Analytical Resources Inc.: Organics Instrument Log

ECD1 Serial No.: 3410A39690

Date: 8/9/2010 Analysis: ~~Herbicides~~ Cl. Phenols AR 8/10/2010 Analyst: AR

GC Program: HERB.M Column No: 150608/148146 Column Type: ZB5/ZB35

Instrument Tune (.U or .CT.): AR ~~NA~~ PCPFAST.M EM Voltage: NA

Calibration File: ~~HERB20100802~~FPCP20100809.b Curve Date: ~~8/2/2010~~ AR 8/9/2010

IS/SS	Ical/Ccal	LCS/ICV
AR	1663-2	1703-2
	1739-1	1731-2

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	

AR 8/12/2010

Maintenance / Comments

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

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

MANUAL INTEGRATION SUMMARY FOR DATABATCH - /chem2/ecd1.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/ecd1.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.
RETENTION TIME SUMMARY REPORT

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

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
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	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: 8/13/10

RI46:00515

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

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

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
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 [signature] Date: 8/13/10

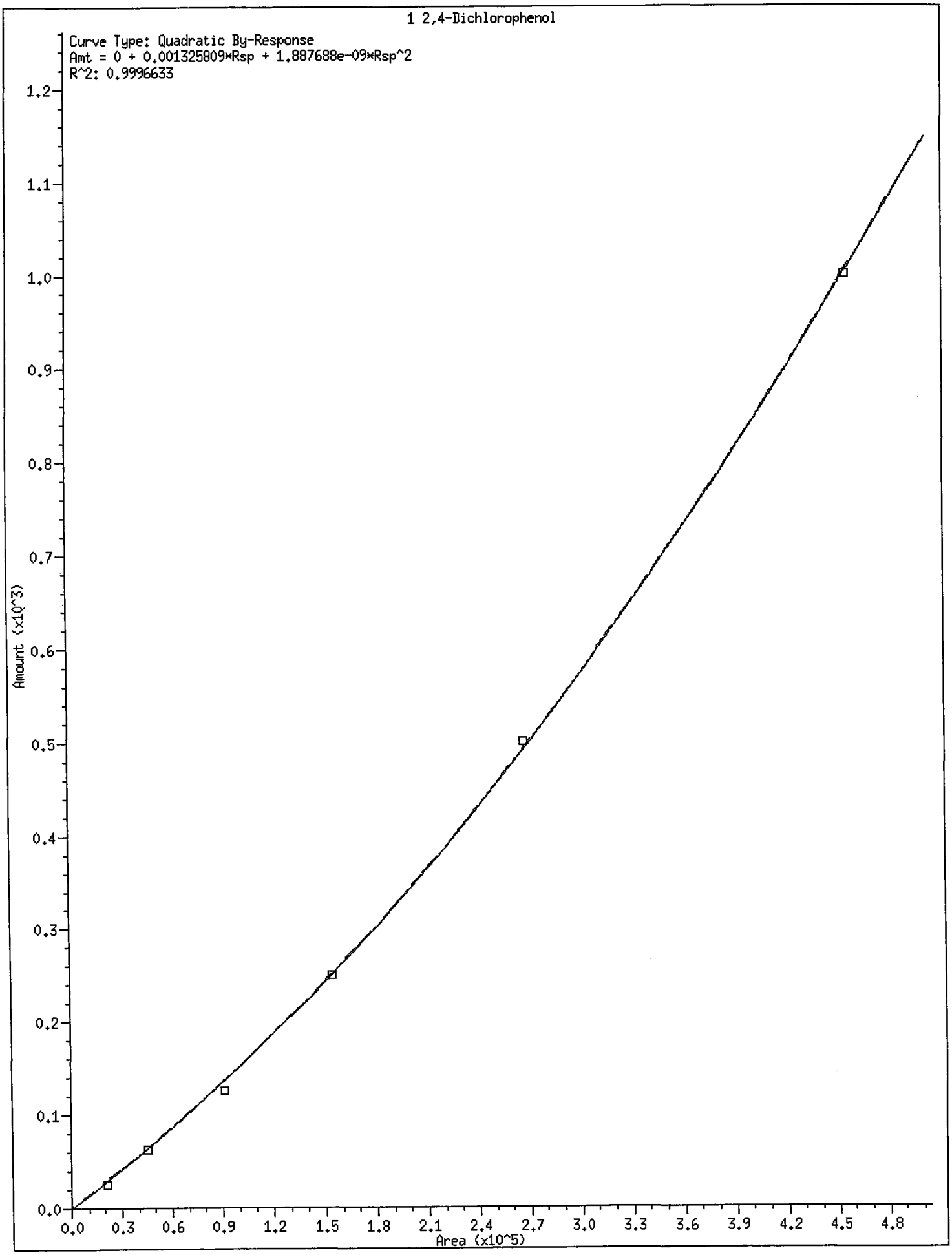
Analytical Resources, Inc.

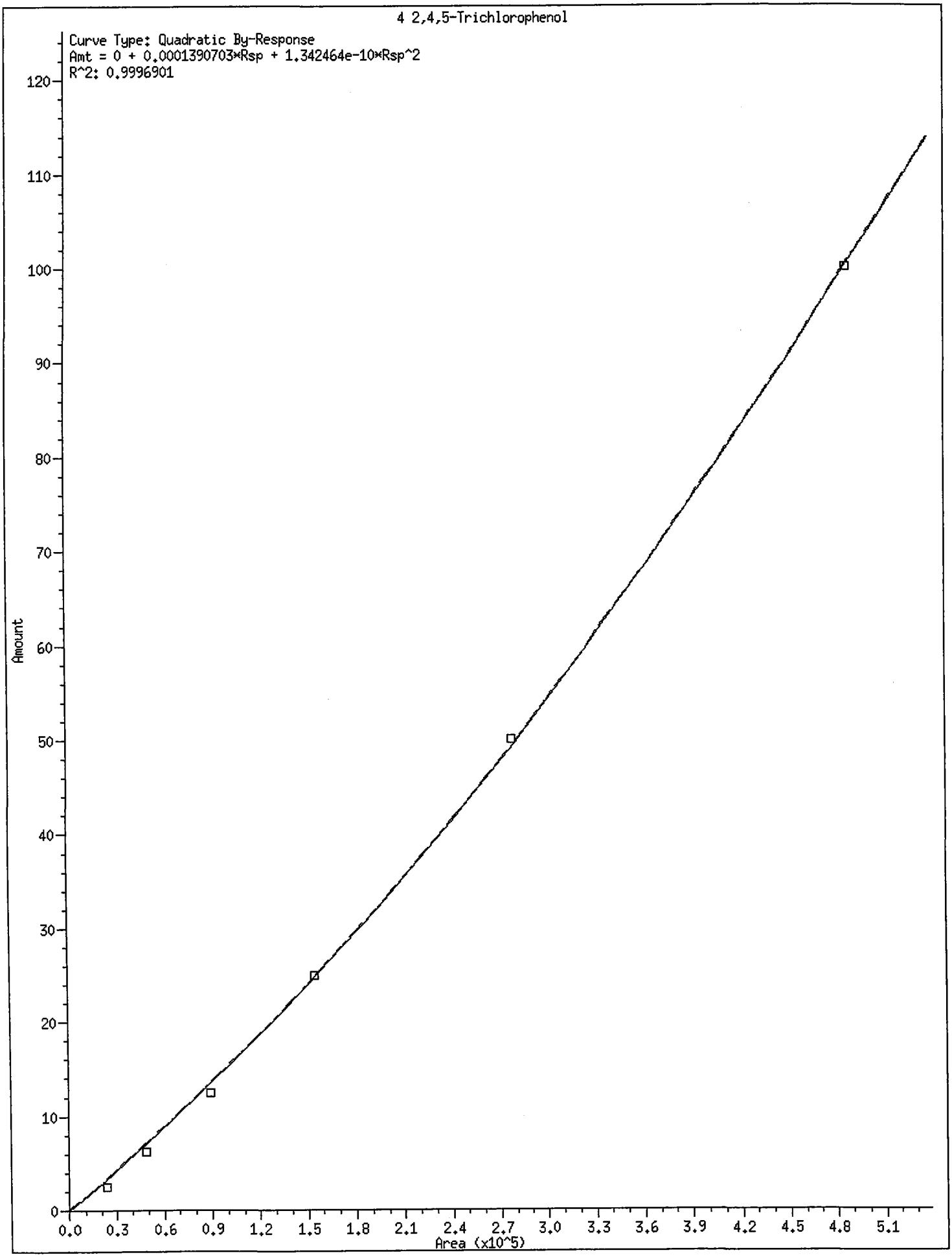
INITIAL CALIBRATION DATA AR 8/12/2010

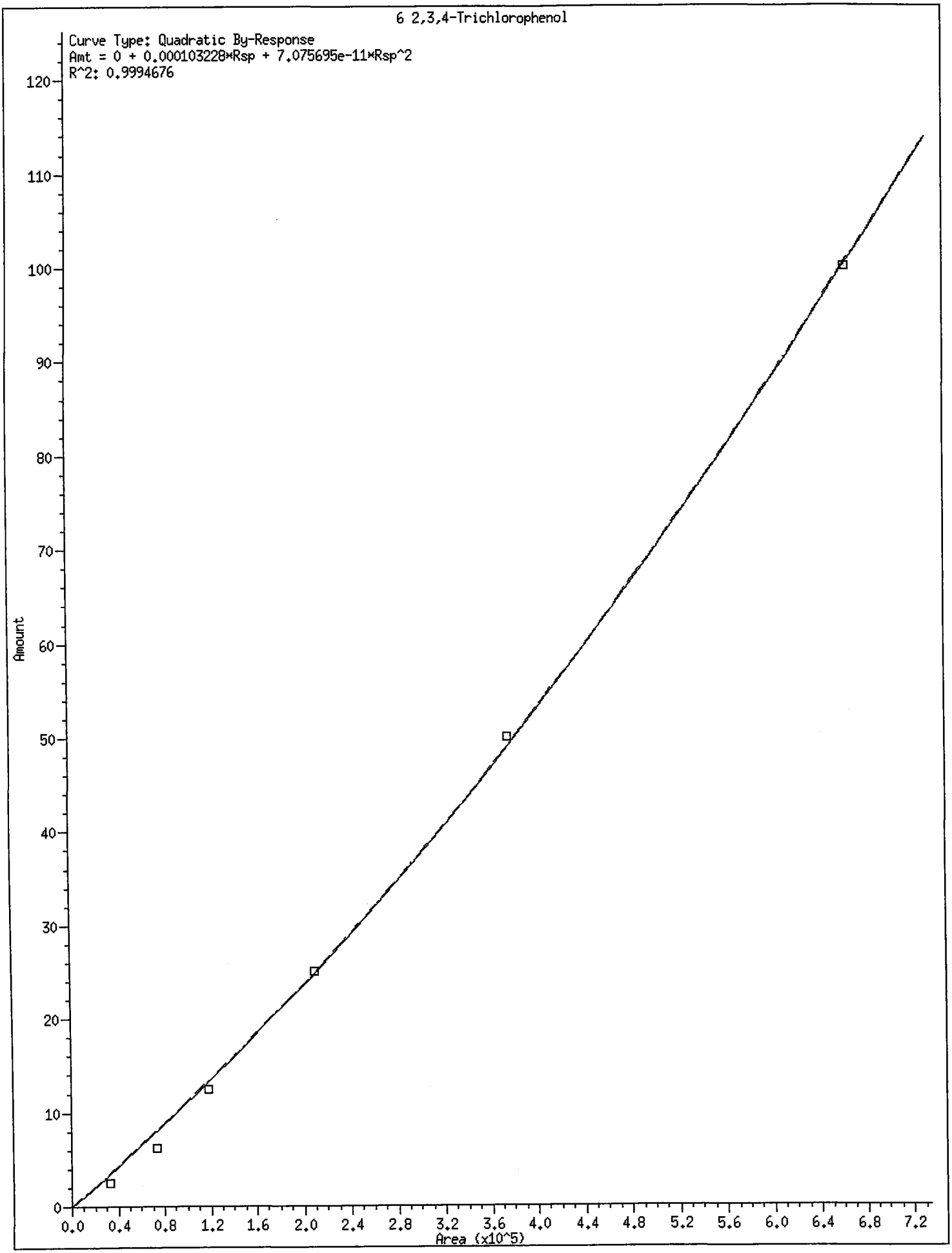
Start Cal Date : 09-AUG-2010 12:23
End Cal Date : 09-AUG-2010 14:03
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd1.i/FPCP20100809.b/FPCPB.m
Cal Date : 12-Aug-2010 18:59 aron
Curve Type : Average

Calibration File Names:
Level 1: /chem2/ecd1.i/FPCP20100809.b/ical-2.b/0809A006.d/0809A006.cdf
Level 2: /chem2/ecd1.i/FPCP20100809.b/ical-2.b/0809A007.d/0809A007.cdf
Level 3: /chem2/ecd1.i/FPCP20100809.b/ical-2.b/0809A008.d
Level 4: /chem2/ecd1.i/FPCP20100809.b/ical-2.b/0809A005.d
Level 5: /chem2/ecd1.i/FPCP20100809.b/ical-2.b/0809A009.d
Level 6: /chem2/ecd1.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
Amount (x10^3)
1.2
1.1
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
0.0 0.3 0.6 0.9 1.2 1.5 1.8 2.1 2.4 2.7 3.0 3.3 3.6 3.9 4.2 4.5 4.8
Area (x10^5)


4 2,4,5-Trichlorophenol
Curve Type: Quadratic By-Response
Amt = 0 + 0.0001390703*Rsp + 1.342464e-10*Rsp^2
R^2: 0.9996901
Amount
Area (x10^5)
0
10
20
30
40
50
60
70
80
90
100
110
120
0.0
0.3
0.6
0.9
1.2
1.5
1.8
2.1
2.4
2.7
3.0
3.3
3.6
3.9
4.2
4.5
4.8
5.1


6 2,3,4-Trichlorophenol
Curve Type: Quadratic By-Response
Amt = 0 + 0.000103228*Rsp + 7.075695e-11*Rsp^2
R^2: 0.9994676
Amount
Area (x10^5)
0
10
20
30
40
50
60
70
80
90
100
110
120
0.0
0.4
0.8
1.2
1.6
2.0
2.4
2.8
3.2
3.6
4.0
4.4
4.8
5.2
5.6
6.0
6.4
6.8
7.2

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/ecd1.i/FPCP20100809.b/FPCPB.m
Cal Date : 12-Aug-2010 18:59 aron

Calibration File Names:
Level 1: /chem2/ecd1.i/FPCP20100809.b/ical-2.b/0809A006.d/0809A006.cdf
Level 2: /chem2/ecd1.i/FPCP20100809.b/ical-2.b/0809A007.d/0809A007.cdf
Level 3: /chem2/ecd1.i/FPCP20100809.b/ical-2.b/0809A008.d
Level 4: /chem2/ecd1.i/FPCP20100809.b/ical-2.b/0809A005.d
Level 5: /chem2/ecd1.i/FPCP20100809.b/ical-2.b/0809A009.d
Level 6: /chem2/ecd1.i/FPCP20100809.b/ical-2.b/0809A010.d

Compound	2 Level 1	6 Level 2	12 Level 3	25 Level 4	50 Level 5	100 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
1 2,4-Dichlorophenol	21466	45023	91643	154741	267768	457854	QUAD	0.000e+00	0.00133	1.888e-09	0.99966
2 2,4,6-Trichlorophenol	14811	12542	14020	12241	11222	10071	AVRG		12485		13.99132
3 2,3,6-Trichlorophenol	15358	13183	12610	12054	11138	10108	AVRG		12409		14.58387
4 2,4,5-Trichlorophenol	23627	48273	89400	155087	278412	489569	QUAD	0.000e+00	0.00014	1.342e-10	0.99969
5 2,3,5,6-Tetrachlorophenol	22710	20100	18581	17733	16666	15298	AVRG		18515		14.18619
6 2,3,4-Trichlorophenol	32846	73211	117878	210189	376624	666942	QUAD	0.000e+00	0.00010	7.076e-11	0.99947
8 2,3,4,5-Tetrachlorophenol	18414	16106	15136	13550	12798	11541	AVRG		14591		17.01254
9 Pentachlorophenol	28790	24995	23903	21206	20507	18368	AVRG		22961		16.20188
7 2,4,6-Tribromophenol (surr)	22648	19438	18816	17793	17226	16083	AVRG		18667		12.21092

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/ecd1.i/FPCP20100809.b/FPCPB.m
Cal Date : 12-Aug-2010 18:59 aron

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

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 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/ecd1.i/FPCP20100809.b/FPCP.m
Cal Date : 12-Aug-2010 19:13 aron
Curve Type : Average

Calibration File Names:
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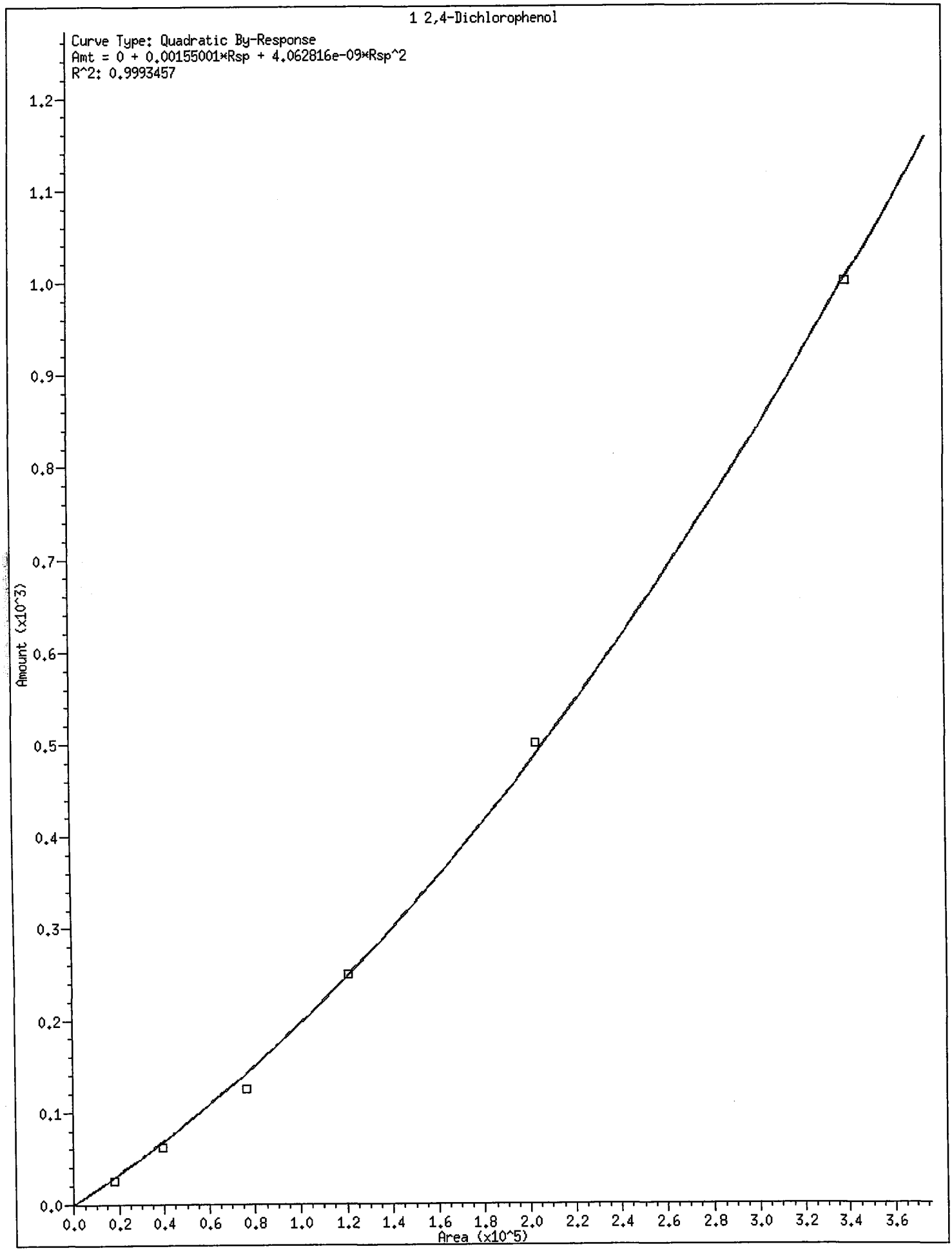
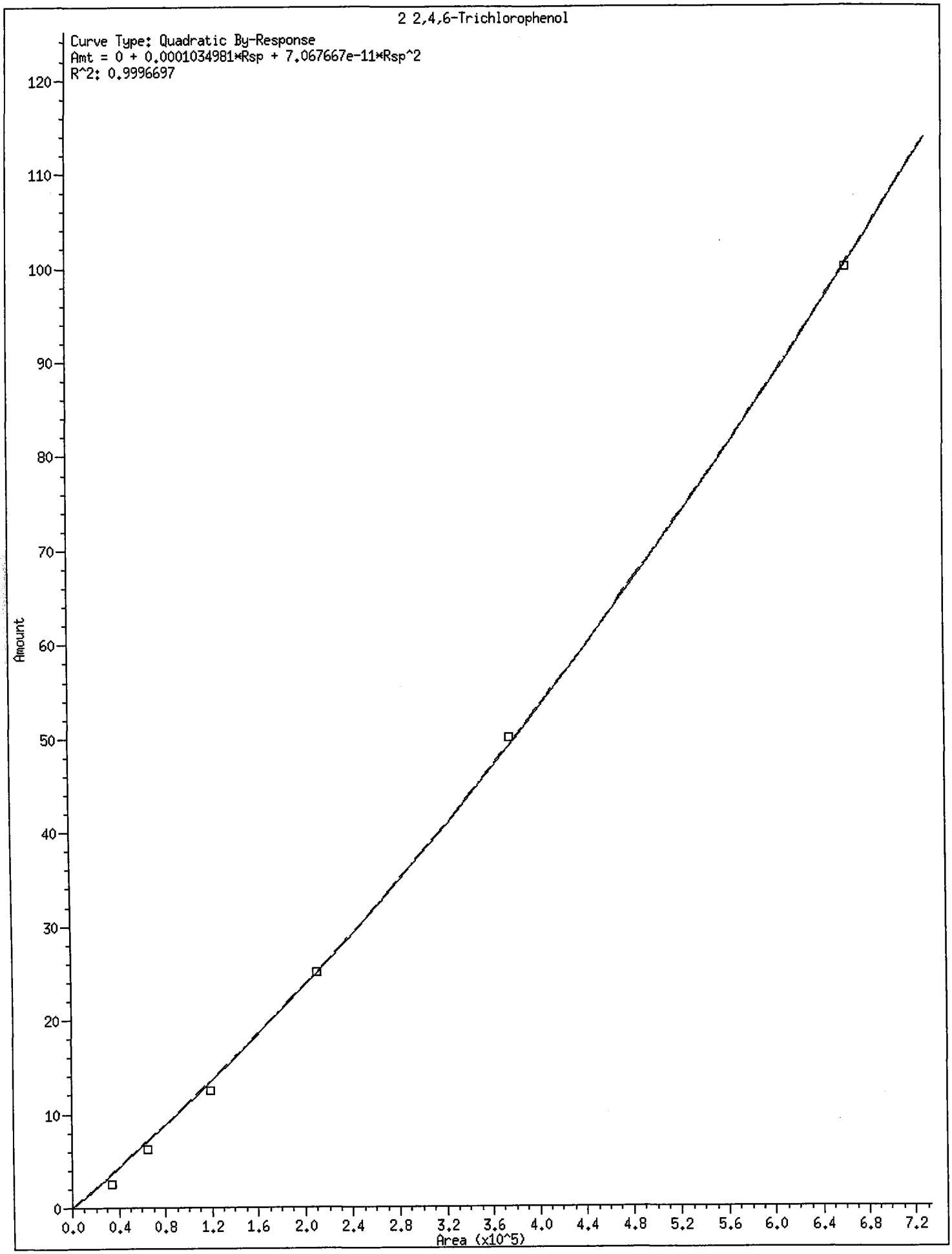
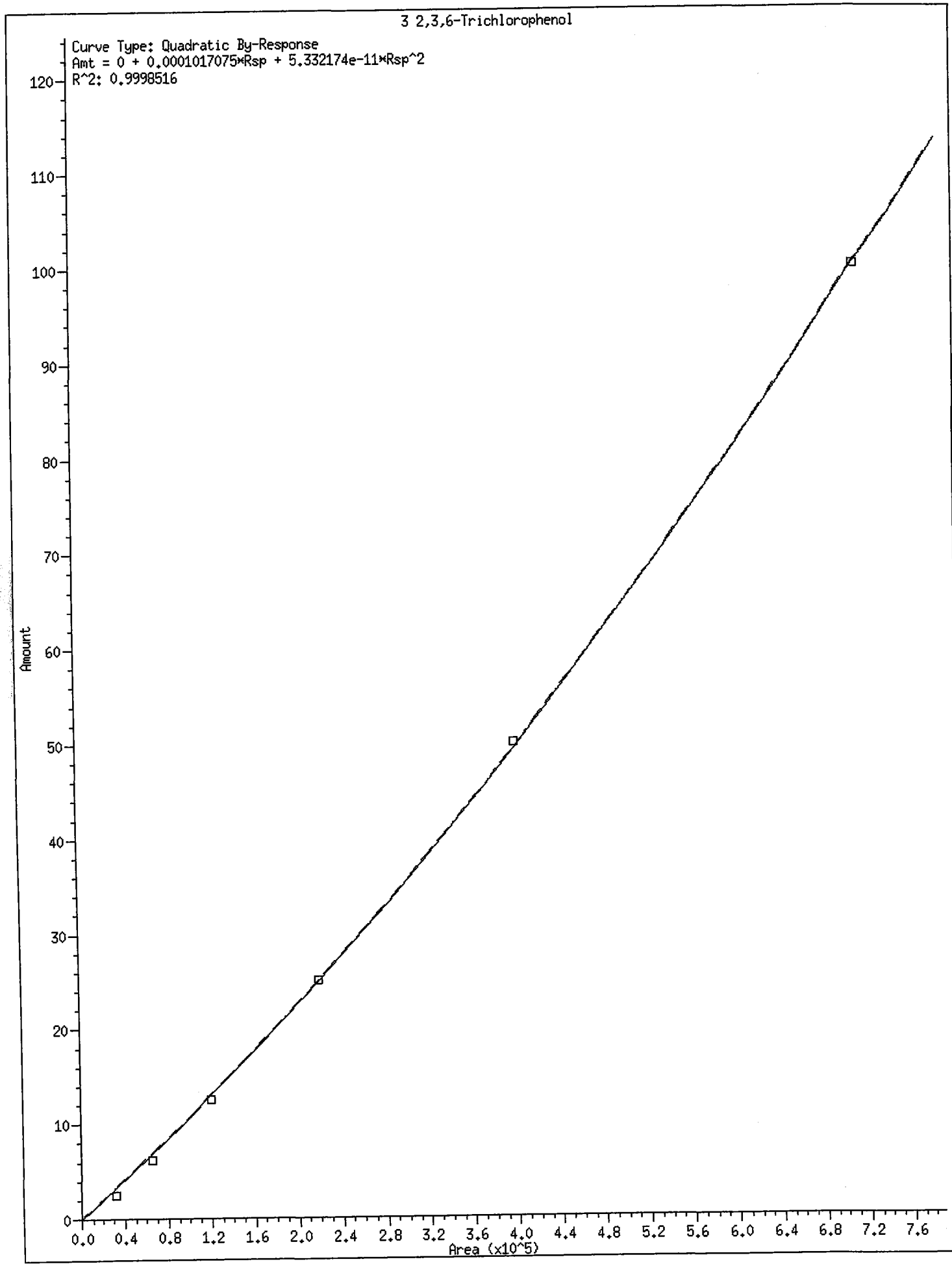
Level 2: /chem2/ecd1.i/FPCP20100809.b/ical-1.b/0809A007.d/0809A007.cdf
Level 3: /chem2/ecd1.i/FPCP20100809.b/ical-1.b/0809A008.d
Level 4: /chem2/ecd1.i/FPCP20100809.b/ical-1.b/0809A005.d/0809A005.cdf
Level 5: /chem2/ecd1.i/FPCP20100809.b/ical-1.b/0809A009.d
Level 6: /chem2/ecd1.i/FPCP20100809.b/ical-1.b/0809A010.d

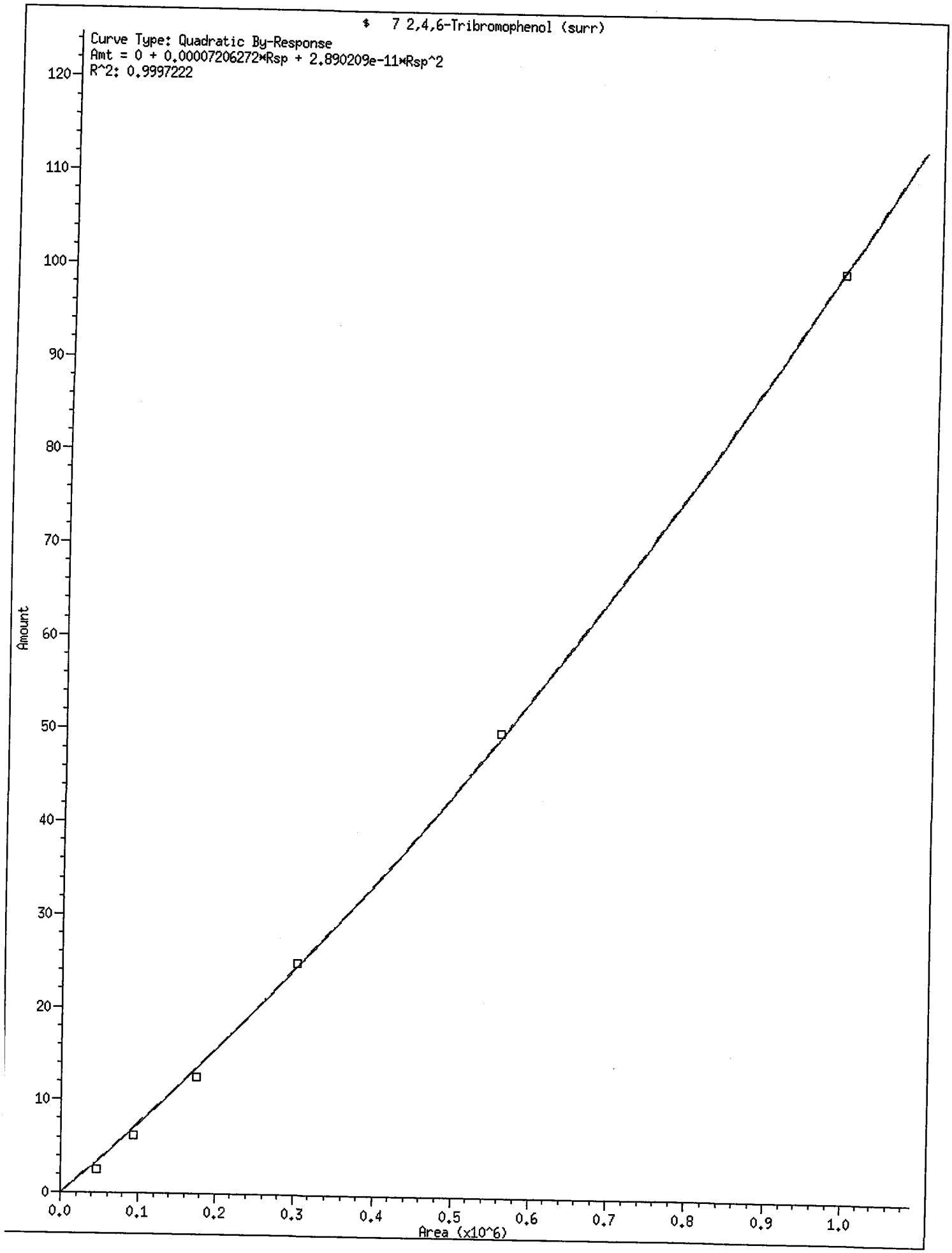
Compound	2.500 Level 1	6.250 Level 2	12.500 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	___ RRF	% RSD	
1 2,4-Dichlorophenol	721	627	611	486	409	342	533	27.140	<-
2 2,4,6-Trichlorophenol	13540	10473	9560	8413	7539	6660	9364	26.271	<-
3 2,3,6-Trichlorophenol	12902	10500	9607	8801	8025	7161	9499	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	<-

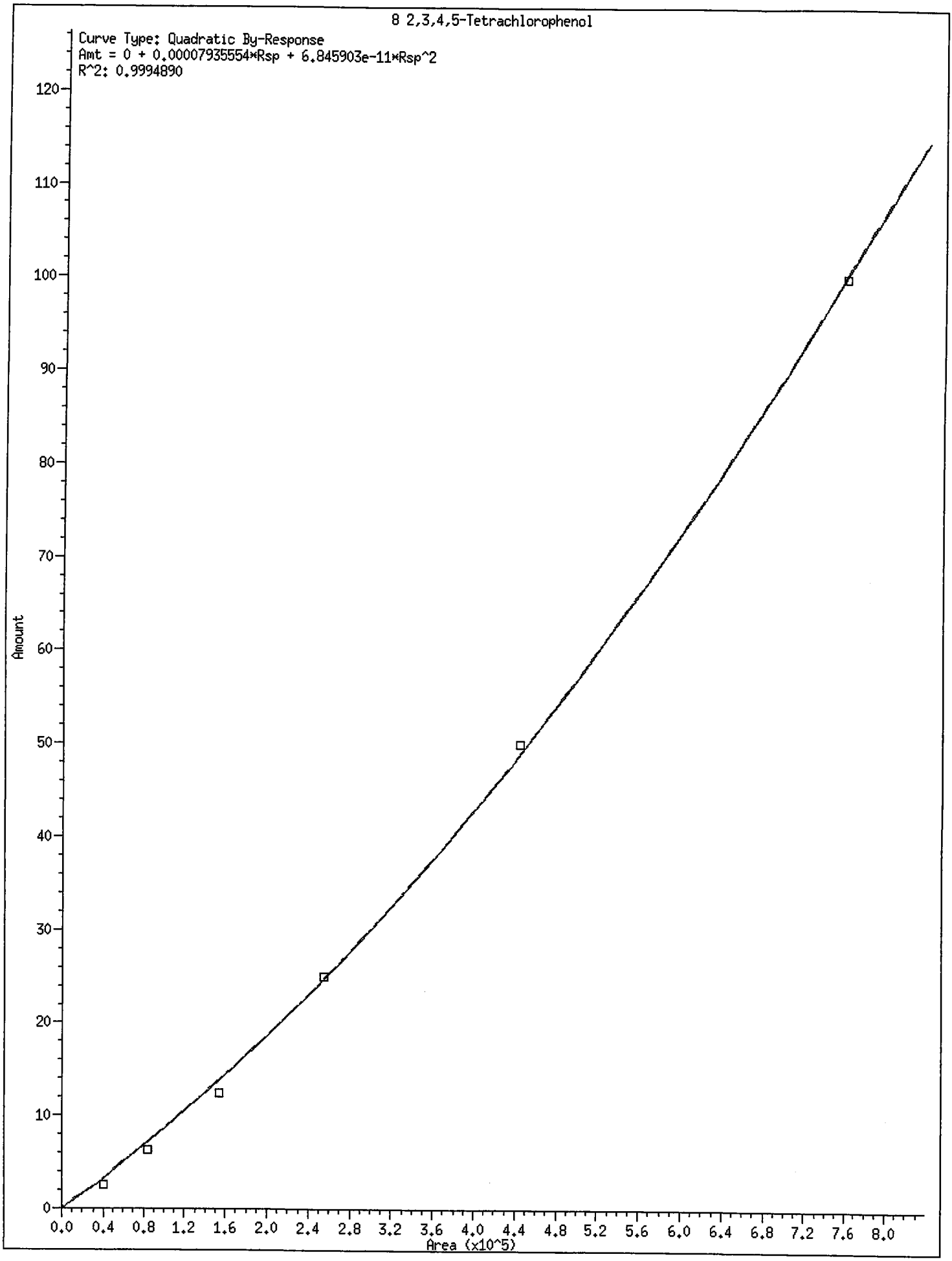

1 2,4-Dichlorophenol
Curve Type: Quadratic By-Response
Amt = 0 + 0.00155001*Rsp + 4.062816e-09*Rsp^2
R^2: 0.9993457
Amount (x10^3)
Area (x10^5)
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
0.0 0.2 0.4 0.6 0.8 1.0 1.2 1.4 1.6 1.8 2.0 2.2 2.4 2.6 2.8 3.0 3.2 3.4 3.6

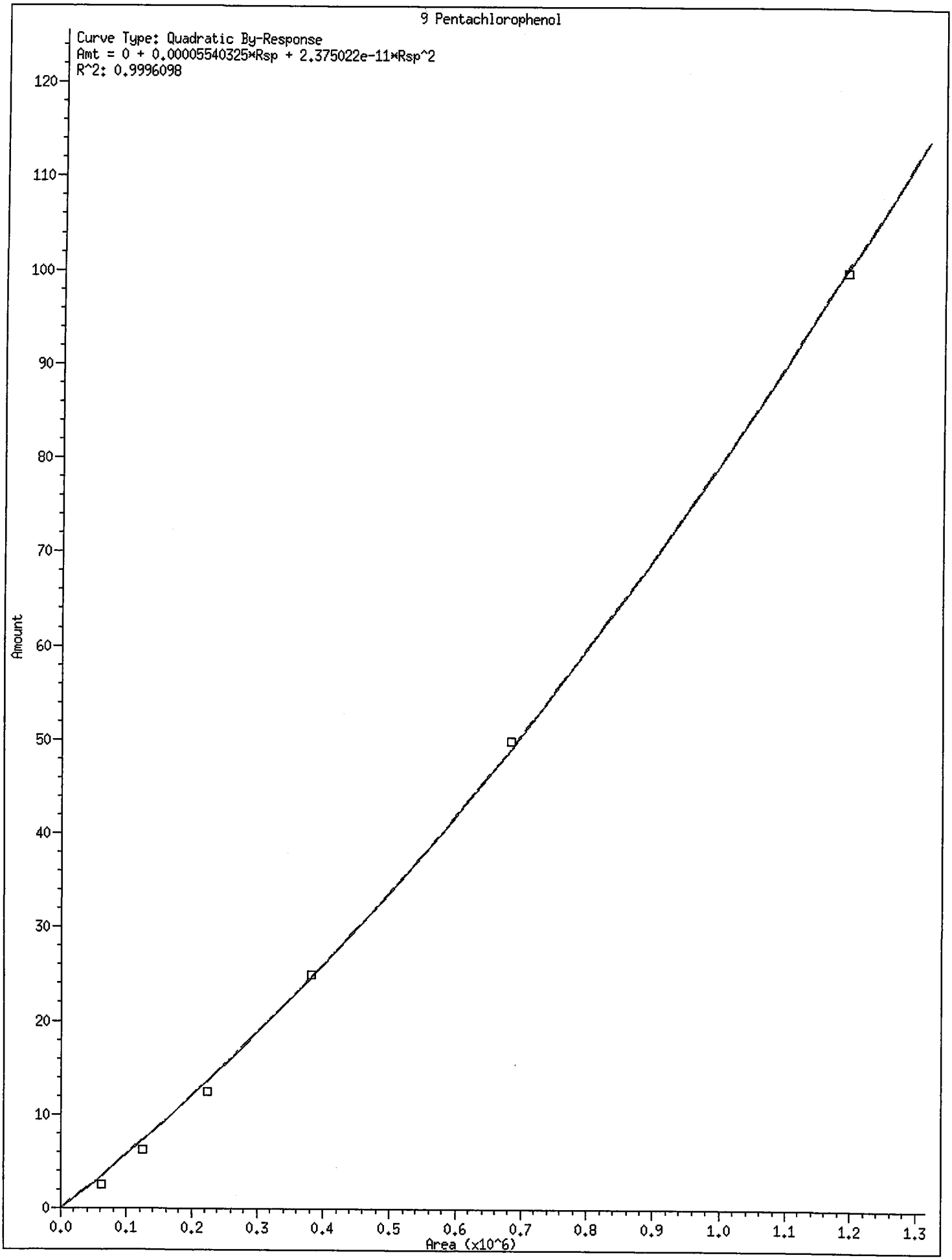
RI46:00524


2 2,4,6-Trichlorophenol
Curve Type: Quadratic By-Response
Amt = 0 + 0.0001034981*Rsp + 7.067667e-11*Rsp^2
R^2: 0.9996697
Amount
Area (x10^5)
0
10
20
30
40
50
60
70
80
90
100
110
120
0.0
0.4
0.8
1.2
1.6
2.0
2.4
2.8
3.2
3.6
4.0
4.4
4.8
5.2
5.6
6.0
6.4
6.8
7.2


3 2,3,6-Trichlorophenol
Curve Type: Quadratic By-Response
Amt = 0 + 0.0001017075*Rsp + 5.332174e-11*Rsp^2
R^2: 0.9998516
Amount
Area (x10^5)
0
10
20
30
40
50
60
70
80
90
100
110
120
0.0
0.4
0.8
1.2
1.6
2.0
2.4
2.8
3.2
3.6
4.0
4.4
4.8
5.2
5.6
6.0
6.4
6.8
7.2
7.6


$ 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
Amount
Area (x10^6)
0
10
20
30
40
50
60
70
80
90
100
110
120
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0


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
Amount
Area (x10^5)
0
10
20
30
40
50
60
70
80
90
100
110
120
0.0
0.4
0.8
1.2
1.6
2.0
2.4
2.8
3.2
3.6
4.0
4.4
4.8
5.2
5.6
6.0
6.4
6.8
7.2
7.6
8.0


9 Pentachlorophenol
Curve Type: Quadratic By-Response
Amt = 0 + 0.00005540325*Rsp + 2.375022e-11*Rsp^2
R^2: 0.9996098
Amount
Area (x10^6)
0
10
20
30
40
50
60
70
80
90
100
110
120
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3

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/ecd1.i/FPCP20100809.b/FPCP.m
Cal Date : 12-Aug-2010 19:13 aron

Calibration File Names:
Level 1: /chem2/ecd1.i/FPCP20100809.b/ical-1.b/0809A006.d/0809A006.cdf
Level 2: /chem2/ecd1.i/FPCP20100809.b/ical-1.b/0809A007.d/0809A007.cdf
Level 3: /chem2/ecd1.i/FPCP20100809.b/ical-1.b/0809A008.d
Level 4: /chem2/ecd1.i/FPCP20100809.b/ical-1.b/0809A005.d/0809A005.cdf
Level 5: /chem2/ecd1.i/FPCP20100809.b/ical-1.b/0809A009.d
Level 6: /chem2/ecd1.i/FPCP20100809.b/ical-1.b/0809A010.d

Compound	2 Level 1	6 Level 2	12 Level 3	25 Level 4	50 Level 5	100 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
1 2,4-Dichlorophenol	18020	39212	76337	121400	204471	341711	QUAD	0.000e+00	0.00155	4.063e-09	0.99935
2 2,4,6-Trichlorophenol	33851	65457	119503	210327	376941	665977	QUAD	0.000e+00	0.00010	7.068e-11	0.99967
3 2,3,6-Trichlorophenol	32256	65624	120087	220036	401238	716085	QUAD	0.000e+00	0.00010	5.332e-11	0.99985
4 2,4,5-Trichlorophenol	6404	5362	5688	4915	4290	3627	AVRG		5048		19.72715
5 2,3,4-Trichlorophenol	8393	7068	7135	7922	5475	5053	AVRG		6841		19.37297
6 2,3,5,6-Tetrachlorophenol	17905	15060	14996	14233	11882	10558	AVRG		14106		18.40050
8 2,3,4,5-Tetrachlorophenol	40811	84118	153678	255392	444734	762767	QUAD	0.000e+00	0.00008	6.846e-11	0.99949
9 Pentachlorophenol	61320	123902	222874	383426	684285	1196534	QUAD	0.000e+00	0.00006	2.375e-11	0.99961
7 2,4,6-Tribromophenol (surr)	46402	93741	174610	303374	559983	994034	QUAD	0.000e+00	0.00007	2.890e-11	0.99972

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/ecd1.i/FPCP20100809.b/FPCP.m
Cal Date : 12-Aug-2010 19:13 aron

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

Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report AR 8/12/2010

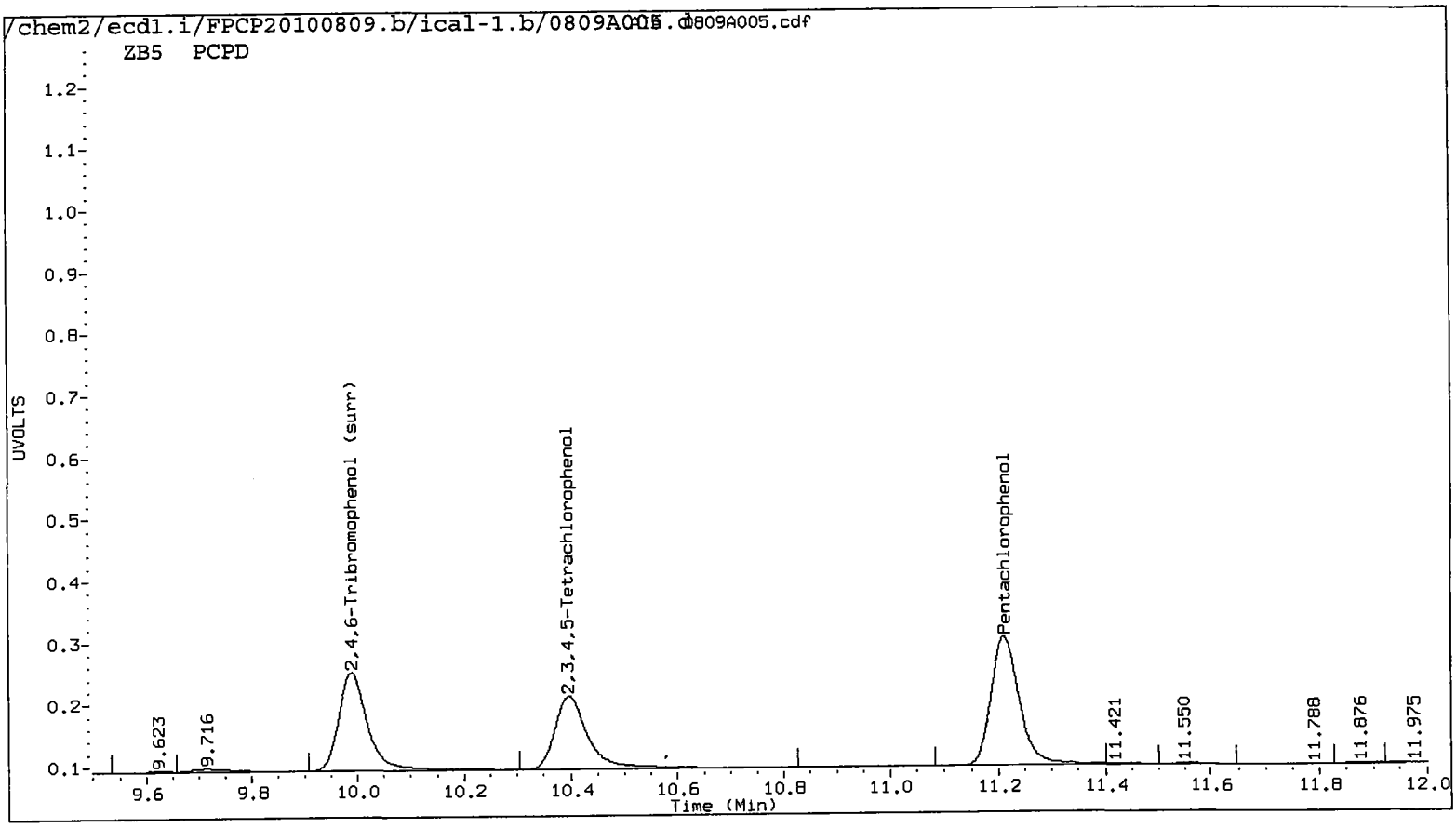
Data file 1: /chem2/ecd1.i/FPCP20100809.b/ical-1.b/0809A005.d ARI ID: PCPD
Data file 2: /chem2/ecd1.i/FPCP20100809.b/ical-2.b/0809A005.d Client ID:
Method: /chem2/ecd1.i/FPCP20100809.b/FPCP.m
Compound Sublist: all
Instrument: ecd1.i
Operator: ar

Injection Date: 09-AUG-2010 12:23
Report Date: 08/12/2010 19:15
Matrix: WATER
Dilution Factor: 1.000

ZB-5 Col RT	Shift	Response	ZB35 Col RT	Shift	Response	ZB-5 on col	ZB35 on col	RPD	Compound
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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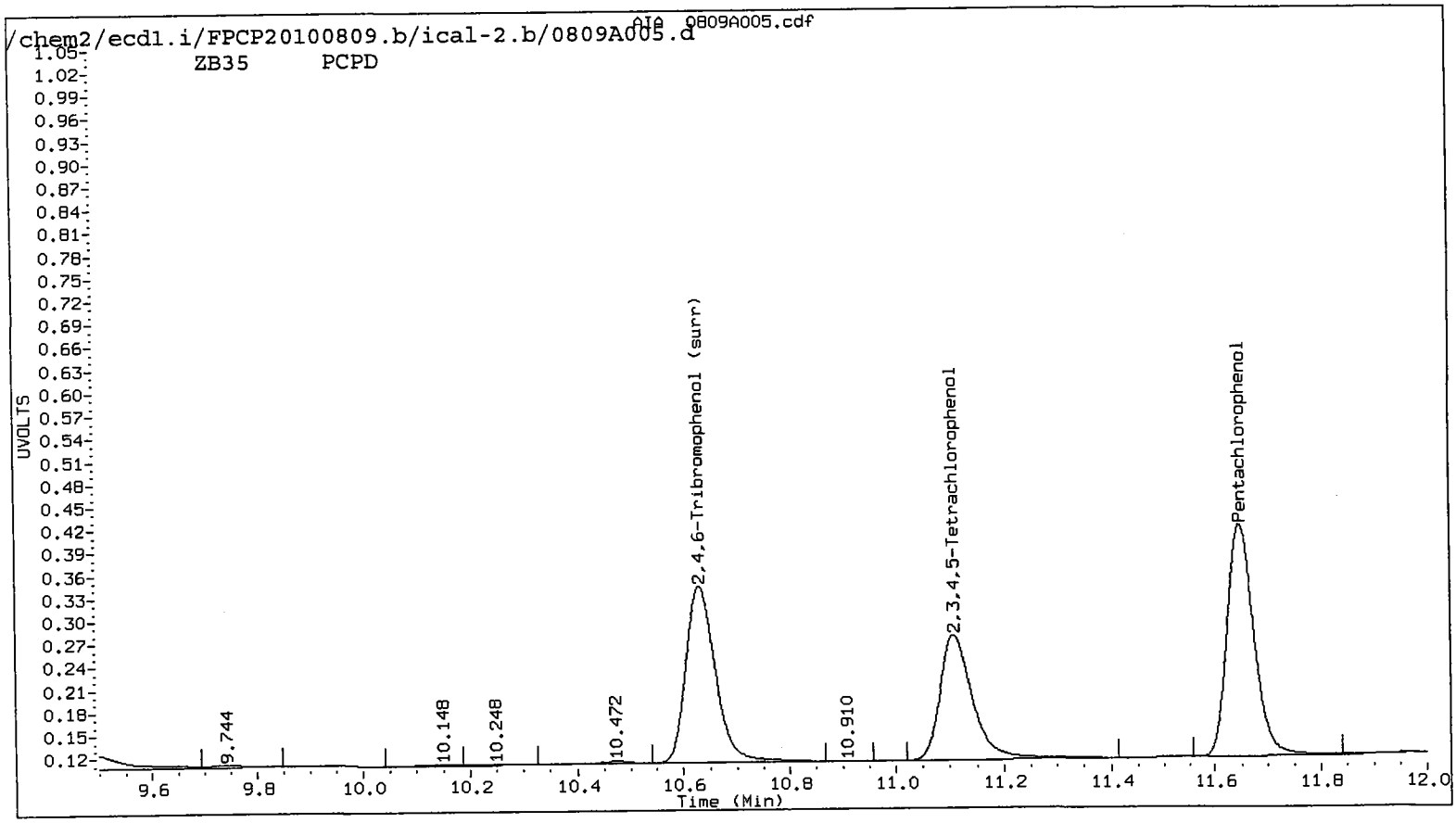
AIA 0809A005.cdf
ZB5 PCPD
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.623
9.716
11.421
11.550
11.788
11.876
11.975
Time (Min)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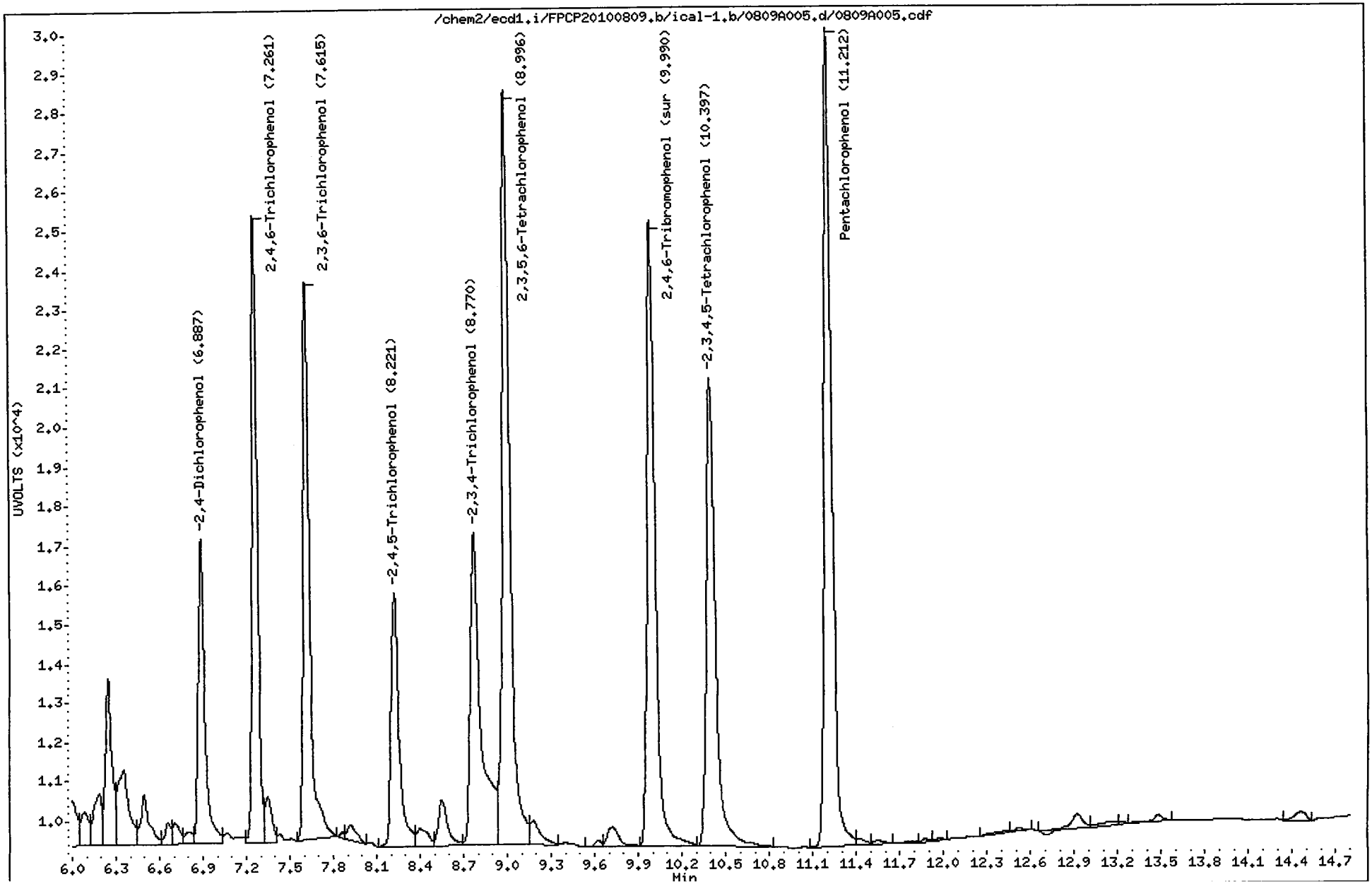
AIA 0809A005.cdf
ZB35 PCPD
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.744
10.148
10.248
10.472
10.910
Time (Min)

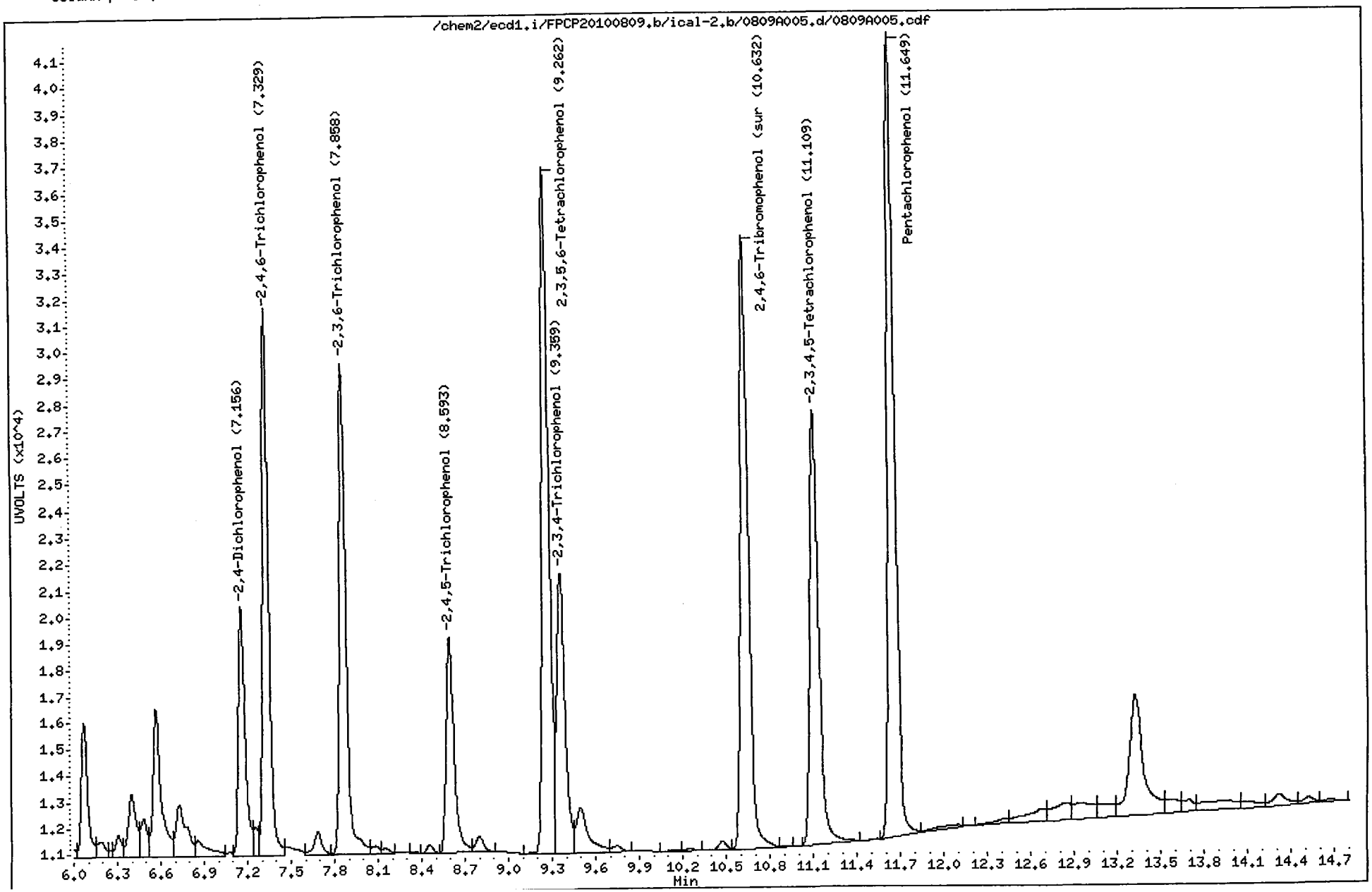
Data File: /chem2/ecd1.i/FPCP20100809.b/ical-1.b/0809A005.d
Date : 09-AUG-2010 12:23
Client ID:
Sample Info: PCPD
Purge Volume: 2.0
Column phase: ZB5

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



Data File: /chem2/ecd1.i/FPCP20100809.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



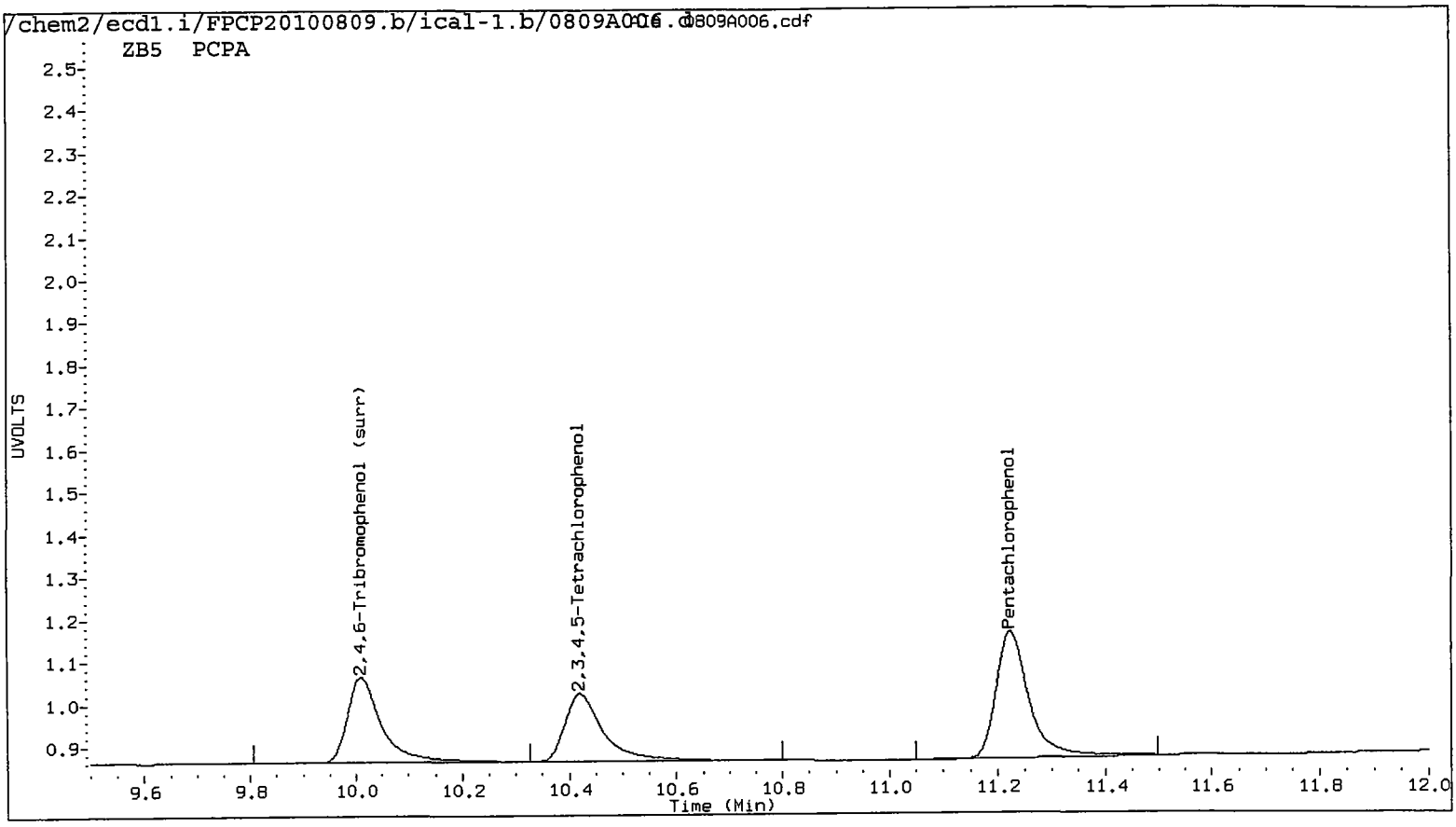
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

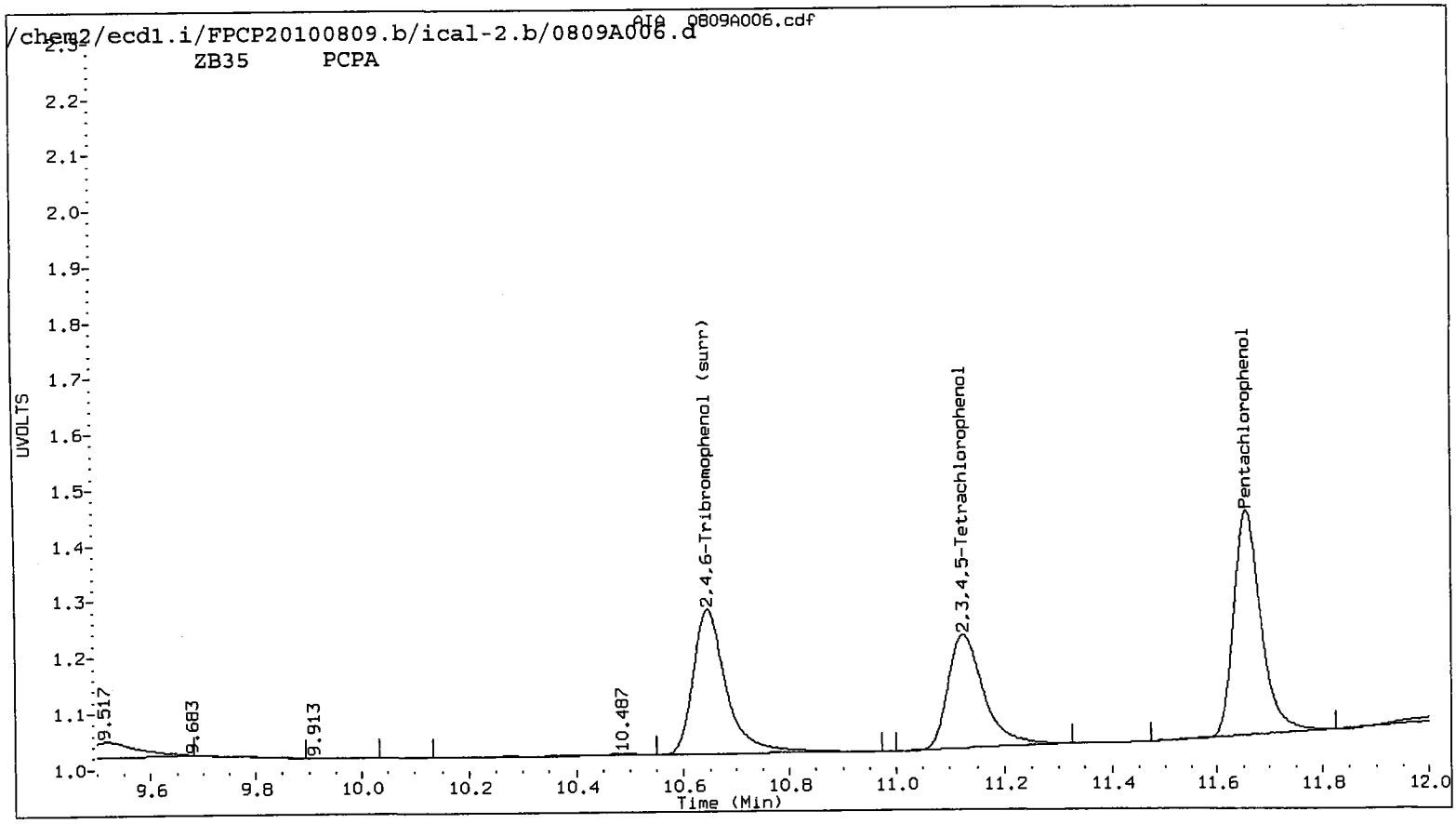
Data file 1: /chem2/ecd1.i/FPCP20100809.b/ical-1.b/0809A006.d ARI ID: PCPA
Data file 2: /chem2/ecd1.i/FPCP20100809.b/ical-2.b/0809A006.d Client ID:
Method: /chem2/ecd1.i/FPCP20100809.b/FPCP.m Injection Date: 09-AUG-2010 12:43
Compound Sublist: all Report Date: 08/12/2010 19:15
Instrument: ecd1.i Matrix: WATER
Operator: ar Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
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

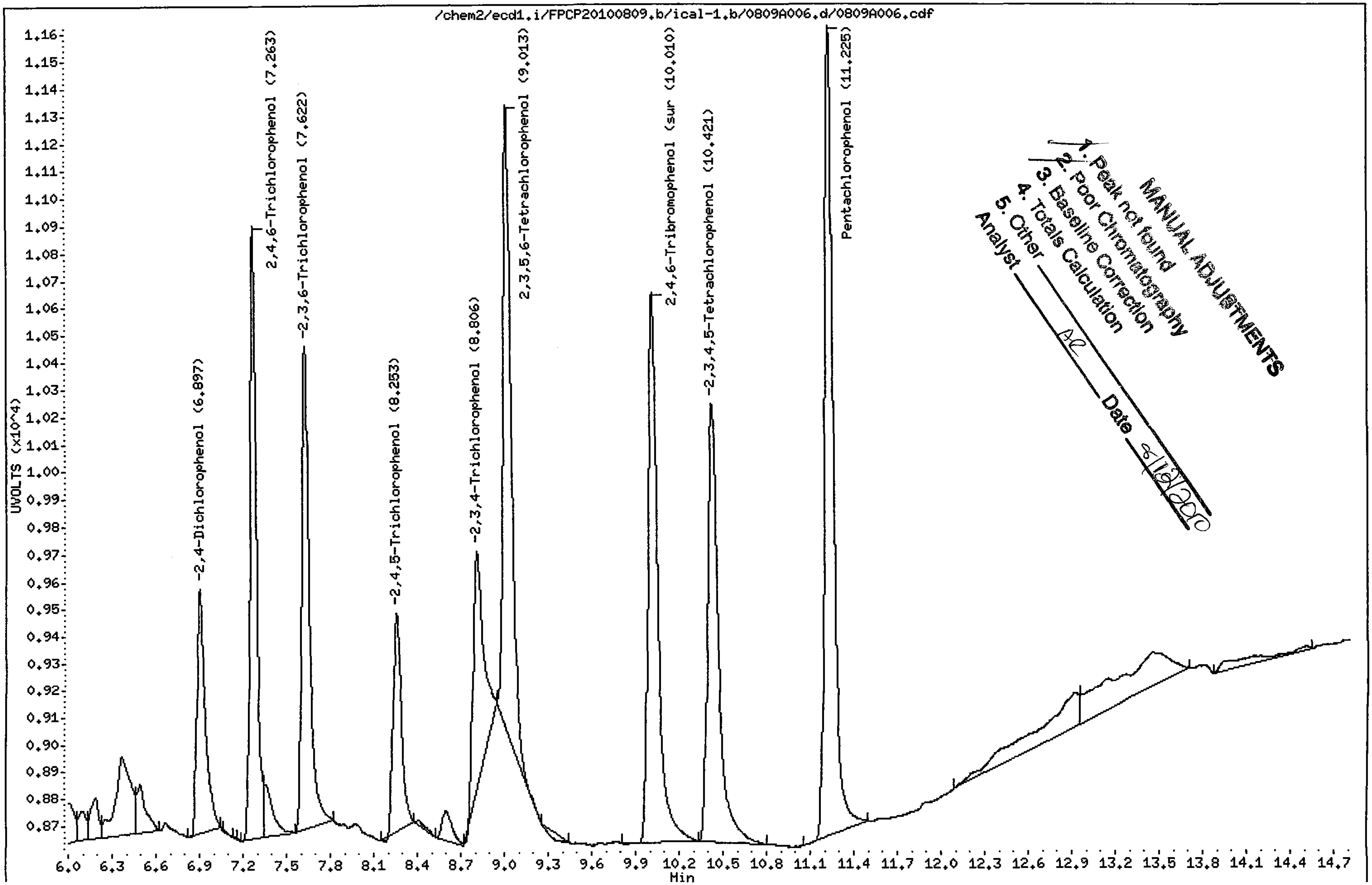

/chem2/ecd1.i/FPCP20100809.b/ical-1.b/0809A006.d
0809A006.cdf
ZB5 PCPA
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
Time (Min)


/chem2/ecd1.i/FPCP20100809.b/ical-2.b/0809A006.d
0809A006.cdf
ZB35 PCPA
UVOLTS
9.517
9.683
9.913
10.487
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
Time (Min)

Data File: /chem2/ecd1.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

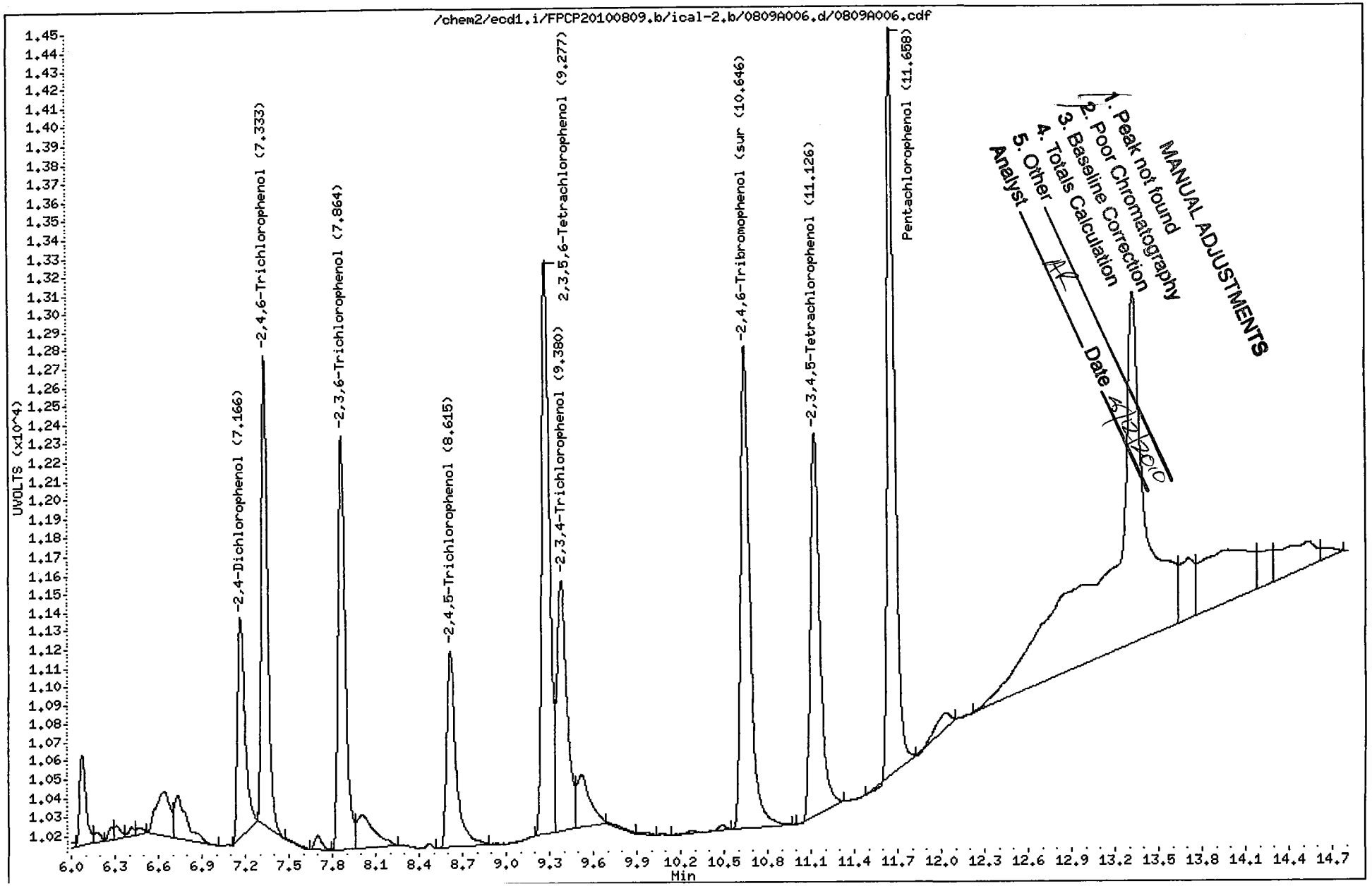
Instrument: ecd1.i

Operator: ar
Column diameter: 0.53



Data File: /chem2/ecd1.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

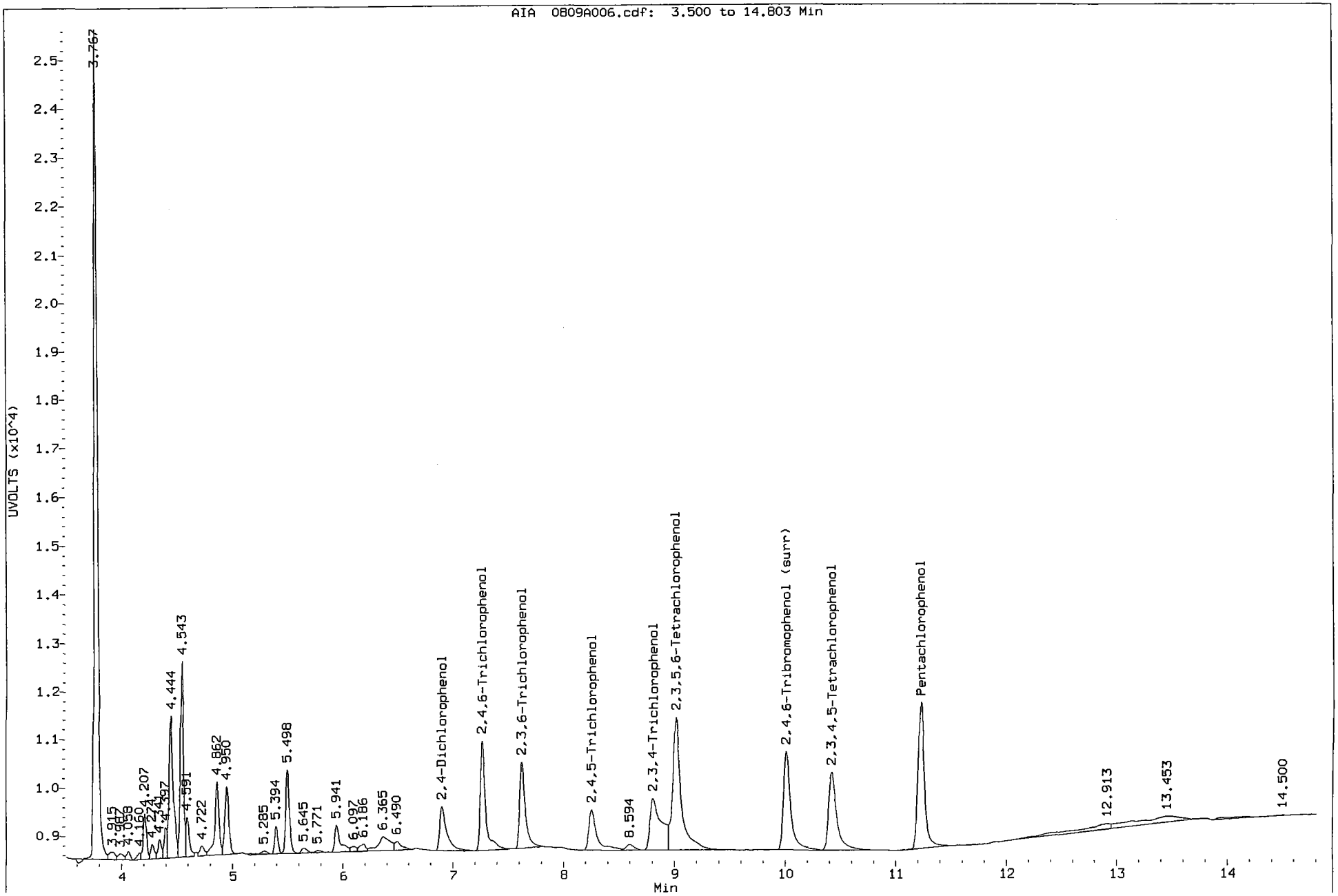
Instrument: ecd1.i
Operator: ar
Column diameter: 0.53



R146 : 09539

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

Before 08/12/2010



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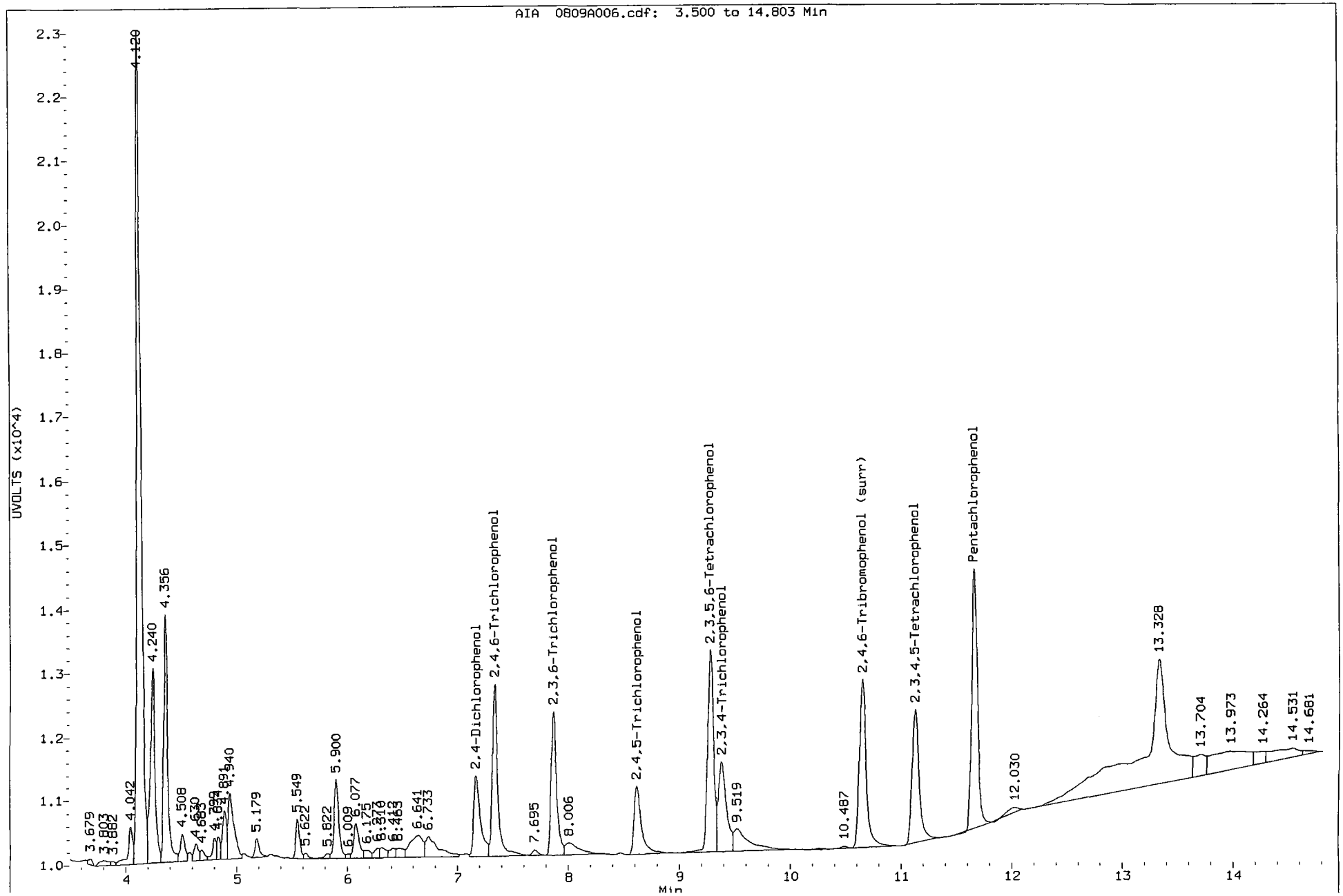
Injection Date: 09-AUG-2010 12:43
Instrument: ecd1.i
Client Sample ID:

Before AR 8/12/2010



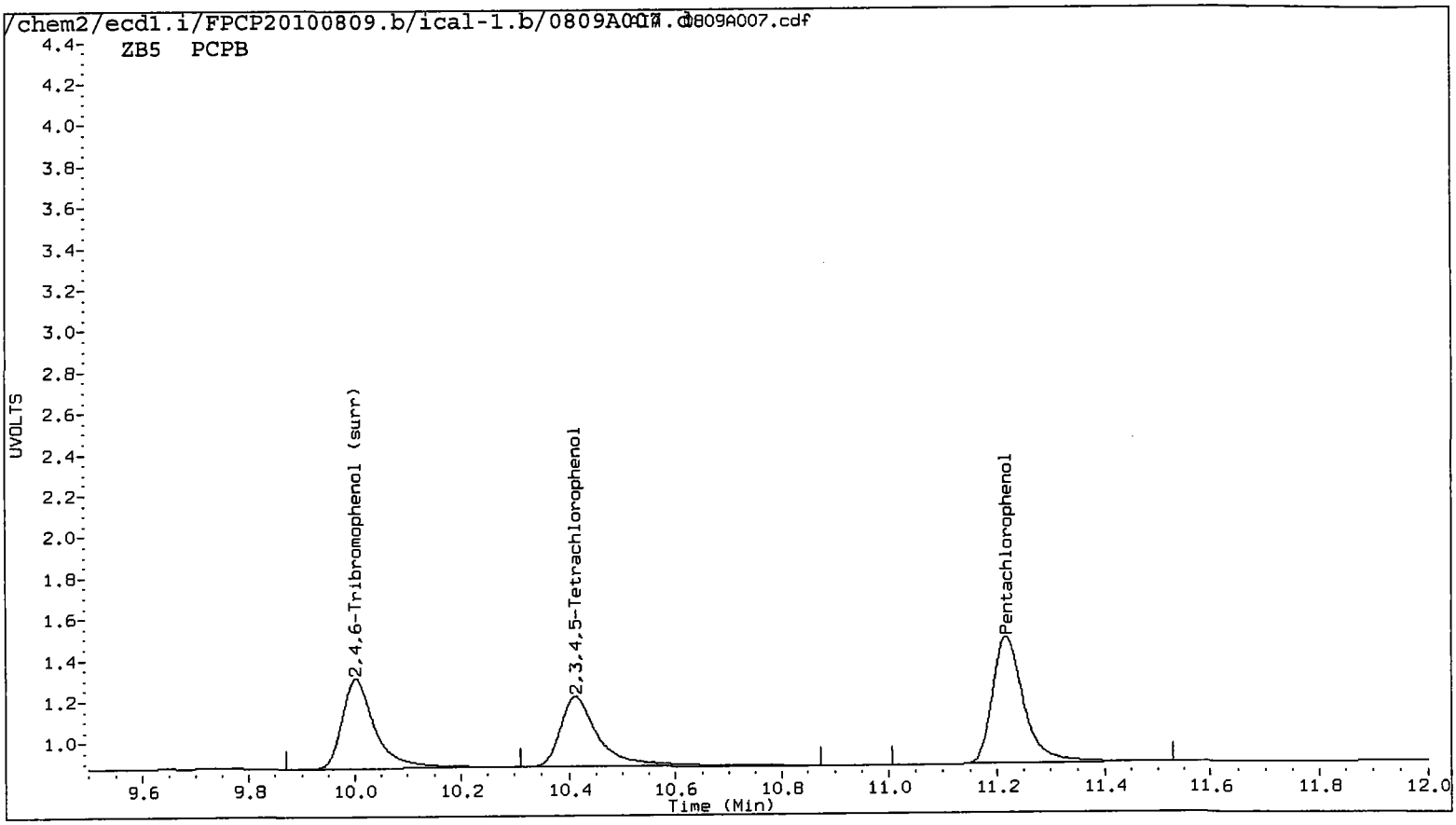
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/FPCP20100809.b/ical-1.b/0809A007.d ARI ID: PCPB
Data file 2: /chem2/ecd1.i/FPCP20100809.b/ical-2.b/0809A007.d Client ID:
Method: /chem2/ecd1.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		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
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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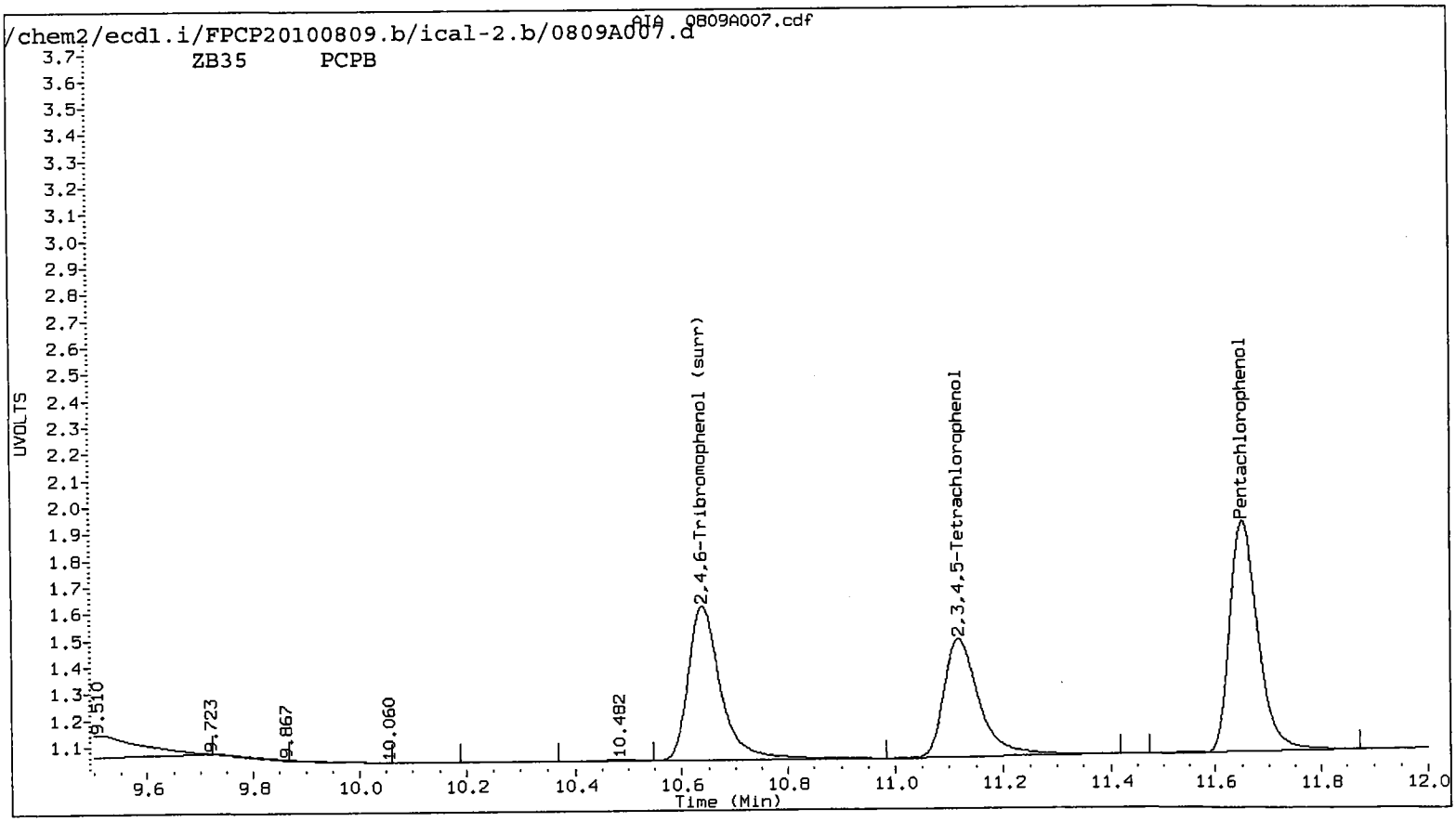
AIA 0809A007.cdf
ZB5 PCPB
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
Time (Min)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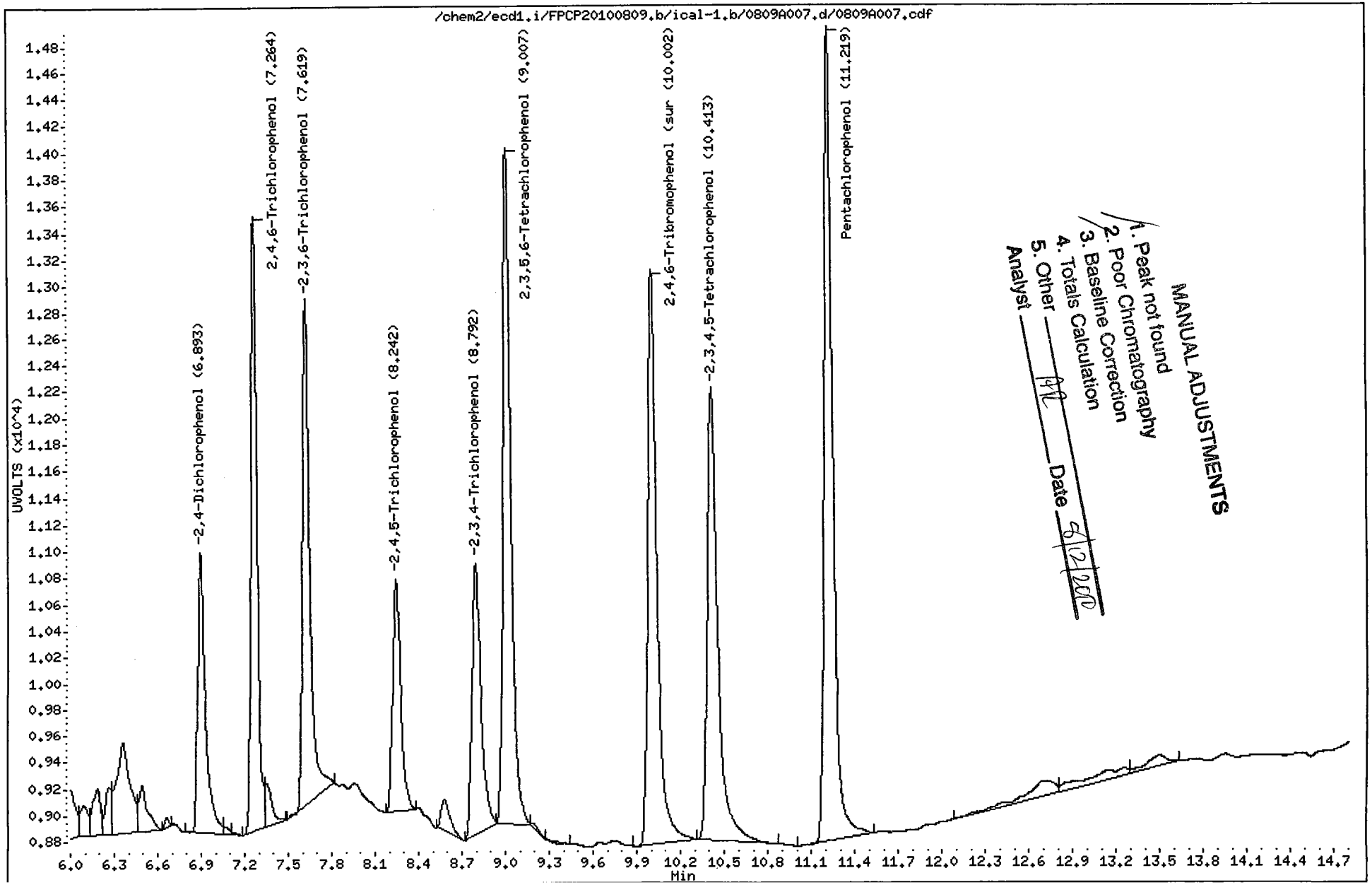
AIA 0809A007.cdf
ZB35 PCPB
UVOLTS
9.510
9.723
9.867
10.060
10.482
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
Time (Min)

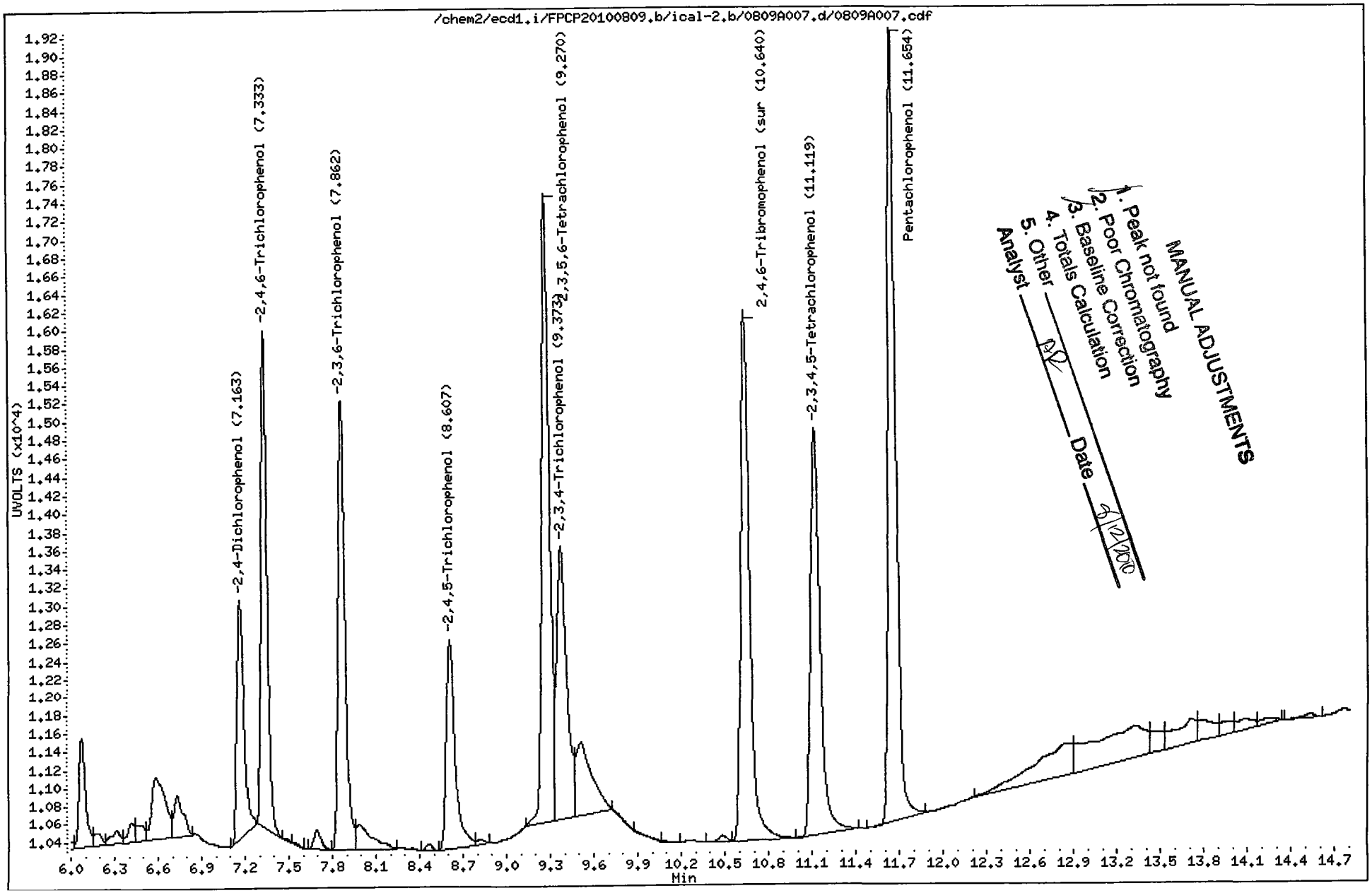
Data File: /chem2/ecd1.i/FPCP20100809.b/ical-1.b/0809A007.d
Date : 09-AUG-2010 13:03
Client ID:
Sample Info: PCPB
Purge Volume: 2.0
Column phase: ZB5

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



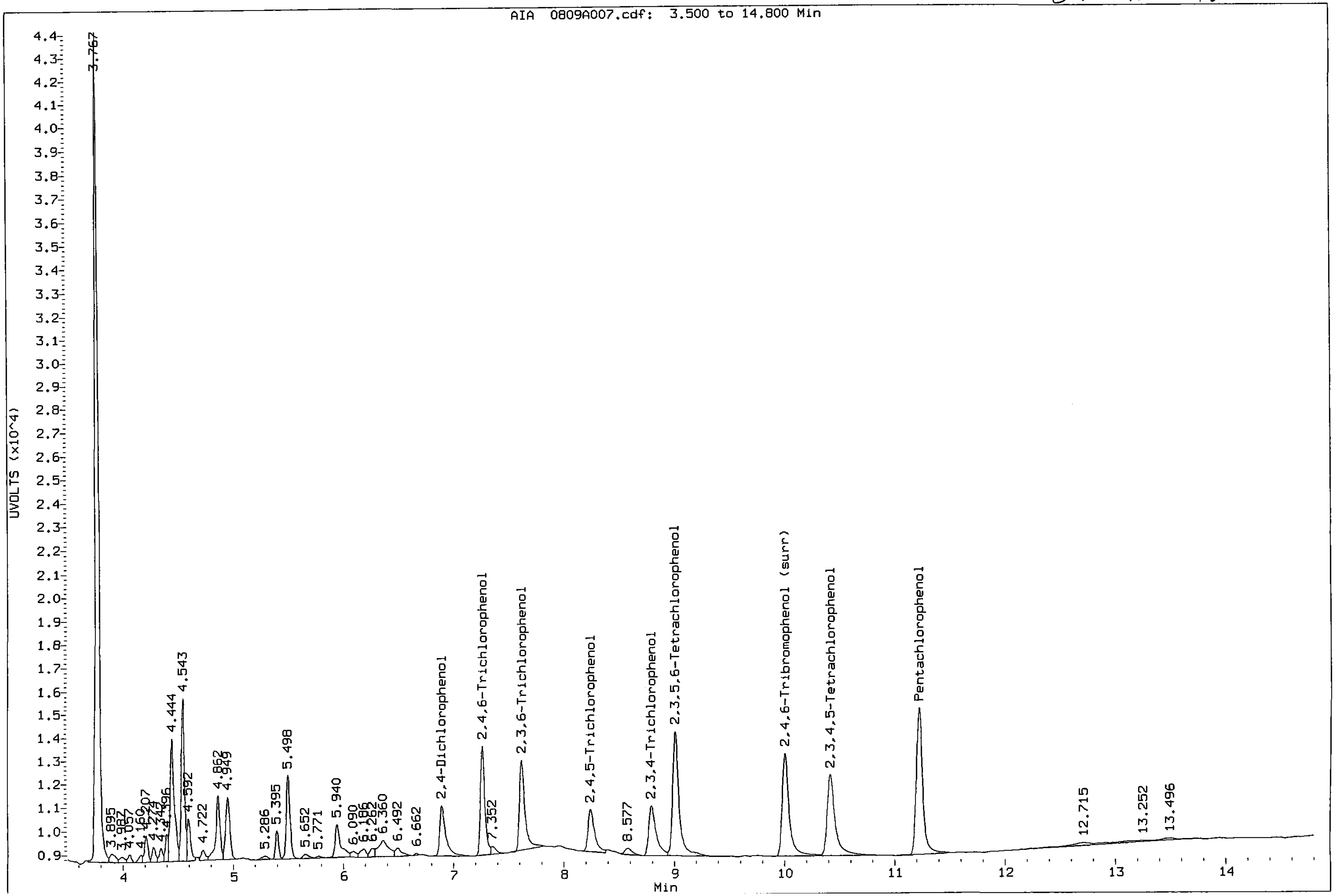
Data File: /chem2/ecd1.i/FPCP20100809.b/ical-2.b/0809A007.d
Date : 09-AUG-2010 13:03
Client ID:
Sample Info: PCPB
Purge Volume: 2.0
Column phase: ZB35

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



Data File: /chem2/ecd1.i/FPCP20100809.b/ical-1.b/0809A007.d/0809A007.cdf
Injection Date: 09-AUG-2010 13:03
Instrument: ecd1.i
Client Sample ID:

Before AR 8/12/2010



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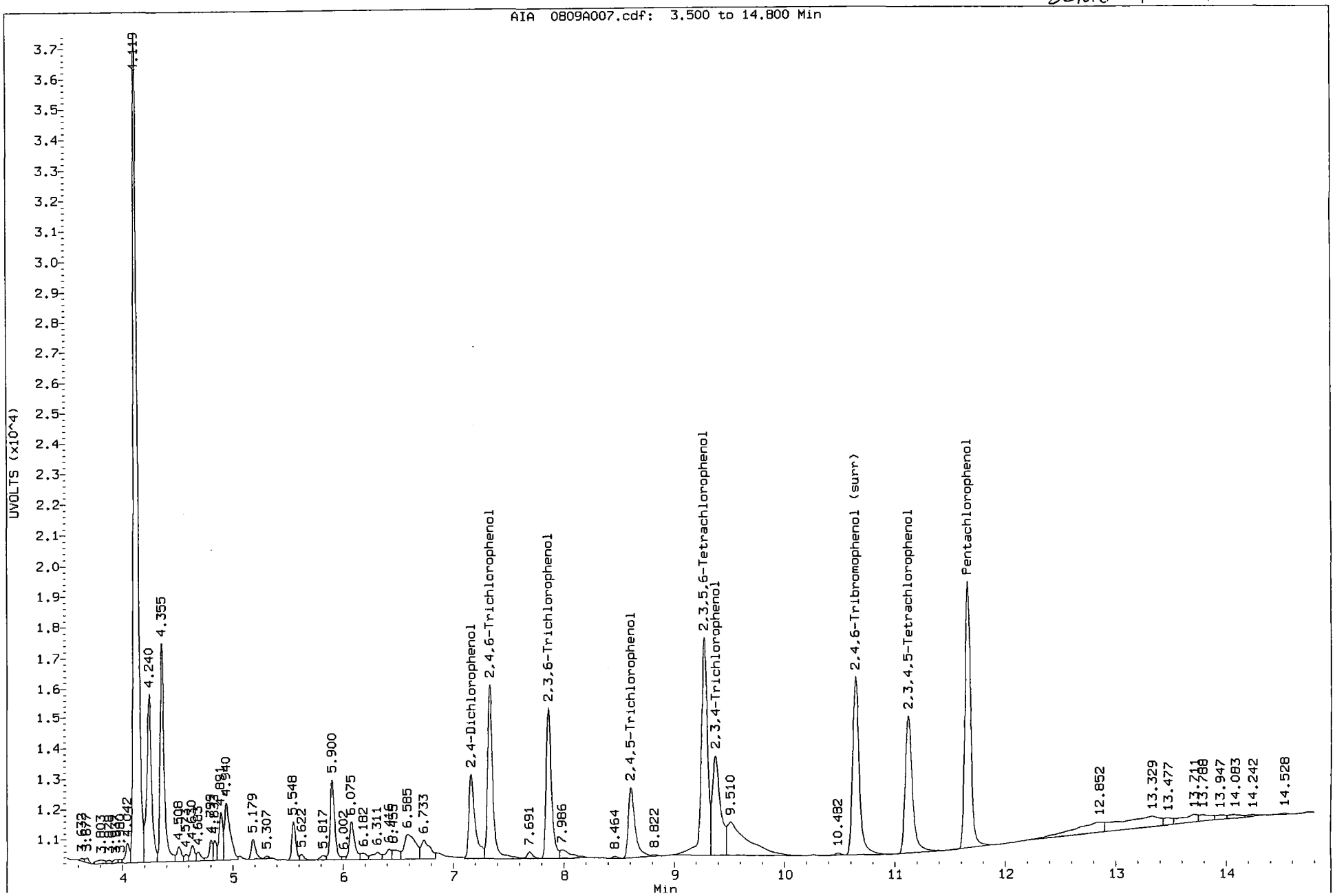
Injection Date: 09-AUG-2010 13:03
Instrument: ecd1.i
Client Sample ID:

Before AR 8/12/2010



Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

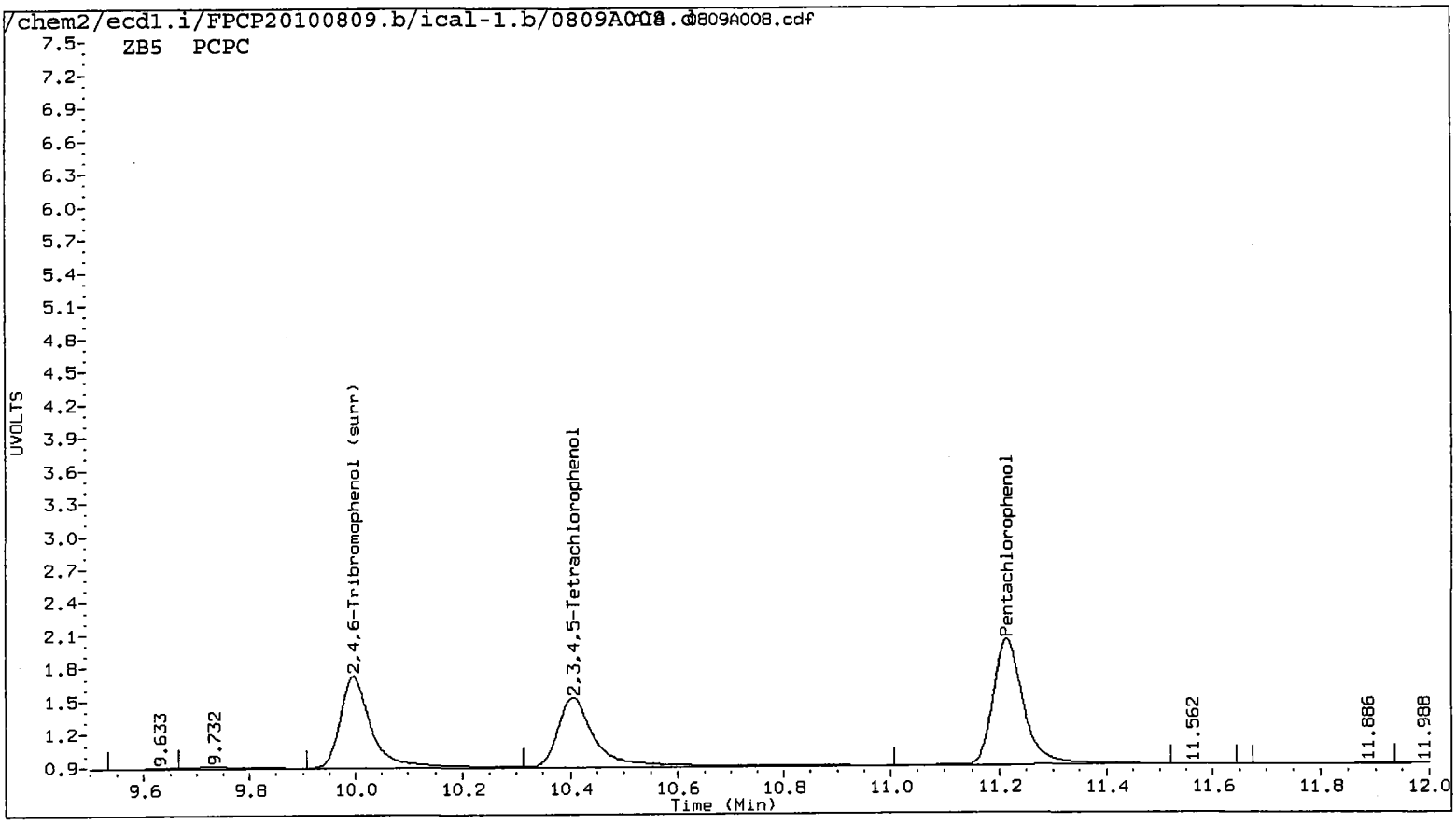
Data file 1: /chem2/ecd1.i/FPCP20100809.b/ical-1.b/0809A008.d ARI ID: PCPC
Data file 2: /chem2/ecd1.i/FPCP20100809.b/ical-2.b/0809A008.d Client ID:
Method: /chem2/ecd1.i/FPCP20100809.b/FPCP.m
Compound Sublist: all
Instrument: ecd1.i
Operator: ar

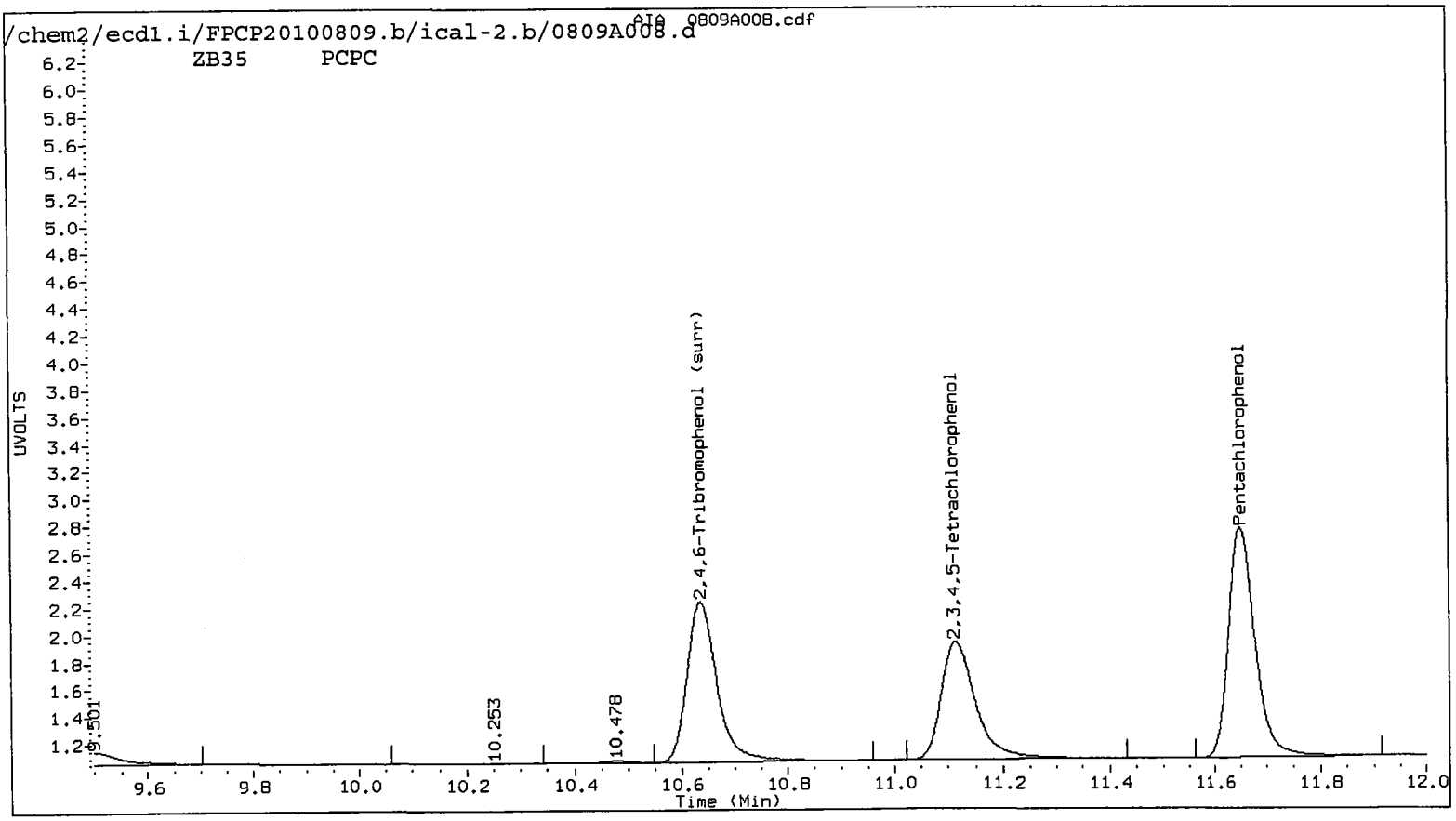
Injection Date: 09-AUG-2010 13:23
Report Date: 08/12/2010 19:15
Matrix: WATER
Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
11.215	-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


/chem2/ecd1.i/FPCP20100809.b/ical-1.b/0809A008.d
AIA 0809A008.cdf
ZB5 PCPC
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.633
9.732
11.562
11.886
11.988
Time (Min)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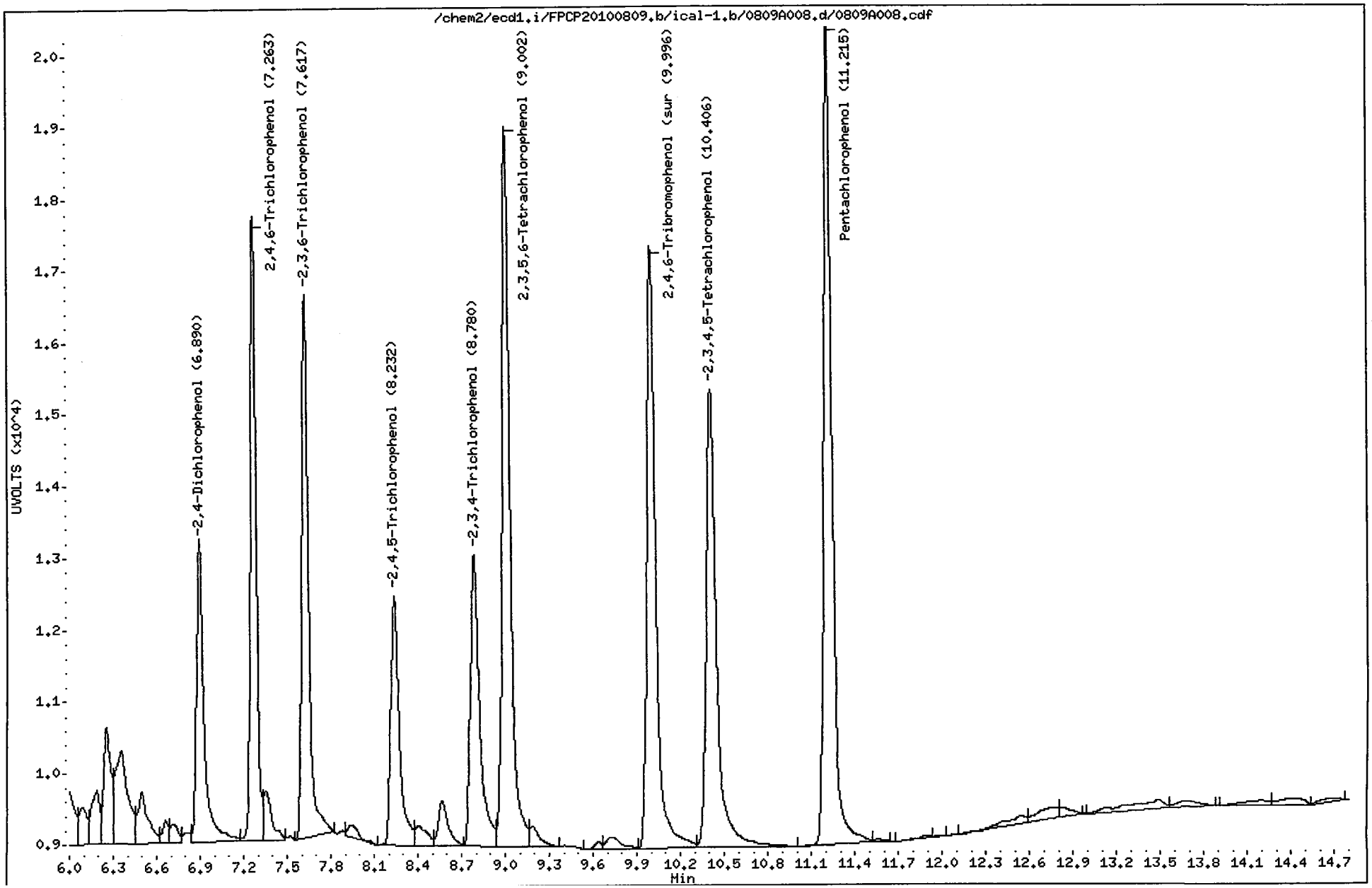
AIA 0809A008.cdf
ZB35 PCPC
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.501
10.253
10.478
Time (Min)

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

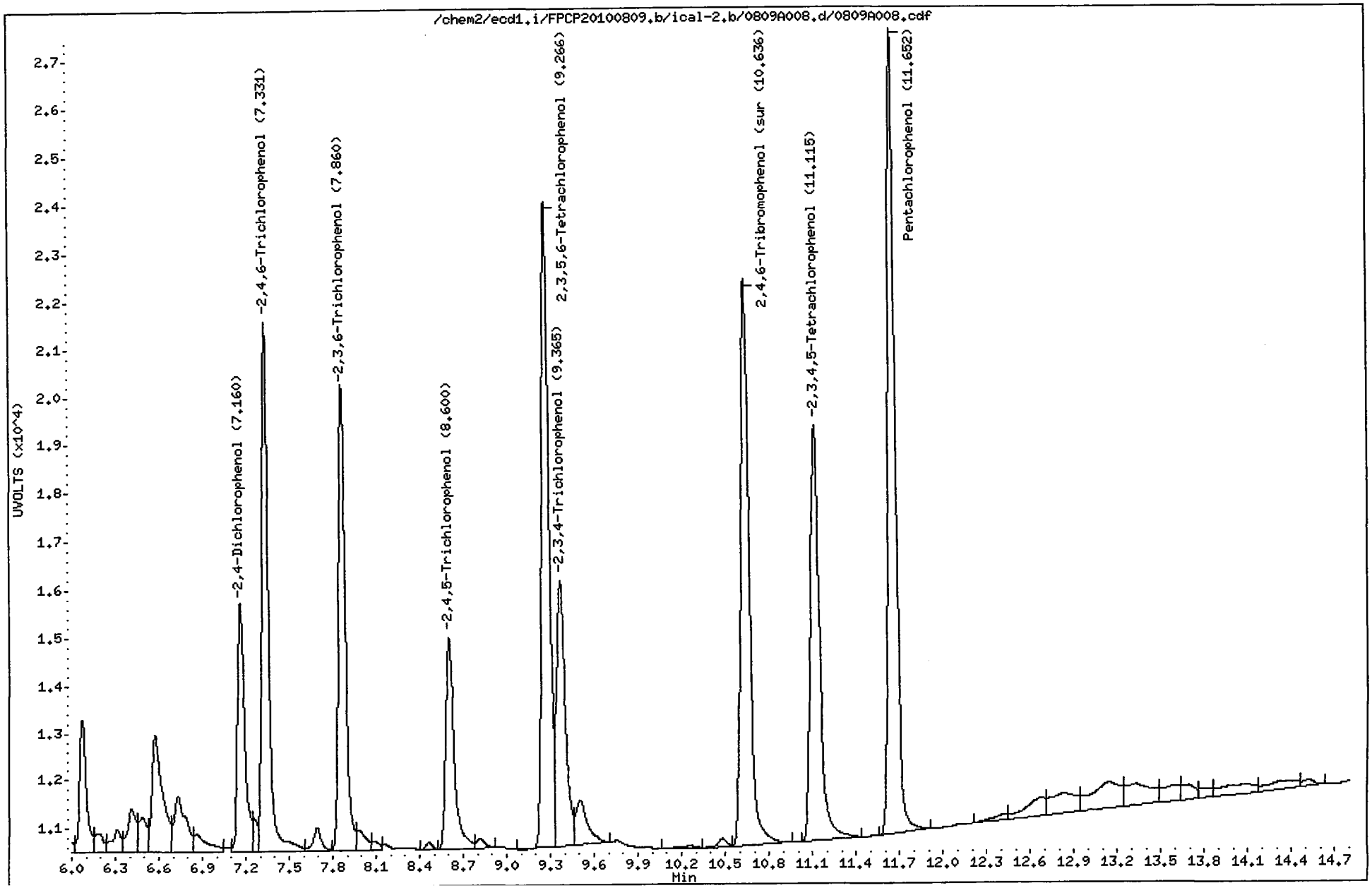
Instrument: ecd1.i
Operator: ar
Column diameter: 0.53



Data File: /chem2/ecd1.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: ecd1.i

Operator: ar
Column diameter: 0.53



Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

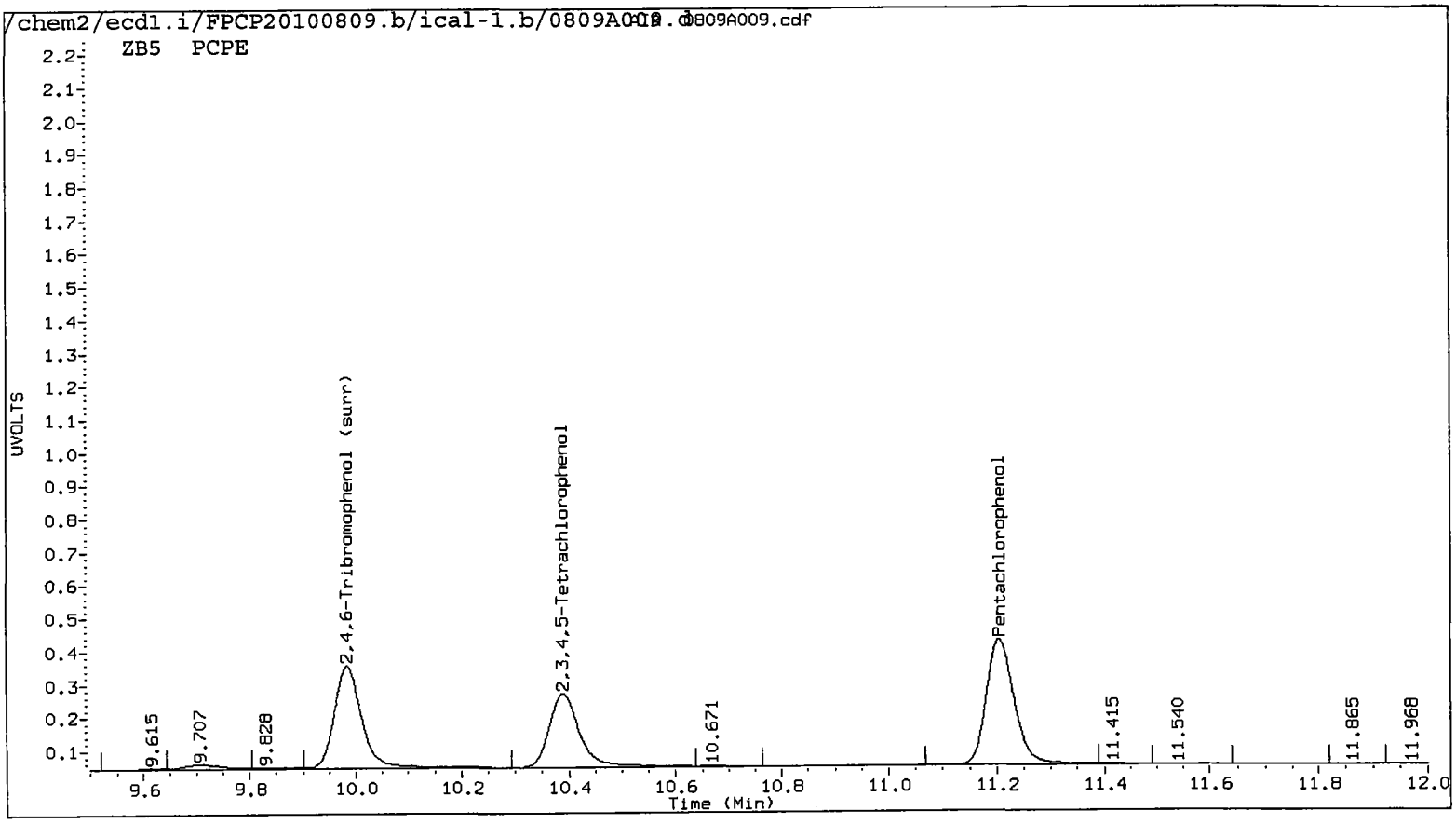
Data file 1: /chem2/ecd1.i/FPCP20100809.b/ical-1.b/0809A009.d ARI ID: PCPE
Data file 2: /chem2/ecd1.i/FPCP20100809.b/ical-2.b/0809A009.d Client ID:
Method: /chem2/ecd1.i/FPCP20100809.b/FPCP.m
Compound Sublist: all
Instrument: ecd1.i
Operator: ar

Injection Date: 09-AUG-2010 13:43
Report Date: 08/12/2010 19:15
Matrix: WATER
Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
11.206	-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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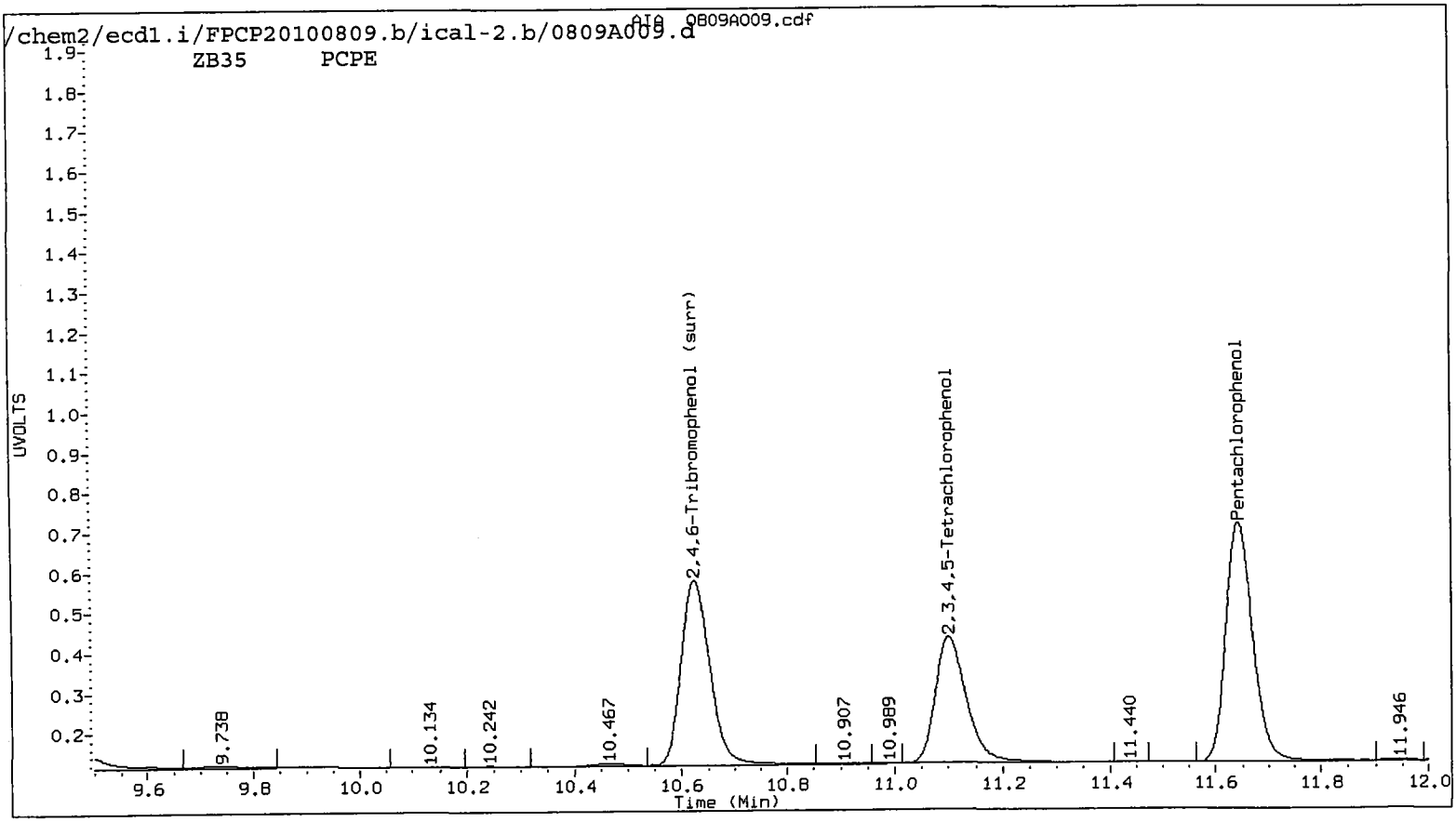
0809A009.cdf
ZB5 PCPE
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.615
9.707
9.828
10.671
11.415
11.540
11.865
11.968
Time (Min)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0809A009.cdf
ZB35 PCPE
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.738
10.134
10.242
10.467
10.907
10.989
11.440
11.946
Time (Min)

Data File: /chem2/ecd1.i/FPCP20100809.b/ical-1.b/0809A009.d

Date : 09-AUG-2010 13:43

Client ID:

Instrument: ecd1.i

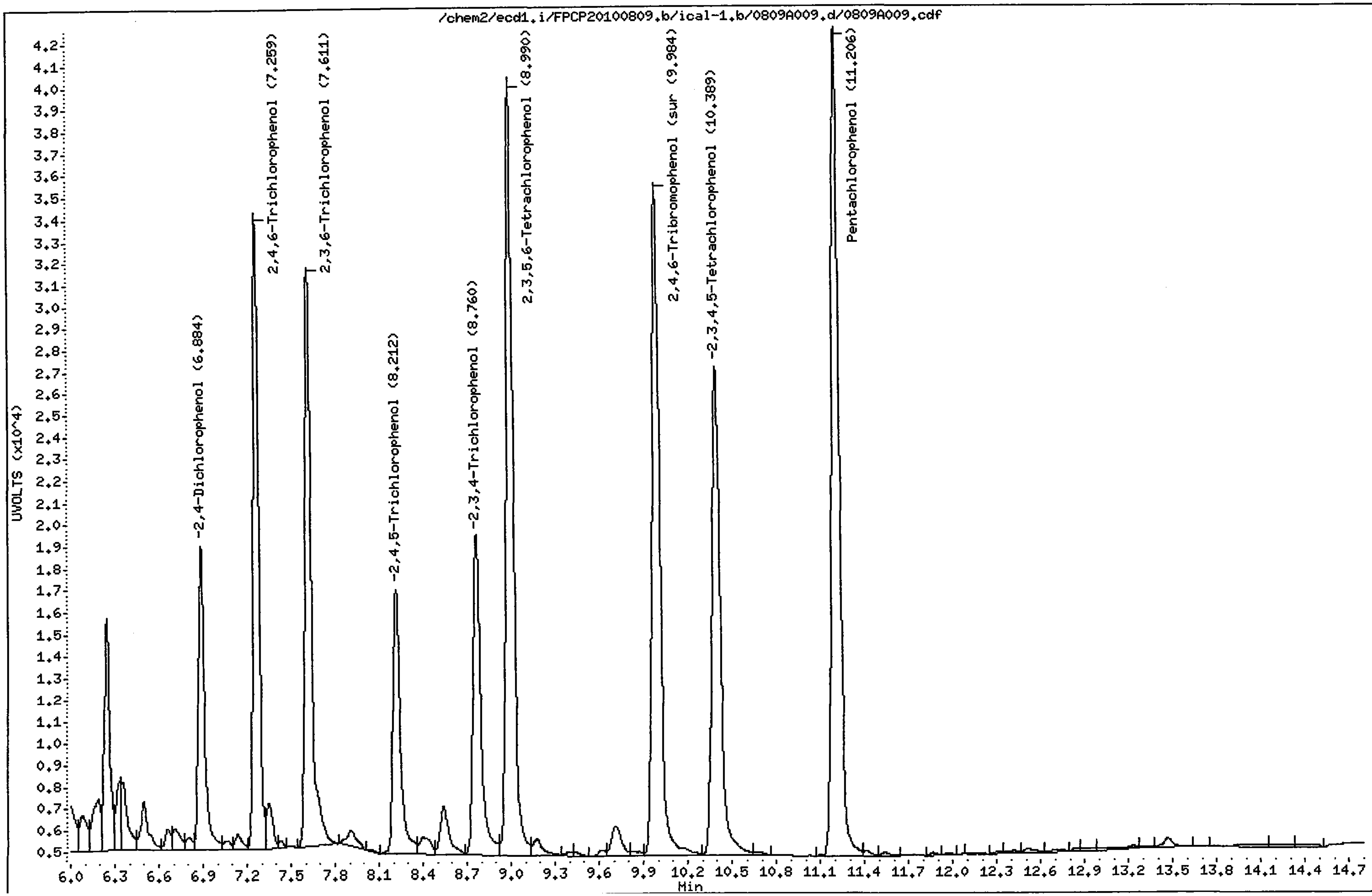
Sample Info: PCPE

Purge Volume: 2.0

Operator: ar

Column phase: ZB5

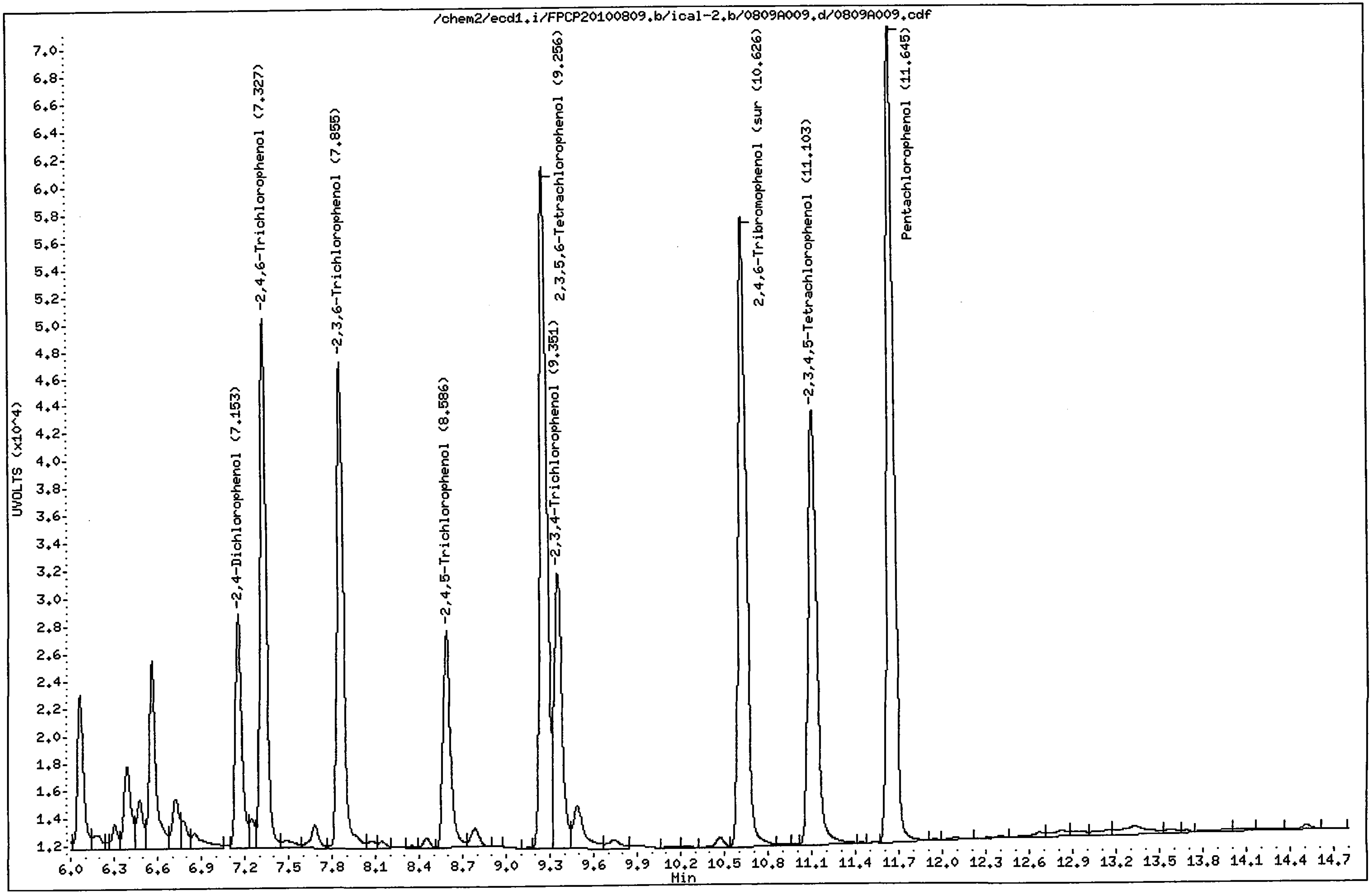
Column diameter: 0.53



Data File: /chem2/ecd1.i/FPCP20100809.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



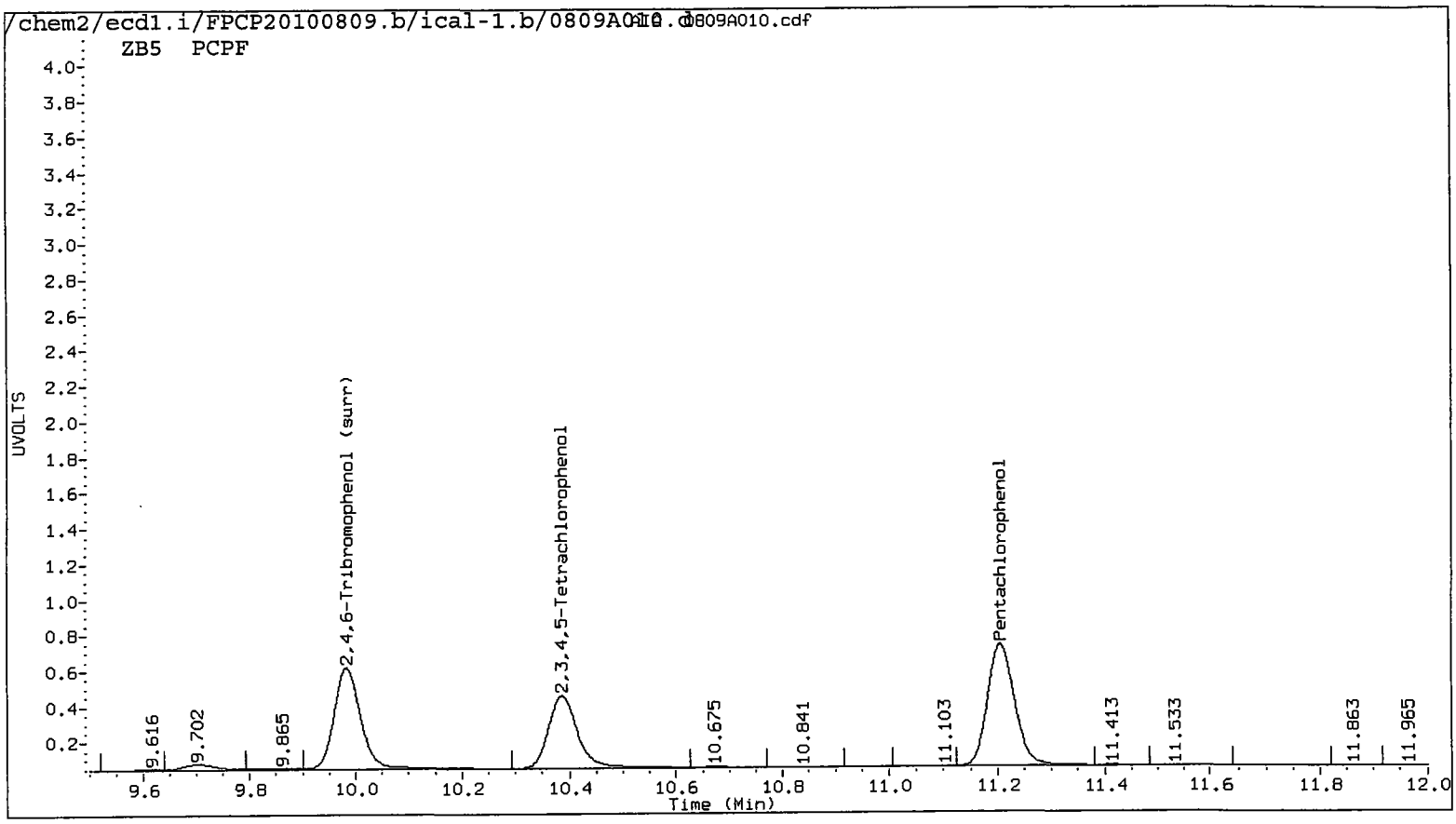
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/FPCP20100809.b/ical-1.b/0809A010.d ARI ID: PCPF
Data file 2: /chem2/ecd1.i/FPCP20100809.b/ical-2.b/0809A010.d Client ID:
Method: /chem2/ecd1.i/FPCP20100809.b/FPCP.m Injection Date: 09-AUG-2010 14:03
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		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
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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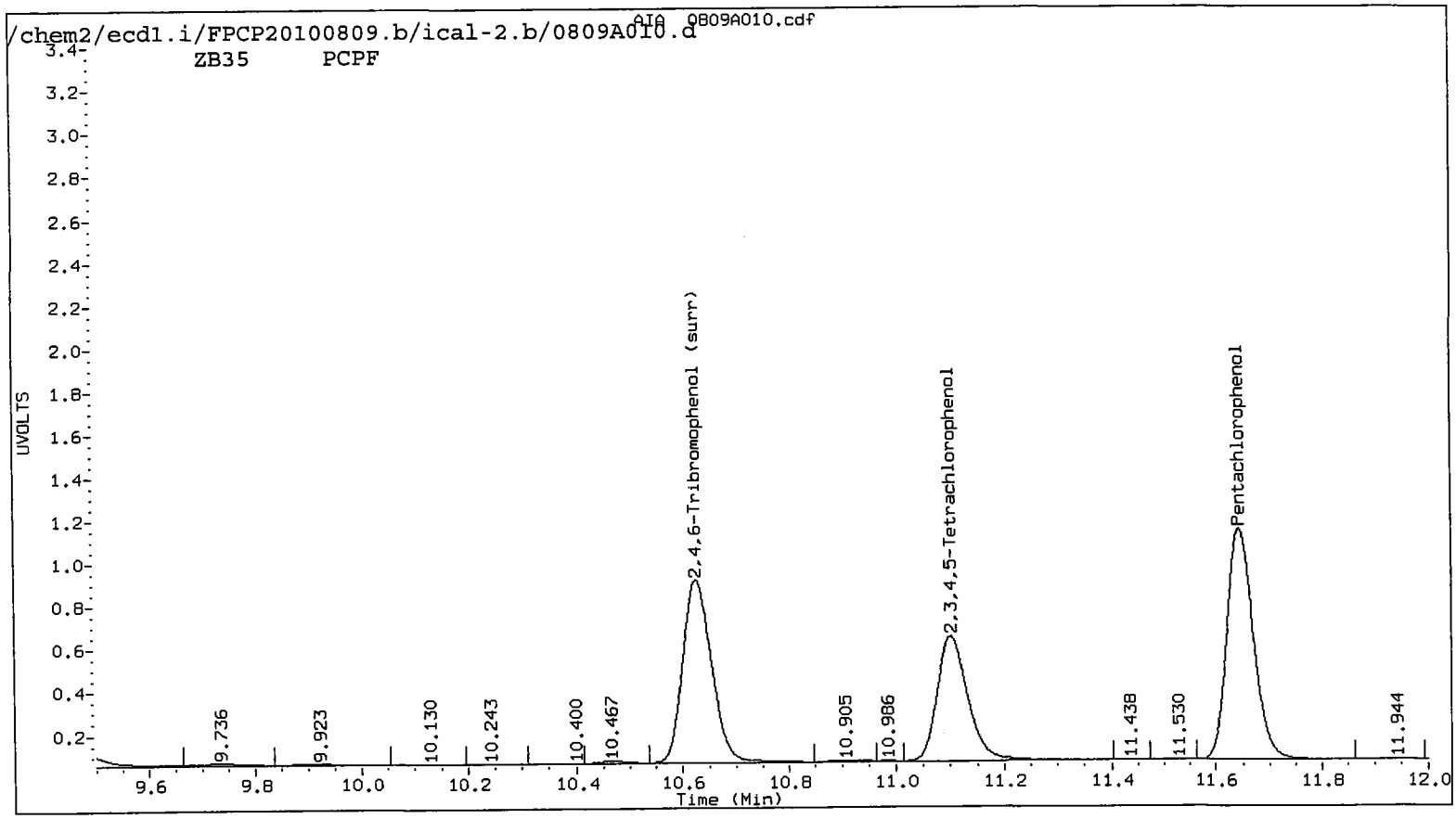
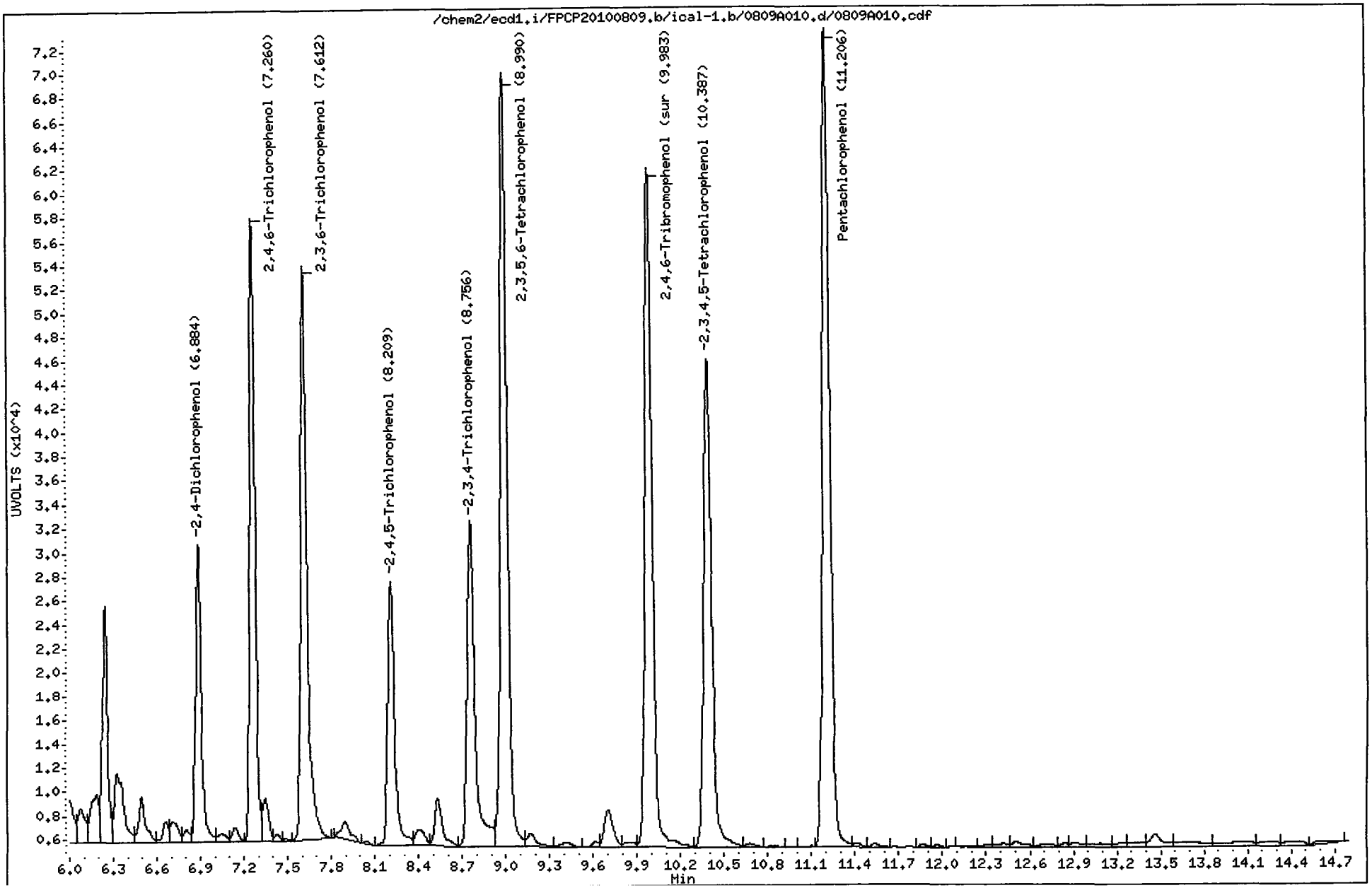
A1A 0809A010.cdf
ZB5 PCPF
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.616
9.702
9.865
10.675
10.841
11.103
11.413
11.533
11.863
11.965
Time (Min)


/chem2/ecd1.i/FPCP20100809.b/ical-2.b/0809A010.d
A1A 0809A010.cdf
ZB35 PCPF
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.736
9.923
10.130
10.243
10.400
10.467
10.905
10.986
11.438
11.530
11.944
Time (Min)

Data File: /chem2/ecd1.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

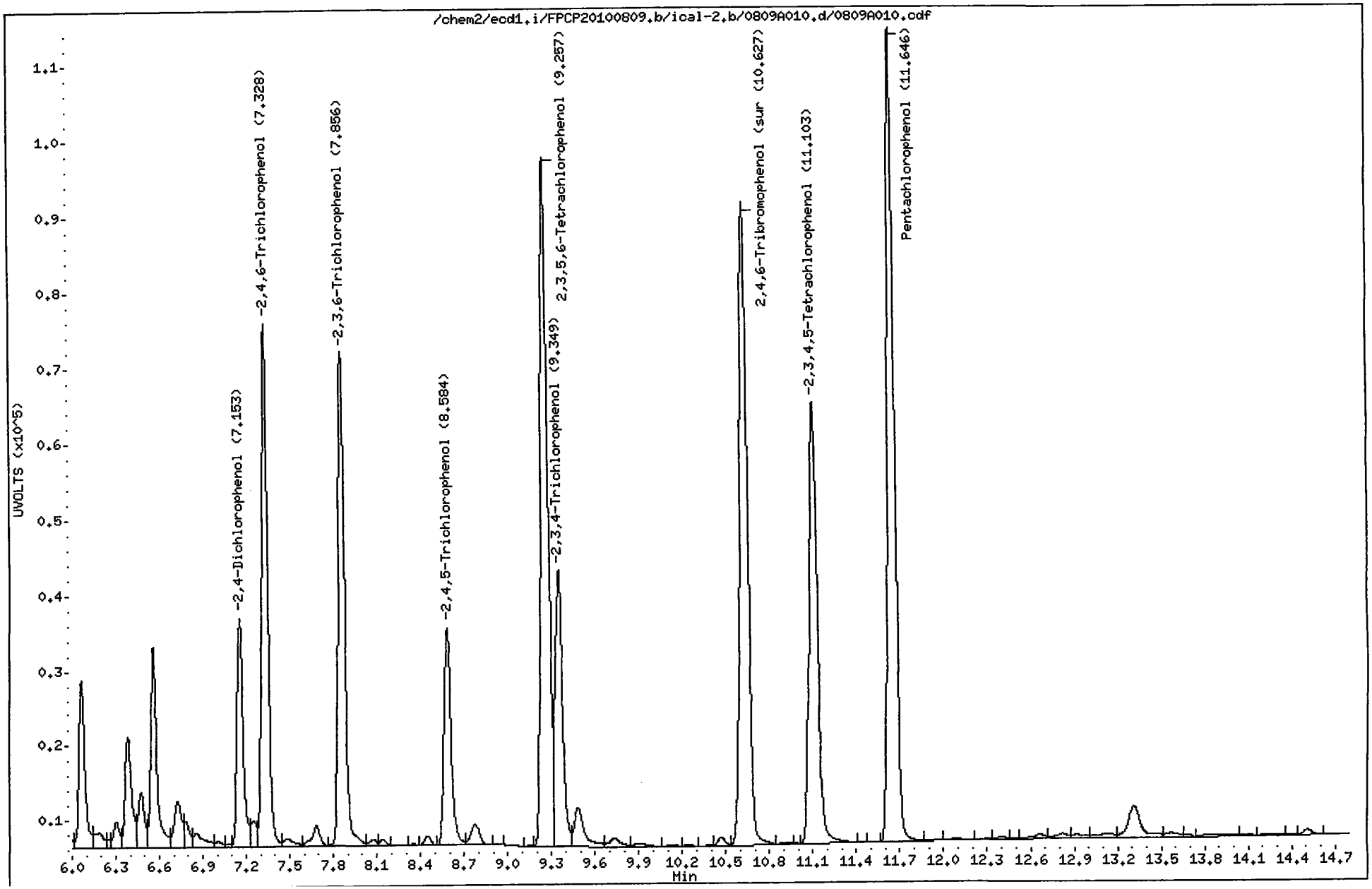
Instrument: ecd1.i
Operator: ar
Column diameter: 0.53



Data File: /chem2/ecd1.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: ecd1.i

Operator: ar
Column diameter: 0.53



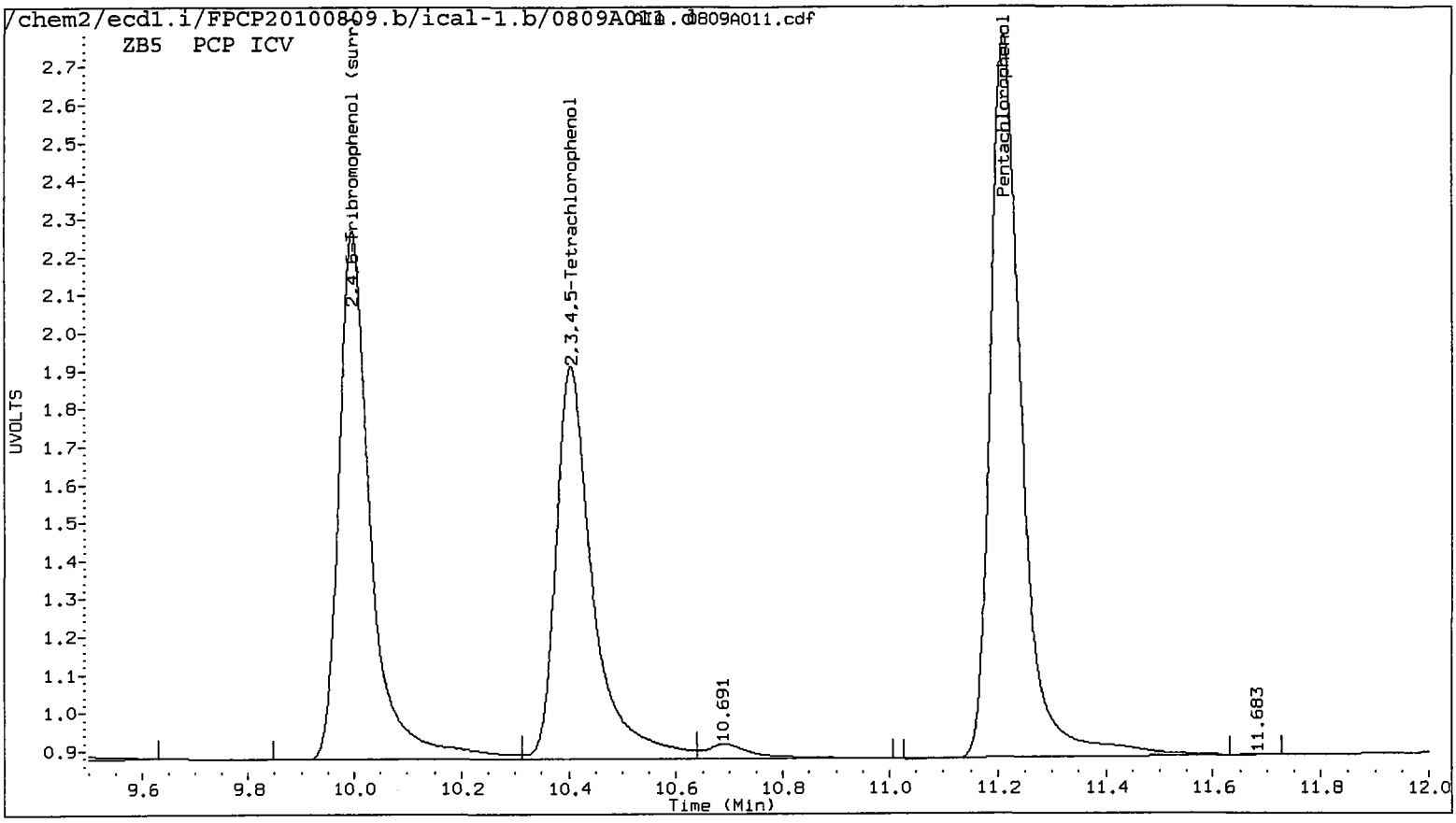
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

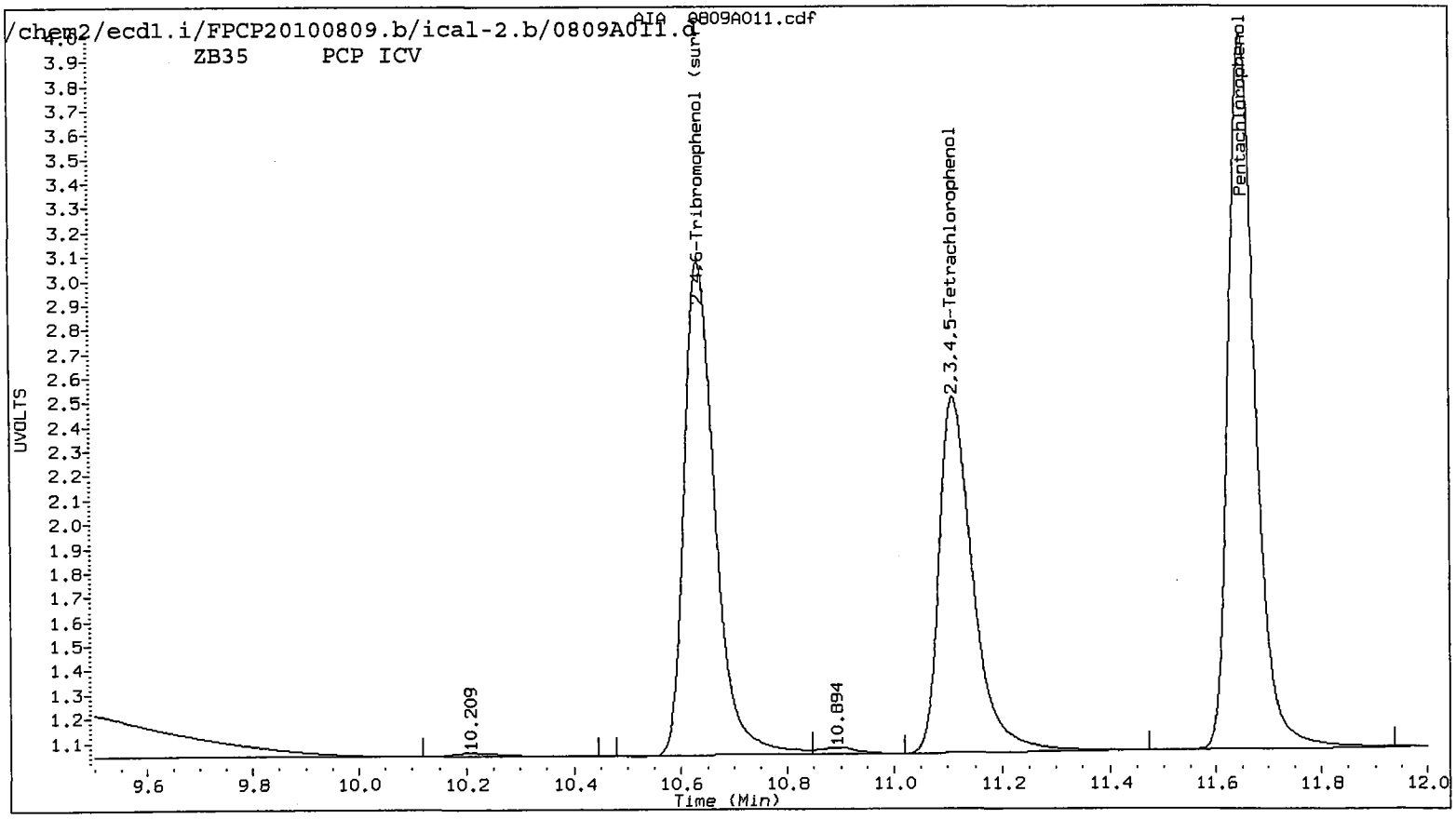
Data file 1: /chem2/ecd1.i/FPCP20100809.b/ical-1.b/0809A011.d ARI ID: PCP ICV
Data file 2: /chem2/ecd1.i/FPCP20100809.b/ical-2.b/0809A011.d Client ID:
Method: /chem2/ecd1.i/FPCP20100809.b/FPCP.m Injection Date: 09-AUG-2010 14:23
Compound Sublist: all Report Date: 08/12/2010 19:15
Instrument: ecd1.i Matrix: WATER
Operator: ar Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
11.215	-0.004	379790	11.652	-0.006	529883	24.4673	23.0771	5.8	Pentachlorophenol
7.262	-0.002	205092	7.330	-0.003	298811	24.1995	23.9344	1.1	2,4,6-Trichlorophenol
7.616	-0.003	218352	7.859	-0.005	286346	24.7503	23.0765	7.0	2,3,6-Trichlorophenol
8.230	-0.012	122402	8.599	-0.016	148542	24.2499	23.6199	2.6	2,4,5-Trichlorophenol
8.781	-0.011	146955	9.367	-0.013	237744	21.4812	28.5412	28.2	2,3,4-Trichlorophenol
9.000	-0.007	327277	9.265	-0.012	434865	23.2019	23.4874	1.2	2,3,5,6-Tetrachlorophenol
10.405	-0.008	246924	11.114	-0.012	318432	23.7688	21.8243	8.5	2,3,4,5-Tetrachlorophenol
6.888	-0.005	114813	7.158	-0.008	155429	231.5174	251.6722	8.3	2,4-Dichlorophenol
9.997	-0.005	292116	10.636	-0.010	411868	23.5	22.1	6.4	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
Pentachlorophenol	97.9	92.3
2,4,6-Trichlorophenol	96.8	95.7
2,3,6-Trichlorophenol	99.0	92.3
2,4,5-Trichlorophenol	97.0	94.5
2,3,4-Trichlorophenol	85.9	114.2
2,3,5,6-Tetrachlorophenol	92.8	93.9
2,3,4,5-Tetrachlorophenol	95.1	87.3
2,4-Dichlorophenol	92.6	100.7
2,4,6-TBP (surr)	47.0	44.1


/chem2/ecd1.i/FPCP20100809.b/ical-1.b/0809A011.d
AIA 0809A011.cdf
ZB5 PCP ICV
2,4,6-Tribromophenol (surr
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
10.691
11.683
UVOLTS
Time (Min)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AIA 0809A011.cdf
ZB35 PCP ICV
2,4,6-Tribromophenol (surr
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
10.209
10.894
UVOLTS
Time (Min)

Data File: /chem2/ecd1.i/FPCP20100809.b/ical-1.b/0809A011.d

Page 1

Date : 09-AUG-2010 14:23

Client ID:

Instrument: ecd1.i

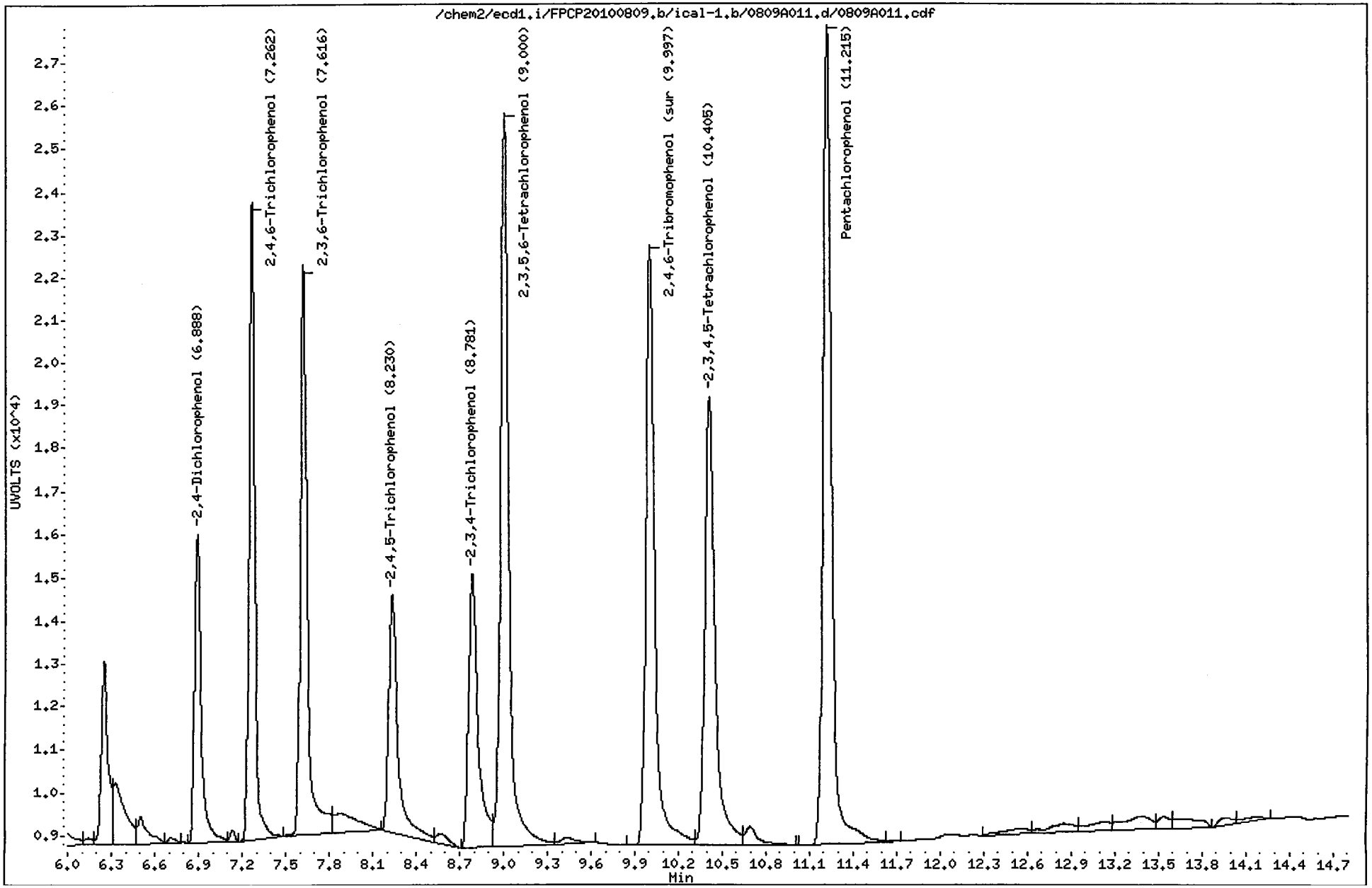
Sample Info: PCP ICV

Operator: ar

Purge Volume: 2.0

Column diameter: 0.53

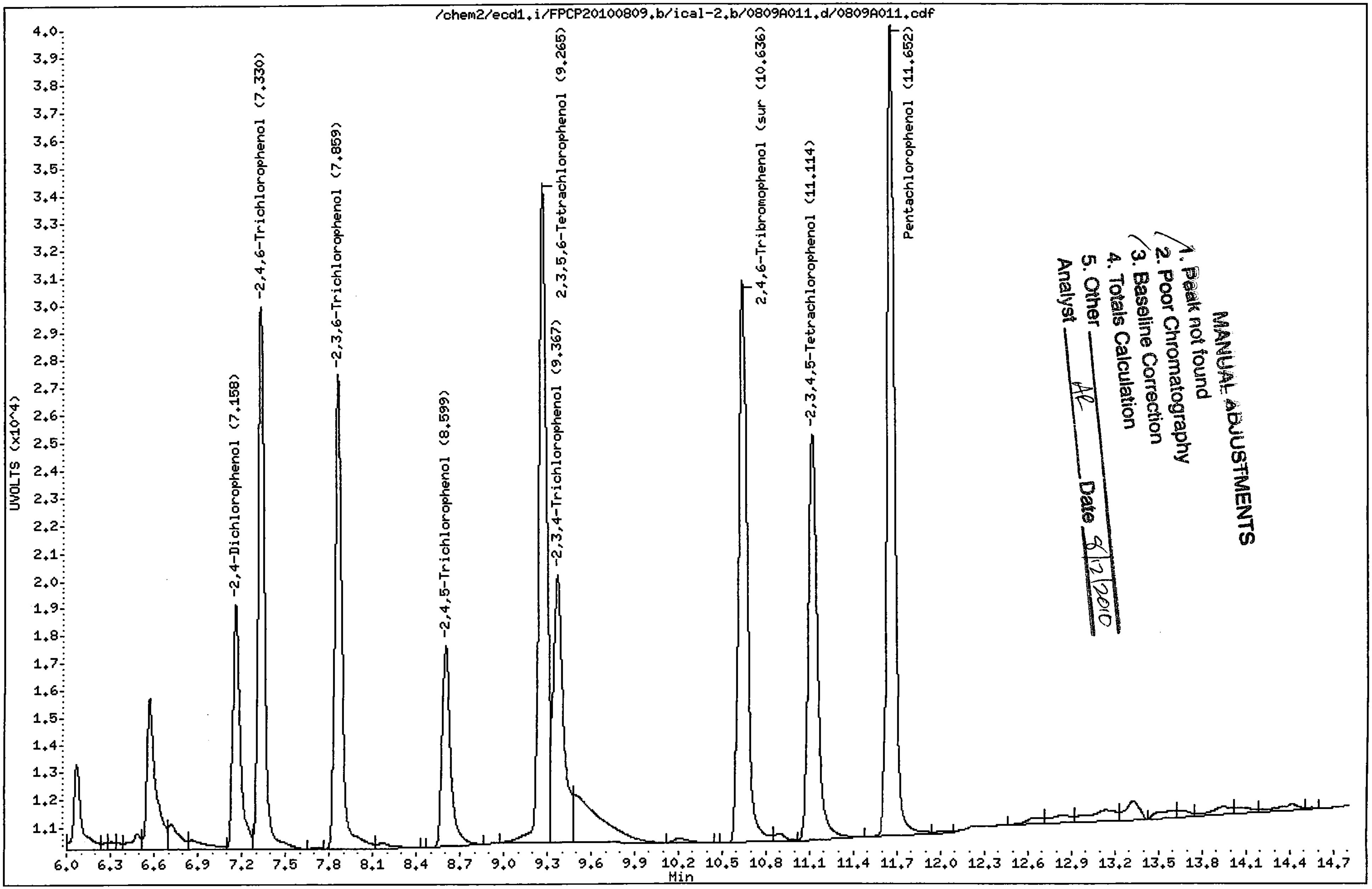
Column phase: ZB5



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

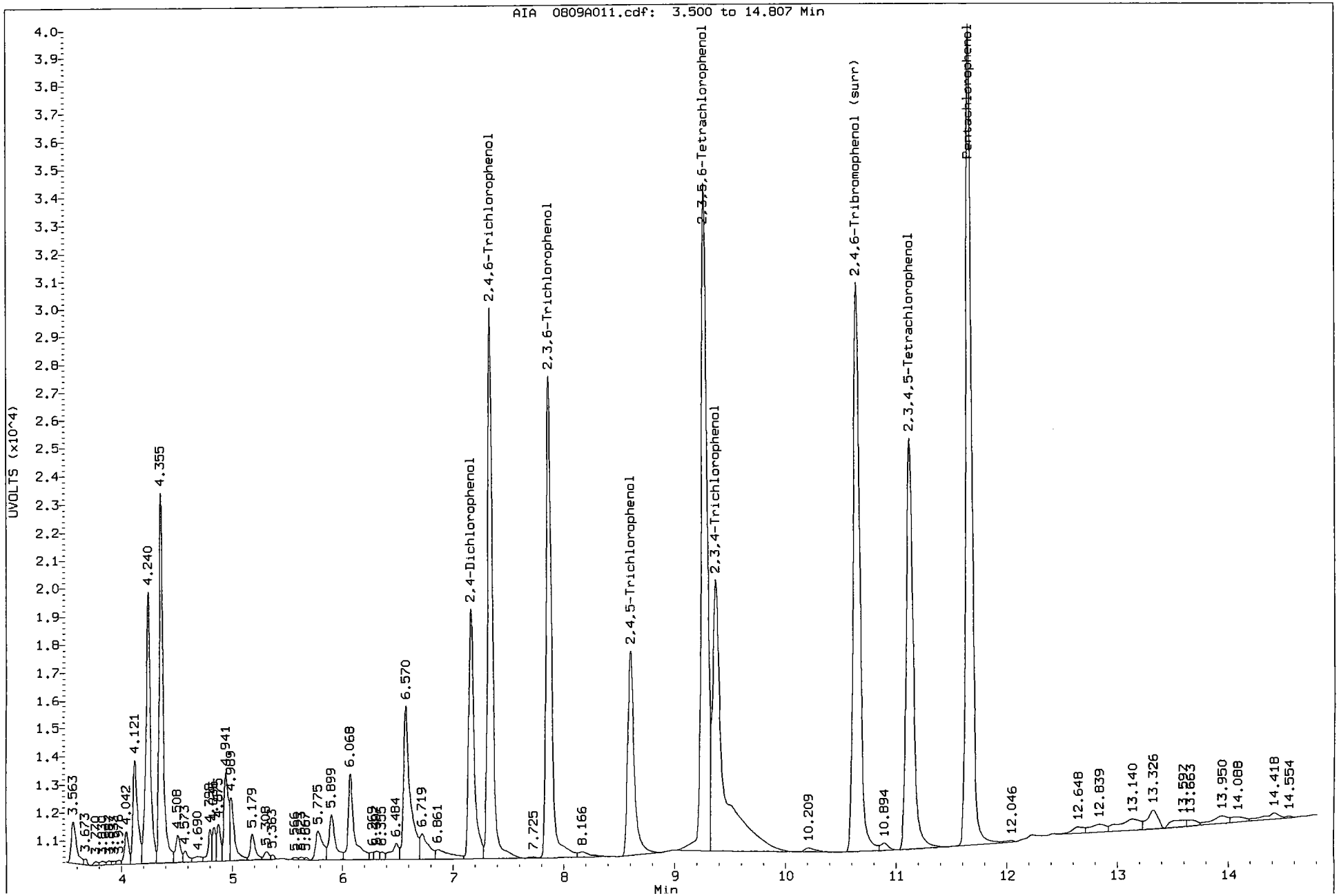
Instrument: ecd1.i

Operator: ar
Column diameter: 0.53



Data File: /chem2/ecd1.i/FPCP20100809.b/ical-2.b/0809A011.d/0809A011.cdf
Injection Date: 09-AUG-2010 14:23
Instrument: ecd1.i
Client Sample ID:

Before AR 8/12/2010



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

ARI Job ID: RI46

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC Analyst Notes / Corrective Action Log

ARI Project ID: RI46 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): _____

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: 8/24/2010

Endrin/DDT Breakdown <15%? YES / NO / NA — Method Blank In Control? YES / NO

ICal Meets RF & %RSD Criteria? YES / NO — LCS/LCSD Recovery In Control? YES / NO

CCal Meets RF & %RSD Criteria? YES / NO — Surrogate Recovery In Control? YES / NO

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

VDP

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

Additional Details on Reverse: Yes / No

Analyst: _____ **Date:** 8/25/2010

Reviewer: _____ **Date:** 8/26/10

Analytical Resources Inc.: Organics Instrument Log

ECD1 Serial No.: 3410A39690

Date: 8/24/10 Analysis: Cl.Phenols Analyst: AR

GC Program: PCPFAST.M Column No: 150608/148146 Column Type: 225/35

Instrument Tune (.U or .CT.): NA EM Voltage: NA

Calibration File: FPCP20100809.b Curve Date: 8/9/2010

IS/SS	Ical/Ccal	LCS/ICV
	1663-2&1739-1	1703-2&1731-2

GC LOG SUMMARY FOR DATABATCH - /chem2/ecd1.i/FPCP20100809.b/0824-1.b

	Inject Date/Time	Filename	DF	LabID	ClientID
1	24-AUG-2010 14:27	0824A001.d	1	RINSE	
2	24-AUG-2010 14:47	0824A002.d	1	RINSE	
3	24-AUG-2010 15:07	0824A003.d	1	RINSE	
4	24-AUG-2010 15:27	0824A004.d	1	PCPCCAL	
5	24-AUG-2010 15:47	0824A005.d	1	PCPCCAL	
6	24-AUG-2010 16:08	0824A006.d	1	RI46MBW1	
7	24-AUG-2010 16:28	0824A007.d	1	RI46LCSW1	
8	24-AUG-2010 16:48	0824A008.d	1	RI46OLCSDW1	
9	24-AUG-2010 17:08	0824A009.d	1	RI46A	
10	24-AUG-2010 17:28	0824A010.d	1	RI46B	
11	24-AUG-2010 17:48	0824A011.d	1	RI46C	
12	24-AUG-2010 18:08	0824A012.d	1	RI46D	
13	24-AUG-2010 18:28	0824A013.d	1	RI46E	
14	24-AUG-2010 18:48	0824A014.d	1	RI46F	
15	24-AUG-2010 19:08	0824A015.d	1	RI46G	
16	24-AUG-2010 19:28	0824A016.d	1	RINSE	
17	24-AUG-2010 19:48	0824A017.d	1	PCPCCAL	
18	24-AUG-2010 20:08	0824A018.d	1	PCPCCAL	
19	24-AUG-2010 20:28	0824A019.d	1	RI46H	
20	24-AUG-2010 20:48	0824A020.d	1	RI46I	
21	25-AUG-2010 09:36	0824A021.d	1	pcp	
22	25-AUG-2010 09:56	0824A022.d	1	PCPCCAL	
23	25-AUG-2010 10:16	0824A023.d	1	PCPCCAL	
24	25-AUG-2010 10:36	0824A024.d	1	RI46MBW1	
25	25-AUG-2010 10:56	0824A025.d	1	RI46H	
26	25-AUG-2010 11:16	0824A026.d	1	RI46I	
27	25-AUG-2010 12:02	0824A027.d	1	RI46MBW1	
28	25-AUG-2010 12:21	0824A028.d	1	pcp	
29	25-AUG-2010 12:41	0824A029.d	1	PCPCCAL	

AR 8/25/2010

Maintenance / Comments

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

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

AR 8/25/2010

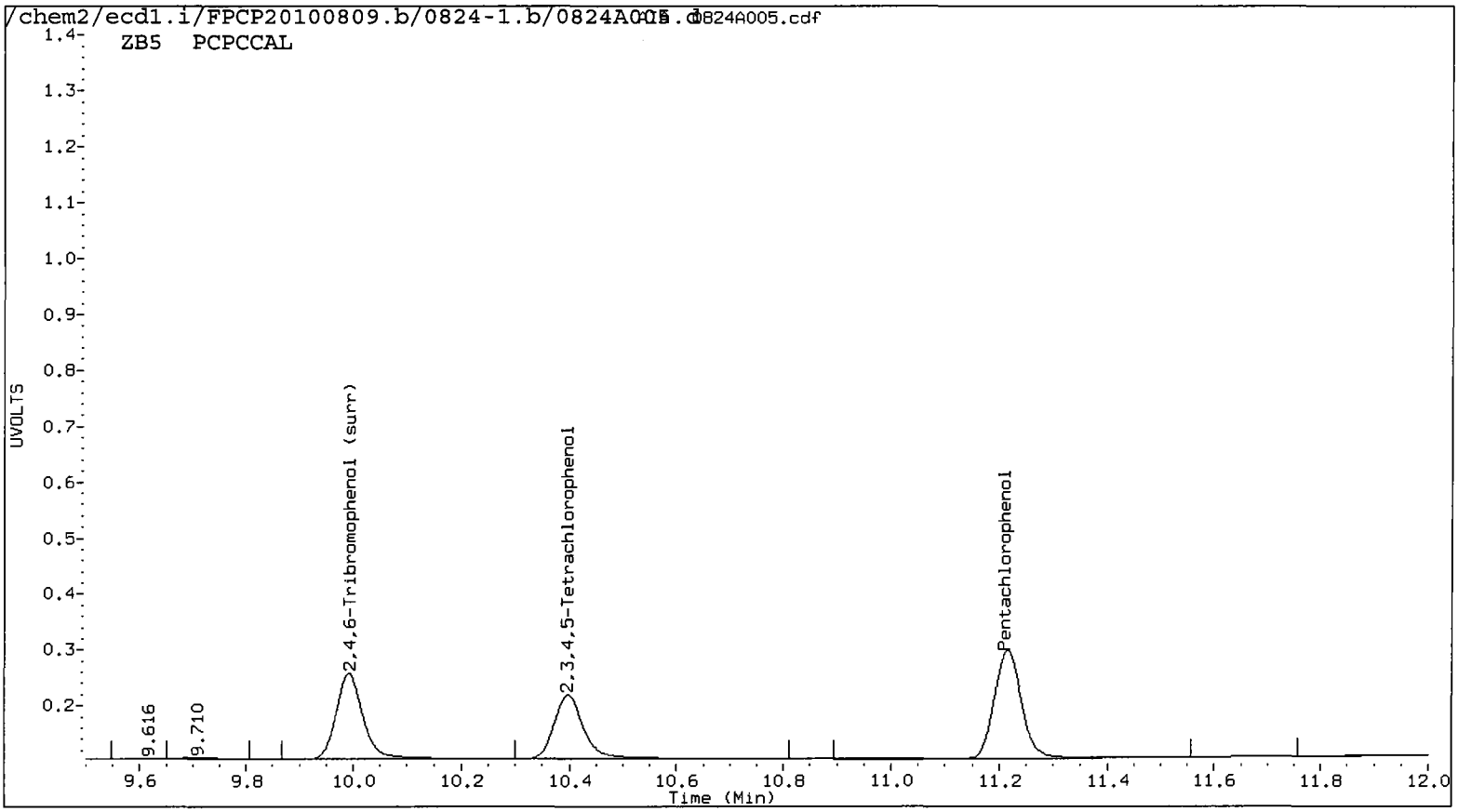
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/FPCP20100809.b/0824-1.b/0824A005.d ARI ID: PCPCCAL
Data file 2: /chem2/ecd1.i/FPCP20100809.b/0824-2.b/0824A005.d Client ID:
Method: /chem2/ecd1.i/FPCP20100809.b/FPCP.m Injection Date: 24-AUG-2010 15:47
Compound Sublist: all Report Date: 08/25/2010 10:29
Instrument: ecd1.i Matrix: WATER
Operator: ar Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
11.213	-0.006	348828	11.652	-0.006	524918	22.2162	22.8609	2.9	Pentachlorophenol
7.264	0.000	202610	7.332	-0.001	282259	23.8711	22.6086	5.4	2,4,6-Trichlorophenol
7.617	-0.002	213837	7.860	-0.004	270309	24.1870	21.7841	10.5	2,3,6-Trichlorophenol
8.220	-0.022	116173	8.592	-0.023	146976	23.0158	23.3401	1.4	2,4,5-Trichlorophenol
8.768	-0.024	147795	9.358	-0.022	201008	21.6040	23.6086	8.9	2,3,4-Trichlorophenol
8.998	-0.009	301592	9.263	-0.014	438316	21.3810	23.6738	10.2	2,3,5,6-Tetrachlorophenol
10.398	-0.015	221914	11.109	-0.017	304953	20.9814	20.9005	0.4	2,3,4,5-Tetrachlorophenol
6.889	-0.004	107158	7.158	-0.008	139942	212.7486	222.5061	4.5	2,4-Dichlorophenol
9.992	-0.010	270699	10.634	-0.012	402394	21.6	21.6	0.3	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
Pentachlorophenol	88.9	91.4
2,4,6-Trichlorophenol	95.5	90.4
2,3,6-Trichlorophenol	96.7	87.1
2,4,5-Trichlorophenol	92.1	93.4
2,3,4-Trichlorophenol	86.4	94.4
2,3,5,6-Tetrachlorophenol	85.5	94.7
2,3,4,5-Tetrachlorophenol	83.9	83.6
2,4-Dichlorophenol	85.1	89.0
2,4,6-TBP (surr)	86.5	86.2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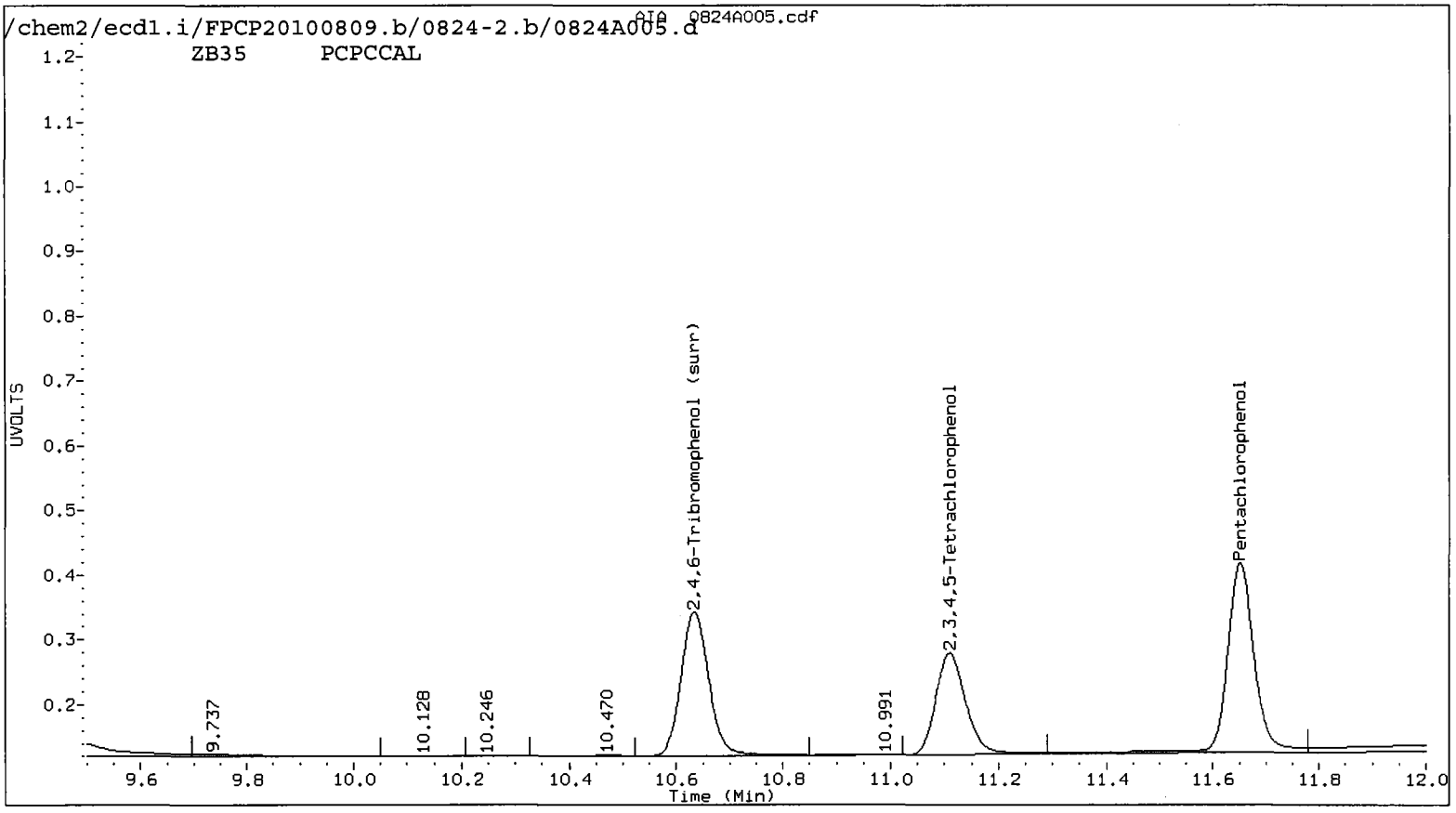
ZB5 PCPCCAL
UVOLTS
9.616
9.710
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
Time (Min)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ZB35 PCPCCAL
UVOLTS
9.737
10.128
10.246
10.470
2,4,6-Tribromophenol (surr)
10.991
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
Time (Min)

Data File: /chem2/ecd1.i/FPCP20100809.b/0824-1.b/0824A005.d

Page 1

Date : 24-AUG-2010 15:47

Client ID:

Instrument: ecd1.i

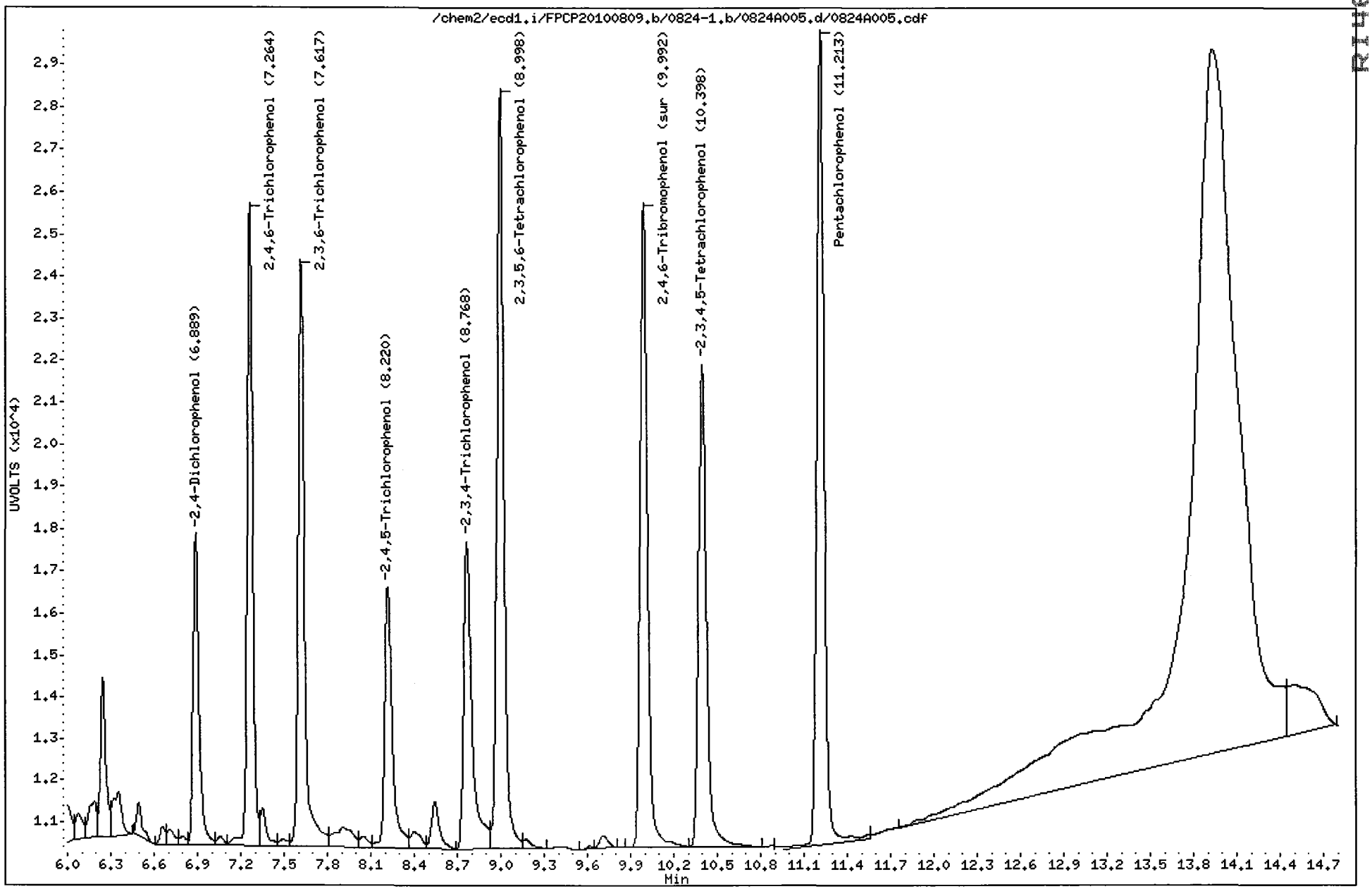
Sample Info: PCPCCAL

Purge Volume: 2.0

Operator: ar

Column phase: ZB5

Column diameter: 0.53



RI46:00576

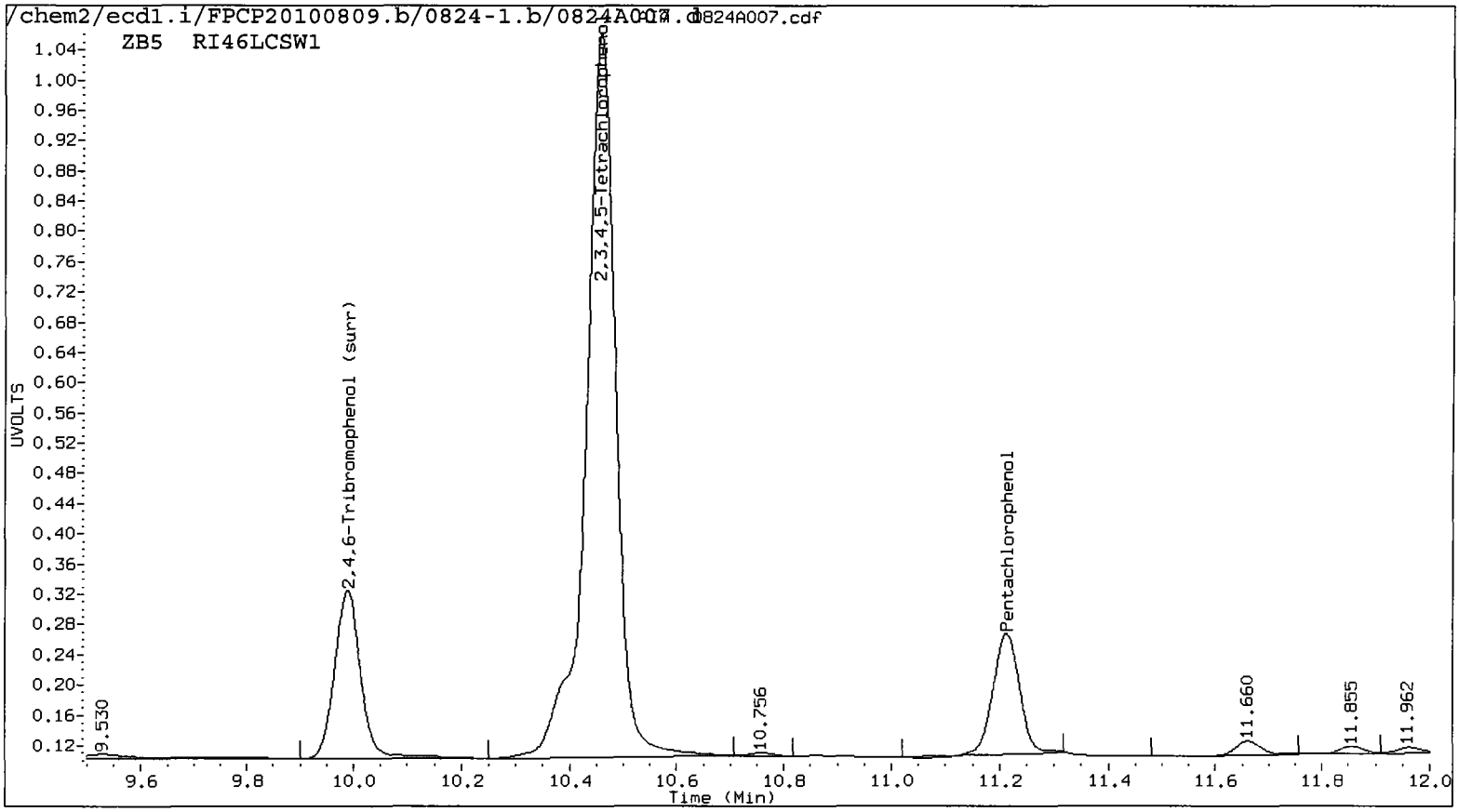
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/FPCP20100809.b/0824-1.b/0824A007.d ARI ID: RI46LCSW1
Data file 2: /chem2/ecd1.i/FPCP20100809.b/0824-2.b/0824A007.d Client ID:
Method: /chem2/ecd1.i/FPCP20100809.b/FPCP.m Injection Date: 24-AUG-2010 16:28
Compound Sublist: all Report Date: 08/25/2010 10:54
Instrument: ecd1.i Matrix: WATER
Operator: ar Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
11.213	-0.006	267596	11.649	-0.009	462610	16.5264	20.1473	19.7	Pentachlorophenol
7.263	-0.001	162731	7.331	-0.002	215978	18.7140	17.2996	7.9	2,4,6-Trichlorophenol
7.615	-0.004	182078	7.858	-0.006	235120	20.2864	18.9483	6.8	2,3,6-Trichlorophenol
8.212	-0.030	84945	8.587	-0.028	111157	16.8290	17.1174	1.7	2,4,5-Trichlorophenol
8.760	-0.032	115588	9.352	-0.028	143931	16.8961	16.3235	3.4	2,3,4-Trichlorophenol
8.993	-0.014	231773	9.260	-0.017	362693	16.4313	19.5893	17.5	2,3,5,6-Tetrachlorophenol
10.458	0.045	1842750	11.105	-0.021	239275	378.7006	16.3991	183.4*	2,3,4,5-Tetrachlorophenol
6.889	-0.004	84926	7.158	-0.008	92133	160.9389	138.1744	15.2	2,4-Dichlorophenol
9.989	-0.013	376901	10.630	-0.016	565013	31.3	30.3	3.2	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
Pentachlorophenol	66.1	80.6
2,4,6-Trichlorophenol	74.9	69.2
2,3,6-Trichlorophenol	81.1	75.8
2,4,5-Trichlorophenol	67.3	68.5
2,3,4-Trichlorophenol	67.6	65.3
2,3,5,6-Tetrachlorophenol	65.7	78.4
2,3,4,5-Tetrachlorophenol	1514.8	65.6
2,4-Dichlorophenol	64.4	55.3
2,4,6-TBP (surr)	62.5	60.5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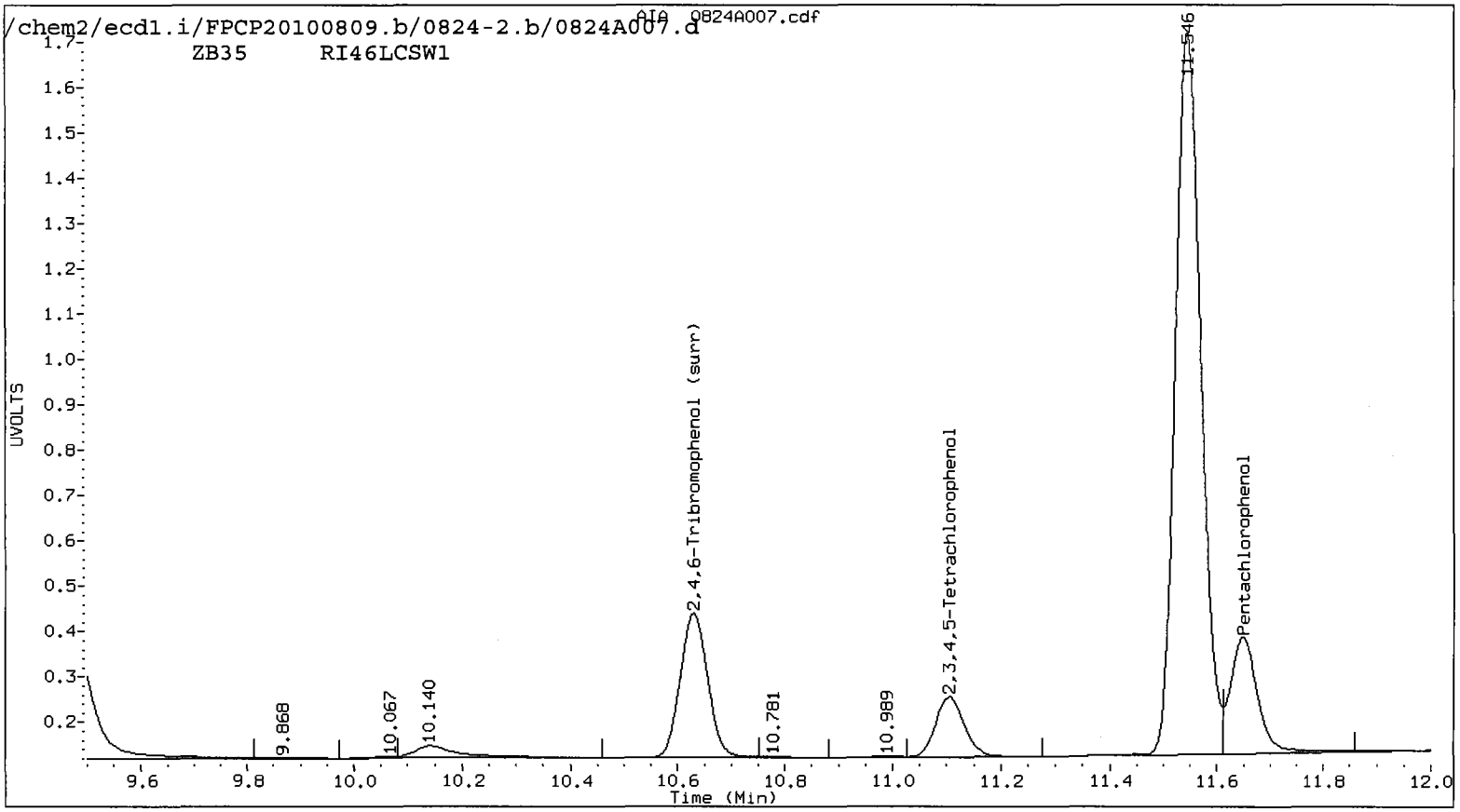
0824A007.cdf
ZB5 RI46LCSW1
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.530
10.756
11.660
11.855
11.962
Time (Min)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AIA 0824A007.cdf
ZB35 RI46LCSW1
UVOLTS
9.868
10.067
10.140
2,4,6-Tribromophenol (surr)
10.781
10.989
2,3,4,5-Tetrachlorophenol
11.546
Pentachlorophenol
Time (Min)

Data File: /chem2/ecd1.i/FPCP20100809.b/0824-1.b/0824A007.d

Date : 24-AUG-2010 16:28

Client ID:

Instrument: ecd1.i

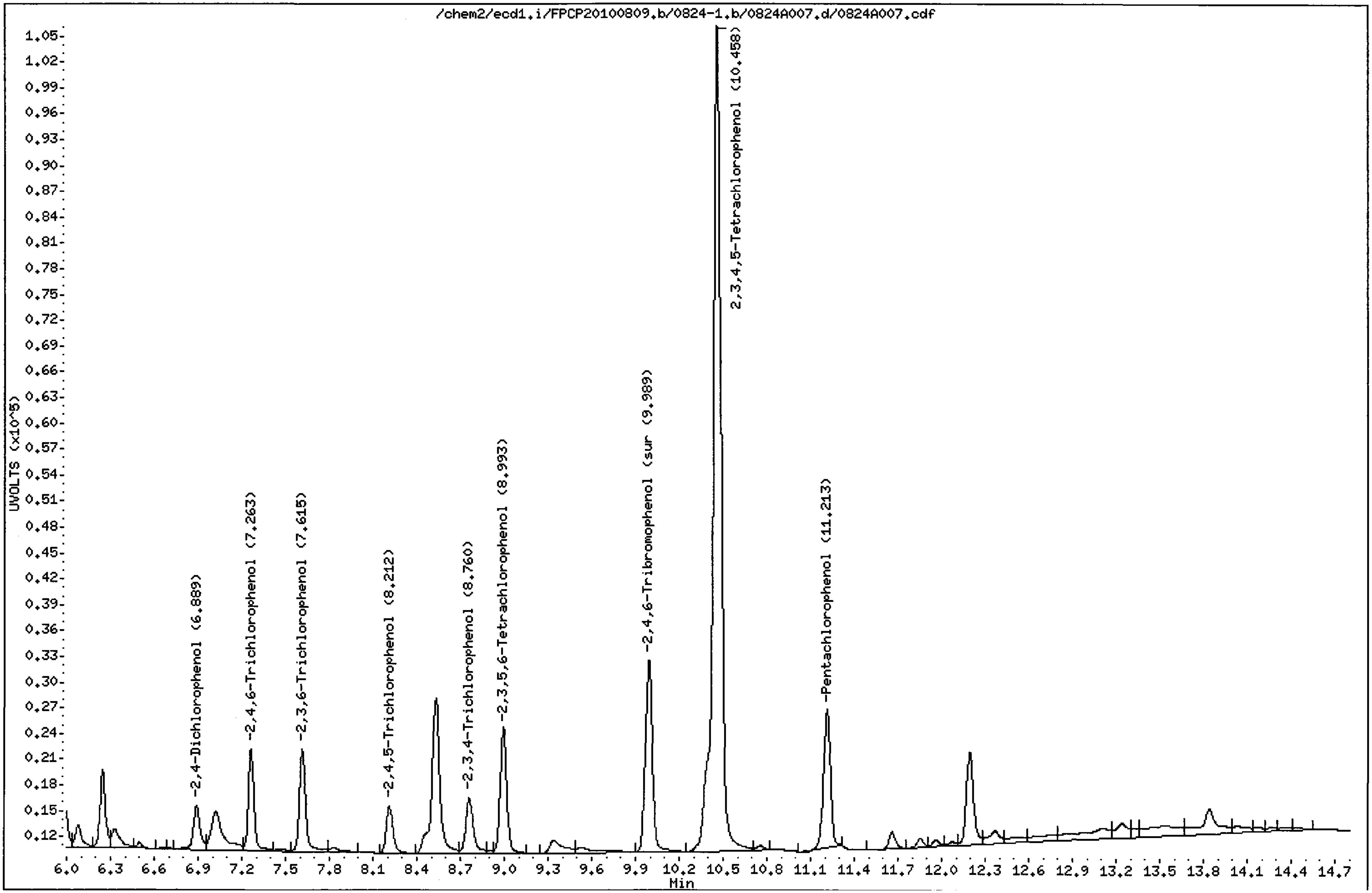
Sample Info: RI46LCSW1

Purge Volume: 2.0

Operator: ar

Column phase: ZB5

Column diameter: 0.53



Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

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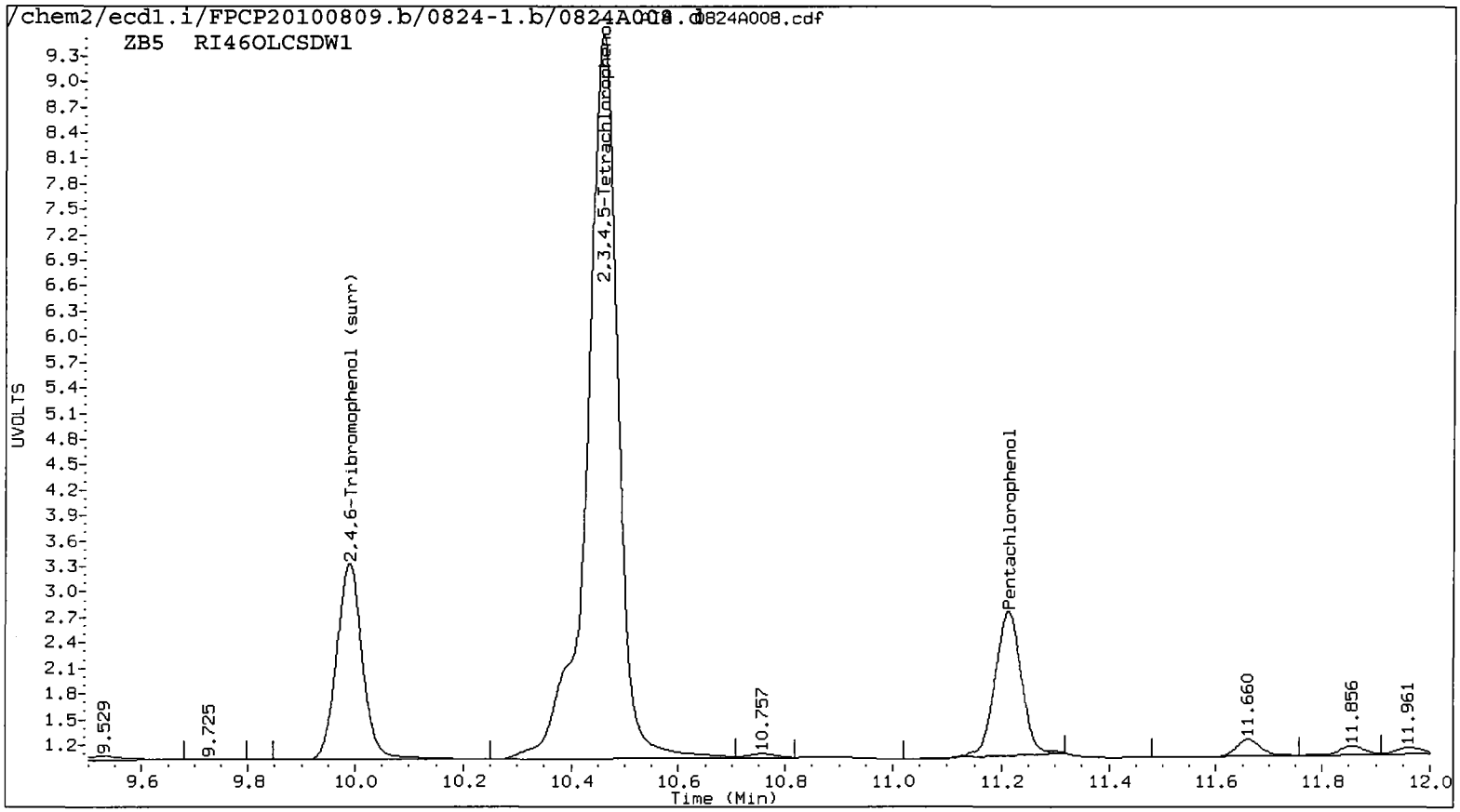
Data file 2: /chem2/ecd1.i/FPCP20100809.b/0824-2.b/0824A008.d Client ID:
Method: /chem2/ecd1.i/FPCP20100809.b/FPCP.m Injection Date: 24-AUG-2010 16:48
Compound Sublist: all Report Date: 08/25/2010 10:54
Instrument: ecd1.i Matrix: WATER
Operator: ar Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
11.212	-0.007	280844	11.650	-0.008	505282	17.4329	22.0057	23.2	Pentachlorophenol
7.263	-0.001	184605	7.332	-0.001	218368	21.5149	17.4910	20.6	2,4,6-Trichlorophenol
7.615	-0.004	174063	7.859	-0.005	244120	19.3190	19.6736	1.8	2,3,6-Trichlorophenol
8.213	-0.029	93253	8.588	-0.027	115454	18.4750	17.8457	3.5	2,4,5-Trichlorophenol
8.761	-0.031	117270	9.353	-0.027	139984	17.1420	15.8368	7.9	2,3,4-Trichlorophenol
8.993	-0.014	271526	9.260	-0.017	339516	19.2495	18.3375	4.9	2,3,5,6-Tetrachlorophenol
10.458	0.045	1702412	11.106	-0.020	249300	333.5042	17.0862	180.5*	2,3,4,5-Tetrachlorophenol
6.889	-0.004	75344	7.158	-0.008	94186	139.8474	141.6183	1.3	2,4-Dichlorophenol
9.989	-0.013	388911	10.630	-0.016	592745	32.4	31.8	2.0	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
Pentachlorophenol	69.7	88.0
2,4,6-Trichlorophenol	86.1	70.0
2,3,6-Trichlorophenol	77.3	78.7
2,4,5-Trichlorophenol	73.9	71.4
2,3,4-Trichlorophenol	68.6	63.3
2,3,5,6-Tetrachlorophenol	77.0	73.4
2,3,4,5-Tetrachlorophenol	1334.0	68.3
2,4-Dichlorophenol	55.9	56.6
2,4,6-TBP (surr)	64.8	63.5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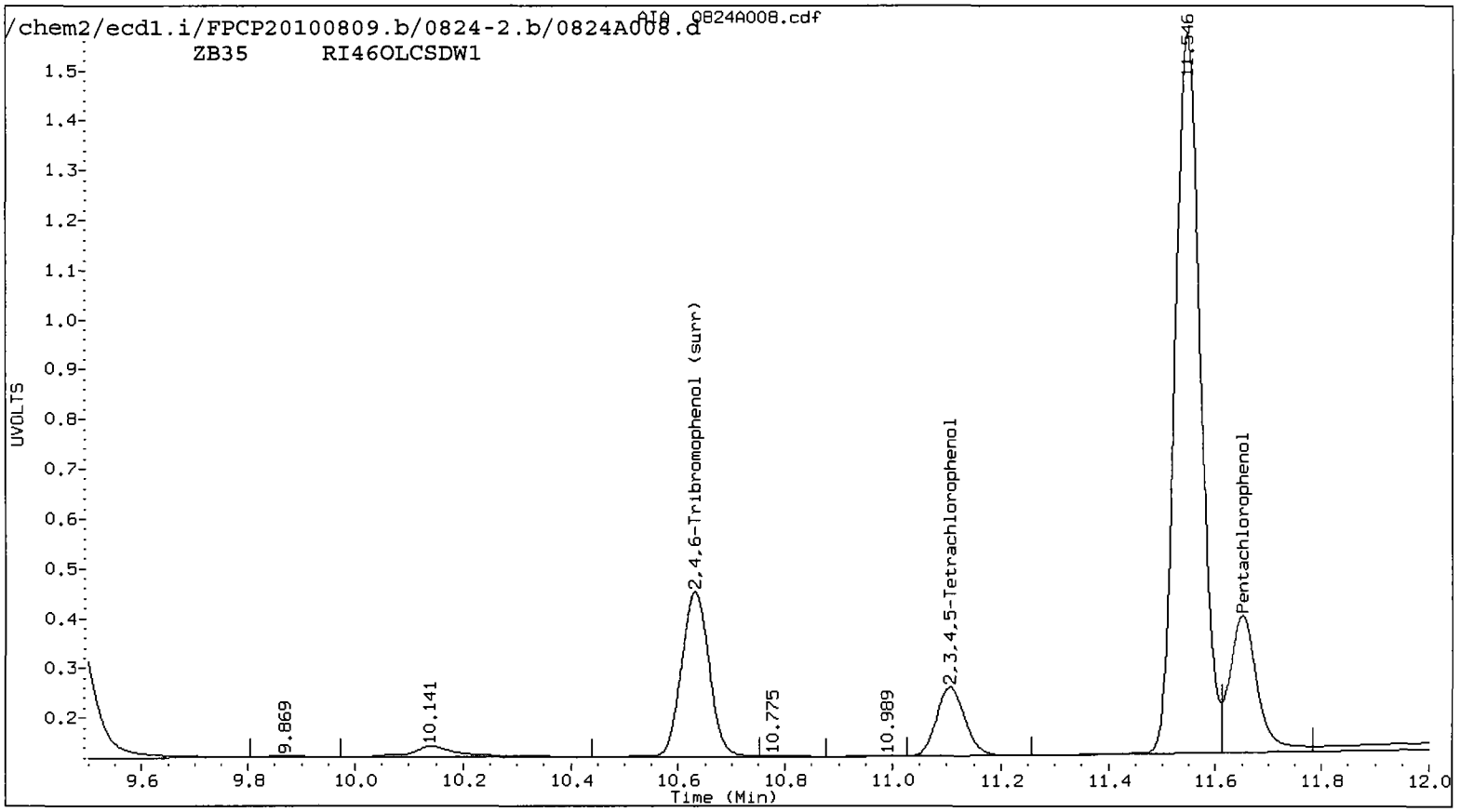
ZB5 RI46OLCSDW1
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.529
9.725
10.757
11.660
11.856
11.961
Time (Min)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ZB35 RI46OLCSDW1
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.869
10.141
10.775
10.989
11.546
Time (Min)

Data File: /chem2/ecd1.i/FPCP20100809.b/0824-1.b/0824A008.d

Page 1

Date : 24-AUG-2010 16:48

Client ID:

Instrument: ecd1.i

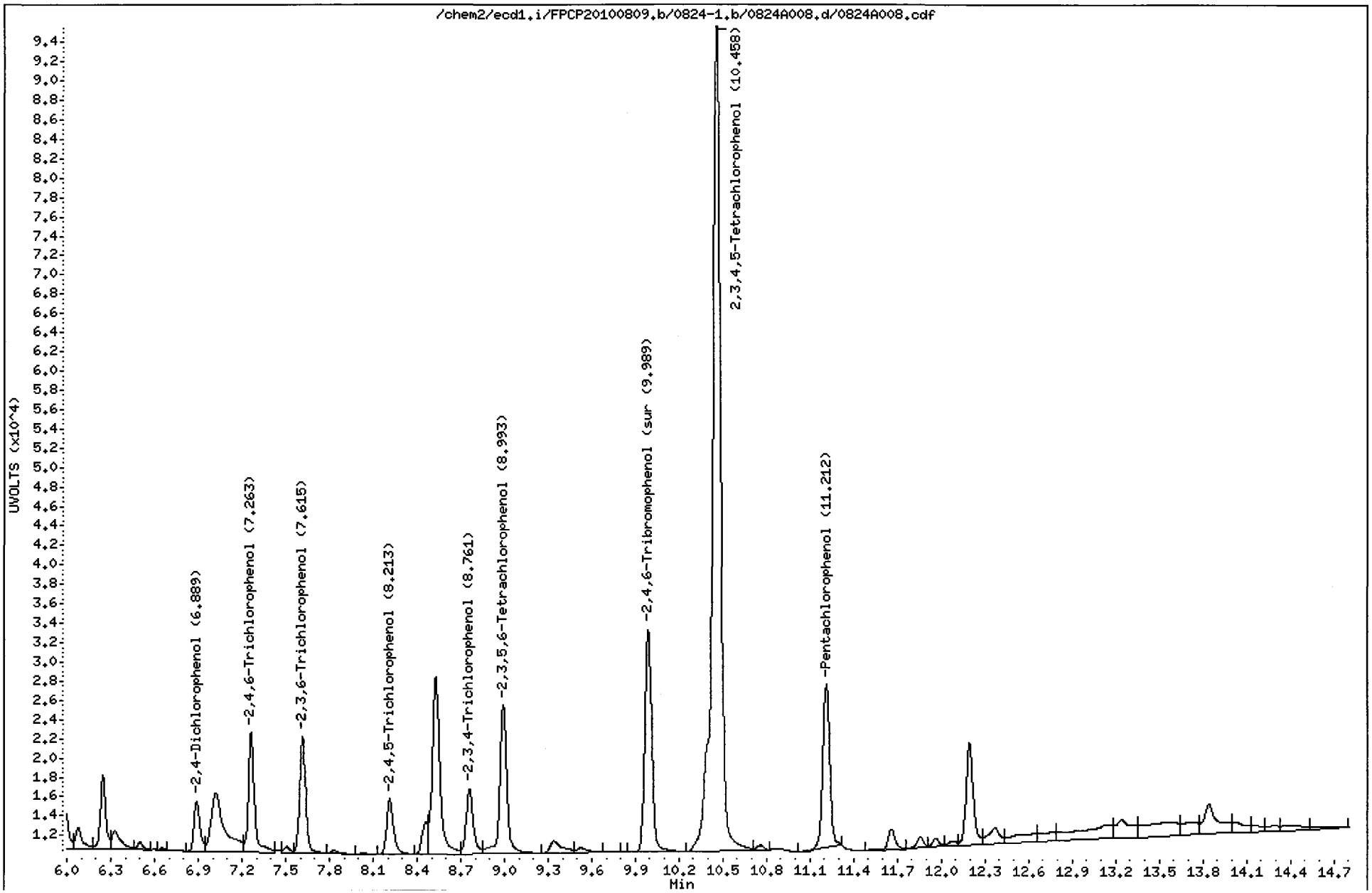
Sample Info: RI460LCSDW1

Purge Volume: 2.0

Operator: ar

Column phase: ZB5

Column diameter: 0.53



RI46 : 00576

Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

AR 8/25/2010

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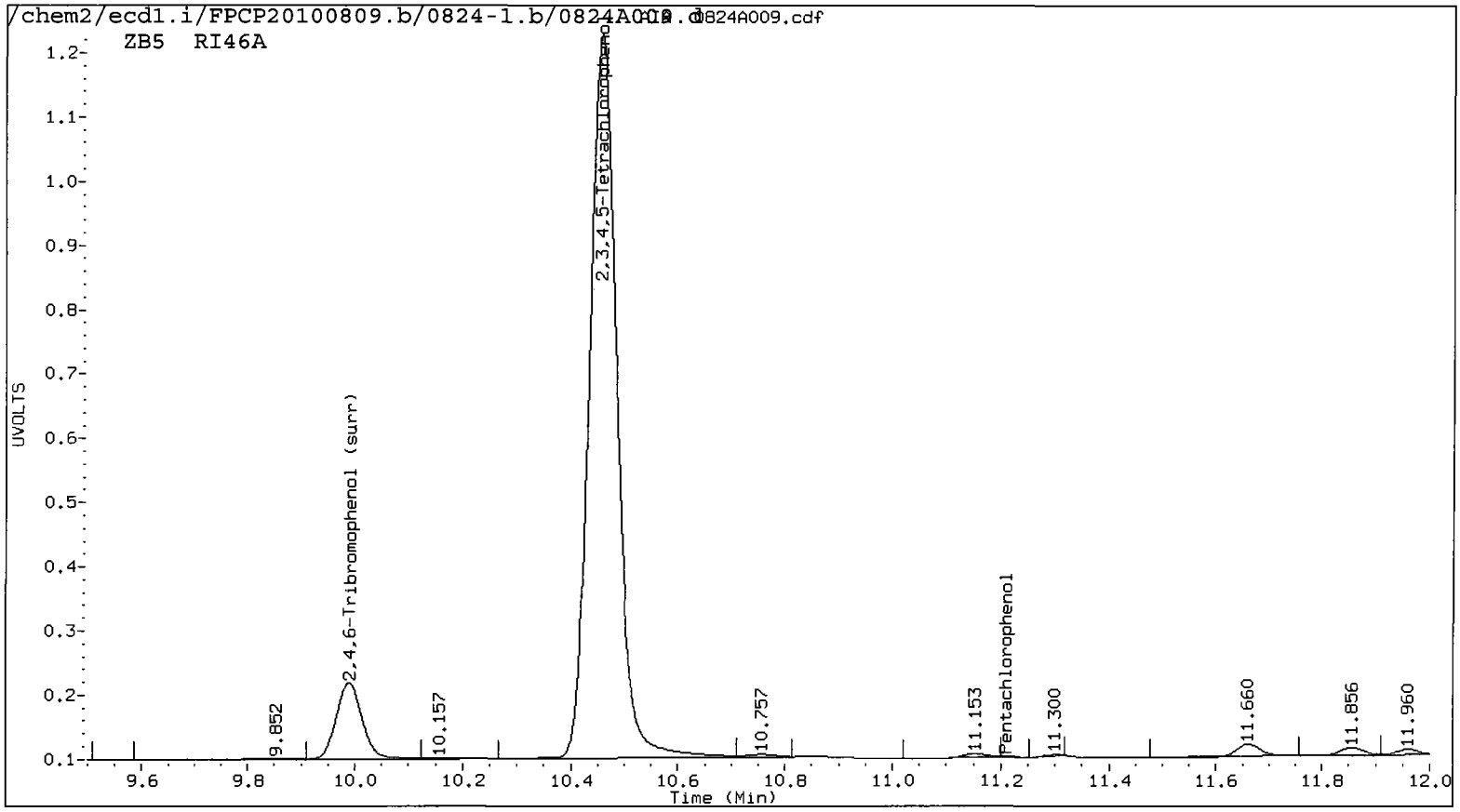
Data file 2: /chem2/ecd1.i/FPCP20100809.b/0824-2.b/0824A009.d Client ID:
Method: /chem2/ecd1.i/FPCP20100809.b/FPCP.m Injection Date: 24-AUG-2010 17:08
Compound Sublist: all Report Date: 08/25/2010 10:54
Instrument: ecd1.i Matrix: WATER
Operator: ar Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
11.211	-0.008	1648	----			0.0914	0.0000	---	Pentachlorophenol
----			----			0.0000	0.0000	---	2,4,6-Trichlorophenol
7.601	-0.018	17136	7.894	0.030	9813	1.7585	0.7909	75.9*	2,3,6-Trichlorophenol
8.257	0.015	4457	8.678	0.063	2381	0.8831	0.3319	90.7*	2,4,5-Trichlorophenol
----			----			0.0000	0.0000	---	2,3,4-Trichlorophenol
----			9.255	-0.022	1400	0.0000	0.0756	---	2,3,5,6-Tetrachlorophenol
10.457	0.044	1995175	----			430.8449	0.0000	---	2,3,4,5-Tetrachlorophenol
6.929	0.036	19272	7.221	0.055	1199	31.3824	1.5924	180.7*	2,4-Dichlorophenol
9.989	-0.013	199276	10.631	-0.015	293582	15.5	15.7	1.4	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	62.0	62.9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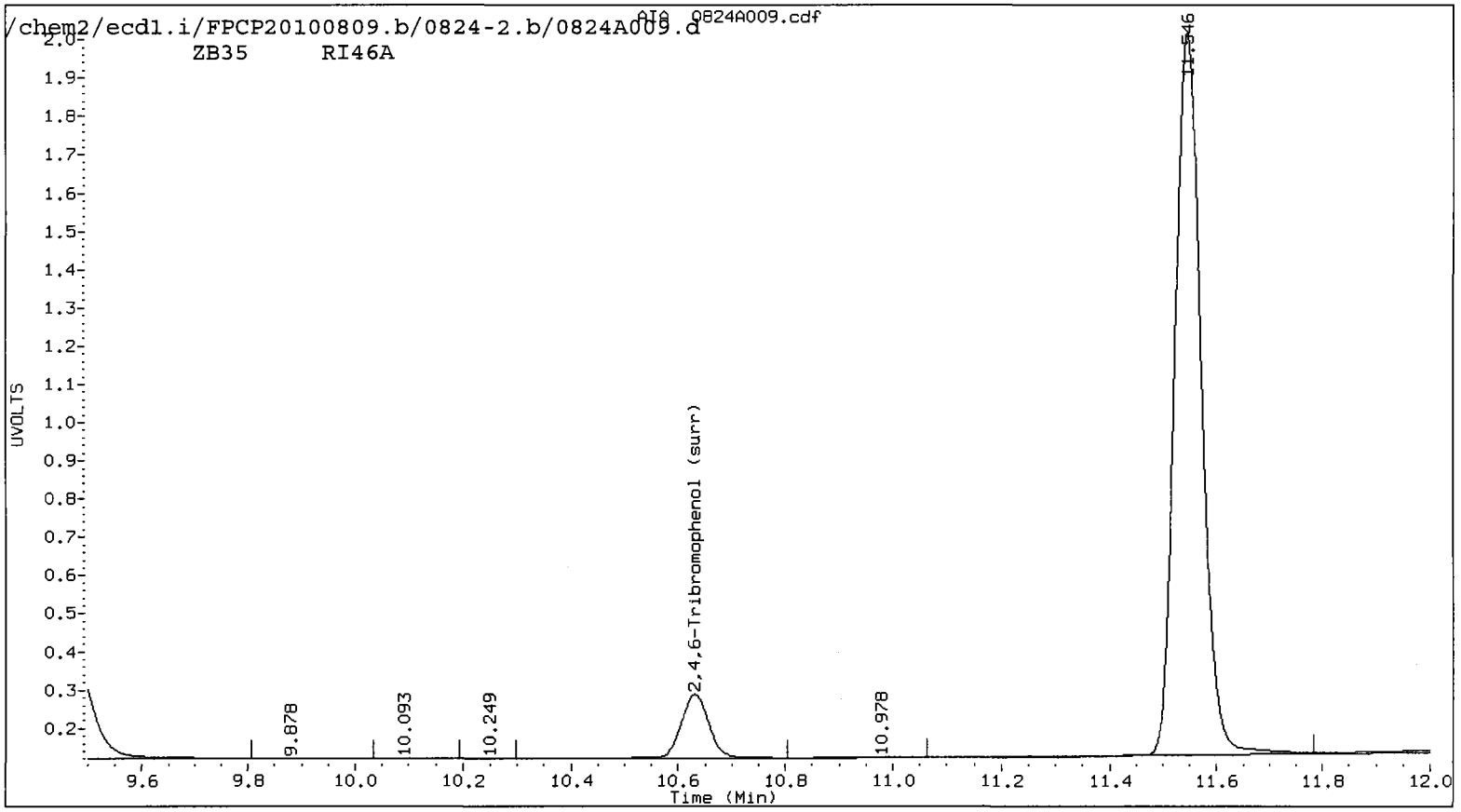
ZB5 RI46A
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.852
10.157
10.757
11.153
11.300
11.660
11.856
11.960
Time (Min)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AIA: 0824A009.cdf
ZB35 RI46A
UVOLTS
2,4,6-Tribromophenol (surr)
11.546
9.878
10.093
10.249
10.978
Time (Min)

Data File: /chem2/ecd1.i/FPCP20100809.b/0824-1.b/0824A009.d

Date : 24-AUG-2010 17:08

Client ID:

Instrument: ecd1.i

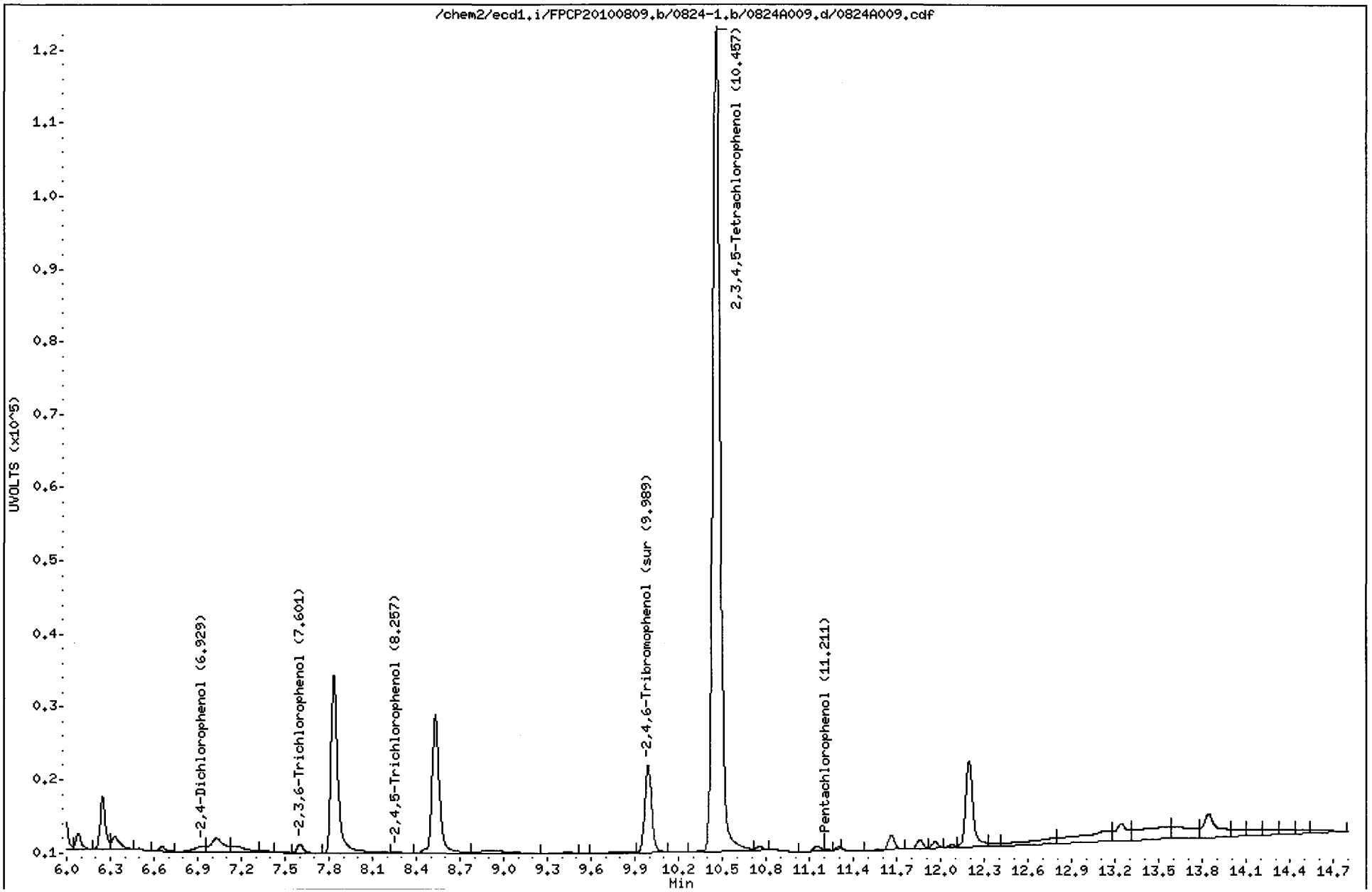
Sample Info: RI46A

Purge Volume: 2.0

Operator: ar

Column phase: ZB5

Column diameter: 0.53



RI46 : 00579

Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

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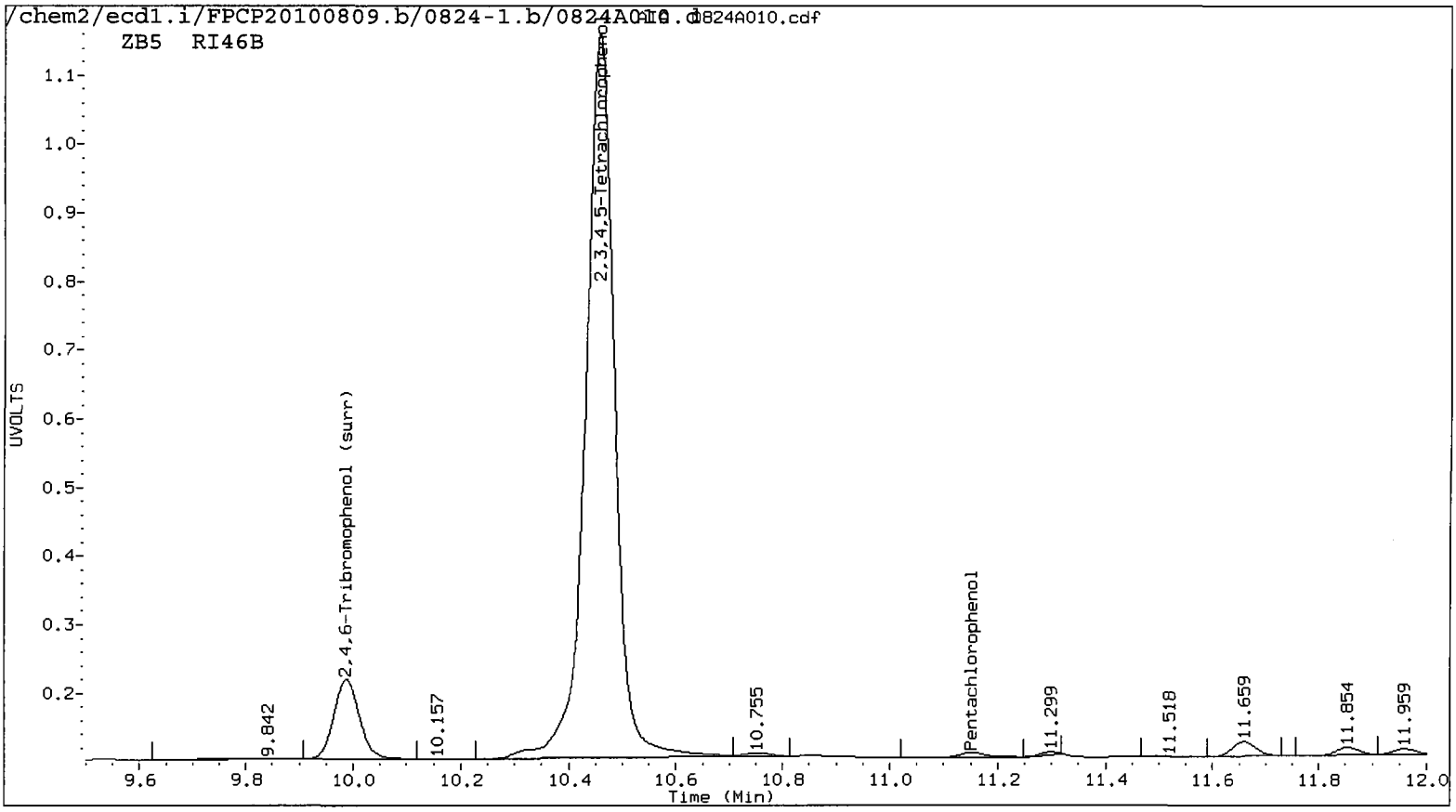
Data file 2: /chem2/ecd1.i/FPCP20100809.b/0824-2.b/0824A010.d Client ID:
Method: /chem2/ecd1.i/FPCP20100809.b/FPCP.m Injection Date: 24-AUG-2010 17:28
Compound Sublist: all Report Date: 08/25/2010 10:54
Instrument: ecd1.i Matrix: WATER
Operator: ar Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
11.151	-0.068	11193	11.666	0.008	84158	0.6231	3.6652	141.9*	Pentachlorophenol
----			7.383	0.050	2812	0.0000	0.2252	---	2,4,6-Trichlorophenol
7.600	-0.019	22194	----			2.2836	0.0000	---	2,3,6-Trichlorophenol
8.258	0.016	3145	8.678	0.062	1833	0.6232	0.2554	83.7*	2,4,5-Trichlorophenol
----			----			0.0000	0.0000	---	2,3,4-Trichlorophenol
----			9.252	-0.025	1326	0.0000	0.0717	---	2,3,5,6-Tetrachlorophenol
10.457	0.044	1990369	----			429.1521	0.0000	---	2,3,4,5-Tetrachlorophenol
6.924	0.031	8871	7.226	0.060	2844	14.0709	3.7872	115.2*	2,4-Dichlorophenol
9.987	-0.015	196334	10.630	-0.016	287293	15.3	15.4	0.8	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	61.0	61.6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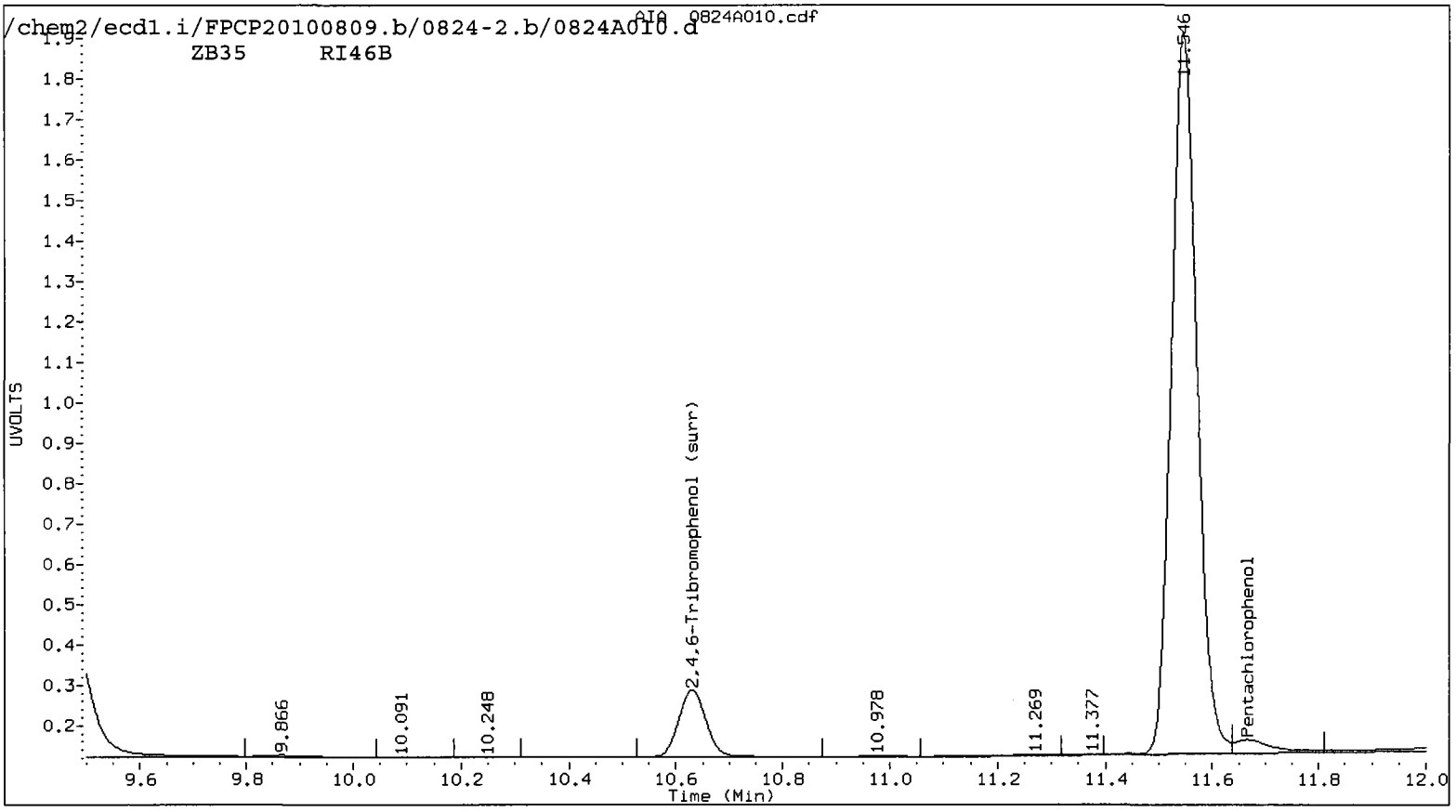
AIA 0824A010.cdf
ZB5 RI46B
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.842
10.157
10.755
11.299
11.518
11.659
11.854
11.959
Time (Min)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AIA 0824A010.cdf
ZB35 RI46B
UVOLTS
2,4,6-Tribromophenol (surr)
Pentachlorophenol
9.866
10.091
10.248
10.978
11.269
11.377
11.546
Time (Min)

Data File: /chem2/ecd1.i/FPCP20100809.b/0824-1.b/0824A010.d

Page 1

Date : 24-AUG-2010 17:28

Client ID:

Instrument: ecd1.i

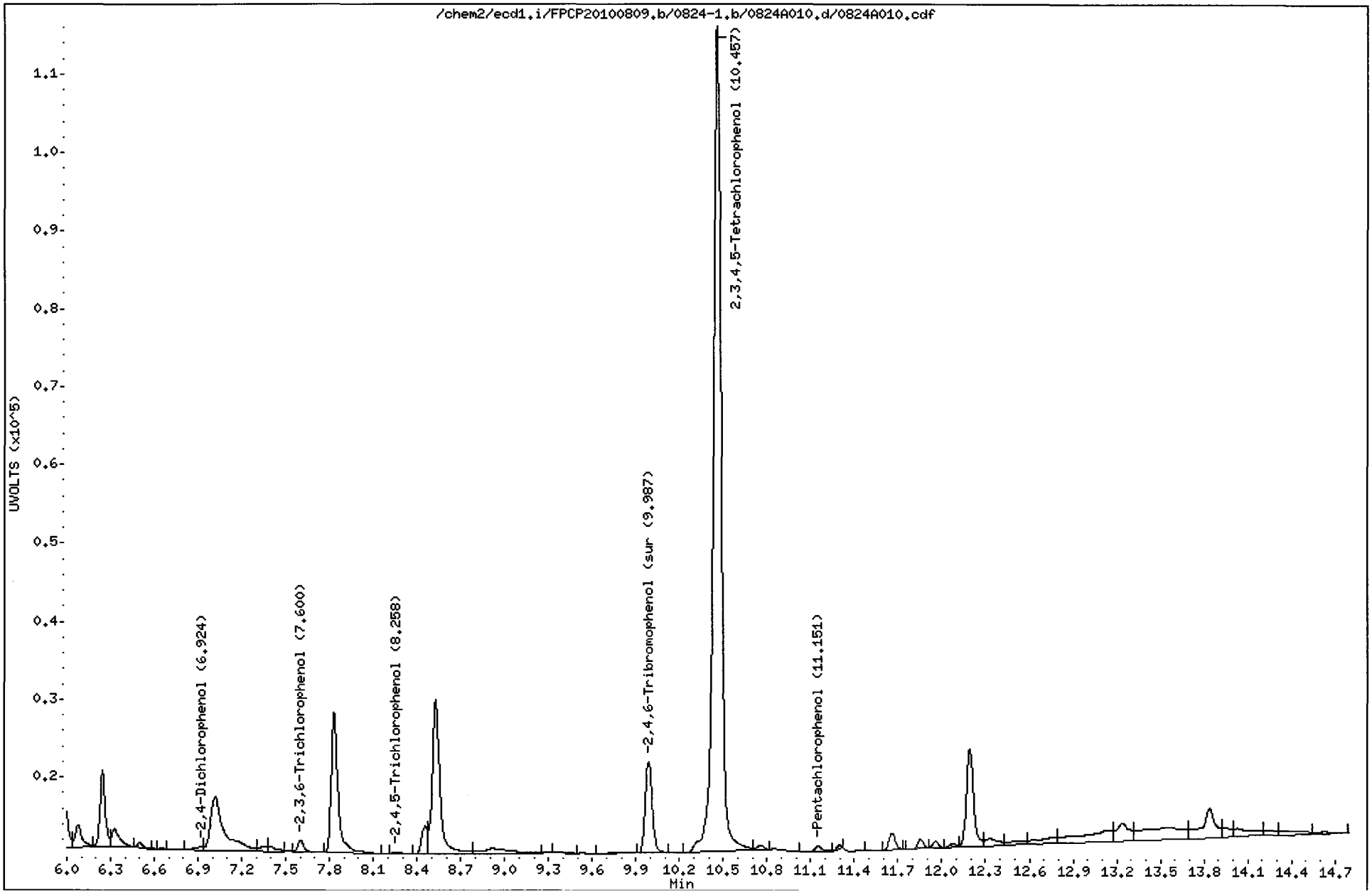
Sample Info: RI46B

Purge Volume: 2.0

Operator: ar

Column phase: ZB5

Column diameter: 0.53



RI46:005582

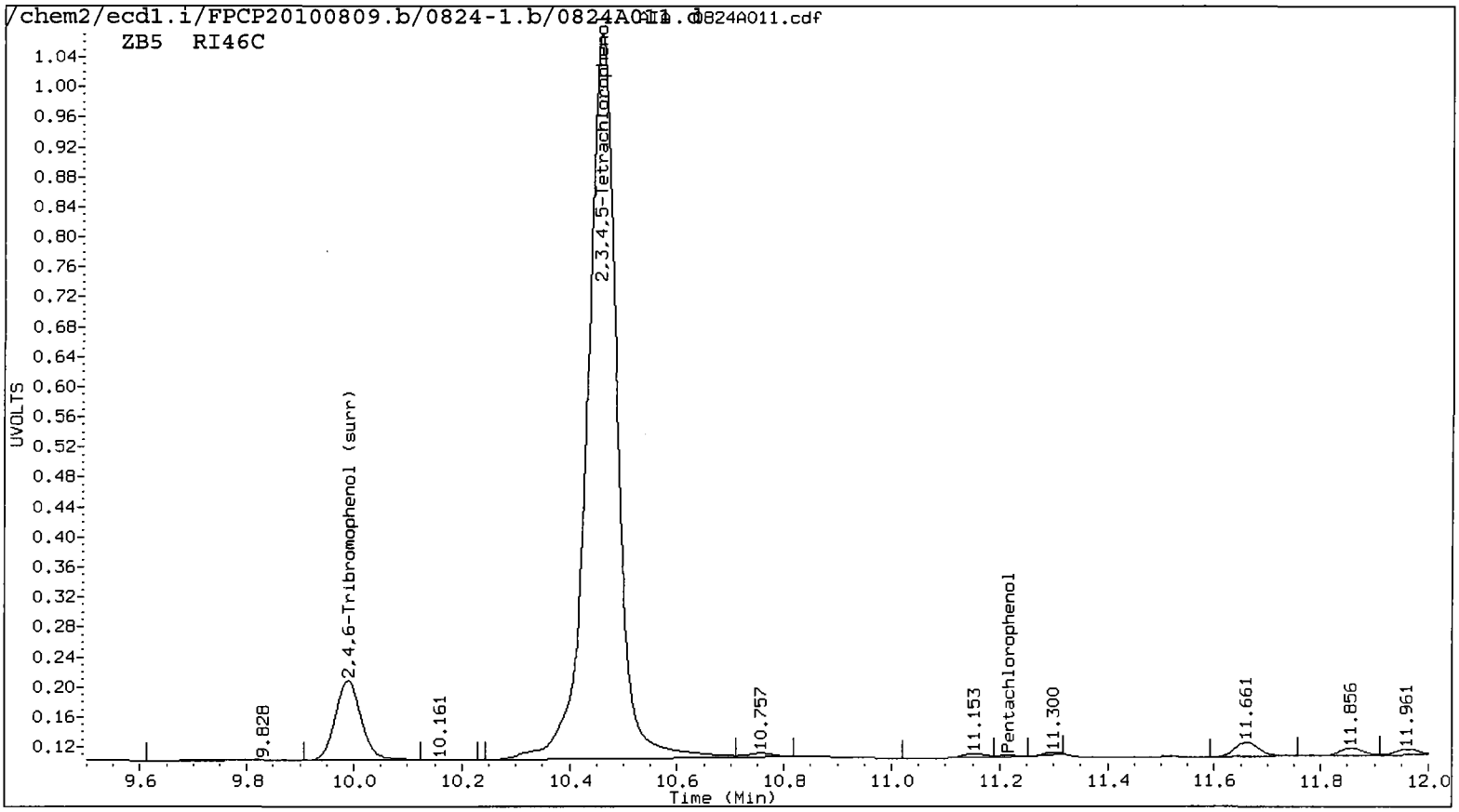
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

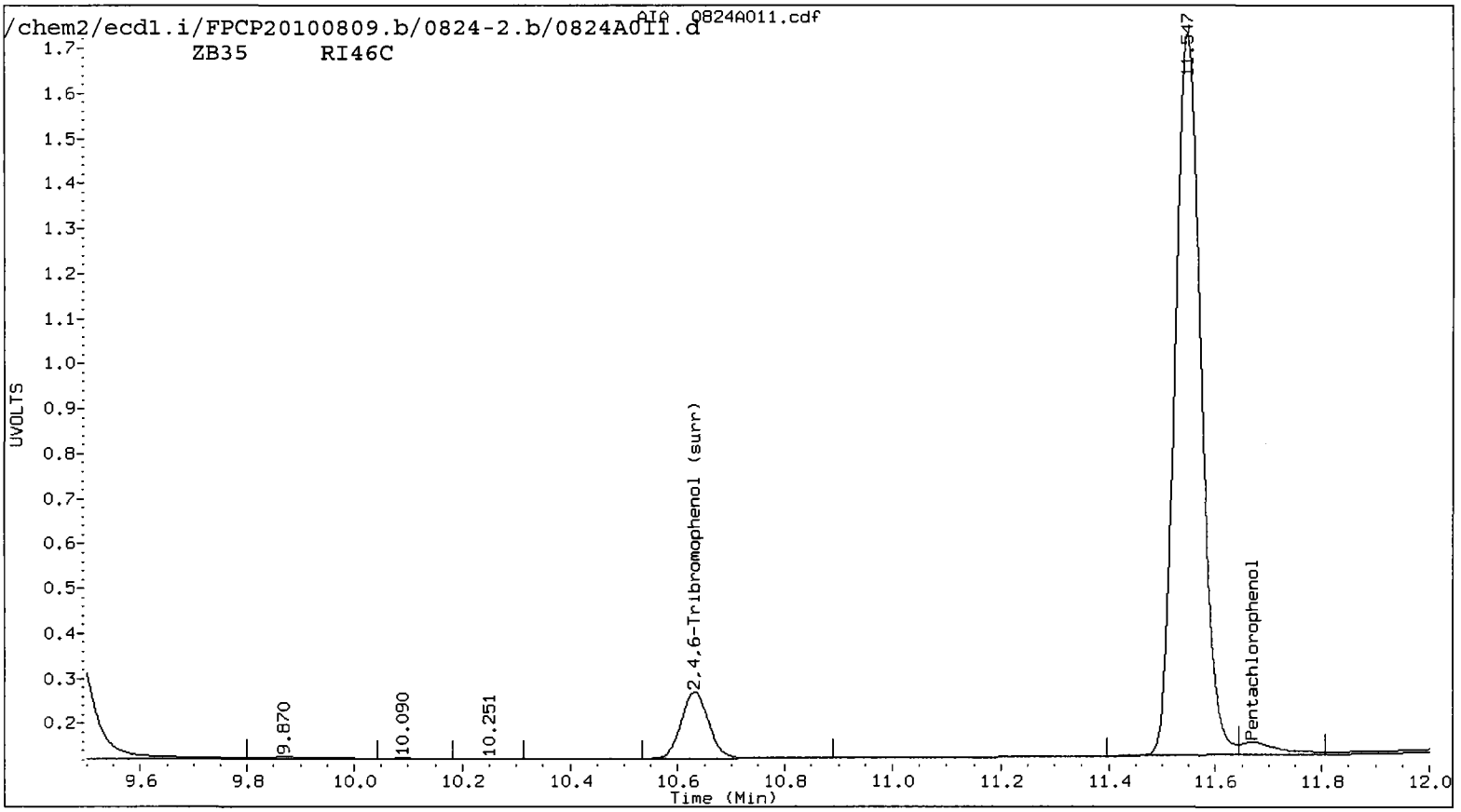
Data file 1: /chem2/ecd1.i/FPCP20100809.b/0824-1.b/0824A011.d ARI ID: RI46C
Data file 2: /chem2/ecd1.i/FPCP20100809.b/0824-2.b/0824A011.d Client ID:
Method: /chem2/ecd1.i/FPCP20100809.b/FPCP.m Injection Date: 24-AUG-2010 17:48
Compound Sublist: all Report Date: 08/25/2010 10:54
Instrument: ecd1.i Matrix: WATER
Operator: ar Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
11.216	-0.003	2765	11.669	0.011	70603	0.1534	3.0749	181.0*	Pentachlorophenol
----			7.386	0.053	2239	0.0000	0.1794	---	2,4,6-Trichlorophenol
7.601	-0.018	20233	----			2.0797	0.0000	---	2,3,6-Trichlorophenol
8.268	0.026	1801	8.677	0.062	1106	0.3568	0.1540	79.4*	2,4,5-Trichlorophenol
----			----			0.0000	0.0000	---	2,3,4-Trichlorophenol
----			9.246	-0.031	2002	0.0000	0.1082	---	2,3,5,6-Tetrachlorophenol
10.458	0.045	1837536	----			376.9734	0.0000	---	2,3,4,5-Tetrachlorophenol
----			7.229	0.063	2434	0.0000	3.2393	---	2,4-Dichlorophenol
9.989	-0.013	178709	10.631	-0.015	259686	13.8	13.9	0.8	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	55.2	55.6


/chem2/ecd1.i/FPCP20100809.b/0824-1.b/0824A011.d
ZB5 RI46C
UVOLTS
Time (Min)
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.828
10.161
10.757
11.153
11.300
11.661
11.856
11.961


/chem2/ecd1.i/FPCP20100809.b/0824-2.b/0824A011.d
ZB35 RI46C
UVOLTS
Time (Min)
2,4,6-Tribromophenol (surr)
Pentachlorophenol
9.870
10.090
10.251
11.547

Data File: /chem2/ecd1.i/FPCP20100809.b/0824-1.b/0824A011.d

Page 1

Date : 24-AUG-2010 17:48

Client ID:

Instrument: ecd1.i

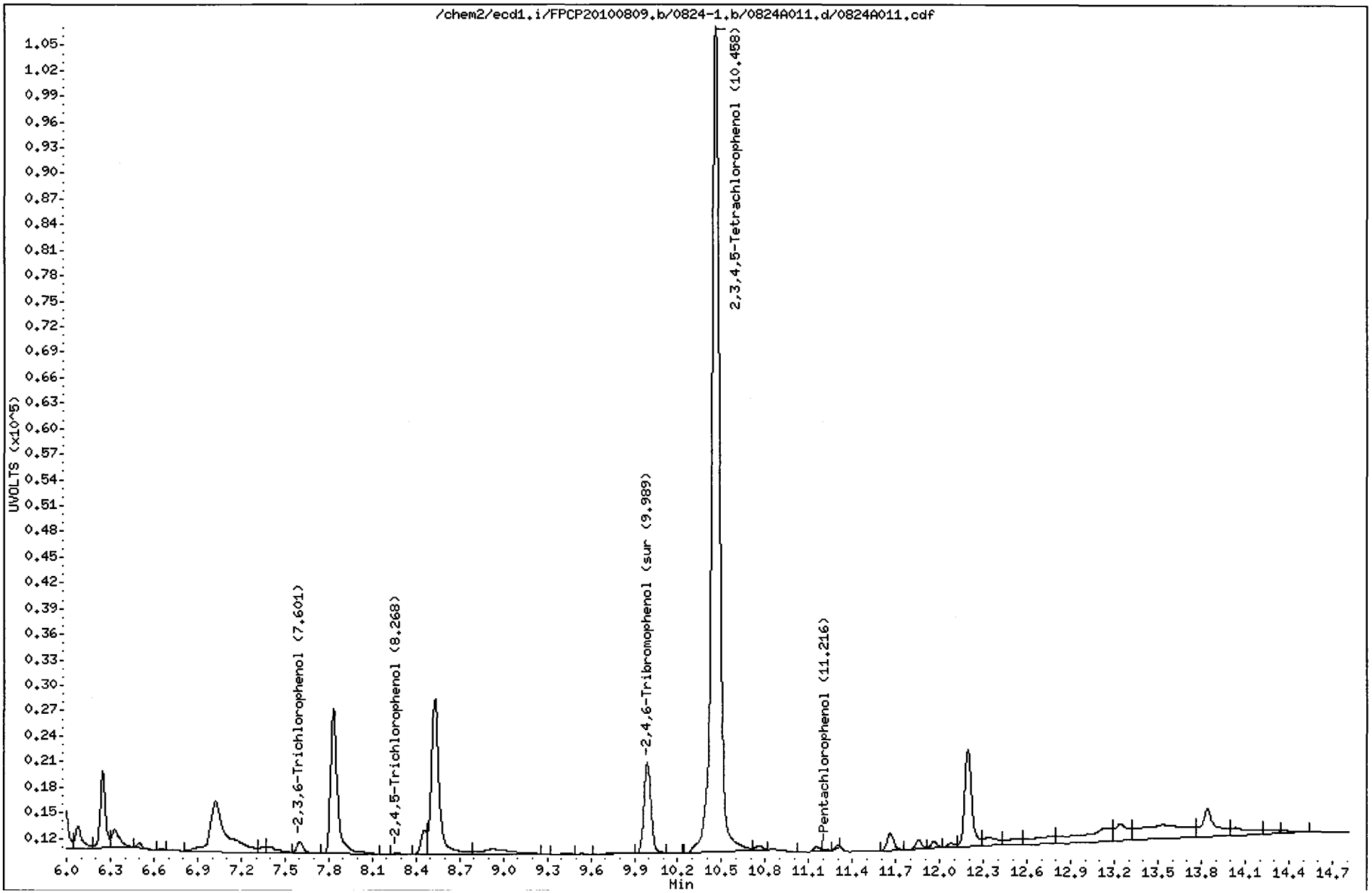
Sample Info: RI46C

Purge Volume: 2.0

Operator: ar

Column phase: ZB5

Column diameter: 0.53



RI46 00585

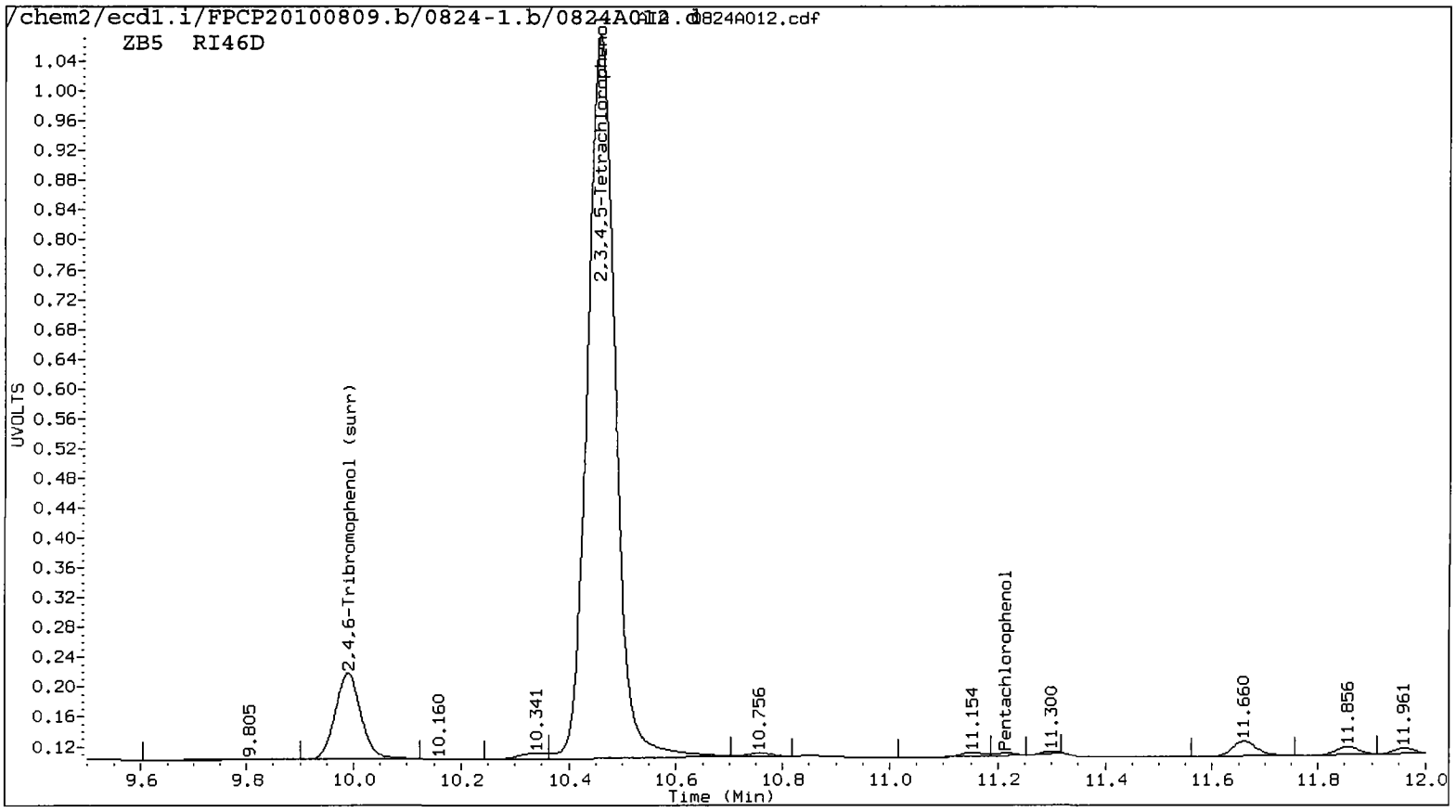
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

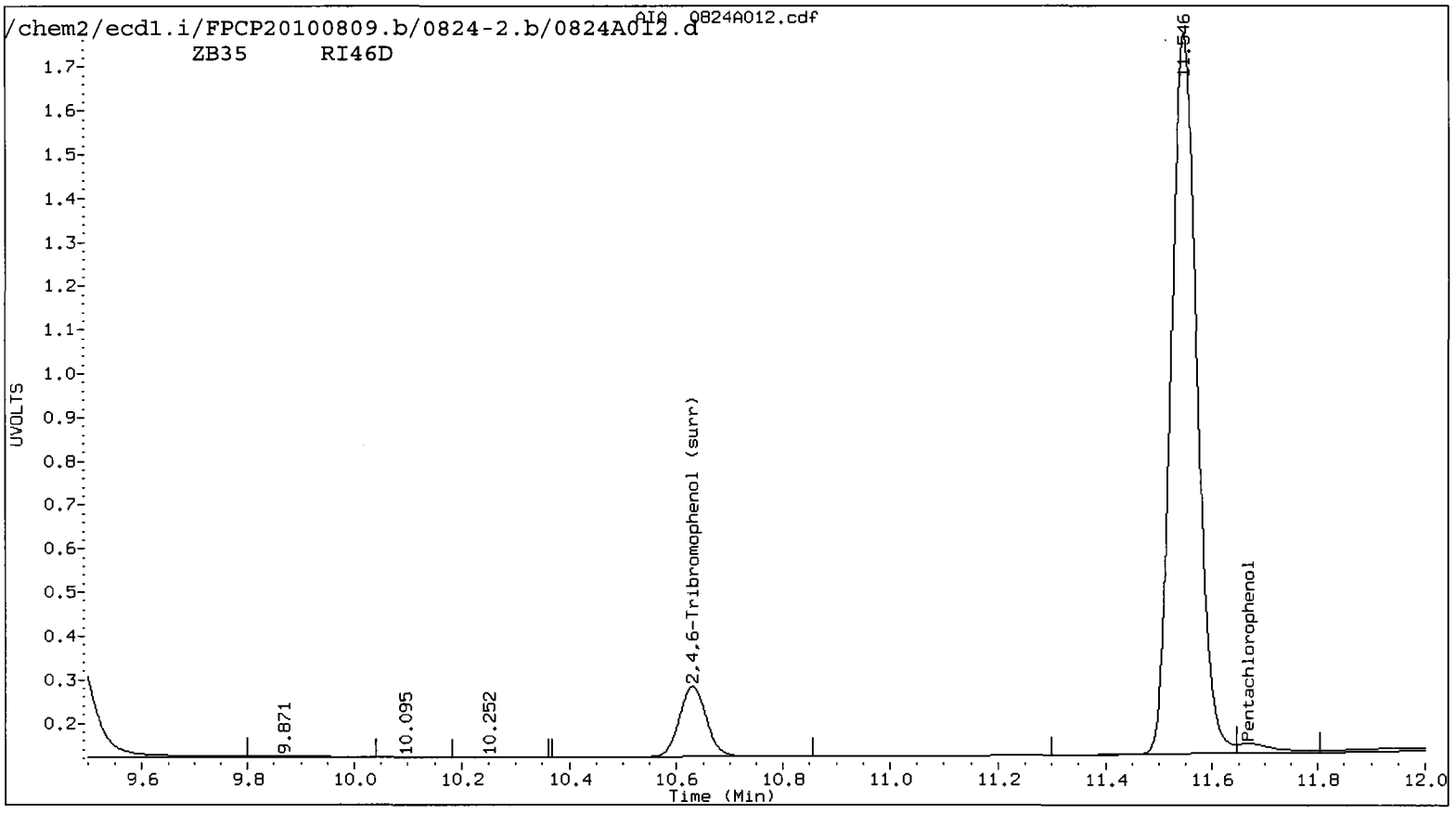
Data file 1: /chem2/ecd1.i/FPCP20100809.b/0824-1.b/0824A012.d ARI ID: RI46D
Data file 2: /chem2/ecd1.i/FPCP20100809.b/0824-2.b/0824A012.d Client ID:
Method: /chem2/ecd1.i/FPCP20100809.b/FPCP.m Injection Date: 24-AUG-2010 18:08
Compound Sublist: all Report Date: 08/25/2010 10:54
Instrument: ecd1.i Matrix: WATER
Operator: ar Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
11.215	-0.004	4719	11.668	0.010	56549	0.2620	2.4628	161.5*	Pentachlorophenol
----			7.383	0.050	2409	0.0000	0.1930	---	2,4,6-Trichlorophenol
7.601	-0.018	19610	----			2.0150	0.0000	---	2,3,6-Trichlorophenol
8.279	0.037	2073	8.679	0.064	1172	0.4107	0.1633	86.2*	2,4,5-Trichlorophenol
----			----			0.0000	0.0000	---	2,3,4-Trichlorophenol
----			9.247	-0.030	2793	0.0000	0.1509	---	2,3,5,6-Tetrachlorophenol
10.458	0.045	1746418	----			347.3866	0.0000	---	2,3,4,5-Tetrachlorophenol
6.918	0.025	21260	7.233	0.067	2741	34.7909	3.6492	162.0*	2,4-Dichlorophenol
9.989	-0.013	194035	10.630	-0.016	281487	15.1	15.1	0.1	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

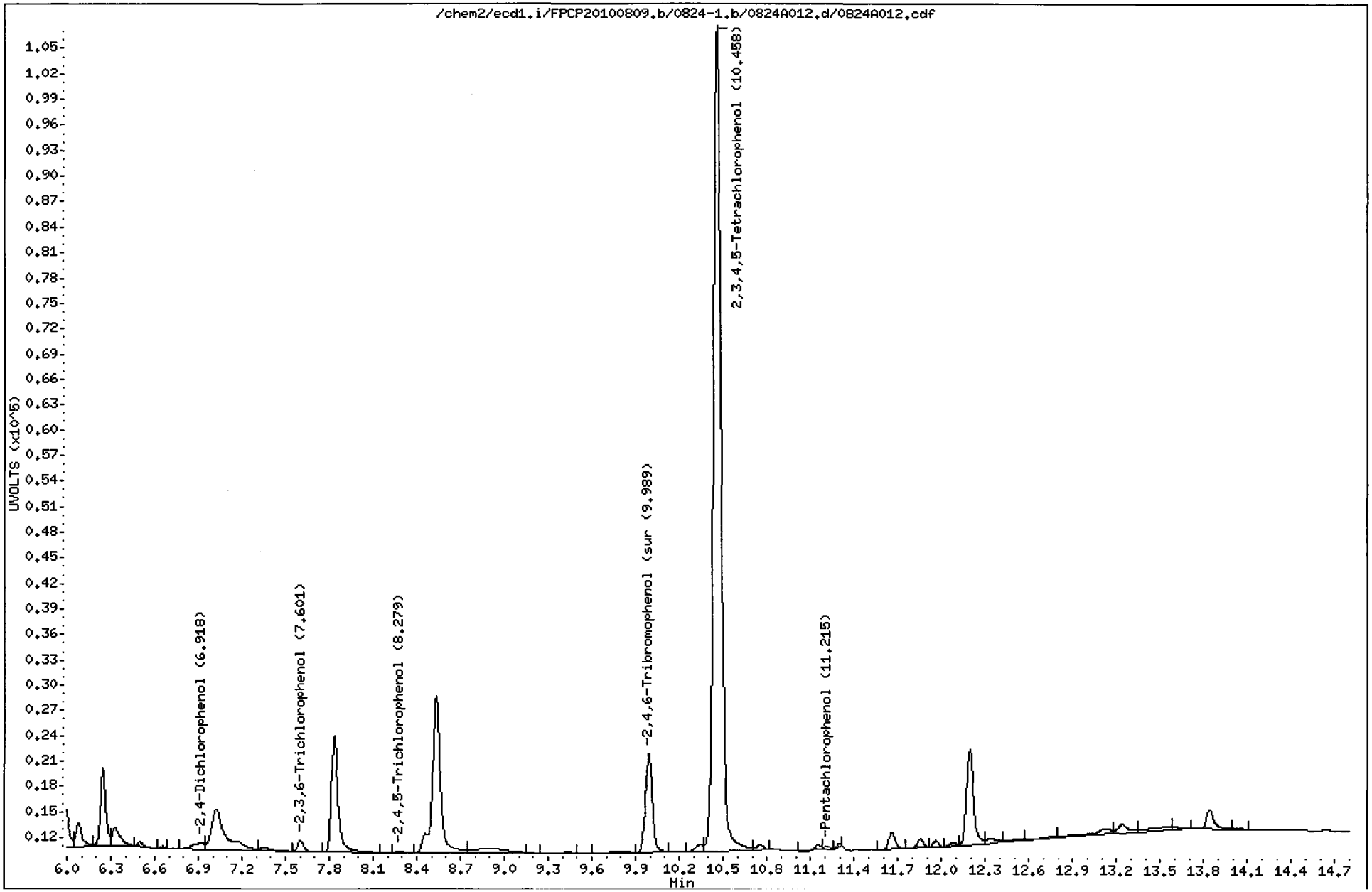
COMPOUND	Col1	Col2
2,4,6-TBP (surr)	60.3	60.3


/chem2/ecd1.i/FPCP20100809.b/0824-1.b/0824A012.d
ZB5 RI46D
2,3,4,5-Tetrachlorophenol
2,4,6-Tribromophenol (surr)
Pentachlorophenol
9.805
10.160
10.341
10.756
11.154
11.300
11.660
11.856
11.961
UVOLTS
Time (Min)


/chem2/ecd1.i/FPCP20100809.b/0824-2.b/0824A012.d
ZB35 RI46D
11.546
2,4,6-Tribromophenol (surr)
Pentachlorophenol
9.871
10.095
10.252
UVOLTS
Time (Min)

Data File: /chem2/ecd1.i/FPCP20100809.b/0824-1.b/0824A012.d
Date : 24-AUG-2010 18:08
Client ID:
Sample Info: RI46D
Purge Volume: 2.0
Column phase: ZB5

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



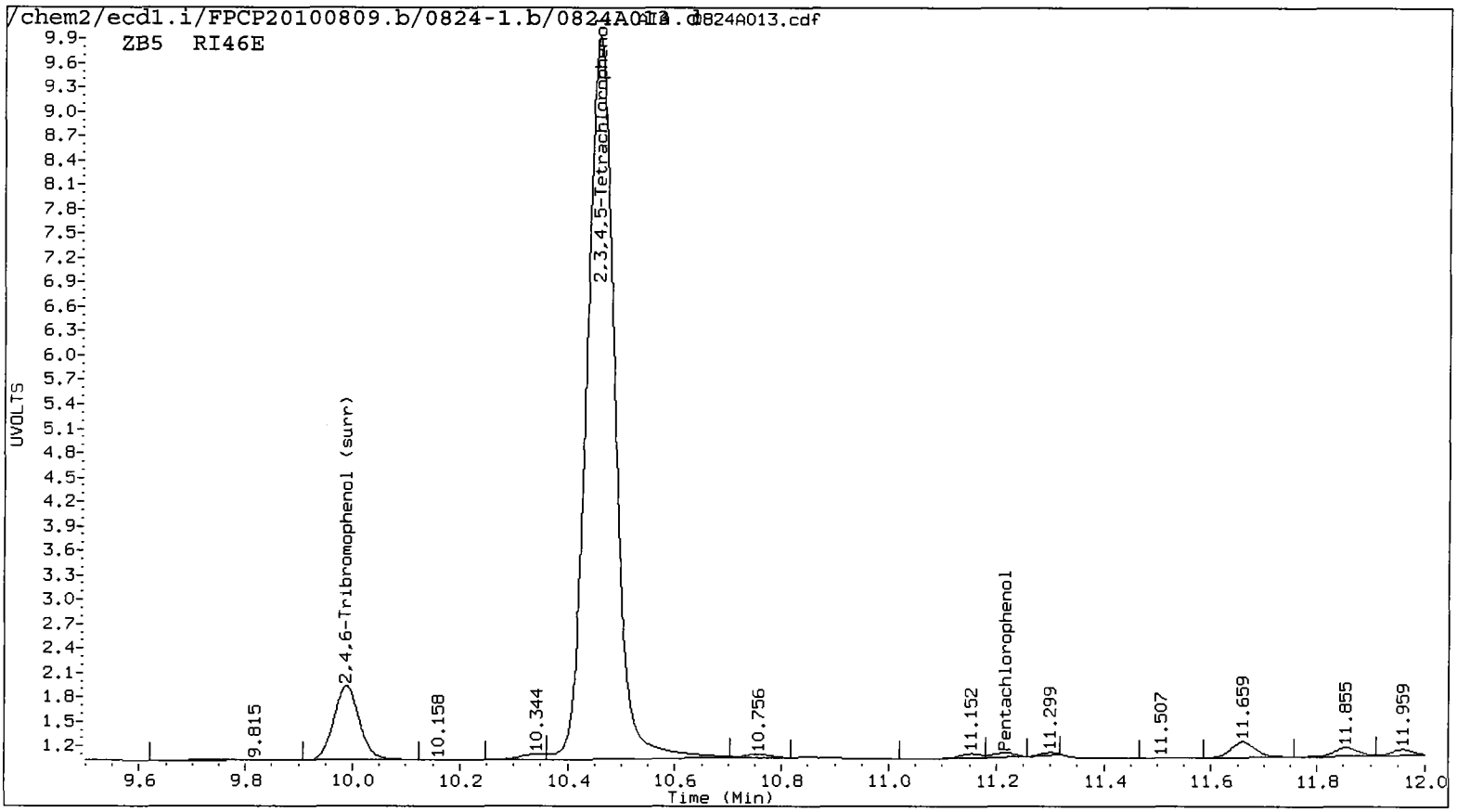
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

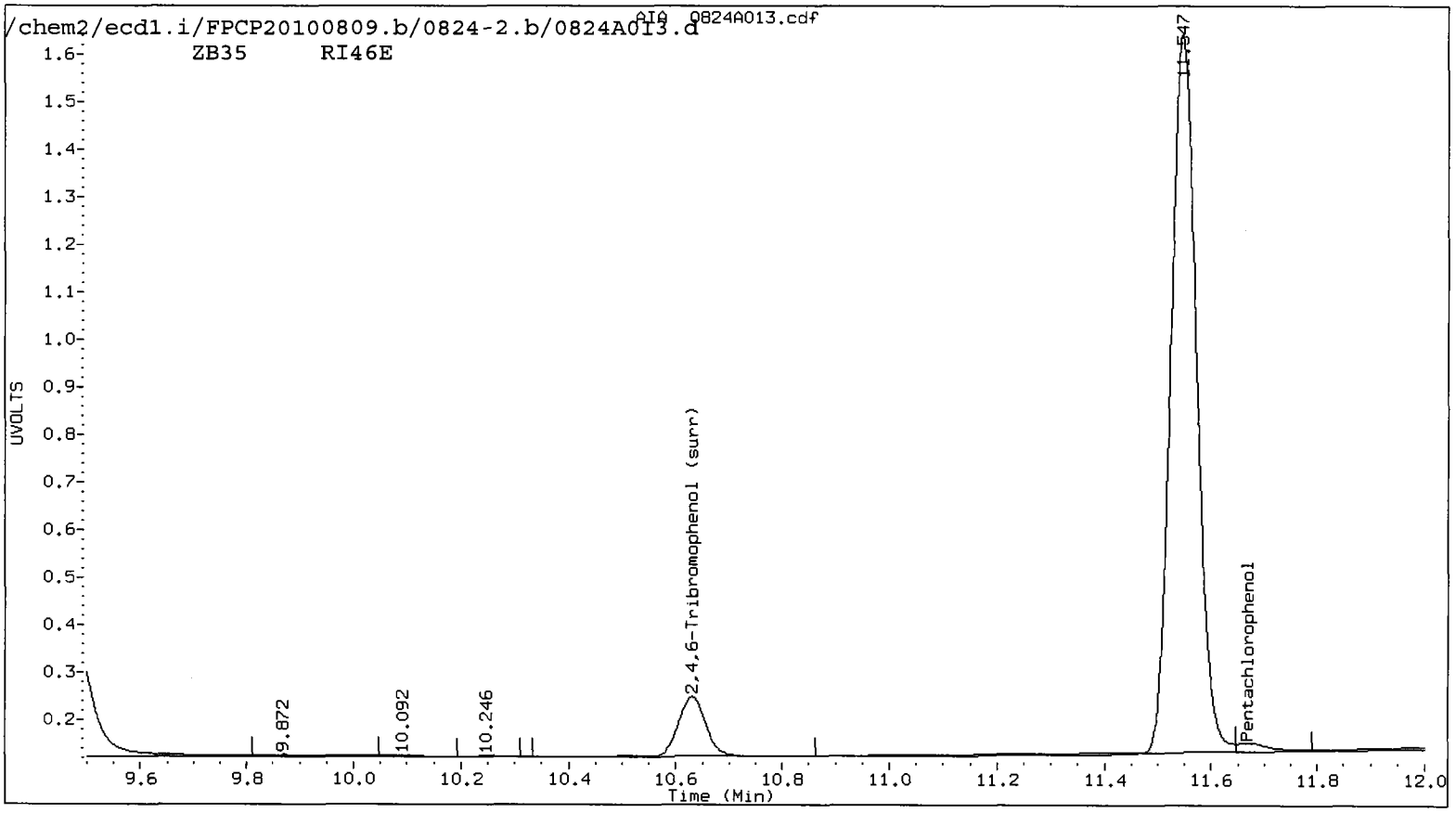
Data file 1: /chem2/ecd1.i/FPCP20100809.b/0824-1.b/0824A013.d ARI ID: RI46E
Data file 2: /chem2/ecd1.i/FPCP20100809.b/0824-2.b/0824A013.d Client ID:
Method: /chem2/ecd1.i/FPCP20100809.b/FPCP.m Injection Date: 24-AUG-2010 18:28
Compound Sublist: all Report Date: 08/25/2010 10:54
Instrument: ecd1.i Matrix: WATER
Operator: ar Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
11.216	-0.003	6520	11.670	0.012	39931	0.3623	1.7391	131.0*	Pentachlorophenol
----			7.378	0.045	1953	0.0000	0.1564	---	2,4,6-Trichlorophenol
7.601	-0.018	18227	7.877	0.013	11343	1.8716	0.9142	68.7*	2,3,6-Trichlorophenol
8.256	0.014	3221	8.679	0.064	1349	0.6382	0.1880	109.0*	2,4,5-Trichlorophenol
----			----			0.0000	0.0000	---	2,3,4-Trichlorophenol
----			9.257	-0.020	3312	0.0000	0.1789	---	2,3,5,6-Tetrachlorophenol
10.457	0.044	1598188	----			301.6837	0.0000	---	2,3,4,5-Tetrachlorophenol
6.926	0.033	12223	7.229	0.063	2485	19.5532	3.3064	142.1*	2,4-Dichlorophenol
9.988	-0.014	153378	10.631	-0.015	218584	11.7	11.7	0.2	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	46.9	46.8


/chem2/ecd1.i/FPCP20100809.b/0824-1.b/0824A013.d
AI0 0824A013.cdf
ZB5 RI46E
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.815
10.158
10.344
10.756
11.152
11.299
11.507
11.659
11.855
11.959
Time (Min)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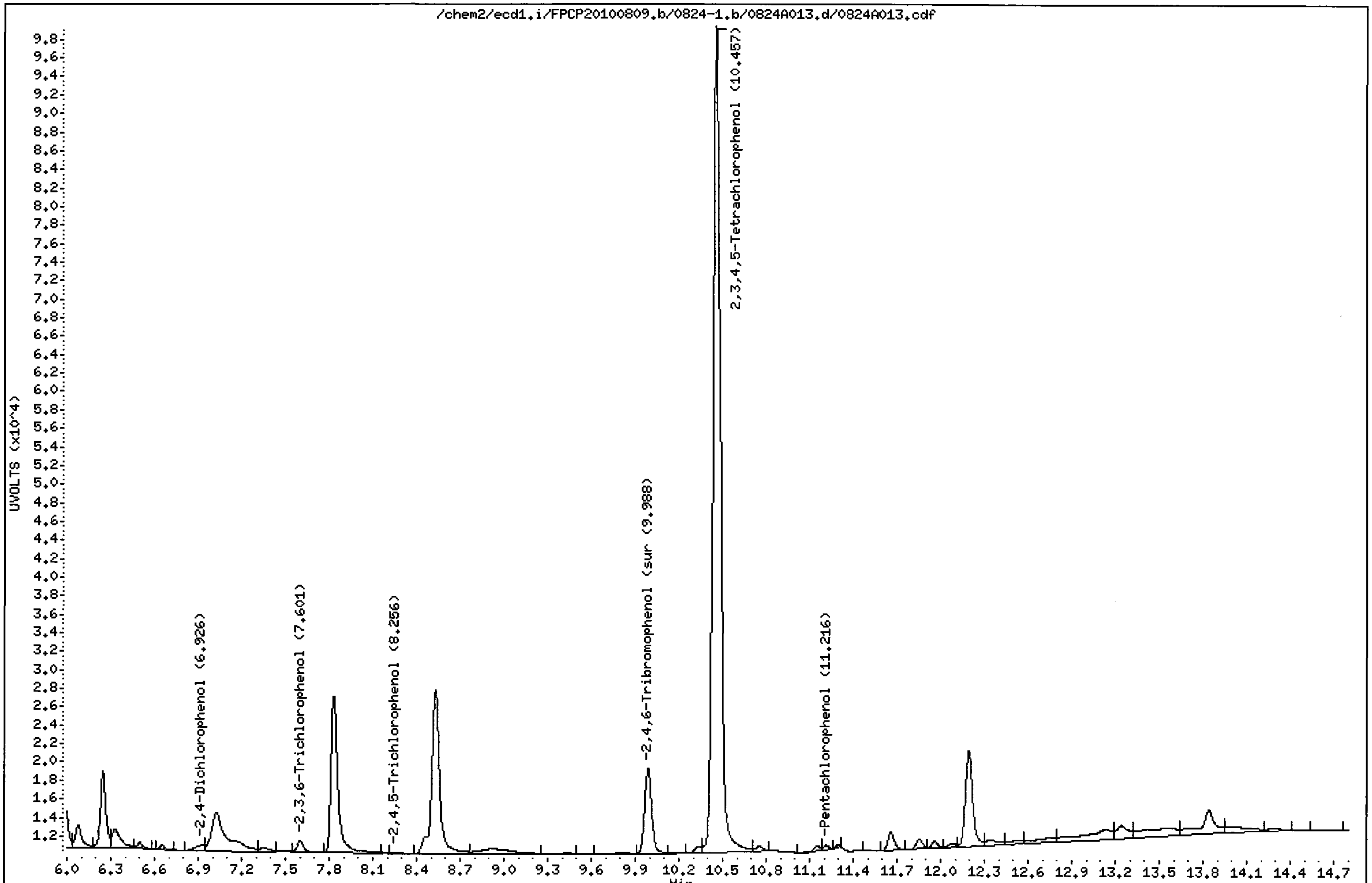
AI0 0824A013.cdf
ZB35 RI46E
UVOLTS
2,4,6-Tribromophenol (surr)
Pentachlorophenol
9.872
10.092
10.246
11.547
Time (Min)

Data File: /chem2/ecd1.i/FPCP20100809.b/0824-1.b/0824A013.d
Date : 24-AUG-2010 18:28
Client ID:
Instrument: ecd1.i
Sample Info: RI46E
Purge Volume: 2.0
Operator: ar
Column phase: ZB5
Column diameter: 0.53



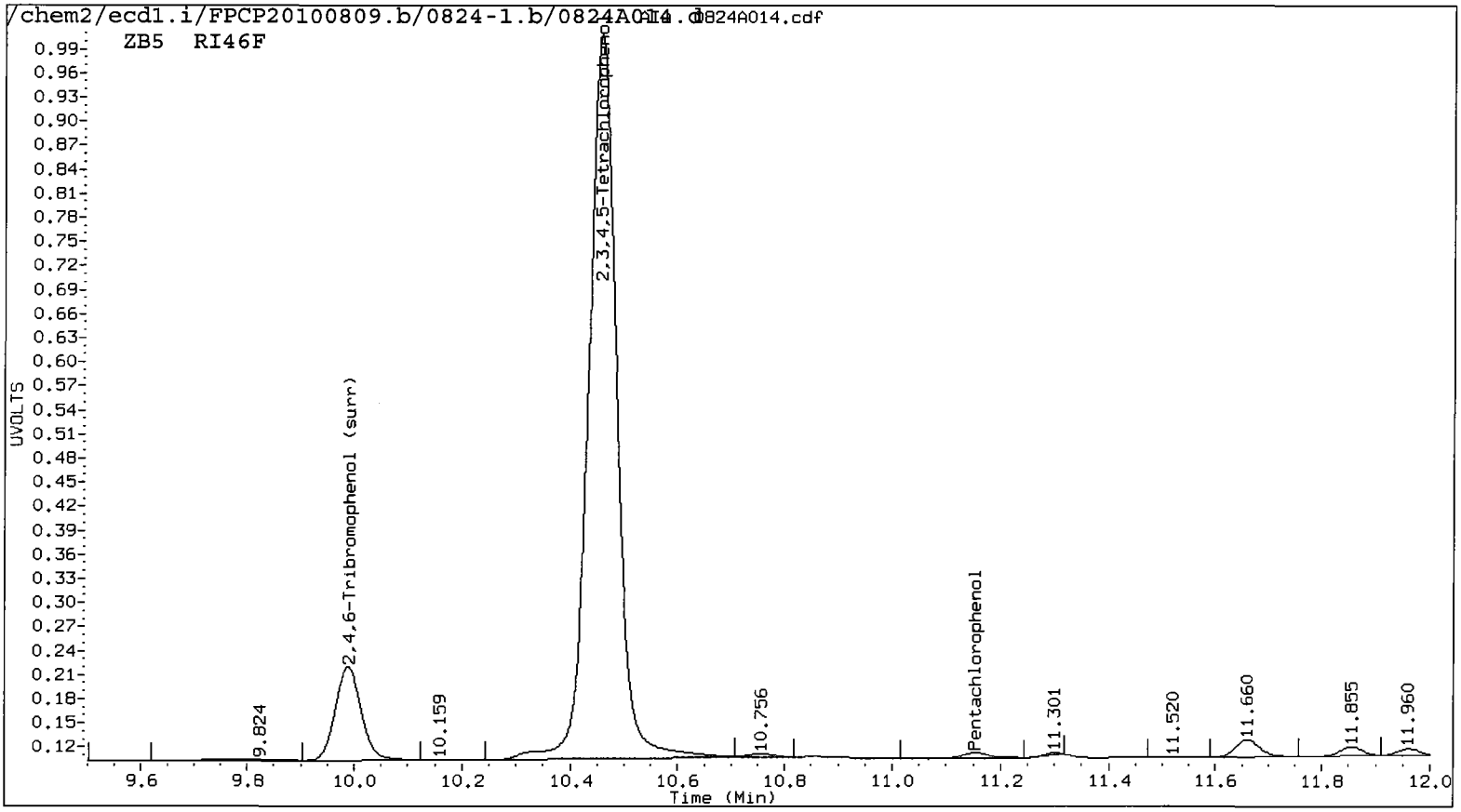
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

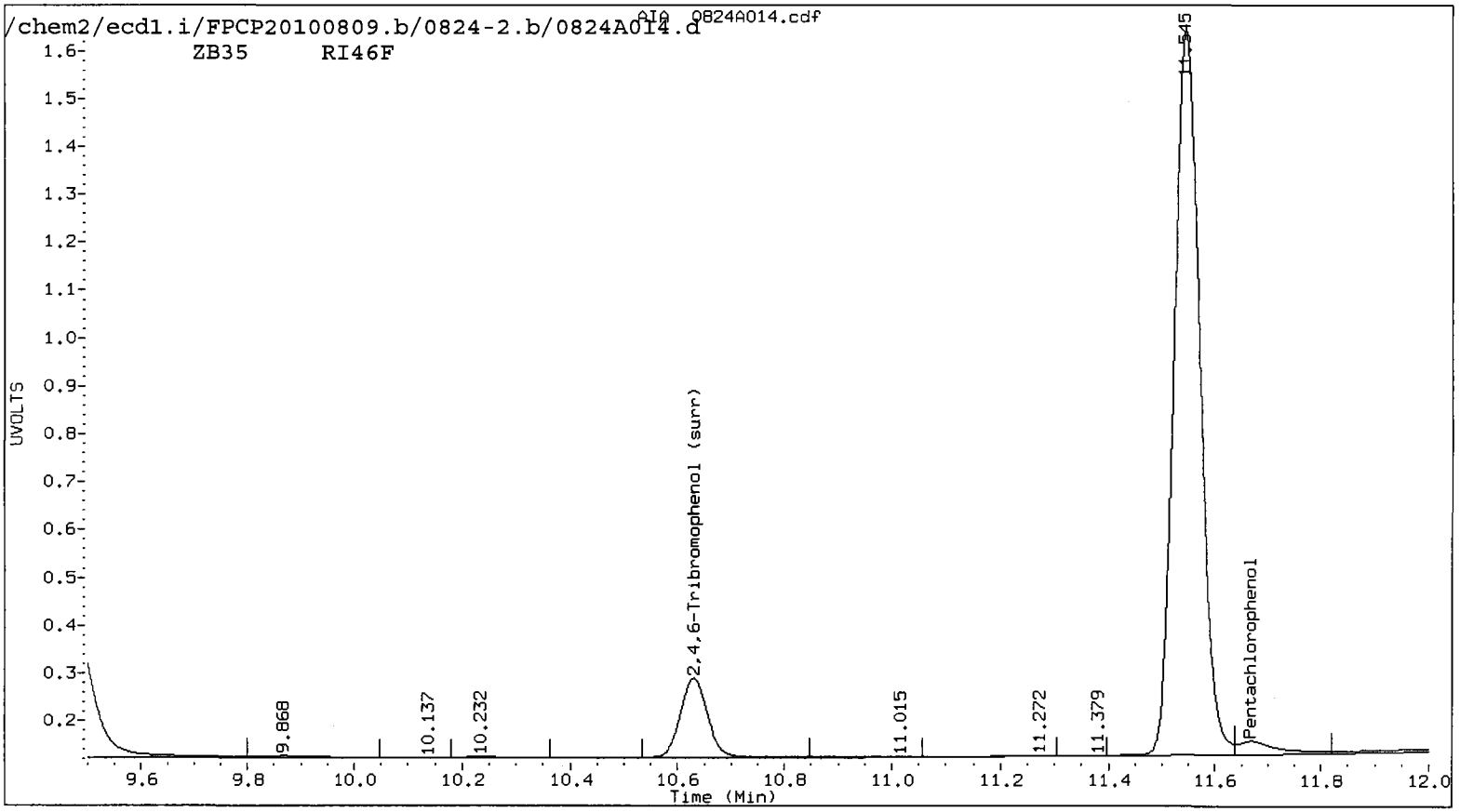
Data file 1: /chem2/ecd1.i/FPCP20100809.b/0824-1.b/0824A014.d ARI ID: RI46F
Data file 2: /chem2/ecd1.i/FPCP20100809.b/0824-2.b/0824A014.d Client ID:
Method: /chem2/ecd1.i/FPCP20100809.b/FPCP.m Injection Date: 24-AUG-2010 18:48
Compound Sublist: all Report Date: 08/25/2010 10:54
Instrument: ecd1.i Matrix: WATER
Operator: ar Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
11.153	-0.066	11355	11.668	0.010	70306	0.6322	3.0619	131.5*	Pentachlorophenol
----			7.381	0.048	1949	0.0000	0.1561	---	2,4,6-Trichlorophenol
7.601	-0.018	21437	----			2.2049	0.0000	---	2,3,6-Trichlorophenol
8.273	0.031	1228	8.676	0.061	1320	0.2434	0.1839	27.8	2,4,5-Trichlorophenol
----			----			0.0000	0.0000	---	2,3,4-Trichlorophenol
----			9.252	-0.025	1787	0.0000	0.0965	---	2,3,5,6-Tetrachlorophenol
10.457	0.044	1655632	----			319.0379	0.0000	---	2,3,4,5-Tetrachlorophenol
6.925	0.032	8906	7.231	0.065	2453	14.1273	3.2645	124.9*	2,4-Dichlorophenol
9.989	-0.013	196286	10.630	-0.016	289285	15.3	15.5	1.6	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	61.0	62.0


/chem2/ecd1.i/FPCP20100809.b/0824-1.b/0824A014.d
ZB5 RI46F
UVOLTS
Time (Min)
9.824
2,4,6-Tribromophenol (surr)
10.159
2,3,4,5-Tetrachlorophenol
10.756
Pentachlorophenol
11.301
11.520
11.660
11.855
11.960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ZB35 RI46F
UVOLTS
Time (Min)
9.868
10.137
10.232
2,4,6-Tribromophenol (surr)
11.015
11.272
11.379
11.545
Pentachlorophenol

Data File: /chem2/ecd1.i/FPCP20100809.b/0824-1.b/0824A014.d

Date : 24-AUG-2010 18:48

Client ID:

Instrument: ecd1.i

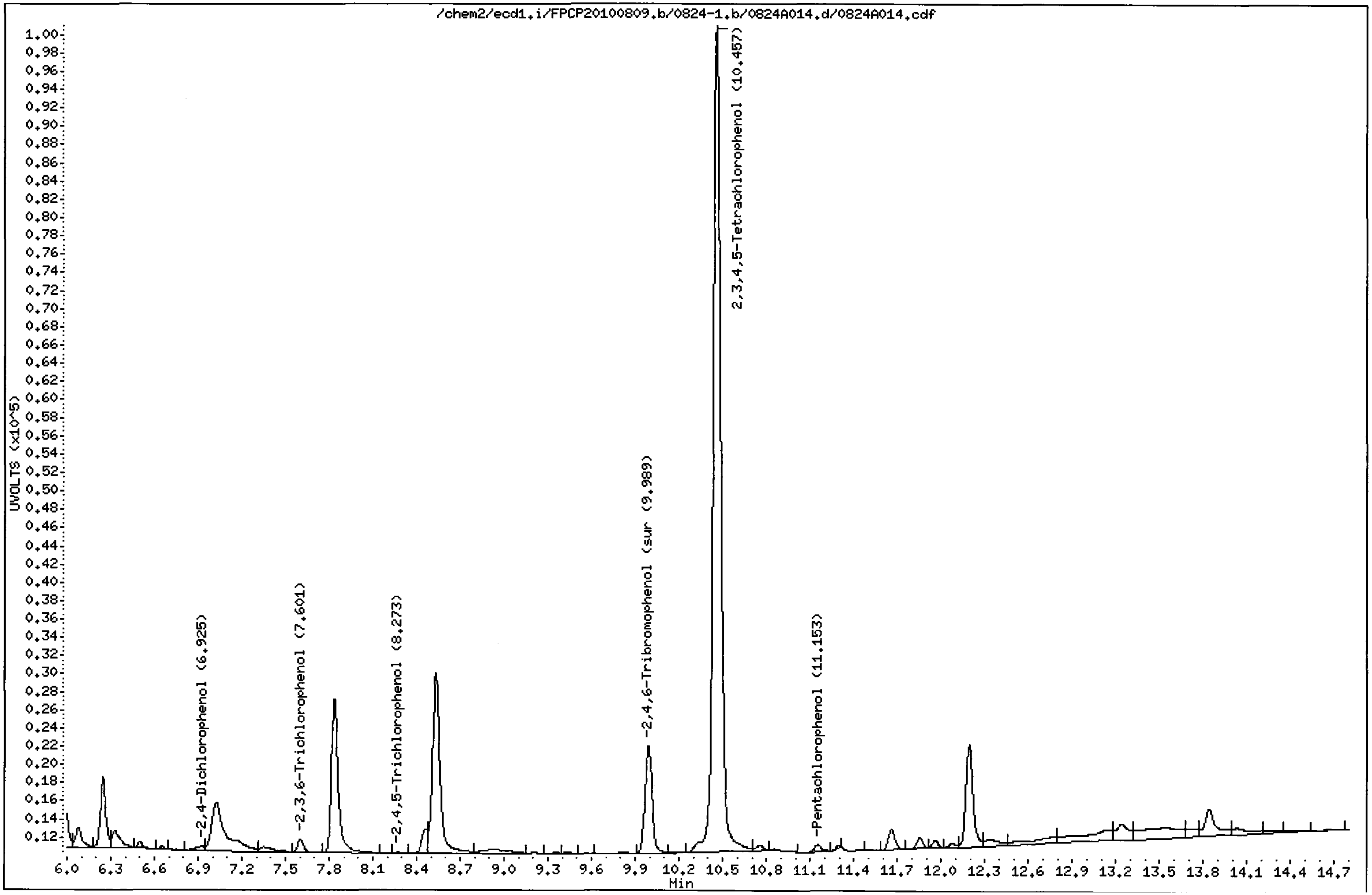
Sample Info: RI46F

Purge Volume: 2.0

Operator: ar

Column phase: ZB5

Column diameter: 0.53



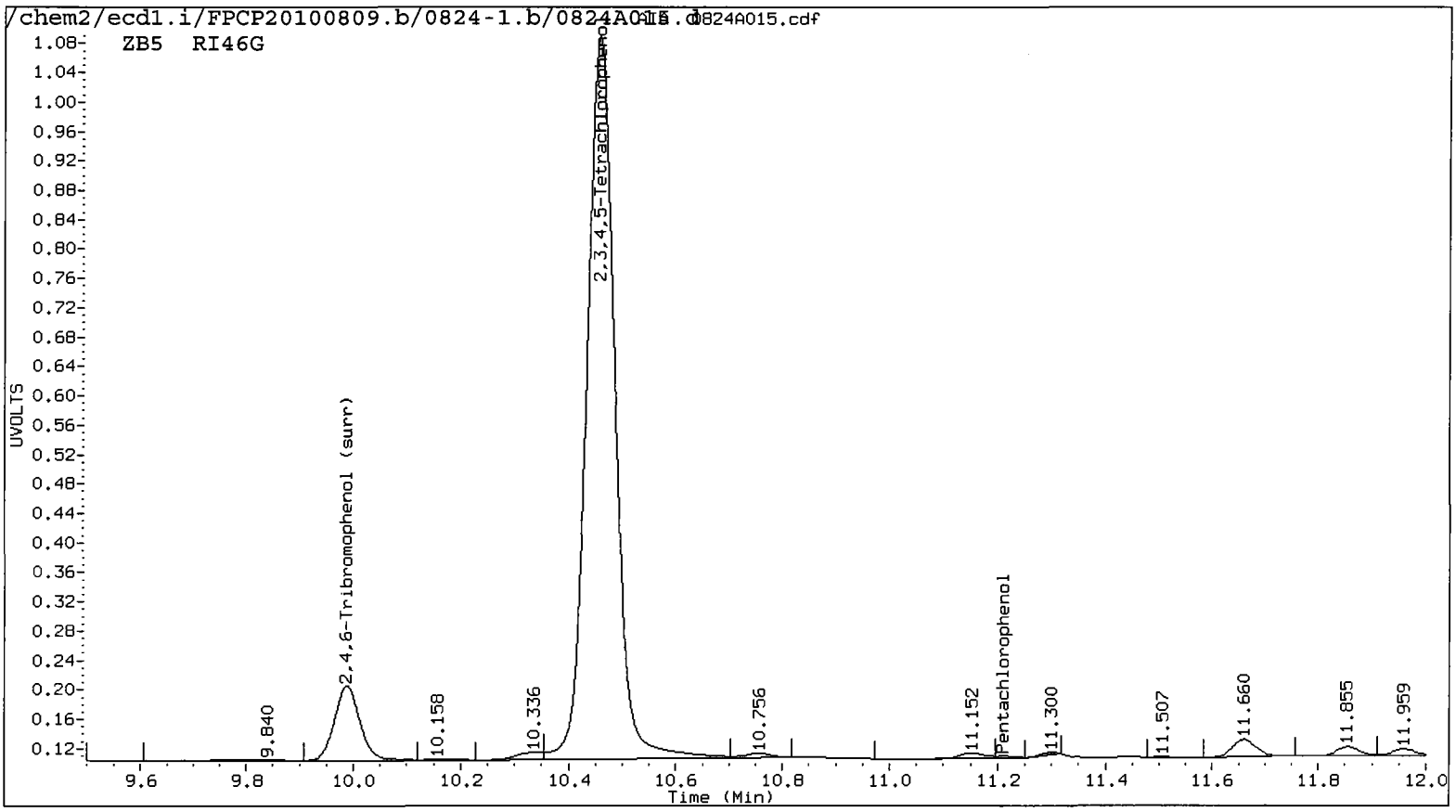
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

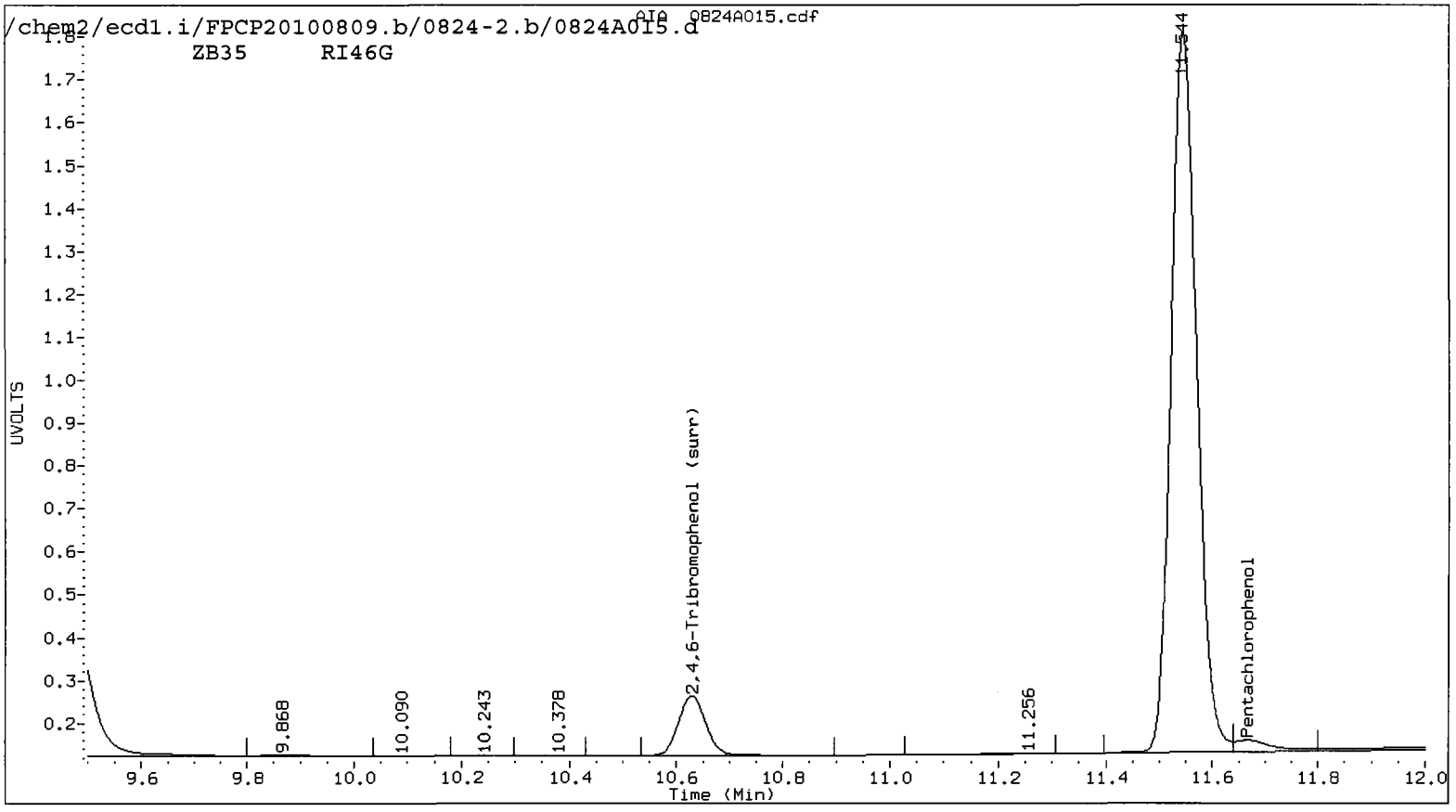
Data file 1: /chem2/ecd1.i/FPCP20100809.b/0824-1.b/0824A015.d ARI ID: RI46G
Data file 2: /chem2/ecd1.i/FPCP20100809.b/0824-2.b/0824A015.d Client ID:
Method: /chem2/ecd1.i/FPCP20100809.b/FPCP.m Injection Date: 24-AUG-2010 19:08
Compound Sublist: all Report Date: 08/25/2010 10:54
Instrument: ecd1.i Matrix: WATER
Operator: ar Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
11.210	-0.009	2092	11.666	0.008	66690	0.1160	2.9045	184.6*	Pentachlorophenol
----			7.378	0.045	2482	0.0000	0.1988	---	2,4,6-Trichlorophenol
7.600	-0.019	22241	----			2.2886	0.0000	---	2,3,6-Trichlorophenol
8.258	0.016	3112	8.675	0.060	1573	0.6166	0.2191	95.1*	2,4,5-Trichlorophenol
----			----			0.0000	0.0000	---	2,3,4-Trichlorophenol
----			9.256	-0.021	2405	0.0000	0.1299	---	2,3,5,6-Tetrachlorophenol
10.457	0.044	1786859	----			360.3777	0.0000	---	2,3,4,5-Tetrachlorophenol
6.920	0.027	13970	7.226	0.060	2981	22.4472	3.9695	139.9*	2,4-Dichlorophenol
9.988	-0.014	169371	10.629	-0.017	246733	13.0	13.2	1.4	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	52.1	52.9


/chem2/ecd1.i/FPCP20100809.b/0824-1.b/0824A015.d
AIA 0824A015.cdf
ZB5 RI46G
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.840
10.158
10.336
10.756
11.152
11.300
11.507
11.660
11.855
11.959
Time (Min)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AIA 0824A015.cdf
ZB35 RI46G
UVOLTS
11.544
2,4,6-Tribromophenol (surr)
Pentachlorophenol
9.868
10.090
10.243
10.378
11.256
Time (Min)

Data File: /chem2/ecd1.i/FPCP20100809.b/0824-1.b/0824A015.d

Date : 24-AUG-2010 19:08

Client ID:

Instrument: ecd1.i

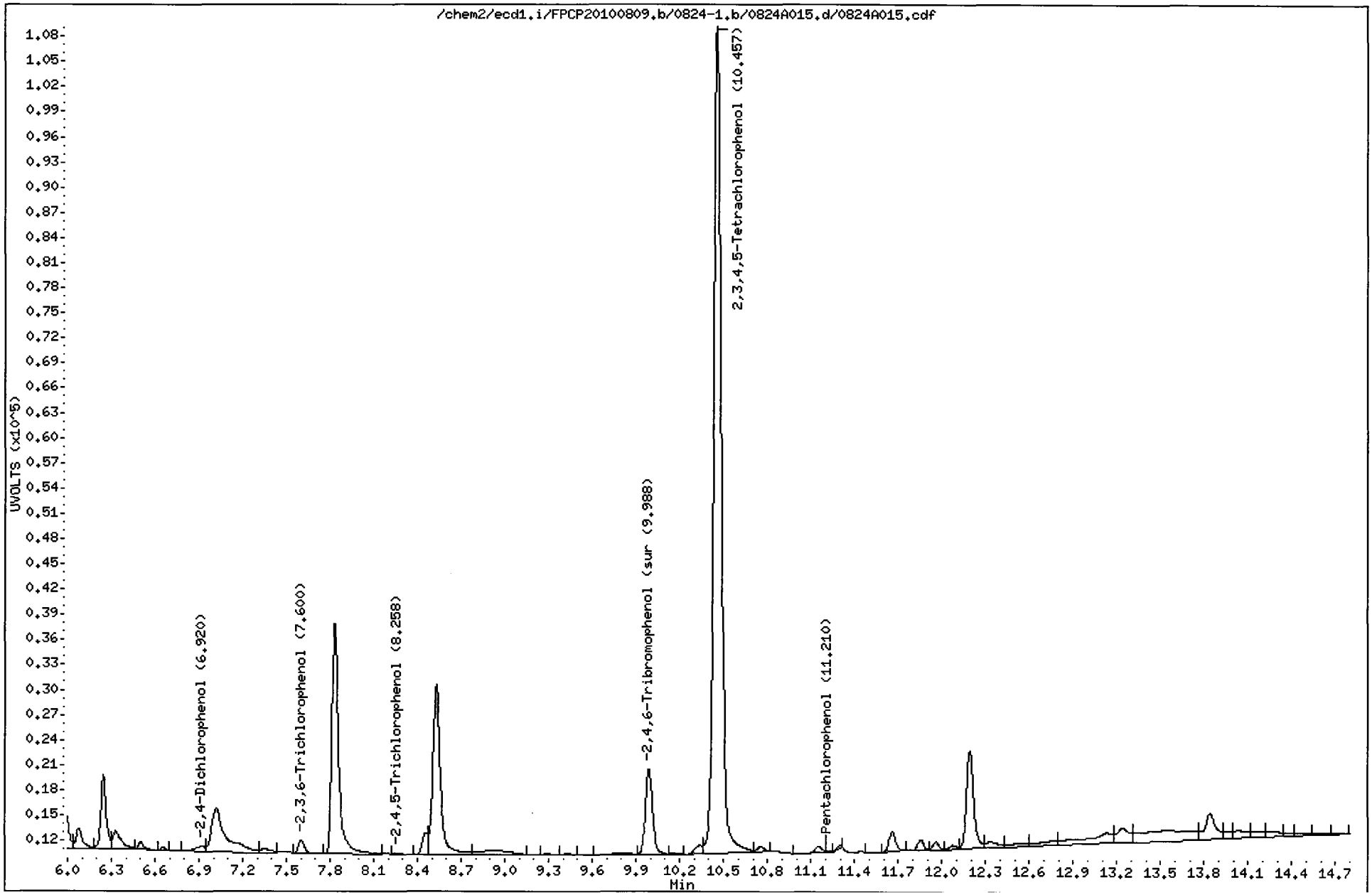
Sample Info: RI46G

Purge Volume: 2.0

Operator: ar

Column phase: ZB5

Column diameter: 0.53



RI46:00557

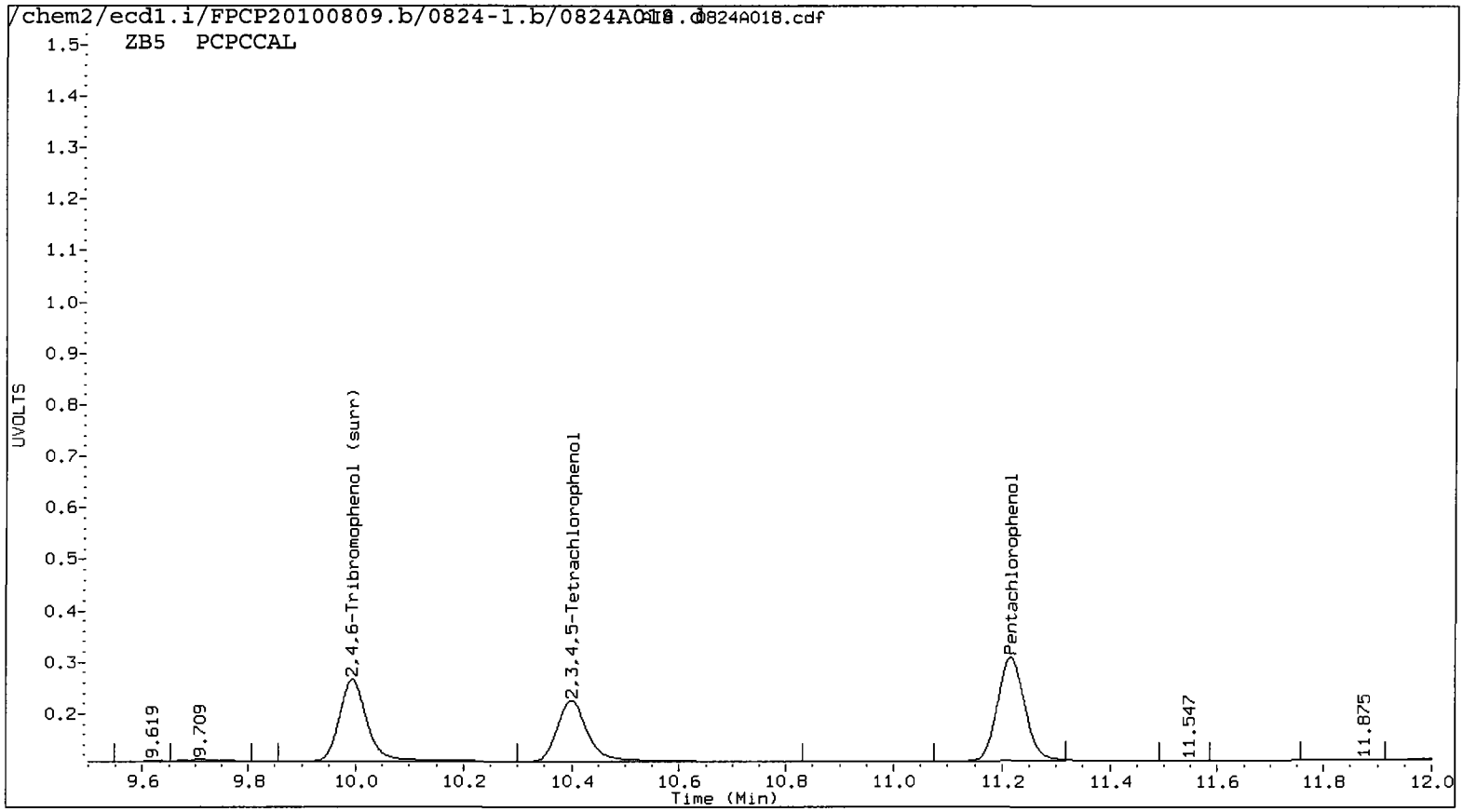
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

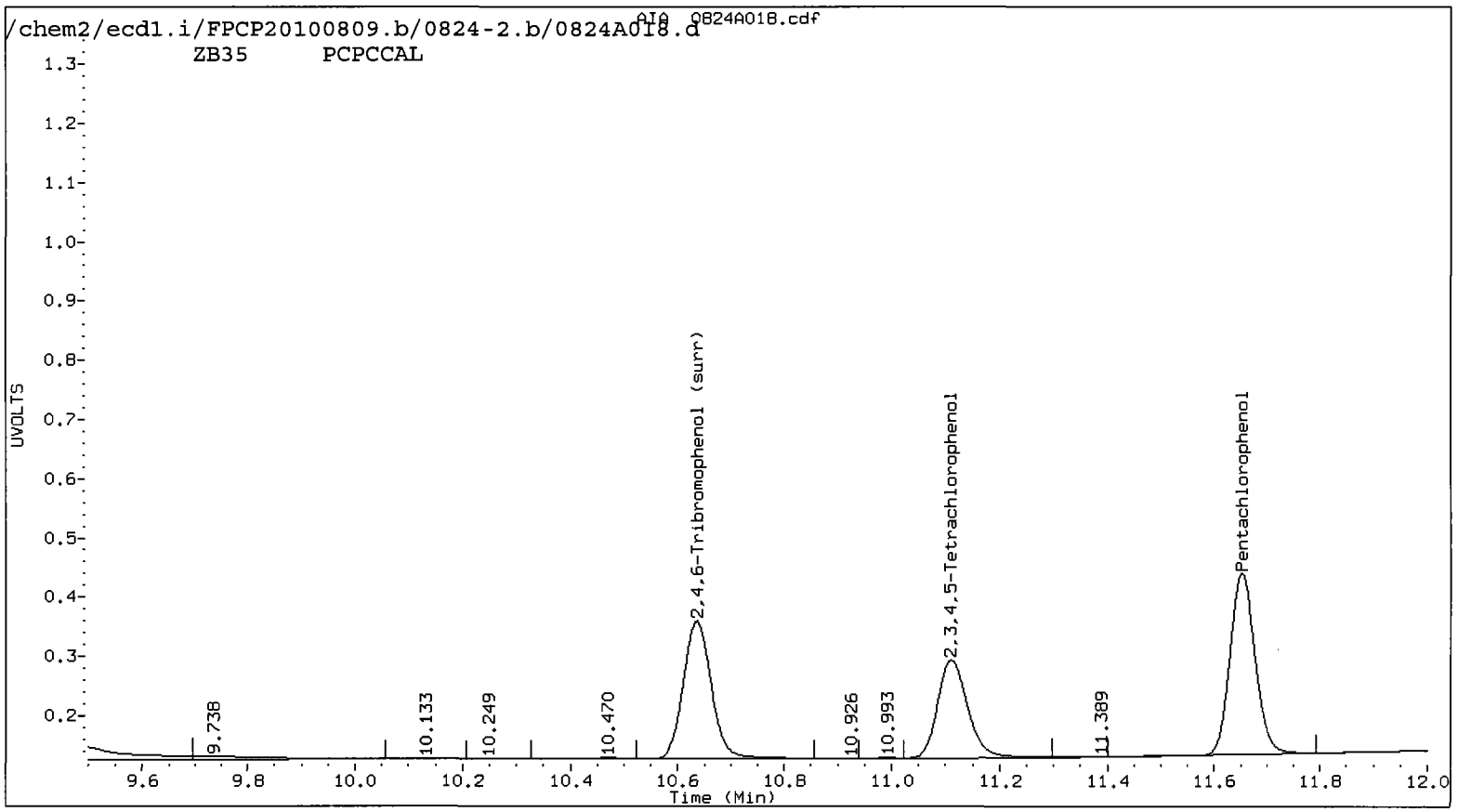
Data file 1: /chem2/ecd1.i/FPCP20100809.b/0824-1.b/0824A018.d ARI ID: PCPCCAL
Data file 2: /chem2/ecd1.i/FPCP20100809.b/0824-2.b/0824A018.d Client ID:
Method: /chem2/ecd1.i/FPCP20100809.b/FPCP.m Injection Date: 24-AUG-2010 20:08
Compound Sublist: all Report Date: 08/25/2010 10:54
Instrument: ecd1.i Matrix: WATER
Operator: ar Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
11.216	-0.003	345967	11.653	-0.005	511610	22.0105	22.2813	1.2	Pentachlorophenol
7.266	0.002	205548	7.333	0.000	297754	24.2600	23.8498	1.7	2,4,6-Trichlorophenol
7.619	0.000	217731	7.861	-0.003	281198	24.6727	22.6617	8.5	2,3,6-Trichlorophenol
8.222	-0.020	126122	8.594	-0.021	152696	24.9871	24.3656	2.5	2,4,5-Trichlorophenol
8.771	-0.021	151514	9.360	-0.020	207599	22.1477	24.4795	10.0	2,3,4-Trichlorophenol
8.999	-0.008	320447	9.265	-0.012	443111	22.7177	23.9328	5.2	2,3,5,6-Tetrachlorophenol
10.399	-0.014	236206	11.111	-0.015	319312	22.5638	21.8847	3.1	2,3,4,5-Tetrachlorophenol
6.891	-0.002	110301	7.160	-0.006	144840	220.3988	231.6317	5.0	2,4-Dichlorophenol
9.994	-0.008	285215	10.636	-0.010	428150	22.9	22.9	0.1	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
Pentachlorophenol	88.0	89.1
2,4,6-Trichlorophenol	97.0	95.4
2,3,6-Trichlorophenol	98.7	90.6
2,4,5-Trichlorophenol	99.9	97.5
2,3,4-Trichlorophenol	88.6	97.9
2,3,5,6-Tetrachlorophenol	90.9	95.7
2,3,4,5-Tetrachlorophenol	90.3	87.5
2,4-Dichlorophenol	88.2	92.7
2,4,6-TBP (surr)	91.6	91.7


/chem2/ecd1.i/FPCP20100809.b/0824-1.b/0824A018.d
AIQ 0824A018.cdf
ZB5 PCPCCAL
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.619
9.709
11.547
11.875
Time (Min)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AIQ 0824A018.cdf
ZB35 PCPCCAL
UVOLTS
9.738
10.133
10.249
10.470
2,4,6-Tribromophenol (surr)
10.926
10.993
2,3,4,5-Tetrachlorophenol
11.389
Pentachlorophenol
Time (Min)

Data File: /chem2/ecd1.i/FPCP20100809.b/0824-1.b/0824A018.d

Date : 24-AUG-2010 20:08

Client ID:

Instrument: ecd1.i

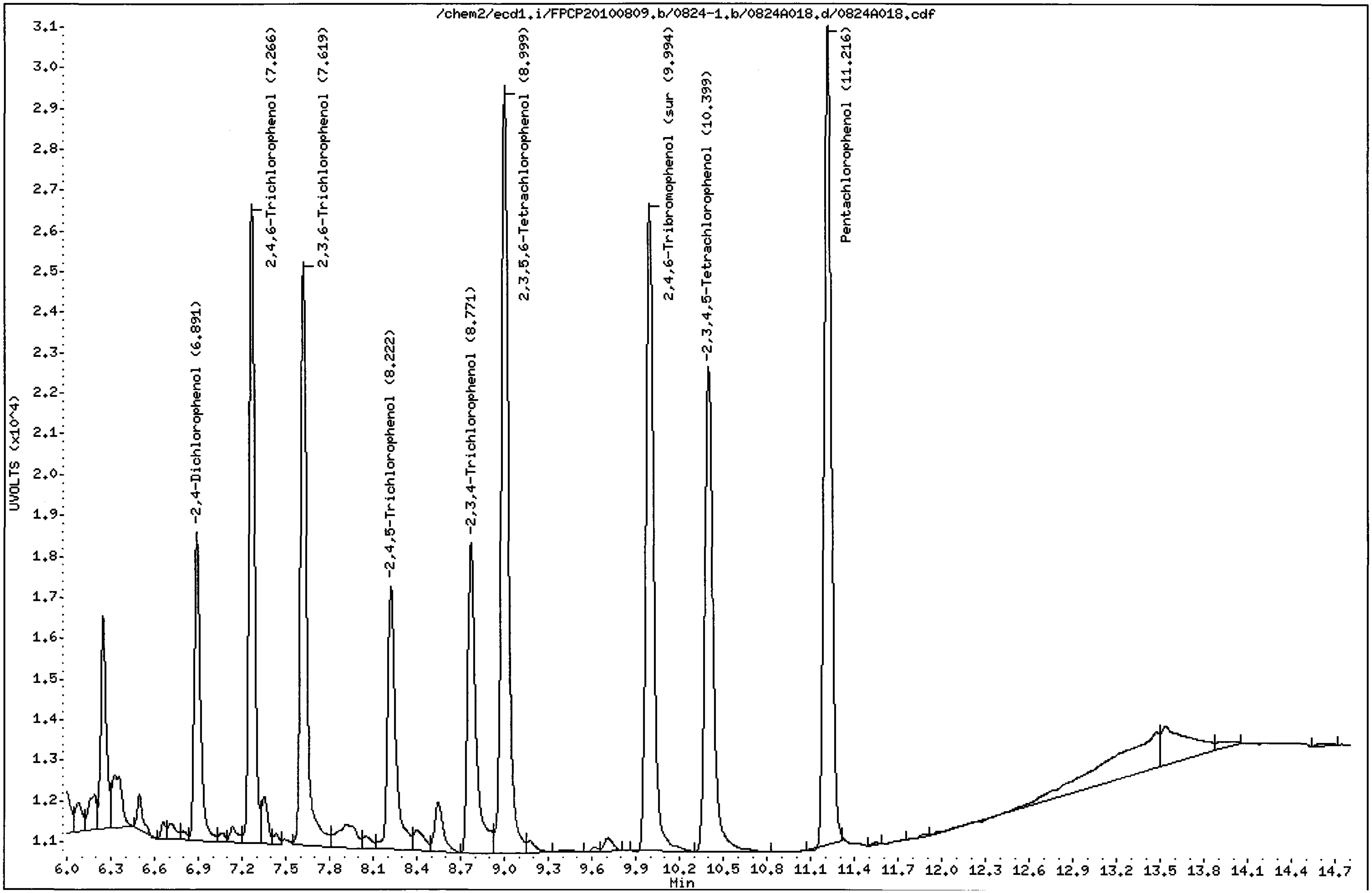
Sample Info: PCPCCAL

Purge Volume: 2.0

Operator: ar

Column phase: ZB5

Column diameter: 0.53



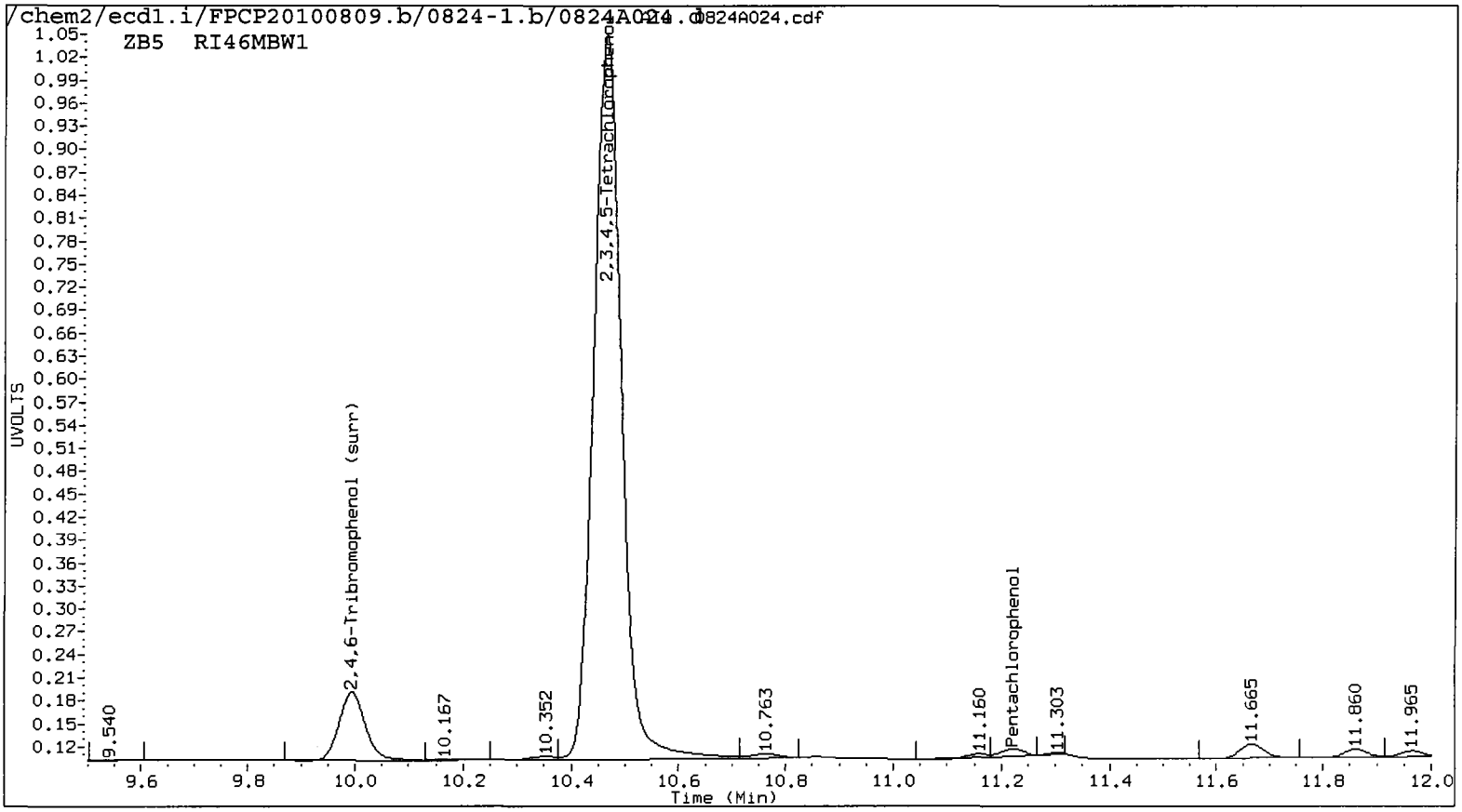
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report AR 8/25/2010

Data file 1: /chem2/ecd1.i/FPCP20100809.b/0824-1.b/0824A024.d ARI ID: RI46MBW1
Data file 2: /chem2/ecd1.i/FPCP20100809.b/0824-2.b/0824A024.d Client ID:
Method: /chem2/ecd1.i/FPCP20100809.b/FPCP.m Injection Date: 25-AUG-2010 10:36
Compound Sublist: all Report Date: 08/25/2010 13:48
Instrument: ecd1.i Matrix: WATER
Operator: ar Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
11.221	0.002	14380	----			0.8017	0.0000	---	Pentachlorophenol
----			7.379	0.046	2747	0.0000	0.2201	---	2,4,6-Trichlorophenol
7.606	-0.013	22950	----			2.3623	0.0000	---	2,3,6-Trichlorophenol
----			----			0.0000	0.0000	---	2,4,5-Trichlorophenol
----			----			0.0000	0.0000	---	2,3,4-Trichlorophenol
----			9.260	-0.017	48029	0.0000	2.5941	---	2,3,5,6-Tetrachlorophenol
10.464	0.051	1690962	----			329.9360	0.0000	---	2,3,4,5-Tetrachlorophenol
6.913	0.020	2494	7.232	0.066	2309	3.8910	3.0720	23.5	2,4-Dichlorophenol
9.994	-0.008	151270	10.636	-0.010	214567	11.6	11.5	0.6	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	46.2	46.0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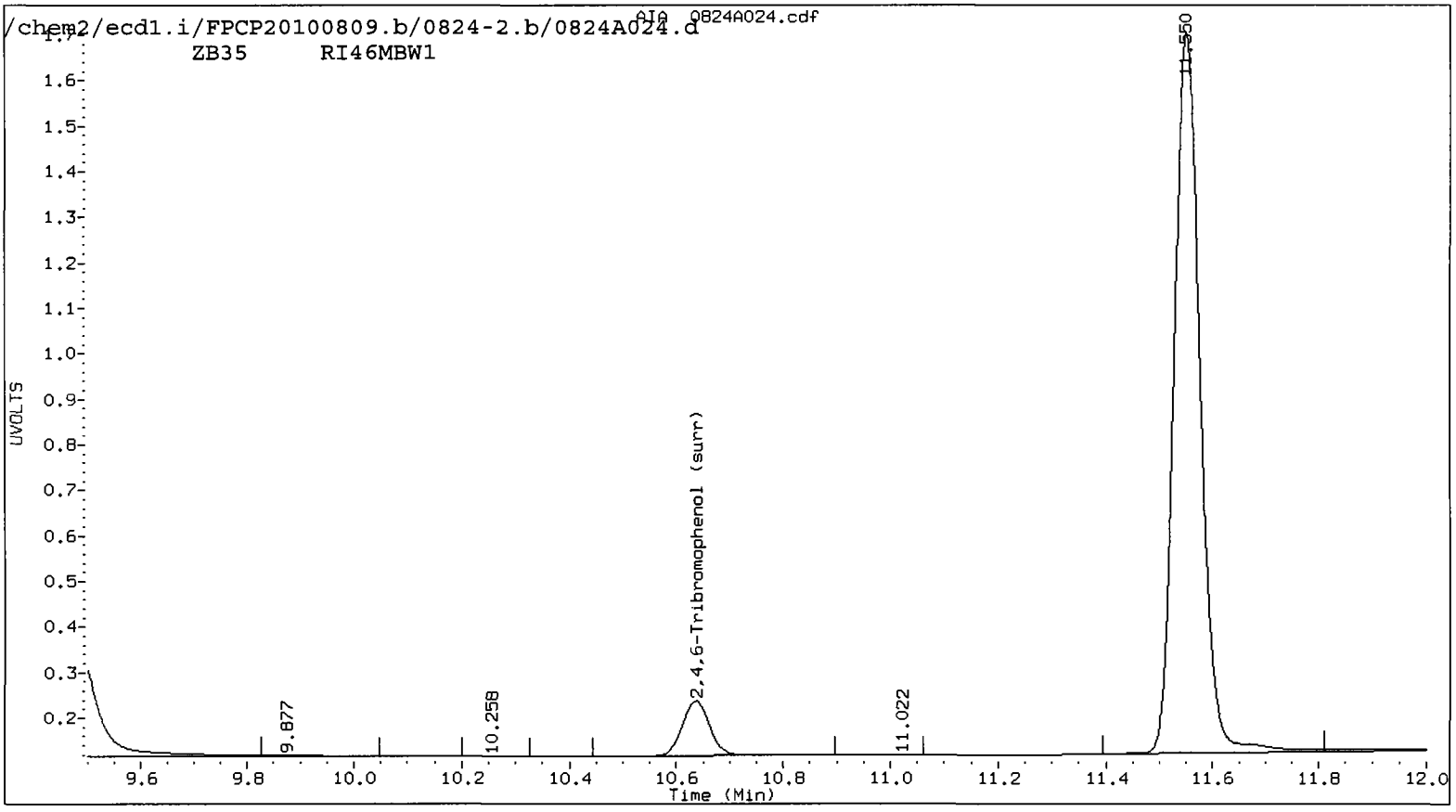
0824A024.cdf
ZB5 RI46MBW1
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.540
10.167
10.352
10.763
11.160
11.303
11.665
11.860
11.965
Time (Min)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0824A024.cdf
ZB35 RI46MBW1
UVOLTS
2,4,6-Tribromophenol (surr)
9.877
10.258
11.022
11.550
Time (Min)

Data File: /chem2/ecd1.i/FPCP20100809.b/0824-1.b/0824A024.d

Date : 25-AUG-2010 10:36

Client ID:

Instrument: ecd1.i

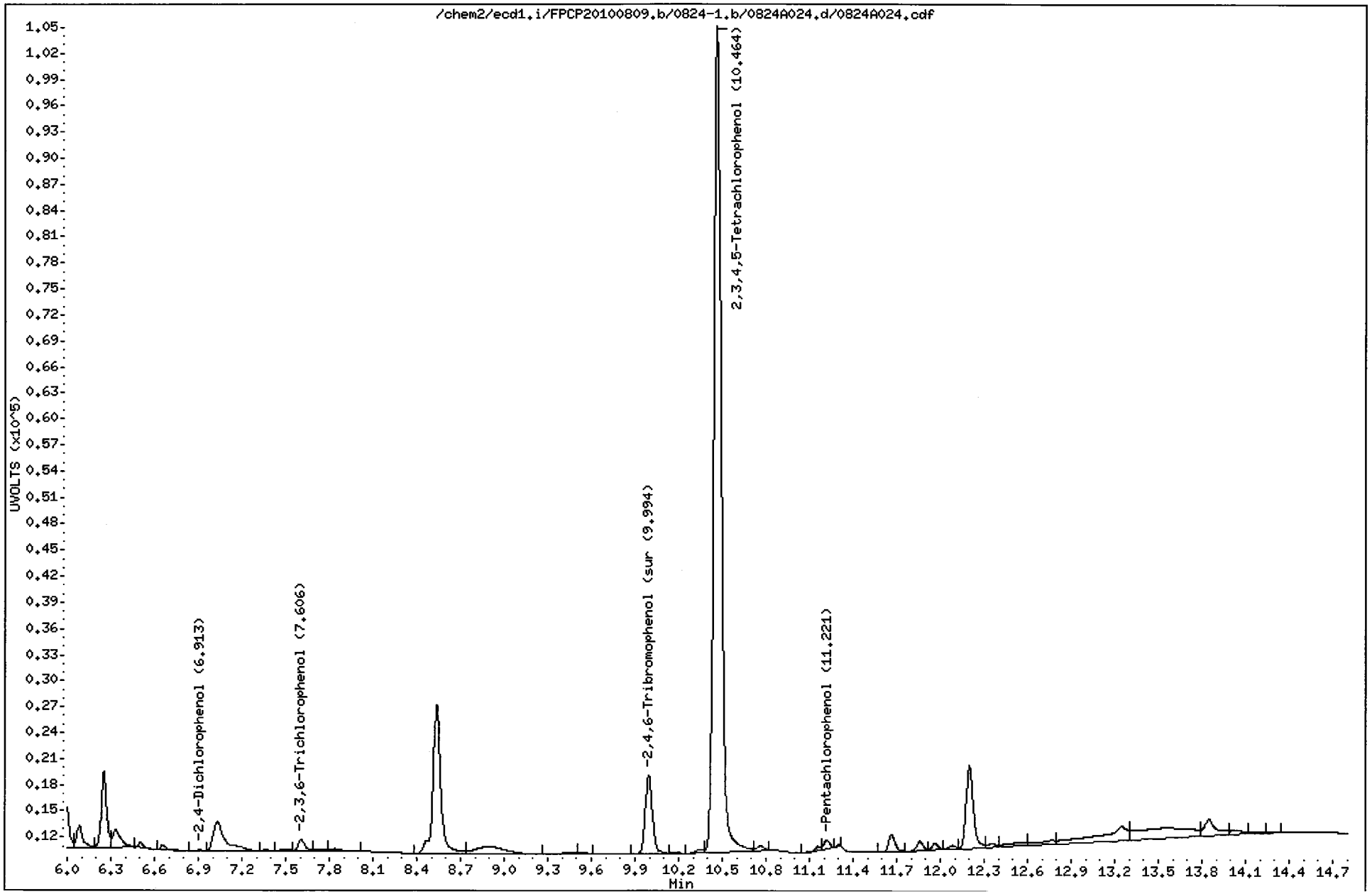
Sample Info: RI46MBW1

Purge Volume: 2.0

Operator: ar

Column phase: ZB5

Column diameter: 0.53



RI46:00603

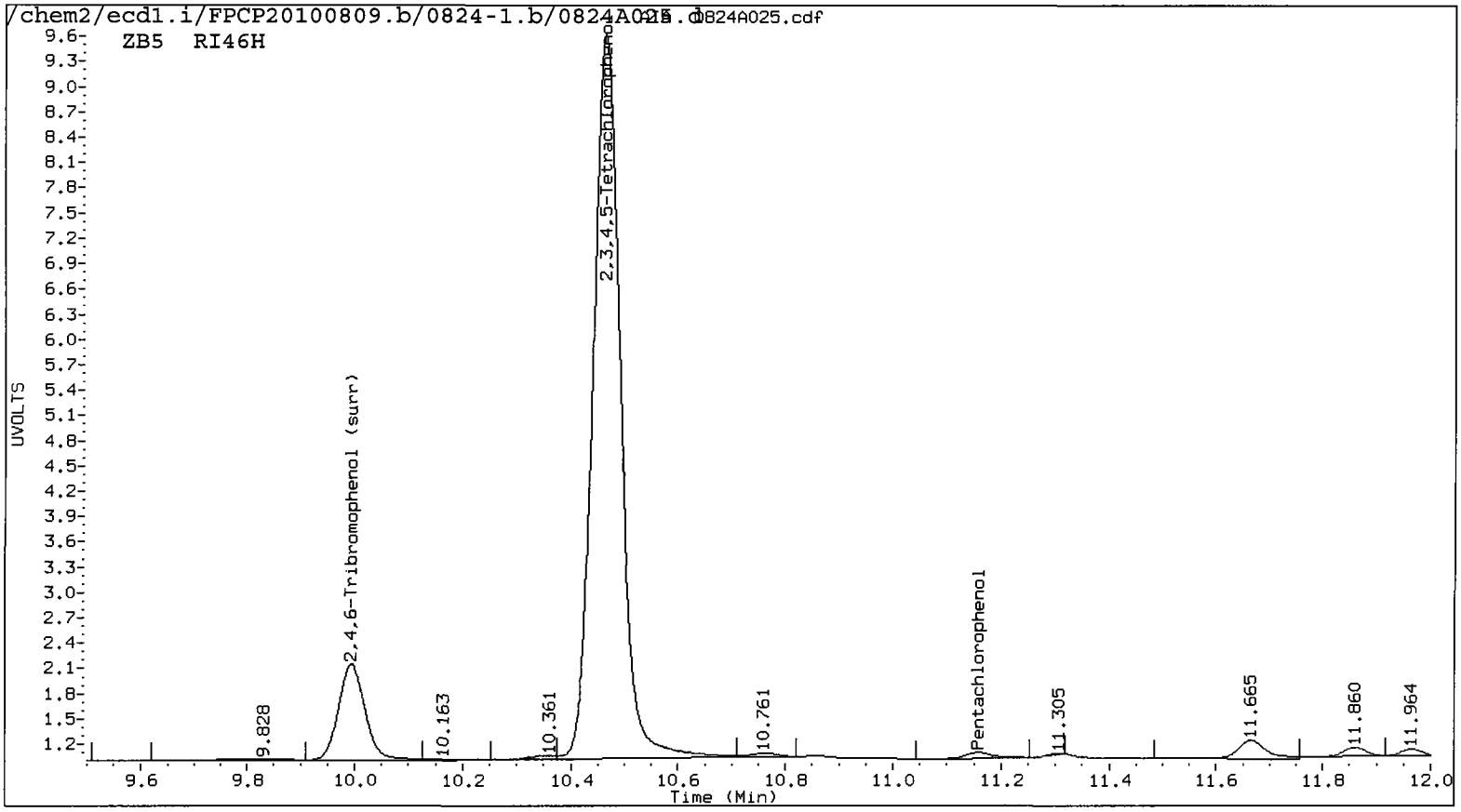
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/FPCP20100809.b/0824-1.b/0824A025.d ARI ID: RI46H
Data file 2: /chem2/ecd1.i/FPCP20100809.b/0824-2.b/0824A025.d Client ID: MW-10-081210
Method: /chem2/ecd1.i/FPCP20100809.b/FPCP.m Injection Date: 25-AUG-2010 10:56
Compound Sublist: all Report Date: 08/25/2010 17:10
Instrument: ecd1.i Matrix: WATER
Operator: ar Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
11.158	-0.061	11757	----			0.6547	0.0000	---	Pentachlorophenol
----			7.382	0.049	728	0.0000	0.0583	---	2,4,6-Trichlorophenol
7.606	-0.013	26659	7.890	0.026	10435	2.7493	0.8410	106.3*	2,3,6-Trichlorophenol
----			----			0.0000	0.0000	---	2,4,5-Trichlorophenol
----			----			0.0000	0.0000	---	2,3,4-Trichlorophenol
----			9.260	-0.017	46715	0.0000	2.5231	---	2,3,5,6-Tetrachlorophenol
10.464	0.051	1531441	----			282.0861	0.0000	---	2,3,4,5-Tetrachlorophenol
6.922	0.029	10791	7.235	0.069	1283	17.1998	1.7044	163.9*	2,4-Dichlorophenol
9.994	-0.008	195065	10.635	-0.011	278807	15.2	14.9	1.5	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	60.6	59.7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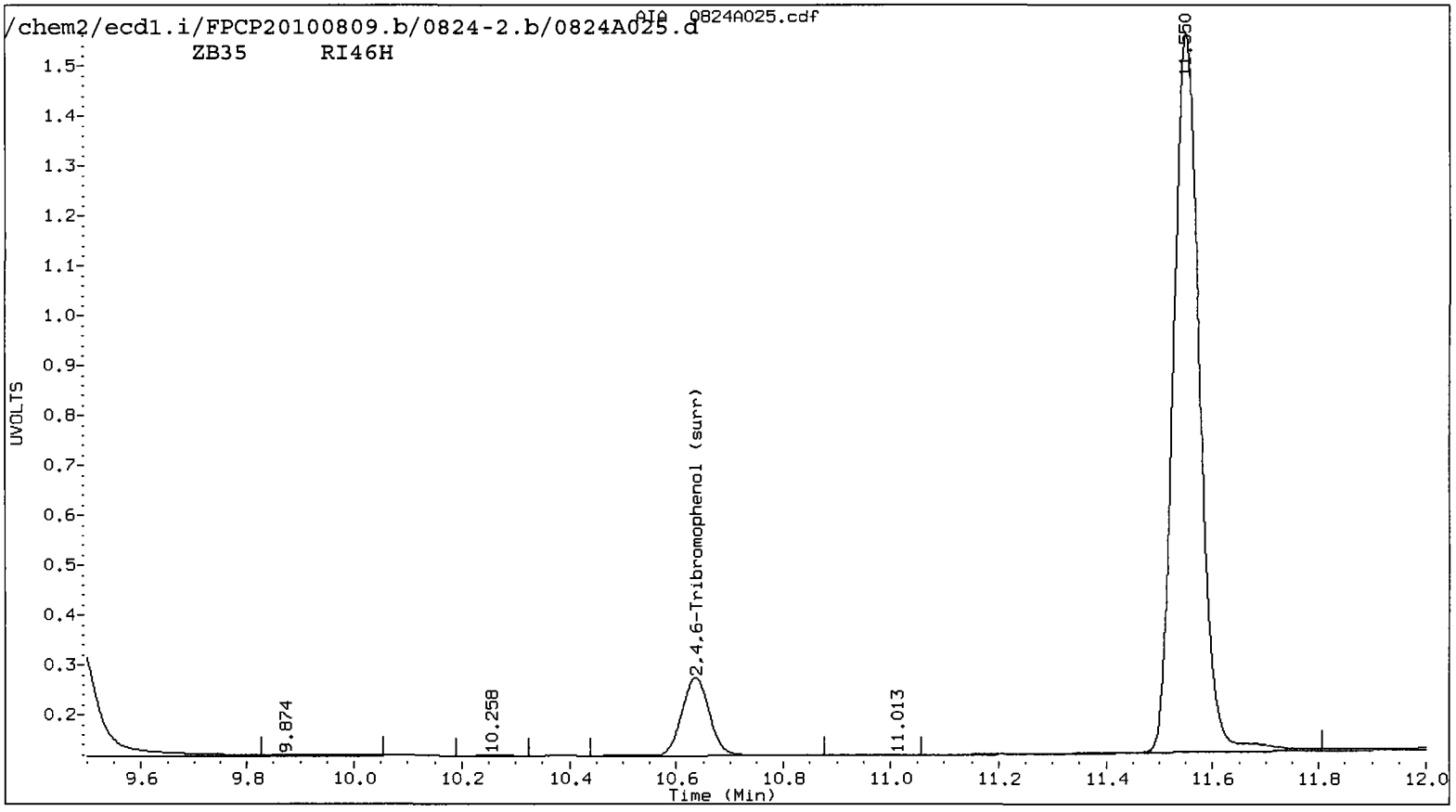
0824A025.cdf
ZB5 RI46H
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.828
10.163
10.361
10.761
11.305
11.665
11.860
11.964
Time (Min)


/chem2/ecd1.i/FPCP20100809.b/0824-2.b/0824A025.d
0824A025.cdf
ZB35 RI46H
UVOLTS
2,4,6-Tribromophenol (surr)
9.874
10.258
11.013
11.550
Time (Min)

Data File: /chem2/ecd1.i/FPCP20100809.b/0824-1.b/0824A025.d

Date : 25-AUG-2010 10:56

Client ID: MW-10-081210

Instrument: ecd1.i

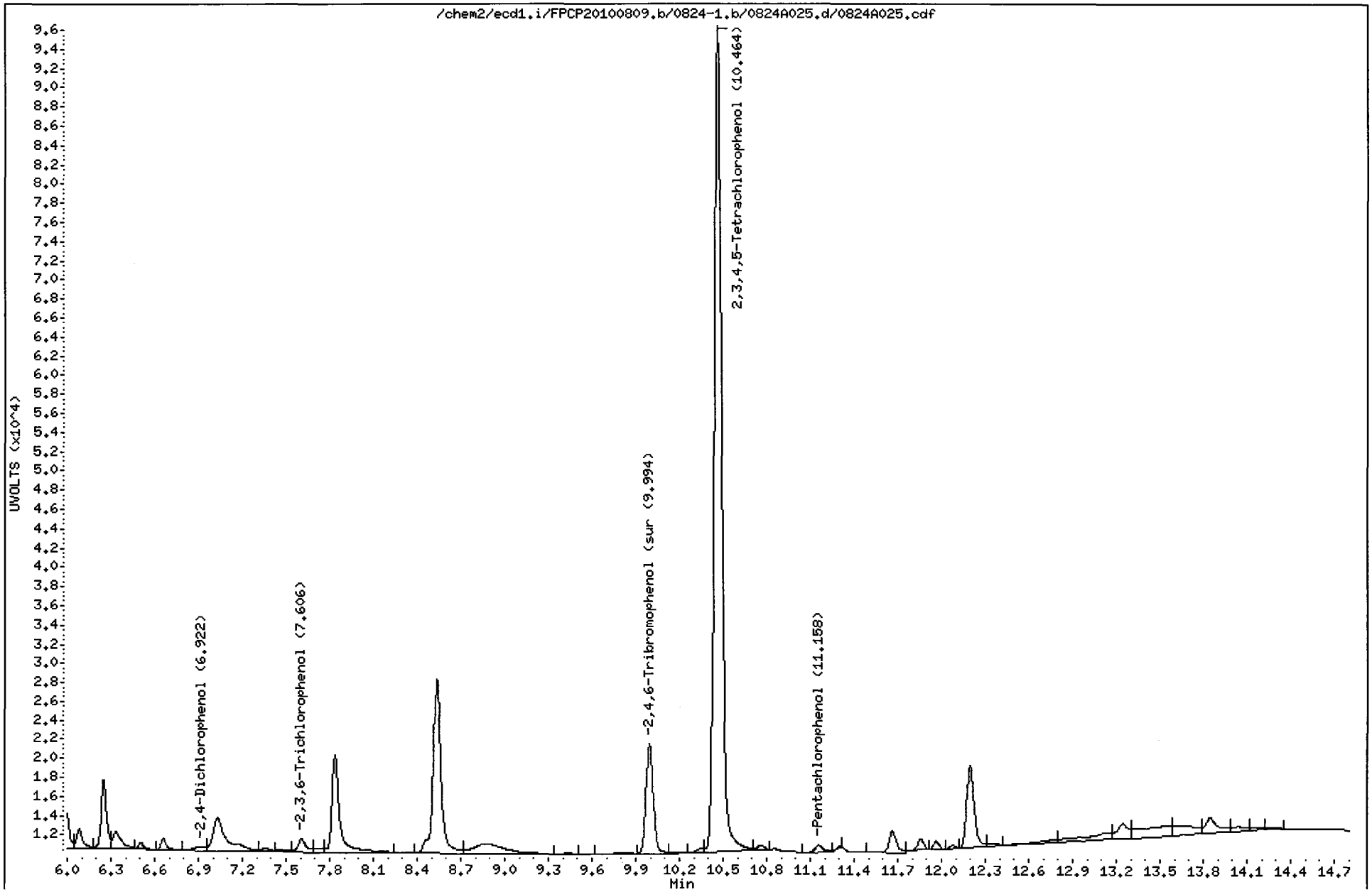
Sample Info: RI46H

Purge Volume: 2.0

Operator: ar

Column phase: ZB5

Column diameter: 0.53



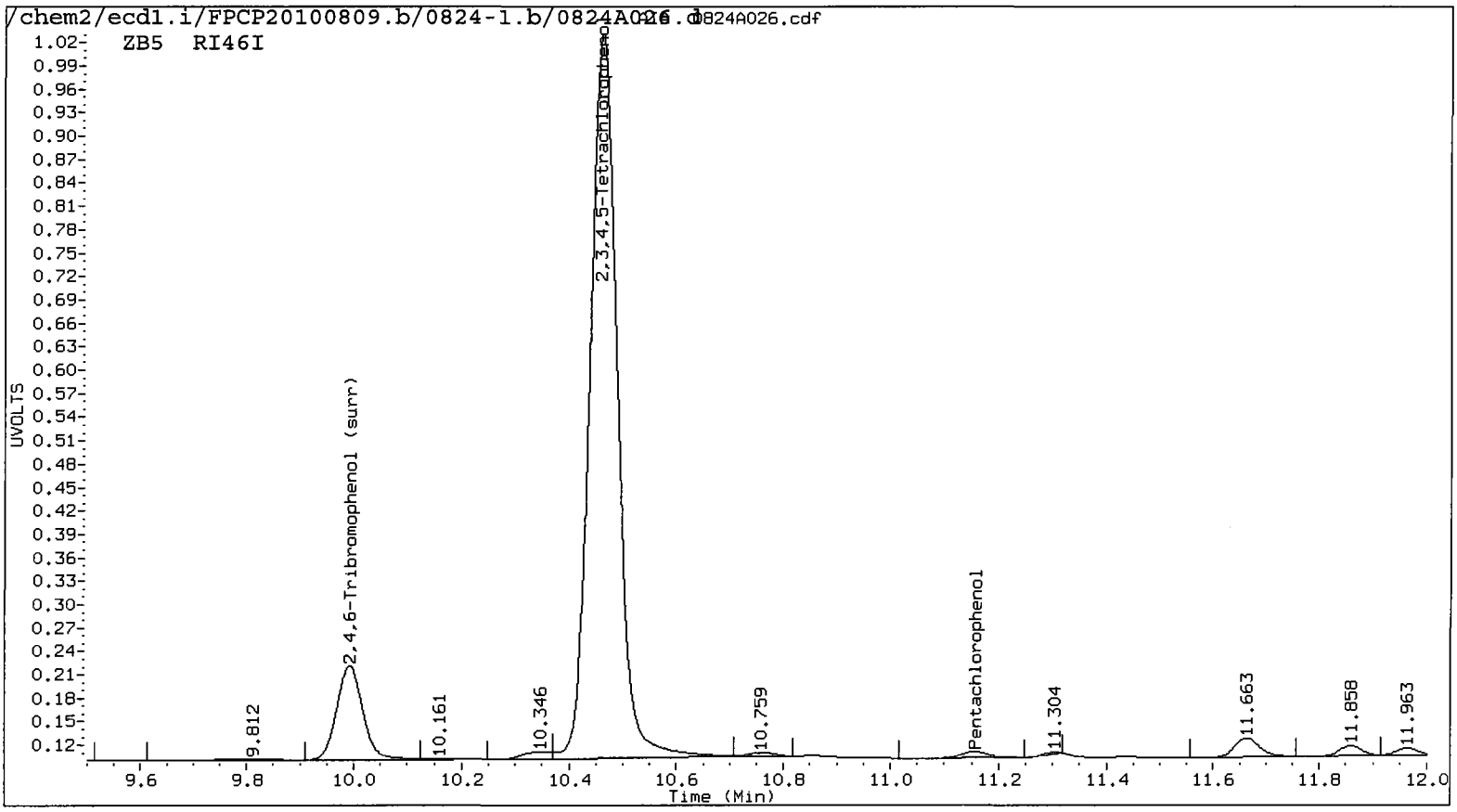
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/FPCP20100809.b/0824-1.b/0824A026.d ARI ID: RI46I
Data file 2: /chem2/ecd1.i/FPCP20100809.b/0824-2.b/0824A026.d Client ID: MW-11-081210
Method: /chem2/ecd1.i/FPCP20100809.b/FPCP.m Injection Date: 25-AUG-2010 11:16
Compound Sublist: all Report Date: 08/25/2010 17:10
Instrument: ecd1.i Matrix: WATER
Operator: ar Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
11.156	-0.063	12579	11.671	0.013	59426	0.7007	2.5881	114.8*	Pentachlorophenol
----			7.377	0.044	1123	0.0000	0.0900	---	2,4,6-Trichlorophenol
7.603	-0.016	22630	----			2.3290	0.0000	---	2,3,6-Trichlorophenol
8.262	0.020	2736	8.678	0.063	1483	0.5422	0.2066	89.6*	2,4,5-Trichlorophenol
----			----			0.0000	0.0000	---	2,3,4-Trichlorophenol
----			9.249	-0.028	1244	0.0000	0.0672	---	2,3,5,6-Tetrachlorophenol
10.461	0.048	1655315	----			318.9410	0.0000	---	2,3,4,5-Tetrachlorophenol
6.918	0.025	7479	7.229	0.063	1533	11.8208	2.0379	141.2*	2,4-Dichlorophenol
9.992	-0.010	203200	10.633	-0.013	298132	15.8	16.0	0.8	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	63.3	63.9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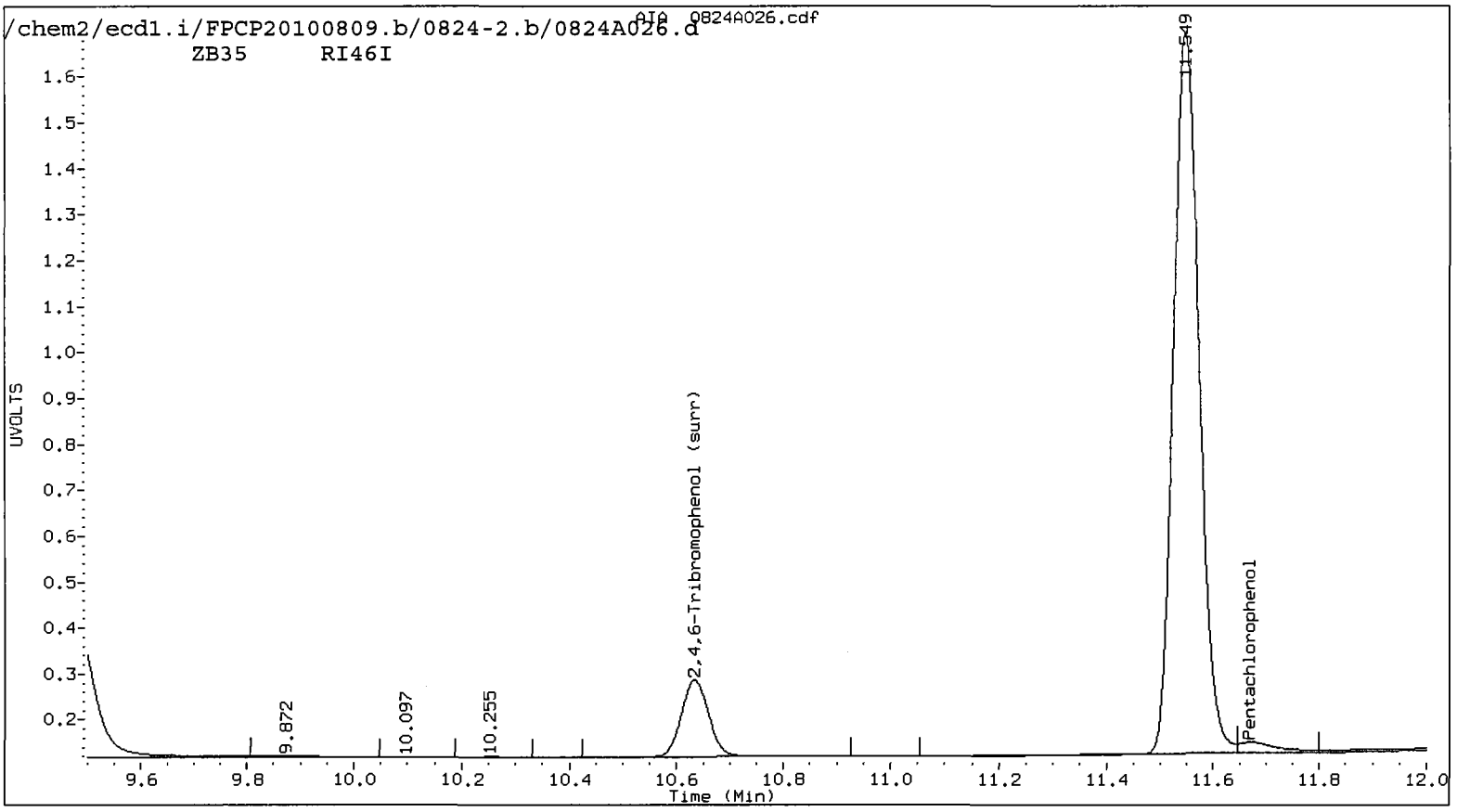
0824A026.cdf
ZB5 RI46I
UVOLTS
Time (Min)
9.812
2,4,6-Tribromophenol (surr)
10.161
10.346
2,3,4,5-Tetrachlorophenol
10.759
Pentachlorophenol
11.304
11.663
11.858
11.963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AIA 0824A026.cdf
ZB35 RI46I
UVOLTS
Time (Min)
9.872
10.097
10.255
2,4,6-Tribromophenol (surr)
11.549
Pentachlorophenol

RI46:00608

Data File: /chem2/ecd1.i/FPCP20100809.b/0824-1.b/0824A026.d

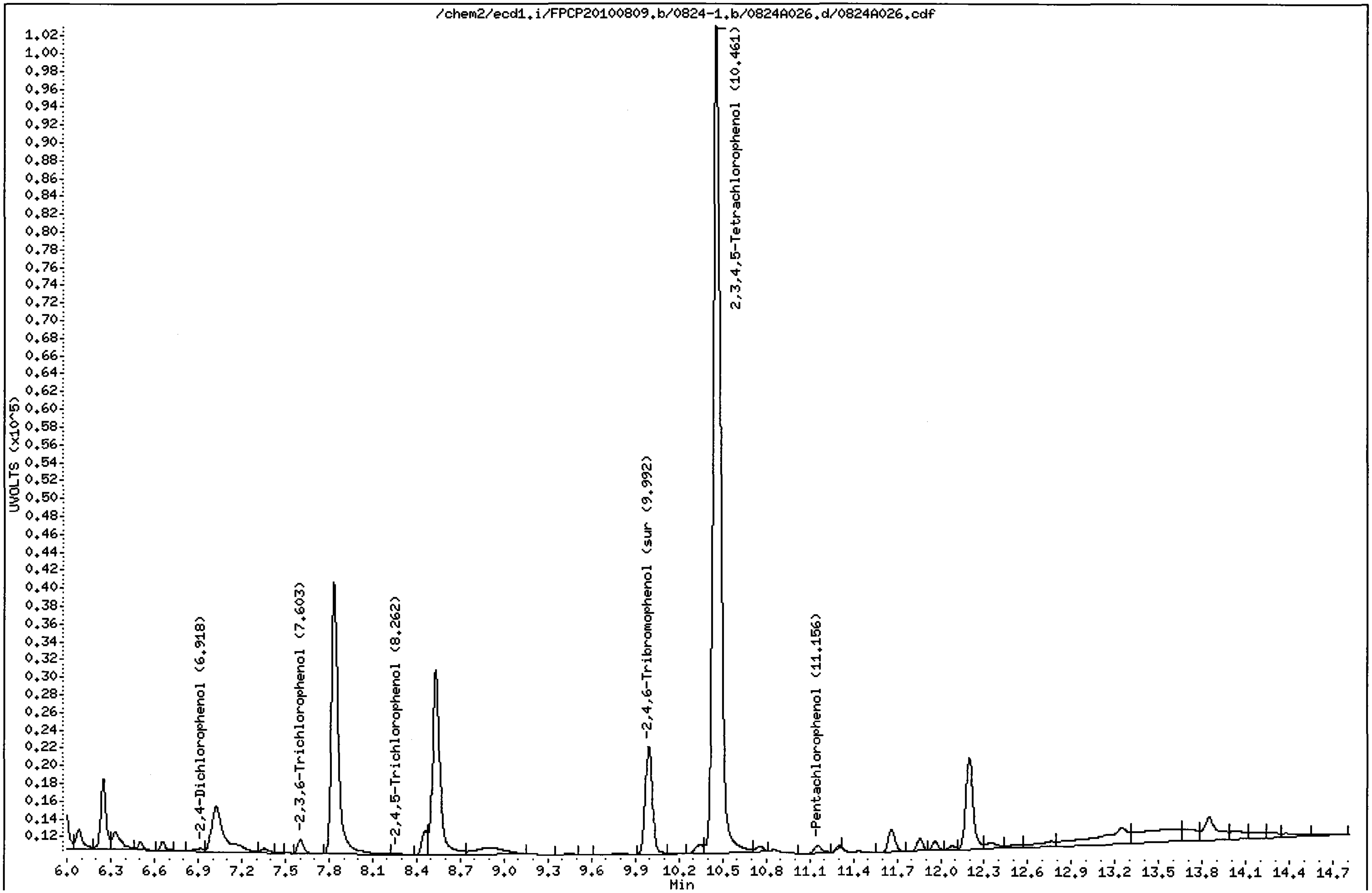
Date : 25-AUG-2010 11:16

Client ID: MW-11-081210 Instrument: ecd1.i

Sample Info: RI46I

Purge Volume: 2.0 Operator: ar

Column phase: ZB5 Column diameter: 0.53



TPHD Raw Data
Extraction Bench Sheets and Notes

ARI Job ID: RI46

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Benchsheet

(NWTPHD) / NWHCID –Water
Separatory Funnel (3510C) (SOP # 3311S)

Preparation Test (TPHD)/HCID # 1
ARI Job No(s) RI46

In-House (0.25-0.50ppm)
Batch set up by: ~~JS~~

Bottle #	Extraction Requirements	Verify Client ID	Volume Extracted	DryVap Or (KD)	Turbo Vap (1) 2 3	Acid/Silica Clean (1:1) (Y) N	Final Effective Volume	Volume to Lab	Comments
	RI46 MBW	Date 08/17/10	500mL			1mL	1mL	1mL	
	SBW	↓	↓			↓	↓	↓	
	SBW Dup.	↓	↓			↓	↓	↓	
6	A	checked	500 mL						
5	B								
6	C								
3	D								
6	E								
6	F								
5	G								
5	H								
2	I	↓	↓	↓	↓	↓	↓	↓	
				TS	CJZ				
Analyst/Date:		08/17/10 →		8-17-10	8/18/10	→	→		

Standard	Standard ID	Volume	Expiration Date	Analyst	Witness
Surrogate	O	100µL	6/22/11	AR	WW
Spike	11	100µL	4/26/11	AR	WW
Extraction Time: 13:25					

SPECIAL INSTRUCTIONS: 1. Add Surr/Spk. 2. Acidify with 1 pipet of 1:1 Sulfuric Acid. 3. Check pH.

4. Extract 2X with 30mL DCM. 5. DryVap or (KD) at 80°. 6. TurboVap if KD. 7. Acid/Silica Clean-ups? (Y) / N.

8. Vial in DCM. A. Archive Y / (N)

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

ARI Job No.: RI46 Client ID: Floyd-Snider

Parameter: TPHD w/Acids Client Project: Lava Lakes Apts. RI

Note problems, concerns, corrective actions	Analyst/Date
Screens: Soil/Sediment/Solid/Other:	
☐ No Anomalies (standard soil/sediment)	
☐ Wet sediment/sludge=	
☐ Standing Water Decanted=	
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay (Difficult to homogenize/Mixed with Kitchen Aid)=	
☐ Rocks/Organics=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
Aqueous:	
☑ No Anomalies	AR 08/17/10
☐ Turbid/Color=	
☐ Particulates=	
☐ Emulsions=	
☐ Other (Details)=	
☒ Other Notes/Comments=	
Used recycled KD's for all samples.	8-17-10 TS

TPHD Raw Data
Initial Calibration

ARI Job ID: RI46

Analytical Resources, Incorporated
Analytical Chemists and Consultants

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, AK102, oTerphenyl, 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 / NA		Method Blank In Control?	YES / NO (N/A)
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: _____ **Date:** 7/30/10

Reviewer: _____ **Date:** 7/30/10

Analytical Resources Inc.: Organics Instrument Log

FID-9 Agilent 6850 - Serial No.: US10404004

Date: 7/28/10 Analysis: MOIPHD Analyst: DM

GC Program: IDH Column No: S02031 Column Type: HP-1

Instrument Tune (.U or .CT.): EM Voltage:

Calibration File: Curve Date: 7/29/10

IS/SS	Ical/Ccal	LCS/ICV
	7001	
	1680.3	
	1730)	
	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						

7/30/10

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.

