.i  
Operator: MH  
Column diameter: 0.18



/chem3/pid3.i/20100629-1.b/0629a008.d/0629a008.cdf

Mt.  
7/10/10

Analytical Resources Inc.  
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100629-2.b/0629a009.d      ARI ID: BETX 50  
Data file 2: /chem3/pid3.i/20100629-1.b/0629a009.d      Client ID:  
Method: /chem3/pid3.i/20100629-1.b/PIDB.m              Injection Date: 29-JUN-2010 09:37  
Instrument: pid3.i    Matrix: WATER  
Gas Ical Date: 02-FEB-2010                                  Dilution Factor: 1.000  
BETX Ical Date: 29-JUN-2010

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.438	-0.001	9374	110805	130.2	TFT (Surr)
14.911	-0.001	5595	46087	129.9	BB (Surr)

PETROLEUM HYDROCARBONS (FID)

Range	Total Area*	Amount
WAGas Tol-C12 (10.21 to 17.13)	1045595	1.504
8015B 2MP-TMB ( 4.93 to 15.54)	1041320	0.768
AK101 nC6-nC10 ( 5.50 to 14.63)	978534	0.906
NWTPHG Tol-Nap (10.21 to 18.23)	1053990	1.423

\* Surrogate areas are subtracted from Total Area  
Range marker RT's are set by daily RT standard

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.436	-0.001	28902	131.5	TFT(Surr)
14.909	-0.001	60660	133.1	BB(Surr)

SW8021 (PID)

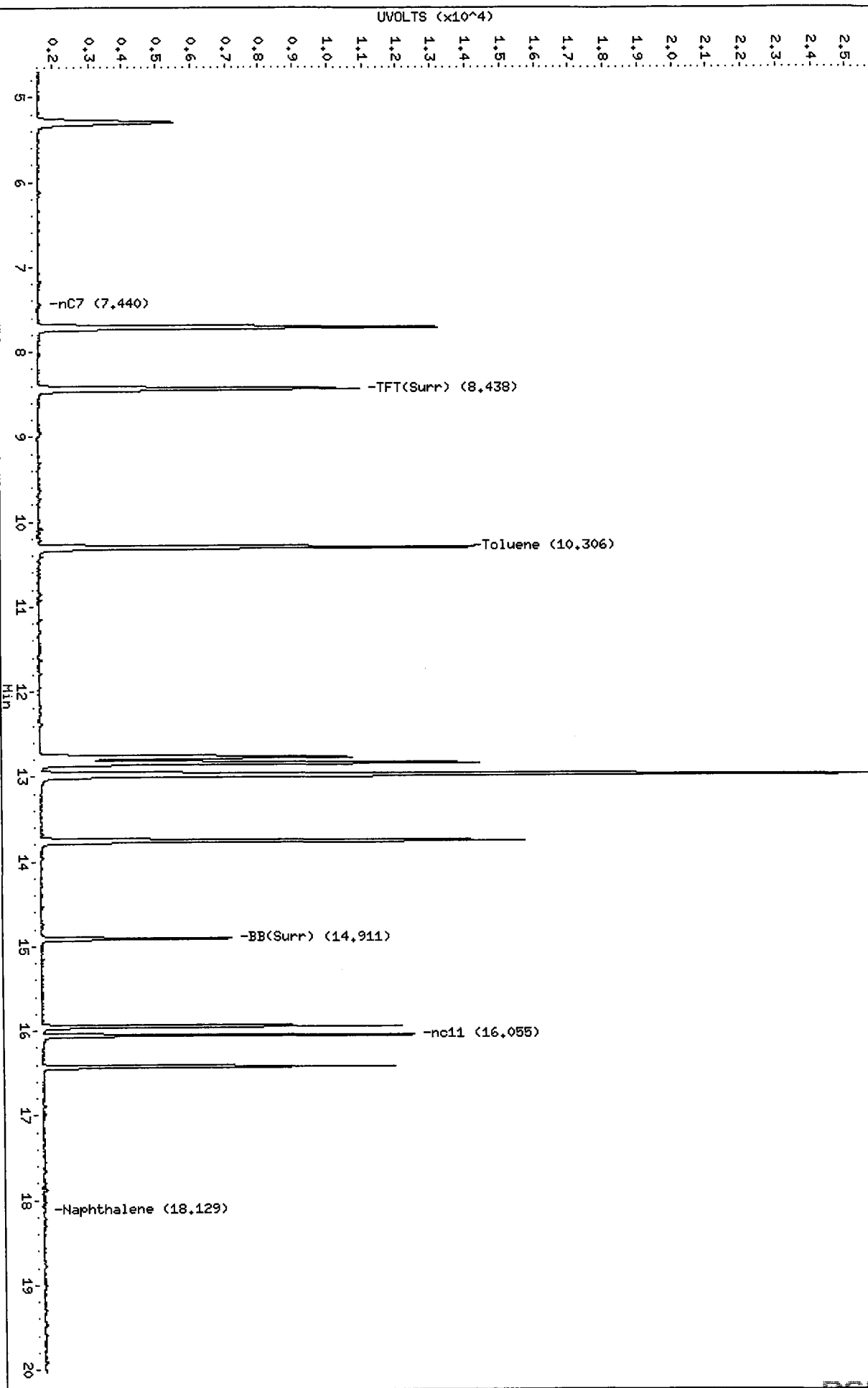
RT	Shift	Response	Amount	Compound
7.711	-0.002	62822	47.52	Benzene
10.305	-0.003	63750	48.30	Toluene
12.841	-0.006	59507	47.89	Ethylbenzene
12.979	-0.010	130181	96.67	M/P-Xylene
13.757	-0.005	64099	49.89	O-Xylene
5.298	-0.003	17422	48.97	MTBE

A Indicates Peak Area was used for quantitation instead of Height  
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20100629-2.b/0629a009.d  
Date : 29-JUN-2010 09:37  
Client ID:  
Sample Info: BETX 50  
Column phase: RTX 502-2 FID

Instrument: pid3.i  
Operator: MH  
Column diameter: 0.18

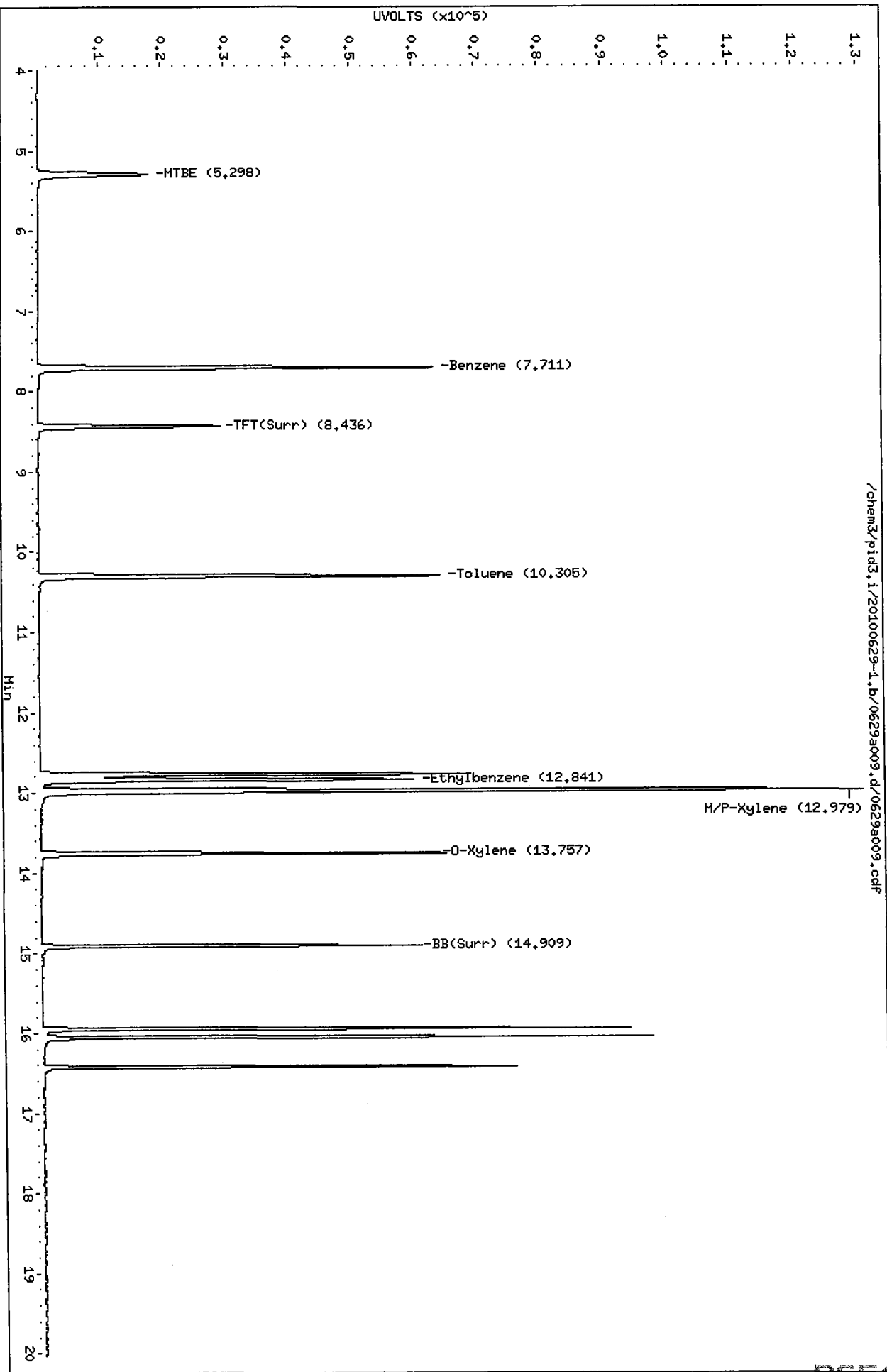
/chem3/pid3.i/20100629-2.b/0629a009.d/0629a009.cdf



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Data File: /chem3/pid3.i/20100629-1.b/0629a009.d  
Date : 29-JUN-2010 09:37  
Client ID:  
Sample Info: BETX 50  
Column phase: RTX 502-2 PID

Instrument: pid3.i  
Operator: NH  
Column diameter: 0.18



/chem3/pid3.i/20100629-1.b/0629a009.d/0629a009.pdf

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M.  
7/10/10

Analytical Resources Inc.  
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100629-2.b/0629a010.d	ARI ID: BETX 100
Data file 2: /chem3/pid3.i/20100629-1.b/0629a010.d	Client ID:
Method: /chem3/pid3.i/20100629-1.b/PIDB.m	Injection Date: 29-JUN-2010 10:01
Instrument: pid3.i	Matrix: WATER
Gas Ical Date: 02-FEB-2010	Dilution Factor: 1.000
BETX Ical Date: 29-JUN-2010	

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.440	0.001	12289	144775	170.7	TFT (Surr)
14.912	0.001	7394	58577	171.7	BB (Surr)

PETROLEUM HYDROCARBONS (FID)

Range	Total Area*	Amount
WAGas Tol-C12 (10.21 to 17.13)	2011481	2.893
8015B 2MP-TMB ( 4.93 to 15.54)	1982095	1.462
AK101 nC6-nC10 ( 5.50 to 14.63)	1860428	1.722
NWTPHG Tol-Nap (10.21 to 18.23)	2014004	2.719

\* Surrogate areas are subtracted from Total Area  
 Range marker RT's are set by daily RT standard

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.438	0.001	37664	171.3	TFT (Surr)
14.910	0.001	80033	175.6	BB (Surr)

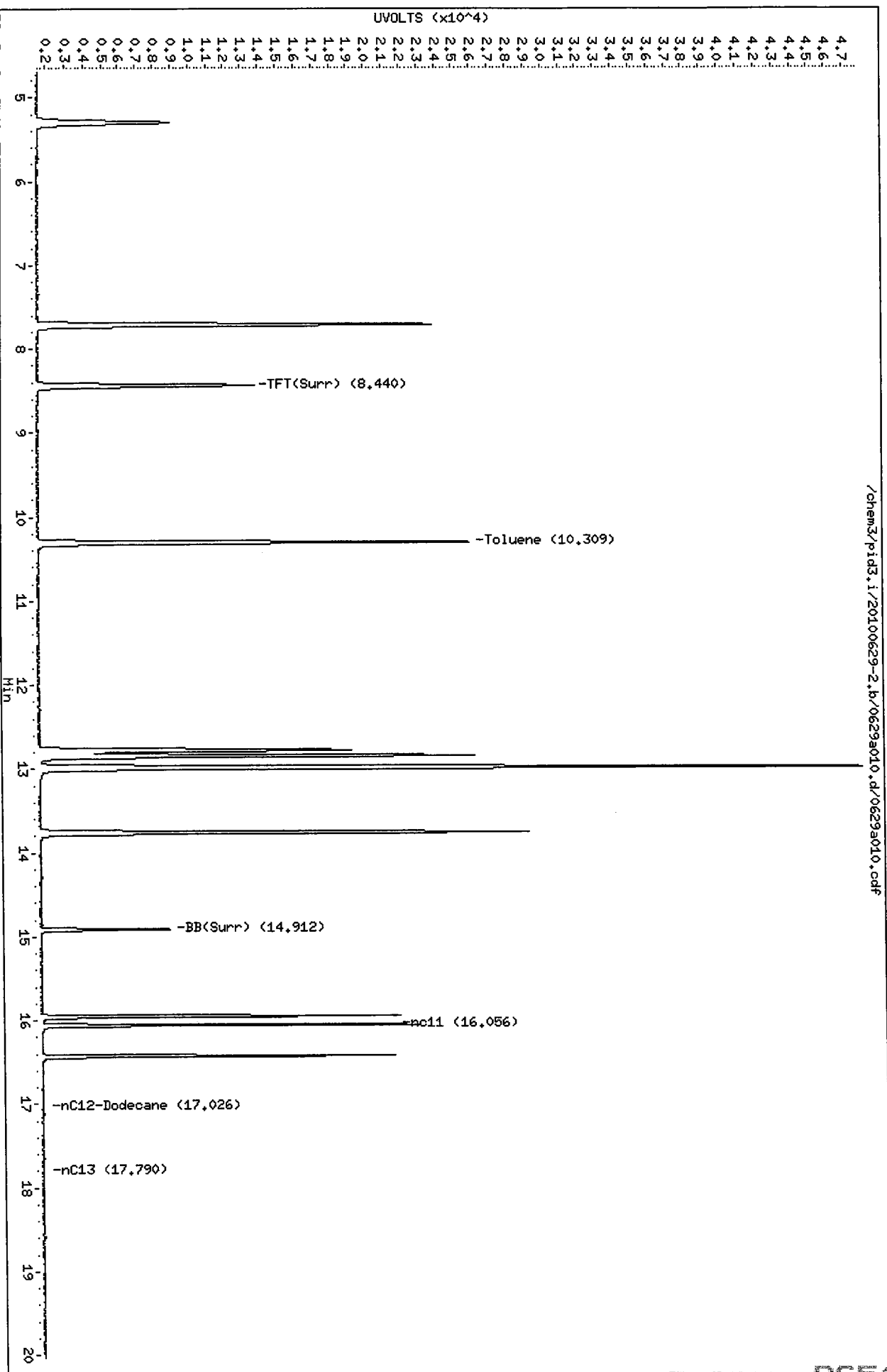
SW8021 (PID)

RT	Shift	Response	Amount	Compound
7.714	0.001	122057	92.32	Benzene
10.307	-0.001	124686	94.47	Toluene
12.844	-0.003	115194	92.70	Ethylbenzene
12.984	-0.006	249433	185.23	M/P-Xylene
13.759	-0.003	125630	97.78	O-Xylene
5.302	0.001	33414	93.91	MTBE

A Indicates Peak Area was used for quantitation instead of Height  
 N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20100629-2.b/0629a010.d  
Date : 29-JUN-2010 10:01  
Client ID:  
Sample Info: BETX 100  
Column phase: RTX 502-2 FID

Instrument: pid3.i  
Operator: MH  
Column diameter: 0.18



/chem3/pid3.i/20100629-2.b/0629a010.d/0629a010.cdf

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Mt.  
7/10/10

Analytical Resources Inc.  
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100629-2.b/0629a011.d      ARI ID: BETX 200  
Data file 2: /chem3/pid3.i/20100629-1.b/0629a011.d      Client ID:  
Method: /chem3/pid3.i/20100629-1.b/PIDB.m              Injection Date: 29-JUN-2010 10:26  
Instrument: pid3.i    Matrix: WATER  
Gas Ical Date: 02-FEB-2010                                  Dilution Factor: 1.000  
BETX Ical Date: 29-JUN-2010

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FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.439	0.000	14060	165027	195.3	TFT(Surr)
14.911	0.000	8446	67516	196.1	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

-----

Range	Total Area*	Amount
WAGas Tol-C12 (10.21 to 17.13)	4138650	5.951
8015B 2MP-TMB ( 4.93 to 15.54)	4088735	3.015
AK101 nC6-nC10 ( 5.50 to 14.63)	3833098	3.547
NWTPHG Tol-Nap (10.21 to 18.23)	4139793	5.588

\* Surrogate areas are subtracted from Total Area  
Range marker RT's are set by daily RT standard

=====

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.437	0.000	43804	199.3	TFT(Surr)
14.910	0.000	92698	203.3	BB(Surr)

SW8021 (PID)

-----

RT	Shift	Response	Amount	Compound
7.713	0.000	250899	189.77	Benzene
10.308	0.000	258768	196.06	Toluene
12.847	0.000	236635	190.43	Ethylbenzene
12.989	0.000	507143	376.60	M/P-Xylene
13.762	0.000	261479	203.52	O-Xylene
5.301	0.000	68624	192.87	MTBE

A Indicates Peak Area was used for quantitation instead of Height  
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20100629-2.b/0629a011.d

Date: 29-JUN-2010 10:26

Client ID:

Sample Info: BETX 200

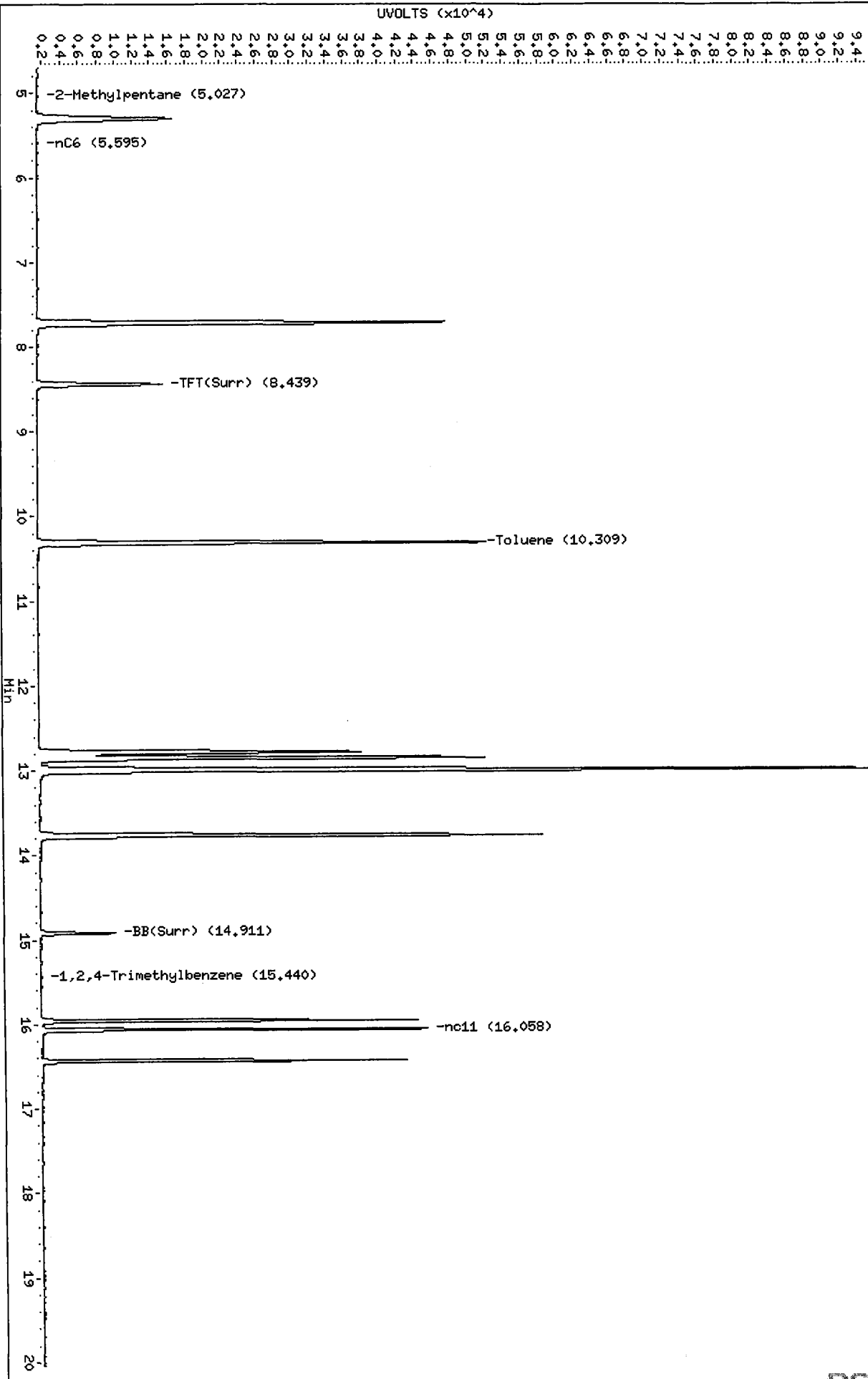
Column phase: RTX 502-2 FID

Instrument: pid3.i

Operator: MH

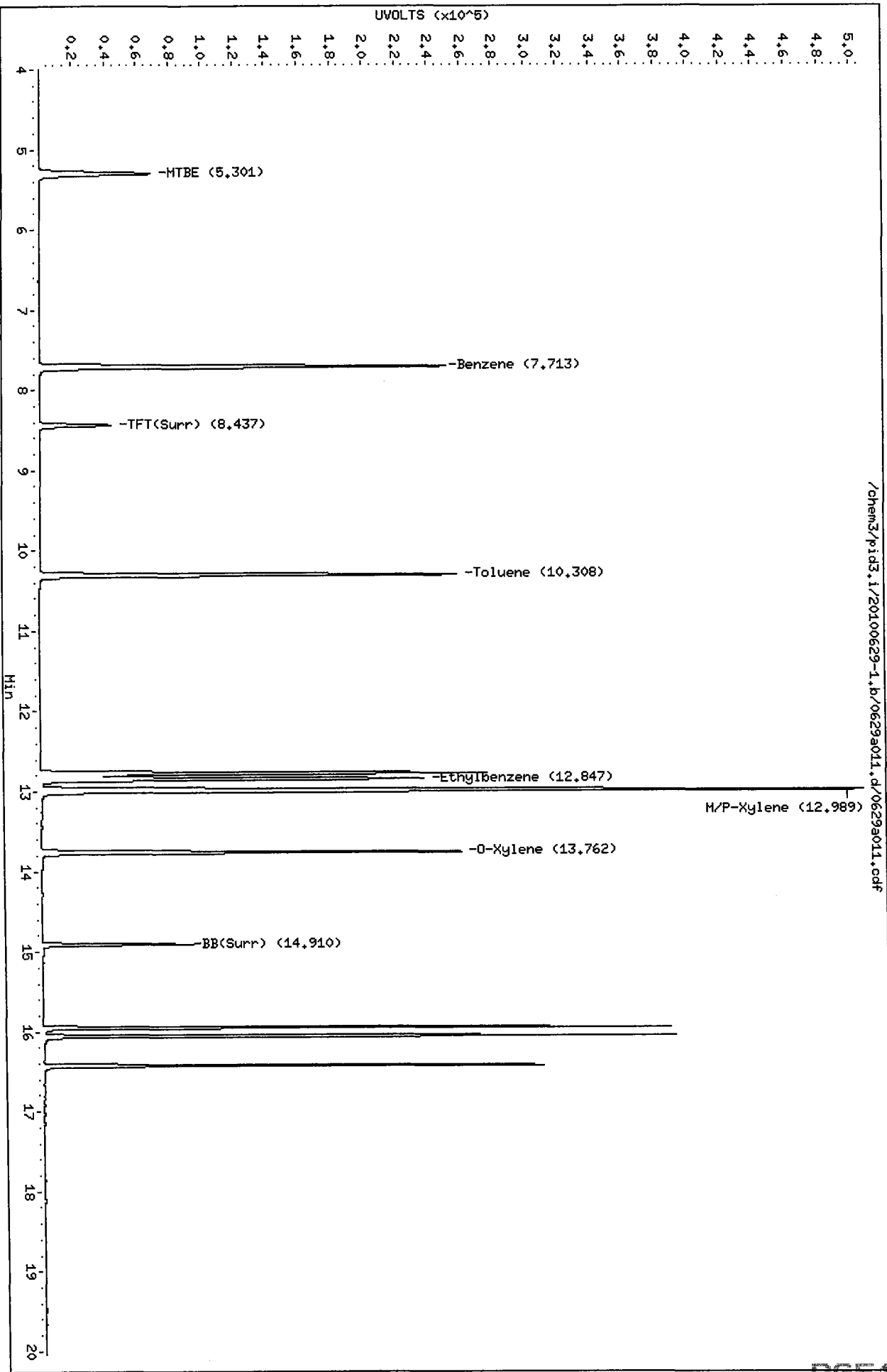
Column diameter: 0.18

/chem3/pid3.i/20100629-2.b/0629a011.d/0629a011.cdf



Data File: /chem3/pid3.i/20100629-1.b/0629a011.d  
Date : 29-JUN-2010 10:26  
Client ID:  
Sample Info: BETX 200  
Column phase: RTX 502-2 PID

