TPH METHOD BLANK SUMMARY

BLANK NO.: ST89MBW1

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

SDG No.: ST98,SU21 Project No.: LORA LAKE APTS. RI

Date Extracted: 05/02/11 Matrix: LIQUID

Date Analyzed : 05/05/11 Instrument ID : FID3B

Time Analyzed : 1203

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED
01	ST89LCSW1	ST89LCSW1	05/05/11
02	ST89LCSDW1	ST89LCSDW1	05/05/11
03	MW-1	ST89A	05/05/11
04	MW-2	ST89B	05/05/11
05	MW02-042611	ST98A	05/05/11
06	MW03-042611	ST98B	05/05/11
07	MW13-042611	ST98C	05/05/11
08	MW06-042611	ST98D	05/05/11
09	MW06-042611	ST98DMS	05/05/11
10	MW06-042611	ST98DMSD	05/05/11
11	MW07-042711	SU21A	05/05/11
12	MW11-042711	SU21B	05/05/11
13	MW10-042711	SU21C	05/05/11
14	MW09-042711	SU21D	05/05/11
15	MW08-042711	SU21E	05/05/11
16	MW12-042711	SU21F	05/05/11
17	MW1	SU14A	05/05/11
18	MW1 MS	SU14AMS	05/05/11
19	MW1 MSD	SU14AMSD	05/05/11
20	MW3	SU14B	05/05/11
21	MW4	SU14C	05/05/11
22	MW5	SU14D	05/05/11
23	MW6	SU14E	05/05/11
24			
25			
26			
27			
28			
29			
30			

FORM IV TPH

6a
DIESEL INITIAL CALIBRATION

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

Instrument: FID3B.I Project: LORA LAKE APTS. RI

Calibration Date: 07-APR-2011 SDG No.: ST98,SU21

Diesel Range	RF1 50	RF2 100	RF3 250	RF4 500	RF5 1000	RF6 2500	Ave RF	%RSD
WA Diesel	19039	18130	16923	17802	16613	16257	17461	6.0
AK Diesel	23142	21372	19447	20232	18819	18302	20219	8.9
OR Diesel	23232	21458	19533	20329	18913	18394	20310	8.8
Cal Diesel	23080	21312	19391	20174	18767	18246	20162	8.9
o-Terph	17125	16533	15608	16380	15640	13271	15759	8.6

<- Indicates %RSD outside limits
Surrogate areas are not included in Diesel RF calculation.

Quant Ranges : WA Diesel C12-C24 (2.230-5.894)
AK Diesel C10-C25 (1.495-6.146)
OR Diesel C10-C28 (1.495-6.857)
Cal Diesel C10-C24 (1.495-5.894)

Calibration Files	Analysis Time
0407b005.d	07-APR-2011 15:00
0407b006.d	07-APR-2011 15:22
0407b007.d	07-APR-2011 15:45
0407b008.d	07-APR-2011 16:07
0407b009.d	07-APR-2011 16:29
0407b010.d	07-APR-2011 16:52

6a
DIESEL INITIAL CALIBRATION

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

Instrument: FID3B.I
Project: LORA LAKE APTS. RI

Calibration Date: 07-APR-2011
SDG No.: ST98,SU21

Diesel Range	RF1 50	RF2 100	RF3 250	RF4 500	RF5 1000	RF6 2500	Ave RF	%RSD
WA Diesel	19039	18130	16923	17802	16613	16257	17461	6.0
AK Diesel	23142	21372	19447	20232	18819	18302	20219	8.9
OR Diesel	23232	21458	19533	20329	18913	18394	20310	8.8
Cal Diesel	23080	21312	19391	20174	18767	18246	20162	8.9
o-Terph	17125	16533	15608	16380	15640	13271	15759	8.6

<- Indicates %RSD outside limits
Surrogate areas are not included in Diesel RF calculation.

Quant Ranges :
WA Diesel C12-C24 (2.230-5.894)
AK Diesel C10-C25 (1.495-6.146)
OR Diesel C10-C28 (1.495-6.857)
Cal Diesel C10-C24 (1.495-5.894)

Calibration Files	Analysis Time
0407b005.d	07-APR-2011 15:00
0407b006.d	07-APR-2011 15:22
0407b007.d	07-APR-2011 15:45
0407b008.d	07-APR-2011 16:07
0407b009.d	07-APR-2011 16:29
0407b010.d	07-APR-2011 16:52

NW MOTOR OIL RANGE INITIAL CALIBRATION

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

Instrument: FID3B.I Project: LORA LAKE APTS. RI

Calibration Date: 07-APR-2011 SDG No.: ST98,SU21

Product Range	RF1 100	RF2 250	RF3 500	RF4 1000	RF5 2500	RF6 5000	Ave RF	%RSD
WA M.Oil C24-C38	9560	8804	9059	9068	10338		9285.725	4.950
Triac Surr	13492	12364	12670	12249	9074		12836.6	4.530

<- Indicates %RSD outside limits
Surrogate areas are not included in Motor Oil RF calculation.

Calibration Files	Analysis Time
0407b012.d	07-APR-2011 17:36
0407b013.d	07-APR-2011 17:58
0407b014.d	07-APR-2011 18:20
0407b015.d	07-APR-2011 18:42
0407b016.d	07-APR-2011 19:04

7a

DIESEL CONTINUING CALIBRATION VERIFICATION

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

ICal Date: 07-APR-2011 Project: LORA LAKE APTS. RI

CCal Date: 05-MAY-2011 SDG No.: ST98,SU21

Analysis Time: 11:17 Lab ID: DIESEL#1

Instrument: FID3B.I Lab File Name: 0505b011.d

Diesel Range	Area*	CalcAmnt	NomAmnt	% D
WADies(C12-C24)	4486420	256.9	250	2.8
AK102 (C10-C25)	5089895	251.7	250	0.7
Terphenyl	734009	46.6	45	3.5

* 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: 07-APR-2011
Project: LORA LAKE APTS. RI

CCal Date: 05-MAY-2011
SDG No.: ST98,SU21

Analysis Time: 11:40
Lab ID: MOIL#1

Instrument: FID3B.I
Lab File Name: 0505b012.d

M.oil Range	Area*	CalcAmnt	NomAmnt	% D
WAMoil(C24-C38)	5025714	541.2	500	8.2
AK103 (C25-C36)	4193152	480.5	500	-3.9
n-Triacontane	609657	47.5	45	5.5

* 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

FORM VII-Diesel

7a

DIESEL CONTINUING CALIBRATION VERIFICATION

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

ICal Date: 07-APR-2011 Project: LORA LAKE APTS. RI

CCal Date: 05-MAY-2011 SDG No.: ST98,SU21

Analysis Time: 16:42 Lab ID: DIESEL#2

Instrument: FID3B.I Lab File Name: 0505b025.d

Diesel Range	Area*	CalcAmnt	NomAmnt	% D
WADies(C12-C24)	4411738	252.7	250	1.1
AK102 (C10-C25)	5054715	250.0	250	0.0
Terphenyl	724701	46.0	45	2.2

* 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: 07-APR-2011 Project: LORA LAKE APTS. RI

CCal Date: 05-MAY-2011 SDG No.: ST98,SU21

Analysis Time: 17:05 Lab ID: MOIL#2

Instrument: FID3B.I Lab File Name: 0505b026.d

M.oil Range	Area*	CalcAmnt	NomAmnt	% D
WAMoil(C24-C38)	4911485	528.9	500	5.8
AK103 (C25-C36)	4102025	470.0	500	-6.0
n-Triacontane	600169	46.8	45	3.9

* 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: 07-APR-2011 Project: LORA LAKE APTS. RI

CCal Date: 05-MAY-2011 SDG No.: ST98,SU21

Analysis Time: 19:45 Lab ID: DIESEL#3

Instrument: FID3B.I Lab File Name: 0505b033.d

Diesel Range	Area*	CalcAmnt	NomAmnt	% D
WADies(C12-C24)	4483981	256.8	250	2.7
AK102 (C10-C25)	5146162	254.5	250	1.8
Terphenyl	732530	46.5	45	3.3

* 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: 07-APR-2011 Project: LORA LAKE APTS. RI

CCal Date: 05-MAY-2011 SDG No.: ST98,SU21

Analysis Time: 20:08 Lab ID: MOIL#3

Instrument: FID3B.I Lab File Name: 0505b034.d

M.oil Range	Area*	CalcAmnt	NomAmnt	% D
WAMoil(C24-C38)	5051411	544.0	500	8.8
AK103 (C25-C36)	4214549	482.9	500	-3.4
n-Triacontane	614191	47.8	45	6.3

* 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.: ST98,SU21 Project: LORA LAKE APTS. RI

Instrument ID: FID3B GC Column: RTX-1

Run Date: 05/05/11

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, AND STANDARDS, IS GIVEN BELOW:

SURROGATE RT FROM DAILY STANDARD
TERPH: 4.36 TRIAC: 7.37

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TERPH RT #	TRIAC RT #
01	ZZZZZ	ZZZZZ	05/05/11	0947	4.36	7.37
02	ZZZZZ	ZZZZZ	05/05/11	1010	4.36	7.37
03	RT	RT	05/05/11	1032	4.36	7.37
04	IB	IB	05/05/11	1055	4.37	7.36
05	LORA LAKE AP	DIESEL#1	05/05/11	1117	4.36	7.37
06	LORA LAKE AP	MOIL#1	05/05/11	1140	4.37	7.36
07	ST89MBW1	ST89MBW1	05/05/11	1203	4.36	7.36
08	ST89LCSW1	ST89LCSW1	05/05/11	1226	4.36	7.35
09	ST89LCSDW1	ST89LCSDW1	05/05/11	1249	4.36	7.36
10	ZZZZZ	ZZZZZ	05/05/11	1312	4.36	7.35
11	ZZZZZ	ZZZZZ	05/05/11	1336	4.36	7.36
12	ZZZZZ	ZZZZZ	05/05/11	1359	4.36	7.35
13	MW02-042611	ST98A	05/05/11	1423	4.36	7.36
14	MW03-042611	ST98B	05/05/11	1446	4.36	7.36
15	MW13-042611	ST98C	05/05/11	1509	4.36	7.35
16	MW06-042611	ST98D	05/05/11	1532	4.36	7.36
17	MW06-042611	ST98DMS	05/05/11	1555	4.36	7.35
18	MW06-042611	ST98DMSD	05/05/11	1619	4.36	7.35
19	LORA LAKE AP	DIESEL#2	05/05/11	1642	4.36	7.37
20	LORA LAKE AP	MOIL#2	05/05/11	1705	4.37	7.36
21	MW07-042711	SU21A	05/05/11	1728	4.36	7.35
22	MW11-042711	SU21B	05/05/11	1751	4.36	7.35
23	MW10-042711	SU21C	05/05/11	1814	4.36	7.36
24	MW09-042711	SU21D	05/05/11	1836	4.36	7.36
25	MW08-042711	SU21E	05/05/11	1859	4.36	7.36
26	MW12-042711	SU21F	05/05/11	1922	4.36	7.35
27	LORA LAKE AP	DIESEL#3	05/05/11	1945	4.36	7.37
28	LORA LAKE AP	MOIL#3	05/05/11	2008	4.35	7.36
29	ZZZZZ	ZZZZZ	05/05/11	2031	4.36	7.35
30	ZZZZZ	ZZZZZ	05/05/11	2053	4.36	7.36
31	ZZZZZ	ZZZZZ	05/05/11	2116	4.36	7.35
32	ZZZZZ	ZZZZZ	05/05/11	2139	4.36	7.35

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.: ST98,SU21 Project: LORA LAKE APTS. RI

Instrument ID: FID3B GC Column: RTX-1

Run Date: 05/05/11

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, AND STANDARDS, IS GIVEN BELOW:

SURROGATE RT FROM DAILY STANDARD
TERPH: 4.36 TRIAC: 7.37

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TERPH RT #	TRIAC RT #
01	ZZZZZ	ZZZZZ	05/05/11	2202	4.36	7.35
02	ZZZZZ	ZZZZZ	05/05/11	2224	4.36	7.36
03	ZZZZZ	ZZZZZ	05/05/11	2247	4.36	7.35
04	WA LIQUOR CO	DIESEL#4	05/06/11	2310	4.36	7.38
05	WA LIQUOR CO	MOIL#4	05/06/11	2332	4.35	7.36

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.: ST98,SU21 Project: LORA LAKE APTS. RI

Instrument ID: FID3B GC Column: RTX-1

Run Date: 04/07/11

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, AND STANDARDS, IS GIVEN BELOW:

SURROGATE RT FROM DAILY STANDARD
TERPH: 4.36 TRIAC: 7.36

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TERPH RT #	TRIAC RT #
01		RT	04/07/11	1416	4.36	7.36
02		IB	04/07/11	1438	4.36	7.36
03		DIESEL 50	04/07/11	1500	4.35	7.36
04		DIESEL 100	04/07/11	1522	4.35	7.36
05		DIESEL 250	04/07/11	1545	4.36	7.36
06		DIESEL 500	04/07/11	1607	4.37	7.36
07		DIESEL 1000	04/07/11	1629	4.38	7.37
08		DIESEL 2500	04/07/11	1652	4.41	7.37
09		DIESEL ICV	04/07/11	1714	4.36	7.36
10		MOIL 100	04/07/11	1736	4.35	7.34
11		MOIL 250	04/07/11	1758	4.35	7.35
12		MOIL 500	04/07/11	1820	4.36	7.36
13		MOIL 1000	04/07/11	1842	4.35	7.37
14		MOIL 2500	04/07/11	1904	4.35	7.40
15		MOIL ICV	04/07/11	1948	4.35	7.36

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: ST98, SU21

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
TPHG by Method NWTPHG
Page 1 of 1

Sample ID: MW02-042611
SAMPLE

Lab Sample ID: ST98A
LIMS ID: 11-9409
Matrix: Water
Data Release Authorized:
Reported: 05/09/11

QC Report No: ST98-Floyd Snider
Project: Lora Lake Apts RI
Event: POS-LLA T.4010
Date Sampled: 04/26/11
Date Received: 04/26/11

Date Analyzed: 05/06/11 09:01
Instrument/Analyst: PID1/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	97.7%
Bromobenzene	95.4%

Gasoline Surrogate Recovery

Trifluorotoluene	97.6%
Bromobenzene	96.3%

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: MW03-042611
SAMPLE

Lab Sample ID: ST98B
LIMS ID: 11-9410
Matrix: Water
Data Release Authorized:
Reported: 05/09/11

QC Report No: ST98-Floyd Snider
Project: Lora Lake Apts RI
Event: POS-LLA T.4010
Date Sampled: 04/26/11
Date Received: 04/26/11

Date Analyzed: 05/06/11 09:30
Instrument/Analyst: PID1/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	96.6%
Bromobenzene	95.9%

Gasoline Surrogate Recovery

Trifluorotoluene	97.3%
Bromobenzene	96.4%

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

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod **Sample ID: MW13-042611**
TPHG by Method NWTPHG **SAMPLE**
Page 1 of 1

Lab Sample ID: ST98C
LIMS ID: 11-9411
Matrix: Water
Data Release Authorized:
Reported: 05/09/11

QC Report No: ST98-Floyd Snider
Project: Lora Lake Apts RI
Event: POS-LLA T.4010
Date Sampled: 04/26/11
Date Received: 04/26/11

Date Analyzed: 05/06/11 09:59
Instrument/Analyst: PID1/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	97.1%
Bromobenzene	97.8%

Gasoline Surrogate Recovery

Trifluorotoluene	98.5%
Bromobenzene	98.8%

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: MW06-042611**
TPHG by Method NWTPHG **SAMPLE**
Page 1 of 1

Lab Sample ID: ST98D
LIMS ID: 11-9412
Matrix: Water
Data Release Authorized:
Reported: 05/09/11

QC Report No: ST98-Floyd Snider
Project: Lora Lake Apts RI
Event: POS-LLA T.4010
Date Sampled: 04/26/11
Date Received: 04/26/11

Date Analyzed: 05/06/11 10:28
Instrument/Analyst: PID1/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**	**1.1**	
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	96.6%
Bromobenzene	98.7%

Gasoline Surrogate Recovery

Trifluorotoluene	98.4%
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: MW07-042711
SAMPLE

Lab Sample ID: SU21A
LIMS ID: 11-9507
Matrix: Water
Data Release Authorized:
Reported: 05/09/11

QC Report No: SU21-Floyd Snider
Project: Lora Lake Apartments RI
Event: POS-LLA Task 4010
Date Sampled: 04/27/11
Date Received: 04/27/11

Date Analyzed: 05/04/11 08:40
Instrument/Analyst: PID1/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	90.7%
Bromobenzene	91.2%

Gasoline Surrogate Recovery

Trifluorotoluene	93.8%
Bromobenzene	91.2%

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
Page 1 of 1

Sample ID: MW11-042711
SAMPLE

Lab Sample ID: SU21B
LIMS ID: 11-9508
Matrix: Water
Data Release Authorized:
Reported: 05/09/11

QC Report No: SU21-Floyd Snider
Project: Lora Lake Apartments RI
Event: POS-LLA Task 4010
Date Sampled: 04/27/11
Date Received: 04/27/11

Date Analyzed: 05/04/11 09:09
Instrument/Analyst: PID1/MH

Purge Volume: 5.0 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result	GAS ID
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	---

BETX Surrogate Recovery

Trifluorotoluene	90.2%
Bromobenzene	91.8%

Gasoline Surrogate Recovery

Trifluorotoluene	93.6%
Bromobenzene	92.0%

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: MW10-042711
SAMPLE

Lab Sample ID: SU21C
LIMS ID: 11-9509
Matrix: Water
Data Release Authorized:
Reported: 05/09/11

QC Report No: SU21-Floyd Snider
Project: Lora Lake Apartments RI
Event: POS-LLA Task 4010
Date Sampled: 04/27/11
Date Received: 04/27/11

Date Analyzed: 05/04/11 09:39
Instrument/Analyst: PID1/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	90.9%
Bromobenzene	92.1%

Gasoline Surrogate Recovery

Trifluorotoluene	95.5%
Bromobenzene	93.1%

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: MW09-042711
SAMPLE

Lab Sample ID: SU21D
LIMS ID: 11-9510
Matrix: Water
Data Release Authorized:
Reported: 05/09/11

QC Report No: SU21-Floyd Snider
Project: Lora Lake Apartments RI
Event: POS-LLA Task 4010
Date Sampled: 04/27/11
Date Received: 04/27/11

Date Analyzed: 05/04/11 10:08
Instrument/Analyst: PID1/MH

Purge Volume: 5.0 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result	GAS ID
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	---

BETX Surrogate Recovery

Trifluorotoluene	89.3%
Bromobenzene	91.3%

Gasoline Surrogate Recovery

Trifluorotoluene	93.9%
Bromobenzene	91.7%

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: MW08-042711
SAMPLE

Lab Sample ID: SU21E
LIMS ID: 11-9511
Matrix: Water
Data Release Authorized:
Reported: 05/09/11

QC Report No: SU21-Floyd Snider
Project: Lora Lake Apartments RI
Event: POS-LLA Task 4010
Date Sampled: 04/27/11
Date Received: 04/27/11

Date Analyzed: 05/04/11 10:37
Instrument/Analyst: PID1/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	90.5%
Bromobenzene	93.2%

Gasoline Surrogate Recovery

Trifluorotoluene	95.1%
Bromobenzene	94.4%

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

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
TPHG by Method NWTPHG
Page 1 of 1

Sample ID: MW12-042711
SAMPLE

Lab Sample ID: SU21F
LIMS ID: 11-9512
Matrix: Water
Data Release Authorized:
Reported: 05/09/11

QC Report No: SU21-Floyd Snider
Project: Lora Lake Apartments RI
Event: POS-LLA Task 4010
Date Sampled: 04/27/11
Date Received: 04/27/11

Date Analyzed: 05/04/11 11:06
Instrument/Analyst: PID1/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	90.0%
Bromobenzene	92.9%

Gasoline Surrogate Recovery

Trifluorotoluene	94.8%
Bromobenzene	94.0%

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: ST98
Matrix: Water

QC Report No: ST98-Floyd Snider
Project: Lora Lake Apts RI
Event: POS-LLA T.4010

Client ID	TFT	BBZ	TOT OUT
MB-050611	96.2%	97.8%	0
LCS-050611	98.0%	95.9%	0
LCSD-050611	99.1%	97.2%	0
MW02-042611	97.6%	96.3%	0
MW03-042611	97.3%	96.4%	0
MW13-042611	98.5%	98.8%	0
MW06-042611	98.4%	100%	0
MW06-042611 MS	105%	102%	0
MW06-042611 MSD	103%	102%	0

	LCS/MB LIMITS	QC LIMITS
(TFT) = Trifluorotoluene	(80-120)	(80-120)
(BBZ) = Bromobenzene	(80-120)	(80-120)

Log Number Range: 11-9409 to 11-9412

FORM II TPHG

ST98:00159

ANALYTICAL RESOURCES INCORPORATED

BETX WATER SURROGATE RECOVERY SUMMARY

ARI Job: ST98
Matrix: Water

QC Report No: ST98-Floyd Snider
Project: Lora Lake Apts RI
Event: POS-LLA T.4010

Client ID	TFT	BBZ	TOT OUT
MB-050611	94.4%	96.9%	0
LCS-050611	94.6%	94.9%	0
LCSD-050611	95.8%	95.8%	0
MW02-042611	97.7%	95.4%	0
MW03-042611	96.6%	95.9%	0
MW13-042611	97.1%	97.8%	0
MW06-042611	96.6%	98.7%	0
MW06-042611 MS	102%	102%	0
MW06-042611 MSD	100%	101%	0

	LCS/MB LIMITS	QC LIMITS
(TFT) = Trifluorotoluene	(79-120)	(80-120)
(BBZ) = Bromobenzene	(79-120)	(80-120)

Log Number Range: 11-9409 to 11-9412

ANALYTICAL RESOURCES INCORPORATED

TPHG WATER SURROGATE RECOVERY SUMMARY

ARI Job: SU21
Matrix: Water

QC Report No: SU21-Floyd Snider
Project: Lora Lake Apartments RI
Event: POS-LLA Task 4010

Client ID	TFT	BBZ	TOT OUT
MB-050411	86.5%	86.4%	0
LCS-050411	95.2%	91.2%	0
LCSD-050411	96.2%	93.0%	0
MW07-042711	93.8%	91.2%	0
MW11-042711	93.6%	92.0%	0
MW10-042711	95.5%	93.1%	0
MW09-042711	93.9%	91.7%	0
MW08-042711	95.1%	94.4%	0
MW12-042711	94.8%	94.0%	0

	LCS/MB LIMITS	QC LIMITS
(TFT) = Trifluorotoluene	(80-120)	(80-120)
(BBZ) = Bromobenzene	(80-120)	(80-120)

Log Number Range: 11-9507 to 11-9512

ST98:00161

ANALYTICAL RESOURCES INCORPORATED

BETX WATER SURROGATE RECOVERY SUMMARY

ARI Job: SU21
Matrix: Water

QC Report No: SU21-Floyd Snider
Project: Lora Lake Apartments RI
Event: POS-LLA Task 4010

Client ID	TFT	BBZ	TOT OUT
MB-050411	82.0%	86.0%	0
LCS-050411	89.1%	91.3%	0
LCSD-050411	89.9%	93.7%	0
MW07-042711	90.7%	91.2%	0
MW11-042711	90.2%	91.8%	0
MW10-042711	90.9%	92.1%	0
MW09-042711	89.3%	91.3%	0
MW08-042711	90.5%	93.2%	0
MW12-042711	90.0%	92.9%	0

	LCS/MB LIMITS	QC LIMITS
(TFT) = Trifluorotoluene	(79-120)	(80-120)
(BBZ) = Bromobenzene	(79-120)	(80-120)

Log Number Range: 11-9507 to 11-9512

ST98:00162

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TPHG by Method NWTPHG **Sample ID: MW06-042611**
Page 1 of 1 **MATRIX SPIKE**

Lab Sample ID: ST98D
LIMS ID: 11-9412
Matrix: Water
Data Release Authorized:
Reported: 05/09/11

QC Report No: ST98-Floyd Snider
Project: Lora Lake Apts RI
Event: POS-LLA T.4010
Date Sampled: 04/26/11
Date Received: 04/26/11

Date Analyzed MS: 05/06/11 10:57
MSD: 05/06/11 11:26
Instrument/Analyst MS: PID1/MH
MSD: PID1/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	1.18	1.00	118%	1.18	1.00	118%	0.0%

Reported in mg/L (ppm)

RPD calculated using sample concentrations per SW846.

TPHG Surrogate Recovery

	MS	MSD
Trifluorotoluene	105%	103%
Bromobenzene	102%	102%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
Page 1 of 1

Sample ID: MW06-042611
MATRIX SPIKE

Lab Sample ID: ST98D
LIMS ID: 11-9412
Matrix: Water
Data Release Authorized:
Reported: 05/09/11

QC Report No: ST98-Floyd Snider
Project: Lora Lake Apts RI
Event: POS-LLA T.4010
Date Sampled: 04/26/11
Date Received: 04/26/11

Date Analyzed MS: 05/06/11 10:57
MSD: 05/06/11 11:26
Instrument/Analyst MS: PID1/MH
MSD: PID1/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	3.11	3.70	84.1%	3.32	3.70	89.7%	6.5%
Toluene	< 1.00 U	36.7	36.5	101%	36.1	36.5	98.9%	1.6%
Ethylbenzene	1.13	11.9	10.7	101%	11.9	10.7	101%	0.0%
m,p-Xylene	< 1.00 U	39.1	40.1	97.5%	38.7	40.1	96.5%	1.0%
o-Xylene	< 1.00 U	17.9	18.1	98.9%	17.7	18.1	97.8%	1.1%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

BETX Surrogate Recovery

	MS	MSD
Trifluorotoluene	102%	100%
Bromobenzene	102%	101%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TPHG by Method NWTPHG

Sample ID: LCS-050411
LAB CONTROL SAMPLE

Lab Sample ID: LCS-050411
LIMS ID: 11-9507
Matrix: Water
Data Release Authorized:
Reported: 05/09/11

QC Report No: SU21-Floyd Snider
Project: Lora Lake Apartments RI
Event: POS-LLA Task 4010
Date Sampled: NA
Date Received: NA

Date Analyzed LCS: 05/04/11 06:54
LCSD: 05/04/11 07:23
Instrument/Analyst LCS: PID1/MH
LCSD: PID1/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	0.98	1.00	98.0%	0.96	1.00	96.0%	2.1%

Reported in mg/L (ppm)

RPD calculated using sample concentrations per SW846.

TPHG Surrogate Recovery

	LCS	LCSD
Trifluorotoluene	95.2%	96.2%
Bromobenzene	91.2%	93.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod

Sample ID: LCS-050411
LAB CONTROL SAMPLE

Lab Sample ID: LCS-050411
LIMS ID: 11-9507
Matrix: Water
Data Release Authorized:
Reported: 05/09/11

QC Report No: SU21-Floyd Snider
Project: Lora Lake Apartments RI
Event: POS-LLA Task 4010
Date Sampled: NA
Date Received: NA

Date Analyzed LCS: 05/04/11 06:54
LCSD: 05/04/11 07:23
Instrument/Analyst LCS: PID1/MH
LCSD: PID1/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	3.11	3.70	84.1%	3.16	3.70	85.4%	1.6%
Toluene	34.6	36.5	94.8%	35.5	36.5	97.3%	2.6%
Ethylbenzene	10.0	10.7	93.5%	10.3	10.7	96.3%	3.0%
m,p-Xylene	37.4	40.1	93.3%	37.6	40.1	93.8%	0.5%
o-Xylene	17.1	18.1	94.5%	17.5	18.1	96.7%	2.3%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

BETX Surrogate Recovery

	LCS	LCSD
Trifluorotoluene	89.1%	89.9%
Bromobenzene	91.3%	93.7%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TPHG by Method NWTPHG **Sample ID: LCS-050611**
Page 1 of 1 **LAB CONTROL SAMPLE**

Lab Sample ID: LCS-050611 QC Report No: ST98-Floyd Snider
LIMS ID: 11-9409 Project: Lora Lake Apts RI
Matrix: Water Event: POS-LLA T.4010
Data Release Authorized: Date Sampled: NA
Reported: 05/09/11 Date Received: NA

Date Analyzed LCS: 05/06/11 07:11 Purge Volume: 5.0 mL
LCSD: 05/06/11 07:41
Instrument/Analyst LCS: PID1/MH Dilution Factor LCS: 1.0
LCSD: PID1/MH LCSD: 1.0

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Gasoline Range Hydrocarbons	1.06	1.00	106%	0.98	1.00	98.0%	7.8%

Reported in mg/L (ppm)

RPD calculated using sample concentrations per SW846.

TPHG Surrogate Recovery

	LCS	LCSD
Trifluorotoluene	98.0%	99.1%
Bromobenzene	95.9%	97.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
Page 1 of 1

Sample ID: LCS-050611
LAB CONTROL SAMPLE

Lab Sample ID: LCS-050611
LIMS ID: 11-9409
Matrix: Water
Data Release Authorized:
Reported: 05/09/11

QC Report No: ST98-Floyd Snider
Project: Lora Lake Apts RI
Event: POS-LLA T.4010
Date Sampled: NA
Date Received: NA

Date Analyzed LCS: 05/06/11 07:11
LCSD: 05/06/11 07:41
Instrument/Analyst LCS: PID1/MH
LCSD: PID1/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	3.22	3.70	87.0%	3.06	3.70	82.7%	5.1%
Toluene	35.2	36.5	96.4%	33.6	36.5	92.1%	4.7%
Ethylbenzene	10.4	10.7	97.2%	9.99	10.7	93.4%	4.0%
m,p-Xylene	37.1	40.1	92.5%	35.6	40.1	88.8%	4.1%
o-Xylene	17.0	18.1	93.9%	16.4	18.1	90.6%	3.6%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

BETX Surrogate Recovery

	LCS	LCSD
Trifluorotoluene	94.6%	95.8%
Bromobenzene	94.9%	95.8%

4

BLANK NO.

BETX/GAS METHOD BLANK SUMMARY

MB0504S1

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

SDG No.: SU21 Project No.: LORA LAKE APARTMENTS

Date Analyzed : 05/04/11 Matrix: WATER

Time Analyzed : 0752 Instrument ID : PID1

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED
01	LCS0504S1	LCS0504	05/04/11
02	LCSD0504S1	LCSD0504	05/04/11
03	MW07-042711	SU21A	05/04/11
04	MW11-042711	SU21B	05/04/11
05	MW10-042711	SU21C	05/04/11
06	MW09-042711	SU21D	05/04/11
07	MW08-042711	SU21E	05/04/11
08	MW12-042711	SU21F	05/04/11
09			
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ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod **Sample ID: MB-050411**
TPHG by Method NWTPHG **METHOD BLANK**

Lab Sample ID: MB-050411
LIMS ID: 11-9507
Matrix: Water
Data Release Authorized:
Reported: 05/09/11

QC Report No: SU21-Floyd Snider
Project: Lora Lake Apartments RI
Event: POS-LLA Task 4010
Date Sampled: NA
Date Received: NA

Date Analyzed: 05/04/11 07:52
Instrument/Analyst: PID1/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	82.0%
Bromobenzene	86.0%

Gasoline Surrogate Recovery

Trifluorotoluene	86.5%
Bromobenzene	86.4%

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.

4

BETX/GAS METHOD BLANK SUMMARY

BLANK NO.

MB0506S1

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

SDG No.: ST98-SU53-SU73-SU74 Project No.: LORA LAKE

Date Analyzed : 05/06/11 Matrix: WATER

Time Analyzed : 0810 Instrument ID : PID1

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED
01	LCS0506S1	LCS0506	05/06/11
02	LCSD0506S1	LCSD0506	05/06/11
03	MW02-042611	ST98A	05/06/11
04	MW03-042611	ST98B	05/06/11
05	MW13-042611	ST98C	05/06/11
06	MW06-042611	ST98D	05/06/11
07	MW06-042611	ST98DMS	05/06/11
08	MW06-042611	ST98DMSD	05/06/11
09	MW5042811	SU53A	05/06/11
10	MW15042811	SU53B	05/06/11
11	MW4042811	SU53C	05/06/11
12	MW17042811	SU53D	05/06/11
13	MW14042811	SU53E	05/06/11
14	MW16042811	SU53F	05/06/11
15	MW-01-042911	SU73A	05/06/11
16	MW-01-042911	SU73B	05/06/11
17	B312-042911	SU74A	05/06/11
18	B310-042911	SU74B	05/06/11
19	B311-042911	SU74C	05/06/11
20			
21			
22			
23			
24			
25			
26			
27			
28			
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30			

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod **Sample ID: MB-050611**
TPHG by Method NWTPHG **METHOD BLANK**

Lab Sample ID: MB-050611
LIMS ID: 11-9409
Matrix: Water
Data Release Authorized:
Reported: 05/09/11

QC Report No: ST98-Floyd Snider
Project: Lora Lake Apts RI
Event: POS-LLA T.4010
Date Sampled: NA
Date Received: NA

Date Analyzed: 05/06/11 08:10
Instrument/Analyst: PID1/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	94.4%
Bromobenzene	96.9%

Gasoline Surrogate Recovery

Trifluorotoluene	96.2%
Bromobenzene	97.8%

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.

6a
GAS INITIAL CALIBRATION

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

Instrument/Det: PID1.I/RTX 502-2 FID Project:LORA LAKE APARTMENTS

Calibration Date: 16-APR-2011 SDG No.: SU21

Gas Range	RF1 0.1	RF2 0.25	RF3 1.0	RF4 2.5	RF5 5.0	RF6 20	Ave RF	%RSD
WA Gas	473250	380984	347138	343150	344223	359894	374773	13.4
AK Gas	727610	621608	562218	550059	548531	614349	604063	11.3
NW Gas	520635	420932	371165	363968	364413	379420	403422	15.2
Cal Gas	903420	770886	701902	689102	686110	751141	750427	11.0
8015Gas	881800	768758	703324	689546	685838	752838	747017	10.0
$TFT(Surr)	31.27273	29.79545	27.23881	28.27000	27.63910	27.41011		
	26.40500						28.29017	5.953
$BB(Surr)	22.59091	21.52273	20.02985	21.00000	20.45113	20.64607		
	19.47500						20.85510	4.632

<- 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
Cal Gas nC6 - nC12
8015 Gas 2-Methylpentane - 1,2,4-Trimethylbenzene

Calibration Files	Analysis Time
0416a013.d	16-APR-2011 14:50
0416a014.d	16-APR-2011 15:19
0416a015.d	16-APR-2011 15:48
0416a016.d	16-APR-2011 16:17
0416a017.d	16-APR-2011 16:47
0416a018.d	16-APR-2011 17:16

Surr Calibration Files	Analysis Time
0416a004.d	16-APR-2011 10:27
0416a005.d	16-APR-2011 10:56
0416a006.d	16-APR-2011 11:26
0416a007.d	16-APR-2011 11:55
0416a008.d	16-APR-2011 12:24
0416a009.d	16-APR-2011 12:53
0416a010.d	16-APR-2011 13:22

BETX INITIAL CALIBRATION

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

SDG No.: SU21 Project No.: LORA LAKE APARTMENTS

Instrument/Det: PID1 /RTX 502-2 PID Calibration Date: 04/16/11

	CALIBRATION FACTORS						
COMPOUND	0.25	0.5	5	25	50	MEAN	%RSD
Benzene	524	488	441	415	406		
Toluene	412	408	378	389	387		
Ethylbenzene	352	340	331	350	345		
M/P-Xylene	376	364	353	374	372		
O-Xylene	260	270	284	300	298		
MTBE	148	166	172	178	177		
TFT(Surr)	69	67	62	65	65		
BB(Surr)	138	135	127	134	136		

Calibration Files

/chem3/pid1.i/vpcc0416-2.b/0416a004.d
/chem3/pid1.i/vpcc0416-2.b/0416a005.d
/chem3/pid1.i/vpcc0416-2.b/0416a006.d
/chem3/pid1.i/vpcc0416-2.b/0416a007.d
/chem3/pid1.i/vpcc0416-2.b/0416a008.d
/chem3/pid1.i/vpcc0416-2.b/0416a009.d
/chem3/pid1.i/vpcc0416-2.b/0416a010.d

BETX INITIAL CALIBRATION

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

SDG No.: SU21 Project No.: LORA LAKE APARTMENTS

Instrument/Det: PID1 /RTX 502-2 PID Calibration Date: 04/16/11

	CALIBRATION FACTORS						
COMPOUND	100	200	MEAN	%RSD			
Benzene	398	397	438	11.30			
Toluene	386	377	391	3.52			
Ethylbenzene	340	334	342	2.26			
M/P-Xylene	372	360	367	2.34			
O-Xylene	297	296	286	5.52			
MTBE	174	173	170	6.12			
TFT(Surr)	65	63	65	3.74			
BB(Surr)	138	134	134	2.70			

FORM VI BETX-2

6a

GAS INITIAL CALIBRATION

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

Instrument/Det: PID1.I/RTX 502-2 FID Project: LORA LAKE

Calibration Date: 05-MAY-2011 SDG No.: ST98-SU53-SU73-SU74

Gas Range	RF1 0.1	RF2 0.25	RF3 1.0	RF4 2.5	RF5 5.0	RF6 20	Ave RF	%RSD
WA Gas	336230	321660	304072	312797	319762	322507	319505	3.4
AK Gas	569160	524066	506656	500913	512756	551605	527526	5.1
NW Gas	365065	344296	323980	330156	336968	340039	340084	4.2
Cal Gas	683430	650156	625526	626200	638532	671902	649291	3.7
8015Gas	693780	652706	630988	626013	638038	671733	652210	4.0
$TFT(Surr)	28.77273	26.50000	25.56716	25.53000	25.92481	25.32022		
	25.11500						26.10428	4.826
$BB(Surr)	20.36364	19.04545	18.50746	18.56000	18.72180	18.53933		
	18.39500						18.87610	3.649

<- 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
Cal Gas nC6 - nC12
8015 Gas 2-Methylpentane - 1,2,4-Trimethylbenzene

Calibration Files	Analysis Time
0505a014.d	05-MAY-2011 16:31
0505a015.d	05-MAY-2011 17:00
0505a016.d	05-MAY-2011 17:30
0505a017.d	05-MAY-2011 17:59
0505a018.d	05-MAY-2011 18:28
0505a019.d	05-MAY-2011 18:57

SURR Calibration Files	Analysis Time
0505a005.d	05-MAY-2011 12:09
0505a006.d	05-MAY-2011 12:38
0505a007.d	05-MAY-2011 13:07
0505a008.d	05-MAY-2011 13:36
0505a009.d	05-MAY-2011 14:05
0505a010.d	05-MAY-2011 14:34
0505a011.d	05-MAY-2011 15:04

BETX INITIAL CALIBRATION

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

SDG No.: VPCC0505-2 Project No.: LORA LAKE

Instrument/Det: PID1 /RTX 502-2 PID Calibration Date: 05/05/11

	CALIBRATION FACTORS						
COMPOUND	0.25	0.5	5	25	50	MEAN	%RSD
Benzene	432	400	403	349	344		
Toluene	396	342	346	321	326		
Ethylbenzene	284	272	311	287	295		
M/P-Xylene	358	311	330	308	318		
O-Xylene	240	242	270	246	255		
MTBE	124	114	121	110	114		
TFT(Surr)	60	56	54	55	56		
BB(Surr)	123	117	115	116	120		

Calibration Files

/chem3/pid1.i/vpcc0505-2.b/0505a005.d
/chem3/pid1.i/vpcc0505-2.b/0505a006.d
/chem3/pid1.i/vpcc0505-2.b/0505a007.d
/chem3/pid1.i/vpcc0505-2.b/0505a008.d
/chem3/pid1.i/vpcc0505-2.b/0505a009.d
/chem3/pid1.i/vpcc0505-2.b/0505a010.d
/chem3/pid1.i/vpcc0505-2.b/0505a011.d

BETX INITIAL CALIBRATION

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

SDG No.: VPCC0505-2 Project No.: LORA LAKE

Instrument/Det: PID1 /RTX 502-2 PID Calibration Date: 05/05/11

	CALIBRATION FACTORS						
COMPOUND	100	200	MEAN	%RSD			
Benzene	337	340	372	10.37			
Toluene	324	326	340	7.78			
Ethylbenzene	291	294	290	4.13			
M/P-Xylene	317	315	322	5.31			
O-Xylene	254	258	252	4.16			
MTBE	111	113	115	4.58			
TFT(Surr)	55	55	56	3.81			
BB(Surr)	120	121	119	2.22			

BETX CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

SDG No.: SU21 Project No.: LORA LAKE APARTMENTS

Instrument/Det: PID1/RTX 502-2 PID Calibration Date: 05/04/11

Init. Calib. Date(s): 04/16/11 Calib. File: 0504A002.D

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng/mL)	NOM AMOUNT (ng/mL)	%D
Benzene	7.06	7.01	7.11	21.72	25.00	-13.1
Toluene	9.94	9.89	9.99	22.74	25.00	-9.0
Ethylbenzene	12.84	12.79	12.89	23.46	25.00	-6.2
M/P-Xylene	13.01	12.96	13.06	46.81	50.00	-6.4
O-Xylene	13.96	13.93	13.99	24.03	25.00	-3.9
MTBE	4.53	4.48	4.58	19.96	25.00	-20.2
TFT(Surr)	7.90	7.85	7.95	87.71	100.0	-12.3
BB(Surr)	15.44	15.39	15.49	90.32	100.0	-9.7

FORM VII BETX

7a
GAS CONTINUING CALIBRATION VERIFICATION

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

ICal Date: 16-APRIL-2011 Project: LORA LAKE APARTMENT

CCal Date: 04-MAY-2011 SDG No.: SU21

Lab File Name: 0504a003.d Inst/Det: PID1.I/RTX 502-2 FID

Gas Range	Area*	CalcAmnt	NomAmnt	%D
WAGas (Tol-C12)	863714	2.30	2.50	-7.8
AKGas (C6-C10)	1397515	2.31	2.50	-7.5
NWGas (Tol-Nap)	918138	2.28	2.50	-9.0
8015B (2MP-TMB)	1746060	2.34	2.50	-6.5

* 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: 16-APRIL-2011
Project: LORA LAKE APARTMENT

CCal Date: 04-MAY-2011
SDG No.: SU21

Lab File Name: 0504a003.d
Inst/Det: PID1.I/RTX 502-2 FID

Surrogate	Area	CalcAmnt	NomAmnt	RPD
Trifluorotol	50080	101.4	100.0	1.4
Bromoflrbenz	17761	92.9	100.0	-7.1

FORM VII-Surr

BETX CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

SDG No.: SU21 Project No.: LORA LAKE APARTMENTS

Instrument/Det: PID1/RTX 502-2 PID Calibration Date: 05/04/11

Init. Calib. Date(s): 04/16/11 Calib. File: 0504A014.D

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng/mL)	NOM AMOUNT (ng/mL)	%D
Benzene	7.06	7.01	7.11	21.81	25.00	-12.8
Toluene	9.94	9.89	9.99	22.61	25.00	-9.6
Ethylbenzene	12.85	12.79	12.89	23.25	25.00	-7.0
M/P-Xylene	13.01	12.96	13.06	46.70	50.00	-6.6
O-Xylene	13.97	13.93	13.99	23.94	25.00	-4.2
MTBE	4.53	4.48	4.58	19.63	25.00	-21.5
TFT(Surr)	7.90	7.85	7.95	96.52	100.0	-3.5
BB(Surr)	15.45	15.39	15.49	97.15	100.0	-2.8

FORM VII BETX

7a
GAS CONTINUING CALIBRATION VERIFICATION

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

ICal Date: 16-APRIL-2011 Project: LORA LAKE APARTMENT

CCal Date: 04-MAY-2011 SDG No.: SU21

Lab File Name: 0504a015.d Inst/Det: PID1.I/RTX 502-2 FID

Gas Range	Area*	CalcAmnt	NomAmnt	%D
WAGas (Tol-C12)	880600	2.35	2.50	-6.0
AKGas (C6-C10)	1472108	2.44	2.50	-2.5
NWGas (Tol-Nap)	929143	2.30	2.50	-7.9
8015B (2MP-TMB)	1829659	2.45	2.50	-2.0

* 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: 16-APRIL-2011
Project: LORA LAKE APARTMENT

CCal Date: 04-MAY-2011
SDG No.: SU21

Lab File Name: 0504a015.d
Inst/Det: PID1.I/RTX 502-2 FID

Surrogate	Area	CalcAmnt	NomAmnt	RPD
Trifluorotol	54005	108.4	100.0	8.4
Bromoflrbenz	19246	98.2	100.0	-1.8

BETX CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

SDG No.: ST98-SU53-SU73-SU74 Project No.: LORA LAKE

Instrument/Det: PID1/RTX 502-2 PID Calibration Date: 05/06/11

Init. Calib. Date(s): 05/05/11 Calib. File: 0506A002.D

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng/mL)	NOM AMOUNT (ng/mL)	%D
Benzene	7.06	7.01	7.11	23.00	25.00	-8.0
Toluene	9.95	9.90	10.00	23.66	25.00	-5.4
Ethylbenzene	12.85	12.80	12.90	24.92	25.00	-0.3
M/P-Xylene	13.01	12.96	13.06	48.31	50.00	-3.4
O-Xylene	13.97	13.94	14.00	24.73	25.00	-1.1
MTBE	4.54	4.49	4.59	23.14	25.00	-7.4
TFT(Surr)	7.90	7.85	7.95	97.89	100.0	-2.1
BB(Surr)	15.45	15.40	15.50	98.97	100.0	-1.0

FORM VII BETX

7a
GAS CONTINUING CALIBRATION VERIFICATION

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

ICal Date: 05-MAY-2011 Project: LORA LAKE

CCal Date: 06-MAY-2011 SDG No.: ST98-SU53-SU73-SU74

Lab File Name: 0506a003.d Inst/Det: PID1.I/RTX 502-2 FID

Gas Range	Area*	CalcAmnt	NomAmnt	%D
WAGas (Tol-C12)	836004	2.62	2.50	4.7
AKGas (C6-C10)	1354554	2.57	2.50	2.7
NWGas (Tol-Nap)	885484	2.60	2.50	4.1
8015B (2MP-TMB)	1687232	2.59	2.50	3.5

* 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: 05-MAY-2011 Project: LORA LAKE

CCal Date: 06-MAY-2011 SDG No.: ST98-SU53-SU73-SU74

Lab File Name: 0506a003.d Inst/Det: PID1.I/RTX 502-2 FID

Surrogate	Area	CalcAmnt	NomAmnt	RPD
Trifluorotol	49638	109.5	100.0	9.5
Bromoflrbenz	17630	101.0	100.0	1.0

BETX CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

SDG No.: ST98-SU53-SU73-SU74 Project No.: LORA LAKE

Instrument/Det: PID1/RTX 502-2 PID Calibration Date: 05/06/11

Init. Calib. Date(s): 05/05/11 Calib. File: 0506A015.D

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng/mL)	NOM AMOUNT (ng/mL)	%D
Benzene	7.06	7.01	7.11	23.17	25.00	-7.3
Toluene	9.95	9.90	10.00	23.18	25.00	-7.3
Ethylbenzene	12.85	12.80	12.90	24.13	25.00	-3.5
M/P-Xylene	13.01	12.96	13.06	46.99	50.00	-6.0
O-Xylene	13.97	13.94	14.00	24.25	25.00	-3.0
MTBE	4.54	4.49	4.59	22.54	25.00	-9.8
TFT(Surr)	7.91	7.85	7.95	93.51	100.0	-6.5
BB(Surr)	15.45	15.40	15.50	95.76	100.0	-4.2

FORM VII BETX

7a
GAS CONTINUING CALIBRATION VERIFICATION

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

ICal Date: 05-MAY-2011 Project: LORA LAKE

CCal Date: 06-MAY-2011 SDG No.: ST98-SU53-SU73-SU74

Lab File Name: 0506a016.d Inst/Det: PID1.I/RTX 502-2 FID

Gas Range	Area*	CalcAmnt	NomAmnt	%D
WAGas (Tol-C12)	795463	2.49	2.50	-0.4
AKGas (C6-C10)	1295895	2.46	2.50	-1.7
NWGas (Tol-Nap)	837278	2.46	2.50	-1.5
8015B (2MP-TMB)	1612176	2.47	2.50	-1.1

* 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: 05-MAY-2011
Project: LORA LAKE

CCal Date: 06-MAY-2011
SDG No.: ST98-SU53-SU73-SU74

Lab File Name: 0506a016.d
Inst/Det: PID1.I/RTX 502-2 FID

Surrogate	Area	CalcAmnt	NomAmnt	RPD
Trifluorotol	48653	108.6	100.0	8.6
Bromoflrbenz	17527	102.6	100.0	2.6

FORM VII-Surr

BETX/GAS ANALYTICAL SEQUENCE

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

SDG No.: SU21 Project: LORA LAKE APARTMENTS

Instrument ID: PID1 GC Detector: RTX 502-2 PID

Run Date: 05/04/11

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, AND STANDARDS, IS GIVEN BELOW:

METHOD SURROGATE RT
S1 : 7.90 S2 : 15.44

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	S1 #	S2 RT	S2 #
01	ZZZZZ	ZZZZZ	05/04/11	0526				
02	RT+BCAL 1	RT+BCAL 1	05/04/11	0555	7.90		15.44	
03	GCAL 1	GCAL 1	05/04/11	0625	7.90		15.44	
04	LCS0504S1	LCS0504	05/04/11	0654	7.90		15.45	
05	LCSD0504S1	LCSD0504	05/04/11	0723	7.90		15.45	
06	MB0504S1	MB0504	05/04/11	0752	7.90		15.44	
07	MW07-042711	SU21A	05/04/11	0840	7.90		15.44	
08	MW11-042711	SU21B	05/04/11	0909	7.90		15.45	
09	MW10-042711	SU21C	05/04/11	0939	7.90		15.45	
10	MW09-042711	SU21D	05/04/11	1008	7.90		15.45	
11	MW08-042711	SU21E	05/04/11	1037	7.90		15.45	
12	MW12-042711	SU21F	05/04/11	1106	7.90		15.45	
13	ZZZZZ	ZZZZZ	05/04/11	1135				
14	BCAL 2	BCAL 2	05/04/11	1205	7.90		15.45	
15	GCAL 2	GCAL 2	05/04/11	1233	7.90		15.45	

QC LIMITS

S1 = TFT(Surr) (+/- 0.05 MINUTES)
S2 = BB(Surr) (+/- 0.05 MINUTES)

* Values outside of QC limits.

BETX/GAS ANALYTICAL SEQUENCE

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

SDG No.: SU21 Project: LORA LAKE APARTMENTS

Instrument ID: PID1 GC Detector: RTX 502-2 FID

Run Date: 04/16/11

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, AND STANDARDS, IS GIVEN BELOW:

METHOD SURROGATE RT
S1 : 7.90 S2 : 15.45

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	S1 #	S2 RT	S2 #
01		RINSE	04/16/11	0900				
02		RT+BCAL 1	04/16/11	0929	7.90		15.45	
03		RINSE	04/16/11	0958				
04		BETX .25	04/16/11	1027	7.90		15.45	
05		BETX .5	04/16/11	1056	7.90		15.45	
06		BETX 5	04/16/11	1126	7.90		15.45	
07		BETX 25	04/16/11	1155	7.90		15.45	
08		BETX 50	04/16/11	1224	7.90		15.45	
09		BETX 100	04/16/11	1253	7.90		15.45	
10		BETX 200	04/16/11	1322	7.90		15.45	
11		BETX ICV	04/16/11	1352	7.90		15.45	
12		RINSE	04/16/11	1421				
13		GAS .1	04/16/11	1450	7.90		15.45	
14		GAS .25	04/16/11	1519	7.90		15.45	
15		GAS 1	04/16/11	1548	7.90		15.45	
16		GAS 2.5	04/16/11	1617	7.90		15.45	
17		GAS 5	04/16/11	1647	7.90		15.45	
18		GAS 20	04/16/11	1716			15.45	
19		RINSE	04/16/11	1745	7.89		15.40	
20		GAS ICV	04/16/11	1814	7.90		15.45	

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.: ST98-SU53-SU73-SU74 Project: LORA LAKE

Instrument ID: PID1 GC Detector: RTX 502-2 PID

Run Date: 05/06/11

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, AND STANDARDS, IS GIVEN BELOW:

METHOD SURROGATE RT
S1 : 7.90 S2 : 15.45

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	S1 #	S2 RT	S2 #
01	ZZZZZ	ZZZZZ	05/06/11	0544				
02	RT+BCAL 1	RT+BCAL 1	05/06/11	0613	7.90		15.45	
03	GCAL 1	GCAL 1	05/06/11	0642	7.90		15.45	
04	LCS0506S1	LCS0506	05/06/11	0711	7.90		15.45	
05	LCSD0506S1	LCSD0506	05/06/11	0741	7.91		15.45	
06	MB0506S1	MB0506	05/06/11	0810	7.91		15.45	
07	MW02-042611	ST98A	05/06/11	0901	7.91		15.45	
08	MW03-042611	ST98B	05/06/11	0930	7.90		15.45	
09	MW13-042611	ST98C	05/06/11	0959	7.91		15.45	
10	MW06-042611	ST98D	05/06/11	1028	7.91		15.45	
11	MW06-042611	ST98DMS	05/06/11	1057	7.91		15.45	
12	MW06-042611	ST98DMSD	05/06/11	1126	7.91		15.45	
13	MW5042811	SU53A	05/06/11	1155	7.91		15.45	
14	ZZZZZ	ZZZZZ	05/06/11	1224				
15	BCAL 2	BCAL 2	05/06/11	1253	7.91		15.45	
16	GCAL 2	GCAL 2	05/06/11	1322	7.91		15.45	
17	MW15042811	SU53B	05/06/11	1351	7.91		15.45	
18	MW4042811	SU53C	05/06/11	1420	7.91		15.45	
19	MW17042811	SU53D	05/06/11	1449	7.91		15.45	
20	MW14042811	SU53E	05/06/11	1518	7.91		15.45	
21	MW16042811	SU53F	05/06/11	1547	7.91		15.45	
22	MW-01-042911	SU73A	05/06/11	1616	7.91		15.45	
23	MW-01-042911	SU73B	05/06/11	1645	7.91		15.45	
24	B312-042911	SU74A	05/06/11	1715	7.91		15.45	
25	B310-042911	SU74B	05/06/11	1744	7.91		15.45	
26	B311-042911	SU74C	05/06/11	1813	7.91		15.45	
27	ZZZZZ	ZZZZZ	05/06/11	1842				
28	BCAL 3	BCAL 3	05/06/11	1911	7.91		15.45	
29	GCAL 3	GCAL 3	05/06/11	1941	7.91		15.45	

QC LIMITS

S1 = TFT(Surr) (+/- 0.05 MINUTES)
S2 = BB(Surr) (+/- 0.05 MINUTES)

* Values outside of QC limits.

BETX/GAS ANALYTICAL SEQUENCE

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

SDG No.: VPCC0505-2 Project: LORA LAKE

Instrument ID: PID1 GC Detector: RTX 502-2 PID

Run Date: 05/05/11

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, AND STANDARDS, IS GIVEN BELOW:

METHOD SURROGATE RT
S1 : 7.90 S2 : 15.45

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	S1 #	S2 RT	S2 #
01		RINSE	05/05/11	0517				
02		RT+BCAL 1	05/05/11	0546	7.90		15.45	
03		GCAL 1	05/05/11	0901	7.90		15.45	
04		RINSE	05/05/11	1139				
05		BETX .25	05/05/11	1209	7.90		15.45	
06		BETX .5	05/05/11	1238	7.90		15.45	
07		BETX 5	05/05/11	1307	7.90		15.45	
08		BETX 25	05/05/11	1336	7.90		15.45	
09		BETX 50	05/05/11	1405	7.91		15.45	
10		BETX 100	05/05/11	1434	7.90		15.45	
11		BETX 200	05/05/11	1504	7.90		15.45	
12		BETX ICV	05/05/11	1533	7.90		15.45	
13		RINSE	05/05/11	1602				
14		GAS .1	05/05/11	1631	7.91		15.45	
15		GAS .25	05/05/11	1700	7.90		15.45	
16		GAS 1	05/05/11	1730	7.90		15.45	
17		GAS 2.5	05/05/11	1759	7.90		15.45	
18		GAS 5	05/05/11	1828	7.90		15.45	
19		GAS 20	05/05/11	1857	7.90		15.45	
20		RINSE	05/05/11	1927				
21		GAS ICV	05/05/11	1956	7.90		15.45	

QC LIMITS

S1 = TFT(Surr) (+/- 0.05 MINUTES)
S2 = BB(Surr) (+/- 0.05 MINUTES)

* Values outside of QC limits.

Metals Analysis
Report and Summary QC Forms

ARI Job ID: ST98, SU21

Cover Page

INORGANIC ANALYSIS DATA PACKAGE

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd Snider

PROJECT: Lora Lake Apts RI

SDG: ST98

CLIENT ID	ARI ID	ARI LIMS ID	REPREP
MW02-042611	ST98A	11-9409	
PBW	ST98MB1	11-9409	
LCSW	ST98MB1SPK	11-9409	
MW03-042611	ST98B	11-9410	
MW13-042611	ST98C	11-9411	
MW06-042611	ST98D	11-9412	
MW06-042611D	ST98DDUP	11-9412	
MW06-042611S	ST98DSPK	11-9412	
MW07-042711	SU21A	11-9507	
MW11-042711	SU21B	11-9508	
MW10-042711	SU21C	11-9509	
MW09-042711	SU21D	11-9510	
MW08-042711	SU21E	11-9511	
MW12-042711	SU21F	11-9512	

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: 5/9/11 Title: Inorganics Director

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: MW02-042611
SAMPLE

Lab Sample ID: ST98A
LIMS ID: 11-9409
Matrix: Water
Data Release Authorized:
Reported: 05/09/11

QC Report No: ST98-Floyd Snider
Project: Lora Lake Apts RI
POS-LLA T.4010
Date Sampled: 04/26/11
Date Received: 04/26/11

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/03/11	200.8	05/06/11	7440-38-2	Arsenic	0.2	0.2	U
200.8	05/03/11	200.8	05/06/11	7439-92-1	Lead	0.1	0.1	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: MW03-042611
SAMPLE

Lab Sample ID: ST98B
LIMS ID: 11-9410
Matrix: Water
Data Release Authorized:
Reported: 05/09/11

QC Report No: ST98-Floyd Snider
Project: Lora Lake Apts RI
POS-LLA T.4010
Date Sampled: 04/26/11
Date Received: 04/26/11

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/03/11	200.8	05/06/11	**7440-38-2**	**Arsenic**	0.2	**0.4**	
200.8	05/03/11	200.8	05/06/11	7439-92-1	Lead	0.1	0.1	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: MW13-042611
SAMPLE

Lab Sample ID: ST98C
LIMS ID: 11-9411
Matrix: Water
Data Release Authorized:
Reported: 05/09/11

QC Report No: ST98-Floyd Snider
Project: Lora Lake Apts RI
POS-LLA T.4010
Date Sampled: 04/26/11
Date Received: 04/26/11

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/03/11	200.8	05/06/11	**7440-38-2**	**Arsenic**	0.2	**0.2**	
200.8	05/03/11	200.8	05/06/11	7439-92-1	Lead	0.1	0.1	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS **Sample ID: MW06-042611**
Page 1 of 1 **SAMPLE**

Lab Sample ID: ST98D
LIMS ID: 11-9412
Matrix: Water
Data Release Authorized:
Reported: 05/09/11

QC Report No: ST98-Floyd Snider
Project: Lora Lake Apts RI
POS-LLA T.4010
Date Sampled: 04/26/11
Date Received: 04/26/11

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/03/11	200.8	05/06/11	**7440-38-2**	**Arsenic**	0.2	**0.4**	
200.8	05/03/11	200.8	05/06/11	7439-92-1	Lead	0.1	0.1	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: MW07-042711
SAMPLE

Lab Sample ID: SU21A
LIMS ID: 11-9507
Matrix: Water
Data Release Authorized:
Reported: 05/09/11

QC Report No: SU21-Floyd Snider
Project: Lora Lake Apartments RI
POS-LLA Task 4010
Date Sampled: 04/27/11
Date Received: 04/27/11

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/03/11	200.8	05/06/11	**7440-38-2**	**Arsenic**	0.2	**0.5**	
200.8	05/03/11	200.8	05/06/11	7439-92-1	Lead	0.1	0.1	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: MW11-042711
SAMPLE

Lab Sample ID: SU21B
LIMS ID: 11-9508
Matrix: Water
Data Release Authorized:
Reported: 05/09/11

QC Report No: SU21-Floyd Snider
Project: Lora Lake Apartments RI
POS-LLA Task 4010
Date Sampled: 04/27/11
Date Received: 04/27/11

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/03/11	200.8	05/06/11	7440-38-2	Arsenic	0.2	0.2	U
200.8	05/03/11	200.8	05/06/11	7439-92-1	Lead	0.1	0.1	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: MW10-042711
SAMPLE

Lab Sample ID: SU21C
LIMS ID: 11-9509
Matrix: Water
Data Release Authorized:
Reported: 05/09/11

QC Report No: SU21-Floyd Snider
Project: Lora Lake Apartments RI
POS-LLA Task 4010
Date Sampled: 04/27/11
Date Received: 04/27/11

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/03/11	200.8	05/06/11	**7440-38-2**	**Arsenic**	0.2	**0.6**	
200.8	05/03/11	200.8	05/06/11	7439-92-1	Lead	0.1	0.1	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: MW09-042711
SAMPLE

Lab Sample ID: SU21D
LIMS ID: 11-9510
Matrix: Water
Data Release Authorized:
Reported: 05/09/11

QC Report No: SU21-Floyd Snider
Project: Lora Lake Apartments RI
POS-LLA Task 4010
Date Sampled: 04/27/11
Date Received: 04/27/11

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/03/11	200.8	05/06/11	**7440-38-2**	**Arsenic**	0.2	**0.2**	
200.8	05/03/11	200.8	05/06/11	7439-92-1	Lead	0.1	0.1	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: MW08-042711
SAMPLE

Lab Sample ID: SU21E
LIMS ID: 11-9511
Matrix: Water
Data Release Authorized:
Reported: 05/09/11

QC Report No: SU21-Floyd Snider
Project: Lora Lake Apartments RI
POS-LLA Task 4010
Date Sampled: 04/27/11
Date Received: 04/27/11

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/03/11	200.8	05/06/11	**7440-38-2**	**Arsenic**	0.2	**0.5**	
200.8	05/03/11	200.8	05/06/11	7439-92-1	Lead	0.1	0.1	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS **Sample ID: MW12-042711**
Page 1 of 1 **SAMPLE**

Lab Sample ID: SU21F
LIMS ID: 11-9512
Matrix: Water
Data Release Authorized:
Reported: 05/09/11

QC Report No: SU21-Floyd Snider
Project: Lora Lake Apartments RI
POS-LLA Task 4010
Date Sampled: 04/27/11
Date Received: 04/27/11

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/03/11	200.8	05/06/11	**7440-38-2**	**Arsenic**	0.2	**0.4**	
200.8	05/03/11	200.8	05/06/11	7439-92-1	Lead	0.1	0.1	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: MW06-042611
MATRIX SPIKE

Lab Sample ID: ST98D
LIMS ID: 11-9412
Matrix: Water
Data Release Authorized:
Reported: 05/09/11

QC Report No: ST98-Floyd Snider
Project: Lora Lake Apts RI
POS-LLA T.4010
Date Sampled: 04/26/11
Date Received: 04/26/11

MATRIX SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Spike	Spike Added	% Recovery	Q
Arsenic	200.8	0.450	25.8	25.0	101%	
Lead	200.8	0.100 U	23.8	25.0	95.2%	

Reported in µg/L

N-Control Limit Not Met
H-% Recovery Not Applicable, Sample Concentration Too High
NA-Not Applicable, Analyte Not Spiked

Percent Recovery Limits: 75-125%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: MW06-042611
DUPLICATE

Lab Sample ID: ST98D
LIMS ID: 11-9412
Matrix: Water
Data Release Authorized:
Reported: 05/09/11

QC Report No: ST98-Floyd Snider
Project: Lora Lake Apts RI
POS-LLA T.4010
Date Sampled: 04/26/11
Date Received: 04/26/11

MATRIX DUPLICATE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Duplicate	RPD	Control Limit	Q
Arsenic	200.8	0.4	0.4	0.0%	+/- 0.2	L
Lead	200.8	0.1 U	0.1 U	0.0%	+/- 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 **Sample ID: LAB CONTROL**

Lab Sample ID: ST98LCS
LIMS ID: 11-9409
Matrix: Water
Data Release Authorized:
Reported: 05/09/11

QC Report No: ST98-Floyd Snider
Project: Lora Lake Apts RI
POS-LLA T.4010
Date Sampled: NA
Date Received: NA

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Arsenic	200.8	24.6	25.0	98.4%	
Lead	200.8	24.6	25.0	98.4%	

Reported in µg/L

N-Control limit not met
Control Limits: 80-120%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS **Sample ID: METHOD BLANK**

Lab Sample ID: ST98MB
LIMS ID: 11-9409
Matrix: Water
Data Release Authorized:
Reported: 05/09/11

QC Report No: ST98-Floyd Snider
Project: Lora Lake Apts RI
POS-LLA T.4010
Date Sampled: NA
Date Received: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/03/11	200.8	05/06/11	7440-38-2	Arsenic	0.2	0.2	U
200.8	05/03/11	200.8	05/06/11	7439-92-1	Lead	0.1	0.1	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: ST98

ANALYTE	EL	M	RUN	ICVTV	ICV	%R	CCVTV	CCV1	%R	CCV2	%R	CCV3	%R	CCV4	%R	CCV5	%R
Arsenic	AS	PMS	MS050681	50.0	49.36	98.7	50.0	49.67	99.3	50.20	100.4	50.21	100.4	50.44	100.9	50.72	101.4
Lead	PB	PMS	MS050681	50.0	48.88	97.8	50.0	49.25	98.5	50.03	100.1	49.16	98.3	48.67	97.3	48.82	97.6

ST98.00211

Control Limits: Mercury 80-120; Other Metals 90-110

Calibration Verification

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd Snider

PROJECT: Lora Lake Apts RI

SDG: ST98

UNITS: ug/L

ANALYTE	EL	M	RUN	CCVTV	CCV6	%R	CCV7	%R	CCV8	%R	CCV9	%R	CCV10	%R	CCV11	%R
Arsenic	AS	PMS	MS050681	50.0	50.48	101.0	50.43	100.9	50.78	101.6						
Lead	PB	PMS	MS050681	50.0	47.57	95.1	47.84	95.7	48.55	97.1						

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: ST98

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	MS050681	0.2	0.18	**90.0**										
Lead	PB	PMS	MS050681	0.1	0.11	**110.0**										

ST98:00213

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

SDG: ST98

UNITS: ug/L

ANALYTE	EL	METH	RUN	CRDL	IDL	ICB	C	CCB1	C	CCB2	C	CCB3	C	CCB4	C	CCB5	C
Arsenic	AS	PMS	MS050681	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	MS050681	3.0	0.1	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U

ST98:00214

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd Snider

PROJECT: Lora Lake Apts RI

SDG: ST98

UNITS: ug/L

ANALYTE	EL	METH	RUN	CRDL	IDL	CCB6	C	CCB7	C	CCB8	C	CCB9	C	CCB10	C	CCB11	C
Arsenic	AS	PMS	MS050681	10.0	0.2	0.2	U	0.2	U	0.2	U						
Lead	PB	PMS	MS050681	3.0	0.1	0.1	U	0.1	U	0.1	U						

ST98 : 00215

ICP Interference Check Sample

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd Snider

PROJECT: Lora Lake Apts RI

SDG: ST98

ICS SOURCE: I.V.

RUNID: MS050681

INSTRUMENT ID: PE ELAN 6000

UNITS: ug/L

ANALYTE	ICSA TV	ICSAB TV	ICSA1	ICSAB1	%R	ICSA2	ICSAB2	%R	ICSA3	ICSAB3	%R
Antimony			0.1	0.1							
Arsenic		20	0.0	19.7	**98.5**						
Barium			0.0	0.1							
Cadmium		20	0.1	19.4	**97.0**						
Chromium		20	0.7	20.9	**104.5**						
Cobalt		20	0.0	20.6	**103.0**						
Copper		20	0.5	20.5	**102.5**						
Manganese		20	0.0	20.0	**100.0**						
Molybdenum	400	400	437.5	439.5	**109.9**						
Nickel		20	0.7	21.2	**106.0**						
Silver		20	0.0	19.1	**95.5**						
Vanadium			0.0	-0.6							
Zinc		20	1.1	20.5	**102.5**						

ST98:00216

IDLs and ICP Linear Ranges

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd Snider

PROJECT: Lora Lake Apts RI

SDG: ST98 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	4/1/2011		
Lead	PB	PMS	PE ELAN 6000 MS	0.00		3	0.1	4/1/2011		

Preparation Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd Snider

PROJECT: Lora Lake Apts RI

SDG: ST98

ANALYSIS METHOD: PMS

ARI PREP CODE: REN

PREPDATE: 5/3/2011

CLIENT ID	ARI ID	MASS (g)	INITIAL VOLUME (mL)	FINAL VOLUME (mL)
MW02-042611	ST98A	0.000	50.0	25.0
MW03-042611	ST98B	0.000	50.0	25.0
MW13-042611	ST98C	0.000	50.0	25.0
MW06-042611	ST98D	0.000	50.0	25.0
MW06-042611D	ST98DDUP	0.000	50.0	25.0
MW06-042611S	ST98DSPK	0.000	50.0	25.0
PBW	ST98MB1	0.000	50.0	25.0
LCSW	ST98MB1SPK	0.000	50.0	25.0
MW07-042711	SU21A	0.000	50.0	25.0
MW11-042711	SU21B	0.000	50.0	25.0
MW10-042711	SU21C	0.000	50.0	25.0
MW09-042711	SU21D	0.000	50.0	25.0
MW08-042711	SU21E	0.000	50.0	25.0
MW12-042711	SU21F	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: 5/6/2011

SDG: ST98 | RUNID: MS050681 METHOD: PMS | END DATE: 5/6/2011

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	08590				X																	X									
S1	S1	1.00	09070				X																	X									
S2	S2	1.00	09150				X																	X									
S3	S3	1.00	09220				X																	X									
S4	S4	1.00	09300				X																	X									
ZZZZZZ	Rinse Sampl	1.00	09380																														
ICV	MICV	1.00	09450				X																	X									
ICB	ICB	1.00	09520				X																	X									
CCV	MCCV1	1.00	10000				X																	X									
CCB	CCB1	1.00	10070				X																	X									
CRI	MCRI	1.00	10140				X																	X									
ICSA	ICSAI	1.00	10210				X																	X									
ICSAB	ICSABI	1.00	10290				X																	X									
ZZZZZZ	LR200	1.00	10360																														
ZZZZZZ	LR300	1.00	10440																														
CCV	MCCV2	1.00	10510				X																	X									
CCB	CCB2	1.00	10580				X																	X									
ZZZZZZ	SU04A-L	10.00	11080																														
ZZZZZZ	SU04A	2.00	11140																														
ZZZZZZ	SU04E-L	10.00	11210																														
ZZZZZZ	SU04E	2.00	11270																														
ZZZZZZ	SU02N	2.00	11340																														
ZZZZZZ	ST73CDUP	2.00	11400																														
ZZZZZZ	ST73C	2.00	11470																														
ZZZZZZ	ST73B	2.00	11540																														
ZZZZZZ	ST73F	2.00	12000																														
ZZZZZZ	ST73I	2.00	12070																														
CCV	MCCV3	1.00	12130				X																	X									
CCB	CCB3	1.00	12210				X																	X									
ZZZZZZ	SU11ADUP	2.00	12280																														
ZZZZZZ	SU11A	2.00	12340																														
ZZZZZZ	SU11ASPK	2.00	12410																														
ZZZZZZ	SU11FDUP	2.00	12470																														
ZZZZZZ	SU11F	2.00	12540																														
ZZZZZZ	SU11FSPK	2.00	13000																														

ST98:00219

FORM XIV

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd Snider

PROJECT: Lora Lake Apts RI | INSTRUMENT ID: PE ELAN 6000 MS | START DATE: 5/6/2011

SDG: ST98 | RUNID: MS050681 METHOD: PMS | END DATE: 5/6/2011

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	SU11B	2.00	13070																														
ZZZZZZ	SU11C	2.00	13140																														
ZZZZZZ	SU11D	2.00	13200																														
ZZZZZZ	SU11G	2.00	13270																														
CCV	MCCV4	1.00	13330				X																	X									
CCB	CCB4	1.00	13400				X																	X									
ZZZZZZ	ST77MB	20.00	13480																														
ZZZZZZ	ST77MBSPK	20.00	13550																														
ZZZZZZ	SU11H	2.00	14010																														
ZZZZZZ	SU11I	2.00	14080																														
ZZZZZZ	ST89A	2.00	14140																														
ZZZZZZ	ST77A	20.00	14210																														
ZZZZZZ	ST77B	20.00	14280																														
ZZZZZZ	ST77C	20.00	14340																														
ZZZZZZ	ST77D	20.00	14410																														
ZZZZZZ	ST77E	20.00	14470																														
CCV	MCCV5	1.00	14540				X																	X									
CCB	CCB5	1.00	15010				X																	X									
ZZZZZZ	ST89MB	2.00	15180																														
ZZZZZZ	ST89MBSPK	2.00	15240																														
ZZZZZZ	ST77F	100.00	15310																														
ZZZZZZ	ST77F	20.00	15370																														
ZZZZZZ	ST89B	2.00	15440																														
ZZZZZZ	ST65A	5.00	15500																														
ZZZZZZ	ST65E	5.00	15570																														
MW02-042611	ST98A	2.00	16040				X																	X									
MW03-042611	ST98B	2.00	16100				X																	X									
MW13-042611	ST98C	2.00	16170				X																	X									
CCV	MCCV6	1.00	16230				X																	X									
CCB	CCB6	1.00	16310				X																	X									
PBW	ST98MB1	2.00	16380				X																	X									
LCSW	ST98MB1SPK	2.00	16440				X																	X									
MW06-042611D	ST98DDUP	2.00	16510				X																	X									
MW06-042611	ST98D	2.00	16570				X																	X									
MW06-042611S	ST98DSPK	2.00	17040				X																	X									

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd Snider

PROJECT: Lora Lake Apts RI | INSTRUMENT ID: PE ELAN 6000 MS | START DATE: 5/6/2011

SDG: ST98 | RUNID: MS050681 METHOD: PMS | END DATE: 5/6/2011

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
MW07-042711	SU21A	2.00	17100				X																	X									
MW11-042711	SU21B	2.00	17170				X																	X									
MW10-042711	SU21C	2.00	17240				X																	X									
MW09-042711	SU21D	2.00	17300				X																	X									
MW08-042711	SU21E	2.00	17370				X																	X									
CCV	MCCV7	1.00	17430				X																	X									
CCB	CCB7	1.00	17500				X																	X									
ZZZZZZ	SU15MB1	2.00	17580																														
ZZZZZZ	SU15MB2	2.00	18040																														
ZZZZZZ	SU15MB1SPK	2.00	18110																														
ZZZZZZ	SU15MB2SPK	2.00	18170																														
MW12-042711	SU21F	2.00	18240				X																	X									
ZZZZZZ	SU15A	2.00	18300																														
ZZZZZZ	SU15B	2.00	18370																														
ZZZZZZ	SU15C	2.00	18440																														
ZZZZZZ	SU15D	2.00	18500																														
ZZZZZZ	SU15E	2.00	18570																														
CCV	MCCV8	1.00	19030				X																	X									
CCB	CCB8	1.00	19100				X																	X									

ST98 : 00221

General Chemistry Analysis
Report and Summary QC Forms

ARI Job ID: ST98, SU21

SAMPLE RESULTS-CONVENTIONALS
ST98-Floyd Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 04/28/11

Project: Lora Lake Apts RI
Event: POS-LLA T.4010
Date Sampled: 04/26/11
Date Received: 04/26/11

Client ID: MW02-042611
ARI ID: 11-9409 ST98A

Analyte	Date Batch	Method	Units	RL	Sample
pH	04/26/11 042611#1	EPA 150.1	std units	0.01	6.69
Total Suspended Solids	04/27/11 042711#1	EPA 160.2	mg/L	1.1	< 1.1 U

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
ST98-Floyd Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 04/28/11

Project: Lora Lake Apts RI
Event: POS-LLA T.4010
Date Sampled: 04/26/11
Date Received: 04/26/11

Client ID: MW03-042611
ARI ID: 11-9410 ST98B

Analyte	Date Batch	Method	Units	RL	Sample
pH	04/26/11 042611#1	EPA 150.1	std units	0.01	6.52
Total Suspended Solids	04/27/11 042711#1	EPA 160.2	mg/L	1.1	< 1.1 U

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
ST98-Floyd Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 04/28/11

Project: Lora Lake Apts RI
Event: POS-LLA T.4010
Date Sampled: 04/26/11
Date Received: 04/26/11

Client ID: MW13-042611
ARI ID: 11-9411 ST98C

Analyte	Date Batch	Method	Units	RL	Sample
pH	04/26/11 042611#1	EPA 150.1	std units	0.01	6.21
Total Suspended Solids	04/27/11 042711#1	EPA 160.2	mg/L	1.1	16.4

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
ST98-Floyd Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 04/28/11

Project: Lora Lake Apts RI
Event: POS-LLA T.4010
Date Sampled: 04/26/11
Date Received: 04/26/11

Client ID: MW06-042611
ARI ID: 11-9412 ST98D

Analyte	Date Batch	Method	Units	RL	Sample
pH	04/26/11 042611#1	EPA 150.1	std units	0.01	6.02
Total Suspended Solids	04/27/11 042711#1	EPA 160.2	mg/L	1.1	1.6

RL Analytical reporting limit
U Undetected at reported detection limit

REPLICATE RESULTS-CONVENTIONALS
ST98-Floyd Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 04/28/11

Project: Lora Lake Apts RI
Event: POS-LLA T.4010
Date Sampled: 04/26/11
Date Received: 04/26/11

Analyte	Method	Date	Units	Sample	Replicate(s)	RPD/RSD
ARI ID: ST98A Client ID: MW02-042611						
pH	EPA 150.1	04/26/11	std units	6.69	6.68	0.01
ARI ID: ST98D Client ID: MW06-042611						
Total Suspended Solids	EPA 160.2	04/27/11	mg/L	1.6	1.4	13.3%

pH is evaluated as the Absolute Difference between the values rather than Relative Percent Difference

LAB CONTROL RESULTS-CONVENTIONALS
ST98-Floyd Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 04/28/11

Project: Lora Lake Apts RI
Event: POS-LLA T.4010
Date Sampled: NA
Date Received: NA

Analyte/Method	QC ID	Date	Units	LCS	Spike Added	Recovery
pH EPA 150.1	ICVL	04/26/11	std units	7.05	7.00	0.05
Total Suspended Solids EPA 160.2	ICVL	04/27/11	mg/L	48.1	50.0	96.2%

pH is evaluated as the Absolute Difference between the values rather than Percent Recovery.

METHOD BLANK RESULTS-CONVENTIONALS
ST98-Floyd Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 04/28/11

Project: Lora Lake Apts RI
Event: POS-LLA T.4010
Date Sampled: NA
Date Received: NA

Analyte	Method	Date	Units	Blank	ID
Total Suspended Solids	EPA 160.2	04/27/11	mg/L	< 1.0 U	

INORGANICS ANALYSIS DATA SHEET
pH by Method EPA 150.1

ANALYTICAL RESOURCES INCORPORATED

Data Release Authorized:
Reported: 05/04/11
Date Received: 04/27/11
Page 1 of 1

QC Report No: SU21-Floyd Snider
Project: Lora Lake Apartments RI
POS-LLA Task 4010

Client/ ARI ID	Date Sampled	Matrix	Analysis Date & Batch	RL	Result
MW07-042711 SU21A 11-9507	04/27/11	Water	04/27/11 13:48 042711#1	0.01	6.86
MW11-042711 SU21B 11-9508	04/27/11	Water	04/27/11 13:48 042711#1	0.01	6.36
MW10-042711 SU21C 11-9509	04/27/11	Water	04/27/11 13:48 042711#1	0.01	6.74
MW09-042711 SU21D 11-9510	04/27/11	Water	04/27/11 13:48 042711#1	0.01	6.25
MW08-042711 SU21E 11-9511	04/27/11	Water	04/27/11 13:48 042711#1	0.01	6.20
MW12-042711 SU21F 11-9512	04/27/11	Water	04/27/11 13:48 042711#1	0.01	5.90

Reported in std units

RL-Analytical reporting limit
U-Undetected at reported detection limit

INORGANICS ANALYSIS DATA SHEET
Total Suspended Solids by Method EPA 160.2

ANALYTICAL RESOURCES INCORPORATED

Data Release Authorized:
Reported: 05/04/11
Date Received: 04/27/11
Page 1 of 1

QC Report No: SU21-Floyd Snider
Project: Lora Lake Apartments RI
POS-LLA Task 4010

Client/ ARI ID	Date Sampled	Matrix	Analysis Date & Batch	RL	Result
MW07-042711 SU21A 11-9507	04/27/11	Water	04/28/11 15:54 042811#1	1.1	1.4
MW11-042711 SU21B 11-9508	04/27/11	Water	04/28/11 15:54 042811#1	1.0	< 1.0 U
MW10-042711 SU21C 11-9509	04/27/11	Water	04/28/11 15:54 042811#1	1.0	< 1.0 U
MW09-042711 SU21D 11-9510	04/27/11	Water	04/28/11 15:54 042811#1	1.1	< 1.1 U
MW08-042711 SU21E 11-9511	04/27/11	Water	04/28/11 15:54 042811#1	1.1	< 1.1 U
MW12-042711 SU21F 11-9512	04/27/11	Water	04/28/11 15:54 042811#1	1.0	< 1.0 U

Reported in mg/L

RL-Analytical reporting limit
U-Undetected at reported detection limit

REPLICATE RESULTS-CONVENTIONALS
SU21-Floyd Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 05/04/11

Project: Lora Lake Apartments RI
Event: POS-LLA Task 4010
Date Sampled: 04/27/11
Date Received: 04/27/11

Analyte	Date	Units	Sample	Replicate(s)	RPD/RSD
ARI ID: SU21A Client ID: MW07-042711					
pH	04/27/11	std units	6.86	6.86	0.00

pH is evaluated as the Absolute Difference between the values rather than Relative Percent Difference

LAB CONTROL RESULTS-CONVENTIONALS
SU21-Floyd Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 05/04/11

Project: Lora Lake Apartments RI
Event: POS-LLA Task 4010
Date Sampled: NA
Date Received: NA

Analyte	Date/Time	Units	LCS	Spike Added	Recovery
pH	04/27/11	std units	7.03	7.00	0.03
Total Suspended Solids	04/28/11 15:54	mg/L	48.8	50.0	97.6%

pH is evaluated as the Absolute Difference between the values rather than Percent Recovery.

METHOD BLANK RESULTS-CONVENTIONALS
SU21-Floyd Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 05/04/11

Project: Lora Lake Apartments RI
Event: POS-LLA Task 4010
Date Sampled: NA
Date Received: NA

Analyte	Date/Time	Units	Blank
Total Suspended Solids	04/28/11 15:54	mg/L	< 1.0 U

SIM Volatile Raw Data
Initial Calibration Notes and Raw Data

ARI Job ID: ST98, SU21

Analytical Resources, Incorporated
Analytical Chemists and Consultants

VOA Analyst Notes / Corrective Action Log

ARI Project ID: NT7 SIM CURVE. 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: 4/26/11 Analysis Start Date: 4/26/11

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: _____ **Date:** 5/4/11

Reviewer: _____ **Date:** 5/4/11

Analytical Resources Inc.: Volatile Organics Instrument Log

NT-7 Serial No.:GC=US00024417, MS=US72821196

Date: 4/26/11 Analysis: SM VOA Analyst: MH

GC Program: VC Column No: 850322 Column Type: RTXVMS

Instrument Tune (.U or .CT.): 0426001 EM Voltage: 1647

Calibration File: 042601Y Curve Date: 4/26/11

IS/SS	Ical/Ccal	LCS/ICV
VW685-1	VW682-2	VW682-2

INTERNAL STANDARD SUMMARY FOR DATABATCH - /chem1/nt7.i/26APR2011.b

	Time	Filename	LabID	ClientID	WT				
1	0607	0426001.d	BFB0426	BFB0426	0.00 | 0.00	0|	0.00	0|
2	0642	0426002.d	CC0426		1 | 5.32	332515|	5.76	634854|
3	0708	0426003.d	LCS0426		1 | 5.33	347755|	5.75	657907|
4	0849	0426004.d	40000426		1 | 5.32	417755|	6.15	46790|
5	0911	0426005.d	20000426		1 | 4.85	457|	6.16	5993|
6	0934	0426006.d	10000426		1 | 4.90	102|	6.16	2762|
7	0956	0426007.d	05000426		1 | 4.88	51|	6.16	1307|
8	1019	0426008.d	01000426		1 | 4.93	59|	6.17	265|
9	1042	0426009.d	00500426		1 | 4.93	40|	6.11	21|
10	1104	0426010.d	00200426		1 | 5.33	260930|	5.77	507355|
11	1130	0426011.d	00500426	50	1 | 5.33	338988|	5.77	623089|
12	1155	0426012.d	01000426	100	1 | 5.32	311045|	5.76	572143|
13	1221	0426013.d	05000426	500	1 | 5.32	310955|	5.76	577506|
14	1247	0426014.d	1000426	1000	1 | 5.33	363407|	5.75	667797|
15	1312	0426015.d	10000426		1 | 5.32	411992|	5.76	753329|
16	1337	0426016.d	20000426	2000	1 | 5.33	430008|	5.75	798217|
17	1403	0426017.d	40000426	4000	1 | 5.32	457509|	5.76	848269|
18	1429	0426018.d	ICV0426	ICV	1 | 5.33	428287|	5.75	783828|
19	1500	0426019.d	00200426	20	1 | 5.32	391217|	5.76	742226|

MH
5/4/11

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/26APR2011.b

ARI Job No.: 0050 Method: sim042611.m Instrument: nt7.i Date: 26-APR-2011

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1130	0426011.d	00500426	50	1	cis-1,2-dichloroethene, Benzene, Trichloroethene, Trans-1,2-Dichloroethene, d4-1,2-Dichloroethane,
1155	0426012.d	01000426	100	1	cis-1,2-dichloroethene, Benzene, Trichloroethene, 1,1,2,2-Tetrachloroethane, Trans-1,2-Dichloroethene, d4-1,2-Dichloroethane,
1221	0426013.d	05000426	500	1	cis-1,2-dichloroethene, Benzene, Trichloroethene, Trans-1,2-Dichloroethene, d4-1,2-Dichloroethane,
1247	0426014.d	1000426	1000	1	cis-1,2-dichloroethene, Benzene, Trichloroethene, Trans-1,2-Dichloroethene, d4-1,2-Dichloroethane,
1337	0426016.d	20000426	2000	1	cis-1,2-dichloroethene, Benzene, Trichloroethene, Trans-1,2-Dichloroethene, d4-1,2-Dichloroethane,
1403	0426017.d	40000426	4000	1	cis-1,2-dichloroethene, Benzene, Trichloroethene, Trans-1,2-Dichloroethene, d4-1,2-Dichloroethane,
1429	0426018.d	ICV0426	ICV	1	NO MANUAL INTEGRATION
1500	0426019.d	00200426	20	1	NO MANUAL INTEGRATION

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 26-APR-2011 08:49
End Cal Date : 26-APR-2011 15:00
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/nt7.i/26APR2011.b/sim042611.m
Cal Date : 27-Apr-2011 06:43 monicah
Curve Type : Average

Calibration File Names:
Level 1: /chem1/nt7.i/26APR2011.b/0426019.d
Level 2: /chem1/nt7.i/26APR2011.b/0426011.d
Level 3: /chem1/nt7.i/26APR2011.b/0426012.d
Level 4: /chem1/nt7.i/26APR2011.b/0426013.d
Level 5: /chem1/nt7.i/26APR2011.b/0426014.d
Level 6: /chem1/nt7.i/26APR2011.b/0426016.d
Level 7: /chem1/nt7.i/26APR2011.b/0426017.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	1.07153	1.11025	1.23426	1.28098	1.13636	0.97283	0.89746	1.10052	12.315	
2 1,1-Dichloroethene	0.84199	0.92800	1.00031	1.04732	0.87812	0.74915	0.68456	0.87564	14.847	
175 Trans-1,2-Dichloroethene	0.94564	0.89189	0.99191	1.05283	0.88071	0.75035	0.71381	0.88961	13.816	
177 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
3 cis-1,2-dichloroethene	0.74971	0.99537	1.08296	1.15781	0.99803	0.85897	0.80519	0.94974	15.768	
6 Benzene	2.66327	2.35806	2.52669	2.58728	2.27560	1.91901	1.69591	2.28941	15.740	

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 26-APR-2011 08:49
End Cal Date : 26-APR-2011 15:00
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/nt7.i/26APR2011.b/sim042611.m
Cal Date : 27-Apr-2011 06:43 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	1.29800	1.42459	1.54399	1.77958	1.48203	1.25650	1.18539	1.42431	14.189
8 Trichloroethene	0.39927	0.41875	0.41799	0.45439	0.39069	0.34008	0.32332	0.39208	11.758
10 Tetrachloroethene	0.27674	0.29367	0.34493	0.36431	0.31698	0.27205	0.24911	0.30255	13.727
11 1,1,2,2-Tetrachloroethane	0.31891	0.36964	0.36276	0.42701	0.39667	0.33913	0.32125	0.36220	11.002
$ 5 d4-1,2-Dichloroethane	0.87402	0.93416	0.94934	0.94171	0.89275	0.86897	0.84712	0.90115	4.489
$ 9 d8-Toluene	1.23795	1.28407	1.25861	1.27736	1.28470	1.28000	1.29474	1.27392	1.513

MH
5/4/11

Data File: /chem1/nt7.i/26APR2011.b/0426001.d

Page 1

Date : 26-APR-2011 06:07

Client ID: BFB0426

Instrument: nt7.i

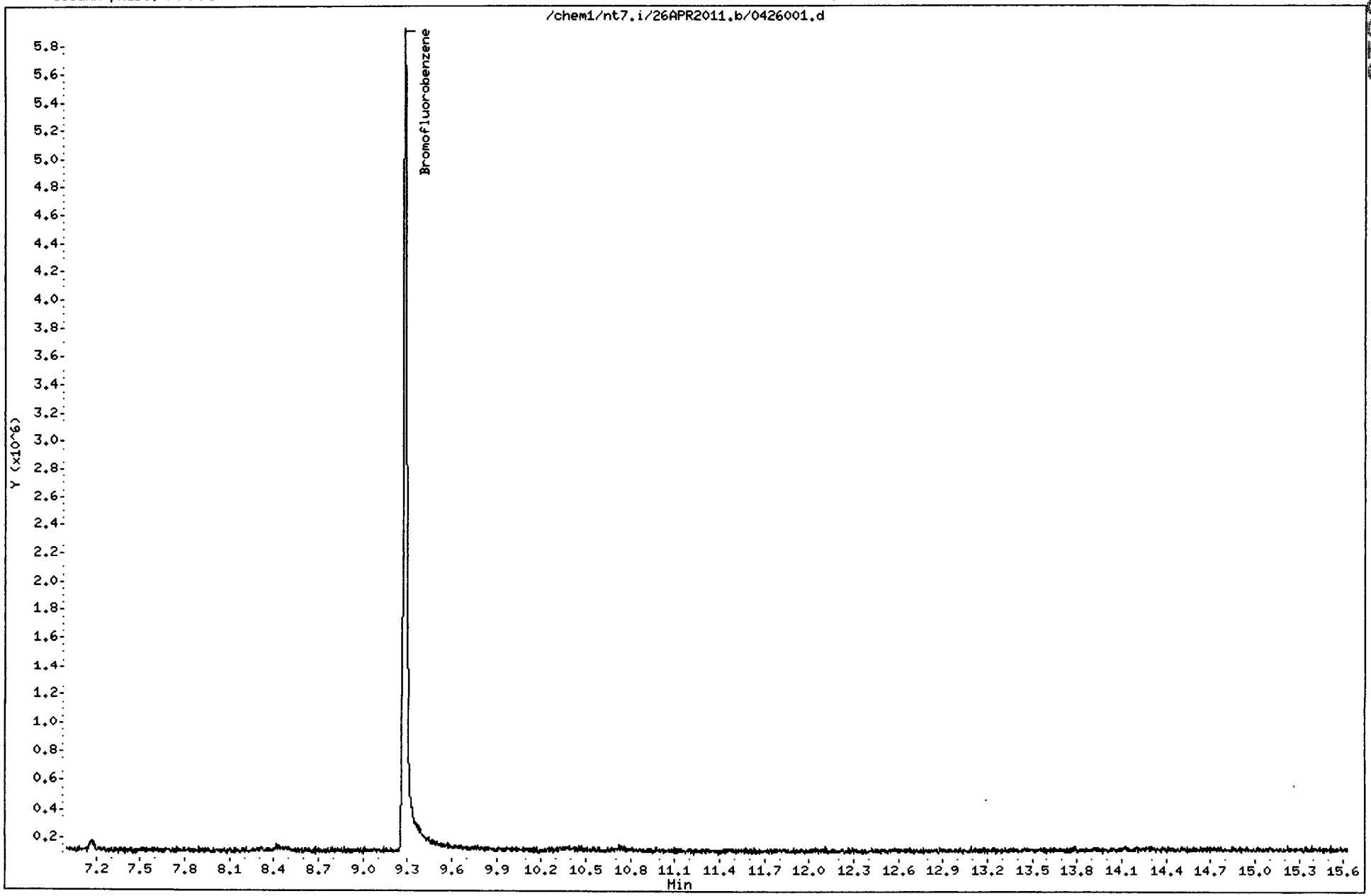
Sample Info: BFB0426,BFB0426,1,26APR2011,,

Operator: MH

Column phase: RTXVMS

Column diameter: 0.18

ST98 00241



Data File: /chem1/nt7.i/26APR2011.b/0426001.d

Date : 26-APR-2011 06:07

Client ID: BFB0426

Instrument: nt7.i

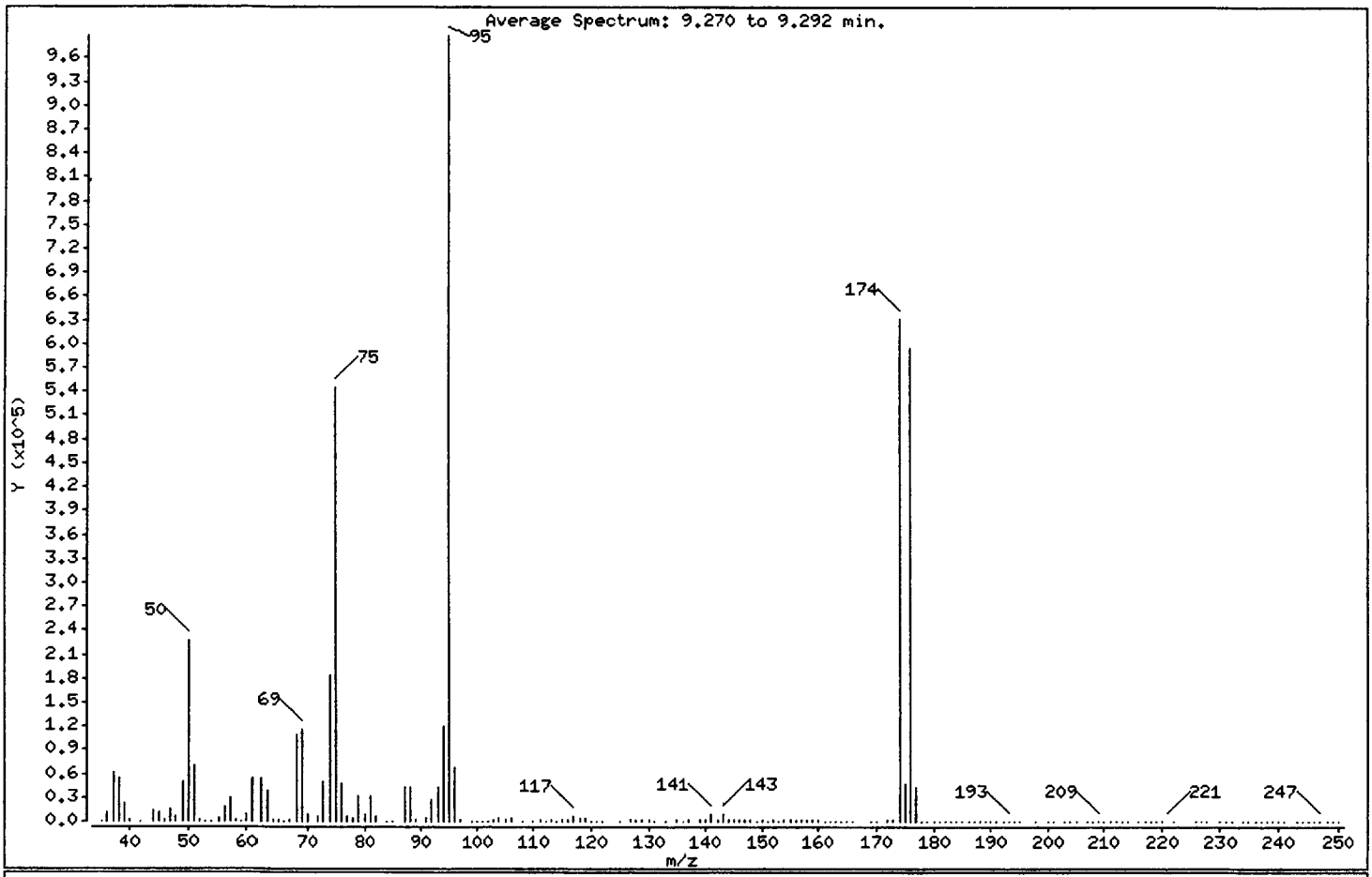
Sample Info: BFB0426,BFB0426,1,26APR2011,,

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	22.92
75	30.00 - 66.00% of mass 95	55.15
96	5.00 - 9.00% of mass 95	6.93
173	Less than 2.00% of mass 174	0.26 (0.40)
174	50.00 - 101.00% of mass 95	63.80
175	4.00 - 9.00% of mass 174	4.72 (7.40)
176	93.00 - 101.00% of mass 174	60.13 (94.25)
177	5.00 - 9.00% of mass 176	4.28 (7.11)

Data File: /chem1/nt7.i/26APR2011.b/0426001.d

Date : 26-APR-2011 06:07

Client ID: BFB0426

Instrument: nt7.i

Sample Info: BFB0426,BFB0426,1,26APR2011,,

Operator: MH

Column phase: RTXVMS

Column diameter: 0.18

Data File: 0426001.d

Spectrum: Average Spectrum: 9.270 to 9.292 min.

Location of Maximum: 95.00

Number of points: 217

m/z	Y	m/z	Y	m/z	Y	m/z	Y
34.00	568	89.00	1160	144.00	1839	199.00	267
35.00	681	90.00	901	145.00	1400	200.00	472
36.00	10929	91.00	4136	146.00	1776	201.00	348
37.00	61224	92.00	28256	147.00	1738	202.00	242
38.00	53952	93.00	43728	148.00	1774	203.00	273
39.00	22624	94.00	120184	149.00	954	204.00	342
40.00	1720	95.00	988096	150.00	1690	205.00	292
41.00	529	96.00	68488	151.00	777	206.00	441
42.00	381	97.00	2154	152.00	1598	207.00	466
43.00	716	98.00	273	153.00	776	208.00	287
44.00	13293	99.00	337	154.00	1441	209.00	630
45.00	11189	100.00	298	155.00	1607	210.00	511
46.00	1165	101.00	467	156.00	2252	211.00	404
47.00	17016	102.00	284	157.00	1272	212.00	351
48.00	6413	103.00	1310	158.00	1665	213.00	315
49.00	50088	104.00	4898	159.00	1422	214.00	395
50.00	226432	105.00	1262	160.00	1246	215.00	291
51.00	71136	106.00	4261	161.00	829	216.00	464
52.00	2624	107.00	1055	162.00	476	217.00	543
53.00	594	108.00	336	163.00	558	218.00	341
54.00	396	109.00	716	164.00	308	219.00	568
55.00	3576	110.00	967	165.00	505	220.00	302
56.00	18800	111.00	1577	166.00	458	221.00	598
57.00	29656	112.00	1017	167.00	169	222.00	202
58.00	2235	113.00	1145	168.00	260	223.00	595
59.00	432	114.00	968	169.00	497	224.00	484
60.00	9638	115.00	1360	170.00	865	225.00	349
61.00	53672	116.00	3284	171.00	668	226.00	498
62.00	54616	117.00	6319	172.00	3003	227.00	492
63.00	39296	118.00	3461	173.00	2538	228.00	270
64.00	2998	119.00	5181	174.00	630400	229.00	473
65.00	2794	120.00	927	175.00	46648	230.00	376
66.00	542	121.00	621	176.00	594112	231.00	311
67.00	1923	122.00	884	177.00	42264	232.00	20
68.00	109472	123.00	627	178.00	805	233.00	379

Data File: /chem1/nt7.i/26APR2011.b/0426001.d

Date : 26-APR-2011 06:07

Client ID: BFB0426

Instrument: nt7.1

Sample Info: BFB0426,BFB0426,1,26APR2011,,

Operator: MH

Column phase: RTXVMS

Column diameter: 0.18

Data File: 0426001.d

Spectrum: Average Spectrum: 9.270 to 9.292 min.

Location of Maximum: 95.00

Number of points: 217

m/z	Y	m/z	Y	m/z	Y	m/z	Y
69.00	116808	124.00	846	179.00	592	234.00	117
70.00	8820	125.00	914	180.00	386	235.00	417
71.00	241	126.00	1100	181.00	428	236.00	421
72.00	6461	127.00	1845	182.00	297	237.00	570
73.00	50000	128.00	3004	183.00	231	238.00	558
74.00	184704	129.00	1219	184.00	369	239.00	417
75.00	544896	130.00	3227	185.00	488	240.00	181
76.00	48264	131.00	1042	186.00	603	241.00	249
77.00	6928	132.00	589	187.00	343	242.00	421
78.00	5213	133.00	852	188.00	644	243.00	425
79.00	31016	134.00	825	189.00	314	244.00	166
80.00	9237	135.00	1920	190.00	149	245.00	434
81.00	31840	136.00	580	191.00	605	246.00	632
82.00	6066	137.00	2101	192.00	573	247.00	695
83.00	1050	138.00	344	193.00	787	248.00	449
84.00	686	139.00	1142	194.00	474	249.00	410
85.00	484	140.00	1434	195.00	583	250.00	189
86.00	799	141.00	8345	196.00	476		
87.00	43920	142.00	2106	197.00	203		
88.00	42736	143.00	8004	198.00	155		

MH 5/4/11

Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/26APR2011.b/0426011.d
Lab Smp Id: 00500426 Client Smp ID: 50
Inj Date : 26-APR-2011 11:30
Operator : MH Inst ID: nt7.i
Smp Info : 00500426,10,10,0,
Misc Info : 11-
Comment :
Method : /chem1/nt7.i/26APR2011.b/sim042611.m
Meth Date : 04-May-2011 06:35 monicah Quant Type: ISTD
Cal Date : 26-APR-2011 11:30 Cal File: 0426011.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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/L)	ON-COL (ng/L)
	1 Vinyl Chloride	62	1.552	1.554	(0.291)	18818	50.0000	50.442
	2 1,1-Dichloroethene	96	2.510	2.510	(0.471)	15729	50.0000	52.990
	175 Trans-1,2-Dichloroethene	96	3.289	3.289	(0.618)	15117	50.0000	50.129(M)
	3 cis-1,2-dichloroethene	96	4.444	4.444	(0.835)	16871	50.0000	52.403(M)
	6 Benzene	78	5.221	5.212	(0.906)	73464	50.0000	51.499(M)
*	4 Pentafluorobenzene	168	5.325	5.326	(1.000)	338988	1000.00	
$	5 d4-1,2-Dichloroethane	65	5.335	5.335	(1.002)	316669	1000.00	1036.6(M)
	176 1,2-Dichloroethane	62	5.392	5.392	(1.012)	24146	50.0000	50.010
	8 Trichloroethene	130	5.720	5.720	(0.992)	13046	50.0000	53.403(M)
*	7 1,4-Difluorobenzene	114	5.766	5.754	(1.000)	623089	1000.00	
$	9 d8-Toluene	98	6.915	6.914	(1.199)	800088	1000.00	1008.0
	10 Tetrachloroethene	166	7.283	7.271	(1.263)	9149	50.0000	48.533
	11 1,1,2,2-Tetrachloroethane	83	9.481	9.458	(1.644)	11516	50.0000	51.028

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt7.i
Lab File ID: 0426011.d
Lab Smp Id: 00500426
Analysis Type: VOA
Quant Type: ISTD
Operator: MH
Method File: /chem1/nt7.i/26APR2011.b/sim042611.m
Misc Info: 11-

Calibration Date: 26-APR-2011
Calibration Time: 12:47
Client Smp ID: 50
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	363407	181704	726814	338988	-6.72
7 1,4-Difluorobenze	667797	333898	1335594	623089	-6.69

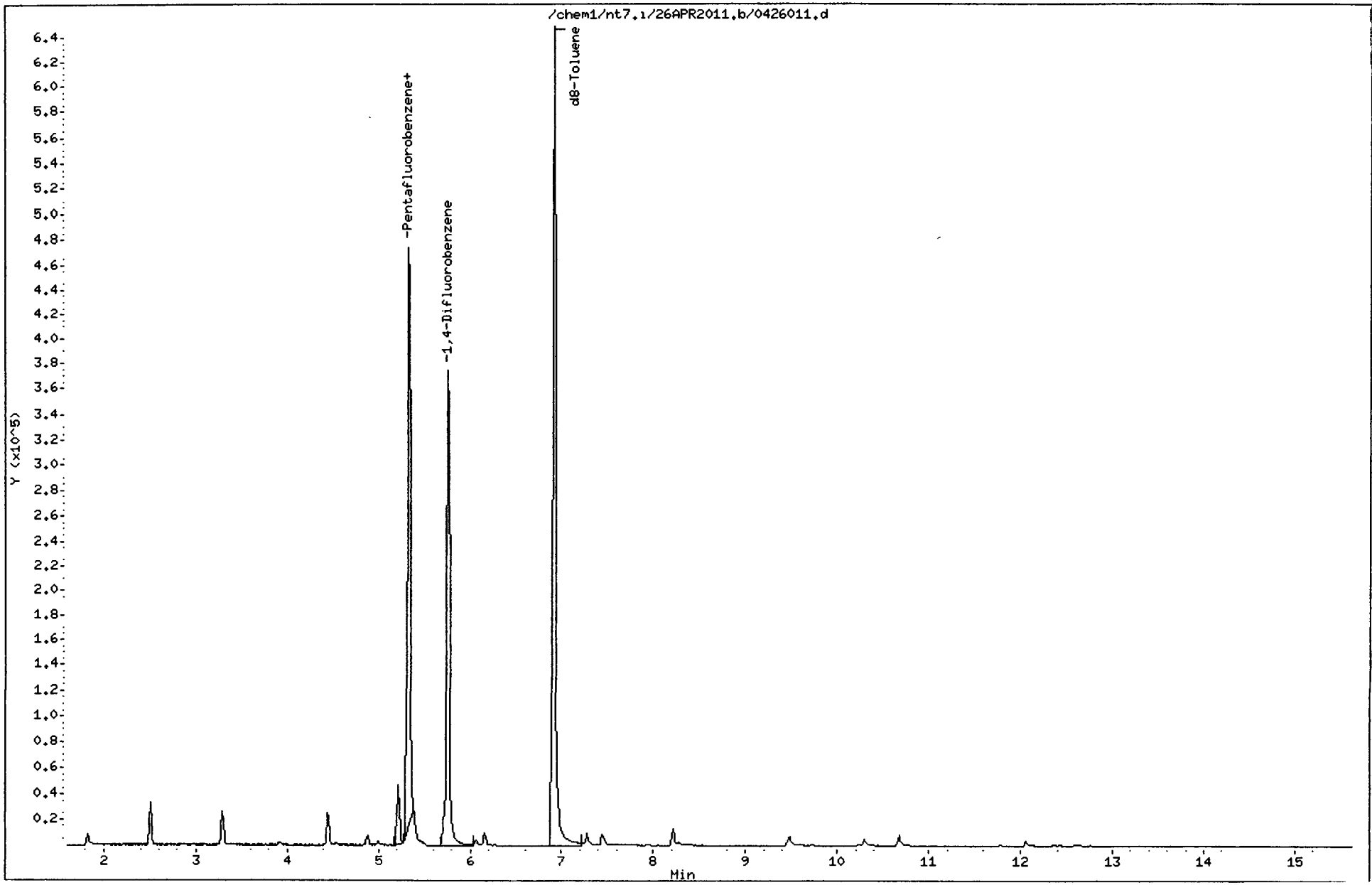
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.33	4.83	5.83	5.33	-0.01
7 1,4-Difluorobenze	5.75	5.25	6.25	5.77	0.20

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/26APR2011.b/0426011.d
Date : 26-APR-2011 11:30
Client ID: 50
Sample Info: 00500426,10,10,0,

Instrument: nt7.i
Operator: MH
Column diameter: 0.18

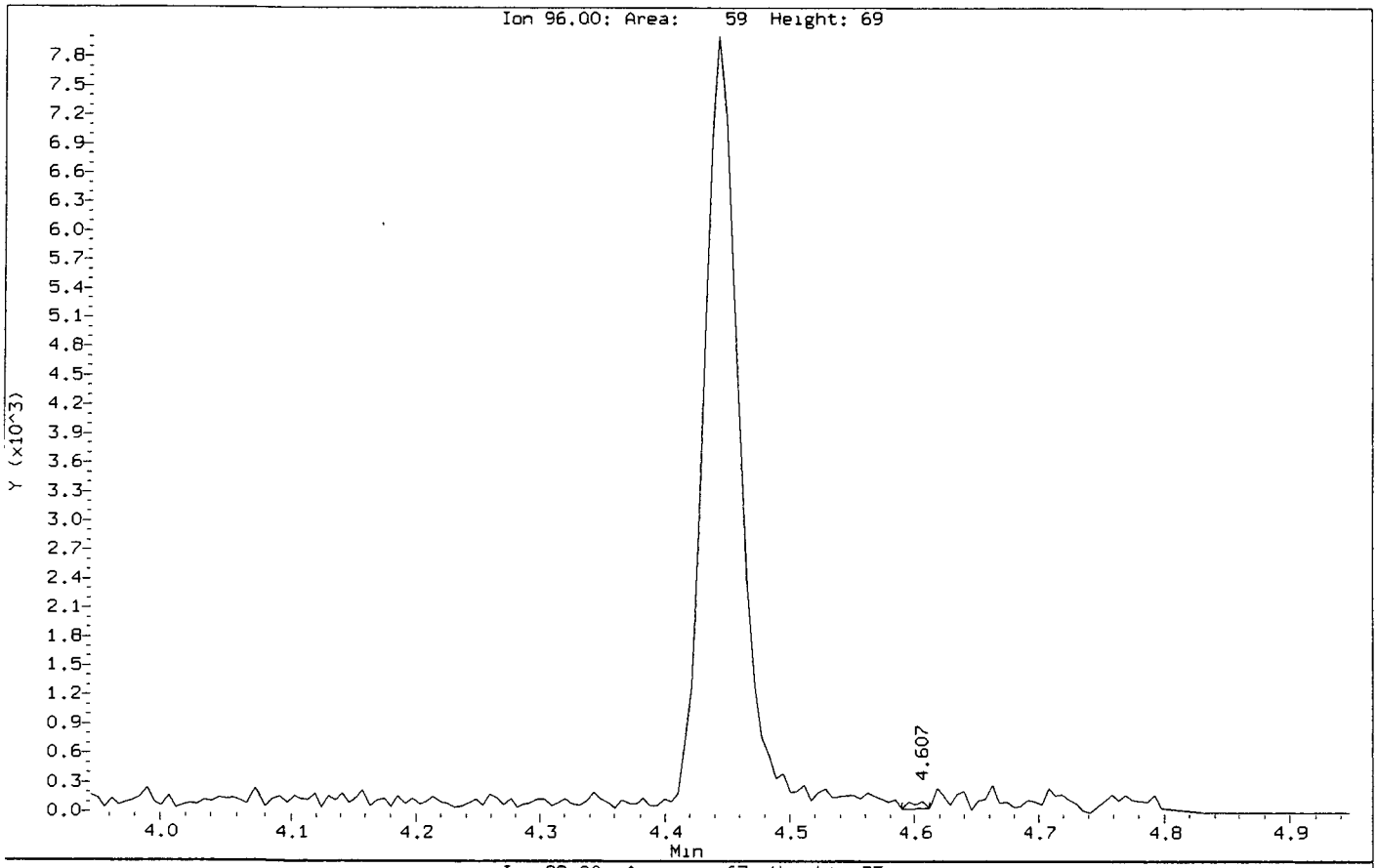
Column phase: RTXVMS

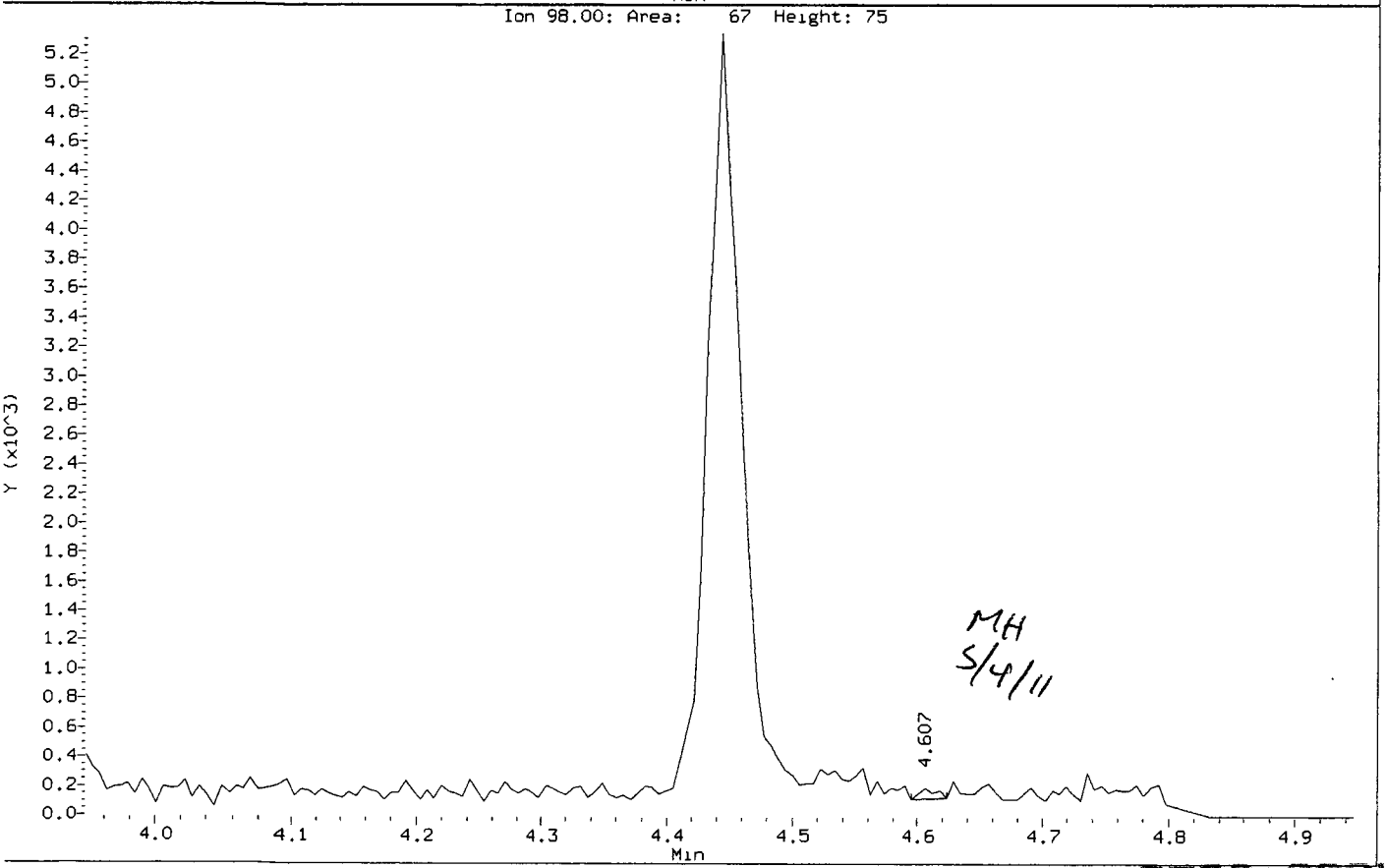


STS8 : 00248

Data File: /chem1/nt7.1/26APR2011.b/0426011.d
Injection Date: 26-APR-2011 11:30
Instrument: nt7.1
Client Sample ID: 50

Compound: cis-1,2-dichloroethene
CAS Number:



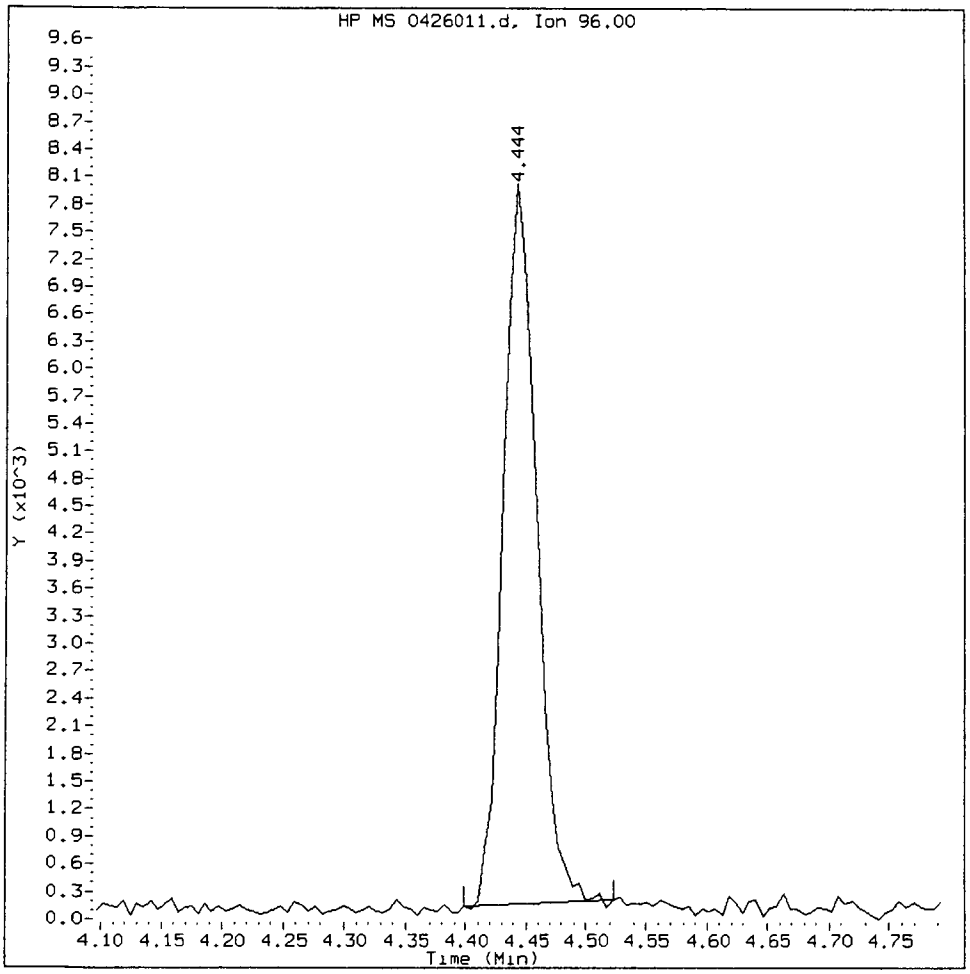


MH
5/4/11

ST98:00249

00500426, /chem1/nt7.i/26APR2011.b/0426011.d

cis-1,2-dichloroethene Amount: 52.40 Area: 16871



MANUAL INTEGRATION for cis-1,2-dichloroethene

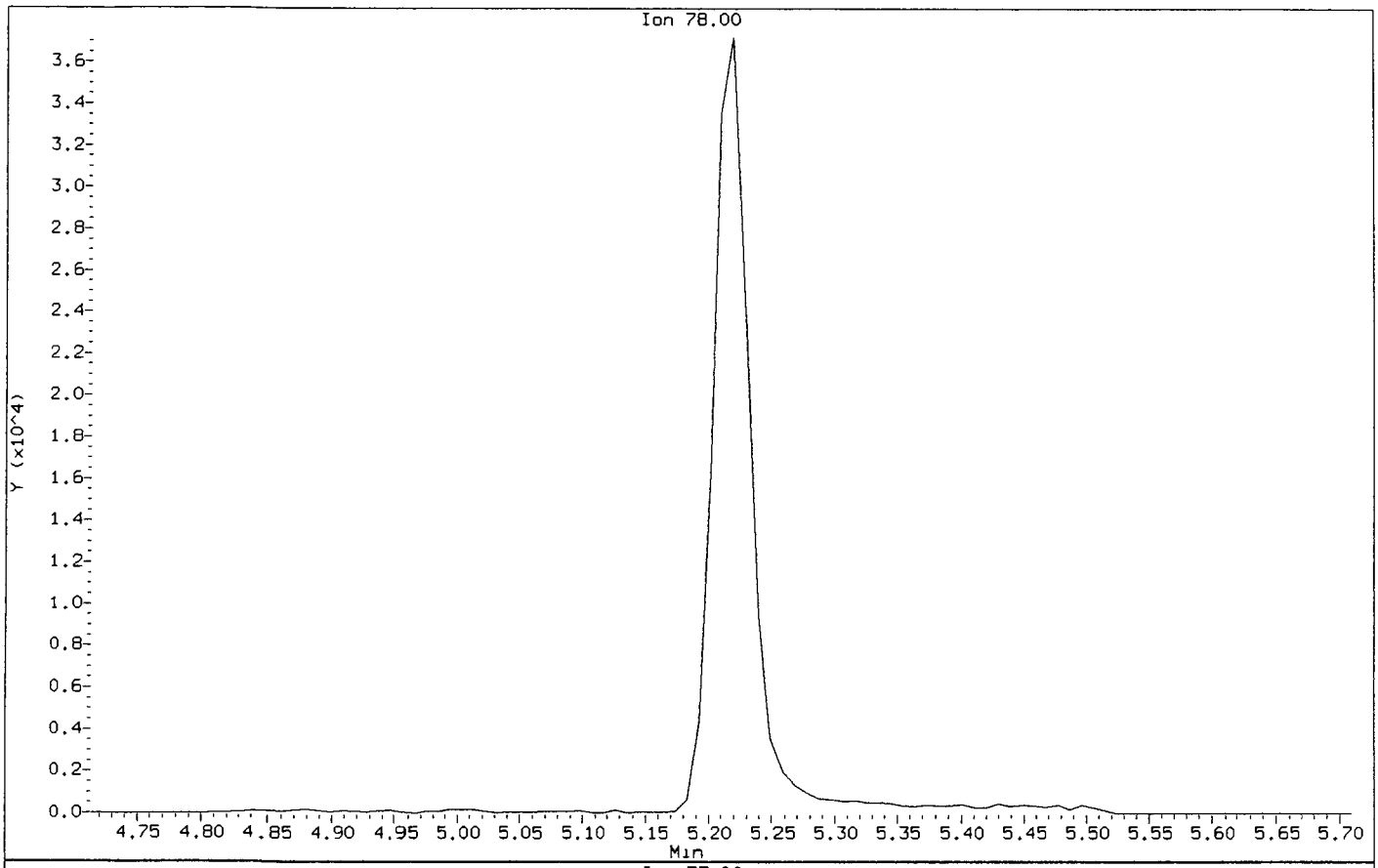
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

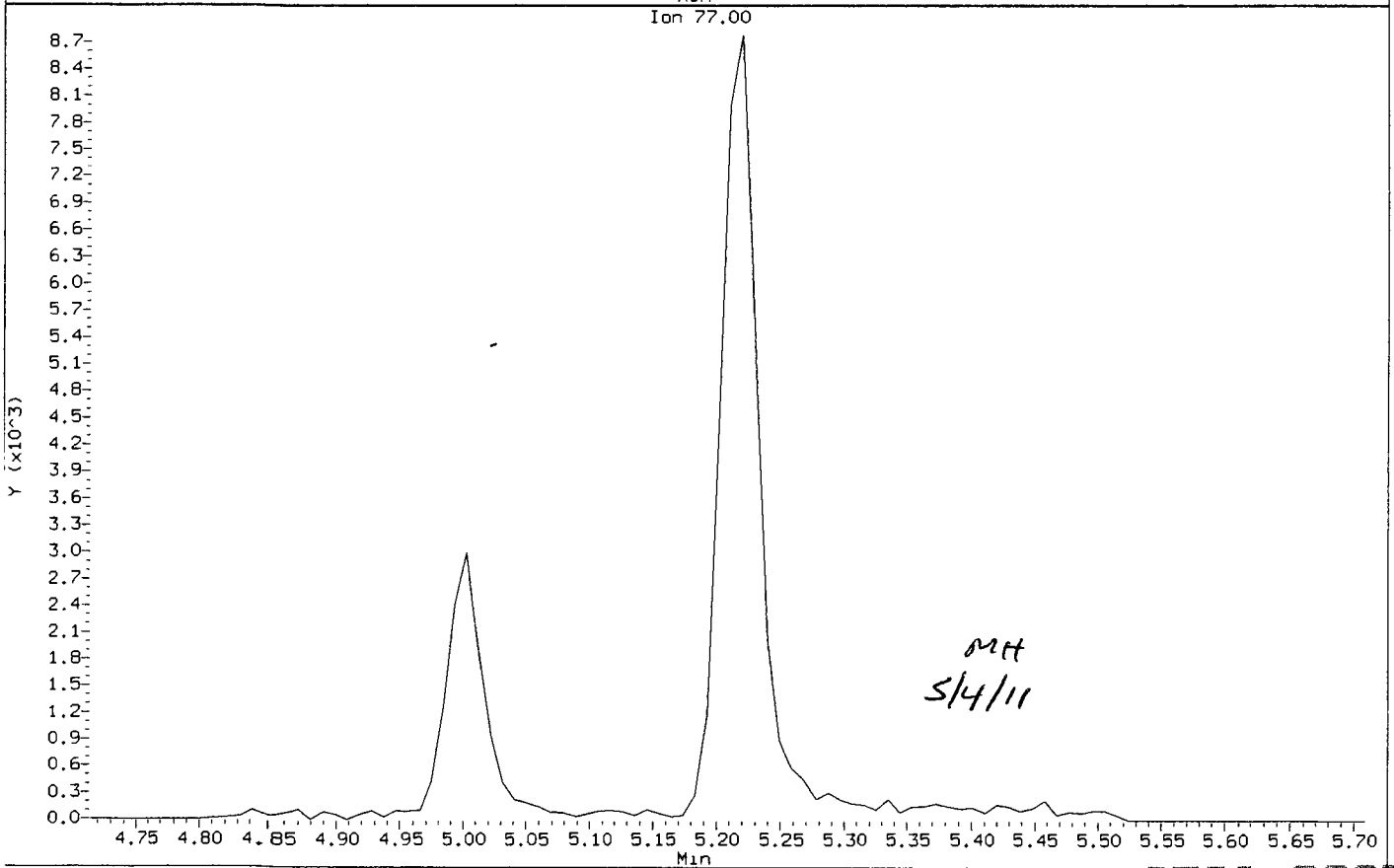
5. Other _____

Analyst: MH Date: 5/4/11

Data File: /chem1/nt7.1/26APR2011.b/0426011.d
Injection Date: 26-APR-2011 11:30
Instrument: nt7.1
Client Sample ID: 50

Compound: Benzene
CAS Number:

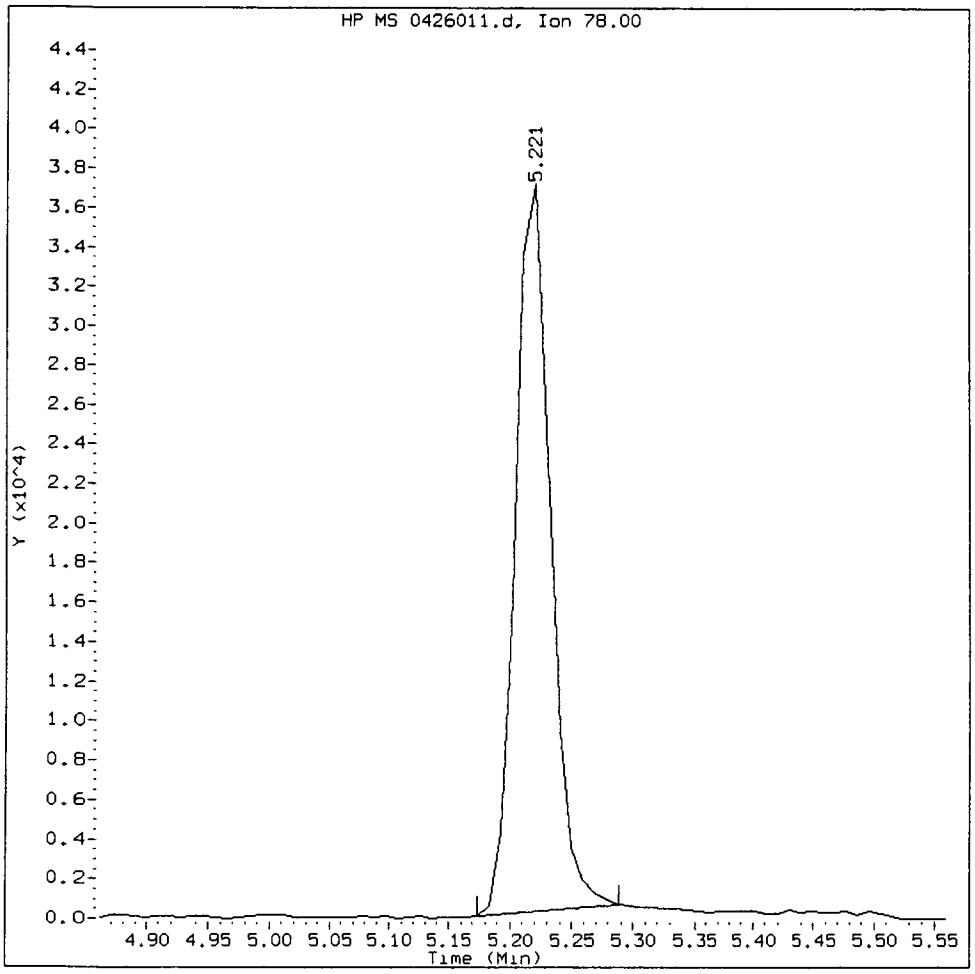




MH
5/4/11

00500426, /chem1/nt7.i/26APR2011.b/0426011.d

Benzene Amount: 51.50 Area: 73464



MANUAL INTEGRATION for Benzene

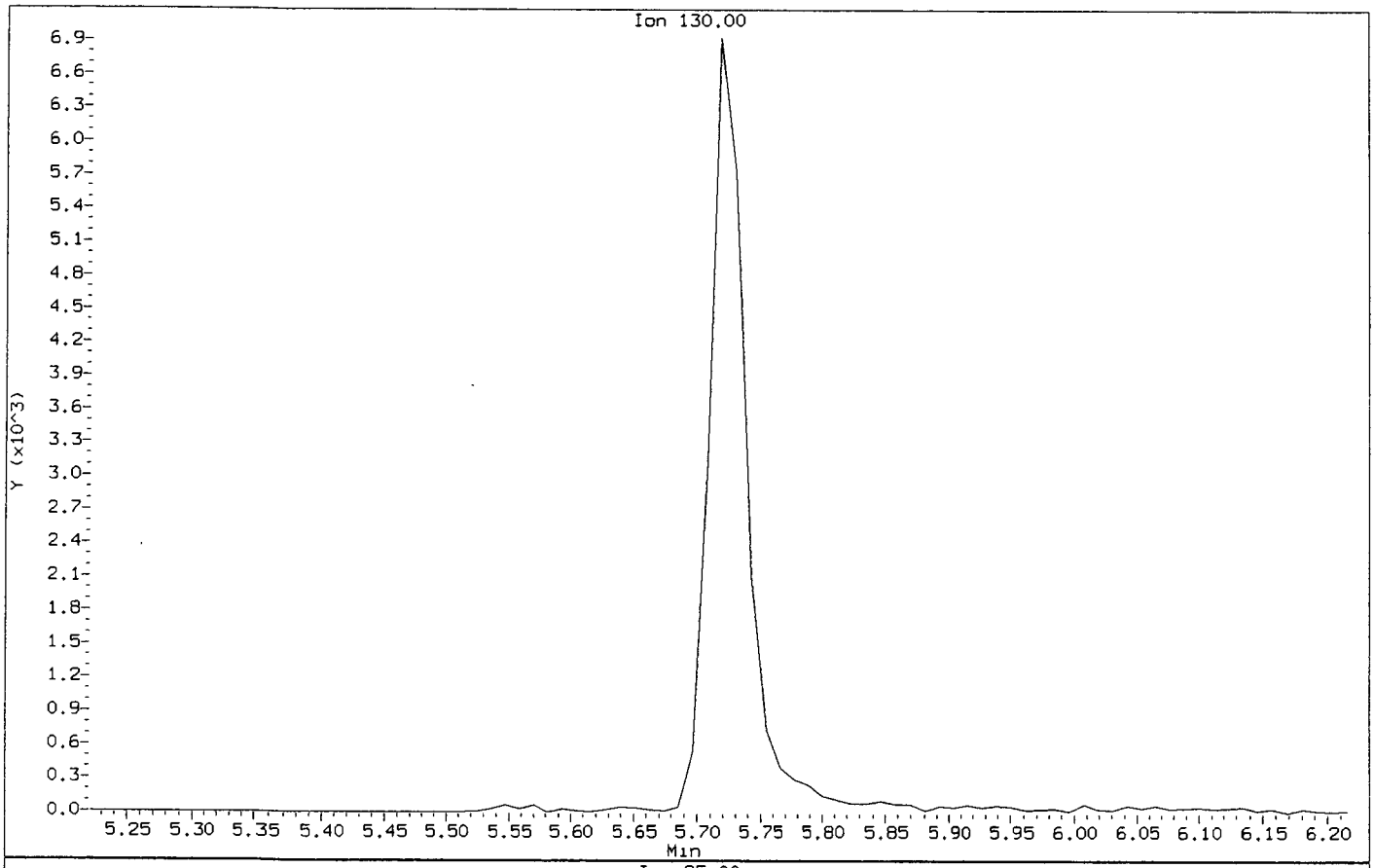
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

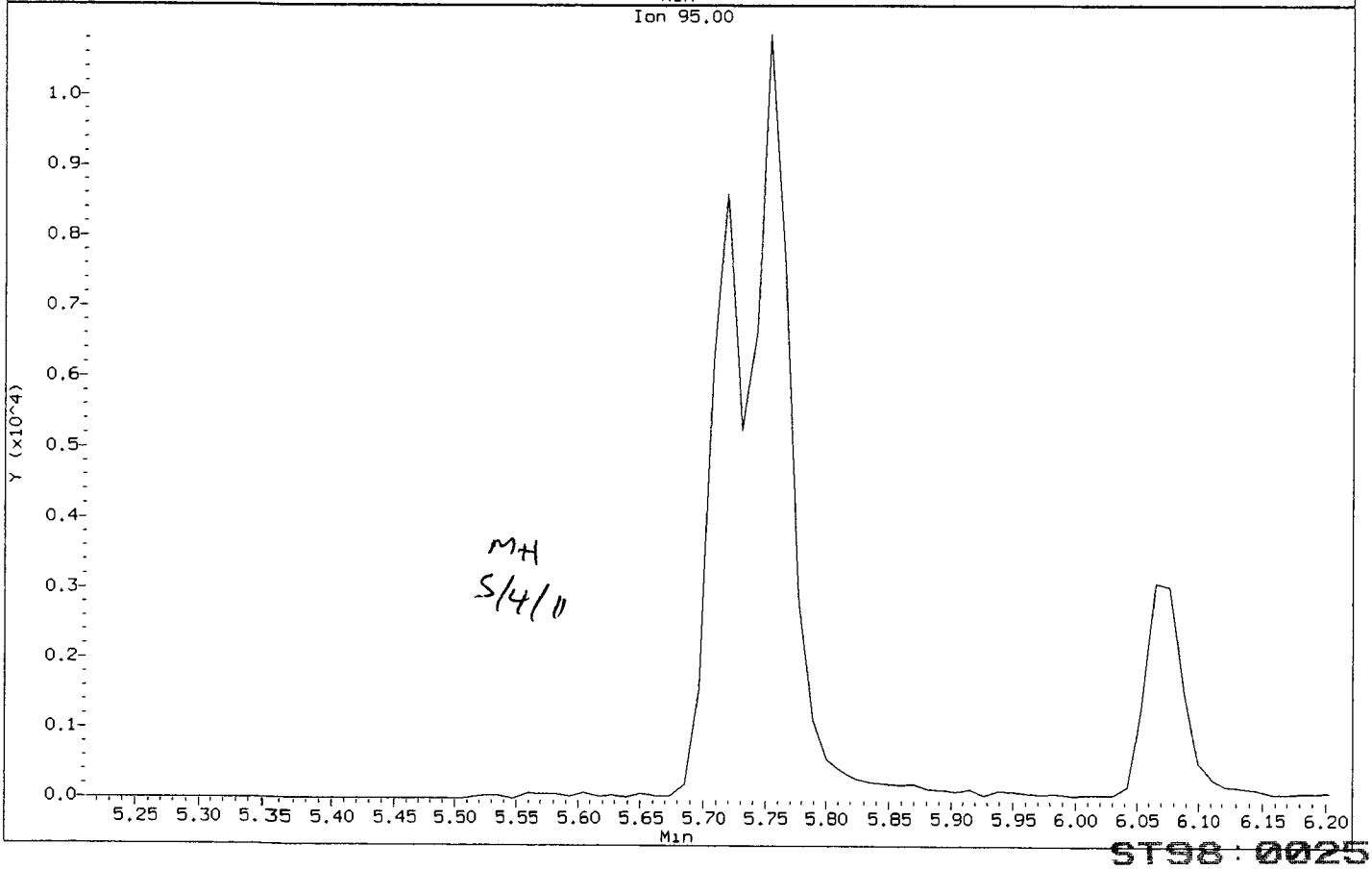
5. Other _____

Analyst: MH Date: 5/4/11

Data File: /chem1/nt7.i/26APR2011.b/0426011.d
Injection Date: 26-APR-2011 11:30
Instrument: nt7.i
Client Sample ID: 50

Compound: Trichloroethene
CAS Number:



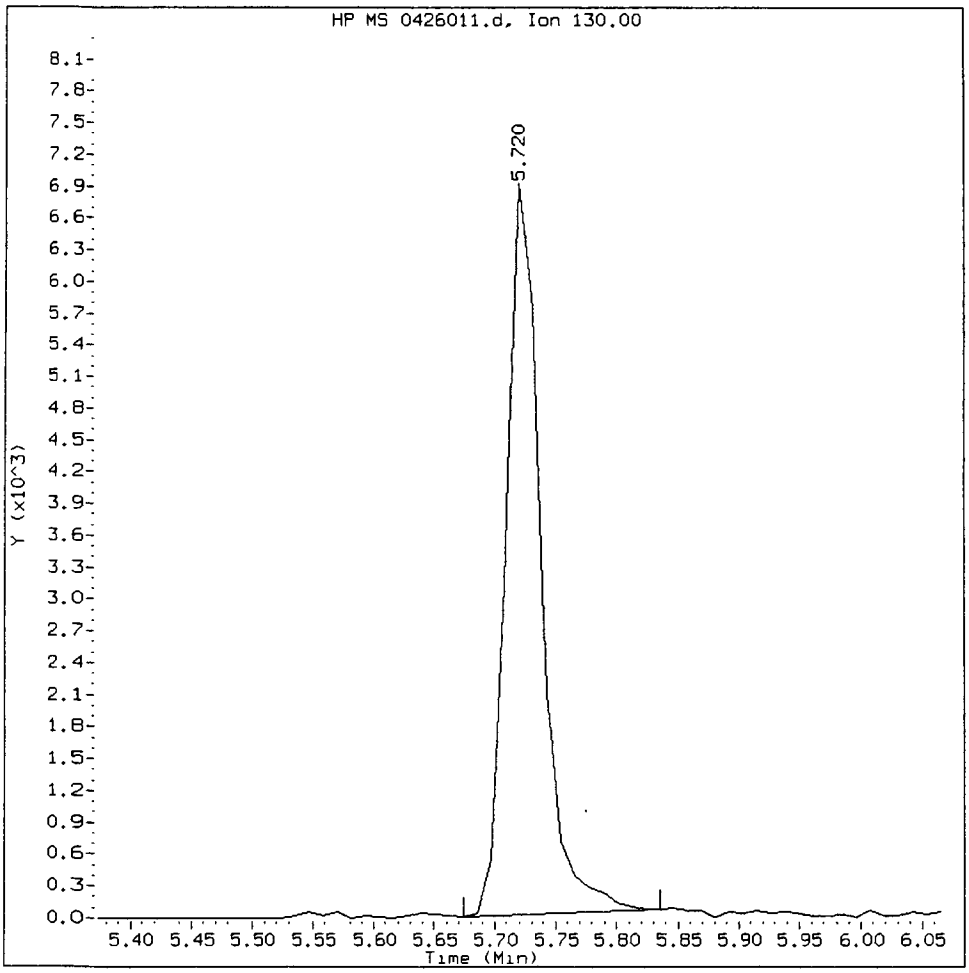


MH
5/4/11

ST98:00253

00500426, /chem1/nt7.i/26APR2011.b/0426011.d

Trichloroethene Amount: 53.40 Area: 13046



MANUAL INTEGRATION for Trichloroethene

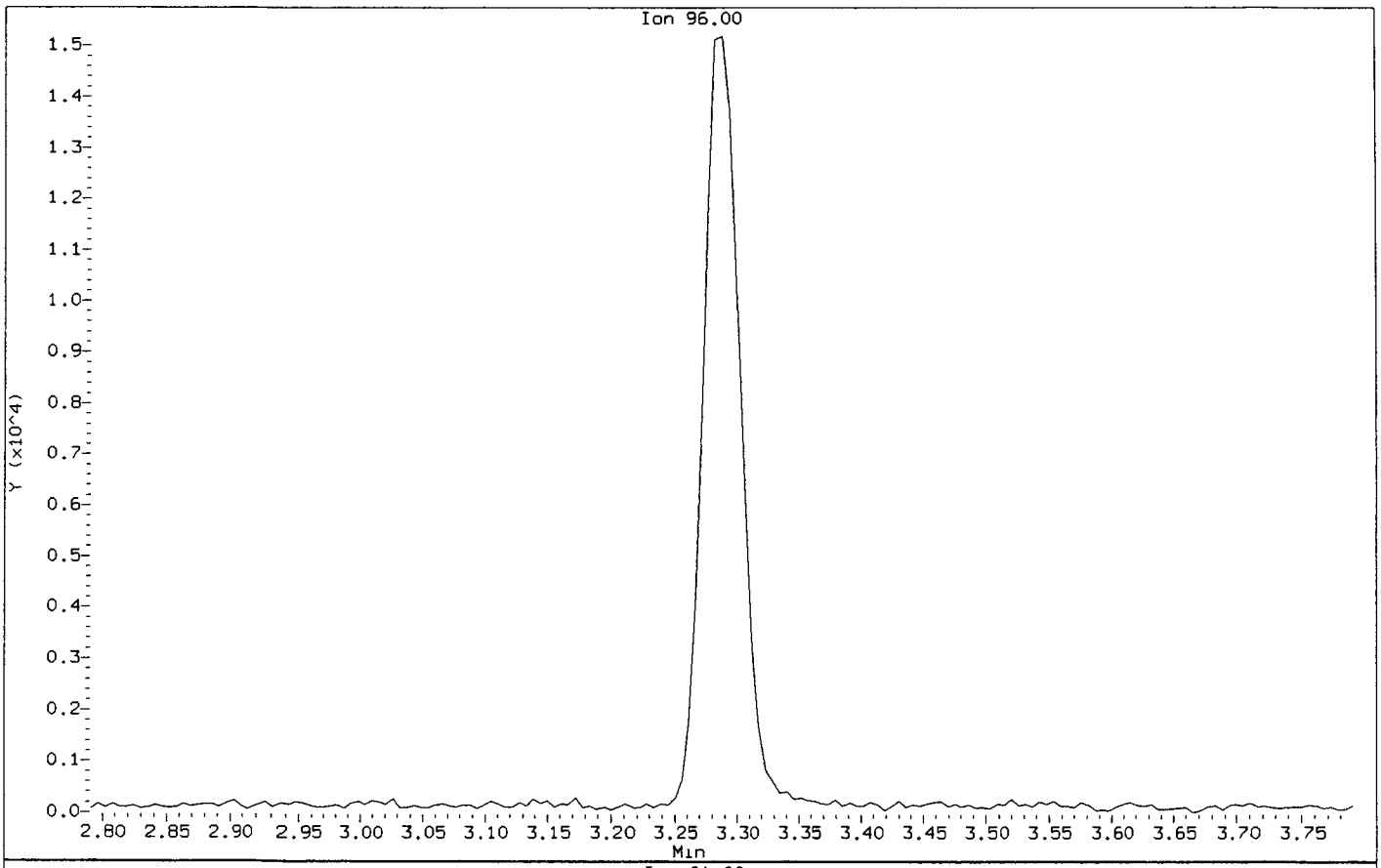
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

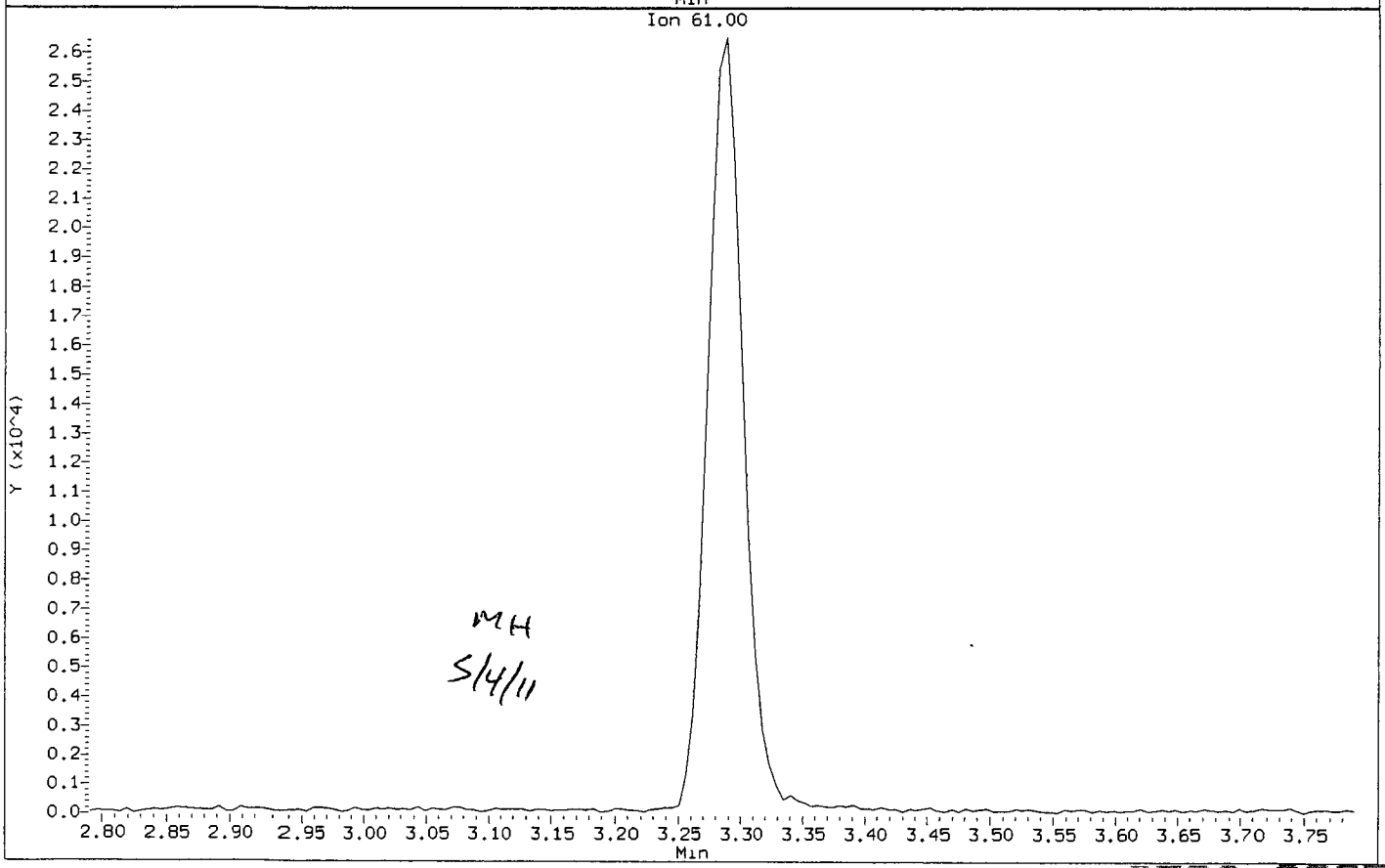
5. Other _____

Analyst: MH Date: 5/4/11

Data File: /chem1/nt7.i/26APR2011.b/0426012.d
Injection Date: 26-APR-2011 11:55
Instrument: nt7.i
Client Sample ID: 100

Compound: Trans-1,2-Dichloroethene
CAS Number:

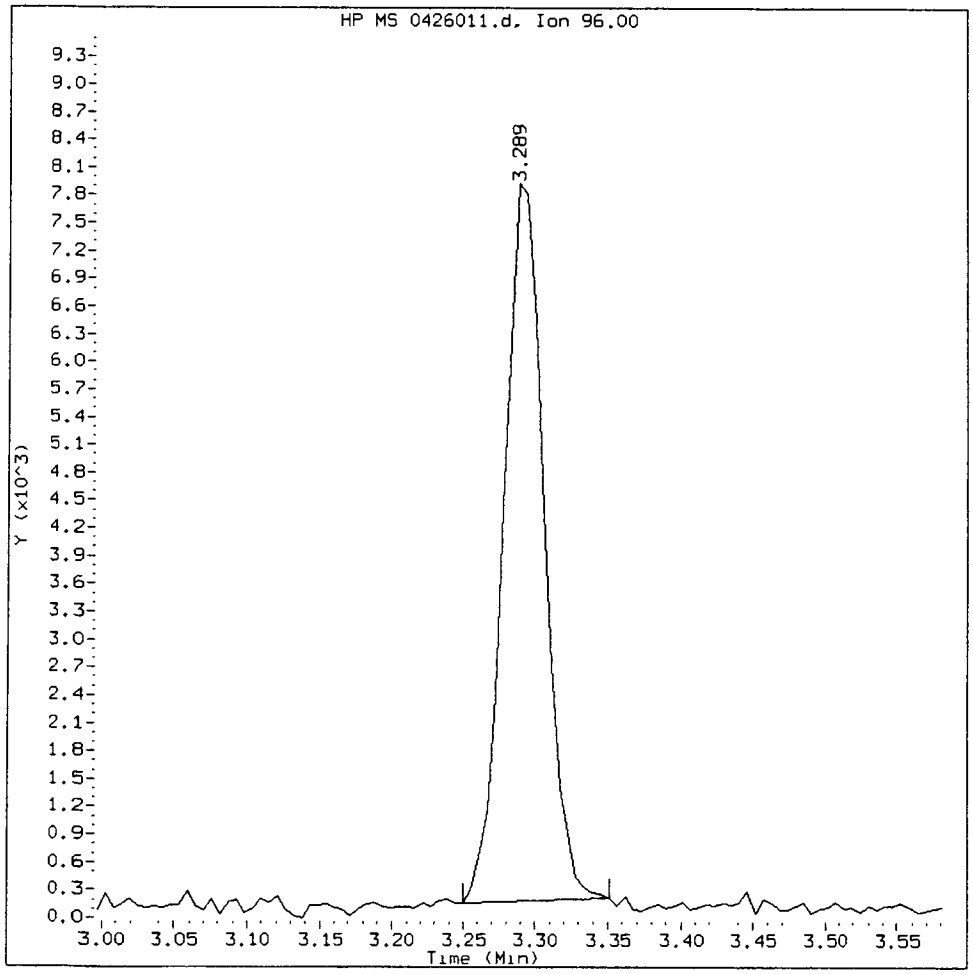




MH
5/4/11

00500426, /chem1/nt7.i/26APR2011.b/0426011.d

Trans-1,2-Dichloroethene Amount: 50.13 Area: 15117



MANUAL INTEGRATION for Trans-1,2-Dichloroethene

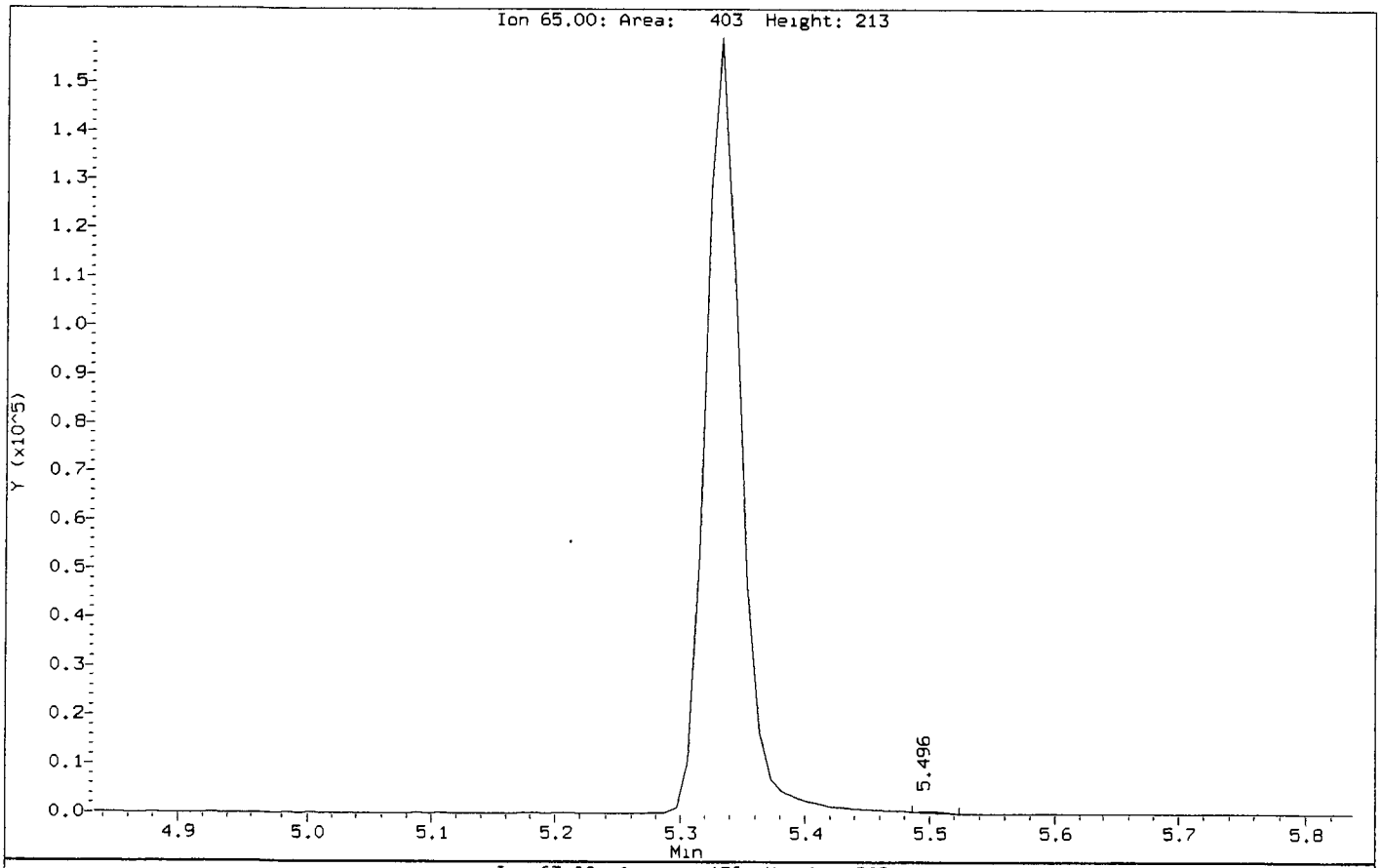
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

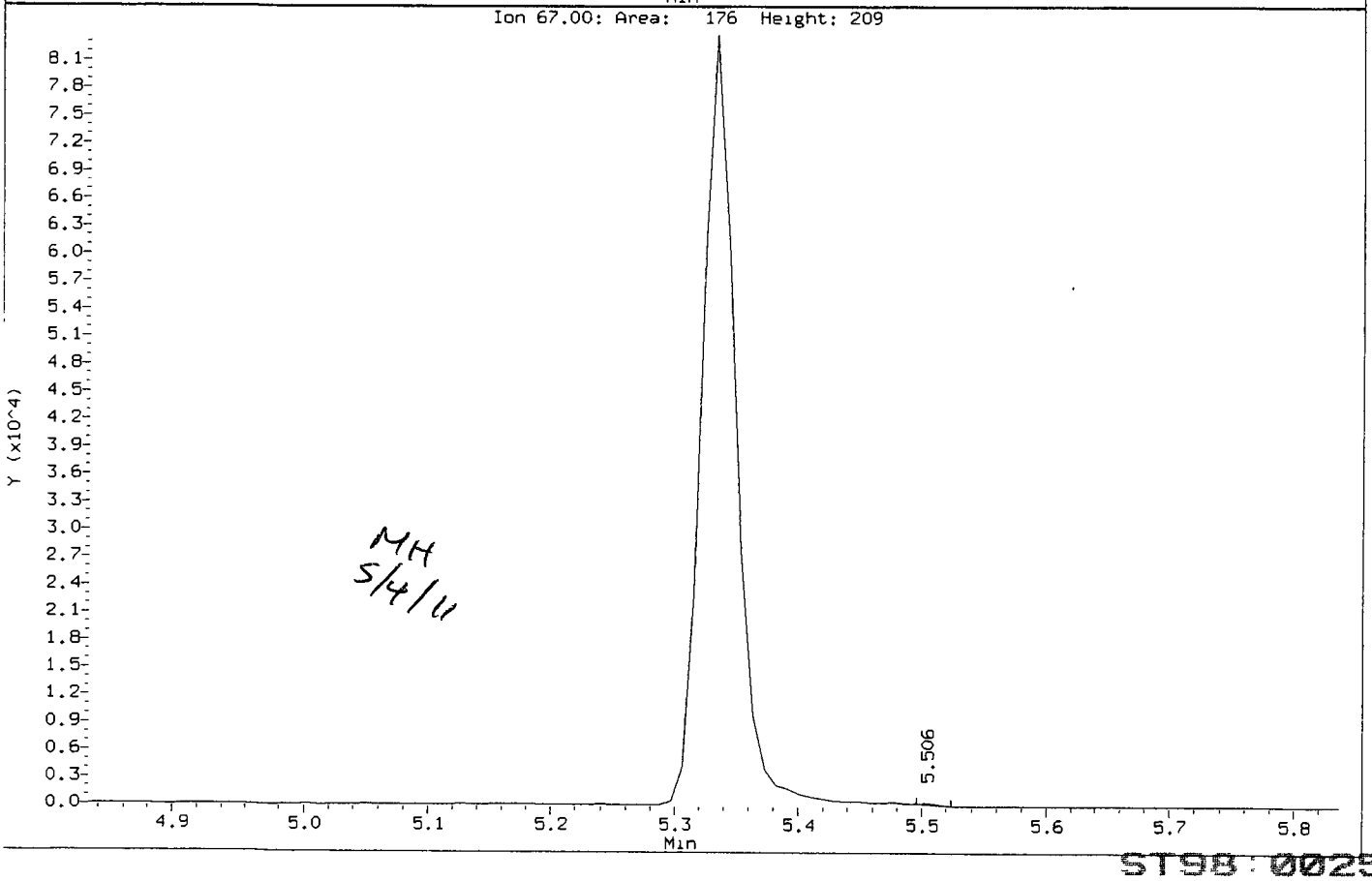
5. Other _____

Analyst: MH Date: 5/4/11

Data File: /chem1/nt7.1/26APR2011.b/0426011.d
Injection Date: 26-APR-2011 11:30
Instrument: nt7.1
Client Sample ID: 50

Compound: d4-1,2-Dichloroethane
CAS Number:

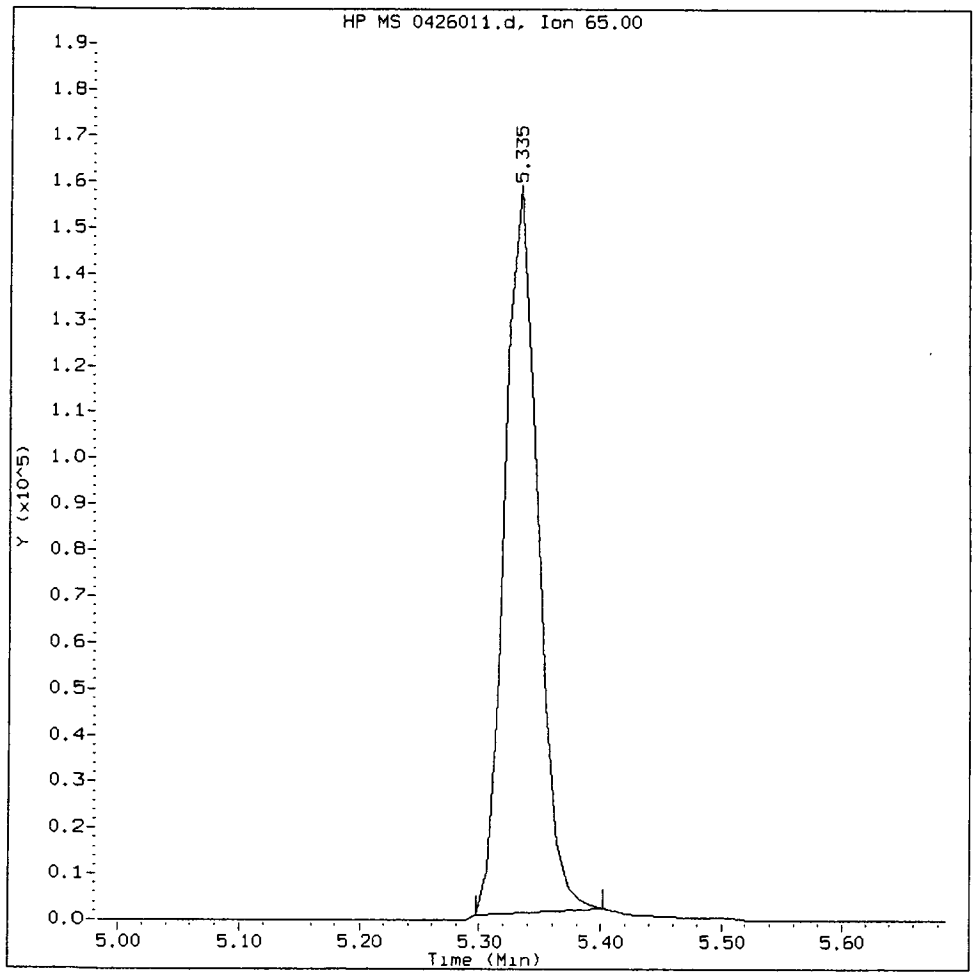




MH
5/4/11

00500426, /chem1/nt7.i/26APR2011.b/0426011.d

d4-1,2-Dichloroethane Amount: 1036.63 Area: 316669



MANUAL INTEGRATION for d4-1,2-Dichloroethane

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

5. Other _____

Analyst: MH Date: 5/4/11

CO-ELUTION SUMMARY FOR FILE - 0426011.d

Lab ID: 00500426, Method: sim042611.m, Instrument: nt7.i, Date: 26-APR-2011

RT	CO-ELUTION COMPOUNDS

MH 5/4/11

Data File: /chem1/nt7.i/26APR2011.b/0426012.d
Report Date: 04-May-2011 09:21

Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/26APR2011.b/0426012.d
Lab Smp Id: 01000426 Client Smp ID: 100
Inj Date : 26-APR-2011 11:55
Operator : MH Inst ID: nt7.i
Smp Info : 01000426,10,10,0,
Misc Info : 11-
Comment :
Method : /chem1/nt7.i/26APR2011.b/sim042611.m
Meth Date : 04-May-2011 06:35 monicah Quant Type: ISTD
Cal Date : 26-APR-2011 11:55 Cal File: 0426012.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)	ON-COL (ng/L)
	1 Vinyl Chloride	62	1.552	1.554	(0.292)	38391	100.000	112.15
	2 1,1-Dichloroethene	96	2.505	2.510	(0.470)	31114	100.000	114.24
	175 Trans-1,2-Dichloroethene	96	3.290	3.289	(0.618)	30853	100.000	111.50(M)
	3 cis-1,2-dichloroethene	96	4.439	4.444	(0.834)	33685	100.000	114.03(M)
	6 Benzene	78	5.220	5.212	(0.907)	144563	100.000	110.36(M)
*	4 Pentafluorobenzene	168	5.324	5.326	(1.000)	311045	1000.00	
$	5 d4-1,2-Dichloroethane	65	5.333	5.335	(1.002)	295289	1000.00	1053.5(M)
	176 1,2-Dichloroethane	62	5.390	5.392	(1.012)	48025	100.000	108.40
	8 Trichloroethene	130	5.721	5.720	(0.994)	23915	100.000	106.61(M)
*	7 1,4-Difluorobenzene	114	5.755	5.754	(1.000)	572143	1000.00	
$	9 d8-Toluene	98	6.913	6.914	(1.201)	720104	1000.00	987.98
	10 Tetrachloroethene	166	7.281	7.271	(1.265)	19735	100.000	114.01
	11 1,1,2,2-Tetrachloroethane	83	9.468	9.458	(1.645)	20755	100.000	100.16(M)

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt7.i
Lab File ID: 0426012.d
Lab Smp Id: 01000426
Analysis Type: VOA
Quant Type: ISTD
Operator: MH
Method File: /chem1/nt7.i/26APR2011.b/sim042611.m
Misc Info: 11-

Calibration Date: 26-APR-2011
Calibration Time: 12:47
Client Smp ID: 100
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	363407	181704	726814	311045	-14.41
7 1,4-Difluorobenze	667797	333898	1335594	572143	-14.32

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.33	4.83	5.83	5.32	-0.03
7 1,4-Difluorobenze	5.75	5.25	6.25	5.76	0.02

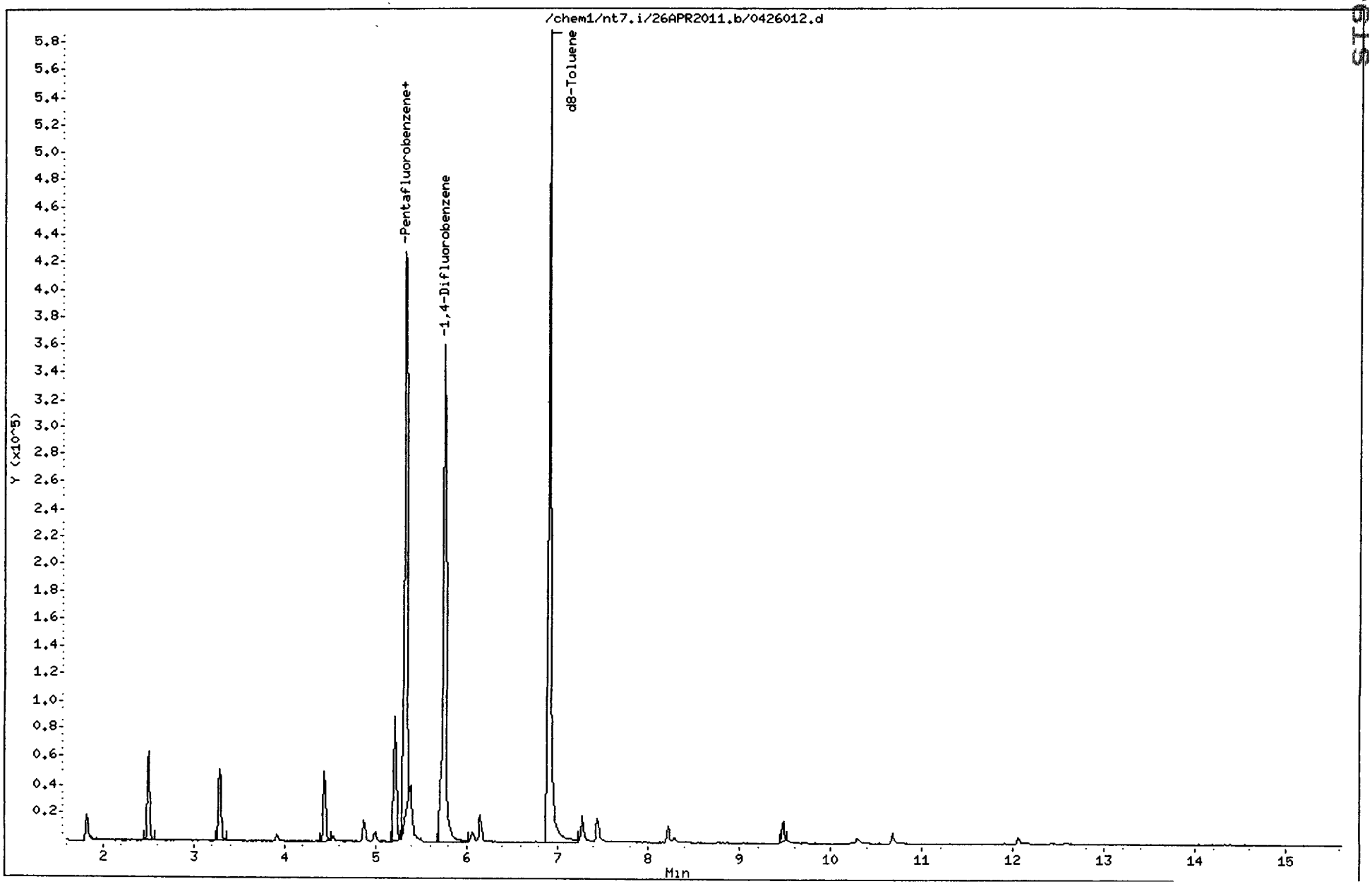
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/nt7.i/26APR2011.b/0426012.d
Date : 26-APR-2011 11:55
Client ID: 100
Sample Info: 01000426,10,10,0,

Instrument: nt7.i

Operator: MH
Column diameter: 0.18

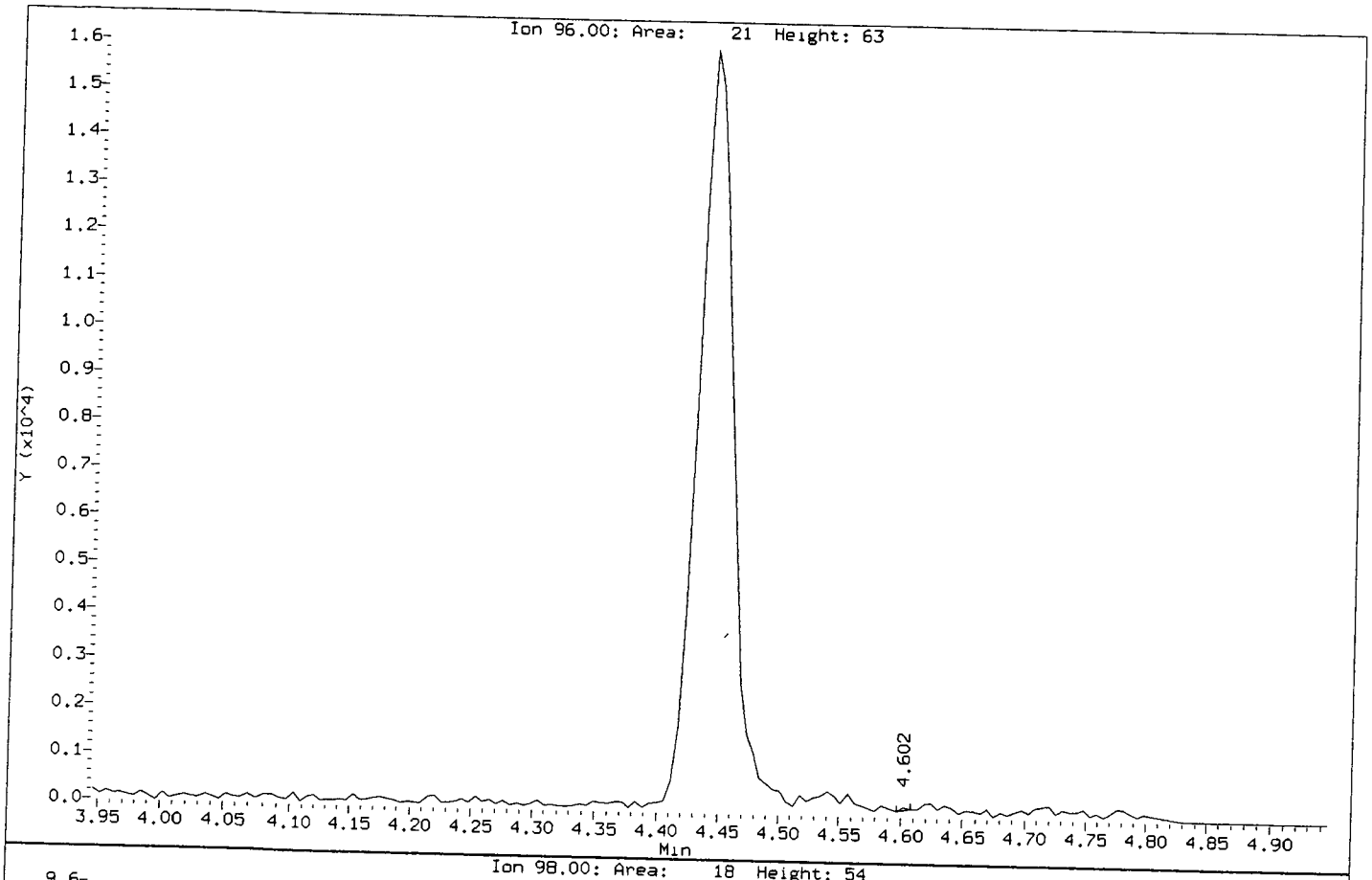
Column phase: RTXVMS

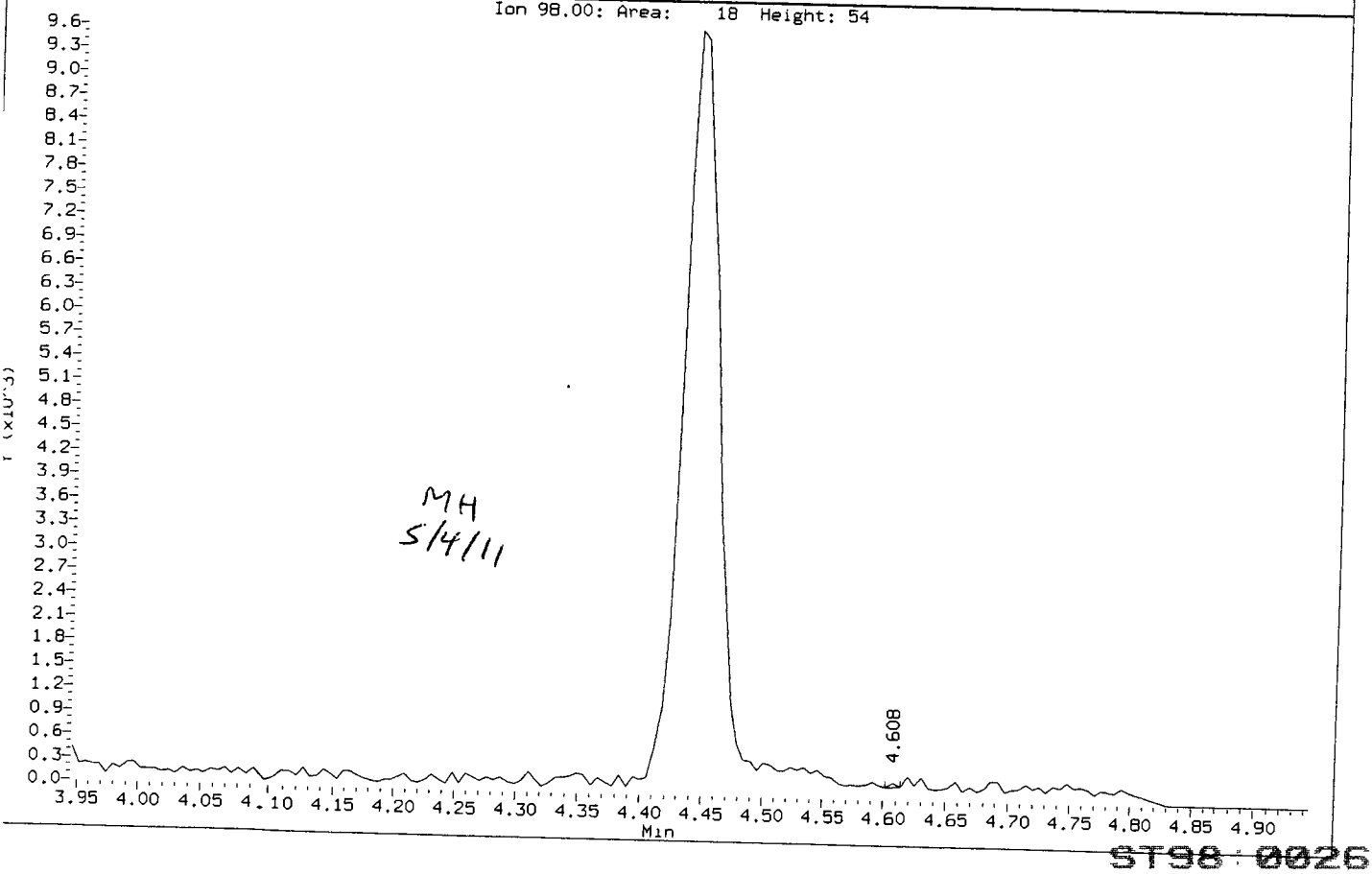


STD 00263

Data File: /chem1/nt7.1/26APR2011.b/0426012.d
Injection Date: 26-APR-2011 11:55
Instrument: nt7.1
Client Sample ID: 100

Compound: cis-1,2-dichloroethene
CAS Number:

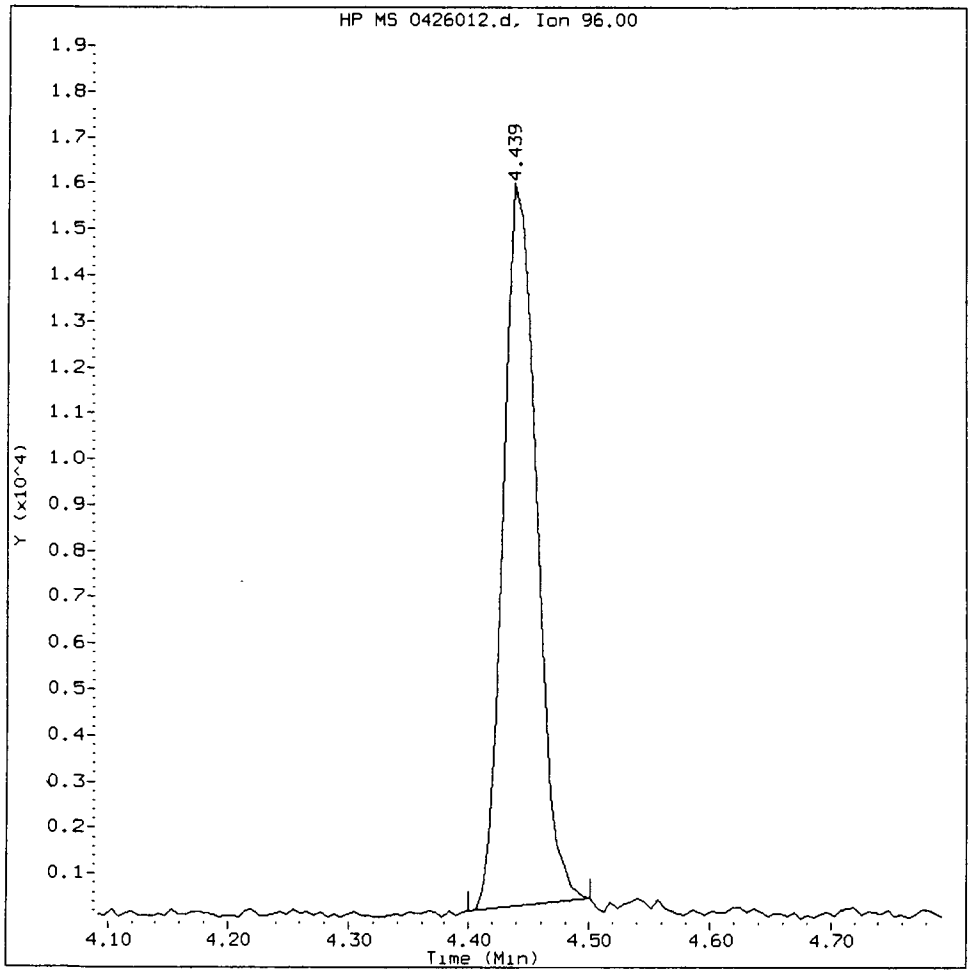




MH
5/4/11

01000426, /chem1/nt7.i/26APR2011.b/0426012.d

cis-1,2-dichloroethene Amount: 114.03 Area: 33685



MANUAL INTEGRATION for cis-1,2-dichloroethene

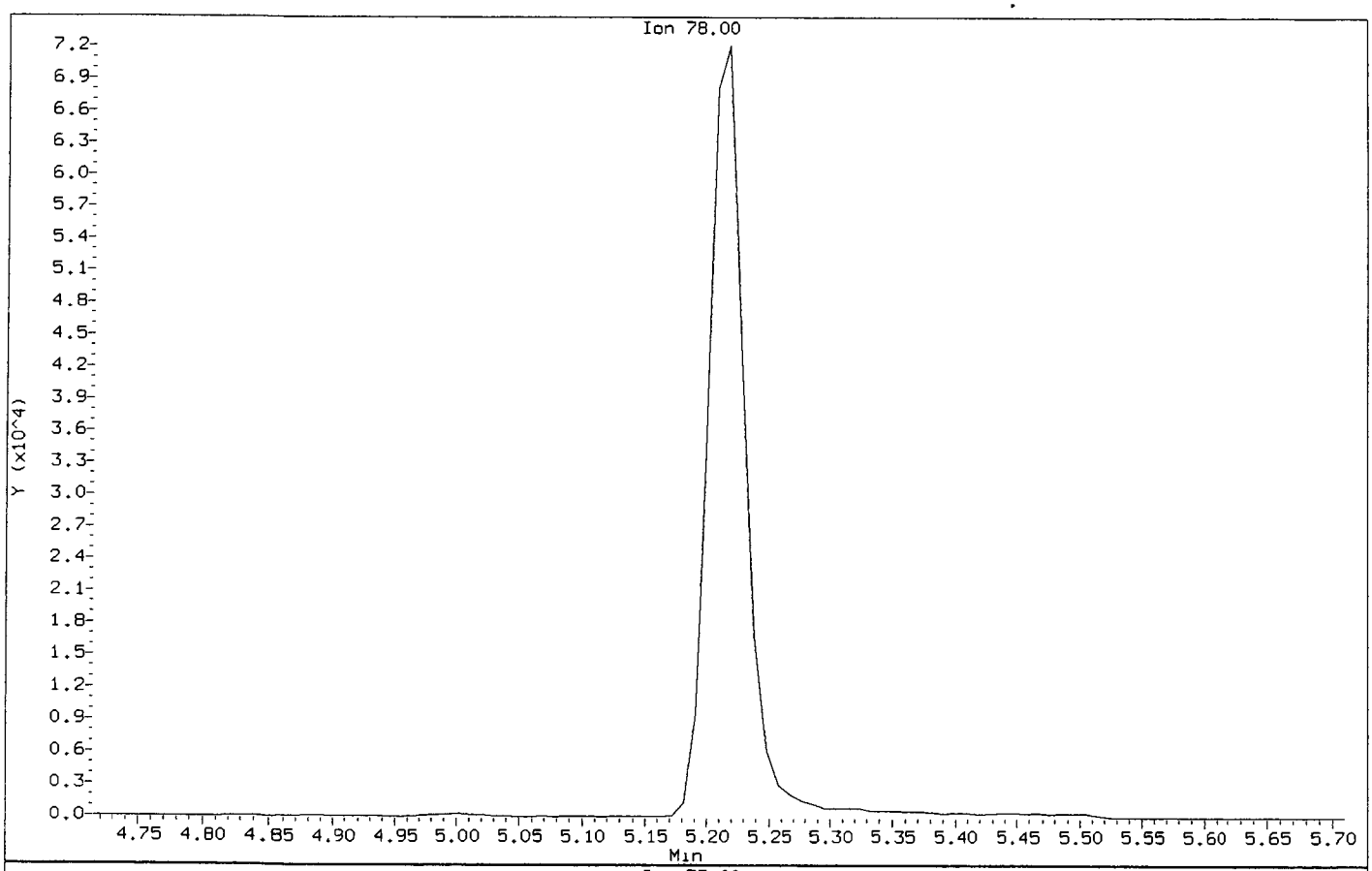
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

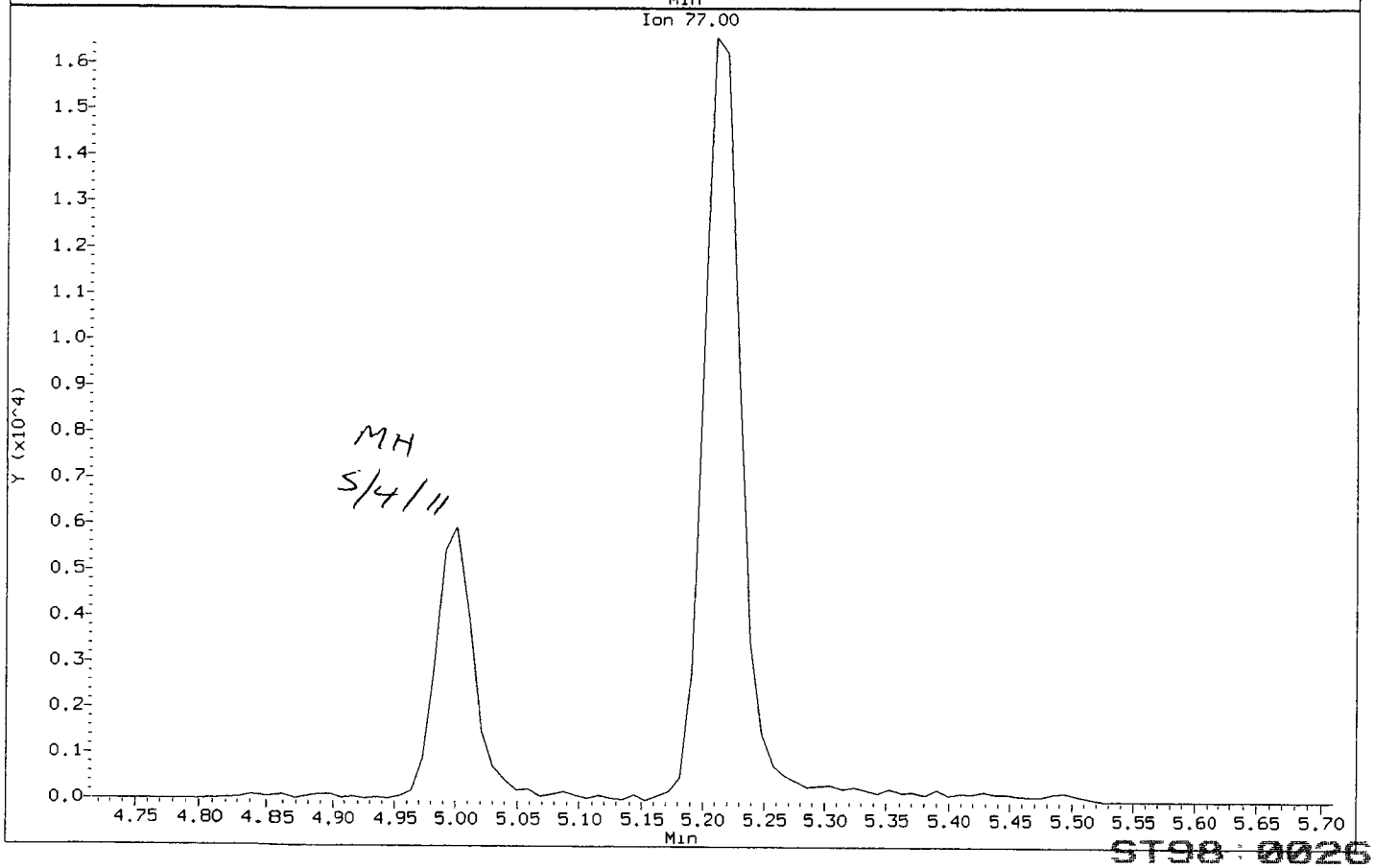
5. Other _____

Analyst: MH Date: 5/4/11

Data File: /chem1/nt7.1/26APR2011.b/0426012.d
Injection Date: 26-APR-2011 11:55
Instrument: nt7.1
Client Sample ID: 100

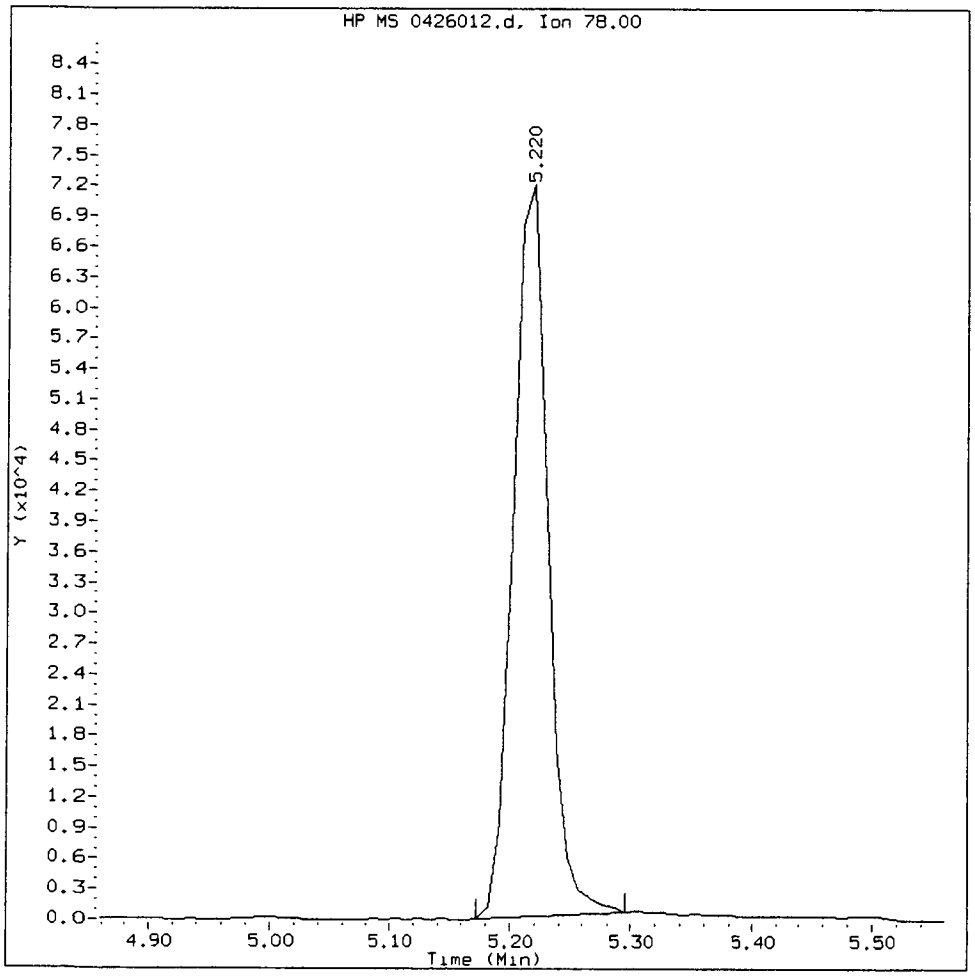
Compound: Benzene
CAS Number:





01000426, /chem1/nt7.i/26APR2011.b/0426012.d

Benzene Amount: 110.36 Area: 144563



MANUAL INTEGRATION for Benzene

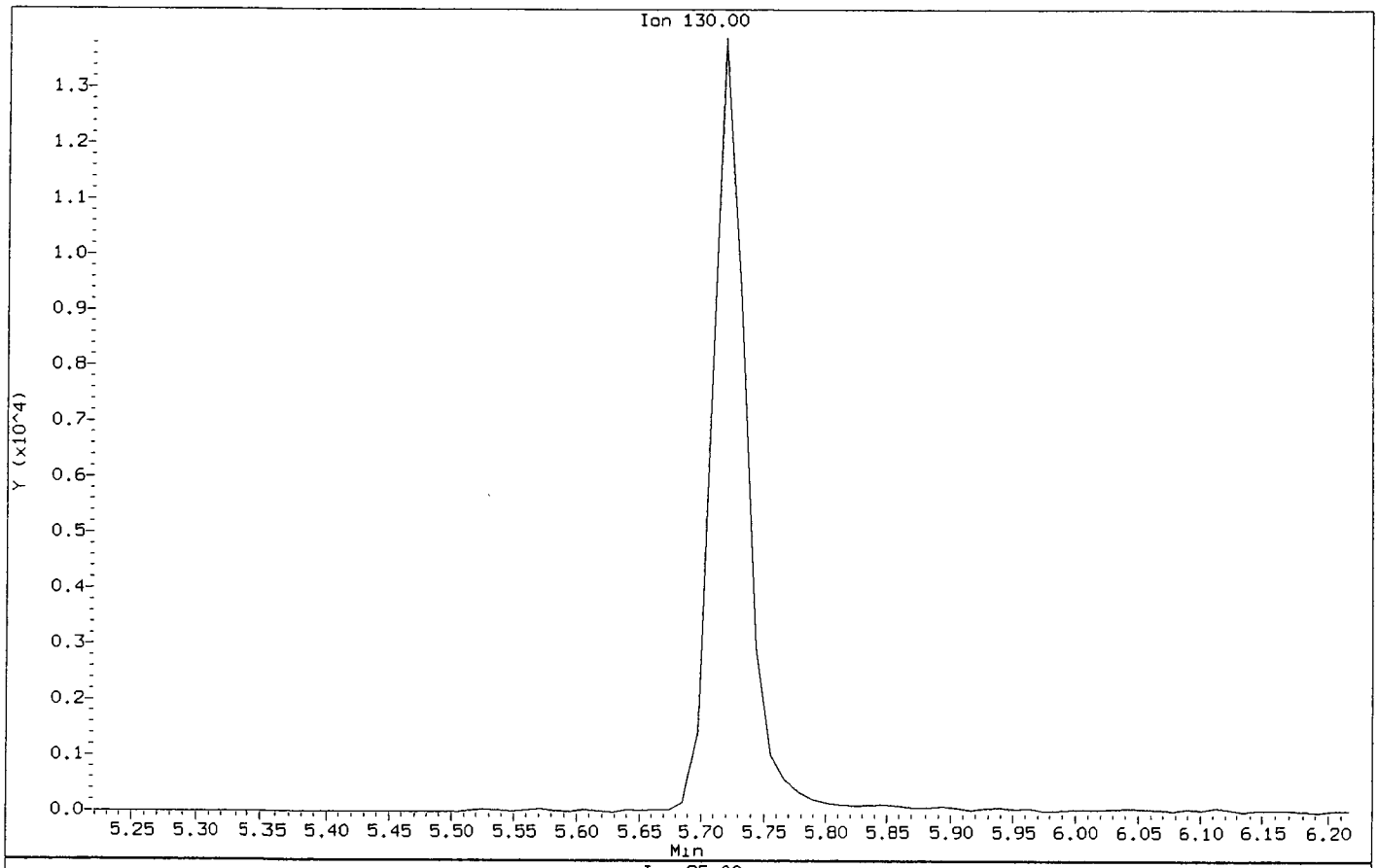
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

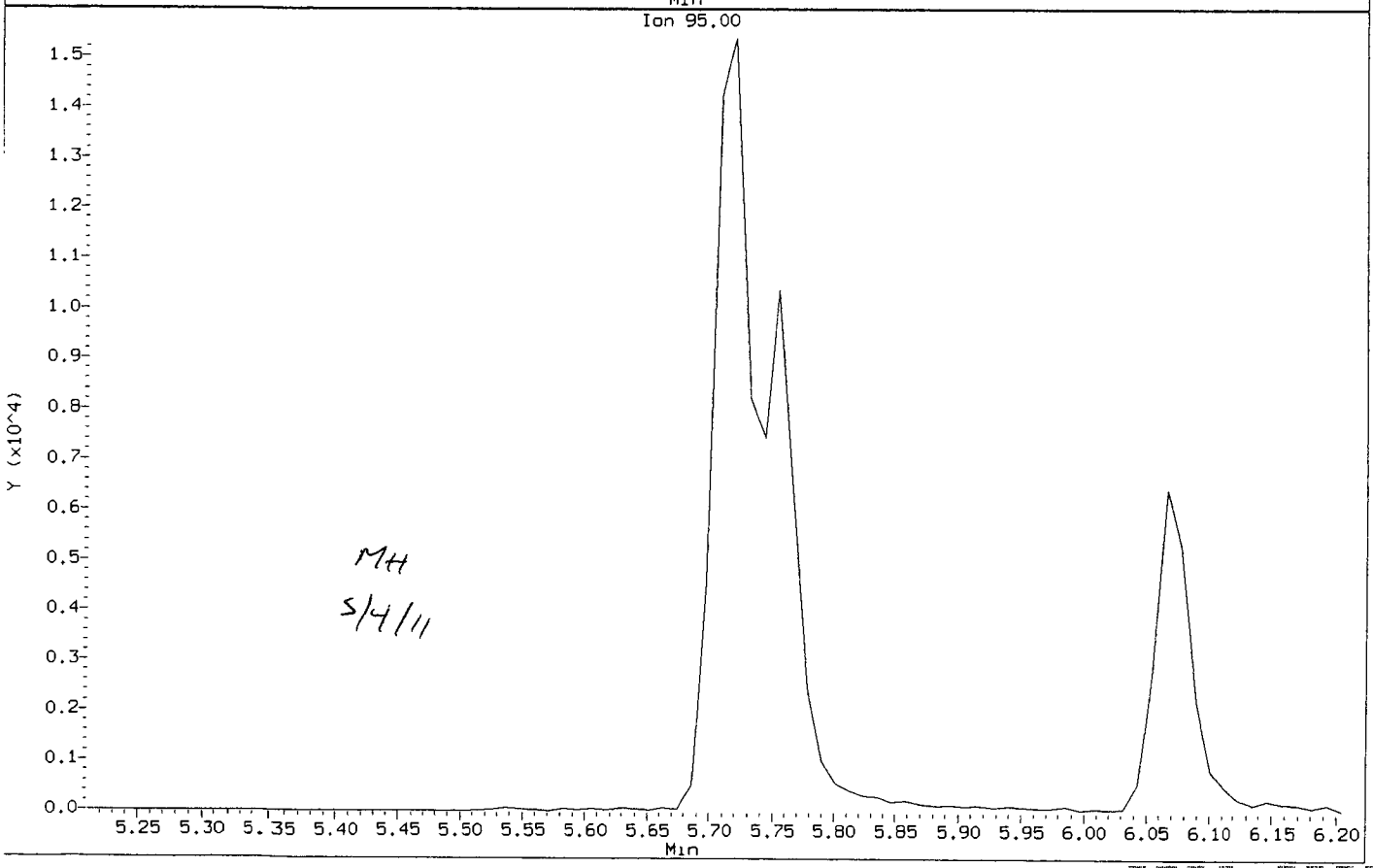
5. Other _____

Analyst: MH Date: 5/4/11

Data File: /chem1/nt7.1/26APR2011.b/0426012.d
Injection Date: 26-APR-2011 11:55
Instrument: nt7.1
Client Sample ID: 100

Compound: Trichloroethene
CAS Number:

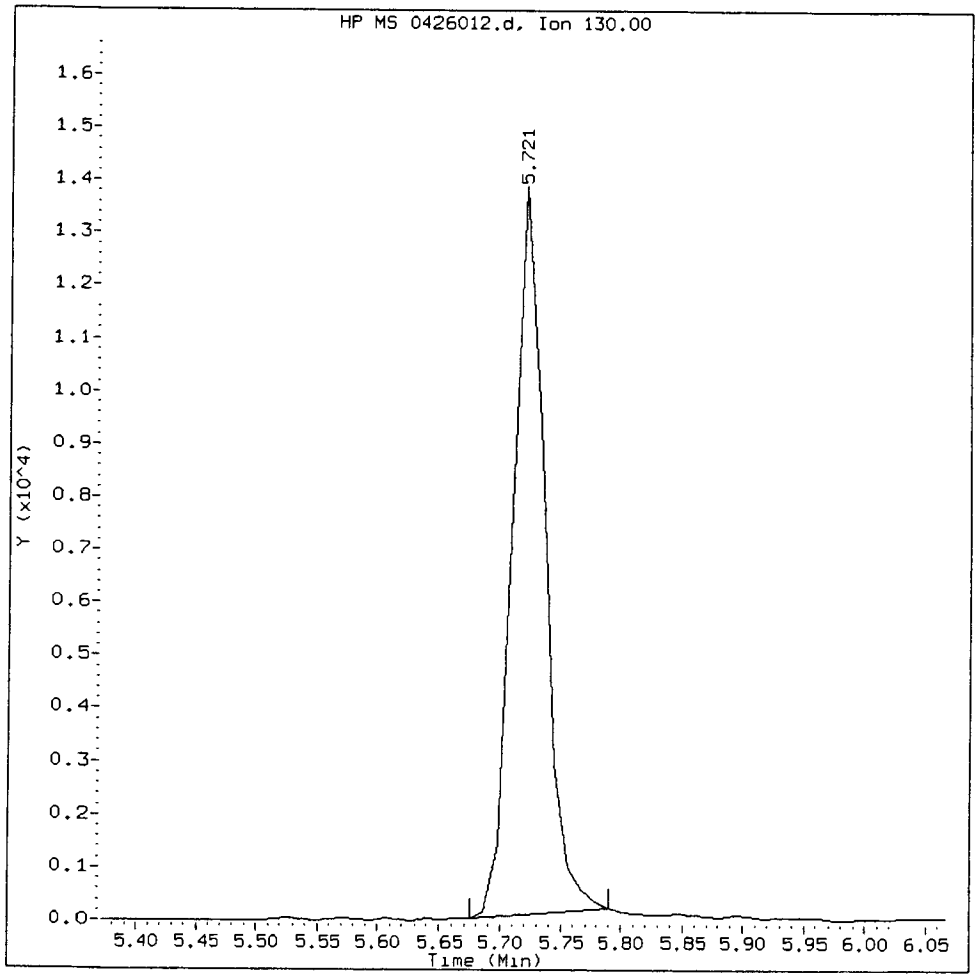




MH
5/4/11

01000426, /chem1/nt7.i/26APR2011.b/0426012.d

Trichloroethene Amount: 106.61 Area: 23915



MANUAL INTEGRATION for Trichloroethene

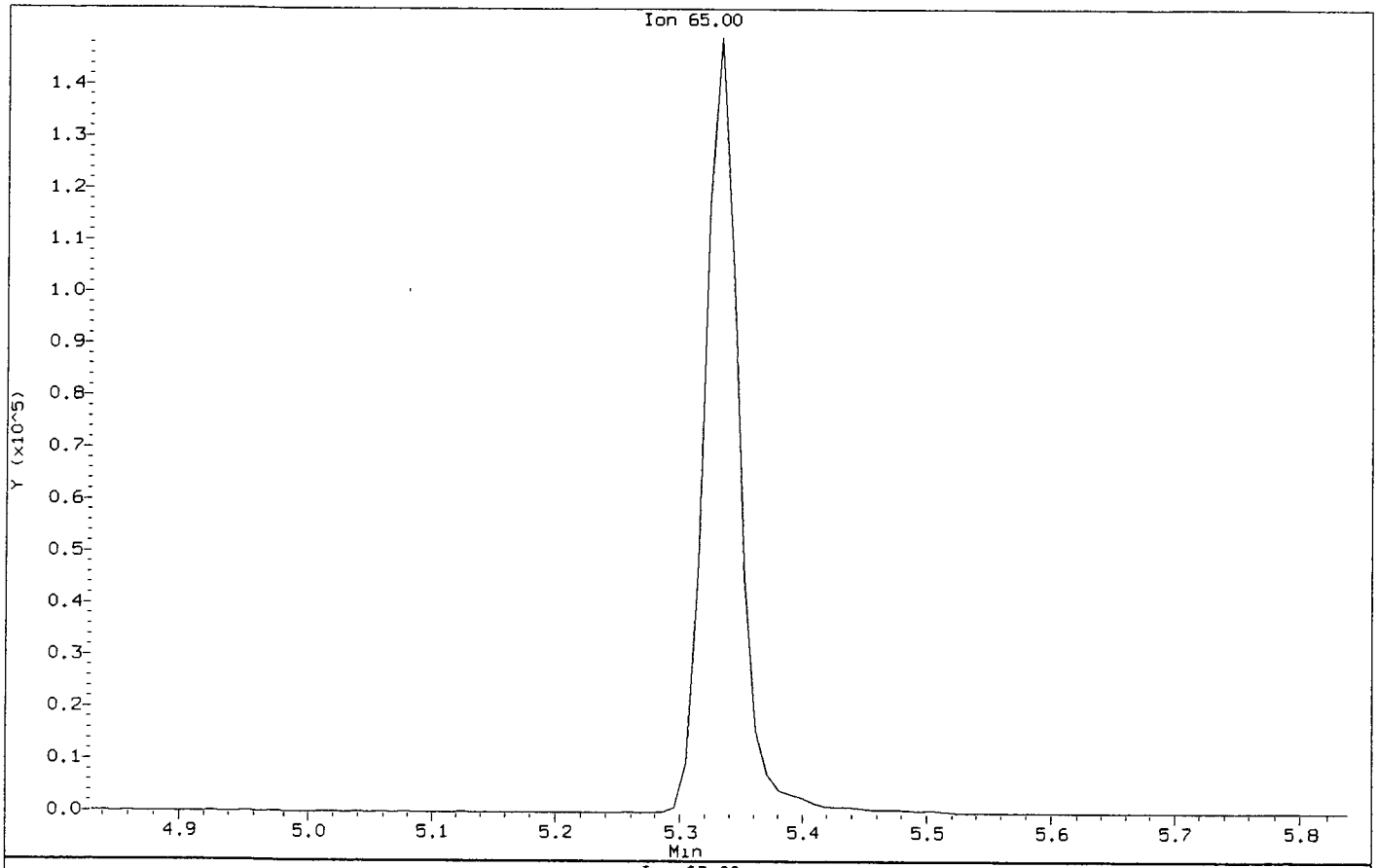
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

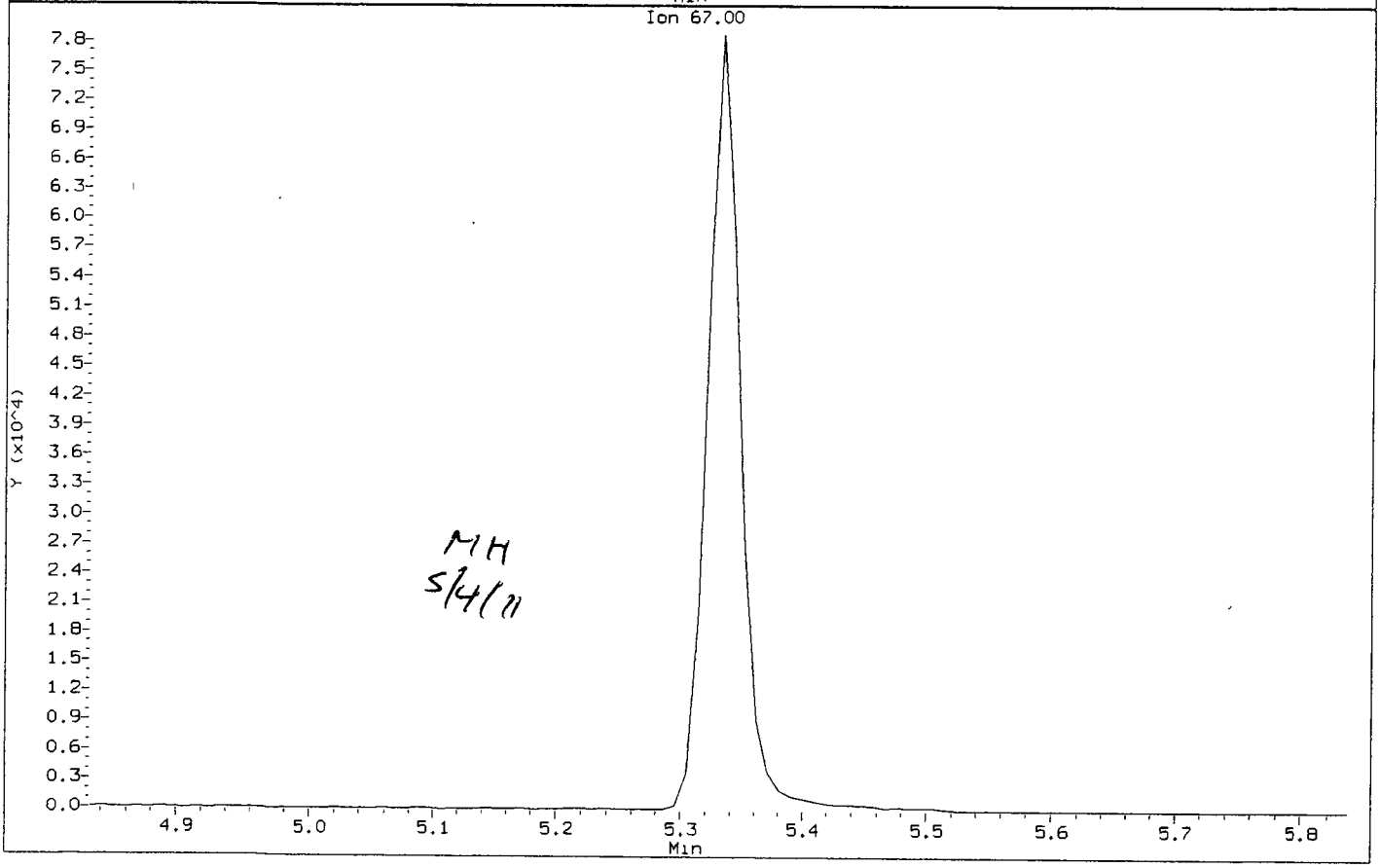
5. Other _____

Analyst: MH Date: 5/4/11

Data File: /chem1/nt7.i/26APR2011.b/0426012.d
Injection Date: 26-APR-2011 11:55
Instrument: nt7.i
Client Sample ID: 100

Compound: d4-1,2-Dichloroethane
CAS Number:

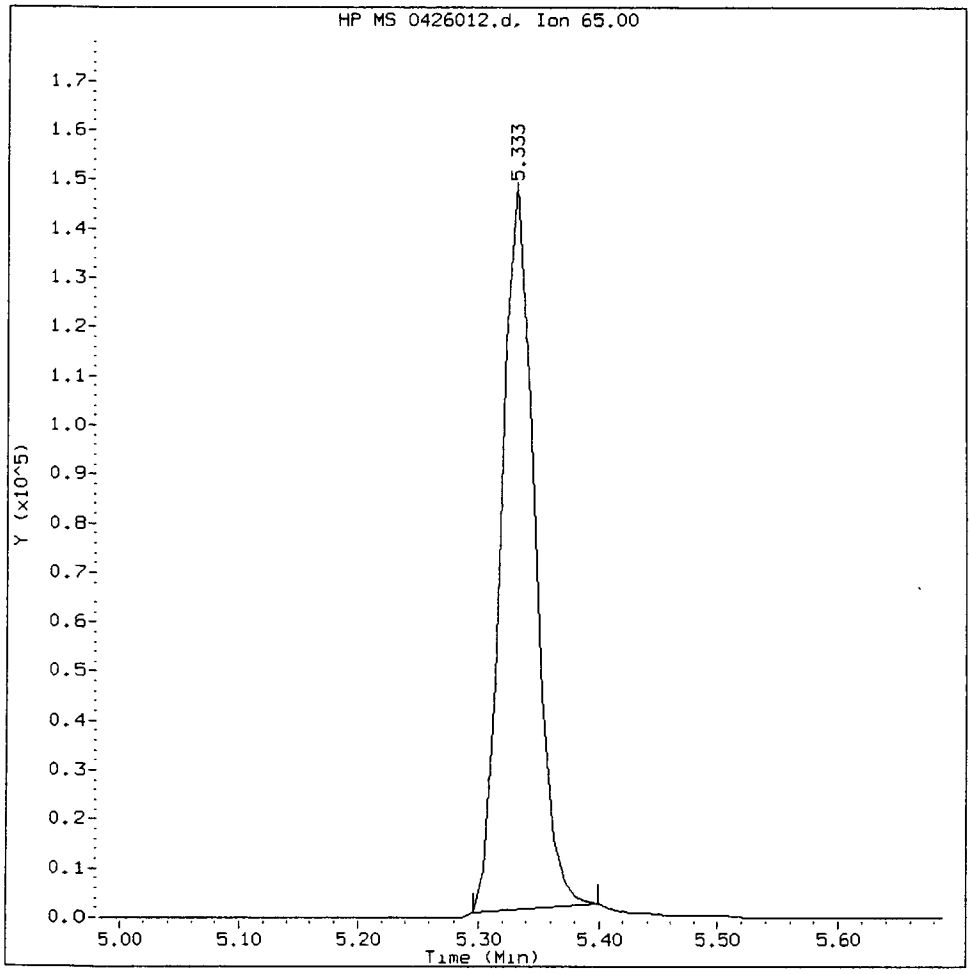




MH
5/4/11

01000426, /chem1/nt7.i/26APR2011.b/0426012.d

d4-1,2-Dichloroethane Amount: 1053.48 Area: 295289



MANUAL INTEGRATION for d4-1,2-Dichloroethane

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

5. Other _____

Analyst: MH Date: 5/4/11

CO-ELUTION SUMMARY FOR FILE - 0426012.d

Lab ID: 01000426, Method: sim042611.m, Instrument: nt7.i, Date: 26-APR-2011

RT	CO-ELUTION COMPOUNDS

MH 5/4/11

Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/26APR2011.b/0426013.d
Lab Smp Id: 05000426 Client Smp ID: 500
Inj Date : 26-APR-2011 12:21
Operator : MH Inst ID: nt7.i
Smp Info : 05000426,10,10,0,
Misc Info : 11-
Comment :
Method : /chem1/nt7.i/26APR2011.b/sim042611.m
Meth Date : 04-May-2011 06:35 monicah Quant Type: ISTD
Cal Date : 26-APR-2011 12:21 Cal File: 0426013.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)	ON-COL (ng/L)
	1 Vinyl Chloride	62	1.551	1.554	(0.291)	199163	500.000	581.99
	2 1,1-Dichloroethene	96	2.505	2.510	(0.471)	162834	500.000	598.03
	175 Trans-1,2-Dichloroethene	96	3.290	3.289	(0.618)	163691	500.000	591.75(M)
	3 cis-1,2-dichloroethene	96	4.440	4.444	(0.834)	180014	500.000	609.55(M)
	6 Benzene	78	5.211	5.212	(0.905)	747086	500.000	565.06(M)
*	4 Pentafluorobenzene	168	5.324	5.326	(1.000)	310955	1000.00	
$	5 d4-1,2-Dichloroethane	65	5.334	5.335	(1.002)	292830	1000.00	1045.0(M)
	176 1,2-Dichloroethane	62	5.391	5.392	(1.012)	276684	500.000	624.72
	8 Trichloroethene	130	5.721	5.720	(0.994)	131207	500.000	579.48(M)
*	7 1,4-Difluorobenzene	114	5.756	5.754	(1.000)	577506	1000.00	
$	9 d8-Toluene	98	6.914	6.914	(1.201)	737681	1000.00	1002.7
	10 Tetrachloroethene	166	7.270	7.271	(1.263)	105197	500.000	602.09
	11 1,1,2,2-Tetrachloroethane	83	9.469	9.458	(1.645)	123301	500.000	589.48

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt7.i
Lab File ID: 0426013.d
Lab Smp Id: 05000426
Analysis Type: VOA
Quant Type: ISTD
Operator: MH
Method File: /chem1/nt7.i/26APR2011.b/sim042611.m
Misc Info: 11-

Calibration Date: 26-APR-2011
Calibration Time: 12:47
Client Smp ID: 500
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.