IANUAL INTEGRATION SUMMARY FOR DATABATCH - /chem2/fid9.i/20100728.B

.RI Job No.: DIES   Method: ftphfid9a.m   Instrument: fid9.i   Date: 28-JUL-2010

ime	Filename	LabID	ClientId	DF	Manually Integrated Compounds
)24	0728A012.D	DIESEL 50		1	o-terph,
)45	0728A013.D	DIESEL 100		1	o-terph,
107	0728A014.D	DIESEL 250		1	o-terph,
128	0728A015.D	DIESEL 500		1	o-terph,
149	0728A016.D	DIESEL 1000		1	o-terph,
211	0728A017.D	DIESEL 2500		1	o-terph,
232	0728A018.D	DIESEL ICV		1	o-terph,
253	0728A019.D	MOIL 100		1	Triacon Surr,
315	0728A020.D	MOIL 250		1	Triacon Surr,
336	0728A021.D	MOIL 500		1	Triacon Surr,
357	0728A022.D	MOIL 1000		1	Triacon Surr,
)18	0728A023.D	MOIL 2500		1	Triacon Surr,
)40	0728A024.D	MOIL 5000		1	Triacon Surr,
101	0728A025.D	MOIL ICV		1	Triacon Surr,

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

ID:	RT01	RT02	RT03	RT04	RT05	RT06
FILENAME:	0728A012	0728A013	0728A014	0728A015	0728A016	0728A017
INJ.DATE:	28-JUL-2010	28-JUL-2010	28-JUL-2010	28-JUL-2010	28-JUL-2010	28-JUL-2010
INJ.TIME:	20:24	20:45	21:07	21:28	21:49	22:11

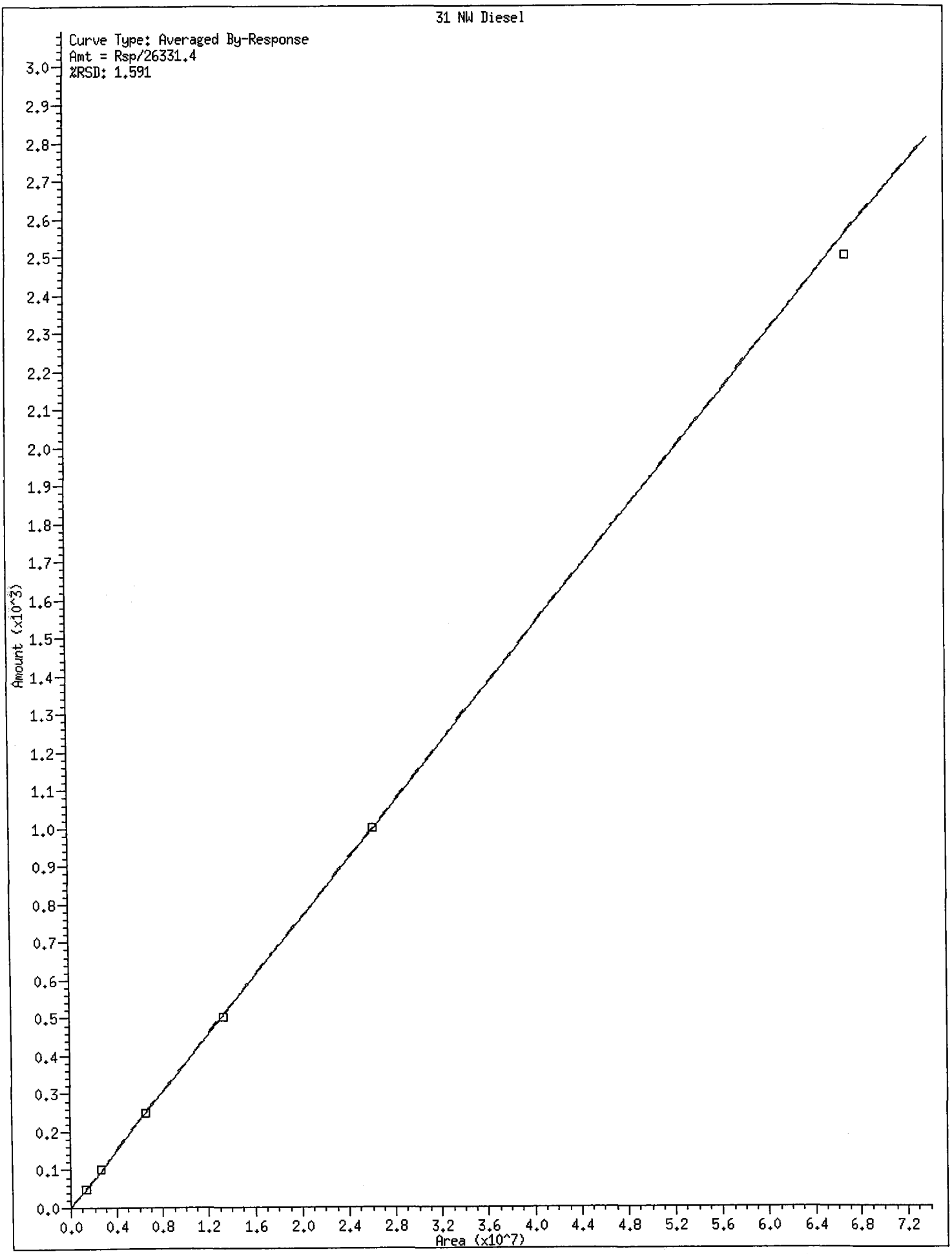
Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
1 Toluene	1.545	1.545	1.542	1.550	1.522	1.527	1.536	1.436-1.636	1.539	0.011
37 JET-A	1.621	1.620	1.617	1.625	1.631	1.619	1.624	1.574-1.674	1.622	0.005
2 C8	1.699	1.703	1.700	1.707	1.681	1.696	1.694	1.594-1.794	1.698	0.009
3 C10	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 ________ Date: 7/30/10
Reviewer 2 ________ Date: 7/30/10

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	7.594	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
Curve Type: Averaged By-Response
Amt = Rsp/26331.4
%RSD: 1.591
Amount (x10^3)
Area (x10^7)
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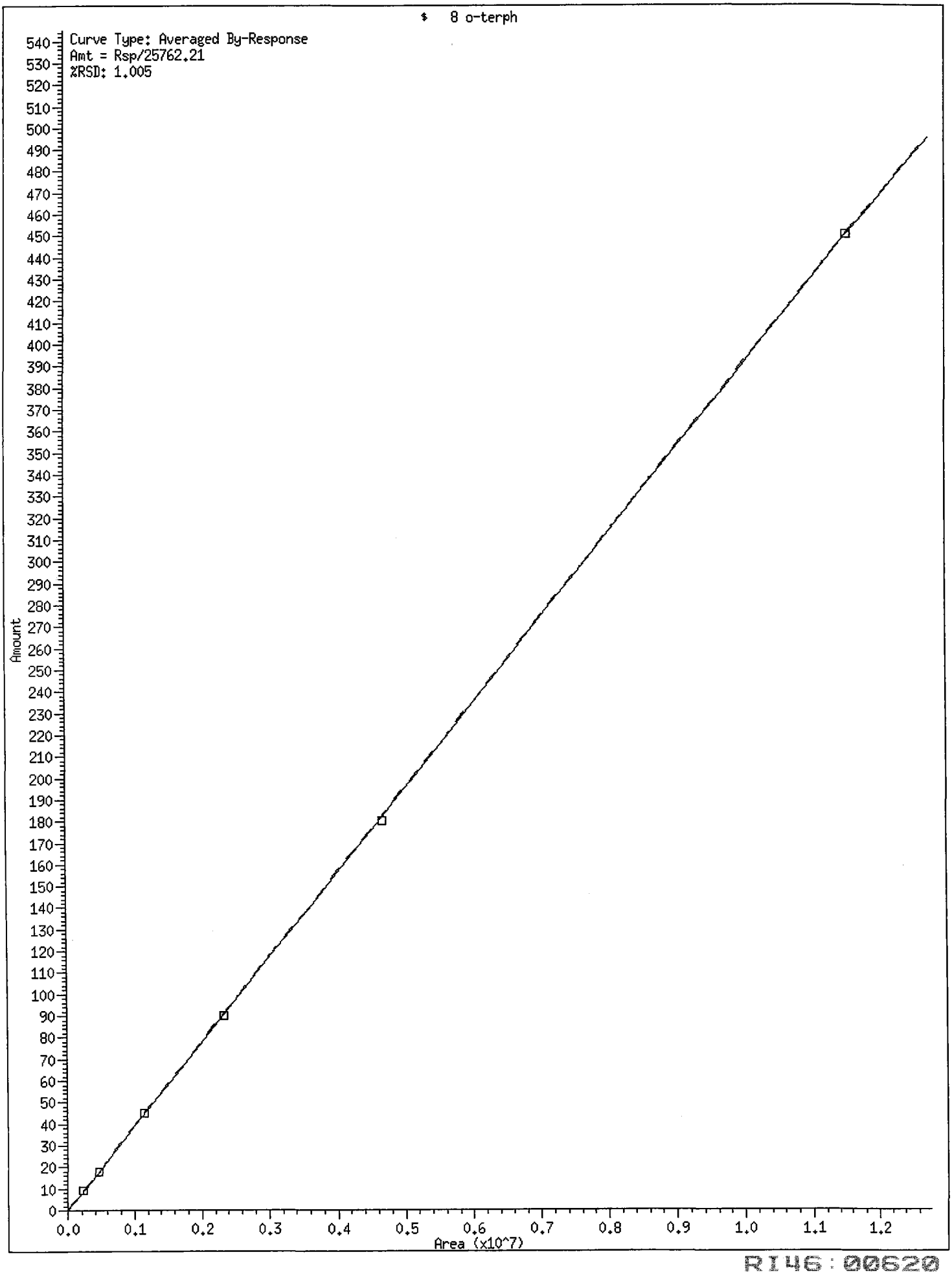
0.0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 2.0 2.1 2.2 2.3 2.4 2.5 2.6 2.7 2.8 2.9 3.0


$ 8 o-terph
Curve Type: Averaged By-Response
Amt = Rsp/25762.21
%RSD: 1.005
Amount
Area (x10^7)
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2

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

ID:	RT01	RT02	RT03	RT04	RT05	RT06
FILENAME:	0728A019	0728A020	0728A021	0728A022	0728A023	0728A024
INJ.DATE:	28-JUL-2010	28-JUL-2010	28-JUL-2010	28-JUL-2010	29-JUL-2010	29-JUL-2010
INJ.TIME:	22:53	23:15	23:36	23:57	00:18	00:40

* Not in Mail range

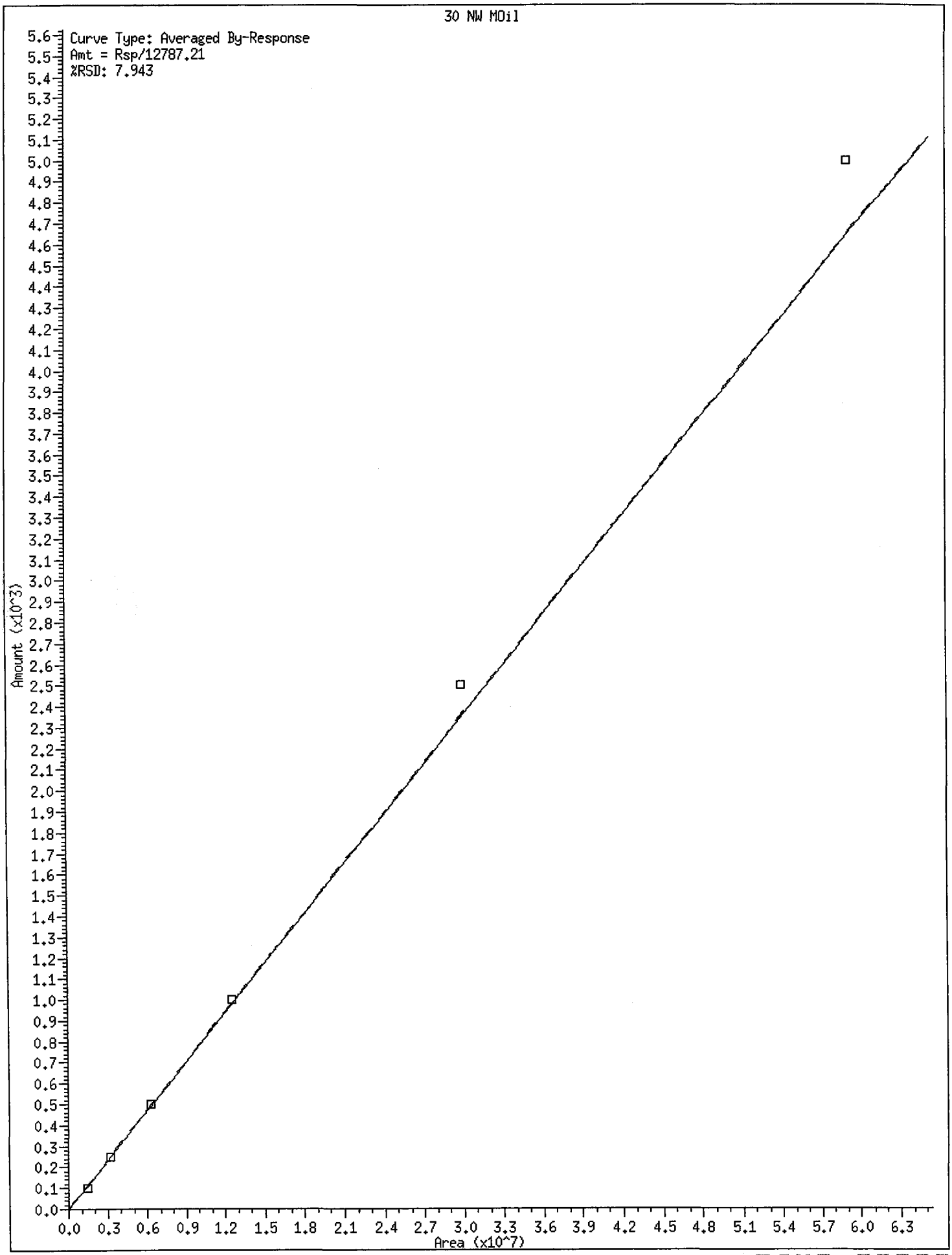
	Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	1 Toluene	1.544	1.542	1.544	1.538	+++++	1.505	1.536	1.436-1.636	1.535	0.017
	37 JET-A	1.598	1.620	1.621	+++++	1.654	+++++	1.624	1.574-1.674	1.624	0.023
	2 C8	1.726	1.701	1.728	1.703	1.718	1.724	1.694	1.594-1.794	1.717	0.012
	3 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

Reviewer 1 _____ Date: 7/30/10
Reviewer 2 _____ Date: 7/30/10

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	+++++	+++++


30 NW MOil
Curve Type: Averaged By-Response
Amt = Rsp/12787.21
%RSD: 7.943
Amount (x10^3)
Area (x10^7)
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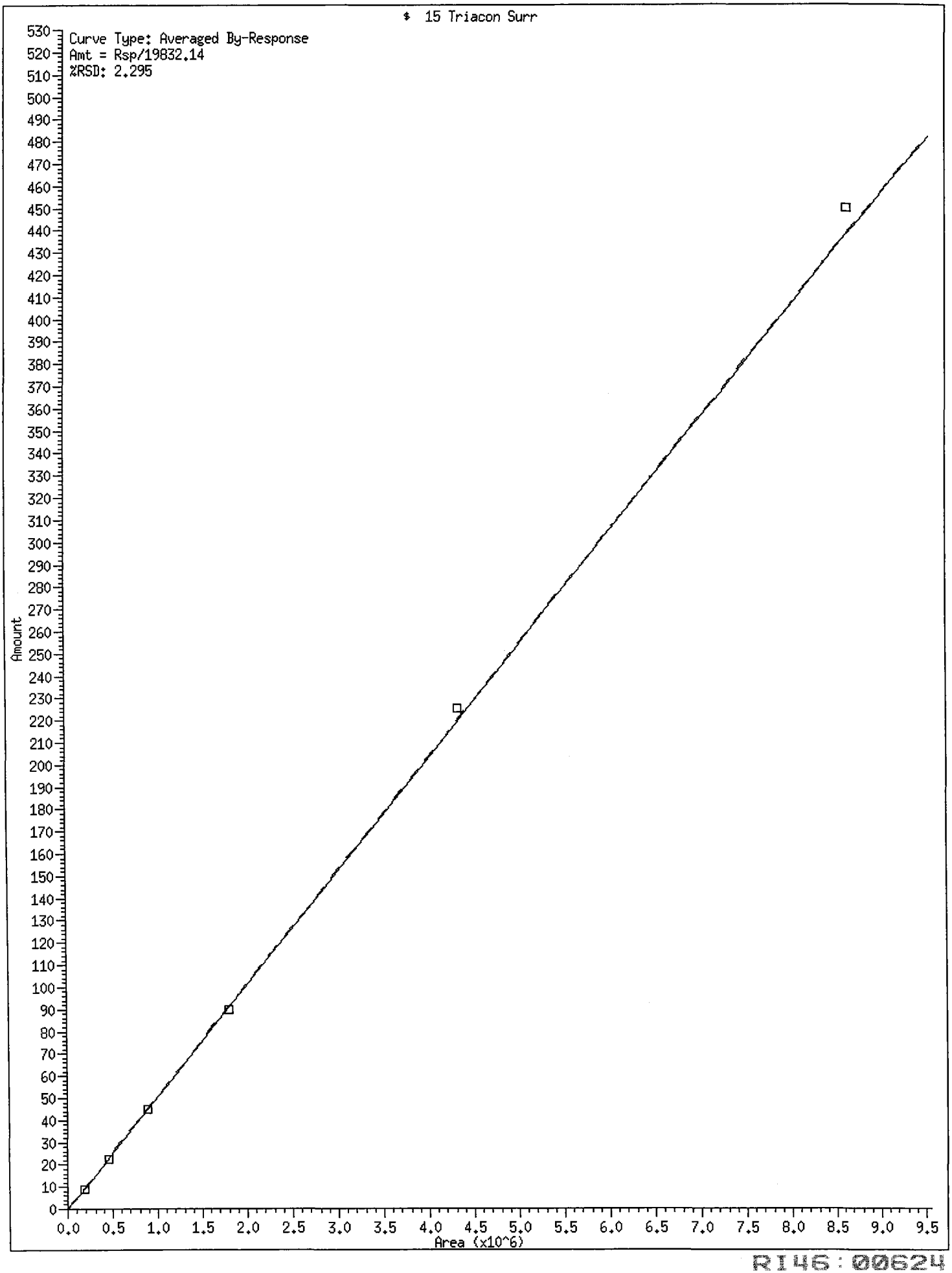

$ 15 Triacon Surr
Curve Type: Averaged By-Response
Amt = Rsp/19832.14
%RSD: 2.295
Amount
Area (x10^6)
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290 300 310 320 330 340 350 360 370 380 390 400 410 420 430 440 450 460 470 480 490 500 510 520 530
0.0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0 5.5 6.0 6.5 7.0 7.5 8.0 8.5 9.0 9.5

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
Triacontane	1311650	66.1	147.0

MX 7/30/10

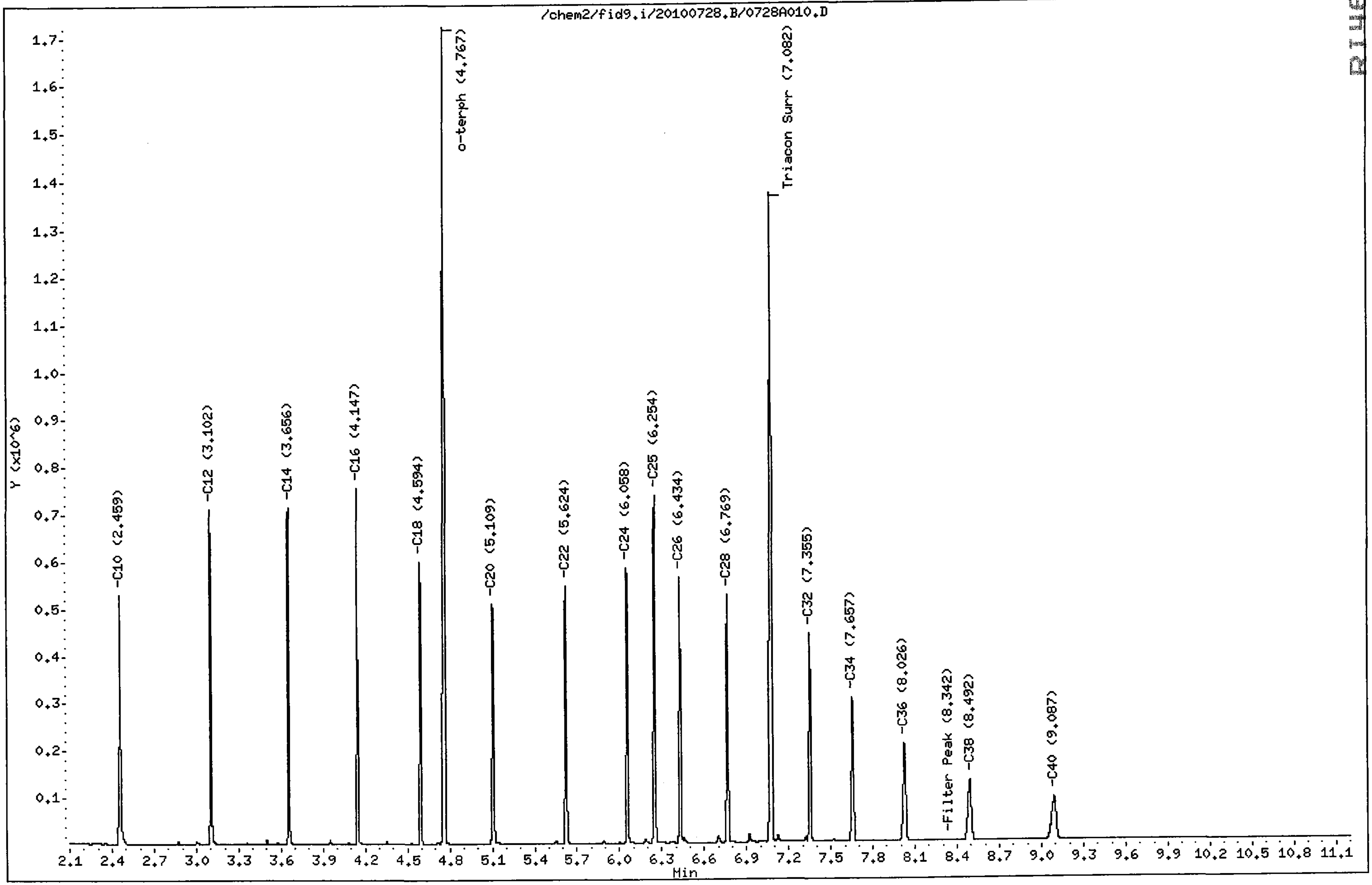
Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8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

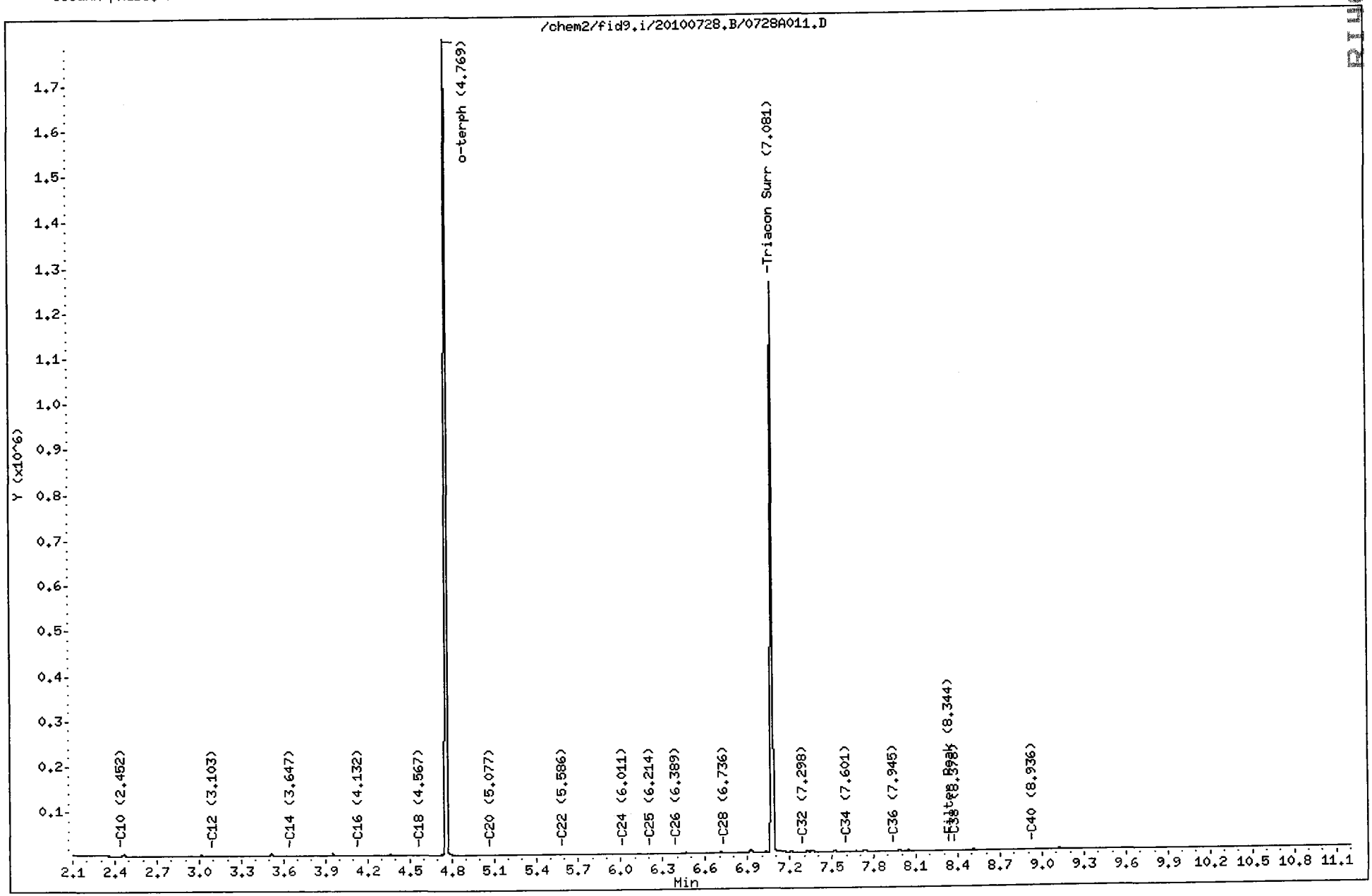
Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8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

Instrument: fid9.i

Operator: MS
Column diameter: 0.25

Column phase: RTX-1



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:

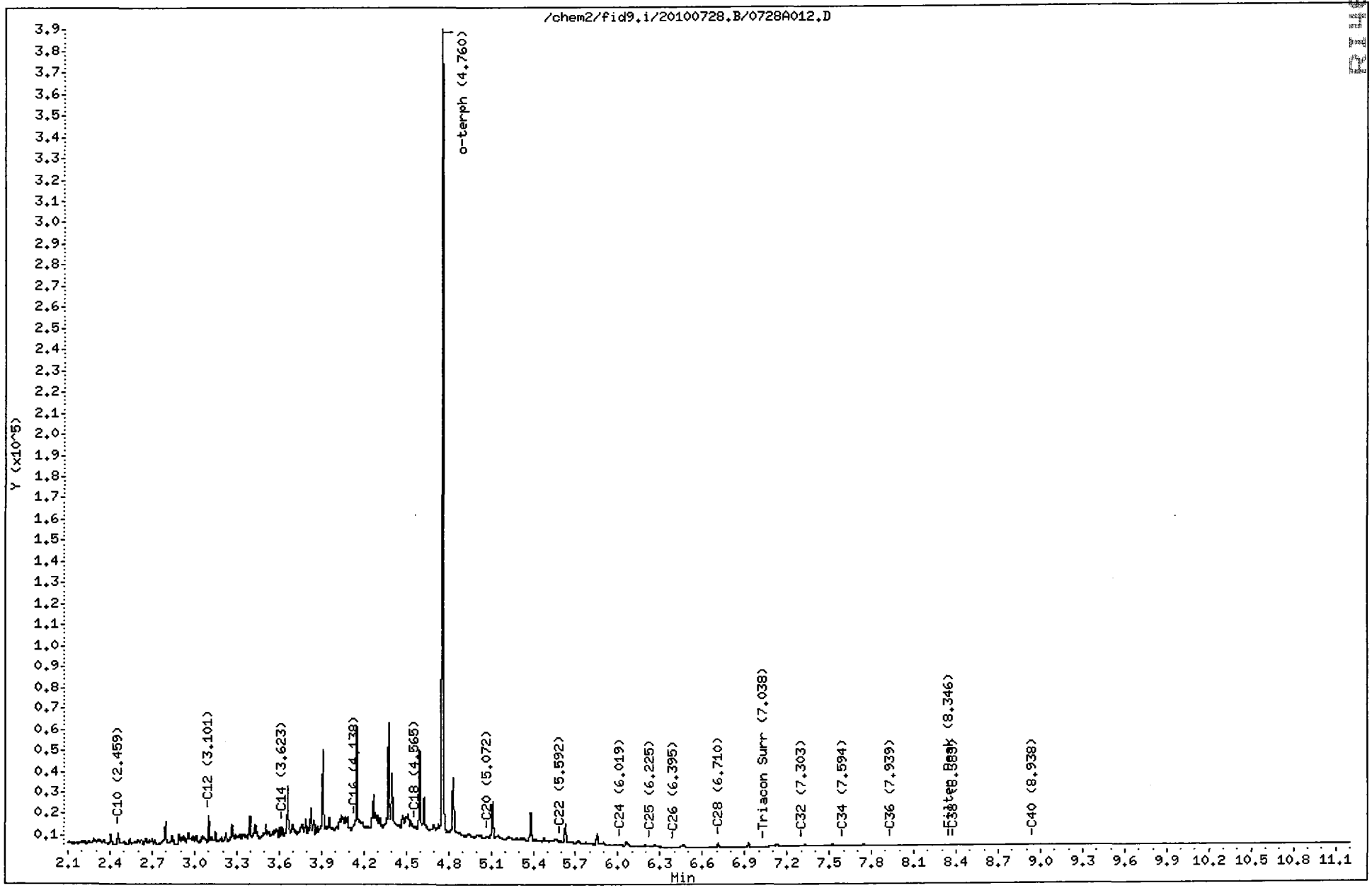
Sample Info: DIESEL 50

Column phase: RTX-1

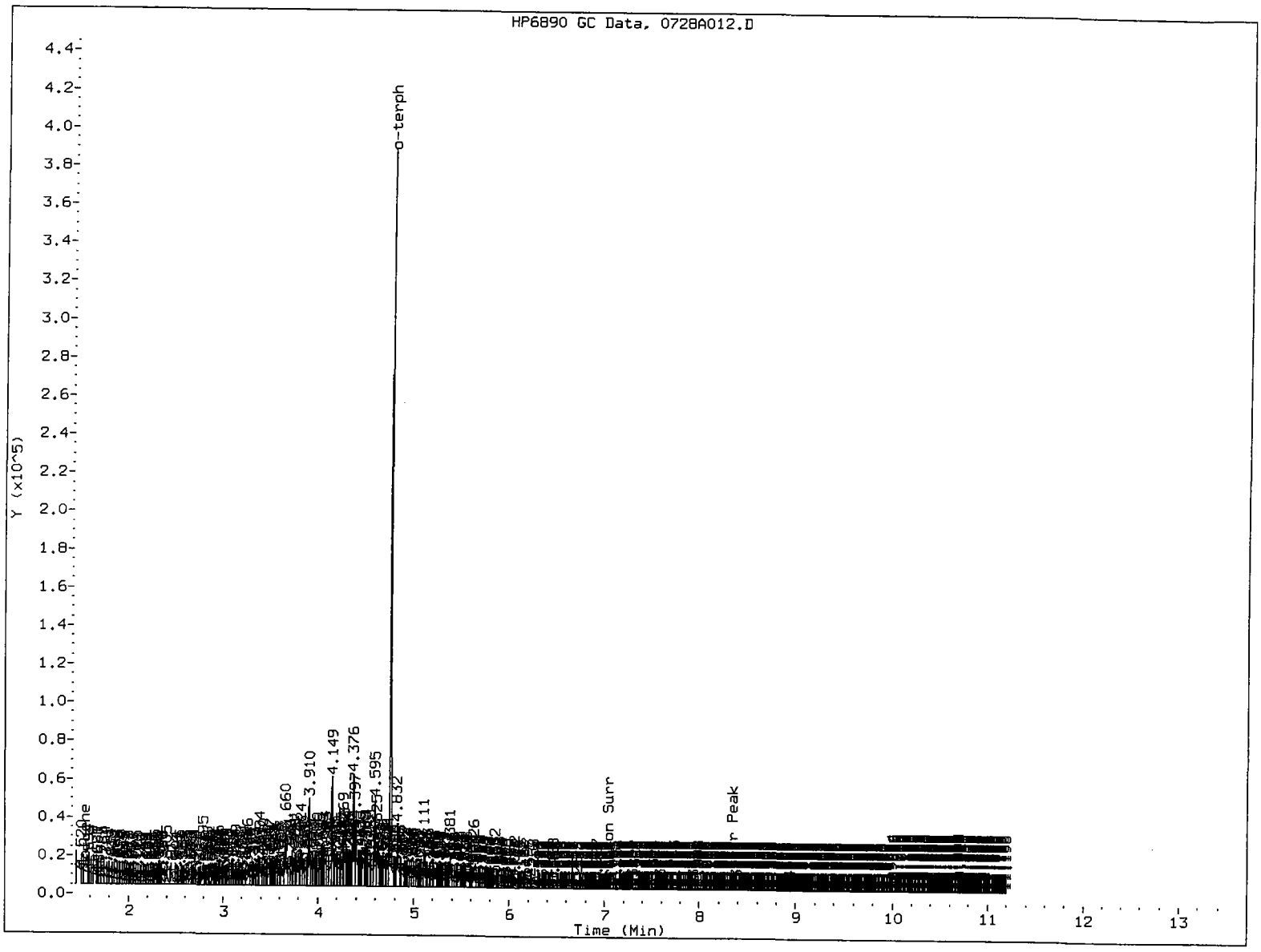
Instrument: fid9.i

Operator: MS

Column diameter: 0.25



FID:9A-2C/RTX-1 DIESEL 50 FID:9A SIGNAL



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
Triacontane	42	0.0	0.0

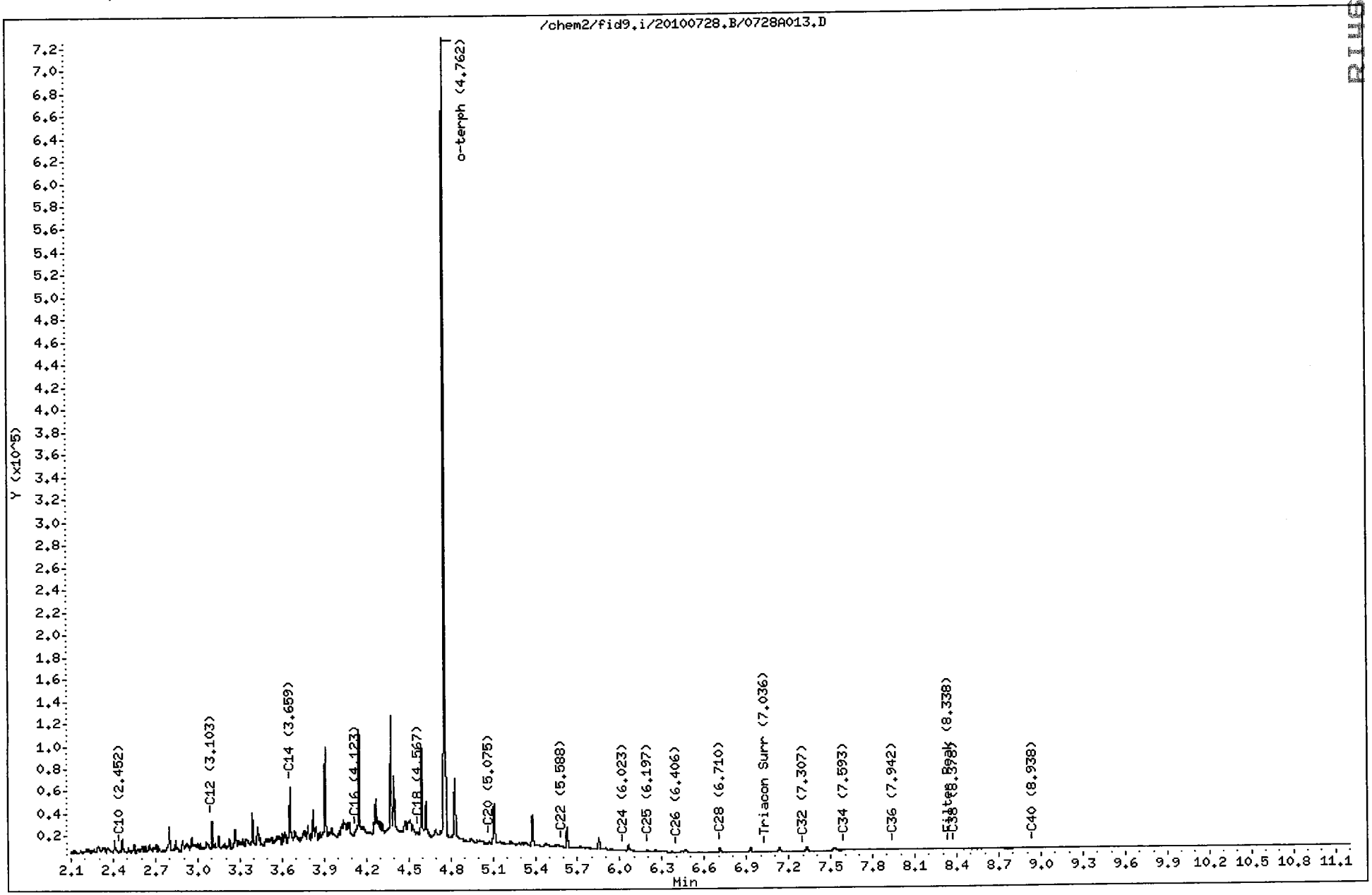
Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8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

Data File: /chem2/fid9.i/20100728.B/0728A013.D
Date : 28-JUL-2010 20:45
Client ID:
Sample Info: DIESEL 100

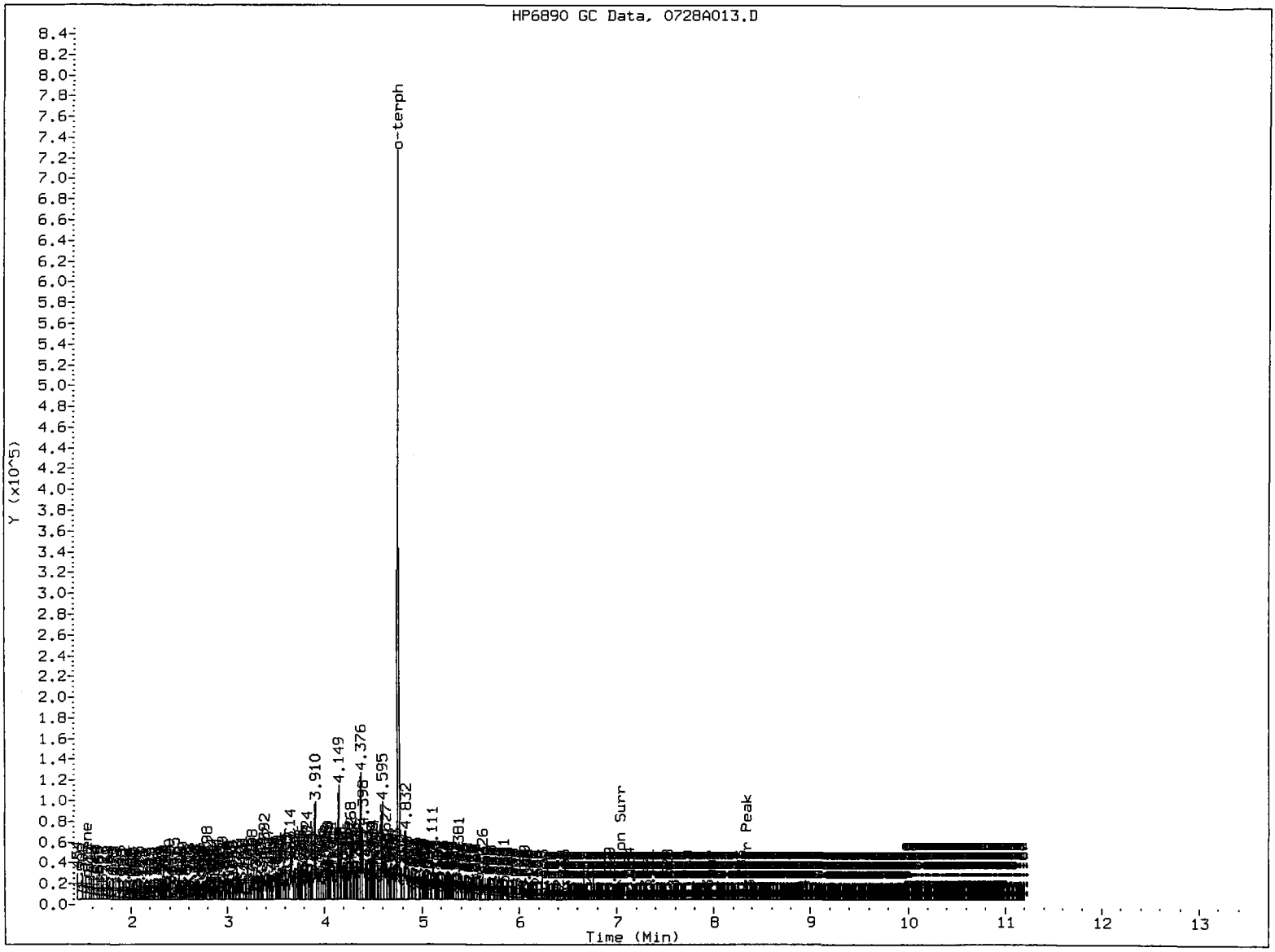
Instrument: fid9.i

Operator: MS
Column diameter: 0.25

Column phase: RTX-1



FID:9A-2C/RTX-1 DIESEL 100 FID:9A SIGNAL



MANUAL INTEGRATION

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

5. Other _____

Analyst: _____ Date: 7/30/12

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/0728A014.D

Date : 28-JUL-2010 21:07

Client ID:

Sample Info: DIESEL 250

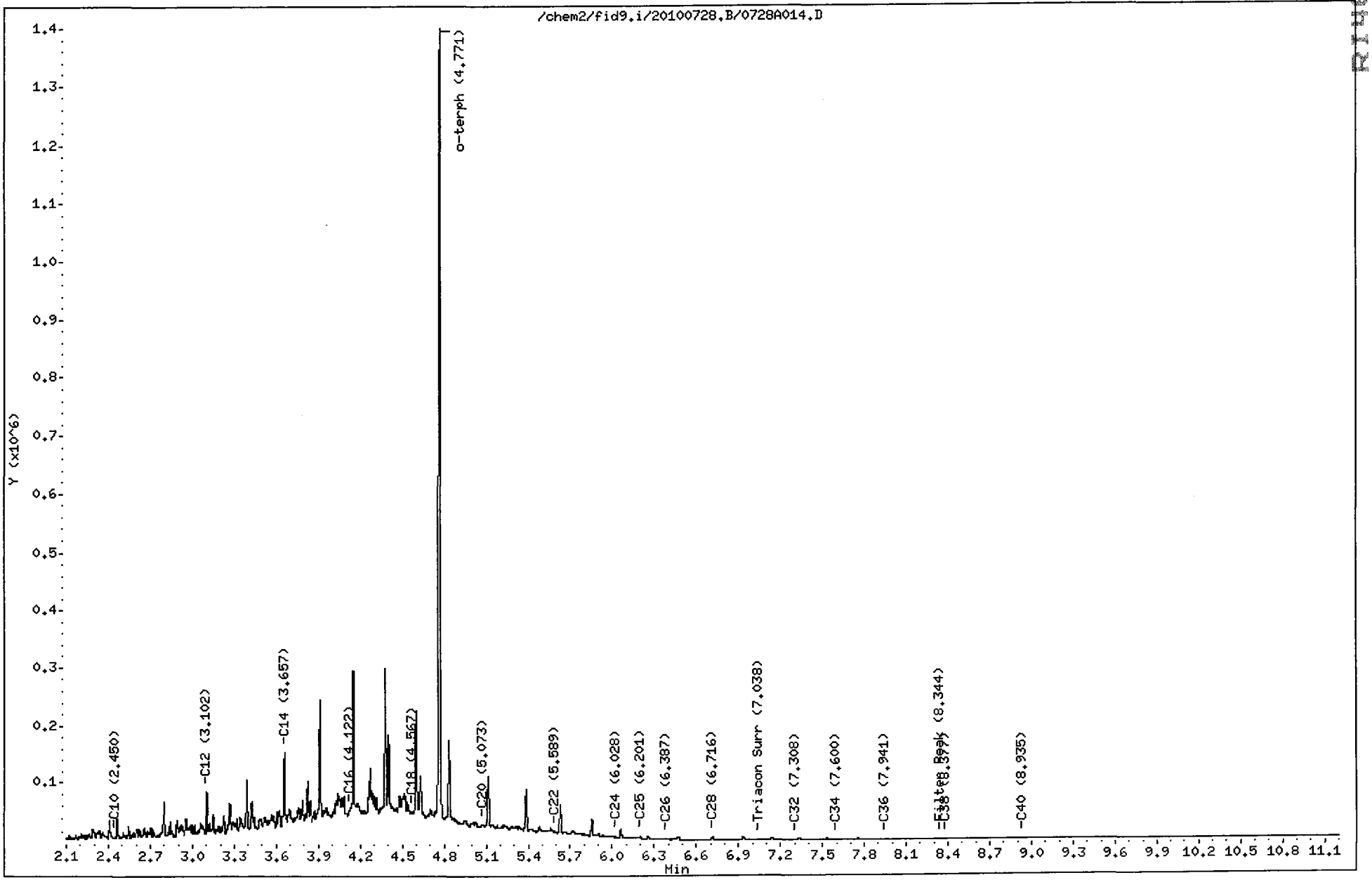
Column phase: RTX-1

Instrument: fid9.i

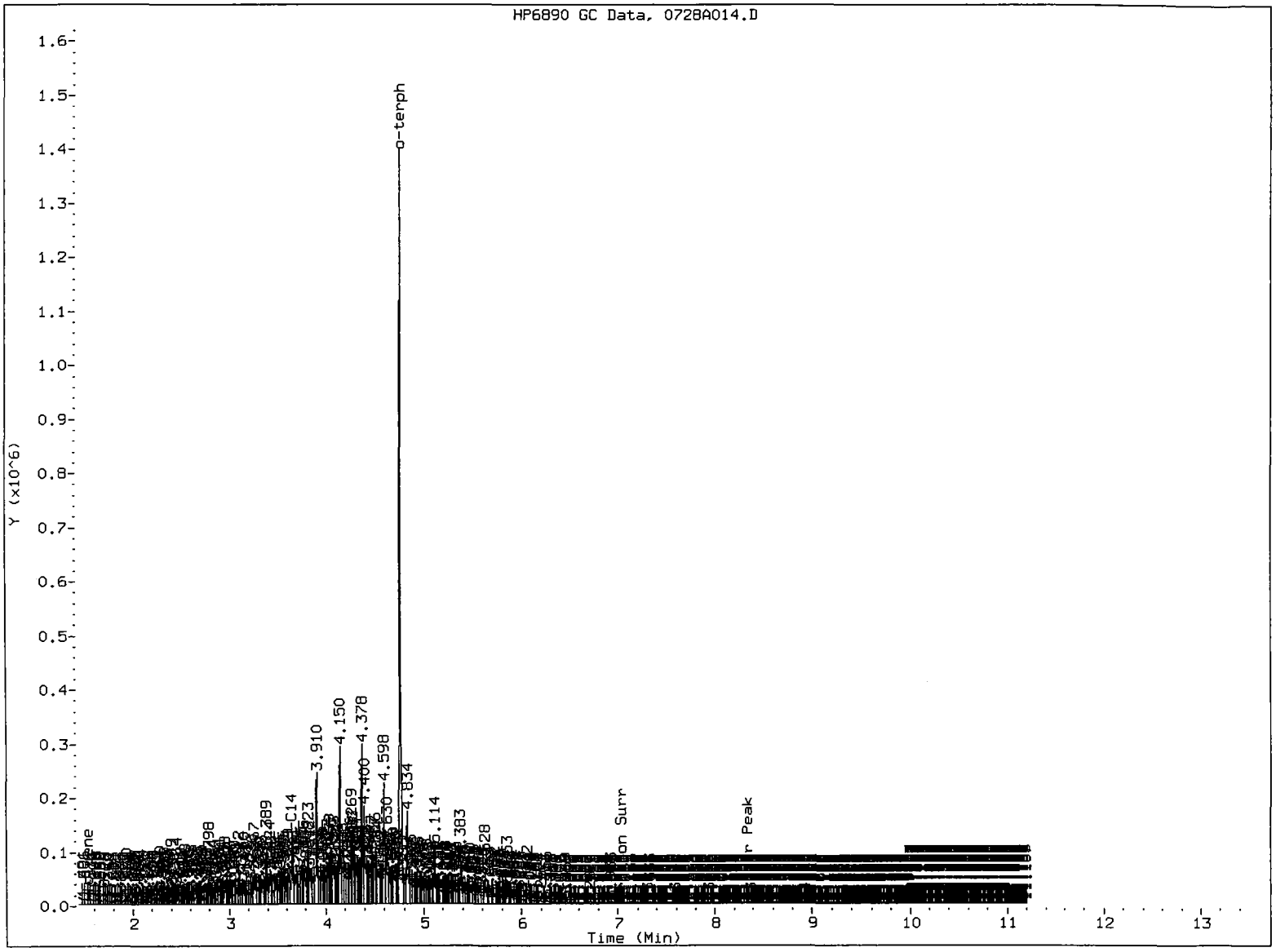
Operator: MS

Column diameter: 0.25

RTI6 : 00035



FID:9A-2C/RTX-1 DIESEL 250 FID:9A SIGNAL



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/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

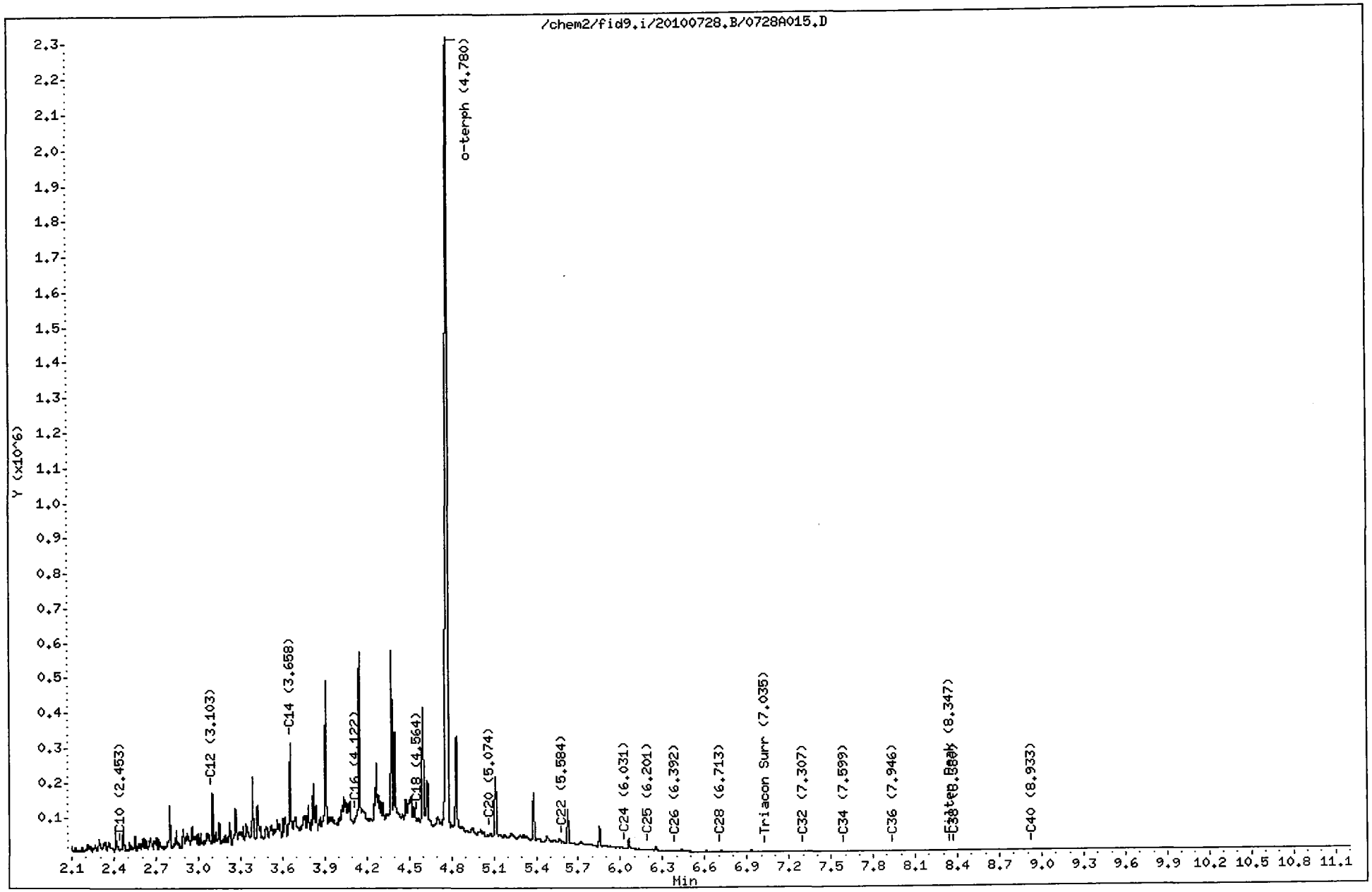
Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8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

Data File: /chem2/fid9.i/20100728.B/0728A015.D
Date : 28-JUL-2010 21:28
Client ID:
Sample Info: DIESEL 500

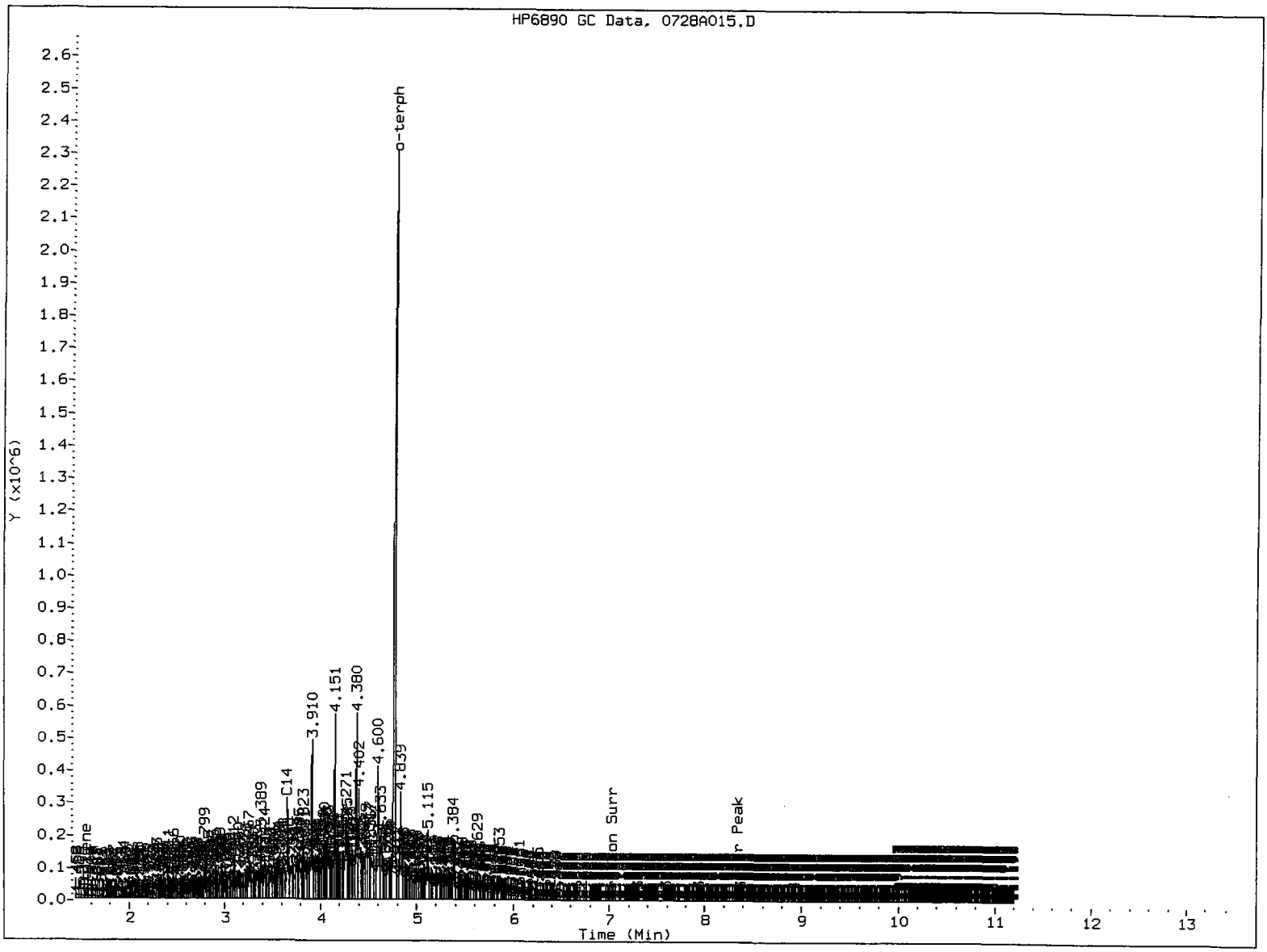
Instrument: fid9.i

Operator: MS
Column diameter: 0.25

Column phase: RTX-1



FID:9A-2C/RTX-1 DIESEL 500 FID:9A SIGNAL



MANUAL INTEGRATION

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

5. Other _____

Analyst: _____ Date: 7/30/08

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/0728A016.D

Date : 28-JUL-2010 21:49

Client ID:

Sample Info: DIESEL 1000

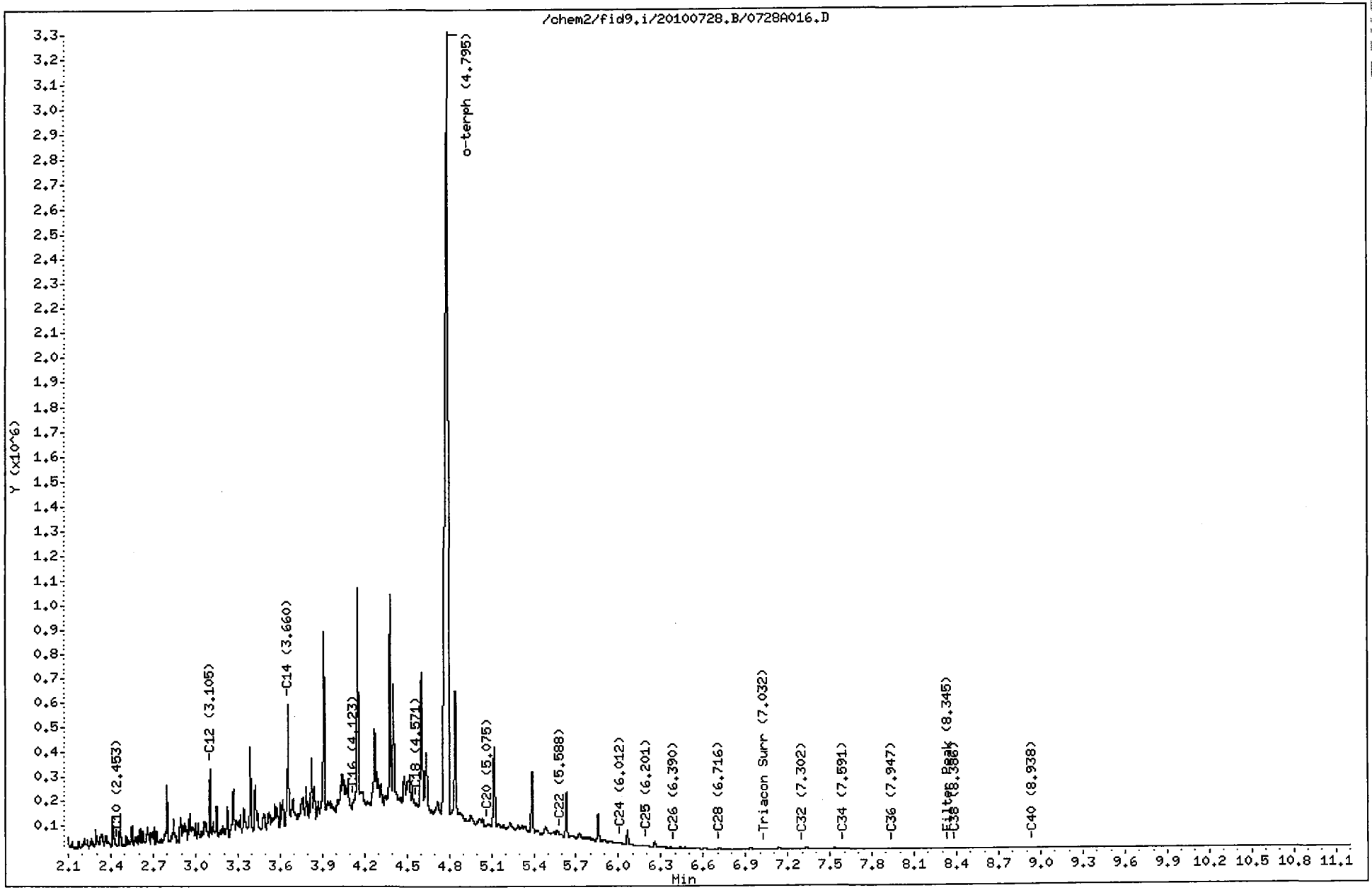
Column phase: RTX-1

Instrument: fid9.i

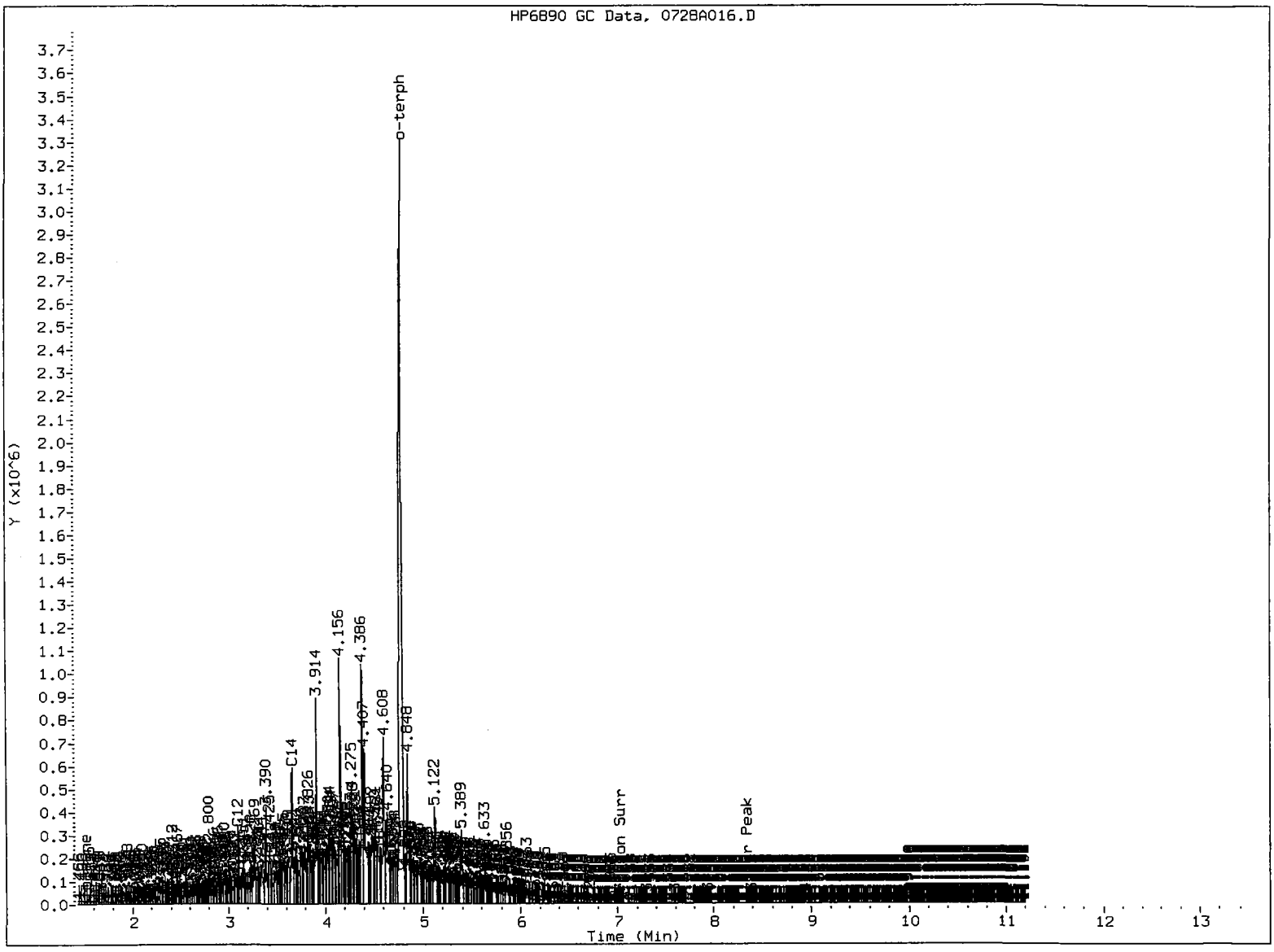
Operator: MS

Column diameter: 0.25

RT16:00512



FID:9A-2C/RTX-1 DIESEL 1000 FID:9A SIGNAL



MANUAL INTEGRATION

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

5. Other _____

Analyst: _____ Date: 7/30/15

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

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)	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
Triacontane	1487	0.1	0.2

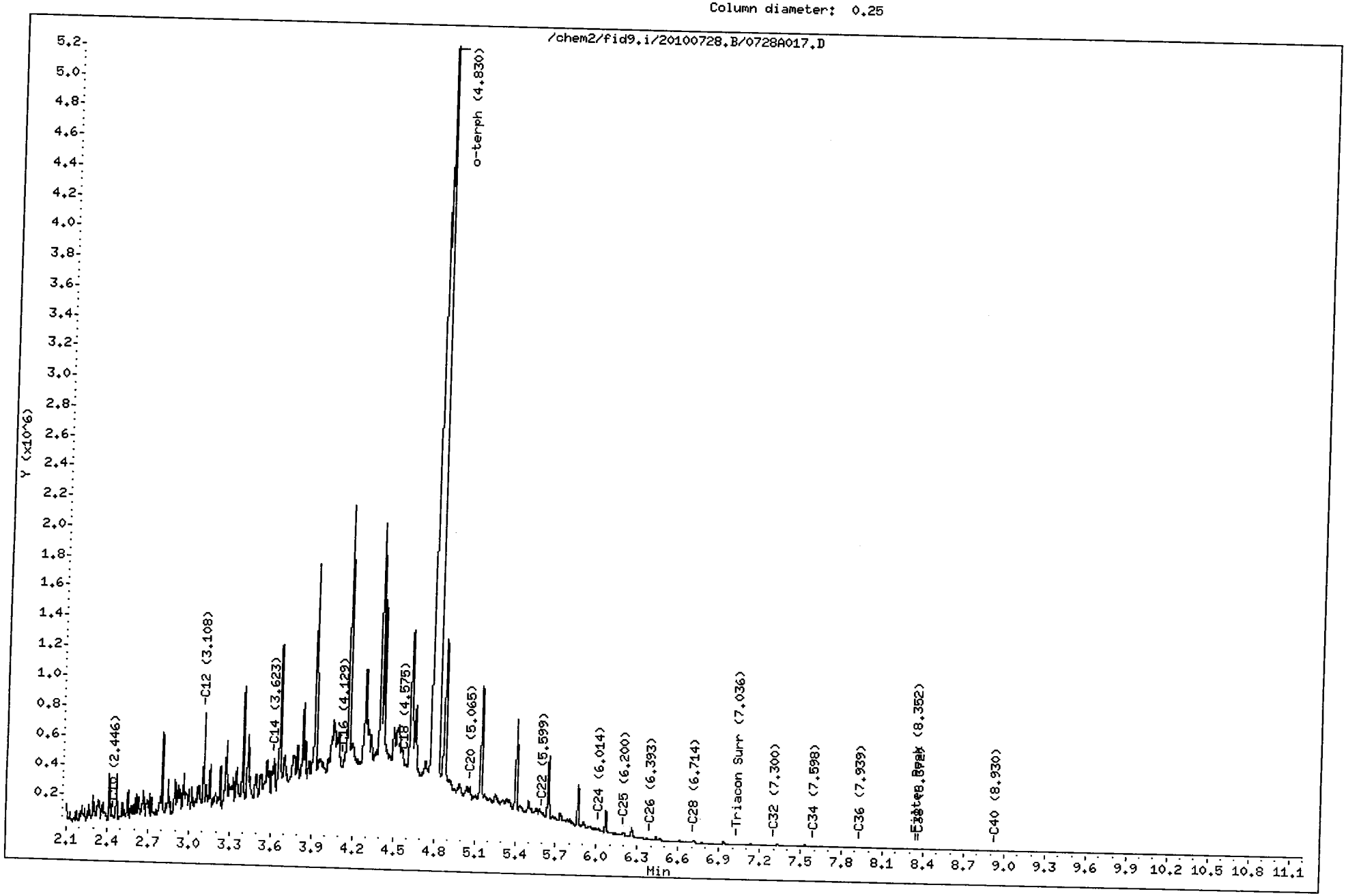
Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8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

Data File: /chem2/fid9.i/20100728.B/0728A017.D
Date : 28-JUL-2010 22:11
Client ID:
Sample Info: DIESEL 2500

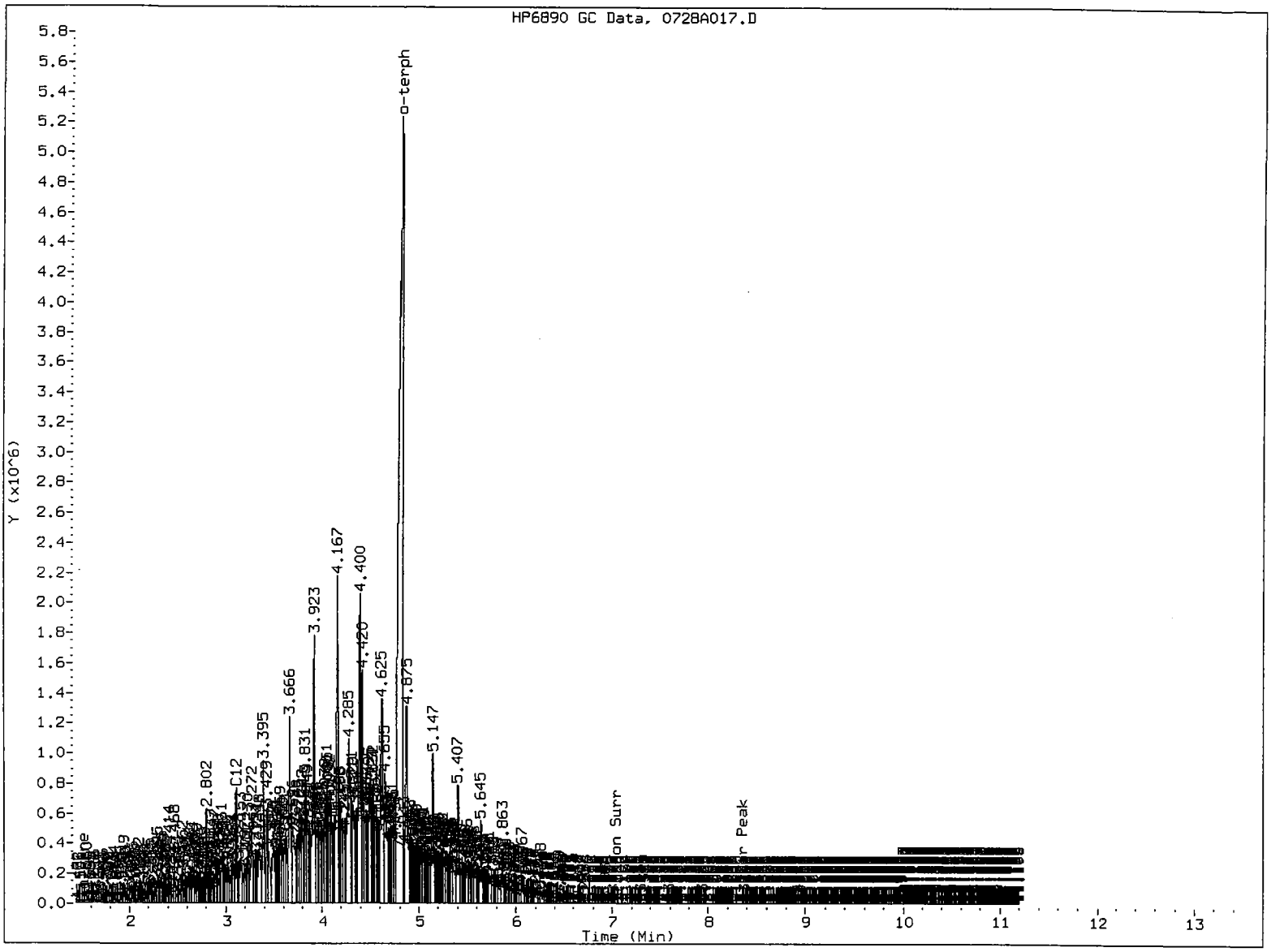
Column phase: RTX-1

Instrument: fid9.i

Operator: MS
Column diameter: 0.25



FID:9A-2C/RTX-1 DIESEL 2500 FID:9A SIGNAL



MANUAL INTEGRATION

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

5. Other _____

Analyst: _____ Date: 7/30/11

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
Triacontane	10	0.0	0.0

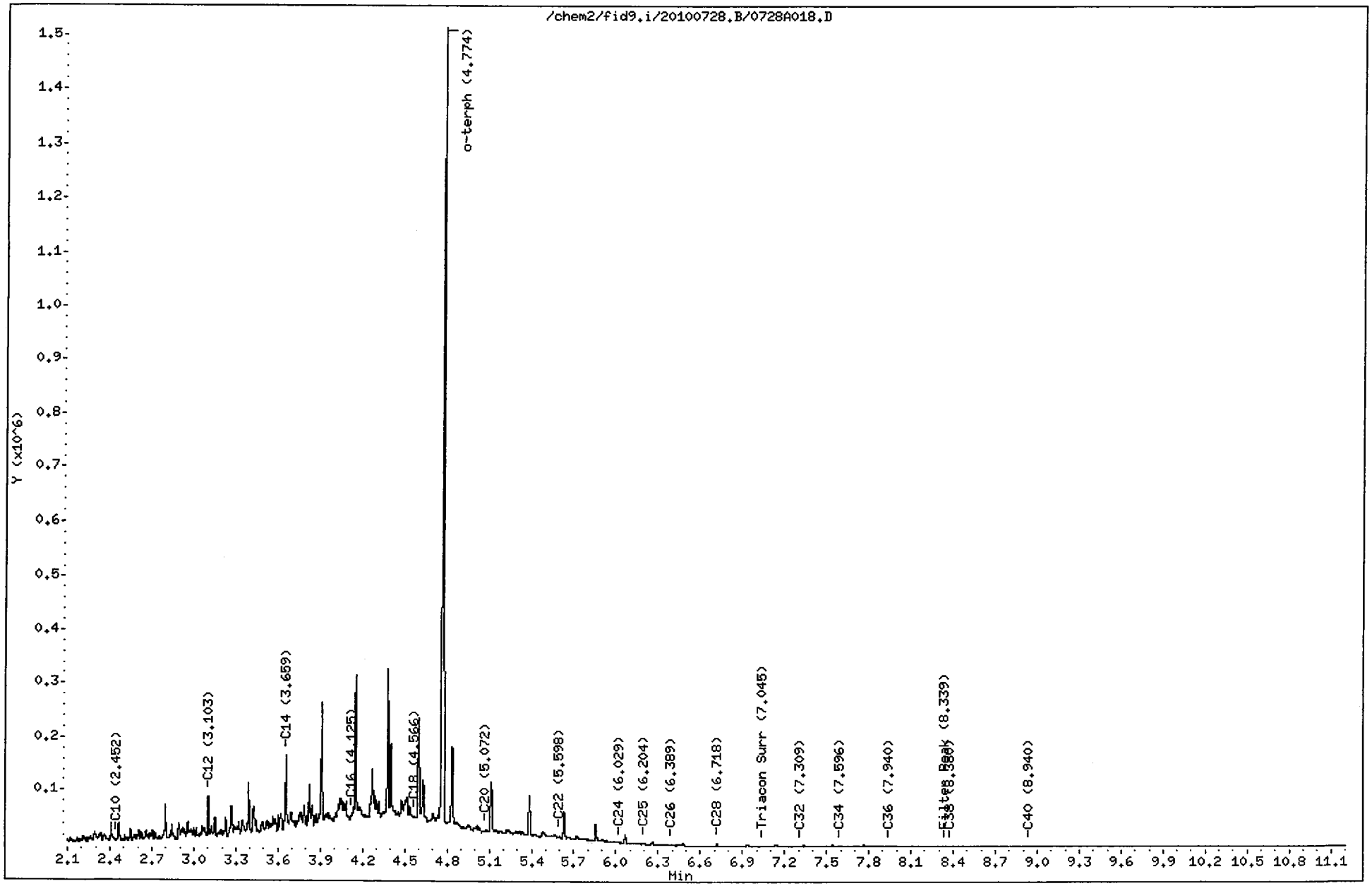
Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8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

Data File: /chem2/fid9.i/20100728.B/0728A018.D
Date : 28-JUL-2010 22:32
Client ID:
Sample Info: DIESEL ICV

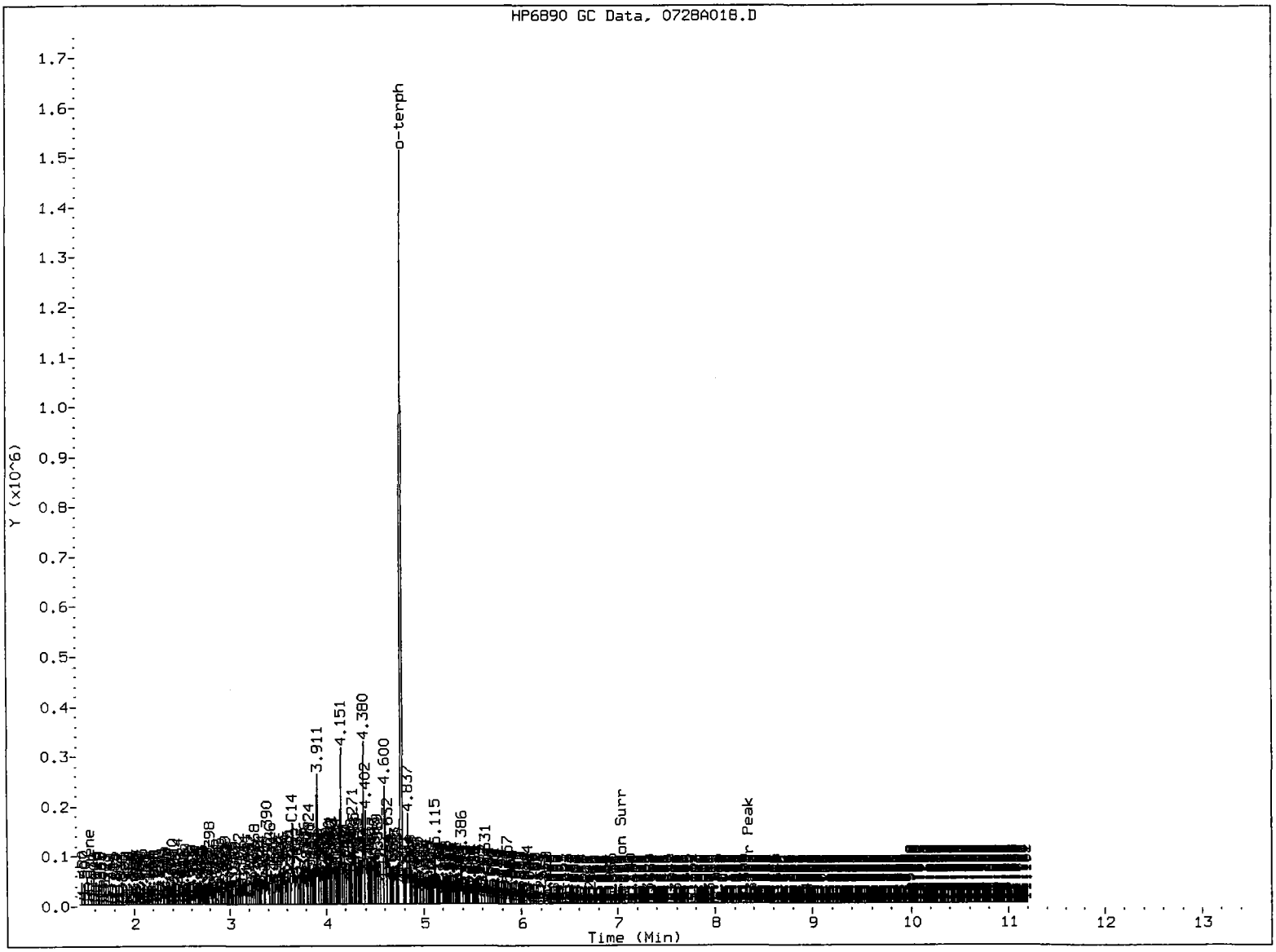
Column phase: RTX-1

Instrument: fid9.i

Operator: MS
Column diameter: 0.25



FID:9A-2C/RTX-1 DIESEL ICV FID:9A SIGNAL



MANUAL INTEGRATION

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

5. Other _____

Analyst: _____ Date: 7/30/16

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

Data File: /chem2/fid9.i/20100728.B/0728A019.D

Date : 28-JUL-2010 22:53

Client ID:

Sample Info: MOIL 100

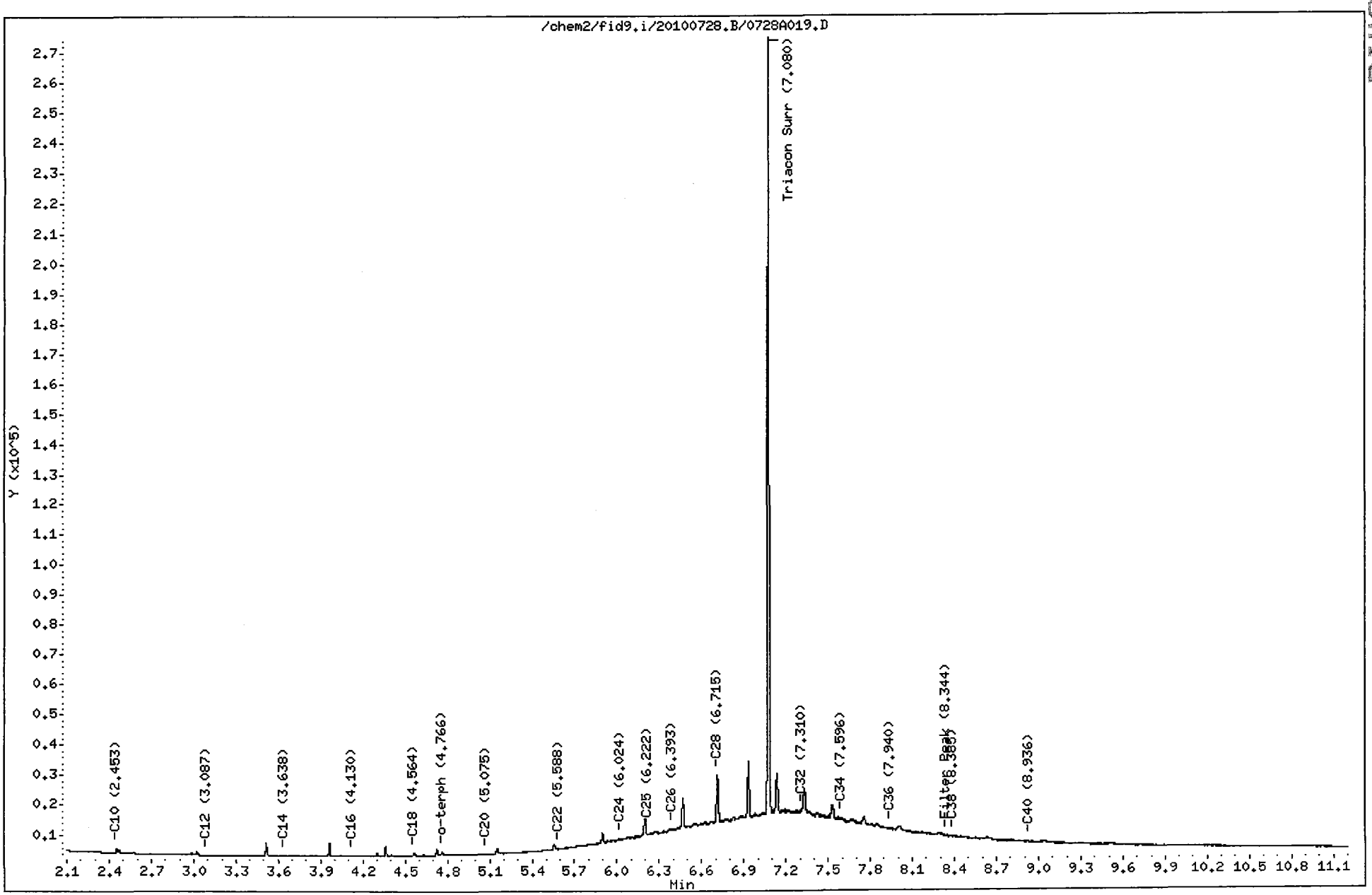
Column phase: RTX-1

Instrument: fid9.i

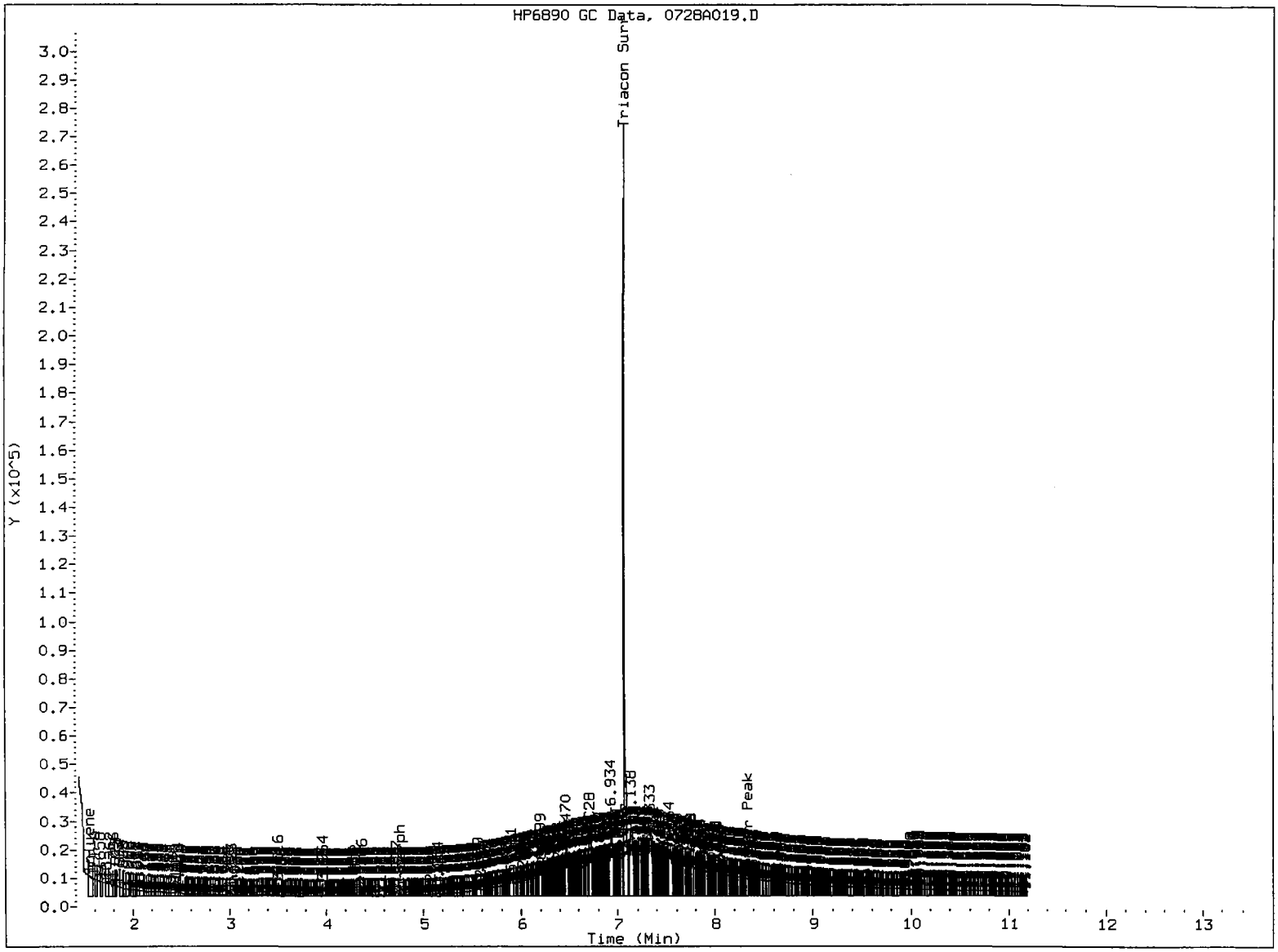
Operator: MS

Column diameter: 0.25

RTI 9651



FID:9A-2C/RTX-1 MOIL 100 FID:9A SIGNAL



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/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

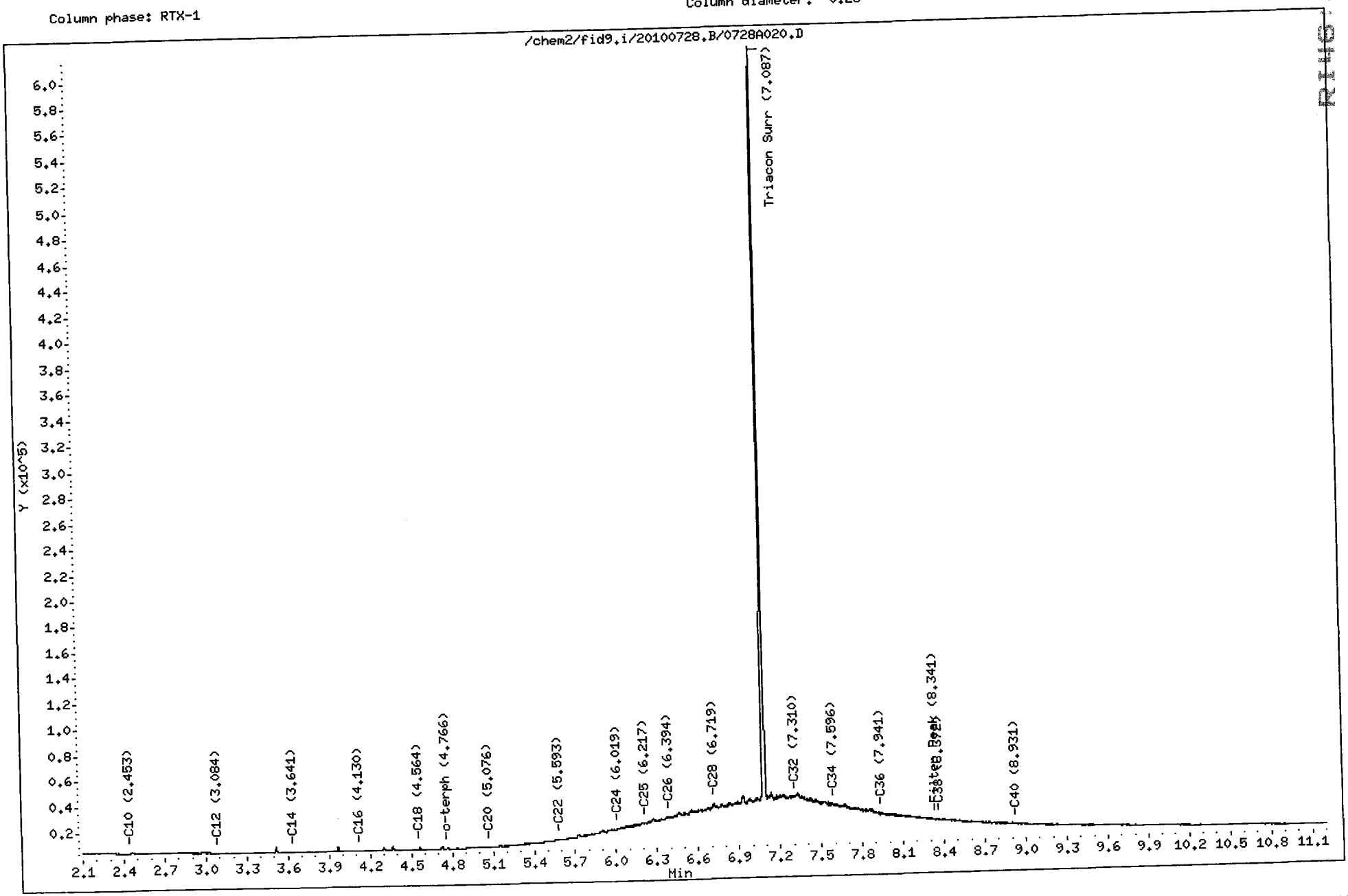
Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8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

Data File: /chem2/fid9.i/20100728.B/0728A020.D
Date : 28-JUL-2010 23:15
Client ID:
Sample Info: MOIL 250

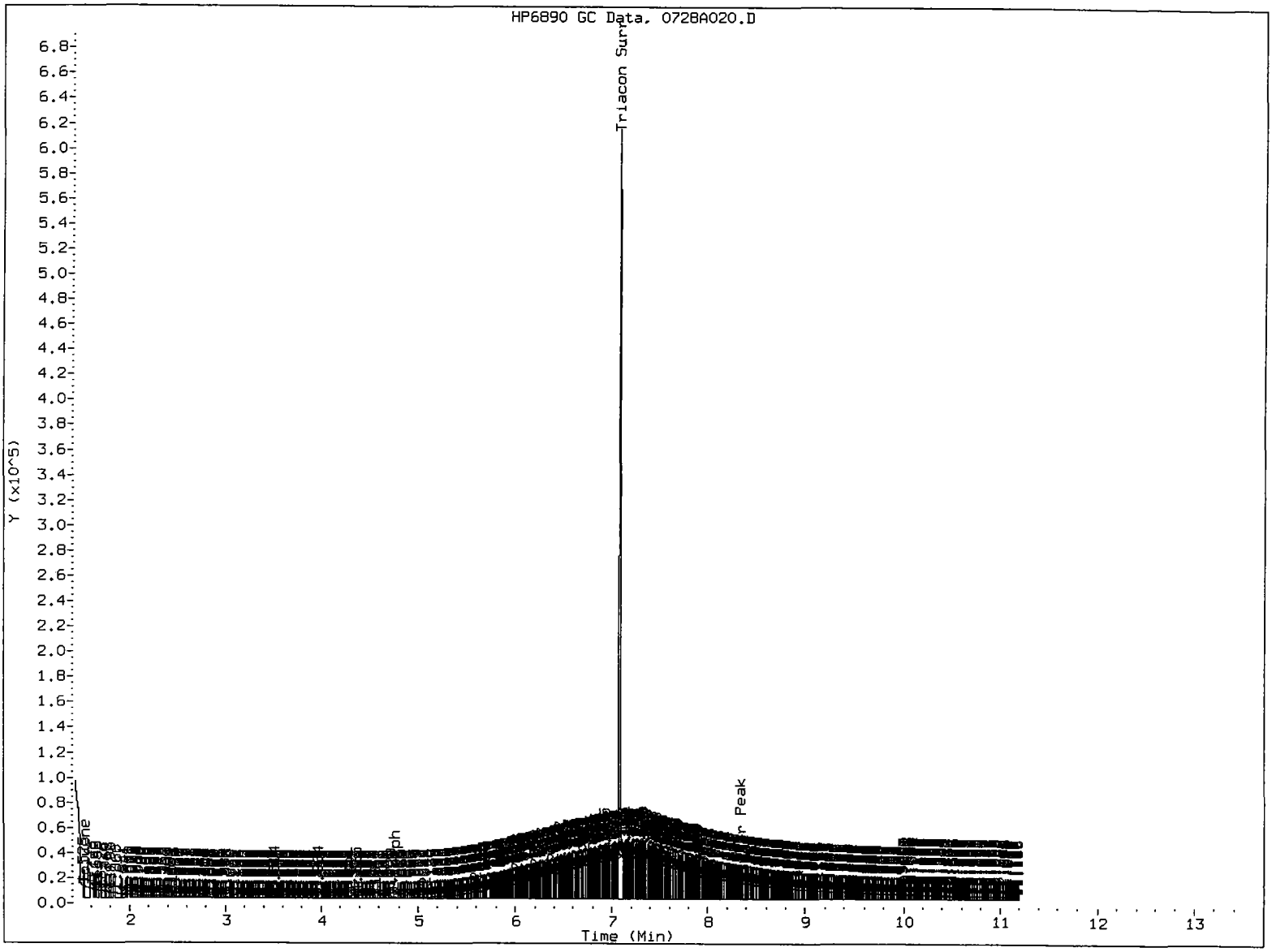
Column phase: RTX-1

Instrument: fid9.i

Operator: MS
Column diameter: 0.25



FID:9A-2C/RTX-1 MOIL 250 FID:9A SIGNAL



MANUAL INTEGRATION

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

5. Other _____

Analyst: _____ Date: 7/29/10

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/0728A021.D

Date : 28-JUL-2010 23:36

Client ID:

Sample Info: MOIL 500

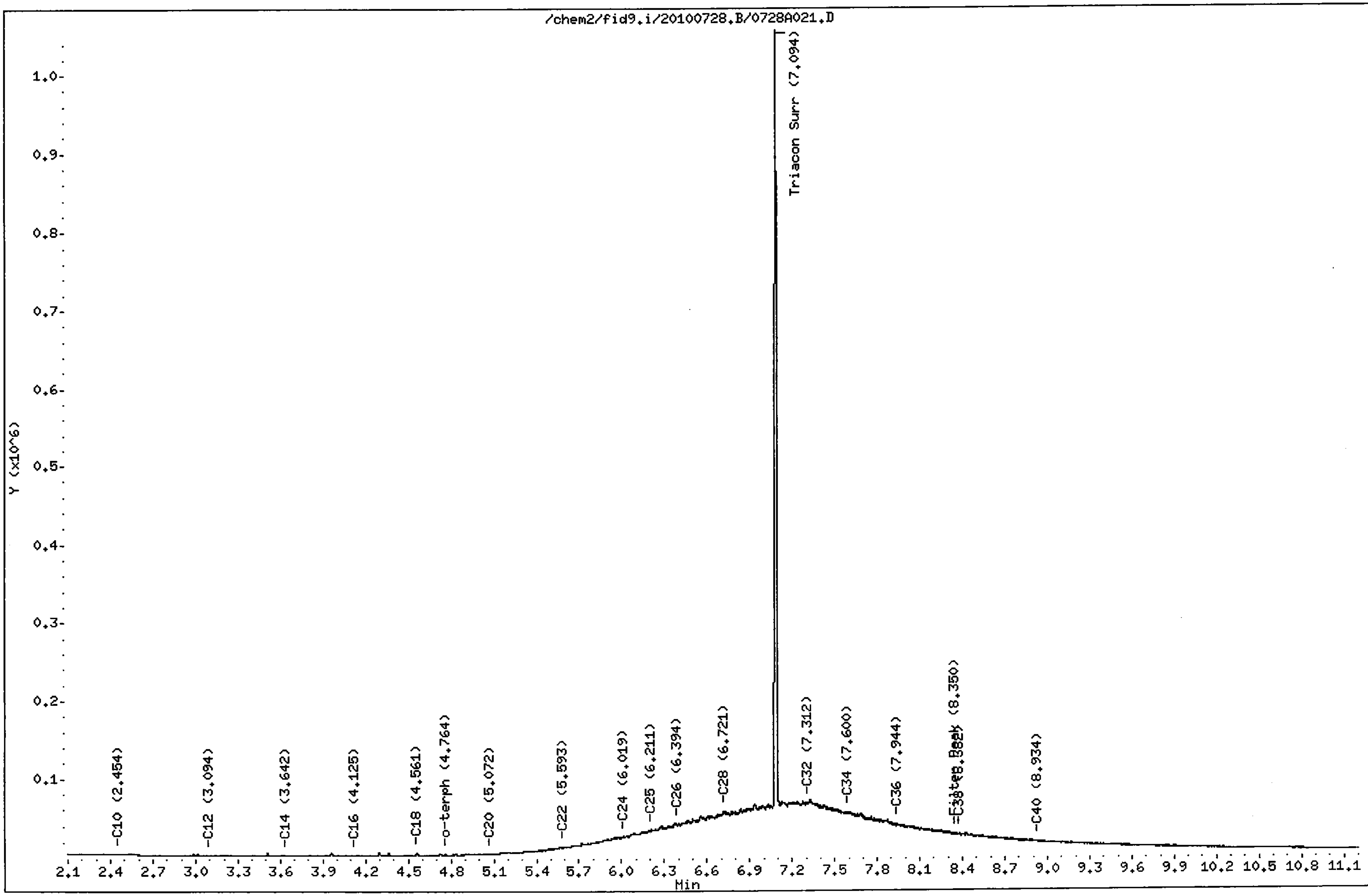
Column phase: RTX-1

Page 1

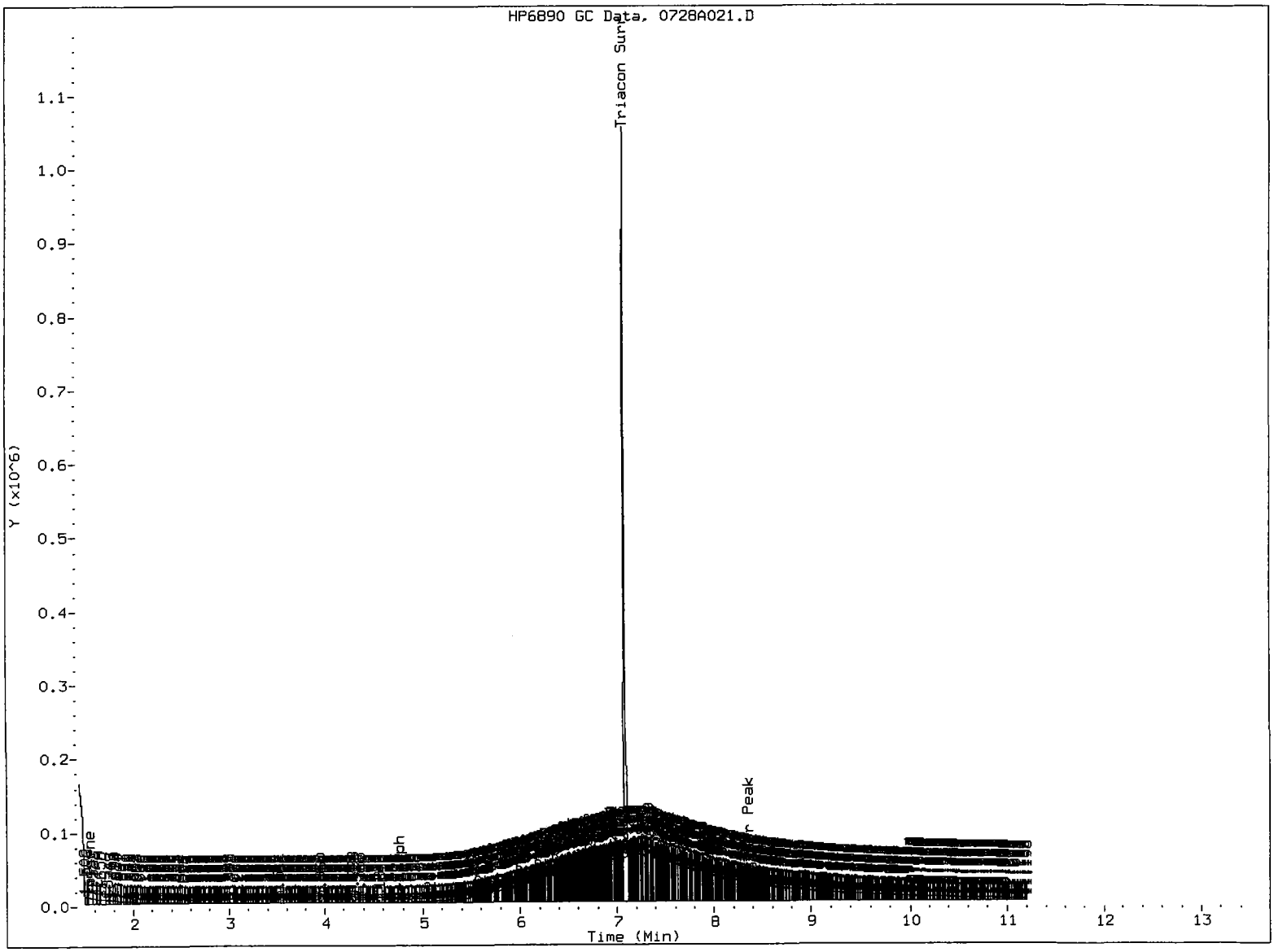
Instrument: fid9.i

Operator: MS

Column diameter: 0.25



FID:9A-2C/RTX-1 MOIL 500 FID:9A SIGNAL



MANUAL INTEGRATION

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

5. Other _____

Analyst: [signature] 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: MOIL 1000

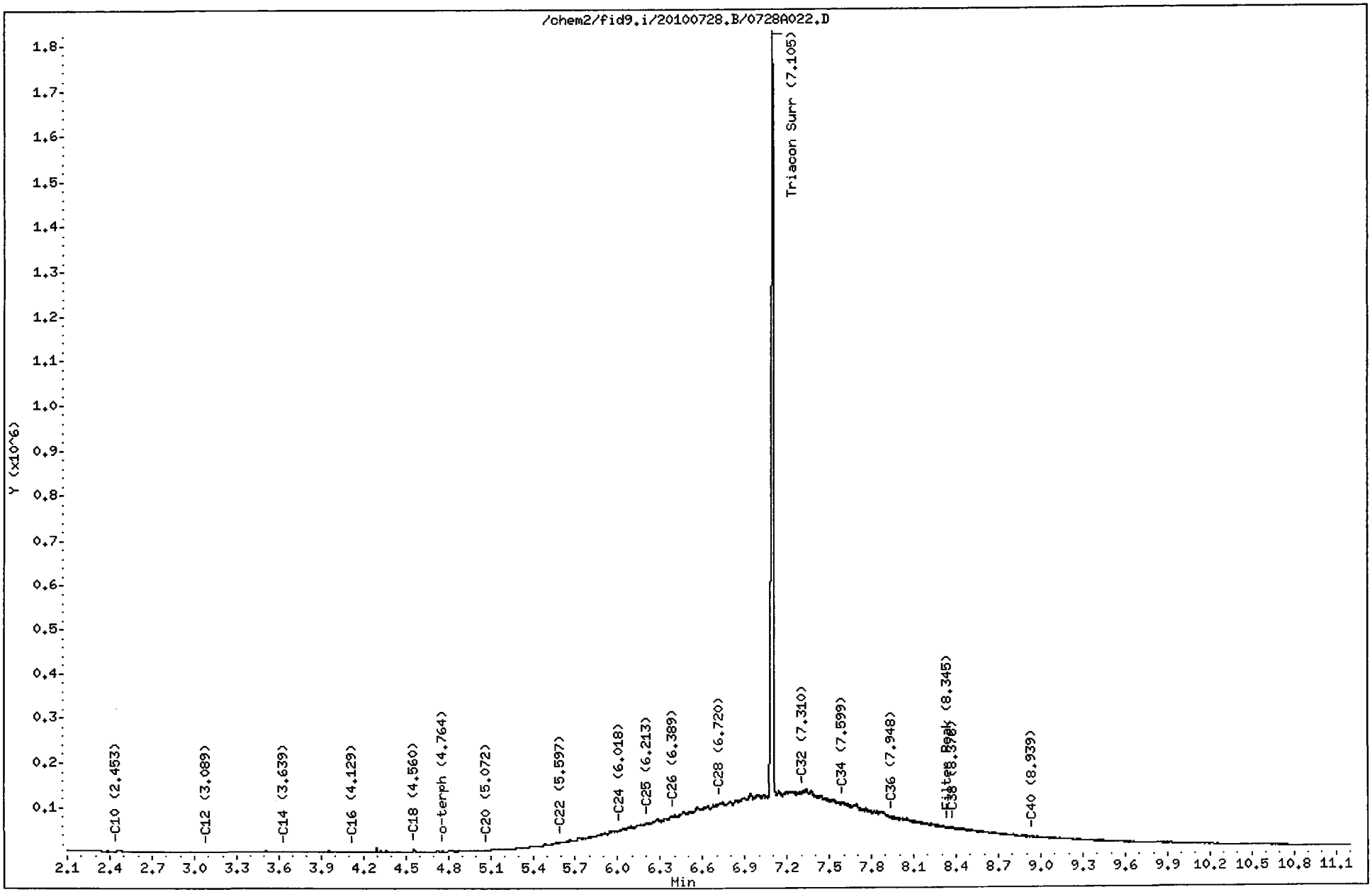
Column phase: RTX-1

Instrument: fid9.i

Operator: MS

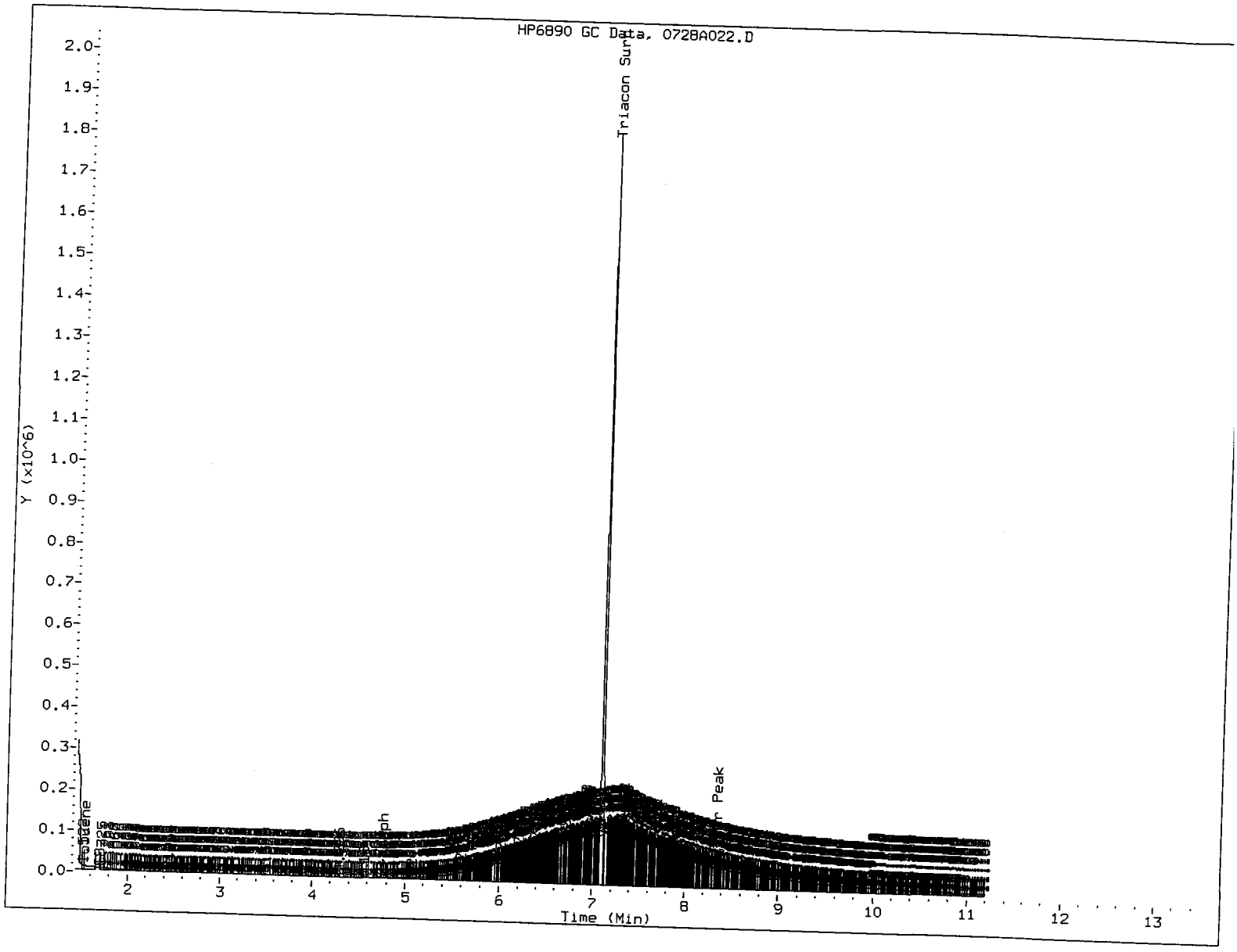
Column diameter: 0.25

RIG: 99669



FID:9A-2C/RTX-1 MOIL 1000

FID:9A SIGNAL



MANUAL INTEGRATION

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

5. Other _____

Analyst: _____ 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

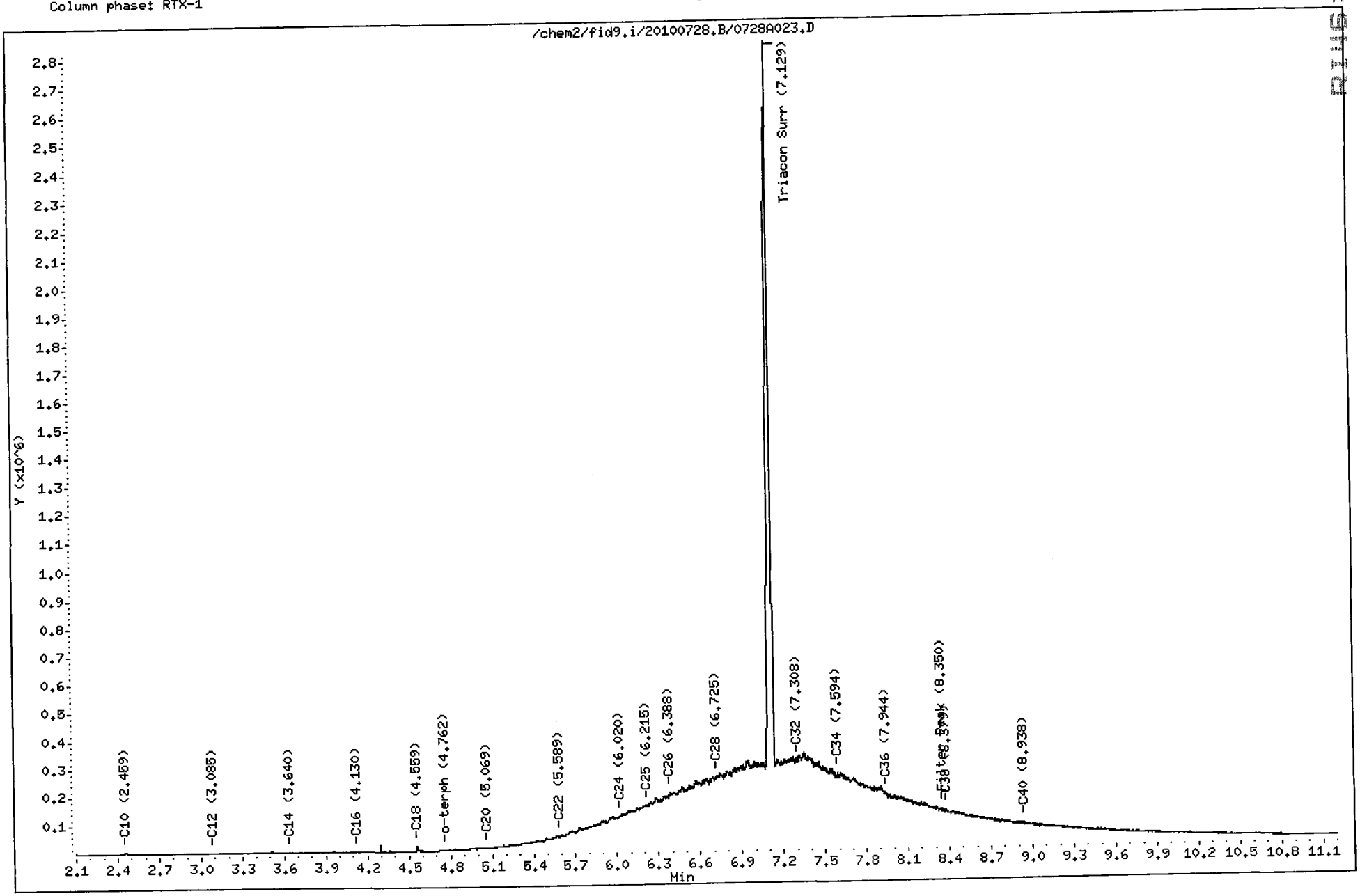
Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8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

Data File: /chem2/fid9.i/20100728.B/0728A023.D
Date : 29-JUL-2010 00:18
Client ID:
Sample Info: MOIL 2500

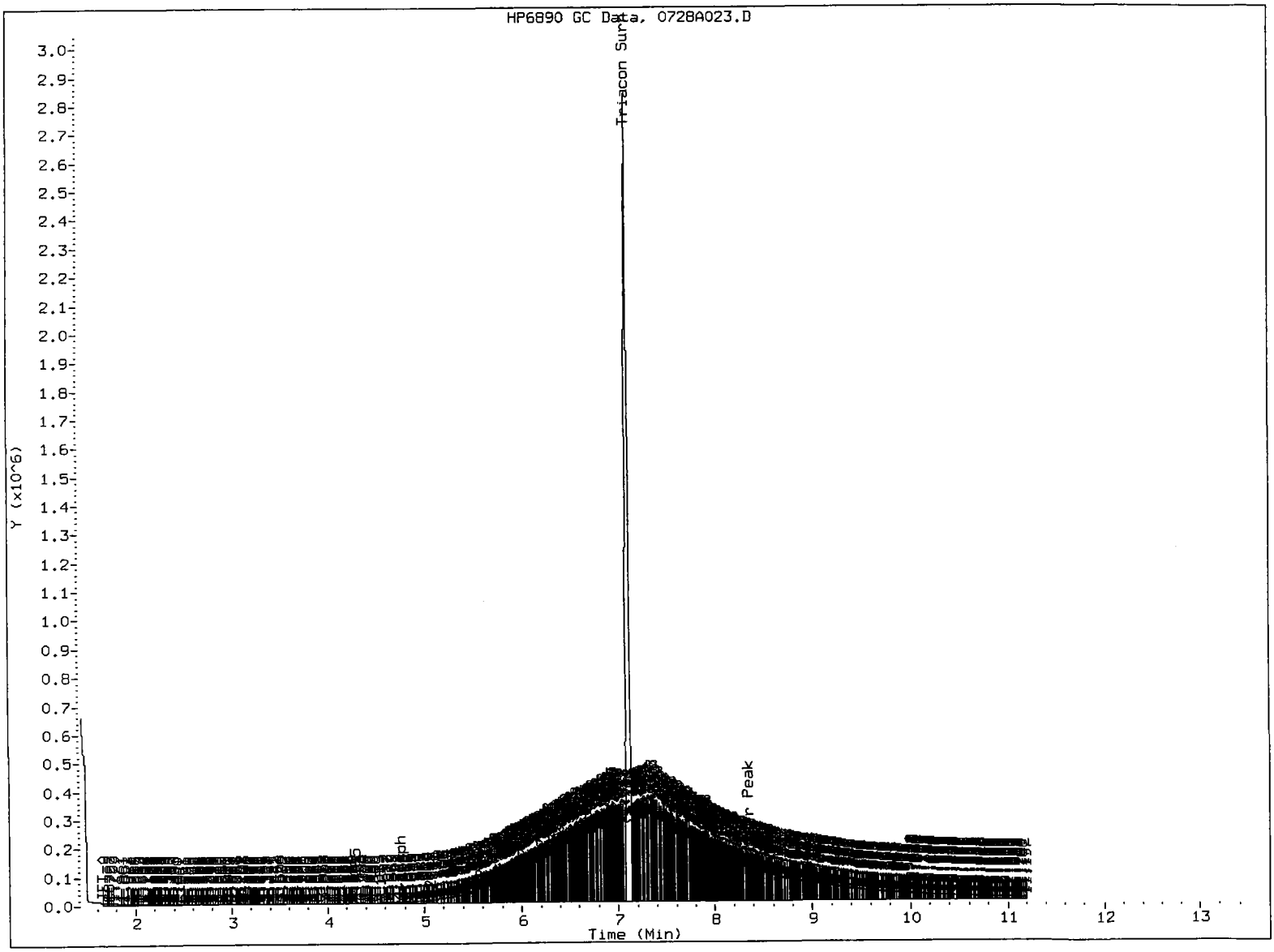
Instrument: fid9.i

Operator: MS
Column diameter: 0.25

Column phase: RTX-1



FID:9A-2C/RTX-1 MOIL 2500 FID:9A SIGNAL



MANUAL INTEGRATION

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

5. Other _____

Analyst: _____ Date: 9/30/10

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

Data File: /chem2/fid9.i/20100728.B/0728A024.D

Date : 29-JUL-2010 00:40

Client ID:

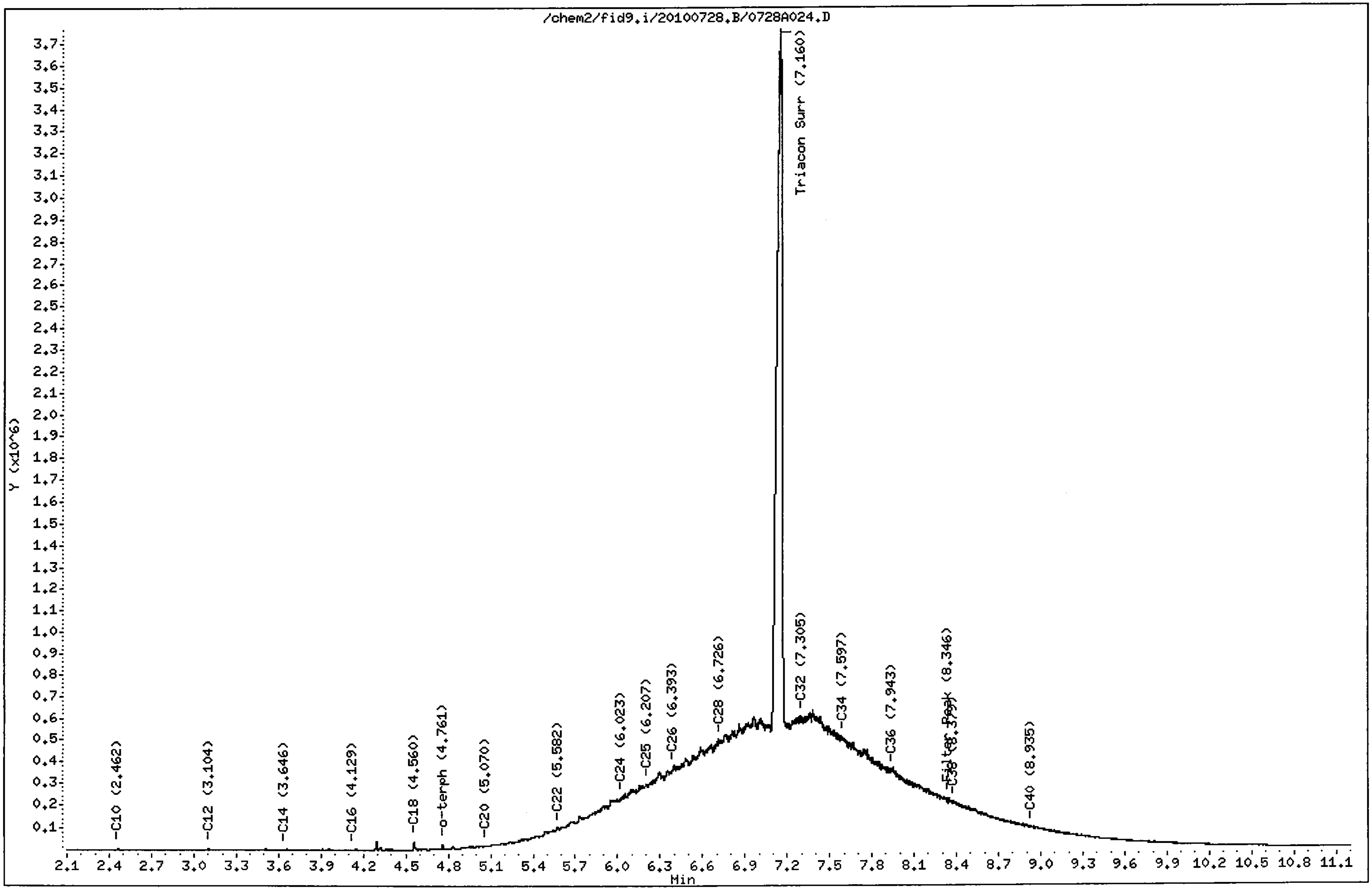
Sample Info: MOIL 5000

Column phase: RTX-1

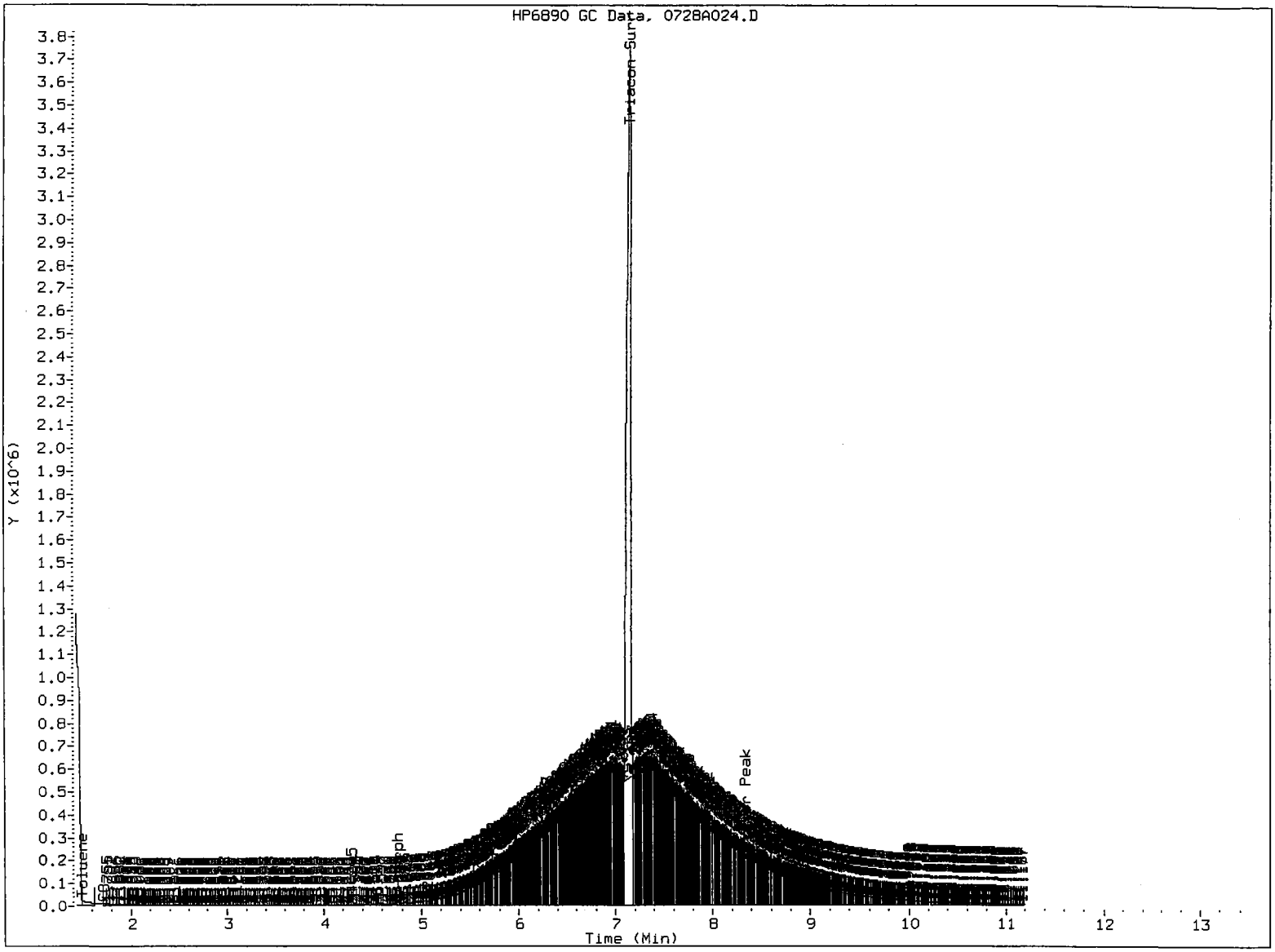
Instrument: fid9.i

Operator: MS

Column diameter: 0.25



FID:9A-2C/RTX-1 MOIL 5000 FID:9A SIGNAL



MANUAL INTEGRATION

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

5. Other _____

Analyst: _____ 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
Triacontane	806969	40.7	90.4

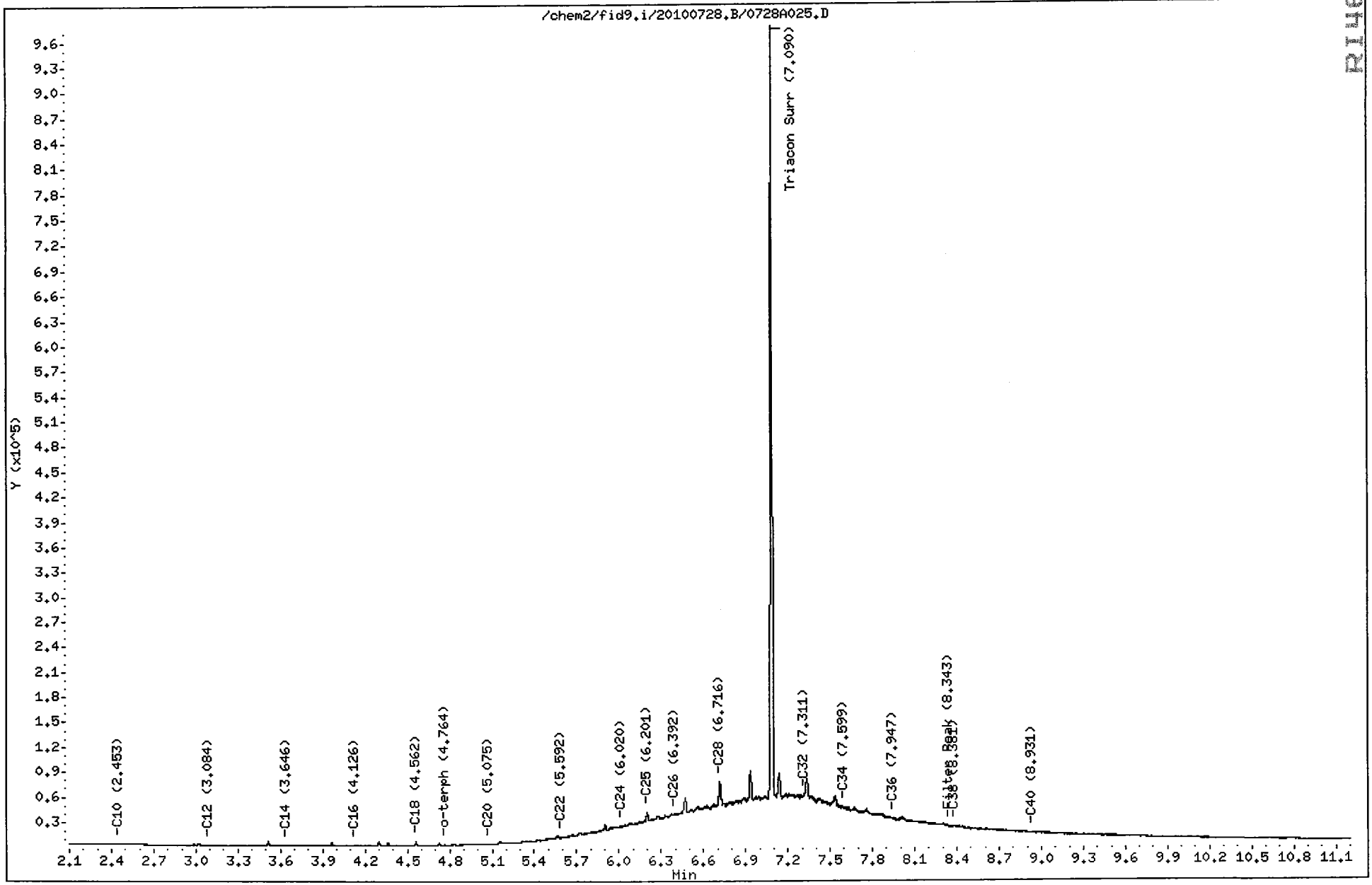
Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8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

Data File: /chem2/fid9.i/20100728.B/0728A025.D
Date : 29-JUL-2010 01:01
Client ID:
Sample Info: MOIL ICV

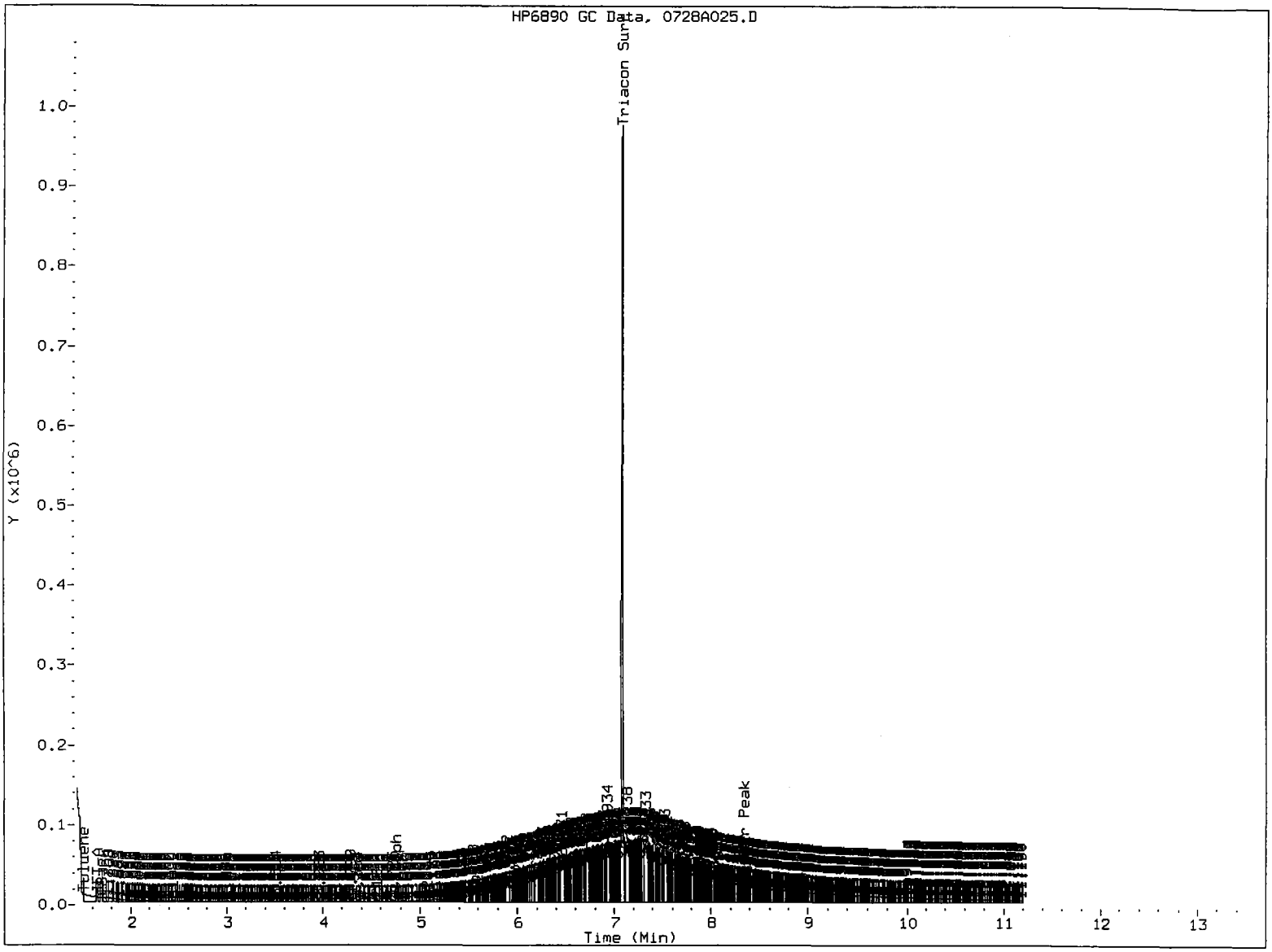
Instrument: fid9.i

Operator: MS
Column diameter: 0.25

Column phase: RTX-1



FID:9A-2C/RTX-1 MOIL ICV FID:9A SIGNAL



MANUAL INTEGRATION

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

5. Other _____

Analyst: _____ Date: 7/30/04

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
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	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

7/30/10

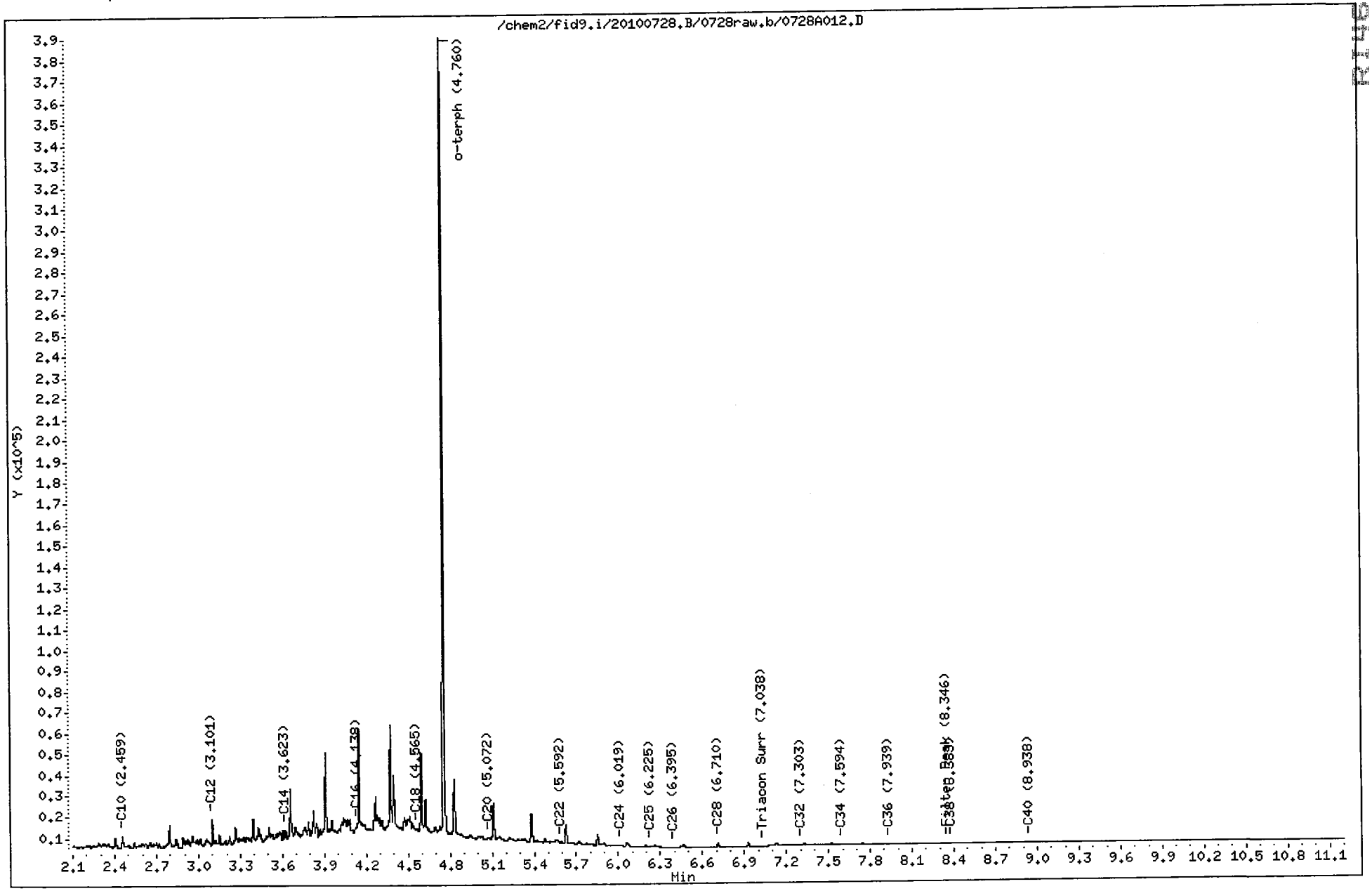
Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8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

Data File: /chem2/fid9.i/20100728.B/0728raw.b/0728A012.D
Date : 28-JUL-2010 20:24
Client ID:
Sample Info: DIESEL 50

Instrument: fid9.i

Operator: MS
Column diameter: 0.25

Column phase: RTX-1



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

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/0728A013.D

Page 1

Date : 28-JUL-2010 20:45

Client ID:

Instrument: fid9.i

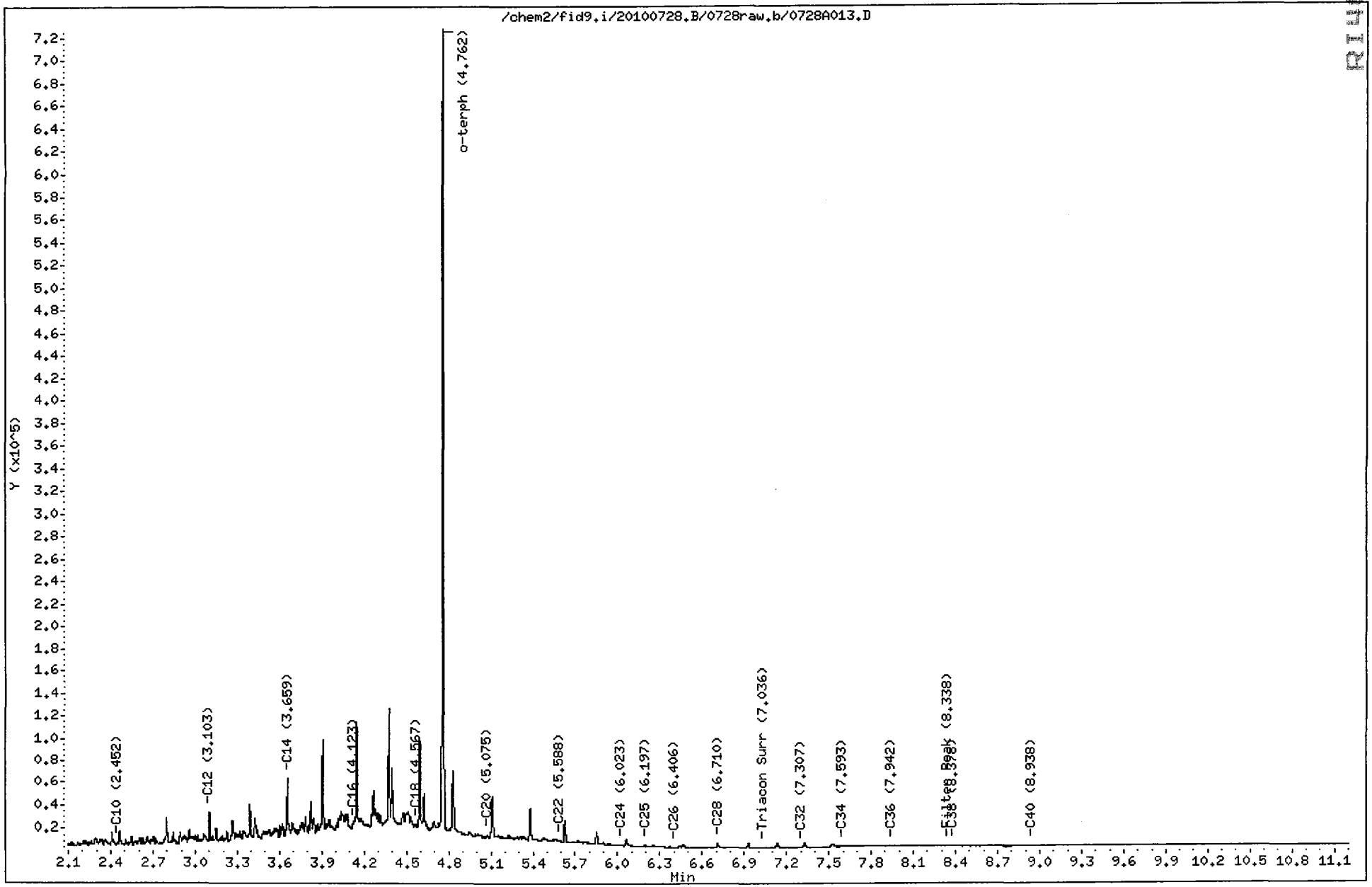
Sample Info: DIESEL 100

Operator: MS

Column phase: RTX-1

Column diameter: 0.25

RTL#: 60674



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
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

7/30/10

Data File: /chem2/fid9.i/20100728.B/0728raw.b/0728A014.D

Page 1

Date : 28-JUL-2010 21:07

Client ID:

Instrument: fid9.i

Sample Info: DIESEL 250

Operator: MS

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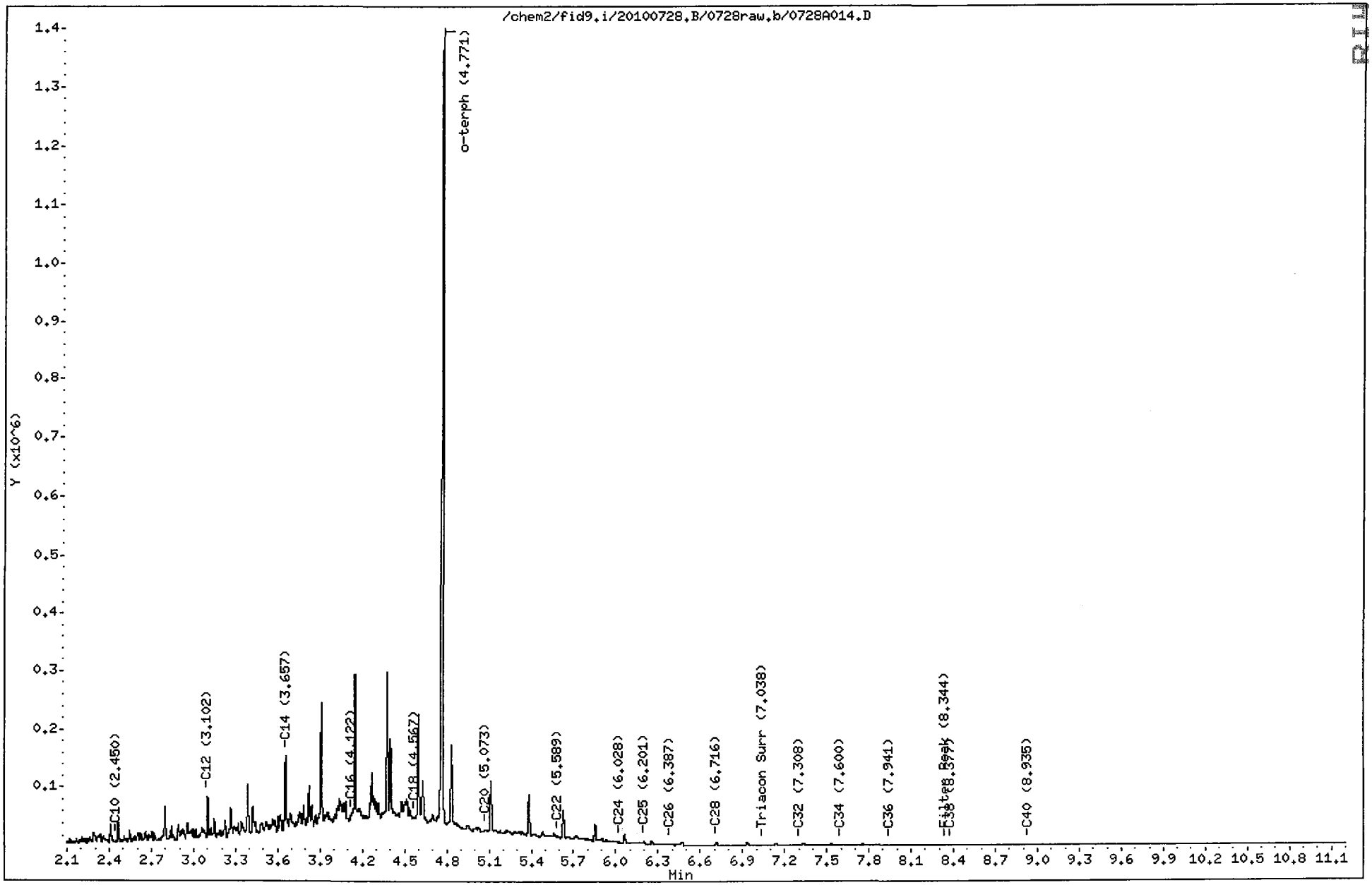

Analytical Resources Inc.
NWTPH Quantitation Report

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

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/0728A015.D
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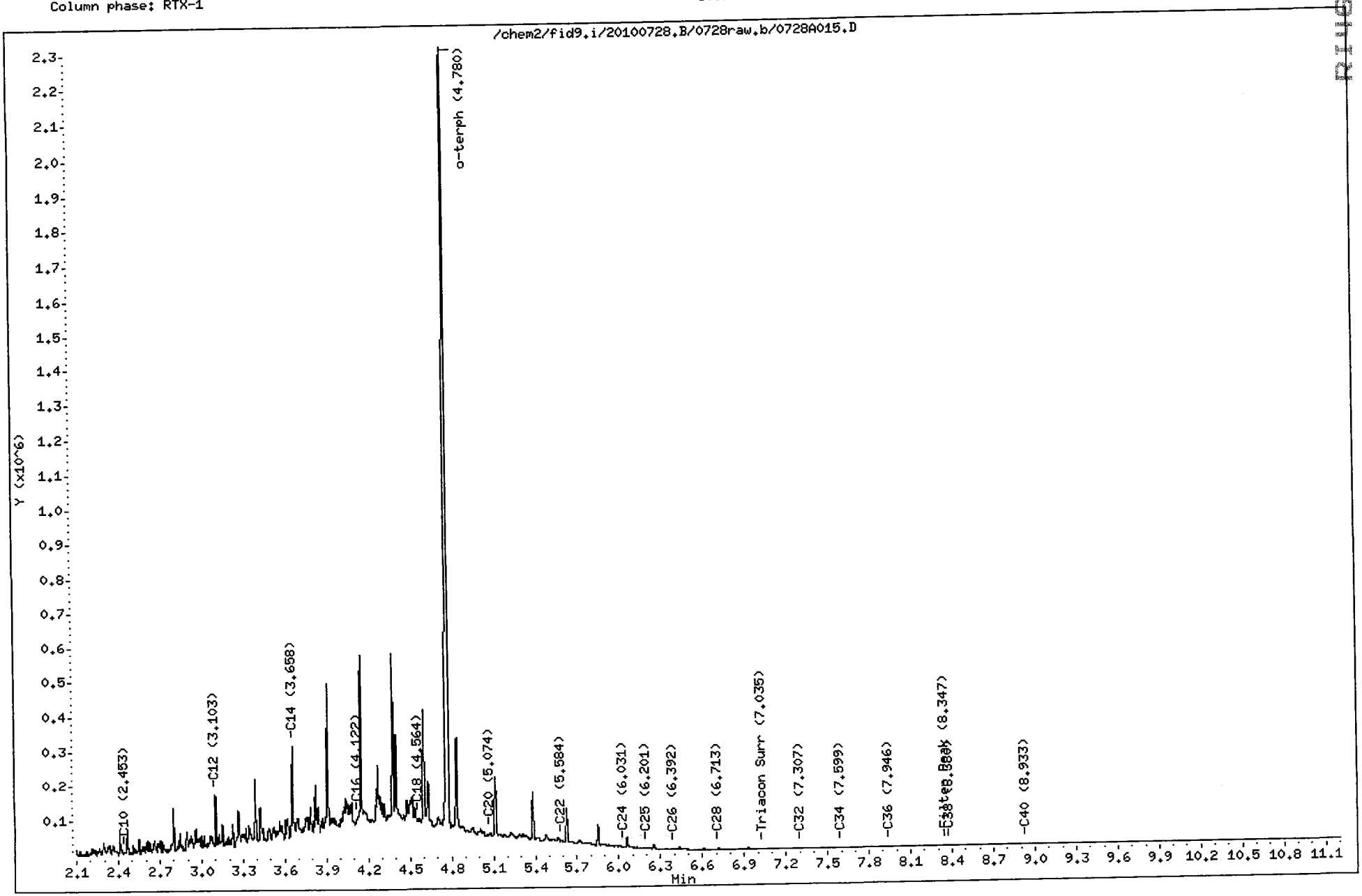
Sample Info: DIESEL 500

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/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
Triacontane	242	0.0	0.0

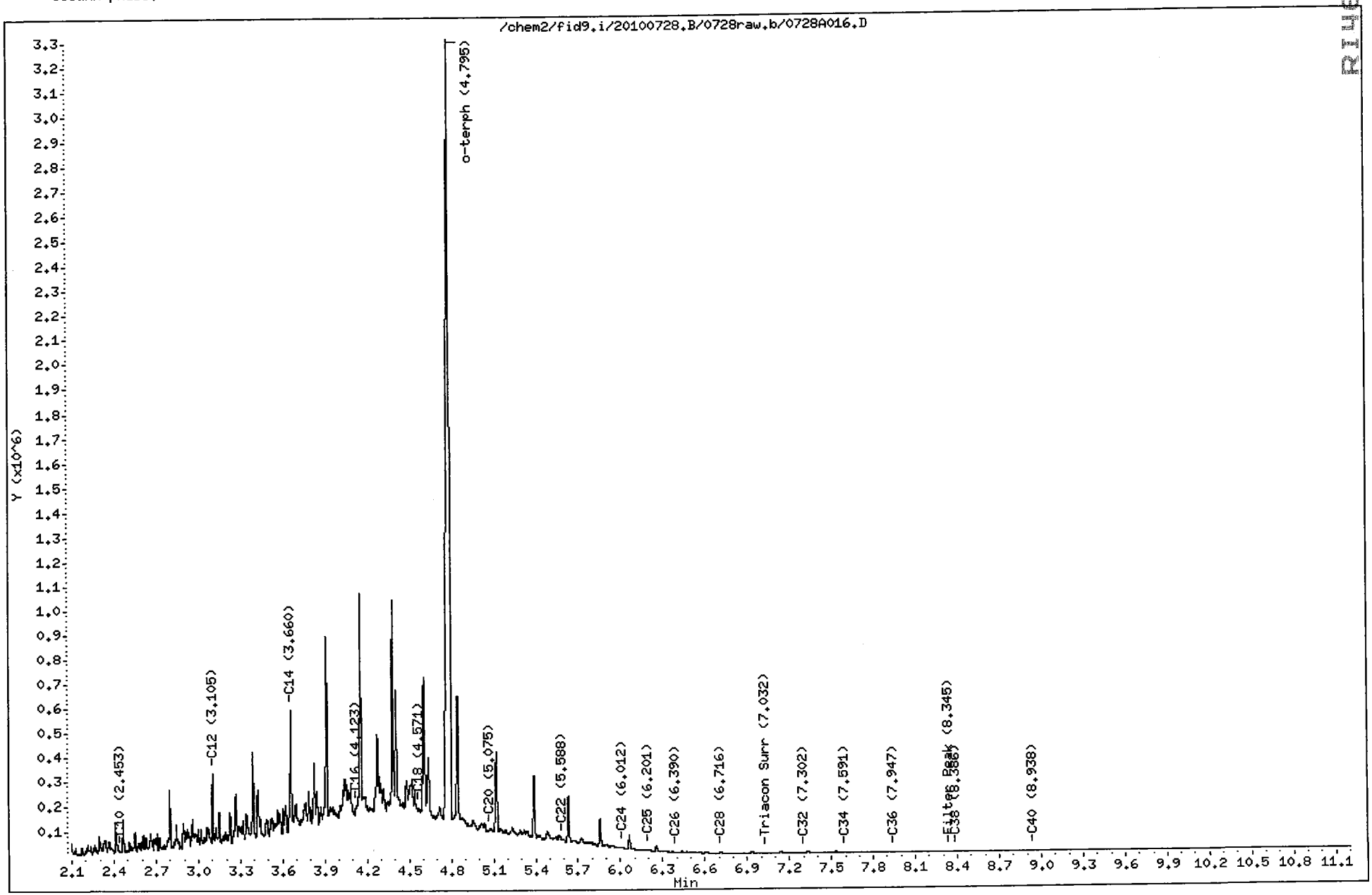
Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8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

Data File: /chem2/fid9.i/20100728.B/0728raw.b/0728A016.D
Date : 28-JUL-2010 21:49
Client ID:
Sample Info: DIESEL 1000

Instrument: fid9.i

Operator: MS
Column diameter: 0.25

Column phase: RTX-1



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

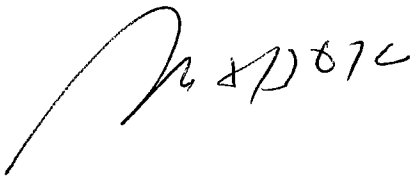
FID:9 RESULTS

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
Triacontane	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



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Date : 28-JUL-2010 22:11

Client ID:

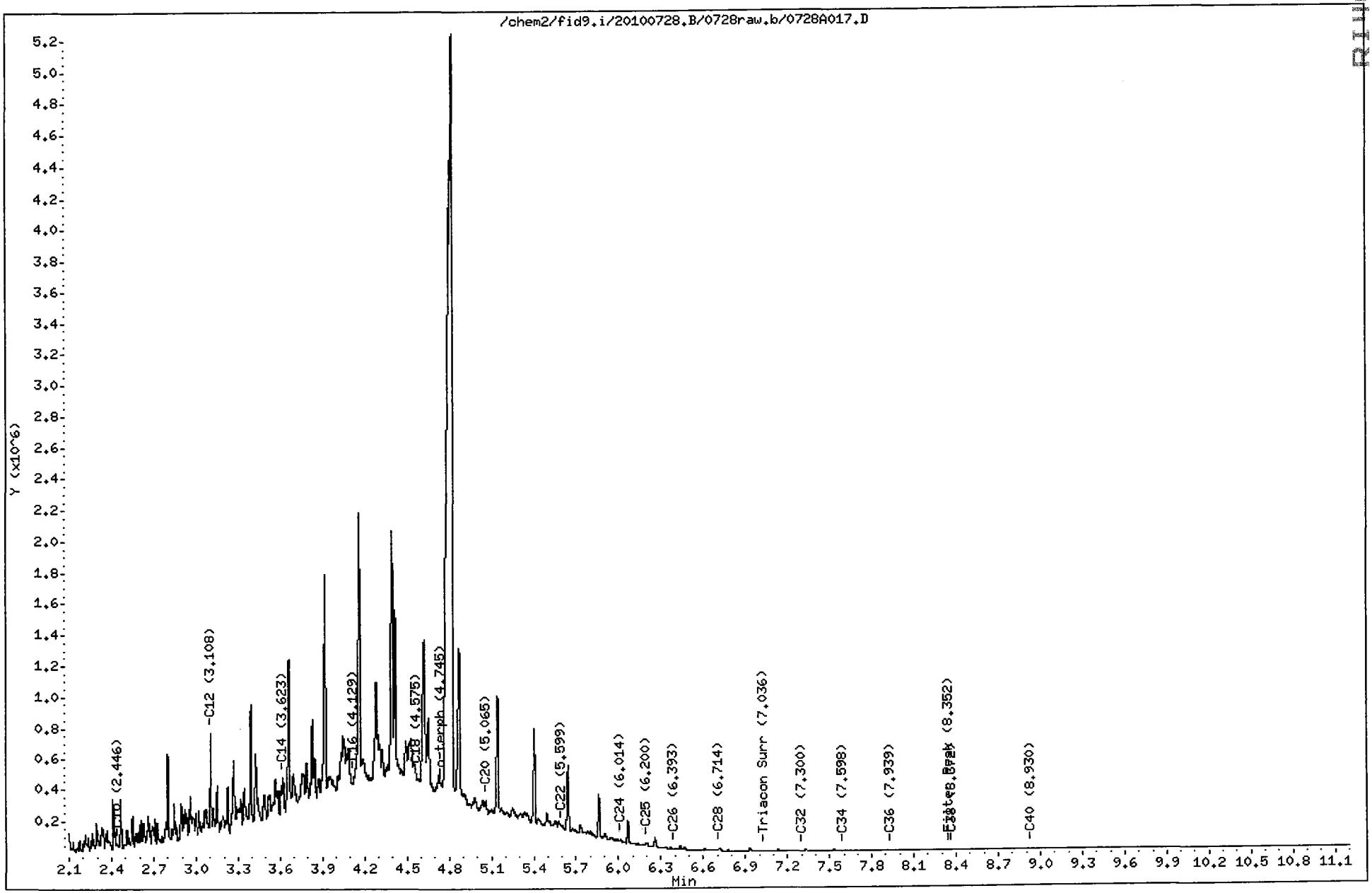
Sample Info: DIESEL 2500

Column phase: RTX-1

Instrument: fid9.i

Operator: MS

Column diameter: 0.25



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
Triacontane	12287	0.6	1.4

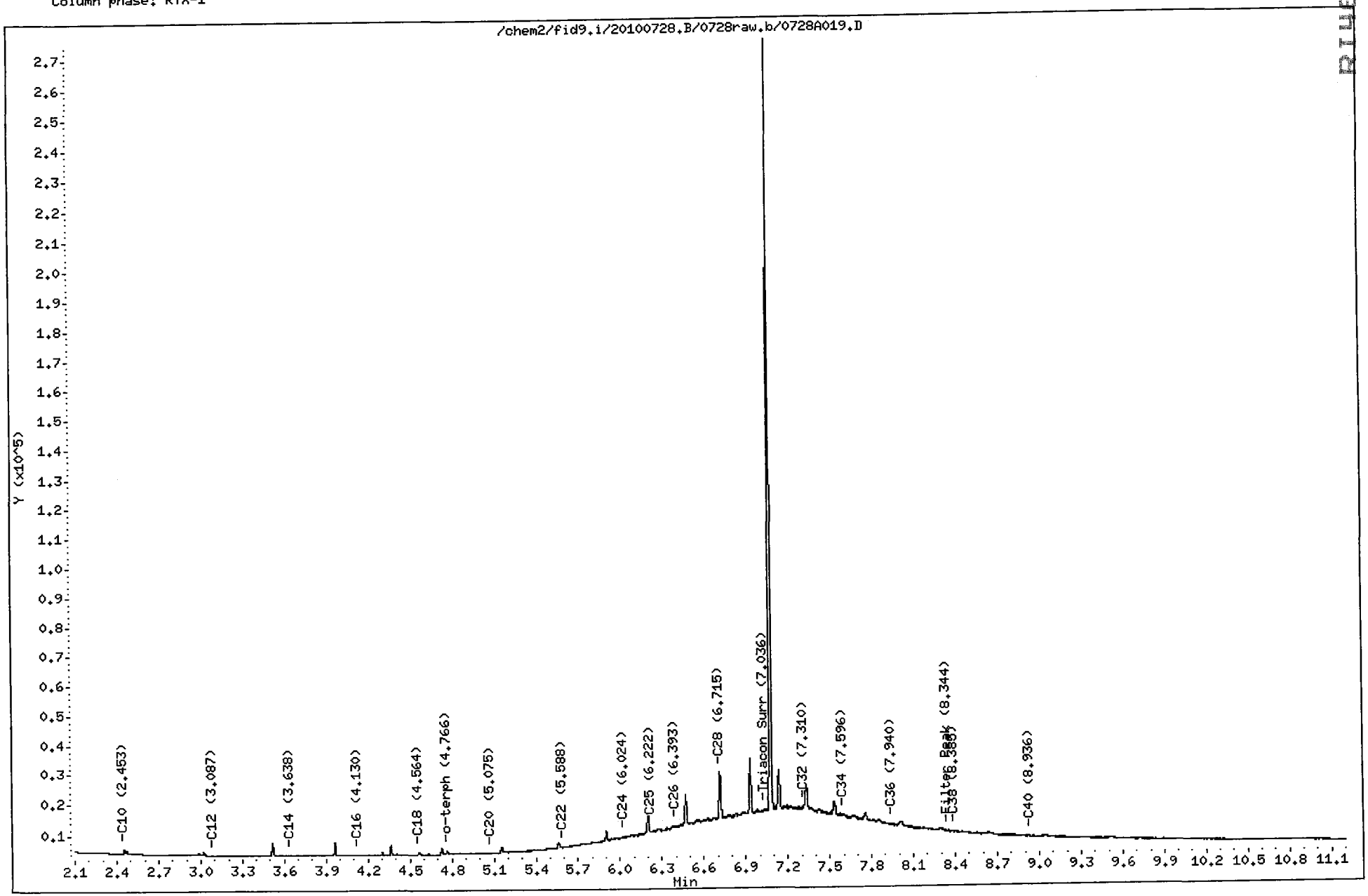
Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8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

Data File: /chem2/fid9.i/20100728.B/0728raw.b/0728A019.D
Date : 28-JUL-2010 22:53
Client ID:
Sample Info: MOIL 100

Instrument: fid9.i

Operator: MS
Column diameter: 0.25

Column phase: RTX-1



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

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
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Client ID:
Sample Info: MOIL 250

Instrument: fid9.i

Operator: MS
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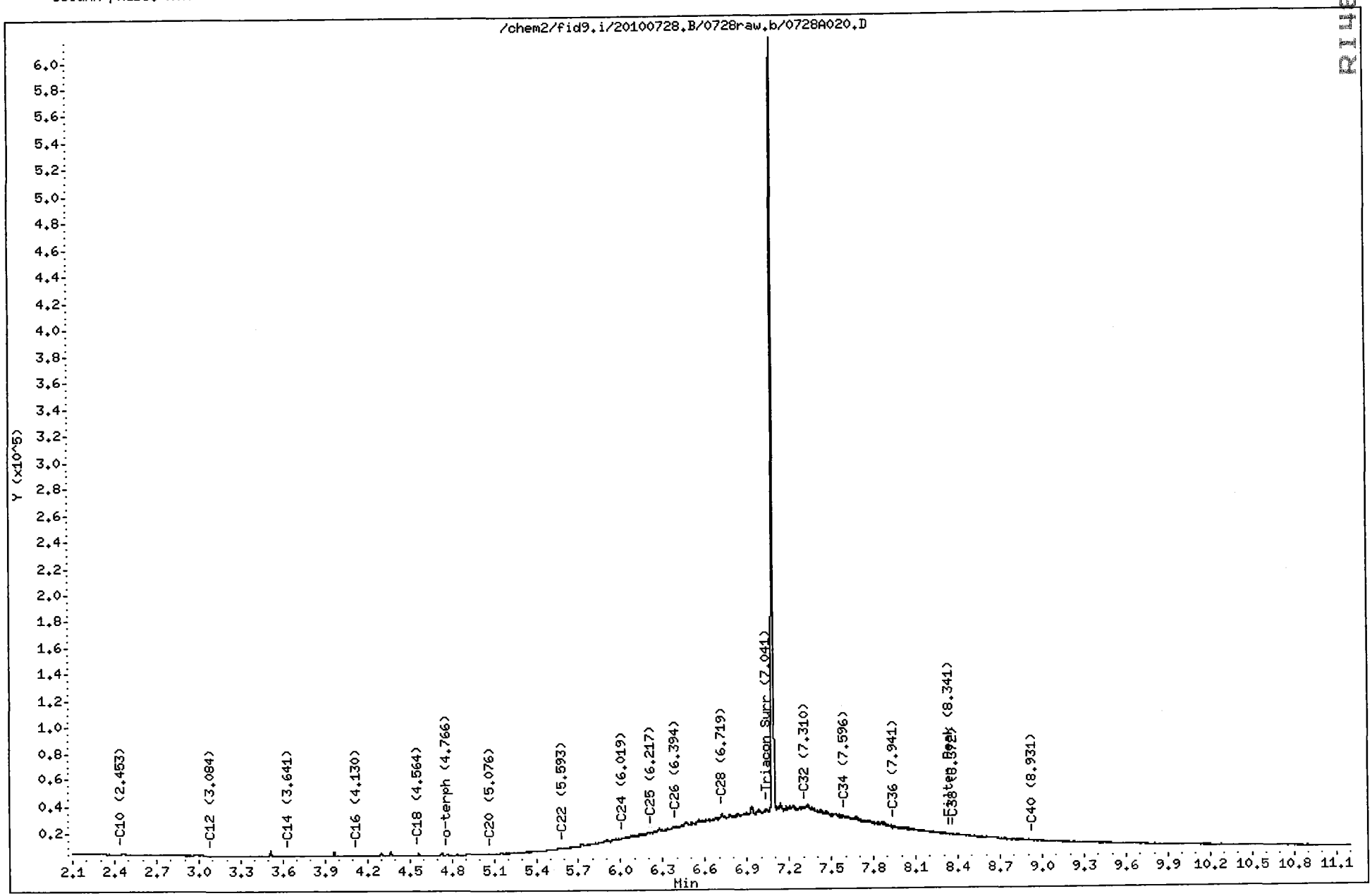
Column phase: RTX-1



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

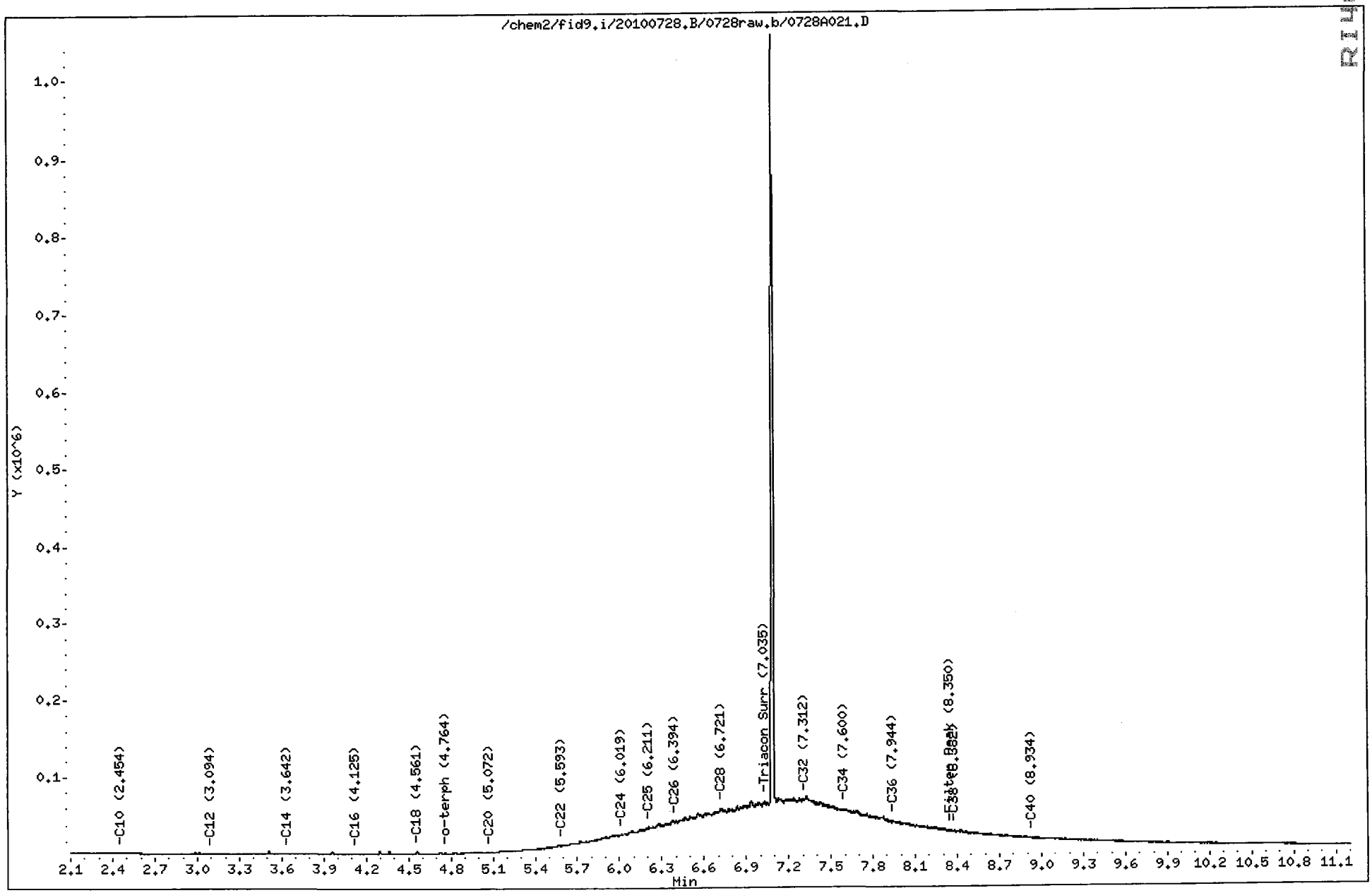
7/30/10

Data File: /chem2/fid9.i/20100728.B/0728raw.b/0728A021.D
Date : 28-JUL-2010 23:36
Client ID:
Sample Info: MOIL 500

Instrument: fid9.i

Operator: MS
Column diameter: 0.25

Column phase: RTX-1



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

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/0728A022.D

Date : 28-JUL-2010 23:57

Client ID:

Sample Info: MOIL 1000

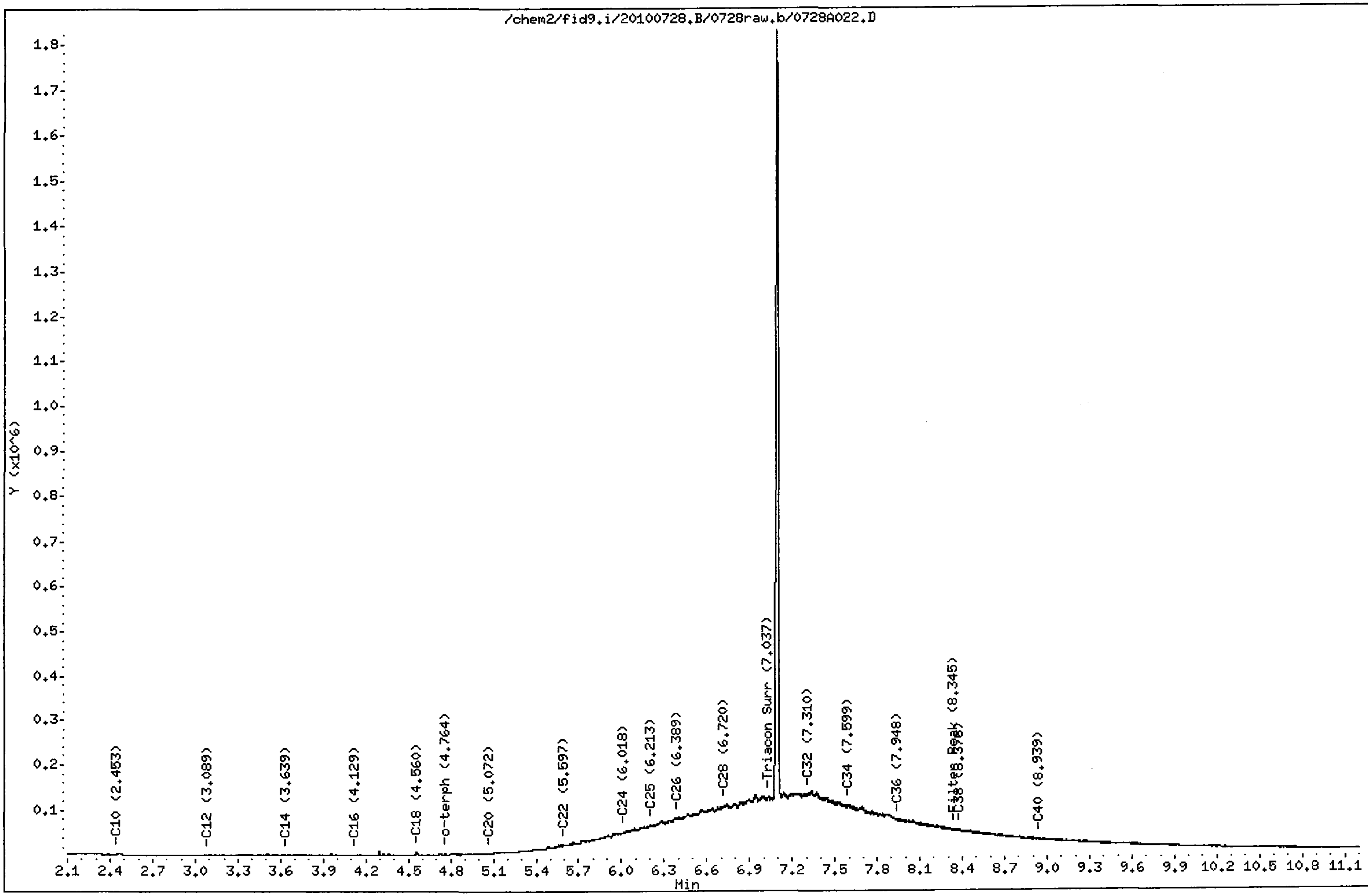
Column phase: RTX-1

Page 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/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

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: MOIL 2500

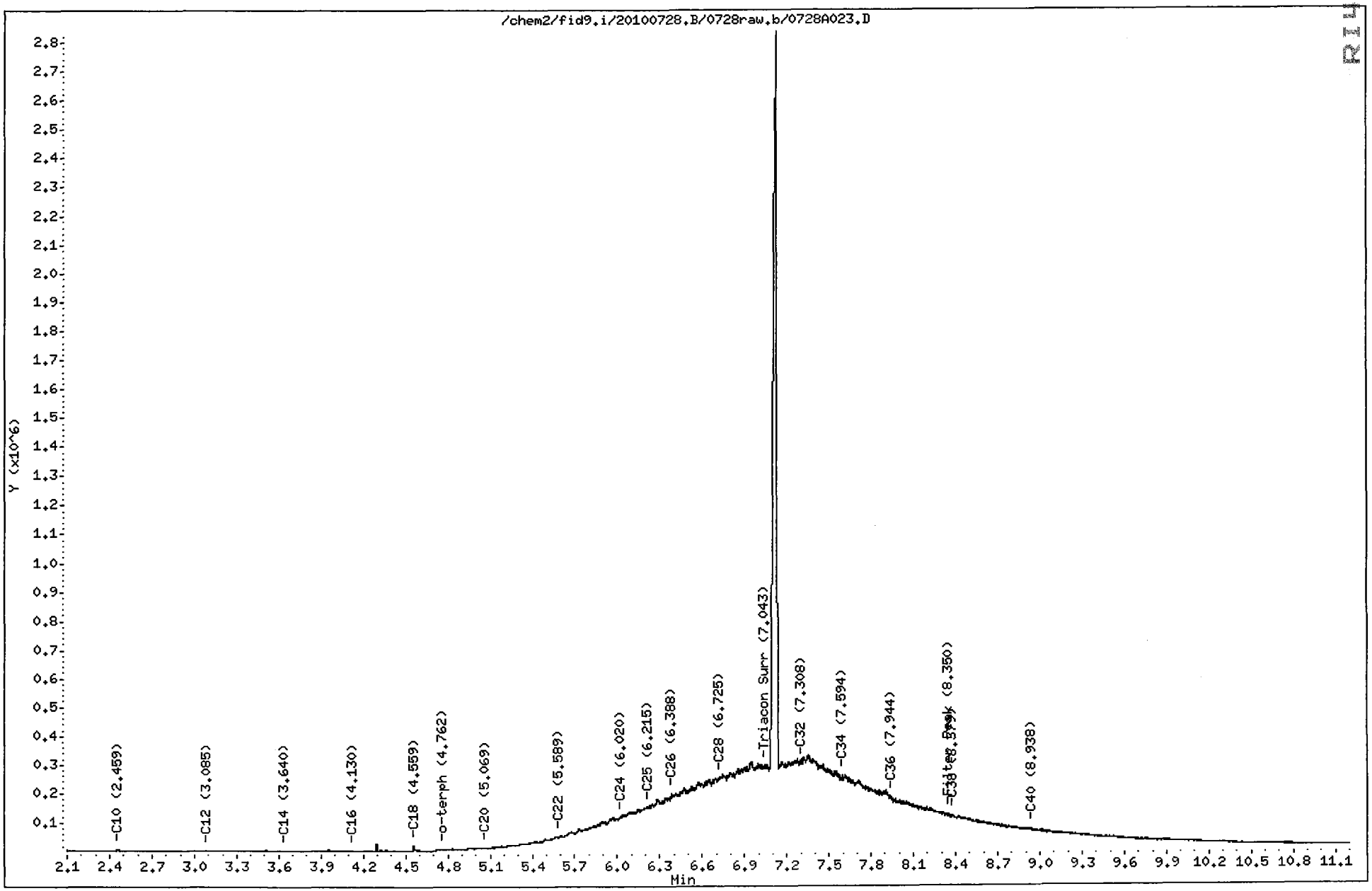
Column phase: RTX-1

Instrument: fid9.i

Operator: MS

Column diameter: 0.25

RTHS-00692



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
Triacontane	111509	5.6	12.5

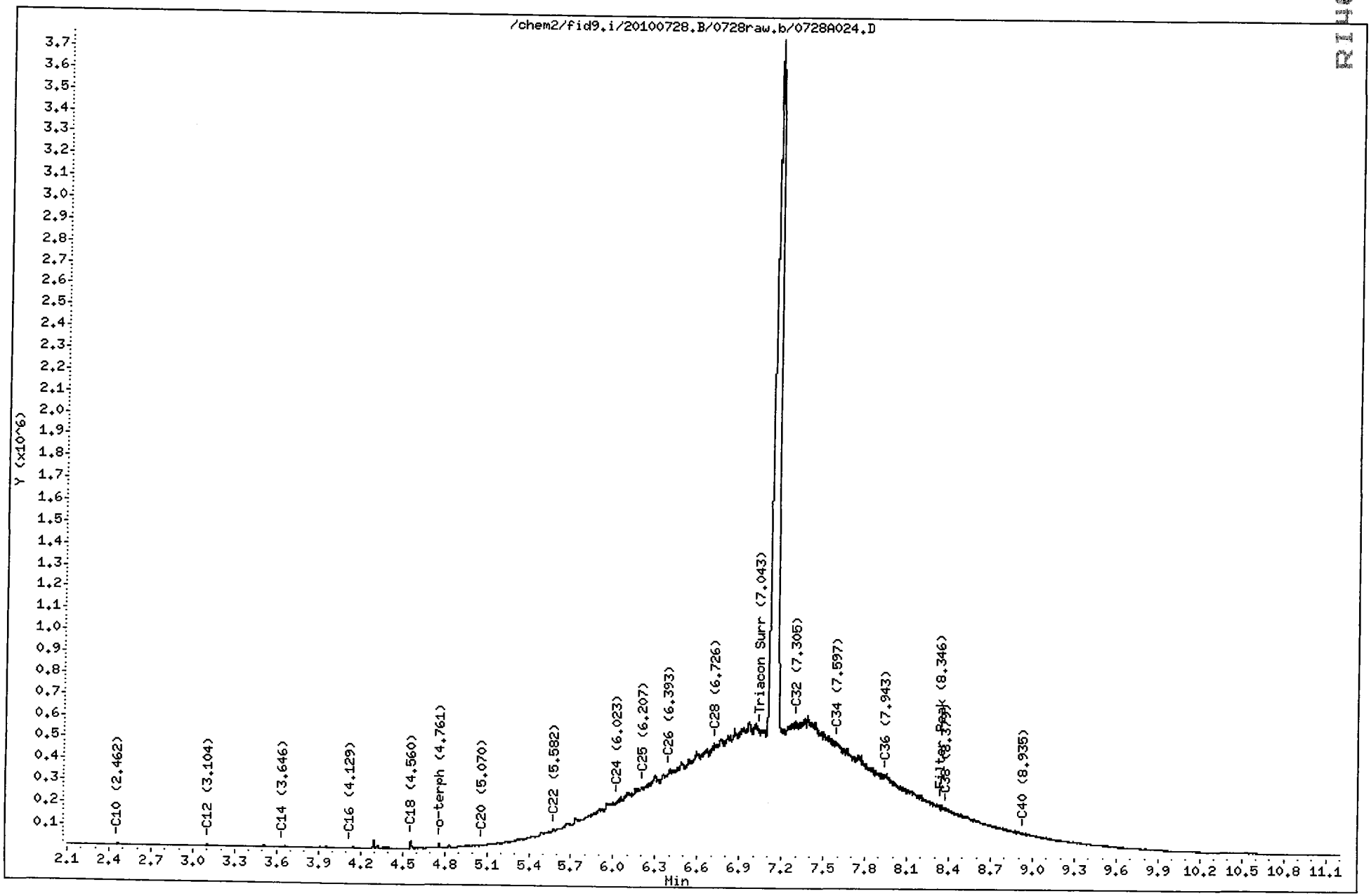
Analyte	RF	Curve Date
o-Terph Surr	25762.2	28-JUL-2010
Triacon Surr	19832.1	28-JUL-2010
Gas	21009.8	15-JUN-2010
Diesel	26331.0	28-JUL-2010
Motor Oil	12787.0	28-JUL-2010
AK102	29053.0	28-JUL-2010
AK103	5009.0	26-JUL-2010
JP4	16396.5	09-JUN-2010
JetA	13819.1	11-JUN-2010
Bunker C	8770.6	05-JAN-2010
JP-8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

Data File: /chem2/fid9.i/20100728.B/0728raw.b/0728A024.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



TPHD Raw Data
Run Logs, Continuing Calibrations, and Raw Data

ARI Job ID: RI46

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC Analyst Notes / Corrective Action Log

ARI Project ID: RI46 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): Diesel, MOil, Strph

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: 8/19/10

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: MD **Date:** 8/19/10

Reviewer: VD **Date:** 8/19/10

Analytical Resources Inc.: Organics Instrument Log

FID-9 Agilent 6850 - Serial No.: US10404004

Date: 8/18/10 Analysis: NWTPHD Analyst: MD

GC Program: TPH Column No: 802031 Column Type: rtx-1

Instrument Tune (.U or .CT.): EM Voltage:

Calibration File: Curve Date: 7/28/10

IS/SS

Ical/Ccal

1700-1
1751-2
1730-3
1755-2

LCS/ICV

	Time	Filename	LabID	ClientId	DF
1	1203	0818A001.D	RINSE		1
2	1225	0818A002.D	RT		1
3	1246	0818A003.D	IB		1
4	1307	0818A004.D	DIESEL#1		1
5	1329	0818A005.D	MOIL#1		1
6	1407	0818A006.D	RI62E	10081209	1
7	1428	0818A007.D	RI32A	RCW081210	1
8	1450	0818A008.D	RI62LCSW1	RI62LCSW1	1
9	1511	0818A009.D	RI62LCSDW1	RI62LCSDW1	1
10	1533	0818A010.D	RI62MBW1	RI62MBW1	1
11	1555	0818A011.D	DIESEL#2		1
12	1616	0818A012.D	MOIL#2		1
13	1638	0818A013.D	RH66A	SDE4/S108071	1
14	1700	0818A014.D	RH66B	SDN3080710GR	1
15	1721	0818A015.D	RH66C	SDN4080710GR	1
16	1743	0818A016.D	RH66D	SDS6/7080710	1
17	1805	0818A017.D	RH66LCSW1	RH66LCSW1	1
18	1826	0818A018.D	RH66MBW1	RH66MBW1	1
19	1848	0818A019.D	DIESEL#3		1
20	1909	0818A020.D	MOIL#3		1
21	1931	0818A021.D	HCID VER 10X		1
22	1952	0818A022.D	HCID VER 100X		

	Time	Filename	LabID	ClientId	DF
23	2014	0818A023.D	RI46A		1
24	2035	0818A024.D	RI46B		1
25	2056	0818A025.D	RI46C		1
26	2118	0818A026.D	RI46D		1
27	2139	0818A027.D	RI46E		1
28	2201	0818A028.D	RI46F		1
29	2222	0818A029.D	RI46G		1
30	2243	0818A030.D	RI46H		1
31	2305	0818A031.D	RI46I		1
32	2326	0818A032.D	RI46LCSW1		1
33	2348	0818A033.D	RI46LCSDW1		1
34	0009	0818A034.D	RI46MBW1		1
35	0030	0818A035.D	DIESEL#4		1
36	0052	0818A036.D	MOIL#4		1

8/19/10

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.