Instrument: pid3.i  
Operator: HH  
Column diameter: 0.18



/chem3/pid3.i/20100629-1.b/0629a011.d/0629a011.cdf

MH  
7/10/10

Analytical Resources Inc.  
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100629-2.b/0629a012.d      ARI ID: BETX ICV  
Data file 2: /chem3/pid3.i/20100629-1.b/0629a012.d      Client ID:  
Method: /chem3/pid3.i/20100629-1.b/PIDB.m              Injection Date: 29-JUN-2010 10:50  
Instrument: pid3.i    Matrix: WATER  
Gas Ical Date: 02-FEB-2010                                  Dilution Factor: 1.000  
BETX Ical Date: 29-JUN-2010

=====

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.439	0.000	6906	81786	95.9	TFT(Surr)
14.911	0.000	4128	34996	95.9	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

-----

Range	Total Area*	Amount
WAGas Tol-C12 (10.21 to 17.13)	577743	0.831
8015B 2MP-TMB ( 4.93 to 15.54)	579812	0.428
AK101 nC6-nC10 ( 5.50 to 14.63)	541769	0.501
NWTPHG Tol-Nap (10.21 to 18.23)	580332	0.783

\* Surrogate areas are subtracted from Total Area  
Range marker RT's are set by daily RT standard

=====

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.437	0.000	21036	95.7	TFT(Surr)
14.909	0.000	44825	98.3	BB(Surr)

SW8021 (PID)

-----

RT	Shift	Response	Amount	Compound
7.712	-0.001	34297	25.94	Benzene
10.305	-0.002	33530	25.40	Toluene
12.841	-0.005	30482	24.53	Ethylbenzene
12.979	-0.010	67184	49.89	M/P-Xylene
13.757	-0.005	32583	25.36	O-Xylene
5.300	-0.001	9537	26.80	MTBE

A Indicates Peak Area was used for quantitation instead of Height  
N Indicates peak peak was manually integrated









Analytical Resources, Inc.  
RETENTION TIME SUMMARY REPORT

Method File: /chem3/pid3.i/20100629-1.b/PIDB.m  
Batch File: /chem3/pid3.i/20100629-1.b  
Inst ID: pid3.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
1 MTBE	5.283	5.300	5.297	5.300	5.298	5.302	5.301	5.283	5.213-5.353	5.297	0.006
2 Benzene	7.694	7.706	7.709	7.712	7.711	7.714	7.713	7.694	7.624-7.764	7.708	0.007
3 TPT(Surr)	8.417	8.429	8.434	8.436	8.436	8.438	8.437	8.417	8.347-8.487	8.433	0.008
4 Toluene	10.287	10.297	10.302	10.304	10.305	10.307	10.308	10.287	10.217-10.357	10.301	0.007
15 Chlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.835	12.765-12.905	+++++	+++++
5 Ethylbenzene	12.817	12.832	12.837	12.840	12.841	12.844	12.847	12.817	12.747-12.887	12.837	0.010
6 M/P-Xylene	12.955	12.969	12.974	12.977	12.979	12.984	12.989	12.955	12.885-13.025	12.975	0.011
7 O-Xylene	13.737	13.750	13.753	13.755	13.757	13.759	13.762	13.737	13.687-13.787	13.753	0.008
8 BB(Surr)	14.893	14.904	14.907	14.908	14.909	14.910	14.910	14.893	14.823-14.963	14.906	0.006
13 1,3,5 Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.421	12.351-12.491	+++++	+++++
14 1,2,4 Trimethyl benzen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.059	12.989-13.129	+++++	+++++
16 1,3 Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.034	15.964-16.104	+++++	+++++
17 1,4 Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.140	16.070-16.210	+++++	+++++
18 1,2 Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.513	16.443-16.583	+++++	+++++

Reviewer 1 MH Date: 7/10/10  
Reviewer 2 WJ Date: 7-10-10

MANUAL INTEGRATION SUMMARY FOR DATABATCH - /chem3/pid3.i/20100629-1.b

ARI Job No.: BETX Method: PIDB.m Instrument: pid3.i Date: 29-JUN-2010

Time	Filename	LabID	ClientID	DF	Manually Integrated Compounds
0759	0629a005.d	BETX .25		1	Toluene, Ethylbenzene, O-Xylene, MTBE, TFT (Surr), BB (Surr),
0824	0629a006.d	BETX .5		1	Toluene, O-Xylene, MTBE,
0848	0629a007.d	BETX 5		1	NO MANUAL INTEGRATION
0912	0629a008.d	BETX 25		1	NO MANUAL INTEGRATION
0937	0629a009.d	BETX 50		1	NO MANUAL INTEGRATION
1001	0629a010.d	BETX 100		1	NO MANUAL INTEGRATION
1026	0629a011.d	BETX 200		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - /chem3/pid3.i/20100629-2.b

ARI Job No.: BETX Method: FID.m Instrument: pid3.i Date: 29-JUN-2010

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0759	0629a005.d	BETX .25		1	NO MANUAL INTEGRATION
0824	0629a006.d	BETX .5		1	NO MANUAL INTEGRATION
0848	0629a007.d	BETX 5		1	NO MANUAL INTEGRATION
0912	0629a008.d	BETX 25		1	NO MANUAL INTEGRATION
0937	0629a009.d	BETX 50		1	NO MANUAL INTEGRATION
1001	0629a010.d	BETX 100		1	NO MANUAL INTEGRATION
1026	0629a011.d	BETX 200		1	NO MANUAL INTEGRATION

**TPHG/BETX Raw Data**  
**Run Logs, Continuing Calibrations, and Raw Data**

**ARI Job ID: RG51**

**Analytical Resources Inc.: Organics Instrument Log**  
**PID-3 HP 5890 Series II - Serial No.: 2728A-13336**

Date: 8/4/10 Analysis: NWTPHG/BETX Analyst: MH

GC Program: BETX Column No: 832213 Column Type: RTX502-Z

Instrument Tune (.U or .CT.): \_\_\_\_\_ EM Voltage: \_\_\_\_\_

Calibration File: \_\_\_\_\_ Curve Date: 7/29/10 GMS  
8/29/10 BETX

IS/SS	Ical/Ccal	LCS/ICV
<u>VW632-3</u>	<u>VW635-1</u>	<u>VW647-2</u>
	<u>VW644-3</u>	
	<u>VW647-2</u>	

Time	Filename	LabID	ClientID	Vial#	pH	DF						
1	0634	0804a001.d	RINSE			1	23	1608	0804a023.d	RG51G	PSB12-4-5-072810	0.00
2	0658	0804a002.d	RT+BCAL 1			1	24	1632	0804a024.d	RINSE		1
3	0723	0804a003.d	GCAL 1			1	25	1657	0804a025.d	BCAL3		1
4	0747	0804a004.d	LCS0804			1	26	1722	0804a026.d	GCAL3		1
5	0811	0804a005.d	LCSD0804			1	27	1746	0804a027.d	RG71A	KSC-DP-16-S-7.5-8-1	0.00
6	0836	0804a006.d	MB0804			1	28	1811	0804a028.d	RG71B	KSC-DP-11-S-5-5-5-1	0.00
7	0933	0804a007.d	RH00D	Trip Blanks		1	29	1836	0804a029.d	RG71C	KSC-DP-13-S-4.5-5-1	0.00
8	0958	0804a008.d	RH00A	HPT02-100803		0.00	30	1900	0804a030.d	RG63A	KSC-DP-5-GW-100730	1
9	1022	0804a009.d	RH00B	HPT03-100803		0.00	31	1925	0804a031.d	RG63B	KSC-DP-2-GW-100730	1
10	1047	0804a010.d	RH00C	HPT04-100803		0.00	32	1950	0804a032.d	RG63C	KSC-DP-3-GW-100730	1
11	1112	0804a011.d	RINSE			1	33	2014	0804a033.d	RG63D	KSC-DP-16-GW-100730	1
12	1136	0804a012.d	GCAL 2			1	34	2038	0804a034.d	RG63E	KSC-DP-11-GW-100730	1
13	1201	0804a013.d	BCAL 2			1	35	2103	0804a035.d	RINSE		1
14	1226	0804a014.d	RG51H	PSB12-TB		1	36	2127	0804a036.d	GCAL 4		1
15	1250	0804a015.d	RG51A	PSB12-0-0.5-072810		0.00						
16	1315	0804a016.d	RG51B	PSB12-1.5-2.0-07281		0.00						
17	1339	0804a017.d	RG51C	PSB12-2-4-072810		0.00						
18	1404	0804a018.d	RG51D	PSB12-8-10-072810		0.00						
19	1429	0804a019.d	RG51E	PSB12-8-10-072810-D		0.00						
20	1454	0804a020.d	RG51F	PSB12-14-17-072810		0.00						
21	1518	0804a021.d	RG51FMS	PSB12-14-17-072 MS		0.00						
22	1543	0804a022.d	RG51FMSD	PSB12-14-17-072 MSD		0.00						

*MH*  
*8/5/10*

**Maintenance / Comments**

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**Maintenance Verification** (Identify ICal or CCal that demonstrates the instrument is in control):  
 Every line must contain information or be lined out. Make all entries legible. Start a new page for each QC period.

Analytical Resources Inc.  
 BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100804-2.b/0804a002.d  
 Data file 2: /chem3/pid3.i/20100804-1.b/0804a002.d  
 Method: /chem3/pid3.i/20100804-1.b/PIDB.m  
 Instrument: pid3.i  
 Gas Ical Date: 28-JUL-2010  
 BETX Ical Date: 29-JUN-2010

ARI ID: RT+BCAL 1  
 Client ID:  
 Injection Date: 04-AUG-2010 06:58  
 Matrix: WATER  
 Dilution Factor: 1.000

AR 8/4/10

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.407	0.000	7663	90534	106.5	TFT (Surr)
14.886	0.000	4562	38262	105.9	BB (Surr)

PETROLEUM HYDROCARBONS (FID)

Range	RF	Total Area*	Amount
WAGas Tol-C12 (10.17 to 17.11)	827807	1099493	1.328
8015B 2MP-TMB ( 4.92 to 15.58)	1664107	1342209	0.807
AK101 nC6-nC10 ( 5.41 to 14.53)	1131784	938927	0.830
NWTPHG Tol-Nap (10.17 to 18.18)	882029	1162973	1.319

M Indicates manual integration within range

\* Surrogate areas are subtracted from Total Area  
 Range marker RT's are set by daily RT standard

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.406	0.000	22525	102.5	TFT (Surr)
14.885	0.000	46616	102.3	BB (Surr)

SW8021 (PID)

RT	Shift	Response	Amount	Compound
7.686	0.000	35199	26.62	Benzene
10.270	0.000	35407	26.83	Toluene
12.804	0.000	32494	26.15	Ethylbenzene
12.941	0.000	70950	52.69	M/P-Xylene
13.723	0.000	34253	26.66	O-Xylene
5.288	0.000	9662	27.16	MTBE

A Indicates Peak Area was used for quantitation instead of Height  
 N Indicates peak peak was manually integrated



Data File: /chem3/pid3.i/20100804-2.b/0804a002.d

Date : 04-AUG-2010 06:58

Client ID:

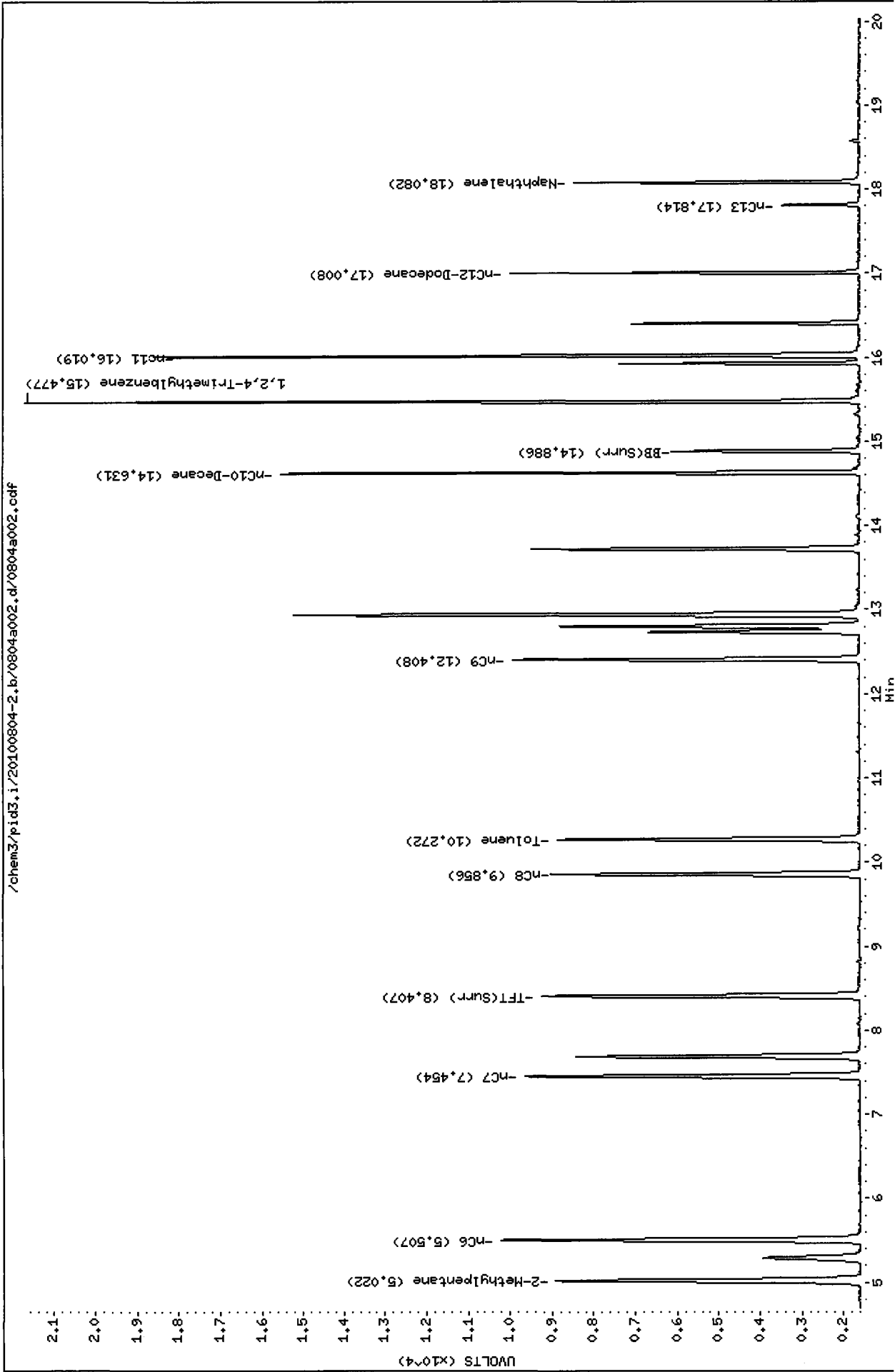
Sample Info: RT+BCAL 1

Instrument: pid3.i

Operator: MH

Column diameter: 0.18

Column phase: RTX 502-2 FID



Analytical Resources Inc.  
 BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100804-2.b/0804a003.d  
 Data file 2: /chem3/pid3.i/20100804-1.b/0804a003.d  
 Method: /chem3/pid3.i/20100804-1.b/PIDB.m  
 Instrument: pid3.i  
 Gas Ical Date: 28-JUL-2010  
 BETX Ical Date: 29-JUN-2010

ARI ID: GCAL 1  
 Client ID: *AR 5/14/10*  
 Injection Date: 04-AUG-2010 07:23  
 Matrix: WATER  
 Dilution Factor: 1.000

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.425	0.017	7718	92562	107.2	TFT (Surr)
14.900	0.014	4600	38397	106.8	BB (Surr)

PETROLEUM HYDROCARBONS (FID)

Range	RF	Total Area*	Amount
WAGas Tol-C12 (10.17 to 17.11)	827807	2059367	2.488 M
8015B 2MP-TMB ( 4.92 to 15.58)	1664107	4082097	2.453 M
AK101 nC6-nC10 ( 5.41 to 14.53)	1131784	2742036	2.423 M
NWTFHG Tol-Nap (10.17 to 18.18)	882029	2191235	2.484 M <i>99.4812</i>

M Indicates manual integration within range

\* Surrogate areas are subtracted from Total Area  
 Range marker RT's are set by daily RT standard

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.424	0.017	22654	103.1	TFT (Surr)
14.900	0.015	46079	101.1	BB (Surr)

SW8021 (PID)

RT	Shift	Response	Amount	Compound
7.703	0.017	7404	5.60	Benzene
10.290	0.020	100404	76.07	Toluene
12.823	0.020	29182	23.48	Ethylbenzene
12.964	0.023	111464	82.77	M/P-Xylene
13.741	0.018	46037	35.83	O-Xylene
5.301	0.013	84047	236.22	MTBE

A Indicates Peak Area was used for quantitation instead of Height  
 N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20100804-2.b/0804a003.d

Date : 04-AUG-2010 07:23

Client ID:

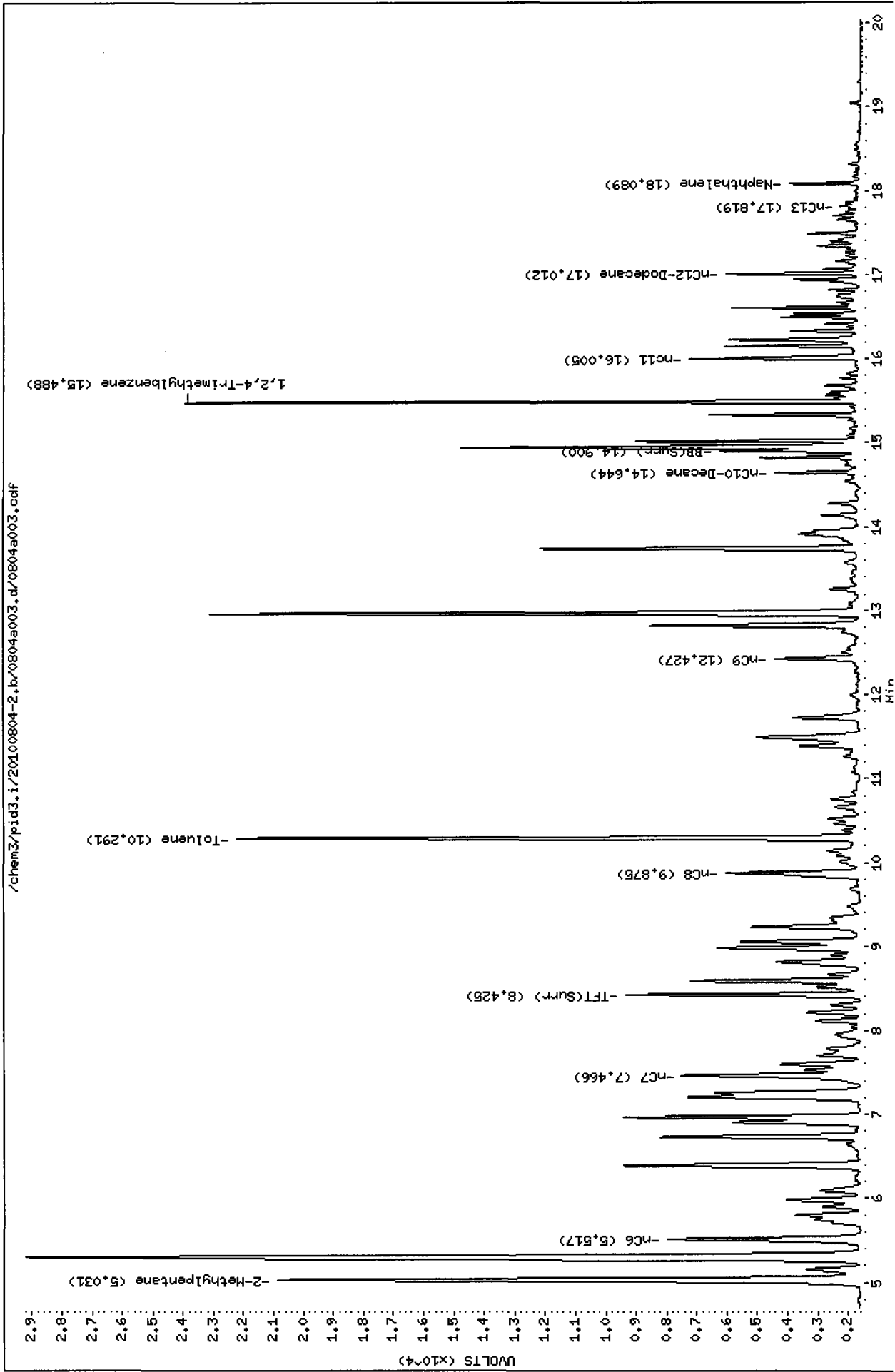
Sample Info: GCAL 1

Instrument: pid3.i

Operator: MH

Column diameter: 0.18

Column phase: RTX 502-2 FID





MH  
8/4/10

Analytical Resources Inc.  
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100804-2.b/0804a004.d      ARI ID: LCS0804  
Data file 2: /chem3/pid3.i/20100804-1.b/0804a004.d      Client ID:  
Method: /chem3/pid3.i/20100804-1.b/PIDB.m              Injection Date: 04-AUG-2010 07:47  
Instrument: pid3.i    Matrix: WATER  
Gas Ical Date: 28-JUL-2010                                  Dilution Factor: 1.000  
BETX Ical Date: 29-JUN-2010

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.439	0.031	7354	87287	102.2	TFT(Surr)
14.908	0.021	4354	35365	101.1	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range	RF	Total Area*	Amount
WAGas Tol-C12 (10.17 to 17.11)	827807	830768	1.004 M
8015B 2MP-TMB ( 4.92 to 15.58)	1664107	1624643	0.976 M
AK101 nC6-nC10 ( 5.41 to 14.53)	1131784	1092052	0.965 M
NWTPHG Tol-Nap (10.17 to 18.18)	882029	894024	1.014 M

M Indicates manual integration within range

\* Surrogate areas are subtracted from Total Area  
Range marker RT's are set by daily RT standard

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.437	0.031	21665	98.6	TFT(Surr)
14.905	0.020	44360	97.3	BB(Surr)

SW8021 (PID)