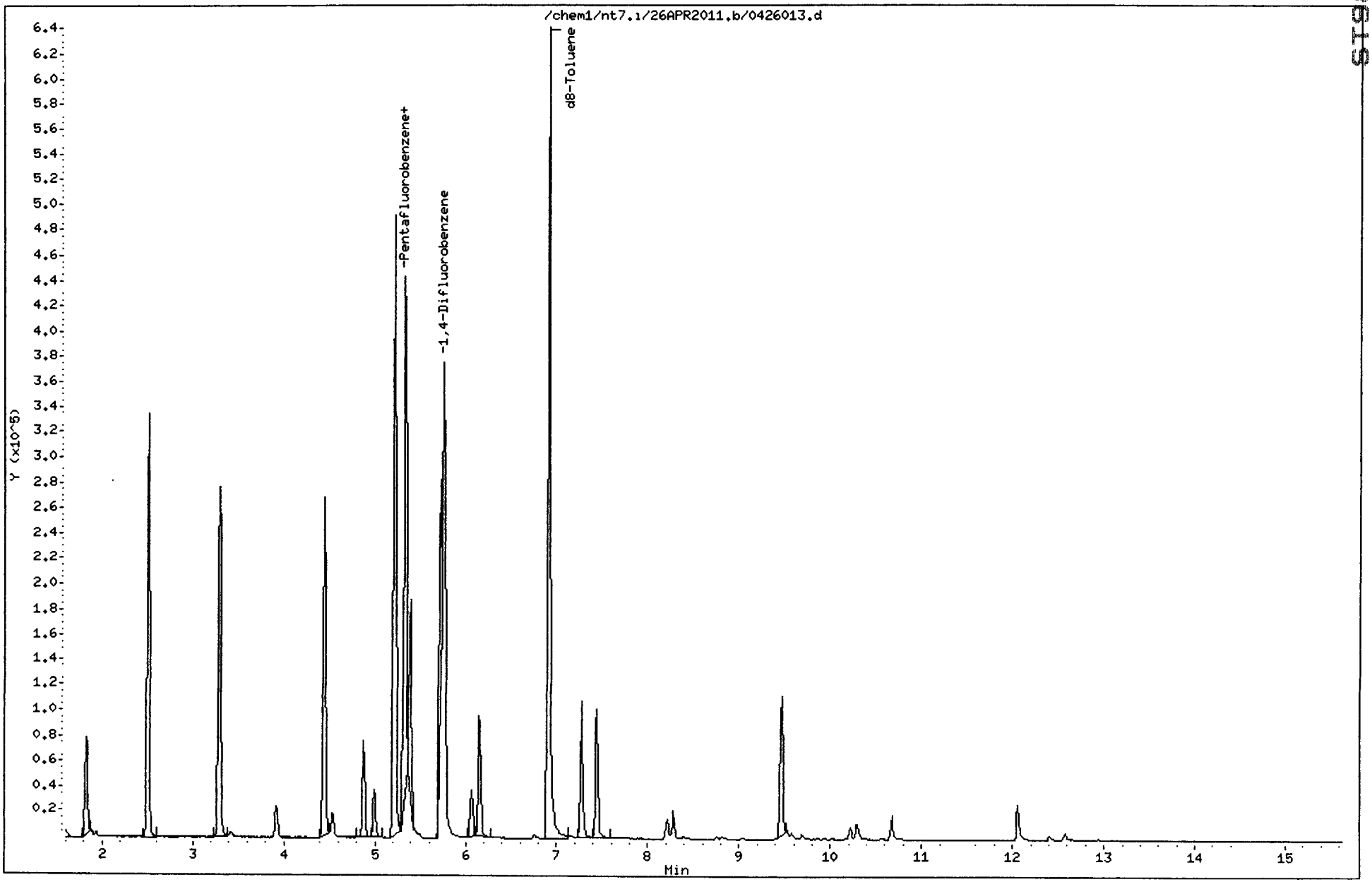
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	363407	181704	726814	310955	-14.43
7 1,4-Difluorobenze	667797	333898	1335594	577506	-13.52

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.33	4.83	5.83	5.32	-0.03
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/26APR2011.b/0426013.d
Date : 26-APR-2011 12:21
Client ID: 500
Sample Info: 05000426,10,10,0,

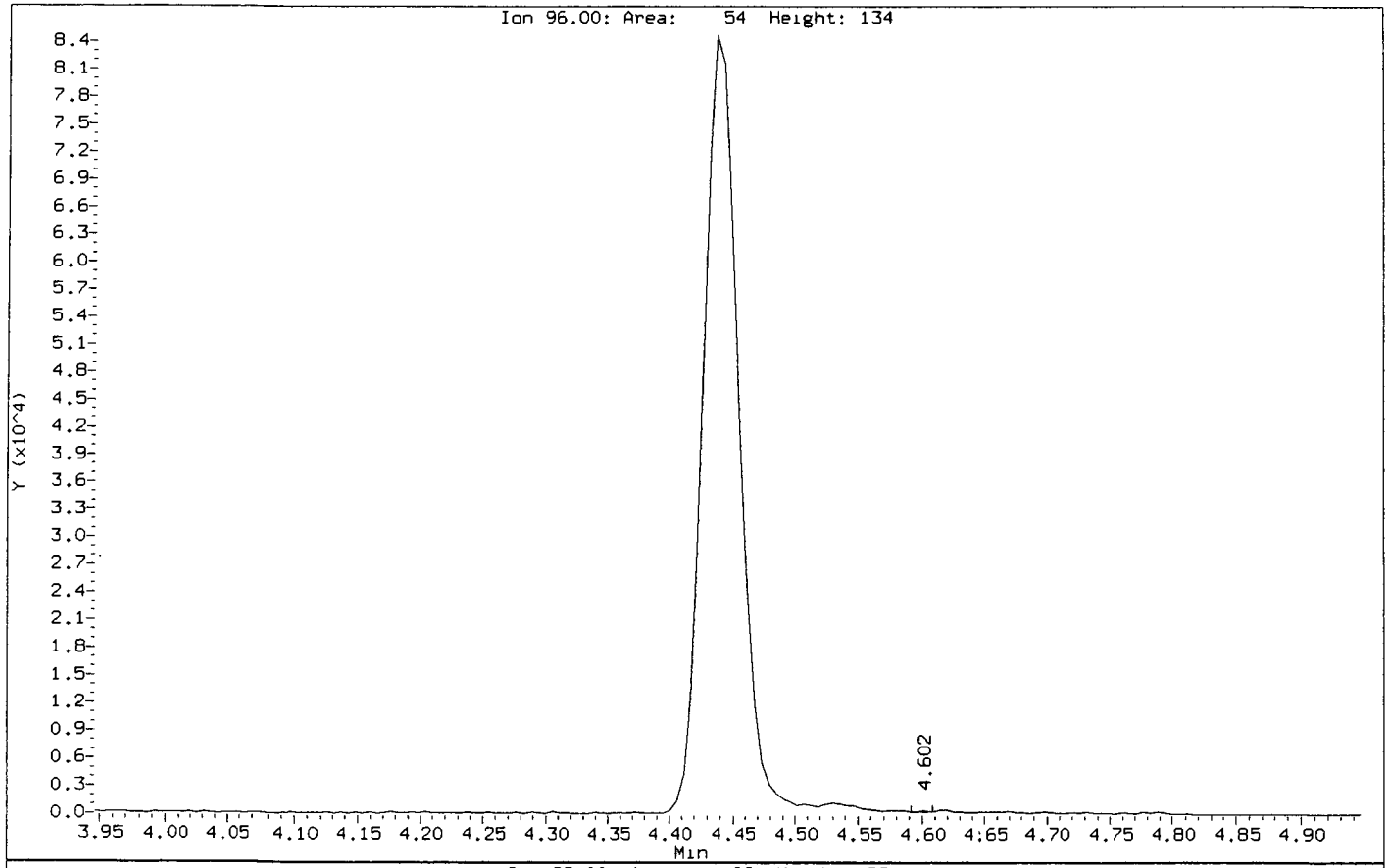
Instrument: nt7.i
Operator: MH
Column phase: RTXVMS
Column diameter: 0.18

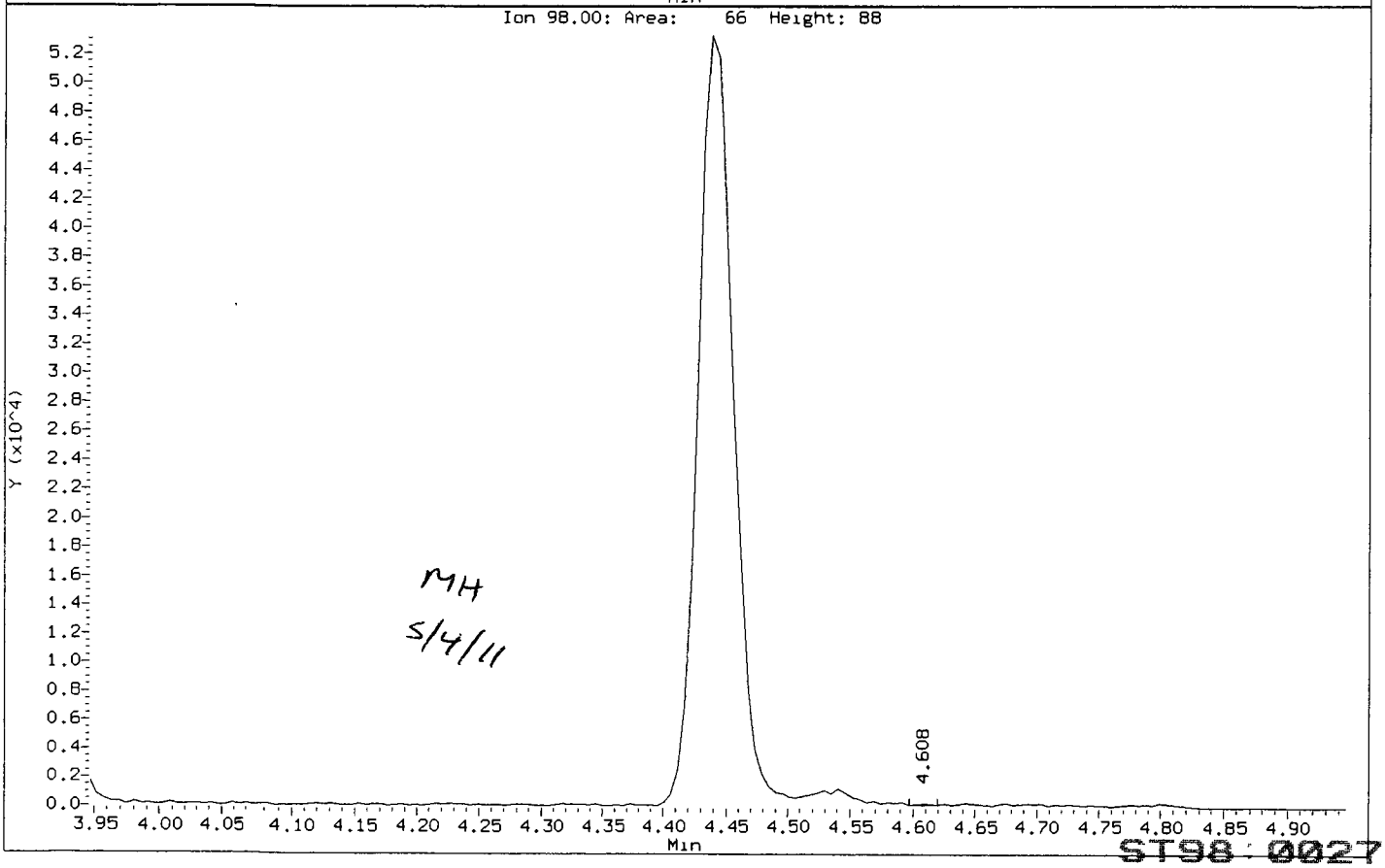


ST98:00276

Data File: /chem1/nt7.1/26APR2011.b/0426013.d
Injection Date: 26-APR-2011 12:21
Instrument: nt7.1
Client Sample ID: 500

Compound: cis-1,2-dichloroethene
CAS Number:

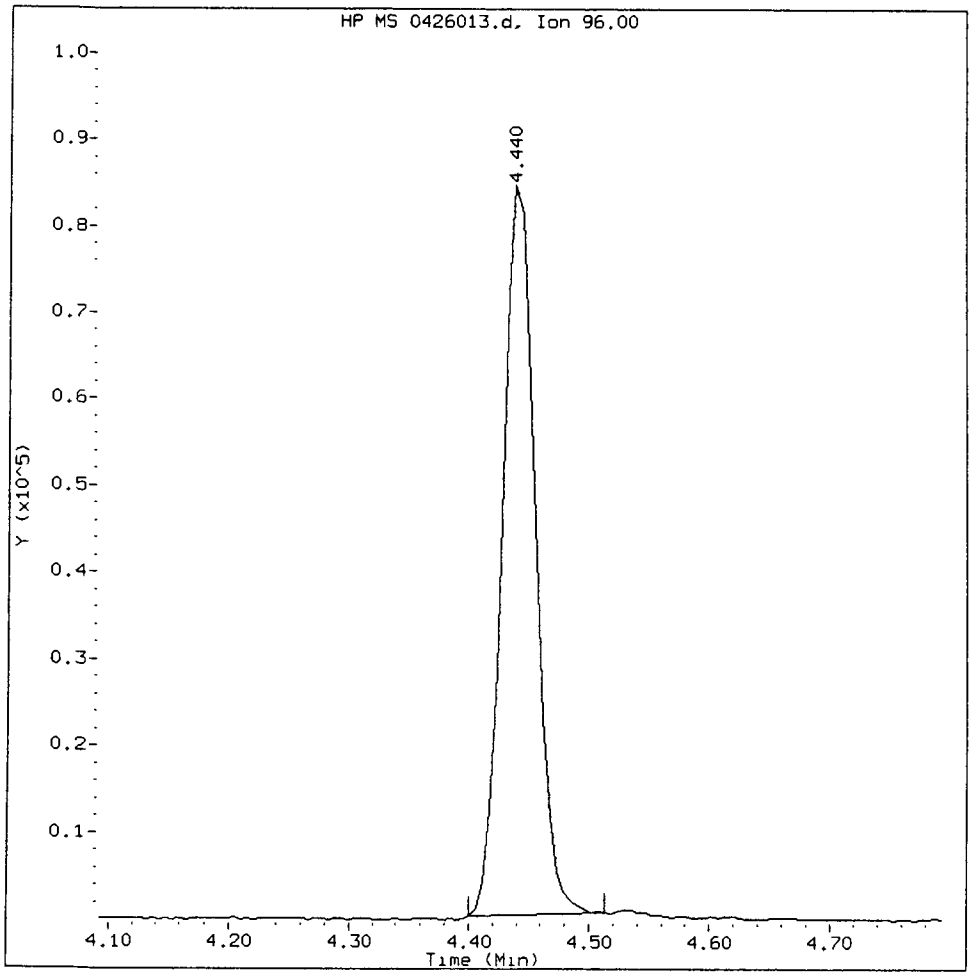




MH
5/4/11

05000426, /chem1/nt7.i/26APR2011.b/0426013.d

cis-1,2-dichloroethene Amount: 609.55 Area: 180014



MANUAL INTEGRATION for cis-1,2-dichloroethene

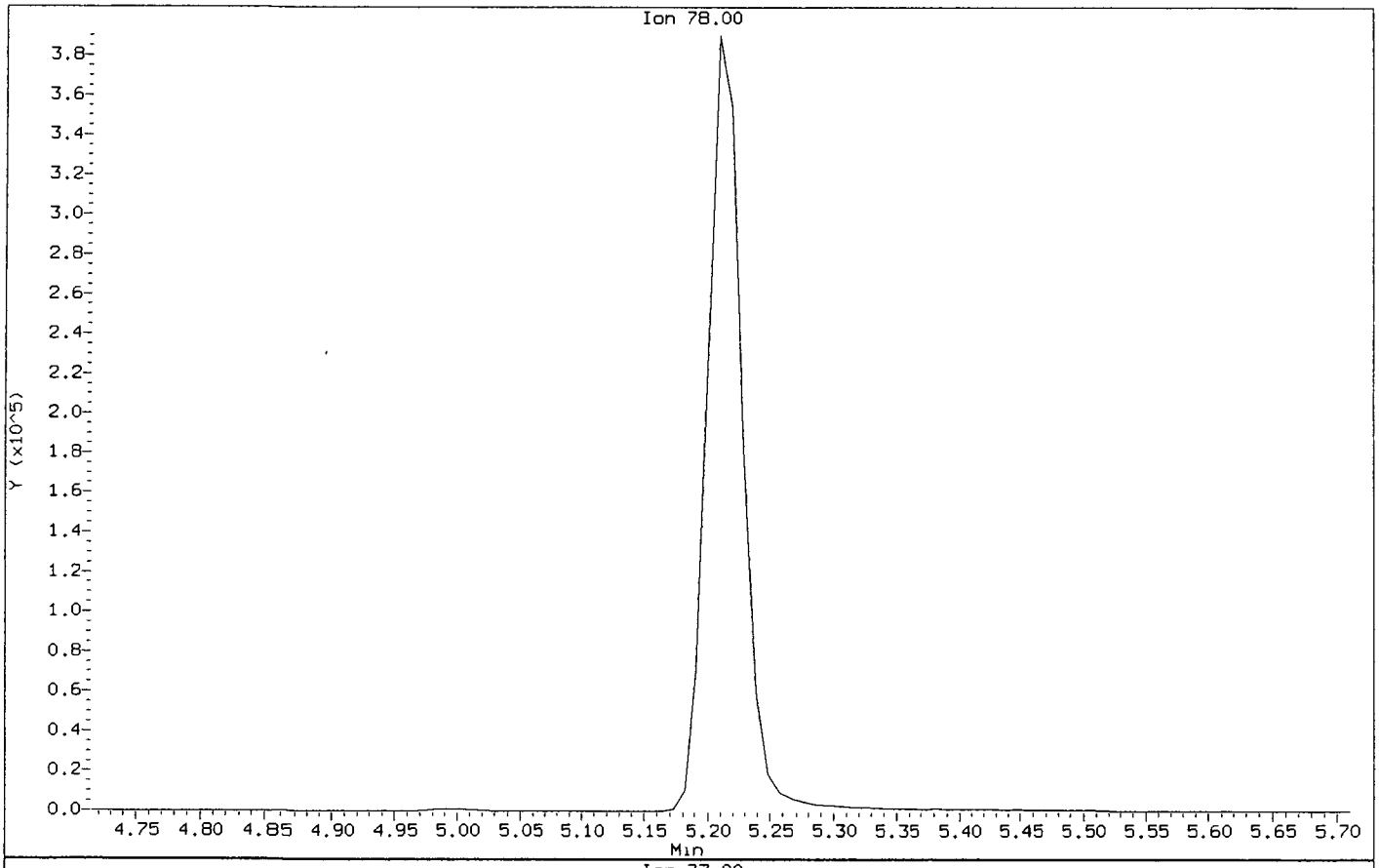
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

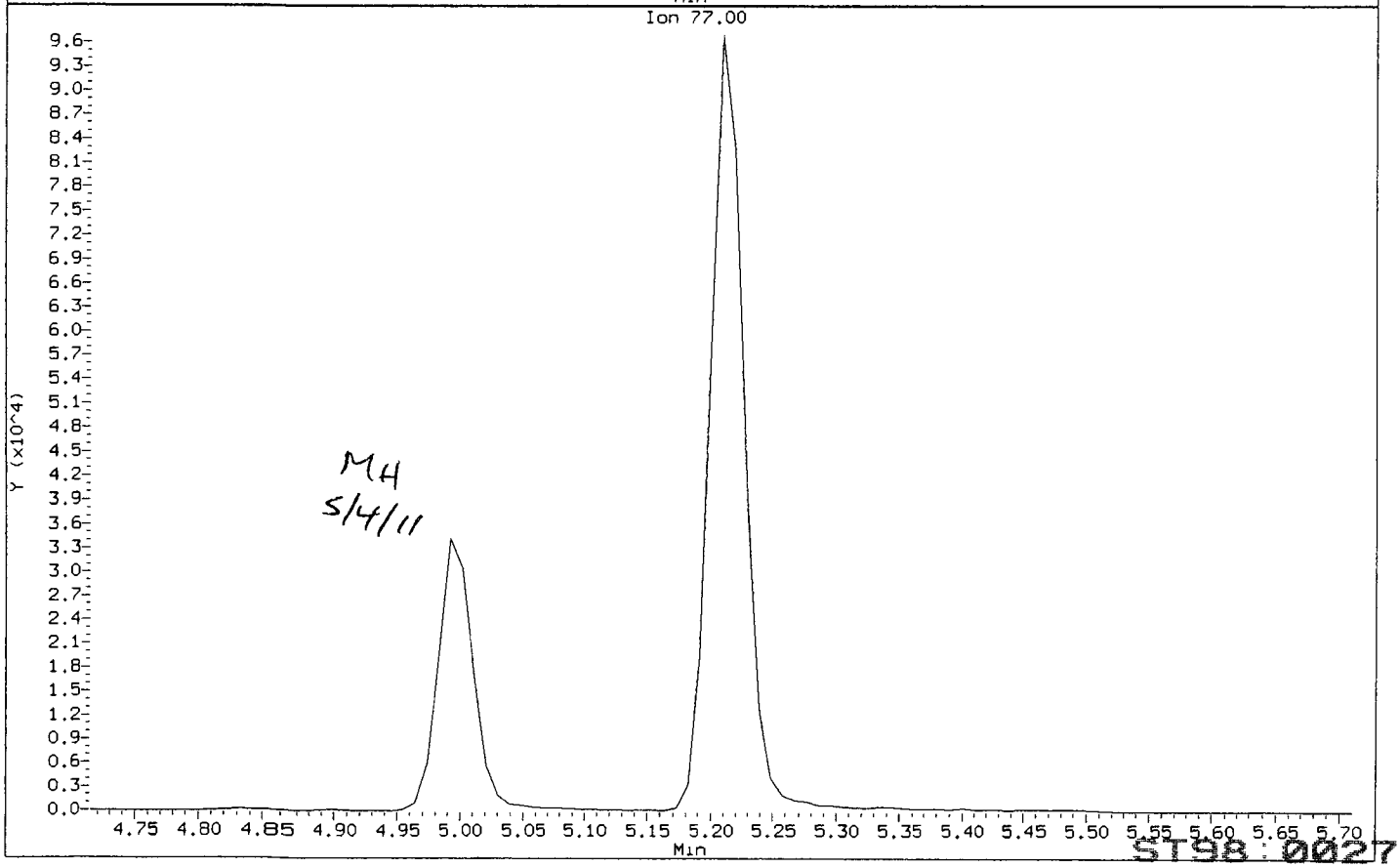
5. Other _____

Analyst: MH Date: 5/4/11

Data File: /chem1/nt7.1/26APR2011.b/0426013.d
Injection Date: 26-APR-2011 12:21
Instrument: nt7.1
Client Sample ID: 500

Compound: Benzene
CAS Number:

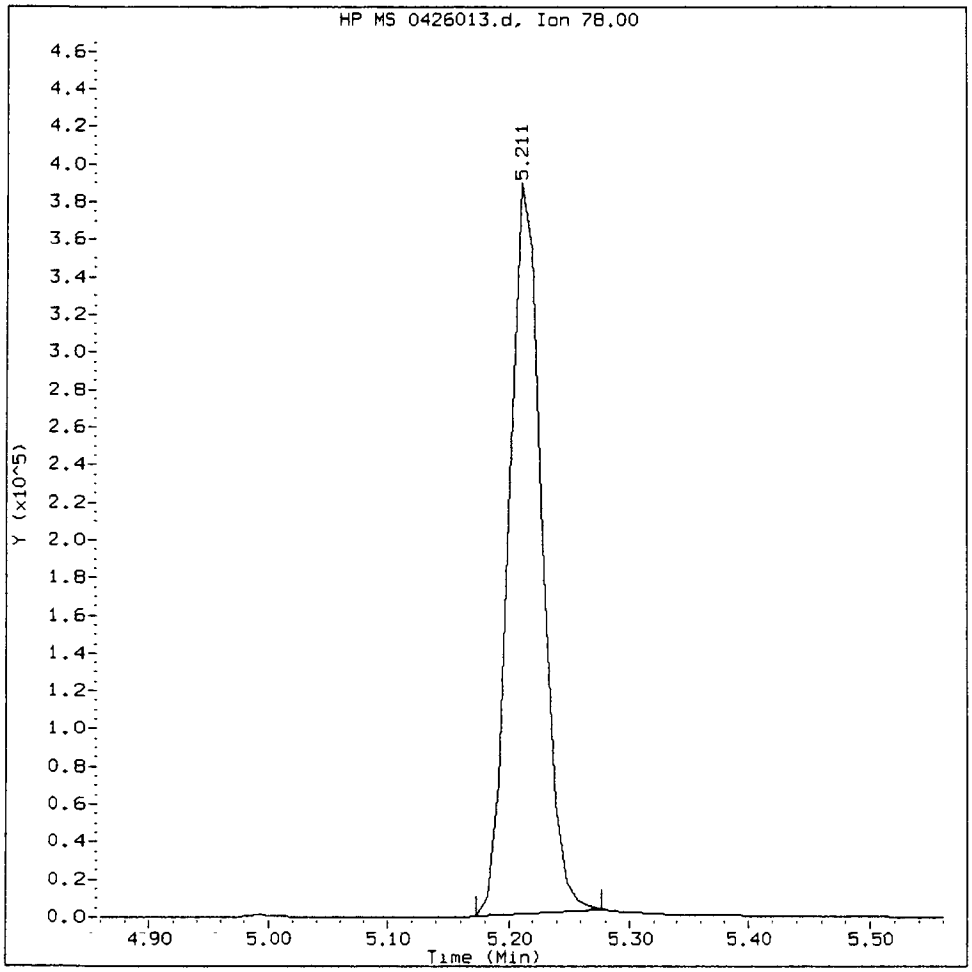




MH
5/4/11

05000426, /chem1/nt7.i/26APR2011.b/0426013.d

Benzene Amount: 565.06 Area: 747086



MANUAL INTEGRATION for Benzene

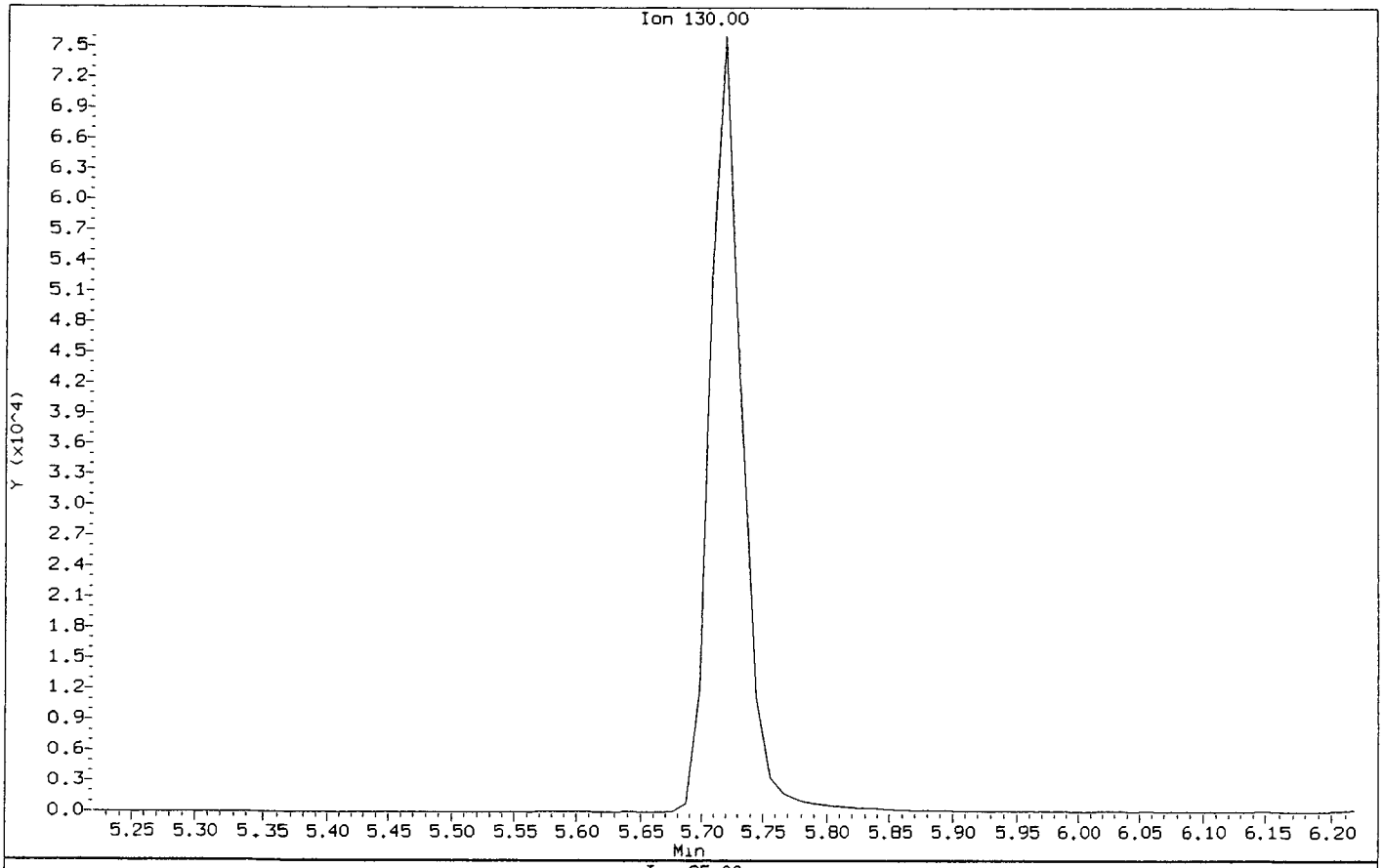
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

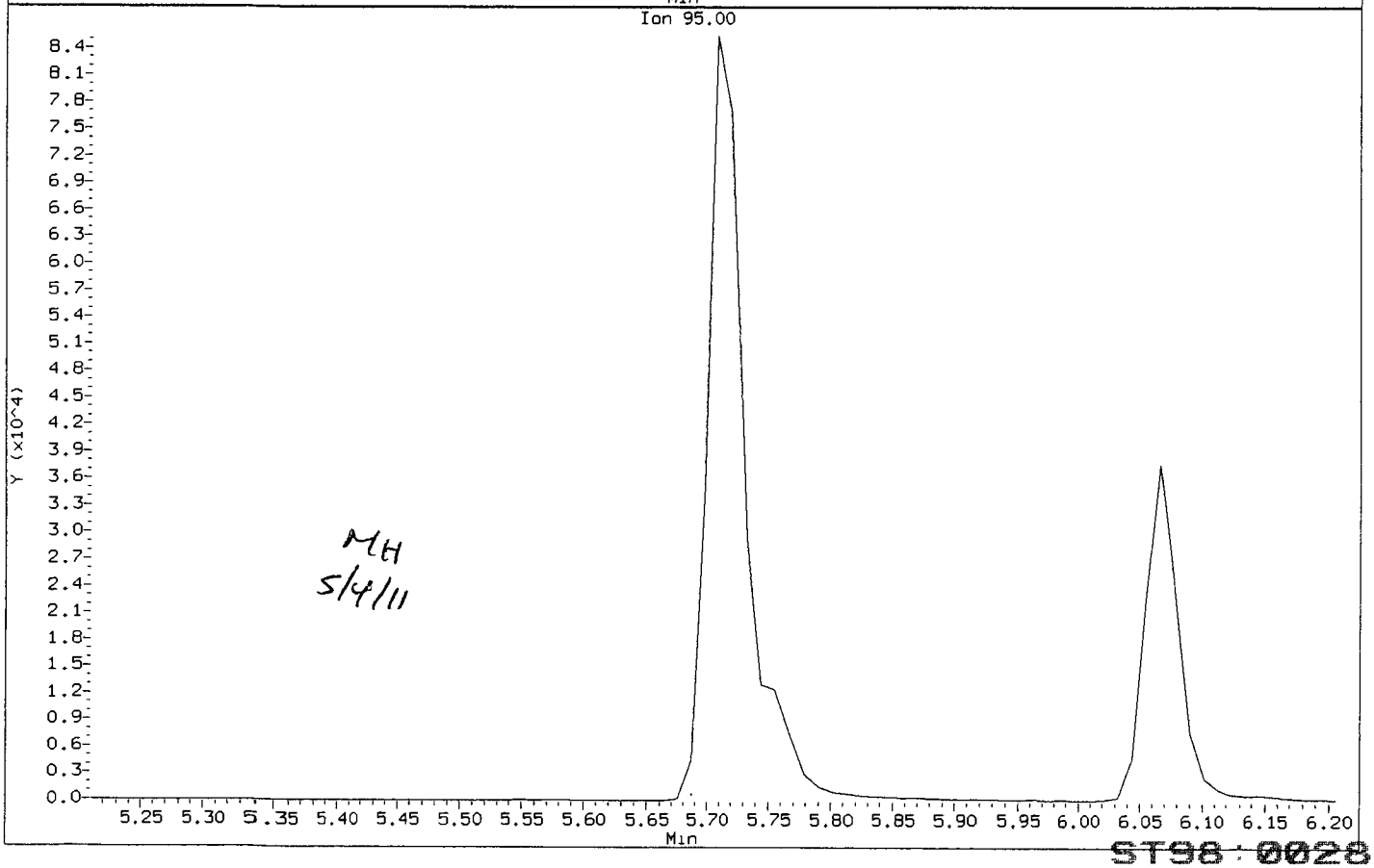
5. Other _____

Analyst: MH Date: 5/4/11

Data File: /chem1/nt7.1/26APR2011.b/0426013.d
Injection Date: 26-APR-2011 12:21
Instrument: nt7.1
Client Sample ID: 500

Compound: Trichloroethene
CAS Number:

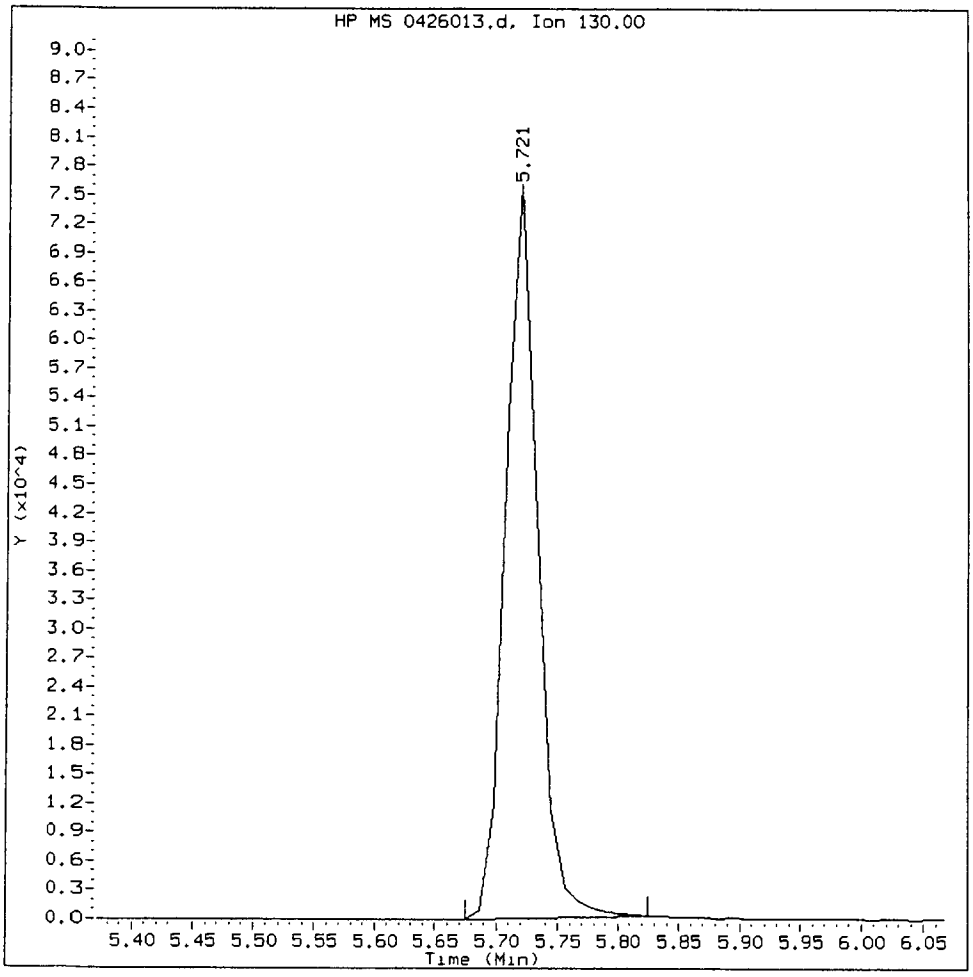




MH
5/4/11

05000426, /chem1/nt7.i/26APR2011.b/0426013.d

Trichloroethene Amount: 579.48 Area: 131207



MANUAL INTEGRATION for Trichloroethene

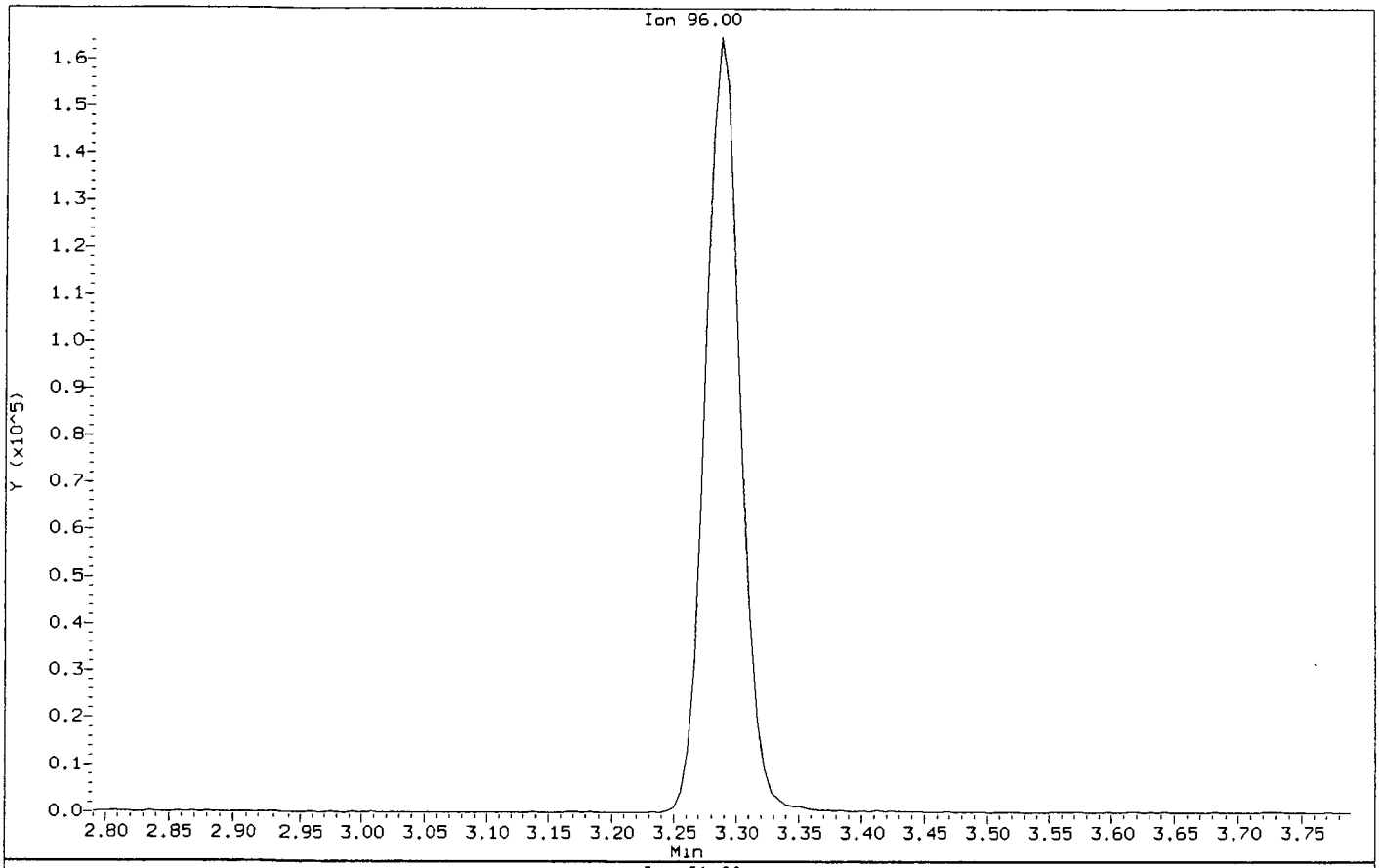
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

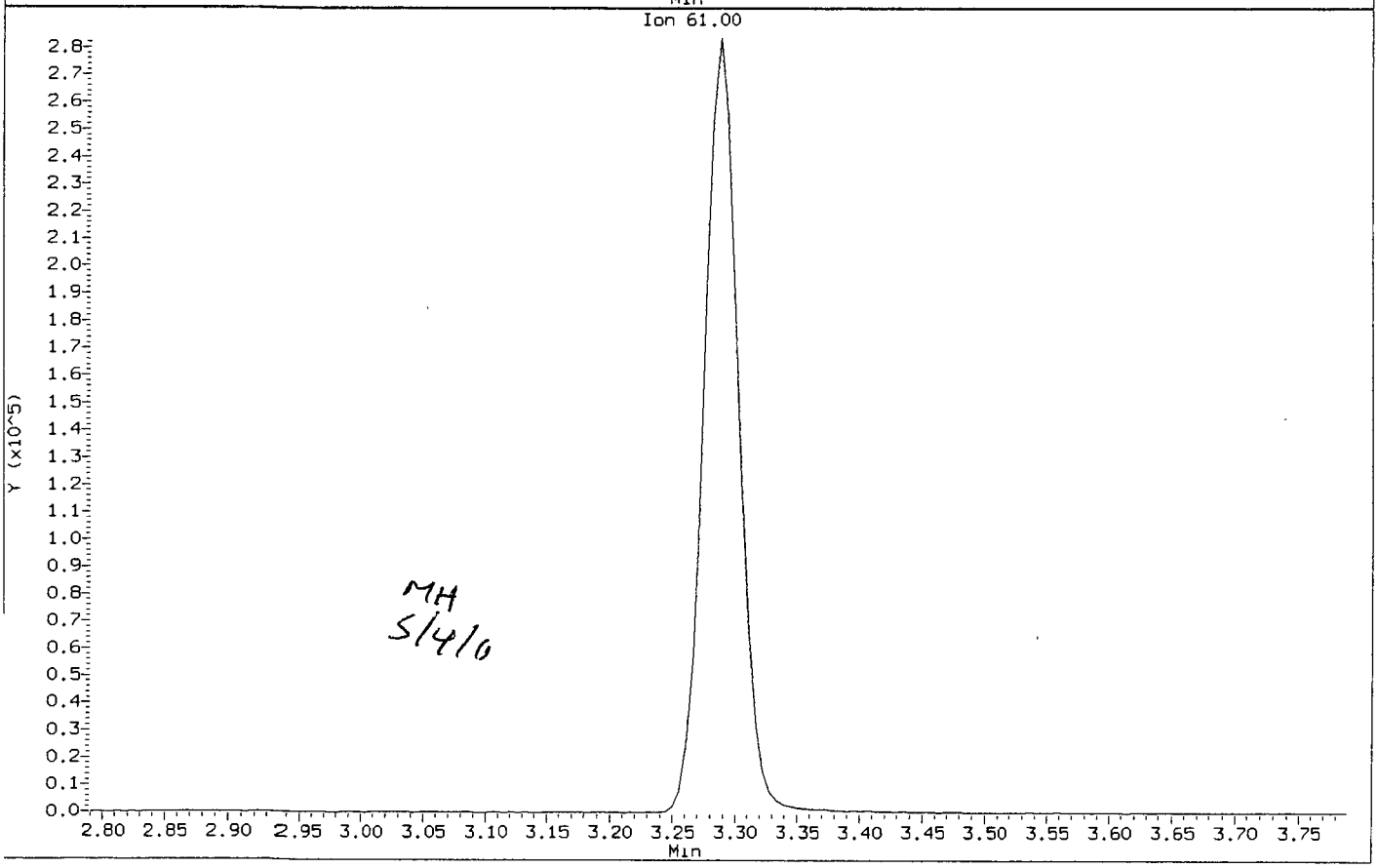
5. Other _____

Analyst: MH Date: 5/4/11

Data File: /chem1/nt7.1/26APR2011.b/0426014.d
Injection Date: 26-APR-2011 12:47
Instrument: nt7.1
Client Sample ID: 1000

Compound: Trans-1,2-Dichloroethene
CAS Number:

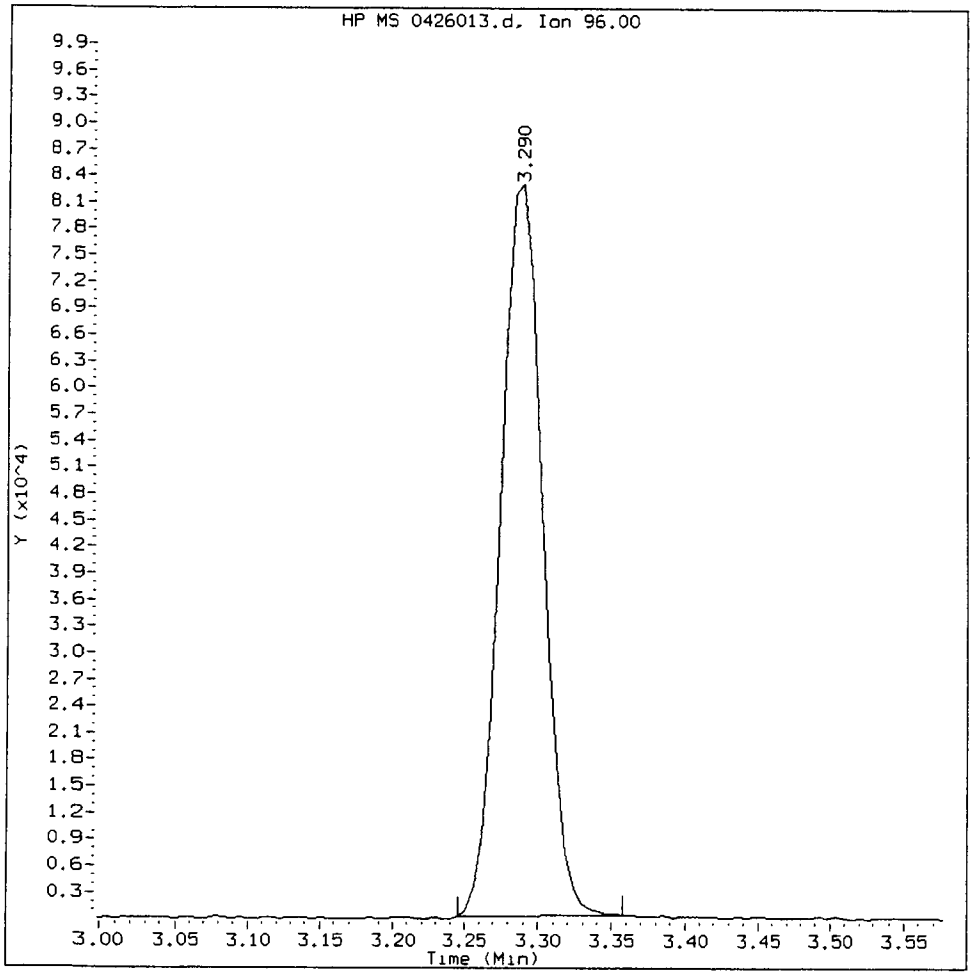




MH
5/4/11

05000426, /chem1/nt7.i/26APR2011.b/0426013.d

Trans-1,2-Dichloroethene Amount: 591.75 Area: 163691



MANUAL INTEGRATION for Trans-1,2-Dichloroethene

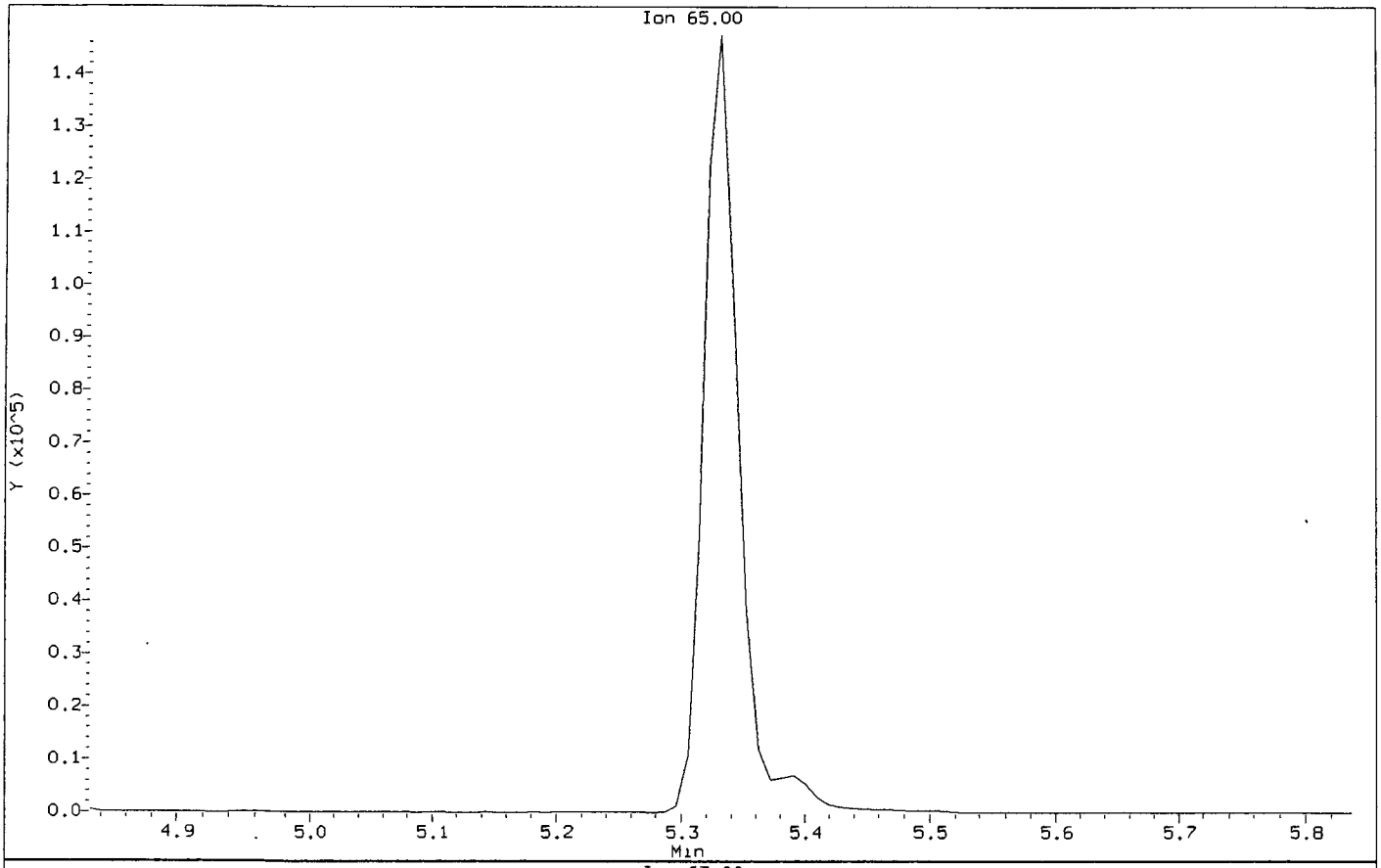
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

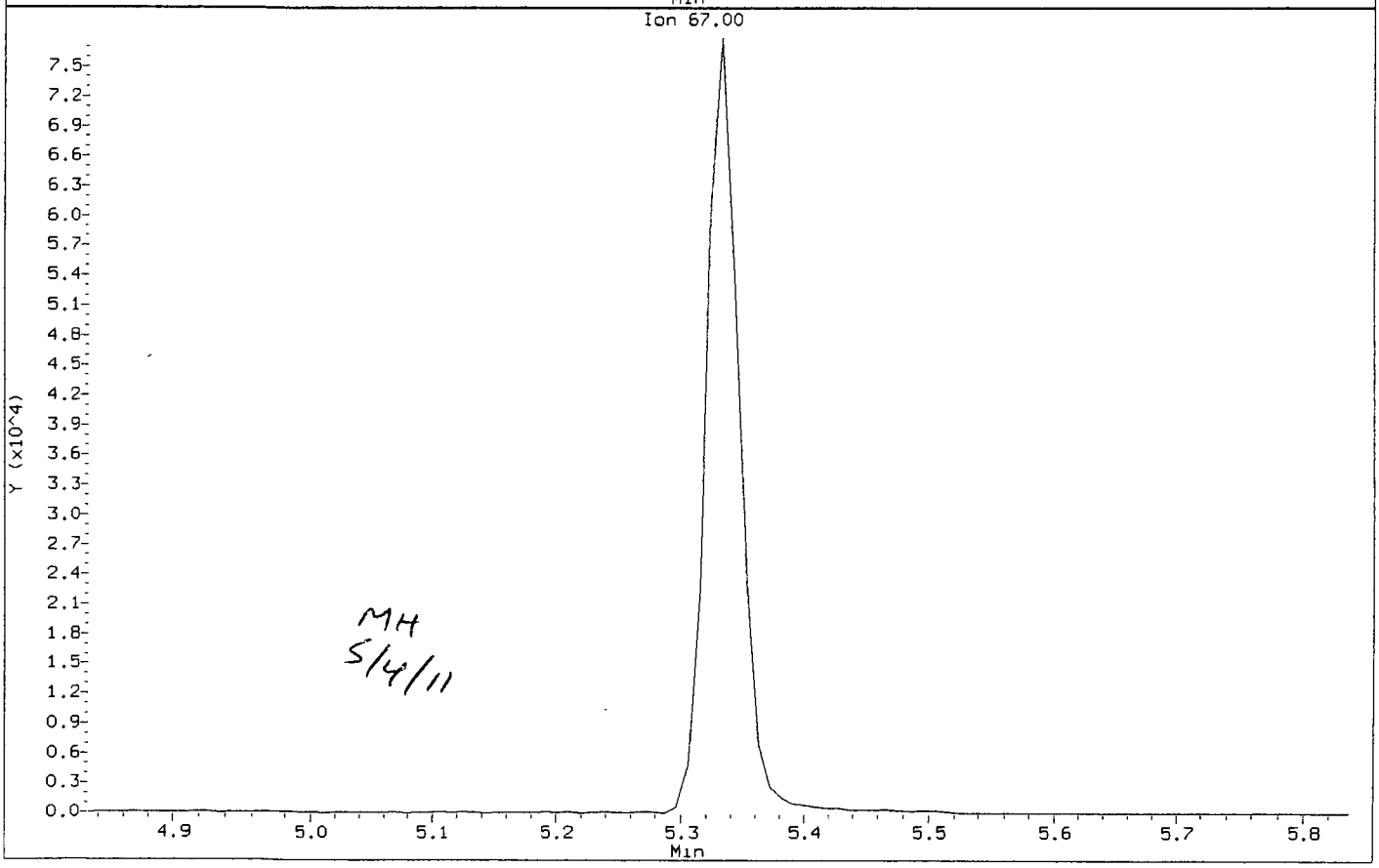
5. Other _____

Analyst: MH Date: 5/4/11

Data File: /chem1/nt7.1/26APR2011.b/0426013.d
Injection Date: 26-APR-2011 12:21
Instrument: nt7.1
Client Sample ID: 500

Compound: d4-1,2-Dichloroethane
CAS Number:

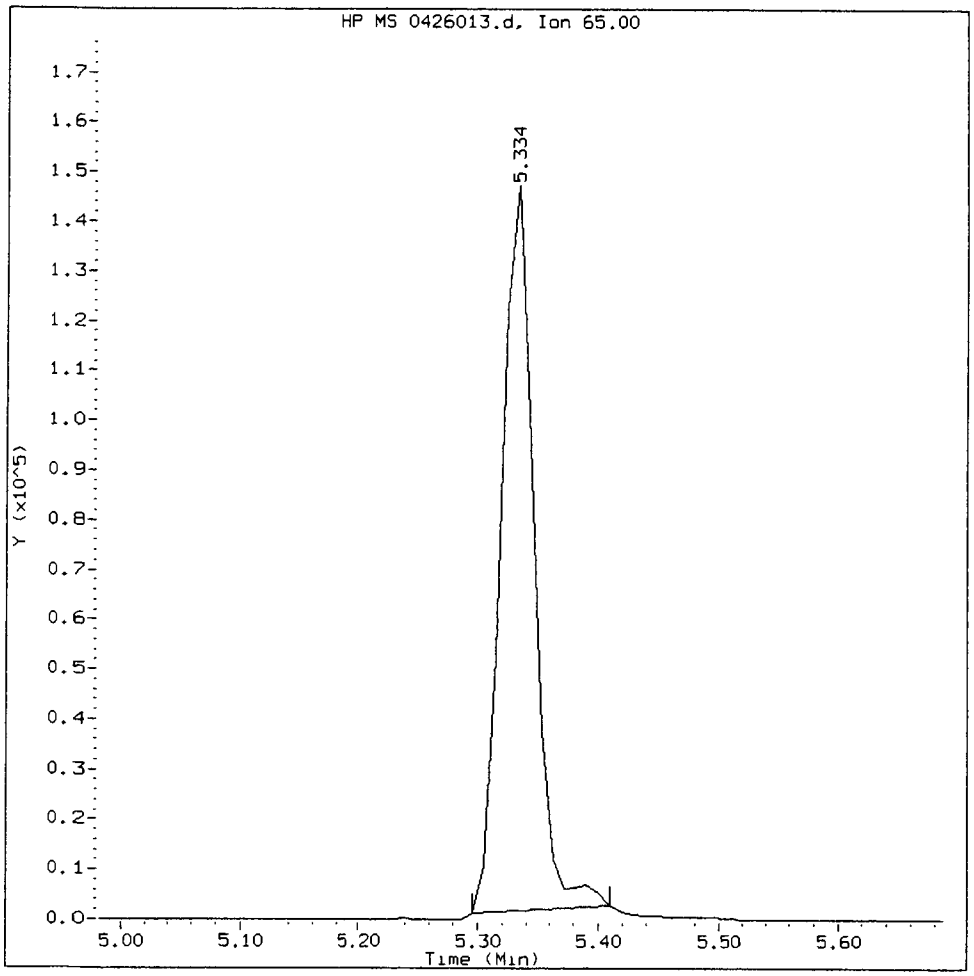




MH
5/4/11

05000426, /chem1/nt7.i/26APR2011.b/0426013.d

d4-1,2-Dichloroethane Amount: 1045.01 Area: 292830



MANUAL INTEGRATION for d4-1,2-Dichloroethane

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

5. Other _____

Analyst: MH Date: 5/4/11

CO-ELUTION SUMMARY FOR FILE - 0426013.d

Lab ID: 05000426, Method: sim042611.m, Instrument: nt7.i, Date: 26-APR-2011

RT	CO-ELUTION COMPOUNDS

MH 5/4/11

Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/26APR2011.b/0426014.d
Lab Smp Id: 1000426 Client Smp ID: 1000
Inj Date : 26-APR-2011 12:47
Operator : MH Inst ID: nt7.i
Smp Info : 1000426,10,10,0,
Misc Info : 11-
Comment :
Method : /chem1/nt7.i/26APR2011.b/sim042611.m
Meth Date : 04-May-2011 06:35 monicah Quant Type: ISTD
Cal Date : 26-APR-2011 12:47 Cal File: 0426014.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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/L)	ON-COL (ng/L)
	1 Vinyl Chloride	62	1.554	1.554	(0.292)	412962	1000.00	1032.6
	2 1,1-Dichloroethene	96	2.510	2.510	(0.471)	319114	1000.00	1002.8
	175 Trans-1,2-Dichloroethene	96	3.289	3.289	(0.618)	320056	1000.00	990.01(M)
	3 cis-1,2-dichloroethene	96	4.444	4.444	(0.834)	362692	1000.00	1050.9(M)
	6 Benzene	78	5.212	5.212	(0.906)	1519641	1000.00	993.97(M)
*	4 Pentafluorobenzene	168	5.326	5.326	(1.000)	363407	1000.00	
$	5 d4-1,2-Dichloroethane	65	5.335	5.335	(1.002)	324433	1000.00	990.68(M)
	176 1,2-Dichloroethane	62	5.392	5.392	(1.012)	538579	1000.00	1040.5
	8 Trichloroethene	130	5.720	5.720	(0.994)	260900	1000.00	996.47(M)
*	7 1,4-Difluorobenzene	114	5.754	5.754	(1.000)	667797	1000.00	
$	9 d8-Toluene	98	6.914	6.914	(1.202)	857919	1000.00	1008.5
	10 Tetrachloroethene	166	7.271	7.271	(1.264)	211681	1000.00	1047.7
	11 1,1,2,2-Tetrachloroethane	83	9.458	9.458	(1.644)	264894	1000.00	1095.2

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt7.i
Lab File ID: 0426014.d
Lab Smp Id: 1000426
Analysis Type: VOA
Quant Type: ISTD
Operator: MH
Method File: /chem1/nt7.i/26APR2011.b/sim042611.m
Misc Info: 11-

Calibration Date: 26-APR-2011
Calibration Time: 12:47
Client Smp ID: 1000
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	363407	181704	726814	363407	0.00
7 1,4-Difluorobenze	667797	333898	1335594	667797	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.00
7 1,4-Difluorobenze	5.75	5.25	6.25	5.75	0.00

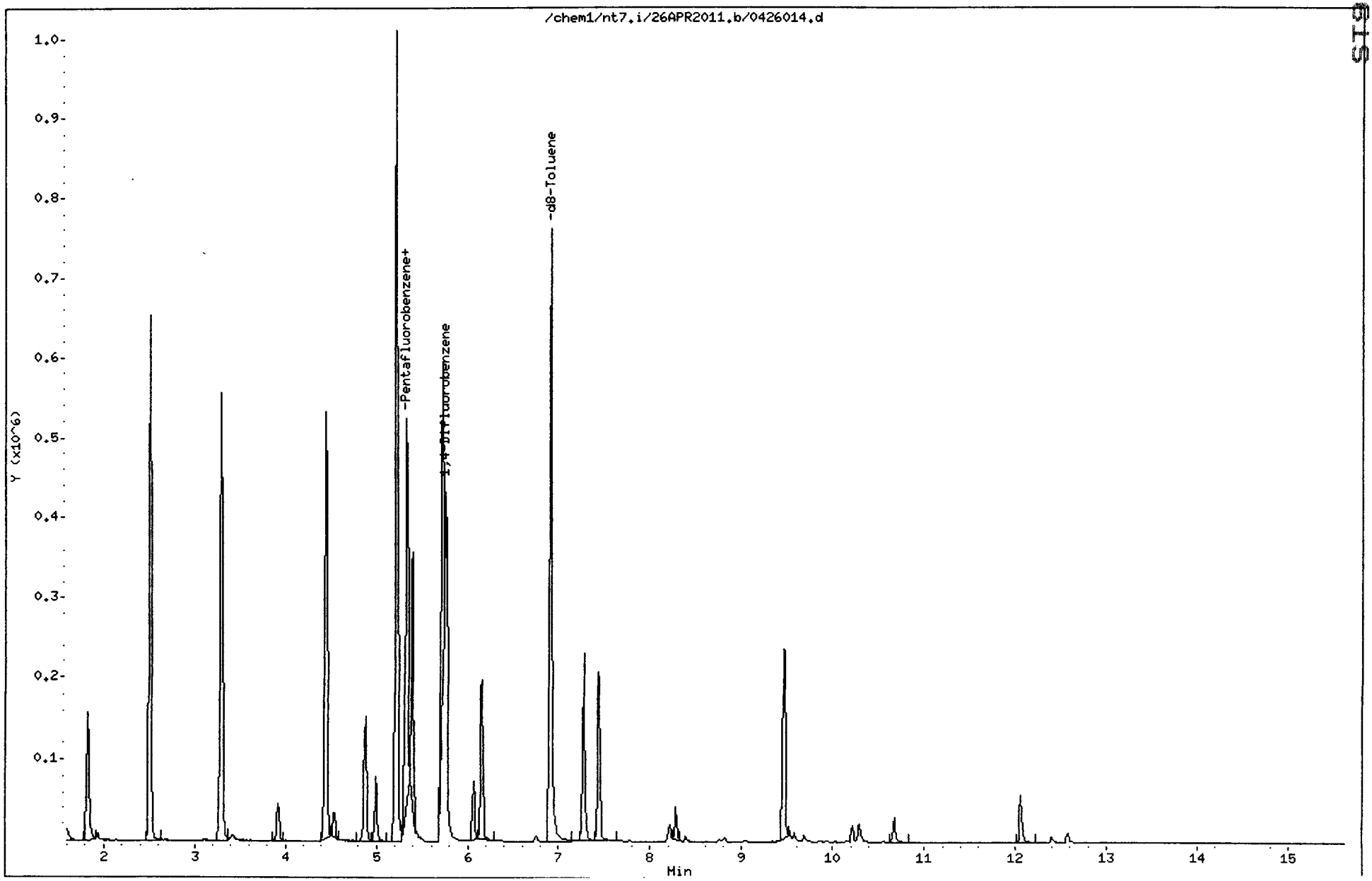
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/nt7.i/26APR2011.b/0426014.d
Date : 26-APR-2011 12:47
Client ID: 1000
Sample Info: 1000426,10,10,0,

Column phase: RTXVMS

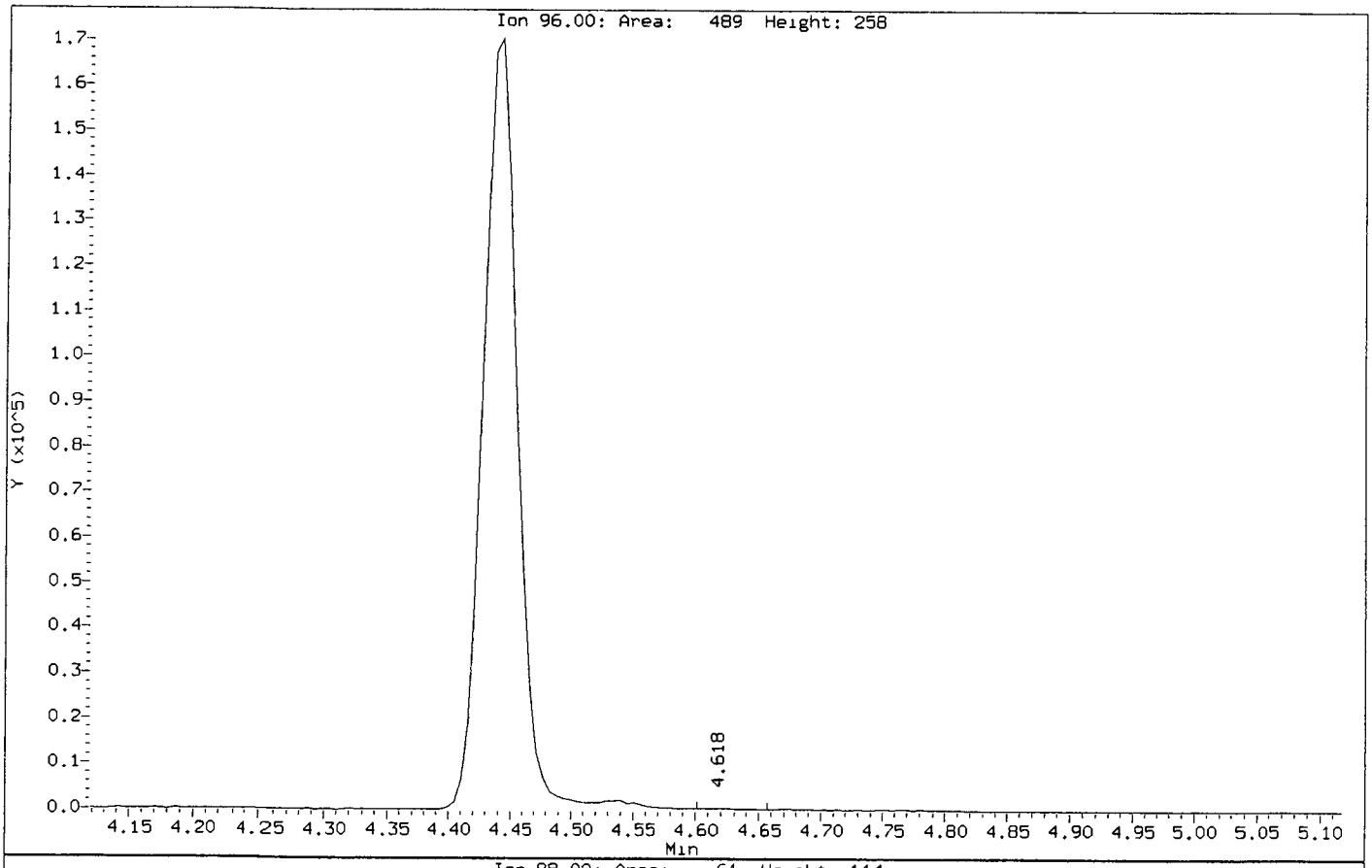
Instrument: nt7.i

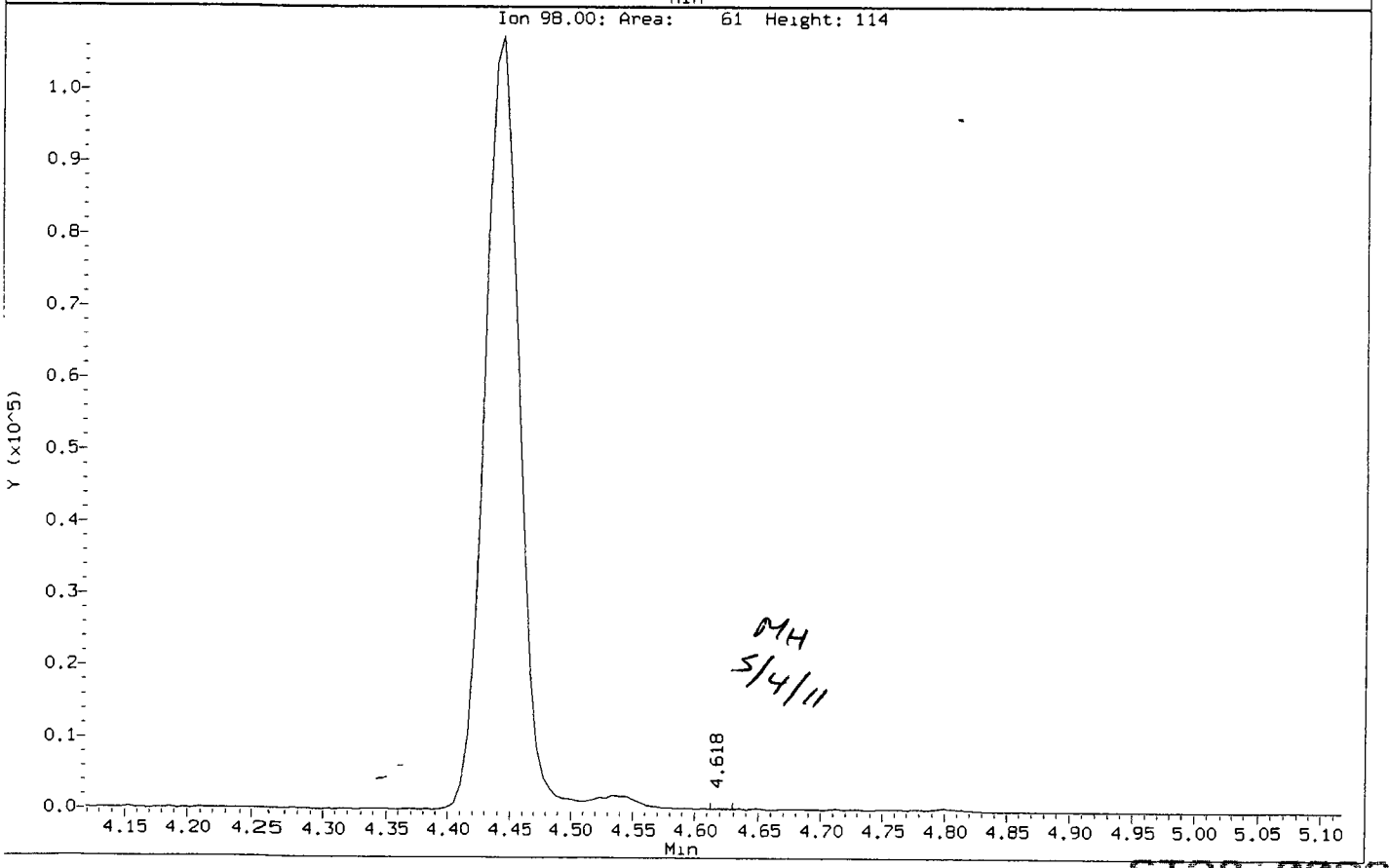
Operator: MH
Column diameter: 0.18



Data File: /chem1/nt7.1/26APR2011.b/0426014.d
Injection Date: 26-APR-2011 12:47
Instrument: nt7.1
Client Sample ID: 1000

Compound: cis-1,2-dichloroethene
CAS Number:

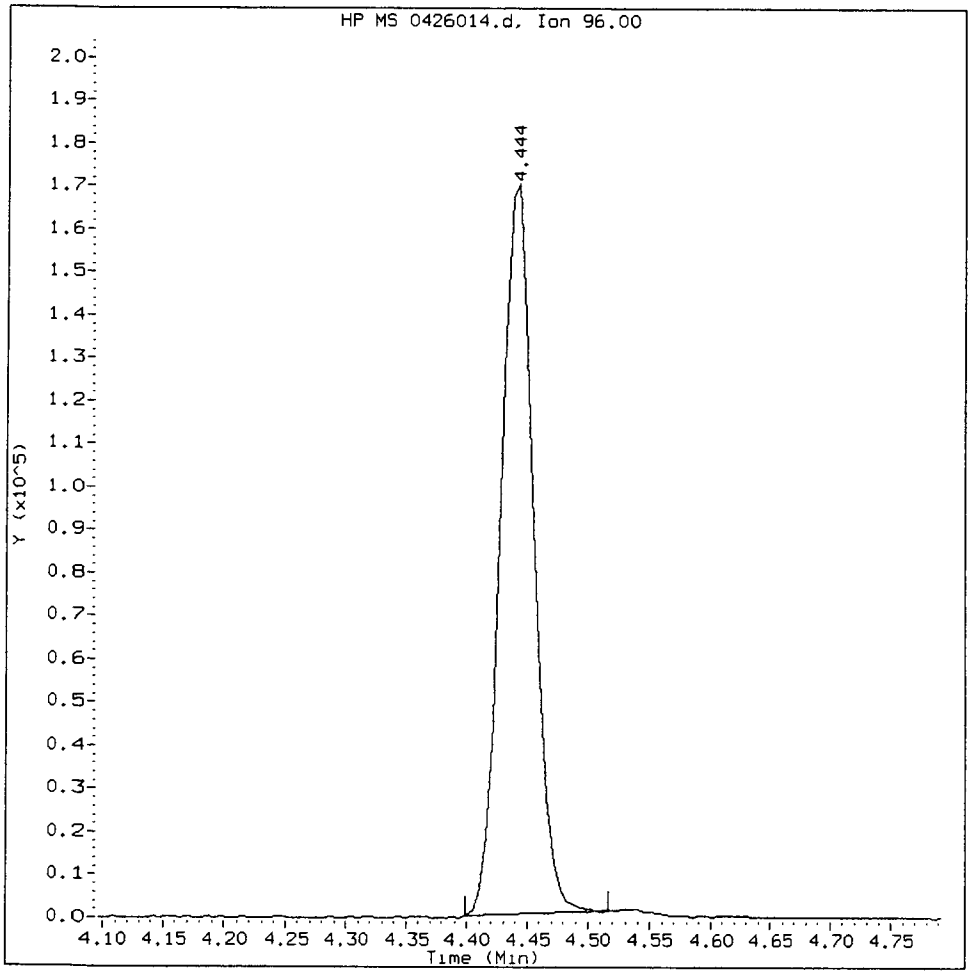




MH
5/4/11

1000426, /chem1/nt7.i/26APR2011.b/0426014.d

cis-1,2-dichloroethene Amount: 1050.87 Area: 362692



MANUAL INTEGRATION for cis-1,2-dichloroethene

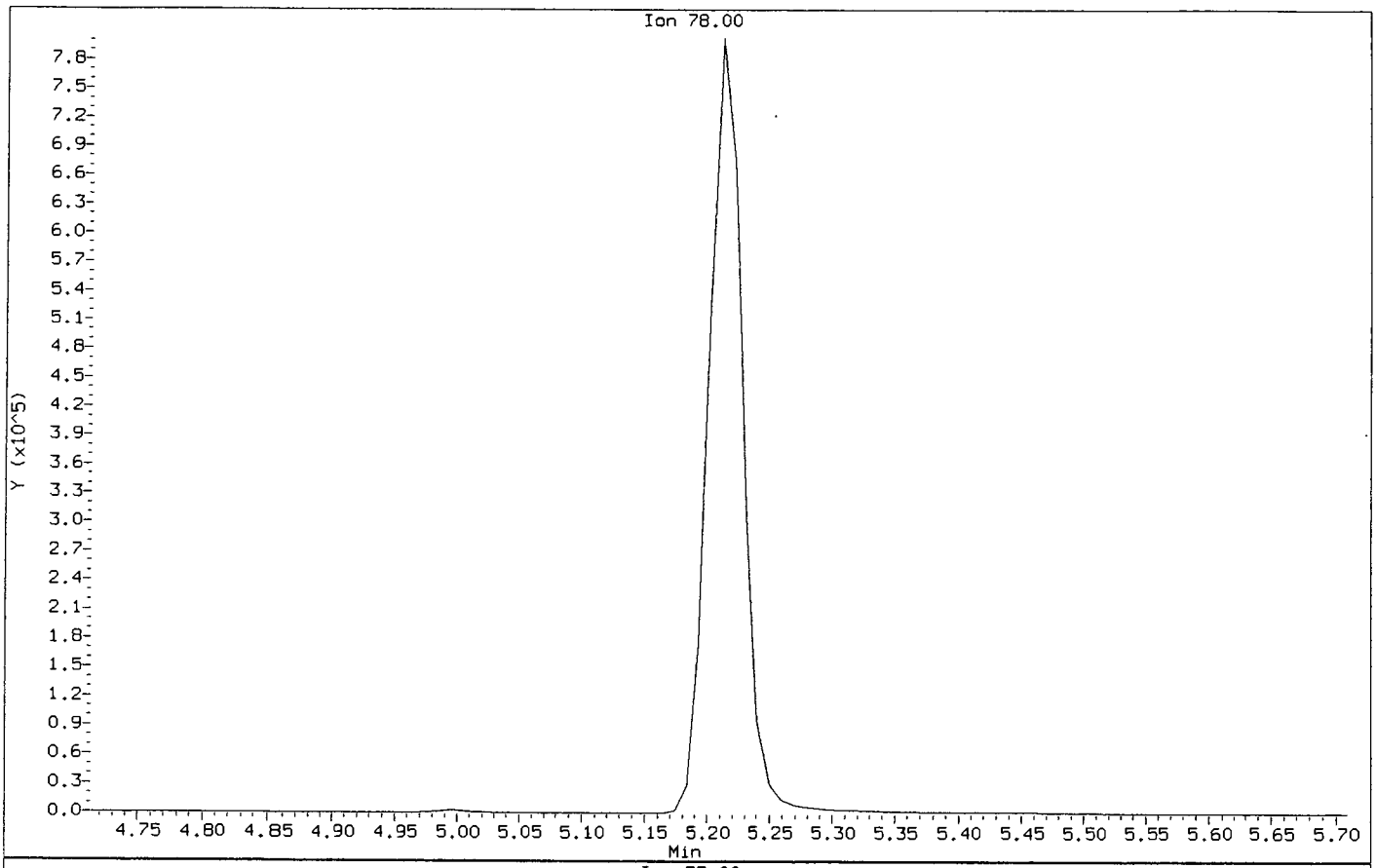
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

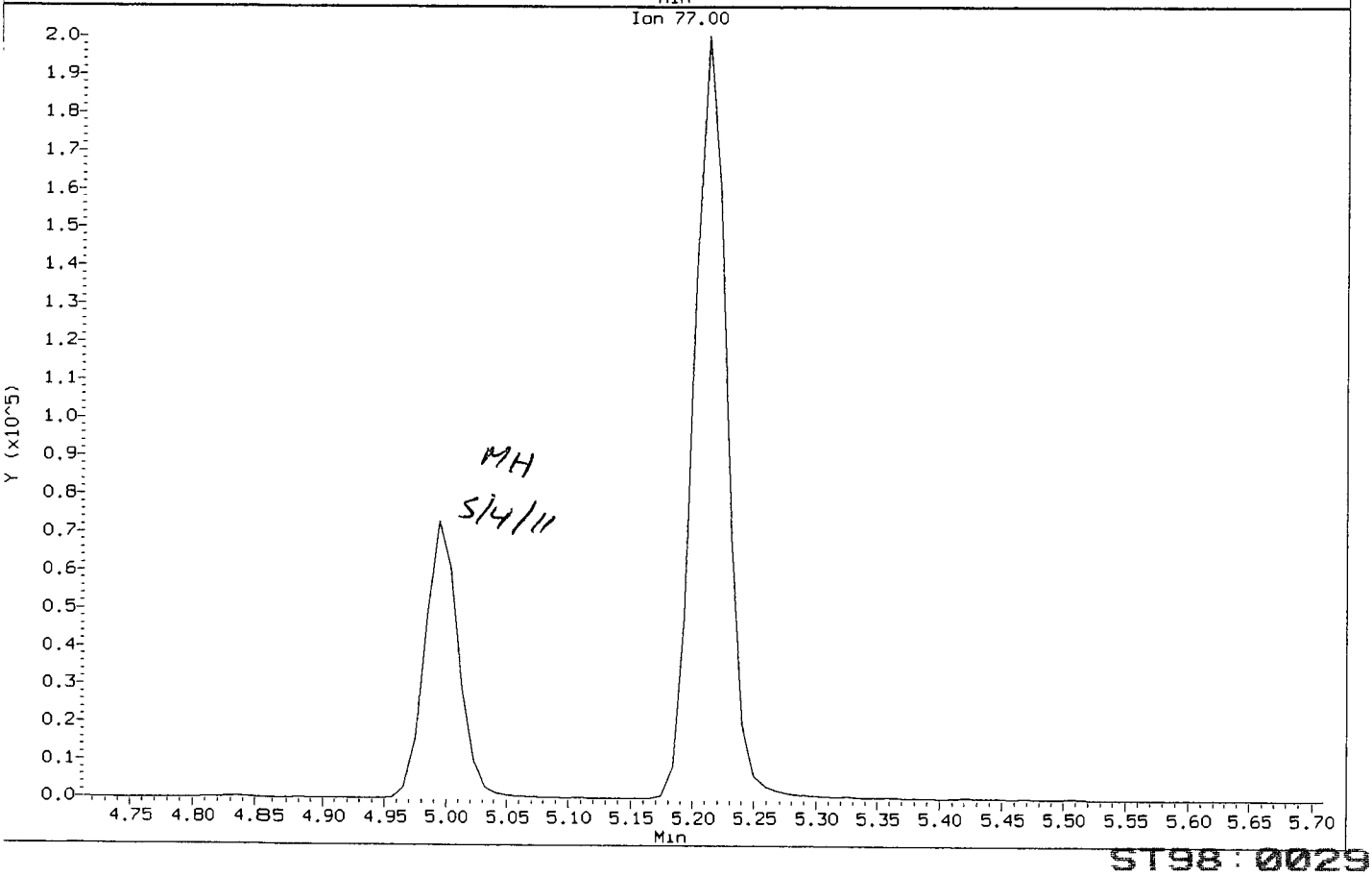
5. Other _____

Analyst: MH Date: 5/4/11

Data File: /chem1/nt7.1/26APR2011.b/0426014.d
Injection Date: 26-APR-2011 12:47
Instrument: nt7.1
Client Sample ID: 1000

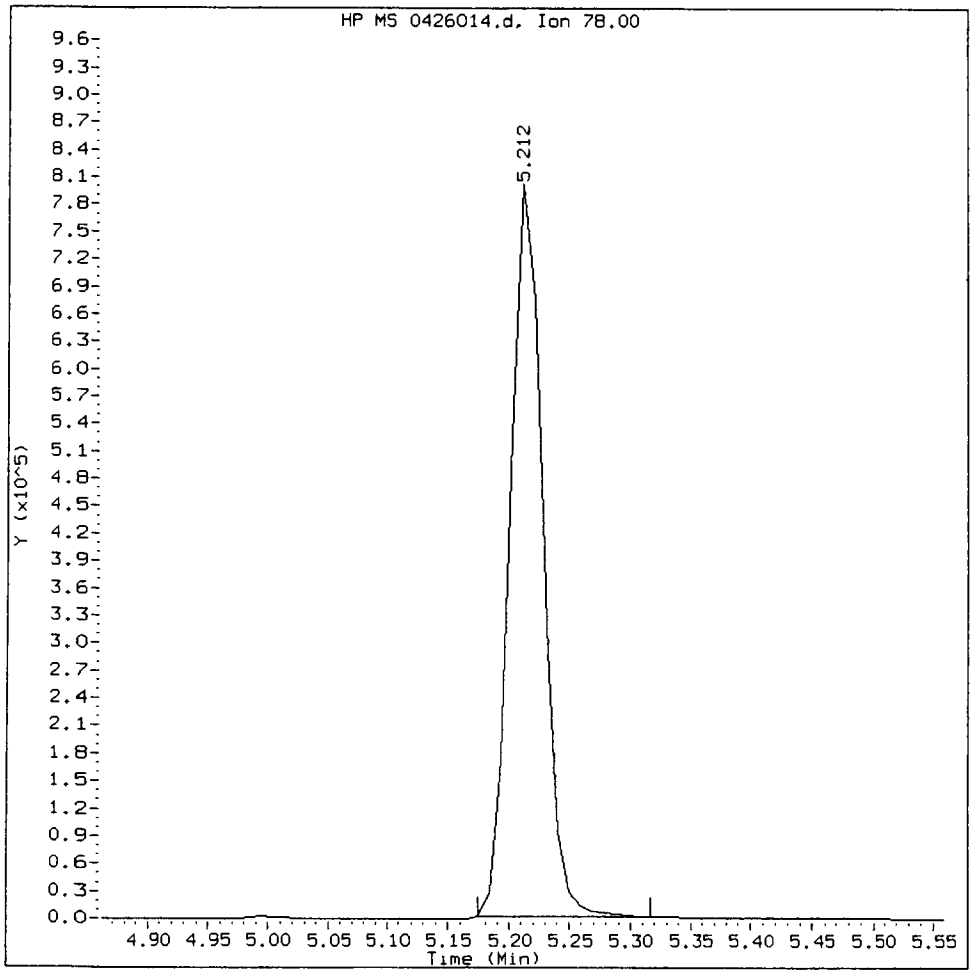
Compound: Benzene
CAS Number:





1000426, /chem1/nt7.i/26APR2011.b/0426014.d

Benzene Amount: 993.97 Area: 1519641



MANUAL INTEGRATION for Benzene

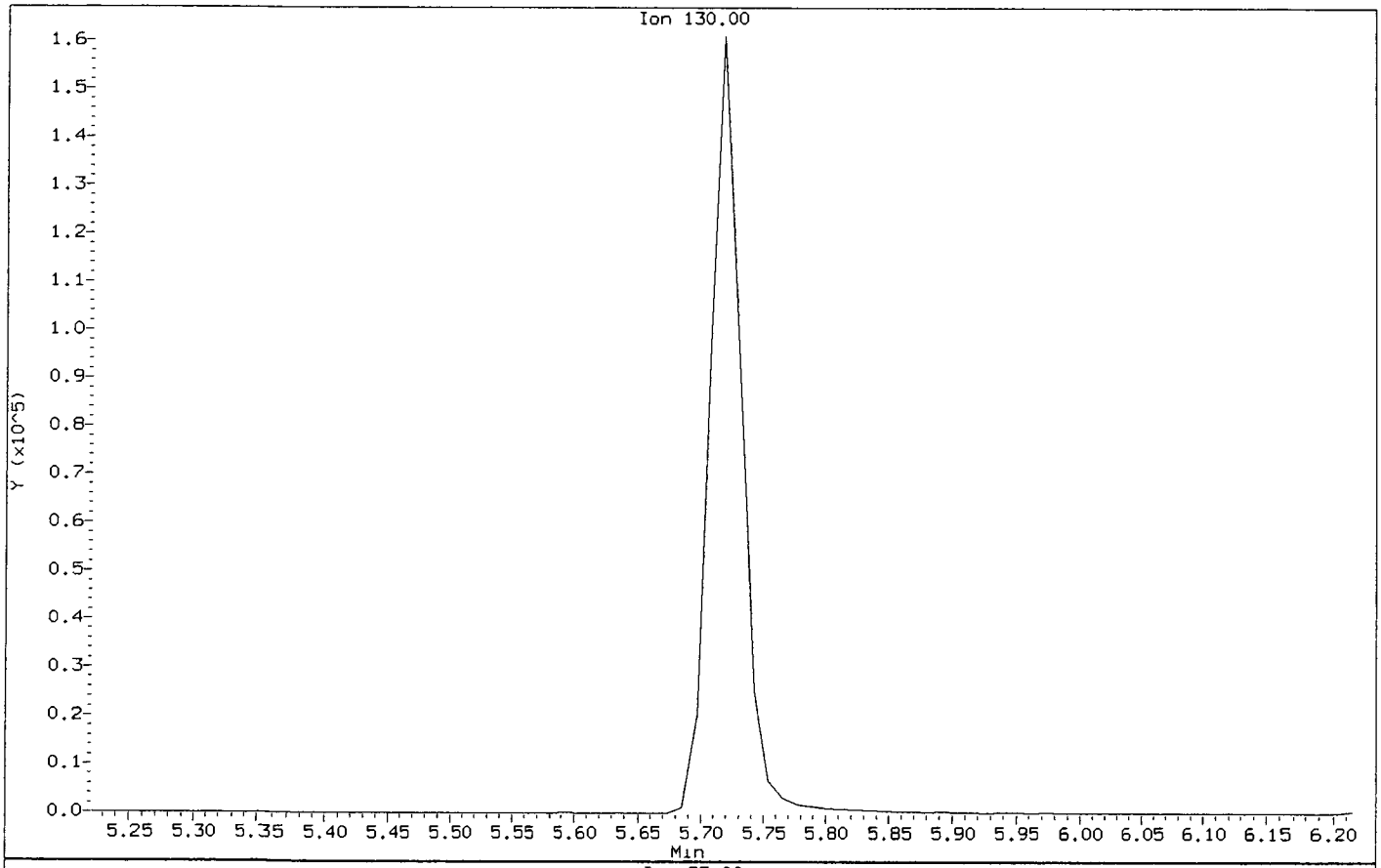
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

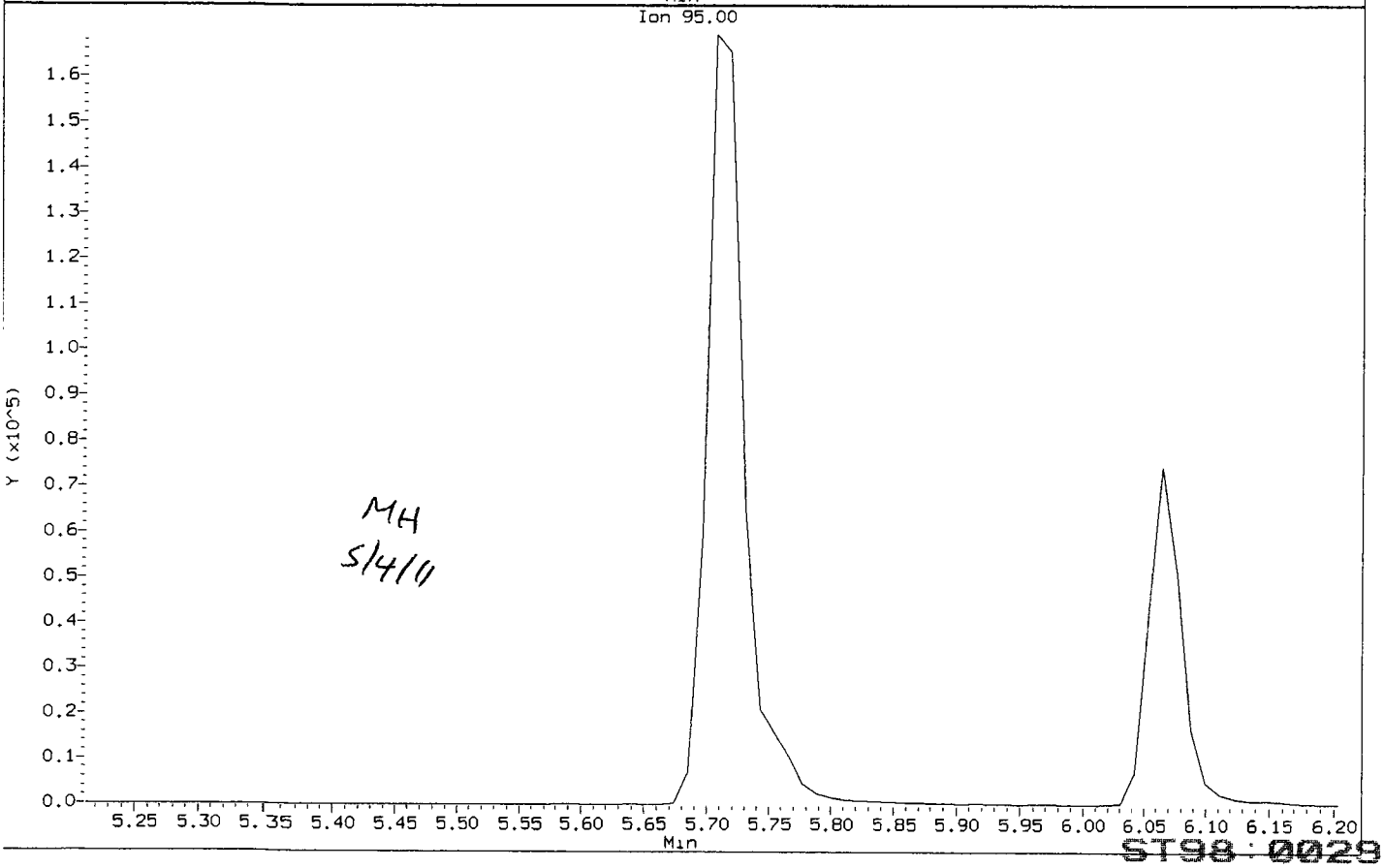
5. Other _____

Analyst: MH Date: 5/4/11

Data File: /chem1/nt7.i/26APR2011.b/0426014.d
Injection Date: 26-APR-2011 12:47
Instrument: nt7.i
Client Sample ID: 1000

Compound: Trichloroethene
CAS Number:

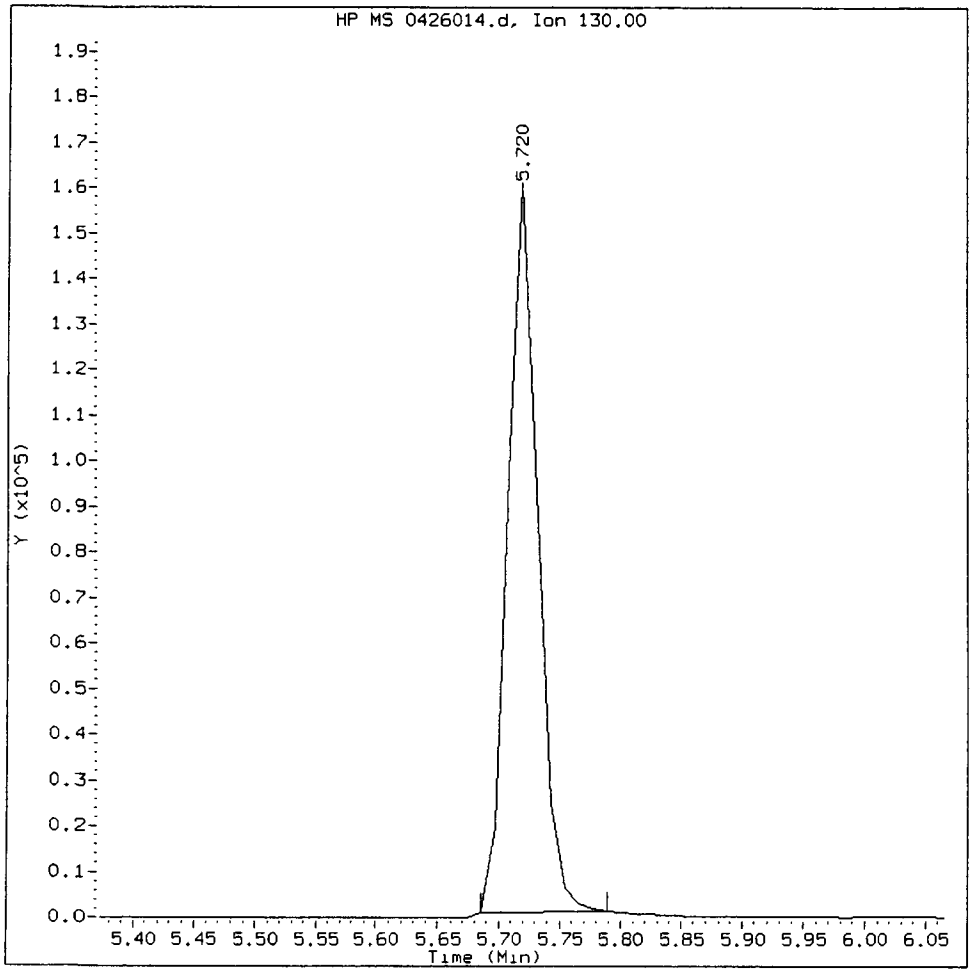




MH
5/4/11

1000426, /chem1/nt7.i/26APR2011.b/0426014.d

Trichloroethene Amount: 996.47 Area: 260900



MANUAL INTEGRATION for Trichloroethene

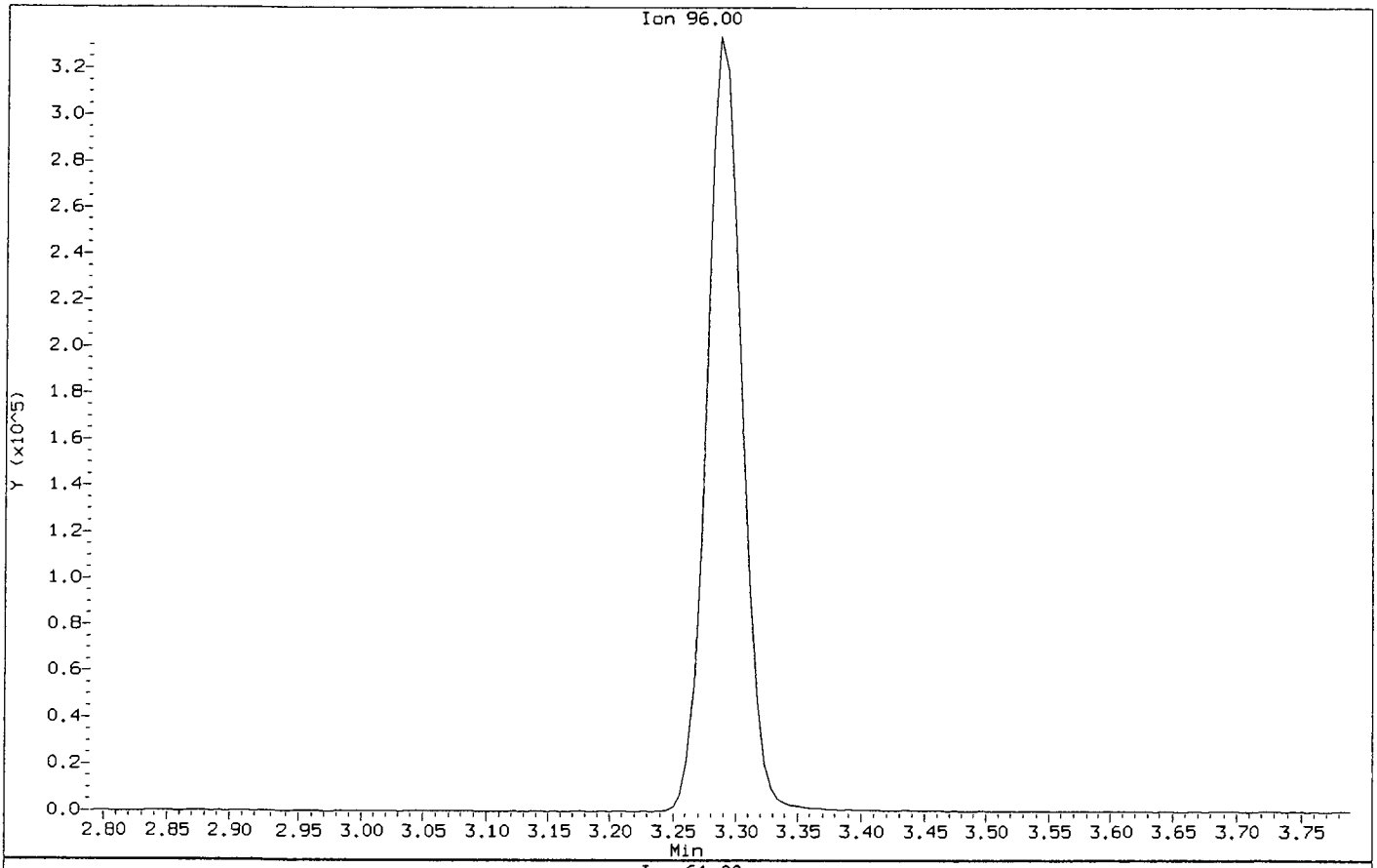
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

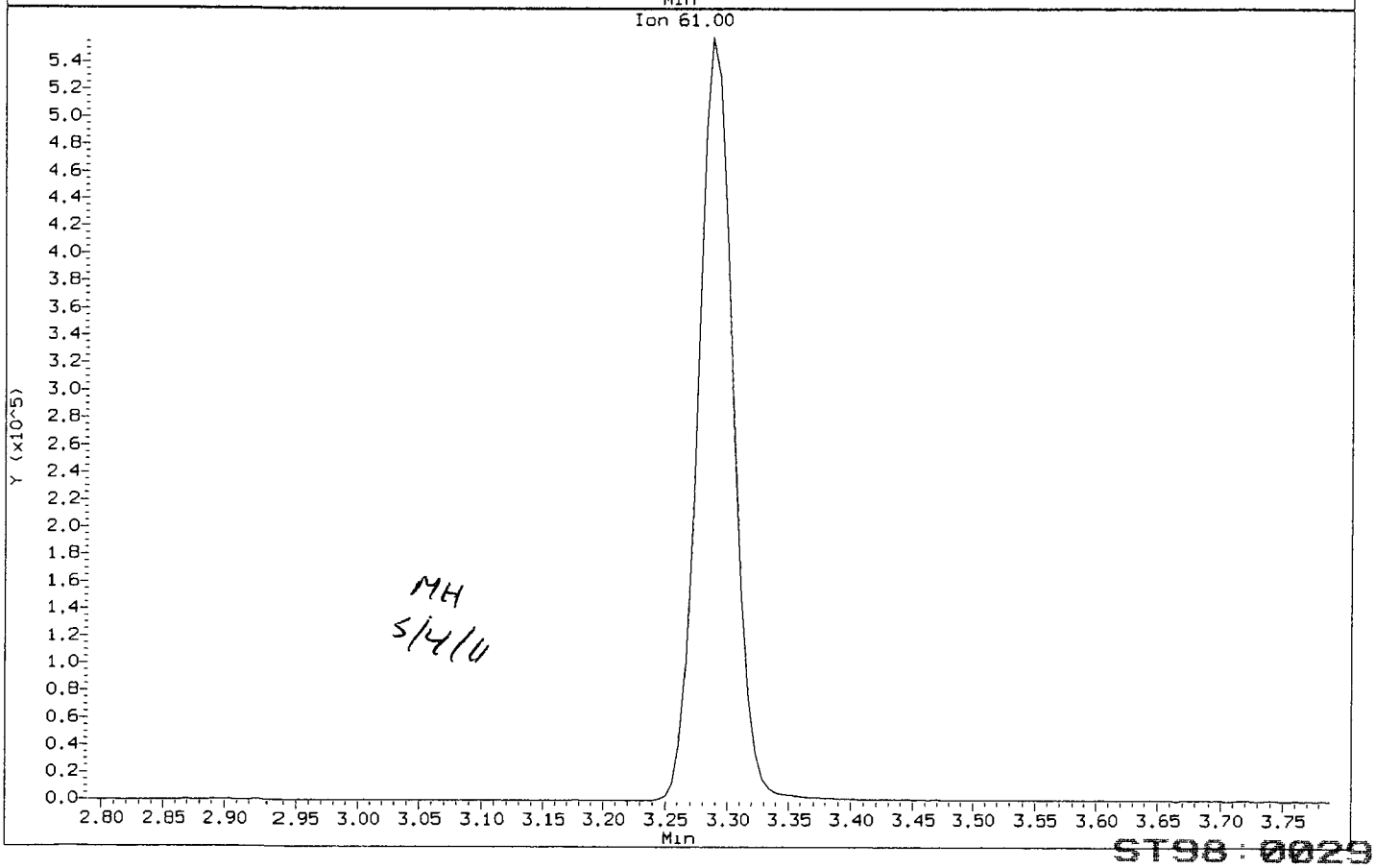
5. Other _____

Analyst: MH Date: 5/4/11

Data File: /chem1/nt7.i/26APR2011.b/0426016.d
Injection Date: 26-APR-2011 13:37
Instrument: nt7.i
Client Sample ID: 2000

Compound: Trans-1,2-Dichloroethene
CAS Number:

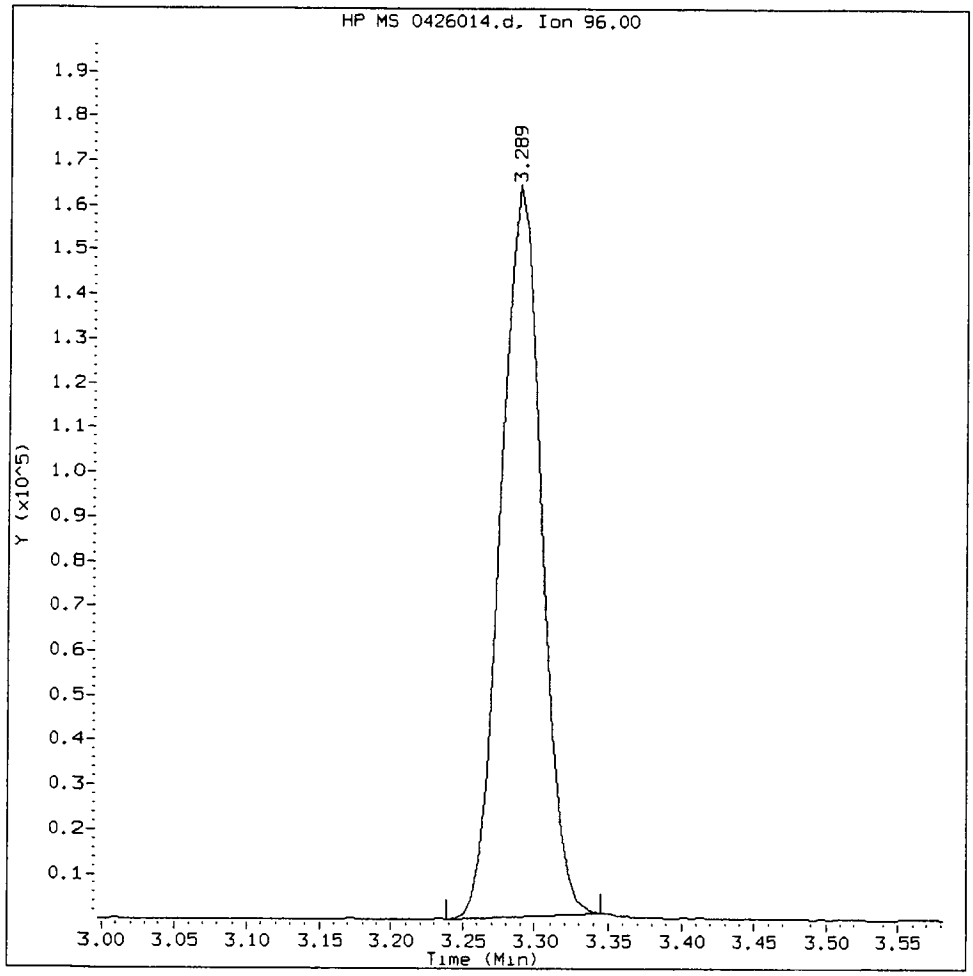




MH
5/4/11

1000426, /chem1/nt7.i/26APR2011.b/0426014.d

Trans-1,2-Dichloroethene Amount: 990.01 Area: 320056



MANUAL INTEGRATION for Trans-1,2-Dichloroethene

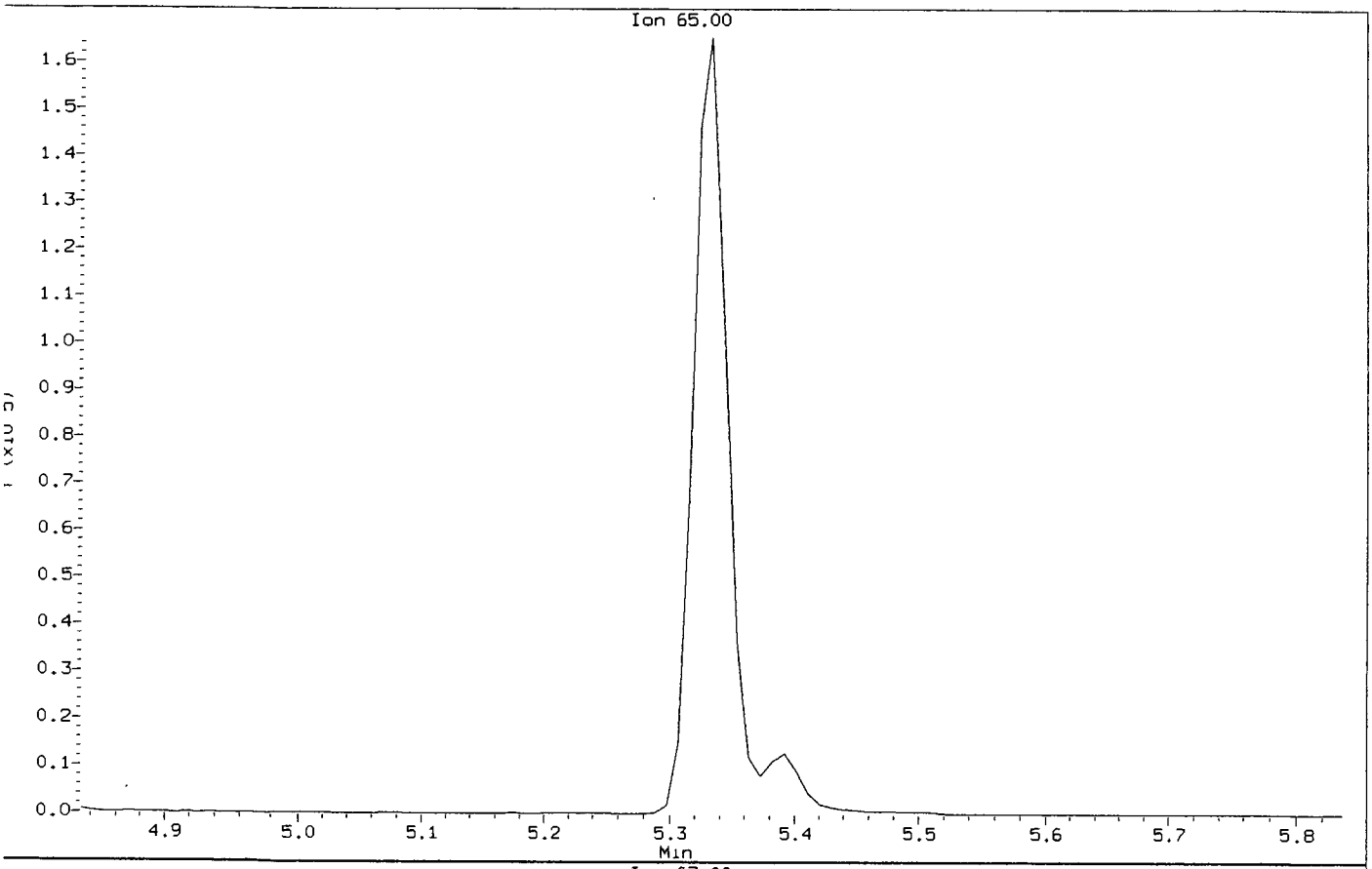
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

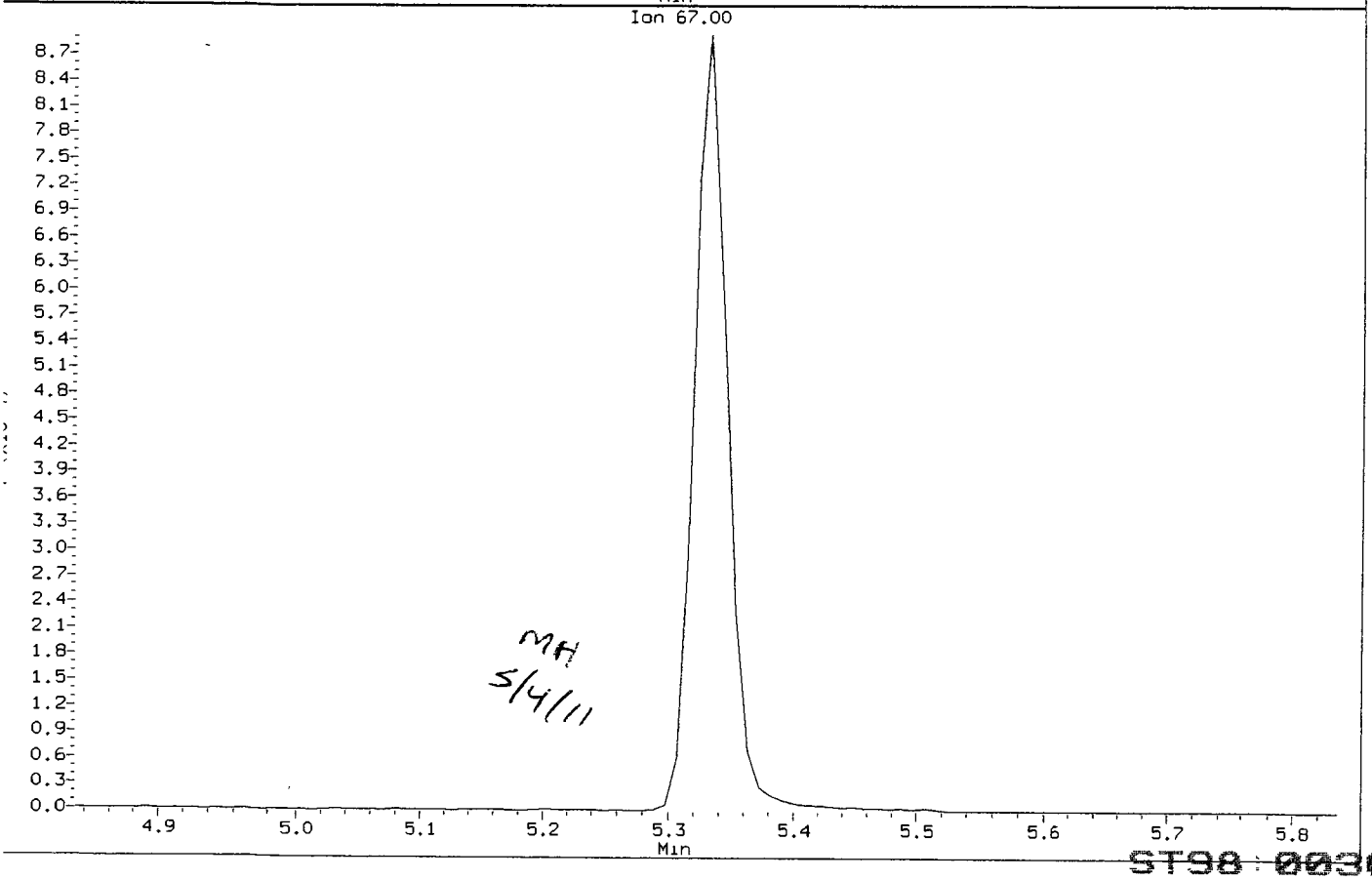
5. Other _____

Analyst: MH Date: 5/4/11

Data File: /chem1/nt7.i/26APR2011.b/0426014.d
Injection Date: 26-APR-2011 12:47
Instrument: nt7.i
Client Sample ID: 1000

Compound: d4-1,2-Dichloroethane
CAS Number:



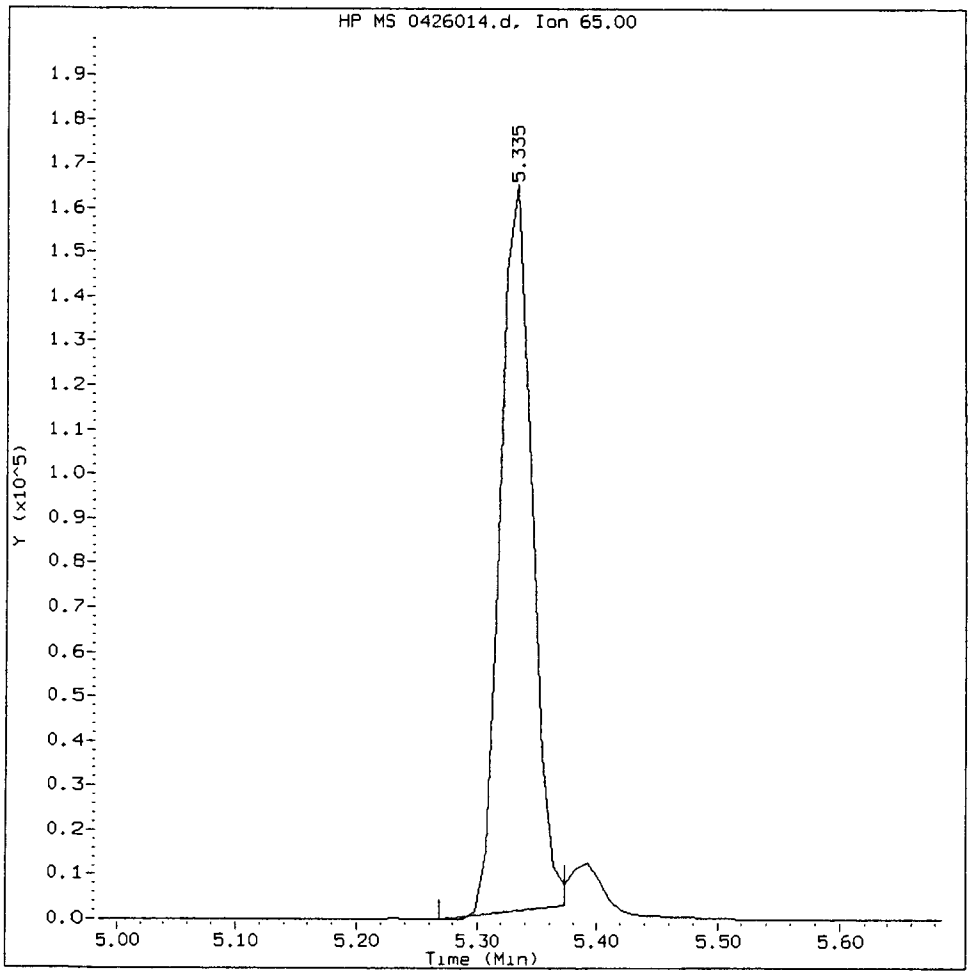


MH
5/4/11

ST98 00300

1000426, /chem1/nt7.i/26APR2011.b/0426014.d

d4-1,2-Dichloroethane Amount: 990.68 Area: 324433



MANUAL INTEGRATION for d4-1,2-Dichloroethane

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

5. Other _____

Analyst: MH Date: 5/4/11

CO-ELUTION SUMMARY FOR FILE - 0426014.d

Lab ID: 1000426, Method: sim042611.m, Instrument: nt7.i, Date: 26-APR-2011

RT	CO-ELUTION COMPOUNDS

MH 5/4/11

Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/26APR2011.b/0426016.d
Lab Smp Id: 20000426 Client Smp ID: 2000
Inj Date : 26-APR-2011 13:37
Operator : MH Inst ID: nt7.i
Smp Info : 20000426,10,10,0,
Misc Info : 11-
Comment :
Method : /chem1/nt7.i/26APR2011.b/sim042611.m
Meth Date : 04-May-2011 06:35 monicah Quant Type: ISTD
Cal Date : 26-APR-2011 13:37 Cal File: 0426016.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)	ON-COL (ng/L)
1	Vinyl Chloride	62	1.552	1.554	(0.291)	836647	2000.00	1767.9
2	1,1-Dichloroethene	96	2.510	2.510	(0.471)	644283	2000.00	1711.1
175	Trans-1,2-Dichloroethene	96	3.289	3.289	(0.618)	645317	2000.00	1687.0(M)
3	cis-1,2-dichloroethene	96	4.444	4.444	(0.835)	738732	2000.00	1808.9(M)
6	Benzene	78	5.212	5.212	(0.906)	3063572	2000.00	1676.4(M)
* 4	Pentafluorobenzene	168	5.326	5.326	(1.000)	430008	1000.00	
$ 5	d4-1,2-Dichloroethane	65	5.335	5.335	(1.002)	373663	1000.00	964.28(M)
176	1,2-Dichloroethane	62	5.392	5.392	(1.012)	1080610	2000.00	1764.4
8	Trichloroethene	130	5.720	5.720	(0.994)	542909	2000.00	1734.8(M)
* 7	1,4-Difluorobenzene	114	5.754	5.754	(1.000)	798217	1000.00	
$ 9	d8-Toluene	98	6.915	6.914	(1.202)	1021719	1000.00	1004.8
10	Tetrachloroethene	166	7.271	7.271	(1.264)	434314	2000.00	1798.4
11	1,1,2,2-Tetrachloroethane	83	9.458	9.458	(1.644)	541391	2000.00	1872.6

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt7.i
Lab File ID: 0426016.d
Lab Smp Id: 20000426
Analysis Type: VOA
Quant Type: ISTD
Operator: MH
Method File: /chem1/nt7.i/26APR2011.b/sim042611.m
Misc Info: 11-

Calibration Date: 26-APR-2011
Calibration Time: 12:47
Client Smp ID: 2000
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	363407	181704	726814	430008	18.33
7 1,4-Difluorobenze	667797	333898	1335594	798217	19.53

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.33	4.83	5.83	5.33	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/26APR2011.b/0426016.d

Date : 26-APR-2011 13:37

Client ID: 2000

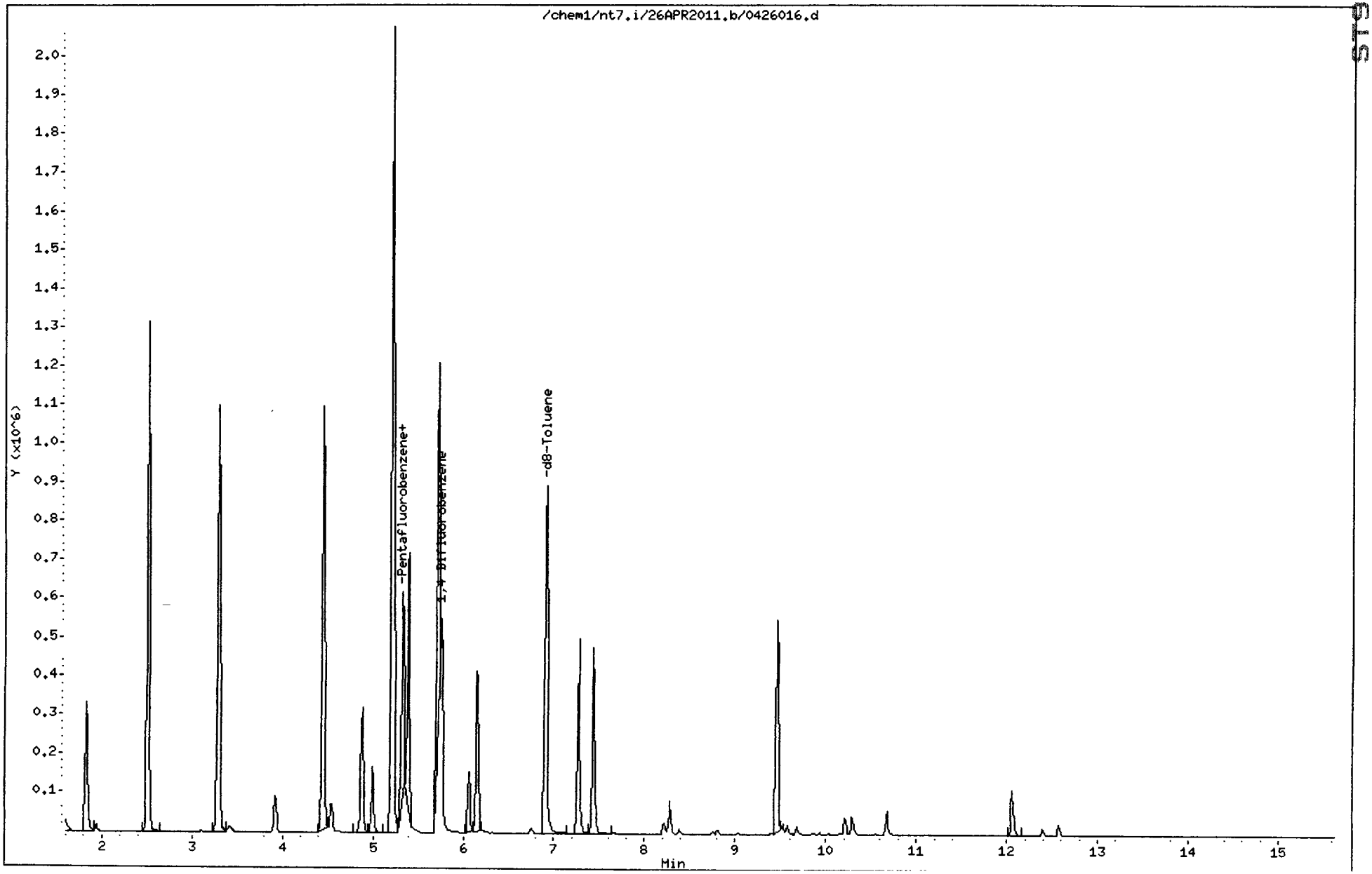
Sample Info: 20000426,10,10,0,

Column phase: RTXVMS

Instrument: nt7.i

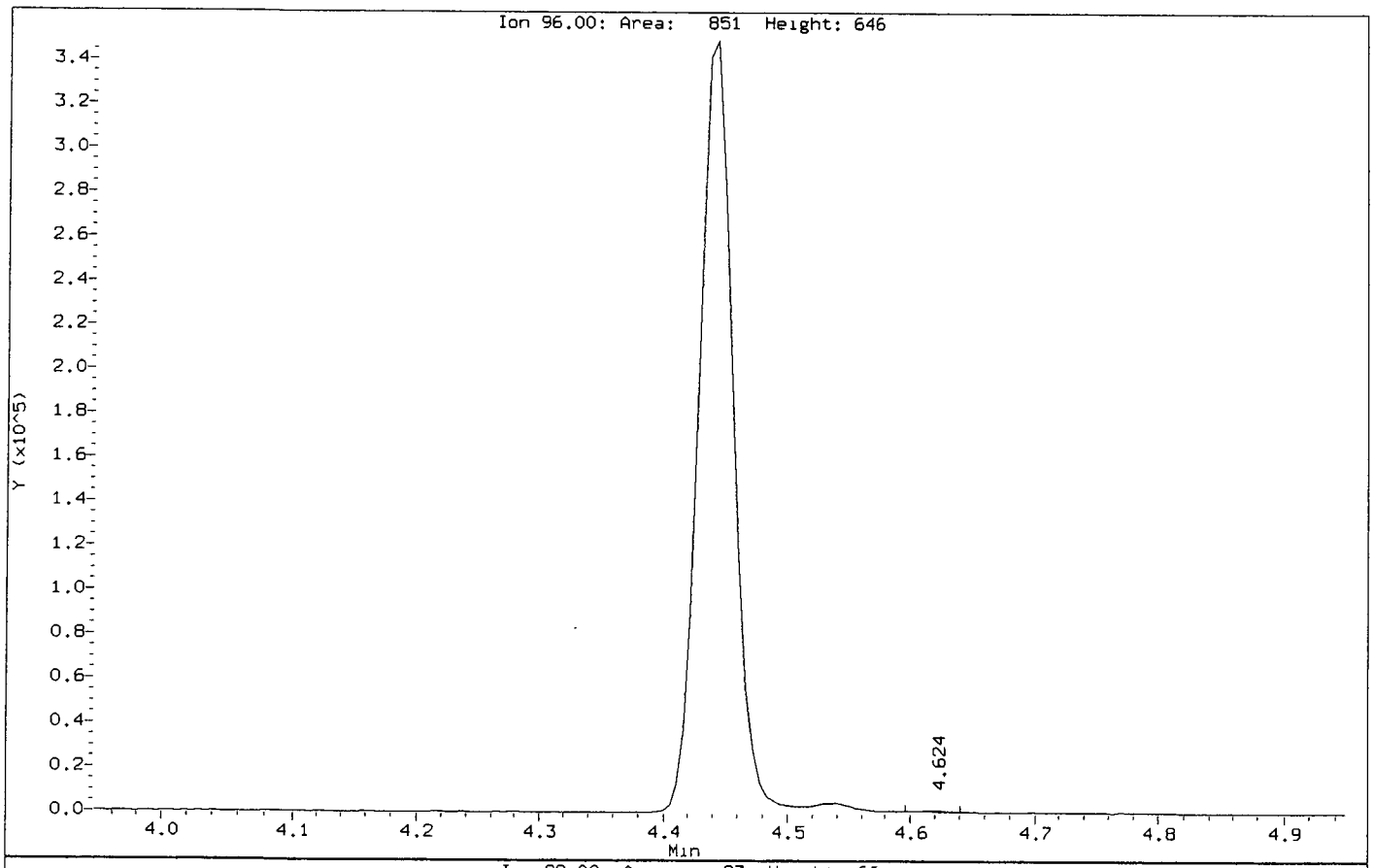
Operator: MH

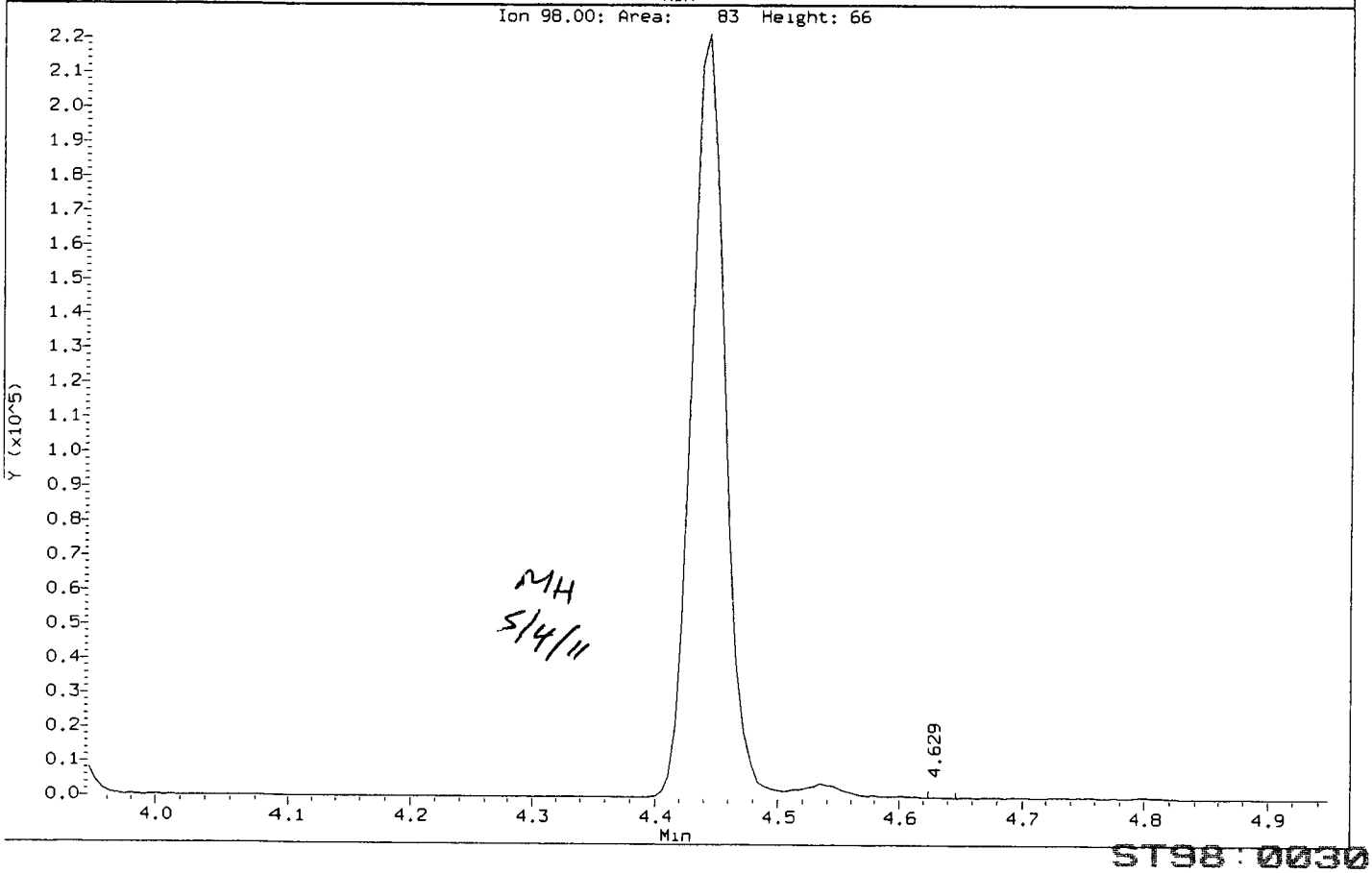
Column diameter: 0.18



Data File: /chem1/nt7.1/26APR2011.b/0426016.d
Injection Date: 26-APR-2011 13:37
Instrument: nt7.1
Client Sample ID: 2000

Compound: cis-1,2-dichloroethene
CAS Number:



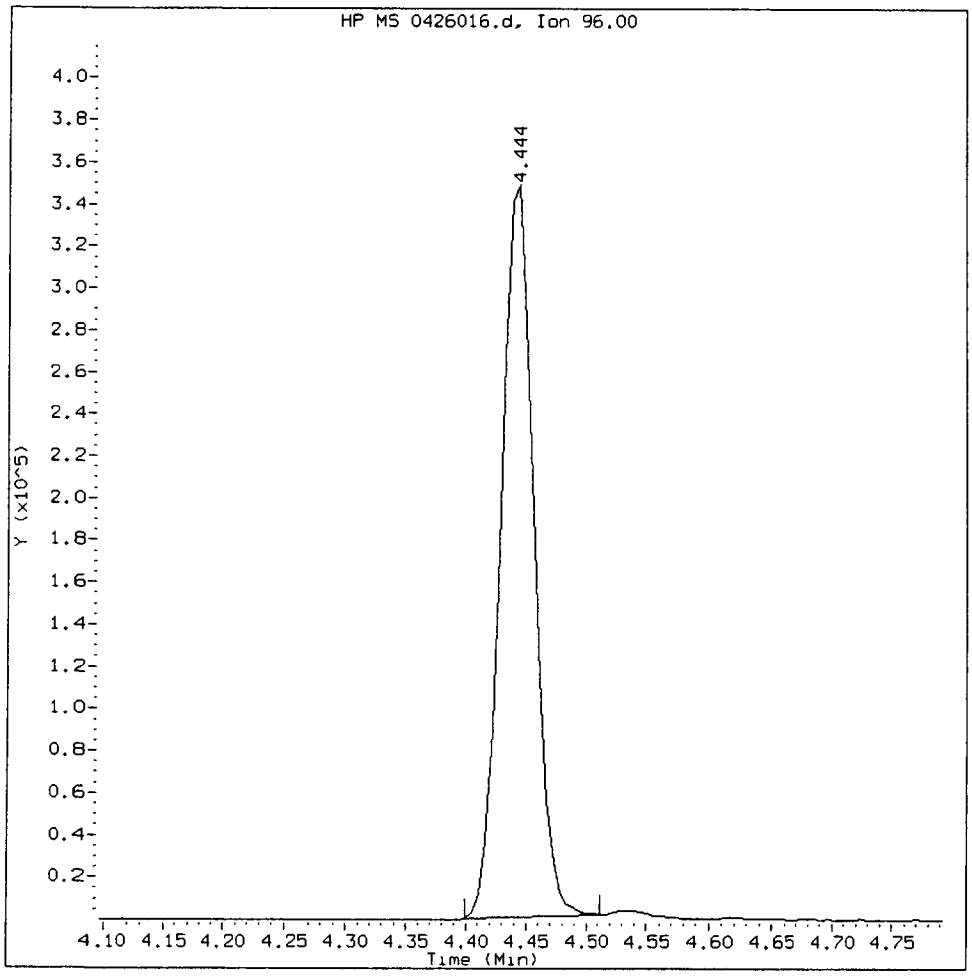


MH
5/4/11

ST98:00307

20000426, /chem1/nt7.i/26APR2011.b/0426016.d

cis-1,2-dichloroethene Amount: 1808.90 Area: 738732



MANUAL INTEGRATION for cis-1,2-dichloroethene

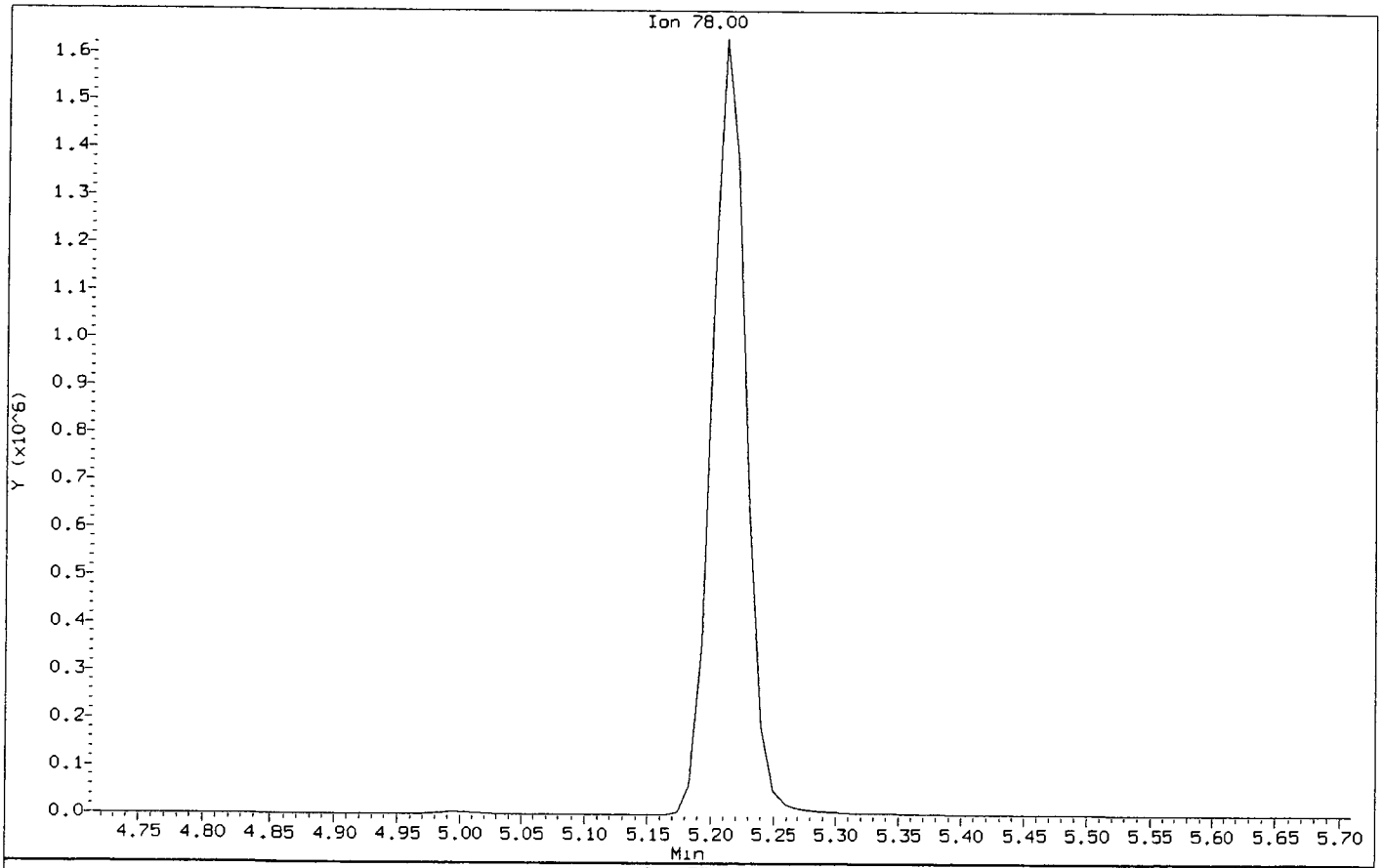
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

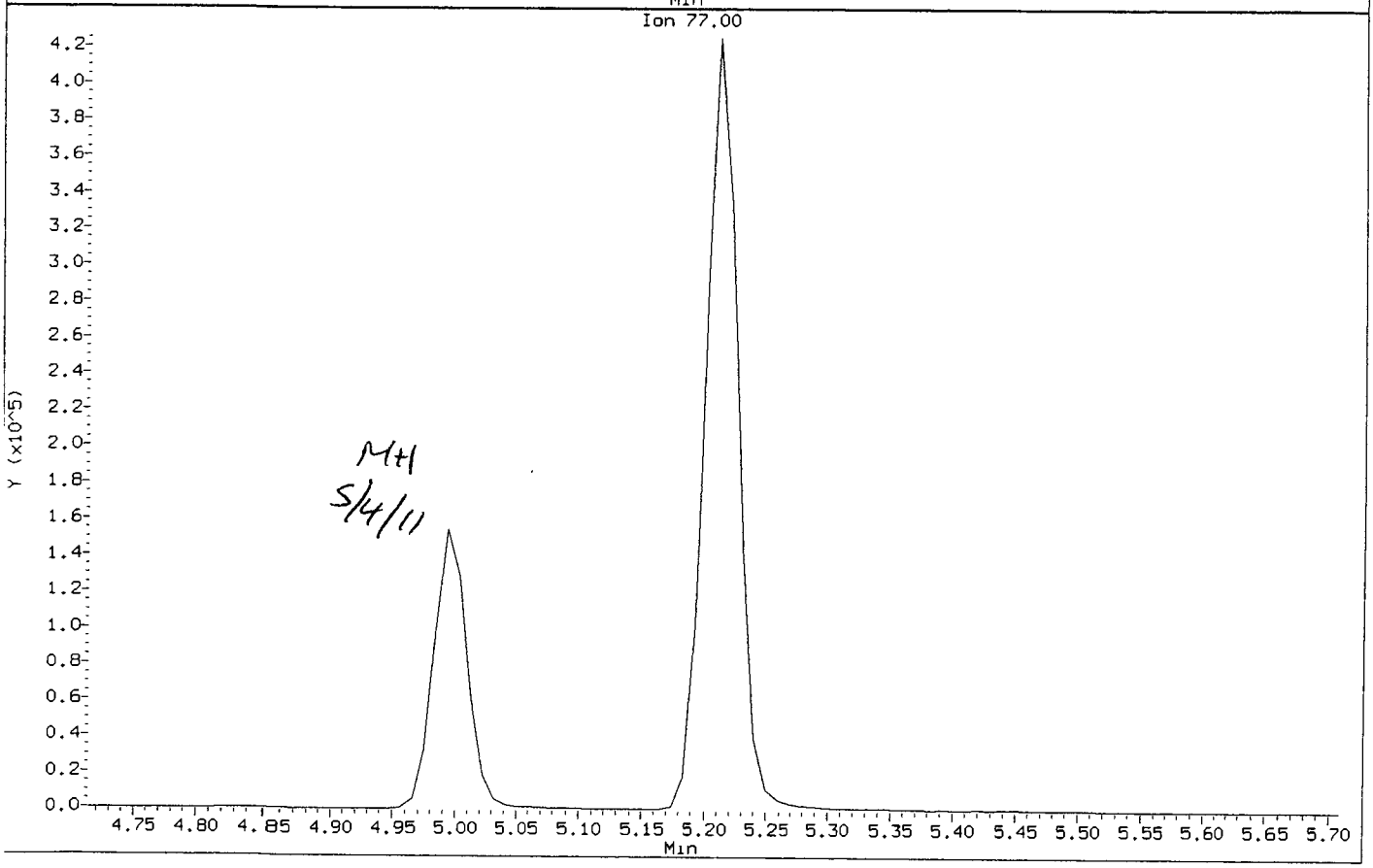
5. Other _____

Analyst: MH Date: 5/4/11

Data File: /chem1/nt7.i/26APR2011.b/0426016.d
Injection Date: 26-APR-2011 13:37
Instrument: nt7.i
Client Sample ID: 2000

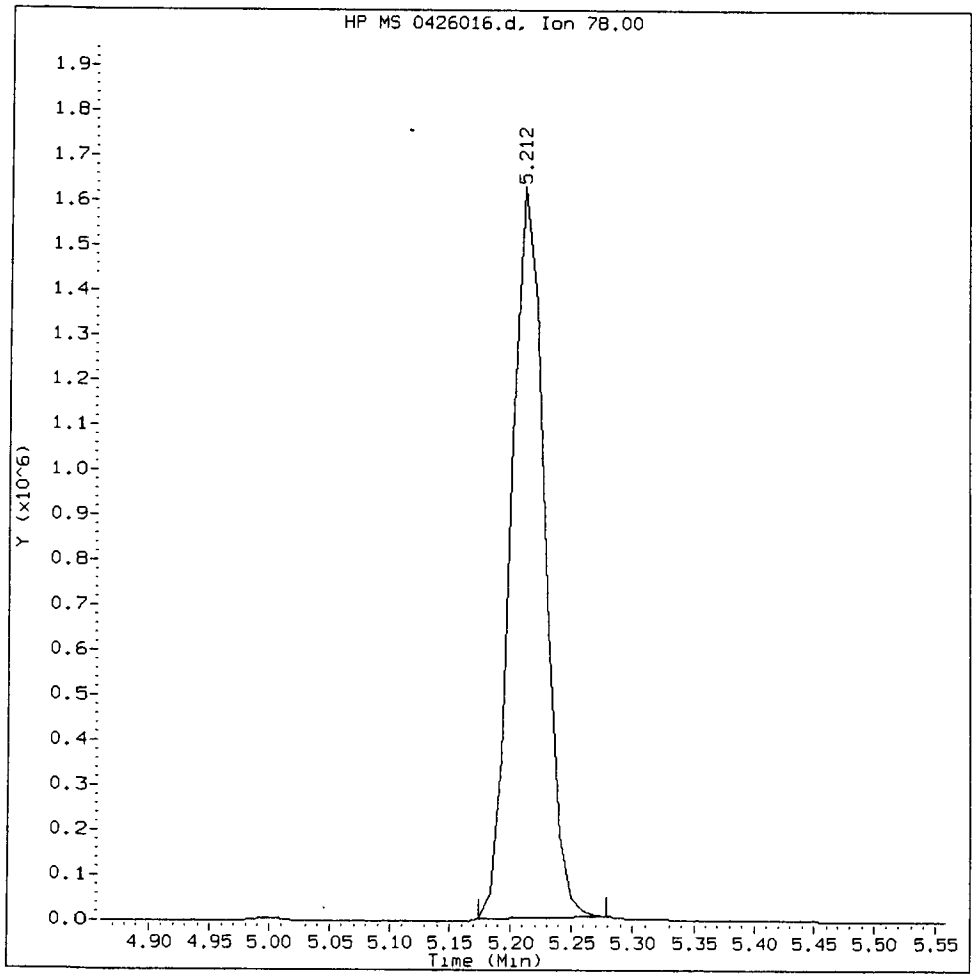
Compound: Benzene
CAS Number:





20000426, /chem1/nt7.i/26APR2011.b/0426016.d

Benzene Amount: 1676.43 Area: 3063572



MANUAL INTEGRATION for Benzene

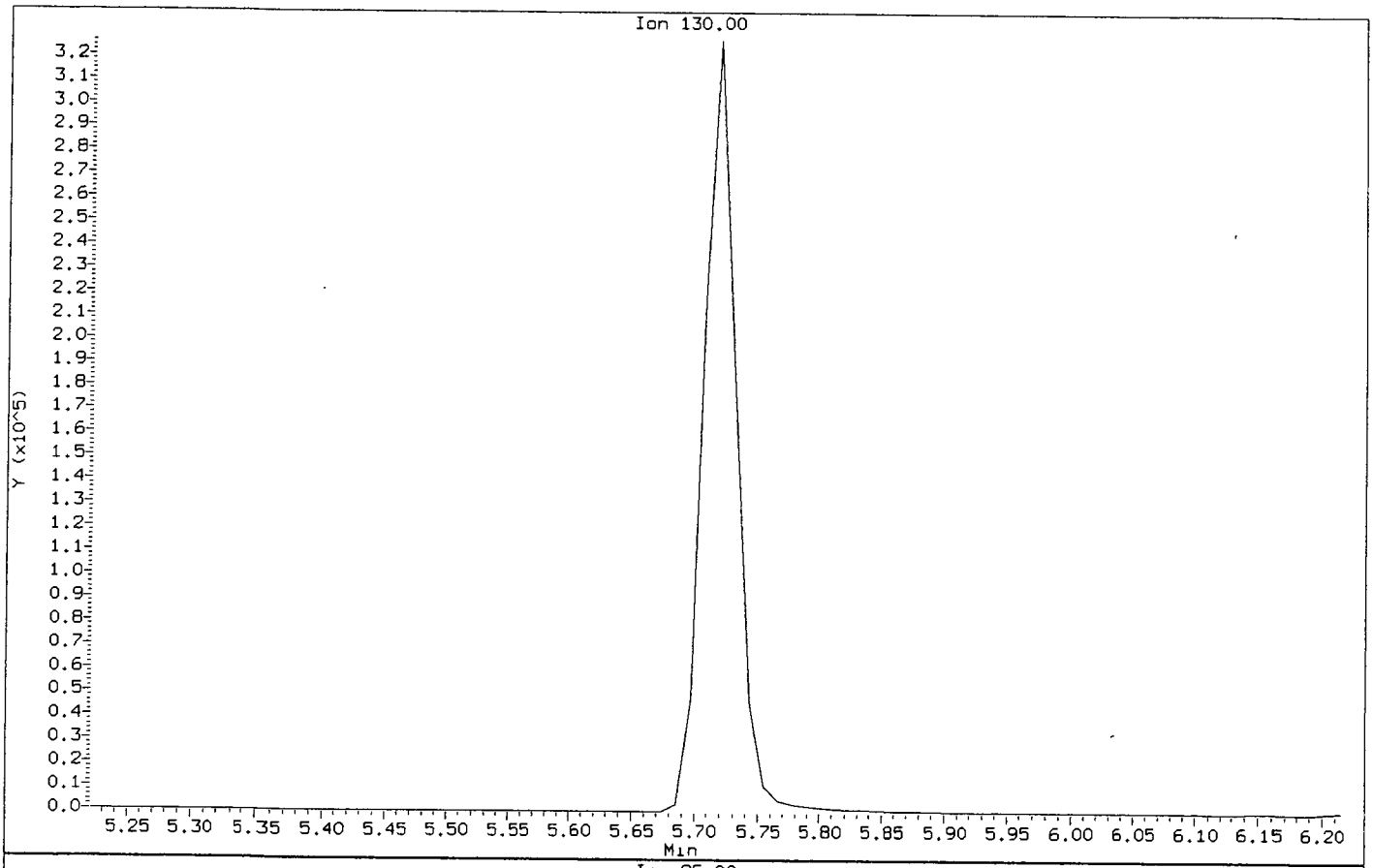
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

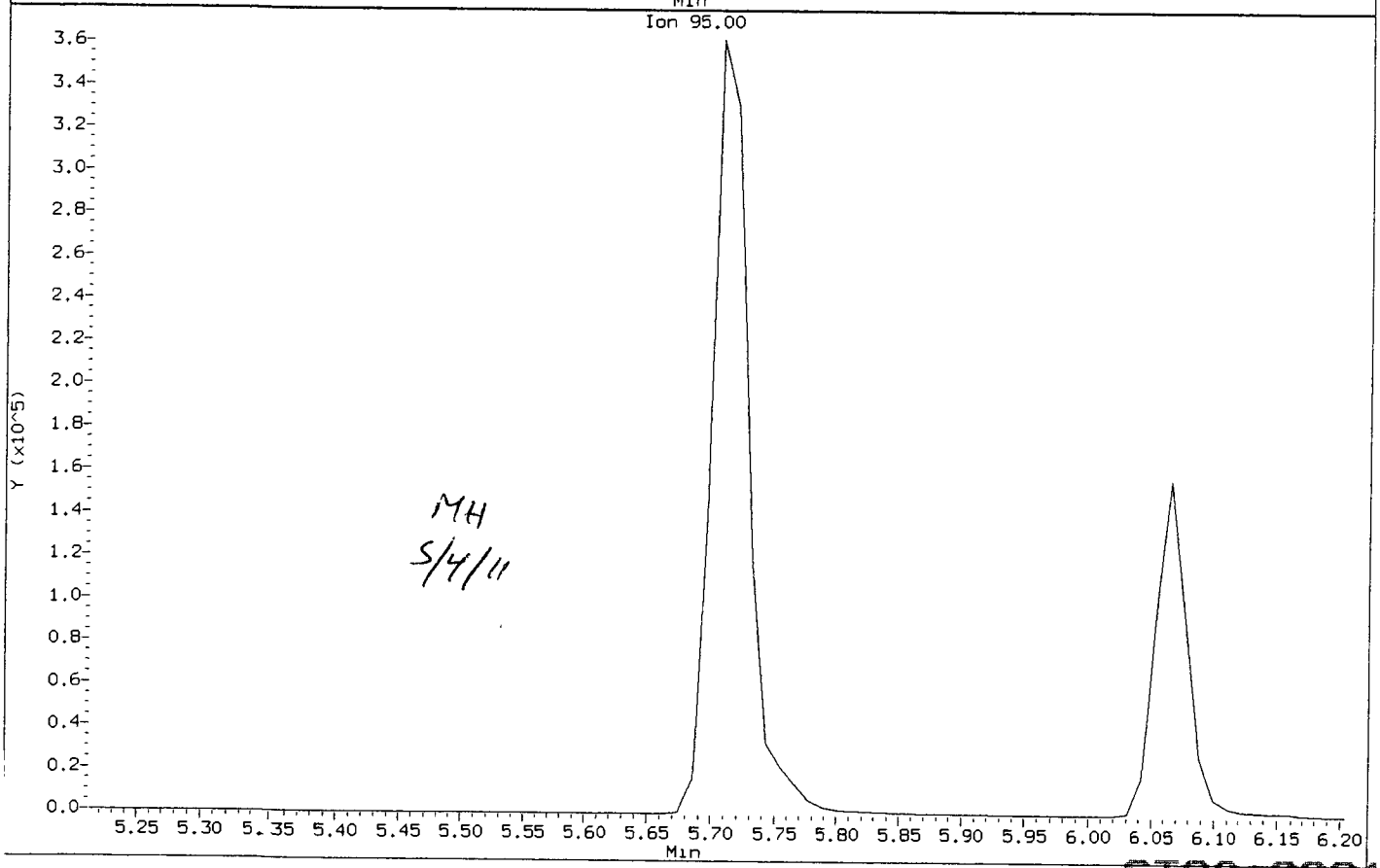
5. Other _____

Analyst: MH Date: 5/4/11

Data File: /chem1/nt7.1/26APR2011.b/0426016.d
Injection Date: 26-APR-2011 13:37
Instrument: nt7.1
Client Sample ID: 2000

Compound: Trichloroethene
CAS Number:

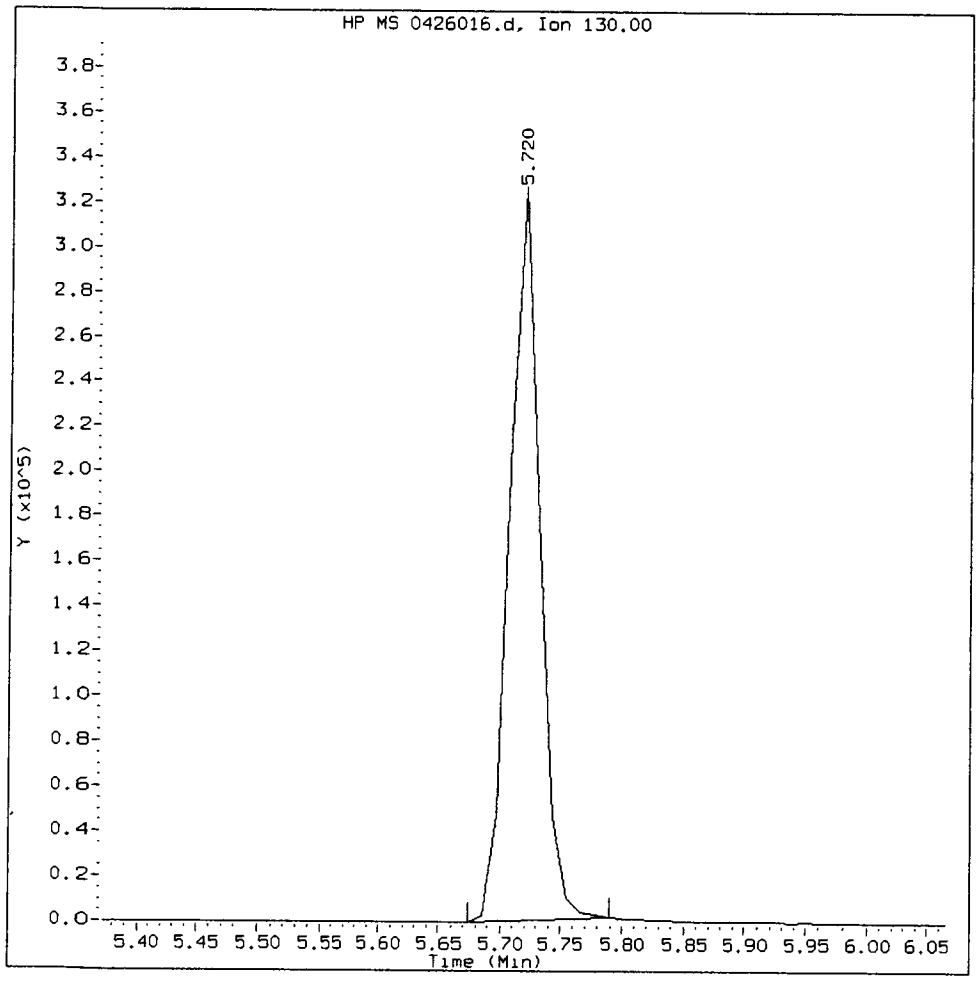




MH
5/4/11

20000426, /chem1/nt7.i/26APR2011.b/0426016.d

Trichloroethene Amount: 1734.77 Area: 542909



MANUAL INTEGRATION for Trichloroethene

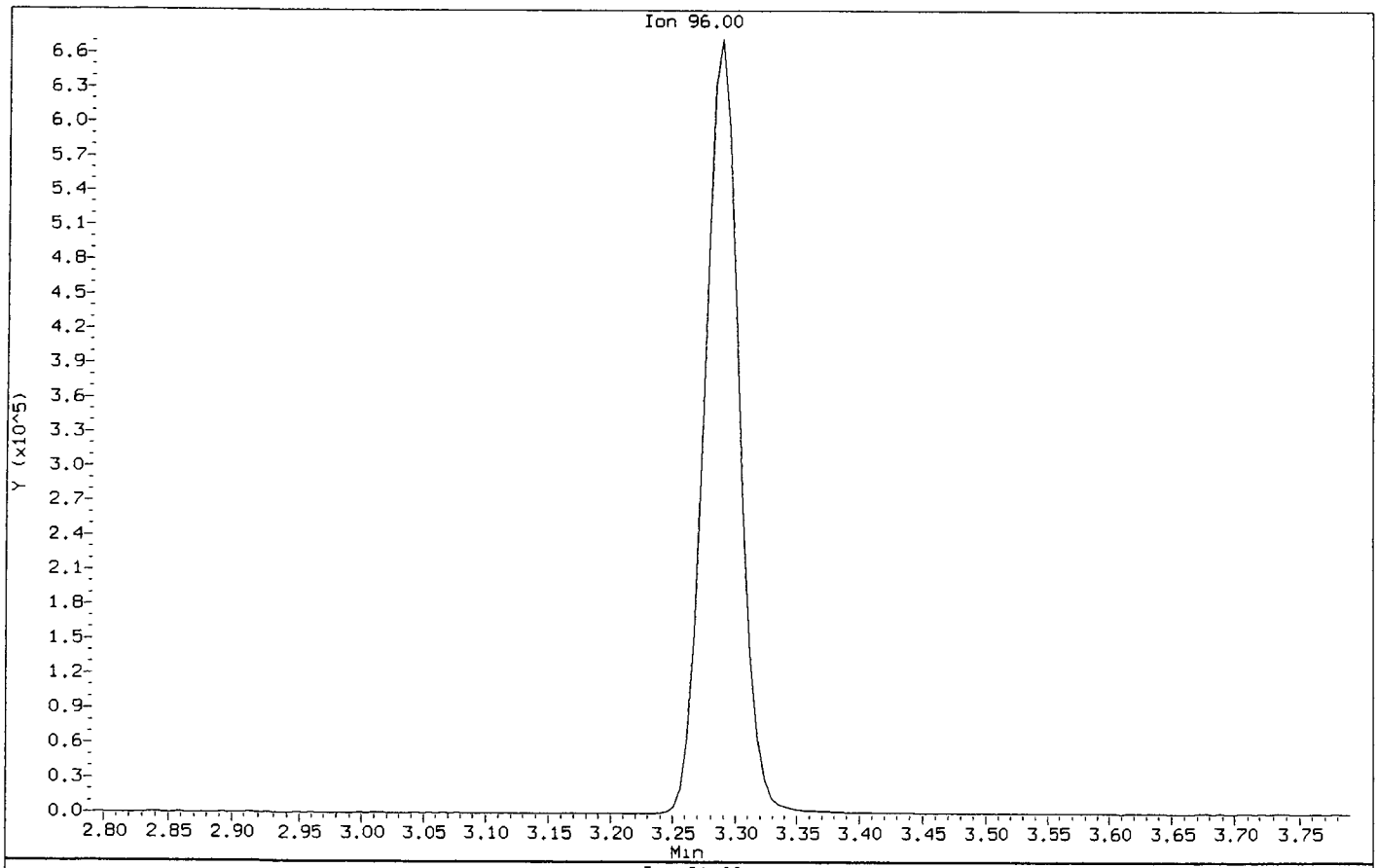
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

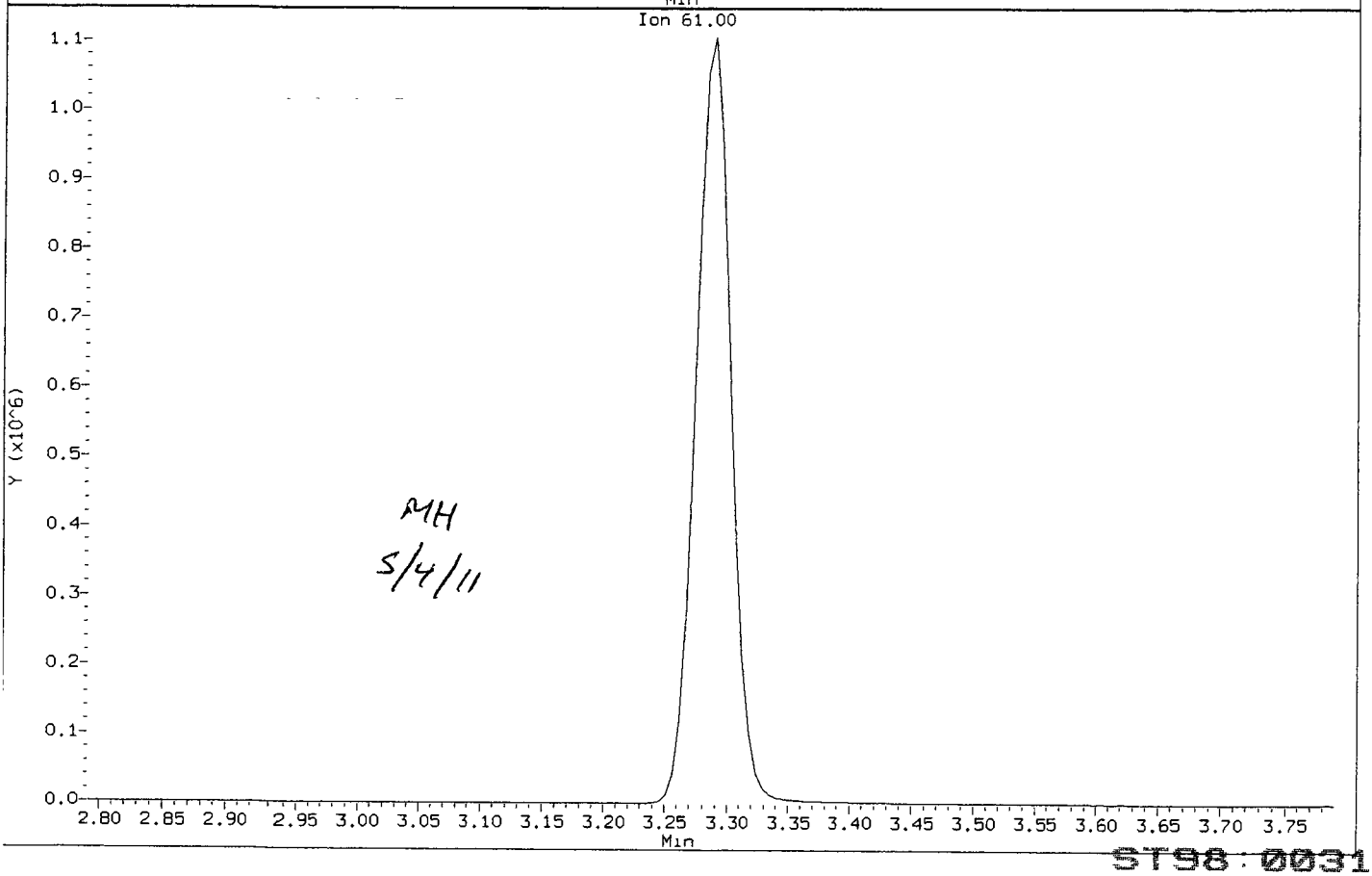
5. Other _____

Analyst: MH Date: 5/4/11

Data File: /chem1/nt7.i/26APR2011.b/0426017.d
Injection Date: 26-APR-2011 14:03
Instrument: nt7.i
Client Sample ID: 4000

Compound: Trans-1,2-Dichloroethene
CAS Number:

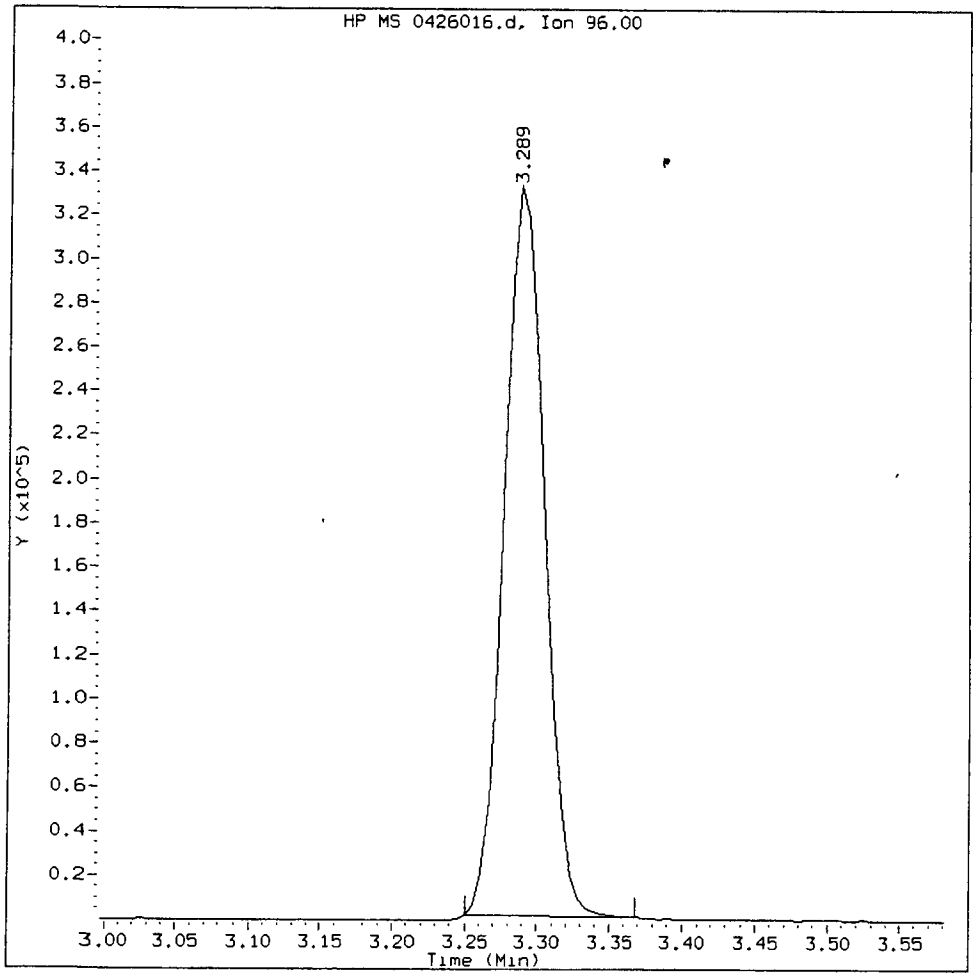




MH
5/4/11

20000426, /chem1/nt7.i/26APR2011.b/0426016.d

Trans-1,2-Dichloroethene Amount: 1686.96 Area: 645317



MANUAL INTEGRATION for Trans-1,2-Dichloroethene

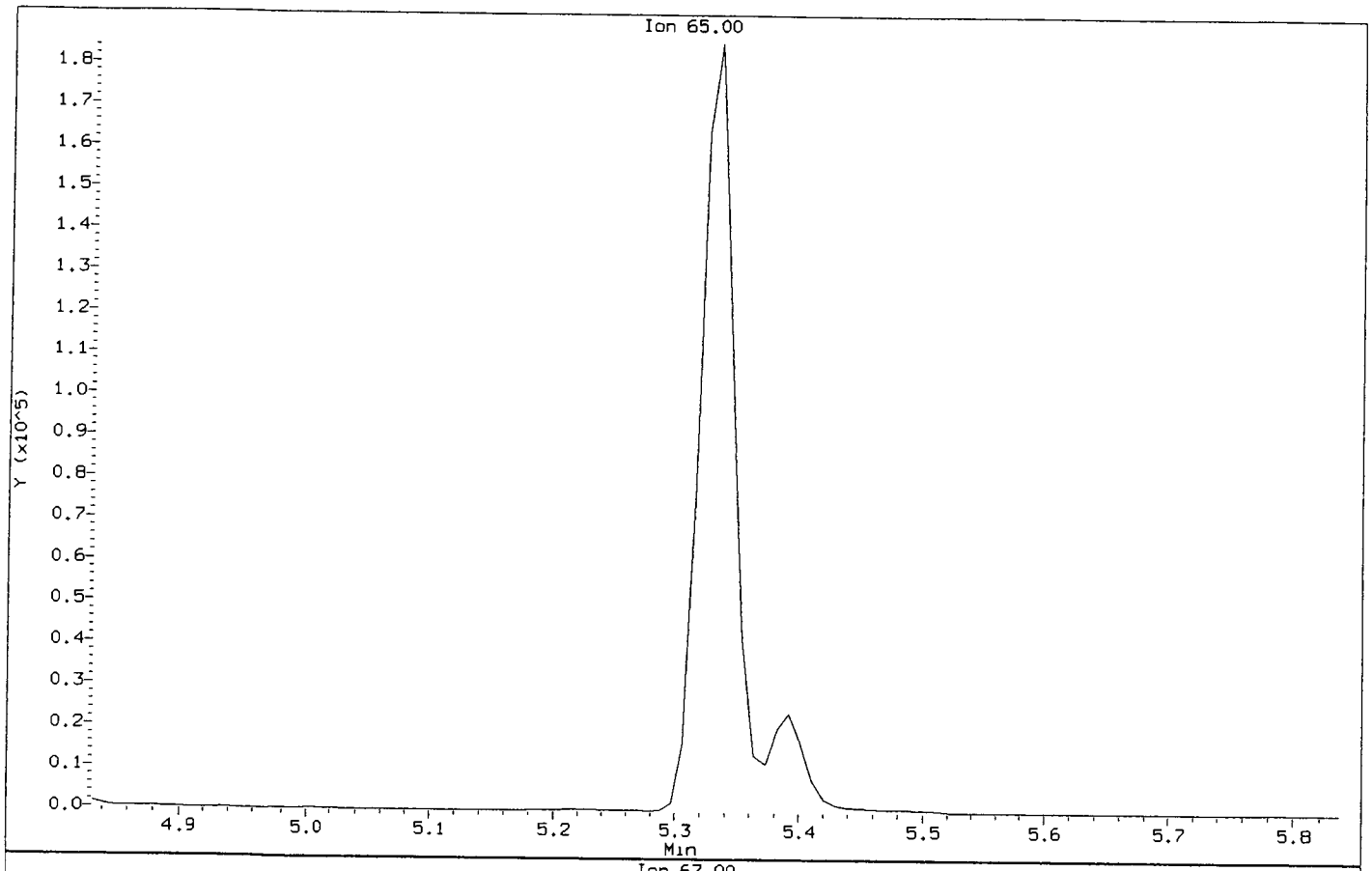
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

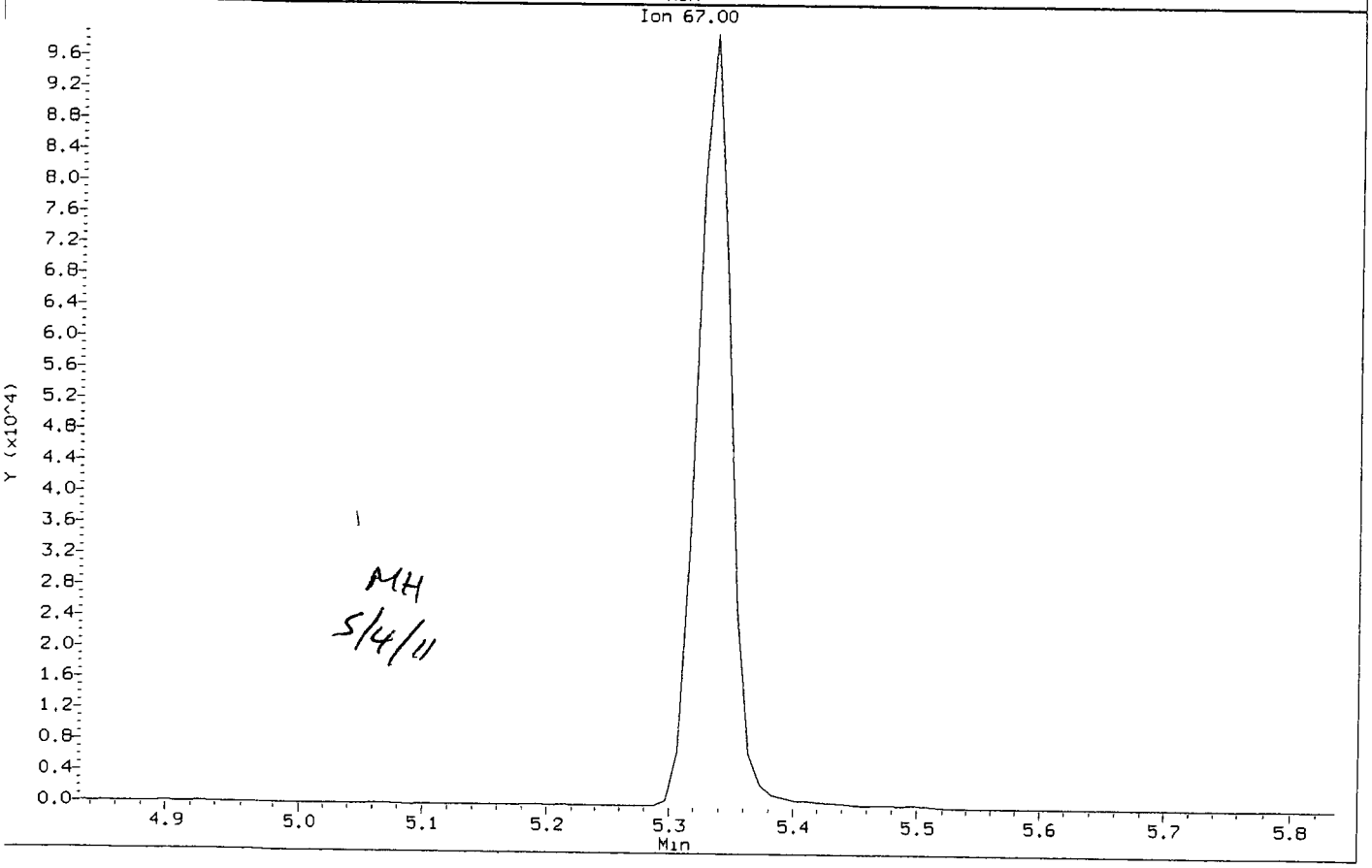
5. Other _____

Analyst: MH Date: 5/4/11

Data File: /chem1/nt7.1/26APR2011.b/0426016.d
Injection Date: 26-APR-2011 13:37
Instrument: nt7.1
Client Sample ID: 2000

Compound: d4-1,2-Dichloroethane
CAS Number:

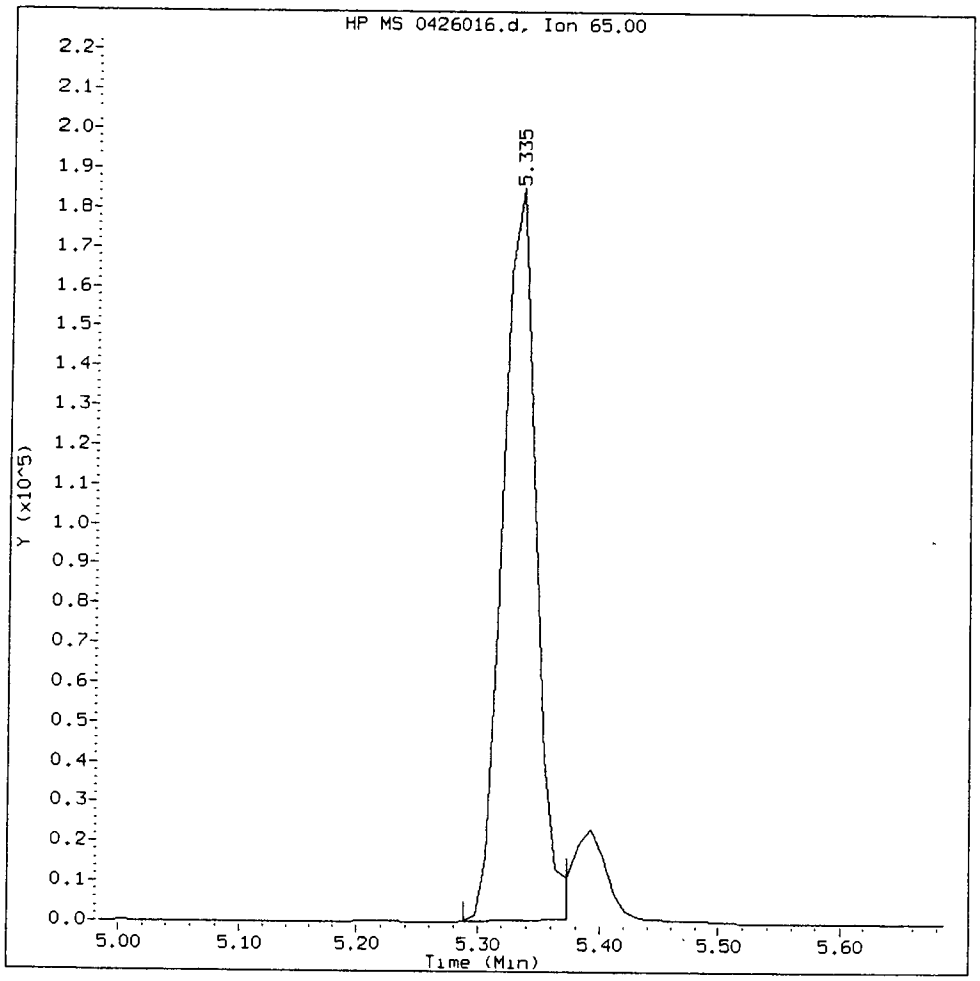




MH
5/4/11

20000426, /chem1/nt7.i/26APR2011.b/0426016.d

d4-1,2-Dichloroethane Amount: 964.28 Area: 373663



MANUAL INTEGRATION for d4-1,2-Dichloroethane

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

5. Other _____

Analyst: MH Date: 5/4/11

CO-ELUTION SUMMARY FOR FILE - 0426016.d

Lab ID: 20000426, Method: sim042611.m, Instrument: nt7.i, Date: 26-APR-2011

RT	CO-ELUTION COMPOUNDS

MH 5/4/11

Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/26APR2011.b/0426017.d
Lab Smp Id: 40000426 Client Smp ID: 4000
Inj Date : 26-APR-2011 14:03
Operator : MH Inst ID: nt7.i
Smp Info : 40000426,10,10,0,
Misc Info : 11-
Comment :
Method : /chem1/nt7.i/26APR2011.b/sim042611.m
Meth Date : 04-May-2011 06:35 monicah Quant Type: ISTD
Cal Date : 26-APR-2011 14:03 Cal File: 0426017.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)	ON-COL (ng/L)
	1 Vinyl Chloride	62	1.553	1.554	(0.292)	1642377	4000.00	3261.9
	2 1,1-Dichloroethene	96	2.511	2.510	(0.472)	1252775	4000.00	3127.2
	175 Trans-1,2-Dichloroethene	96	3.290	3.289	(0.618)	1306300	4000.00	3209.6(M)
	3 cis-1,2-dichloroethene	96	4.440	4.444	(0.834)	1473521	4000.00	3391.3(M)
	6 Benzene	78	5.210	5.212	(0.905)	5754348	4000.00	2963.1(M)
*	4 Pentafluorobenzene	168	5.324	5.326	(1.000)	457509	1000.00	
}	5 d4-1,2-Dichloroethane	65	5.334	5.335	(1.002)	387566	1000.00	940.04(M)
	176 1,2-Dichloroethane	62	5.390	5.392	(1.012)	2169305	4000.00	3329.1
	8 Trichloroethene	130	5.721	5.720	(0.994)	1097065	4000.00	3298.6(M)
*	7 1,4-Difluorobenzene	114	5.755	5.754	(1.000)	848269	1000.00	
}	9 d8-Toluene	98	6.913	6.914	(1.201)	1098285	1000.00	1016.3
	10 Tetrachloroethene	166	7.270	7.271	(1.263)	845233	4000.00	3293.5
	11 1,1,2,2-Tetrachloroethane	83	9.457	9.458	(1.643)	1090025	4000.00	3547.8

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt7.i
Lab File ID: 0426017.d
Lab Smp Id: 40000426
Analysis Type: VOA
Quant Type: ISTD
Operator: MH
Method File: /chem1/nt7.i/26APR2011.b/sim042611.m
Misc Info: 11-

Calibration Date: 26-APR-2011
Calibration Time: 12:47
Client Smp ID: 4000
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	363407	181704	726814	457509	25.89
7 1,4-Difluorobenze	667797	333898	1335594	848269	27.02

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.33	4.83	5.83	5.32	-0.03
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/26APR2011.b/0426017.d

Date : 26-APR-2011 14:03

Client ID: 4000

Sample Info: 40000426,10,10,0,

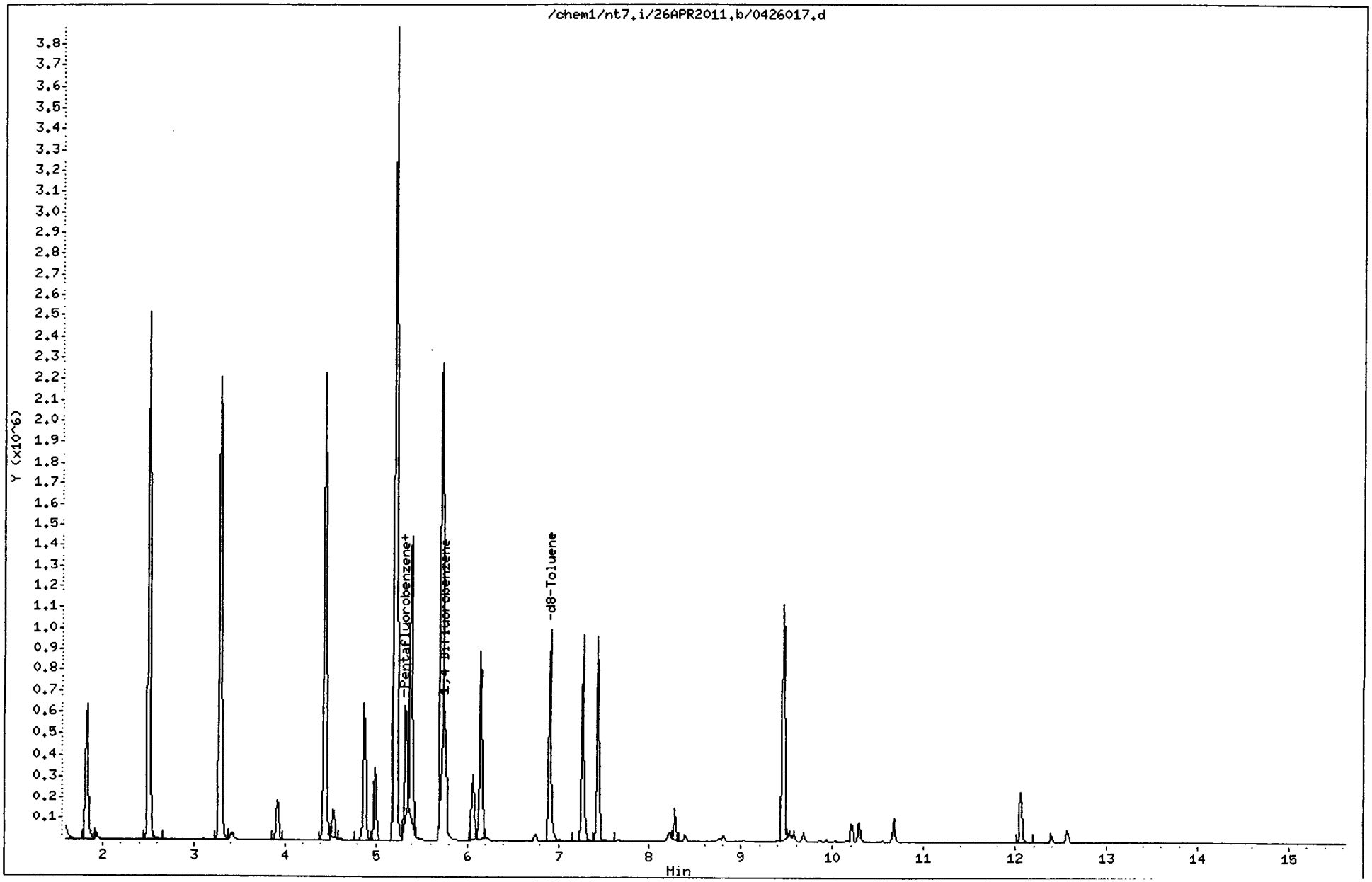
Column phase: RTXVMS

Instrument: nt7.1

Operator: MH

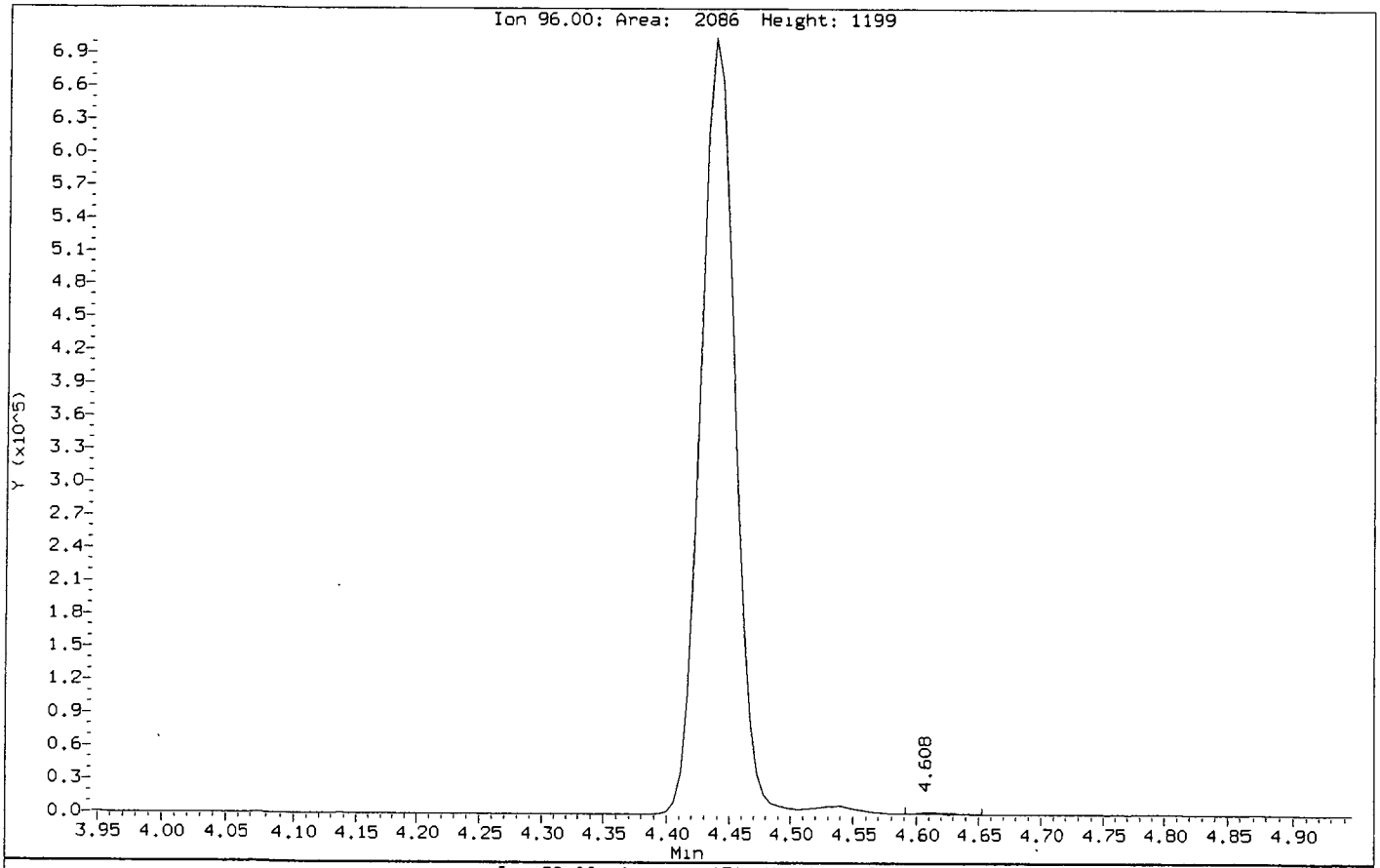
Column diameter: 0.18

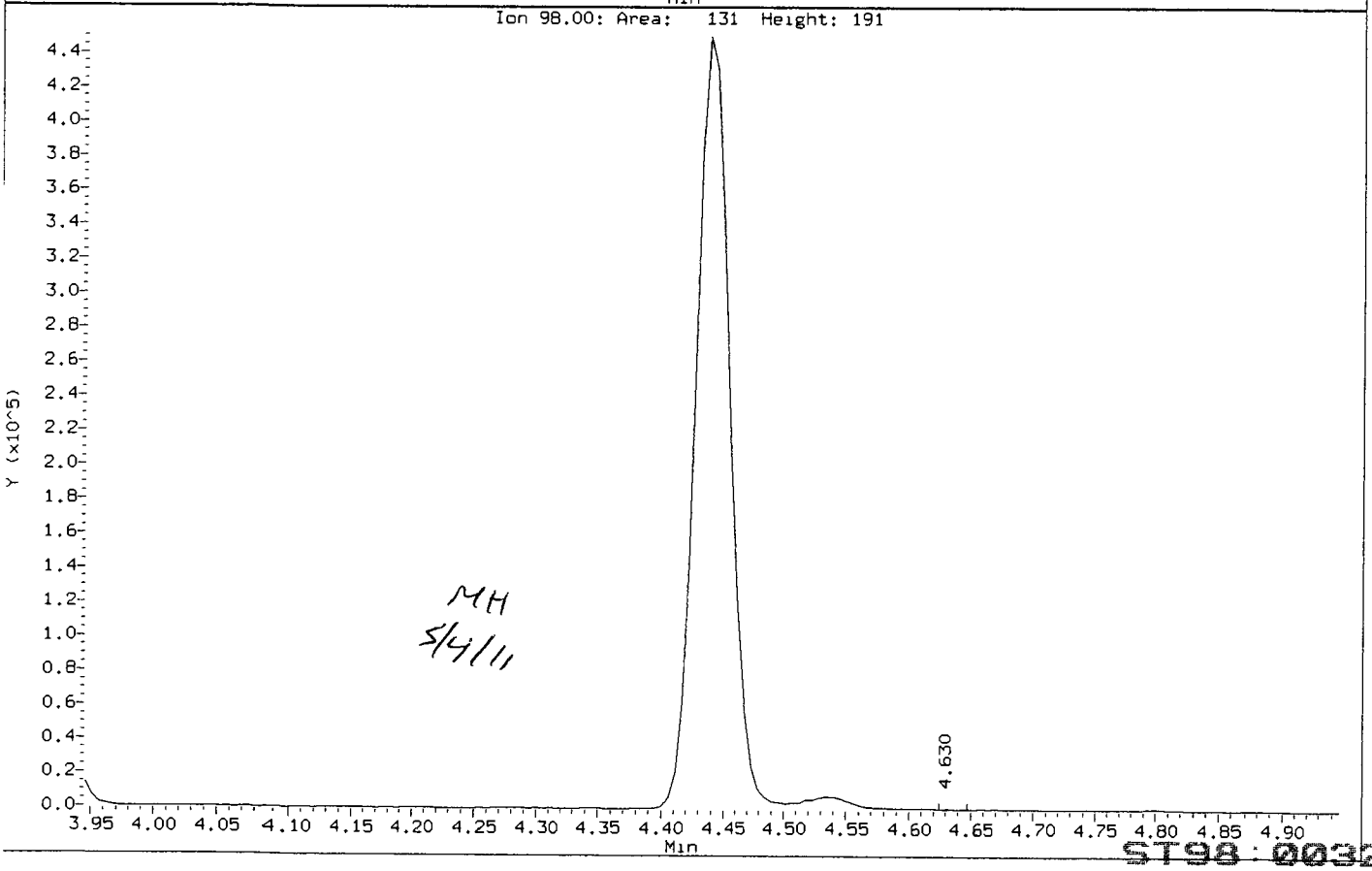
ST98 09321



Data File: /chem1/nt7.1/26APR2011.b/0426017.d
Injection Date: 26-APR-2011 14:03
Instrument: nt7.1
Client Sample ID: 4000

Compound: cis-1,2-dichloroethene
CAS Number:

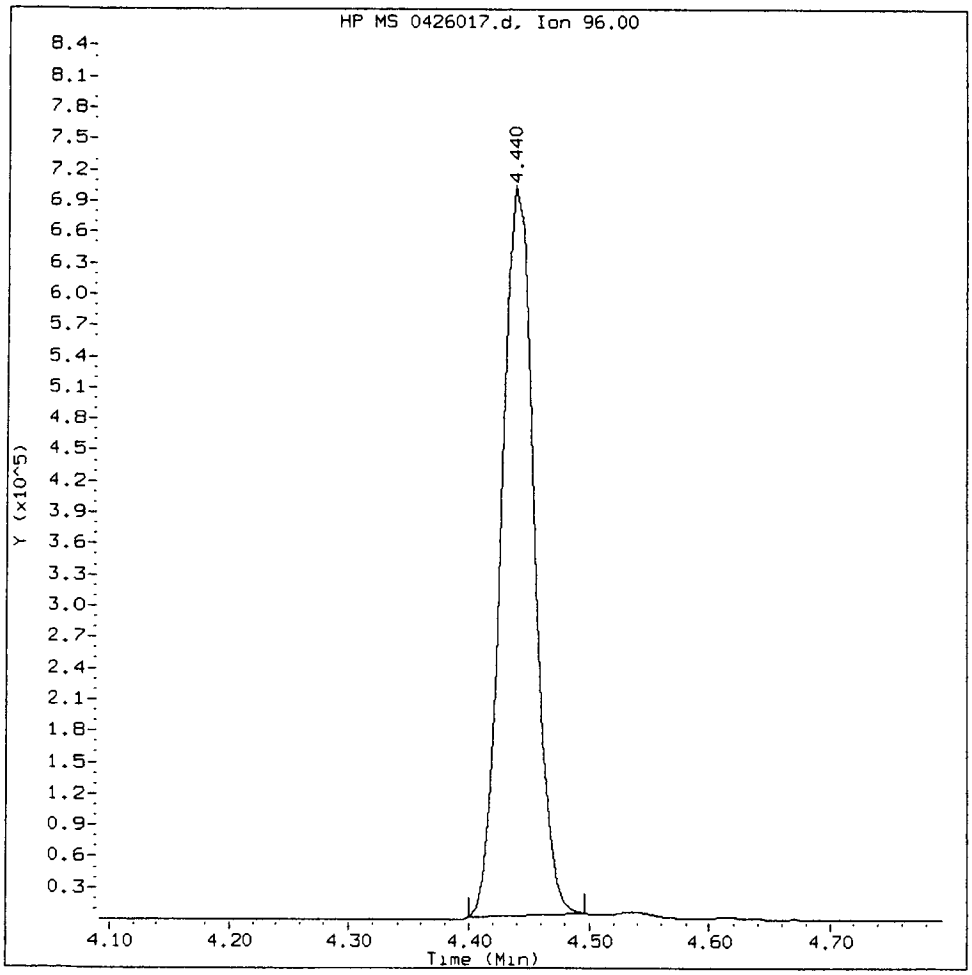




MH
5/4/11

40000426, /chem1/nt7.i/26APR2011.b/0426017.d

cis-1,2-dichloroethene Amount: 3391.25 Area: 1473521



MANUAL INTEGRATION for cis-1,2-dichloroethene

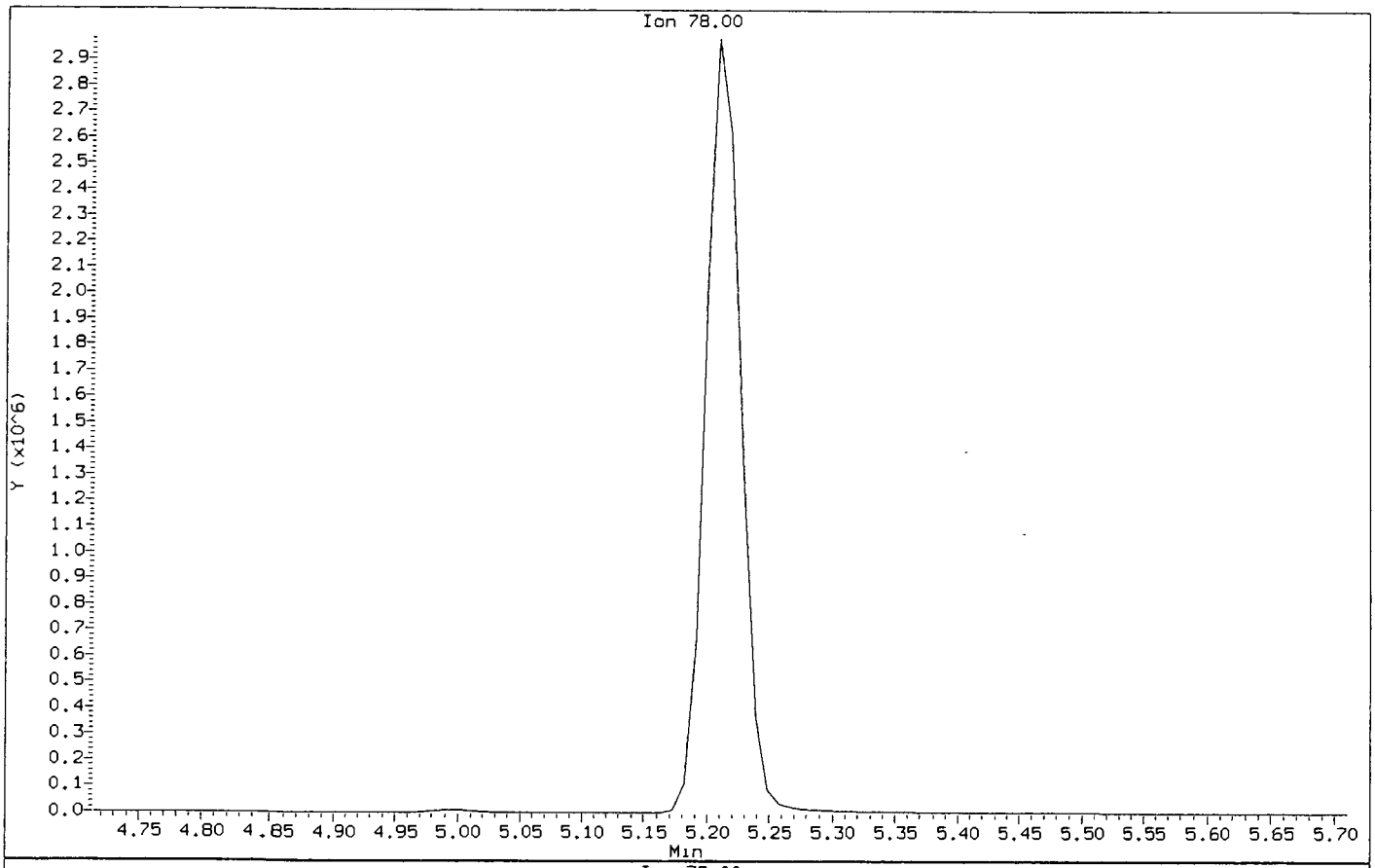
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

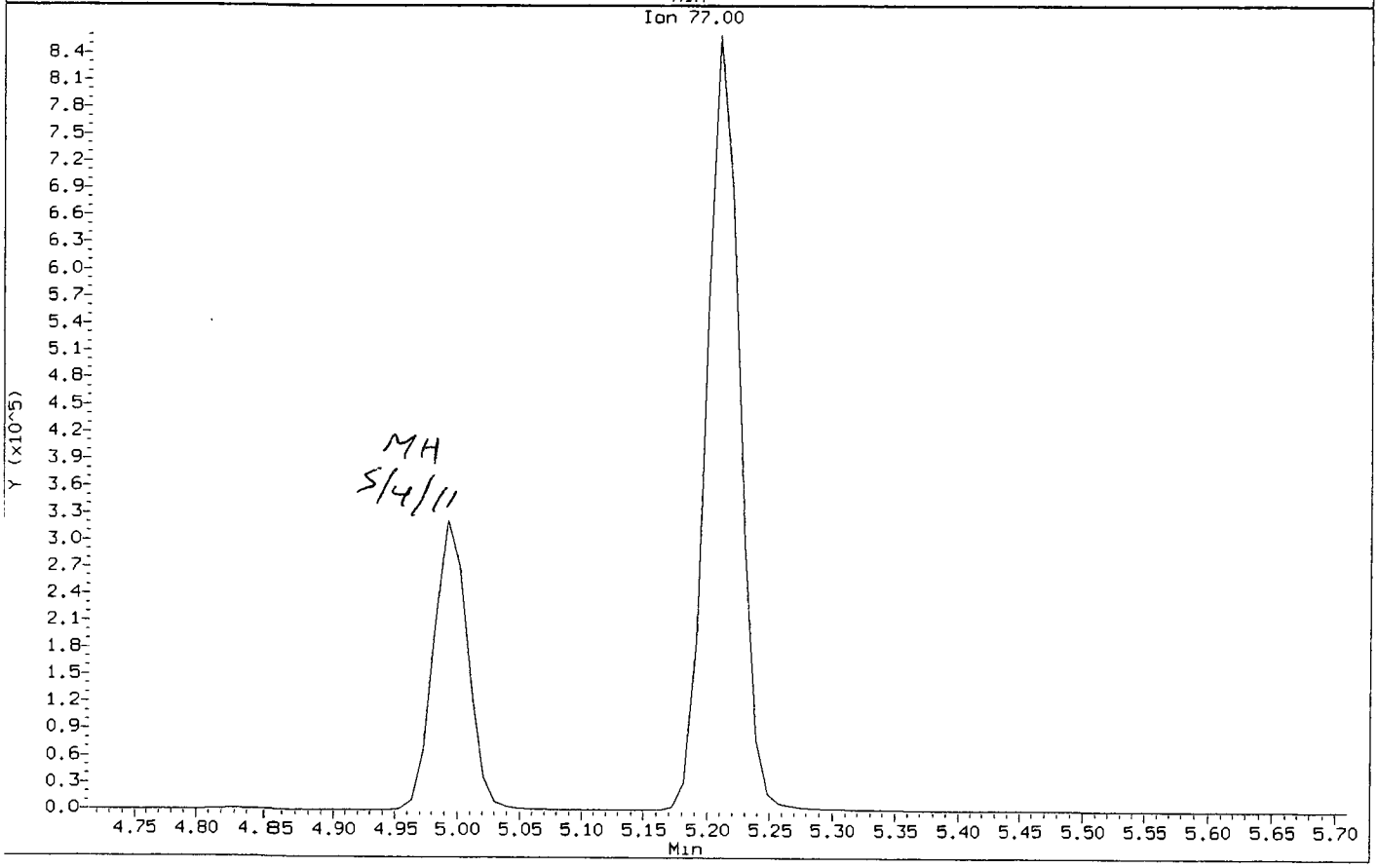
5. Other _____

Analyst: MH Date: 5/4/11

Data File: /chem1/nt7.i/26APR2011.b/0426017.d
Injection Date: 26-APR-2011 14:03
Instrument: nt7.i
Client Sample ID: 4000

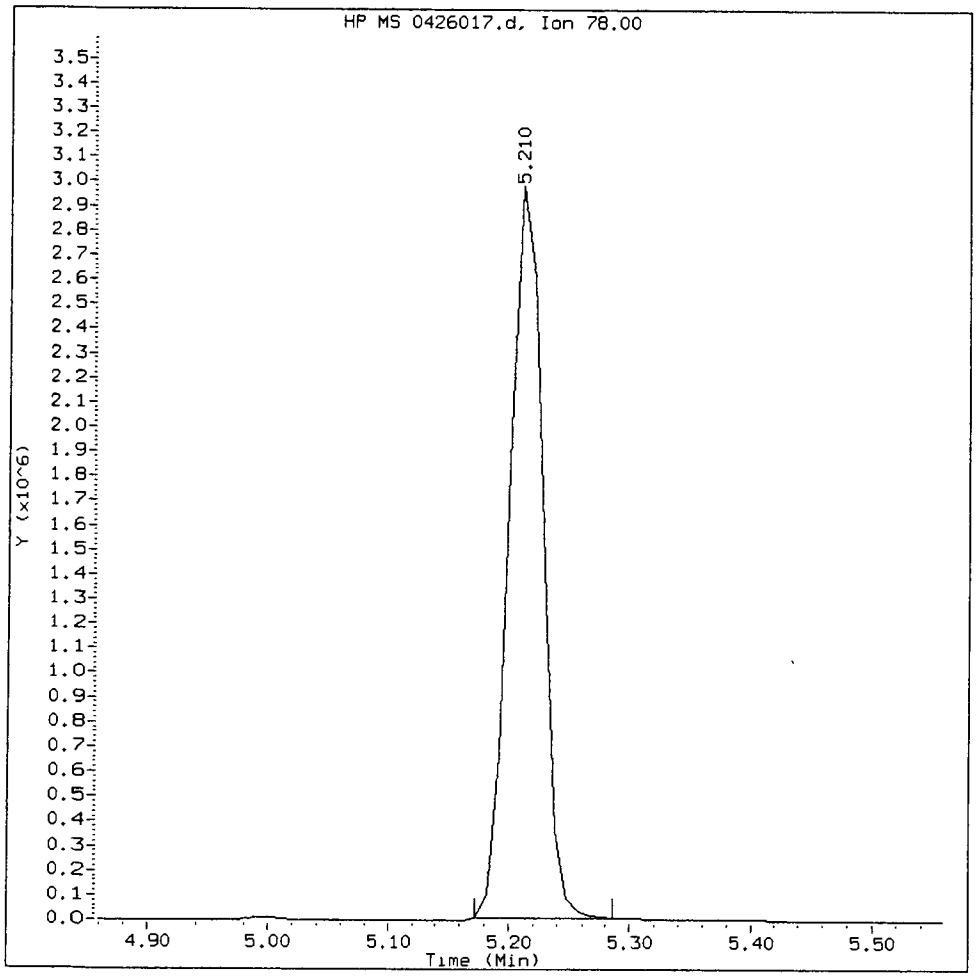
Compound: Benzene
CAS Number:





40000426, /chem1/nt7.i/26APR2011.b/0426017.d

Benzene Amount: 2963.06 Area: 5754348



MANUAL INTEGRATION for Benzene

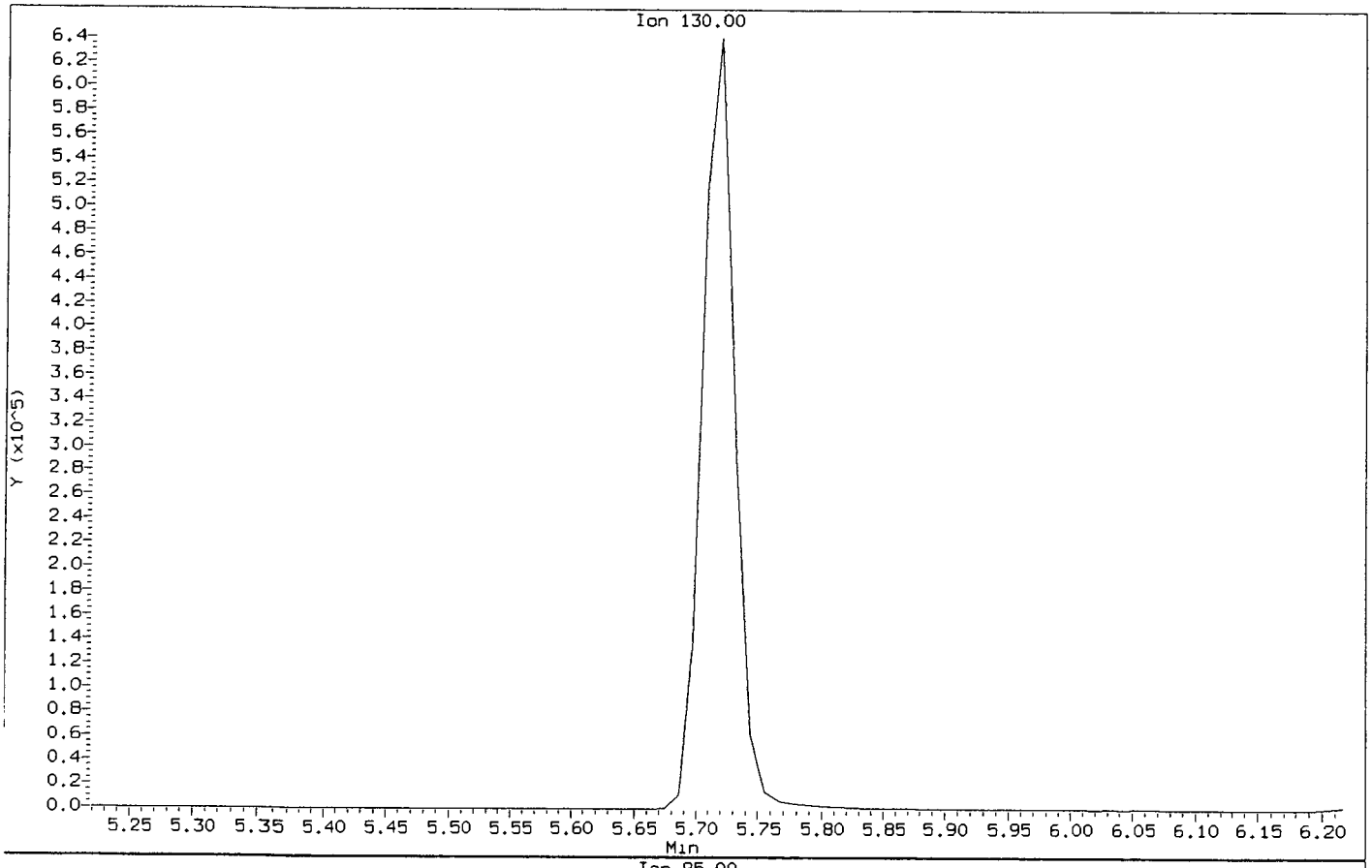
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

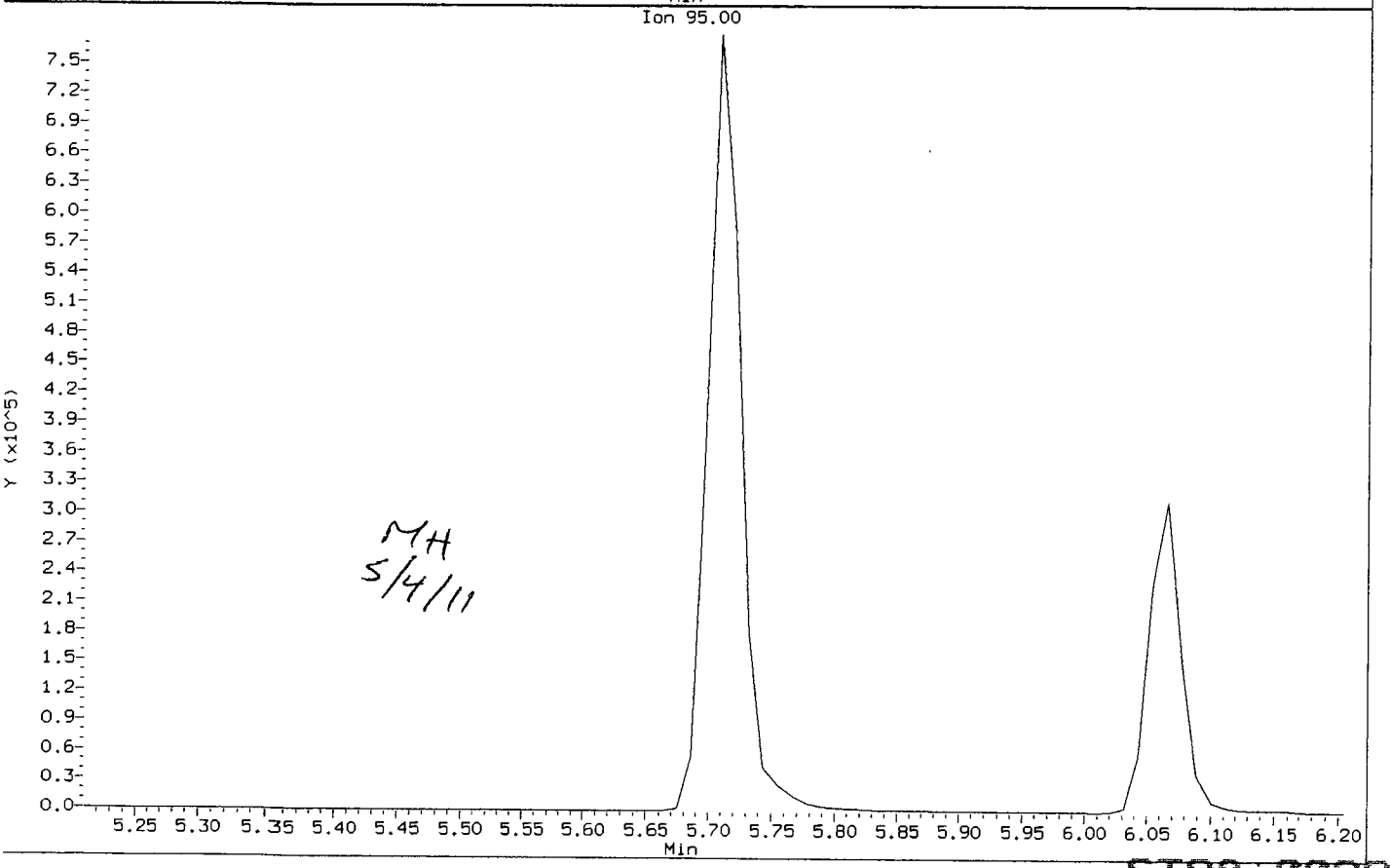
5. Other _____

Analyst: MH Date: 5/4/11

Data File: /chem1/nt7.i/26APR2011.b/0426017.d
Injection Date: 26-APR-2011 14:03
Instrument: nt7.i
Client Sample ID: 4000

Compound: Trichloroethene
CAS Number:

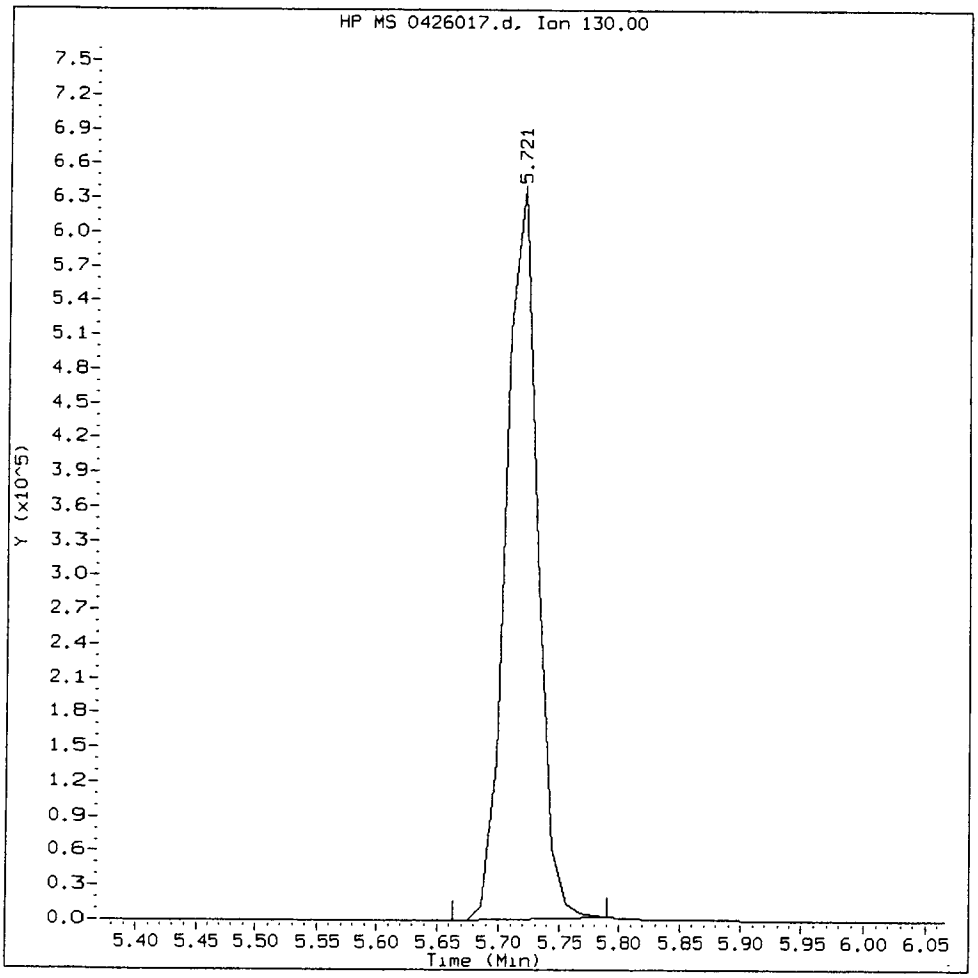




MH
5/4/11

40000426, /chem1/nt7.i/26APR2011.b/0426017.d

Trichloroethene Amount: 3298.64 Area: 1097065



MANUAL INTEGRATION for Trichloroethene

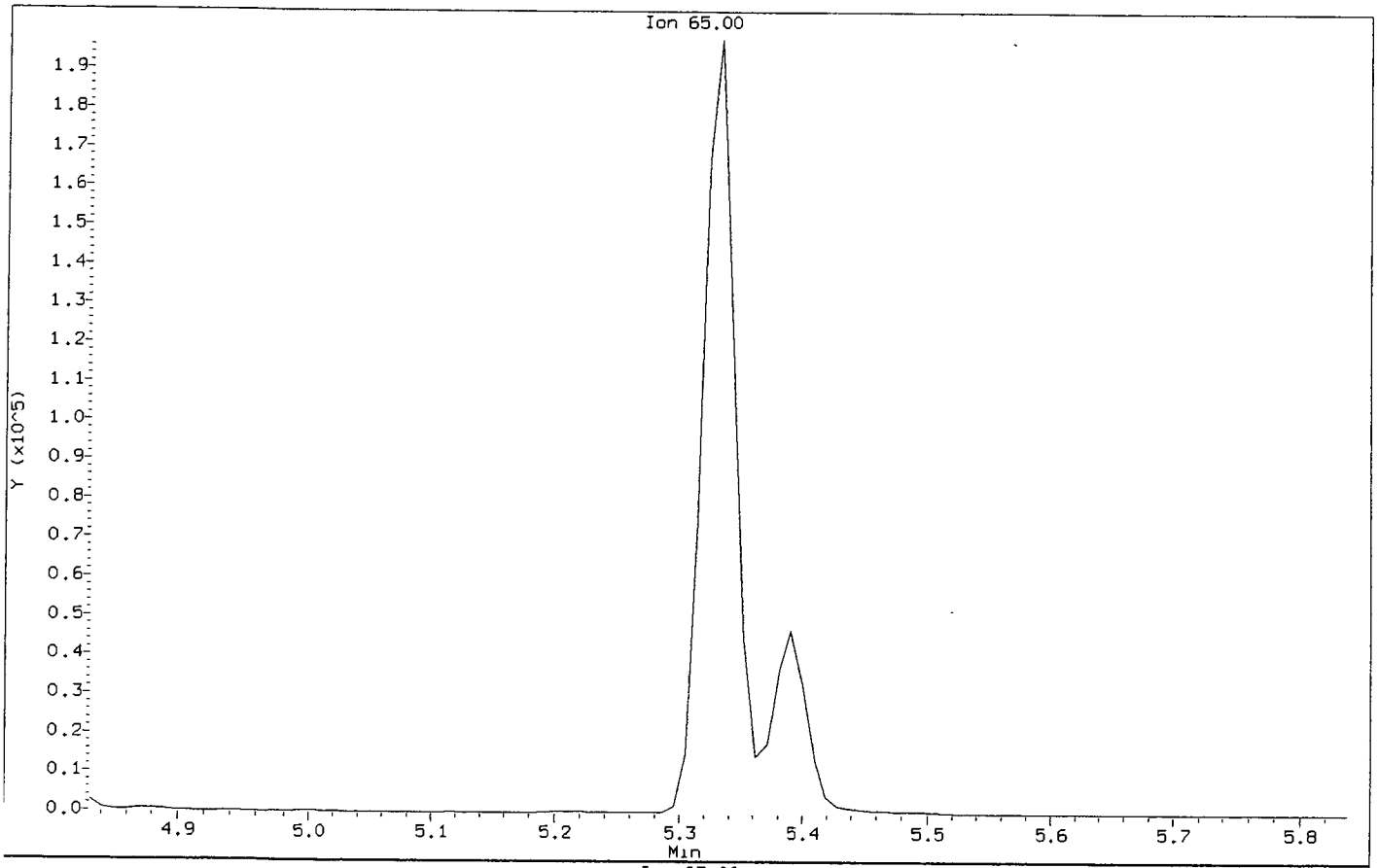
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

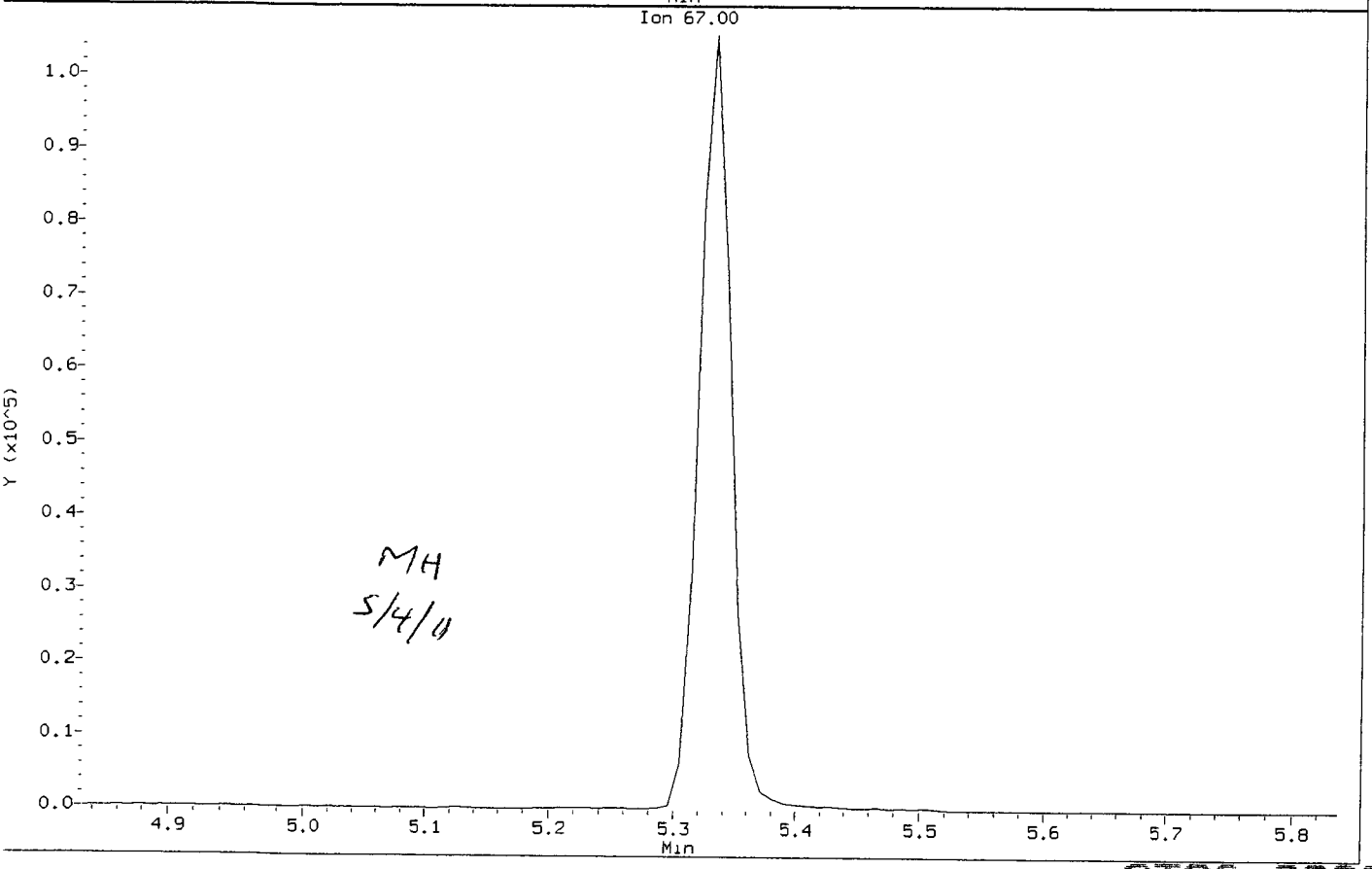
5. Other _____

Analyst: MH Date: 5/4/11

Data File: /chem1/nt7.1/26APR2011.b/0426017.d
Injection Date: 26-APR-2011 14:03
Instrument: nt7.1
Client Sample ID: 4000

Compound: d4-1,2-Dichloroethane
CAS Number:

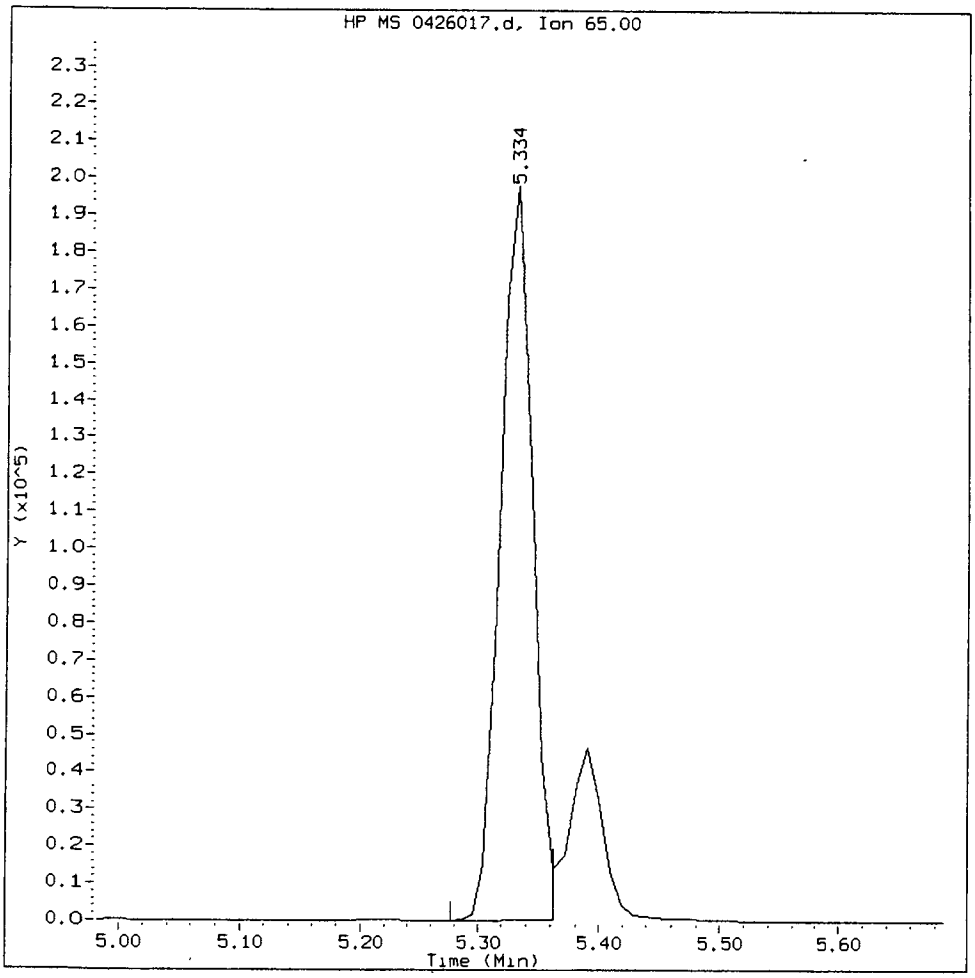




MH
5/4/11

40000426, /chem1/nt7.i/26APR2011.b/0426017.d

d4-1,2-Dichloroethane Amount: 940.04 Area: 387566



MANUAL INTEGRATION for d4-1,2-Dichloroethane

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

5. Other _____

Analyst: MH Date: 5/4/11

CO-ELUTION SUMMARY FOR FILE - 0426017.d

Lab ID: 40000426, Method: sim042611.m, Instrument: nt7.i, Date: 26-APR-2011

RT	CO-ELUTION COMPOUNDS

MH 5/4/11

Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/26APR2011.b/0426019.d
Lab Smp Id: 00200426 Client Smp ID: 20
Inj Date : 26-APR-2011 15:00
Operator : MH Inst ID: nt7.i
Smp Info : 00200426,10,10,0,
Misc Info : 11-
Comment :
Method : /chem1/nt7.i/26APR2011.b/sim042611.m
Meth Date : 04-May-2011 06:35 monicah Quant Type: ISTD
Cal Date : 26-APR-2011 15:00 Cal File: 0426019.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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/L)	ON-COL (ng/L)
	1 Vinyl Chloride	62	1.551	1.554	(0.291)	8384	20.0000	19.473
	2 1,1-Dichloroethene	96	2.509	2.510	(0.471)	6588	20.0000	19.232
	175 Trans-1,2-Dichloroethene	96	3.289	3.289	(0.618)	7399	20.0000	21.260
	3 cis-1,2-dichloroethene	96	4.444	4.444	(0.835)	5866	20.0000	15.788
	6 Benzene	78	5.220	5.212	(0.907)	39535	20.0000	23.266
*	4 Pentafluorobenzene	168	5.325	5.326	(1.000)	391217	1000.00	
$	5 d4-1,2-Dichloroethane	65	5.334	5.335	(1.002)	341930	1000.00	969.89
	176 1,2-Dichloroethane	62	5.391	5.392	(1.012)	10156	20.0000	18.227
	8 Trichloroethene	130	5.721	5.720	(0.994)	5927	20.0000	20.367
*	7 1,4-Difluorobenzene	114	5.756	5.754	(1.000)	742226	1000.00	
$	9 d8-Toluene	98	6.914	6.914	(1.201)	918839	1000.00	971.77
	10 Tetrachloroethene	166	7.282	7.271	(1.265)	4108	20.0000	18.294
	11 1,1,2,2-Tetrachloroethane	83	9.480	9.458	(1.647)	4734	20.0000	17.610

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt7.i
Lab File ID: 0426019.d
Lab Smp Id: 00200426
Analysis Type: VOA
Quant Type: ISTD
Operator: MH
Method File: /chem1/nt7.i/26APR2011.b/sim042611.m
Misc Info: 11-

Calibration Date: 26-APR-2011
Calibration Time: 12:47
Client Smp ID: 20
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.

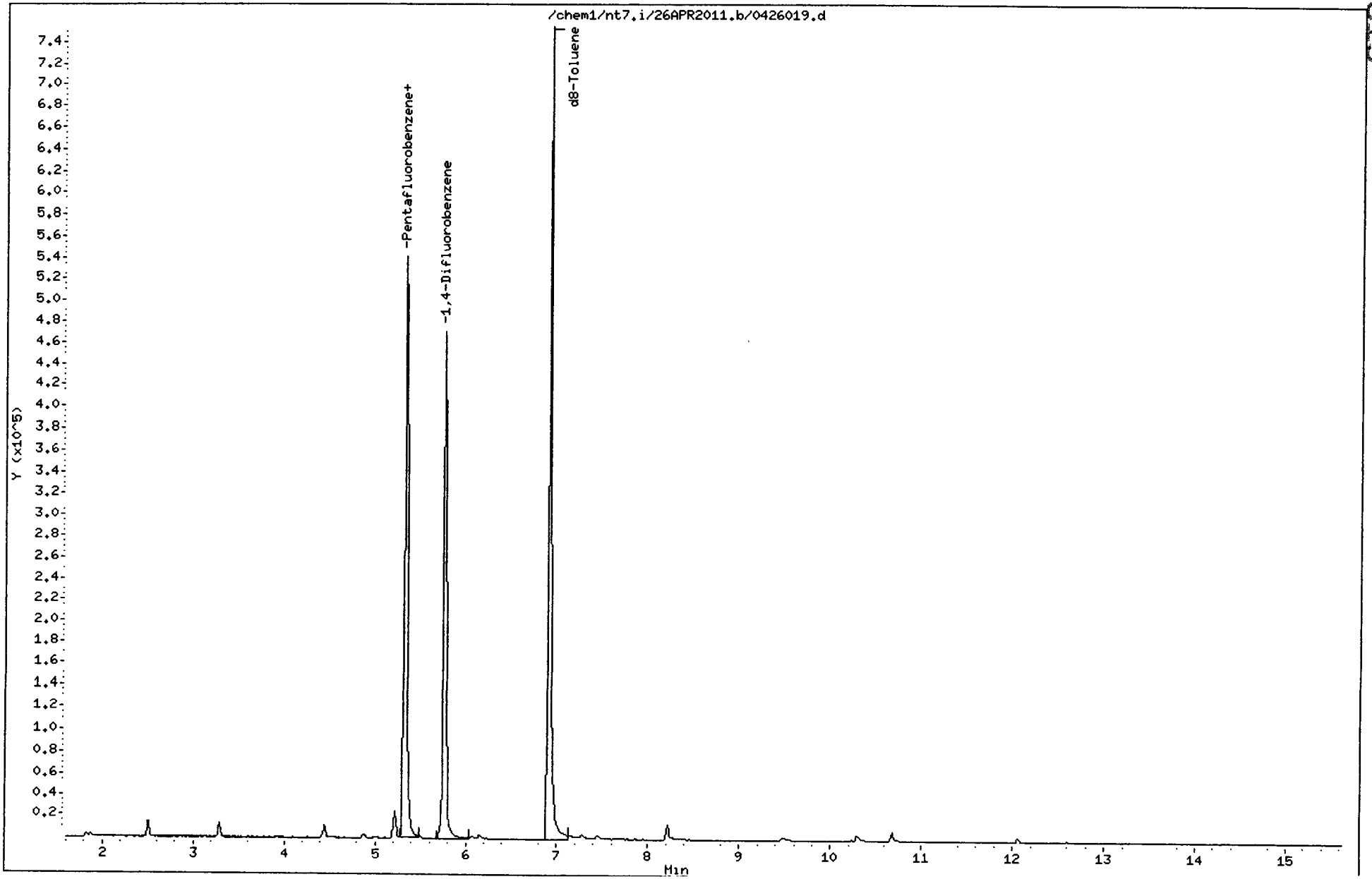
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	363407	181704	726814	391217	7.65
7 1,4-Difluorobenze	667797	333898	1335594	742226	11.15

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.33	4.83	5.83	5.32	-0.02
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/26APR2011.b/0426019.d
Date : 26-APR-2011 15:00
Client ID: 20
Sample Info: 00200426,10,10,0,

Instrument: nt7.i
Operator: MH
Column phase: RTXVMS
Column diameter: 0.18



STD 00836

CO-ELUTION SUMMARY FOR FILE - 0426019.d

Lab ID: 00200426, Method: sim042611.m, Instrument: nt7.i, Date: 26-APR-2011

RT	CO-ELUTION COMPOUNDS

MH 5/4/11

Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/26APR2011.b/0426018.d
Lab Smp Id: ICV0426 Client Smp ID: ICV
Inj Date : 26-APR-2011 14:29
Operator : MH Inst ID: nt7.i
Smp Info : ICV0426,10,10,0,
Misc Info : 11-
Comment :
Method : /chem1/nt7.i/26APR2011.b/sim042611.m
Meth Date : 04-May-2011 06:35 monicah Quant Type: ISTD
Cal Date : 26-APR-2011 14:03 Cal File: 0426017.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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/L)	FINAL (ug/L)
	1 Vinyl Chloride	62	1.551	1.554	(0.291)	525106	1114.07	1114.1
	2 1,1-Dichloroethene	96	2.509	2.510	(0.471)	363363	968.909	968.91
	175 Trans-1,2-Dichloroethene	96	3.289	3.289	(0.618)	320050	840.024	840.02
	3 cis-1,2-dichloroethene	96	4.438	4.444	(0.833)	360970	887.441	887.44
	6 Benzene	78	5.212	5.212	(0.906)	1595599	889.161	889.16
*	4 Pentafluorobenzene	168	5.325	5.326	(1.000)	428287	1000.00	
$	5 d4-1,2-Dichloroethane	65	5.335	5.335	(1.002)	321187	832.193	832.19
	176 1,2-Dichloroethane	62	5.392	5.392	(1.012)	556573	912.403	912.40
	8 Trichloroethene	130	5.720	5.720	(0.994)	297091	966.728	966.73 (Q)
*	7 1,4-Difluorobenzene	114	5.755	5.754	(1.000)	783828	1000.00	
$	9 d8-Toluene	98	6.914	6.914	(1.202)	1002333	1003.81	1003.8
	10 Tetrachloroethene	166	7.271	7.271	(1.264)	214228	903.381	903.38
	11 1,1,2,2-Tetrachloroethane	83	9.458	9.458	(1.644)	265381	934.775	934.77

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt7.i
Lab File ID: 0426018.d
Lab Smp Id: ICV0426
Analysis Type: VOA
Quant Type: ISTD
Operator: MH
Method File: /chem1/nt7.i/26APR2011.b/sim042611.m
Misc Info: 11-

Calibration Date: 26-APR-2011
Calibration Time: 12:47
Client Smp ID: ICV
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	363407	181704	726814	428287	17.85
7 1,4-Difluorobenze	667797	333898	1335594	783828	17.38

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.33	4.83	5.83	5.33	-0.01
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.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: ICV0426
Level: LOW
Data Type: MS DATA
SpikeList File: special.spk
Sublist File: sim12dca.sub
Client SDG: 26APR2011
Fraction: VOA
Client Smp ID: ICV
Operator: MH
SampleType: LCS
Quant Type: ISTD
Method File: /chem1/nt7.i/26APR2011.b/sim042611.m
Misc Info: 11-

	SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
1	Vinyl Chloride	1000.0	1114.1	111.41	76-120
176	1,2-Dichloroethane	1000.0	912.40	91.24	80-128
175	Trans-1,2-Dichloro	1000.0	840.02	84.00	80-120
2	1,1-Dichloroethene	1000.0	968.91	96.89	80-120
3	cis-1,2-dichloroet	1000.0	887.44	88.74	80-120
6	Benzene	1000.0	889.16	88.92	80-120
8	Trichloroethene	1000.0	966.73	96.67	80-120
10	Tetrachloroethene	1000.0	903.38	90.34	80-122
11	1,1,2,2-Tetrachlor	1000.0	934.77	93.48	80-128

	SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 5	d4-1,2-Dichloroeth	1000.0	832.19	83.22	80-126
$ 9	d8-Toluene	1000.0	1003.8	100.38	80-120

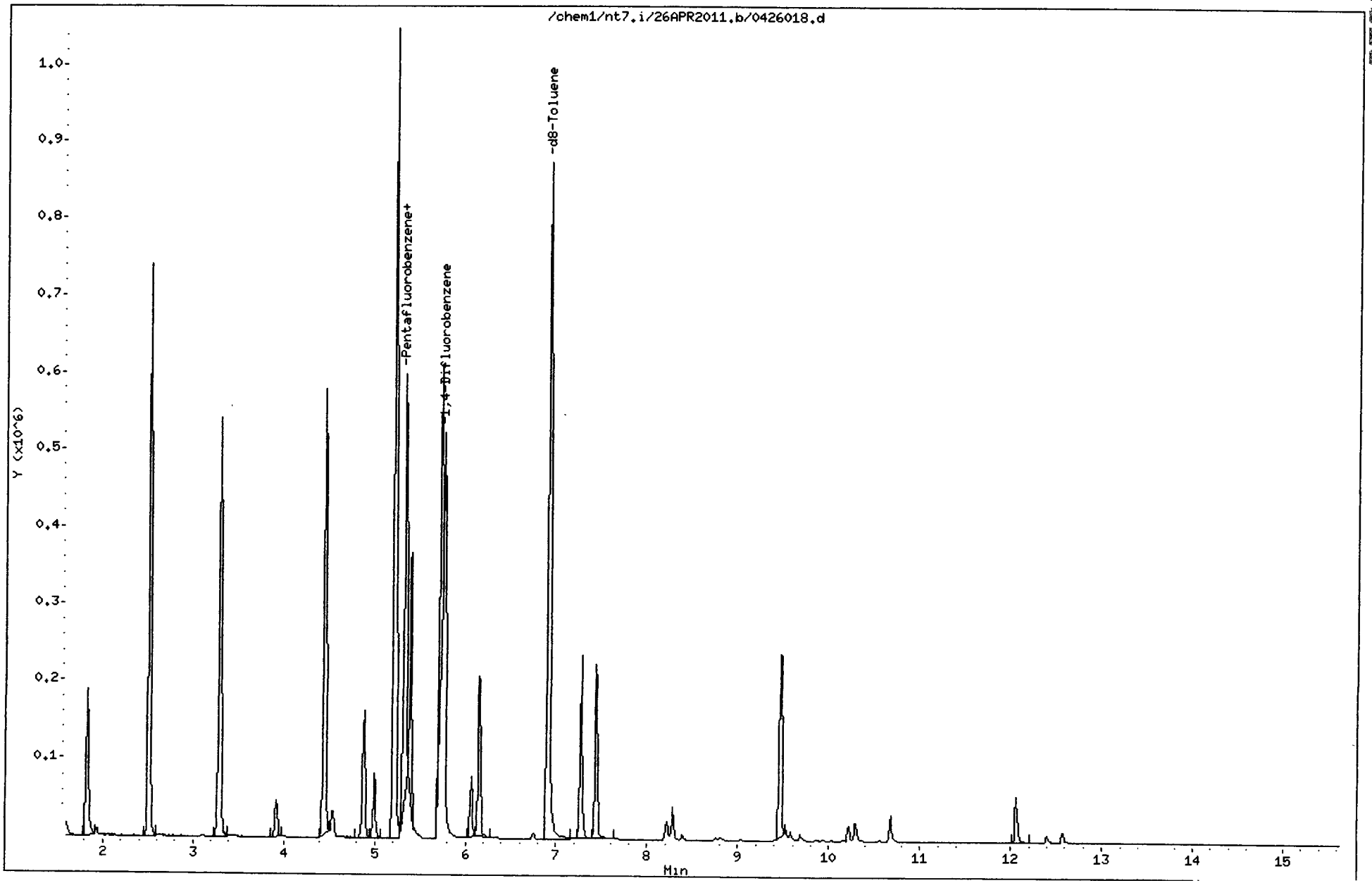
Data File: /chem1/nt7.i/26APR2011.b/0426018.d
Date : 26-APR-2011 14:29
Client ID: ICV
Sample Info: ICV0426,10,10,0,

Column phase: RTXVMS

Instrument: nt7.i

Operator: MH
Column diameter: 0.18

ST98:00339



CO-ELUTION SUMMARY FOR FILE - 0426018.d

Lab ID: ICV0426, Method: sim042611.m, Instrument: nt7.i, Date: 26-APR-2011

RT	CO-ELUTION COMPOUNDS

Report Date : 04-May-2011 09:22

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem1/nt7.i/26APR2011.b/sim042611.m
Batch File: /chem1/nt7.i/26APR2011.b
Inst ID: nt7.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	0426011	0426012	0426013	0426014	0426016	0426017	0426019
INJ.DATE:	26-APR-2011	26-APR-2011	26-APR-2011	26-APR-2011	26-APR-2011	26-APR-2011	26-APR-2011
INJ.TIME:	11:30	11:55	12:21	12:47	13:37	14:03	15:00

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	1 Vinyl Chloride	1.552	1.552	1.551	1.554	1.552	1.553	1.551	1.551	1.338-1.764	1.552	0.001
	2 1,1-Dichloroethene	2.510	2.505	2.505	2.510	2.510	2.511	2.509	2.505	2.292-2.718	2.508	0.002
	175 Trans-1,2-Dichloroethe	3.289	3.290	3.290	3.289	3.289	3.290	3.289	3.285	3.071-3.498	3.289	0.001
	177 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.980	3.767-4.193	+++++	+++++
	3 cis-1,2-dichloroethene	4.444	4.439	4.440	4.444	4.444	4.440	4.444	4.440	4.227-4.653	4.442	0.002
	6 Benzene	5.221	5.220	5.211	5.212	5.212	5.210	5.220	5.210	4.980-5.441	5.215	0.005
*	4 Pentafluorobenzene	5.325	5.324	5.324	5.326	5.326	5.324	5.325	5.324	5.111-5.537	5.325	0.001
$	5 d4-1,2-Dichloroethane	5.335	5.333	5.334	5.335	5.335	5.334	5.334	5.324	5.111-5.537	5.334	0.001
	176 1,2-Dichloroethane	5.392	5.390	5.391	5.392	5.392	5.390	5.391	5.381	5.168-5.594	5.391	0.001
	8 Trichloroethene	5.720	5.721	5.721	5.720	5.720	5.721	5.721	5.721	5.491-5.951	5.720	0.001
*	7 1,4-Difluorobenzene	5.766	5.755	5.756	5.754	5.754	5.755	5.756	5.756	5.526-5.986	5.757	0.004
$	9 d8-Toluene	6.915	6.913	6.914	6.914	6.915	6.913	6.914	6.914	6.683-7.144	6.914	0.001
	10 Tetrachloroethene	7.283	7.281	7.270	7.271	7.271	7.270	7.282	7.270	7.040-7.501	7.276	0.006
	11 1,1,2,2-Tetrachloroeth	9.481	9.468	9.469	9.458	9.458	9.457	9.480	9.457	9.227-9.687	9.467	0.010

Reviewer 1 MH Date: 5/4/11
Reviewer 2 [signature] Date: 5/4/11

ST98:0031

SIM Volatile Raw Data
Run Logs, Continuing Calibrations, and Raw Data

ARI Job ID: ST98, SU21

Analytical Resources, Incorporated
Analytical Chemists and Consultants

VOA Analyst Notes / Corrective Action Log

ARI Project ID: SY98 Client ID: Floyd Snider

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

Parameter(s): 5 VOA

Instrument: NT-2 NT-3 NT-5 (NT-7) NT-9 PID-1 PID-2 PID-3 FID-6 FINN-5

Purge Volume (mL) 10 Curve Date: 4/26/11 Analysis Start Date: 5/3/11

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

E

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

cis 1,2 DCE 79.39% in 5/3/11 LCSD

Additional Details on Reverse: Yes / No

Analyst: PC **Date:** 5/5/11

Reviewer: **Date:** 5/6/11

Analytical Resources, Incorporated
Analytical Chemists and Consultants

VOA Analyst Notes / Corrective Action Log

ARI Project ID: 5421 Client ID: Floyd Snider

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

Parameter(s): SIM VOA

Instrument: NT-2 NT-3 NT-5 (NT-7) NT-9 PID-1 PID-2 PID-3 FID-6 FINN-5

Purge Volume (mL) 10 Curve Date: 4/28/11 Analysis Start Date: 5/3/11

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):

c's 1,2DCE 79.39% in 5/3/11 LCSD

Additional Details on Reverse: Yes / No

Analyst: PC **Date:** 5/5/11

Reviewer: [signature] **Date:** 5/5/11

MANUAL INTEGRATION SUMMARY FOR DATABATCH - /chem1/nt7.i/03MAY2011.b

ARI Job No.: BFB0 Method: bfb8260.m Instrument: nt7.i Date: 03-MAY-2011

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1025	bfb0503.d	BFB0503	BFB0503	3	NO MANUAL INTEGRATION
1129	cc0503a.d	CC0503	CC0503	1	NO MANUAL INTEGRATION
1206	lcs0503a.d	LCS0503	LCS0503	1	NO MANUAL INTEGRATION
1232	lcs0503b.d	LCS0503	LCS0503	1	NO MANUAL INTEGRATION
1323	mb0503a.d	MB0503	MB0503	1	NO MANUAL INTEGRATION
1505	st98a.d	ST98A	MW02-04261	1	NO MANUAL INTEGRATION
1531	st98b.d	ST98B	MW03-04261	1	NO MANUAL INTEGRATION
1557	st98c.d	ST98C	MW13-04261	1	NO MANUAL INTEGRATION
1622	st98d.d	ST98D	MW06-04261	1	NO MANUAL INTEGRATION
1648	st98dms.d	ST98DMS	MW06-04261	1	NO MANUAL INTEGRATION
1714	st98dmsd.d	ST98DMSD	MW06-04261	1	NO MANUAL INTEGRATION
1348	st98e.d	ST98E	TB-042611	1	NO MANUAL INTEGRATION
1739	su21a.d	SU21A	MW07-04271	1	NO MANUAL INTEGRATION
1831	su21c.d	SU21C	MW10-04271	1	NO MANUAL INTEGRATION
1856	su21d.d	SU21D	MW09-04271	1	NO MANUAL INTEGRATION
1947	su21f.d	SU21F	MW12-04271	1	NO MANUAL INTEGRATION
1414	su21g.d	SU21G	TB-042711	1	NO MANUAL INTEGRATION
1939	su53b.d	SU53B	MW15042811	1	NO MANUAL INTEGRATION
2104	su53c.d	SU53C	MW4042811	1	NO MANUAL INTEGRATION
2130	su53d.d	SU53D	MW17042811	1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - /chem1/nt7.i/03MAY2011.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1440	su53g.d	SU53G	TB-042811	1	NO MANUAL INTEGRATION

Q-FLAG SUMMARY FOR DATABATCH - /chem1/nt7.i/03MAY2011.b

Instrument: nt7.i Date: 03-MAY-2011 Method: sim042611.m

INITIAL CAL: 26-APR-2011

Compound	%RSD or R^2
NO Q-FLAGS	

CONTINUING CAL: 03-MAY-2011

Compound	%D
NO Q-FLAGS	

Analytical Resources Inc.: Volatile Organics Instrument Log

NT-7 Serial No.:GC=US00024417, MS=US72821196

Date: 5/3/11 Analysis: 5/M VOA Analyst: PC

GC Program: VC Column No: 850322 Column Type: RTXVMS

Instrument Tune (.U or .CT.): b050503 EM Voltage: 1647

Calibration File: cc0503a Curve Date: 4/26/11

IS/SS	Ical/Ccal	LCS/ICV
VW685F1	VW682-2	VW682-2

INTERNAL STANDARD SUMMARY FOR DATABATCH - /chem1/nt7.i/03MAY2011.b

	Time	Filename	LabID	ClientID	WT						
1	1025	bfb0503.d	BFB0503	BFB0503	0.00						
2	1103	cc0503.d	CC0503	CC0503		1	5.32	343960	5.75	648916	
3	1129	cc0503a.d	CC0503	CC0503		1	5.33	367586	5.75	677458	
4	1206	lcs0503a.d	LCS0503	LCS0503		1	5.32	371235	5.75	691618	
5	1232	lcs0503b.d	LCS0503	LCS0503		1	5.32	368545	5.76	688280	
6	1258	mb0503.d	MB0503	misinject		1	5.33	374029	5.75	694748	
7	1323	mb0503a.d	MB0503	MB0503		1	5.33	374268	5.75	671582	
8	1348	st98e.d	ST98E	TB-042611	1 C2	1	5.33	360193	5.75	635546	
9	1414	su21g.d	SU21G	TB-042711	1	1	5.32	342984	5.76	622310	
10	1440	su53g.d	SU53G	TB-042811	2	1	5.33	334355	5.75	617379	
11	1505	st98a.d	ST98A	MW02-042611	4	1	5.33	337272	5.75	605168	
12	1531	st98b.d	ST98B	MW03-042611	2	1	5.32	345206	5.76	603420	
13	1557	st98c.d	ST98C	MW13-042611	2	1	5.33	332326	5.77	598780	
14	1622	st98d.d	ST98D	MW06-042611	3	1	5.33	329307	5.75	596467	
15	1648	st98dms.d	ST98DMS	MW06-042611 MS	4	1	5.32	381200	5.76	696898	
16	1714	st98dmsd.d	ST98DMSD	MW06-042611 MSD	5	1	5.33	412190	5.75	751697	
17	1739	su21a.d	SU21A	MW07-042711	3	1	5.32	396604	5.76	753683	
18	1805	su21b.d	SU21B	MW11-042711	3	1	5.33	53850	5.77	91485	
19	1831	su21c.d	SU21C	MW10-042711	3	1	5.33	354061	5.77	661517	
20	1856	su21d.d	SU21D	MW09-042711	3	1	5.32	378093	5.77	644456	
21	1922	su21e.d	SU21E	MW08-042711	4	1	5.33	121207	5.77	211336	
22	1947	su21f.d	SU21F	MW12-042711	3	1	5.33	266113	5.77	458881	
23	2013	su53a.d	SU53A	MW5042811	9 C2	1	5.32	58907	5.77	106273	
24	2039	su53b.d	SU53B	MW15042811	8	1	5.33	320598	5.77	566633	
25	2104	su53c.d	SU53C	MW4042811	4	1	5.33	324280	5.77	565886	
26	2130	su53d.d	SU53D	MW17042811	4	1	5.33	291433	5.77	551688	
27	2156	su53e.d	SU53E	MW14042811	4	1	5.33	307760	5.77	551825	
28	2221	su53f.d	SU53F	MW16042811	3	1	5.33	52546	5.77	97211	

PC 5/4/11

Maintenance / Comments

IS delivery problems SU21B, SU21E, SU53A, SU53F

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.

Data File: /chem1/nt7.i/03MAY2011.b/bfb0503.d

Date : 03-MAY-2011 10:25

Client ID: BFB0503

Instrument: nt7.i

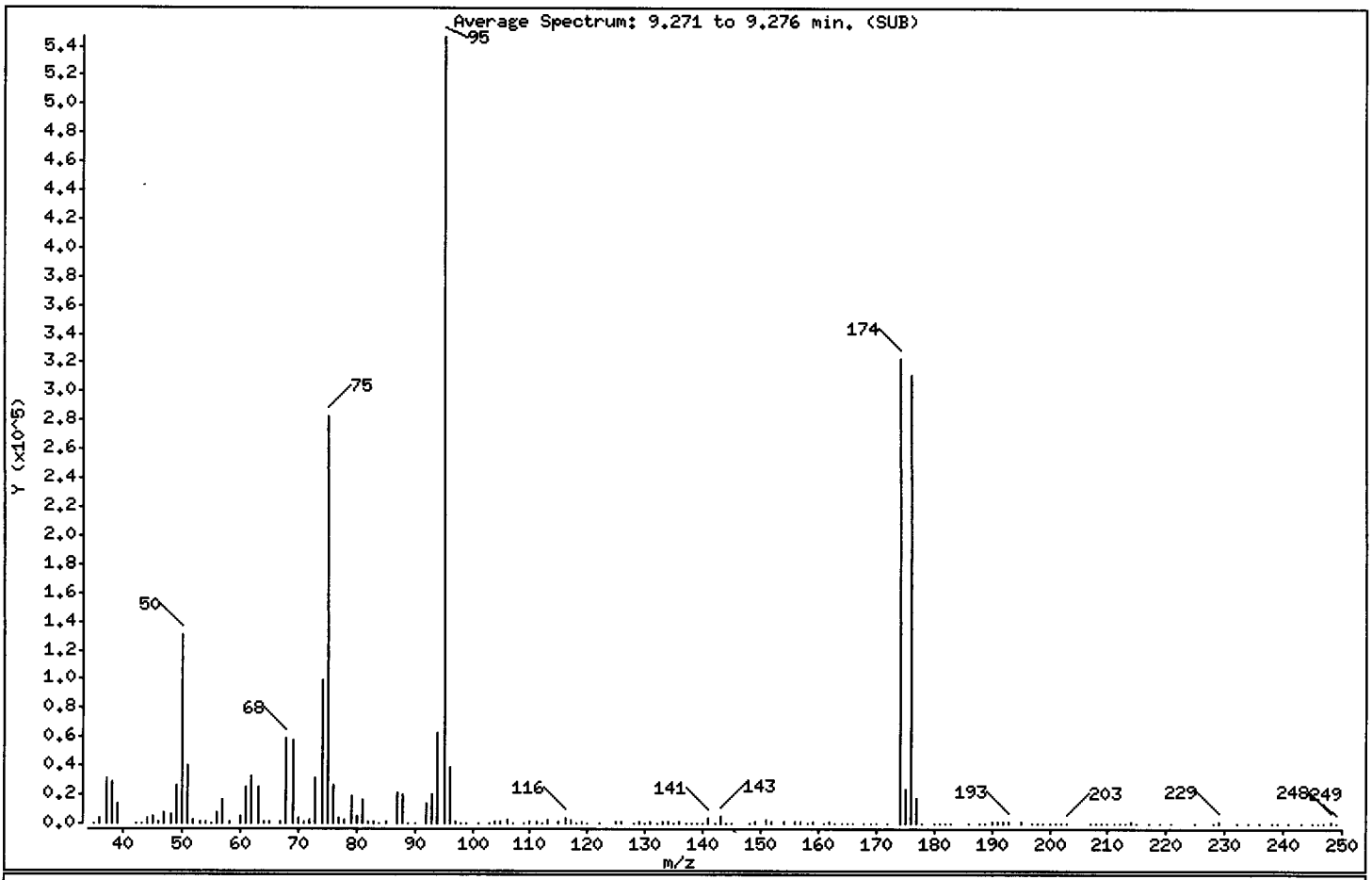
Sample Info: BFB0503,BFB0503,1,03MAY2011,,

Operator: PC

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	23.90
75	30.00 - 66.00% of mass 95	51.67
96	5.00 - 9.00% of mass 95	7.04
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 101.00% of mass 95	59.18
175	4.00 - 9.00% of mass 174	4.37 (7.39)
176	93.00 - 101.00% of mass 174	57.12 (96.52)
177	5.00 - 9.00% of mass 176	3.19 (5.59)

Data File: /chem1/nt7.i/03MAY2011.b/bfb0503.d

Date : 03-MAY-2011 10:25

Client ID: BFB0503

Instrument: nt7.i

Sample Info: BFB0503,BFB0503,1,03MAY2011,,

Operator: PC

Column phase: RTXVMS

Column diameter: 0.18

Data File: bfb0503.d
Spectrum: Average Spectrum: 9.271 to 9.276 min. (SUB)
Location of Maximum: 95.00
Number of points: 167

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	127	81.00	16408	133.00	1042	188.00	74
36.00	3776	82.00	700	134.00	926	189.00	158
37.00	31544	83.00	1159	135.00	223	190.00	1475
38.00	28792	84.00	320	136.00	1275	191.00	963
39.00	13809	85.00	908	137.00	162	192.00	1170
42.00	312	87.00	21512	138.00	106	193.00	1567
43.00	351	88.00	20576	139.00	558	195.00	674
44.00	3419	89.00	254	140.00	498	197.00	76
45.00	4909	90.00	506	141.00	4081	198.00	284
46.00	1393	92.00	14318	142.00	39	199.00	97
47.00	7414	93.00	19928	143.00	5501	200.00	347
48.00	5714	94.00	62256	144.00	37	201.00	552
49.00	27032	95.00	546944	145.00	623	202.00	407
50.00	130720	96.00	38528	148.00	61	203.00	567
51.00	39840	97.00	969	149.00	639	207.00	526
52.00	2410	98.00	374	151.00	1966	208.00	331
53.00	838	99.00	600	152.00	691	209.00	302
54.00	640	101.00	462	154.00	1312	210.00	53
55.00	190	103.00	565	156.00	758	211.00	66
56.00	8057	104.00	1354	157.00	668	212.00	99
57.00	15772	105.00	656	158.00	187	213.00	339
58.00	1046	106.00	2282	159.00	928	214.00	801
60.00	5629	107.00	344	161.00	291	215.00	218
61.00	24544	109.00	237	162.00	1018	217.00	467
62.00	32208	110.00	769	163.00	200	219.00	404
63.00	25136	111.00	1378	164.00	509	221.00	130
64.00	1750	112.00	484	165.00	147	225.00	103
65.00	1004	113.00	2350	166.00	106	228.00	295
67.00	1535	115.00	1083	168.00	115	229.00	879
68.00	59600	116.00	3197	169.00	326	232.00	623
69.00	57792	117.00	2632	170.00	200	234.00	168
70.00	3408	118.00	463	172.00	481	236.00	139
71.00	1057	119.00	901	174.00	323648	238.00	341
72.00	2440	120.00	419	175.00	23920	239.00	146
73.00	31024	122.00	64	176.00	312384	241.00	354

Date : 03-MAY-2011 10:25

Client ID: BFB0503 Instrument: nt7.i

Sample Info: BFB0503,BFB0503,1,03MAY2011,,

Operator: PC

Column phase: RTXVMS Column diameter: 0.18

Data File: bfb0503.d
Spectrum: Average Spectrum: 9.271 to 9.276 min. (SUB)
Location of Maximum: 95.00
Number of points: 167

m/z	Y	m/z	Y	m/z	Y	m/z	Y
74.00	99080	125.00	1721	177.00	17464	243.00	593
75.00	282560	126.00	739	178.00	214	245.00	284
76.00	25824	128.00	597	180.00	382	246.00	240
77.00	3374	129.00	1091	181.00	209	247.00	194
78.00	2963	130.00	383	182.00	339	248.00	1650
79.00	19368	131.00	1080	183.00	436	249.00	436
80.00	5449	132.00	179	186.00	234		

Data File: /chem1/nt7.i/03MAY2011.b/bfb0503.d

Date : 03-MAY-2011 10:25

Client ID: BFB0503

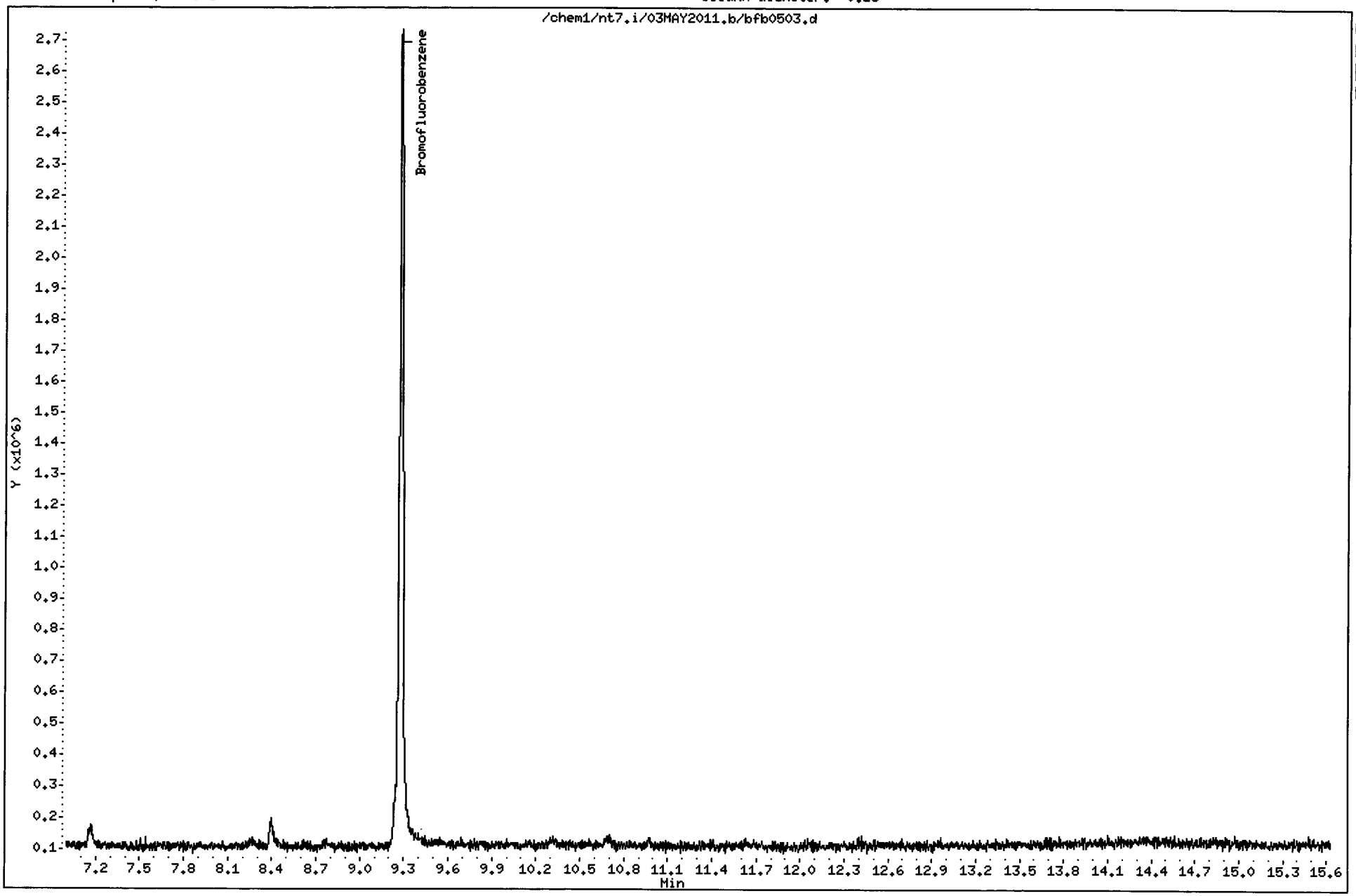
Sample Info: BFB0503,BFB0503,1,03MAY2011,,

Column phase: RTXVMS

Instrument: nt7.i

Operator: PC

Column diameter: 0.18



PC 5/4/11

Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/03MAY2011.b/cc0503a.d
Lab Smp Id: CC0503 Client Smp ID: CC0503
Inj Date : 03-MAY-2011 11:29
Operator : PC Inst ID: nt7.i
Smp Info : CC0503,10,10,0,
Misc Info : 11-
Comment :
Method : /chem1/nt7.i/03MAY2011.b/sim042611.m
Meth Date : 03-May-2011 12:16 paul Quant Type: ISTD
Cal Date : 26-APR-2011 15:00 Cal File: 0426019.d
Als bottle: 1 Continuing Calibration Sample
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)	ON-COL (ng/L)
	1 Vinyl Chloride	62	1.552	1.552	(0.291)	364320	1000.00	900.58
	2 1,1-Dichloroethene	96	2.505	2.505	(0.470)	275396	1000.00	855.61
	175 Trans-1,2-Dichloroethene	96	3.284	3.284	(0.617)	283504	1000.00	866.97
	3 cis-1,2-dichloroethene	96	4.439	4.439	(0.834)	284161	1000.00	813.96
	6 Benzene	78	5.212	5.212	(0.906)	1338657	1000.00	863.11
*	4 Pentafluorobenzene	168	5.326	5.326	(1.000)	367586	1000.00	
$	5 d4-1,2-Dichloroethane	65	5.326	5.326	(1.000)	288044	1000.00	869.56
	176 1,2-Dichloroethane	62	5.383	5.383	(1.011)	462721	1000.00	883.80
	8 Trichloroethene	130	5.720	5.720	(0.994)	243121	1000.00	915.31(Q)
*	7 1,4-Difluorobenzene	114	5.754	5.754	(1.000)	677458	1000.00	
$	9 d8-Toluene	98	6.913	6.913	(1.201)	882319	1000.00	1022.4
	10 Tetrachloroethene	166	7.270	7.270	(1.263)	172672	1000.00	842.45
	11 1,1,2,2-Tetrachloroethane	83	9.457	9.457	(1.643)	230281	1000.00	938.49

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt7.i Injection Date: 03-MAY-2011 11:29
Lab File ID: cc0503a.d Init. Cal. Date(s): 26-APR-2011 26-APR-2011
Analysis Type: WATER Init. Cal. Times: 08:49 15:00
Lab Sample ID: CC0503 Quant Type: ISTD
Method: /chem1/nt7.i/03MAY2011.b/sim042611.m

COMPOUND	RRF / AMOUNT	RF1000	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 Vinyl Chloride	1.10052	0.99111	0.040	-9.94151	20.00000	Averaged
2 1,1-Dichloroethene	0.87564	0.74920	0.040	-14.43902	20.00000	Averaged
175 Trans-1,2-Dichloroethene	0.88961	0.77126	0.040	-13.30339	20.00000	Averaged
3 cis-1,2-dichloroethene	0.94974	0.77305	0.040	-18.60433	20.00000	Averaged
6 Benzene	2.28941	1.97600	0.040	-13.68942	20.00000	Averaged
$ 5 d4-1,2-Dichloroethane	0.90115	0.78361	0.040	-13.04357	20.00000	Averaged
176 1,2-Dichloroethane	1.42431	1.25881	0.040	-11.61972	20.00000	Averaged
8 Trichloroethene	0.39208	0.35887	0.040	-8.46943	20.00000	Averaged
$ 9 d8-Toluene	1.27392	1.30240	0.040	2.23563	20.00000	Averaged
10 Tetrachloroethene	0.30255	0.25488	0.040	-15.75503	20.00000	Averaged
11 1,1,2,2-Tetrachloroethane	0.36220	0.33992	0.040	-6.15053	20.00000	Averaged

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt7.i
Lab File ID: cc0503a.d
Lab Smp Id: CC0503
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: /chem1/nt7.i/03MAY2011.b/sim042611.m
Misc Info: 11-

Calibration Date: 03-MAY-2011
Calibration Time: 11:03
Client Smp ID: CC0503
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	363407	181704	726814	367586	1.15
7 1,4-Difluorobenze	667797	333898	1335594	677458	1.45

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.00
7 1,4-Difluorobenze	5.75	5.25	6.25	5.75	0.00

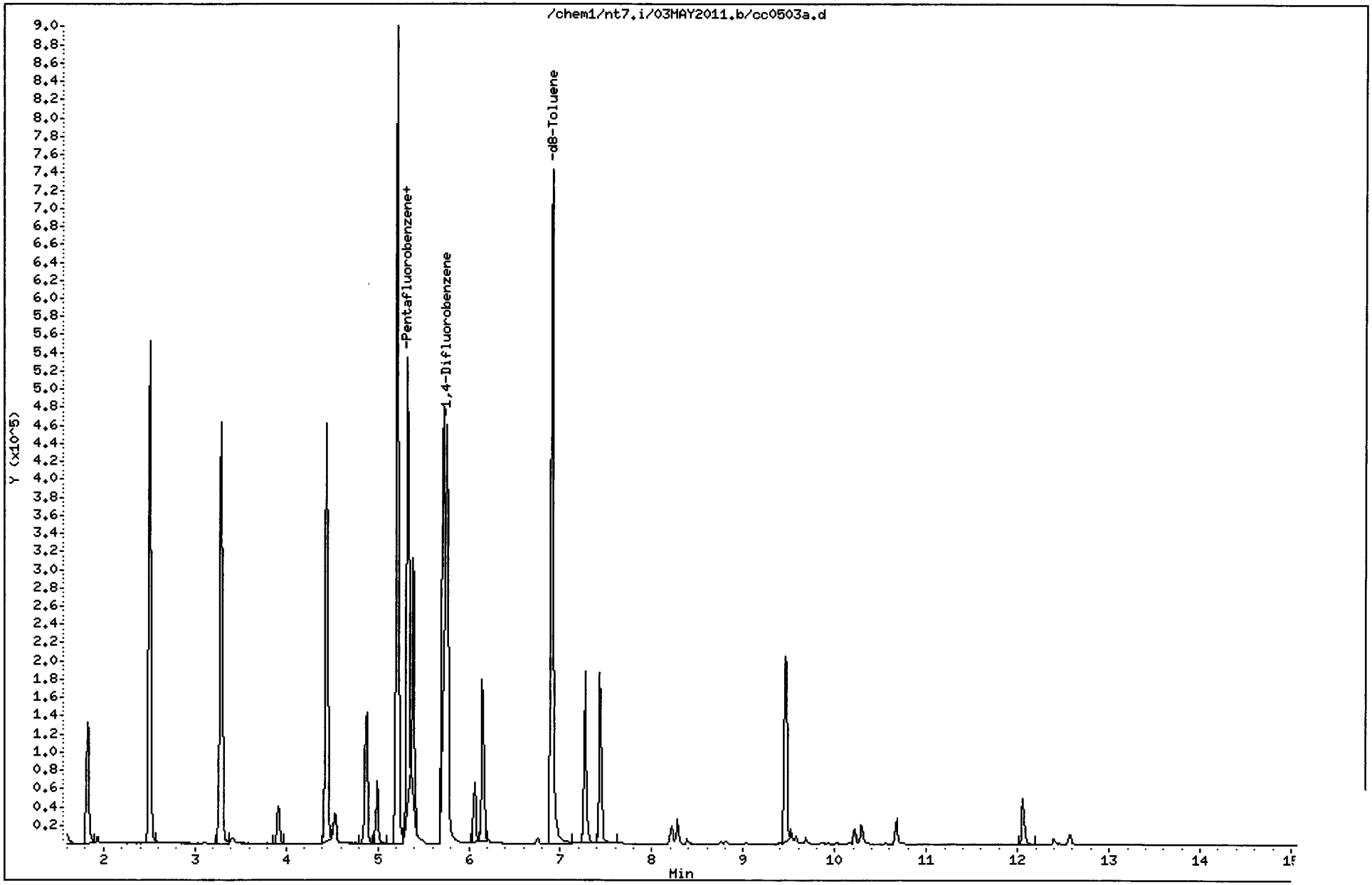
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/nt7.i/03MAY2011.b/cc0503a.d
Date : 03-MAY-2011 11:29
Client ID: CC0503
Sample Info: CC0503,10,10,0,

Column phase: RTXVMS

Instrument: nt7.i

Operator: PC
Column diameter: 0.18



CO-ELUTION SUMMARY FOR FILE - cc0503a.d

Lab ID: CC0503, Method: sim042611.m, Instrument: nt7.i, Date: 03-MAY-2011

RT	CO-ELUTION COMPOUNDS

PC 5/4/11

Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/03MAY2011.b/lcs0503a.d
Lab Smp Id: LCS0503 Client Smp ID: LCS0503
Inj Date : 03-MAY-2011 12:06
Operator : PC Inst ID: nt7.i
Smp Info : LCS0503,10,10,0,
Misc Info : 11-
Comment :
Method : /chem1/nt7.i/03MAY2011.b/sim042611.m
Meth Date : 03-May-2011 12:16 paul Quant Type: ISTD
Cal Date : 26-APR-2011 15:00 Cal File: 0426019.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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/L)	FINAL (ug/L)
	1 Vinyl Chloride	62	1.540	1.552	(0.289)	390148	954.950	954.95
	2 1,1-Dichloroethene	96	2.505	2.505	(0.470)	292701	900.434	900.43
	175 Trans-1,2-Dichloroethene	96	3.284	3.284	(0.617)	299692	907.461	907.46
	3 cis-1,2-dichloroethene	96	4.439	4.439	(0.834)	295609	838.427	838.43
	6 Benzene	78	5.210	5.212	(0.905)	1420246	896.962	896.96
*	4 Pentafluorobenzene	168	5.323	5.326	(1.000)	371235	1000.00	
$	5 d4-1,2-Dichloroethane	65	5.333	5.326	(1.002)	287830	860.376	860.38
	176 1,2-Dichloroethane	62	5.380	5.383	(1.011)	501520	948.495	948.49
	8 Trichloroethene	130	5.720	5.720	(0.994)	267396	986.085	986.08(Q)
*	7 1,4-Difluorobenzene	114	5.755	5.754	(1.000)	691618	1000.00	
$	9 d8-Toluene	98	6.913	6.913	(1.201)	869579	986.964	986.96
	10 Tetrachloroethene	166	7.270	7.270	(1.263)	177815	849.783	849.78
	11 1,1,2,2-Tetrachloroethane	83	9.457	9.457	(1.643)	254097	1014.35	1014.4

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt7.i
Lab File ID: lcs0503a.d
Lab Smp Id: LCS0503
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: /chem1/nt7.i/03MAY2011.b/sim042611.m
Misc Info: 11-

Calibration Date: 03-MAY-2011
Calibration Time: 11:29
Client Smp ID: LCS0503
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	363407	181704	726814	371235	2.15
7 1,4-Difluorobenze	667797	333898	1335594	691618	3.57

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.33	4.83	5.83	5.32	-0.05
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.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Client SDG: 03MAY2011
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: LCS0503 Client Smp ID: LCS0503
Level: LOW Operator: PC
Data Type: MS DATA SampleType: LCS
SpikeList File: special.spk Quant Type: ISTD
Sublist File: sim12dca.sub
Method File: /chem1/nt7.i/03MAY2011.b/sim042611.m
Misc Info: 11-

	SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
1	Vinyl Chloride	1000.0	954.95	95.50	76-120
176	1,2-Dichloroethane	1000.0	948.49	94.85	80-128
175	Trans-1,2-Dichloro	1000.0	907.46	90.75	80-120
2	1,1-Dichloroethene	1000.0	900.43	90.04	80-120
3	cis-1,2-dichloroet	1000.0	838.43	83.84	80-120
6	Benzene	1000.0	896.96	89.70	80-120
8	Trichloroethene	1000.0	986.08	98.61	80-120
10	Tetrachloroethene	1000.0	849.78	84.98	80-122
11	1,1,2,2-Tetrachlor	1000.0	1014.4	101.44	80-128

	SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 5	d4-1,2-Dichloroeth	1000.0	860.38	86.04	80-126
$ 9	d8-Toluene	1000.0	986.96	98.70	80-120

Data File: /chem1/nt7.i/03MAY2011.b/lcs0503a.d

Date : 03-MAY-2011 12:06

Client ID: LCS0503

Sample Info: LCS0503,10,10,0,

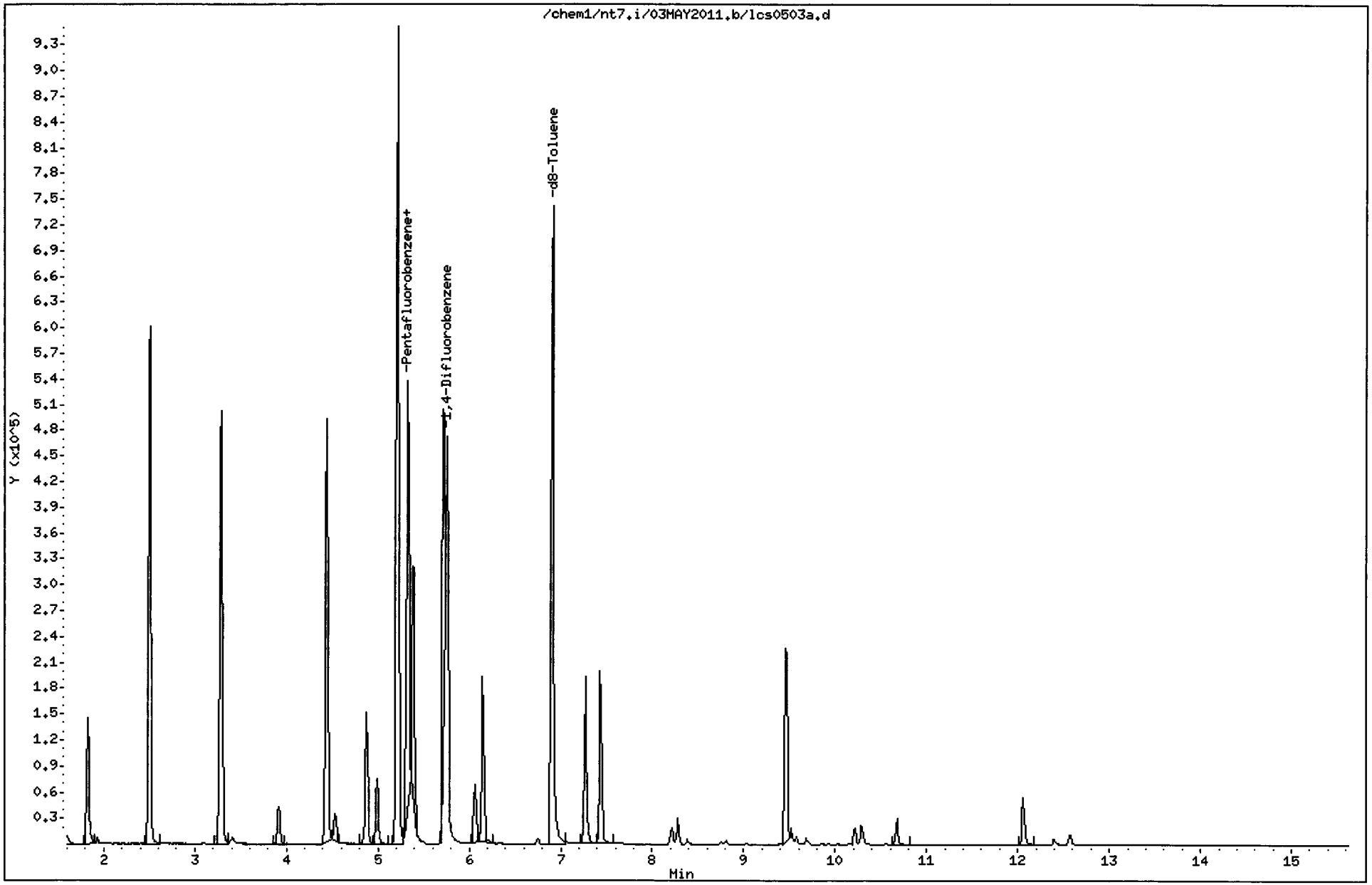
Column phase: RTXVMS

Instrument: nt7.i

Operator: PC

Column diameter: 0.18

ST98:00363



CO-ELUTION SUMMARY FOR FILE - lcs0503a.d

Lab ID: LCS0503, Method: sim042611.m, Instrument: nt7.i, Date: 03-MAY-2011

RT	CO-ELUTION COMPOUNDS

PL 5/4/11

Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/03MAY2011.b/lcs0503b.d
Lab Smp Id: LCS0503 Client Smp ID: LCS0503
Inj Date : 03-MAY-2011 12:32
Operator : PC Inst ID: nt7.i
Smp Info : LCS0503,10,10,0,
Misc Info : 11-
Comment :
Method : /chem1/nt7.i/03MAY2011.b/sim042611.m
Meth Date : 03-May-2011 12:16 paul Quant Type: ISTD
Cal Date : 26-APR-2011 15:00 Cal File: 0426019.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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/L)	FINAL (ug/L)
	1 Vinyl Chloride	62	1.553	1.552	(0.292)	348750	859.855	859.86
	2 1,1-Dichloroethene	96	2.505	2.505	(0.470)	265077	821.408	821.41
	175 Trans-1,2-Dichloroethene	96	3.290	3.284	(0.618)	272938	832.485	832.49
	3 cis-1,2-dichloroethene	96	4.439	4.439	(0.834)	277872	793.874	793.87(R)
	6 Benzene	78	5.210	5.212	(0.905)	1279163	811.779	811.78
*	4 Pentafluorobenzene	168	5.324	5.326	(1.000)	368545	1000.00	
$	5 d4-1,2-Dichloroethane	65	5.333	5.326	(1.002)	287668	866.170	866.17
	176 1,2-Dichloroethane	62	5.390	5.383	(1.012)	457454	871.470	871.47
	8 Trichloroethene	130	5.721	5.720	(0.994)	241864	896.256	896.26(Q)
*	7 1,4-Difluorobenzene	114	5.756	5.754	(1.000)	688280	1000.00	
$	9 d8-Toluene	98	6.914	6.913	(1.201)	874134	996.946	996.95
	10 Tetrachloroethene	166	7.270	7.270	(1.263)	180541	866.995	867.00
	11 1,1,2,2-Tetrachloroethane	83	9.457	9.457	(1.643)	233944	938.432	938.43

QC Flag Legend

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

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt7.i
Lab File ID: lcs0503b.d
Lab Smp Id: LCS0503
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: /chem1/nt7.i/03MAY2011.b/sim042611.m
Misc Info: 11-

Calibration Date: 03-MAY-2011
Calibration Time: 11:29
Client Smp ID: LCS0503
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	363407	181704	726814	368545	1.41
7 1,4-Difluorobenze	667797	333898	1335594	688280	3.07

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.33	4.83	5.83	5.32	-0.03
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.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: LCS0503
Level: LOW
Data Type: MS DATA
SpikeList File: special.spk
Sublist File: sim12dca.sub
Method File: /chem1/nt7.i/03MAY2011.b/sim042611.m
Misc Info: 11-

Client SDG: 03MAY2011
Fraction: VOA
Client Smp ID: LCS0503
Operator: PC
SampleType: LCS
Quant Type: ISTD

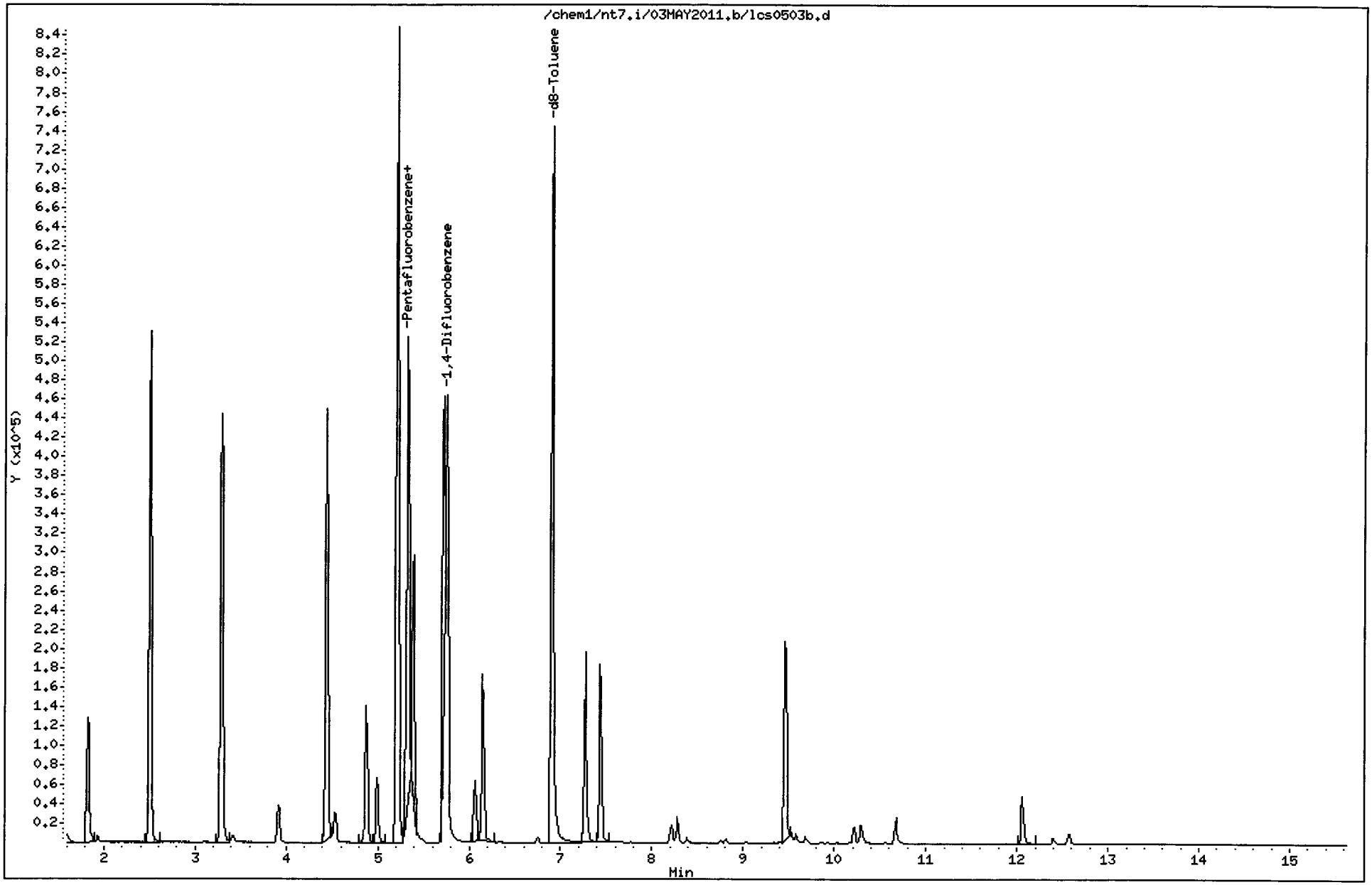
SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
1 Vinyl Chloride	1000.0	859.86	85.99	76-120
176 1,2-Dichloroethane	1000.0	871.47	87.15	80-128
175 Trans-1,2-Dichloro	1000.0	832.49	83.25	80-120
2 1,1-Dichloroethene	1000.0	821.41	82.14	80-120
3 cis-1,2-dichloroet	1000.0	793.87	79.39*	80-120
6 Benzene	1000.0	811.78	81.18	80-120
8 Trichloroethene	1000.0	896.26	89.63	80-120
10 Tetrachloroethene	1000.0	867.00	86.70	80-122
11 1,1,2,2-Tetrachlor	1000.0	938.43	93.84	80-128

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 5 d4-1,2-Dichloroeth	1000.0	866.17	86.62	80-126
$ 9 d8-Toluene	1000.0	996.95	99.69	80-120

Data File: /chem1/nt7.i/03MAY2011.b/lcs0503b.d
Date : 03-MAY-2011 12:32
Client ID: LCS0503
Sample Info: LCS0503,10,10,0,

Instrument: nt7.i

Operator: PC
Column phase: RTXVMS
Column diameter: 0.18



CO-ELUTION SUMMARY FOR FILE - lcs0503b.d

Lab ID: LCS0503, Method: sim042611.m, Instrument: nt7.i, Date: 03-MAY-2011

RT	CO-ELUTION COMPOUNDS

PC 5/4/11

Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/03MAY2011.b/mb0503a.d
Lab Smp Id: MB0503 Client Smp ID: MB0503
Inj Date : 03-MAY-2011 13:23
Operator : PC Inst ID: nt7.i
Smp Info : MB0503,10,10,0,
Misc Info : 11-
Comment :
Method : /chem1/nt7.i/03MAY2011.b/sim042611.m
Meth Date : 03-May-2011 12:16 paul Quant Type: ISTD
Cal Date : 26-APR-2011 15:00 Cal File: 0426019.d
Als bottle: 1 QC Sample: BLANK
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	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/L)	FINAL (ug/L)
	1 Vinyl Chloride	62	Compound Not Detected.					
	2 1,1-Dichloroethene	96	Compound Not Detected.					
	175 Trans-1,2-Dichloroethene	96	Compound Not Detected.					
	3 cis-1,2-dichloroethene	96	Compound Not Detected.					
	6 Benzene	78	Compound Not Detected.					
*	4 Pentafluorobenzene	168	5.325	5.326	(1.000)	374268	1000.00	
$	5 d4-1,2-Dichloroethane	65	5.335	5.326	(1.002)	306108	907.597	907.60
	176 1,2-Dichloroethane	62	Compound Not Detected.					
	8 Trichloroethene	130	Compound Not Detected.					
*	7 1,4-Difluorobenzene	114	5.754	5.754	(1.000)	671582	1000.00	
$	9 d8-Toluene	98	6.914	6.913	(1.202)	814023	951.472	951.47
	10 Tetrachloroethene	166	Compound Not Detected.					
	11 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt7.i
Lab File ID: mb0503a.d
Lab Smp Id: MB0503
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: /chem1/nt7.i/03MAY2011.b/sim042611.m
Misc Info: 11-

Calibration Date: 03-MAY-2011
Calibration Time: 11:29
Client Smp ID: MB0503
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	363407	181704	726814	374268	2.99
7 1,4-Difluorobenze	667797	333898	1335594	671582	0.57

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.33	4.83	5.83	5.33	-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.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Client SDG: 03MAY2011
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: MB0503 Client Smp ID: MB0503
Level: LOW Operator: PC
Data Type: MS DATA SampleType: BLANK
SpikeList File: special.spk Quant Type: ISTD
Sublist File: sim12dca.sub
Method File: /chem1/nt7.i/03MAY2011.b/sim042611.m
Misc Info: 11-

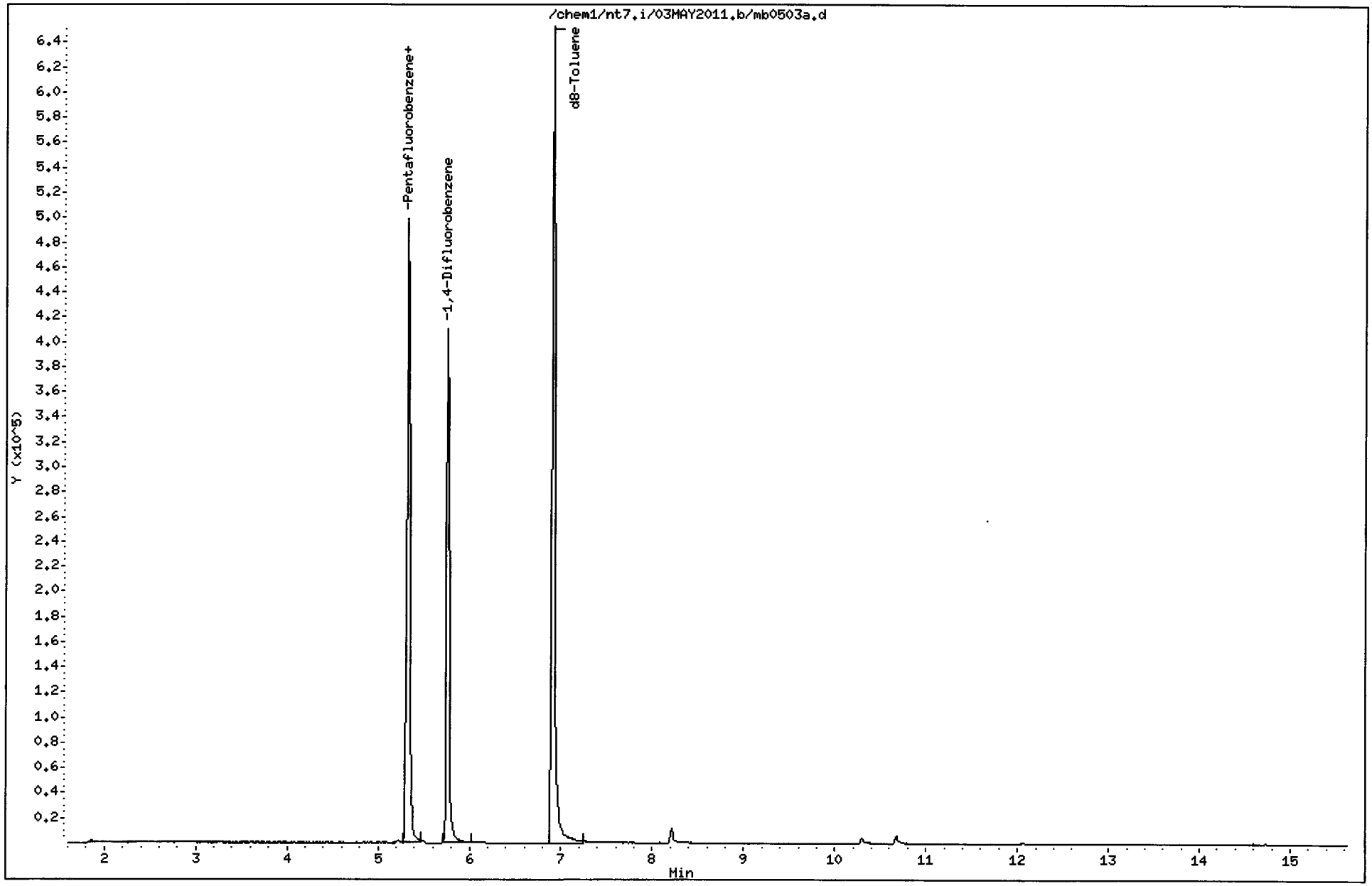
SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 5 d4-1,2-Dichloroeth	1000.0	907.60	90.76	80-126
$ 9 d8-Toluene	1000.0	951.47	95.15	80-120

Data File: /chem1/nt7.i/03MAY2011.b/mb0503a.d
Date : 03-MAY-2011 13:23
Client ID: MB0503
Sample Info: MB0503,10,10,0,

Instrument: nt7.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS



CO-ELUTION SUMMARY FOR FILE - mb0503a.d

Lab ID: MB0503, Method: sim042611.m, Instrument: nt7.i, Date: 03-MAY-2011

RT	CO-ELUTION COMPOUNDS

PC 5/4/11

Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/03MAY2011.b/st98e.d
Lab Smp Id: ST98E Client Smp ID: TB-042611
Inj Date : 03-MAY-2011 13:48
Operator : PC Inst ID: nt7.i
Smp Info : ST98E,10,10,0,
Misc Info : 11-9413
Comment :
Method : /chem1/nt7.i/03MAY2011.b/sim042611.m
Meth Date : 03-May-2011 12:16 paul Quant Type: ISTD
Cal Date : 26-APR-2011 15:00 Cal File: 0426019.d
Als bottle: 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

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/L)	FINAL (ug/L)
	1	Vinyl Chloride	62	Compound Not Detected.					
	2	1,1-Dichloroethene	96	Compound Not Detected.					
	175	Trans-1,2-Dichloroethene	96	Compound Not Detected.					
	3	cis-1,2-dichloroethene	96	Compound Not Detected.					
	6	Benzene	78	Compound Not Detected.					
*	4	Pentafluorobenzene	168	5.326	5.326	(1.000)	360193	1000.00	
$	5	d4-1,2-Dichloroethane	65	5.336	5.326	(1.002)	311641	960.110	960.11
	176	1,2-Dichloroethane	62	Compound Not Detected.					
	8	Trichloroethene	130	Compound Not Detected.					
*	7	1,4-Difluorobenzene	114	5.755	5.754	(1.000)	635546	1000.00	
$	9	d8-Toluene	98	6.915	6.913	(1.202)	795907	983.047	983.05
	10	Tetrachloroethene	166	Compound Not Detected.					
	11	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt7.i
Lab File ID: st98e.d
Lab Smp Id: ST98E
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: /chem1/nt7.i/03MAY2011.b/sim042611.m
Misc Info: 11-9413

Calibration Date: 03-MAY-2011
Calibration Time: 11:29
Client Smp ID: TB-042611
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	363407	181704	726814	360193	-0.88
7 1,4-Difluorobenze	667797	333898	1335594	635546	-4.83

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.01
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.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd Snider
Sample Matrix: LIQUID
Lab Smp Id: ST98E
Level: LOW
Data Type: MS DATA
SpikeList File: special.spk
Sublist File: sim12dca.sub
Method File: /chem1/nt7.i/03MAY2011.b/sim042611.m
Misc Info: 11-9413

Client SDG: ST98
Fraction: VOA
Client Smp ID: TB-042611
Operator: PC
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 5 d4-1,2-Dichloroeth	1000.0	960.11	96.01	80-126
$ 9 d8-Toluene	1000.0	983.05	98.30	80-120

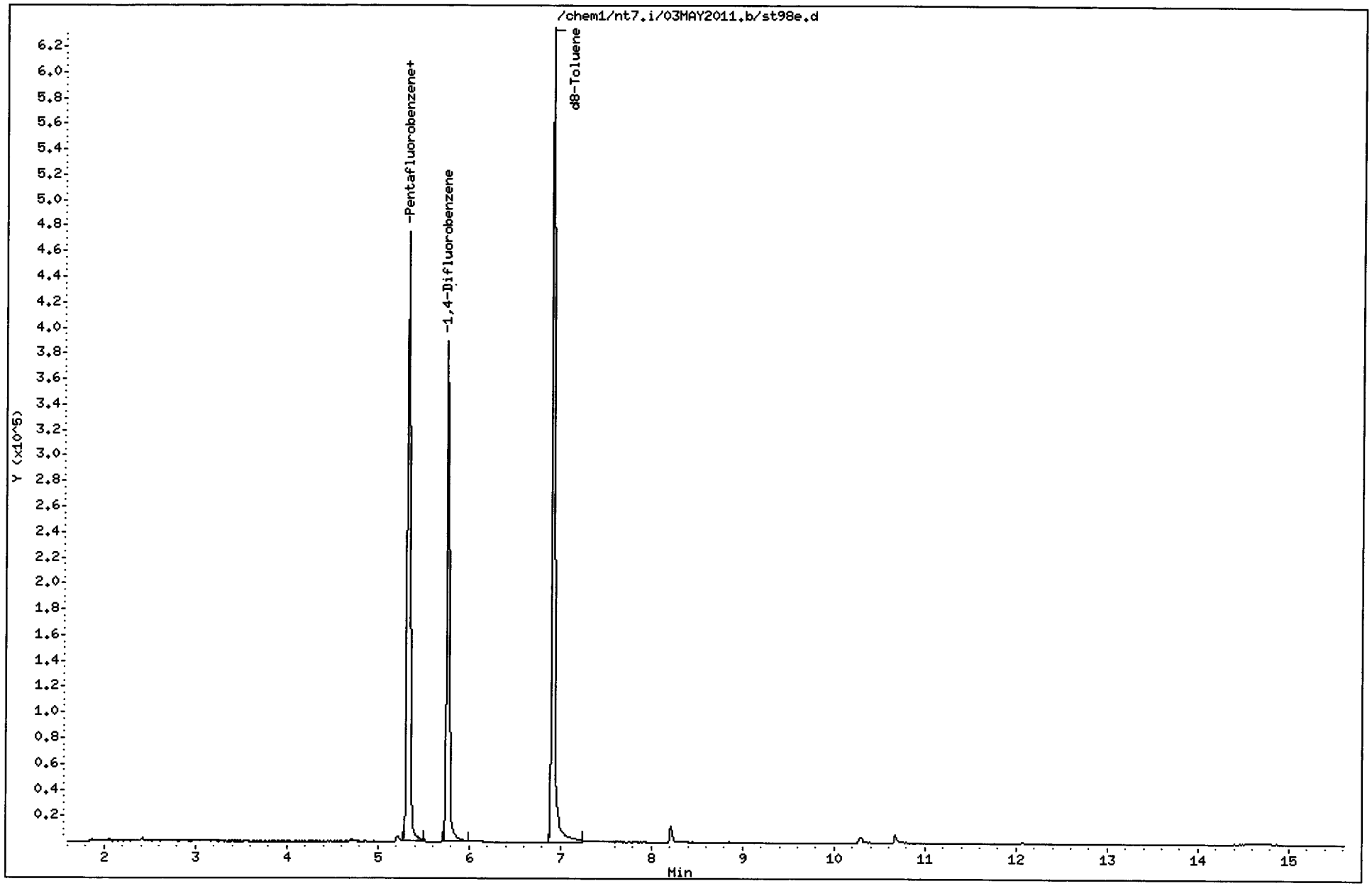
Data File: /chem1/nt7.i/03MAY2011.b/st98e.d
Date : 03-MAY-2011 13:48
Client ID: TB-042611
Sample Info: ST98E,10,10,0,

Instrument: nt7.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS

ST98:00379



CO-ELUTION SUMMARY FOR FILE - st98e.d

Lab ID: ST98E, Method: sim042611.m, Instrument: nt7.i, Date: 03-MAY-2011

RT	CO-ELUTION COMPOUNDS

PC 5/4/11

Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/03MAY2011.b/su21g.d
Lab Smp Id: SU21G Client Smp ID: TB-042711
Inj Date : 03-MAY-2011 14:14
Operator : PC Inst ID: nt7.i
Smp Info : SU21G,10,10,0,
Misc Info : 11-9513
Comment :
Method : /chem1/nt7.i/03MAY2011.b/sim042611.m
Meth Date : 03-May-2011 12:16 paul Quant Type: ISTD
Cal Date : 26-APR-2011 15:00 Cal File: 0426019.d
Als bottle: 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					CONCENTRATIONS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/L)	FINAL (ug/L)
	1	Vinyl Chloride	62	Compound Not Detected.					
	2	1,1-Dichloroethene	96	Compound Not Detected.					
	175	Trans-1,2-Dichloroethene	96	Compound Not Detected.					
	3	cis-1,2-dichloroethene	96	Compound Not Detected.					
	6	Benzene	78	Compound Not Detected.					
*	4	Pentafluorobenzene	168	5.325	5.326	(1.000)	342984	1000.00	
$	5	d4-1,2-Dichloroethane	65	5.334	5.326	(1.002)	314962	1019.02	1019.0
	176	1,2-Dichloroethane	62	Compound Not Detected.					
	8	Trichloroethene	130	Compound Not Detected.					
*	7	1,4-Difluorobenzene	114	5.756	5.754	(1.000)	622310	1000.00	
$	9	d8-Toluene	98	6.914	6.913	(1.201)	775263	977.915	977.91
	10	Tetrachloroethene	166	Compound Not Detected.					
	11	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt7.i
Lab File ID: su21g.d
Lab Smp Id: SU21G
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: /chem1/nt7.i/03MAY2011.b/sim042611.m
Misc Info: 11-9513

Calibration Date: 03-MAY-2011
Calibration Time: 11:29
Client Smp ID: TB-042711
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	363407	181704	726814	342984	-5.62
7 1,4-Difluorobenze	667797	333898	1335594	622310	-6.81

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.33	4.83	5.83	5.32	-0.02
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: Floyd Snider
Client SDG: SU21
Sample Matrix: LIQUID
Fraction: VOA
Lab Smp Id: SU21G
Client Smp ID: TB-042711
Level: LOW
Operator: PC
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: special.spk
Quant Type: ISTD
Sublist File: sim12dca.sub
Method File: /chem1/nt7.i/03MAY2011.b/sim042611.m
Misc Info: 11-9513

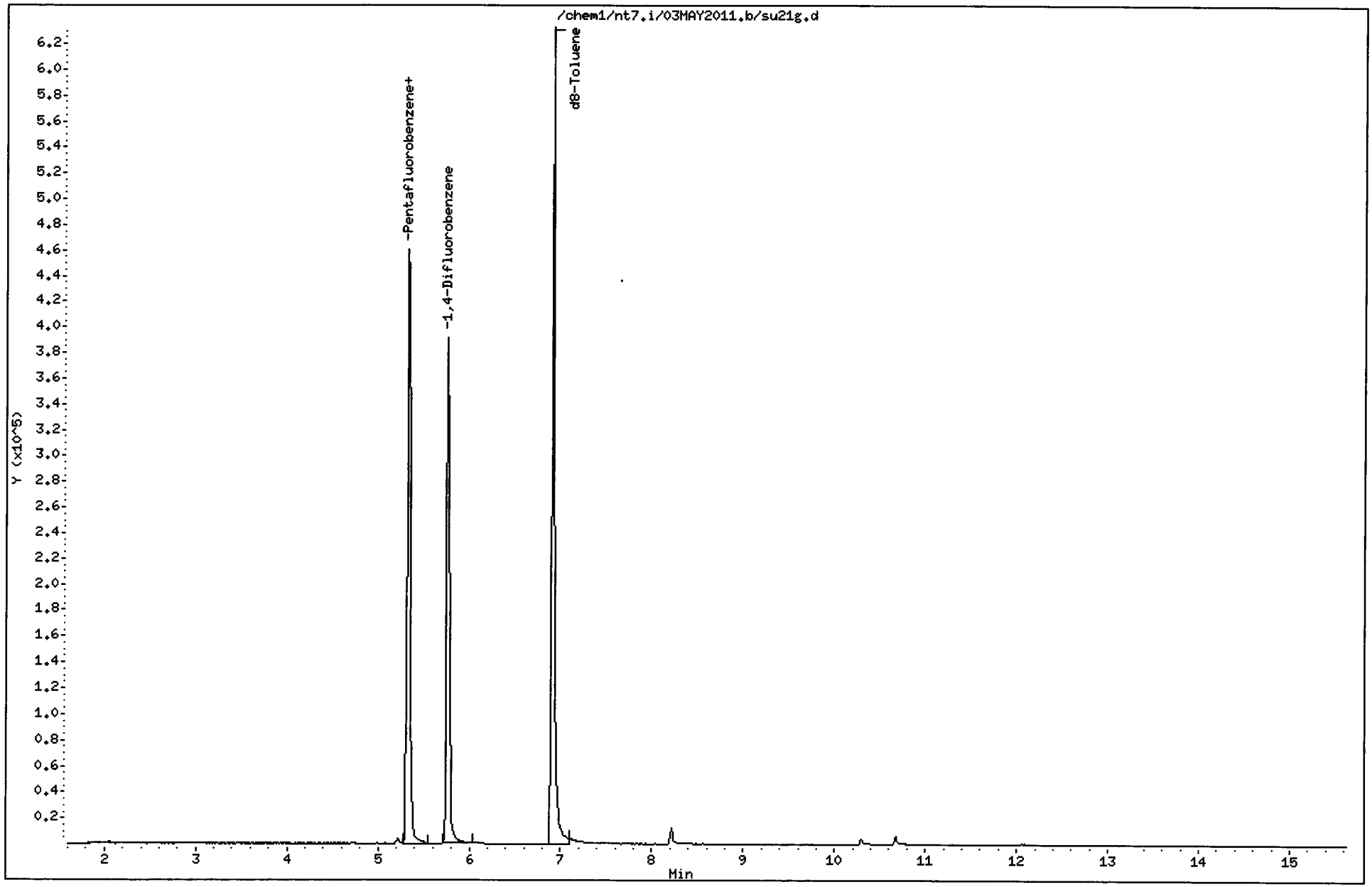
SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 5 d4-1,2-Dichloroeth	1000.0	1019.0	101.90	80-126
$ 9 d8-Toluene	1000.0	977.91	97.79	80-120

Data File: /chem1/nt7.i/03MAY2011.b/su21g.d
Date : 03-MAY-2011 14:14
Client ID: TB-042711
Sample Info: SU21G,10,10,0,

Instrument: nt7.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS



CO-ELUTION SUMMARY FOR FILE - su21g.d

Lab ID: SU21G, Method: sim042611.m, Instrument: nt7.i, Date: 03-MAY-2011

RT	CO-ELUTION COMPOUNDS

PC 5/4/11

Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/03MAY2011.b/st98a.d
Lab Smp Id: ST98A Client Smp ID: MW02-042611
Inj Date : 03-MAY-2011 15:05
Operator : PC Inst ID: nt7.i
Smp Info : ST98A,10,10,0,
Misc Info : 11-9409
Comment :
Method : /chem1/nt7.i/03MAY2011.b/sim042611.m
Meth Date : 03-May-2011 12:16 paul Quant Type: ISTD
Cal Date : 26-APR-2011 15:00 Cal File: 0426019.d
Als bottle: 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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/L)	FINAL (ug/L)
	1 Vinyl Chloride	62	Compound Not Detected.					
	2 1,1-Dichloroethene	96	Compound Not Detected.					
	175 Trans-1,2-Dichloroethene	96	Compound Not Detected.					
	3 cis-1,2-dichloroethene	96	Compound Not Detected.					
	6 Benzene	78	Compound Not Detected.					
*	4 Pentafluorobenzene	168	5.326	5.326	(1.000)	337272	1000.00	
$	5 d4-1,2-Dichloroethane	65	5.336	5.326	(1.002)	296457	975.397	975.40
	176 1,2-Dichloroethane	62	Compound Not Detected.					
	8 Trichloroethene	130	Compound Not Detected.					
*	7 1,4-Difluorobenzene	114	5.755	5.754	(1.000)	605168	1000.00	
$	9 d8-Toluene	98	6.913	6.913	(1.201)	759174	984.746	984.75
	10 Tetrachloroethene	166	Compound Not Detected.					
	11 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt7.i
Lab File ID: st98a.d
Lab Smp Id: ST98A
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: /chem1/nt7.i/03MAY2011.b/sim042611.m
Misc Info: 11-9409

Calibration Date: 03-MAY-2011
Calibration Time: 11:29
Client Smp ID: MW02-042611
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	363407	181704	726814	337272	-7.19
7 1,4-Difluorobenze	667797	333898	1335594	605168	-9.38

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.33	4.83	5.83	5.33	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.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd Snider
Sample Matrix: LIQUID
Lab Smp Id: ST98A
Level: LOW
Data Type: MS DATA
SpikeList File: special.spk
Sublist File: sim12dca.sub
Method File: /chem1/nt7.i/03MAY2011.b/sim042611.m
Misc Info: 11-9409

Client SDG: ST98
Fraction: VOA
Client Smp ID: MW02-042611
Operator: PC
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 5 d4-1,2-Dichloroeth	1000.0	975.40	97.54	80-126
$ 9 d8-Toluene	1000.0	984.75	98.47	80-120

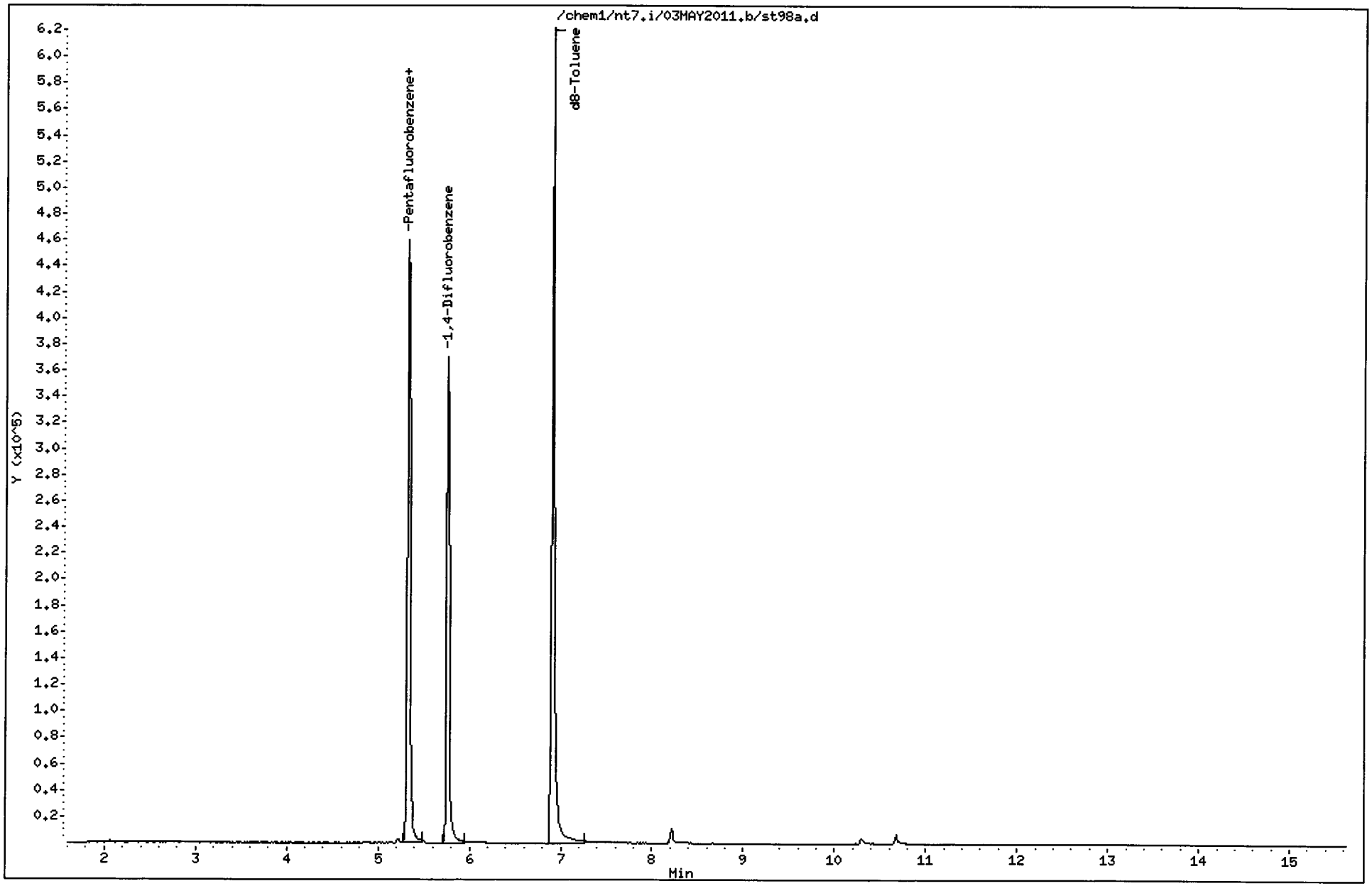
Data File: /chem1/nt7.i/03MAY2011.b/st98a.d
Date : 03-MAY-2011 15:05
Client ID: MW02-042611
Sample Info: ST98A,10,10,0,

Instrument: nt7.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS

ST98:00389



CO-ELUTION SUMMARY FOR FILE - st98a.d

Lab ID: ST98A, Method: sim042611.m, Instrument: nt7.i, Date: 03-MAY-2011

RT	CO-ELUTION COMPOUNDS

PC 5/4/11

Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/03MAY2011.b/st98b.d
Lab Smp Id: ST98B Client Smp ID: MW03-042611
Inj Date : 03-MAY-2011 15:31
Operator : PC Inst ID: nt7.i
Smp Info : ST98B,10,10,0,
Misc Info : 11-9410
Comment :
Method : /chem1/nt7.i/03MAY2011.b/sim042611.m
Meth Date : 03-May-2011 12:16 paul Quant Type: ISTD
Cal Date : 26-APR-2011 15:00 Cal File: 0426019.d
Als bottle: 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

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/L)	FINAL (ug/L)
	1	Vinyl Chloride	62	Compound Not Detected.					
	2	1,1-Dichloroethene	96	Compound Not Detected.					
	175	Trans-1,2-Dichloroethene	96	Compound Not Detected.					
	3	cis-1,2-dichloroethene	96	Compound Not Detected.					
	6	Benzene	78	Compound Not Detected.					
*	4	Pentafluorobenzene	168	5.324	5.326	(1.000)	345206	1000.00	
$	5	d4-1,2-Dichloroethane	65	5.334	5.326	(1.002)	311974	1002.86	1002.9
	176	1,2-Dichloroethane	62	Compound Not Detected.					
	8	Trichloroethene	130	Compound Not Detected.					
*	7	1,4-Difluorobenzene	114	5.756	5.754	(1.000)	603420	1000.00	
$	9	d8-Toluene	98	6.913	6.913	(1.201)	756663	984.333	984.33
	10	Tetrachloroethene	166	Compound Not Detected.					
	11	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt7.i
Lab File ID: st98b.d
Lab Smp Id: ST98B
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: /chem1/nt7.i/03MAY2011.b/sim042611.m
Misc Info: 11-9410

Calibration Date: 03-MAY-2011
Calibration Time: 11:29
Client Smp ID: MW03-042611
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	363407	181704	726814	345206	-5.01
7 1,4-Difluorobenze	667797	333898	1335594	603420	-9.64

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.33	4.83	5.83	5.32	-0.03
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.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd Snider
Sample Matrix: LIQUID
Lab Smp Id: ST98B
Level: LOW
Data Type: MS DATA
SpikeList File: special.spk
Sublist File: sim12dca.sub
Method File: /chem1/nt7.i/03MAY2011.b/sim042611.m
Misc Info: 11-9410

Client SDG: ST98
Fraction: VOA
Client Smp ID: MW03-042611
Operator: PC
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 5 d4-1,2-Dichloroeth	1000.0	1002.9	100.29	80-126
$ 9 d8-Toluene	1000.0	984.33	98.43	80-120

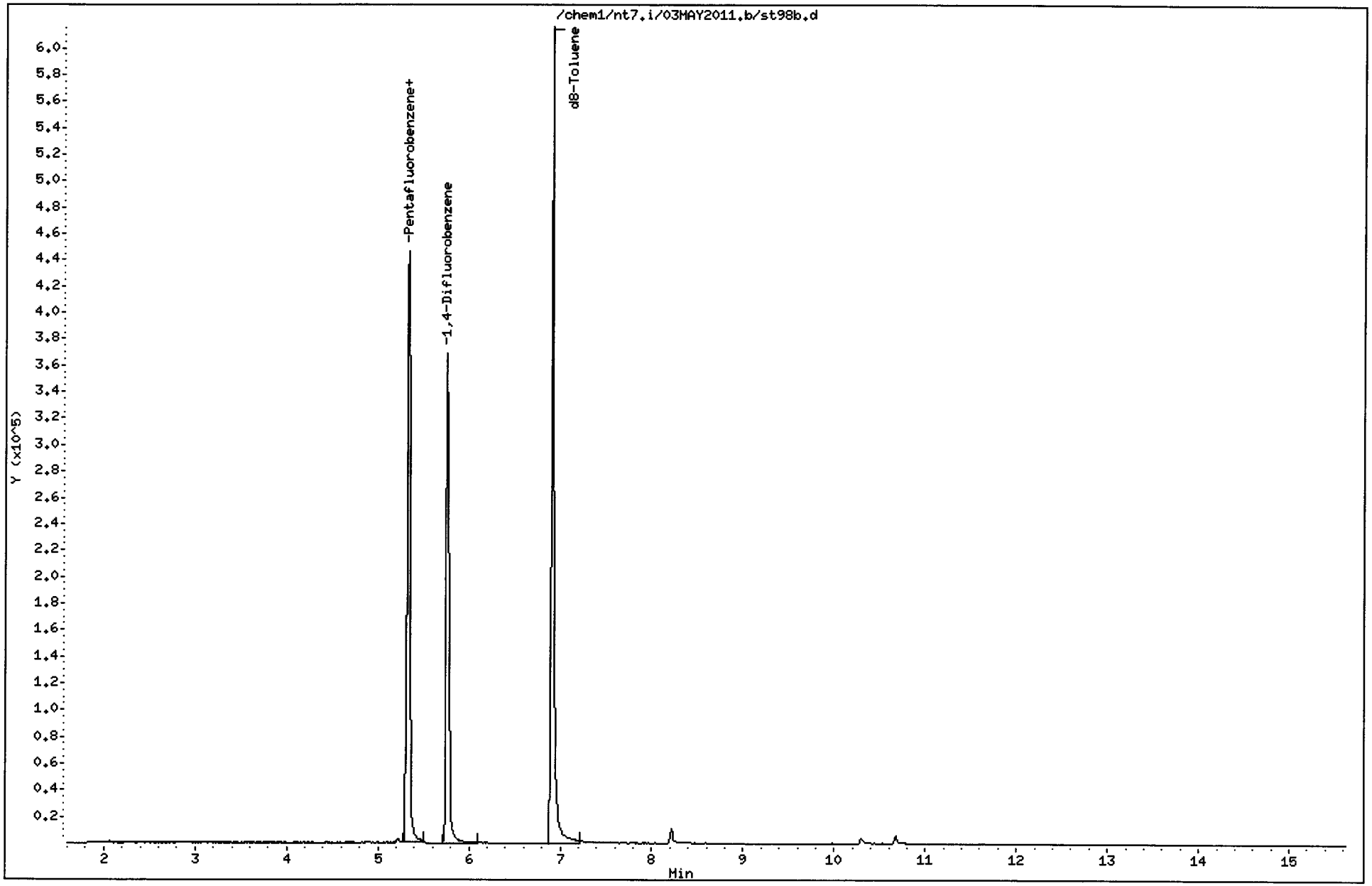
Data File: /chem1/nt7.i/03MAY2011.b/st98b.d
Date : 03-MAY-2011 15:31
Client ID: MW03-042611
Sample Info: ST98B,10,10,0,

Instrument: nt7.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS

ST98:00394



CO-ELUTION SUMMARY FOR FILE - st98b.d

Lab ID: ST98B, Method: sim042611.m, Instrument: nt7.i, Date: 03-MAY-2011

RT	CO-ELUTION COMPOUNDS

PC 5/4/11

Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/03MAY2011.b/st98c.d
Lab Smp Id: ST98C Client Smp ID: MW13-042611
Inj Date : 03-MAY-2011 15:57
Operator : PC Inst ID: nt7.i
Smp Info : ST98C,10,10,0,
Misc Info : 11-9411
Comment :
Method : /chem1/nt7.i/03MAY2011.b/sim042611.m
Meth Date : 03-May-2011 12:16 paul Quant Type: ISTD
Cal Date : 26-APR-2011 15:00 Cal File: 0426019.d
Als bottle: 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					CONCENTRATIONS ON-COLUMN	FINAL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ng/L)	(ug/L)
1	Vinyl Chloride	62	Compound Not Detected.					
2	1,1-Dichloroethene	96	Compound Not Detected.					
175	Trans-1,2-Dichloroethene	96	Compound Not Detected.					
3	cis-1,2-dichloroethene	96	Compound Not Detected.					
6	Benzene	78	Compound Not Detected.					
* 4	Pentafluorobenzene	168	5.326	5.326	(1.000)	332326	1000.00	
$ 5	d4-1,2-Dichloroethane	65	5.335	5.326	(1.002)	295462	986.594	986.59
176	1,2-Dichloroethane	62	Compound Not Detected.					
8	Trichloroethene	130	Compound Not Detected.					
* 7	1,4-Difluorobenzene	114	5.766	5.754	(1.000)	598780	1000.00	
$ 9	d8-Toluene	98	6.914	6.913	(1.199)	746325	978.407	978.41
10	Tetrachloroethene	166	7.283	7.270	(1.263)	4508	24.8859	24.886
11	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt7.i
Lab File ID: st98c.d
Lab Smp Id: ST98C
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: /chem1/nt7.i/03MAY2011.b/sim042611.m
Misc Info: 11-9411

Calibration Date: 03-MAY-2011
Calibration Time: 11:29
Client Smp ID: MW13-042611
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	363407	181704	726814	332326	-8.55
7 1,4-Difluorobenze	667797	333898	1335594	598780	-10.34

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.00
7 1,4-Difluorobenze	5.75	5.25	6.25	5.77	0.20

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

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd Snider
Client SDG: ST98
Sample Matrix: LIQUID
Fraction: VOA
Lab Smp Id: ST98C
Client Smp ID: MW13-042611
Level: LOW
Operator: PC
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: special.spk
Quant Type: ISTD
Sublist File: sim12dca.sub
Method File: /chem1/nt7.i/03MAY2011.b/sim042611.m
Misc Info: 11-9411

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 5 d4-1,2-Dichloroeth	1000.0	986.59	98.66	80-126
$ 9 d8-Toluene	1000.0	978.41	97.84	80-120

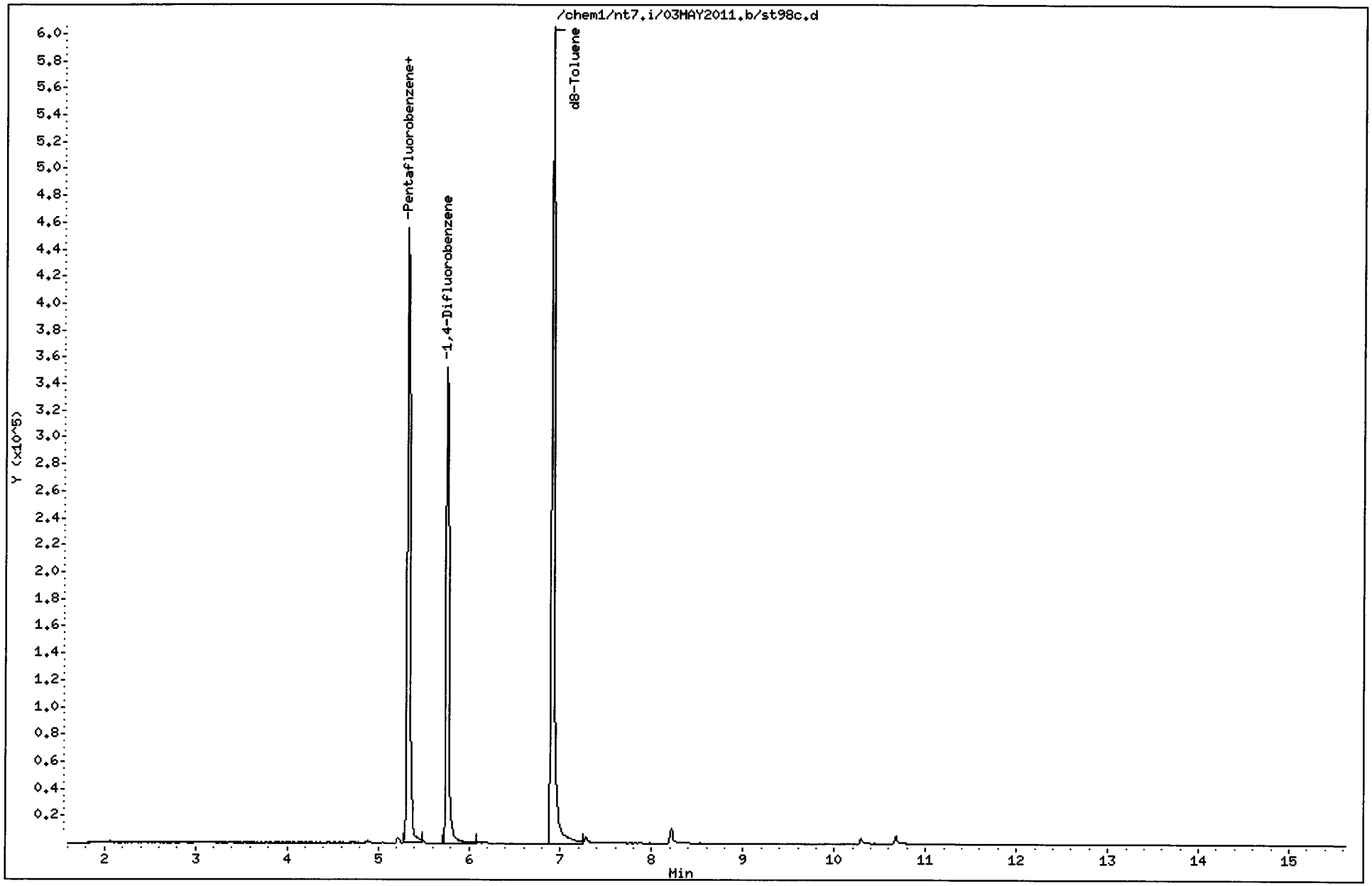
Data File: /chem1/nt7.i/03MAY2011.b/st98c.d
Date : 03-MAY-2011 15:57
Client ID: MW13-042611
Sample Info: ST98C,10,10,0,

Instrument: nt7.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS

ST98:00399



Data File: /chem1/nt7.i/03MAY2011.b/st98c.d

Date : 03-MAY-2011 15:57

Client ID: MW13-042611

Instrument: nt7.i

Sample Info: ST98C,10,10,0,

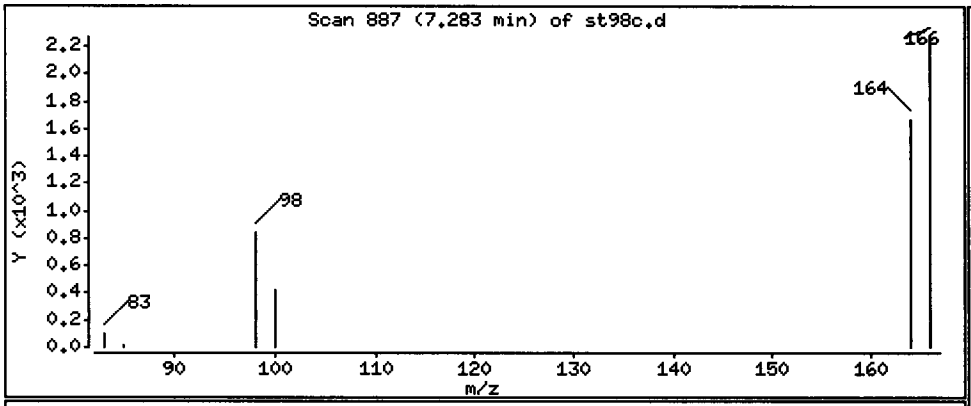
Operator: PC

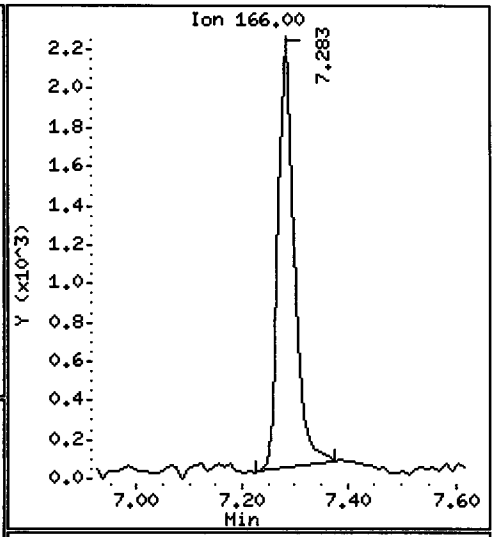
Column phase: RTXVMS

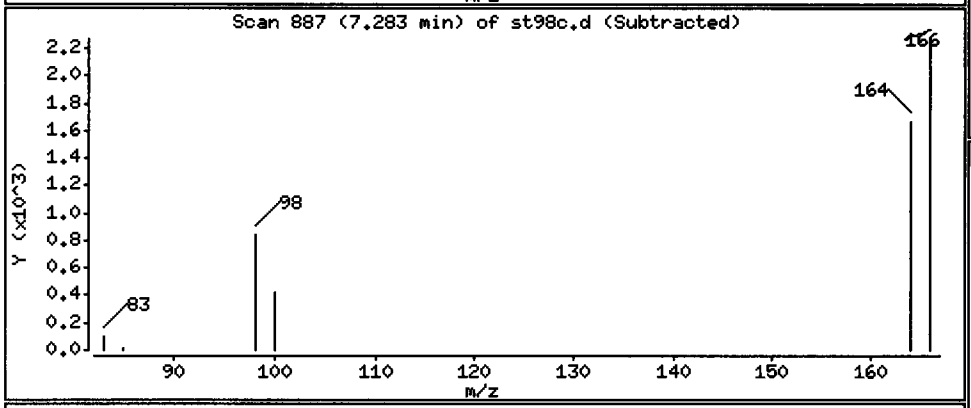
Column diameter: 0.18

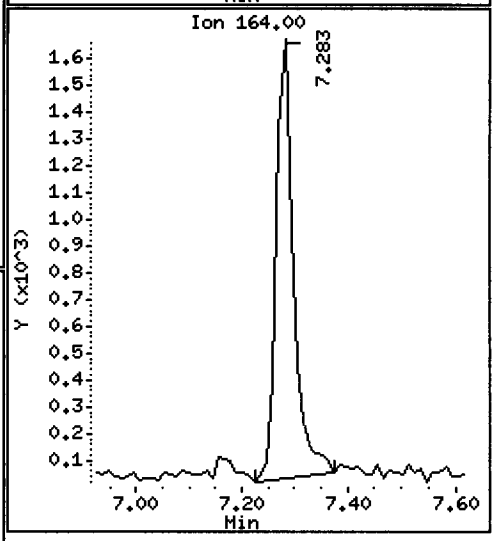
10 Tetrachloroethene

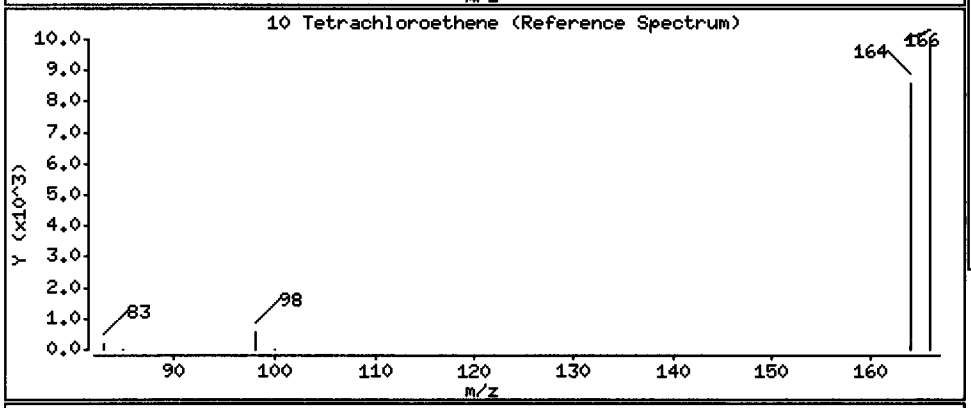
Concentration: 24.886 ug/L

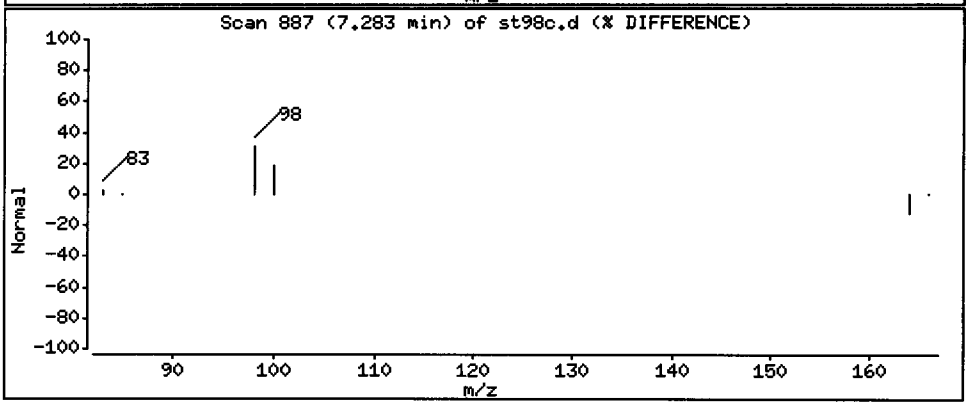












CO-ELUTION SUMMARY FOR FILE - st98c.d

Lab ID: ST98C, Method: sim042611.m, Instrument: nt7.i, Date: 03-MAY-2011

RT	CO-ELUTION COMPOUNDS

PC 5/4/11

Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/03MAY2011.b/st98d.d
Lab Smp Id: ST98D Client Smp ID: MW06-042611
Inj Date : 03-MAY-2011 16:22
Operator : PC Inst ID: nt7.i
Smp Info : ST98D,10,10,0,
Misc Info : 11-9412
Comment :
Method : /chem1/nt7.i/03MAY2011.b/sim042611.m
Meth Date : 03-May-2011 12:16 paul Quant Type: ISTD
Cal Date : 26-APR-2011 15:00 Cal File: 0426019.d
Als bottle: 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

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/L)	CONCENTRATIONS FINAL (ug/L)
	1	Vinyl Chloride	62	Compound Not Detected.					
	2	1,1-Dichloroethene	96	Compound Not Detected.					
	175	Trans-1,2-Dichloroethene	96	Compound Not Detected.					
	3	cis-1,2-dichloroethene	96	Compound Not Detected.					
	6	Benzene	78	5.221	5.212	(0.907)	36890	27.0149	27.015
*	4	Pentafluorobenzene	168	5.326	5.326	(1.000)	329307	1000.00	
$	5	d4-1,2-Dichloroethane	65	5.335	5.326	(1.002)	314545	1059.94	1059.9
	176	1,2-Dichloroethane	62	Compound Not Detected.					
	8	Trichloroethene	130	Compound Not Detected.					
*	7	1,4-Difluorobenzene	114	5.755	5.754	(1.000)	596467	1000.00	
$	9	d8-Toluene	98	6.913	6.913	(1.201)	767227	1009.71	1009.7
	10	Tetrachloroethene	166	Compound Not Detected.					
	11	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt7.i
Lab File ID: st98d.d
Lab Smp Id: ST98D
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: /chem1/nt7.i/03MAY2011.b/sim042611.m
Misc Info: 11-9412

Calibration Date: 03-MAY-2011
Calibration Time: 11:29
Client Smp ID: MW06-042611
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	363407	181704	726814	329307	-9.38
7 1,4-Difluorobenze	667797	333898	1335594	596467	-10.68

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.00
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.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd Snider
Client SDG: ST98
Sample Matrix: LIQUID
Fraction: VOA
Lab Smp Id: ST98D
Client Smp ID: MW06-042611
Level: LOW
Operator: PC
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: special.spk
Quant Type: ISTD
Sublist File: sim12dca.sub
Method File: /chem1/nt7.i/03MAY2011.b/sim042611.m
Misc Info: 11-9412

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 5 d4-1,2-Dichloroeth	1000.0	1059.9	105.99	80-126
$ 9 d8-Toluene	1000.0	1009.7	100.97	80-120

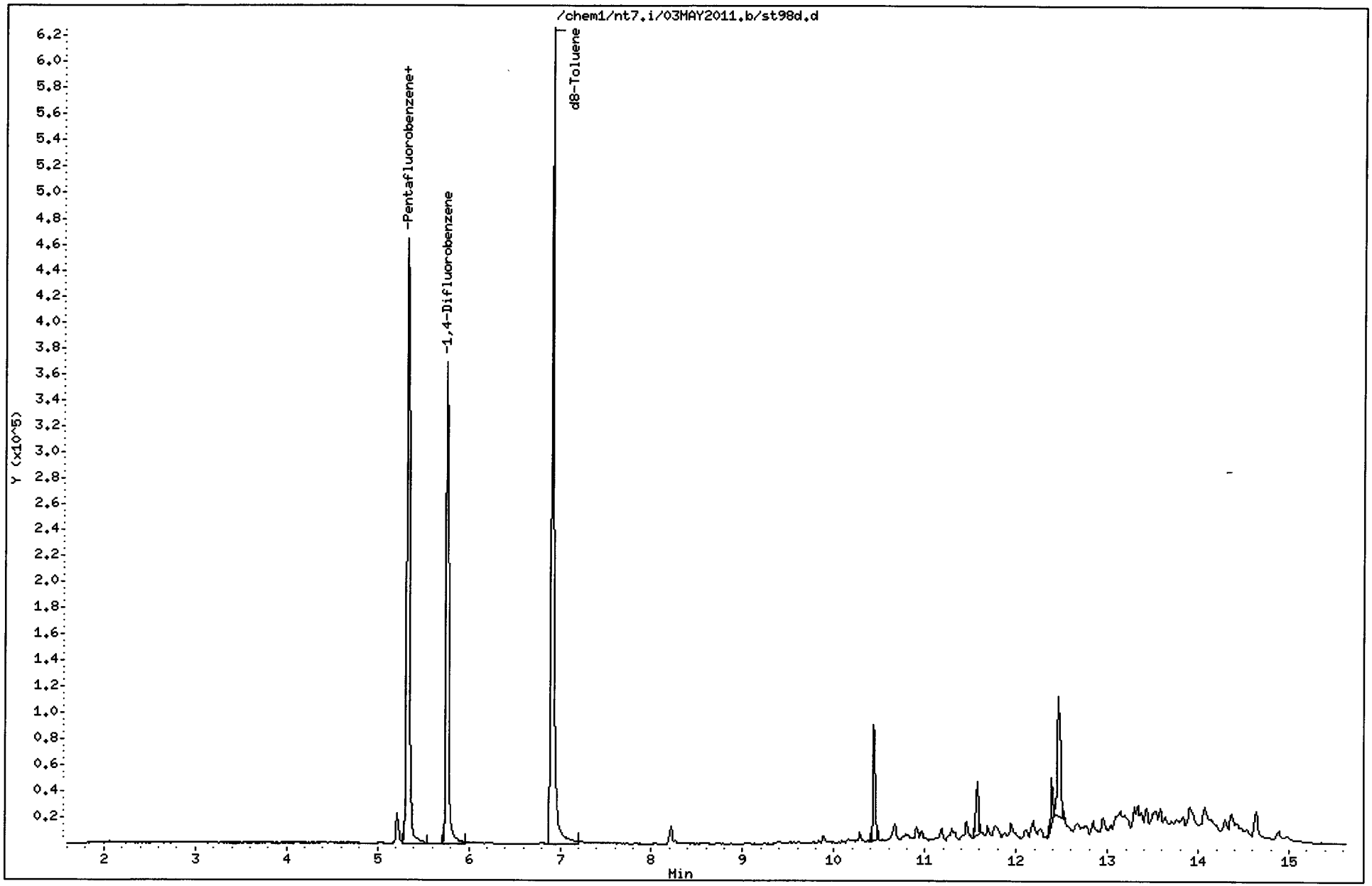
Data File: /chem1/nt7.i/03MAY2011.b/st98d.d
Date : 03-MAY-2011 16:22
Client ID: MW06-042611
Sample Info: ST98D,10,10,0,

Instrument: nt7.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS

ST98:00405



Data File: /chem1/nt7.i/03MAY2011.b/st98d.d

Date : 03-MAY-2011 16:22

Client ID: MW06-042611

Instrument: nt7.i

Sample Info: ST98D,10,10,0,

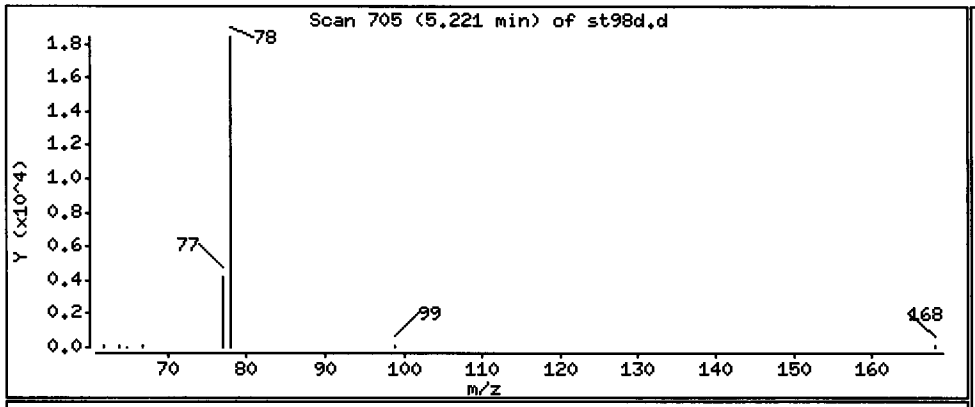
Operator: PC

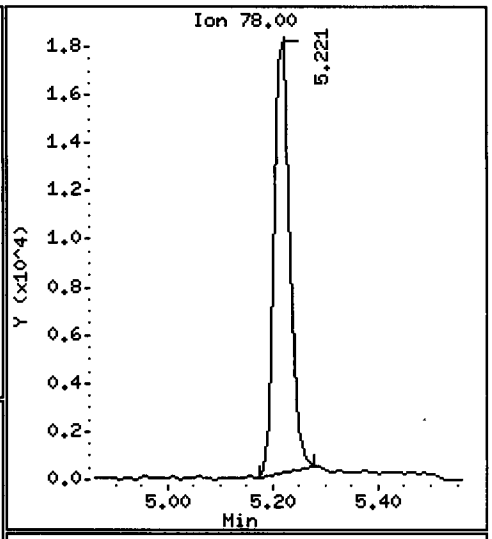
Column phase: RTXVMS

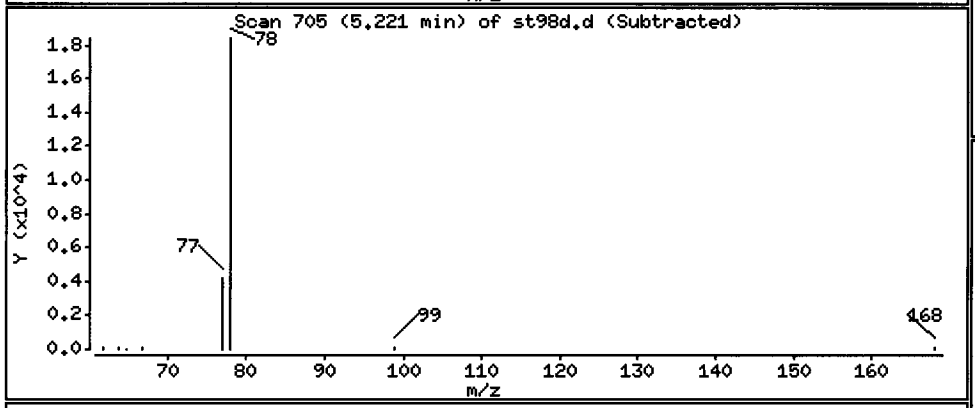
Column diameter: 0.18

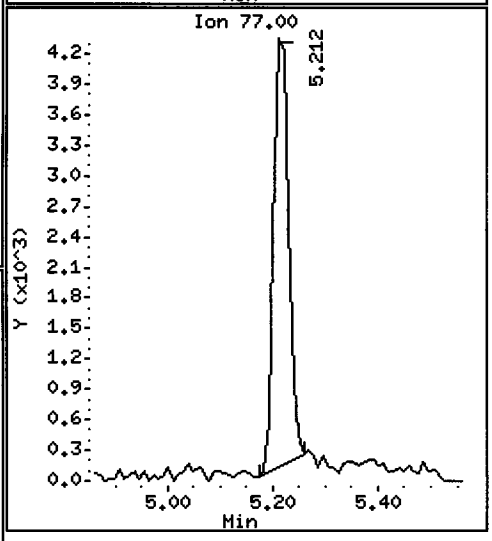
6 Benzene

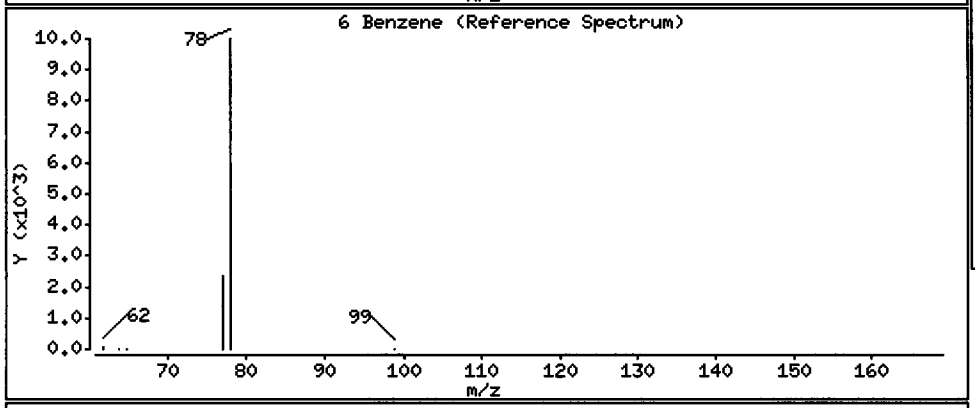
Concentration: 27.015 ug/L

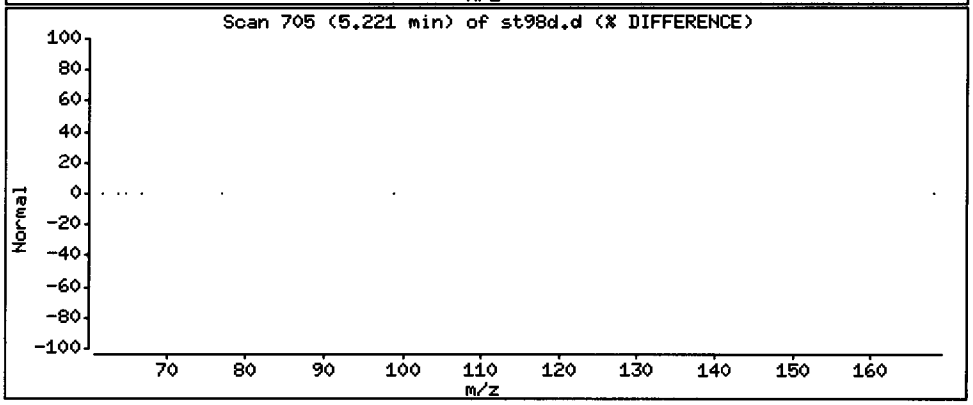












CO-ELUTION SUMMARY FOR FILE - st98d.d

Lab ID: ST98D, Method: sim042611.m, Instrument: nt7.i, Date: 03-MAY-2011

RT	CO-ELUTION COMPOUNDS

ST98:004 06A
& 5/27/11

PC
5/3/11

Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/03MAY2011.b/st98dms.d
Lab Smp Id: ST98DMS Client Smp ID: MW06-042611 MS
Inj Date : 03-MAY-2011 16:48
Operator : PC Inst ID: nt7.i
Smp Info : ST98DMS,10,10,0,
Misc Info : 11-9412
Comment :
Method : /chem1/nt7.i/03MAY2011.b/sim042611.m
Meth Date : 03-May-2011 12:16 paul Quant Type: ISTD
Cal Date : 26-APR-2011 15:00 Cal File: 0426019.d
Als bottle: 1 QC Sample: MS
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	CONCENTRATIONS ON-COLUMN (ng/L)	FINAL (ug/L)
	1 Vinyl Chloride	62	1.551	1.552	(0.291)	380720	907.516	907.52
	2 1,1-Dichloroethene	96	2.509	2.505	(0.471)	298248	893.513	893.51
	175 Trans-1,2-Dichloroethene	96	3.288	3.284	(0.618)	299937	884.463	884.46
	3 cis-1,2-dichloroethene	96	4.438	4.439	(0.834)	303792	839.111	839.11
	6 Benzene	78	5.211	5.212	(0.905)	1464088	917.646	917.65
*	4 Pentafluorobenzene	168	5.324	5.326	(1.000)	381200	1000.00	
$	5 d4-1,2-Dichloroethane	65	5.334	5.326	(1.002)	291021	847.176	847.18
	176 1,2-Dichloroethane	62	5.381	5.383	(1.011)	498939	918.946	918.95
	8 Trichloroethene	130	5.721	5.720	(0.994)	261194	955.916	955.92(Q)
*	7 1,4-Difluorobenzene	114	5.755	5.754	(1.000)	696898	1000.00	
$	9 d8-Toluene	98	6.913	6.913	(1.201)	894188	1007.21	1007.2
	10 Tetrachloroethene	166	7.270	7.270	(1.263)	208452	988.647	988.65
	11 1,1,2,2-Tetrachloroethane	83	9.457	9.457	(1.643)	284013	1125.19	1125.2

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt7.i
Lab File ID: st98dms.d
Lab Smp Id: ST98DMS
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: /chem1/nt7.i/03MAY2011.b/sim042611.m
Misc Info: 11-9412

Calibration Date: 03-MAY-2011
Calibration Time: 11:29
Client Smp ID: MW06-042611 MS
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	363407	181704	726814	381200	4.90
7 1,4-Difluorobenze	667797	333898	1335594	696898	4.36

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.33	4.83	5.83	5.32	-0.02
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.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd Snider
Client SDG: ST98
Sample Matrix: LIQUID
Fraction: VOA
Lab Smp Id: ST98DMS
Client Smp ID: MW06-042611 MS
Level: LOW
Operator: PC
Data Type: MS DATA
SampleType: MS
SpikeList File: special.spk
Quant Type: ISTD
Sublist File: sim12dca.sub
Method File: /chem1/nt7.i/03MAY2011.b/sim042611.m
Misc Info: 11-9412

	SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
1	Vinyl Chloride	1000.0	907.52	90.75	76-120
176	1,2-Dichloroethane	1000.0	918.95	91.89	80-128
175	Trans-1,2-Dichloro	1000.0	884.46	88.45	80-120
2	1,1-Dichloroethene	1000.0	893.51	89.35	80-120
3	cis-1,2-dichloroet	1000.0	839.11	83.91	80-120
6	Benzene	1000.0	917.65	91.76	80-120
8	Trichloroethene	1000.0	955.92	95.59	80-120
10	Tetrachloroethene	1000.0	988.65	98.86	80-122
11	1,1,2,2-Tetrachlor	1000.0	1125.2	112.52	80-128

	SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 5	d4-1,2-Dichloroeth	1000.0	847.18	84.72	80-126
$ 9	d8-Toluene	1000.0	1007.2	100.72	80-120

Data File: /chem1/nt7.i/03MAY2011.b/st98dms.d

Page 5

Date : 03-MAY-2011 16:48

Client ID: MW06-042611 MS

Instrument: nt7.i

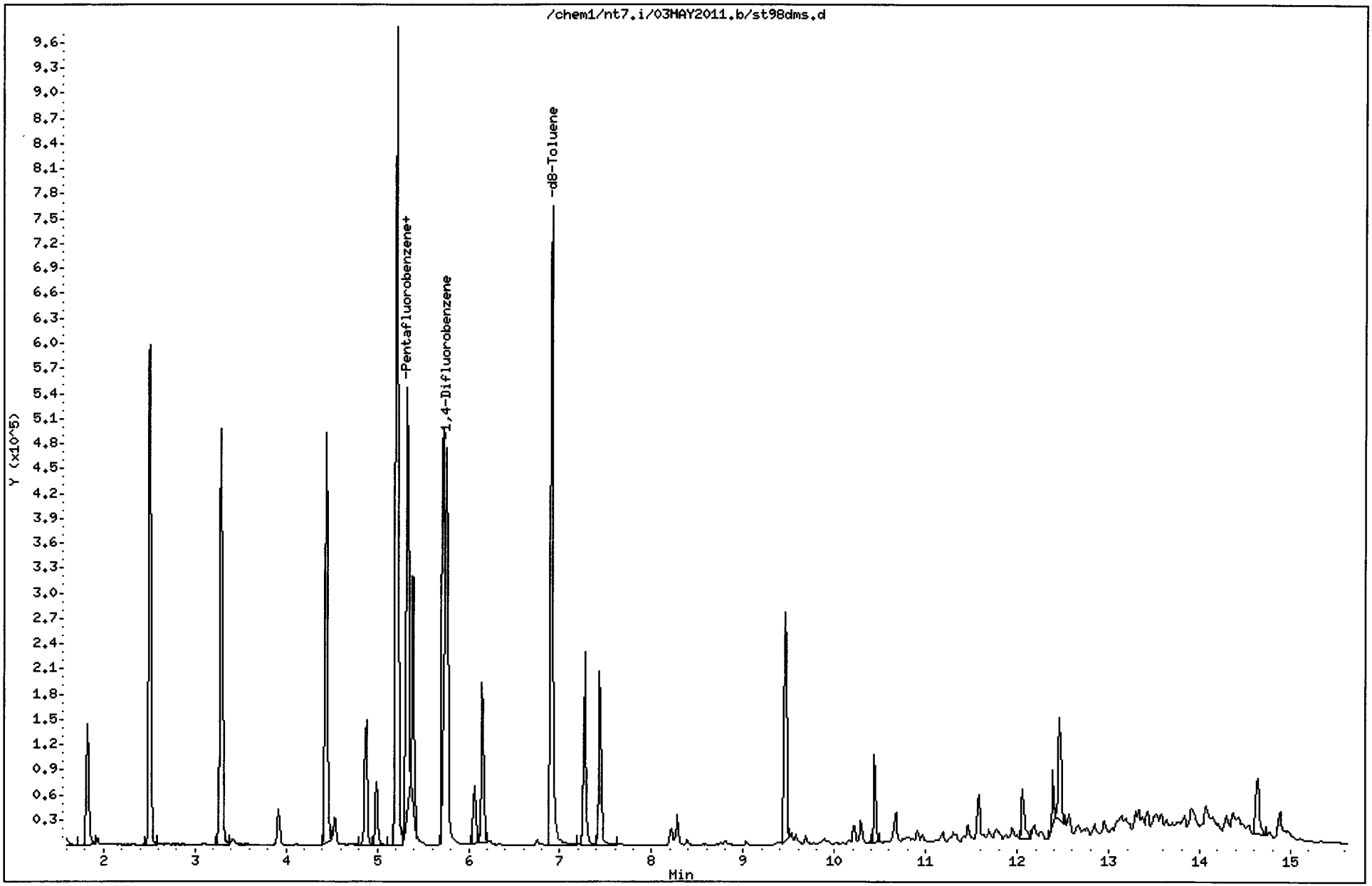
Sample Info: ST98DMS,10,10,0,

Operator: PC

Column phase: RTXVMS

Column diameter: 0.18

ST98:004111



CO-ELUTION SUMMARY FOR FILE - st98dms.d

Lab ID: ST98DMS, Method: sim042611.m, Instrument: nt7.i, Date: 03-MAY-2011

RT	CO-ELUTION COMPOUNDS

PC 5/4/11

Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/03MAY2011.b/st98dmsd.d
Lab Smp Id: ST98DMSD Client Smp ID: MW06-042611 MSD
Inj Date : 03-MAY-2011 17:14
Operator : PC Inst ID: nt7.i
Smp Info : ST98DMSD,10,10,0,
Misc Info : 11-9412
Comment :
Method : /chem1/nt7.i/03MAY2011.b/sim042611.m
Meth Date : 03-May-2011 12:16 paul Quant Type: ISTD
Cal Date : 26-APR-2011 15:00 Cal File: 0426019.d
Als bottle: 1 QC Sample: MSD
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	1.554	1.552	(0.292)	393531	867.524	867.52
	2 1,1-Dichloroethene	96	2.510	2.505	(0.471)	312165	864.895	864.90
	175 Trans-1,2-Dichloroethene	96	3.289	3.284	(0.618)	318759	869.294	869.29
	3 cis-1,2-dichloroethene	96	4.439	4.439	(0.833)	321770	821.948	821.95
	6 Benzene	78	5.212	5.212	(0.906)	1527295	887.477	887.48
*	4 Pentafluorobenzene	168	5.325	5.326	(1.000)	412190	1000.00	
$	5 d4-1,2-Dichloroethane	65	5.335	5.326	(1.002)	297968	802.181	802.18
	176 1,2-Dichloroethane	62	5.382	5.383	(1.011)	509523	867.883	867.88
	8 Trichloroethene	130	5.720	5.720	(0.994)	275081	933.348	933.35(Q)
*	7 1,4-Difluorobenzene	114	5.754	5.754	(1.000)	751697	1000.00	
$	9 d8-Toluene	98	6.903	6.913	(1.200)	948583	990.583	990.58
	10 Tetrachloroethene	166	7.271	7.270	(1.264)	212249	933.271	933.27
	11 1,1,2,2-Tetrachloroethane	83	9.458	9.457	(1.644)	285490	1048.59	1048.6

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt7.i
Lab File ID: st98dmsd.d
Lab Smp Id: ST98DMSD
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: /chem1/nt7.i/03MAY2011.b/sim042611.m
Misc Info: 11-9412

Calibration Date: 03-MAY-2011
Calibration Time: 11:29
Client Smp ID: MW06-042611 MSD
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	363407	181704	726814	412190	13.42
7 1,4-Difluorobenze	667797	333898	1335594	751697	12.56

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.33	4.83	5.83	5.33	-0.01
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.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd Snider
Sample Matrix: LIQUID
Lab Smp Id: ST98DMSD
Level: LOW
Data Type: MS DATA
SpikeList File: special.spk
Sublist File: sim12dca.sub
Method File: /chem1/nt7.i/03MAY2011.b/sim042611.m
Misc Info: 11-9412

Client SDG: ST98
Fraction: VOA
Client Smp ID: MW06-042611 MSD
Operator: PC
SampleType: MSD
Quant Type: ISTD

	SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
1	Vinyl Chloride	1000.0	867.52	86.75	76-120
176	1,2-Dichloroethane	1000.0	867.88	86.79	80-128
175	Trans-1,2-Dichloro	1000.0	869.29	86.93	80-120
2	1,1-Dichloroethene	1000.0	864.90	86.49	80-120
3	cis-1,2-dichloroet	1000.0	821.95	82.19	80-120
6	Benzene	1000.0	887.48	88.75	80-120
8	Trichloroethene	1000.0	933.35	93.33	80-120
10	Tetrachloroethene	1000.0	933.27	93.33	80-122
11	1,1,2,2-Tetrachlor	1000.0	1048.6	104.86	80-128

	SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 5	d4-1,2-Dichloroeth	1000.0	802.18	80.22	80-126
$ 9	d8-Toluene	1000.0	990.58	99.06	80-120

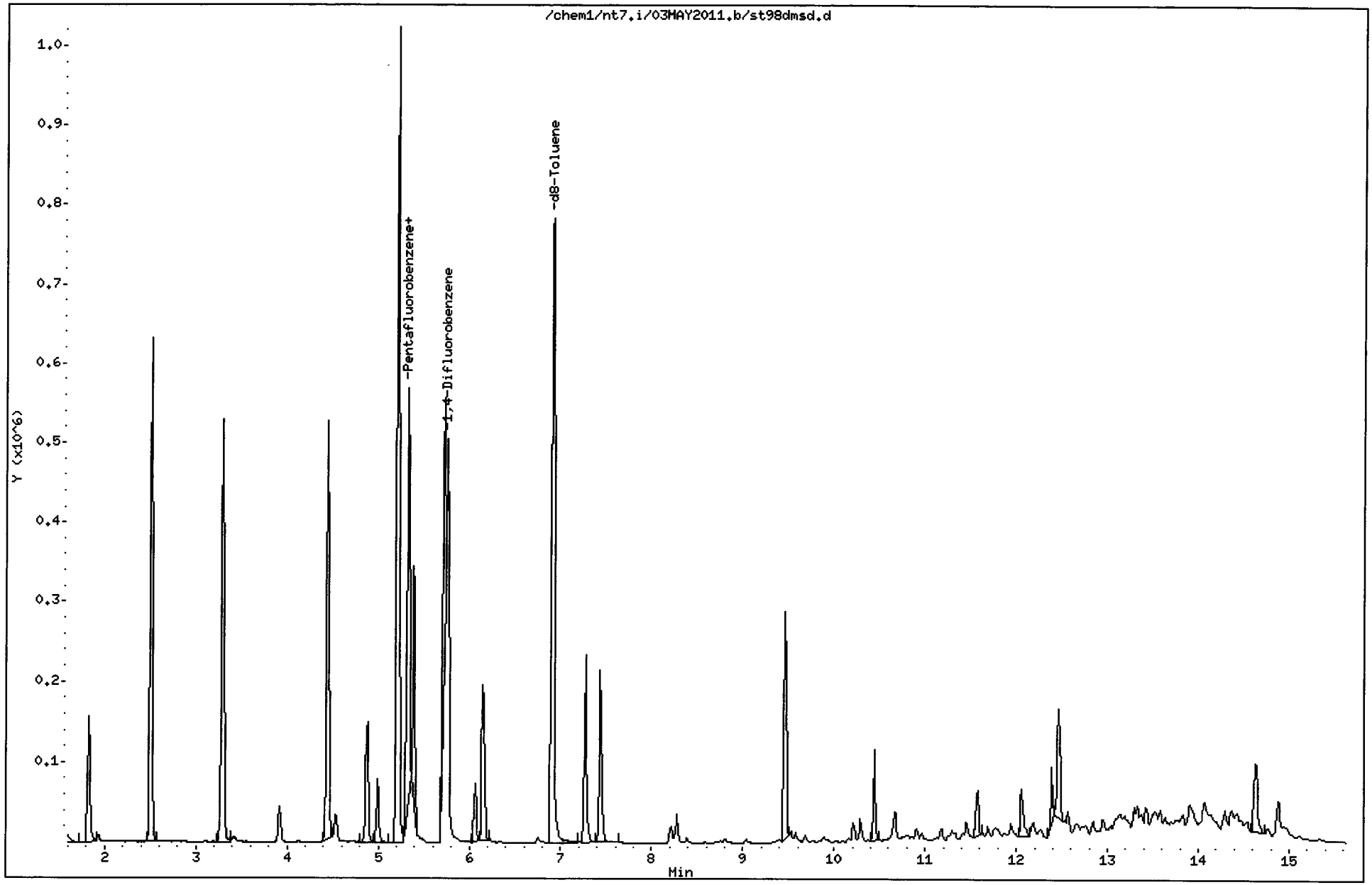
Data File: /chem1/nt7.i/03MAY2011.b/st98dmsd.d
Date : 03-MAY-2011 17:14
Client ID: MW06-042611 MSD
Sample Info: ST98DMSD,10,10,0,

Instrument: nt7.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS

ST98:004117



CO-ELUTION SUMMARY FOR FILE - st98dmsd.d

Lab ID: ST98DMSD, Method: sim042611.m, Instrument: nt7.i, Date: 03-MAY-2011

RT	CO-ELUTION COMPOUNDS

PC 5/4/11

Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/03MAY2011.b/su21a.d
Lab Smp Id: SU21A Client Smp ID: MW07-042711
Inj Date : 03-MAY-2011 17:39
Operator : PC Inst ID: nt7.i
Smp Info : SU21A,10,10,0,
Misc Info : 11-9507
Comment :
Method : /chem1/nt7.i/03MAY2011.b/sim042611.m
Meth Date : 03-May-2011 12:16 paul Quant Type: ISTD
Cal Date : 26-APR-2011 15:00 Cal File: 0426019.d
Als bottle: 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					CONCENTRATIONS	
	Compounds	MASS	RT	EXP RT REL RT	RESPONSE	ON-COLUMN (ng/L)	FINAL (ug/L)
	1 Vinyl Chloride	62	Compound Not Detected.				
	2 1,1-Dichloroethene	96	Compound Not Detected.				
	175 Trans-1,2-Dichloroethene	96	Compound Not Detected.				
	3 cis-1,2-dichloroethene	96	Compound Not Detected.				
	6 Benzene	78	Compound Not Detected.				
*	4 Pentafluorobenzene	168	5.324	5.326 (1.000)	396604	1000.00	
$	5 d4-1,2-Dichloroethane	65	5.333	5.326 (1.002)	331755	928.242	928.24
	176 1,2-Dichloroethane	62	Compound Not Detected.				
	8 Trichloroethene	130	Compound Not Detected.				
*	7 1,4-Difluorobenzene	114	5.755	5.754 (1.000)	753683	1000.00	
$	9 d8-Toluene	98	6.913	6.913 (1.201)	950945	990.434	990.43
	10 Tetrachloroethene	166	Compound Not Detected.				
	11 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.				