MANUAL INTEGRATION SUMMARY FOR DATABATCH - /chem2/fid9.i/20100818.b

ARI Job No.: DIES Method: ftphfid9a.m Instrument: fid9.i Date: 18-AUG-2010

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1848	0818A019.D	DIESEL#3		1	o-terph,
1909	0818A020.D	MOIL#3		1	Triacon Surr,
1931	0818A021.D	HCID VER 10X		1	Triacon Surr,
1952	0818A022.D	HCID VER 100X		1	NO MANUAL INTEGRATION
2014	0818A023.D	RI46A	MW-02-0811	1	NO MANUAL INTEGRATION
2035	0818A024.D	RI46B	MW-03-0811	1	NO MANUAL INTEGRATION
2056	0818A025.D	RI46C	MW-03-0811	1	NO MANUAL INTEGRATION
2118	0818A026.D	RI46D	MW-04-0811	1	NO MANUAL INTEGRATION
2139	0818A027.D	RI46E	MW-14-0811	1	NO MANUAL INTEGRATION
2201	0818A028.D	RI46F	MW-12-0812	1	NO MANUAL INTEGRATION
2222	0818A029.D	RI46G	MW-13-0812	1	NO MANUAL INTEGRATION
2243	0818A030.D	RI46H	MW-10-0812	1	NO MANUAL INTEGRATION
2305	0818A031.D	RI46I	MW-11-0812	1	NO MANUAL INTEGRATION
2326	0818A032.D	RI46LCSW1	RI46LCSW1	1	o-terph,
2348	0818A033.D	RI46LCSDW1	RI46LCSDW1	1	o-terph,
0009	0818A034.D	RI46MBW1	RI46MBW1	1	NO MANUAL INTEGRATION
0030	0818A035.D	DIESEL#4		1	o-terph,
0052	0818A036.D	MOIL#4		1	Triacon Surr,

Analytical Resources Inc.
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100818.b/0818A002.D
Method: /chem2/fid9.i/20100818.b/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 08/19/2010

ARI ID: RT
Client ID:
Injection: 18-AUG-2010 12:25
Dilution Factor: 1
Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.565	0.001	957639	449484	GAS (Tol-C12)	1417470	67
C8	1.727	0.011	601017	300139	DIESEL (C12-C24)	1890172	72
C10	2.491	0.009	700749	317410	M.OIL (C24-C38)	2108677	165
C12	3.126	0.007	617712	300895	AK-102 (C10-C25)	2522920	87
C14	3.681	0.005	557493	306411	AK-103 (C25-C36)	1894898	378
C16	4.172	0.002	554666	310983			
C18	4.622	0.001	444595	312963			
C20	5.150	0.004	348842	314906			
C22	5.662	0.001	391961	309074			
C24	6.098	0.003	360133	306938			
C25	6.296	0.002	484474	419573			
C26	6.480	0.004	347546	304652			
C28	6.817	-0.016	346101	301564			
C32	7.410	0.000	287131	291713	JP-4 (Tol-C14)	1729853	106
C34	7.739	-0.041	191590	270355	BUNKERC (C10-C38)	4626250	527
Filter Peak	8.341	-0.002	733	508			
C36	8.146	0.000	121459	249736			
C38	8.647	0.000	68490	127791			
C40	9.307	-0.046	47459	112613			
o-terph	4.797	0.003	1252674	1116364	JET-A (C10-C18)	1570455	114
Triacon Surr	7.131	-0.014	997724	1031053	JP8 (Tol-C16)	2044118	116

M Indicates manual integration within range.
Range Times: NW Diesel(3.119 - 6.095) AK102(2.48 - 6.29) Jet A(2.48 - 4.62)
NW M.Oil(6.09 - 8.65) AK103(6.29 - 8.15) OR Diesel(2.48 - 6.83)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1116364	43.3	96.3
Triacontane	1031053	52.0	115.5

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/20100818.b/0818A002.D

Date : 18-AUG-2010 12:25

Client ID:

Sample Info: RT

Column phase: RTX-1

Instrument: fid9.i

Operator: MS

Column diameter: 0.25

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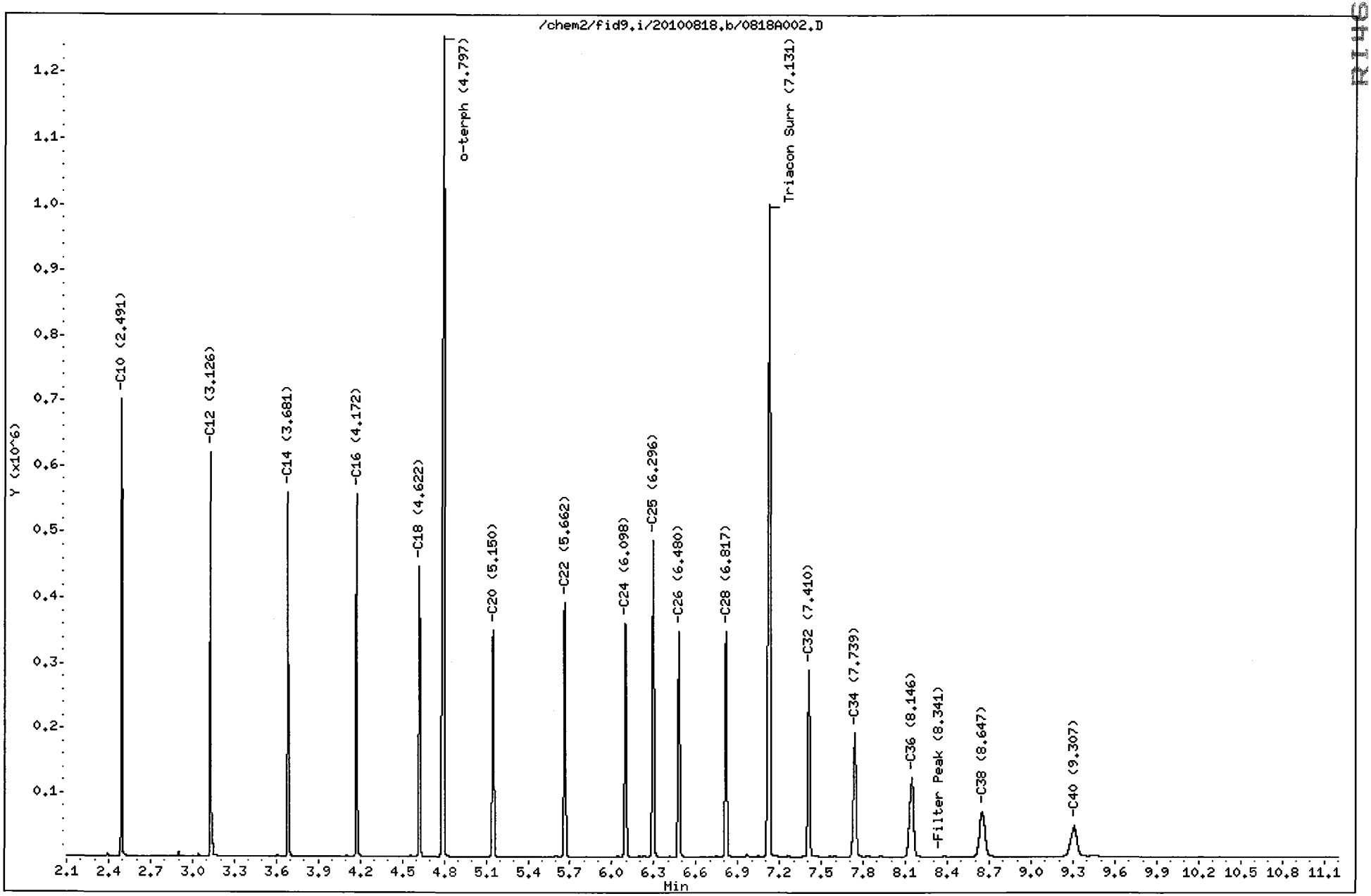


Analytical Resources Inc.
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100818.b/0818A003.D
Method: /chem2/fid9.i/20100818.b/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 08/19/2010

ARI ID: IB
Client ID:
Injection: 18-AUG-2010 12:46
Dilution Factor: 1
Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.567	0.003	1795	2105	GAS (Tol-C12)	24926	1
C8	1.712	-0.005	496	302	DIESEL (C12-C24)	15448	1
C10	2.472	-0.009	192	50	M.OIL (C24-C38)	77916	6
C12	3.117	-0.002	65	43	AK-102 (C10-C25)	22286	1
C14	3.679	0.003	38	13	AK-103 (C25-C36)	62060	12
C16	4.160	-0.010	26	12			
C18	4.620	-0.001	812	677			
C20	5.139	-0.006	109	52			
C22	5.668	0.006	699	908			
C24	6.101	0.007	879	928			
C25	6.296	0.002	1245	1371			
C26	6.479	0.003	963	1014			
C28	6.836	0.003	406	508			
C32	7.409	-0.001	2264	4798	JP-4 (Tol-C14)	26886	2
C34	7.798	0.018	655	219	BUNKERC (C10-C38)	99363	11
Filter Peak	8.344	0.000	646	381			
C36	8.202	0.013	628	271			
C38	8.655	0.007	868	1341			
C40	9.350	-0.003	750	751			
o-terph	4.796	0.002	1456073	1243968	JET-A (C10-C18)	11288	1
Triacon Surr	7.130	-0.015	953662	980210	JP8 (Tol-C16)	28134	2

M Indicates manual integration within range.
Range Times: NW Diesel(3.119 - 6.095) AK102(2.48 - 6.29) Jet A(2.48 - 4.62)
NW M.Oil(6.09 - 8.65) AK103(6.29 - 8.19) OR Diesel(2.48 - 6.83)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1243968	48.3	107.3
Triacontane	980210	49.4	109.8

8/19/10

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/20100818.b/0818A003.D

Date : 18-AUG-2010 12:46

Client ID:

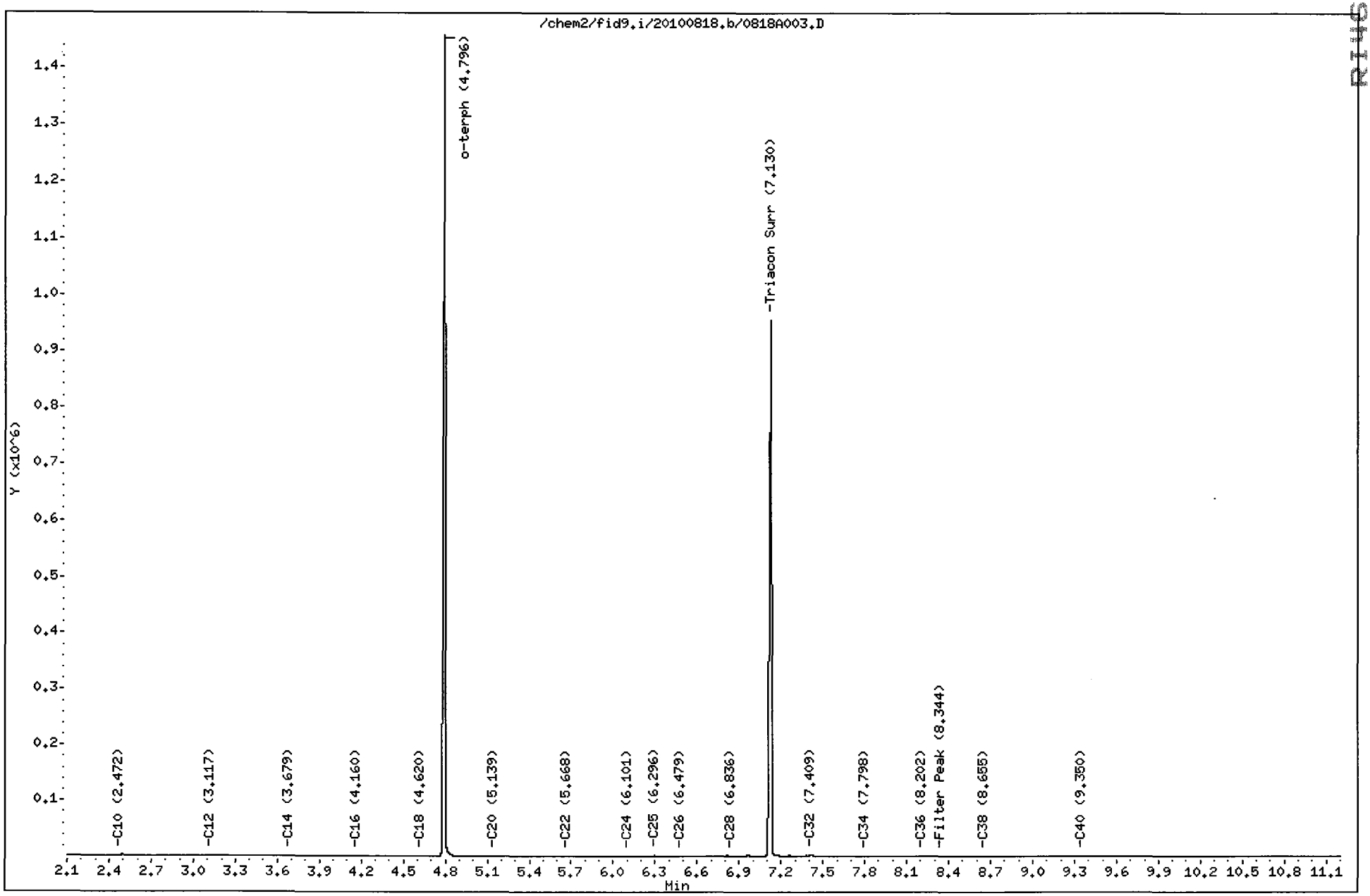
Sample Info: IB

Column phase: RTX-1

Instrument: fid9.i

Operator: MS

Column diameter: 0.25



Analytical Resources Inc.
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100818.b/0818raw.b/0818A019.D ARI ID: DIESEL#3
Method: /chem2/fid9.i/20100818.b/ftphfid9a.m Client ID:
Instrument: fid9.i Injection: 18-AUG-2010 18:48
Operator: MS Dilution Factor: 1
Report Date: 08/19/2010 Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.579	0.015	10486	6000	GAS (Tol-C12)	900892	43
C8	1.706	-0.010	1701	1514	DIESEL (C12-C24)	6341322	241
C10	2.483	0.001	4093	2657	M.OIL (C24-C38)	144675	11
C12	3.128	0.009	73092	41772	AK-102 (C10-C25)	7059805	243
C14	3.680	0.005	149450	147442	AK-103 (C25-C36)	103568	21
C16	4.172	0.002	278830	205654			
C18	4.622	0.001	199594	210700			
C20	5.149	0.003	101643	117323			
C22	5.659	-0.003	53010	60523			
C24	6.095	0.000	16836	22360			
C25	6.291	-0.003	6989	13878			
C26	6.477	0.001	2856	4160			
C28	6.839	0.006	620	845			
C32	7.403	-0.007	754	676	JP-4 (Tol-C14)	1981517	121
C34	7.781	0.001	724	114	BUNKERC (C10-C38)	7179416	819
Filter Peak	8.345	0.002	642	240			
C36	8.189	0.000	666	248			
C38	8.648	0.000	648	192			
C40	9.352	-0.001	630	467			
o-terph	4.799	0.005	1350584	1263566	JET-A (C10-C18)	5248023	380
Triacon Surr	7.155	0.010	489	337	JP8 (Tol-C16)	3615842	206

M Indicates manual integration within range.
Range Times: NW Diesel(3.119 - 6.095) AK102(2.48 - 6.29) Jet A(2.48 - 4.62)
NW M.Oil(6.09 - 8.65) AK103(6.29 - 8.19) OR Diesel(2.48 - 6.83)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1263566	49.0	109.0
Triacontane	337	0.0	0.0

8/19/10

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/20100818.b/0818raw.b/0818A019.D

Date : 18-AUG-2010 18:48

Client ID:

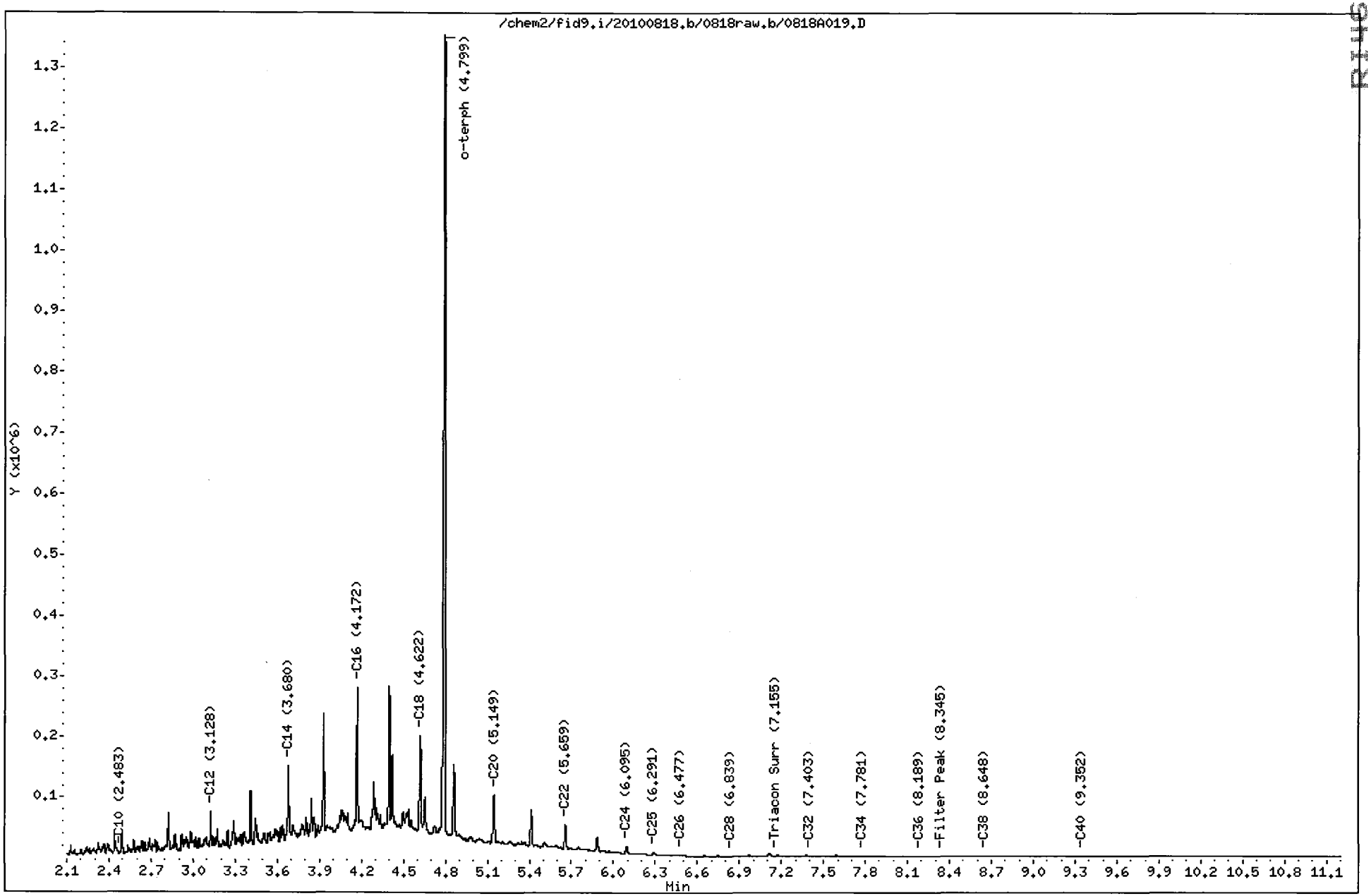
Sample Info: DIESEL#3

Column phase: RTX-1

Instrument: fid9.i

Operator: MS

Column diameter: 0.25



Analytical Resources Inc.
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100818.b/0818A019.D
Method: /chem2/fid9.i/20100818.b/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 08/19/2010

ARI ID: DIESEL#3
Client ID:
Injection: 18-AUG-2010 18:48
Dilution Factor: 1
Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.579	0.015	10486	6000	GAS (Tol-C12)	900892	43
C8	1.706	-0.010	1701	1514	DIESEL (C12-C24)	6494595	247
C10	2.483	0.001	4093	2657	M.OIL (C24-C38)	144675	11
C12	3.128	0.009	73092	41772	AK-102 (C10-C25)	7213078	248 M
C14	3.680	0.005	149450	147442	AK-103 (C25-C36)	103568	21
C16	4.172	0.002	278830	205654			
C18	4.622	0.001	199594	210700			
C20	5.149	0.003	101643	117323			
C22	5.659	-0.003	53010	60523			
C24	6.095	0.000	16836	22360			
C25	6.291	-0.003	6989	13878			
C26	6.477	0.001	2856	4160			
C28	6.839	0.006	620	845			
C32	7.403	-0.007	754	676	JP-4 (Tol-C14)	1981517	121
C34	7.781	0.001	724	114	BUNKERC (C10-C38)	7332689	836 M
Filter Peak	8.345	0.002	642	240			
C36	8.189	0.000	666	248			
C38	8.648	0.000	648	192			
C40	9.352	-0.001	630	467			
o-terph	4.799	0.005	1308868	1111063	JET-A (C10-C18)	5248023	380
Triacon Surr	7.155	0.010	489	337	JP8 (Tol-C16)	3615842	206

M Indicates manual integration within range.
Range Times: NW Diesel(3.119 - 6.095) AK102(2.48 - 6.29) Jet A(2.48 - 4.62)
NW M.Oil(6.09 - 8.65) AK103(6.29 - 8.19) OR Diesel(2.48 - 6.83)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1111063	43.1	95.8
Triacontane	337	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/20100818.b/0818A019.D

Date : 18-AUG-2010 18:48

Client ID:

Sample Info: DIESEL#3

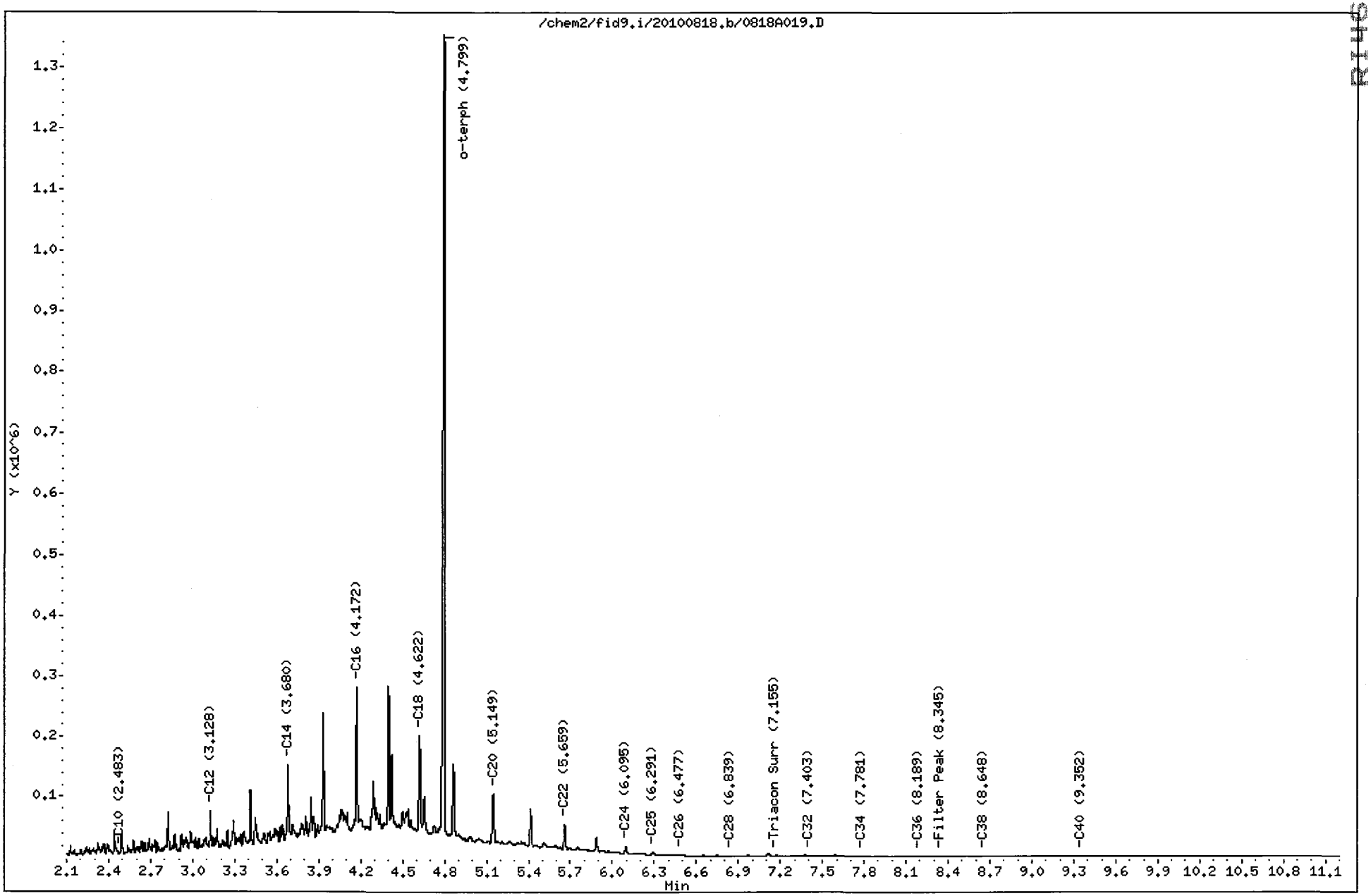
Column phase: RTX-1

Instrument: fid9.i

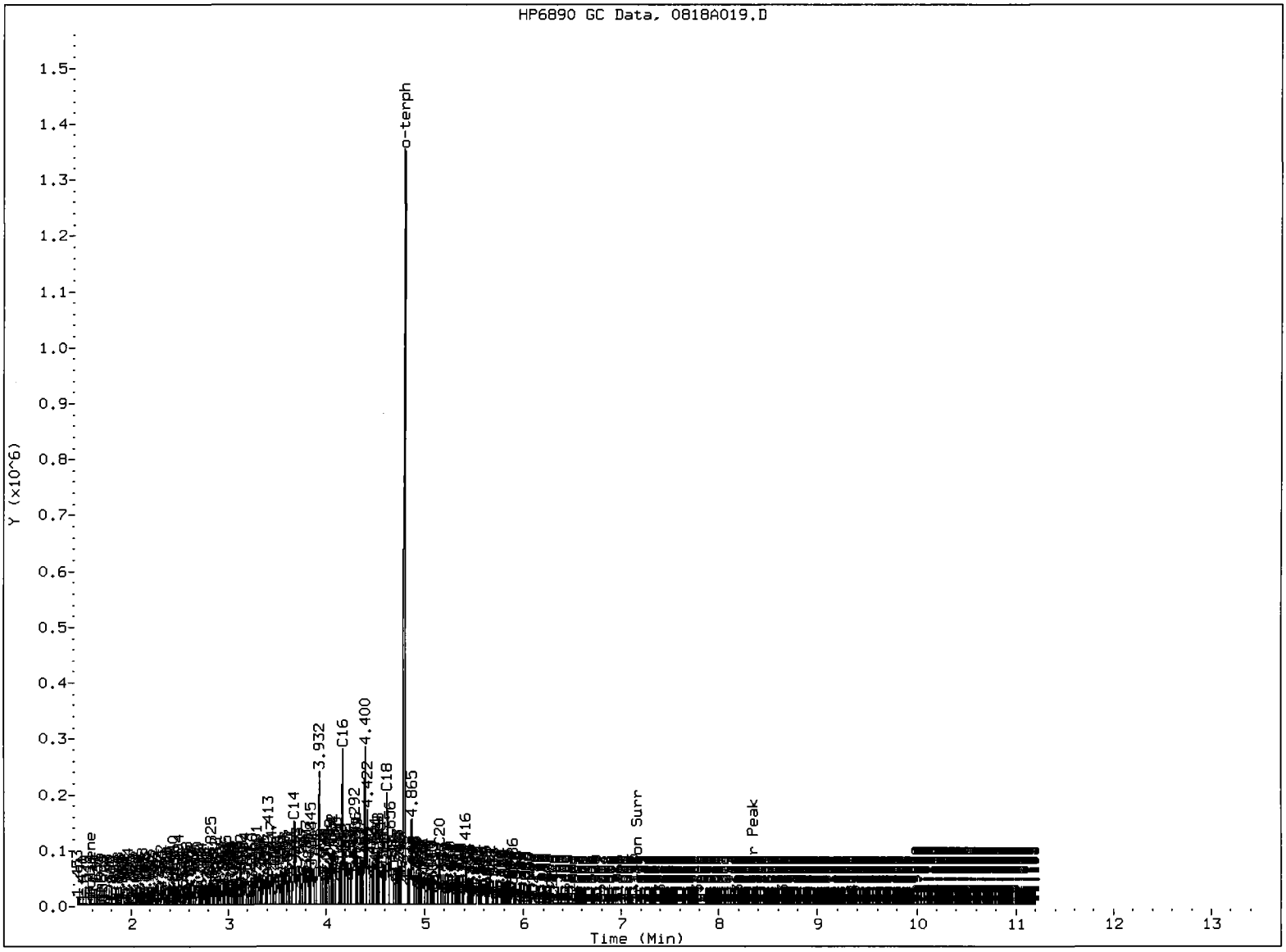
Operator: MS

Column diameter: 0.25

RI45:9075



FID:9A-2C/RTX-1 DIESEL#3 FID:9A SIGNAL



MANUAL INTEGRATION

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

5. Other _____

Analyst: _____ Date: 8/15/10

Analytical Resources Inc.
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100818.b/0818raw.b/0818A020.D ARI ID: MOIL#3
Method: /chem2/fid9.i/20100818.b/ftphfid9a.m Client ID:
Instrument: fid9.i Injection: 18-AUG-2010 19:09
Operator: MS Dilution Factor: 1
Report Date: 08/19/2010 Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.570	0.005	1287	2146	GAS (Tol-C12)	25682	1
C8	1.709	-0.008	582	634	DIESEL (C12-C24)	732910	28
C10	2.479	-0.002	112	35	M.OIL (C24-C38)	6000185	469
C12	3.127	0.008	20	4	AK-102 (C10-C25)	886970	31
C14	3.679	0.003	151	97	AK-103 (C25-C36)	5231719	1044
C16	4.164	-0.006	231	88			
C18	4.624	0.004	1101	1328			
C20	5.149	0.003	2770	5205			
C22	5.664	0.002	10925	7480			
C24	6.099	0.005	24680	20606			
C25	6.297	0.003	31695	8724			
C26	6.472	-0.004	36981	27646			
C28	6.829	-0.004	50478	28965			
C32	7.409	-0.001	60705	12015	JP-4 (Tol-C14)	29188	2
C34	7.776	-0.004	44898	16804	BUNKERC (C10-C38)	6738924	768
Filter Peak	8.348	0.005	25759	11130			
C36	8.187	-0.002	30981	23123			
C38	8.650	0.003	18898	10624			
C40	9.355	0.002	9664	7244			
o-terph	4.788	-0.005	6430	6494	JET-A (C10-C18)	37110	3
Triacon Surr	7.135	-0.010	863486	1079663	JP8 (Tol-C16)	34453	2

M Indicates manual integration within range.
Range Times: NW Diesel(3.119 - 6.095) AK102(2.48 - 6.29) Jet A(2.48 - 4.62)
NW M.Oil(6.09 - 8.65) AK103(6.29 - 8.19) OR Diesel(2.48 - 6.83)

Surrogate	Area	Amount	%Rec
o-Terphenyl	6494	0.3	0.6
Triacontane	1079663	54.4	121.0

8/19/10

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/20100818.b/0818raw.b/0818A020.D

Date : 18-AUG-2010 19:09

Client ID:

Sample Info: MOIL#3

Column phase: RTX-1

Instrument: fid9.i

Operator: MS

Column diameter: 0.25

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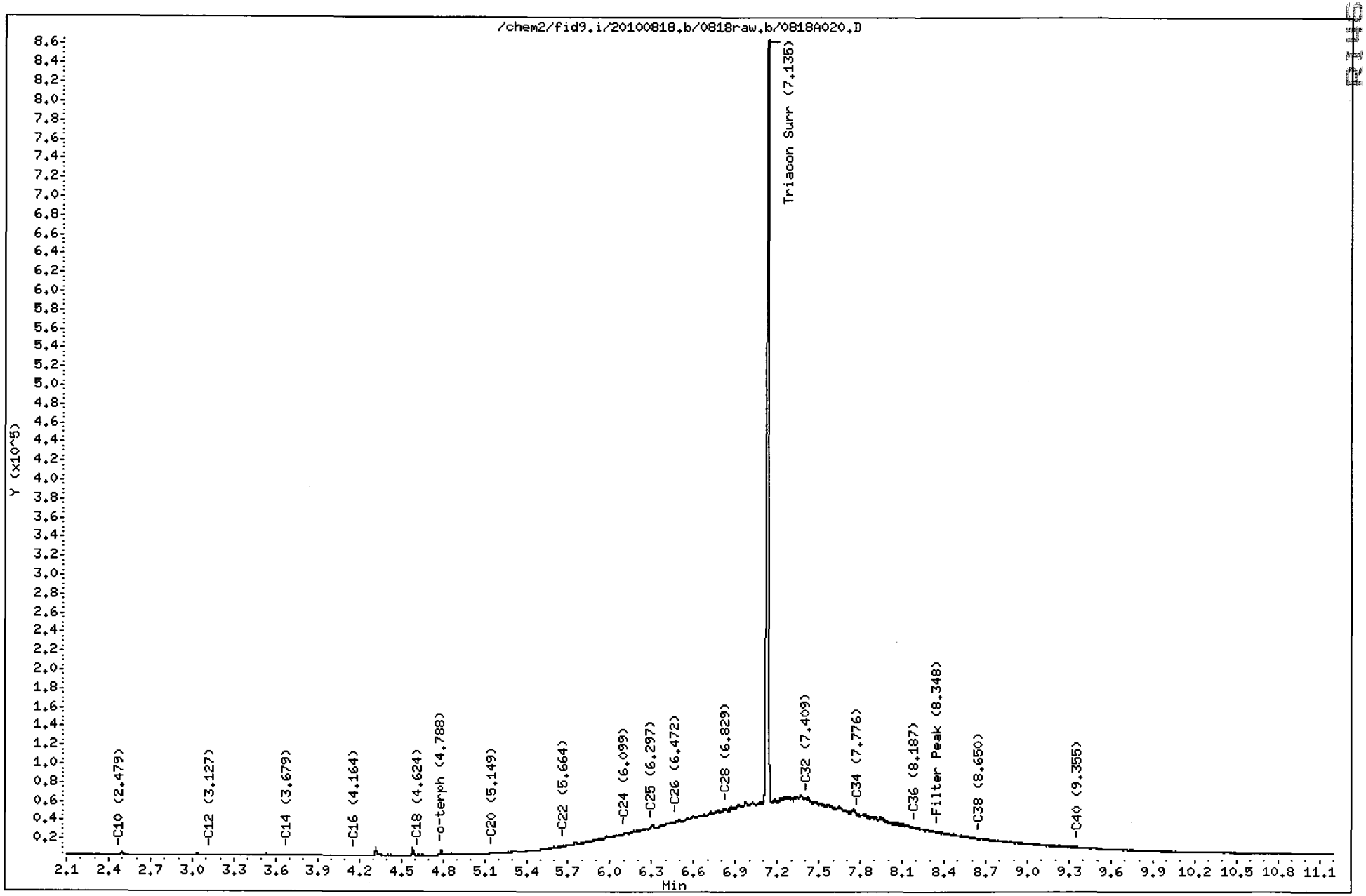


Analytical Resources Inc.
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100818.b/0818A020.D
Method: /chem2/fid9.i/20100818.b/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 08/19/2010

ARI ID: MOIL#3
Client ID:
Injection: 18-AUG-2010 19:09
Dilution Factor: 1
Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.570	0.005	1287	2146	GAS (Tol-C12)	25682	1
C8	1.709	-0.008	582	634	DIESEL (C12-C24)	732910	28
C10	2.479	-0.002	112	35	M.OIL (C24-C38)	6217252	486
C12	3.127	0.008	20	4	AK-102 (C10-C25)	886970	31
C14	3.679	0.003	151	97	AK-103 (C25-C36)	5448786	1088 M
C16	4.164	-0.006	231	88			
C18	4.624	0.004	1101	1328			
C20	5.149	0.003	2770	5205			
C22	5.664	0.002	10925	7480			
C24	6.099	0.005	24680	20606			
C25	6.297	0.003	31695	8724			
C26	6.472	-0.004	36981	27646			
C28	6.829	-0.004	50478	28965			
C32	7.409	-0.001	60705	12015	JP-4 (Tol-C14)	29188	2
C34	7.776	-0.004	44898	16804	BUNKERC (C10-C38)	6955992	793 M
Filter Peak	8.348	0.005	25759	11130			
C36	8.187	-0.002	30981	23123			
C38	8.650	0.003	18898	10624			
C40	9.355	0.002	9664	7244			
o-terph	4.788	-0.005	6430	6494	JET-A (C10-C18)	37110	3
Triacon Surr	7.135	-0.010	803752	863708	JP8 (Tol-C16)	34453	2

M Indicates manual integration within range.
Range Times: NW Diesel(3.119 - 6.095) AK102(2.48 - 6.29) Jet A(2.48 - 4.62)
NW M.Oil(6.09 - 8.65) AK103(6.29 - 8.19) OR Diesel(2.48 - 6.83)

Surrogate	Area	Amount	%Rec
o-Terphenyl	6494	0.3	0.6
Triacontane	863708	43.6	96.8

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/20100818.b/0818A020.D

Date : 18-AUG-2010 19:09

Client ID:

Sample Info: MOIL#3

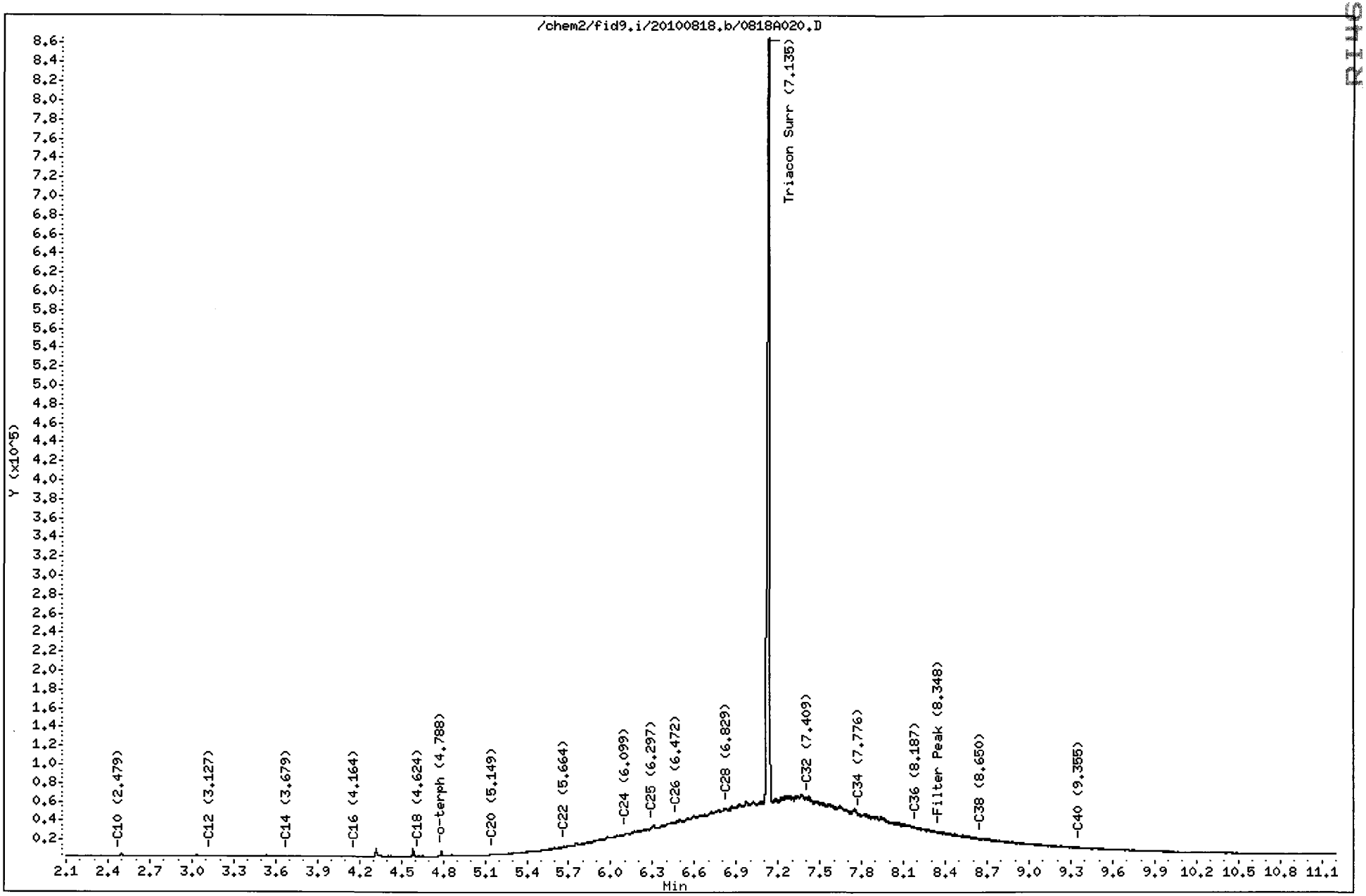
Column phase: RTX-1

Instrument: fid9.i

Operator: MS

Column diameter: 0.25

RIHG : 06711



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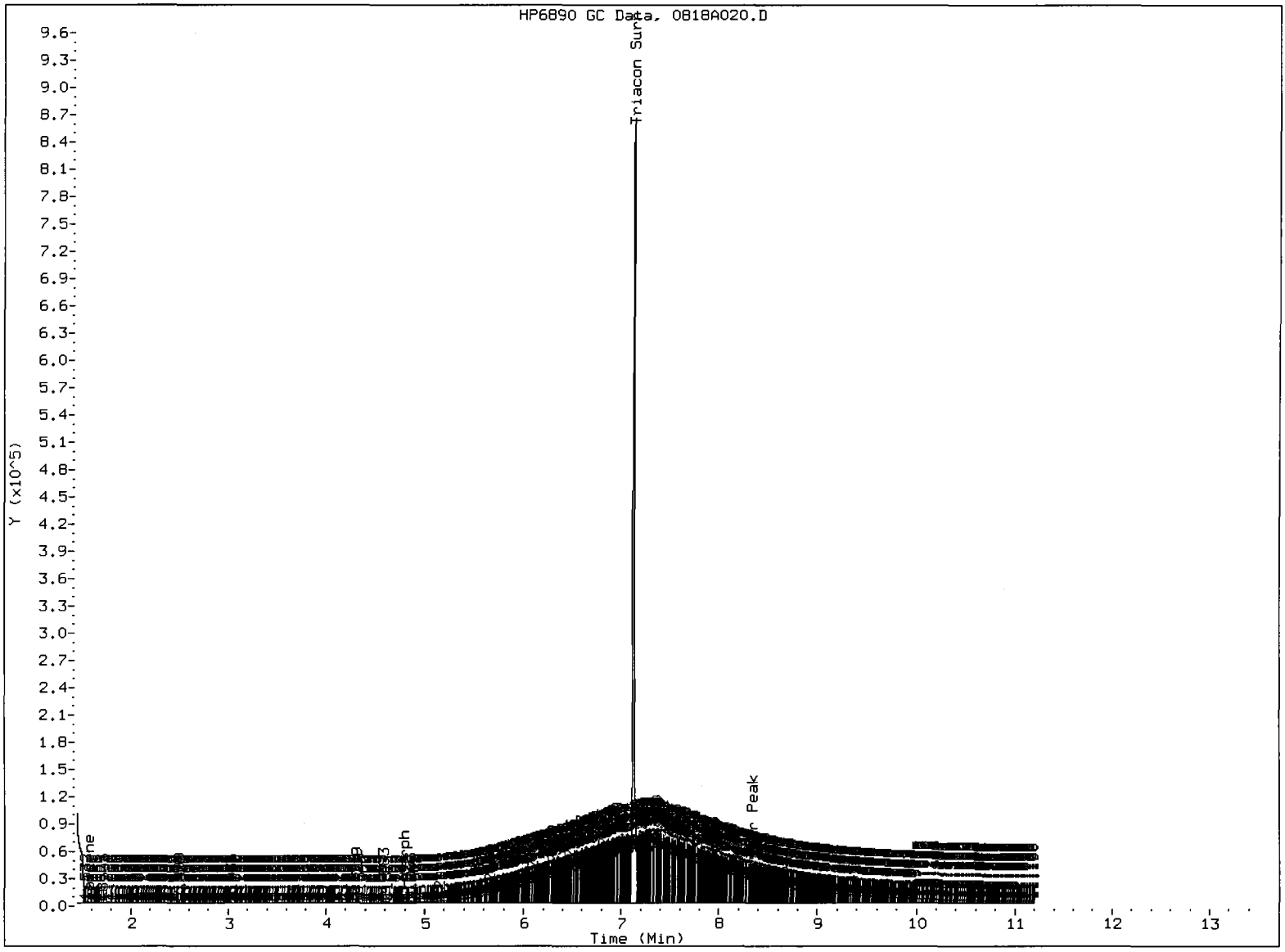

MANUAL INTEGRATION

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

5. Other _____

Analyst: _____ Date: 8/19/16

Analytical Resources Inc.
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100818.b/0818A023.D
Method: /chem2/fid9.i/20100818.b/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 08/19/2010

ARI ID: RI46A
Client ID: MW-02-081110
Injection: 18-AUG-2010 20:14
Dilution Factor: 1
Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.575	0.010	5432	3792	GAS (Tol-C12)	32749	2
C8	1.735	0.019	420	553	DIESEL (C12-C24)	83763	3
C10	2.478	-0.004	622	335	M.OIL (C24-C38)	310937	24
C12	3.121	0.002	23	8	AK-102 (C10-C25)	100063	3
C14	3.673	-0.003	123	75	AK-103 (C25-C36)	279839	56
C16	4.176	0.006	795	953			
C18	4.617	-0.003	889	1153			
C20	5.148	0.002	822	417			
C22	5.668	0.006	550	783			
C24	6.088	-0.006	307	113			
C25	6.290	-0.005	1139	1598			
C26	6.477	0.001	520	557			
C28	6.838	0.006	1476	2070			
C32	7.407	-0.003	2224	3255	JP-4 (Tol-C14)	43054	3
C34	7.783	0.003	1127	532	BUNKERC (C10-C38)	405206	46
Filter Peak	8.350	0.007	997	870			
C36	8.195	0.006	1124	906			
C38	8.647	-0.001	984	761			
C40	9.352	-0.001	931	222			
o-terph	4.792	-0.002	885284	677735	JET-A (C10-C18)	65667	5
Triacon Surr	7.125	-0.020	583948	565520	JP8 (Tol-C16)	66793	4

M Indicates manual integration within range.
Range Times: NW Diesel(3.119 - 6.095) AK102(2.48 - 6.29) Jet A(2.48 - 4.62)
NW M.Oil(6.09 - 8.65) AK103(6.29 - 8.19) OR Diesel(2.48 - 6.83)

Surrogate	Area	Amount	%Rec
o-Terphenyl	677735	26.3	58.5
Triacontane	565520	28.5	63.4

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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

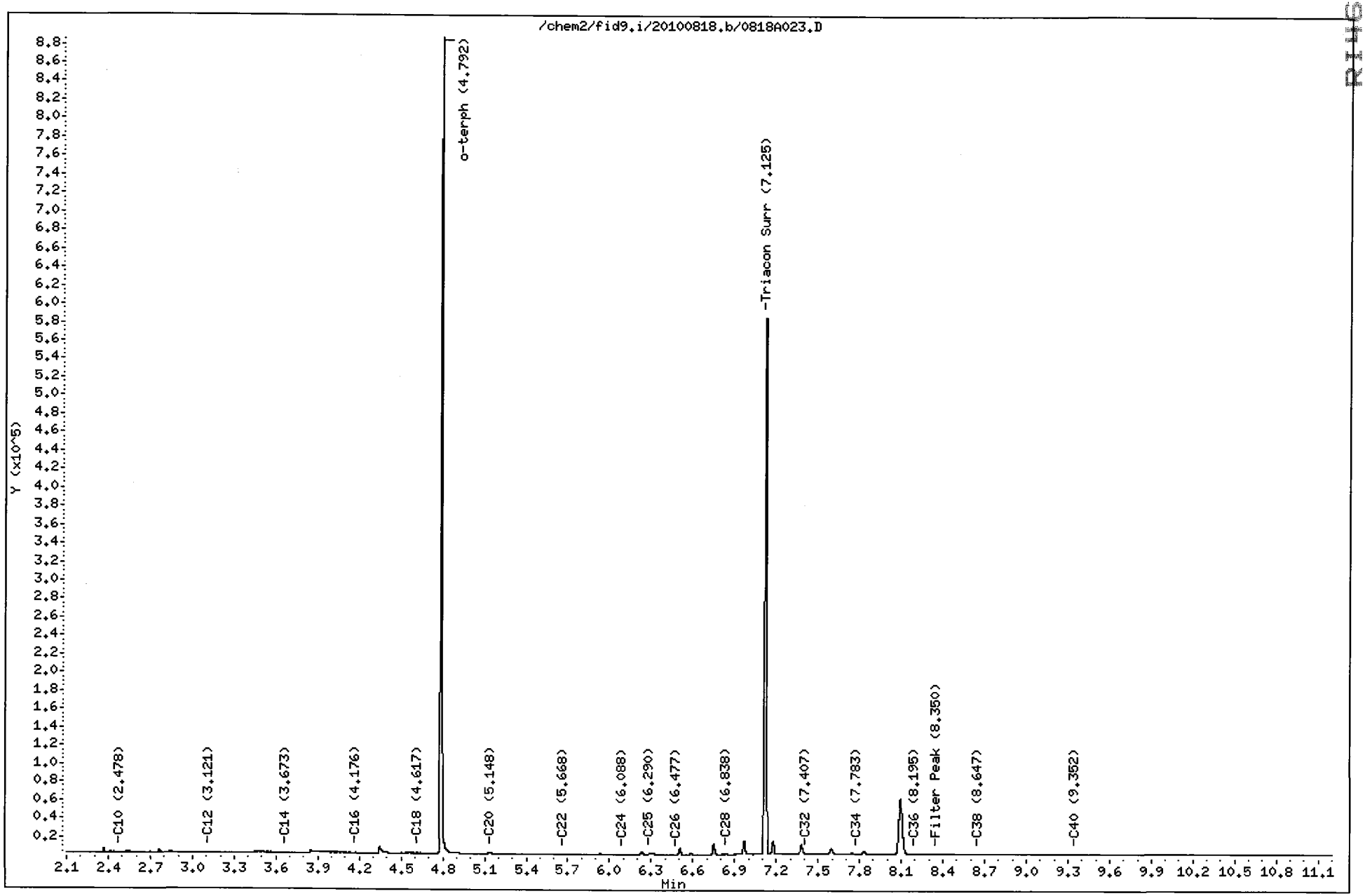
Data File: /chem2/fid9.i/20100818.b/0818A023.D
Date : 18-AUG-2010 20:14
Client ID: MW-02-081110
Sample Info: RI46A

Column phase: RTX-1

Instrument: fid9.i

Operator: MS
Column diameter: 0.25

RTLG-00711



Analytical Resources Inc.
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100818.b/0818A024.D
Method: /chem2/fid9.i/20100818.b/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 08/19/2010

ARI ID: RI46B
Client ID: MW-03-081110
Injection: 18-AUG-2010 20:35
Dilution Factor: 1
Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.573	0.008	5143	3699	GAS (Tol-C12)	34515	2
C8	1.721	0.005	377	96	DIESEL (C12-C24)	87557	3
C10	2.478	-0.003	661	332	M.OIL (C24-C38)	263750	21
C12	3.123	0.004	33	10	AK-102 (C10-C25)	101337	3
C14	3.679	0.003	128	100	AK-103 (C25-C36)	236217	47
C16	4.177	0.007	2026	2355			
C18	4.620	0.000	2353	2228			
C20	5.137	-0.009	982	1460			
C22	5.668	0.006	709	986			
C24	6.099	0.004	450	375			
C25	6.290	-0.005	1172	1587			
C26	6.478	0.002	476	805			
C28	6.838	0.006	1173	1707			
C32	7.405	-0.005	2209	4115	JP-4 (Tol-C14)	45236	3
C34	7.780	0.000	1050	496	BUNKERC (C10-C38)	362466	41
Filter Peak	8.352	0.009	959	286			
C36	8.200	0.010	1054	730			
C38	8.651	0.004	931	795			
C40	9.360	0.007	919	779			
o-terph	4.795	0.001	1088230	857157	JET-A (C10-C18)	68520	5
Triacon Surr	7.126	-0.020	713692	708496	JP8 (Tol-C16)	68080	4

M Indicates manual integration within range.
Range Times: NW Diesel(3.119 - 6.095) AK102(2.48 - 6.29) Jet A(2.48 - 4.62)
NW M.Oil(6.09 - 8.65) AK103(6.29 - 8.19) OR Diesel(2.48 - 6.83)

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Surrogate	Area	Amount	%Rec
o-Terphenyl	857157	33.3	73.9
Triacontane	708496	35.7	79.4

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

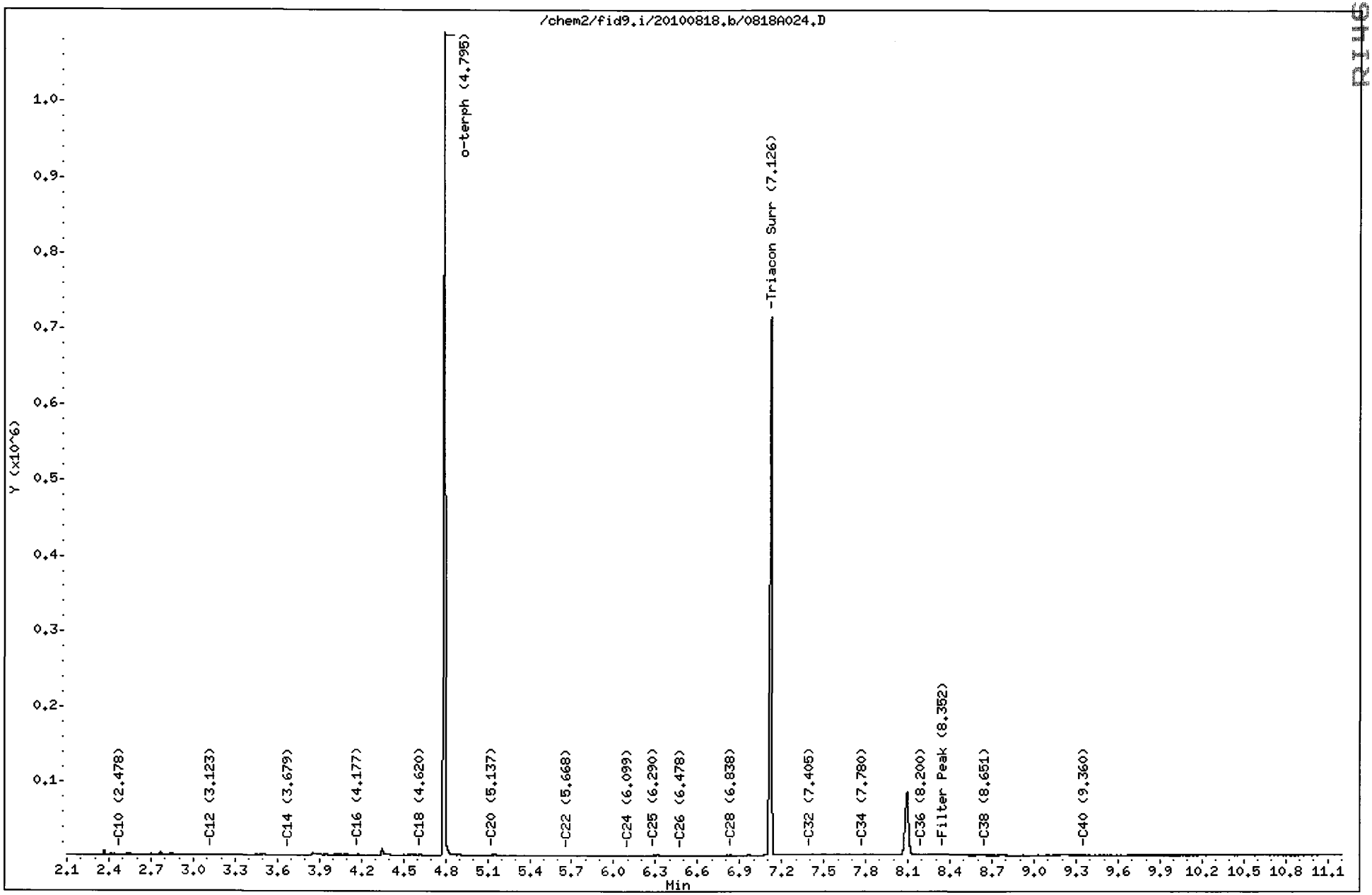
Data File: /chem2/fid9.i/20100818.b/0818A024.D
Date : 18-AUG-2010 20:35
Client ID: MW-03-081110
Sample Info: RI46B

Column phase: RTX-1

Instrument: fid9.i

Operator: MS
Column diameter: 0.25

RI46 : 09716



Analytical Resources Inc.
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100818.b/0818A025.D
Method: /chem2/fid9.i/20100818.b/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 08/19/2010

ARI ID: RI46C
Client ID: MW-03-081110-D
Injection: 18-AUG-2010 20:56
Dilution Factor: 1
Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.574	0.010	4511	3849	GAS (Tol-C12)	37679	2
C8	1.725	0.008	561	208	DIESEL (C12-C24)	69535	3
C10	2.479	-0.003	607	347	M.OIL (C24-C38)	174268	14
C12	3.122	0.002	23	4	AK-102 (C10-C25)	82624	3
C14	3.677	0.001	123	61	AK-103 (C25-C36)	149334	30
C16	4.178	0.008	620	932			
C18	4.615	-0.006	716	866			
C20	5.145	-0.001	615	420			
C22	5.662	0.000	340	143			
C24	6.108	0.013	333	450			
C25	6.289	-0.006	972	1392			
C26	6.478	0.002	363	259			
C28	6.836	0.004	1237	1433			
C32	7.402	-0.008	2038	3909	JP-4 (Tol-C14)	47432	3
C34	7.781	0.001	1010	535	BUNKERC (C10-C38)	254475	29
Filter Peak	8.345	0.001	918	308			
C36	8.197	0.008	983	697			
C38	8.648	0.001	867	222			
C40	9.349	-0.004	854	547			
o-terph	4.794	0.000	975467	789983	JET-A (C10-C18)	60096	4
Triacon Surr	7.124	-0.021	697029	662366	JP8 (Tol-C16)	68278	4

M Indicates manual integration within range.
Range Times: NW Diesel(3.119 - 6.095) AK102(2.48 - 6.29) Jet A(2.48 - 4.62)
NW M.Oil(6.09 - 8.65) AK103(6.29 - 8.19) OR Diesel(2.48 - 6.83)

Surrogate	Area	Amount	%Rec
o-Terphenyl	789983	30.7	68.1
Triacontane	662366	33.4	74.2

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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/20100818.b/0818A025.D

Date : 18-AUG-2010 20:56

Client ID: MW-03-081110-D

Sample Info: RI46C

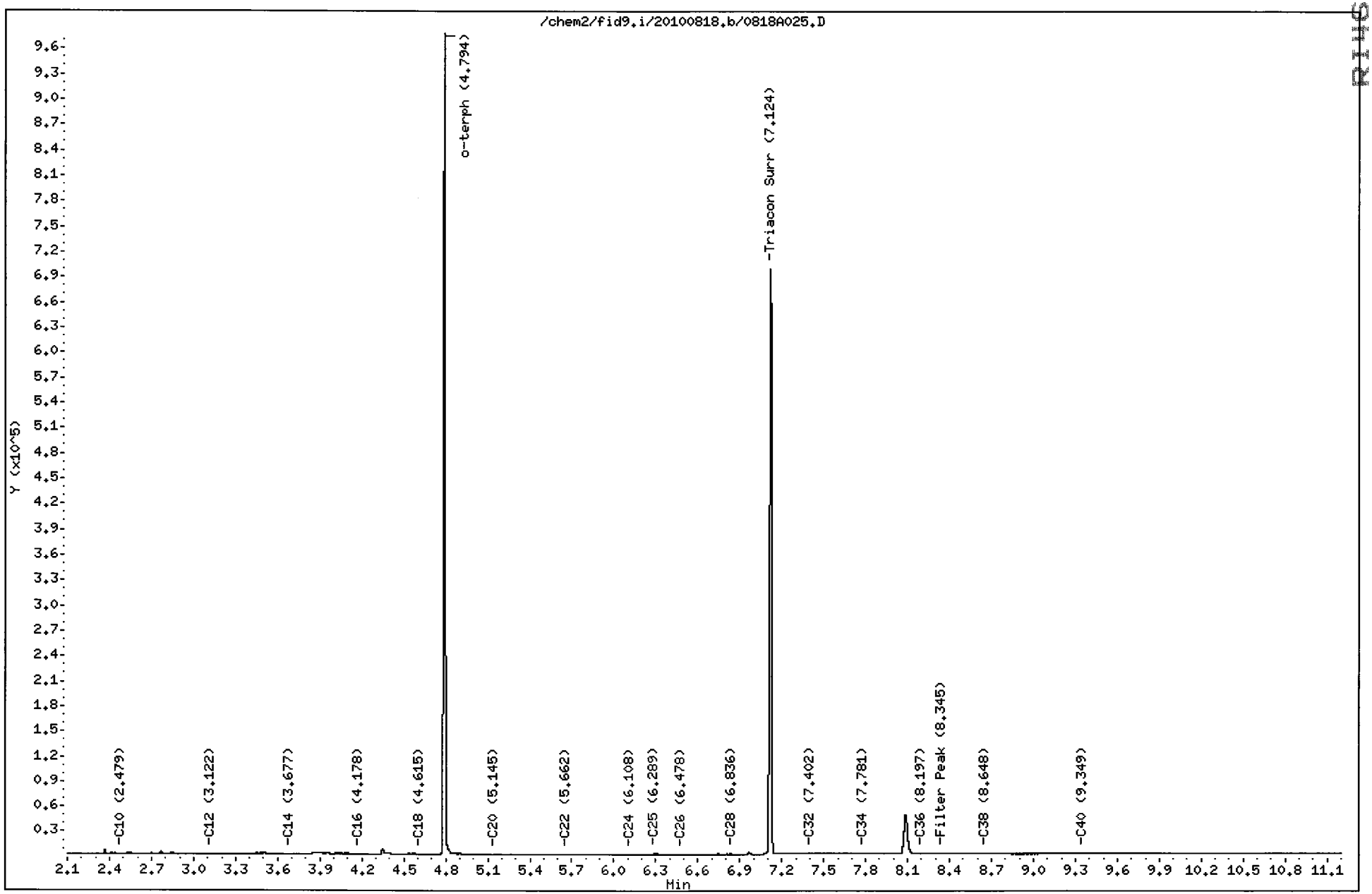
Column phase: RTX-1

Instrument: fid9.i

Operator: MS

Column diameter: 0.25

RI46-0718



Analytical Resources Inc.
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100818.b/0818A026.D
Method: /chem2/fid9.i/20100818.b/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 08/19/2010

ARI ID: RI46D
Client ID: MW-04-081110
Injection: 18-AUG-2010 21:18
Dilution Factor: 1
Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.576	0.011	4622	3762	GAS (Tol-C12)	39441	2
C8	1.723	0.006	564	88	DIESEL (C12-C24)	75256	3
C10	2.479	-0.002	703	449	M.OIL (C24-C38)	268339	21
C12	3.118	-0.001	27	14	AK-102 (C10-C25)	88778	3
C14	3.673	-0.003	107	26	AK-103 (C25-C36)	242136	48
C16	4.178	0.008	564	747			
C18	4.616	-0.004	652	553			
C20	5.150	0.004	808	728			
C22	5.658	-0.004	375	86			
C24	6.091	-0.004	271	232			
C25	6.289	-0.005	1090	1501			
C26	6.481	0.005	452	495			
C28	6.837	0.005	4161	4571			
C32	7.407	-0.003	2154	3631	JP-4 (Tol-C14)	48444	3
C34	7.781	0.001	1058	625	BUNKERC (C10-C38)	354421	40
Filter Peak	8.344	0.001	948	319			
C36	8.180	-0.009	1110	1365			
C38	8.643	-0.005	892	529			
C40	9.353	0.000	874	641			
o-terph	4.794	0.001	1030196	856257	JET-A (C10-C18)	57736	4
Triacon Surr	7.127	-0.018	706135	682518	JP8 (Tol-C16)	67823	4

M Indicates manual integration within range.
Range Times: NW Diesel(3.119 - 6.095) AK102(2.48 - 6.29) Jet A(2.48 - 4.62)
NW M.Oil(6.09 - 8.65) AK103(6.29 - 8.19) OR Diesel(2.48 - 6.83)

Surrogate	Area	Amount	%Rec
o-Terphenyl	856257	33.2	73.9
Triacontane	682518	34.4	76.5

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

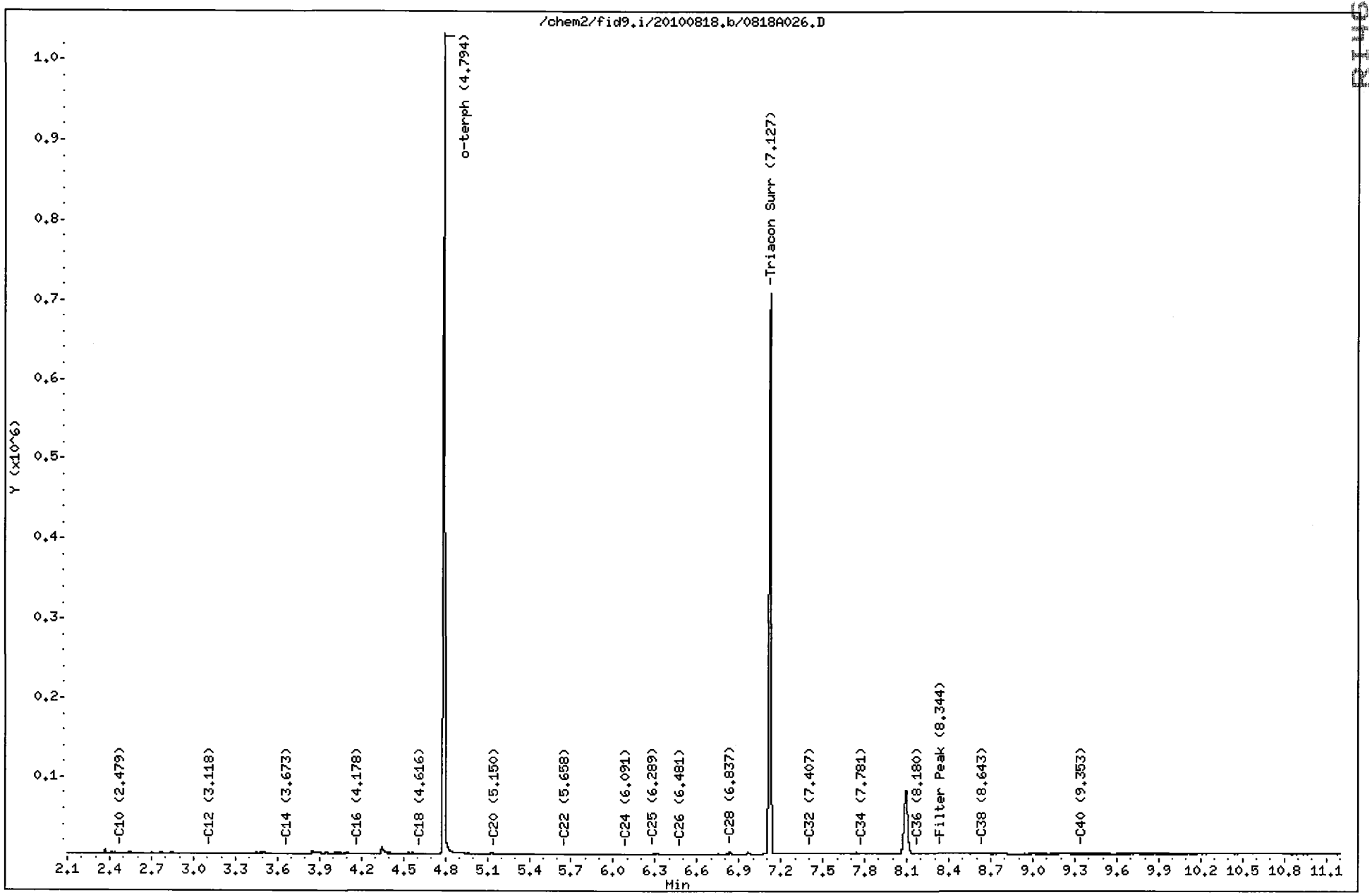
Data File: /chem2/fid9.i/20100818.b/0818A026.D
Date : 18-AUG-2010 21:18
Client ID: MW-04-081110
Sample Info: RI46D

Column phase: RTX-1

Instrument: fid9.i

Operator: MS
Column diameter: 0.25

RI46 - 66729



Analytical Resources Inc.
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100818.b/0818A027.D
Method: /chem2/fid9.i/20100818.b/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 08/19/2010

ARI ID: RI46E
Client ID: MW-14-081110
Injection: 18-AUG-2010 21:39
Dilution Factor: 1
Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.575	0.011	4890	3894	GAS (Tol-C12)	35463	2
C8	1.723	0.007	463	118	DIESEL (C12-C24)	71261	3
C10	2.479	-0.003	669	390	M.OIL (C24-C38)	244812	19
C12	3.116	-0.004	20	9	AK-102 (C10-C25)	84502	3
C14	3.679	0.003	104	74	AK-103 (C25-C36)	219410	44
C16	4.177	0.007	588	969			
C18	4.614	-0.007	655	701			
C20	5.141	-0.004	799	697			
C22	5.671	0.009	461	642			
C24	6.085	-0.009	242	97			
C25	6.289	-0.005	978	1440			
C26	6.481	0.005	433	444			
C28	6.838	0.006	1446	1754			
C32	7.405	-0.005	2233	3435	JP-4 (Tol-C14)	44621	3
C34	7.780	0.000	1038	450	BUNKERC (C10-C38)	326194	37
Filter Peak	8.348	0.004	918	563			
C36	8.177	-0.012	1083	1400			
C38	8.641	-0.006	886	665			
C40	9.356	0.003	861	650			
o-terph	4.795	0.001	1036653	859095	JET-A (C10-C18)	57050	4
Triacon Surr	7.126	-0.019	734970	707598	JP8 (Tol-C16)	64193	4

M Indicates manual integration within range.
Range Times: NW Diesel(3.119 - 6.095) AK102(2.48 - 6.29) Jet A(2.48 - 4.62)
NW M.Oil(6.09 - 8.65) AK103(6.29 - 8.19) OR Diesel(2.48 - 6.83)

Surrogate	Area	Amount	%Rec
o-Terphenyl	859095	33.3	74.1
Triacontane	707598	35.7	79.3

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/20100818.b/0818A027.D

Date : 18-AUG-2010 21:39

Client ID: MW-14-081110

Sample Info: RI46E

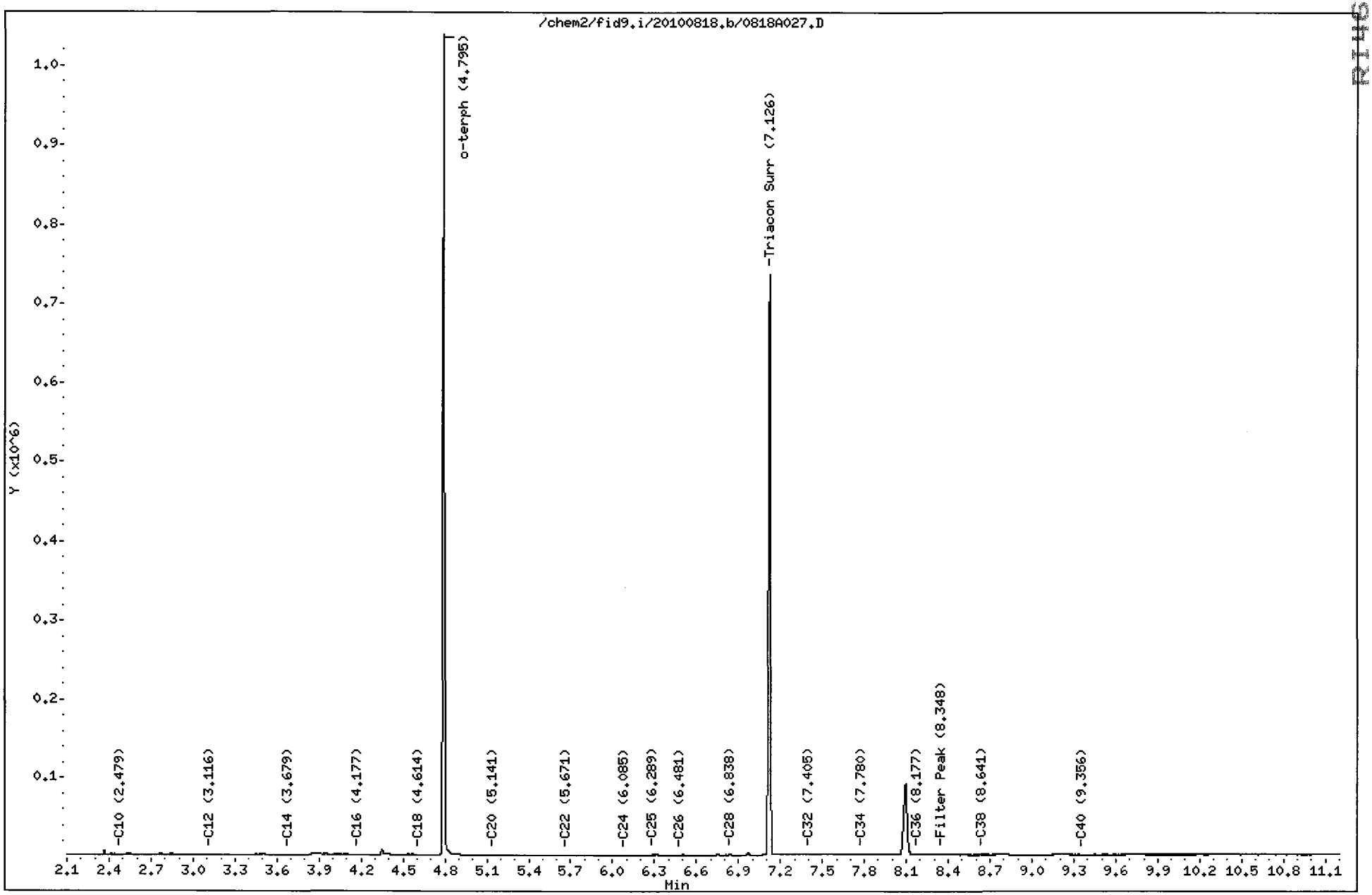
Column phase: RTX-1

Instrument: fid9.i

Operator: MS

Column diameter: 0.25

RI46 : 00722



Analytical Resources Inc.
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100818.b/0818A028.D
Method: /chem2/fid9.i/20100818.b/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 08/19/2010

ARI ID: RI46F
Client ID: MW-12-081210
Injection: 18-AUG-2010 22:01
Dilution Factor: 1
Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.562	-0.003	618	85	GAS (Tol-C12)	30786	1
C8	1.721	0.005	356	83	DIESEL (C12-C24)	69983	3
C10	2.479	-0.003	631	329	M.OIL (C24-C38)	231151	18
C12	3.122	0.003	25	10	AK-102 (C10-C25)	82164	3
C14	3.677	0.001	110	45	AK-103 (C25-C36)	205745	41
C16	4.177	0.007	604	872			
C18	4.614	-0.007	704	720			
C20	5.145	0.000	664	499			
C22	5.671	0.010	447	543			
C24	6.097	0.002	282	70			
C25	6.289	-0.006	991	1341			
C26	6.480	0.004	403	537			
C28	6.839	0.007	860	1109			
C32	7.407	-0.003	2087	3188	JP-4 (Tol-C14)	40055	2
C34	7.779	-0.001	997	573	BUNKERC (C10-C38)	310857	35
Filter Peak	8.344	0.001	902	712			
C36	8.193	0.004	1009	578			
C38	8.649	0.002	860	497			
C40	9.348	-0.004	859	392			
o-terph	4.794	0.000	989182	817697	JET-A (C10-C18)	56151	4
Triacon Surr	7.127	-0.018	669590	675717	JP8 (Tol-C16)	58629	3

M Indicates manual integration within range.
Range Times: NW Diesel(3.119 - 6.095) AK102(2.48 - 6.29) Jet A(2.48 - 4.62)
NW M.Oil(6.09 - 8.65) AK103(6.29 - 8.19) OR Diesel(2.48 - 6.83)

Surrogate	Area	Amount	%Rec
o-Terphenyl	817697	31.7	70.5
Triacontane	675717	34.1	75.7

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/20100818.b/0818A028.D

Date : 18-AUG-2010 22:01

Client ID: MW-12-081210

Sample Info: RI46F

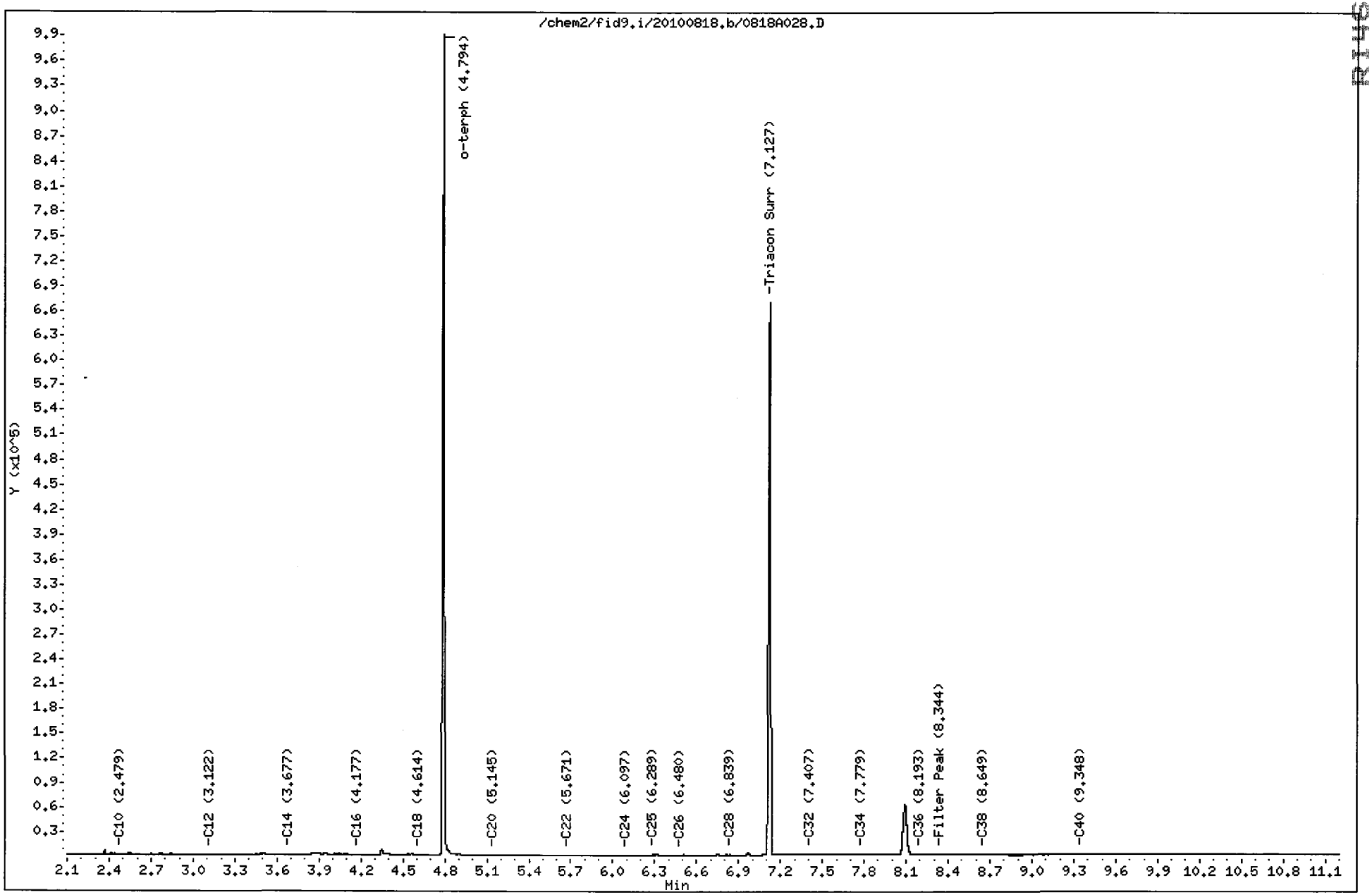
Column phase: RTX-1

Instrument: fid9.i

Operator: MS

Column diameter: 0.25

RI46 : 007211



Analytical Resources Inc.
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100818.b/0818A029.D
Method: /chem2/fid9.i/20100818.b/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 08/19/2010

ARI ID: RI46G
Client ID: MW-13-081210
Injection: 18-AUG-2010 22:22
Dilution Factor: 1
Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.575	0.011	4856	3744	GAS (Tol-C12)	35015	2
C8	1.719	0.003	423	99	DIESEL (C12-C24)	66571	3
C10	2.479	-0.003	724	393	M.OIL (C24-C38)	228856	18
C12	3.119	-0.001	29	4	AK-102 (C10-C25)	78999	3
C14	3.676	0.000	109	34	AK-103 (C25-C36)	205733	41
C16	4.177	0.007	546	685			
C18	4.615	-0.006	652	857			
C20	5.144	-0.002	634	175			
C22	5.669	0.008	411	593			
C24	6.101	0.006	357	234			
C25	6.286	-0.008	956	1192			
C26	6.477	0.001	460	591			
C28	6.836	0.004	1400	1789			
C32	7.404	-0.006	2054	3292	JP-4 (Tol-C14)	44205	3
C34	7.778	-0.002	1043	345	BUNKERC (C10-C38)	305334	35
Filter Peak	8.339	-0.005	895	444			
C36	8.198	0.009	990	745			
C38	8.642	-0.005	857	289			
C40	9.346	-0.007	845	648			
o-terph	4.793	-0.001	961790	786567	JET-A (C10-C18)	53987	4
Triacon Surr	7.124	-0.021	678937	637086	JP8 (Tol-C16)	61598	4

M Indicates manual integration within range.
Range Times: NW Diesel(3.119 - 6.095) AK102(2.48 - 6.29) Jet A(2.48 - 4.62)
NW M.Oil(6.09 - 8.65) AK103(6.29 - 8.19) OR Diesel(2.48 - 6.83)

Surrogate	Area	Amount	%Rec
o-Terphenyl	786567	30.5	67.8
Triacontane	637086	32.1	71.4

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

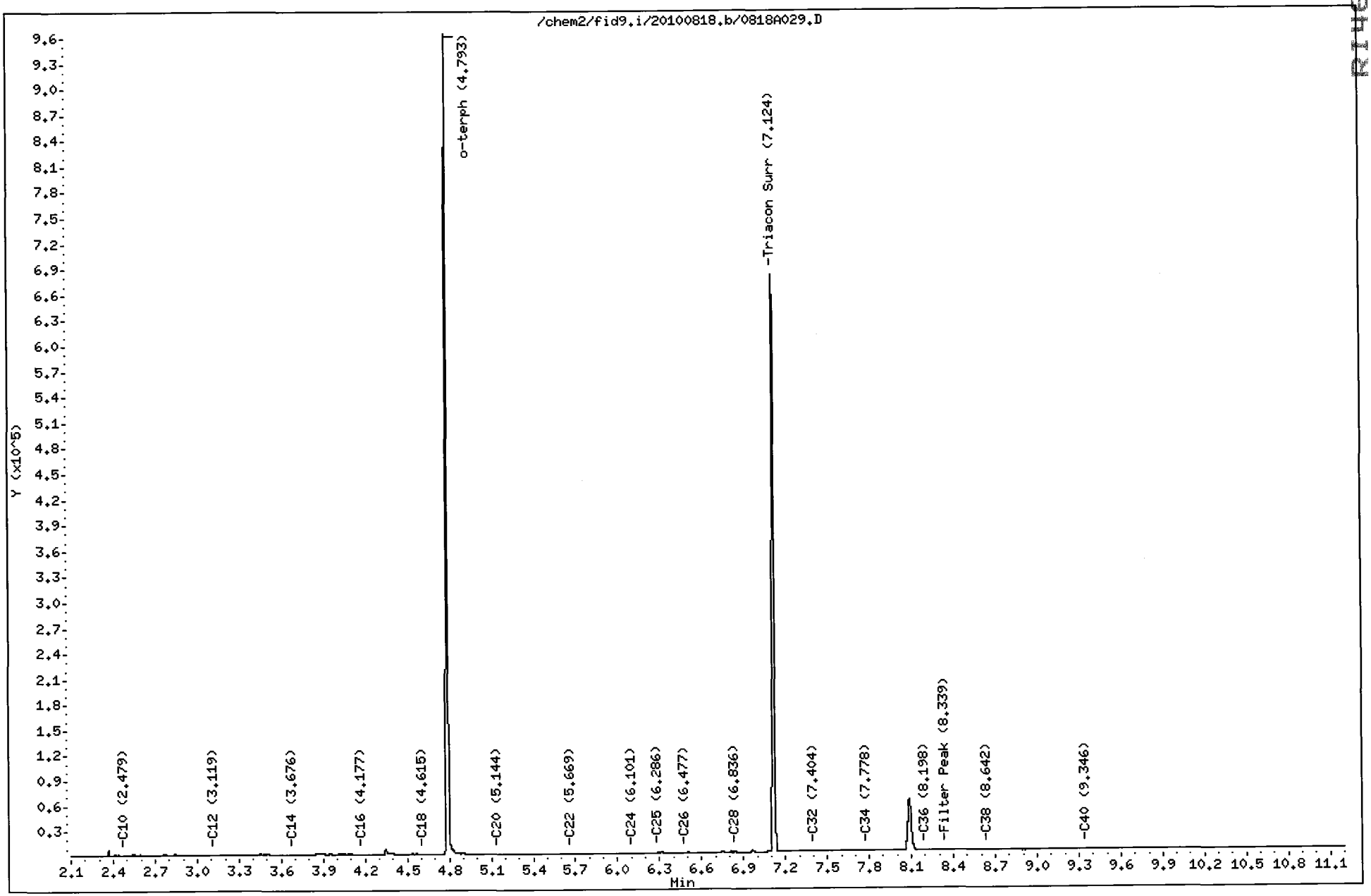
8/15/10

Data File: /chem2/fid9.i/20100818.b/0818A029.D
Date : 18-AUG-2010 22:22
Client ID: MW-13-081210
Sample Info: RI46G

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

Column phase: RTX-1

RTH6:00726



Analytical Resources Inc.
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100818.b/0818A030.D
Method: /chem2/fid9.i/20100818.b/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 08/19/2010

ARI ID: RI46H
Client ID: MW-10-081210
Injection: 18-AUG-2010 22:43
Dilution Factor: 1
Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.576	0.011	4081	3245	GAS (Tol-C12)	33068	2
C8	1.726	0.010	388	121	DIESEL (C12-C24)	68771	3
C10	2.479	-0.003	644	360	M.OIL (C24-C38)	292888	23
C12	3.113	-0.006	34	20	AK-102 (C10-C25)	80527	3
C14	3.675	-0.001	126	51	AK-103 (C25-C36)	269576	54
C16	4.180	0.010	518	618			
C18	4.620	0.000	527	780			
C20	5.137	-0.009	736	1311			
C22	5.668	0.006	411	596			
C24	6.106	0.011	403	476			
C25	6.291	-0.004	942	1480			
C26	6.481	0.005	497	697			
C28	6.851	0.019	665	851			
C32	7.403	-0.007	2067	4274	JP-4 (Tol-C14)	42740	3
C34	7.776	-0.004	987	292	BUNKERC (C10-C38)	371876	42
Filter Peak	8.345	0.002	896	426			
C36	8.198	0.009	998	747			
C38	8.644	-0.003	840	299			
C40	9.356	0.003	832	591			
o-terph	4.794	0.000	983963	805769	JET-A (C10-C18)	54075	4
Triacon Surr	7.126	-0.019	703133	672220	JP8 (Tol-C16)	56696	3

M Indicates manual integration within range.
Range Times: NW Diesel(3.119 - 6.095) AK102(2.48 - 6.29) Jet A(2.48 - 4.62)
NW M.Oil(6.09 - 8.65) AK103(6.29 - 8.19) OR Diesel(2.48 - 6.83)

Surrogate	Area	Amount	%Rec
o-Terphenyl	805769	31.3	69.5
Triacontane	672220	33.9	75.3

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

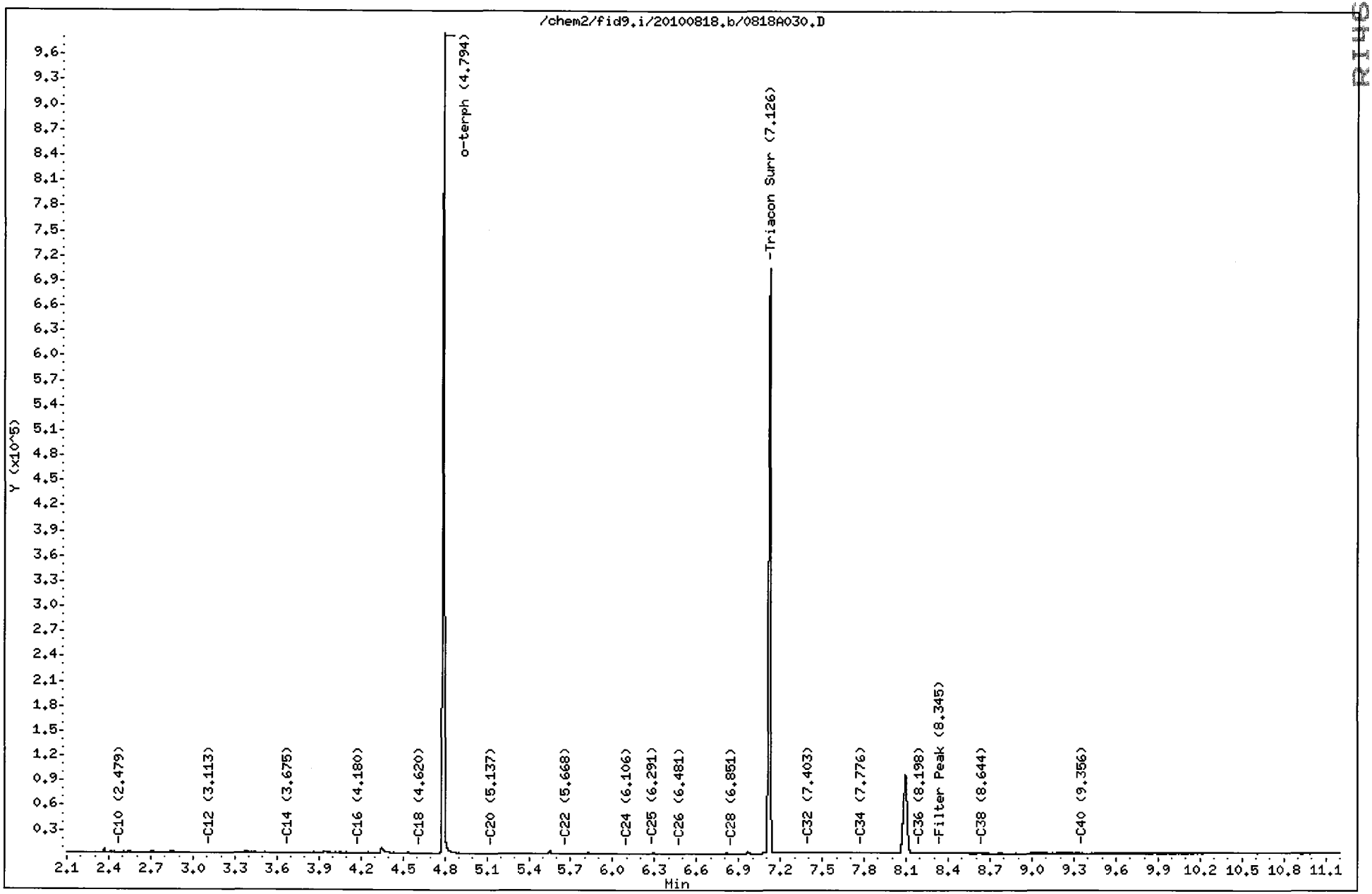
Data File: /chem2/fid9.i/20100818.b/0818A030.D
Date : 18-AUG-2010 22:43
Client ID: MW-10-081210
Sample Info: RI46H

Column phase: RTX-1

Instrument: fid9.i

Operator: MS
Column diameter: 0.25

RI46:00729



Analytical Resources Inc.
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100818.b/0818A031.D
Method: /chem2/fid9.i/20100818.b/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 08/19/2010

ARI ID: RI46I
Client ID: MW-11-081210
Injection: 18-AUG-2010 23:05
Dilution Factor: 1
Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.574	0.010	4930	3580	GAS (Tol-C12)	35370	2
C8	1.724	0.008	389	45	DIESEL (C12-C24)	71564	3
C10	2.479	-0.002	734	426	M.OIL (C24-C38)	241422	19
C12	3.117	-0.002	25	10	AK-102 (C10-C25)	84444	3
C14	3.677	0.001	147	28	AK-103 (C25-C36)	218683	44
C16	4.178	0.008	816	1121			
C18	4.619	-0.002	781	1004			
C20	5.147	0.002	687	228			
C22	5.667	0.005	430	598			
C24	6.096	0.002	273	161			
C25	6.288	-0.007	1101	1427			
C26	6.476	0.001	394	330			
C28	6.834	0.001	1013	1605			
C32	7.399	-0.011	2157	3792	JP-4 (Tol-C14)	46042	3
C34	7.778	-0.002	1067	481	BUNKERC (C10-C38)	323640	37
Filter Peak	8.340	-0.003	866	222			
C36	8.188	-0.002	973	1541			
C38	8.652	0.004	813	580			
C40	9.345	-0.007	799	699			
o-terph	4.795	0.002	1137800	887738	JET-A (C10-C18)	62576	5
Triacon Surr	7.122	-0.023	731666	726620	JP8 (Tol-C16)	66760	4

M Indicates manual integration within range.
Range Times: NW Diesel(3.119 - 6.095) AK102(2.48 - 6.29) Jet A(2.48 - 4.62)
NW M.Oil(6.09 - 8.65) AK103(6.29 - 8.19) OR Diesel(2.48 - 6.83)

Surrogate	Area	Amount	%Rec
o-Terphenyl	887738	34.5	76.6
Triacontane	726620	36.6	81.4

8/19/10

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

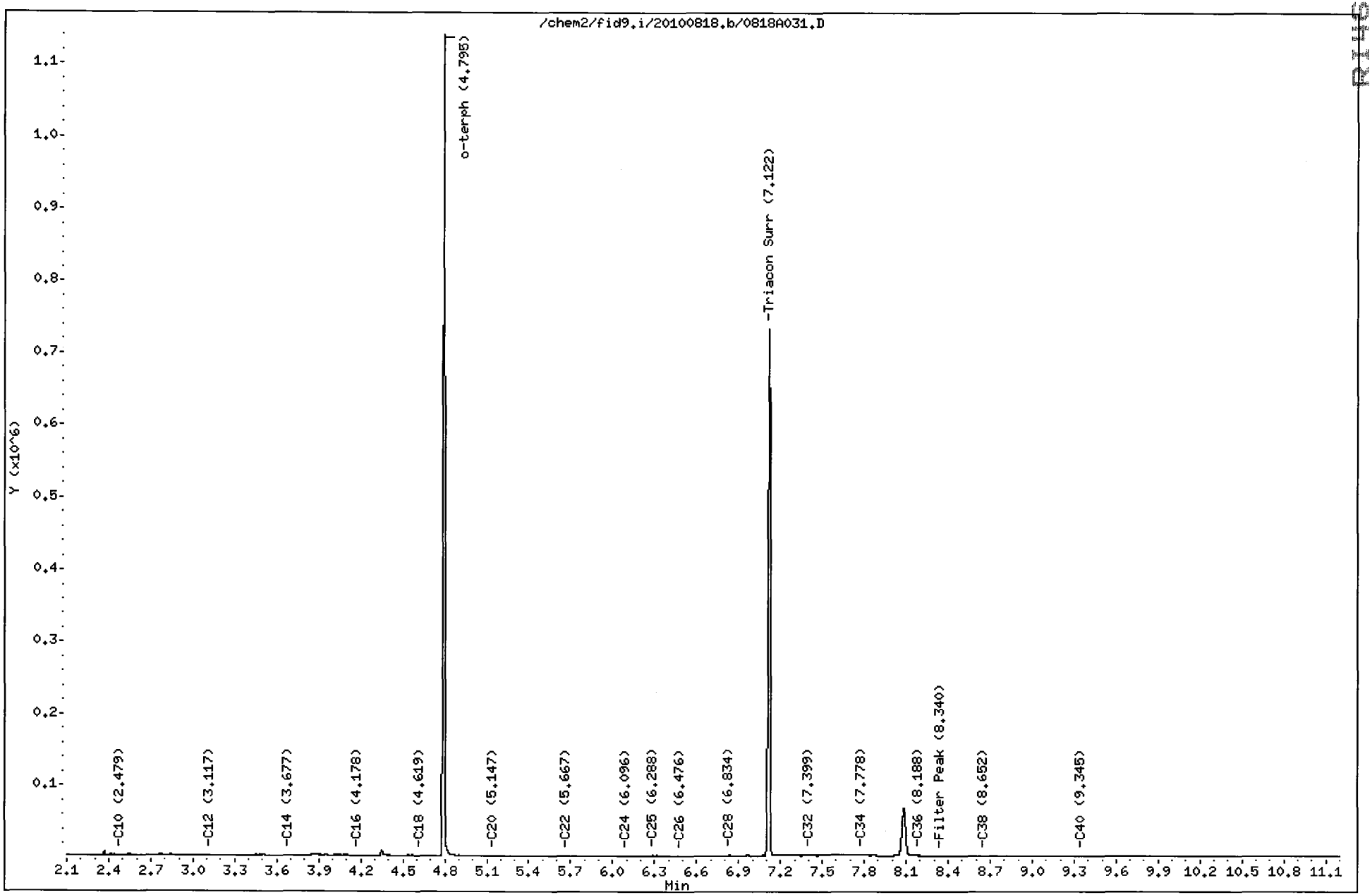
Data File: /chem2/fid9.i/20100818.b/0818A031.D
Date : 18-AUG-2010 23:05
Client ID: MW-11-081210
Sample Info: RI46I

Column phase: RTX-1

Instrument: fid9.i

Operator: MS
Column diameter: 0.25

RI46 : 00739



Analytical Resources Inc.
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100818.b/0818A032.D
Method: /chem2/fid9.i/20100818.b/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 08/19/2010

ARI ID: RI46LCSW1
Client ID: RI46LCSW1
Injection: 18-AUG-2010 23:26
Dilution Factor: 1
Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.577	0.012	26093	14038	GAS (Tol-C12)	2665665	127
C8	1.703	-0.013	2345	1840	DIESEL (C12-C24)	25908871	984
C10	2.495	0.013	113546	79089	M.OIL (C24-C38)	1177415	92
C12	3.129	0.009	298546	162093	AK-102 (C10-C25)	28170411	970
C14	3.683	0.007	614282	586669	AK-103 (C25-C36)	1058056	211
C16	4.162	-0.008	234403	153320			
C18	4.612	-0.009	178643	53171			
C20	5.159	0.013	423685	521634			
C22	5.666	0.005	222410	253481			
C24	6.097	0.003	72243	88130			
C25	6.291	-0.004	32746	54411			
C26	6.475	-0.001	13303	24072			
C28	6.837	0.004	2305	3441			
C32	7.402	-0.008	1846	3013	JP-4 (Tol-C14)	6491074	396
C34	7.781	0.001	723	1052	BUNKERC (C10-C38)	29239410	3334
Filter Peak	8.343	-0.001	490	303			
C36	8.182	-0.007	661	609			
C38	8.651	0.004	408	190			
C40	9.355	0.002	363	284			
o-terph	4.800	0.007	1090466	1193050	JET-A (C10-C18)	20249110	1465
Triacon Surr	7.163	0.018	1163	342	JP8 (Tol-C16)	13250951	753

M Indicates manual integration within range.
Range Times: NW Diesel(3.119 - 6.095) AK102(2.48 - 6.29) Jet A(2.48 - 4.62)
NW M.Oil(6.09 - 8.65) AK103(6.29 - 8.19) OR Diesel(2.48 - 6.83)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1193050	46.3	102.9
Triacontane	342	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/20100818.b/0818A032.D

Date : 18-AUG-2010 23:26

Client ID: RI46LCSW1

Sample Info: RI46LCSW1

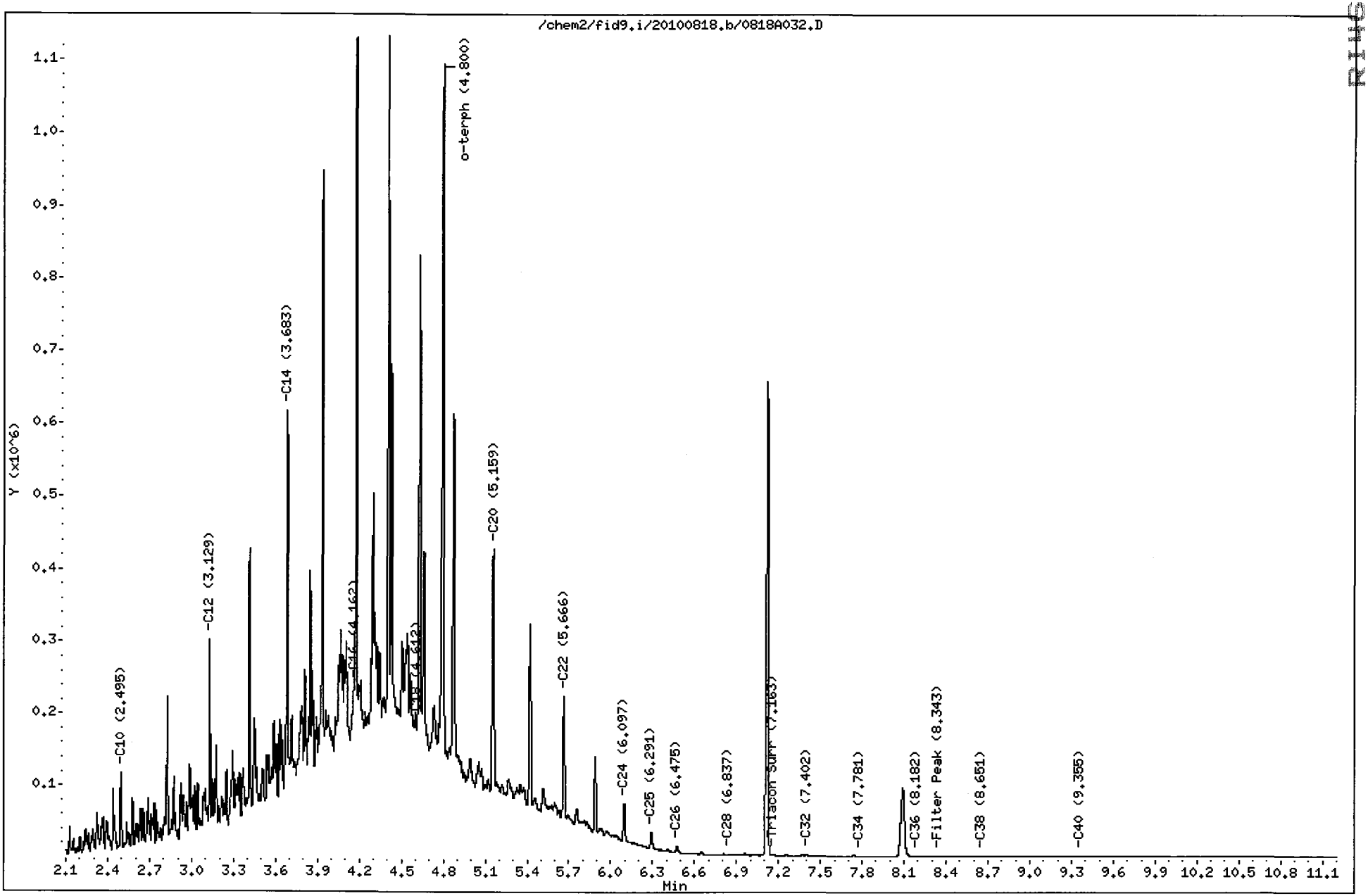
Column phase: RTX-1

Instrument: fid9.i

Operator: MS

Column diameter: 0.25

RI46 : 66732



Analytical Resources Inc.
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100818.b/0818A032.D
Method: /chem2/fid9.i/20100818.b/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 08/19/2010

ARI ID: RI46LCSW1
Client ID: RI46LCSW1
Injection: 18-AUG-2010 23:26
Dilution Factor: 1
Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc	
Toluene	1.577	0.012	26093	14038	GAS (Tol-C12)	2665665	127	
C8	1.703	-0.013	2345	1840	DIESEL (C12-C24)	26317152	999	
C10	2.495	0.013	113546	79089	M.OIL (C24-C38)	554105	43	
C12	3.129	0.009	298546	162093	AK-102 (C10-C25)	28578691	984	M
C14	3.683	0.007	614282	586669	AK-103 (C25-C36)	433678	87	
C16	4.162	-0.008	234403	153320				
C18	4.612	-0.009	178643	53171				
C20	5.159	0.013	423685	521634				
C22	5.666	0.005	222410	253481				
C24	6.097	0.003	72243	88130				
C25	6.291	-0.004	32746	54411				
C26	6.475	-0.001	13303	24072				
C28	6.837	0.004	2305	3441				
C32	7.402	-0.008	1846	3013	JP-4 (Tol-C14)	6491074	396	
C34	7.781	0.001	723	1052	BUNKERC (C10-C38)	29024381	3309	M
Filter Peak	8.343	-0.001	490	303				
C36	8.182	0.036	661	609				
C38	8.651	0.004	408	190				
C40	9.355	0.002	363	284				
o-terph	4.800	0.007	930396	787971	JET-A (C10-C18)	20249110	1465	
Triacon Surr	7.124	-0.022	655543	623652	JP8 (Tol-C16)	13250951	753	

M Indicates manual integration within range.
Range Times: NW Diesel(3.119 - 6.095) AK102(2.48 - 6.29) Jet A(2.48 - 4.62)
NW M.Oil(6.09 - 8.65) AK103(6.29 - 8.15) OR Diesel(2.48 - 6.83)

Surrogate	Area	Amount	%Rec
o-Terphenyl	787971	30.6	68.0
Triacontane	623652	31.4	69.9

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

Data File: /chem2/fid9.i/20100818.b/0818A032.D

Date : 18-AUG-2010 23:26

Client ID: RI46LCSW1

Sample Info: RI46LCSW1

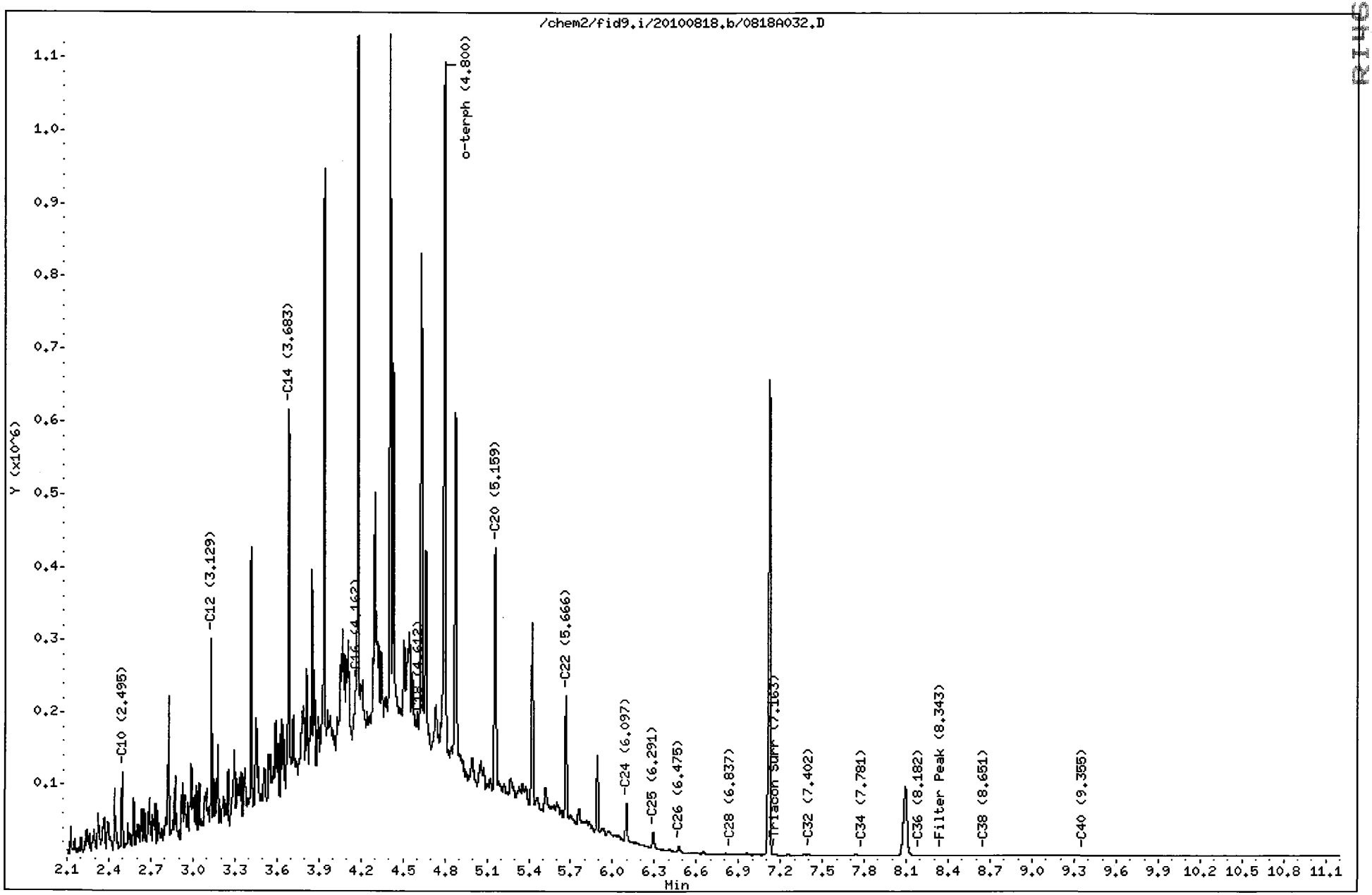
Column phase: RTX-1

Instrument: fid9.i

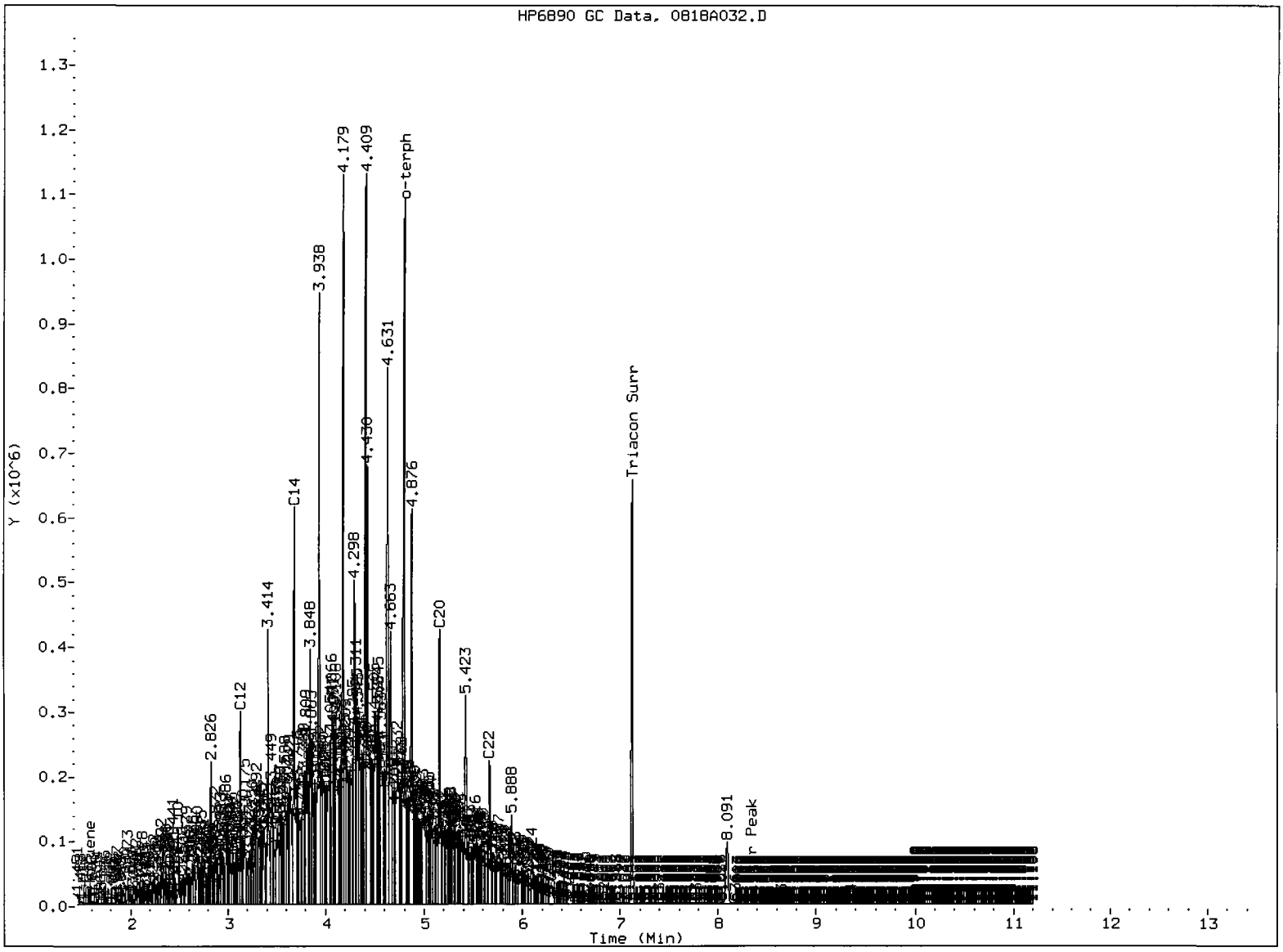
Operator: MS

Column diameter: 0.25

RTX-1 9671



FID:9A-2C/RTX-1 RI46LCSW1 FID:9A SIGNAL



MANUAL INTEGRATION

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

5. Other _____

Analyst: _____ Date: 8/11/06

Analytical Resources Inc.
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100818.b/0818A033.D
Method: /chem2/fid9.i/20100818.b/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 08/19/2010

ARI ID: RI46LCSDW1
Client ID: RI46LCSDW1
Injection: 18-AUG-2010 23:48
Dilution Factor: 1
Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.576	0.012	32707	16672	GAS (Tol-C12)	2921891	139
C8	1.704	-0.012	2820	2307	DIESEL (C12-C24)	28452307	1081
C10	2.495	0.013	124594	86538	M.OIL (C24-C38)	562146	44
C12	3.129	0.010	315453	172408	AK-102 (C10-C25)	30910918	1064
C14	3.684	0.008	650129	649020	AK-103 (C25-C36)	445045	89
C16	4.164	-0.006	261053	176986			
C18	4.636	0.015	886729	1049825			
C20	5.142	-0.003	103200	22574			
C22	5.668	0.007	247090	291675			
C24	6.098	0.004	80861	99168			
C25	6.293	-0.002	36668	58007			
C26	6.476	0.001	14968	26427			
C28	6.838	0.006	5258	6679			
C32	7.404	-0.006	1969	3286	JP-4 (Tol-C14)	7184324	438
C34	7.779	-0.001	632	547	BUNKERC (C10-C38)	31364404	3576
Filter Peak	8.342	-0.001	372	209			
C36	8.191	0.002	496	521			
C38	8.650	0.003	313	160			
C40	9.356	0.003	239	83			
o-terph	4.804	0.010	1176926	1376230	JET-A (C10-C18)	22112054	1600
Triacon Surr	7.124	-0.021	703989	692435	JP8 (Tol-C16)	14653063	833

M Indicates manual integration within range.
Range Times: NW Diesel(3.119 - 6.095) AK102(2.48 - 6.29) Jet A(2.48 - 4.62)
NW M.Oil(6.09 - 8.65) AK103(6.29 - 8.19) OR Diesel(2.48 - 6.83)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1376230	53.4	118.7
Triacontane	692435	34.9	77.6

8/19/10

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/20100818.b/0818A033.D

Date : 18-AUG-2010 23:48

Client ID: RI46LCSDW1

Sample Info: RI46LCSDW1

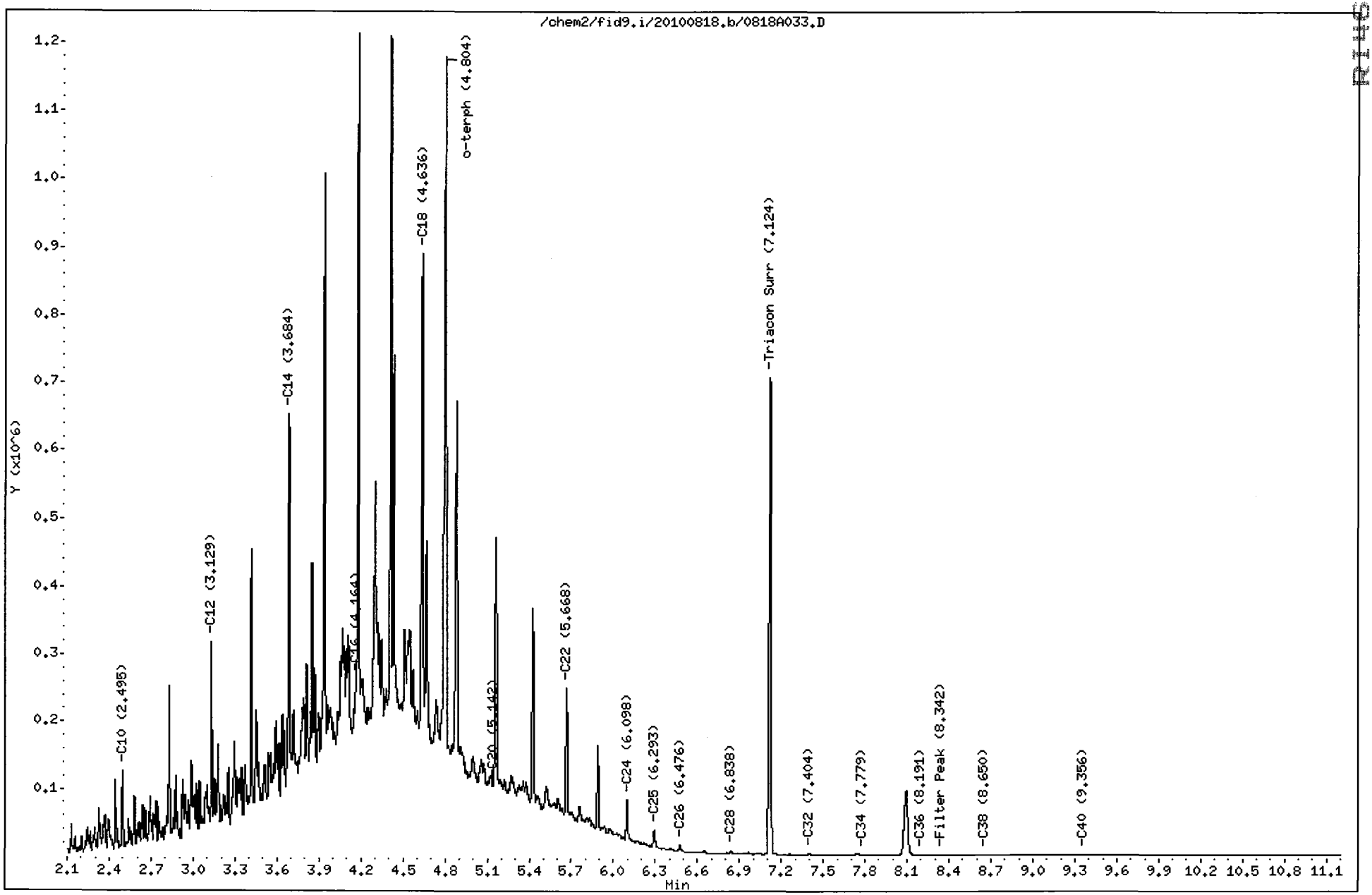
Column phase: RTX-1

Instrument: fid9.i

Operator: MS

Column diameter: 0.25

RI46:60737



Analytical Resources Inc.
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100818.b/0818A033.D
Method: /chem2/fid9.i/20100818.b/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 08/19/2010

ARI ID: RI46LCSDW1
Client ID: RI46LCSDW1
Injection: 18-AUG-2010 23:48
Dilution Factor: 1
Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.576	0.012	32707	16672	GAS (Tol-C12)	2921891	139
C8	1.704	-0.012	2820	2307	DIESEL (C12-C24)	28892959	1097
C10	2.495	0.013	124594	86538	M.OIL (C24-C38)	562146	44
C12	3.129	0.010	315453	172408	AK-102 (C10-C25)	31351569	1079 M
C14	3.684	0.008	650129	649020	AK-103 (C25-C36)	445045	89
C16	4.164	-0.006	261053	176986			
C18	4.636	0.015	886729	1049825			
C20	5.142	-0.003	103200	22574			
C22	5.668	0.007	247090	291675			
C24	6.098	0.004	80861	99168			
C25	6.293	-0.002	36668	58007			
C26	6.476	0.001	14968	26427			
C28	6.838	0.006	5258	6679			
C32	7.404	-0.006	1969	3286	JP-4 (Tol-C14)	7184324	438
C34	7.779	-0.001	632	547	BUNKERC (C10-C38)	31805056	3626 M
Filter Peak	8.342	-0.001	372	209			
C36	8.191	0.002	496	521			
C38	8.650	0.003	313	160			
C40	9.356	0.003	239	83			
o-terph	4.804	0.010	1006990	939119	JET-A (C10-C18)	22112054	1600
Triacon Surr	7.124	-0.021	703989	692435	JP8 (Tol-C16)	14653063	833

M Indicates manual integration within range.
Range Times: NW Diesel(3.119 - 6.095) AK102(2.48 - 6.29) Jet A(2.48 - 4.62)
NW M.Oil(6.09 - 8.65) AK103(6.29 - 8.19) OR Diesel(2.48 - 6.83)

Surrogate	Area	Amount	%Rec
o-Terphenyl	939119	36.5	81.0
Triacontane	692435	34.9	77.6

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

Data File: /chem2/fid9.i/20100818.b/0818A033.D

Date : 18-AUG-2010 23:48

Client ID: RI46LCSDW1

Sample Info: RI46LCSDW1

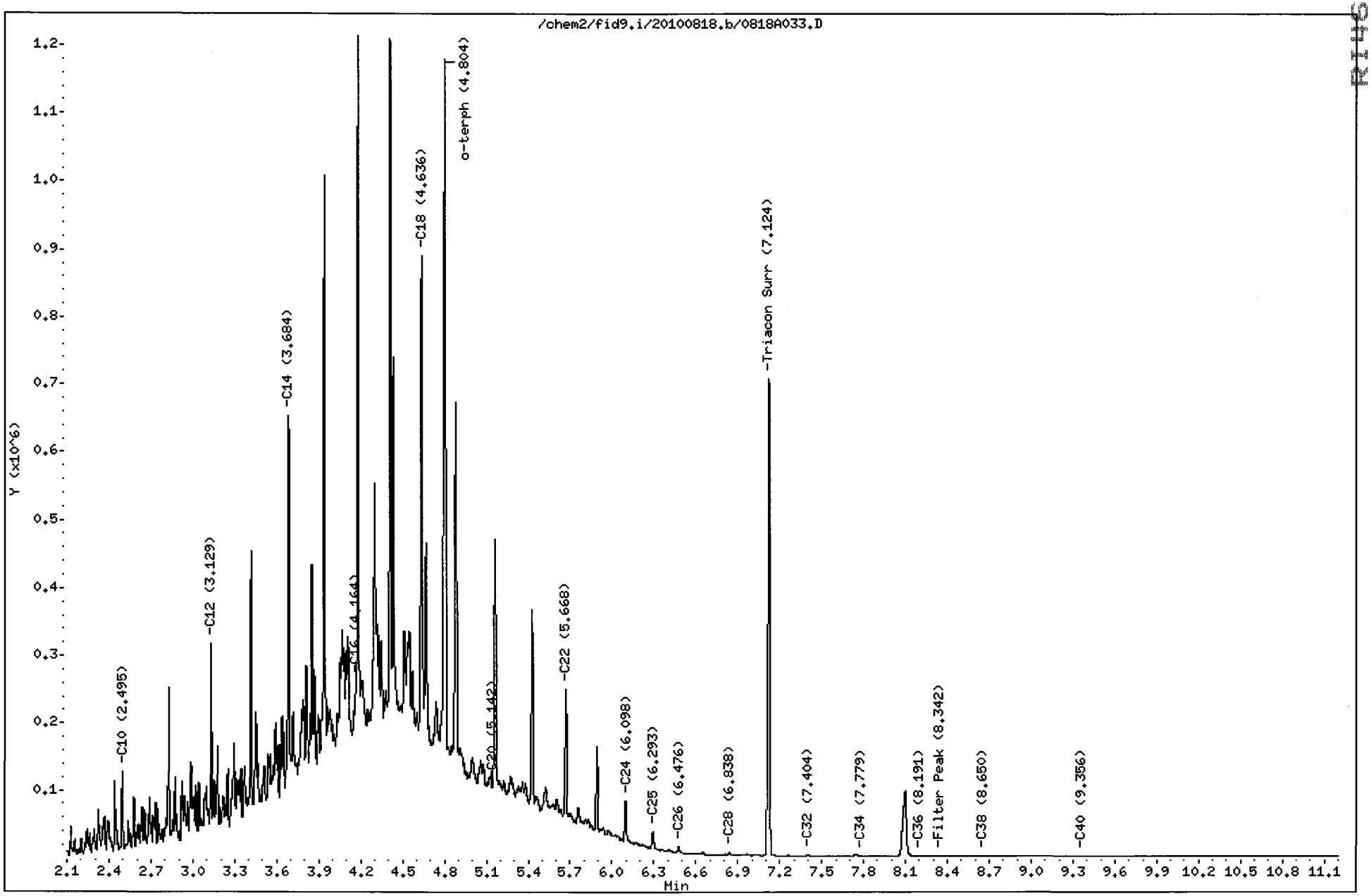
Column phase: RTX-1

Instrument: fid9.i

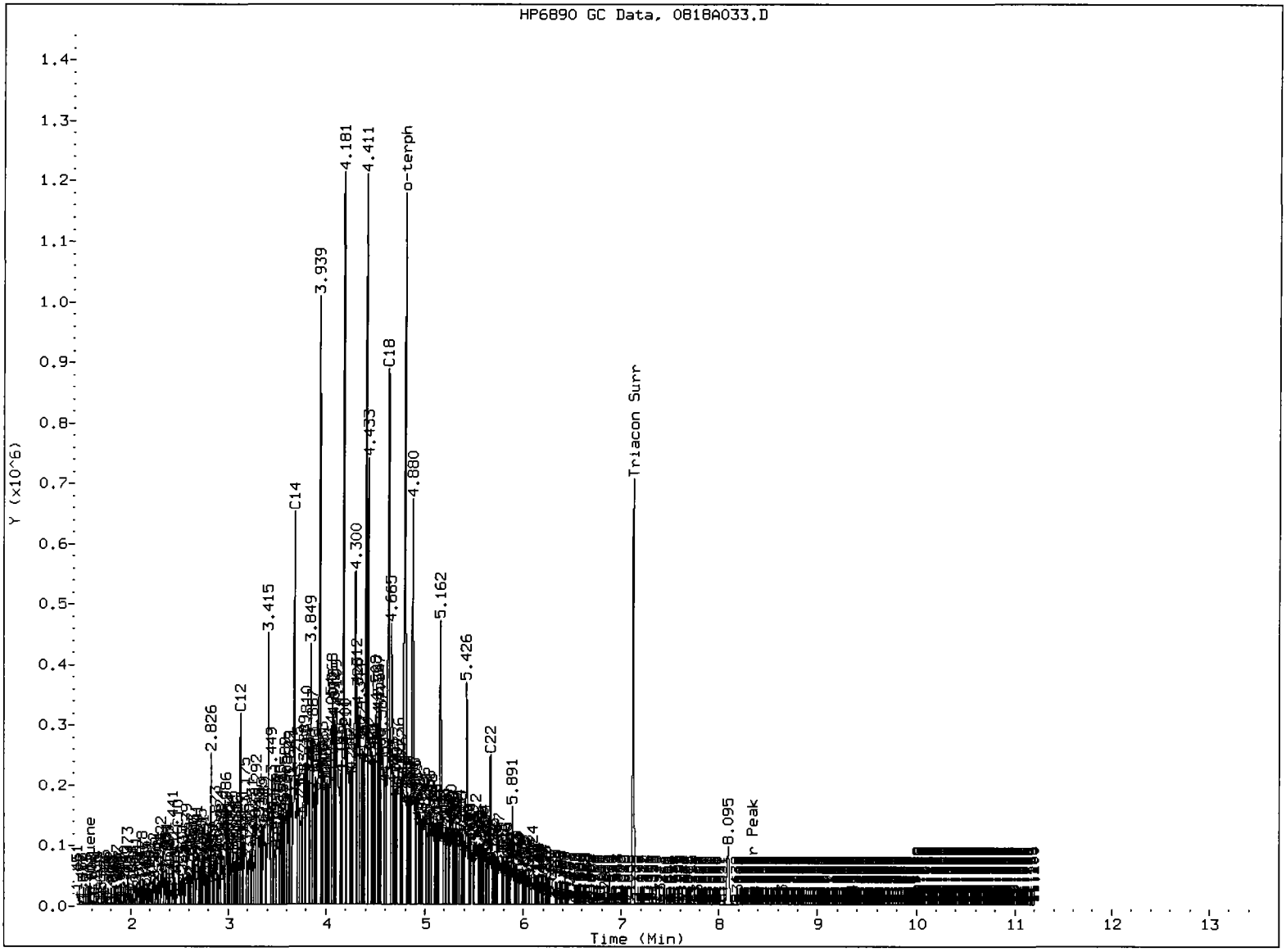
Operator: MS

Column diameter: 0.25

RI46:00739



FID:9A-2C/RTX-1 RI46LCSDW1 FID:9A SIGNAL



MANUAL INTEGRATION

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

5. Other _____

Analyst: _____ Date: 8/18/10

Analytical Resources Inc.
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100818.b/0818A034.D
Method: /chem2/fid9.i/20100818.b/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 08/19/2010

ARI ID: RI46MBW1
Client ID: RI46MBW1
Injection: 19-AUG-2010 00:09
Dilution Factor: 1
Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.578	0.014	4099	3391	GAS (Tol-C12)	33881	2
C8	1.728	0.012	397	99	DIESEL (C12-C24)	104282	4
C10	2.480	-0.001	597	319	M.OIL (C24-C38)	316073	25
C12	3.115	-0.004	34	18	AK-102 (C10-C25)	118438	4
C14	3.677	0.002	225	140	AK-103 (C25-C36)	294609	59
C16	4.177	0.007	1623	2209			
C18	4.621	0.000	1620	1944			
C20	5.152	0.007	1147	1070			
C22	5.669	0.007	663	929			
C24	6.106	0.011	439	741			
C25	6.290	-0.004	1175	1614			
C26	6.477	0.001	460	588			
C28	6.837	0.004	1610	1999			
C32	7.402	-0.008	2064	3597	JP-4 (Tol-C14)	47206	3
C34	7.781	0.001	938	657	BUNKERC (C10-C38)	431999	49
Filter Peak	8.334	-0.009	807	650			
C36	8.191	0.001	942	678			
C38	8.649	0.002	770	605			
C40	9.350	-0.003	757	284			
o-terph	4.794	0.000	995232	789183	JET-A (C10-C18)	84740	6
Triacon Surr	7.124	-0.021	683596	655857	JP8 (Tol-C16)	76987	4

M Indicates manual integration within range.
Range Times: NW Diesel(3.119 - 6.095) AK102(2.48 - 6.29) Jet A(2.48 - 4.62)
NW M.Oil(6.09 - 8.65) AK103(6.29 - 8.19) OR Diesel(2.48 - 6.83)

Surrogate	Area	Amount	%Rec
o-Terphenyl	789183	30.6	68.1
Triacontane	655857	33.1	73.5

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/20100818.b/0818A034.D

Date : 19-AUG-2010 00:09

Client ID: RI46MBW1

Sample Info: RI46MBW1

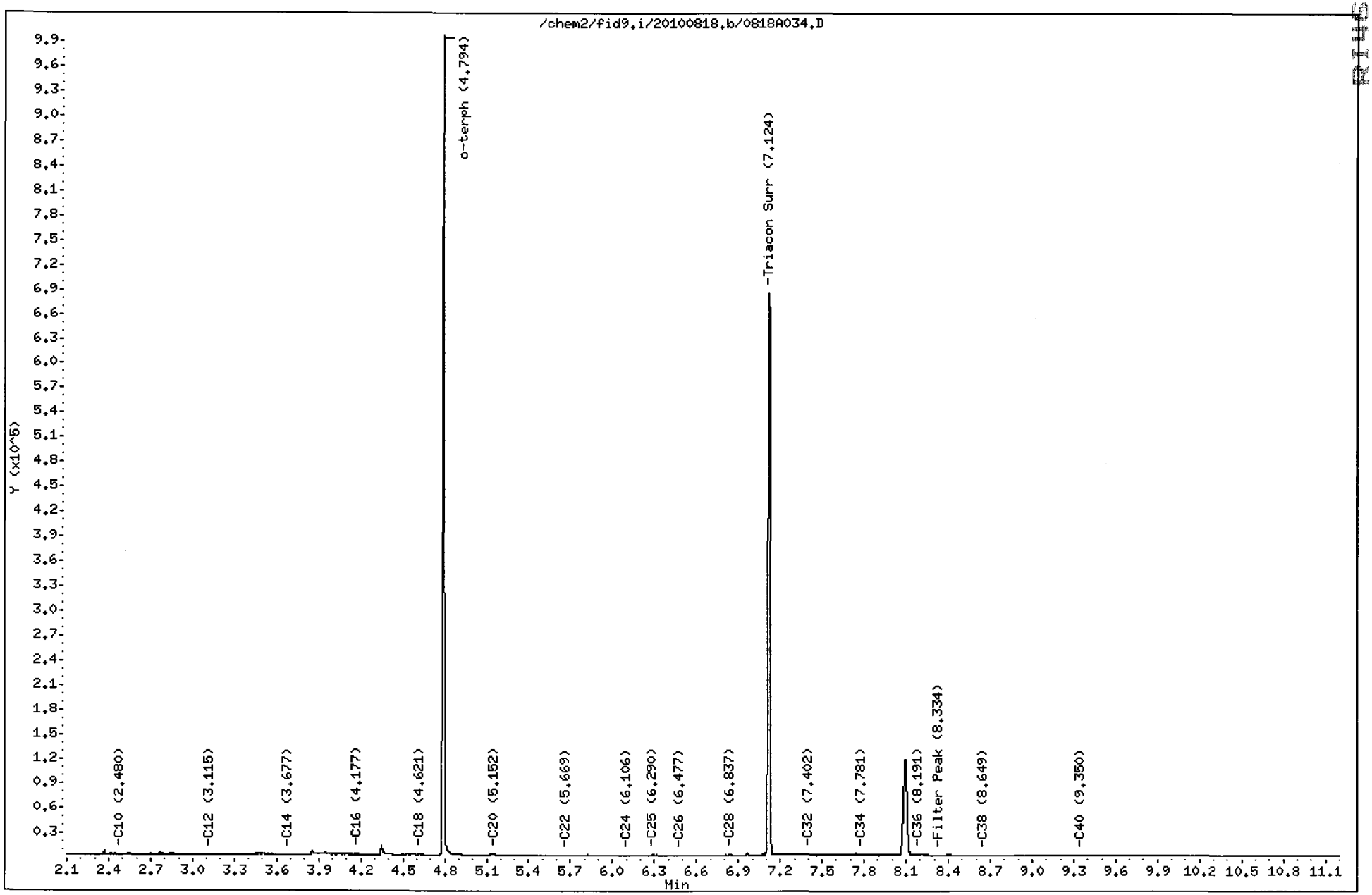
Instrument: fid9.i

Operator: MS

Column phase: RTX-1

Column diameter: 0.25

RI46:006712



Analytical Resources Inc.
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100818.b/0818raw.b/0818A035.D ARI ID: DIESEL#4
Method: /chem2/fid9.i/20100818.b/ftphfid9a.m Client ID:
Instrument: fid9.i Injection: 19-AUG-2010 00:30
Operator: MS Dilution Factor: 1
Report Date: 08/19/2010 Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.548	-0.016	1253	1362	GAS (Tol-C12)	902983	43
C8	1.707	-0.009	1682	1404	DIESEL (C12-C24)	6377429	242
C10	2.484	0.003	4158	2835	M.OIL (C24-C38)	108712	9
C12	3.129	0.010	73943	40982	AK-102 (C10-C25)	7092318	244
C14	3.682	0.007	152764	145743	AK-103 (C25-C36)	77791	16
C16	4.174	0.004	282899	207001			
C18	4.623	0.003	200879	205684			
C20	5.150	0.005	101115	121573			
C22	5.660	-0.001	52735	58086			
C24	6.097	0.003	16380	24777			
C25	6.295	0.000	7026	11878			
C26	6.480	0.004	2757	4221			
C28	6.841	0.009	470	660			
C32	7.409	-0.001	425	426	JP-4 (Tol-C14)	1975866	121
C34	7.777	-0.003	394	311	BUNKERC (C10-C38)	7179092	819
Filter Peak	8.340	-0.003	337	268			
C36	8.183	-0.007	349	279			
C38	8.649	0.002	347	214			
C40	9.348	-0.005	358	335			
o-terph	4.800	0.006	1325169	1265559	JET-A (C10-C18)	5244139	379
Triacon Surr	7.151	0.006	279	48	JP8 (Tol-C16)	3655612	208

M Indicates manual integration within range.
Range Times: NW Diesel(3.119 - 6.095) AK102(2.48 - 6.29) Jet A(2.48 - 4.62)
NW M.Oil(6.09 - 8.65) AK103(6.29 - 8.19) OR Diesel(2.48 - 6.83)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1265559	49.1	109.2
Triacontane	48	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/20100818.b/0818raw.b/0818A035.D

Date : 19-AUG-2010 00:30

Client ID:

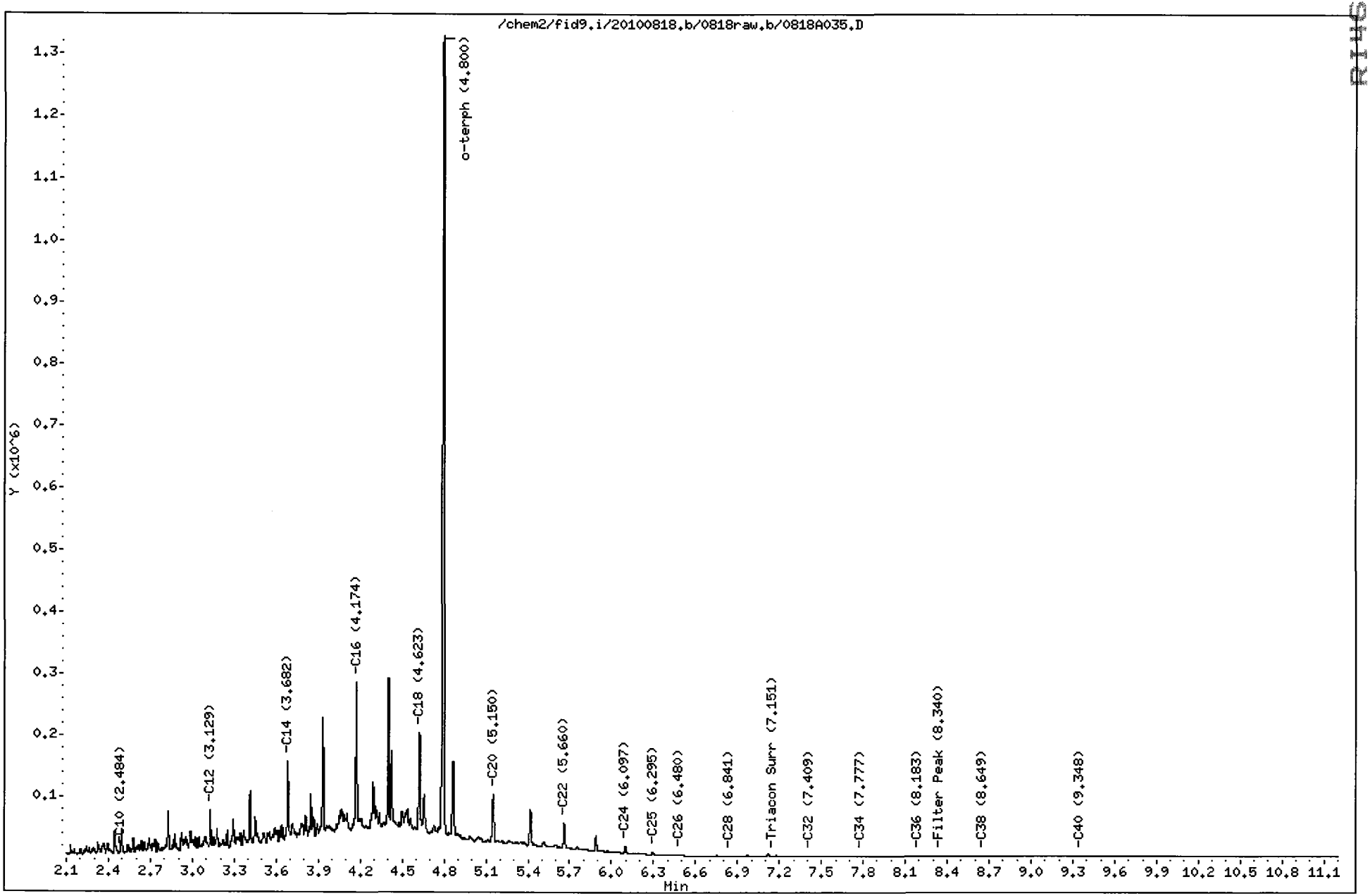
Sample Info: DIESEL#4

Column phase: RTX-1

Instrument: fid9.i

Operator: MS

Column diameter: 0.25



Analytical Resources Inc.
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100818.b/0818A035.D
Method: /chem2/fid9.i/20100818.b/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 08/19/2010

ARI ID: DIESEL#4
Client ID:
Injection: 19-AUG-2010 00:30
Dilution Factor: 1
Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc	
Toluene	1.548	-0.016	1253	1362	GAS (Tol-C12)	902983	43	
C8	1.707	-0.009	1682	1404	DIESEL (C12-C24)	6523111	248	
C10	2.484	0.003	4158	2835	M.OIL (C24-C38)	108712	9	
C12	3.129	0.010	73943	40982	AK-102 (C10-C25)	7238000	249	M
C14	3.682	0.007	152764	145743	AK-103 (C25-C36)	77791	16	
C16	4.174	0.004	282899	207001				
C18	4.623	0.003	200879	205684				
C20	5.150	0.005	101115	121573				
C22	5.660	-0.001	52735	58086				
C24	6.097	0.003	16380	24777				
C25	6.295	0.000	7026	11878				
C26	6.480	0.004	2757	4221				
C28	6.841	0.009	470	660				
C32	7.409	-0.001	425	426	JP-4 (Tol-C14)	1975866	121	
C34	7.777	-0.003	394	311	BUNKERC (C10-C38)	7324773	835	M
Filter Peak	8.340	-0.003	337	268				
C36	8.183	-0.007	349	279				
C38	8.649	0.002	347	214				
C40	9.348	-0.005	358	335				
o-terph	4.800	0.006	1284950	1120649	JET-A (C10-C18)	5244139	379	
Triacon Surr	7.151	0.006	279	48	JP8 (Tol-C16)	3655612	208	

M Indicates manual integration within range.
Range Times: NW Diesel(3.119 - 6.095) AK102(2.48 - 6.29) Jet A(2.48 - 4.62)
NW M.Oil(6.09 - 8.65) AK103(6.29 - 8.19) OR Diesel(2.48 - 6.83)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1120649	43.5	96.7
Triacontane	48	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/20100818.b/0818A035.D

Date : 19-AUG-2010 00:30

Client ID:

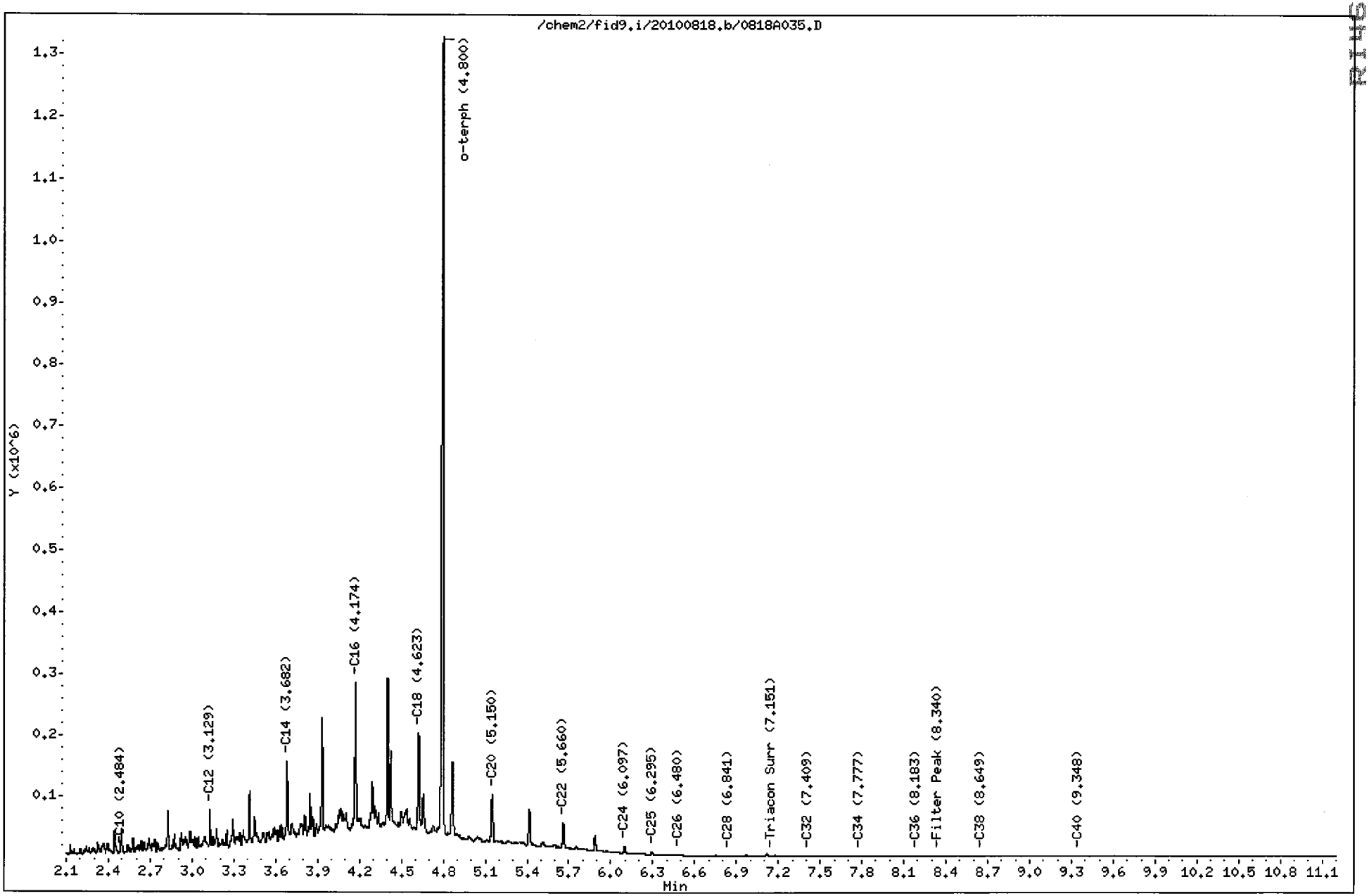
Sample Info: DIESEL#4

Column phase: RTX-1

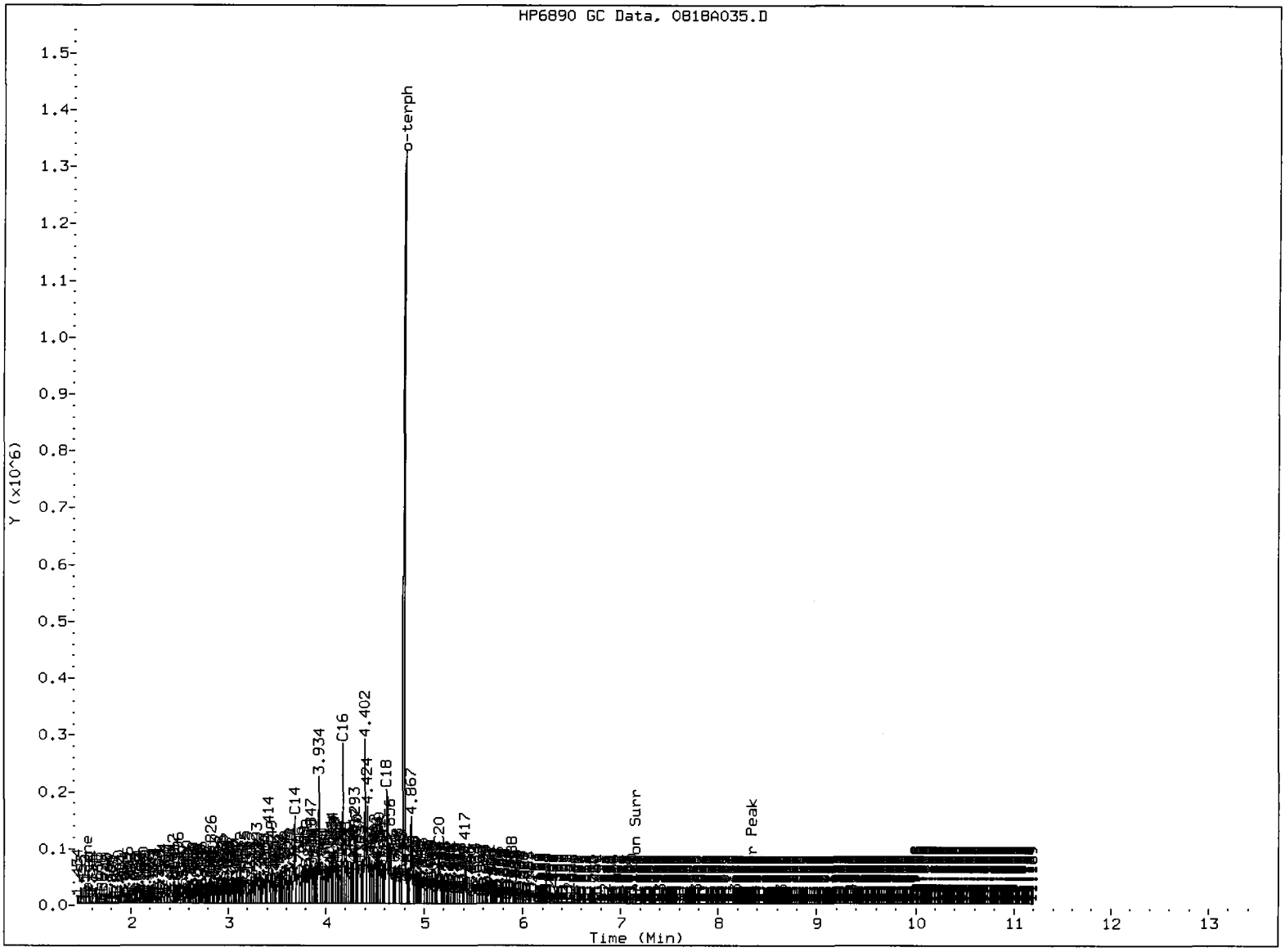
Instrument: fid9.i

Operator: MS

Column diameter: 0.25



FID:9A-2C/RTX-1 DIESEL#4 FID:9A SIGNAL



MANUAL INTEGRATION

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

5. Other _____

Analyst: _____ Date: 8/15/10

Analytical Resources Inc.
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100818.b/0818raw.b/0818A036.D ARI ID: MOIL#4
Method: /chem2/fid9.i/20100818.b/ftphfid9a.m Client ID:
Instrument: fid9.i Injection: 19-AUG-2010 00:52
Operator: MS Dilution Factor: 1
Report Date: 08/19/2010 Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.573	0.008	1300	1575	GAS (Tol-C12)	26022	1
C8	1.710	-0.006	584	633	DIESEL (C12-C24)	731277	28
C10	2.501	0.020	3548	2277	M.OIL (C24-C38)	5997343	469
C12	3.114	-0.005	37	22	AK-102 (C10-C25)	896219	31
C14	3.672	-0.004	115	25	AK-103 (C25-C36)	5235352	1045
C16	4.162	-0.008	232	93			
C18	4.624	0.004	1077	1219			
C20	5.150	0.004	2856	4814			
C22	5.662	0.000	10788	8834			
C24	6.096	0.001	23426	6900			
C25	6.285	-0.010	29283	8138			
C26	6.481	0.005	37878	11862			
C28	6.835	0.003	50995	32762			
C32	7.404	-0.006	62043	47349	JP-4 (Tol-C14)	29689	2
C34	7.783	0.003	45088	33674	BUNKERC (C10-C38)	6735377	768
Filter Peak	8.342	-0.001	25651	12149			
C36	8.191	0.001	29526	7621			
C38	8.647	0.000	18997	9607			
C40	9.357	0.004	8857	6111			
o-terph	4.789	-0.004	6792	6545	JET-A (C10-C18)	36828	3
Triacon Surr	7.135	-0.010	870064	1074333	JP8 (Tol-C16)	35209	2

M Indicates manual integration within range.
Range Times: NW Diesel(3.119 - 6.095) AK102(2.48 - 6.29) Jet A(2.48 - 4.62)
NW M.Oil(6.09 - 8.65) AK103(6.29 - 8.19) OR Diesel(2.48 - 6.83)

Surrogate	Area	Amount	%Rec
o-Terphenyl	6545	0.3	0.6
Triacontane	1074333	54.2	120.4

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/20100818.b/0818raw.b/0818A036.D

Date : 19-AUG-2010 00:52

Client ID:

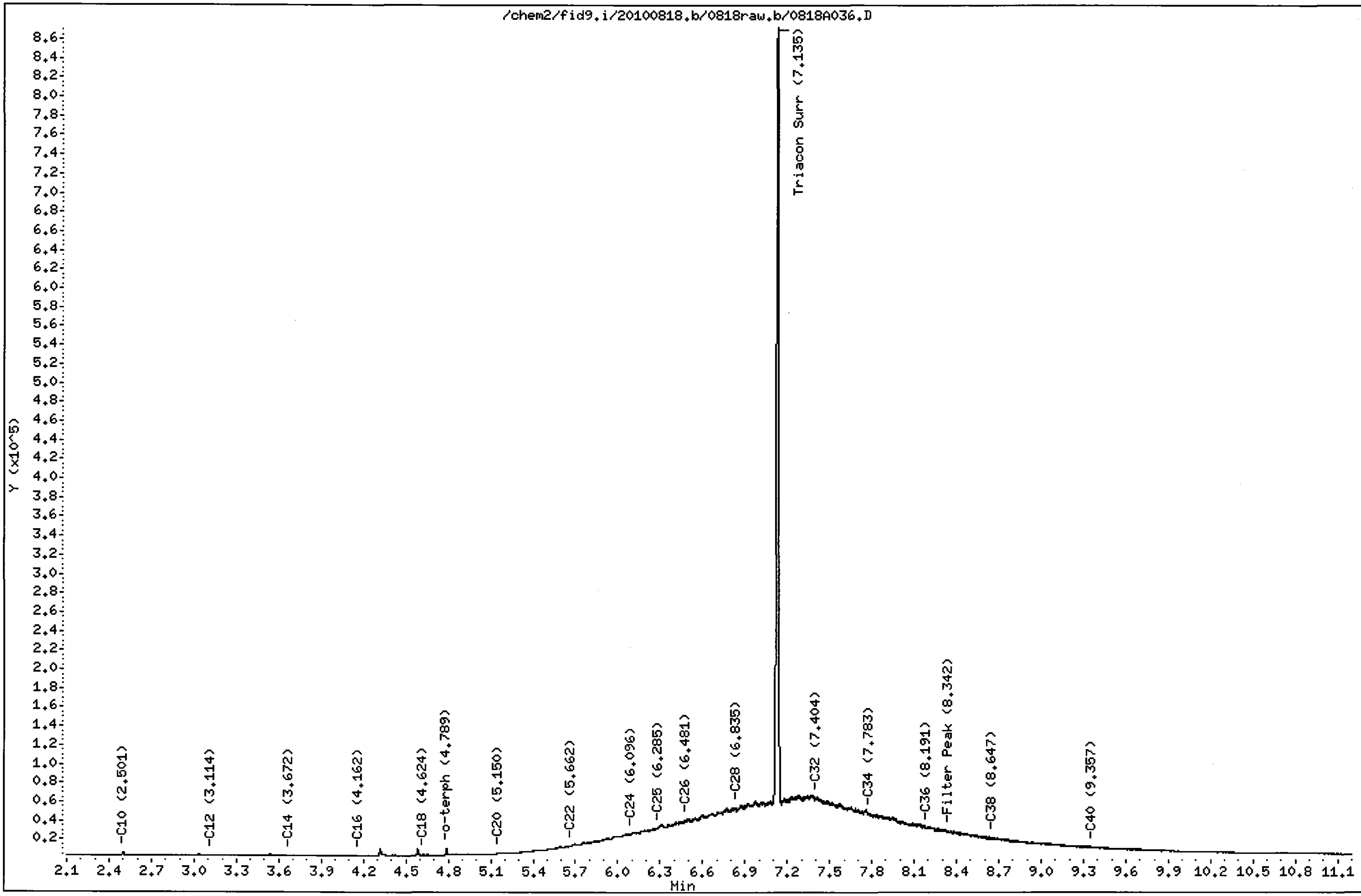
Instrument: fid9.i

Sample Info: MOIL#4

Operator: MS

Column phase: RTX-1

Column diameter: 0.25



Analytical Resources Inc.
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20100818.b/0818A036.D
Method: /chem2/fid9.i/20100818.b/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 08/19/2010

ARI ID: MOIL#4
Client ID:
Injection: 19-AUG-2010 00:52
Dilution Factor: 1
Macro: 28-JUN-2010

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.573	0.008	1300	1575	GAS (Tol-C12)	26022	1
C8	1.710	-0.006	584	633	DIESEL (C12-C24)	731277	28
C10	2.501	0.020	3548	2277	M.OIL (C24-C38)	6201135	485
C12	3.114	-0.005	37	22	AK-102 (C10-C25)	896219	31
C14	3.672	-0.004	115	25	AK-103 (C25-C36)	5439144	1086 M
C16	4.162	-0.008	232	93			
C18	4.624	0.004	1077	1219			
C20	5.150	0.004	2856	4814			
C22	5.662	0.000	10788	8834			
C24	6.096	0.001	23426	6900			
C25	6.285	-0.010	29283	8138			
C26	6.481	0.005	37878	11862			
C28	6.835	0.003	50995	32762			
C32	7.404	-0.006	62043	47349	JP-4 (Tol-C14)	29689	2
C34	7.783	0.003	45088	33674	BUNKERC (C10-C38)	6939170	791 M
Filter Peak	8.342	-0.001	25651	12149			
C36	8.191	0.001	29526	7621			
C38	8.647	0.000	18997	9607			
C40	9.357	0.004	8857	6111			
o-terph	4.789	-0.004	6792	6545	JET-A (C10-C18)	36828	3
Triacon Surr	7.135	-0.010	813099	871638	JP8 (Tol-C16)	35209	2

M Indicates manual integration within range.
Range Times: NW Diesel(3.119 - 6.095) AK102(2.48 - 6.29) Jet A(2.48 - 4.62)
NW M.Oil(6.09 - 8.65) AK103(6.29 - 8.19) OR Diesel(2.48 - 6.83)

Surrogate	Area	Amount	%Rec
o-Terphenyl	6545	0.3	0.6
Triacontane	871638	44.0	97.7

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/20100818.b/0818A036.D

Date : 19-AUG-2010 00:52

Client ID:

Sample Info: MOIL#4

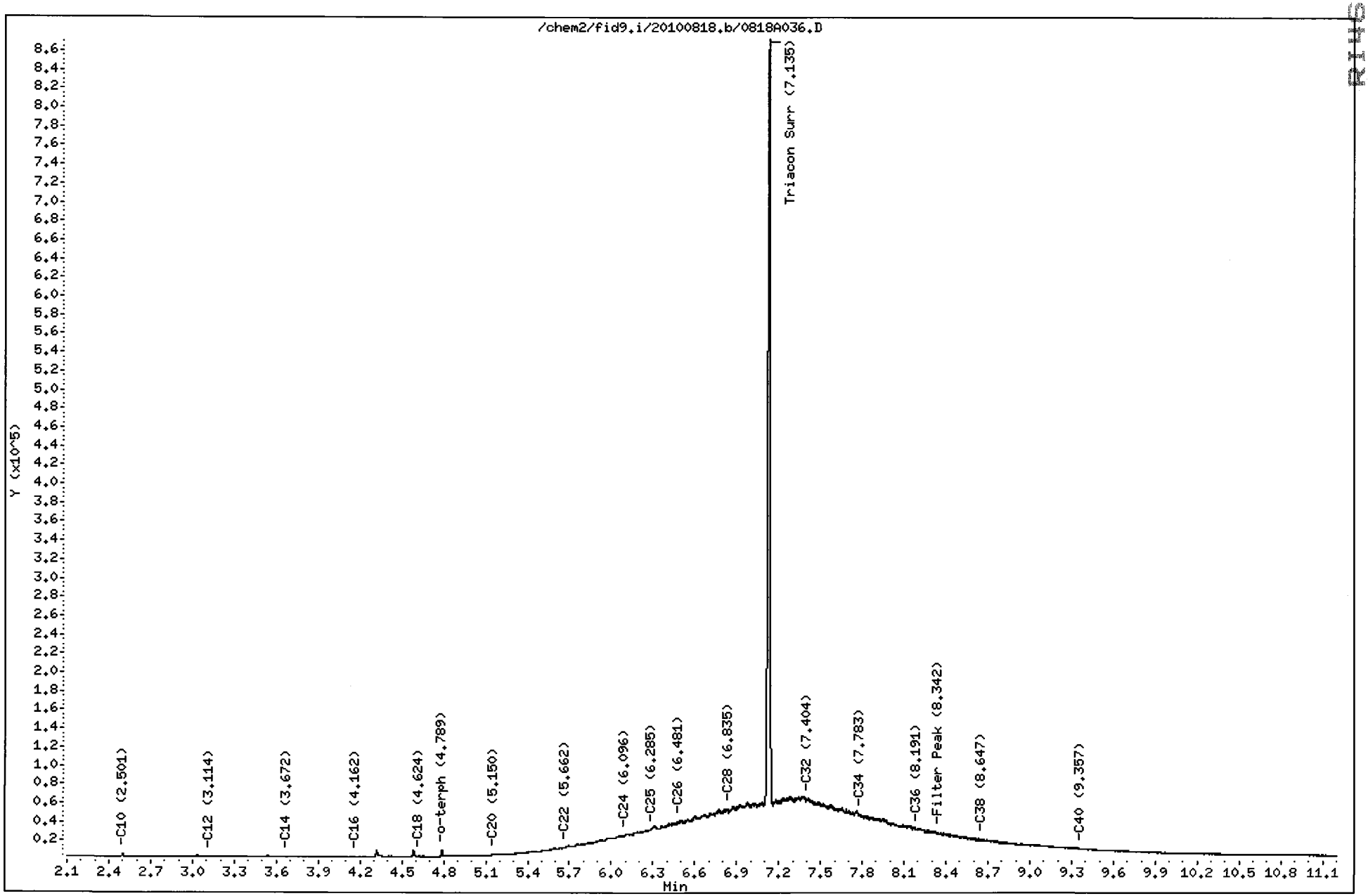
Column phase: RTX-1

Instrument: fid9.i

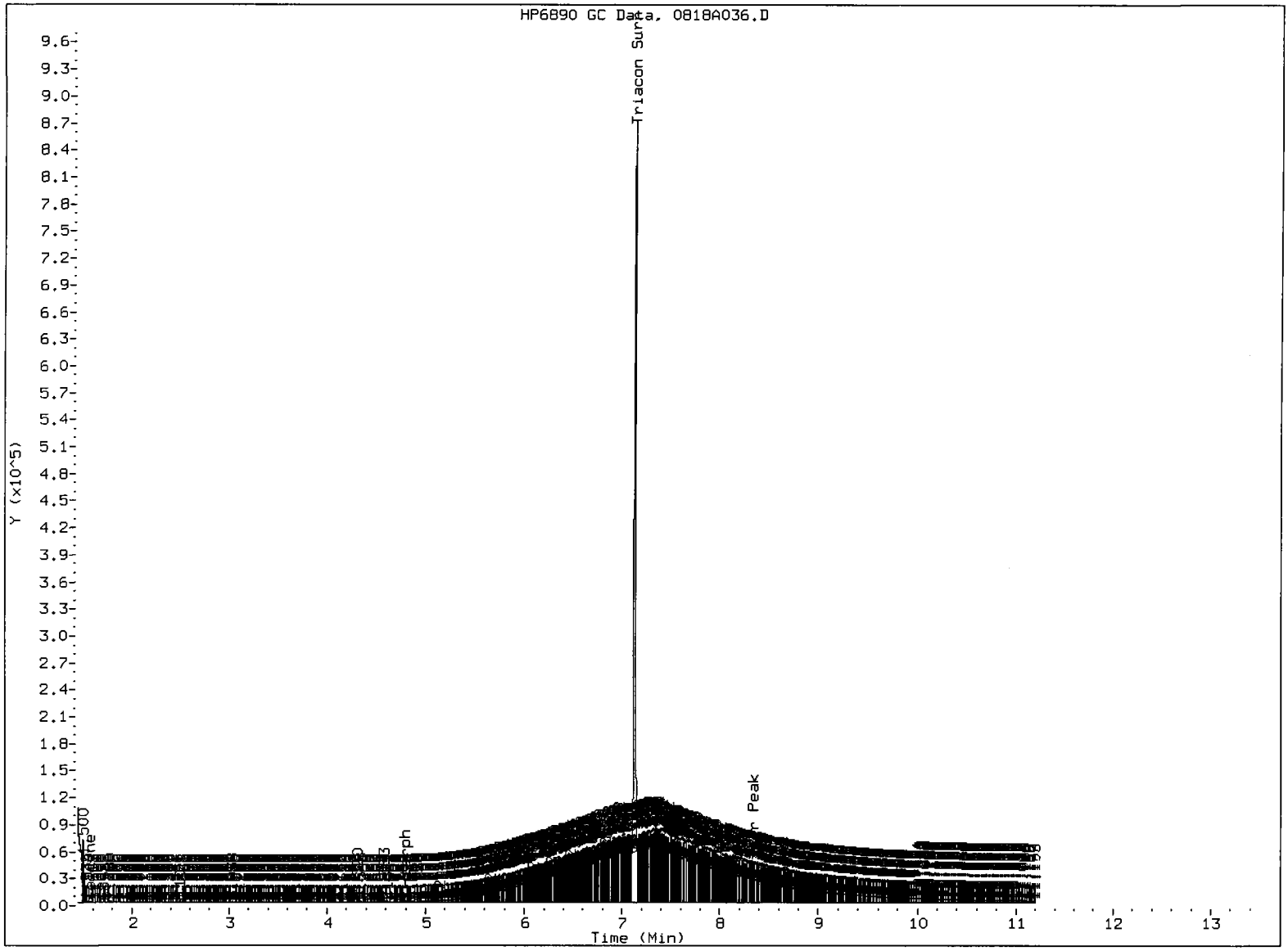
Operator: MS

Column diameter: 0.25

RTC : 60751



FID:9A-2C/RTX-1 MOIL#4 FID:9A SIGNAL



MANUAL INTEGRATION

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

5. Other _____

Analyst: _____ Date: 8/15/10

TPHG/BETX Raw Data
Initial Calibration Notes and Raw Data

ARI Job ID: RI46

Analytical Resources, Incorporated
Analytical Chemists and Consultants

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 (NA)	Method Blank In Control?	(YES) / NO
BFB Tune Meets Criteria?	YES / NO (NA)	LCS / LCSD Recovery In Control?	(YES) / NO
Internal Standard Meets Criteria?	YES / NO (NA)	Surrogate Recovery In Control?	(YES) / NO
ICal acceptable?	(YES) / NO	CCal acceptable?	(YES) / NO
Q flag applied?	YES / NO (NA)	Q flag applied?	YES / NO (NA)
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):

Gas ICV Targed 2.5

Additional Details on Reverse: Yes / No

Analyst: _____ **Date:** 7/29/10

Reviewer: _____ **Date:** 7/29/10

Analytical Resources Inc.: Organics Instrument Log

PID-3 HP 5890 Series II - Serial No.: 2728A-13336

Date: 7/28/10 Analysis: NWTPH6 Analyst: MH

GC Program: BETX Column No: 832213 Column Type: RTX502-2

Instrument Tune (.U or .CT.): — EM Voltage: —

Calibration File: — Curve Date: 7/28/10

IS/SS	Ical/Ccal	LCS/ICV
VW632-3	VW635-1	VW618-1
	VW644-3	VW647-2
	VW647-2	

	Time	Filename	LabID	ClientID	Vial#	pH	DF
1	0653	0728a001.d	RINSE				1
2	0718	0728a002.d	RT+BCAL 1				1
3	0742	0728a003.d	GAS .1				1
4	0807	0728a004.d	GAS .25				1
5	0831	0728a005.d	GAS 1				1
6	0856	0728a006.d	GAS 2.5				1
7	0920	0728a007.d	GAS 5				1
8	0945	0728a008.d	GAS 20				1
9	1009	0728a009.d	RINSE				1
10	1034	0728a010.d	GAS ICV				1
11	1117	0728a011.d	RINSE				1
12	1142	0728a012.d	GAS .1				1
13	1238	0728a013.d	LCS0728				1
14	1303	0728a014.d	LCSD0728				1
15	1328	0728a015.d	MB0728				1
16	1410	0728a016.d	RF80K	GTSP-TB-03			1
17	1435	0728a017.d	RF82E	LLASB10-2		0.00	
18	1459	0728a018.d	RF82G	LLASB10-5		0.00	
19	1523	0728a019.d	RF82H	LLASB10-5S		0.00	
20	1548	0728a020.d	RF82J	LLASB10-8		0.00	
21	1613	0728a021.d	RF82O	LLASB06-2		0.00	
22	1637	0728a022.d	RINSE				1
23	1702	0728a023.d	GCAL 2				1
24	1726	0728a024.d	RF82Q	LLASB06-5		0.00	
25	1751	0728a025.d	RF82S	LLASB06-8		0.00	
26	1816	0728a026.d	RF83A	LLASB06-8S		0.00	
27	1840	0728a027.d	RF83B	LLASB11-8		0.00	
28	1904	0728a028.d	RF83C	LLASB11-5		0.00	
29	1929	0728a029.d	RF83D	LLASB11-2		0.00	
30	1953	0728a030.d	RG01D	LLASB01-5		0.00	
31	2018	0728a031.d	RG01E	LLASB01-5S		0.00	
32	2042	0728a032.d	RG01EMS				1
33	2107	0728a033.d	RG01EMSD				1
34	2132	0728a034.d	RINSE				1
35	2156	0728a035.d	GCALJ				1
36	2221	0728a036.d	RG01F	LLASB01-6.5		0.00	
37	2246	0728a037.d	RG01G	LLASB01-8		0.00	
38	2311	0728a038.d	RF74A	SYASB01-5		0.00	
39	2335	0728a039.d	RF80A	SYASB05-5		0.00	
40	0000	0728a040.d	RF80B	SYASB05-5S		0.00	
41	0025	0728a041.d	RF80C	SYASB05-8		0.00	
42	0049	0728a042.d	RINSE				1
43	0114	0728a043.d	GCAL 4				1

MH 7/29/10

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.

MH 7/29/10

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100728-2.b/0728a012.d
Data file 2: /chem3/pid3.i/20100728-1.b/0728a012.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 .1
Client ID:
Injection Date: 28-JUL-2010 11:42
Matrix: WATER
Dilution Factor: 1.000

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)

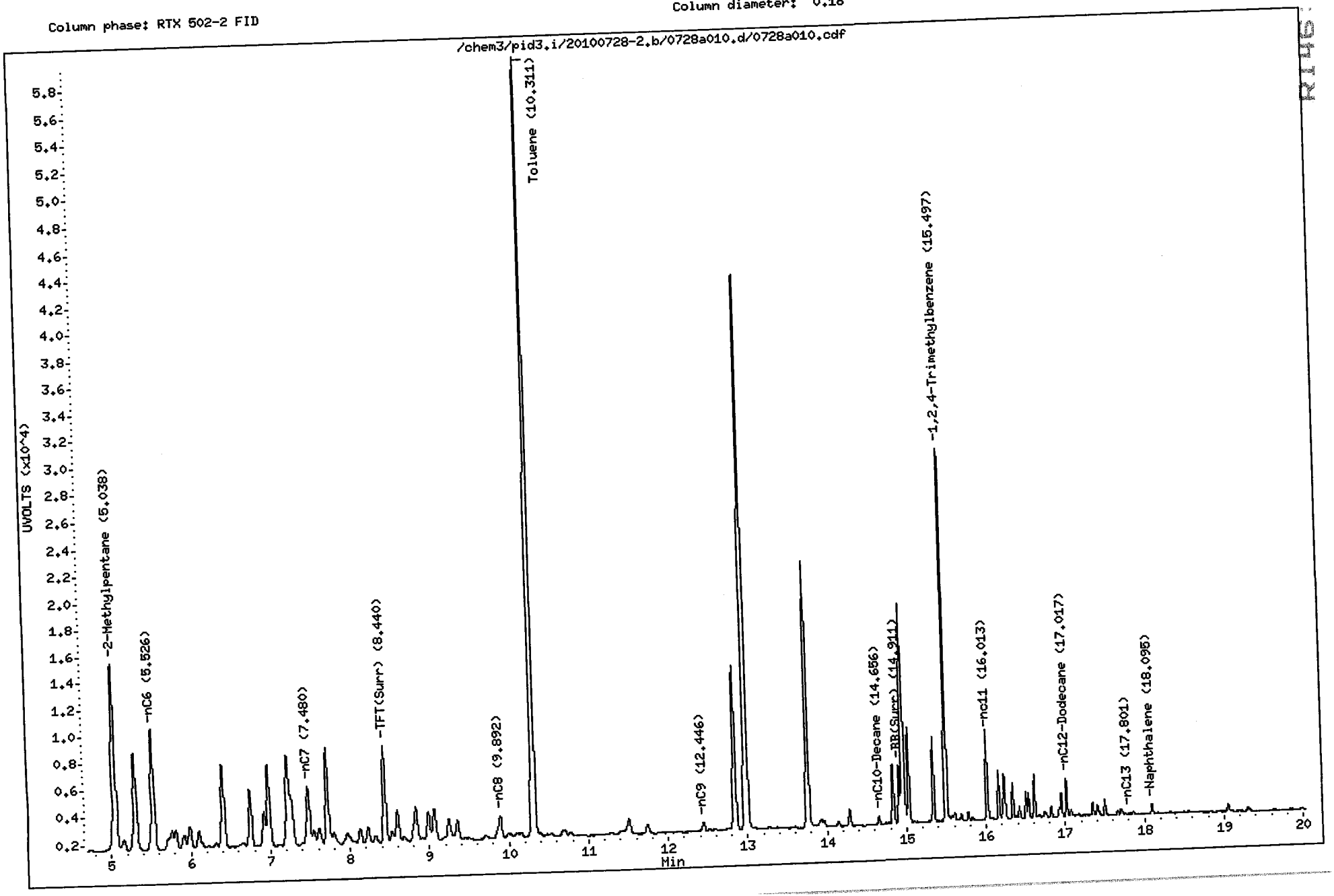
RT	Shift	Response	Amount	Compound
ND	---	---	---	Benzene
10.290	0.018	4229	3.20	Toluene
12.825	0.020	1325	1.07	Ethylbenzene
12.964	0.022	4623	3.43	M/P-Xylene
13.742	0.018	1960	1.53	O-Xylene
5.294	0.007	3815	10.72	MTBE

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

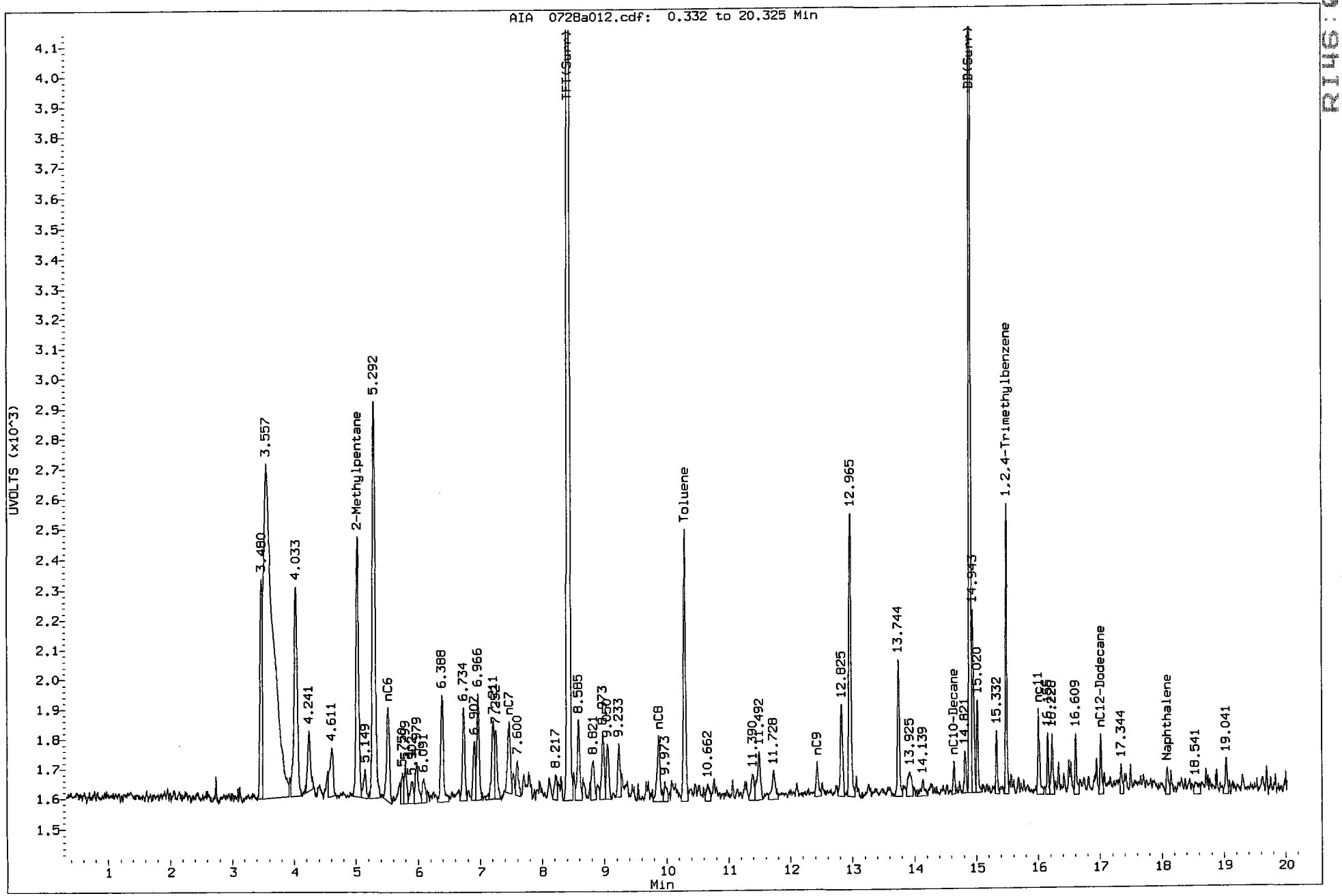
Instrument: pid3.i
Operator: MH
Column diameter: 0.18

Column phase: RTX 502-2 FID

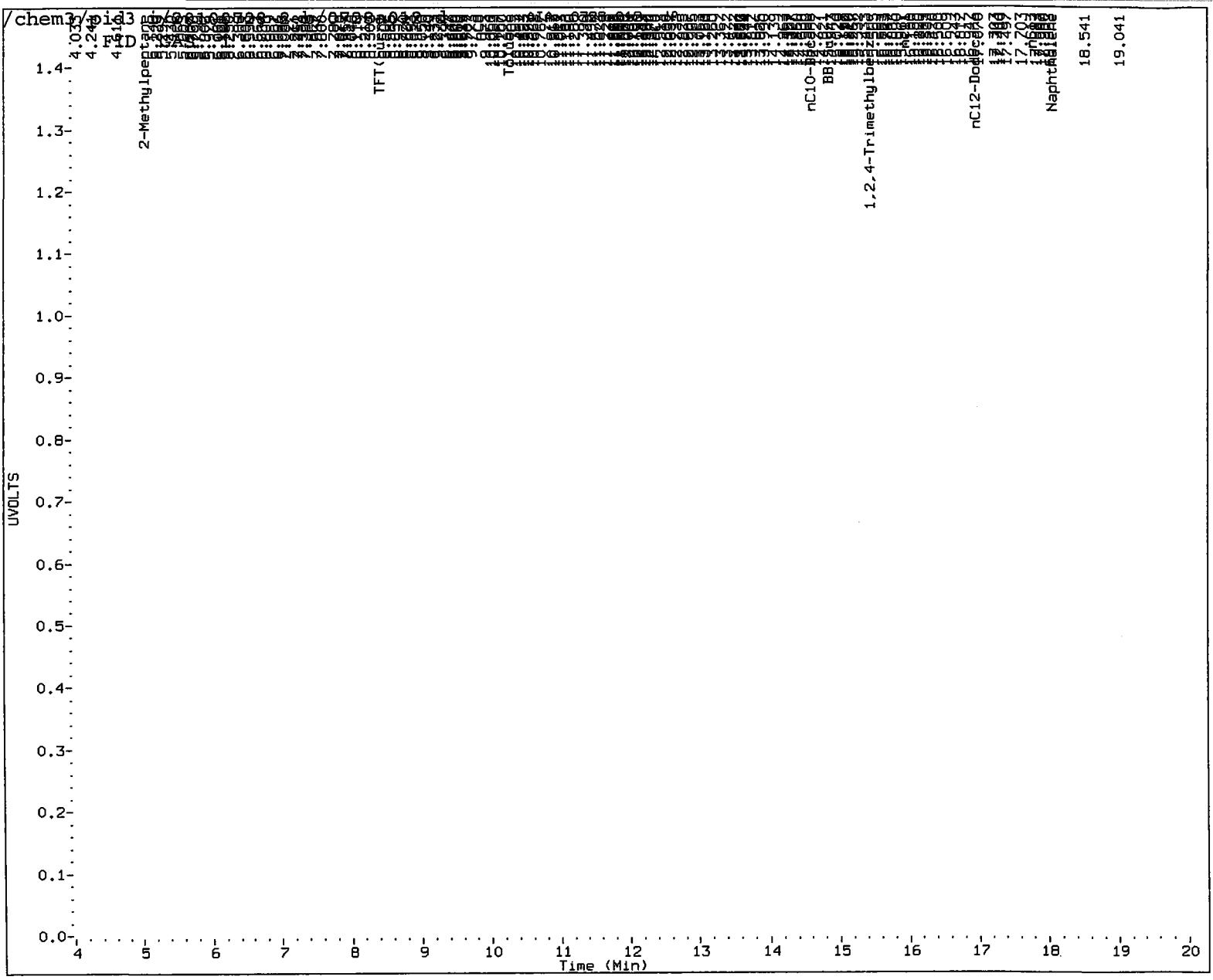


MM
7/29/10

Data File: /chem3/pid3.i/20100728-2.b/0728a012.d/0728a012.cdf
Injection Date: 28-JUL-2010 11:42
Instrument: pid3.i
Client Sample ID:



RIG: 00758



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.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100728-2.b/0728a004.d
Data file 2: /chem3/pid3.i/20100728-1.b/0728a004.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 .25
Client ID:
Injection Date: 28-JUL-2010 08:07
Matrix: WATER
Dilution Factor: 1.000

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)

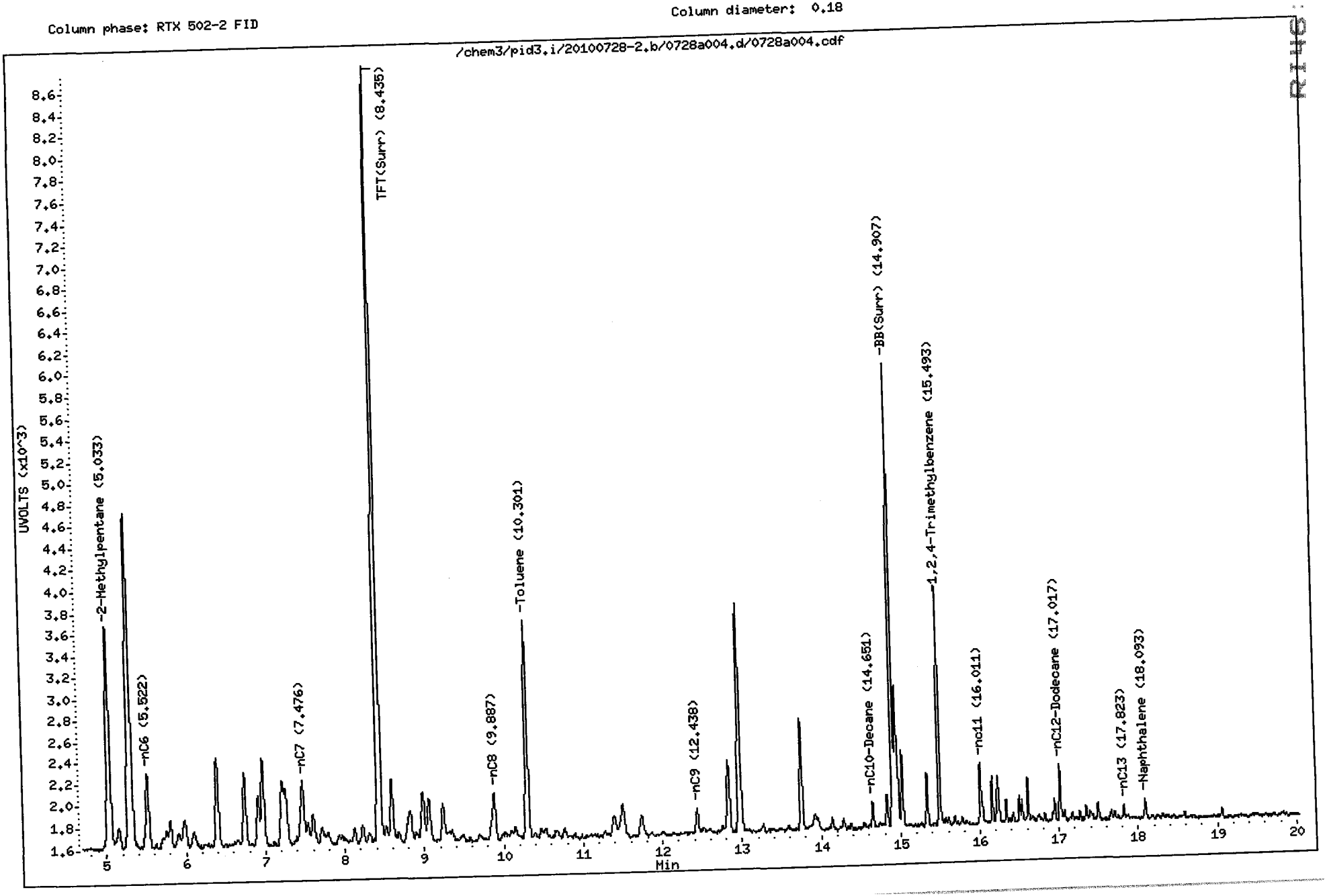
RT	Shift	Response	Amount	Compound
7.711	0.024	617	0.47	Benzene
10.300	0.029	9631	7.30	Toluene
12.835	0.030	2739	2.20	Ethylbenzene
12.974	0.032	10740	7.98	M/P-Xylene
13.751	0.027	4547	3.54	O-Xylene
5.301	0.013	9271	26.06	MTBE

A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

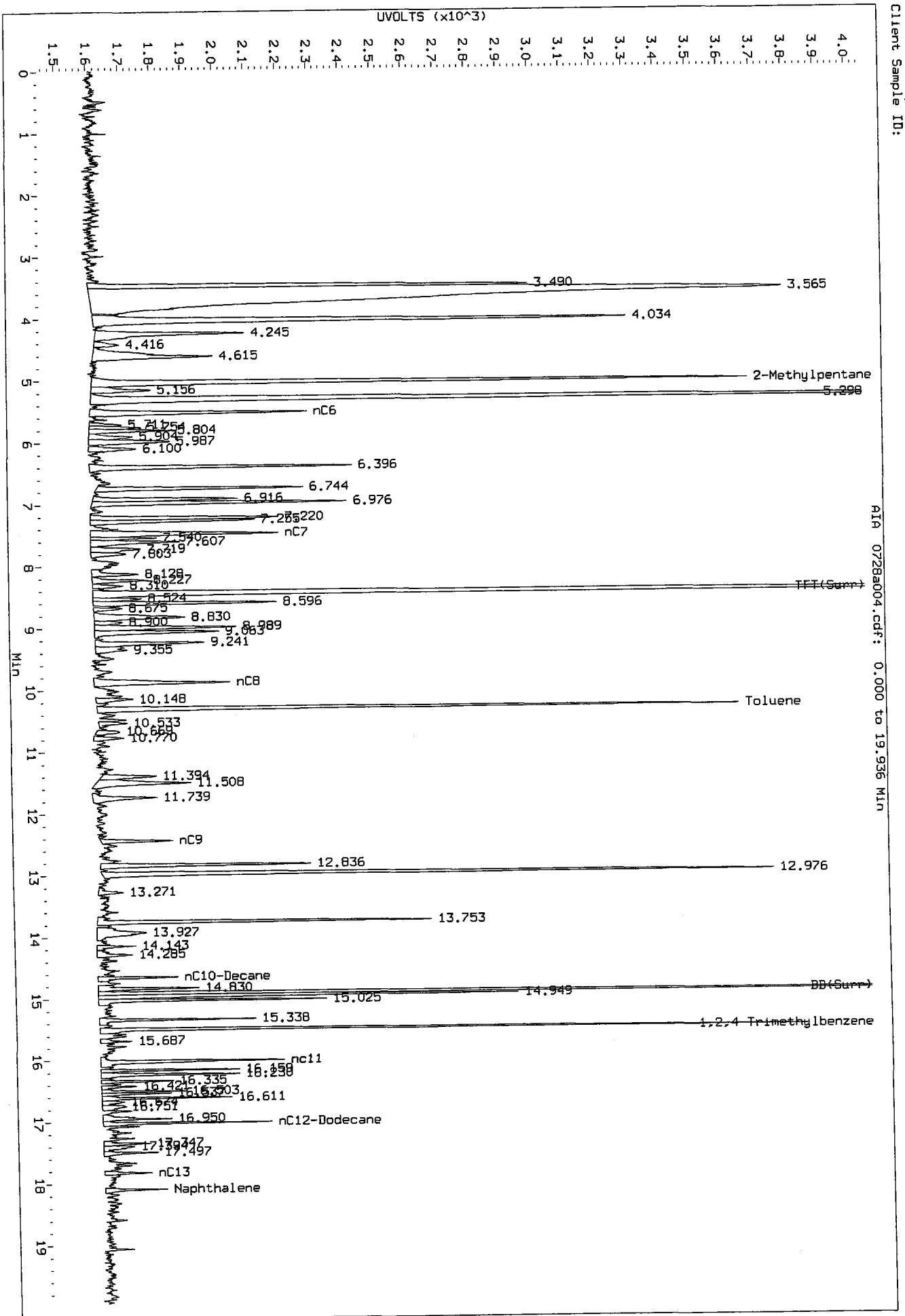
Data File: /chem3/pid3.i/20100728-2.b/0728a004.d
Date : 28-JUL-2010 08:07
Client ID:
Sample Info: GAS .25

Instrument: pid3.i
Operator: MH
Column diameter: 0.18

Column phase: RTX 502-2 FID

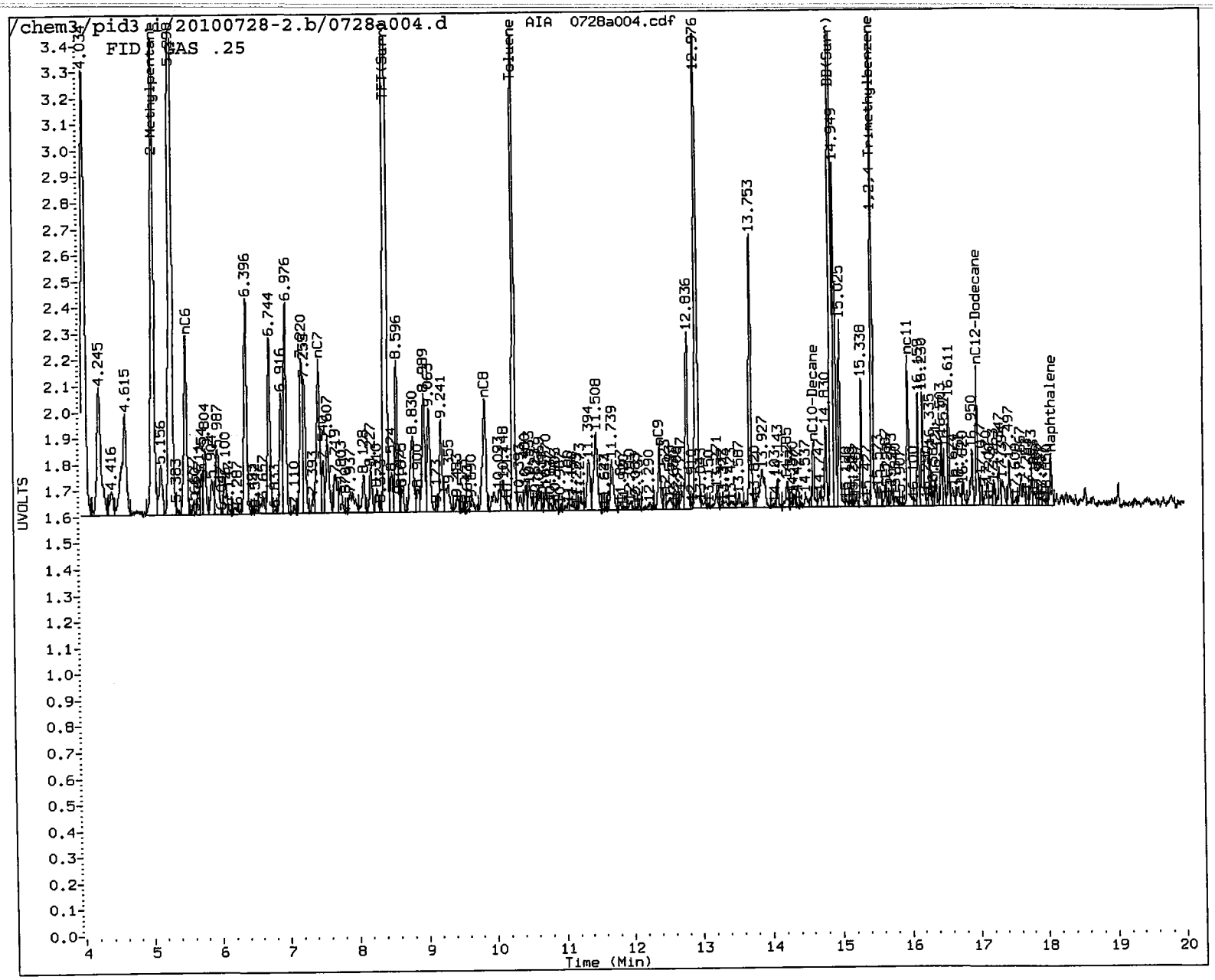


MH 7/29/10



Data File: /chem3/pid3.i/20100728-2.b/0728a004.d/0728a004.cdf
Injection Date: 28-JUL-2010 08:07
Instrument: pid3.i
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

2/29/10

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100728-2.b/0728a005.d
Data file 2: /chem3/pid3.i/20100728-1.b/0728a005.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 1
Client ID:
Injection Date: 28-JUL-2010 08:31
Matrix: WATER
Dilution Factor: 1.000

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)

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

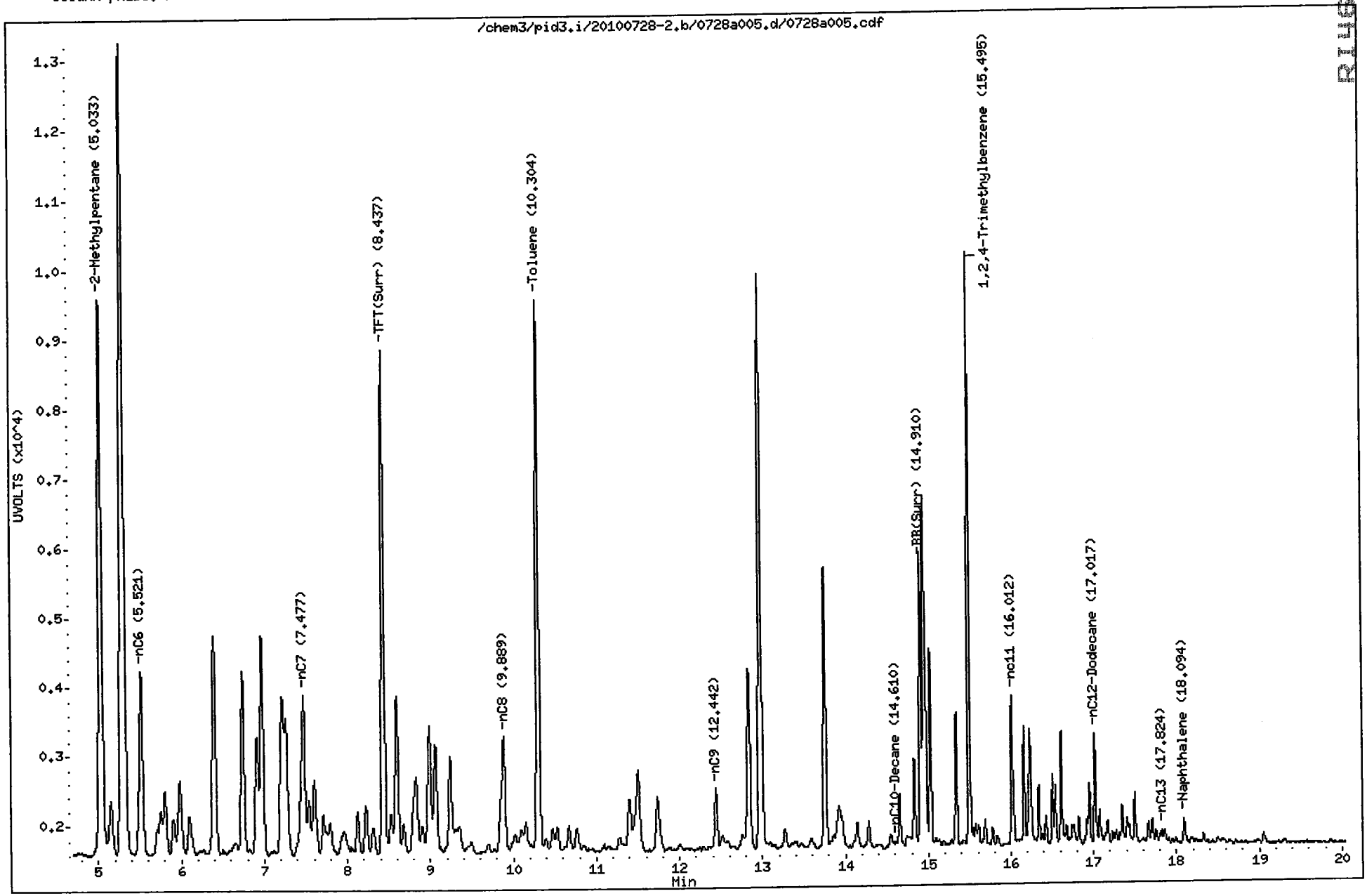
A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20100728-2.b/0728a005.d
Date : 28-JUL-2010 08:31
Client ID:
Sample Info: GAS 1

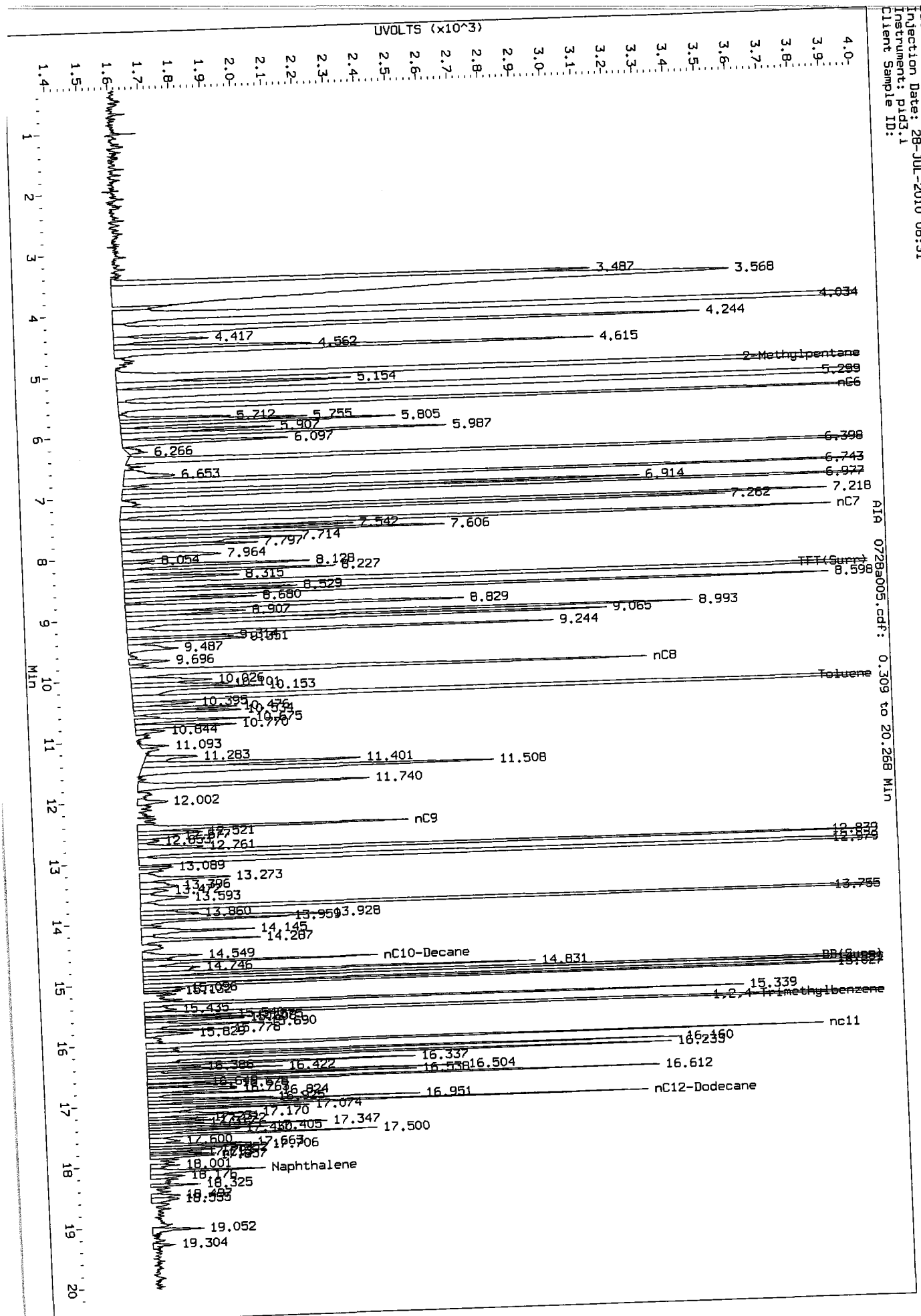
Instrument: pid3.i

Operator: MH
Column diameter: 0.18

Column phase: RTX 502-2 FID



MH 7/29/10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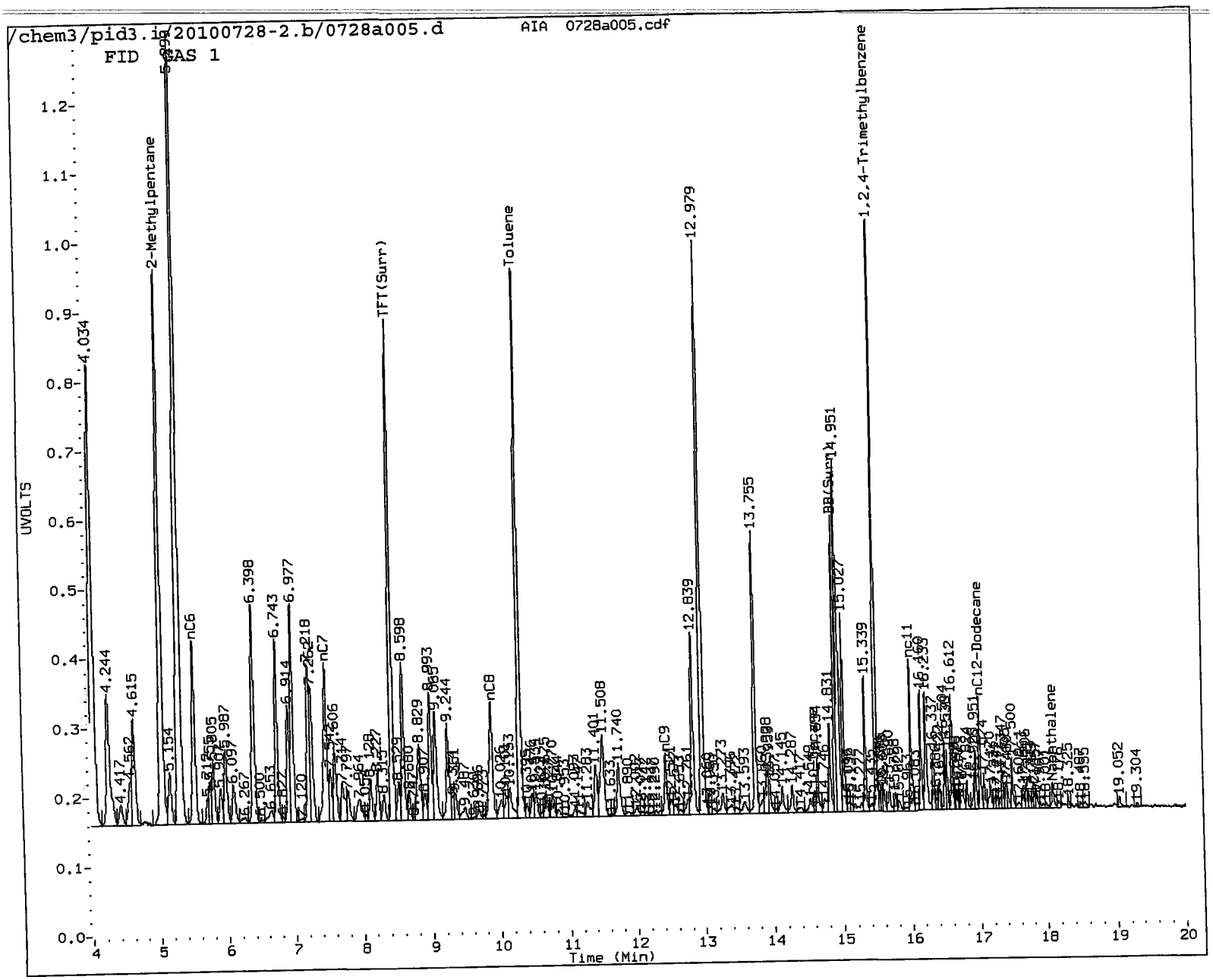
Injection Date: 28-JUL-2010 08:31
Instrument: pid3.i
Client Sample ID:
UVOLTS (x10^3)
Min
AIA 0728a005.cdf: 0.309 to 20.268 Min
3.487
3.568
4.034
4.244
4.417
4.562
4.615
2-Methylpentane
5.299
nC6
5.154
5.712
5.755
5.805
5.907
5.987
6.097
6.266
6.398
6.653
6.743
6.914
6.977
7.218
7.262
nC7
7.542
7.606
7.714
7.797
7.964
8.054
8.128
8.227
TFT(Surr)
8.315
8.598
8.529
8.680
8.829
8.993
8.907
9.065
9.244
9.487
9.696
nC8
10.153
Toluene
10.395
10.476
10.844
10.970
11.093
11.283
11.401
11.508
11.740
12.002
nC9
12.761
13.089
13.273
13.593
13.755
13.860
13.928
14.145
14.287
14.549
nC10-Decane
14.831
14.746
15.339
1,2,4-Trimethylbenzene
15.435
15.690
15.825
nc11
16.160
16.337
16.386
16.422
16.504
16.612
16.824
16.951
nC12-Dodecane
17.074
17.170
17.347
17.405
17.500
17.600
18.001
Naphthalene
18.175
18.325
19.052
19.304



MANUAL INTEGRATION

1. 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/0728a006.d
Data file 2: /chem3/pid3.i/20100728-1.b/0728a006.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 2.5
Client ID:
Injection Date: 28-JUL-2010 08:56
Matrix: WATER
Dilution Factor: 1.000

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
NWTPHG 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)

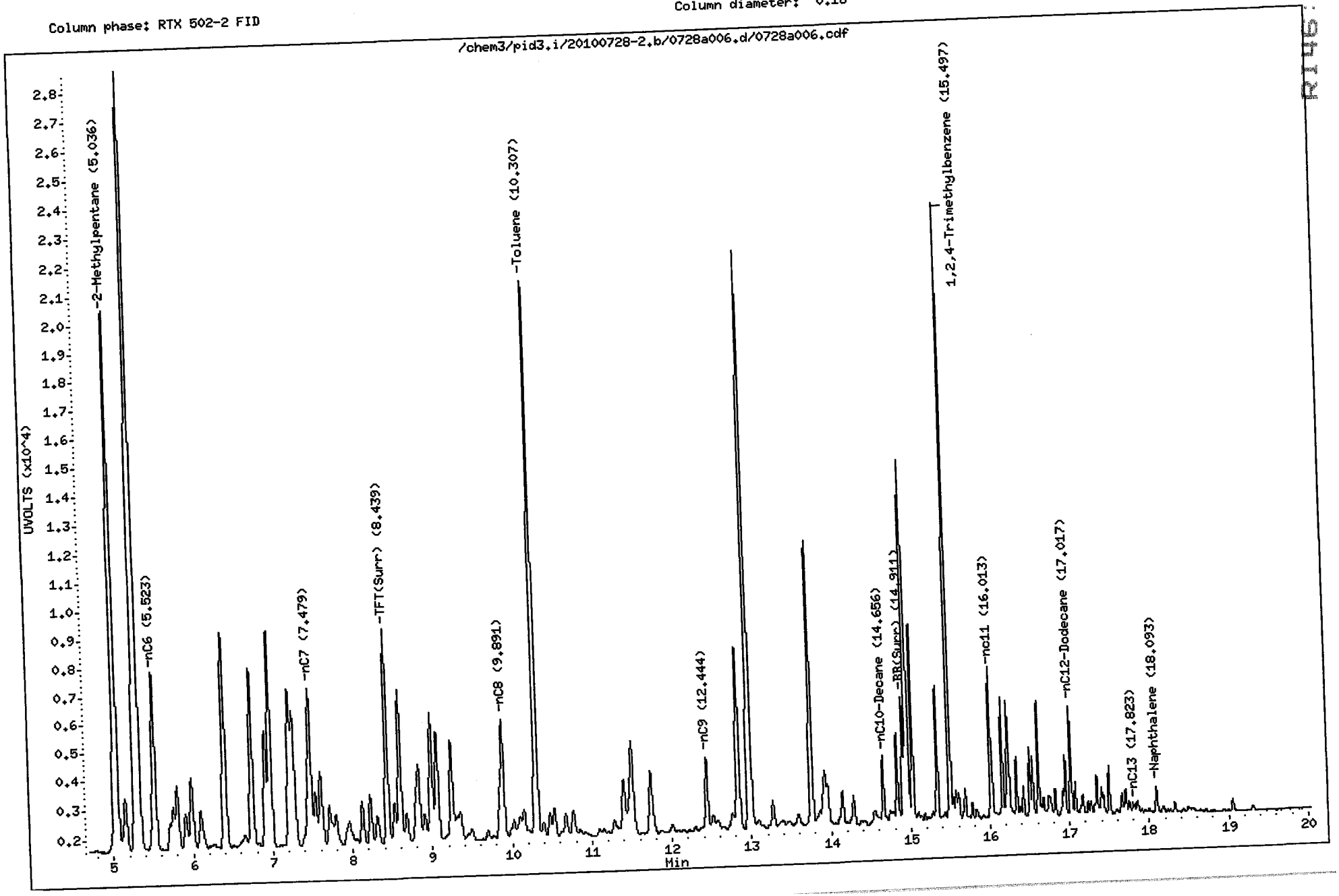
RT	Shift	Response	Amount	Compound
7.715	0.028	7095	5.37	Benzene
10.306	0.034	94086	71.29	Toluene
12.840	0.036	27296	21.97	Ethylbenzene
12.981	0.039	105425	78.29	M/P-Xylene
13.756	0.032	43640	33.97	O-Xylene
5.306	0.019	82935	233.09	MTBE

A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

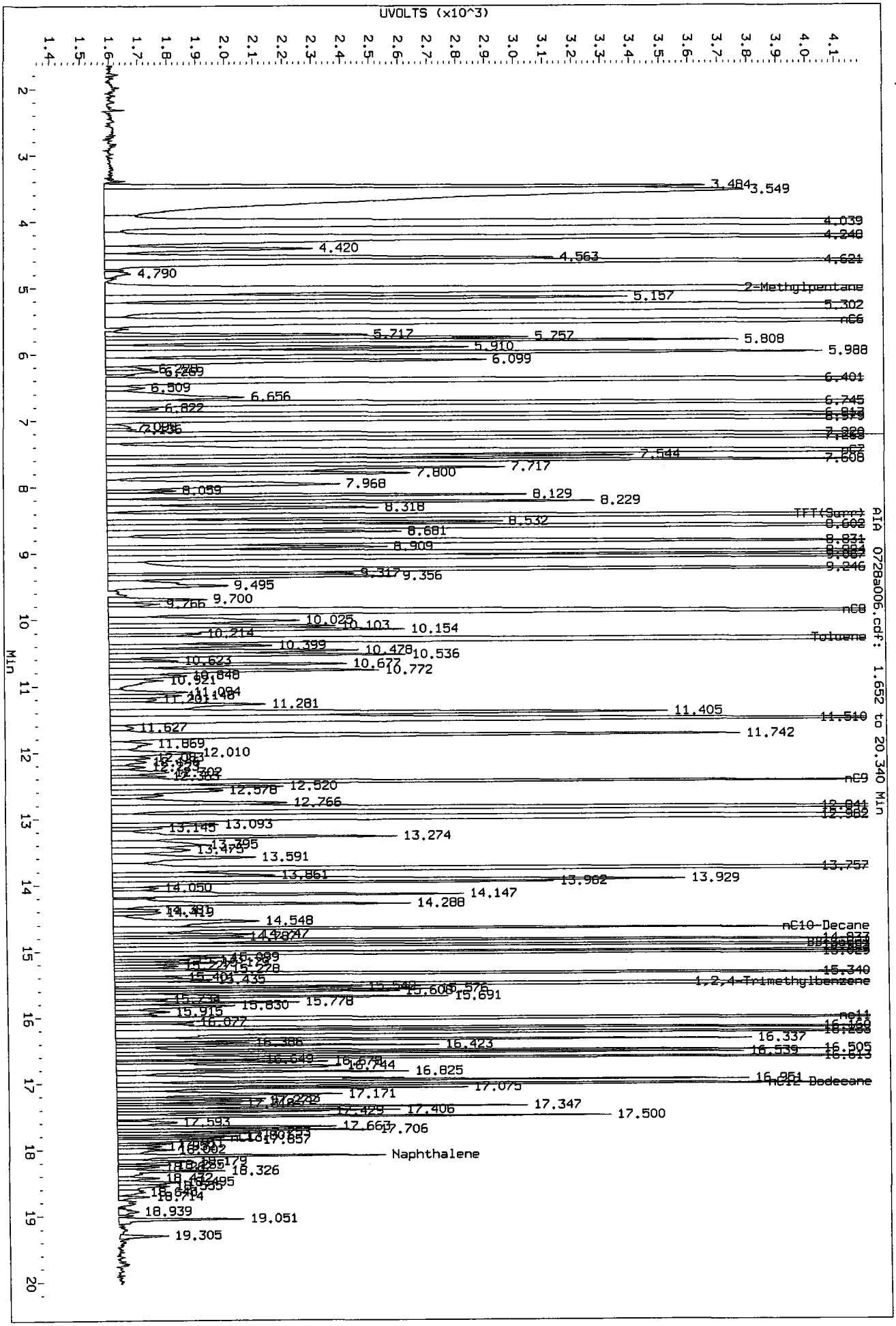
Data File: /chem3/pid3.i/20100728-2.b/0728a006.d
Date : 28-JUL-2010 08:56
Client ID:
Sample Info: GAS 2.5

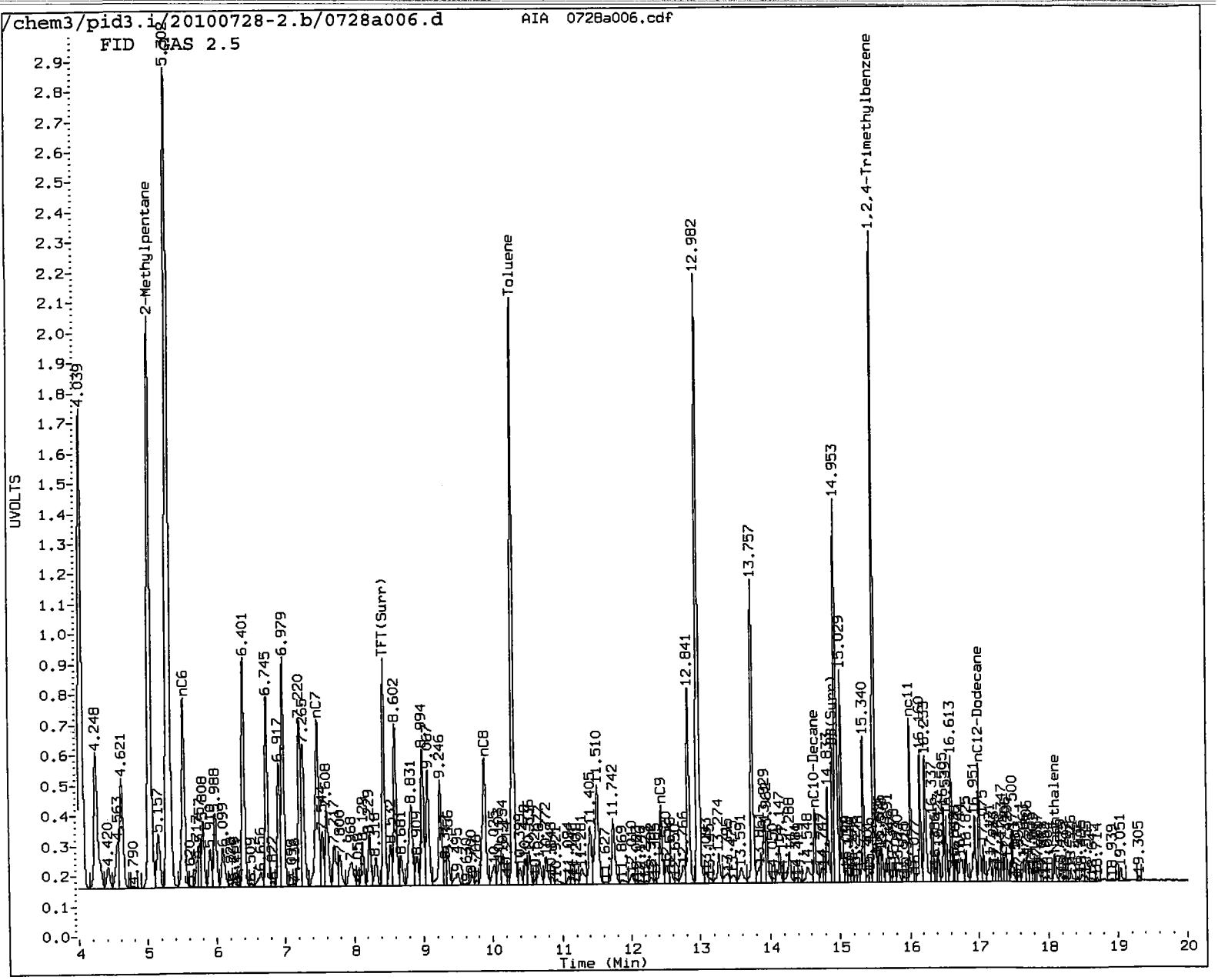
Instrument: pid3.i
Operator: MH
Column diameter: 0.18