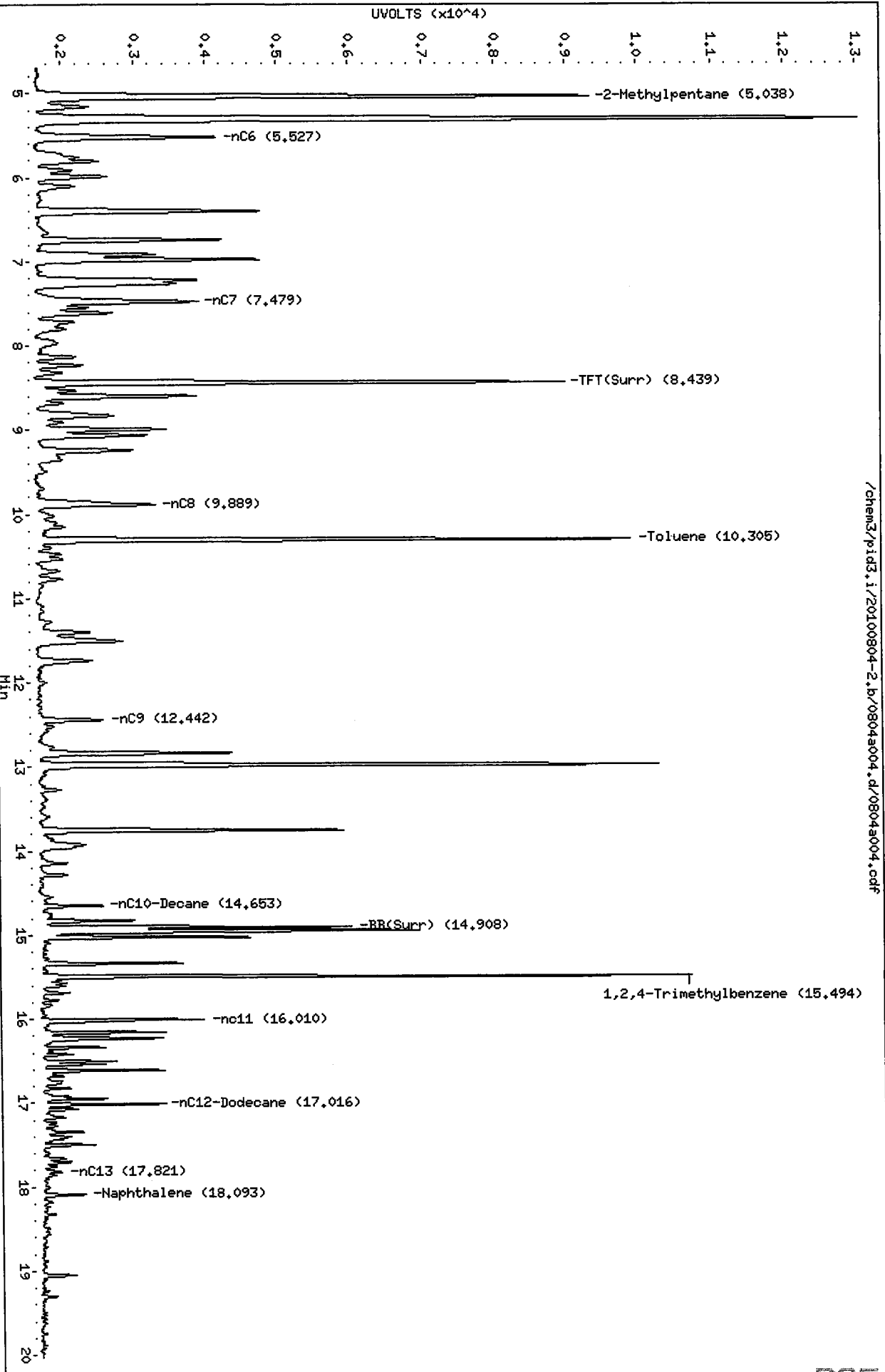
RT	Shift	Response	Amount	Compound
7.714	0.028	2923	2.21	Benzene
10.303	0.032	39848	30.19	Toluene
12.836	0.032	11113	8.94	Ethylbenzene
12.975	0.034	44419	32.99	M/P-Xylene
13.752	0.028	18122	14.10	O-Xylene
5.307	0.020	34866	97.99	MTBE

A Indicates Peak Area was used for quantitation instead of Height  
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20100804-2.b/0804s004.d  
Date: 04-AUG-2010 07:47  
Client ID:  
Sample Info: LCS0804

Column phase: RTX 502-2 FID

Instrument: pid3.i  
Operator: HH  
Column diameter: 0.18

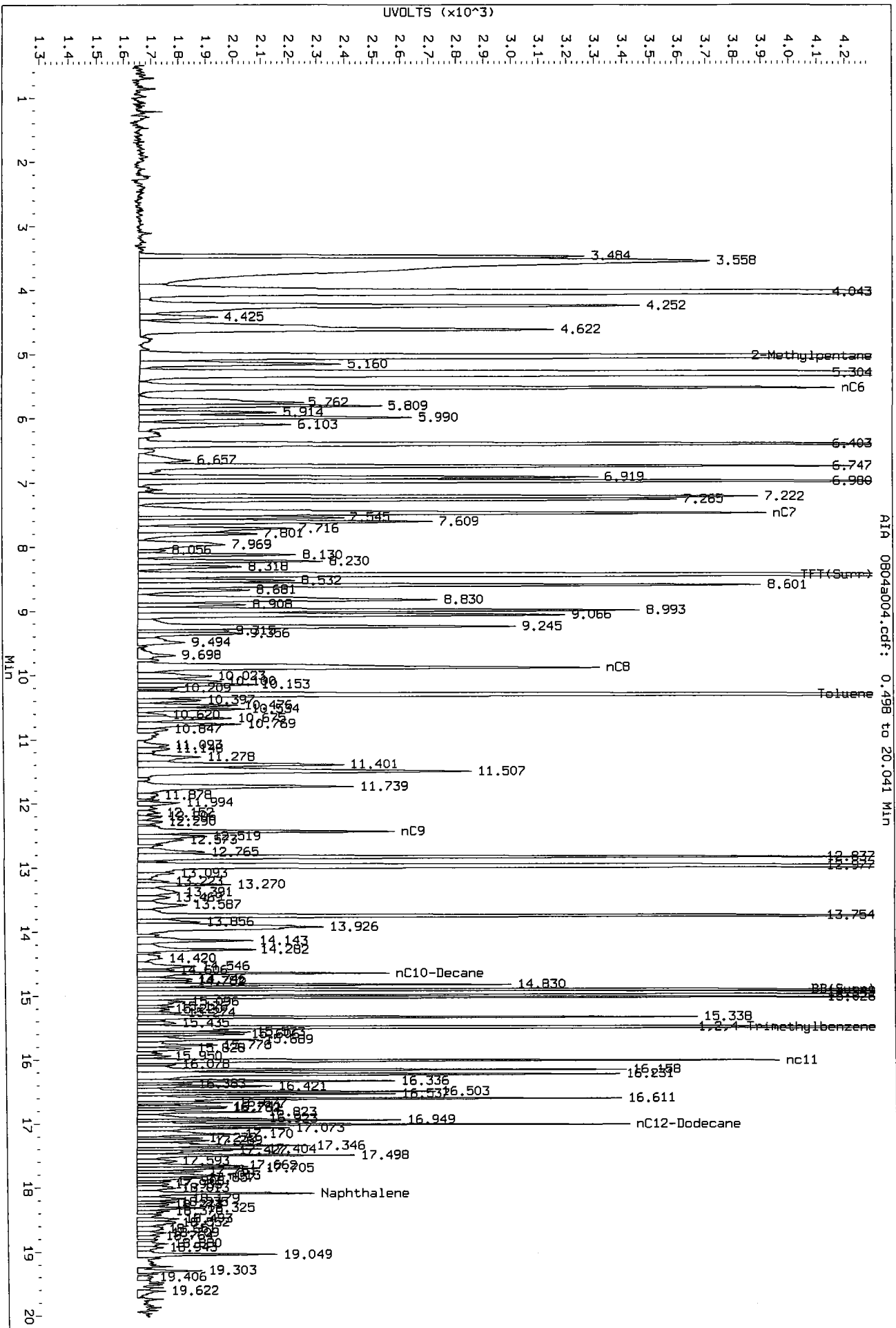


/chem3/pid3.i/20100804-2.b/0804s004.d/0804s004.cdf

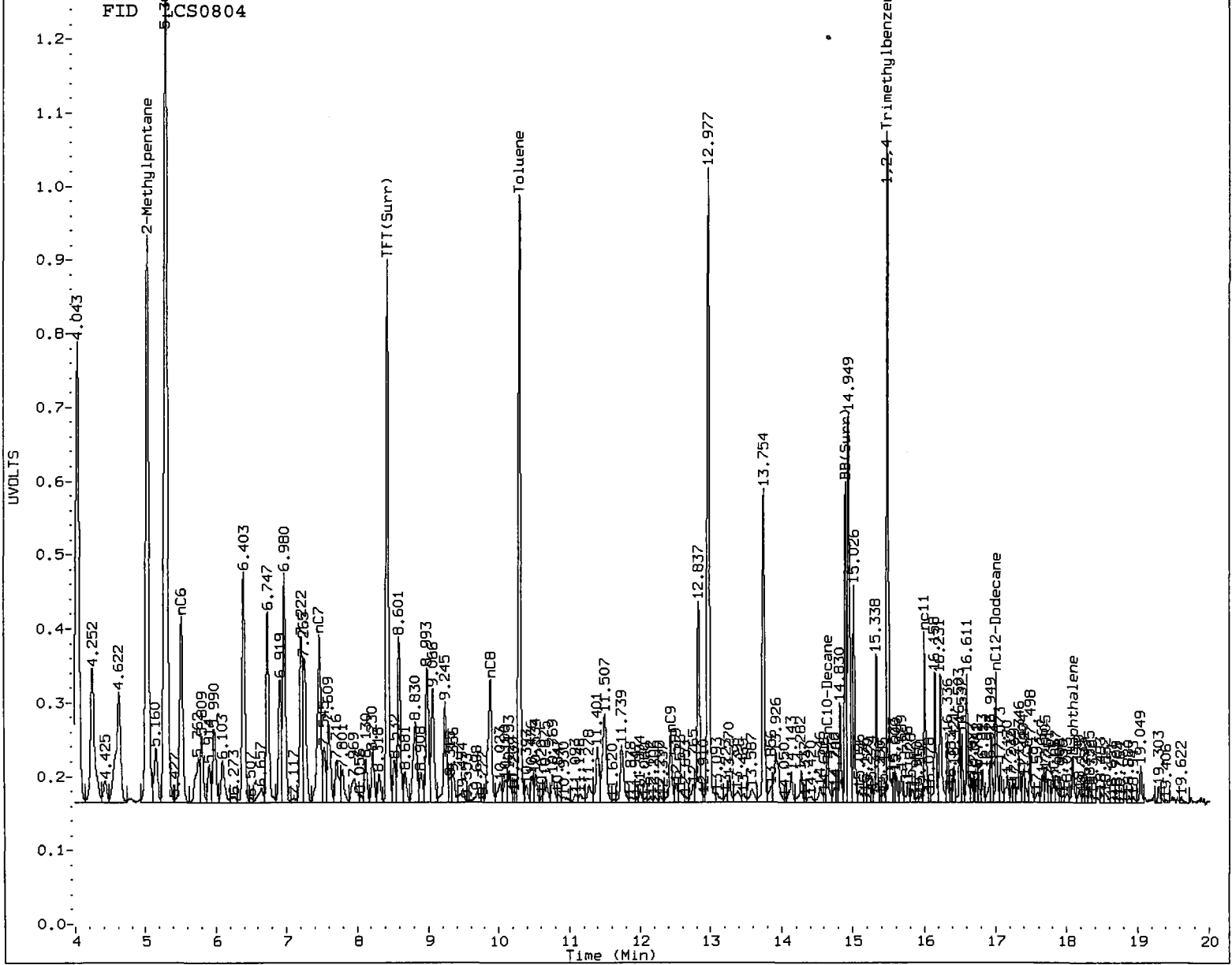
20100804

M  
8/4/10

Data File: /chem3/p103.1/20100804--2.b/0804a004.d/0804a004.cdf  
Injection Date: 04-AUG-2010 07:47  
Instrument: p103.1  
Client Sample ID:



AIR 0804a004.cdf: 0.498 to 20.041 Min



MANUAL INTEGRATION

- 1. Baseline correction
- 2. Poor chromatography
- 3. Peak not found
- 4. Totals calculation
- 5. Other \_\_\_\_\_

Analyst: MH Date: 8/4/10



Mh  
8/4/10

Analytical Resources Inc.  
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100804-2.b/0804a005.d      ARI ID: LCSD0804  
Data file 2: /chem3/pid3.i/20100804-1.b/0804a005.d      Client ID:  
Method: /chem3/pid3.i/20100804-1.b/PIDB.m            Injection Date: 04-AUG-2010 08:11  
Instrument: pid3.i                                        Matrix: WATER  
Gas Ical Date: 28-JUL-2010                            Dilution Factor: 1.000  
BETX Ical Date: 29-JUN-2010

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.438	0.030	7396	88104	102.8	TFT(Surr)
14.909	0.023	4449	36386	103.3	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range	RF	Total Area*	Amount
WAGas Tol-C12 (10.17 to 17.11)	827807	832317	1.005 M
8015B 2MP-TMB ( 4.92 to 15.58)	1664107	1674141	1.006 M
AK101 nC6-nC10 ( 5.41 to 14.53)	1131784	1120695	0.990 M
NWTPHG Tol-Nap (10.17 to 18.18)	882029	885637	1.004 M

M Indicates manual integration within range

\* Surrogate areas are subtracted from Total Area  
Range marker RT's are set by daily RT standard

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.436	0.030	21632	98.4	TFT(Surr)
14.908	0.023	45850	100.6	BB(Surr)

SW8021 (PID)

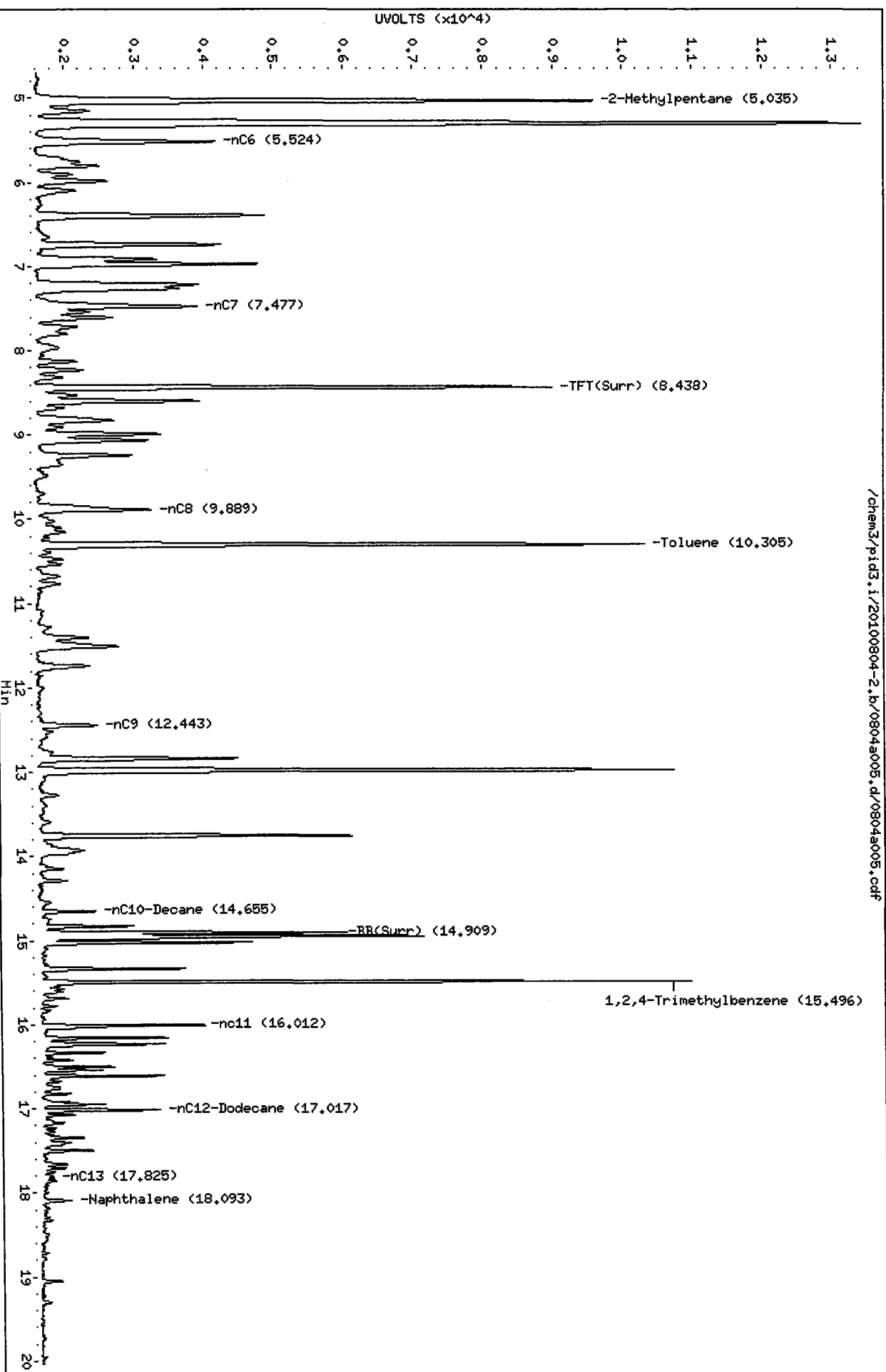
RT	Shift	Response	Amount	Compound
7.713	0.027	3113	2.35	Benzene
10.303	0.033	42278	32.03	Toluene
12.838	0.035	12099	9.74	Ethylbenzene
12.978	0.037	46766	34.73	M/P-Xylene
13.754	0.031	19411	15.11	O-Xylene
5.305	0.017	36021	101.24	MTBE

A Indicates Peak Area was used for quantitation instead of Height

N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20100804-2.b/0804a005.d  
Date: 04-AUG-2010 08:11  
Client ID:  
Sample Info: LCSID0804  
Column phase: RTX 502-2 FID

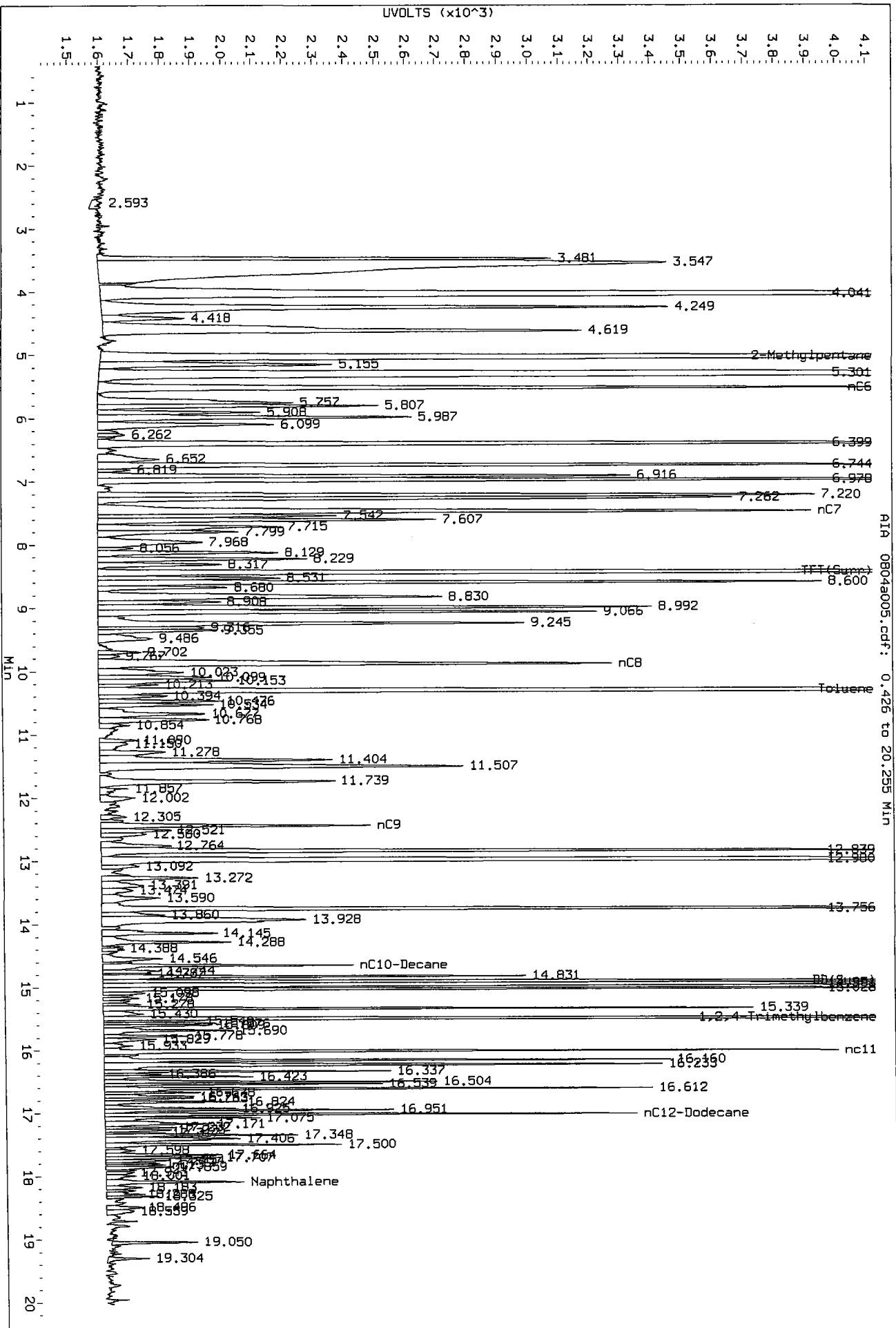
Instrument: pid3.i  
Operator: HH  
Column diameter: 0.18



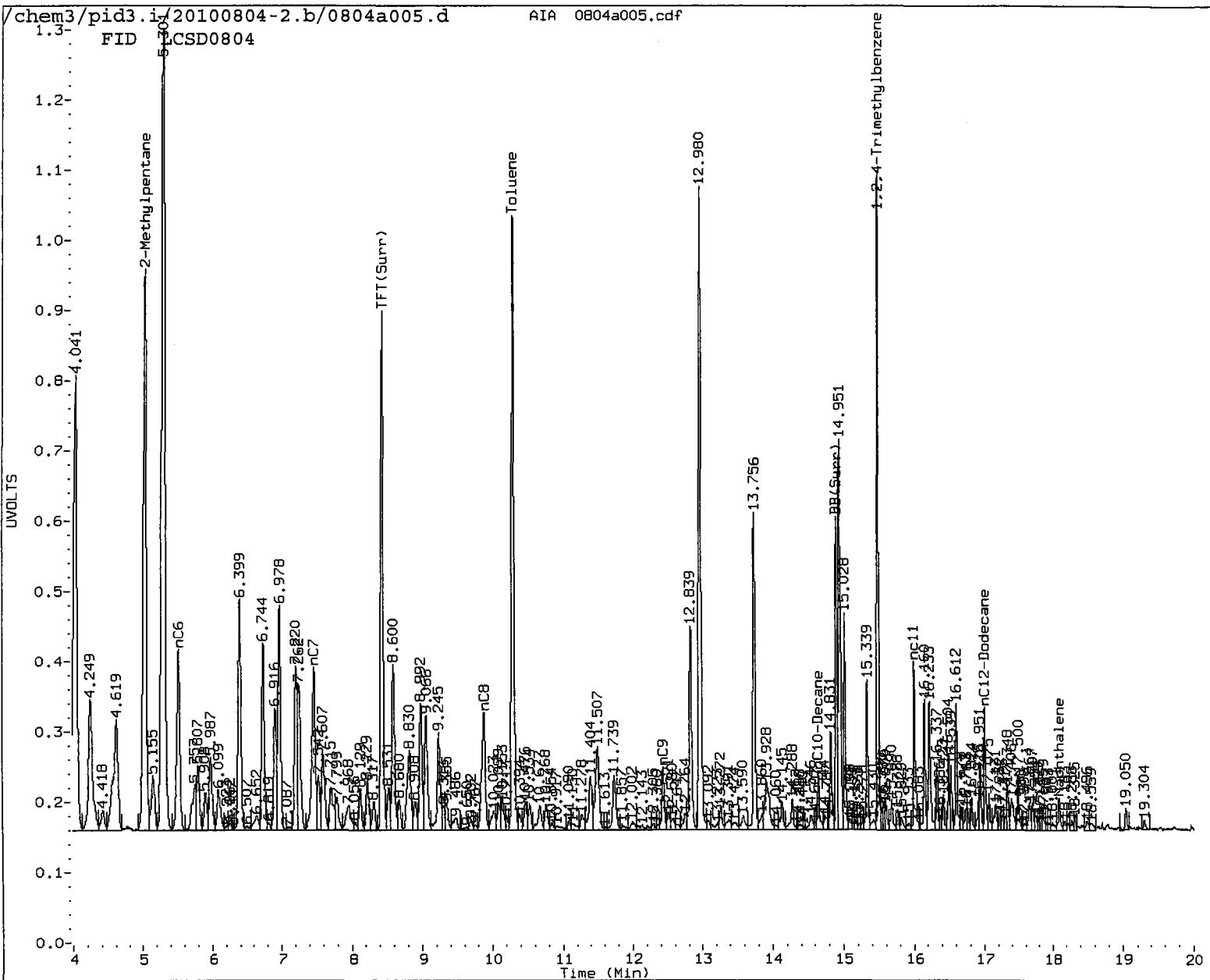
/chem3/pid3.i/20100804-2.b/0804a005.d/0804a005.cdf