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt7.i
Lab File ID: su21a.d
Lab Smp Id: SU21A
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: /chem1/nt7.i/03MAY2011.b/sim042611.m
Misc Info: 11-9507

Calibration Date: 03-MAY-2011
Calibration Time: 11:29
Client Smp ID: MW07-042711
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	363407	181704	726814	396604	9.13
7 1,4-Difluorobenze	667797	333898	1335594	753683	12.86

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.33	4.83	5.83	5.32	-0.04
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.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd Snider
Client SDG: SU21
Sample Matrix: LIQUID
Fraction: VOA
Lab Smp Id: SU21A
Client Smp ID: MW07-042711
Level: LOW
Operator: PC
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: special.spk
Quant Type: ISTD
Sublist File: sim12dca.sub
Method File: /chem1/nt7.i/03MAY2011.b/sim042611.m
Misc Info: 11-9507

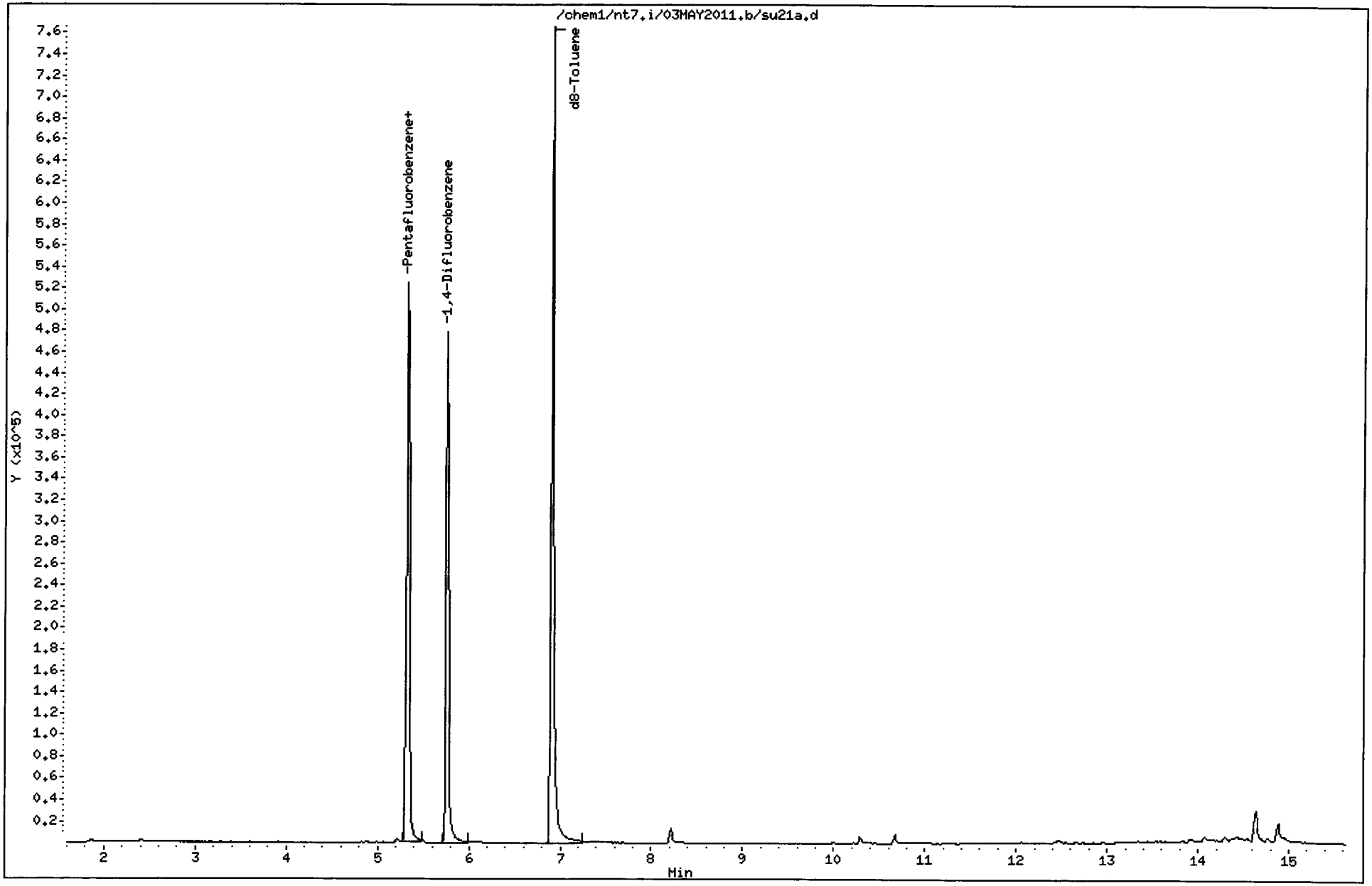
SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 5 d4-1,2-Dichloroeth	1000.0	928.24	92.82	80-126
$ 9 d8-Toluene	1000.0	990.43	99.04	80-120

Data File: /chem1/nt7.i/03MAY2011.b/su21a.d
Date : 03-MAY-2011 17:39
Client ID: MW07-042711
Sample Info: SU21A,10,10,0,

Instrument: nt7.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS



CO-ELUTION SUMMARY FOR FILE - su21a.d

Lab ID: SU21A, Method: sim042611.m, Instrument: nt7.i, Date: 03-MAY-2011

RT	CO-ELUTION COMPOUNDS

PC 5/4/11

Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/03MAY2011.b/su21c.d
Lab Smp Id: SU21C Client Smp ID: MW10-042711
Inj Date : 03-MAY-2011 18:31
Operator : PC Inst ID: nt7.i
Smp Info : SU21C,10,10,0,
Misc Info : 11-9509
Comment :
Method : /chem1/nt7.i/03MAY2011.b/sim042611.m
Meth Date : 03-May-2011 12:16 paul Quant Type: ISTD
Cal Date : 26-APR-2011 15:00 Cal File: 0426019.d
Als bottle: 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

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/L)	CONCENTRATIONS FINAL (ug/L)
	1	Vinyl Chloride	62	Compound Not Detected.					
	2	1,1-Dichloroethene	96	Compound Not Detected.					
	175	Trans-1,2-Dichloroethene	96	Compound Not Detected.					
	3	cis-1,2-dichloroethene	96	Compound Not Detected.					
	6	Benzene	78	Compound Not Detected.					
*	4	Pentafluorobenzene	168	5.326	5.326	(1.000)	354061	1000.00	
$	5	d4-1,2-Dichloroethane	65	5.335	5.326	(1.002)	311991	977.833	977.83
	176	1,2-Dichloroethane	62	Compound Not Detected.					
	8	Trichloroethene	130	Compound Not Detected.					
*	7	1,4-Difluorobenzene	114	5.766	5.754	(1.000)	661517	1000.00	
$	9	d8-Toluene	98	6.915	6.913	(1.199)	842899	1000.22	1000.2
	10	Tetrachloroethene	166	Compound Not Detected.					
	11	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt7.i
Lab File ID: su21c.d
Lab Smp Id: SU21C
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: /chem1/nt7.i/03MAY2011.b/sim042611.m
Misc Info: 11-9509

Calibration Date: 03-MAY-2011
Calibration Time: 11:29
Client Smp ID: MW10-042711
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	363407	181704	726814	354061	-2.57
7 1,4-Difluorobenze	667797	333898	1335594	661517	-0.94

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.00
7 1,4-Difluorobenze	5.75	5.25	6.25	5.77	0.20

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

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd Snider
Client SDG: SU21
Sample Matrix: LIQUID
Fraction: VOA
Lab Smp Id: SU21C
Client Smp ID: MW10-042711
Level: LOW
Operator: PC
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: special.spk
Quant Type: ISTD
Sublist File: sim12dca.sub
Method File: /chem1/nt7.i/03MAY2011.b/sim042611.m
Misc Info: 11-9509

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 5 d4-1,2-Dichloroeth	1000.0	977.83	97.78	80-126
$ 9 d8-Toluene	1000.0	1000.2	100.02	80-120

Data File: /chem1/nt7.i/03MAY2011.b/su21c.d

Date : 03-MAY-2011 18:31

Client ID: MW10-042711

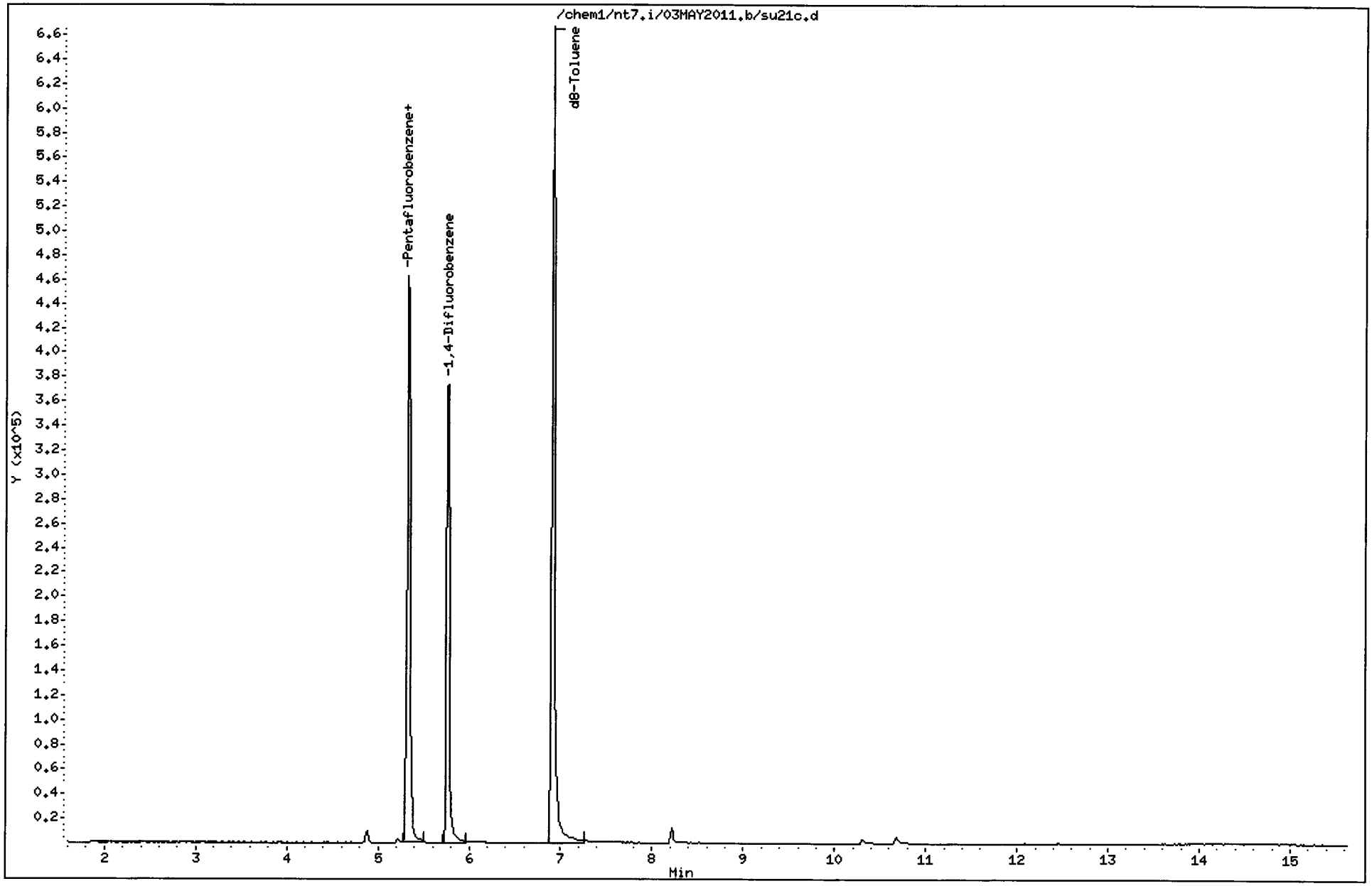
Sample Info: SU21C,10,10,0,

Column phase: RTXVMS

Instrument: nt7.i

Operator: PC

Column diameter: 0.18



CO-ELUTION SUMMARY FOR FILE - su21c.d

Lab ID: SU21C, Method: sim042611.m, Instrument: nt7.i, Date: 03-MAY-2011

RT	CO-ELUTION COMPOUNDS

5/4/11

Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/03MAY2011.b/su21d.d
Lab Smp Id: SU21D Client Smp ID: MW09-042711
Inj Date : 03-MAY-2011 18:56
Operator : PC Inst ID: nt7.i
Smp Info : SU21D,10,10,0,
Misc Info : 11-9510
Comment :
Method : /chem1/nt7.i/03MAY2011.b/sim042611.m
Meth Date : 03-May-2011 12:16 paul Quant Type: ISTD
Cal Date : 26-APR-2011 15:00 Cal File: 0426019.d
Als bottle: 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

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/L)	CONCENTRATIONS FINAL (ug/L)
	1	Vinyl Chloride	62	Compound Not Detected.					
	2	1,1-Dichloroethene	96	Compound Not Detected.					
	175	Trans-1,2-Dichloroethene	96	Compound Not Detected.					
	3	cis-1,2-dichloroethene	96	Compound Not Detected.					
	6	Benzene	78	Compound Not Detected.					
*	4	Pentafluorobenzene	168	5.324	5.326	(1.000)	378093	1000.00	
$	5	d4-1,2-Dichloroethane	65	5.333	5.326	(1.002)	292600	858.769	858.77
	176	1,2-Dichloroethane	62	Compound Not Detected.					
	8	Trichloroethene	130	Compound Not Detected.					
*	7	1,4-Difluorobenzene	114	5.767	5.754	(1.000)	644456	1000.00	
$	9	d8-Toluene	98	6.913	6.913	(1.199)	785104	956.296	956.30
	10	Tetrachloroethene	166	Compound Not Detected.					
	11	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt7.i
Lab File ID: su21d.d
Lab Smp Id: SU21D
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: /chem1/nt7.i/03MAY2011.b/sim042611.m
Misc Info: 11-9510

Calibration Date: 03-MAY-2011
Calibration Time: 11:29
Client Smp ID: MW09-042711
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	363407	181704	726814	378093	4.04
7 1,4-Difluorobenze	667797	333898	1335594	644456	-3.50

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.33	4.83	5.83	5.32	-0.03
7 1,4-Difluorobenze	5.75	5.25	6.25	5.77	0.22

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

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd Snider
Sample Matrix: LIQUID
Lab Smp Id: SU21D
Level: LOW
Data Type: MS DATA
SpikeList File: special.spk
Sublist File: sim12dca.sub
Method File: /chem1/nt7.i/03MAY2011.b/sim042611.m
Misc Info: 11-9510

Client SDG: SU21
Fraction: VOA
Client Smp ID: MW09-042711
Operator: PC
SampleType: SAMPLE
Quant Type: ISTD

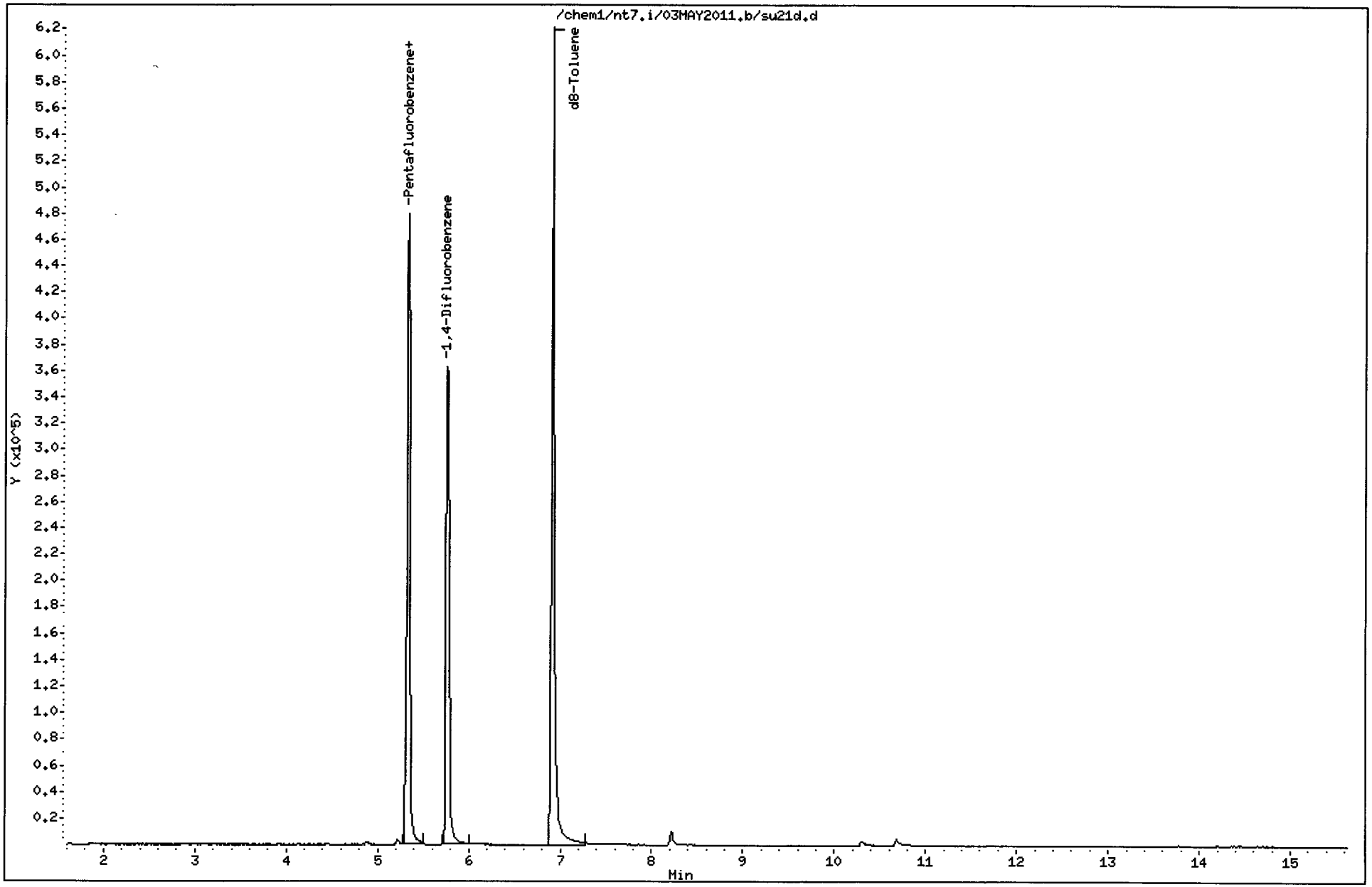
SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 5 d4-1,2-Dichloroeth	1000.0	858.77	85.88	80-126
$ 9 d8-Toluene	1000.0	956.30	95.63	80-120

Data File: /chem1/nt7.i/03MAY2011.b/su21d.d
Date : 03-MAY-2011 18:56
Client ID: MW09-042711
Sample Info: SU21D,10,10,0,

Instrument: nt7.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS



CO-ELUTION SUMMARY FOR FILE - su21d.d

Lab ID: SU21D, Method: sim042611.m, Instrument: nt7.i, Date: 03-MAY-2011

RT	CO-ELUTION COMPOUNDS

Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/03MAY2011.b/su21f.d
Lab Smp Id: SU21F Client Smp ID: MW12-042711
Inj Date : 03-MAY-2011 19:47
Operator : PC Inst ID: nt7.i
Smp Info : SU21F,10,10,0,
Misc Info : 11-9512
Comment :
Method : /chem1/nt7.i/03MAY2011.b/sim042611.m
Meth Date : 03-May-2011 12:16 paul Quant Type: ISTD
Cal Date : 26-APR-2011 15:00 Cal File: 0426019.d
Als bottle: 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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/L)	FINAL (ug/L)
	1 Vinyl Chloride	62	Compound Not Detected.					
	2 1,1-Dichloroethene	96	Compound Not Detected.					
	175 Trans-1,2-Dichloroethene	96	Compound Not Detected.					
	3 cis-1,2-dichloroethene	96	Compound Not Detected.					
	6 Benzene	78	Compound Not Detected.					
*	4 Pentafluorobenzene	168	5.325	5.326	(1.000)	266113	1000.00	
$	5 d4-1,2-Dichloroethane	65	5.335	5.326	(1.002)	220213	918.283	918.28
	176 1,2-Dichloroethane	62	Compound Not Detected.					
	8 Trichloroethene	130	Compound Not Detected.					
*	7 1,4-Difluorobenzene	114	5.765	5.754	(1.000)	458881	1000.00	
$	9 d8-Toluene	98	6.914	6.913	(1.199)	556786	952.461	952.46
	10 Tetrachloroethene	166	7.283	7.270	(1.263)	1422	10.2426	10.243
	11 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt7.i
Lab File ID: su21f.d
Lab Smp Id: SU21F
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: /chem1/nt7.i/03MAY2011.b/sim042611.m
Misc Info: 11-9512

Calibration Date: 03-MAY-2011
Calibration Time: 11:29
Client Smp ID: MW12-042711
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	363407	181704	726814	266113	-26.77
7 1,4-Difluorobenze	667797	333898	1335594	458881	-31.28

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.33	4.83	5.83	5.33	-0.01
7 1,4-Difluorobenze	5.75	5.25	6.25	5.77	0.19

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

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd Snider
Sample Matrix: LIQUID
Lab Smp Id: SU21F
Level: LOW
Data Type: MS DATA
SpikeList File: special.spk
Sublist File: sim12dca.sub
Method File: /chem1/nt7.i/03MAY2011.b/sim042611.m
Misc Info: 11-9512

Client SDG: SU21
Fraction: VOA
Client Smp ID: MW12-042711
Operator: PC
SampleType: SAMPLE
Quant Type: ISTD

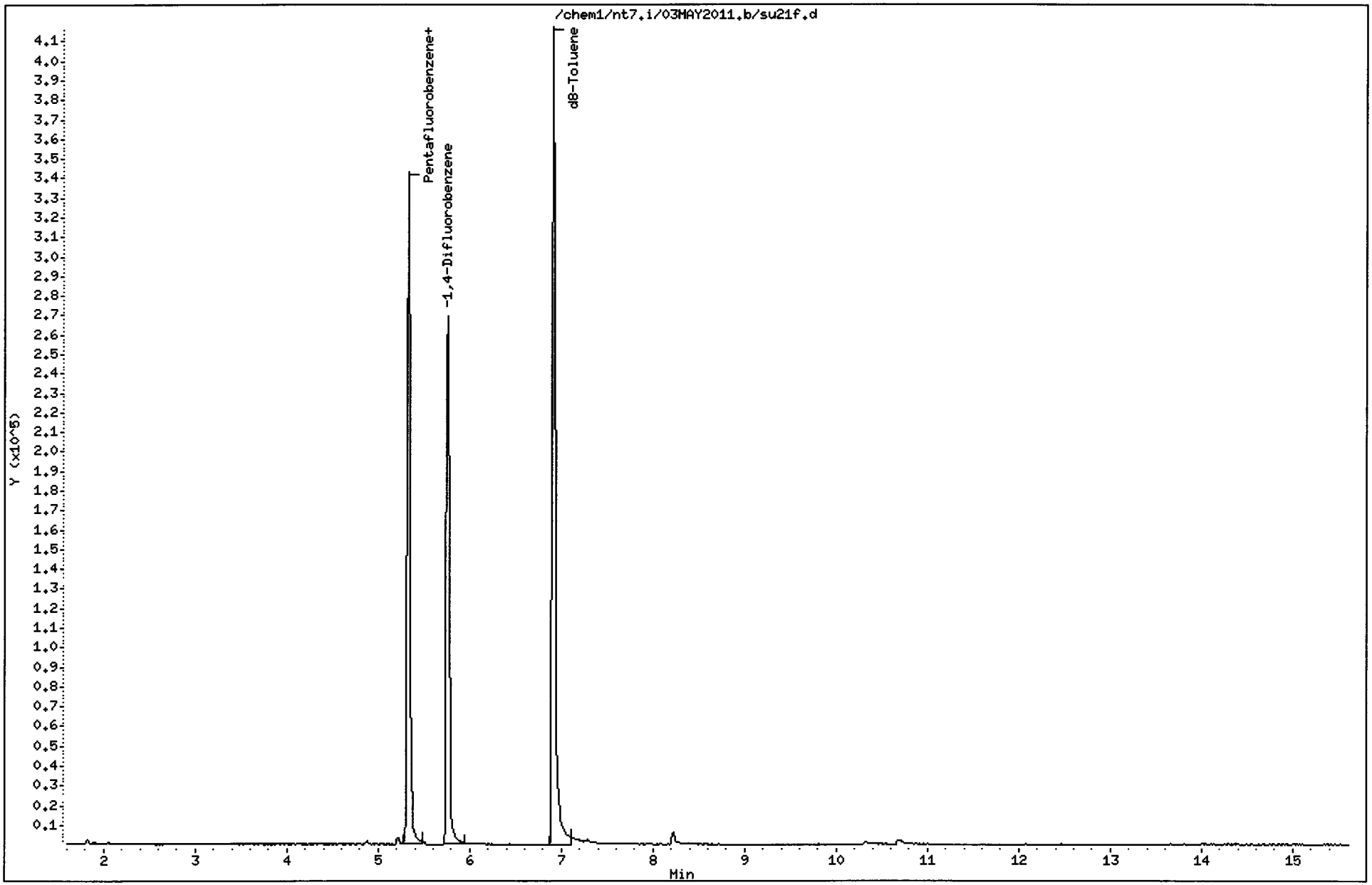
SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 5 d4-1,2-Dichloroeth	1000.0	918.28	91.83	80-126
$ 9 d8-Toluene	1000.0	952.46	95.25	80-120

Data File: /chem1/nt7.i/03MAY2011.b/su21f.d
Date : 03-MAY-2011 19:47
Client ID: MW12-042711
Sample Info: SU21F,10,10,0,

Instrument: nt7.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS



Data File: /chem1/nt7.i/03MAY2011.b/su21f.d

Date : 03-MAY-2011 19:47

Client ID: MW12-042711

Instrument: nt7.i

Sample Info: SU21F,10,10,0,

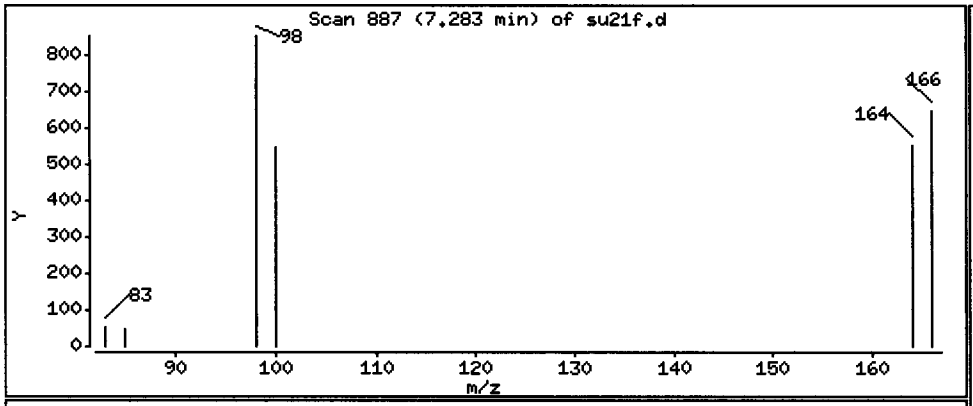
Operator: PC

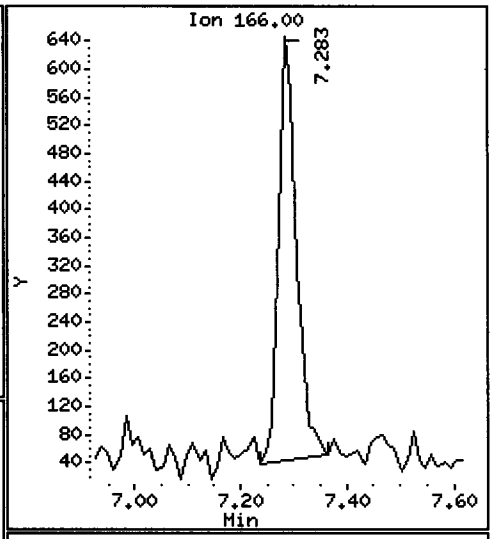
Column phase: RTXVMS

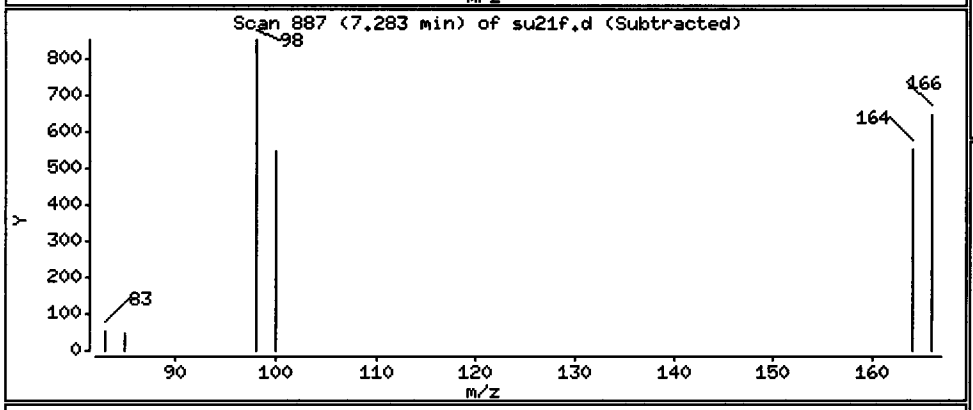
Column diameter: 0.18

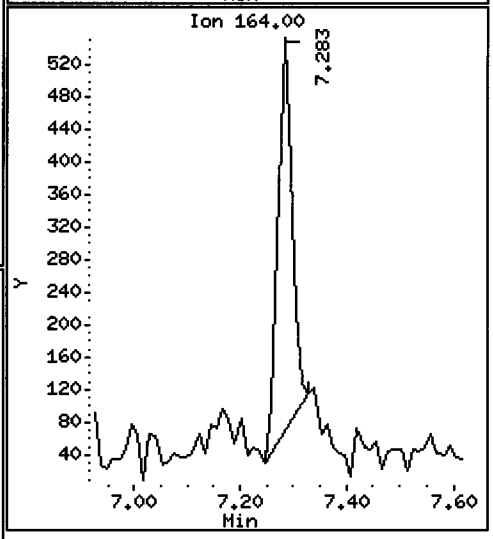
10 Tetrachloroethene

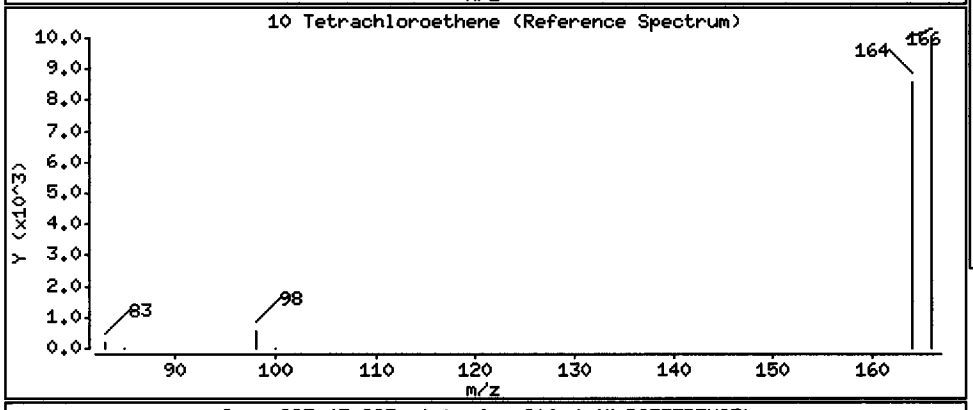
Concentration: 10.243 ug/L

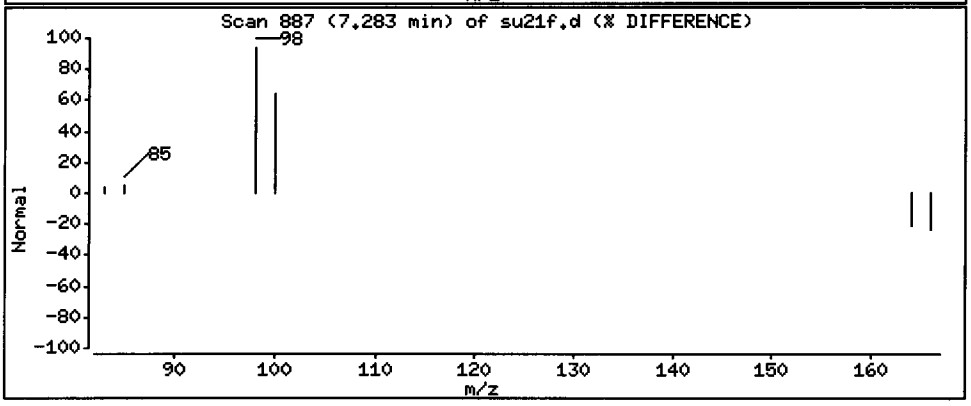












CO-ELUTION SUMMARY FOR FILE - su21f.d

Lab ID: SU21F, Method: sim042611.m, Instrument: nt7.i, Date: 03-MAY-2011

RT	CO-ELUTION COMPOUNDS

Data File: /chem1/nt7.i/04MAY2011.b/bfb0504.d

Date : 04-MAY-2011 09:18

Client ID: BFB0504

Instrument: nt7.i

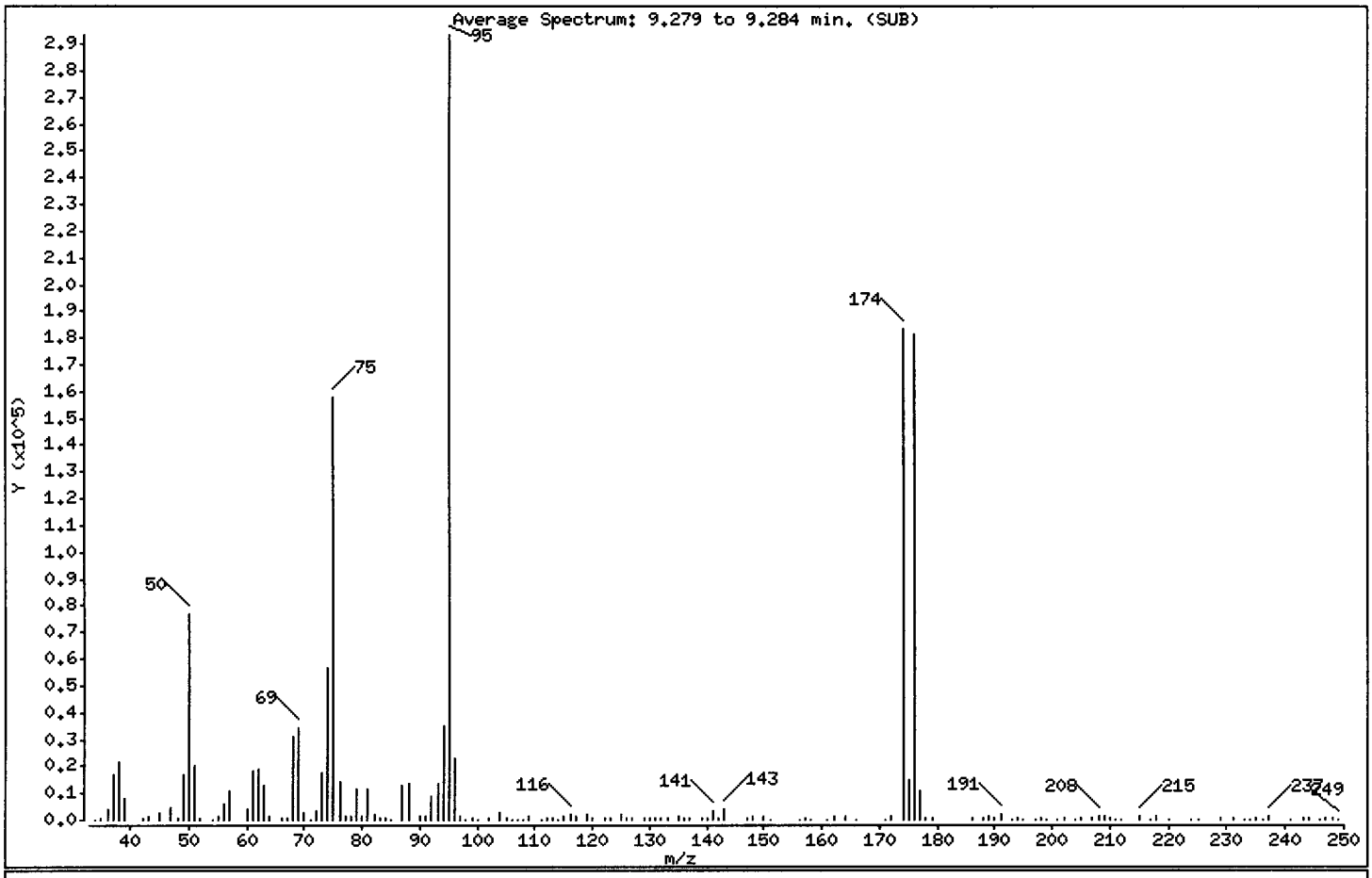
Sample Info: BFB0504,BFB0504,1,04MAY2011,,

Operator: PC

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	26.18
75	30.00 - 66.00% of mass 95	53.86
96	5.00 - 9.00% of mass 95	7.84
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 101.00% of mass 95	62.63
175	4.00 - 9.00% of mass 174	5.00 (7.98)
176	93.00 - 101.00% of mass 174	61.81 (98.70)
177	5.00 - 9.00% of mass 176	3.65 (5.90)

Data File: /chem1/nt7.i/04MAY2011.b/bfb0504.d

Date : 04-MAY-2011 09:18

Client ID: BFB0504

Instrument: nt7.i

Sample Info: BFB0504,BFB0504,1,04MAY2011,,

Operator: PC

Column phase: RTXVMS

Column diameter: 0.18

Data File: bfb0504.d
Spectrum: Average Spectrum: 9.279 to 9.284 min. (SUB)
Location of Maximum: 95.00
Number of points: 152

m/z	Y	m/z	Y	m/z	Y	m/z	Y
34.00	275	81.00	11606	129.00	1010	194.00	774
35.00	584	82.00	2239	130.00	655	195.00	170
36.00	3919	83.00	695	131.00	435	197.00	169
37.00	16816	84.00	414	132.00	347	198.00	359
38.00	21352	85.00	266	133.00	429	199.00	48
39.00	7846	87.00	13043	135.00	1458	201.00	64
42.00	669	88.00	13546	136.00	445	202.00	605
43.00	1131	90.00	1505	137.00	503	204.00	68
45.00	2561	91.00	1024	139.00	642	205.00	761
47.00	4740	92.00	8588	140.00	355	207.00	816
48.00	958	93.00	13664	141.00	3231	208.00	1205
49.00	16696	94.00	35408	142.00	465	209.00	1189
50.00	76816	95.00	293440	143.00	4355	210.00	798
51.00	20048	96.00	23000	147.00	1001	211.00	240
52.00	861	97.00	1236	148.00	1098	212.00	143
54.00	162	98.00	251	150.00	1146	215.00	1249
55.00	1302	99.00	562	151.00	176	217.00	61
56.00	6270	100.00	210	154.00	194	218.00	1219
57.00	10538	102.00	369	156.00	201	220.00	63
60.00	3810	104.00	2629	157.00	533	224.00	258
61.00	17880	105.00	885	158.00	145	225.00	300
62.00	18592	106.00	296	161.00	196	229.00	517
63.00	12796	107.00	277	162.00	1116	231.00	907
64.00	1423	108.00	139	164.00	1073	233.00	51
66.00	511	109.00	1218	166.00	140	234.00	297
67.00	458	111.00	211	171.00	203	235.00	482
68.00	30968	112.00	508	172.00	1044	236.00	266
69.00	34304	113.00	456	174.00	183744	237.00	1141
70.00	2994	114.00	100	175.00	14664	241.00	308
71.00	239	115.00	1675	176.00	181376	243.00	412
72.00	3143	116.00	2191	177.00	10706	244.00	508
73.00	17592	117.00	1070	178.00	392	246.00	37
74.00	56848	119.00	1777	179.00	383	247.00	407
75.00	158016	120.00	451	186.00	374	248.00	823
76.00	14459	122.00	739	188.00	455	249.00	197

Data File: /chem1/nt7.i/04MAY2011.b/bfb0504.d

Date : 04-MAY-2011 09:18

Client ID: BFB0504

Instrument: nt7.i

Sample Info: BFB0504,BFB0504,1,04MAY2011,,

Operator: PC

Column phase: RTXVMS

Column diameter: 0.18

Data File: bfb0504.d

Spectrum: Average Spectrum: 9.279 to 9.284 min. (SUB)

Location of Maximum: 95.00

Number of points: 152

m/z	Y	m/z	Y	m/z	Y	m/z	Y
77.00	1422	123.00	678	189.00	1101		
78.00	1212	125.00	1963	190.00	624		
79.00	11190	126.00	467	191.00	1703		
80.00	1045	127.00	773	193.00	309		

Data File: /chem1/nt7.i/04MAY2011.b/bfb0504.d

Date : 04-MAY-2011 09:18

Client ID: BFB0504

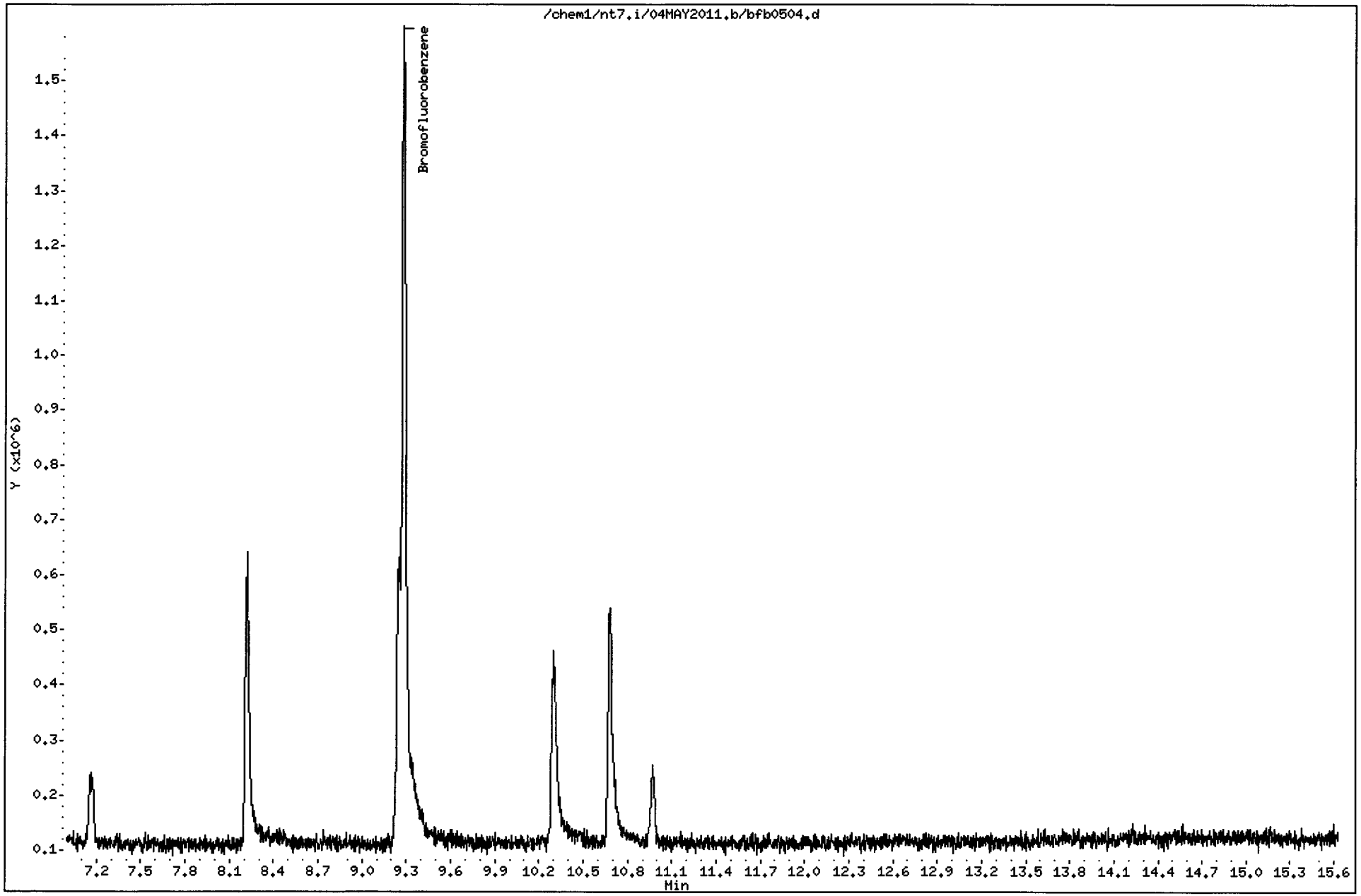
Sample Info: BFB0504,BFB0504,1,04MAY2011,,

Column phase: RTXVMS

Instrument: nt7.i

Operator: PC

Column diameter: 0.18



PC 5/5/11

Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/04MAY2011.b/cc0504b.d
Lab Smp Id: CC0504 Client Smp ID: CC0504
Inj Date : 04-MAY-2011 10:45
Operator : PC Inst ID: nt7.i
Smp Info : CC0504,10,10,0,,
Misc Info : 11-
Comment :
Method : /chem1/nt7.i/04MAY2011.b/sim042611.m
Meth Date : 05-May-2011 11:14 paul Quant Type: ISTD
Cal Date : 26-APR-2011 15:00 Cal File: 0426019.d
Als bottle: 1 Continuing Calibration Sample
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)	ON-COL (ng/L)
	1 Vinyl Chloride	62	1.551	1.551	(0.291)	368701	1000.00	1028.9
	2 1,1-Dichloroethene	96	2.510	2.510	(0.471)	291648	1000.00	1022.9
	175 Trans-1,2-Dichloroethene	96	3.290	3.290	(0.618)	298684	1000.00	1031.1
	3 cis-1,2-dichloroethene	96	4.439	4.439	(0.834)	294538	1000.00	952.41
	6 Benzene	78	5.212	5.212	(0.906)	1372896	1000.00	987.21
*	4 Pentafluorobenzene	168	5.326	5.326	(1.000)	325620	1000.00	
$	5 d4-1,2-Dichloroethane	65	5.335	5.335	(1.002)	255850	1000.00	871.92
	176 1,2-Dichloroethane	62	5.383	5.383	(1.011)	478688	1000.00	1032.1
	8 Trichloroethene	130	5.720	5.720	(0.994)	256861	1000.00	1078.5(Q)
*	7 1,4-Difluorobenzene	114	5.754	5.754	(1.000)	607444	1000.00	
$	9 d8-Toluene	98	6.913	6.913	(1.201)	777969	1000.00	1005.3
	10 Tetrachloroethene	166	7.270	7.270	(1.263)	189909	1000.00	1033.3
	11 1,1,2,2-Tetrachloroethane	83	9.457	9.457	(1.643)	230404	1000.00	1047.2

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt7.i Injection Date: 04-MAY-2011 10:45
Lab File ID: cc0504b.d Init. Cal. Date(s): 26-APR-2011 26-APR-2011
Analysis Type: WATER Init. Cal. Times: 08:49 15:00
Lab Sample ID: CC0504 Quant Type: ISTD
Method: /chem1/nt7.i/04MAY2011.b/sim042611.m

COMPOUND	RRF / AMOUNT	RF1000	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 Vinyl Chloride	1.10052	1.13230	0.040	2.88766	20.00000	Averaged
2 1,1-Dichloroethene	0.87564	0.89567	0.040	2.28796	20.00000	Averaged
175 Trans-1,2-Dichloroethene	0.88961	0.91728	0.040	3.11043	20.00000	Averaged
3 cis-1,2-dichloroethene	0.94974	0.90454	0.040	-4.75857	20.00000	Averaged
6 Benzene	2.28941	2.26012	0.040	-1.27941	20.00000	Averaged
$ 5 d4-1,2-Dichloroethane	0.90115	0.78573	0.040	-12.80817	20.00000	Averaged
176 1,2-Dichloroethane	1.42431	1.47008	0.040	3.21342	20.00000	Averaged
8 Trichloroethene	0.39208	0.42286	0.040	7.84944	20.00000	Averaged
$ 9 d8-Toluene	1.27392	1.28072	0.040	0.53430	20.00000	Averaged
10 Tetrachloroethene	0.30255	0.31264	0.040	3.33411	20.00000	Averaged
11 1,1,2,2-Tetrachloroethane	0.36220	0.37930	0.040	4.72258	20.00000	Averaged

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt7.i
Lab File ID: cc0504b.d
Lab Smp Id: CC0504
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: /chem1/nt7.i/04MAY2011.b/sim042611.m
Misc Info: 11-

Calibration Date: 04-MAY-2011
Calibration Time: 10:19
Client Smp ID: CC0504
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	363407	181704	726814	325620	-10.40
7 1,4-Difluorobenze	667797	333898	1335594	607444	-9.04

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.33	4.83	5.83	5.33	0.00
7 1,4-Difluorobenze	5.75	5.25	6.25	5.75	0.00

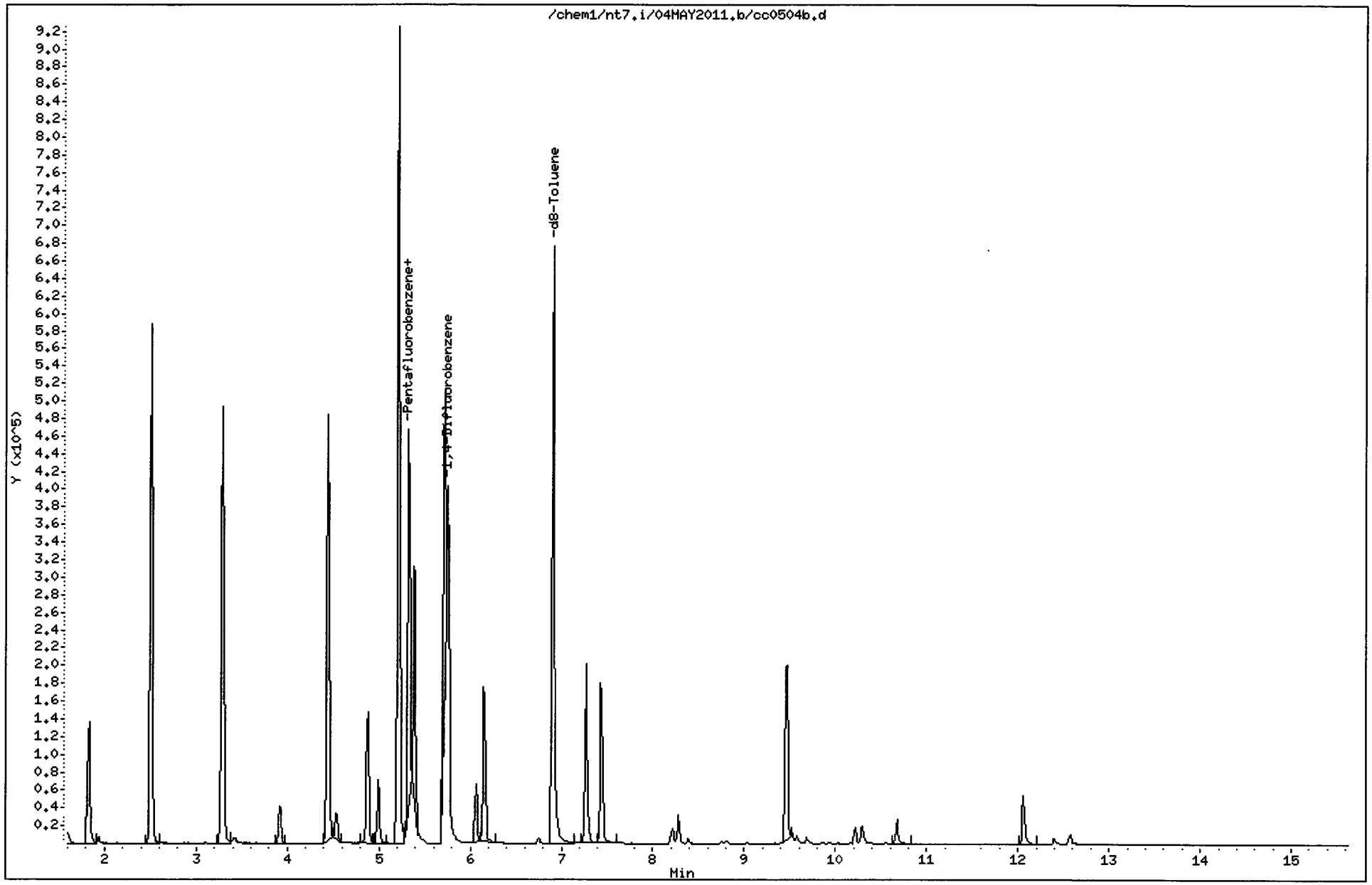
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/nt7.i/04MAY2011.b/cc0504b.d
Date : 04-MAY-2011 10:45
Client ID: CC0504
Sample Info: CC0504,10,10,0,,

Instrument: nt7.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS



CO-ELUTION SUMMARY FOR FILE - cc0504b.d

Lab ID: CC0504, Method: sim042611.m, Instrument: nt7.i, Date: 04-MAY-2011

RT	CO-ELUTION COMPOUNDS

Analytical Resources Inc.: Volatile Organics Instrument Log

NT-7 Serial No.:GC=US00024417, MS=US72821196

Date: 5/4/11 Analysis: 5/M VOA Analyst: RC

GC Program: VC Column No: 850322 Column Type: RTX-VMS

Instrument Tune (.U or .CT.): bfb0504 EM Voltage: 1647

Calibration File: cc0504b Curve Date: 4/26/11

IS/SS	Ical/Ccal	LCS/ICV
VW685-1	VW682-2	VW682-2

INTERNAL STANDARD SUMMARY FOR DATABATCH - /chem1/nt7.i/04MAY2011'.b

	Time	Filename	LabID	ClientID	WT		
1	0918	bfb0504.d	BFB0504	BFB0504	0.00		
2	0953	cc0504.d	CC0504	CC0504		1 | 5.32 321147 | 5.76 596355 |	
3	1019	cc0504a.d	CC0504	CC0504		1 | 5.33 178181 | 5.75 337874 |	
4	1045	cc0504b.d	CC0504	CC0504		1 | 5.33 325620 | 5.75 607444 |	
5	1121	lcs0504x.d	LCS0504	LCS0504		1 | 5.32 262777 | 5.76 496109 |	
6	1147	lcs0504y.d	LCS0504	LCS0504		1 | 5.33 332174 | 5.75 613837 |	
7	1213	mb0504.d	MB0504	MB0504		1 | 5.32 288519 | 5.76 540873 |	
8	1246	su78b.d	SU78B	trip Blanks	1	<2	1 | 5.33 348685 | 5.75 610257 |
9	1312	su73c.d	SU73C	TB-042911	2		1 | 5.32 318932 | 5.75 579037 |
10	1338	sv04d.d	SV04D	Trip Blank	2		1 | 5.33 314331 | 5.76 584294 |
11	1403	su21b2.d	SU21B	MW11-042711	5		1 | 5.33 314236 | 5.77 566832 |
12	1429	su21e2.d	SU21E	MW08-042711	6		1 | 5.32 306214 | 5.77 555326 |
13	1455	su53a2.d	SU53A	MW5042811	11		1 | 5.32 284721 | 5.77 537725 |
14	1520	su53f2.d	SU53F	MW16042811	7		1 | 5.33 77079 | 5.77 149271 |
15	1546	su78a.d	SU78A	AGW182-29-20110429	3		1 | 5.32 286695 | 5.77 598976 |
16	1609	su53f3.d	SU53F	MW16042811	7		1 | 5.32 329550 | 5.77 559059 |
17	1635	su73a.d	SU73A	MW-01-042911	6		1 | 5.32 327319 | 5.77 616507 |
18	1701	su73b.d	SU73B	MW-01-042911-D	7		1 | 5.32 358015 | 5.77 671821 |
19	1726	su74a.d	SU74A	B312-042911	3		1 | 5.32 376103 | 5.77 682816 |
20	1752	su74b.d	SU74B	B310-042911	2		1 | 5.32 361270 | 5.77 654245 |
21	1818	su74c.d	SU74C	B311-042911	6		1 | 5.33 341470 | 5.77 625591 |
22	1843	sv04a.d	SV04A	MW29B	9		1 | 5.32 352276 | 5.77 634564 |
23	1909	sv04b.d	SV04B	MW31	9	<2	1 | 5.33 335260 | 5.77 604688 |
24	1935	sv04c.d	SV04C	MW30C	9		1 | 5.33 326663 | 5.77 592888 |

RC 5/5/11

Maintenance / Comments IS delivery problems cc0504y SU53F2

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/04MAY2011.b

ARI Job No.: CC05 Method: sim042611.m Instrument: nt7.i Date: 04-MAY-2011

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1045	cc0504b.d	CC0504	CC0504	1	NO MANUAL INTEGRATION
1121	lcs0504x.d	LCS0504	LCS0504	1	NO MANUAL INTEGRATION
1147	lcs0504y.d	LCS0504	LCS0504	1	NO MANUAL INTEGRATION
1213	mb0504.d	MB0504	MB0504	1	NO MANUAL INTEGRATION
1403	su21b2.d	SU21B	MW11-04271	1	NO MANUAL INTEGRATION
1429	su21e2.d	SU21E	MW08-04271	1	NO MANUAL INTEGRATION
1455	su53a2.d	SU53A	MW5042811	1	NO MANUAL INTEGRATION
1609	su53f3.d	SU53F	MW16042811	1	NO MANUAL INTEGRATION
1635	su73a.d	SU73A	MW-01-0429	1	NO MANUAL INTEGRATION
1701	su73b.d	SU73B	MW-01-0429	1	NO MANUAL INTEGRATION
1312	su73c.d	SU73C	TB-042911	1	NO MANUAL INTEGRATION
1726	su74a.d	SU74A	B312-04291	1	NO MANUAL INTEGRATION
1752	su74b.d	SU74B	B310-04291	1	NO MANUAL INTEGRATION
1818	su74c.d	SU74C	B311-04291	1	NO MANUAL INTEGRATION

Q-FLAG SUMMARY FOR DATABATCH - /chem1/nt7.i/04MAY2011.b

Instrument: nt7.i Date: 04-MAY-2011 Method: sim042611.m

INITIAL CAL: 26-APR-2011

Compound	%RSD or R^2
NO Q-FLAGS	

CONTINUING CAL: 04-MAY-2011

Compound	%D
NO Q-FLAGS	

PC 5/5/11

Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/04MAY2011.b/lcs0504x.d
Lab Smp Id: LCS0504 Client Smp ID: LCS0504
Inj Date : 04-MAY-2011 11:21
Operator : PC Inst ID: nt7.i
Smp Info : LCS0504,10,10,0,,
Misc Info : 11-
Comment :
Method : /chem1/nt7.i/04MAY2011.b/sim042611.m
Meth Date : 05-May-2011 11:14 paul Quant Type: ISTD
Cal Date : 26-APR-2011 15:00 Cal File: 0426019.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	1.551	1.551	(0.291)	332422	1149.49	1149.5
	2 1,1-Dichloroethene	96	2.504	2.510	(0.470)	261593	1136.88	1136.9
	175 Trans-1,2-Dichloroethene	96	3.283	3.290	(0.617)	268441	1148.32	1148.3
	3 cis-1,2-dichloroethene	96	4.438	4.439	(0.834)	269691	1080.62	1080.6
	6 Benzene	78	5.211	5.212	(0.905)	1241865	1093.39	1093.4
*	4 Pentafluorobenzene	168	5.325	5.326	(1.000)	262777	1000.00	
$	5 d4-1,2-Dichloroethane	65	5.334	5.335	(1.002)	207791	877.485	877.49
	176 1,2-Dichloroethane	62	5.381	5.383	(1.011)	438718	1172.18	1172.2
	8 Trichloroethene	130	5.721	5.720	(0.994)	230303	1183.99	1184.0(Q)
*	7 1,4-Difluorobenzene	114	5.756	5.754	(1.000)	496109	1000.00	
$	9 d8-Toluene	98	6.914	6.913	(1.201)	629175	995.528	995.53
	10 Tetrachloroethene	166	7.270	7.270	(1.263)	173947	1158.90	1158.9
	11 1,1,2,2-Tetrachloroethane	83	9.457	9.457	(1.643)	206828	1151.04	1151.0

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt7.i
Lab File ID: lcs0504x.d
Lab Smp Id: LCS0504
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: /chem1/nt7.i/04MAY2011.b/sim042611.m
Misc Info: 11-

Calibration Date: 04-MAY-2011
Calibration Time: 10:45
Client Smp ID: LCS0504
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	363407	181704	726814	262777	-27.69
7 1,4-Difluorobenze	667797	333898	1335594	496109	-25.71

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.33	4.83	5.83	5.32	-0.02
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: 04MAY2011
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: LCS0504 Client Smp ID: LCS0504
Level: LOW Operator: PC
Data Type: MS DATA SampleType: LCS
SpikeList File: special.spk Quant Type: ISTD
Sublist File: sim12dca.sub
Method File: /chem1/nt7.i/04MAY2011.b/sim042611.m
Misc Info: 11-

	SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
1	Vinyl Chloride	1000.0	1149.5	114.95	76-120
176	1,2-Dichloroethane	1000.0	1172.2	117.22	80-128
175	Trans-1,2-Dichloro	1000.0	1148.3	114.83	80-120
2	1,1-Dichloroethene	1000.0	1136.9	113.69	80-120
3	cis-1,2-dichloroet	1000.0	1080.6	108.06	80-120
6	Benzene	1000.0	1093.4	109.34	80-120
8	Trichloroethene	1000.0	1184.0	118.40	80-120
10	Tetrachloroethene	1000.0	1158.9	115.89	80-122
11	1,1,2,2-Tetrachlor	1000.0	1151.0	115.10	80-128

	SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 5	d4-1,2-Dichloroeth	1000.0	877.49	87.75	80-126
$ 9	d8-Toluene	1000.0	995.53	99.55	80-120

Data File: /chem1/nt7.i/04MAY2011.b/lcs0504x.d

Page 5

Date : 04-MAY-2011 11:21

Client ID: LCS0504

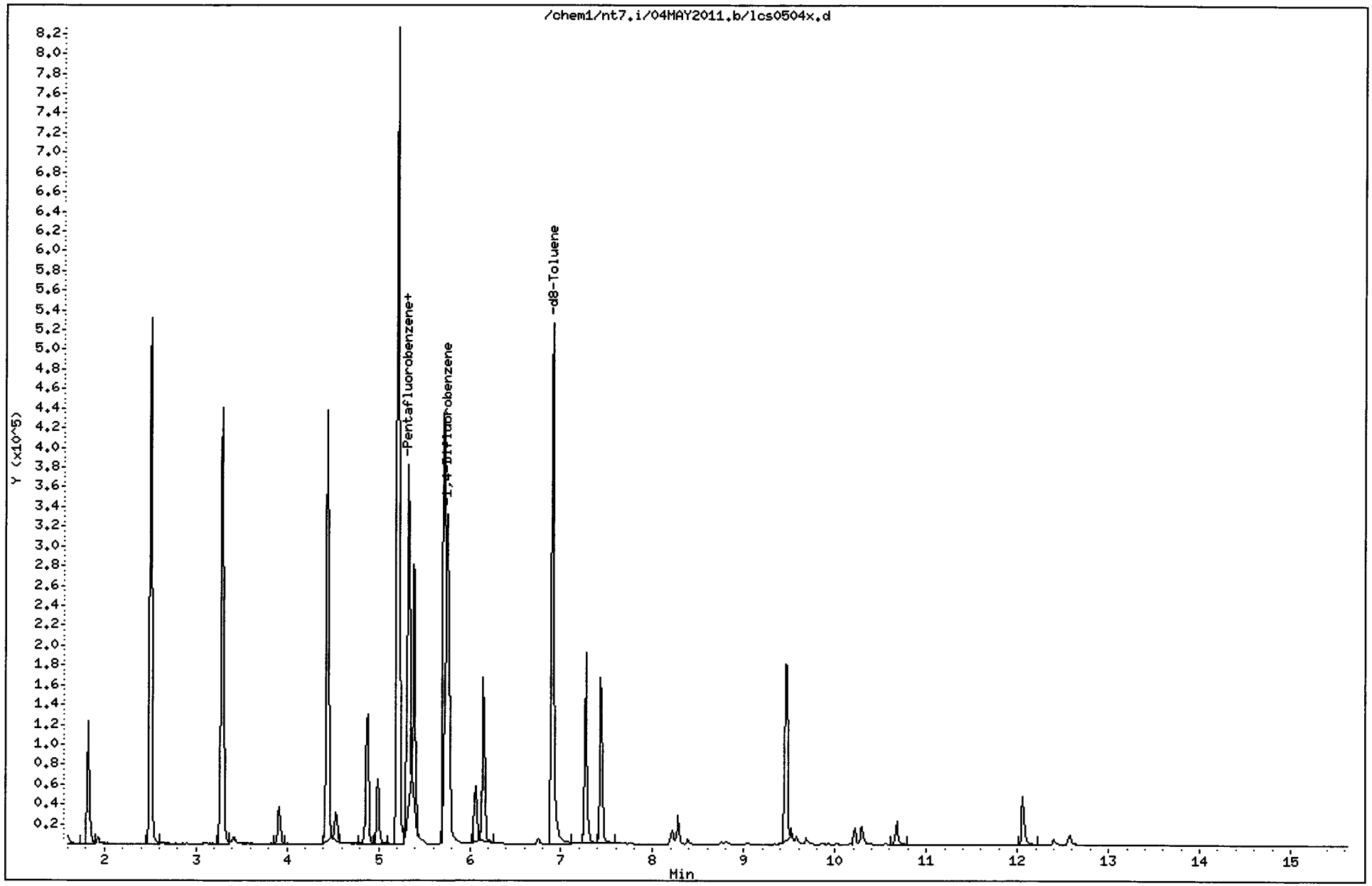
Instrument: nt7.i

Sample Info: LCS0504,10,10,0,,

Operator: PC

Column phase: RTXVMS

Column diameter: 0.18



ST98 00457

CO-ELUTION SUMMARY FOR FILE - lcs0504x.d

Lab ID: LCS0504, Method: sim042611.m, Instrument: nt7.i, Date: 04-MAY-2011

RT	CO-ELUTION COMPOUNDS

PC 5/5/11

Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/04MAY2011.b/lcs0504y.d
Lab Smp Id: LCS0504 Client Smp ID: LCS0504
Inj Date : 04-MAY-2011 11:47
Operator : PC Inst ID: nt7.i
Smp Info : LCS0504,10,10,0,,
Misc Info : 11-
Comment :
Method : /chem1/nt7.i/04MAY2011.b/sim042611.m
Meth Date : 05-May-2011 11:14 paul Quant Type: ISTD
Cal Date : 26-APR-2011 15:00 Cal File: 0426019.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

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/L)	CONCENTRATIONS FINAL (ug/L)
	1	Vinyl Chloride	62	1.552	1.551	(0.291)	316510	865.810	865.81
	2	1,1-Dichloroethene	96	2.510	2.510	(0.471)	255379	878.006	878.01
	175	Trans-1,2-Dichloroethene	96	3.289	3.290	(0.618)	262022	886.696	886.70
	3	cis-1,2-dichloroethene	96	4.439	4.439	(0.834)	260996	827.302	827.30
	6	Benzene	78	5.211	5.212	(0.906)	1206672	858.644	858.64
*	4	Pentafluorobenzene	168	5.325	5.326	(1.000)	332174	1000.00	
$	5	d4-1,2-Dichloroethane	65	5.335	5.335	(1.002)	253719	847.598	847.60
	176	1,2-Dichloroethane	62	5.382	5.383	(1.011)	423111	894.303	894.30
	8	Trichloroethene	130	5.720	5.720	(0.994)	227956	947.163	947.16(Q)
*	7	1,4-Difluorobenzene	114	5.754	5.754	(1.000)	613837	1000.00	
$	9	d8-Toluene	98	6.915	6.913	(1.202)	769804	984.434	984.43
	10	Tetrachloroethene	166	7.271	7.270	(1.264)	175519	945.096	945.10
	11	1,1,2,2-Tetrachloroethane	83	9.458	9.457	(1.644)	201752	907.447	907.45

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt7.i
Lab File ID: lcs0504y.d
Lab Smp Id: LCS0504
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: /chem1/nt7.i/04MAY2011.b/sim042611.m
Misc Info: 11-

Calibration Date: 04-MAY-2011
Calibration Time: 10:45
Client Smp ID: LCS0504
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	363407	181704	726814	332174	-8.59
7 1,4-Difluorobenze	667797	333898	1335594	613837	-8.08

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.33	4.83	5.83	5.33	-0.01
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.

Analytical Resources, Inc.

RECOVERY REPORT

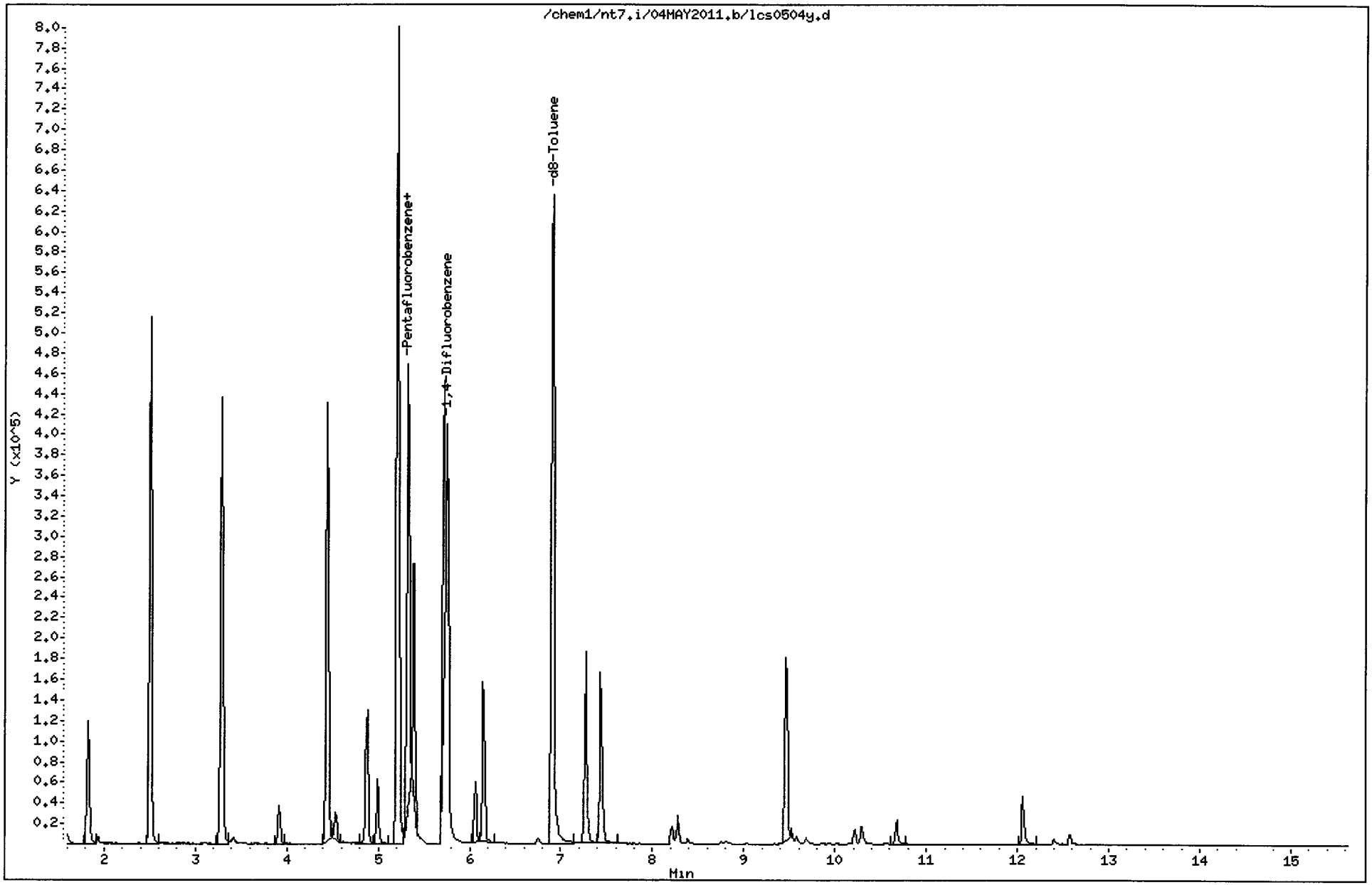
Client Name: Client SDG: 04MAY2011
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: LCS0504 Client Smp ID: LCS0504
Level: LOW Operator: PC
Data Type: MS DATA SampleType: LCS
SpikeList File: special.spk Quant Type: ISTD
Sublist File: sim12dca.sub
Method File: /chem1/nt7.i/04MAY2011.b/sim042611.m
Misc Info: 11-

	SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
1	Vinyl Chloride	1000.0	865.81	86.58	76-120
176	1,2-Dichloroethane	1000.0	894.30	89.43	80-128
175	Trans-1,2-Dichloro	1000.0	886.70	88.67	80-120
2	1,1-Dichloroethene	1000.0	878.01	87.80	80-120
3	cis-1,2-dichloroet	1000.0	827.30	82.73	80-120
6	Benzene	1000.0	858.64	85.86	80-120
8	Trichloroethene	1000.0	947.16	94.72	80-120
10	Tetrachloroethene	1000.0	945.10	94.51	80-122
11	1,1,2,2-Tetrachlor	1000.0	907.45	90.74	80-128

	SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 5	d4-1,2-Dichloroeth	1000.0	847.60	84.76	80-126
$ 9	d8-Toluene	1000.0	984.43	98.44	80-120

Data File: /chem1/nt7.i/04MAY2011.b/lcs0504y.d
Date : 04-MAY-2011 11:47
Client ID: LCS0504
Sample Info: LCS0504,10,10,0,,
Column phase: RTXVMS

Instrument: nt7.i
Operator: PC
Column diameter: 0.18



CO-ELUTION SUMMARY FOR FILE - lcs0504y.d

Lab ID: LCS0504, Method: sim042611.m, Instrument: nt7.i, Date: 04-MAY-2011

RT	CO-ELUTION COMPOUNDS

PC 5/5/11

Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/04MAY2011.b/mb0504.d
Lab Smp Id: MB0504 Client Smp ID: MB0504
Inj Date : 04-MAY-2011 12:13
Operator : PC Inst ID: nt7.i
Smp Info : MB0504,10,10,0,,
Misc Info : 11-
Comment :
Method : /chem1/nt7.i/04MAY2011.b/sim042611.m
Meth Date : 05-May-2011 11:15 paul Quant Type: ISTD
Cal Date : 26-APR-2011 15:00 Cal File: 0426019.d
Als bottle: 1 QC Sample: BLANK
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	Compound Not Detected.					
	2 1,1-Dichloroethene	96	Compound Not Detected.					
	175 Trans-1,2-Dichloroethene	96	Compound Not Detected.					
	3 cis-1,2-dichloroethene	96	Compound Not Detected.					
	6 Benzene	78	Compound Not Detected.					
*	4 Pentafluorobenzene	168	5.325	5.326	(1.000)	288519	1000.00	
$	5 d4-1,2-Dichloroethane	65	5.334	5.335	(1.002)	270071	1038.73	1038.7
	176 1,2-Dichloroethane	62	Compound Not Detected.					
	8 Trichloroethene	130	Compound Not Detected.					
*	7 1,4-Difluorobenzene	114	5.755	5.754	(1.000)	540873	1000.00	
$	9 d8-Toluene	98	6.913	6.913	(1.201)	671164	974.075	974.08
	10 Tetrachloroethene	166	Compound Not Detected.					
	11 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt7.i
Lab File ID: mb0504.d
Lab Smp Id: MB0504
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: /chem1/nt7.i/04MAY2011.b/sim042611.m
Misc Info: 11-

Calibration Date: 04-MAY-2011
Calibration Time: 10:45
Client Smp ID: MB0504
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	363407	181704	726814	288519	-20.61
7 1,4-Difluorobenze	667797	333898	1335594	540873	-19.01

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.33	4.83	5.83	5.32	-0.02
7 1,4-Difluorobenze	5.75	5.25	6.25	5.76	0.01

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

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Client SDG: 04MAY2011
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: MB0504 Client Smp ID: MB0504
Level: LOW Operator: PC
Data Type: MS DATA SampleType: BLANK
SpikeList File: special.spk Quant Type: ISTD
Sublist File: sim12dca.sub
Method File: /chem1/nt7.i/04MAY2011.b/sim042611.m
Misc Info: 11-

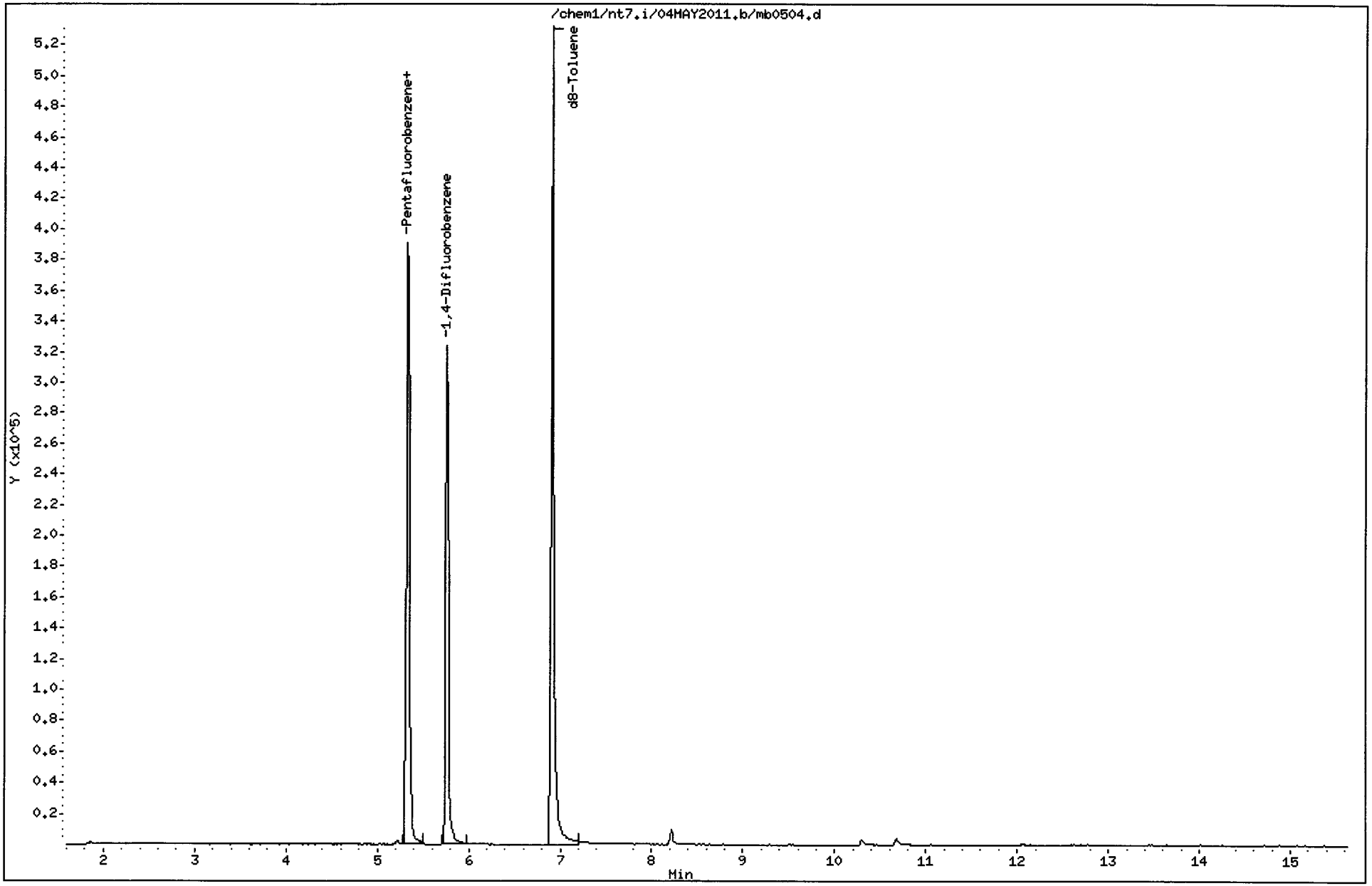
SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 5 d4-1,2-Dichloroeth	1000.0	1038.7	103.87	80-126
$ 9 d8-Toluene	1000.0	974.08	97.41	80-120

Data File: /chem1/nt7.i/04MAY2011.b/mb0504.d
Date : 04-MAY-2011 12:13
Client ID: MB0504
Sample Info: MB0504,10,10,0,,

Instrument: nt7.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS



CO-ELUTION SUMMARY FOR FILE - mb0504.d

Lab ID: MB0504, Method: sim042611.m, Instrument: nt7.i, Date: 04-MAY-2011

RT	CO-ELUTION COMPOUNDS

PC 5/5/11

Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/04MAY2011.b/su21b2.d
Lab Smp Id: SU21B Client Smp ID: MW11-042711
Inj Date : 04-MAY-2011 14:03
Operator : PC Inst ID: nt7.i
Smp Info : SU21B,10,10,0,,
Misc Info : 11-9508
Comment :
Method : /chem1/nt7.i/04MAY2011.b/sim042611.m
Meth Date : 05-May-2011 11:15 paul Quant Type: ISTD
Cal Date : 26-APR-2011 15:00 Cal File: 0426019.d
Als bottle: 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	CONCENTRATIONS ON-COLUMN (ng/L)	FINAL (ug/L)
	1 Vinyl Chloride	62	Compound Not Detected.					
	2 1,1-Dichloroethene	96	Compound Not Detected.					
	175 Trans-1,2-Dichloroethene	96	Compound Not Detected.					
	3 cis-1,2-dichloroethene	96	Compound Not Detected.					
	6 Benzene	78	Compound Not Detected.					
*	4 Pentafluorobenzene	168	5.325	5.326	(1.000)	314236	1000.00	
$	5 d4-1,2-Dichloroethane	65	5.335	5.335	(1.002)	291636	1029.88	1029.9
	176 1,2-Dichloroethane	62	Compound Not Detected.					
	8 Trichloroethene	130	Compound Not Detected.					
*	7 1,4-Difluorobenzene	114	5.766	5.754	(1.000)	566832	1000.00	
$	9 d8-Toluene	98	6.914	6.913	(1.199)	710697	984.212	984.21
	10 Tetrachloroethene	166	Compound Not Detected.					
	11 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt7.i
Lab File ID: su21b2.d
Lab Smp Id: SU21B
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: /chem1/nt7.i/04MAY2011.b/sim042611.m
Misc Info: 11-9508

Calibration Date: 04-MAY-2011
Calibration Time: 10:45
Client Smp ID: MW11-042711
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	363407	181704	726814	314236	-13.53
7 1,4-Difluorobenze	667797	333898	1335594	566832	-15.12

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.33	4.83	5.83	5.33	-0.01
7 1,4-Difluorobenze	5.75	5.25	6.25	5.77	0.20

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

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd Snider
Sample Matrix: LIQUID
Lab Smp Id: SU21B
Level: LOW
Data Type: MS DATA
SpikeList File: special.spk
Sublist File: sim12dca.sub
Method File: /chem1/nt7.i/04MAY2011.b/sim042611.m
Misc Info: 11-9508

Client SDG: SU21
Fraction: VOA
Client Smp ID: MW11-042711
Operator: PC
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 5 d4-1,2-Dichloroeth	1000.0	1029.9	102.99	80-126
$ 9 d8-Toluene	1000.0	984.21	98.42	80-120

Data File: /chem1/nt7.i/04MAY2011.b/su21b2.d

Date : 04-MAY-2011 14:03

Client ID: MW11-042711

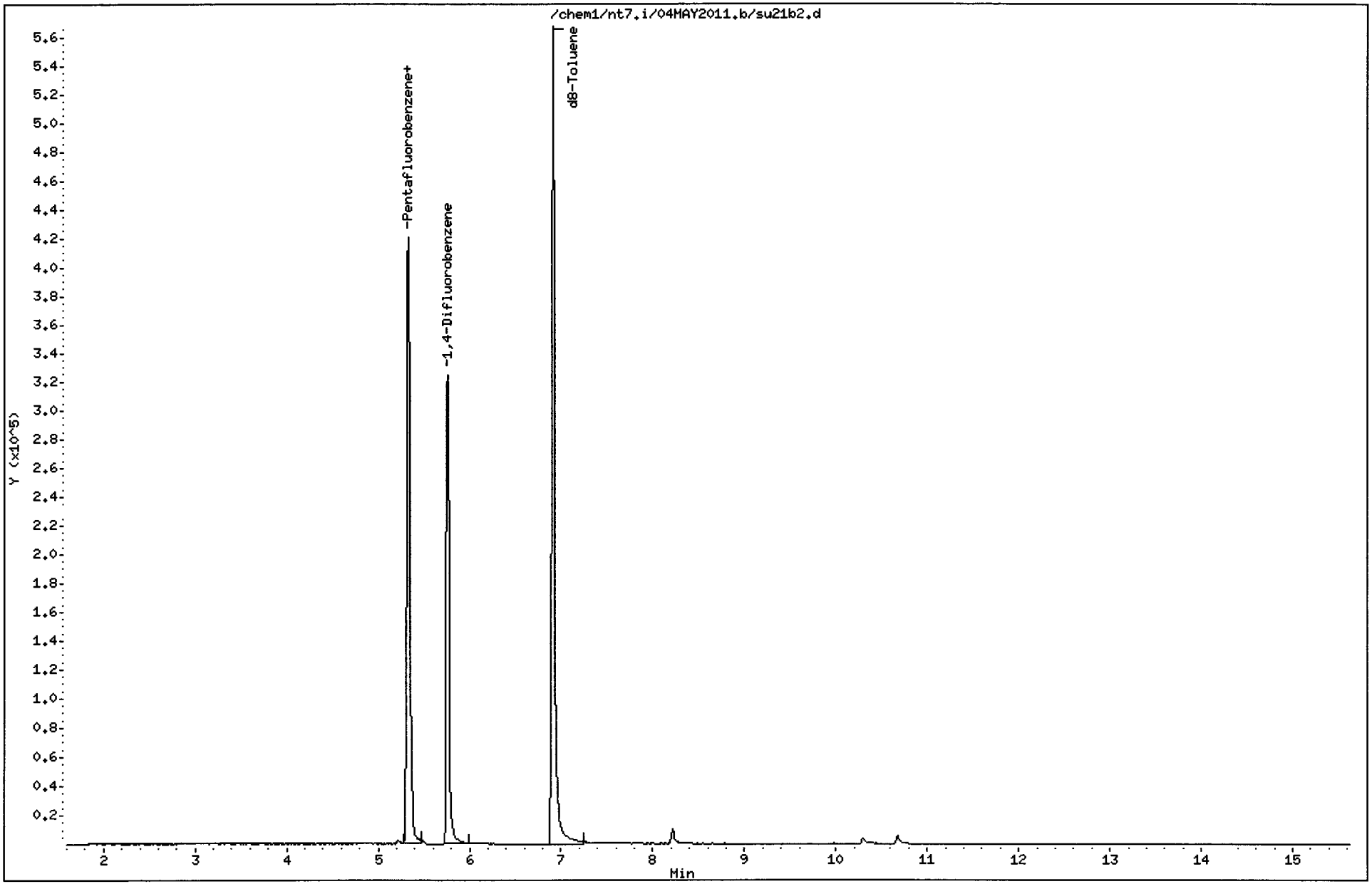
Sample Info: SU21B,10,10,0,,

Column phase: RTXVMS

Instrument: nt7.i

Operator: PC

Column diameter: 0.18



CO-ELUTION SUMMARY FOR FILE - su21b2.d

Lab ID: SU21B, Method: sim042611.m, Instrument: nt7.i, Date: 04-MAY-2011

RT	CO-ELUTION COMPOUNDS

PC 5/5/11

Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/04MAY2011.b/su21e2.d
Lab Smp Id: SU21E Client Smp ID: MW08-042711
Inj Date : 04-MAY-2011 14:29
Operator : PC Inst ID: nt7.i
Smp Info : SU21E,10,10,0,,
Misc Info : 11-9511
Comment :
Method : /chem1/nt7.i/04MAY2011.b/sim042611.m
Meth Date : 05-May-2011 11:15 paul Quant Type: ISTD
Cal Date : 26-APR-2011 15:00 Cal File: 0426019.d
Als bottle: 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					CONCENTRATIONS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/L)	FINAL (ug/L)
	1 Vinyl Chloride	62	Compound Not Detected.					
	2 1,1-Dichloroethene	96	Compound Not Detected.					
	175 Trans-1,2-Dichloroethene	96	Compound Not Detected.					
	3 cis-1,2-dichloroethene	96	Compound Not Detected.					
	6 Benzene	78	Compound Not Detected.					
*	4 Pentafluorobenzene	168	5.324	5.326	(1.000)	306214	1000.00	
$	5 d4-1,2-Dichloroethane	65	5.334	5.335	(1.002)	277895	1007.06	1007.1
	176 1,2-Dichloroethane	62	Compound Not Detected.					
	8 Trichloroethene	130	Compound Not Detected.					
*	7 1,4-Difluorobenzene	114	5.767	5.754	(1.000)	555326	1000.00	
$	9 d8-Toluene	98	6.913	6.913	(1.199)	699833	989.249	989.25
	10 Tetrachloroethene	166	Compound Not Detected.					
	11 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt7.i
Lab File ID: su21e2.d
Lab Smp Id: SU21E
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: /chem1/nt7.i/04MAY2011.b/sim042611.m
Misc Info: 11-9511

Calibration Date: 04-MAY-2011
Calibration Time: 10:45
Client Smp ID: MW08-042711
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	363407	181704	726814	306214	-15.74
7 1,4-Difluorobenze	667797	333898	1335594	555326	-16.84

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.33	4.83	5.83	5.32	-0.03
7 1,4-Difluorobenze	5.75	5.25	6.25	5.77	0.22

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

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd Snider
Sample Matrix: LIQUID
Lab Smp Id: SU21E
Level: LOW
Data Type: MS DATA
SpikeList File: special.spk
Sublist File: sim12dca.sub
Method File: /chem1/nt7.i/04MAY2011.b/sim042611.m
Misc Info: 11-9511

Client SDG: SU21
Fraction: VOA
Client Smp ID: MW08-042711
Operator: PC
SampleType: SAMPLE
Quant Type: ISTD

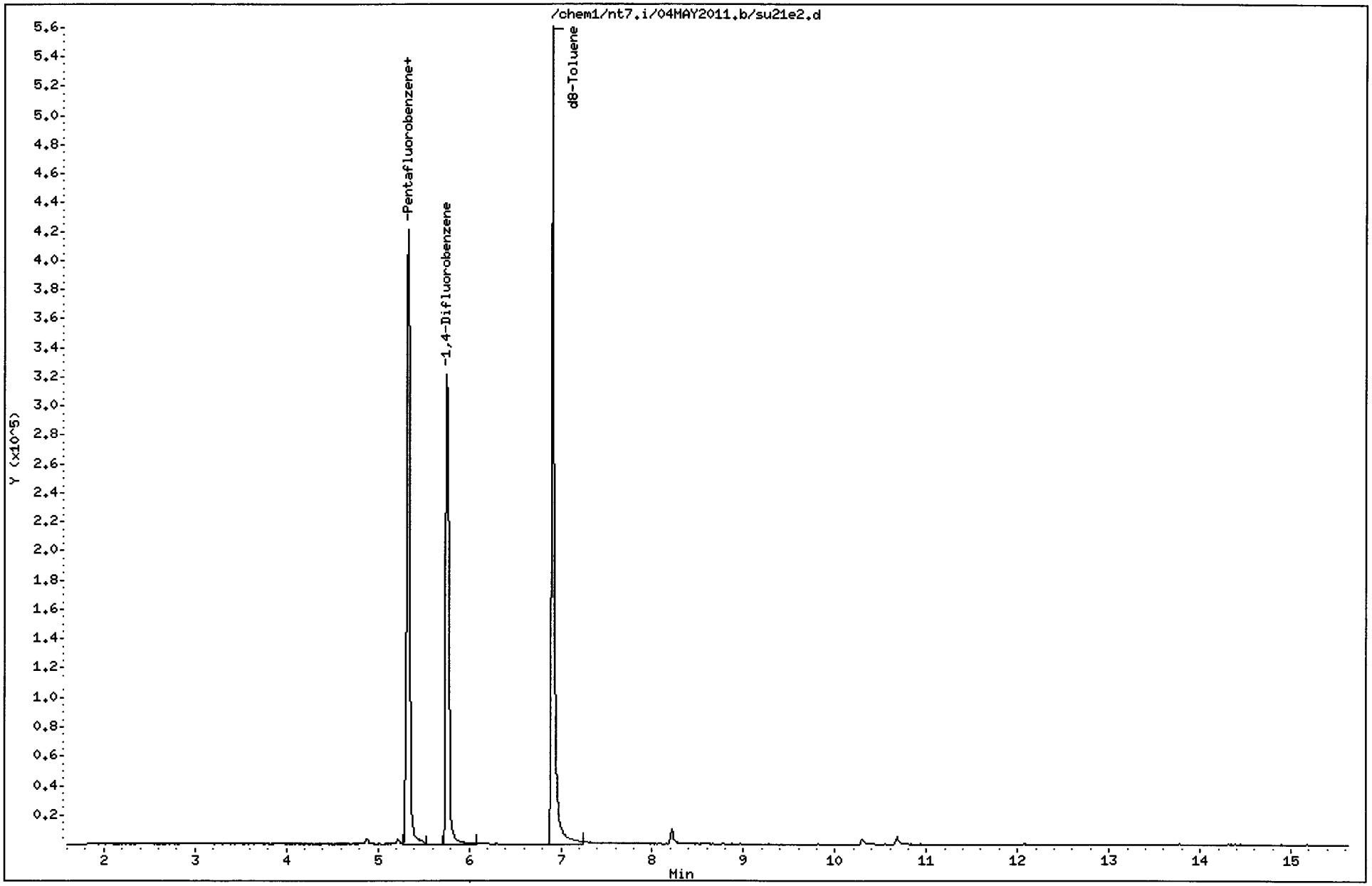
SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 5 d4-1,2-Dichloroeth	1000.0	1007.1	100.71	80-126
$ 9 d8-Toluene	1000.0	989.25	98.92	80-120

Data File: /chem1/nt7.i/04MAY2011.b/su21e2.d
Date : 04-MAY-2011 14:29
Client ID: MW08-042711
Sample Info: SU21E,10,10,0,,

Instrument: nt7.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS



CO-ELUTION SUMMARY FOR FILE - su21e2.d

Lab ID: SU21E, Method: sim042611.m, Instrument: nt7.i, Date: 04-MAY-2011

RT	CO-ELUTION COMPOUNDS

SIM PAH Raw Data
Extraction Bench Sheets and Notes

ARI Job ID: ST98, SU21

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Benchsheet

SIM PNA-Water
Separatory Funnel (3510C) (SOP # 3311S)
Low Level (0.01ppb)

Preparation Test SIM PNA # 6
ARI Job No(s) SU14, ST98, SU21

Batch set up by: JH

Bottle #	Extraction Requirements	Verify Client ID	Volume Extracted	KD Low lvl Exchange to Hexane (X2)	Turbo Vap 1 2 3	(REQ) Silica Gel Clean (1:1) (Y) N	Turbo Vap 1 2 3	Final Effective Volume	Volume to Lab	Comments
	SU14 MBW	Date 5-2-11	500mL					0.5mL	0.5mL	
	SBW	↓	↓					↓	↓	
	SBW Dup.	↓	↓					↓	↓	
	QLS	↓	↓					↓	↓	
4.12.18	A	verified	5/4/12							
↓	AMS									
	AMSD									
2	B									
2	C									
7	D									
3	E									
14	ST98 A									
13	B									
14	C									
25, 27 34	D									
	DMS									
	DMSD									
11	SU21 A									
AC 5-2-11 11 17	B									
11	C									
AC 5-2-11 13 11	D									
13	E									
	F									
Analyst/Date:	PD 5-2-11			YC/RP 5/3/11	AC 5-12-11			AC 5-12-11		

AC 5-2-11

Standard	Standard ID	Volume	Expiration Date	Analyst	Witness
Surrogate	I	100µL	10/05/11	AC	PD
Spike	18	100µL	1/04/12	AC	PD
QLS Spike	2	50µL	1/04/12	AC	PD
Extraction Time: 16:40					

SPECIAL INSTRUCTIONS: 1. Rinse all glassware with Low Level DCM. 2. Extract 3X with 30mL Low Level DCM.

3. KD (no drying column) to ~8mL at 80°. 4. Exchange (2 X with 10mL) to Low Level Hexane at 100°. 5. TurboVap.

6. Silica Clean-up=REQUIRED. 6. TurboVap. 7. Vial in Low Level DCM. 8. Post screen extracts with any color.
A. Archive (Y) N
ST98 &
SU21 only

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

ARI Job No.: ST98/SU21 Client ID: Floyd Snider

Parameter: SIM PNA low level Client Project: Lora Lake 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 A-C, SU21 A-F.	PD 5-2-11
☑ Turbid/Color= ST98 D is tan not turbid.	PD 5-2-11
☐ Particulates=	
☑ Emulsions= ST98 D it broke up as it drained.	PD 5-2-11
☐ Other (Details)=	
☑ Other Notes/Comments=	
KD Station Recycled turbo tubes for Job# ST98/SU21	YL 5/10/11

3056F

Revision 007
02/25/10

SIM PAH Raw Data
Initial Calibration

ARI Job ID: ST98, SU21

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC/MS SVOA Analyst Notes / Corrective Action Log

ARI Project ID: CurvE2 Client ID: _____

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

Parameter(s): Low sim PNA's

Instrument: NT-4 NT-6 NT-8 NT-10 (NT11) NT12

Curve Date: 4.30.11 Analysis Start Date: _____

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

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

- 6 point curve, All targets <20% RSD
- fluorene at 123% in ICV, Rest within ±20%

Additional Details on Reverse: Yes / No

Analyst: VB **Date:** 4.30.11

Reviewer: _____ **Date:** 5/2/11

Analytical Resources Inc.: Organics Instrument Log

NT-11 Serial No.:GC=US10140004, MS=US10481502

Date: 4.30.11 Analysis: LOW SIM PNA Analyst: VT

GC Program: LOWSIM Column No: 195516 Column Type: ZB-5MS

Instrument Tune (.U or .CT.): 110430.U EM Voltage: 1494

Calibration File: DF0430 Curve Date: 4.30.11

IS/SS	Ical/Ccal	LCS/ICV
1754-1	1818-2	1831-1

INTERNAL STANDARD SUMMARY FOR DATABATCH - /chem3/nt11.i/20110430.b

	Time	Filename	LabID	ClientId	DF						
1	0952	df0430.d	DF0430		1	NO ISTDS FOUND					
2	1012	ic0430a.d	SIM250		1	6.27	129326	8.47	70573	10.30	113741	13.63	70763	15.61	54896
3	1037	ic0430b.d	SIM1000		1	6.27	133908	8.47	72587	10 30	114760	13.63	78082	15.61	58430
4	1102	ic0430c.d	SIM10		1	6.27	126410	8.47	67004	10.30	107827	13.63	60309	15.61	50334
5	1126	ic0430d.d	SIM500		1	6.27	127404	8.47	72156	10.30	112214	13.63	73029	15 61	55910
6	1151	ic0430e.d	SIM50		1	6 27	128015	8.47	70175	10.30	110629	13.63	63954	15.61	50988
7	1215	ic0430f.d	SIM100		1	6.27	126437	8.47	68901	10.30	107249	13.63	64366	15.61	52142
8	1239	icv0430.d	ICV-250		1	6 27	124975	8.45	70122	10.30	110829	13 63	69995	15.61	54585
9	1303	st19mb.d	ST19MBW1	ST19MBW1	1	6.27	124744	8.47	68608	10.30	113177	13.63	68248	15.61	52447
10	1327	st19sb.d	ST19LCSW1	ST19LCSW1	1	6.27	128882	8.47	75574	10.30	126815	13.63	79459	15.61	60316
11	1351	st19sbd.d	ST19LCSDW1	ST19LCSDW1	1	6.27	131281	8 47	77069	10.30	122701	13.63	75764	15 61	57945
12	1416	st19qls1.d	ST19QLS1		1	6.27	125046	8.47	71997	10.30	122271	13.63	75655	15.61	57284
13	1440	st19a.d	ST19A	NBF-MH178-04	1	6.27	116769	8.47	64407	10.30	103429	13.63	59777	15.61	54631
14	1506	st39a.d	ST39A	KC2062-04211	1	6.27	121438	8.47	67979	10.30	109728	13.63	59371	15.61	50325
15	1531	st39b.d	ST39B	PS2220-04211	1	6.27	121641	8 45	66659	10.30	108292	13.63	60212	15.61	49837
16	1555	st39c.d	ST39C	NF2095-04211	1	6.27	117392	8.47	66158	10.30	106052	13.63	61143	15 61	49446
17	1619	st39d d	ST39D	SQ1-042111-W	1	6 27	119539	8.45	65648	10.30	105834	13.63	61228	15 61	49006
18	1643	st39e d	ST39E	SQ3-042111-W	1	6 27	120708	8 47	66746	10.30	109122	13.63	64030	15.61	52334
19	1707	st39f.d	ST39F	SQ4-042111-W	1	6.27	113784	8.47	62955	10.30	102566	13.63	60497	15 61	49543

Maintenance Verification (Identify ICal or CCal that demonstrates the instrument is in control): IC0430A

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

VT 5.3.11

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-APR-2011 10:12
End Cal Date : 30-APR-2011 12:15
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem3/nt11.i/20110430.b/lowsim.m
Cal Date : 30-Apr-2011 13:04 van
Curve Type : Average

Calibration File Names:
Level 1: /chem3/nt11.i/20110430.b/ic0430c.d
Level 2: /chem3/nt11.i/20110430.b/ic0430e.d
Level 3: /chem3/nt11.i/20110430.b/ic0430f.d
Level 4: /chem3/nt11.i/20110430.b/ic0430a.d
Level 5: /chem3/nt11.i/20110430.b/ic0430d.d
Level 6: /chem3/nt11.i/20110430.b/ic0430b.d

Compound	10.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	___ RRF	% RSD
2 Phenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
3 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
5 Naphthalene	1.08109	1.02454	1.03280	0.97197	0.89881	0.74598	0.95920	12.667
7 2-Methylnaphthalene	0.59062	0.58399	0.61060	0.60292	0.58723	0.52043	0.58263	5.508
8 1-Methylnaphthalene	0.58524	0.57834	0.61003	0.59640	0.58546	0.51405	0.57825	5.768
9 Dimethylphthalate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
10 Acenaphthylene	1.66826	1.55725	1.66572	1.59329	1.53004	1.34692	1.56025	7 601
12 Acenaphthene	1.03009	0.96245	1.04599	1.01243	0.95111	0.89614	0.98304	5.761
13 Diethylphthalate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
14 Dibenzofuran	1.55513	1.43789	1.54529	1.50906	1.39255	1.24393	1.44731	8.146
15 Fluorene	1.07158	0.99893	1.06924	1.05521	0.99528	0.94061	1.02181	5 116
17 Pentachlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
19 Phenanthrene	1.11716	1.03908	1.06574	1.01879	0.96695	0.82453	1.00537	10 108
20 Anthracene	0.99919	0.93939	1.01567	0.97270	0.94773	0.83502	0.95162	6.740
21 Di-n-butylphthalate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
22 Carbazole	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
24 Fluoranthene	1.07209	0.94594	1.05030	1.00918	0.99300	0.85825	0.98812	7.843
25 Pyrene	1.94697	1.72074	1.83491	1.73390	1.55148	1.29409	1.68035	13.708
26 Butylbenzylphthalate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
27 Bis(2-Ethylhexyl)phthalate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
28 Benzo(a)anthracene	1.69958	1.39488	1.49874	1.37225	1.30437	1.13458	1.40073	13.541

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-APR-2011 10:12
End Cal Date : 30-APR-2011 12:15
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem3/nt11.i/20110430.b/lowsim.m
Cal Date : 30-Apr-2011 13:04 van
Curve Type : Average

	Compound	10.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	___ RRF	.. % RSD
	30 Chrysene	1.67604	1.43397	1.52077	1.39083	1.29800	1.12978	1.40823	13.286
	31 Di-n-octylphthalate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	43 Total Benzofluoranthenes	1.72587	1.60324	1.70619	1.64091	1.57070	1.44648	1.61557	6.299
	34 Benzo(a)pyrene	1.50395	1.38817	1.47919	1.46046	1.41911	1.35740	1.43471	3.921
	37 Indeno(1,2,3-cd)pyrene	1.79600	1.69334	1.77473	1.78012	1.70598	1.64018	1.73173	3.545
	38 Dibenzo(a,h)anthracene	1.41813	1.31388	1.37321	1.37195	1.32157	1.29488	1.34894	3.446
	39 Benzo(g,h,i)perylene	1.63905	1.52695	1.59250	1.56849	1.49632	1.43490	1.54303	4.713
$	1 D5-Phenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$	6 2-Methylnaphthalene-d10	0.61403	0.58474	0.60576	0.59572	0.57112	0.51362	0.58083	6.242
$	16 2,4,6-Tribromophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$	23 Fluoranthene-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$	36 Dibenzo(a,h)anthracene-d14	1.35336	1.19848	1.30187	1.27571	1.19560	1.19068	1.25261	5.429

MANUAL INTEGRATION SUMMARY FOR DATABATCH - /chem3/nt11.i/20110430.b

ARI Job No.: DF04 Method: DF8270.m Instrument: nt11.i Date: 30-APR-2011

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0952	df0430.d	DF0430		1	NO MANUAL INTEGRATION
1012	ic0430a.d	SIM250		1	NO MANUAL INTEGRATION
1037	ic0430b.d	SIM1000		1	NO MANUAL INTEGRATION
1102	ic0430c.d	SIM10		1	Total Benzofluoranthenes,
1126	ic0430d.d	SIM500		1	NO MANUAL INTEGRATION
1151	ic0430e.d	SIM50		1	NO MANUAL INTEGRATION
1215	ic0430f.d	SIM100		1	NO MANUAL INTEGRATION
1239	icv0430.d	ICV-250		1	NO MANUAL INTEGRATION

ST9809:98489

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem3/nt11.i/20110430.b/lowsim.m
Batch File: /chem3/nt11.i/20110430.b
Inst ID: nt11.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06
FILENAME:	ic0430a	ic0430b	ic0430c	ic0430d	ic0430e	ic0430f
INJ.DATE:	30-APR-2011	30-APR-2011	30-APR-2011	30-APR-2011	30-APR-2011	30-APR-2011
INJ.TIME:	10:12	10:37	11:02	11:26	11:51	12:15

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
$	1 D5-Phenol	+++++	+++++	+++++	+++++	+++++	+++++	3.150	2.900-3.400	+++++	+++++
	2 Phenol	+++++	+++++	+++++	+++++	+++++	+++++	3.160	2.910-3.410	+++++	+++++
	3 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	6.639	6.389-6.889	+++++	+++++
*	4 Naphthalene-d8	6.273	6.272	6.273	6.273	6.273	6.272	6.272	6.022-6.522	6.273	0.000
	5 Naphthalene	6.296	6.295	6.296	6.296	6.296	6.295	6.295	6.045-6.545	6.296	0.000
$	6 2-Methylnaphthalene-d1	7.101	7.101	7.101	7.101	7.101	7.101	7.101	6.851-7.351	7.101	0.000
	7 2-Methylnaphthalene	7.136	7.135	7.136	7.136	7.136	7.135	7.135	6.885-7.385	7.136	0.000
	8 1-Methylnaphthalene	7.274	7.273	7.274	7.274	7.274	7.273	7.273	7.023-7.523	7.274	0.000
	9 Dimethylphthalate	+++++	+++++	+++++	+++++	+++++	+++++	10.433	10.183-10.683	+++++	+++++
	10 Acenaphthylene	8.265	8.265	8.265	8.265	8.265	8.265	8.265	8.015-8.515	8.265	0.000
*	11 Acenaphthene-d10	8.466	8.466	8.466	8.466	8.466	8.466	8.466	8.216-8.716	8.466	0.000
	12 Acenaphthene	8.493	8.492	8.493	8.493	8.493	8.492	8.492	8.242-8.742	8.493	0.000
	13 Diethylphthalate	+++++	+++++	+++++	+++++	+++++	+++++	11.543	11.293-11.793	+++++	+++++
	14 Dibenzofuran	8.694	8.694	8.694	8.694	8.694	8.694	8.694	8.444-8.944	8.694	0.000
	15 Fluorene	9.123	9.123	9.123	9.123	9.123	9.123	9.123	8.873-9.373	9.123	0.000
$	16 2,4,6-Tribromophenol	+++++	+++++	+++++	+++++	+++++	+++++	12.499	12.249-12.749	+++++	+++++
	17 Pentachlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	13.381	13.131-13.631	+++++	+++++

Reviewer 1 VTB Date: 4.30.11
Reviewer 2 [signature] Date: 5/2/11

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem3/nt11.i/20110430.b/lowsim.m
Batch File: /chem3/nt11.i/20110430.b
Inst ID: nt11.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
*	18 Phenanthrene-d10	10.303	10.302	10.303	10.302	10.303	10.302	10.302	10.052-10.552	10.302	0.000
	19 Phenanthrene	10.329	10.329	10.329	10.329	10.329	10.329	10.329	10.079-10.579	10.329	0.000
	20 Anthracene	10.383	10.383	10.383	10.383	10.383	10.383	10.383	10.133-10.633	10.383	0.000
	21 Di-n-butylphthalate	+++++	+++++	+++++	+++++	+++++	+++++	14.153	13.903-14.403	+++++	+++++
	22 Carbazole	+++++	+++++	+++++	+++++	+++++	+++++	14.533	14.283-14.783	+++++	+++++
$	23 Fluoranthene-d10	+++++	+++++	+++++	+++++	+++++	+++++	14.682	14.432-14.932	+++++	+++++
	24 Fluoranthene	11.831	11.831	11.818	11.818	11.818	11.817	11.817	11.567-12.067	11.822	0.007
	25 Pyrene	12.113	12.112	12.113	12.113	12.113	12.112	12.112	11.862-12.362	12.113	0.000
	26 Butylbenzylphthalate	+++++	+++++	+++++	+++++	+++++	+++++	16.528	16.278-16.778	+++++	+++++
	27 Bis(2-Ethylhexyl)phtha	+++++	+++++	+++++	+++++	+++++	+++++	17.320	17.070-17.570	+++++	+++++
	28 Benzo(a)anthracene	13.601	13.601	13.601	13.601	13.601	13.601	13.601	13.351-13.851	13.601	0.000
*	29 Chrysene-d12	13.628	13.628	13.628	13.628	13.628	13.628	13.628	13.378-13.878	13.628	0.000
	30 Chrysene	13.655	13.655	13.655	13.655	13.655	13.655	13.655	13.405-13.905	13.655	0.000
	31 Di-n-octylphthalate	+++++	+++++	+++++	+++++	+++++	+++++	18.607	18.357-18.857	+++++	+++++
	43 Total Benzofluoranthen	15.042	15.041	15.042	15.042	15.042	15.041	15.041	14.791-15.291	15.042	0.000
	34 Benzo(a)pyrene	15.522	15.512	15.512	15.512	15.512	15.512	15.512	15.262-15.762	15.514	0.004
*	35 Perylene-d12	15.608	15.608	15.609	15.608	15.609	15.608	15.608	15.358-15.858	15.608	0.000
$	36 Dibenzo(a,h)anthracene	17.618	17.618	17.618	17.618	17.618	17.618	17.618	17.368-17.868	17.618	0.000
	37 Indeno(1,2,3-cd)pyrene	17.685	17.685	17.672	17.672	17.672	17.672	17.672	17.422-17.922	17.676	0.007
	38 Dibenzo(a,h)anthracene	17.685	17.685	17.685	17.685	17.685	17.685	17.685	17.435-17.935	17.685	0.000
	39 Benzo(g,h,i)perylene	18.302	18.302	18.289	18.289	18.289	18.289	18.289	18.039-18.539	18.293	0.007

Data File: /chem3/nt11.i/20110430.b/df0430.d

Date : 30-APR-2011 09:52

Client ID:

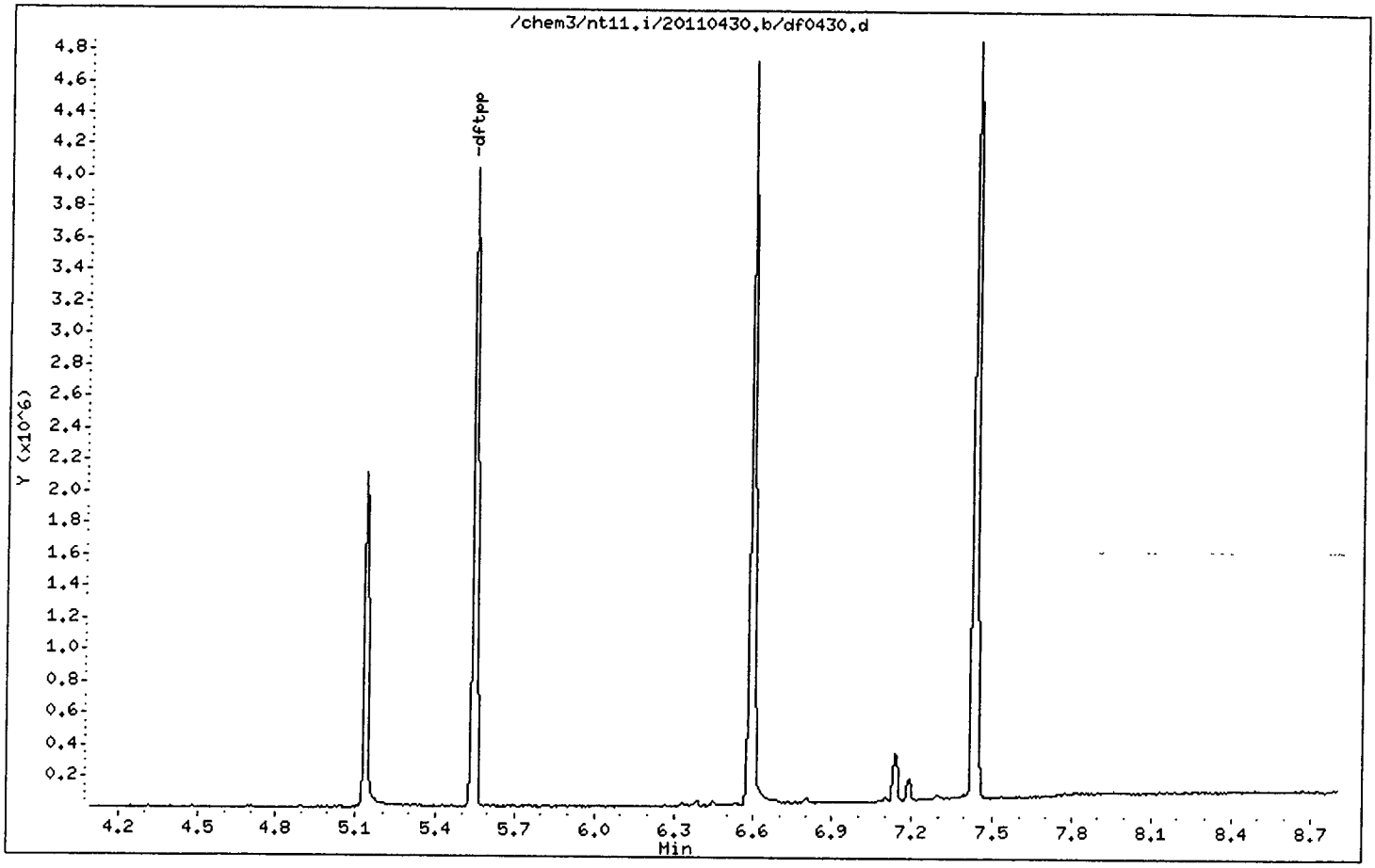
Instrument: nt11.i

Sample Info: DF0430

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



Data File: /chem3/nt11.i/20110430.b/df0430.d

Date : 30-APR-2011 09:52

Client ID:

Instrument: nt11.i

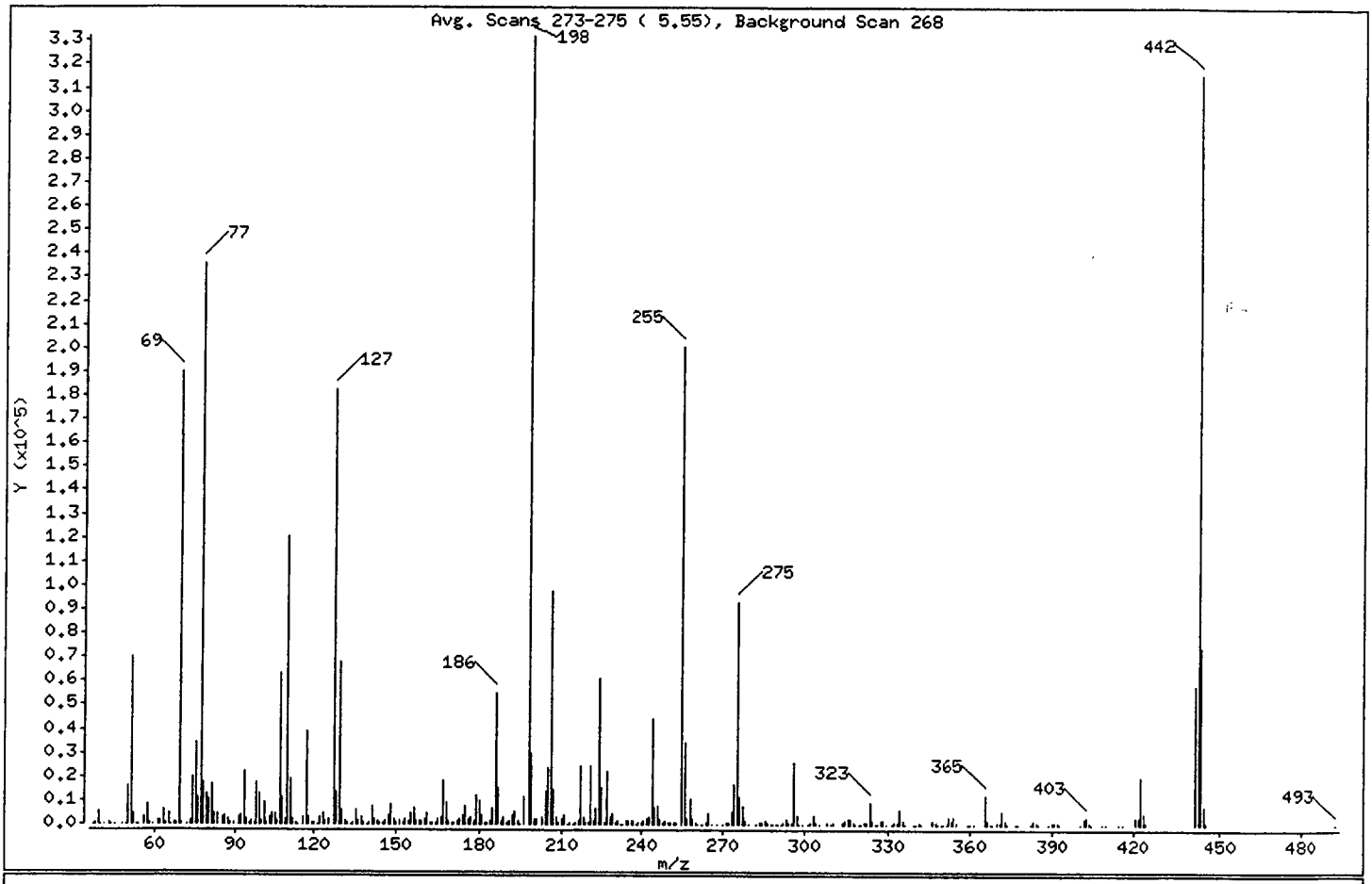
Sample Info: DF0430

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	21.25
68	Less than 2.00% of mass 69	0.25 (0.43)
69	Mass 69 relative abundance	57.16
70	Less than 2.00% of mass 69	0.27 (0.47)
127	10.00 - 80.00% of mass 198	55.04
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	8.88
275	10.00 - 60.00% of mass 198	28.11
365	Greater than 1.00% of mass 198	3.78
441	0.01 - 24.00% of mass 442	17.37 (18.26)
442	50.00 - 200.00% of mass 198	95.11
443	15.00 - 24.00% of mass 442	22.19 (23.33)

Data File: df0430.d

Spectrum: Avg. Scans 273-275 (5.55), Background Scan 268

Location of Maximum: 198.00

Number of points: 335

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	226	131.00	1341	217.00	24216	309.00	280
38.00	835	132.00	698	218.00	3205	310.00	536
39.00	5046	133.00	233	219.00	417	311.00	86
40.00	189	134.00	1101	220.00	403	313.00	550
41.00	215	135.00	5774	221.00	24072	314.00	1493
43.00	451	136.00	1811	222.00	1255	315.00	2626
44.00	75	137.00	2870	223.00	6528	316.00	2216
45.00	200	138.00	633	224.00	60832	317.00	561
48.00	108	139.00	167	225.00	15547	318.00	62
49.00	153	140.00	986	226.00	1036	319.00	53
50.00	15982	141.00	7835	227.00	22208	320.00	94
51.00	70512	142.00	2667	228.00	3156	321.00	1049
52.00	4664	143.00	1773	229.00	4918	322.00	517
53.00	309	144.00	682	230.00	614	323.00	9074
54.00	58	145.00	691	231.00	1627	324.00	1671
56.00	3272	146.00	1289	232.00	267	325.00	147
57.00	8045	147.00	4037	233.00	331	326.00	137
58.00	494	148.00	8630	234.00	1274	327.00	1401
59.00	255	149.00	1938	235.00	1538	328.00	1215
61.00	1629	150.00	733	236.00	1432	329.00	136
62.00	1847	151.00	1420	237.00	1637	331.00	52
63.00	5885	152.00	781	238.00	239	332.00	778
64.00	1049	153.00	2232	239.00	552	333.00	1088
65.00	4902	154.00	1687	240.00	810	334.00	5853
66.00	247	155.00	4616	241.00	1365	335.00	1511
67.00	459	156.00	7053	242.00	2415	336.00	230
68.00	814	157.00	1607	243.00	3055	339.00	212
69.00	189632	158.00	1201	244.00	44256	340.00	127
70.00	899	159.00	1289	245.00	6601	341.00	1142
72.00	223	160.00	2097	246.00	7951	342.00	315
73.00	1624	161.00	4411	247.00	2080	346.00	1365
74.00	19680	162.00	823	248.00	469	347.00	620
75.00	34688	163.00	581	249.00	1537	348.00	83
76.00	11536	164.00	717	250.00	410	349.00	60
77.00	235968	165.00	2379	251.00	386	350.00	80

Data File: /chem3/nt11.i/20110430.b/df0430.d

Date : 30-APR-2011 09:52

Client ID:

Instrument: nt11.i

Sample Info: DF0430

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

Data File: df0430.d

Spectrum: Avg. Scans 273-275 (5.55), Background Scan 268

Location of Maximum: 198.00

Number of points: 335

m/z	Y	m/z	Y	m/z	Y	m/z	Y
78.00	17520	166.00	2893	252.00	642	351.00	97
79.00	13267	167.00	18232	253.00	935	352.00	3275
80.00	10539	168.00	9360	255.00	200896	353.00	1748
81.00	16768	169.00	1825	256.00	33992	354.00	3285
82.00	4451	170.00	553	257.00	2234	355.00	662
83.00	4507	171.00	808	258.00	10597	359.00	264
85.00	2740	172.00	1716	259.00	2036	360.00	83
86.00	3664	173.00	1955	260.00	432	361.00	167
87.00	2218	174.00	3714	261.00	293	365.00	12545
88.00	1115	175.00	7966	262.00	114	366.00	1903
89.00	408	176.00	2145	263.00	187	367.00	78
91.00	3360	177.00	3312	264.00	569	368.00	91
92.00	3550	178.00	1277	265.00	4421	370.00	456
93.00	21816	179.00	11860	266.00	251	371.00	759
94.00	1923	180.00	9696	268.00	135	372.00	5196
95.00	496	181.00	3932	270.00	277	373.00	1228
96.00	1579	182.00	674	271.00	482	374.00	165
97.00	575	183.00	634	272.00	485	377.00	68
98.00	17304	184.00	1154	273.00	5642	378.00	80
99.00	12887	185.00	6515	274.00	17072	382.00	52
100.00	1498	186.00	54696	275.00	93264	383.00	1185
101.00	8878	187.00	15313	276.00	11769	384.00	474
102.00	418	188.00	1614	277.00	7779	385.00	121
103.00	2980	189.00	3375	278.00	1457	389.00	93
104.00	4695	190.00	471	279.00	228	390.00	842
105.00	4206	191.00	1688	282.00	357	391.00	583
106.00	1267	192.00	4056	283.00	761	392.00	599
107.00	63248	193.00	5106	284.00	564	393.00	147
108.00	11654	194.00	1327	285.00	1616	401.00	345
109.00	1933	195.00	283	286.00	442	402.00	2144
110.00	120512	196.00	11244	287.00	51	403.00	3089
111.00	18720	198.00	331776	288.00	206	404.00	1027
112.00	2253	199.00	29456	289.00	50	405.00	158
113.00	912	200.00	2249	290.00	371	409.00	67
114.00	258	201.00	2051	291.00	143	410.00	73

Data File: /chem3/nt11.i/20110430.b/df0430.d

Date : 30-APR-2011 09:52

Client ID:

Instrument: nt11.i

Sample Info: DF0430

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

Data File: df0430.d

Spectrum: Avg. Scans 273-275 (5.55), Background Scan 268

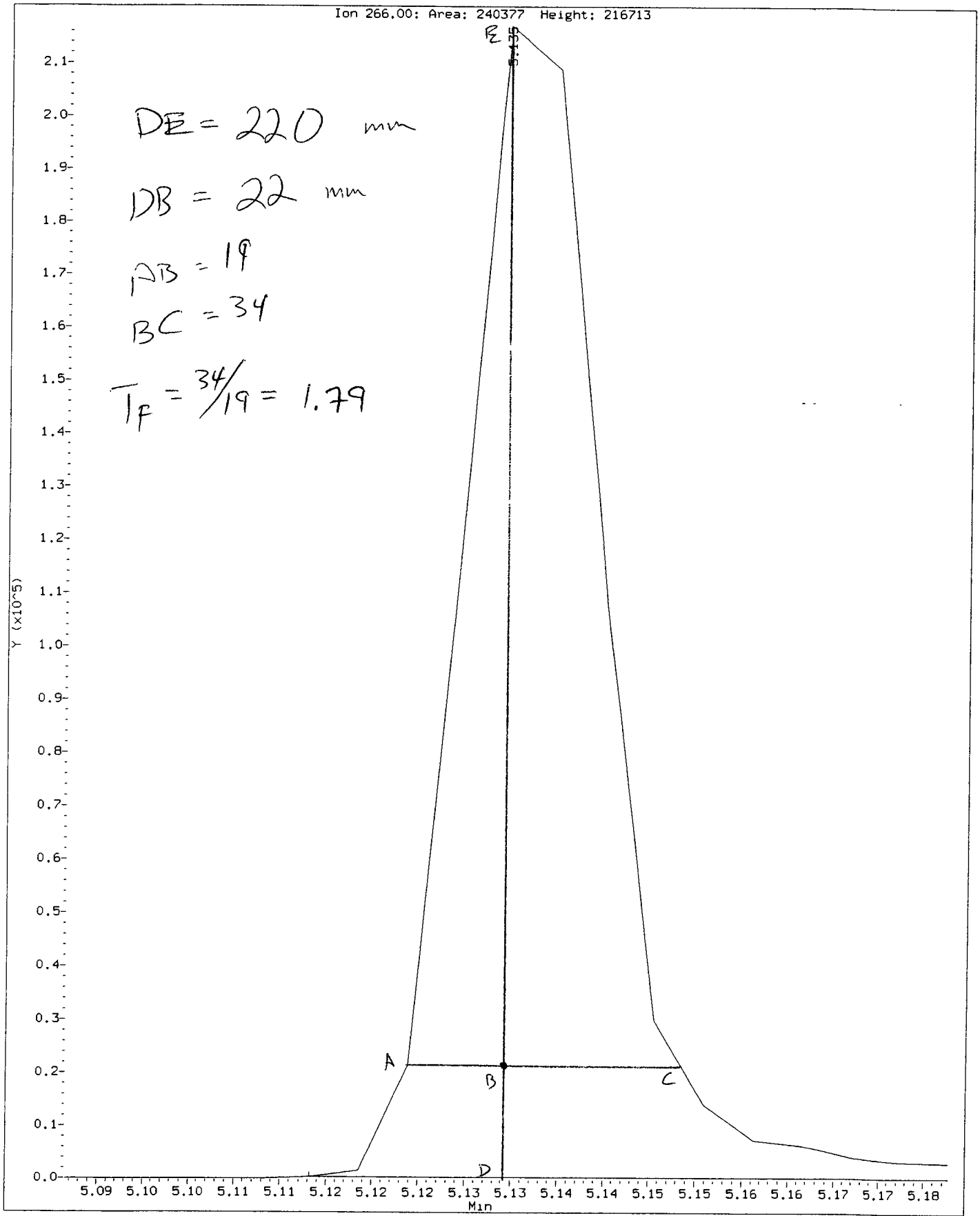
Location of Maximum: 198.00

Number of points: 335

m/z	Y	m/z	Y	m/z	Y	m/z	Y
116.00	2986	203.00	2725	292.00	579	415.00	323
117.00	38656	204.00	13504	293.00	1983	416.00	68
118.00	2690	205.00	23800	294.00	528	421.00	2775
119.00	601	206.00	97264	295.00	657	422.00	3015
120.00	627	207.00	14188	296.00	25640	423.00	20056
121.00	69	208.00	2965	297.00	3849	424.00	4847
122.00	3288	209.00	880	298.00	343	425.00	554
123.00	4673	210.00	1936	299.00	164	441.00	57616
124.00	1765	211.00	3706	301.00	245	442.00	315520
125.00	2498	212.00	357	302.00	671	443.00	73624
127.00	182592	213.00	507	303.00	3682	444.00	7765
128.00	13673	214.00	223	304.00	1014	445.00	525
129.00	67776	215.00	911	305.00	145	493.00	64
130.00	5837	216.00	1725	308.00	523		

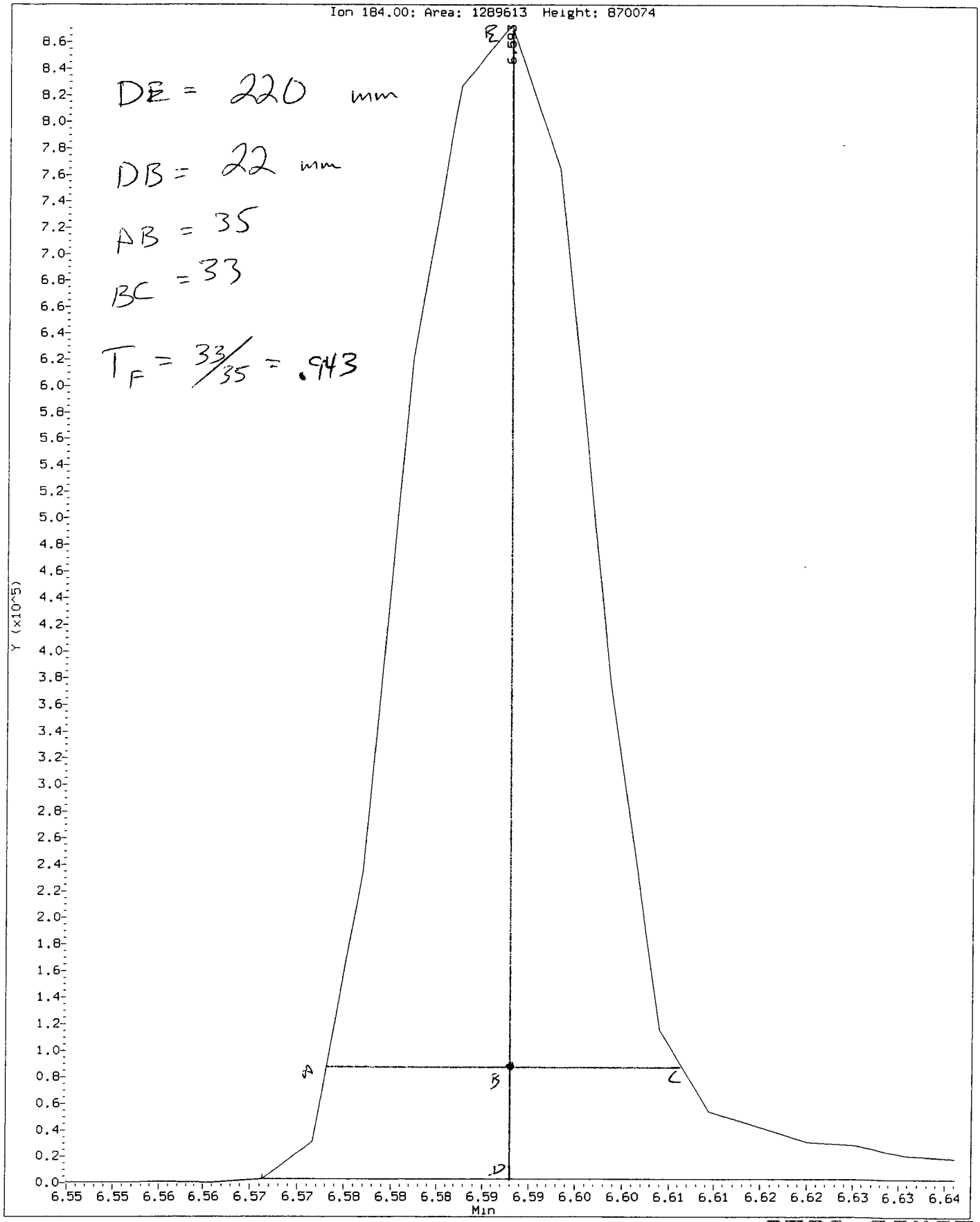
Data File: /chem3/nt11.i/20110430.b/ddt.b/df0430.d
Injection Date: 30-APR-2011 09:52
Instrument: nt11.i
Client Sample ID:

Compound: Pentachlorophenol
CAS Number: 87-86-5



Data File: /chem3/nt11.i/20110430.b/ddt.b/df0430.d
Injection Date: 30-APR-2011 09:52
Instrument: nt11.i
Client Sample ID:

Compound: Benzidine
CAS Number:



ST98 : 00497

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

Data file: /chem3/nt11.i/20110430.b/ddt.b/df0430.d ARI ID: DF0430
Method: /chem3/nt11.i/20110430.b/ddt.b/sw846ddt.m Misc:
Analysis Date: 30-APR-2011 09:52 Instrument: nt11.i

COMPOUND	RT	AREA
Pentachlorophenol	5.135	240377
Benzidine	6.593	1289613
4,4'-DDE	6.807	3713
4,4'-DDD	7.138	62455
4,4'-DDT	7.437	801029

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

$$\text{DDT Percent Breakdown} = \frac{(\ 3713 + 62455) * 100}{(\ 3713 + 62455 + 801029)}$$

DDT Percent Breakdown = 7.6 %

Analytical Resources, Inc.

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt11.i/20110430.b/ic0430a.d
Lab Smp Id: SIM250
Inj Date : 30-APR-2011 10:12
Operator : VTS Inst ID: nt11.i
Smp Info : SIM250
Misc Info :
Comment :
Method : /chem3/nt11.i/20110430.b/lowsim.m
Meth Date : 30-Apr-2011 13:05 van Quant Type: ISTD
Cal Date : 30-APR-2011 12:15 Cal File: ic0430f.d
Als bottle: 2 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnalmn.sub
Target Version: 3.50
Processing Host: cserv3

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)
*	4 Naphthalene-d8	136	6.273	6.272	(1.000)	129326	200.000	
	5 Naphthalene	128	6.296	6.295	(1.004)	157126	250.000	253
$	6 2-Methylnaphthalene-d10	152	7.101	7.101	(1.132)	96303	250.000	256
	7 2-Methylnaphthalene	142	7.136	7.135	(1.138)	97467	250.000	259
	8 1-Methylnaphthalene	142	7.274	7.273	(1.160)	96412	250.000	258
	10 Acenaphthylene	152	8.265	8.265	(0.976)	140554	250.000	255
*	11 Acenaphthene-d10	164	8.466	8.466	(1.000)	70573	200.000	
	12 Acenaphthene	153	8.493	8.492	(1.003)	89313	250.000	257
	14 Dibenzofuran	168	8.694	8.694	(1.027)	133124	250.000	261
	15 Fluorene	166	9.123	9.123	(1.078)	93087	250.000	258
*	18 Phenanthrene-d10	188	10.303	10.302	(1.000)	113741	200.000	
	19 Phenanthrene	178	10.329	10.329	(1.003)	144848	250.000	253
	20 Anthracene	178	10.383	10.383	(1.008)	138295	250.000	256
	24 Fluoranthene	202	11.831	11.817	(1.148)	143481	250.000	255
	25 Pyrene	202	12.113	12.112	(0.889)	153370	250.000	258
	28 Benzo(a)anthracene	228	13.601	13.601	(0.998)	121381	250 000	245
*	29 Chrysene-d12	240	13.628	13.628	(1.000)	70763	200.000	
	30 Chrysene	228	13.655	13.655	(1.002)	123024	250.000	247
	43 Total Benzofluoranthenes	252	15.042	15.041	(0.964)	225199	500.000	508
	34 Benzo(a)pyrene	252	15.522	15.512	(0.994)	100217	250.000	254
*	35 Perylene-d12	264	15.608	15.608	(1.000)	54896	200.000	
	37 Indeno(1,2,3-cd)pyrene	276	17.685	17.672	(1.133)	122152	250.000	257
$	36 Dibenzo(a,h)anthracene-d14	292	17.618	17.618	(1.129)	87539	250.000	255
	38 Dibenzo(a,h)anthracene	278	17.685	17.685	(1.133)	94143	250.000	254
	39 Benzo(g,h,i)perylene	276	18.302	18.289	(1.173)	107630	250.000	254

4.30.11

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt11.i
Lab File ID: ic0430a.d
Lab Smp Id: SIM250
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt11.i/20110430.b/lowsim.m
Misc Info:

Calibration Date: 30-APR-2011
Calibration Time: 10:12

Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	129326	64663	258652	129326	0.00
11 Acenaphthene-d10	70573	35286	141146	70573	0.00
18 Phenanthrene-d10	113741	56870	227482	113741	0.00
29 Chrysene-d12	70763	35382	141526	70763	0.00
35 Perylene-d12	54896	27448	109792	54896	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	6.27	5.77	6.77	6.27	0.00
11 Acenaphthene-d10	8.47	7.97	8.97	8.47	0.00
18 Phenanthrene-d10	10.30	9.80	10.80	10.30	0.00
29 Chrysene-d12	13.63	13.13	14.13	13.63	0.00
35 Perylene-d12	15.61	15.11	16.11	15.61	0.00

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

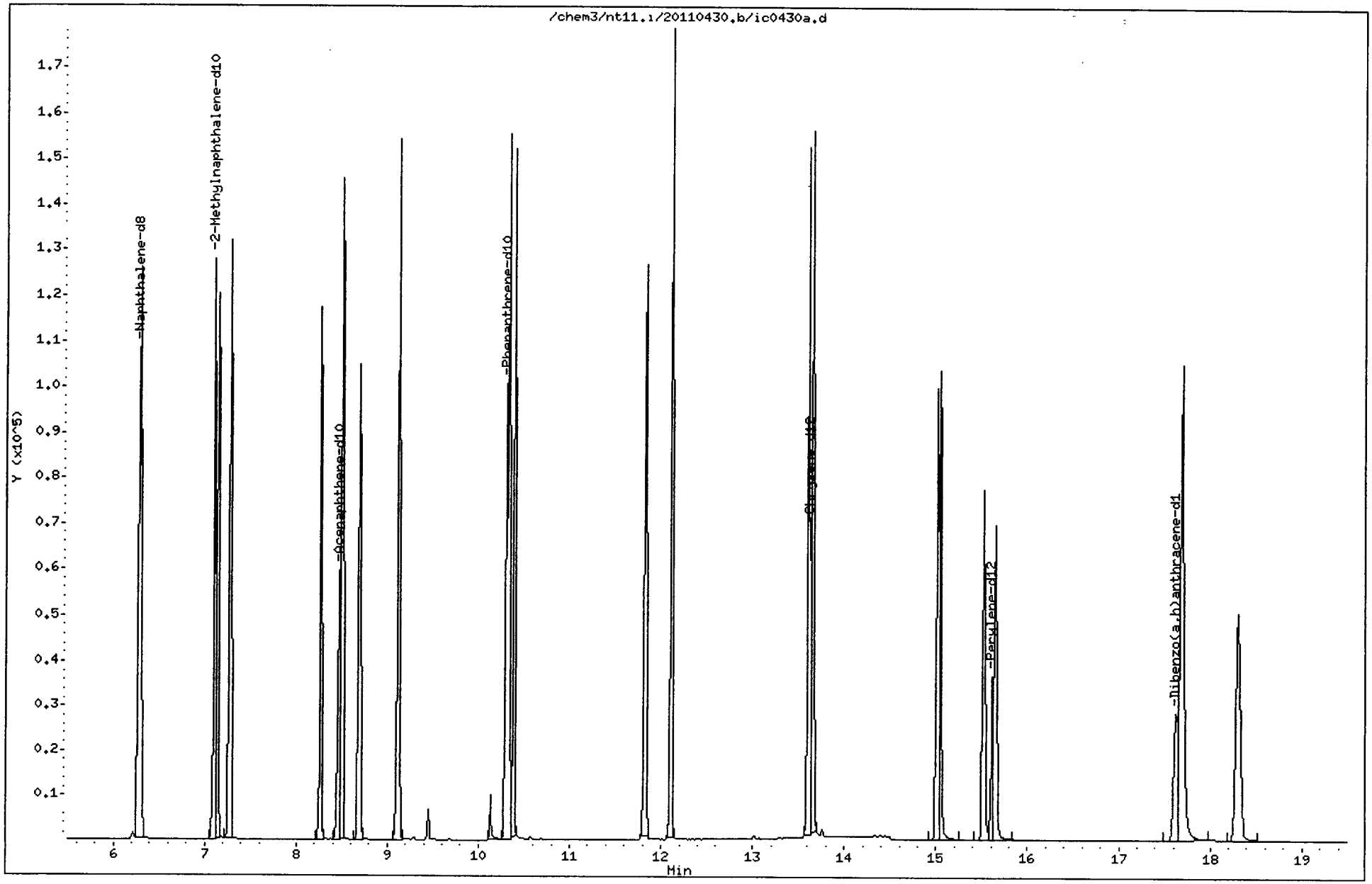
Data File: /chem3/nt11.i/20110430.b/ic0430a.d
Date : 30-APR-2011 10:12
Client ID:
Sample Info: SIM250

Instrument: nt11.i

Operator: VTS
Column diameter: 0.25

Column phase: ZB-5msi

ST98:00591



CO-ELUTION SUMMARY FOR FILE - ic0430a.d

Lab ID: SIM250, Method: lowsim.m, Instrument: nt11.i, Date: 30-APR-2011

RT	CO-ELUTION COMPOUNDS
17.685	Indeno(1,2,3-cd)pyrene and Dibenzo(a,h)anthracene
17.685	Dibenzo(a,h)anthracene and Indeno(1,2,3-cd)pyrene

Analytical Resources, Inc.

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt11.i/20110430.b/ic0430b.d
Lab Smp Id: SIM1000
Inj Date : 30-APR-2011 10:37
Operator : VTS Inst ID: nt11.i
Smp Info : SIM1000
Misc Info :
Comment :
Method : /chem3/nt11.i/20110430.b/lowsim.m
Meth Date : 30-Apr-2011 13:05 van Quant Type: ISTD
Cal Date : 30-APR-2011 12:15 Cal File: ic0430f.d
Als bottle: 3 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnalmn.sub
Target Version: 3.50
Processing Host: cserv3

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)
*	4 Naphthalene-d8	136	6.272	6.272	(1.000)	133908	200.000	
	5 Naphthalene	128	6.295	6.295	(1.004)	499464	1000.00	778
$	6 2-Methylnaphthalene-d10	152	7.101	7.101	(1.132)	343890	1000.00	884
	7 2-Methylnaphthalene	142	7.135	7.135	(1.138)	348447	1000.00	893
	8 1-Methylnaphthalene	142	7.273	7.273	(1.160)	344176	1000.00	889
	10 Acenaphthylene	152	8.265	8.265	(0.976)	488844	1000.00	863
*	11 Acenaphthene-d10	164	8.466	8.466	(1.000)	72587	200.000	
	12 Acenaphthene	153	8.492	8.492	(1.003)	325241	1000.00	912
	14 Dibenzofuran	168	8.694	8.694	(1.027)	451464	1000.00	859
	15 Fluorene	166	9.123	9.123	(1.078)	341381	1000.00	921
*	18 Phenanthrene-d10	188	10.302	10.302	(1.000)	114760	200.000	
	19 Phenanthrene	178	10.329	10.329	(1.003)	473114	1000.00	820
	20 Anthracene	178	10.383	10.383	(1.008)	479136	1000.00	877
	24 Fluoranthene	202	11.831	11.817	(1.148)	492461	1000 00	869
	25 Pyrene	202	12.112	12.112	(0.889)	505226	1000.00	770
	28 Benzo(a)anthracene	228	13.601	13.601	(0.998)	442950	1000.00	810
*	29 Chrysene-d12	240	13.628	13.628	(1.000)	78082	200.000	
	30 Chrysene	228	13.655	13.655	(1.002)	441076	1000.00	802
	43 Total Benzofluoranthenes	252	15.041	15.041	(0.964)	845178	2000.00	1790
	34 Benzo(a)pyrene	252	15.512	15.512	(0.994)	396564	1000.00	946
*	35 Perylene-d12	264	15.608	15.608	(1.000)	58430	200.000	
	37 Indeno(1,2,3-cd)pyrene	276	17.685	17.672	(1.133)	479179	1000.00	947
$	36 Dibenzo(a,h)anthracene-d14	292	17.618	17.618	(1.129)	347856	1000.00	951
	38 Dibenzo(a,h)anthracene	278	17.685	17.685	(1.133)	378298	1000.00	960
	39 Benzo(g,h,i)perylene	276	18.302	18.289	(1.173)	419205	1000.00	930

VB
4.30.11

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt11.i
Lab File ID: ic0430b.d
Lab Smp Id: SIM1000
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt11.i/20110430.b/lowsim.m
Misc Info:

Calibration Date: 30-APR-2011
Calibration Time: 10:12

Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	129326	64663	258652	133908	3.54
11 Acenaphthene-d10	70573	35286	141146	72587	2.85
18 Phenanthrene-d10	113741	56870	227482	114760	0.90
29 Chrysene-d12	70763	35382	141526	78082	10.34
35 Perylene-d12	54896	27448	109792	58430	6.44

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	6.27	5.77	6.77	6.27	0.00
11 Acenaphthene-d10	8.47	7.97	8.97	8.47	0.00
18 Phenanthrene-d10	10.30	9.80	10.80	10.30	0.00
29 Chrysene-d12	13.63	13.13	14.13	13.63	0.00
35 Perylene-d12	15.61	15.11	16.11	15.61	0.00

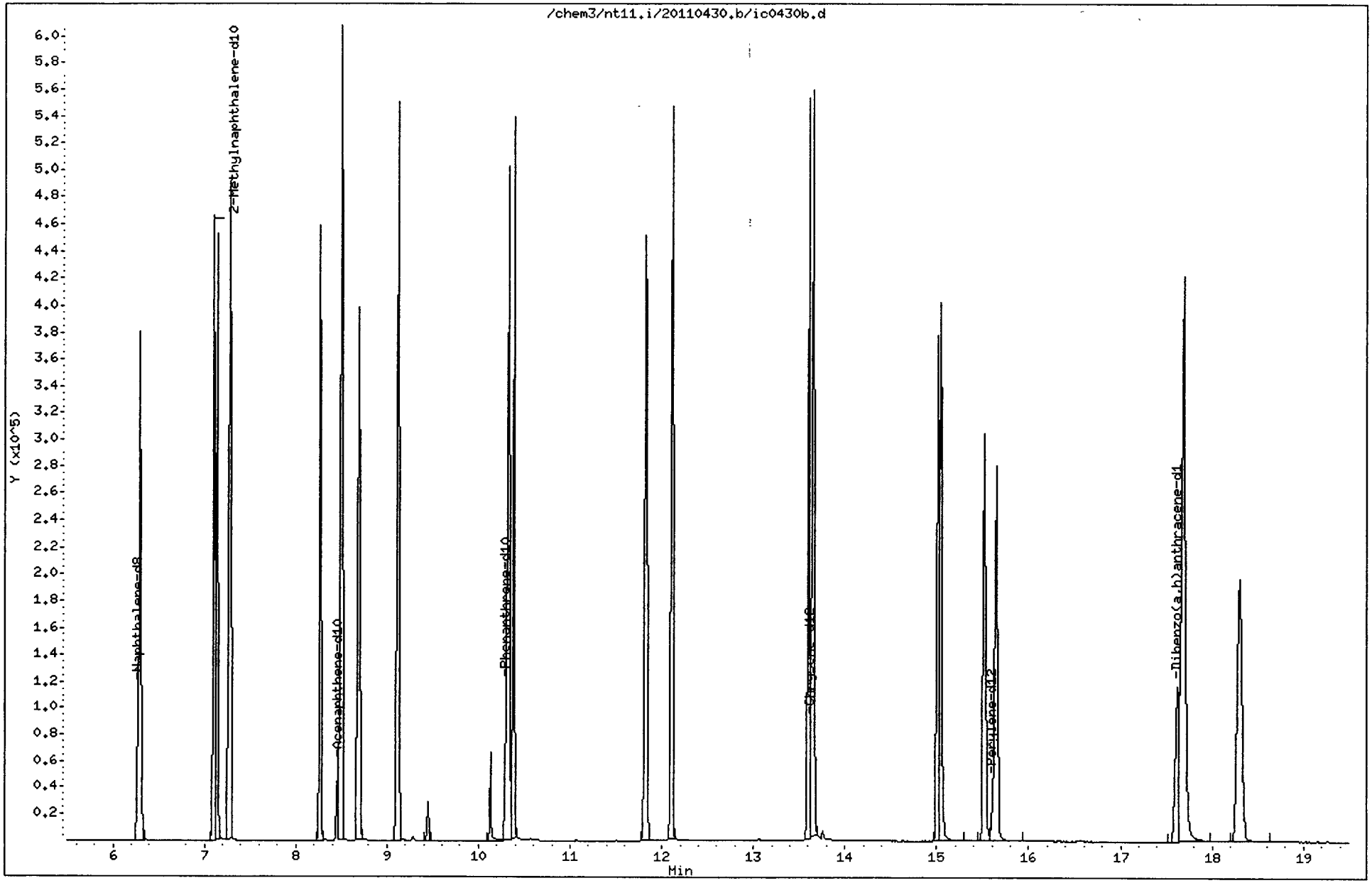
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem3/nt11.i/20110430.b/ic0430b.d
Date : 30-APR-2011 10:37
Client ID:
Sample Info: SIM1000

Instrument: nt11.i

Operator: VTS
Column diameter: 0.25

Column phase: ZB-5ms1



ST98:00505

CO-ELUTION SUMMARY FOR FILE - ic0430b.d

Lab ID: SIM1000, Method: lowsim.m, Instrument: nt11.i, Date: 30-APR-2011

RT	CO-ELUTION COMPOUNDS
17.685	Indeno(1,2,3-cd)pyrene and Dibenzo(a,h)anthracene
17.685	Dibenzo(a,h)anthracene and Indeno(1,2,3-cd)pyrene

Analytical Resources, Inc.

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt11.i/20110430.b/ic0430c.d
Lab Smp Id: SIM10
Inj Date : 30-APR-2011 11:02
Operator : VTS Inst ID: nt11.i
Smp Info : SIM10
Misc Info :
Comment :
Method : /chem3/nt11.i/20110430.b/lowsim.m
Meth Date : 30-Apr-2011 13:05 van Quant Type: ISTD
Cal Date : 30-APR-2011 12:15 Cal File: ic0430f.d
Als bottle: 4 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna1mn.sub
Target Version: 3.50
Processing Host: cserv3

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)
*	4 Naphthalene-d8	136	6.273	6.272	(1.000)	126410	200.000	
	5 Naphthalene	128	6.296	6.295	(1.004)	6833	10.0000	11.3
$	6 2-Methylnaphthalene-d10	152	7.101	7.101	(1.132)	3881	10.0000	10.6
	7 2-Methylnaphthalene	142	7.136	7.135	(1.138)	3733	10.0000	10.1
	8 1-Methylnaphthalene	142	7.274	7.273	(1.160)	3699	10.0000	10 1
	10 Acenaphthylene	152	8.265	8.265	(0.976)	5589	10.0000	10.7
*	11 Acenaphthene-d10	164	8.466	8.466	(1.000)	67004	200.000	
	12 Acenaphthene	153	8.493	8.492	(1.003)	3451	10.0000	10 5
	14 Dibenzofuran	168	8.694	8.694	(1.027)	5210	10.0000	10.7
	15 Fluorene	166	9.123	9.123	(1 078)	3590	10.0000	10.5
*	18 Phenanthrene-d10	188	10.303	10.302	(1.000)	107827	200.000	
	19 Phenanthrene	178	10.329	10.329	(1.003)	6023	10.0000	11.1
	20 Anthracene	178	10.383	10.383	(1 008)	5387	10.0000	10.5
	24 Fluoranthene	202	11.818	11.817	(1.147)	5780	10.0000	10 8
	25 Pyrene	202	12.113	12.112	(0.889)	5871	10.0000	11.6
	28 Benzo(a)anthracene	228	13.601	13.601	(0.998)	5125	10.0000	12.1
*	29 Chrysene-d12	240	13.628	13.628	(1.000)	60309	200.000	
	30 Chrysene	228	13.655	13.655	(1.002)	5054	10.0000	11.9
	43 Total Benzofluoranthenes	252	15.042	15.041	(0.964)	8687	20.0000	21.4 (M)
	34 Benzo(a)pyrene	252	15.512	15.512	(0.994)	3785	10.0000	10 5
*	35 Perylene-d12	264	15.609	15.608	(1.000)	50334	200.000	
	37 Indeno(1,2,3-cd)pyrene	276	17.672	17.672	(1.132)	4520	10.0000	10.4
$	36 Dibenzo(a,h)anthracene-d14	292	17.618	17.618	(1.129)	3406	10.0000	10.8
	38 Dibenzo(a,h)anthracene	278	17.685	17.685	(1.133)	3569	10.0000	10 5
	39 Benzo(g,h,i)perylene	276	18.289	18.289	(1.172)	4125	10.0000	10.6

VTS 4-30-11

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt11.i
Lab File ID: ic0430c.d
Lab Smp Id: SIM10
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt11.i/20110430.b/lowsim.m
Misc Info:

Calibration Date: 30-APR-2011
Calibration Time: 10:12

Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	129326	64663	258652	126410	-2.25
11 Acenaphthene-d10	70573	35286	141146	67004	-5.06
18 Phenanthrene-d10	113741	56870	227482	107827	-5.20
29 Chrysene-d12	70763	35382	141526	60309	-14.77
35 Perylene-d12	54896	27448	109792	50334	-8.31

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	6.27	5.77	6.77	6.27	0.00
11 Acenaphthene-d10	8.47	7.97	8.97	8.47	0.00
18 Phenanthrene-d10	10.30	9.80	10.80	10.30	0.00
29 Chrysene-d12	13.63	13.13	14.13	13.63	0.00
35 Perylene-d12	15.61	15.11	16.11	15.61	0.00

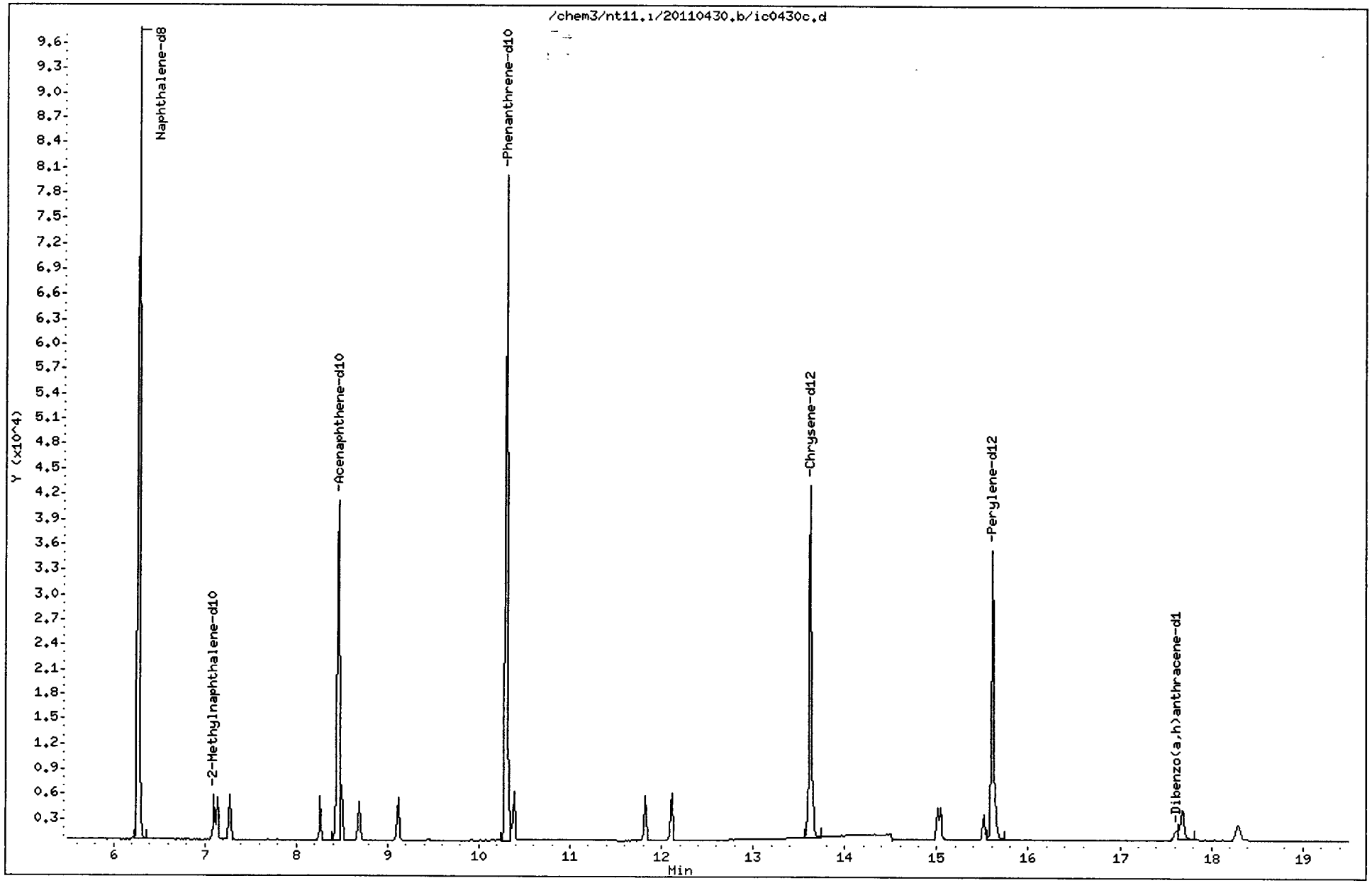
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem3/nt11.i/20110430.b/ic0430c.d
Date : 30-APR-2011 11:02
Client ID:
Sample Info: SIM10

Instrument: nt11.i

Operator: VTS
Column diameter: 0.25

Column phase: ZB-5msi

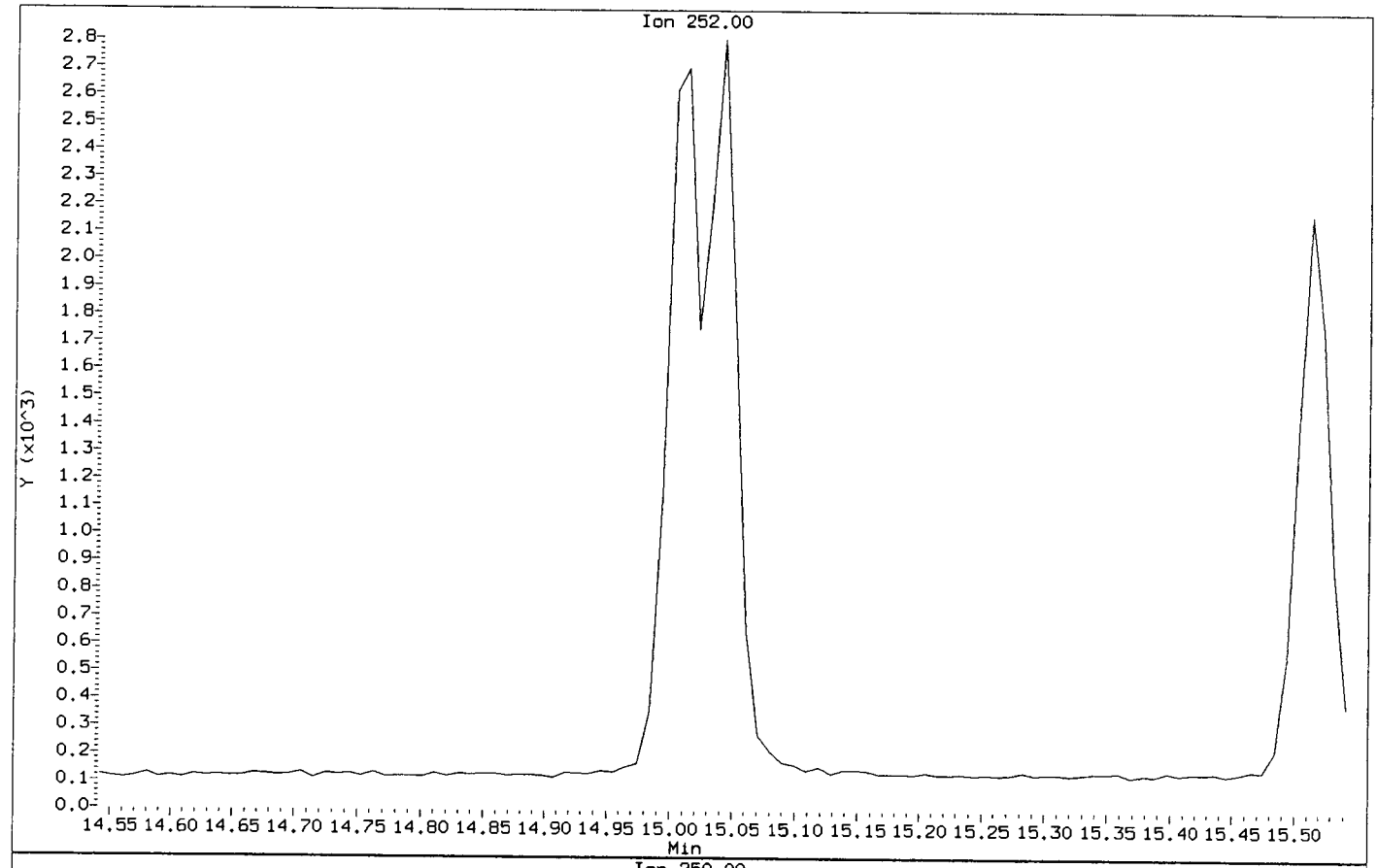


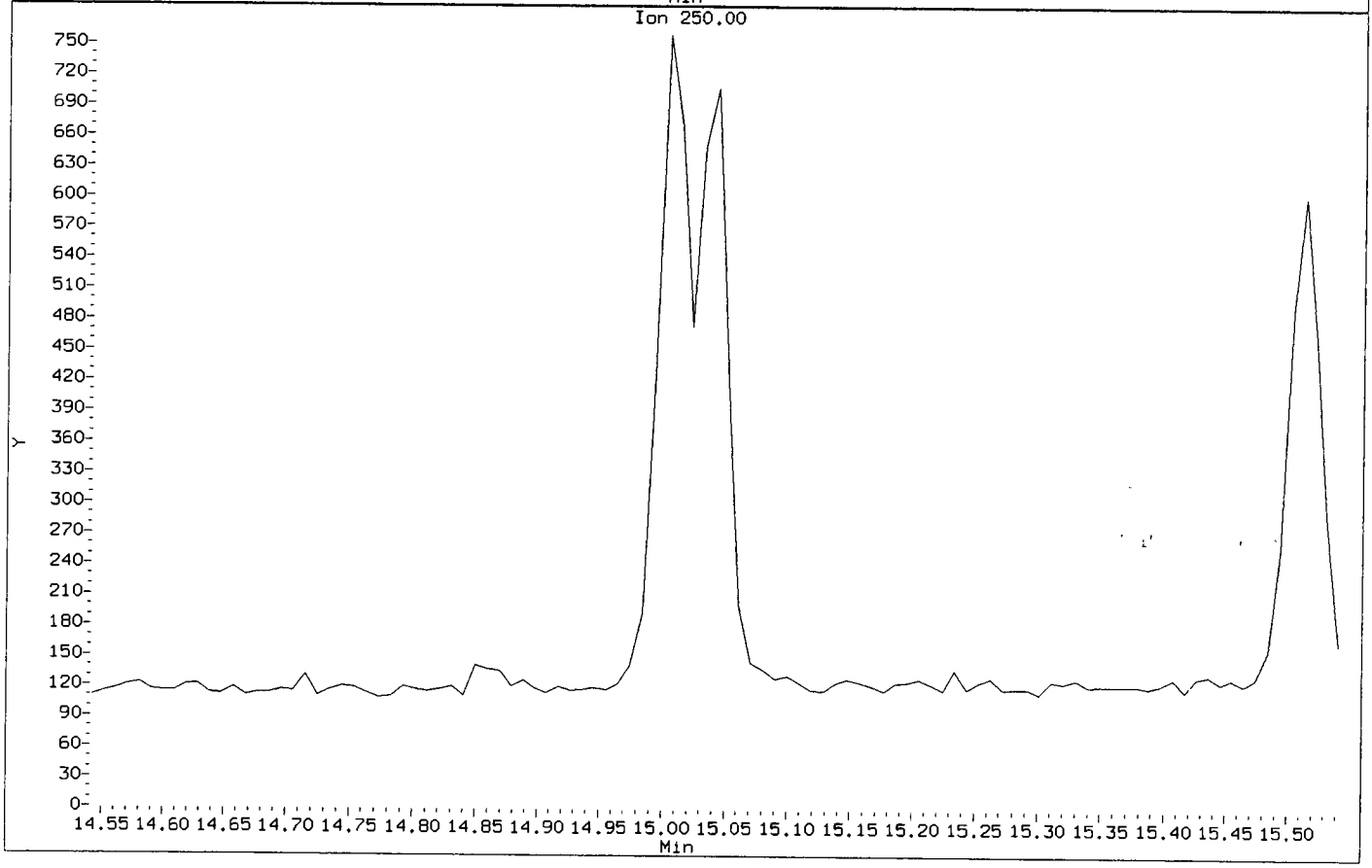
ST98:00510

VB
4.30.11

Data File: /chem3/nt11.i/20110430.b/ic0430c.d
Injection Date: 30-APR-2011 11:02
Instrument: nt11.i
Client Sample ID:

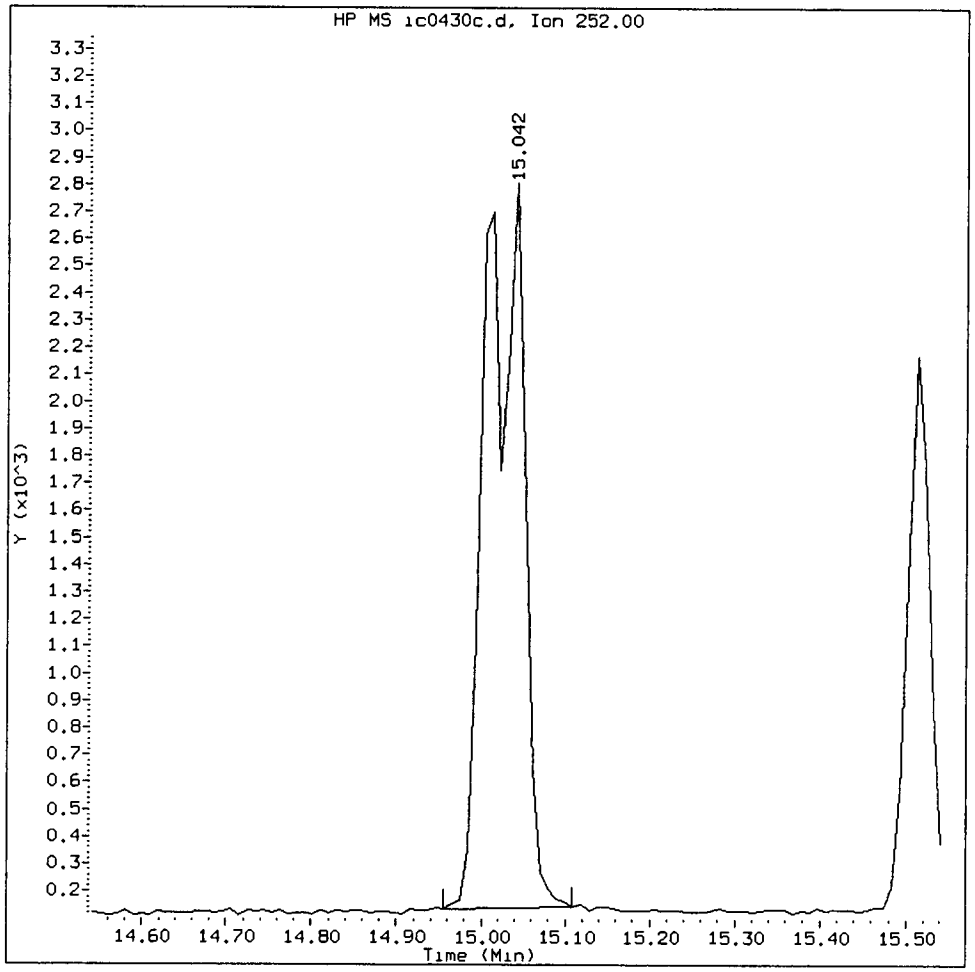
Compound: Total Benzofluoranthenes
CAS Number:





SIM10, /chem3/nt11.i/20110430.b/ic0430c.d

Total Benzofluoranthenes Amount: 21.37 Area: 8687



MANUAL INTEGRATION for Total Benzofluoranthenes

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

5. Other _____

Analyst: VB Date: 4-30-11

CO-ELUTION SUMMARY FOR FILE - ic0430c.d

Lab ID: SIM10, Method: lowsim.m, Instrument: nt11.i, Date: 30-APR-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt11.i/20110430.b/ic0430d.d
Lab Smp Id: SIM500
Inj Date : 30-APR-2011 11:26
Operator : VTS Inst ID: nt11.i
Smp Info : SIM500
Misc Info :
Comment :
Method : /chem3/nt11.i/20110430.b/lowsim.m
Meth Date : 30-Apr-2011 13:05 van Quant Type: ISTD
Cal Date : 30-APR-2011 12:15 Cal File: ic0430f.d
Als bottle: 5 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna1mn.sub
Target Version: 3.50
Processing Host: cserv3

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)
*	4 Naphthalene-d8	136	6.273	6.272	(1.000)	127404	200.000	
	5 Naphthalene	128	6.296	6.295	(1.004)	286280	500.000	469
$	6 2-Methylnaphthalene-d10	152	7.101	7.101	(1.132)	181907	500.000	492
	7 2-Methylnaphthalene	142	7.136	7.135	(1.138)	187040	500.000	504
	8 1-Methylnaphthalene	142	7.274	7.273	(1.160)	186475	500.000	506
	10 Acenaphthylene	152	8.265	8.265	(0.976)	276004	500.000	490
*	11 Acenaphthene-d10	164	8.466	8.466	(1.000)	72156	200.000	
	12 Acenaphthene	153	8.493	8.492	(1.003)	171570	500.000	484
	14 Dibenzofuran	168	8.694	8.694	(1.027)	251202	500.000	481
	15 Fluorene	166	9.123	9.123	(1.078)	179539	500.000	487
*	18 Phenanthrene-d10	188	10.302	10.302	(1.000)	112214	200.000	
	19 Phenanthrene	178	10.329	10.329	(1.003)	271263	500.000	481
	20 Anthracene	178	10.383	10.383	(1.008)	265871	500.000	498
	24 Fluoranthene	202	11.818	11.817	(1.147)	278570	500.000	502
	25 Pyrene	202	12.113	12.112	(0.889)	283258	500.000	462
	28 Benzo(a)anthracene	228	13.601	13.601	(0.998)	238142	500.000	466
*	29 Chrysene-d12	240	13.628	13.628	(1.000)	73029	200.000	
	30 Chrysene	228	13.655	13.655	(1.002)	236979	500.000	461
	43 Total Benzofluoranthenes	252	15.042	15.041	(0.964)	439089	1000.00	972
	34 Benzo(a)pyrene	252	15.512	15.512	(0.994)	198356	500.000	495
*	35 Perylene-d12	264	15.608	15.608	(1.000)	55910	200.000	
	37 Indeno(1,2,3-cd)pyrene	276	17.672	17.672	(1.132)	238454	500.000	493
$	36 Dibenzo(a,h)anthracene-d14	292	17.618	17.618	(1.129)	167115	500.000	477
	38 Dibenzo(a,h)anthracene	278	17.685	17.685	(1.133)	184723	500.000	490
	39 Benzo(g,h,i)perylene	276	18.289	18.289	(1.172)	209148	500.000	485

UJ
4-30-11

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt11.i
Lab File ID: ic0430d.d
Lab Smp Id: SIM500
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt11.i/20110430.b/lowsim.m
Misc Info:

Calibration Date: 30-APR-2011
Calibration Time: 10:12

Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	129326	64663	258652	127404	-1.49
11 Acenaphthene-d10	70573	35286	141146	72156	2.24
18 Phenanthrene-d10	113741	56870	227482	112214	-1.34
29 Chrysene-d12	70763	35382	141526	73029	3.20
35 Perylene-d12	54896	27448	109792	55910	1.85

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	6.27	5.77	6.77	6.27	0.00
11 Acenaphthene-d10	8.47	7.97	8.97	8.47	0.00
18 Phenanthrene-d10	10.30	9.80	10.80	10.30	0.00
29 Chrysene-d12	13.63	13.13	14.13	13.63	0.00
35 Perylene-d12	15.61	15.11	16.11	15.61	0.00

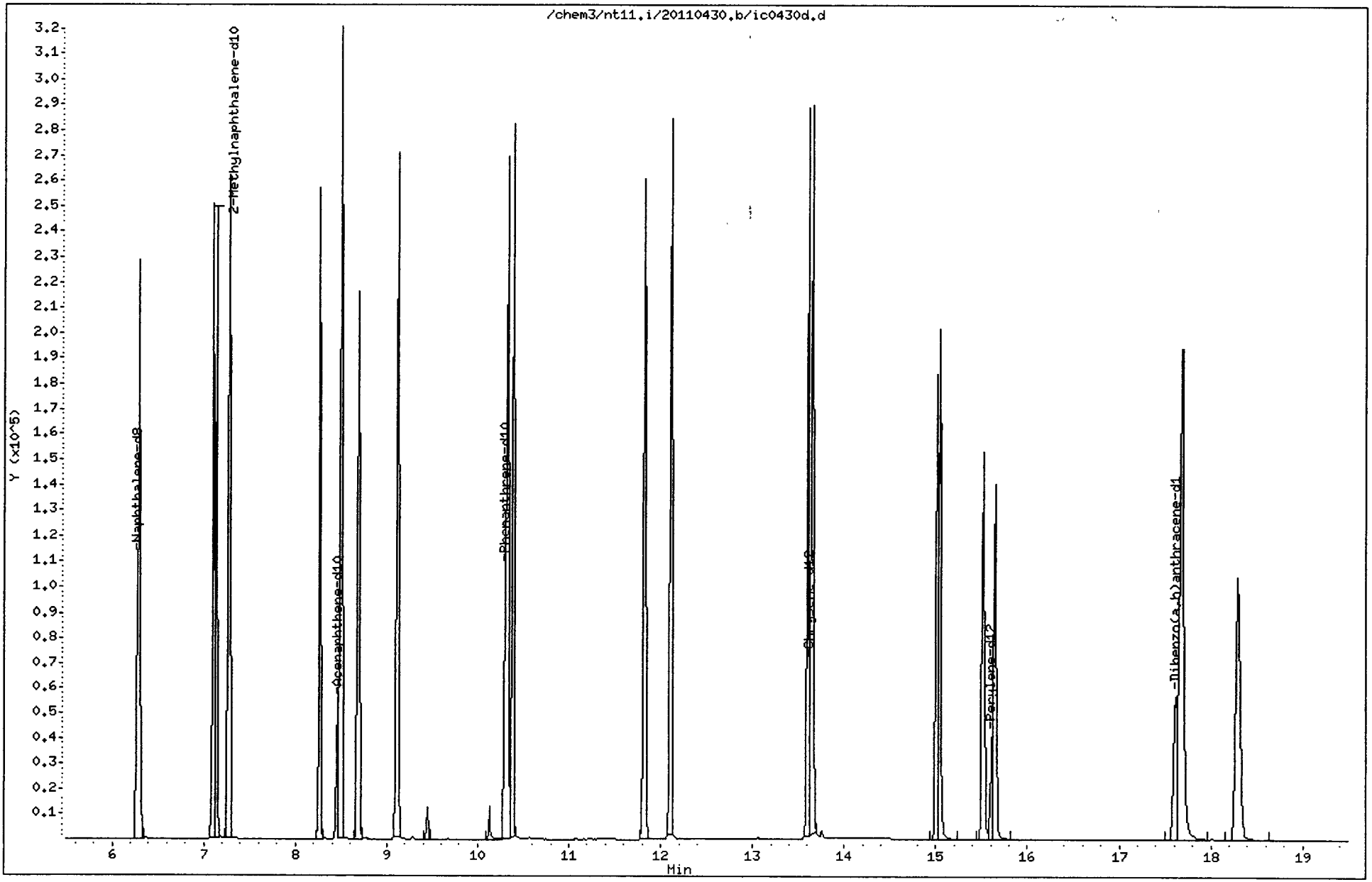
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem3/nt11.i/20110430.b/ic0430d.d
Date : 30-APR-2011 11:26
Client ID:
Sample Info: SIM500

Instrument: nt11.i

Operator: VTS
Column diameter: 0.25

Column phase: ZB-5msi



CO-ELUTION SUMMARY FOR FILE - ic0430d.d

Lab ID: SIM500, Method: lowsim.m, Instrument: nt11.i, Date: 30-APR-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt11.i/20110430.b/ic0430e.d
Lab Smp Id: SIM50
Inj Date : 30-APR-2011 11:51
Operator : VTS Inst ID: nt11.i
Smp Info : SIM50
Misc Info :
Comment :
Method : /chem3/nt11.i/20110430.b/lowsim.m
Meth Date : 30-Apr-2011 13:05 van Quant Type: ISTD
Cal Date : 30-APR-2011 12:15 Cal File: ic0430f.d
Als bottle: 6 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna1mn.sub
Target Version: 3.50
Processing Host: cserv3

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)
*	4 Naphthalene-d8	136	6.273	6.272	(1.000)	128015	200.000	
	5 Naphthalene	128	6.296	6.295	(1.004)	32789	50.0000	53.4
$	6 2-Methylnaphthalene-d10	152	7.101	7.101	(1.132)	18714	50.0000	50.3
	7 2-Methylnaphthalene	142	7.136	7.135	(1.138)	18690	50.0000	50.1
	8 1-Methylnaphthalene	142	7.274	7.273	(1.160)	18509	50.0000	50 0
	10 Acenaphthylene	152	8.265	8.265	(0.976)	27320	50.0000	49.9
*	11 Acenaphthene-d10	164	8.466	8.466	(1.000)	70175	200.000	
	12 Acenaphthene	153	8.493	8.492	(1.003)	16885	50.0000	49.0
	14 Dibenzofuran	168	8.694	8.694	(1.027)	25226	50.0000	49 7
	15 Fluorene	166	9.123	9.123	(1.078)	17525	50.0000	48.9
*	18 Phenanthrene-d10	188	10.303	10.302	(1.000)	110629	200.000	
	19 Phenanthrene	178	10.329	10.329	(1.003)	28738	50.0000	51.7
	20 Anthracene	178	10.383	10.383	(1.008)	25981	50.0000	49.4
	24 Fluoranthene	202	11.818	11.817	(1.147)	26162	50.0000	47.9
	25 Pyrene	202	12.113	12.112	(0.889)	27512	50.0000	51.2
	28 Benzo(a)anthracene	228	13.601	13.601	(0.998)	22302	50.0000	49.8
*	29 Chrysene-d12	240	13.628	13.628	(1.000)	63954	200.000	
	30 Chrysene	228	13.655	13.655	(1.002)	22927	50.0000	50 9
	43 Total Benzofluoranthenes	252	15.042	15.041	(0.964)	40873	100.000	99.2
	34 Benzo(a)pyrene	252	15.512	15.512	(0.994)	17695	50.0000	48.4
*	35 Perylene-d12	264	15.609	15.608	(1.000)	50988	200.000	
	37 Indeno(1,2,3-cd)pyrene	276	17.672	17.672	(1.132)	21585	50.0000	48 9
$	36 Dibenzo(a,h)anthracene-d14	292	17.618	17.618	(1.129)	15277	50.0000	47 8
	38 Dibenzo(a,h)anthracene	278	17.685	17.685	(1.133)	16748	50.0000	48.7
	39 Benzo(g,h,i)perylene	276	18.289	18.289	(1.172)	19464	50.0000	49.5

VJS
4-30-11

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt11.i
Lab File ID: ic0430e.d
Lab Smp Id: SIM50
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt11.i/20110430.b/lowsim.m
Misc Info:

Calibration Date: 30-APR-2011
Calibration Time: 10:12

Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	129326	64663	258652	128015	-1.01
11 Acenaphthene-d10	70573	35286	141146	70175	-0.56
18 Phenanthrene-d10	113741	56870	227482	110629	-2.74
29 Chrysene-d12	70763	35382	141526	63954	-9.62
35 Perylene-d12	54896	27448	109792	50988	-7.12

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	6.27	5.77	6.77	6.27	0.00
11 Acenaphthene-d10	8.47	7.97	8.97	8.47	0.00
18 Phenanthrene-d10	10.30	9.80	10.80	10.30	0.00
29 Chrysene-d12	13.63	13.13	14.13	13.63	0.00
35 Perylene-d12	15.61	15.11	16.11	15.61	0.00

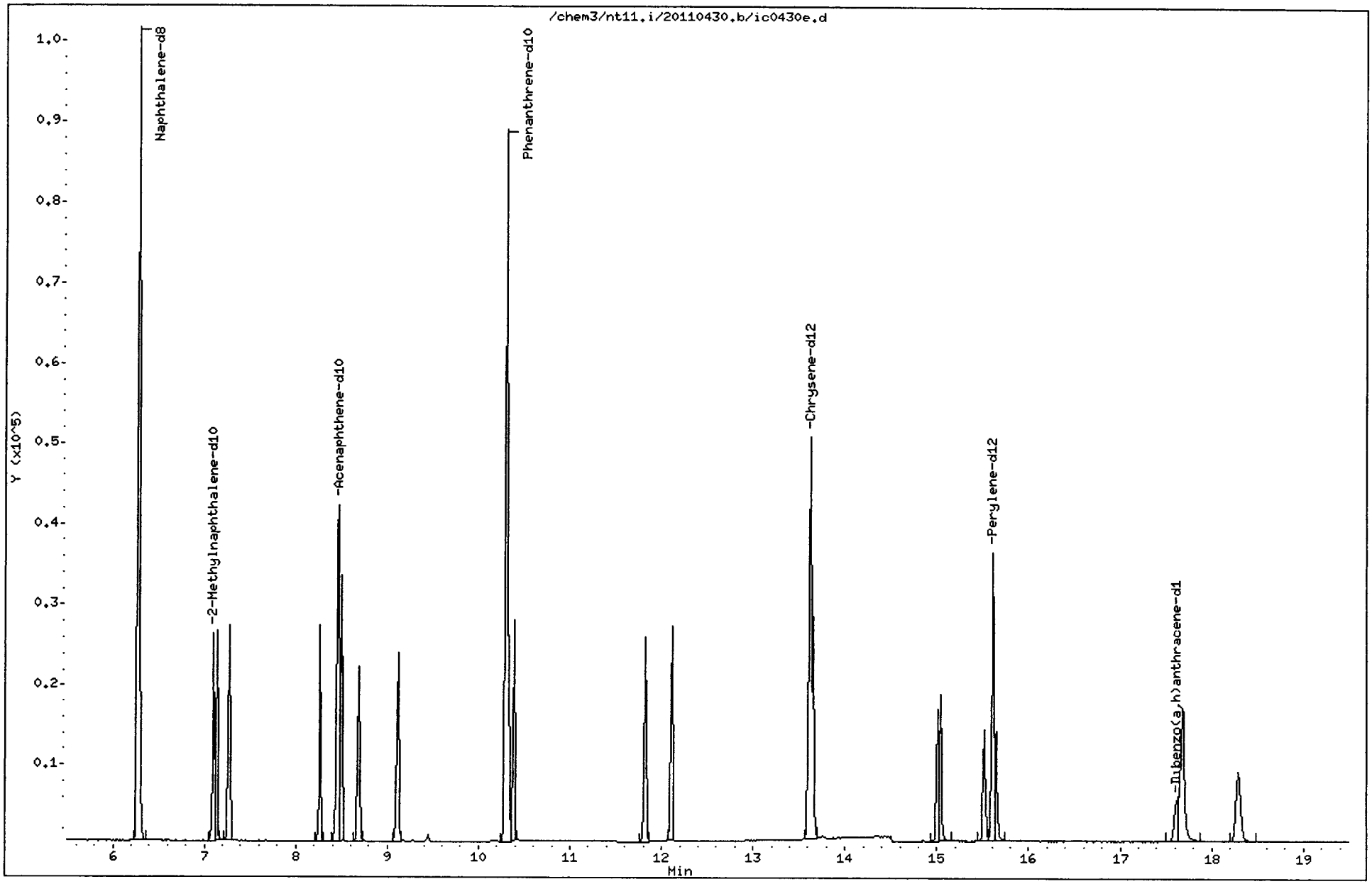
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem3/nt11.i/20110430.b/ic0430e.d
Date : 30-APR-2011 11:51
Client ID:
Sample Info: SIM50