Column phase: RTX 502-2 FID



MH 7/29/10





MANUAL INTEGRATION

1. 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

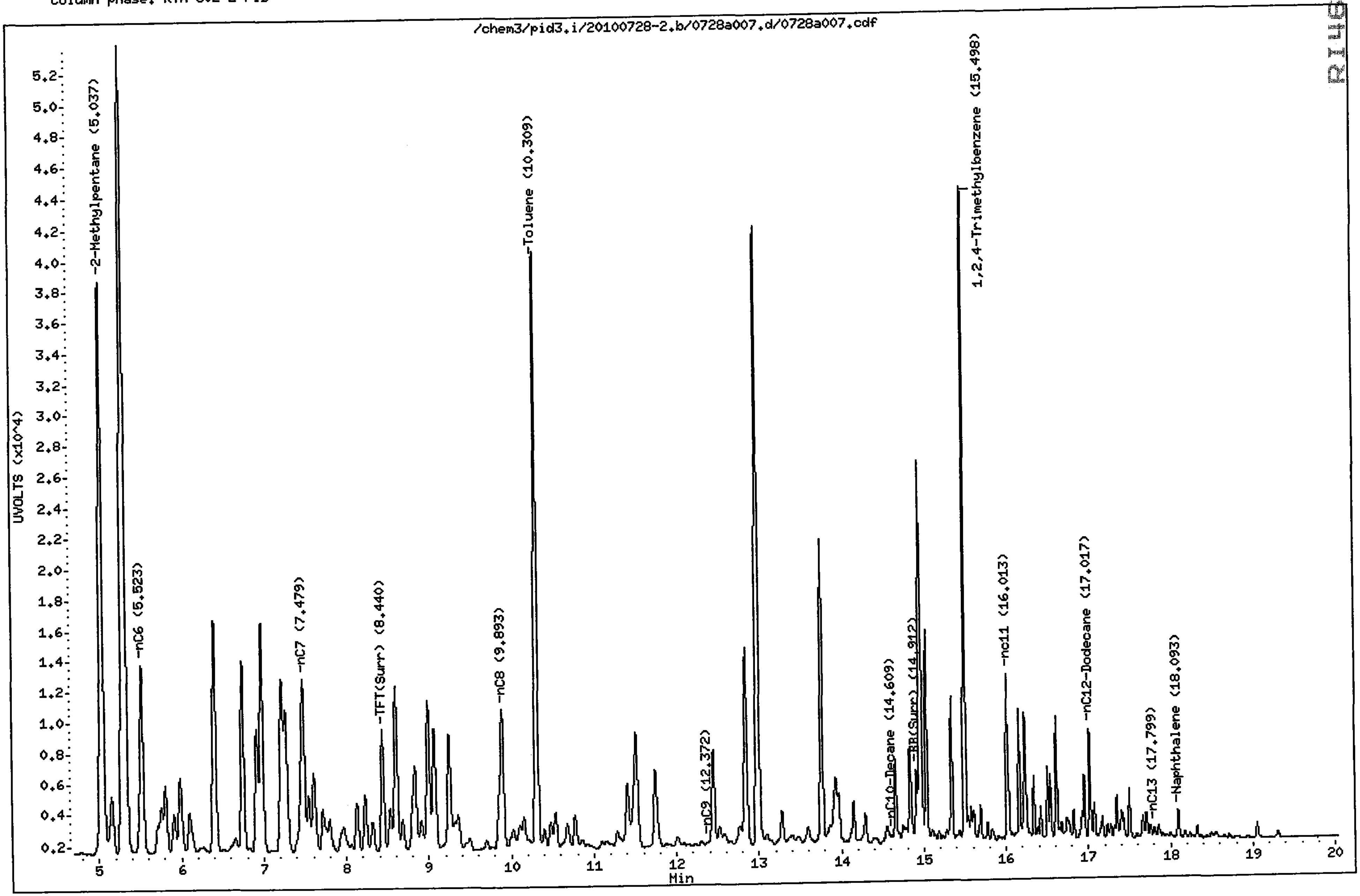
A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

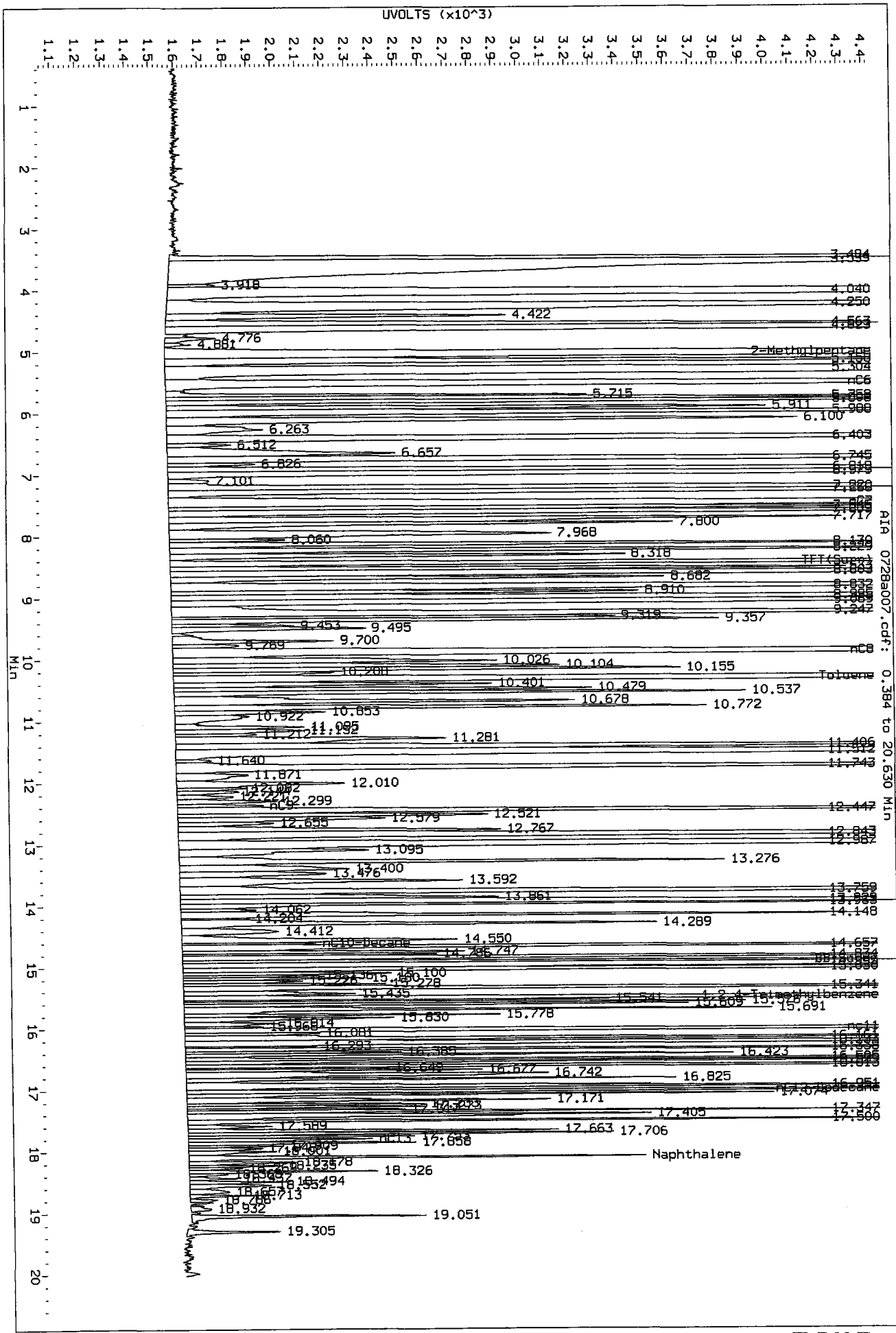
Data File: /chem3/pid3.i/20100728-2.b/0728a007.d
Date : 28-JUL-2010 09:20
Client ID:
Sample Info: GAS 5

Column phase: RTX 502-2 FID

Instrument: pid3.i

Operator: MH
Column diameter: 0.18

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Min
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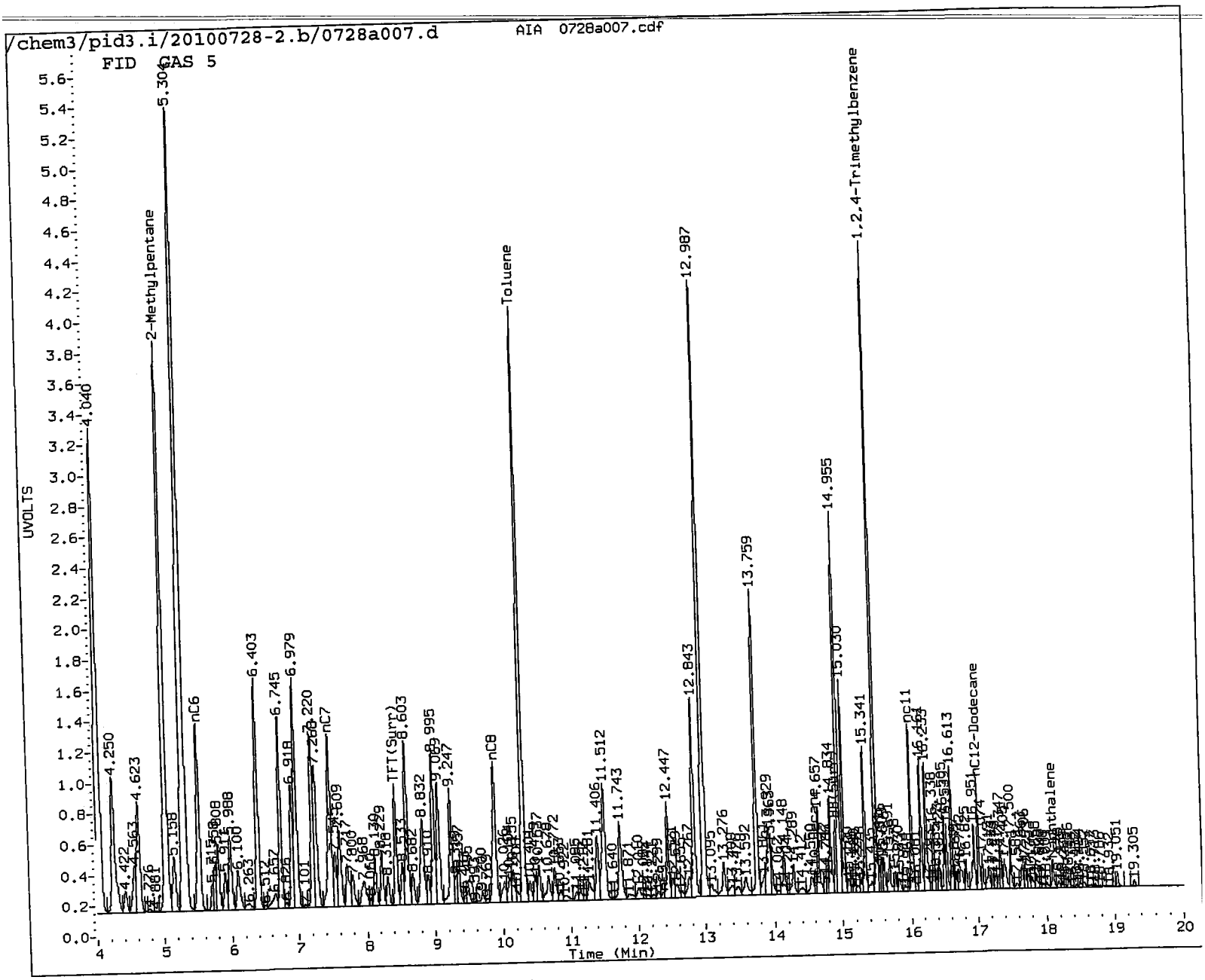
Injection Date: 28-JUL-2010 09:20
Instrument: pid3.i
Client Sample ID:
AIA 0728a007.cdf: 0.384 to 20.630 Min
2-Methylpentane
nC6
nC8
Toluene
nC9
nC10-Decane
1,2,4-Trimethylbenzene
nC11
nC12-Dodecane
Naphthalene
3.484
3.918
4.040
4.250
4.422
4.563
4.776
4.881
5.304
5.715
5.911
6.100
6.263
6.403
6.512
6.657
6.745
6.826
7.101
7.717
7.800
7.968
8.060
8.318
8.682
8.832
8.910
9.247
9.319
9.357
9.453
9.495
9.700
9.769
10.026
10.104
10.155
10.200
10.401
10.479
10.537
10.678
10.772
10.853
10.922
11.085
11.192
11.281
11.406
11.640
11.743
11.871
12.010
12.299
12.447
12.521
12.579
12.655
12.767
12.843
13.095
13.276
13.400
13.476
13.592
13.759
13.861
14.062
14.148
14.289
14.412
14.550
14.657
14.747
15.100
15.228
15.341
15.435
15.541
15.609
15.691
15.778
15.830
16.081
16.293
16.385
16.423
16.649
16.677
16.742
16.825
16.951
17.074
17.171
17.293
17.347
17.405
17.500
17.589
17.663
17.706
17.858
18.001
18.326
18.494
18.552
18.713
18.932
19.051
19.305



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.
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

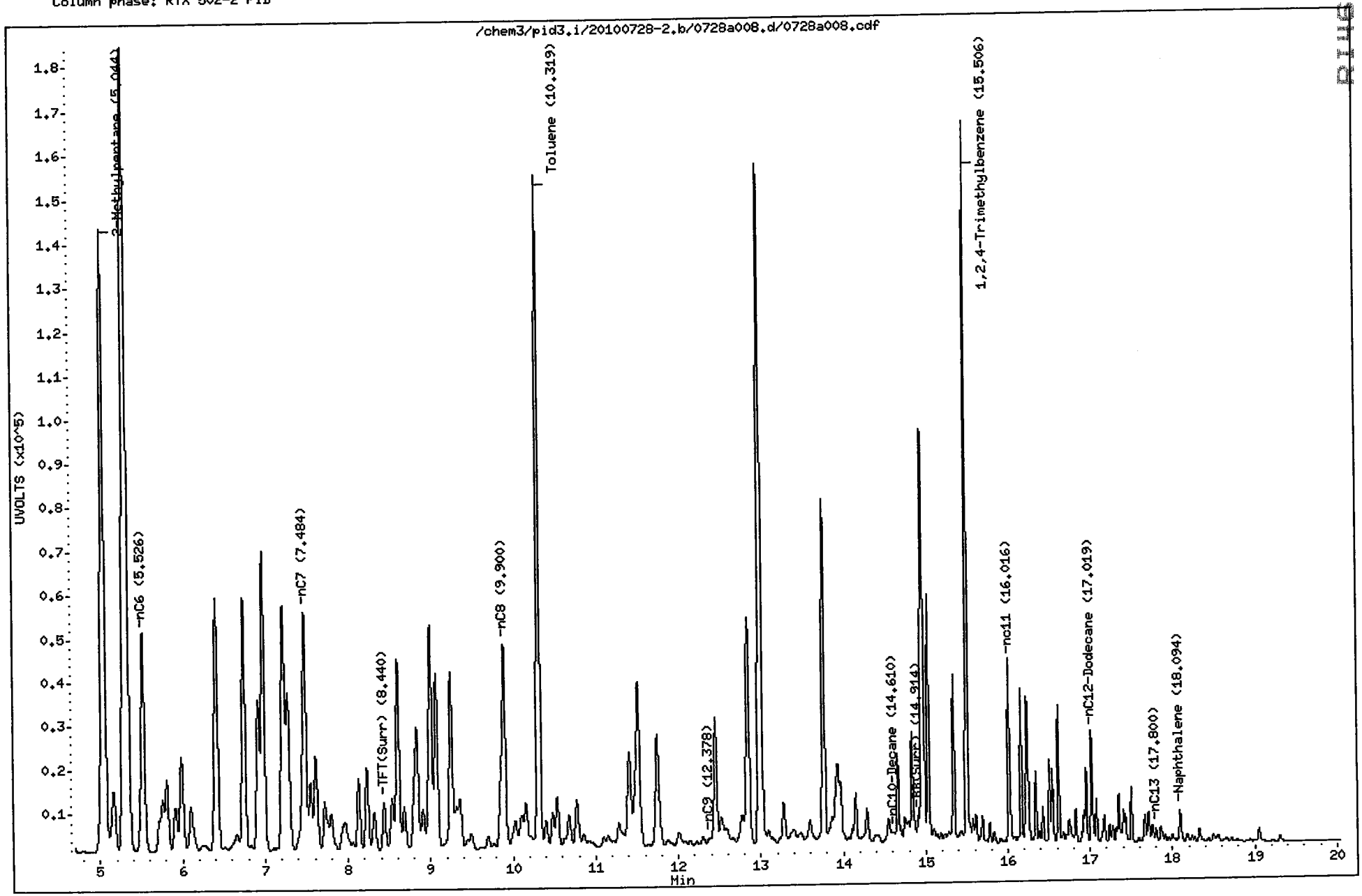
A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20100728-2.b/0728a008.d
Date : 28-JUL-2010 09:45
Client ID:
Sample Info: GAS 20

Instrument: pid3.i

Operator: MH
Column diameter: 0.18

Column phase: RTX 502-2 FID



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.b/0728a010.d

Date : 28-JUL-2010 10:34

Client ID:

Sample Info: GAS ICV

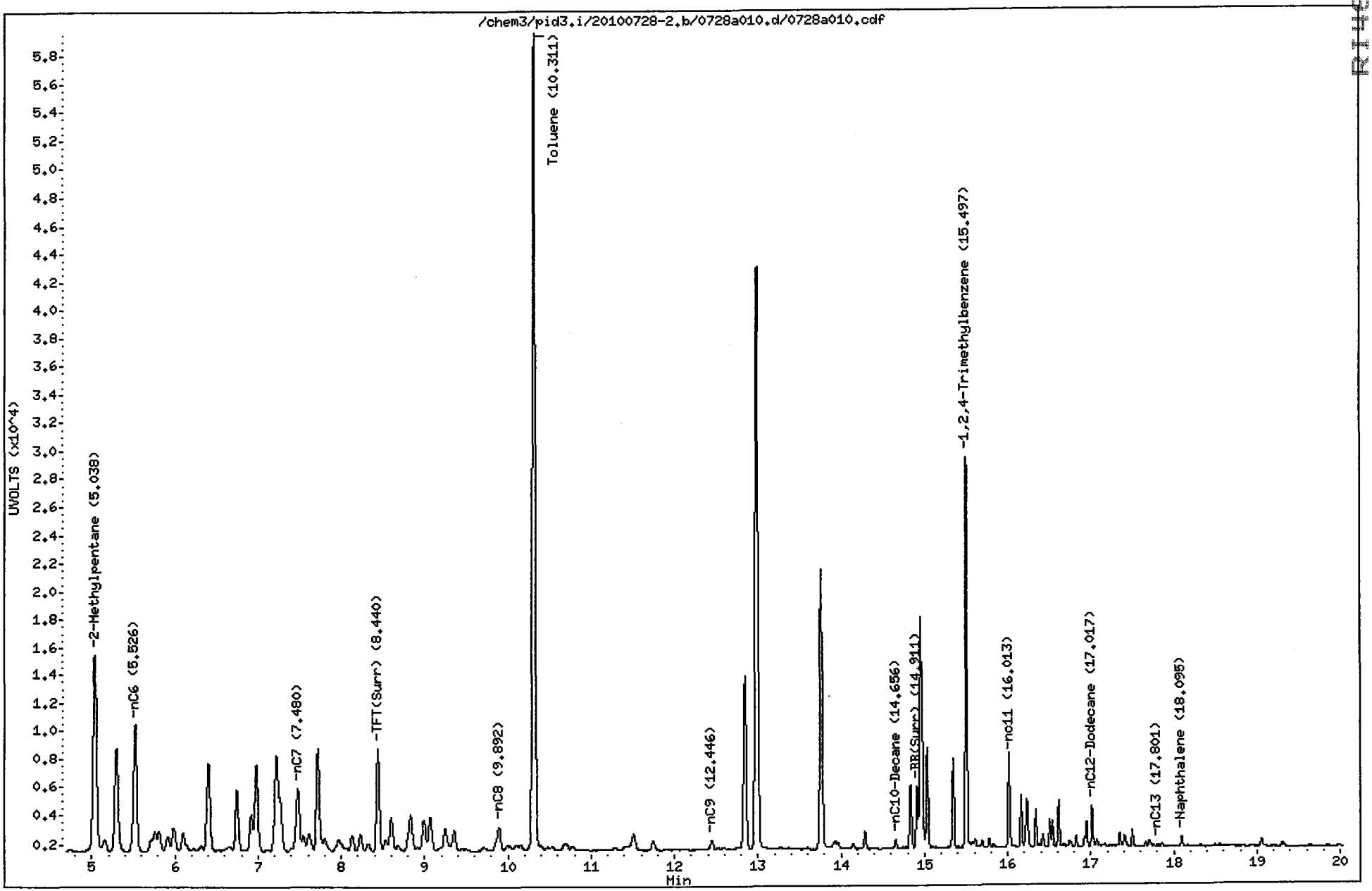
Column phase: RTX 502-2 FID

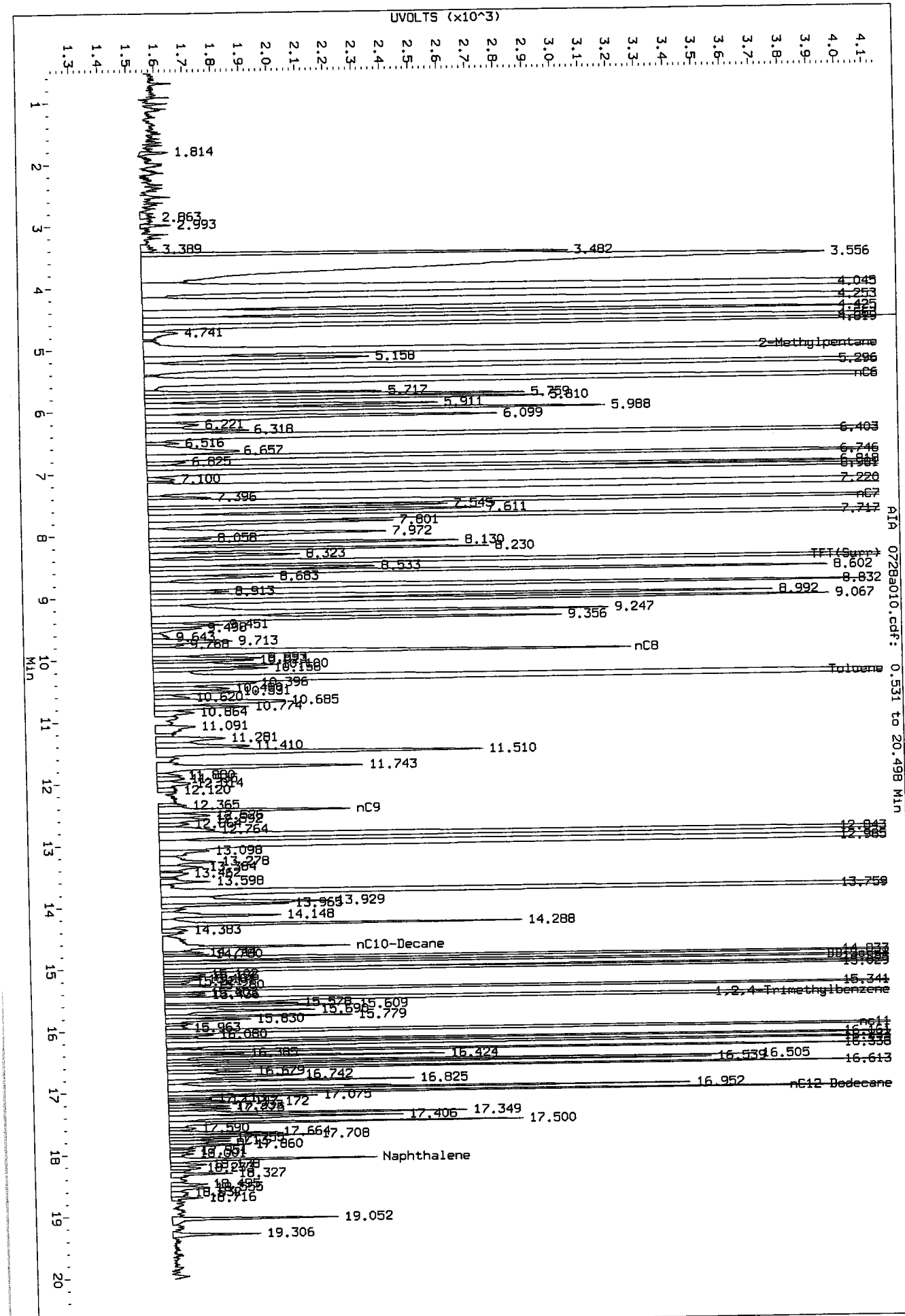
Instrument: pid3.i

Operator: MH

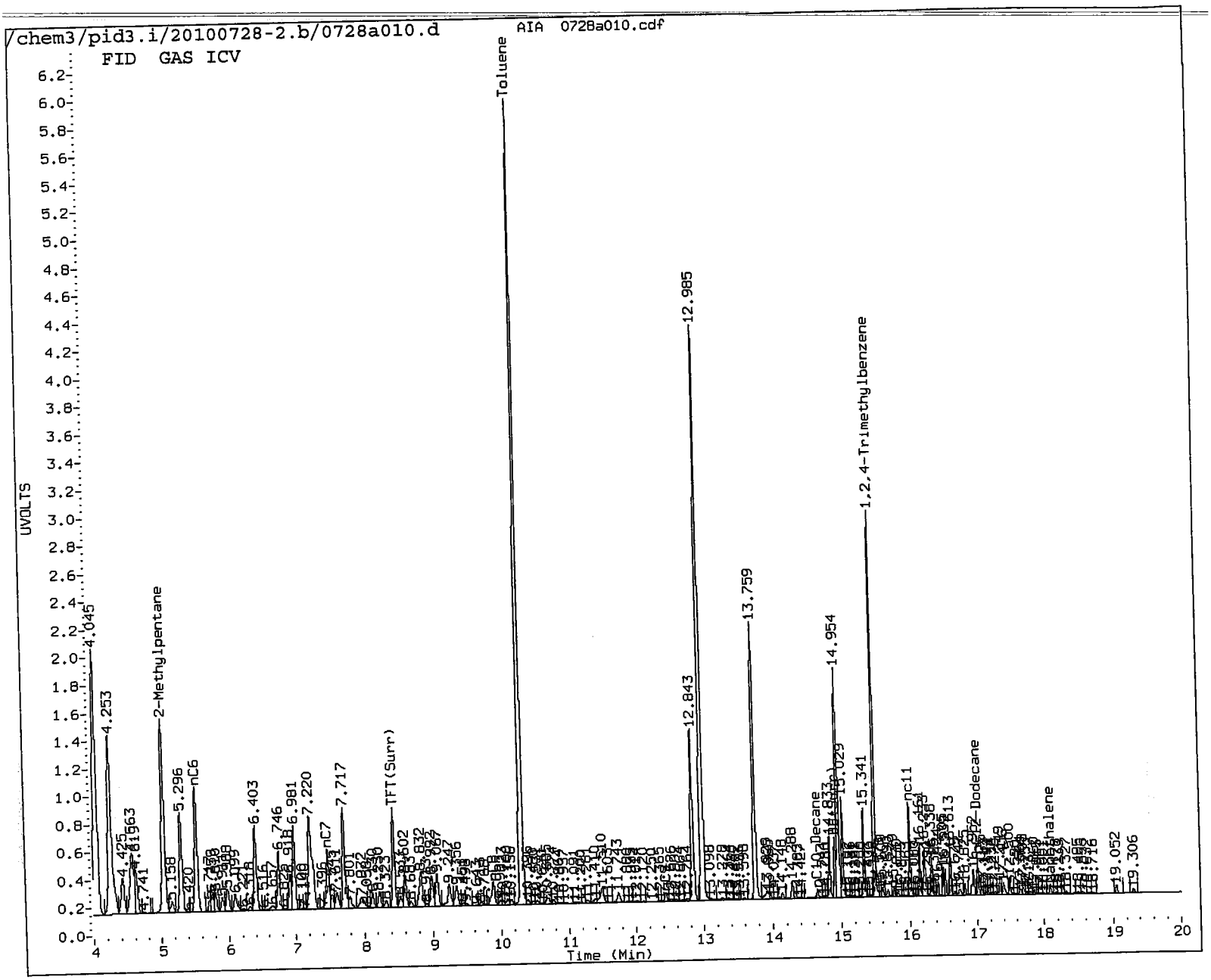
Column diameter: 0.18

RTIS: 00775




UVOLTS (x10^3)
Min
Data File: /chem3/pid3.i/20100728-2.b/0728a010.d/0728a010.cdf
Injection Date: 28-JUL-2010 10:34
Instrument: pid3.1
Client Sample ID:
AIA 0728a010.cdf: 0.531 to 20.498 Min
1.814
2.863
2.993
3.389
3.482
3.556
4.045
4.253
4.741
2-Methylpentane
5.158
5.296
nC6
5.712
5.759
5.810
5.911
5.988
6.099
6.221
6.318
6.403
6.516
6.657
6.746
6.825
7.100
7.220
7.396
nC7
7.545
7.611
7.717
7.801
7.972
8.056
8.130
8.230
8.323
TFT(Surr)
8.533
8.602
8.683
8.832
8.913
8.992
9.067
9.356
9.247
9.643
9.713
nC8
Toluene
10.620
10.685
10.774
10.864
11.091
11.281
11.410
11.510
11.743
12.120
12.365
nC9
12.764
13.098
13.278
13.598
13.759
13.965
13.929
14.148
14.288
14.383
nC10-Decane
15.341
1,2,4-Trimethylbenzene
15.578
15.609
15.696
15.779
15.830
15.963
16.080
16.424
16.539
16.505
16.613
16.679
16.742
16.825
16.952
nC12 Dodecane
17.075
17.406
17.349
17.500
17.590
17.664
17.708
17.860
Naphthalene
18.327
18.716
19.052
19.306

RI46:00780



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
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
INJ.TIME:	08:07	08:31	08:56	09:20	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 TFT(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 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 (NA)

Method Blank In Control? (YES) / NO

BFB Tune Meets Criteria? YES / NO (NA)

LCS / LCSD Recovery In Control? (YES) / NO

Internal Standard Meets Criteria? YES / NO (NA)

Surrogate Recovery In Control? (YES) / NO

ICal acceptable? (YES) / NO

Q flag applied? YES / NO (NA)

CCal acceptable? (YES) / NO

Q flag applied? YES / NO (NA)

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 Targed 25

Additional Details on Reverse: Yes / No

Analyst: _____ **Date:** 7/10/10

Reviewer: _____ **Date:** 7-10-10

Analytical Resources Inc.: Organics Instrument Log

PID-3 HP 5890 Series II - Serial No.: 2728A-13336

Date: 6/29/10 MH 7/1/10 Analysis: NWTPH6/BETX Analyst: MH

GC Program: BETX Column No: 837213 Column Type: RTX502-2

Instrument Tune (.U or .CT.): EM Voltage:

Calibration File: Curve Date: 2/2/10 6-8 6/29/10 BETX

IS/SS	Ical/Ccal	LCS/ICV
VW632-2	VW607-1	VW629-4
	VW630-4	
	VW629-4	

	Time	Filename	LabID	ClientID	Vial#	pH	DF
1	0548	0629a001.d	RINSE				1
2	0613	0629a002.d	RT+BCAL 1				1
3	0637	0629a003.d	GCAL 1				1
4	0735	0629a004.d	RINSE				1
5	0759	0629a005.d	BETX .25				1
6	0824	0629a006.d	BETX .5				1
7	0848	0629a007.d	BETX 5				1
8	0912	0629a008.d	BETX 25				1
9	0937	0629a009.d	BETX 50				1
10	1001	0629a010.d	BETX 100				1
11	1026	0629a011.d	BETX 200				1
12	1050	0629a012.d	BETX ICV				1
13	1145	0629a013.d	GCAL 2				1
14	1210	0629a014.d	LCS0629				1
15	1234	0629a015.d	LCSD0629				1
16	1259	0629a016.d	MB0629				1
17	1344	0629a017.d	RC18B	Trip Blank	2	1	1
18	1408	0629a018.d	RC18A	Sample 1	2	1	1
19	1433	0629a019.d	RB54D	92-8S	8	1	1
20	1458	0629a020.d	RB54E	92-9S	4	1	1
21	1522	0629a021.d	RB54F	92-10S	4	1	1
22	1547	0629a022.d	RB54G	51-2	3	1	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 7/1/16

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.

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

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 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	
1 MTBE	464	288	367	346	348	334	343	356	15.046	
2 Benzene	1564	1462	1257	1240	1256	1221	1254	1322	10.156	
4 Toluene	1608	1252	1288	1275	1275	1247	1294	1320	9.717	
15 Chlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
5 Ethylbenzene	1404	1420	1164	1185	1190	1152	1183	1243	9.380	
6 M/P-Xylene	1614	1381	1314	1300	1302	1247	1268	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	1232	1295	1269	1282	1256	1307	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	220	213	214	217	212	219	220	4.943	
$ 8 BB(Surr)	496	451	434	440	456	450	463	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 Level 1	0.000e+00 Level 2	0.000e+00 Level 3	0.000e+00 Level 4	0.000e+00 Level 5	0.000e+00 Level 6	0.000e+00 Level 7	RRF	% RSD	
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
Data file 2: /chem3/pid3.i/20100629-1.b/0629a005.d
Method: /chem3/pid3.i/20100629-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 02-FEB-2010
BETX Ical Date: 29-JUN-2010

ARI ID: BETX .25
Client ID:
Injection Date: 29-JUN-2010 07:59
Matrix: WATER
Dilution Factor: 1.000

==========

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

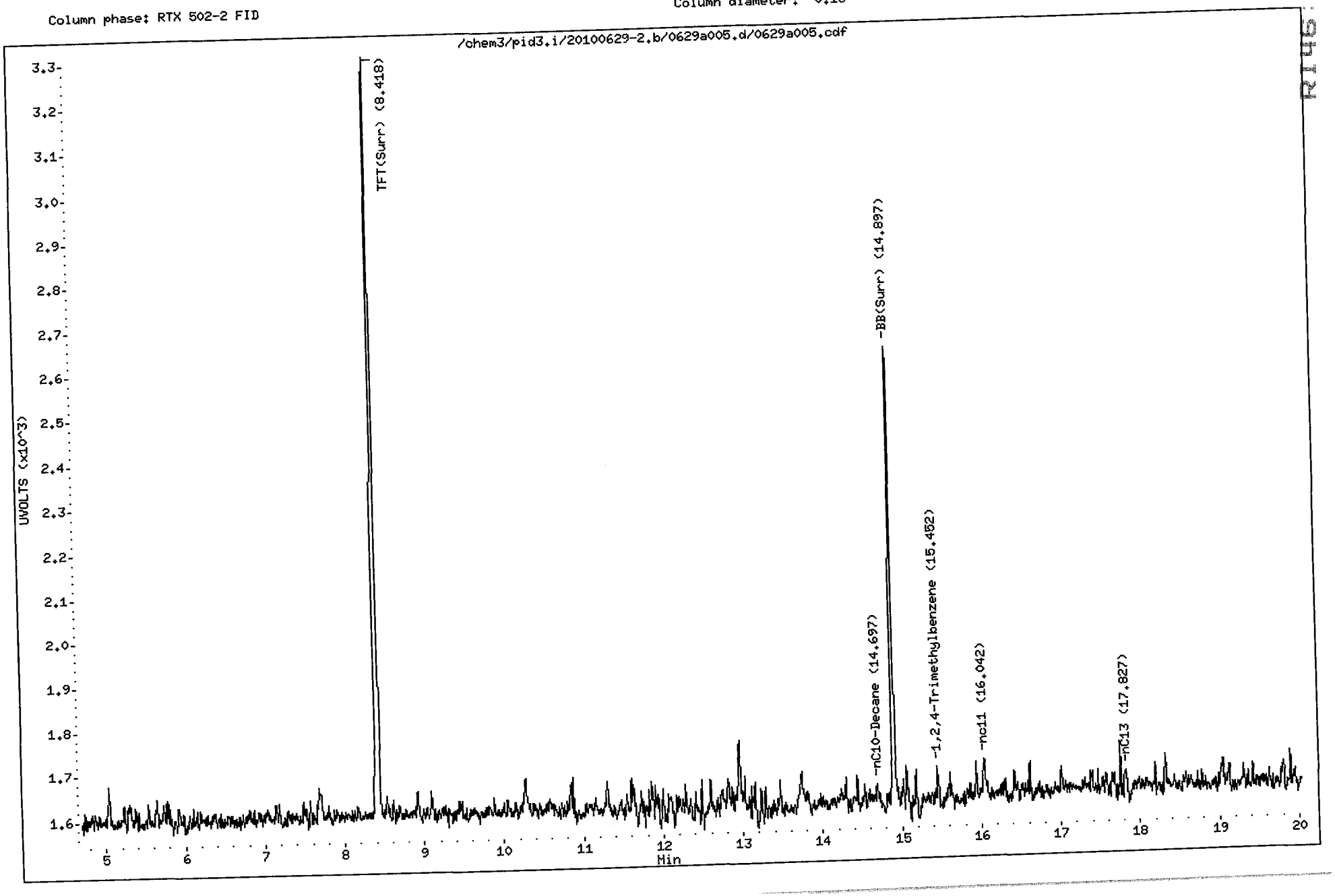
A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20100629-2.b/0629a005.d
Date : 29-JUN-2010 07:59
Client ID:
Sample Info: BETX .25

Instrument: pid3.i

Operator: MH
Column diameter: 0.18

Column phase: RTX 502-2 FID

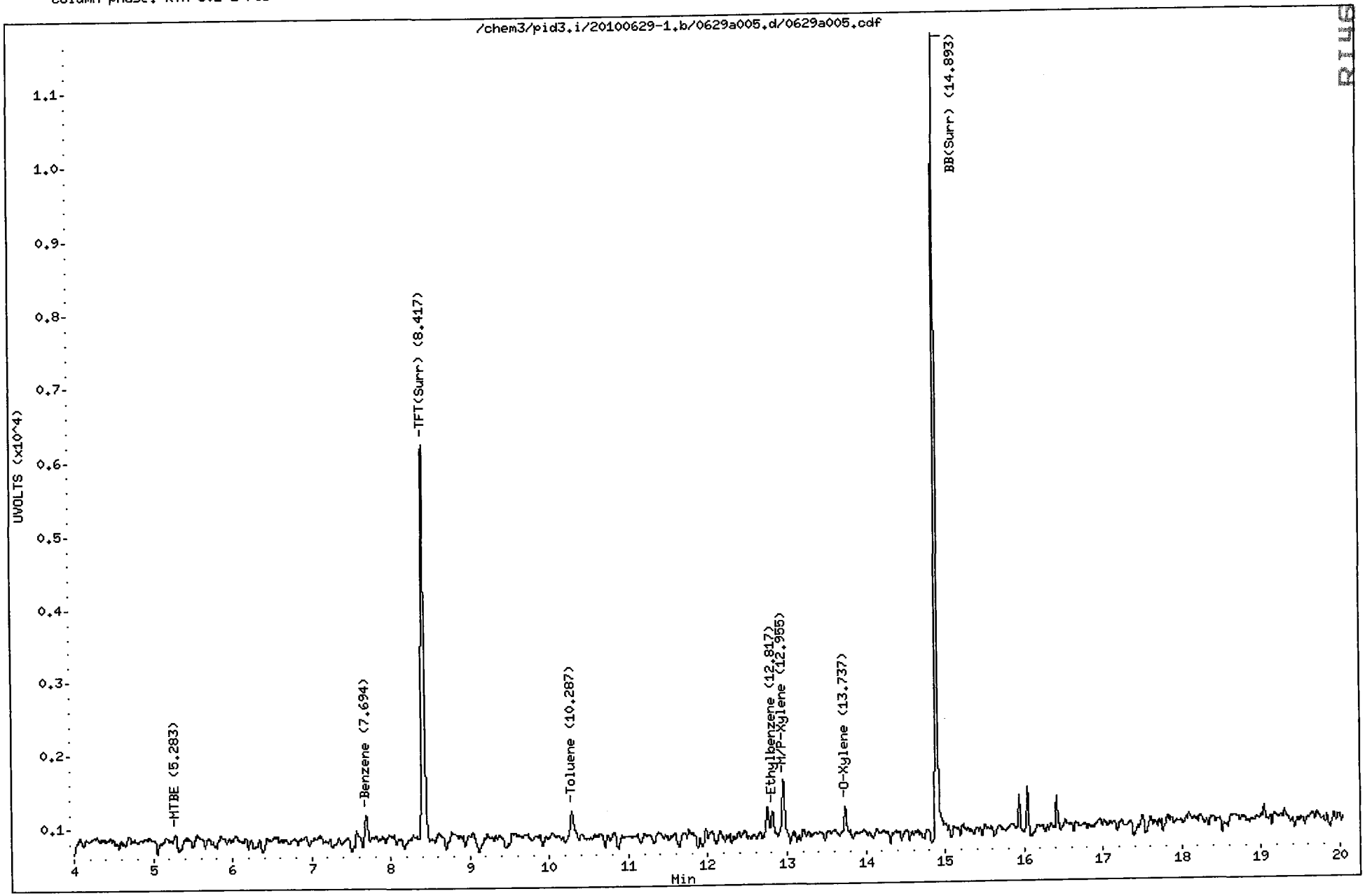


Data File: /chem3/pid3.i/20100629-1.b/0629a005.d
Date : 29-JUN-2010 07:59
Client ID:
Sample Info: BETX .25

Instrument: pid3.i

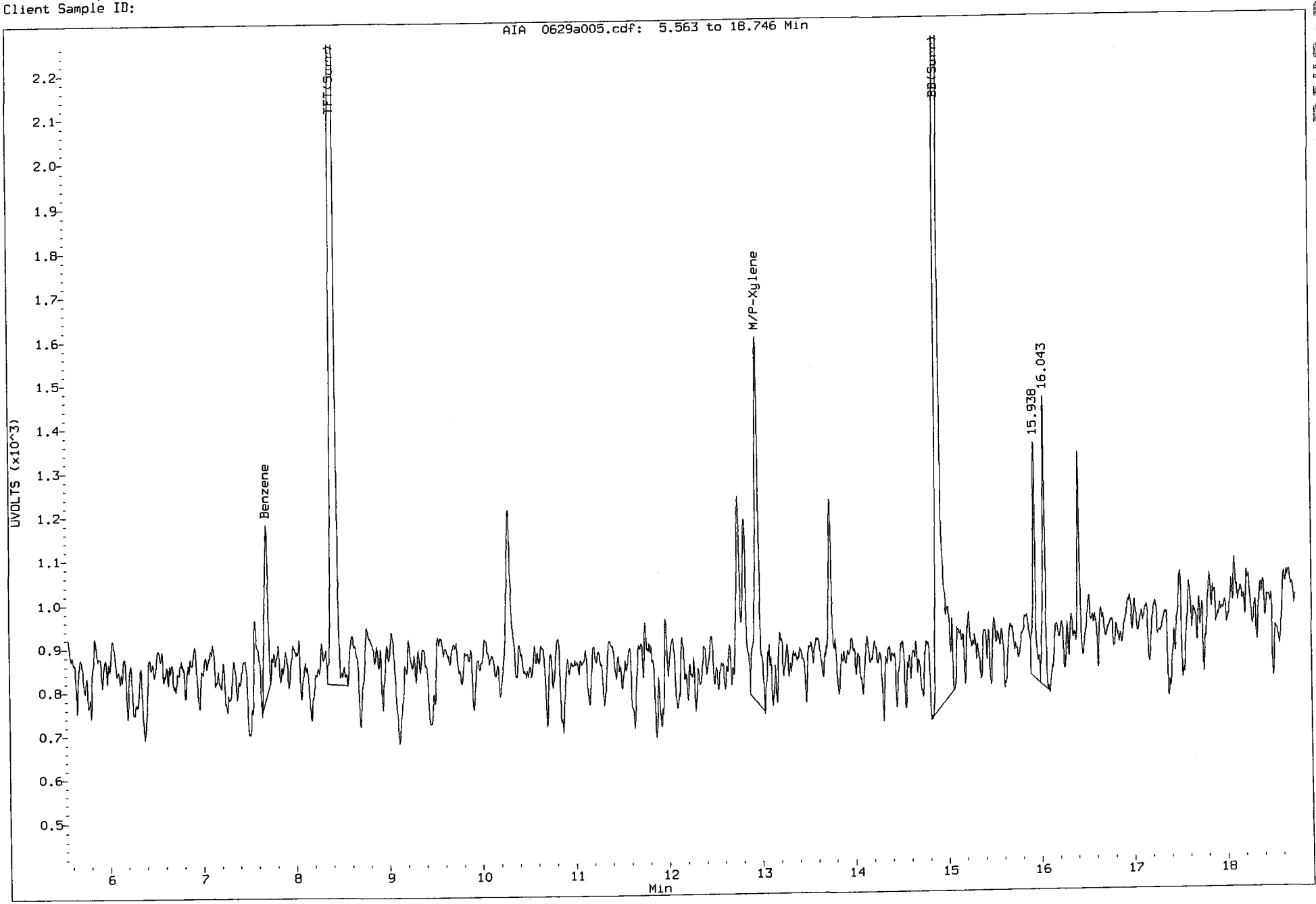
Operator: MH
Column diameter: 0.18

Column phase: RTX 502-2 PID



MM 7/10/10

Data File: /chem3/pid3.i/20100629-1.b/0629a005.d/0629a005.cdf
Injection Date: 29-JUN-2010 07:59
Instrument: pid3.i
Client Sample ID:



RT16:00794

Data File: /chem3/pid3.i/20100629-1.b/0629a005.d/0629a005.cdf
Injection Date: 29-JUN-2010 07:59
Instrument: pid3.i
Client Sample ID:

AIA 0629a005.cdf: 4.391 to 17.575 Min

UVOLTS (x10^3)

MTBE
Benzene
TFT(Surr)
Toluene
12.750
Ethylbenzene
M/P-Xylene
O-Xylene
BB(Surr)
15.938
16.043

Min

MANUAL ADJUSTMENTS

1. Peak not found
2. Poor Chromatography
3. Baseline Correction
4. Totals Calculation
5. Other

Analyst MA Date 7/12/10

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100629-2.b/0629a006.d
Data file 2: /chem3/pid3.i/20100629-1.b/0629a006.d
Method: /chem3/pid3.i/20100629-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 02-FEB-2010
BETX Ical Date: 29-JUN-2010

ARI ID: BETX .5
Client ID:
Injection Date: 29-JUN-2010 08:24
Matrix: WATER
Dilution Factor: 1.000

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

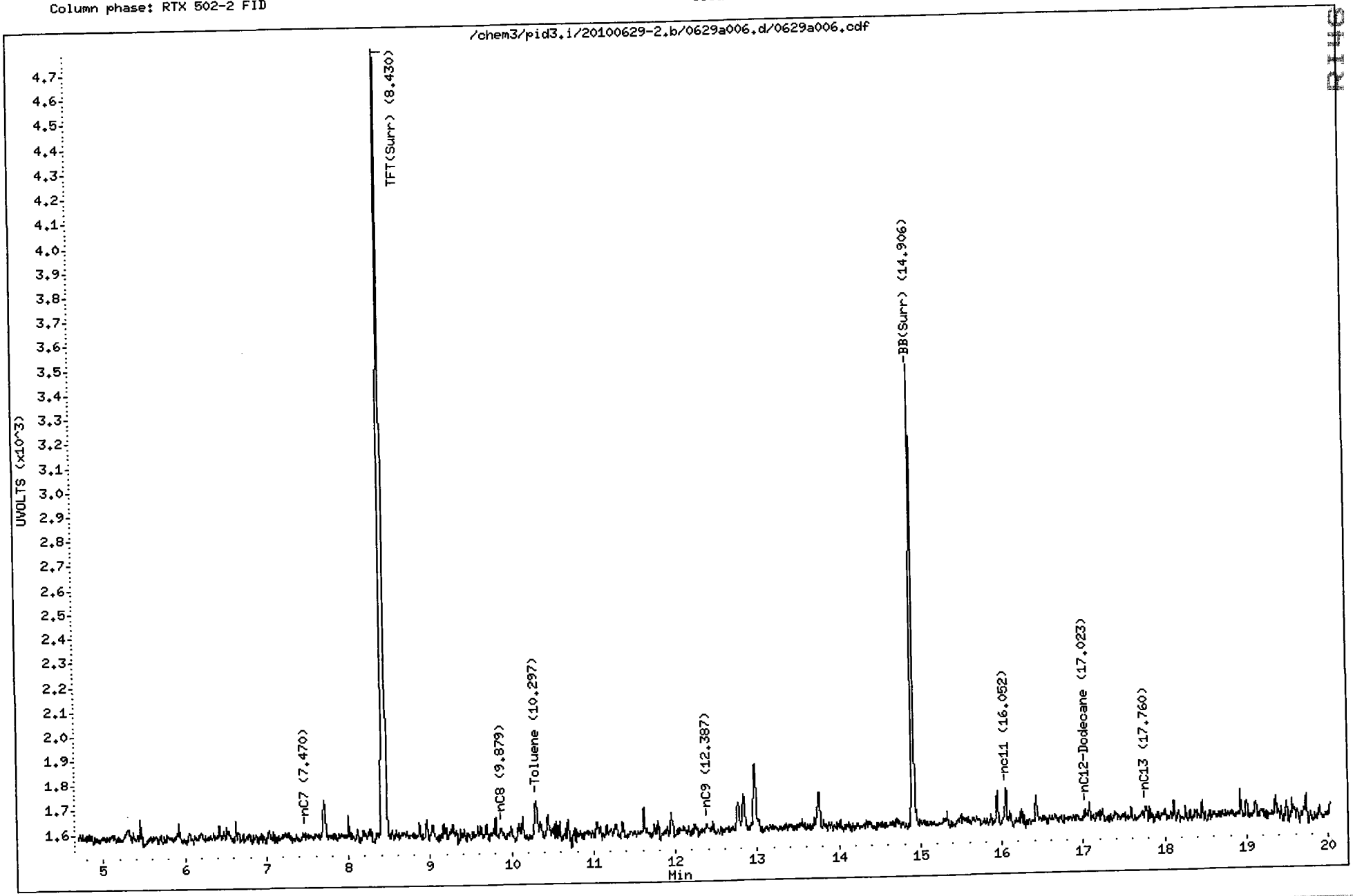
A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20100629-2.b/0629a006.d
Date : 29-JUN-2010 08:24
Client ID:
Sample Info: BETX .5

Instrument: pid3.i

Operator: MH
Column diameter: 0.18

Column phase: RTX 502-2 FID

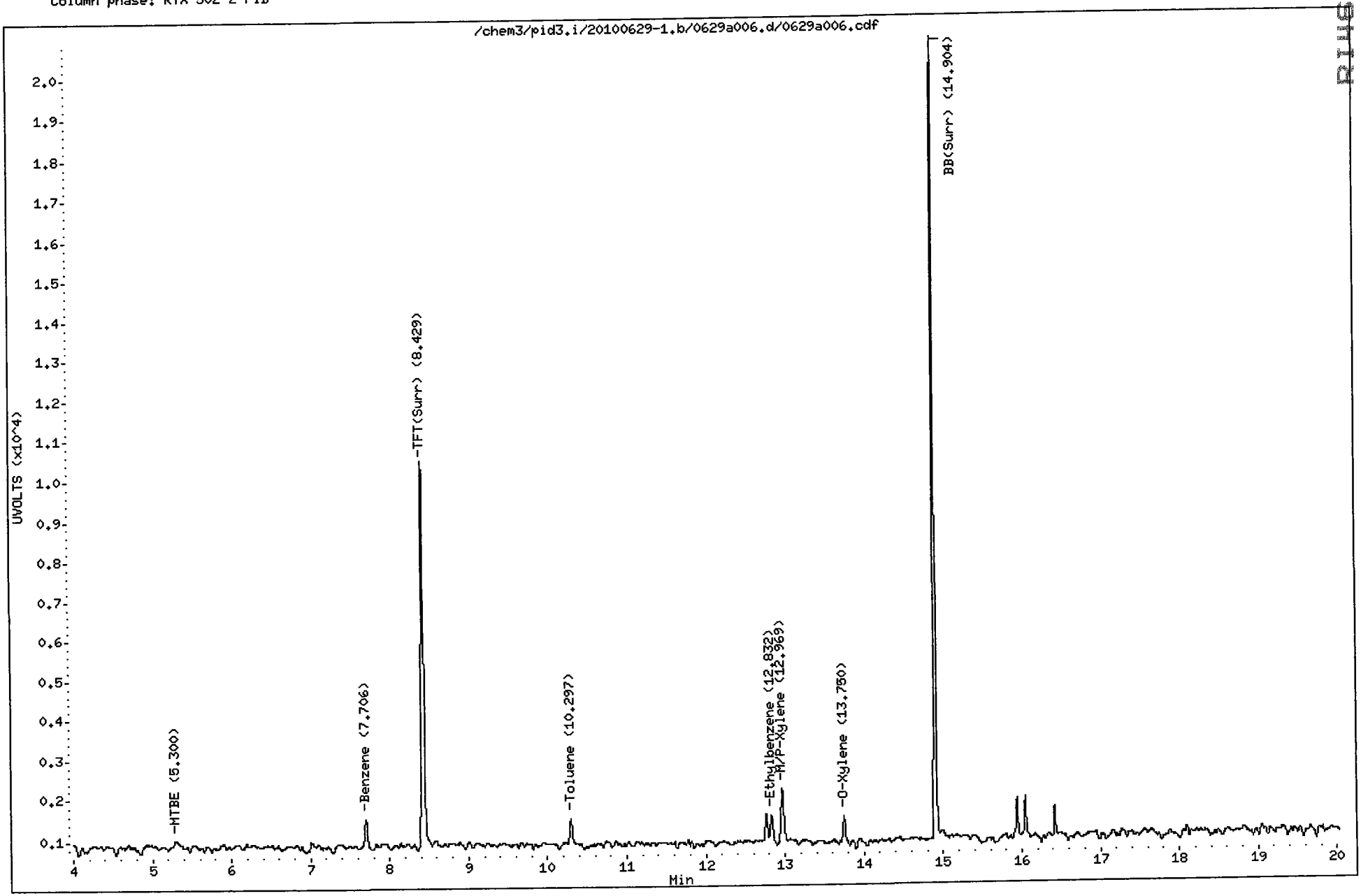


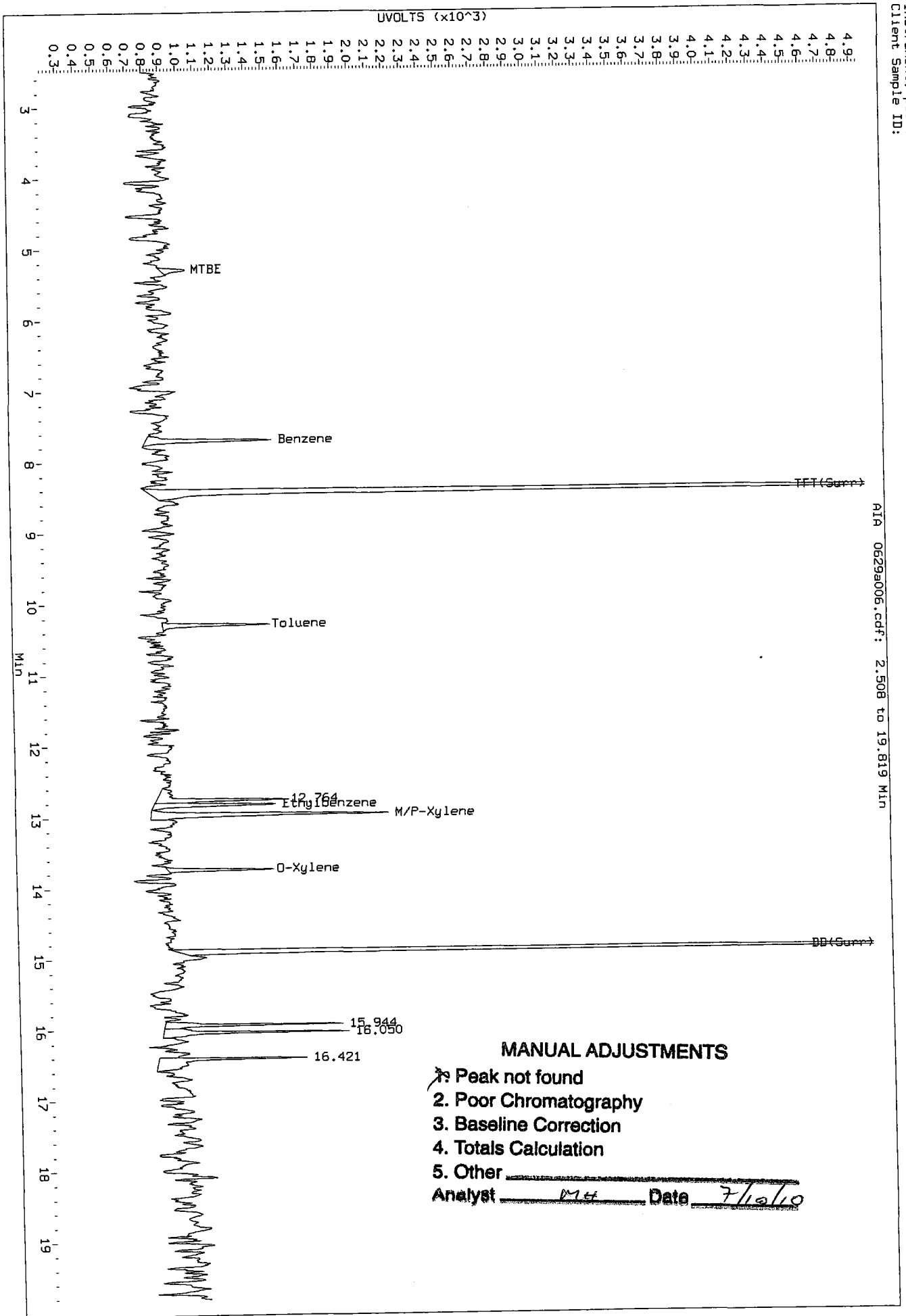
Data File: /chem3/pid3.i/20100629-1.b/0629a006.d
Date : 29-JUN-2010 08:24
Client ID:
Sample Info: BETX .5

Instrument: pid3.i

Operator: MH
Column diameter: 0.18

Column phase: RTX 502-2 PID





Data File: /chem3/pid3.i/20100629-1.b/0629a006.d/0629a006.cdf
Injection Date: 29-JUN-2010 08:24
Instrument: pid3.i
Client Sample ID:

AIA 0629a006.cdf: 2.508 to 19.819 Min

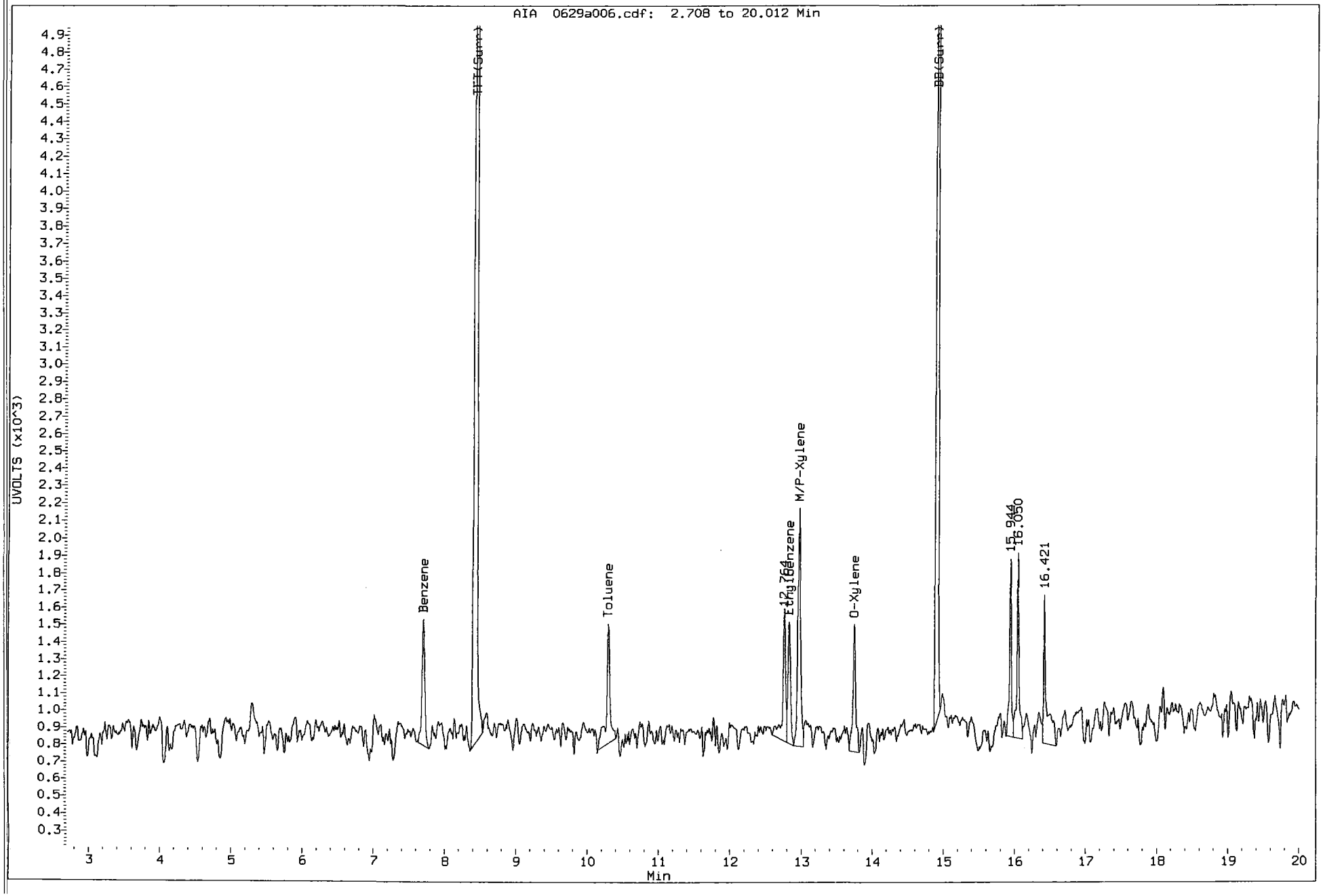
MANUAL ADJUSTMENTS

1. Peak not found
2. Poor Chromatography
3. Baseline Correction
4. Totals Calculation
5. Other _____

Analyst MH Date 7/19/10

MH
7/10/12

Data File: /chem3/pid3.i/20100629-1.b/0629a006.d/0629a006.cdf
Injection Date: 29-JUN-2010 08:24
Instrument: pid3.i
Client Sample ID:



MH 7/10/10

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100629-2.b/0629a007.d
Data file 2: /chem3/pid3.i/20100629-1.b/0629a007.d
Method: /chem3/pid3.i/20100629-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 02-FEB-2010
BETX Ical Date: 29-JUN-2010

ARI ID: BETX 5
Client ID:
Injection Date: 29-JUN-2010 08:48
Matrix: WATER
Dilution Factor: 1.000

==========

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

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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

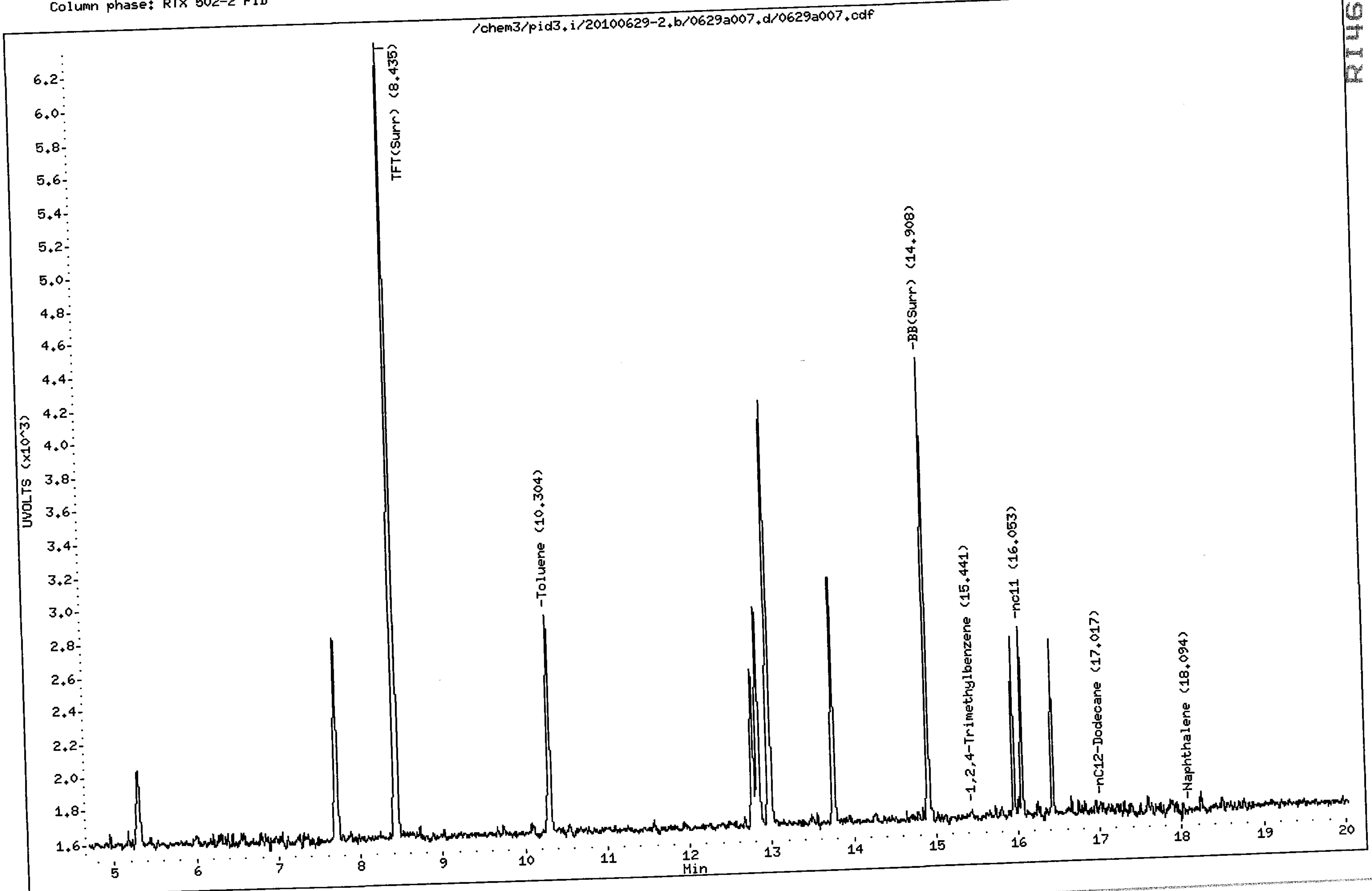
A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20100629-2.b/0629a007.d
Date : 29-JUN-2010 08:48
Client ID:
Sample Info: BETX 5

Column phase: RTX 502-2 FID

Instrument: pid3.i

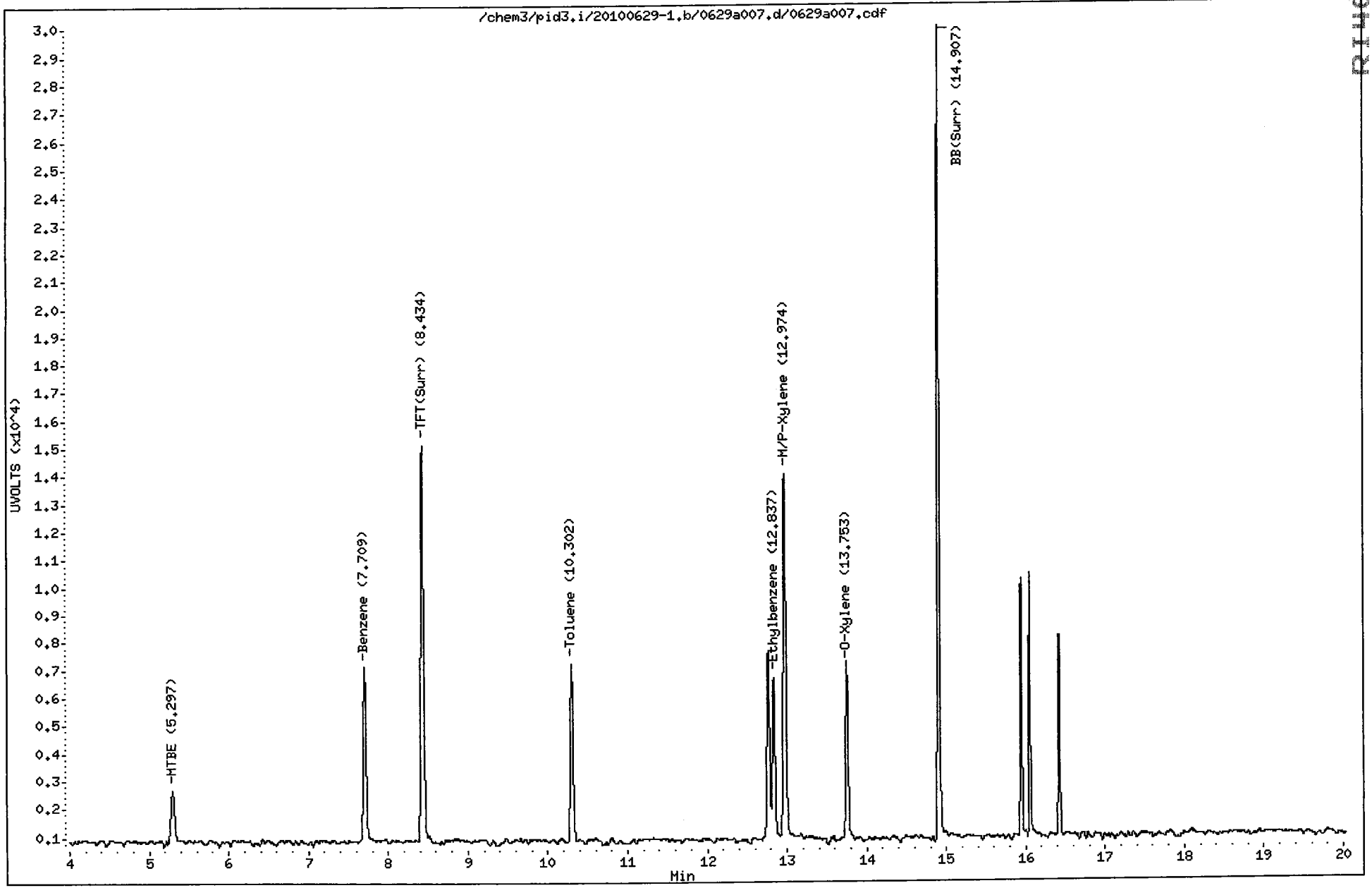
Operator: MH
Column diameter: 0.18



Data File: /chem3/pid3.i/20100629-1.b/0629a007.d
Date : 29-JUN-2010 08:48
Client ID:
Sample Info: BETX 5

Instrument: pid3.i
Operator: MH
Column diameter: 0.18

Column phase: RTX 502-2 PID



7/10/10

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100629-2.b/0629a008.d
Data file 2: /chem3/pid3.i/20100629-1.b/0629a008.d
Method: /chem3/pid3.i/20100629-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 02-FEB-2010
BETX Ical Date: 29-JUN-2010

ARI ID: BETX 25
Client ID:
Injection Date: 29-JUN-2010 09:12
Matrix: WATER
Dilution Factor: 1.000

==========

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

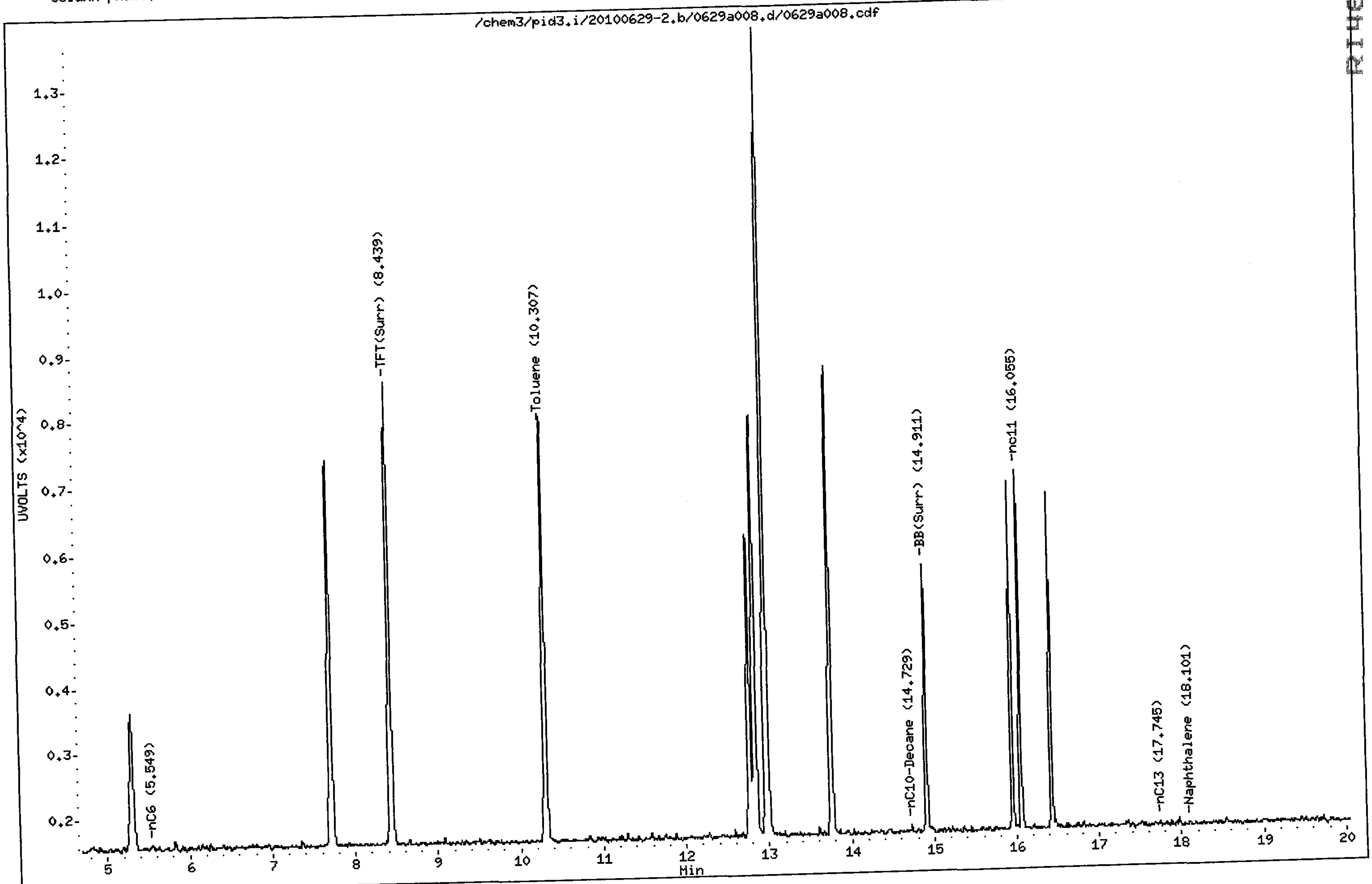
A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

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: MH
Column diameter: 0.18

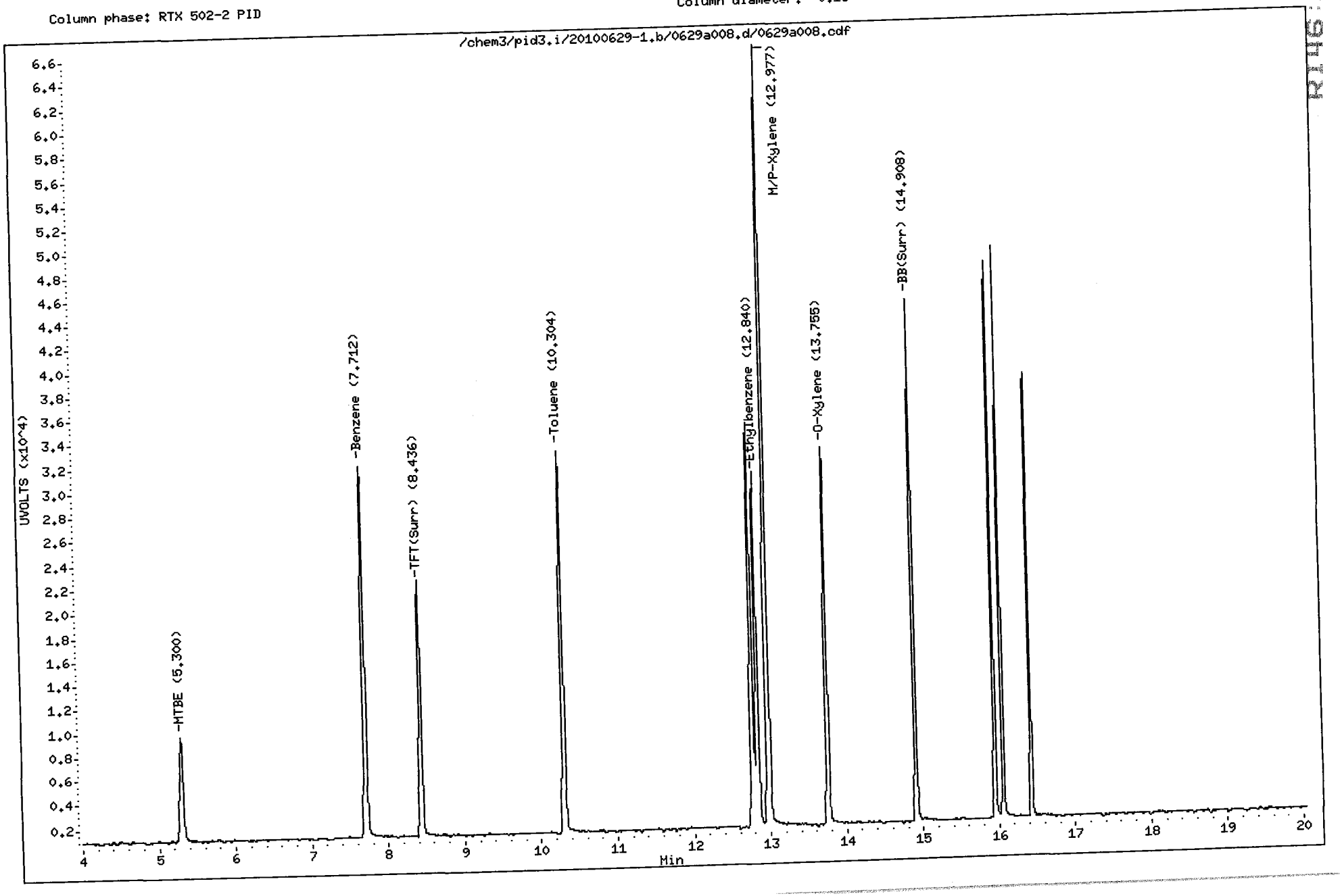


Data File: /chem3/pid3.i/20100629-1.b/0629a008.d
Date : 29-JUN-2010 09:12
Client ID:
Sample Info: BETX 25

Instrument: pid3.i

Operator: MH
Column diameter: 0.18

Column phase: RTX 502-2 PID



Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100629-2.b/0629a009.d
Data file 2: /chem3/pid3.i/20100629-1.b/0629a009.d
Method: /chem3/pid3.i/20100629-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 02-FEB-2010
BETX Ical Date: 29-JUN-2010

ARI ID: BETX 50
Client ID:
Injection Date: 29-JUN-2010 09:37
Matrix: WATER
Dilution Factor: 1.000

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:

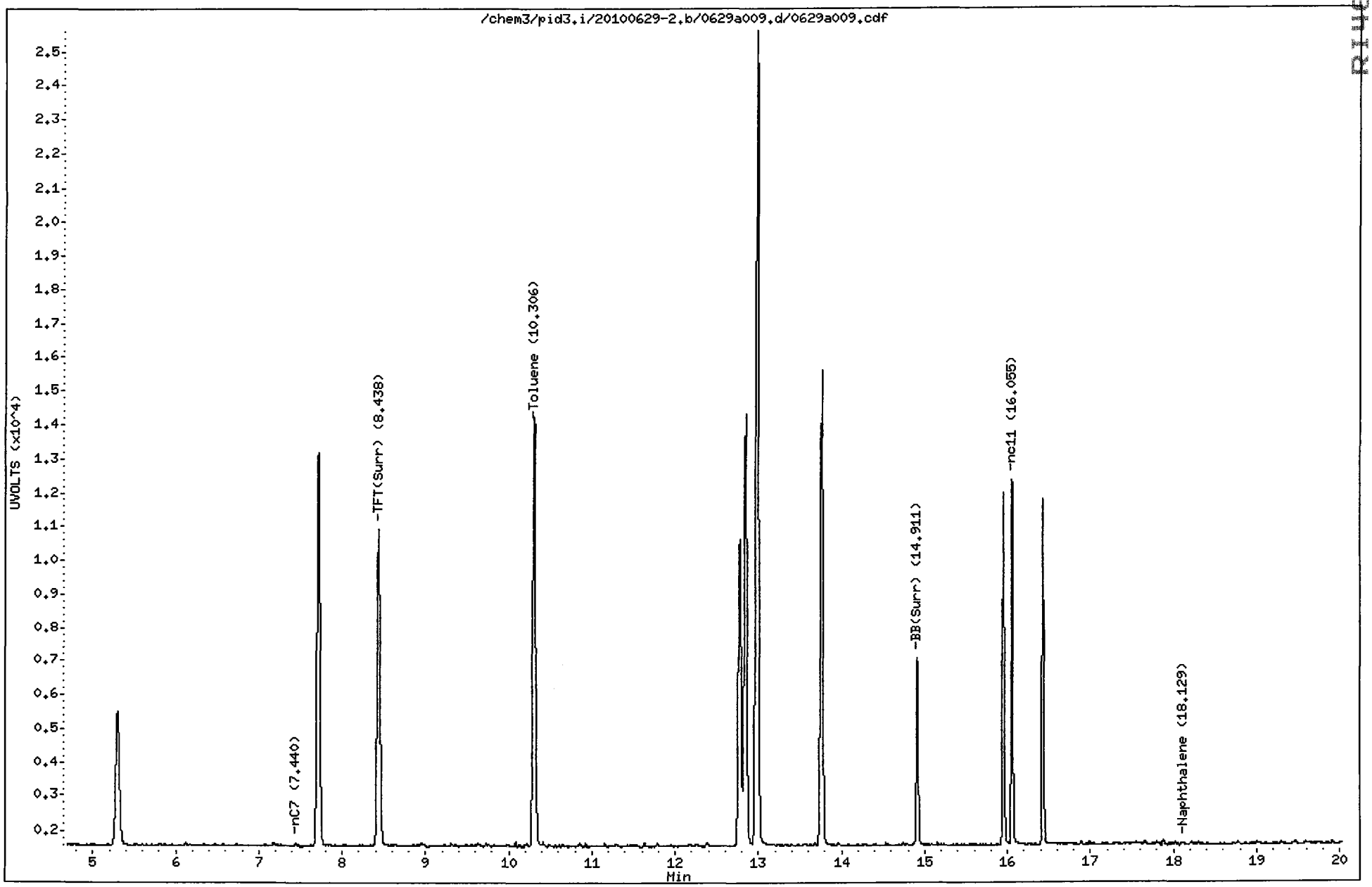
Sample Info: BETX 50

Column phase: RTX 502-2 FID

Instrument: pid3.i

Operator: MH

Column diameter: 0.18



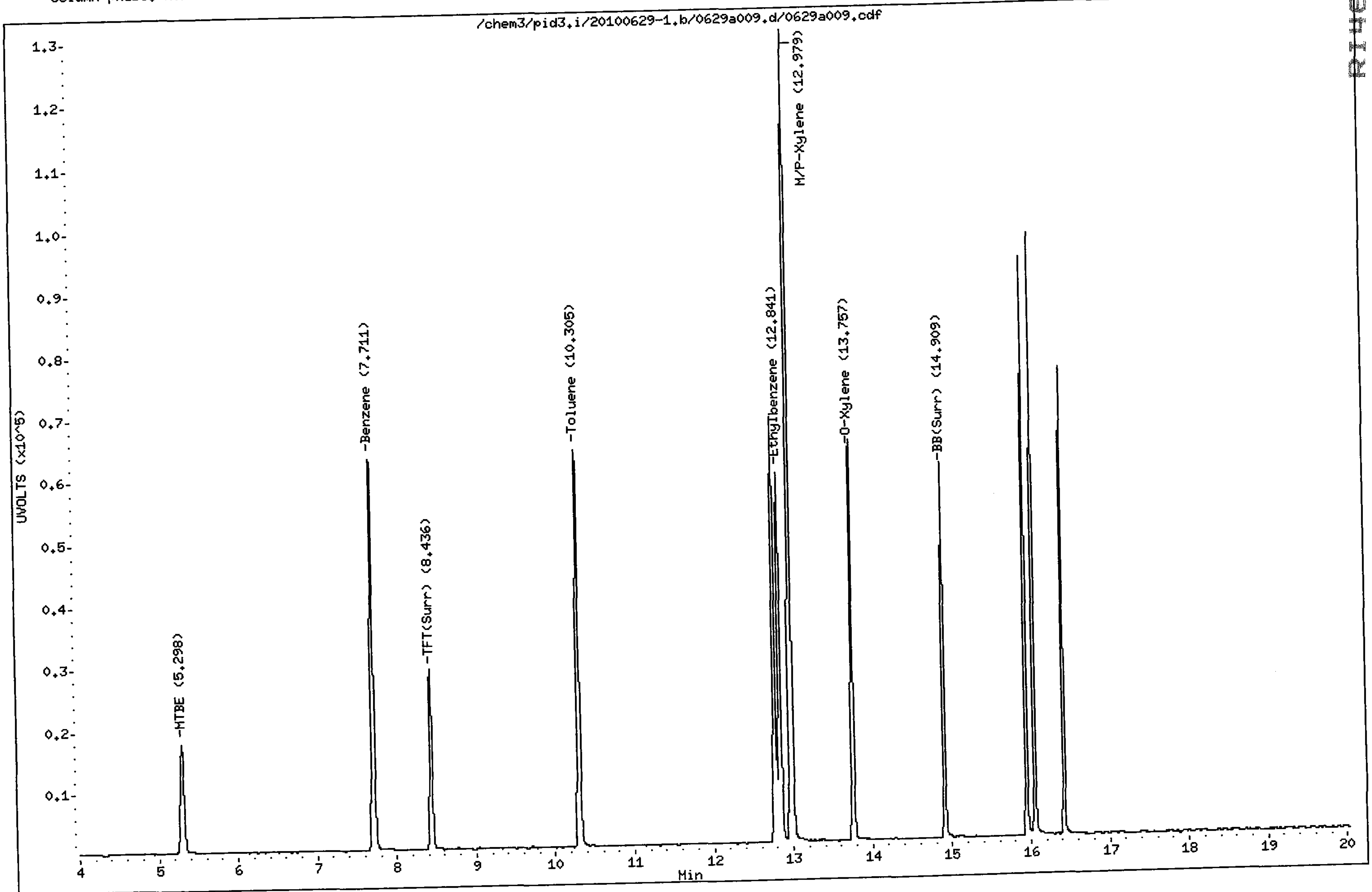
Page 1

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: MH
Column diameter: 0.18



Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100629-2.b/0629a010.d
Data file 2: /chem3/pid3.i/20100629-1.b/0629a010.d
Method: /chem3/pid3.i/20100629-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 02-FEB-2010
BETX Ical Date: 29-JUN-2010

ARI ID: BETX 100
Client ID:
Injection Date: 29-JUN-2010 10:01
Matrix: WATER
Dilution Factor: 1.000

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

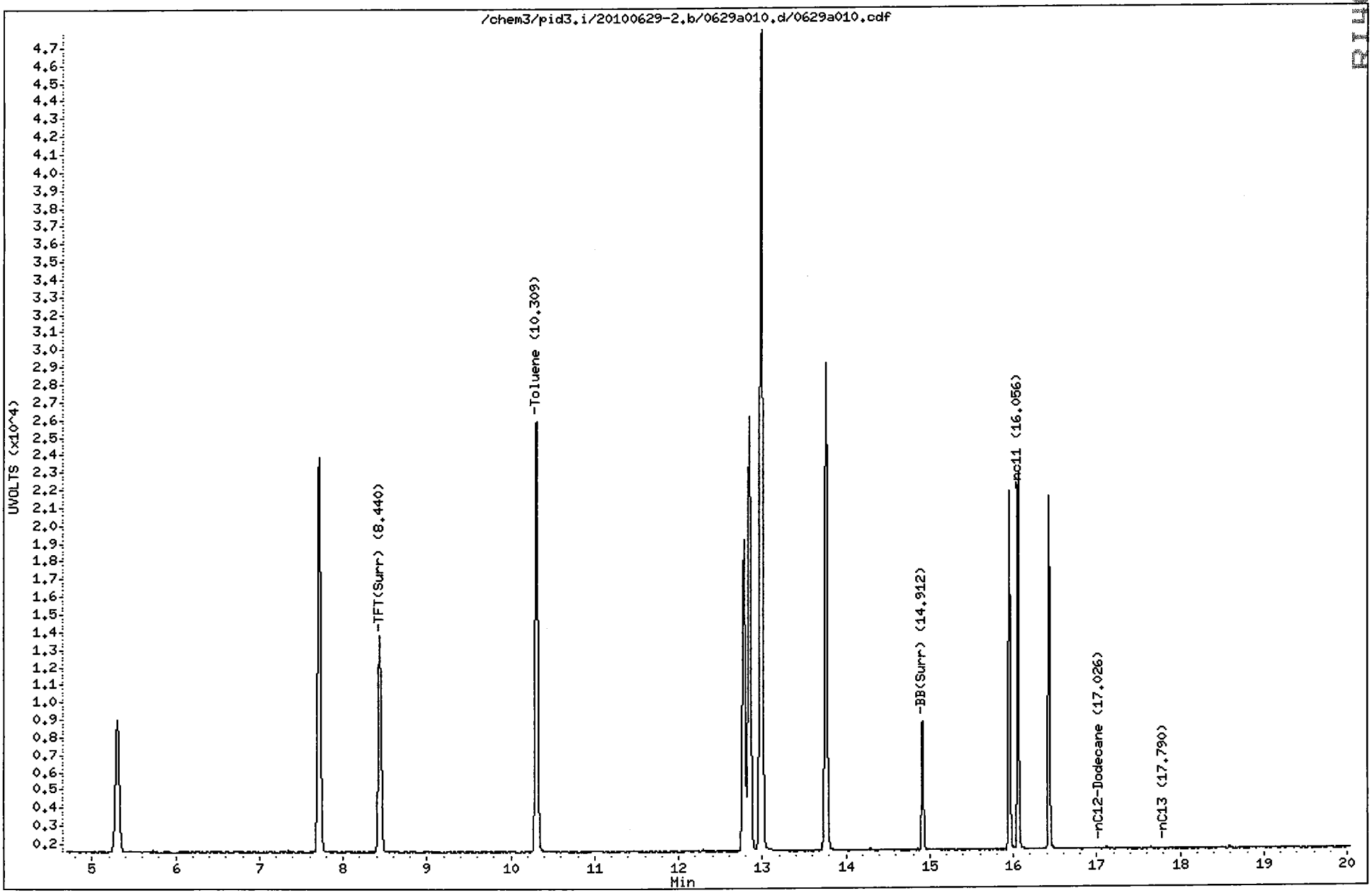
Column phase: RTX 502-2 FID

Instrument: pid3.i

Operator: MH

Column diameter: 0.18

RTI5:00011



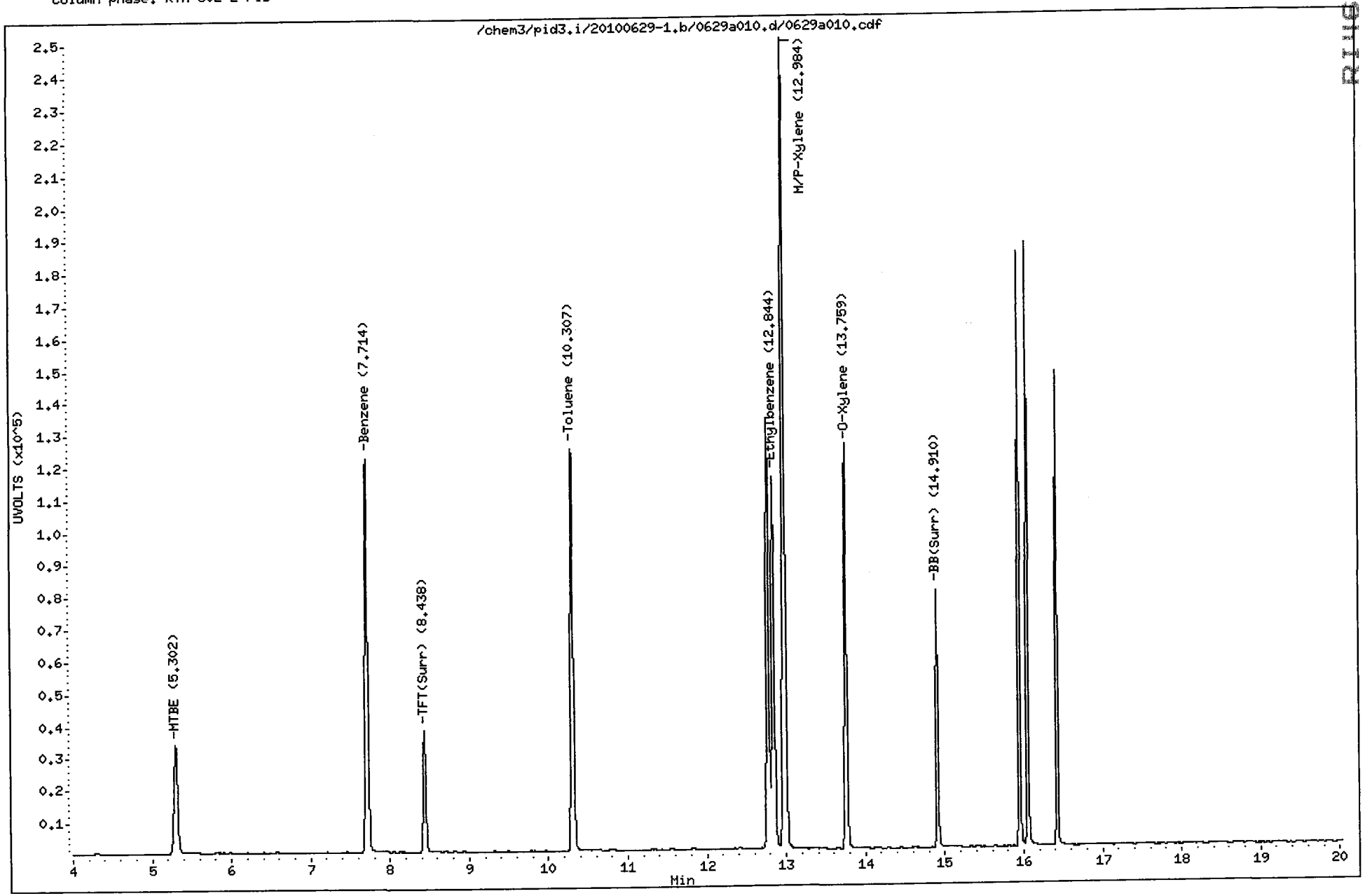
Data File: /chem3/pid3.i/20100629-1.b/0629a010.d
Date : 29-JUN-2010 10:01
Client ID:
Sample Info: BETX 100

Instrument: pid3.i

Operator: MH
Column diameter: 0.18

Column phase: RTX 502-2 PID

R110906812



Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100629-2.b/0629a011.d
Data file 2: /chem3/pid3.i/20100629-1.b/0629a011.d
Method: /chem3/pid3.i/20100629-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 02-FEB-2010
BETX Ical Date: 29-JUN-2010

ARI ID: BETX 200
Client ID:
Injection Date: 29-JUN-2010 10:26
Matrix: WATER
Dilution Factor: 1.000

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

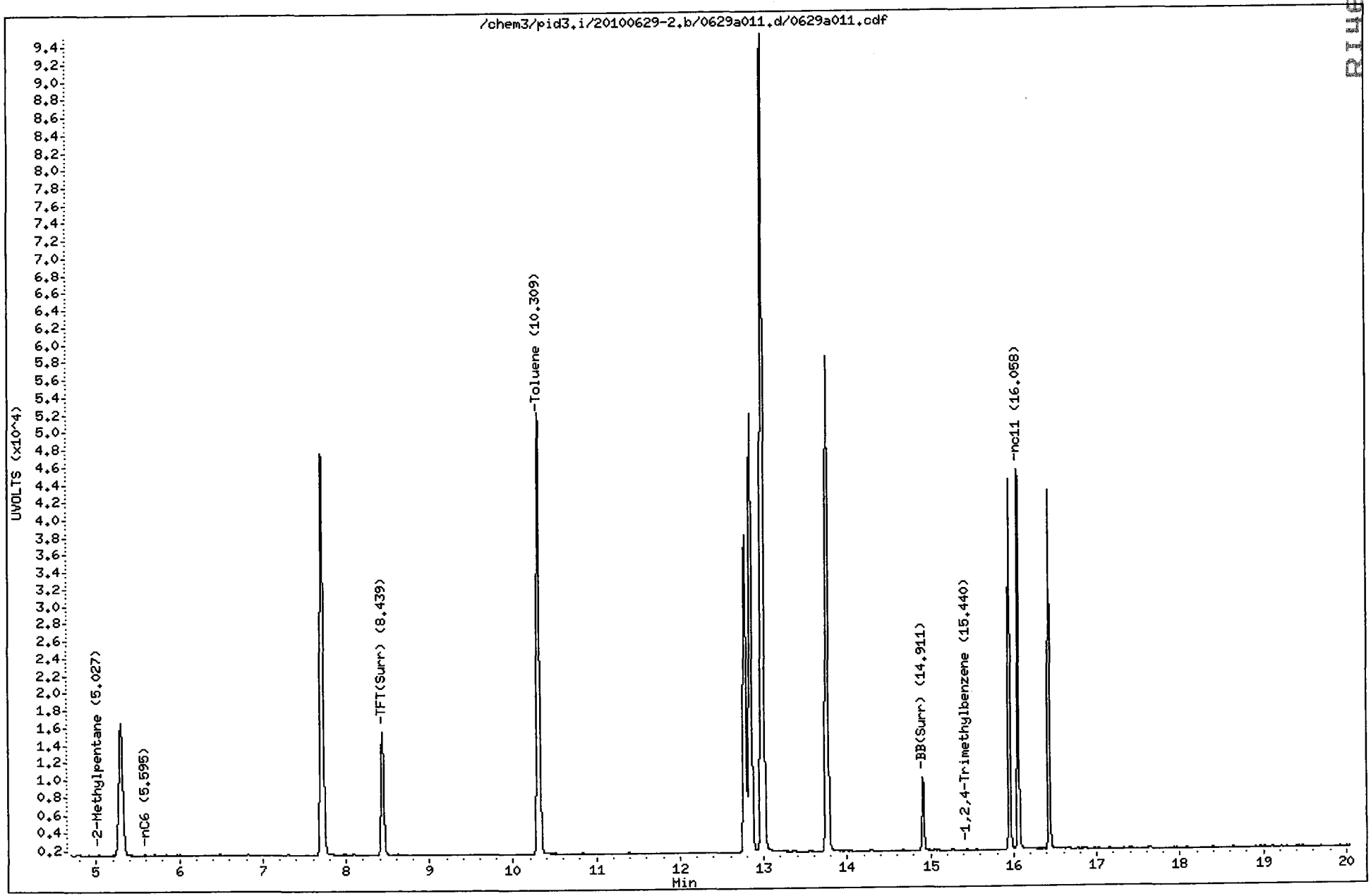
A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20100629-2.b/0629a011.d
Date : 29-JUN-2010 10:26
Client ID:
Sample Info: BETX 200

Instrument: pid3.i

Operator: MH
Column diameter: 0.18

Column phase: RTX 502-2 FID

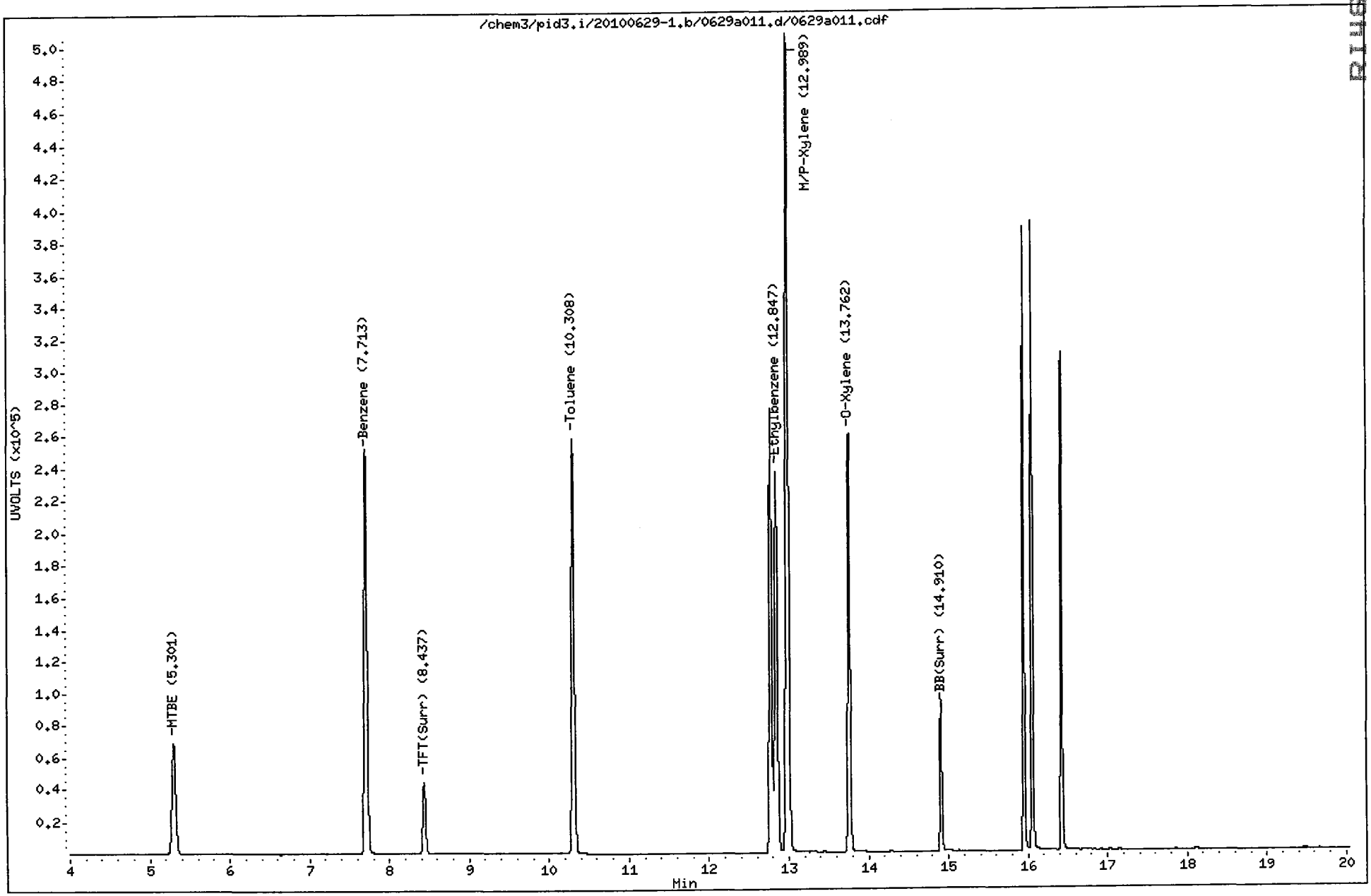


Data File: /chem3/pid3.i/20100629-1.b/0629a011.d
Date : 29-JUN-2010 10:26
Client ID:
Sample Info: BETX 200

Instrument: pid3.i

Operator: MH
Column diameter: 0.18

Column phase: RTX 502-2 PID



MH 7/10/10

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100629-2.b/0629a012.d
Data file 2: /chem3/pid3.i/20100629-1.b/0629a012.d
Method: /chem3/pid3.i/20100629-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 02-FEB-2010
BETX Ical Date: 29-JUN-2010

ARI ID: BETX ICV
Client ID:
Injection Date: 29-JUN-2010 10:50
Matrix: WATER
Dilution Factor: 1.000

==========

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

Data File: /chem3/pid3.i/20100629-2.b/0629a012.d

Date : 29-JUN-2010 10:50

Client ID:

Sample Info: BETX ICV

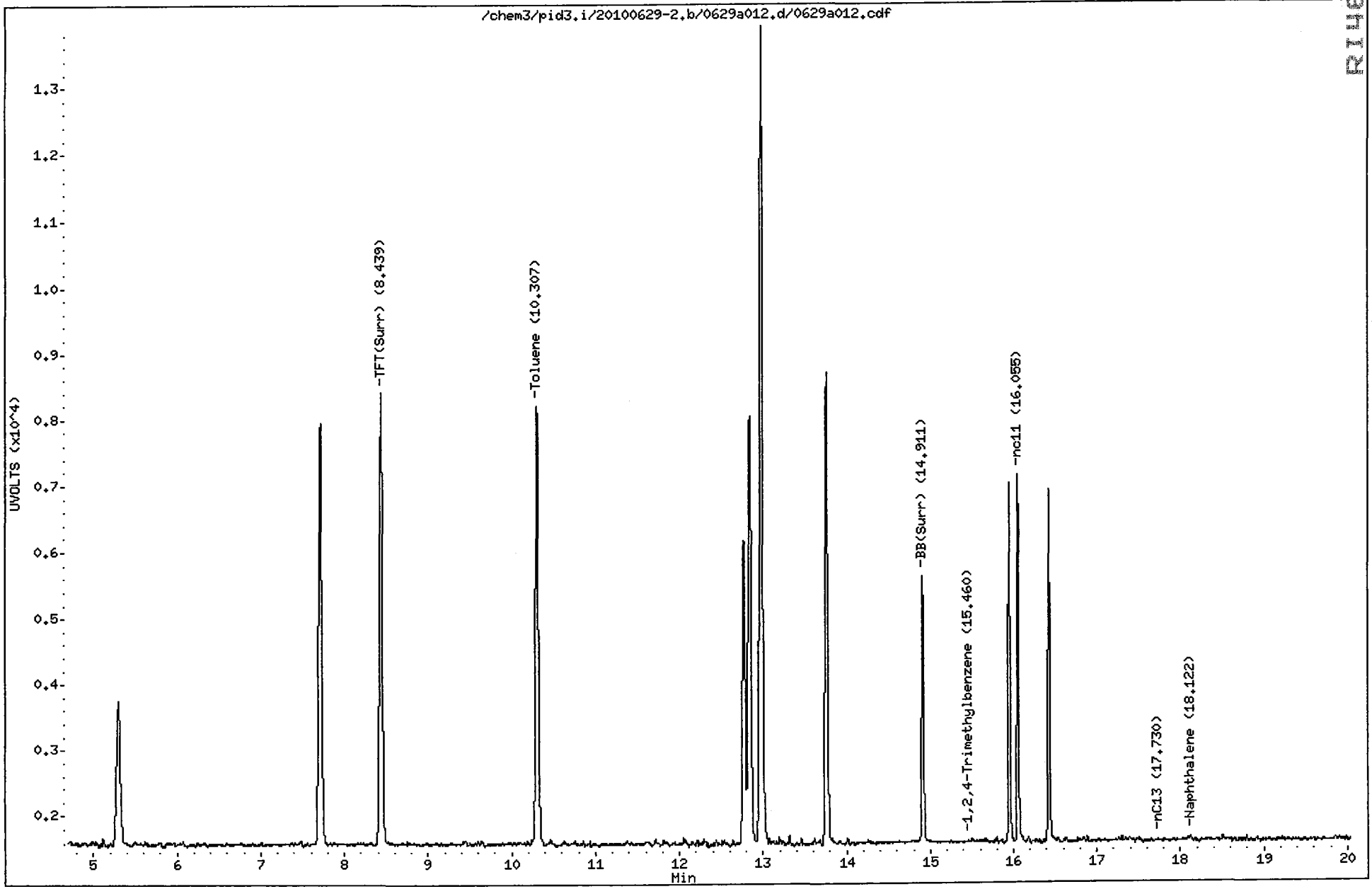
Column phase: RTX 502-2 FID

Instrument: pid3.i

Operator: MH

Column diameter: 0.18

R116 : 00017



Data File: /chem3/pid3.i/20100629-1.b/0629a012.d

Date : 29-JUN-2010 10:50

Client ID:

Sample Info: BETX ICV

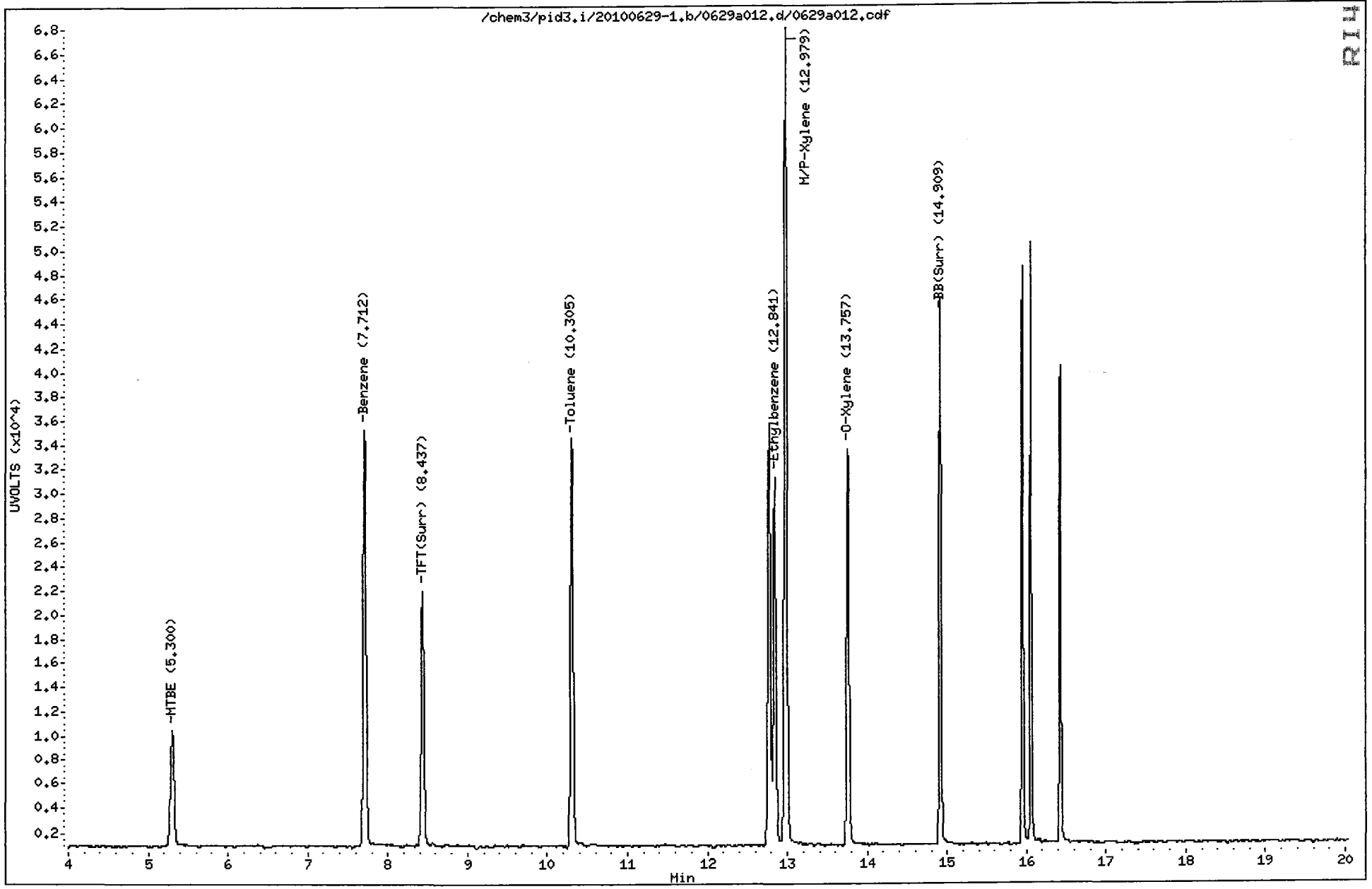
Column phase: RTX 502-2 PID

Instrument: pid3.i

Operator: MH

Column diameter: 0.18

R1H5:006818



Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem3/pid3.i/20100629-2.b/FID.m
Batch File: /chem3/pid3.i/20100629-2.b
Inst ID: pid3.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	0629a005	0629a006	0629a007	0629a008	0629a009	0629a010	0629a011
INJ.DATE:	29-JUN-2010	29-JUN-2010	29-JUN-2010	29-JUN-2010	29-JUN-2010	29-JUN-2010	29-JUN-2010
INJ.TIME:	07:59	08:24	08:48	09:12	09:37	10:01	10:26

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
1	2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	5.027	5.027	4.957-5.097	5.027	0.000
18	WAGAS	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.097	1.027-1.167	+++++	+++++
19	8015B	+++++	+++++	+++++	+++++	+++++	+++++	+++++	0.891	0.821-0.961	+++++	+++++
20	AK101	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.000	0.930-1.070	+++++	+++++
21	NWGAS	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.000	0.930-1.070	+++++	+++++
2	nC6	+++++	+++++	+++++	5.549	+++++	+++++	5.595	5.595	5.525-5.665	5.572	0.032
3	nC7	+++++	7.470	+++++	+++++	7.440	+++++	+++++	7.440	7.370-7.510	7.455	0.021
$ 4	TFT(Surr)	8.418	8.430	8.435	8.439	8.438	8.440	8.439	8.418	8.348-8.488	8.434	0.008
5	nC8	+++++	9.879	+++++	+++++	+++++	+++++	+++++	9.879	9.809-9.949	9.879	0.000
6	Toluene	+++++	10.297	10.304	10.307	10.306	10.309	10.309	10.309	10.239-10.379	10.305	0.005
7	nC9	+++++	12.387	+++++	+++++	+++++	+++++	+++++	12.387	12.317-12.457	12.387	0.000
8	nC10-Decane	14.697	+++++	+++++	14.729	+++++	+++++	+++++	14.697	14.627-14.767	14.713	0.023
$ 9	BB(Surr)	14.897	14.906	14.908	14.911	14.911	14.912	14.911	14.897	14.827-14.967	14.908	0.005
10	1,2,4-Trimethylbenzene	15.452	+++++	15.441	+++++	+++++	+++++	15.440	15.452	15.382-15.522	15.444	0.007
11	nc11	16.042	16.052	16.053	16.055	16.055	16.056	16.058	16.042	15.972-16.112	16.053	0.005
12	nC12-Dodecane	+++++	17.023	17.017	+++++	+++++	17.026	+++++	17.026	16.956-17.096	17.022	0.005
13	nC13	17.827	17.760	+++++	17.745	+++++	17.790	+++++	17.827	17.757-17.897	17.781	0.036

Reviewer 1 MH Date: 7/10/10
Reviewer 2 VJ Date: 7.10.10

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

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	0629a005	0629a006	0629a007	0629a008	0629a009	0629a010	0629a011
INJ.DATE:	29-JUN-2010	29-JUN-2010	29-JUN-2010	29-JUN-2010	29-JUN-2010	29-JUN-2010	29-JUN-2010
INJ.TIME:	07:59	08:24	08:48	09:12	09:37	10:01	10:26

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 TFT(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 VM Date: 7-10-10

TPHG/BETX Raw Data
Run Logs, Continuing Calibrations, and Raw Data

ARI Job ID: RI46

Analytical Resources, Incorporated
Analytical Chemists and Consultants

VOA Analyst Notes / Corrective Action Log

ARI Project ID: RI46 Client ID: Floyd/Snider

ARI SOP: ~~**404S**(Gas)~~ ~~**410S**(BTEX)~~ **430S**(VPH) **700S**(8260C) **703S**(SIM) **706S**(524.2) **710S**(RSK-175)

Parameter(s): NWTPH6

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 BETX 7/28/10 6-5 Analysis Start Date: 8/13/10

pH ≤ 2.0 YES / NO / NA

Method Blank In Control? YES / NO

BFB Tune Meets Criteria? YES / NO / NA

LCS / LCSD Recovery In Control? YES / NO

Internal Standard Meets Criteria? YES / NO / NA

Surrogate Recovery In Control? YES / NO

ICal acceptable? YES / NO

Q flag applied? YES / NO / NA

CCal acceptable? YES / NO

Q flag applied? YES / NO / NA

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):

Additional Details on Reverse: Yes / No

Analyst: [signature] **Date:** 8/23/10

Reviewer: [signature] **Date:** [signature]

Analytical Resources Inc.: Organics Instrument Log

PID-3 HP 5890 Series II - Serial No.: 2728A-13336

Date: 8/13/10 Analysis: NWTPH6/BETX Analyst: MH

GC Program: BETX Column No: 832213 Column Type: RTX502-2

Instrument Tune (.U or .CT.): — EM Voltage: —

Calibration File: — Curve Date: 8/MH 8/16 7/28/10 GS 6/29/10 BETX

IS/SS	Ical/Ccal	LCS/ICV
VW648-3	VW635-1	VW647-2
	VW644-3	
	VW647-2	

	Time	Filename	LabID	ClientID	Vial#	pH	DF
1	1328	0813a001.d	RINSE				1
2	1353	0813a002.d	RT+BCAL 1				1
3	1417	0813a003.d	GCAL 1				1
4	1442	0813a004.d	LCS0813				1
5	1507	0813a005.d	LCSD0813				1
6	1531	0813a006.d	MB0813				1
7	1621	0813a007.d	RI46K	081210-TB	2	1	1
8	1646	0813a008.d	RI46J	081110-TB	2	1	1
9	1711	0813a009.d	RI46A	MW-02-081110	9	1	1
10	1735	0813a010.d	RI46B	MW-03-081110	11	1	1
11	1759	0813a011.d	RI27A	MW-6		0.00	
12	1824	0813a012.d	RI45A	STOCKPILE(1)2010081		0.00	
13	1848	0813a013.d	RINSE				1
14	1913	0813a014.d	BCAL 2				1
15	1938	0813a015.d	GCAL 2				1
16	2002	0813a016.d	RI46C	MW-03-081110-D	13	1	1
17	2027	0813a017.d	RI46D	MW-04-081110	8	1	1
18	2051	0813a018.d	RI46DMS		9	1	1
19	2116	0813a019.d	RI46DMSD		7	1	1
20	2141	0813a020.d	RI46E	MW-14-081110	14	1	1
21	2205	0813a021.d	RI46F	MW-12-081210	9	1	1
22	2230	0813a022.d	RI46G	MW-13-081210	11	1	1
23	2254	0813a023.d	RI46H	MW-10-081210	14	1	1
24	2319	0813a024.d	RI46I	MW-11-081210	11	1	1
25	2344	0813a025.d	RINSE				1
26	0008	0813a026.d	BCAL 3				1
27	0033	0813a027.d	GCAL 3				1

MH 8/16/10

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.

8/23/10

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100813-2.b/0813a002.d
Data file 2: /chem3/pid3.i/20100813-1.b/0813a002.d
Method: /chem3/pid3.i/20100813-1.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: 13-AUG-2010 13:53
Matrix: WATER
Dilution Factor: 1.000

==========

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.408	-0.033	7043	83427	97.9	TFT(Surr)
14.887	-0.025	4269	34281	99.1	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range		RF	Total Area*	Amount
WAGas Tol-C12	(10.21 to 17.12)	827807	1025083	1.238
8015B 2MP-TMB	(4.94 to 15.60)	1664107	1245481	0.748
AK101 nC6-nC10	(5.43 to 14.51)	1131784	878643	0.776
NWTPHG Tol-Nap	(10.21 to 18.19)	882029	1084577	1.230

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
8.407	0.000	20683	94.1	TFT(Surr)
14.885	0.000	43800	96.1	BB(Surr)

SW8021 (PID)

RT	Shift	Response	Amount	Compound
7.688	0.000	33617	25.43	Benzene
10.270	0.000	32659	24.74	Toluene
12.803	0.000	29942	24.10	Ethylbenzene
12.941	0.000	65999	49.01	M/P-Xylene
13.723	0.000	31947	24.87	O-Xylene
5.290	0.000	9617	27.03	MTBE

A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20100813-2.b/0813a002.d

Date : 13-AUG-2010 13:53

Client ID: RT+BCAL 1

Sample Info: RT+BCAL 1

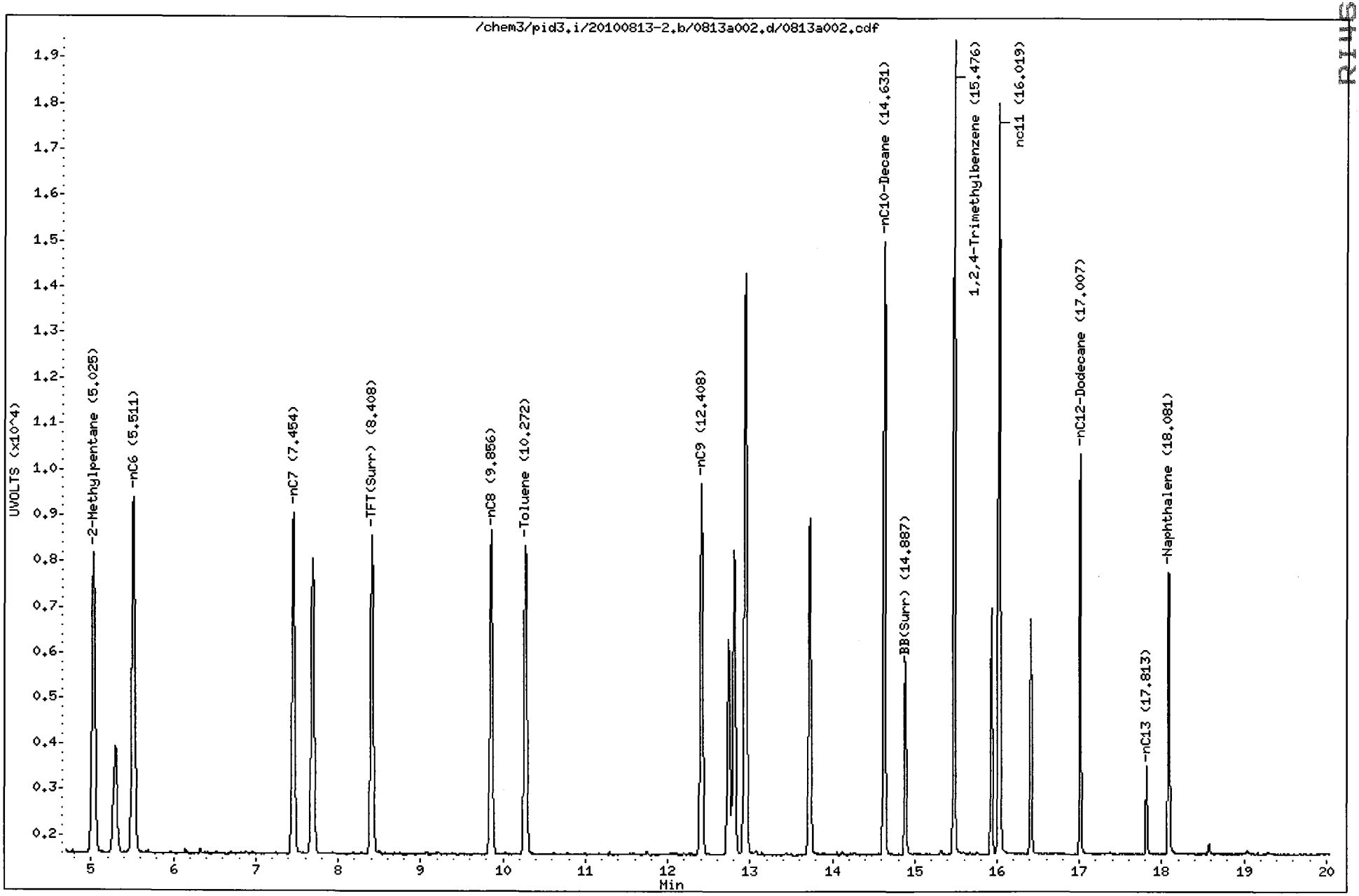
Column phase: RTX 502-2 FID

Instrument: pid3.i

Operator: MH

Column diameter: 0.18

RTL# 00825



Data File: /chem3/pid3.i/20100813-1.b/0813a002.d

Date : 13-AUG-2010 13:53

Client ID:

Sample Info: RT+BCAL 1

Column phase: RTX 502-2 PID

Instrument: pid3.i

Operator: MH

Column diameter: 0.18

RT#: 00826

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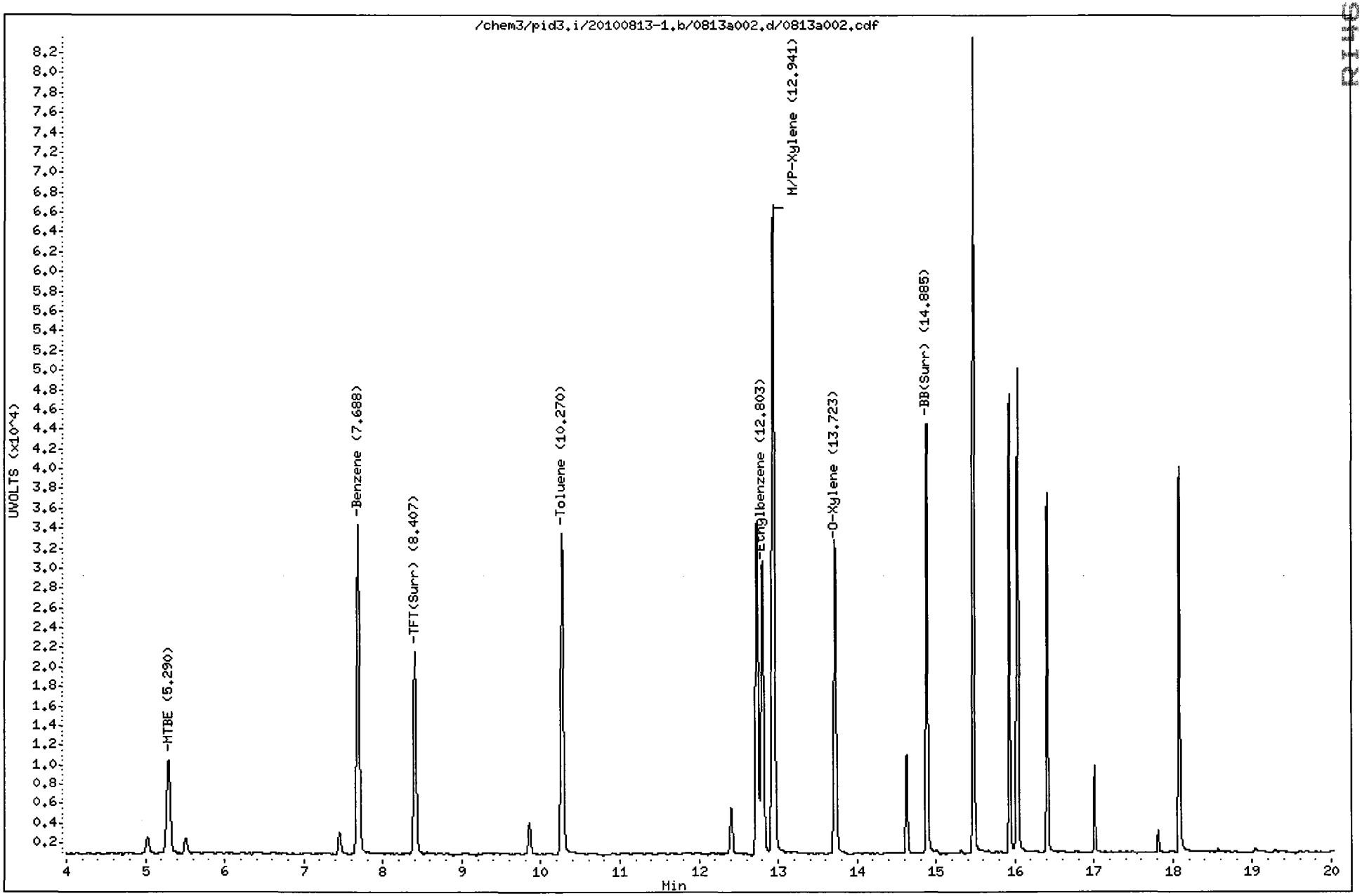


MK 8/23/10

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100813-2.b/0813a003.d
Data file 2: /chem3/pid3.i/20100813-1.b/0813a003.d
Method: /chem3/pid3.i/20100813-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 28-JUL-2010
BETX Ical Date: 29-JUN-2010

ARI ID: GCAL 1
Client ID:
Injection Date: 13-AUG-2010 14:17
Matrix: WATER
Dilution Factor: 1.000

==========

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.425	-0.016	7225	86638	100.4	TFT(Surr)
14.900	-0.012	4440	36610	103.1	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range		RF	Total Area*	Amount
WAGas Tol-C12	(10.21 to 17.12)	827807	1973217	2.384 M
8015B 2MP-TMB	(4.94 to 15.60)	1664107	3860578	2.320 M
AK101 nC6-nC10	(5.43 to 14.51)	1131784	2603334	2.300 M
NWTPHG Tol-Nap	(10.21 to 18.19)	882029	2101664	2.383 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	21146	96.2	TFT(Surr)
14.897	0.012	43975	96.5	BB(Surr)

SW8021 (PID)

RT	Shift	Response	Amount	Compound
7.704	0.016	6926	5.24	Benzene
10.290	0.019	93568	70.89	Toluene
12.823	0.020	26838	21.60	Ethylbenzene
12.964	0.023	104763	77.80	M/P-Xylene
13.742	0.019	42441	33.03	O-Xylene
5.302	0.012	81088	227.90	MTBE

A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20100813-2.b/0813a003.d

Date : 13-AUG-2010 14:17

Client ID: LORA LAKE

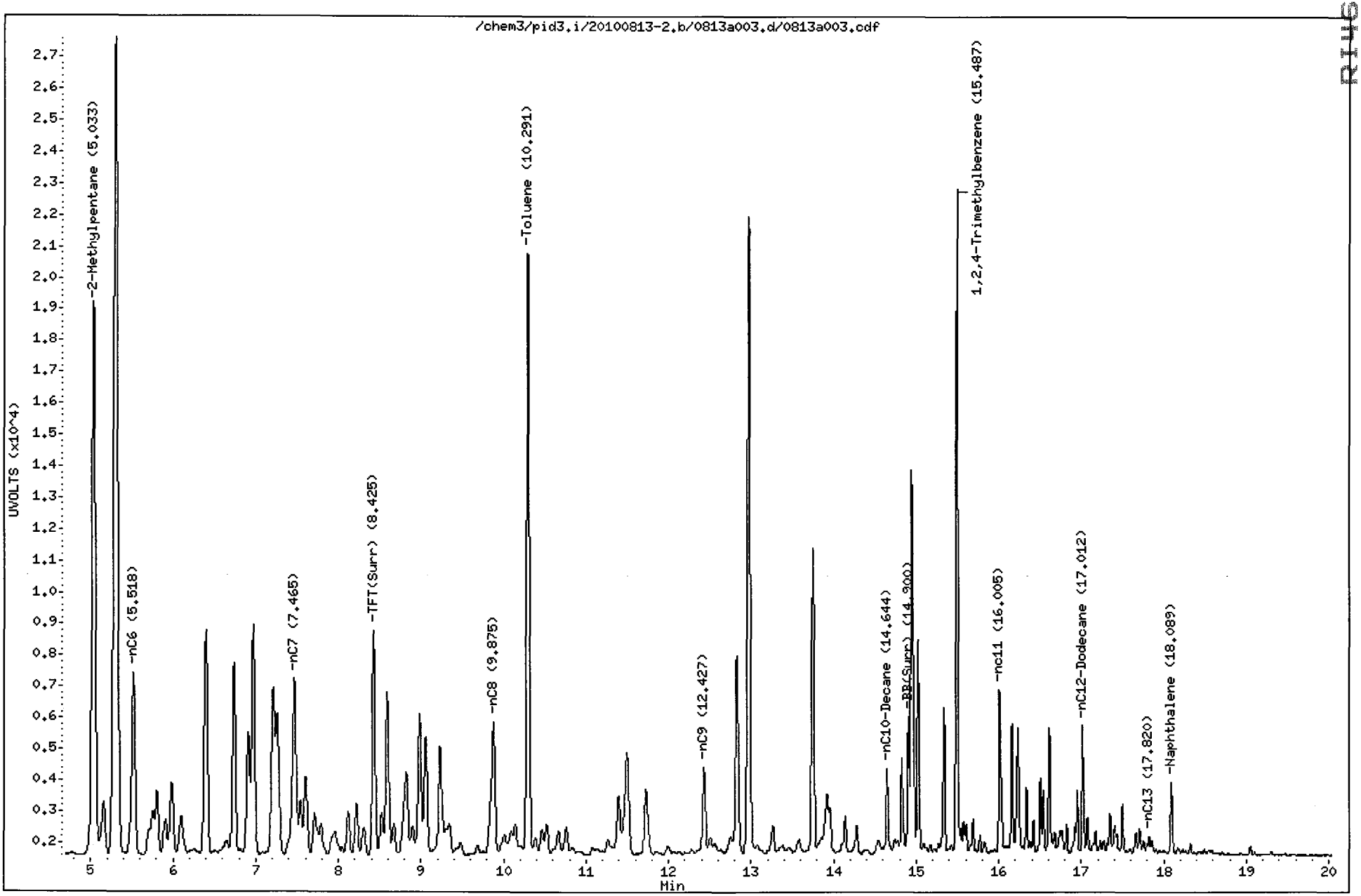
Sample Info: GCAL 1

Instrument: pid3.i

Operator: MH

Column phase: RTX 502-2 FID

Column diameter: 0.18



Data File: /chem3/pid3.i/20100813-1.b/0813a003.d

Date : 13-AUG-2010 14:17

Client ID:

Sample Info: GCAL 1

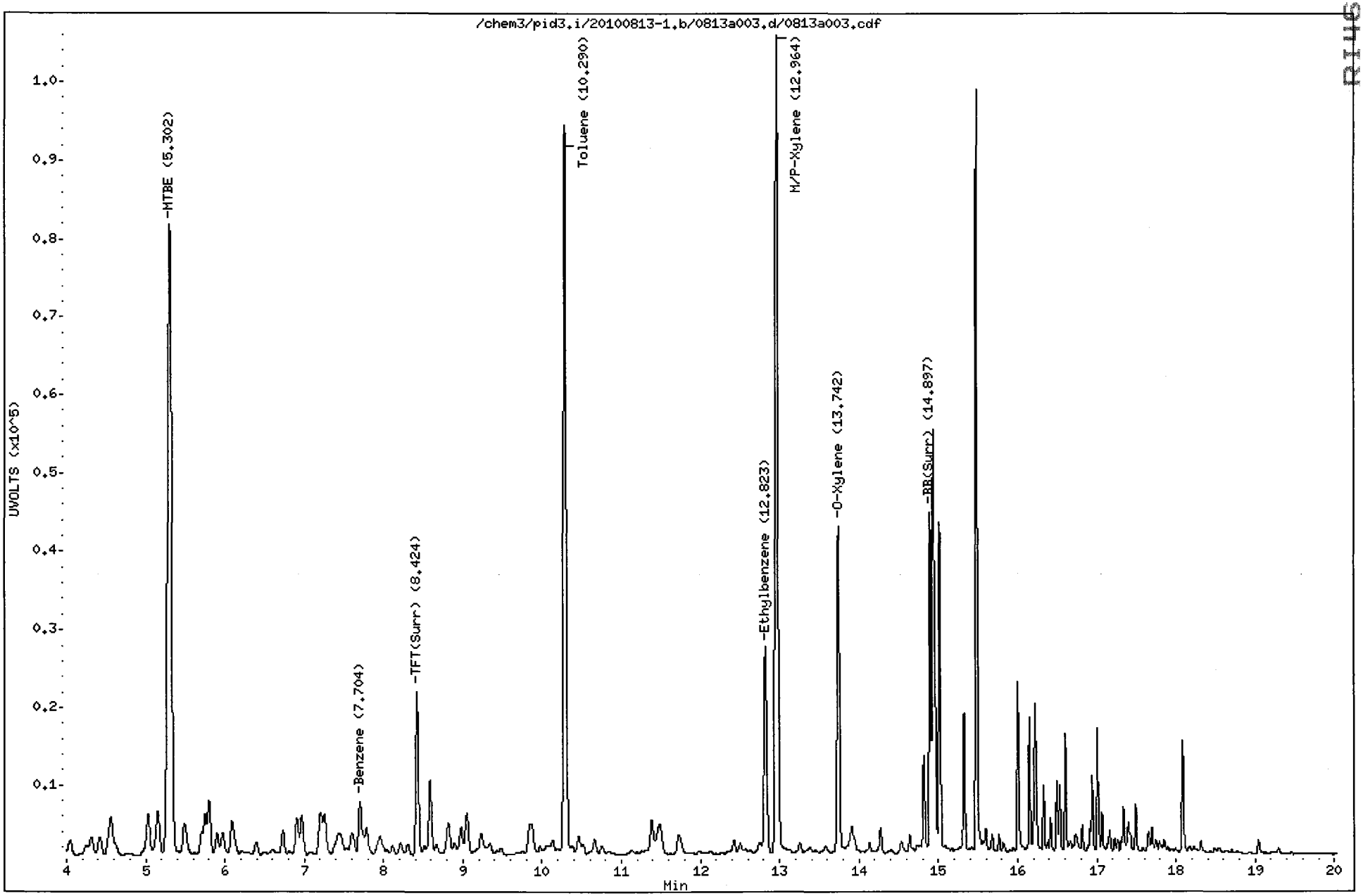
Column phase: RTX 502-2 PID

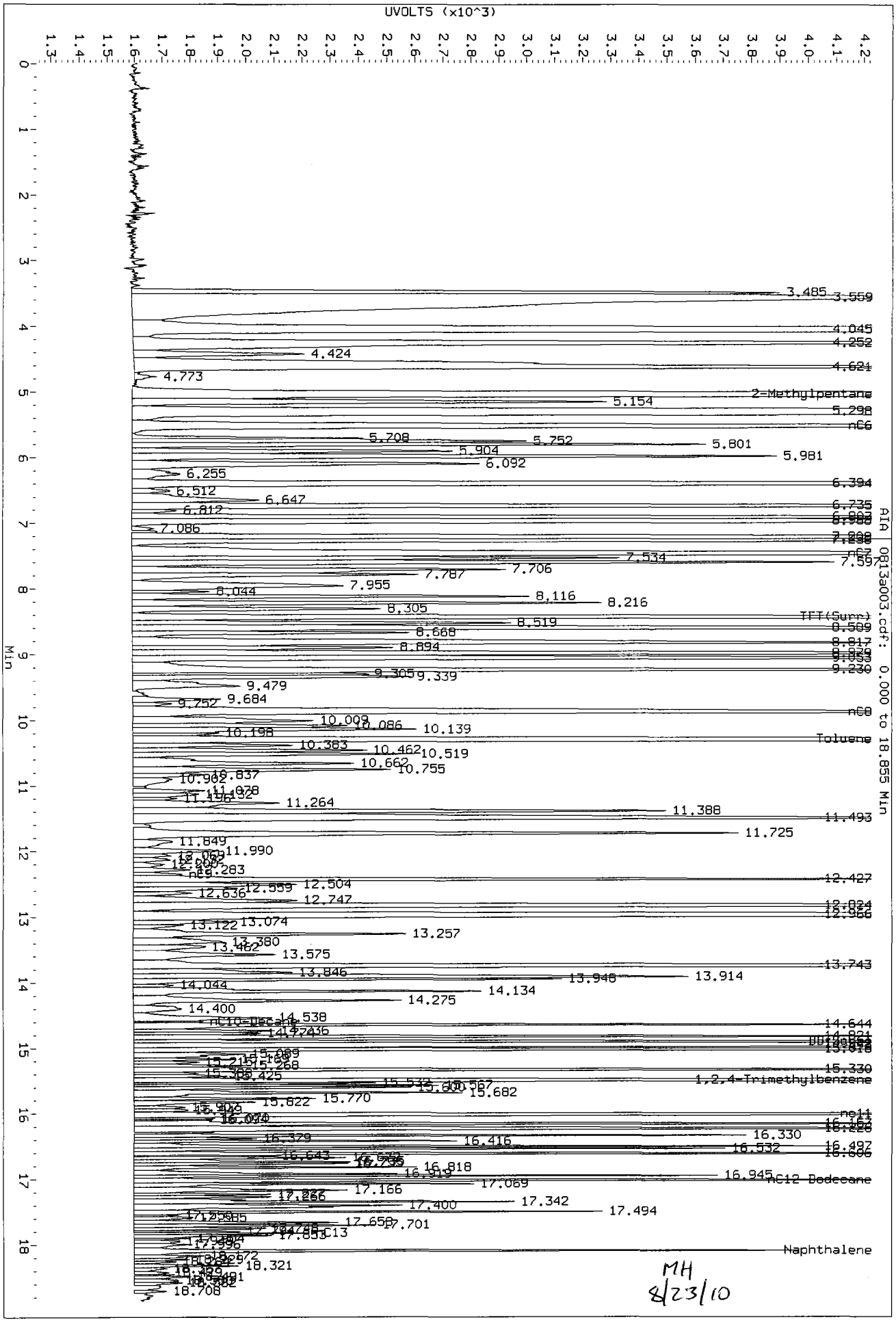
Instrument: pid3.i

Operator: MH

Column diameter: 0.18

R116 : 66629





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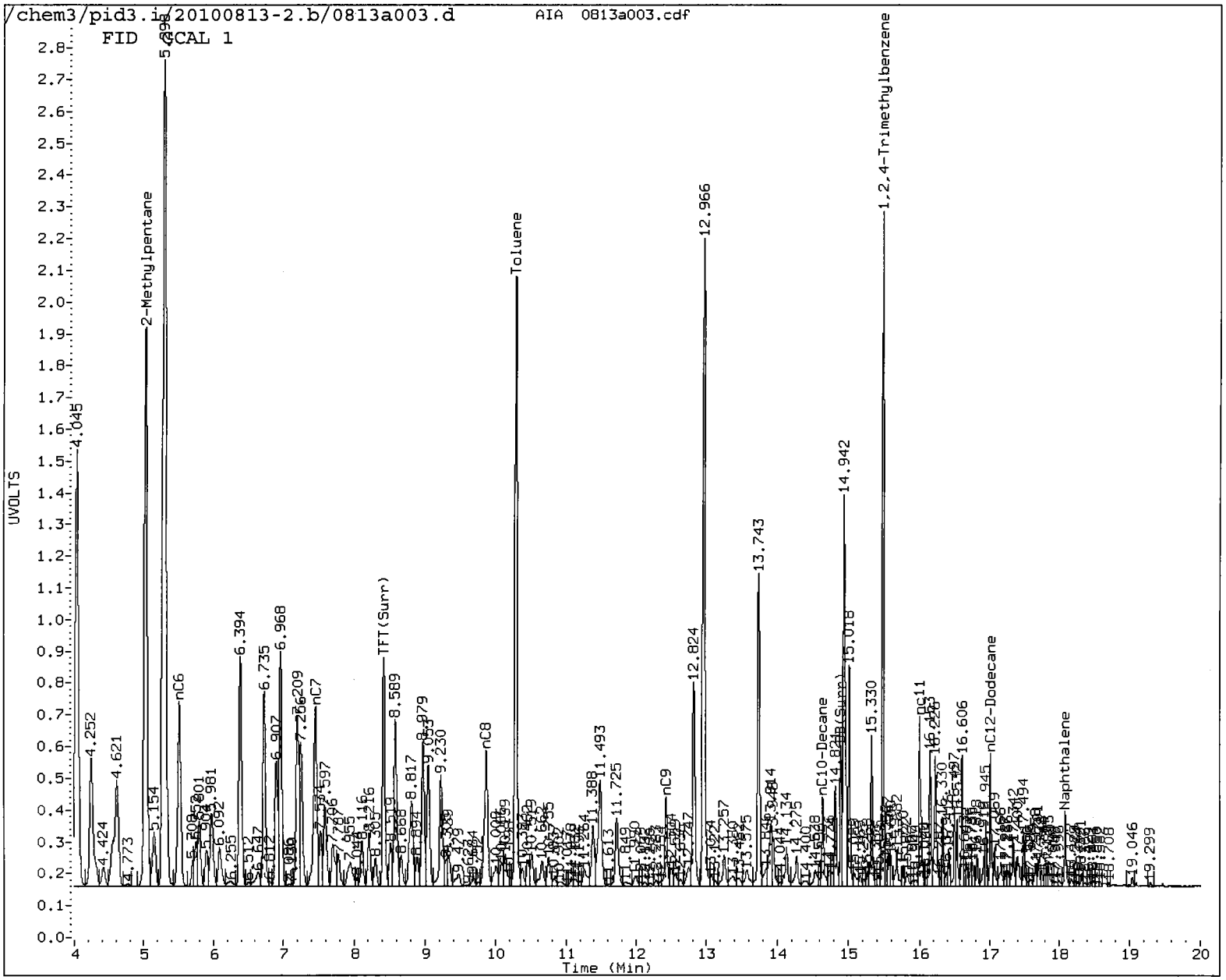
Injection Date: 13-AUG-2010 14:17
Instrument: pid3.i
Client Sample ID: LORA LAKE

MH
8/23/10



MANUAL INTEGRATION

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

5. Other _____

Analyst: MH Date: 8/23/10

8/23

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100813-2.b/0813a004.d
Data file 2: /chem3/pid3.i/20100813-1.b/0813a004.d
Method: /chem3/pid3.i/20100813-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 28-JUL-2010
BETX Ical Date: 29-JUN-2010

ARI ID: LCS0813
Client ID:
Injection Date: 13-AUG-2010 14:42
Matrix: WATER
Dilution Factor: 1.000

==========

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.434	-0.007	7145	85698	99.3	TFT(Surr)
14.907	-0.005	4355	35523	101.1	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range		RF	Total Area*	Amount
WAGas Tol-C12	(10.21 to 17.12)	827807	796988	0.963 M
8015B 2MP-TMB	(4.94 to 15.60)	1664107	1576495	0.947 M
AK101 nC6-nC10	(5.43 to 14.51)	1131784	1061934	0.938 M
NWTPHG Tol-Nap	(10.21 to 18.19)	882029	855199	0.970 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
8.432	0.025	21111	96.0	TFT(Surr)
14.904	0.019	44277	97.1	BB(Surr)

SW8021 (PID)

RT	Shift	Response	Amount	Compound
7.711	0.023	2970	2.25	Benzene
10.299	0.028	38206	28.95	Toluene
12.833	0.029	11025	8.87	Ethylbenzene
12.972	0.032	42319	31.43	M/P-Xylene
13.749	0.026	17459	13.59	O-Xylene
5.305	0.015	34528	97.04	MTBE

A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

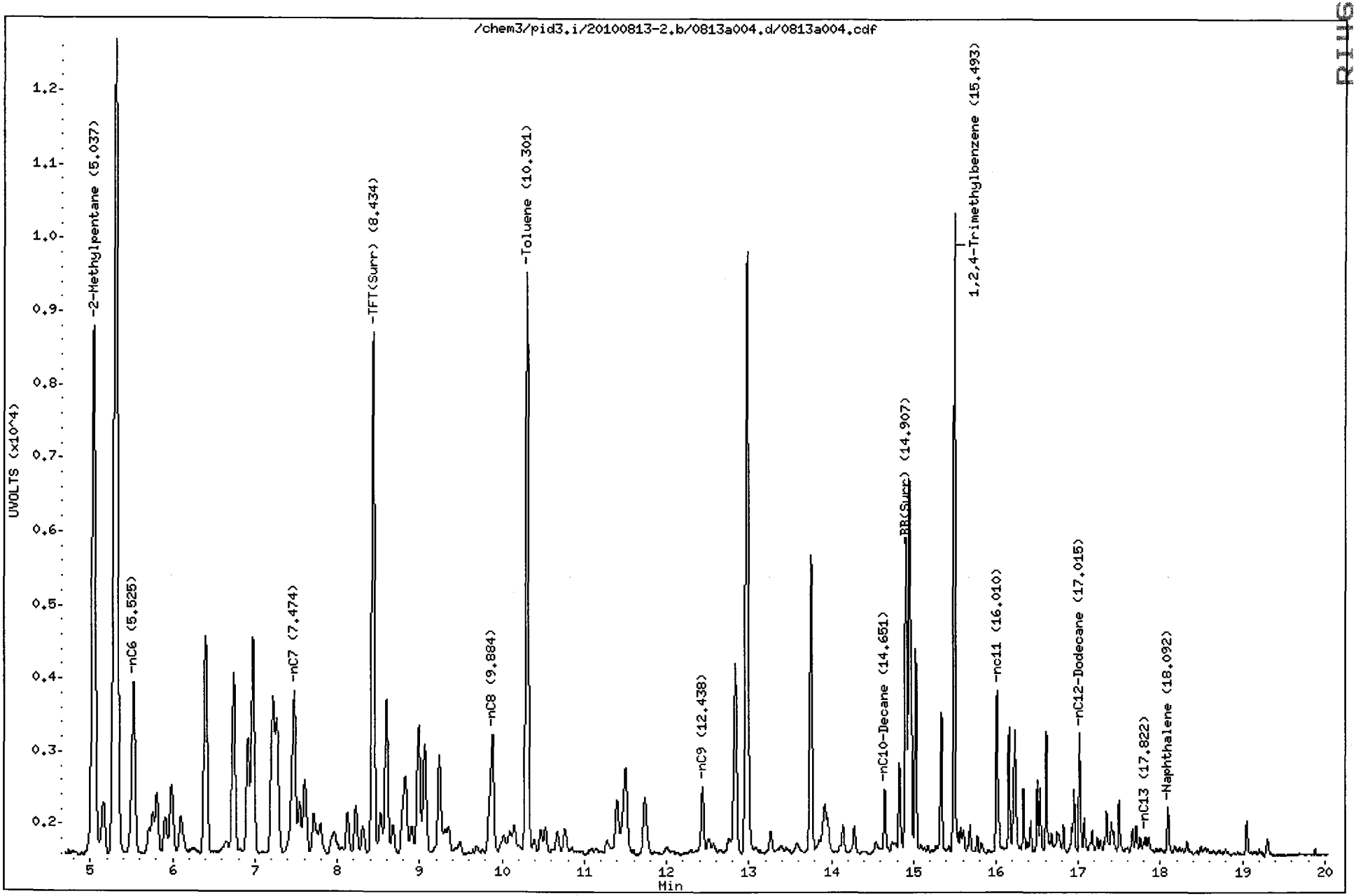
Data File: /chem3/pid3.i/20100813-2.b/0813a004.d
Date : 13-AUG-2010 14:42
Client ID: LCS0813S1
Sample Info: LCS0813

Column phase: RTX 502-2 FID

Instrument: pid3.i

Operator: MH
Column diameter: 0.18

RTIC: 00833



Data File: /chem3/pid3.i/20100813-1.b/0813a004.d

Date : 13-AUG-2010 14:42

Client ID:

Sample Info: LCS0813

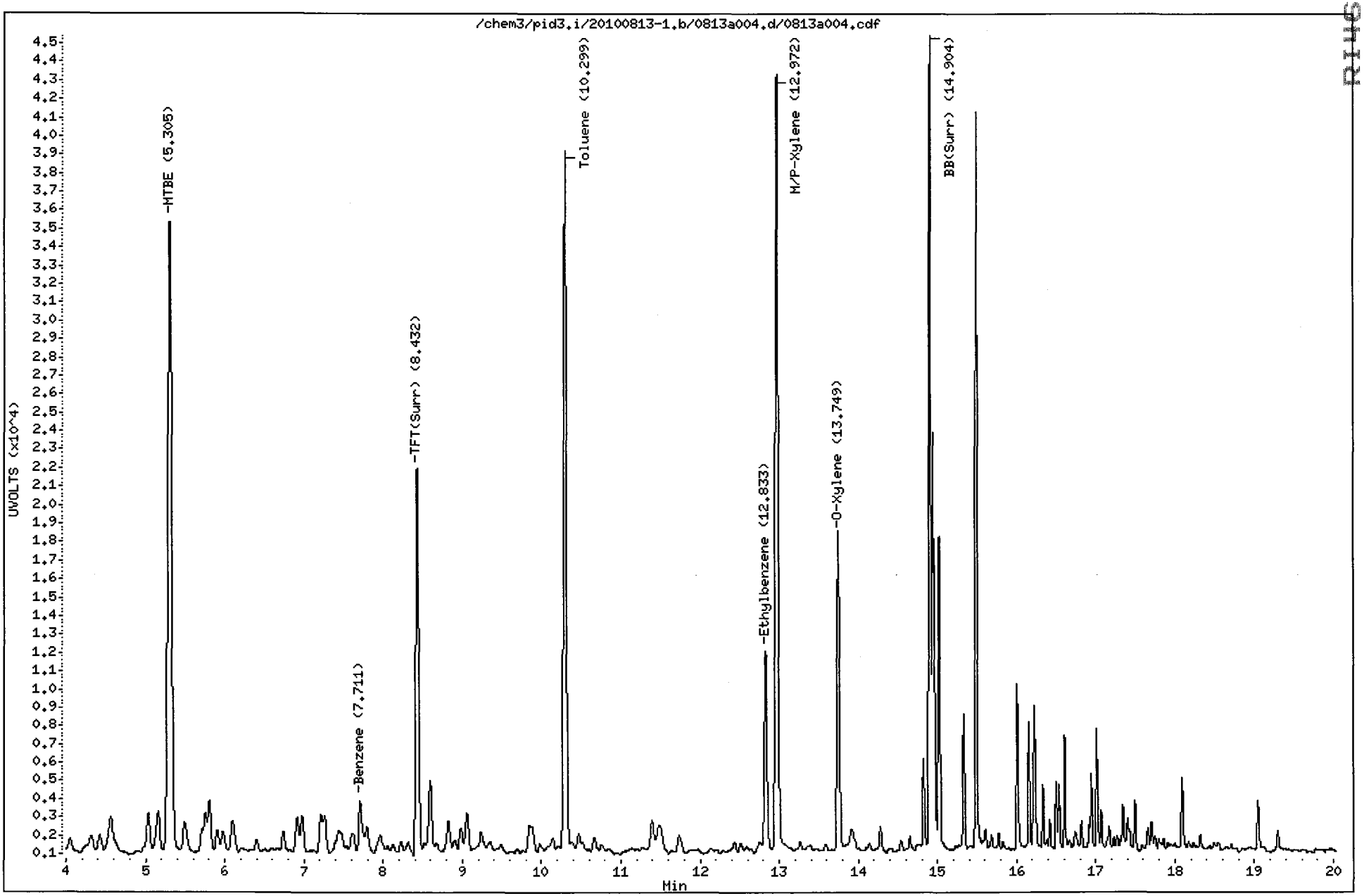
Column phase: RTX 502-2 PID

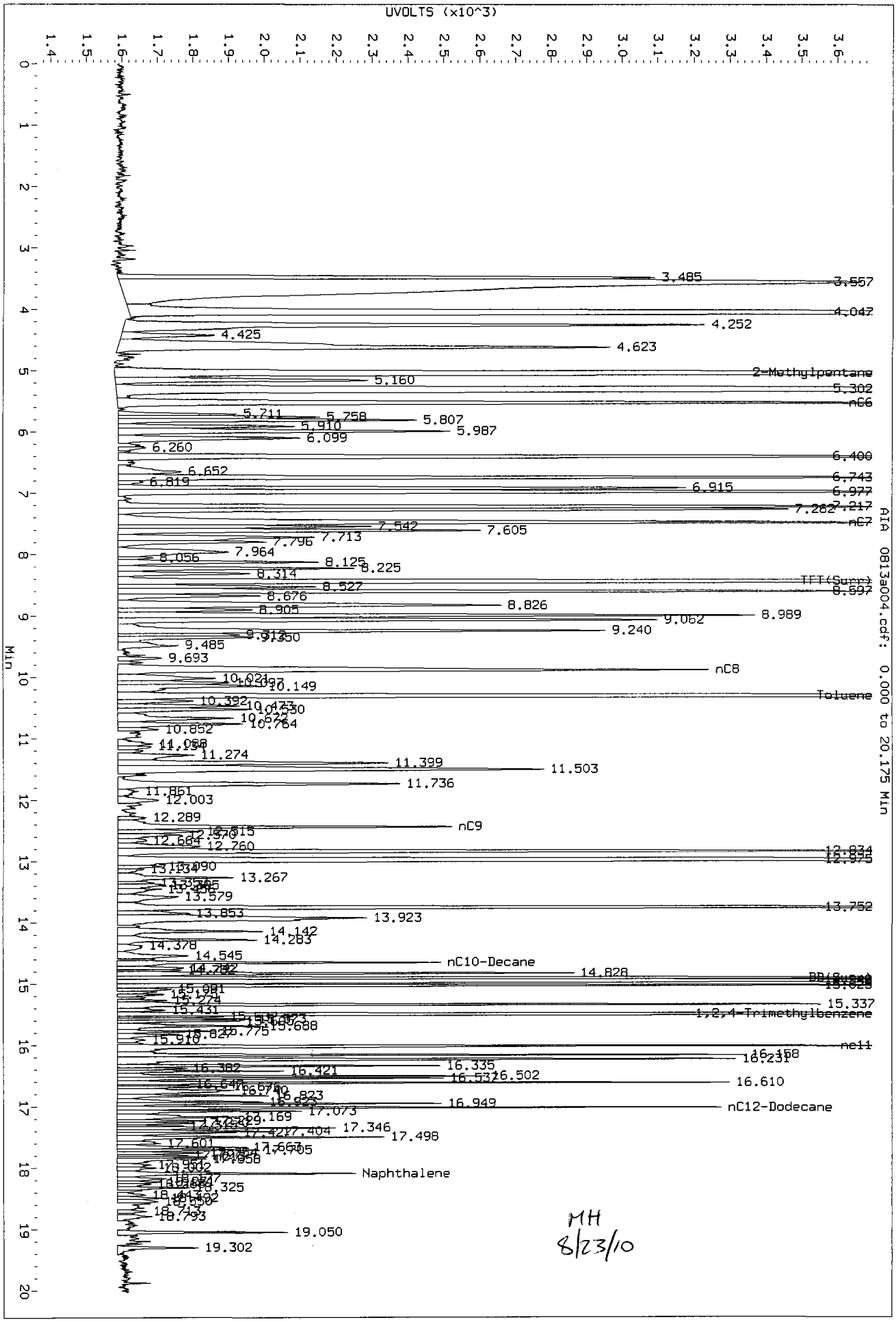
Instrument: pid3.i

Operator: MH

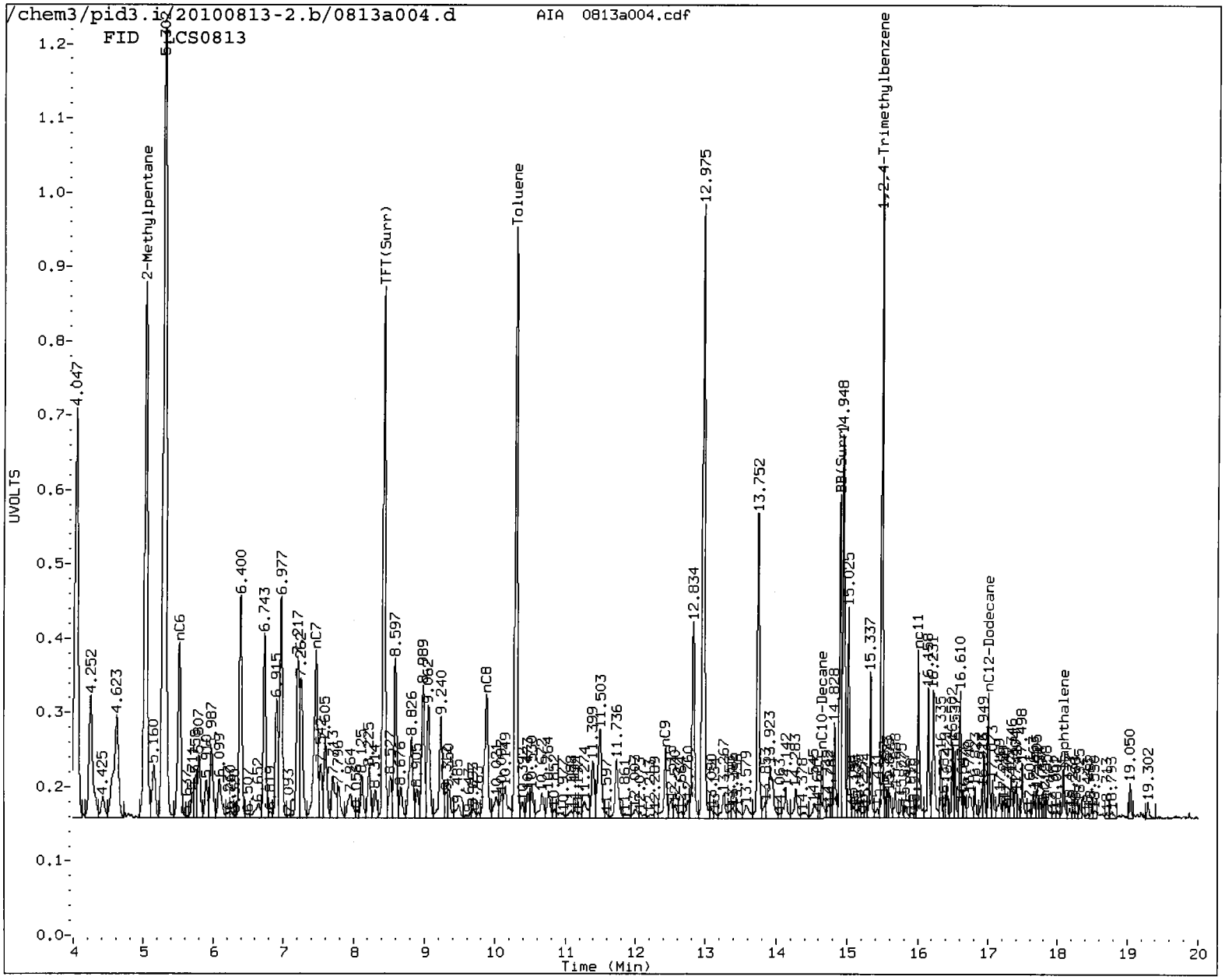
Column diameter: 0.18

H3600 : PID1





MH
8/23/10



MANUAL INTEGRATION

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

5. Other _____

Analyst: MH Date: 8/23/10

M 8/23/10

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100813-2.b/0813a005.d
Data file 2: /chem3/pid3.i/20100813-1.b/0813a005.d
Method: /chem3/pid3.i/20100813-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 28-JUL-2010
BETX Ical Date: 29-JUN-2010

ARI ID: LCSD0813
Client ID:
Injection Date: 13-AUG-2010 15:07
Matrix: WATER
Dilution Factor: 1.000

==========

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.438	-0.003	7083	84481	98.4	TFT(Surr)
14.909	-0.003	4370	36313	101.5	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range		RF	Total Area*	Amount
WAGas Tol-C12	(10.21 to 17.12)	827807	782172	0.945 M
8015B 2MP-TMB	(4.94 to 15.60)	1664107	1557022	0.936 M
AK101 nC6-nC10	(5.43 to 14.51)	1131784	1047226	0.925 M
NWTPHG Tol-Nap	(10.21 to 18.19)	882029	836329	0.948 M

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
8.436	0.029	20948	95.3	TFT(Surr)
14.907	0.022	44493	97.6	BB(Surr)

SW8021 (PID)

RT	Shift	Response	Amount	Compound
7.714	0.027	2928	2.21	Benzene
10.302	0.032	38169	28.92	Toluene
12.837	0.033	10962	8.82	Ethylbenzene
12.976	0.036	42617	31.65	M/P-Xylene
13.753	0.030	17366	13.52	O-Xylene
5.307	0.017	34419	96.74	MTBE

A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20100813-2.b/0813a005.d

Date : 13-AUG-2010 15:07

Client ID: LCSD0813S1

Sample Info: LCSD0813

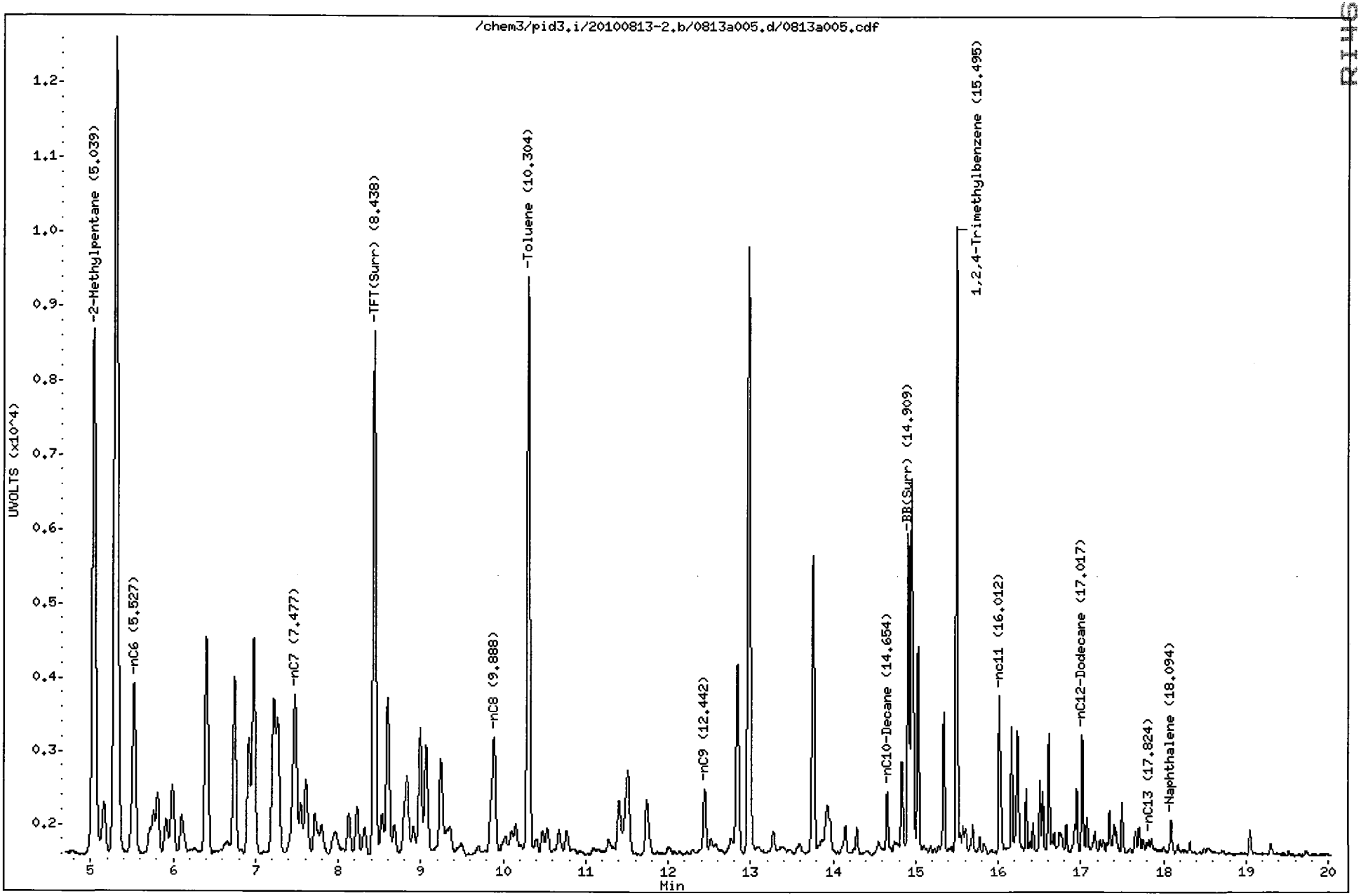
Column phase: RTX 502-2 FID

Instrument: pid3.i

Operator: MH

Column diameter: 0.18

RIIS: 00838



Data File: /chem3/pid3.i/20100813-1.b/0813a005.d

Date : 13-AUG-2010 15:07

Client ID:

Sample Info: LCSD0813

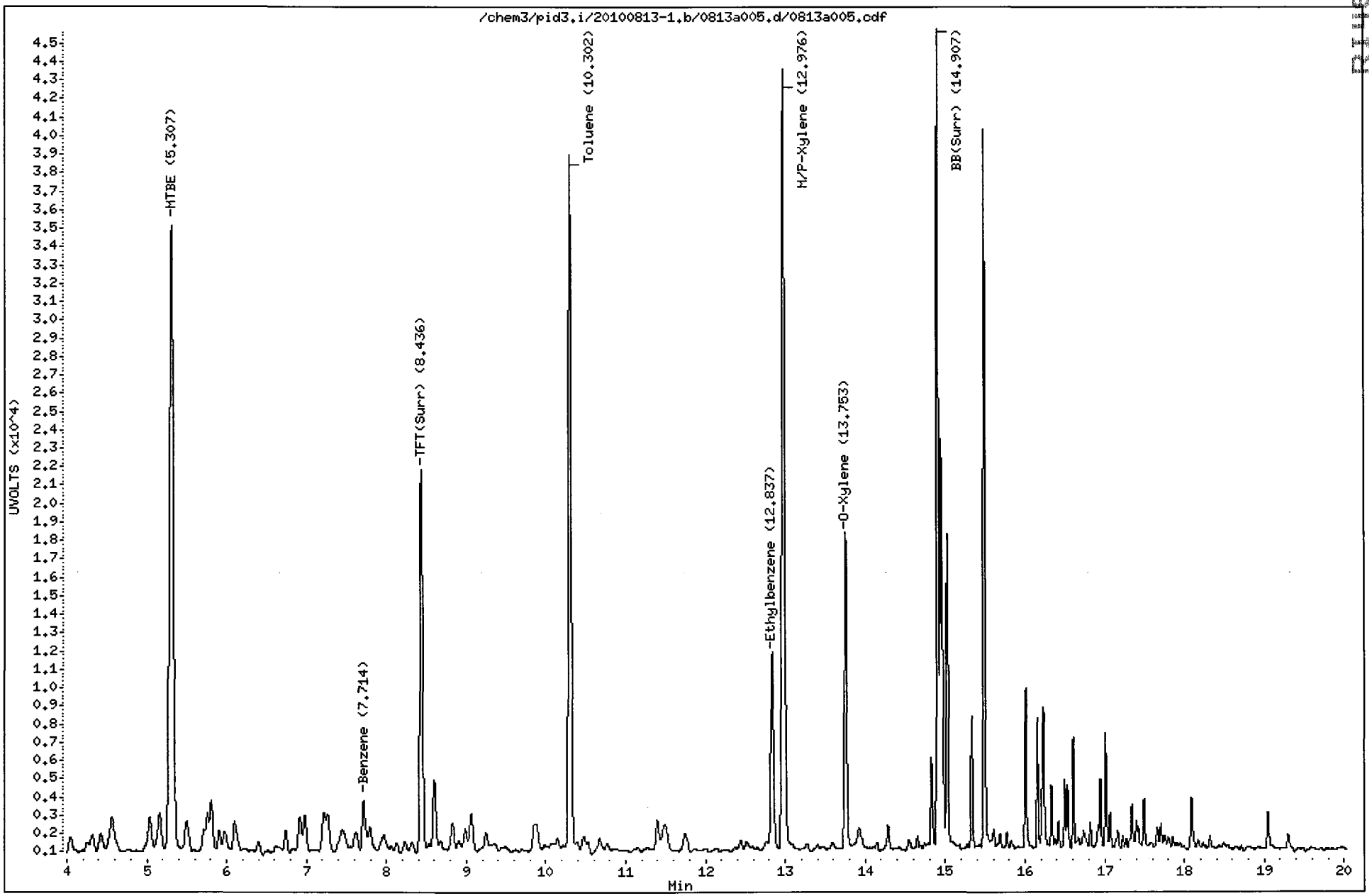
Instrument: pid3.i

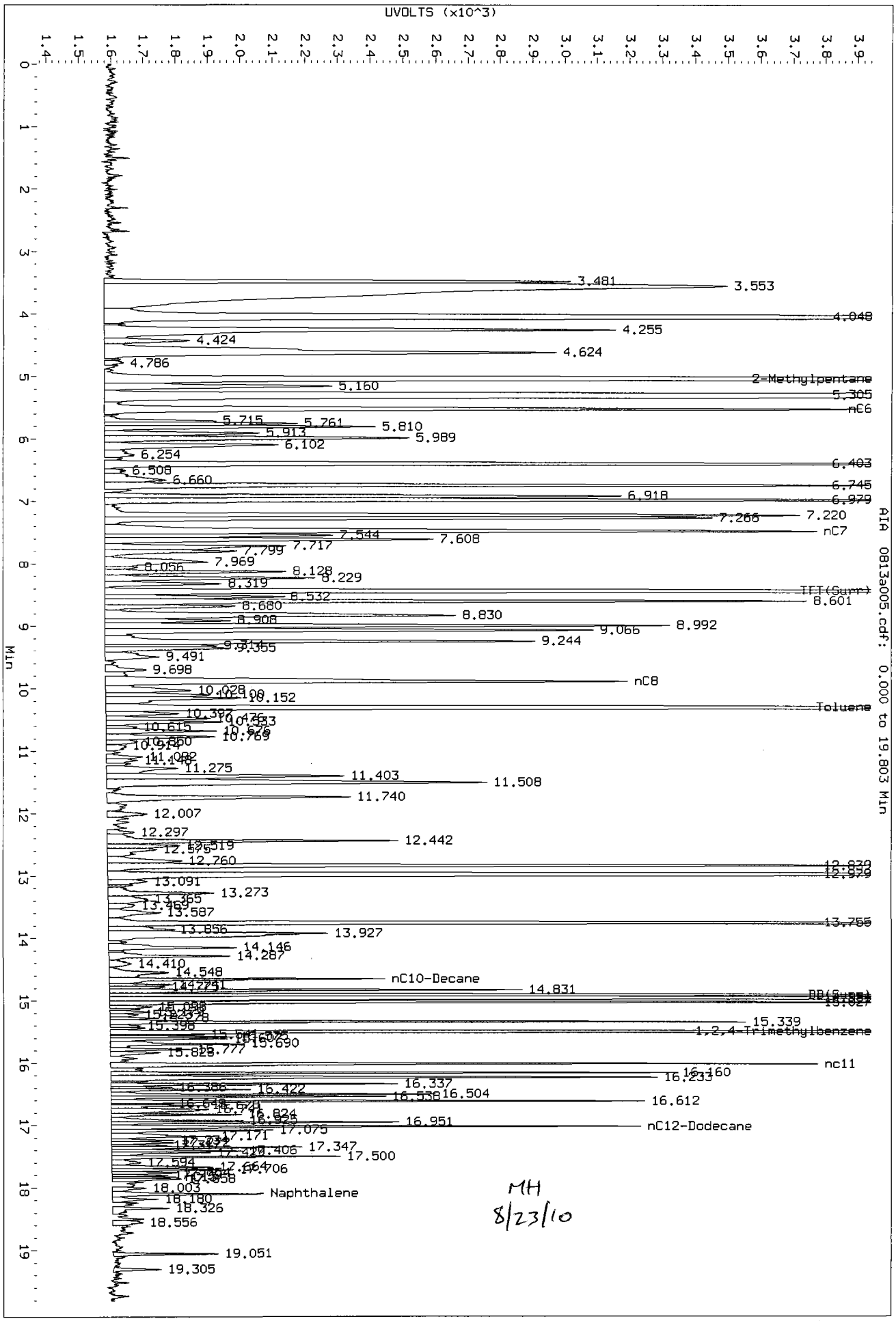
Operator: MH

Column phase: RTX 502-2 PID

Column diameter: 0.18

RIL: 66839





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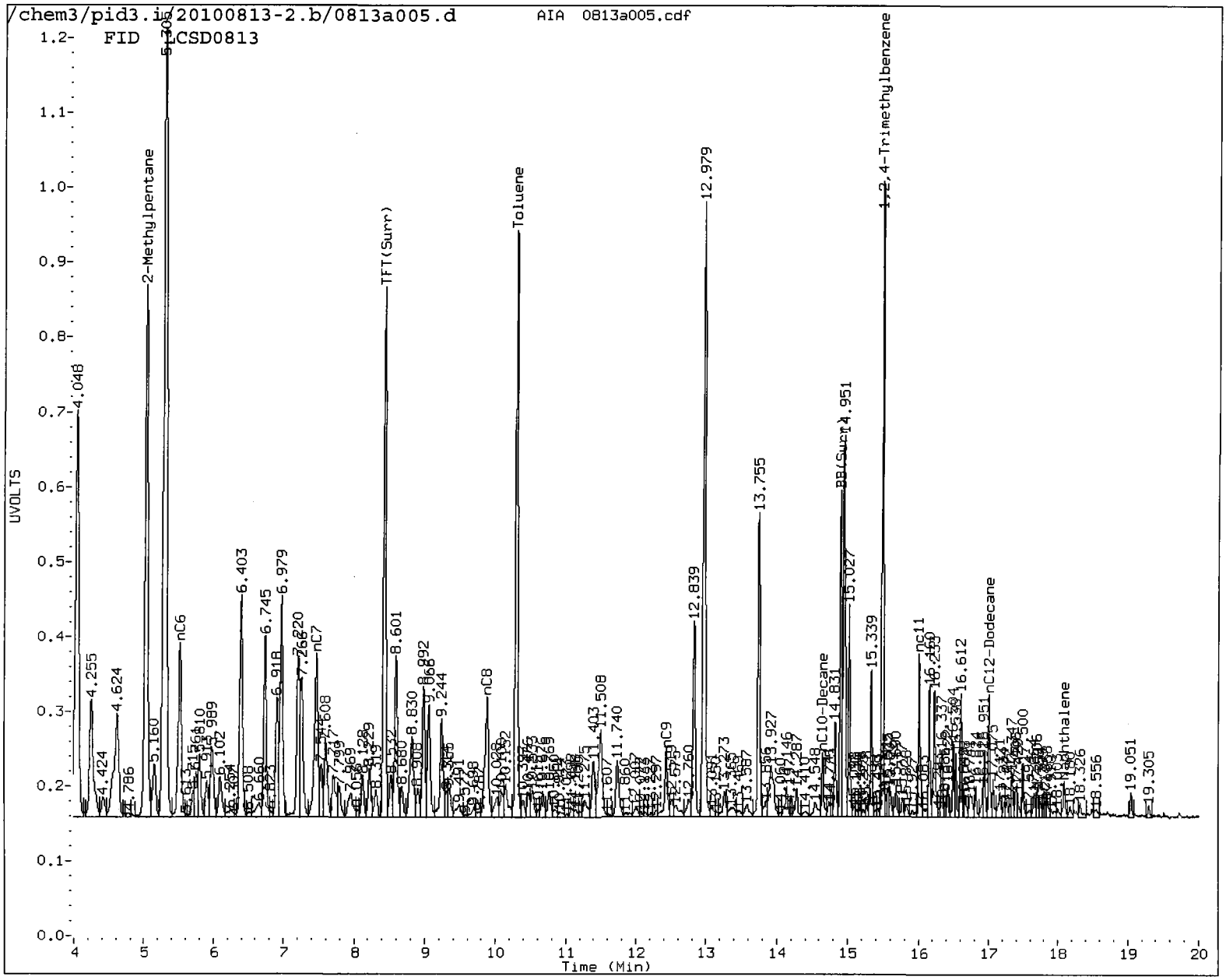
Injection Date: 13-AUG-2010 15:07
Instrument: pid3.i
Client Sample ID: LCSD081351

MH
8/23/10



MANUAL INTEGRATION

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

5. Other _____

Analyst: MH Date: 8/23/10

8/23/10

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100813-2.b/0813a006.d
Data file 2: /chem3/pid3.i/20100813-1.b/0813a006.d
Method: /chem3/pid3.i/20100813-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 28-JUL-2010
BETX Ical Date: 29-JUN-2010

ARI ID: MB0813
Client ID:
Injection Date: 13-AUG-2010 15:31
Matrix: WATER
Dilution Factor: 1.000

==========

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.440	-0.002	6869	80868	95.4	TFT(Surr)
14.911	-0.001	4242	35077	98.5	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range		RF	Total Area*	Amount
WAGas Tol-C12	(10.21 to 17.12)	827807	3366	0.004
8015B 2MP-TMB	(4.94 to 15.60)	1664107	2248	0.001
AK101 nC6-nC10	(5.43 to 14.51)	1131784	1101	0.001
NWTPHG Tol-Nap	(10.21 to 18.19)	882029	4692	0.005

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	20035	91.1	TFT(Surr)
14.909	0.024	43642	95.7	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/20100813-2.b/0813a006.d

Date : 13-AUG-2010 15:31

Client ID: MB0813S1

Sample Info: MB0813

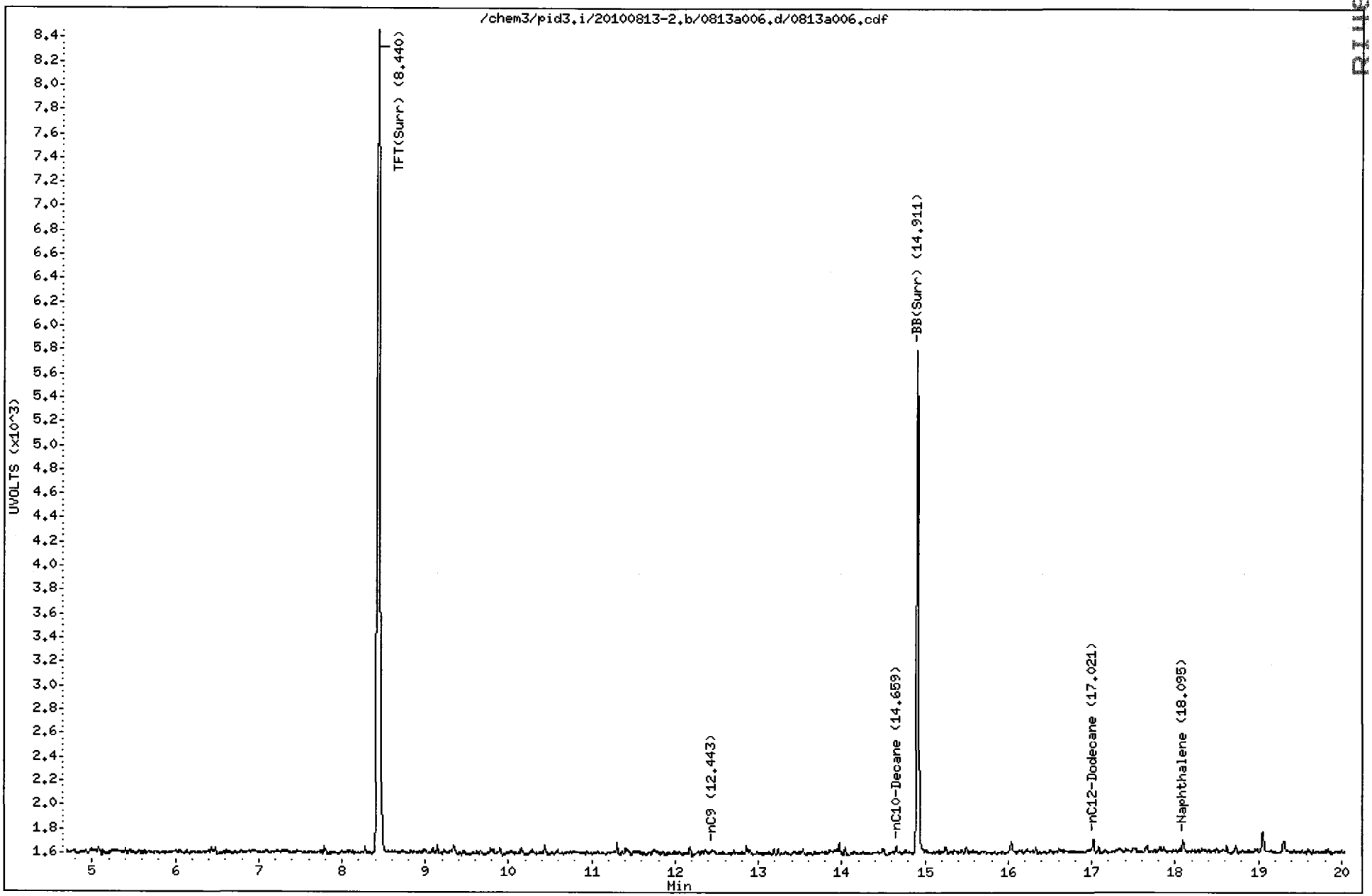
Column phase: RTX 502-2 FID

Instrument: pid3.i

Operator: MH

Column diameter: 0.18

RIUS : 60813



Data File: /chem3/pid3.i/20100813-1.b/0813a006.d

Date : 13-AUG-2010 15:31

Client ID:

Sample Info: MB0813

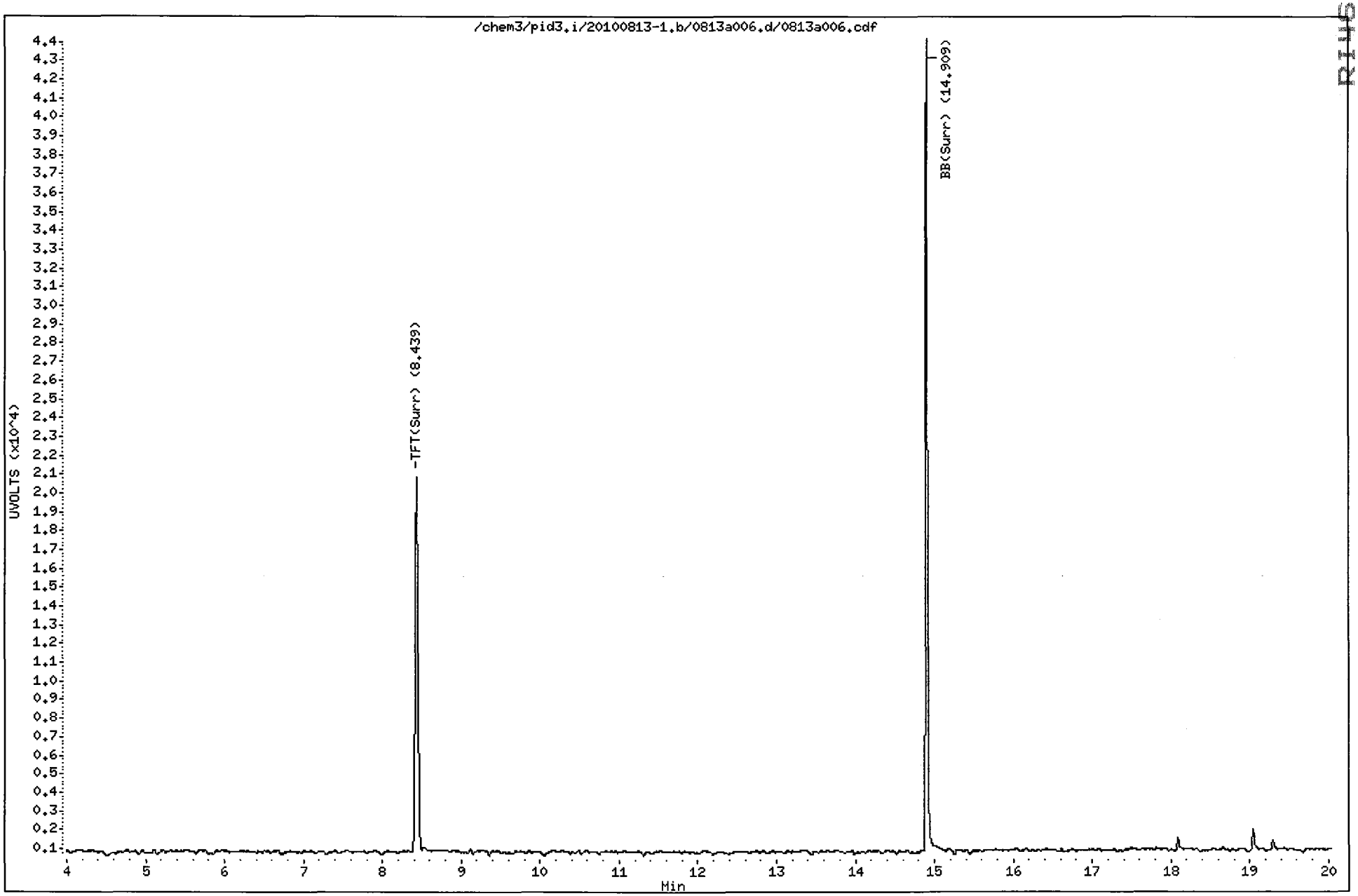
Instrument: pid3.i

Operator: MH

Column phase: RTX 502-2 PID

Column diameter: 0.18

RTI 66011



8/27/10

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100813-2.b/0813a007.d
Data file 2: /chem3/pid3.i/20100813-1.b/0813a007.d
Method: /chem3/pid3.i/20100813-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 28-JUL-2010
BETX Ical Date: 29-JUN-2010

ARI ID: RI46K
Client ID: 081210-TB
Injection Date: 13-AUG-2010 16:21
Matrix: WATER
Dilution Factor: 1.000

==========

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.376	-0.065	7166	85772	99.6	TFT(Surr)
14.878	-0.034	4263	36721	99.0	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range		RF	Total Area*	Amount
WAGas Tol-C12	(10.21 to 17.12)	827807	13409	0.016
8015B 2MP-TMB	(4.94 to 15.60)	1664107	9420	0.006
AK101 nC6-nC10	(5.43 to 14.51)	1131784	2322	0.002
NWTPHG Tol-Nap	(10.21 to 18.19)	882029	14853	0.017

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
8.375	-0.032	21167	96.3	TFT(Surr)
14.876	-0.009	43793	96.1	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/20100813-2.b/0813a007.d

Date : 13-AUG-2010 16:21

Client ID: 081210-TB

Sample Info: RI46K

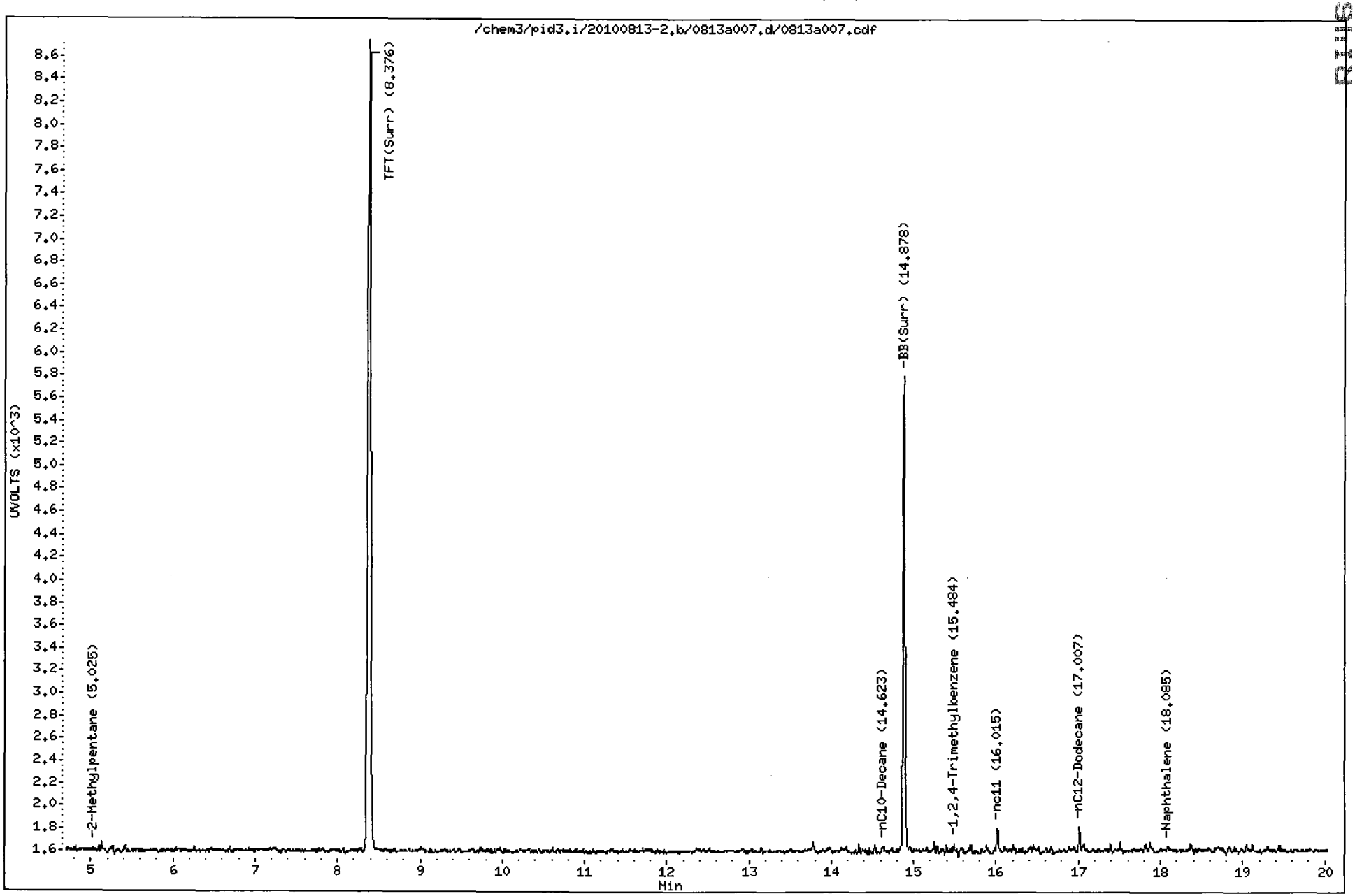
Column phase: RTX 502-2 FID

Instrument: pid3.i

Operator: MH

Column diameter: 0.18

RI16-668



Data File: /chem3/pid3.i/20100813-1.b/0813a007.d

Date : 13-AUG-2010 16:21

Client ID: 081210-TB

Sample Info: RI46K

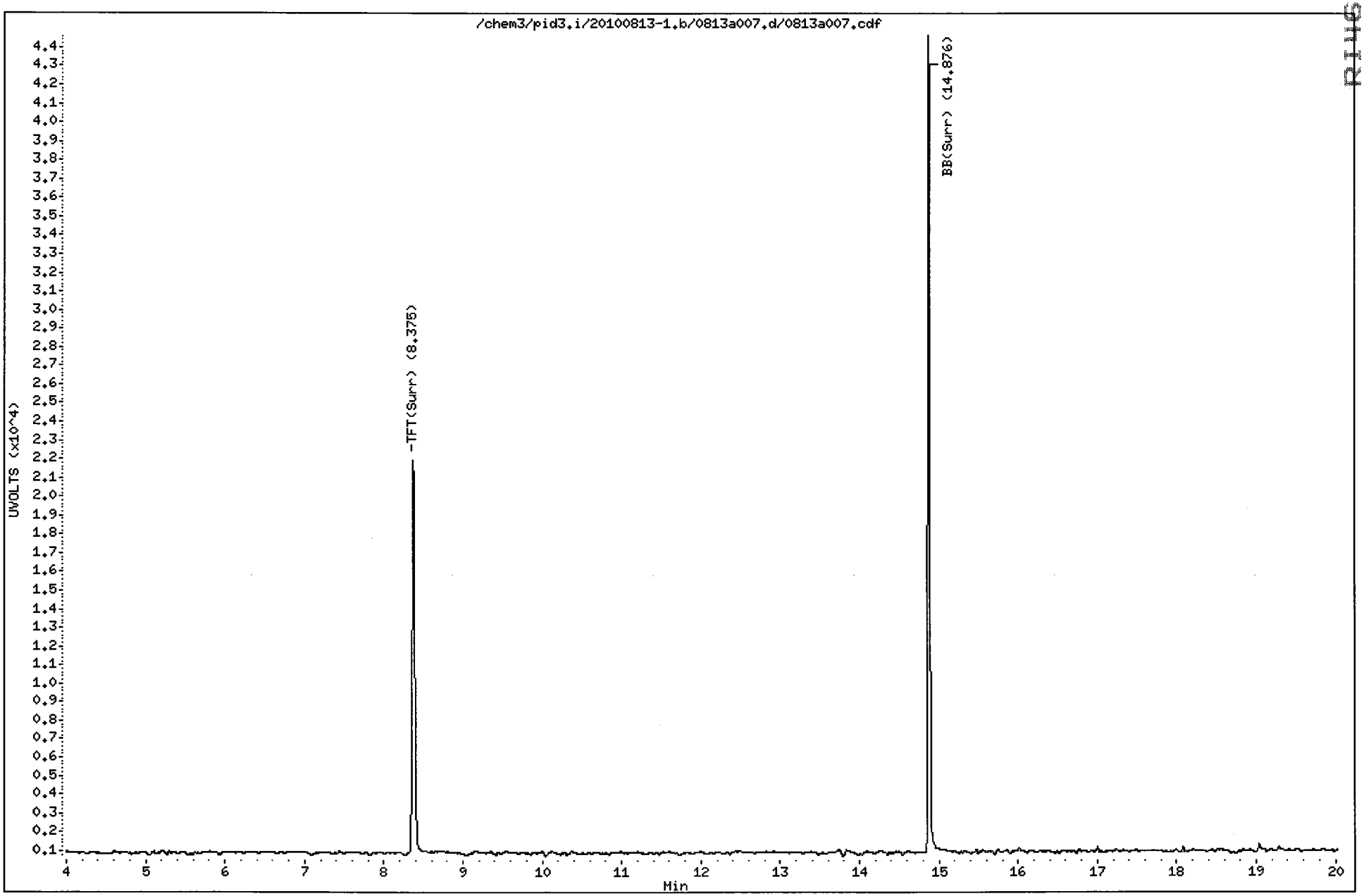
Column phase: RTX 502-2 PID

Instrument: pid3.i

Operator: MH

Column diameter: 0.18

RI46 : 00317



MH 8/23/10

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100813-2.b/0813a008.d
Data file 2: /chem3/pid3.i/20100813-1.b/0813a008.d
Method: /chem3/pid3.i/20100813-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 28-JUL-2010
BETX Ical Date: 29-JUN-2010