MH  
8/14/10

Data File: /chem3/pid3.1/20100804-2.b/0804a005.d/0804a005.cdf  
Injection Date: 04-AUG-2010 08:11  
Instrument: pid3.1  
Client Sample ID:



AIA 0804a005.cdf: 0.426 to 20.255 Min



M4  
8/4/10

Analytical Resources Inc.  
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100804-2.b/0804a006.d      ARI ID: MB0804  
Data file 2: /chem3/pid3.i/20100804-1.b/0804a006.d      Client ID:  
Method: /chem3/pid3.i/20100804-1.b/PIDB.m              Injection Date: 04-AUG-2010 08:36  
Instrument: pid3.i    Matrix: WATER  
Gas Ical Date: 28-JUL-2010                                  Dilution Factor: 1.000  
BETX Ical Date: 29-JUN-2010

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FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
--	----	-----	-----	----	-----
8.439	0.031	7289	85980	101.3	TFT(Surr)
14.910	0.024	4405	36820	102.3	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

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Range	RF	Total Area*	Amount
-----	----	-----	-----
WAGas Tol-C12 (10.17 to 17.11)	827807	4979	0.006
8015B 2MP-TMB ( 4.92 to 15.58)	1664107	3887	0.002
AK101 nC6-nC10 ( 5.41 to 14.53)	1131784	2573	0.002
NWTPHG Tol-Nap (10.17 to 18.18)	882029	6115	0.007

M Indicates manual integration within range

\* Surrogate areas are subtracted from Total Area  
Range marker RT's are set by daily RT standard

=====

PID Surrogates

RT	Shift	Response	%Rec	Compound
--	----	-----	----	-----
8.438	0.031	21362	97.2	TFT(Surr)
14.909	0.024	44927	98.5	BB(Surr)

SW8021 (PID)

-----

RT	Shift	Response	Amount	Compound
--	----	-----	-----	-----
ND	---	---	---	Benzene
ND	---	---	---	Toluene
ND	---	---	---	Ethylbenzene
ND	---	---	---	M/P-Xylene
ND	---	---	---	O-Xylene
ND	---	---	---	MTBE

A Indicates Peak Area was used for quantitation instead of Height  
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20100804-2.b/0804a006.d

Date : 04-AUG-2010 08:36

Client ID:

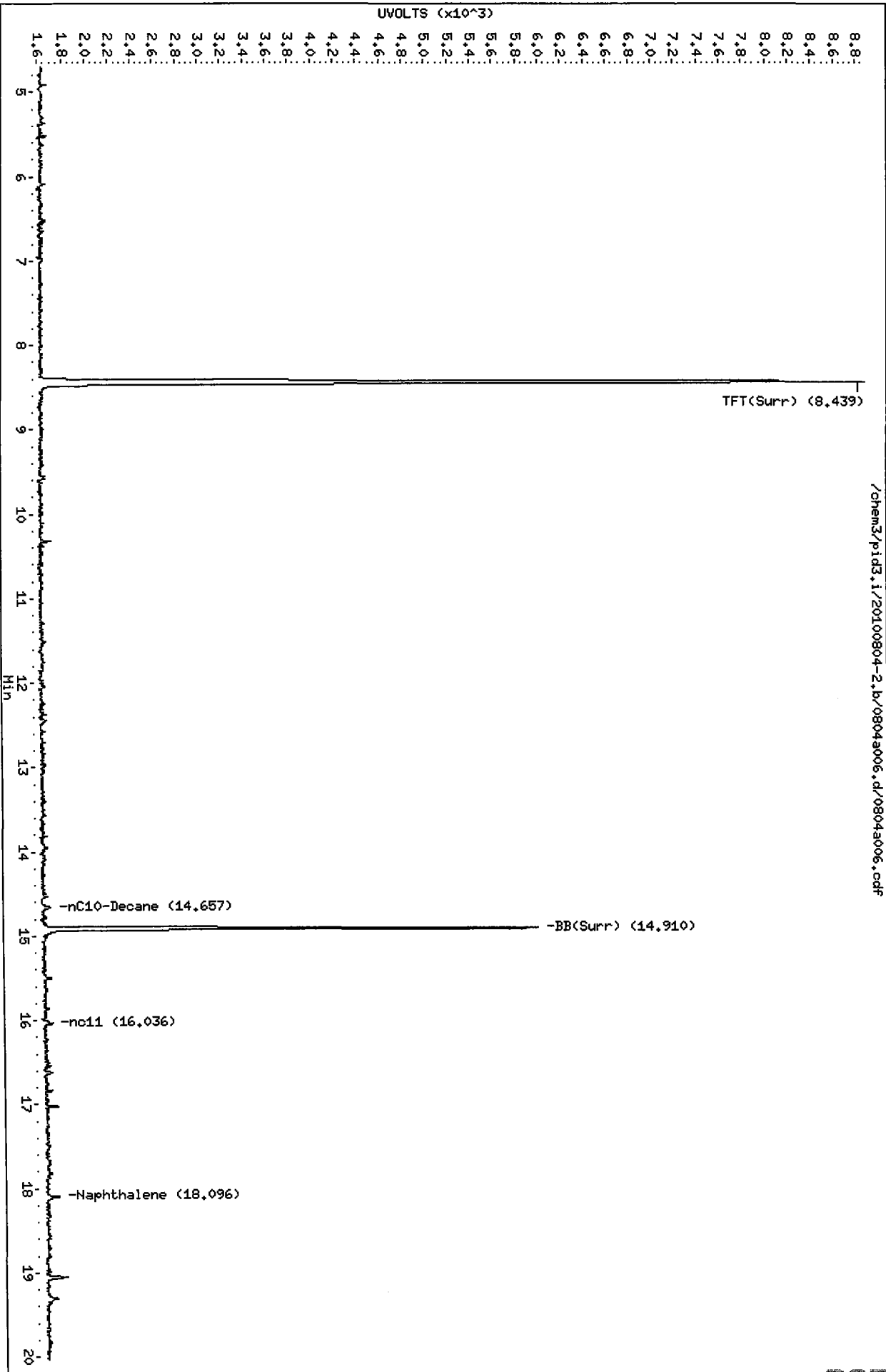
Sample Info: HB0804

Column phase: RTX 502-2 FID

Instrument: pid3.i

Operator: HH

Column diameter: 0.18



/chem3/pid3.i/20100804-2.b/0804a006.d/0804a006.cdf

Analytical Resources Inc.  
 BETX/Gas Quantitation Report

*AR 8/11/10*

Data file 1: /chem3/pid3.i/20100804-2.b/0804a012.d  
 Data file 2: /chem3/pid3.i/20100804-1.b/0804a012.d  
 Method: /chem3/pid3.i/20100804-1.b/PIDB.m  
 Instrument: pid3.i  
 Gas Ical Date: 28-JUL-2010  
 BETX Ical Date: 29-JUN-2010

ARI ID: GCAL 2  
 Client ID:  
 Injection Date: 04-AUG-2010 11:36  
 Matrix: WATER  
 Dilution Factor: 1.000

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.439	0.032	7690	91748	106.8	TFT (Surr)
14.910	0.024	4616	38053	107.2	BB (Surr)

PETROLEUM HYDROCARBONS (FID)

Range	RF	Total Area*	Amount
WAGas Tol-C12 (10.17 to 17.11)	827807	1976189	2.387 M
8015B 2MP-TMB ( 4.92 to 15.58)	1664107	3899854	2.344 M
AK101 nC6-nC10 ( 5.41 to 14.53)	1131784	2621508	2.316 M
NWTPHG Tol-Nap (10.17 to 18.18)	882029	2093750	2.374 M <i>95.082</i>

M Indicates manual integration within range

\* Surrogate areas are subtracted from Total Area  
 Range marker RT's are set by daily RT standard

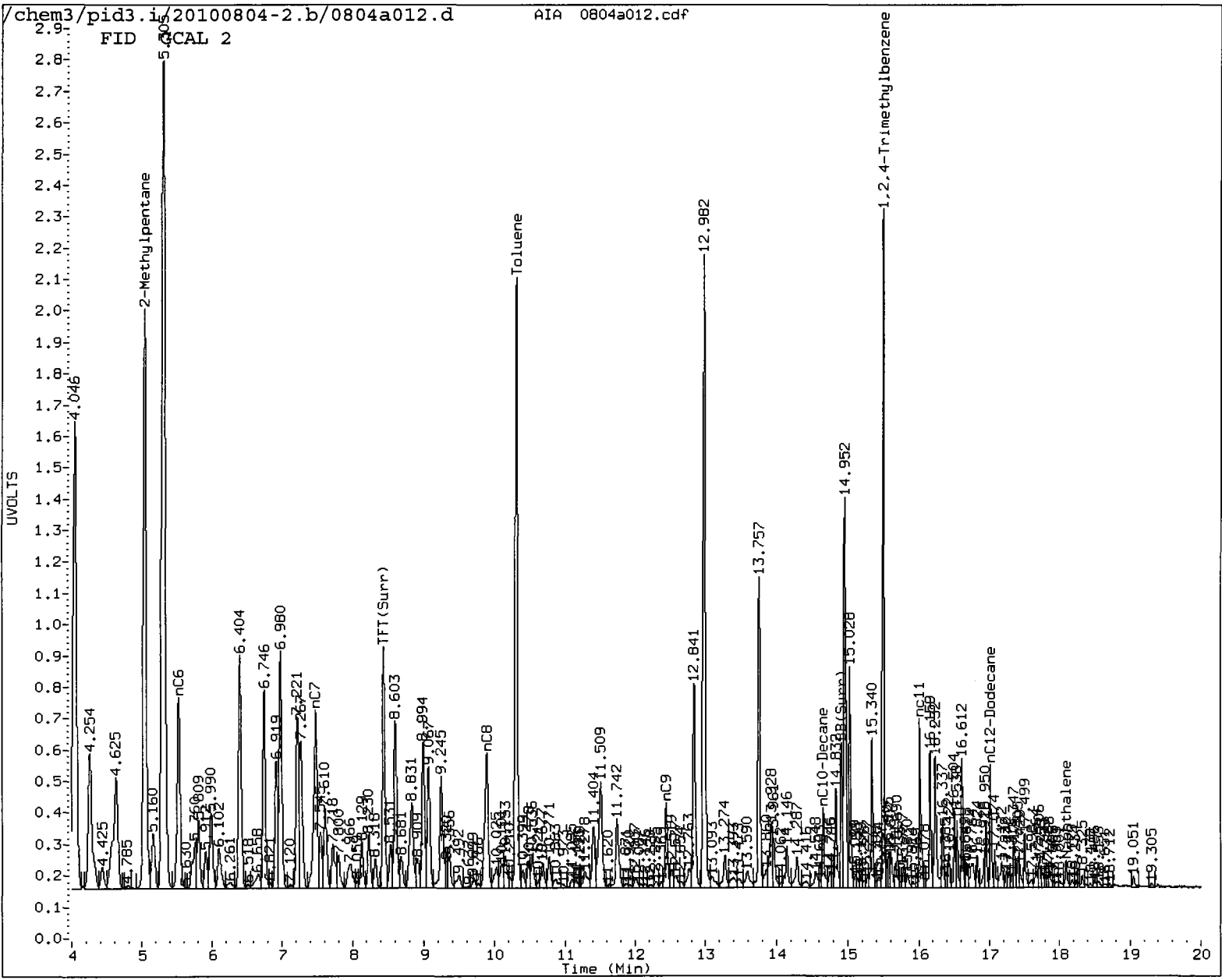
PID Surrogates

RT	Shift	Response	%Rec	Compound
8.438	0.032	22659	103.1	TFT (Surr)
14.908	0.023	47701	104.6	BB (Surr)

SW8021 (PID)

RT	Shift	Response	Amount	Compound
7.715	0.029	7228	5.47	Benzene
10.305	0.035	94613	71.69	Toluene
12.839	0.036	28141	22.65	Ethylbenzene
12.980	0.039	108030	80.22	M/P-Xylene
13.755	0.032	43951	34.21	O-Xylene
5.310	0.022	82406	231.61	MTBE

A Indicates Peak Area was used for quantitation instead of Height  
 N Indicates peak peak was manually integrated





Data File: /chem3/pid3.i/20100804-2.b/0804a012.d

Date : 04-AUG-2010 11:36

Client ID:

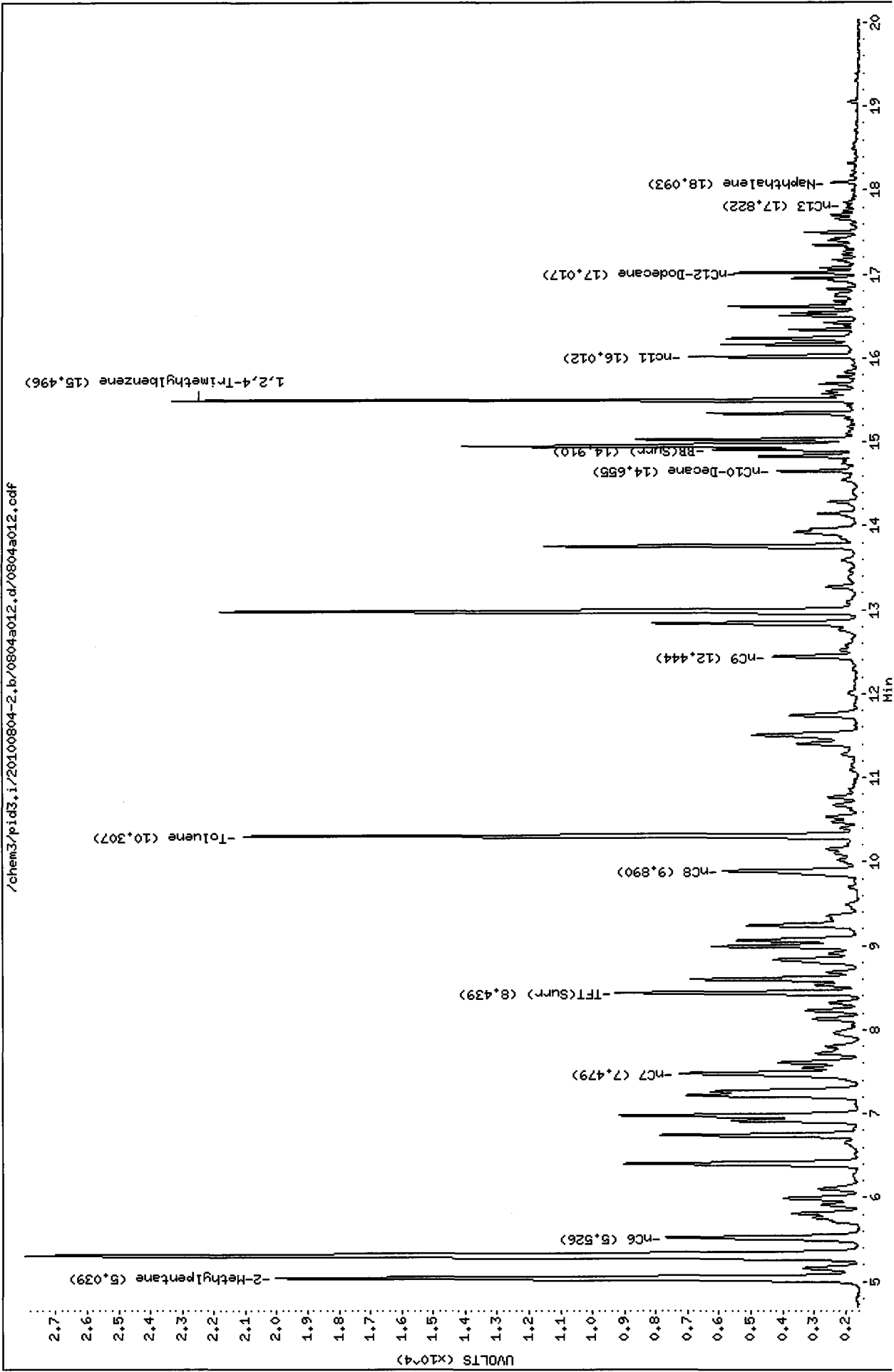
Sample Info: GCAL 2

Instrument: pid3.i

Operator: MH

Column diameter: 0.18

Column phase: RTX 502-2 FID



Analytical Resources Inc.  
 BETX/Gas Quantitation Report

AR 8/1/10

Data file 1: /chem3/pid3.i/20100804-2.b/0804a013.d  
 Data file 2: /chem3/pid3.i/20100804-1.b/0804a013.d  
 Method: /chem3/pid3.i/20100804-1.b/PIDB.m  
 Instrument: pid3.i  
 Gas Ical Date: 28-JUL-2010  
 BETX Ical Date: 29-JUN-2010

ARI ID: BCAL 2  
 Client ID:  
 Injection Date: 04-AUG-2010 12:01  
 Matrix: WATER  
 Dilution Factor: 1.000

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.438	0.031	7118	84452	98.9	TFT (Surr)
14.910	0.023	4296	35491	99.8	BB (Surr)

PETROLEUM HYDROCARBONS (FID)

Range	RF	Total Area*	Amount
WAGas Tol-C12 (10.17 to 17.11)	827807	564055	0.681
8015B 2MP-TMB ( 4.92 to 15.58)	1664107	567820	0.341
AK101 nC6-nC10 ( 5.41 to 14.53)	1131784	527909	0.466
NWTPHG Tol-Nap (10.17 to 18.18)	882029	565941	0.642

M Indicates manual integration within range

\* Surrogate areas are subtracted from Total Area  
 Range marker RT's are set by daily RT standard

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.437	0.031	21093	96.0	TFT (Surr)
14.908	0.023	44731	98.1	BB (Surr)

SW8021 (PID)

RT	Shift	Response	Amount	Compound
7.713	0.027	35095	26.54	Benzene
10.305	0.034	34451	26.10	Toluene
12.772	-0.032	35325	28.43	Ethylbenzene
12.977	0.036	67368	50.03	M/P-Xylene
13.756	0.032	33087	25.75	O-Xylene
5.303	0.016	9866	27.73	MTBE

A Indicates Peak Area was used for quantitation instead of Height  
 N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20100804-2.b/0804a013.d

Date : 04-AUG-2010 12:01

Client ID:

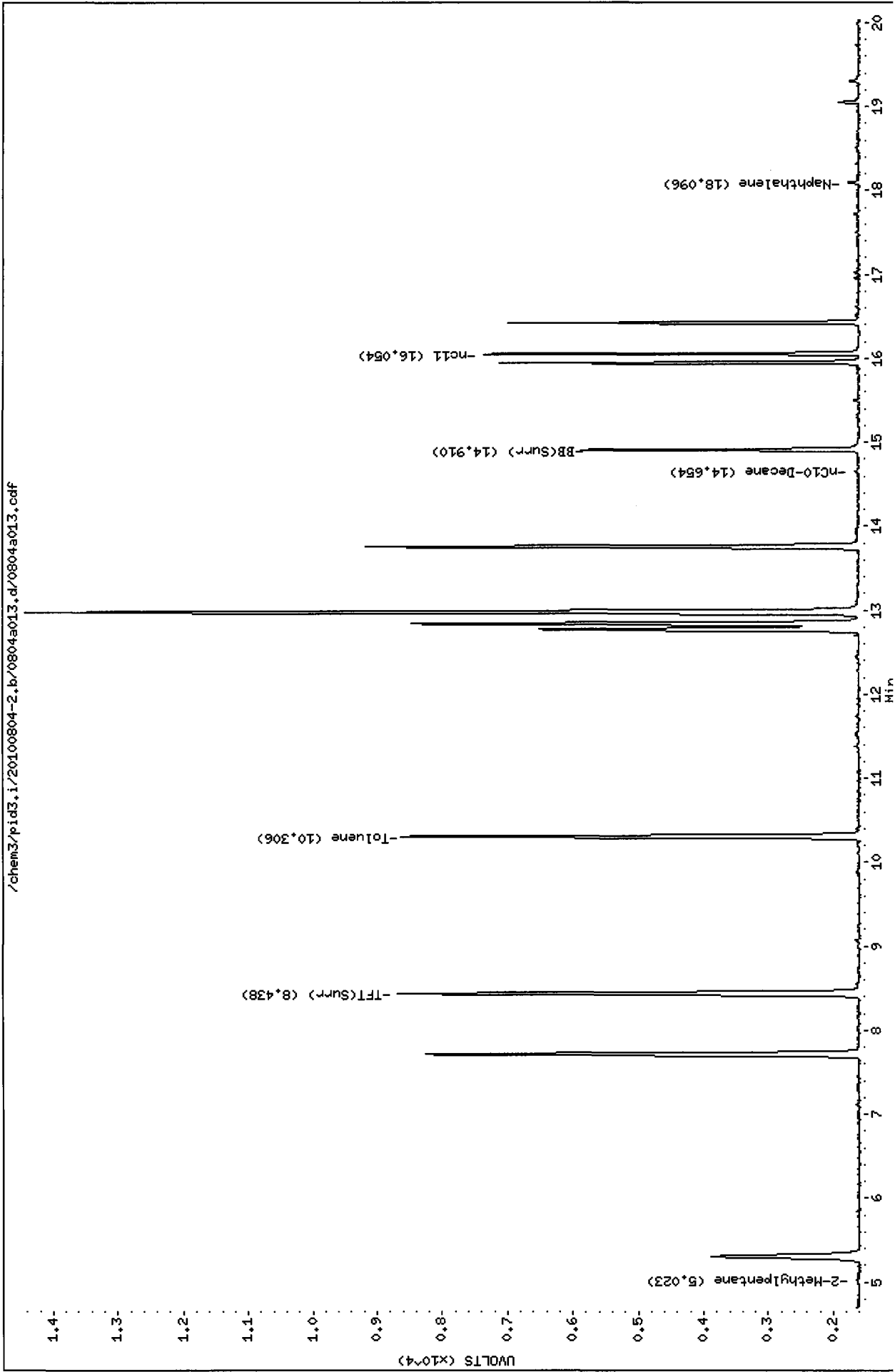
Sample Info: BCAL 2

Instrument: pid3.i

Operator: MH

Column diameter: 0.18

Column phase: RTX 502-2 FID



Analytical Resources Inc.  
 BETX/Gas Quantitation Report

AR 8/11/10

Data file 1: /chem3/pid3.i/20100804-2.b/0804a014.d  
 Data file 2: /chem3/pid3.i/20100804-1.b/0804a014.d  
 Method: /chem3/pid3.i/20100804-1.b/PIDB.m  
 Instrument: pid3.i  
 Gas Ical Date: 28-JUL-2010  
 BETX Ical Date: 29-JUN-2010

ARI ID: RG51H  
 Client ID: PSB12-TB  
 Injection Date: 04-AUG-2010 12:26  
 Matrix: WATER  
 Dilution Factor: 1.000