Instrument: nt11.i

Operator: VTS
Column diameter: 0.25

Column phase: ZB-5msi



CO-ELUTION SUMMARY FOR FILE - ic0430e.d

Lab ID: SIM50, Method: lowsim.m, Instrument: nt11.i, Date: 30-APR-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt11.i/20110430.b/ic0430f.d
Lab Smp Id: SIM100
Inj Date : 30-APR-2011 12:15
Operator : VTS Inst ID: nt11.i
Smp Info : SIM100
Misc Info :
Comment :
Method : /chem3/nt11.i/20110430.b/lowsim.m
Meth Date : 30-Apr-2011 13:05 van Quant Type: ISTD
Cal Date : 30-APR-2011 12:15 Cal File: ic0430f.d
Als bottle: 7 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnalmn.sub
Target Version: 3.50
Processing Host: cserv3

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)
*	4 Naphthalene-d8	136	6.272	6.272	(1.000)	126437	200.000	
	5 Naphthalene	128	6.295	6.295	(1.004)	65292	100.000	108
$	6 2-Methylnaphthalene-d10	152	7.101	7.101	(1.132)	38295	100.000	104
	7 2-Methylnaphthalene	142	7.135	7.135	(1.138)	38601	100.000	105
	8 1-Methylnaphthalene	142	7.273	7.273	(1.160)	38565	100.000	105
	10 Acenaphthylene	152	8.265	8.265	(0.976)	57385	100 000	107
*	11 Acenaphthene-d10	164	8.466	8.466	(1.000)	68901	200.000	
	12 Acenaphthene	153	8.492	8.492	(1.003)	36035	100.000	106
	14 Dibenzofuran	168	8.694	8.694	(1.027)	53236	100.000	107
	15 Fluorene	166	9.123	9.123	(1.078)	36836	100.000	105
*	18 Phenanthrene-d10	188	10.302	10.302	(1.000)	107249	200.000	
	19 Phenanthrene	178	10.329	10.329	(1.003)	57150	100.000	106
	20 Anthracene	178	10.383	10.383	(1.008)	54465	100.000	107
	24 Fluoranthene	202	11.817	11.817	(1.147)	56322	100.000	106
	25 Pyrene	202	12.112	12.112	(0.889)	59053	100 000	109
	28 Benzo(a)anthracene	228	13.601	13.601	(0.998)	48234	100 000	107
*	29 Chrysene-d12	240	13.628	13.628	(1.000)	64366	200.000	
	30 Chrysene	228	13.655	13.655	(1.002)	48943	100.000	108
	43 Total Benzofluoranthenes	252	15.041	15.041	(0.964)	88964	200.000	211
	34 Benzo(a)pyrene	252	15.512	15.512	(0.994)	38564	100 000	103
*	35 Perylene-d12	264	15.608	15.608	(1.000)	52142	200 000	
	37 Indeno(1,2,3-cd)pyrene	276	17.672	17.672	(1.132)	46269	100 000	102
$	36 Dibenzo(a,h)anthracene-d14	292	17.618	17.618	(1.129)	33941	100.000	104
	38 Dibenzo(a,h)anthracene	278	17.685	17.685	(1.133)	35801	100.000	102
	39 Benzo(g,h,i)perylene	276	18.289	18.289	(1.172)	41518	100.000	103

VB
4.30.11

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt11.i
Lab File ID: ic0430f.d
Lab Smp Id: SIM100
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt11.i/20110430.b/lowsim.m
Misc Info:

Calibration Date: 30-APR-2011
Calibration Time: 10:12

Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	129326	64663	258652	126437	-2.23
11 Acenaphthene-d10	70573	35286	141146	68901	-2.37
18 Phenanthrene-d10	113741	56870	227482	107249	-5.71
29 Chrysene-d12	70763	35382	141526	64366	-9.04
35 Perylene-d12	54896	27448	109792	52142	-5.02

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	6.27	5.77	6.77	6.27	0.00
11 Acenaphthene-d10	8.47	7.97	8.97	8.47	0.00
18 Phenanthrene-d10	10.30	9.80	10.80	10.30	0.00
29 Chrysene-d12	13.63	13.13	14.13	13.63	0.00
35 Perylene-d12	15.61	15.11	16.11	15.61	0.00

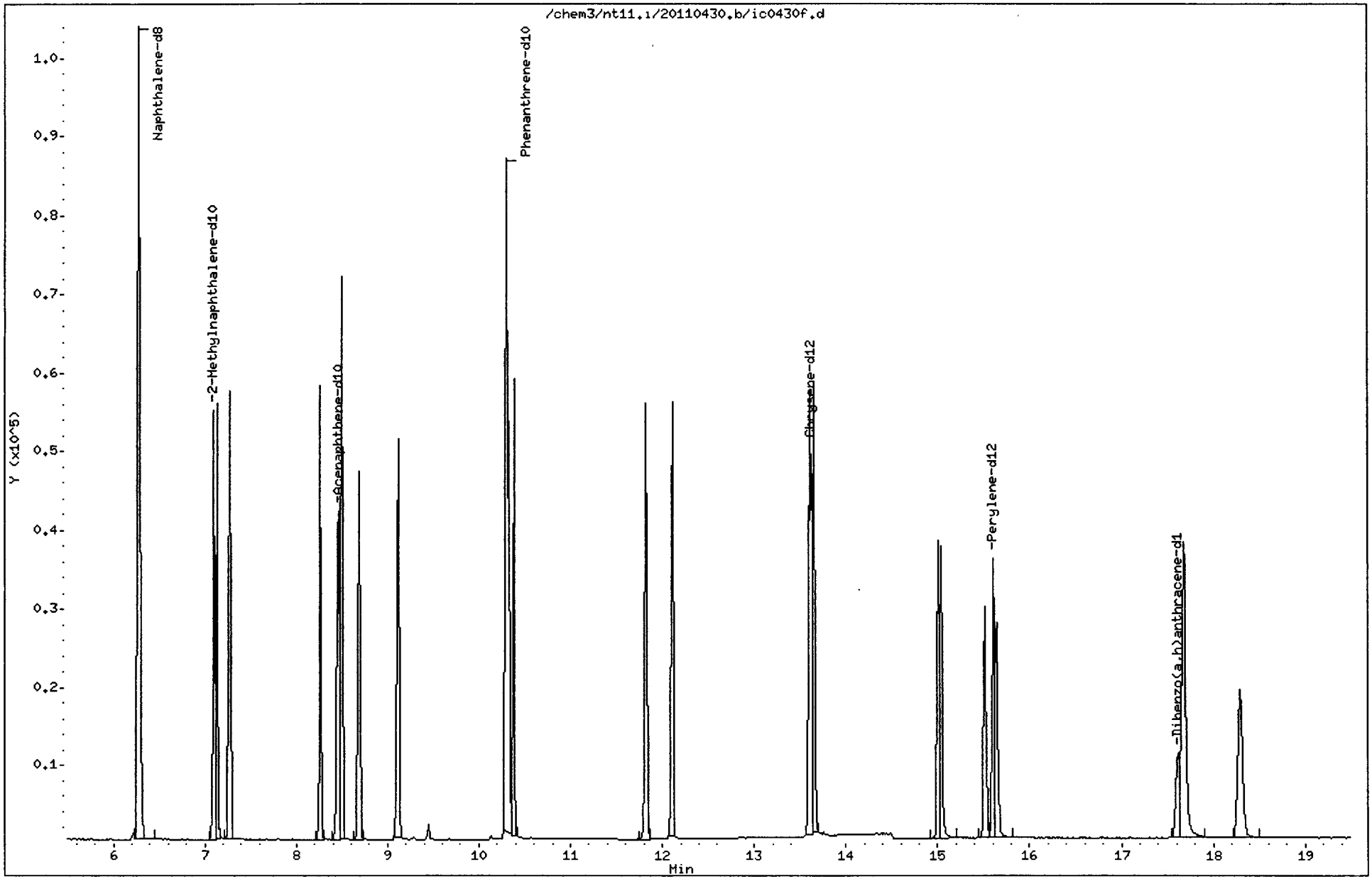
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem3/nt11.i/20110430.b/ic0430f.d
Date : 30-APR-2011 12:15
Client ID:
Sample Info: SIM100

Instrument: nt11.i

Operator: VTS
Column diameter: 0.25

Column phase: ZB-5msi



CO-ELUTION SUMMARY FOR FILE - ic0430f.d

Lab ID: SIM100, Method: lowsim.m, Instrument: nt11.i, Date: 30-APR-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt11.i/20110430.b/icv0430.d
Lab Smp Id: ICV-250
Inj Date : 30-APR-2011 12:39
Operator : VTS Inst ID: nt11.i
Smp Info : ICV-250
Misc Info :
Comment :
Method : /chem3/nt11.i/20110430.b/lowsim.m
Meth Date : 30-Apr-2011 14:37 van Quant Type: ISTD
Cal Date : 30-APR-2011 12:15 Cal File: ic0430f.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna1mn.sub
Target Version: 3.50
Processing Host: cserv3

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	FINAL (ng/mL)
*	4 Naphthalene-d8	136	6.273	6.272	(1.000)	124975	200.000	
	5 Naphthalene	128	6.296	6.295	(1.004)	173843	290.039	290
$	6 2-Methylnaphthalene-d10	152	Compound Not Detected.					
	7 2-Methylnaphthalene	142	~~7.274~~	7.135	(1.160)	94554	~~259.712~~	260
	8 1-Methylnaphthalene	142	7.274	7.273	(1.160)	94554	261.680	262
	10 Acenaphthylene	152	8.265	8.265	(0.978)	163303	298.522	299
*	11 Acenaphthene-d10	164	8.452	8.466	(1.000)	70122	200.000	
	12 Acenaphthene	153	8.493	8.492	(1.005)	100025	290.212	290
	14 Dibenzofuran	168	Compound Not Detected.					
	15 Fluorene	166	9.123	9.123	(1.079)	110202	307.606	308
*	18 Phenanthrene-d10	188	10.302	10.302	(1.000)	110829	200.000	
	19 Phenanthrene	178	10.329	10.329	(1.003)	163542	293.547	294
	20 Anthracene	178	10.383	10.383	(1.008)	152395	288.991	289
	24 Fluoranthene	202	11.817	11.817	(1.147)	162660	297.061	297
	25 Pyrene	202	12.113	12.112	(0.889)	168034	285.733	286
	28 Benzo(a)anthracene	228	13.601	13.601	(0.998)	136905	279.272	279
*	29 Chrysene-d12	240	13.628	13.628	(1.000)	69995	200.000	
	30 Chrysene	228	13.655	13.655	(1.002)	140351	284.777	285
	43 Total Benzofluoranthenes	252	15.041	15.041	(0.964)	256486	581.696	582
	34 Benzo(a)pyrene	252	15.512	15.512	(0.994)	110447	282.062	282
*	35 Perylene-d12	264	15.608	15.608	(1.000)	54585	200.000	
	37 Indeno(1,2,3-cd)pyrene	276	17.672	17.672	(1.132)	133097	281.608	282
$	36 Dibenzo(a,h)anthracene-d14	292	Compound Not Detected.					
	38 Dibenzo(a,h)anthracene	278	17.685	17.685	(1.133)	102758	279.114	279
	39 Benzo(g,h,i)perylene	276	18.289	18.289	(1.172)	119260	283.189	283

@250

1232

UB
4.30.11

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt11.i
Lab File ID: icv0430.d
Lab Smp Id: ICV-250
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt11.i/20110430.b/lowsim.m
Misc Info:

Calibration Date: 30-APR-2011
Calibration Time: 10:12
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	129326	64663	258652	124975	-3.36
11 Acenaphthene-d10	70573	35286	141146	70122	-0.64
18 Phenanthrene-d10	113741	56870	227482	110829	-2.56
29 Chrysene-d12	70763	35382	141526	69995	-1.09
35 Perylene-d12	54896	27448	109792	54585	-0.57

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	6.27	5.77	6.77	6.27	0.00
11 Acenaphthene-d10	8.47	7.97	8.97	8.45	-0.16
18 Phenanthrene-d10	10.30	9.80	10.80	10.30	0.00
29 Chrysene-d12	13.63	13.13	14.13	13.63	0.00
35 Perylene-d12	15.61	15.11	16.11	15.61	0.00

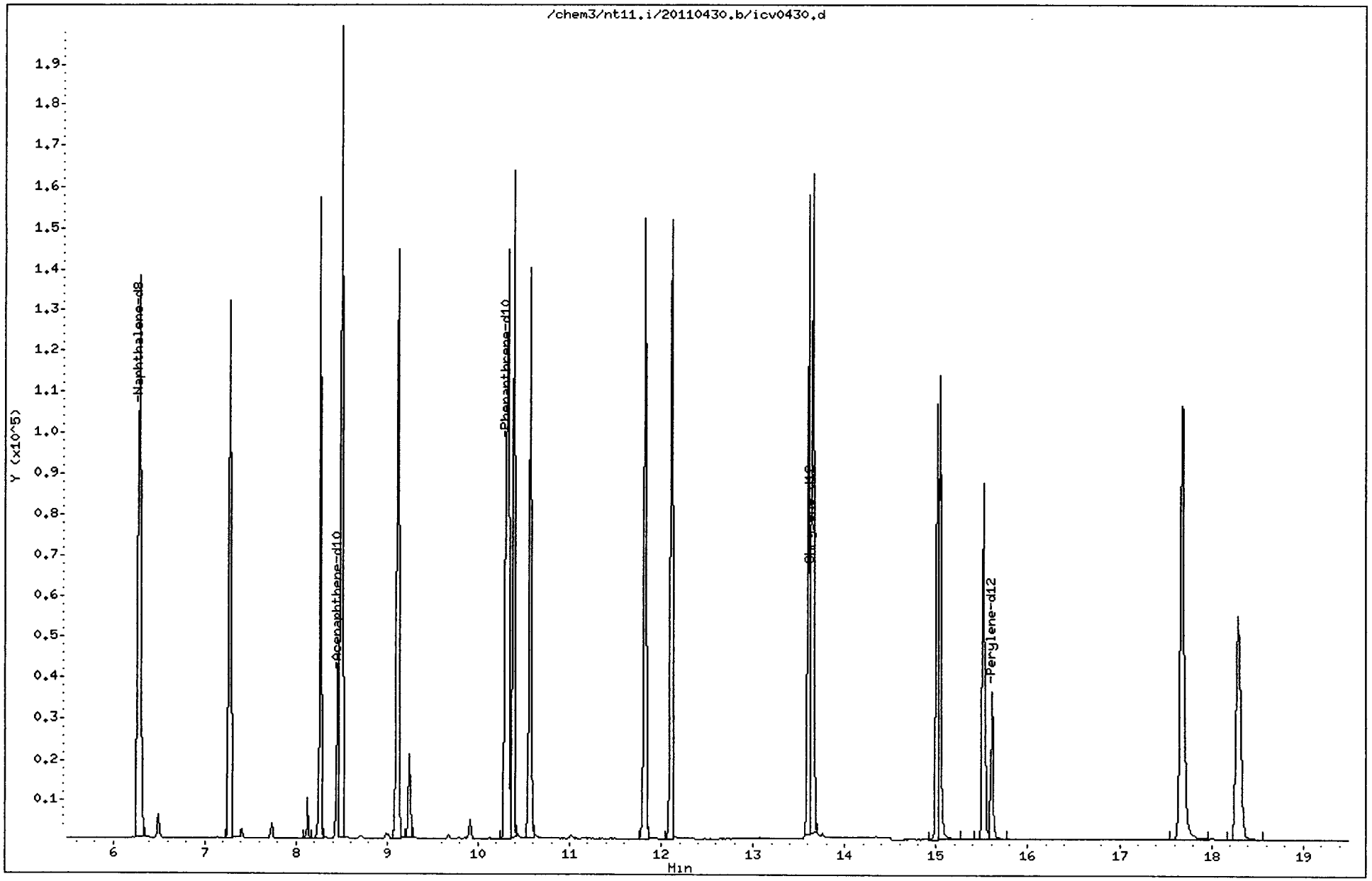
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem3/nt11.i/20110430.b/icv0430.d
Date : 30-APR-2011 12:39
Client ID:
Sample Info: ICV-250

Instrument: nt11.i

Operator: VTS
Column diameter: 0.25

Column phase: ZB-5msi



ST98:00528

CO-ELUTION SUMMARY FOR FILE - icv0430.d

Lab ID: ICV-250, Method: lowsim.m, Instrument: nt11.i, Date: 30-APR-2011

RT	CO-ELUTION COMPOUNDS
7.274	1-Methylnaphthalene and ~~2-Methylnaphthalene~~

NOT IN ICV

SIM PAH Raw Data
Run Logs, Continuing Calibrations, and Raw Data

ARI Job ID: ST98, SU21

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC/MS SVOA Analyst Notes / Corrective Action Log

ARI Project ID: ST98 Client ID: Floyd Snider

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

Parameter(s): L.L SIM PNA

Instrument: NT-4 NT-6 NT-8 NT-10 NT11 (circled) NT12

Curve Date: 04/30/11 Analysis Start Date: 05/14/11

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

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

MB indeno(cd)pyrene <RL .0076 J

B-Flagged LCS/LCSD
~~[illegible]~~
MS/MSD ~~[illegible]~~

Additional Details on Reverse: Yes / No (circled)

Analyst: [signature] **Date:** 5/16/11

Reviewer: [signature] **Date:** 5/16/11

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC/MS SVOA Analyst Notes / Corrective Action Log

ARI Project ID: 5121 Client ID: Floyd Snider

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

Parameter(s): L. L SIM PNA

Instrument: NT-4 NT-6 NT-8 NT-10 (NT11) NT12

Curve Date: 4/30/11 Analysis Start Date: 5/14/11

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

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

MB – Indeno cd pyrene – LPL 0076J (100%) B-Flagged ~~ng/mg~~ ug/kg LCS/LCSD 5/14

Additional Details on Reverse: Yes / (No)

Analyst: VZ **Date:** 5/16/11

Reviewer: [signature] **Date:** 5/16/11

Analytical Resources Inc.: Organics Instrument Log

NT-11 Serial No.:GC=US10140004, MS=US10481502

Date: 5/14/11 Analysis: Low SIM ANA Analyst: YZ

GC Program: LowSIM Column No: 195816 Column Type: ZB5 ms 1

Instrument Tune (.U or .CT.): 110430 4 EM Voltage: 1471

Calibration File: DF0514 Curve Date: 04/30/11

IS/SS	Ical/Ccal	LCS/ICV
1754-1	1819-2	

INTERNAL STANDARD SUMMARY FOR DATABATCH - /chem3/nt11.i/20110514.b

	Time	Filename	LabID	ClientId	DF											
1	1044	df0514 d	DF0514		1	NO ISTDS FOUND										
2	1058	cc0514 d	CC0514		1	6 27	127532	8 47	70913	10 30	116365	13 63	77875	15 61	62637	
3	1134	st71mb d	ST71MBW1	ST71MBW1	1	6 27	126924	8 47	73346	10 30	119442	13 63	78581	15 62	62259	
4	1158	st71sb d	ST71LCSW1	ST71LCSW1	1	6 27	126521	8 47	72151	10 30	122986	13 63	80823	15 62	66171	
5	1222	st71sbd d	ST71LCSDW1	ST71LCSDW1	1	6 27	124269	8 47	71681	10 30	116147	13 63	77230	15 61	62260	
6	1246	st71qls1 d	ST71QLS1		1	6 27	126171	8 47	71540	10 30	119614	13 63	74178	15 61	62027	
7	1311	st71a d	ST71A	NBF-MH108-04	1	6 27	123742	8 47	70956	10 30	117357	13 63	77803	15 61	61876	
8	1335	st71b d	ST71B	NBF-LS431-04	1	6 27	125266	8 47	72945	10 30	123218	13 63	81876	15 61	67172	
9	1359	su04a d	SU04A	MW-2	1	6 27	122510	8 47	70118	10 30	112761	13 63	70164	15 61	58521	
10	1424	su04b d	SU04B	MW-7	1	6 27	124409	8 47	70191	10 30	115112	13 63	74898	15 61	61624	
11	1448	su04c d	SU04C	MW-8	1	6 27	123410	8 47	71016	10 30	117681	13 63	77561	15 61	62944	
12	1512	su14mb d	SU14MBW1		1	6 28	128498	8 47	73978	10 30	126818	13 63	84338	15 61	67721	
13	1536	su14sb d	SU14LCSW1		1	6 27	127737	8 47	75636	10 30	128287	13 63	85111	15 61	68647	
14	1601	su14sbd d	SU14LCSDW1		1	6 27	127743	8 47	75249	10 30	124194	13 63	81150	15 61	67329	
15	1625	su14qls1 d	SU14QLS1		1	6 27	130530	8 47	73192	10 30	125219	13 63	83552	15 61	66286	
16	1649	su14a d	SU14A		1	6 27	125242	8 47	72276	10 30	122782	13 63	81029	15 61	65266	
17	1713	su14ams d	SU14AMS		1	6 27	128633	8 47	77242	10 30	130075	13 63	90127	15 61	71468	
18	1738	su14amsd d	SU14AMSD		1	6 27	128968	8 47	76598	10 30	125055	13 63	87080	15 61	69375	
19	1802	su14b d	SU14B		1	6 27	129350	8 47	75019	10 30	125365	13 63	82891	15 61	66683	
20	1826	su14c d	SU14C		1	6 27	129860	8 47	76926	10 30	131588	13 63	87002	15 61	68793	
21	1850	su14d d	SU14D		1	6 27	126084	8 47	71386	10 30	123749	13 63	80362	15 61	66067	
22	1915	su14e d	SU14E		1	6 27	129640	8 47	74384	10 30	127659	13 63	82552	15 61	66260	
23	1939	st98a d	ST98A		1	6 27	128597	8 47	75668	10 30	126618	13 63	85285	15 61	68280	
24	2003	st98b d	ST98B		1	6 27	127867	8 47	75276	10 30	125494	13 63	84793	15 61	67572	
25	2028	st98c d	ST98C		1	6 27	128845	8 47	76084	10 30	127327	13 63	83781	15 61	67652	
26	2052	st98d d	ST98D		1	6 27	129473	8 47	80002	10 30	131612	13 63	85574	15 61	68197	
27	2116	st98dms d	ST98DMS		1	6 27	132444	8 47	79451	10 30	137087	13 63	93589	15 61	72725	
28	2140	st98dmsd d	ST98DMSD		1	6 27	133180	8 47	81440	10 30	136318	13 63	94653	15 61	71787	
29	2204	su21a d	SU21A		1	6 27	128789	8 47	73823	10 30	124916	13 63	83651	15 61	65771	
30	2229	su21b d	SU21B		1	6 27	124783	8 47	73063	10 30	125305	13 63	82424	15 61	66098	
31	2253	su21c d	SU21C		1	6 27	126923	8 47	73797	10 30	119224	13 63	80880	15 61	65617	
32	2317	su21d d	SU21D		1	6 27	129407	8 47	74629	10 30	125739	13 63	83959	15 61	67117	
33	2341	su21e d	SU21E		1	6 27	128744	8 47	73353	10 30	124198	13 63	83078	15 61	66301	
34	0005	su21f d	SU21F		1	6 27	126265	8 47	73275	10 30	122750	13 63	81688	15 61	65439	

YZ 5/16/11

Q-FLAG SUMMARY FOR DATABATCH - /chem3/nt11.i/20110514.b

Instrument: nt11.i Date: 14-MAY-2011 Method: lowsim.m

INITIAL CAL: 30-APR-2011

Compound	%RSD or R^2
NO Q-FLAGS	

CONTINUING CAL: 14-MAY-2011

Compound	%D
NO Q-FLAGS	

Data File: /chem3/nt11.i/20110514.b/df0514.d

Date : 14-MAY-2011 10:44

Client ID:

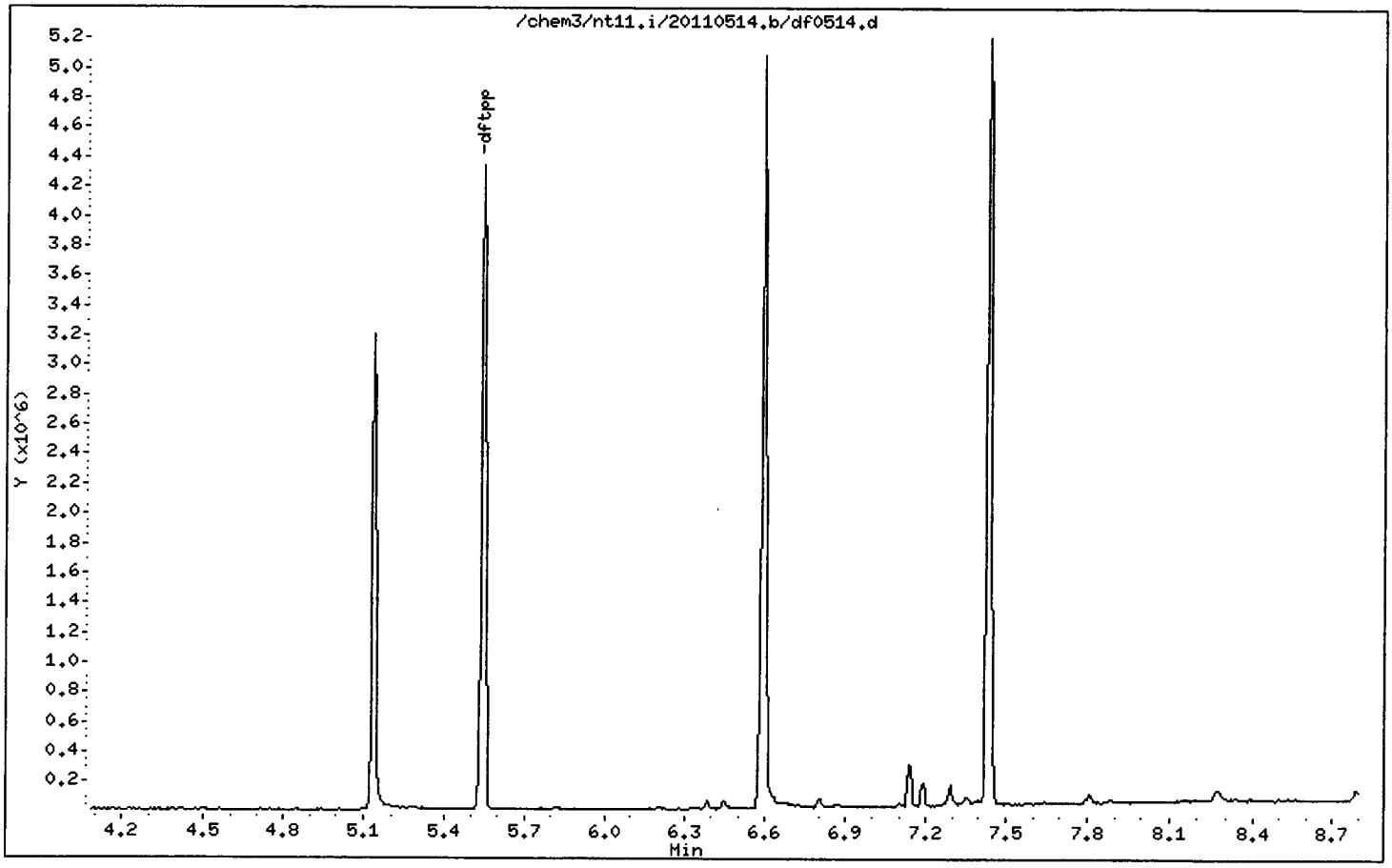
Instrument: nt11.i

Sample Info: DF0514

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



Data File: /chem3/nt11.i/20110514.b/df0514.d

Date : 14-MAY-2011 10:44

Client ID:

Instrument: nt11.i

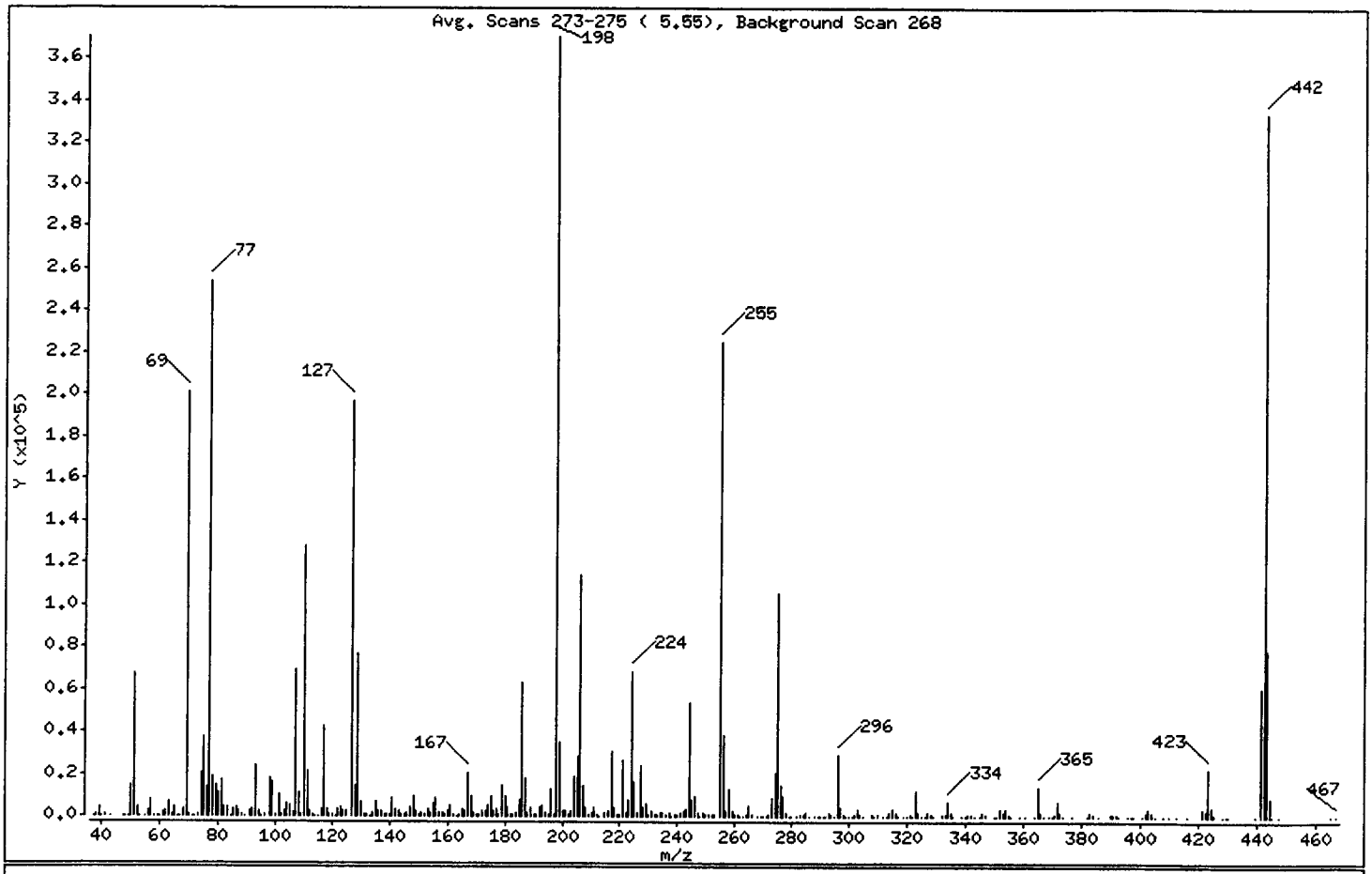
Sample Info: DF0514

Operator: VTS

Column phase: ZB-5ms1

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	16.89
68	Less than 2.00% of mass 69	1.06 (1.93)
69	Mass 69 relative abundance	54.77
70	Less than 2.00% of mass 69	0.25 (0.46)
127	10.00 - 80.00% of mass 198	51.63
197	Less than 2.00% of mass 198	0.13
199	5.00 - 9.00% of mass 198	8.79
275	10.00 - 60.00% of mass 198	27.10
365	Greater than 1.00% of mass 198	3.43
441	0.01 - 24.00% of mass 442	15.76 (17.41)
442	50.00 - 200.00% of mass 198	90.50
443	15.00 - 24.00% of mass 442	20.49 (22.64)

Data File: /chem3/nt11.i/20110514.b/df0514.d

Date : 14-MAY-2011 10:44

Client ID:

Instrument: nt11.i

Sample Info: DF0514

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

Data File: df0514.d

Spectrum: Avg. Scans 273-275 (5.55), Background Scan 268

Location of Maximum: 198.00

Number of points: 348

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	189	133.00	205	222.00	1751	317.00	295
38.00	759	134.00	1590	223.00	7476	319.00	71
39.00	4369	135.00	6603	224.00	67776	320.00	76
40.00	232	136.00	2332	225.00	16384	321.00	1201
41.00	612	137.00	2461	226.00	1418	322.00	392
43.00	134	138.00	712	227.00	24152	323.00	11654
47.00	101	139.00	430	228.00	4058	324.00	2044
48.00	63	140.00	797	229.00	5742	325.00	391
49.00	179	141.00	8447	230.00	467	326.00	148
50.00	14719	142.00	3424	231.00	2212	327.00	1934
51.00	66896	143.00	2172	232.00	611	328.00	1099
52.00	4071	144.00	618	233.00	469	329.00	198
53.00	111	145.00	622	234.00	1866	332.00	646
55.00	66	146.00	1639	235.00	1480	333.00	1093
56.00	2833	147.00	4477	236.00	1255	334.00	7041
57.00	8078	148.00	9272	237.00	1751	335.00	1850
58.00	372	149.00	2267	238.00	261	336.00	233
59.00	216	150.00	747	239.00	690	339.00	207
60.00	220	151.00	1378	240.00	821	340.00	63
61.00	1379	152.00	729	241.00	1594	341.00	908
62.00	2244	153.00	3161	242.00	2855	342.00	491
63.00	6468	154.00	2046	243.00	3515	343.00	113
64.00	997	155.00	5762	244.00	54080	345.00	50
65.00	4527	156.00	8356	245.00	7319	346.00	1916
66.00	241	157.00	1670	246.00	9147	347.00	678
67.00	203	158.00	1437	247.00	1763	350.00	257
68.00	3601	159.00	1271	248.00	356	351.00	285
69.00	201152	160.00	2599	249.00	2090	352.00	3822
70.00	1125	161.00	4893	250.00	574	353.00	1745
71.00	200	162.00	1060	251.00	463	354.00	3612
72.00	175	163.00	206	252.00	514	355.00	848
73.00	990	164.00	950	253.00	1154	356.00	57
74.00	20608	165.00	3574	255.00	225088	357.00	56
75.00	37320	166.00	2154	256.00	38560	359.00	310
76.00	13510	167.00	20232	257.00	2530	361.00	95

Data File: /chem3/nt11.i/20110514.b/df0514.d

Date : 14-MAY-2011 10:44

Client ID:

Instrument: nt11.i

Sample Info: DF0514

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

Data File: df0514.d
Spectrum: Avg. Scans 273-275 (5.55), Background Scan 268
Location of Maximum: 198.00
Number of points: 348

m/z	Y	m/z	Y	m/z	Y	m/z	Y
77.00	254144	168.00	9747	258.00	13024	364.00	50
78.00	18392	169.00	1609	259.00	2217	365.00	13321
79.00	14130	170.00	607	260.00	487	366.00	1936
80.00	10989	171.00	958	261.00	535	367.00	249
81.00	16944	172.00	2182	262.00	142	369.00	67
82.00	4111	173.00	2188	263.00	52	370.00	288
83.00	4477	174.00	4891	264.00	733	371.00	932
84.00	224	175.00	9064	265.00	5236	372.00	6496
85.00	3597	176.00	2697	266.00	960	373.00	1656
86.00	4099	177.00	3387	268.00	225	374.00	35
87.00	2144	178.00	1162	269.00	67	377.00	60
88.00	441	179.00	14822	270.00	395	382.00	60
89.00	369	180.00	9798	271.00	408	383.00	1937
91.00	2704	181.00	4108	272.00	438	384.00	627
92.00	3709	182.00	913	273.00	8517	386.00	87
93.00	24168	183.00	593	274.00	20120	390.00	849
94.00	2205	184.00	1476	275.00	105512	391.00	561
95.00	124	185.00	8006	276.00	14628	392.00	540
96.00	1032	186.00	63000	277.00	9677	393.00	53
98.00	17536	187.00	17584	278.00	1603	396.00	59
99.00	16544	188.00	1678	279.00	308	397.00	69
100.00	987	189.00	3881	280.00	166	398.00	129
101.00	10108	190.00	825	282.00	339	401.00	423
102.00	698	191.00	1153	283.00	920	402.00	2081
103.00	2588	192.00	4051	284.00	682	403.00	3631
104.00	6082	193.00	5237	285.00	2064	404.00	1291
105.00	5522	194.00	1367	286.00	417	405.00	95
106.00	1961	195.00	897	288.00	126	408.00	108
107.00	69152	196.00	12657	289.00	331	410.00	122
108.00	10991	197.00	629	290.00	289	412.00	60
109.00	1114	198.00	370624	291.00	287	415.00	139
110.00	127768	199.00	34672	292.00	375	416.00	133
111.00	20928	200.00	2316	293.00	1648	421.00	3117
112.00	2626	201.00	2386	294.00	713	422.00	2921
113.00	909	202.00	855	295.00	82	423.00	22240

Data File: /chem3/nt11.i/20110514.b/df0514.d

Date : 14-MAY-2011 10:44

Client ID:

Instrument: nt11.i

Sample Info: DF0514

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

Data File: df0514.d

Spectrum: Avg. Scans 273-275 (5.55), Background Scan 268

Location of Maximum: 198.00

Number of points: 348

m/z	Y	m/z	Y	m/z	Y	m/z	Y
114.00	167	203.00	2945	296.00	28952	424.00	4585
115.00	123	204.00	18352	297.00	4042	425.00	451
116.00	3467	205.00	28080	298.00	443	428.00	126
117.00	42448	206.00	114552	299.00	131	429.00	55
118.00	3258	207.00	14205	300.00	116	430.00	54
119.00	562	208.00	4160	301.00	426	439.00	78
120.00	906	209.00	1099	302.00	859	441.00	60840
121.00	338	210.00	1389	303.00	3339	442.00	333632
122.00	3562	211.00	4637	304.00	792	443.00	78712
123.00	4595	212.00	767	305.00	76	444.00	8134
124.00	2259	213.00	286	308.00	471	445.00	375
125.00	2664	215.00	1512	309.00	422	447.00	58
127.00	196864	216.00	2271	310.00	628	465.00	51
128.00	14873	217.00	31096	312.00	127	467.00	52
129.00	76600	218.00	4270	313.00	358	-	
130.00	7149	219.00	861	314.00	1709		
131.00	1030	220.00	460	315.00	3380		
132.00	883	221.00	26504	316.00	2123		

Analytical Resources, Inc.

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt11.i/20110514.b/cc0514.d
Lab Smp Id: CC0514
Inj Date : 14-MAY-2011 10:58
Operator : VTS Inst ID: nt11.i
Smp Info : CC0514
Misc Info :
Comment :
Method : /chem3/nt11.i/20110514.b/lowsim.m
Meth Date : 14-May-2011 11:43 van Quant Type: ISTD
Cal Date : 30-APR-2011 12:15 Cal File: ic0430f.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna1mn.sub
Target Version: 3.50
Processing Host: cserv3

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)
*	4 Naphthalene-d8	136	6.272	6.272	(1.000)	127532	200.000	
	5 Naphthalene	128	6.295	6.295	(1.004)	153373	250.000	251
$	6 2-Methylnaphthalene-d10	152	7.101	7.101	(1.132)	94810	250.000	256
	7 2-Methylnaphthalene	142	7.135	7.135	(1.138)	96742	250.000	260
	8 1-Methylnaphthalene	142	7.273	7.273	(1.160)	94665	250.000	257
	10 Acenaphthylene	152	8.265	8.265	(0.976)	140408	250.000	254
*	11 Acenaphthene-d10	164	8.466	8.466	(1.000)	70913	200.000	
	12 Acenaphthene	153	8.492	8.492	(1.003)	89803	250.000	258
	14 Dibenzofuran	168	8.694	8.694	(1.027)	133536	250.000	260
	15 Fluorene	166	9.123	9.123	(1.078)	95722	250.000	264
*	18 Phenanthrene-d10	188	10.302	10.302	(1.000)	116365	200.000	
	19 Phenanthrene	178	10.329	10.329	(1.003)	143819	250.000	246
	20 Anthracene	178	10.383	10.383	(1.008)	137865	250.000	249
	24 Fluoranthene	202	11.831	11.831	(1.148)	149256	250.000	260
	25 Pyrene	202	12.112	12.112	(0.889)	155381	250.000	237
	28 Benzo(a)anthracene	228	13.601	13.601	(0.998)	128182	250.000	235
*	29 Chrysene-d12	240	13.628	13.628	(1.000)	77875	200.000	
	30 Chrysene	228	13.655	13.655	(1.002)	133171	250.000	243
	43 Total Benzofluoranthenes	252	15.013	15.013	(0.962)	243303	500.000	481
	34 Benzo(a)pyrene	252	15.522	15.522	(0.994)	107993	250.000	240
*	35 Perylene-d12	264	15.608	15.608	(1.000)	62637	200.000	
	37 Indeno(1,2,3-cd)pyrene	276	17.685	17.685	(1.133)	134887	250.000	249
$	36 Dibenzo(a,h)anthracene-d14	292	17.618	17.618	(1.129)	99181	250.000	253
	38 Dibenzo(a,h)anthracene	278	17.699	17.699	(1.134)	105439	250.000	250
	39 Benzo(g,h,i)perylene	276	18.302	18.302	(1.173)	117244	250.000	243

VTS 5.14.11

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt11.i
Lab File ID: cc0514.d
Lab Smp Id: CC0514
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt11.i/20110514.b/lowsim.m
Misc Info:

Calibration Date: 14-MAY-2011
Calibration Time: 10:16

Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	129326	64663	258652	127532	-1.39
11 Acenaphthene-d10	70573	35286	141146	70913	0.48
18 Phenanthrene-d10	113741	56870	227482	116365	2.31
29 Chrysene-d12	70763	35382	141526	77875	10.05
35 Perylene-d12	54896	27448	109792	62637	14.10

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	6.27	5.77	6.77	6.27	0.00
11 Acenaphthene-d10	8.47	7.97	8.97	8.47	0.00
18 Phenanthrene-d10	10.30	9.80	10.80	10.30	0.00
29 Chrysene-d12	13.63	13.13	14.13	13.63	0.00
35 Perylene-d12	15.61	15.11	16.11	15.61	0.00

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

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt11.i Injection Date: 14-MAY-2011 10:58
Lab File ID: cc0514.d Init. Cal. Date(s): 30-APR-2011 30-APR-2011
Analysis Type: Init. Cal. Times: 10:12 12:15
Lab Sample ID: CC0514 Quant Type: ISTD
Method: /chem3/nt11.i/20110514.b/lowsim.m

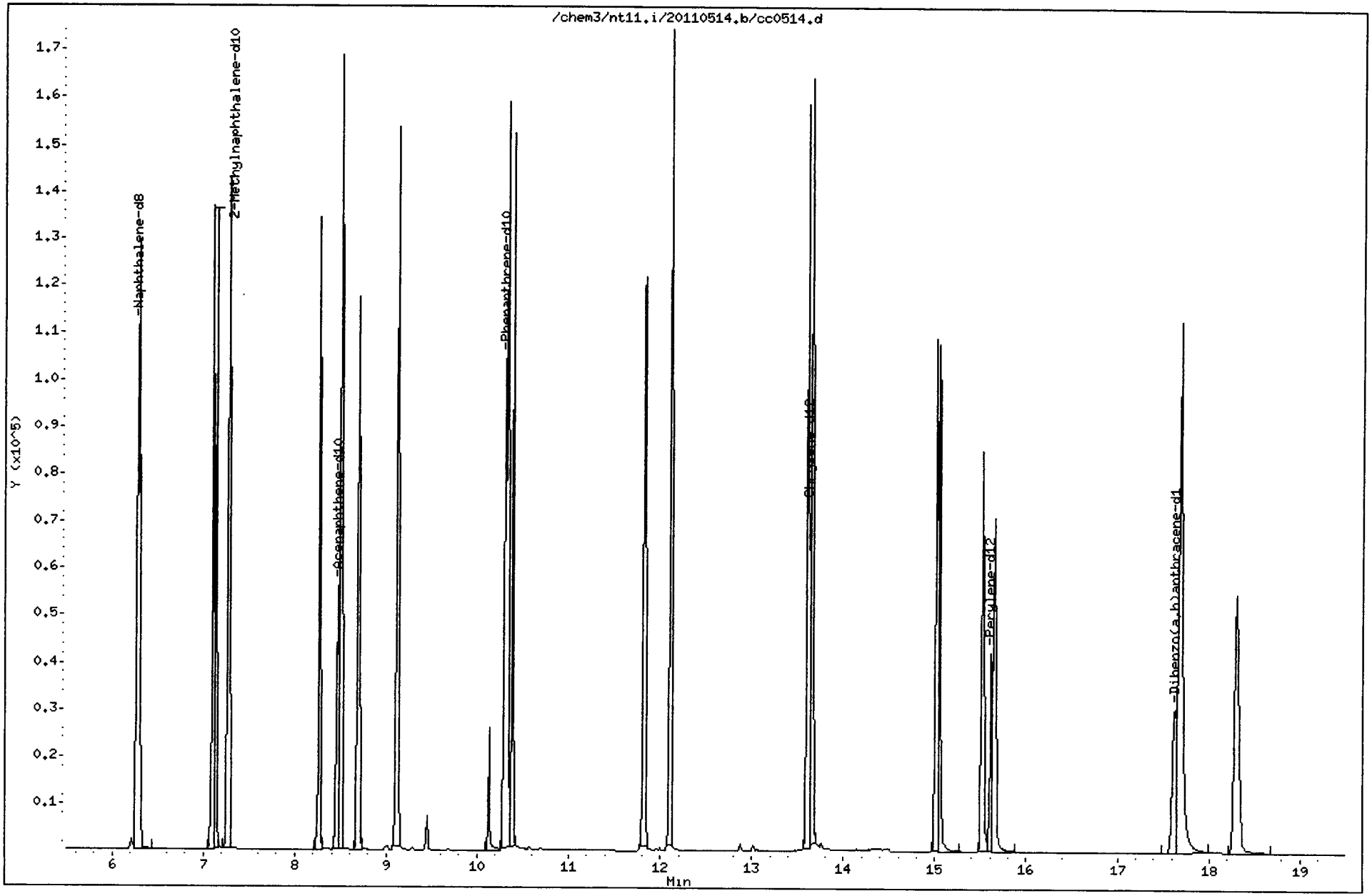
COMPOUND	RRF / AMOUNT	RF250	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
5 Naphthalene	0.95920	0.96210	0.010	0.30237	20.00000	Averaged
$ 6 2-Methylnaphthalene-d10	0.58083	0.59473	0.010	2.39328	20.00000	Averaged
7 2-Methylnaphthalene	0.58263	0.60686	0.010	4.15798	20.00000	Averaged
8 1-Methylnaphthalene	0.57825	0.59383	0.010	2.69382	20.00000	Averaged
10 Acenaphthylene	1.56025	1.58399	0.010	1.52202	20.00000	Averaged
12 Acenaphthene	0.98304	1.01310	0.010	3.05848	20.00000	Averaged
14 Dibenzofuran	1.44731	1.50648	0.010	4.08804	20.00000	Averaged
15 Fluorene	1.02181	1.07988	0.010	5.68347	20.00000	Averaged
19 Phenanthrene	1.00537	0.98874	0.010	-1.65446	20.00000	Averaged
20 Anthracene	0.95162	0.94781	0.010	-0.40052	20.00000	Averaged
24 Fluoranthene	0.98812	1.02612	0.010	3.84527	20.00000	Averaged
25 Pyrene	1.68035	1.59620	0.010	-5.00795	20.00000	Averaged
28 Benzo(a)anthracene	1.40073	1.31679	0.010	-5.99292	20.00000	Averaged
30 Chrysene	1.40823	1.36805	0.010	-2.85350	20.00000	Averaged
43 Total Benzofluoranthenes	1.61557	1.55374	0.010	-3.82715	20.00000	Averaged
34 Benzo(a)pyrene	1.43471	1.37930	0.010	-3.86271	20.00000	Averaged
37 Indeno(1,2,3-cd)pyrene	1.73173	1.72278	0.010	-0.51681	20.00000	Averaged
$ 36 Dibenzo(a,h)anthracene-d14	1.25261	1.26675	0.010	1.12821	20.00000	Averaged
38 Dibenzo(a,h)anthracene	1.34894	1.34667	0.010	-0.16812	20.00000	Averaged
39 Benzo(g,h,i)perylene	1.54303	1.49745	0.010	-2.95411	20.00000	Averaged

Data File: /chem3/nt11.i/20110514.b/cc0514.d
Date : 14-MAY-2011 10:58
Client ID:
Sample Info: CC0514

Column phase: ZB-5msi

Instrument: nt11.i

Operator: VTS
Column diameter: 0.25



CO-ELUTION SUMMARY FOR FILE - cc0514.d

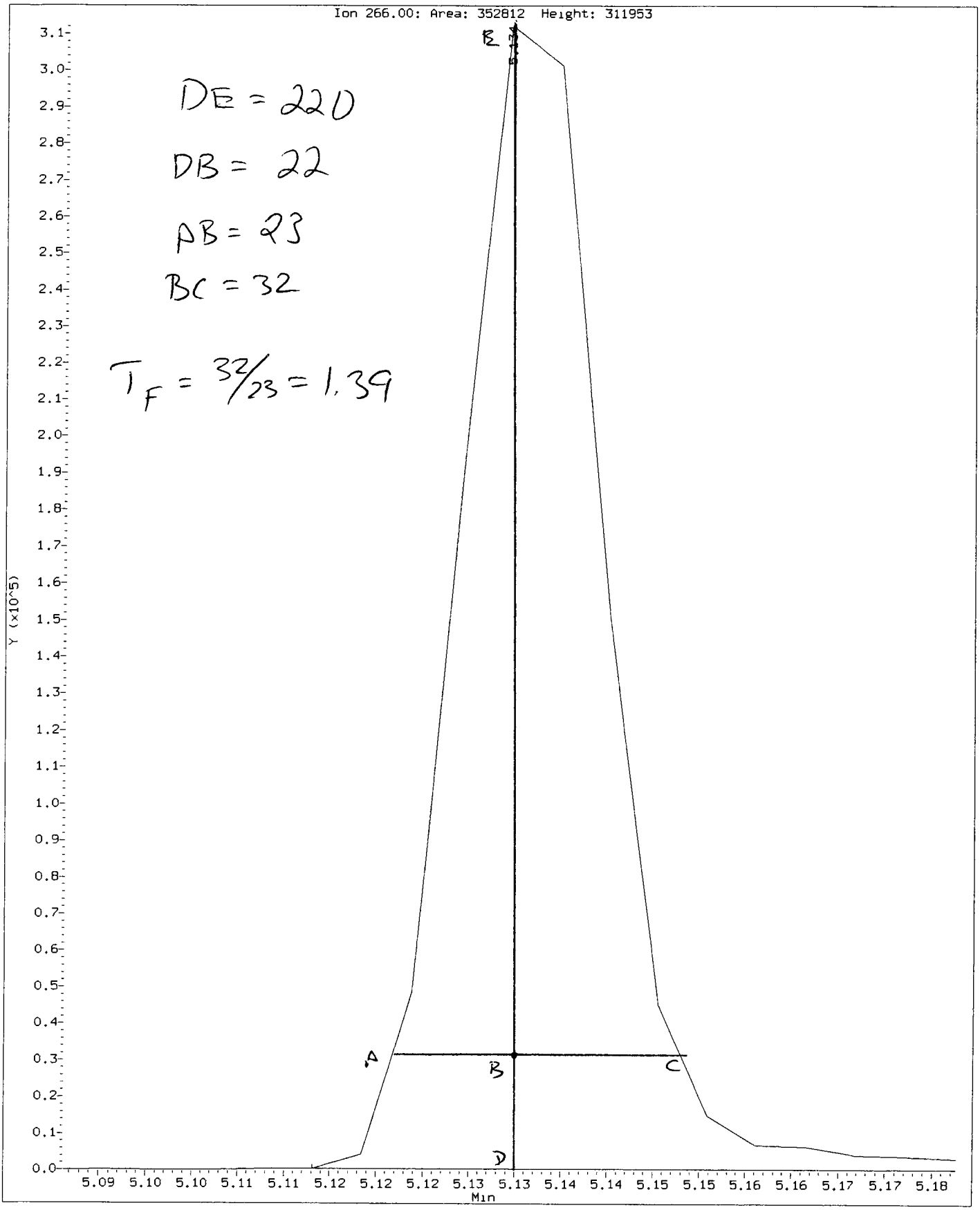
Lab ID: CC0514, Method: lowsim.m, Instrument: nt11.i, Date: 14-MAY-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Data File: /chem3/nt11.1/20110514.b/ddt.b/df0514.d
Injection Date: 14-MAY-2011 10:44
Instrument: nt11.1
Client Sample ID:

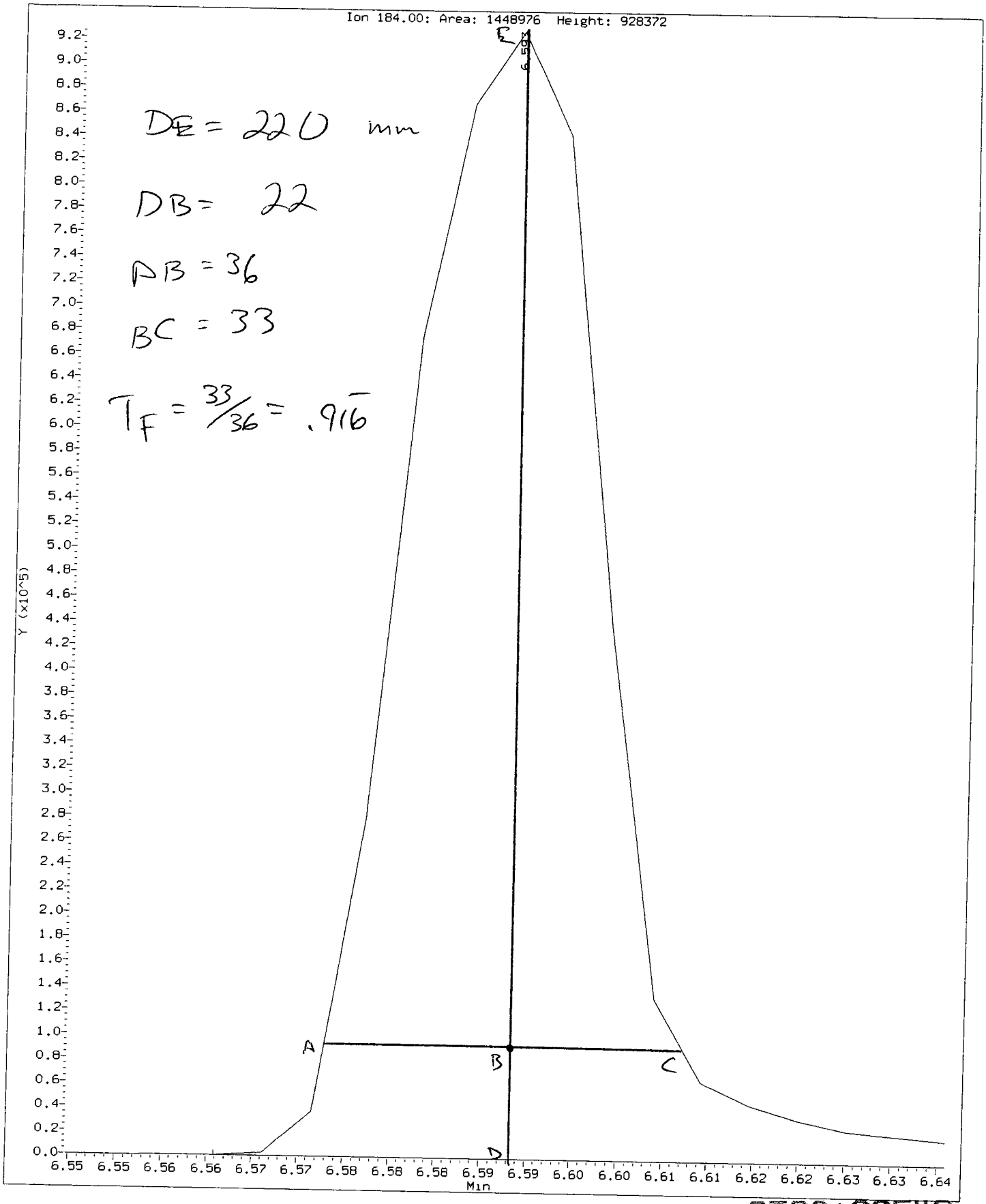
Compound: Pentachlorophenol
CAS Number: 87-86-5



ST98 : 00545

Data File: /chem3/nt11.i/20110514.b/ddt.b/df0514.d
Injection Date: 14-MAY-2011 10:44
Instrument: nt11.i
Client Sample ID:

Compound: Benzidine
CAS Number:



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

Data file: /chem3/nt11.i/20110514.b/ddt.b/df0514.d ARI ID: DF0514
Method: /chem3/nt11.i/20110514.b/ddt.b/sw846ddt.m Misc:
Analysis Date: 14-MAY-2011 10:44 Instrument: nt11.i

COMPOUND	RT	AREA
Pentachlorophenol	5.134	352812
Benzidine	6.593	1448976
4,4'-DDE	6.807	6888
4,4'-DDD	7.138	57653
4,4'-DDT	7.437	873011

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

$$\text{DDT Percent Breakdown} = \frac{(6888 + 57653) * 100}{(6888 + 57653 + 873011)}$$

DDT Percent Breakdown = 6.9 %

Analytical Resources, Inc.

YZ 5/16/11

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt11.i/20110514.b/su14mb.d
Lab Smp Id: SU14MBW1 Client Smp ID: SU14MBW1
Inj Date : 14-MAY-2011 15:12
Operator : VTS Inst ID: nt11.i
Smp Info : SU14MBW1
Misc Info : 11-9455
Comment :
Method : /chem3/nt11.i/20110514.b/lowsim.m
Meth Date : 16-May-2011 14:46 yev Quant Type: ISTD
Cal Date : 30-APR-2011 12:15 Cal File: ic0430f.d
Als bottle: 10 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna1mn.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt / Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Final Extract Volume (uL)
Vo	500.00000	Sample Volume extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	FINAL (ug/L)
*	4 Naphthalene-d8	136	6.284	6.272	(1.000)	128498	200.000	
	5 Naphthalene	128	Compound Not Detected.					
$	6 2-Methylnaphthalene-d10	152	7.112	7.101	(1.132)	72036	193.033	193
	7 2-Methylnaphthalene	142	Compound Not Detected.					
	8 1-Methylnaphthalene	142	Compound Not Detected.					
	10 Acenaphthylene	152	Compound Not Detected.					
*	11 Acenaphthene-d10	164	8.466	8.466	(1.000)	73978	200.000	
	12 Acenaphthene	153	Compound Not Detected.					
	14 Dibenzofuran	168	Compound Not Detected.					
	15 Fluorene	166	Compound Not Detected.					
*	18 Phenanthrene-d10	188	10.302	10.302	(1.000)	126818	200.000	
	19 Phenanthrene	178	Compound Not Detected.					
	20 Anthracene	178	Compound Not Detected.					
	24 Fluoranthene	202	Compound Not Detected.					
	25 Pyrene	202	Compound Not Detected.					
	28 Benzo(a)anthracene	228	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	FINAL (ug/L)
* 29 Chrysene-d12	240	13.628	13.628	(1.000)	84338	200.000	
30 Chrysene	228	Compound Not Detected.					
43 Total Benzofluoranthenes	252	Compound Not Detected.					
34 Benzo(a)pyrene	252	Compound Not Detected.					
* 35 Perylene-d12	264	15.608	15.608	(1.000)	67721	200.000	
37 Indeno(1,2,3-cd)pyrene	276	17.672	17.685	(1.132)	4452	7.59246 J	7.59
$ 36 Dibenzo(a,h)anthracene-d14	292	17.618	17.618	(1.129)	89484	210.977	211
38 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
39 Benzo(g,h,i)perylene	276	18.302	18.302	(1.173)	5624	10.7641	10.8

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt11.i
Lab File ID: su14mb.d
Lab Smp Id: SU14MBW1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt11.i/20110514.b/lowsim.m
Misc Info: 11-9455

Calibration Date: 14-MAY-2011
Calibration Time: 10:58
Client Smp ID: SU14MBW1
Level: LOW
Sample Type: Liquid

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	129326	64663	258652	128498	-0.64
11 Acenaphthene-d10	70573	35286	141146	73978	4.82
18 Phenanthrene-d10	113741	56870	227482	126818	11.50
29 Chrysene-d12	70763	35382	141526	84338	19.18
35 Perylene-d12	54896	27448	109792	67721	23.36

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	6.27	5.77	6.77	6.28	0.18
11 Acenaphthene-d10	8.47	7.97	8.97	8.47	0.00
18 Phenanthrene-d10	10.30	9.80	10.80	10.30	0.00
29 Chrysene-d12	13.63	13.13	14.13	13.63	0.00
35 Perylene-d12	15.61	15.11	16.11	15.61	0.00

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

Analytical Resources, Inc.

RECOVERY REPORT

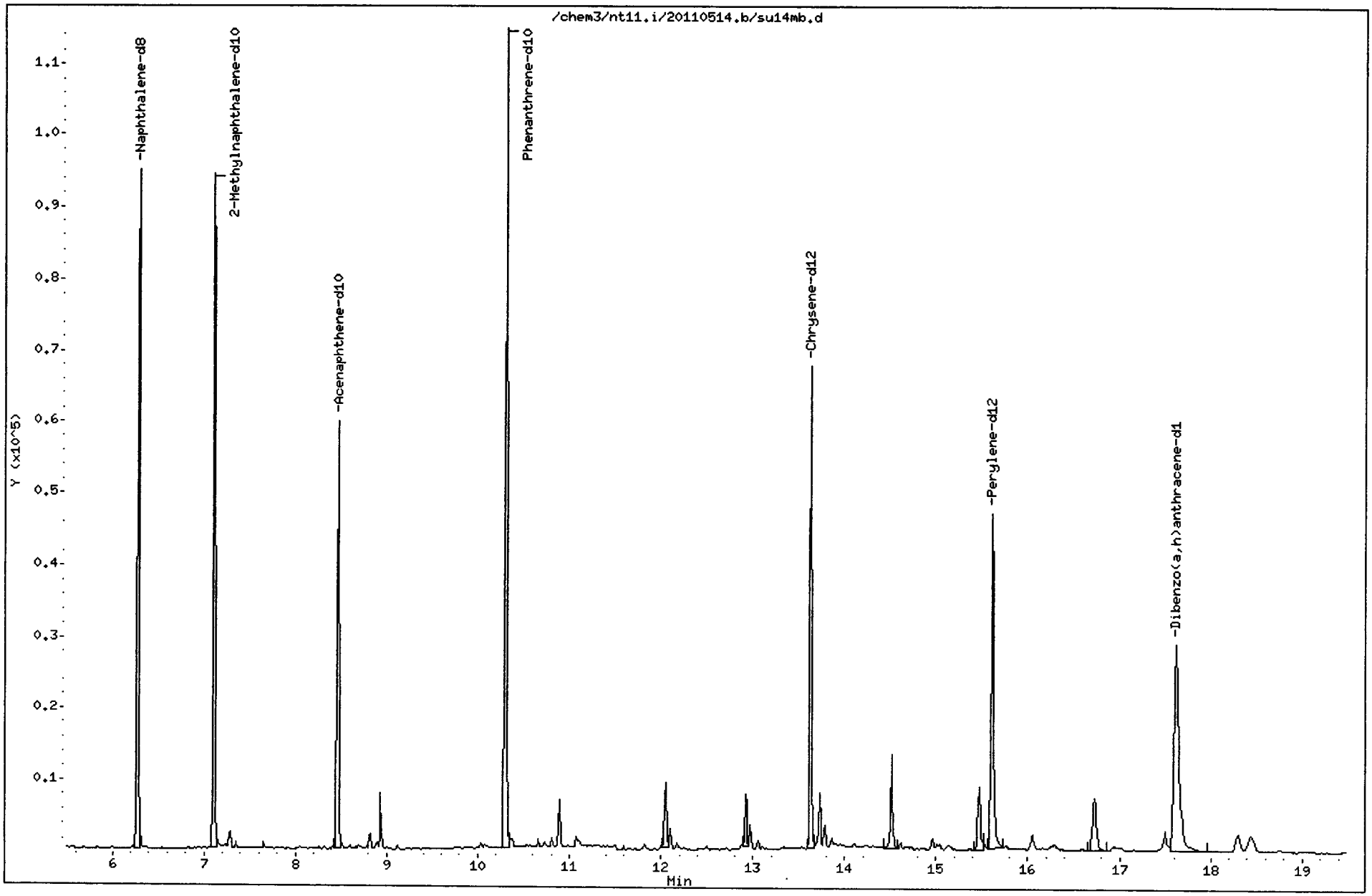
Client Name: Hart Crowser
Sample Matrix: LIQUID
Lab Smp Id: SU14MBW1
Level: LOW
Data Type: MS DATA
SpikeList File: waterlcs.spk
Sublist File: pna1mn.sub
Method File: /chem3/nt11.i/20110514.b/lowsim.m
Misc Info: 11-9455

Client SDG: SU14
Fraction: SV
Client Smp ID: SU14MBW1
Operator: VTS
SampleType: BLANK
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 6 2-Methylnaphthalen	300	193	64.34	31-109
$ 36 Dibenzo(a,h)anthra	300	211	70.33	10-133

Data File: /chem3/nt11.i/20110514.b/su14mb.d
Date : 14-MAY-2011 15:12
Client ID: SU14MBW1
Sample Info: SU14MBW1
Volume Injected (uL): 2.0
Column phase: ZB-5msi

Instrument: nt11.i
Operator: VTS
Column diameter: 0.25



ST98:00552

Data File: /chem3/nt11.i/20110514.b/su14mb.d

Date : 14-MAY-2011 15:12

Client ID: SU14MBW1

Instrument: nt11.i

Sample Info: SU14MBW1

Volume Injected (uL): 2.0

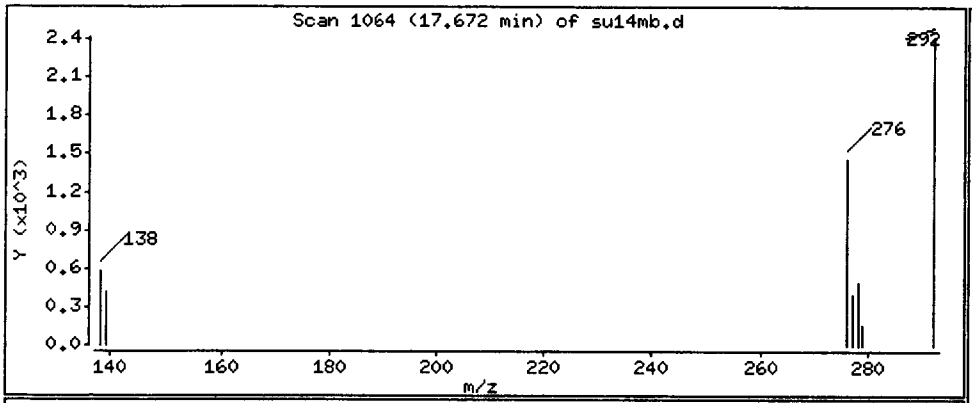
Operator: VTS

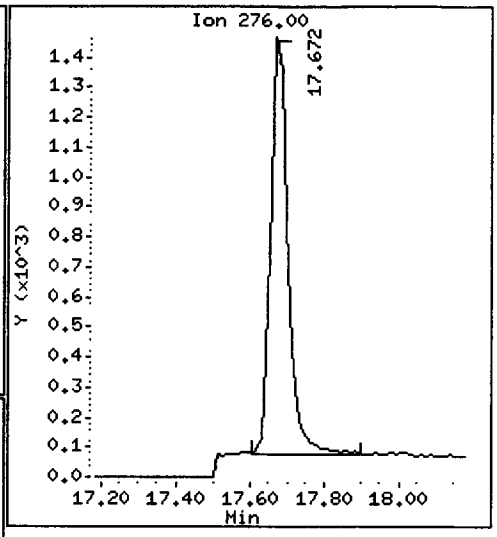
Column phase: ZB-5msi

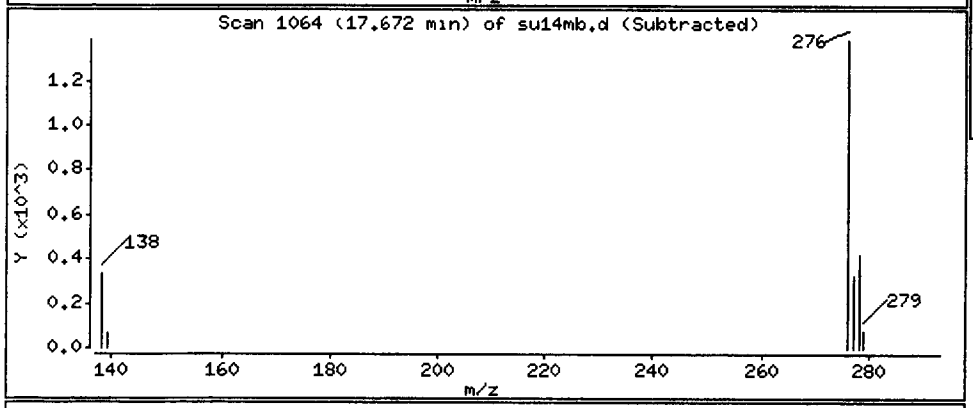
Column diameter: 0.25

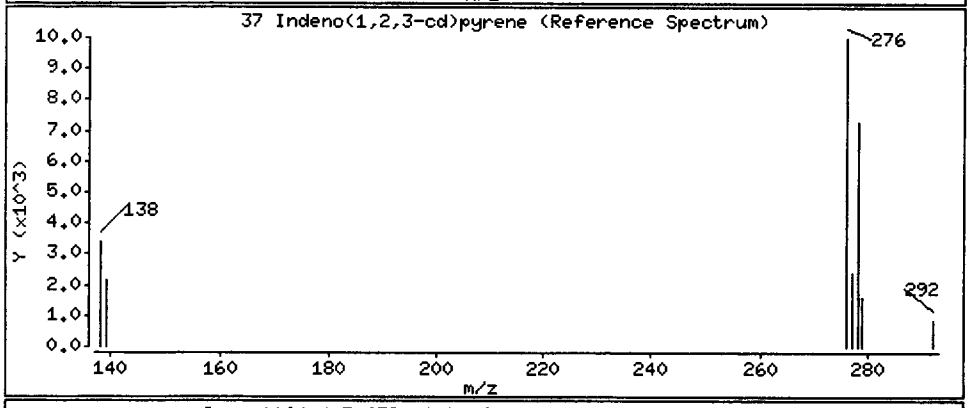
37 Indeno(1,2,3-cd)pyrene

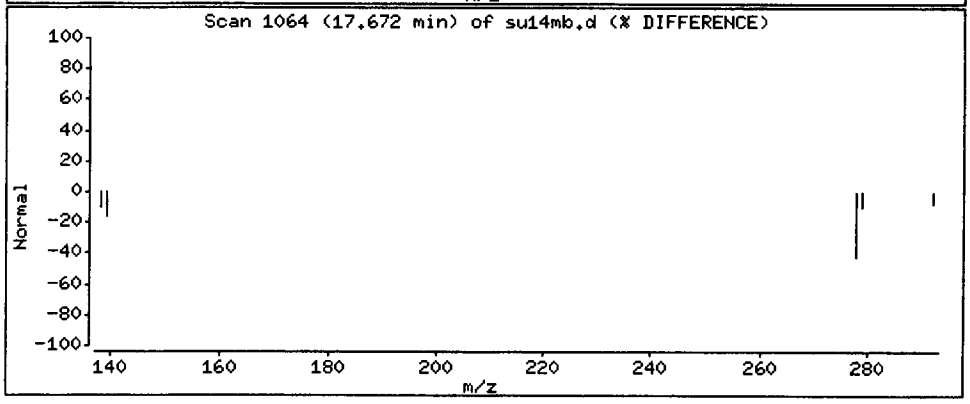
Concentration: 7.59 ug/L











Data File: /chem3/nt11.i/20110514.b/su14mb.d

Date : 14-MAY-2011 15:12

Client ID: SU14MBW1

Instrument: nt11.i

Sample Info: SU14MBW1

Volume Injected (uL): 2.0

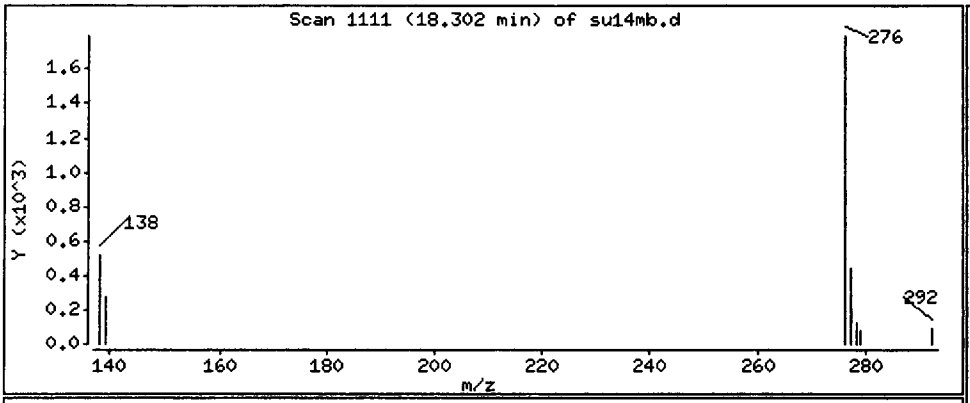
Operator: VTS

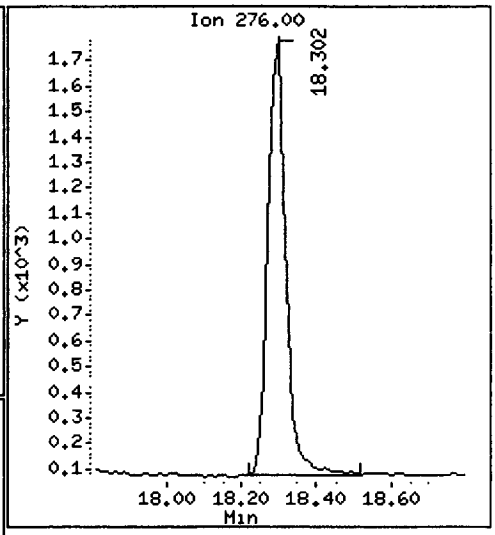
Column phase: ZB-5msi

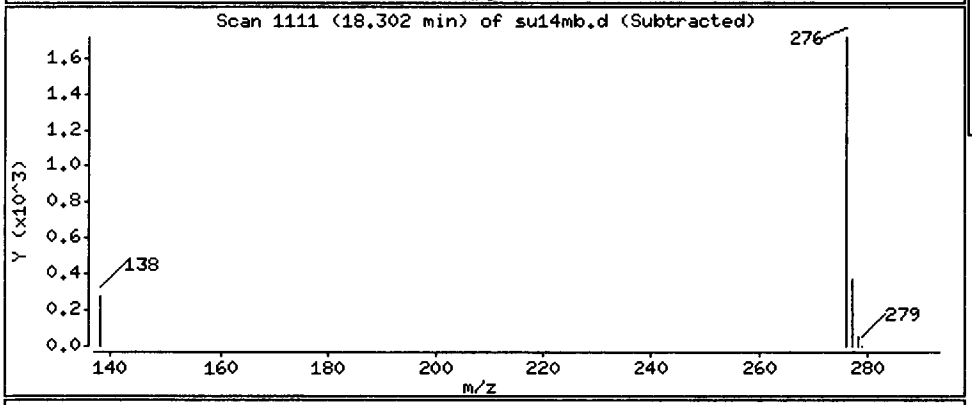
Column diameter: 0.25

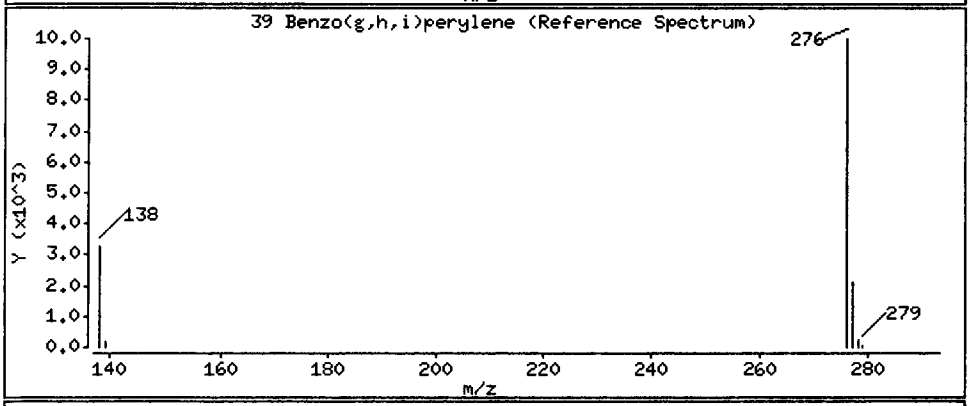
39 Benzo(g,h,i)perylene

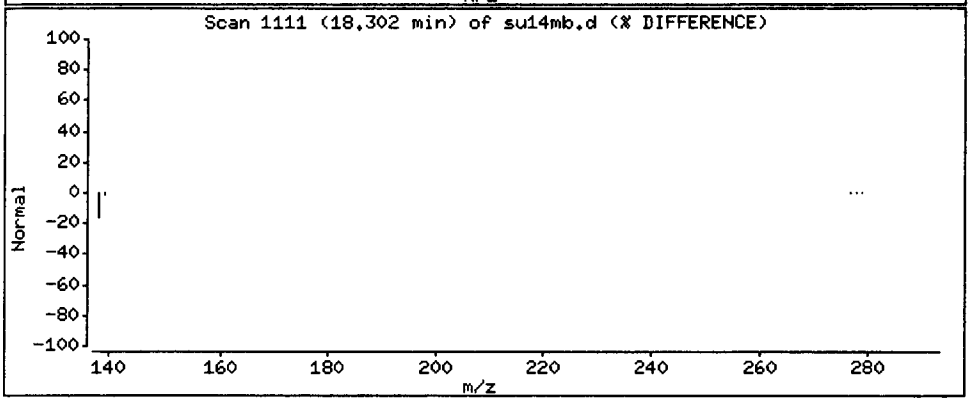
Concentration: 10.8 ug/L











CO-ELUTION SUMMARY FOR FILE - su14mb.d

Lab ID: SU14MBW1, Method: lowsim.m, Instrument: nt11.i, Date: 14-MAY-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

LOW LEVEL PNAs BY SW8270D-SIM

YZ 5/16/11

Data file : /chem3/nt11.i/20110514.b/su14sb.d
Lab Smp Id: SU14LCSW1 Client Smp ID: SU14LCSW1
Inj Date : 14-MAY-2011 15:36
Operator : VTS Inst ID: nt11.i
Smp Info : SU14LCSW1
Misc Info : 11-9455
Comment :
Method : /chem3/nt11.i/20110514.b/lowsim.m
Meth Date : 16-May-2011 14:33 yev Quant Type: ISTD
Cal Date : 30-APR-2011 12:15 Cal File: ic0430f.d
Als bottle: 11 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna1mn.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt / Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Final Extract Volume (uL)
Vo	500.00000	Sample Volume extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	FINAL (ug/L)
*	4 Naphthalene-d8	136	6.273	6.272	(1.000)	127737	200.000	
	5 Naphthalene	128	6.296	6.295	(1.004)	124400	203.061	203
$	6 2-Methylnaphthalene-d10	152	7.101	7.101	(1.132)	80965	218.253	218
	7 2-Methylnaphthalene	142	7.136	7.135	(1.138)	80185	215.482	215
	8 1-Methylnaphthalene	142	7.274	7.273	(1.160)	78343	212.127	212
	10 Acenaphthylene	152	8.265	8.265	(0.976)	119007	201.688	202
*	11 Acenaphthene-d10	164	8.466	8.466	(1.000)	75636	200.000	
	12 Acenaphthene	153	8.493	8.492	(1.003)	78353	210.760	211
	14 Dibenzofuran	168	8.694	8.694	(1.027)	120819	220.737	221
	15 Fluorene	166	9.123	9.123	(1.078)	91031	235.570	236
*	18 Phenanthrene-d10	188	10.302	10.302	(1.000)	128287	200.000	
	19 Phenanthrene	178	10.329	10.329	(1.003)	150076	232.718	233
	20 Anthracene	178	10.383	10.383	(1.008)	114152	187.011	187
	24 Fluoranthene	202	11.818	11.831	(1.147)	171073	269.909	270
	25 Pyrene	202	12.113	12.112	(0.889)	176702	247.108	247

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	FINAL (ug/L)
	28 Benzo(a)anthracene	228	13.601	13.601	(0.998)	139815	234.554	235
*	29 Chrysene-d12	240	13.628	13.628	(1.000)	85111	200.000	
	30 Chrysene	228	13.655	13.655	(1.002)	144337	240.851	241
	43 Total Benzofluoranthenes	252	15.042	15.013	(0.964)	258512	466.192	466
	34 Benzo(a)pyrene	252	15.512	15.522	(0.994)	76982	156.326	156
*	35 Perylene-d12	264	15.608	15.608	(1.000)	68647	200.000	
	37 Indeno(1,2,3-cd)pyrene	276	17.672	17.685	(1.132)	124533	209.514 B	210
$	36 Dibenzo(a,h)anthracene-d14	292	17.618	17.618	(1.129)	99737	231.978	232
	38 Dibenzo(a,h)anthracene	278	17.685	17.699	(1.133)	100999	218.140	218
	39 Benzo(g,h,i)perylene	276	18.302	18.302	(1.173)	103297	195.039 B	195

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt11.i
Lab File ID: su14sb.d
Lab Smp Id: SU14LCSW1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt11.i/20110514.b/lowsim.m
Misc Info: 11-9455

Calibration Date: 14-MAY-2011
Calibration Time: 10:58
Client Smp ID: SU14LCSW1
Level: LOW
Sample Type: Liquid

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	129326	64663	258652	127737	-1.23
11 Acenaphthene-d10	70573	35286	141146	75636	7.17
18 Phenanthrene-d10	113741	56870	227482	128287	12.79
29 Chrysene-d12	70763	35382	141526	85111	20.28
35 Perylene-d12	54896	27448	109792	68647	25.05

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	6.27	5.77	6.77	6.27	0.00
11 Acenaphthene-d10	8.47	7.97	8.97	8.47	0.00
18 Phenanthrene-d10	10.30	9.80	10.80	10.30	0.00
29 Chrysene-d12	13.63	13.13	14.13	13.63	0.00
35 Perylene-d12	15.61	15.11	16.11	15.61	0.00

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

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Hart Crowser
Sample Matrix: LIQUID
Lab Smp Id: SU14LCSW1
Level: LOW
Data Type: MS DATA
SpikeList File: waterlcs.spk
Sublist File: pna1mn.sub
Method File: /chem3/nt11.i/20110514.b/lowsim.m
Misc Info: 11-9455

Client SDG: SU14
Fraction: SV
Client Smp ID: SU14LCSW1
Operator: VTS
SampleType: LCS
Quant Type: ISTD

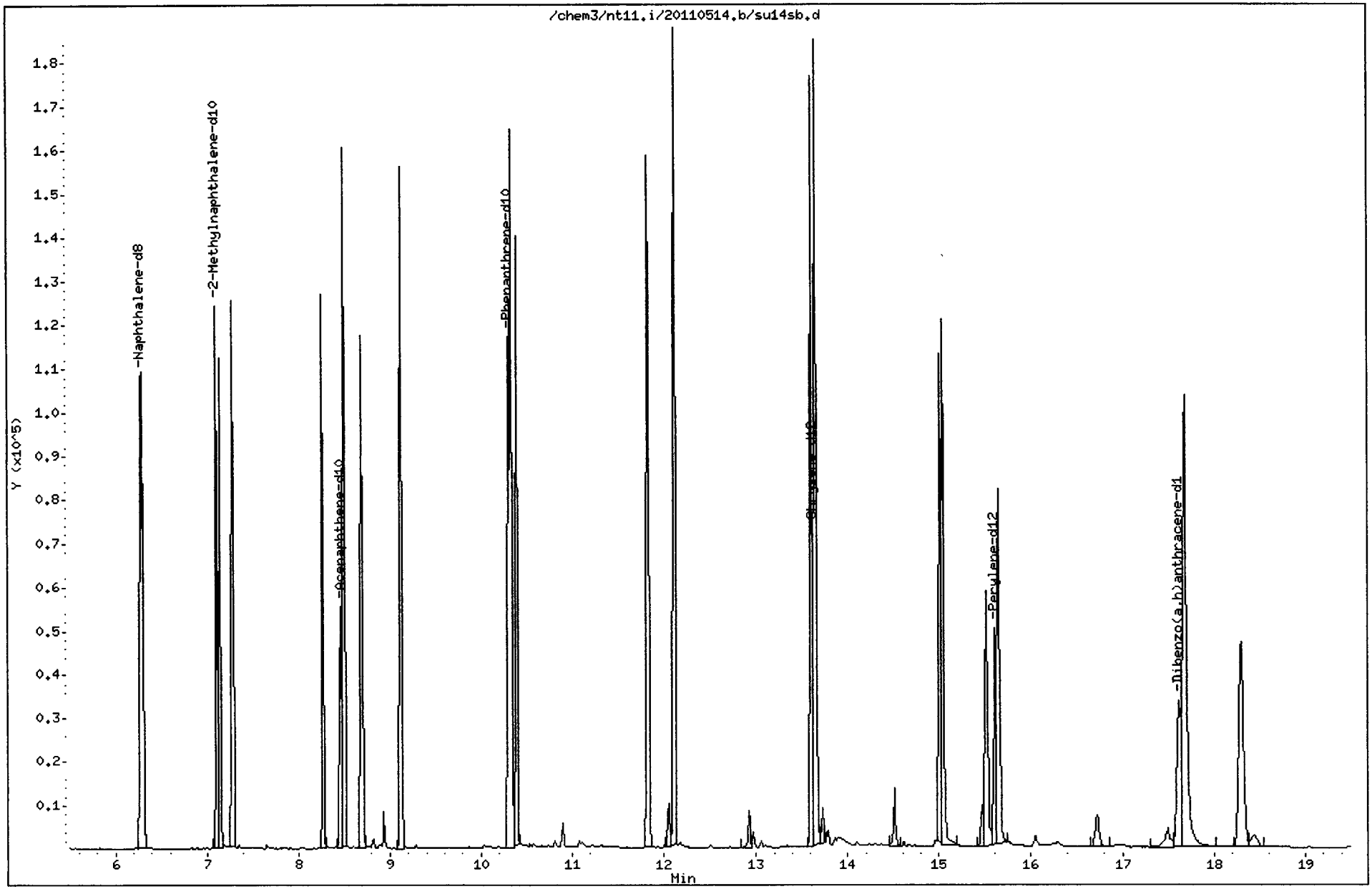
SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
5 Naphthalene	300	203	67.69	41-101
7 2-Methylnaphthalen	300	215	71.83	47-100
8 1-Methylnaphthalen	300	212	70.71	30-160
10 Acenaphthylene	300	202	67.23	35-100
12 Acenaphthene	300	211	70.25	43-104
14 Dibenzofuran	300	221	73.58	37-100
15 Fluorene	300	236	78.52	51-103
19 Phenanthrene	300	233	77.57	55-109
20 Anthracene	300	187	62.34	30-101
24 Fluoranthene	300	270	89.97	49-123
25 Pyrene	300	247	82.37	48-120
28 Benzo(a)anthracene	300	235	78.18	43-113
30 Chrysene	300	241	80.28	59-112
43 Total Benzofluoran	600	466	77.70	30-160
34 Benzo(a)pyrene	300	156	52.11	10-100
37 Indeno(1,2,3-cd)py	300	210	69.84	43-112
38 Dibenzo(a,h)anthra	300	218	72.71	42-114
39 Benzo(g,h,i)peryle	300	195	65.01	31-118

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 6 2-Methylnaphthalen	300	218	72.75	31-109
$ 36 Dibenzo(a,h)anthra	300	232	77.33	10-133

Data File: /chem3/nt11.i/20110514.b/su14sb.d
Date : 14-MAY-2011 15:36
Client ID: SU14LCSW1
Sample Info: SU14LCSW1
Volume Injected (uL): 2.0
Column phase: ZB-5msi

Instrument: nt11.i

Operator: VTS
Column diameter: 0.25



ST98:00560

CO-ELUTION SUMMARY FOR FILE - su14sb.d

Lab ID: SU14LCSW1, Method: lowsim.m, Instrument: nt11.i, Date: 14-MAY-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

YZ 5/16/11

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt11.i/20110514.b/su14sbd.d
Lab Smp Id: SU14LCSDW1 Client Smp ID: SU14LCSDW1
Inj Date : 14-MAY-2011 16:01
Operator : VTS Inst ID: nt11.i
Smp Info : SU14LCSDW1
Misc Info : 11-9455
Comment :
Method : /chem3/nt11.i/20110514.b/lowsim.m
Meth Date : 16-May-2011 14:33 yev Quant Type: ISTD
Cal Date : 30-APR-2011 12:15 Cal File: ic0430f.d
Als bottle: 12 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna1mn.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt / Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Final Extract Volume (uL)
Vo	500.00000	Sample Volume extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	CONCENTRATIONS FINAL (ug/L)
*	4 Naphthalene-d8	136	6.273	6.272	(1.000)	127743	200.000	
	5 Naphthalene	128	6.296	6.295	(1.004)	128080	209.058	209
$	6 2-Methylnaphthalene-d10	152	7.101	7.101	(1.132)	81083	218.560	219
	7 2-Methylnaphthalene	142	7.136	7.135	(1.138)	80668	216.770	217
	8 1-Methylnaphthalene	142	7.274	7.273	(1.160)	80568	218.142	218
	10 Acenaphthylene	152	8.265	8.265	(0.976)	122428	208.553	209
*	11 Acenaphthene-d10	164	8.466	8.466	(1.000)	75249	200.000	
	12 Acenaphthene	153	8.493	8.492	(1.003)	79818	215.805	216
	14 Dibenzofuran	168	8.694	8.694	(1.027)	122075	224.179	224
	15 Fluorene	166	9.123	9.123	(1.078)	92135	239.653	240
*	18 Phenanthrene-d10	188	10.303	10.302	(1.000)	124194	200.000	
	19 Phenanthrene	178	10.329	10.329	(1.003)	146792	235.128	235
	20 Anthracene	178	10.383	10.383	(1.008)	116644	197.392	197
	24 Fluoranthene	202	11.818	11.831	(1.147)	168755	275.026	275
	25 Pyrene	202	12.113	12.112	(0.889)	169615	248.775	249

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	CONCENTRATIONS FINAL (ug/L)
	28 Benzo(a)anthracene	228	13.601	13.601	(0.998)	136283	239.788	240
*	29 Chrysene-d12	240	13.628	13.628	(1.000)	81150	200.000	
	30 Chrysene	228	13.655	13.655	(1.002)	142675	249.698	250
	43 Total Benzofluoranthenes	252	15.042	15.013	(0.964)	253189	465.531	466
	34 Benzo(a)pyrene	252	15.512	15.522	(0.994)	77538	160.538	161
*	35 Perylene-d12	264	15.609	15.608	(1.000)	67329	200.000	
	37 Indeno(1,2,3-cd)pyrene	276	17.672	17.685	(1.132)	124374	213.343	213
$	36 Dibenzo(a,h)anthracene-d14	292	17.618	17.618	(1.129)	94351	223.747	224
	38 Dibenzo(a,h)anthracene	278	17.685	17.699	(1.133)	101208	222.870	223
	39 Benzo(g,h,i)perylene	276	18.289	18.302	(1.172)	103833	199.888	200

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt11.i
Lab File ID: su14sbd.d
Lab Smp Id: SU14LCSDW1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt11.i/20110514.b/lowsim.m
Misc Info: 11-9455

Calibration Date: 14-MAY-2011
Calibration Time: 10:58
Client Smp ID: SU14LCSDW1
Level: LOW
Sample Type: Liquid

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	129326	64663	258652	127743	-1.22
11 Acenaphthene-d10	70573	35286	141146	75249	6.63
18 Phenanthrene-d10	113741	56870	227482	124194	9.19
29 Chrysene-d12	70763	35382	141526	81150	14.68
35 Perylene-d12	54896	27448	109792	67329	22.65

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	6.27	5.77	6.77	6.27	0.00
11 Acenaphthene-d10	8.47	7.97	8.97	8.47	0.00
18 Phenanthrene-d10	10.30	9.80	10.80	10.30	0.00
29 Chrysene-d12	13.63	13.13	14.13	13.63	0.00
35 Perylene-d12	15.61	15.11	16.11	15.61	0.00

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

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Hart Crowser
Sample Matrix: LIQUID
Lab Smp Id: SU14LCSDW1
Level: LOW
Data Type: MS DATA
SpikeList File: waterlcs.spk
Sublist File: pna1mn.sub
Method File: /chem3/nt11.i/20110514.b/lowsim.m
Misc Info: 11-9455

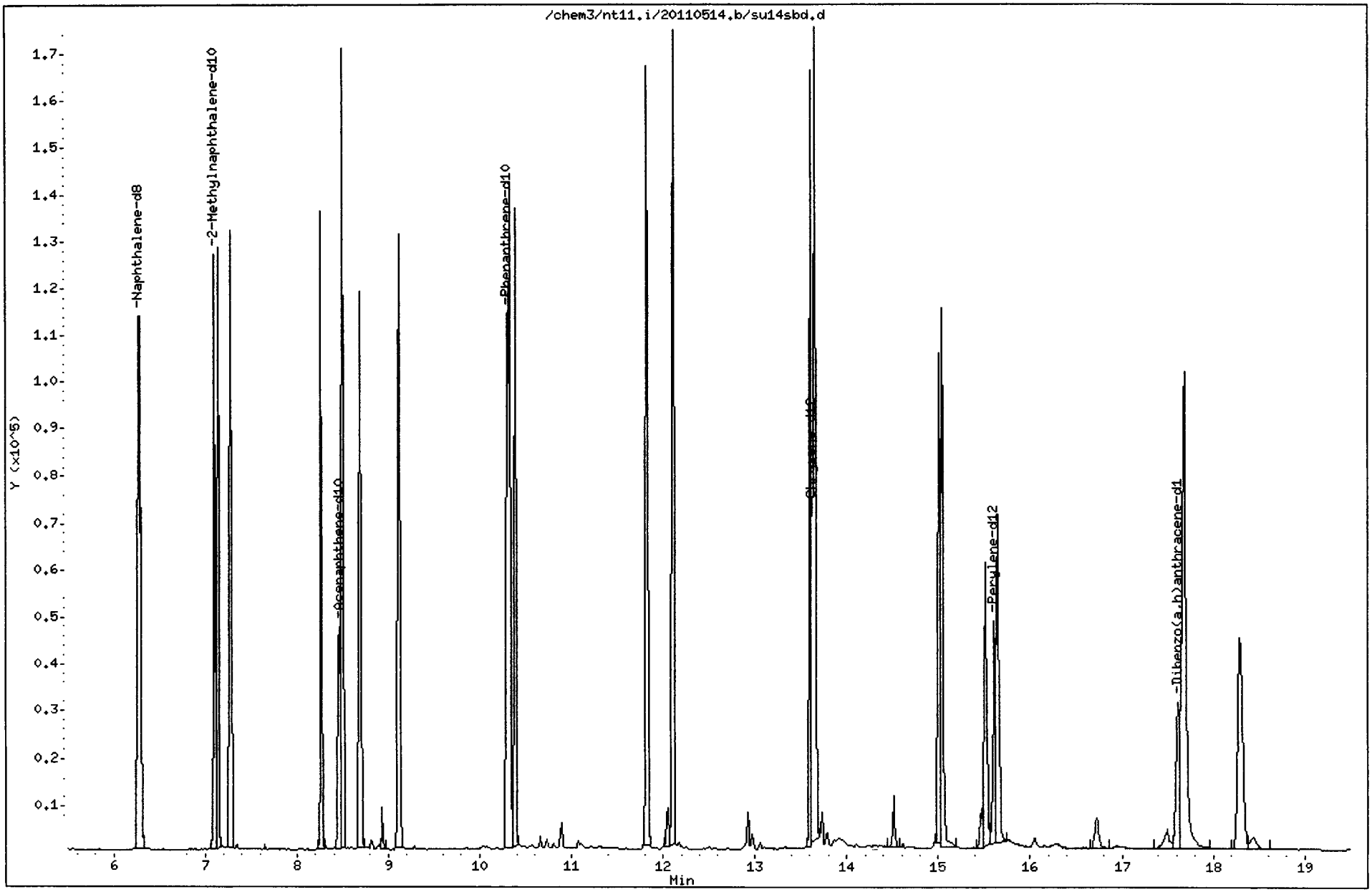
Client SDG: SU14
Fraction: SV
Client Smp ID: SU14LCSDW1
Operator: VTS
SampleType: LCSD
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
5 Naphthalene	300	209	69.69	41-101
7 2-Methylnaphthalen	300	217	72.26	47-100
8 1-Methylnaphthalen	300	218	72.71	30-160
10 Acenaphthylene	300	209	69.52	35-100
12 Acenaphthene	300	216	71.93	43-104
14 Dibenzofuran	300	224	74.73	37-100
15 Fluorene	300	240	79.88	51-103
19 Phenanthrene	300	235	78.38	55-109
20 Anthracene	300	197	65.80	30-101
24 Fluoranthene	300	275	91.68	49-123
25 Pyrene	300	249	82.92	48-120
28 Benzo(a)anthracene	300	240	79.93	43-113
30 Chrysene	300	250	83.23	59-112
43 Total Benzofluoran	600	466	77.59	30-160
34 Benzo(a)pyrene	300	161	53.51	10-100
37 Indeno(1,2,3-cd)py	300	213	71.11	43-112
38 Dibenzo(a,h)anthra	300	223	74.29	42-114
39 Benzo(g,h,i)peryle	300	200	66.63	31-118

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 6 2-Methylnaphthalen	300	219	72.85	31-109
$ 36 Dibenzo(a,h)anthra	300	224	74.58	10-133

Data File: /chem3/nt11.i/20110514.b/su14sbd.d
Date : 14-MAY-2011 16:01
Client ID: SU14LCSDW1
Sample Info: SU14LCSDW1
Volume Injected (uL): 2.0
Column phase: ZB-5msi

Instrument: nt11.i
Operator: VTS
Column diameter: 0.25



CO-ELUTION SUMMARY FOR FILE - su14sbd.d

Lab ID: SU14LCSDW1, Method: lowsim.m, Instrument: nt11.i, Date: 14-MAY-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

YZ 5/16/11

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt11.i/20110514.b/st98a.d
Lab Smp Id: ST98A Client Smp ID: MW02-042611
Inj Date : 14-MAY-2011 19:39
Operator : VTS Inst ID: nt11.i
Smp Info : ST98A
Misc Info : 11-9409
Comment :
Method : /chem3/nt11.i/20110514.b/lowsim.m
Meth Date : 16-May-2011 11:29 yev Quant Type: ISTD
Cal Date : 30-APR-2011 12:15 Cal File: ic0430f.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna1mn.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt / Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Final Extract Volume (uL)
Vo	500.00000	Sample Volume extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	CONCENTRATIONS FINAL (ug/L)
*	4 Naphthalene-d8	136	6.273	6.272	(1.000)	128597	200.000	
	5 Naphthalene	128	6.296	6.295	(1.004)	11936	19.3531	19.4
$	6 2-Methylnaphthalene-d10	152	7.101	7.101	(1.132)	76396	204.559	205
	7 2-Methylnaphthalene	142	Compound Not Detected.					
	8 1-Methylnaphthalene	142	Compound Not Detected.					
	10 Acenaphthylene	152	Compound Not Detected.					
*	11 Acenaphthene-d10	164	8.466	8.466	(1.000)	75668	200.000	
	12 Acenaphthene	153	Compound Not Detected.					
	14 Dibenzofuran	168	Compound Not Detected.					
	15 Fluorene	166	Compound Not Detected.					
*	18 Phenanthrene-d10	188	10.302	10.302	(1.000)	126618	200.000	
	19 Phenanthrene	178	Compound Not Detected.					
	20 Anthracene	178	Compound Not Detected.					
	24 Fluoranthene	202	Compound Not Detected.					
	25 Pyrene	202	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	CONCENTRATIONS FINAL (ug/L)
	28 Benzo(a)anthracene	228	Compound Not Detected.					
*	29 Chrysene-d12	240	13.628	13.628	(1.000)	85285	200.000	
	30 Chrysene	228	Compound Not Detected.					
	43 Total Benzofluoranthenes	252	Compound Not Detected.					
	34 Benzo(a)pyrene	252	Compound Not Detected.					
*	35 Perylene-d12	264	15.608	15.608	(1.000)	68280	200.000	
	37 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
$	36 Dibenzo(a,h)anthracene-d14	292	17.618	17.618	(1.129)	104739	244.922	245
	38 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	39 Benzo(g,h,i)perylene	276	Compound Not Detected.					

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt11.i
Lab File ID: st98a.d
Lab Smp Id: ST98A
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt11.i/20110514.b/lowsim.m
Misc Info: 11-9409

Calibration Date: 14-MAY-2011
Calibration Time: 10:58
Client Smp ID: MW02-042611
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	129326	64663	258652	128597	-0.56
11 Acenaphthene-d10	70573	35286	141146	75668	7.22
18 Phenanthrene-d10	113741	56870	227482	126618	11.32
29 Chrysene-d12	70763	35382	141526	85285	20.52
35 Perylene-d12	54896	27448	109792	68280	24.38

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	6.27	5.77	6.77	6.27	0.00
11 Acenaphthene-d10	8.47	7.97	8.97	8.47	0.00
18 Phenanthrene-d10	10.30	9.80	10.80	10.30	0.00
29 Chrysene-d12	13.63	13.13	14.13	13.63	0.00
35 Perylene-d12	15.61	15.11	16.11	15.61	0.00

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

Analytical Resources, Inc.

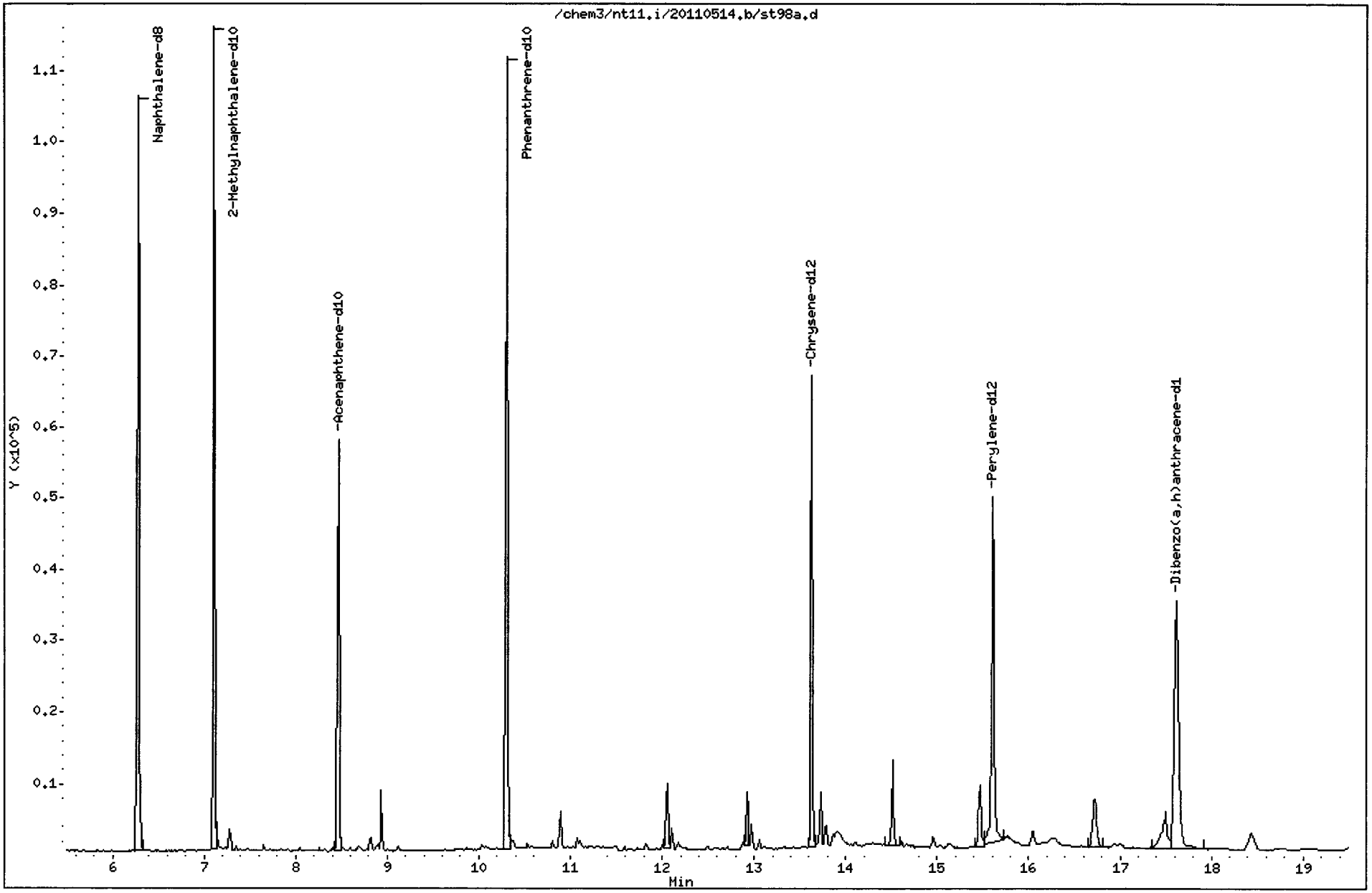
RECOVERY REPORT

Client Name: Floyd Snider
Client SDG: ST98
Sample Matrix: LIQUID
Fraction: SV
Lab Smp Id: ST98A
Client Smp ID: MW02-042611
Level: LOW
Operator: VTS
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: waterlcs.spk
Quant Type: ISTD
Sublist File: pna1mn.sub
Method File: /chem3/nt11.i/20110514.b/lowsim.m
Misc Info: 11-9409

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 6 2-Methylnaphthalen	300	205	68.19	31-109
$ 36 Dibenzo(a,h)anthra	300	245	81.64	10-133

Data File: /chem3/nt11.i/20110514.b/st98a.d
Date : 14-MAY-2011 19:39
Client ID: MW02-042611
Sample Info: ST98A
Volume Injected (uL): 2.0
Column phase: ZB-5msi

Instrument: nt11.i
Operator: VTS
Column diameter: 0.25



ST98:09572

CO-ELUTION SUMMARY FOR FILE - st98a.d

Lab ID: ST98A, Method: lowsim.m, Instrument: nt11.i, Date: 14-MAY-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

YZ 5/16/11

Analytical Resources, Inc.

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt11.i/20110514.b/st98b.d
Lab Smp Id: ST98B Client Smp ID: MW03-042611
Inj Date : 14-MAY-2011 20:03
Operator : VTS Inst ID: nt11.i
Smp Info : ST98B
Misc Info : 11-9410
Comment :
Method : /chem3/nt11.i/20110514.b/lowsim.m
Meth Date : 16-May-2011 11:29 yev Quant Type: ISTD
Cal Date : 30-APR-2011 12:15 Cal File: ic0430f.d
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna1mn.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt / Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Final Extract Volume (uL)
Vo	500.00000	Sample Volume extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	CONCENTRATIONS FINAL (ug/L)
*	4 Naphthalene-d8	136	6.273	6.272	(1.000)	127867	200.000	
	5 Naphthalene	128	6.296	6.295	(1.004)	13536	22.0726	22.1
$	6 2-Methylnaphthalene-d10	152	7.101	7.101	(1.132)	76643	206.392	206
	7 2-Methylnaphthalene	142	Compound Not Detected.					
	8 1-Methylnaphthalene	142	Compound Not Detected.					
	10 Acenaphthylene	152	Compound Not Detected.					
*	11 Acenaphthene-d10	164	8.466	8.466	(1.000)	75276	200.000	
	12 Acenaphthene	153	Compound Not Detected.					
	14 Dibenzofuran	168	Compound Not Detected.					
	15 Fluorene	166	Compound Not Detected.					
*	18 Phenanthrene-d10	188	10.302	10.302	(1.000)	125494	200.000	
	19 Phenanthrene	178	Compound Not Detected.					
	20 Anthracene	178	Compound Not Detected.					
	24 Fluoranthene	202	Compound Not Detected.					
	25 Pyrene	202	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	CONCENTRATIONS FINAL (ug/L)
	28 Benzo(a)anthracene	228	Compound Not Detected.					
*	29 Chrysene-d12	240	13.628	13.628	(1.000)	84793	200.000	
	30 Chrysene	228	Compound Not Detected.					
	43 Total Benzofluoranthenes	252	Compound Not Detected.					
	34 Benzo(a)pyrene	252	Compound Not Detected.					
*	35 Perylene-d12	264	15.608	15.608	(1.000)	67572	200.000	
	37 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
$	36 Dibenzo(a,h)anthracene-d14	292	17.618	17.618	(1.129)	105461	249.194	249
	38 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	39 Benzo(g,h,i)perylene	276	Compound Not Detected.					

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt11.i
Lab File ID: st98b.d
Lab Smp Id: ST98B
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt11.i/20110514.b/lowsim.m
Misc Info: 11-9410

Calibration Date: 14-MAY-2011
Calibration Time: 10:58
Client Smp ID: MW03-042611
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	129326	64663	258652	127867	-1.13
11 Acenaphthene-d10	70573	35286	141146	75276	6.66
18 Phenanthrene-d10	113741	56870	227482	125494	10.33
29 Chrysene-d12	70763	35382	141526	84793	19.83
35 Perylene-d12	54896	27448	109792	67572	23.09

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	6.27	5.77	6.77	6.27	0.00
11 Acenaphthene-d10	8.47	7.97	8.97	8.47	0.00
18 Phenanthrene-d10	10.30	9.80	10.80	10.30	0.00
29 Chrysene-d12	13.63	13.13	14.13	13.63	0.00
35 Perylene-d12	15.61	15.11	16.11	15.61	0.00

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

Analytical Resources, Inc.

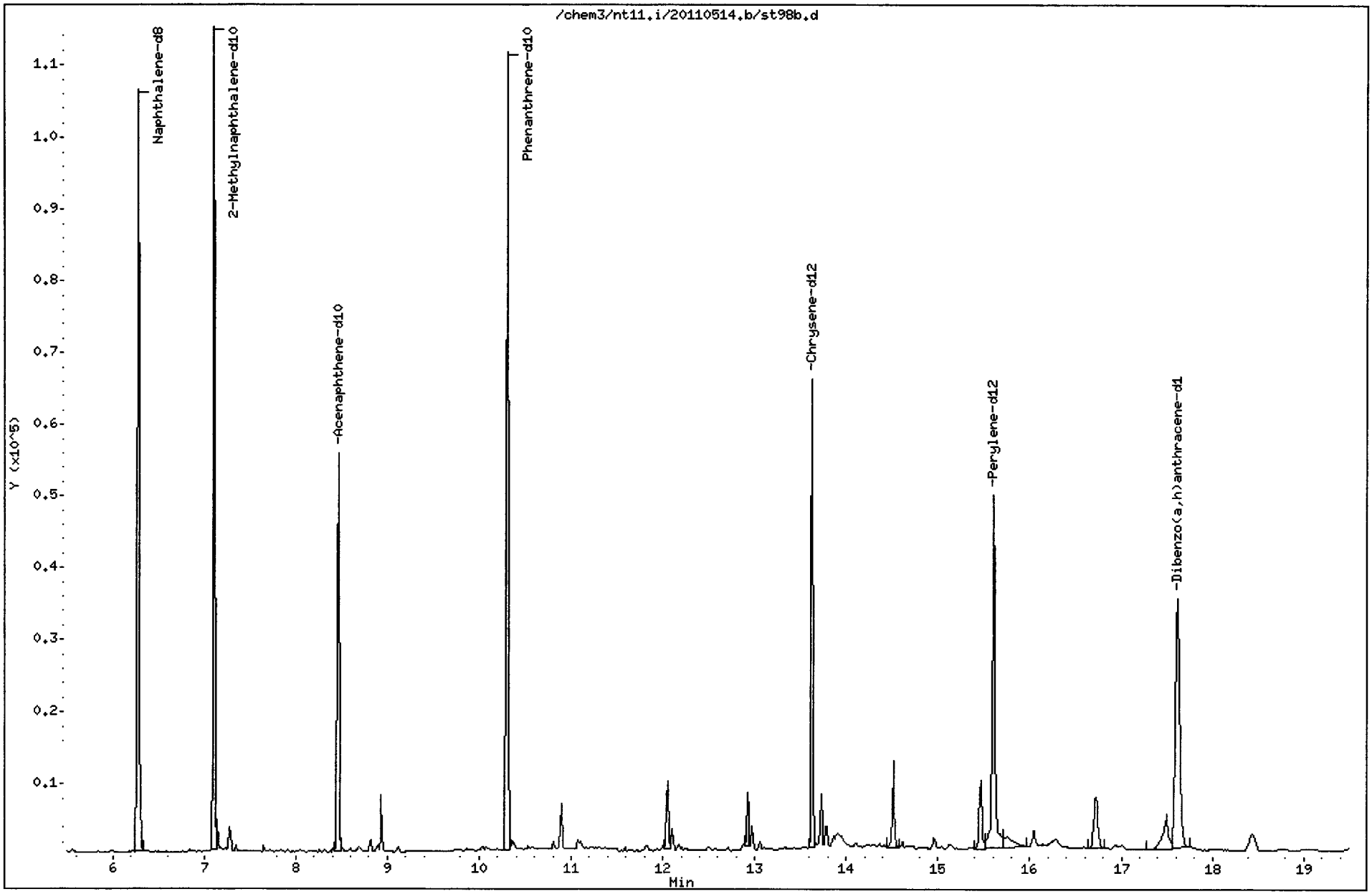
RECOVERY REPORT

Client Name: Floyd Snider
Client SDG: ST98
Sample Matrix: LIQUID
Fraction: SV
Lab Smp Id: ST98B
Client Smp ID: MW03-042611
Level: LOW
Operator: VTS
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: waterlcs.spk
Quant Type: ISTD
Sublist File: pna1mn.sub
Method File: /chem3/nt11.i/20110514.b/lowsim.m
Misc Info: 11-9410

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 6 2-Methylnaphthalen	300	206	68.80	31-109
$ 36 Dibenzo(a,h)anthra	300	249	83.06	10-133

Data File: /chem3/nt11.i/20110514.b/st98b.d
Date : 14-MAY-2011 20:03
Client ID: MW03-042611
Sample Info: ST98B
Volume Injected (uL): 2.0
Column phase: ZB-5msi

Instrument: nt11.i
Operator: VTS
Column diameter: 0.25



ST98:00578

CO-ELUTION SUMMARY FOR FILE - st98b.d

Lab ID: ST98B, Method: lowsim.m, Instrument: nt11.i, Date: 14-MAY-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

YZ 5/19/11

Analytical Resources, Inc.

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt11.i/20110514.b/st98c.d
Lab Smp Id: ST98C Client Smp ID: MW13-042611
Inj Date : 14-MAY-2011 20:28
Operator : VTS Inst ID: nt11.i
Smp Info : ST98C
Misc Info : 11-9411
Comment :
Method : /chem3/nt11.i/20110514.b/lowsim.m
Meth Date : 16-May-2011 11:29 yev Quant Type: ISTD
Cal Date : 30-APR-2011 12:15 Cal File: ic0430f.d
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna1mn.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt / Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Final Extract Volume (uL)
Vo	500.00000	Sample Volume extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	CONCENTRATIONS FINAL (ug/L)
*	4 Naphthalene-d8	136	6.273	6.272	(1.000)	128845	200.000	
	5 Naphthalene	128	6.296	6.295	(1.004)	13960	22.5912	22.6
$	6 2-Methylnaphthalene-d10	152	7.101	7.101	(1.132)	79942	213.642	214
	7 2-Methylnaphthalene	142	Compound Not Detected.					
	8 1-Methylnaphthalene	142	Compound Not Detected.					
	10 Acenaphthylene	152	Compound Not Detected.					
*	11 Acenaphthene-d10	164	8.466	8.466	(1.000)	76084	200.000	
	12 Acenaphthene	153	Compound Not Detected.					
	14 Dibenzofuran	168	Compound Not Detected.					
	15 Fluorene	166	Compound Not Detected.					
*	18 Phenanthrene-d10	188	10.303	10.302	(1.000)	127327	200.000	
	19 Phenanthrene	178	Compound Not Detected.					
	20 Anthracene	178	Compound Not Detected.					
	24 Fluoranthene	202	Compound Not Detected.					
	25 Pyrene	202	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	CONCENTRATIONS FINAL (ug/L)
	28 Benzo(a)anthracene	228	Compound Not Detected.					
*	29 Chrysene-d12	240	13.628	13.628	(1.000)	83781	200.000	
	30 Chrysene	228	Compound Not Detected.					
	43 Total Benzofluoranthenes	252	Compound Not Detected.					
	34 Benzo(a)pyrene	252	Compound Not Detected.					
*	35 Perylene-d12	264	15.608	15.608	(1.000)	67652	200.000	
	37 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
$	36 Dibenzo(a,h)anthracene-d14	292	17.618	17.618	(1.129)	104924	247.632	248
	38 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	39 Benzo(g,h,i)perylene	276	Compound Not Detected.					

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt11.i
Lab File ID: st98c.d
Lab Smp Id: ST98C
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt11.i/20110514.b/lowsim.m
Misc Info: 11-9411

Calibration Date: 14-MAY-2011
Calibration Time: 10:58
Client Smp ID: MW13-042611
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	129326	64663	258652	128845	-0.37
11 Acenaphthene-d10	70573	35286	141146	76084	7.81
18 Phenanthrene-d10	113741	56870	227482	127327	11.94
29 Chrysene-d12	70763	35382	141526	83781	18.40
35 Perylene-d12	54896	27448	109792	67652	23.24

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	6.27	5.77	6.77	6.27	0.00
11 Acenaphthene-d10	8.47	7.97	8.97	8.47	0.00
18 Phenanthrene-d10	10.30	9.80	10.80	10.30	0.00
29 Chrysene-d12	13.63	13.13	14.13	13.63	0.00
35 Perylene-d12	15.61	15.11	16.11	15.61	0.00

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

Analytical Resources, Inc.

RECOVERY REPORT

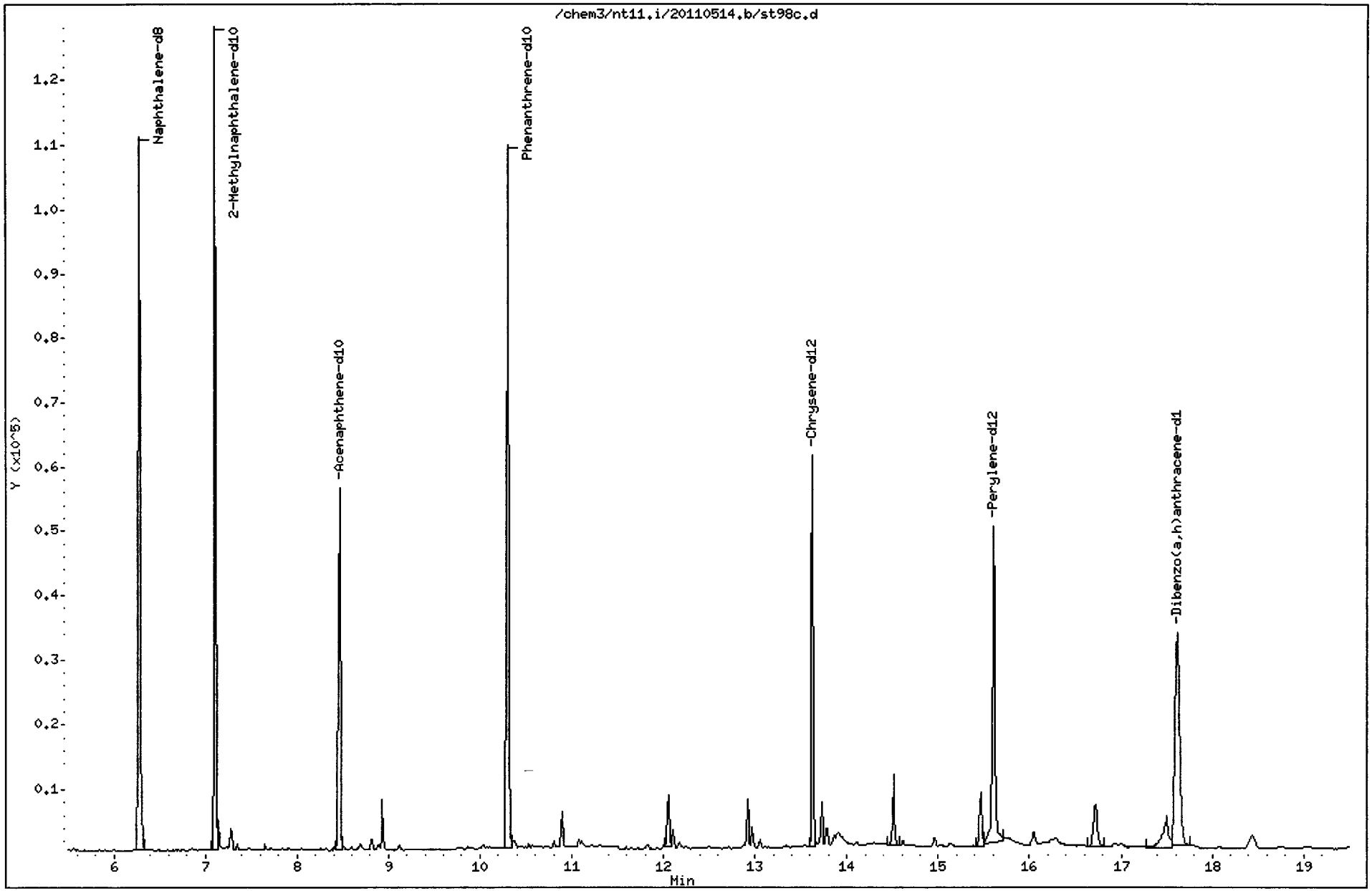
Client Name: Floyd Snider
Sample Matrix: LIQUID
Lab Smp Id: ST98C
Level: LOW
Data Type: MS DATA
SpikeList File: waterlcs.spk
Sublist File: pna1mn.sub
Method File: /chem3/nt11.i/20110514.b/lowsim.m
Misc Info: 11-9411

Client SDG: ST98
Fraction: SV
Client Smp ID: MW13-042611
Operator: VTS
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 6 2-Methylnaphthalen	300	214	71.21	31-109
$ 36 Dibenzo(a,h)anthra	300	248	82.54	10-133

Data File: /chem3/nt11.i/20110514.b/st98c.d
Date : 14-MAY-2011 20:28
Client ID: MW13-042611
Sample Info: ST98C
Volume Injected (uL): 2.0
Column phase: ZB-5msi

Instrument: nt11.i
Operator: VTS
Column diameter: 0.25



ST98:00584

CO-ELUTION SUMMARY FOR FILE - st98c.d

Lab ID: ST98C, Method: lowsim.m, Instrument: nt11.i, Date: 14-MAY-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

yz 5/18/11

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt11.i/20110514.b/st98d.d
Lab Smp Id: ST98D Client Smp ID: MW06-042611
Inj Date : 14-MAY-2011 20:52
Operator : VTS Inst ID: nt11.i
Smp Info : ST98D
Misc Info : 11-9412
Comment :
Method : /chem3/nt11.i/20110514.b/lowsim.m
Meth Date : 16-May-2011 11:29 yev Quant Type: ISTD
Cal Date : 30-APR-2011 12:15 Cal File: ic0430f.d
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna1mn.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt / Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Final Extract Volume (uL)
Vo	500.00000	Sample Volume extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	CONCENTRATIONS FINAL (ug/L)
*	4 Naphthalene-d8	136	6.272	6.272	(1.000)	129473	200.000	
	5 Naphthalene	128	6.295	6.295	(1.004)	63893	102.896	103
$	6 2-Methylnaphthalene-d10	152	7.101	7.101	(1.132)	88265	234.741	235
	7 2-Methylnaphthalene	142	7.135	7.135	(1.138)	2525	6.69449 J	6.69
	8 1-Methylnaphthalene	142	7.273	7.273	(1.160)	9361	25.0067	25.0
	10 Acenaphthylene	152	Compound Not Detected.					
*	11 Acenaphthene-d10	164	8.466	8.466	(1.000)	80002	200.000	
	12 Acenaphthene	153	8.492	8.492	(1.003)	7370	18.7425	18.7
	14 Dibenzofuran	168	8.694	8.694	(1.027)	9166	15.8324	15.8
	15 Fluorene	166	Compound Not Detected.					
*	18 Phenanthrene-d10	188	10.302	10.302	(1.000)	131612	200.000	
	19 Phenanthrene	178	Compound Not Detected.					
	20 Anthracene	178	Compound Not Detected.					
	24 Fluoranthene	202	Compound Not Detected.					
	25 Pyrene	202	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	CONCENTRATIONS FINAL (ug/L)
	28 Benzo(a)anthracene	228	Compound Not Detected.					
*	29 Chrysene-d12	240	13.628	13.628	(1.000)	85574	200.000	
	30 Chrysene	228	Compound Not Detected.					
	43 Total Benzofluoranthenes	252	Compound Not Detected.					
	34 Benzo(a)pyrene	252	Compound Not Detected.					
*	35 Perylene-d12	264	15.608	15.608	(1.000)	68197	200.000	
	37 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
$	36 Dibenzo(a,h)anthracene-d14	292	17.618	17.618	(1.129)	98685	231.046	231
	38 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	39 Benzo(g,h,i)perylene	276	Compound Not Detected.					

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt11.i
Lab File ID: st98d.d
Lab Smp Id: ST98D
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt11.i/20110514.b/lowsim.m
Misc Info: 11-9412

Calibration Date: 14-MAY-2011
Calibration Time: 10:58
Client Smp ID: MW06-042611
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	129326	64663	258652	129473	0.11
11 Acenaphthene-d10	70573	35286	141146	80002	13.36
18 Phenanthrene-d10	113741	56870	227482	131612	15.71
29 Chrysene-d12	70763	35382	141526	85574	20.93
35 Perylene-d12	54896	27448	109792	68197	24.23

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	6.27	5.77	6.77	6.27	0.00
11 Acenaphthene-d10	8.47	7.97	8.97	8.47	0.00
18 Phenanthrene-d10	10.30	9.80	10.80	10.30	0.00
29 Chrysene-d12	13.63	13.13	14.13	13.63	0.00
35 Perylene-d12	15.61	15.11	16.11	15.61	0.00

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

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd Snider
Sample Matrix: LIQUID
Lab Smp Id: ST98D
Level: LOW
Data Type: MS DATA
SpikeList File: waterlcs.spk
Sublist File: pna1mn.sub
Method File: /chem3/nt11.i/20110514.b/lowsim.m
Misc Info: 11-9412

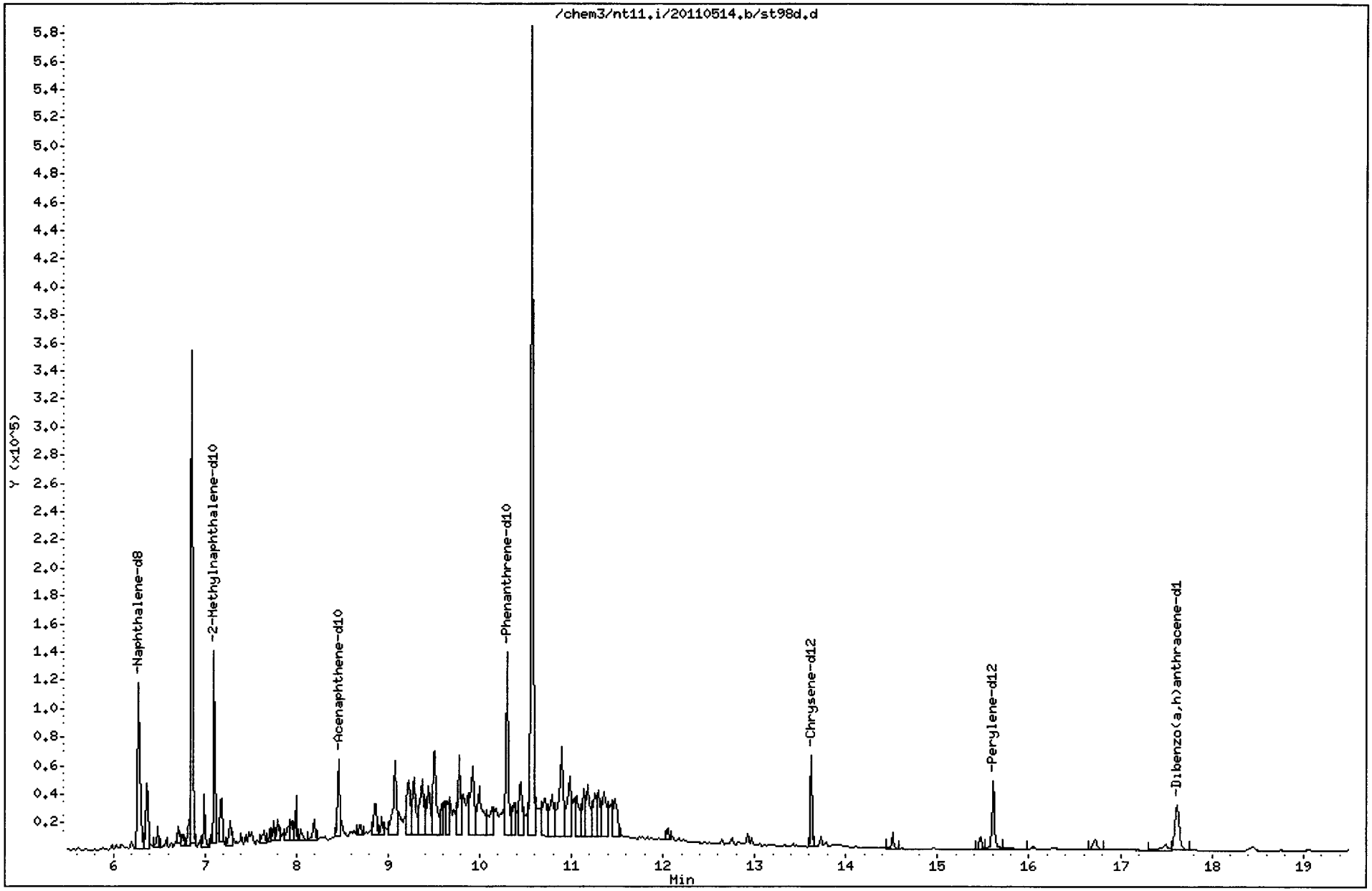
Client SDG: ST98
Fraction: SV
Client Smp ID: MW06-042611
Operator: VTS
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 6 2-Methylnaphthalen	300	235	78.25	31-109
$ 36 Dibenzo(a,h)anthra	300	231	77.02	10-133

Data File: /chem3/nt11.i/20110514.b/st98d.d
Date : 14-MAY-2011 20:52
Client ID: MW06-042611
Sample Info: ST98D
Volume Injected (uL): 2.0
Column phase: ZB-5msi

Instrument: nt11.i
Operator: VTS
Column diameter: 0.25

ST98:00598



CO-ELUTION SUMMARY FOR FILE - st98d.d

Lab ID: ST98D, Method: lowsim.m, Instrument: nt11.i, Date: 14-MAY-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc. YZ 5/16/11

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt11.i/20110514.b/st98dms.d
Lab Smp Id: ST98DMS Client Smp ID: MW06-042611 MS
Inj Date : 14-MAY-2011 21:16
Operator : VTS Inst ID: nt11.i
Smp Info : ST98DMS
Misc Info : 11-9412
Comment :
Method : /chem3/nt11.i/20110514.b/lowsim.m
Meth Date : 16-May-2011 14:33 yev Quant Type: ISTD
Cal Date : 30-APR-2011 12:15 Cal File: ic0430f.d
Als bottle: 25 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna1mn.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt / Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Final Extract Volume (uL)
Vo	500.00000	Sample Volume extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	CONCENTRATIONS FINAL (ug/L)
*	4 Naphthalene-d8	136	6.272	6.272	(1.000)	132444	200.000	
	5 Naphthalene	128	6.295	6.295	(1.004)	183610	289.059	289
$	6 2-Methylnaphthalene-d10	152	7.112	7.101	(1.134)	112763	293.166	293
	7 2-Methylnaphthalene	142	7.147	7.135	(1.139)	88573	229.564	230
	8 1-Methylnaphthalene	142	7.273	7.273	(1.160)	96853	252.926	253
	10 Acenaphthylene	152	8.265	8.265	(0.976)	142854	230.478	230
*	11 Acenaphthene-d10	164	8.466	8.466	(1.000)	79451	200.000	
	12 Acenaphthene	153	8.492	8.492	(1.003)	97808	250.459	250
	14 Dibenzofuran	168	8.694	8.694	(1.027)	142349	247.585	248
	15 Fluorene	166	9.123	9.123	(1.078)	110502	272.227	272
*	18 Phenanthrene-d10	188	10.302	10.302	(1.000)	137087	200.000	
	19 Phenanthrene	178	10.329	10.329	(1.003)	163934	237.889	238
	20 Anthracene	178	10.383	10.383	(1.008)	135237	207.332	207
	24 Fluoranthene	202	11.831	11.831	(1.148)	188209	277.883	278
	25 Pyrene	202	12.112	12.112	(0.889)	194720	247.637	248

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	FINAL (ug/L)	
	28 Benzo(a)anthracene	228	13.601	13.601	(0.998)	153948	234.868	235	
*	29 Chrysene-d12	240	13.628	13.628	(1.000)	93589	200.000		
	30 Chrysene	228	13.655	13.655	(1.002)	164617	249.808	250	
	43 Total Benzofluoranthenes	252	15.041	15.013	(0.964)	285876	486.631	487	
	34 Benzo(a)pyrene	252	15.512	15.522	(0.994)	92421	177.154	177	
*	35 Perylene-d12	264	15.608	15.608	(1.000)	72725	200.000		
	37 Indeno(1,2,3-cd)pyrene	276	17.672	17.685	(1.132)	146796	233.121	233	B
$	36 Dibenzo(a,h)anthracene-d14	292	17.618	17.618	(1.129)	108038	237.195	237	
	38 Dibenzo(a,h)anthracene	278	17.685	17.699	(1.133)	116035	236.562	237	
	39 Benzo(g,h,i)perylene	276	18.289	18.302	(1.172)	124061	221.109	221	B

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt11.i
Lab File ID: st98dms.d
Lab Smp Id: ST98DMS
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt11.i/20110514.b/lowsim.m
Misc Info: 11-9412

Calibration Date: 14-MAY-2011
Calibration Time: 10:58
Client Smp ID: MW06-042611 MS
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	129326	64663	258652	132444	2.41
11 Acenaphthene-d10	70573	35286	141146	79451	12.58
18 Phenanthrene-d10	113741	56870	227482	137087	20.53
29 Chrysene-d12	70763	35382	141526	93589	32.26
35 Perylene-d12	54896	27448	109792	72725	32.48

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	6.27	5.77	6.77	6.27	0.00
11 Acenaphthene-d10	8.47	7.97	8.97	8.47	0.00
18 Phenanthrene-d10	10.30	9.80	10.80	10.30	0.00
29 Chrysene-d12	13.63	13.13	14.13	13.63	0.00
35 Perylene-d12	15.61	15.11	16.11	15.61	0.00

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

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd Snid
Sample Matrix: LIQUID
Lab Smp Id: ST98DMS
Level: LOW
Data Type: MS DATA
SpikeList File: waterlcs.spk
Sublist File: pna1mn.sub
Method File: /chem3/nt11.i/20110514.b/lowsim.m
Misc Info: 11-9412

Client SDG: ST98
Fraction: SV
Client Smp ID: MW06-042611 MS
Operator: VTS
SampleType: MS
Quant Type: ISTD

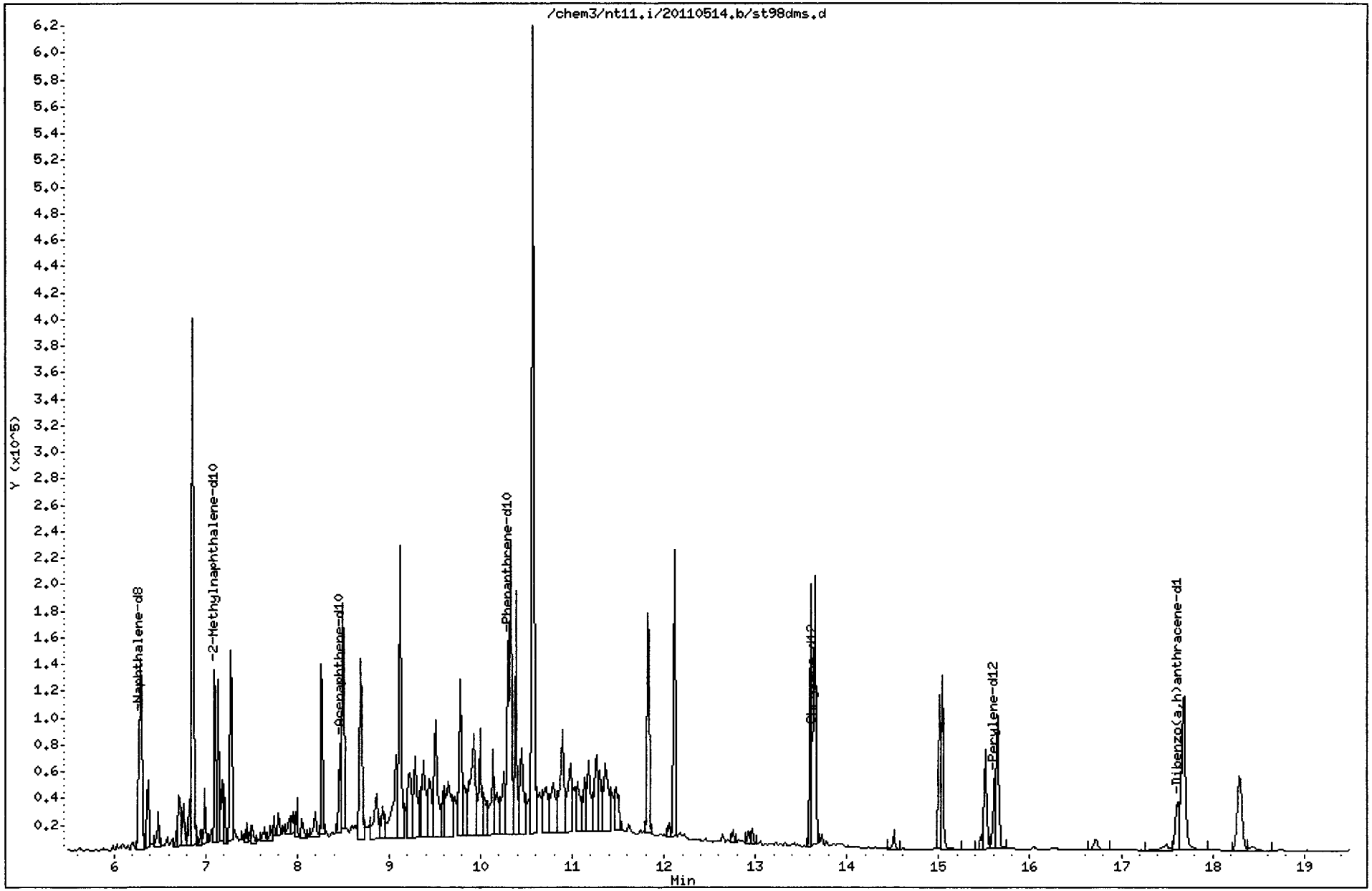
SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
5 Naphthalene	300	289	96.35	41-101
7 2-Methylnaphthalen	300	230	76.52	47-100
8 1-Methylnaphthalen	300	253	84.31	30-160
10 Acenaphthylene	300	230	76.83	35-100
12 Acenaphthene	300	250	83.49	43-104
14 Dibenzofuran	300	248	82.53	37-100
15 Fluorene	300	272	90.74	51-103
19 Phenanthrene	300	238	79.30	55-109
20 Anthracene	300	207	69.11	30-101
24 Fluoranthene	300	278	92.63	49-123
25 Pyrene	300	248	82.55	48-120
28 Benzo(a)anthracene	300	235	78.29	43-113
30 Chrysene	300	250	83.27	59-112
43 Total Benzofluoran	600	487	81.11	30-160
34 Benzo(a)pyrene	300	177	59.05	10-100
37 Indeno(1,2,3-cd)py	300	233	77.71	43-112
38 Dibenzo(a,h)anthra	300	237	78.85	42-114
39 Benzo(g,h,i)peryle	300	221	73.70	31-118

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 6 2-Methylnaphthalen	300	293	97.72	31-109
$ 36 Dibenzo(a,h)anthra	300	237	79.06	10-133

Data File: /chem3/nt11.i/20110514.b/st98dms.d
Date : 14-MAY-2011 21:16
Client ID: MW06-042611 MS
Sample Info: ST98DMS
Volume Injected (uL): 2.0
Column phase: ZB-5msi

Instrument: nt11.i
Operator: VTS
Column diameter: 0.25

ST98 00556



CO-ELUTION SUMMARY FOR FILE - st98dms.d

Lab ID: ST98DMS, Method: lowsim.m, Instrument: nt11.i, Date: 14-MAY-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

YZ 5/16/11

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt11.i/20110514.b/st98dmsd.d
Lab Smp Id: ST98DMSD Client Smp ID: MW06-042611 MSD
Inj Date : 14-MAY-2011 21:40
Operator : VTS Inst ID: nt11.i
Smp Info : ST98DMSD
Misc Info : 11-9412
Comment :
Method : /chem3/nt11.i/20110514.b/lowsim.m
Meth Date : 16-May-2011 14:33 yev Quant Type: ISTD
Cal Date : 30-APR-2011 12:15 Cal File: ic0430f.d
Als bottle: 26 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna1mn.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt / Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Final Extract Volume (uL)
Vo	500.00000	Sample Volume extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	CONCENTRATIONS FINAL (ug/L)
*	4 Naphthalene-d8	136	6.273	6.272	(1.000)	133180	200.000	
	5 Naphthalene	128	6.296	6.295	(1.004)	173537	271.691	272
$	6 2-Methylnaphthalene-d10	152	7.101	7.101	(1.132)	101067	261.306	261
	7 2-Methylnaphthalene	142	7.147	7.135	(1.139)	84614	218.092	218
	8 1-Methylnaphthalene	142	7.274	7.273	(1.160)	91364	237.273	237
	10 Acenaphthylene	152	8.265	8.265	(0.976)	136266	214.480	214
*	11 Acenaphthene-d10	164	8.466	8.466	(1.000)	81440	200.000	
	12 Acenaphthene	153	8.493	8.492	(1.003)	91515	228.621	229
	14 Dibenzofuran	168	8.694	8.694	(1.027)	139781	237.181	237
	15 Fluorene	166	9.123	9.123	(1.078)	104928	252.182	252
*	18 Phenanthrene-d10	188	10.302	10.302	(1.000)	136318	200.000	
	19 Phenanthrene	178	10.329	10.329	(1.003)	154919	226.075	226
	20 Anthracene	178	10.383	10.383	(1.008)	116587	179.748	180
	24 Fluoranthene	202	11.831	11.831	(1.148)	177320	263.283	263
	25 Pyrene	202	12.112	12.112	(0.889)	182541	229.539	230

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	FINAL (ug/L)
	28 Benzo(a)anthracene	228	13.601	13.601	(0.998)	145367	219.284	219
*	29 Chrysene-d12	240	13.628	13.628	(1.000)	94653	200.000	
	30 Chrysene	228	13.655	13.655	(1.002)	152420	228.699	229
	43 Total Benzofluoranthenes	252	15.041	15.013	(0.964)	271761	468.648	469
	34 Benzo(a)pyrene	252	15.512	15.522	(0.994)	76528	148.607	149
*	35 Perylene-d12	264	15.608	15.608	(1.000)	71787	200.000	
	37 Indeno(1,2,3-cd)pyrene	276	17.672	17.685	(1.132)	141213	227.185 B	227
$	36 Dibenzo(a,h)anthracene-d14	292	17.618	17.618	(1.129)	104057	231.440	231
	38 Dibenzo(a,h)anthracene	278	17.685	17.699	(1.133)	110650	228.531	229
	39 Benzo(g,h,i)perylene	276	18.289	18.302	(1.172)	120225	217.072 B	217

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt11.i
Lab File ID: st98dmsd.d
Lab Smp Id: ST98DMSD
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt11.i/20110514.b/lowsim.m
Misc Info: 11-9412

Calibration Date: 14-MAY-2011
Calibration Time: 10:58
Client Smp ID: MW06-042611 MSD
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	129326	64663	258652	133180	2.98
11 Acenaphthene-d10	70573	35286	141146	81440	15.40
18 Phenanthrene-d10	113741	56870	227482	136318	19.85
29 Chrysene-d12	70763	35382	141526	94653	33.76
35 Perylene-d12	54896	27448	109792	71787	30.77

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	6.27	5.77	6.77	6.27	0.00
11 Acenaphthene-d10	8.47	7.97	8.97	8.47	0.00
18 Phenanthrene-d10	10.30	9.80	10.80	10.30	0.00
29 Chrysene-d12	13.63	13.13	14.13	13.63	0.00
35 Perylene-d12	15.61	15.11	16.11	15.61	0.00

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

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd Snid
Client SDG: ST98
Sample Matrix: LIQUID
Fraction: SV
Lab Smp Id: ST98DMSD
Client Smp ID: MW06-042611 MSD
Level: LOW
Operator: VTS
Data Type: MS DATA
SampleType: MS
SpikeList File: waterlcs.spk
Quant Type: ISTD
Sublist File: pna1mn.sub
Method File: /chem3/nt11.i/20110514.b/lowsim.m
Misc Info: 11-9412

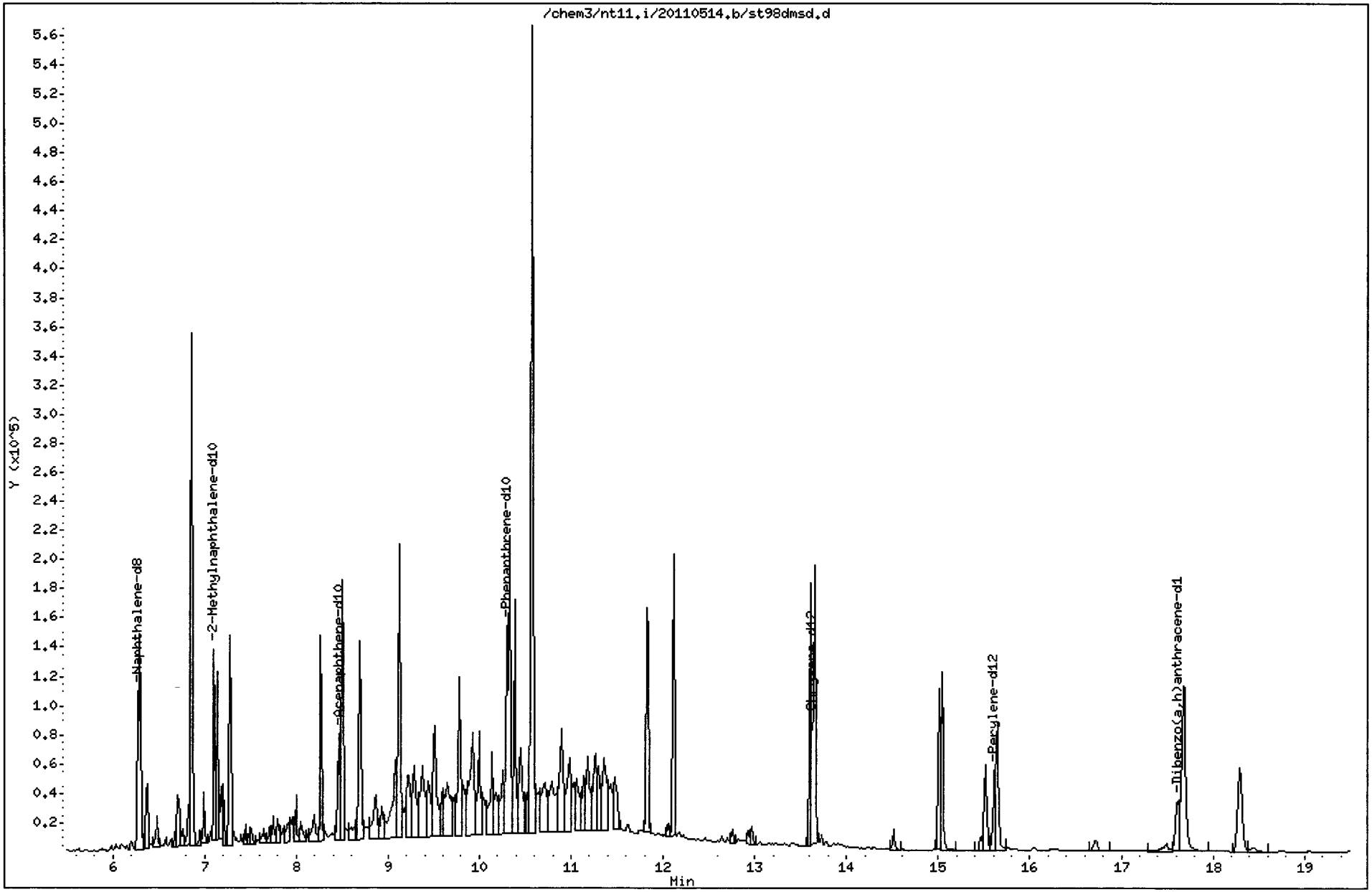
SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
5 Naphthalene	300	272	90.56	41-101
7 2-Methylnaphthalen	300	218	72.70	47-100
8 1-Methylnaphthalen	300	237	79.09	30-160
10 Acenaphthylene	300	214	71.49	35-100
12 Acenaphthene	300	229	76.21	43-104
14 Dibenzofuran	300	237	79.06	37-100
15 Fluorene	300	252	84.06	51-103
19 Phenanthrene	300	226	75.36	55-109
20 Anthracene	300	180	59.92	30-101
24 Fluoranthene	300	263	87.76	49-123
25 Pyrene	300	230	76.51	48-120
28 Benzo(a)anthracene	300	219	73.09	43-113
30 Chrysene	300	229	76.23	59-112
43 Total Benzofluoran	600	469	78.11	30-160
34 Benzo(a)pyrene	300	149	49.54	10-100
37 Indeno(1,2,3-cd)py	300	227	75.73	43-112
38 Dibenzo(a,h)anthra	300	229	76.18	42-114
39 Benzo(g,h,i)peryle	300	217	72.36	31-118

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 6 2-Methylnaphthalen	300	261	87.10	31-109
$ 36 Dibenzo(a,h)anthra	300	231	77.15	10-133

Data File: /chem3/nt11.i/20110514.b/st98dmsd.d
Date : 14-MAY-2011 21:40
Client ID: MW06-042611 MSD
Sample Info: ST98DMSD
Volume Injected (uL): 2.0
Column phase: ZB-5msi

Instrument: nt11.i
Operator: VTS
Column diameter: 0.25

ST98:00602



CO-ELUTION SUMMARY FOR FILE - st98dmsd.d

Lab ID: ST98DMSD, Method: lowsim.m, Instrument: nt11.i, Date: 14-MAY-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

YZ 5/16/11

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt11.i/20110514.b/su21a.d
Lab Smp Id: SU21A Client Smp ID: MW07-042711
Inj Date : 14-MAY-2011 22:04
Operator : VTS Inst ID: nt11.i
Smp Info : SU21A
Misc Info : 11-9507
Comment :
Method : /chem3/nt11.i/20110514.b/lowsim.m
Meth Date : 16-May-2011 11:29 yev Quant Type: ISTD
Cal Date : 30-APR-2011 12:15 Cal File: ic0430f.d
Als bottle: 27
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna1mn.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt / Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Final Extract Volume (uL)
Vo	500.00000	Sample Volume extracted (mL)

Cpnd Variable Local Compound Variable

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	CONCENTRATIONS FINAL (ug/L)
*	4	Naphthalene-d8	136	6.273	6.272	(1.000)	128789	200.000	
	5	Naphthalene	128	6.296	6.295	(1.004)	16425	26.5919	26.6
$	6	2-Methylnaphthalene-d10	152	7.101	7.101	(1.132)	73381	196.193	196
	7	2-Methylnaphthalene	142	7.136	7.135	(1.138)	1966	5.24011 J	5.24
	8	1-Methylnaphthalene	142	Compound Not Detected.					
	10	Acenaphthylene	152	Compound Not Detected.					
*	11	Acenaphthene-d10	164	8.466	8.466	(1.000)	73823	200.000	
	12	Acenaphthene	153	Compound Not Detected.					
	14	Dibenzofuran	168	Compound Not Detected.					
	15	Fluorene	166	Compound Not Detected.					
*	18	Phenanthrene-d10	188	10.303	10.302	(1.000)	124916	200.000	
	19	Phenanthrene	178	Compound Not Detected.					
	20	Anthracene	178	Compound Not Detected.					
	24	Fluoranthene	202	Compound Not Detected.					
	25	Pyrene	202	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	CONCENTRATIONS FINAL (ug/L)
	28 Benzo(a)anthracene	228	Compound Not Detected.					
*	29 Chrysene-d12	240	13.628	13.628	(1.000)	83651	200.000	
	30 Chrysene	228	Compound Not Detected.					
	43 Total Benzofluoranthenes	252	Compound Not Detected.					
	34 Benzo(a)pyrene	252	Compound Not Detected.					
*	35 Perylene-d12	264	15.609	15.608	(1.000)	65771	200.000	
	37 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
$	36 Dibenzo(a,h)anthracene-d14	292	17.618	17.618	(1.129)	105791	256.819	257
	38 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	39 Benzo(g,h,i)perylene	276	Compound Not Detected.					

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt11.i
Lab File ID: su21a.d
Lab Smp Id: SU21A
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt11.i/20110514.b/lowsim.m
Misc Info: 11-9507

Calibration Date: 14-MAY-2011
Calibration Time: 10:58
Client Smp ID: MW07-042711
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	129326	64663	258652	128789	-0.42
11 Acenaphthene-d10	70573	35286	141146	73823	4.61
18 Phenanthrene-d10	113741	56870	227482	124916	9.82
29 Chrysene-d12	70763	35382	141526	83651	18.21
35 Perylene-d12	54896	27448	109792	65771	19.81

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	6.27	5.77	6.77	6.27	0.00
11 Acenaphthene-d10	8.47	7.97	8.97	8.47	0.00
18 Phenanthrene-d10	10.30	9.80	10.80	10.30	0.00
29 Chrysene-d12	13.63	13.13	14.13	13.63	0.00
35 Perylene-d12	15.61	15.11	16.11	15.61	0.00

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

Analytical Resources, Inc.

RECOVERY REPORT

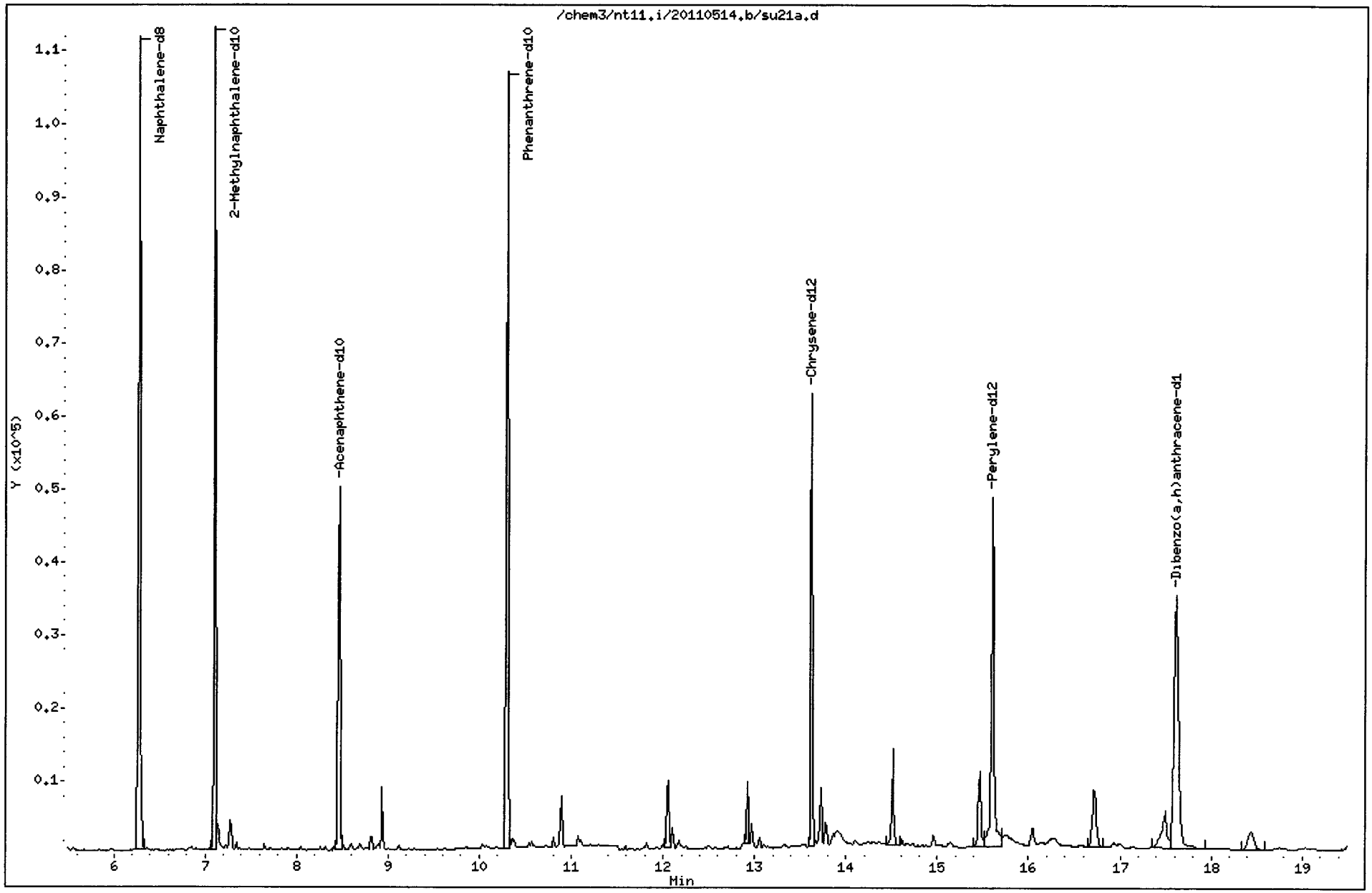
Client Name: Floyd Snider
Sample Matrix: LIQUID
Lab Smp Id: SU21A
Level: LOW
Data Type: MS DATA
SpikeList File: waterlcs.spk
Sublist File: pna1mn.sub
Method File: /chem3/nt11.i/20110514.b/lowsim.m
Misc Info: 11-9507

Client SDG: SU21
Fraction: SV
Client Smp ID: MW07-042711
Operator: VTS
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 6 2-Methylnaphthalen	300	196	65.40	31-109
$ 36 Dibenzo(a,h)anthra	300	257	85.61	10-133

Data File: /chem3/nt11.i/20110514.b/su21a.d
Date : 14-MAY-2011 22:04
Client ID: MW07-042711
Sample Info: SU21A
Volume Injected (uL): 2.0
Column phase: ZB-5msi

Instrument: nt11.i
Operator: VTS
Column diameter: 0.25



CO-ELUTION SUMMARY FOR FILE - su21a.d

Lab ID: SU21A, Method: lowsim.m, Instrument: nt11.i, Date: 14-MAY-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc. yz 5/16/11

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt11.i/20110514.b/su21b.d
Lab Smp Id: SU21B Client Smp ID: MW11-042711
Inj Date : 14-MAY-2011 22:29
Operator : VTS Inst ID: nt11.i
Smp Info : SU21B
Misc Info : 11-9508
Comment :
Method : /chem3/nt11.i/20110514.b/lowsim.m
Meth Date : 16-May-2011 11:29 yev Quant Type: ISTD
Cal Date : 30-APR-2011 12:15 Cal File: ic0430f.d
Als bottle: 28
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna1mn.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt / Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Final Extract Volume (uL)
Vo	500.00000	Sample Volume extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	CONCENTRATIONS FINAL (ug/L)
*	4 Naphthalene-d8	136	6.273	6.272	(1.000)	124783	200.000	
	5 Naphthalene	128	6.296	6.295	(1.004)	18442	30.8159	30.8
$	6 2-Methylnaphthalene-d10	152	7.101	7.101	(1.132)	68810	189.878	190
	7 2-Methylnaphthalene	142	Compound Not Detected.					
	8 1-Methylnaphthalene	142	Compound Not Detected.					
	10 Acenaphthylene	152	Compound Not Detected.					
*	11 Acenaphthene-d10	164	8.466	8.466	(1.000)	73063	200.000	
	12 Acenaphthene	153	Compound Not Detected.					
	14 Dibenzofuran	168	Compound Not Detected.					
	15 Fluorene	166	Compound Not Detected.					
*	18 Phenanthrene-d10	188	10.303	10.302	(1.000)	125305	200.000	
	19 Phenanthrene	178	Compound Not Detected.					
	20 Anthracene	178	Compound Not Detected.					
	24 Fluoranthene	202	Compound Not Detected.					
	25 Pyrene	202	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	FINAL (ug/L)
	28 Benzo(a)anthracene	228	Compound Not Detected.					
*	29 Chrysene-d12	240	13.628	13.628	(1.000)	82424	200.000	
	30 Chrysene	228	Compound Not Detected.					
	43 Total Benzofluoranthenes	252	Compound Not Detected.					
	34 Benzo(a)pyrene	252	Compound Not Detected.					
*	35 Perylene-d12	264	15.609	15.608	(1.000)	66098	200.000	
	37 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
$	36 Dibenzo(a,h)anthracene-d14	292	17.618	17.618	(1.129)	84635	204.444	204
	38 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	39 Benzo(g,h,i)perylene	276	Compound Not Detected.					

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt11.i
Lab File ID: su21b.d
Lab Smp Id: SU21B
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt11.i/20110514.b/lowsim.m
Misc Info: 11-9508

Calibration Date: 14-MAY-2011
Calibration Time: 10:58
Client Smp ID: MW11-042711
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	129326	64663	258652	124783	-3.51
11 Acenaphthene-d10	70573	35286	141146	73063	3.53
18 Phenanthrene-d10	113741	56870	227482	125305	10.17
29 Chrysene-d12	70763	35382	141526	82424	16.48
35 Perylene-d12	54896	27448	109792	66098	20.41

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	6.27	5.77	6.77	6.27	0.00
11 Acenaphthene-d10	8.47	7.97	8.97	8.47	0.00
18 Phenanthrene-d10	10.30	9.80	10.80	10.30	0.00
29 Chrysene-d12	13.63	13.13	14.13	13.63	0.00
35 Perylene-d12	15.61	15.11	16.11	15.61	0.00

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

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd Snider
Client SDG: SU21
Sample Matrix: LIQUID
Fraction: SV
Lab Smp Id: SU21B
Client Smp ID: MW11-042711
Level: LOW
Operator: VTS
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: waterlcs.spk
Quant Type: ISTD
Sublist File: pna1mn.sub
Method File: /chem3/nt11.i/20110514.b/lowsim.m
Misc Info: 11-9508

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 6 2-Methylnaphthalen	300	190	63.29	31-109
$ 36 Dibenzo(a,h)anthra	300	204	68.15	10-133

Data File: /chem3/nt11.i/20110514.b/su21b.d

Date : 14-MAY-2011 22:29

Client ID: MW11-042711

Sample Info: SU21B

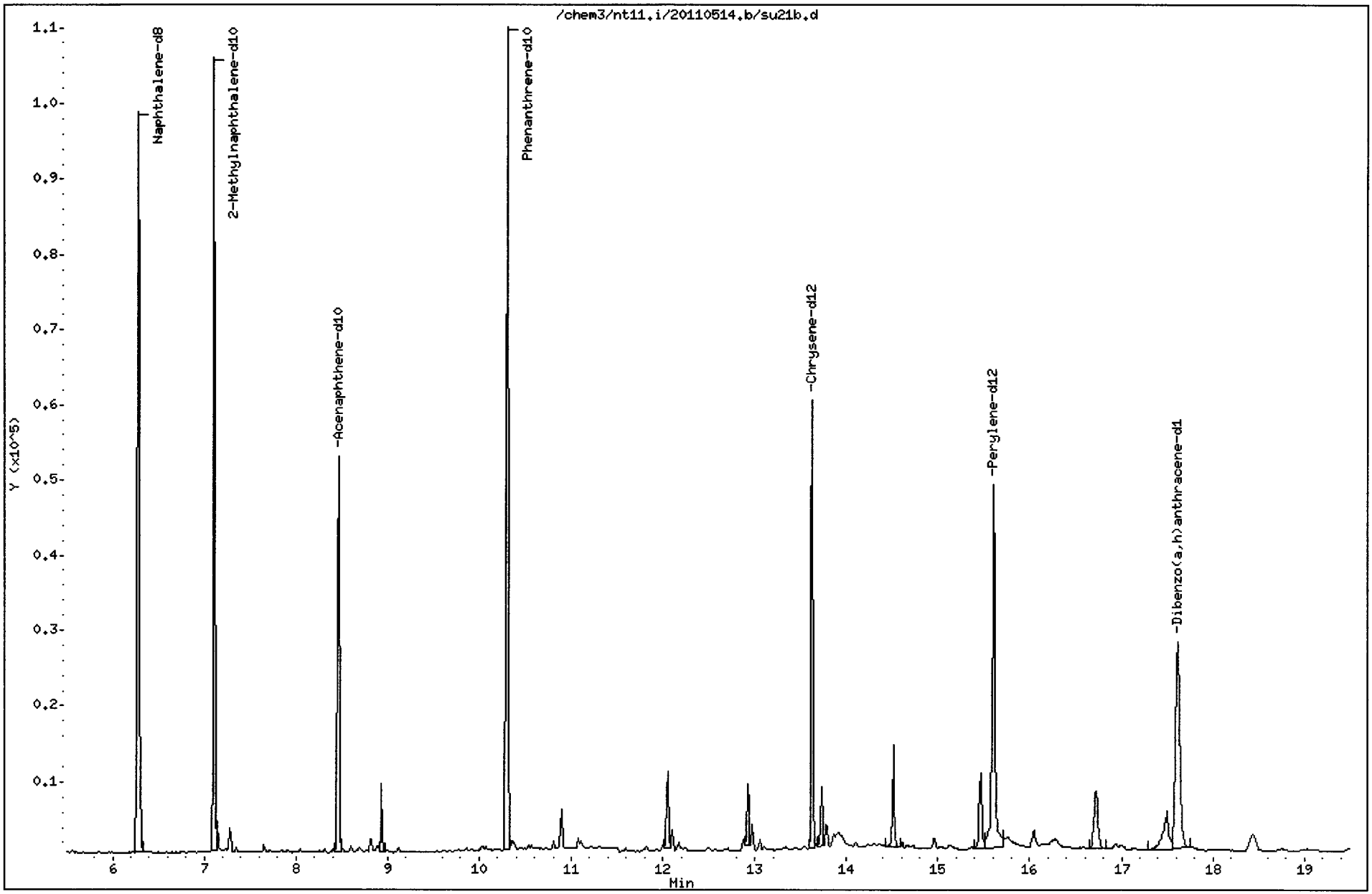
Volume Injected (uL): 2.0

Column phase: ZB-5msi

Instrument: nt11.i

Operator: VTS

Column diameter: 0.25



CO-ELUTION SUMMARY FOR FILE - su21b.d

Lab ID: SU21B, Method: lowsim.m, Instrument: nt11.i, Date: 14-MAY-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources Inc.: Organics Instrument Log

NT-11 Serial No.:GC=US10140004, MS=US10481502

Date: 5/16/11 Analysis: Low SIM µg Analyst: YZ

GC Program: Low SIM Column No: 196 516 Column Type: ZB5 msi

Instrument Tune (.U or .CT.): 110430u EM Voltage: 1474

Calibration File: DF 0516 Curve Date: 04/30/11

IS/SS	Ical/Ccal	LCS/ICV
1754-1	1818-2	

INTERNAL STANDARD SUMMARY FOR DATABATCH - /chem3/nt11.i/20110516.b

	Time	Filename	LabID	ClientId	DF								
1	1043	su21c.d	SU21C	MW10-042711	1	6 27	115895	8 47	66799	10 30	113038	13.63	72524	15.61	60672
2	1107	su21d d	SU21D	MW09-042711	1	6 27	116896	8.45	68135	10 30	116708	13.63	75275	15 61	62256
3	1131	su21e.d	SU21E	MW08-042711	1	6 27	121086	8 45	70652	10 30	115647	13 63	75741	15 61	63723
4	1156	su21f d	SU21F	MW12-042711	1	6 27	115933	8.47	68372	10.30	113477	13 63	74607	15 61	61690
5	1220	su45mb d	SU45MBW1	SU45MBW1	1	6 27	114372	8.45	63779	10 30	101283	13 63	66352	15 61	57382
6	1333	su45qls d	SU45QLS		1	6 27	116798	8 45	67069	10.30	110231	13 63	70277	15 61	59877
7	1244	su45sb d	SU45LCSW1	SU45LCSW1	1	6 27	122313	8 45	72780	10 30	119298	13 63	78581	15.61	65906
8	1308	su45sbd.d	SU45LCSDW1	SU45LCSDW1	1	6 27	118073	8 45	69478	10.30	106510	13 63	71825	15.61	60831
9	1357	su45a d	SU45A	PS2220-04271	1	6.27	123112	8 47	73762	10.30	122629	13.63	75002	15 62	66199
10	1421	su45b.d	SU45B	NF20925-0427	1	6 27	110636	8.47	64734	10 30	104703	13 63	66073	15 61	59685
11	1446	su45c d	SU45C	BDC2088-0427	1	6 27	124452	8 45	72832	10.30	119394	13 63	79460	15.61	69050
12	1510	su47a d	SU47A	DK1-042711-W	1	6 27	121199	8.47	70565	10 30	119220	13.63	73532	15 61	64621
13	1534	su47b d	SU47B	DK2-042711-W	1	6 27	113494	8 47	66738	10.30	109012	13 63	70695	15 62	62178
14	1558	su53a d	SU53A	MW5042811	1	6 27	118071	8 47	70065	10 30	113950	13.63	77577	15 61	66676
15	1623	su53b d	SU53B	MW15042811	1	6 27	121196	8 47	70575	10 30	118974	13.63	78241	15 61	66146
16	1647	su53c d	SU53C	MW4042811	1	6 27	120343	8.47	72423	10 30	123589	13.63	81508	15 61	68851
17	1711	su53cms d	SU53CMS	MW4042811 MS	1	6.27	120332	8 47	72647	10 30	120641	13 63	83655	15 61	69114
18	1736	su53cmsd d	SU53CMSD	MW4042811 MS	1	6 27	123172	8 45	72829	10.30	121870	13 63	81868	15 61	69858
19	1800	su53d d	SU53D	MW17042811	1	6 27	124759	8 47	72222	10 30	122396	13 63	80713	15 61	66914
20	1824	su53e d	SU53E	MW14042811	1	6.27	121662	8 45	70080	10 30	118353	13 63	78044	15 61	67186
21	1848	su53f d	SU53F	MW16042811	1	6 27	122354	8 45	68437	10 30	113162	13 63	75098	15 61	65013

YZ 5/20/11

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.

Data File: /chem3/nt11.i/20110516.b/df0516.d

Date : 16-MAY-2011 10:04

Client ID:

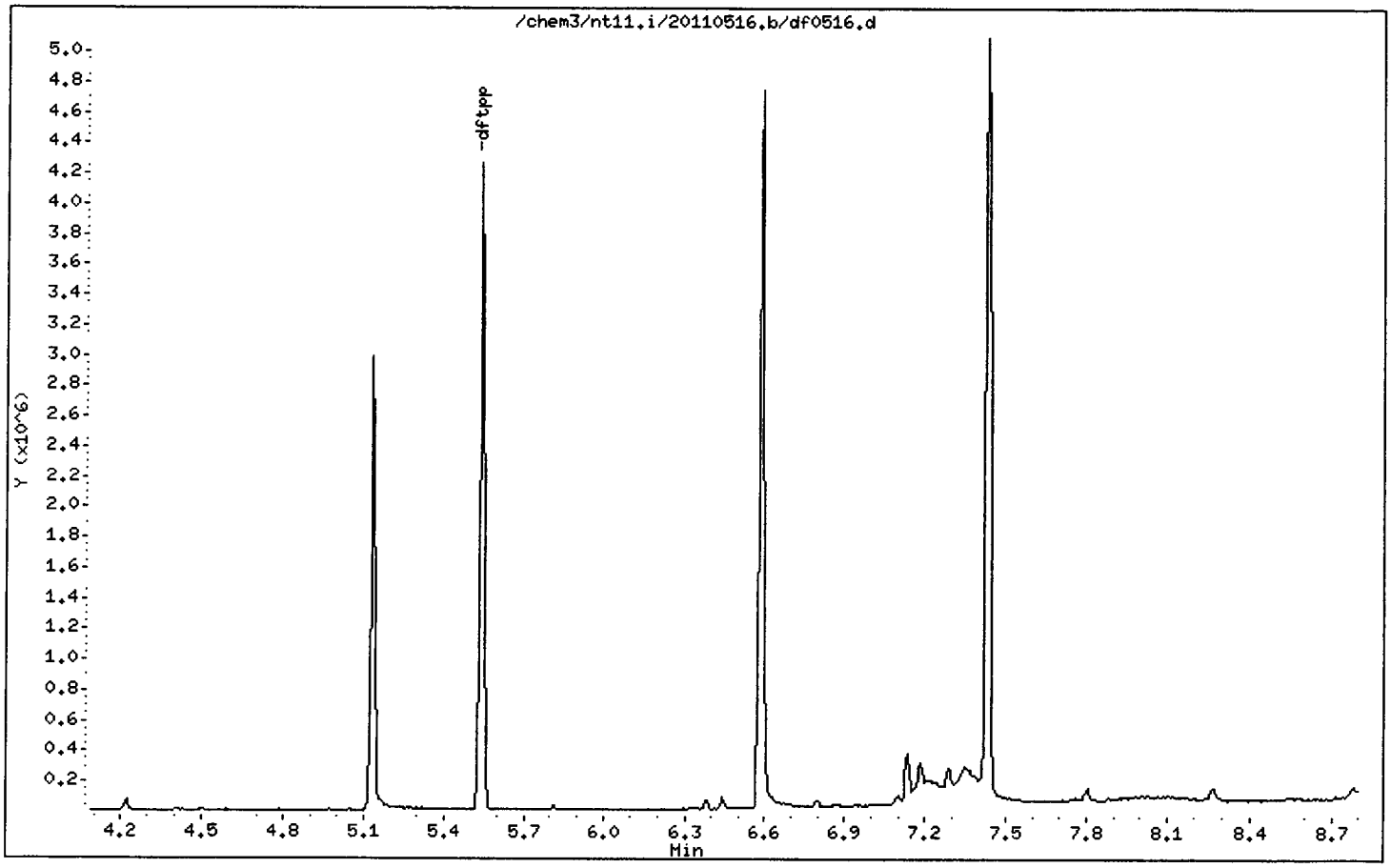
Instrument: nt11.i

Sample Info: DF0516

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



Data File: /chem3/nt11.i/20110516.b/df0516.d

Date : 16-MAY-2011 10:04

Client ID:

Instrument: nt11.i

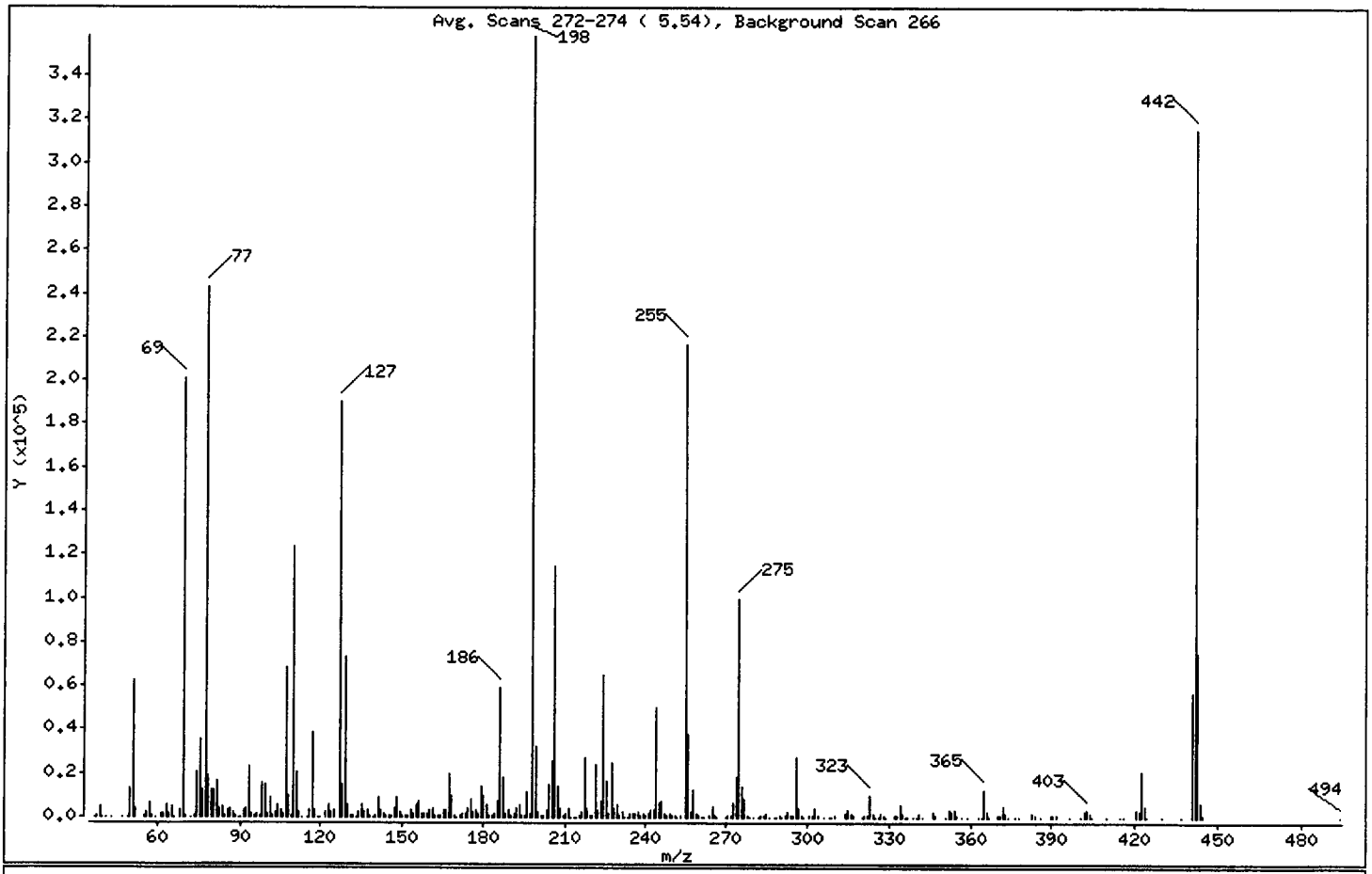
Sample Info: DF0516

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	17.43
68	Less than 2.00% of mass 69	0.91 (1.61)
69	Mass 69 relative abundance	56.08
70	Less than 2.00% of mass 69	0.26 (0.46)
127	10.00 - 80.00% of mass 198	52.99
197	Less than 2.00% of mass 198	0.45
199	5.00 - 9.00% of mass 198	8.92
275	10.00 - 60.00% of mass 198	27.72
365	Greater than 1.00% of mass 198	3.52
441	0.01 - 24.00% of mass 442	15.96 (18.15)
442	50.00 - 200.00% of mass 198	87.96
443	15.00 - 24.00% of mass 442	20.92 (23.78)

Data File: /chem3/nt11.i/20110516.b/df0516.d

Date : 16-MAY-2011 10:04

Client ID:

Instrument: nt11.i

Sample Info: DF0516

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

Data File: df0516.d

Spectrum: Avg. Scans 272-274 (5.54), Background Scan 266

Location of Maximum: 198.00

Number of points: 327

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	55	130.00	6124	212.00	394	301.00	530
37.00	261	131.00	1189	213.00	361	302.00	672
38.00	465	132.00	681	214.00	145	303.00	3936
39.00	4583	133.00	262	215.00	981	304.00	999
40.00	309	134.00	2263	216.00	2164	306.00	95
41.00	239	135.00	5572	217.00	27080	308.00	391
43.00	65	136.00	2272	218.00	3748	309.00	282
45.00	121	137.00	3566	219.00	520	310.00	477
47.00	59	138.00	768	220.00	502	314.00	1481
49.00	271	139.00	110	221.00	24232	315.00	3553
50.00	13063	140.00	691	222.00	2949	316.00	1867
51.00	62440	141.00	9392	223.00	7628	317.00	463
52.00	3707	142.00	3086	224.00	65320	320.00	70
55.00	513	143.00	1875	225.00	16608	321.00	1018
56.00	2498	144.00	673	226.00	1729	322.00	630
57.00	6987	145.00	640	227.00	25088	323.00	9894
58.00	510	146.00	1157	228.00	3872	324.00	1993
59.00	58	147.00	4197	229.00	5371	325.00	130
61.00	1667	148.00	9462	230.00	808	326.00	110
62.00	1991	149.00	2203	231.00	2151	327.00	1343
63.00	5971	150.00	648	232.00	252	328.00	857
64.00	1255	151.00	1177	233.00	292	329.00	304
65.00	4592	152.00	707	234.00	1714	332.00	728
66.00	265	153.00	3064	235.00	1778	333.00	880
68.00	3242	154.00	1881	236.00	1360	334.00	5607
69.00	200896	155.00	5396	237.00	2616	335.00	1648
70.00	930	156.00	7721	238.00	449	336.00	366
72.00	77	157.00	1460	239.00	1275	337.00	54
73.00	1126	158.00	1747	240.00	743	339.00	50
74.00	20976	159.00	1452	241.00	1274	340.00	133
75.00	35712	160.00	3044	242.00	2973	341.00	1264
76.00	12195	161.00	4475	243.00	3038	342.00	326
77.00	243328	162.00	930	244.00	50368	346.00	2060
78.00	18840	163.00	528	245.00	6768	347.00	466
79.00	11943	164.00	483	246.00	7401	351.00	354

Date : 16-MAY-2011 10:04

Client ID: Instrument: nt11.i

Sample Info: DF0516

Operator: VTS

Column phase: ZB-5msi Column diameter: 0.25

Data File: df0516.d
Spectrum: Avg. Scans 272-274 (5.54), Background Scan 266
Location of Maximum: 198.00
Number of points: 327

m/z	Y	m/z	Y	m/z	Y	m/z	Y
80.00	12159	165.00	3157	247.00	1872	352.00	3037
81.00	16832	166.00	3200	248.00	612	353.00	2379
82.00	3731	167.00	19456	249.00	1570	354.00	2980
83.00	4929	168.00	10002	250.00	566	355.00	450
84.00	440	169.00	1068	251.00	428	357.00	82
85.00	3186	170.00	251	252.00	351	359.00	311
86.00	4405	171.00	719	253.00	944	363.00	63
87.00	2093	172.00	1483	255.00	216640	364.00	60
88.00	887	173.00	1786	256.00	37904	365.00	12604
89.00	111	174.00	4193	257.00	2542	366.00	2285
90.00	129	175.00	7973	258.00	12555	367.00	109
91.00	3630	176.00	2348	259.00	2029	370.00	457
92.00	4079	177.00	3355	260.00	432	371.00	950
93.00	22976	178.00	1293	261.00	234	372.00	4727
94.00	1907	179.00	13917	262.00	53	373.00	1568
95.00	785	180.00	10116	264.00	627	374.00	200
96.00	1466	181.00	5393	265.00	4843	377.00	157
97.00	499	182.00	674	266.00	1011	378.00	118
98.00	15240	183.00	730	267.00	83	383.00	1327
99.00	14927	184.00	1330	270.00	95	384.00	461
100.00	1344	185.00	7814	271.00	534	386.00	143
101.00	9116	186.00	59448	272.00	897	390.00	769
102.00	683	187.00	17976	273.00	6733	391.00	615
103.00	2298	188.00	1333	274.00	17984	392.00	425
104.00	5463	189.00	3366	275.00	99312	397.00	61
105.00	3444	190.00	861	276.00	13717	401.00	369
106.00	1573	191.00	1719	277.00	8285	402.00	2425
107.00	68048	192.00	4216	278.00	1005	403.00	3129
108.00	10158	193.00	5928	279.00	122	404.00	1267
109.00	642	194.00	782	280.00	122	405.00	63
110.00	123216	195.00	869	282.00	337	410.00	57
111.00	20608	196.00	11897	283.00	1038	415.00	83
112.00	2365	197.00	1606	284.00	872	416.00	68
113.00	374	198.00	358208	285.00	1537	421.00	3059
115.00	317	199.00	31936	286.00	333	422.00	2752

Date : 16-MAY-2011 10:04

Client ID: Instrument: nt11.i

Sample Info: DF0516

Operator: VTS

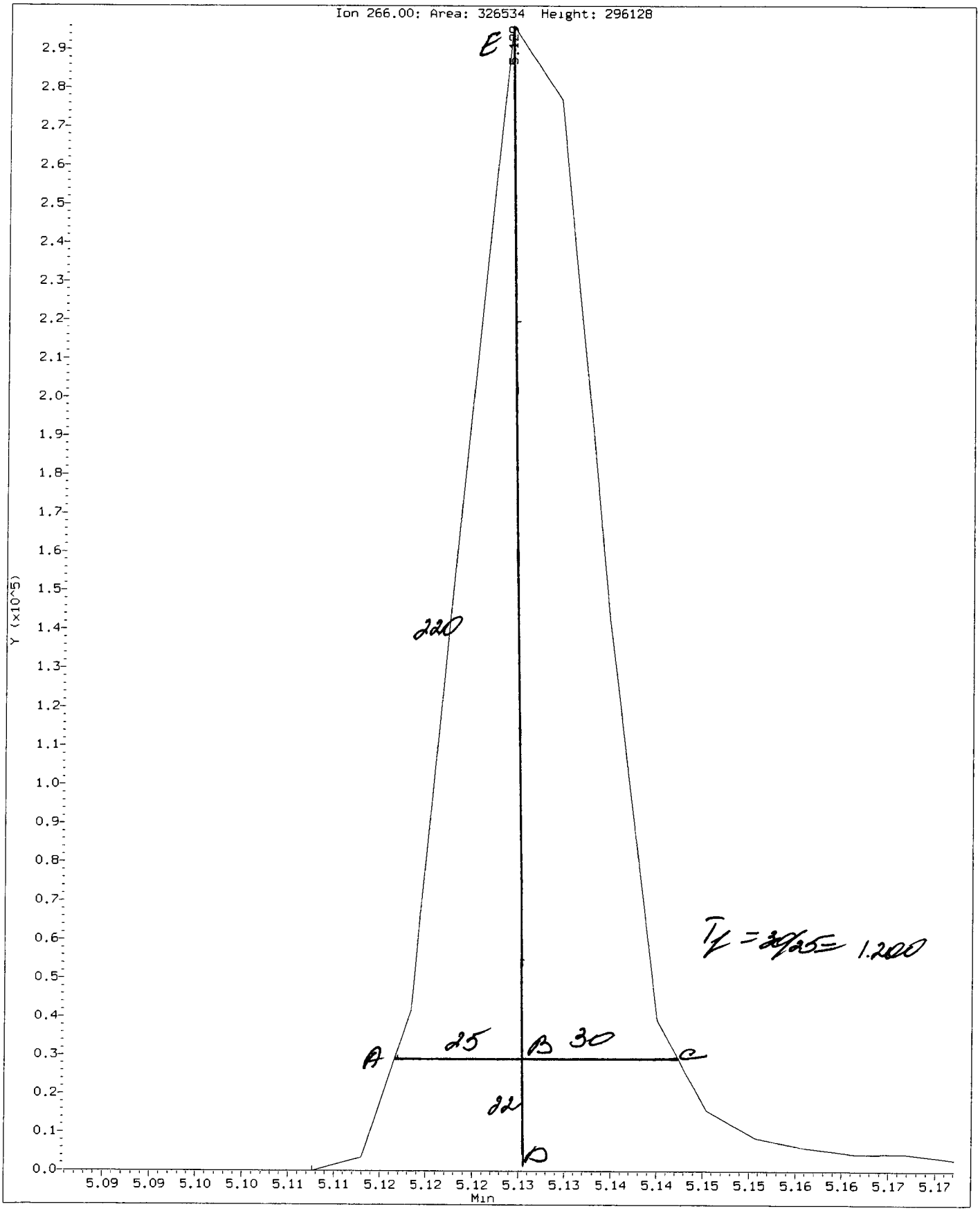
Column phase: ZB-5msi Column diameter: 0.25

Data File: df0516.d
Spectrum: Avg. Scans 272-274 (5.54), Background Scan 266
Location of Maximum: 198.00
Number of points: 327

m/z	Y	m/z	Y	m/z	Y	m/z	Y
116.00	3241	200.00	2339	288.00	256	423.00	20704
117.00	38776	201.00	878	289.00	306	424.00	4616
118.00	2928	202.00	726	290.00	440	425.00	383
119.00	401	203.00	3398	291.00	322	430.00	56
120.00	408	204.00	14711	292.00	429	437.00	52
122.00	2580	205.00	25280	293.00	2361	441.00	57176
123.00	5684	206.00	114152	294.00	492	442.00	315072
124.00	2616	207.00	13991	295.00	444	443.00	74936
125.00	3028	208.00	4219	296.00	27192	444.00	6354
127.00	189824	209.00	1001	297.00	4292	445.00	577
128.00	14574	210.00	1641	298.00	413	494.00	53
129.00	72968	211.00	3864	299.00	152		

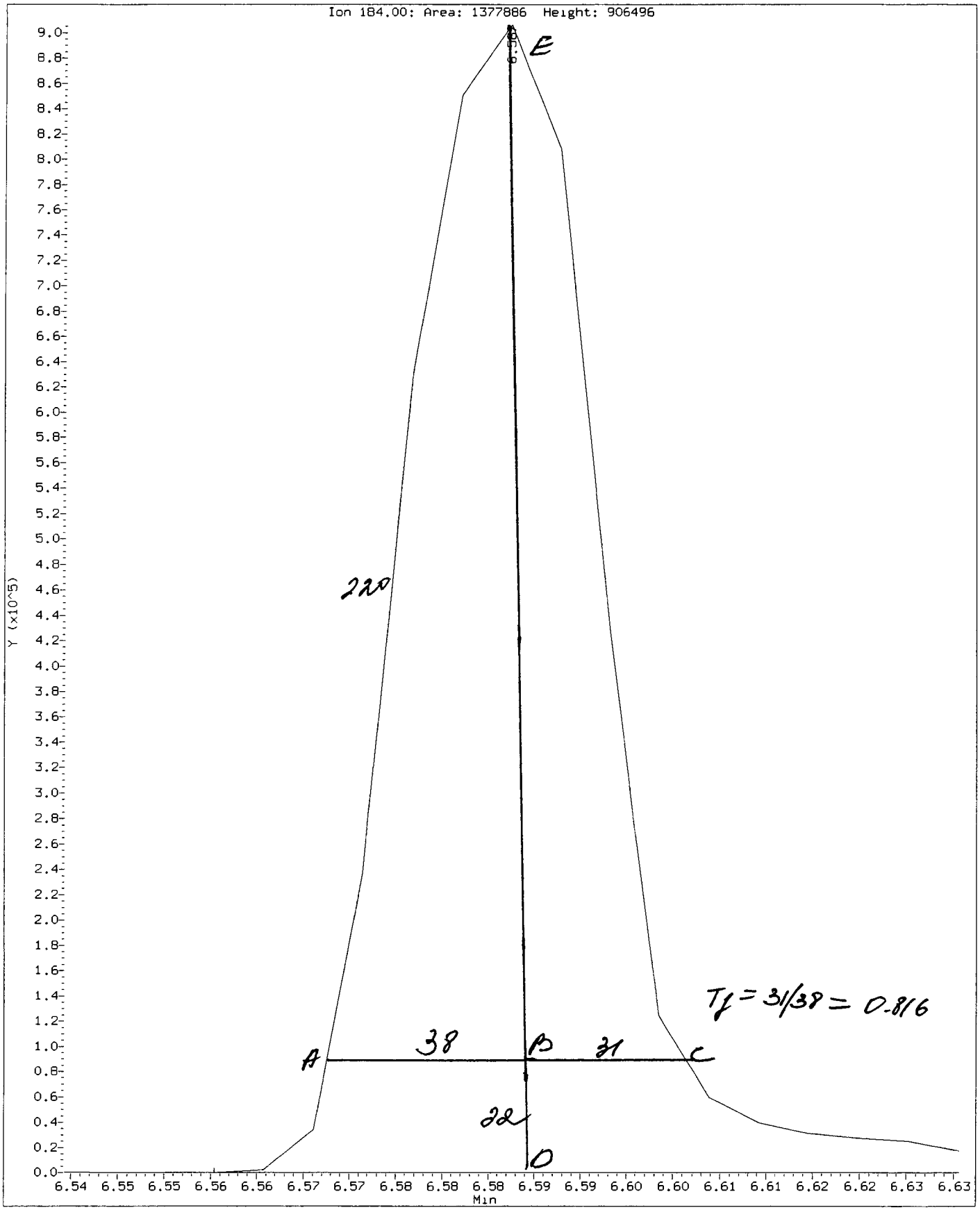
Data File: /chem3/nt11.i/20110516.b/ddt.b/df0516.d
Injection Date: 16-MAY-2011 10:04
Instrument: nt11.i
Client Sample ID:

Compound: Pentachlorophenol
CAS Number: 87-86-5



Data File: /chem3/nt11.1/20110516.b/ddt.b/df0516.d
Injection Date: 16-MAY-2011 10:04
Instrument: nt11.1
Client Sample ID:

Compound: Benzidine
CAS Number:



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

Data file: /chem3/nt11.i/20110516.b/ddt.b/df0516.d ARI ID: DF0516
Method: /chem3/nt11.i/20110516.b/ddt.b/sw846ddt.m Misc:
Analysis Date: 16-MAY-2011 10:04 Instrument: nt11.i

COMPOUND	RT	AREA
Pentachlorophenol	5.129	326534
Benzidine	6.587	1377885
4,4'-DDE	6.801	6502
4,4'-DDD	7.138	55534
4,4'-DDT	7.432	822529

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

$$\text{DDT Percent Breakdown} = \frac{(\ 6502 + 55534) * 100}{(\ 6502 + 55534 + 822529)}$$

DDT Percent Breakdown = 7.0 %

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt11.i Injection Date: 16-MAY-2011 10:19
Lab File ID: cc0516.d Init. Cal. Date(s): 30-APR-2011 30-APR-2011
Analysis Type: Init. Cal. Times: 10:12 12:15
Lab Sample ID: CC0514 Quant Type: ISTD
Method: /chem3/nt11.i/20110516.b/lowsim.m

COMPOUND	RRF / AMOUNT	RF250	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
5 Naphthalene	0.95920	0.96878	0.010	0.99873	20.00000	Averaged
$ 6 2-Methylnaphthalene-d10	0.58083	0.60424	0.010	4.02979	20.00000	Averaged
7 2-Methylnaphthalene	0.58263	0.60448	0.010	3 75036	20.00000	Averaged
8 1-Methylnaphthalene	0.57825	0.61500	0.010	6.35566	20.00000	Averaged
10 Acenaphthylene	1.56025	1.62832	0.010	4.36286	20.00000	Averaged
12 Acenaphthene	0.98304	1.00196	0.010	1.92467	20.00000	Averaged
14 Dibenzofuran	1.44731	1.52314	0.010	5.23928	20.00000	Averaged
15 Fluorene	1.02181	1.07888	0.010	5.58546	20.00000	Averaged
19 Phenanthrene	1.00537	0.97708	0.010	-2 81451	20.00000	Averaged
20 Anthracene	0.95162	0.97044	0.010	1.97791	20.00000	Averaged
24 Fluoranthene	0.98812	1.05213	0.010	6.47737	20.00000	Averaged
25 Pyrene	1.68035	1.62150	0.010	-3.50230	20.00000	Averaged
28 Benzo(a)anthracene	1.40073	1.35742	0.010	-3.09225	20.00000	Averaged
30 Chrysene	1.40823	1.38003	0.010	-2.00267	20.00000	Averaged
43 Total Benzofluoranthenes	1.61557	1.53358	0.010	-5 07482	20.00000	Averaged
34 Benzo(a)pyrene	1.43471	1.38494	0.010	-3.46940	20.00000	Averaged
37 Indeno(1,2,3-cd)pyrene	1.73173	1.70705	0.010	-1 42499	20.00000	Averaged
$ 36 Dibenzo(a,h)anthracene-d14	1.25261	1.22798	0.010	-1.96650	20.00000	Averaged
38 Dibenzo(a,h)anthracene	1.34894	1.34622	0.010	-0.20140	20.00000	Averaged
39 Benzo(g,h,i)perylene	1.54303	1.50008	0.010	-2.78373	20.00000	Averaged

Analytical Resources, Inc.