ARI ID: RI46J
Client ID: 081110-TB
Injection Date: 13-AUG-2010 16:46
Matrix: WATER
Dilution Factor: 1.000

==========

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.423	-0.018	7112	84457	98.8	TFT(Surr)
14.898	-0.014	4241	34565	98.5	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range		RF	Total Area*	Amount
WAGas Tol-C12	(10.21 to 17.12)	827807	1	0.000
8015B 2MP-TMB	(4.94 to 15.60)	1664107	1064	0.001
AK101 nC6-nC10	(5.43 to 14.51)	1131784	1064	0.001
NWTPHG Tol-Nap	(10.21 to 18.19)	882029	1	0.000

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
8.422	0.015	20671	94.0	TFT(Surr)
14.897	0.012	43315	95.0	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/20100813-2.b/0813a008.d

Date : 13-AUG-2010 16:46

Client ID: 081110-TB

Sample Info: RI46J

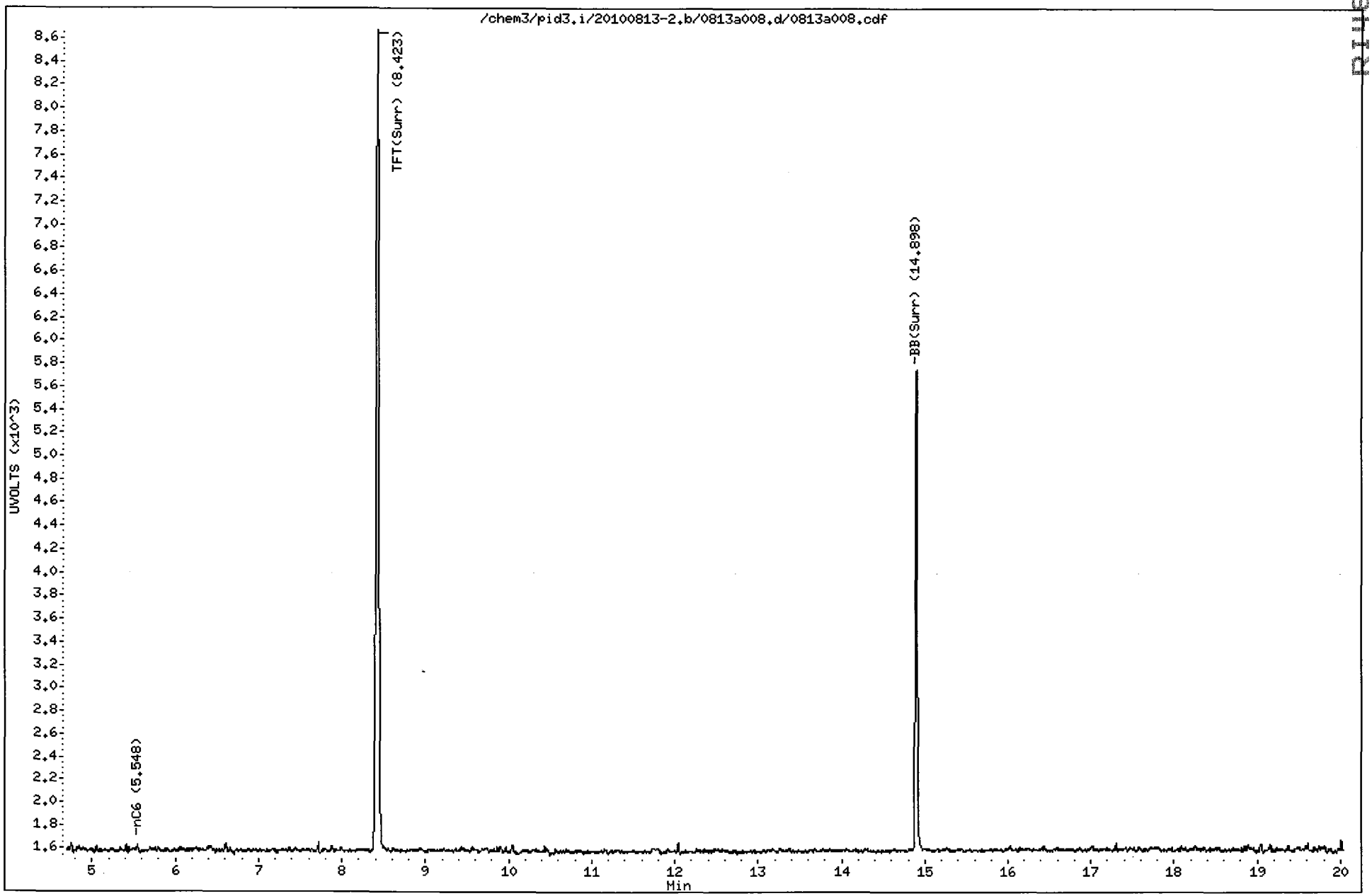
Column phase: RTX 502-2 FID

Instrument: pid3.i

Operator: MH

Column diameter: 0.18

RI46J 081110-TB



Data File: /chem3/pid3.i/20100813-1.b/0813a008.d

Date : 13-AUG-2010 16:46

Client ID: 081110-TB

Sample Info: RI46J

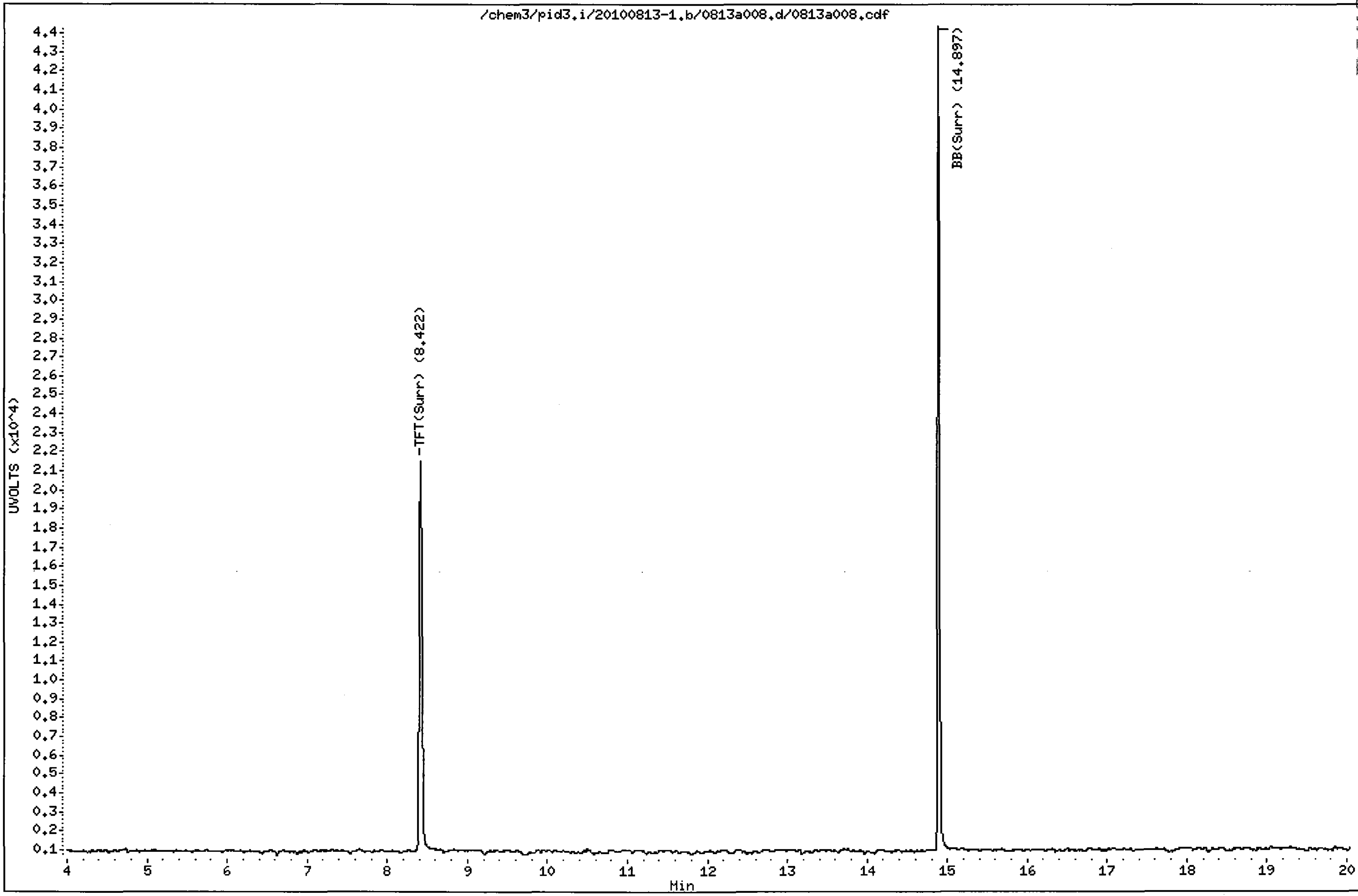
Column phase: RTX 502-2 PID

Page 1

Instrument: pid3.i

Operator: MH

Column diameter: 0.18



8/23/10

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100813-2.b/0813a009.d
Data file 2: /chem3/pid3.i/20100813-1.b/0813a009.d
Method: /chem3/pid3.i/20100813-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 28-JUL-2010
BETX Ical Date: 29-JUN-2010

ARI ID: RI46A
Client ID: MW-02-081110
Injection Date: 13-AUG-2010 17:11
Matrix: WATER
Dilution Factor: 1.000

==========

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.433	-0.008	7147	84126	99.3	TFT(Surr)
14.906	-0.006	4261	33703	98.9	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range		RF	Total Area*	Amount
WAGas Tol-C12	(10.21 to 17.12)	827807	0	0.000
8015B 2MP-TMB	(4.94 to 15.60)	1664107	0	0.000
AK101 nC6-nC10	(5.43 to 14.51)	1131784	0	0.000
NWTPHG Tol-Nap	(10.21 to 18.19)	882029	0	0.000

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
8.431	0.024	20652	93.9	TFT(Surr)
14.904	0.019	43493	95.4	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/20100813-2.b/0813a009.d

Date : 13-AUG-2010 17:11

Client ID: MW-02-081110

Sample Info: RI46A

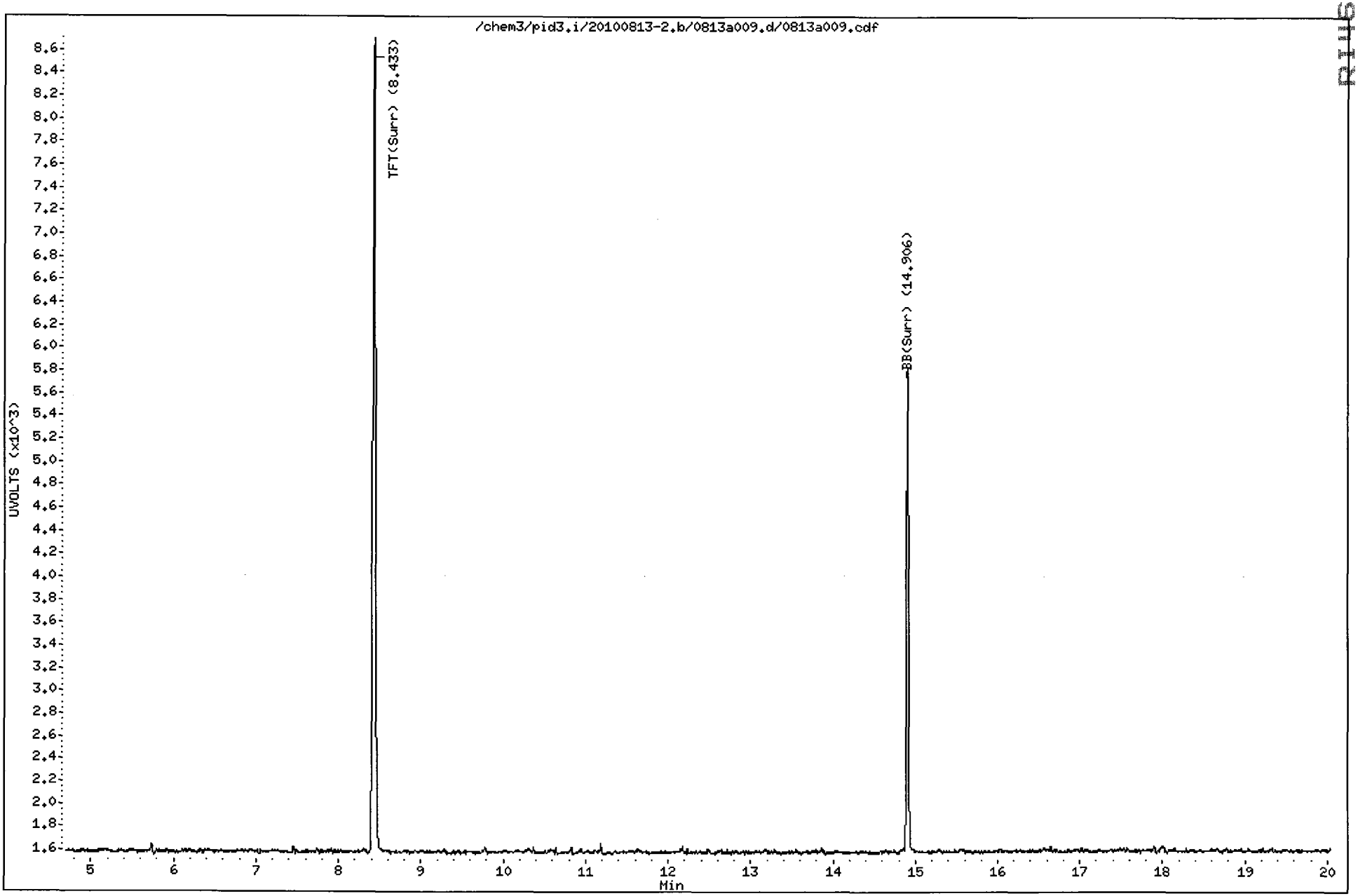
Column phase: RTX 502-2 FID

Instrument: pid3.i

Operator: MH

Column diameter: 0.18

RI46 25990



Data File: /chem3/pid3.i/20100813-1.b/0813a009.d

Date : 13-AUG-2010 17:11

Client ID: MW-02-081110

Instrument: pid3.i

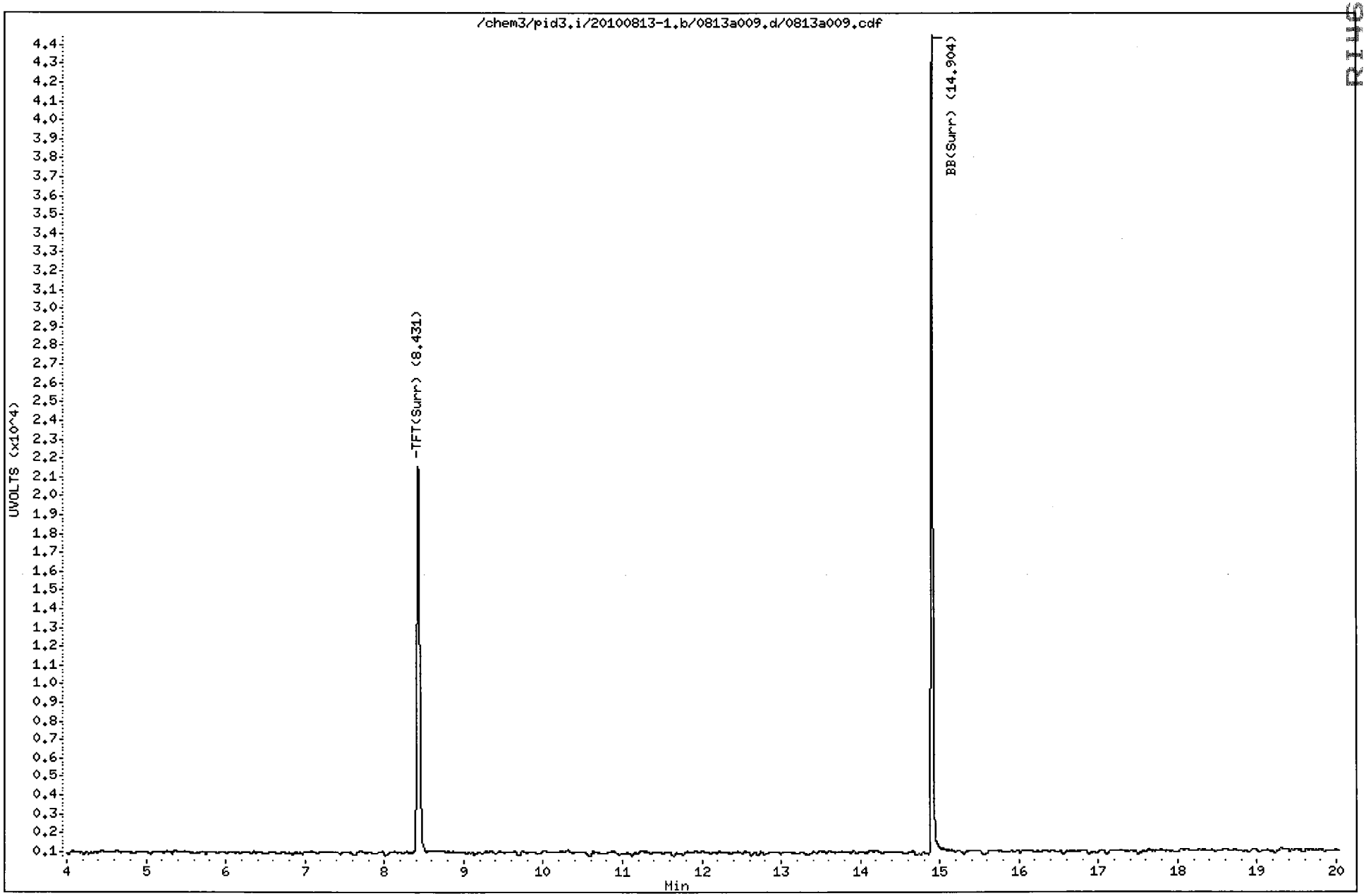
Sample Info: RI46A

Operator: MH

Column phase: RTX 502-2 PID

Column diameter: 0.18

RI46 9353



MH 8/23/10

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100813-2.b/0813a010.d
Data file 2: /chem3/pid3.i/20100813-1.b/0813a010.d
Method: /chem3/pid3.i/20100813-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 28-JUL-2010
BETX Ical Date: 29-JUN-2010

ARI ID: RI46B
Client ID: MW-03-081110
Injection Date: 13-AUG-2010 17:35
Matrix: WATER
Dilution Factor: 1.000

==========

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.442	0.001	7058	83137	98.1	TFT(Surr)
14.911	-0.001	4182	34991	97.1	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range		RF	Total Area*	Amount
WAGas Tol-C12	(10.21 to 17.12)	827807	14614	0.018
8015B 2MP-TMB	(4.94 to 15.60)	1664107	11286	0.007
AK101 nC6-nC10	(5.43 to 14.51)	1131784	8620	0.008
NWTPHG Tol-Nap	(10.21 to 18.19)	882029	14614	0.017

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
8.441	0.034	20323	92.4	TFT(Surr)
14.909	0.024	42758	93.8	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/20100813-2.b/0813a010.d

Date : 13-AUG-2010 17:35

Client ID: MW-03-081110

Sample Info: RI46B

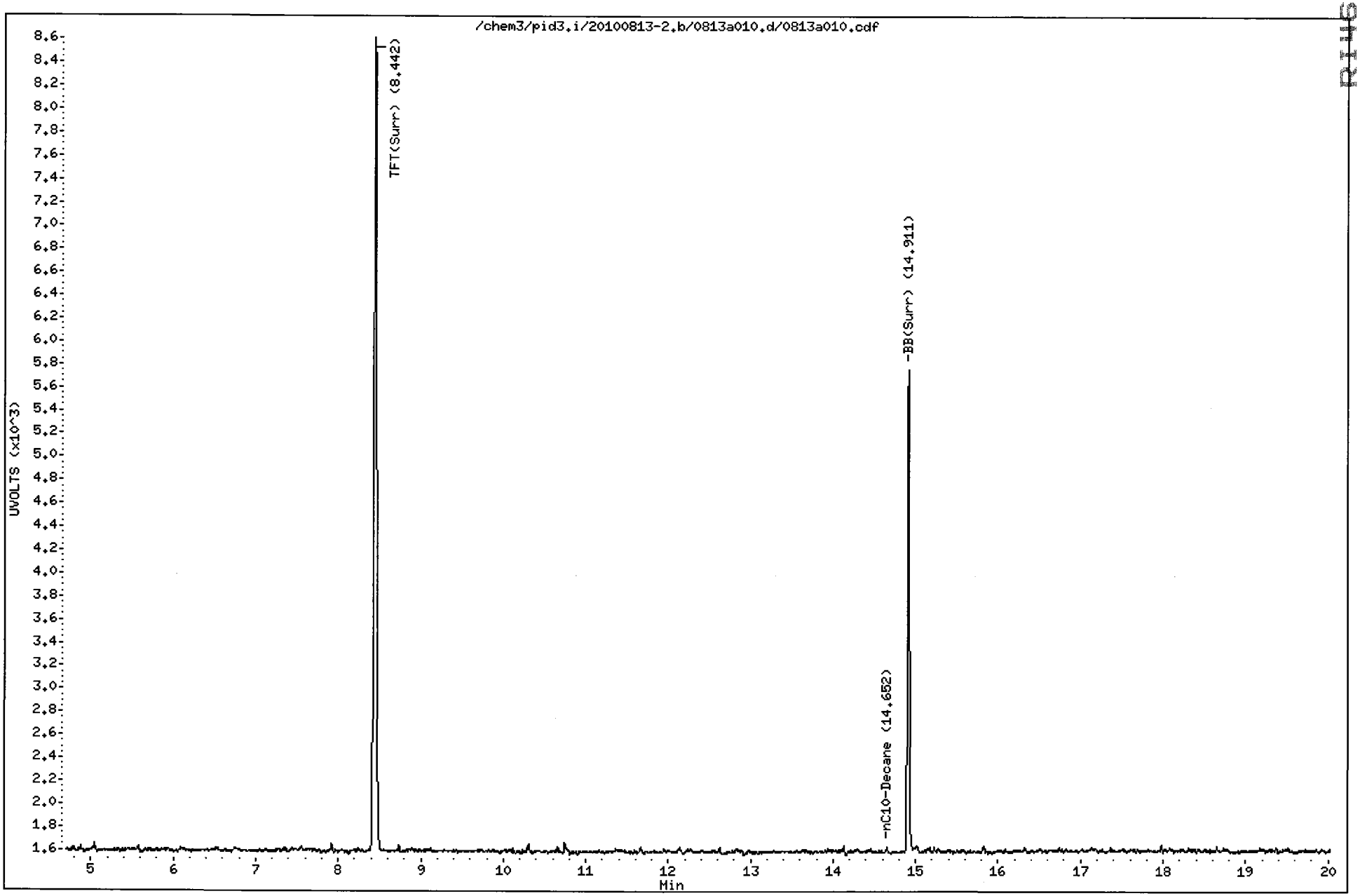
Column phase: RTX 502-2 FID

Instrument: pid3.i

Operator: MH

Column diameter: 0.18

RI46 005555



Data File: /chem3/pid3.i/20100813-1.b/0813a010.d

Date : 13-AUG-2010 17:35

Client ID: MW-03-081110

Sample Info: RI46B

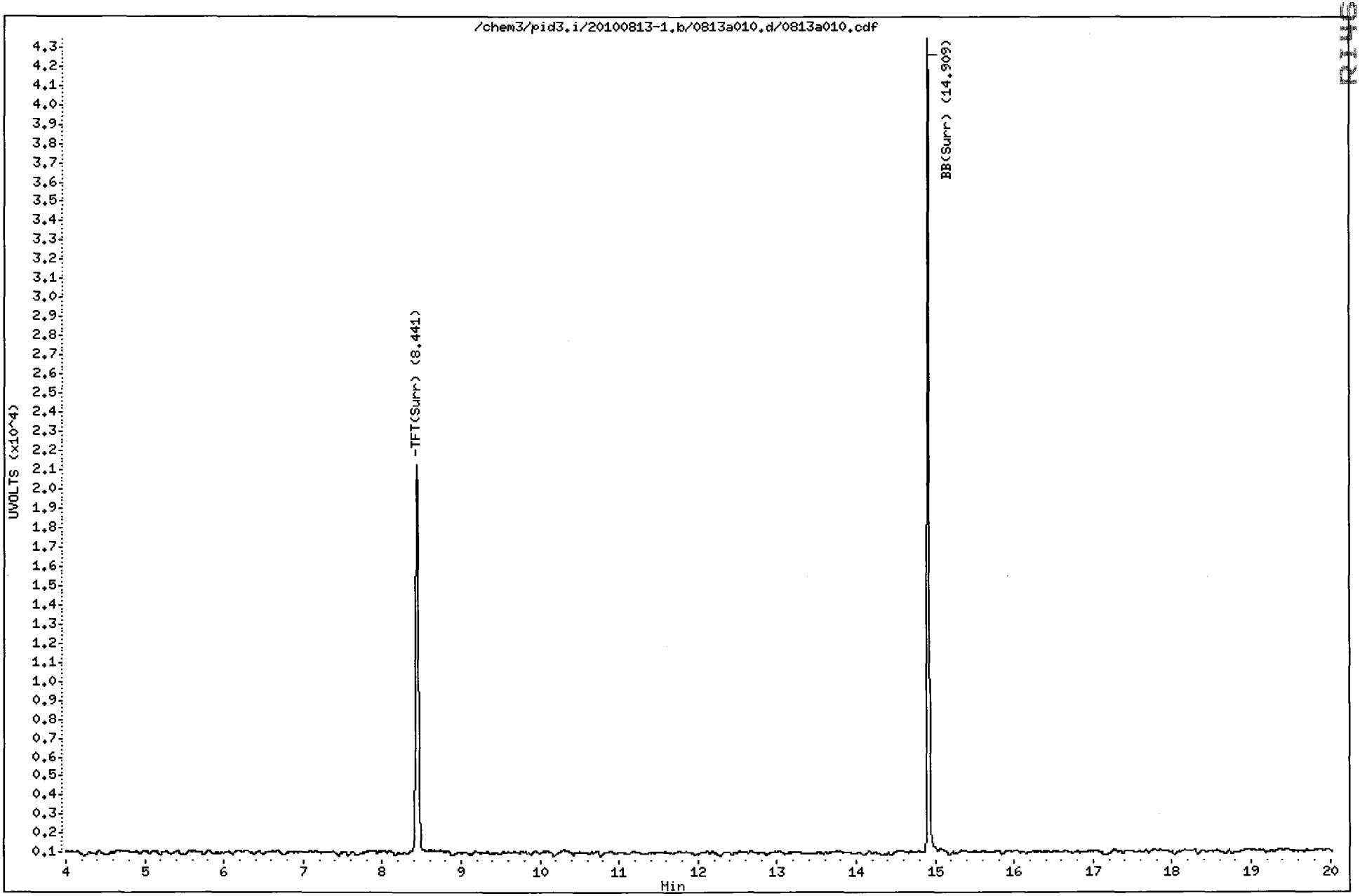
Instrument: pid3.i

Operator: MH

Column phase: RTX 502-2 PID

Column diameter: 0.18

RI46 : 66856



Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100813-2.b/0813a014.d
Data file 2: /chem3/pid3.i/20100813-1.b/0813a014.d
Method: /chem3/pid3.i/20100813-1.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: 13-AUG-2010 19:13
Matrix: WATER
Dilution Factor: 1.000

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.441	0.000	7110	83038	98.8	TFT(Surr)
14.912	0.000	4257	34755	98.8	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range		RF	Total Area*	Amount
WAGas Tol-C12	(10.21 to 17.12)	827807	548268	0.662
8015B 2MP-TMB	(4.94 to 15.60)	1664107	553554	0.333
AK101 nC6-nC10	(5.43 to 14.51)	1131784	517823	0.458
NWTPHG Tol-Nap	(10.21 to 18.19)	882029	549271	0.623

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	0.033	20766	94.5	TFT(Surr)
14.910	0.025	43927	96.4	BB(Surr)

SW8021 (PID)

RT	Shift	Response	Amount	Compound
7.716	0.028	33656	25.46	Benzene
10.307	0.037	32920	24.94	Toluene
12.842	0.038	30216	24.32	Ethylbenzene
12.979	0.039	65612	48.72	M/P-Xylene
13.757	0.034	32054	24.95	O-Xylene
5.305	0.015	9485	26.66	MTBE

A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20100813-2.b/0813a014.d

Date : 13-AUG-2010 19:13

Client ID:

Sample Info: BCAL 2

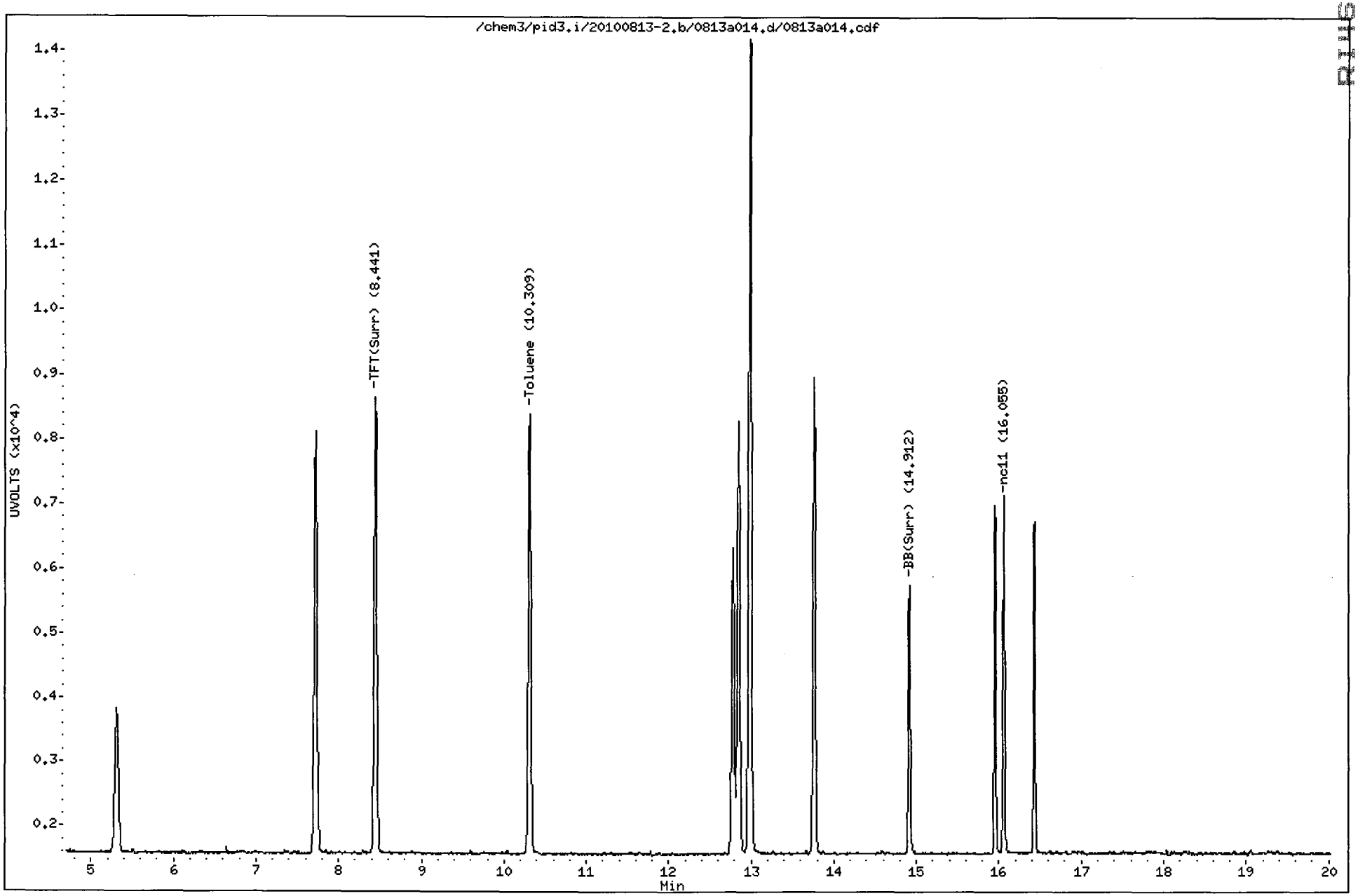
Column phase: RTX 502-2 FID

Instrument: pid3.i

Operator: MH

Column diameter: 0.18

RTI 9859



Data File: /chem3/pid3.i/20100813-1.b/0813a014.d

Date : 13-AUG-2010 19:13

Client ID:

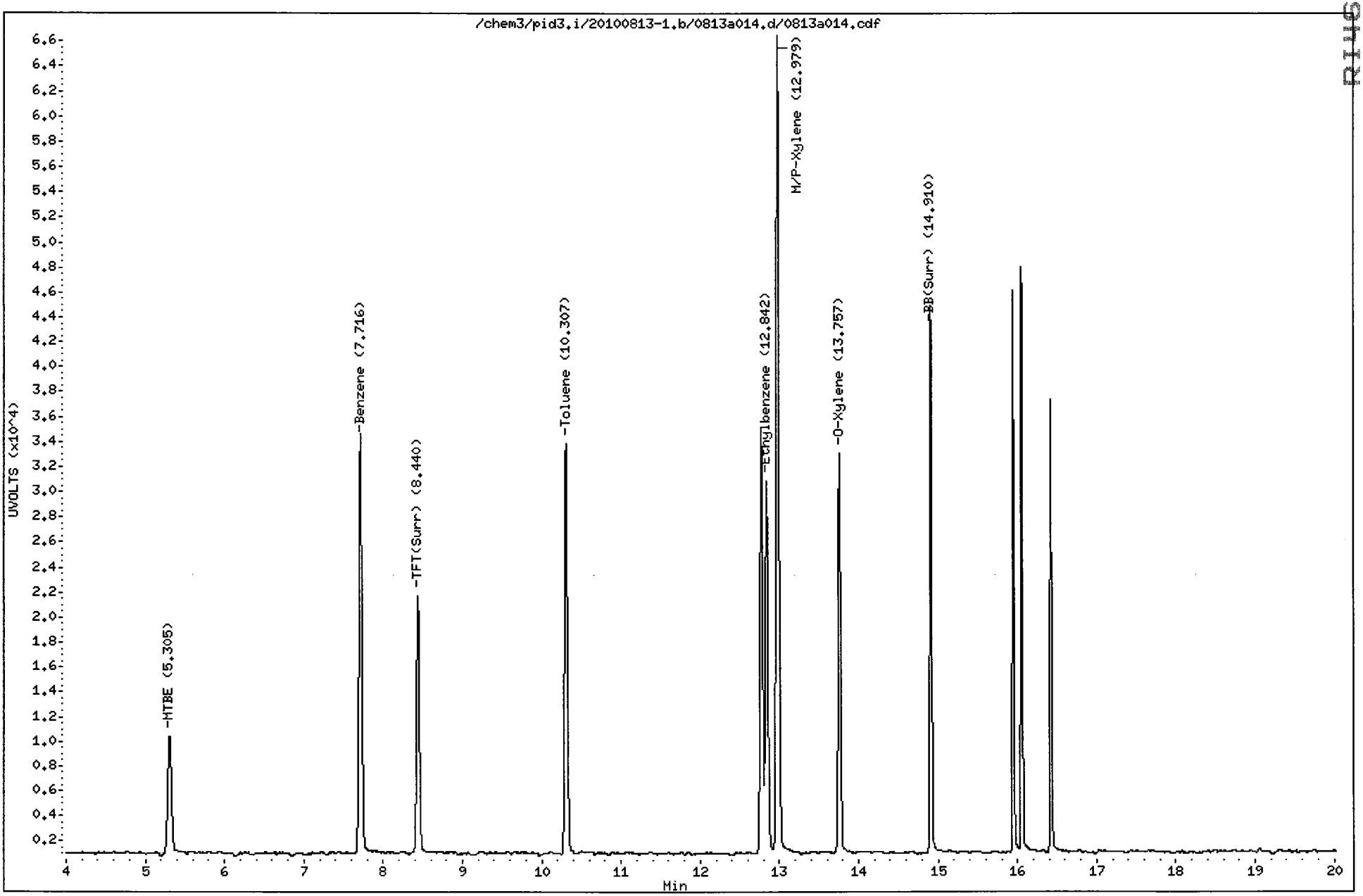
Sample Info: BCAL 2

Instrument: pid3.i

Operator: MH

Column phase: RTX 502-2 PID

Column diameter: 0.18



8/23

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100813-2.b/0813a015.d
Data file 2: /chem3/pid3.i/20100813-1.b/0813a015.d
Method: /chem3/pid3.i/20100813-1.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: 13-AUG-2010 19:38
Matrix: WATER
Dilution Factor: 1.000

==========

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.441	0.000	7277	87573	101.1	TFT(Surr)
14.912	0.000	4394	37836	102.0	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range		RF	Total Area*	Amount
WAGas Tol-C12	(10.21 to 17.12)	827807	1960964	2.369 M
8015B 2MP-TMB	(4.94 to 15.60)	1664107	3836033	2.305 M
AK101 nC6-nC10	(5.43 to 14.51)	1131784	2584374	2.283 M
NWTPHG Tol-Nap	(10.21 to 18.19)	882029	2075720	2.353 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
8.440	0.033	21456	97.6	TFT(Surr)
14.910	0.025	44853	98.4	BB(Surr)

SW8021 (PID)

RT	Shift	Response	Amount	Compound
7.717	0.029	7125	5.39	Benzene
10.308	0.037	93662	70.97	Toluene
12.766	-0.037	1562	1.26	Ethylbenzene
12.983	0.042	104414	77.54	M/P-Xylene
13.758	0.035	43089	33.54	O-Xylene
5.309	0.019	83274	234.05	MTBE

A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20100813-2.b/0813a015.d

Date : 13-AUG-2010 19:38

Client ID: LORA LAKE

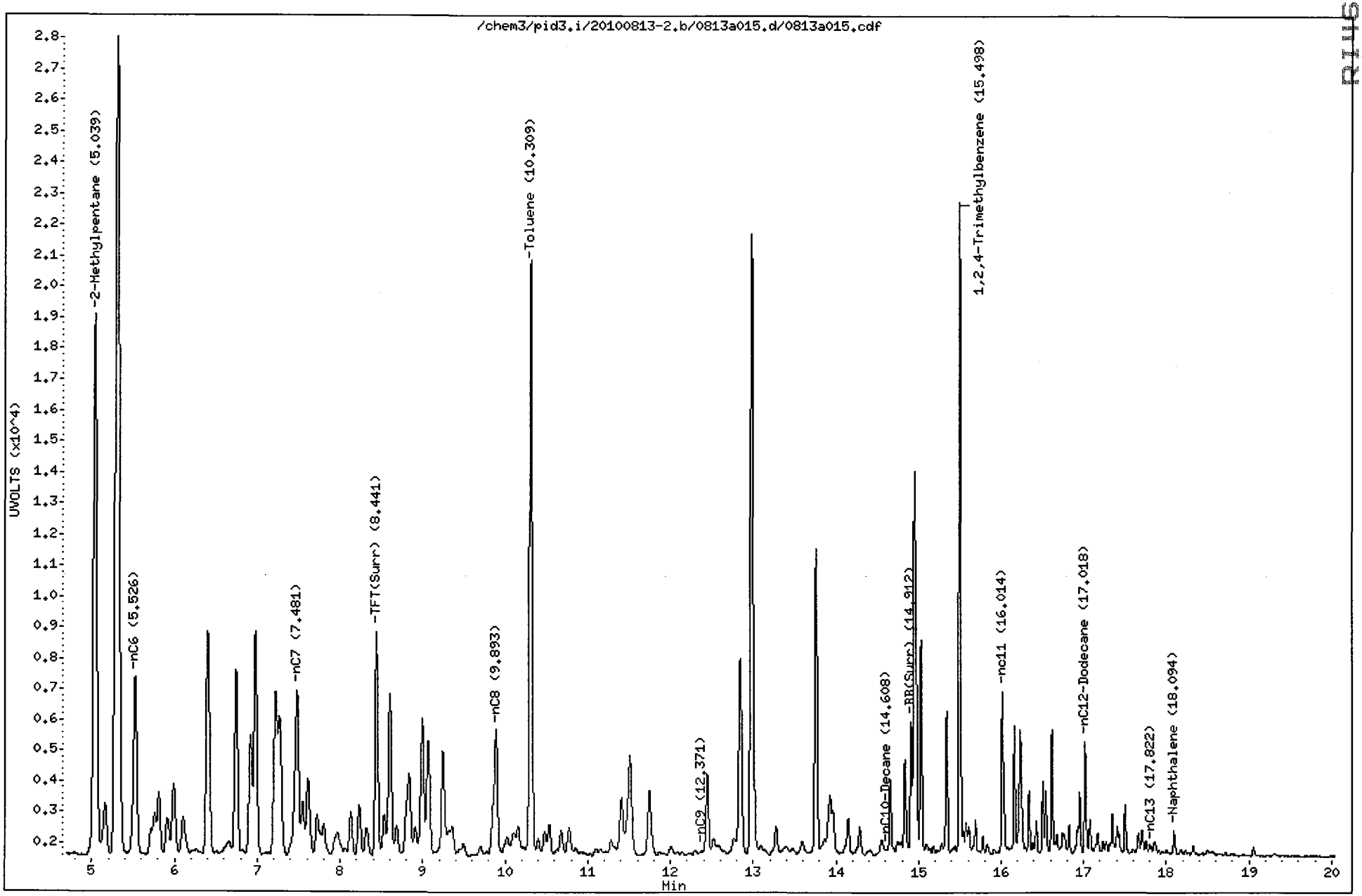
Sample Info: GCAL 2

Column phase: RTX 502-2 FID

Instrument: pid3.i

Operator: MH

Column diameter: 0.18



Data File: /chem3/pid3.i/20100813-1.b/0813a015.d

Date : 13-AUG-2010 19:38

Client ID:

Sample Info: GCAL 2

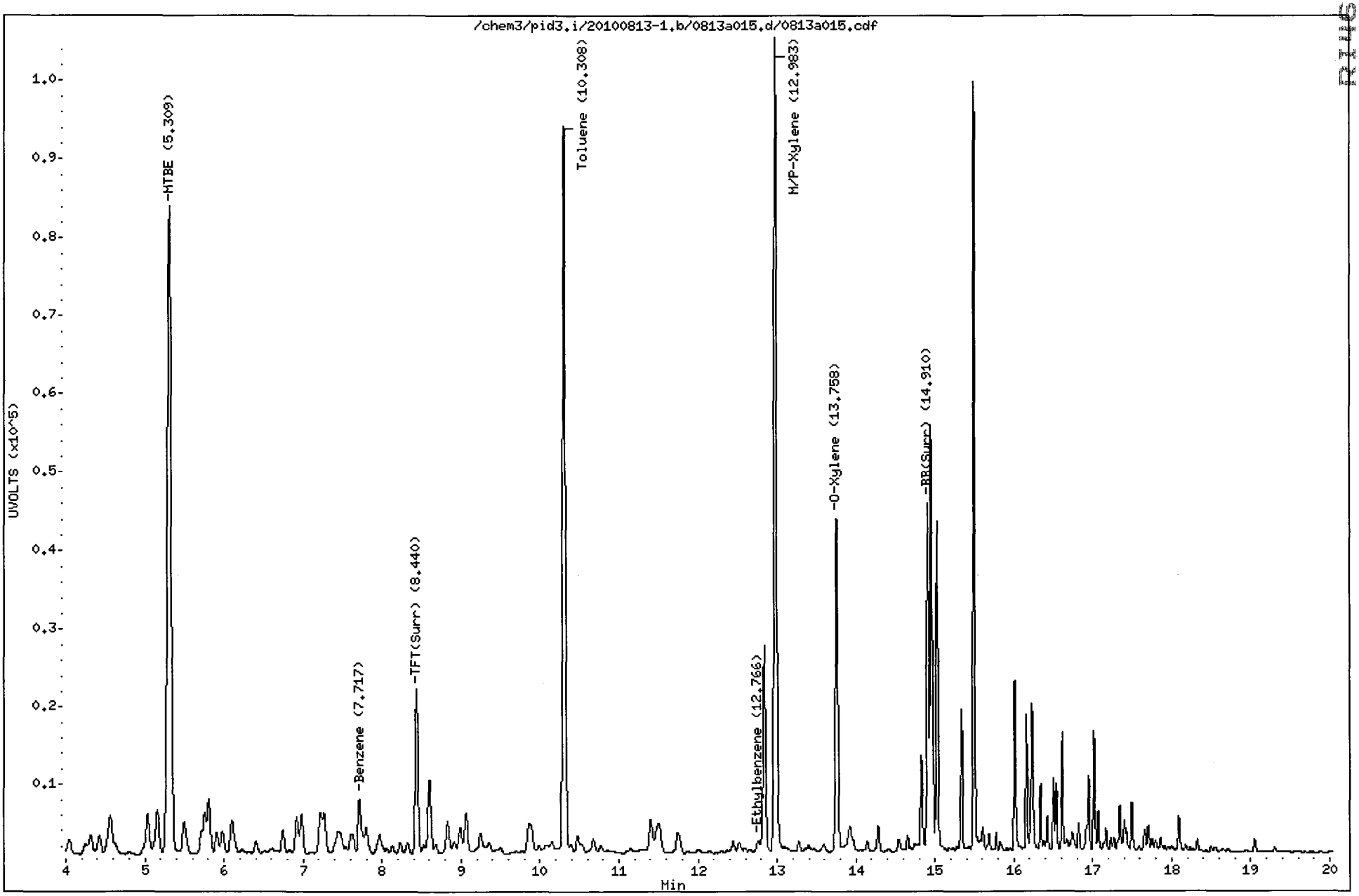
Column phase: RTX 502-2 PID

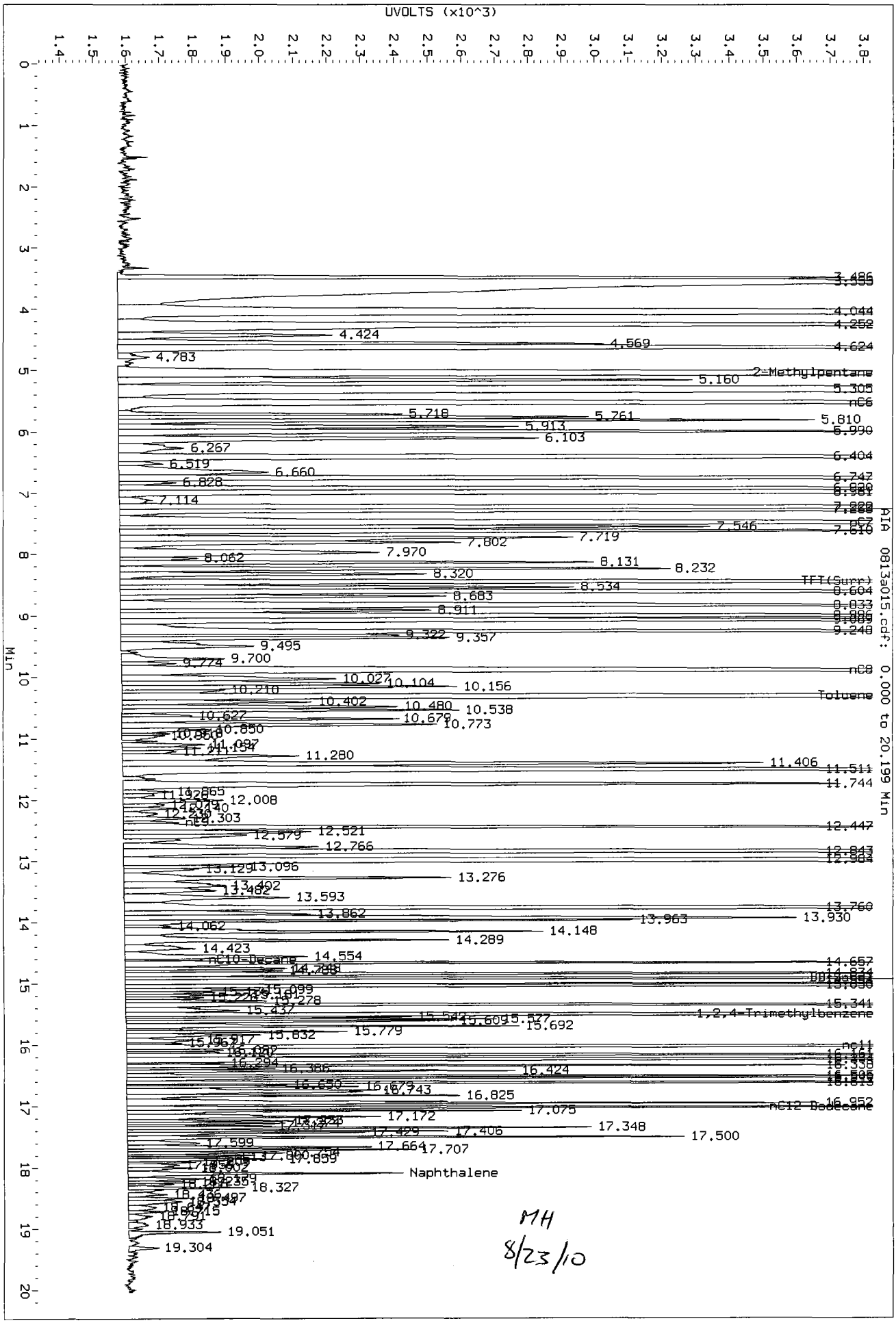
Instrument: pid3.i

Operator: MH

Column diameter: 0.18

RTI-005662




UVOLTS (x10^3)
Min
Data File: /chem3/pid3.i/20100813-2.b/08130015.d/08130015.cdf
Injection Date: 13-AUG-2010 19:38
Instrument: pid3.i
Client Sample ID: LORA LAKE
PIA 08130015.cdf: 0.000 to 20.199 Min
2-Methylpentane
nC6
nC8
Toluene
nC10-Decane
1,2,4-Trimethylbenzene
nC12-Dodecane
Naphthalene
TFT(Surr)
4.424
4.569
4.783
5.160
5.718
5.761
5.810
5.913
6.103
6.267
6.519
6.660
6.828
7.114
7.546
7.719
7.802
7.970
8.062
8.131
8.232
8.320
8.534
8.683
8.911
9.322
9.357
9.495
9.700
9.774
10.027
10.104
10.156
10.210
10.402
10.480
10.538
10.627
10.679
10.773
10.850
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11.406
11.744
12.008
12.303
12.447
12.521
12.579
12.766
13.096
13.129
13.276
13.402
13.482
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13.930
13.963
14.062
14.148
14.289
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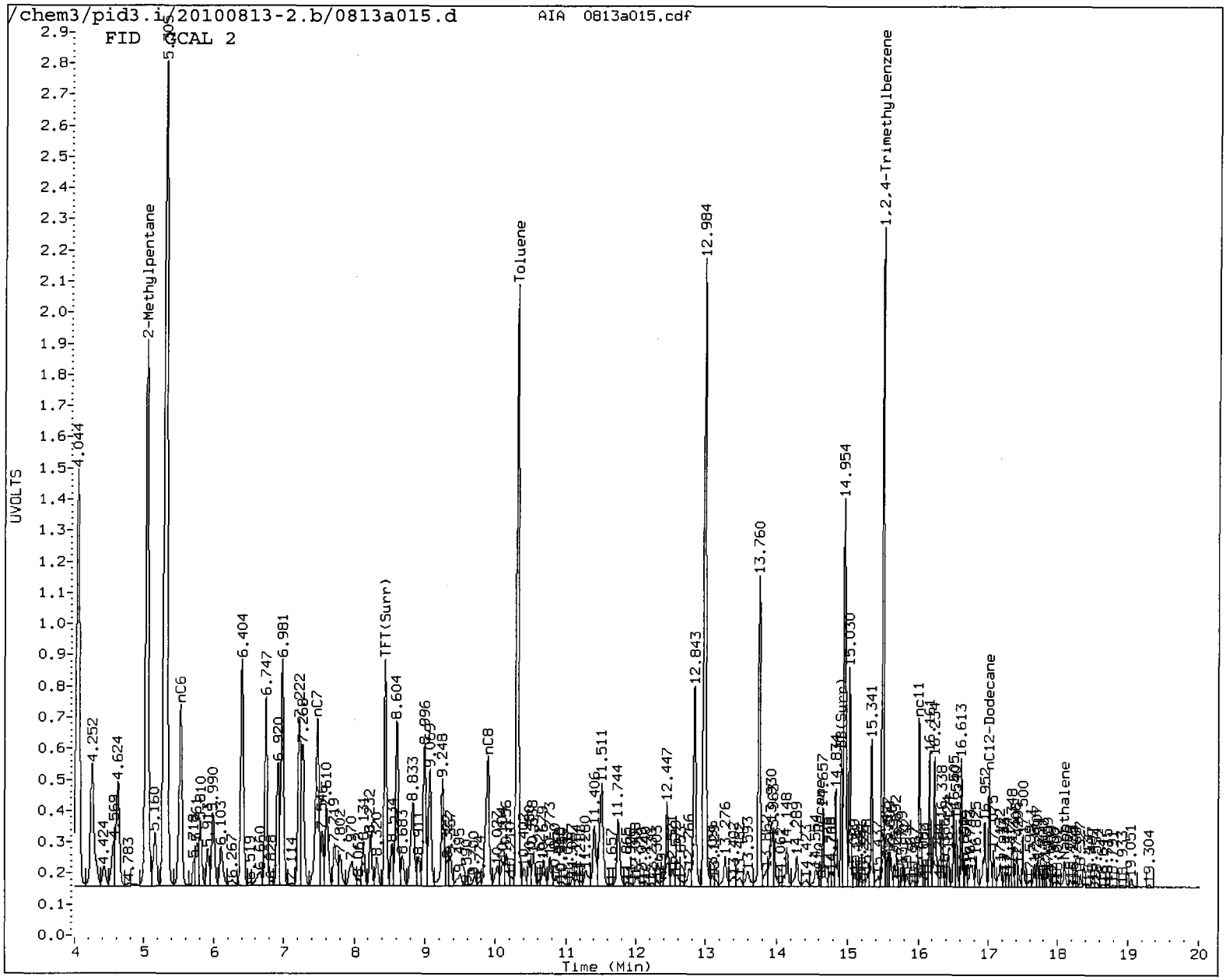
14.554
14.657
15.341
15.437
15.542
15.609
15.692
15.779
15.832
16.294
16.386
16.424
16.650
16.743
16.825
16.952
17.075
17.172
17.348
17.406
17.500
17.599
17.664
17.707
18.327
18.933
19.051
19.304
MH
8/23/10



MANUAL INTEGRATION

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

5. Other _____

Analyst: MH Date: 8/23/10

MH 8/23/10

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100813-2.b/0813a016.d
Data file 2: /chem3/pid3.i/20100813-1.b/0813a016.d
Method: /chem3/pid3.i/20100813-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 28-JUL-2010
BETX Ical Date: 29-JUN-2010

ARI ID: RI46C
Client ID: MW-03-081110-D
Injection Date: 13-AUG-2010 20:02
Matrix: WATER
Dilution Factor: 1.000

==========

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.441	0.000	7227	86265	100.4	TFT(Surr)
14.912	0.000	4366	35699	101.4	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range		RF	Total Area*	Amount
WAGas Tol-C12	(10.21 to 17.12)	827807	4818	0.006
8015B 2MP-TMB	(4.94 to 15.60)	1664107	17481	0.011
AK101 nC6-nC10	(5.43 to 14.51)	1131784	14896	0.013
NWTPHG Tol-Nap	(10.21 to 18.19)	882029	8496	0.010

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	0.033	21238	96.6	TFT(Surr)
14.910	0.025	44506	97.6	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/20100813-2.b/0813a016.d

Date : 13-AUG-2010 20:02

Client ID: MW-03-081110-D

Sample Info: RI46C

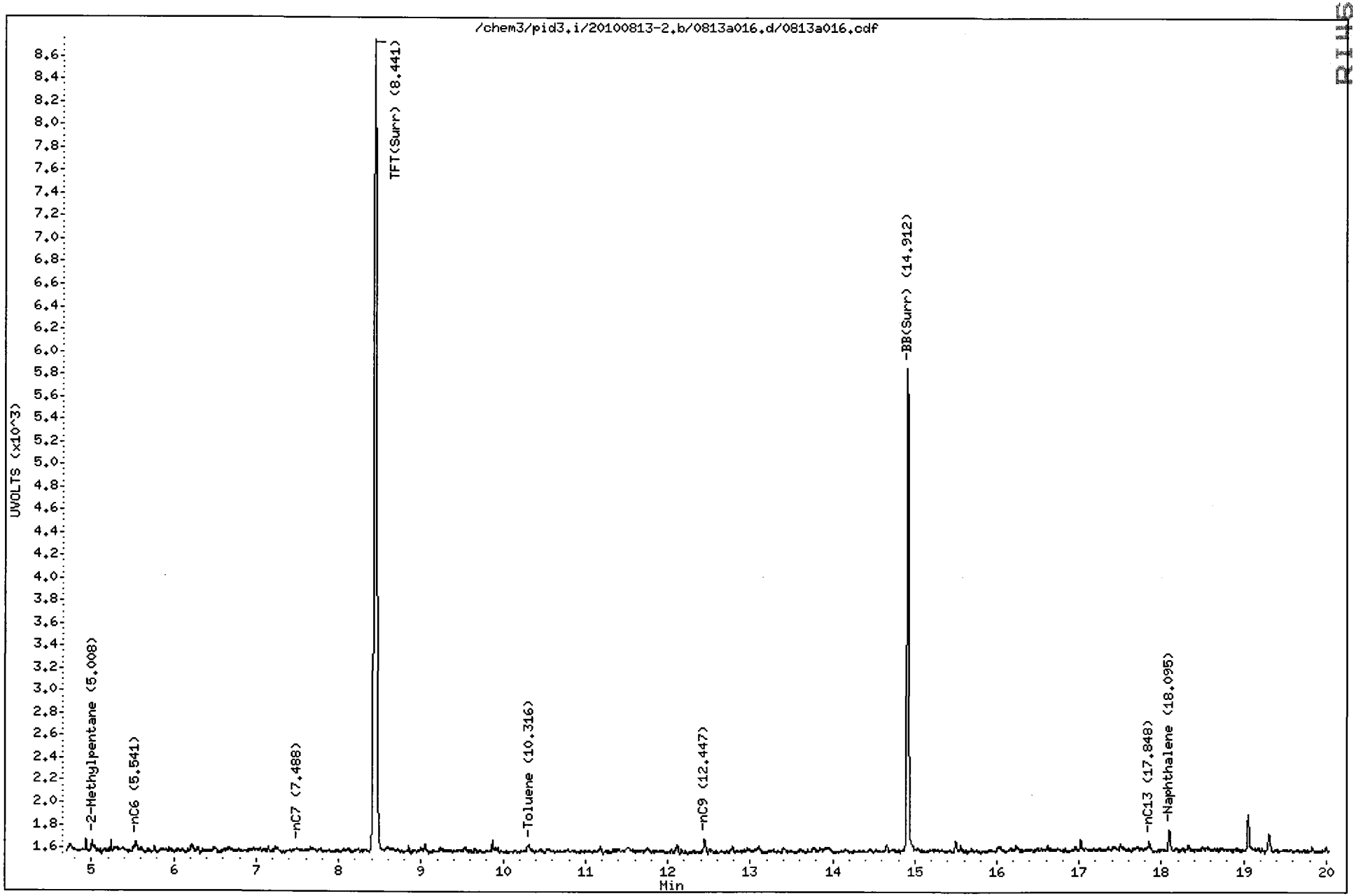
Column phase: RTX 502-2 FID

Instrument: pid3.i

Operator: MH

Column diameter: 0.18

RI46 : 00866



Data File: /chem3/pid3.i/20100813-1.b/0813a016.d

Date : 13-AUG-2010 20:02

Client ID: MW-03-081110-D

Sample Info: RI46C

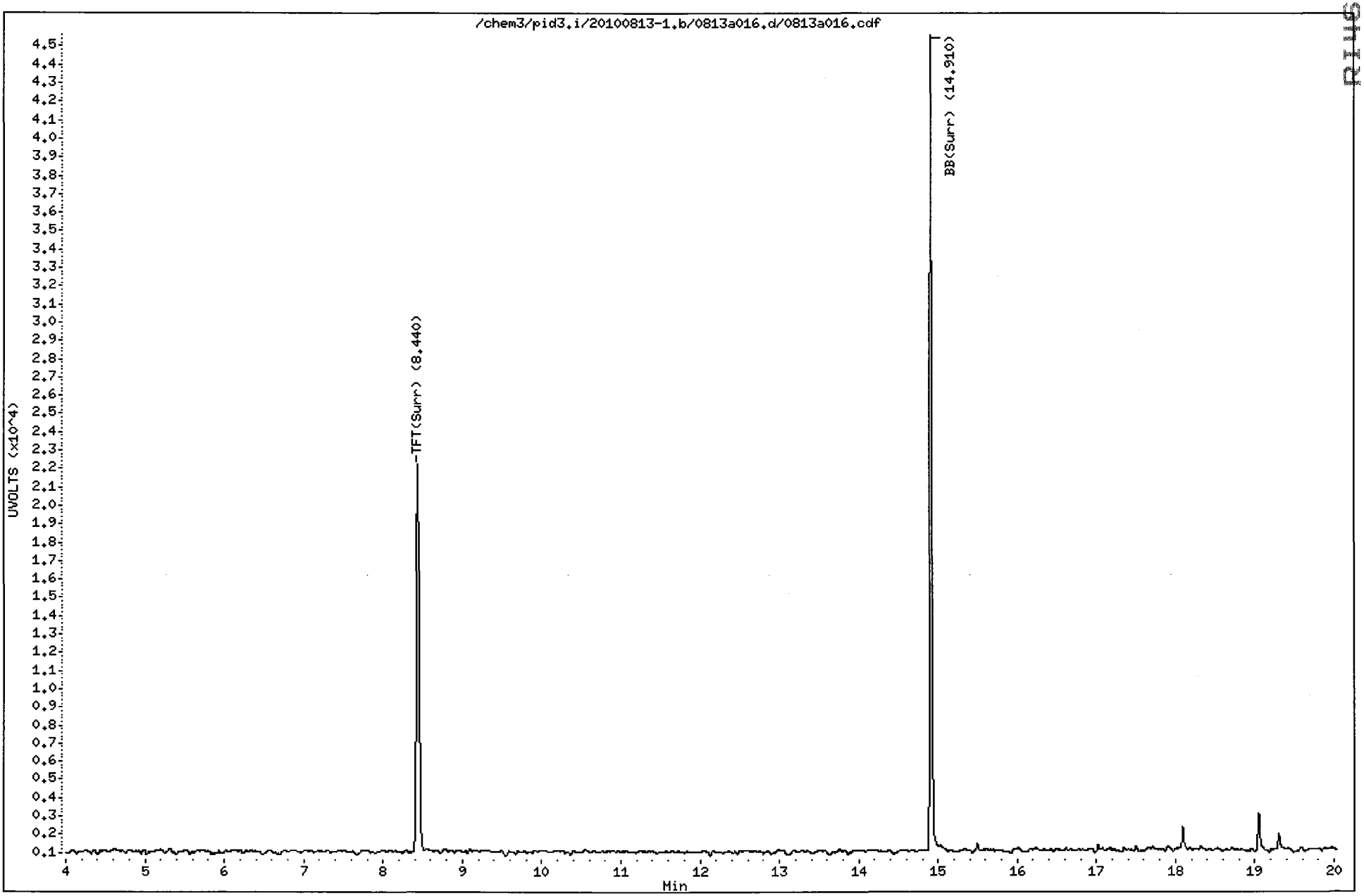
Instrument: pid3.i

Operator: MH

Column phase: RTX 502-2 PID

Column diameter: 0.18

RI46C.9867



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Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100813-2.b/0813a017.d
Data file 2: /chem3/pid3.i/20100813-1.b/0813a017.d
Method: /chem3/pid3.i/20100813-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 28-JUL-2010
BETX Ical Date: 29-JUN-2010

ARI ID: RI46D
Client ID: MW-04-081110
Injection Date: 13-AUG-2010 20:27
Matrix: WATER
Dilution Factor: 1.000

==========

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.441	0.000	7140	83758	99.2	TFT(Surr)
14.911	-0.001	4252	35261	98.7	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range		RF	Total Area*	Amount
WAGas Tol-C12	(10.21 to 17.12)	827807	6142	0.007
8015B 2MP-TMB	(4.94 to 15.60)	1664107	1004	0.001
AK101 nC6-nC10	(5.43 to 14.51)	1131784	1003	0.001
NWTPHG Tol-Nap	(10.21 to 18.19)	882029	14262	0.016

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	0.033	20854	94.9	TFT(Surr)
14.910	0.025	42864	94.0	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/20100813-2.b/0813a017.d

Date : 13-AUG-2010 20:27

Client ID: MW-04-081110

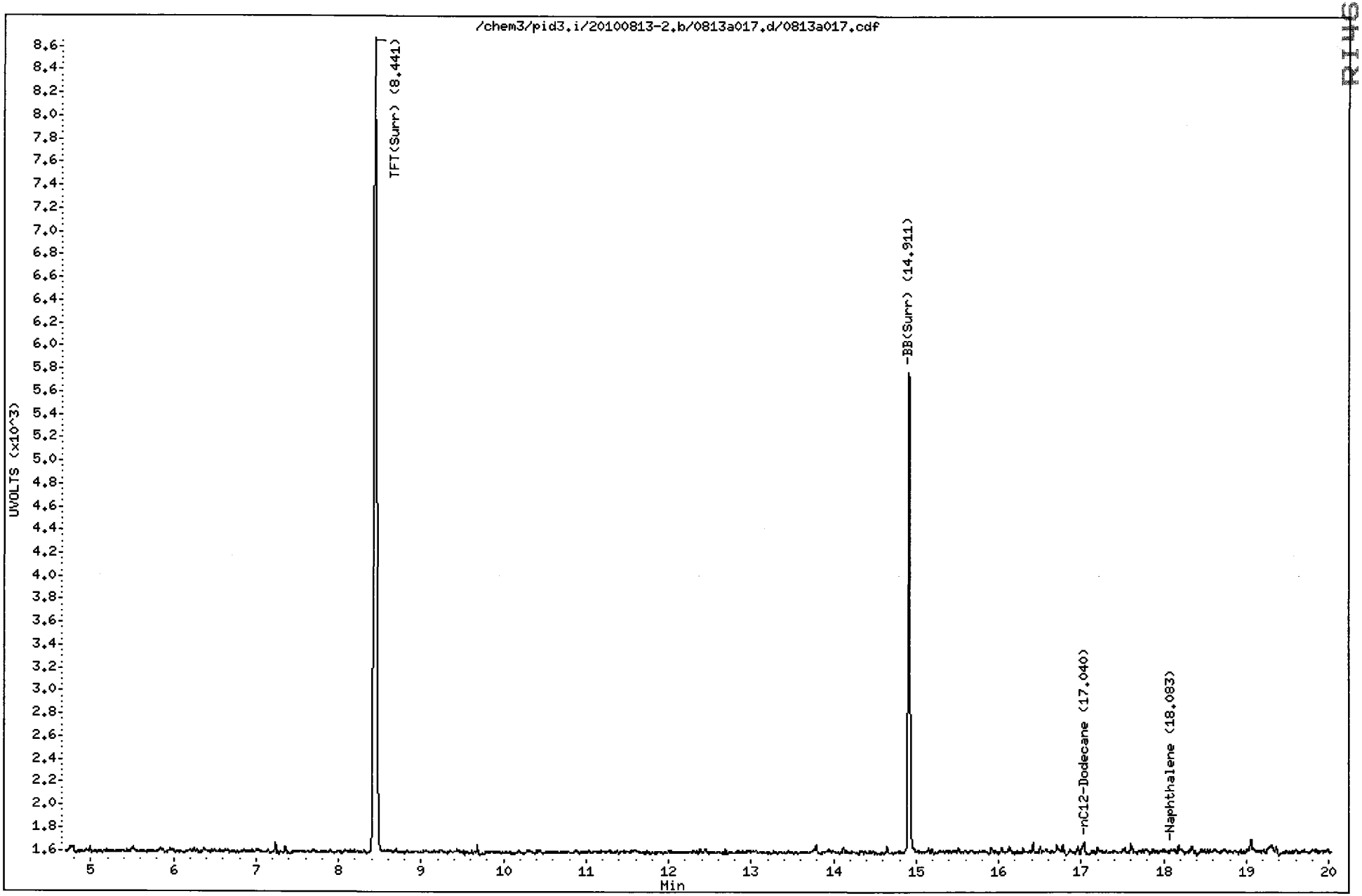
Sample Info: RI46D

Column phase: RTX 502-2 FID

Instrument: pid3.i

Operator: MH

Column diameter: 0.18



Data File: /chem3/pid3.i/20100813-1.b/0813a017.d

Date : 13-AUG-2010 20:27

Client ID: MW-04-081110

Sample Info: RI46D

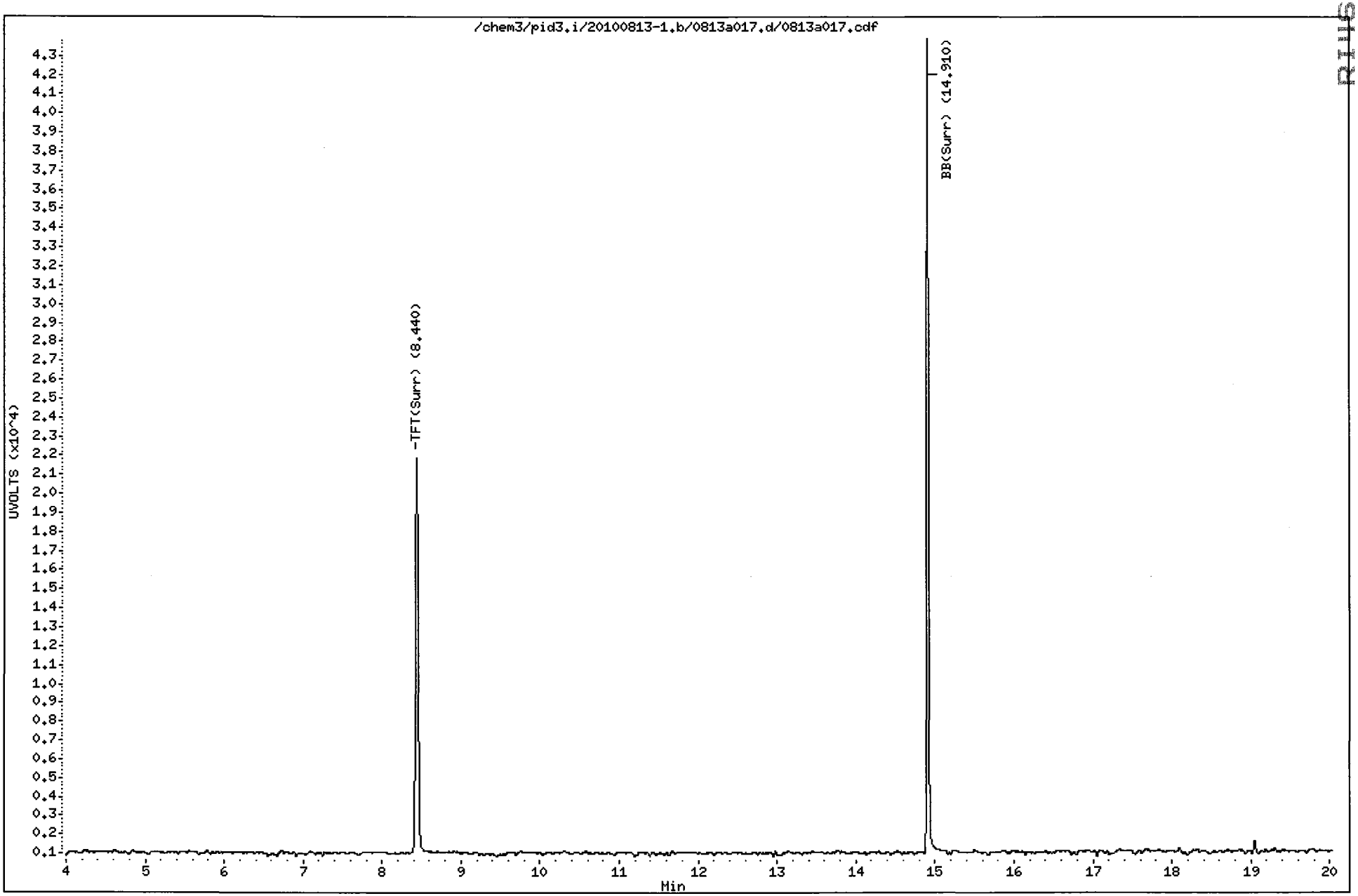
Column phase: RTX 502-2 PID

Instrument: pid3.i

Operator: MH

Column diameter: 0.18

RI46 : 6879



8/23

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100813-2.b/0813a018.d
Data file 2: /chem3/pid3.i/20100813-1.b/0813a018.d
Method: /chem3/pid3.i/20100813-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 28-JUL-2010
BETX Ical Date: 29-JUN-2010

ARI ID: RI46DMS
Client ID:
Injection Date: 13-AUG-2010 20:51
Matrix: WATER
Dilution Factor: 1.000

==========

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.441	0.000	7123	84774	99.0	TFT(Surr)
14.911	-0.001	4253	34479	98.8	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range		RF	Total Area*	Amount
WAGas Tol-C12	(10.21 to 17.12)	827807	785244	0.949 M
8015B 2MP-TMB	(4.94 to 15.60)	1664107	1555000	0.934 M
AK101 nC6-nC10	(5.43 to 14.51)	1131784	1053586	0.931 M
NWTPHG Tol-Nap	(10.21 to 18.19)	882029	841035	0.954 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	20690	94.1	TFT(Surr)
14.909	0.024	43362	95.1	BB(Surr)

SW8021 (PID)

RT	Shift	Response	Amount	Compound
7.716	0.028	2856	2.16	Benzene
10.306	0.036	36540	27.69	Toluene
12.841	0.037	10603	8.53	Ethylbenzene
12.981	0.040	40672	30.20	M/P-Xylene
13.757	0.034	16674	12.98	O-Xylene
5.306	0.016	33885	95.24	MTBE

A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20100813-2.b/0813a018.d

Date : 13-AUG-2010 20:51

Client ID:

Sample Info: RI46DMS

Column phase: RTX 502-2 FID

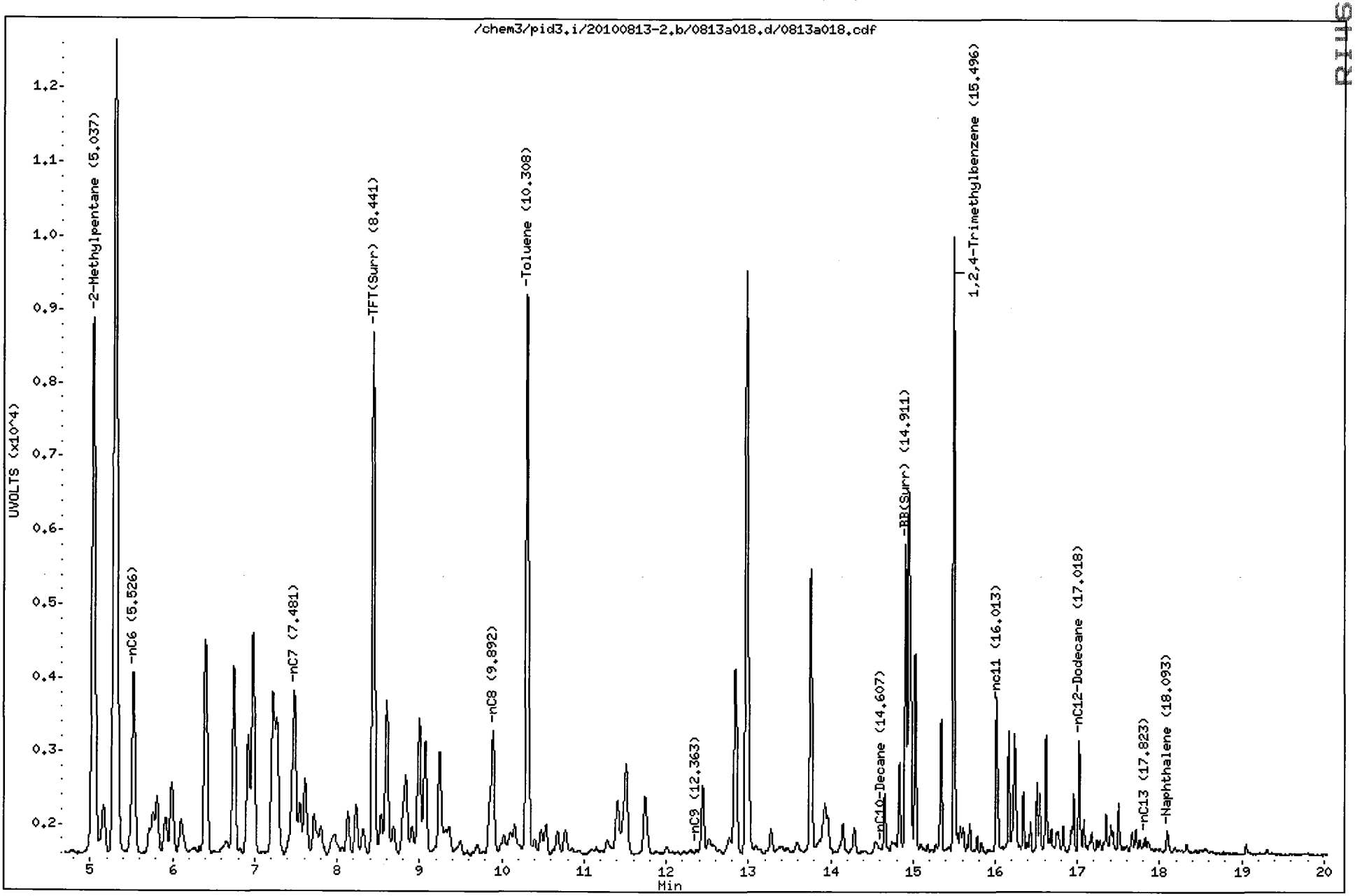
Instrument: pid3.i

Operator: MH

Column diameter: 0.18

RI46:00872

/chem3/pid3.i/20100813-2.b/0813a018.d/0813a018.cdf



Data File: /chem3/pid3.i/20100813-1.b/0813a018.d

Date : 13-AUG-2010 20:51

Client ID:

Sample Info: RI46DMS

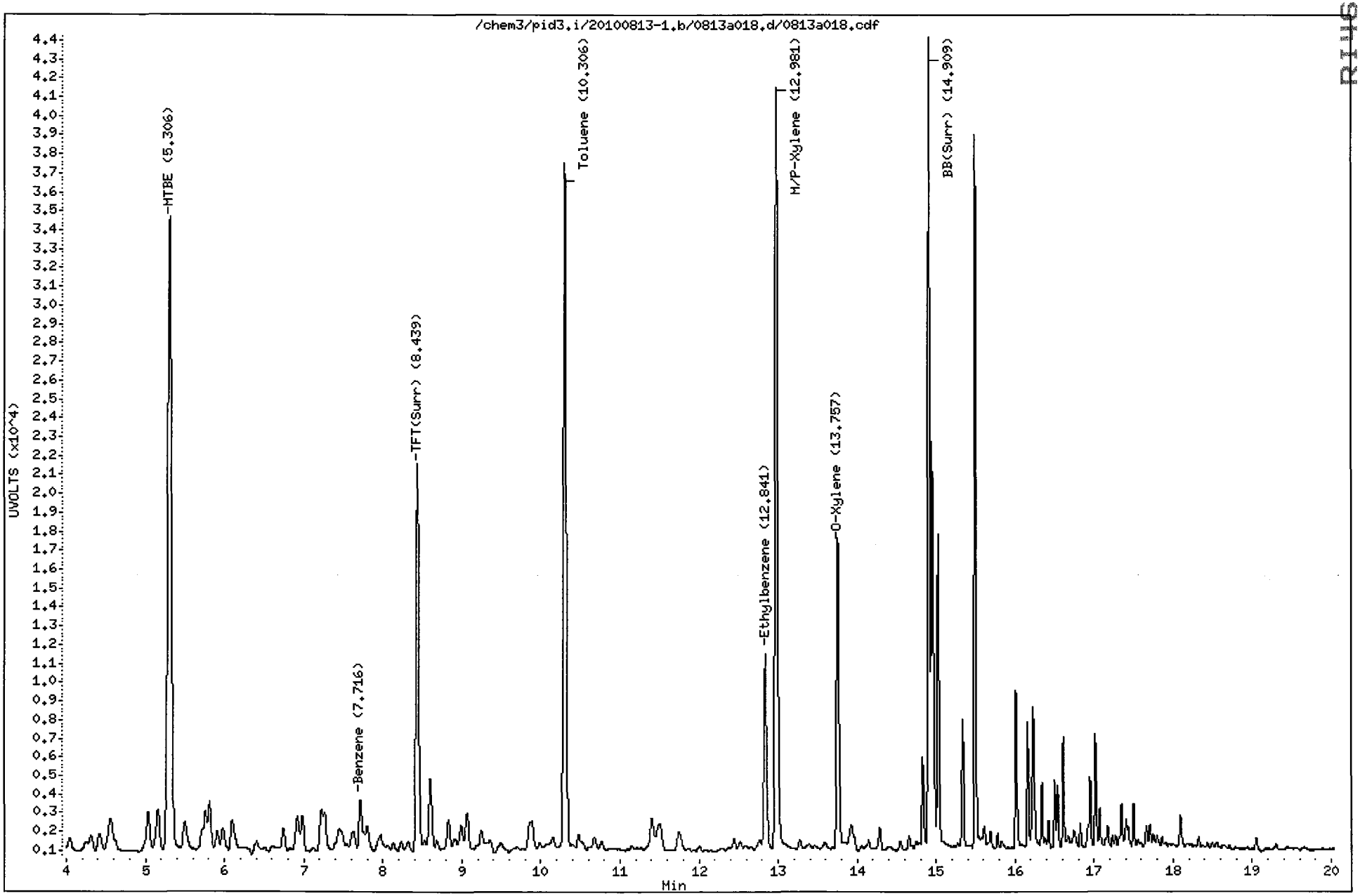
Column phase: RTX 502-2 PID

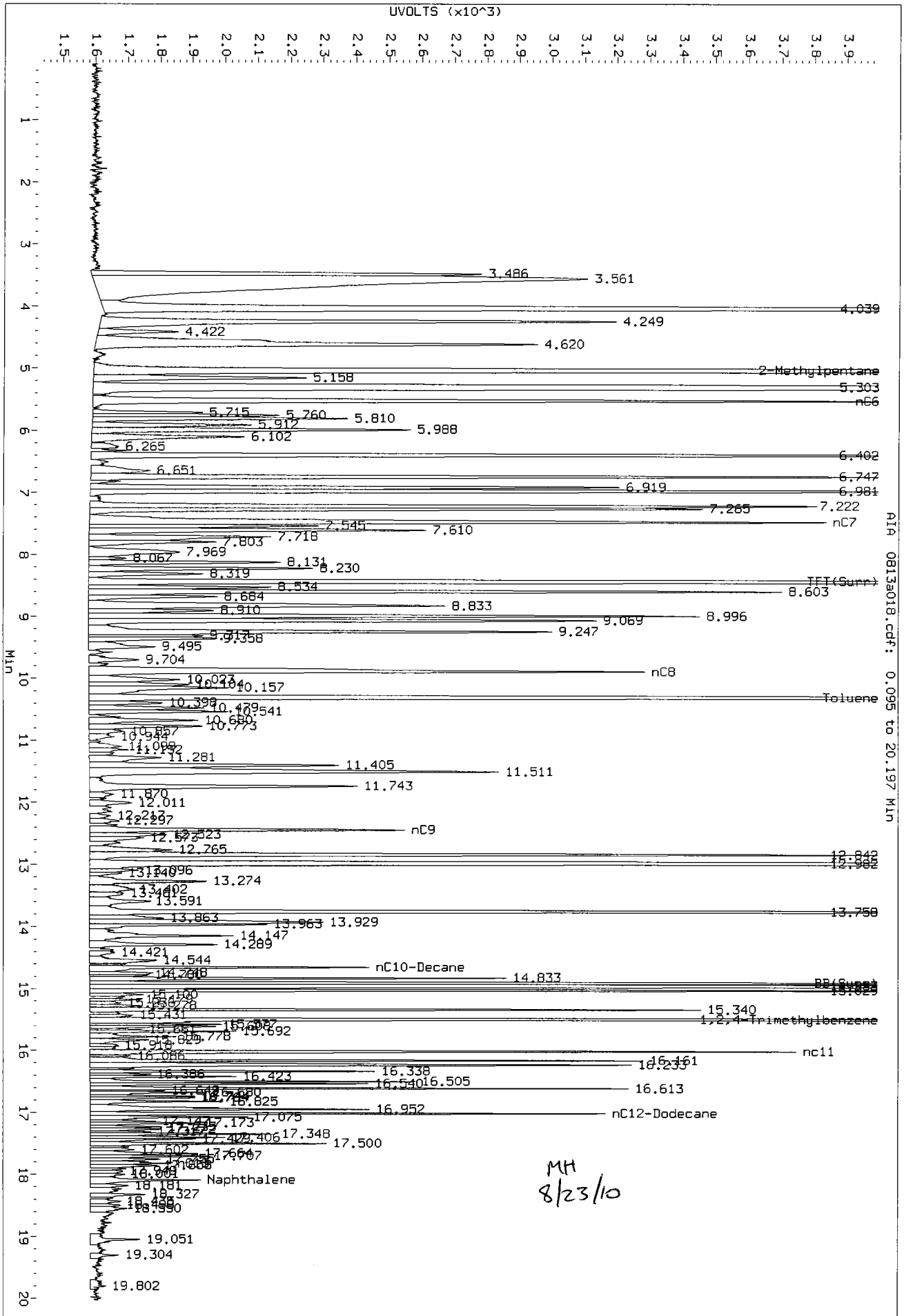
Instrument: pid3.i

Operator: MH

Column diameter: 0.18

RI46:66673





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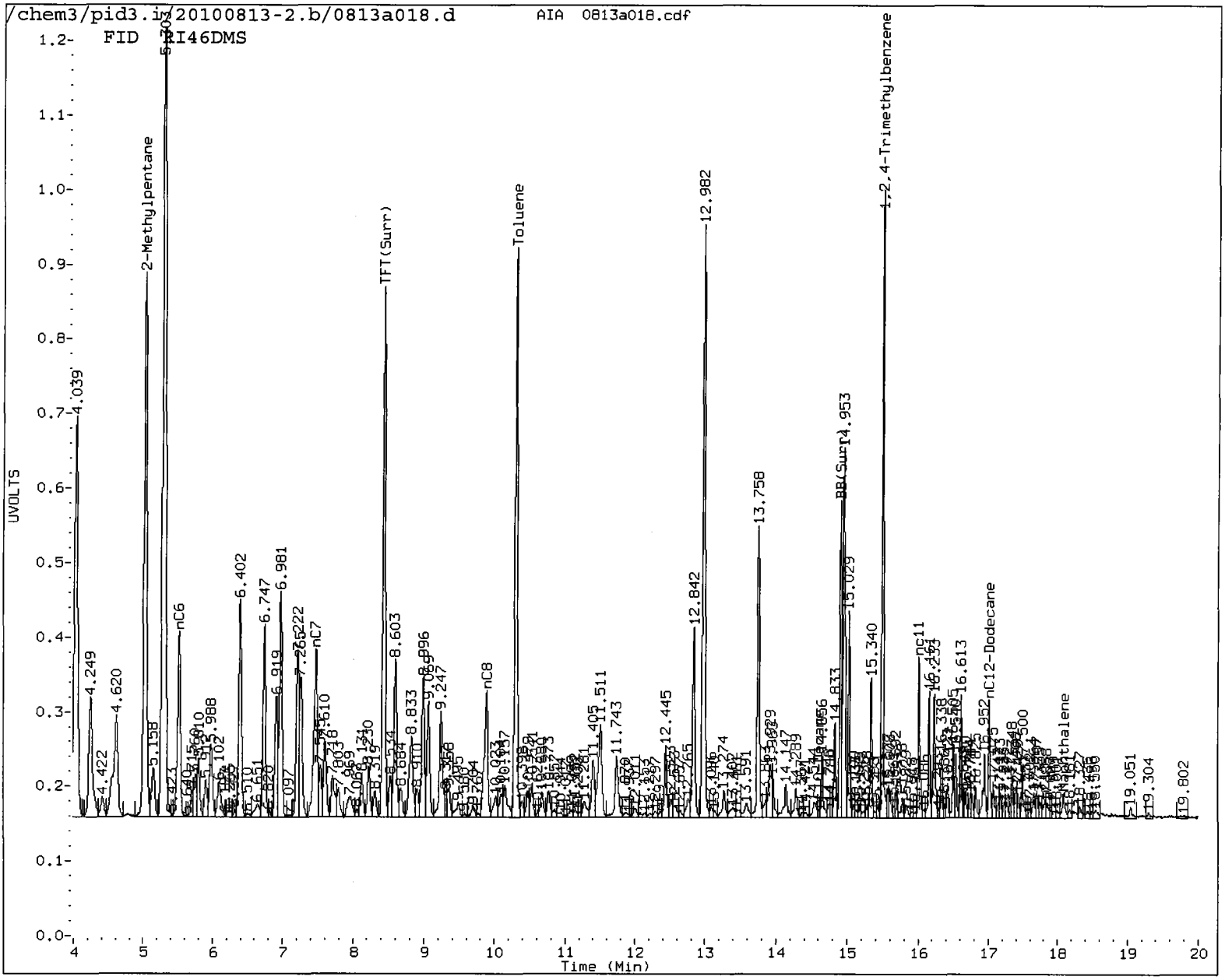
Injection Date: 13-AUG-2010 20:51
Instrument: pid3.i
Client Sample ID:

MH
8/23/10



MANUAL INTEGRATION

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

5. Other _____

Analyst: MH Date: 8/23/10

8/23/10

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100813-2.b/0813a019.d
Data file 2: /chem3/pid3.i/20100813-1.b/0813a019.d
Method: /chem3/pid3.i/20100813-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 28-JUL-2010
BETX Ical Date: 29-JUN-2010

ARI ID: RI46DMSD
Client ID:
Injection Date: 13-AUG-2010 21:16
Matrix: WATER
Dilution Factor: 1.000

==========

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.441	0.000	7122	84679	98.9	TFT(Surr)
14.911	-0.001	4242	34427	98.5	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range		RF	Total Area*	Amount
WAGas Tol-C12	(10.21 to 17.12)	827807	794218	0.959 M
8015B 2MP-TMB	(4.94 to 15.60)	1664107	1568094	0.942 M
AK101 nC6-nC10	(5.43 to 14.51)	1131784	1062696	0.939 M
NWTPHG Tol-Nap	(10.21 to 18.19)	882029	852190	0.966 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
8.440	0.033	20935	95.2	TFT(Surr)
14.910	0.025	43680	95.8	BB(Surr)

SW8021 (PID)

RT	Shift	Response	Amount	Compound
7.717	0.029	2841	2.15	Benzene
10.307	0.036	37147	28.15	Toluene
12.841	0.038	10856	8.74	Ethylbenzene
12.981	0.040	41417	30.76	M/P-Xylene
13.757	0.034	16943	13.19	O-Xylene
5.307	0.017	33643	94.56	MTBE

A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20100813-2.b/0813a019.d

Date : 13-AUG-2010 21:16

Client ID:

Sample Info: RI46DMSD

Column phase: RTX 502-2 FID

Instrument: pid3.i

Operator: MH

Column diameter: 0.18

RI46:00877

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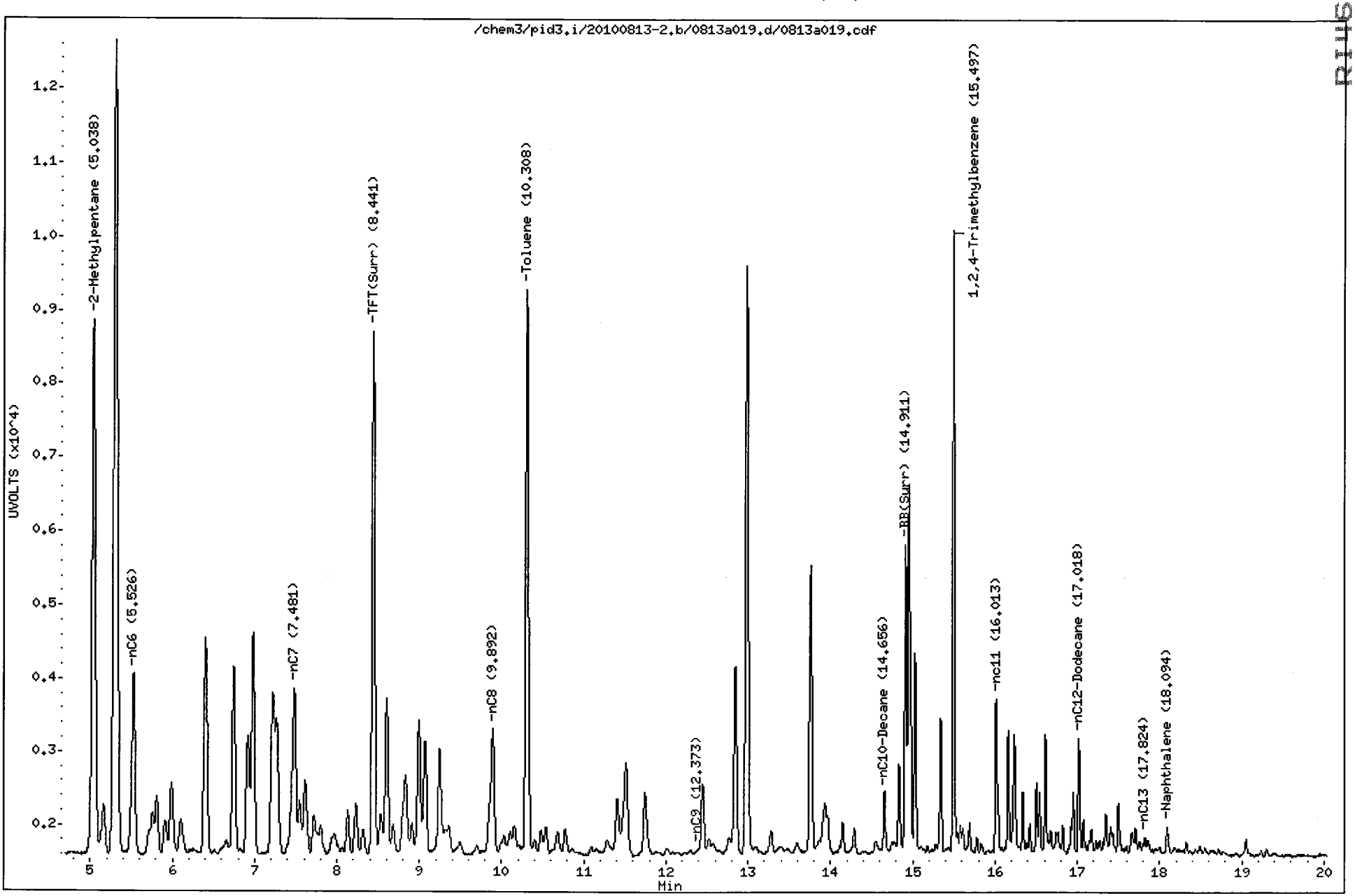


Data File: /chem3/pid3.i/20100813-1.b/0813a019.d

Date : 13-AUG-2010 21:16

Client ID:

Sample Info: RI46DMSD

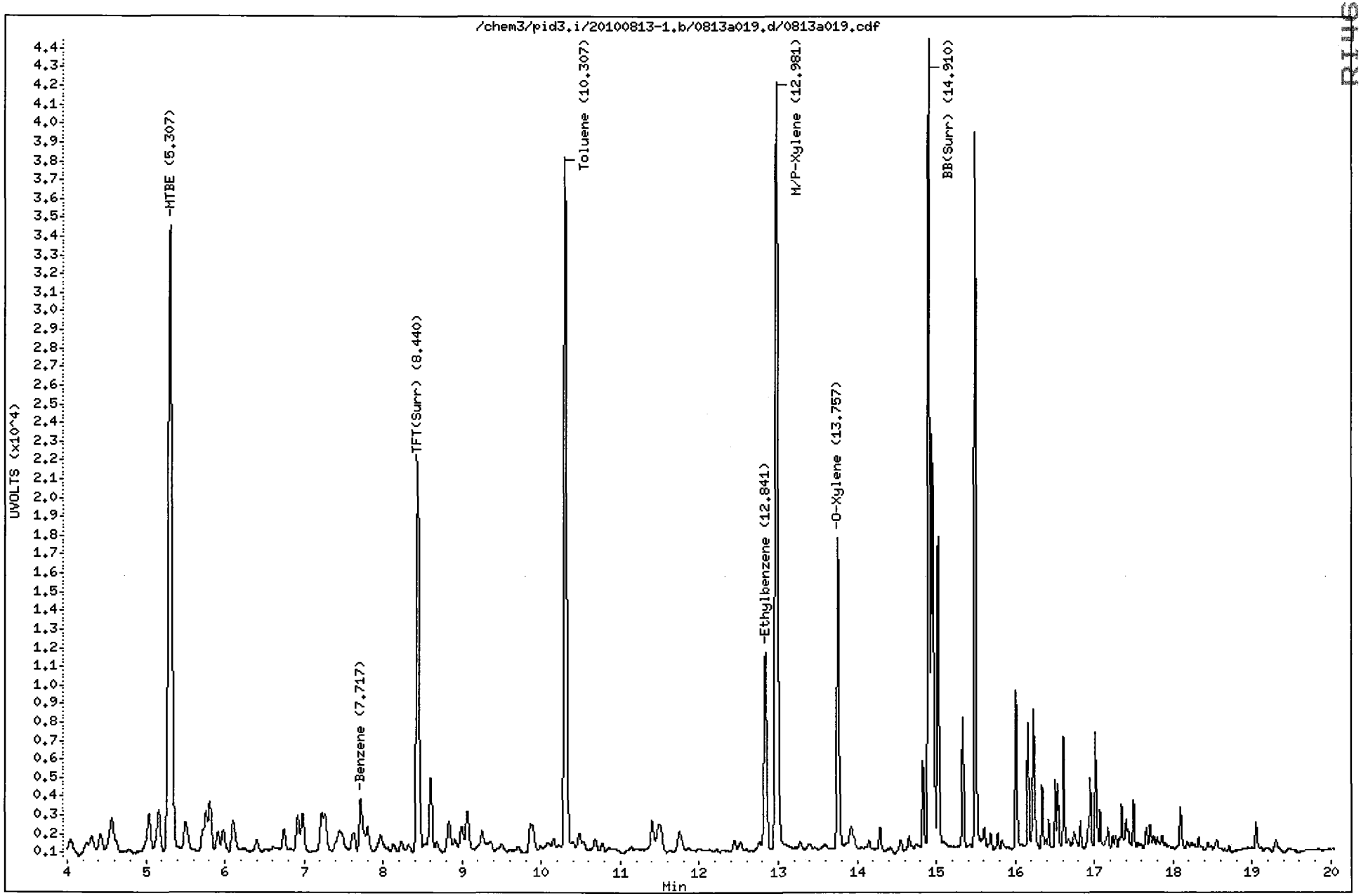
Instrument: pid3.i

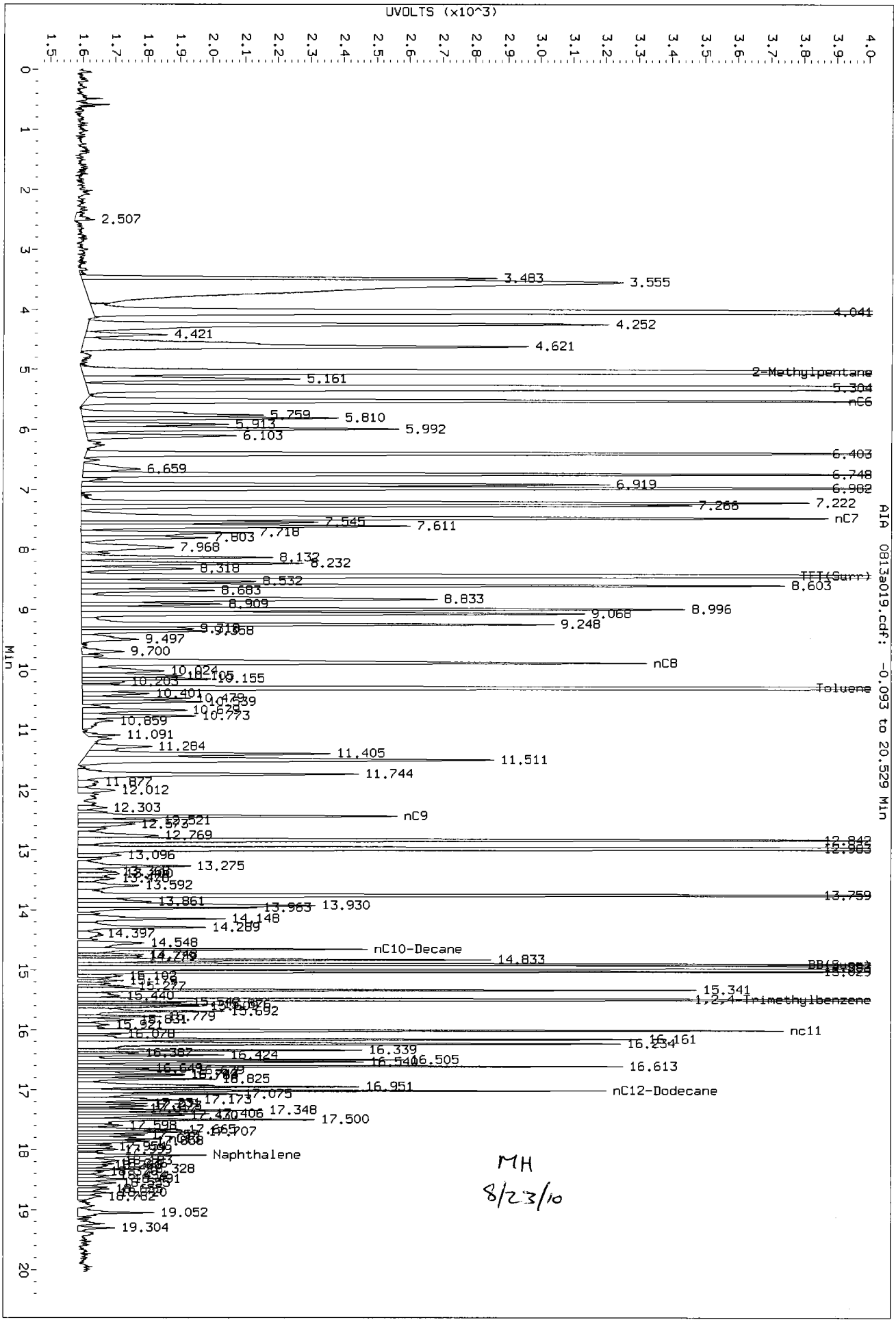
Operator: MH

Column phase: RTX 502-2 PID

Column diameter: 0.18

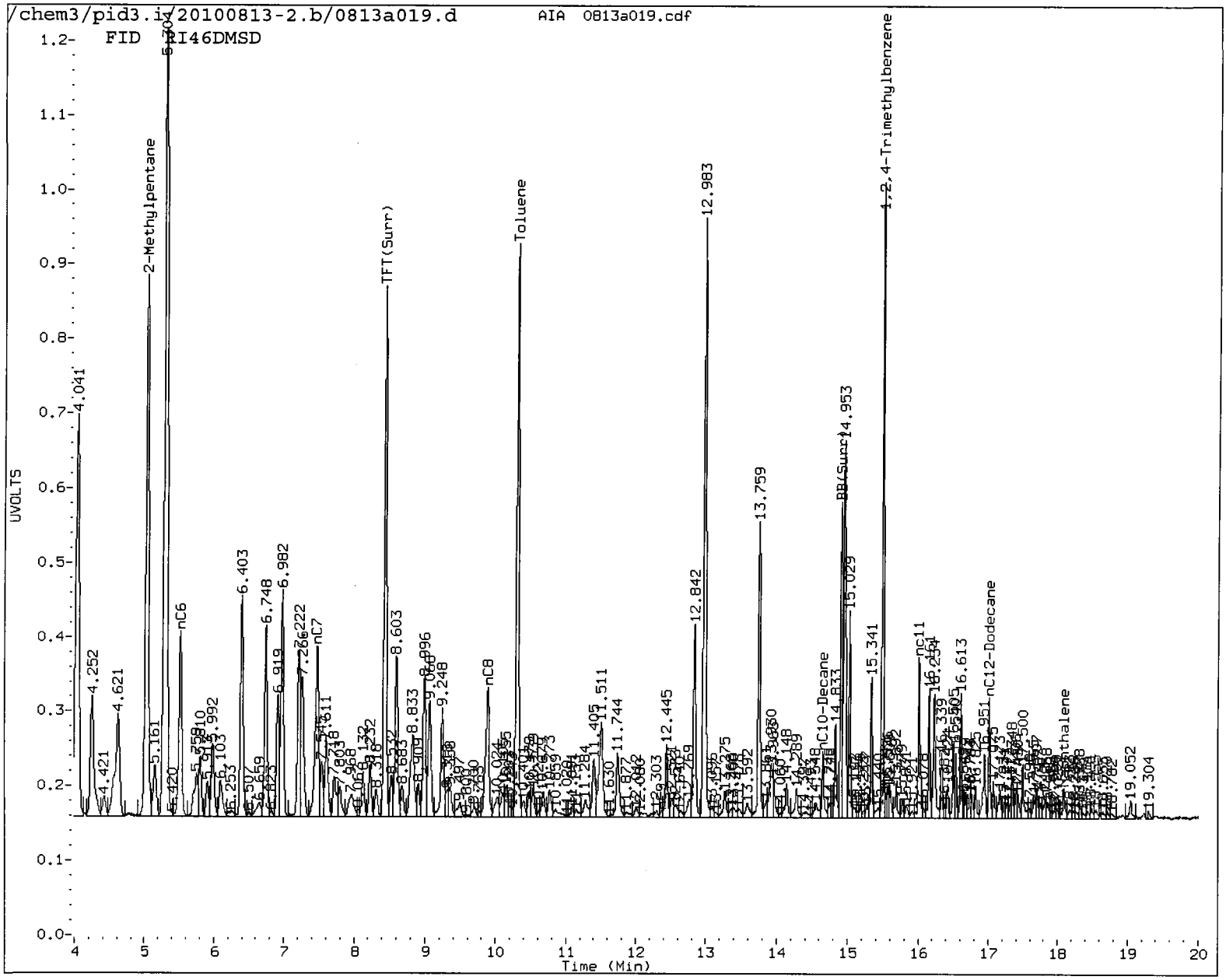
RI46:00878





Data File: /chem3/pid3.i/20100813-2.b/08132019.d/08132019.cdf
Injection Date: 13-AUG-2010 21:16
Instrument: pid3.i
Client Sample ID:

MH
8/23/10



MANUAL INTEGRATION

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

5. Other _____

Analyst: MH Date: 8/23/10

8/23/10

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100813-2.b/0813a020.d
Data file 2: /chem3/pid3.i/20100813-1.b/0813a020.d
Method: /chem3/pid3.i/20100813-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 28-JUL-2010
BETX Ical Date: 29-JUN-2010

ARI ID: RI46E
Client ID: MW-14-081110
Injection Date: 13-AUG-2010 21:41
Matrix: WATER
Dilution Factor: 1.000

==========

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.442	0.000	7057	83647	98.0	TFT(Surr)
14.912	0.000	4282	34650	99.4	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range		RF	Total Area*	Amount
WAGas Tol-C12	(10.21 to 17.12)	827807	1	0.000
8015B 2MP-TMB	(4.94 to 15.60)	1664107	1	0.000
AK101 nC6-nC10	(5.43 to 14.51)	1131784	0	0.000
NWTPHG Tol-Nap	(10.21 to 18.19)	882029	1	0.000

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	0.033	20426	92.9	TFT(Surr)
14.910	0.025	43811	96.1	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/20100813-2.b/0813a020.d

Date : 13-AUG-2010 21:41

Client ID: MW-14-081110

Sample Info: RI46E

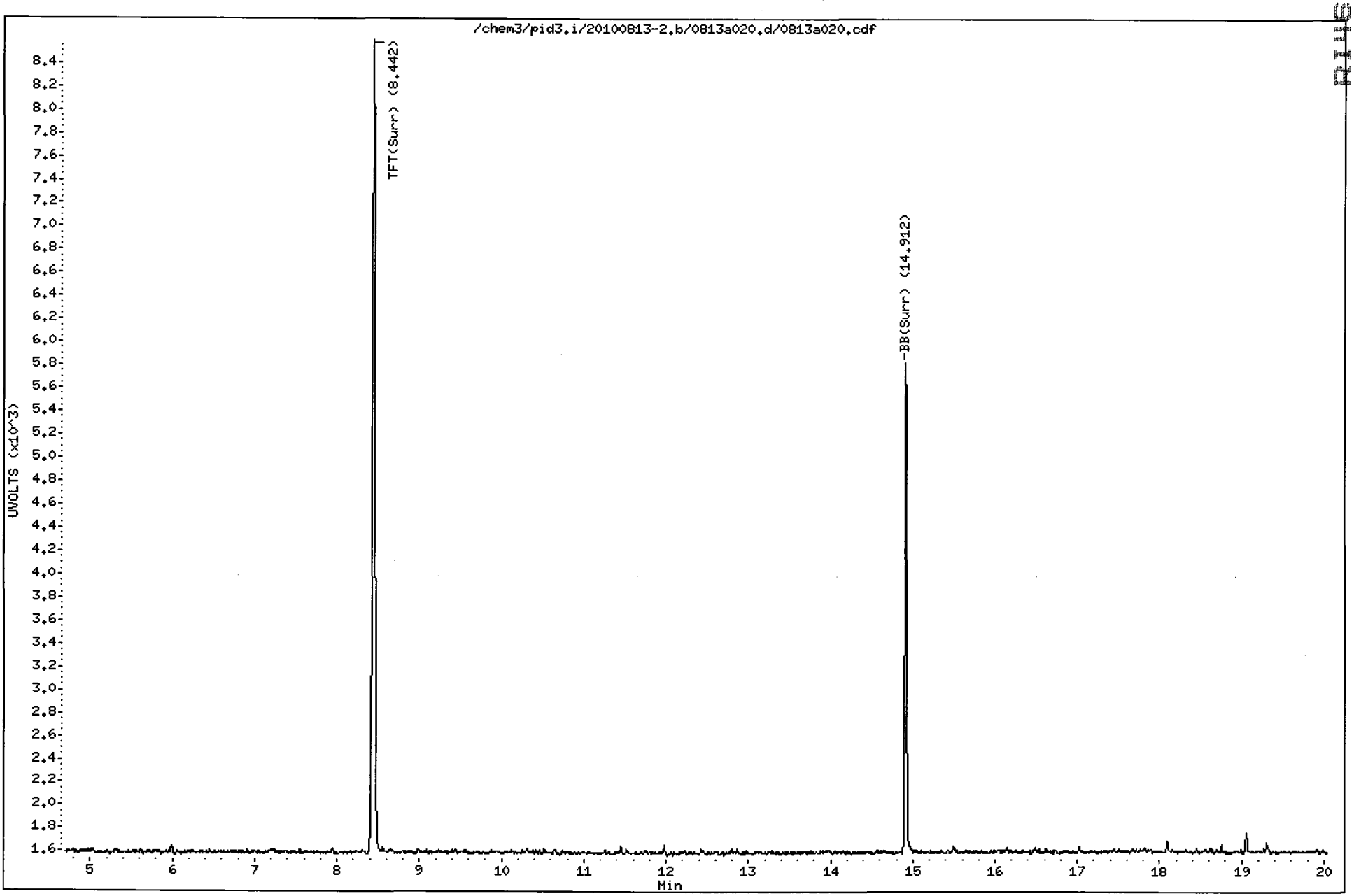
Column phase: RTX 502-2 FID

Instrument: pid3.i

Operator: MH

Column diameter: 0.18

RI46 : 66882



Data File: /chem3/pid3.i/20100813-1.b/0813a020.d

Date : 13-AUG-2010 21:41

Client ID: MW-14-081110

Sample Info: RI46E

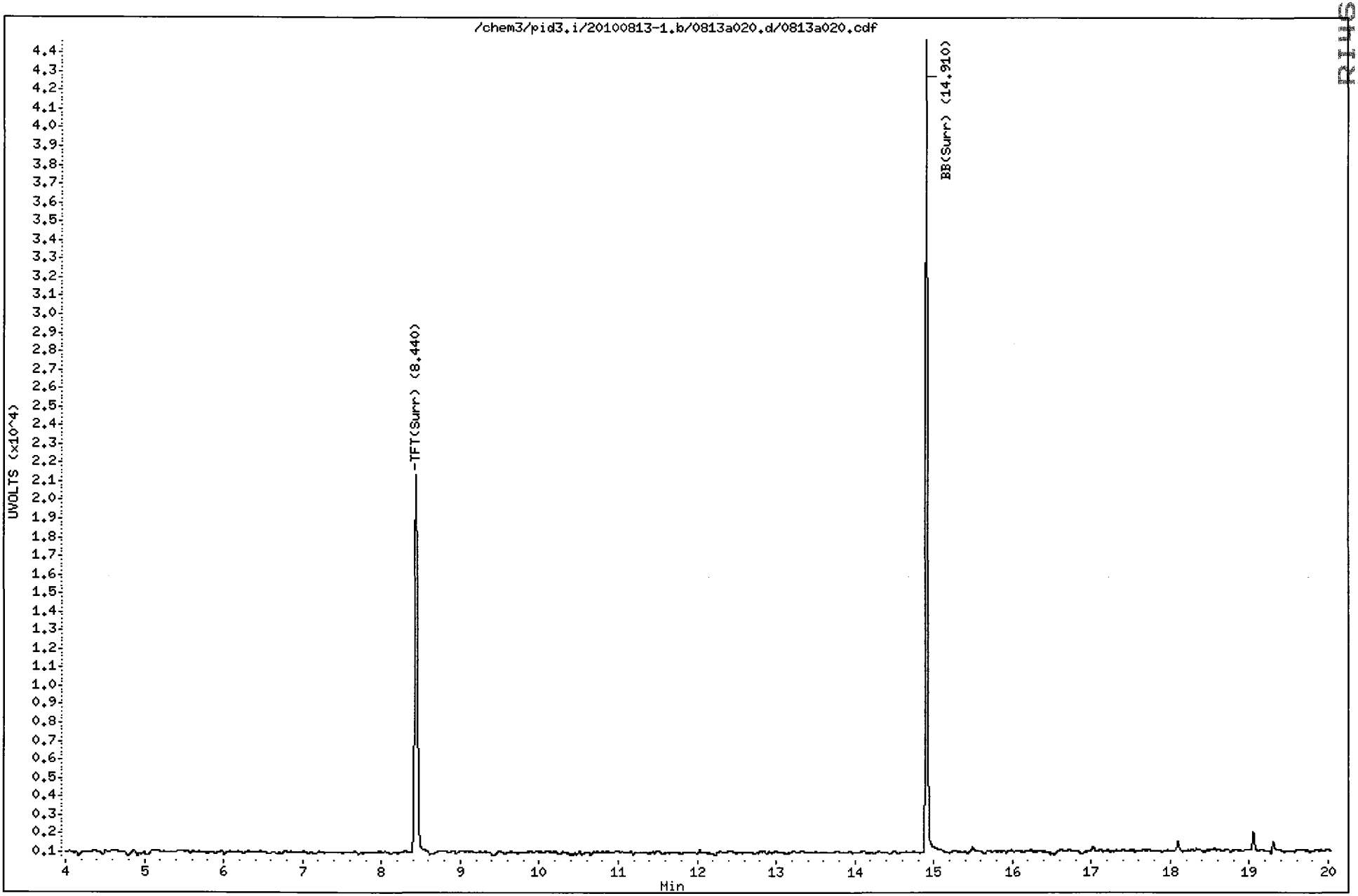
Column phase: RTX 502-2 PID

Instrument: pid3.i

Operator: MH

Column diameter: 0.18

RI46E 0888



M 8/23/10

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100813-2.b/0813a021.d
Data file 2: /chem3/pid3.i/20100813-1.b/0813a021.d
Method: /chem3/pid3.i/20100813-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 28-JUL-2010
BETX Ical Date: 29-JUN-2010

ARI ID: RI46F
Client ID: MW-12-081210
Injection Date: 13-AUG-2010 22:05
Matrix: WATER
Dilution Factor: 1.000

==========

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.446	0.005	6965	82137	96.8	TFT(Surr)
14.914	0.001	4166	35074	96.7	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range		RF	Total Area*	Amount
WAGas Tol-C12	(10.21 to 17.12)	827807	0	0.000
8015B 2MP-TMB	(4.94 to 15.60)	1664107	1	0.000
AK101 nC6-nC10	(5.43 to 14.51)	1131784	0	0.000
NWTPHG Tol-Nap	(10.21 to 18.19)	882029	0	0.000

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
8.445	0.038	19967	90.8	TFT(Surr)
14.912	0.027	42049	92.2	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/20100813-2.b/0813a021.d

Date : 13-AUG-2010 22:05

Client ID: MW-12-081210

Sample Info: RI46F

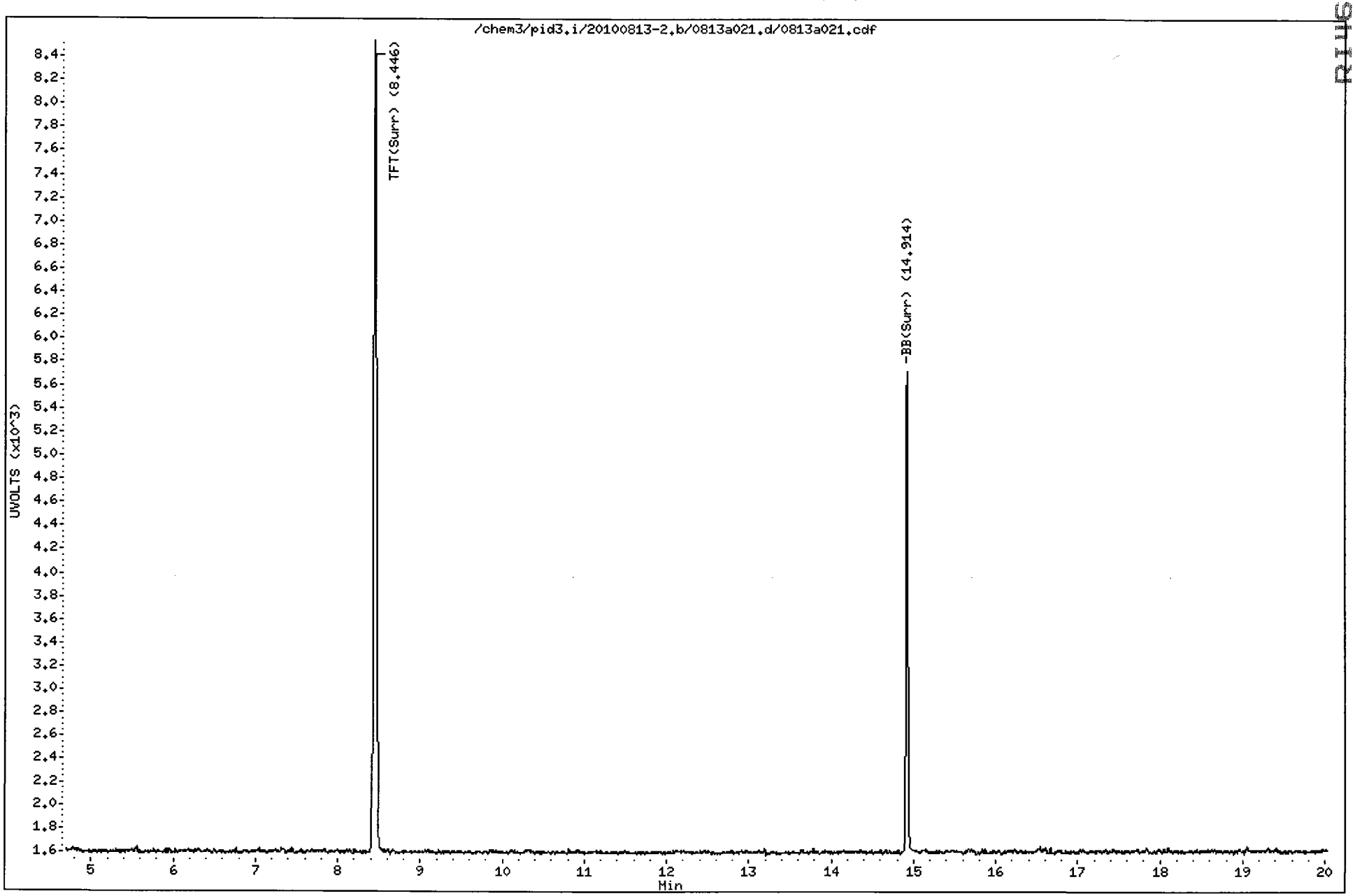
Column phase: RTX 502-2 FID

Instrument: pid3.i

Operator: MH

Column diameter: 0.18

RI46 66885



Data File: /chem3/pid3.i/20100813-1.b/0813a021.d

Date : 13-AUG-2010 22:05

Client ID: MW-12-081210

Sample Info: RI46F

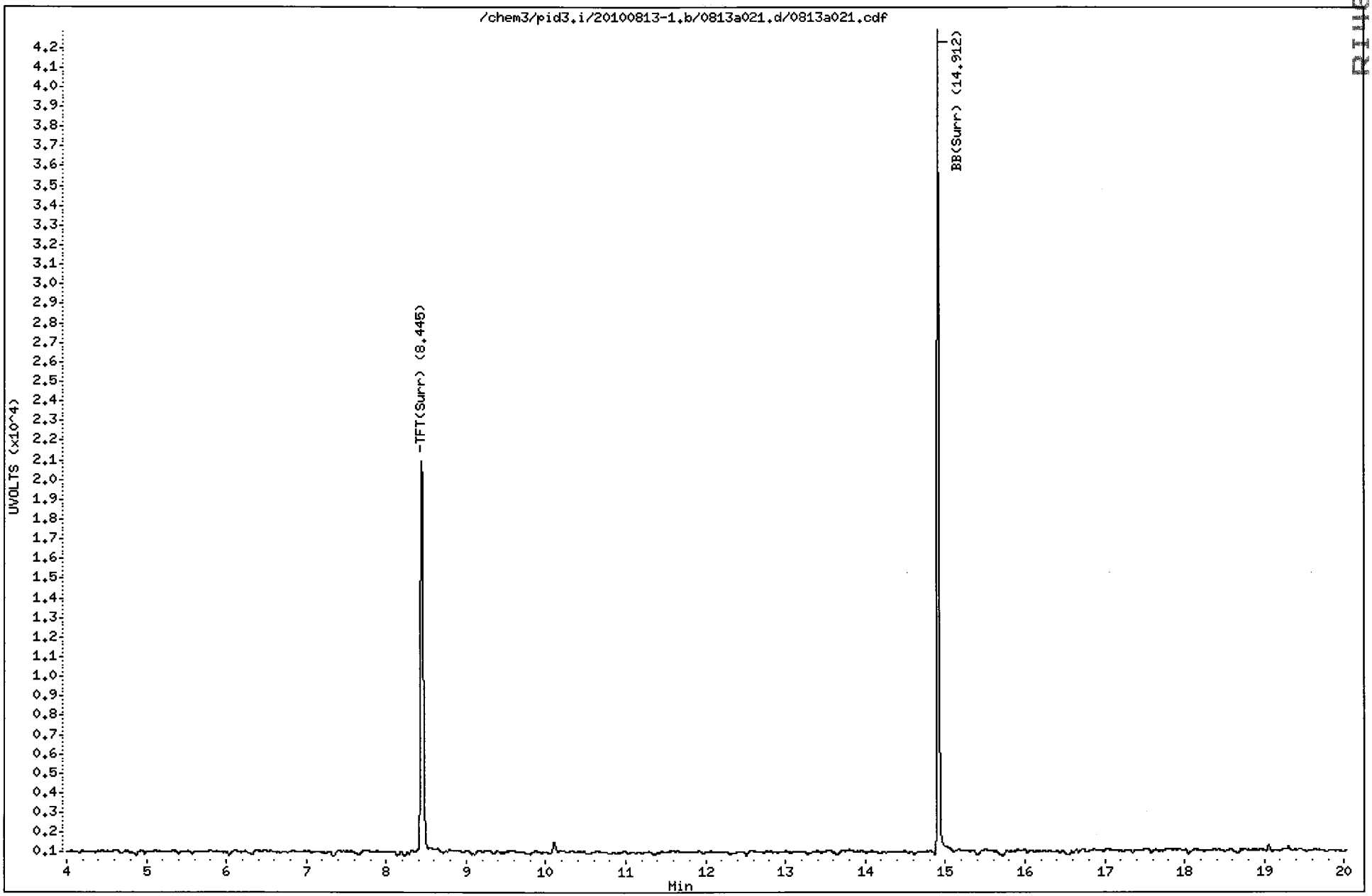
Column phase: RTX 502-2 PID

Instrument: pid3.i

Operator: MH

Column diameter: 0.18

RI46: 65886



8/23/10

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100813-2.b/0813a022.d
Data file 2: /chem3/pid3.i/20100813-1.b/0813a022.d
Method: /chem3/pid3.i/20100813-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 28-JUL-2010
BETX Ical Date: 29-JUN-2010

ARI ID: RI46G
Client ID: MW-13-081210
Injection Date: 13-AUG-2010 22:30
Matrix: WATER
Dilution Factor: 1.000

==========

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.441	0.000	7055	82856	98.0	TFT(Surr)
14.912	0.000	4206	34231	97.7	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range		RF	Total Area*	Amount
WAGas Tol-C12	(10.21 to 17.12)	827807	0	0.000
8015B 2MP-TMB	(4.94 to 15.60)	1664107	0	0.000
AK101 nC6-nC10	(5.43 to 14.51)	1131784	0	0.000
NWTPHG Tol-Nap	(10.21 to 18.19)	882029	1112	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
8.439	0.032	20498	93.2	TFT(Surr)
14.910	0.025	42717	93.7	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/20100813-2.b/0813a022.d

Date : 13-AUG-2010 22:30

Client ID: MW-13-081210

Sample Info: RI46G

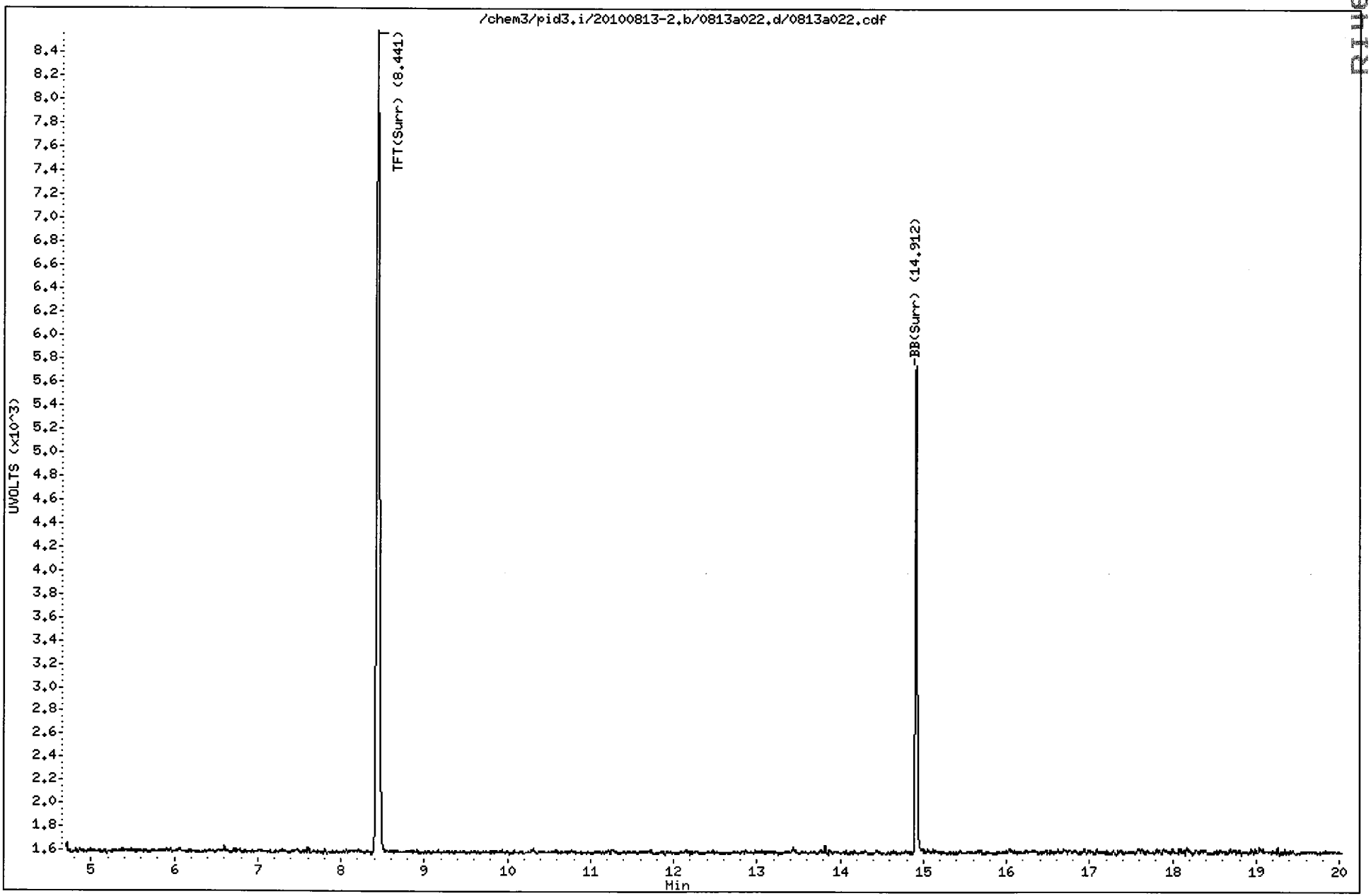
Column phase: RTX 502-2 FID

Instrument: pid3.i

Operator: MH

Column diameter: 0.18

RI46 99888



Data File: /chem3/pid3.i/20100813-1.b/0813a022.d

Date : 13-AUG-2010 22:30

Client ID: MW-13-081210

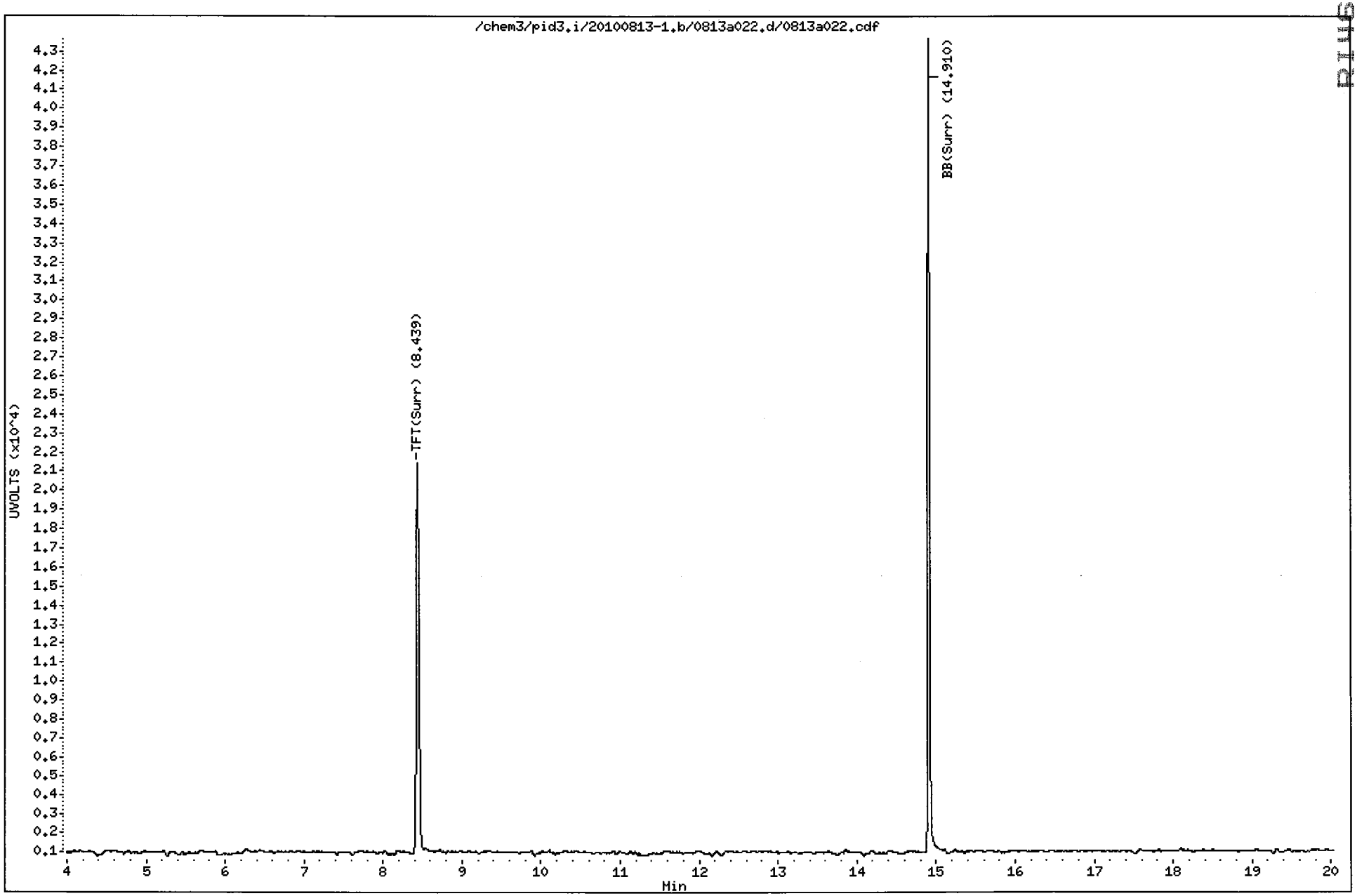
Sample Info: RI46G

Column phase: RTX 502-2 PID

Instrument: pid3.i

Operator: MH

Column diameter: 0.18



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Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100813-2.b/0813a023.d
Data file 2: /chem3/pid3.i/20100813-1.b/0813a023.d
Method: /chem3/pid3.i/20100813-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 28-JUL-2010
BETX Ical Date: 29-JUN-2010

ARI ID: RI46H
Client ID: MW-10-081210
Injection Date: 13-AUG-2010 22:54
Matrix: WATER
Dilution Factor: 1.000

==========

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.440	-0.001	6818	80715	94.7	TFT(Surr)
14.911	-0.001	4101	34342	95.2	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range		RF	Total Area*	Amount
WAGas Tol-C12	(10.21 to 17.12)	827807	3611	0.004
8015B 2MP-TMB	(4.94 to 15.60)	1664107	2423	0.001
AK101 nC6-nC10	(5.43 to 14.51)	1131784	0	0.000
NWTPHG Tol-Nap	(10.21 to 18.19)	882029	3611	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
8.439	0.032	19704	89.6	TFT(Surr)
14.909	0.024	41620	91.3	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/20100813-2.b/0813a023.d

Date : 13-AUG-2010 22:54

Client ID: MW-10-081210

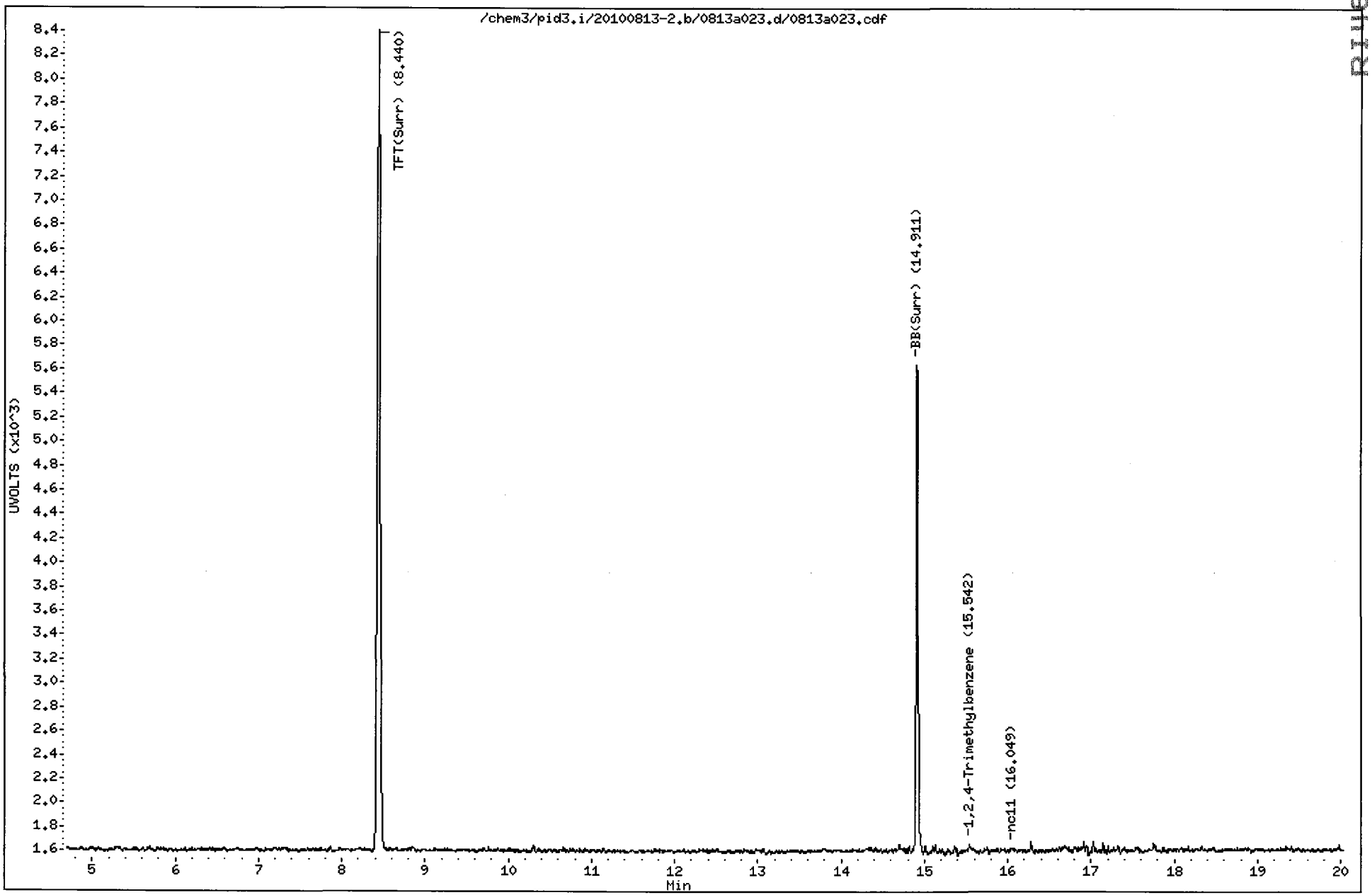
Sample Info: RI46H

Column phase: RTX 502-2 FID

Instrument: pid3.i

Operator: MH

Column diameter: 0.18



Data File: /chem3/pid3.i/20100813-1.b/0813a023.d

Date : 13-AUG-2010 22:54

Client ID: MW-10-081210

Sample Info: RI46H

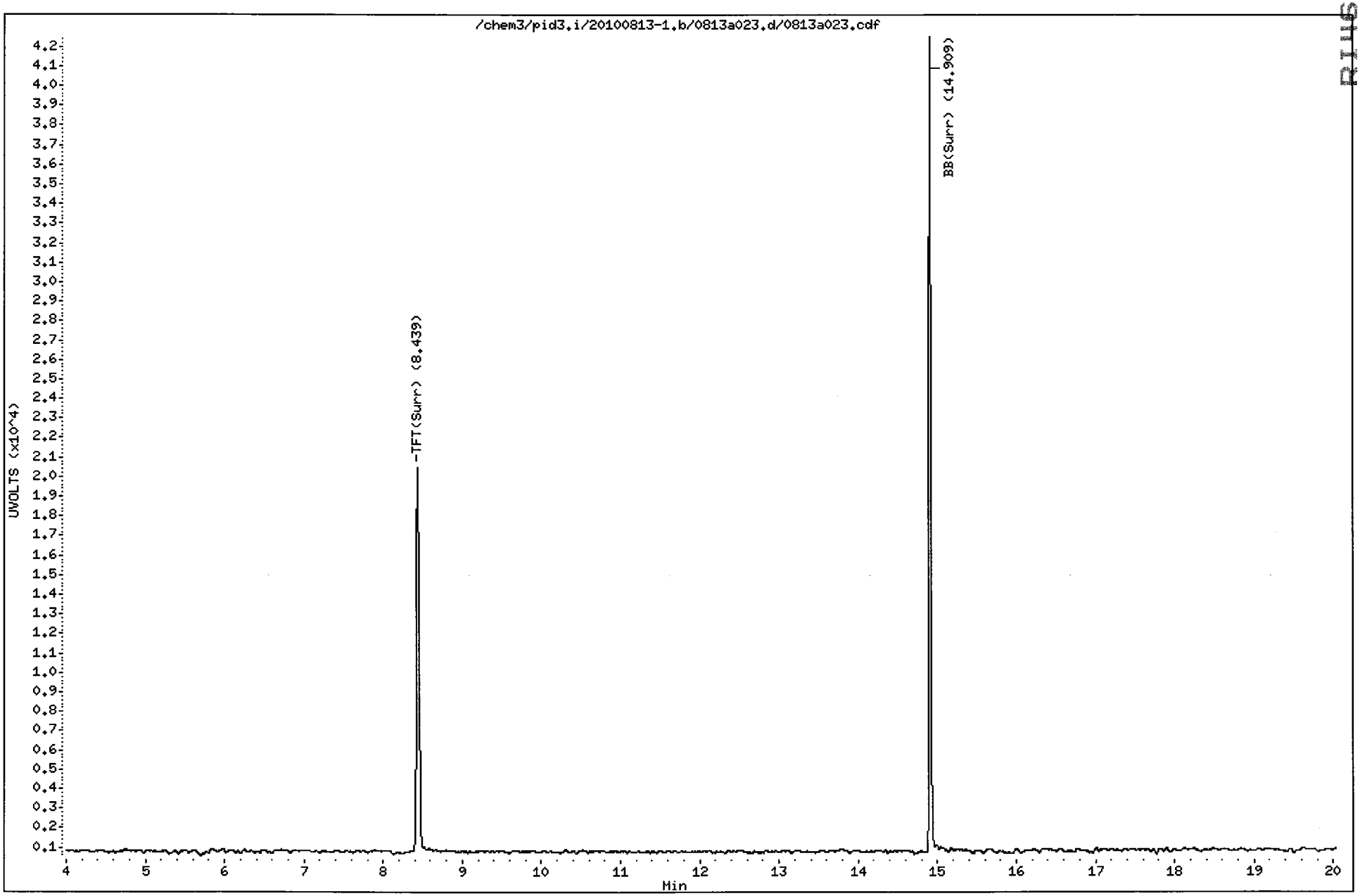
Instrument: pid3.i

Operator: MH

Column phase: RTX 502-2 PID

Column diameter: 0.18

RI46 66332



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Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100813-2.b/0813a024.d
Data file 2: /chem3/pid3.i/20100813-1.b/0813a024.d
Method: /chem3/pid3.i/20100813-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 28-JUL-2010
BETX Ical Date: 29-JUN-2010

ARI ID: RI46I
Client ID: MW-11-081210
Injection Date: 13-AUG-2010 23:19
Matrix: WATER
Dilution Factor: 1.000

==========

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.440	-0.001	7063	83321	98.1	TFT(Surr)
14.911	-0.001	4244	35538	98.5	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range		RF	Total Area*	Amount
WAGas Tol-C12	(10.21 to 17.12)	827807	3400	0.004
8015B 2MP-TMB	(4.94 to 15.60)	1664107	3292	0.002
AK101 nC6-nC10	(5.43 to 14.51)	1131784	3291	0.003
NWTPHG Tol-Nap	(10.21 to 18.19)	882029	3400	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
8.439	0.032	20512	93.3	TFT(Surr)
14.909	0.024	42958	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/20100813-2.b/0813a024.d

Date : 13-AUG-2010 23:19

Client ID: MW-11-081210

Sample Info: RI46I

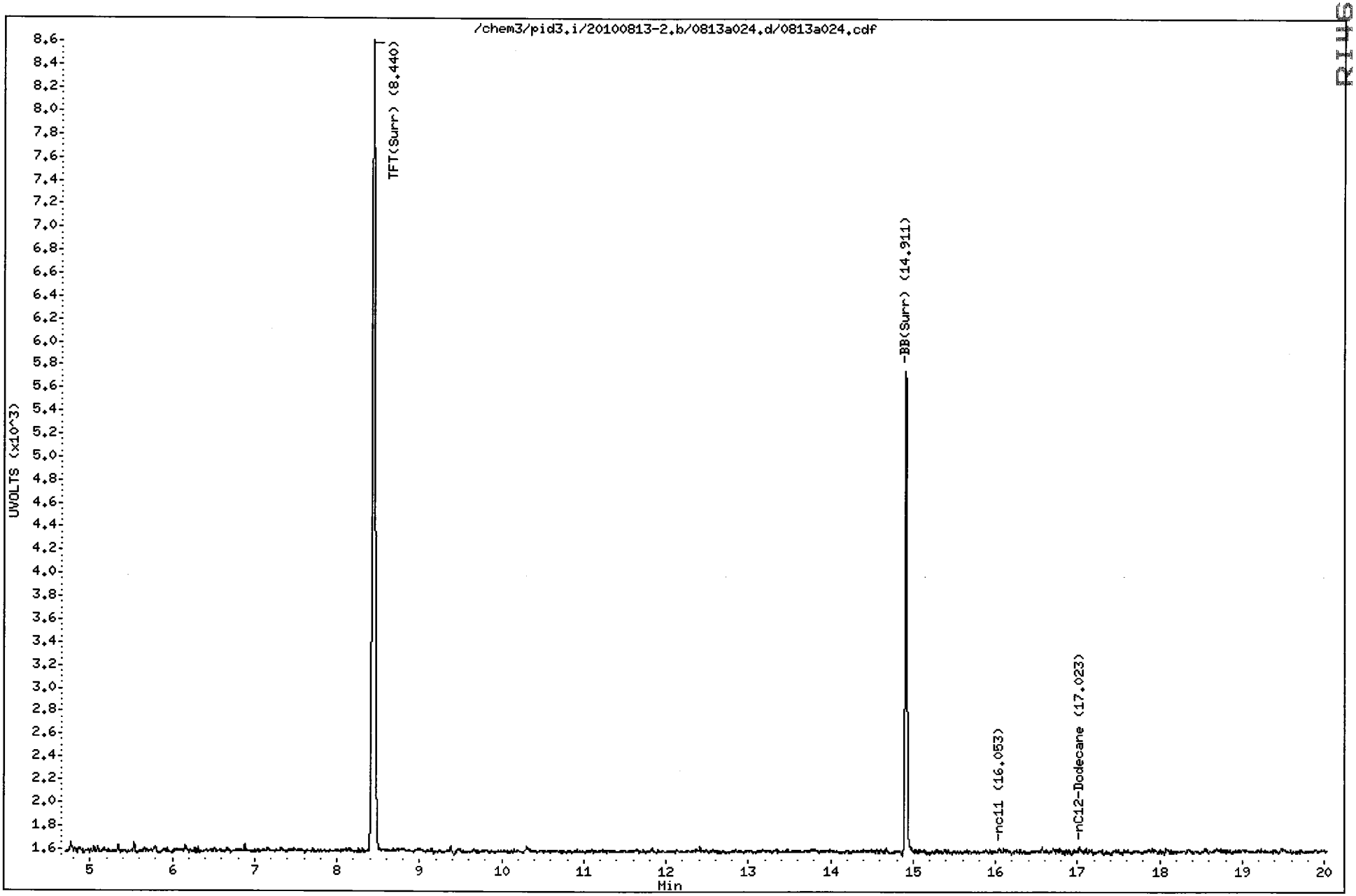
Column phase: RTX 502-2 FID

Instrument: pid3.i

Operator: MH

Column diameter: 0.18

RI46I 08813



Data File: /chem3/pid3.i/20100813-1.b/0813a024.d

Date : 13-AUG-2010 23:19

Client ID: MW-11-081210

Sample Info: RI46I

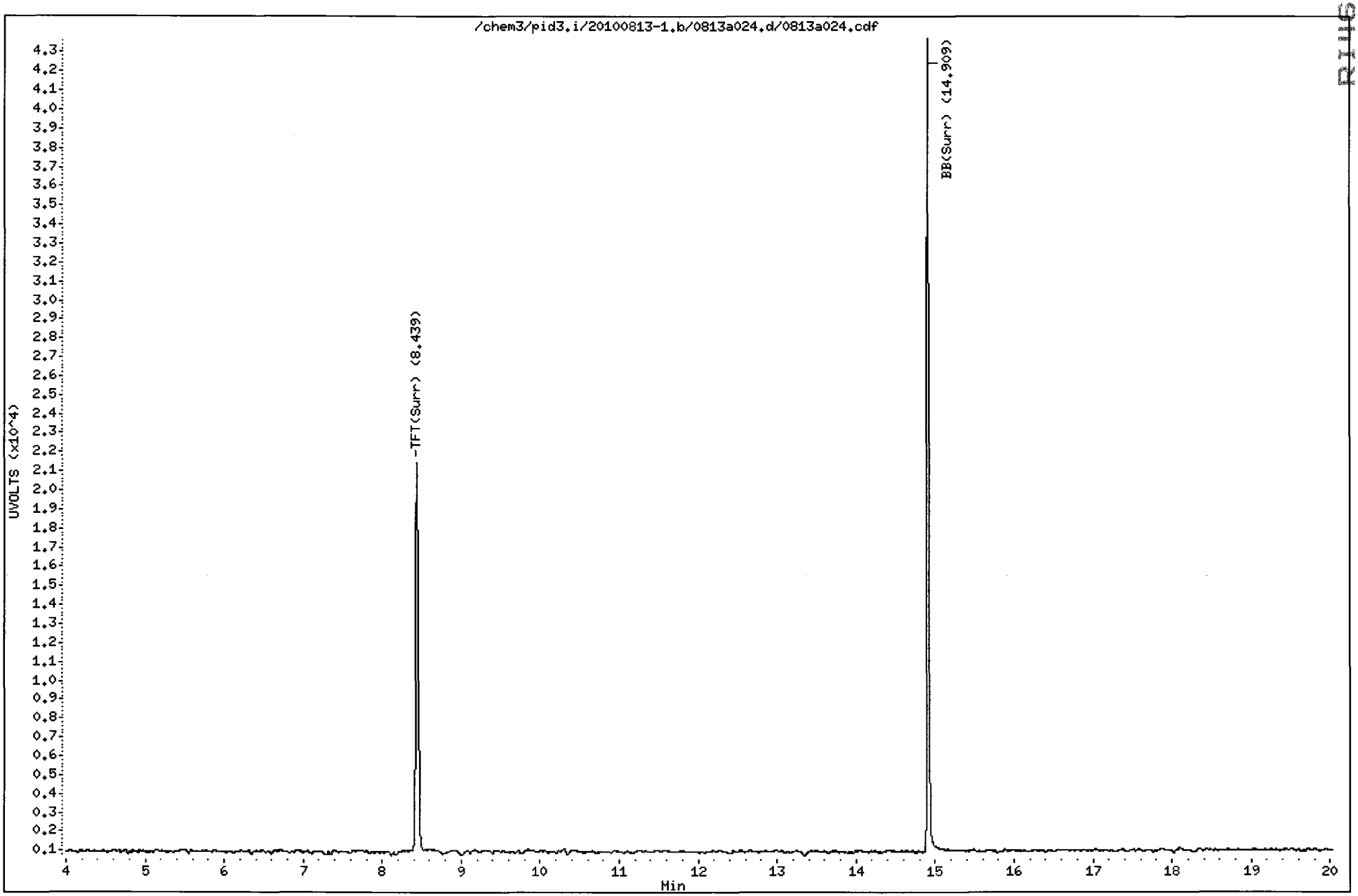
Instrument: pid3.i

Operator: MH

Column phase: RTX 502-2 PID

Column diameter: 0.18

RI46 : 66895



MR 8/23/10

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100813-2.b/0813a026.d
Data file 2: /chem3/pid3.i/20100813-1.b/0813a026.d
Method: /chem3/pid3.i/20100813-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 28-JUL-2010
BETX Ical Date: 29-JUN-2010

ARI ID: BCAL 3
Client ID:
Injection Date: 14-AUG-2010 00:08
Matrix: WATER
Dilution Factor: 1.000

==========

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.441	-0.001	6922	82184	96.2	TFT(Surr)
14.911	-0.001	4417	35732	102.6	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range		RF	Total Area*	Amount
WAGas Tol-C12	(10.21 to 17.12)	827807	544751	0.658
8015B 2MP-TMB	(4.94 to 15.60)	1664107	558395	0.336
AK101 nC6-nC10	(5.43 to 14.51)	1131784	519289	0.459
NWTPHG Tol-Nap	(10.21 to 18.19)	882029	545756	0.619

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	20426	92.9	TFT(Surr)
14.910	0.025	45301	99.4	BB(Surr)

SW8021 (PID)

RT	Shift	Response	Amount	Compound
7.715	0.028	33997	25.71	Benzene
10.306	0.036	33074	25.06	Toluene
12.840	0.037	30198	24.30	Ethylbenzene
12.978	0.037	65296	48.49	M/P-Xylene
13.756	0.033	32241	25.09	O-Xylene
5.307	0.017	9568	26.89	MTBE

A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20100813-2.b/0813a026.d

Date : 14-AUG-2010 00:08

Client ID:

Sample Info: BCAL 3

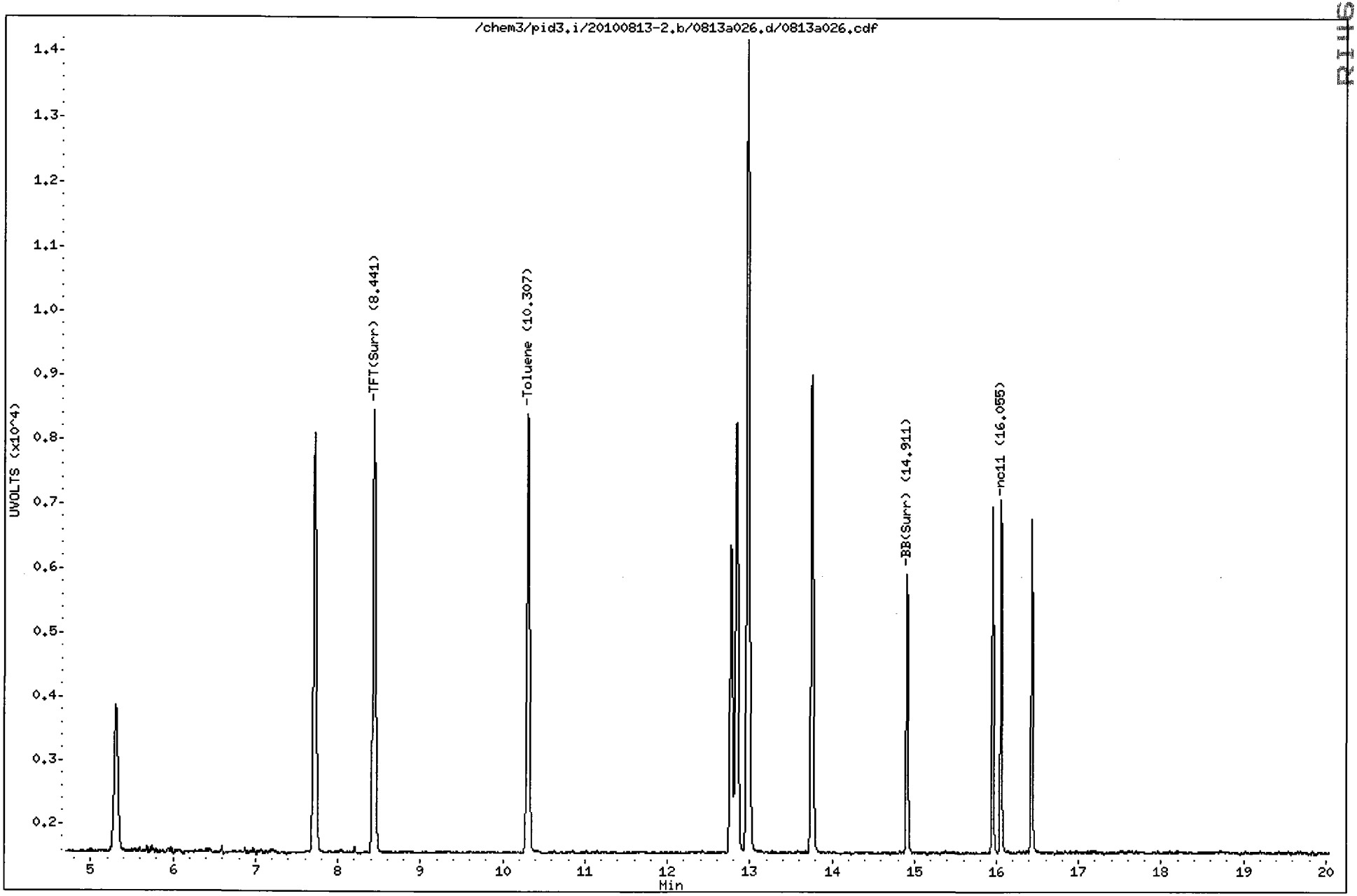
Column phase: RTX 502-2 FID

Instrument: pid3.i

Operator: MH

Column diameter: 0.18

RTIS:08857



Data File: /chem3/pid3.i/20100813-1.b/0813a026.d

Date : 14-AUG-2010 00:08

Client ID:

Sample Info: BCAL 3

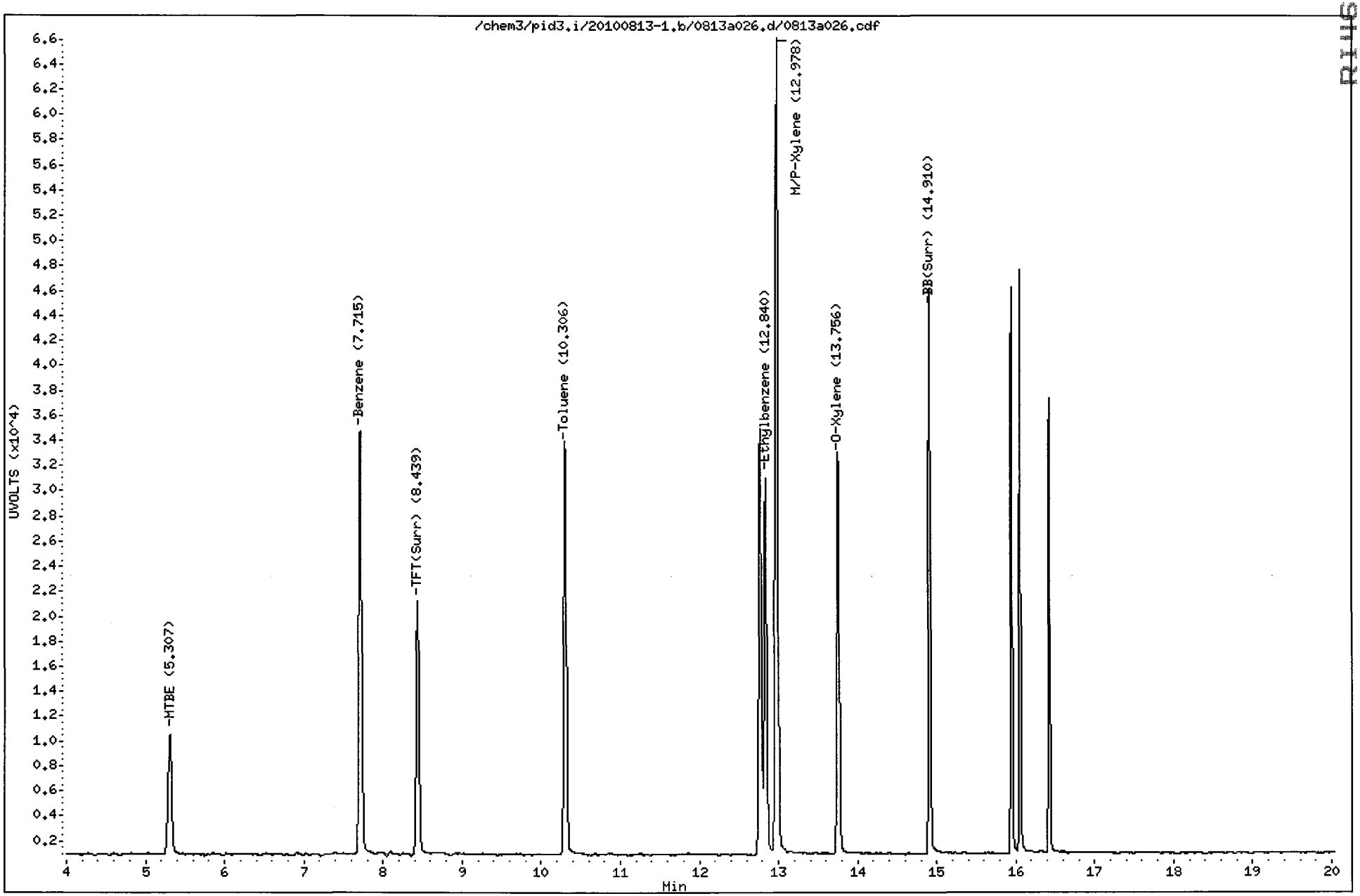
Column phase: RTX 502-2 PID

Instrument: pid3.i

Operator: MH

Column diameter: 0.18

RIIG 008898



MK 8/23/10

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20100813-2.b/0813a027.d
Data file 2: /chem3/pid3.i/20100813-1.b/0813a027.d
Method: /chem3/pid3.i/20100813-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 28-JUL-2010
BETX Ical Date: 29-JUN-2010

ARI ID: GCAL 3
Client ID:
Injection Date: 14-AUG-2010 00:33
Matrix: WATER
Dilution Factor: 1.000

==========

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.439	-0.002	6977	82617	96.9	TFT(Surr)
14.910	-0.002	4343	35485	100.8	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range		RF	Total Area*	Amount
WAGas Tol-C12	(10.21 to 17.12)	827807	1814268	2.192 M
8015B 2MP-TMB	(4.94 to 15.60)	1664107	3536182	2.125 M
AK101 nC6-nC10	(5.43 to 14.51)	1131784	2349556	2.076 M
NWTPHG Tol-Nap	(10.21 to 18.19)	882029	1920448	2.177 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	20292	92.3	TFT(Surr)
14.908	0.024	44243	97.0	BB(Surr)

SW8021 (PID)

RT	Shift	Response	Amount	Compound
7.715	0.028	6809	5.15	Benzene
10.305	0.035	91258	69.14	Toluene
12.839	0.036	26018	20.94	Ethylbenzene
12.980	0.039	102318	75.98	M/P-Xylene
13.755	0.033	42369	32.98	O-Xylene
5.310	0.020	79658	223.88	MTBE

A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20100813-2.b/0813a027.d

Date : 14-AUG-2010 00:33

Client ID: LORA LAKE

Sample Info: GCAL 3

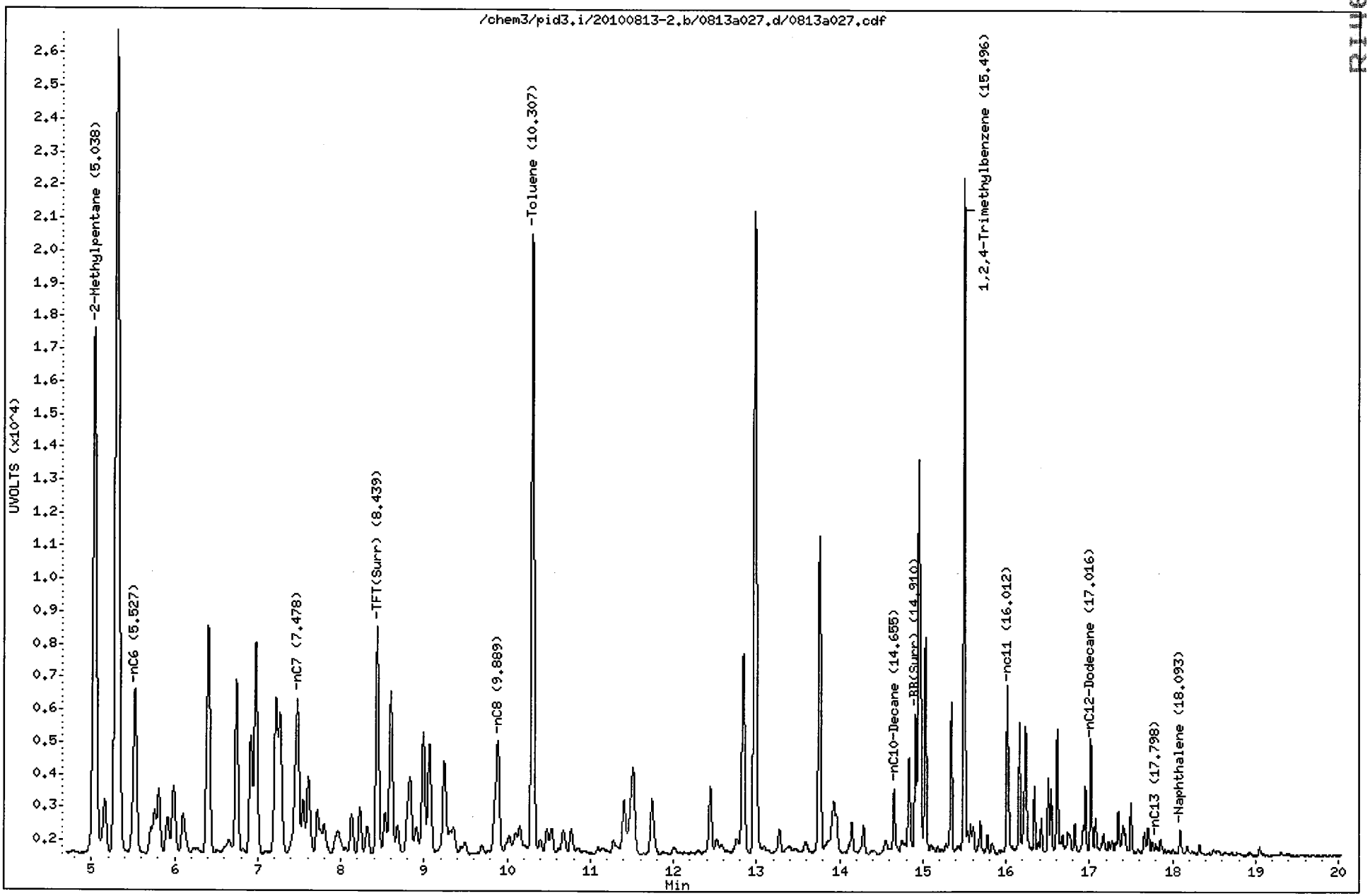
Column phase: RTX 502-2 FID

Instrument: pid3.i

Operator: MH

Column diameter: 0.18

RTIS: 999999



Data File: /chem3/pid3.i/20100813-1.b/0813a027.d

Date : 14-AUG-2010 00:33

Client ID:

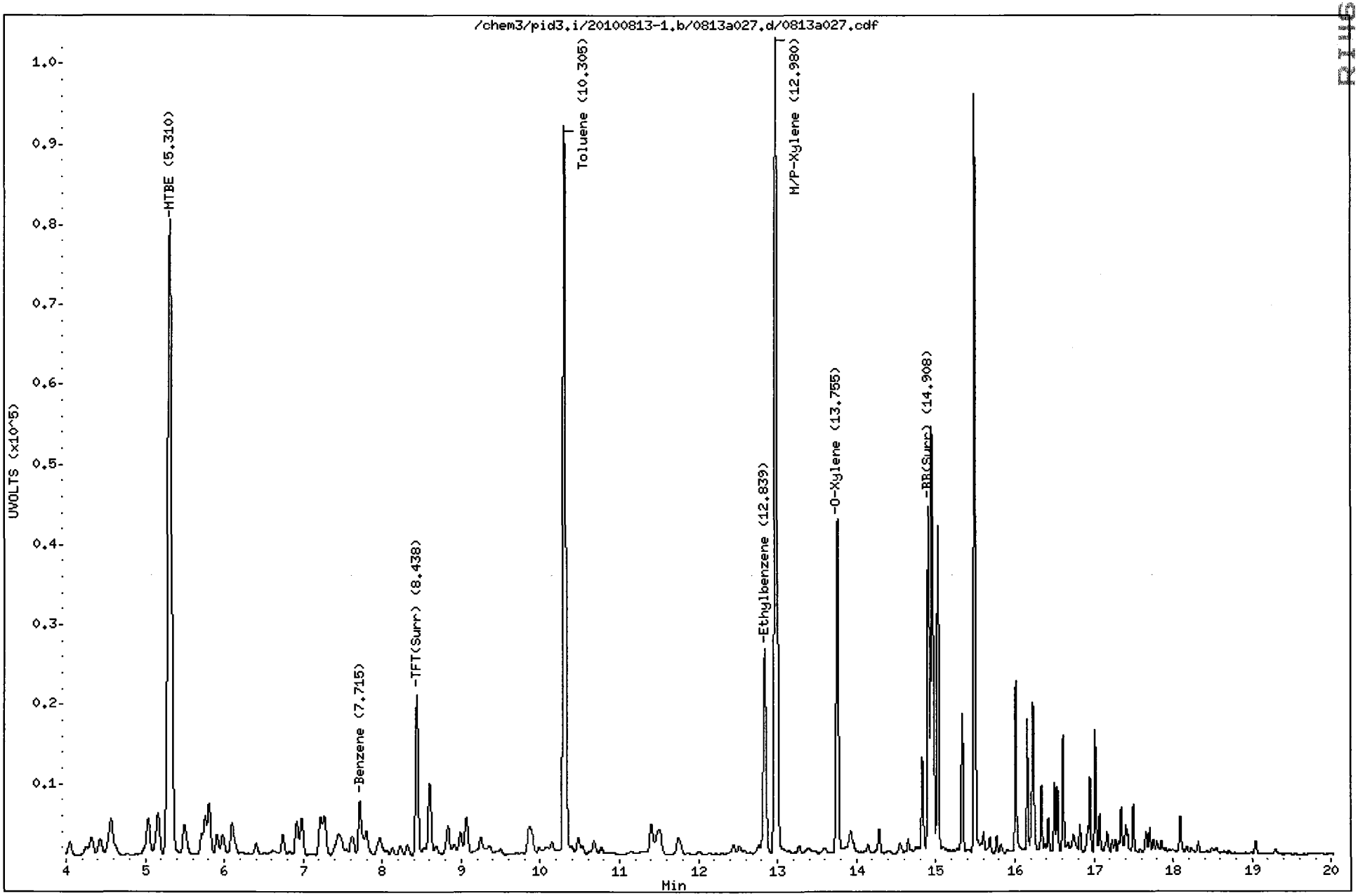
Sample Info: GCAL 3

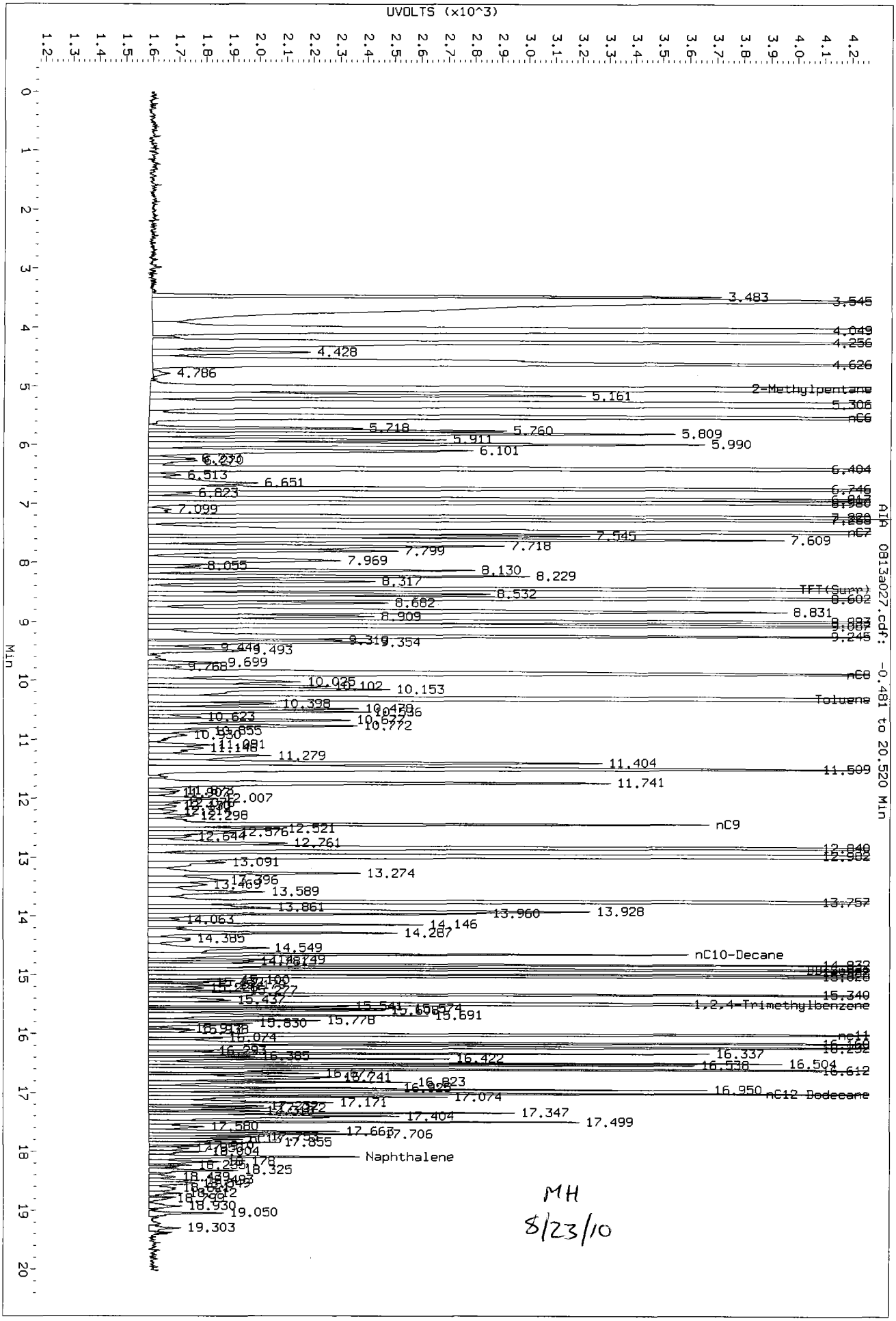
Column phase: RTX 502-2 PID

Instrument: pid3.i

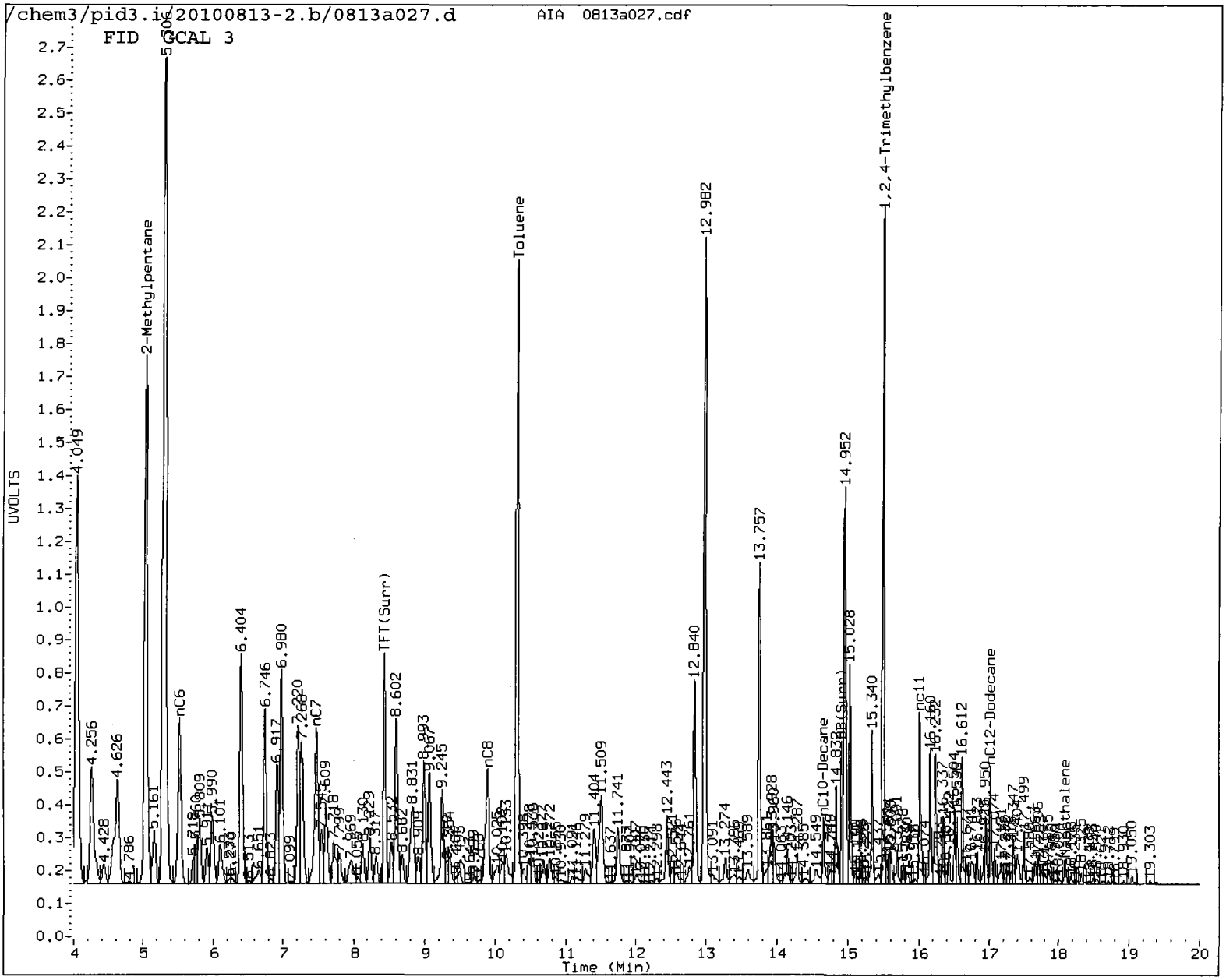
Operator: MH

Column diameter: 0.18




UVOLTS (x10^3)
Min
3.483
3.545
4.049
4.256
4.428
4.626
4.786
2=Methylpentane
5.161
5.306
nC6
5.718
5.760
5.809
5.911
5.990
6.101
6.404
6.513
6.651
6.746
6.823
7.099
nC7
7.545
7.609
7.718
7.799
7.969
8.055
8.130
8.229
8.317
TFT(Surr)
8.532
8.602
8.662
8.831
8.909
9.245
9.319
9.354
9.493
9.699
nC8
10.102
10.153
Toluene
10.398
10.623
10.772
11.279
11.404
11.509
11.741
nC9
12.298
12.521
12.644
12.761
12.840
12.982
13.091
13.274
13.589
13.757
13.861
13.928
13.960
14.063
14.146
14.287
14.385
14.549
nC10-Decane
14.872
15.340
1,2,4-Trimethylbenzene
15.541
15.691
15.778
15.830
nC11
16.292
16.337
16.385
16.422
16.504
16.538
16.612
16.741
16.823
16.950
nC12 Dodecane
17.074
17.171
17.347
17.404
17.499
17.580
17.706
17.855
Naphthalene
18.325
18.930
19.050
19.303
AIA 0813a027.cdf: -0.481 to 20.520 Min
Data File: /chem3/pid3.i/20100813-2.b/0813a027.d/0813a027.cdf
Injection Date: 14-AUG-2010 00:33
Instrument: pid3.i
Client Sample ID:

MH
8/23/10



MANUAL INTEGRATION

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

5. Other _____

Analyst: MH Date: 8/23/10

Metals Raw Data
Preparation Bench Sheets and Notes

ARI Job ID: RI46

Analytical Resources, Incorporated
Analytical Chemists and Consultants

SPIKING LOG

Analyst: MH

Date: 8/17/10

Final Volume 25

Final Volume (Hg): _____

Sample ID RI46 ASPK, MBSPK
RI65 BSPK, MBSPK

	Prepcode:			
	Spike Solution:	ICP Routine	ICP No GFA	GFA
	Standard No.:			
	Vol Added (mL):			
STOCK CONCENTRATION	Ag	50		2.0
	Al	200	200	
	As	200		10
	Ba	200	200	
	Be	50	50	
	Ca	1000	1000	
	Cd	50		2.0
	Co	50	50	
	Cr	50	50	
	Cu	50	50	
	Fe	200	200	
	K	1000	1000	
	Mg	1000	1000	
	Mn	50	50	
	Na	1000	1000	
	Ni	50	50	
	Pb	200		10
	Se	200		10
	Sr	50	50	
	Tl	200		10
	V	50	50	
	Zn	50	50	

	REN		
	ICP-MS #1	ICP-MS #2	ICP-MS Minerals
	2722-2		
	0.05		
Ag	25		
Al			500
As	25 ✓		
Ba	25		
Be	25		
Ca			500
Cd	25		
Co	25		
Cr	25		
Cu	25		
Fe			500
K			500
Mg			500
Mn	25		
Mo		25	
Na			500
Ni	25		
Pb	25 ✓		
Sb		25	
Se	80		
Tl	25		
U	25		
V	25		
Zn	80		

Element	Prepcode	Analysis	Stock Conc.	Stock Added	Std No.
Hg		CVA	1.0		
Hg MBSPK		CVA	1.0		
Sb		ICP	2000		
Sb		GFA	100		
B		ICP	500		
Mo		ICP	500		
Si		ICP	10000		
Sn		ICP	500		
Ti		ICP	2000		

Additional Elements:

Element	Prepcode	Analysis	Stock Conc.	Stock Added	Std. No.