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.439	0.031	7403	87089	102.9	TFT (Surr)
14.910	0.024	4391	34956	102.0	BB (Surr)

PETROLEUM HYDROCARBONS (FID)

Range	RF	Total Area*	Amount
WAGas Tol-C12 (10.17 to 17.11)	827807	1007	0.001
8015B 2MP-TMB ( 4.92 to 15.58)	1664107	1	0.000
AK101 nC6-nC10 ( 5.41 to 14.53)	1131784	1	0.000
NWTFPHG Tol-Nap (10.17 to 18.18)	882029	1007	0.001

M Indicates manual integration within range

\* Surrogate areas are subtracted from Total Area  
 Range marker RT's are set by daily RT standard

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.438	0.031	21760	99.0	TFT (Surr)
14.909	0.024	45472	99.7	BB (Surr)

SW8021 (PID)

RT	Shift	Response	Amount	Compound
ND	---	---	---	Benzene
ND	---	---	---	Toluene
ND	---	---	---	Ethylbenzene
ND	---	---	---	M/P-Xylene
ND	---	---	---	O-Xylene
ND	---	---	---	MTBE

A Indicates Peak Area was used for quantitation instead of Height  
 N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20100804-2.k/0804a014.d

Date : 04-AUG-2010 12:26

Client ID: PSB12-TB

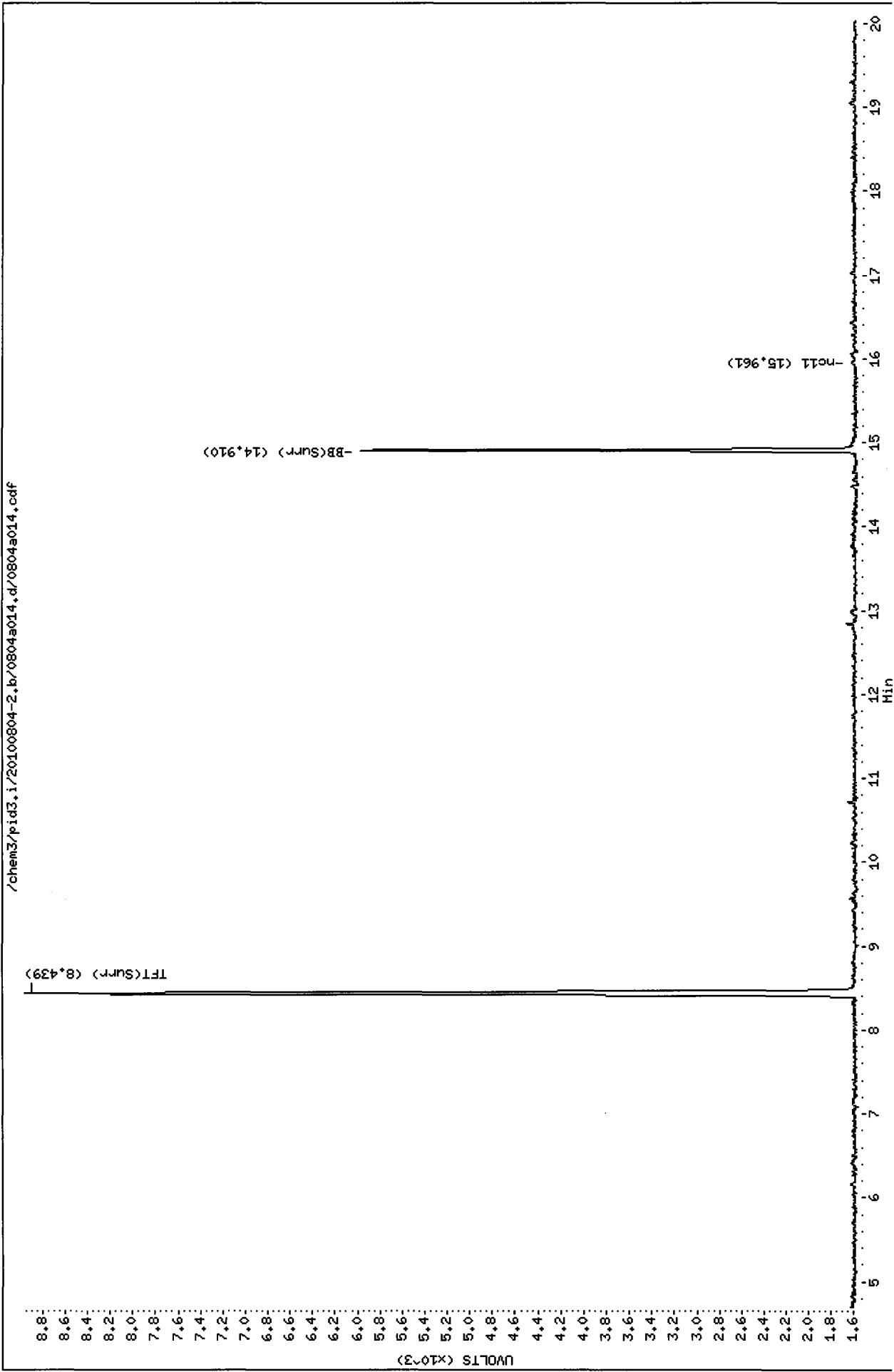
Sample Info: RG51H

Instrument: pid3.i

Operator: MH

Column diameter: 0.18

Column phase: RTX 502-2 FID



Analytical Resources Inc.  
 BETX/Gas Quantitation Report

AR static

Data file 1: /chem3/pid3.i/20100804-2.b/0804a015.d  
 Data file 2: /chem3/pid3.i/20100804-1.b/0804a015.d  
 Method: /chem3/pid3.i/20100804-1.b/PIDB.m  
 Instrument: pid3.i  
 Gas Ical Date: 28-JUL-2010  
 BETX Ical Date: 29-JUN-2010

ARI ID: RG51A  
 Client ID: PSB12-0-0.5-072810  
 Injection Date: 04-AUG-2010 12:50  
 Matrix: SOIL  
 Dilution Factor: 1.000

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.444	0.037	7145	84336	99.3	TFT (Surr)
14.912	0.026	4328	34749	100.5	BB (Surr)

PETROLEUM HYDROCARBONS (FID)

Range	RF	Total Area*	Amount
WAGas Tol-C12 (10.17 to 17.11)	827807	2196	0.003
8015B 2MP-TMB ( 4.92 to 15.58)	1664107	1	0.000
AK101 nC6-nC10 ( 5.41 to 14.53)	1131784	1	0.000
NWTPHG Tol-Nap (10.17 to 18.18)	882029	3695	0.004

M Indicates manual integration within range

\* Surrogate areas are subtracted from Total Area  
 Range marker RT's are set by daily RT standard

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.443	0.037	20857	94.9	TFT (Surr)
14.910	0.025	44048	96.6	BB (Surr)

SW8021 (PID)

RT	Shift	Response	Amount	Compound
ND	---	---	---	Benzene
ND	---	---	---	Toluene
ND	---	---	---	Ethylbenzene
ND	---	---	---	M/P-Xylene
ND	---	---	---	O-Xylene
ND	---	---	---	MTBE

A Indicates Peak Area was used for quantitation instead of Height  
 N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20100804-2.b/0804a015.d

Date : 04-AUG-2010 12:50

Client ID: PSE12-0-0.5-072810

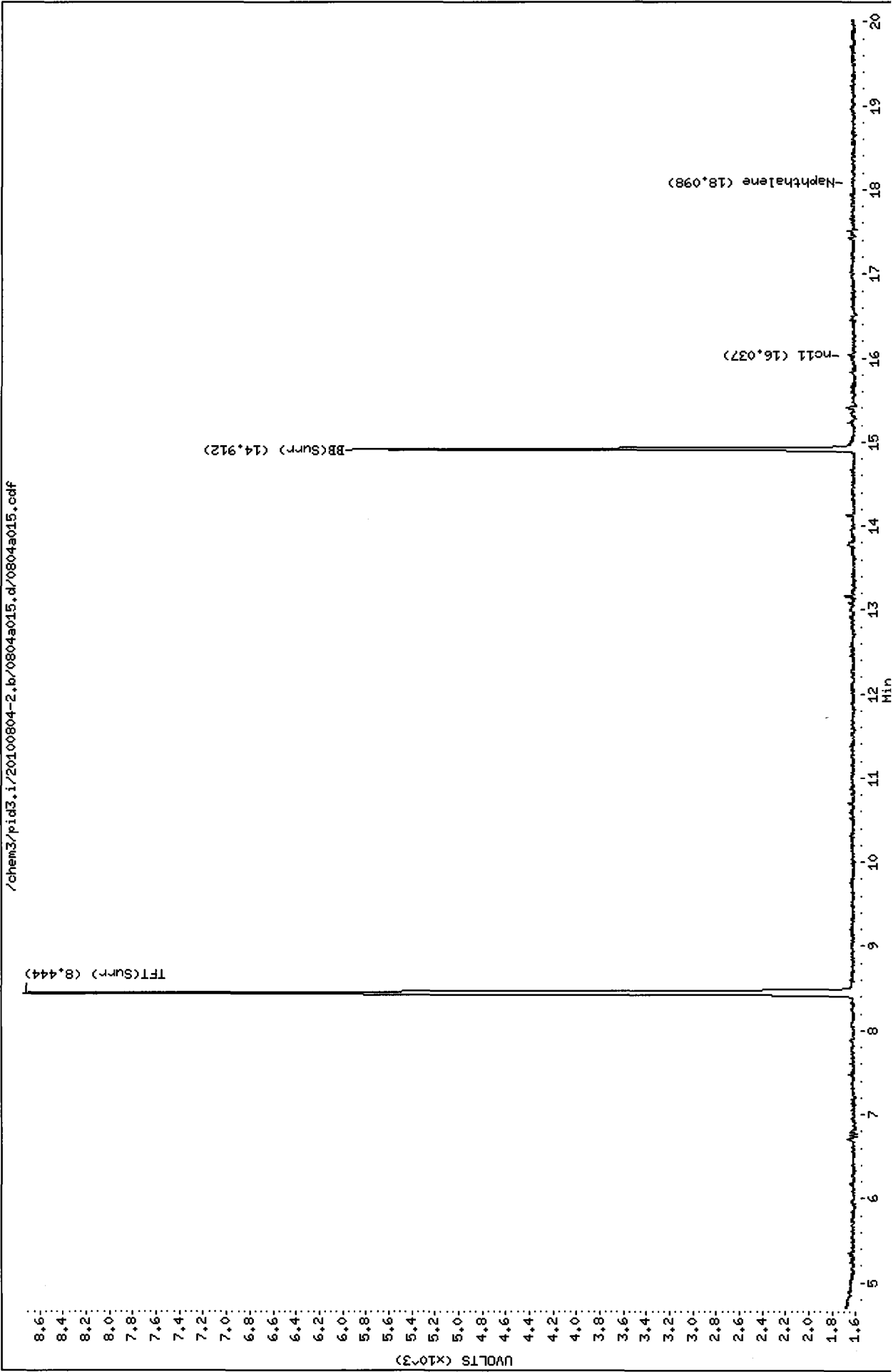
Sample Info: RG51A

Instrument: pid3.i

Operator: MH

Column diameter: 0.18

Column phase: RTX 502-2 FID



Analytical Resources Inc.  
 BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100804-2.b/0804a016.d  
 Data file 2: /chem3/pid3.i/20100804-1.b/0804a016.d  
 Method: /chem3/pid3.i/20100804-1.b/PIDB.m  
 Instrument: pid3.i  
 Gas Ical Date: 28-JUL-2010  
 BETX Ical Date: 29-JUN-2010

ARI ID: RG51B  
 Client ID: PSB12-1.5-2.0-07281  
 Injection Date: 04-AUG-2010 13:15  
 Matrix: SOIL  
 Dilution Factor: 1.000

AR 8/11/10

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.440	0.033	7143	84203	99.2	TFT (Surr)
14.911	0.025	4308	34843	100.0	BB (Surr)

PETROLEUM HYDROCARBONS (FID)

Range	RF	Total Area*	Amount
WAGas Tol-C12 (10.17 to 17.11)	827807	7523	0.009
8015B 2MP-TMB ( 4.92 to 15.58)	1664107	8582	0.005
AK101 nC6-nC10 ( 5.41 to 14.53)	1131784	7564	0.007
NWTPHG Tol-Nap (10.17 to 18.18)	882029	7523	0.009

M Indicates manual integration within range

\* Surrogate areas are subtracted from Total Area  
 Range marker RT's are set by daily RT standard

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.438	0.032	20974	95.4	TFT (Surr)
14.909	0.024	44240	97.0	BB (Surr)

SW8021 (PID)

RT	Shift	Response	Amount	Compound
ND	---	---	---	Benzene
ND	---	---	---	Toluene
ND	---	---	---	Ethylbenzene
ND	---	---	---	M/P-Xylene
ND	---	---	---	O-Xylene
ND	---	---	---	MTBE

A Indicates Peak Area was used for quantitation instead of Height  
 N Indicates peak peak was manually integrated



Data File: /chem3/pid3.i/20100804-2.b/0804a016.d

Date : 04-AUG-2010 13:15

Client ID: PSM12-1.5-2.0-07281

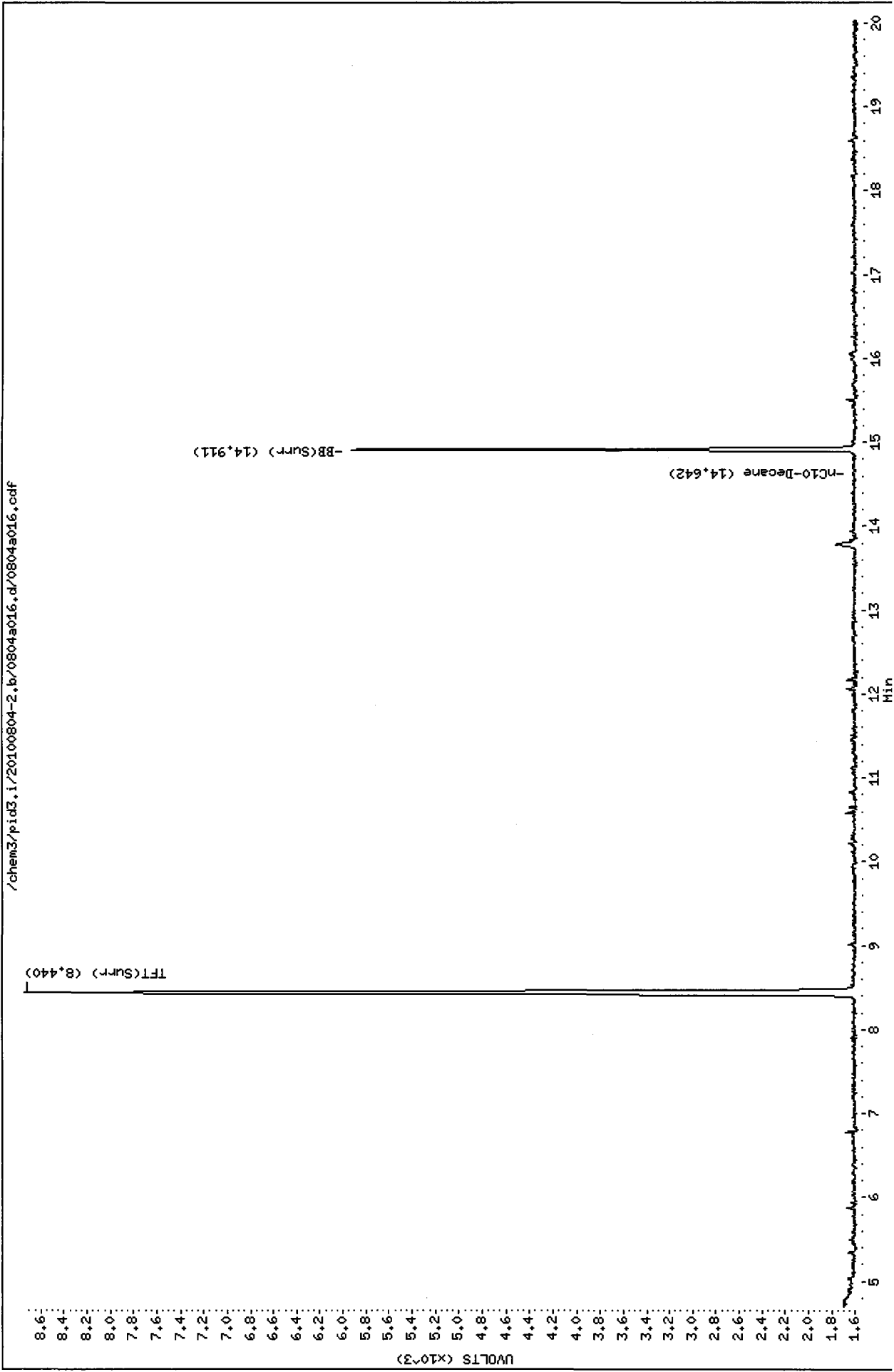
Sample Info: RG51B

Instrument: pid3.i

Operator: MH

Column diameter: 0.18

Column phase: RTX 502-2 FID



Analytical Resources Inc.  
 BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100804-2.b/0804a017.d  
 Data file 2: /chem3/pid3.i/20100804-1.b/0804a017.d  
 Method: /chem3/pid3.i/20100804-1.b/PIDB.m  
 Instrument: pid3.i  
 Gas Ical Date: 28-JUL-2010  
 BETX Ical Date: 29-JUN-2010

ARI ID: RG51C  
 Client ID: PSB12-2-4-072810  
 Injection Date: 04-AUG-2010 13:39  
 Matrix: SOIL  
 Dilution Factor: 1.000

AR 8/19/2010

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.440	0.032	6971	83185	96.9	TFT (Surr)
14.911	0.024	4248	35443	98.6	BB (Surr)

PETROLEUM HYDROCARBONS (FID)

Range	RF	Total Area*	Amount
WAGas Tol-C12 (10.17 to 17.11)	827807	23742	0.029
8015B 2MP-TMB ( 4.92 to 15.58)	1664107	23897	0.014
AK101 nC6-nC10 ( 5.41 to 14.53)	1131784	22777	0.020
NWTPHG Tol-Nap (10.17 to 18.18)	882029	23742	0.027

M Indicates manual integration within range

\* Surrogate areas are subtracted from Total Area  
 Range marker RT's are set by daily RT standard

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.439	0.033	20327	92.5	TFT (Surr)
14.909	0.024	43349	95.1	BB (Surr)

SW8021 (PID)

RT	Shift	Response	Amount	Compound
ND	---	---	---	Benzene
ND	---	---	---	Toluene
ND	---	---	---	Ethylbenzene
ND	---	---	---	M/P-Xylene
ND	---	---	---	O-Xylene
ND	---	---	---	MTBE

A Indicates Peak Area was used for quantitation instead of Height  
 N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20100804-2.b/0804a017.d

Date : 04-AUG-2010 13:39

Client ID: PSB12-2-4-072810

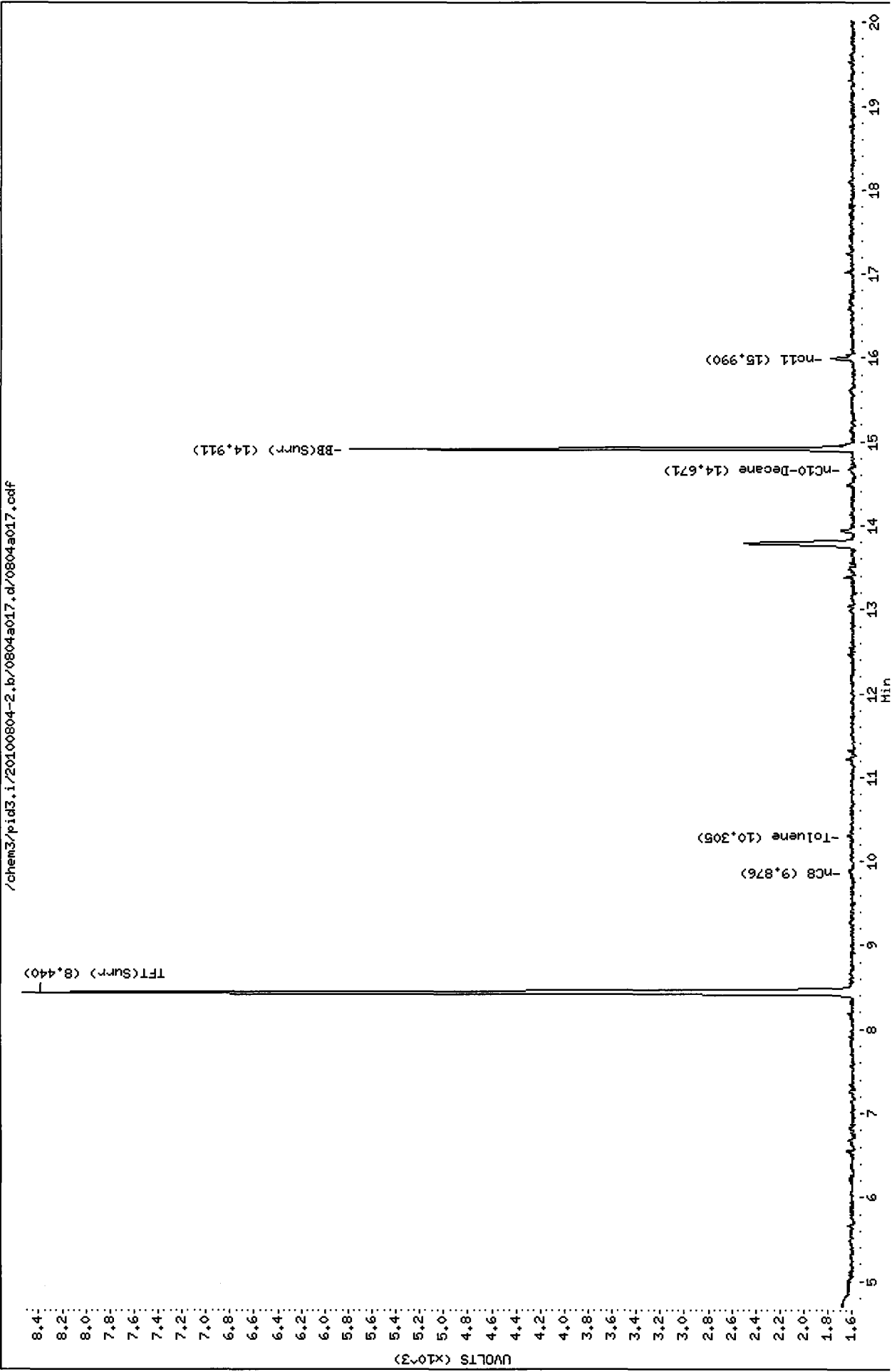
Sample Info: RG51C

Instrument: pid3.i

Operator: MH

Column diameter: 0.18

Column phase: RTX 502-2 FID



Analytical Resources Inc.  
 BETX/Gas Quantitation Report

AR 8/19/2010

Data file 1: /chem3/pid3.i/20100804-2.b/0804a018.d  
 Data file 2: /chem3/pid3.i/20100804-1.b/0804a018.d  
 Method: /chem3/pid3.i/20100804-1.b/PIDB.m  
 Instrument: pid3.i  
 Gas Ical Date: 28-JUL-2010  
 BETX Ical Date: 29-JUN-2010

ARI ID: RG51D  
 Client ID: PSB12-8-10-072810  
 Injection Date: 04-AUG-2010 14:04  
 Matrix: SOIL  
 Dilution Factor: 1.000

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.440	0.032	6927	81949	96.2	TFT (Surr)
14.911	0.024	4157	34149	96.5	BB (Surr)

PETROLEUM HYDROCARBONS (FID)

Range	RF	Total Area*	Amount
WAGas Tol-C12 (10.17 to 17.11)	827807	33597	0.041
8015B 2MP-TMB ( 4.92 to 15.58)	1664107	29127	0.018
AK101 nC6-nC10 ( 5.41 to 14.53)	1131784	29126	0.026
NWTPHG Tol-Nap (10.17 to 18.18)	882029	33597	0.038