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt11.i/20110516.b/cc0516.d
Lab Smp Id: CC0514
Inj Date : 16-MAY-2011 10:19
Operator : VTS Inst ID: nt11.i

YZ 5/16/11

Smp Info : CC0514
Misc Info :
Comment :
Method : /chem3/nt11.i/20110516.b/lowsim.m
Meth Date : 16-May-2011 12:01 yev Quant Type: ISTD
Cal Date : 30-APR-2011 12:15 Cal File: ic0430f.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna1mn.sub
Target Version: 3.50

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)
*	4 Naphthalene-d8	136	6.272	6.272	(1.000)	121727	200.000	
	5 Naphthalene	128	6.295	6.295	(1.004)	147408	250.000	252
$	6 2-Methylnaphthalene-d10	152	7.101	7.101	(1.132)	91940	250.000	260
	7 2-Methylnaphthalene	142	7.135	7.135	(1.138)	91977	250.000	259
	8 1-Methylnaphthalene	142	7.273	7.273	(1.160)	93578	250.000	266
	10 Acenaphthylene	152	8.265	8.265	(0.976)	142243	250.000	261
*	11 Acenaphthene-d10	164	8.466	8.466	(1.000)	69884	200.000	
	12 Acenaphthene	153	8.492	8.492	(1.003)	87526	250.000	255
	14 Dibenzofuran	168	8.694	8.694	(1.027)	133054	250.000	263
	15 Fluorene	166	9.123	9.123	(1.078)	94246	250.000	264
*	18 Phenanthrene-d10	188	10.302	10.302	(1.000)	116143	200.000	
	19 Phenanthrene	178	10.329	10.329	(1.003)	141851	250.000	243
	20 Anthracene	178	10.383	10.383	(1.008)	140888	250.000	255
	24 Fluoranthene	202	11.817	11.817	(1.147)	152747	250.000	266
	25 Pyrene	202	12.112	12.112	(0.889)	157723	250.000	241
	28 Benzo(a)anthracene	228	13.601	13.601	(0.998)	132036	250.000	242
*	29 Chrysene-d12	240	13.628	13.628	(1.000)	77816	200.000	
	30 Chrysene	228	13.655	13.655	(1.002)	134235	250.000	245
	43 Total Benzofluoranthenes	252	15.041	15.041	(0.964)	246664	500.000	475
	34 Benzo(a)pyrene	252	15.512	15.512	(0.994)	111378	250.000	241
*	35 Perylene-d12	264	15.608	15.608	(1.000)	64337	200.000	
	37 Indeno(1,2,3-cd)pyrene	276	17.672	17.672	(1.132)	137283	250.000	246
$	36 Dibenzo(a,h)anthracene-d14	292	17.618	17.618	(1.129)	98755	250.000	245
	38 Dibenzo(a,h)anthracene	278	17.685	17.685	(1.133)	108264	250.000	249
	39 Benzo(g,h,i)perylene	276	18.289	18.289	(1.172)	120638	250.000	243

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt11.i
Lab File ID: cc0516.d
Lab Smp Id: CC0514
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt11.i/20110516.b/lowsim.m
Misc Info:

Calibration Date: 16-MAY-2011
Calibration Time: 10:19
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	129326	64663	258652	121727	-5.88
11 Acenaphthene-d10	70573	35286	141146	69884	-0.98
18 Phenanthrene-d10	113741	56870	227482	116143	2.11
29 Chrysene-d12	70763	35382	141526	77816	9.97
35 Perylene-d12	54896	27448	109792	64337	17.20

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	6.27	5.77	6.77	6.27	0.00
11 Acenaphthene-d10	8.47	7.97	8.97	8.47	0.00
18 Phenanthrene-d10	10.30	9.80	10.80	10.30	0.00
29 Chrysene-d12	13.63	13.13	14.13	13.63	0.00
35 Perylene-d12	15.61	15.11	16.11	15.61	0.00

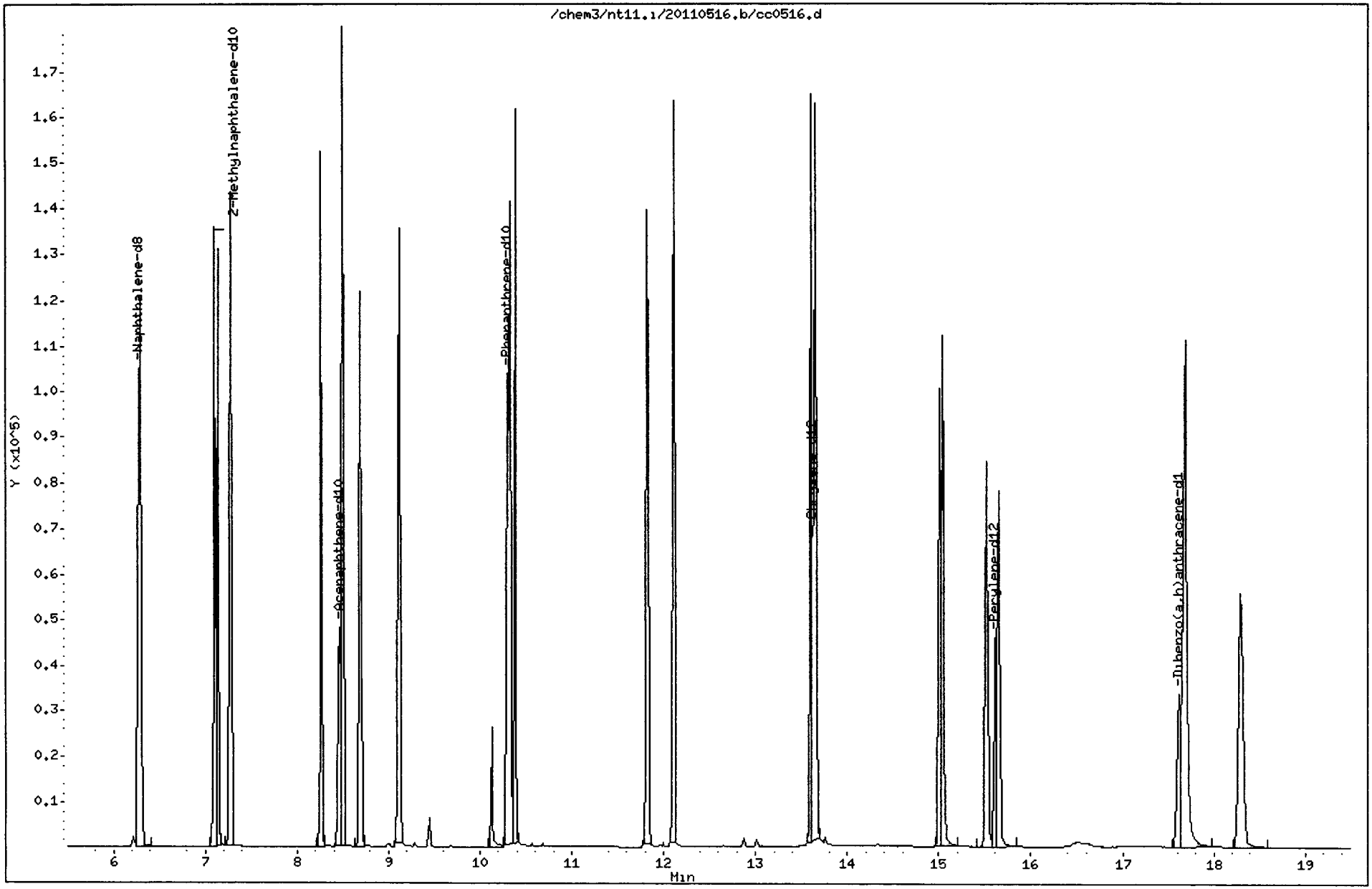
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem3/nt11.i/20110516.b/cc0516.d
Date : 16-MAY-2011 10:19
Client ID:
Sample Info: CC0514

Instrument: nt11.i

Operator: VTS
Column diameter: 0.25

Column phase: ZB-5msi



ST98:00628

CO-ELUTION SUMMARY FOR FILE - cc0516.d

Lab ID: CC0514, Method: lowsim.m, Instrument: nt11.i, Date: 16-MAY-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

YZ 5/11/11

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt11.i/20110516.b/su21c.d
Lab Smp Id: SU21C Client Smp ID: MW10-042711
Inj Date : 16-MAY-2011 10:43
Operator : VTS Inst ID: nt11.i
Smp Info : SU21C
Misc Info : 11-9509
Comment :
Method : /chem3/nt11.i/20110516.b/lowsim.m
Meth Date : 16-May-2011 12:01 yev Quant Type: ISTD
Cal Date : 30-APR-2011 12:15 Cal File: ic0430f.d
Als bottle: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna1mn.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt / Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Final Extract Volume (uL)
Vo	500.00000	Sample Volume extracted (mL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	FINAL (ug/L)
* 4 Naphthalene-d8	136	6.272	6.272	(1.000)	115895	200.000	
5 Naphthalene	128	6.295	6.295	(1.004)	12784	22.9998	23.0
$ 6 2-Methylnaphthalene-d10	152	7.101	7.101	(1.132)	67491	200.521	201
7 2-Methylnaphthalene	142	7.135	7.135	(1.138)	1808	5.35512 J	5.36
8 1-Methylnaphthalene	142	Compound Not Detected.					
10 Acenaphthylene	152	Compound Not Detected.					
* 11 Acenaphthene-d10	164	8.466	8.466	(1.000)	66799	200.000	
12 Acenaphthene	153	Compound Not Detected.					
14 Dibenzofuran	168	Compound Not Detected.					
15 Fluorene	166	Compound Not Detected.					
* 18 Phenanthrene-d10	188	10.302	10.302	(1.000)	113038	200.000	
19 Phenanthrene	178	10.329	10.329	(1.003)	3217	5.66146 J	5.66
20 Anthracene	178	Compound Not Detected.					
24 Fluoranthene	202	11.817	11.817	(1.147)	4303	7.70487 J	7.70
25 Pyrene	202	12.112	12.112	(0.889)	5277	8.66036 J	8.66

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)		FINAL (ug/L)
	28 Benzo(a)anthracene	228	13.601	13.601	(0.998)	2746	5.40622	J	5.41
*	29 Chrysene-d12	240	13.628	13.628	(1.000)	72524	200.000		
	30 Chrysene	228	13.655	13.655	(1.002)	2932	5.74168	J	5.74
	43 Total Benzofluoranthenes	252	Compound Not Detected.						
	34 Benzo(a)pyrene	252	15.512	15.512	(0.994)	3361	7.72227	J	7.72
*	35 Perylene-d12	264	15.608	15.608	(1.000)	60672	200.000		
	37 Indeno(1,2,3-cd)pyrene	276	17.672	17.672	(1.132)	2850	5.42509	JB	5.43
$	36 Dibenzo(a,h)anthracene-d14	292	17.618	17.618	(1.129)	86946	228.809	✓	229
	38 Dibenzo(a,h)anthracene	278	Compound Not Detected.						
	39 Benzo(g,h,i)perylene	276	18.289	18.289	(1.172)	4510	9.63480	JB	9.63

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt11.i
Lab File ID: su21c.d
Lab Smp Id: SU21C
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt11.i/20110516.b/lowsim.m
Misc Info: 11-9509

Calibration Date: 16-MAY-2011
Calibration Time: 10:19
Client Smp ID: MW10-042711
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	129326	64663	258652	115895	-10.39
11 Acenaphthene-d10	70573	35286	141146	66799	-5.35
18 Phenanthrene-d10	113741	56870	227482	113038	-0.62
29 Chrysene-d12	70763	35382	141526	72524	2.49
35 Perylene-d12	54896	27448	109792	60672	10.52

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	6.27	5.77	6.77	6.27	0.00
11 Acenaphthene-d10	8.47	7.97	8.97	8.47	0.00
18 Phenanthrene-d10	10.30	9.80	10.80	10.30	0.00
29 Chrysene-d12	13.63	13.13	14.13	13.63	0.00
35 Perylene-d12	15.61	15.11	16.11	15.61	0.00

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

Analytical Resources, Inc.

RECOVERY REPORT

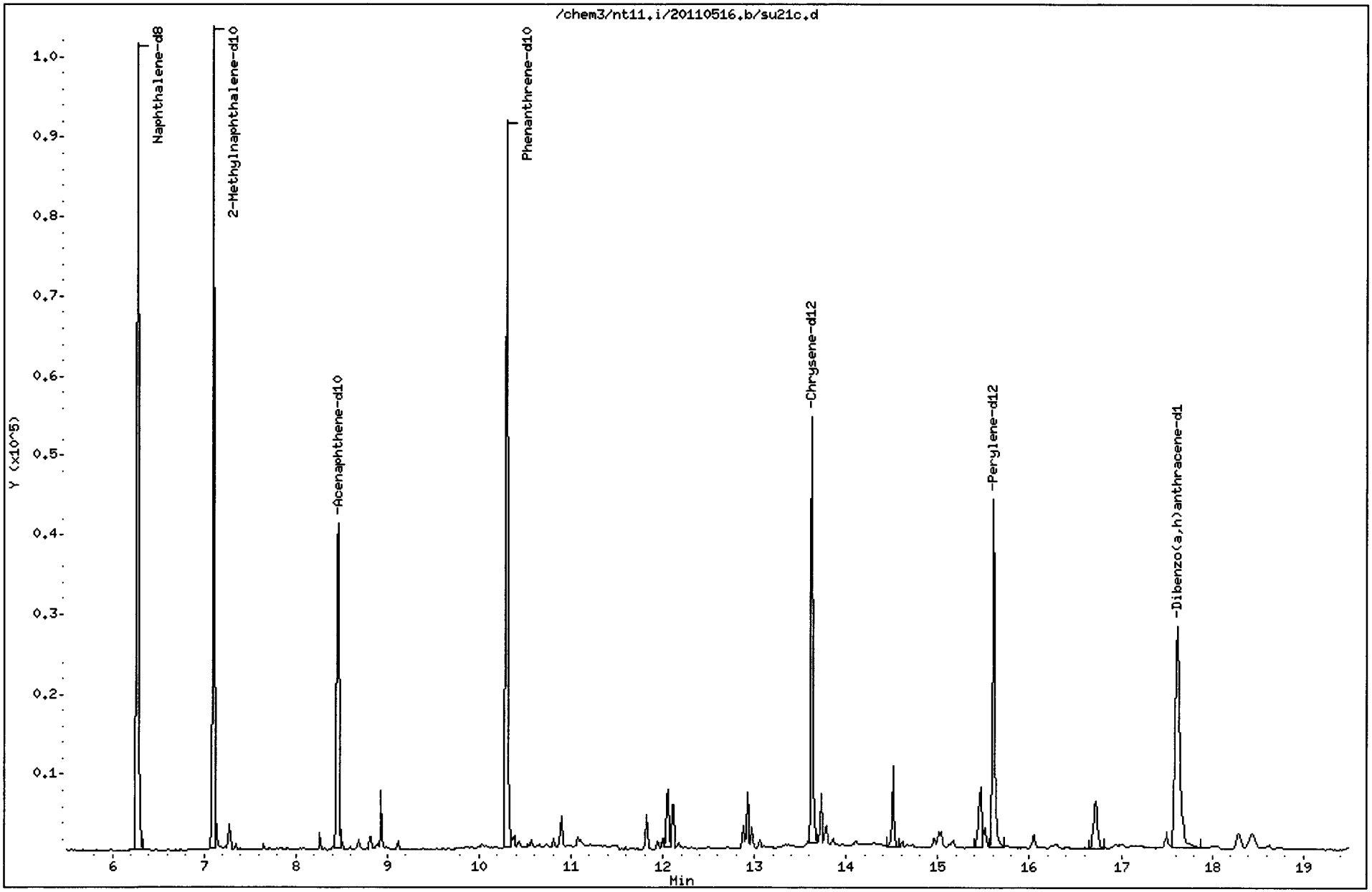
Client Name: Floyd Snider
Sample Matrix: LIQUID
Lab Smp Id: SU21C
Level: LOW
Data Type: MS DATA
SpikeList File: waterlcs.spk
Sublist File: pna1mn.sub
Method File: /chem3/nt11.i/20110516.b/lowsim.m
Misc Info: 11-9509

Client SDG: SU21
Fraction: SV
Client Smp ID: MW10-042711
Operator: VTS
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 6 2-Methylnaphthalen	300	201	66.84	31-109
$ 36 Dibenzo(a,h)anthra	300	229	76.27	10-133

Data File: /chem3/nt11.i/20110516.b/su21c.d
Date : 16-MAY-2011 10:43
Client ID: MW10-042711
Sample Info: SU21C
Volume Injected (uL): 2.0
Column phase: ZB-5msi

Instrument: nt11.i
Operator: VTS
Column diameter: 0.25



ST98:00634

Data File: /chem3/nt11.i/20110516.b/su21c.d

Date : 16-MAY-2011 10:43

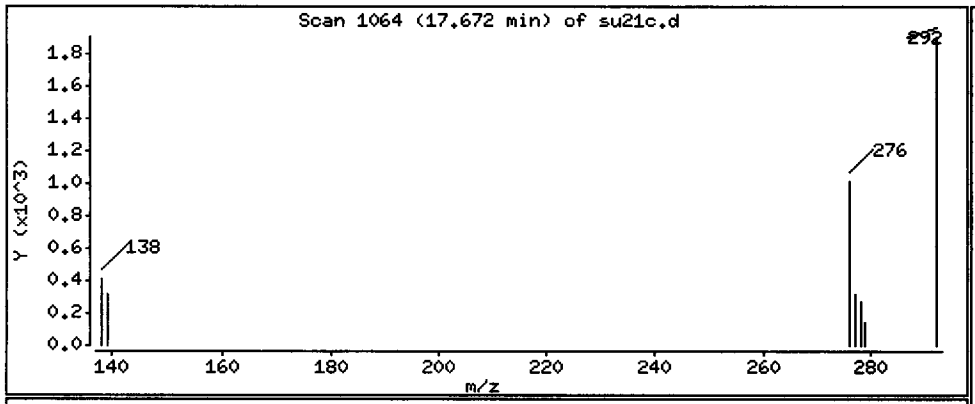
Client ID: MW10-042711 Instrument: nt11.i

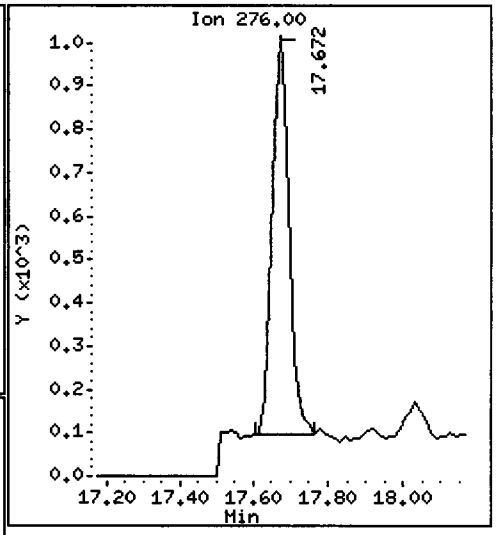
Sample Info: SU21C

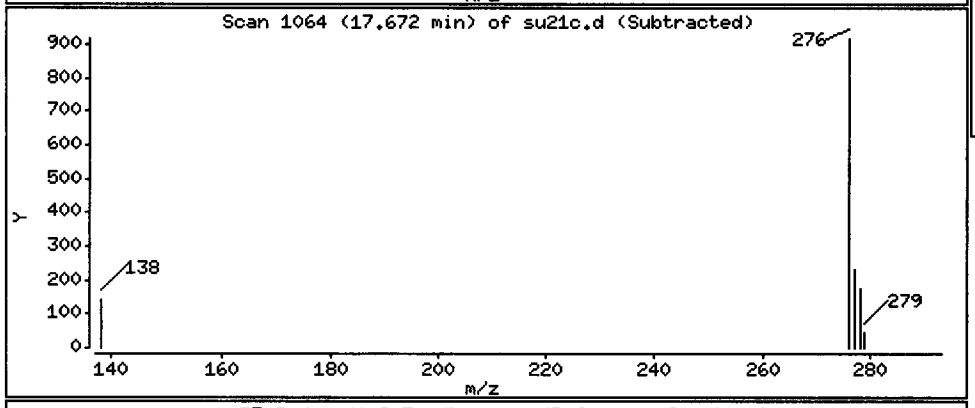
Volume Injected (uL): 2.0 Operator: VTS

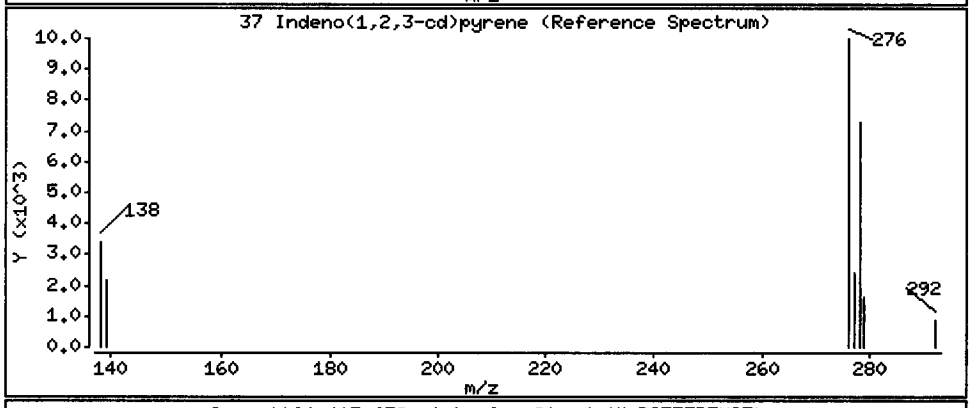
Column phase: ZB-5msi Column diameter: 0.25

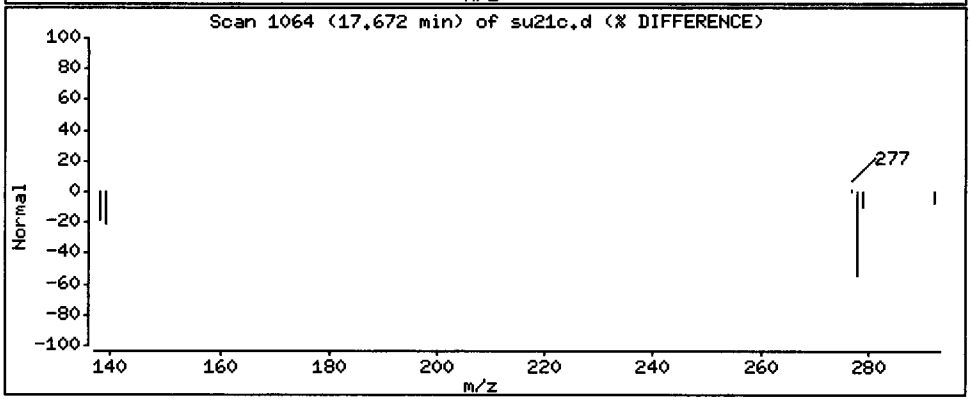
37 Indeno(1,2,3-cd)pyrene Concentration: 5.43 ug/L











CO-ELUTION SUMMARY FOR FILE - su21c.d

Lab ID: SU21C, Method: lowsim.m, Instrument: nt11.i, Date: 16-MAY-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

YZ 5/16/11

Analytical Resources, Inc.

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt11.i/20110516.b/su21d.d
Lab Smp Id: SU21D Client Smp ID: MW09-042711
Inj Date : 16-MAY-2011 11:07
Operator : VTS Inst ID: nt11.i
Smp Info : SU21D
Misc Info : 11-9510
Comment :
Method : /chem3/nt11.i/20110516.b/lowsim.m
Meth Date : 16-May-2011 12:01 yev Quant Type: ISTD
Cal Date : 30-APR-2011 12:15 Cal File: ic0430f.d
Als bottle: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna1mn.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt / Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Final Extract Volume (uL)
Vo	500.00000	Sample Volume extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	CONCENTRATIONS FINAL (ug/L)
*	4 Naphthalene-d8	136	6.272	6.272	(1.000)	116896	200.000	
	5 Naphthalene	128	6.296	6.295	(1.004)	22322	39.8158	39.8
$	6 2-Methylnaphthalene-d10	152	7.101	7.101	(1.132)	70099	206.486	206
	7 2-Methylnaphthalene	142	Compound Not Detected.					
	8 1-Methylnaphthalene	142	Compound Not Detected.					
	10 Acenaphthylene	152	Compound Not Detected.					
*	11 Acenaphthene-d10	164	8.452	8.466	(1.000)	68135	200.000	
	12 Acenaphthene	153	Compound Not Detected.					
	14 Dibenzofuran	168	Compound Not Detected.					
	15 Fluorene	166	Compound Not Detected.					
*	18 Phenanthrene-d10	188	10.302	10.302	(1.000)	116708	200.000	
	19 Phenanthrene	178	Compound Not Detected.					
	20 Anthracene	178	Compound Not Detected.					
	24 Fluoranthene	202	Compound Not Detected.					
	25 Pyrene	202	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	FINAL (ug/L)
	28 Benzo(a)anthracene	228	Compound Not Detected.					
*	29 Chrysene-d12	240	13.628	13.628	(1.000)	75275	200.000	
	30 Chrysene	228	Compound Not Detected.					
	43 Total Benzofluoranthenes	252	Compound Not Detected.					
	34 Benzo(a)pyrene	252	Compound Not Detected.					
*	35 Perylene-d12	264	15.608	15.608	(1.000)	62256	200.000	
	37 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
$	36 Dibenzo(a,h)anthracene-d14	292	17.618	17.618	(1.129)	98414	252.399	252
	38 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	39 Benzo(g,h,i)perylene	276	Compound Not Detected.					

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt11.i
Lab File ID: su21d.d
Lab Smp Id: SU21D
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt11.i/20110516.b/lowsim.m
Misc Info: 11-9510

Calibration Date: 16-MAY-2011
Calibration Time: 10:19
Client Smp ID: MW09-042711
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	129326	64663	258652	116896	-9.61
11 Acenaphthene-d10	70573	35286	141146	68135	-3.45
18 Phenanthrene-d10	113741	56870	227482	116708	2.61
29 Chrysene-d12	70763	35382	141526	75275	6.38
35 Perylene-d12	54896	27448	109792	62256	13.41

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	6.27	5.77	6.77	6.27	0.00
11 Acenaphthene-d10	8.47	7.97	8.97	8.45	-0.16
18 Phenanthrene-d10	10.30	9.80	10.80	10.30	0.00
29 Chrysene-d12	13.63	13.13	14.13	13.63	0.00
35 Perylene-d12	15.61	15.11	16.11	15.61	0.00

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

Analytical Resources, Inc.

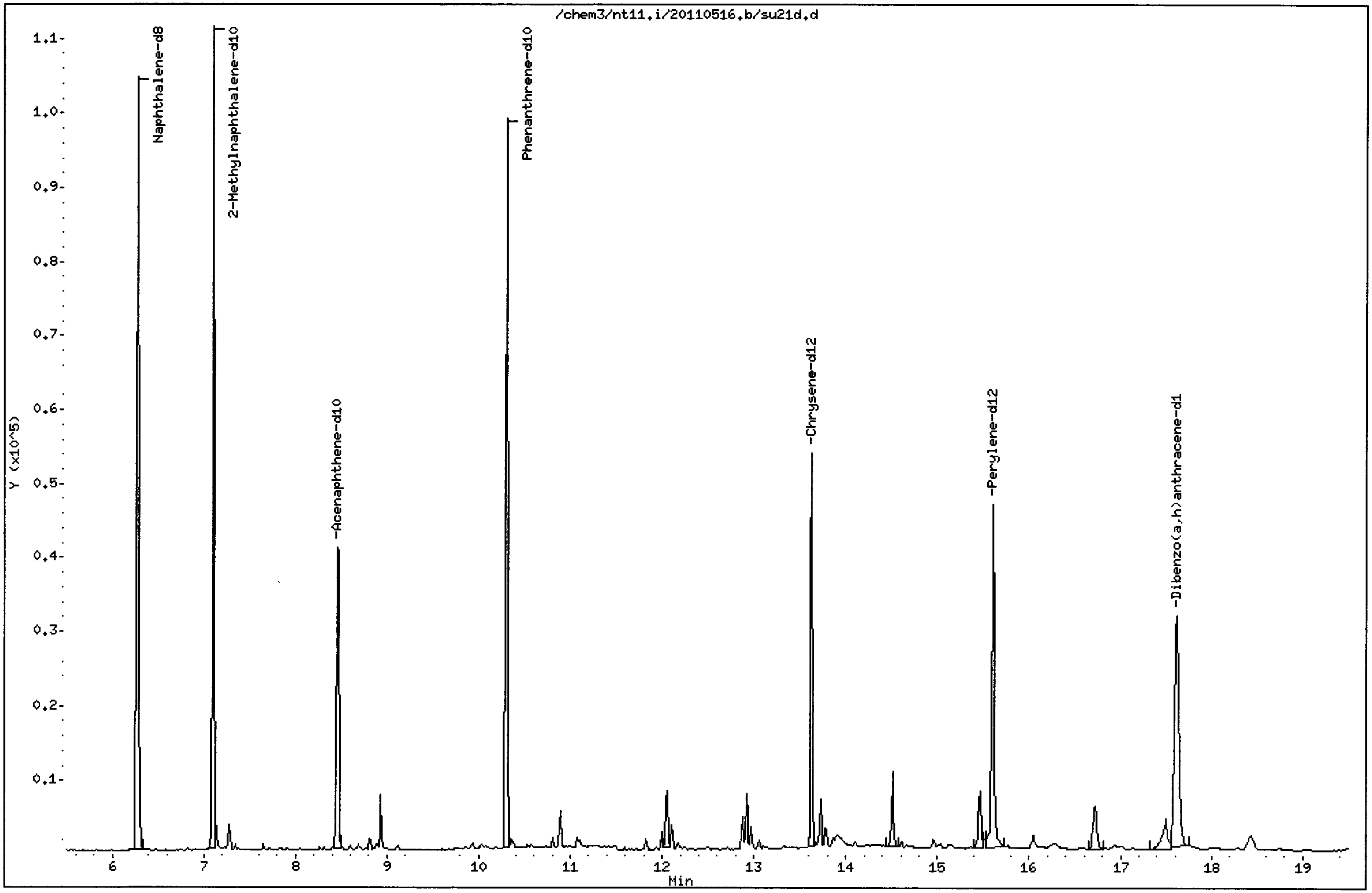
RECOVERY REPORT

Client Name: Floyd Snider
Client SDG: SU21
Sample Matrix: LIQUID
Fraction: SV
Lab Smp Id: SU21D
Client Smp ID: MW09-042711
Level: LOW
Operator: VTS
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: waterlcs.spk
Quant Type: ISTD
Sublist File: pna1mn.sub
Method File: /chem3/nt11.i/20110516.b/lowsim.m
Misc Info: 11-9510

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 6 2-Methylnaphthalen	300	206	68.83	31-109
$ 36 Dibenzo(a,h)anthra	300	252	84.13	10-133

Data File: /chem3/nt11.i/20110516.b/su21d.d
Date : 16-MAY-2011 11:07
Client ID: MW09-042711
Sample Info: SU21D
Volume Injected (uL): 2.0
Column phase: ZB-5msi

Instrument: nt11.i
Operator: VTS
Column diameter: 0.25



CO-ELUTION SUMMARY FOR FILE - su21d.d

Lab ID: SU21D, Method: lowsim.m, Instrument: nt11.i, Date: 16-MAY-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc. YZ 5/16/11

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt11.i/20110516.b/su21e.d
Lab Smp Id: SU21E Client Smp ID: MW08-042711
Inj Date : 16-MAY-2011 11:31
Operator : VTS Inst ID: nt11.i
Smp Info : SU21E
Misc Info : 11-9511
Comment :
Method : /chem3/nt11.i/20110516.b/lowsim.m
Meth Date : 16-May-2011 12:01 yev Quant Type: ISTD
Cal Date : 30-APR-2011 12:15 Cal File: ic0430f.d
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna1mn.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt / Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Final Extract Volume (uL)
Vo	500.00000	Sample Volume extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	CONCENTRATIONS FINAL (ug/L)
*	4 Naphthalene-d8	136	6.272	6.272	(1.000)	121086	200.000	
	5 Naphthalene	128	6.295	6.295	(1.004)	24001	41.3293	41.3
$	6 2-Methylnaphthalene-d10	152	7.101	7.101	(1.132)	71583	203.561	204
	7 2-Methylnaphthalene	142	Compound Not Detected.					
	8 1-Methylnaphthalene	142	Compound Not Detected.					
	10 Acenaphthylene	152	Compound Not Detected.					
*	11 Acenaphthene-d10	164	8.452	8.466	(1.000)	70652	200.000	
	12 Acenaphthene	153	Compound Not Detected.					
	14 Dibenzofuran	168	Compound Not Detected.					
	15 Fluorene	166	Compound Not Detected.					
*	18 Phenanthrene-d10	188	10.302	10.302	(1.000)	115647	200.000	
	19 Phenanthrene	178	Compound Not Detected.					
	20 Anthracene	178	Compound Not Detected.					
	24 Fluoranthene	202	Compound Not Detected.					
	25 Pyrene	202	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	CONCENTRATIONS FINAL (ug/L)
	28 Benzo(a)anthracene	228	Compound Not Detected.					
*	29 Chrysene-d12	240	13.628	13.628	(1.000)	75741	200.000	
	30 Chrysene	228	Compound Not Detected.					
	43 Total Benzofluoranthenes	252	Compound Not Detected.					
	34 Benzo(a)pyrene	252	Compound Not Detected.					
*	35 Perylene-d12	264	15.608	15.608	(1.000)	63723	200.000	
	37 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
$	36 Dibenzo(a,h)anthracene-d14	292	17.618	17.618	(1.129)	98434	246.639	247
	38 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	39 Benzo(g,h,i)perylene	276	Compound Not Detected.					

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt11.i
Lab File ID: su21e.d
Lab Smp Id: SU21E
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt11.i/20110516.b/lowsim.m
Misc Info: 11-9511

Calibration Date: 16-MAY-2011
Calibration Time: 10:19
Client Smp ID: MW08-042711
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	129326	64663	258652	121086	-6.37
11 Acenaphthene-d10	70573	35286	141146	70652	0.11
18 Phenanthrene-d10	113741	56870	227482	115647	1.68
29 Chrysene-d12	70763	35382	141526	75741	7.03
35 Perylene-d12	54896	27448	109792	63723	16.08

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	6.27	5.77	6.77	6.27	0.00
11 Acenaphthene-d10	8.47	7.97	8.97	8.45	-0.16
18 Phenanthrene-d10	10.30	9.80	10.80	10.30	0.00
29 Chrysene-d12	13.63	13.13	14.13	13.63	0.00
35 Perylene-d12	15.61	15.11	16.11	15.61	0.00

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

Analytical Resources, Inc.

RECOVERY REPORT

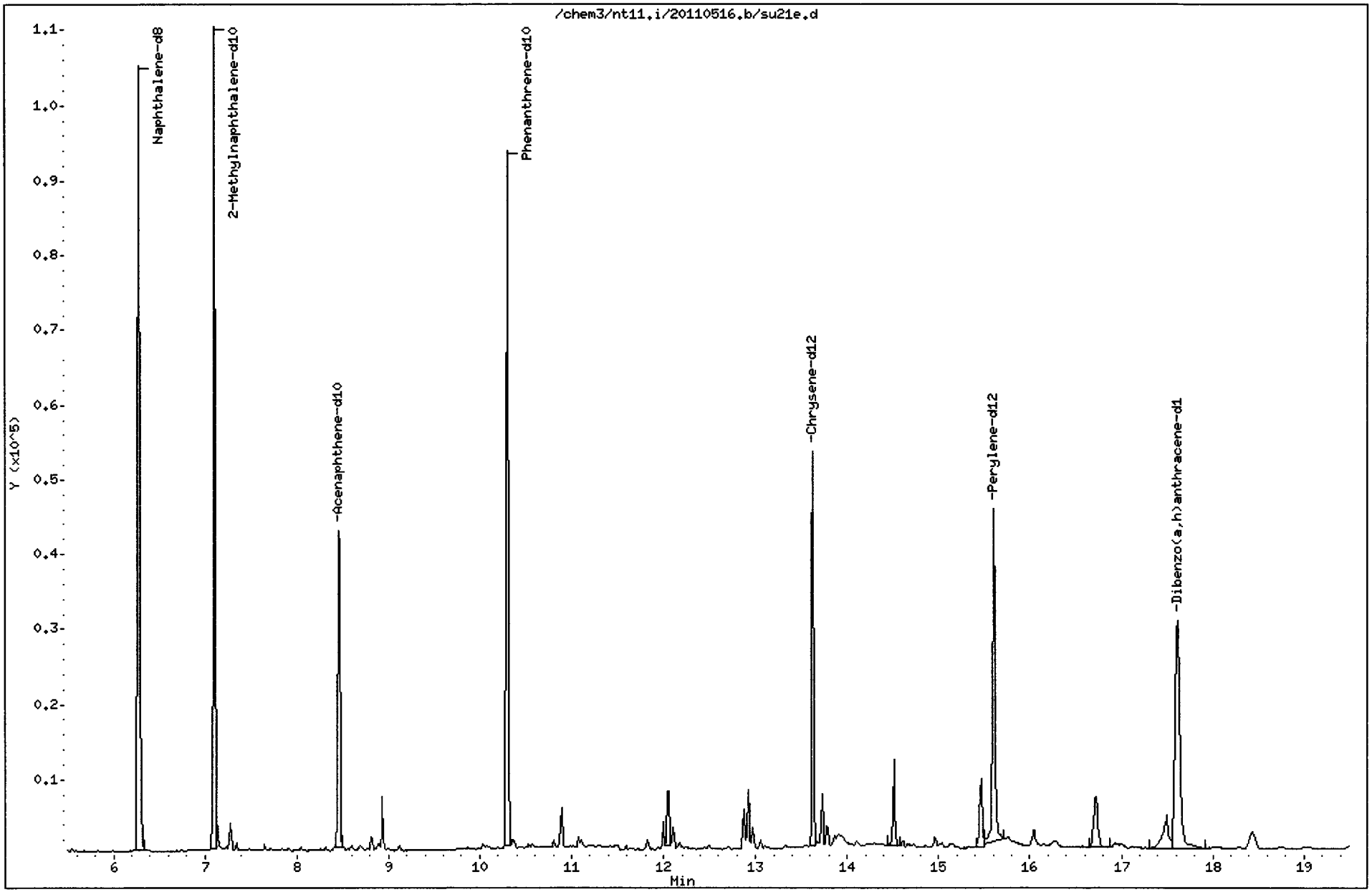
Client Name: Floyd Snider
Sample Matrix: LIQUID
Lab Smp Id: SU21E
Level: LOW
Data Type: MS DATA
SpikeList File: waterlcs.spk
Sublist File: pna1mn.sub
Method File: /chem3/nt11.i/20110516.b/lowsim.m
Misc Info: 11-9511

Client SDG: SU21
Fraction: SV
Client Smp ID: MW08-042711
Operator: VTS
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 6 2-Methylnaphthalen	300	204	67.85	31-109
$ 36 Dibenzo(a,h)anthra	300	247	82.21	10-133

Data File: /chem3/nt11.i/20110516.b/su21e.d
Date : 16-MAY-2011 11:31
Client ID: MW08-042711
Sample Info: SU21E
Volume Injected (uL): 2.0
Column phase: ZB-5ms1

Instrument: nt11.i
Operator: VTS
Column diameter: 0.25



CO-ELUTION SUMMARY FOR FILE - su21e.d

Lab ID: SU21E, Method: lowsim.m, Instrument: nt11.i, Date: 16-MAY-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

YZ 5/16/11

Analytical Resources, Inc.

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt11.i/20110516.b/su21f.d
Lab Smp Id: SU21F Client Smp ID: MW12-042711
Inj Date : 16-MAY-2011 11:56
Operator : VTS Inst ID: nt11.i
Smp Info : SU21F
Misc Info : 11-9512
Comment :
Method : /chem3/nt11.i/20110516.b/lowsim.m
Meth Date : 16-May-2011 12:01 yev Quant Type: ISTD
Cal Date : 30-APR-2011 12:15 Cal File: ic0430f.d
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna1mn.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Vt / Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Final Extract Volume (uL)
Vo	500.00000	Sample Volume extracted (mL)

Cpnd Variable Local Compound Variable

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	CONCENTRATIONS FINAL (ug/L)
*	4	Naphthalene-d8	136	6.272	6.272	(1.000)	115933	200.000	
	5	Naphthalene	128	6.296	6.295	(1.004)	23084	41.5170	41.5
$	6	2-Methylnaphthalene-d10	152	7.101	7.101	(1.132)	70041	208.029	208
	7	2-Methylnaphthalene	142	7.135	7.135	(1.138)	1750	5.18163 J	5.18
	8	1-Methylnaphthalene	142	Compound Not Detected.					
	10	Acenaphthylene	152	Compound Not Detected.					
*	11	Acenaphthene-d10	164	8.466	8.466	(1.000)	68372	200.000	
	12	Acenaphthene	153	Compound Not Detected.					
	14	Dibenzofuran	168	Compound Not Detected.					
	15	Fluorene	166	Compound Not Detected.					
*	18	Phenanthrene-d10	188	10.302	10.302	(1.000)	113477	200.000	
	19	Phenanthrene	178	Compound Not Detected.					
	20	Anthracene	178	Compound Not Detected.					
	24	Fluoranthene	202	Compound Not Detected.					
	25	Pyrene	202	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	CONCENTRATIONS FINAL (ug/L)
	28 Benzo(a)anthracene	228	Compound Not Detected.					
*	29 Chrysene-d12	240	13.628	13.628	(1.000)	74607	200.000	
	30 Chrysene	228	Compound Not Detected.					
	43 Total Benzofluoranthenes	252	Compound Not Detected.					
	34 Benzo(a)pyrene	252	Compound Not Detected.					
*	35 Perylene-d12	264	15.608	15.608	(1.000)	61690	200.000	
	37 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
$	36 Dibenzo(a,h)anthracene-d14	292	17.618	17.618	(1.129)	97714	252.903	253
	38 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	39 Benzo(g,h,i)perylene	276	Compound Not Detected.					

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt11.i
Lab File ID: su21f.d
Lab Smp Id: SU21F
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt11.i/20110516.b/lowsim.m
Misc Info: 11-9512

Calibration Date: 16-MAY-2011
Calibration Time: 10:19
Client Smp ID: MW12-042711
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	129326	64663	258652	115933	-10.36
11 Acenaphthene-d10	70573	35286	141146	68372	-3.12
18 Phenanthrene-d10	113741	56870	227482	113477	-0.23
29 Chrysene-d12	70763	35382	141526	74607	5.43
35 Perylene-d12	54896	27448	109792	61690	12.38

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	6.27	5.77	6.77	6.27	0.00
11 Acenaphthene-d10	8.47	7.97	8.97	8.47	0.00
18 Phenanthrene-d10	10.30	9.80	10.80	10.30	0.00
29 Chrysene-d12	13.63	13.13	14.13	13.63	0.00
35 Perylene-d12	15.61	15.11	16.11	15.61	0.00

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

Analytical Resources, Inc.

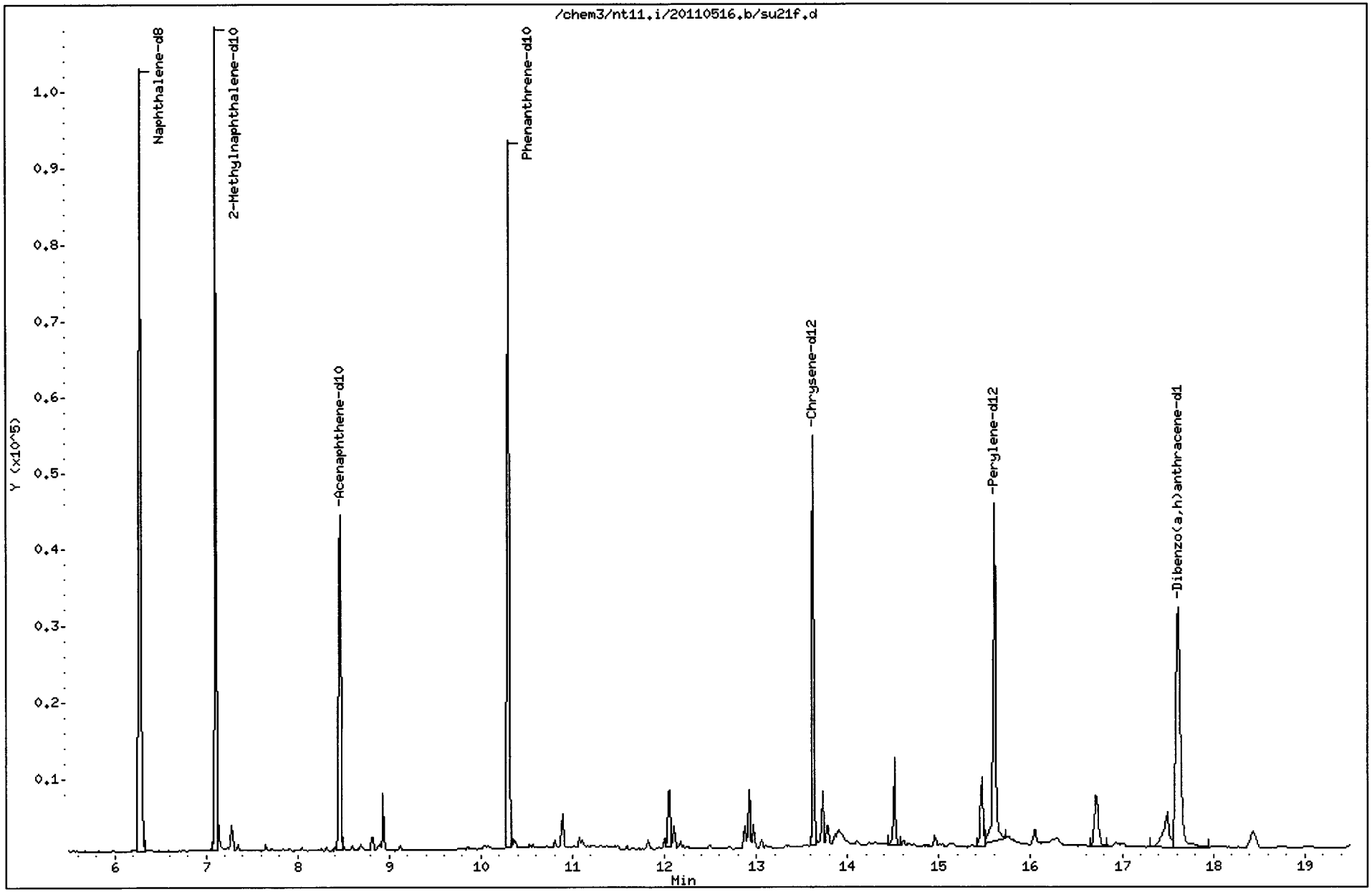
RECOVERY REPORT

Client Name: Floyd Snider
Client SDG: SU21
Sample Matrix: LIQUID
Fraction: SV
Lab Smp Id: SU21F
Client Smp ID: MW12-042711
Level: LOW
Operator: VTS
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: waterlcs.spk
Quant Type: ISTD
Sublist File: pna1mn.sub
Method File: /chem3/nt11.i/20110516.b/lowsim.m
Misc Info: 11-9512

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 6 2-Methylnaphthalen	300	208	69.34	31-109
$ 36 Dibenzo(a,h)anthra	300	253	84.30	10-133

Data File: /chem3/nt11.i/20110516.b/su21f.d
Date : 16-MAY-2011 11:56
Client ID: MW12-042711
Sample Info: SU21F
Volume Injected (uL): 2.0
Column phase: ZB-5msi

Instrument: nt11.i
Operator: VTS
Column diameter: 0.25



CO-ELUTION SUMMARY FOR FILE - su21f.d

Lab ID: SU21F, Method: lowsim.m, Instrument: nt11.i, Date: 16-MAY-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

PCP/Chlorophenols Raw Data
Extraction Bench Sheets and Notes

ARI Job ID: ST98, SU21

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Benchsheet

8041 PCP – Water
Separatory Funnel (3510C) (SOP # 3311S)

Preparation Test PCP # 1

In-House (0.25ppb)

ARI Job No(s) ST99, ST98, 5u21

Batch set up by: SA

Bottle #	Extraction Requirements	Verify Client ID	Volume Extracted	KD Exchange To Hexane (X2)	Turbo Vap 1@3	Volume to Lab	Derivitize	Final Effective Volume	Comments
	ST99 MBW	Date 5-2-11	500mL	↓	↓	10mL		50mL	
	↓ SBW	↓	↓	↓	↓	↓		↓	
	~~SBWDup.~~		↓			↓		↓	
	ST99 QLS	5-2-11	↓	↓	↓	↓		↓	
1	↓ A	verified	560mL						
11	ST98 A								
↓	B								
↓	C								
28,29,30	D								
↓	Dmso								
↓	↓ Dmso2								
16	5u21 A								
	B								
	C								
	D								
	E								
↓	↓ F	↓	↓	↓	↓	↓			
				YL	CJZ				
Analyst/Date:	PD 5-2-11			5/6/11	5/11/11 →				

Standard	Standard ID	Volume	Expiration Date	Analyst	Witness
Surrogate	F	100µL	12/09/11	MP 05/02/11	SP
Spike	6	100µL	12/16/11	MP 05/02/11	SP
QLS Spike	16	50µL	12/16/11	MP 05/02/11	SP
Extraction Time: 1140			Derivitized by:		Diazald ID:

SPECIAL INSTRUCTIONS: 1. Add surr/spike. 2. Acidify all with 1:1 Sulfuric Acid 3. Extract 3X with 30mL DCM.

4. KD (NO Drying Column) at 80° to 5mL. 5. Exchange (2 X with 20mL) Hexane at 100°. 6. Turbo Vap.

7. Vial at 10mL into Herb tubes using Hexane. 8. GC Analyst to Derivitize.

A. Archive Y (N)

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

ARI Job No.: ST98/Su21 Client ID: Floyd Snider

Parameter: PCP Client Project: Lora Lake 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 ST98 A-C, Su21 A-F.	PD 5-2-11
☑ Turbid/Color= ST98 D is tan, not turbid.	PD 5-2-11
☐ Particulates=	
☐ Emulsions=	
☐ Other (Details)=	
☒ Other Notes/Comments=	
KD Station Recycled KD flasks for Job # ST98, Su21	YL 5/6/11

3056F

Revision 007
02/25/10

PCP/Chlorophenols Raw Data
Initial Calibration

ARI Job ID: ST98, SU21

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC Analyst Notes / Corrective Action Log

ARI Project ID: 11. Phenols Curve Client ID: ARI

ARI SOP: **403S**(PCB) **405S**(Herb) **407S**(TPH-D) **409S**(HCID) **412S**(PCP) **423S**(Pest)
427S(Dir Inj) **428S**(EPH) **432S**(EDB) **Other**

Parameter(s): _____

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

Dates: Curve: 5/4/2011 Analysis Start: 5/4/2011

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):

Col 2 Quadratic-forced: 2,4-DCP; 2,3,4-TCP & 2,3,4,5-TTCP

Col 1 Quadratic-forced: 2,4-DCP & 2,4,5-TCP

Additional Details on Reverse: Yes / No

Analyst: _____ **Date:** 5/6/2011

Reviewer: _____ **Date:** 5/6/11

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/ecd1.i/PCP20110504.b/PCPB.m
Batch File: /chem2/ecd1.i/PCP20110504.b/ical-2.b
Inst ID: ecd1.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	0504A009	0504A010	0504A011	0504A012	0504A013	0504A014	0504A015
INJ.DATE:	04-MAY-2011	04-MAY-2011	04-MAY-2011	04-MAY-2011	04-MAY-2011	04-MAY-2011	04-MAY-2011
INJ.TIME:	13:56	14:32	15:08	15:44	16:21	16:57	17:33

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	1 2,4-Dichlorophenol	13.820	13.824	13.821	13.821	13.821	13.820	13.822	13.820	13.750-13.890	13.821	0.001
	2 2,4,6-Trichlorophenol	14.311	14.314	14.311	14.312	14.312	14.311	14.313	14.311	14.241-14.381	14.312	0.001
	3 2,3,6-Trichlorophenol	15.557	15.560	15.557	15.558	15.558	15.559	15.560	15.557	15.487-15.627	15.558	0.001
	4 2,4,5-Trichlorophenol	17.474	17.477	17.475	17.474	17.475	17.475	17.476	17.474	17.404-17.544	17.475	0.001
	5 2,3,5,6-Tetrachlorophe	18.814	18.816	18.814	18.814	18.814	18.814	18.816	18.814	18.744-18.884	18.814	0.001
	6 2,3,4-Trichlorophenol	19.023	19.025	19.024	19.023	19.023	19.023	19.024	19.023	18.953-19.093	19.024	0.001
$	7 2,4,6-Tribromophenol (	20.936	20.937	20.936	20.936	20.937	20.937	20.938	20.936	20.866-21.006	20.937	0.001
	8 2,3,4,5-Tetrachlorophe	22.080	22.082	22.081	22.080	22.081	22.081	22.081	22.080	22.010-22.150	22.081	0.001
	9 Pentachlorophenol	22.967	22.968	22.967	22.967	22.967	22.968	22.968	22.967	22.897-23.037	22.968	0.001

Reviewer 1 AR Date: 5/6/2011
Reviewer 2 [signature] Date: 5/6/11

ST98:00660

MANUAL INTEGRATION SUMMARY FOR DATABATCH - /chem2/ecd1.i/PCP20110504.b/ical-2.b

ARI Job No.: PCPD Method: PCPB.m Instrument: ecd1.i Date: 04-MAY-2011

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1356	0504A009.d	PCPD		1	NO MANUAL INTEGRATION
1432	0504A010.d	PCPA		1	NO MANUAL INTEGRATION
1508	0504A011.d	PCPB		1	NO MANUAL INTEGRATION
1544	0504A012.d	PCPC		1	NO MANUAL INTEGRATION
1621	0504A013.d	PCPE		1	NO MANUAL INTEGRATION
1657	0504A014.d	PCPF		1	NO MANUAL INTEGRATION
1733	0504A015.d	PCP ICV		1	NO MANUAL INTEGRATION

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/ecd1.i/PCP20110504.b/PCP.m
Batch File: /chem2/ecd1.i/PCP20110504.b/ical-1.b
Inst ID: ecd1.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	0504A009	0504A010	0504A011	0504A012	0504A013	0504A014	0504A015
INJ.DATE:	04-MAY-2011	04-MAY-2011	04-MAY-2011	04-MAY-2011	04-MAY-2011	04-MAY-2011	04-MAY-2011
INJ.TIME:	13:56	14:32	15:08	15:44	16:21	16:57	17:33

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
1	2,4-Dichlorophenol	12.555	12.560	12.557	12.556	12.556	12.556	12.557	12.555	12.485-12.625	12.557	0.002
2	2,4,6-Trichlorophenol	13.101	13.104	13.101	13.102	13.101	13.102	13.103	13.101	13.031-13.171	13.102	0.001
3	2,3,6-Trichlorophenol	14.097	14.100	14.097	14.097	14.097	14.097	14.099	14.097	14.027-14.167	14.098	0.001
4	2,4,5-Trichlorophenol	15.845	15.849	15.845	15.846	15.845	15.846	15.847	15.845	15.775-15.915	15.846	0.001
5	2,3,4-Trichlorophenol	17.351	17.355	17.352	17.352	17.352	17.351	17.354	17.351	17.281-17.421	17.353	0.001
6	2,3,5,6-Tetrachlorophe	17.153	17.155	17.153	17.153	17.153	17.154	17.155	17.153	17.083-17.223	17.154	0.001
$ 7	2,4,6-Tribromophenol (	18.596	18.598	18.596	18.596	18.596	18.596	18.598	18.596	18.526-18.666	18.597	0.001
8	2,3,4,5-Tetrachlorophe	20.155	20.157	20.156	20.155	20.155	20.155	20.157	20.155	20.085-20.225	20.156	0.001
9	Pentachlorophenol	20.997	21.000	20.998	20.998	20.998	20.999	20.999	20.997	20.927-21.067	20.998	0.001

Reviewer 1 _____ Date: 5/6/2011
Reviewer 2 _____ Date: 5/6/11

ST08 0962

MANUAL INTEGRATION SUMMARY FOR DATABATCH - /chem2/ecd1.i/PCP20110504.b/ical-1.b

ARI Job No.: PCPD Method: PCP.m Instrument: ecd1.i Date: 04-MAY-2011

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1356	0504A009.d	PCPD		1	NO MANUAL INTEGRATION
1432	0504A010.d	PCPA		1	2,3,4,5-Tetrachlorophenol,
1508	0504A011.d	PCPB		1	NO MANUAL INTEGRATION
1544	0504A012.d	PCPC		1	NO MANUAL INTEGRATION
1621	0504A013.d	PCPE		1	NO MANUAL INTEGRATION
1657	0504A014.d	PCPF		1	NO MANUAL INTEGRATION
1733	0504A015.d	PCP ICV		1	NO MANUAL INTEGRATION

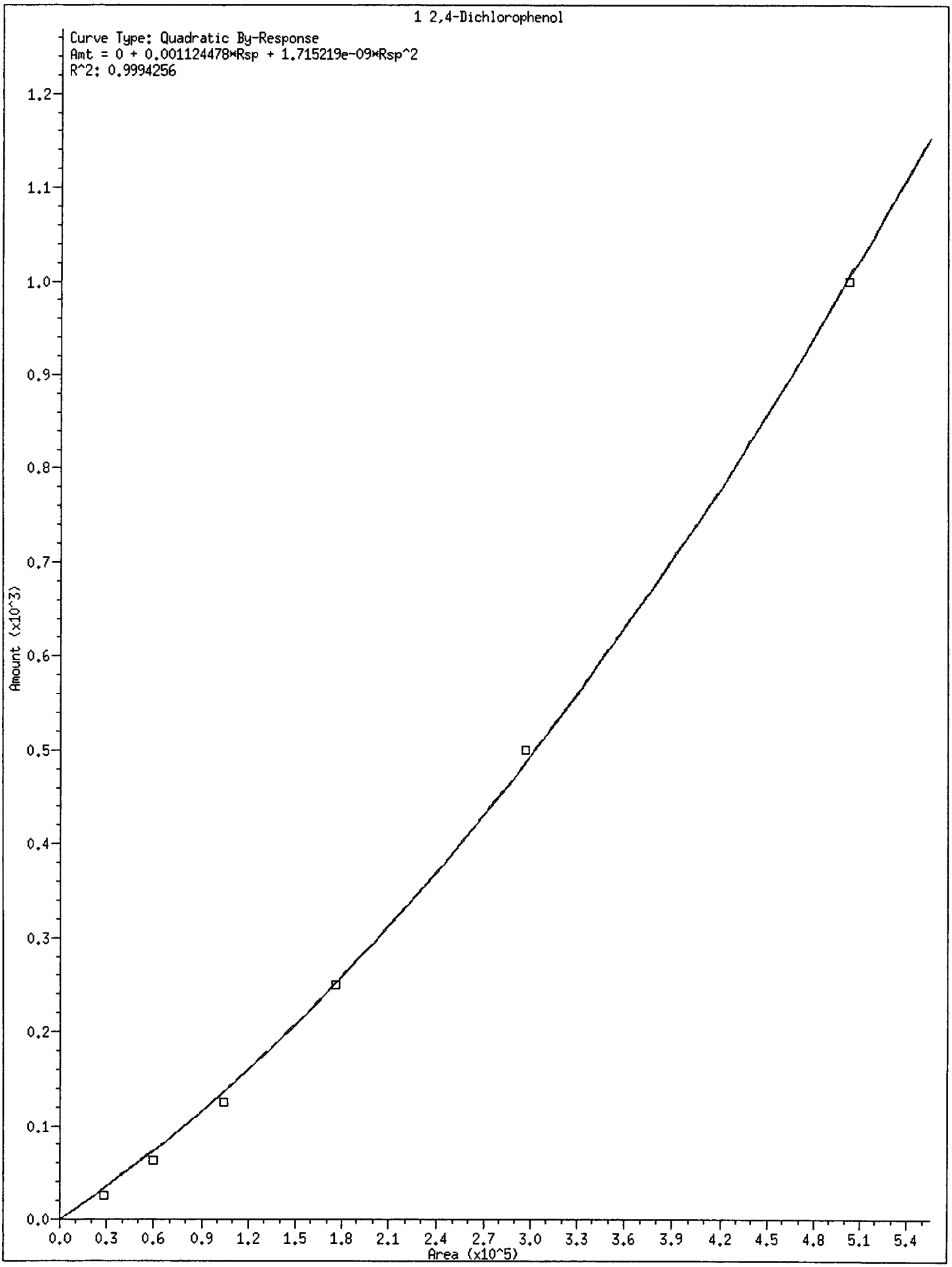
Analytical Resources, Inc.

INITIAL CALIBRATION DATA

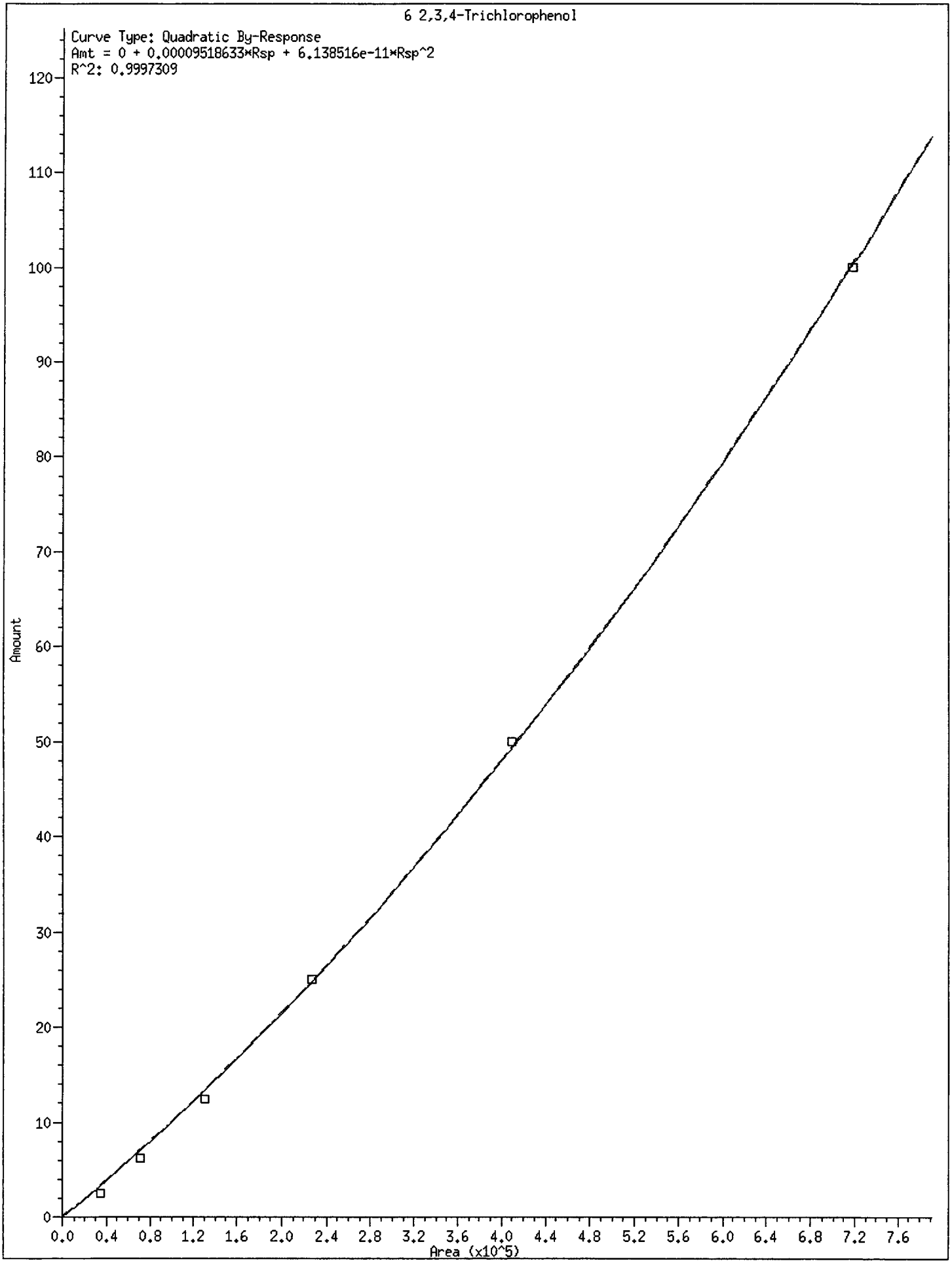
Start Cal Date : 04-MAY-2011 13:56
End Cal Date : 04-MAY-2011 16:57
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd1.i/PCP20110504.b/PCPB.m
Cal Date : 06-May-2011 10:29 aron
Curve Type : Average

Calibration File Names:
Level 1: /chem2/ecd1.i/PCP20110504.b/ical-2.b/0504A010.d
Level 2: /chem2/ecd1.i/PCP20110504.b/ical-2.b/0504A011.d
Level 3: /chem2/ecd1.i/PCP20110504.b/ical-2.b/0504A012.d
Level 4: /chem2/ecd1.i/PCP20110504.b/ical-2.b/0504A009.d
Level 5: /chem2/ecd1.i/PCP20110504.b/ical-2.b/0504A013.d
Level 6: /chem2/ecd1.i/PCP20110504.b/ical-2.b/0504A014.d

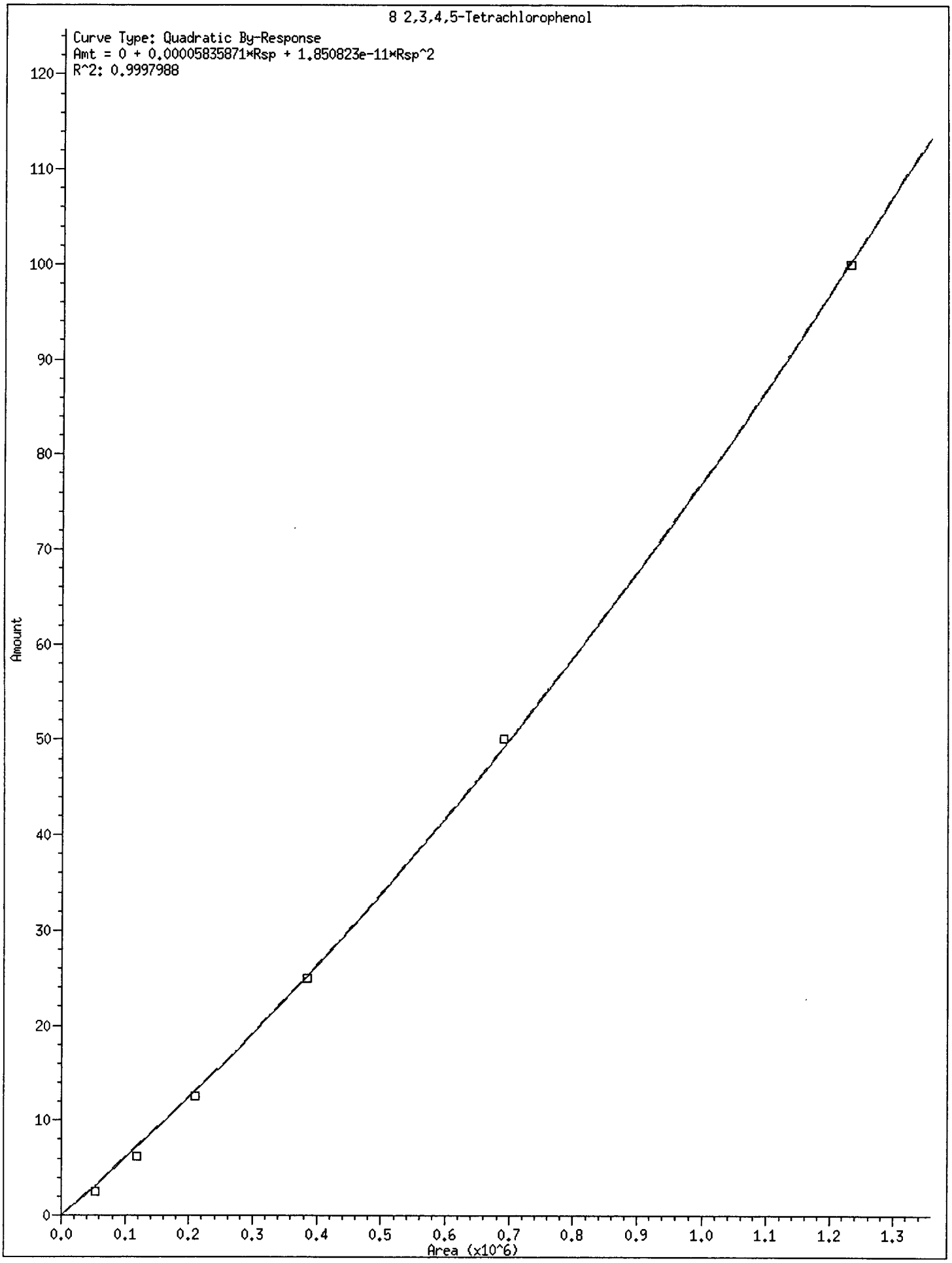
	Compound	2.500 Level 1	6.250 Level 2	12.500 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD	
1	2,4-Dichlorophenol	1124	962	835	702	594	505	787	29.552	<-
2	2,4,6-Trichlorophenol	18173	16199	15364	13872	12302	11052	14494	18.054	
3	2,3,6-Trichlorophenol	17538	16304	15194	13812	12444	10949	14373	17.093	
4	2,4,5-Trichlorophenol	10375	9203	8375	7827	6888	5906	8096	19.784	
5	2,3,5,6-Tetrachlorophenol	28198	24060	22545	20410	19063	17352	21938	17.734	
6	2,3,4-Trichlorophenol	13793	11382	10368	9080	8182	7194	10000	23.857	<-
8	2,3,4,5-Tetrachlorophenol	21700	18848	16677	15352	13827	12342	16458	20.753	<-
9	Pentachlorophenol	35686	31408	28958	26156	24465	22293	28161	17.390	
$ 7	2,4,6-Tribromophenol (surr)	26776	22121	21311	19850	18746	17341	21024	15.703	


1 2,4-Dichlorophenol
Curve Type: Quadratic By-Response
Amt = 0 + 0.001124478*Rsp + 1.715219e-09*Rsp^2
R^2: 0.9994256
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 5.1 5.4
Area (x10^5)

ST98 : 00665


6 2,3,4-Trichlorophenol
Curve Type: Quadratic By-Response
Amt = 0 + 0.00009518633*Rsp + 6.138516e-11*Rsp^2
R^2: 0.9997309
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

ST98 : 00666


8 2,3,4,5-Tetrachlorophenol
Curve Type: Quadratic By-Response
Amt = 0 + 0.00005835871×Rsp + 1.850823e-11×Rsp^2
R^2: 0.9997988
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

ST98 : 00667

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 04-MAY-2011 13:56
End Cal Date : 04-MAY-2011 16:57
Quant Method : ESTD
Origin : Force
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd1.i/PCP20110504.b/PCPB.m
Cal Date : 06-May-2011 10:29 aron

Calibration File Names:
Level 1: /chem2/ecd1.i/PCP20110504.b/ical-2.b/0504A010.d
Level 2: /chem2/ecd1.i/PCP20110504.b/ical-2.b/0504A011.d
Level 3: /chem2/ecd1.i/PCP20110504.b/ical-2.b/0504A012.d
Level 4: /chem2/ecd1.i/PCP20110504.b/ical-2.b/0504A009.d
Level 5: /chem2/ecd1.i/PCP20110504.b/ical-2.b/0504A013.d
Level 6: /chem2/ecd1.i/PCP20110504.b/ical-2.b/0504A014.d

	2	6	12	25	50	100		Coefficients			%RSD
Compound	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve	b	m1	m2	or R^2
1 2,4-Dichlorophenol	28101	60102	104374	175491	297223	504644	QUAD	0.000e+00	0.00112	1.715e-09	0.99943
2 2,4,6-Trichlorophenol	18173	16199	15364	13872	12302	11052	AVRG		14494		18.05411
3 2,3,6-Trichlorophenol	17538	16304	15194	13812	12444	10949	AVRG		14373		17.09291
4 2,4,5-Trichlorophenol	10375	9203	8375	7827	6888	5906	AVRG		8096		19.78419
5 2,3,5,6-Tetrachlorophenol	28198	24060	22545	20410	19063	17352	AVRG		21938		17.73407
6 2,3,4-Trichlorophenol	34482	71137	129601	227012	409120	719354	QUAD	0.000e+00	0.00010	6.139e-11	0.99973
8 2,3,4,5-Tetrachlorophenol	54250	117798	208459	383811	691341	1234197	QUAD	0.000e+00	0.00006	1.851e-11	0.99980
9 Pentachlorophenol	35686	31408	28958	26156	24465	22293	AVRG		28161		17.38988
7 2,4,6-Tribromophenol (surr)	26776	22121	21311	19850	18746	17341	AVRG		21024		15.70277

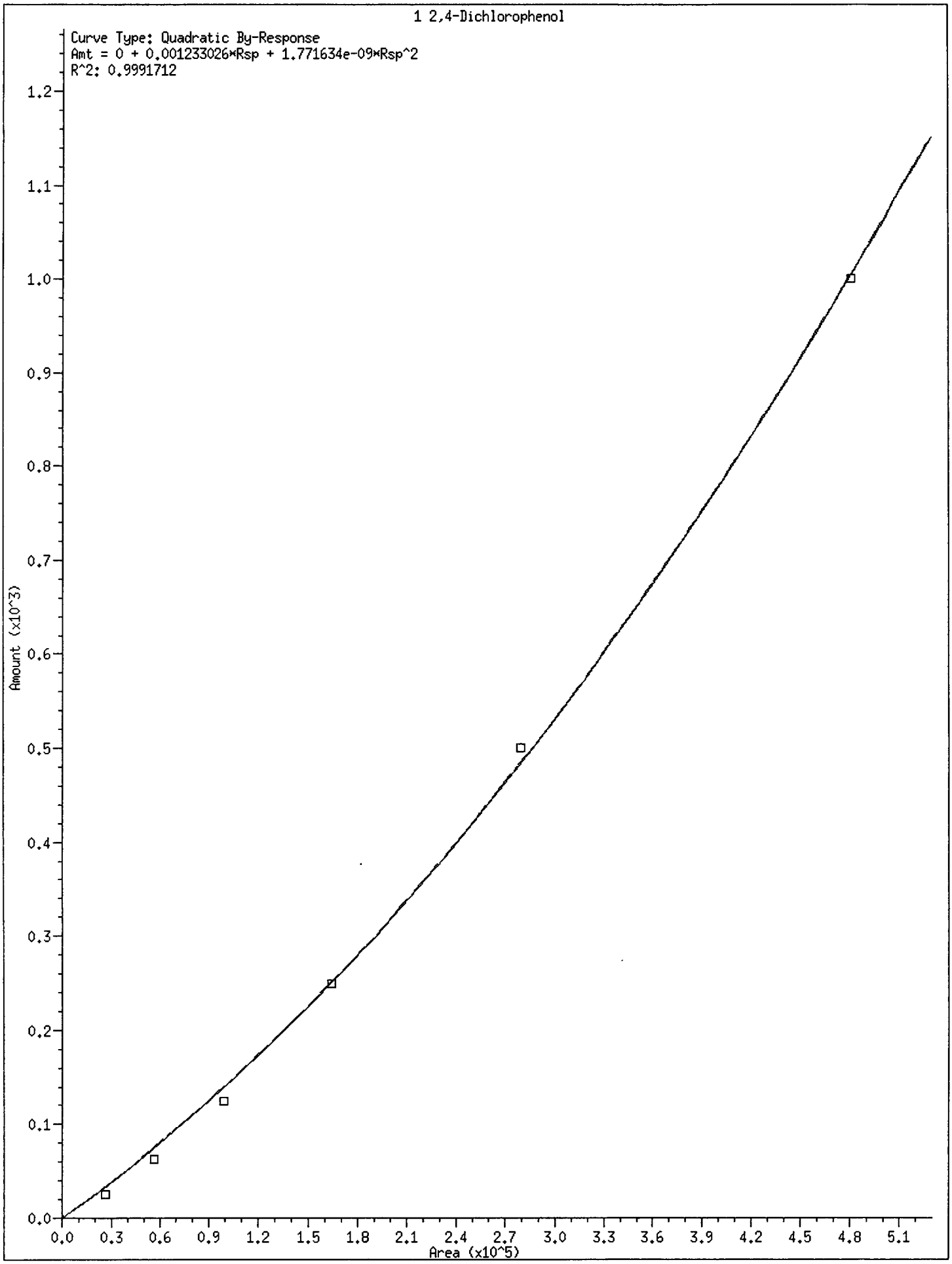
Analytical Resources, Inc.

INITIAL CALIBRATION DATA

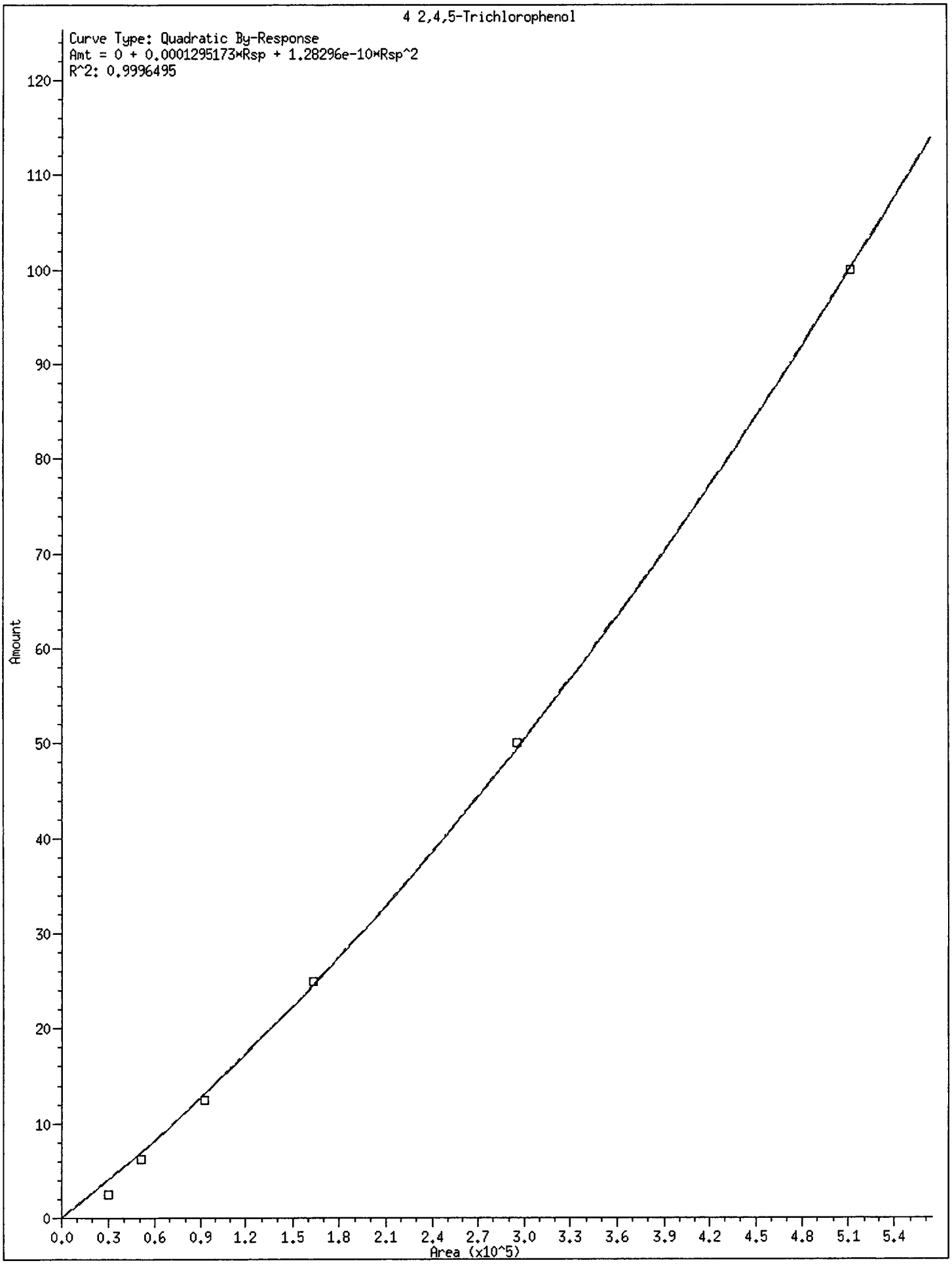
Start Cal Date : 04-MAY-2011 13:56
End Cal Date : 04-MAY-2011 16:57
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd1.i/PCP20110504.b/PCP.m
Cal Date : 06-May-2011 10:50 aron
Curve Type : Average

Calibration File Names:
Level 1: /chem2/ecd1.i/PCP20110504.b/ical-1.b/0504A010.d
Level 2: /chem2/ecd1.i/PCP20110504.b/ical-1.b/0504A011.d
Level 3: /chem2/ecd1.i/PCP20110504.b/ical-1.b/0504A012.d
Level 4: /chem2/ecd1.i/PCP20110504.b/ical-1.b/0504A009.d
Level 5: /chem2/ecd1.i/PCP20110504.b/ical-1.b/0504A013.d
Level 6: /chem2/ecd1.i/PCP20110504.b/ical-1.b/0504A014.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	1040	896	796	655	559	482	738	28.677	<-
	2 2,4,6-Trichlorophenol	15281	13835	12795	11181	10412	9532	12173	17 948	
	3 2,3,6-Trichlorophenol	14259	12818	11863	10765	9925	9085	11453	16.712	
	4 2,4,5-Trichlorophenol	12140	8082	7421	6534	5905	5130	7535	33.025	<-
	5 2,3,4-Trichlorophenol	10565	9519	8778	7811	7138	6322	8355	18.794	
	6 2,3,5,6-Tetrachlorophenol	20194	18565	17499	16125	15182	13876	16907	13.661	
	8 2,3,4,5-Tetrachlorophenol	16824	14772	13475	11938	10977	9904	12982	19.728	
	9 Pentachlorophenol	24557	22356	20781	19124	17785	16292	20149	15.089	
$	7 2,4,6-Tribromophenol (surr)	18340	16896	15885	15230	14566	13549	15744	10.839	


1 2,4-Dichlorophenol
Curve Type: Quadratic By-Response
Amt = 0 + 0.001233026*Rsp + 1.771634e-09*Rsp^2
R^2: 0.9991712
Amount (x10^3)
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
Area (x10^5)
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

ST98 : 00670


4 2,4,5-Trichlorophenol
Curve Type: Quadratic By-Response
Amt = 0 + 0.0001295173*Rsp + 1.28296e-10*Rsp^2
R^2: 0.9996495
Amount
Area (x10^5)
0
10
20
30
40
50
60
70
80
90
100
110
120
0.0
0.3
0.6
0.9
1.2
1.5
1.8
2.1
2.4
2.7
3.0
3.3
3.6
3.9
4.2
4.5
4.8
5.1
5.4

ST98 : 00671

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 04-MAY-2011 13:56
End Cal Date : 04-MAY-2011 16:57
Quant Method : ESTD
Origin : Force
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd1.i/PCP20110504.b/PCP.m
Cal Date : 06-May-2011 10:50 aron

Calibration File Names:
Level 1: /chem2/ecd1.i/PCP20110504.b/ical-1.b/0504A010.d
Level 2: /chem2/ecd1.i/PCP20110504.b/ical-1.b/0504A011.d
Level 3: /chem2/ecd1.i/PCP20110504.b/ical-1.b/0504A012.d
Level 4: /chem2/ecd1.i/PCP20110504.b/ical-1.b/0504A009.d
Level 5: /chem2/ecd1.i/PCP20110504.b/ical-1.b/0504A013.d
Level 6: /chem2/ecd1.i/PCP20110504.b/ical-1.b/0504A014.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	25994	56009	99540	163817	279617	481637	QUAD	0.000e+00	0.00123	1.772e-09	0.99917
2 2,4,6-Trichlorophenol	15281	13835	12795	11181	10412	9532	AVRG		12173		17.94765
3 2,3,6-Trichlorophenol	14259	12818	11863	10765	9925	9085	AVRG		11453		16.71151
4 2,4,5-Trichlorophenol	30350	50514	92760	163352	295231	512989	QUAD	0.000e+00	0.00013	1.283e-10	0.99965
5 2,3,4-Trichlorophenol	10565	9519	8778	7811	7138	6322	AVRG		8355		18.79441
6 2,3,5,6-Tetrachlorophenol	20194	18565	17499	16125	15182	13876	AVRG		16907		13.66148
8 2,3,4,5-Tetrachlorophenol	16824	14772	13475	11938	10977	9904	AVRG		12982		19.72816
9 Pentachlorophenol	24557	22356	20781	19124	17785	16292	AVRG		20149		15.08931
7 2,4,6-Tribromophenol (surr)	18340	16896	15885	15230	14566	13549	AVRG		15744		10.83879

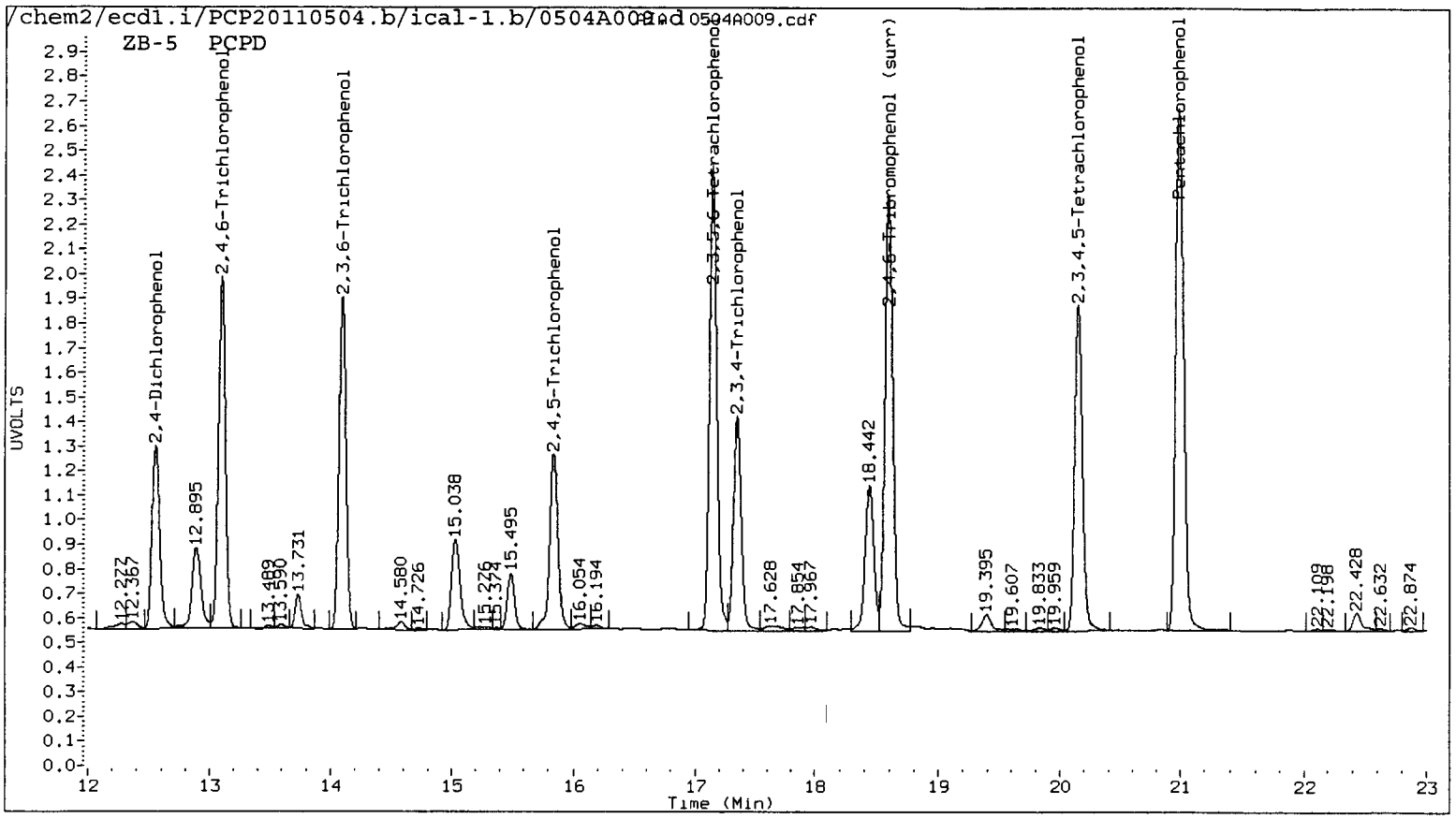
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/PCP20110504.b/ical-1.b/0504A009.d ARI ID: PCPD
Data file 2: /chem2/ecd1.i/PCP20110504.b/ical-2.b/0504A009.d Client ID:
Method: /chem2/ecd1.i/PCP20110504.b/PCP.m Injection Date: 04-MAY-2011 13:56
Compound Sublist: all Report Date: 05/06/2011 10:51
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
20.997	0.000	478095	22.967	0.000	653905	23.7278	23.2203	2.2	Pentachlorophenol
13.101	0.000	279531	14.311	0.000	346808	22.9636	23.9281	4.1	2,4,6-Trichlorophenol
14.097	0.000	269131	15.557	0.000	345288	23.4995	24.0227	2.2	2,3,6-Trichlorophenol
15.845	0.000	163352	17.474	0.000	195681	24.5803	24.1710	1.7	2,4,5-Trichlorophenol
17.351	0.000	195271	19.023	0.000	227012	23.3708	24.7719	5.8	2,3,4-Trichlorophenol
17.153	0.000	403117	18.814	0.000	510260	23.8436	23.2592	2.5	2,3,5,6-Tetrachlorophenol
20.155	0.000	298448	22.080	0.000	383811	22.9898	25.1252	8.9	2,3,4,5-Tetrachlorophenol
12.555	0.000	163817	13.820	0.000	175491	249.5342	250.1594	0.3	2,4-Dichlorophenol
18.596	0.000	380744	20.936	0.000	496261	24.2	23.6	2.4	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	96.7	94.4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ZB-5 PCPD
UVOLTS
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2,4,6-Trichlorophenol
2,3,6-Trichlorophenol
2,4,5-Trichlorophenol
2,3,4-Trichlorophenol
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
12.895
13.731
15.038
15.495
16.054
16.194
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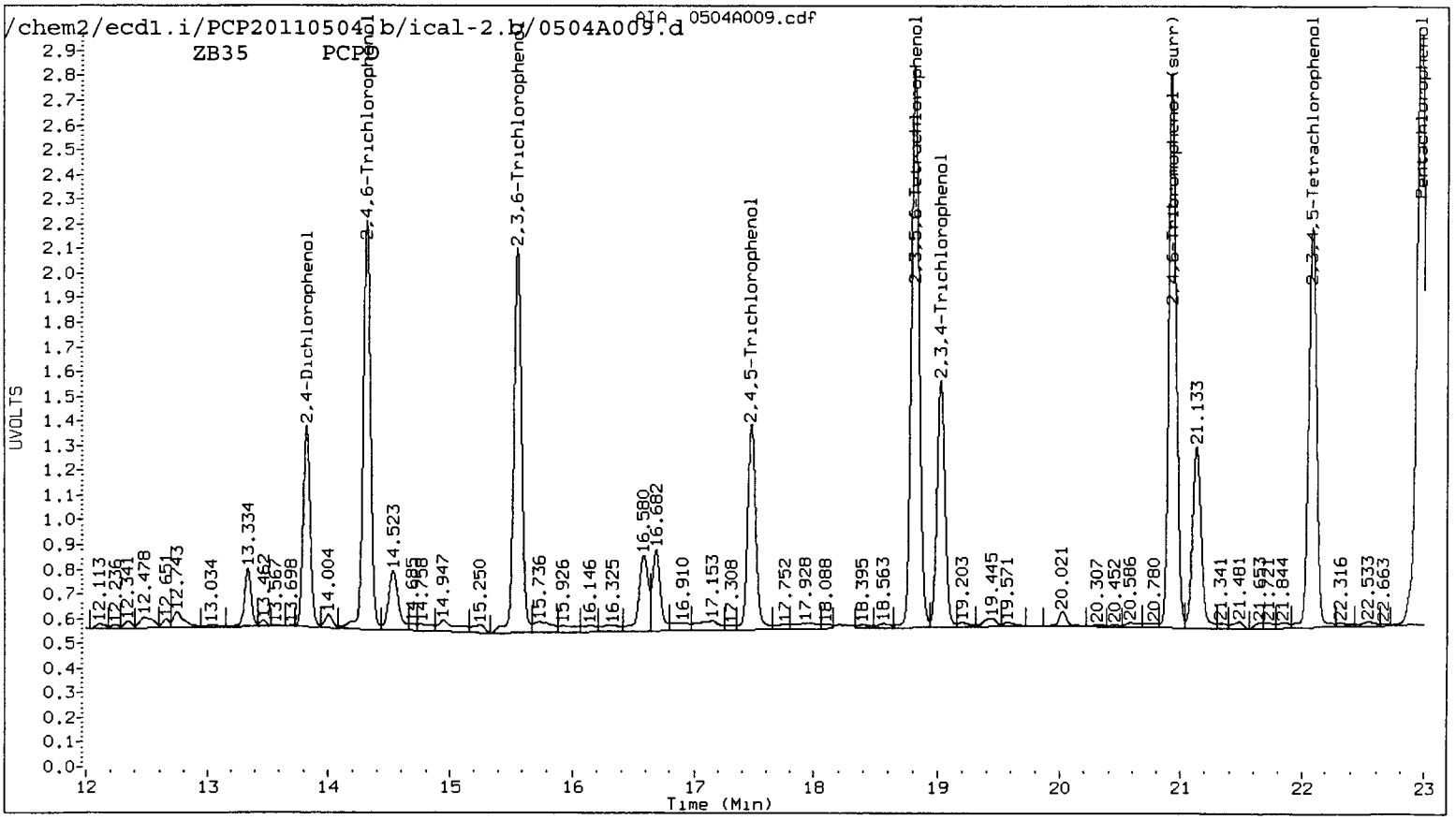
18.442
19.395
19.607
19.833
19.959
22.428
22.632
22.874
Time (Min)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0504A009.cdf
ZB35 PCPD
UVOLTS
2,4-Dichlorophenol
2,4,6-Trichlorophenol
2,3,6-Trichlorophenol
2,4,5-Trichlorophenol
2,3,4-Trichlorophenol
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
13.334
14.004
14.523
15.736
16.580
16.682
17.153
17.308
17.752
17.928
18.088
18.395
18.563
19.203
19.445
19.571
20.021
20.307
20.452
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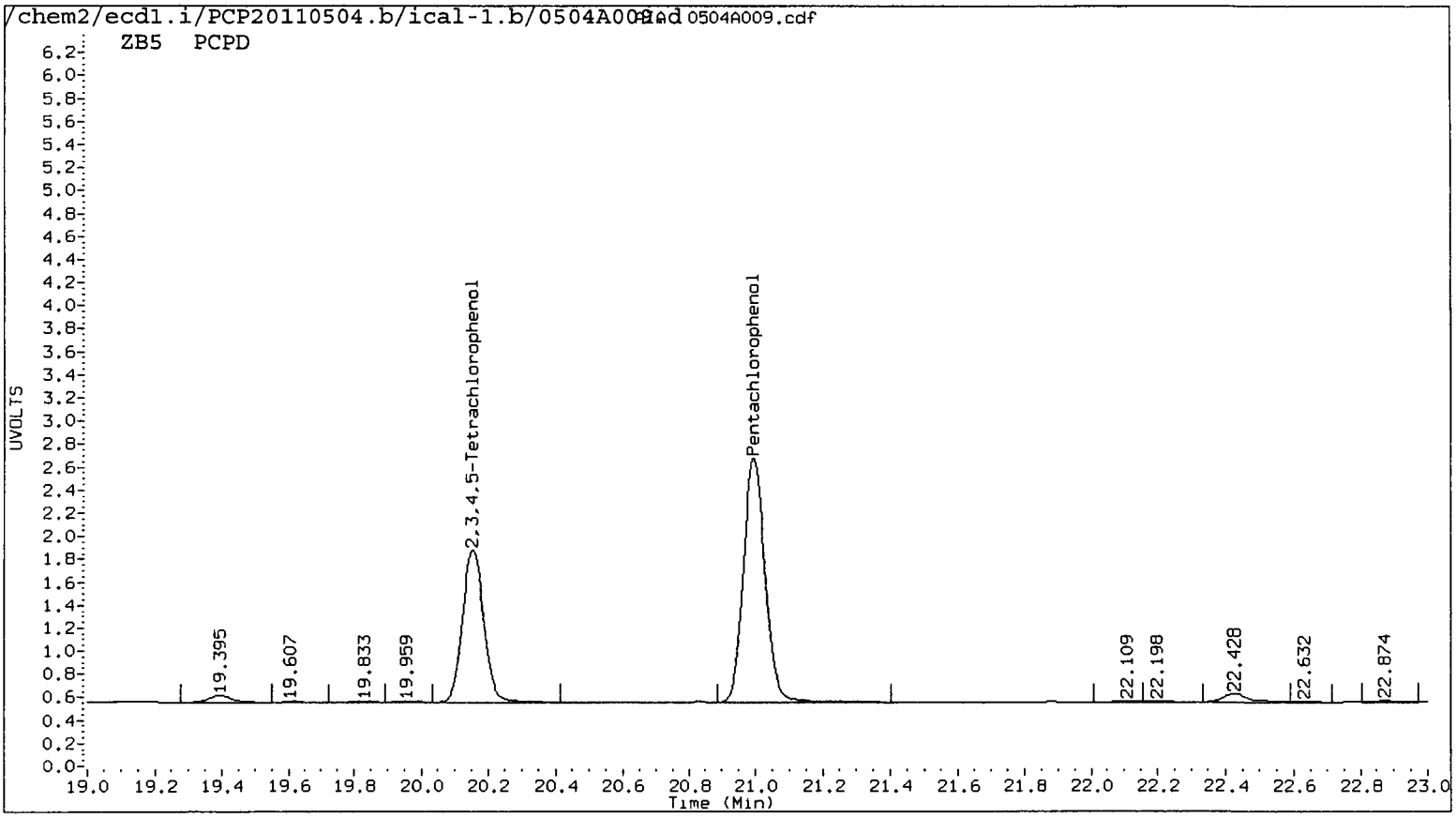
20.780
21.133
21.341
21.481
21.844
22.316
22.533
22.663
Time (Min)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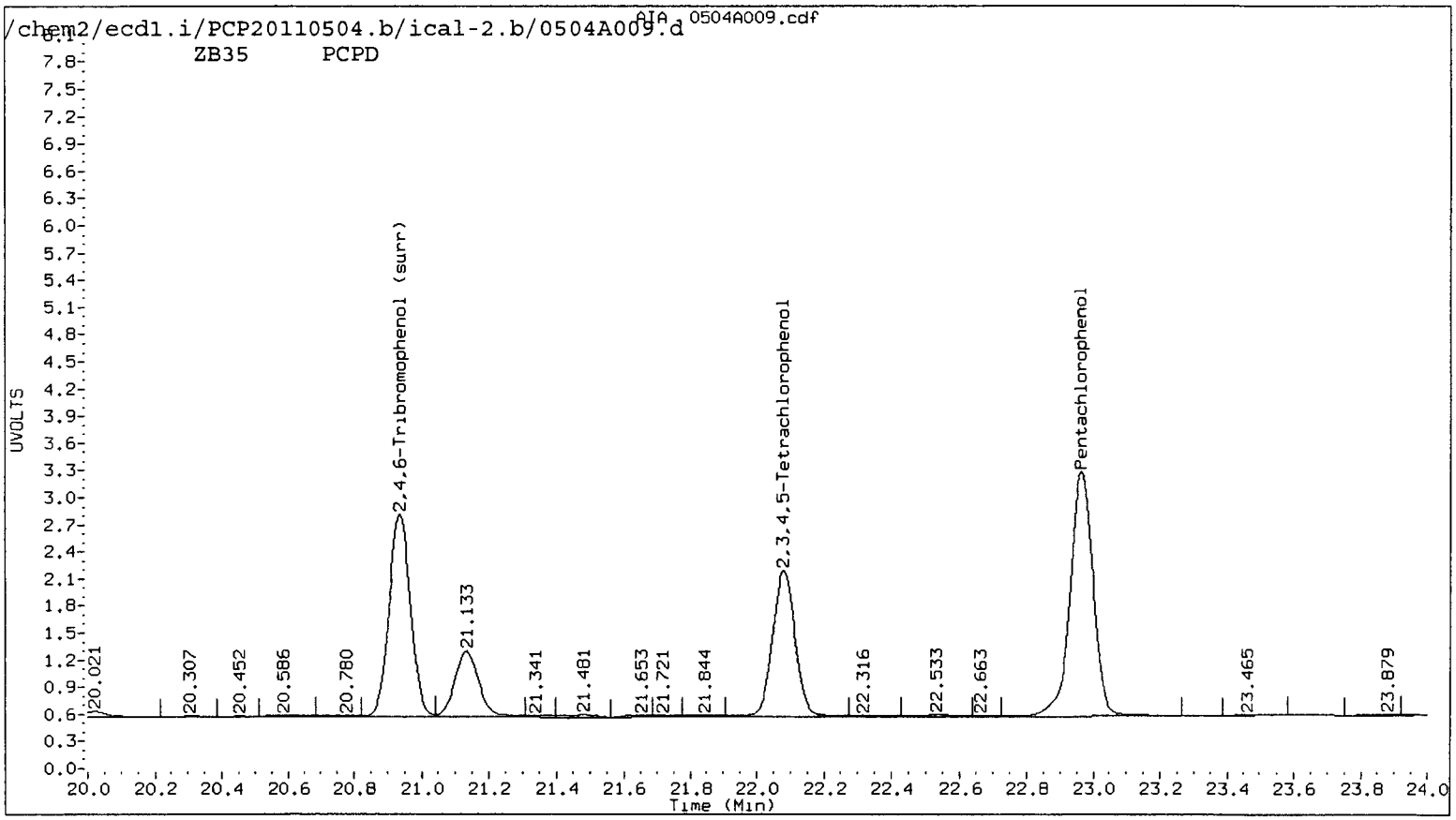
0504A009.cdf
ZB5 PCPD
UVOLTS
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
19.395
19.607
19.833
19.959
22.109
22.198
22.428
22.632
22.874
Time (Min)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AIA 0504A009.cdf
ZB35 PCPD
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
20.021
20.307
20.452
20.586
20.780
21.133
21.341
21.481
21.653
21.721
21.844
22.316
22.533
22.663
23.465
23.879
Time (Min)

Data File: /chem2/ecd1.i/PCP20110504.b/ical-1.b/0504A009.d

Date : 04-MAY-2011 13:56

Client ID:

Instrument: ecd1.i

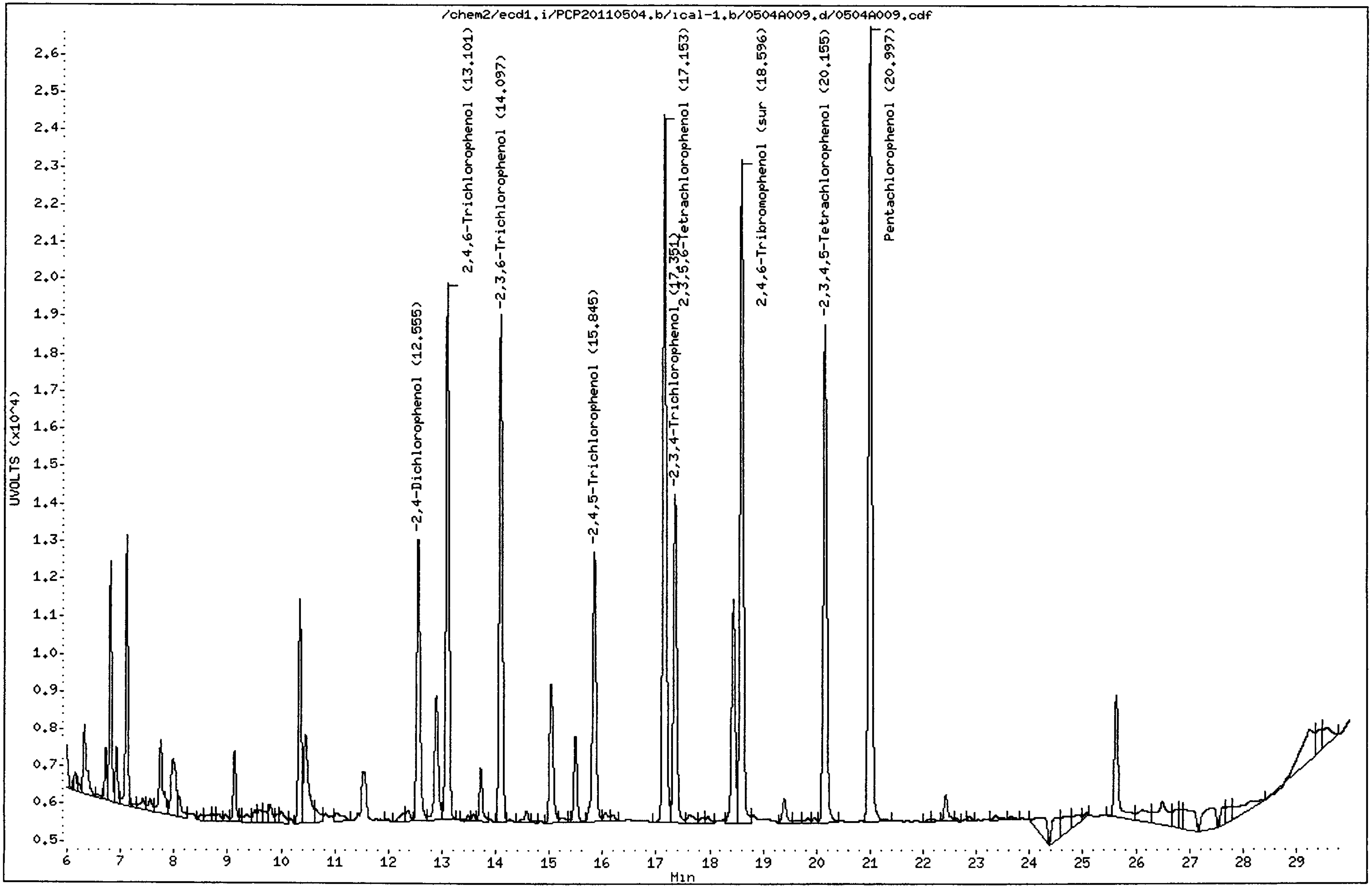
Sample Info: PCPD

Purge Volume: 500.0

Operator: ar

Column phase: STX CLP1

Column diameter: 0.53



Data File: /chem2/ecd1.i/PCP20110504.b/ical-2.b/0504A009.d

Date : 04-MAY-2011 13:56

Client ID:

Instrument: ecd1.i

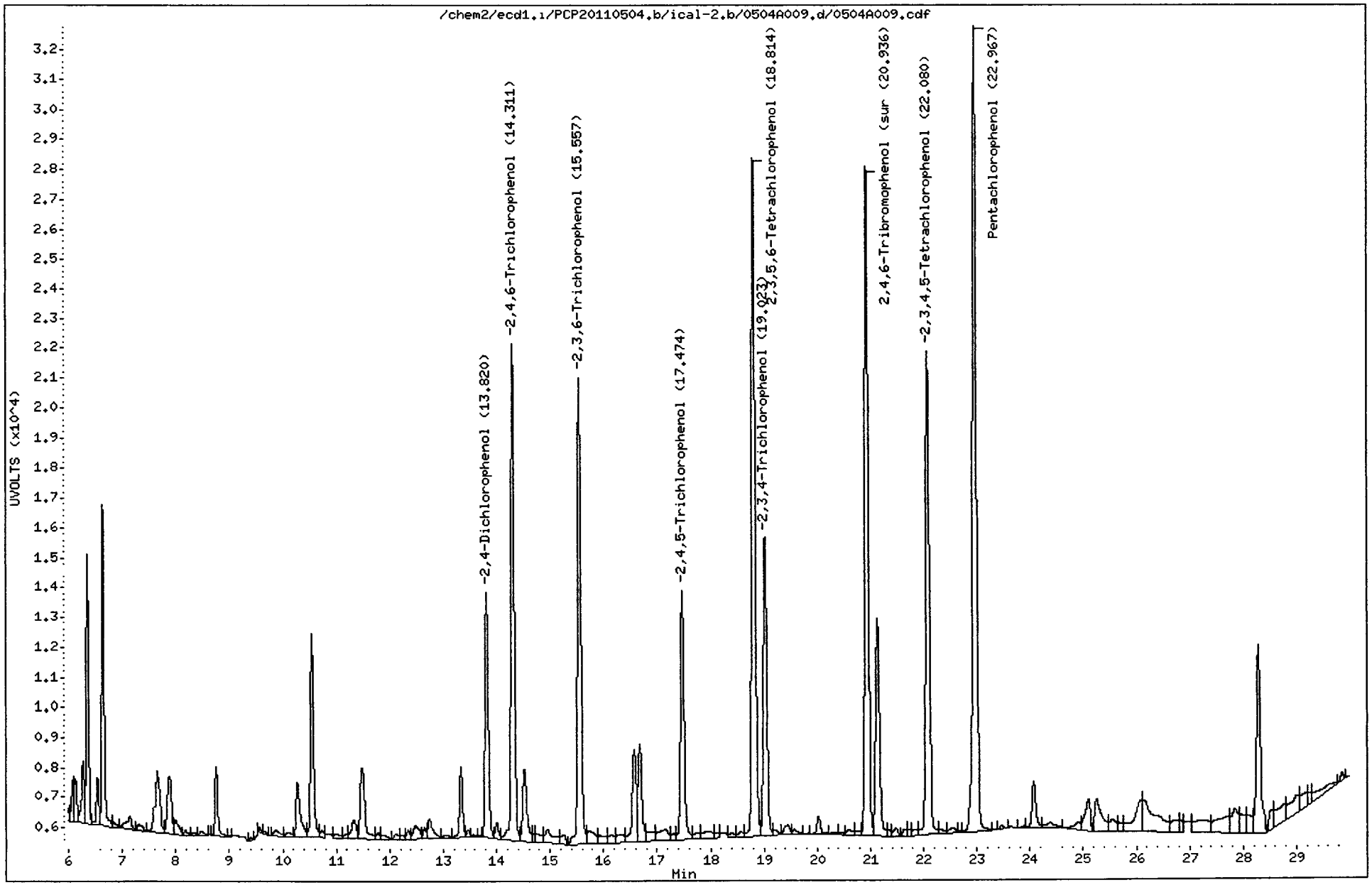
Sample Info: PCPD

Purge Volume: 500.0

Operator: ar

Column phase: STX CLP2

Column diameter: 0.53



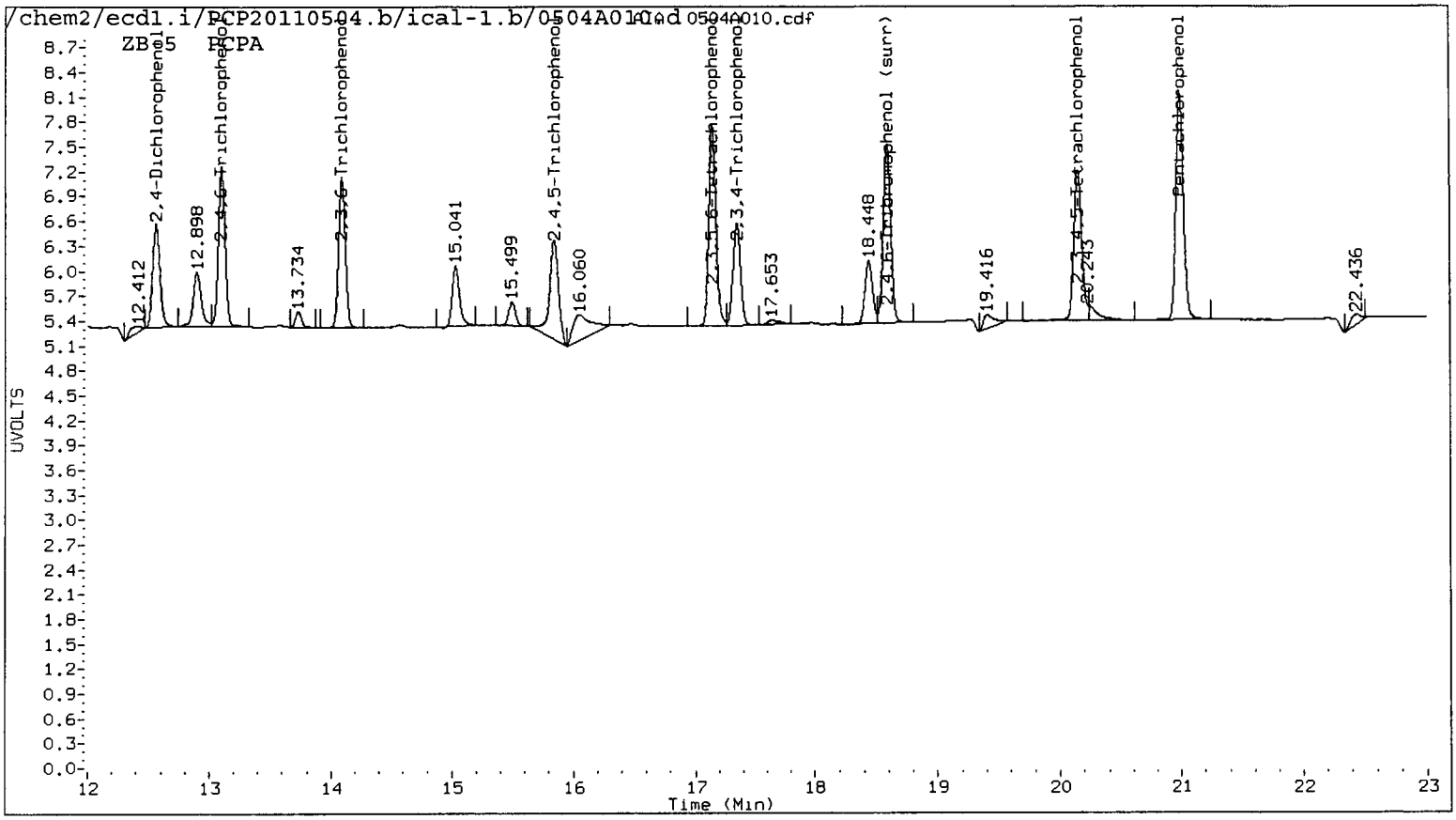
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

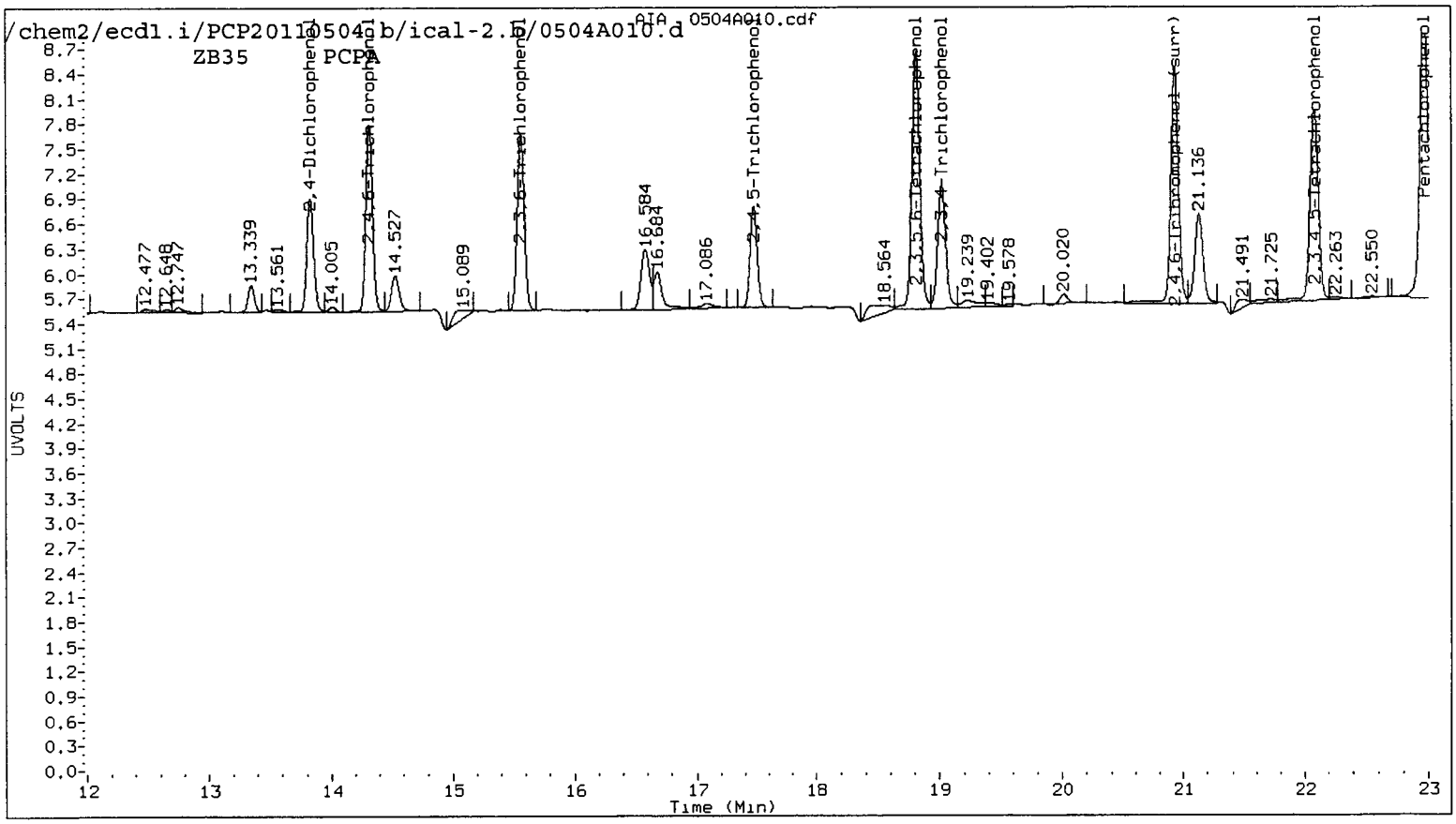
Data file 1: /chem2/ecd1.i/PCP20110504.b/ical-1.b/0504A010.d ARI ID: PCPA
Data file 2: /chem2/ecd1.i/PCP20110504.b/ical-2.b/0504A010.d Client ID:
Method: /chem2/ecd1.i/PCP20110504.b/PCP.m Injection Date: 04-MAY-2011 14:32
Compound Sublist: all Report Date: 05/06/2011 10:51
Instrument: ecd1.i Matrix: 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
21.000	0.002	61392	22.968	0.001	89214	3.0469	3.1680	3.9	Pentachlorophenol
13.104	0.003	38202	14.314	0.003	45432	3.1383	3.1346	0.1	2,4,6-Trichlorophenol
14.100	0.003	35647	15.560	0.003	43844	3.1126	3.0504	2.0	2,3,6-Trichlorophenol
15.849	0.004	30350	17.477	0.003	25938	4.0490	3.2039	23.3	2,4,5-Trichlorophenol
17.355	0.004	26413	19.025	0.002	34482	3.1612	3.3552	6.0	2,3,4-Trichlorophenol
17.155	0.003	50484	18.816	0.002	70494	2.9860	3.2133	7.3	2,3,5,6-Tetrachlorophenol
20.157	0.002	42060	22.082	0.002	54250	3.2399	3.2204	0.6	2,3,4,5-Tetrachlorophenol
12.560	0.005	25994	13.824	0.004	28101	33.2484	32.9534	0.9	2,4-Dichlorophenol
18.598	0.002	45851	20.937	0.001	66939	2.9	3.2	8.9	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	11.6	12.7


/chem2/ecd1.i/PCP20110504.b/ical-1.b/0504A010.d
ZB35 PCPA
2,4-Dichlorophenol
2,4,6-Trichlorophenol
2,3,6-Trichlorophenol
2,4,5-Trichlorophenol
2,3,4-Trichlorophenol
2,4,6-Tribromophenol (surr)
Pentachlorophenol
12.412
12.898
13.734
15.041
15.499
16.060
17.653
18.448
19.416
20.243
22.436
UVOLTS
Time (Min)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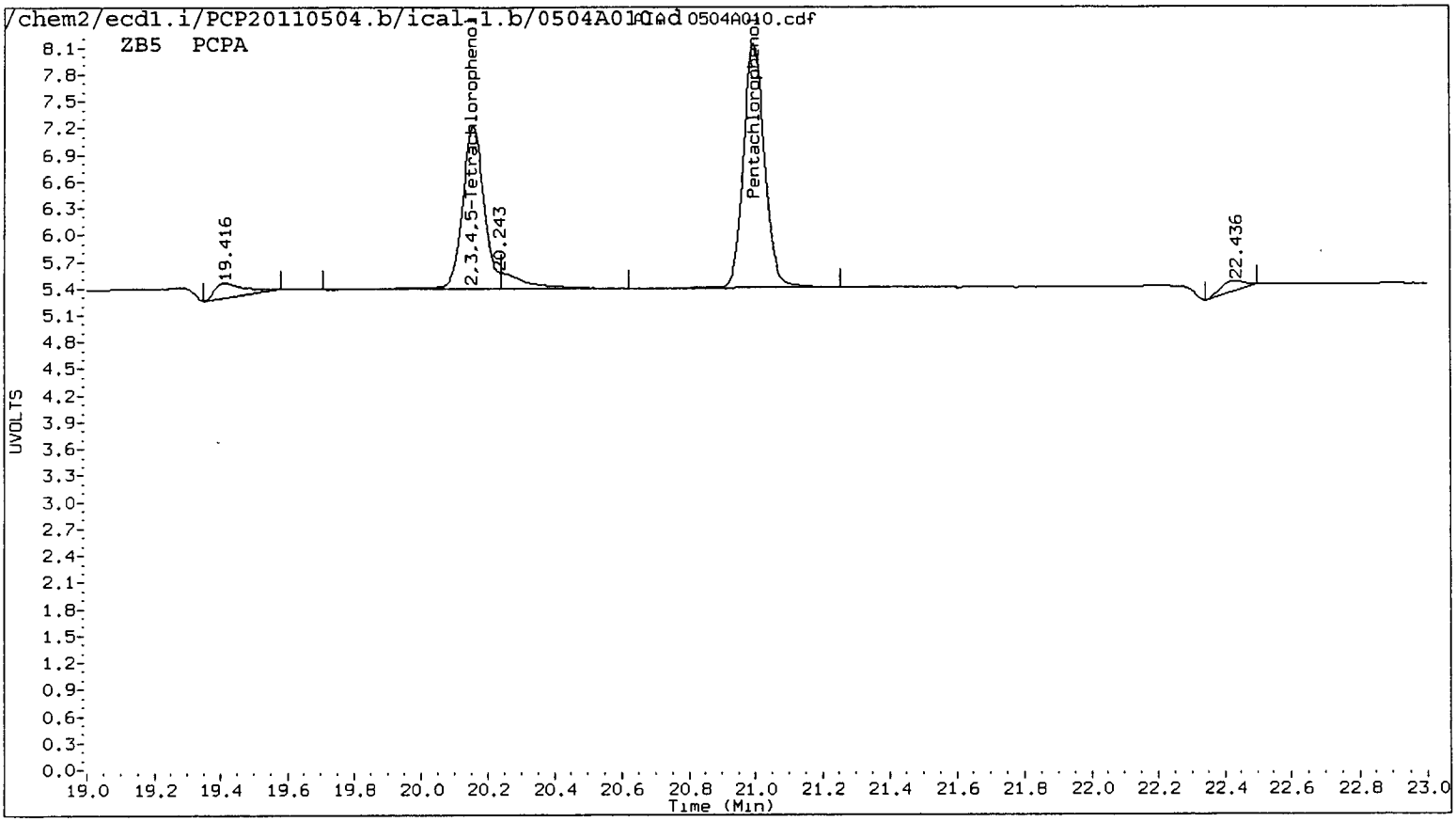
ZB35 PCPA
2,4-Dichlorophenol
2,4,6-Trichlorophenol
2,3,6-Trichlorophenol
2,4,5-Trichlorophenol
2,3,4-Trichlorophenol
2,4,6-Tribromophenol (surr)
Pentachlorophenol
12.477
13.339
13.561
14.005
14.527
15.089
16.584
16.684
17.086
18.564
19.239
19.402
19.578
20.020
21.136
21.491
21.725
22.263
22.550
UVOLTS
Time (Min)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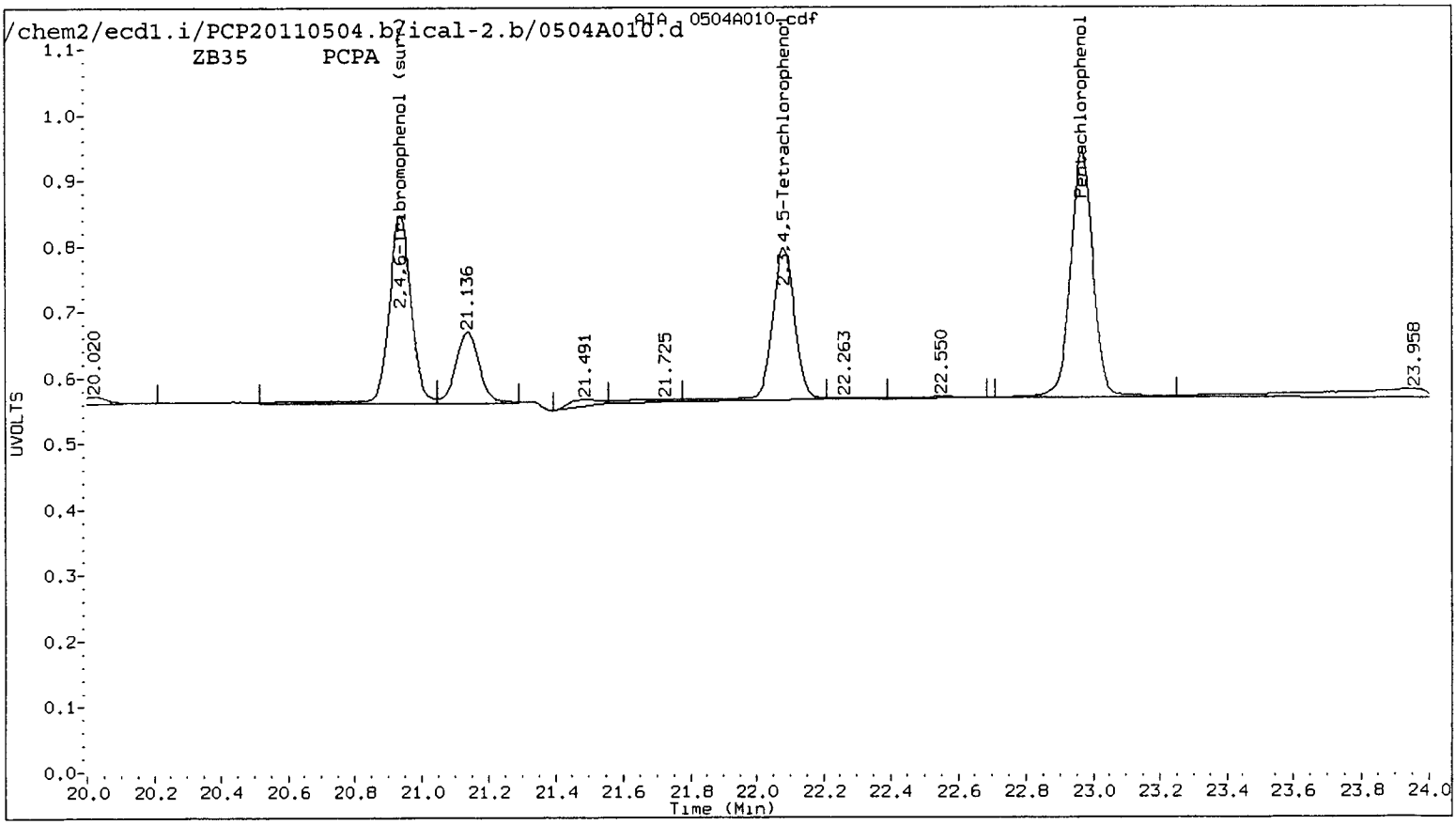
AIA 0504A010.cdf
ZB5 PCPA
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
19.416
20.243
22.436
UVOLTS
Time (Min)


/chem2/ecd1.i/PCP20110504.b/ical-2.b/0504A010.d
AIA 0504A010.cdf
ZB35 PCPA
2,4,6-Tribromophenol (sur
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
20.020
21.136
21.491
21.725
22.263
22.550
23.958
UVOLTS
Time (Min)

Data File: /chem2/ecd1.i/PCP20110504.b/ical-1.b/0504A010.d

Date : 04-MAY-2011 14:32

Client ID:

Instrument: ecd1.i

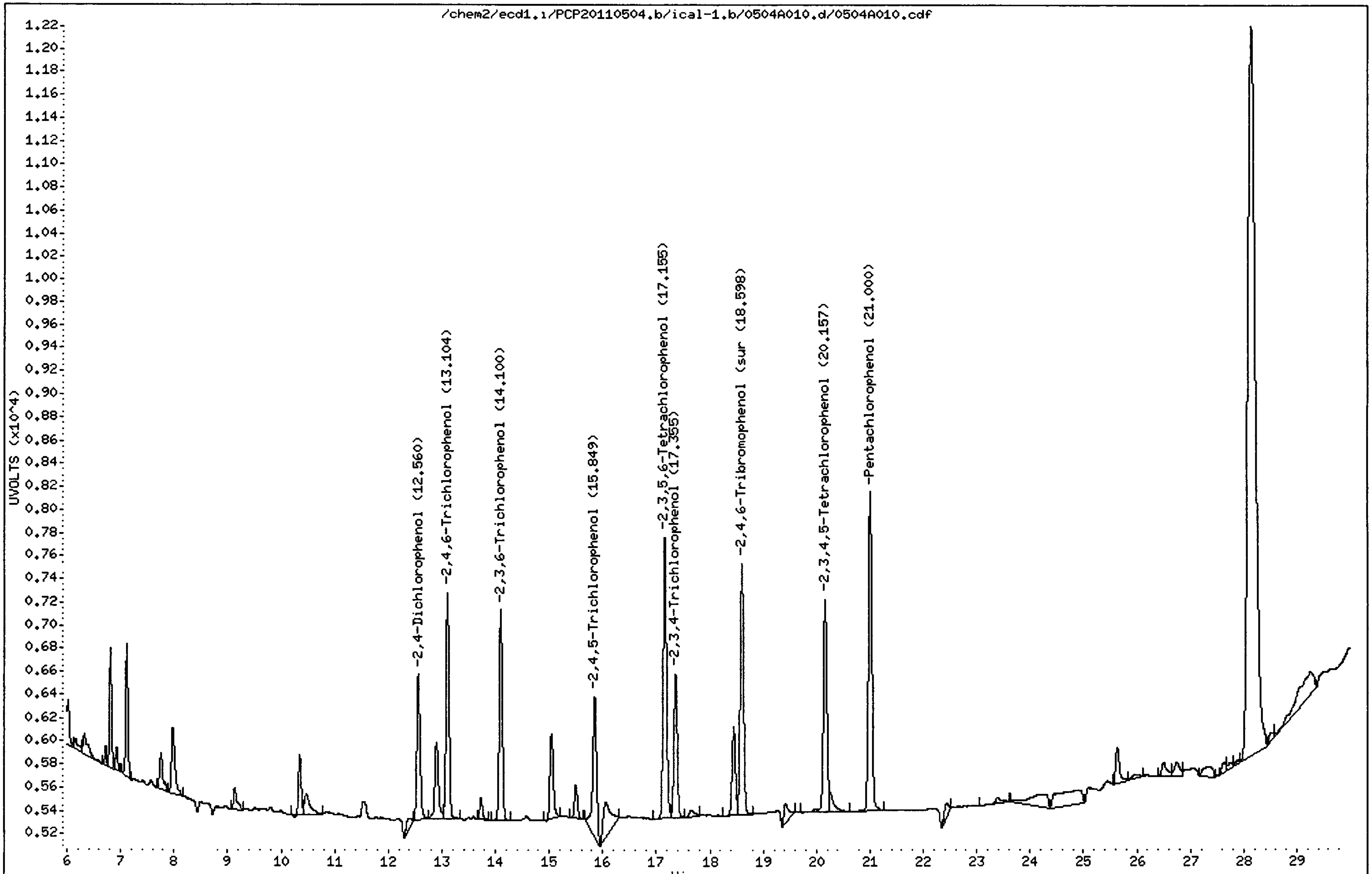
Sample Info: PCPA

Purge Volume: 500.0

Operator: ar

Column phase: STX CLP1

Column diameter: 0.53



Data File: /chem2/ecd1.i/PCP20110504.b/ical-2.b/0504A010.d

Page 1

Date : 04-MAY-2011 14:32

Client ID:

Instrument: ecd1.i

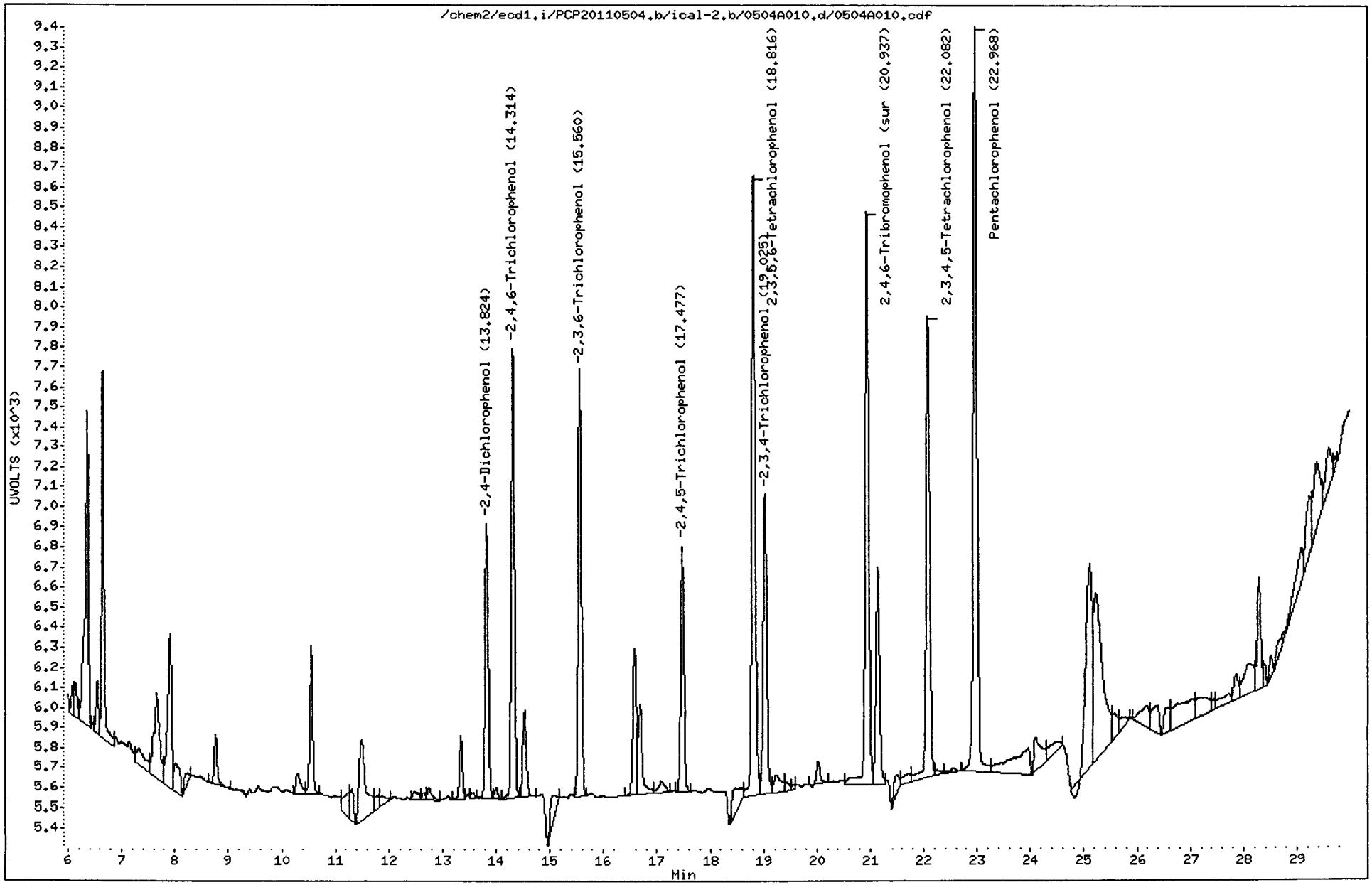
Sample Info: PCPA

Purge Volume: 500.0

Operator: ar

Column phase: STX CLP2

Column diameter: 0.53



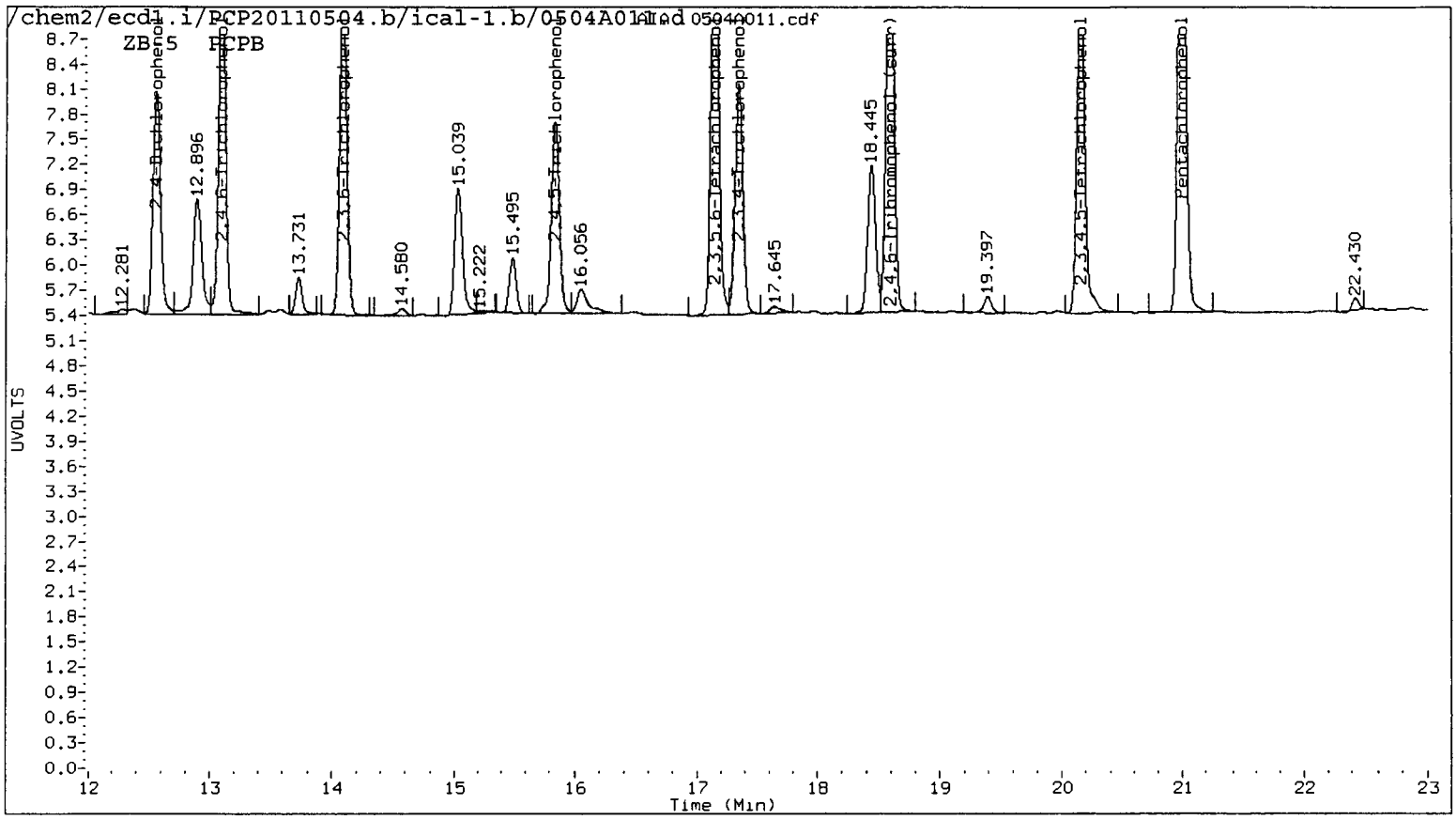
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/PCP20110504.b/ical-1.b/0504A011.d ARI ID: PCPB
Data file 2: /chem2/ecd1.i/PCP20110504.b/ical-2.b/0504A011.d Client ID:
Method: /chem2/ecd1.i/PCP20110504.b/PCP.m Injection Date: 04-MAY-2011 15:08
Compound Sublist: all Report Date: 05/06/2011 10:51
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
20.998	0.001	139728	22.967	0.000	196299	6.9347	6.9706	0.5	Pentachlorophenol
13.101	0.000	86469	14.311	0.000	101246	7.1035	6.9855	1.7	2,4,6-Trichlorophenol
14.097	0.000	80111	15.557	0.000	101902	6.9950	7.0896	1.3	2,3,6-Trichlorophenol
15.845	0.000	50514	17.475	0.001	57517	6.8698	7.1047	3.4	2,4,5-Trichlorophenol
17.352	0.001	59492	19.024	0.001	71137	7.1202	7.0819	0.5	2,3,4-Trichlorophenol
17.153	0.000	116029	18.814	0.000	150373	6.8629	6.8545	0.1	2,3,5,6-Tetrachlorophenol
20.156	0.001	92328	22.081	0.001	117798	7.1121	7.1314	0.3	2,3,4,5-Tetrachlorophenol
12.557	0.002	56009	13.821	0.001	60102	74.6182	73.7791	1.1	2,4-Dichlorophenol
18.596	0.000	105601	20.936	0.000	138254	6.7	6.6	2.0	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	26.8	26.3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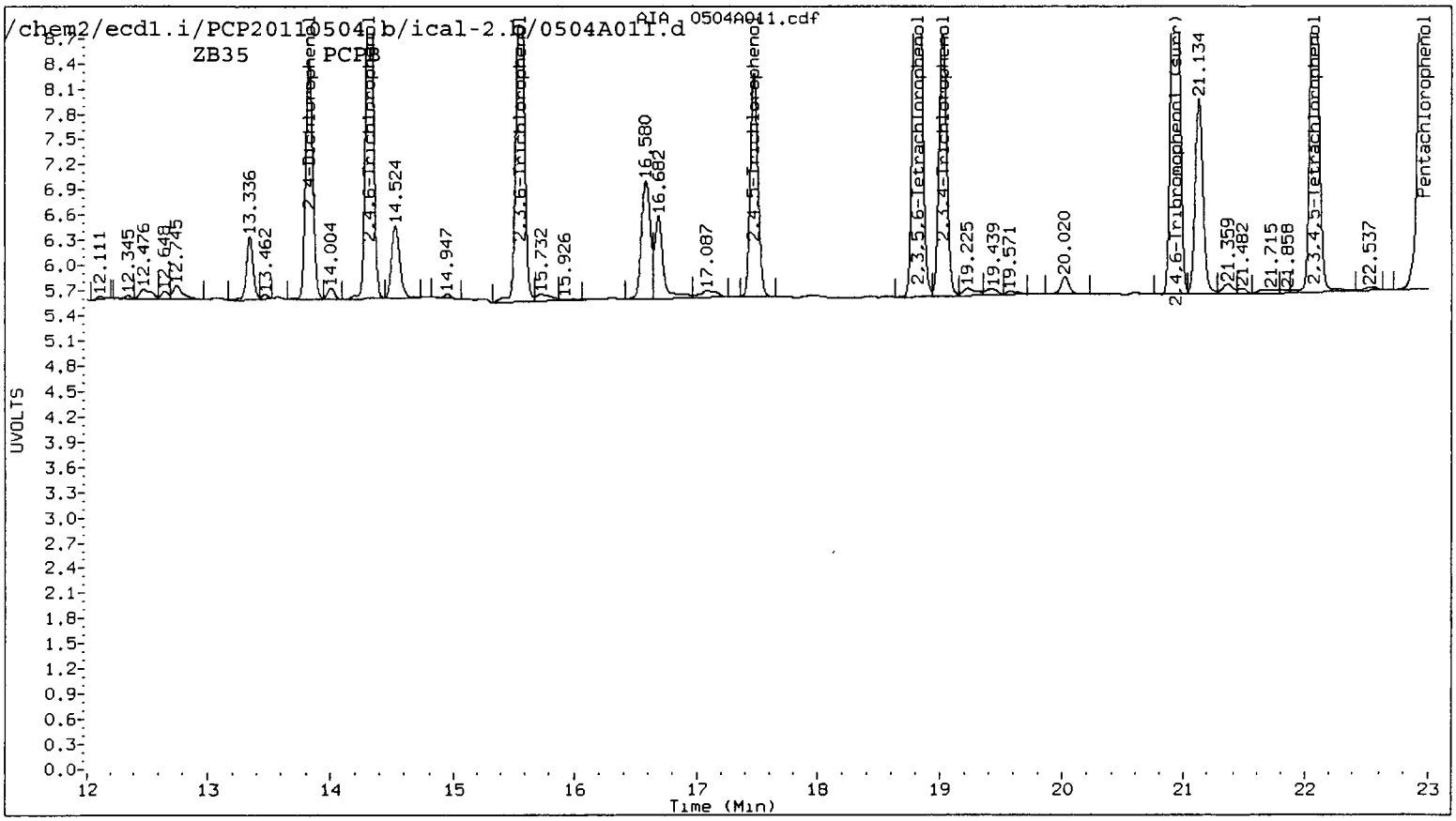
AIA 0504A011.cdf
ZB5 PCPB
12.281
12.896
13.731
14.580
15.039
15.222
15.495
16.056
17.645
18.445
19.397
22.430
UVOLTS
Time (Min)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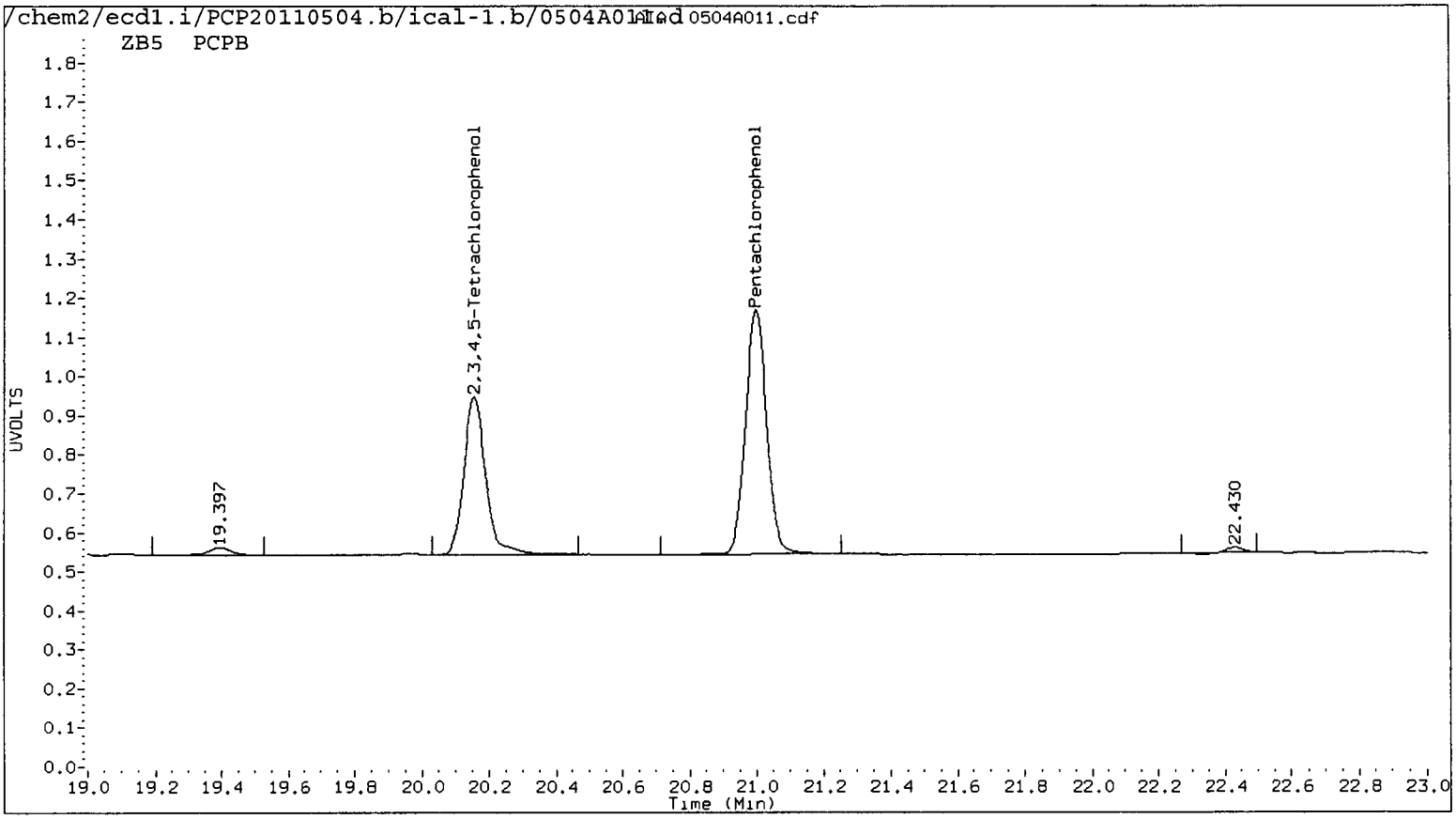
AIA 0504A011.cdf
ZB35 PCPB
12.111
12.345
12.476
13.336
13.462
14.004
14.524
14.947
15.732
15.926
16.580
16.682
17.087
19.225
19.439
19.571
20.020
21.134
21.359
21.482
21.715
21.858
22.537
UVOLTS
Time (Min)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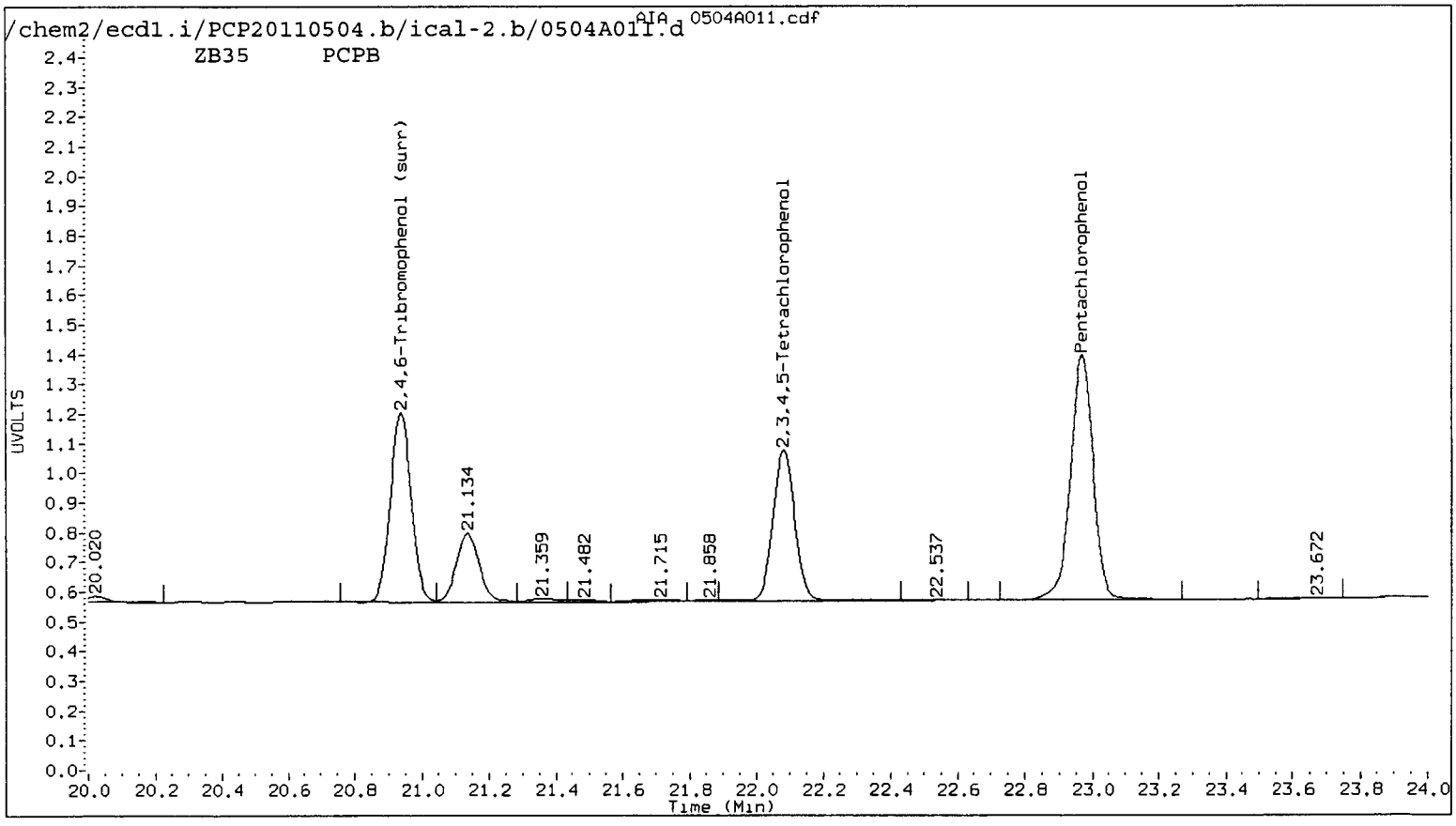
0504A011.cdf
ZB5 PCPB
UVOLTS
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
19.397
22.430
Time (Min)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0504A011.cdf
ZB35 PCPB
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
20.020
21.134
21.359
21.482
21.715
21.858
22.537
23.672
Time (Min)

Data File: /chem2/ecd1.i/PCP20110504.b/ical-1.b/0504A011.d

Page 1

Date : 04-MAY-2011 15:08

Client ID:

Instrument: ecd1.i

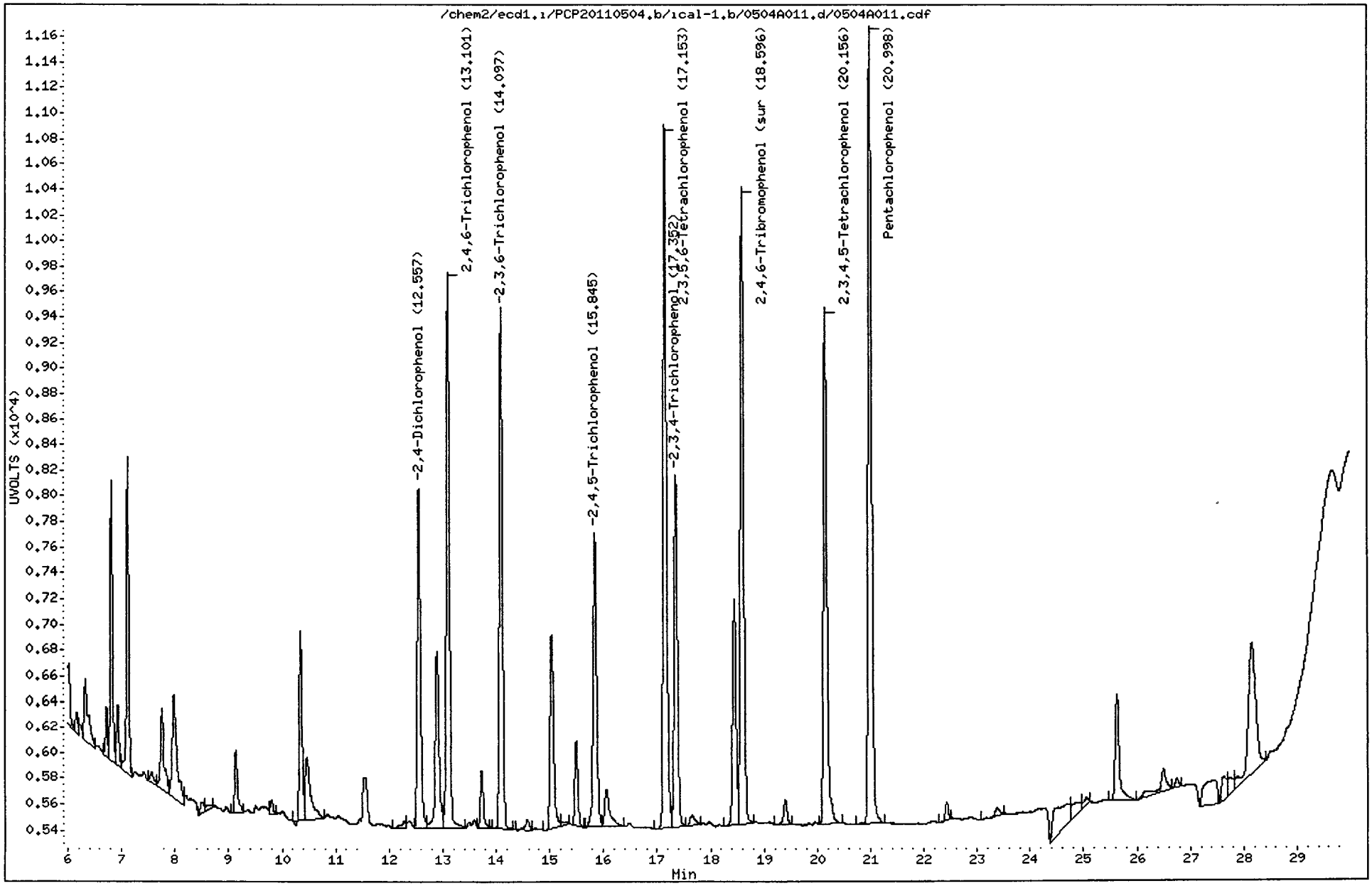
Sample Info: PCPB

Purge Volume: 500.0

Operator: ar

Column phase: STX CLP1

Column diameter: 0.53



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Date : 04-MAY-2011 15:08

Client ID:

Instrument: ecd1.i

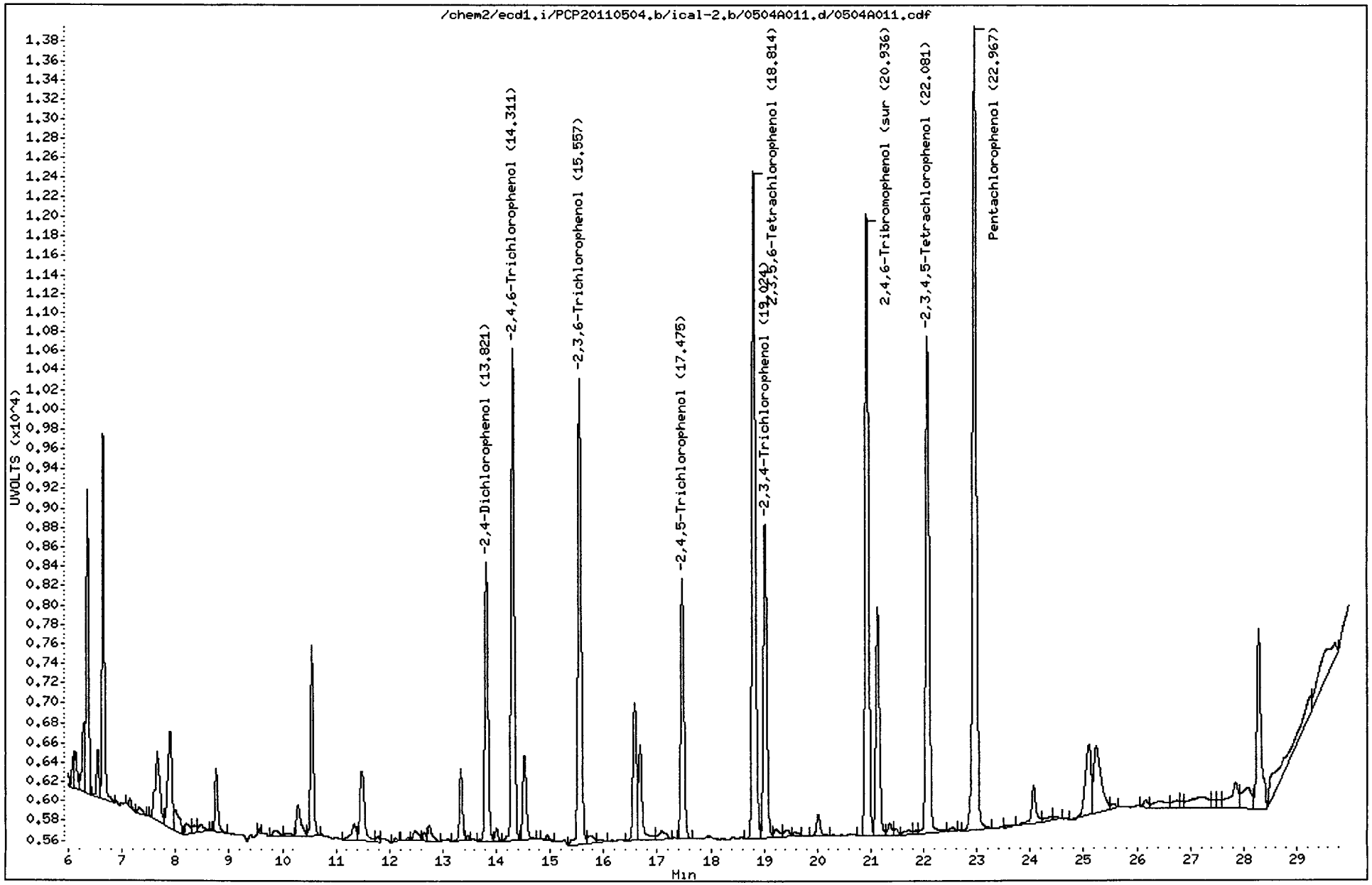
Sample Info: PCPB

Purge Volume: 500.0

Operator: ar

Column phase: STX CLP2

Column diameter: 0.53



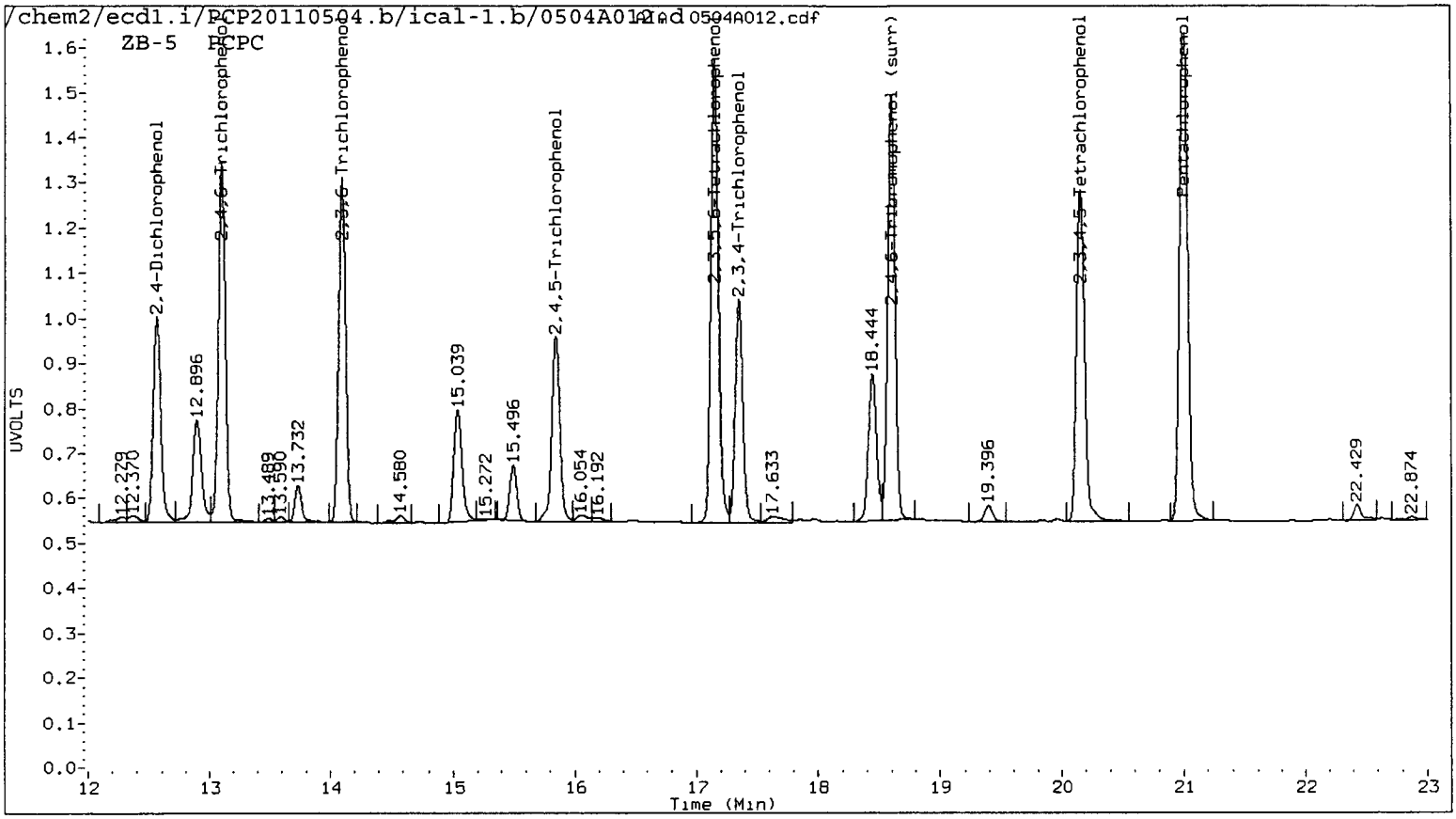
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/PCP20110504.b/ical-1.b/0504A012.d ARI ID: PCPC
Data file 2: /chem2/ecd1.i/PCP20110504.b/ical-2.b/0504A012.d Client ID:
Method: /chem2/ecd1.i/PCP20110504.b/PCP.m Injection Date: 04-MAY-2011 15:44
Compound Sublist: all Report Date: 05/06/2011 10:51
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
20.998	0.000	259764	22.967	0.000	361971	12.8921	12.8537	0.3	Pentachlorophenol
13.102	0.001	159940	14.312	0.001	192050	13.1391	13.2505	0.8	2,4,6-Trichlorophenol
14.097	0.000	148290	15.558	0.001	189925	12.9481	13.2136	2.0	2,3,6-Trichlorophenol
15.846	0.001	92760	17.474	0.000	104692	13.1179	12.9318	1.4	2,4,5-Trichlorophenol
17.352	0.001	109723	19.023	0.000	129601	13.1321	13.3673	1.8	2,3,4-Trichlorophenol
17.153	0.001	218741	18.814	0.000	281810	12.9381	12.8458	0.7	2,3,5,6-Tetrachlorophenol
20.155	0.000	168443	22.080	0.000	208459	12.9754	12.9697	0.0	2,3,4,5-Tetrachlorophenol
12.556	0.001	99540	13.821	0.001	104374	140.2891	136.0517	3.1	2,4-Dichlorophenol
18.596	0.000	198567	20.936	0.000	266388	12.6	12.7	0.5	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	50.4	50.7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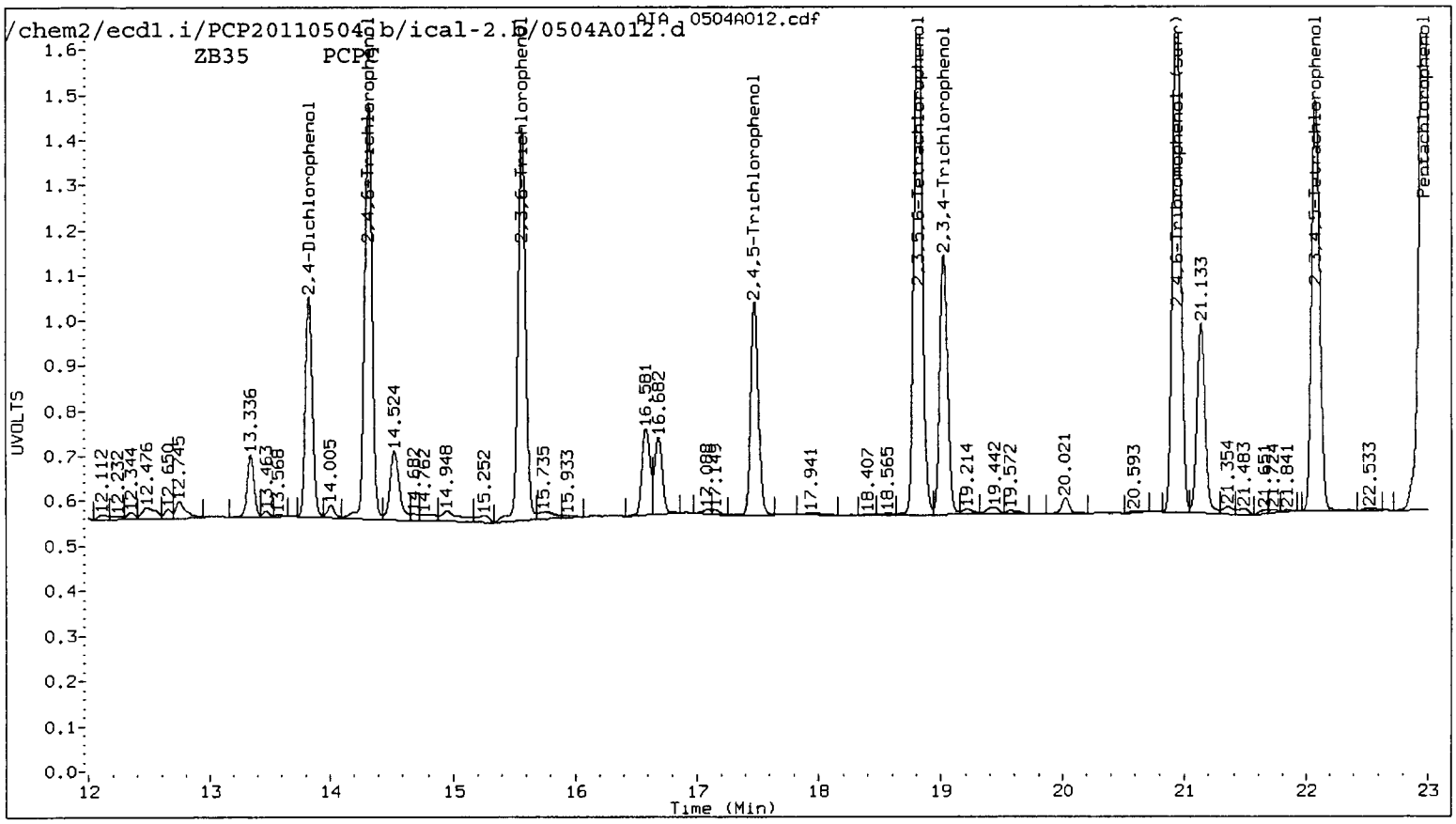
AIA 0504A012.cdf
ZB-5 PCPC
2,4-Dichlorophenol
2,4,6-Trichlorophenol
2,3,6-Trichlorophenol
2,3,5,6-Tetrachlorophenol
2,3,4-Trichlorophenol
2,4,5-Trichlorophenol
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
12.896
15.039
15.496
18.444
19.396
22.429
22.874
UVOLTS
Time (Min)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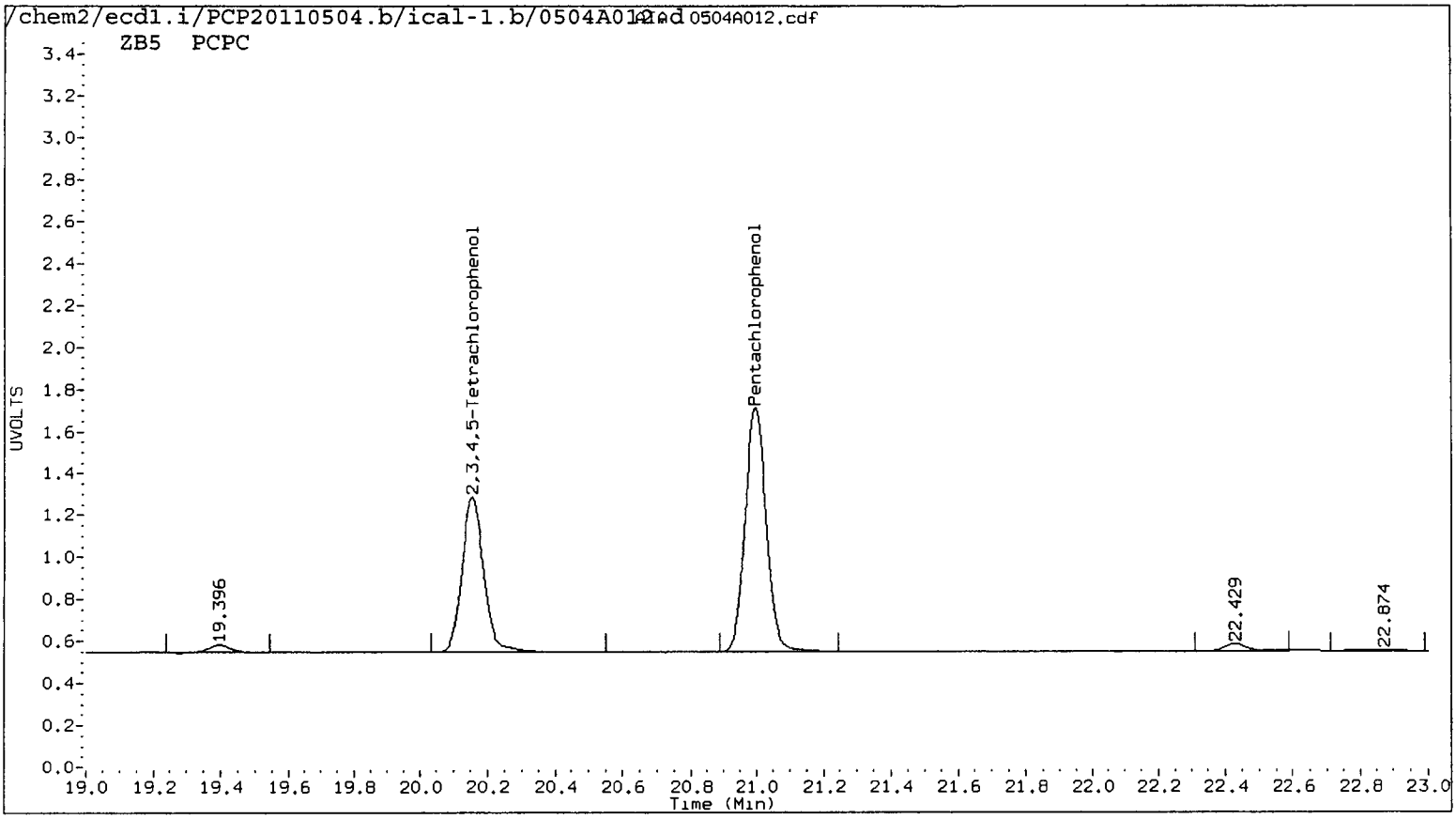
AIA 0504A012.cdf
ZB35 PCPC
2,4-Dichlorophenol
2,4,6-Trichlorophenol
2,3,6-Trichlorophenol
2,4,5-Trichlorophenol
2,3,5,6-Tetrachlorophenol
2,3,4-Trichlorophenol
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
13.336
14.524
16.581
16.682
21.133
UVOLTS
Time (Min)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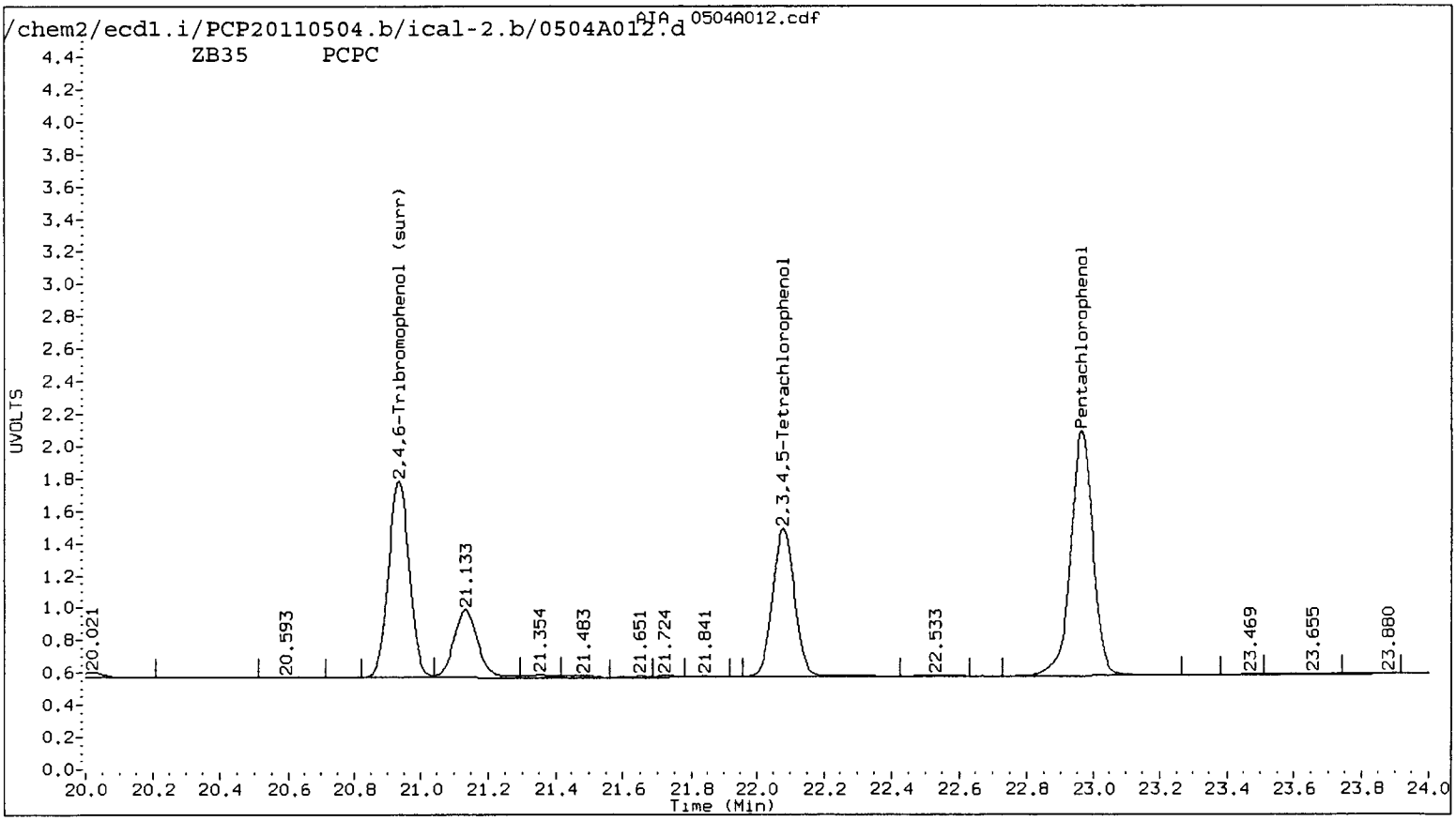
0504A012.cdf
ZB5 PCPC
UVOLTS
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
19.396
22.429
22.874
Time (Min)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AJA 0504A012.cdf
ZB35 PCPC
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
20.021
20.593
21.133
21.354
21.483
21.651
21.724
21.841
22.533
23.469
23.655
23.880
Time (Min)

Data File: /chem2/ecd1.i/PCP20110504.b/ical-1.b/0504A012.d

Page 1

Date : 04-MAY-2011 15:44

Client ID:

Instrument: ecd1.i

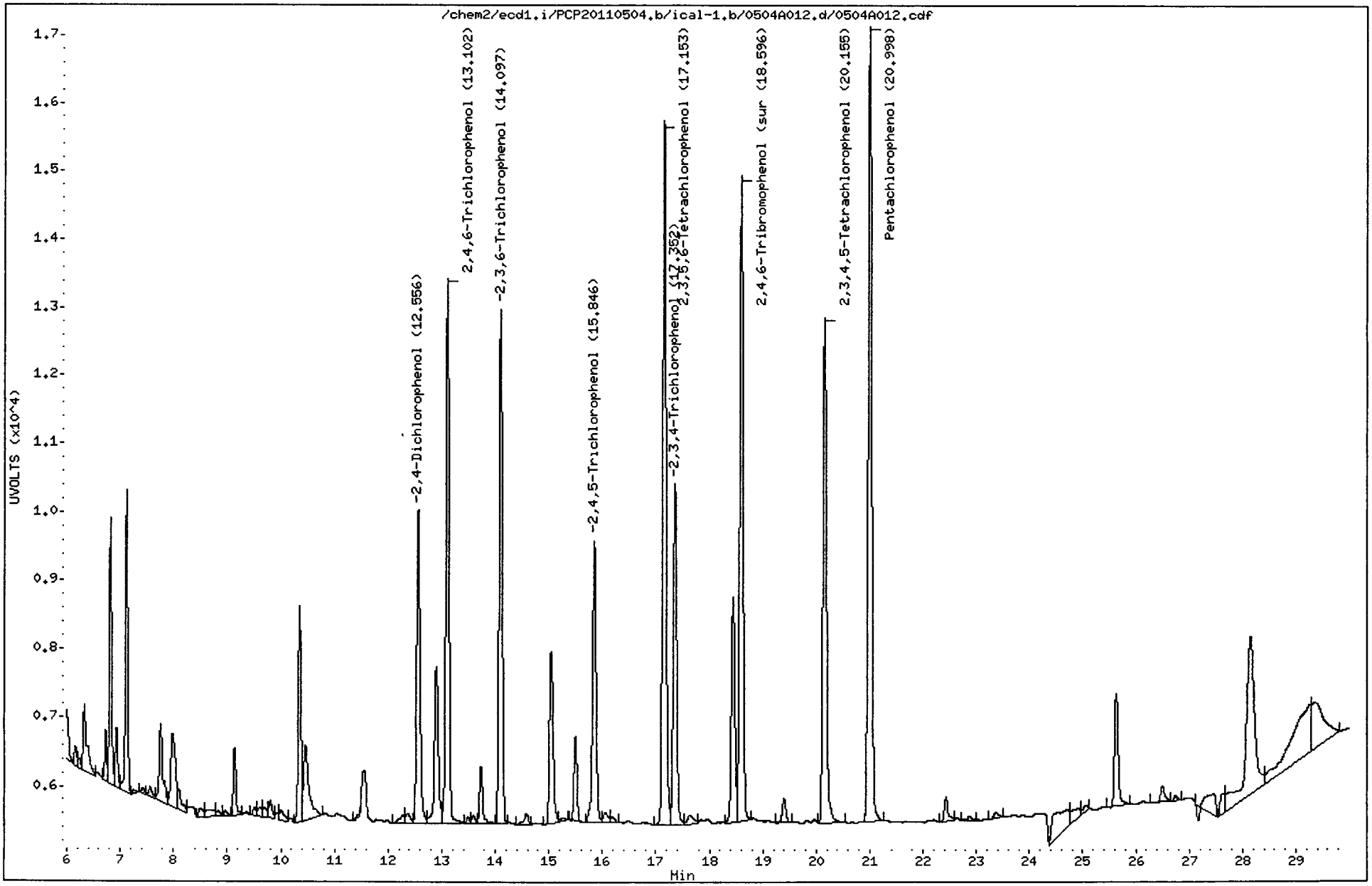
Sample Info: PCPC

Purge Volume: 500.0

Operator: ar

Column phase: STX CLP1

Column diameter: 0.53



16990 8815

Data File: /chem2/ecd1.i/PCP20110504.b/ical-2.b/0504A012.d

Page 1

Date : 04-MAY-2011 15:44

Client ID:

Instrument: ecd1.i

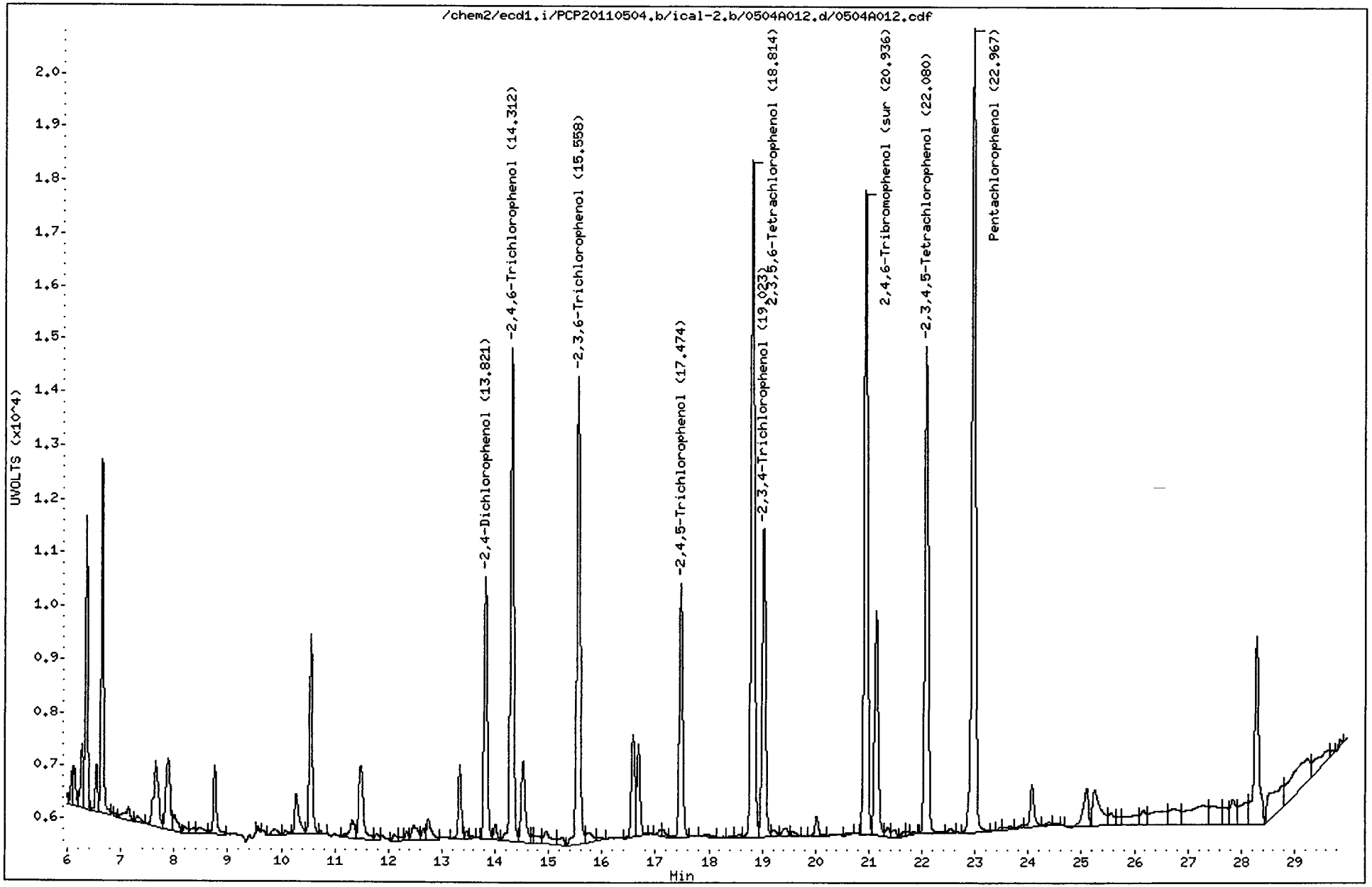
Sample Info: PCPC

Purge Volume: 500.0

Operator: ar

Column phase: STX CLP2

Column diameter: 0.53



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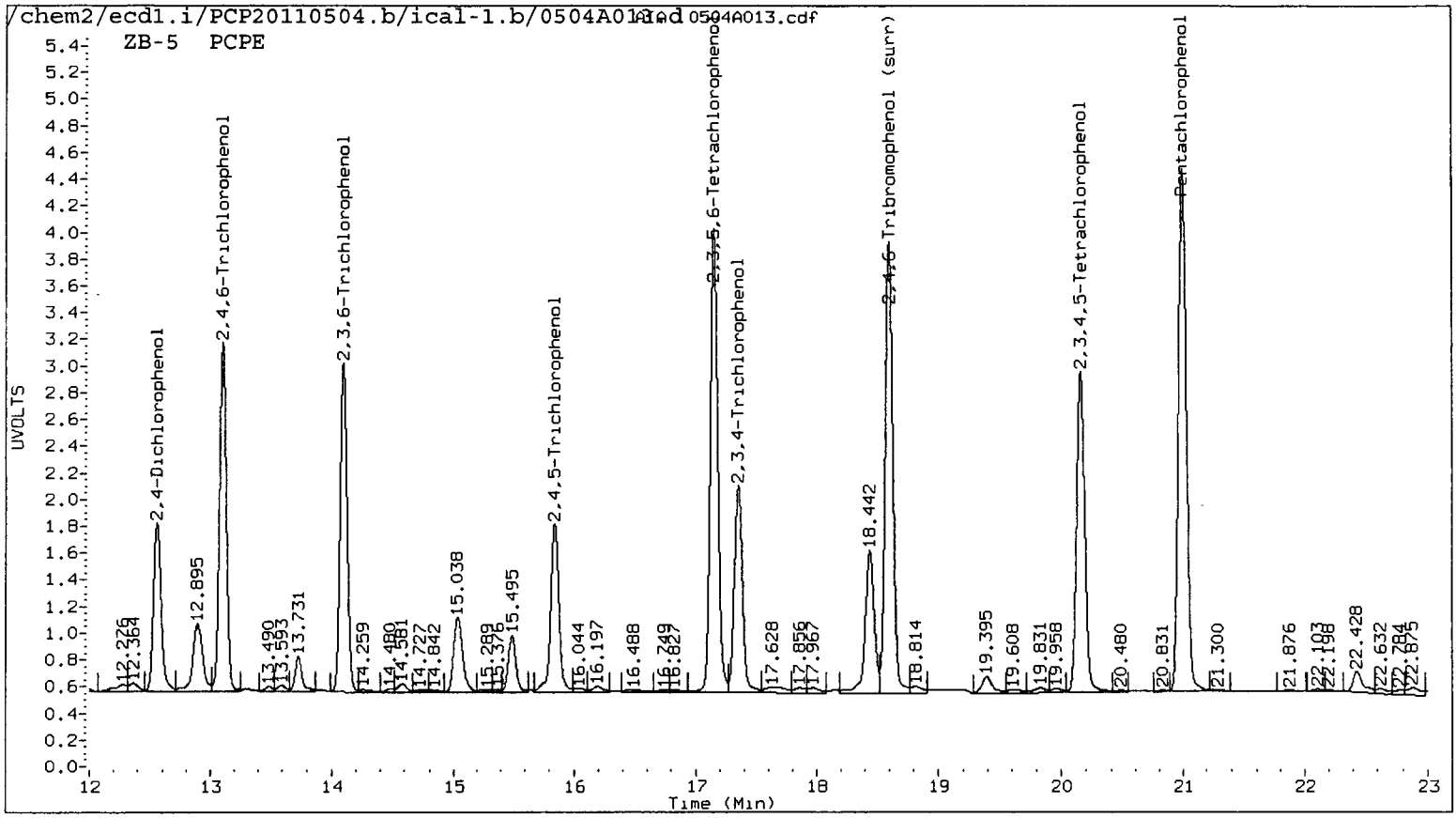
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/PCP20110504.b/ical-1.b/0504A013.d ARI ID: PCPE
Data file 2: /chem2/ecd1.i/PCP20110504.b/ical-2.b/0504A013.d Client ID:
Method: /chem2/ecd1.i/PCP20110504.b/PCP.m Injection Date: 04-MAY-2011 16:21
Compound Sublist: all Report Date: 05/06/2011 10:51
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
20.998	0.001	889243	22.967	0.000	1223251	44.1330	43.4380	1.6	Pentachlorophenol
13.101	0.000	520607	14.312	0.001	615086	42.7681	42.4380	0.8	2,4,6-Trichlorophenol
14.097	0.000	496269	15.558	0.001	622220	43.3323	43.2897	0.1	2,3,6-Trichlorophenol
15.845	0.000	295231	17.475	0.001	344386	49.4200	42.5395	15.0	2,4,5-Trichlorophenol
17.352	0.000	356877	19.023	0.000	409120	42.7124	49.2172	14.2	2,3,4-Trichlorophenol
17.153	0.001	759088	18.814	0.000	953164	44.8986	43.4481	3.3	2,3,5,6-Tetrachlorophenol
20.155	0.000	548832	22.081	0.001	691341	42.2771	49.1918	15.1	2,3,4,5-Tetrachlorophenol
12.556	0.001	279617	13.821	0.001	297223	483.2915	485.7456	0.5	2,4-Dichlorophenol
18.596	0.001	728285	20.937	0.001	937307	46.3	44.6	3.7	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	185.0	178.3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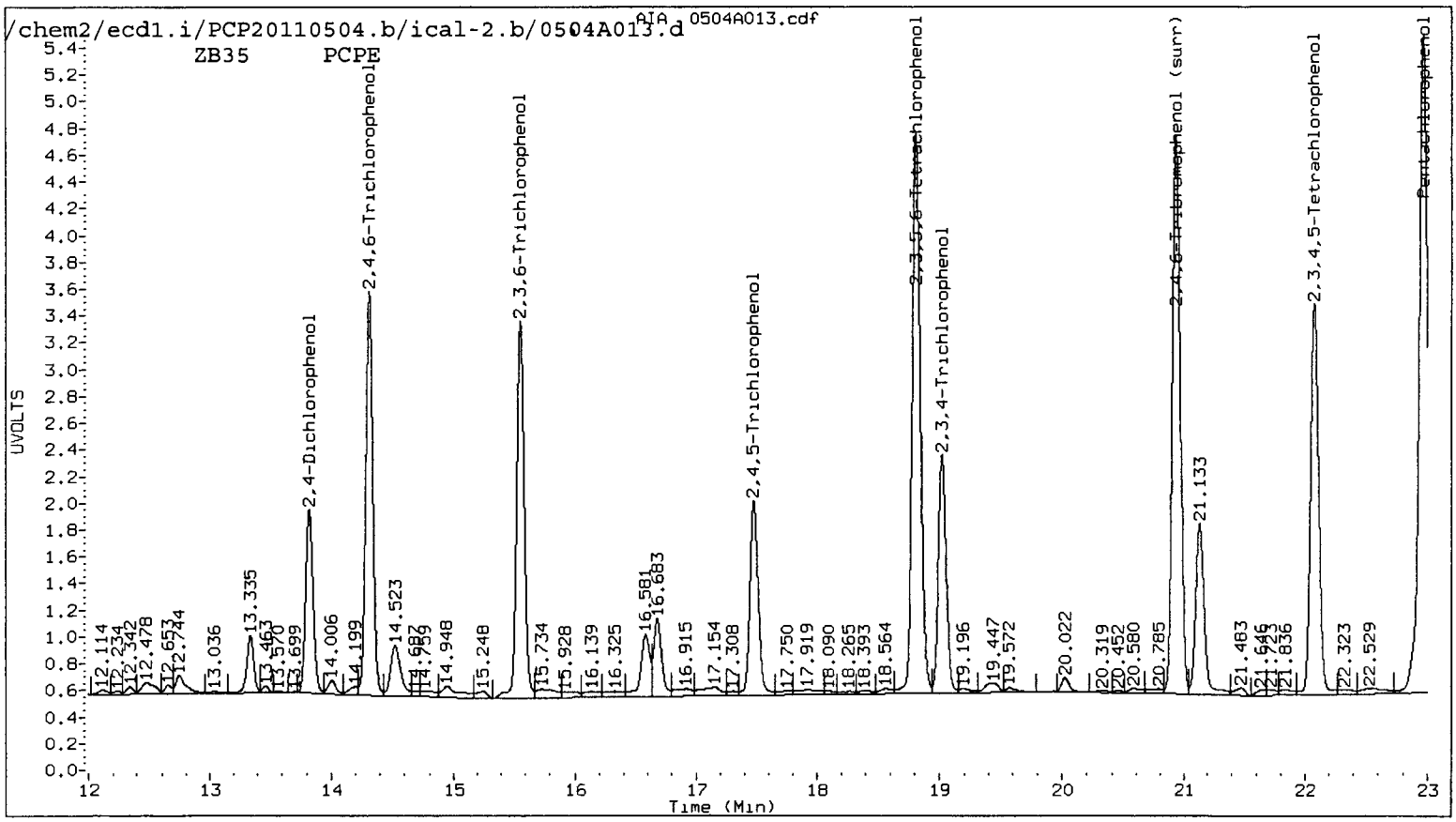
0504A013.cdf
ZB-5 PCPE
UVOLTS
Time (Min)
2,4-Dichlorophenol
2,4,6-Trichlorophenol
2,3,6-Trichlorophenol
2,4,5-Trichlorophenol
2,3,5,6-Tetrachlorophenol
2,3,4-Trichlorophenol
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol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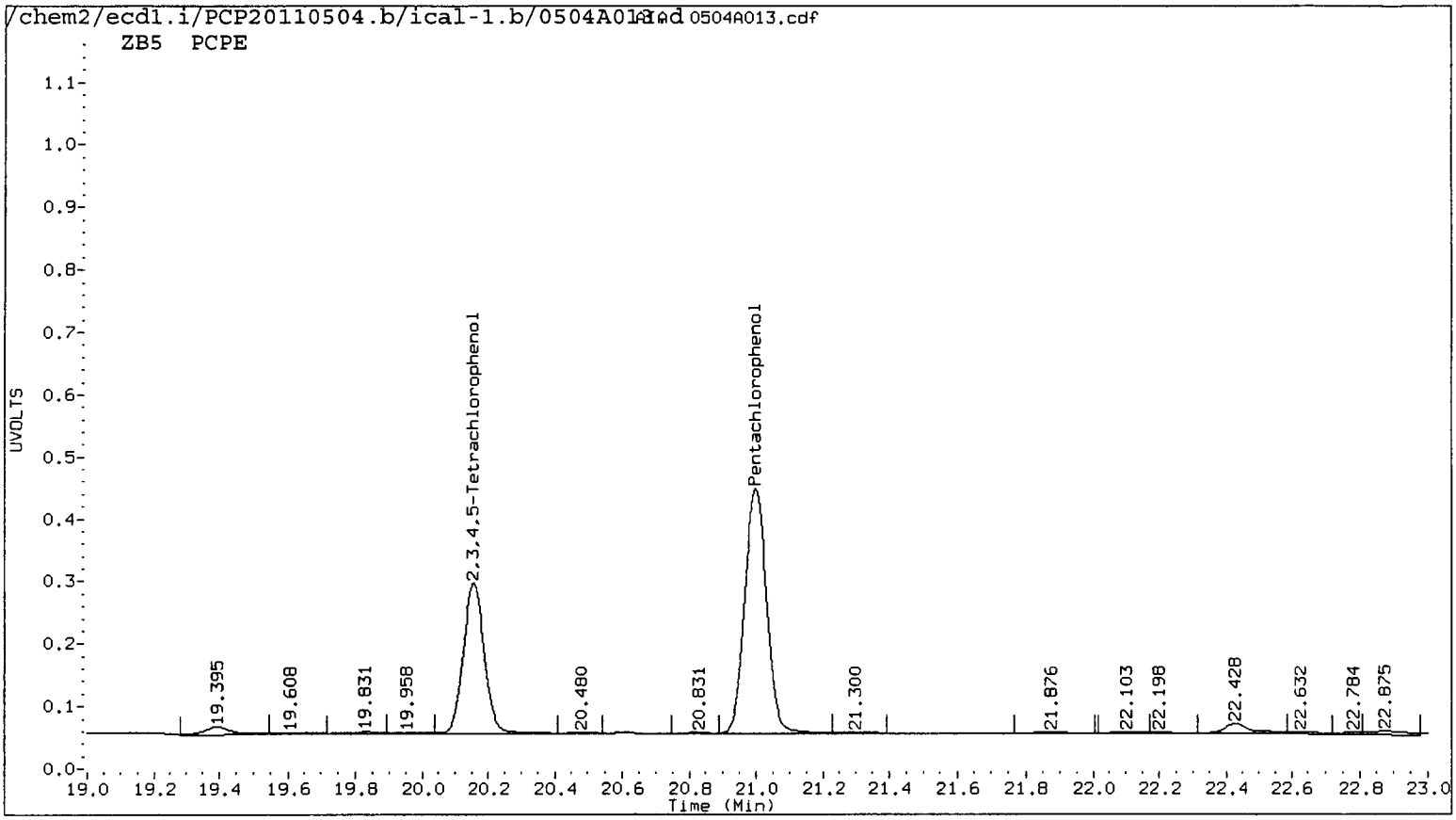
0504A013.cdf
ZB35 PCPE
UVOLTS
Time (Min)
2,4-Dichlorophenol
2,4,6-Trichlorophenol
2,3,6-Trichlorophenol
2,4,5-Trichlorophenol
2,3,5,6-Tetrachlorophenol
2,3,4-Trichlorophenol
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol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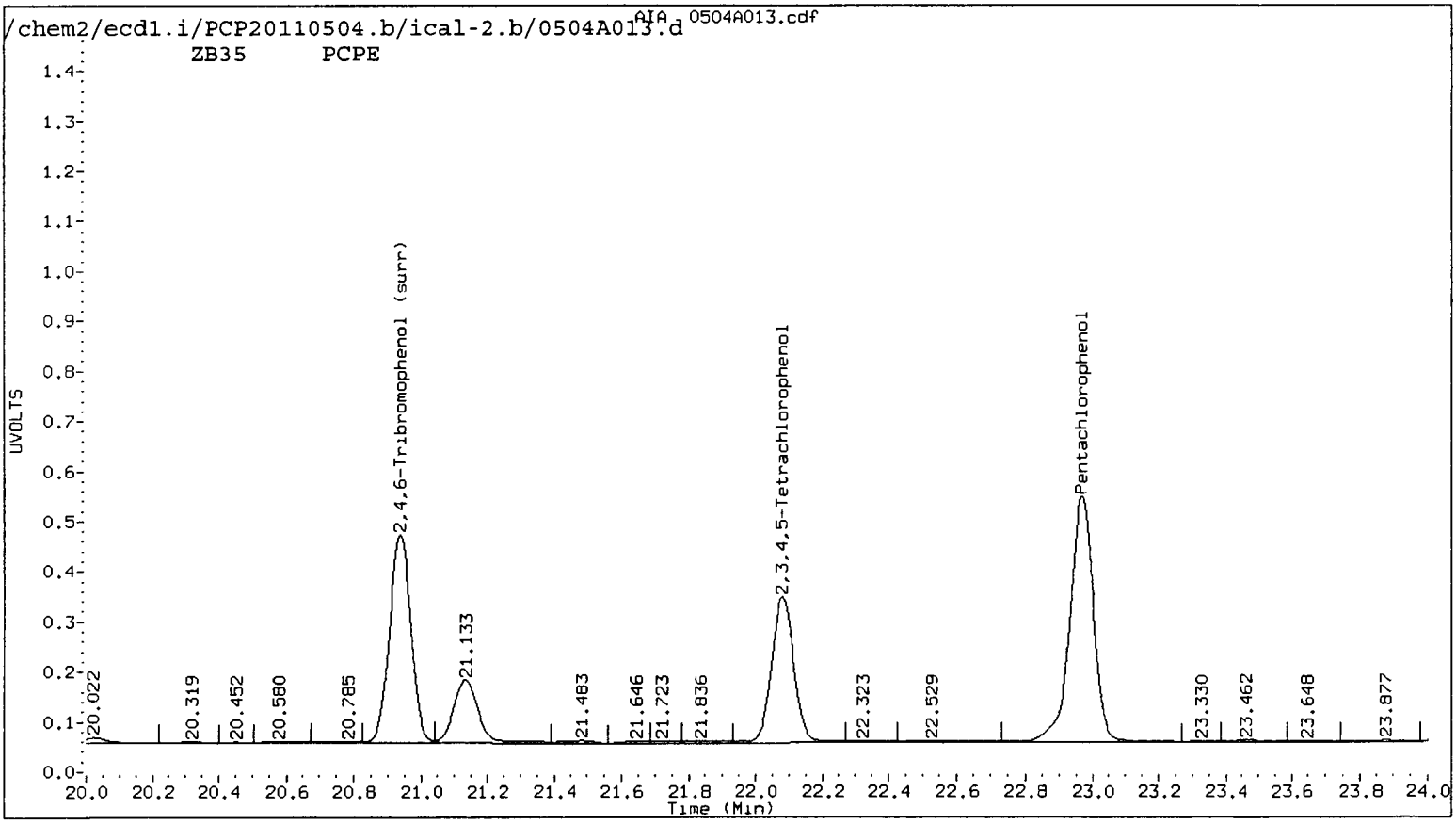
0504A013.cdf
ZB5 PCPE
UVOLTS
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
19.395
19.608
19.831
19.958
20.480
20.831
21.300
21.876
22.103
22.198
22.428
22.632
22.784
22.875
Time (Min)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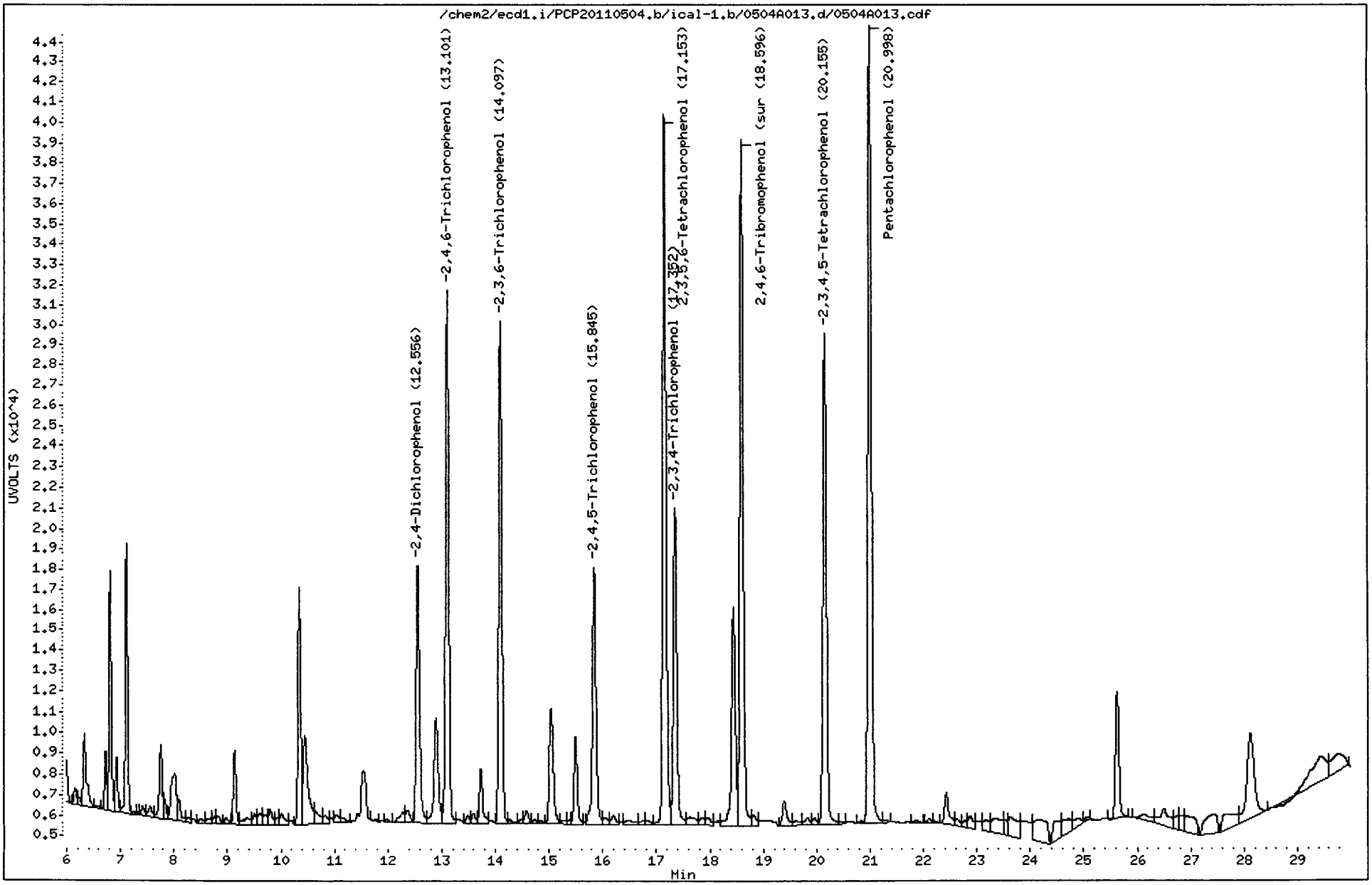
0504A013.cdf
ZB35 PCPE
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
20.022
20.319
20.452
20.580
20.785
21.133
21.483
21.646
21.723
21.836
22.323
22.529
23.330
23.462
23.648
23.877
Time (Min)

Data File: /chem2/ecd1.i/PCP20110504.b/ical-1.b/0504A013.d
Date : 04-MAY-2011 16:21
Client ID:
Sample Info: PCPE
Purge Volume: 500.0
Column phase: STX CLP1

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



Data File: /chem2/ecd1.i/PCP20110504.b/ical-2.b/0504A013.d

Date : 04-MAY-2011 16:21

Client ID:

Instrument: ecd1.i

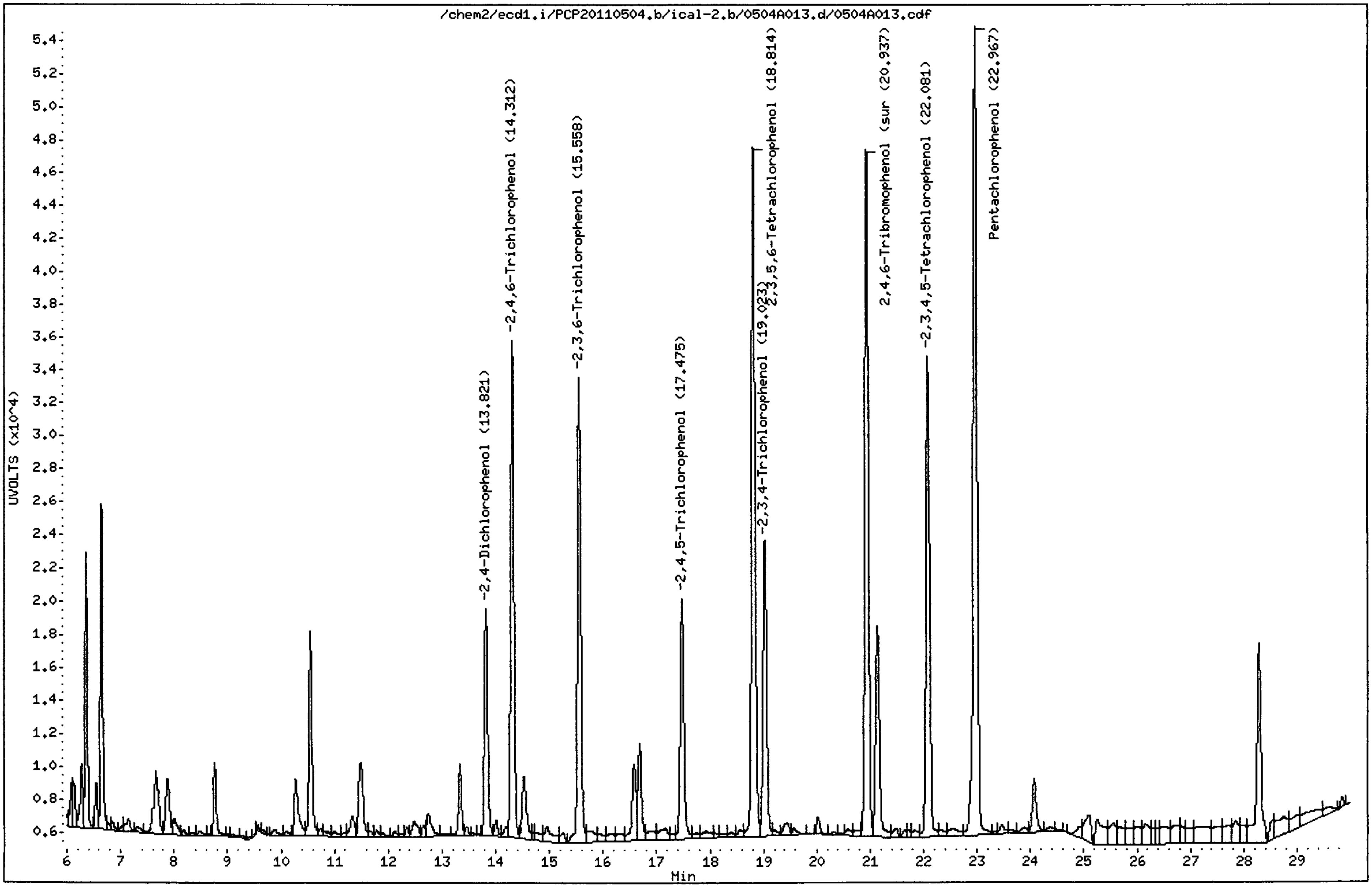
Sample Info: PCPE

Purge Volume: 500.0

Operator: ar

Column phase: STX CLP2

Column diameter: 0.53



ST98:00697

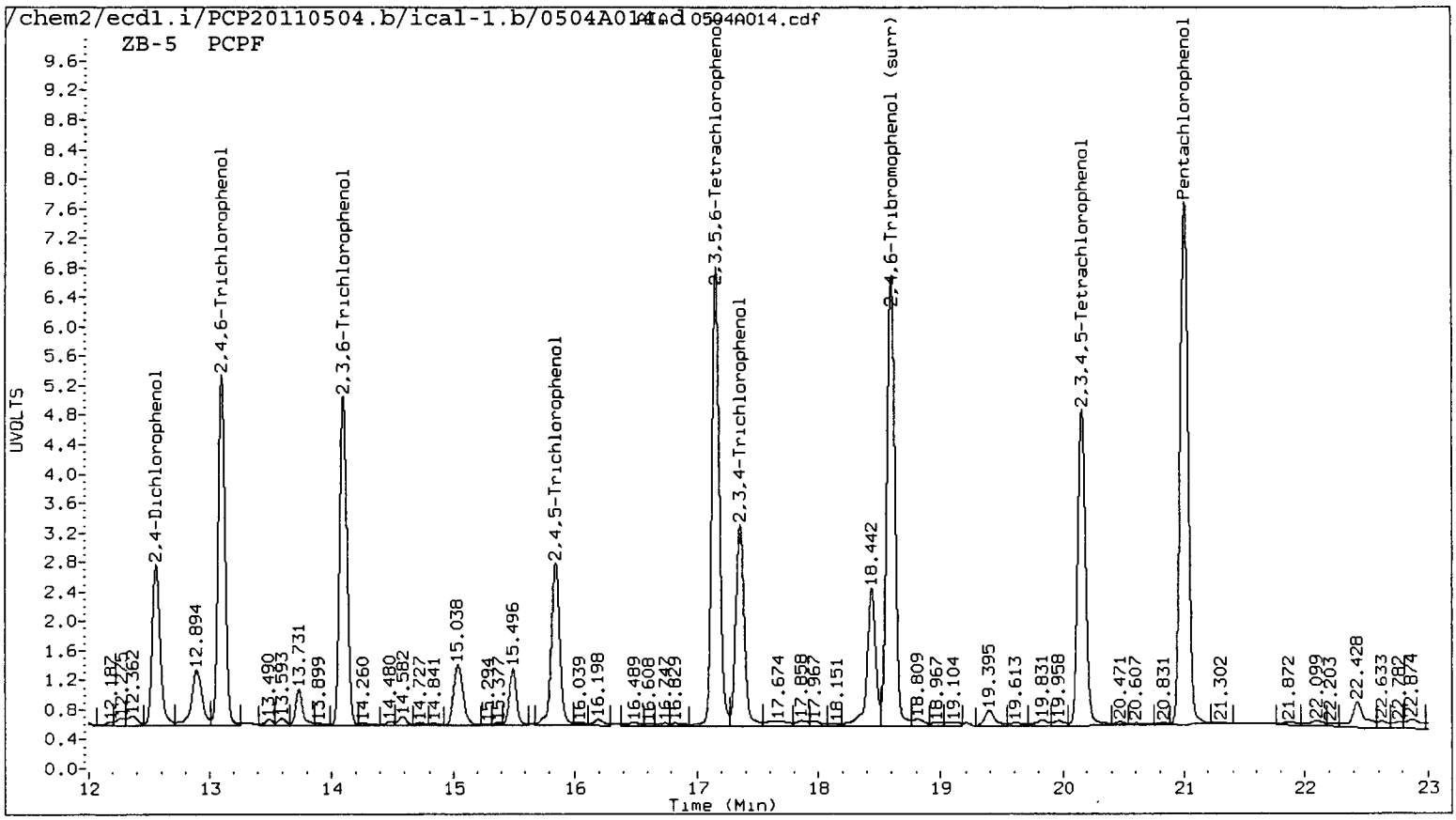
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/PCP20110504.b/ical-1.b/0504A014.d ARI ID: PCPF
Data file 2: /chem2/ecd1.i/PCP20110504.b/ical-2.b/0504A014.d Client ID:
Method: /chem2/ecd1.i/PCP20110504.b/PCP.m Injection Date: 04-MAY-2011 16:57
Compound Sublist: all Report Date: 05/06/2011 10:51
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
20.999	0.002	1629183	22.968	0.001	2229293	80.8562	79.1628	2.1	Pentachlorophenol
13.102	0.001	953234	14.311	0.000	1105237	78.3086	76.2560	2.7	2,4,6-Trichlorophenol
14.097	0.000	908546	15.559	0.002	1094858	79.3307	76.1725	4.1	2,3,6-Trichlorophenol
15.846	0.001	512989	17.475	0.001	590583	100.2030	72.9504	31.5	2,4,5-Trichlorophenol
17.351	0.000	632191	19.023	0.000	719354	75.6631	100.2377	27.9	2,3,4-Trichlorophenol
17.154	0.001	1387633	18.814	0.000	1735216	82.0758	79.0964	3.7	2,3,5,6-Tetrachloropheno
20.155	0.000	990411	22.081	0.001	1234197	76.2925	100.2187	27.1	2,3,4,5-Tetrachloropheno
12.556	0.001	481637	13.820	0.000	504644	1004.8445	1004.2680	0.1	2,4-Dichlorophenol
18.596	0.001	1354876	20.937	0.001	1734112	86.1	82.5	4.2	2,4,6-Tribromophenol (sur

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	344.2	329.9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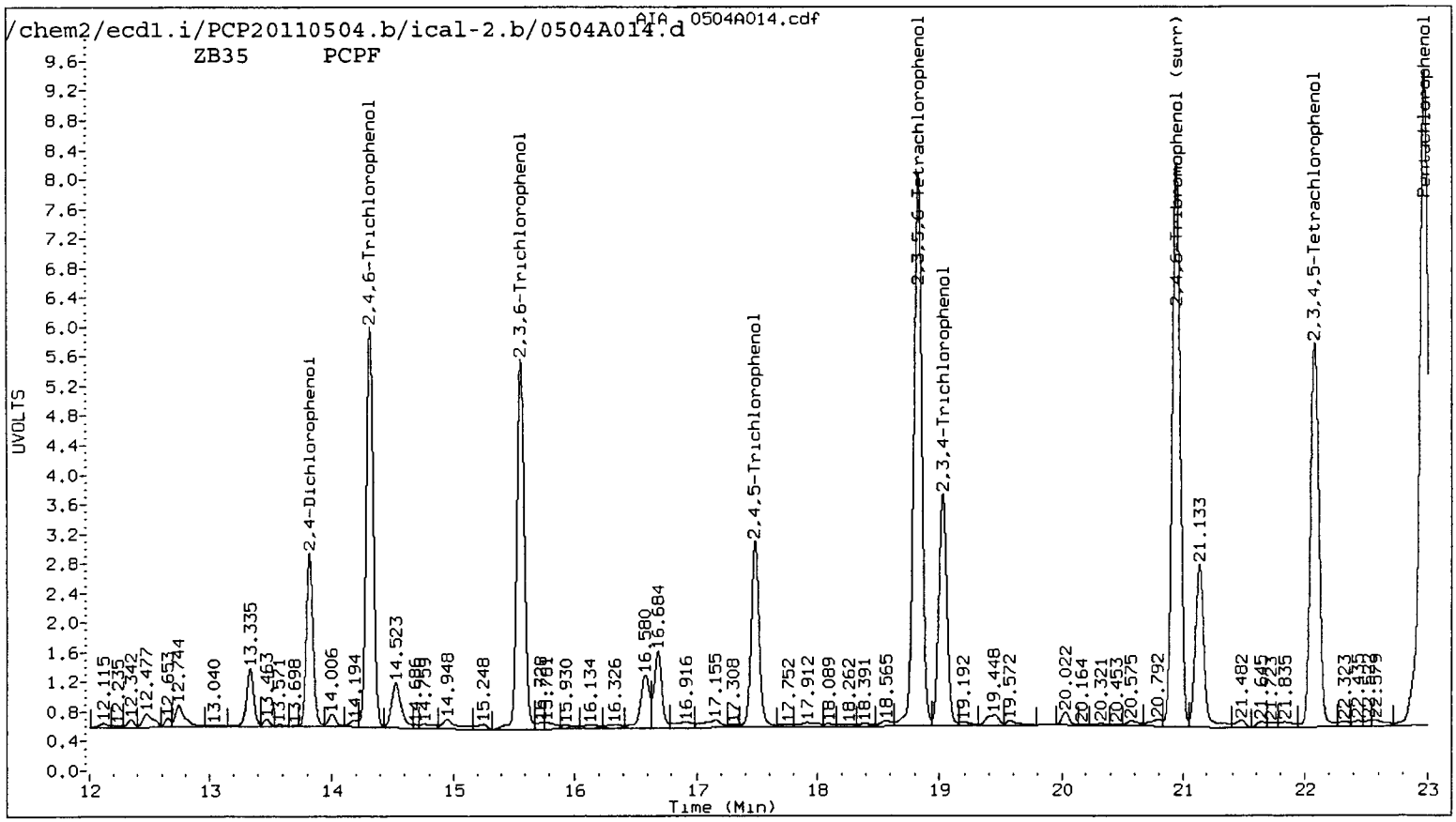
0504A014.cdf
ZB-5 PCPF
UVOLTS
2,4-Dichlorophenol
2,4,6-Trichlorophenol
2,3,6-Trichlorophenol
2,4,5-Trichlorophenol
2,3,5,6-Tetrachlorophenol
2,3,4-Trichlorophenol
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
Time (Min)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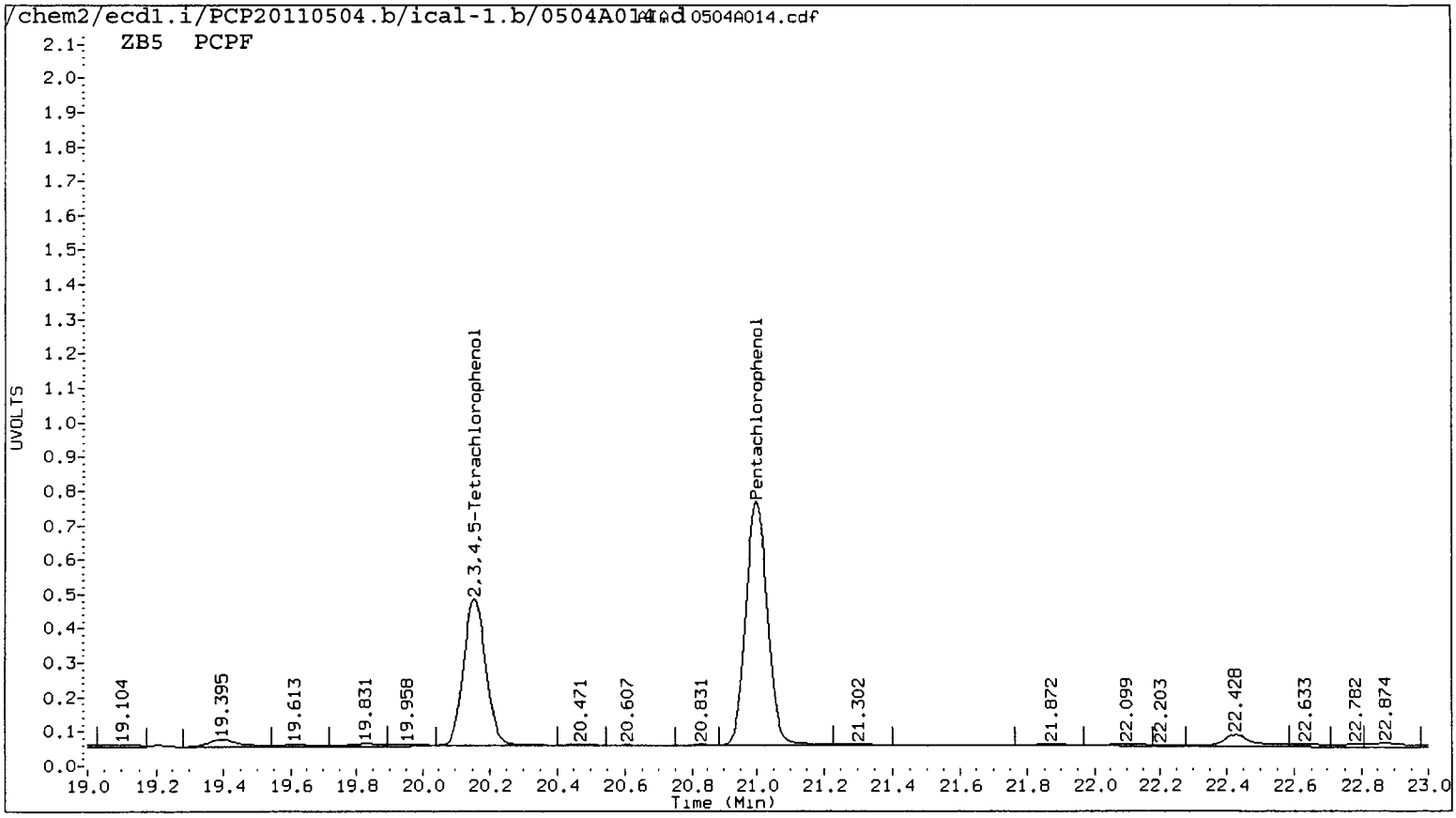
0504A014.cdf
ZB35 PCPF
UVOLTS
2,4-Dichlorophenol
2,4,6-Trichlorophenol
2,3,6-Trichlorophenol
2,4,5-Trichlorophenol
2,3,5,6-Tetrachlorophenol
2,3,4-Trichlorophenol
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
Time (Min)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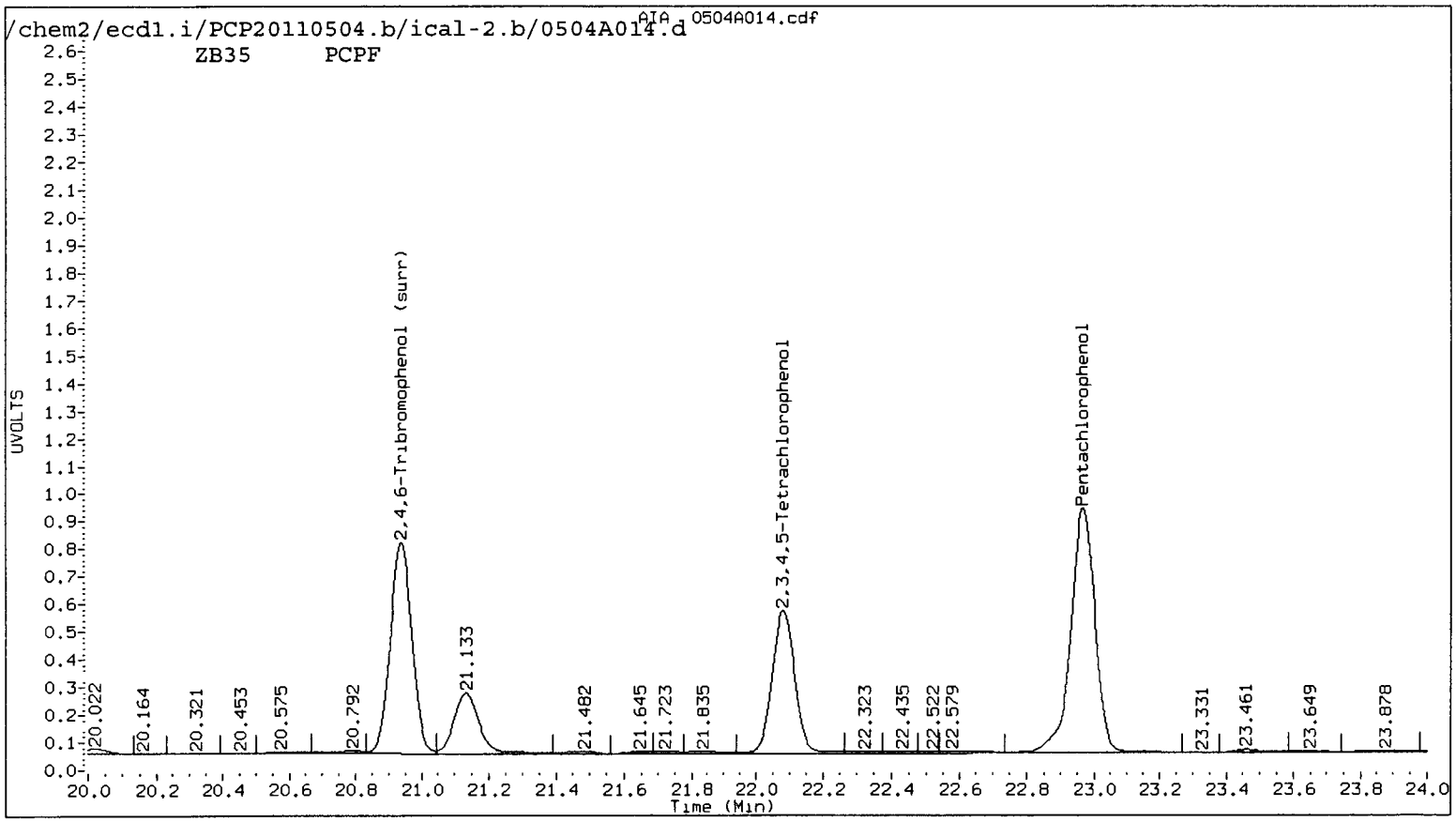
0504A014.cdf
ZB5 PCPF
UVOLTS
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
19.104
19.395
19.613
19.831
19.958
20.471
20.607
20.831
21.302
21.872
22.099
22.203
22.428
22.633
22.782
22.874
Time (Min)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0504A014.cdf
ZB35 PCPF
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
20.022
20.164
20.321
20.453
20.575
20.792
21.133
21.482
21.645
21.723
21.835
22.323
22.435
22.522
22.579
23.331
23.461
23.649
23.878
Time (Min)

Data File: /chem2/ecd1.i/PCP20110504.b/ical-1.b/0504A014.d

Date : 04-MAY-2011 16:57

Client ID:

Instrument: ecd1.i

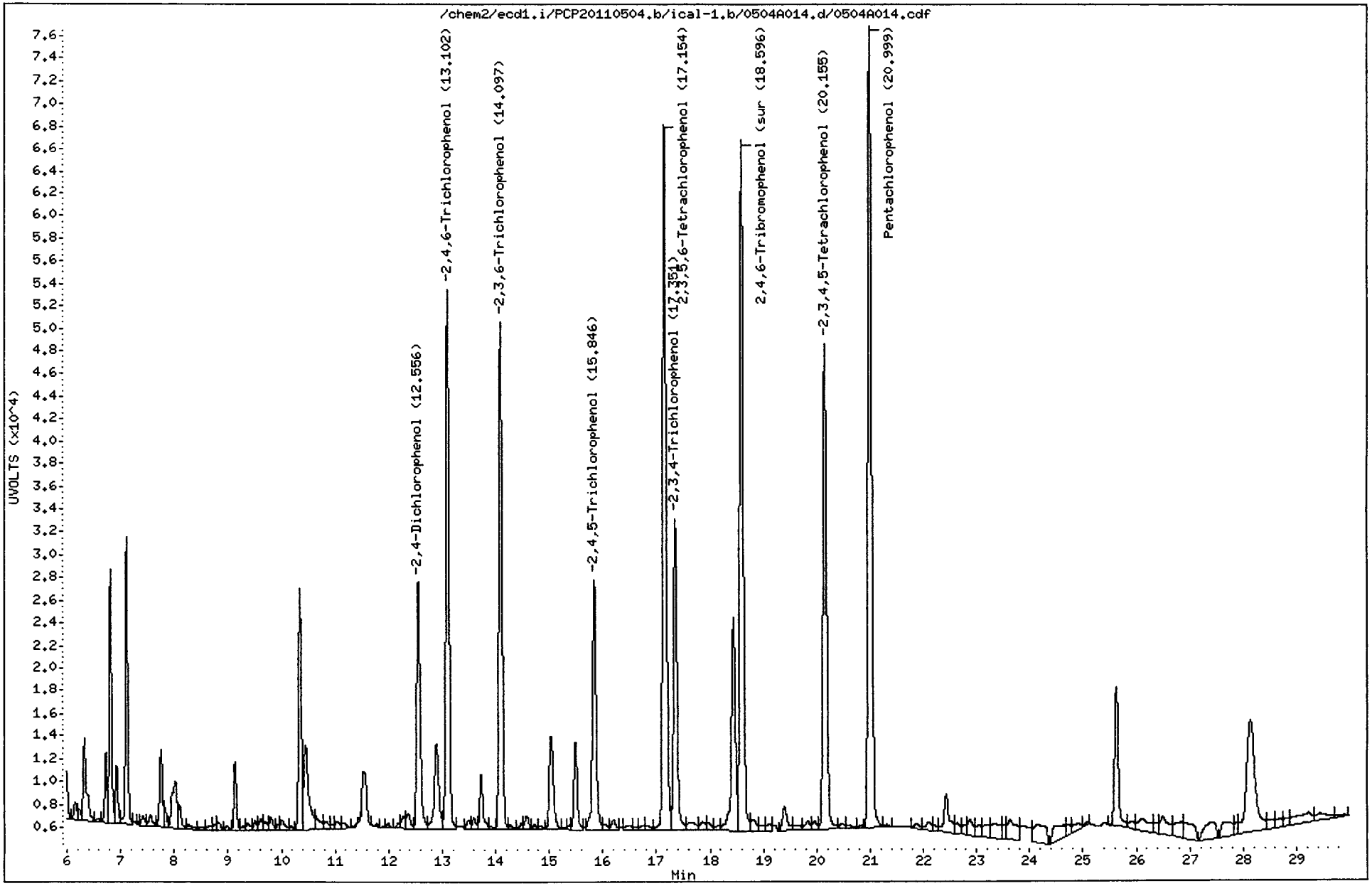
Sample Info: PCPF

Purge Volume: 500.0

Operator: ar

Column phase: STX CLP1

Column diameter: 0.53



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Date : 04-MAY-2011 16:57

Client ID:

Instrument: ecd1.i

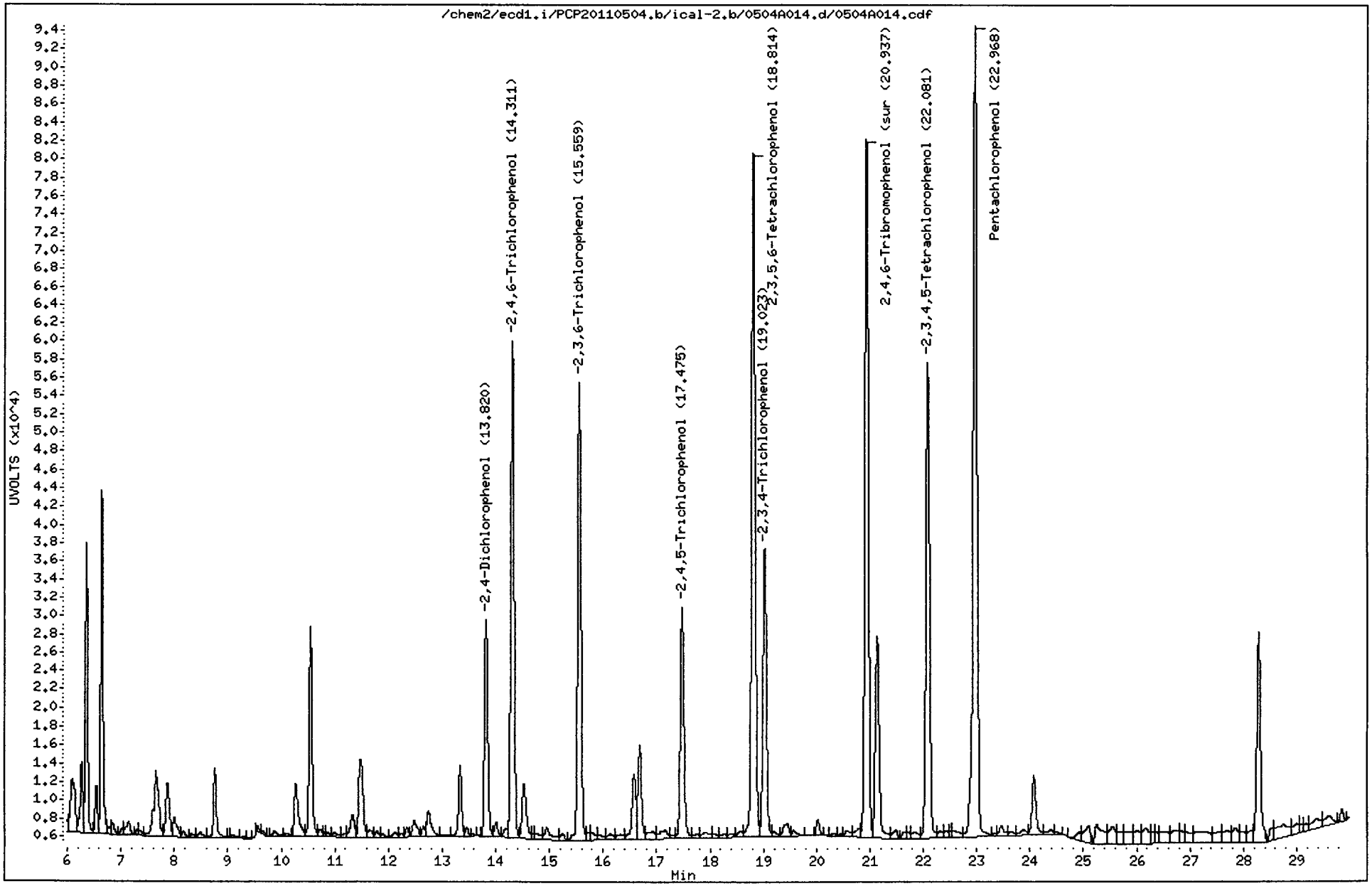
Sample Info: PCPF

Purge Volume: 500.0

Operator: ar

Column phase: STX CLP2

Column diameter: 0.53



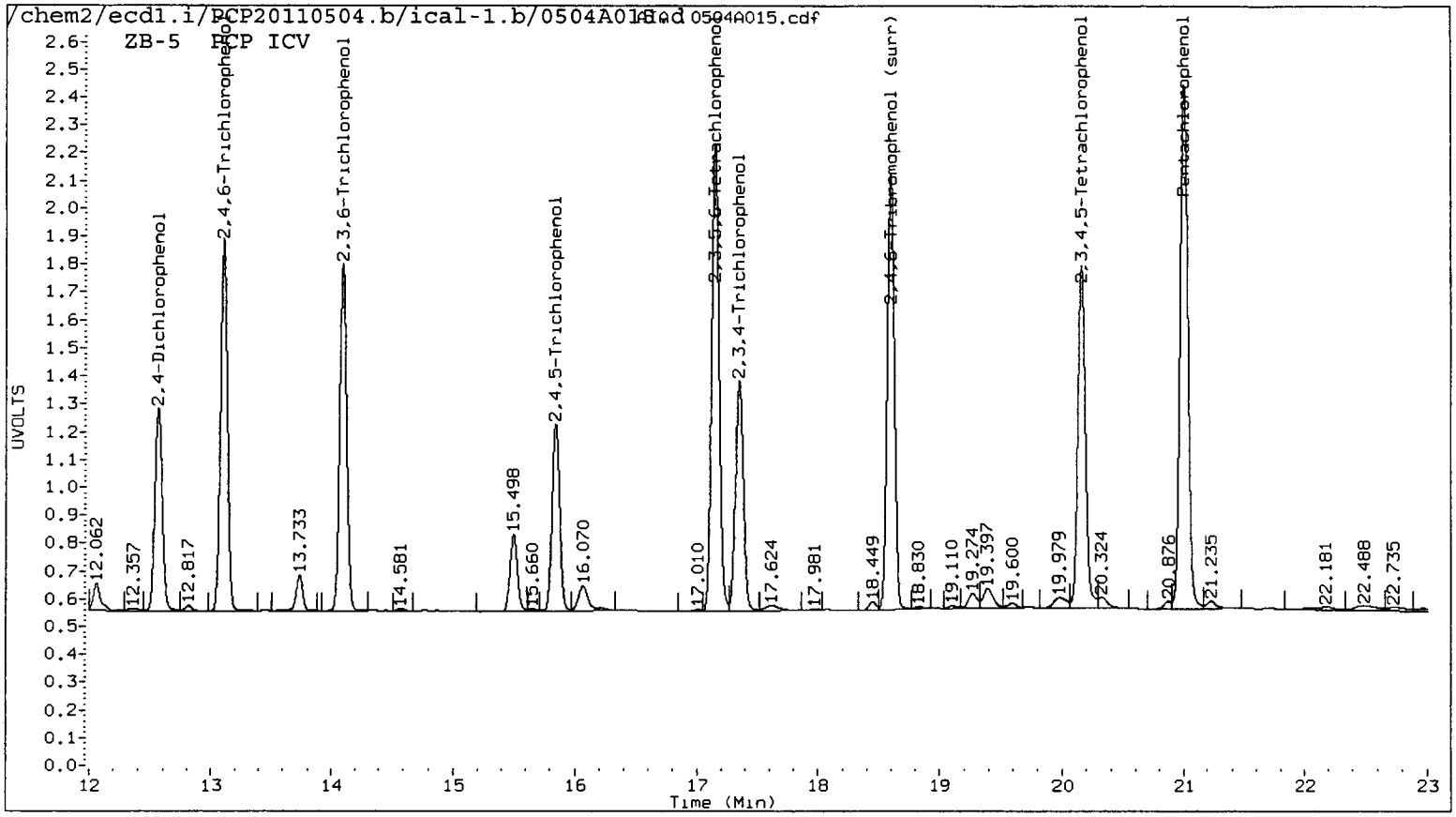
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/PCP20110504.b/ical-1.b/0504A015.d ARI ID: PCP ICV
Data file 2: /chem2/ecd1.i/PCP20110504.b/ical-2.b/0504A015.d Client ID:
Method: /chem2/ecd1.i/PCP20110504.b/PCP.m Injection Date: 04-MAY-2011 17:33
Compound Sublist: all Report Date: 05/06/2011 10:51
Instrument: ecd1.i Matrix: WATER
Operator: ar Dilution Factor: 1.000

ZB-5 Col RT	ZB-5 Col Shift	ZB-5 Col Response	ZB35 Col RT	ZB35 Col Shift	ZB35 Col Response	ZB-5 on col	ZB35 on col	RPD	Compound
20.999	0.002	419390	22.968	0.001	573013	20.8143	20.3478	2.3	Pentachlorophenol
13.103	0.002	261364	14.313	0.002	313109	21.4712	21.6030	0.6	2,4,6-Trichlorophenol
14.099	0.002	249795	15.560	0.003	297315	21.8111	20.6851	5.3	2,3,6-Trichlorophenol
15.847	0.002	142426	17.476	0.002	175158	21.0491	21.6360	2.7	2,4,5-Trichlorophenol
17.354	0.002	182226	19.024	0.001	220578	21.8095	23.9827	9.5	2,3,4-Trichlorophenol
17.155	0.002	353209	18.816	0.002	460959	20.8916	21.0119	0.6	2,3,5,6-Tetrachlorophenol
20.157	0.002	280017	22.081	0.001	345838	21.5700	22.3963	3.8	2,3,4,5-Tetrachlorophenol
12.557	0.002	154019	13.822	0.002	166897	231.9359	235.4487	1.5	2,4-Dichlorophenol
18.598	0.002	326814	20.938	0.002	449994	20.8	21.4	3.1	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
Pentachlorophenol	83.3	81.4
2,4,6-Trichlorophenol	85.9	86.4
2,3,6-Trichlorophenol	87.2	82.7
2,4,5-Trichlorophenol	84.2	86.5
2,3,4-Trichlorophenol	87.2	95.9
2,3,5,6-Tetrachlorophenol	83.6	84.0
2,3,4,5-Tetrachlorophenol	86.3	89.6
2,4-Dichlorophenol	92.8	94.2
2,4,6-TBP (surr)	~~41.5~~ 83.0	42.8 ~~85.6~~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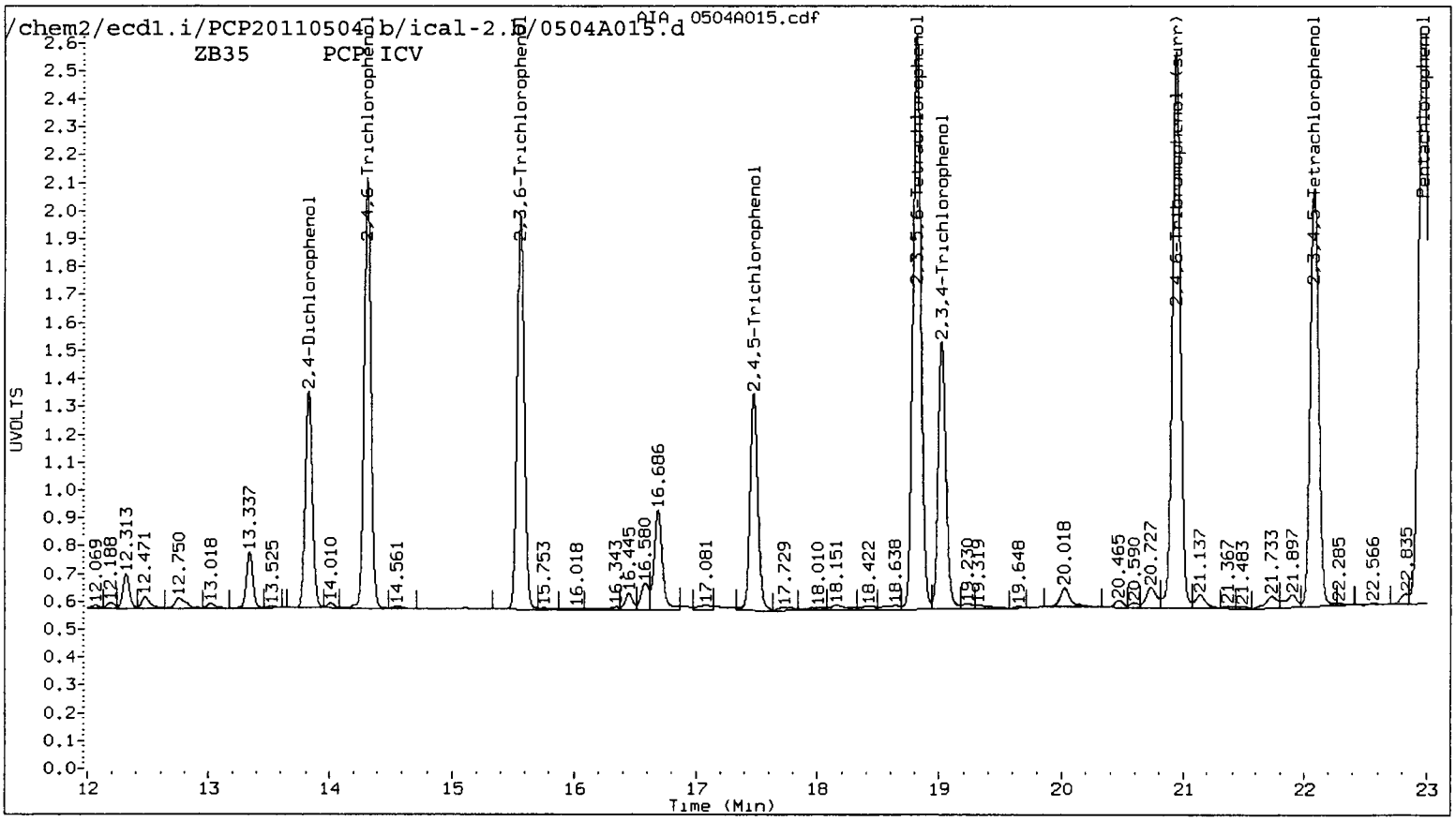
ZB-5 PCP ICV
UVOLTS
Time (Min)
12.062
12.357
2,4-Dichlorophenol
12.817
2,4,6-Trichlorophenol
13.733
2,3,6-Trichlorophenol
14.581
15.498
15.660
2,4,5-Trichlorophenol
16.070
17.010
2,3,5,6-Tetrachlorophenol
2,3,4-Trichlorophenol
17.624
17.981
18.449
2,4,6-Tribromophenol (surr)
18.830
19.110
19.274
19.397
19.600
19.979
2,3,4,5-Tetrachlorophenol
20.324
20.876
Pentachlorophenol
21.235
22.181
22.488
22.735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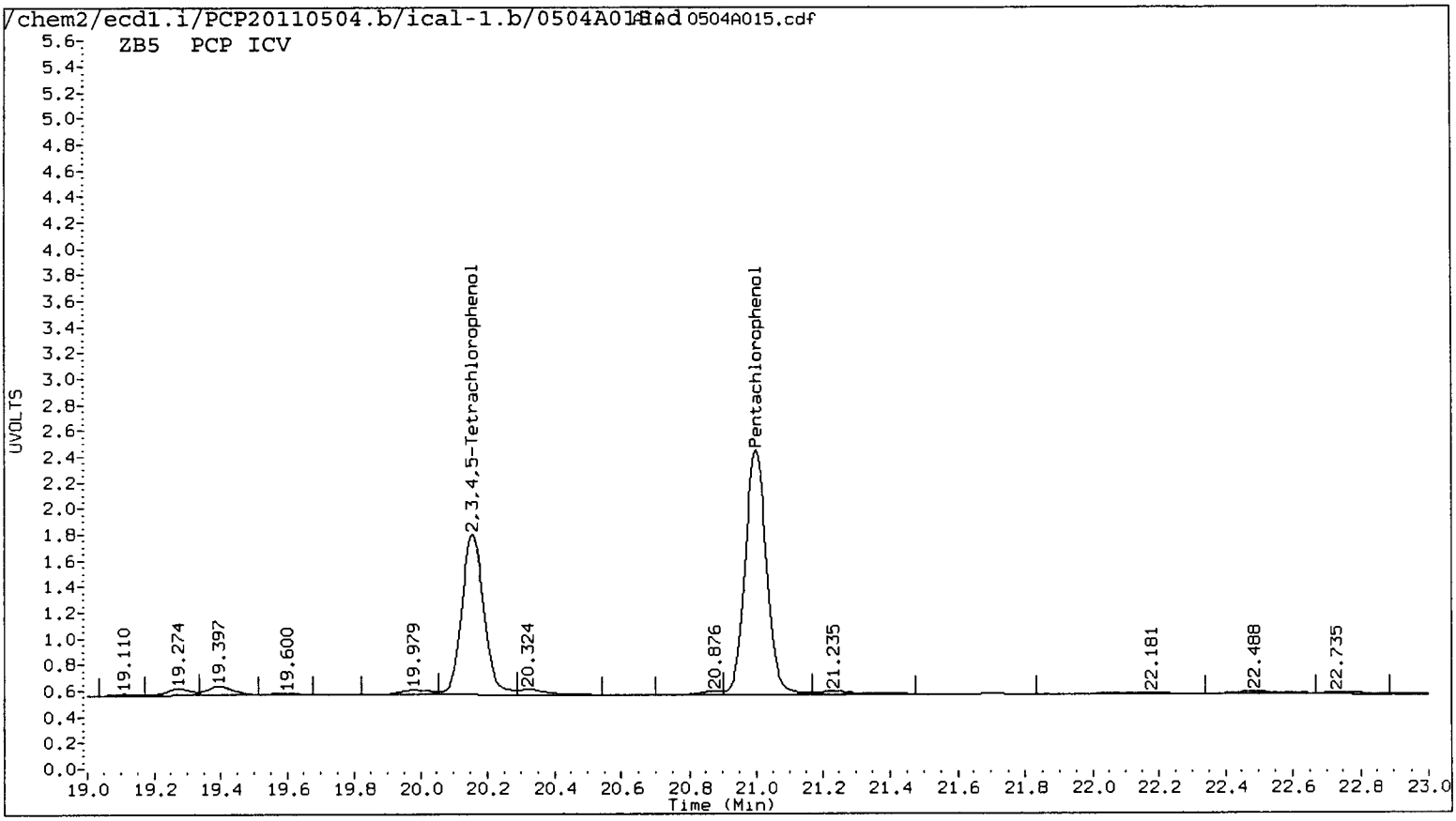
ZB35 PCP ICV
UVOLTS
Time (Min)
12.069
12.188
12.313
12.471
12.750
13.018
13.337
13.525
2,4-Dichlorophenol
14.010
2,4,6-Trichlorophenol
14.561
2,3,6-Trichlorophenol
15.753
16.018
16.343
16.445
16.580
16.686
17.081
2,4,5-Trichlorophenol
17.729
18.010
18.151
18.422
18.638
2,3,5,6-Tetrachlorophenol
2,3,4-Trichlorophenol
19.230
19.319
19.648
20.018
20.465
20.590
20.727
2,4,6-Tribromophenol (surr)
21.137
21.367
21.483
21.733
21.897
2,3,4,5-Tetrachlorophenol
22.285
22.566
22.835
Pentachlorophenol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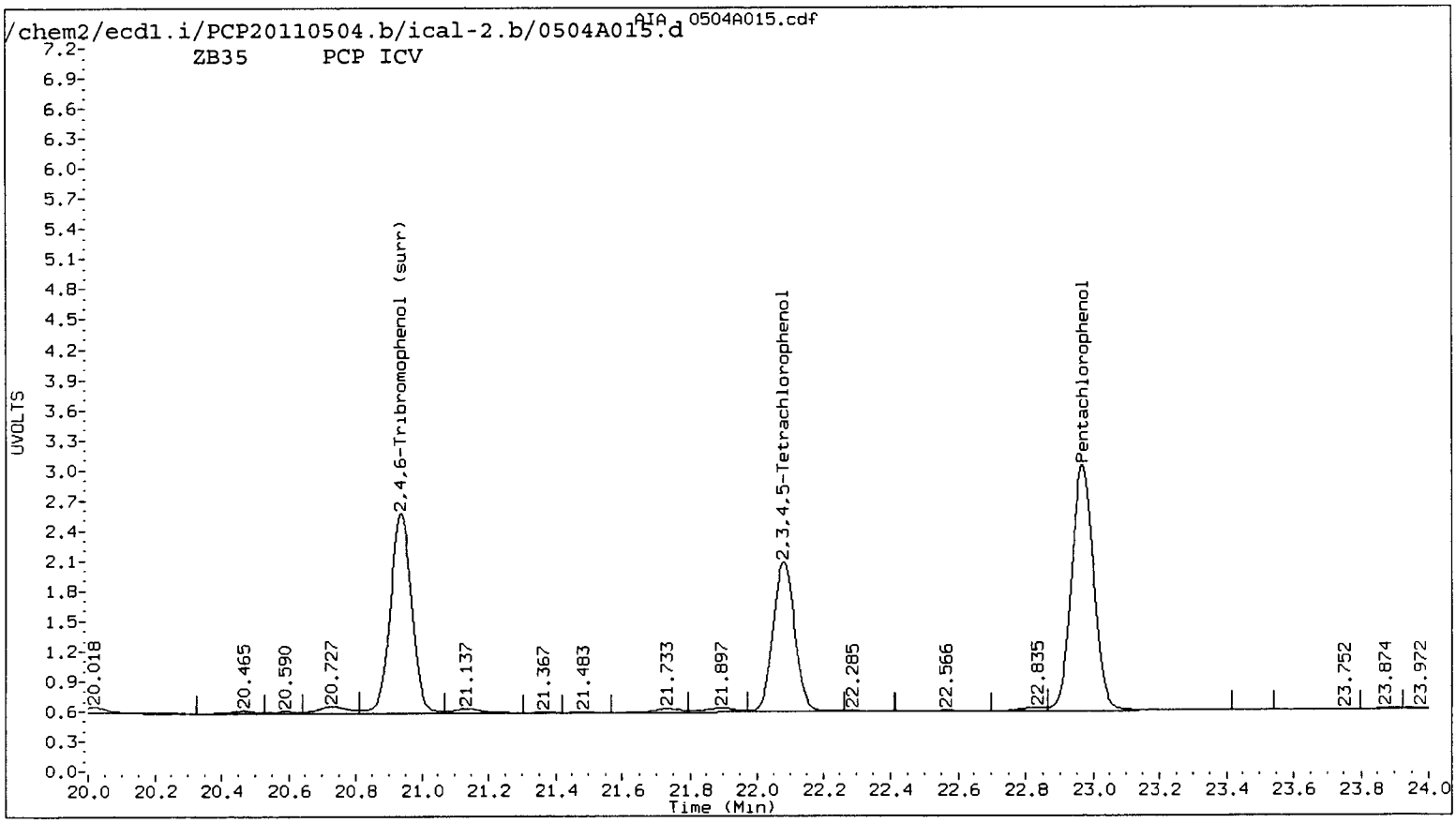
0504A015.cdf
ZB5 PCP ICV
UVOLTS
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
19.110
19.274
19.397
19.600
19.979
20.324
20.876
21.235
22.181
22.488
22.735
Time (Min)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0504A015.cdf
ZB35 PCP ICV
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
20.018
20.465
20.590
20.727
21.137
21.367
21.483
21.733
21.897
22.285
22.566
22.835
23.752
23.874
23.972
Time (Min)

Data File: /chem2/ecd1.i/PCP20110504.b/ical-1.b/0504A015.d

Page 1

Date : 04-MAY-2011 17:33

Client ID:

Instrument: ecd1.i

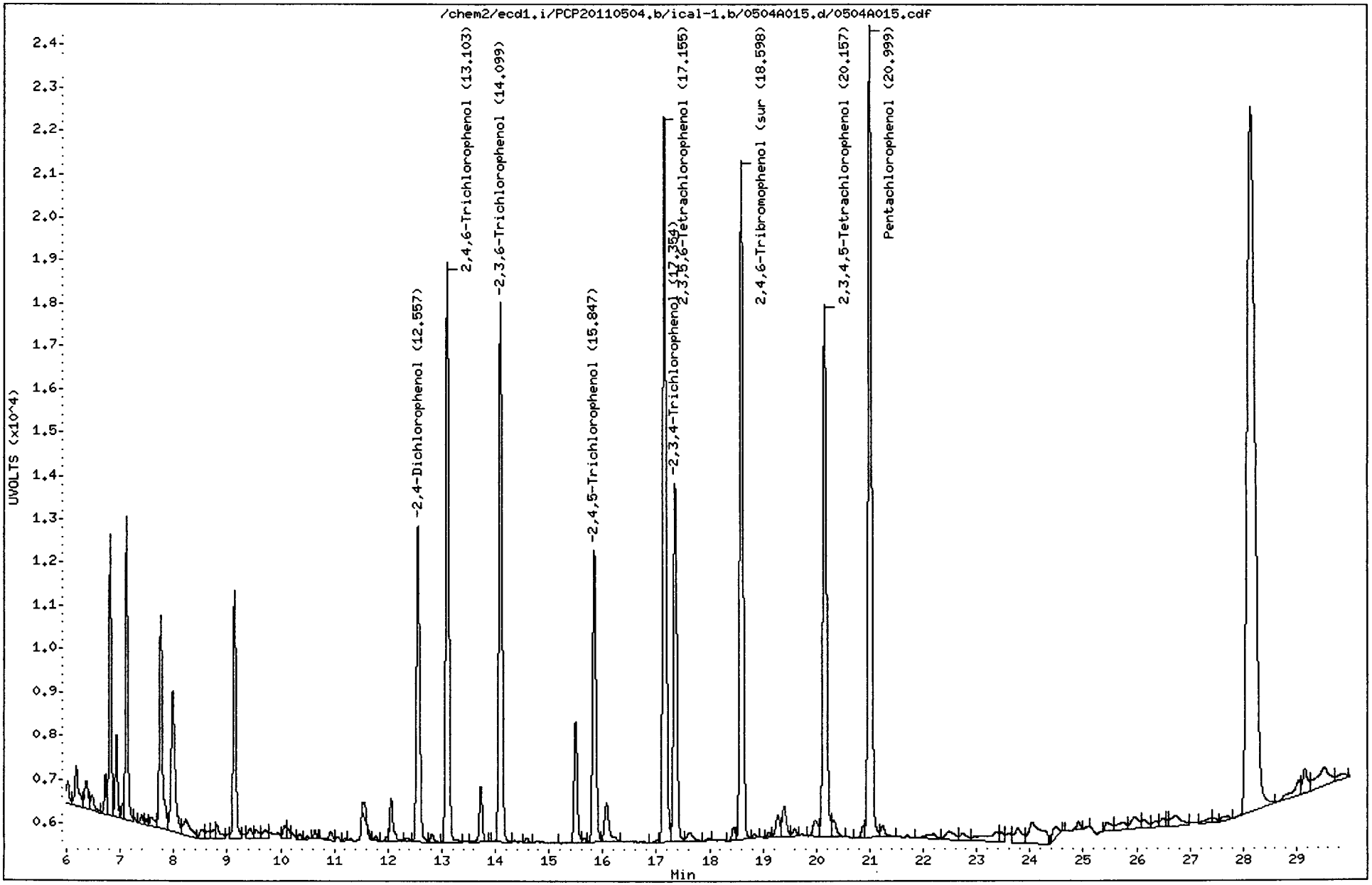
Sample Info: PCP ICV

Purge Volume: 500.0

Operator: ar

Column phase: STX CLP1

Column diameter: 0.53



Data File: /chem2/ecd1.i/PCP20110504.b/ical-2.b/0504A015.d

Date : 04-MAY-2011 17:33

Client ID:

Sample Info: PCP ICV

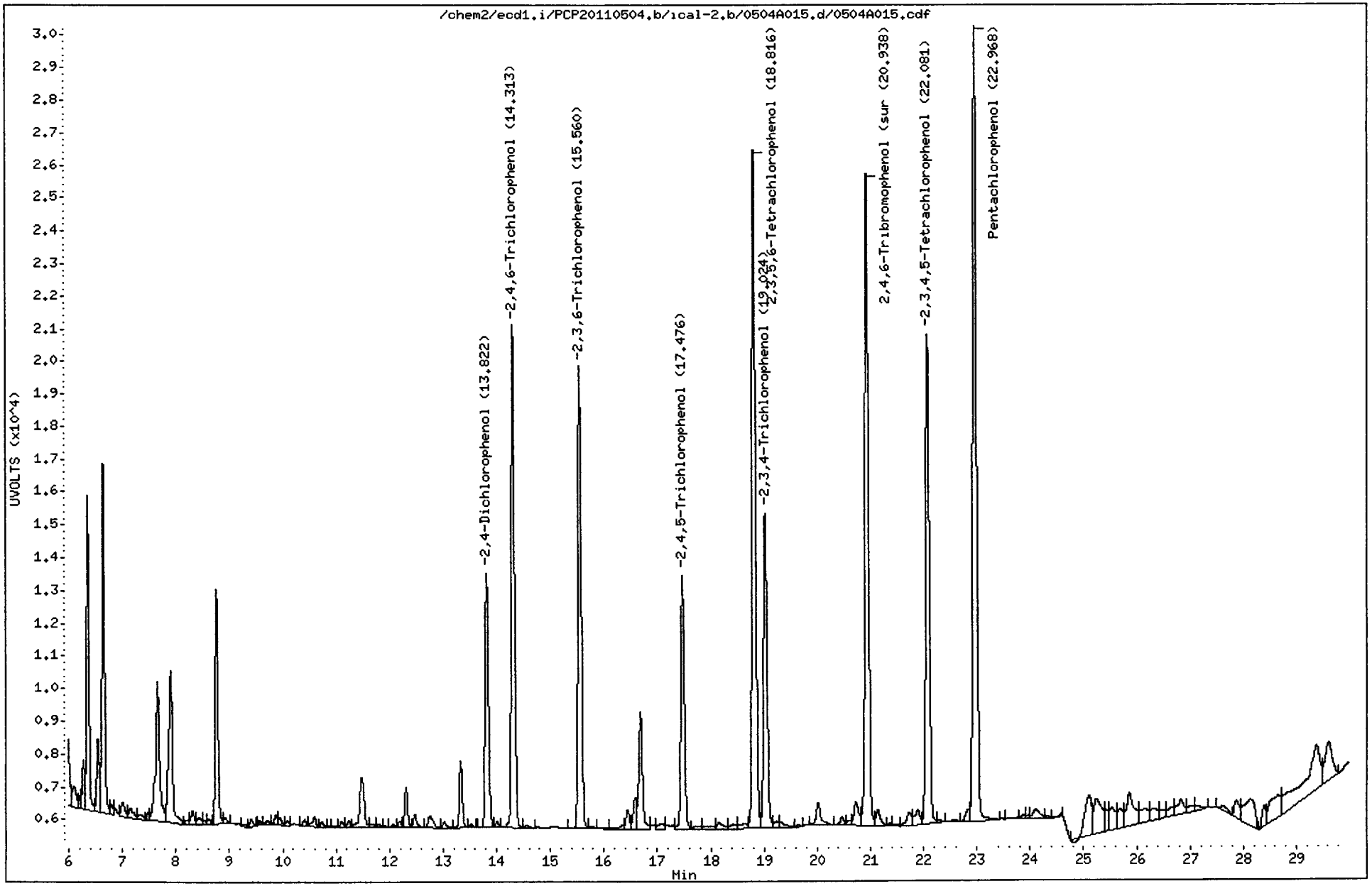
Purge Volume: 500.0

Column phase: STX CLP2

Instrument: ecd1.i

Operator: ar

Column diameter: 0.53



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

ARI Job ID: ST98, SU21

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC Analyst Notes / Corrective Action Log

ARI Project ID: ST98/su81 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): cl. Phenols, 500mL/50mL FV

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: 5/4/2011 Analysis Start: 5/12/2011

Endrin/DDT Breakdown <15%? YES / NO / NA
ICal Meets RF & %RSD Criteria? YES / NO
CCal Meets RF & %RSD Criteria? YES / NO (1)
Manual Integrations for ICal? YES / NO
Internal Standard Meets Criteria? YES / NO / NA

Method Blank In Control? YES / NO (1)
LCS/LCSD Recovery In Control? YES / NO (1)
Surrogate Recovery In Control? YES / NO
Manual Integrations for Samples? YES / NO
Special Analysis Criteria Met? YES / NO / NA
UDP Requested

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

(1) For requested cmpds
- No y-flags assigned

tional Details on Reverse: Yes / No

Date: 5/13/2011

Date: 5/13/11

6/18/10

Version 007

ST98:00709

Analytical Resources Inc.: Organics Instrument Log

ECD1 Serial No.: 3410A39690

Date: 5/13/2011 Analysis: PCP Analyst: AR

GC Program: 1HERB.M Column No: 922995/801682 Column Type: STXCLPI/2

Calibration File: PCP20110504.b Curve Date: 5/4/2011 Injection Vol.: 2µL

IS/SS	Ical/Ccal	LCS/ICV
	1796	1820-4

Document All Maintenance Tasks In StarLIMS

GC LOG SUMMARY FOR DATABATCH - /chem2/ecd1.i/PCP20110504.b/0512-1.b

	Inject Date/Time	Filename	DF	LabID	ClientID
1	12-MAY-2011 15:15	0512A001.d	1	RINSE	
2	12-MAY-2011 15:35	0512A002.d	1	RINSE	
3	12-MAY-2011 15:55	0512A003.d	1	RINSE	
4	12-MAY-2011 16:15	0512A004.d	1	PCP	
5	12-MAY-2011 16:52	0512A005.d	1	PCP CCAL – Passes	
6	12-MAY-2011 17:28	0512A006.d	1	ST99MBW1	ST99MBW1
7	12-MAY-2011 18:04	0512A007.d	1	ST99LCSW1	ST99LCSW1
8	12-MAY-2011 18:41	0512A008.d	1	ST99QLS	
9	12-MAY-2011 19:17	0512A009.d	1	ST99A	BLAIR 4/26/11
10	12-MAY-2011 19:53	0512A010.d	1	PCP	
11	12-MAY-2011 20:29	0512A011.d	1	PCP CCAL – Passes	
12	12-MAY-2011 21:06	0512A012.d	1	ST98A	MW02-042611
13	12-MAY-2011 21:42	0512A013.d	1	ST98B	MW03-042611
14	12-MAY-2011 22:18	0512A014.d	1	ST98C	MW13-042611
15	12-MAY-2011 22:55	0512A015.d	1	ST98D	MW06-042611
16	12-MAY-2011 23:31	0512A016.d	1	ST98DMS	MW06-042611 MS
17	13-MAY-2011 00:07	0512A017.d	1	ST98DMSD	MW06-042611 MSD
18	13-MAY-2011 00:43	0512A018.d	1	PCP	
19	13-MAY-2011 01:19	0512A019.d	1	PCP CCAL – Passes	
20	13-MAY-2011 01:55	0512A020.d	1	SU21A	MW07-042711
21	13-MAY-2011 02:32	0512A021.d	1	SU21B	MW11-042711
22	13-MAY-2011 03:08	0512A022.d	1	SU21C	MW10-042711
23	13-MAY-2011 03:44	0512A023.d	1	SU21D	MW09-042711
24	13-MAY-2011 04:20	0512A024.d	1	SU21E	MW08-042711
25	13-MAY-2011 04:56	0512A025.d	1	SU21F	MW12-042711
26	13-MAY-2011 05:33	0512A026.d	1	PCP	
27	13-MAY-2011 06:09	0512A027.d	1	PCP CCAL – Passes	

AR 5/13/2011

Every line must contain information or be lined out. Make all entries legible.
Start a new page for each QC period. Document All Maintenance Tasks In StarLIMS

Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

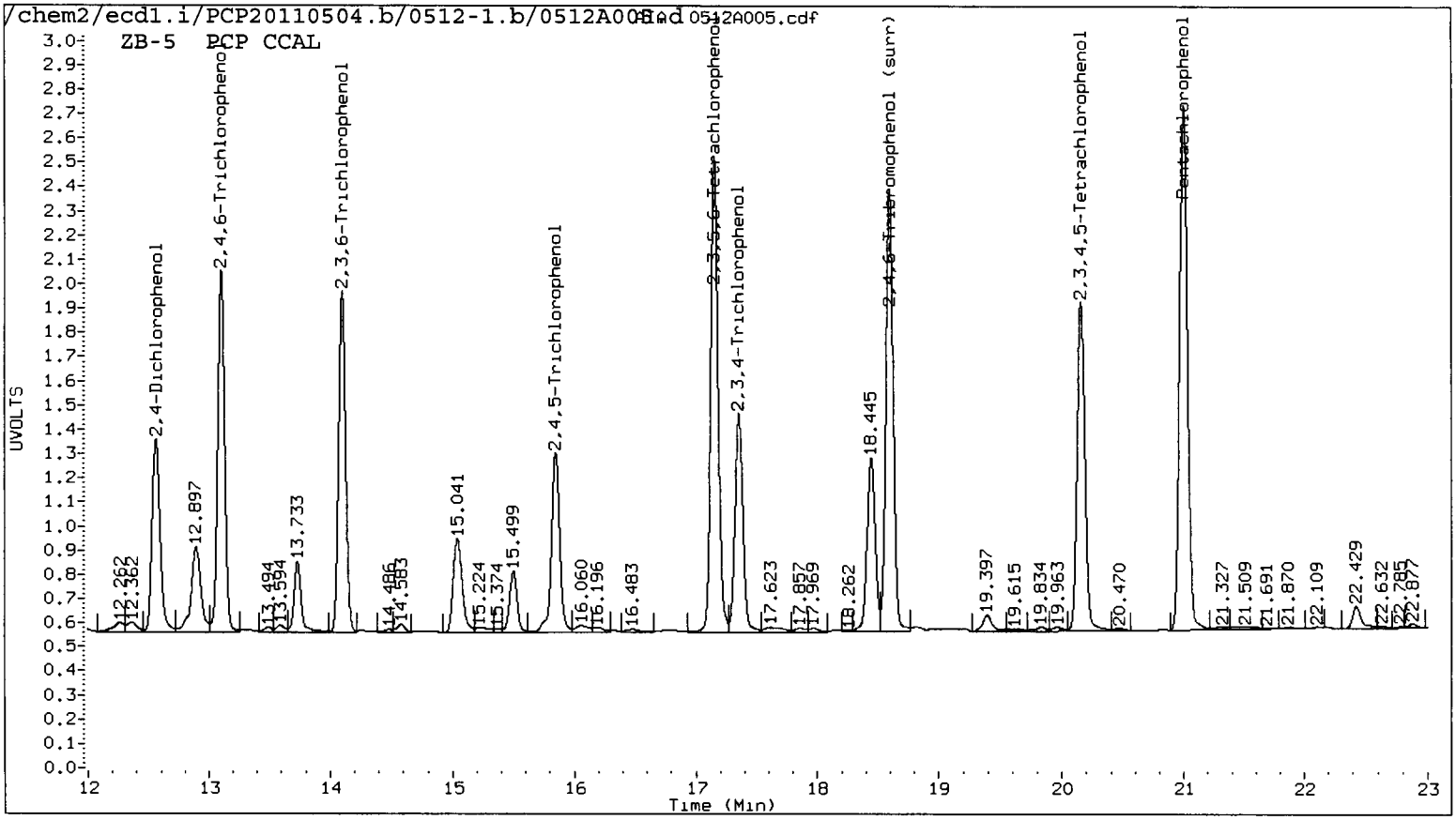
AR 5/13/2011

Data file 1: /chem2/ecd1.i/PCP20110504.b/0512-1.b/0512A005.d ARI ID: PCP CCAL
Data file 2: /chem2/ecd1.i/PCP20110504.b/0512-2.b/0512A005.d Client ID:
Method: /chem2/ecd1.i/PCP20110504.b/PCP.m Injection Date: 12-MAY-2011 16:52
Compound Sublist: all Report Date: 05/13/2011 09:33
Instrument: ecd1.i Matrix: WATER
Operator: ar Dilution Factor: 1.000

ZB-5 Col RT	Shift	Response	ZB35 Col RT	Shift	Response	ZB-5 on col	ZB35 on col	RPD	Compound
21.000	0.003	486986	22.970	0.003	628552	24.1691	22.3200	8.0	Pentachlorophenol
13.105	0.004	298096	14.315	0.004	345448	24.4887	23.8343	2.7	2,4,6-Trichlorophenol
14.100	0.003	280635	15.561	0.004	333296	24.5040	23.1884	5.5	2,3,6-Trichlorophenol
15.848	0.003	174385	17.477	0.003	188436	26.4875	23.2762	12.9	2,4,5-Trichlorophenol
17.354	0.003	203412	19.026	0.003	229741	24.3452	25.1082	3.1	2,3,4-Trichlorophenol
17.156	0.003	420051	18.817	0.003	518611	24.8453	23.6399	5.0	2,3,5,6-Tetrachlorophenol
20.157	0.003	308119	22.083	0.003	365153	23.7348	23.7777	0.2	2,3,4,5-Tetrachlorophenol
12.560	0.005	180138	13.824	0.004	175498	279.6048	250.1722	11.1	2,4-Dichlorophenol
18.599	0.003	393311	20.939	0.003	500283	25.0	23.8	4.9	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
Pentachlorophenol	96.7	89.3
2,4,6-Trichlorophenol	98.0	95.3
2,3,6-Trichlorophenol	98.0	92.8
2,4,5-Trichlorophenol	105.9	93.1
2,3,4-Trichlorophenol	97.4	100.4
2,3,5,6-Tetrachlorophenol	99.4	94.6
2,3,4,5-Tetrachlorophenol	94.9	95.1
2,4-Dichlorophenol	111.8	100.1
2,4,6-TBP (surr)	99.9	95.2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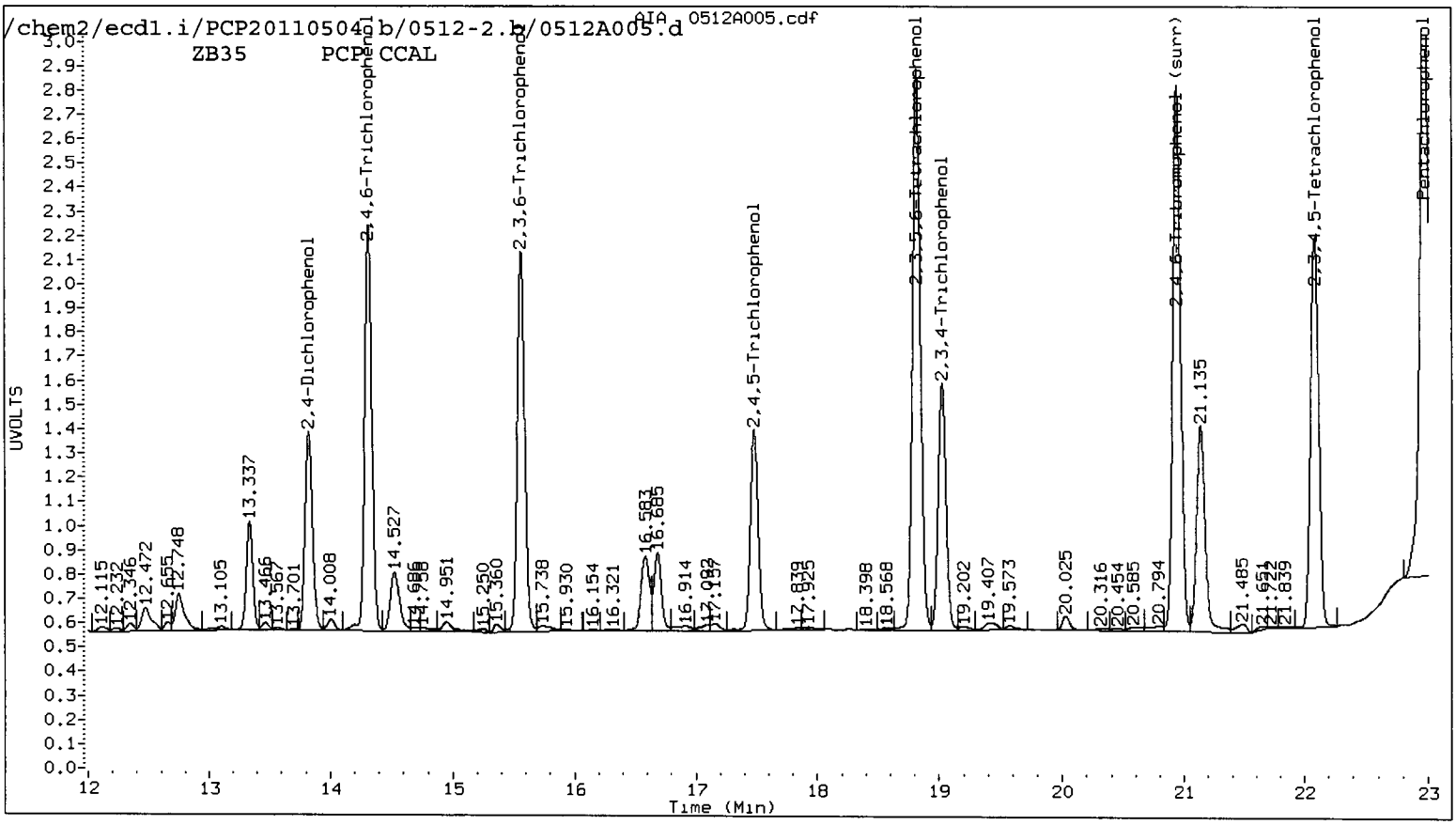
0512A005.cdf
ZB-5 PCP CCAL
UVOLTS
Time (Min)
2,4-Dichlorophenol
2,4,6-Trichlorophenol
2,3,6-Trichlorophenol
2,4,5-Trichlorophenol
2,3,4-Trichlorophenol
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
(surr)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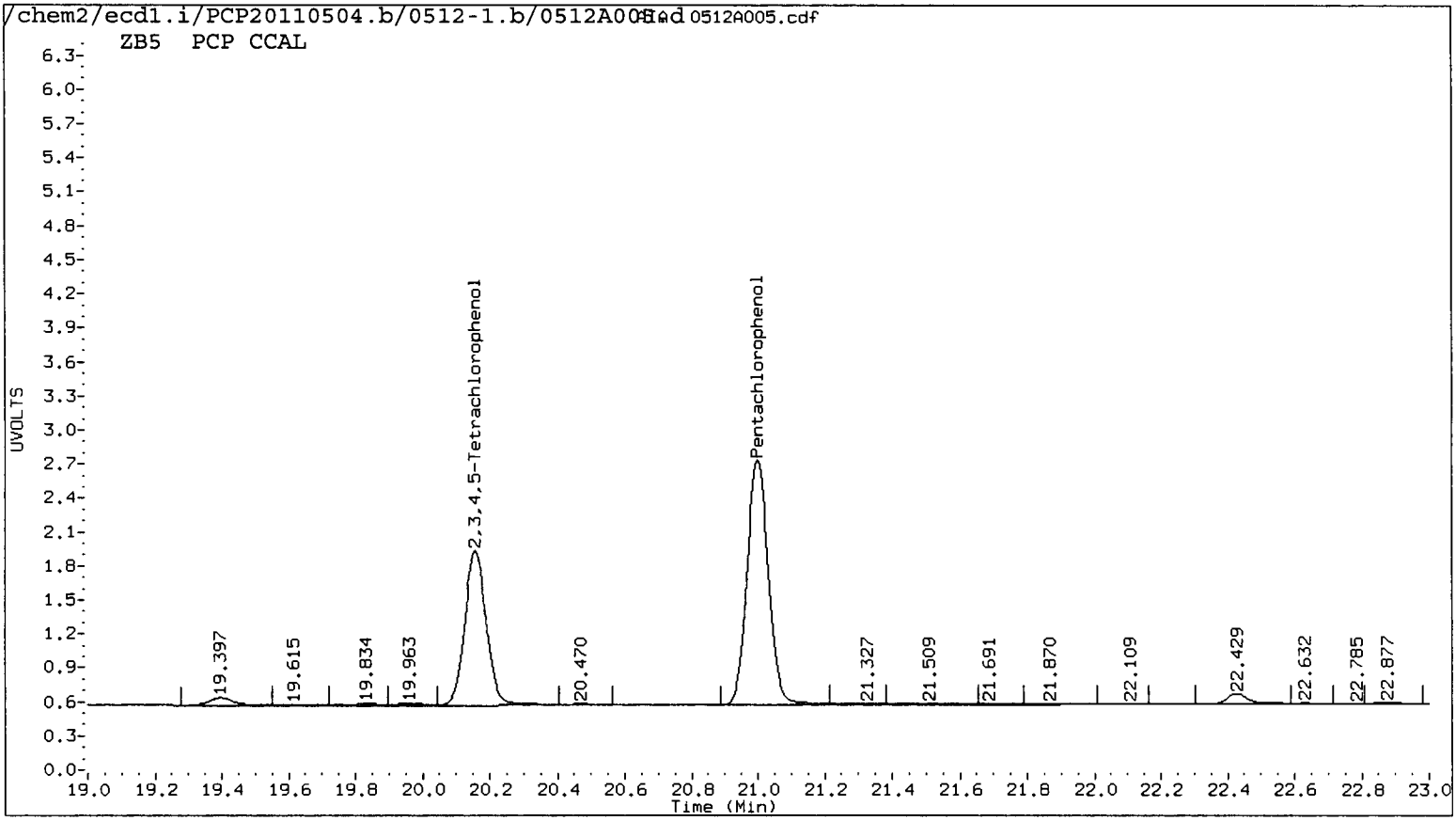
0512A005.cdf
ZB35 PCP CCAL
UVOLTS
Time (Min)
2,4-Dichlorophenol
2,4,6-Trichlorophenol
2,3,6-Trichlorophenol
2,4,5-Trichlorophenol
2,3,4-Trichlorophenol
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
(surr)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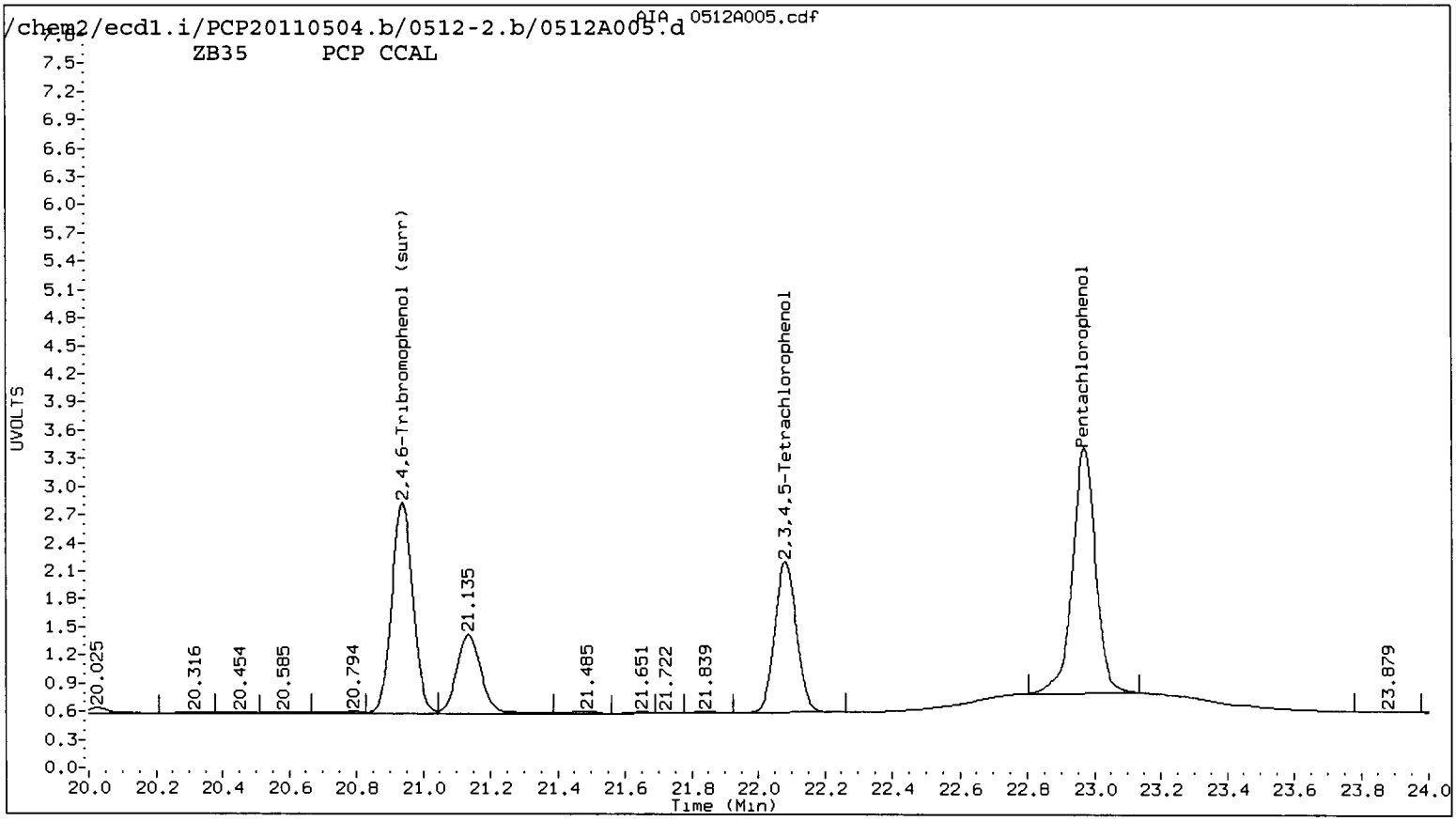
ZB5 PCP CCAL
UVOLTS
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
19.397
19.615
19.834
19.963
20.470
21.327
21.509
21.691
21.870
22.109
22.429
22.632
22.785
22.877
Time (Min)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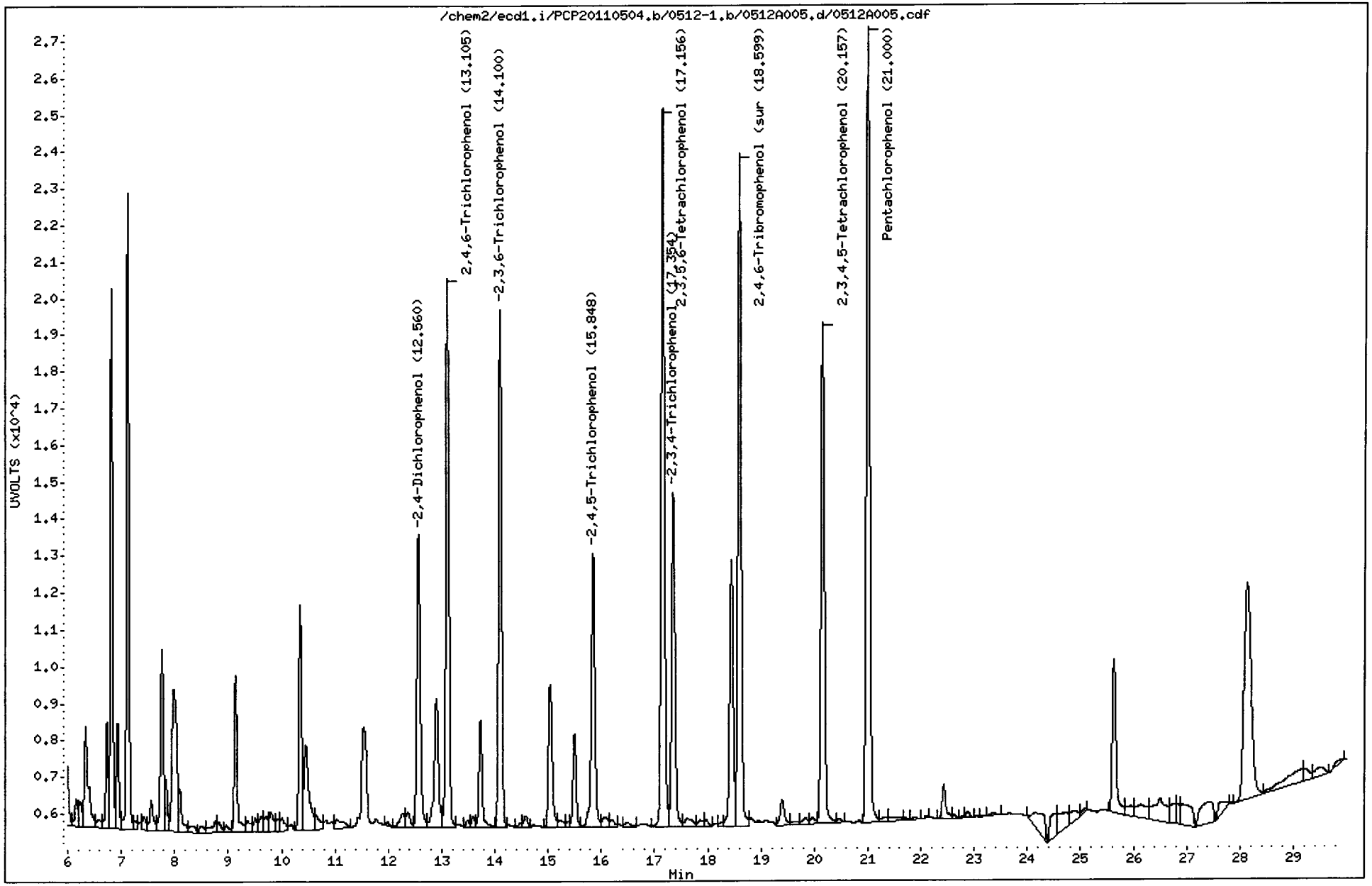
ZB35 PCP CCAL
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
20.025
20.316
20.454
20.585
20.794
21.135
21.485
21.651
21.722
21.839
23.879
Time (Min)

Data File: /chem2/ecd1.i/PCP20110504.b/0512-1.b/0512A005.d
Date : 12-MAY-2011 16:52
Client ID:
Sample Info: PCP CCAL
Purge Volume: 500.0
Column phase: STX CLP1

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



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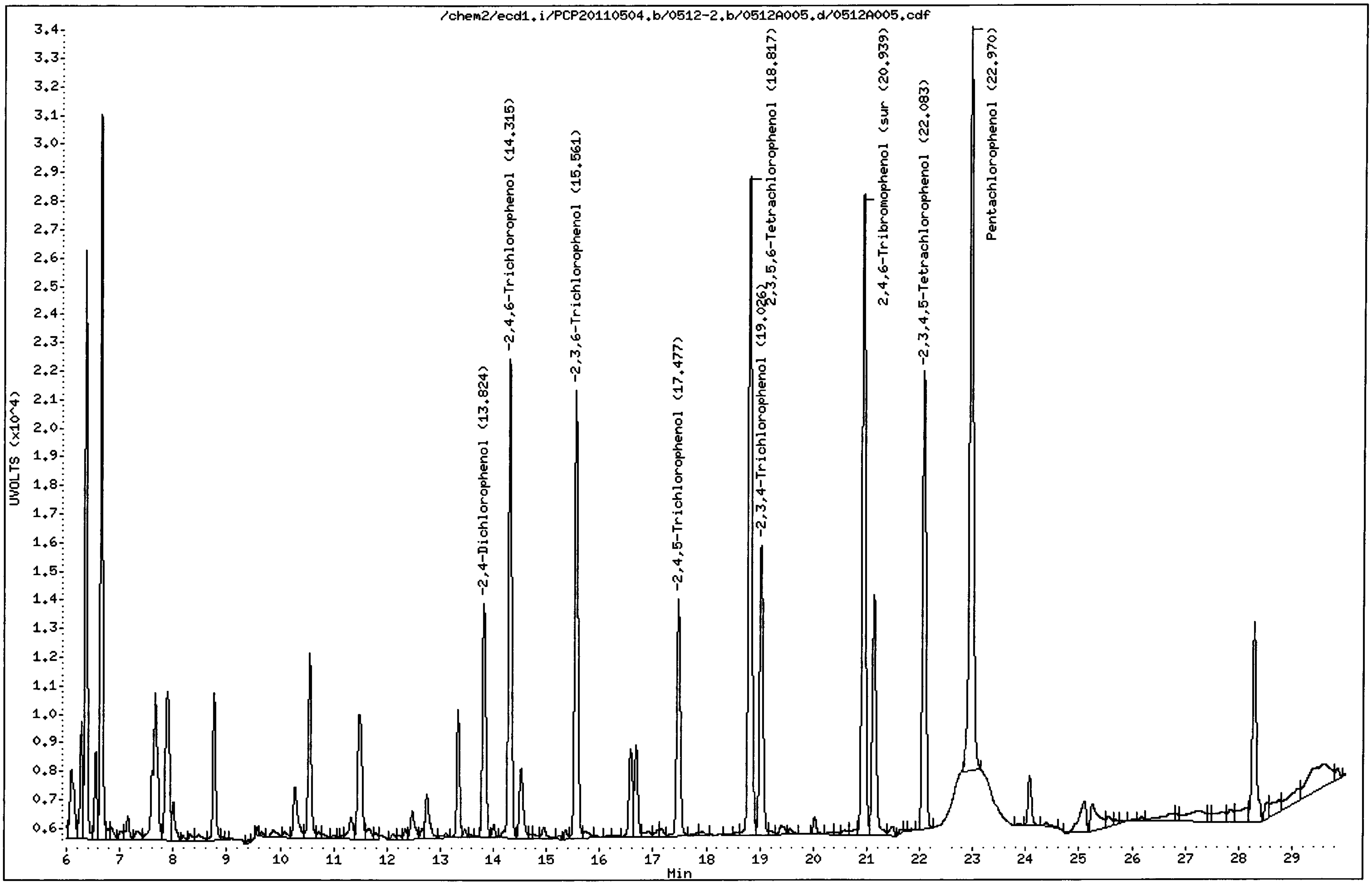
Date : 12-MAY-2011 16:52
Client ID: Instrument: ecd1.i
Sample Info: PCP CCAL
Purge Volume: 500.0 Operator: ar
Column phase: STX CLP2 Column diameter: 0.53



Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

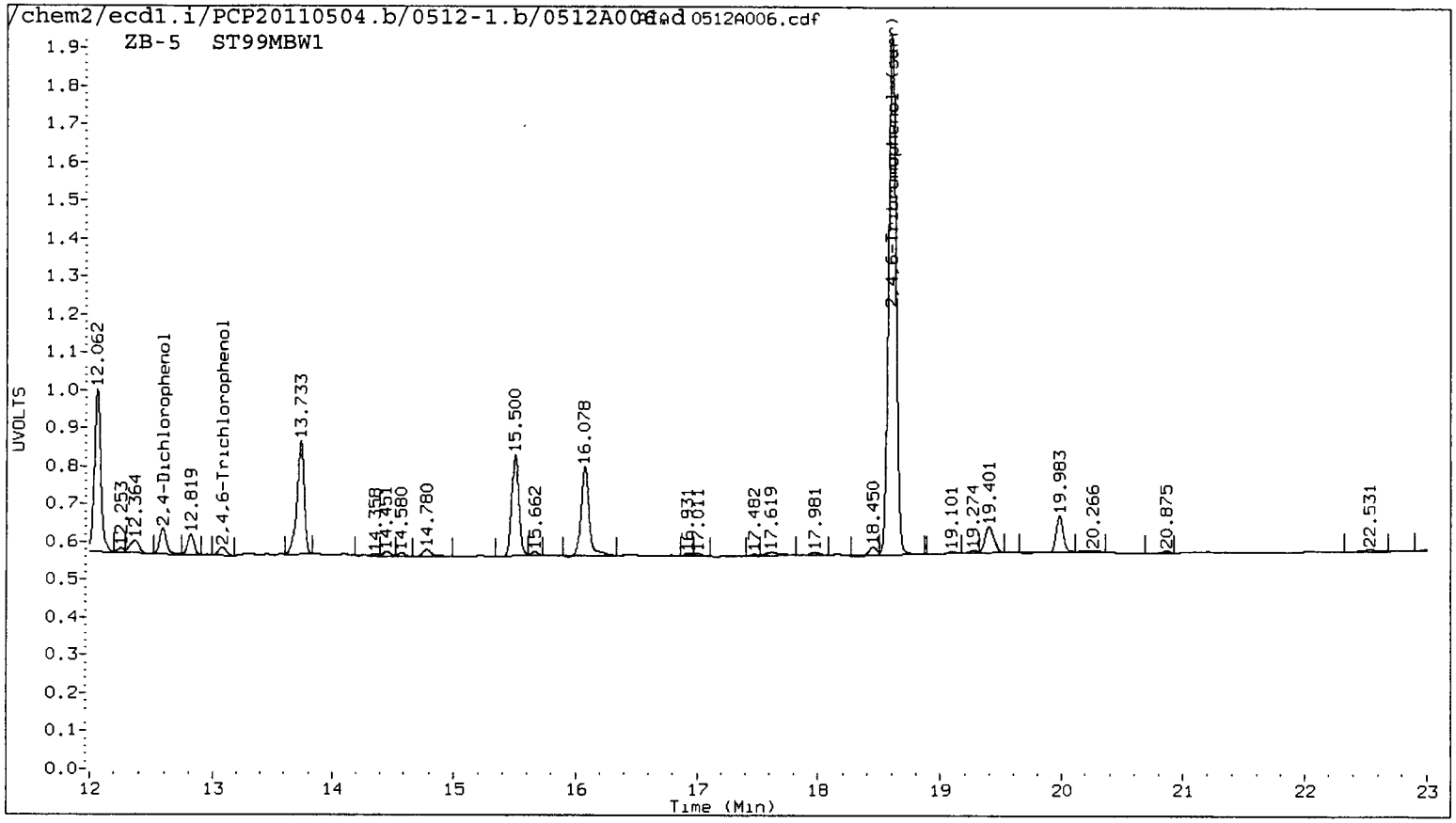
ARS 5/13/2011

Data file 1: /chem2/ecd1.i/PCP20110504.b/0512-1.b/0512A006.d ARI ID: ST99MBW1
Data file 2: /chem2/ecd1.i/PCP20110504.b/0512-2.b/0512A006.d Client ID: ST99MBW1
Method: /chem2/ecd1.i/PCP20110504.b/PCP.m Injection Date: 12-MAY-2011 17:28
Compound Sublist: all Report Date: 05/13/2011 09:31
Instrument: ecd1.i Matrix: WATER
Operator: ar Dilution Factor: 1.000

ZB-5 Col RT	ZB-5 Col Shift	ZB-5 Col Response	ZB35 Col RT	ZB35 Col Shift	ZB35 Col Response	ZB-5 on col	ZB35 on col	RPD	Compound
----			23.026	0.059	6681	0.0000	0.2373 LRV	---	Pentachlorophenol
13.076	-0.025	4826	14.364	0.053	1298	0.3965	0.0896	126.3*	2,4,6-Trichlorophenol
----			----			0.0000	0.0000	---	2,3,6-Trichlorophenol
----			----			0.0000	0.0000	---	2,4,5-Trichlorophenol
----			----			0.0000	0.0000	---	2,3,4-Trichlorophenol
----			18.850	0.036	2578	0.0000	0.1175	---	2,3,5,6-Tetrachlorophenol
----			----			0.0000	0.0000	---	2,3,4,5-Tetrachlorophenol
12.589	0.034	13552	----			17.0356	0.0000	---	2,4-Dichlorophenol
18.601	0.005	288778	20.942	0.006	377590	18.3	18.0	2.1	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	73.4	71.8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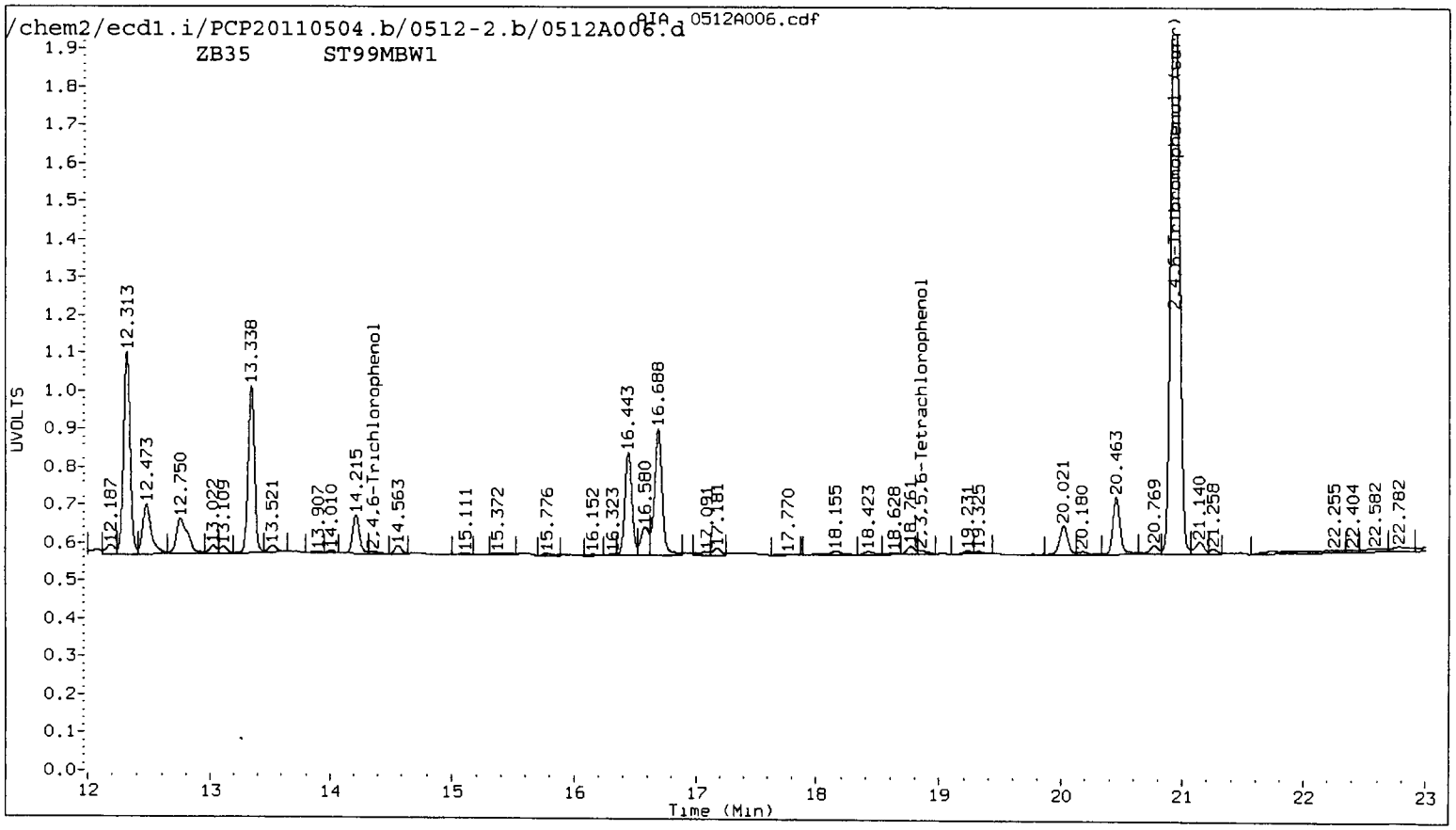
ZB-5 ST99MBW1
UVOLTS
Time (Min)
12.062
2,4-Dichlorophenol
12.819
2,4,6-Trichlorophenol
13.733
15.500
16.078
2,4,6-Tribromophenol (surr)
19.983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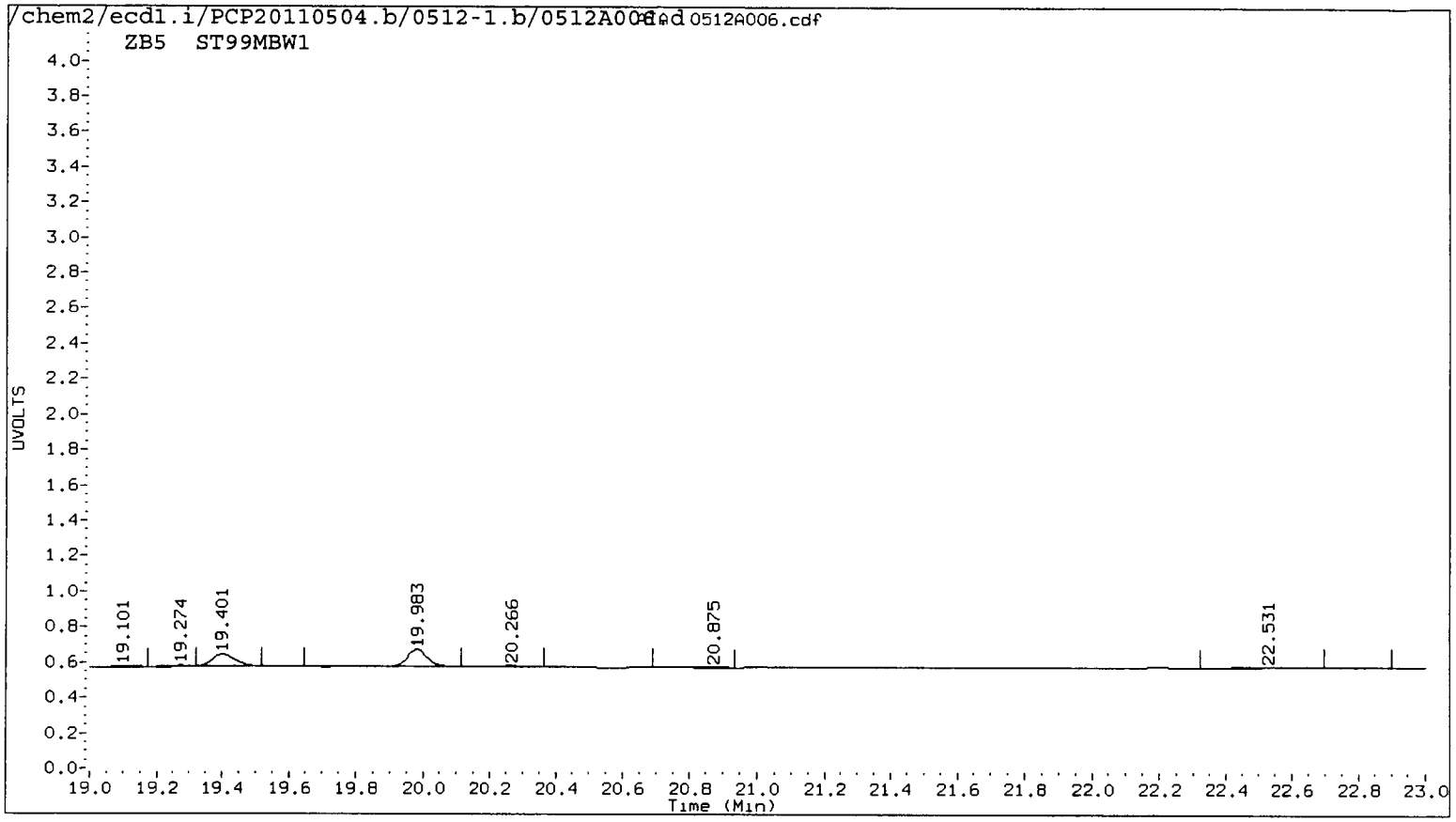
ZB35 ST99MBW1
UVOLTS
Time (Min)
12.313
12.473
12.750
13.338
14.215
2,4,6-Trichlorophenol
16.443
16.688
2,3,5,6-Tetrachlorophenol
2,4,6-Tribromophenol (surr)
20.463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ZB5 ST99MBW1
UVOLTS
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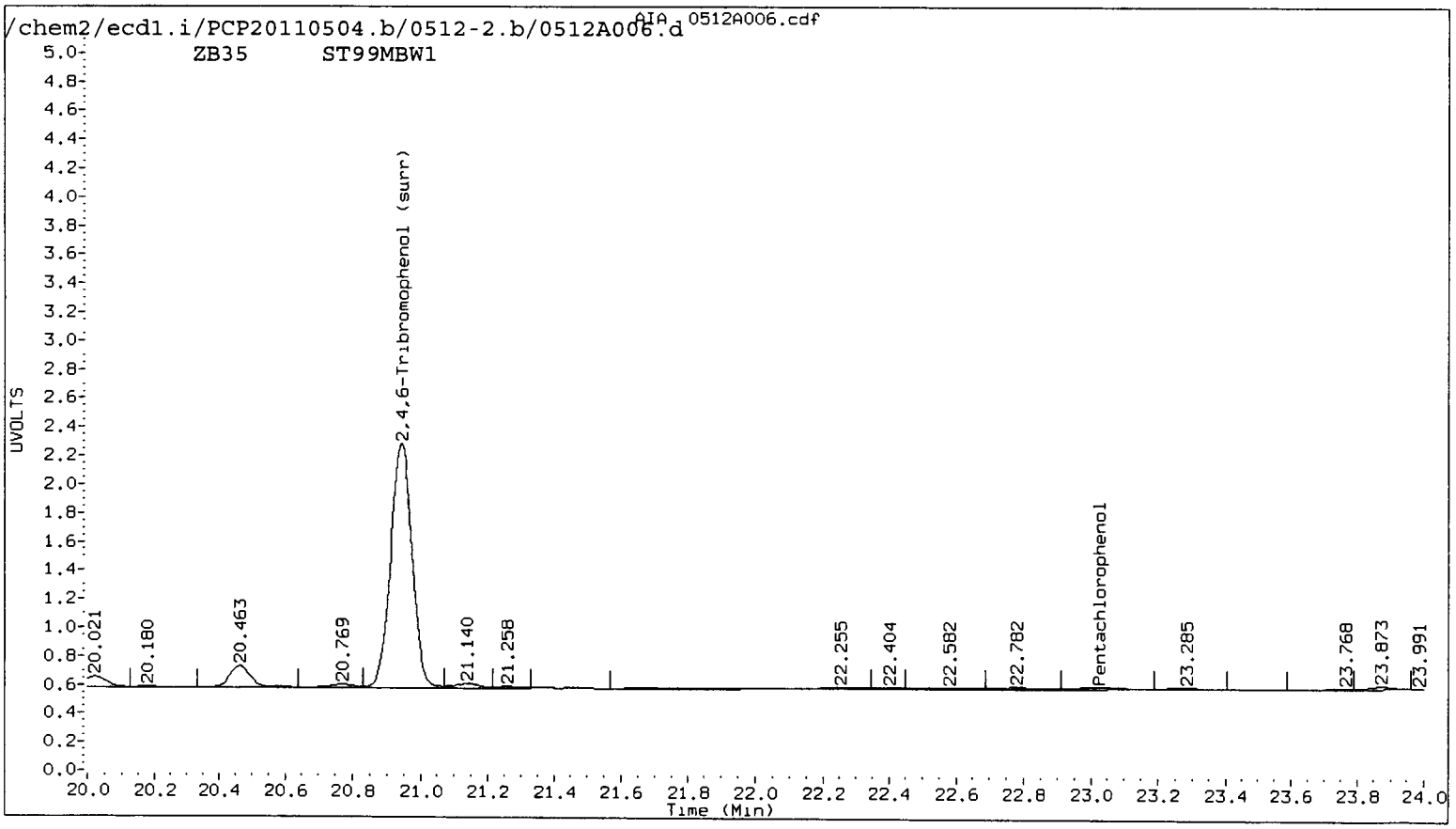
19.274
19.401
19.983
20.266
20.875
22.531
Time (Min)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0512A006.cdf
ZB35 ST99MBW1
UVOLTS
20.021
20.180
20.463
20.769
2,4,6-Tribromophenol (surr)
21.140
21.258
22.255
22.404
22.582
22.782
Pentachlorophenol
23.285
23.768
23.873
23.991
Time (Min)

Data File: /chem2/ecd1.i/PCP20110504.b/0512-1.b/0512A006.d

Page 1

Date : 12-MAY-2011 17:28

Client ID: ST99MBW1

Instrument: ecd1.i

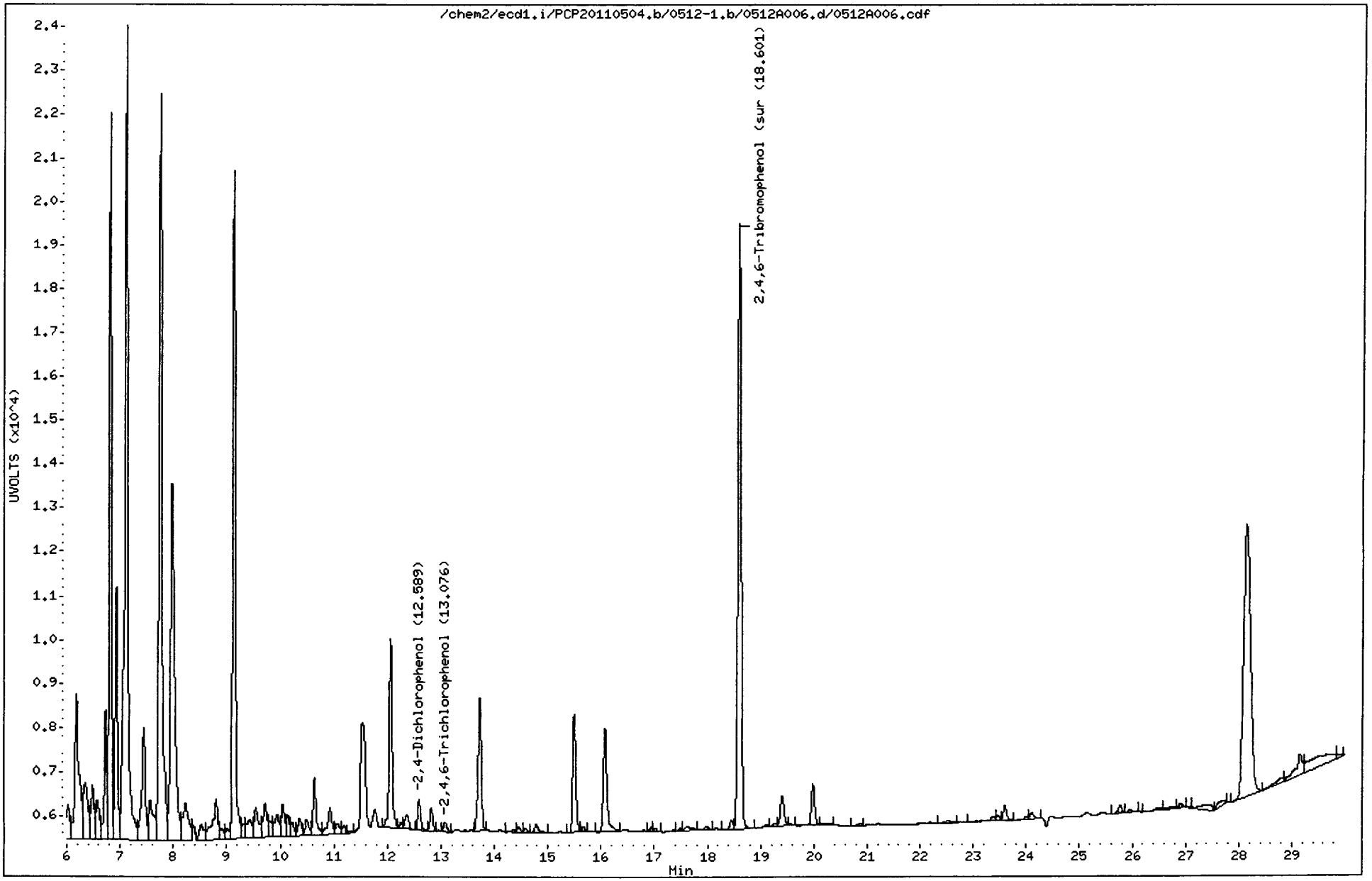
Sample Info: ST99MBW1

Purge Volume: 500.0

Operator: ar

Column phase: STX CLP1

Column diameter: 0.53



ST99:00719

Data File: /chem2/ecd1.i/PCP20110504.b/0512-2.b/0512A006.d

Page 1

Date : 12-MAY-2011 17:28

Client ID: ST99MBW1

Instrument: ecd1.i

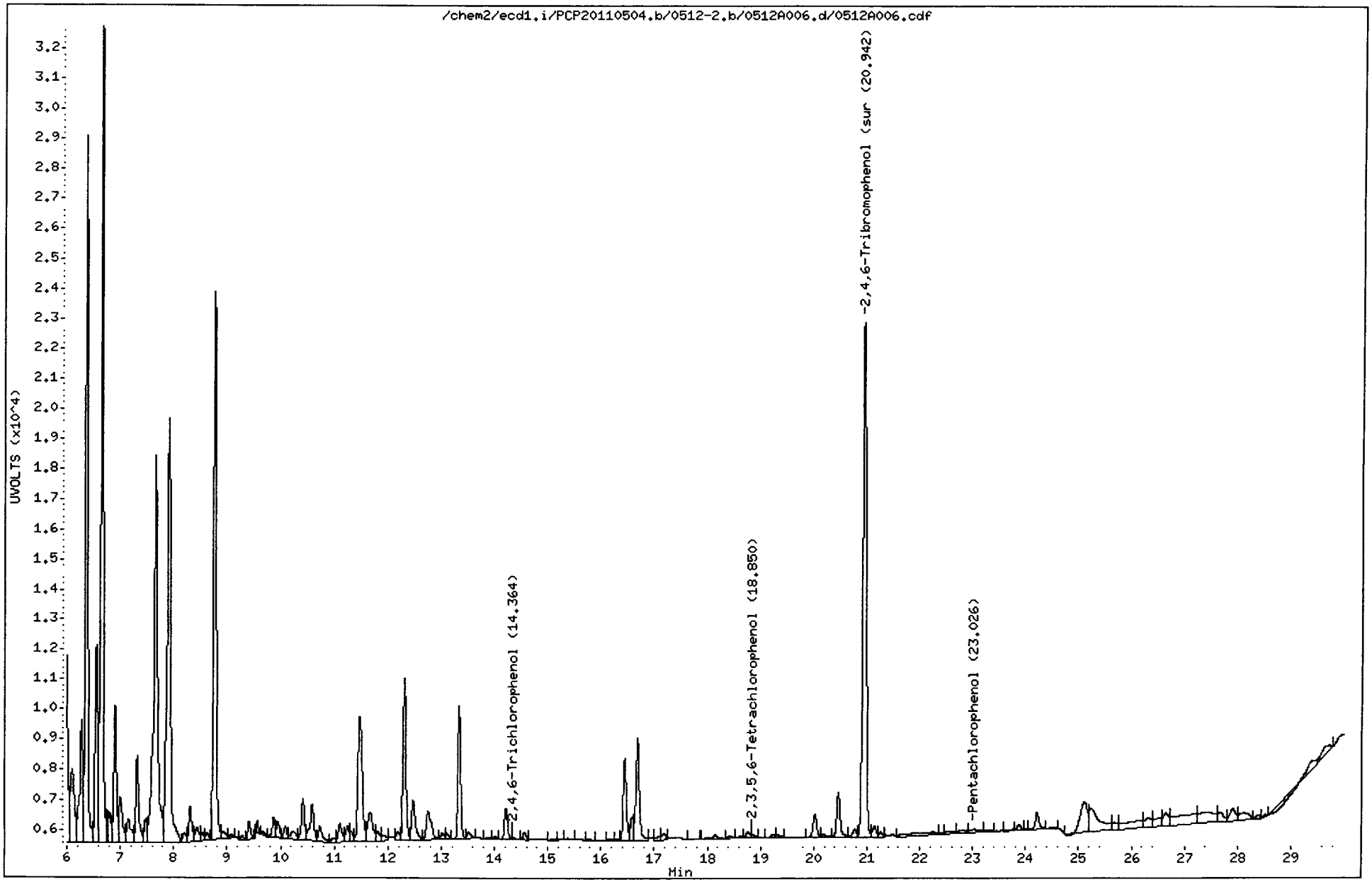
Sample Info: ST99MBW1

Purge Volume: 500.0

Operator: ar

Column phase: STX CLP2

Column diameter: 0.53



ST99:00720

Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

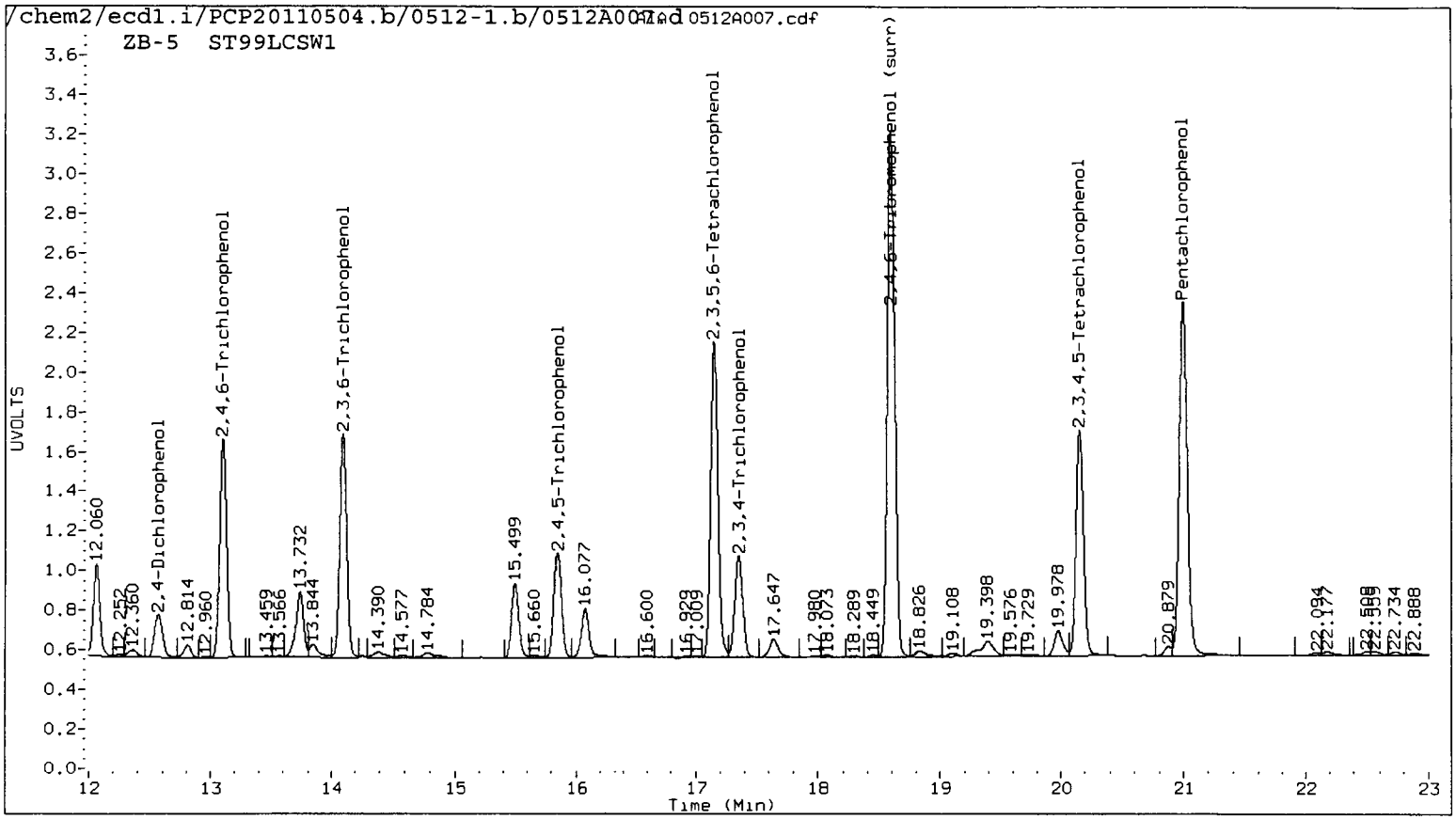
AR 5/13/2011

Data file 1: /chem2/ecd1.i/PCP20110504.b/0512-1.b/0512A007.d ARI ID: ST99LCSW1
Data file 2: /chem2/ecd1.i/PCP20110504.b/0512-2.b/0512A007.d Client ID: ST99LCSW1
Method: /chem2/ecd1.i/PCP20110504.b/PCP.m Injection Date: 12-MAY-2011 18:04
Compound Sublist: all Report Date: 05/13/2011 09:31
Instrument: ecd1.i Matrix: WATER
Operator: ar Dilution Factor: 1.000

ZB-5 Col RT	ZB-5 Col Shift	ZB-5 Col Response	ZB35 Col RT	ZB35 Col Shift	ZB35 Col Response	ZB-5 on col	ZB35 on col	RPD	Compound
21.001	0.004	405445	22.971	0.004	511086	20.1222	18.1488	10.3	Pentachlorophenol
13.104	0.003	215083	14.314	0.003	255553	17.6692	17.6320	0.2	2,4,6-Trichlorophenol
14.100	0.003	227247	15.561	0.004	275049	19.8424	19.1360	3.6	2,3,6-Trichlorophenol
15.849	0.004	111104	17.478	0.004	130396	15.9736	16.1069	0.8	2,4,5-Trichlorophenol
17.355	0.004	112735	19.027	0.004	133272	13.4926	13.7760	2.1	2,3,4-Trichlorophenol
17.156	0.003	335664	18.817	0.003	435906	19.8539	19.8699	0.1	2,3,5,6-Tetrachlorophenol
20.158	0.004	253252	22.084	0.004	311035	19.5083	19.9422	2.2	2,3,4,5-Tetrachlorophenol
12.565	0.010	49485	13.824	0.004	43746	65.3548	52.4748	21.9	2,4-Dichlorophenol
18.599	0.003	556252	20.940	0.004	708541	35.3	33.7	4.7	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
Pentachlorophenol	80.5	72.6
2,4,6-Trichlorophenol	70.7	70.5
2,3,6-Trichlorophenol	79.4	76.5
2,4,5-Trichlorophenol	63.9	64.4
2,3,4-Trichlorophenol	54.0	55.1
2,3,5,6-Tetrachlorophenol	79.4	79.5
2,3,4,5-Tetrachlorophenol	78.0	79.8
2,4-Dichlorophenol	26.1	21.0
2,4,6-TBP (surr)	70.7	67.4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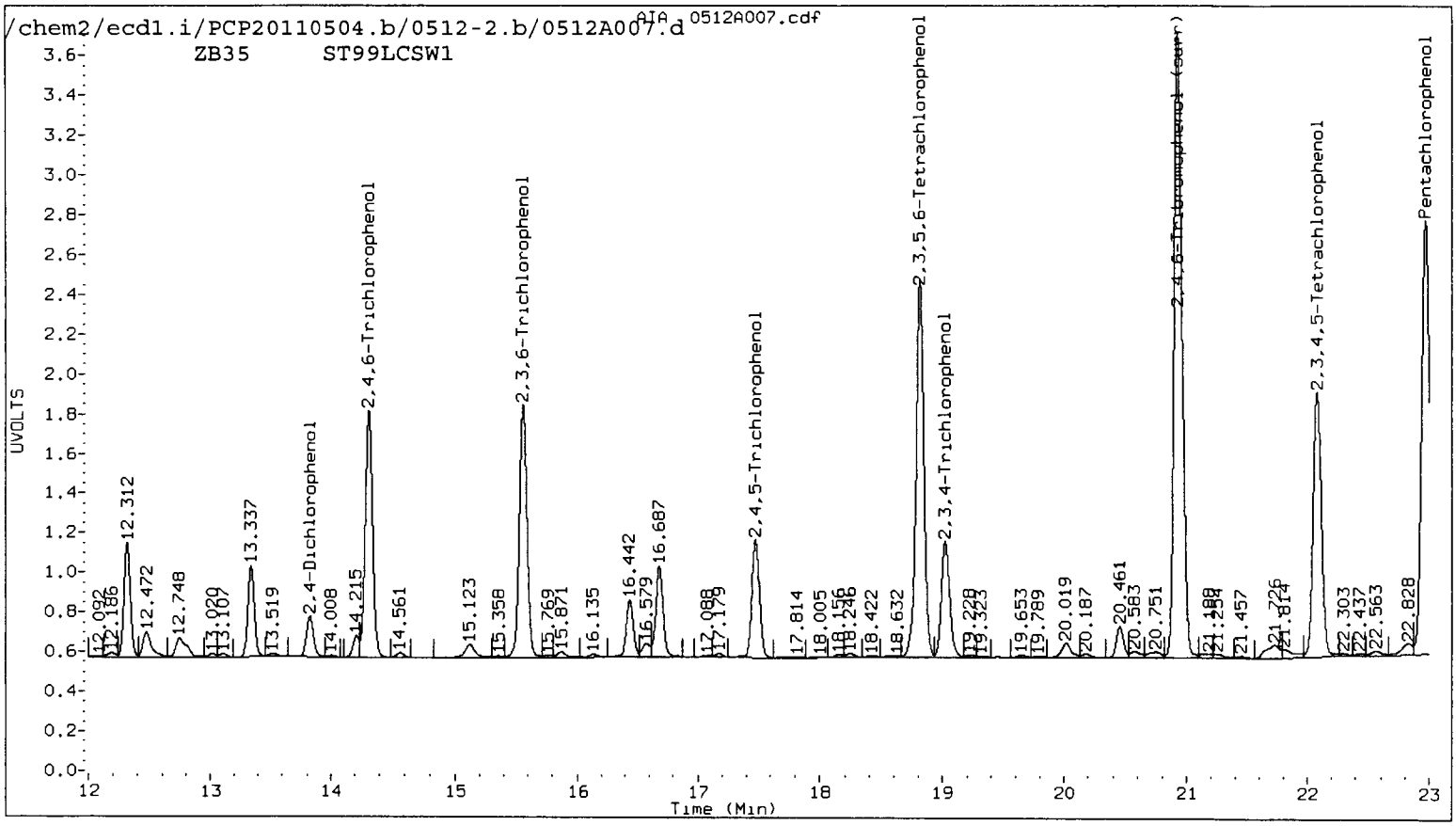
ZB-5 ST99LCSW1
UVOLTS
Time (Min)
12.060
2,4-Dichlorophenol
2,4,6-Trichlorophenol
2,3,6-Trichlorophenol
2,4,5-Trichlorophenol
2,3,5,6-Tetrachlorophenol
2,3,4-Trichlorophenol
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol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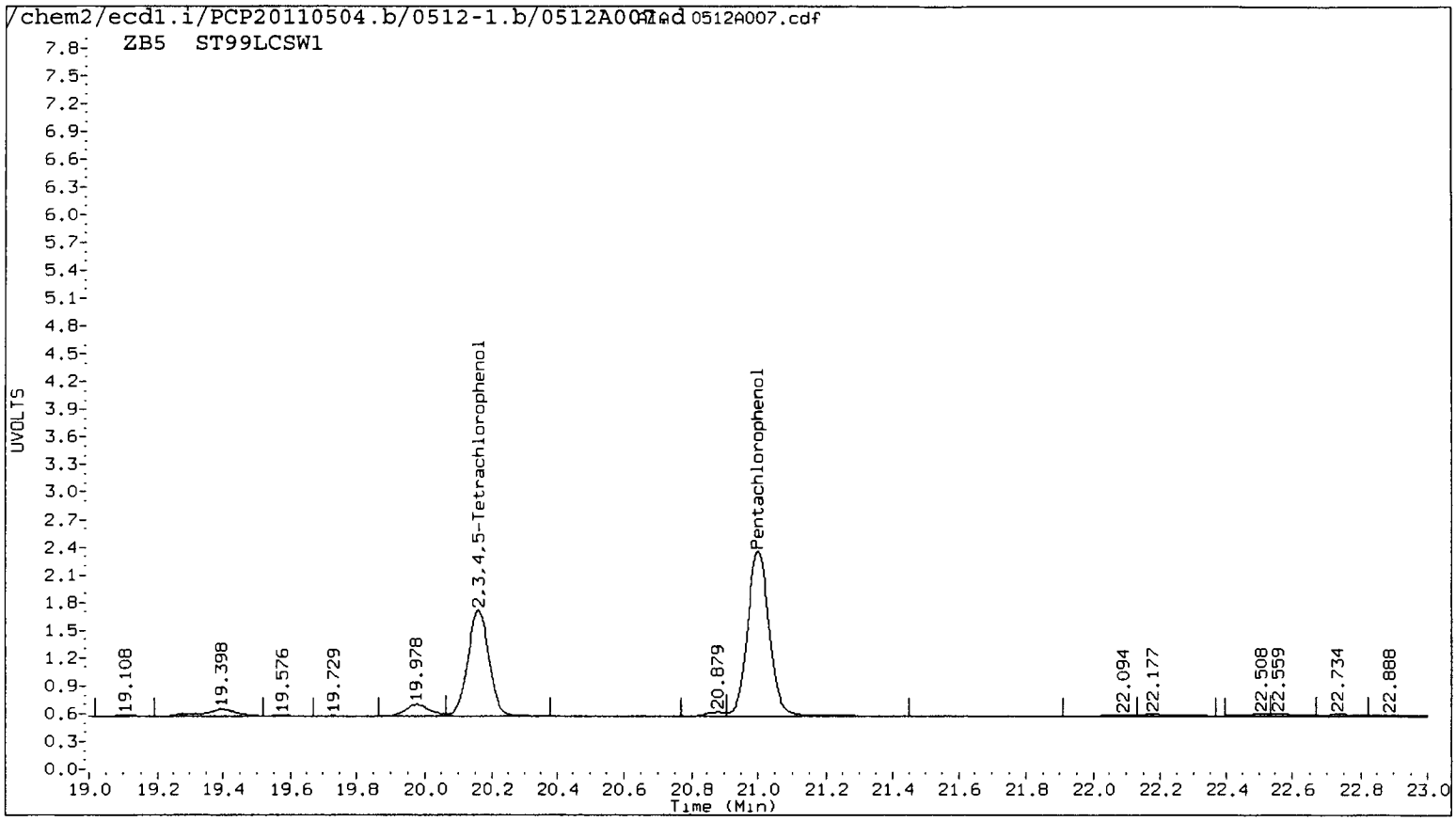
ZB35 ST99LCSW1
UVOLTS
Time (Min)
12.312
2,4-Dichlorophenol
2,4,6-Trichlorophenol
2,3,6-Trichlorophenol
2,4,5-Trichlorophenol
2,3,5,6-Tetrachlorophenol
2,3,4-Trichlorophenol
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol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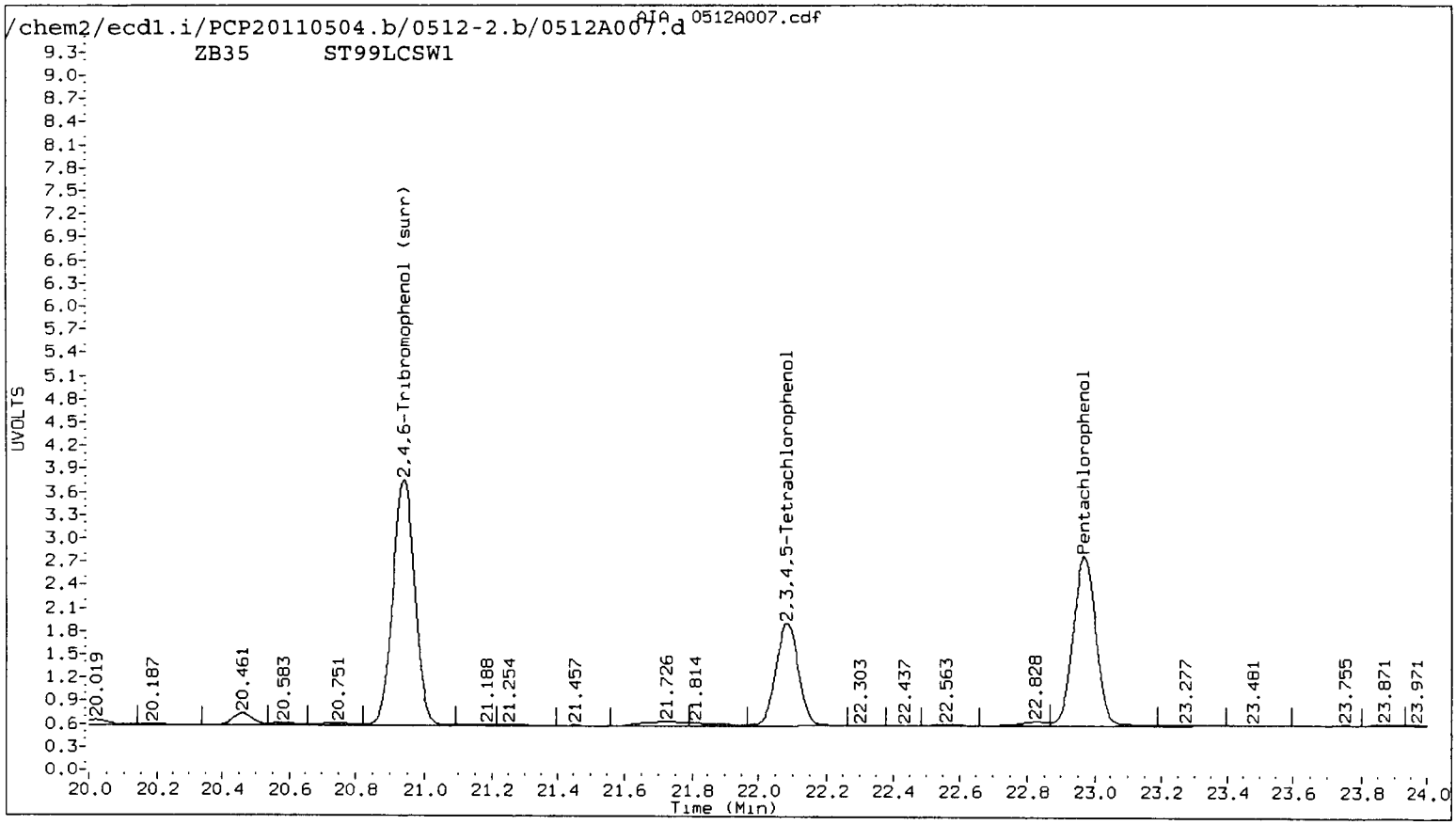
AIA 0512A007.cdf
ZB5 ST99LCSW1
UVOLTS
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
19.108
19.398
19.576
19.729
19.978
20.879
22.094
22.177
22.508
22.559
22.734
22.888
Time (Min)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AIA 0512A007.cdf
ZB35 ST99LCSW1
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
20.019
20.187
20.461
20.583
20.751
21.188
21.254
21.457
21.726
21.814
22.303
22.437
22.563
22.828
23.277
23.481
23.755
23.871
23.971
Time (Min)

Data File: /chem2/ecd1.i/PCP20110504.b/0512-1.b/0512A007.d

Page 1

Date : 12-MAY-2011 18:04

Client ID: ST99LCSW1

Instrument: ecd1.i

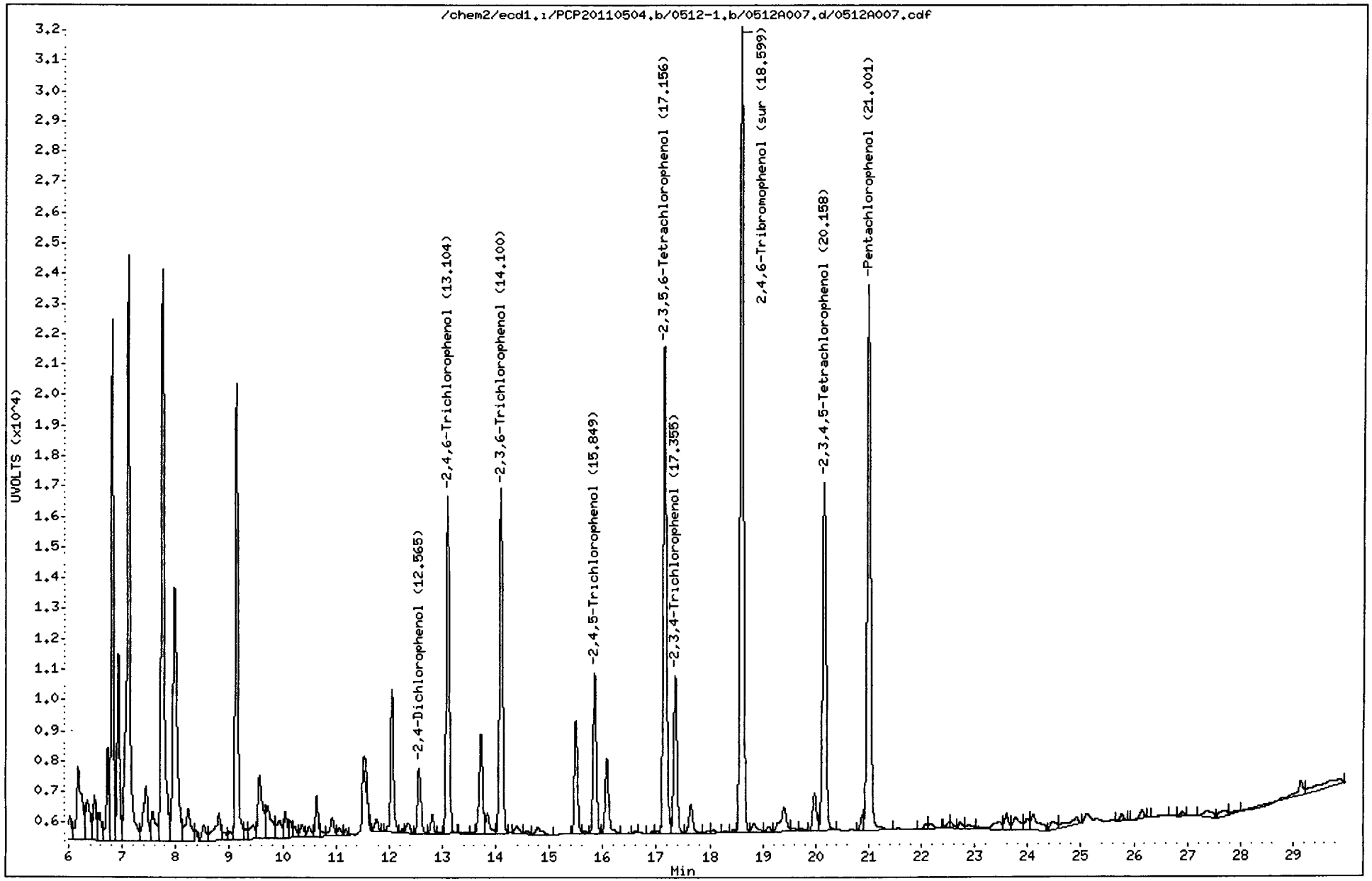
Sample Info: ST99LCSW1

Purge Volume: 500.0

Operator: ar

Column phase: STX CLP1

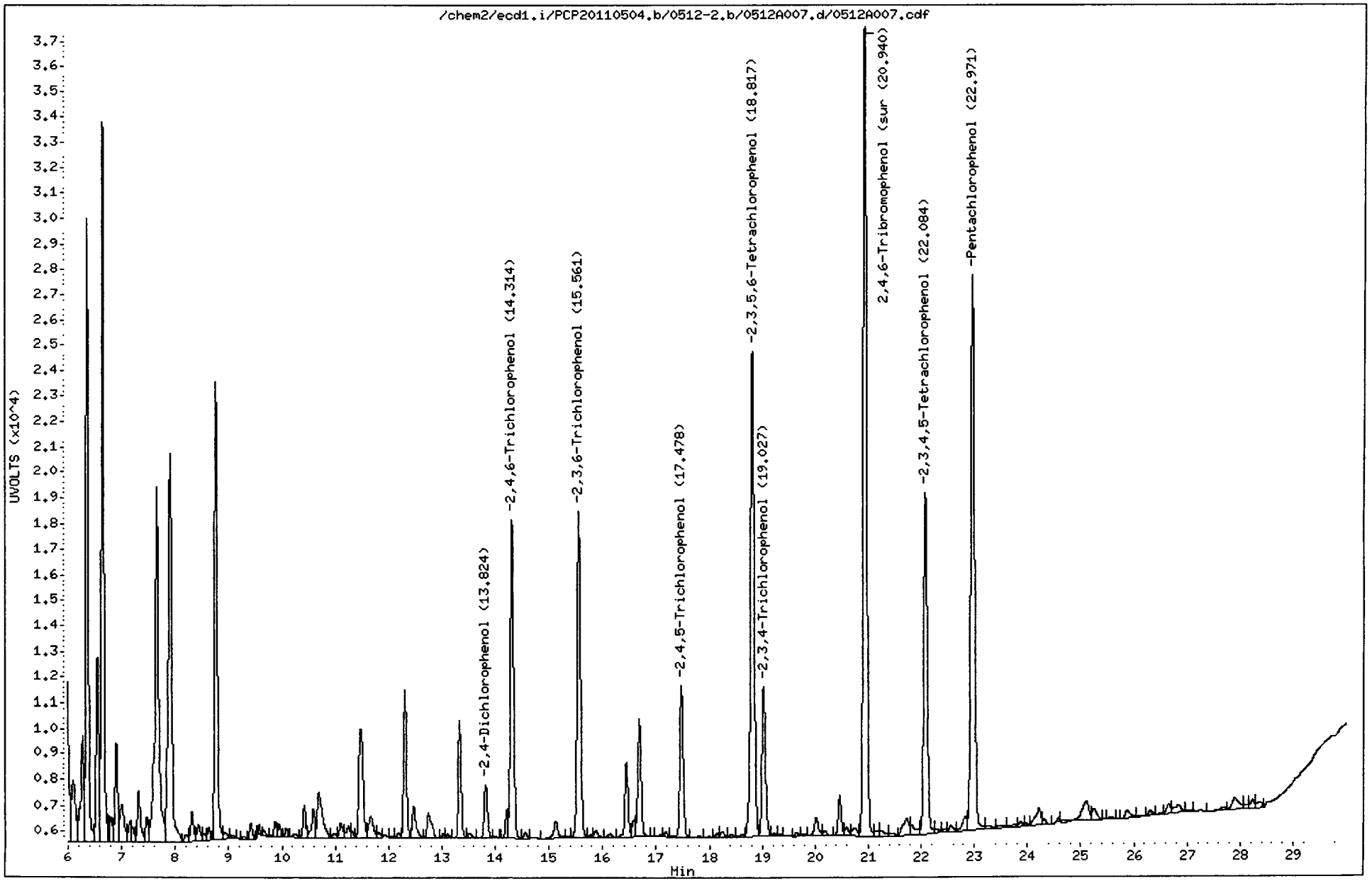
Column diameter: 0.53



ST99:0512h

Data File: /chem2/ecd1.i/PCP20110504.b/0512-2.b/0512A007.d
Date : 12-MAY-2011 18:04
Client ID: ST99LCSW1
Sample Info: ST99LCSW1
Purge Volume: 500.0
Column phase: STX CLP2

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



ST98:00725

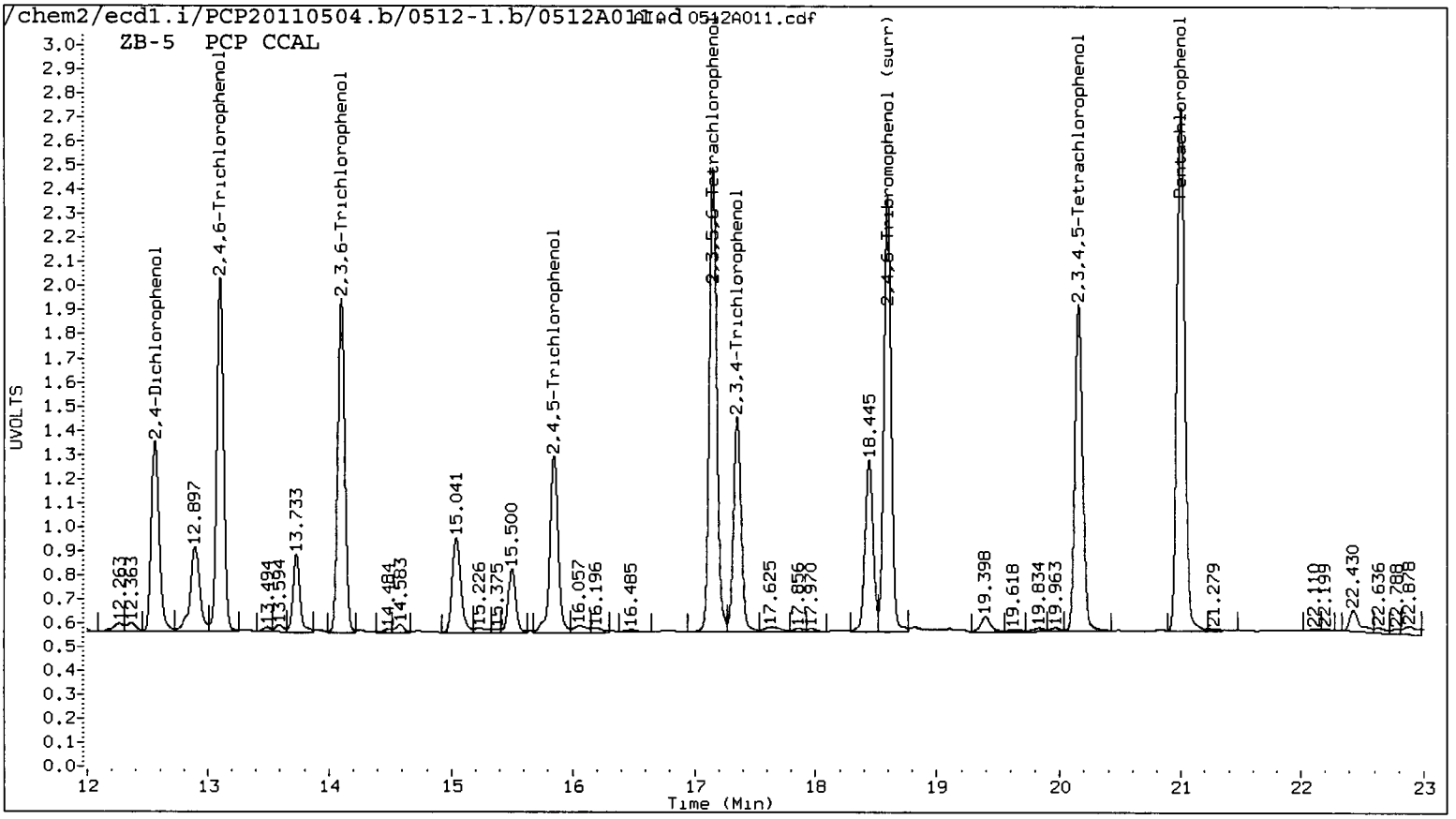
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

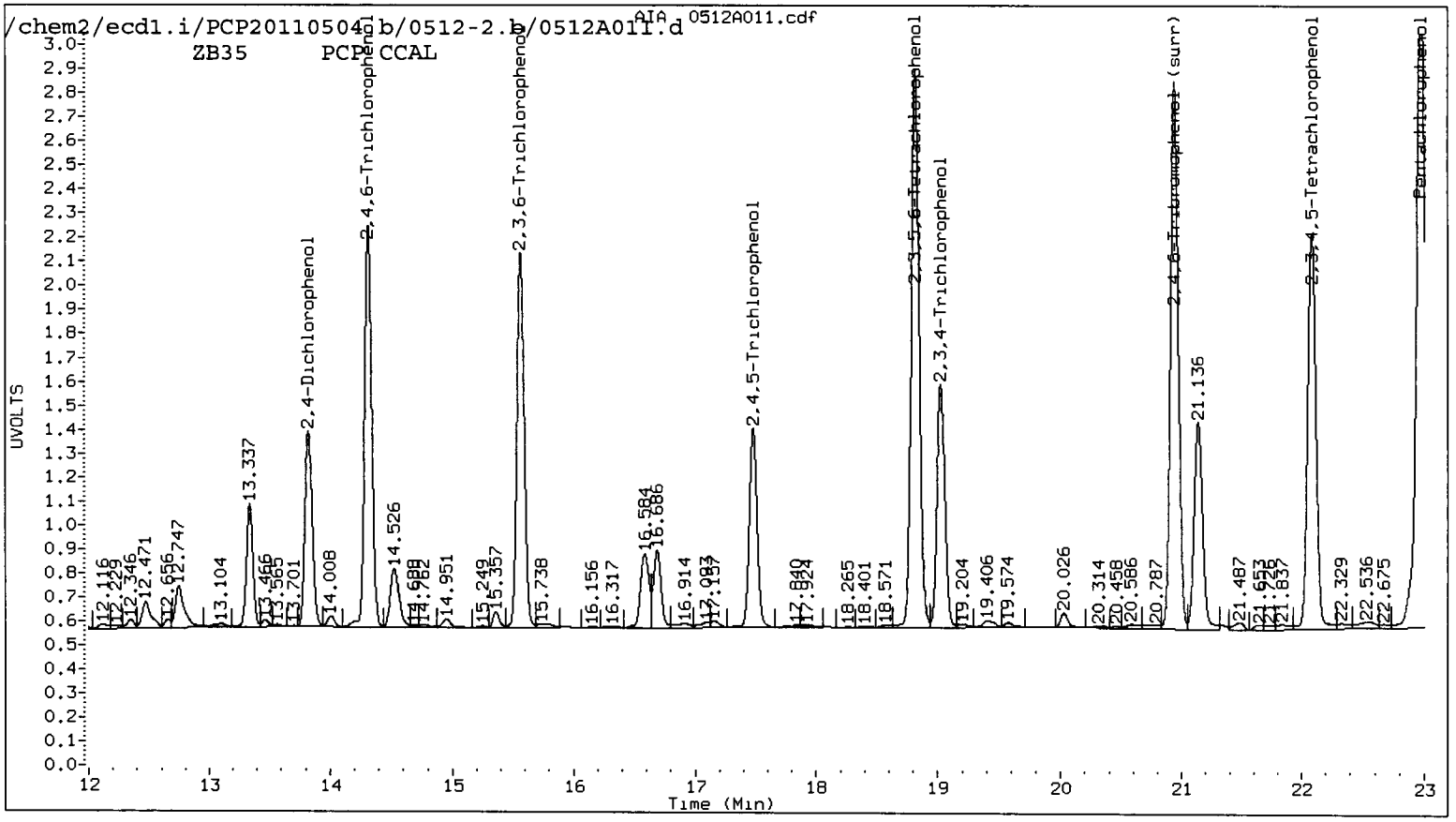
Data file 1: /chem2/ecd1.i/PCP20110504.b/0512-1.b/0512A011.d ARI ID: PCP CCAL
Data file 2: /chem2/ecd1.i/PCP20110504.b/0512-2.b/0512A011.d Client ID:
Method: /chem2/ecd1.i/PCP20110504.b/PCP.m Injection Date: 12-MAY-2011 20:29
Compound Sublist: all Report Date: 05/13/2011 09:33
Instrument: ecd1.i Matrix: 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
21.001	0.004	489302	22.971	0.004	676802	24.2840	24.0334	1.0	Pentachlorophenol
13.104	0.003	294379	14.315	0.004	342419	24.1834	23.6253	2.3	2,4,6-Trichlorophenol
14.100	0.003	276943	15.561	0.004	331117	24.1816	23.0368	4.8	2,3,6-Trichlorophenol
15.848	0.003	171026	17.478	0.004	187701	25.9035	23.1854	11.1	2,4,5-Trichlorophenol
17.355	0.003	200684	19.026	0.003	229989	24.0187	25.1388	4.6	2,3,4-Trichlorophenol
17.156	0.004	414796	18.818	0.004	519842	24.5344	23.6960	3.5	2,3,5,6-Tetrachlorophenol
20.158	0.004	303420	22.084	0.004	386670	23.3728	25.3329	8.0	2,3,4,5-Tetrachlorophenol
12.559	0.004	178924	13.824	0.004	174936	277.3354	249.2018	10.7	2,4-Dichlorophenol
18.599	0.003	388339	20.940	0.004	503037	24.7	23.9	3.0	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
Pentachlorophenol	97.1	96.1
2,4,6-Trichlorophenol	96.7	94.5
2,3,6-Trichlorophenol	96.7	92.1
2,4,5-Trichlorophenol	103.6	92.7
2,3,4-Trichlorophenol	96.1	100.6
2,3,5,6-Tetrachlorophenol	98.1	94.8
2,3,4,5-Tetrachlorophenol	93.5	101.3
2,4-Dichlorophenol	110.9	99.7
2,4,6-TBP (surr)	98.7	95.7


/chem2/ecd1.i/PCP20110504.b/0512-1.b/0512A01A.d
AIA 0512A011.cdf
ZB-5 PCP CCAL
2,4-Dichlorophenol
2,4,6-Trichlorophenol
2,3,6-Trichlorophenol
2,4,5-Trichlorophenol
2,3,4-Trichlorophenol
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
2,4,6-Tribromophenol (surr)
UVOLTS
Time (Min)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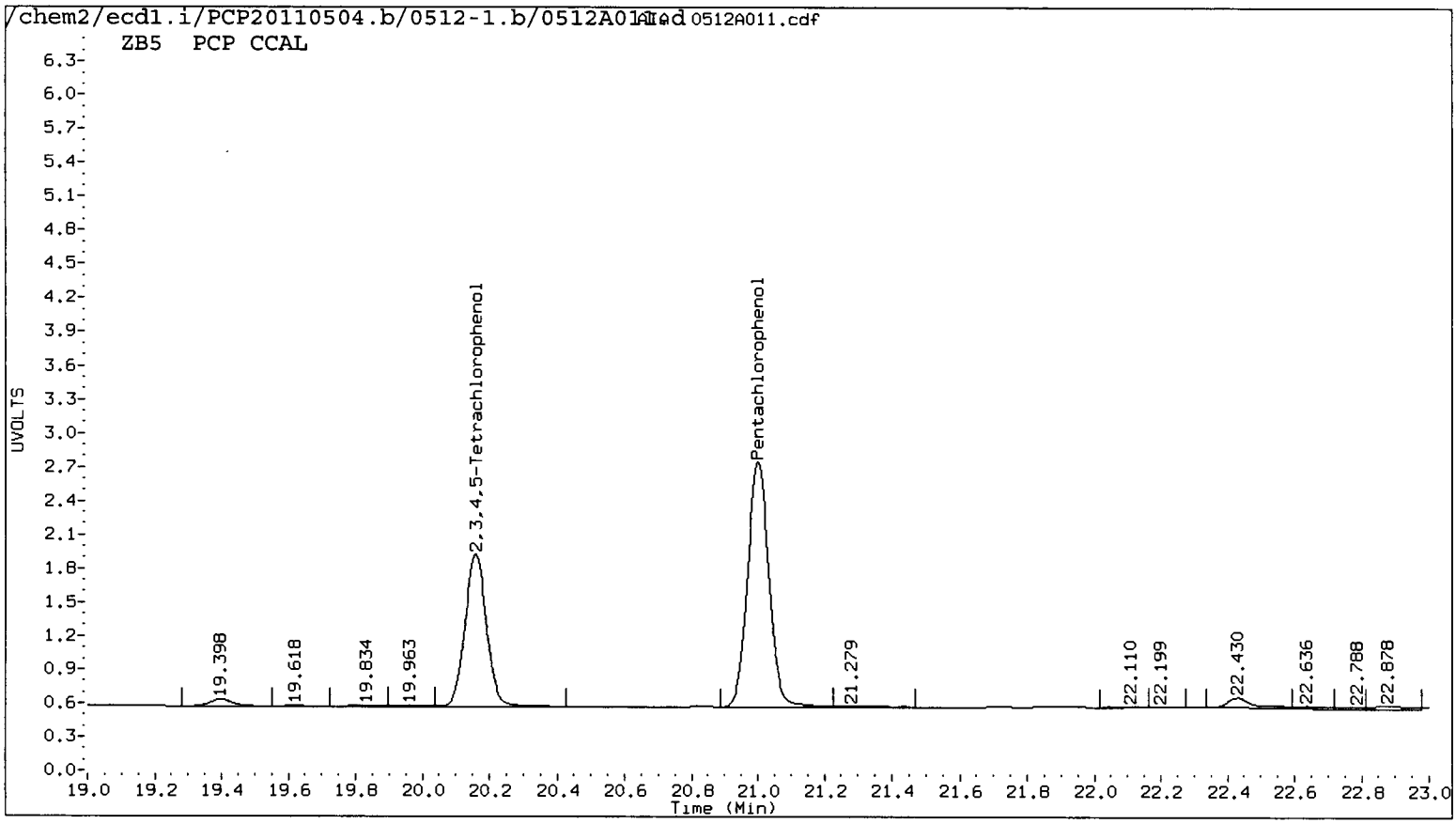
AIA 0512A011.cdf
ZB35 PCP CCAL
2,4-Dichlorophenol
2,4,6-Trichlorophenol
2,3,6-Trichlorophenol
2,4,5-Trichlorophenol
2,3,4-Trichlorophenol
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
UVOLTS
Time (Min)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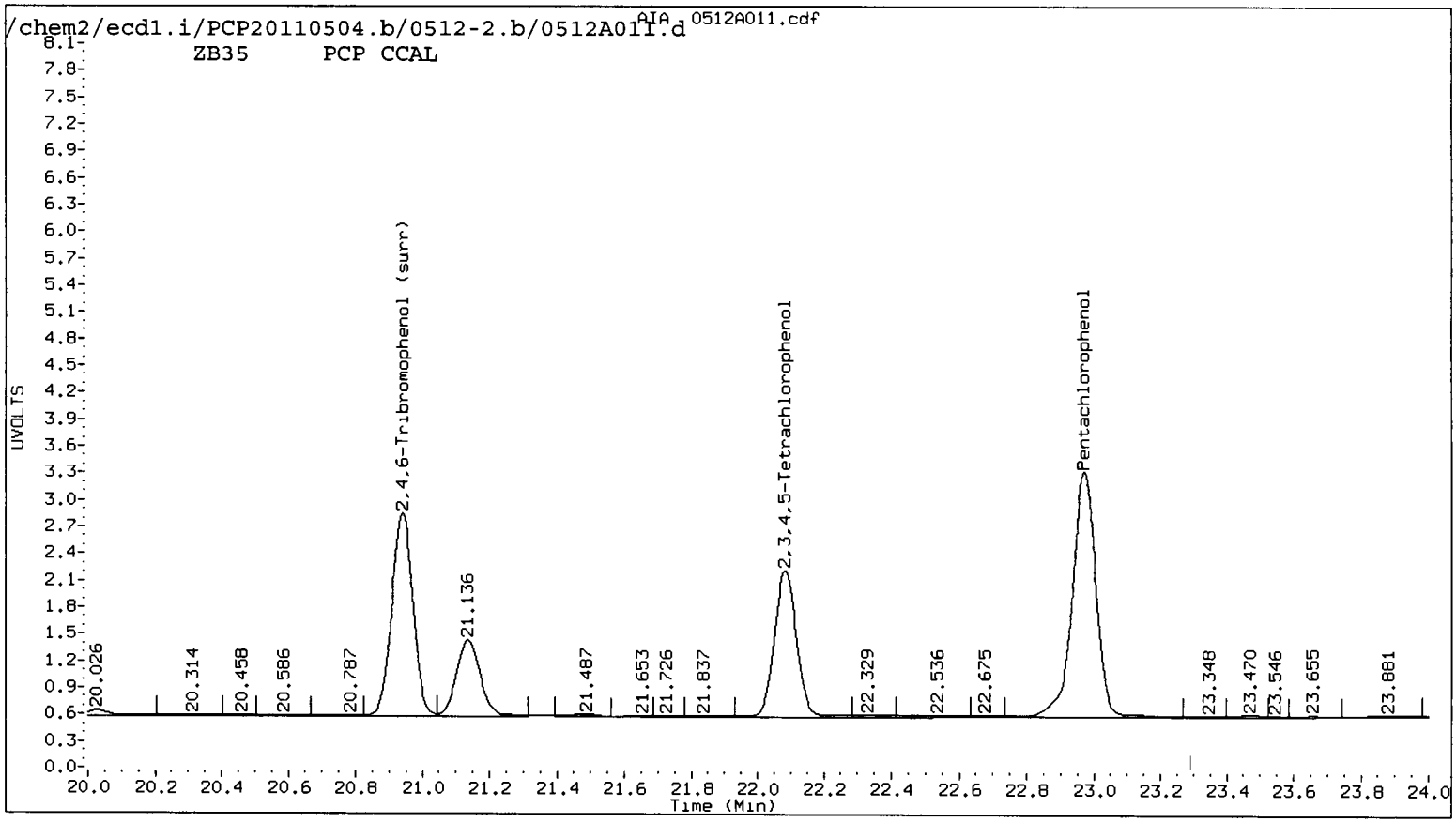
ZB5 PCP CCAL
UVOLTS
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
19.398
19.618
19.834
19.963
21.279
22.110
22.199
22.430
22.636
22.788
22.878
Time (Min)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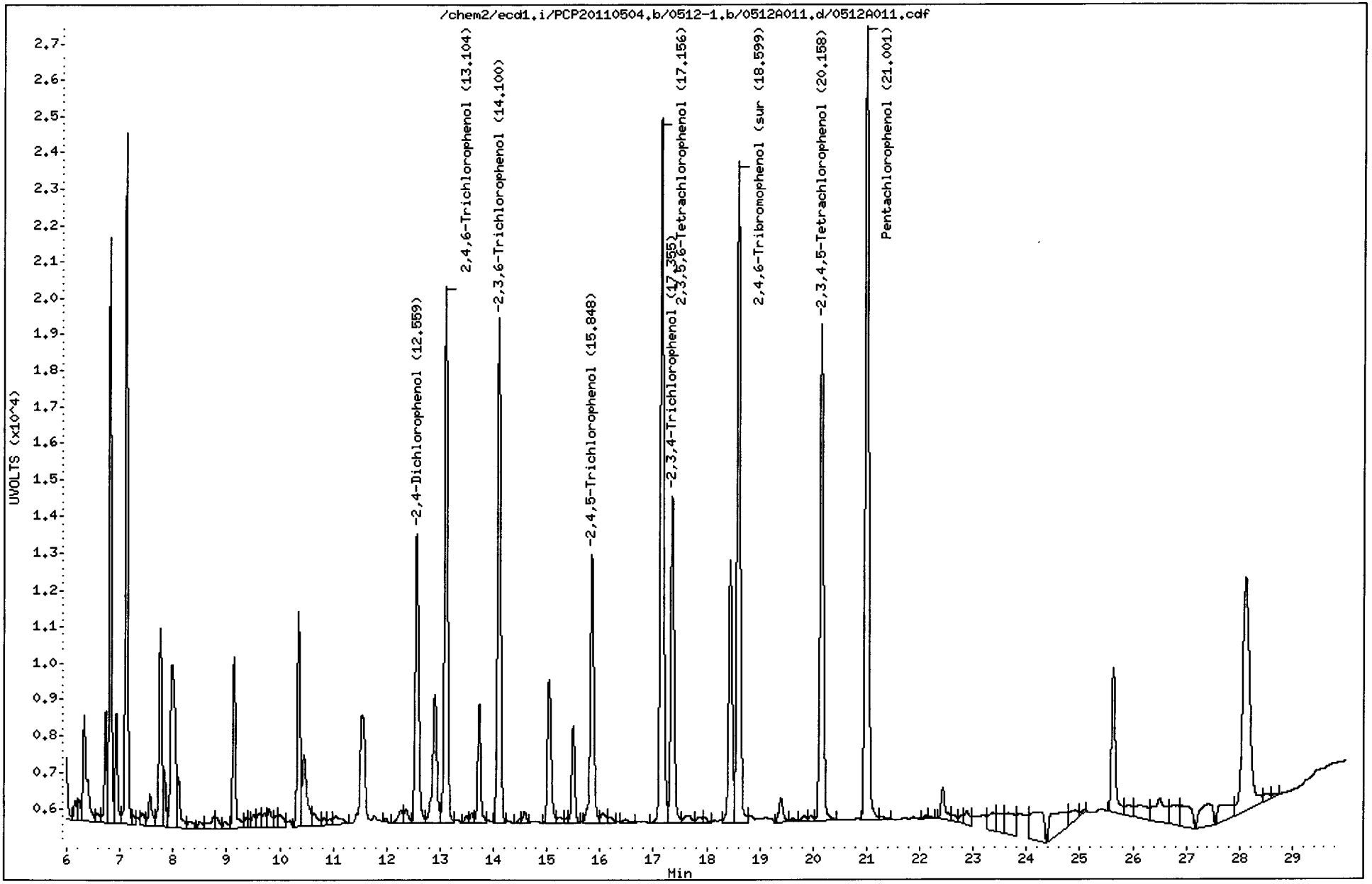
ZB35 PCP CCAL
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
20.026
20.314
20.458
20.586
20.787
21.136
21.487
21.653
21.726
21.837
22.329
22.536
22.675
23.348
23.470
23.546
23.655
23.881
Time (Min)

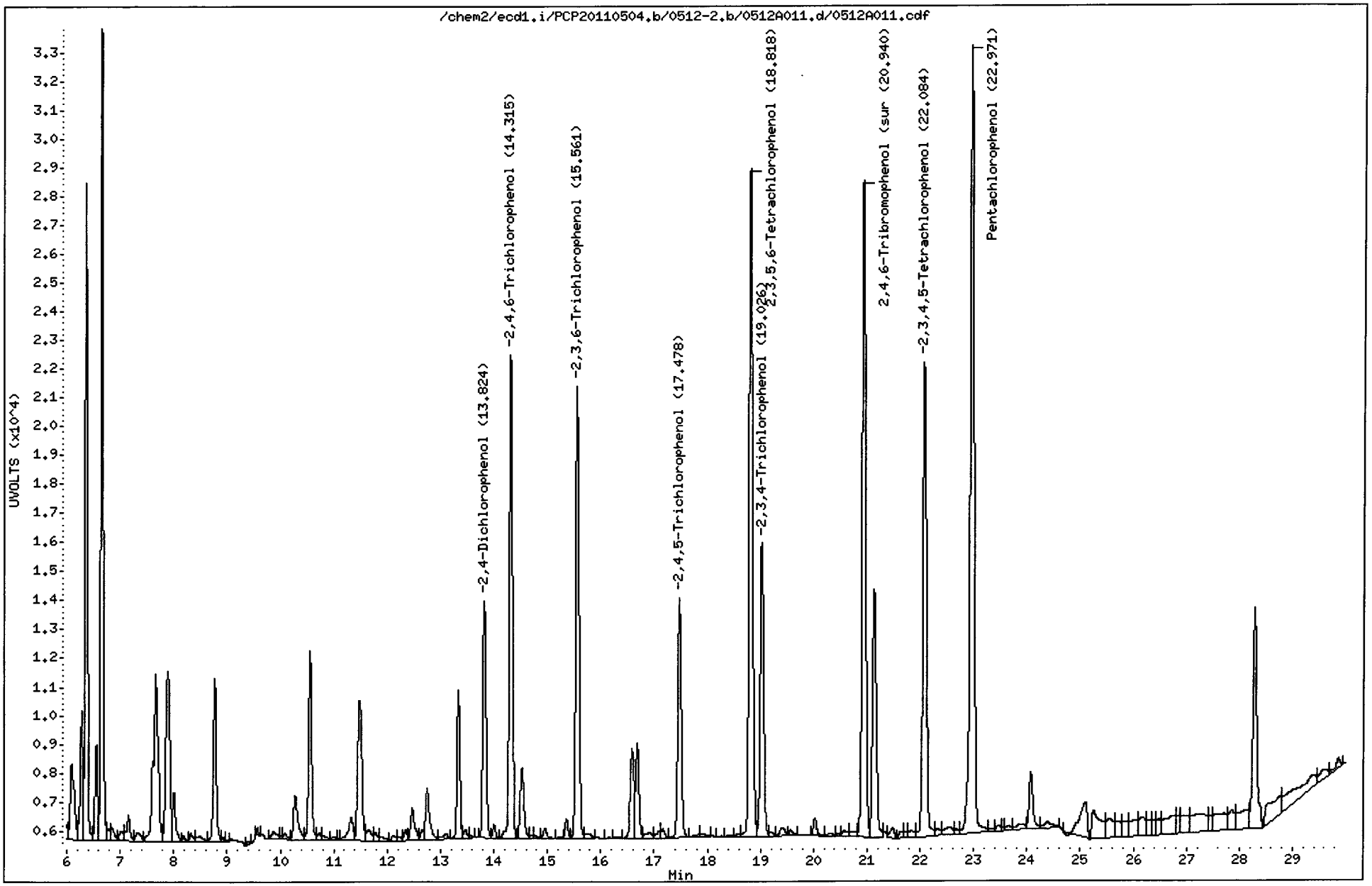
Data File: /chem2/ecd1.i/PCP20110504.b/0512-1.b/0512A011.d
Date : 12-MAY-2011 20:29
Client ID:
Sample Info: PCP CCAL
Purge Volume: 500.0
Column phase: STX CLP1

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



Data File: /chem2/ecd1.i/PCP20110504.b/0512-2.b/0512A011.d
Date : 12-MAY-2011 20:29
Client ID:
Sample Info: PCP CCAL
Purge Volume: 500.0
Column phase: STX CLP2

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



Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

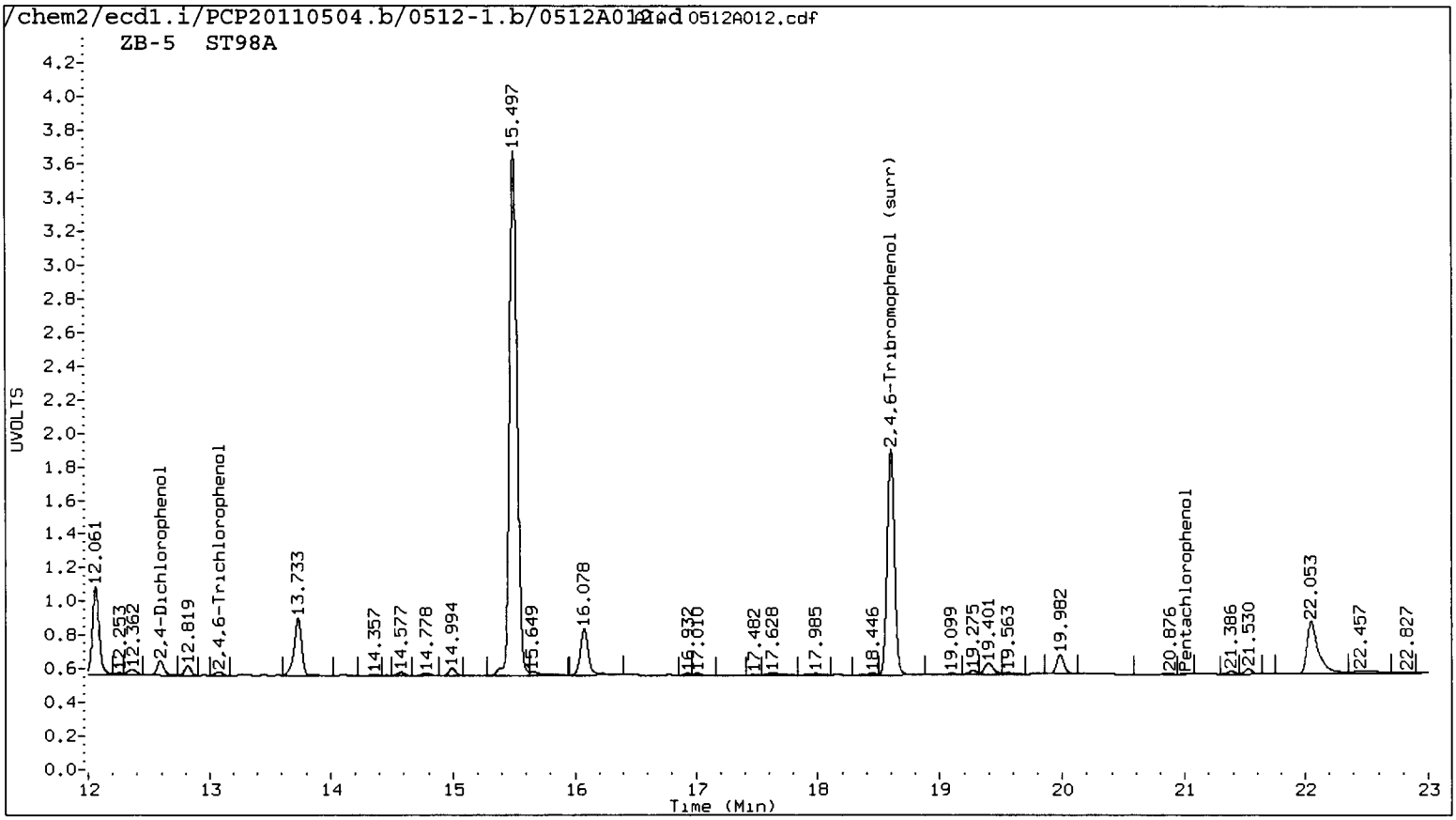
AR 5/13/2011

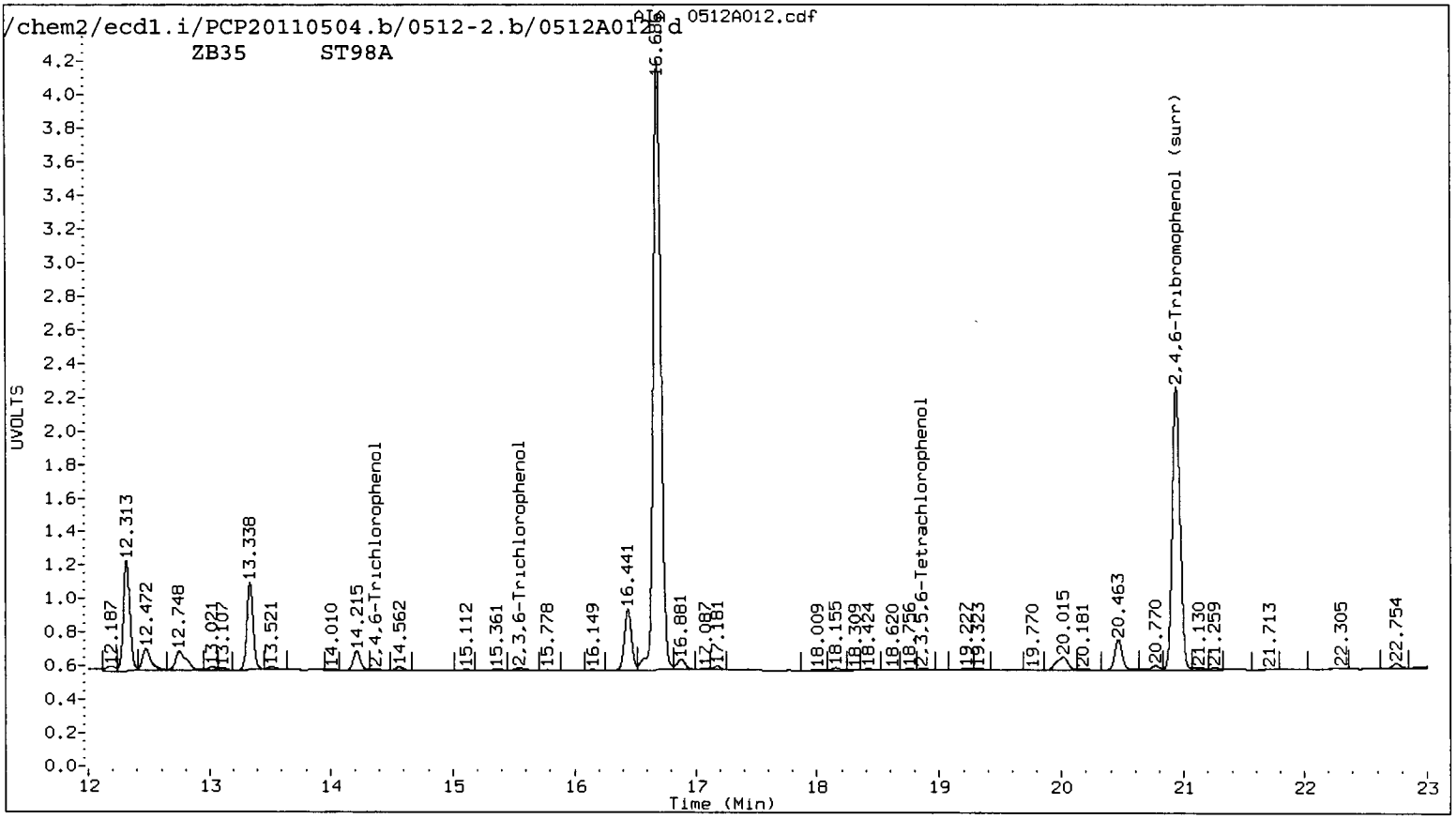
Data file 1: /chem2/ecd1.i/PCP20110504.b/0512-1.b/0512A012.d ARI ID: ST98A
Data file 2: /chem2/ecd1.i/PCP20110504.b/0512-2.b/0512A012.d Client ID: MW02-042611
Method: /chem2/ecd1.i/PCP20110504.b/PCP.m Injection Date: 12-MAY-2011 21:06
Compound Sublist: all Report Date: 05/13/2011 09:47
Instrument: ecd1.i Matrix: WATER
Operator: ar Dilution Factor: 1.000