RI45 SSSS

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Digestion Log

Analyst: MH Date: 8/17/10

Matrix: Water Block ID: #14 Block Temp: 95°C Thermometer: MP18

ARI Sample ID	Btl #	pH<2	Prep Code: REN Initial ~~Wt (g)~~ Vol (mL)	Prep Code: REN Final Vol (mL)	Prep Code: Initial Wt (g) Vol (mL)	Prep Code: Final Vol (mL)	Comments
RI46 A	15	—	50.0	25.0			
" ADUP	15	—					
" ASPK	15	—					
" B	15	—					
" C	15	—					
" D	15	—					
" E	15	—					
" F	15	—					
" G	15	—					
" H	15	—					
" I	15	—					Filtered in Lab
" MB1	—	—					
" MB1SPK	—	—					
RI65 A	9	—					
" B	21	—					
" BDUP	21	—					
" BSPK	21	—					
" C	9	—					
" D	9	—					
" E	9	—					
" MB1	—	—					
" MB1SPK	—	—	50.0	25.0			
				MH 8/17/10			

Chemical/Reagent ID:

HNO_3: MP1937 I5547 HCl: — H_2O_2: I5512 Tube Lot #: 1005282

Metals Raw Data
Run Logs, Calibrations, and Raw Data

ARI Job ID: RI46

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Sciex ELAN 6000 Serial No. Z13960660

Analysis Date: 8.19.10 **Analyst:** RW **Page:** 1 **of** 4

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		std 0			2750-3
		1			2748-5
		2			2748-6
		3			2754-1
		4			2748-8
		rinse sample			
		ICV			2732-4
		ICB			
		CCV1			
		CCB1			
		low check			
		ICSA			
		ICSAB			
		CCV2			
		CCB2			
		RH25 A-L	RW	10 ✓	As
		A		2	
		Adup		↓ ✓ ✓	
		Aspk		↓	
		B		5	
		Q		↓	
		RH66 E		2	
		F		↓	rean Zn
		G		↓	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Sciex ELAN 6000 Serial No. Z13960660

Analysis Date: 8.19.10 **Analyst:** REW **Page:** 2 **of** 4

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		RH66 H	REW	2	
		CCV3			
		CCB3			
		RI46 MB1	REW	2	
		RH66 MB			
		↓ MB5ph		✓	
		RI46 MB1 5ph		✓	
		Adup A		✓	
		Asph B		✓	
		C			
		↓ D	↓	↓	
		CCV4			
		CCB4			
		RI65 MB1	REW	2	
		↓ MB15ph		✓	
		RI46 E			
		F			
		G			
		H			
		↓ I		↓	
		RI66 F	↓	10	Zn
		LR200			

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Sciex ELAN 6000 Serial No. Z13960660

Analysis Date: 8.19.10 **Analyst:** BW **Page:** 3 of 4

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		LR300			
		CCV5			
		CCB5			
		RI57 MB	SWN	20	
		↓ MBsplk	↓	↓ ✓	
		RI65 Bdup	REN	2 ✓	
		B			
		Bsplk		✓	
		A			
		C			
		D			
		↓ E	↓	↓	
		RI57 A	SWN	20	
		CCV6			
		CCB6			
		RI28 MB1	SWN	20	
		MB1splk		✓	
		Adup		✓	
		A			
		Asplk		✓	Sb 2%
		Apost			0.06 spk #1, spk #2 Sb
		B			
		↓ C			
		RI57 B	↓	↓	

8/20/10

ANALYTICAL RESOURCES INCORPORATED

Metals Data Review Checklist

Method: ICP ICP-MS GFA CVA **Analysis Date:** 8/19/10

	Analyst RJD 8/20	Peer AE 8/20	Comment
Logbook:			
Analyst, Date, Method info	✓	✓	
Sample ID's	✓	✓	
Standard/QC solution ID's recorded	✓	✓	
Prep codes	✓	✓	
Dilution factors	✓	✓	
Crossouts/Corrections/Deletions	✓	✓	
Calibration:			
Blank & Standard intensities	✓	✓	
Standard deviations	✓	✓	
Curve fit	✓	✓	
Calibration Verification:			
ICV/CCV	✓	✓	
ICB/CCB	✓	✓	
Samples:			
RSD's & SD's	✓	✓	
Internal Standards	✓	✓	
Carry-over	✓	✓	
Method QC:			
CRI/CRA	✓	✓	
ICSA/ICSAB	✓	✓	
Post Spikes/Serial Dilutions	✓	✓	
Analytic Spikes	—	—	
Matrix QC:			
SRM/LCS	✓	✓	
Matrix Spikes	✓	✓	RI28
Matrix Duplicates	✓	✓	
Method Blanks	✓	✓	
Data Distribution:			
Requested elements/isotope identified	✓	✓	
Correct samples identified for distribution	✓	✓	
Raw data match distributed data	✓	✓	
Data filename correct	✓	✓	
Necessary Analysts Notes and CAF's	✓	✓	RI28

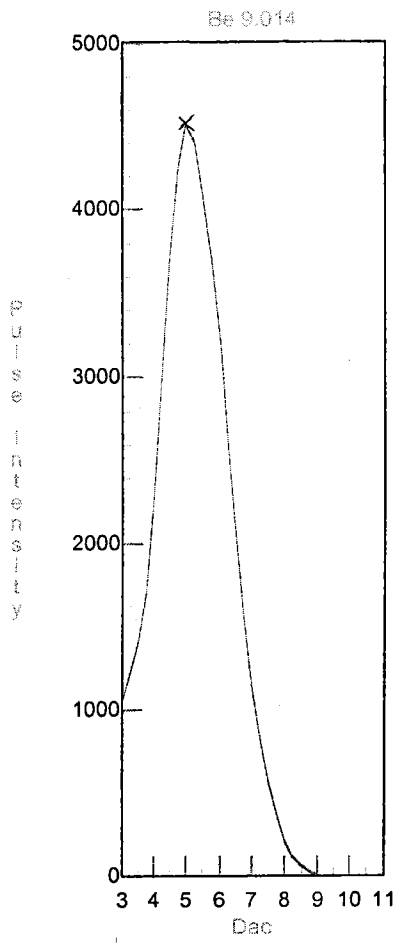
Instrument Tuning Report

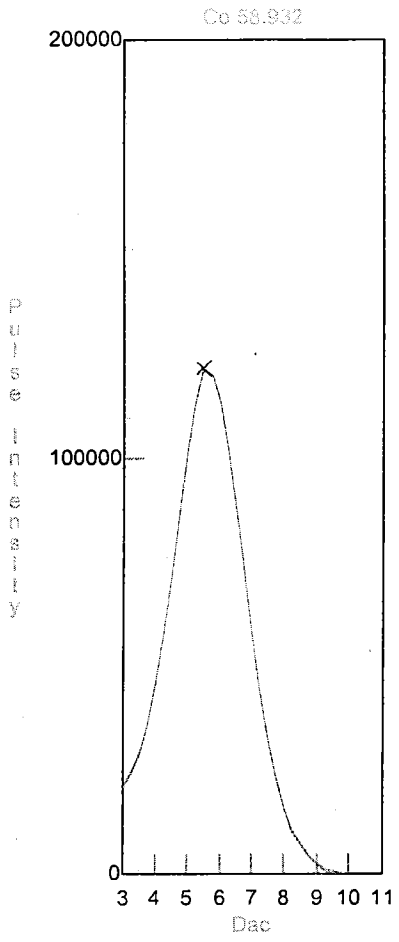
1st

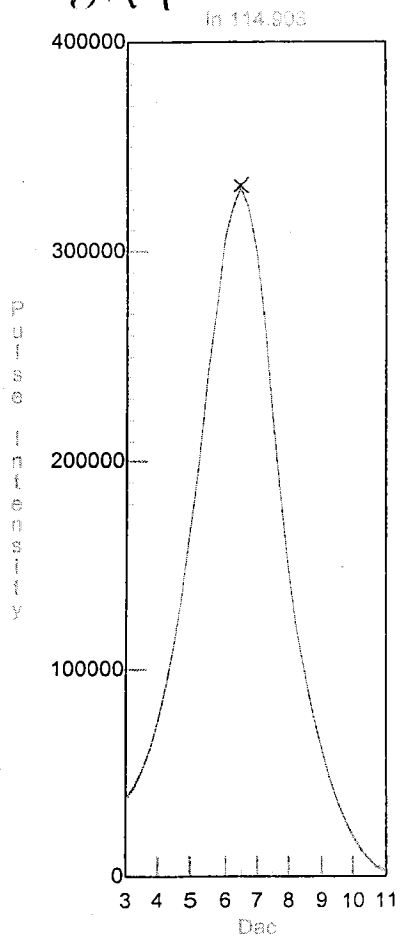
File Name: 2008.tun
File Path: c:\elandata\Tuning

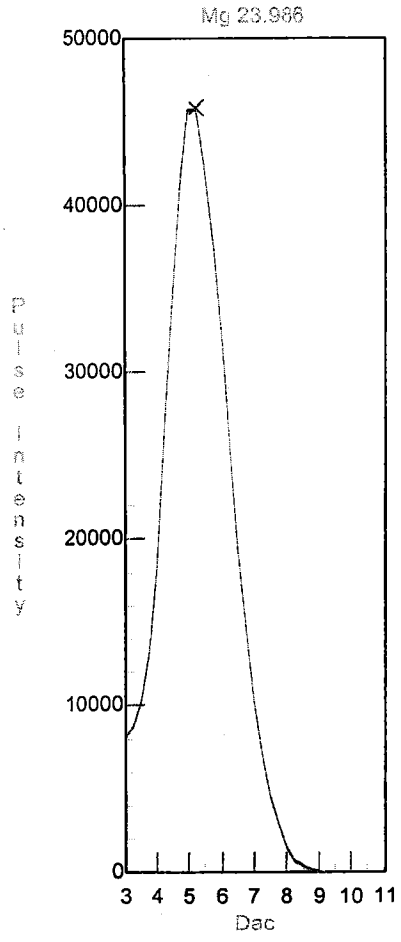
Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width	Custom Res.
Be	9.012	8.976 ✓	2027	2170	0.717	
Mg	23.985	23.979 ✓	5663	2282	0.704	✓
Co	58.933	58.979 ✓	14150	2546	0.694	
In	114.904	114.878 ✓	27758	2997	0.678	
Pb	207.977	207.976 ✓	50419	3763	0.678	

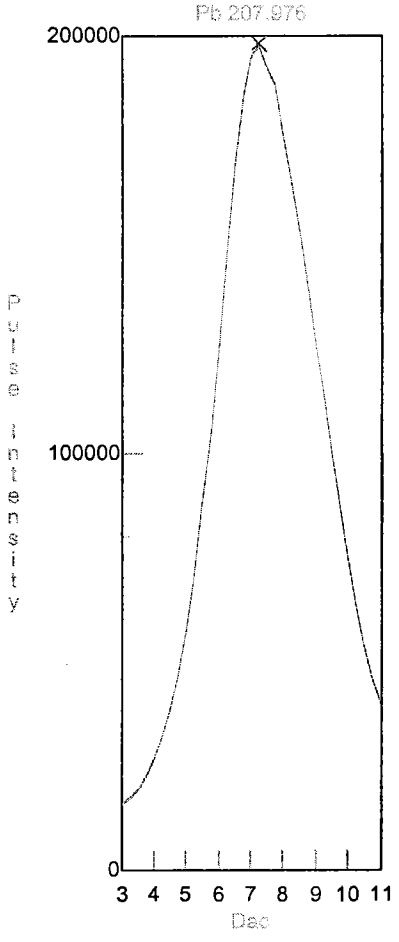
8.19.10

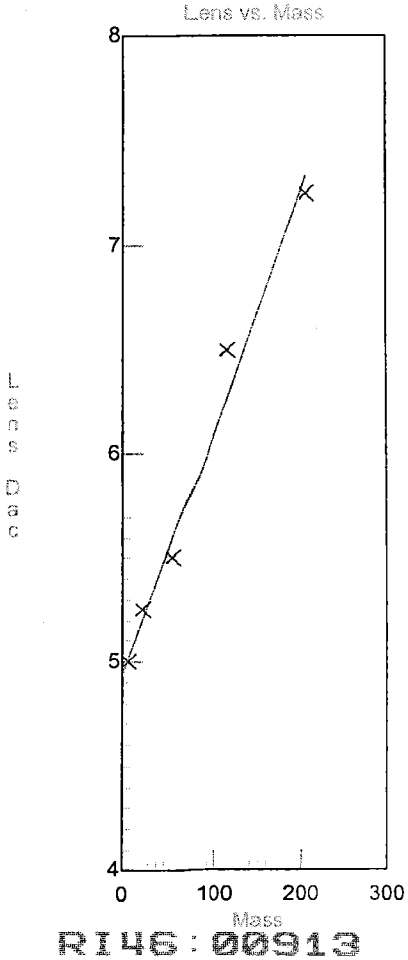












Daily Performance Report

Sample ID: Sample
Sample Date/Time: Thursday, August 19, 2010 11:17:52
Sample Description:
Sample File: 1120.sam
Method File: c:\elandata\Method\aridailyperf.mth
Dataset File: c:\elandata\Dataset\daily performance\Sample.7030
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Number of Replicates: 5
Dual Detector Mode: Pulse

Neb
1.05

Summary

	Analyte	Mass	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Mg	24	47668.976	677.074	1.420
	In	115	330907.629	1764.708	0.533
	Pb	208	198398.305	630.784	0.318
⌈>	Ba	138	209354.780	960.884	0.459
⌊	Ba++	69	0.009	0.000	2.407
⌈>	Ce	140	246582.104	1304.880	0.529
⌊	CeO	156	0.028	0.001	1.985
	Bkgd	220	2.500	0.884	35.355

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Blank
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, August 19, 2010 11:24:45
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L				4707	1
	Cl	37		mg/L				1264649	0
>	Ge	72		ug/L				241496	0
	Ni	60		ug/L				28	18
	Ni	62		ug/L				168	3
	Cu	63		ug/L				260	3
	Cu	65		ug/L				62	12
	Zn	66		ug/L				253	13
	Zn	67		ug/L				110	8
	Zn	68		ug/L				2272	2
	As-1	75		ug/L				35	126
	As	75		ug/L				4780	0
	Se	82		ug/L				-5	117
	Se	78		ug/L				4907	0
	Y	89		ug/L				230220	0
	Kr	83		ug/L				76	9
>	In	115		ug/L				331526	0
	Ag	107		ug/L				19	35
	Cd	111		ug/L				203	7
	Cd	114		ug/L				45	22
	Sb	121		ug/L				22	33
	Sb	123		ug/L				14	17
	Ba	135		ug/L				14	5
	Ba	137		ug/L				20	49
>	Tb	159		ug/L				301360	0
	Tl	205		ug/L				426	11
	Pb	208		ug/L				331	8
	Bi	209		ug/L				307927	0
	Th	232		ug/L				40	15
	U	238		ug/L				10	12

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, August 19, 2010 11:32:00
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			4707	4103	1
	Cl	37		mg/L			1264649	1256454	0
>	Ge	72		ug/L			241496	244320	0
	Ni	60	10.000	ug/L	0.048	0	28	24256	0
	Ni	62	10.000	ug/L	0.248	2	168	3751	2
	Cu	63	10.000	ug/L	0.027	0	260	52180	0
	Cu	65	10.000	ug/L	0.038	0	62	24304	0
	Zn	66	10.000	ug/L	0.104	1	253	17476	1
	Zn	67	10.000	ug/L	0.169	1	110	3015	1
	Zn	68	10.000	ug/L	0.100	1	2272	14007	0
	As-1	75	10.000	ug/L	0.116	1	35	13235	1
	As	75	10.000	ug/L	0.168	1	4780	17810	1
	Se	82	10.000	ug/L	0.029	0	-5	1704	0
	Se	78	10.000	ug/L	0.140	1	4907	9065	0
	Y	89		ug/L			230220	231909	0
	Kr	83		ug/L			76	69	5
>	In	115		ug/L			331526	334130	0
	Ag	107	10.000	ug/L	0.018	0	19	104679	0
	Cd	111	10.000	ug/L	0.077	0	203	28055	0
	Cd	114	10.000	ug/L	0.023	0	45	65790	0
	Sb	121	10.000	ug/L	0.056	0	22	85572	0
	Sb	123	10.000	ug/L	0.041	0	14	64446	0
	Ba	135	10.000	ug/L	0.134	1	14	19297	1
	Ba	137	10.000	ug/L	0.026	0	20	32875	0
>	Tb	159		ug/L			301360	304808	0
	Tl	205	10.000	ug/L	0.034	0	426	273827	0
	Pb	208	10.000	ug/L	0.024	0	331	378577	0
	Bi	209		ug/L			307927	307734	0
	Th	232	10.000	ug/L	0.049	0	40	394808	0
	U	238	10.000	ug/L	0.038	0	10	450526	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 2
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, August 19, 2010 11:39:16
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			4707	4194	1
	Cl	37		mg/L			1264649	1254605	0
>	Ge	72		ug/L			241496	244412	0
	Ni	60	19.942	ug/L	0.088	0	28	47811	0
	Ni	62	19.904	ug/L	0.410	2	168	7167	1
	Cu	63	19.966	ug/L	0.139	0	260	103258	0
	Cu	65	19.953	ug/L	0.140	0	62	47997	1
	Zn	66	20.048	ug/L	0.160	0	253	35129	0
	Zn	67	19.922	ug/L	0.263	1	110	5810	0
	Zn	68	20.023	ug/L	0.027	0	2272	25863	0
	As-1	75	20.075	ug/L	0.153	0	35	26943	0
	As	75	20.050	ug/L	0.082	0	4780	31124	0
	Se	82	20.050	ug/L	0.147	0	-5	3458	0
	Se	78	19.979	ug/L	0.178	0	4907	13128	0
	Y	89		ug/L			230220	232030	0
	Kr	83		ug/L			76	70	5
>	In	115		ug/L			331526	330040	0
	Ag	107	20.006	ug/L	0.144	0	19	207094	0
	Cd	111	20.027	ug/L	0.046	0	203	55591	0
	Cd	114	20.047	ug/L	0.014	0	45	131469	0
	Sb	121	20.052	ug/L	0.088	0	22	171268	0
	Sb	123	20.045	ug/L	0.012	0	14	128757	0
	Ba	135	20.071	ug/L	0.060	0	14	38792	0
	Ba	137	20.040	ug/L	0.080	0	20	65577	0
>	Tb	159		ug/L			301360	303040	0
	Tl	205	19.999	ug/L	0.033	0	426	543866	0
	Pb	208	20.019	ug/L	0.096	0	331	755962	0
	Bi	209		ug/L			307927	306514	0
	Th	232	20.056	ug/L	0.056	0	40	796208	0
	U	238	20.030	ug/L	0.090	0	10	902603	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 3
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, August 19, 2010 11:46:34
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			4707	3903	1
	Cl	37		mg/L			1264649	1265617	0
>	Ge	72		ug/L			241496	237510	0
	Ni	60	49.913	ug/L	0.437	0	28	115244	0
	Ni	62	50.011	ug/L	0.618	1	168	17267	1
	Cu	63	49.826	ug/L	0.426	0	260	245745	0
	Cu	65	49.832	ug/L	0.393	0	62	114465	0
	Zn	66	49.803	ug/L	0.435	0	253	82799	0
	Zn	67	49.811	ug/L	0.436	0	110	13698	0
	Zn	68	49.848	ug/L	0.503	1	2272	58386	0
	As-1	75	49.981	ug/L	0.279	0	35	65012	0
	As	75	50.009	ug/L	0.168	0	4780	68470	0
	Se	82	49.924	ug/L	0.482	0	-5	8314	0
	Se	78	50.042	ug/L	0.211	0	4907	24775	0
	Y	89		ug/L			230220	225508	0
	Kr	83		ug/L			76	84	5
>	In	115		ug/L			331526	320190	0
	Ag	107	49.916	ug/L	0.473	0	19	497069	0
	Cd	111	49.959	ug/L	0.090	0	203	133694	0
	Cd	114	49.952	ug/L	0.229	0	45	316229	0
	Sb	121	49.955	ug/L	0.143	0	22	412042	0
	Sb	123	49.936	ug/L	0.147	0	14	309177	0
	Ba	135	49.989	ug/L	0.336	0	14	93604	0
	Ba	137	49.940	ug/L	0.172	0	20	157560	0
>	Tb	159		ug/L			301360	296416	0
	Tl	205	49.956	ug/L	0.284	0	426	1322416	0
	Pb	208	49.933	ug/L	0.071	0	331	1831571	0
	Bi	209		ug/L			307927	294440	0
	Th	232	50.014	ug/L	0.146	0	40	1944779	0
	U	238	50.043	ug/L	0.175	0	10	2215406	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 4
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, August 19, 2010 11:53:55
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			4707	4087	1
	Cl	37		mg/L			1264649	1246565	0
>	Ge	72		ug/L			241496	233247	0
	Ni	60	99.689	ug/L	0.399	0	28	223698	0
	Ni	62	99.638	ug/L	0.099	0	168	33225	0
	Cu	63	99.586	ug/L	0.435	0	260	475545	0
	Cu	65	99.509	ug/L	0.542	0	62	220796	0
	Zn	66	99.316	ug/L	0.412	0	253	158306	0
	Zn	67	99.410	ug/L	0.673	0	110	26229	1
	Zn	68	99.484	ug/L	0.624	0	2272	110384	0
	As-1	75	99.823	ug/L	0.779	0	35	126731	0
	As	75	99.846	ug/L	0.685	0	4780	129009	0
	Se	82	99.536	ug/L	0.938	0	-5	16035	0
	Se	78	99.599	ug/L	0.785	0	4907	43216	0
	Y	89		ug/L			230220	221127	0
	Kr	83		ug/L			76	87	3
>	In	115		ug/L			331526	314518	0
	Ag	107	99.719	ug/L	0.310	0	19	966395	0
	Cd	111	99.616	ug/L	0.176	0	203	258364	0
	Cd	114	99.692	ug/L	0.293	0	45	613599	0
	Sb	121	99.893	ug/L	0.269	0	22	806455	0
	Sb	123	99.861	ug/L	0.408	0	14	604515	0
	Ba	135	99.816	ug/L	0.239	0	14	182470	0
	Ba	137	99.715	ug/L	0.532	0	20	306104	0
>	Tb	159		ug/L			301360	290826	0
	Tl	205	100.060	ug/L	0.359	0	426	2603521	0
	Pb	208	99.931	ug/L	0.721	0	331	3587693	0
	Bi	209		ug/L			307927	286224	0
	Th	232	100.190	ug/L	0.443	0	40	3846706	0
	U	238	100.000	ug/L	0.372	0	10	4343416	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Rinse Sample
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, August 19, 2010 12:00:57
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			4707	4656	0
	Cl	37		mg/L			1264649	1304040	0
>	Ge	72		ug/L			241496	244394	0
	Ni	60	0.002	ug/L	0.004	190	28	34	27
	Ni	62	-0.074	ug/L	0.043	57	168	145	10
	Cu	63	0.001	ug/L	0.003	224	260	268	4
	Cu	65	0.001	ug/L	0.001	120	62	65	4
	Zn	66	-0.070	ug/L	0.011	16	253	140	13
	Zn	67	-0.105	ug/L	0.031	29	110	82	10
	Zn	68	-0.265	ug/L	0.055	20	2272	1998	3
	As-1	75	0.015	ug/L	0.010	68	35	55	23
	As	75	-0.040	ug/L	0.019	46	4780	4785	0
	Se	82	0.058	ug/L	0.019	32	-5	4	71
	Se	78	-0.134	ug/L	0.061	45	4907	4912	0
	Y	89		ug/L			230220	234557	0
	Kr	83		ug/L			76	73	11
>	In	115		ug/L			331526	333702	0
	Ag	107	0.017	ug/L	0.002	10	19	192	9
	Cd	111	0.001	ug/L	0.004	338	203	207	4
	Cd	114	0.003	ug/L	0.001	29	45	63	8
	Sb	121	0.059	ug/L	0.008	13	22	524	12
	Sb	123	0.060	ug/L	0.004	6	14	402	5
	Ba	135	0.003	ug/L	0.003	124	14	19	32
	Ba	137	0.004	ug/L	0.001	27	20	33	10
>	Tb	159		ug/L			301360	305015	0
	Tl	205	0.002	ug/L	0.001	29	426	495	3
	Pb	208	0.006	ug/L	0.001	19	331	545	7
	Bi	209		ug/L			307927	310110	0
	Th	232	0.036	ug/L	0.003	9	40	1471	8
	U	238	0.007	ug/L	0.001	9	10	349	9

Quantitative Analysis - Calibration Report

Sample Date/Time: Thursday, August 19, 2010 11:53:55
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\081910.cal

Analyte	Mass	r Corr Coeff	Slope	Std 1 Conc	Std 2 Conc	Std 3 Conc	Std 4 Conc	Std 5 Conc
C	13							
Cl	37							
Ge	72							
Ni	60	1.0000	0.0096	10	20	50	100	
Ni	62	1.0000	0.0014	10	20	50	100	
Cu	63	1.0000	0.0205	10	20	50	100	
Cu	65	1.0000	0.0095	10	20	50	100	
Zn	66	0.9999	0.0068	10	20	50	100	
Zn	67	0.9999	0.0011	10	20	50	100	
Zn	68	0.9999	0.0047	10	20	50	100	
As-1	75	1.0000	0.0054	10	20	50	100	
As	75	1.0000	0.0053	10	20	50	100	
Se	82	1.0000	0.0007	10	20	50	100	
Se	78	1.0000	0.0017	10	20	50	100	
Y	89							
Kr	83							
In	115							
Ag	107	1.0000	0.0308	10	20	50	100	
Cd	111	1.0000	0.0082	10	20	50	100	
Cd	114	1.0000	0.0196	10	20	50	100	
Sb	121	1.0000	0.0257	10	20	50	100	
Sb	123	1.0000	0.0192	10	20	50	100	
Ba	135	1.0000	0.0058	10	20	50	100	
Ba	137	1.0000	0.0098	10	20	50	100	
Tb	159							
Tl	205	1.0000	0.0895	10	20	50	100	
Pb	208	1.0000	0.1234	10	20	50	100	
Bi	209							
Th	232	1.0000	0.1320	10	20	50	100	
U	238	1.0000	0.1493	10	20	50	100	

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICV
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, August 19, 2010 12:07:47
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\081910.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			4707	4946	2
	Cl	37		mg/L			1264649	1261420	1
>	Ge	72		ug/L			241496	240612	0
	Ni	60	49.509	ug/L	0.106	0	28	114618	0
	Ni	62	49.339	ug/L	0.695	1	168	17056	1
	Cu	63	49.899	ug/L	0.141	0	260	245939	0
	Cu	65	50.035	ug/L	0.191	0	62	114559	0
	Zn	66	51.862	ug/L	0.040	0	253	85398	0
	Zn	67	51.706	ug/L	0.892	1	110	14125	1
	Zn	68	51.472	ug/L	0.344	0	2272	60008	0
	As-1	75	49.732	ug/L	0.109	0	35	65150	0
	As	75	49.040	ug/L	0.140	0	4780	67789	0
	Se	82	79.573	ug/L	0.479	0	-5	13223	0
	Se	78	79.104	ug/L	0.441	0	4907	36413	0
	Y	89		ug/L			230220	231478	0
	Kr	83		ug/L			76	79	5
>	In	115		ug/L			331526	327333	0
	Ag	107	48.511	ug/L	0.518	1	19	489263	0
	Cd	111	49.080	ug/L	0.322	0	203	132578	0
	Cd	114	48.974	ug/L	0.303	0	45	313729	0
	Sb	121	48.952	ug/L	0.369	0	22	411294	0
	Sb	123	48.986	ug/L	0.343	0	14	308615	0
	Ba	135	50.560	ug/L	0.185	0	14	96197	0
	Ba	137	50.644	ug/L	0.069	0	20	161809	0
>	Tb	159		ug/L			301360	301152	0
	Tl	205	49.536	ug/L	0.095	0	426	1334891	0
	Pb	208	48.759	ug/L	0.267	0	331	1812878	0
	Bi	209		ug/L			307927	300708	0
	Th	232	49.296	ug/L	0.180	0	40	1959903	0
	U	238	49.277	ug/L	0.196	0	10	2216305	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICB
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, August 19, 2010 12:14:30
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\081910.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			4707	4730	2
	Cl	37		mg/L			1264649	1281721	0
>	Ge	72		ug/L			241496	245946	0
	Ni	60	0.005	ug/L	0.001	23	28	40	6
	Ni	62	-0.191	ug/L	0.067	35	168	105	22
	Cu	63	-0.004	ug/L	0.004	111	260	245	8
	Cu	65	-0.003	ug/L	0.003	103	62	57	10
	Zn	66	-0.070	ug/L	0.006	9	253	140	8
	Zn	67	-0.125	ug/L	0.034	26	110	77	12
	Zn	68	-0.338	ug/L	0.004	1	2272	1927	0
	As-1	75	0.009	ug/L	0.010	117	35	47	28
	As	75	-0.103	ug/L	0.031	29	4780	4733	1
	Se	82	0.023	ug/L	0.035	155	-5	-1	374
	Se	78	-0.342	ug/L	0.119	34	4907	4859	1
	Y	89		ug/L			230220	233701	0
	Kr	83		ug/L			76	76	6
>	In	115		ug/L			331526	331329	0
	Ag	107	0.011	ug/L	0.000	3	19	127	3
	Cd	111	-0.004	ug/L	0.005	107	203	190	6
	Cd	114	0.001	ug/L	0.002	230	45	51	29
	Sb	121	0.029	ug/L	0.002	5	22	268	5
	Sb	123	0.027	ug/L	0.004	15	14	183	14
	Ba	135	0.003	ug/L	0.003	117	14	19	30
	Ba	137	0.002	ug/L	0.001	44	20	28	12
>	Tb	159		ug/L			301360	304490	0
	Tl	205	-0.002	ug/L	0.002	97	426	388	11
	Pb	208	0.004	ug/L	0.001	26	331	470	7
	Bi	209		ug/L			307927	307955	0
	Th	232	0.024	ug/L	0.000	1	40	986	2
	U	238	0.005	ug/L	0.000	3	10	247	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, August 19, 2010 12:21:12
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\081910.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			4707	3872	0
	Cl	37		mg/L			1264649	1264402	0
>	Ge	72		ug/L			241496	238322	0
	Ni	60	50.205	ug/L	0.370	0	28	115121	0
	Ni	62	50.042	ug/L	0.849	1	168	17132	1
	Cu	63	50.234	ug/L	0.194	0	260	245229	0
	Cu	65	50.402	ug/L	0.294	0	62	114301	0
	Zn	66	51.244	ug/L	0.364	0	253	83579	0
	Zn	67	51.504	ug/L	0.708	1	110	13936	1
	Zn	68	51.028	ug/L	0.311	0	2272	58944	0
	As-1	75	50.613	ug/L	0.066	0	35	65673	0
	As	75	50.415	ug/L	0.060	0	4780	68894	0
	Se	82	51.548	ug/L	0.362	0	-5	8482	0
	Se	78	50.961	ug/L	0.455	0	4907	24959	0
	Y	89		ug/L			230220	228582	0
	Kr	83		ug/L			76	81	6
>	In	115		ug/L			331526	323328	0
	Ag	107	49.964	ug/L	0.028	0	19	497777	0
	Cd	111	50.207	ug/L	0.080	0	203	133963	0
	Cd	114	50.381	ug/L	0.118	0	45	318799	0
	Sb	121	49.723	ug/L	0.137	0	22	412680	0
	Sb	123	49.807	ug/L	0.457	0	14	309956	0
	Ba	135	49.644	ug/L	0.158	0	14	93300	0
	Ba	137	49.948	ug/L	0.056	0	20	157634	0
>	Tb	159		ug/L			301360	297946	0
	Tl	205	49.764	ug/L	0.032	0	426	1326778	0
	Pb	208	49.950	ug/L	0.142	0	331	1837420	0
	Bi	209		ug/L			307927	295619	0
	Th	232	49.587	ug/L	0.080	0	40	1950501	0
	U	238	50.146	ug/L	0.137	0	10	2231378	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, August 19, 2010 12:27:53
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\081910.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			4707	4574	3
	Cl	37		mg/L			1264649	1289731	0
>	Ge	72		ug/L			241496	243214	0
	Ni	60	0.006	ug/L	0.004	64	28	42	20
	Ni	62	-0.176	ug/L	0.033	18	168	109	10
	Cu	63	-0.006	ug/L	0.003	47	260	231	5
	Cu	65	-0.001	ug/L	0.004	472	62	60	16
	Zn	66	-0.066	ug/L	0.014	21	253	146	16
	Zn	67	-0.164	ug/L	0.059	36	110	66	24
	Zn	68	-0.367	ug/L	0.053	14	2272	1872	2
	As-1	75	-0.007	ug/L	0.017	266	35	27	84
	As	75	-0.127	ug/L	0.031	24	4780	4649	0
	Se	82	0.012	ug/L	0.019	158	-5	-3	97
	Se	78	-0.409	ug/L	0.072	17	4907	4777	0
	Y	89		ug/L			230220	235122	0
	Kr	83		ug/L			76	70	2
>	In	115		ug/L			331526	332877	0
	Ag	107	0.012	ug/L	0.002	18	19	140	16
	Cd	111	-0.000	ug/L	0.007	3620	203	203	10
	Cd	114	0.003	ug/L	0.002	74	45	64	21
	Sb	121	0.063	ug/L	0.009	13	22	557	13
	Sb	123	0.059	ug/L	0.005	8	14	394	8
	Ba	135	0.003	ug/L	0.001	46	14	19	13
	Ba	137	0.001	ug/L	0.002	194	20	24	32
>	Tb	159		ug/L			301360	304592	0
	Tl	205	-0.003	ug/L	0.001	24	426	361	4
	Pb	208	0.004	ug/L	0.000	12	331	474	3
	Bi	209		ug/L			307927	305967	0
	Th	232	0.036	ug/L	0.003	8	40	1504	7
	U	238	0.006	ug/L	0.001	20	10	290	19

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LOW CHECK
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, August 19, 2010 12:34:32
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\081910.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			4707	3874	0
	Cl	37		mg/L			1264649	1291054	0
>	Ge	72		ug/L			241496	244916	0
	Ni	60	0.527	ug/L	0.010	1	28	1269	1
	Ni	62	0.324	ug/L	0.021	6	168	284	2
	Cu	63	0.526	ug/L	0.012	2	260	2898	2
	Cu	65	0.529	ug/L	0.017	3	62	1296	2
	Zn	66	4.173	ug/L	0.014	0	253	7231	0
	Zn	67	3.821	ug/L	0.146	3	110	1166	3
	Zn	68	3.804	ug/L	0.103	2	2272	6648	1
	As-1	75	0.214	ug/L	0.017	7	35	321	7
	As	75	0.081	ug/L	0.050	61	4780	4955	1
	Se	82	0.548	ug/L	0.017	3	-5	87	3
	Se	78	0.117	ug/L	0.136	115	4907	5025	1
	Y	89		ug/L			230220	237148	0
	Kr	83		ug/L			76	73	2
>	In	115		ug/L			331526	334736	0
	Ag	107	0.210	ug/L	0.007	3	19	2189	3
	Cd	111	0.200	ug/L	0.015	7	203	757	5
	Cd	114	0.219	ug/L	0.003	1	45	1480	1
	Sb	121	0.230	ug/L	0.006	2	22	2000	2
	Sb	123	0.232	ug/L	0.004	1	14	1508	1
	Ba	135	0.511	ug/L	0.018	3	14	1008	3
	Ba	137	0.502	ug/L	0.006	1	20	1661	0
>	Tb	159		ug/L			301360	308032	0
	Tl	205	0.193	ug/L	0.006	2	426	5764	2
	Pb	208	1.006	ug/L	0.007	0	331	38608	0
	Bi	209		ug/L			307927	308552	0
	Th	232	0.210	ug/L	0.003	1	40	8577	1
	U	238	0.214	ug/L	0.004	1	10	9854	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSA
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, August 19, 2010 12:41:12
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\081910.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			4707	14528	1
	Cl	37		mg/L			1264649	2055036	3
>	Ge	72		ug/L			241496	212634	1
	Ni	60	0.643	ug/L	0.017	2	28	1341	1
	Ni	62	3.724	ug/L	0.055	1	168	1275	1
	Cu	63	0.473	ug/L	0.010	2	260	2288	2
	Cu	65	0.678	ug/L	0.034	4	62	1426	5
	Zn	66	1.319	ug/L	0.073	5	253	2137	5
	Zn	67	1.332	ug/L	0.066	4	110	416	2
	Zn	68	0.236	ug/L	0.071	30	2272	2235	3
	As-1	75	0.011	ug/L	0.031	295	35	43	84
	As	75	-0.214	ug/L	0.045	20	4780	3966	2
	Se	82	-0.049	ug/L	0.052	104	-5	-11	63
	Se	78	-0.641	ug/L	0.081	12	4907	4095	1
	Y	89		ug/L			230220	213438	0
	Kr	83		ug/L			76	85	5
>	In	115		ug/L			331526	302317	0
	Ag	107	0.035	ug/L	0.001	2	19	347	3
	Cd	111	0.012	ug/L	0.058	470	203	215	66
	Cd	114	0.593	ug/L	0.016	2	45	3551	3
	Sb	121	0.057	ug/L	0.001	2	22	466	2
	Sb	123	0.061	ug/L	0.001	1	14	366	2
	Ba	135	0.040	ug/L	0.007	17	14	82	15
	Ba	137	0.040	ug/L	0.002	4	20	135	2
>	Tb	159		ug/L			301360	290427	0
	Tl	205	-0.007	ug/L	0.000	6	426	225	5
	Pb	208	0.044	ug/L	0.002	5	331	1909	4
	Bi	209		ug/L			307927	265441	0
	Th	232	0.060	ug/L	0.004	6	40	2358	6
	U	238	0.001	ug/L	0.000	22	10	69	19

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSAB
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, August 19, 2010 12:48:12
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\081910.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			4707	13863	0
	Cl	37		mg/L			1264649	1830452	1
>	Ge	72		ug/L			241496	201846	0
	Ni	60	19.492	ug/L	0.233	1	28	37873	2
	Ni	62	22.460	ug/L	0.553	2	168	6591	3
	Cu	63	18.747	ug/L	0.089	0	260	77649	1
	Cu	65	18.958	ug/L	0.282	1	62	36447	2
	Zn	66	20.377	ug/L	0.169	0	253	28278	1
	Zn	67	18.212	ug/L	0.415	2	110	4233	2
	Zn	68	18.660	ug/L	0.157	0	2272	19461	1
	As-1	75	18.868	ug/L	0.098	0	35	20754	1
	As	75	18.968	ug/L	0.143	0	4780	24446	1
	Se	82	-0.020	ug/L	0.023	117	-5	-7	45
	Se	78	-0.719	ug/L	0.116	16	4907	3861	1
	Y	89		ug/L			230220	205713	0
	Kr	83		ug/L			76	79	5
>	In	115		ug/L			331526	290585	0
	Ag	107	17.743	ug/L	0.079	0	19	158882	1
	Cd	111	19.170	ug/L	0.084	0	203	46079	1
	Cd	114	19.615	ug/L	0.133	0	45	111580	1
	Sb	121	0.052	ug/L	0.001	2	22	406	2
	Sb	123	0.054	ug/L	0.002	3	14	311	3
	Ba	135	0.026	ug/L	0.003	12	14	56	9
	Ba	137	0.031	ug/L	0.003	8	20	107	7
>	Tb	159		ug/L			301360	287610	0
	Tl	205	-0.008	ug/L	0.000	2	426	192	3
	Pb	208	0.039	ug/L	0.001	3	331	1708	3
	Bi	209		ug/L			307927	258389	0
	Th	232	0.034	ug/L	0.002	4	40	1326	3
	U	238	0.001	ug/L	0.000	38	10	37	28

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, August 19, 2010 12:55:13
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\081910.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			4707	3588	1
	Cl	37		mg/L			1264649	1032442	0
>	Ge	72		ug/L			241496	212264	0
	Ni	60	48.682	ug/L	0.221	0	28	99426	0
	Ni	62	48.095	ug/L	0.245	0	168	14671	1
	Cu	63	48.024	ug/L	0.207	0	260	208815	0
	Cu	65	48.036	ug/L	0.376	0	62	97024	0
	Zn	66	51.623	ug/L	0.114	0	253	74991	0
	Zn	67	50.930	ug/L	0.116	0	110	12276	0
	Zn	68	50.749	ug/L	0.096	0	2272	52223	0
	As-1	75	50.449	ug/L	0.177	0	35	58302	0
	As	75	50.015	ug/L	0.152	0	4780	60907	0
	Se	82	53.536	ug/L	0.764	1	-5	7846	0
	Se	78	52.301	ug/L	0.759	1	4907	22700	0
	Y	89		ug/L			230220	215326	0
	Kr	83		ug/L			76	69	5
>	In	115		ug/L			331526	307796	0
	Ag	107	47.442	ug/L	0.127	0	19	449951	0
	Cd	111	50.557	ug/L	0.277	0	203	128415	0
	Cd	114	50.685	ug/L	0.094	0	45	305320	0
	Sb	121	50.562	ug/L	0.505	0	22	399476	0
	Sb	123	50.829	ug/L	0.290	0	14	301127	0
	Ba	135	50.072	ug/L	0.180	0	14	89584	0
	Ba	137	50.702	ug/L	0.224	0	20	152326	0
>	Tb	159		ug/L			301360	302926	0
	Tl	205	45.791	ug/L	0.404	0	426	1241263	0
	Pb	208	46.178	ug/L	0.209	0	331	1727079	0
	Bi	209		ug/L			307927	277120	0
	Th	232	46.926	ug/L	0.227	0	40	1876688	0
	U	238	48.194	ug/L	0.363	0	10	2180387	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB2
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, August 19, 2010 13:01:55
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\081910.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			4707	4102	2
	Cl	37		mg/L			1264649	1033602	0
>	Ge	72		ug/L			241496	212650	0
	Ni	60	0.003	ug/L	0.003	91	28	31	17
	Ni	62	-0.330	ug/L	0.037	11	168	48	22
	Cu	63	-0.016	ug/L	0.001	8	260	158	3
	Cu	65	0.001	ug/L	0.005	518	62	57	18
	Zn	66	-0.075	ug/L	0.010	12	253	114	12
	Zn	67	-0.126	ug/L	0.025	19	110	67	8
	Zn	68	-0.427	ug/L	0.008	1	2272	1577	0
	As-1	75	-0.005	ug/L	0.014	266	35	25	61
	As	75	-0.222	ug/L	0.025	11	4780	3957	0
	Se	82	0.043	ug/L	0.009	21	-5	1	84
	Se	78	-0.679	ug/L	0.084	12	4907	4082	0
	Y	89		ug/L			230220	218507	0
	Kr	83		ug/L			76	63	8
>	In	115		ug/L			331526	311733	0
	Ag	107	0.011	ug/L	0.001	12	19	125	10
	Cd	111	-0.020	ug/L	0.008	40	203	138	15
	Cd	114	0.003	ug/L	0.000	13	45	61	4
	Sb	121	0.086	ug/L	0.052	60	22	708	58
	Sb	123	0.061	ug/L	0.009	13	14	380	13
	Ba	135	-0.000	ug/L	0.006	2543	14	12	81
	Ba	137	0.002	ug/L	0.001	57	20	25	14
>	Tb	159		ug/L			301360	307002	0
	Tl	205	0.001	ug/L	0.001	68	426	457	3
	Pb	208	0.002	ug/L	0.001	60	331	395	9
	Bi	209		ug/L			307927	287326	0
	Th	232	0.032	ug/L	0.002	7	40	1324	7
	U	238	0.005	ug/L	0.001	15	10	250	14

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RH25 A-L REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Thursday, August 19, 2010 13:08:35
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\081910.cal

As

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			4707	3521	3
	Cl	37		mg/L			1264649	1271134	0
>	Ge	72		ug/L			241496	204831	0
	Ni	60	0.212	ug/L	0.004	1	28	442	1
	Ni	62	-0.104	ug/L	0.026	25	168	112	6
	Cu	63	0.611	ug/L	0.011	1	260	2782	1
	Cu	65	0.135	ug/L	0.015	10	62	315	9
	Zn	66	0.861	ug/L	0.039	4	253	1418	3
	Zn	67	0.775	ug/L	0.016	2	110	272	1
	Zn	68	0.735	ug/L	0.067	9	2272	2629	2
	As-1	75	0.123	ug/L	0.044	35	35	167	29
	As	75	-0.206	ug/L	0.026	12	4780	3829	0
	Se	82	0.400	ug/L	0.070	17	-5	52	19
	Se	78	-0.670	ug/L	0.040	6	4907	3935	0
	Y	89		ug/L			230220	216353	0
	Kr	83		ug/L			76	60	3
>	In	115		ug/L			331526	297919	0
	Ag	107	0.008	ug/L	0.001	16	19	91	13
	Cd	111	-0.033	ug/L	0.020	59	203	101	48
	Cd	114	0.002	ug/L	0.002	76	45	53	18
	Sb	121	0.024	ug/L	0.001	4	22	201	3
	Sb	123	0.024	ug/L	0.002	8	14	148	7
	Ba	135	0.875	ug/L	0.016	1	14	1527	1
	Ba	137	0.887	ug/L	0.007	0	20	2597	0
>	Tb	159		ug/L			301360	300867	0
	Tl	205	-0.003	ug/L	0.001	25	426	350	5
	Pb	208	0.028	ug/L	0.001	3	331	1374	2
	Bi	209		ug/L			307927	266354	0
	Th	232	0.017	ug/L	0.001	4	40	703	3
	U	238	0.002	ug/L	0.000	1	10	118	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RH25 A REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, August 19, 2010 13:14:36
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\081910.cal

As

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			4707	5472	1
	Cl	37		mg/L			1264649	2454902	1
>	Ge	72		ug/L			241496	191052	0
	Ni	60	0.904	ug/L	0.042	4	28	1683	4
	Ni	62	0.962	ug/L	0.029	3	168	395	2
	Cu	63	2.917	ug/L	0.055	1	260	11607	1
	Cu	65	0.581	ug/L	0.012	2	62	1105	2
	Zn	66	3.415	ug/L	0.129	3	253	4652	3
	Zn	67	3.540	ug/L	0.018	0	110	849	0
	Zn	68	3.775	ug/L	0.013	0	2272	5160	0
	As-1	75	0.698	ug/L	0.038	5	35	753	5
	As	75	-0.006	ug/L	0.035	549	4780	3775	0
	Se	82	1.922	ug/L	0.038	1	-5	249	1
	Se	78	-0.215	ug/L	0.091	42	4907	3814	0
	Y	89		ug/L			230220	216889	0
	Kr	83		ug/L			76	66	1
>	In	115		ug/L			331526	274142	0
	Ag	107	0.015	ug/L	0.000	3	19	144	2
	Cd	111	-0.115	ug/L	0.013	10	203	-92	30
	Cd	114	0.011	ug/L	0.002	19	45	98	11
	Sb	121	0.030	ug/L	0.002	6	22	230	5
	Sb	123	0.031	ug/L	0.002	5	14	173	4
	Ba	135	4.171	ug/L	0.010	0	14	6657	0
	Ba	137	4.213	ug/L	0.035	0	20	11290	1
>	Tb	159		ug/L			301360	270401	0
	Tl	205	-0.010	ug/L	0.000	1	426	147	2
	Pb	208	0.065	ug/L	0.000	0	331	2458	0
	Bi	209		ug/L			307927	233709	0
	Th	232	0.045	ug/L	0.002	5	40	1639	4
	U	238	0.007	ug/L	0.000	4	10	291	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RH25 ADUP REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, August 19, 2010 13:20:37
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\081910.cal

AS

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			4707	5464	2
	Cl	37		mg/L			1264649	2509235	0
>	Ge	72		ug/L			241496	194441	0
	Ni	60	1.143	ug/L	0.042	3	28	2160	3
	Ni	62	1.348	ug/L	0.100	7	168	508	5
	Cu	63	3.192	ug/L	0.015	0	260	12909	0
	Cu	65	0.969	ug/L	0.058	6	62	1841	6
	Zn	66	1.978	ug/L	0.036	1	253	2827	1
	Zn	67	2.225	ug/L	0.027	1	110	576	1
	Zn	68	2.380	ug/L	0.123	5	2272	3987	2
	As-1	75	0.706	ug/L	0.072	10	35	775	9
	As	75	V -0.053	ug/L	0.087	163	4780	3793	1
	Se	82	1.906	ug/L	0.129	6	-5	251	6
	Se	78	-0.357	ug/L	0.204	57	4907	3836	1
	Y	89		ug/L			230220	216872	0
	Kr	83		ug/L			76	74	6
>	In	115		ug/L			331526	276135	0
	Ag	107	0.013	ug/L	0.002	14	19	130	13
	Cd	111	-0.152	ug/L	0.042	27	203	-176	55
	Cd	114	0.009	ug/L	0.002	17	45	86	9
	Sb	121	0.029	ug/L	0.004	13	22	221	12
	Sb	123	0.031	ug/L	0.003	9	14	174	9
	Ba	135	4.020	ug/L	0.069	1	14	6463	0
	Ba	137	3.980	ug/L	0.010	0	20	10742	0
>	Tb	159		ug/L			301360	269164	0
	Tl	205	-0.010	ug/L	0.001	7	426	138	13
	Pb	208	0.069	ug/L	0.001	1	331	2590	1
	Bi	209		ug/L			307927	235218	0
	Th	232	0.035	ug/L	0.001	3	40	1279	2
	U	238	0.005	ug/L	0.001	14	10	190	13

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RH25 ASPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, August 19, 2010 13:26:39
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\081910.cal

As

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			4707	5784	2
	Cl	37		mg/L			1264649	2484426	0
>	Ge	72		ug/L			241496	192223	0
	Ni	60	25.998	ug/L	0.015	0	28	48095	0
	Ni	62	26.836	ug/L	0.229	0	168	7472	0
	Cu	63	27.450	ug/L	0.166	0	260	108175	0
	Cu	65	25.211	ug/L	0.041	0	62	46139	0
	Zn	66	74.798	ug/L	0.298	0	253	98306	0
	Zn	67	69.021	ug/L	1.067	1	110	15034	1
	Zn	68	73.773	ug/L	0.315	0	2272	67927	0
	As-1	75	27.061	ug/L	0.114	0	35	28333	0
	As	75	25.354	ug/L	0.162	0	4780	29836	0
	Se	82	78.772	ug/L	0.274	0	-5	10457	0
	Se	78	76.416	ug/L	0.283	0	4907	28235	0
	Y	89		ug/L			230220	212647	0
	Kr	83		ug/L			76	70	8
>	In	115		ug/L			331526	271709	0
	Ag	107	22.898	ug/L	0.065	0	19	191714	0
	Cd	111	24.157	ug/L	0.070	0	203	54250	0
	Cd	114	24.126	ug/L	0.177	0	45	128310	0
	Sb	121	25.250	ug/L	0.037	0	22	176114	0
	Sb	123	25.293	ug/L	0.229	0	14	132280	0
	Ba	135	29.919	ug/L	0.137	0	14	47257	0
	Ba	137	30.175	ug/L	0.092	0	20	80033	0
>	Tb	159		ug/L			301360	263269	0
	Tl	205	23.453	ug/L	0.010	0	426	552717	0
	Pb	208	23.903	ug/L	0.007	0	331	777096	0
	Bi	209		ug/L			307927	231958	0
	Th	232	25.376	ug/L	0.060	0	40	882023	0
	U	238	25.604	ug/L	0.018	0	10	1006746	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RH25 B REN
Sample Dil Factor: 5
Comments:
Sample Date/Time: Thursday, August 19, 2010 13:32:42
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\081910.cal

As

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			4707	4619	1
	Cl	37		mg/L			1264649	3678137	0
>	Ge	72		ug/L			241496	181145	0
	Ni	60	1.072	ug/L	0.021	1	28	1889	1
	Ni	62	2.248	ug/L	0.257	11	168	705	9
	Cu	63	4.189	ug/L	0.029	0	260	15723	0
	Cu	65	0.931	ug/L	0.011	1	62	1650	1
	Zn	66	4.117	ug/L	0.014	0	253	5279	0
	Zn	67	4.075	ug/L	0.158	3	110	914	3
	Zn	68	4.175	ug/L	0.070	1	2272	5231	1
	As-1	75	2.381	ug/L	0.025	1	35	2373	1
	As	75	0.797	ug/L	0.036	4	4780	4357	0
	Se	82	4.847	ug/L	0.162	3	-5	602	3
	Se	78	0.027	ug/L	0.086	324	4907	3689	0
	Y	89		ug/L			230220	192693	0
	Kr	83		ug/L			76	71	10
>	In	115		ug/L			331526	257192	0
	Ag	107	0.019	ug/L	0.002	9	19	162	8
	Cd	111	-0.206	ug/L	0.011	5	203	-279	8
	Cd	114	0.006	ug/L	0.000	2	45	62	1
	Sb	121	0.044	ug/L	0.003	6	22	308	6
	Sb	123	0.044	ug/L	0.006	13	14	226	13
	Ba	135	4.252	ug/L	0.094	2	14	6365	1
	Ba	137	4.239	ug/L	0.060	1	20	10655	0
>	Tb	159		ug/L			301360	251046	0
	Tl	205	0.011	ug/L	0.004	34	426	606	14
	Pb	208	0.105	ug/L	0.003	2	331	3542	2
	Bi	209		ug/L			307927	218194	0
	Th	232	0.043	ug/L	0.001	2	40	1457	2
	U	238	0.019	ug/L	0.001	7	10	720	8

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RH25 Q REN
Sample Dil Factor: 5
Comments:
Sample Date/Time: Thursday, August 19, 2010 13:38:45
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\081910.cal

As

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			4707	3361	1
	Cl	37		mg/L			1264649	7363748	1
>	Ge	72		ug/L			241496	152468	0
	Ni	60	4.413	ug/L	0.175	3	28	6491	4
	Ni	62	10.908	ug/L	0.566	5	168	2472	5
	Cu	63	9.110	ug/L	0.037	0	260	28584	0
	Cu	65	2.828	ug/L	0.088	3	62	4139	3
	Zn	66	45.578	ug/L	0.144	0	253	47577	0
	Zn	67	40.821	ug/L	0.635	1	110	7081	1
	Zn	68	43.874	ug/L	0.625	1	2272	32624	1
	As-1	75	1.675	ug/L	0.026	1	35	1412	1
	As	75	0.862	ug/L	0.078	9	4780	3720	1
	Se	82	2.804	ug/L	0.096	3	-5	292	3
	Se	78	0.670	ug/L	0.069	10	4907	3267	0
	Y	89		ug/L			230220	171076	0
	Kr	83		ug/L			76	89	5
>	In	115		ug/L			331526	221426	0
	Ag	107	0.155	ug/L	0.001	0	19	1070	0
	Cd	111	1.026	ug/L	0.055	5	203	2007	4
	Cd	114	1.335	ug/L	0.023	1	45	5816	1
	Sb	121	1.604	ug/L	0.017	1	22	9133	1
	Sb	123	1.579	ug/L	0.013	0	14	6740	1
	Ba	135	15.694	ug/L	0.150	0	14	20204	0
	Ba	137	15.833	ug/L	0.119	0	20	34228	0
>	Tb	159		ug/L			301360	215519	0
	Tl	205	-0.005	ug/L	0.001	10	426	202	5
	Pb	208	0.041	ug/L	0.002	5	331	1331	3
	Bi	209		ug/L			307927	177286	0
	Th	232	0.014	ug/L	0.001	7	40	434	6
	U	238	0.246	ug/L	0.005	2	10	7929	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RH66 E REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, August 19, 2010 13:44:48
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\081910.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			4707	5520	2
	Cl	37		mg/L			1264649	1242172	1
>	Ge	72		ug/L			241496	249664	0
	Ni	60	2.425	ug/L	0.062	2	28	5853	2
	Ni	62	2.623	ug/L	0.056	2	168	1106	1
	Cu	63	26.531	ug/L	0.188	0	260	135804	0
	Cu	65	26.773	ug/L	0.166	0	62	63634	0
	Zn	66	56.382	ug/L	0.499	0	253	96307	0
	Zn	67	50.793	ug/L	0.915	1	110	14400	1
	Zn	68	55.609	ug/L	0.112	0	2272	67083	0
	As-1	75	10.471	ug/L	0.120	1	35	14262	0
	As	75	9.995	ug/L	0.111	1	4780	18271	0
	Se	82	0.313	ug/L	0.059	18	-5	48	20
	Se	78	-1.933	ug/L	0.079	4	4907	4274	0
	Y	89		ug/L			230220	240469	0
	Kr	83		ug/L			76	61	4
>	In	115		ug/L			331526	342193	0
	Ag	107	0.012	ug/L	0.001	11	19	149	10
	Cd	111	0.334	ug/L	0.003	0	203	1151	0
	Cd	114	0.327	ug/L	0.014	4	45	2234	3
	Sb	121	24.073	ug/L	0.041	0	22	211462	0
	Sb	123	24.081	ug/L	0.052	0	14	158616	0
	Ba	135	19.205	ug/L	0.025	0	14	38208	0
	Ba	137	19.295	ug/L	0.022	0	20	64458	0
>	Tb	159		ug/L			301360	315808	0
	Tl	205	0.004	ug/L	0.001	21	426	573	5
	Pb	208	2.612	ug/L	0.010	0	331	102156	0
	Bi	209		ug/L			307927	315534	0
	Th	232	0.021	ug/L	0.001	4	40	929	5
	U	238	0.054	ug/L	0.001	1	10	2550	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RH66 F REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, August 19, 2010 13:50:55
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\081910.cal

REN
Zn

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			4707	5552	1
	Cl	37		mg/L			1264649	1210618	0
>	Ge	72		ug/L			241496	243575	0
	Ni	60	7.899	ug/L	0.112	1	28	18535	0
	Ni	62	8.203	ug/L	0.278	3	168	3012	3
	Cu	63	55.335	ug/L	0.156	0	260	276056	0
	Cu	65	55.734	ug/L	0.085	0	62	129172	0
	Zn	66	477.613	ug/L	0.690	0	253	794041	0
	Zn	67	427.003	ug/L	2.325	0	110	117282	0
	Zn	68	473.575	ug/L	1.539	0	2272	540119	0
	As-1	75	10.712	ug/L	0.035	0	35	14234	0
	As	75	10.319	ug/L	0.058	0	4780	18247	0
	Se	82	0.529	ug/L	0.049	9	-5	83	10
	Se	78	-1.392	ug/L	0.153	11	4907	4388	1
	Y	89		ug/L			230220	282457	0
	Kr	83		ug/L			76	69	5
>	In	115		ug/L			331526	331969	0
	Ag	107	0.033	ug/L	0.001	2	19	359	1
	Cd	111	0.516	ug/L	0.004	0	203	1614	0
	Cd	114	0.456	ug/L	0.009	2	45	3005	1
	Sb	121	2.702	ug/L	0.010	0	22	23049	0
	Sb	123	2.696	ug/L	0.017	0	14	17238	0
	Ba	135	49.697	ug/L	0.329	0	14	95895	0
	Ba	137	49.755	ug/L	0.190	0	20	161219	0
>	Tb	159		ug/L			301360	307405	0
	Tl	205	0.014	ug/L	0.002	12	426	811	5
	Pb	208	1.873	ug/L	0.002	0	331	71403	0
	Bi	209		ug/L			307927	306348	0
	Th	232	0.111	ug/L	0.002	1	40	4548	1
	U	238	0.239	ug/L	0.002	0	10	10973	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RH66 G REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, August 19, 2010 13:57:00
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\081910.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			4707	5481	1
	Cl	37		mg/L			1264649	1214229	0
>	Ge	72		ug/L			241496	242287	0
	Ni	60	3.214	ug/L	0.039	1	28	7520	1
	Ni	62	2.567	ug/L	0.159	6	168	1054	5
	Cu	63	36.432	ug/L	0.191	0	260	180881	0
	Cu	65	36.643	ug/L	0.179	0	62	84498	0
	Zn	66	39.629	ug/L	0.058	0	253	65770	0
	Zn	67	36.099	ug/L	0.364	1	110	9964	1
	Zn	68	39.371	ug/L	0.266	0	2272	46757	0
	As-1	75	1.196	ug/L	0.040	3	35	1611	3
	As	75	0.681	ug/L	0.031	4	4780	5677	0
	Se	82	0.362	ug/L	0.032	8	-5	55	9
	Se	78	-1.412	ug/L	0.079	5	4907	4357	0
	Y	89		ug/L			230220	241551	0
	Kr	83		ug/L			76	65	6
>	In	115		ug/L			331526	333178	0
	Ag	107	0.011	ug/L	0.001	13	19	133	11
	Cd	111	0.180	ug/L	0.006	3	203	699	2
	Cd	114	0.156	ug/L	0.008	4	45	1060	4
	Sb	121	0.684	ug/L	0.008	1	22	5876	1
	Sb	123	0.684	ug/L	0.007	0	14	4402	1
	Ba	135	14.765	ug/L	0.020	0	14	28604	0
	Ba	137	14.881	ug/L	0.111	0	20	48410	1
>	Tb	159		ug/L			301360	307722	0
	Tl	205	-0.002	ug/L	0.001	51	426	387	6
	Pb	208	1.886	ug/L	0.001	0	331	71991	0
	Bi	209		ug/L			307927	306010	0
	Th	232	0.034	ug/L	0.002	6	40	1412	5
	U	238	0.103	ug/L	0.002	1	10	4729	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RH66 H REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, August 19, 2010 14:03:05
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\081910.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			4707	5456	0
	Cl	37		mg/L			1264649	1183600	1
>	Ge	72		ug/L			241496	239168	0
	Ni	60	2.236	ug/L	0.049	2	28	5173	2
	Ni	62	1.163	ug/L	0.046	3	168	562	2
	Cu	63	10.597	ug/L	0.066	0	260	52120	0
	Cu	65	10.807	ug/L	0.040	0	62	24644	0
	Zn	66	2.726	ug/L	0.069	2	253	4700	2
	Zn	67	2.847	ug/L	0.071	2	110	876	2
	Zn	68	2.577	ug/L	0.052	2	2272	5125	1
	As-1	75	1.313	ug/L	0.020	1	35	1743	1
	As	75	0.768	ug/L	0.029	3	4780	5715	0
	Se	82	0.307	ug/L	0.022	7	-5	45	8
	Se	78	-1.559	ug/L	0.032	2	4907	4243	0
	Y	89		ug/L			230220	236719	0
	Kr	83		ug/L			76	66	5
>	In	115		ug/L			331526	329516	0
	Ag	107	0.009	ug/L	0.000	5	19	107	4
	Cd	111	0.031	ug/L	0.011	36	203	286	10
	Cd	114	0.019	ug/L	0.002	7	45	170	5
	Sb	121	3.712	ug/L	0.044	1	22	31417	1
	Sb	123	3.731	ug/L	0.025	0	14	23675	0
	Ba	135	20.456	ug/L	0.081	0	14	39188	0
	Ba	137	20.643	ug/L	0.034	0	20	66408	0
>	Tb	159		ug/L			301360	307301	0
	Tl	205	-0.004	ug/L	0.001	24	426	336	7
	Pb	208	0.625	ug/L	0.003	0	331	24042	0
	Bi	209		ug/L			307927	301717	0
	Th	232	0.013	ug/L	0.000	3	40	588	2
	U	238	0.283	ug/L	0.003	0	10	12983	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV3
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, August 19, 2010 14:09:08
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\081910.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			4707	3932	3
	Cl	37		mg/L			1264649	1315311	0
>	Ge	72		ug/L			241496	220041	0
	Ni	60	49.321	ug/L	0.124	0	28	104421	0
	Ni	62	49.594	ug/L	0.077	0	168	15678	0
	Cu	63	49.642	ug/L	0.125	0	260	223752	0
	Cu	65	49.890	ug/L	0.268	0	62	104462	0
	Zn	66	51.721	ug/L	0.265	0	253	77885	0
	Zn	67	51.415	ug/L	0.590	1	110	12845	0
	Zn	68	51.243	ug/L	0.350	0	2272	54643	0
	As-1	75	50.263	ug/L	0.214	0	35	60216	0
	As	75	50.363	ug/L	0.269	0	4780	63548	0
	Se	82	50.698	ug/L	0.151	0	-5	7702	0
	Se	78	51.081	ug/L	0.376	0	4907	23088	0
	Y	89		ug/L			230220	205977	0
	Kr	83		ug/L			76	80	2
>	In	115		ug/L			331526	293104	0
	Ag	107	49.102	ug/L	0.210	0	19	443456	0
	Cd	111	50.453	ug/L	0.333	0	203	122031	0
	Cd	114	50.807	ug/L	0.295	0	45	291434	0
	Sb	121	50.989	ug/L	0.077	0	22	383627	0
	Sb	123	51.131	ug/L	0.226	0	14	288455	0
	Ba	135	50.751	ug/L	0.273	0	14	86463	0
	Ba	137	50.685	ug/L	0.237	0	20	145005	0
>	Tb	159		ug/L			301360	271054	0
	Tl	205	50.407	ug/L	0.301	0	426	1222573	0
	Pb	208	50.442	ug/L	0.408	0	331	1687977	0
	Bi	209		ug/L			307927	273097	0
	Th	232	50.689	ug/L	0.275	0	40	1813854	0
	U	238	51.305	ug/L	0.053	0	10	2076929	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB3
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, August 19, 2010 14:15:49
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\081910.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			4707	4414	1
	Cl	37		mg/L			1264649	1356354	0
>	Ge	72		ug/L			241496	223427	0
	Ni	60	0.001	ug/L	0.005	596	28	28	36
	Ni	62	-0.042	ug/L	0.007	16	168	142	1
	Cu	63	-0.009	ug/L	0.001	15	260	200	3
	Cu	65	0.003	ug/L	0.004	166	62	63	13
	Zn	66	-0.064	ug/L	0.006	8	253	137	5
	Zn	67	-0.118	ug/L	0.042	36	110	72	14
	Zn	68	-0.319	ug/L	0.003	0	2272	1770	0
	As-1	75	-0.003	ug/L	0.019	648	35	29	79
	As	75	0.068	ug/L	0.010	14	4780	4504	0
	Se	82	0.032	ug/L	0.018	55	-5	0	77116
	Se	78	0.271	ug/L	0.043	15	4907	4641	0
	Y	89		ug/L			230220	209858	0
	Kr	83		ug/L			76	71	7
>	In	115		ug/L			331526	299089	0
	Ag	107	0.003	ug/L	0.002	47	19	46	29
	Cd	111	0.003	ug/L	0.002	67	203	190	1
	Cd	114	-0.001	ug/L	0.002	158	45	32	41
	Sb	121	0.047	ug/L	0.003	5	22	382	5
	Sb	123	0.045	ug/L	0.001	2	14	274	2
	Ba	135	-0.002	ug/L	0.001	80	14	10	21
	Ba	137	-0.002	ug/L	0.002	116	20	13	43
>	Tb	159		ug/L			301360	273727	0
	Tl	205	0.001	ug/L	0.001	165	426	402	6
	Pb	208	-0.001	ug/L	0.001	79	331	264	10
	Bi	209		ug/L			307927	284036	0
	Th	232	0.022	ug/L	0.004	18	40	847	17
	U	238	0.003	ug/L	0.000	5	10	122	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RI46 MB1 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, August 19, 2010 14:22:32
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\081910.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			4707	4966	0
	Cl	37		mg/L			1264649	1316966	0
>	Ge	72		ug/L			241496	230156	0
	Ni	60	0.054	ug/L	0.002	3	28	146	3
	Ni	62	-0.042	ug/L	0.039	91	168	147	8
	Cu	63	0.078	ug/L	0.006	7	260	616	4
	Cu	65	0.087	ug/L	0.007	8	62	250	6
	Zn	66	1.916	ug/L	0.283	14	253	3250	13
	Zn	67	1.624	ug/L	0.250	15	110	526	12
	Zn	68	1.581	ug/L	0.289	18	2272	3861	7
	As-1	75	0.019	ug/L	0.015	78	35	57	32
	As	75	-0.099	ug/L	0.023	22	4780	4434	0
	Se	82	0.068	ug/L	0.054	79	-5	5	149
	Se	78	-0.323	ug/L	0.066	20	4907	4554	0
	Y	89		ug/L			230220	219271	0
	Kr	83		ug/L			76	70	6
>	In	115		ug/L			331526	310590	0
	Ag	107	0.001	ug/L	0.001	62	19	30	26
	Cd	111	0.009	ug/L	0.008	88	203	213	9
	Cd	114	-0.003	ug/L	0.001	19	45	21	19
	Sb	121	0.018	ug/L	0.001	6	22	161	6
	Sb	123	0.015	ug/L	0.003	20	14	104	18
	Ba	135	0.033	ug/L	0.005	14	14	73	11
	Ba	137	0.031	ug/L	0.003	9	20	114	7
>	Tb	159		ug/L			301360	286311	0
	Tl	205	-0.012	ug/L	0.001	5	426	107	16
	Pb	208	0.034	ug/L	0.002	6	331	1514	4
	Bi	209		ug/L			307927	294917	0
	Th	232	0.008	ug/L	0.001	7	40	341	6
	U	238	0.001	ug/L	0.000	24	10	40	18

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RH66 MB REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, August 19, 2010 14:28:38
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\081910.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			4707	5107	0
	Cl	37		mg/L			1264649	1341115	0
>	Ge	72		ug/L			241496	230409	0
	Ni	60	0.027	ug/L	0.003	9	28	87	6
	Ni	62	-0.077	ug/L	0.019	24	168	135	4
	Cu	63	0.014	ug/L	0.005	39	260	313	7
	Cu	65	0.024	ug/L	0.006	23	62	111	10
	Zn	66	0.116	ug/L	0.014	12	253	423	4
	Zn	67	0.065	ug/L	0.056	87	110	122	11
	Zn	68	-0.146	ug/L	0.075	50	2272	2010	3
	As-1	75	0.023	ug/L	0.024	105	35	62	48
	As	75	-0.070	ug/L	0.030	42	4780	4475	0
	Se	82	0.092	ug/L	0.086	93	-5	9	144
	Se	78	-0.233	ug/L	0.140	59	4907	4593	0
	Y	89		ug/L			230220	217623	0
	Kr	83		ug/L			76	67	13
>	In	115		ug/L			331526	309455	0
	Ag	107	-0.000	ug/L	0.000	116	19	16	8
	Cd	111	-0.001	ug/L	0.003	193	203	186	3
	Cd	114	-0.004	ug/L	0.000	12	45	19	13
	Sb	121	0.008	ug/L	0.001	9	22	82	7
	Sb	123	0.008	ug/L	0.001	9	14	61	7
	Ba	135	0.008	ug/L	0.002	20	14	28	11
	Ba	137	0.006	ug/L	0.000	7	20	37	3
>	Tb	159		ug/L			301360	282713	0
	Tl	205	-0.012	ug/L	0.001	5	426	103	15
	Pb	208	0.005	ug/L	0.001	27	331	498	10
	Bi	209		ug/L			307927	294262	0
	Th	232	0.002	ug/L	0.001	34	40	114	23
	U	238	0.000	ug/L	0.000	22	10	17	10

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RH66 MBSPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, August 19, 2010 14:34:40
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\081910.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			4707	5404	1
	Cl	37		mg/L			1264649	1337939	0
>	Ge	72		ug/L			241496	232455	0
	Ni	60	23.893	ug/L	0.193	0	28	53454	0
	Ni	62	23.571	ug/L	0.288	1	168	7957	1
	Cu	63	24.802	ug/L	0.164	0	260	118222	0
	Cu	65	25.067	ug/L	0.093	0	62	55478	0
	Zn	66	75.282	ug/L	0.330	0	253	119650	0
	Zn	67	69.783	ug/L	0.236	0	110	18381	0
	Zn	68	74.108	ug/L	0.892	1	2272	82509	1
	As-1	75	24.600	ug/L	0.132	0	35	31151	0
	As	75	23.613	ug/L	0.071	0	4780	33920	0
	Se	82	72.838	ug/L	0.454	0	-5	11693	0
	Se	78	72.550	ug/L	0.160	0	4907	32656	0
	Y	89		ug/L			230220	219502	0
	Kr	83		ug/L			76	78	2
>	In	115		ug/L			331526	310988	0
	Ag	107	23.856	ug/L	0.115	0	19	228610	0
	Cd	111	23.571	ug/L	0.192	0	203	60593	0
	Cd	114	23.578	ug/L	0.079	0	45	143527	0
	Sb	121	0.006	ug/L	0.002	35	22	68	24
	Sb	123	0.006	ug/L	0.001	14	14	51	10
	Ba	135	23.979	ug/L	0.066	0	14	43352	0
	Ba	137	24.127	ug/L	0.075	0	20	73248	0
>	Tb	159		ug/L			301360	284768	0
	Tl	205	24.183	ug/L	0.057	0	426	616451	0
	Pb	208	24.425	ug/L	0.060	0	331	858892	0
	Bi	209		ug/L			307927	298912	0
	Th	232	24.058	ug/L	0.076	0	40	904475	0
	U	238	24.093	ug/L	0.110	0	10	1024694	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RI46 MB1SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, August 19, 2010 14:40:39
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\081910.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			4707	5050	1
	Cl	37		mg/L			1264649	1320215	0
>	Ge	72		ug/L			241496	228971	0
	Ni	60	25.726	ug/L	0.102	0	28	56691	0
	Ni	62	25.610	ug/L	0.146	0	168	8502	0
	Cu	63	26.381	ug/L	0.132	0	260	123847	0
	Cu	65	26.453	ug/L	0.164	0	62	57663	0
	Zn	66	76.705	ug/L	0.572	0	253	120078	0
	Zn	67	70.414	ug/L	0.156	0	110	18268	0
	Zn	68	75.602	ug/L	0.433	0	2272	82866	0
	As-1	75	25.435	ug/L	0.146	0	35	31724	0
	As	75	24.649	ug/L	0.149	0	4780	34679	0
	Se	82	73.060	ug/L	0.507	0	-5	11552	0
	Se	78	73.424	ug/L	0.577	0	4907	32498	0
	Y	89		ug/L			230220	218842	0
	Kr	83		ug/L			76	84	2
>	In	115		ug/L			331526	308537	0
	Ag	107	25.425	ug/L	0.161	0	19	241718	0
	Cd	111	24.592	ug/L	0.188	0	203	62709	0
	Cd	114	24.465	ug/L	0.089	0	45	147745	0
	Sb	121	0.006	ug/L	0.001	18	22	65	12
	Sb	123	0.006	ug/L	0.002	30	14	51	22
	Ba	135	25.673	ug/L	0.013	0	14	46049	0
	Ba	137	25.665	ug/L	0.092	0	20	77300	0
>	Tb	159		ug/L			301360	285134	0
	Tl	205	25.727	ug/L	0.071	0	426	656618	0
	Pb	208	25.929	ug/L	0.201	0	331	912888	0
	Bi	209		ug/L			307927	294654	0
	Th	232	25.572	ug/L	0.096	0	40	962634	0
	U	238	25.622	ug/L	0.243	0	10	1091074	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RI46 ADUP REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, August 19, 2010 14:46:38
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\081910.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			4707	5015	1
	Cl	37		mg/L			1264649	1506862	0
>	Ge	72		ug/L			241496	222187	0
	Ni	60	**2.810**	ug/L	0.055	1	28	6032	2
	Ni	62	**1.907**	ug/L	0.028	1	168	758	1
	Cu	63	**0.177**	ug/L	0.017	9	260	1046	7
	Cu	65	**0.189**	ug/L	0.006	3	62	455	2
	Zn	66	**0.663**	ug/L	0.032	4	253	1238	4
	Zn	67	**0.861**	ug/L	0.037	4	110	317	3
	Zn	68	**0.777**	ug/L	0.047	6	2272	2896	2
	As-1	75	**0.127**	ug/L	0.035	27	35	185	22
	As	75	**-0.045**	ug/L	0.031	67	4780	4344	0
	Se	82	**0.077**	ug/L	0.005	5	-5	6	9
	Se	78	**-0.462**	ug/L	0.026	5	4907	4345	0
	Y	89		ug/L			230220	217717	0
	Kr	83		ug/L			76	72	1
>	In	115		ug/L			331526	303288	0
	Ag	107	**0.001**	ug/L	0.001	97	19	27	34
	Cd	111	**0.005**	ug/L	0.007	144	203	197	8
	Cd	114	**0.009**	ug/L	0.002	20	45	97	11
	Sb	121	**0.014**	ug/L	0.001	4	22	130	4
	Sb	123	**0.018**	ug/L	0.003	16	14	118	13
	Ba	135	**15.297**	ug/L	0.055	0	14	26975	0
	Ba	137	**15.384**	ug/L	0.105	0	20	45553	0
>	Tb	159		ug/L			301360	280516	0
	Tl	205	**-0.009**	ug/L	0.001	6	426	165	9
	Pb	208	**0.012**	ug/L	0.001	9	331	708	5
	Bi	209		ug/L			307927	276364	0
	Th	232	**0.013**	ug/L	0.001	10	40	509	9
	U	238	**0.003**	ug/L	0.000	3	10	135	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RI46 A REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, August 19, 2010 14:52:38
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\081910.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			4707	4774	1
	Cl	37		mg/L			1264649	1458262	0
>	Ge	72		ug/L			241496	217967	0
	Ni	60	2.872	ug/L	0.058	2	28	6047	2
	Ni	62	2.065	ug/L	0.055	2	168	792	2
	Cu	63	0.183	ug/L	0.017	9	260	1051	6
	Cu	65	0.191	ug/L	0.007	3	62	452	4
	Zn	66	0.670	ug/L	0.011	1	253	1225	2
	Zn	67	0.754	ug/L	0.096	12	110	285	8
	Zn	68	0.699	ug/L	0.124	17	2272	2761	5
	As-1	75	0.115	ug/L	0.008	6	35	168	5
	As	75	-0.084	ug/L	0.010	11	4780	4216	0
	Se	82	0.105	ug/L	0.029	27	-5	10	40
	Se	78	-0.540	ug/L	0.065	12	4907	4234	1
	Y	89		ug/L			230220	215472	0
	Kr	83		ug/L			76	68	2
>	In	115		ug/L			331526	302073	0
	Ag	107	0.001	ug/L	0.000	16	19	26	5
	Cd	111	0.011	ug/L	0.009	86	203	212	10
	Cd	114	0.012	ug/L	0.001	10	45	111	6
	Sb	121	0.018	ug/L	0.001	7	22	162	6
	Sb	123	0.020	ug/L	0.003	12	14	130	12
	Ba	135	15.667	ug/L	0.126	0	14	27517	0
	Ba	137	15.908	ug/L	0.038	0	20	46916	0
>	Tb	159		ug/L			301360	281615	0
	Tl	205	-0.009	ug/L	0.000	2	426	172	3
	Pb	208	0.012	ug/L	0.001	6	331	743	3
	Bi	209		ug/L			307927	273617	0
	Th	232	0.003	ug/L	0.000	5	40	161	3
	U	238	0.002	ug/L	0.000	1	10	87	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RI46 ASPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, August 19, 2010 14:58:39
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\081910.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			4707	5091	2
	Cl	37		mg/L			1264649	1417934	0
>	Ge	72		ug/L			241496	213546	0
	Ni	60	27.458	ug/L	0.225	0	28	56431	1
	Ni	62	26.348	ug/L	0.187	0	168	8153	0
	Cu	63	24.703	ug/L	0.052	0	260	108173	0
	Cu	65	24.670	ug/L	0.229	0	62	50161	1
	Zn	66	75.291	ug/L	0.469	0	253	109927	0
	Zn	67	70.662	ug/L	0.370	0	110	17097	0
	Zn	68	74.341	ug/L	0.245	0	2272	76029	0
	As-1	75	26.125	ug/L	0.193	0	35	30390	1
	As	75	24.822	ug/L	0.138	0	4780	32541	1
	Se	82	75.402	ug/L	0.257	0	-5	11120	0
	Se	78	74.186	ug/L	0.181	0	4907	30578	0
	Y	89		ug/L			230220	212352	1
	Kr	83		ug/L			76	76	2
>	In	115		ug/L			331526	299504	0
	Ag	107	15.051	ug/L	0.033	0	19	138916	0
	Cd	111	24.415	ug/L	0.218	0	203	60438	0
	Cd	114	24.443	ug/L	0.248	1	45	143290	1
	Sb	121	0.016	ug/L	0.003	20	22	145	17
	Sb	123	0.016	ug/L	0.001	5	14	107	5
	Ba	135	40.984	ug/L	0.253	0	14	71352	1
	Ba	137	41.421	ug/L	0.173	0	20	121092	0
>	Tb	159		ug/L			301360	281581	0
	Tl	205	23.924	ug/L	0.131	0	426	603009	0
	Pb	208	24.204	ug/L	0.047	0	331	841595	0
	Bi	209		ug/L			307927	269623	0
	Th	232	24.592	ug/L	0.014	0	40	914215	0
	U	238	24.908	ug/L	0.045	0	10	1047505	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RI46 B REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, August 19, 2010 15:04:39
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\081910.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			4707	5335	3
	Cl	37		mg/L			1264649	1170550	1
>	Ge	72		ug/L			241496	209694	0
	Ni	60	5.112	ug/L	0.032	0	28	10335	0
	Ni	62	4.864	ug/L	0.245	5	168	1597	4
	Cu	63	0.269	ug/L	0.011	4	260	1379	3
	Cu	65	0.425	ug/L	0.024	5	62	902	5
	Zn	66	0.816	ug/L	0.006	0	253	1388	1
	Zn	67	0.701	ug/L	0.150	21	110	261	14
	Zn	68	0.677	ug/L	0.037	5	2272	2635	0
	As-1	75	0.389	ug/L	0.026	6	35	475	6
	As	75	0.111	ug/L	0.061	54	4780	4275	1
	Se	82	0.185	ug/L	0.026	14	-5	22	16
	Se	78	-0.704	ug/L	0.140	19	4907	4017	1
	Y	89		ug/L			230220	212641	0
	Kr	83		ug/L			76	68	4
>	In	115		ug/L			331526	298601	0
	Ag	107	0.003	ug/L	0.000	7	19	44	4
	Cd	111	0.011	ug/L	0.007	65	203	209	8
	Cd	114	0.013	ug/L	0.003	20	45	114	13
	Sb	121	0.056	ug/L	0.004	6	22	450	5
	Sb	123	0.057	ug/L	0.008	13	14	338	12
	Ba	135	6.261	ug/L	0.034	0	14	10878	0
	Ba	137	6.295	ug/L	0.035	0	20	18362	0
>	Tb	159		ug/L			301360	284553	0
	Tl	205	-0.006	ug/L	0.001	12	426	252	8
	Pb	208	U 0.009	ug/L	0.001	14	331	617	7
	Bi	209		ug/L			307927	267879	0
	Th	232	0.015	ug/L	0.003	16	40	609	16
	U	238	0.006	ug/L	0.001	10	10	284	10

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RI46 C REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, August 19, 2010 15:10:41
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\081910.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			4707	4817	3
	Cl	37		mg/L			1264649	1104155	1
>	Ge	72		ug/L			241496	203218	1
	Ni	60	5.118	ug/L	0.026	0	28	10029	0
	Ni	62	4.745	ug/L	0.114	2	168	1513	1
	Cu	63	0.260	ug/L	0.003	0	260	1301	1
	Cu	65	0.395	ug/L	0.003	0	62	815	1
	Zn	66	0.593	ug/L	0.005	0	253	1036	1
	Zn	67	0.564	ug/L	0.051	9	110	222	6
	Zn	68	0.361	ug/L	0.050	13	2272	2253	1
	As-1	75	0.380	ug/L	0.015	3	35	449	3
	As	75	0.031	ug/L	0.016	51	4780	4056	1
	Se	82	0.220	ug/L	0.043	19	-5	26	22
	Se	78	-0.932	ug/L	0.040	4	4907	3816	1
	Y	89		ug/L			230220	207947	0
	Kr	83		ug/L			76	61	2
>	In	115		ug/L			331526	293759	0
	Ag	107	0.000	ug/L	0.000	184	19	18	14
	Cd	111	0.004	ug/L	0.005	140	203	188	6
	Cd	114	0.009	ug/L	0.002	18	45	92	11
	Sb	121	0.060	ug/L	0.004	7	22	469	6
	Sb	123	0.056	ug/L	0.001	2	14	330	1
	Ba	135	6.153	ug/L	0.040	0	14	10516	0
	Ba	137	6.236	ug/L	0.031	0	20	17895	0
>	Tb	159		ug/L			301360	284493	0
	Tl	205	-0.009	ug/L	0.000	3	426	175	4
	Pb	208	0.021	ug/L	0.001	5	331	1048	3
	Bi	209		ug/L			307927	264476	0
	Th	232	0.003	ug/L	0.001	19	40	155	13
	U	238	0.002	ug/L	0.000	15	10	104	13

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RI46 D REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, August 19, 2010 15:16:43
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\081910.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			4707	4906	1
	Cl	37		mg/L			1264649	1083453	0
>	Ge	72		ug/L			241496	192325	1
	Ni	60	8.057	ug/L	0.045	0	28	14928	1
	Ni	62	7.443	ug/L	0.215	2	168	2170	3
	Cu	63	0.237	ug/L	0.018	7	260	1141	7
	Cu	65	0.293	ug/L	0.022	7	62	586	7
	Zn	66	0.530	ug/L	0.006	1	253	897	1
	Zn	67	0.570	ug/L	0.106	18	110	211	10
	Zn	68	0.424	ug/L	0.066	15	2272	2190	3
	As-1	75	0.430	ug/L	0.048	11	35	477	9
	As	75	0.195	ug/L	0.035	17	4780	4007	0
	Se	82	0.326	ug/L	0.114	35	-5	38	37
	Se	78	-0.473	ug/L	0.063	13	4907	3757	0
	Y	89		ug/L			230220	196336	0
	Kr	83		ug/L			76	56	13
>	In	115		ug/L			331526	278801	0
	Ag	107	-0.000	ug/L	0.000	225	19	15	16
	Cd	111	-0.008	ug/L	0.006	79	203	153	9
	Cd	114	0.005	ug/L	0.003	62	45	67	26
	Sb	121	0.076	ug/L	0.003	3	22	565	3
	Sb	123	0.076	ug/L	0.001	1	14	419	2
	Ba	135	7.398	ug/L	0.037	0	14	11999	1
	Ba	137	7.434	ug/L	0.079	1	20	20245	1
>	Tb	159		ug/L			301360	273719	0
	Tl	205	-0.010	ug/L	0.000	1	426	137	2
	Pb	208	0.005	ug/L	0.001	15	331	460	5
	Bi	209		ug/L			307927	254884	1
	Th	232	0.002	ug/L	0.000	17	40	98	10
	U	238	0.005	ug/L	0.000	6	10	205	6

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV4
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, August 19, 2010 15:22:45
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\081910.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			4707	3646	2
	Cl	37		mg/L			1264649	1135705	0
>	Ge	72		ug/L			241496	189249	0
	Ni	60	47.529	ug/L	0.510	1	28	86544	0
	Ni	62	47.467	ug/L	0.713	1	168	12911	1
	Cu	63	47.467	ug/L	0.075	0	260	184018	0
	Cu	65	47.345	ug/L	0.186	0	62	85263	0
	Zn	66	51.638	ug/L	0.464	0	253	66878	0
	Zn	67	50.808	ug/L	0.793	1	110	10918	1
	Zn	68	50.746	ug/L	0.372	0	2272	46557	0
	As-1	75	50.244	ug/L	0.409	0	35	51769	0
	As	75	50.035	ug/L	0.432	0	4780	54323	0
	Se	82	52.655	ug/L	0.364	0	-5	6880	0
	Se	78	52.151	ug/L	0.417	0	4907	20192	0
	Y	89		ug/L			230220	187970	0
	Kr	83		ug/L			76	67	2
>	In	115		ug/L			331526	269397	0
	Ag	107	46.581	ug/L	0.577	1	19	386664	1
	Cd	111	50.714	ug/L	0.278	0	203	112742	0
	Cd	114	50.659	ug/L	0.293	0	45	267087	0
	Sb	121	51.549	ug/L	0.273	0	22	356475	0
	Sb	123	51.699	ug/L	0.361	0	14	268069	0
	Ba	135	50.584	ug/L	0.281	0	14	79208	0
	Ba	137	51.001	ug/L	0.160	0	20	134107	0
>	Tb	159		ug/L			301360	265331	0
	Tl	205	46.025	ug/L	0.263	0	426	1092776	0
	Pb	208	46.784	ug/L	0.243	0	331	1532580	0
	Bi	209		ug/L			307927	247691	0
	Th	232	48.179	ug/L	0.174	0	40	1687657	0
	U	238	49.121	ug/L	0.087	0	10	1946499	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB4
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, August 19, 2010 15:29:26
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\081910.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			4707	4015	0
	Cl	37		mg/L			1264649	1156405	0
>	Ge	72		ug/L			241496	191220	0
	Ni	60	0.003	ug/L	0.002	70	28	27	12
	Ni	62	-0.197	ug/L	0.033	16	168	80	10
	Cu	63	-0.017	ug/L	0.001	5	260	139	3
	Cu	65	-0.001	ug/L	0.004	341	62	47	14
	Zn	66	-0.070	ug/L	0.009	13	253	110	10
	Zn	67	-0.135	ug/L	0.046	33	110	58	17
	Zn	68	-0.325	ug/L	0.024	7	2272	1509	1
	As-1	75	0.021	ug/L	0.003	16	35	49	7
	As	75	0.042	ug/L	0.046	109	4780	3828	1
	Se	82	0.025	ug/L	0.030	117	-5	0	440
	Se	78	0.147	ug/L	0.140	95	4907	3932	1
	Y	89		ug/L			230220	190605	0
	Kr	83		ug/L			76	66	6
>	In	115		ug/L			331526	273406	0
	Ag	107	0.004	ug/L	0.002	51	19	46	33
	Cd	111	-0.012	ug/L	0.012	97	203	140	18
	Cd	114	-0.000	ug/L	0.002	3384	45	36	31
	Sb	121	0.046	ug/L	0.003	6	22	339	6
	Sb	123	0.051	ug/L	0.003	6	14	280	5
	Ba	135	-0.001	ug/L	0.000	35	14	9	7
	Ba	137	0.000	ug/L	0.002	681	20	17	25
>	Tb	159		ug/L			301360	268843	0
	Tl	205	-0.006	ug/L	0.001	17	426	236	10
	Pb	208	-0.001	ug/L	0.001	106	331	268	10
	Bi	209		ug/L			307927	257105	1
	Th	232	0.026	ug/L	0.002	8	40	967	7
	U	238	0.003	ug/L	0.001	15	10	147	14

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RI65 MB1 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, August 19, 2010 15:39:23
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\081910.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			4707	4074	0
	Cl	37		mg/L			1264649	1110780	0
>	Ge	72		ug/L			241496	198653	0
	Ni	60	0.022	ug/L	0.005	21	28	65	13
	Ni	62	-0.223	ug/L	0.016	7	168	75	6
	Cu	63	0.163	ug/L	0.003	1	260	878	1
	Cu	65	0.188	ug/L	0.022	11	62	406	10
	Zn	66	0.116	ug/L	0.023	19	253	366	8
	Zn	67	-0.052	ug/L	0.073	140	110	79	20
	Zn	68	-0.246	ug/L	0.019	7	2272	1641	1
	As-1	75	V 0.003	ug/L	0.015	536	35	32	51
	As	75	-0.193	ug/L	0.049	25	4780	3728	1
	Se	82	0.029	ug/L	0.037	128	-5	0	1090
	Se	78	-0.578	ug/L	0.108	18	4907	3846	0
	Y	89		ug/L			230220	202707	0
	Kr	83		ug/L			76	65	6
>	In	115		ug/L			331526	289672	0
	Ag	107	0.001	ug/L	0.000	34	19	22	8
	Cd	111	-0.014	ug/L	0.003	19	203	143	4
	Cd	114	-0.004	ug/L	0.001	22	45	14	39
	Sb	121	0.010	ug/L	0.000	2	22	90	2
	Sb	123	0.009	ug/L	0.002	21	14	63	17
	Ba	135	0.015	ug/L	0.005	29	14	37	19
	Ba	137	0.011	ug/L	0.002	17	20	48	11
>	Tb	159		ug/L			301360	282448	0
	Tl	205	-0.012	ug/L	0.000	3	426	96	11
	Pb	208	V 0.013	ug/L	0.001	6	331	758	3
	Bi	209		ug/L			307927	268487	0
	Th	232	0.008	ug/L	0.005	63	40	354	56
	U	238	0.000	ug/L	0.000	46	10	24	28

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RI65 MB1SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, August 19, 2010 15:45:26
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\081910.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			4707	4489	2
	Cl	37		mg/L			1264649	1109105	0
>	Ge	72		ug/L			241496	196025	0
	Ni	60	24.158	ug/L	0.342	1	28	45575	1
	Ni	62	23.775	ug/L	0.139	0	168	6767	0
	Cu	63	24.639	ug/L	0.152	0	260	99039	0
	Cu	65	24.440	ug/L	0.313	1	62	45612	0
	Zn	66	75.340	ug/L	0.700	0	253	100973	0
	Zn	67	69.956	ug/L	0.397	0	110	15538	0
	Zn	68	74.362	ug/L	0.188	0	2272	69810	0
	As-1	75	25.446	ug/L	0.131	0	35	27172	0
	As	75	24.042	ug/L	0.128	0	4780	29053	0
	Se	82	76.195	ug/L	0.322	0	-5	10315	0
	Se	78	74.718	ug/L	0.059	0	4907	28242	0
	Y	89		ug/L			230220	200437	0
	Kr	83		ug/L			76	66	6
>	In	115		ug/L			331526	286537	0
	Ag	107	23.360	ug/L	0.142	0	19	206252	0
	Cd	111	24.221	ug/L	0.164	0	203	57363	0
	Cd	114	24.036	ug/L	0.133	0	45	134806	0
	Sb	121	0.009	ug/L	0.001	9	22	83	7
	Sb	123	0.009	ug/L	0.002	18	14	60	14
	Ba	135	25.053	ug/L	0.083	0	14	41732	0
	Ba	137	25.322	ug/L	0.171	0	20	70829	0
>	Tb	159		ug/L			301360	281657	0
	Tl	205	22.914	ug/L	0.136	0	426	577723	0
	Pb	208	23.459	ug/L	0.138	0	331	815908	0
	Bi	209		ug/L			307927	268074	0
	Th	232	23.734	ug/L	0.083	0	40	882551	0
	U	238	24.087	ug/L	0.073	0	10	1013206	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RI46 E REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, August 19, 2010 15:51:32
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\081910.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			4707	4053	0
	Cl	37		mg/L			1264649	1047747	1
>	Ge	72		ug/L			241496	181285	1
	Ni	60	3.061	ug/L	0.039	1	28	5358	1
	Ni	62	2.413	ug/L	0.167	6	168	749	6
	Cu	63	0.216	ug/L	0.001	0	260	996	1
	Cu	65	0.208	ug/L	0.011	5	62	405	5
	Zn	66	1.063	ug/L	0.065	6	253	1506	6
	Zn	67	0.937	ug/L	0.199	21	110	274	15
	Zn	68	1.171	ug/L	0.064	5	2272	2696	3
	As-1	75	0.370	ug/L	0.028	7	35	391	6
	As	75	0.264	ug/L	0.065	24	4780	3843	0
	Se	82	0.068	ug/L	0.039	57	-5	4	108
	Se	78	-0.274	ug/L	0.146	53	4907	3601	0
	Y	89		ug/L			230220	187370	0
	Kr	83		ug/L			76	58	6
>	In	115		ug/L			331526	266873	1
	Ag	107	0.001	ug/L	0.000	17	19	27	7
	Cd	111	-0.015	ug/L	0.007	49	203	131	13
	Cd	114	0.005	ug/L	0.004	80	45	63	35
	Sb	121	0.031	ug/L	0.002	4	22	231	3
	Sb	123	0.029	ug/L	0.003	11	14	158	10
	Ba	135	3.966	ug/L	0.037	0	14	6162	0
	Ba	137	4.053	ug/L	0.038	0	20	10572	1
>	Tb	159		ug/L			301360	266903	0
	Tl	205	-0.010	ug/L	0.001	6	426	137	12
	Pb	208	U 0.007	ug/L	0.001	17	331	509	6
	Bi	209		ug/L			307927	247383	0
	Th	232	0.016	ug/L	0.003	16	40	597	15
	U	238	0.005	ug/L	0.000	4	10	204	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RI46 F REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, August 19, 2010 15:57:36
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\081910.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			4707	4055	0
	Cl	37		mg/L			1264649	992989	1
>	Ge	72		ug/L			241496	167873	1
	Ni	60	5.594	ug/L	0.052	0	28	9052	0
	Ni	62	4.926	ug/L	0.378	7	168	1293	6
	Cu	63	0.355	ug/L	0.007	1	260	1401	3
	Cu	65	0.564	ug/L	0.032	5	62	943	6
	Zn	66	0.669	ug/L	0.020	3	253	943	3
	Zn	67	0.441	ug/L	0.072	16	110	160	7
	Zn	68	0.592	ug/L	0.047	7	2272	2042	1
	As-1	75	0.499	ug/L	0.010	2	35	480	1
	As	75	0.456	ug/L	0.017	3	4780	3732	1
	Se	82	0.173	ug/L	0.074	42	-5	16	52
	Se	78	0.082	ug/L	0.042	51	4907	3434	1
	Y	89		ug/L			230220	176323	1
	Kr	83		ug/L			76	60	1
>	In	115		ug/L			331526	249162	1
	Ag	107	0.000	ug/L	0.001	149	19	17	29
	Cd	111	0.007	ug/L	0.005	73	203	166	6
	Cd	114	0.020	ug/L	0.005	26	45	133	20
	Sb	121	0.033	ug/L	0.002	6	22	227	5
	Sb	123	0.031	ug/L	0.002	7	14	157	5
	Ba	135	6.344	ug/L	0.042	0	14	9197	1
	Ba	137	6.489	ug/L	0.037	0	20	15795	1
>	Tb	159		ug/L			301360	256559	1
	Tl	205	-0.009	ug/L	0.000	3	426	145	5
	Pb	208	U 0.003	ug/L	0.001	19	331	371	5
	Bi	209		ug/L			307927	234595	1
	Th	232	0.005	ug/L	0.001	13	40	220	10
	U	238	0.006	ug/L	0.001	14	10	252	15

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RI46 G REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, August 19, 2010 16:03:40
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\081910.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			4707	3895	1
	Cl	37		mg/L			1264649	980300	0
>	Ge	72		ug/L			241496	163314	1
	Ni	60	4.242	ug/L	0.018	0	28	6684	1
	Ni	62	3.663	ug/L	0.312	8	168	964	5
	Cu	63	0.204	ug/L	0.024	11	260	855	7
	Cu	65	0.213	ug/L	0.013	6	62	372	6
	Zn	66	0.560	ug/L	0.035	6	253	795	6
	Zn	67	0.459	ug/L	0.135	29	110	159	15
	Zn	68	0.717	ug/L	0.119	16	2272	2083	5
	As-1	75	0.287	ug/L	0.042	14	35	279	14
	As	75	0.244	ug/L	0.061	24	4780	3445	0
	Se	82	0.131	ug/L	0.018	13	-5	11	19
	Se	78	0.064	ug/L	0.293	455	4907	3335	0
	Y	89		ug/L			230220	169688	1
	Kr	83		ug/L			76	60	8
>	In	115		ug/L			331526	243076	1
	Ag	107	-0.001	ug/L	0.001	107	19	10	45
	Cd	111	-0.017	ug/L	0.001	8	203	115	3
	Cd	114	0.008	ug/L	0.001	18	45	71	9
	Sb	121	0.050	ug/L	0.003	5	22	329	5
	Sb	123	0.057	ug/L	0.004	6	14	276	4
	Ba	135	5.442	ug/L	0.084	1	14	7698	1
	Ba	137	5.506	ug/L	0.094	1	20	13079	2
>	Tb	159		ug/L			301360	252364	1
	Tl	205	-0.010	ug/L	0.001	5	426	128	8
	Pb	208	V 0.006	ug/L	0.001	21	331	460	9
	Bi	209		ug/L			307927	233817	1
	Th	232	0.002	ug/L	0.000	8	40	97	4
	U	238	0.005	ug/L	0.000	7	10	189	6

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RI46 H REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, August 19, 2010 16:09:45
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\081910.cal

	Analyte	Mass	Conc. Mean		Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13			mg/L			4707	3891	0
	Cl	37			mg/L			1264649	939743	0
>	Ge	72			ug/L			241496	160905	0
	Ni	60	2.315		ug/L	0.027	1	28	3602	1
	Ni	62	1.830		ug/L	0.086	4	168	531	3
	Cu	63	0.212		ug/L	0.011	5	260	870	4
	Cu	65	0.228		ug/L	0.006	2	62	391	2
	Zn	66	0.272		ug/L	0.005	1	253	467	0
	Zn	67	0.240		ug/L	0.108	44	110	117	17
	Zn	68	0.386		ug/L	0.074	19	2272	1803	2
	As-1	75	0.549		ug/L	0.016	2	35	504	2
	As	75	0.480		ug/L	0.026	5	4780	3597	0
	Se	82	0.161		ug/L	0.019	11	-5	14	14
	Se	78	0.021		ug/L	0.083	387	4907	3275	0
	Y	89			ug/L			230220	166339	0
	Kr	83			ug/L			76	61	5
>	In	115			ug/L			331526	238163	0
	Ag	107	-0.000		ug/L	0.000	166	19	12	11
	Cd	111	-0.017		ug/L	0.003	17	203	112	4
	Cd	114	-0.001		ug/L	0.001	166	45	29	19
	Sb	121	0.047		ug/L	0.002	5	22	301	5
	Sb	123	0.053		ug/L	0.007	13	14	255	13
	Ba	135	7.044		ug/L	0.046	0	14	9759	0
	Ba	137	7.066		ug/L	0.030	0	20	16439	0
>	Tb	159			ug/L			301360	249998	0
	Tl	205	-0.012		ug/L	0.000	0	426	92	2
	Pb	208	U	0.003	ug/L	0.000	11	331	374	2
	Bi	209			ug/L			307927	231380	0
	Th	232	0.001		ug/L	0.000	29	40	74	15
	U	238	0.010		ug/L	0.000	2	10	397	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RI46 I REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, August 19, 2010 16:15:50
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\081910.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			4707	3874	1
	Cl	37		mg/L			1264649	912047	0
>	Ge	72		ug/L			241496	162018	0
	Ni	60	3.488	ug/L	0.029	0	28	5455	0
	Ni	62	2.951	ug/L	0.185	6	168	793	5
	Cu	63	0.186	ug/L	0.018	9	260	792	6
	Cu	65	0.201	ug/L	0.016	7	62	352	6
	Zn	66	0.467	ug/L	0.021	4	253	685	3
	Zn	67	0.347	ug/L	0.044	12	110	137	5
	Zn	68	0.488	ug/L	0.071	14	2272	1893	3
	As-1	75	U 0.189	ug/L	0.018	9	35	190	7
	As	75	0.030	ug/L	0.081	273	4780	3232	1
	Se	82	0.139	ug/L	0.006	4	-5	11	5
	Se	78	-0.370	ug/L	0.211	56	4907	3193	0
	Y	89		ug/L			230220	168520	0
	Kr	83		ug/L			76	51	5
>	In	115		ug/L			331526	242636	0
	Ag	107	-0.001	ug/L	0.001	148	19	9	79
	Cd	111	-0.012	ug/L	0.000	2	203	124	0
	Cd	114	0.006	ug/L	0.001	22	45	60	9
	Sb	121	0.021	ug/L	0.002	11	22	145	9
	Sb	123	0.021	ug/L	0.003	12	14	107	11
	Ba	135	5.214	ug/L	0.017	0	14	7362	1
	Ba	137	5.358	ug/L	0.094	1	20	12702	1
>	Tb	159		ug/L			301360	253503	0
	Tl	205	-0.012	ug/L	0.000	2	426	89	8
	Pb	208	U 0.006	ug/L	0.000	7	331	472	2
	Bi	209		ug/L			307927	237166	0
	Th	232	0.001	ug/L	0.000	44	40	59	17
	U	238	0.003	ug/L	0.000	1	10	139	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RH66 F REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Thursday, August 19, 2010 16:21:56
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\081910.cal

Zn

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			4707	2945	1
	Cl	37		mg/L			1264649	937837	0
>	Ge	72		ug/L			241496	168268	0
	Ni	60	1.478	ug/L	0.015	0	28	2413	0
	Ni	62	1.157	ug/L	0.072	6	168	394	4
	Cu	63	10.606	ug/L	0.056	0	260	36700	0
	Cu	65	10.557	ug/L	0.089	0	62	16938	0
	Zn	66	102.409	ug/L	0.053	0	253	117758	0
	Zn	67	92.099	ug/L	1.073	1	110	17535	0
	Zn	68	102.243	ug/L	0.432	0	2272	81801	0
	As-1	75	2.154	ug/L	0.004	0	35	1996	0
	As	75	1.995	ug/L	0.040	1	4780	5124	0
	Se	82	0.091	ug/L	0.047	51	-5	6	79
	Se	78	-0.504	ug/L	0.143	28	4907	3279	0
	Y	89		ug/L			230220	177725	0
	Kr	83		ug/L			76	57	9
>	In	115		ug/L			331526	250534	0
	Ag	107	0.007	ug/L	0.001	10	19	68	7
	Cd	111	0.085	ug/L	0.027	31	203	329	16
	Cd	114	0.086	ug/L	0.001	1	45	455	1
	Sb	121	0.570	ug/L	0.008	1	22	3679	1
	Sb	123	0.569	ug/L	0.006	1	14	2754	1
	Ba	135	10.127	ug/L	0.079	0	14	14755	0
	Ba	137	10.322	ug/L	0.063	0	20	25252	0
>	Tb	159		ug/L			301360	259377	0
	Tl	205	-0.007	ug/L	0.000	6	426	198	5
	Pb	208	0.359	ug/L	0.005	1	331	11776	1
	Bi	209		ug/L			307927	247034	0
	Th	232	0.020	ug/L	0.000	0	40	713	0
	U	238	0.046	ug/L	0.001	2	10	1807	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LR200
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, August 19, 2010 16:27:58
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\081910.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			4707	3554	3
	Cl	37		mg/L			1264649	969239	0
>	Ge	72		ug/L			241496	166027	0
	Ni	60	181.747	ug/L	1.149	0	28	290279	0
	Ni	62	180.550	ug/L	1.208	0	168	42760	0
	Cu	63	178.937	ug/L	0.736	0	260	608078	0
	Cu	65	178.403	ug/L	0.773	0	62	281744	0
	Zn	66	193.469	ug/L	0.681	0	253	219348	0
	Zn	67	189.568	ug/L	1.877	0	110	35532	0
	Zn	68	192.613	ug/L	1.007	0	2272	150666	0
	As-1	75	197.050	ug/L	0.586	0	35	178051	0
	As	75	196.217	ug/L	0.714	0	4780	177296	0
	Se	82	204.015	ug/L	1.141	0	-5	23399	0
	Se	78	201.925	ug/L	1.222	0	4907	58900	0
	Y	89		ug/L			230220	167995	0
	Kr	83		ug/L			76	89	3
>	In	115		ug/L			331526	241318	0
	Ag	107	180.107	ug/L	0.399	0	19	1339206	0
	Cd	111	197.900	ug/L	0.062	0	203	393672	0
	Cd	114	197.903	ug/L	0.519	0	45	934561	0
	Sb	121	208.736	ug/L	0.527	0	22	1292957	0
	Sb	123	209.701	ug/L	0.187	0	14	973992	0
	Ba	135	201.442	ug/L	1.068	0	14	282529	0
	Ba	137	203.982	ug/L	0.804	0	20	480428	0
>	Tb	159		ug/L			301360	247088	0
	Tl	205	181.143	ug/L	1.265	0	426	4004082	0
	Pb	208	184.421	ug/L	1.570	0	331	5625054	0
	Bi	209		ug/L			307927	218767	0
	Th	232	194.390	ug/L	1.001	0	40	6340900	0
	U	238	197.111	ug/L	0.794	0	10	7273785	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LR300
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, August 19, 2010 16:33:57
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\081910.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			4707	5343	2
	Cl	37		mg/L			1264649	960312	0
>	Ge	72		ug/L			241496	166358	0
	Ni	60	272.985	ug/L	0.171	0	28	436867	0
	Ni	62	270.738	ug/L	0.987	0	168	64190	0
	Cu	63	266.570	ug/L	1.215	0	260	907582	0
	Cu	65	266.060	ug/L	0.704	0	62	420987	0
	Zn	66	284.362	ug/L	1.102	0	253	322953	0
	Zn	67	282.230	ug/L	1.632	0	110	52969	0
	Zn	68	282.759	ug/L	2.294	0	2272	220882	0
	As-1	75	292.098	ug/L	1.703	0	35	264442	0
	As	75	291.484	ug/L	1.452	0	4780	262295	0
	Se	82	299.165	ug/L	1.450	0	-5	34381	0
	Se	78	297.833	ug/L	0.973	0	4907	85443	0
	Y	89		ug/L			230220	167766	0
	Kr	83		ug/L			76	103	1
>	In	115		ug/L			331526	240274	0
	Ag	107	268.423	ug/L	1.245	0	19	1987255	0
	Cd	111	294.199	ug/L	1.752	0	203	582631	0
	Cd	114	294.700	ug/L	0.599	0	45	1385631	0
	Sb	121	309.901	ug/L	1.009	0	22	1911289	0
	Sb	123	309.940	ug/L	0.992	0	14	1433330	0
	Ba	135	298.622	ug/L	1.716	0	14	417013	0
	Ba	137	302.765	ug/L	0.550	0	20	709995	0
>	Tb	159		ug/L			301360	243134	0
	Tl	205	273.955	ug/L	1.136	0	426	5958708	0
	Pb	208	278.120	ug/L	1.222	0	331	8347191	0
	Bi	209		ug/L			307927	187702	0
	Th	232	295.605	ug/L	0.896	0	40	9488263	0
	U	238	299.272	ug/L	1.521	0	10	10866904	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV5
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, August 19, 2010 16:39:58
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\081910.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			4707	3166	1
	Cl	37		mg/L			1264649	991372	0
>	Ge	72		ug/L			241496	173118	0
	Ni	60	46.915	ug/L	0.377	0	28	78146	0
	Ni	62	46.683	ug/L	0.264	0	168	11618	1
	Cu	63	46.558	ug/L	0.398	0	260	165110	0
	Cu	65	46.448	ug/L	0.189	0	62	76519	0
	Zn	66	51.136	ug/L	0.365	0	253	60585	0
	Zn	67	49.128	ug/L	0.412	0	110	9660	0
	Zn	68	50.802	ug/L	0.305	0	2272	42634	0
	As-1	75	50.346	ug/L	0.128	0	35	47453	0
	As	75	50.090	ug/L	0.077	0	4780	49745	0
	Se	82	53.808	ug/L	0.307	0	-5	6432	0
	Se	78	53.264	ug/L	0.243	0	4907	18790	0
	Y	89		ug/L			230220	176513	0
	Kr	83		ug/L			76	67	11
>	In	115		ug/L			331526	250391	0
	Ag	107	46.671	ug/L	0.152	0	19	360089	0
	Cd	111	51.181	ug/L	0.165	0	203	105753	0
	Cd	114	50.902	ug/L	0.109	0	45	249436	0
	Sb	121	52.699	ug/L	0.294	0	22	338715	0
	Sb	123	52.852	ug/L	0.223	0	14	254716	0
	Ba	135	51.009	ug/L	0.784	1	14	74241	1
	Ba	137	51.874	ug/L	0.242	0	20	126782	0
>	Tb	159		ug/L			301360	256718	0
	Tl	205	46.029	ug/L	0.202	0	426	1057399	0
	Pb	208	46.860	ug/L	0.118	0	331	1485235	0
	Bi	209		ug/L			307927	237858	0
	Th	232	48.831	ug/L	0.236	0	40	1654946	0
	U	238	49.849	ug/L	0.135	0	10	1911224	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB5
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, August 19, 2010 16:46:39
Number of Replicates: 3
Method File: C:\Elandata\Method\2008GFA7+.mth
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Calibration File: C:\Elandata\Caldata\081910.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			4707	3388	0
	Cl	37		mg/L			1264649	1006254	0
>	Ge	72		ug/L			241496	173242	0
	Ni	60	0.006	ug/L	0.004	74	28	30	23
	Ni	62	-0.320	ug/L	0.021	6	168	42	12
	Cu	63	-0.021	ug/L	0.002	11	260	113	7
	Cu	65	-0.001	ug/L	0.004	453	62	43	15
	Zn	66	-0.052	ug/L	0.015	28	253	120	14
	Zn	67	-0.169	ug/L	0.056	32	110	46	23
	Zn	68	-0.313	ug/L	0.031	9	2272	1377	1
	As-1	75	0.040	ug/L	0.002	4	35	62	2
	As	75	0.031	ug/L	0.017	55	4780	3458	0
	Se	82	0.039	ug/L	0.049	125	-5	0	734
	Se	78	0.097	ug/L	0.079	81	4907	3548	0
	Y	89		ug/L			230220	177407	0
	Kr	83		ug/L			76	64	8
>	In	115		ug/L			331526	254158	0
	Ag	107	0.007	ug/L	0.002	29	19	68	22
	Cd	111	-0.011	ug/L	0.010	87	203	132	15
	Cd	114	0.001	ug/L	0.001	73	45	41	12
	Sb	121	0.085	ug/L	0.004	4	22	574	4
	Sb	123	0.085	ug/L	0.015	17	14	427	17
	Ba	135	-0.001	ug/L	0.003	341	14	9	45
	Ba	137	0.001	ug/L	0.001	113	20	17	14
>	Tb	159		ug/L			301360	258936	0
	Tl	205	0.000	ug/L	0.002	812	426	373	14
	Pb	208	0.001	ug/L	0.001	43	331	332	6
	Bi	209		ug/L			307927	246733	0
	Th	232	0.038	ug/L	0.008	20	40	1336	19
	U	238	0.006	ug/L	0.000	6	10	230	6

General Chemistry Raw Data
Analyst Notes and Raw Data

ARI Job ID: RI46

W
8-13-10

TOTAL SUSPENDED SOLIDS / VOLATILE SUSPENDED SOLIDS (TSS / TVSS)

DATE: 8/13/2010
ANALYST: RR

Instrumentation ***Drying Ovens:*** 012 ***Analytical Balance:*** 1123230597
Muffle Furnace:

make no entries to shaded cells
they are calculated !!

TSS (mg/l) calculated as:
Final dry wt (mg) = (minimum Dry Wt - Tare Wt)*1000
TSS = [(Final Dry Wt)/ ml Sample] * 1000
if dy wt < 1mg, TSS = <1mg / mL sample * 1000
with "<" flag

Loss on ignition (LOI) = TVSS (mg/L) calculated as:
LOI (mg) = Dry wt(mg) -((min ash wt - tare wt) * 1000)
TVSS (mg/L) = LOI / mL sample * 1000
if LOI <1mg, TVSS = <1mg / mL sample * 1000
with "<" flag

LCS source: *Cellulose, MP Biomedicals Lot# 6399J* 0.05 grams to 1000 mL = **50** ***mg/L TSS***

SAMPLE ID	DISH #	filtered (mL)	TARE WT (grams)	DRY WT 104C (grams) 1	2	3	4	DryWT (mg)	TSS (mg/L)	ASH WT 550C (grams) 1	2	3	4	LOI (mg)	TVSS (mg/l)
Cal Weight ID			CV-02	CV-02	CV-02	CV-02	CV-02			CV-02	CV-02	CV-02	CV-02		
Date & Time		##########		8/13/10 15:50	8/13/10 16:42										
Cal Wt (g)	10.0000			10.0000	10.0000										
record weights to 4 places				*Cal OK!*	*Cal OK!*										
BLANK		1000	0.1157	0.1157	0.1159	STOP		0.0	< 1						
LCS # 561-3		1000	0.1171	0.1669	0.1668	STOP		49.7	**49.7**	99.4%	% Recovery				
RI46 A16		920	0.1229	0.1235	0.1235	STOP		0.6	< 1.1						
RI46 B16		900	0.1144	0.1152	0.1150	STOP		0.6	< 1.1						
RI46 C16		950	0.1153	0.1154	0.1155	STOP		0.1	< 1.1						
RI46 D16		930	0.1169	0.1173	0.1174	STOP		0.4	< 1.1						
RI46 E16		960	0.1172	0.1174	0.1176	STOP		0.2	< 1						
RI46 F16		920	0.1178	0.1178	0.1179	STOP		0.0	< 1.1						
RI46 G16		940	0.1219	0.1223	0.1223	STOP		0.4	< 1.1						
RI46 H16		960	0.1134	0.1133	0.1132	STOP		-0.2	< 1						
RI46 I16		930	0.1207	0.1219	0.1218	STOP		1.1	1.2						

RI46 : 99968

Analytical Resources, Incorporated
Analytical Chemists and Consultants

TOTAL SUSPENDED (TSS) / TOTAL VOLATILE SUSPENDED SOLID(TVSS) BENCHSHEET

Analyst:	Date/Time:	Oven #:	Muffle Furnance:	Balance:
	8/13/10 14:20	012		1123230597

Dry at 104 °C (12-24 hrs) then combust at 550 °C for 30 min. Record Weights to 4 places

TSS (mg/L) calculated as:
Final Dry Weight (mg) = (Min Dry Weight – Tare Weight) * 1000
TSS = (Final Dry Weight) / (mL Sample) * 1000
If dry wt < 1 mg / mL sample * 1000 use "<" flag

Loss on Ignition (LOI) = TVSS (mg / L) is calculated as:
LOI (mg / L) = Dry Weight (mg) – [(Minimum Ash Weight – Tare Weight) * 1000]
TVSS (mg / L) = LOI / mL sample * 1,000
If LOI < 1 mg, TVSS = < 1 mg / mL sample * 1000 use "<" flag

LCS (Cellulose from MP Biochemicals) Lott # **6399J** — 0.0500 Gram to 1000 mL = **50 mg / L TSS**

Cal Weight ID	CV-02	CV-02	CV-02	CV-02	CV-02			CV-02	CV-02			
Date & Time:	8/13/10 14:25	↓	8/13/10 15:50	8/13/10 15:50	16:42							
Cal Weight (10.0000g):	10.0000 gr	↓	10.0000 gr	10.0000 gr								

Sample ID	Dish #	Filtered mL	Tare	Dry Weight 104°C (grams) 1	2	3	Dry Wt mg	TSS	Ash Weight 550°C 1	2	LOI - mg	TVSS mg/L
BLANK	P8673	1000	0.1157	0.1157	0.1159							
LCS 561-3	P8674	↓	0.1171	0.1669	0.1668							
F146 A16	P8667	920	0.1229	~~0.1229~~	0.1235	0.1235						
B16	P9061	900	0.1144	0.1152	0.1150							
C16	P9063	950	0.1153	0.1154	0.1155							
D16	P9064	930	0.1169	0.1173	0.1174							
E16	P9062	960	0.1172	0.1174	0.1176							
F16	P7955	920	0.1178	0.1178	0.1179							
G16	P7962	940	0.1219	0.1223	0.1223							
H16	P7963	960	0.1134	0.1133	0.1132							
I16	P7964	930	0.1207	0.1219	0.1218							

8/13/10

6054F

Revision 002
12/28/09

R146 : 05/05/09

Analytical Resources, Incorporated
Analytical Chemists and Consultants

pH Logbook

Analyst: _____ **Date:** _____

Meter ID: Accumet AR60 **Time:** _____

Calibration

Date:	8-12-10	Buffer	Source	Lot #	pH	Temp.
Time:	13:00	2.00	RICCA	1006441	2.00	22.5
Analyst:	JJ	4.00	Fisher	102493	4.00	22.7
		7.00	RICCA	1002590	7.01	22.6
		10.00	Fisher	093565	10.02	22.8
		12.00	RICCA	1001169	11.94	22.6
		Verification	Fisher	101625		
Electrolyte Check (analysts initials):						

Sample pH

Sample ID	1	2	3	4	5	Temperature
ICV	7.00	7.00				23.0
RIIIA1	7.36	7.35				23.6
↓ Alow	7.40	7.40				23.7
CCV	7.01	7.01				23.2
CCV	6.98	6.98				23.9
RI23A2	6.87	6.87			1307	19.2
T B2	6.92	6.92			↓	19.0
C2	6.24	6.24				18.7
D2	7.00	7.00				18.9
↓ E2	6.95	6.95				19.7
RI32A1	7.09	7.09				20.2
CCV	7.01	7.01				23.9
CCV	6.97	6.98				24.2
RI46A1	5.98	5.98				21.0
T B1	6.19	6.19				21.7
C1	6.29	6.29				22.0
D1	6.44	6.44				22.7
E1	6.49	6.50				22.7
F1	6.12	6.12				21.7
G1	6.34	6.34				22.8
H1	6.80	6.80				21.3
↓ I1	6.40	6.40				22.0
CCV	7.00	6.99				24.0

Analytical Resources, Incorporated
Analytical Chemists and Consultants

pH Logbook

Analyst: _____ **Date:** _____

Meter ID: Accumet AR60 **Time:** _____

Calibration

Date:	8-12-10	Buffer	Source	Lot #	pH	Temp.
Time:	13:00	2.00	RICCA	1006441	2.00	22.5
Analyst:	JJ	4.00	Fisher	102493	4.00	22.7
		7.00	RICCA	1002590	7.01	22.6
		10.00	Fisher	093565	10.02	22.8
		12.00	RICCA	1001169	11.94	22.6
		Verification	Fisher	101625		
Electrolyte Check (analysts initials):						

Sample pH

Sample ID	1	2	3	4	5	Temperature
ICV	7.00	7.00				23.0
RIIIA1	7.36	7.35				23.6
↓ Aldup	7.40	7.40				23.7
CCV	7.01	7.01				23.2
CCV	6.98	6.98				23.9
RI23A2	6.83	6.83			30	19.2
B2	6.92	6.92			↓	19.0
C2	6.24	6.24				18.7
D2	7.00	7.00				18.9
↓ E2	6.95	6.95				19.7
RI32A1	7.09	7.09				20.2
CCV	7.01	7.01				23.9
CCV	6.97	6.98				24.2
RI46A1	5.98	5.98				21.0
B1	6.19	6.19				21.7
C1	6.29	6.29				22.0
D1	6.44	6.44				22.7
E1	6.49	6.50				22.7
F1	6.12	6.12				21.7
G1	6.34	6.34				22.8
H1	6.80	6.80				21.3
↓ I1	6.40	6.40				22.0
CCV	7.00	6.99				24.0

Table of Contents: ARI Job RI65

Client: Floyd-Snider

Project: POS-LLA Lora Lake Apts RI

E Joshi
Signature

August-24-2010
Date

Table of Contents: ARI Job RI65

Client: Floyd-Snider

Project: POS-LLA Lora Lake Apts RI

Signature

August-24-2010
Date

Analytical Resources, Incorporated
Analytical Chemists and Consultants

September 10, 2010

Jessi Massingale
Floyd-Snider Inc.
601 Union Street, Suite 600
Seattle, WA 98101-2341

RE: Lora Lake RI, POS-LLA
ARI Job No: RI65

Dear Ms. Massingale:

Please find enclosed the original Chain-of-Custody (COC) record, sample receipt documentation, and the final data package for samples from the project referenced above.

Sample receipt and detail of these analyses are discussed in the Case Narrative.

An electronic copy of this package will remain on file with ARI. Should you have any questions or problems, please feel free to contact me at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.

Susan D. Dunnihoo
Director, Client Services
sue@arilabs.com
206-695-6207

Enclosures

cc: eFile RI65

SD/co

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

Chain of Custody Documentation

ARI Job ID: RI65

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: R165	Turn-around Requested: Standard	Page: 1 of 1	
ARI Client Company: Floyd Snider	Phone: 206-292-2078	Date: 8/13/10	Ice Present? Yes
Client Contact: Megan McCullough / Jessi Massingale		No. of Coolers: 4	Cooler Temps: 13.2, 6.0, 12.0, 11.2
Client Project Name: LOra Lake Apts R1			
Client Project #: POS-LLA	Samplers: MM, AM		

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

Sample ID	Date	Time	Matrix	No. Containers	cPAH (8270D SIM)	PCP (8041)	TPH-Dx (NWTPH-Dx)	NWTPH-Gx + BETX (8021)	As + Pb - diss. (200.8)	Dioxin (1613)	VOCs - see proj. list	TSS (SM 2540D)	pH (150.1)	HOLD	Notes/Comments
MW-09-081310	8/13/10	8:53	W	16	✓	✓	✓	✓	✓	✓	✓	✓	✓		
MW-08-081310		10:00		36	✓	✓	✓	✓	✓	✓	✓	✓	✓		VOA MS/MSD
MW-07-081310		11:23		16	✓	✓	✓	✓	✓	✓	✓	✓	✓		
MW-01-081310		13:30		16	✓	✓	✓	✓	✓	✓	✓	✓	✓		
MW-05-081310		14:45		16	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
081310-TB	8/12/10	17:30		2				✓			✓				TRIP BLANK

Comments/Special Instructions
-Lab filter for dissolved metals archive 1 of 2 dioxin jars

Relinquished by: (Signature)	Received by: (Signature)	Relinquished by: (Signature)	Received by: (Signature)
Printed Name: Amanda McKay	Printed Name: Jennifer Millsap	Printed Name:	Printed Name:
Company: Floyd | Snider	Company: ARI	Company:	Company:
Date & Time: 8/13/10 16:36	Date & Time: 8/13/10 1636	Date & Time:	Date & Time:

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: Floyd Snider
Project Name: Lora Lake Apts RI

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

Assigned ARI Job No: RI65
Tracking No: _____ (NA)

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler?	YES	(NO)
Were custody papers included with the cooler?	(YES)	NO
Were custody papers properly filled out (ink, signed, etc.)	(YES)	NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry)..... 13.2 6.0 12.0 11.2

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

Cooler Accepted by: JM Date: 8/13/10 Time: 1637

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		YES	(NO)
What kind of packing material was used? ...	(Bubble Wrap) (Wet Ice) Gel Packs Baggies (Foam Block) Paper Other: _____		
Was sufficient ice used (if appropriate)?	NA	(YES)	(NO)
Were all bottles sealed in individual plastic bags?		YES	(NO)
Did all bottles arrive in good condition (unbroken)?		(YES)	NO
Were all bottle labels complete and legible?		(YES)	NO
Did the number of containers listed on COC match with the number of containers received?		(YES)	NO
Did all bottle labels and tags agree with custody papers?		(YES)	NO
Were all bottles used correct for the requested analyses?		(YES)	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)...	NA	(YES)	NO
Were all VOC vials free of air bubbles?	NA	YES	(NO)
Was sufficient amount of sample sent in each bottle?		(YES)	NO
Date VOC Trip Blank was made at ARI	NA	8/12/10	

Was Sample Split by ARI : (NA) YES Date/Time: _____ Equipment: _____ Split by: _____

Samples Logged by: JM Date: 8/14/10 Time: 836

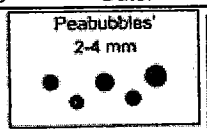
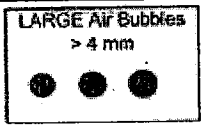
***** Notify Project Manager of discrepancies or concerns *****

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

Additional Notes, Discrepancies, & Resolutions:

MW-07-081310= sm in 1of6
081301-TB= sm in 1of2

By: JM Date: 8/14/10

Small Air Bubbles ~2mm	Peabubbles 2-4 mm	LARGE Air Bubbles > 4 mm
		

Small → "sm"
Peabubbles → "pb"
Large → "lg"
Headspace → "hs"

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Temperature Compliance Form

RI65

Cooler#: 1 Temperature(°C): 11.2

Sample ID	Bottle Count	Bottle Type
MW-05-081310	10	1-sm OJ, 1-Lg OJ, 1-16 oz poly, 2-1 L Amber, 5-500 mL Amber

Cooler#: 2 Temperature(°C): 13.2

Sample ID	Bottle Count	Bottle Type
MW-8-081310	18	1-sm OJ, 1-Lg OJ, 2-16oz poly, 4-1 L Amber, 10-500 mL Amber

Cooler#: 3 Temperature(°C): 12.0

Sample ID	Bottle Count	Bottle Type
MW-07-081310	10	1-sm OJ, 1-Lg OJ, 1-16 oz poly, 2-1L Amber 5-500 mL Amber
MW-01-081310	10	" " "

Cooler#: Temperature(°C):

Sample ID	Bottle Count	Bottle Type

Completed by: JM Date: 8/14/10 Time: 830

PRESERVATION VERIFICATION 08/16/10
Page 1 of 1

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: **RI65**

Inquiry Number: NONE
Analysis Requested: 08/14/10
Contact: Massingale, Jessi
Client: Floyd-Snider
Logged by: JM
Sample Set Used: Yes ~~481~~
Validatable Package: Yes
Deliverables:

PC: Sue D.
VTSR: 08/13/10

Project #: POS-LLA
Project: Lora Lake Apts RI
Sample Site:
SDG No:
Analytical Protocol: In-house

LOGNUM ARI ID	CLIENT ID	CN >12	WAD >12	NH3 <2	COD <2	FOG <2	MET <2	PHEN <2	PHOS <2	TKN <2	NO23 <2	TOC <2	S2 >9	AK102 <2	Fe2+ <2	DMET FLT	DOC FLT	PARAMETER	ADJUSTED TO	LOT NUMBER	AMOUNT ADDED	DATE/BY
10-19847 **RI65A**	MW-09-081310						DIS									N						
10-19848 **RI65B**	MW-08-081310						DIS									N						
10-19849 **RI65C**	MW-07-081310						DIS									N						
10-19850 **RI65D**	MW-01-081310						DIS									N						
10-19851 **RI65E**	MW-05-081310						DIS									N						

To be filtered & preserved

RI65 00005

Checked By JM Date 8/14/10

Case Narrative, Data Qualifiers, Control Limits

ARI Job ID: RI65

Case Narrative

Client: Floyd Snider
Project: Lora Lake RI, POS-LLA
ARI Job No.: RI65

Sample receipt

Analytical Resources, Inc. (ARI) accepted five water samples and a trip blank on August 13, 2010 under ARI job RI65. The cooler temperatures measured by IR thermometer following ARI SOP were between 6.0 and 13.2°C. For details regarding sample receipt, please refer to the enclosed Cooler Receipt Form.

Dioxin/Furan analyses were subcontracted to Frontier Analytical Laboratory in El Dorado Hills, CA. The dioxin data on CD as generated by Frontier is forwarded with this package.

SIM Volatiles by SW8260C

The samples and associated laboratory QC were analyzed within method recommended holding times.

Initial and continuing calibrations were within method requirements. Internal standard areas were within control limits.

The surrogate percent recoveries of d4-1,2-Dichloroethane were outside the control limits high for sample **MW-08-081310** and **MW-07-081310**. The samples were undetected for all requested compounds. No corrective action was taken.

The method blanks were clean at the reporting limit. The LCS and LCSD percent recoveries were within control limits.

The matrix spike and matrix spike duplicate percent recoveries were within advisory control limits.

Low-Level SIM PAHs by SW8270D

The samples and associated laboratory QC were initially extracted and analyzed within the method recommended holding times.

Initial and continuing calibrations were within method requirements. Internal standards were within limits.

The surrogate percent recoveries were within control limits.

The method blank was clean at the reporting limit. The LCS percent recoveries were within control limits.

The matrix spike and matrix spike duplicate percent recoveries were within advisory control limits.

In response to comments from NELAP and DOD auditors, ARI will now report the 'total' benzofluoranthenes rather than the individual compounds. This total will include the response of the b, k and j isomers.

Pentachlorophenol by SW8041

The samples and associated laboratory QC were extracted and analyzed within the method recommended holding times.

Initial and continuing calibrations were within method requirements.

The surrogate percent recoveries were within control limits.

The method blank was clean at the reporting limit. The LCS percent recovery was within control limits.

The matrix spike and matrix spike duplicate percent recoveries were within advisory control limits.

Acid/Silica Cleaned NWTPH-Dx

The samples and associated laboratory QC were extracted and analyzed within the method recommended holding times.

Initial and continuing calibrations were within method requirements.

The surrogate percent recoveries were within control limits.

The method blank was clean at the reporting limits. The LCS and LCSD percent recoveries were within control limits.

The matrix spike and matrix spike duplicate percent recoveries were within advisory control limits.

BETX by SW8021B Mod and NWTPH-Gx

The samples and associated laboratory QC were analyzed within the method recommended holding times.

Initial and continuing calibrations were within method requirements. .

The surrogate percent recoveries were within control limits.

The method blank was clean at the reporting limits. The LCS and LCSD percent recoveries were within control limits.

The matrix spike and matrix spike duplicate percent recoveries were within advisory control limits.

Total Arsenic and Lead by 200.8

The samples and associated laboratory QC were digested and analyzed within the method recommended holding time.

The method blank was clean at the reporting limits. The LCS percent recoveries were within control limits.

The matrix spike percent recoveries and duplicate RPDs were within control limits.

General Chemistry (pH and TSS)

The samples and associated laboratory QC were prepared and analyzed within the method recommended holding time.

The method blank was clean at the reporting limit. The LCS percent recoveries were within control limits.

The replicate RPDs were within the control limit.

Data Reporting Qualifiers

Effective 7/10/2009

Inorganic Data

U Indicates that the target analyte was not detected at the reported concentration

* Duplicate RPD is not within established control limits

B Reported value is less than the CRDL but ≥ the Reporting Limit

N Matrix Spike recovery not within established control limits

NA Not Applicable, analyte not spiked

H The natural concentration of the spiked element is so much greater than the concentration spiked that an accurate determination of spike recovery is not possible

L Analyte concentration is ≤5 times the Reporting Limit and the replicate control limit defaults to ±1 RL instead of the normal 20% RPD

Organic Data

U Indicates that the target analyte was not detected at the reported concentration

* Flagged value is not within established control limits

B Analyte detected in an associated Method Blank at a concentration greater than one-half of ARI's Reporting Limit or 5% of the regulatory limit or 5% of the analyte concentration in the sample.

J Estimated concentration when the value is less than ARI's established reporting limits

D The spiked compound was not detected due to sample extract dilution

E Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

Q Indicates a detected analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20%Drift or minimum RRF).

S Indicates an analyte response that has saturated the detector. The calculated concentration is not valid; a dilution is required to obtain valid quantification of the analyte

NA The flagged analyte was not analyzed for

NR Spiked compound recovery is not reported due to chromatographic interference

NS The flagged analyte was not spiked into the sample

M Estimated value for an analyte detected and confirmed by an analyst but with low spectral match parameters. This flag is used only for GC-MS analyses

M2 The sample contains PCB congeners that do not match any standard Aroclor pattern. The PCBs are identified and quantified as the Aroclor whose pattern most closely matches that of the sample. The reported value is an estimate.

N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification"

Y The analyte is not detected at or above the reported concentration. The reporting limit is raised due to chromatographic interference. The Y flag is equivalent to the U flag with a raised reporting limit.

C The analyte was positively identified on only one of two chromatographic columns. Chromatographic interference prevented a positive identification on the second column

P The analyte was detected on both chromatographic columns but the quantified values differ by ≥40% RPD with no obvious chromatographic interference

Geotechnical Data

A The total of all fines fractions. This flag is used to report total fines when only sieve analysis is requested and balances total grain size with sample weight.

F Samples were frozen prior to particle size determination

SM Sample matrix was not appropriate for the requested analysis. This normally refers to samples contaminated with an organic product that interferes with the sieving process and/or moisture content, porosity and saturation calculations

SS Sample did not contain the proportion of "fines" required to perform the pipette portion of the grain size analysis

W Weight of sample in some pipette aliquots was below the level required for accurate weighting

8/12//2010

SURR SOLUTIONS

LABEL	SOLN ID	TEST	CONC. UG/ML	SOLVENT	EXP.
A	1752-2	ABN	100/150	MEOH	01/22/11
B	1747-2	SIM PNA	15/75	MEOH	10/07/10
C	1705-4	SIM ABN	25/37.5	MEOH	03/08/11
D	1751-1	LOW PCB	0.2	HEXANE	12/29/10
E	1661-2	HERB	62.5	MEOH	10/02/10
F	1683-3	PCP	12.5	ACETONE	12/09/10
G	1707-2	1,4DIOXANE	100	MEOH	03/19/11
H	1723-2	OP-PEST	25	MEOH	04/02/11
I	1747-1	LOW S. PNA	1.5	MEOH	10/07/10
J	1681-2	TBT-PORE	0.125	MECL2	12/01/10
K	1689-1	MED PCB	20	ACETONE	12/29/10
L	1681-1	TBT	2.5	MECL2	12/01/10
M	1682-1	EPH	1500	MECL2	09/17/10
N	1689-3	PCB	2	ACETONE	12/29/10
O	1755-1	TPH	450	MECL2	06/02/11
P	1742-2	HCID	2250	MECL2	05/13/11
Q	1620-2	EDB	1	MEOH	06/22/10
R	1615-1	RESIN ACID	250	ACETONE	06/17/10
S*	1568-5	PBDE	.25	MEOH	01/13/11
T	1674-2	ALKYL PNA	10	MEOH	07/30/10
U	1633-1	CONGENER	2.5	ACETONE	08/11/10
V					
*reverified solution					

LCS SOLUTIONS

8/12/2010

LABL	SOLN ID	TEST	CONC. UG/ML	SOLVENT	EXP.
1	1754-4	PCB 1660	20	ACETONE	03/30/11
2#		BCOC PEST	10	ACETONE	NA
3	1705-3	PEST	02/04/20	ACETONE	03/08/11
4	1744-3	LOW PEST	0.2/0.4/2	ACETONE	03/08/11
5	1677-1	EPH	1500	MECL2	11/12/10
6	1702-2	PCP	12.5/125	ACETONE	02/18/11
7	1750-1	ABN	100	ACETONE	01/31/11
8	1681-4	TBT	2.5	MECL2	12/01/10
9	1682-2	PORE TBT	.125/.25	MECL2	12/01/10
10	1749-1	ABN ACID	100/200	MECL2	01/28/11
11	1730-2	TPHD	15000	ACETONE	04/26/11
12	1749-2	ABN BASE	200	MEOH	01/29/11
13	1716-2	LOW PCB	2	ACETONE	03/30/11
14	1753-3	LOW ABN ACID	10/20	MEOH	01/28/11
15	1726-3	SIM PNA	15/75	MEOH	10/07/10
16	1707-1	DIOXANE	100	MEOH	11/05/10
17	1644-1	1248 PCB	10	ACETONE	09/10/10
18	1726-4	LOW SIM PNA	1.5	ACETONE	10/07/10
19	1746-3	AK103	7500	ACETONE	12/01/10
20	1682-4	PNA	100	ACETONE	12/04/10
21	1725-1	SKY/BHT	100	MEOH	03/18/11
22	1728-1	HERB	12.5/12500	MEOH	10/20/10
23	1753-4	LW ABN BASE	20	MEOH	01/29/11
24	1696-1	LOW ABN	10	ACETONE	01/13/11
25#		DIPHENYL	100	MEOH	NA
26	1723-3	OP-PEST	25	MEOH	11/20/10
27	1668-3	STEROLS	200	MEOH	10/30/10
28#	1750-2	ADD. PEST	4	ACETONE	09/03/10
29#		DECANES	100	MEOH	NA
30	1620-1	EDB/DBCP	0.2	MEOH	06/22/10

LCS SOLUTIONS

8/12/2010

31	1707-3	TERPINEOL	100	MEOH	03/19/11
32	1619-3	GUAIACOL	50-200	ACETONE	04/30/10
33	1639-3	RETENE	100	MEOH	09/03/10
34	1633-1	CONGENERS	2.5	ACETONE	08/11/10
35	1674-3	ALKYL PNA A	10	MEOH	10/28/10
36	1601-3	ALKYL PNA B	10	MEOH	05/13/10
50	1617-1	FULL RESIN	250	ACETONE	06/17/10
51	1696-3	DDTS	2.5	ACETONE	06/03/10
52	1613-5	1232 PCB	20	ACETONE	06/16/10
53	1703-3	DALAPON	50	MEOH	09/11/10
53	1701-2	PBDE	0.5	ACETONE	02/10/11
54	1753-1	T-CHLORDANE	10	ACETONE	07/21/11
55	1753-2	TOXAPHENE	50	ACETONE	07/21/11
#=PROJECT SPECIFIC SOLUTION					
*=REVERIFIED SOLUTION					

Spike Recovery Control Limits for SIM VOA
EPA Method SW-846-8260C [1,2]

Effective 8/1/2010

Control limits are updated periodically. Assure that you have ARI's current control limits by downloading the files at the time of use.
http://www.arilabs.com/portal/downloads/ARI-CLs.zip

Sample Matrix:	Water
Purge Volume:	10 mL
LCS Spike Recovery [3]	
Vinyl Chloride	74 - **120**
1,1-Dichloroethene	**80** - **120**
1,2-Dichloroethane	79 - 134
cis-1,2-Dichloroethene	**80** - **120**
trans-1,2-Dichloroethene	**80** - **120**
Trichloroethene	**80** - **120**
Benzene	**80** - **120**
Tetrachloroethene	**80** - 122
1,1,2,2-Tetrachloroethane	**80** - 125
Method Blank/LCS Surrogate Recovery	
d4-1,2-Dichloroethane	80 - **120**
d8-Toluene	**80** - **120**
Sample Surrogate Recovery	
d4-1,2-Dichloroethane	**80** - **120**
d8-Toluene	**80** - **120**

(1) Control limits calculated using historic data collected from 4/1/05 to 11/15/07
(2) Highlighted control limits (**bold font**) adjusted from the calculated values as follows:

a) ARI does not use control limits < 10
b) Control limits for analyzes with no separate preparation procedure are adjusted to reflect the minimum uncertainty in the calibration of the instrument allowed by the referenced analytical method.

(3) Laboratory Control Sample (LCS) spike recovery control limits also used as advisory control limits for sample matrix spike (MS) analyzes. MS recovery values are advisory and not used to assess the acceptability of an analytical batch.

Analytical Resources,Incorporated
Analytical Chemists and Consultants

Spike Recovery Control Limits for Polycyclic Aromatic Hydrocarbons Selected Ion Monitoring (SIM) EPA Method SW-846-8270D-Modified Low Level Aqueous Samples[1,7]

Effective 5/1/09

Control limits are updated periodically. Assure that you have ARI's current control limits by downloading the files at the time of use. http://www.arilabs.com/portal/downloads/ARI-CLs.zip

Sample Volume / Final Volume	500 mL to 0.5 mL	
	Control Limits	ME Limits [2]
LCS Spike Recovery [6]		
Napthalene	41 - 101	31 - 111
2-Methylnapthalene	47 - **100**	39 - 103
1-Methylnapthalene	30 - 160 [3]	30 - 160 [3]
Acenaphthylene	35 - **100**	25 - 104
Acenapthene	43 - 104	33 - 114
Dibenzofuran	37 - **100**	27 - 108
Fluorene	51 - 103	42 - 112
Phenanthrene	55 - 109	46 - 118
Anthracene	30 - 101	18 - 113
Fluoranthene	49 - 123	37 - 135
Pyrene	48 - 120	36 - 132
Benz(a)anthracene	43 - 113	31 - 125
Chrysene	59 - 112	50 - 121
Benzofluoranthene(s) (Total)	30 - 160[8]	30 - 160[8]
Benzo(a)pyrene	**10** - **100**	**10** - 109
Indeno(1,2,3-cd)pyrene	43 - 112	32 - 124
Dibenzo(a,h)anthracene	42 - 114	30 - 126
Benzo(g,h,i)perylene	31 - 118	17 - 133
MB / LCS Surrogate Recovery		
d10-2-Methylnaphthalene	42 - **100**	(4)
d14-Dibenzo(a,h)anthracene	40 - 125	(4)
Sample Surrogate Recovery		
d10-2-Methylnaphthalene	31 - 109	(4)
d14-Dibenzo(a,h)anthracene	**10** - 133	(4)

(1) ARI's Control limits calculated using all available spike recovery data from 1/1/08 through 12/1/08.
(2) **ME** = A **marginal exceedance** defined in the NELAC Standard [5] as beyond the LCS-CL but still within the ME limits. ME limits are between 3 and 4 standard deviations around the mean. A maximum of one marginal exceedance is acceptable. Two or more marginal exceedances require corrective action.
(3) 30 – 160 are default, advisory control limits used when there is insufficient data to calculate historic control limits. **DO NOT** use these limits as the sole reason to reject the data from a batch of analyses.
(4) Marginal Exceedances not allowed for surrogate standards.
(5) **2003 NELAC Standard (EPA/600/R-04/003), July 2003**, Chapter 5, pages 251-252.
(6)Laboratory Control Sample (LCS) spike recovery control limits also used as advisory control limits for sample matrix spike (MS) analyzes. MS recovery values are advisory and not used to assess the acceptability of an analytical batch.
(7) Highlighted control limits (**bold font**) adjusted to demonstrate that ARI does not use control limits < 10 for the lower limit or < 100 for the upper limit.
(8) Default limits pending generation of historic limits for total benzofluoranthrenes (7/29/10)

Analytical Resources,Incorporated
Analytical Chemists and Consultants

Spike Recovery Control Limits for Chlorinated Phenols
EPA Method SW-846-8041[1,2]

Effective 5/1/09

Control limits are updated periodically. Assure that you have ARI's current control limits by downloading the files at the time of use. http://www.arilabs.com/portal/downloads/ARI-CLs.zip

	ARI's Calculated Control Limits	
Sample Matrix:	Water	Soil / Sediment
Sample Amount / Final Volume:	500 / 50 mL	10 g / 25 mL
LCS Spike Recovery [3]		
Pentachlorophenol	27 - 115	**10** - 162
Method Blank/LCS Surrogate Recovery		
2,4,6-Tribromophenol	40 - 130	50 - 115
Sample Surrogate Recovery		
2,4,6-Tribromophenol	11 - 156	**10** - 146

(1) ARI's Control limits calculated using all available spike recovery data from 1/1/08 through 12/1/08.
(2) Highlighted control limits (**bold font**) adjusted to demonstrate that ARI does not use control limits < 10.
(3) Laboratory Control Sample (LCS) spike recovery control limits also used as advisory control limits for sample matrix spike (MS) analyzes. MS recovery values are advisory and not used to assess the acceptability of an analytical batch.

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Spike Recovery Control Limits Hydrocarbon Identification (NWTPH-HCID) and Diesel Range Petroleum Hydrocarbons (NWTPH-D & AK-102) [1]

Effective 5/1/09

Control limits are updated periodically. Assure that you have ARI's current control limits by downloading the files at the time of use. http://www.arilabs.com/portal/downloads/ARI-CLs.zip

Method:	NWTPH-HCID [2]	NWTPH-D		AK102 [2]
Sample Matrix:	Water& Soil	Water	Soil	Water & Soil
Preparation:	500 to 1 mL	500 to 1 mL	10g to 1 mL	500 to 1 mL or 10g to 1 mL
LCS Spike Recovery [3]				
Diesel	-- - --	56 - 103	55 - 104	75 - 125
Diesel with Acid & Silica Clean-up	-- - --	43 - 100	54 - 96	(4)
Diesel with Silica Clean-up	-- --	43 - 100	54 - 96	75 - 125
Method Blank/LCS Surrogate Recovery				
o-Terphenyl	-- - --	57 - 120	58 - 121	60 - 120
o-Terphenyl with Acid & Silica Clean-up	-- - --	51 - 120	63 - 115	(4)
o-Terphenyl Silica Clean-up		51 - 120	63 - 115	60 - 120
Sample Surrogate Recovery				
o-Terphenyl	50 - 150	35 - 131	53 - 118	50 - 150
o-Terphenyl with Acid & Silica Clean-up	-- - --	41 - 121	49 - 120	(4)
o-Terphenyl with Silica Clean-up		41 - 121	49 - 120	50 - 150

1. Control Limits calculated using all data generated 1/1/08 through 12/31/08
2. Method specified, non-prescriptive limits. The NWTPH-HCID Method does not include LCS or MS analyses.
3. Laboratory Control Sample (LCS) spike recovery control limits also used as advisory control limits for sample matrix spike (MS) analyzes. MS recovery values are advisory and not used to assess the acceptability of an analytical batch.
4. Alaska State UST Methods do not allow acid cleanup of sample extracts.

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Spike Recovery Control Limits BTEX – EPA Method 8021 & Gasoline – Methods NWTPH-G and AK101[1,2]

Effective 5/1/09

Control limits are updated periodically. Assure that you have ARI's current control limits by downloading the files at the time of use. http://www.arilabs.com/portal/downloads/ARI-CLs.zip

Sample Matrix:	Aqueous Samples		Soil / Sediment Samples	
Analytical Method:	Method 8021B	NWTPH-G AK-101	Method 8021B	NWTPH-G AK-101
LCS Spike Recovery [3]				
Benzene	73 - **120**		72 - **120**	
Toluene	73 - **120**		72 - **120**	
Ethyl benzene	69 - **120**		71 - **120**	
m,p-Xylenes	72 - **120**		72 - **120**	
o-Xlyene	73 - **120**		72 - **120**	
MTBE	30 - 182		40 - 163	
Gasoline		75 - 124		74 - 124
Method Blank/LCS Surrogate Recovery				
Trifluorotoluene (TFT)	79 - **120**	**80 - 120**	80 - **120**	**80 - 120**
Bromobenzene	79 - **120**	**80 - 120**	77 - **120**	**80 - 120**
Sample Surrogate Recovery				
Trifluorotoluene (TFT)	**80 - 120**	**80** - 120	68 - 124	66 - 123
Bromobenzene	**80 - 120**	**80** - 120	62 - 134	62 - 130

(1) Control Limits calculated using all data generated 1/1/08 through 12/31/08.
(2) Highlighted control limits (bold font) are adjusted from the calculated values as follows:
a) Highlighted control limits (**bold font**) adjusted to demonstrate that ARI does not use control limits < 10 for the lower limit or < 100 for the upper limit.
b) Control limits for analytes with no separate preparation procedure are adjusted to reflect the minimum uncertainty in the calibration of the instrument allowed by the referenced analytical method.
(3) Laboratory Control Sample (LCS) spike recovery control limits also used as advisory control limits for sample matrix spike (MS) analyzes. MS recovery values are advisory and not used to assess the acceptability of an analytical batch.

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Summary of Laboratory Control Limits Metals Analyses (All Methods & Sample Matrices)

Effective 5/1/09

Control limits are updated periodically. Assure that you have ARI's current control limits by downloading the files at the time of use. http://www.arilabs.com/portal/downloads/ARI-CLs.zip

Element	Matrix Spike Recovery	LCS Recovery	Replicate RPD
Aluminum	75 - 125	80 - 120	≤ 20%
Antimony	75 - 125	80 - 120	≤ 20%
Arsenic	75 - 125	80 - 120	≤ 20%
Barium	75 - 125	80 - 120	≤ 20%
Beryllium	75 - 125	80 - 120	≤ 20%
Boron	75 - 125	80 - 120	≤ 20%
Cadmium	75 - 125	80 - 120	≤ 20%
Calcium	75 - 125	80 - 120	≤ 20%
Chromium	75 - 125	80 - 120	≤ 20%
Cobalt	75 - 125	80 - 120	≤ 20%
Copper	75 - 125	80 - 120	≤ 20%
Iron	75 - 125	80 - 120	≤ 20%
Lead	75 - 125	80 - 120	≤ 20%
Magnesium	75 - 125	80 - 120	≤ 20%
Manganese	75 - 125	80 - 120	≤ 20%
Mercury	75 - 125	80 - 120	≤ 20%
Nickel	75 - 125	80 - 120	≤ 20%
Potassium	75 - 125	80 - 120	≤ 20%
Selenium	75 - 125	80 - 120	≤ 20%
Silica	75 - 125	80 - 120	≤ 20%
Silver	75 - 125	80 - 120	≤ 20%
Sodium	75 - 125	80 - 120	≤ 20%
Strontium	75 - 125	80 - 120	≤ 20%
Thallium	75 - 125	80 - 120	≤ 20%
Vanadium	75 - 125	80 - 120	≤ 20%
Zinc	75 - 125	80 - 120	≤ 20%

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Analytical Chemists and Consultants

Spike Recovery Control Limits for Conventional Wet Chemistry
Effective 5/1/09

Control limits are updated periodically. Assure that you have ARI's current control limits by downloading the files at the time of use. http://www.arilabs.com/portal/downloads/ARI-CLs.zip

	ARI's Control Limits	
Sample Matrix:	Water	Soil / Sediment
Matrix Spike Recoveries	% Recovery	% Recovery
Ammonia	75 - 125	75 - 125
Bromide	75 125	75 - 125
Chloride	75 125	75 - 125
Cyanide	75 - 125	75 - 125
Ferrous Iron	75 - 125	75 - 125
Fluoride	75 - 125	75 - 125
Formaldehyde	75 - 125	75 - 125
Hexane Extractable Material	-- - --	78 - 114
Hexavalent Chromium	75 - 125	75 - 125
Nitrate/Nitrite	75 - 125	75 - 125
Oil and Grease	75 - 125	75 - 125
Phenol	75 - 125	75 - 125
Phosphorous	75 - 125	75 - 125
Sulfate	75 - 125	75 - 125
Sulfide	75 - 125	75 - 125
Total Kjeldahl Nitrogen	75 - 125	75 - 125
Total Organic Carbon	75 - 125	75 - 125
Duplicate RPDs		
Acidity	±20%	±20%
Alkalinity	±20%	±20%
BOD	±20%	±20%
Cation Exchange	±20%	±20%
COD	±20%	±20%
Conductivity	±20%	±20%
Salinity	±20%	±20%
Solids	±20%	±20%
Turbidity	±20%	±20%

SIM Volatile Analysis
Report and Summary QC Forms

ARI Job ID: RI65

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C-SIM Sample ID: MW-09-081310
Page 1 of 1 **SAMPLE**

Lab Sample ID: RI65A
LIMS ID: 10-19847
Matrix: Water
Data Release Authorized:
Reported: 08/25/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: 08/13/10
Date Received: 08/13/10

Instrument/Analyst: NT7/PKC
Date Analyzed: 08/23/10 16:17

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
107-06-2	1,2-Dichloroethane	0.020	< 0.020	U
156-59-2	cis-1,2-Dichloroethene	0.020	< 0.020	U
156-60-5	trans-1,2-Dichloroethene	0.020	< 0.020	U
79-01-6	Trichloroethene	0.020	< 0.020	U
127-18-4	Tetrachloroethene	0.020	< 0.020	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	98.2%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C-SIM Sample ID: MW-08-081310
Page 1 of 1 **SAMPLE**

Lab Sample ID: RI65B
LIMS ID: 10-19848
Matrix: Water
Data Release Authorized:
Reported: 08/25/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: 08/13/10
Date Received: 08/13/10

Instrument/Analyst: NT7/PKC
Date Analyzed: 08/20/10 16:40

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
107-06-2	1,2-Dichloroethane	0.020	< 0.020	U
156-59-2	cis-1,2-Dichloroethene	0.020	< 0.020	U
156-60-5	trans-1,2-Dichloroethene	0.020	< 0.020	U
79-01-6	Trichloroethene	0.020	< 0.020	U
127-18-4	Tetrachloroethene	0.020	< 0.020	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	130%
d8-Toluene	106%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C-SIM Sample ID: MW-07-081310
Page 1 of 1 **SAMPLE**

Lab Sample ID: RI65C
LIMS ID: 10-19849
Matrix: Water
Data Release Authorized:
Reported: 08/25/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: 08/13/10
Date Received: 08/13/10

Instrument/Analyst: NT7/PKC
Date Analyzed: 08/20/10 17:05

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
107-06-2	1,2-Dichloroethane	0.020	< 0.020	U
156-59-2	cis-1,2-Dichloroethene	0.020	< 0.020	U
156-60-5	trans-1,2-Dichloroethene	0.020	< 0.020	U
79-01-6	Trichloroethene	0.020	< 0.020	U
127-18-4	Tetrachloroethene	0.020	< 0.020	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	133%
d8-Toluene	105%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C-SIM Sample ID: MW-01-081310
Page 1 of 1 **SAMPLE**

Lab Sample ID: RI65D
LIMS ID: 10-19850
Matrix: Water
Data Release Authorized:
Reported: 08/25/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: 08/13/10
Date Received: 08/13/10

Instrument/Analyst: NT7/PKC
Date Analyzed: 08/23/10 16:43

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
107-06-2	**1,2-Dichloroethane**	**0.020**	**0.038**	
156-59-2	**cis-1,2-Dichloroethene**	**0.020**	**0.20**	
156-60-5	**trans-1,2-Dichloroethene**	**0.020**	**0.11**	
79-01-6	**Trichloroethene**	**0.020**	**0.17**	
127-18-4	Tetrachloroethene	0.020	< 0.020	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	105%
d8-Toluene	99.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C-SIM Sample ID: MW-05-081310
Page 1 of 1 **SAMPLE**

Lab Sample ID: RI65E
LIMS ID: 10-19851
Matrix: Water
Data Release Authorized:
Reported: 08/25/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: 08/13/10
Date Received: 08/13/10

Instrument/Analyst: NT7/PKC
Date Analyzed: 08/23/10 17:08

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
107-06-2	**1,2-Dichloroethane**	**0.020**	**0.070**	
156-59-2	**cis-1,2-Dichloroethene**	**0.020**	**0.028**	
156-60-5	trans-1,2-Dichloroethene	0.020	< 0.020	U
79-01-6	Trichloroethene	0.020	< 0.020	U
127-18-4	Tetrachloroethene	0.020	< 0.020	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	109%
d8-Toluene	99.0%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C-SIM Sample ID: 081310-TB
Page 1 of 1 **SAMPLE**

Lab Sample ID: RI65F
LIMS ID: 10-19852
Matrix: Water
Data Release Authorized:
Reported: 08/25/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: 08/13/10
Date Received: 08/13/10

Instrument/Analyst: NT7/PKC
Date Analyzed: 08/20/10 11:58

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
107-06-2	1,2-Dichloroethane	0.020	< 0.020	U
156-59-2	cis-1,2-Dichloroethene	0.020	< 0.020	U
156-60-5	trans-1,2-Dichloroethene	0.020	< 0.020	U
79-01-6	Trichloroethene	0.020	< 0.020	U
127-18-4	Tetrachloroethene	0.020	< 0.020	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	116%
d8-Toluene	106%

FORM I

ANALYTICAL RESOURCES INCORPORATED

SW8260-SIM SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
POS-LLA

Client ID	DCE	TOL	TOT OUT
MB-082010	116%	106%	0
LCS-082010	110%	108%	0
LCSD-082010	110%	107%	0
MW-09-081310	104%	98.2%	0
MB-082310	110%	99.7%	0
LCS-082310	96.8%	99.7%	0
LCSD-082310	103%	90.4%	0
MW-08-081310	130%*	106%	1
MW-08-081310-MS	115%	107%	0
MW-08-081310-MSD	115%	107%	0
MW-07-081310	133%*	105%	1
MW-01-081310	105%	99.2%	0
MW-05-081310	109%	99.0%	0
081310-TB	116%	106%	0

	LCS/MB LIMITS	QC LIMITS
(DCE) = d4-1,2-Dichloroethane	(80-120)	(80-120)
(TOL) = d8-Toluene	(80-120)	(80-120)

Prep Method: SW5030
Log Number Range: 10-19847 to 10-19852

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C-SIM Sample ID: MW-08-081310
Page 1 of 1 **MATRIX SPIKE**

Lab Sample ID: RI65B
LIMS ID: 10-19848
Matrix: Water
Data Release Authorized:
Reported: 08/25/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: 08/13/10
Date Received: 08/13/10

Instrument/Analyst MS: NT7/PKC
MSD: NT7/PKC
Date Analyzed MS: 08/20/10 18:22
MSD: 08/20/10 18:48

Sample Amount MS: 10.0 mL
MSD: 10.0 mL
Purge Volume MS: 10.0 mL
MSD: 10.0 mL

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
1,2-Dichloroethane	< 0.020 U	1.14	1.00	114%	1.10	1.00	110%	3.6%
cis-1,2-Dichloroethene	< 0.020 U	1.00	1.00	100%	0.972	1.00	97.2%	2.8%
trans-1,2-Dichloroethene	< 0.020 U	1.01	1.00	101%	0.967	1.00	96.7%	4.4%
Trichloroethene	< 0.020 U	0.922	1.00	92.2%	0.886	1.00	88.6%	4.0%
Tetrachloroethene	< 0.020 U	1.03	1.00	103%	1.00	1.00	100%	3.0%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C-SIM **Sample ID: MW-08-081310**
Page 1 of 1 **MATRIX SPIKE**

Lab Sample ID: RI65B
LIMS ID: 10-19848
Matrix: Water
Data Release Authorized:
Reported: 08/25/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: 08/13/10
Date Received: 08/13/10

Instrument/Analyst: NT7/PKC
Date Analyzed: 08/20/10 18:22

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
107-06-2	1,2-Dichloroethane	0.020	---	
156-59-2	cis-1,2-Dichloroethene	0.020	---	
156-60-5	trans-1,2-Dichloroethene	0.020	---	
79-01-6	Trichloroethene	0.020	---	
127-18-4	Tetrachloroethene	0.020	---	

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	115%
d8-Toluene	107%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C-SIM **Sample ID: MW-08-081310**
Page 1 of 1 **MATRIX SPIKE DUP**

Lab Sample ID: RI65B
LIMS ID: 10-19848
Matrix: Water
Data Release Authorized:
Reported: 08/25/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: 08/13/10
Date Received: 08/13/10

Instrument/Analyst: NT7/PKC
Date Analyzed: 08/20/10 18:48

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
107-06-2	1,2-Dichloroethane	0.020	---	
156-59-2	cis-1,2-Dichloroethene	0.020	---	
156-60-5	trans-1,2-Dichloroethene	0.020	---	
79-01-6	Trichloroethene	0.020	---	
127-18-4	Tetrachloroethene	0.020	---	

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	115%
d8-Toluene	107%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C-SIM Sample ID: LCS-082010
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-082010
LIMS ID: 10-19847
Matrix: Water
Data Release Authorized:
Reported: 08/25/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: NT7/PKC
LCSD: NT7/PKC
Date Analyzed LCS: 08/20/10 09:44
LCSD: 08/20/10 10:10

Sample Amount LCS: 10.0 mL
LCSD: 10.0 mL
Purge Volume LCS: 10.0 mL
LCSD: 10.0 mL

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
1,2-Dichloroethane	0.998	1.00	99.8%	1.03	1.00	103%	3.2%
cis-1,2-Dichloroethene	0.959	1.00	95.9%	0.970	1.00	97.0%	1.1%
trans-1,2-Dichloroethene	0.965	1.00	96.5%	0.977	1.00	97.7%	1.2%
Trichloroethene	0.895	1.00	89.5%	0.893	1.00	89.3%	0.2%
Tetrachloroethene	1.01	1.00	101%	1.00	1.00	100%	1.0%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	110%	110%
d8-Toluene	108%	107%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C-SIM Sample ID: LCS-082310

LAB CONTROL SAMPLE

Lab Sample ID: LCS-082310
LIMS ID: 10-19848
Matrix: Water
Data Release Authorized:
Reported: 08/25/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: NT7/PKC
LCSD: NT7/PKC
Date Analyzed LCS: 08/23/10 14:27
LCSD: 08/23/10 14:50

Sample Amount LCS: 10.0 mL
LCSD: 10.0 mL
Purge Volume LCS: 10.0 mL
LCSD: 10.0 mL

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
1,2-Dichloroethane	0.974	1.00	97.4%	1.19	1.00	119%	20.0%
cis-1,2-Dichloroethene	0.964	1.00	96.4%	1.17	1.00	117%	19.3%
trans-1,2-Dichloroethene	0.963	1.00	96.3%	1.16	1.00	116%	18.6%
Trichloroethene	0.914	1.00	91.4%	1.12	1.00	112%	20.3%
Tetrachloroethene	0.943	1.00	94.3%	1.14	1.00	114%	18.9%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	96.8%	103%
d8-Toluene	99.7%	90.4%

4A

VOLATILE METHOD BLANK SUMMARY

Method Blank ID.

MB0820

Lab Name: ANALYTICAL RESOURCES, INC

Client: FLOYD-SNIDER

ARI Job No: RI46

Project: LORA LAKE APTS RI

Lab File ID: 08201005

Lab Sample ID: MB0820

Date Analyzed: 08/20/10

Time Analyzed: 1035

Instrument ID: NT7

Heated Purge: (Y/N) N

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS0820	LCS0820	08201003	0944
02	LCSD0820	LCSD0820	08201004	1010
03	081110-TB	RI46J	08201006	1107
04	081210-TB	RI46K	08201007	1132
05	081310-TB	RI65F	08201008	1158
06	MW-02-081110	RI46A	08201009	1223
07	MW-03-081110	RI46B	08201010	1249
08	MW-03-081110	RI46C	08201011	1315
09	MW-04-081110	RI46D	08201012	1340
10	MW-14-081110	RI46E	08201013	1406
11	MW-12-081210	RI46F	08201014	1432
12	MW-10-081210	RI46H	08201016	1523
13	MW-11-081210	RI46I	08201017	1549
14	MW-08-081310	RI65B	08201019	1640
15	MW-07-081310	RI65C	08201020	1705
16	MW-08-081310	RI65BMS	08201023	1822
17	MW-08-081310	RI65BMSD	08201024	1848
18	MW-12-081210	RI46FMSD	08201026	1939
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COMMENTS:

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C-SIM **Sample ID: MB-082010**
 METHOD BLANK

Lab Sample ID: MB-082010
LIMS ID: 10-19847
Matrix: Water
Data Release Authorized:
Reported: 08/25/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT7/PKC
Date Analyzed: 08/20/10 10:35

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
107-06-2	1,2-Dichloroethane	0.020	< 0.020	U
156-59-2	cis-1,2-Dichloroethene	0.020	< 0.020	U
156-60-5	trans-1,2-Dichloroethene	0.020	< 0.020	U
79-01-6	Trichloroethene	0.020	< 0.020	U
127-18-4	Tetrachloroethene	0.020	< 0.020	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	116%
d8-Toluene	106%

4A

VOLATILE METHOD BLANK SUMMARY

Method Blank ID.

MB0823

Lab Name: ANALYTICAL RESOURCES, INC

Client: FLOYD-SNIDER

ARI Job No: RI46

Project: LORA LAKE APTS RI

Lab File ID: 08231016

Lab Sample ID: MB0823

Date Analyzed: 08/23/10

Time Analyzed: 1516

Instrument ID: NT7

Heated Purge: (Y/N) N

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	ICV1000	ICV1000	08231013	1326
02	LCS0823	LCS0823	08231014	1427
03	LCSD0823	LCSD0823	08231015	1450
04	MW-13-081210	RI46G	08231017	1551
05	MW-09-081310	RI65A	08231018	1617
06	MW-01-081310	RI65D	08231019	1643
07	MW-05-081310	RI65E	08231020	1708
08	MW-12-081210	RI46FMS	08231021	1734
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COMMENTS:

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C-SIM **Sample ID: MB-082310**
Page 1 of 1 **METHOD BLANK**

Lab Sample ID: MB-082310
LIMS ID: 10-19848
Matrix: Water
Data Release Authorized:
Reported: 08/25/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT7/PKC
Date Analyzed: 08/23/10 15:16

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
107-06-2	1,2-Dichloroethane	0.020	< 0.020	U
156-59-2	cis-1,2-Dichloroethene	0.020	< 0.020	U
156-60-5	trans-1,2-Dichloroethene	0.020	< 0.020	U
79-01-6	Trichloroethene	0.020	< 0.020	U
127-18-4	Tetrachloroethene	0.020	< 0.020	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	110%
d8-Toluene	99.7%

FORM I

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

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

Lab Code: ARI Case No.: LORA LAKE APTS RI SDG No.: RI46

Lab File ID: 07211004 BFB Injection Date: 07/21/10

Instrument ID: NT7 BFB Injection Time: 1026

GC Column: RTXVMS ID: 0.18 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	18.2
75	30.0 - 66.0% of mass 95	48.7
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.3
173	Less than 2.0% of mass 174	0.1 (0.2)1
174	50.0 - 101.0% of mass 95	63.8
175	4.0 - 9.0% of mass 174	4.8 (7.6)1
176	93.0 - 101.0% of mass 174	62.5 (98.0)1
177	5.0 - 9.0% of mass 176	4.2 (6.8)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	20 PPT	00200721	07211005	07/21/10	1104
02	50 PPT	00500721	07211006	07/21/10	1130
03	100 PPT	01000721	07211007	07/21/10	1156
04	500 PPT	05000721	07211008	07/21/10	1221
05	1000 PPT	10000721	07211009	07/21/10	1247
06	2000 PPT	20000721	07211010	07/21/10	1313
07	4000 PPT	40000721	07211011	07/21/10	1338
08	ICV 1000 PPT	ICV0721	07211012	07/21/10	1404
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5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

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

Lab Code: ARI Case No.: LORA LAKE APTS RI SDG No.: RI46

Lab File ID: 08201001 BFB Injection Date: 08/20/10

Instrument ID: NT7 BFB Injection Time: 0827

GC Column: RTXVMS ID: 0.18 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	18.7
75	30.0 - 66.0% of mass 95	47.4
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.1 (0.2)1
174	50.0 - 101.0% of mass 95	58.5
175	4.0 - 9.0% of mass 174	4.2 (7.1)1
176	93.0 - 101.0% of mass 174	55.8 (95.4)1
177	5.0 - 9.0% of mass 176	3.8 (6.9)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CC0820	CC0820	08201002	08/20/10	0905
02	LCS0820	LCS0820	08201003	08/20/10	0944
03	LCSD0820	LCSD0820	08201004	08/20/10	1010
04	MB0820	MB0820	08201005	08/20/10	1035
05	081110-TB	RI46J	08201006	08/20/10	1107
06	081210-TB	RI46K	08201007	08/20/10	1132
07	081310-TB	RI65F	08201008	08/20/10	1158
08	MW-02-081110	RI46A	08201009	08/20/10	1223
09	MW-03-081110	RI46B	08201010	08/20/10	1249
10	MW-03-081110-D	RI46C	08201011	08/20/10	1315
11	MW-04-081110	RI46D	08201012	08/20/10	1340
12	MW-14-081110	RI46E	08201013	08/20/10	1406
13	MW-12-081210	RI46F	08201014	08/20/10	1432
14	MW-10-081210	RI46H	08201016	08/20/10	1523
15	MW-11-081210	RI46I	08201017	08/20/10	1549
16	MW-08-081310	RI65B	08201019	08/20/10	1640
17	MW-07-081310	RI65C	08201020	08/20/10	1705
18	MW-08-081310 MS	RI65BMS	08201023	08/20/10	1822
19	MW-08-081310 MSD	RI65BMSD	08201024	08/20/10	1848
20	MW-12-081210 MSD	RI46FMSD	08201026	08/20/10	1939
21					
22					

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

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

Lab Code: ARI Case No.: LORA LAKE APTS RI SDG No.: RI46

Lab File ID: 08231001 BFB Injection Date: 08/23/10

Instrument ID: NT7 BFB Injection Time: 0711

GC Column: RTXVMS ID: 0.18 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	20.6
75	30.0 - 66.0% of mass 95	49.5
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.2 (0.3)1
174	50.0 - 101.0% of mass 95	56.2
175	4.0 - 9.0% of mass 174	4.1 (7.2)1
176	93.0 - 101.0% of mass 174	53.7 (95.6)1
177	5.0 - 9.0% of mass 176	3.6 (6.8)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	IC4000	IC4000	08231006	08/23/10	1027
02	IC2000	IC2000	08231007	08/23/10	1052
03	IC1000	IC1000	08231008	08/23/10	1118
04	IC500	IC500	08231009	08/23/10	1144
05	IC100	IC100	08231010	08/23/10	1209
06	IC50	IC50	08231011	08/23/10	1235
07	IC20	IC20	08231012	08/23/10	1301
08	ICV1000	ICV1000	08231013	08/23/10	1326
09	LCS0823	LCS0823	08231014	08/23/10	1427
10	LCSD0823	LCSD0823	08231015	08/23/10	1450
11	MB0823	MB0823	08231016	08/23/10	1516
12	MW-13-081210	RI46G	08231017	08/23/10	1551
13	MW-09-081310	RI65A	08231018	08/23/10	1617
14	MW-01-081310	RI65D	08231019	08/23/10	1643
15	MW-05-081310	RI65E	08231020	08/23/10	1708
16	MW-12-081210 MS	RI46FMS	08231021	08/23/10	1734
17					
18					
19					
20					
21					
22					

FORM 6
VOLATILE INITIAL CALIBRATION DATA

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

ARI Job No: RI46 Project: LORA LAKE APTS RI

Instrument ID: NT7 Calibration Date: 07/21/10

LAB FILE ID: RF20: 07211005 RF50: 07211006 RF100: 07211007
RF500: 07211008 RF1000: 07211009

COMPOUND	RF20	RF50	RF100	RF500	RF1000
Vinyl Chloride	0.957	0.958	0.770	0.722	0.692
1,1-Dichloroethene	0.688	0.698	0.542	0.507	0.475
cis-1,2-dichloroethene	0.773	0.751	0.641	0.593	0.562
Benzene	2.497	2.342	1.855	1.726	1.541
Trichloroethene	0.488	0.473	0.379	0.364	0.325
Tetrachloroethene	0.434	0.440	0.340	0.324	0.288
1,1,2,2-Tetrachloroethane	0.316	0.335	0.286	0.291	0.268
Trans-1,2-Dichloroethene	0.718	0.768	0.602	0.575	0.541
1,2-Dichloroethane	0.857	0.896	0.755	0.740	0.653
d4-1,2-Dichloroethane	0.547	0.532	0.543	0.486	0.505
d8-Toluene	1.273	1.279	1.280	1.268	1.268

FORM 6
VOLATILE INITIAL CALIBRATION DATA

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

ARI Job No: RI46 Project: LORA LAKE APTS RI

Instrument ID: NT7 Calibration Date: 07/21/10

LAB FILE ID: RF2000: 07211010 RF4000: 07211011

COMPOUND	RF2000	RF4000
Vinyl Chloride	0.677	0.691
1,1-Dichloroethene	0.458	0.470
cis-1,2-dichloroethene	0.546	0.562
Benzene	1.506	1.557
Trichloroethene	0.317	0.329
Tetrachloroethene	0.280	0.286
1,1,2,2-Tetrachloroethane	0.261	0.273
Trans-1,2-Dichloroethene	0.526	0.538
1,2-Dichloroethane	0.669	0.699
d4-1,2-Dichloroethane	0.499	0.499
d8-Toluene	1.285	1.273

FORM 6
VOLATILE INITIAL CALIBRATION DATA

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

ARI Job No: RI46 Project: LORA LAKE APTS RI

Instrument ID: NT7 Calibration Date: 07/21/10

COMPOUND	CURVE TYPE	AVE RF	%RSD OR R^2
Vinyl Chloride	AVRG	0.781	15.9
1,1-Dichloroethene	AVRG	0.548	18.8
cis-1,2-dichloroethene	AVRG	0.632	14.8
Benzene	LINR		0.9994
Trichloroethene	AVRG	0.382	18.5
Tetrachloroethene	LINR		0.9994
1,1,2,2-Tetrachloroethane	AVRG	0.290	9.3
Trans-1,2-Dichloroethene	AVRG	0.610	15.7
1,2-Dichloroethane	AVRG	0.753	12.3
d4-1,2-Dichloroethane	AVRG	0.516	4.7
d8-Toluene	AVRG	1.275	0.5

<- Indicates value outside QC limits:
(%RSD < 20% or R^2 > 0.990)

FORM 6
VOLATILE INITIAL CALIBRATION DATA

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

ARI Job No: RI46 Project: LORA LAKE APTS RI

Instrument ID: NT7 Calibration Date: 08/23/10

LAB FILE ID: RF20: 08231012 RF50: 08231011 RF100: 08231010
RF500: 08231009 RF1000: 08231008

COMPOUND	RF20	RF50	RF100	RF500	RF1000
Vinyl Chloride	0.881	0.850	0.926	0.876	0.867
1,1-Dichloroethene	0.497	0.510	0.542	0.507	0.494
cis-1,2-dichloroethene	0.608	0.579	0.637	0.616	0.601
Benzene	1.968	1.679	1.787	1.631	1.577
Trichloroethene	0.342	0.320	0.342	0.314	0.305
Tetrachloroethene	0.283	0.254	0.284	0.265	0.255
1,1,2,2-Tetrachloroethane	0.232	0.217	0.274	0.256	0.260
Trans-1,2-Dichloroethene	0.580	0.578	0.643	0.598	0.577
1,2-Dichloroethane	0.806	0.757	0.916	0.850	0.820
d4-1,2-Dichloroethane	0.748	0.710	0.764	0.650	0.651
d8-Toluene	1.364	1.363	1.380	1.389	1.389

FORM 6
VOLATILE INITIAL CALIBRATION DATA

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

ARI Job No: RI46 Project: LORA LAKE APTS RI

Instrument ID: NT7 Calibration Date: 08/23/10

LAB FILE ID: RF2000: 08231007 RF4000: 08231006

COMPOUND	TYPE	RF	CURVE OR R^2	AVE	%RSD
Vinyl Chloride	0.905	0.972	AVRG	0.897	4.6
1,1-Dichloroethene	0.513	0.510	AVRG	0.511	3.0
cis-1,2-dichloroethene	0.619	0.613	AVRG	0.610	2.9
Benzene	1.634	1.614	AVRG	1.699	8.0
Trichloroethene	0.324	0.317	AVRG	0.324	4.3
Tetrachloroethene	0.268	0.259	AVRG	0.267	4.7
1,1,2,2-Tetrachloroethane	0.289	0.272	AVRG	0.257	9.8
Trans-1,2-Dichloroethene	0.602	0.594	AVRG	0.596	3.9
1,2-Dichloroethane	0.868	0.837	AVRG	0.836	6.0
d4-1,2-Dichloroethane	0.650	0.634	AVRG	0.687	7.8
d8-Toluene	1.384	1.383	AVRG	1.379	0.8

<- Indicates value outside QC limits:
(%RSD < 20% or R^2 > 0.990)

7A

VOLATILE CONTINUING CALIBRATION CHECK

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

ARI Job No: RI46 Project: LORA LAKE APTS RI

Instrument ID: NT7 Cont. Calib. Date: 08/20/10

Init. Calib. Date: 07/21/10 Cont. Calib. Time: 0905

COMPOUND	CalAmt or ARF	CC Amt 1000	MIN RRF	CURVE TYPE	%D or Drift	
Vinyl Chloride	0.781	0.725	0.010	AVRG	-7.2	
1,1-Dichloroethene	0.548	0.529	0.010	AVRG	-3.5	
cis-1,2-dichloroethene	0.632	0.615	0.010	AVRG	-2.7	
Benzene	1000.0	1047.1	0.010	LINR	4.7	
Trichloroethene	0.382	0.345	0.010	AVRG	-9.7	
Tetrachloroethene	1000.0	1023.1	0.010	LINR	2.3	
1,1,2,2-Tetrachloroethane	0.290	0.270	0.300	AVRG	-6.9	*
Trans-1,2-Dichloroethene	0.610	0.592	0.010	AVRG	-3.0	
1,2-Dichloroethane	0.753	0.761	0.010	AVRG	1.1	
d4-1,2-Dichloroethane	0.516	0.568	0.010	AVRG	10.1	
d8-Toluene	1.275	1.359	0.010	AVRG	6.6	

<- Exceeds QC limit of 20% D
* RF less than minimum RF

7A

VOLATILE CONTINUING CALIBRATION CHECK

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

ARI Job No: RI46 Project: LORA LAKE APTS RI

Instrument ID: NT7 Cont. Calib. Date: 08/23/10

Init. Calib. Date: 08/23/10 Cont. Calib. Time: 1118

COMPOUND	CalAmt or ARF	CC Amt 1000	MIN RRF	CURVE TYPE	%D or Drift	
Vinyl Chloride	0.897	0.867	0.010	AVRG	-3.3	
1,1-Dichloroethene	0.510	0.494	0.010	AVRG	-3.1	
cis-1,2-dichloroethene	0.610	0.601	0.010	AVRG	-1.5	
Benzene	1.698	1.577	0.010	AVRG	-7.1	
Trichloroethene	0.323	0.305	0.010	AVRG	-5.6	
Tetrachloroethene	0.267	0.255	0.010	AVRG	-4.5	
1,1,2,2-Tetrachloroethane	0.257	0.260	0.300	AVRG	1.2	*
Trans-1,2-Dichloroethene	0.596	0.577	0.010	AVRG	-3.2	
1,2-Dichloroethane	0.836	0.820	0.010	AVRG	-1.9	
d4-1,2-Dichloroethane	0.687	0.651	0.010	AVRG	-5.2	
d8-Toluene	1.379	1.389	0.010	AVRG	0.7	

<- Exceeds QC limit of 20% D
* RF less than minimum RF

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

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

ARI Job No: RI46 Project: LORA LAKE APTS RI

Ical Midpoint ID: 07211008 Ical Date: 07/21/10

Instrument ID: NT7 Project Run Date: 07/21/10

		IS1(PFB) AREA #	RT #	IS2(DFB) AREA #	RT #	AREA #	RT #
	ICAL MIDPT	96505	5.32	146484	5.76		
	UPPER LIMIT	193010	5.82	292968	6.26		
	LOWER LIMIT	48252	4.82	73242	5.26		
	Sample ID						
01	ICV 1000 PPT	91990	5.32	148203	5.76		
02							
03							
04							
05							
06							
07							
08							
09							
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19							
20							
21							
22							

IS1 (PFB) = Pentafluorobenzene
IS2 (DFB) = 1,4-Difluorobenzene

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

* Values outside of QC limits.

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

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

ARI Job No: RI46 Project: LORA LAKE APTS RI

Ical Midpoint ID: 07211008 Ical Date: 07/21/10

Instrument ID: NT7 Project Run Date: 08/20/10

		IS1(PFB) AREA #	RT #	IS2(DFB) AREA #	RT #	AREA #	RT #
	ICAL MIDPT	96505	5.32	146484	5.76		
	UPPER LIMIT	193010	5.82	292968	6.26		
	LOWER LIMIT	48252	4.82	73242	5.26		
	Sample ID						
01	LCS0820	119311	5.32	199529	5.74		
02	LCSD0820	117492	5.32	198297	5.76		
03	MB0820	117096	5.32	193817	5.75		
04	081110-TB	117375	5.32	193889	5.75		
05	081210-TB	115673	5.32	190521	5.76		
06	081310-TB	116375	5.32	190955	5.76		
07	MW-02-081110	116319	5.32	190925	5.75		
08	MW-03-081110	120282	5.32	188302	5.76		
09	MW-03-081110	113954	5.32	187693	5.76		
10	MW-04-081110	113191	5.33	186030	5.75		
11	MW-14-081110	113871	5.32	186671	5.75		
12	MW-12-081210	112477	5.32	185162	5.76		
13	MW-10-081210	110944	5.32	184565	5.75		
14	MW-11-081210	110555	5.32	182706	5.76		
15	MW-08-081310	99955	5.32	168882	5.75		
16	MW-07-081310	97293	5.32	164303	5.76		
17	MW-08-081310	99867	5.32	163693	5.76		
18	MW-08-081310	99451	5.32	162894	5.76		
19	MW-12-081210	86130	5.32	151285	5.75		
20							
21							
22							

IS1 (PFB) = Pentafluorobenzene
IS2 (DFB) = 1,4-Difluorobenzene

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

* Values outside of QC limits.

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

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

ARI Job No: RI46 Project: LORA LAKE APTS RI

Ical Midpoint ID: 08231009 Ical Date: 08/23/10

Instrument ID: NT7 Project Run Date: 08/23/10

		IS1(PFB) AREA #	RT #	IS2(DFB) AREA #	RT #	AREA #	RT #
	ICAL MIDPT	94405	5.32	164423	5.76		
	UPPER LIMIT	188810	5.82	328846	6.26		
	LOWER LIMIT	47202	4.82	82212	5.26		
	Sample ID						
01	ICV1000	93596	5.31	163650	5.76		
02	LCS0823	94718	5.32	168101	5.74		
03	LCSD0823	84063	5.32	148835	5.76		
04	MB0823	91100	5.32	159719	5.76		
05	MW-13-081210	90849	5.32	160038	5.76		
06	MW-09-081310	90517	5.32	157840	5.75		
07	MW-01-081310	91429	5.32	157817	5.75		
08	MW-05-081310	95002	5.31	162456	5.76		
09	MW-12-081210	99393	5.32	166687	5.76		
10							
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20							
21							
22							

IS1 (PFB) = Pentafluorobenzene
IS2 (DFB) = 1,4-Difluorobenzene

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

* Values outside of QC limits.

SIM PAH Analysis
Report and Summary QC Forms

ARI Job ID: RI65

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS **Sample ID: MW-09-081310**
Page 1 of 1 **SAMPLE**

Lab Sample ID: RI65A
LIMS ID: 10-19847
Matrix: Water
Data Release Authorized:
Reported: 08/30/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
Event: POS-LLA
Date Sampled: 08/13/10
Date Received: 08/13/10

Date Extracted: 08/19/10
Date Analyzed: 08/28/10 16:49
Instrument/Analyst: NT11/YZ

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
56-55-3	Benzo(a)anthracene	0.010	< 0.010 U
218-01-9	Chrysene	0.010	< 0.010 U
50-32-8	Benzo(a)pyrene	0.010	< 0.010 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.010	< 0.010 U
53-70-3	Dibenz(a,h)anthracene	0.010	< 0.010 U
TOTBFA	Total Benzofluoranthenes	0.010	< 0.010 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	62.0%
d14-Dibenzo(a,h)anthracene	73.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS **Sample ID: MW-08-081310**
Page 1 of 1 **SAMPLE**

Lab Sample ID: RI65B
LIMS ID: 10-19848
Matrix: Water
Data Release Authorized: MW
Reported: 08/30/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
Event: POS-LLA
Date Sampled: 08/13/10
Date Received: 08/13/10

Date Extracted: 08/19/10
Date Analyzed: 08/28/10 17:13
Instrument/Analyst: NT11/YZ

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
56-55-3	Benzo(a)anthracene	0.010	< 0.010 U
218-01-9	Chrysene	0.010	< 0.010 U
50-32-8	Benzo(a)pyrene	0.010	< 0.010 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.010	< 0.010 U
53-70-3	Dibenz(a,h)anthracene	0.010	< 0.010 U
TOTBFA	Total Benzofluoranthenes	0.010	< 0.010 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	64.7%
d14-Dibenzo(a,h)anthracene	64.0%

ANALYTICAL RESOURCES INCORPORATED

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

Sample ID: MW-07-081310
SAMPLE

Lab Sample ID: RI65C
LIMS ID: 10-19849
Matrix: Water
Data Release Authorized: MW
Reported: 08/30/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
Event: POS-LLA
Date Sampled: 08/13/10
Date Received: 08/13/10

Date Extracted: 08/19/10
Date Analyzed: 08/28/10 18:25
Instrument/Analyst: NT11/YZ

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
56-55-3	Benzo(a)anthracene	0.010	< 0.010 U
218-01-9	Chrysene	0.010	< 0.010 U
50-32-8	Benzo(a)pyrene	0.010	< 0.010 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.010	< 0.010 U
53-70-3	Dibenz(a,h)anthracene	0.010	< 0.010 U
TOTBFA	Total Benzofluoranthenes	0.010	< 0.010 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	64.3%
d14-Dibenzo(a,h)anthracene	78.3%

ANALYTICAL RESOURCES INCORPORATED

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

Sample ID: MW-01-081310
SAMPLE

Lab Sample ID: RI65D
LIMS ID: 10-19850
Matrix: Water
Data Release Authorized:
Reported: 08/30/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
Event: POS-LLA
Date Sampled: 08/13/10
Date Received: 08/13/10

Date Extracted: 08/19/10
Date Analyzed: 08/28/10 18:49
Instrument/Analyst: NT11/YZ

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
56-55-3	Benzo(a)anthracene	0.010	< 0.010 U
218-01-9	Chrysene	0.010	< 0.010 U
50-32-8	Benzo(a)pyrene	0.010	< 0.010 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.010	< 0.010 U
53-70-3	Dibenz(a,h)anthracene	0.010	< 0.010 U
TOTBFA	Total Benzofluoranthenes	0.010	< 0.010 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	53.3%
d14-Dibenzo(a,h)anthracene	67.7%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS **Sample ID: MW-05-081310**
Page 1 of 1 **SAMPLE**

Lab Sample ID: RI65E
LIMS ID: 10-19851
Matrix: Water
Data Release Authorized: MW
Reported: 08/30/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
Event: POS-LLA
Date Sampled: 08/13/10
Date Received: 08/13/10

Date Extracted: 08/19/10
Date Analyzed: 08/28/10 19:12
Instrument/Analyst: NT11/YZ

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
56-55-3	Benzo(a)anthracene	0.010	< 0.010 U
218-01-9	Chrysene	0.010	< 0.010 U
50-32-8	Benzo(a)pyrene	0.010	< 0.010 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.010	< 0.010 U
53-70-3	Dibenz(a,h)anthracene	0.010	< 0.010 U
TOTBFA	Total Benzofluoranthenes	0.010	< 0.010 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	59.3%
d14-Dibenzo(a,h)anthracene	74.7%

ANALYTICAL RESOURCES INCORPORATED

SIM SW8270 SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
POS-LLA

Client ID	MNP	DBA	TOT OUT
MW-09-081310	62.0%	73.0%	0
MB-081910	58.0%	53.3%	0
LCS-081910	67.3%	75.0%	0
MW-08-081310	64.7%	64.0%	0
MW-08-081310 MS	63.3%	66.7%	0
MW-08-081310 MSD	64.0%	82.3%	0
MW-07-081310	64.3%	78.3%	0
MW-01-081310	53.3%	67.7%	0
MW-05-081310	59.3%	74.7%	0

	LCS/MB LIMITS	QC LIMITS
(MNP) = d10-2-Methylnaphthalene	(42-100)	(31-109)
(DBA) = d14-Dibenzo(a,h)anthracene	(40-125)	(10-133)

Prep Method: SW3510C
Log Number Range: 10-19847 to 10-19851

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS **Sample ID: MW-08-081310**
Page 1 of 1 **MATRIX SPIKE**

Lab Sample ID: RI65B
LIMS ID: 10-19848
Matrix: Water
Data Release Authorized:
Reported: 08/30/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
Event: POS-LLA
Date Sampled: 08/13/10
Date Received: 08/13/10

Date Extracted MS/MSD: 08/19/10

Date Analyzed MS: 08/28/10 17:37
MSD: 08/28/10 18:01
Instrument/Analyst MS: SVOA_MSD/YZ
MSD: SVOA_MSD/YZ

Sample Amount MS: 500 mL
MSD: 500 mL
Final Extract Volume MS: 0.50 mL
MSD: 0.50 mL
Dilution Factor MS: 1.00
MSD: 1.00

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Benzo(a)anthracene	< 0.0100 U	0.226	0.300	75.3%	0.278	0.300	92.7%	20.6%
Chrysene	< 0.0100 U	0.243	0.300	81.0%	0.295	0.300	98.3%	19.3%
Benzo(a)pyrene	< 0.0100 U	0.206	0.300	68.7%	0.265	0.300	88.3%	25.1%
Indeno(1,2,3-cd)pyrene	< 0.0100 U	0.182	0.300	60.7%	0.252	0.300	84.0%	32.3%
Dibenz(a,h)anthracene	< 0.0100 U	0.194	0.300	64.7%	0.256	0.300	85.3%	27.6%
Total Benzofluoranthenes	< 0.0100 U	0.439	0.600	73.2%	0.553	0.600	92.2%	23.0%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS **Sample ID: MW-08-081310**
Page 1 of 1 **MATRIX SPIKE**

Lab Sample ID: RI65B
LIMS ID: 10-19848
Matrix: Water
Data Release Authorized:
Reported: 08/30/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
Event: POS-LLA
Date Sampled: 08/13/10
Date Received: 08/13/10

Date Extracted: 08/19/10
Date Analyzed: 08/28/10 17:37
Instrument/Analyst: NT11/YZ

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
56-55-3	Benzo(a)anthracene	0.010	---
218-01-9	Chrysene	0.010	---
50-32-8	Benzo(a)pyrene	0.010	---
193-39-5	Indeno(1,2,3-cd)pyrene	0.010	---
53-70-3	Dibenz(a,h)anthracene	0.010	---
TOTBFA	Total Benzofluoranthenes	0.010	---

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	63.3%
d14-Dibenzo(a,h)anthracene	66.7%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS **Sample ID: MW-08-081310**
Page 1 of 1 **MATRIX SPIKE DUPLICATE**

Lab Sample ID: RI65B
LIMS ID: 10-19848
Matrix: Water
Data Release Authorized:
Reported: 08/30/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
Event: POS-LLA
Date Sampled: 08/13/10
Date Received: 08/13/10

Date Extracted: 08/19/10
Date Analyzed: 08/28/10 18:01
Instrument/Analyst: NT11/YZ

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
56-55-3	Benzo(a)anthracene	0.010	---
218-01-9	Chrysene	0.010	---
50-32-8	Benzo(a)pyrene	0.010	---
193-39-5	Indeno(1,2,3-cd)pyrene	0.010	---
53-70-3	Dibenz(a,h)anthracene	0.010	---
TOTBFA	Total Benzofluoranthenes	0.010	---

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	64.0%
d14-Dibenzo(a,h)anthracene	82.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS **Sample ID: LCS-081910**
Page 1 of 1 **LAB CONTROL SAMPLE**

Lab Sample ID: LCS-081910
LIMS ID: 10-19848
Matrix: Water
Data Release Authorized:
Reported: 08/30/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
Event: POS-LLA
Date Sampled: NA
Date Received: NA

Date Extracted LCS/LCSD: 08/19/10
Date Analyzed LCS: 08/28/10 16:25
Instrument/Analyst LCS: SVOA_MSD/YZ

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

Analyte	LCS	Spike Added	Recovery
Benzo(a)anthracene	0.252	0.300	84.0%
Chrysene	0.272	0.300	90.7%
Benzo(a)pyrene	0.233	0.300	77.7%
Indeno(1,2,3-cd)pyrene	0.212	0.300	70.7%
Dibenz(a,h)anthracene	0.220	0.300	73.3%
Total Benzofluoranthenes	0.497	0.600	82.8%

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	67.3%
d14-Dibenzo(a,h)anthracene	75.0%

4B

SEMIVOLATILE METHOD BLANK SUMMARY

BLANK NO.

RI65MBW1

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

ARI Job No: RI65 Project: LORA LAKE APTS RI

Lab File ID: RI65MB Date Extracted: 08/19/10

Instrument ID: NT11 Date Analyzed: 08/28/10

Matrix: LIQUID Time Analyzed: 1601

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	RI65LCSW1	RI65LCSW1	RI65SB	08/28/10
02	MW-09-081310	RI65A	RI65A	08/28/10
03	MW-08-081310	RI65B	RI65B	08/28/10
04	MW-08-081310 MS	RI65BMS	RI65BMS	08/28/10
05	MW-08-081310 MSD	RI65BMSD	RI65BMSD	08/28/10
06	MW-07-081310	RI65C	RI65C	08/28/10
07	MW-01-081310	RI65D	RI65D	08/28/10
08	MW-05-081310	RI65E	RI65E	08/28/10
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FORM IV SV

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS **Sample ID: MB-081910**
Page 1 of 1 **METHOD BLANK**

Lab Sample ID: MB-081910
LIMS ID: 10-19848
Matrix: Water
Data Release Authorized:
Reported: 08/30/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
Event: POS-LLA
Date Sampled: NA
Date Received: NA

Date Extracted: 08/19/10
Date Analyzed: 08/28/10 16:01
Instrument/Analyst: NT11/YZ

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
56-55-3	Benzo(a)anthracene	0.010	< 0.010 U
218-01-9	Chrysene	0.010	< 0.010 U
50-32-8	Benzo(a)pyrene	0.010	< 0.010 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.010	< 0.010 U
53-70-3	Dibenz(a,h)anthracene	0.010	< 0.010 U
TOTBFA	Total Benzofluoranthenes	0.010	< 0.010 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	58.0%
d14-Dibenzo(a,h)anthracene	53.3%

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

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

Instrument ID: NT11 Project: LORA LAKE APTS RI

DFTPP Injection Date: 08/18/10 DFTPP Injection Time: 1511

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	23.1
68	Less than 2.0% of mass 69	0.1 (0.2)1
69	Mass 69 relative abundance	55.5
70	Less than 2.0% of mass 69	0.2 (0.4)1
127	10.0 - 80.0% of mass 198	56.2
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.5
275	10.0 - 60.0% of mass 198	22.4
365	Greater than 1.0% of mass 198	3.16
441	0.0 - 24.0% of mass 442	13.5 (15.0)2
442	50.0 - 200.0% of mass 198	89.9
443	15.0 - 24.0% of mass 442	17.2 (19.1)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		IC0818A	IC0818A	08/18/10	1525
02		IC0818B	IC0818B	08/18/10	1549
03		IC0818C	IC0818C	08/18/10	1627
04		IC0818D	IC0818D	08/18/10	1651
05		IC0818E	IC0818E	08/18/10	1714
06		IC0818F	IC0818F	08/18/10	1739
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FORM V SV

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

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

Instrument ID: NT11 Project: LORA LAKE APTS RI

DFTPP Injection Date: 08/28/10 DFTPP Injection Time: 1505

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	25.6
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	56.6
70	Less than 2.0% of mass 69	0.2 (0.4)1
127	10.0 - 80.0% of mass 198	58.1
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.4
275	10.0 - 60.0% of mass 198	24.3
365	Greater than 1.0% of mass 198	3.67
441	0.0 - 24.0% of mass 442	14.5 (15.0)2
442	50.0 - 200.0% of mass 198	96.5
443	15.0 - 24.0% of mass 442	18.8 (19.5)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		CC0828	CC0828	08/28/10	1519
02	RI65MBW1	RI65MBW1	RI65MB	08/28/10	1601
03	RI65LCSW1	RI65LCSW1	RI65SB	08/28/10	1625
04	MW-09-081310	RI65A	RI65A	08/28/10	1649
05	MW-08-081310	RI65B	RI65B	08/28/10	1713
06	MW-08-081310 MS	RI65BMS	RI65BMS	08/28/10	1737
07	MW-08-081310 MSD	RI65BMSD	RI65BMSD	08/28/10	1801
08	MW-07-081310	RI65C	RI65C	08/28/10	1825
09	MW-01-081310	RI65D	RI65D	08/28/10	1849
10	MW-05-081310	RI65E	RI65E	08/28/10	1912
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FORM V SV

6B

SEMIVOLATILE 8270-D INITIAL CALIBRATION DATA

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

ARI Job No: RI65 Project: LORA LAKE APTS RI

Instrument ID: NT11 Calibration Date: 08/18/10

LAB FILE ID: RRF10 =IC0818C RRF50 =IC0818F RRF100=IC0818D
RRF250=IC0818A RRF500=IC0818E RRF1000=IC0818B

COMPOUND	RRF 10	RRF 50	RRF 100	RRF 250	RRF 500	RRF 1000	___ RRF	%RSD /R^2
Naphthalene	1.064	1.023	0.994	0.998	1.019	0.975	1.012	3.1
2-Methylnaphthalene	0.624	0.614	0.618	0.629	0.652	0.617	0.626	2.2
Acenaphthylene	1.845	1.854	1.801	1.873	1.958	2.006	1.890	4.1
Acenaphthene	1.094	1.103	1.076	1.103	1.147	1.161	1.114	3.0
Dibenzofuran	1.582	1.601	1.601	1.614	1.657	1.698	1.626	2.7
Fluorene	1.240	1.154	1.152	1.206	1.234	1.256	1.207	3.7
Phenanthrene	1.045	1.035	1.040	0.998	1.004	1.028	1.025	1.9
Anthracene	0.977	0.956	0.973	1.027	1.039	1.067	1.006	4.4
Fluoranthene	1.057	1.025	1.055	1.087	1.112	1.149	1.081	4.1
Pyrene	1.094	1.061	1.087	1.139	1.168	1.176	1.121	4.2
Benzo(a)anthracene	1.460	1.365	1.364	1.388	1.359	1.388	1.387	2.7
Chrysene	1.449	1.406	1.398	1.363	1.384	1.370	1.395	2.2
Benzo(a)pyrene	1.402	1.349	1.338	1.426	1.425	1.403	1.390	2.7
Indeno(1,2,3-cd)pyrene	1.938	1.784	1.852	1.797	1.910	1.891	1.862	3.3
Dibenzo(a,h)anthracene	1.466	1.353	1.413	1.375	1.463	1.446	1.419	3.3
Benzo(g,h,i)perylene	1.709	1.603	1.658	1.573	1.715	1.596	1.642	3.7
1-Methylnaphthalene	0.622	0.610	0.616	0.618	0.639	0.613	0.620	1.7
Total Benzofluoranthenes	1.734	1.654	1.629	1.709	1.743	1.657	1.688	2.8
2-Methylnaphthalene-d10	0.639	0.628	0.629	0.631	0.650	0.630	0.634	1.3
Dibenzo(a,h)anthracene-d14	1.123	0.990	1.042	1.010	1.072	1.065	1.050	4.5

<- Outside QC limits: %RSD <20% or R^2 > 0.990

7B

SEMIVOLATILE 8270-D CONTINUING CALIBRATION CHECK

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

ARI Job No: RI65 Project: LORA LAKE APTS RI

Instrument ID: NT11 Cont. Calib. Date: 08/28/10

Init. Calib. Date: 08/18/10 Cont. Calib. Time: 1519

COMPOUND	CalAmt or ARF	CC Amt or RF	MIN RRF	CURVE TYPE	%D or Drift
Naphthalene	1.012	1.066	0.700	AVRG	5.3
2-Methylnaphthalene	0.626	0.636	0.400	AVRG	1.6
Acenaphthylene	1.890	1.850	0.900	AVRG	-2.1
Acenaphthene	1.114	1.170	0.900	AVRG	5.0
Dibenzofuran	1.626	1.732	0.800	AVRG	6.5
Fluorene	1.207	1.222	0.900	AVRG	1.2
Phenanthrene	1.025	1.082	0.700	AVRG	5.6
Anthracene	1.006	1.006	0.700	AVRG	0.0
Fluoranthene	1.081	1.067	0.600	AVRG	-1.3
Pyrene	1.121	1.202	0.600	AVRG	7.2
Benzo(a)anthracene	1.387	1.317	0.800	AVRG	-5.0
Chrysene	1.395	1.471	0.700	AVRG	5.4
Benzo(a)pyrene	1.390	1.423	0.700	AVRG	2.4
Indeno(1,2,3-cd)pyrene	1.862	1.822	0.500	AVRG	-2.1
Dibenzo(a,h)anthracene	1.419	1.359	0.400	AVRG	-4.2
Benzo(g,h,i)perylene	1.642	1.619	0.500	AVRG	-1.4
1-Methylnaphthalene	0.620	0.622	0.010	AVRG	0.3
Total Benzofluoranthenes	1.688	1.710	0.010	AVRG	1.3
2-Methylnaphthalene-d10	0.634	0.615	0.010	AVRG	-3.0
Dibenzo(a,h)anthracene-d14	1.050	0.994	0.010	AVRG	-5.3

<- Exceeds QC limit of 20% D
* RF less than minimum RF

FORM VII SV-1

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

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

ARI Job No: RI65 — Project: LORA LAKE APTS RI

Ical Midpoint ID: IC0818A — Ical Date: 08/18/10

Instrument ID: NT11 — Cont. Cal Date: 08/28/10

		IS1(NPT) AREA	#	RT	#	IS2(ANT) AREA	#	RT	#	IS3(PHN) AREA	#	RT	#
	ICAL MIDPT	422551		5.94		241002		8.10		409999		9.94	
	UPPER LIMIT	845102				482004				819998			
	LOWER LIMIT	211276				120501				205000			
	CCAL	403803		5.94		205562		8.10		340812		9.93	
	UPPER LIMIT			6.44				8.60				10.43	
	LOWER LIMIT			5.44				7.60				9.43	
01	RI65MBW1	397917		5.94		201819		8.10		330504		9.93	
02	RI65LCSW1	382189		5.94		207871		8.10		334062		9.93	
03	MW-09-081310	393398		5.94		209034		8.10		320491		9.93	
04	MW-08-081310	386018		5.94		204381		8.10		318855		9.93	
05	MW-08-081310	392345		5.94		212746		8.10		341007		9.93	
06	MW-08-081310	392485		5.94		213386		8.10		339911		9.93	
07	MW-07-081310	404256		5.94		212075		8.10		333901		9.93	
08	MW-01-081310	435251		5.94		216920		8.10		343597		9.93	
09	MW-05-081310	389265		5.94		213203		8.10		337527		9.93	
10													
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25													

IS1 = Naphthalene-d8
IS2 = Acenaphthene-d10
IS3 = Phenanthrene-d10

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Cont. Cal
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Cont. Cal

* Values outside of QC limits.

FORM VIII SV-1

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

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

ARI Job No: RI65 Project: LORA LAKE APTS RI

Ical Midpoint ID: IC0818A Ical Date: 08/18/10

Instrument ID: NT11 Cont. Cal Date: 08/28/10

		IS4(CRY) AREA #	RT #	IS5(PRY) AREA #	RT #	AREA #	RT #
	ICAL MIDPT	258429	13.24	200470	15.03		
	UPPER LIMIT	516858		400940			
	LOWER LIMIT	129214		100235			
	CCAL	214043	13.23	157623	15.02		
	UPPER LIMIT		13.73		15.52		
	LOWER LIMIT		12.73		14.52		
01	RI65MBW1	192134	13.24	154089	15.03		
02	RI65LCSW1	204148	13.23	154463	15.02		
03	MW-09-081310	191005	13.23	143684	15.02		
04	MW-08-081310	193619	13.23	152867	15.02		
05	MW-08-081310	209147	13.23	158443	15.02		
06	MW-08-081310	206453	13.23	156217	15.02		
07	MW-07-081310	197822	13.23	151439	15.02		
08	MW-01-081310	200293	13.23	153736	15.02		
09	MW-05-081310	199281	13.23	153173	15.02		
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IS4 = Chrysene-d12
IS5 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Cont. Cal
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Cont. Cal

* Values outside of QC limits.