M Indicates manual integration within range

\* Surrogate areas are subtracted from Total Area  
 Range marker RT's are set by daily RT standard

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.439	0.033	20085	91.4	TFT (Surr)
14.909	0.024	42953	94.2	BB (Surr)

SW8021 (PID)

RT	Shift	Response	Amount	Compound
ND	---	---	---	Benzene
ND	---	---	---	Toluene
ND	---	---	---	Ethylbenzene
ND	---	---	---	M/P-Xylene
ND	---	---	---	O-Xylene
ND	---	---	---	MTBE

A Indicates Peak Area was used for quantitation instead of Height  
 N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20100804-2.b/0804a018.d

Date : 04-AUG-2010 14:04

Client ID: PSE12-8-10-072810

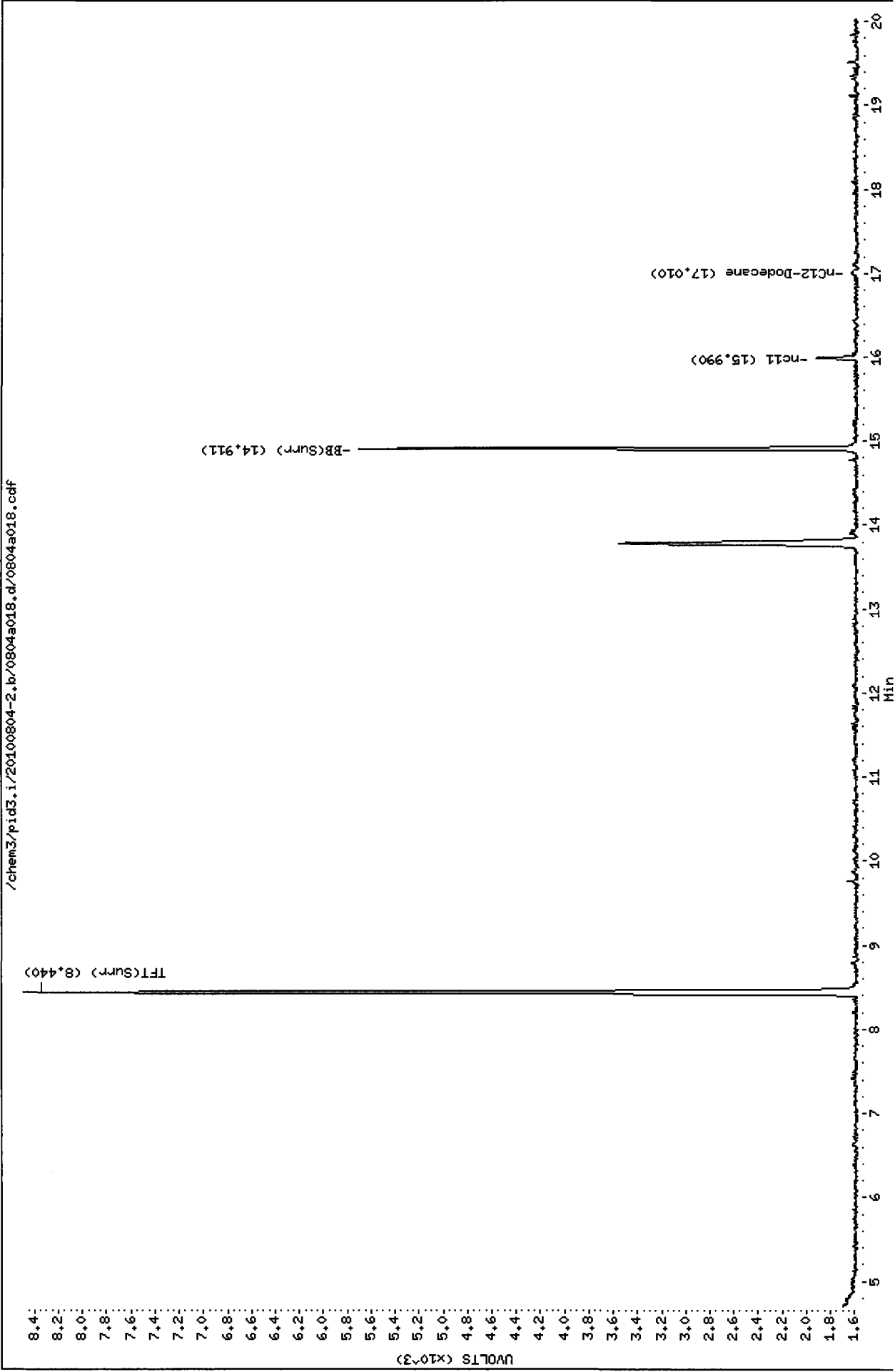
Sample Info: RG51D

Instrument: pid3.i

Operator: MH

Column diameter: 0.18

Column phase: RTX 502-2 FID



Analytical Resources Inc.  
 BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100804-2.b/0804a019.d  
 Data file 2: /chem3/pid3.i/20100804-1.b/0804a019.d  
 Method: /chem3/pid3.i/20100804-1.b/PIDB.m  
 Instrument: pid3.i  
 Gas Ical Date: 28-JUL-2010  
 BETX Ical Date: 29-JUN-2010

ARI ID: RG51E *AR 8/10/10*  
 Client ID: PSB12-8-10-072810-D  
 Injection Date: 04-AUG-2010 14:29  
 Matrix: SOIL  
 Dilution Factor: 1.000

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.440	0.033	7081	84017	98.4	TFT (Surr)
14.911	0.025	4326	35371	100.4	BB (Surr)

PETROLEUM HYDROCARBONS (FID)

Range	RF	Total Area*	Amount
WAGas Tol-C12 (10.17 to 17.11)	827807	3551	0.004
8015B 2MP-TMB ( 4.92 to 15.58)	1664107	3551	0.002
AK101 nC6-nC10 ( 5.41 to 14.53)	1131784	2438	0.002
NWTPHG Tol-Nap (10.17 to 18.18)	882029	3551	0.004 <i>WR</i>

M Indicates manual integration within range

\* Surrogate areas are subtracted from Total Area  
 Range marker RT's are set by daily RT standard

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.439	0.033	20479	93.2	TFT (Surr)
14.909	0.024	44325	97.2	BB (Surr)

SW8021 (PID)

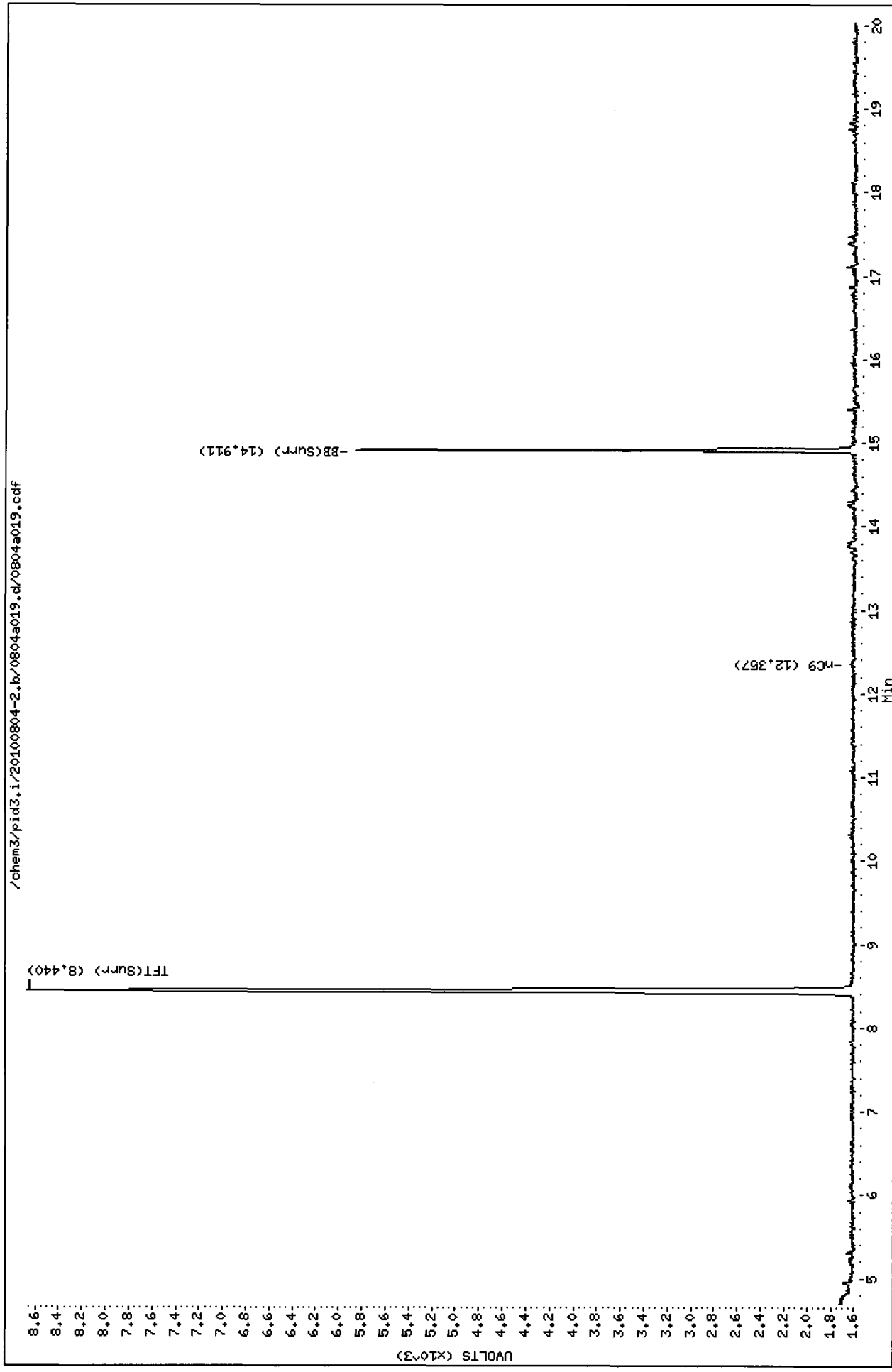
RT	Shift	Response	Amount	Compound
ND	---	---	---	Benzene
ND	---	---	---	Toluene
ND	---	---	---	Ethylbenzene <i>IP</i>
ND	---	---	---	M/P-Xylene
ND	---	---	---	O-Xylene
ND	---	---	---	MTBE

A Indicates Peak Area was used for quantitation instead of Height  
 N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20100804-2.b/0804a019.d  
Date : 04-AUG-2010 14:29  
Client ID: PSB12-8-10-072810-D  
Sample Info: R051E

Instrument: pid3.i  
Operator: MH  
Column diameter: 0.18

Column phase: RTX 502-2 FID



Analytical Resources Inc.  
 BETX/Gas Quantitation Report

AR 8/9/2010

Data file 1: /chem3/pid3.i/20100804-2.b/0804a020.d  
 Data file 2: /chem3/pid3.i/20100804-1.b/0804a020.d  
 Method: /chem3/pid3.i/20100804-1.b/PIDB.m  
 Instrument: pid3.i  
 Gas Ical Date: 28-JUL-2010  
 BETX Ical Date: 29-JUN-2010

ARI ID: RG51F  
 Client ID: PSB12-14-17-072810  
 Injection Date: 04-AUG-2010 14:54  
 Matrix: SOIL  
 Dilution Factor: 1.000

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.441	0.034	6855	81351	95.2	TFT(Surr)
14.912	0.026	4125	34148	95.8	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range	RF	Total Area*	Amount
WAGas Tol-C12 (10.17 to 17.11)	827807	3605	0.004
8015B 2MP-TMB ( 4.92 to 15.58)	1664107	2449	0.001
AK101 nC6-nC10 ( 5.41 to 14.53)	1131784	2449	0.002
NWTPHG Tol-Nap (10.17 to 18.18)	882029	3605	0.004

M Indicates manual integration within range

\* Surrogate areas are subtracted from Total Area  
 Range marker RT's are set by daily RT standard

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.440	0.034	19921	90.6	TFT(Surr)
14.910	0.025	42001	92.1	BB(Surr)

SW8021 (PID)

RT	Shift	Response	Amount	Compound
ND	---	---	---	Benzene
ND	---	---	---	Toluene
ND	---	---	---	Ethylbenzene
ND	---	---	---	M/P-Xylene
ND	---	---	---	O-Xylene
ND	---	---	---	MTBE

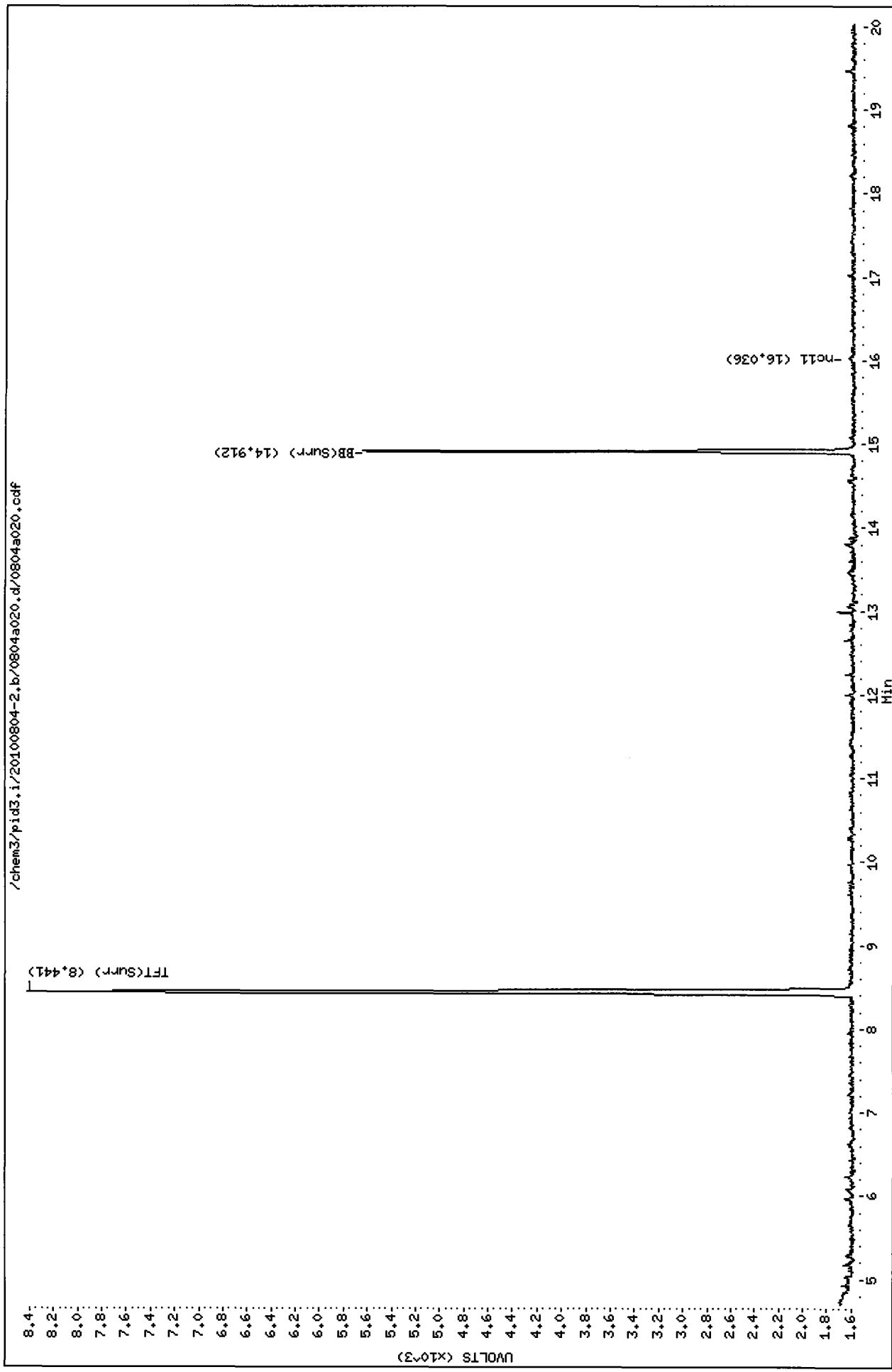
A Indicates Peak Area was used for quantitation instead of Height  
 N Indicates peak peak was manually integrated



Data File: /chem3/pid3.i/20100804-2.b/0804a020.d  
Date : 04-AUG-2010 14:54  
Client ID: PSB12-14-17-072810  
Sample Info: RG51F

Instrument: pid3.i  
Operator: MH  
Column diameter: 0.18

Column phase: RTX 502-2 FID



Analytical Resources Inc.  
 BETX/Gas Quantitation Report

AR 5/10

Data file 1: /chem3/pid3.i/20100804-2.b/0804a021.d  
 Data file 2: /chem3/pid3.i/20100804-1.b/0804a021.d  
 Method: /chem3/pid3.i/20100804-1.b/PIDB.m  
 Instrument: pid3.i  
 Gas Ical Date: 28-JUL-2010  
 BETX Ical Date: 29-JUN-2010

ARI ID: RG51FMS  
 Client ID: PSB12-14-17-072 MS  
 Injection Date: 04-AUG-2010 15:18  
 Matrix: SOIL  
 Dilution Factor: 1.000

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.440	0.033	7135	84625	99.1	TFT (Surr)
14.912	0.025	4251	35624	98.7	BB (Surr)

PETROLEUM HYDROCARBONS (FID)

Range	RF	Total Area*	Amount
WAGas Tol-C12 (10.17 to 17.11)	827807	769900	0.930 M
8015B 2MP-TMB ( 4.92 to 15.58)	1664107	1544789	0.928 M
AK101 nC6-nC10 ( 5.41 to 14.53)	1131784	1045890	0.924 M
NWTPHG Tol-Nap (10.17 to 18.18)	882029	815616	0.925 M

M Indicates manual integration within range

\* Surrogate areas are subtracted from Total Area  
 Range marker RT's are set by daily RT standard

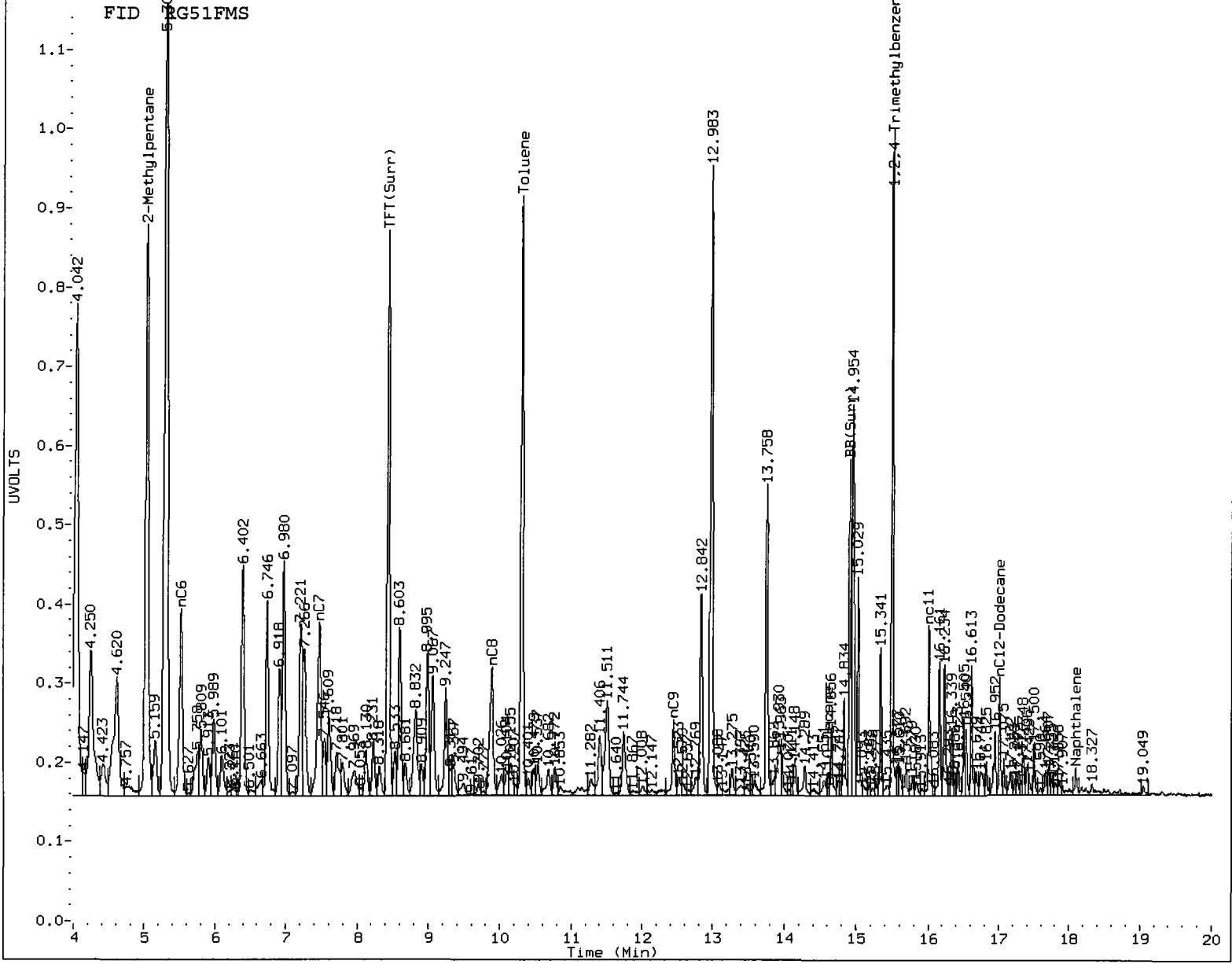
PID Surrogates

RT	Shift	Response	%Rec	Compound
8.439	0.033	20860	94.9	TFT (Surr)
14.910	0.025	44064	96.7	BB (Surr)

SW8021 (PID)

RT	Shift	Response	Amount	Compound
7.716	0.030	2719	2.06	Benzene
10.306	0.036	36341	27.53	Toluene
12.841	0.038	10538	8.48	Ethylbenzene
12.981	0.040	40690	30.22	M/P-Xylene
13.757	0.033	17024	13.25	O-Xylene
5.307	0.019	32099	90.22	MTBE

A Indicates Peak Area was used for quantitation instead of Height  
 N Indicates peak peak was manually integrated



MANUAL INTEGRATION

- 1. Baseline correction
- 2. Poor chromatography
- 3. Peak not found
- 4. Totals calculation
- 5. Other \_\_\_\_\_

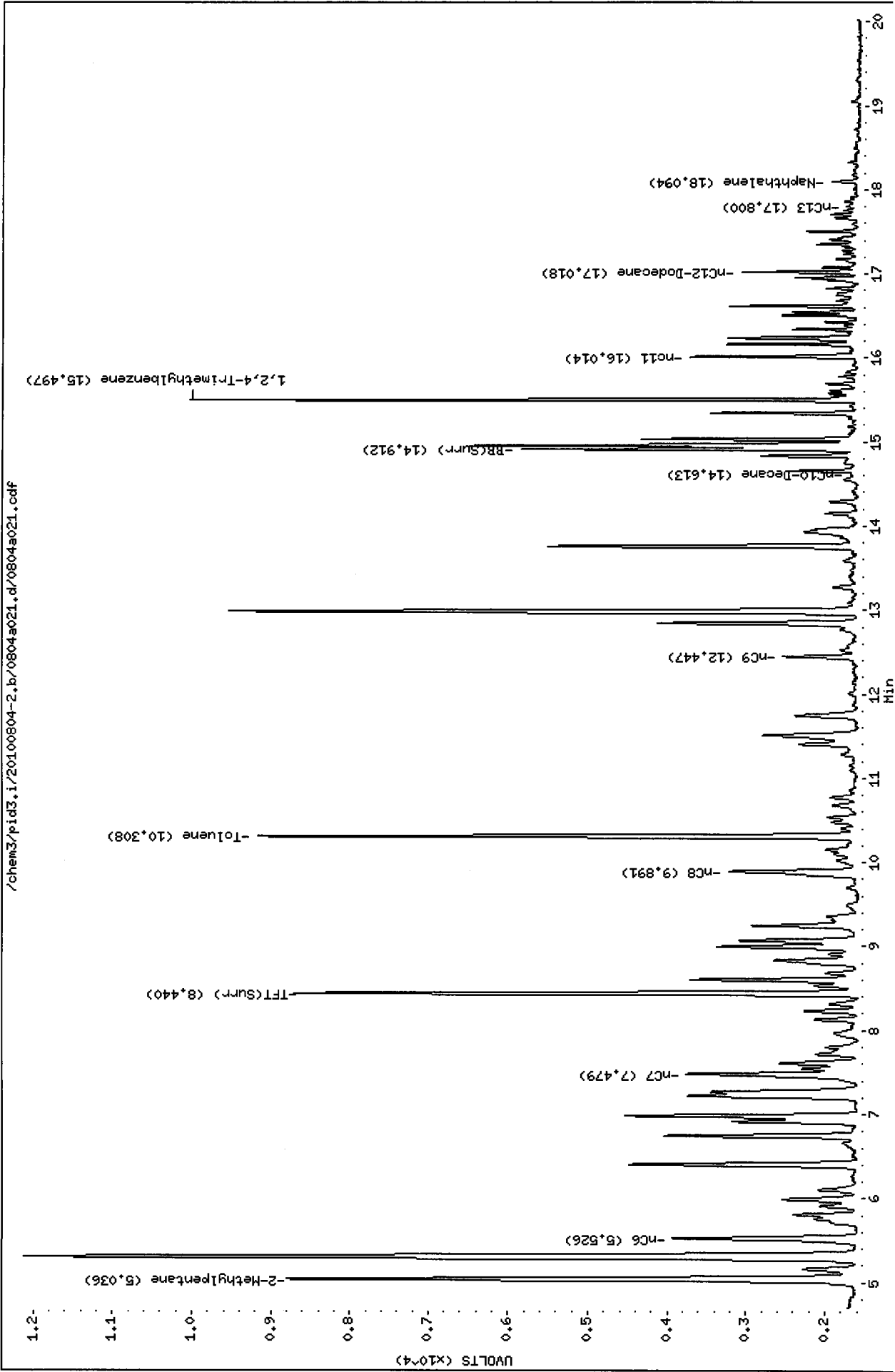
Analyst: AR Date: 8/9/10

Data File: /chem3/pid3.i/20100804-2.b/0804s021.d  
Date : 04-AUG-2010 15:18  
Client ID: PSB12-14-17-072 MS  
Sample Info: RG51FMS

Instrument: pid3.i

Operator: MH  
Column diameter: 0.18

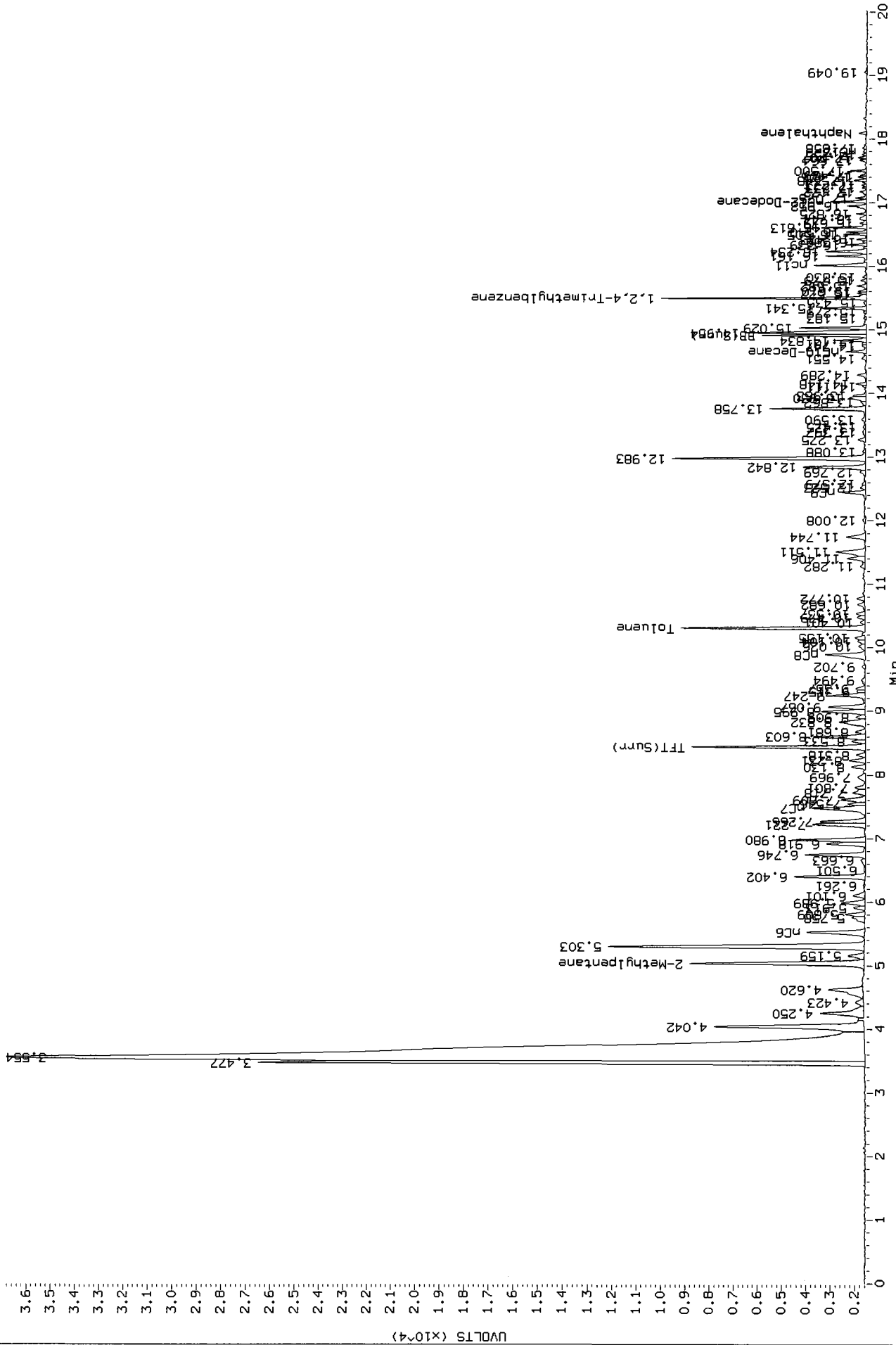
Column phase: RTX 502-2 FID



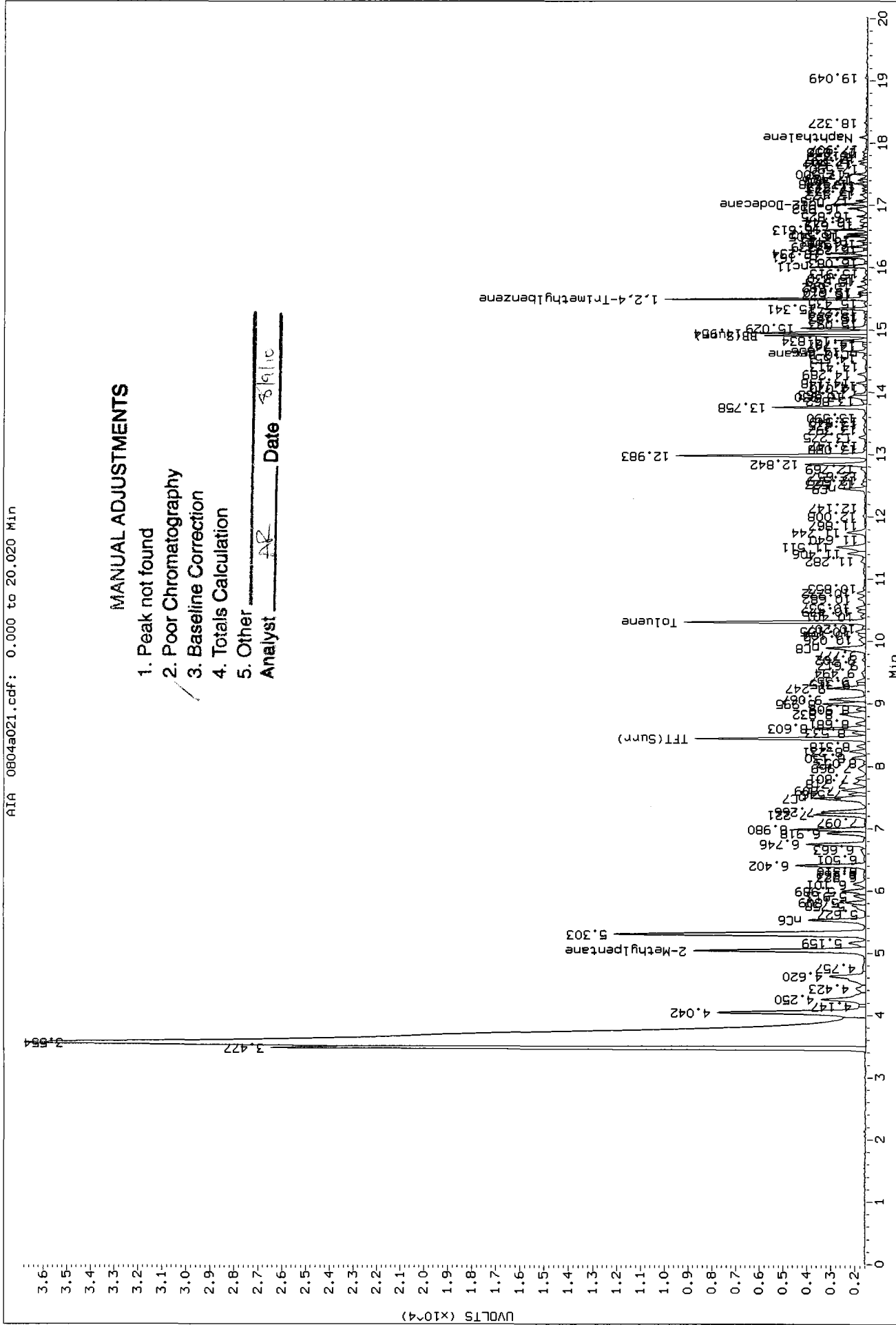
Data File: /chem3/pid3.1/20100804-2.b/0804a021.d/0804a021.cdf  
 Injection Date: 04-AUG-2010 15:18  
 Instrument: pid3.1  
 Client Sample ID: PSB12-14-17-072 MS

Before AR 8/19/10

AIA 0804a021.cdf: 0.000 to 20.020 Min



Data File: /chem3/pid3.1/20100804-2.b/0804a021.d/0804a021.cdf  
 Injection Date: 04-AUG-2010 15:18  
 Instrument: pid3.1  
 Client Sample ID: PSB12-14-17-072 MS



Analytical Resources Inc.  
 BETX/Gas Quantitation Report

AR 8/16/10

Data file 1: /chem3/pid3.i/20100804-2.b/0804a022.d      ARI ID: RG51FMSD  
 Data file 2: /chem3/pid3.i/20100804-1.b/0804a022.d      Client ID: PSB12-14-17-072 MSD  
 Method: /chem3/pid3.i/20100804-1.b/PIDB.m              Injection Date: 04-AUG-2010 15:43  
 Instrument: pid3.i    Matrix: SOIL  
 Gas Ical Date: 28-JUL-2010                                  Dilution Factor: 1.000  
 BETX Ical Date: 29-JUN-2010

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.440	0.032	8000	94389	111.1	TFT (Surr)
14.911	0.025	4684	38191	108.8	BB (Surr)

PETROLEUM HYDROCARBONS (FID)

Range	RF	Total Area*	Amount
WAGas Tol-C12 (10.17 to 17.11)	827807	878570	1.061 M
8015B 2MP-TMB ( 4.92 to 15.58)	1664107	1733452	1.042 M
AK101 nC6-nC10 ( 5.41 to 14.53)	1131784	1170624	1.034 M
NWTPHG Tol-Nap (10.17 to 18.18)	882029	936246	1.061 M

M Indicates manual integration within range

\* Surrogate areas are subtracted from Total Area  
 Range marker RT's are set by daily RT standard

PID Surrogates

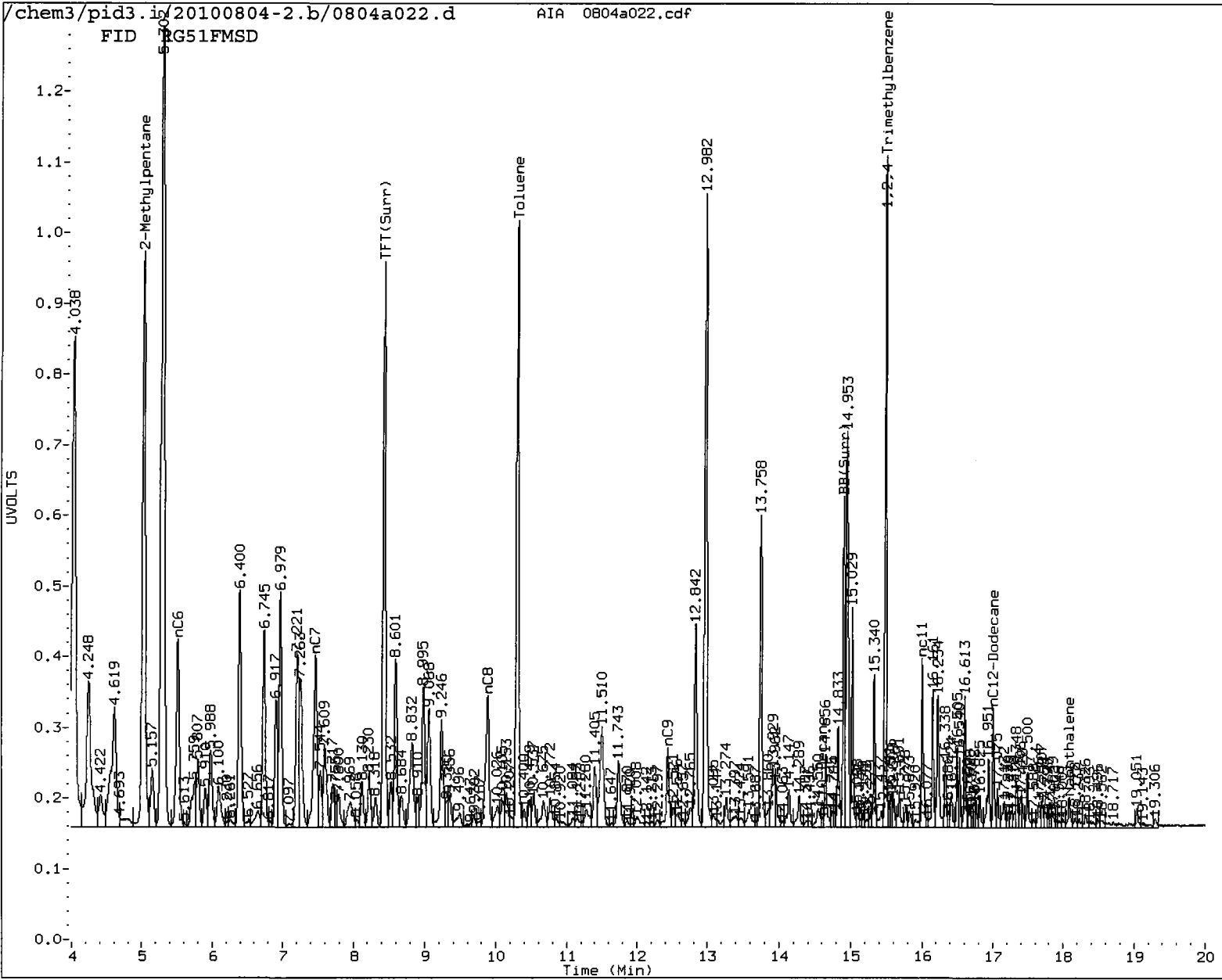
RT	Shift	Response	%Rec	Compound
8.438	0.032	23368	106.3	TFT (Surr)
14.909	0.024	48246	105.8	BB (Surr)

SW8021 (PID)

RT	Shift	Response	Amount	Compound
7.715	0.029	3089	2.34	Benzene
10.305	0.035	41035	31.09	Toluene
12.840	0.037	11931	9.60	Ethylbenzene
12.980	0.039	46176	34.29	M/P-Xylene
13.756	0.033	19068	14.84	O-Xylene
5.306	0.018	35850	100.76	MTBE

A Indicates Peak Area was used for quantitation instead of Height  
 N Indicates peak peak was manually integrated

FID RG51FMSD



MANUAL INTEGRATION

- 1. Baseline correction
- 2. Poor chromatography
- 3. Peak not found
- 4. Totals calculation

5. Other \_\_\_\_\_

Analyst: AR Date: 8/9/10

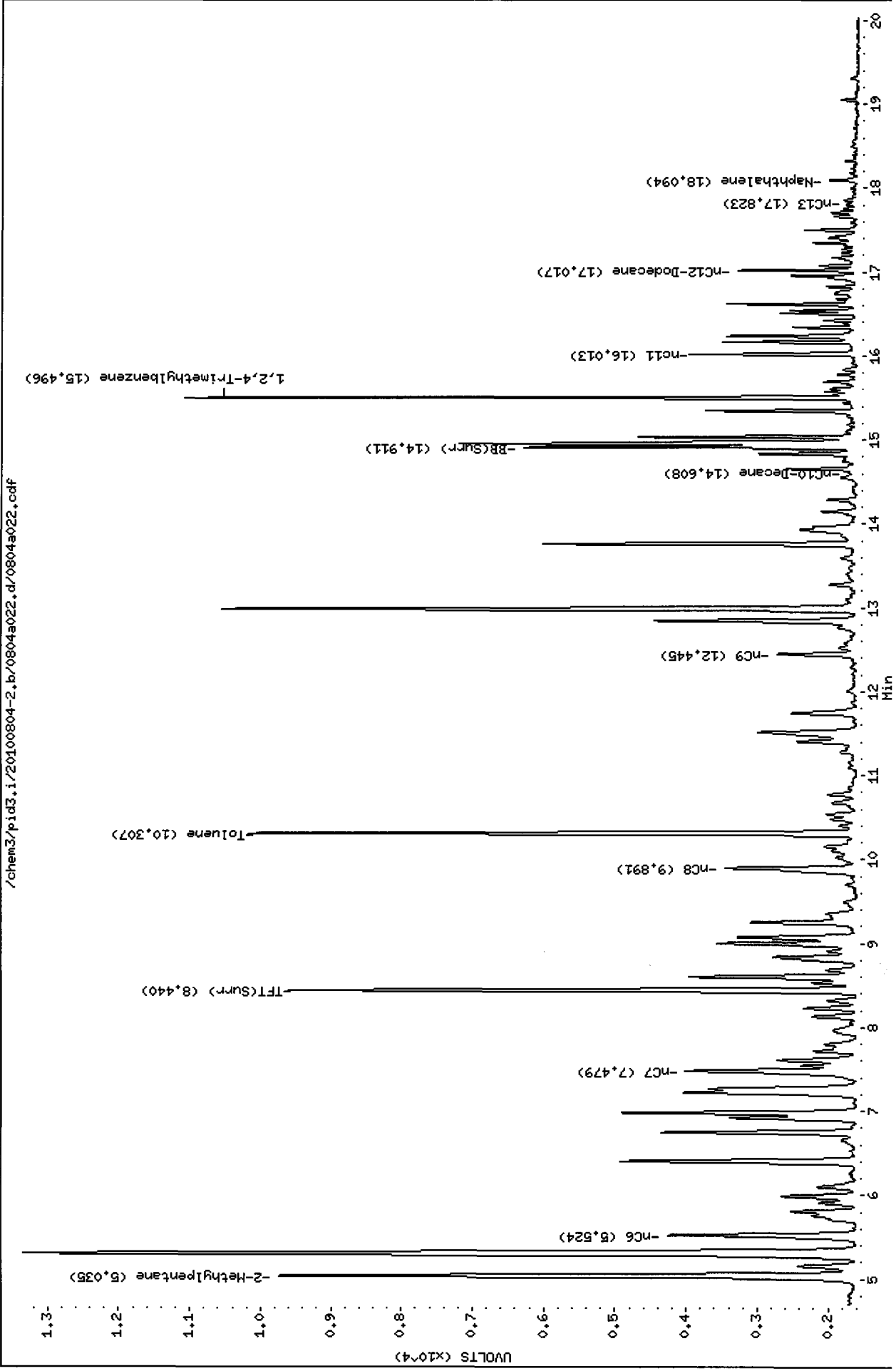


Data File: /chem3/pid3.i/20100804-2.b/0804a022.d  
Date : 04-AUG-2010 15:43  
Client ID: PSB12-14-17-072 MSD  
Sample Info: RG51FMSD

Instrument: pid3.i

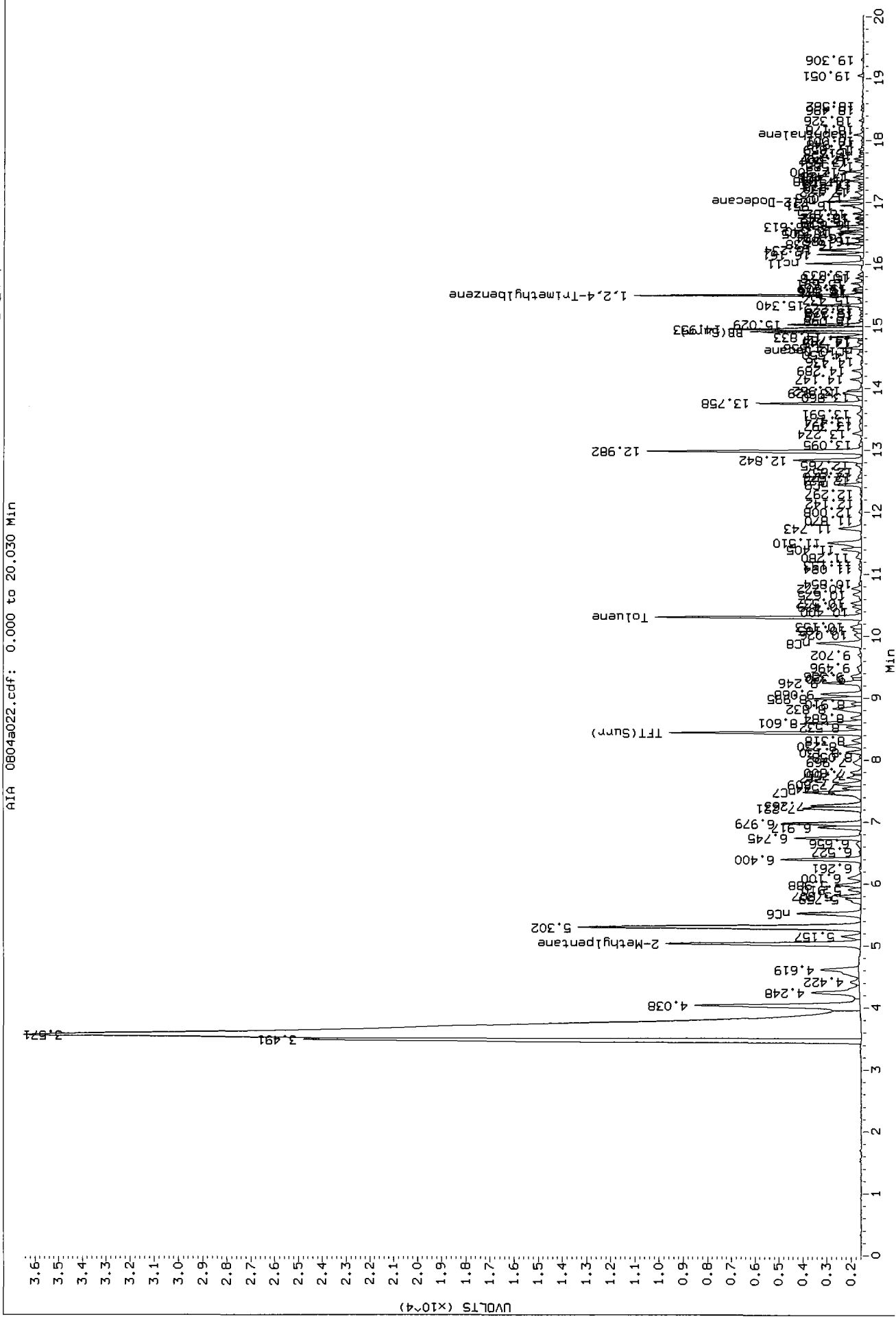
Operator: MH  
Column diameter: 0.18

Column phase: RTX 502-2 FID



Data File: /chem3/pid3.1/20100804-2.b/0804a022.d/0804a022.cdf  
 Injection Date: 04-AUG-2010 15:43  
 Instrument: pid3.1  
 Client Sample ID: PSB12-14-17-072 MSD