FORM VIII SV-2

PCP/Chlorophenols Analysis
Report and Summary QC Forms

ARI Job ID: RI65

ANALYTICAL RESOURCES INCORPORATED

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

Sample ID: MW-09-081310
SAMPLE

Lab Sample ID: RI65A
LIMS ID: 10-19847
Matrix: Water
Data Release Authorized:
Reported: 08/26/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: 08/13/10
Date Received: 08/13/10

Date Extracted: 08/18/10
Date Analyzed: 08/25/10 18:43
Instrument/Analyst: ECD1/AAR

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

CAS Number	Analyte	RL	Result
87-86-5	**Pentachlorophenol**	0.25	0.47

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	56.0%

FORM I

ANALYTICAL RESOURCES INCORPORATED

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

Sample ID: MW-08-081310
SAMPLE

Lab Sample ID: RI65B
LIMS ID: 10-19848
Matrix: Water
Data Release Authorized:
Reported: 08/26/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: 08/13/10
Date Received: 08/13/10

Date Extracted: 08/18/10
Date Analyzed: 08/25/10 19:03
Instrument/Analyst: ECD1/AAR

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

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	< 0.25 U

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	60.8%

FORM I

ANALYTICAL RESOURCES INCORPORATED

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

Sample ID: MW-07-081310
SAMPLE

Lab Sample ID: RI65C
LIMS ID: 10-19849
Matrix: Water
Data Release Authorized:
Reported: 08/26/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: 08/13/10
Date Received: 08/13/10

Date Extracted: 08/18/10
Date Analyzed: 08/25/10 20:03
Instrument/Analyst: ECD1/AAR

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

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	< 0.25 U

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	62.4%

FORM I

ANALYTICAL RESOURCES INCORPORATED

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

Sample ID: MW-01-081310
SAMPLE

Lab Sample ID: RI65D
LIMS ID: 10-19850
Matrix: Water
Data Release Authorized:
Reported: 08/26/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: 08/13/10
Date Received: 08/13/10

Date Extracted: 08/18/10
Date Analyzed: 08/25/10 21:03
Instrument/Analyst: ECD1/AAR

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

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	< 0.25 U

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	60.0%

FORM I

ANALYTICAL RESOURCES INCORPORATED

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

Sample ID: MW-05-081310
SAMPLE

Lab Sample ID: RI65E
LIMS ID: 10-19851
Matrix: Water
Data Release Authorized:
Reported: 08/26/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: 08/13/10
Date Received: 08/13/10

Date Extracted: 08/18/10
Date Analyzed: 08/25/10 21:23
Instrument/Analyst: ECD1/AAR

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

CAS Number	Analyte	RL	Result
87-86-5	**Pentachlorophenol**	**0.25**	**0.76**

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	54.4%

FORM I

ANALYTICAL RESOURCES INCORPORATED

SW8041 CHLOROPHENOLICS SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
POS-LLA

Client ID	TBP	TOT OUT
MW-09-081310	56.0%	0
MB-081810	52.4%	0
LCS-081810	58.8%	0
MW-08-081310	60.8%	0
MW-08-081310 MS	62.4%	0
MW-08-081310 MSD	66.2%	0
MW-07-081310	62.4%	0
MW-01-081310	60.0%	0
MW-05-081310	54.4%	0

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

Prep Method: SW3510C
Log Number Range: 10-19847 to 10-19851

FORM-II SW8041

ANALYTICAL RESOURCES INCORPORATED

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

Sample ID: MW-08-081310 MS/MSD

Lab Sample ID: RI65B
LIMS ID: 10-19848
Matrix: Water
Data Release Authorized:
Reported: 08/26/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI POS-LLA
Date Sampled: 08/13/10
Date Received: 08/13/10

Date Extracted MS/MSD: 08/18/10

Date Analyzed MS: 08/25/10 19:23
MSD: 08/25/10 19:43
Instrument/Analyst MS: ECD1/AAR
MSD: ECD1/AAR

Sample Amount MS: 500 mL
MSD: 500 mL
Final Extract Volume MS: 50 mL
MSD: 50 mL
Dilution Factor MS: 1.00
MSD: 1.00

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Pentachlorophenol	< 0.25 U	1.81	2.50	72.4%	1.89	2.50	75.6%	4.3%

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

ANALYTICAL RESOURCES INCORPORATED

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

Sample ID: MW-08-081310
MATRIX SPIKE

Lab Sample ID: RI65B
LIMS ID: 10-19848
Matrix: Water
Data Release Authorized:
Reported: 08/26/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: 08/13/10
Date Received: 08/13/10

Date Extracted: 08/18/10
Date Analyzed: 08/25/10 19:23
Instrument/Analyst: ECD1/AAR

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

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	---

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	62.4%

FORM I

ANALYTICAL RESOURCES INCORPORATED

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

Sample ID: MW-08-081310 MATRIX SPIKE DUP

Lab Sample ID: RI65B
LIMS ID: 10-19848
Matrix: Water
Data Release Authorized:
Reported: 08/26/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI POS-LLA
Date Sampled: 08/13/10
Date Received: 08/13/10

Date Extracted: 08/18/10
Date Analyzed: 08/25/10 19:43
Instrument/Analyst: ECD1/AAR

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

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	---

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	66.2%

FORM I

ANALYTICAL RESOURCES INCORPORATED

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

Sample ID: LCS-081810
LAB CONTROL

Lab Sample ID: LCS-081810
LIMS ID: 10-19848
Matrix: Water
Data Release Authorized:
Reported: 08/26/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: 08/13/10
Date Received: 08/13/10

Date Extracted: 08/18/10
Date Analyzed: 08/25/10 18:23
Instrument/Analyst: ECD1/AAR

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

Analyte	Lab Control	Spike Added	Recovery
Pentachlorophenol	1.87	2.50	74.8%

Chlorophenols Surrogate Recovery

2,4,6-Tribromophenol	58.8%

Results reported in µg/L

FORM III

4

CHLOROPHENOL METHOD BLANK SUMMARY

SAMPLE NO.

RI65MBW1

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

ARI Job No.: RI65 — Project: LORA LAKE APTS RI

Lab Sample ID: RI65MBW1 — Lab File ID: 0824A045

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

Sulfur Cleanup (Y/N) Y — Date Extracted: 08/18/10

Date Analyzed (1): 08/25/10 — Date Analyzed (2): 08/25/10

Time Analyzed (1): 1803 — Time Analyzed (2): 1803

Instrument ID (1): ECD1 — Instrument ID (2): ECD1

GC Column (1): ZB5 ID: 0.53(mm) — GC Column (2): ZB35 ID: 0.53(mm)

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	RI65LCSW1	RI65LCSW1	08/25/10	08/25/10
02	MW-09-081310	RI65A	08/25/10	08/25/10
03	MW-08-081310	RI65B	08/25/10	08/25/10
04	MW-08-081310	RI65BMS	08/25/10	08/25/10
05	MW-08-081310	RI65BMSD	08/25/10	08/25/10
06	MW-07-081310	RI65C	08/25/10	08/25/10
07	MW-01-081310	RI65D	08/25/10	08/25/10
08	MW-05-081310	RI65E	08/25/10	08/25/10

ANALYTICAL RESOURCES INCORPORATED

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

Sample ID: MB-081810
METHOD BLANK

Lab Sample ID: MB-081810
LIMS ID: 10-19848
Matrix: Water
Data Release Authorized:
Reported: 08/26/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: NA
Date Received: NA

Date Extracted: 08/18/10
Date Analyzed: 08/25/10 18:03
Instrument/Analyst: ECD1/AAR

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

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	< 0.25 U

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery	
2,4,6-Tribromophenol	52.4%

FORM I

6D
CHLOROPHENOL INITIAL CALIBRATION
RETENTION TIME WINDOWS

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

ARI Job No.: RI65 Project: LORA LAKE APTS RI

GC Column: ZB5 ID: 0.53 (mm) Instrument ID: ECD1

Calibration Date: 08/09/10

	RT OF STANDARDS					MEAN	RT WINDOW	
COMPOUND	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	RT	FROM	TO
Pentachlorophenol	11.22	11.22	11.22	11.21	11.21	11.21	11.15	11.29
2,4,6-Trichloropheno	7.26	7.26	7.26	7.26	7.26	7.26	7.19	7.33
2,3,6-Trichloropheno	7.62	7.62	7.62	7.61	7.61	7.62	7.55	7.69
2,4,5-Trichloropheno	8.25	8.24	8.23	8.22	8.21	8.23	8.17	8.31
2,3,4-Trichloropheno	8.81	8.79	8.78	8.77	8.76	8.78	8.72	8.86
2,3,5,6-Tetrachlorop	9.01	9.01	9.00	9.00	8.99	9.00	8.94	9.08
2,3,4,5-Tetrachlorop	10.42	10.41	10.41	10.40	10.39	10.40	10.34	10.48
2,4-Dichlorophenol	6.90	6.89	6.89	6.89	6.88	6.89	6.82	6.96
2,4,6-Tribromophenol	10.01	10.00	10.00	9.99	9.98	10.00	9.93	10.07

6D
CHLOROPHENOL INITIAL CALIBRATION
RETENTION TIME WINDOWS

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

ARI Job No.: RI65 Project: LORA LAKE APTS RI

GC Column: ZB35 ID: 0.53 (mm) Instrument ID: ECD1

Calibration Date: 08/09/10

	RT OF STANDARDS					MEAN	RT WINDOW	
COMPOUND	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	RT	FROM	TO
Pentachlorophenol___	11.66	11.65	11.65	11.65	11.65	11.65	11.59	11.73
2,4,6-Trichloropheno	7.33	7.33	7.33	7.33	7.33	7.33	7.26	7.40
2,3,6-Trichloropheno	7.86	7.86	7.86	7.86	7.85	7.86	7.79	7.93
2,4,5-Trichloropheno	8.62	8.61	8.60	8.59	8.59	8.60	8.54	8.69
2,3,4-Trichloropheno	9.38	9.37	9.36	9.36	9.35	9.36	9.31	9.45
2,3,5,6-Tetrachlorop	9.28	9.27	9.27	9.26	9.26	9.27	9.21	9.35
2,3,4,5-Tetrachlorop	11.13	11.12	11.11	11.11	11.10	11.11	11.06	11.20
2,4-Dichlorophenol__	7.17	7.16	7.16	7.16	7.15	7.16	7.10	7.24
2,4,6-Tribromophenol	10.65	10.64	10.64	10.63	10.63	10.64	10.58	10.72

6E
CHLOROPHENOL INITIAL CALIBRATION
CALIBRATION FACTORS

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

ARI Job No.: RI65 Project: LORA LAKE APTS RI

GC Column: ZB5 ID: 0.53 (mm) Instrument ID: ECD1

Calibration Date: 08/09/10

COMPOUND	CALIBRATION FACTORS LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	R^2/ %RSD	CT
Pentachlorophenol____	24528	19824	17830	15337	13686	11965	0.9996	Q
2,4,6-Trichlorophenol	13540	10473	9560	8413	7539	6660	0.9997	Q
2,3,6-Trichlorophenol	12902	10500	9607	8801	8025	7161	0.9998	Q
2,4,5-Trichlorophenol	6404	5362	5688	4915	4290	3627	19.7	A
2,3,4-Trichlorophenol	8393	7068	7135	7922	5474	5053	19.4	A
2,3,5,6-Tetrachloroph	17905	15060	14996	14233	11882	10558	18.4	A
2,3,4,5-Tetrachloroph	16324	13459	12294	10216	8895	7628	0.9995	Q
2,4-Dichlorophenol___	721	627	611	486	409	342	0.9993	Q
2,4,6-Tribromophenol	18561	14998	13969	12135	11200	9940	0.9997	Q
						AVE RSD	23.3	

CT stands for Curve Types:
- A Indicates an Average Response Factor Curve
- L Indicates a Linear Curve
- Q Indicates a Quadratic Curve

CALIBRATION FILES

LVL 1: /chem2/ecd1.i/FPCP20100809.b/ical-1.b/0809A006.d/0809A006.cdf
LVL 2: /chem2/ecd1.i/FPCP20100809.b/ical-1.b/0809A007.d/0809A007.cdf
LVL 3: /chem2/ecd1.i/FPCP20100809.b/ical-1.b/0809A008.d
LVL 4: /chem2/ecd1.i/FPCP20100809.b/ical-1.b/0809A005.d/0809A005.cdf
LVL 5: /chem2/ecd1.i/FPCP20100809.b/ical-1.b/0809A009.d
LVL 6: /chem2/ecd1.i/FPCP20100809.b/ical-1.b/0809A010.d

6E
CHLOROPHENOL INITIAL CALIBRATION
CALIBRATION FACTORS

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

ARI Job No.: RI65 Project: LORA LAKE APTS RI

GC Column: ZB35 ID: 0.53 (mm) Instrument ID: ECD1

Calibration Date: 08/09/10

COMPOUND	CALIBRATION FACTORS LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	R^2/ %RSD	CT
Pentachlorophenol	28790	24995	23903	21206	20507	18368	16.2	A
2,4,6-Trichlorophenol	14811	12542	14020	12241	11222	10070	14.0	A
2,3,6-Trichlorophenol	15358	13183	12610	12054	11138	10108	14.6	A
2,4,5-Trichlorophenol	9451	7724	7152	6203	5568	4896	0.9997	Q
2,3,4-Trichlorophenol	13138	11714	9430	8408	7532	6669	0.9995	Q
2,3,5,6-Tetrachloroph	22710	20100	18581	17733	16666	15298	14.2	A
2,3,4,5-Tetrachloroph	18414	16106	15136	13550	12798	11541	17.0	A
2,4-Dichlorophenol	859	720	733	619	536	458	0.9997	Q
2,4,6-Tribromophenol	22648	19438	18816	17793	17226	16083	12.2	A
						AVE RSD	17.9	

CT stands for Curve Types:
- A Indicates an Average Response Factor Curve
- L Indicates a Linear Curve
- Q Indicates a Quadratic Curve

CALIBRATION FILES

LVL 1: /chem2/ecd1.i/FPCP20100809.b/ical-2.b/0809A006.d/0809A006.cdf
LVL 2: /chem2/ecd1.i/FPCP20100809.b/ical-2.b/0809A007.d/0809A007.cdf
LVL 3: /chem2/ecd1.i/FPCP20100809.b/ical-2.b/0809A008.d
LVL 4: /chem2/ecd1.i/FPCP20100809.b/ical-2.b/0809A005.d
LVL 5: /chem2/ecd1.i/FPCP20100809.b/ical-2.b/0809A009.d
LVL 6: /chem2/ecd1.i/FPCP20100809.b/ical-2.b/0809A010.d

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

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

ARI Job No.: RI65 Project: LORA LAKE APTS RI

GC Column: ZB5 ID: 0.53 (mm)

Init. Calib. Date(s): 08/09/10 08/09/10

Client Sample No.(PCP): Date Analyzed :08/25/10

Lab Sample ID (PCP): PCPCCAL Time Analyzed :1642

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	11.21	11.15	11.29	25.1	25.0	0.4
2,4,6-Trichlorophenol	7.26	7.19	7.33	26.4	25.0	5.6
2,3,6-Trichlorophenol	7.62	7.55	7.69	26.1	25.0	4.4
2,4,5-Trichlorophenol	8.22	8.17	8.31	25.5	25.0	2.0
2,3,4-Trichlorophenol	8.77	8.72	8.86	24.7	25.0	-1.2
2,3,5,6-Tetrachlorophenol	9.00	8.94	9.08	24.6	25.0	-1.6
2,3,4,5-Tetrachlorophenol	10.40	10.34	10.48	25.1	25.0	0.4
2,4-Dichlorophenol	6.89	6.82	6.96	236	250	-5.6
2,4,6-Tribromophenol (surr	9.99	9.93	10.07	25.6	25.0	2.4

AVERAGE %D = 2.6

FORM VII PCP

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

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

ARI Job No.: RI65 Project: LORA LAKE APTS RI

GC Column: ZB35 ID: 0.53 (mm)

Init. Calib. Date(s): 08/09/10 08/09/10

Client Sample No.(PCP): Date Analyzed :08/25/10

Lab Sample ID (PCP): PCPCCAL Time Analyzed :1642

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	11.65	11.59	11.73	25.3	25.0	1.2
2,4,6-Trichlorophenol	7.33	7.26	7.40	26.8	25.0	7.2
2,3,6-Trichlorophenol	7.86	7.79	7.93	24.7	25.0	-1.2
2,4,5-Trichlorophenol	8.59	8.54	8.69	26.7	25.0	6.8
2,3,4-Trichlorophenol	9.35	9.31	9.45	25.4	25.0	1.6
2,3,5,6-Tetrachlorophenol	9.26	9.21	9.35	25.5	25.0	2.0
2,3,4,5-Tetrachlorophenol	11.11	11.06	11.20	23.9	25.0	-4.4
2,4-Dichlorophenol	7.16	7.10	7.24	253	250	1.2
2,4,6-Tribromophenol (surr	10.63	10.58	10.72	25.3	25.0	1.2

AVERAGE %D = 3.0

FORM VII PCP

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

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

ARI Job No.: RI65 Project: LORA LAKE APTS RI

GC Column: ZB5 ID: 0.53 (mm)

Init. Calib. Date(s): 08/09/10 08/09/10

Client Sample No.(PCP): Date Analyzed :08/25/10

Lab Sample ID (PCP): PCPCCAL Time Analyzed :2043

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	11.21	11.15	11.29	25.8	25.0	3.2
2,4,6-Trichlorophenol	7.26	7.19	7.33	26.8	25.0	7.2
2,3,6-Trichlorophenol	7.62	7.55	7.69	26.3	25.0	5.2
2,4,5-Trichlorophenol	8.22	8.17	8.31	25.8	25.0	3.2
2,3,4-Trichlorophenol	8.77	8.72	8.86	24.3	25.0	-2.8
2,3,5,6-Tetrachlorophenol	9.00	8.94	9.08	24.7	25.0	-1.2
2,3,4,5-Tetrachlorophenol	10.40	10.34	10.48	26.3	25.0	5.2
2,4-Dichlorophenol	6.89	6.82	6.96	239	250	-4.4
2,4,6-Tribromophenol (surr	9.99	9.93	10.07	25.9	25.0	3.6

AVERAGE %D = 4.0

FORM VII PCP

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

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

ARI Job No.: RI65 Project: LORA LAKE APTS RI

GC Column: ZB35 ID: 0.53 (mm)

Init. Calib. Date(s): 08/09/10 08/09/10

Client Sample No.(PCP): Date Analyzed :08/25/10

Lab Sample ID (PCP): PCPCCAL Time Analyzed :2043

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	11.65	11.59	11.73	25.9	25.0	3.6
2,4,6-Trichlorophenol	7.33	7.26	7.40	27.3	25.0	9.2
2,3,6-Trichlorophenol	7.86	7.79	7.93	25.4	25.0	1.6
2,4,5-Trichlorophenol	8.59	8.54	8.69	27.6	25.0	10.4
2,3,4-Trichlorophenol	9.36	9.31	9.45	26.2	25.0	4.8
2,3,5,6-Tetrachlorophenol	9.26	9.21	9.35	26.3	25.0	5.2
2,3,4,5-Tetrachlorophenol	11.11	11.06	11.20	24.6	25.0	-1.6
2,4-Dichlorophenol	7.16	7.10	7.24	260	250	4.0
2,4,6-Tribromophenol (surr	10.63	10.58	10.72	26.0	25.0	4.0

AVERAGE %D = 4.9

FORM VII PCP

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

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

ARI Job No.: RI65 Project: LORA LAKE APTS RI

GC Column: ZB5 ID: 0.53 (mm)

Init. Calib. Date(s): 08/09/10 08/09/10

Client Sample No.(PCP): Date Analyzed :08/26/10

Lab Sample ID (PCP): PCPCCAL Time Analyzed :0023

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	11.22	11.15	11.29	26.5	25.0	6.0
2,4,6-Trichlorophenol	7.26	7.19	7.33	27.2	25.0	8.8
2,3,6-Trichlorophenol	7.62	7.55	7.69	25.8	25.0	3.2
2,4,5-Trichlorophenol	8.22	8.17	8.31	26.2	25.0	4.8
2,3,4-Trichlorophenol	8.77	8.72	8.86	24.0	25.0	-4.0
2,3,5,6-Tetrachlorophenol	9.00	8.94	9.08	25.5	25.0	2.0
2,3,4,5-Tetrachlorophenol	10.40	10.34	10.48	26.7	25.0	6.8
2,4-Dichlorophenol	6.89	6.82	6.96	243	250	-2.8
2,4,6-Tribromophenol (surr	9.99	9.93	10.07	26.4	25.0	5.6

AVERAGE %D = 4.9

FORM VII PCP

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

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

ARI Job No.: RI65 Project: LORA LAKE APTS RI

GC Column: ZB35 ID: 0.53 (mm)

Init. Calib. Date(s): 08/09/10 08/09/10

Client Sample No.(PCP): Date Analyzed :08/26/10

Lab Sample ID (PCP): PCPCCAL Time Analyzed :0023

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	11.65	11.59	11.73	26.3	25.0	5.2
2,4,6-Trichlorophenol	7.33	7.26	7.40	28.2	25.0	12.8
2,3,6-Trichlorophenol	7.86	7.79	7.93	25.8	25.0	3.2
2,4,5-Trichlorophenol	8.59	8.54	8.69	28.3	25.0	13.2
2,3,4-Trichlorophenol	9.36	9.31	9.45	26.9	25.0	7.6
2,3,5,6-Tetrachlorophenol	9.26	9.21	9.35	26.8	25.0	7.2
2,3,4,5-Tetrachlorophenol	11.11	11.06	11.20	25.2	25.0	0.8
2,4-Dichlorophenol	7.16	7.10	7.24	267	250	6.8
2,4,6-Tribromophenol (surr	10.63	10.58	10.72	26.6	25.0	6.4

AVERAGE %D = 7.0

FORM VII PCP

CHLOROPHENOL ANALYTICAL SEQUENCE

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

ARI Job No.: RI65 Project: LORA LAKE APTS RI

GC Column: ZB5 ID: 0.53 (mm) Instrument ID: ECD1

Init. Calib. Date(s): 08/09/10 08/09/10

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 10.00

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #
01		PCPD	08/09/10	1223	9.99
02		PCPA	08/09/10	1243	10.01
03		PCPB	08/09/10	1303	10.00
04		PCPC	08/09/10	1323	10.00
05		PCPE	08/09/10	1343	9.98
06		PCPF	08/09/10	1403	9.98
07	ZZZZZ	ZZZZZ	08/09/10	1423	10.00
08		PCPCCAL	08/25/10	1642	9.99
09	RI65MBW1	RI65MBW1	08/25/10	1803	10.00
10	RI65LCSW1	RI65LCSW1	08/25/10	1823	9.99
11	MW-09-081310	RI65A	08/25/10	1843	9.99
12	MW-08-081310	RI65B	08/25/10	1903	10.00
13	MW-08-081310	RI65BMS	08/25/10	1923	9.99
14	MW-08-081310	RI65BMSD	08/25/10	1943	9.99
15	MW-07-081310	RI65C	08/25/10	2003	10.00
16	ZZZZZ	ZZZZZ	08/25/10	2023	9.99
17		PCPCCAL	08/25/10	2043	9.99
18	MW-01-081310	RI65D	08/25/10	2103	9.99
19	MW-05-081310	RI65E	08/25/10	2123	9.99
20		PCPCCAL	08/26/10	0023	9.99

QC LIMITS

S1 = 2,4,6-Tribromophenol (+/- 0.07 MINUTES)

* Values outside of QC limits.

FORM VIII PCP

CHLOROPHENOL ANALYTICAL SEQUENCE

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

ARI Job No.: RI65 Project: LORA LAKE APTS RI

GC Column: ZB35 ID: 0.53 (mm) Instrument ID: ECD1

Init. Calib. Date(s): 08/09/10 08/09/10

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 10.65

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #
01		PCPD	08/09/10	1223	10.63
02		PCPA	08/09/10	1243	10.65
03		PCPB	08/09/10	1303	10.64
04		PCPC	08/09/10	1323	10.64
05		PCPE	08/09/10	1343	10.63
06		PCPF	08/09/10	1403	10.63
07	ZZZZZ	ZZZZZ	08/09/10	1423	10.64
08		PCPCCAL	08/25/10	1642	10.63
09	RI65MBW1	RI65MBW1	08/25/10	1803	10.64
10	RI65LCSW1	RI65LCSW1	08/25/10	1823	10.63
11	MW-09-081310	RI65A	08/25/10	1843	10.63
12	MW-08-081310	RI65B	08/25/10	1903	10.64
13	MW-08-081310	RI65BMS	08/25/10	1923	10.63
14	MW-08-081310	RI65BMSD	08/25/10	1943	10.63
15	MW-07-081310	RI65C	08/25/10	2003	10.64
16	ZZZZZ	ZZZZZ	08/25/10	2023	10.63
17		PCPCCAL	08/25/10	2043	10.63
18	MW-01-081310	RI65D	08/25/10	2103	10.63
19	MW-05-081310	RI65E	08/25/10	2123	10.63
20		PCPCCAL	08/26/10	0023	10.63

QC LIMITS

S1 = 2,4,6-Tribromophenol (+/- 0.07 MINUTES)

* Values outside of QC limits.

FORM VIII PCP

TPHD Analysis
Report and Summary QC Forms

ARI Job ID: RI65

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TOTAL DIESEL RANGE HYDROCARBONS
NWTPHD by GC/FID-Silica and Acid Cleaned
Page 1 of 1
Matrix: Water

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
POS-LLA

Data Release Authorized:
Reported: 08/23/10

ARI ID	Sample ID	Extraction Date	Analysis Date	EFV DL	Range	RL	Result
RI65A	MW-09-081310	08/18/10	08/19/10	1.00	Diesel	0.10	< 0.10 U
10-19847	HC ID: ---		FID9	1.0	Motor Oil	0.20	< 0.20 U
					o-Terphenyl		71.8%
MB-081810	Method Blank	08/18/10	08/19/10	1.00	Diesel	0.10	< 0.10 U
10-19848	HC ID: ---		FID9	1.0	Motor Oil	0.20	< 0.20 U
					o-Terphenyl		74.2%
RI65B	MW-08-081310	08/18/10	08/19/10	1.00	Diesel	0.10	< 0.10 U
10-19848	HC ID: ---		FID9	1.0	Motor Oil	0.20	< 0.20 U
					o-Terphenyl		76.2%
RI65C	MW-07-081310	08/18/10	08/19/10	1.00	Diesel	0.10	< 0.10 U
10-19849	HC ID: ---		FID9	1.0	Motor Oil	0.20	< 0.20 U
					o-Terphenyl		71.7%
RI65D	MW-01-081310	08/18/10	08/19/10	1.00	Diesel	0.10	< 0.10 U
10-19850	HC ID: ---		FID9	1.0	Motor Oil	0.20	< 0.20 U
					o-Terphenyl		72.1%
RI65E	MW-05-081310	08/18/10	08/19/10	1.00	Diesel	0.10	< 0.10 U
10-19851	HC ID: ---		FID9	1.0	Motor Oil	0.20	< 0.20 U
					o-Terphenyl		74.9%

Reported in mg/L (ppm)

EFV-Effective Final Volume in mL.
DL-Dilution of extract prior to analysis.
RL-Reporting limit.

Diesel quantitation on total peaks in the range from C12 to C24.
Motor Oil quantitation on total peaks in the range from C24 to C38.
HC ID: DRO/RRO indicate results of organics or additional hydrocarbons in ranges are not identifiable.

FORM I

ANALYTICAL RESOURCES INCORPORATED

CLEANED TPHD SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
POS-LLA

Client ID	OTER	TOT OUT
MW-09-081310	71.8%	0
MB-081810	74.2%	0
LCS-081810	73.8%	0
LCSD-081810	78.9%	0
MW-08-081310	76.2%	0
MW-08-081310 MS	83.1%	0
MW-08-081310 MSD	80.8%	0
MW-07-081310	71.7%	0
MW-01-081310	72.1%	0
MW-05-081310	74.9%	0

	LCS/MB LIMITS	QC LIMITS
(OTER) = o-Terphenyl	(51-120)	(41-121)

Prep Method: SW3510C
Log Number Range: 10-19847 to 10-19851

FORM-II TPHD

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
NWTPHD by GC/FID-Silica and Acid Cleaned **Sample ID: MW-08-081310**
Page 1 of 1 **MS/MSD**

Lab Sample ID: RI65B
LIMS ID: 10-19848
Matrix: Water
Data Release Authorized:
Reported: 08/23/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: 08/13/10
Date Received: 08/13/10

Date Extracted MS/MSD: 08/18/10

Date Analyzed MS: 08/19/10 19:22
MSD: 08/19/10 19:44
Instrument/Analyst MS: FID/MS
MSD: FID/MS

Sample Amount MS: 500 mL
MSD: 500 mL
Final Extract Volume MS: 1.0 mL
MSD: 1.0 mL
Dilution Factor MS: 1.00
MSD: 1.00

Range	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Diesel	< 0.10	2.19	3.00	73.0%	2.23	3.00	74.3%	1.8%

TPHD Surrogate Recovery

	MS	MSD
o-Terphenyl	83.1%	80.8%

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

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
NWTPHD by GC/FID-Silica and Acid Cleaned **Sample ID: LCS-081810**
Page 1 of 1 **LCS/LCSD**

Lab Sample ID: LCS-081810
LIMS ID: 10-19848
Matrix: Water
Data Release Authorized:
Reported: 08/23/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: 08/13/10
Date Received: 08/13/10

Date Extracted LCS/LCSD: 08/18/10

Date Analyzed LCS: 08/19/10 21:31
LCSD: 08/19/10 21:53
Instrument/Analyst LCS: FID/MS
LCSD: FID/MS

Sample Amount LCS: 500 mL
LCSD: 500 mL
Final Extract Volume LCS: 1.0 mL
LCSD: 1.0 mL
Dilution Factor LCS: 1.00
LCSD: 1.00

Range	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Diesel	1.97	3.00	65.7%	2.12	3.00	70.7%	7.3%

TPHD Surrogate Recovery

	LCS	LCSD
o-Terphenyl	73.8%	78.9%

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

ANALYTICAL RESOURCES INCORPORATED

TOTAL DIESEL RANGE HYDROCARBONS-EXTRACTION REPORT

ARI Job: RI65
Project: Lora Lake Apts RI
POS-LLA

Matrix: Water
Date Received: 08/13/10

ARI ID	Client ID	Samp Amt	Final Vol	Prep Date
10-19847-RI65A	MW-09-081310	500 mL	1.00 mL	08/18/10
10-19848-081810MB1	Method Blank	500 mL	1.00 mL	08/18/10
10-19848-081810LCS1	Lab Control	500 mL	1.00 mL	08/18/10
10-19848-081810LCSD1	Lab Control Dup	500 mL	1.00 mL	08/18/10
10-19848-RI65B	MW-08-081310	500 mL	1.00 mL	08/18/10
10-19848-RI65BMS	MW-08-081310	500 mL	1.00 mL	08/18/10
10-19848-RI65BMSD	MW-08-081310	500 mL	1.00 mL	08/18/10
10-19849-RI65C	MW-07-081310	500 mL	1.00 mL	08/18/10
10-19850-RI65D	MW-01-081310	500 mL	1.00 mL	08/18/10
10-19851-RI65E	MW-05-081310	500 mL	1.00 mL	08/18/10

4

TPH METHOD BLANK SUMMARY

BLANK NO.

RI98MBW1

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

SDG No.: RI65 Project No.: LORA LAKE APTS.

Date Extracted: 08/18/10 Matrix: LIQUID

Date Analyzed : 08/19/10 Instrument ID : FID9

Time Analyzed : 2214

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED
01	MW-09-081310	RI65A	08/19/10
02	MW-08-081310	RI65B	08/19/10
03	MW-08-081310	RI65BMS	08/19/10
04	MW-08-081310	RI65BMSD	08/19/10
05	MW-07-081310	RI65C	08/19/10
06	MW-01-081310	RI65D	08/19/10
07	MW-05-081310	RI65E	08/19/10
08	RI98LCSW1	RI98LCSW1	08/19/10
09	RI98LCSDW1	RI98LCSDW1	08/19/10

FORM IV TPH

6a
NW DIESEL INITIAL CALIBRATION

Lab Name: ANALYTICAL RESOURCES, INC. Client: FLOYD/SNIDER

Instrument: FID9.I Project: LORA LAKE APTS.

Calibration Date: 28-JUL-2010 SDG No.: RI65

Diesel Range	RF1 50	RF2 100	RF3 250	RF4 500	RF5 1000	RF6 2500	Ave RF	%RSD
WA Diesel	25798	26021	26287	26699	26258	26926	26331	1.6
AK Diesel	28440	28641	29044	29481	28983	29726	29053	1.7
OR Diesel	28651	28856	29299	29708	29231	30010	29293	1.7
o-Terph	25541	25406	25759	26018	26067	25782	25762	1.0

<- Indicates %RSD outside limits
Surrogate areas are not included in Diesel RF calculation.

Quant Ranges : WA Diesel C12-C24 (3.091-6.020)
AK Diesel C10-C25 (2.455-6.212)
OR Diesel C10-C28 (2.455-6.723)

Calibration Files	Analysis Time
0728A012.D	28-JUL-2010 20:24
0728A013.D	28-JUL-2010 20:45
0728A014.D	28-JUL-2010 21:07
0728A015.D	28-JUL-2010 21:28
0728A016.D	28-JUL-2010 21:49
0728A017.D	28-JUL-2010 22:11

NW MOTOR OIL RANGE INITIAL CALIBRATION

Lab Name: ANALYTICAL RESOURCES, INC. Client: FLOYD/SNIDER

Instrument: FID9.I Project: LORA LAKE APTS.

Calibration Date: 29-JUL-2010 SDG No.: RI65

Product Range	RF1 100	RF2 250	RF3 500	RF4 1000	RF5 2500	RF6 5000	Ave RF	%RSD
WA M.Oil C24-C38	14669	13064	12525	12576	12003	11886	12787	7.9
Triac Surr	20395	20154	19766	20069	19304	19306	19832	2.3

<- Indicates %RSD outside limits
Surrogate areas are not included in Motor Oil RF calculation.

Calibration Files	Analysis Time
0728A019.D	28-JUL-2010 22:53
0728A020.D	28-JUL-2010 23:15
0728A021.D	28-JUL-2010 23:36
0728A022.D	28-JUL-2010 23:57
0728A023.D	29-JUL-2010 00:18
0728A024.D	29-JUL-2010 00:40

7a

DIESEL CONTINUING CALIBRATION VERIFICATION

Lab Name: ANALYTICAL RESOURCES, INC. Client: FLOYD/SNIDER

ICal Date: 28-JUL-2010 Project: LORA LAKE APTS.

CCal Date: 19-AUG-2010 SDG No.: RI65

Analysis Time: 16:51 Lab ID: DIESEL#2

Instrument: FID9.I Lab File Name: 0819A017.D

Diesel Range	Area*	CalcAmnt	NomAmnt	% D
WADies(C12-C24)	6227303	236.5	250	-5.4
AK102 (C10-C25)	6932746	238.6	250	-4.6
Terphenyl	1079106	41.9	45	-6.9

* Surrogate areas are subtracted from range areas
<- Indicates a %D outside QC limits

Quant Ranges : WA Diesel C12-C24
AK Diesel C10-C25

7a

MOTOR OIL CONTINUING CALIBRATION VERIFICATION

Lab Name: ANALYTICAL RESOURCES, INC. Client: FLOYD/SNIDER

ICal Date: 28-JUL-2010 Project: LORA LAKE APTS.

CCal Date: 19-AUG-2010 SDG No.: RI65

Analysis Time: 17:13 Lab ID: MOIL#2

Instrument: FID9.I Lab File Name: 0819A018.D

M.oil Range	Area*	CalcAmnt	NomAmnt	% D	
WAMoil(C24-C38)	6363616	497.7	500	-0.5	
AK103 (C25-C36)	5573680	1112.7	500	122.5	<-
n-Triacontane	879598	44.4	45	-1.4	

* Surrogate areas are subtracted from range areas
<- Indicates a %D outside QC limits

Quant Ranges : WA M.Oil C24-C38
AK M.Oil C25-C36

7a

DIESEL CONTINUING CALIBRATION VERIFICATION

Lab Name: ANALYTICAL RESOURCES, INC. Client: FLOYD/SNIDER

ICal Date: 28-JUL-2010 Project: LORA LAKE APTS.

CCal Date: 19-AUG-2010 SDG No.: RI65

Analysis Time: 22:36 Lab ID: DIESEL#3

Instrument: FID9.I Lab File Name: 0819A033.D

Diesel Range	Area*	CalcAmnt	NomAmnt	% D
WADies(C12-C24)	6272899	238.2	250	-4.7
AK102 (C10-C25)	6979376	240.2	250	-3.9
Terphenyl	1076751	41.8	45	-7.1

* Surrogate areas are subtracted from range areas
<- Indicates a %D outside QC limits

Quant Ranges : WA Diesel C12-C24
AK Diesel C10-C25

7a

MOTOR OIL CONTINUING CALIBRATION VERIFICATION

Lab Name: ANALYTICAL RESOURCES, INC. Client: FLOYD/SNIDER

ICal Date: 28-JUL-2010 Project: LORA LAKE APTS.

CCal Date: 19-AUG-2010 SDG No.: RI65

Analysis Time: 22:57 Lab ID: MOIL#3

Instrument: FID9.I Lab File Name: 0819A034.D

M.oil Range	Area*	CalcAmnt	NomAmnt	% D	
WAMoil(C24-C38)	6346221	496.3	500	-0.7	
AK103 (C25-C36)	5541751	1106.4	500	121.3	<-
n-Triacontane	886729	44.7	45	-0.6	

* Surrogate areas are subtracted from range areas
<- Indicates a %D outside QC limits

Quant Ranges : WA M.Oil C24-C38
AK M.Oil C25-C36

TPH ANALYTICAL SEQUENCE

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

SDG No.: RI65 Project: LORA LAKE APTS.

Instrument ID: FID9 GC Column: RTX-1

Run Date: 07/29/10

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, AND STANDARDS, IS GIVEN BELOW:

SURROGATE RT FROM DAILY STANDARD
TERPH: 4.77 TRIAC: 7.04

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TERPH RT #	TRIAC RT #
01		RT	07/28/10	1941	4.77	7.08
02		IB	07/28/10	2002	4.77	7.08
03		DIESEL 50	07/28/10	2024	4.76	7.04
04		DIESEL 100	07/28/10	2045	4.76	7.04
05		DIESEL 250	07/28/10	2107	4.77	7.04
06		DIESEL 500	07/28/10	2128	4.78	7.04
07		DIESEL 1000	07/28/10	2149	4.80	7.03
08		DIESEL 2500	07/28/10	2211	4.83*	7.04
09		DIESEL ICV	07/28/10	2232	4.77	7.04
10		MOIL 100	07/28/10	2253	4.77	7.08
11		MOIL 250	07/28/10	2315	4.77	7.09
12		MOIL 500	07/28/10	2336	4.76	7.09*
13		MOIL 1000	07/28/10	2357	4.76	7.10*
14		MOIL 2500	07/29/10	0018	4.76	7.13*
15		MOIL 5000	07/29/10	0040	4.76	7.16*
16		MOIL ICV	07/29/10	0101	4.76	7.09*

QC LIMITS

TERPH = o-terph (+/- 0.05 MINUTES)
TRIAC = Triacon Surr (+/- 0.05 MINUTES)

* Values outside of QC limits.

FORM VIII TPH

TPH ANALYTICAL SEQUENCE

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

SDG No.: RI65 Project: LORA LAKE APTS.

Instrument ID: FID9 GC Column: RTX-1

Run Date: 08/19/10

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, AND STANDARDS, IS GIVEN BELOW:

SURROGATE RT FROM DAILY STANDARD
TERPH: 4.79 TRIAC: 7.15

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TERPH RT #	TRIAC RT #
01	RT	RT	08/19/10	1127	4.80	7.14
02	IB	IB	08/19/10	1148	4.80	7.13
03	LORA LAKE AP	DIESEL#2	08/19/10	1651	4.80	7.12
04	LORA LAKE AP	MOIL#2	08/19/10	1713	4.79	7.13
05	ZZZZZ	ZZZZZ	08/19/10	1734	4.79	7.13
06	ZZZZZ	ZZZZZ	08/19/10	1756	4.80	7.13
07	ZZZZZ	ZZZZZ	08/19/10	1817	4.79	7.15
08	MW-09-081310	RI65A	08/19/10	1839	4.80	7.13
09	MW-08-081310	RI65B	08/19/10	1901	4.80	7.14
10	MW-08-081310	RI65BMS	08/19/10	1922	4.80	7.13
11	MW-08-081310	RI65BMSD	08/19/10	1944	4.80	7.13
12	MW-07-081310	RI65C	08/19/10	2005	4.80	7.13
13	MW-01-081310	RI65D	08/19/10	2027	4.80	7.13
14	MW-05-081310	RI65E	08/19/10	2048	4.80	7.14
15	ZZZZZ	ZZZZZ	08/19/10	2109	4.80	7.13
16	RI98LCSW1	RI98LCSW1	08/19/10	2131	4.80	7.14
17	RI98LCSDW1	RI98LCSDW1	08/19/10	2153	4.81	7.13
18	RI98MBW1	RI98MBW1	08/19/10	2214	4.80	7.13
19	LORA LAKE AP	DIESEL#3	08/19/10	2236	4.80	7.15
20	LORA LAKE AP	MOIL#3	08/19/10	2257	4.79	7.14

QC LIMITS

TERPH = o-terph (+/- 0.05 MINUTES)
TRIAC = Triacon Surr (+/- 0.05 MINUTES)

* Values outside of QC limits.

FORM VIII TPH

TPHG/BETX Analysis
Report and Summary QC Forms

ARI Job ID: RI65

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
TPHG by Method NWTPHG

Sample ID: MW-09-081310
SAMPLE

Lab Sample ID: RI65A
LIMS ID: 10-19847
Matrix: Water
Data Release Authorized:
Reported: 08/25/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
Event: POS-LLA
Date Sampled: 08/13/10
Date Received: 08/13/10

Date Analyzed: 08/17/10 10:45
Instrument/Analyst: PID3/MH

Purge Volume: 5.0 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result	
71-43-2	Benzene	1.0	< 1.0 U	
108-88-3	Toluene	1.0	< 1.0 U	
100-41-4	Ethylbenzene	1.0	< 1.0 U	
179601-23-1	m,p-Xylene	1.0	< 1.0 U	
95-47-6	o-Xylene	1.0	< 1.0 U	
	Gasoline Range Hydrocarbons	0.25	< 0.25 U	GAS ID ---

BETX Surrogate Recovery

Trifluorotoluene	89.7%
Bromobenzene	91.1%

Gasoline Surrogate Recovery

Trifluorotoluene	97.9%
Bromobenzene	98.2%

BETX values reported in µg/L (ppb)
Gasoline values reported in mg/L (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
TPHG by Method NWTPHG

Sample ID: MW-08-081310
SAMPLE

Lab Sample ID: RI65B
LIMS ID: 10-19848
Matrix: Water
Data Release Authorized:
Reported: 08/25/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
Event: POS-LLA
Date Sampled: 08/13/10
Date Received: 08/13/10

Date Analyzed: 08/17/10 11:09
Instrument/Analyst: PID3/MH

Purge Volume: 5.0 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
71-43-2	Benzene	1.0	< 1.0 U
108-88-3	Toluene	1.0	< 1.0 U
100-41-4	Ethylbenzene	1.0	< 1.0 U
179601-23-1	m,p-Xylene	1.0	< 1.0 U
95-47-6	o-Xylene	1.0	< 1.0 U

			GAS ID
Gasoline Range Hydrocarbons	0.25	< 0.25 U	---

BETX Surrogate Recovery

Trifluorotoluene	90.6%
Bromobenzene	92.4%

Gasoline Surrogate Recovery

Trifluorotoluene	99.6%
Bromobenzene	100%

BETX values reported in µg/L (ppb)
Gasoline values reported in mg/L (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
TPHG by Method NWTPHG
Page 1 of 1

Sample ID: MW-07-081310
SAMPLE

Lab Sample ID: RI65C
LIMS ID: 10-19849
Matrix: Water
Data Release Authorized:
Reported: 08/25/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
Event: POS-LLA
Date Sampled: 08/13/10
Date Received: 08/13/10

Date Analyzed: 08/17/10 12:22
Instrument/Analyst: PID3/MH

Purge Volume: 5.0 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
71-43-2	Benzene	1.0	< 1.0 U
108-88-3	Toluene	1.0	< 1.0 U
100-41-4	Ethylbenzene	1.0	< 1.0 U
179601-23-1	m,p-Xylene	1.0	< 1.0 U
95-47-6	o-Xylene	1.0	< 1.0 U

			GAS ID
Gasoline Range Hydrocarbons	0.25	< 0.25 U	---

BETX Surrogate Recovery

Trifluorotoluene	91.0%
Bromobenzene	92.8%

Gasoline Surrogate Recovery

Trifluorotoluene	98.7%
Bromobenzene	102%

BETX values reported in µg/L (ppb)
Gasoline values reported in mg/L (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
TPHG by Method NWTPHG

Sample ID: MW-01-081310
SAMPLE

Lab Sample ID: RI65D
LIMS ID: 10-19850
Matrix: Water
Data Release Authorized:
Reported: 08/25/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
Event: POS-LLA
Date Sampled: 08/13/10
Date Received: 08/13/10

Date Analyzed: 08/17/10 12:47
Instrument/Analyst: PID3/MH

Purge Volume: 5.0 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
71-43-2	Benzene	1.0	< 1.0 U
108-88-3	Toluene	1.0	< 1.0 U
100-41-4	Ethylbenzene	1.0	< 1.0 U
179601-23-1	m,p-Xylene	1.0	< 1.0 U
95-47-6	o-Xylene	1.0	< 1.0 U

			GAS ID
Gasoline Range Hydrocarbons	0.25	< 0.25 U	---

BETX Surrogate Recovery

Trifluorotoluene	91.6%
Bromobenzene	94.9%

Gasoline Surrogate Recovery

Trifluorotoluene	99.8%
Bromobenzene	102%

BETX values reported in µg/L (ppb)
Gasoline values reported in mg/L (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod **Sample ID: MW-05-081310**
TPHG by Method NWTPHG **SAMPLE**
Page 1 of 1

Lab Sample ID: RI65E
LIMS ID: 10-19851
Matrix: Water
Data Release Authorized:
Reported: 08/25/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
Event: POS-LLA
Date Sampled: 08/13/10
Date Received: 08/13/10

Date Analyzed: 08/17/10 13:12
Instrument/Analyst: PID3/MH

Purge Volume: 5.0 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
71-43-2	Benzene	1.0	< 1.0 U
108-88-3	Toluene	1.0	< 1.0 U
100-41-4	Ethylbenzene	1.0	< 1.0 U
179601-23-1	m,p-Xylene	1.0	< 1.0 U
95-47-6	o-Xylene	1.0	< 1.0 U

			GAS ID
Gasoline Range Hydrocarbons	0.25	< 0.25 U	---

BETX Surrogate Recovery

Trifluorotoluene	90.2%
Bromobenzene	94.1%

Gasoline Surrogate Recovery

Trifluorotoluene	98.9%
Bromobenzene	102%

BETX values reported in µg/L (ppb)
Gasoline values reported in mg/L (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod **Sample ID: 081310-TB**
TPHG by Method NWTPHG **SAMPLE**
Page 1 of 1

Lab Sample ID: RI65F
LIMS ID: 10-19852
Matrix: Water
Data Release Authorized:
Reported: 08/25/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
Event: POS-LLA
Date Sampled: 08/13/10
Date Received: 08/13/10

Date Analyzed: 08/17/10 10:20
Instrument/Analyst: PID3/MH

Purge Volume: 5.0 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
71-43-2	Benzene	1.0	< 1.0 U
108-88-3	Toluene	1.0	< 1.0 U
100-41-4	Ethylbenzene	1.0	< 1.0 U
179601-23-1	m,p-Xylene	1.0	< 1.0 U
95-47-6	o-Xylene	1.0	< 1.0 U

			GAS ID
Gasoline Range Hydrocarbons	0.25	< 0.25 U	---

BETX Surrogate Recovery

Trifluorotoluene	91.1%
Bromobenzene	92.4%

Gasoline Surrogate Recovery

Trifluorotoluene	99.3%
Bromobenzene	99.4%

BETX values reported in µg/L (ppb)
Gasoline values reported in mg/L (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

ANALYTICAL RESOURCES INCORPORATED

TPHG WATER SURROGATE RECOVERY SUMMARY

ARI Job: RI65
Matrix: Water

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
Event: POS-LLA

Client ID	TFT	BBZ	TOT OUT
MB-081710	98.3%	99.9%	0
LCS-081710	98.0%	98.2%	0
LCSD-081710	99.1%	101%	0
MW-09-081310	97.9%	98.2%	0
MW-08-081310	99.6%	100%	0
MW-08-081310 MS	100%	101%	0
MW-08-081310 MSD	100%	102%	0
MW-07-081310	98.7%	102%	0
MW-01-081310	99.8%	102%	0
MW-05-081310	98.9%	102%	0
081310-TB	99.3%	99.4%	0

	LCS/MB LIMITS	QC LIMITS
(TFT) = Trifluorotoluene	(80-120)	(80-120)
(BBZ) = Bromobenzene	(80-120)	(80-120)

Log Number Range: 10-19847 to 10-19852

ANALYTICAL RESOURCES INCORPORATED

BETX WATER SURROGATE RECOVERY SUMMARY

ARI Job: RI65
Matrix: Water

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
Event: POS-LLA

Client ID	TFT	BBZ	TOT OUT
MB-081710	89.3%	92.8%	0
LCS-081710	90.0%	90.9%	0
LCSD-081710	91.0%	93.7%	0
MW-09-081310	89.7%	91.1%	0
MW-08-081310	90.6%	92.4%	0
MW-08-081310 MS	92.1%	91.8%	0
MW-08-081310 MSD	92.6%	95.2%	0
MW-07-081310	91.0%	92.8%	0
MW-01-081310	91.6%	94.9%	0
MW-05-081310	90.2%	94.1%	0
081310-TB	91.1%	92.4%	0

	LCS/MB LIMITS	QC LIMITS
(TFT) = Trifluorotoluene	(79-120)	(80-120)
(BBZ) = Bromobenzene	(79-120)	(80-120)

Log Number Range: 10-19847 to 10-19852

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TPHG by Method NWTPHG **Sample ID: MW-08-081310**
Page 1 of 1 **MATRIX SPIKE**

Lab Sample ID: RI65B
LIMS ID: 10-19848
Matrix: Water
Data Release Authorized: MW
Reported: 08/25/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
Event: POS-LLA
Date Sampled: 08/13/10
Date Received: 08/13/10

Date Analyzed MS: 08/17/10 11:33
MSD: 08/17/10 11:58
Instrument/Analyst MS: PID3/MH
MSD: PID3/MH

Purge Volume: 5.0 mL
Dilution Factor MS: 1.0
MSD: 1.0

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Gasoline Range Hydrocarbons	< 0.25 U	0.95	1.00	95.0%	0.94	1.00	94.0%	1.1%

Reported in mg/L (ppm)

RPD calculated using sample concentrations per SW846.

TPHG Surrogate Recovery

	MS	MSD
Trifluorotoluene	100%	100%
Bromobenzene	101%	102%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod

Sample ID: MW-08-081310
MATRIX SPIKE

Lab Sample ID: RI65B
LIMS ID: 10-19848
Matrix: Water
Data Release Authorized: MW
Reported: 08/25/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
Event: POS-LLA
Date Sampled: 08/13/10
Date Received: 08/13/10

Date Analyzed MS: 08/17/10 11:33
MSD: 08/17/10 11:58
Instrument/Analyst MS: PID3/MH
MSD: PID3/MH

Purge Volume: 5.0 mL

Dilution Factor MS: 1.0
MSD: 1.0

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Benzene	< 1.00 U	2.08	2.10	99.0%	2.05	2.10	97.6%	1.5%
Toluene	< 1.00 U	26.8	28.7	93.4%	26.9	28.7	93.7%	0.4%
Ethylbenzene	< 1.00 U	8.20	9.20	89.1%	8.05	9.20	87.5%	1.8%
m,p-Xylene	< 1.00 U	29.4	33.8	87.0%	29.2	33.8	86.4%	0.7%
o-Xylene	< 1.00 U	12.5	14.0	89.3%	12.7	14.0	90.7%	1.6%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

BETX Surrogate Recovery

	MS	MSD
Trifluorotoluene	92.1%	92.6%
Bromobenzene	91.8%	95.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TPHG by Method NWTPHG

Sample ID: LCS-081710
LAB CONTROL SAMPLE

Lab Sample ID: LCS-081710
LIMS ID: 10-19847
Matrix: Water
Data Release Authorized:
Reported: 08/25/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
Event: POS-LLA
Date Sampled: NA
Date Received: NA

Date Analyzed LCS: 08/17/10 07:07
LCSD: 08/17/10 07:32
Instrument/Analyst LCS: PID3/MH
LCSD: PID3/MH

Purge Volume: 5.0 mL
Dilution Factor LCS: 1.0
LCSD: 1.0

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Gasoline Range Hydrocarbons	0.93	1.00	93.0%	0.90	1.00	90.0%	3.3%

Reported in mg/L (ppm)

RPD calculated using sample concentrations per SW846.

TPHG Surrogate Recovery

	LCS	LCSD
Trifluorotoluene	98.0%	99.1%
Bromobenzene	98.2%	101%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
Page 1 of 1

Sample ID: LCS-081710
LAB CONTROL SAMPLE

Lab Sample ID: LCS-081710
LIMS ID: 10-19847
Matrix: Water
Data Release Authorized:
Reported: 08/25/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
Event: POS-LLA
Date Sampled: NA
Date Received: NA

Date Analyzed LCS: 08/17/10 07:07
LCSD: 08/17/10 07:32
Instrument/Analyst LCS: PID3/MH
LCSD: PID3/MH

Purge Volume: 5.0 mL

Dilution Factor LCS: 1.0
LCSD: 1.0

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Benzene	2.05	2.10	97.6%	2.02	2.10	96.2%	1.5%
Toluene	26.8	28.7	93.4%	25.9	28.7	90.2%	3.4%
Ethylbenzene	8.03	9.20	87.3%	7.96	9.20	86.5%	0.9%
m,p-Xylene	29.0	33.8	85.8%	28.2	33.8	83.4%	2.8%
o-Xylene	12.6	14.0	90.0%	12.1	14.0	86.4%	4.0%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

BETX Surrogate Recovery

	LCS	LCSD
Trifluorotoluene	90.0%	91.0%
Bromobenzene	90.9%	93.7%

BETX/GAS METHOD BLANK SUMMARY

BLANK NO.: MB0817S1

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

SDG No.: RI65 Project No.: LORA LAKE

Date Analyzed : 08/17/10 Matrix: WATER

Time Analyzed : 0756 Instrument ID : PID3

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED
01	LCS0817S1	LCS0817	08/17/10
02	LCSD0817S1	LCSD0817	08/17/10
03	081310-TB	RI65F	08/17/10
04	MW-09-081310	RI65A	08/17/10
05	MW-08-081310	RI65B	08/17/10
06	MW-08-081310	RI65BMS	08/17/10
07	MW-08-081310	RI65BMSD	08/17/10
08	MW-07-081310	RI65C	08/17/10
09	MW-01-081310	RI65D	08/17/10
10	MW-05-081310	RI65E	08/17/10
11			
12			
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ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod **Sample ID: MB-081710**
TPHG by Method NWTPHG **METHOD BLANK**
Page 1 of 1

Lab Sample ID: MB-081710 QC Report No: RI65-Floyd-Snider
LIMS ID: 10-19847 Project: Lora Lake Apts RI
Matrix: Water Event: POS-LLA
Data Release Authorized: MW Date Sampled: NA
Reported: 08/25/10 Date Received: NA

Date Analyzed: 08/17/10 07:56 Purge Volume: 5.0 mL
Instrument/Analyst: PID3/MH Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
71-43-2	Benzene	1.0	< 1.0 U
108-88-3	Toluene	1.0	< 1.0 U
100-41-4	Ethylbenzene	1.0	< 1.0 U
179601-23-1	m,p-Xylene	1.0	< 1.0 U
95-47-6	o-Xylene	1.0	< 1.0 U

			GAS ID
Gasoline Range Hydrocarbons	0.25	< 0.25 U	---

BETX Surrogate Recovery

Trifluorotoluene	89.3%
Bromobenzene	92.8%

Gasoline Surrogate Recovery

Trifluorotoluene	98.3%
Bromobenzene	99.9%

BETX values reported in µg/L (ppb)
Gasoline values reported in mg/L (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

GAS INITIAL CALIBRATION

Lab Name: ANALYTICAL RESOURCES, INC. Client: FLOYD/SNIDER

Instrument/Det: PID3.I/RTX 502-2 FID Project: LORA LAKE

Calibration Date: 28-JUL-2010 SDG No.: RI65

Gas Range	RF1 0.1	RF2 0.25	RF3 1.0	RF4 2.5	RF5 5.0	RF6 20	Ave RF	%RSD
WA Gas	1009250	772696	761867	782843	800745	839442	827807	11.2
AK Gas	1342560	1066876	1050254	1042480	1063396	1225137	1131784	10.9
NW Gas	1102210	829838	811111	828987	844316	875713	882029	12.5
8015Gas	1959390	1600162	1564234	1551602	1571254	1738000	1664107	9.6
$TFT(Surr)	78.13636	73.54545	71.97015	70.35000	70.48120	69.03933		
	70.30000						71.97607	4.271
$BB(Surr)	48.72727	43.22727	42.49254	41.18000	42.06767	41.53933		
	42.23000						43.06630	5.994

<- Indicates %RSD outside limits
Surrogate areas are not included in RF calculation.

Quant Ranges : WA Gas Toluene - nC12
AK Gas nC6 - nC10
NW Gas Toluene - Naphthalene
8015 Gas 2-Methylpentane - 1,2,4-Trimethylbenzene

Calibration Files	Analysis Time
0728a012.d	28-JUL-2010 11:42
0728a004.d	28-JUL-2010 08:07
0728a005.d	28-JUL-2010 08:31
0728a006.d	28-JUL-2010 08:56
0728a007.d	28-JUL-2010 09:20
0728a008.d	28-JUL-2010 09:45

Surr Calibration Files	Analysis Time
0629a005.d	29-JUN-2010 07:59
0629a006.d	29-JUN-2010 08:24
0629a007.d	29-JUN-2010 08:48
0629a008.d	29-JUN-2010 09:12
0629a009.d	29-JUN-2010 09:37
0629a010.d	29-JUN-2010 10:01
0629a011.d	29-JUN-2010 10:26

BETX INITIAL CALIBRATION

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

SDG No.: RI65 Project: LORA LAKE

Instrument/Det: PID3 /RTX 502-2 PID Calibration Date: 06/29/10

	CALIBRATION FACTORS						
COMPOUND	0.25	0.5	5	25	50	MEAN	%RSD
Benzene	1564	1462	1257	1240	1256		
Toluene	1608	1252	1288	1275	1275		
Ethylbenzene	1404	1420	1164	1185	1190		
M/P-Xylene	1614	1381	1314	1300	1302		
O-Xylene	1352	1232	1295	1269	1282		
MTBE	464	288	367	346	348		
TFT(Surr)	243	220	213	214	217		
BB(Surr)	496	451	434	440	456		

Calibration Files

/chem3/pid3.i/20100629-1.b/0629a005.d
/chem3/pid3.i/20100629-1.b/0629a006.d
/chem3/pid3.i/20100629-1.b/0629a007.d
/chem3/pid3.i/20100629-1.b/0629a008.d
/chem3/pid3.i/20100629-1.b/0629a009.d
/chem3/pid3.i/20100629-1.b/0629a010.d
/chem3/pid3.i/20100629-1.b/0629a011.d

BETX INITIAL CALIBRATION

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

SDG No.: RI65 Project: LORA LAKE

Instrument/Det: PID3 /RTX 502-2 PID Calibration Date: 06/29/10

	CALIBRATION FACTORS						
COMPOUND	100	200	MEAN	%RSD			
Benzene	1220	1254	1322	10.16			
Toluene	1247	1294	1320	9.72			
Ethylbenzene	1152	1183	1242	9.38			
M/P-Xylene	1247	1268	1346	9.29			
O-Xylene	1256	1307	1285	3.02			
MTBE	334	343	356	15.04			
TFT(Surr)	212	219	220	4.94			
BB(Surr)	450	463	456	4.41			

BETX CALIBRATION VERIFICATION SUMMARY

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

SDG No.: RI65 Project No.: LORA LAKE

Instrument/Det: PID3/RTX 502-2 PID Calibration Date: 08/17/10

Init. Calib. Date(s): 06/29/10 Calib. File: 0817A002.D

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng/mL)	NOM AMOUNT (ng/mL)	%D
Benzene	7.69	7.62	7.76	23.92	25.00	-4.3
Toluene	10.27	10.20	10.34	23.35	25.00	-6.6
Ethylbenzene	12.81	12.74	12.88	22.45	25.00	-10.2
M/P-Xylene	12.94	12.87	13.01	45.23	50.00	-9.5
O-Xylene	13.72	13.67	13.77	22.78	25.00	-8.9
MTBE	5.29	5.22	5.36	25.55	25.00	2.2
TFT(Surr)	8.41	8.34	8.48	91.57	100.0	-8.4
BB(Surr)	14.89	14.82	14.96	92.96	100.0	-7.0

FORM VII BETX

7a

GAS CONTINUING CALIBRATION VERIFICATION

Lab Name: ANALYTICAL RESOURCES, INC.

Client: FLOYD/SNIDER

ICal Date: 28-JUL-2010

Project: LORA LAKE

CCal Date: 17-AUG-2010

SDG No.: RI65

Lab File Name: 0817a003.d

Inst/Det: PID3.I/RTX 502-2 FID

Gas Range	Area*	CalcAmnt	NomAmnt	%D
WAGas (Tol-C12)	1893461	2.29	2.50	-8.5
AKGas (C6-C10)	2507769	2.22	2.50	-11.4
NWGas (Tol-Nap)	2023073	2.29	2.50	-8.3
8015B (2MP-TMB)	3711638	2.23	2.50	-10.8

* Surrogate areas are subtracted from Total Area

<- Indicates an RPD outside QC limits

7b
FID SURROGATE CONTINUING CALIBRATION

Lab Name: ANALYTICAL RESOURCES, INC. Client: FLOYD/SNIDER

ICal Date: 28-JUL-2010 Project: LORA LAKE

CCal Date: 17-AUG-2010 SDG No.: RI65

Lab File Name: 0817a003.d Inst/Det: PID3.I/RTX 502-2 FID

Surrogate	Area	CalcAmnt	NomAmnt	RPD
Trifluorotol	89253	103.4	100.0	3.4
Bromoflrbenz	38174	104.4	100.0	4.4

BETX CALIBRATION VERIFICATION SUMMARY

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

SDG No.: RI65 Project No.: LORA LAKE

Instrument/Det: PID3/RTX 502-2 PID Calibration Date: 08/17/10

Init. Calib. Date(s): 06/29/10 Calib. File: 0817A009.D

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng/mL)	NOM AMOUNT (ng/mL)	%D
Benzene	7.72	7.62	7.76	24.51	25.00	-2.0
Toluene	10.30	10.20	10.34	23.83	25.00	-4.7
Ethylbenzene	12.84	12.74	12.88	22.97	25.00	-8.1
M/P-Xylene	12.97	12.87	13.01	46.60	50.00	-6.8
O-Xylene	13.75	13.67	13.77	23.54	25.00	-5.8
MTBE	5.31	5.22	5.36	25.34	25.00	1.4
TFT(Surr)	8.44	8.34	8.48	94.14	100.0	-5.9
BB(Surr)	14.91	14.82	14.96	95.40	100.0	-4.6

FORM VII BETX

7a
GAS CONTINUING CALIBRATION VERIFICATION

Lab Name: ANALYTICAL RESOURCES, INC. Client: FLOYD/SNIDER

ICal Date: 28-JUL-2010 Project: LORA LAKE

CCal Date: 17-AUG-2010 SDG No.: RI65

Lab File Name: 0817a010.d Inst/Det: PID3.I/RTX 502-2 FID

Gas Range	Area*	CalcAmnt	NomAmnt	%D
WAGas (Tol-C12)	1837748	2.22	2.50	-11.2
AKGas (C6-C10)	2419964	2.14	2.50	-14.5
NWGas (Tol-Nap)	1956475	2.22	2.50	-11.3
8015B (2MP-TMB)	3608572	2.17	2.50	-13.3

* Surrogate areas are subtracted from Total Area
<- Indicates an RPD outside QC limits

7b
FID SURROGATE CONTINUING CALIBRATION

Lab Name: ANALYTICAL RESOURCES, INC.
Client: FLOYD/SNIDER

ICal Date: 28-JUL-2010
Project: LORA LAKE

CCal Date: 17-AUG-2010
SDG No.: RI65

Lab File Name: 0817a010.d
Inst/Det: PID3.I/RTX 502-2 FID

Surrogate	Area	CalcAmnt	NomAmnt	RPD
Trifluorotol	88750	103.2	100.0	3.2
Bromoflrbenz	36698	104.0	100.0	4.0

BETX CALIBRATION VERIFICATION SUMMARY

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

SDG No.: RI65 Project No.: LORA LAKE

Instrument/Det: PID3/RTX 502-2 PID Calibration Date: 08/17/10

Init. Calib. Date(s): 06/29/10 Calib. File: 0817A020.D

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng/mL)	NOM AMOUNT (ng/mL)	%D
Benzene	7.72	7.62	7.76	24.14	25.00	-3.4
Toluene	10.31	10.20	10.34	23.55	25.00	-5.8
Ethylbenzene	12.84	12.74	12.88	22.55	25.00	-9.8
M/P-Xylene	12.98	12.87	13.01	45.56	50.00	-8.9
O-Xylene	13.76	13.67	13.77	23.22	25.00	-7.1
MTBE	5.31	5.22	5.36	25.55	25.00	2.2
TFT(Surr)	8.44	8.34	8.48	87.53	100.0	-12.5
BB(Surr)	14.91	14.82	14.96	93.14	100.0	-6.9

FORM VII BETX

7a
GAS CONTINUING CALIBRATION VERIFICATION

Lab Name: ANALYTICAL RESOURCES, INC. Client: FLOYD/SNIDER

ICal Date: 28-JUL-2010 Project: LORA LAKE

CCal Date: 17-AUG-2010 SDG No.: RI65

Lab File Name: 0817a021.d Inst/Det: PID3.I/RTX 502-2 FID

Gas Range	Area*	CalcAmnt	NomAmnt	%D	
WAGas (Tol-C12)	1771430	2.14	2.50	-14.4	
AKGas (C6-C10)	2267248	2.00	2.50	-19.9	
NWGas (Tol-Nap)	1874480	2.13	2.50	-15.0	
8015B (2MP-TMB)	3411095	2.05	2.50	-18.0	<-

* Surrogate areas are subtracted from Total Area
<- Indicates an RPD outside QC limits

7b
FID SURROGATE CONTINUING CALIBRATION

Lab Name: ANALYTICAL RESOURCES, INC.
Client: FLOYD/SNIDER

ICal Date: 28-JUL-2010
Project: LORA LAKE

CCal Date: 17-AUG-2010
SDG No.: RI65

Lab File Name: 0817a021.d
Inst/Det: PID3.I/RTX 502-2 FID

Surrogate	Area	CalcAmnt	NomAmnt	RPD
Trifluorotol	83557	97.0	100.0	-3.0
Bromoflrbenz	35541	102.0	100.0	2.0

BETX/GAS ANALYTICAL SEQUENCE

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

SDG No.: RI65 Project: LORA LAKE

Instrument ID: PID3 GC Detector: RTX 502-2 PID

Run Date: 06/29/10

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, AND STANDARDS, IS GIVEN BELOW:

METHOD SURROGATE RT
S1 : 8.44 S2 : 14.91

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	S1 #	S2 RT	S2 #
01		RINSE	06/29/10	0548				
02		RT+BCAL 1	06/29/10	0613	8.42		14.90	
03		GCAL 1	06/29/10	0637	8.43		14.91	
04		RINSE	06/29/10	0735				
05		BETX .25	06/29/10	0759	8.42		14.89	
06		BETX .5	06/29/10	0824	8.43		14.90	
07		BETX 5	06/29/10	0848	8.43		14.91	
08		BETX 25	06/29/10	0912	8.44		14.91	
09		BETX 50	06/29/10	0937	8.44		14.91	
10		BETX 100	06/29/10	1001	8.44		14.91	
11		BETX 200	06/29/10	1026	8.44		14.91	
12		BETX ICV	06/29/10	1050	8.44		14.91	
13		GCAL 2	06/29/10	1145	8.37		14.87	
14		LCS0629	06/29/10	1210	8.42		14.89	
15		LCSD0629	06/29/10	1234	8.43		14.90	
16		MB0629	06/29/10	1259	8.43		14.91	
17	ZZZZZ	ZZZZZ	06/29/10	1344	8.38		14.88	
18	ZZZZZ	ZZZZZ	06/29/10	1408	8.42		14.90	
19	ZZZZZ	ZZZZZ	06/29/10	1433	8.43		14.90	
20	ZZZZZ	ZZZZZ	06/29/10	1458	8.43		14.91	
21	ZZZZZ	ZZZZZ	06/29/10	1522	8.43		14.91	
22	ZZZZZ	ZZZZZ	06/29/10	1547	8.44		14.91	
23	ZZZZZ	ZZZZZ	06/29/10	1611	8.44		14.91	
24		RINSE	06/29/10	1636				
25		BCAL 3	06/29/10	1700	8.44		14.91	
26		GCAL 2	06/29/10	1725	8.44		14.91	

QC LIMITS

S1 = TFT(Surr) (+/- 0.07 MINUTES)

S2 = BB(Surr) (+/- 0.07 MINUTES)

* Values outside of QC limits.

BETX/GAS ANALYTICAL SEQUENCE

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

SDG No.: RI65 Project: LORA LAKE

Instrument ID: PID3 GC Detector: RTX 502-2 PID

Run Date: 07/28/10

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, AND STANDARDS, IS GIVEN BELOW:

METHOD SURROGATE RT
S1 : 8.44 S2 : 14.91

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	S2 RT #
01		ZZZZZ	07/28/10	0653		14.86
02		RT+BCAL 1	07/28/10	0718	8.41	14.89
03		ZZZZZ	07/28/10	0742	8.43	14.90
04		GAS .25	07/28/10	0807	8.43	14.91
05		GAS 1	07/28/10	0831	8.44	14.91
06		GAS 2.5	07/28/10	0856	8.44	14.91
07		GAS 5	07/28/10	0920	8.44	14.91
08		GAS 20	07/28/10	0945	8.44	14.91
09		ZZZZZ	07/28/10	1009		14.84
10		GAS ICV	07/28/10	1034	8.44	14.91
11		ZZZZZ	07/28/10	1117		14.93
12		GAS .1	07/28/10	1142	8.43	14.90

QC LIMITS

S1 = TFT(Surr) (+/- 0.07 MINUTES)
S2 = BB(Surr) (+/- 0.07 MINUTES)

* Values outside of QC limits.

FORM VIII-2 BETX

BETX/GAS ANALYTICAL SEQUENCE

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

SDG No.: RI65 Project: LORA LAKE

Instrument ID: PID3 GC Detector: RTX 502-2 PID

Run Date: 08/17/10

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, AND STANDARDS, IS GIVEN BELOW:

METHOD SURROGATE RT
S1 : 8.41 S2 : 14.89

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	S1 #	S2 RT	S2 #
01	ZZZZZ	ZZZZZ	08/17/10	0554				
02	RT+BCAL 1	RT+BCAL 1	08/17/10	0618	8.41		14.89	
03	GCAL 1	GCAL 1	08/17/10	0643	8.43		14.90	
04	LCS0817S1	LCS0817	08/17/10	0707	8.43		14.91	
05	LCSD0817S1	LCSD0817	08/17/10	0732	8.44		14.91	
06	MB0817S1	MB0817	08/17/10	0756	8.44		14.91	
07	ZZZZZ	ZZZZZ	08/17/10	0842	8.38		14.88	
08	ZZZZZ	ZZZZZ	08/17/10	0907				
09	BCAL 2	BCAL 2	08/17/10	0931	8.44		14.91	
10	GCAL 2	GCAL 2	08/17/10	0956	8.44		14.91	
11	081310-TB	RI65F	08/17/10	1020	8.44		14.91	
12	MW-09-081310	RI65A	08/17/10	1045	8.44		14.91	
13	MW-08-081310	RI65B	08/17/10	1109	8.45		14.91	
14	MW-08-081310	RI65BMS	08/17/10	1133	8.45		14.91	
15	MW-08-081310	RI65BMSD	08/17/10	1158	8.44		14.91	
16	MW-07-081310	RI65C	08/17/10	1222	8.44		14.91	
17	MW-01-081310	RI65D	08/17/10	1247	8.44		14.91	
18	MW-05-081310	RI65E	08/17/10	1312	8.44		14.91	
19	ZZZZZ	ZZZZZ	08/17/10	1337				
20	BCAL 3	BCAL 3	08/17/10	1401	8.44		14.91	
21	GCAL 3	GCAL 3	08/17/10	1426	8.45		14.91	

QC LIMITS

S1 = TFT(Surr) (+/- 0.07 MINUTES)
S2 = BB(Surr) (+/- 0.07 MINUTES)

* Values outside of QC limits.

Metals Analysis
Report and Summary QC Forms

ARI Job ID: RI65

Cover Page

INORGANIC ANALYSIS DATA PACKAGE

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: Lora Lake Apts RI

SDG: RI65

CLIENT ID	ARI ID	ARI LIMS ID	REPREP
MW-09-081310	RI65A	10-19847	
MW-08-081310	RI65B	10-19848	
MW-08-081310D	RI65BDUP	10-19848	
MW-08-081310S	RI65BSPK	10-19848	
MW-07-081310	RI65C	10-19849	
PBW	RI65MB1	10-19849	
LCSW	RI65MB1SPK	10-19849	
MW-01-081310	RI65D	10-19850	
MW-05-081310	RI65E	10-19851	

Were ICP interelement corrections applied ?	Yes/No	YES
Were ICP background corrections applied ?	Yes/No	YES
If yes - were raw data generated before application of background corrections ?	Yes/No	NO

Comments: _____

THIS DATA PACKAGE HAS BEEN REVIEWED AND AUTHORIZED FOR RELEASE BY:

Signature: _____ Name: Jay Kuhn

Date: 9/23/10 Title: Inorganic Manager

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: MW-09-081310
SAMPLE

Lab Sample ID: RI65A
LIMS ID: 10-19847
Matrix: Water
Data Release Authorized:
Reported: 08/23/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: 08/13/10
Date Received: 08/13/10

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	08/17/10	200.8	08/19/10	**7440-38-2**	**Arsenic**	0.2	**0.3**	
200.8	08/17/10	200.8	08/19/10	7439-92-1	Lead	1	1	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: MW-08-081310
SAMPLE

Lab Sample ID: RI65B
LIMS ID: 10-19848
Matrix: Water
Data Release Authorized:
Reported: 08/23/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: 08/13/10
Date Received: 08/13/10

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	08/17/10	200.8	08/19/10	**7440-38-2**	**Arsenic**	0.2	**0.6**	
200.8	08/17/10	200.8	08/19/10	7439-92-1	Lead	1	1	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: MW-07-081310
SAMPLE

Lab Sample ID: RI65C
LIMS ID: 10-19849
Matrix: Water
Data Release Authorized:
Reported: 08/23/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: 08/13/10
Date Received: 08/13/10

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	08/17/10	200.8	08/19/10	**7440-38-2**	**Arsenic**	0.2	**0.3**	
200.8	08/17/10	200.8	08/19/10	7439-92-1	Lead	1	1	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: MW-01-081310
SAMPLE

Lab Sample ID: RI65D
LIMS ID: 10-19850
Matrix: Water
Data Release Authorized:
Reported: 08/23/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: 08/13/10
Date Received: 08/13/10

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	08/17/10	200.8	08/19/10	**7440-38-2**	**Arsenic**	0.2	**5.6**	
200.8	08/17/10	200.8	08/19/10	7439-92-1	Lead	1	1	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: MW-05-081310
SAMPLE

Lab Sample ID: RI65E
LIMS ID: 10-19851
Matrix: Water
Data Release Authorized:
Reported: 08/23/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: 08/13/10
Date Received: 08/13/10

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	08/17/10	200.8	08/19/10	**7440-38-2**	**Arsenic**	0.2	**3.0**	
200.8	08/17/10	200.8	08/19/10	7439-92-1	Lead	1	1	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: MW-08-081310
MATRIX SPIKE

Lab Sample ID: RI65B
LIMS ID: 10-19848
Matrix: Water
Data Release Authorized:
Reported: 08/23/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: 08/13/10
Date Received: 08/13/10

MATRIX SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Spike	Spike Added	% Recovery	Q
Arsenic	200.8	0.560	25.8	25.0	101%	
Lead	200.8	1.00 U	22.6	25.0	90.4%	

Reported in µg/L

N-Control Limit Not Met
H-% Recovery Not Applicable, Sample Concentration Too High
NA-Not Applicable, Analyte Not Spiked

Percent Recovery Limits: 75-125%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS

Sample ID: MW-08-081310
DUPLICATE

Lab Sample ID: RI65B
LIMS ID: 10-19848
Matrix: Water
Data Release Authorized:
Reported: 08/23/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: 08/13/10
Date Received: 08/13/10

MATRIX DUPLICATE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Duplicate	RPD	Control Limit	Q
Arsenic	200.8	0.6	0.5	18.2%	+/- 0.2	L
Lead	200.8	1 U	1 U	0.0%	+/- 1	L

Reported in µg/L

*-Control Limit Not Met
L-RPD Invalid, Limit = Detection Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: LAB CONTROL

Lab Sample ID: RI65LCS
LIMS ID: 10-19849
Matrix: Water
Data Release Authorized:
Reported: 08/23/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: NA
Date Received: NA

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Arsenic	200.8	25.4	25.0	102%	
Lead	200.8	23	25	92.0%	

Reported in µg/L

N-Control limit not met
Control Limits: 80-120%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: METHOD BLANK

Lab Sample ID: RI65MB
LIMS ID: 10-19849
Matrix: Water
Data Release Authorized:
Reported: 08/23/10

QC Report No: RI65-Floyd-Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: NA
Date Received: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	08/17/10	200.8	08/19/10	7440-38-2	Arsenic	0.2	0.2	U
200.8	08/17/10	200.8	08/19/10	7439-92-1	Lead	1	1	U

U-Analyte undetected at given RL
RL-Reporting Limit

Calibration Verification

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: Lora Lake Apts RI

UNITS: ug/L

SDG: RI65

ANALYTE	EL	M	RUN	ICVTV	ICV	%R	CCVTV	CCV1	%R	CCV2	%R	CCV3	%R	CCV4	%R	CCV5	%R
Arsenic	AS	PMS	MS081981	50.0	49.73	99.5	50.0	50.61	101.2	50.45	100.9	50.26	100.5	50.24	100.5	50.35	100.7
Lead	PB	PMS	MS081981	50.0	48.76	97.5	50.0	49.95	99.9	46.18	92.4	50.44	100.9	46.78	93.6	46.86	93.7

Control Limits: Mercury 80-120; Other Metals 90-110

Calibration Verification

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: Lora Lake Apts RI

SDG: RI65

UNITS: ug/L

ANALYTE	EL	M	RUN	CCVTV	CCV6	%R	CCV7	%R	CCV8	%R	CCV9	%R	CCV10	%R	CCV11	%R
Arsenic	AS	PMS	MS081981	50.0	50.34	100.7										
Lead	PB	PMS	MS081981	50.0	46.74	93.5										

Control Limits: Mercury 80-120; Other Metals 90-110

CRDL Standard

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: Lora Lake Apts RI

UNITS: ug/L

SDG: RI65

ANALYTE	EL	M	RUN	CRA/I TV	CR-1	%R	CR-2	%R	CR-3	%R	CR-4	%R	CR-5	%R	CR-6	%R
Arsenic	AS	PMS	MS081981	0.2	0.21	**105.0**										
Lead	PB	PMS	MS081981	1.0	1.01	**101.0**										

Control Limits: no control limits have been established by the EPA at this time.

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: Lora Lake Apts RI

UNITS: ug/L

SDG: RI65

ANALYTE	EL	METH	RUN	CRDL	IDL	ICB	C	CCB1	C	CCB2	C	CCB3	C	CCB4	C	CCB5	C
Arsenic	AS	PMS	MS081981	10.0	0.2	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Lead	PB	PMS	MS081981	3.0	1.0	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U

RI65 09159

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: Lora Lake Apts RI

SDG: RI65

UNITS: ug/L

ANALYTE	EL	METH	RUN	CRDL	IDL	CCB6	C	CCB7	C	CCB8	C	CCB9	C	CCB10	C	CCB11	C
Arsenic	AS	PMS	MS081981	10.0	0.2	0.2	U										
Lead	PB	PMS	MS081981	3.0	1.0	1.0	U										

RI65 00157

ICP Interference Check Sample

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

ICS SOURCE: I.V.

PROJECT: Lora Lake Apts RI

RUNID: MS081981

SDG: RI65

INSTRUMENT ID: PE ELAN 6000

UNITS: ug/L

ANALYTE	ICSA TV	ICSAB TV	ICSA1	ICSAB1	%R	ICSA2	ICSAB2	%R	ICSA3	ICSAB3	%R
Antimony			0.1	0.1							
Arsenic		20	0.0	18.9	**94.5**						
Cadmium		20	0.0	19.2	**96.0**						
Copper		20	0.5	18.7	**93.5**						
Nickel		20	0.6	19.5	**97.5**						
Silver		20	0.0	17.7	**88.5**						
Zinc		20	1.3	20.4	**102.0**						

RI65.09158

IDLs and ICP Linear Ranges

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: Lora Lake Apts RI

SDG: RI65 UNITS: ug/L

ANALYTE	EL	METH	INSTRUMENT	WAVELENTH (nm)	GFA BACK-GROUND	CLP CRDL	RL	RL DATE	ICP LINEAR RANGE (ug/L)	ICP LR DATE
Arsenic	AS	PMS	PE ELAN 6000 MS	0.00		10	0.2	4/1/2010		
Lead	PB	PMS	PE ELAN 6000 MS	0.00		3	1.0	4/1/2010		

Preparation Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: Lora Lake Apts RI

SDG: RI65

ANALYSIS METHOD: PMS

ARI PREP CODE: REN

PREPDATE: 8/17/2010

CLIENT ID	ARI ID	MASS (g)	INITIAL VOLUME (mL)	FINAL VOLUME (mL)
MW-09-081310	RI65A	0.000	50.0	25.0
MW-08-081310	RI65B	0.000	50.0	25.0
MW-08-081310D	RI65BDUP	0.000	50.0	25.0
MW-08-081310S	RI65BSPK	0.000	50.0	25.0
MW-07-081310	RI65C	0.000	50.0	25.0
MW-01-081310	RI65D	0.000	50.0	25.0
MW-05-081310	RI65E	0.000	50.0	25.0
PBW	RI65MB1	0.000	50.0	25.0
LCSW	RI65MB1SPK	0.000	50.0	25.0

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: Lora Lake Apts RI | INSTRUMENT ID: PE ELAN 6000 MS | START DATE: 8/19/2010

SDG: RI65 | RUNID: MS081981 METHOD: PMS | END DATE: 8/19/2010

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
S0	S0	1.00	11240				X																	X									
S1	S1	1.00	11320				X																	X									
S2	S2	1.00	11390				X																	X									
S3	S3	1.00	11460				X																	X									
S4	S4	1.00	11530				X																	X									
ZZZZZZ	Rinse Sampl	1.00	12000																														
ICV	MICV	1.00	12070				X																	X									
ICB	ICB	1.00	12140				X																	X									
CCV	MCCV1	1.00	12210				X																	X									
CCB	CCB1	1.00	12270				X																	X									
CRI	MCRI	1.00	12340				X																	X									
ICSA	ICSAI	1.00	12410				X																	X									
ICSAB	ICSABI	1.00	12480				X																	X									
CCV	MCCV2	1.00	12550				X																	X									
CCB	CCB2	1.00	13010				X																	X									
ZZZZZZ	RH25A-L	10.00	13080																														
ZZZZZZ	RH25A	2.00	13140																														
ZZZZZZ	RH25ADUP	2.00	13200																														
ZZZZZZ	RH25ASPK	2.00	13260																														
ZZZZZZ	RH25B	5.00	13320																														
ZZZZZZ	RH25Q	5.00	13380																														
ZZZZZZ	RH66E	2.00	13440																														
ZZZZZZ	RH66F	2.00	13500																														
ZZZZZZ	RH66G	2.00	13570																														
ZZZZZZ	RH66H	2.00	14030																														
CCV	MCCV3	1.00	14090				X																	X									
CCB	CCB3	1.00	14150				X																	X									
ZZZZZZ	RI46MB1	2.00	14220																														
ZZZZZZ	RH66MB	2.00	14280																														
ZZZZZZ	RH66MBSPK	2.00	14340																														
ZZZZZZ	RI46MB1SPK	2.00	14400																														
ZZZZZZ	RI46ADUP	2.00	14460																														
ZZZZZZ	RI46A	2.00	14520																														
ZZZZZZ	RI46ASPK	2.00	14580																														
ZZZZZZ	RI46B	2.00	15040																														

FORM XIV

RI65 00151

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: Lora Lake Apts RI | INSTRUMENT ID: PE ELAN 6000 MS | START DATE: 8/19/2010

SDG: RI65 | RUNID: MS081981 METHOD: PMS | END DATE: 8/19/2010

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
ZZZZZZ	RI46C	2.00	15100																														
ZZZZZZ	RI46D	2.00	15160																														
CCV	MCCV4	1.00	15220				X																	X									
CCB	CCB4	1.00	15290				X																	X									
PBW	RI65MB1	2.00	15390				X																	X									
LCSW	RI65MB1SPK	2.00	15450				X																	X									
ZZZZZZ	RI46E	2.00	15510																														
ZZZZZZ	RI46F	2.00	15570																														
ZZZZZZ	RI46G	2.00	16030																														
ZZZZZZ	RI46H	2.00	16090																														
ZZZZZZ	RI46I	2.00	16150																														
ZZZZZZ	RH66F	10.00	16210																														
ZZZZZZ	LR200	1.00	16270																														
ZZZZZZ	LR300	1.00	16330																														
CCV	MCCV5	1.00	16390				X																	X									
CCB	CCB5	1.00	16460				X																	X									
ZZZZZZ	RI57MB	20.00	16540																														
ZZZZZZ	RI57MBSPK	20.00	17000																														
MW-08-081310D	RI65BDUP	2.00	17060				X																	X									
MW-08-081310	RI65B	2.00	17120				X																	X									
MW-08-081310S	RI65BSPK	2.00	17180				X																	X									
MW-09-081310	RI65A	2.00	17240				X																	X									
MW-07-081310	RI65C	2.00	17300				X																	X									
MW-01-081310	RI65D	2.00	17360				X																	X									
MW-05-081310	RI65E	2.00	17420				X																	X									
ZZZZZZ	RI57A	20.00	17480																														
CCV	MCCV6	1.00	17540				X																	X									
CCB	CCB6	1.00	18010				X																	X									

RI65:00162

General Chemistry Analysis
Report and Summary QC Forms

ARI Job ID: RI65

SAMPLE RESULTS-CONVENTIONALS
RI65-Floyd-Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 08/18/10

Project: Lora Lake Apts RI
Event: POS-LLA
Date Sampled: 08/13/10
Date Received: 08/13/10

Client ID: MW-09-081310
ARI ID: 10-19847 RI65A

Analyte	Date Batch	Method	Units	RL	Sample
pH	08/13/10 081310#1	EPA 150.1	std units	0.01	6.20
Total Suspended Solids	08/16/10 081610#1	EPA 160.2	mg/L	1.1	< 1.1 U

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RI65-Floyd-Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 08/18/10

Project: Lora Lake Apts RI
Event: POS-LLA
Date Sampled: 08/13/10
Date Received: 08/13/10

Client ID: MW-08-081310
ARI ID: 10-19848 RI65B

Analyte	Date Batch	Method	Units	RL	Sample
pH	08/13/10 081310#1	EPA 150.1	std units	0.01	6.31
Total Suspended Solids	08/16/10 081610#1	EPA 160.2	mg/L	1.1	< 1.1 U

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RI65-Floyd-Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 08/18/10

Project: Lora Lake Apts RI
Event: POS-LLA
Date Sampled: 08/13/10
Date Received: 08/13/10

Client ID: MW-07-081310
ARI ID: 10-19849 RI65C

Analyte	Date Batch	Method	Units	RL	Sample
pH	08/13/10 081310#1	EPA 150.1	std units	0.01	6.64
Total Suspended Solids	08/16/10 081610#1	EPA 160.2	mg/L	1.1	< 1.1 U

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RI65-Floyd-Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 08/18/10

Project: Lora Lake Apts RI
Event: POS-LLA
Date Sampled: 08/13/10
Date Received: 08/13/10

Client ID: MW-01-081310
ARI ID: 10-19850 RI65D

Analyte	Date Batch	Method	Units	RL	Sample
pH	08/13/10 081310#1	EPA 150.1	std units	0.01	6.99
Total Suspended Solids	08/16/10 081610#1	EPA 160.2	mg/L	2.3	16.8

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RI65-Floyd-Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 08/18/10

Project: Lora Lake Apts RI
Event: POS-LLA
Date Sampled: 08/13/10
Date Received: 08/13/10

Client ID: MW-05-081310
ARI ID: 10-19851 RI65E

Analyte	Date Batch	Method	Units	RL	Sample
pH	08/13/10 081310#1	EPA 150.1	std units	0.01	6.57
Total Suspended Solids	08/16/10 081610#1	EPA 160.2	mg/L	1.2	2.5

RL Analytical reporting limit
U Undetected at reported detection limit

REPLICATE RESULTS-CONVENTIONALS
RI65-Floyd-Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 08/18/10

Project: Lora Lake Apts RI
Event: POS-LLA
Date Sampled: 08/13/10
Date Received: 08/13/10

Analyte	Method	Date	Units	Sample	Replicate(s)	RPD/RSD
ARI ID: RI65B Client ID: MW-08-081310						
pH	EPA 150.1	08/13/10	std units	6.31	6.31	0.00
ARI ID: RI65D Client ID: MW-01-081310						
Total Suspended Solids	EPA 160.2	08/16/10	mg/L	16.8	16.8	0.0%

pH is evaluated as the Absolute Difference between the values rather than Relative Percent Difference

LAB CONTROL RESULTS-CONVENTIONALS
RI65-Floyd-Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 08/18/10

Project: Lora Lake Apts RI
Event: POS-LLA
Date Sampled: NA
Date Received: NA

Analyte/Method	QC ID	Date	Units	LCS	Spike Added	Recovery
pH EPA 150.1	ICVL	08/13/10	std units	6.98	7.00	0.02
Total Suspended Solids EPA 160.2	ICVL	08/16/10	mg/L	49.6	50.0	99.2%

pH is evaluated as the Absolute Difference between the values rather than Percent Recovery.

METHOD BLANK RESULTS-CONVENTIONALS
RI65-Floyd-Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 08/18/10

Project: Lora Lake Apts RI
Event: POS-LLA
Date Sampled: NA
Date Received: NA

Analyte	Method	Date	Units	Blank	ID
Total Suspended Solids	EPA 160.2	08/16/10	mg/L	< 1.0 U	

SIM Volatile Raw Data
Initial Calibration Notes and Raw Data

ARI Job ID: RI65

Analytical Resources, Incorporated
Analytical Chemists and Consultants

VOA Analyst Notes / Corrective Action Log

ARI Project ID: NT7 Curve SIM Client ID: _____

ARI SOP: **404S**(Gas) **410S**(BTEX) **430S**(VPH) **700S**(8260C) ~~**703S**(SIM)~~ **706S**(524.2) **710S**(RSK-175)

Parameter(s): SIM

Instrument: NT-3 NT-5 (NT-7) NT-9 NT-10 PID-1 PID-2 PID-3 FID-6 FINN-5

Purge Volume (mL) 10 Curve Date: 7/21/10 Analysis Start Date: 7/21/10

pH ≤ 2.0	YES / NO / (NA)	Method Blank In Control?	YES / NO
BFB Tune Meets Criteria?	(YES) / NO / NA	LCS / LCSD Recovery In Control?	YES / NO
Internal Standard Meets Criteria?	(YES) / NO / NA	Surrogate Recovery In Control?	(YES) / NO
ICal acceptable?	(YES) / NO	CCal acceptable?	YES / NO
Q flag applied?	YES / NO / NA	Q flag applied?	YES / NO / NA
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):

Additional Details on Reverse: Yes / No

Analyst: [signature] **Date:** 7/22/10

Reviewer: [signature] **Date:** 7/22/10

Analytical Resources Inc.: Volatile Organics Instrument Log

NT-7 Serial No.:GC=US00024417, MS=US72821196

Date: 7/21/10 Analysis: SIM VOA Analyst: MH

GC Program: VC Column No: 850322 Column Type: RTXVMS

Instrument Tune (.U or .CT.): 07211004 EM Voltage: 2306

Calibration File: 07211009 Curve Date: 7/21/10

IS/SS	Ical/Ccal	LCS/ICV
VW641-2	VW640-1	~~VW640-1~~ MH
		VW637-2

INTERNAL STANDARD SUMMARY FOR DATABATCH - /chem1/nt7.i/21Jul2010.b

	Time	Filename	LabID	ClientID	Vial#	pH	DF			
1	0823	07211001.d	00200721		1	5.32	11389	5.74	17915
2	0905	07211002.d	00200721		1	5.31	35679	5.74	56727
3	0948	07211003.d	00200721		1	5.32	94816	5.75	150585
4	1026	07211004.d	BFB0721		0.00					
5	1104	07211005.d	00200721		1	5.32	94293	5.76	147943
6	1130	07211006.d	00500721		1	5.32	92801	5.75	147874
7	1156	07211007.d	01000721		1	5.32	92386	5.76	146365
8	1221	07211008.d	05000721		1	5.32	96505	5.76	146484
9	1247	07211009.d	10000721		1	5.32	91666	5.75	147386
10	1313	07211010.d	20000721		1	5.32	93055	5.75	148831
11	1338	07211011.d	40000721		1	5.32	92839	5.76	148421
12	1404	07211012.d	ICV0721		1	5.32	91990	5.76	148203

MH 7/22/10

Maintenance / Comments

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

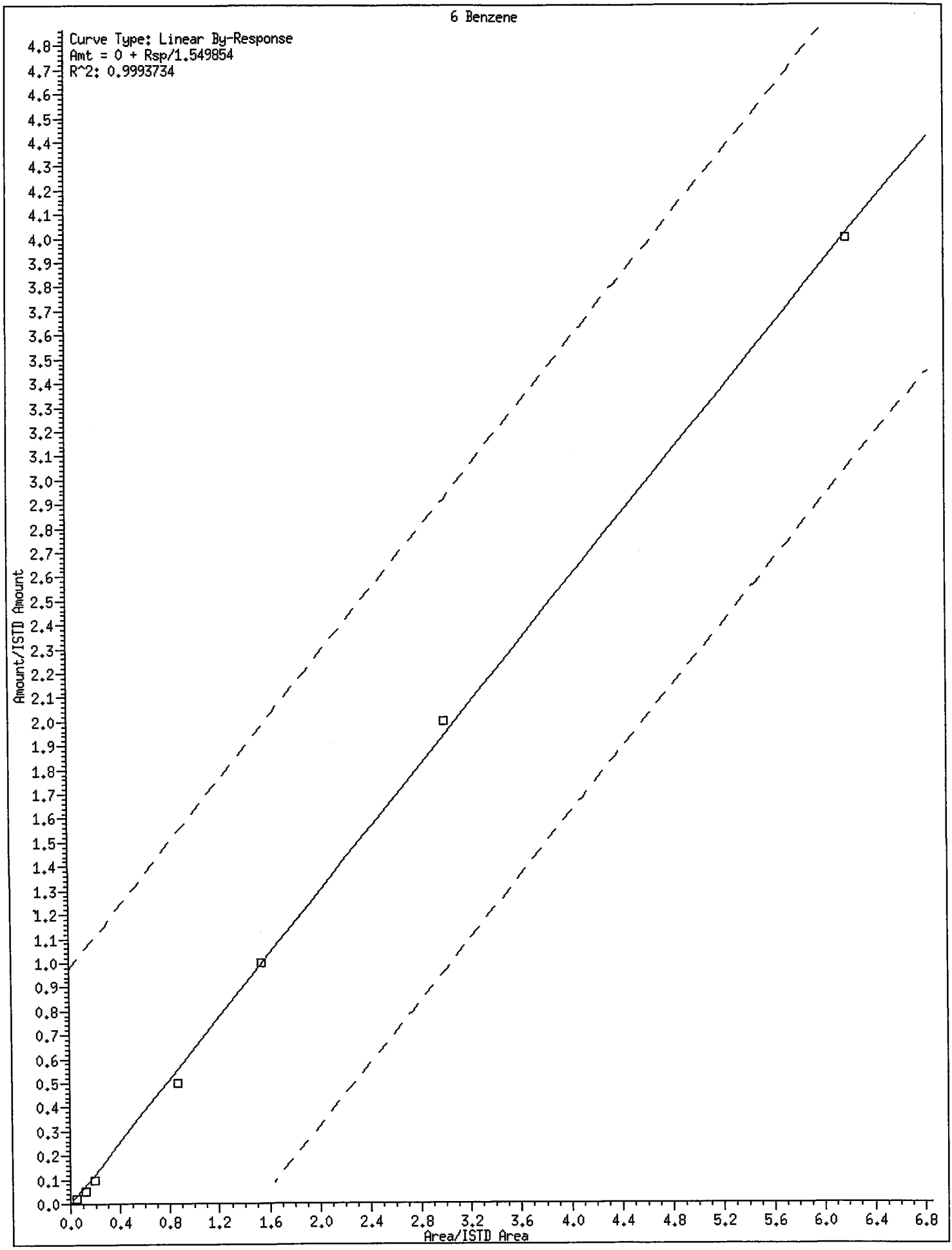
Every line must contain information or be lined out. Make all entries legible. Start a new page for each QC period.

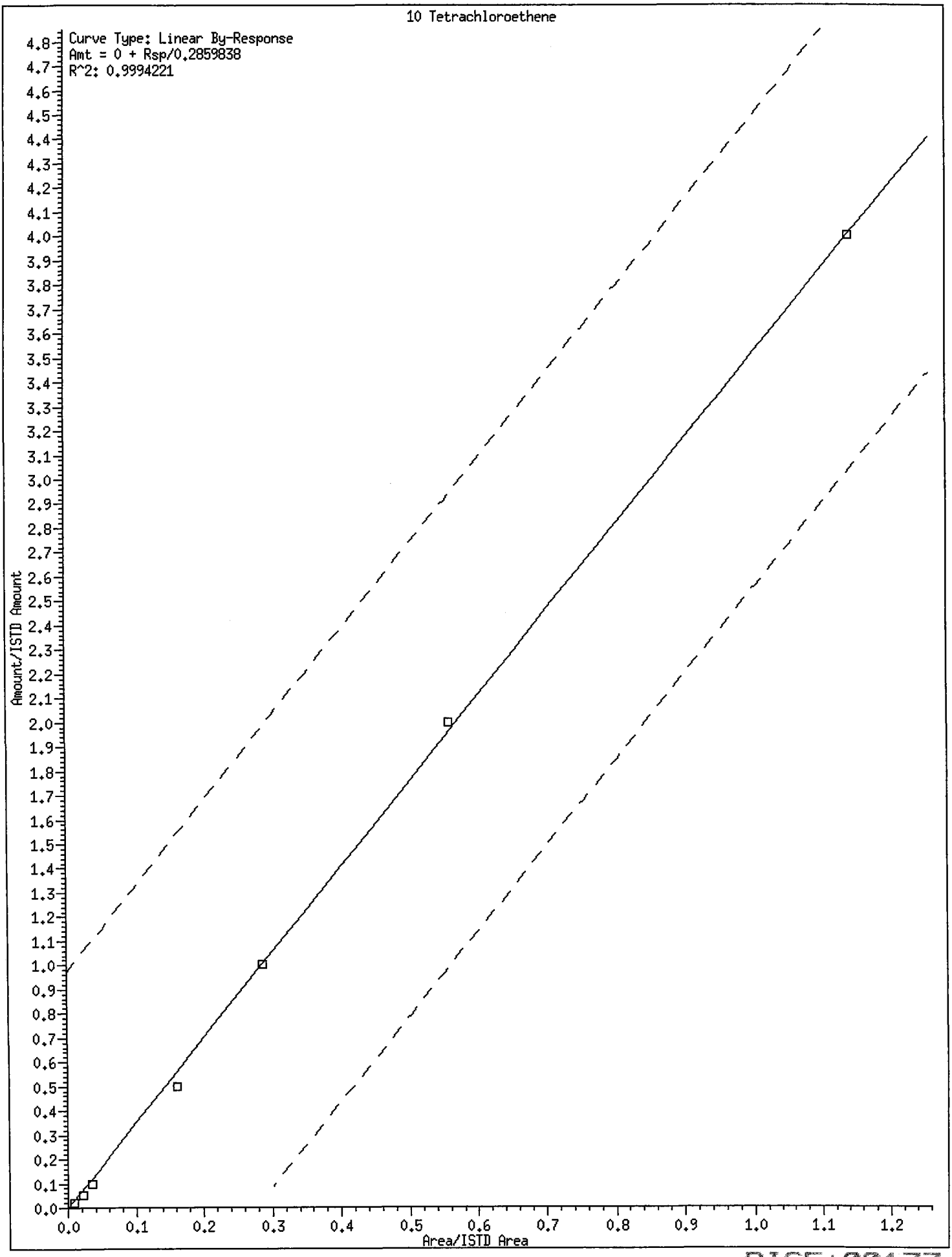
MANUAL INTEGRATION SUMMARY FOR DATABATCH - /chem1/nt7.i/21Jul2010.b

ARI Job No.: 0020 Method: sim072110.m Instrument: nt7.i Date: 21-JUL-2010

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1104	07211005.d	00200721		1	NO MANUAL INTEGRATION
1130	07211006.d	00500721		1	NO MANUAL INTEGRATION
1156	07211007.d	01000721		1	NO MANUAL INTEGRATION
1221	07211008.d	05000721		1	NO MANUAL INTEGRATION
1247	07211009.d	10000721		1	NO MANUAL INTEGRATION
1313	07211010.d	20000721		1	NO MANUAL INTEGRATION
1338	07211011.d	40000721		1	NO MANUAL INTEGRATION
1404	07211012.d	ICV0721		1	NO MANUAL INTEGRATION

RICS 091725


6 Benzene
Curve Type: Linear By-Response
Amt = 0 + Rsp/1.549854
R^2: 0.9993734
Amount/ISTD Amount
Area/ISTD Area


10 Tetrachloroethene
Curve Type: Linear By-Response
Amt = 0 + Rsp/0.2859838
R^2: 0.9994221
Amount/ISTD Amount
Area/ISTD Area

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 21-JUL-2010 11:04
End Cal Date : 21-JUL-2010 13:38
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/nt7.i/21Jul2010.b/sim072110.m
Cal Date : 21-Jul-2010 14:18 monicah
Curve Type : Average

Calibration File Names:
Level 1: /chem1/nt7.i/21Jul2010.b/07211005.d
Level 2: /chem1/nt7.i/21Jul2010.b/07211006.d
Level 3: /chem1/nt7.i/21Jul2010.b/07211007.d
Level 4: /chem1/nt7.i/21Jul2010.b/07211008.d
Level 5: /chem1/nt7.i/21Jul2010.b/07211009.d
Level 6: /chem1/nt7.i/21Jul2010.b/07211010.d
Level 7: /chem1/nt7.i/21Jul2010.b/07211011.d

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	500.000 Level 4	1000.000 Level 5	2000.000 Level 6	4000.000 Level 7	___ RRF	% RSD	
1 Vinyl Chloride	0.95712	0.95839	0.77014	0.72226	0.69232	0.67746	0.69081	0.78121	15.917	
2 1,1-Dichloroethene	0.68828	0.69848	0.54153	0.50731	0.47493	0.45821	0.46959	0.54833	18.772	
175 Trans-1,2-Dichloroethene	0.71797	0.76810	0.60236	0.57466	0.54083	0.52554	0.53792	0.60963	15.716	
177 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
3 cis-1,2-dichloroethene	0.77312	0.75085	0.64111	0.59303	0.56187	0.54654	0.56156	0.63258	14.833	
6 Benzene	2.49691	2.34199	1.85488	1.72640	1.54127	1.50598	1.55748	1.86070	21.657	<-

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 21-JUL-2010 11:04
End Cal Date : 21-JUL-2010 13:38
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/nt7.i/21Jul2010.b/sim072110.m
Cal Date : 21-Jul-2010 14:18 monicah
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	500.000 Level 4	1000.000 Level 5	2000.000 Level 6	4000.000 Level 7	RRF	% RSD	
176 1,2-Dichloroethane	0.85743	0.89611	0.75498	0.74002	0.65292	0.66928	0.69874	0.75278	12.311	
8 Trichloroethene	0.48803	0.47297	0.37939	0.36441	0.32525	0.31725	0.32912	0.38235	18.506	
10 Tetrachloroethene	0.43395	0.44024	0.33984	0.32380	0.28836	0.28002	0.28654	0.34182	20.069	<-
11 1,1,2,2-Tetrachloroethane	0.31566	0.33529	0.28572	0.29135	0.26814	0.26063	0.27347	0.29004	9.276	
$ 5 d4-1,2-Dichloroethane	0.54686	0.53157	0.54300	0.48659	0.50513	0.49875	0.49921	0.51587	4.673	
$ 9 d8-Toluene	1.27334	1.27937	1.28009	1.26858	1.26768	1.28491	1.27324	1.27531	0.499	

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 21-JUL-2010 11:04
End Cal Date : 21-JUL-2010 13:38
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/nt7.i/21Jul2010.b/sim072110.m
Cal Date : 21-Jul-2010 14:18 monicah

Calibration File Names:
Level 1: /chem1/nt7.i/21Jul2010.b/07211005.d
Level 2: /chem1/nt7.i/21Jul2010.b/07211006.d
Level 3: /chem1/nt7.i/21Jul2010.b/07211007.d
Level 4: /chem1/nt7.i/21Jul2010.b/07211008.d
Level 5: /chem1/nt7.i/21Jul2010.b/07211009.d
Level 6: /chem1/nt7.i/21Jul2010.b/07211010.d
Level 7: /chem1/nt7.i/21Jul2010.b/07211011.d

Compound	20 Level 1	50 Level 2	100 Level 3	500 Level 4	1000 Level 5	2000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	4000 Level 7											
1 Vinyl Chloride	0.95712	0.95839	0.77014	0.72226	0.69232	0.67746						
	0.69081						AVRG		0.78121		15.91735	
2 1,1-Dichloroethene	0.68828	0.69848	0.54153	0.50731	0.47493	0.45821						
	0.46959						AVRG		0.54833		18.77184	
175 Trans-1,2-Dichloroethene	0.71797	0.76810	0.60236	0.57466	0.54083	0.52554						
	0.53792						AVRG		0.60963		15.71550	
177 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+00		0.000e+00	<-

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 21-JUL-2010 11:04
End Cal Date : 21-JUL-2010 13:38
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/nt7.i/21Jul2010.b/sim072110.m
Cal Date : 21-Jul-2010 14:18 monicah

Compound	20 Level 1 / 4000 Level 7	50 Level 2	100 Level 3	500 Level 4	1000 Level 5	2000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
3 cis-1,2-dichloroethene	0.77312 / 0.56156	0.75085	0.64111	0.59303	0.56187	0.54654	AVRG		0.63258		14.83290
6 Benzene	7388 / 924652	17316	27149	126445	227162	448273	LINR	0.000e+00	1.54985		0.99937
176 1,2-Dichloroethane	0.85743 / 0.69874	0.89611	0.75498	0.74002	0.65292	0.66928	AVRG		0.75278		12.31060
8 Trichloroethene	0.48803 / 0.32912	0.47297	0.37939	0.36441	0.32525	0.31725	AVRG		0.38235		18.50638
10 Tetrachloroethene	1284 / 170115	3255	4974	23716	42500	83351	LINR	0.000e+00	0.28598		0.99942
11 1,1,2,2-Tetrachloroethane	0.31566 / 0.27347	0.33529	0.28572	0.29135	0.26814	0.26063	AVRG		0.29004		9.27596
5 d4-1,2-Dichloroethane	0.54686 / 0.49921	0.53157	0.54300	0.48659	0.50513	0.49875	AVRG		0.51587		4.67300

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 21-JUL-2010 11:04
End Cal Date : 21-JUL-2010 13:38
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/nt7.i/21Jul2010.b/sim072110.m
Cal Date : 21-Jul-2010 14:18 monicah

Compound	20 Level 1	50 Level 2	100 Level 3	500 Level 4	1000 Level 5	2000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	4000 Level 7										
$ 9 d8-Toluene	1.27334	1.27937	1.28009	1.26858	1.26768	1.28491					
	1.27324						AVRG		1.27531		0.49917

7/22/10

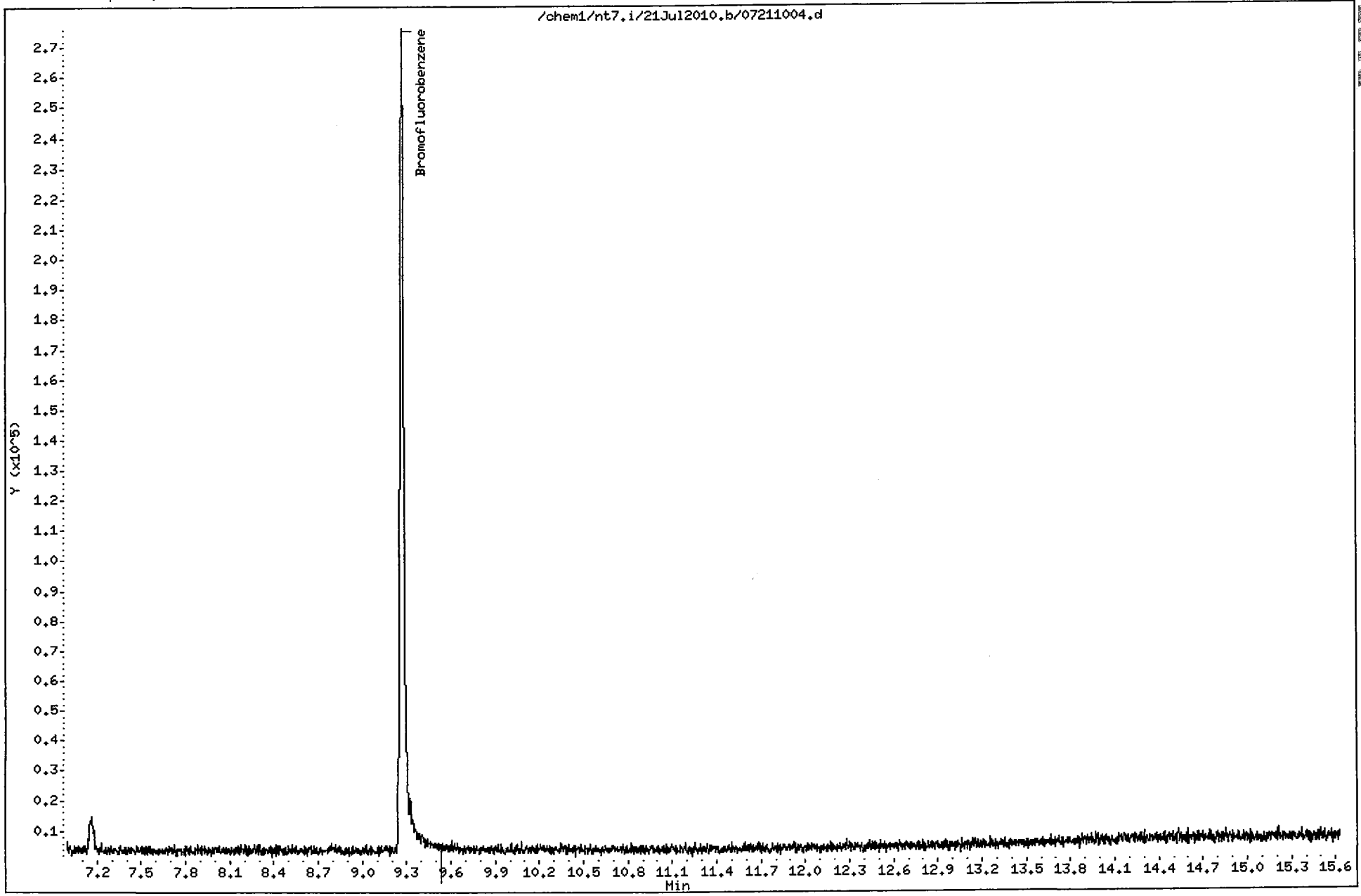
Data File: /chem1/nt7.i/21Jul2010.b/07211004.d
Date : 21-JUL-2010 10:26
Client ID:
Sample Info: BFB0721

Column phase: RTXVMS

Instrument: nt7.i

Operator: MH
Column diameter: 0.18

RIGS 00169



Data File: /chem1/nt7.i/21Jul2010.b/07211004.d

Date : 21-JUL-2010 10:26

Client ID:

Instrument: nt7.i

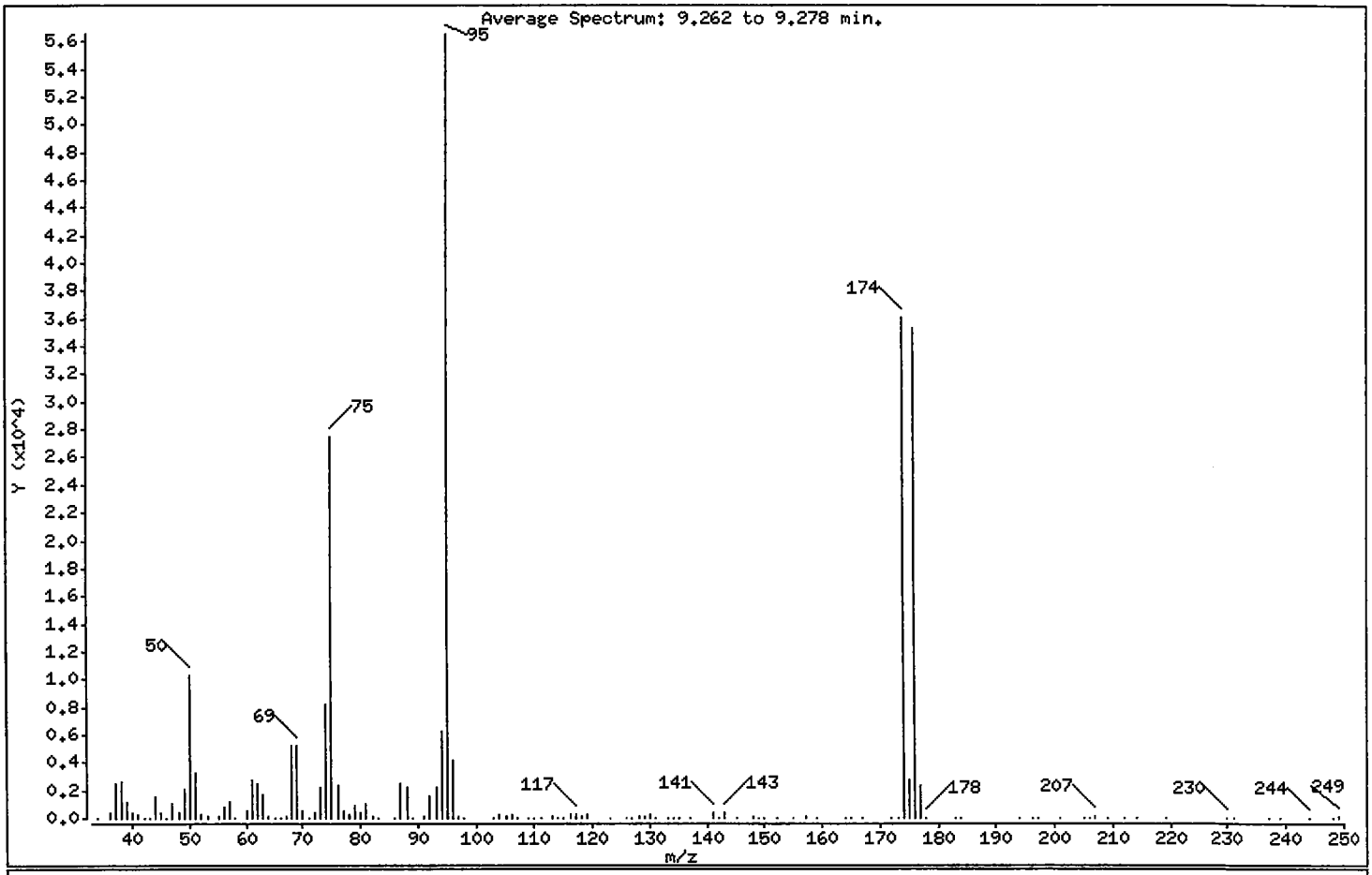
Sample Info: BFB0721

Operator: MH

Column phase: RTXVMS

Column diameter: 0.18

1 Bromofluorobenzene



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	18.21
75	30.00 - 66.00% of mass 95	48.69
96	5.00 - 9.00% of mass 95	7.28
173	Less than 2.00% of mass 174	0.11 (0.17)
174	50.00 - 101.00% of mass 95	63.77
175	4.00 - 9.00% of mass 174	4.83 (7.57)
176	93.00 - 101.00% of mass 174	62.48 (97.97)
177	5.00 - 9.00% of mass 176	4.24 (6.79)

Data File: /chem1/nt7.i/21Jul2010.b/07211004.d

Date : 21-JUL-2010 10:26

Client ID:

Instrument: nt7.i

Sample Info: BFB0721

Operator: MH

Column phase: RTXVMS

Column diameter: 0.18

Data File: 07211004.d

Spectrum: Average Spectrum: 9.262 to 9.278 min.

Location of Maximum: 95.00

Number of points: 126

m/z	Y	m/z	Y	m/z	Y	m/z	Y
34.00	58	69.00	5243	109.00	22	164.00	30
36.00	445	70.00	524	110.00	22	165.00	24
37.00	2433	71.00	52	111.00	21	167.00	30
38.00	2613	72.00	382	113.00	87	172.00	55
39.00	1187	73.00	2274	114.00	21	173.00	63
40.00	358	74.00	8178	115.00	57	174.00	36064
41.00	233	75.00	27536	116.00	221	175.00	2731
42.00	47	76.00	2369	117.00	281	176.00	35336
43.00	45	77.00	479	118.00	190	177.00	2399
44.00	1617	78.00	287	119.00	216	178.00	48
45.00	428	79.00	866	123.00	24	183.00	23
46.00	28	80.00	355	126.00	33	184.00	28
47.00	1075	81.00	1090	127.00	57	194.00	26
48.00	394	82.00	148	128.00	194	196.00	49
49.00	2085	83.00	56	129.00	108	197.00	30
50.00	10301	86.00	59	130.00	209	201.00	31
51.00	3302	87.00	2537	131.00	41	205.00	25
52.00	237	88.00	2244	133.00	22	206.00	25
53.00	93	89.00	36	134.00	22	207.00	75
55.00	136	91.00	150	135.00	60	209.00	24
56.00	735	92.00	1546	137.00	22	212.00	26
57.00	1162	93.00	2174	141.00	456	214.00	29
58.00	31	94.00	6195	142.00	22	219.00	22
60.00	466	95.00	56552	143.00	357	230.00	60
61.00	2790	96.00	4119	145.00	23	231.00	25
62.00	2456	97.00	189	148.00	76	237.00	22
63.00	1714	98.00	25	149.00	32	239.00	22
64.00	146	103.00	24	150.00	24	244.00	28
65.00	22	104.00	225	152.00	22	248.00	22
66.00	25	105.00	89	155.00	29	249.00	72
67.00	150	106.00	212	157.00	66		
68.00	5235	107.00	23	159.00	31		

Data File: /chem1/nt7.i/21Jul2010.b/07211005.d
Report Date: 22-Jul-2010 06:50

Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/21Jul2010.b/07211005.d
Lab Smp Id: 00200721
Inj Date : 21-JUL-2010 11:04
Operator : MH Inst ID: nt7.i
Smp Info : 00200721,10,10,0
Misc Info : 10-
Comment :
Method : /chem1/nt7.i/21Jul2010.b/sim072110.m
Meth Date : 22-Jul-2010 06:50 monicah Quant Type: ISTD
Cal Date : 21-JUL-2010 11:04 Cal File: 07211005.d
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: sim12dca.sub
Target Version: 3.50

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

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	10.00000	Purge Volume (mL)
Sa	10.00000	Sample Amount (mL)

Cpnd Variable Local Compound Variable

		QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/L)	AMOUNTS ON-COL (ng/L)
	Compounds							
1	Vinyl Chloride	62	1.553	1.554	(0.292)	1805	20.0000	24.503
2	1,1-Dichloroethene	96	2.509	2.509	(0.472)	1298	20.0000	25.104
175	Trans-1,2-Dichloroethene	96	3.288	3.289	(0.619)	1354	20.0000	23.555
3	cis-1,2-dichloroethene	96	4.438	4.438	(0.835)	1458	20.0000	24.443
6	Benzene	78	5.211	5.211	(0.905)	7388	20.0000	32.221
* 4	Pentafluorobenzene	168	5.316	5.316	(1.000)	94293	1000.00	
$ 5	d4-1,2-Dichloroethane	65	5.325	5.325	(1.002)	51565	1000.00	1060.1
176	1,2-Dichloroethane	62	5.382	5.382	(1.012)	1617	20.0000	22.780
8	Trichloroethene	130	5.710	5.708	(0.992)	1444	20.0000	25.528
* 7	1,4-Difluorobenzene	114	5.756	5.754	(1.000)	147943	1000.00	
$ 9	d8-Toluene	98	6.902	6.903	(1.199)	188382	1000.00	998.45
10	Tetrachloroethene	166	7.271	7.260	(1.263)	1284	20.0000	30.348
11	1,1,2,2-Tetrachloroethane	83	9.458	9.447	(1.643)	934	20.0000	21.767

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt7.i
Lab File ID: 07211005.d
Lab Smp Id: 00200721
Analysis Type: VOA
Quant Type: ISTD
Operator: MH
Method File: /chem1/nt7.i/21Jul2010.b/sim072110.m
Misc Info: 10-

Calibration Date: 21-JUL-2010
Calibration Time: 12:47

Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	91666	45833	183332	94293	2.87
7 1,4-Difluorobenze	147386	73693	294772	147943	0.38

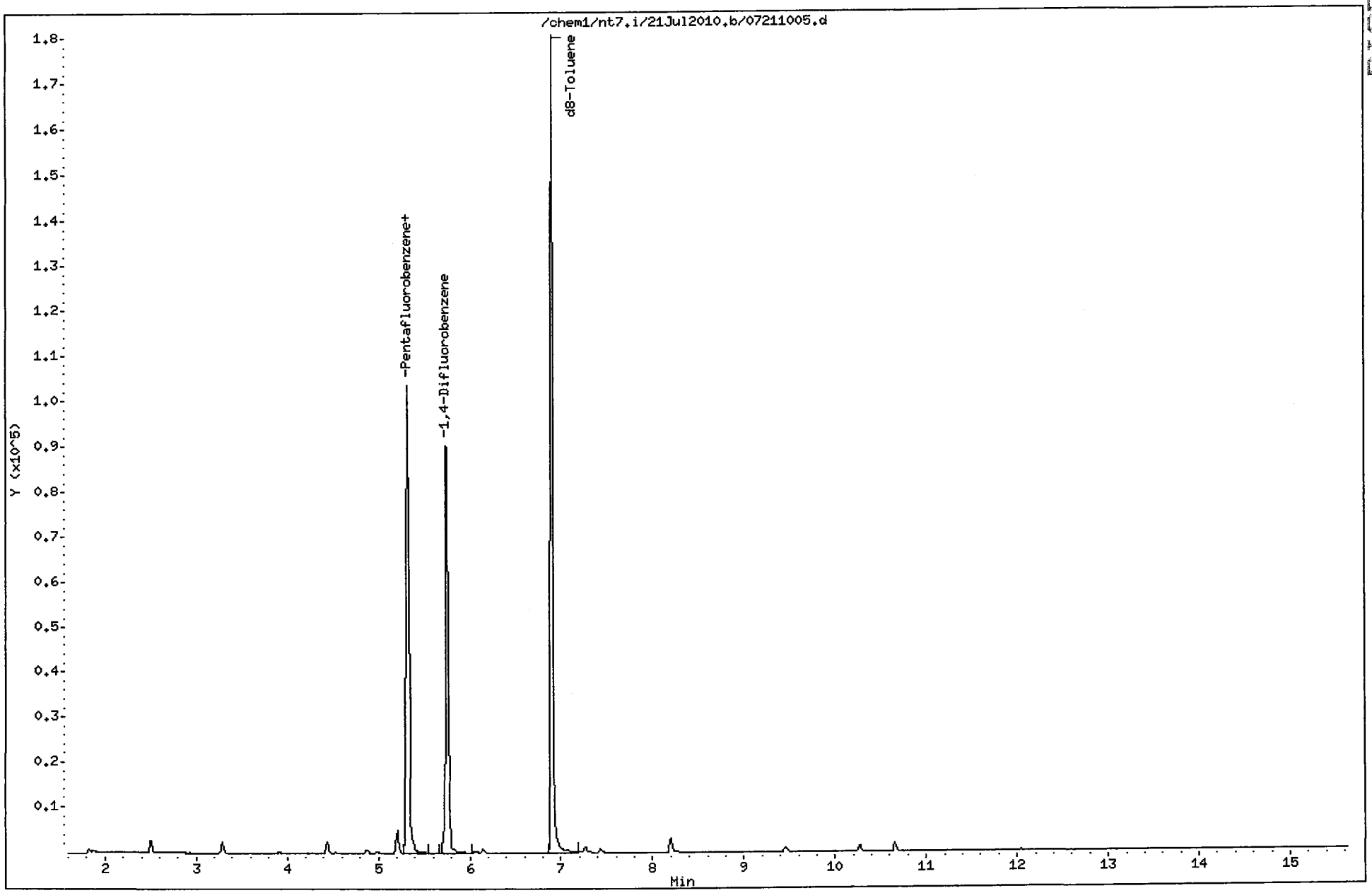
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.32	4.82	5.82	5.32	0.00
7 1,4-Difluorobenze	5.75	5.25	6.25	5.76	0.03

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

Data File: /chem1/nt7.i/21Jul2010.b/07211005.d
Date : 21-JUL-2010 11:04
Client ID:
Sample Info: 00200721,10,10,0

Instrument: nt7.i
Operator: MH
Column diameter: 0.18

Column phase: RTXVMS



Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/21Jul2010.b/07211006.d
Lab Smp Id: 00500721
Inj Date : 21-JUL-2010 11:30
Operator : MH Inst ID: nt7.i
Smp Info : 00500721,10,10,0
Misc Info : 10-
Comment :
Method : /chem1/nt7.i/21Jul2010.b/sim072110.m
Meth Date : 22-Jul-2010 06:50 monicah Quant Type: ISTD
Cal Date : 21-JUL-2010 11:30 Cal File: 07211006.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: sim12dca.sub
Target Version: 3.50

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

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	10.00000	Purge Volume (mL)
Sa	10.00000	Sample Amount (mL)

Cpnd Variable Local Compound Variable

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/L)	ON-COL (ng/L)
	1 Vinyl Chloride	62	1.554	1.554	(0.292)	4447	50.0000	61.340
	2 1,1-Dichloroethene	96	2.509	2.509	(0.472)	3241	50.0000	63.691
	175 Trans-1,2-Dichloroethene	96	3.289	3.289	(0.619)	3564	50.0000	62.997
	3 cis-1,2-dichloroethene	96	4.438	4.438	(0.835)	3484	50.0000	59.348
	6 Benzene	78	5.212	5.211	(0.906)	17316	50.0000	75.555
*	4 Pentafluorobenzene	168	5.316	5.316	(1.000)	92801	1000.00	
$	5 d4-1,2-Dichloroethane	65	5.325	5.325	(1.002)	49330	1000.00	1030.4
	176 1,2-Dichloroethane	62	5.382	5.382	(1.012)	4158	50.0000	59.520
	8 Trichloroethene	130	5.720	5.708	(0.994)	3497	50.0000	61.851
*	7 1,4-Difluorobenzene	114	5.755	5.754	(1.000)	147874	1000.00	
$	9 d8-Toluene	98	6.903	6.903	(1.200)	189185	1000.00	1003.2
	10 Tetrachloroethene	166	7.271	7.260	(1.264)	3255	50.0000	76.969
	11 1,1,2,2-Tetrachloroethane	83	9.458	9.447	(1.644)	2479	50.0000	57.800

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt7.i
Lab File ID: 07211006.d
Lab Smp Id: 00500721
Analysis Type: VOA
Quant Type: ISTD
Operator: MH
Method File: /chem1/nt7.i/21Jul2010.b/sim072110.m
Misc Info: 10-

Calibration Date: 21-JUL-2010
Calibration Time: 12:47

Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	91666	45833	183332	92801	1.24
7 1,4-Difluorobenze	147386	73693	294772	147874	0.33

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.32	4.82	5.82	5.32	0.01
7 1,4-Difluorobenze	5.75	5.25	6.25	5.75	0.01

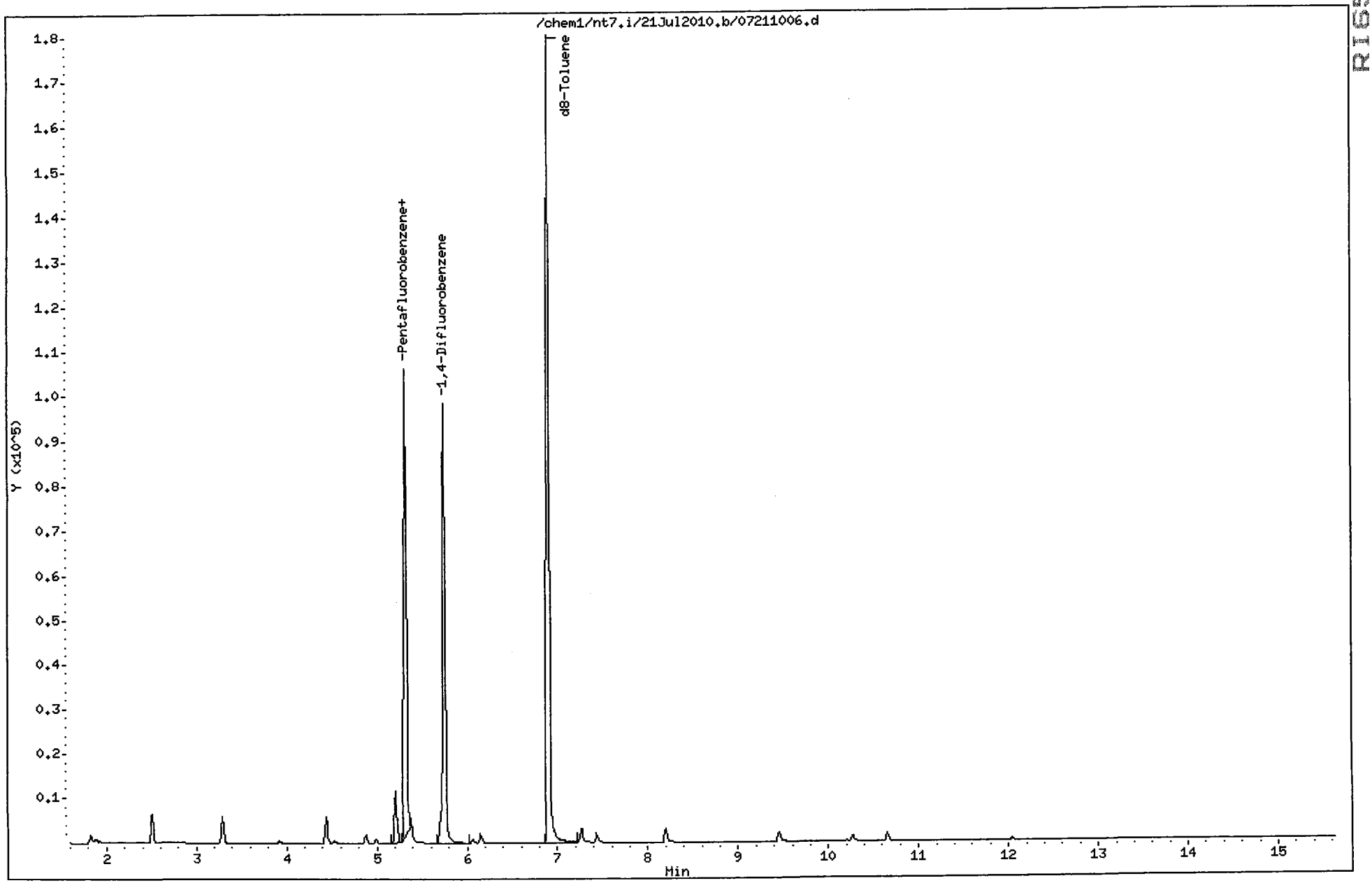
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/nt7.i/21Jul2010.b/07211006.d
Date : 21-JUL-2010 11:30
Client ID:
Sample Info: 00500721,10,10,0

Instrument: nt7.i

Operator: MH
Column diameter: 0.18

Column phase: RTXVMS



MH 7/22/10

Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/21Jul2010.b/07211007.d
Lab Smp Id: 01000721
Inj Date : 21-JUL-2010 11:56
Operator : MH Inst ID: nt7.i
Smp Info : 01000721,10,10,0
Misc Info : 10-
Comment :
Method : /chem1/nt7.i/21Jul2010.b/sim072110.m
Meth Date : 22-Jul-2010 06:50 monicah Quant Type: ISTD
Cal Date : 21-JUL-2010 11:56 Cal File: 07211007.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: sim12dca.sub
Target Version: 3.50

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

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	10.00000	Purge Volume (mL)
Sa	10.00000	Sample Amount (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/L)	AMOUNTS ON-COL (ng/L)
	1 Vinyl Chloride	62	1.551	1.554	(0.291)	7115	100.000	98.582
	2 1,1-Dichloroethene	96	2.510	2.509	(0.472)	5003	100.000	98.760
	175 Trans-1,2-Dichloroethene	96	3.290	3.289	(0.618)	5565	100.000	98.809
	3 cis-1,2-dichloroethene	96	4.439	4.438	(0.834)	5923	100.000	101.35
	6 Benzene	78	5.210	5.211	(0.905)	27149	100.000	119.68
*	4 Pentafluorobenzene	168	5.324	5.316	(1.000)	92386	1000.00	
$	5 d4-1,2-Dichloroethane	65	5.324	5.325	(1.000)	50166	1000.00	1052.6
	176 1,2-Dichloroethane	62	5.381	5.382	(1.011)	6975	100.000	100.29
	8 Trichloroethene	130	5.721	5.708	(0.994)	5553	100.000	99.228
*	7 1,4-Difluorobenzene	114	5.755	5.754	(1.000)	146365	1000.00	
$	9 d8-Toluene	98	6.901	6.903	(1.199)	187361	1000.00	1003.7
	10 Tetrachloroethene	166	7.270	7.260	(1.263)	4974	100.000	118.83
	11 1,1,2,2-Tetrachloroethane	83	9.457	9.447	(1.643)	4182	100.000	98.513

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt7.i
Lab File ID: 07211007.d
Lab Smp Id: 01000721
Analysis Type: VOA
Quant Type: ISTD
Operator: MH
Method File: /chem1/nt7.i/21Jul2010.b/sim072110.m
Misc Info: 10-

Calibration Date: 21-JUL-2010
Calibration Time: 12:47

Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	91666	45833	183332	92386	0.79
7 1,4-Difluorobenze	147386	73693	294772	146365	-0.69

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.32	4.82	5.82	5.32	0.16
7 1,4-Difluorobenze	5.75	5.25	6.25	5.76	0.02

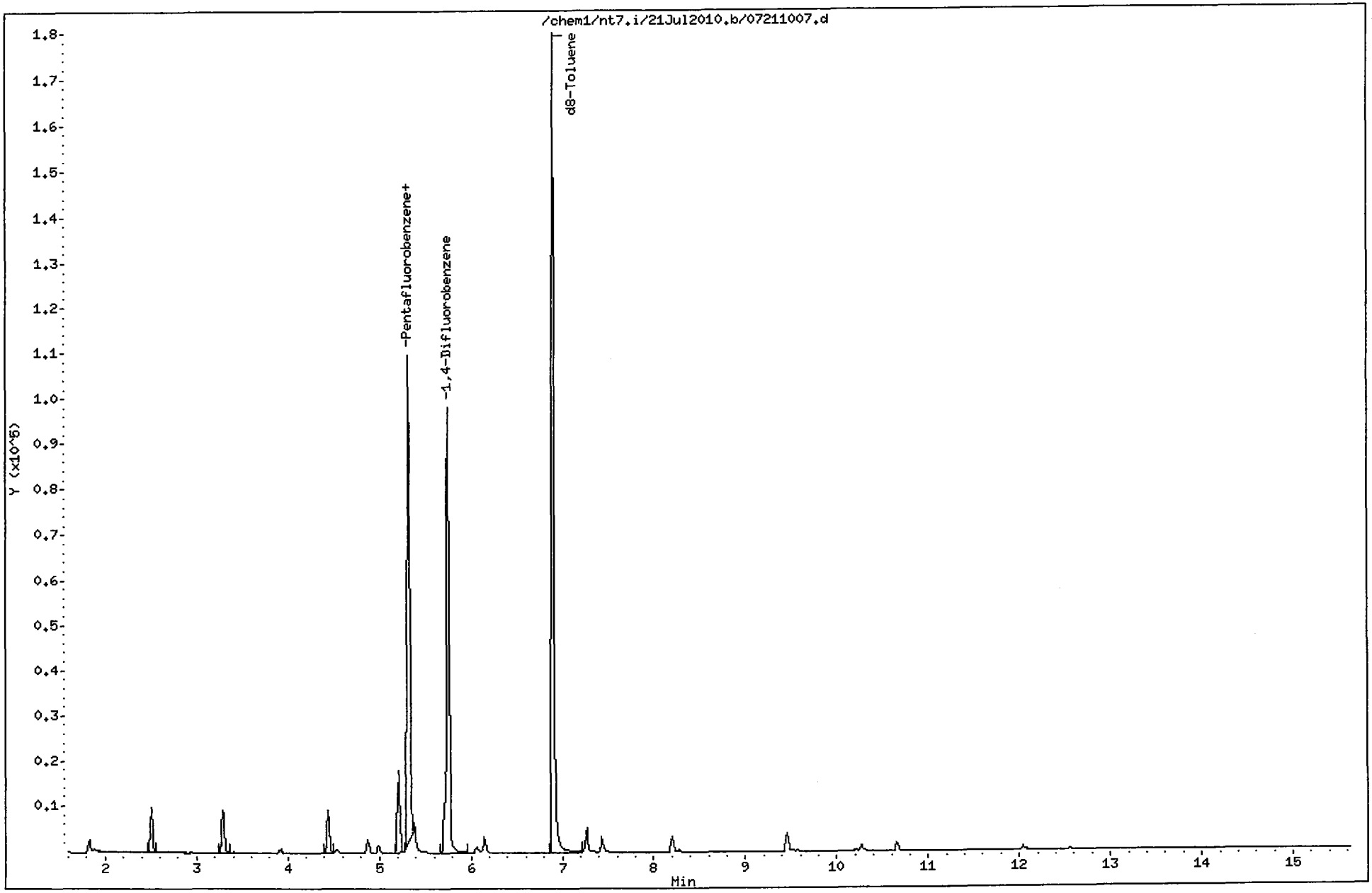
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/nt7.i/21Jul2010.b/07211007.d
Date : 21-JUL-2010 11:56
Client ID:
Sample Info: 01000721,10,10,0

Instrument: nt7.i

Operator: MH
Column diameter: 0.18

Column phase: RTXVMS



MH 7/22/10

Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/21Jul2010.b/07211008.d
Lab Smp Id: 05000721
Inj Date : 21-JUL-2010 12:21
Operator : MH Inst ID: nt7.i
Smp Info : 05000721,10,10,0
Misc Info : 10-
Comment :
Method : /chem1/nt7.i/21Jul2010.b/sim072110.m
Meth Date : 22-Jul-2010 06:50 monicah Quant Type: ISTD
Cal Date : 21-JUL-2010 12:21 Cal File: 07211008.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: sim12dca.sub
Target Version: 3.50

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

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	10.00000	Purge Volume (mL)
Sa	10.00000	Sample Amount (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/L)	AMOUNTS ON-COL (ng/L)
	1 Vinyl Chloride	62	1.553	1.554	(0.292)	34851	500.000	462.27
	2 1,1-Dichloroethene	96	2.509	2.509	(0.472)	24479	500.000	462.59
	175 Trans-1,2-Dichloroethene	96	3.288	3.289	(0.619)	27729	500.000	471.32
	3 cis-1,2-dichloroethene	96	4.438	4.438	(0.835)	28615	500.000	468.73
	6 Benzene	78	5.211	5.211	(0.905)	126445	500.000	556.96
*	4 Pentafluorobenzene	168	5.316	5.316	(1.000)	96505	1000.00	
$	5 d4-1,2-Dichloroethane	65	5.325	5.325	(1.002)	46958	1000.00	943.23
	176 1,2-Dichloroethane	62	5.382	5.382	(1.012)	35708	500.000	491.52
	8 Trichloroethene	130	5.710	5.708	(0.992)	26690	500.000	476.54
*	7 1,4-Difluorobenzene	114	5.756	5.754	(1.000)	146484	1000.00	
$	9 d8-Toluene	98	6.903	6.903	(1.199)	185827	1000.00	994.72
	10 Tetrachloroethene	166	7.271	7.260	(1.263)	23716	500.000	566.12
	11 1,1,2,2-Tetrachloroethane	83	9.446	9.447	(1.641)	21339	500.000	502.26

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt7.i
Lab File ID: 07211008.d
Lab Smp Id: 05000721
Analysis Type: VOA
Quant Type: ISTD
Operator: MH
Method File: /chem1/nt7.i/21Jul2010.b/sim072110.m
Misc Info: 10-

Calibration Date: 21-JUL-2010
Calibration Time: 12:47

Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	91666	45833	183332	96505	5.28
7 1,4-Difluorobenze	147386	73693	294772	146484	-0.61

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.32	4.82	5.82	5.32	0.00
7 1,4-Difluorobenze	5.75	5.25	6.25	5.76	0.03

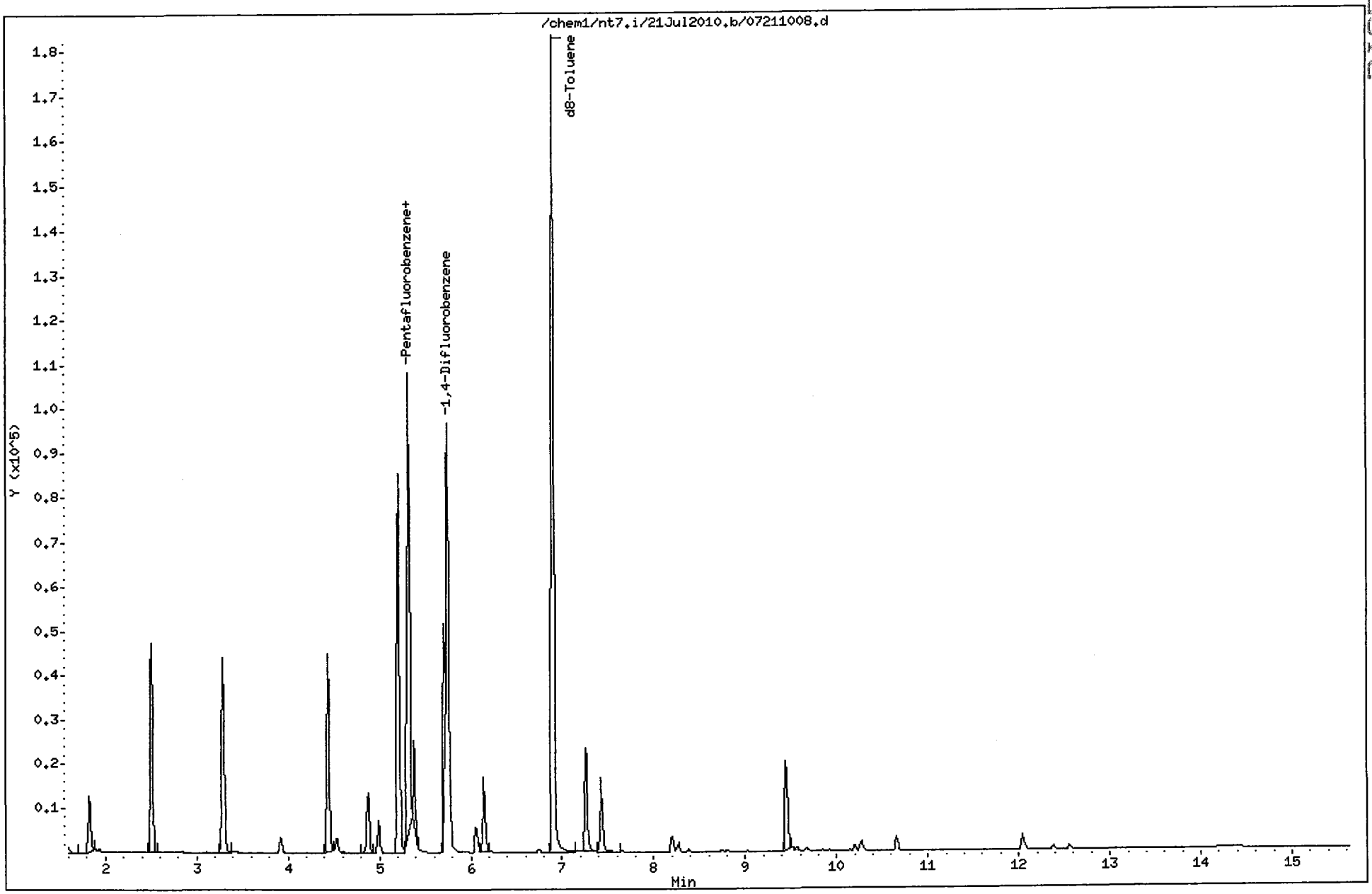
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/nt7.i/21Jul2010.b/07211008.d
Date : 21-JUL-2010 12:21
Client ID:
Sample Info: 05000721,10,10,0

Instrument: nt7.i

Operator: MH
Column diameter: 0.18

Column phase: RTXVMS



Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/21Jul2010.b/07211009.d
Lab Smp Id: 10000721
Inj Date : 21-JUL-2010 12:47
Operator : MH Inst ID: nt7.i
Smp Info : 10000721,10,10,0
Misc Info : 10-
Comment :
Method : /chem1/nt7.i/21Jul2010.b/sim072110.m
Meth Date : 22-Jul-2010 06:50 monicah Quant Type: ISTD
Cal Date : 21-JUL-2010 12:47 Cal File: 07211009.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: sim12dca.sub
Target Version: 3.50

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

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	10.00000	Purge Volume (mL)
Sa	10.00000	Sample Amount (mL)

Cpnd Variable Local Compound Variable

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/L)	ON-COL (ng/L)
	1 Vinyl Chloride	62	1.554	1.554	(0.292)	63462	1000.00	886.21
	2 1,1-Dichloroethene	96	2.509	2.509	(0.472)	43535	1000.00	866.13
	175 Trans-1,2-Dichloroethene	96	3.289	3.289	(0.619)	49576	1000.00	887.15
	3 cis-1,2-dichloroethene	96	4.438	4.438	(0.835)	51504	1000.00	888.21
	6 Benzene	78	5.211	5.211	(0.906)	227162	1000.00	994.46
*	4 Pentafluorobenzene	168	5.316	5.316	(1.000)	91666	1000.00	
$	5 d4-1,2-Dichloroethane	65	5.325	5.325	(1.002)	46303	1000.00	979.17
	176 1,2-Dichloroethane	62	5.382	5.382	(1.012)	59851	1000.00	867.35
	8 Trichloroethene	130	5.708	5.708	(0.992)	47938	1000.00	850.68
*	7 1,4-Difluorobenzene	114	5.754	5.754	(1.000)	147386	1000.00	
$	9 d8-Toluene	98	6.903	6.903	(1.200)	186838	1000.00	994.01
	10 Tetrachloroethene	166	7.260	7.260	(1.262)	42500	1000.00	1008.3
	11 1,1,2,2-Tetrachloroethane	83	9.447	9.447	(1.642)	39520	1000.00	924.50

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt7.i
Lab File ID: 07211009.d
Lab Smp Id: 10000721
Analysis Type: VOA
Quant Type: ISTD
Operator: MH
Method File: /chem1/nt7.i/21Jul2010.b/sim072110.m
Misc Info: 10-

Calibration Date: 21-JUL-2010
Calibration Time: 12:47

Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	91666	45833	183332	91666	0.00
7 1,4-Difluorobenze	147386	73693	294772	147386	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.32	4.82	5.82	5.32	0.00
7 1,4-Difluorobenze	5.75	5.25	6.25	5.75	0.00

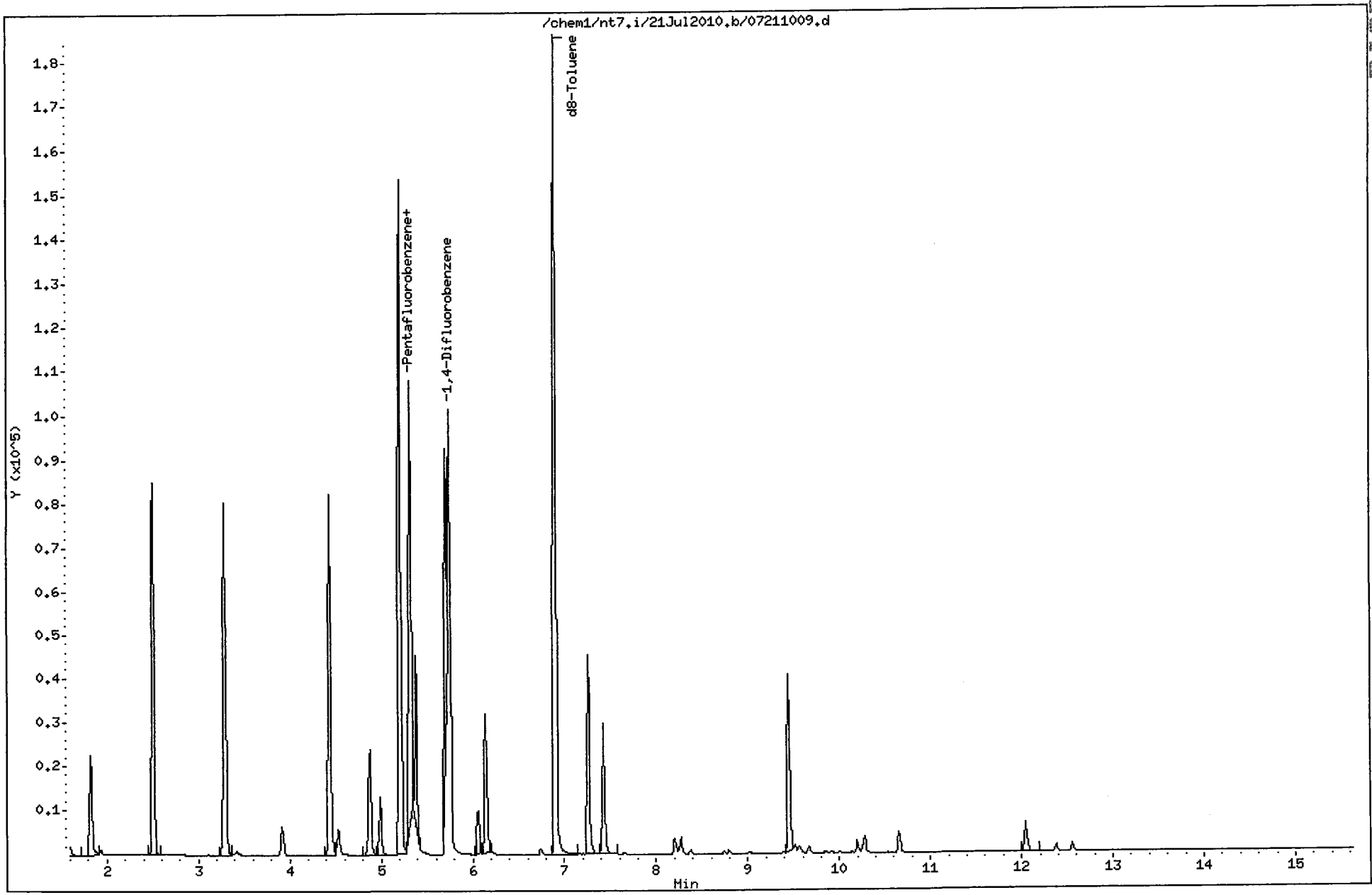
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/nt7.i/21Jul2010.b/07211009.d
Date : 21-JUL-2010 12:47
Client ID:
Sample Info: 10000721,10,10,0

Instrument: nt7.i

Operator: MH
Column diameter: 0.18

Column phase: RTXVMS



Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/21Jul2010.b/07211010.d
Lab Smp Id: 20000721
Inj Date : 21-JUL-2010 13:13
Operator : MH Inst ID: nt7.i
Smp Info : 20000721,10,10,0
Misc Info : 10-
Comment :
Method : /chem1/nt7.i/21Jul2010.b/sim072110.m
Meth Date : 22-Jul-2010 06:50 monicah Quant Type: ISTD
Cal Date : 21-JUL-2010 13:13 Cal File: 07211010.d
Als bottle: 1 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: sim12dca.sub
Target Version: 3.50

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

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	10.00000	Purge Volume (mL)
Sa	10.00000	Sample Amount (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/L)	AMOUNTS ON-COL (ng/L)
	1 Vinyl Chloride	62	1.552	1.554	(0.292)	126083	2000.00	1734.4
	2 1,1-Dichloroethene	96	2.510	2.509	(0.472)	85278	2000.00	1671.3
	175 Trans-1,2-Dichloroethene	96	3.290	3.289	(0.619)	97808	2000.00	1724.1
	3 cis-1,2-dichloroethene	96	4.439	4.438	(0.835)	101717	2000.00	1728.0
	6 Benzene	78	5.212	5.211	(0.906)	448273	2000.00	1943.4
*	4 Pentafluorobenzene	168	5.317	5.316	(1.000)	93055	1000.00	
$	5 d4-1,2-Dichloroethane	65	5.326	5.325	(1.002)	46411	1000.00	966.81
	176 1,2-Dichloroethane	62	5.383	5.382	(1.012)	124559	2000.00	1778.1
	8 Trichloroethene	130	5.708	5.708	(0.992)	94434	2000.00	1659.5
*	7 1,4-Difluorobenzene	114	5.754	5.754	(1.000)	148831	1000.00	
$	9 d8-Toluene	98	6.902	6.903	(1.199)	191234	1000.00	1007.5
	10 Tetrachloroethene	166	7.259	7.260	(1.261)	83351	2000.00	1958.3
	11 1,1,2,2-Tetrachloroethane	83	9.446	9.447	(1.641)	77581	2000.00	1797.2

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt7.i
Lab File ID: 07211010.d
Lab Smp Id: 20000721
Analysis Type: VOA
Quant Type: ISTD
Operator: MH
Method File: /chem1/nt7.i/21Jul2010.b/sim072110.m
Misc Info: 10-

Calibration Date: 21-JUL-2010
Calibration Time: 12:47

Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	91666	45833	183332	93055	1.52
7 1,4-Difluorobenze	147386	73693	294772	148831	0.98

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.32	4.82	5.82	5.32	0.02
7 1,4-Difluorobenze	5.75	5.25	6.25	5.75	0.01

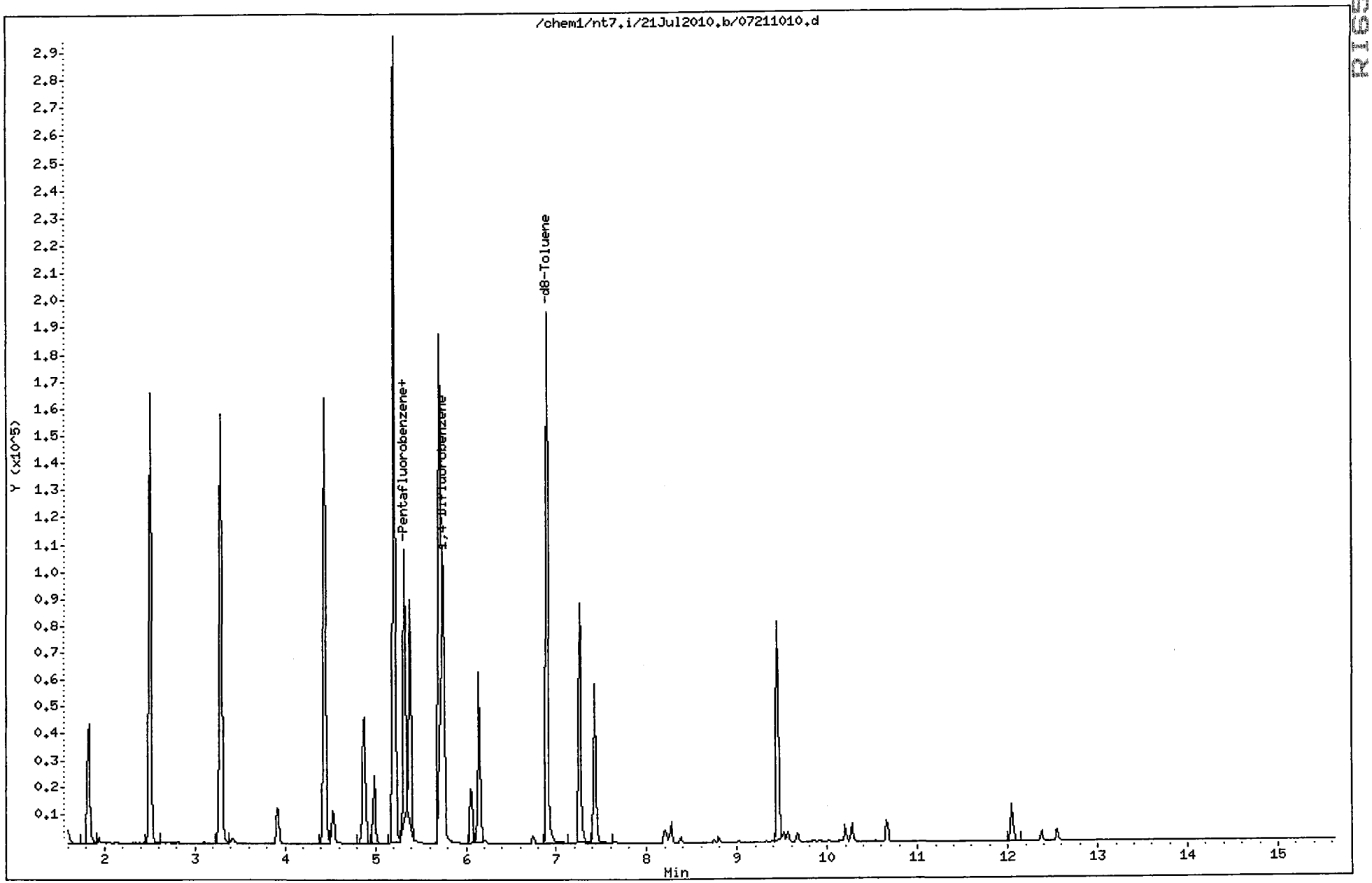
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/nt7.i/21Jul2010.b/07211010.d
Date : 21-JUL-2010 13:13
Client ID:
Sample Info: 20000721,10,10,0

Instrument: nt7.i

Operator: MH
Column diameter: 0.18

Column phase: RTXVMS



MH 7/22/10

Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/21Jul2010.b/07211011.d
Lab Smp Id: 40000721
Inj Date : 21-JUL-2010 13:38
Operator : MH Inst ID: nt7.i
Smp Info : 40000721,10,10,0
Misc Info : 10-
Comment :
Method : /chem1/nt7.i/21Jul2010.b/sim072110.m
Meth Date : 22-Jul-2010 06:50 monicah Quant Type: ISTD
Cal Date : 21-JUL-2010 13:38 Cal File: 07211011.d
Als bottle: 1 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: sim12dca.sub
Target Version: 3.50

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

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	10.00000	Purge Volume (mL)
Sa	10.00000	Sample Amount (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/L)	AMOUNTS ON-COL (ng/L)
	1 Vinyl Chloride	62	1.551	1.554	(0.292)	256535	4000.00	3537.1
	2 1,1-Dichloroethene	96	2.511	2.509	(0.472)	174384	4000.00	3425.6
	175 Trans-1,2-Dichloroethene	96	3.290	3.289	(0.619)	199759	4000.00	3529.5
	3 cis-1,2-dichloroethene	96	4.440	4.438	(0.835)	208540	4000.00	3550.9
	6 Benzene	78	5.211	5.211	(0.905)	924652	4000.00	4019.7
*	4 Pentafluorobenzene	168	5.315	5.316	(1.000)	92839	1000.00	
$	5 d4-1,2-Dichloroethane	65	5.325	5.325	(1.002)	46346	1000.00	967.70
	176 1,2-Dichloroethane	62	5.381	5.382	(1.012)	259480	4000.00	3712.8
	8 Trichloroethene	130	5.709	5.708	(0.992)	195396	4000.00	3443.2
*	7 1,4-Difluorobenzene	114	5.755	5.754	(1.000)	148421	1000.00	
$	9 d8-Toluene	98	6.902	6.903	(1.199)	188975	1000.00	998.37
	10 Tetrachloroethene	166	7.259	7.260	(1.261)	170115	4000.00	4007.8
	11 1,1,2,2-Tetrachloroethane	83	9.445	9.447	(1.641)	162355	4000.00	3771.5

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt7.i
Lab File ID: 07211011.d
Lab Smp Id: 40000721
Analysis Type: VOA
Quant Type: ISTD
Operator: MH
Method File: /chem1/nt7.i/21Jul2010.b/sim072110.m
Misc Info: 10-

Calibration Date: 21-JUL-2010
Calibration Time: 12:47

Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	91666	45833	183332	92839	1.28
7 1,4-Difluorobenze	147386	73693	294772	148421	0.70

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.32	4.82	5.82	5.32	-0.01
7 1,4-Difluorobenze	5.75	5.25	6.25	5.76	0.03

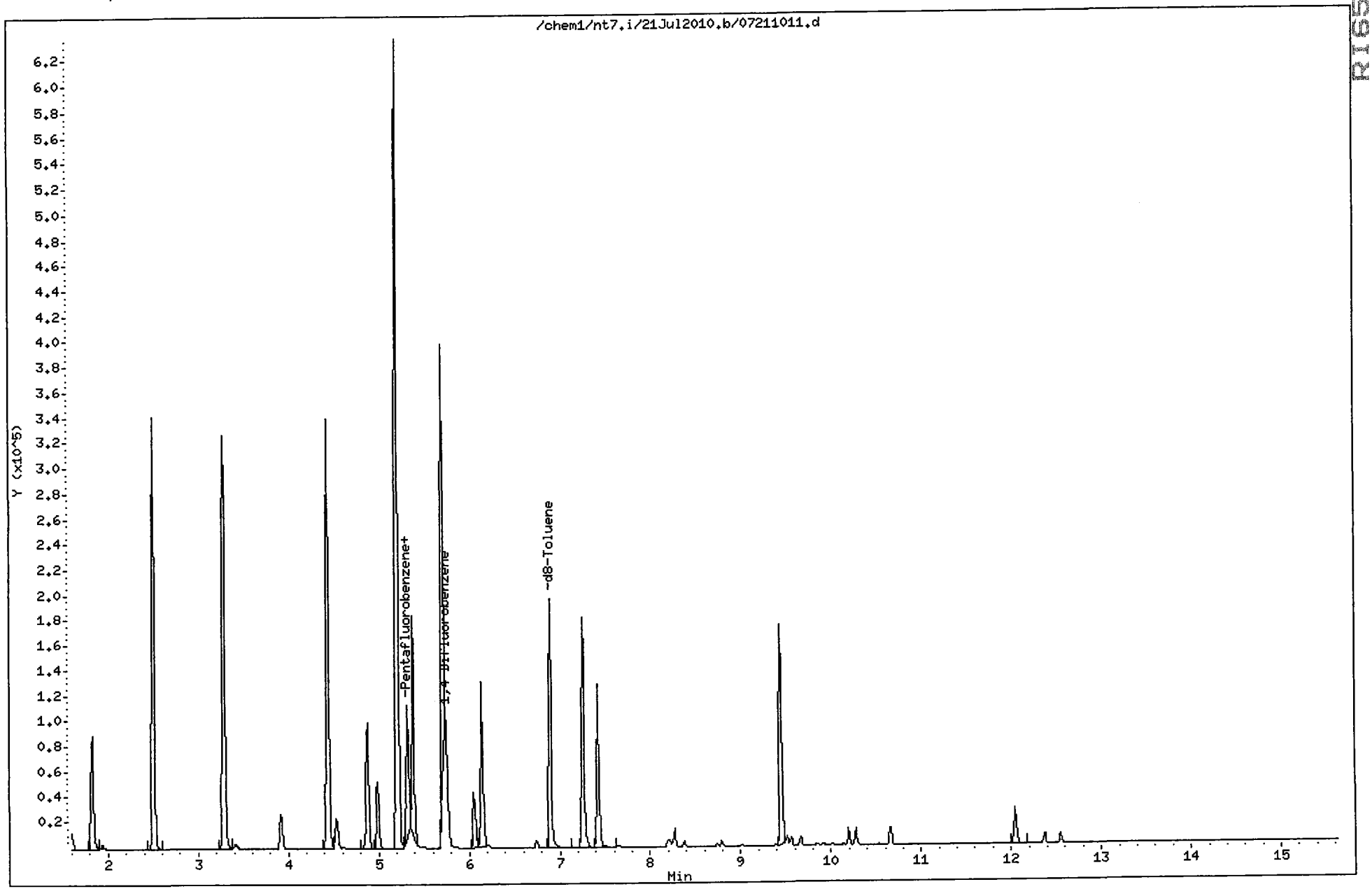
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/nt7.i/21Jul2010.b/07211011.d
Date : 21-JUL-2010 13:38
Client ID:
Sample Info: 40000721,10,10,0

Instrument: nt7.i

Operator: MH
Column diameter: 0.18

Column phase: RTXVMS



Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/21Jul2010.b/07211012.d
Lab Smp Id: ICV0721
Inj Date : 21-JUL-2010 14:04
Operator : MH Inst ID: nt7.i
Smp Info : ICV0721,10,10,0
Misc Info : 10-
Comment :
Method : /chem1/nt7.i/21Jul2010.b/sim072110.m
Meth Date : 22-Jul-2010 06:50 monicah Quant Type: ISTD
Cal Date : 21-JUL-2010 13:38 Cal File: 07211011.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: sim12dca.sub
Target Version: 3.50

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

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	10.00000	Purge Volume (mL)
Sa	10.00000	Sample Amount (mL)

Cpnd Variable Local Compound Variable

		QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ng/L)	(ug/L)
	1 Vinyl Chloride	62	1.552	1.554	(0.292)	69353	965.065	965.07
	2 1,1-Dichloroethene	96	2.510	2.509	(0.472)	43932	870.962	870.96
	175 Trans-1,2-Dichloroethene	96	3.289	3.289	(0.619)	51664	921.269	921.27
	3 cis-1,2-dichloroethene	96	4.439	4.438	(0.835)	53617	921.400	921.40
	6 Benzene	78	5.211	5.211	(0.905)	230183	1002.13	1002.1
*	4 Pentafluorobenzene	168	5.316	5.316	(1.000)	91990	1000.00	
$	5 d4-1,2-Dichloroethane	65	5.325	5.325	(1.002)	46932	988.993	988.99
	176 1,2-Dichloroethane	62	5.382	5.382	(1.012)	66224	956.330	956.33
	8 Trichloroethene	130	5.710	5.708	(0.992)	48902	863.014	863.01
*	7 1,4-Difluorobenzene	114	5.756	5.754	(1.000)	148203	1000.00	
$	9 d8-Toluene	98	6.902	6.903	(1.199)	190057	1005.56	1005.6
	10 Tetrachloroethene	166	7.259	7.260	(1.261)	42797	1009.76	1009.8
	11 1,1,2,2-Tetrachloroethane	83	9.446	9.447	(1.641)	40922	952.019	952.02

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt7.i
Lab File ID: 07211012.d
Lab Smp Id: ICV0721
Analysis Type: VOA
Quant Type: ISTD
Operator: MH
Method File: /chem1/nt7.i/21Jul2010.b/sim072110.m
Misc Info: 10-

Calibration Date: 21-JUL-2010
Calibration Time: 12:47

Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	91666	45833	183332	91990	0.35
7 1,4-Difluorobenze	147386	73693	294772	148203	0.55

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.32	4.82	5.82	5.32	0.00
7 1,4-Difluorobenze	5.75	5.25	6.25	5.76	0.03

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

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Client SDG: 21Jul2010
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: ICV0721
Level: LOW Operator: MH
Data Type: MS DATA SampleType: LCS
SpikeList File: special.spk Quant Type: ISTD
Sublist File: sim12dca.sub
Method File: /chem1/nt7.i/21Jul2010.b/sim072110.m
Misc Info: 10-

	SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
1	Vinyl Chloride	1000.0	965.07	96.51	76-120
176	1,2-Dichloroethane	1000.0	956.33	95.63	70-130
175	Trans-1,2-Dichloro	1000.0	921.27	92.13	70-130
2	1,1-Dichloroethene	1000.0	870.96	87.10	79-126
3	cis-1,2-dichloroet	1000.0	921.40	92.14	76-127
6	Benzene	1000.0	1002.1	100.21	75-121
8	Trichloroethene	1000.0	863.01	86.30	79-120
10	Tetrachloroethene	1000.0	1009.8	100.98	75-123
11	1,1,2,2-Tetrachlor	1000.0	952.02	95.20	72-129

	SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 5	d4-1,2-Dichloroeth	1000.0	988.99	98.90	80-133
$ 9	d8-Toluene	1000.0	1005.6	100.56	80-120

Data File: /chem1/nt7.i/21Jul2010.b/07211012.d

Date : 21-JUL-2010 14:04

Client ID:

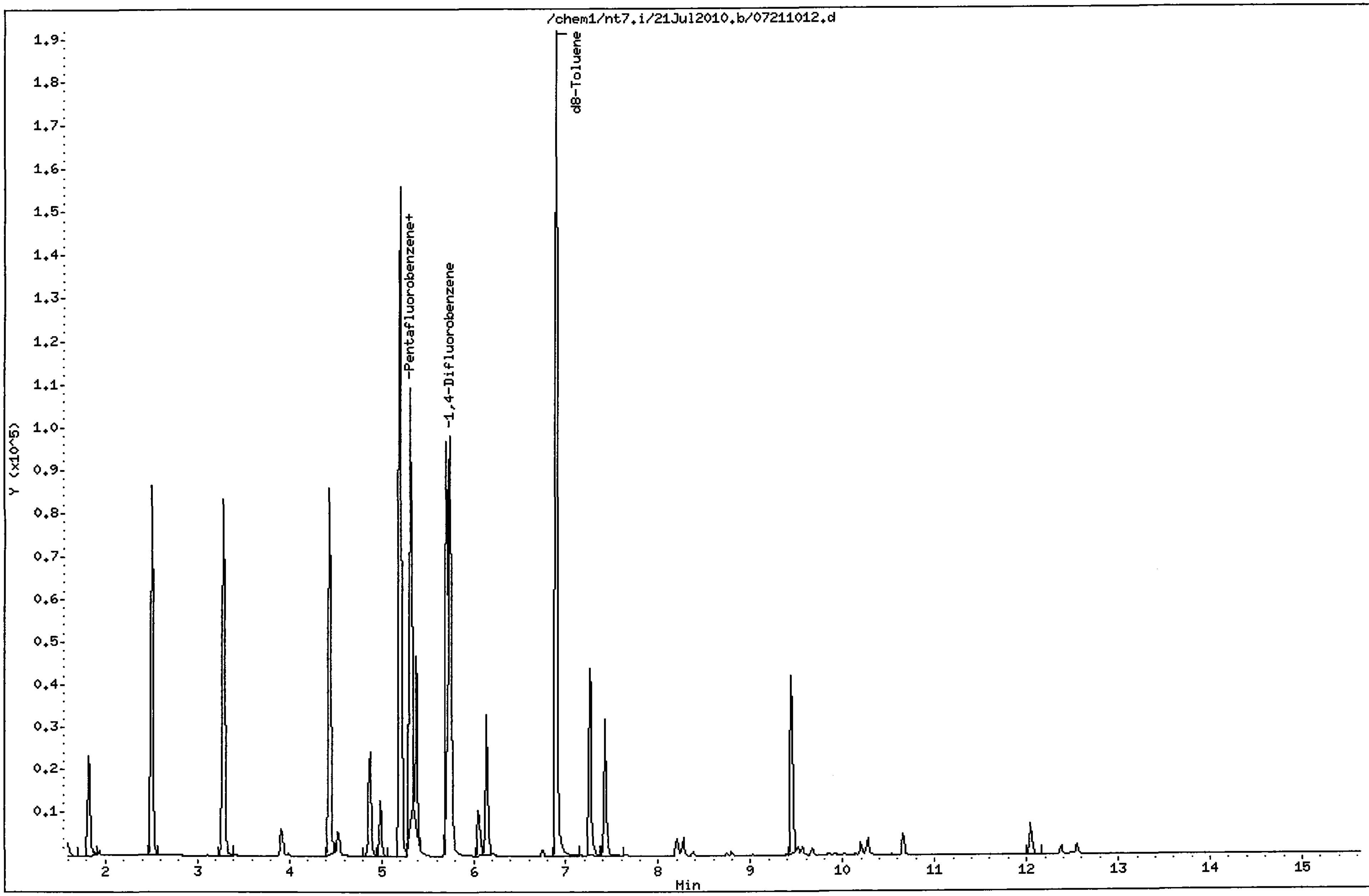
Sample Info: ICV0721,10,10,0

Column phase: RTXVMS

Instrument: nt7.i

Operator: MH

Column diameter: 0.18



Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem1/nt7.i/21Jul2010.b/sim072110.m
Batch File: /chem1/nt7.i/21Jul2010.b
Inst ID: nt7.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	07211005	07211006	07211007	07211008	07211009	07211010	07211011
INJ.DATE:	21-JUL-2010	21-JUL-2010	21-JUL-2010	21-JUL-2010	21-JUL-2010	21-JUL-2010	21-JUL-2010
INJ.TIME:	11:04	11:30	11:56	12:21	12:47	13:13	13:38

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	1 Vinyl Chloride	1.553	1.554	1.551	1.553	1.554	1.552	1.551	1.554	1.341-1.766	1.553	0.001
	2 1,1-Dichloroethene	2.509	2.509	2.510	2.509	2.509	2.510	2.511	2.509	2.297-2.722	2.510	0.001
	175 Trans-1,2-Dichloroethe	3.288	3.289	3.290	3.288	3.289	3.290	3.290	3.289	3.076-3.501	3.289	0.001
	177 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.980	3.767-4.192	+++++	+++++
	3 cis-1,2-dichloroethene	4.438	4.438	4.439	4.438	4.438	4.439	4.440	4.438	4.226-4.651	4.439	0.001
	6 Benzene	5.211	5.212	5.210	5.211	5.211	5.212	5.211	5.211	4.981-5.441	5.211	0.001
*	4 Pentafluorobenzene	5.316	5.316	5.324	5.316	5.316	5.317	5.315	5.316	5.103-5.528	5.317	0.003
$	5 d4-1,2-Dichloroethane	5.325	5.325	5.324	5.325	5.325	5.326	5.325	5.325	5.112-5.538	5.325	0.001
	176 1,2-Dichloroethane	5.382	5.382	5.381	5.382	5.382	5.383	5.381	5.382	5.169-5.595	5.382	0.001
	8 Trichloroethene	5.710	5.720	5.721	5.710	5.708	5.708	5.709	5.708	5.478-5.938	5.712	0.006
*	7 1,4-Difluorobenzene	5.756	5.755	5.755	5.756	5.754	5.754	5.755	5.754	5.524-5.984	5.755	0.001
$	9 d8-Toluene	6.902	6.903	6.901	6.903	6.903	6.902	6.902	6.903	6.673-7.133	6.902	0.001
	10 Tetrachloroethene	7.271	7.271	7.270	7.271	7.260	7.259	7.259	7.260	7.030-7.490	7.266	0.006
	11 1,1,2,2-Tetrachloroeth	9.458	9.458	9.457	9.446	9.447	9.446	9.445	9.447	9.217-9.677	9.451	0.006

Reviewer 1 MH Date: 7/22/10
Reviewer 2 Date: 7/22/10

Analytical Resources, Incorporated
Analytical Chemists and Consultants

VOA Analyst Notes / Corrective Action Log

ARI Project ID: SIM VOA ICAL Client ID: _____

ARI SOP: **404S**(Gas) **410S**(BTEX) **430S**(VPH) **700S**(8260C) **703S**(SIM) **706S**(524.2) **710S**(RSK-175)

Parameter(s): SIM Chlorinated VOA

Instrument: NT-3 NT-5 NT-7 NT-9 NT-10 PID-1 PID-2 PID-3 FID-6 FINN-5

Purge Volume (mL) 10 Curve Date: 8/23/10 Analysis Start Date: _____

pH ≤ 2.0	YES / NO / NA	Method Blank In Control?	YES / NO
BFB Tune Meets Criteria?	YES / NO / NA	LCS / LCSD Recovery In Control?	YES / NO
Internal Standard Meets Criteria?	YES / NO / NA	Surrogate Recovery In Control?	YES / NO
ICal acceptable?	YES / NO	CCal acceptable?	YES / NO
Q flag applied?	YES / NO / NA	Q flag applied?	YES / NO / NA
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):

All averaged.

Additional Details on Reverse: Yes / No

Analyst: Paul Caplan **Date:** 8/23/10

Reviewer: _____ **Date:** 8/23/10

MANUAL INTEGRATION SUMMARY FOR DATABATCH - /chem1/nt7.i/23AUG2010.b

ARI Job No.: IC40 Method: sim082310.m Instrument: nt7.i Date: 23-AUG-2010

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1027	08231006.d	IC4000	IC4000	1	NO MANUAL INTEGRATION
1052	08231007.d	IC2000	IC2000	1	NO MANUAL INTEGRATION
1118	08231008.d	IC1000	IC1000	1	NO MANUAL INTEGRATION
1144	08231009.d	IC500	IC500	1	NO MANUAL INTEGRATION
1209	08231010.d	IC100	IC100	1	NO MANUAL INTEGRATION
1235	08231011.d	IC50	IC50	1	NO MANUAL INTEGRATION
1301	08231012.d	IC20	IC20	1	NO MANUAL INTEGRATION
1326	08231013.d	ICV1000	ICV1000	1	NO MANUAL INTEGRATION

Data File: /chem1/nt7.i/23AUG2010.b/08231008.d
Report Date: 23-Aug-2010 15:30

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Report Date : 23-Aug-2010 15:32

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem1/nt7.i/23AUG2010.b/sim082310.m
Batch File: /chem1/nt7.i/23AUG2010.b
Inst ID: nt7.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08
FILENAME:	08231006	08231007	08231008	08231009	08231010	08231011	08231012	08231013
INJ.DATE:	23-AUG-2010	23-AUG-2010	23-AUG-2010	23-AUG-2010	23-AUG-2010	23-AUG-2010	23-AUG-2010	23-AUG-2010
INJ.TIME:	10:27	10:52	11:18	11:44	12:09	12:35	13:01	13:26

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	1 Vinyl Chloride	1.551	1.551	1.552	1.552	1.552	1.552	1.552	1.551	1.552	1.339-1.765	1.552	0.001
	2 1,1-Dichloroethene	2.505	2.510	2.510	2.511	2.511	2.509	2.510	2.511	2.510	2.297-2.723	2.509	0.002
	175 Trans-1,2-Dichloroethe	3.284	3.289	3.289	3.290	3.290	3.289	3.295	3.291	3.289	3.077-3.502	3.290	0.003
	177 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.980	3.767-4.193	+++++	+++++
	3 cis-1,2-dichloroethene	4.434	4.439	4.439	4.440	4.440	4.444	4.439	4.440	4.439	4.227-4.652	4.439	0.003
	6 Benzene	5.201	5.211	5.212	5.210	5.211	5.211	5.212	5.210	5.212	4.991-5.452	5.210	0.004
*	4 Pentafluorobenzene	5.315	5.315	5.316	5.324	5.324	5.325	5.316	5.315	5.316	5.103-5.529	5.319	0.005
$	5 d4-1,2-Dichloroethane	5.324	5.325	5.325	5.334	5.324	5.325	5.325	5.324	5.325	5.113-5.538	5.326	0.003
	176 1,2-Dichloroethane	5.381	5.382	5.382	5.381	5.381	5.382	5.382	5.381	5.382	5.170-5.595	5.382	0.001
	8 Trichloroethene	5.709	5.710	5.720	5.721	5.721	5.720	5.720	5.709	5.720	5.500-5.961	5.716	0.006
*	7 1,4-Difluorobenzene	5.744	5.756	5.754	5.755	5.756	5.754	5.754	5.755	5.754	5.524-5.984	5.754	0.004
$	9 d8-Toluene	6.902	6.902	6.903	6.902	6.902	6.903	6.903	6.902	6.903	6.672-7.133	6.902	0.001
	10 Tetrachloroethene	7.258	7.259	7.260	7.270	7.270	7.271	7.272	7.270	7.260	7.029-7.489	7.266	0.006
	11 1,1,2,2-Tetrachloroeth	9.445	9.446	9.447	9.446	9.457	9.458	9.458	9.445	9.447	9.216-9.676	9.450	0.006

Reviewer 1 PC Date: 8/23/10
Reviewer 2 [signature] Date: 8/23/10

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 23-AUG-2010 10:27
End Cal Date : 23-AUG-2010 13:01
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/nt7.i/23AUG2010.b/sim082310.m
Cal Date : 23-Aug-2010 15:29 paul
Curve Type : Average

Calibration File Names:
Level 1: /chem1/nt7.i/23AUG2010.b/08231012.d
Level 2: /chem1/nt7.i/23AUG2010.b/08231011.d
Level 3: /chem1/nt7.i/23AUG2010.b/08231010.d
Level 4: /chem1/nt7.i/23AUG2010.b/08231009.d
Level 5: /chem1/nt7.i/23AUG2010.b/08231008.d
Level 6: /chem1/nt7.i/23AUG2010.b/08231007.d
Level 7: /chem1/nt7.i/23AUG2010.b/08231006.d

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	500.000 Level 4	1000.000 Level 5	2000.000 Level 6	4000.000 Level 7	RRF	% RSD	
1 Vinyl Chloride	0.88083	0.85023	0.92552	0.87622	0.86744	0.90518	0.97204	0.89685	4.609	
2 1,1-Dichloroethene	0.49668	0.51036	0.54175	0.50724	0.49398	0.51339	0.51051	0.51063	3.040	
175 Trans-1,2-Dichloroethene	0.58000	0.57846	0.64317	0.59808	0.57685	0.60158	0.59362	0.59603	3.863	
177 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
3 cis-1,2-dichloroethene	0.60760	0.57868	0.63679	0.61584	0.60093	0.61870	0.61302	0.61028	2.918	
6 Benzene	1.96823	1.67941	1.78672	1.63067	1.57682	1.63446	1.61415	1.69864	8.026	

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 23-AUG-2010 10:27
End Cal Date : 23-AUG-2010 13:01
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/nt7.i/23AUG2010.b/sim082310.m
Cal Date : 23-Aug-2010 15:29 paul
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	500.000 Level 4	1000.000 Level 5	2000.000 Level 6	4000.000 Level 7	RRF	% RSD
176 1,2-Dichloroethane	0.80562	0.75718	0.91585	0.85021	0.82041	0.86836	0.83731	0.83648	5.973
8 Trichloroethene	0.34256	0.32015	0.34177	0.31437	0.30527	0.32364	0.31687	0.32354	4.322
10 Tetrachloroethene	0.28294	0.25370	0.28457	0.26545	0.25535	0.26844	0.25872	0.26702	4.708
11 1,1,2,2-Tetrachloroethane	0.23228	0.21684	0.27428	0.25618	0.25983	0.28918	0.27225	0.25726	9.780
$ 5 d4-1,2-Dichloroethane	0.74851	0.71022	0.76363	0.64999	0.65142	0.65039	0.63366	0.68683	7.754
$ 9 d8-Toluene	1.36399	1.36333	1.37986	1.38864	1.38900	1.38372	1.38296	1.37878	0.785

PC
8/23/10

Data File: /chem1/nt7.i/23AUG2010.b/08231001.d

Date : 23-AUG-2010 07:11

Client ID: BFB0823

Instrument: nt7.i

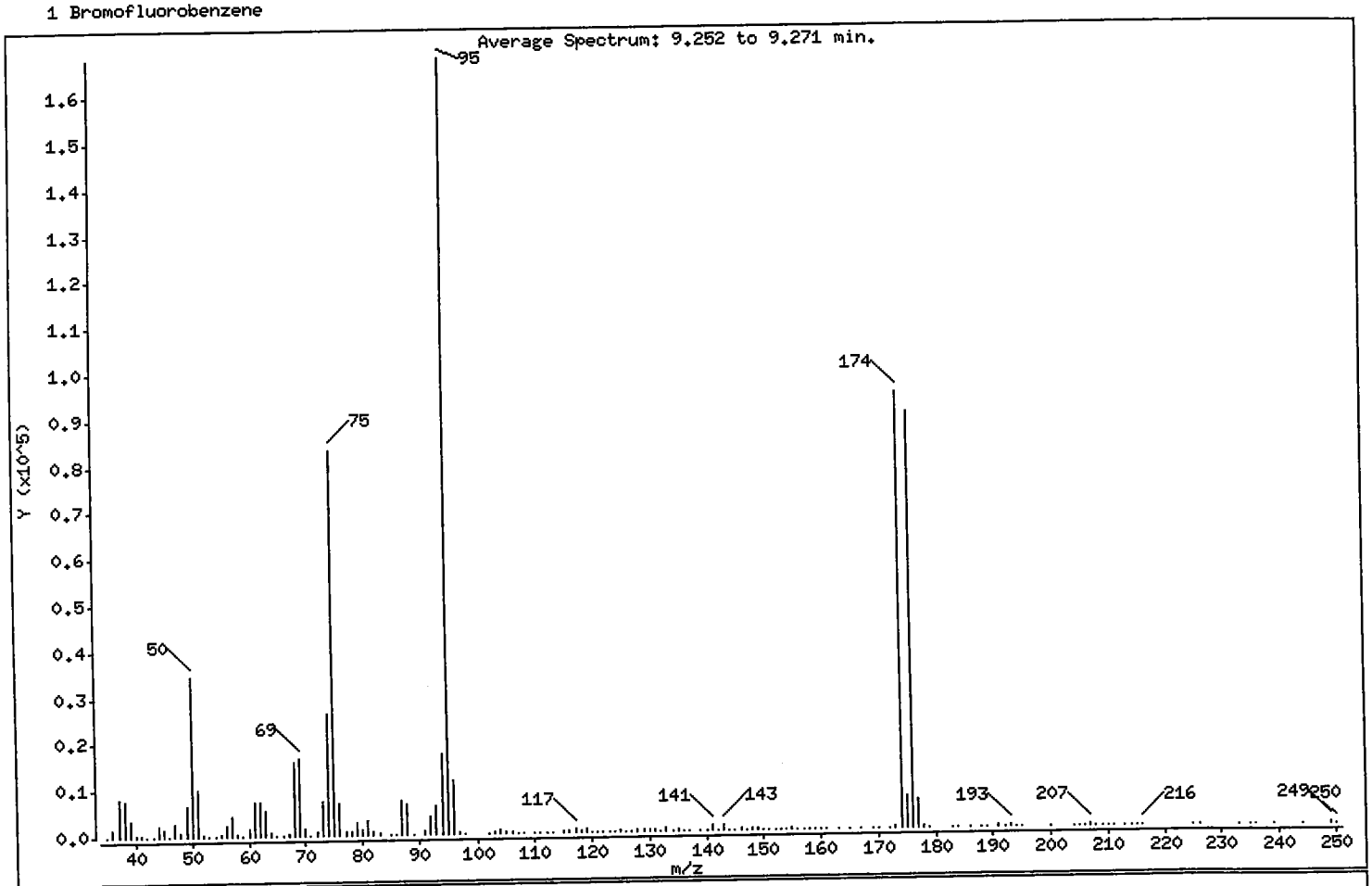
Sample Info: BFB0823,BFB0823,1,082310,

Operator: MH

Column phase: RTXVMS

Column diameter: 0.18

1 Bromofluorobenzene



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	20.61
75	30.00 - 66.00% of mass 95	49.52
96	5.00 - 9.00% of mass 95	6.89
173	Less than 2.00% of mass 174	0.18 (0.32)
174	50.00 - 101.00% of mass 95	56.22
175	4.00 - 9.00% of mass 174	4.07 (7.24)
176	93.00 - 101.00% of mass 174	53.72 (95.55)
177	5.00 - 9.00% of mass 176	3.63 (6.76)

Data File: /chem1/nt7.i/23AUG2010.b/08231001.d

Date : 23-AUG-2010 07:11

Client ID: BFB0823

Instrument: nt7.i

Sample Info: BFB0823,BFB0823,1,082310,

Operator: MH

Column phase: RTXVMS

Column diameter: 0.18

Data File: 08231001.d

Spectrum: Average Spectrum: 9.252 to 9.271 min.

Location of Maximum: 95.00

Number of points: 164

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	25	77.00	907	126.00	66	174.00	94568
36.00	1673	78.00	736	127.00	95	175.00	6846
37.00	8024	79.00	2714	128.00	451	176.00	90360
38.00	7943	80.00	1093	129.00	216	177.00	6106
39.00	3330	81.00	3031	130.00	483	178.00	290
40.00	387	82.00	694	131.00	274	179.00	93
41.00	197	83.00	291	132.00	88	183.00	26
42.00	101	85.00	20	133.00	664	184.00	19
43.00	174	86.00	84	134.00	165	186.00	19
44.00	2499	87.00	7398	135.00	246	188.00	19
45.00	1538	88.00	6473	136.00	70	189.00	71
46.00	53	89.00	30	137.00	138	191.00	396
47.00	2612	91.00	594	139.00	22	192.00	73
48.00	954	92.00	3984	140.00	41	193.00	464
49.00	6743	93.00	6274	141.00	1245	194.00	143
50.00	34656	94.00	17504	142.00	139	195.00	46
51.00	10113	95.00	168192	143.00	1344	200.00	19
52.00	513	96.00	11596	144.00	34	204.00	73
53.00	19	97.00	416	145.00	168	205.00	83
54.00	69	98.00	51	146.00	200	206.00	36
55.00	522	102.00	56	147.00	129	207.00	514
56.00	2139	103.00	243	148.00	373	208.00	46
57.00	4372	104.00	679	149.00	232	209.00	60
58.00	212	105.00	297	150.00	32	210.00	24
59.00	177	106.00	484	151.00	30	211.00	105
60.00	1409	107.00	112	152.00	62	213.00	19
61.00	7426	108.00	29	153.00	93	214.00	20
62.00	7230	110.00	135	154.00	66	215.00	23
63.00	5344	111.00	148	155.00	286	216.00	37
64.00	732	112.00	121	156.00	35	225.00	24
65.00	59	113.00	43	157.00	181	226.00	19
66.00	19	115.00	251	158.00	26	233.00	30
67.00	467	116.00	494	159.00	186	235.00	73
68.00	16016	117.00	801	160.00	22	236.00	19
69.00	16696	118.00	550	161.00	145	239.00	24

Data File: /chem1/nt7.i/23AUG2010.b/08231001.d

Date : 23-AUG-2010 07:11

Client ID: BFB0823

Instrument: nt7.i

Sample Info: BFB0823,BFB0823,1,082310,

Operator: MH

Column phase: RTXVMS

Column diameter: 0.18

Data File: 08231001.d
Spectrum: Average Spectrum: 9.252 to 9.271 min.
Location of Maximum: 95.00
Number of points: 164

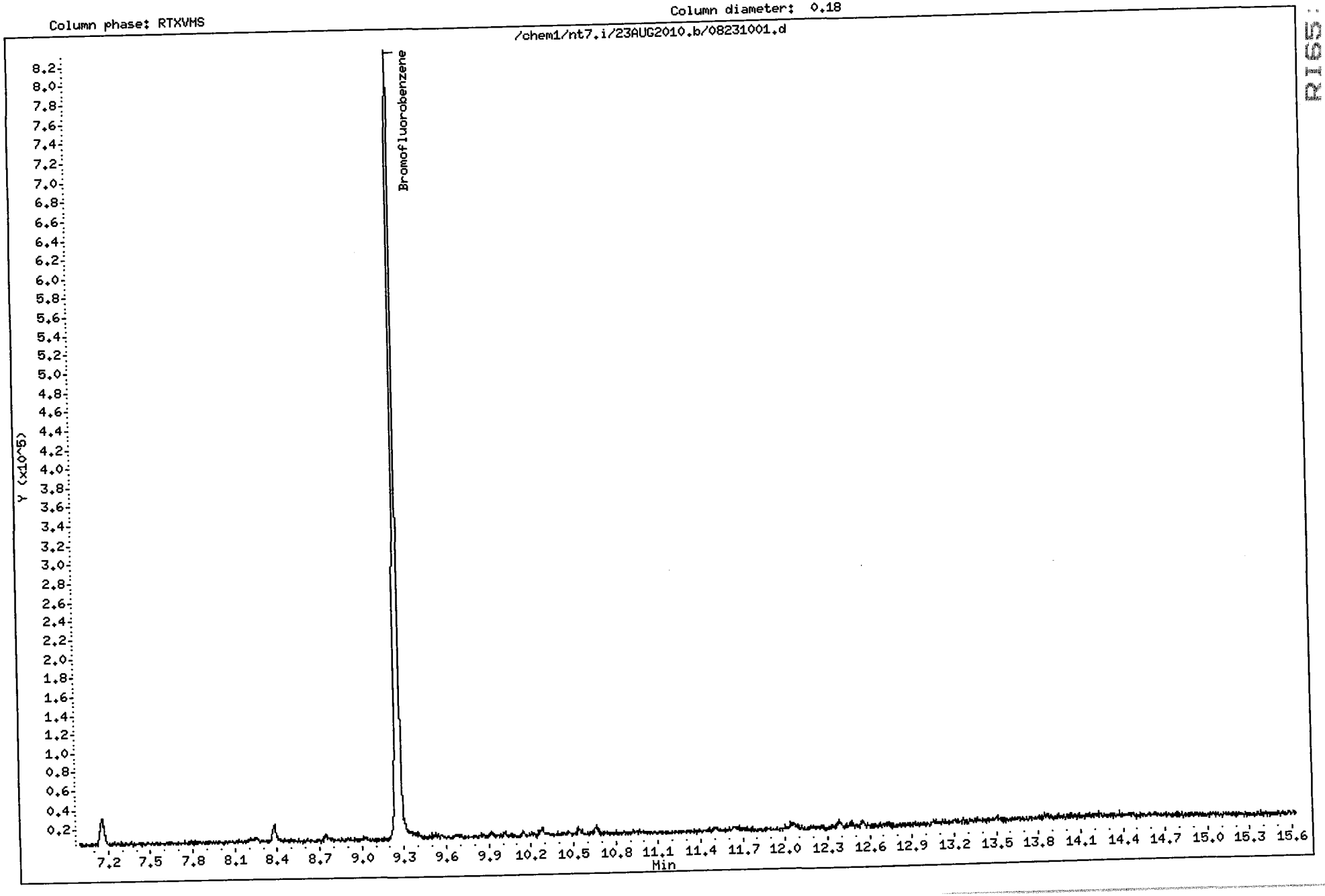
m/z	Y	m/z	Y	m/z	Y	m/z	Y
70.00	1584	119.00	628	163.00	52	244.00	20
71.00	28	120.00	42	165.00	149	249.00	279
72.00	966	121.00	45	167.00	30	250.00	24
73.00	7265	122.00	24	169.00	36		
74.00	26280	123.00	192	170.00	51		
75.00	83304	124.00	96	172.00	20		
76.00	7039	125.00	204	173.00	304		

Data File: /chem1/nt7.i/23AUG2010.b/08231001.d
Date : 23-AUG-2010 07:11
Client ID: BFB0823
Sample Info: BFB0823,BFB0823,1,082310,

Instrument: nt7.i

Operator: MH
Column diameter: 0.18

Column phase: RTXVMS



Data File: /chem1/nt7.i/23AUG2010.b/08231006.d
Report Date: 23-Aug-2010 15:30

Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/23AUG2010.b/08231006.d
Lab Smp Id: IC4000
Inj Date : 23-AUG-2010 10:27
Operator : PC
Smp Info : IC4000,10,10,0,
Misc Info : 10-
Comment :
Method : /chem1/nt7.i/23AUG2010.b/sim082310.m
Meth Date : 23-Aug-2010 15:29 paul
Cal Date : 23-AUG-2010 13:01
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE
Target Version: 3.50

Client Smp ID: IC4000
Inst ID: nt7.i
Quant Type: ISTD
Cal File: 08231012.d
Calibration Sample, Level: 7
Compound Sublist: sim12dca.sub

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

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	10.00000	Purge Volume (mL)
Sa	10.00000	Sample Amount (mL)

Cpnd Variable — Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/L)	AMOUNTS ON-COL (ng/L)
	1 Vinyl Chloride	62	1.551	1.552	(0.292)	375182	4000.00	4335.4
	2 1,1-Dichloroethene	96	2.505	2.510	(0.471)	197042	4000.00	3999.1
	175 Trans-1,2-Dichloroethene	96	3.284	3.289	(0.618)	229120	4000.00	3983.8
	3 cis-1,2-dichloroethene	96	4.434	4.439	(0.834)	236607	4000.00	4018.0
	6 Benzene	78	5.201	5.212	(0.906)	1096904	4000.00	3801.0
*	4 Pentafluorobenzene	168	5.315	5.316	(1.000)	96493	1000.00	
$	5 d4-1,2-Dichloroethane	65	5.324	5.325	(1.002)	61144	1000.00	922.59
	176 1,2-Dichloroethane	62	5.381	5.382	(1.012)	323180	4000.00	4004.0
	8 Trichloroethene	130	5.709	5.720	(0.994)	215334	4000.00	3917.6(Q)
*	7 1,4-Difluorobenzene	114	5.744	5.754	(1.000)	169889	1000.00	
$	9 d8-Toluene	98	6.902	6.903	(1.202)	234949	1000.00	1003.0
	10 Tetrachloroethene	166	7.258	7.260	(1.264)	175815	4000.00	3875.6
	11 1,1,2,2-Tetrachloroethane	83	9.445	9.447	(1.645)	185009	4000.00	4233.0

QC Flag Legend

Q - Qualifier signal failed the ratio test.