Before AR 8/4/10





Analytical Resources Inc.  
 BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100804-2.b/0804a023.d  
 Data file 2: /chem3/pid3.i/20100804-1.b/0804a023.d  
 Method: /chem3/pid3.i/20100804-1.b/PIDB.m  
 Instrument: pid3.i  
 Gas Ical Date: 28-JUL-2010  
 BETX Ical Date: 29-JUN-2010

ARI ID: RG51G  
 Client ID: PSB12-4-6-072810  
 Injection Date: 04-AUG-2010 16:08  
 Matrix: SOIL  
 Dilution Factor: 1.000

AR 8/19/2010

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.441	0.033	7155	84878	99.4	TFT(Surr)
14.912	0.025	4360	35923	101.2	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range	RF	Total Area*	Amount
WAGas Tol-C12 (10.17 to 17.11)	827807	39972	0.048
8015B 2MP-TMB ( 4.92 to 15.58)	1664107	35666	0.021
AK101 nC6-nC10 ( 5.41 to 14.53)	1131784	35665	0.032
NWTPHG Tol-Nap (10.17 to 18.18)	882029	41091	0.047

M Indicates manual integration within range

\* Surrogate areas are subtracted from Total Area  
 Range marker RT's are set by daily RT standard

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.439	0.033	21033	95.7	TFT(Surr)
14.910	0.025	44575	97.8	BB(Surr)

SW8021 (PID)

RT	Shift	Response	Amount	Compound
ND	---	---	---	Benzene
ND	---	---	---	Toluene
ND	---	---	---	Ethylbenzene
ND	---	---	---	M/P-Xylene
ND	---	---	---	O-Xylene
ND	---	---	---	MTBE

A Indicates Peak Area was used for quantitation instead of Height  
 N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20100804-2.b/0804a023.d

Date : 04-AUG-2010 16:08

Client ID: PSB12-4-6-072810

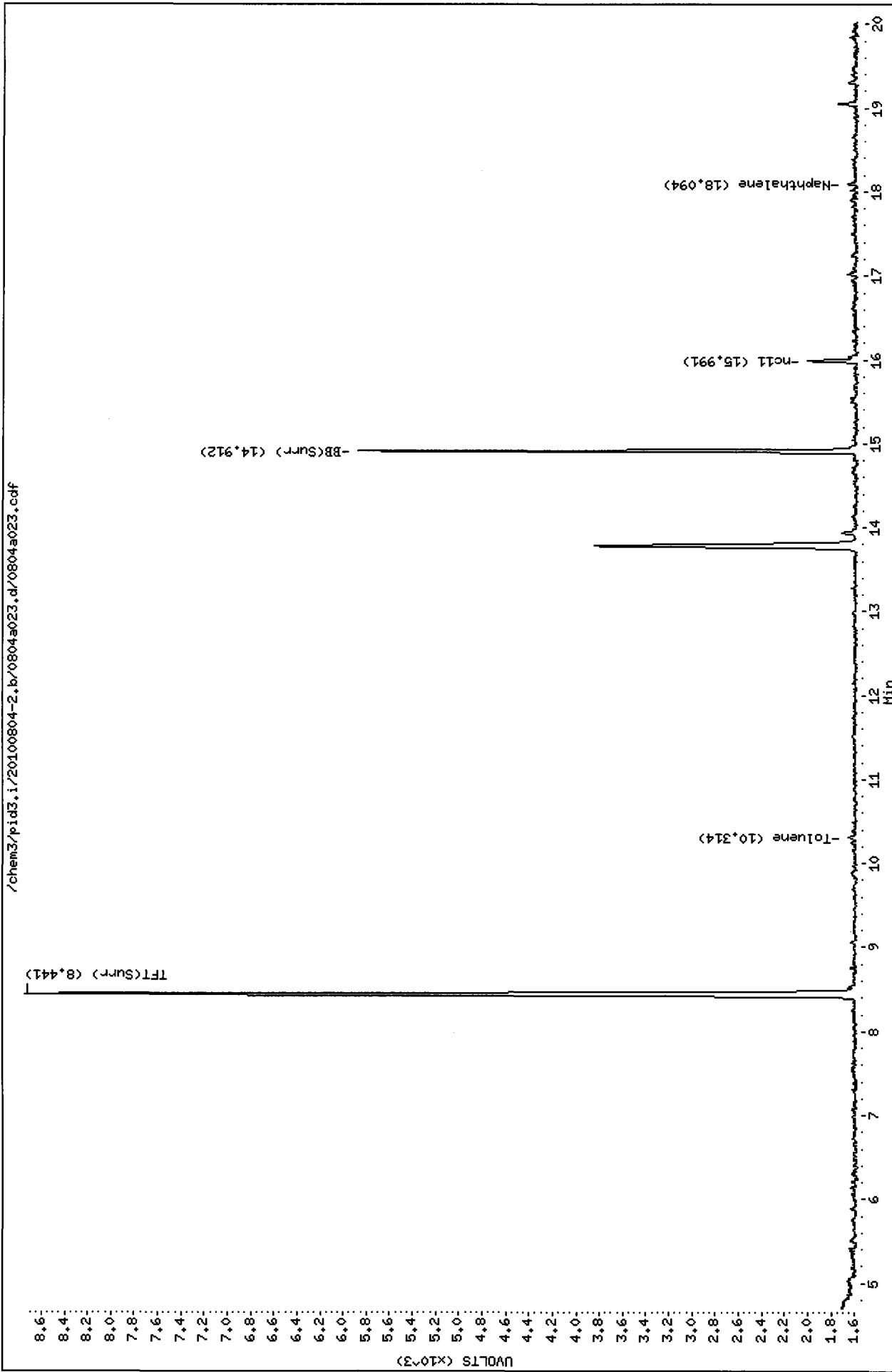
Sample Info: RG51C

Instrument: pid3.i

Operator: MH

Column diameter: 0.18

Column phase: RTX 502-2 FID



/chem3/pid3.i/20100804-2.b/0804a023.d/0804a023.caf

Analytical Resources Inc.  
 BETX/Gas Quantitation Report

AR 8/10

Data file 1: /chem3/pid3.i/20100804-2.b/0804a025.d  
 Data file 2: /chem3/pid3.i/20100804-1.b/0804a025.d  
 Method: /chem3/pid3.i/20100804-1.b/PIDB.m  
 Instrument: pid3.i  
 Gas Ical Date: 28-JUL-2010  
 BETX Ical Date: 29-JUN-2010

ARI ID: BCAL3  
 Client ID:  
 Injection Date: 04-AUG-2010 16:57  
 Matrix: WATER  
 Dilution Factor: 1.000

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.441	0.033	7181	84251	99.8	TFT (Surr)
14.912	0.025	4452	35482	103.4	BB (Surr)

PETROLEUM HYDROCARBONS (FID)

Range	RF	Total Area*	Amount
WAGas Tol-C12 (10.17 to 17.11)	827807	541562	0.654
8015B 2MP-TMB ( 4.92 to 15.58)	1664107	547475	0.329
AK101 nC6-nC10 ( 5.41 to 14.53)	1131784	511362	0.452
NWTPHG Tol-Nap (10.17 to 18.18)	882029	541562	0.614

M Indicates manual integration within range

\* Surrogate areas are subtracted from Total Area  
 Range marker RT's are set by daily RT standard

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.440	0.034	21074	95.9	TFT (Surr)
14.910	0.025	45737	100.3	BB (Surr)

SW8021 (PID)

RT	Shift	Response	Amount	Compound
7.715	0.029	33863	25.61	Benzene
10.307	0.037	32726	24.80	Toluene
12.774	-0.030	34202	27.52	Ethylbenzene
12.980	0.039	64990	48.26	M/P-Xylene
13.758	0.034	32034	24.93	O-Xylene
5.304	0.016	9268	26.05	MTBE

A Indicates Peak Area was used for quantitation instead of Height  
 N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20100804-2.b/0804a025.d

Date : 04-AUG-2010 16:57

Client ID:

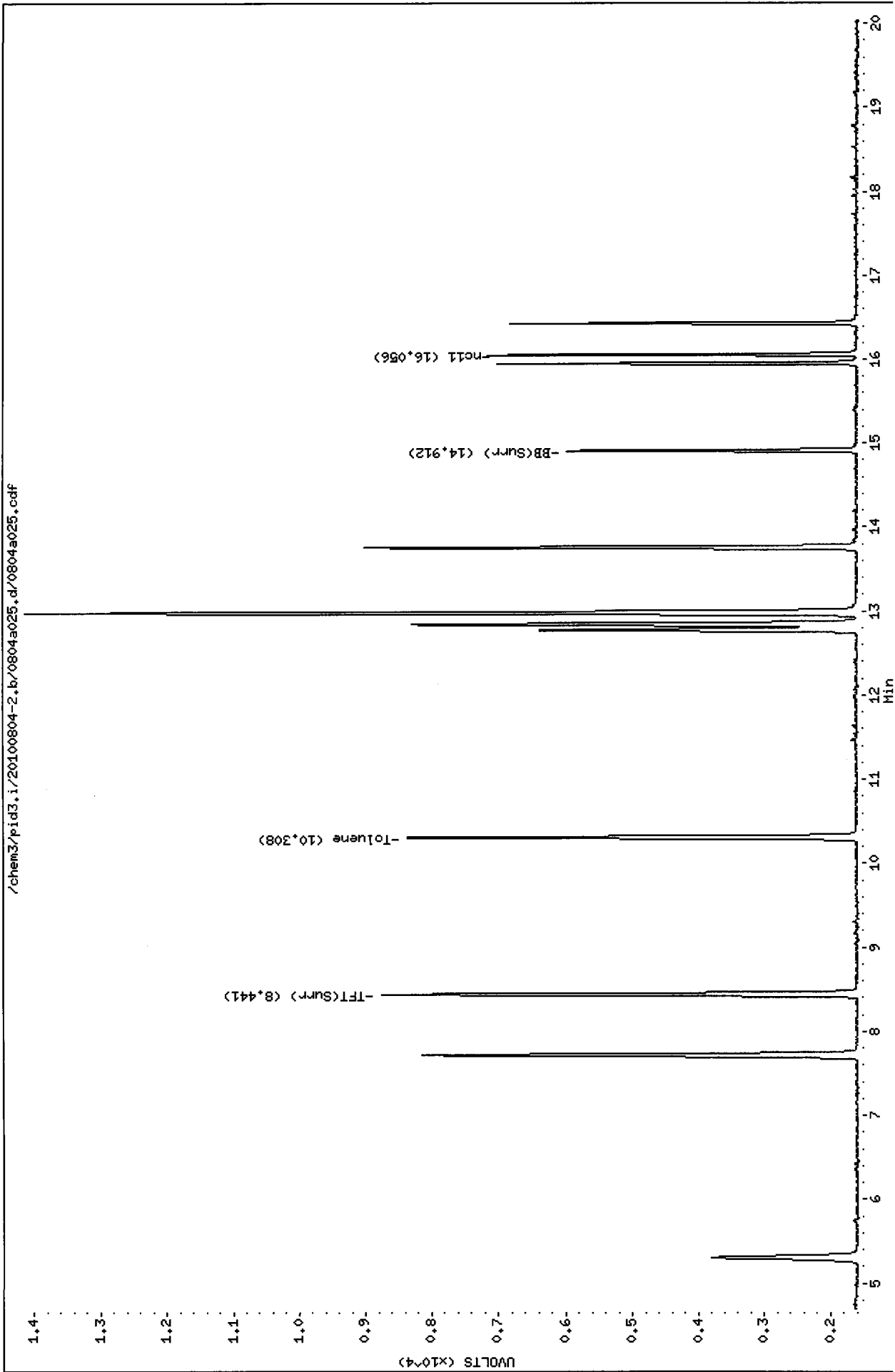
Sample Info: BCAL3

Instrument: pid3.i

Operator: MH

Column diameter: 0.18

Column phase: RTX 502-2 FID



Analytical Resources Inc.  
 BETX/Gas Quantitation Report

AR 8/4/10

Data file 1: /chem3/pid3.i/20100804-2.b/0804a026.d  
 Data file 2: /chem3/pid3.i/20100804-1.b/0804a026.d  
 Method: /chem3/pid3.i/20100804-1.b/PIDB.m  
 Instrument: pid3.i  
 Gas Ical Date: 28-JUL-2010  
 BETX Ical Date: 29-JUN-2010

ARI ID: GCAL3  
 Client ID:  
 Injection Date: 04-AUG-2010 17:22  
 Matrix: WATER  
 Dilution Factor: 1.000

=====

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
--	----	-----	-----	-----	-----
8.440	0.033	7323	87012	101.7	TFT(Surr)
14.912	0.026	4412	37444	102.4	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

-----

Range	RF	Total Area*	Amount
-----	-----	-----	-----
WAGas Tol-C12 (10.17 to 17.11)	827807	1874414	2.264 M
8015B 2MP-TMB ( 4.92 to 15.58)	1664107	3684297	2.214 M
AK101 nC6-nC10 ( 5.41 to 14.53)	1131784	2468832	2.181 M
NWTPHG Tol-Nap (10.17 to 18.18)	882029	1980636	2.246 M <i>89.8%</i>

M Indicates manual integration within range

\* Surrogate areas are subtracted from Total Area  
 Range marker RT's are set by daily RT standard

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PID Surrogates

RT	Shift	Response	%Rec	Compound
--	----	-----	-----	-----
8.439	0.033	21332	97.0	TFT(Surr)
14.910	0.025	45265	99.3	BB(Surr)

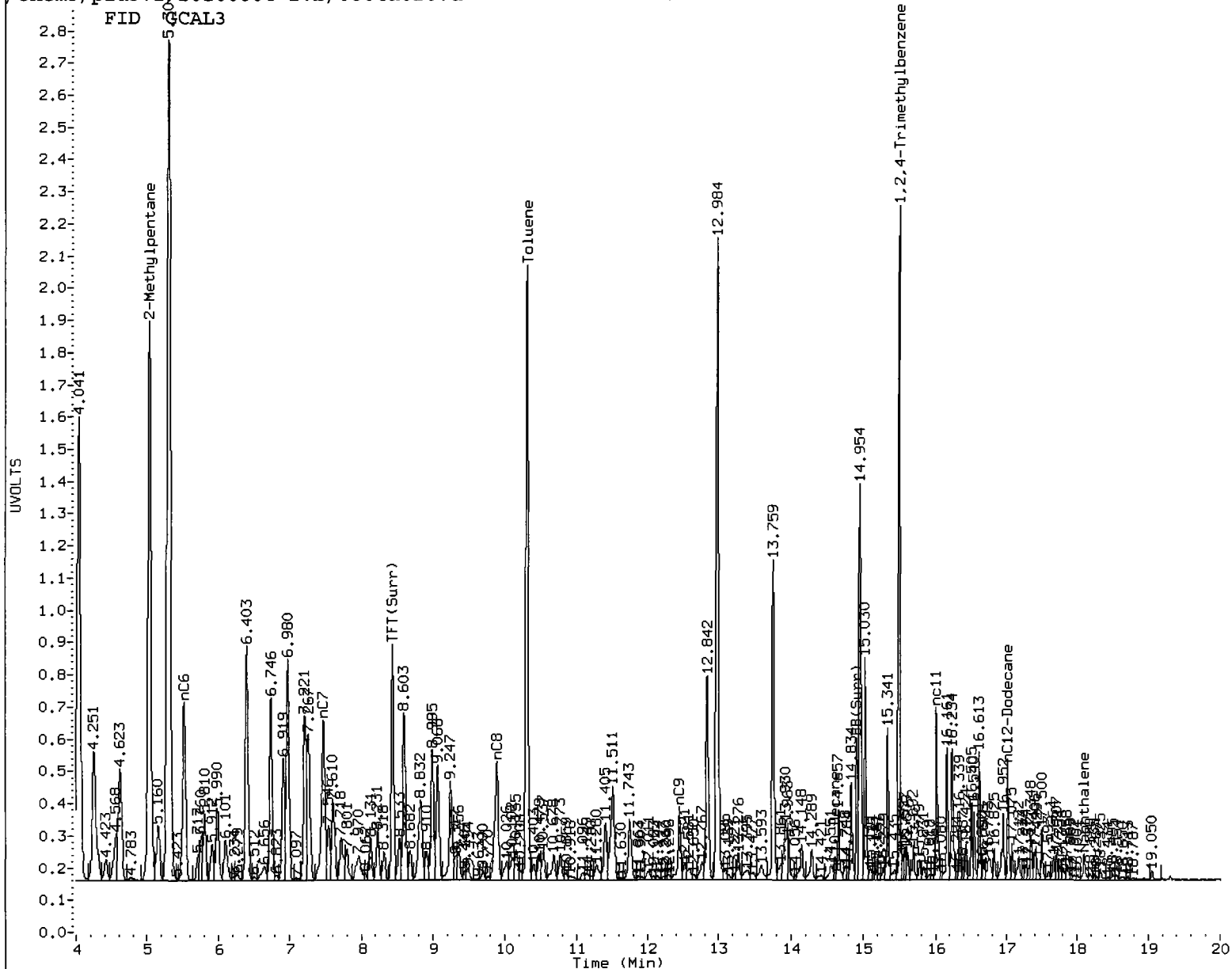
SW8021 (PID)

-----

RT	Shift	Response	Amount	Compound
--	----	-----	-----	-----
7.716	0.030	7056	5.34	Benzene
10.307	0.037	93130	70.56	Toluene
12.841	0.038	26754	21.53	Ethylbenzene
12.982	0.041	103822	77.10	M/P-Xylene
13.757	0.034	43234	33.65	O-Xylene
5.308	0.021	81100	227.94	MTBE

A Indicates Peak Area was used for quantitation instead of Height  
 N Indicates peak peak was manually integrated





MANUAL INTEGRATION

- 1. Baseline correction
- 2. Poor chromatography
- 3. Peak not found
- 4. Totals calculation

5. Other \_\_\_\_\_

Analyst: AR

Date: 8/11/04



Data File: /chem3/pid3.i/20100804-2.b/0804a026.d

Date : 04-AUG-2010 17:22

Client ID:

Sample Info: GCAL3

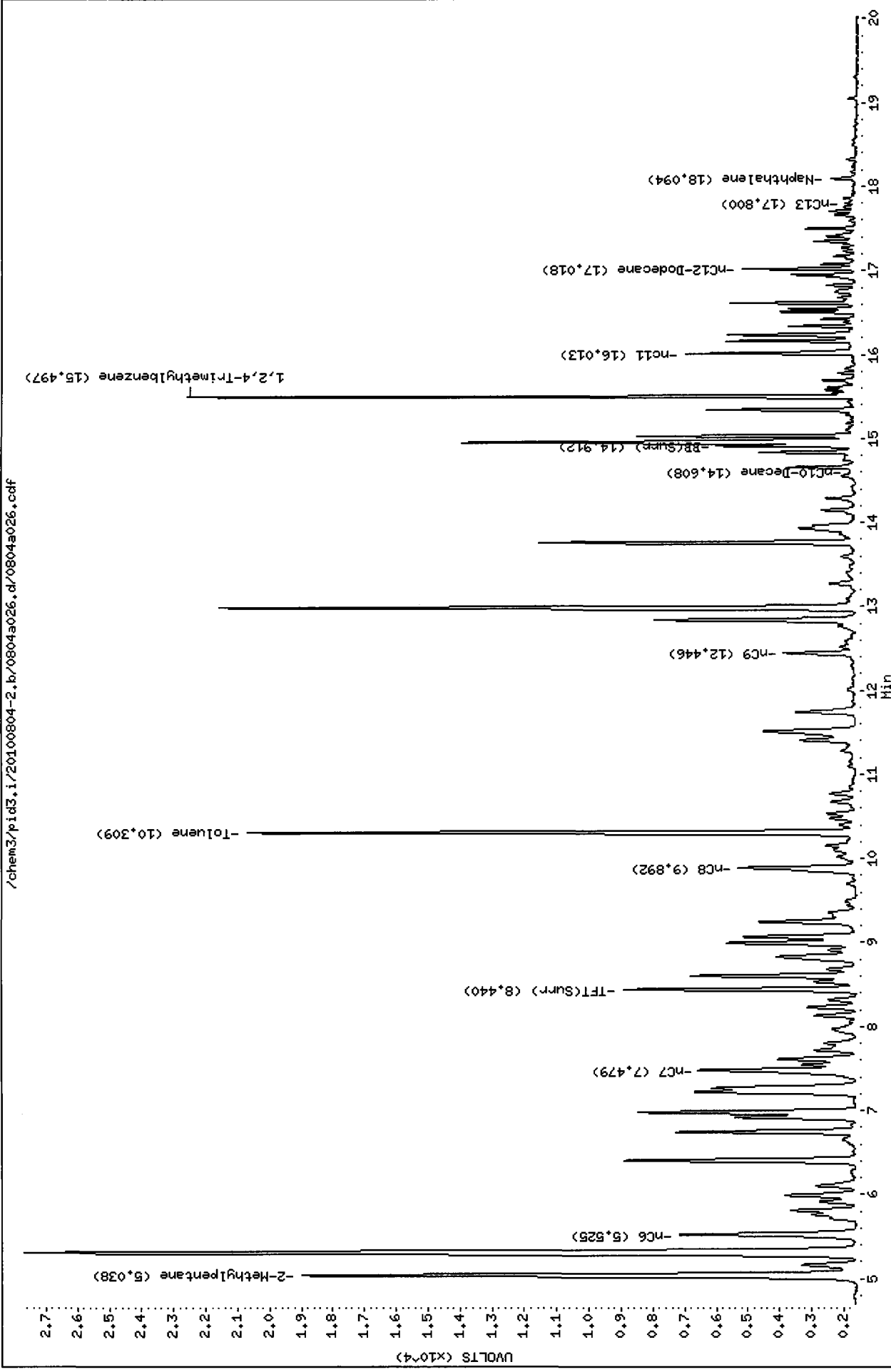
Instrument: pid3.i

Operator: MH

Column diameter: 0.18

Column phase: RTX 502-2 FID

/chem3/pid3.i/20100804-2.b/0804a026.d/0804a026.caf



**Metals Raw Data  
Preparation Bench Sheets and Notes**

**ARI Job ID: RG51**





# Digestion Log

Analyst: DM  
Matrix: Soil

Date: 8-03-10  
Block Temp: 90°C

ARI Sample ID	Btl #	pH<2	Prep Code: <u>SWC</u>		Prep Code:		Comments	
			Initial Wt (g) Vol (mL)	Final Vol (mL)	Initial Wt (g) Vol (mL)	Final Vol (mL)		
RG51 A	3	-	1.064	50.0			←	
" ADUP	3	-	1.069					
" ASPK	3	-	1.060					
" B	3	-	1.054					
" C	3	-	1.076					
" D	3	-	1.089					
" E	1	-	1.005					
" F	6	-	1.074					
" G	3	-	1.033					
" REF1	0053	-	1.009					BATCH
" MBI	-	-	-					
" MBSPK	-	-	-					
RG54 A	7	-	1.080					
" B	7	-	1.030					
" C	7	-	1.034					
" E	7	-	1.088					
" F	7	-	1.001					
" H	7	-	1.045					
" I	7	-	1.024					
" J	7	-	1.044					
" K	7	-	1.019					
" L	7	-	1.055	50.0			←	
					8-3-10	DM		

Chemical/Reagent ID:

HNO<sub>3</sub>: AP1926 / ISS47 HCl: I5548 H<sub>2</sub>O<sub>2</sub>: I5512 Tube Lot #: 1005282

**Metals Raw Data  
Run Logs, Calibrations, and Raw Data**

**ARI Job ID: RG51**