ZB-5 Col RT	ZB-5 Col Shift	ZB-5 Col Response	ZB35 Col RT	ZB35 Col Shift	ZB35 Col Response	ZB-5 on col	ZB35 on col	RPD	Compound
21.010	0.013	1105	----			0.0548	0.0000	---	Pentachlorophenol
13.077	-0.024	4997	14.365	0.054	1539	0.4106	0.1062	117.8*	2,4,6-Trichlorophenol
----			15.548	-0.009	5495	0.0000	0.3824	---	2,3,6-Trichlorophenol
----			----			0.0000	0.0000	---	2,4,5-Trichlorophenol
----			----			0.0000	0.0000	---	2,3,4-Trichlorophenol
----			18.856	0.042	1608	0.0000	0.0733	---	2,3,5,6-Tetrachlorophenol
----			----			0.0000	0.0000	---	2,3,4,5-Tetrachlorophenol
12.589	0.034	17489	----			22.1063	0.0000	---	2,4-Dichlorophenol
18.601	0.005	283120	20.941	0.005	374649	18.0	17.8	0.9	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	71.9	71.3


/chem2/ecd1.i/PCP20110504.b/0512-1.b/0512A012.d
0512A012.cdf
ZB-5 ST98A
UVOLTS
Time (Min)
12.061
12.253
12.362
2,4-Dichlorophenol
12.819
2,4,6-Trichlorophenol
13.733
14.357
14.577
14.778
14.994
15.497
15.649
16.078
16.932
17.010
17.482
17.628
17.985
18.446
2,4,6-Tribromophenol (surr)
19.099
19.275
19.401
19.563
19.982
20.876
Pentachlorophenol
21.386
21.530
22.053
22.457
22.827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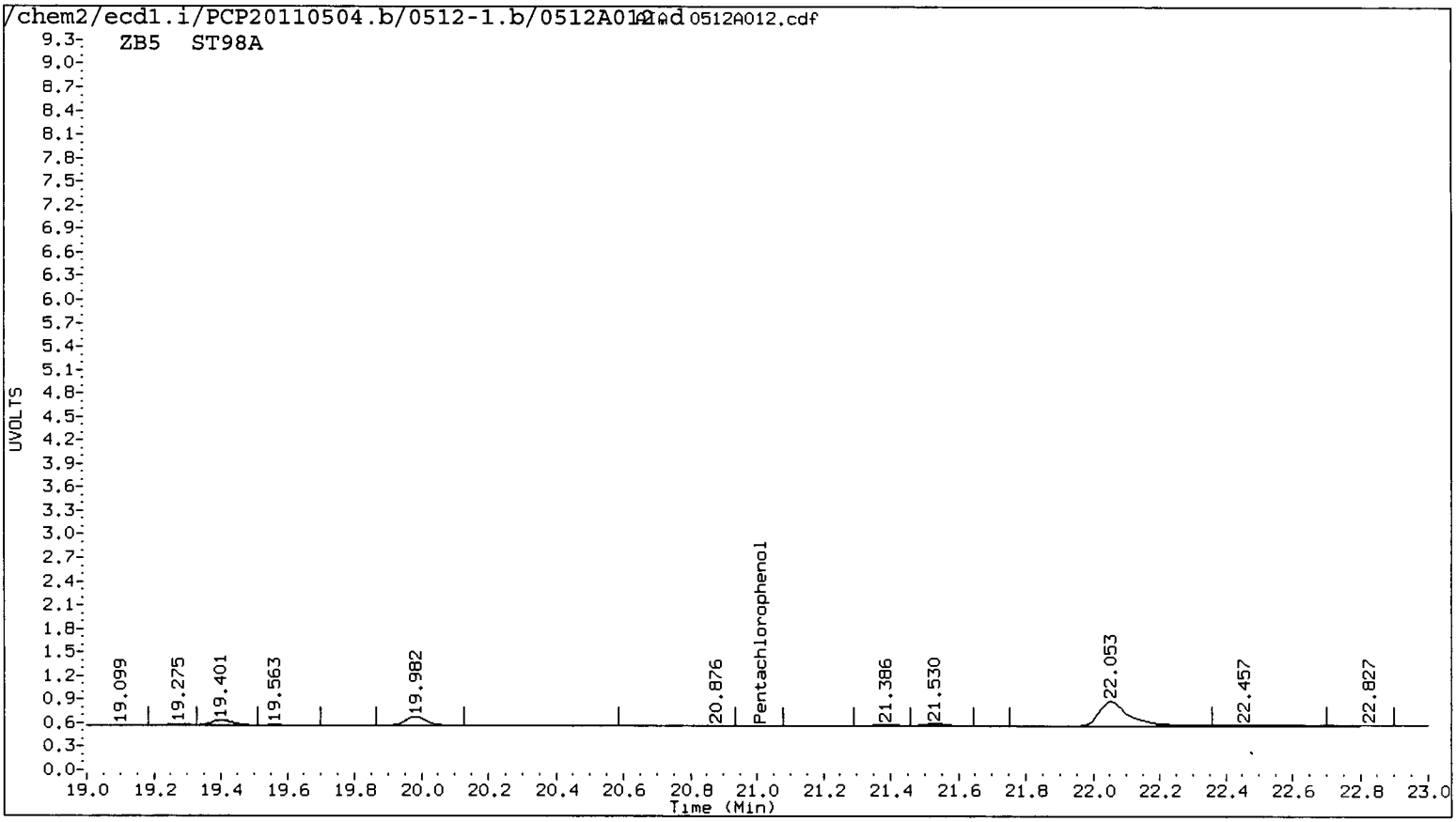
0512A012.cdf
ZB35 ST98A
UVOLTS
Time (Min)
12.187
12.313
12.472
12.748
13.021
13.107
13.338
13.521
14.010
14.215
2,4,6-Trichlorophenol
14.562
15.112
15.361
2,3,6-Trichlorophenol
15.778
16.149
16.441
16.686
16.881
17.087
17.181
18.009
18.155
18.309
18.424
18.620
18.756
2,3,5,6-Tetrachlorophenol
19.227
19.323
19.770
20.015
20.181
20.463
2,4,6-Tribromophenol (surr)
20.770
21.130
21.259
21.713
22.305
22.754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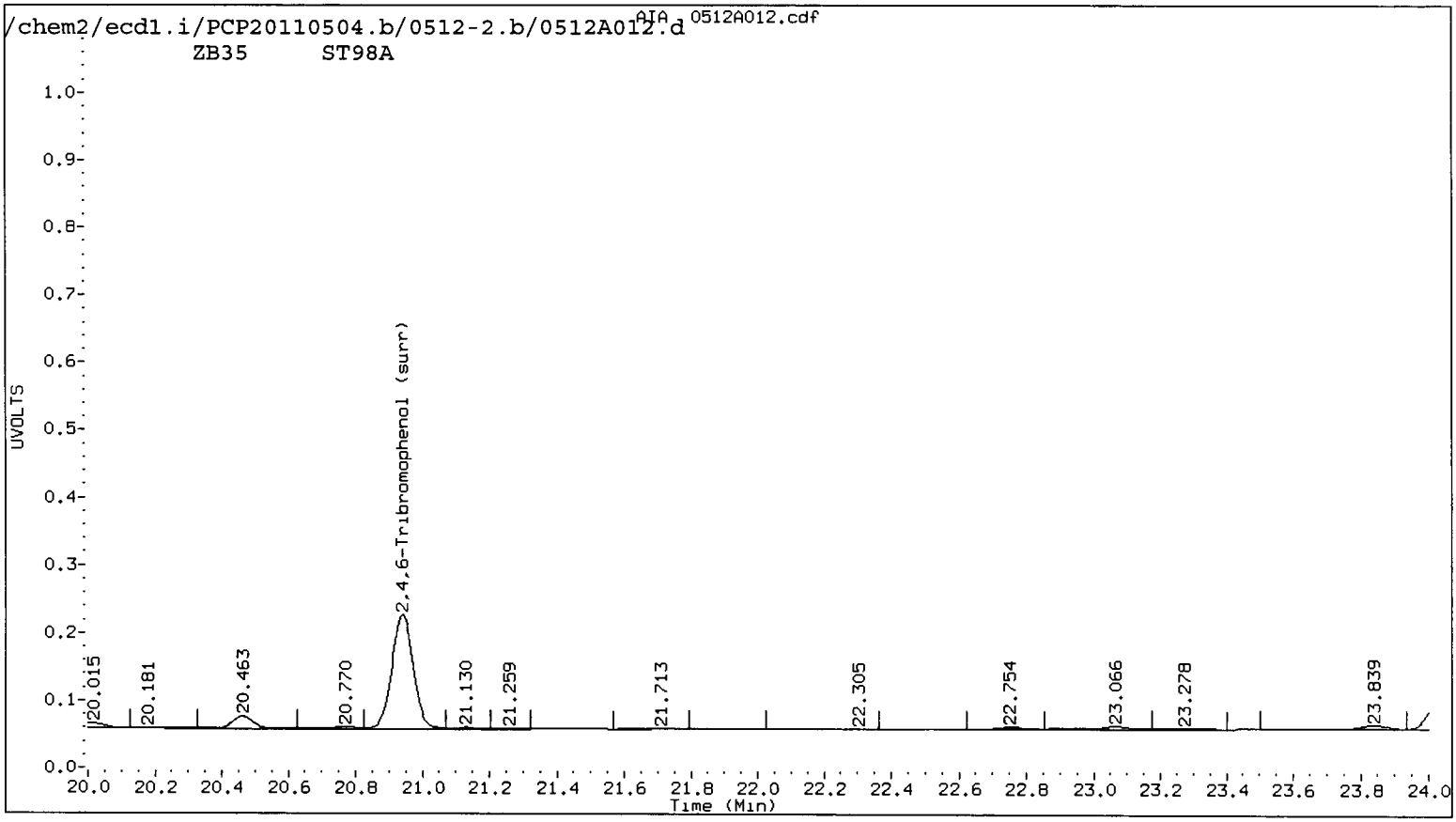
0512A012.cdf
ZB5 ST98A
UVOLTS
Time (Min)
19.099
19.275
19.401
19.563
19.982
20.876
Pentachlorophenol
21.386
21.530
22.053
22.457
22.827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0512A012.cdf
ZB35 ST98A
UVOLTS
Time (Min)
20.015
20.181
20.463
20.770
2,4,6-Tribromophenol (surr)
21.130
21.259
21.713
22.305
22.754
23.066
23.278
23.839

Data File: /chem2/ecd1.i/PCP20110504.b/0512-1.b/0512A012.d

Date : 12-MAY-2011 21:06

Client ID: MW02-042611

Instrument: ecd1.i

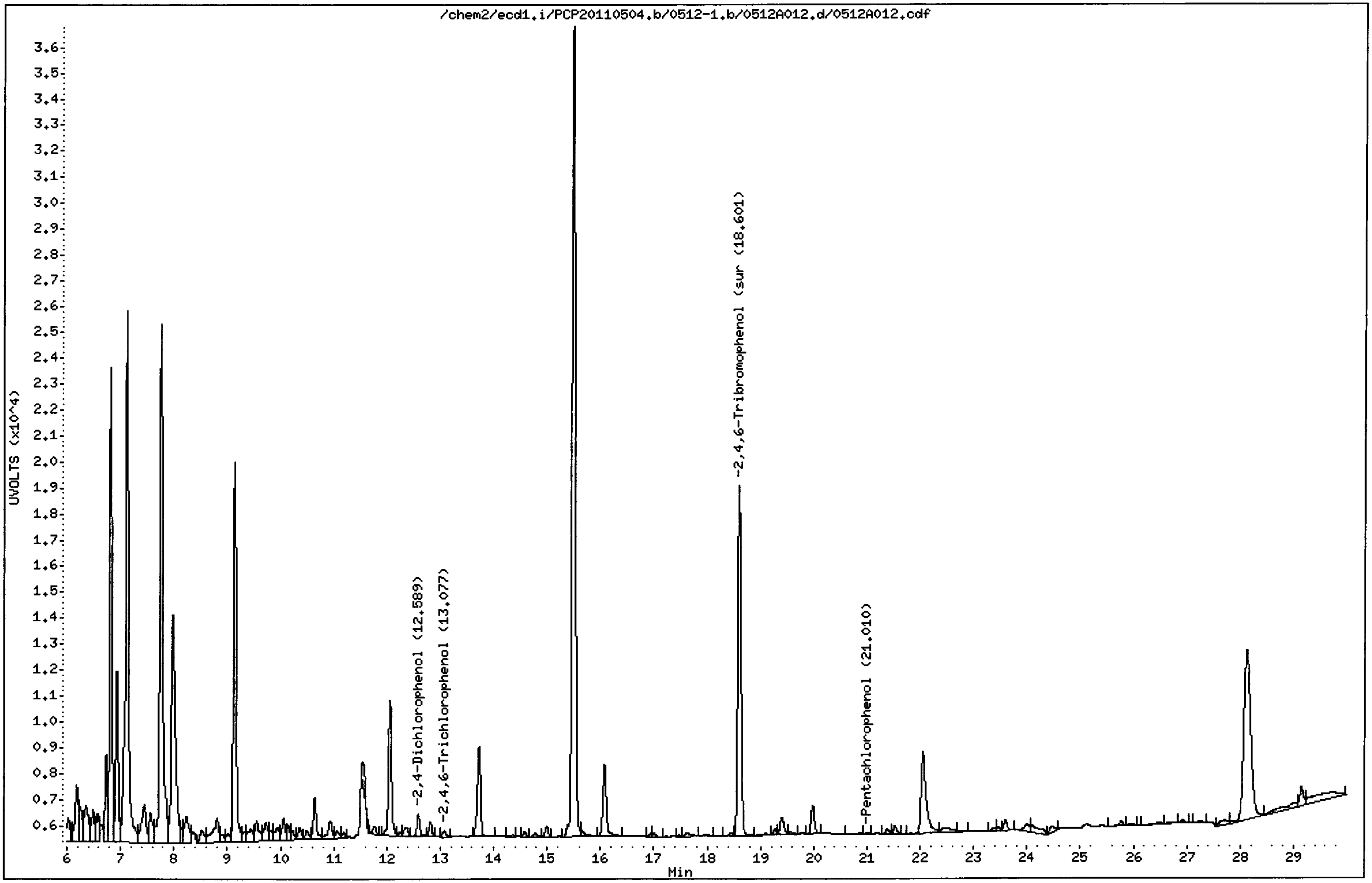
Sample Info: ST98A

Purge Volume: 500.0

Operator: ar

Column phase: STX CLP1

Column diameter: 0.53



Data File: /chem2/ecd1.i/PCP20110504.b/0512-2.b/0512A012.d

Page 1

Date : 12-MAY-2011 21:06

Client ID: MW02-042611

Instrument: ecd1.i

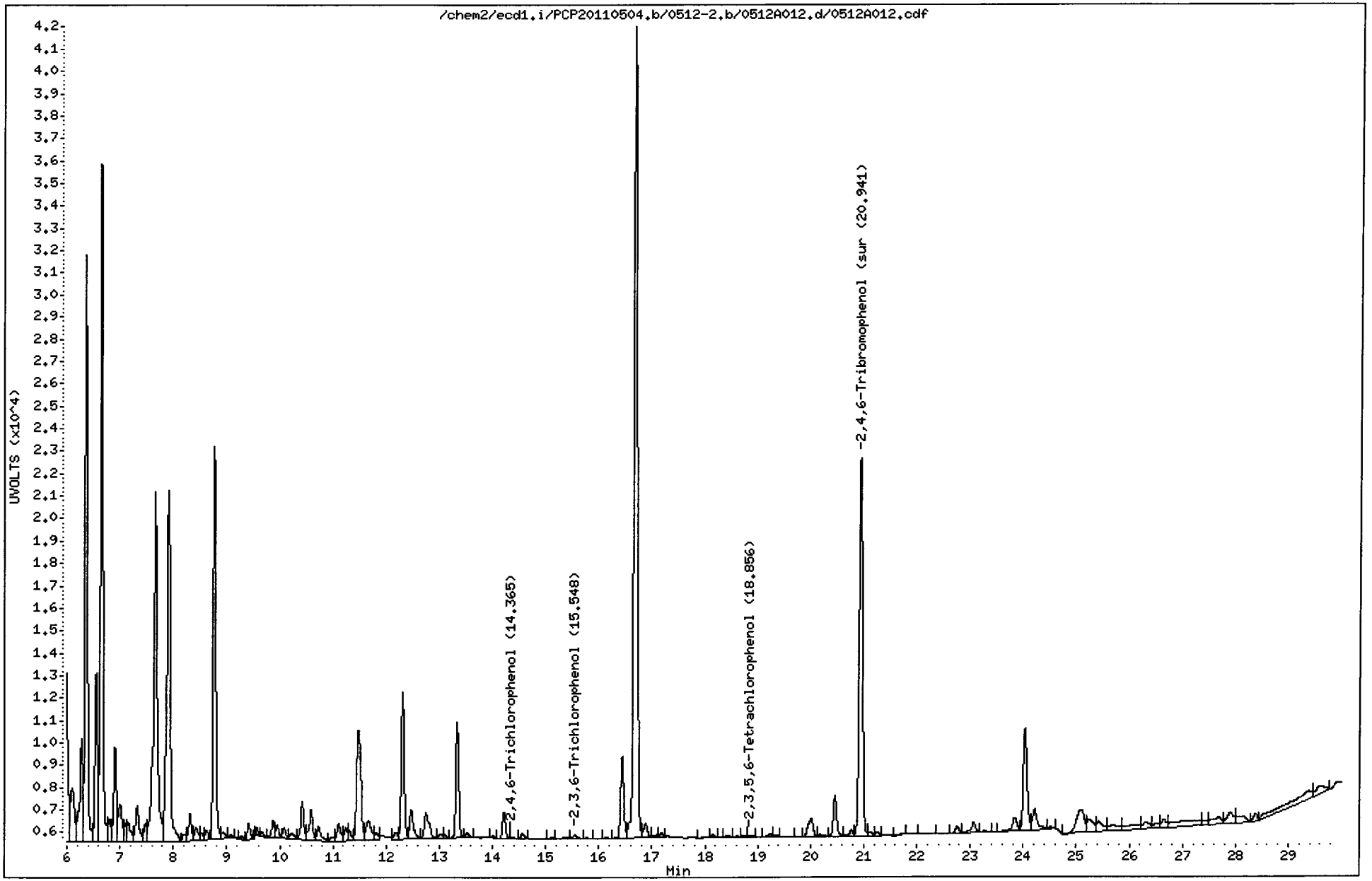
Sample Info: ST98A

Purge Volume: 500.0

Operator: ar

Column phase: STX CLP2

Column diameter: 0.53



ST98:00735

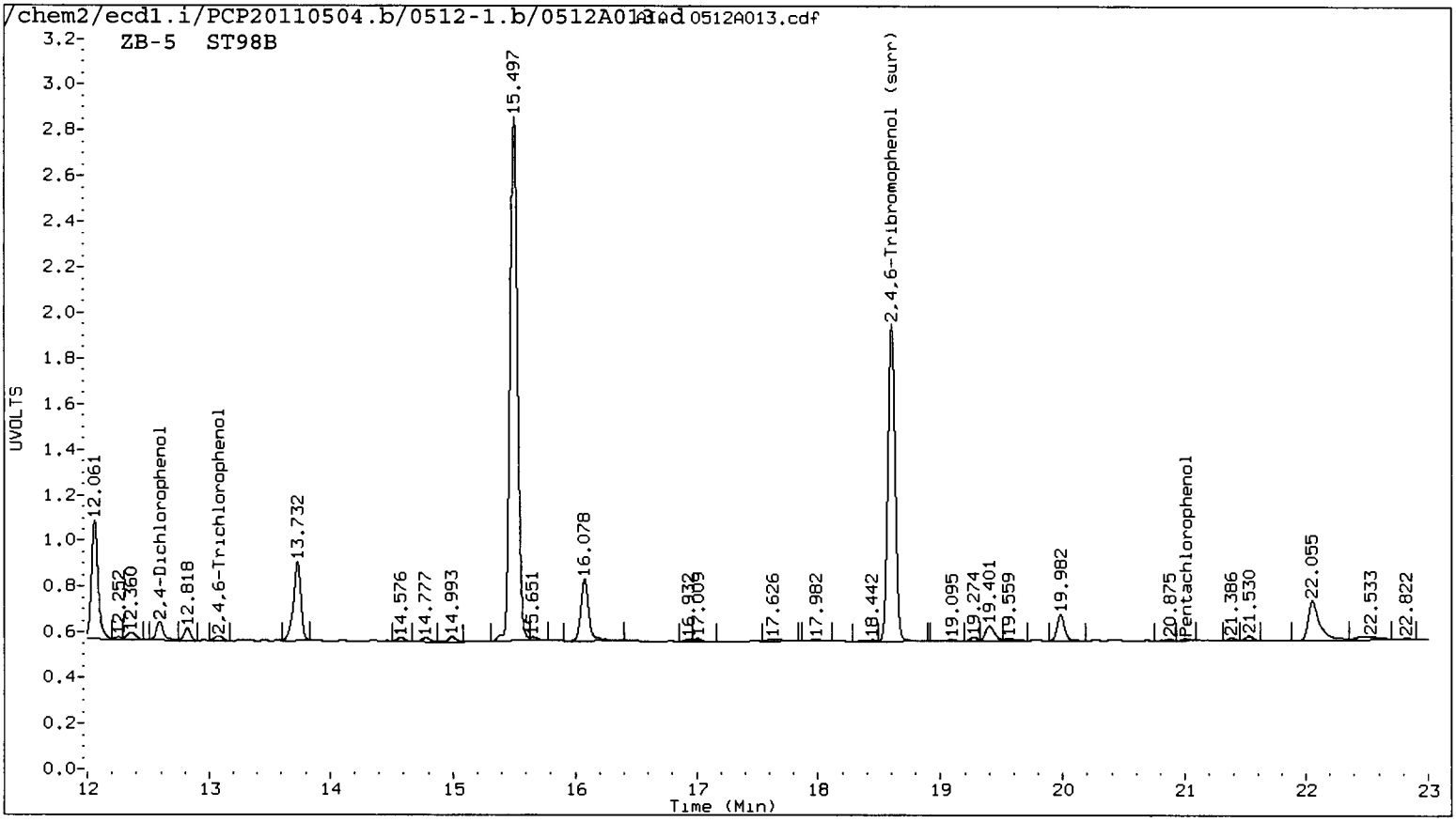
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/PCP20110504.b/0512-1.b/0512A013.d ARI ID: ST98B
Data file 2: /chem2/ecd1.i/PCP20110504.b/0512-2.b/0512A013.d Client ID: MW03-042611
Method: /chem2/ecd1.i/PCP20110504.b/PCP.m Injection Date: 12-MAY-2011 21:42
Compound Sublist: all Report Date: 05/13/2011 09:47
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
21.009	0.011	1975	----			0.0980	0.0000	---	Pentachlorophenol
13.077	-0.024	5294	14.363	0.052	1753	0.4349	0.1210	113.0*	2,4,6-Trichlorophenol
----			15.547	-0.010	5346	0.0000	0.3720	---	2,3,6-Trichlorophenol
----			----			0.0000	0.0000	---	2,4,5-Trichlorophenol
----			----			0.0000	0.0000	---	2,3,4-Trichlorophenol
----			18.862	0.048	1345	0.0000	0.0613	---	2,3,5,6-Tetrachlorophenol
----			----			0.0000	0.0000	---	2,3,4,5-Tetrachlorophenol
12.589	0.034	17310	----			21.8748	0.0000	---	2,4-Dichlorophenol
18.600	0.004	291826	20.941	0.005	389070	18.5	18.5	0.2	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	74.1	74.0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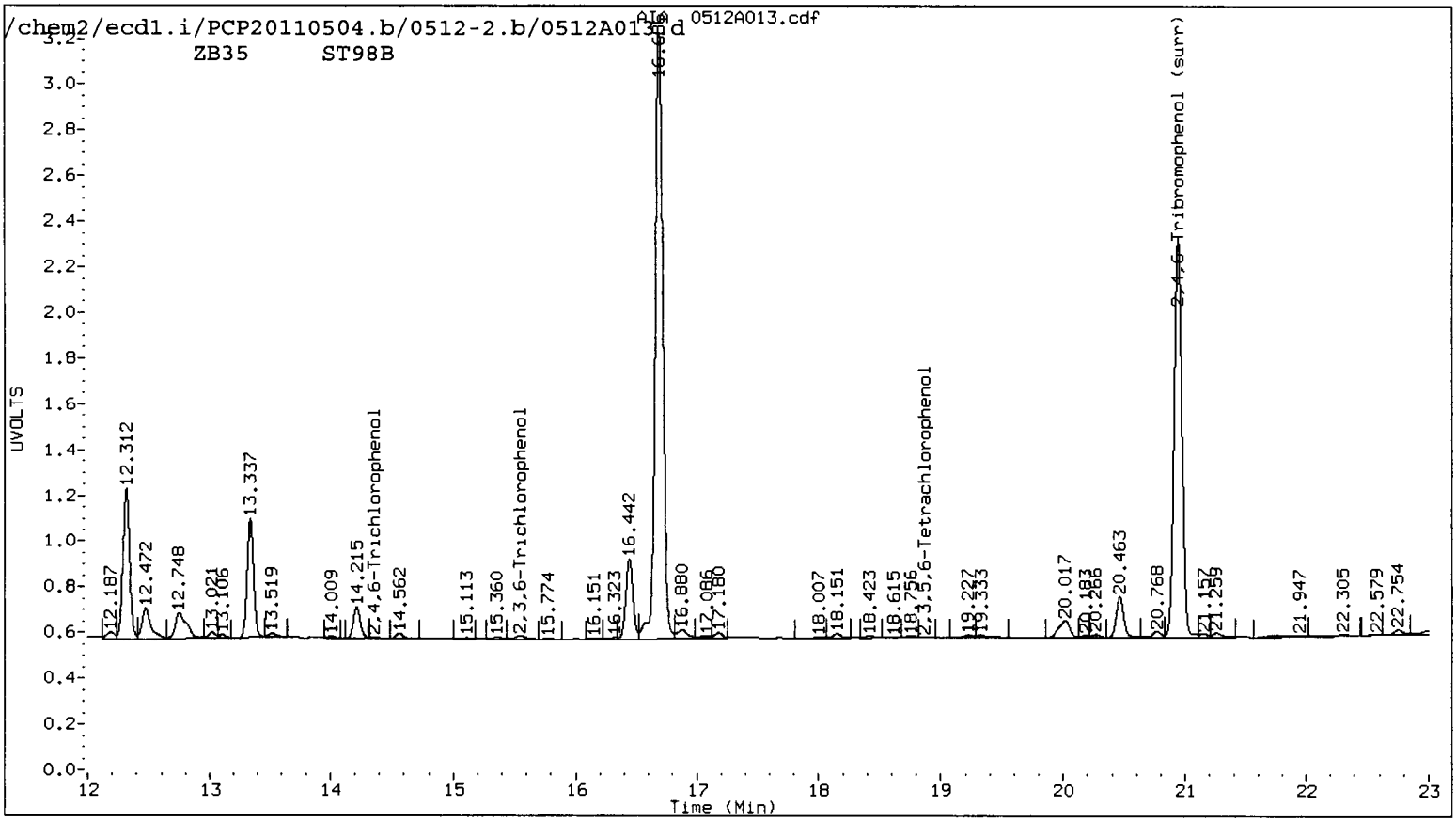
0512A013.cdf
ZB-5 ST98B
UVOLTS
Time (Min)
12.061
2,4-Dichlorophenol
2,4,6-Trichlorophenol
13.732
15.497
16.078
2,4,6-Tribromophenol (surr)
19.982
Pentachlorophenol
22.055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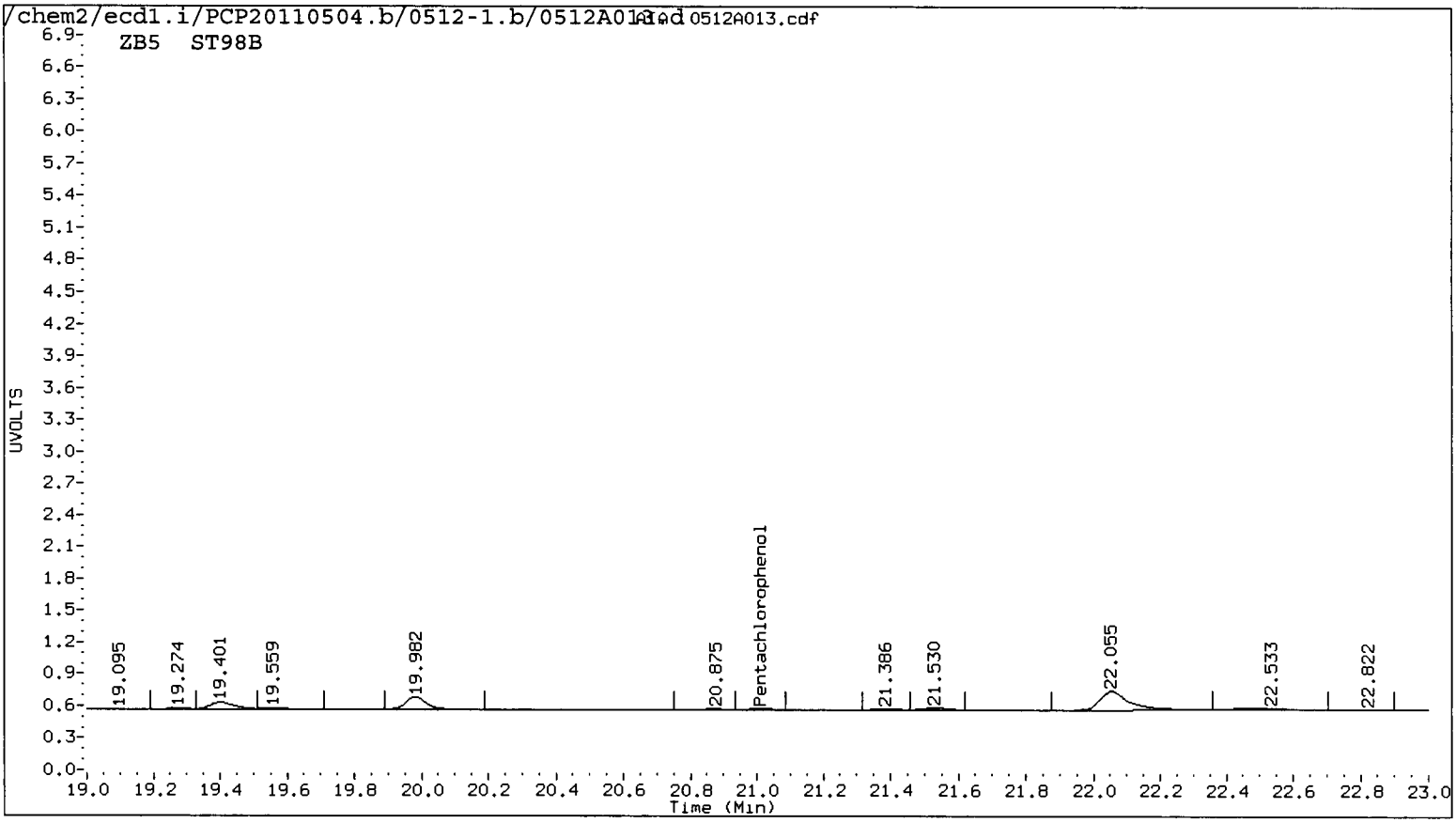
0512A013.cdf
ZB35 ST98B
UVOLTS
Time (Min)
12.312
12.472
12.748
13.337
14.215
2,4,6-Trichlorophenol
2,3,6-Trichlorophenol
16.442
2,3,5,6-Tetrachlorophenol
2,4,6-Tribromophenol (surr)
20.463
20.768
21.947
22.305
22.579
22.754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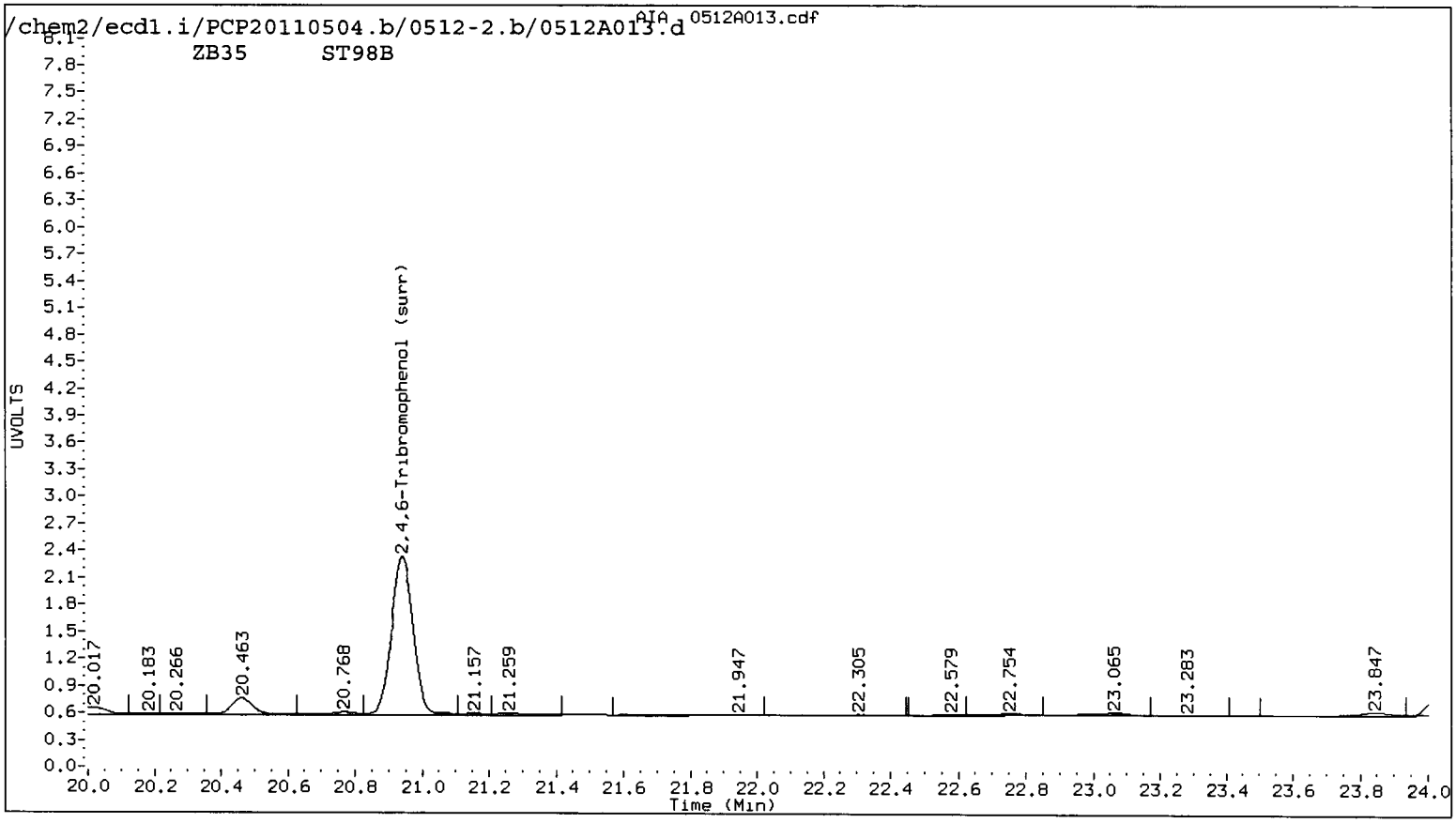
AIA 0512A013.cdf
ZB5 ST98B
UVOLTS
Time (Min)
19.095
19.274
19.401
19.559
19.982
20.875
Pentachlorophenol
21.386
21.530
22.055
22.533
22.822


/chem2/ecd1.i/PCP20110504.b/0512-2.b/0512A013.d
AIA 0512A013.cdf
ZB35 ST98B
UVOLTS
Time (Min)
20.017
20.183
20.266
20.463
20.768
2,4,6-Tribromophenol (surr)
21.157
21.259
21.947
22.305
22.579
22.754
23.065
23.283
23.847

Data File: /chem2/ecd1.i/PCP20110504.b/0512-2.b/0512A013.d

Page 1

Date : 12-MAY-2011 21:42

Client ID: MW03-042611

Instrument: ecd1.i

Sample Info: ST98B

Purge Volume: 500.0

Operator: ar

Column phase: STX CLP2

Column diameter: 0.53

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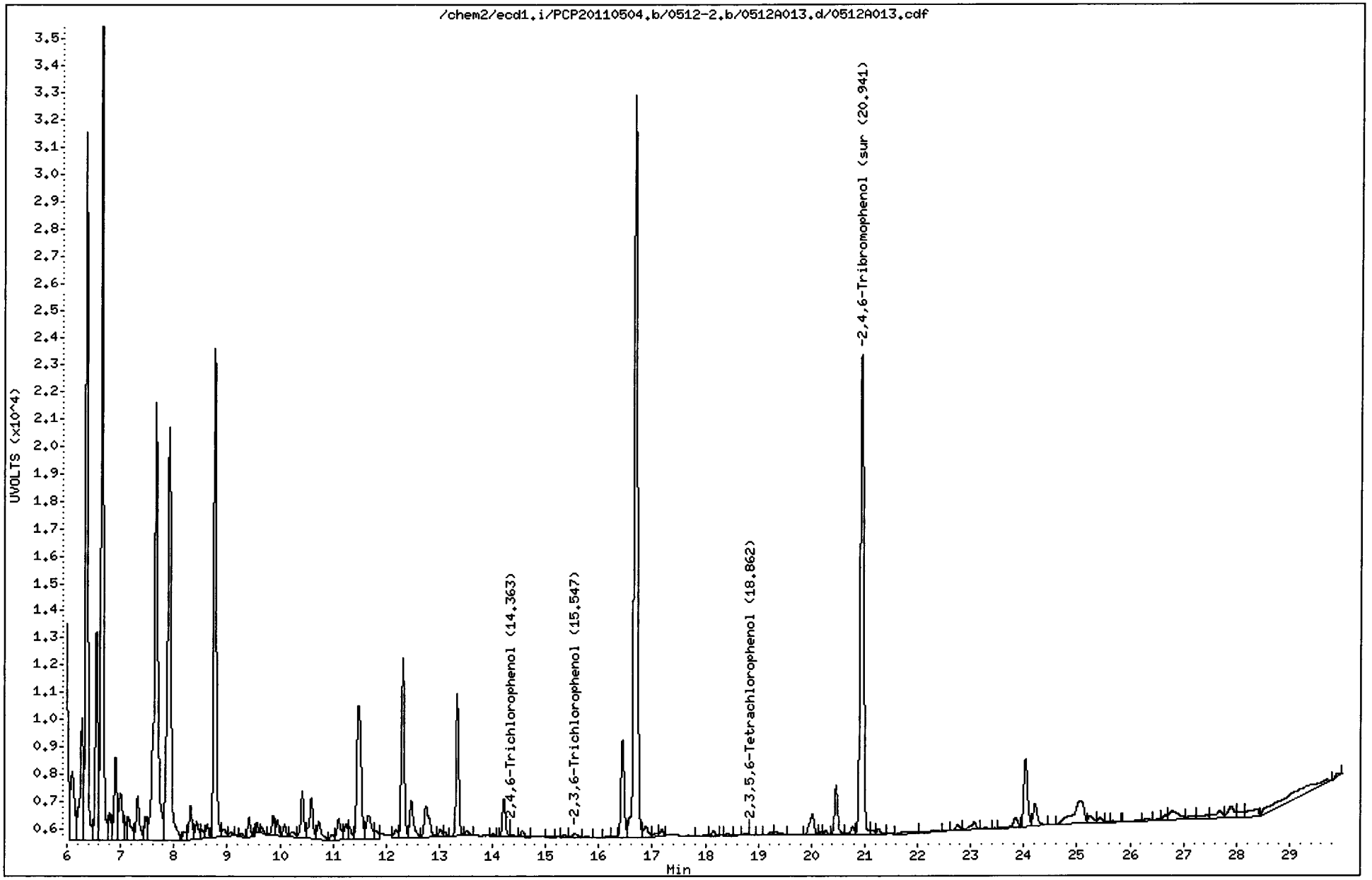
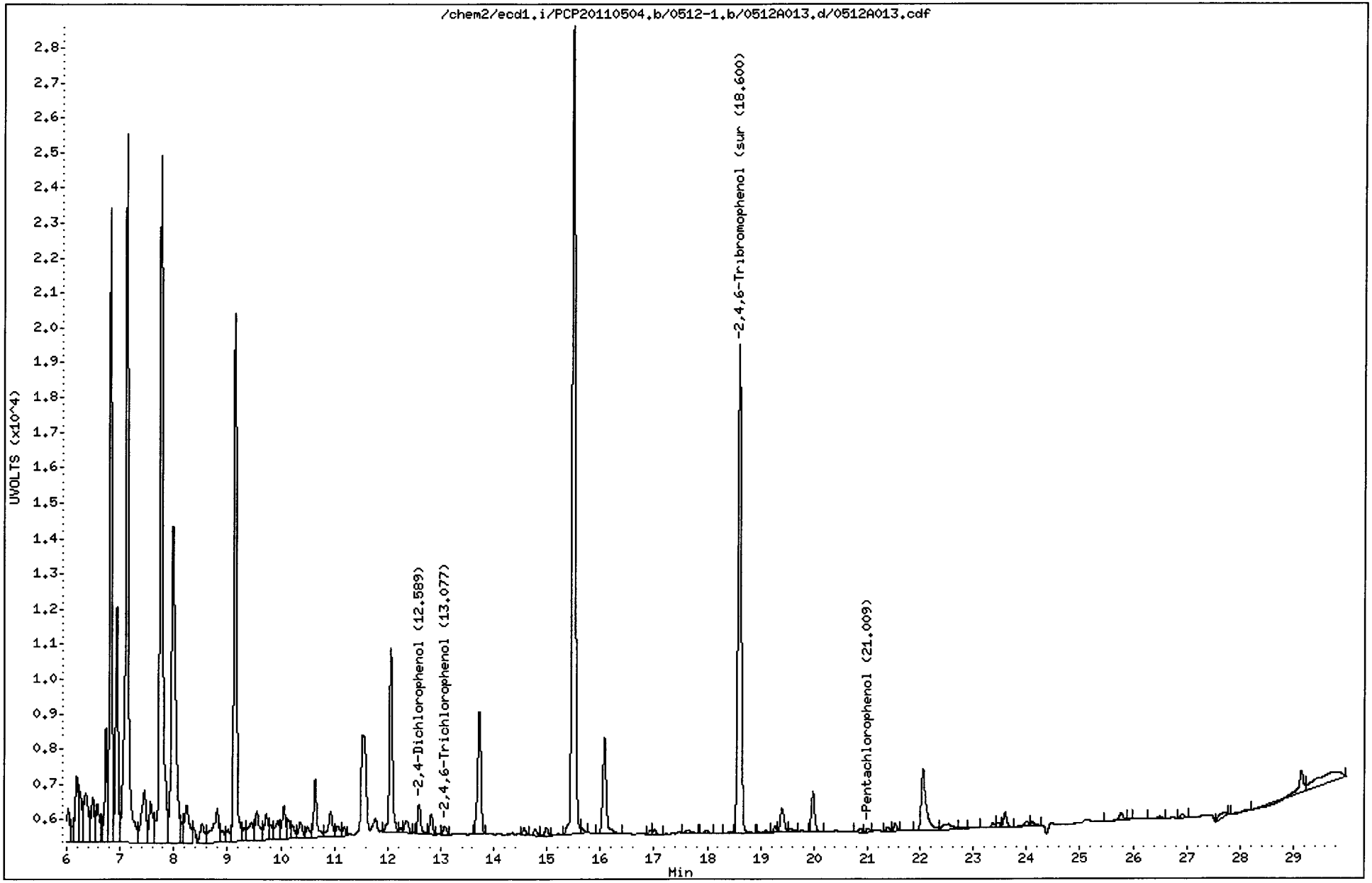


ST98:00739

Data File: /chem2/ecd1.i/PCP20110504.b/0512-1.b/0512A013.d
Date : 12-MAY-2011 21:42
Client ID: MW03-042611
Sample Info: ST98B
Purge Volume: 500.0
Column phase: STX CLP1

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



ST98:007h0

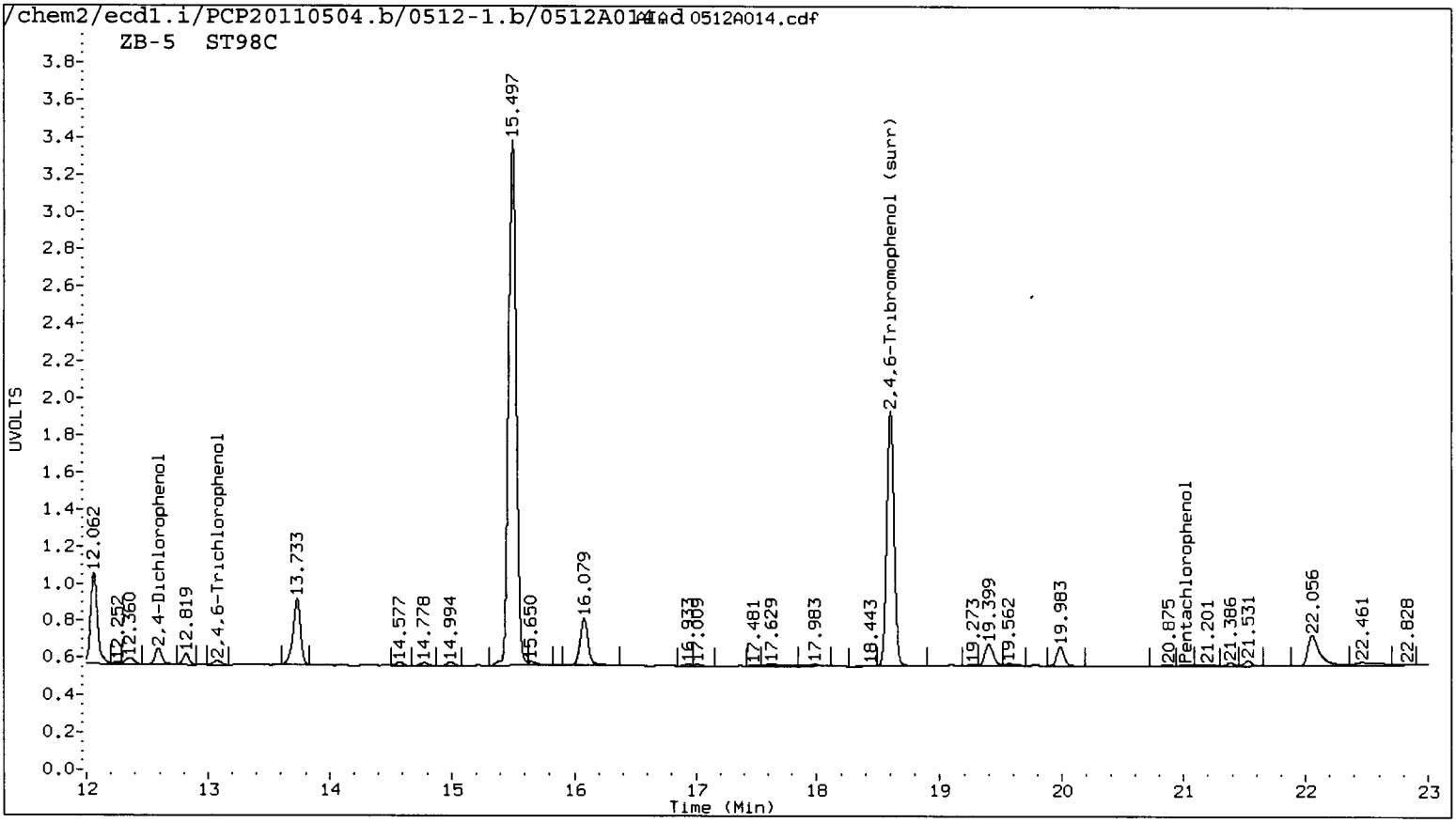
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

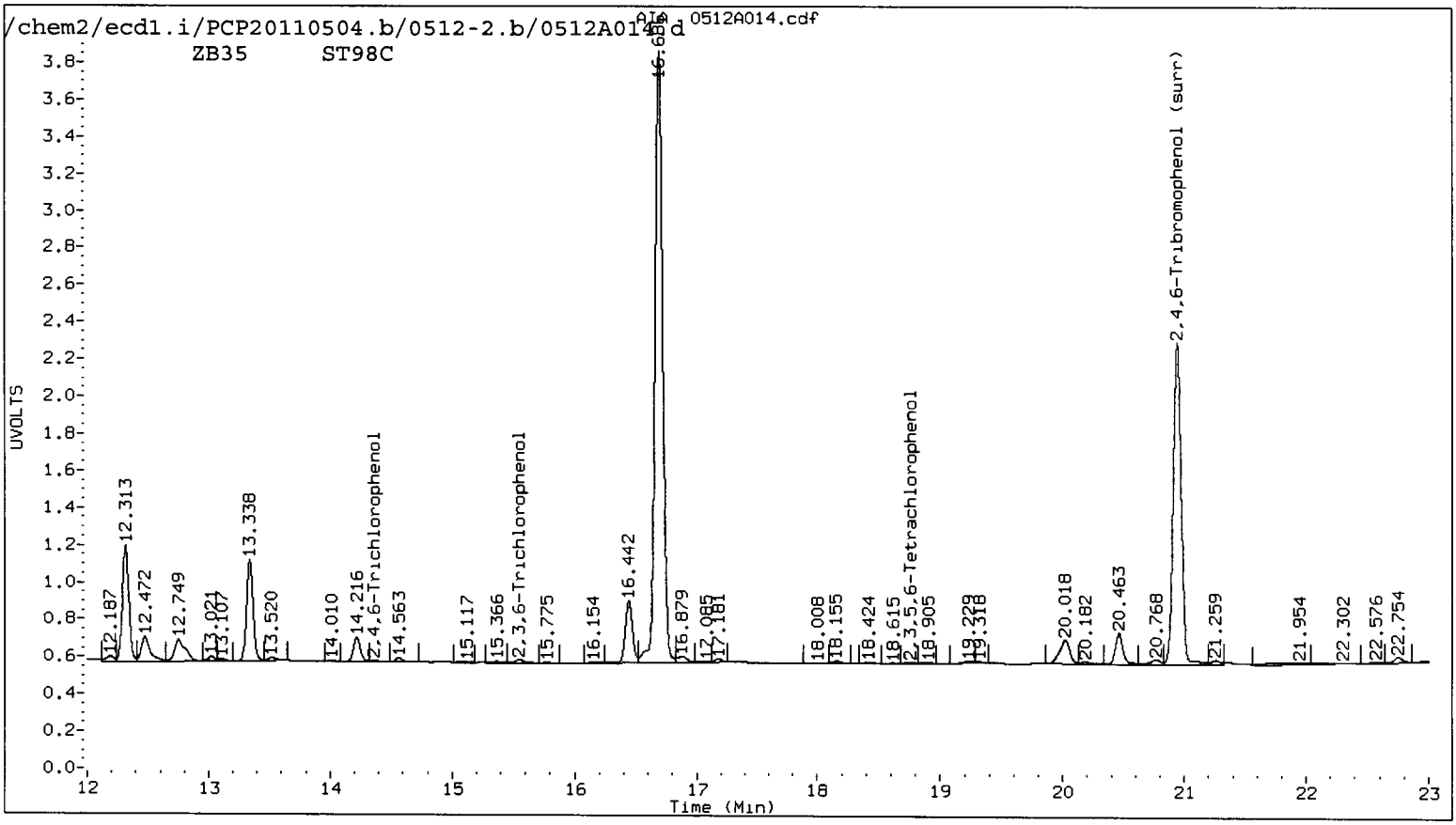
Data file 1: /chem2/ecd1.i/PCP20110504.b/0512-1.b/0512A014.d ARI ID: ST98C
Data file 2: /chem2/ecd1.i/PCP20110504.b/0512-2.b/0512A014.d Client ID: MW13-042611
Method: /chem2/ecd1.i/PCP20110504.b/PCP.m Injection Date: 12-MAY-2011 22:18
Compound Sublist: all Report Date: 05/13/2011 09:47
Instrument: ecd1.i Matrix: WATER
Operator: ar Dilution Factor: 1.000

ZB-5 Col RT	ZB-5 Col Shift	ZB-5 Col Response	ZB35 Col RT	ZB35 Col Shift	ZB35 Col Response	ZB-5 on col	ZB35 on col	RPD	Compound
21.015	0.018	1779	----			0.0883	0.0000	---	Pentachlorophenol
13.077	-0.024	5216	14.363	0.052	1690	0.4285	0.1166	114.4*	2,4,6-Trichlorophenol
----			15.547	-0.010	5458	0.0000	0.3798	---	2,3,6-Trichlorophenol
----			----			0.0000	0.0000	---	2,4,5-Trichlorophenol
----			----			0.0000	0.0000	---	2,3,4-Trichlorophenol
----			18.755	-0.059	1732	0.0000	0.0790	---	2,3,5,6-Tetrachlorophenol
----			----			0.0000	0.0000	---	2,3,4,5-Tetrachlorophenol
12.589	0.034	17777	----			22.4796	0.0000	---	2,4-Dichlorophenol
18.600	0.005	289080	20.941	0.005	386854	18.4	18.4	0.2	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	73.4	73.6


/chem2/ecd1.i/PCP20110504.b/0512-1.b/0512A014.d
0512A014.cdf
ZB-5 ST98C
UVOLTS
Time (Min)
12.062
2,4-Dichlorophenol
12.819
2,4,6-Trichlorophenol
13.733
15.497
16.079
2,4,6-Tribromophenol (surr)
19.983
Pentachlorophenol
22.056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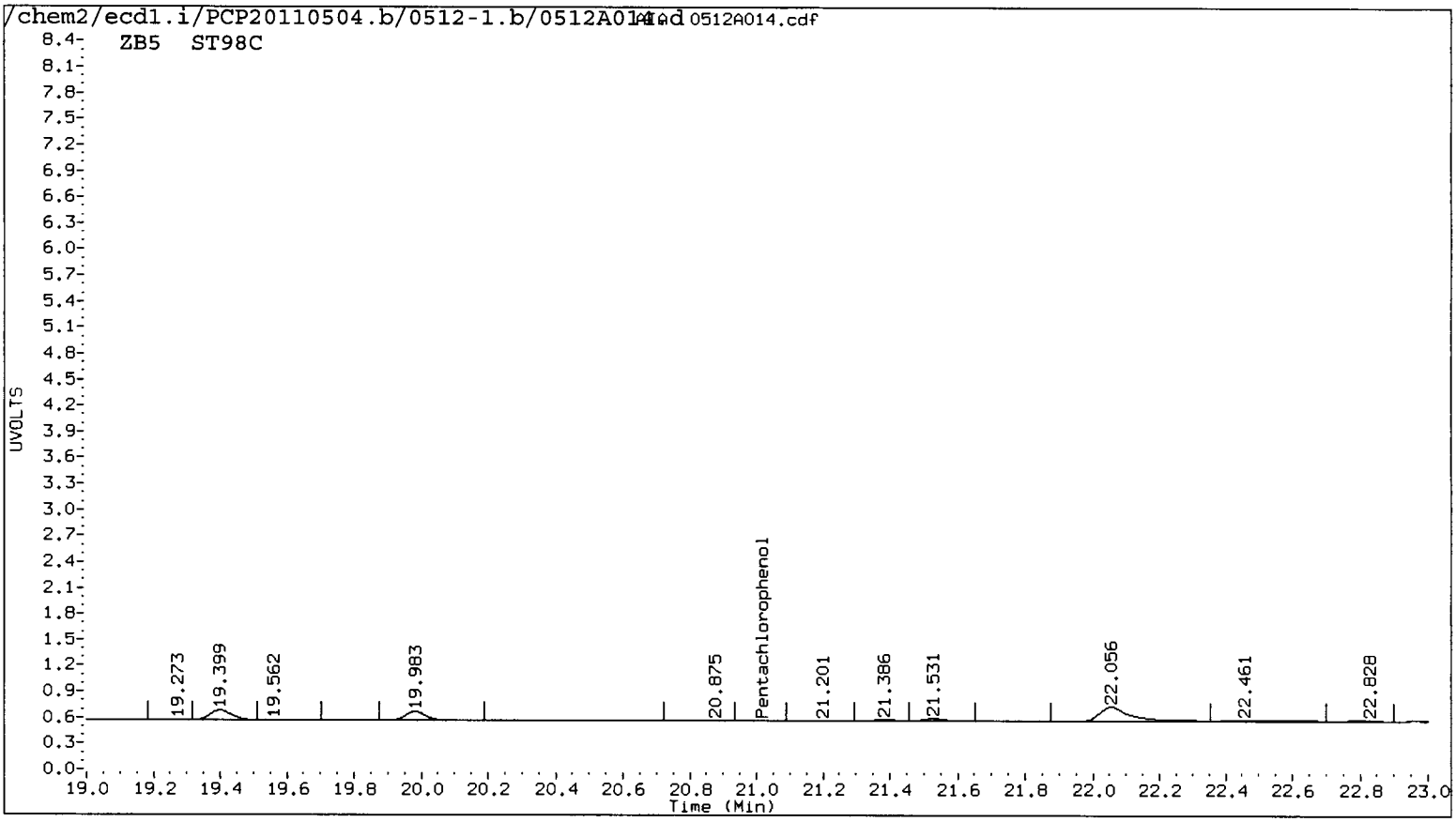
0512A014.cdf
ZB35 ST98C
UVOLTS
Time (Min)
12.313
13.338
14.216
2,4,6-Trichlorophenol
2,3,6-Trichlorophenol
16.442
2,3,5,6-Tetrachlorophenol
2,4,6-Tribromophenol (surr)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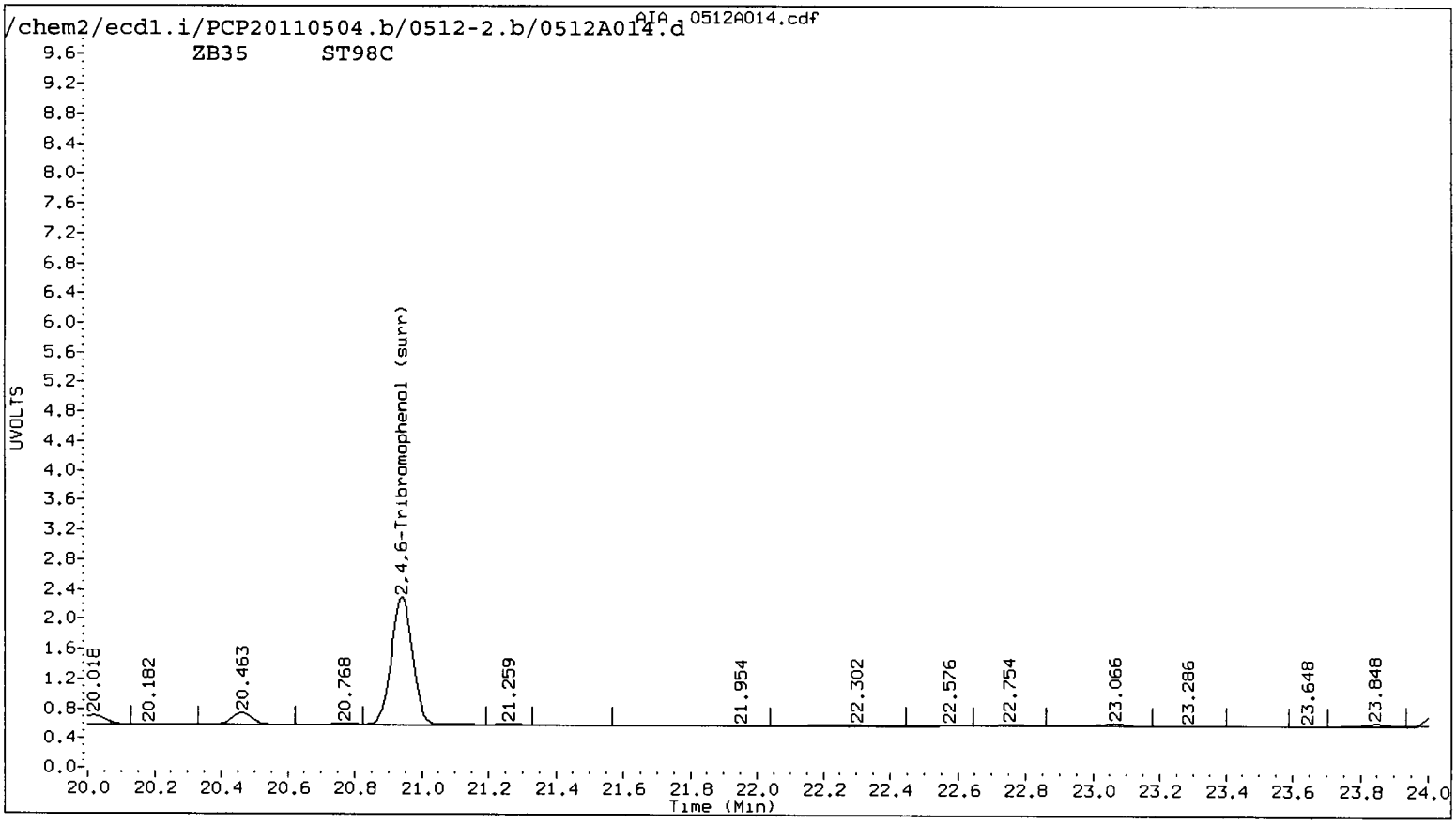
ZB5 ST98C
UVOLTS
19.273
19.399
19.562
19.983
20.875
Pentachlorophenol
21.201
21.386
21.531
22.056
22.461
22.828
Time (Min)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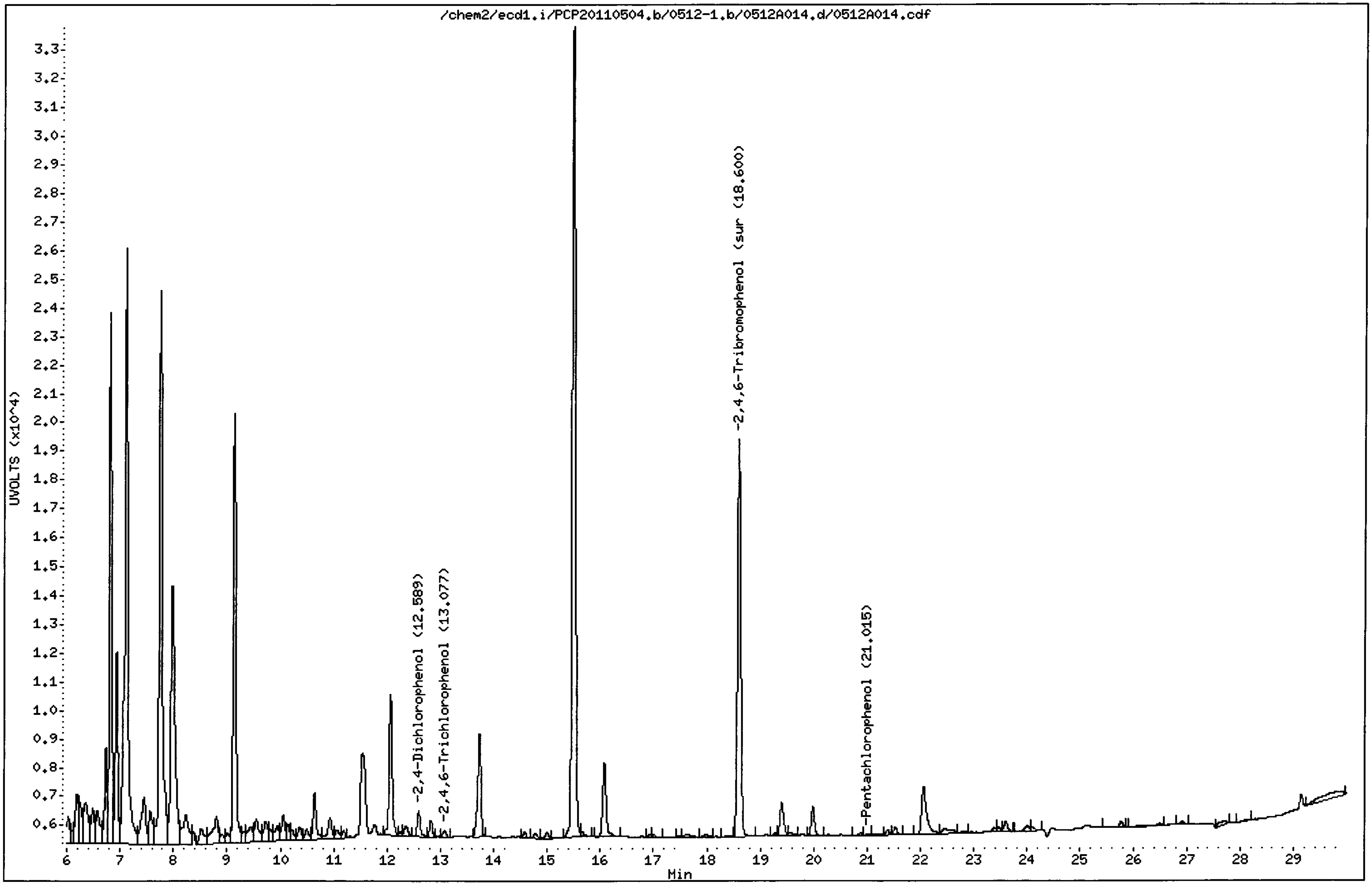
ZB35 ST98C
UVOLTS
20.018
20.182
20.463
20.768
2,4,6-Tribromophenol (surr)
21.259
21.954
22.302
22.576
22.754
23.066
23.286
23.648
23.848
Time (Min)

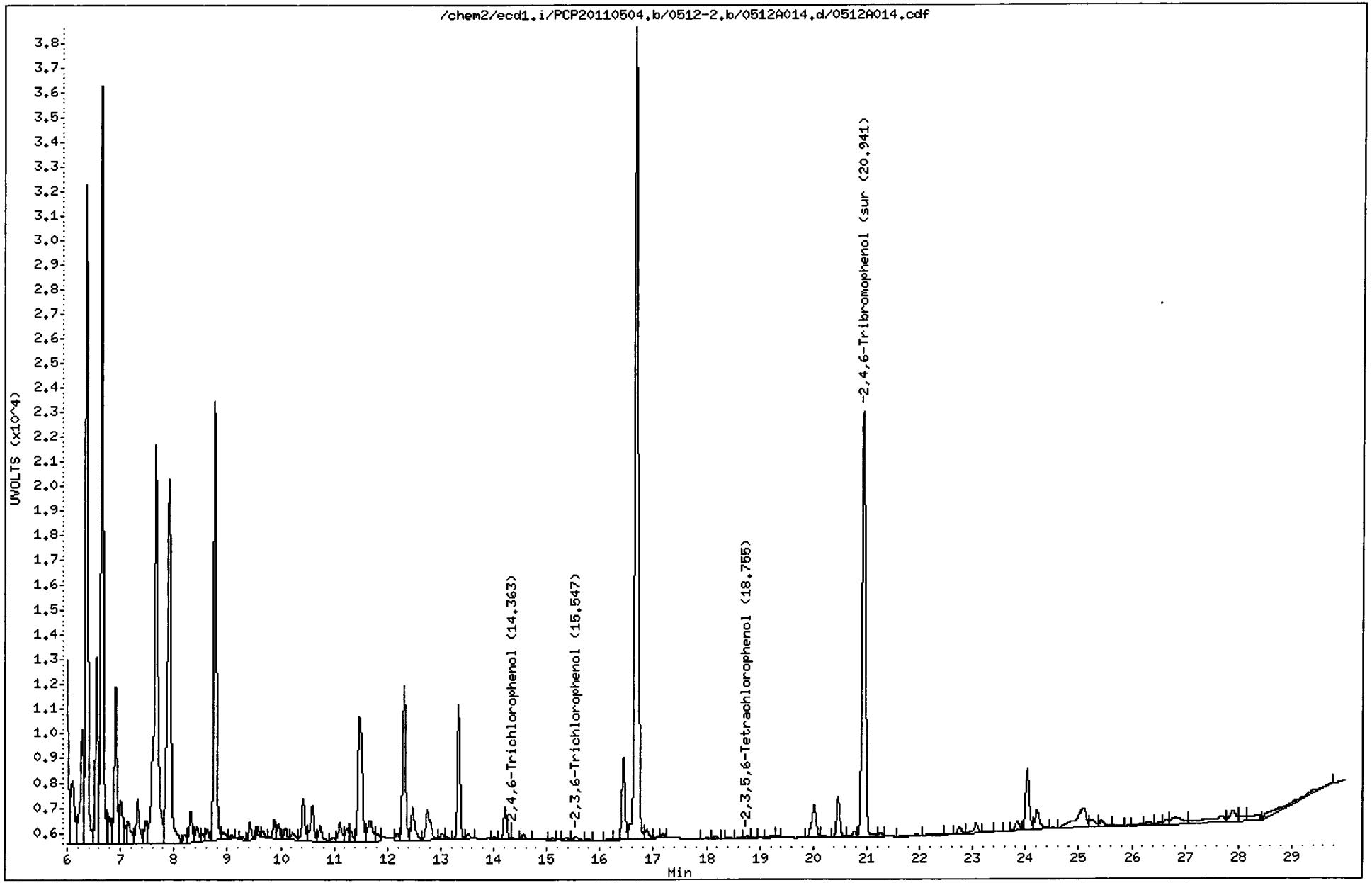
Data File: /chem2/ecd1.i/PCP20110504.b/0512-1.b/0512A014.d
Date : 12-MAY-2011 22:18
Client ID: MW13-042611
Sample Info: ST98C
Purge Volume: 500.0
Column phase: STX CLP1

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



Data File: /chem2/ecd1.i/PCP20110504.b/0512-2.b/0512A014.d
Date : 12-MAY-2011 22:18
Client ID: MW13-042611
Sample Info: ST98C
Purge Volume: 500.0
Column phase: STX CLP2

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



ST98:8615

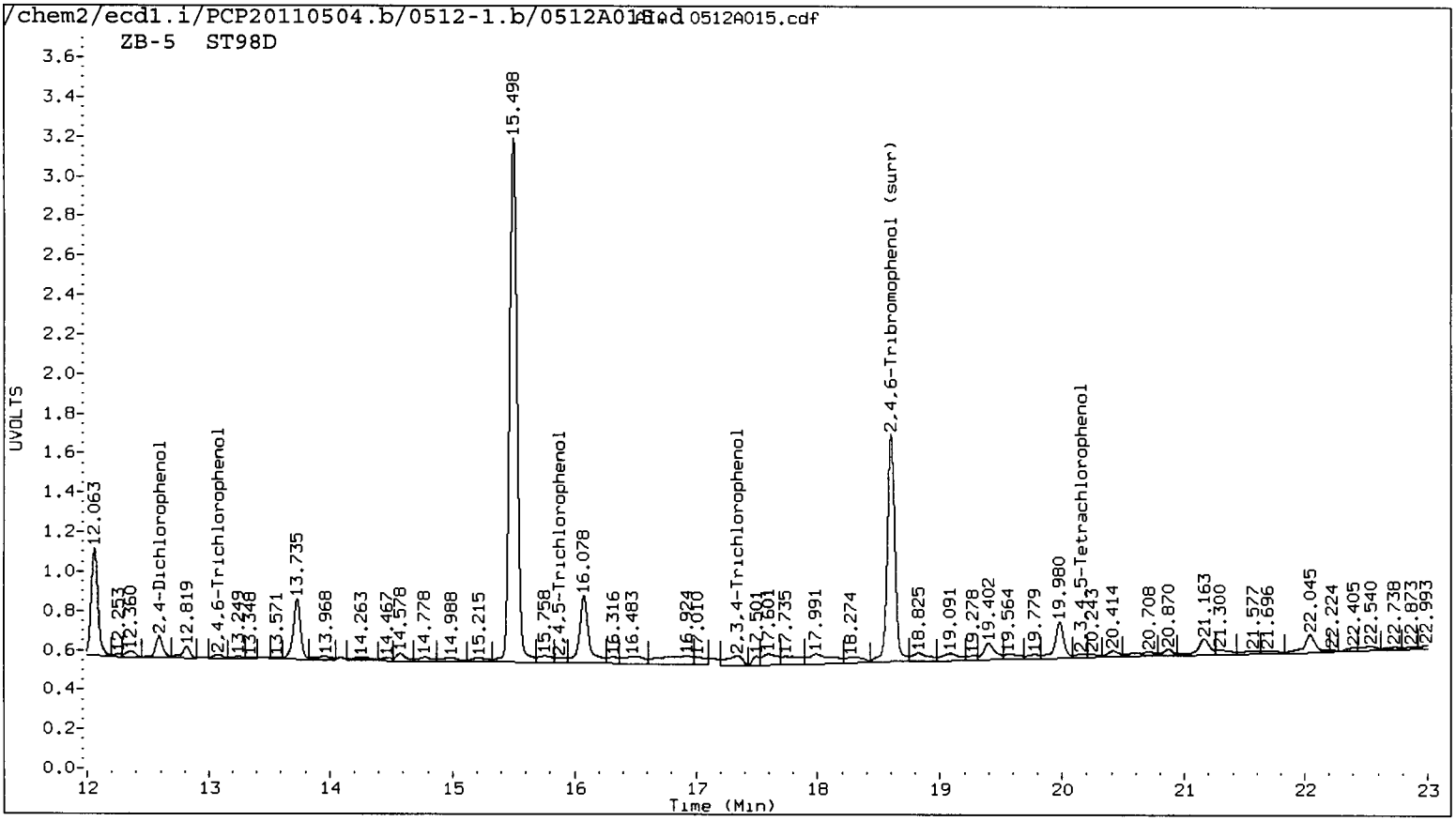
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/PCP20110504.b/0512-1.b/0512A015.d ARI ID: ST98D
Data file 2: /chem2/ecd1.i/PCP20110504.b/0512-2.b/0512A015.d Client ID: MW06-042611
Method: /chem2/ecd1.i/PCP20110504.b/PCP.m Injection Date: 12-MAY-2011 22:55
Compound Sublist: all Report Date: 05/13/2011 09:47
Instrument: ecd1.i Matrix: WATER
Operator: ar Dilution Factor: 1.000

ZB-5 Col RT	ZB-5 Col Shift	ZB-5 Col Response	ZB35 Col RT	ZB35 Col Shift	ZB35 Col Response	ZB-5 on col	ZB35 on col	RPD	Compound
----			23.015	0.048	2929	0.0000	0.1040	---	Pentachlorophenol
13.083	-0.018	5250	14.347	0.036	2334	0.4314	0.1611	91.2*	2,4,6-Trichlorophenol
----			15.553	-0.004	11024	0.0000	0.7670	---	2,3,6-Trichlorophenol
15.877	0.032	8601	----			1.1235	0.0000	---	2,4,5-Trichlorophenol
17.341	-0.010	21081	19.054	0.031	20051	2.5231	1.9333	26.5	2,3,4-Trichlorophenol
----			18.840	0.026	9004	0.0000	0.4105	---	2,3,5,6-Tetrachlorophenol
20.158	0.003	5581	22.039	-0.041	1531	0.4299	0.0894	131.1*	2,3,4,5-Tetrachlorophenol
12.590	0.035	27844	----			30.4087	0.0000	---	2,4-Dichlorophenol
18.601	0.005	259038	20.942	0.006	301659	16.5	14.3	13.7	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	65.8	57.4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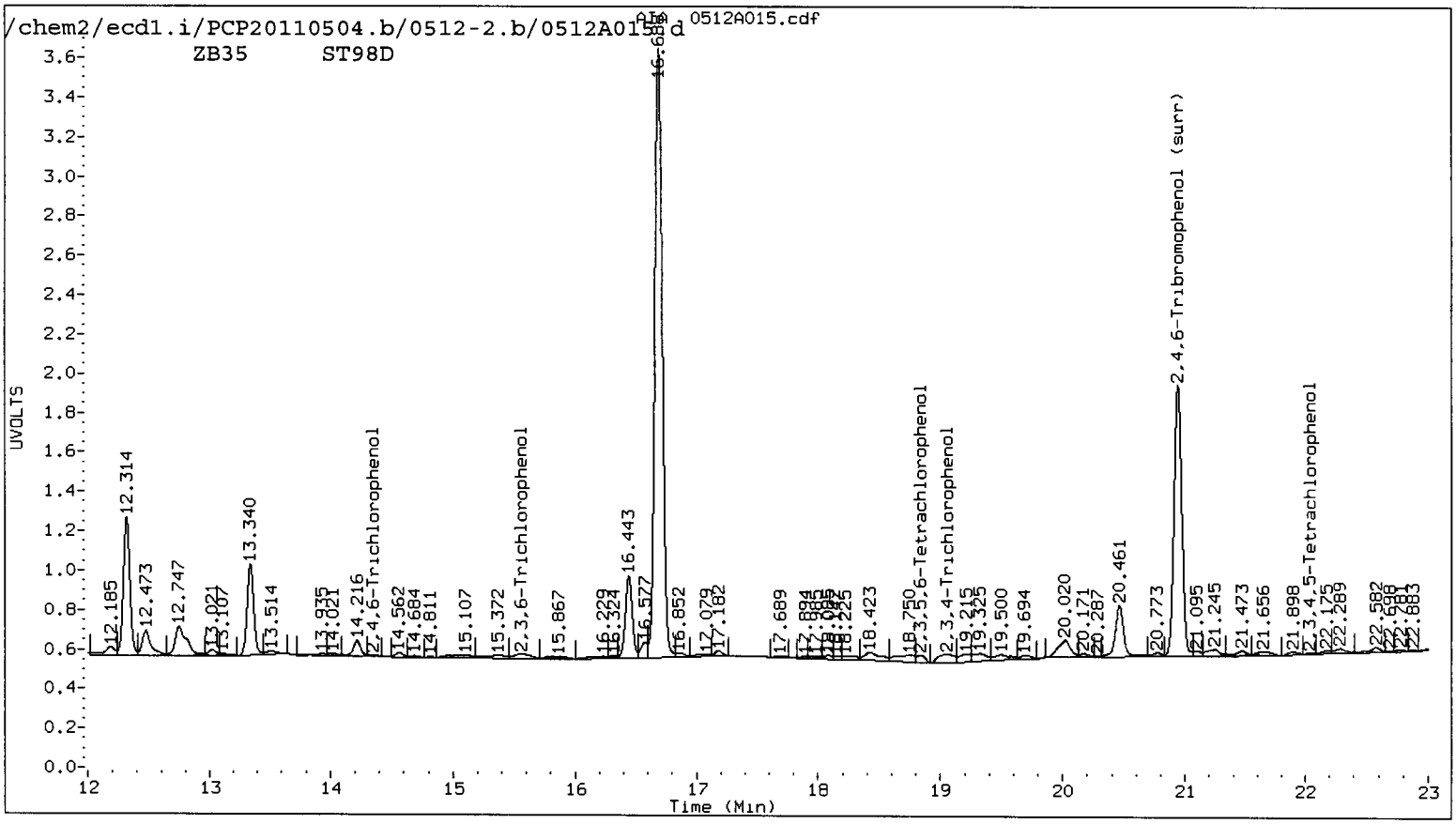
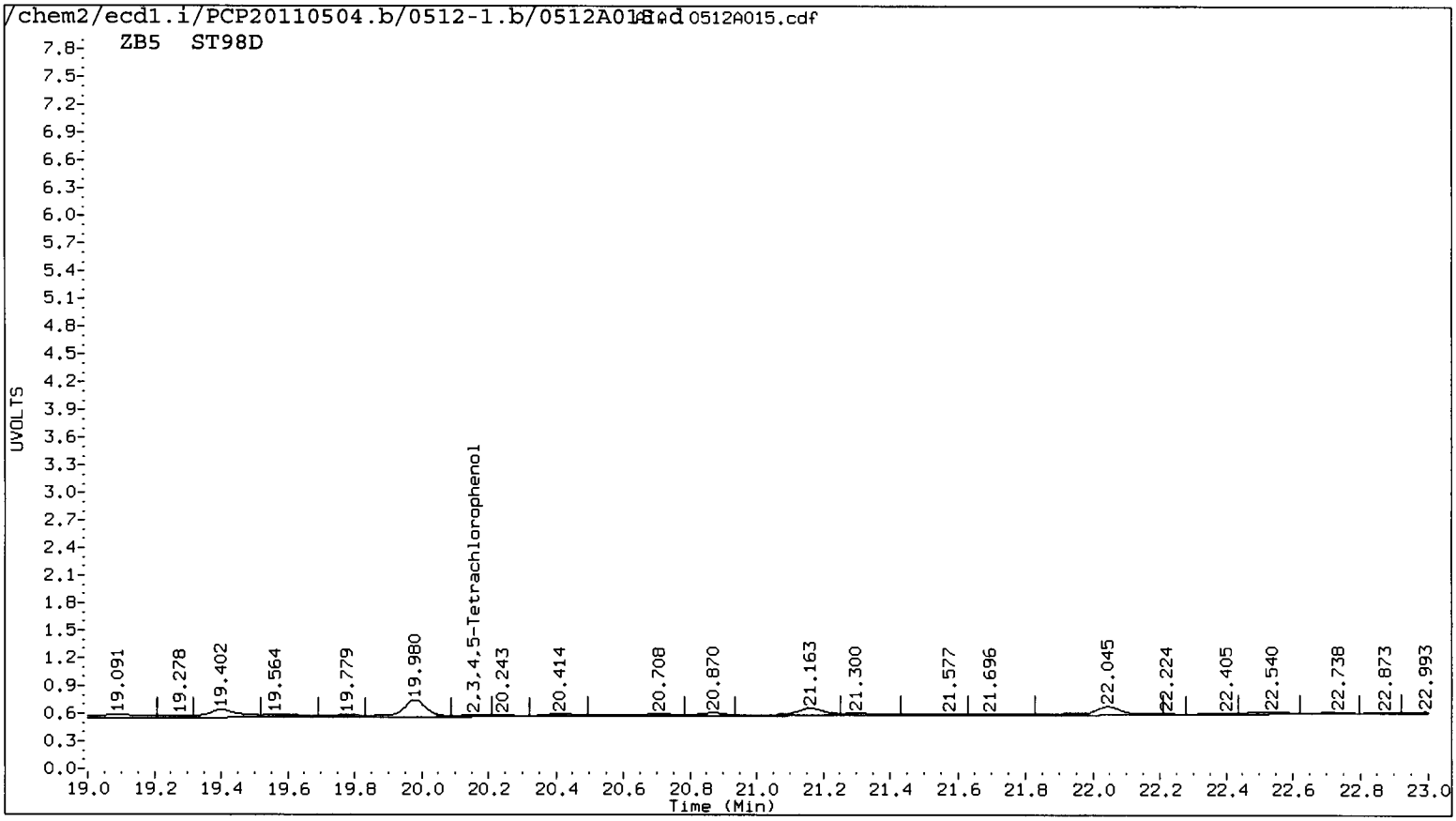
0512A015.cdf
ZB-5 ST98D
UVOLTS
Time (Min)
12.063
2,4-Dichlorophenol
2,4,6-Trichlorophenol
13.735
15.498
2,4,5-Trichlorophenol
16.078
2,3,4-Trichlorophenol
2,4,6-Tribromophenol (surr)
19.980
2,3,4,5-Tetrachlorophenol


/chem2/ecd1.i/PCP20110504.b/0512-2.b/0512A015.d
0512A015.cdf
ZB35 ST98D
UVOLTS
Time (Min)
12.314
13.340
16.443
2,3,6-Trichlorophenol
14.216
2,4,6-Trichlorophenol
2,3,5,6-Tetrachlorophenol
2,3,4-Trichlorophenol
2,4,6-Tribromophenol (surr)
20.461
2,3,4,5-Tetrachlorophenol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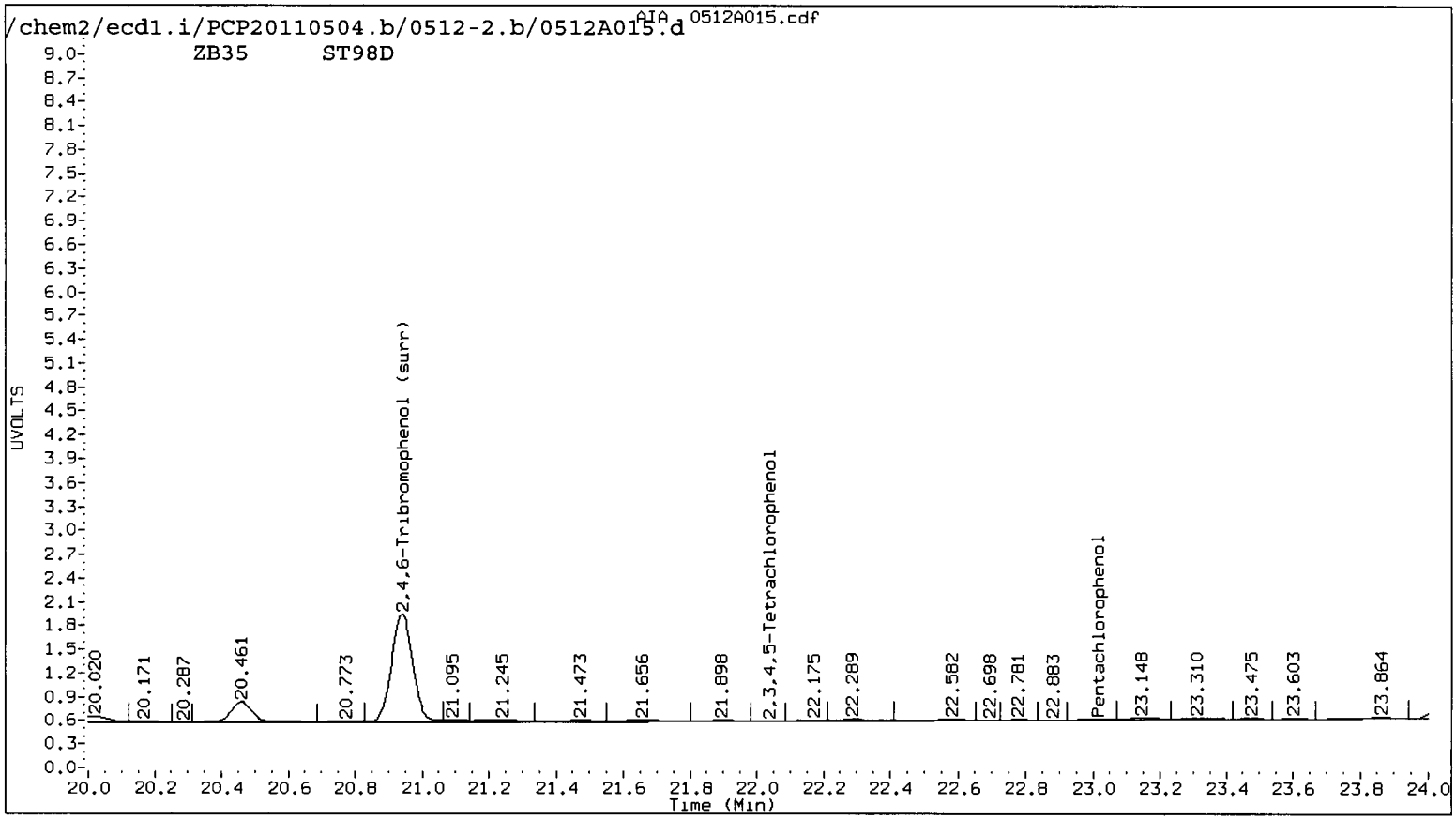
AIA 0512A015.cdf
ZB5 ST98D
UVOLTS
Time (Min)
19.091
19.278
19.402
19.564
19.779
19.980
2,3,4,5-Tetrachlorophenol
20.243
20.414
20.708
20.870
21.163
21.300
21.577
21.696
22.045
22.224
22.405
22.540
22.738
22.873
22.993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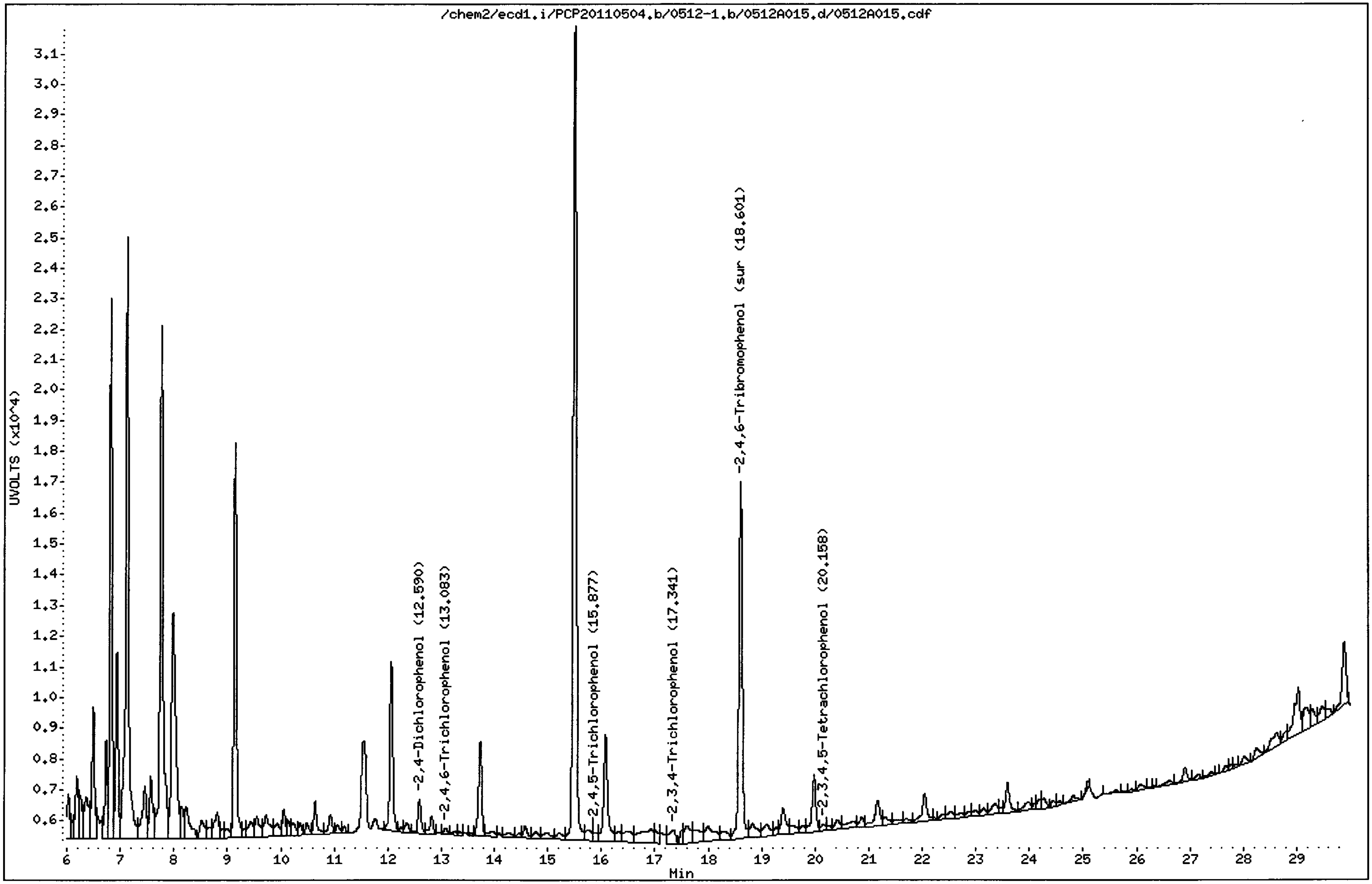
AIA 0512A015.cdf
ZB35 ST98D
UVOLTS
Time (Min)
20.020
20.171
20.287
20.461
20.773
2,4,6-Tribromophenol (surr)
21.095
21.245
21.473
21.656
21.898
2,3,4,5-Tetrachlorophenol
22.175
22.289
22.582
22.698
22.781
22.883
Pentachlorophenol
23.148
23.310
23.475
23.603
23.864

Data File: /chem2/ecd1.i/PCP20110504.b/0512-1.b/0512A015.d
Date : 12-MAY-2011 22:55
Client ID: MW06-042611 Instrument: ecd1.i
Sample Info: ST98D
Purge Volume: 500.0 Operator: ar
Column phase: STX CLP1 Column diameter: 0.53



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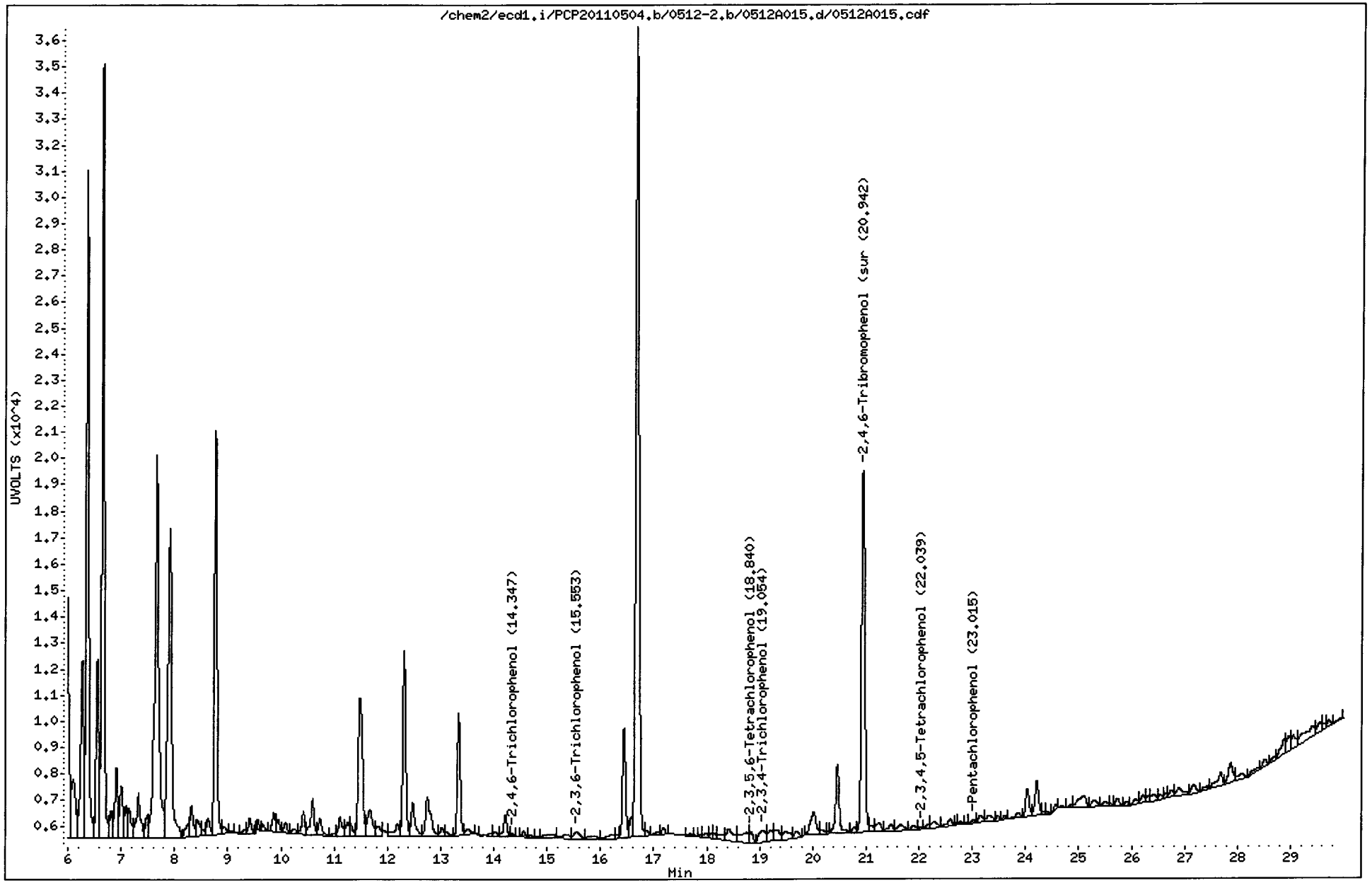
Date : 12-MAY-2011 22:55
Client ID: MW06-042611
Sample Info: ST98D
Purge Volume: 500.0
Column phase: STX CLP2

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



ST98:00750

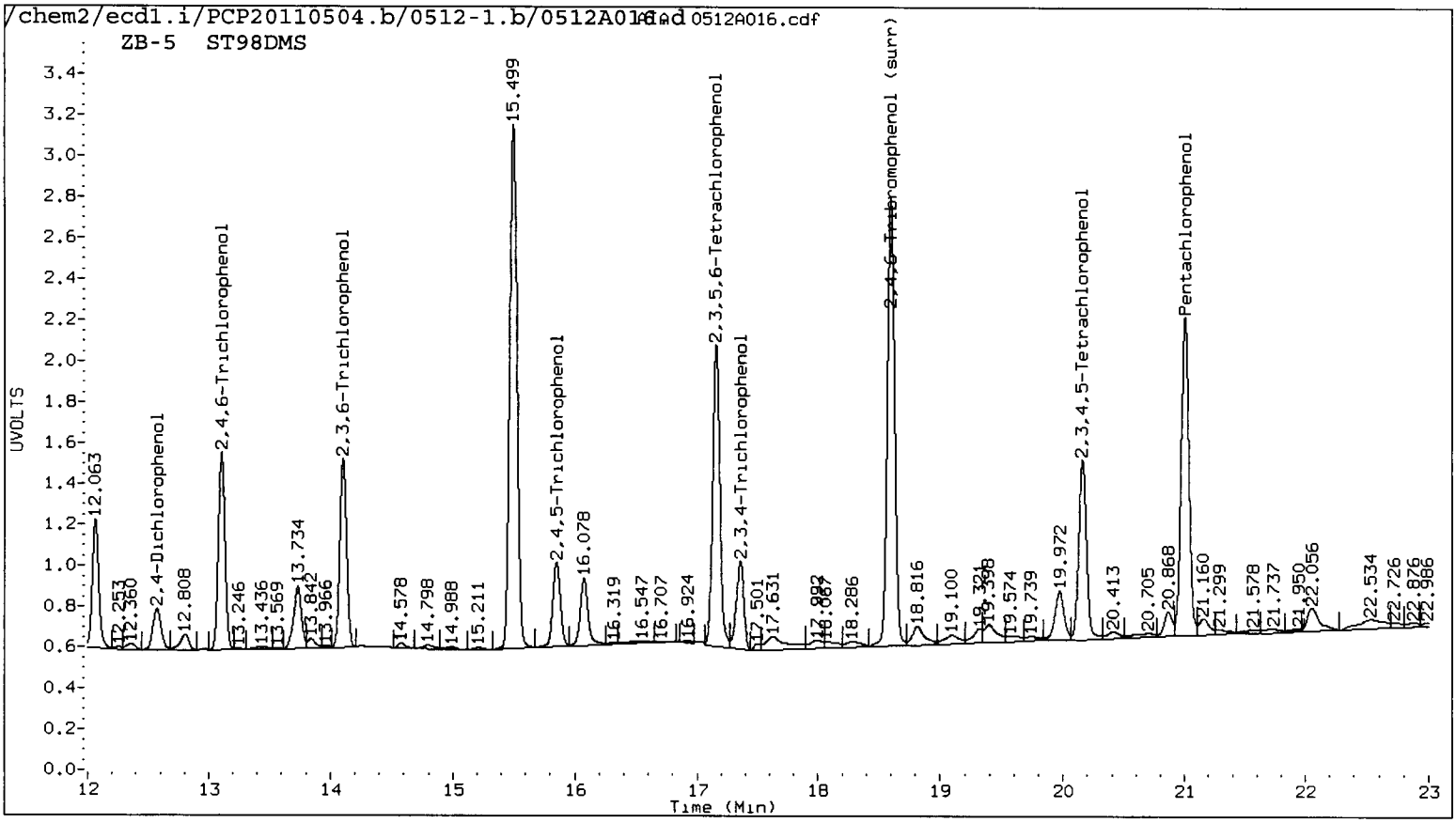
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

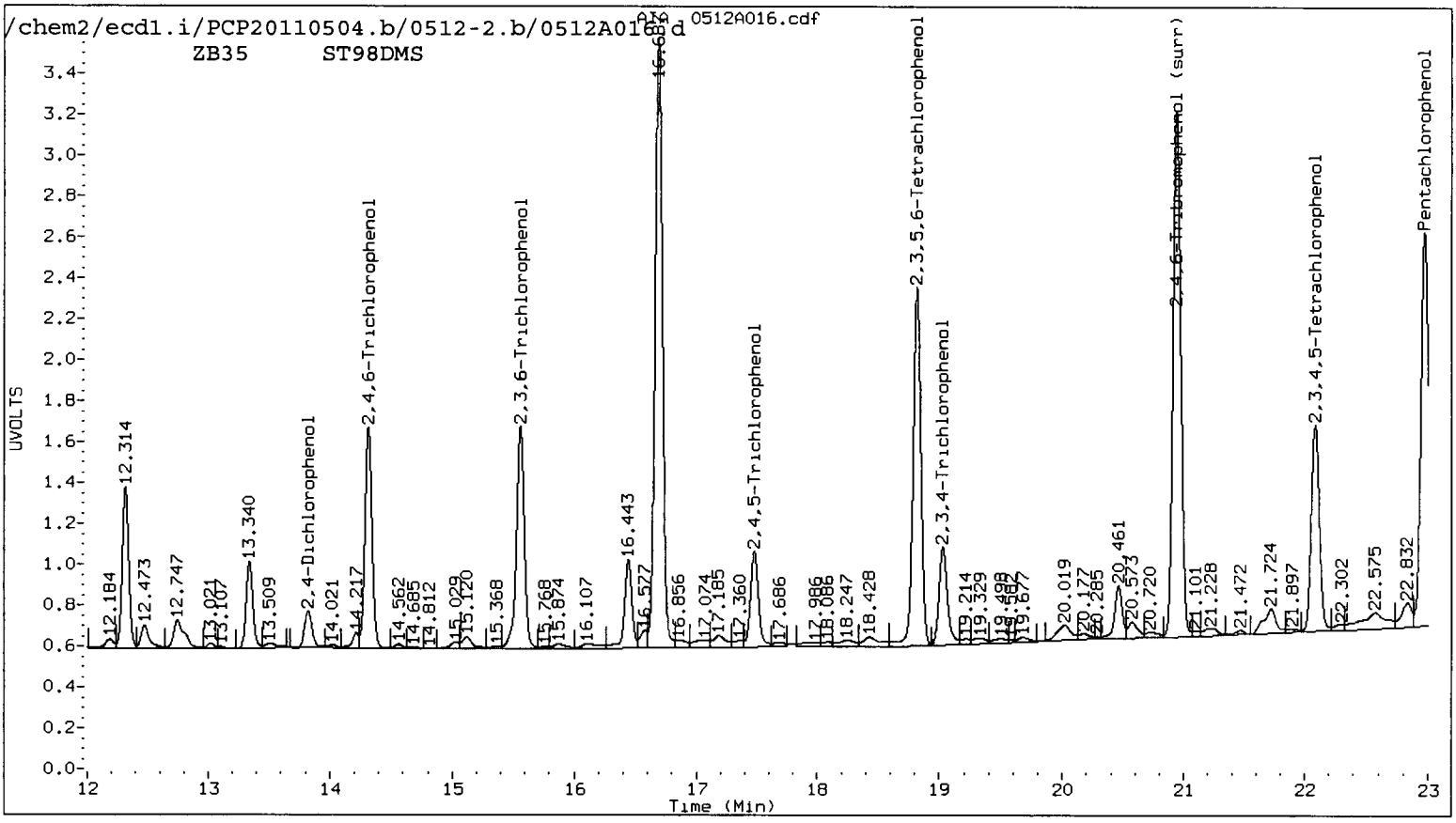
Data file 1: /chem2/ecd1.i/PCP20110504.b/0512-1.b/0512A016.d ARI ID: ST98DMS
Data file 2: /chem2/ecd1.i/PCP20110504.b/0512-2.b/0512A016.d Client ID: MW06-042611 MS
Method: /chem2/ecd1.i/PCP20110504.b/PCP.m Injection Date: 12-MAY-2011 23:31
Compound Sublist: all Report Date: 05/13/2011 09:47
Instrument: ecd1.i Matrix: WATER
Operator: ar Dilution Factor: 1.000

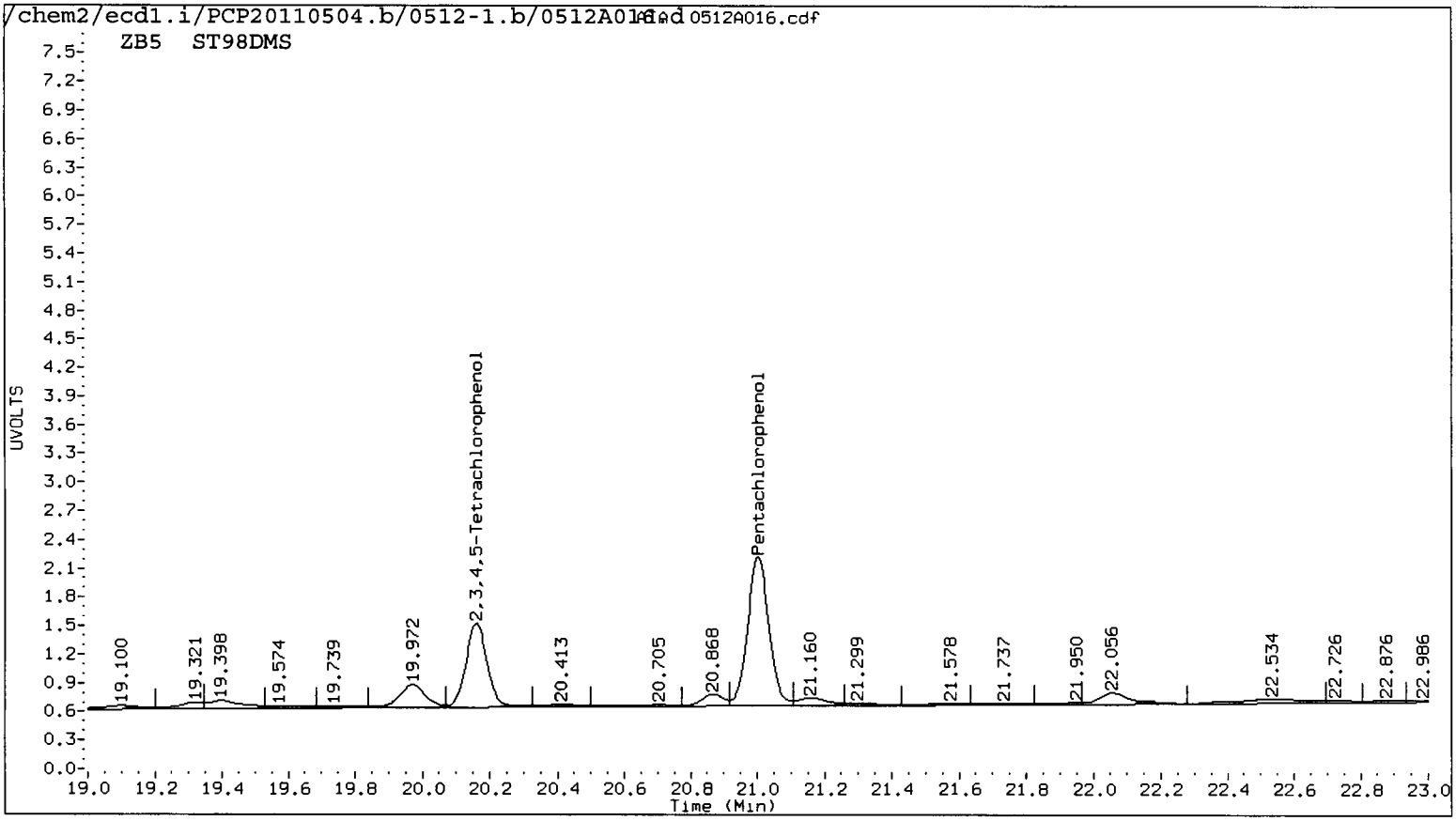
ZB-5 Col RT	ZB-5 Col Shift	ZB-5 Col Response	ZB35 Col RT	ZB35 Col Shift	ZB35 Col Response	ZB-5 on col	ZB35 on col	RPD	Compound
21.003	0.006	346535	22.973	0.006	438593	17.1985	15.5746	9.9	Pentachlorophenol
13.107	0.006	186973	14.317	0.006	221838	15.3600	15.3058	0.4	2,4,6-Trichlorophenol
14.102	0.005	180770	15.563	0.006	247034	15.7842	17.1869	8.5	2,3,6-Trichlorophenol
15.851	0.006	88693	17.480	0.006	109747	12.4966	13.5563	8.1	2,4,5-Trichlorophenol
17.356	0.004	92084	19.029	0.006	115586	11.0210	11.8223	7.0	2,3,4-Trichlorophenol
17.158	0.005	311475	18.819	0.005	392957	18.4232	17.9122	2.8	2,3,5,6-Tetrachlorophenol
20.160	0.006	195522	22.086	0.006	229585	15.0613	14.3739	4.7	2,3,4,5-Tetrachlorophenol
12.573	0.018	49258	13.823	0.003	39251	65.0352	46.7797	32.7	2,4-Dichlorophenol
18.601	0.005	462558	20.942	0.006	564426	29.4	26.8	9.0	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
Pentachlorophenol	68.8	62.3
2,4,6-Trichlorophenol	61.4	61.2
2,3,6-Trichlorophenol	63.1	68.7
2,4,5-Trichlorophenol	50.0	54.2
2,3,4-Trichlorophenol	44.1	47.3
2,3,5,6-Tetrachlorophenol	73.7	71.6
2,3,4,5-Tetrachlorophenol	60.2	57.5
2,4-Dichlorophenol	26.0	18.7
2,4,6-TBP (surr)	58.8	53.7


/chem2/ecd1.i/PCP20110504.b/0512-1.b/0512A016.d 0512A016.cdf
ZB-5 ST98DMS
UVOLTS
Time (Min)
12.063
2,4-Dichlorophenol
2,4,6-Trichlorophenol
2,3,6-Trichlorophenol
15.499
2,4,5-Trichlorophenol
16.078
2,3,5,6-Tetrachlorophenol
2,3,4-Trichlorophenol
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol


/chem2/ecd1.i/PCP20110504.b/0512-2.b/0512A016.d 0512A016.cdf
ZB35 ST98DMS
UVOLTS
Time (Min)
12.314
2,4-Dichlorophenol
2,4,6-Trichlorophenol
2,3,6-Trichlorophenol
16.443
2,4,5-Trichlorophenol
2,3,5,6-Tetrachlorophenol
2,3,4-Trichlorophenol
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol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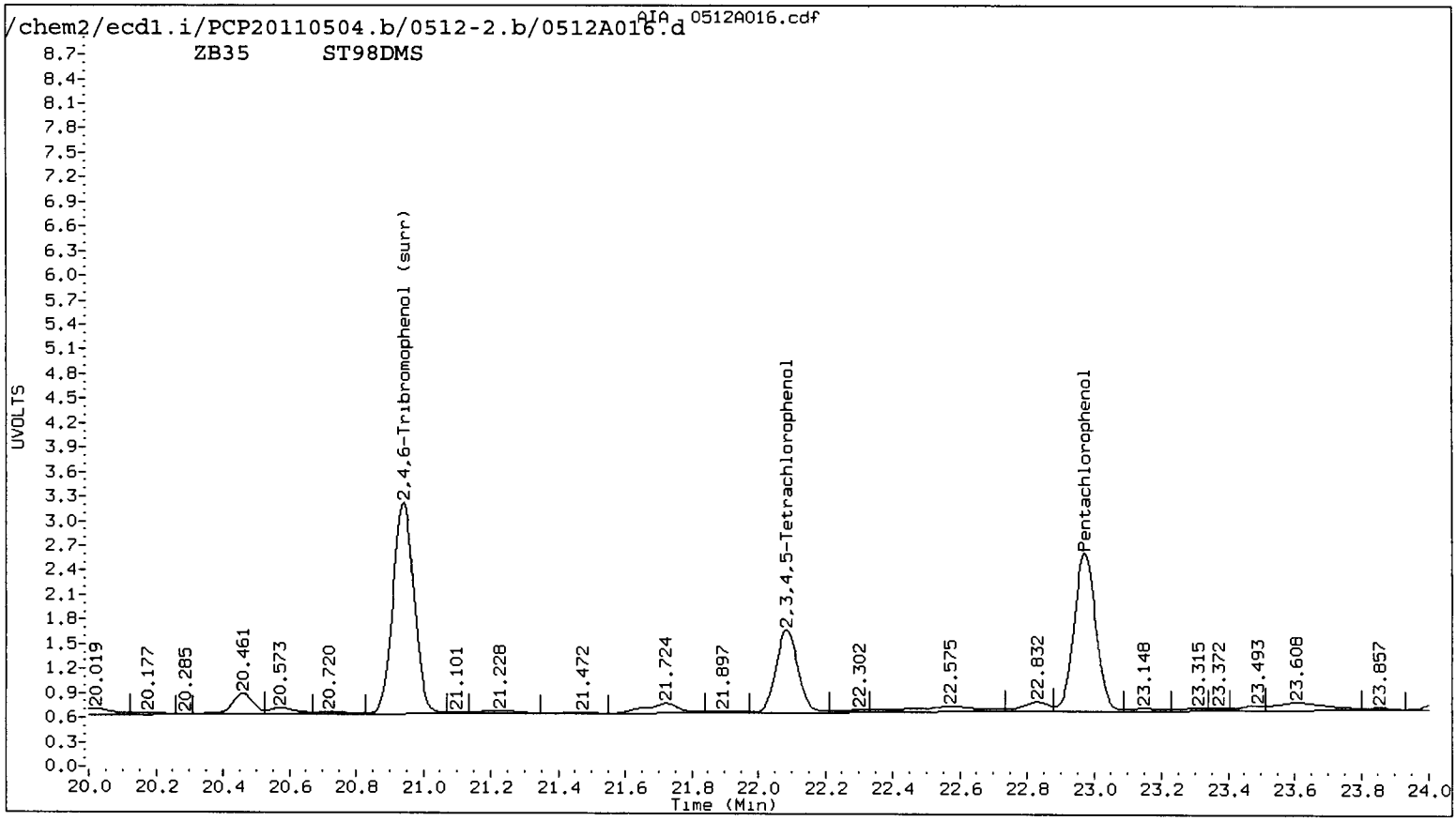
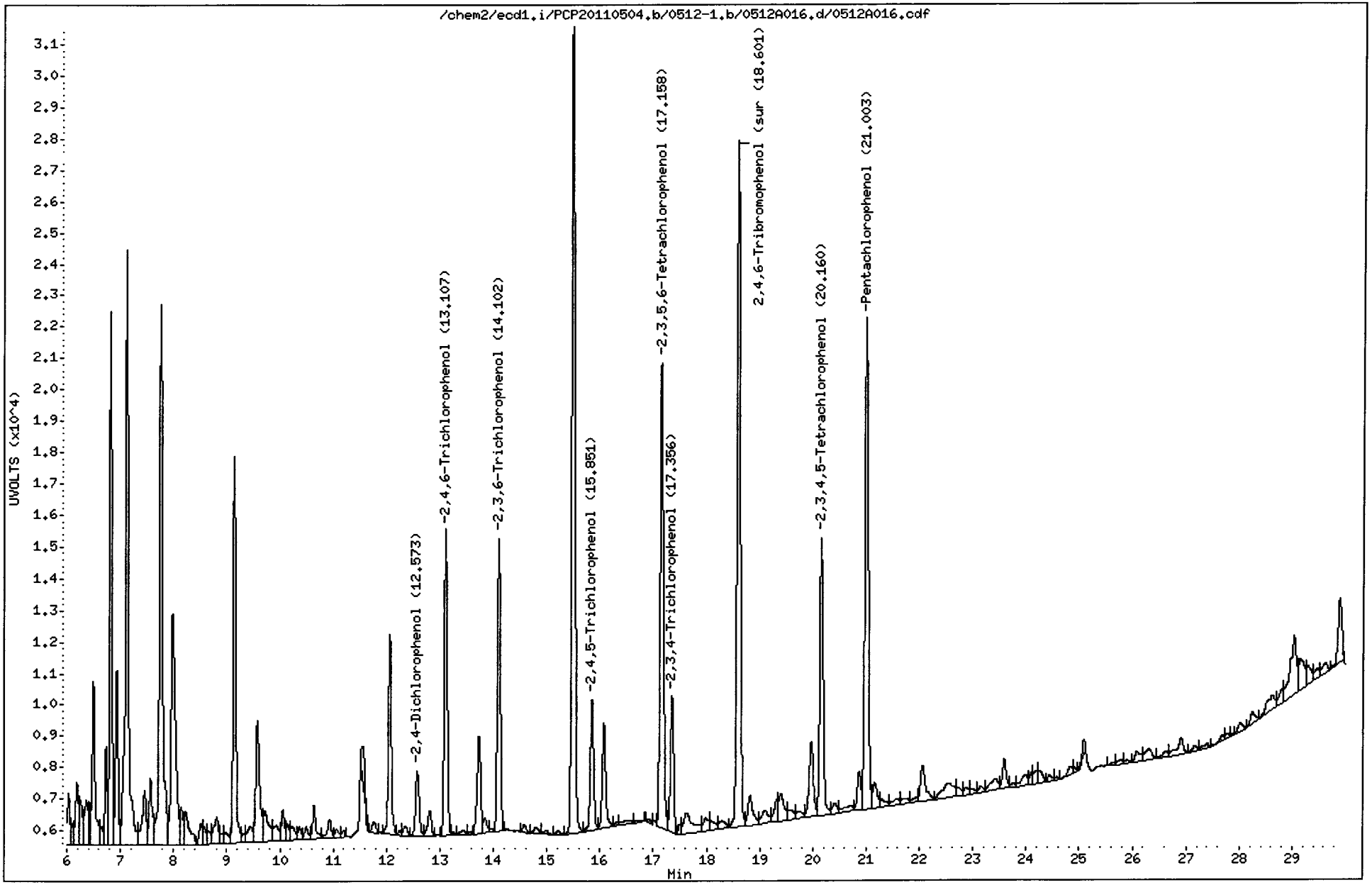
0512A016.cdf
ZB5 ST98DMS
UVOLTS
Time (Min)
19.100
19.321
19.398
19.574
19.739
19.972
2,3,4,5-Tetrachlorophenol
20.413
20.705
20.868
Pentachlorophenol
21.160
21.299
21.578
21.737
21.950
22.056
22.534
22.726
22.876
22.986


/chem2/ecd1.i/PCP20110504.b/0512-2.b/0512A016.d
0512A016.cdf
ZB35 ST98DMS
UVOLTS
Time (Min)
20.019
20.177
20.285
20.461
20.573
20.720
2,4,6-Tribromophenol (surr)
21.101
21.228
21.472
21.724
21.897
2,3,4,5-Tetrachlorophenol
22.302
22.575
22.832
Pentachlorophenol
23.148
23.315
23.372
23.493
23.608
23.857

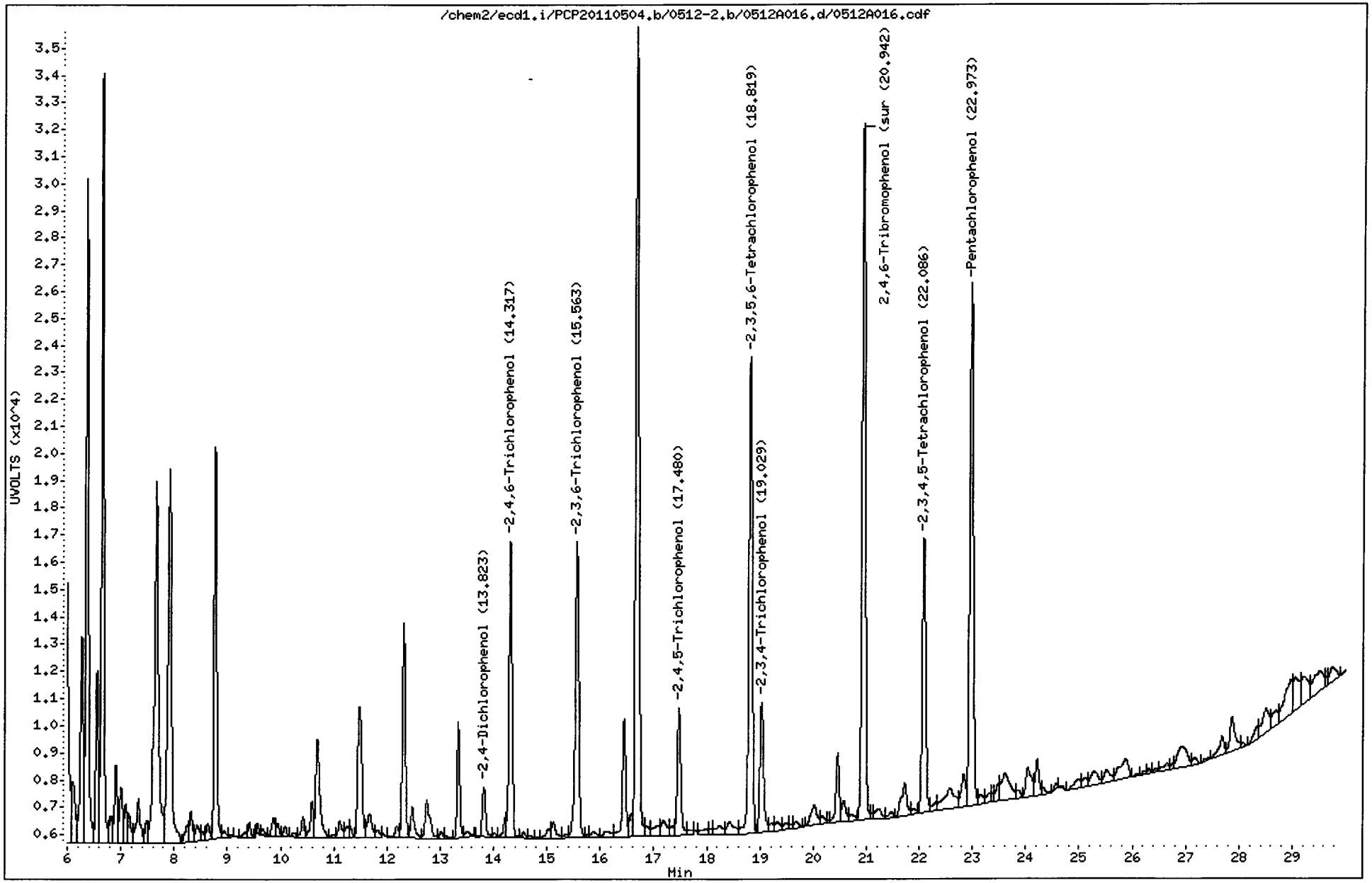
Data File: /chem2/ecd1.i/PCP20110504.b/0512-1.b/0512A016.d
Date : 12-MAY-2011 23:31
Client ID: MW06-042611 MS
Sample Info: ST98DMS
Purge Volume: 500.0
Column phase: STX CLP1

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



ST98:0075u

Data File: /chem2/ecd1.i/PCP20110504.b/0512-2.b/0512A016.d
Date : 12-MAY-2011 23:31
Client ID: MW06-042611 MS
Instrument: ecd1.i
Sample Info: ST98DMS
Purge Volume: 500.0
Operator: ar
Column phase: STX CLP2
Column diameter: 0.53



ST98:00755

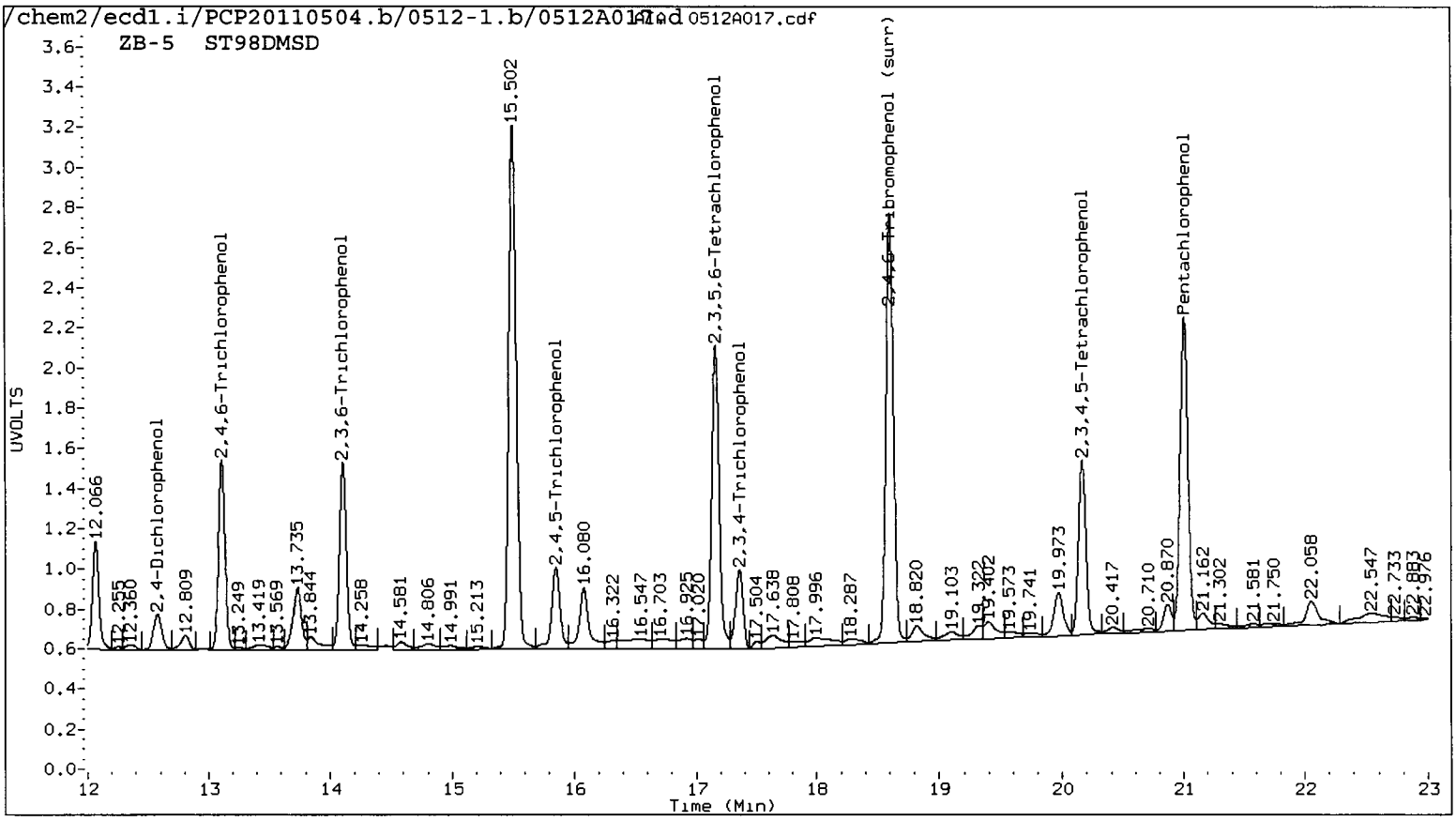
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/PCP20110504.b/0512-1.b/0512A017.d ARI ID: ST98DMSD
Data file 2: /chem2/ecd1.i/PCP20110504.b/0512-2.b/0512A017.d Client ID: MW06-042611 MSD
Method: /chem2/ecd1.i/PCP20110504.b/PCP.m Injection Date: 13-MAY-2011 00:07
Compound Sublist: all Report Date: 05/13/2011 09:47
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
21.006	0.008	350073	22.976	0.009	439317	17.3741	15.6003	10.8	Pentachlorophenol
13.109	0.008	184003	14.320	0.009	215372	15.1160	14.8597	1.7	2,4,6-Trichlorophenol
14.105	0.008	188895	15.566	0.009	252703	16.4936	17.5813	6.4	2,3,6-Trichlorophenol
15.854	0.009	98015	17.482	0.008	101131	13.9273	12.4920	10.9	2,4,5-Trichlorophenol
17.358	0.007	86753	19.032	0.009	102197	10.3830	10.3689	0.1	2,3,4-Trichlorophenol
17.161	0.008	328439	18.822	0.008	395138	19.4265	18.0116	7.6	2,3,5,6-Tetrachlorophenol
20.163	0.008	191690	22.089	0.009	223919	14.7661	13.9957	5.4	2,3,4,5-Tetrachlorophenol
12.576	0.021	43475	13.826	0.006	34078	56.9544	40.3125	34.2	2,4-Dichlorophenol
18.603	0.008	454236	20.945	0.009	551010	28.9	26.2	9.6	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
Pentachlorophenol	69.5	62.4
2,4,6-Trichlorophenol	60.5	59.4
2,3,6-Trichlorophenol	66.0	70.3
2,4,5-Trichlorophenol	55.7	50.0
2,3,4-Trichlorophenol	41.5	41.5
2,3,5,6-Tetrachlorophenol	77.7	72.0
2,3,4,5-Tetrachlorophenol	59.1	56.0
2,4-Dichlorophenol	22.8	16.1
2,4,6-TBP (surr)	57.7	52.4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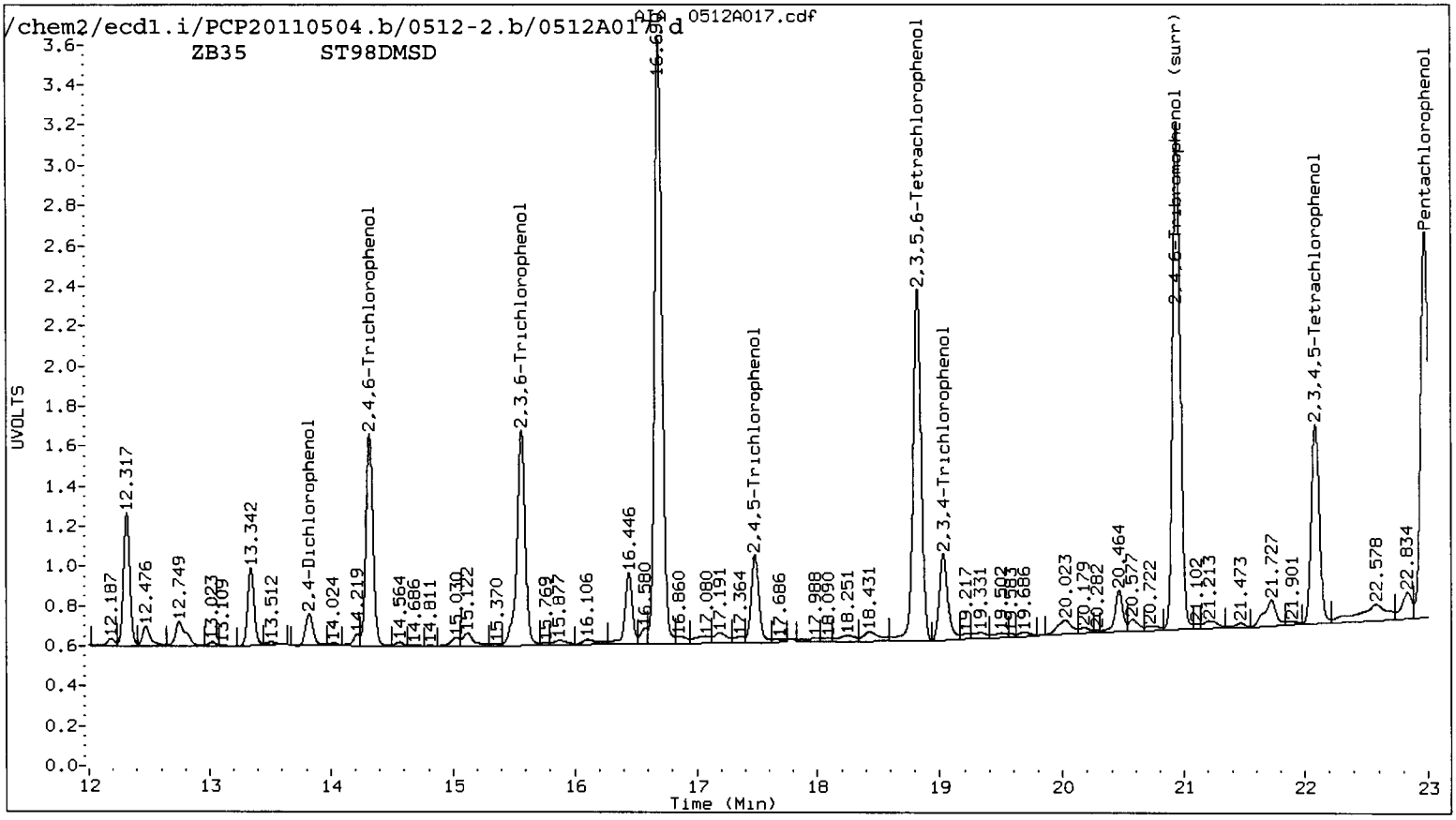
0512A017.cdf
ZB-5 ST98DMSD
UVOLTS
Time (Min)
12.066
2,4-Dichlorophenol
12.809
2,4,6-Trichlorophenol
13.735
2,3,6-Trichlorophenol
14.258
15.502
2,4,5-Trichlorophenol
16.080
2,3,5,6-Tetrachlorophenol
2,3,4-Trichlorophenol
17.504
2,4,6-Tribromophenol (surr)
18.820
19.973
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
22.058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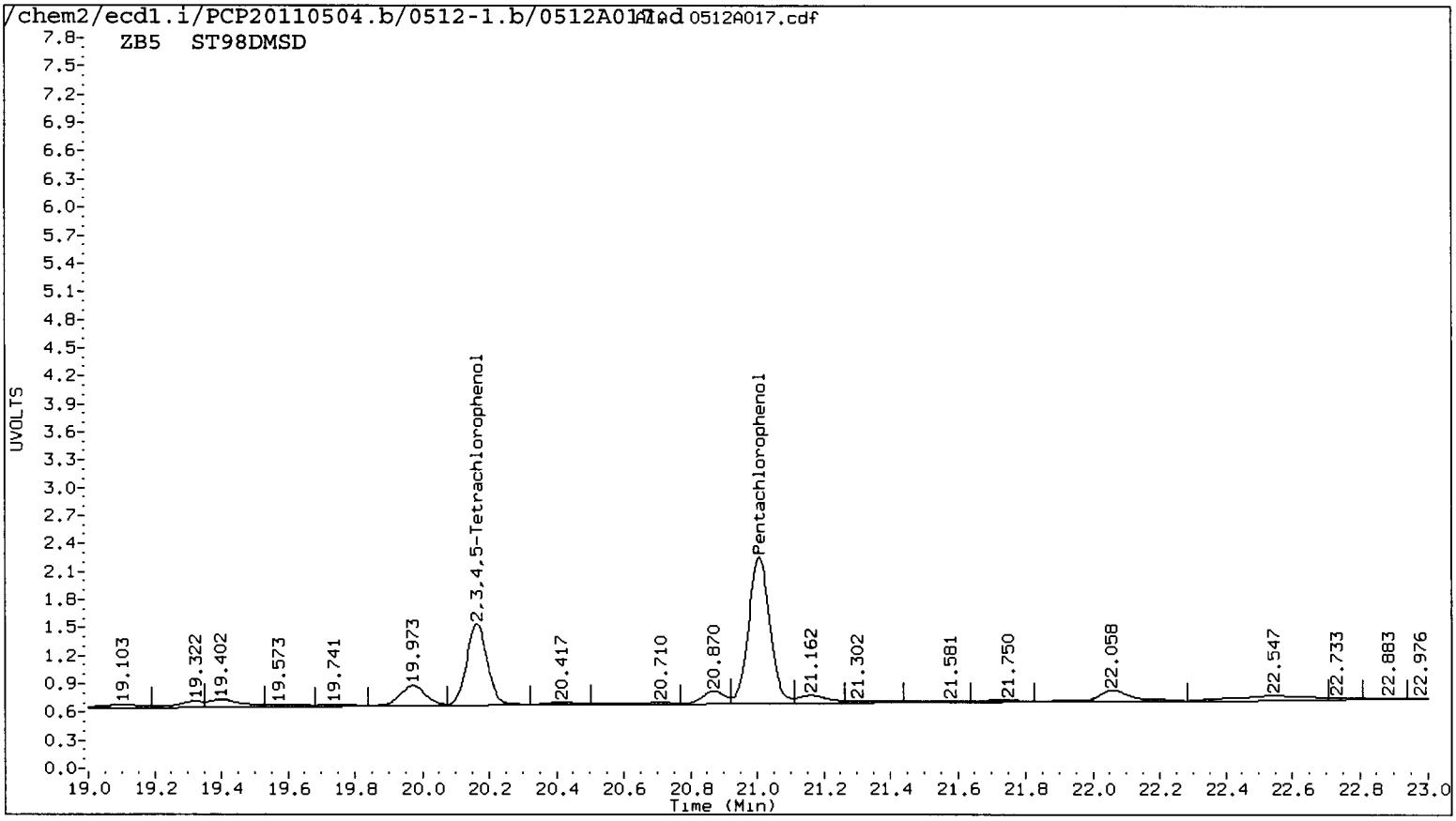
0512A017.cdf
ZB35 ST98DMSD
UVOLTS
Time (Min)
12.317
13.342
2,4-Dichlorophenol
2,4,6-Trichlorophenol
2,3,6-Trichlorophenol
16.446
2,3,5,6-Tetrachlorophenol
2,4,5-Trichlorophenol
2,3,4-Trichlorophenol
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol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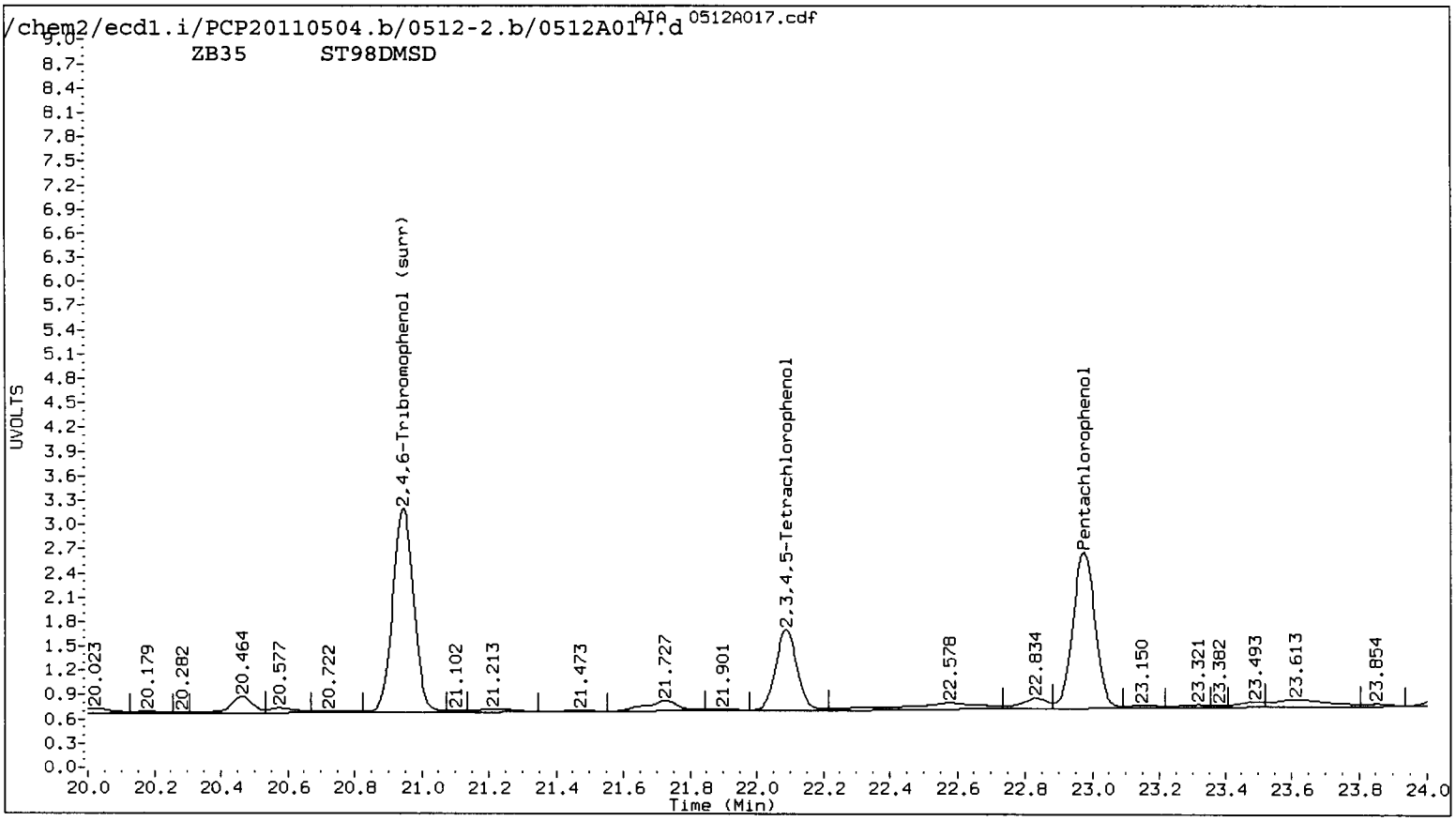
AIA 0512A017.cdf
ZB5 ST98DMSD
UVOLTS
Time (Min)
19.103
19.322
19.402
19.573
19.741
19.973
2,3,4,5-Tetrachlorophenol
20.417
20.710
20.870
Pentachlorophenol
21.162
21.302
21.581
21.750
22.058
22.547
22.733
22.883
22.976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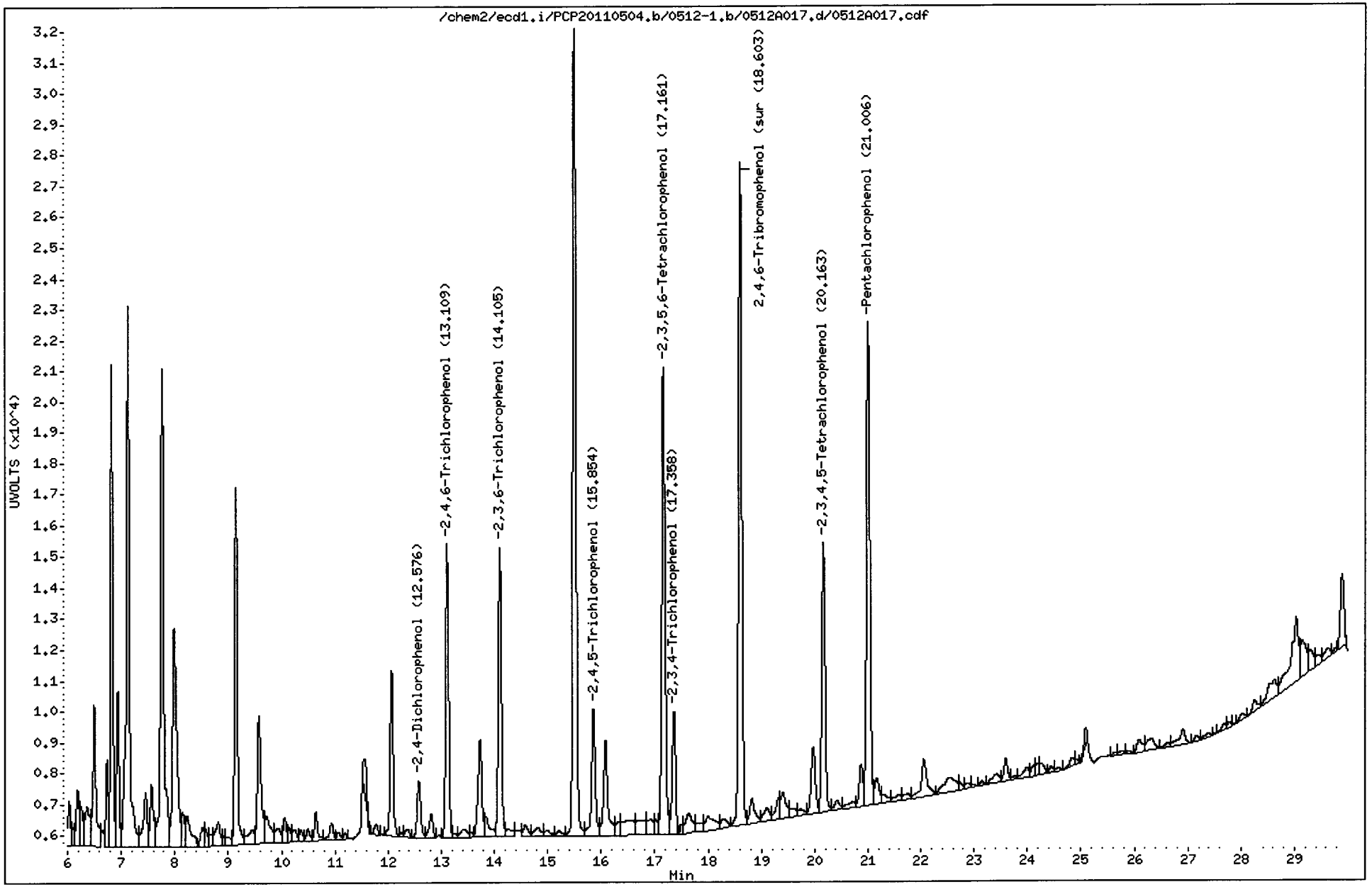
AIA 0512A017.cdf
ZB35 ST98DMSD
UVOLTS
Time (Min)
20.023
20.179
20.282
20.464
20.577
20.722
2,4,6-Tribromophenol (surr)
21.102
21.213
21.473
21.727
21.901
2,3,4,5-Tetrachlorophenol
22.578
22.834
Pentachlorophenol
23.150
23.321
23.382
23.493
23.613
23.854

Data File: /chem2/ecd1.i/PCP20110504.b/0512-1.b/0512A017.d
Date : 13-MAY-2011 00:07
Client ID: MW06-042611 MSD
Sample Info: ST98DMSD
Purge Volume: 500.0
Column phase: STX CLP1

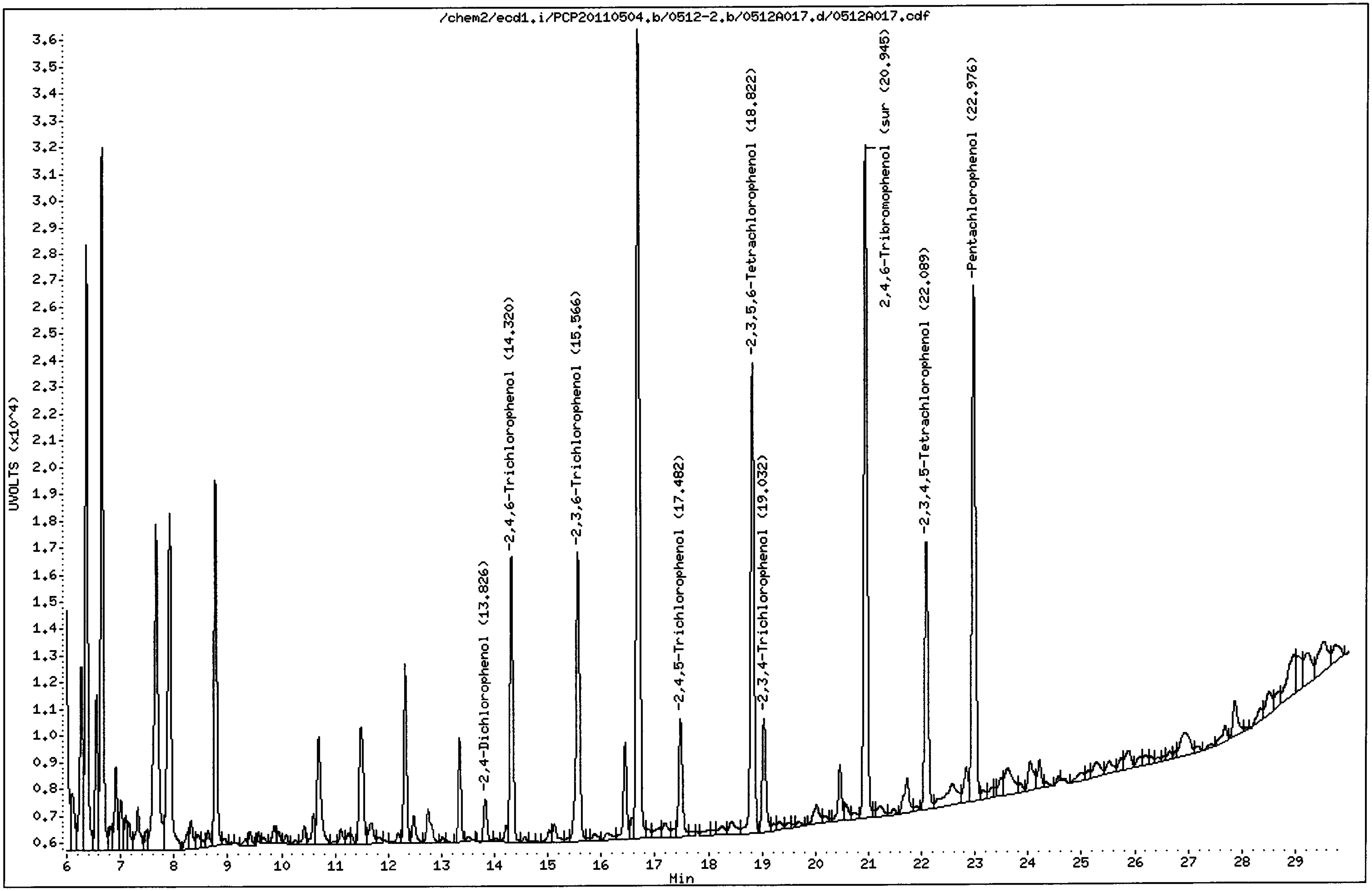
Instrument: ecd1.i
Operator: ar
Column diameter: 0.53



ST98 : 00759

Data File: /chem2/ecd1.i/PCP20110504.b/0512-2.b/0512A017.d
Date : 13-MAY-2011 00:07
Client ID: MW06-042611 MSD
Sample Info: ST98DMSD
Purge Volume: 500.0
Column phase: STX CLP2

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



ST98 : 00760

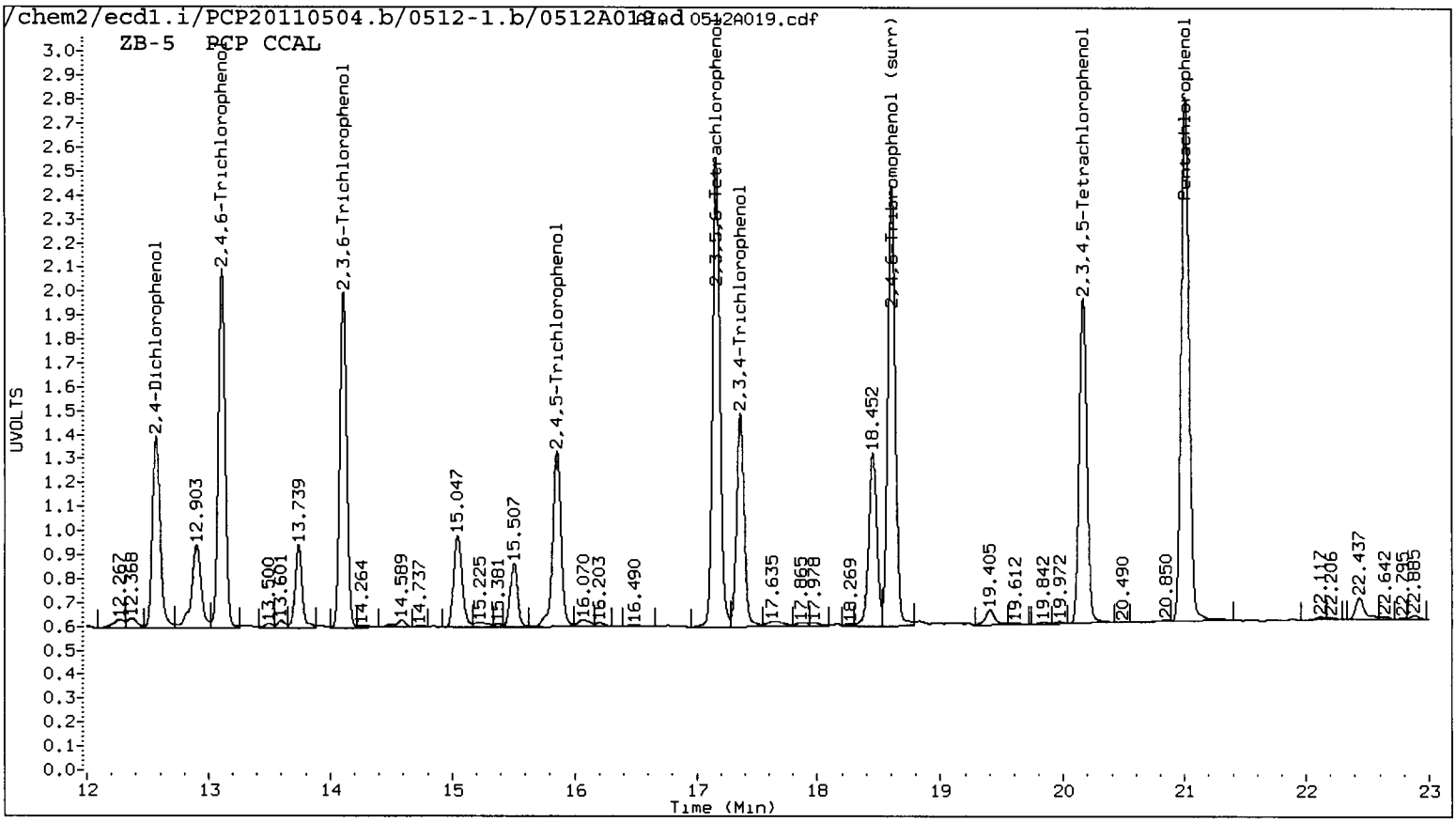
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/PCP20110504.b/0512-1.b/0512A019.d ARI ID: PCP CCAL
Data file 2: /chem2/ecd1.i/PCP20110504.b/0512-2.b/0512A019.d Client ID:
Method: /chem2/ecd1.i/PCP20110504.b/PCP.m Injection Date: 13-MAY-2011 01:19
Compound Sublist: all Report Date: 05/13/2011 09:42
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
21.008	0.011	495793	22.979	0.012	659888	24.6062	23.4328	4.9	Pentachlorophenol
13.110	0.009	295971	14.321	0.010	347182	24.3142	23.9539	1.5	2,4,6-Trichlorophenol
14.107	0.010	279277	15.568	0.011	334599	24.3854	23.2791	4.6	2,3,6-Trichlorophenol
15.855	0.010	168536	17.484	0.010	185430	25.4725	22.9048	10.6	2,4,5-Trichlorophenol
17.361	0.010	199075	19.034	0.011	226701	23.8261	24.7337	3.7	2,3,4-Trichlorophenol
17.163	0.010	417928	18.825	0.011	522688	24.7197	23.8257	3.7	2,3,5,6-Tetrachlorophenol
20.165	0.011	302391	22.091	0.011	374641	23.2936	24.4613	4.9	2,3,4,5-Tetrachlorophenol
12.566	0.011	181273	13.830	0.010	174457	281.7302	248.3763	12.6	2,4-Dichlorophenol
18.607	0.011	392219	20.948	0.012	505459	24.9	24.0	3.6	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
Pentachlorophenol	98.4	93.7
2,4,6-Trichlorophenol	97.3	95.8
2,3,6-Trichlorophenol	97.5	93.1
2,4,5-Trichlorophenol	101.9	91.6
2,3,4-Trichlorophenol	95.3	98.9
2,3,5,6-Tetrachlorophenol	98.9	95.3
2,3,4,5-Tetrachlorophenol	93.2	97.8
2,4-Dichlorophenol	112.7	99.4
2,4,6-TBP (surr)	99.6	96.2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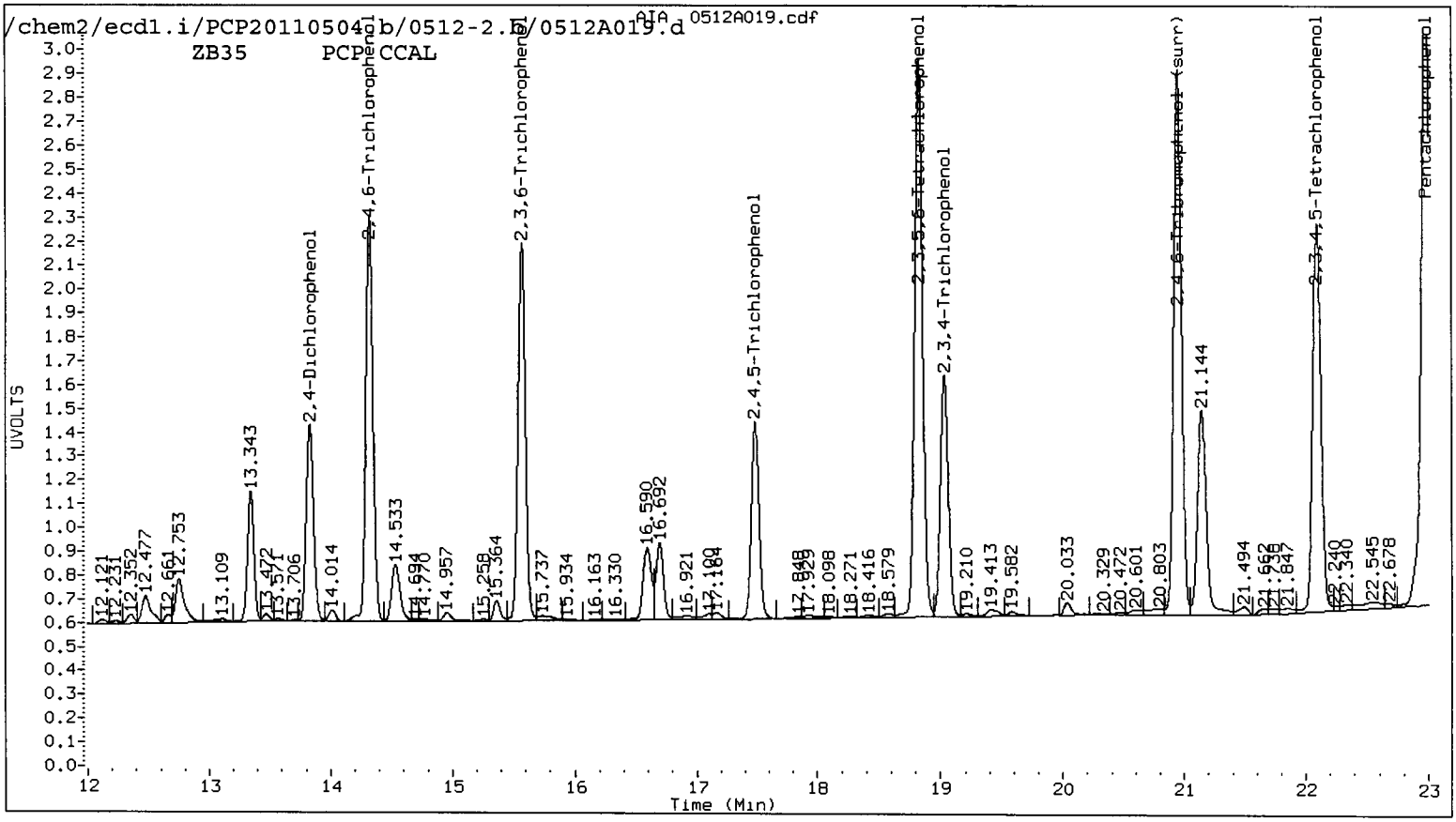
0512A019.cdf
ZB-5 PCP CCAL
UVOLTS
2,4-Dichlorophenol
2,4,6-Trichlorophenol
2,3,6-Trichlorophenol
2,4,5-Trichlorophenol
2,3,5,6-Tetrachlorophenol
2,3,4-Trichlorophenol
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
Time (Min)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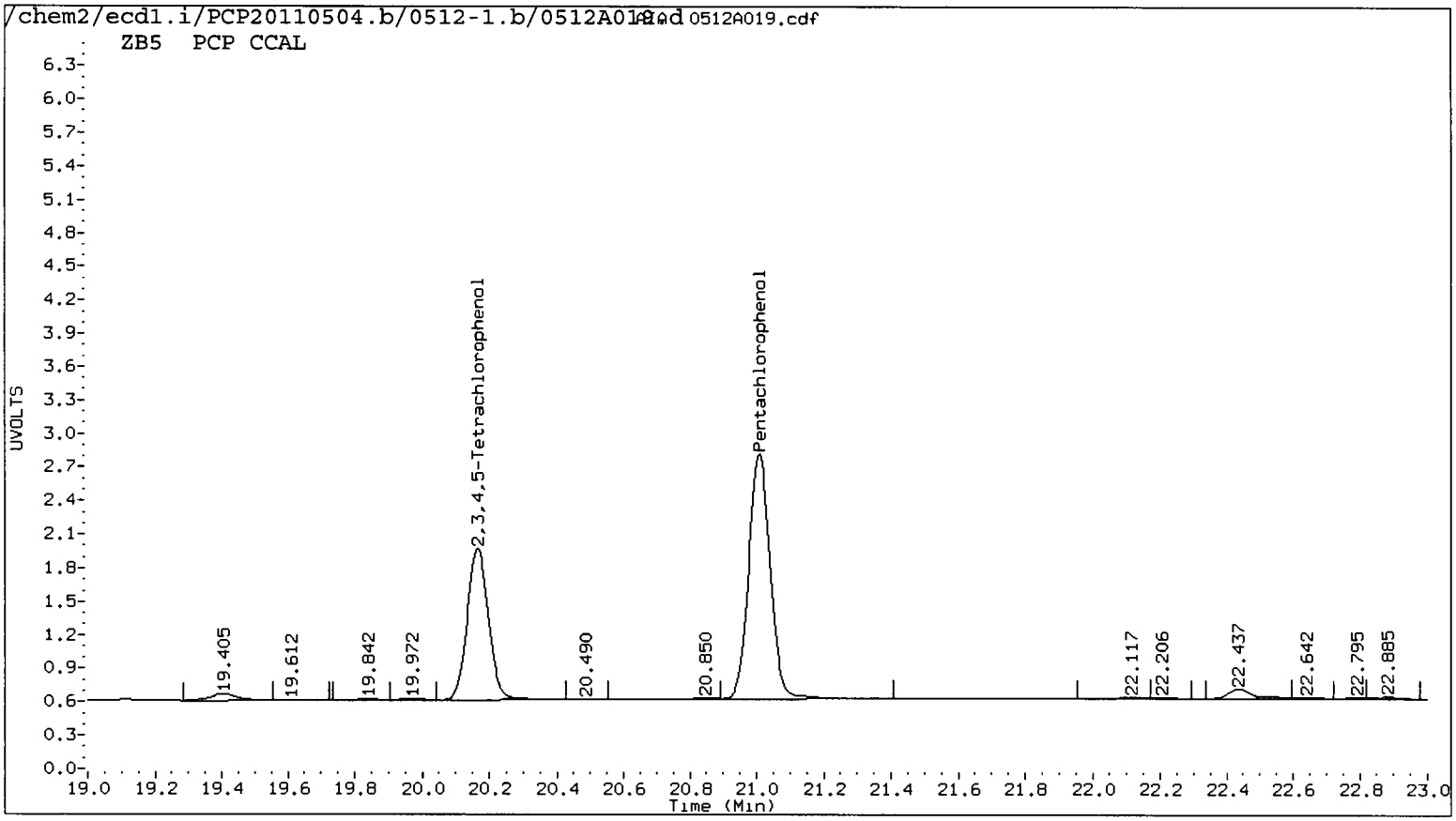
0512A019.cdf
ZB35 PCP CCAL
UVOLTS
2,4-Dichlorophenol
2,4,6-Trichlorophenol
2,3,6-Trichlorophenol
2,4,5-Trichlorophenol
2,3,5,6-Tetrachlorophenol
2,3,4-Trichlorophenol
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
Time (Min)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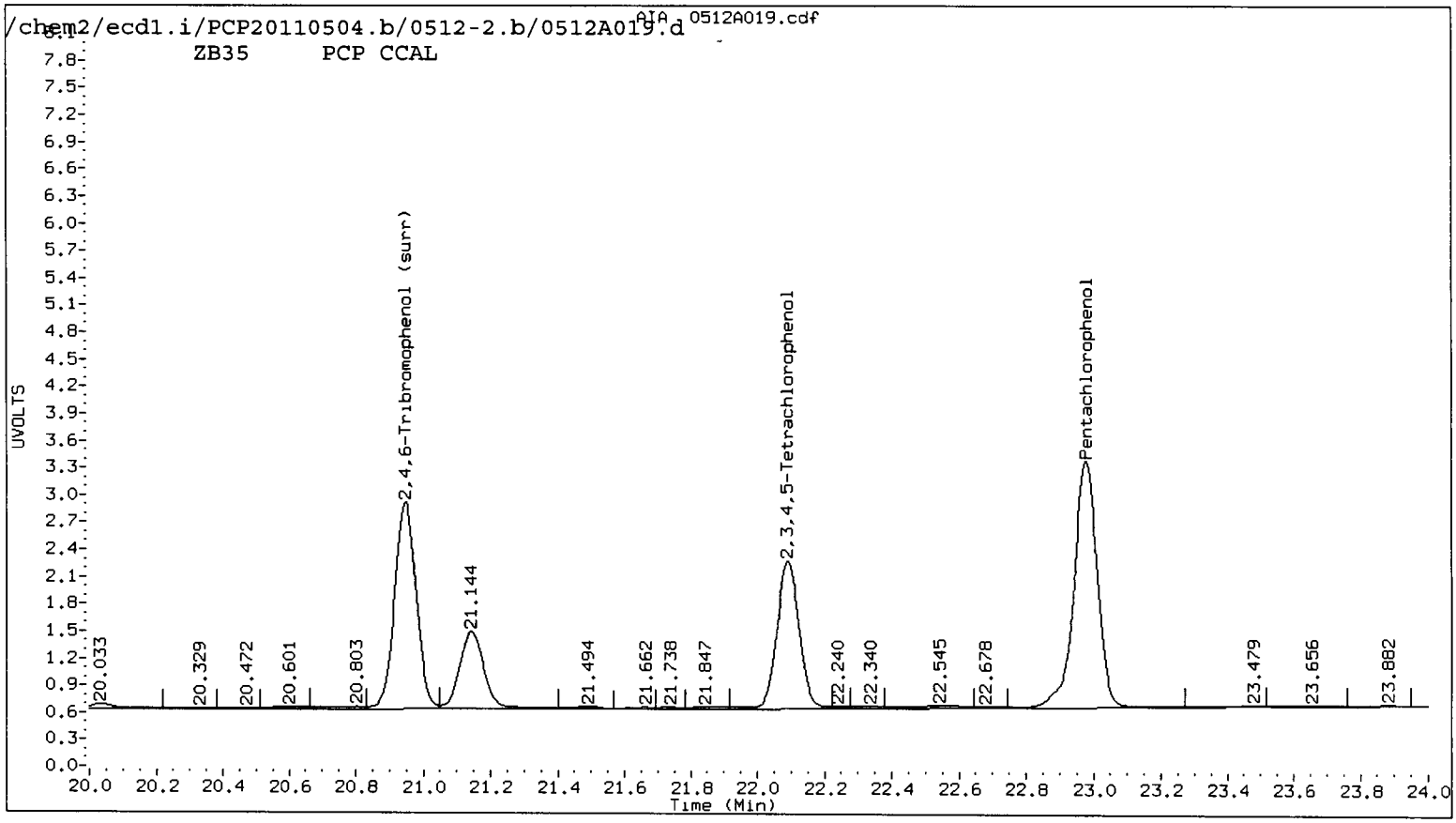
ZB5 PCP CCAL
UVOLTS
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
19.405
19.612
19.842
19.972
20.490
20.850
22.117
22.206
22.437
22.642
22.795
22.885
Time (Min)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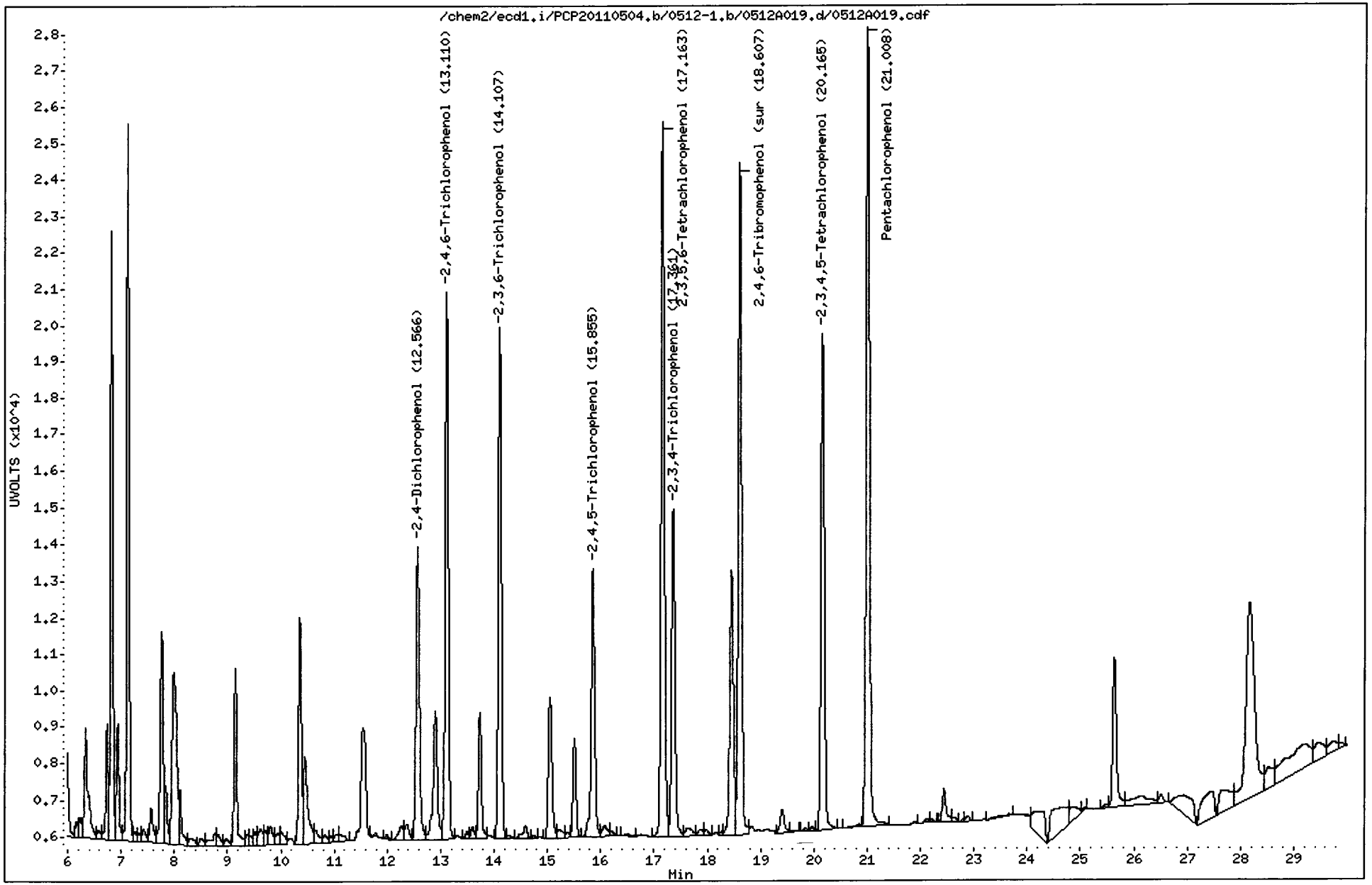
ZB35 PCP CCAL
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
20.033
20.329
20.472
20.601
20.803
21.144
21.494
21.662
21.738
21.847
22.240
22.340
22.545
22.678
23.479
23.656
23.882
Time (Min)

Data File: /chem2/ecd1.i/PCP20110504.b/0512-1.b/0512A019.d
Date : 13-MAY-2011 01:19
Client ID:
Sample Info: PCP CCAL
Purge Volume: 500.0
Column phase: STX CLP1

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



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Date : 13-MAY-2011 01:19

Client ID:

Instrument: ecd1.i

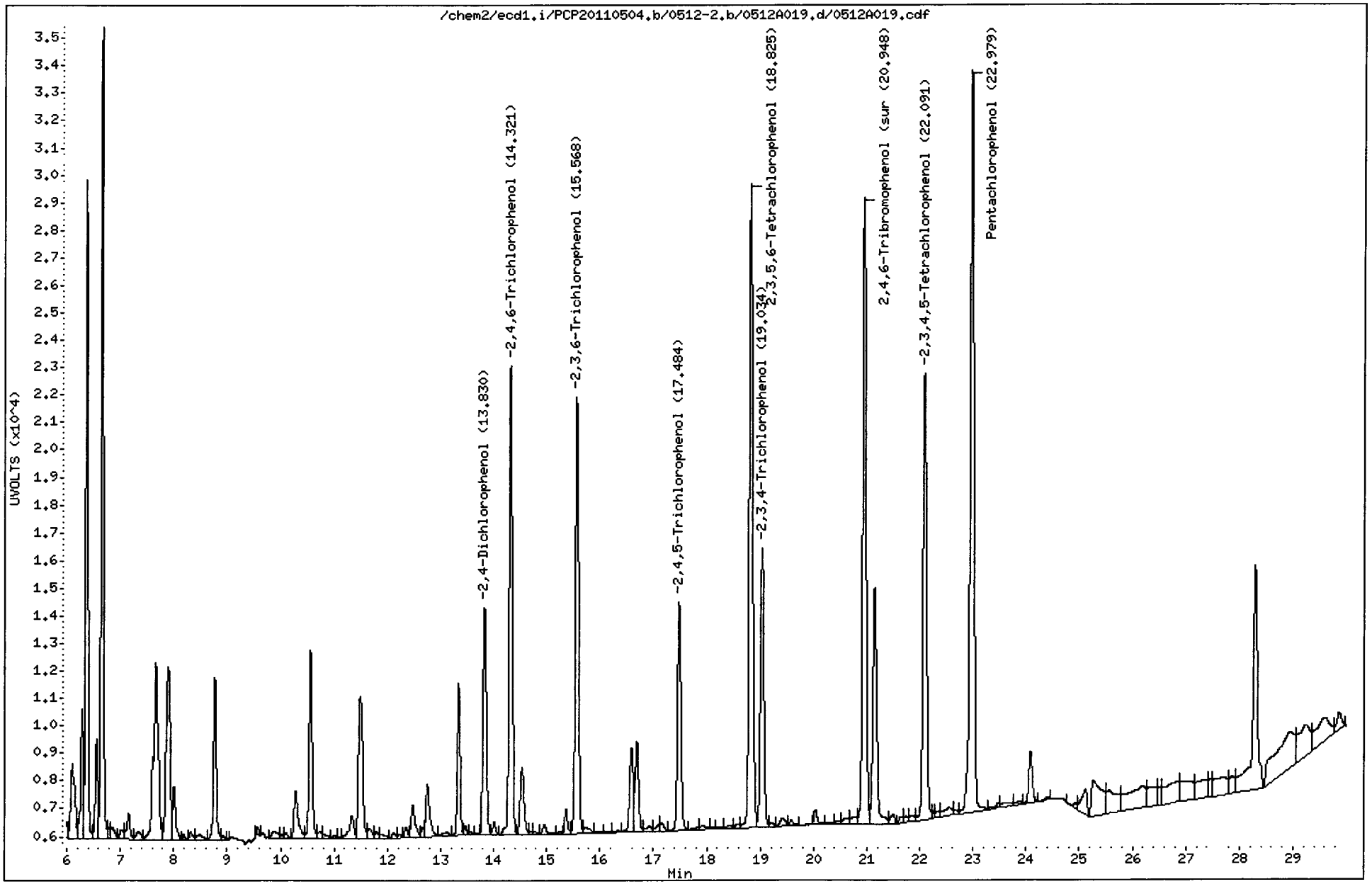
Sample Info: PCP CCAL

Purge Volume: 500.0

Operator: ar

Column phase: STX CLP2

Column diameter: 0.53



ST98:00765

Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

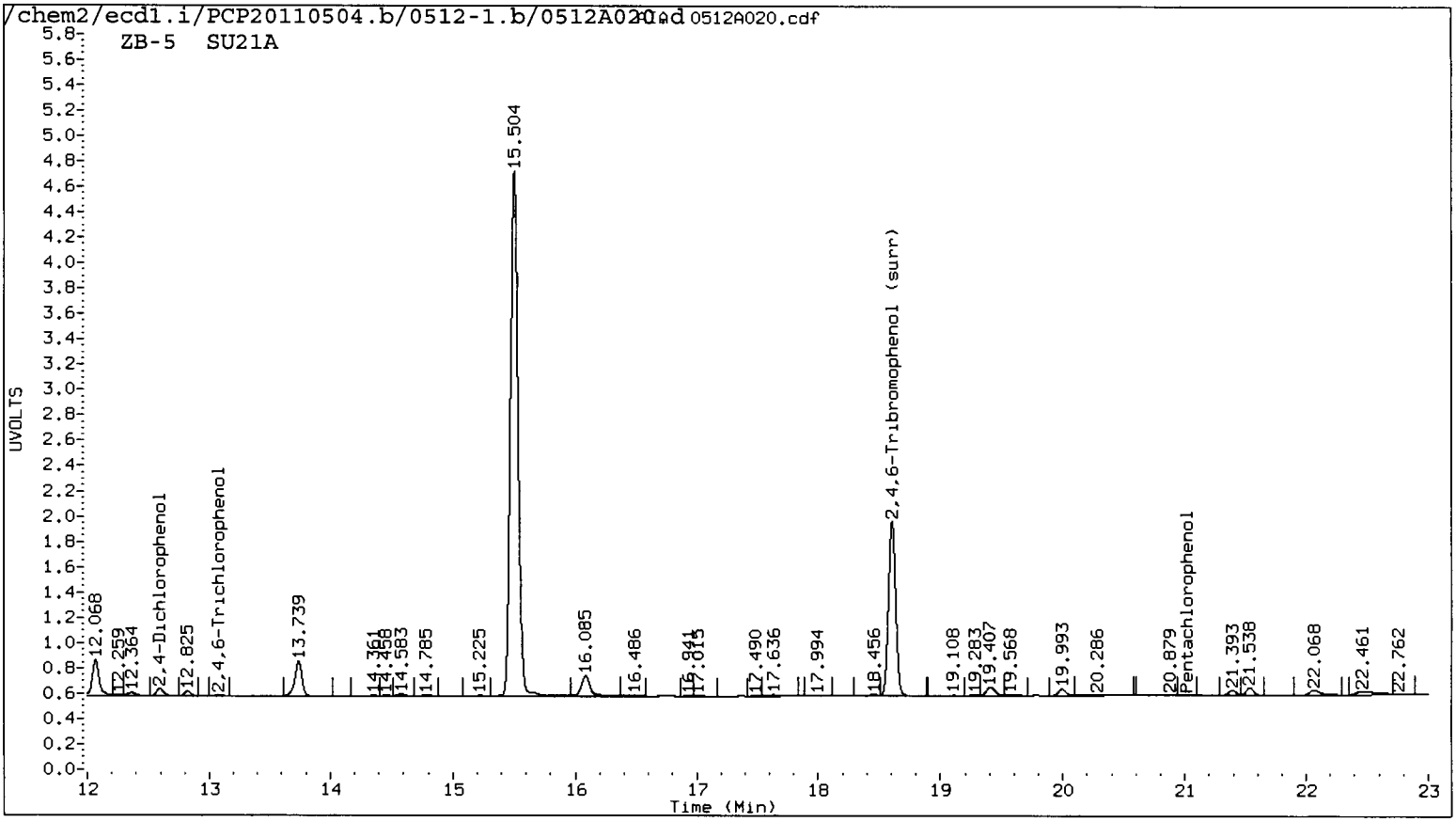
AR 5/13/2011

Data file 1: /chem2/ecd1.i/PCP20110504.b/0512-1.b/0512A020.d ARI ID: SU21A
Data file 2: /chem2/ecd1.i/PCP20110504.b/0512-2.b/0512A020.d Client ID: MW07-042711
Method: /chem2/ecd1.i/PCP20110504.b/PCP.m Injection Date: 13-MAY-2011 01:55
Compound Sublist: all Report Date: 05/13/2011 09:47
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
21.019	0.022	1257	----			0.0624	0.0000	---	Pentachlorophenol
13.084	-0.017	3629	----			0.2982	0.0000	---	2,4,6-Trichlorophenol
----			15.553	-0.004	4738	0.0000	0.3297	---	2,3,6-Trichlorophenol
----			----			0.0000	0.0000	---	2,4,5-Trichlorophenol
----			----			0.0000	0.0000	---	2,3,4-Trichlorophenol
----			18.766	-0.048	2416	0.0000	0.1102	---	2,3,5,6-Tetrachlorophenol
----			----			0.0000	0.0000	---	2,3,4,5-Tetrachlorophenol
12.595	0.040	12774	----			16.0405	0.0000	---	2,4-Dichlorophenol
18.608	0.012	289231	20.948	0.012	375603	18.4	17.9	2.8	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	73.5	71.5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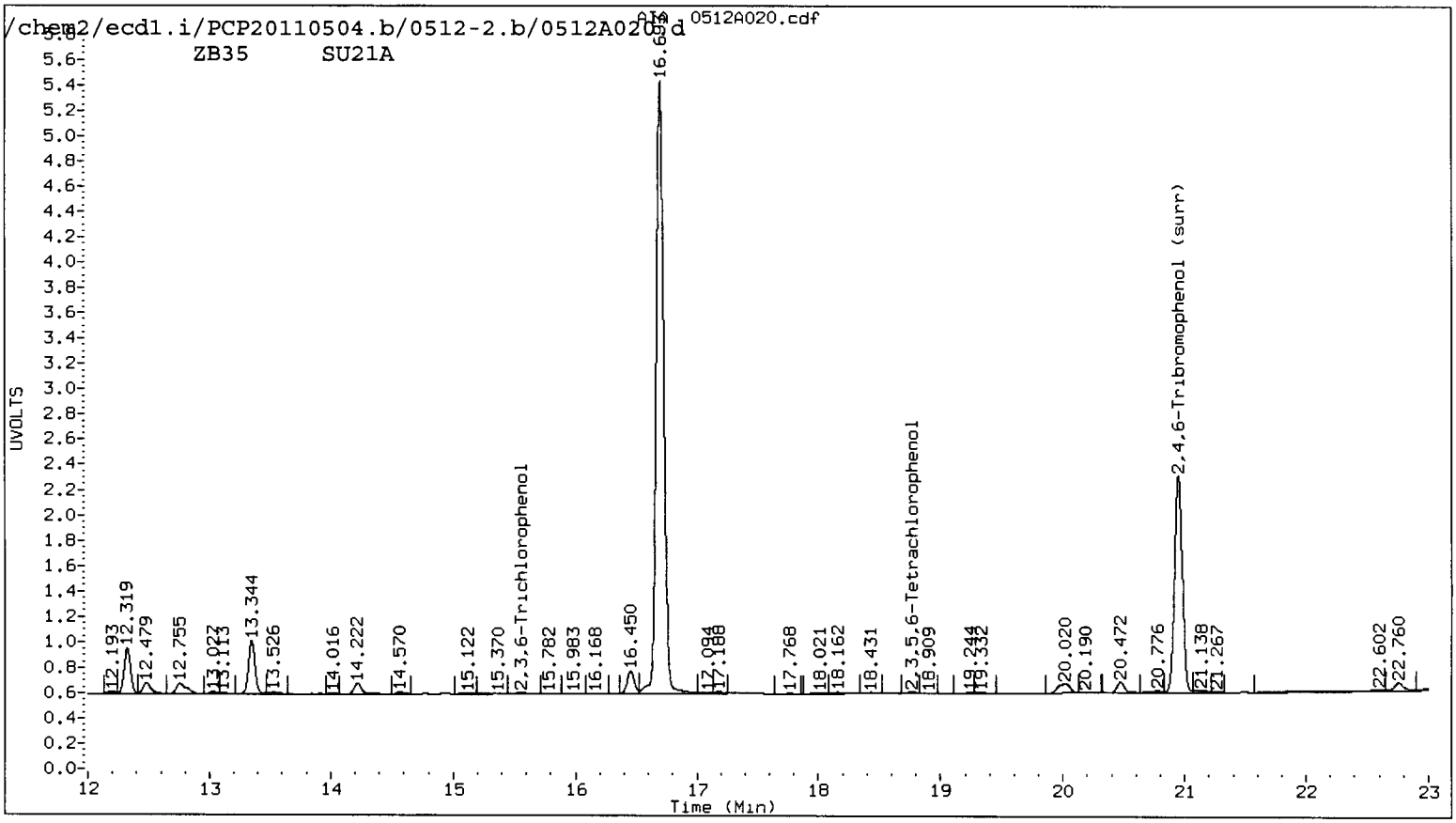
ZB-5 SU21A
UVOLTS
Time (Min)
12.068
12.259
12.364
2,4-Dichlorophenol
12.825
2,4,6-Trichlorophenol
13.739
14.361
14.583
14.785
15.225
15.504
16.085
16.486
17.490
17.636
17.994
18.456
2,4,6-Tribromophenol (surr)
19.108
19.283
19.407
19.568
19.993
20.286
20.879
Pentachlorophenol
21.393
21.538
22.068
22.461
22.762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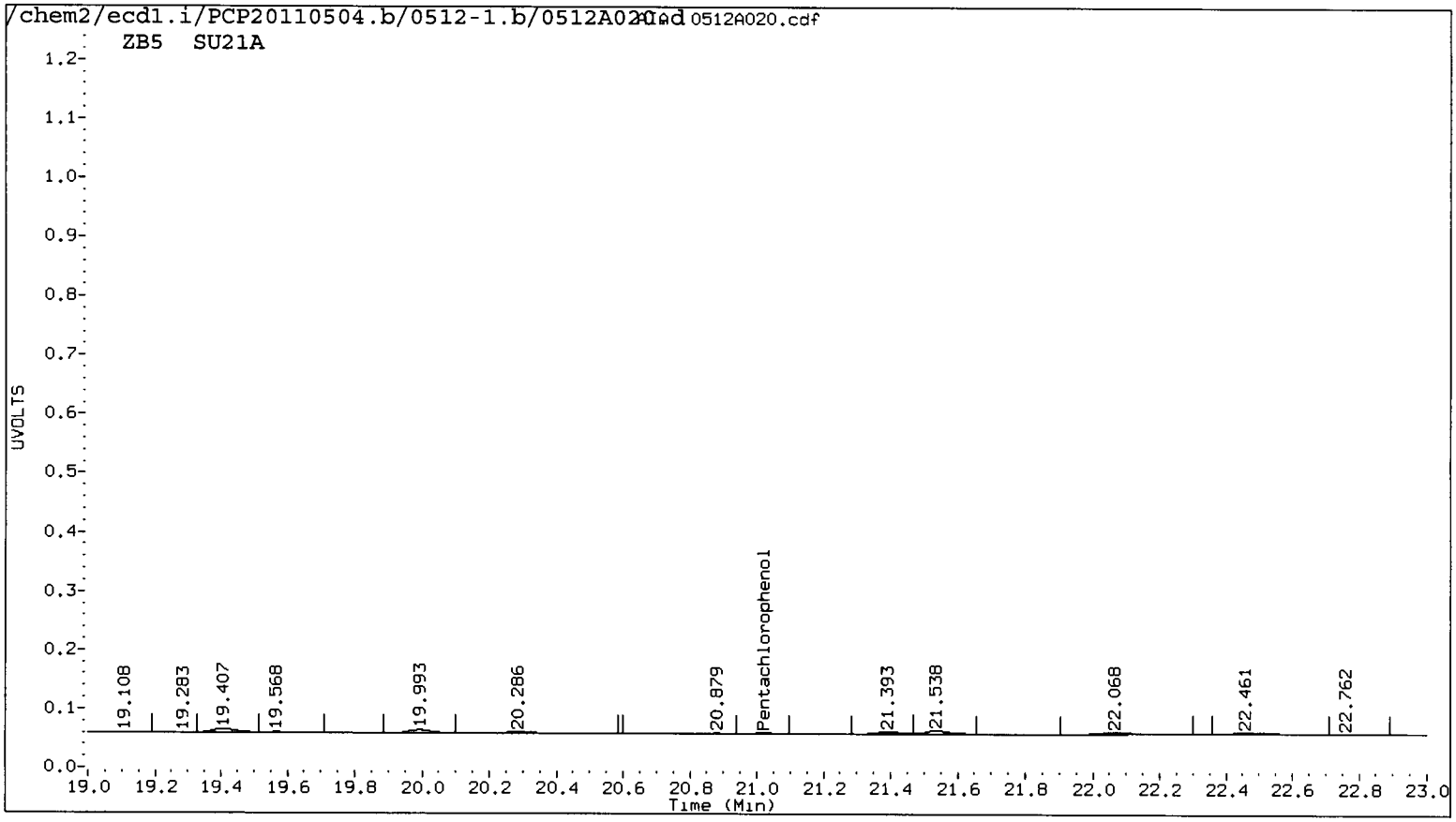
ZB35 SU21A
UVOLTS
Time (Min)
12.193
12.319
12.479
12.755
13.344
13.526
14.016
14.222
14.570
15.122
15.370
2,3,6-Trichlorophenol
15.782
15.983
16.168
16.450
16.695
17.768
18.021
18.162
18.431
2,3,5,6-Tetrachlorophenol
18.909
20.020
20.190
20.472
20.776
2,4,6-Tribromophenol (surr)
21.138
21.267
22.602
22.760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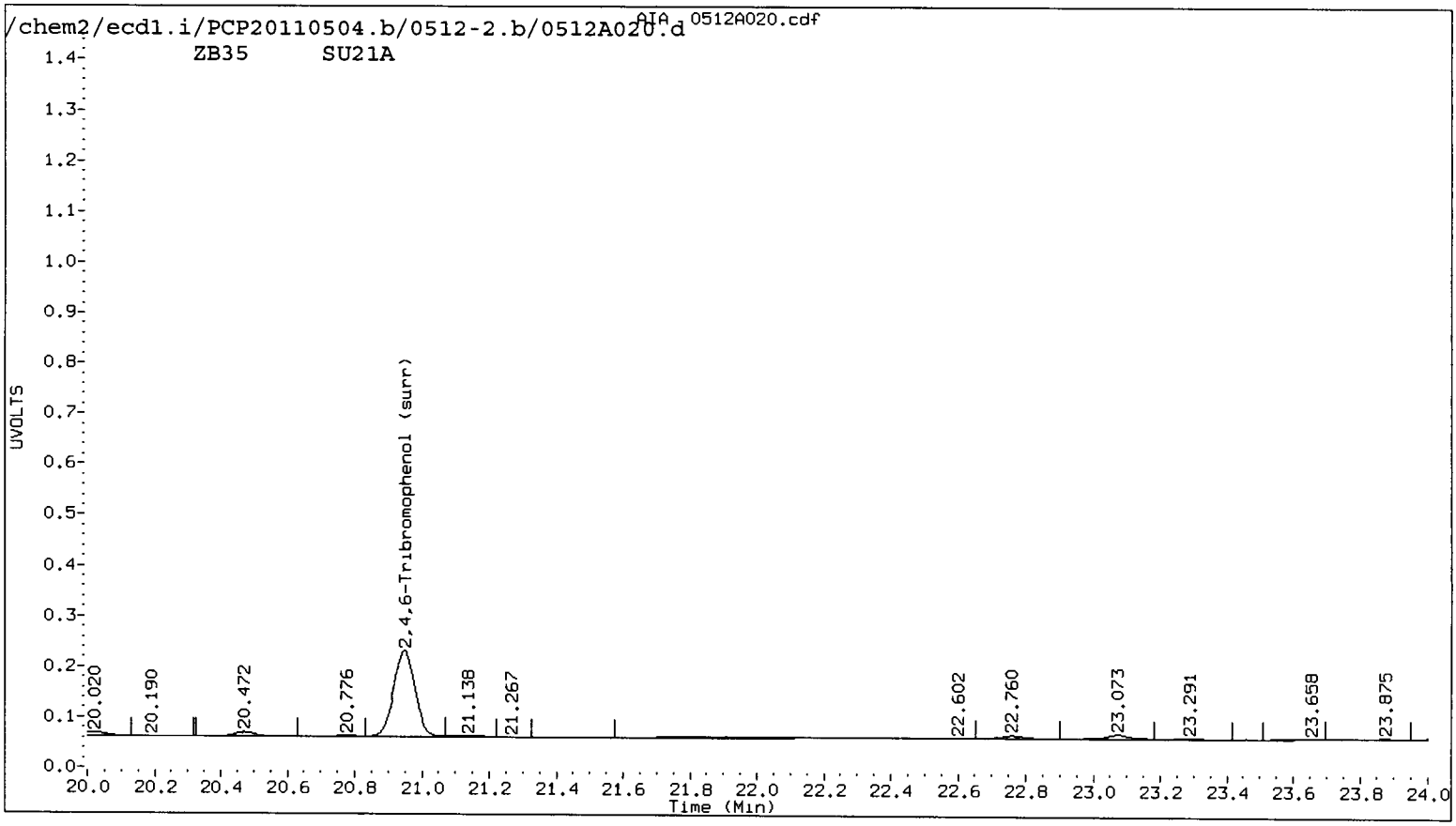
0512A020.cdf
ZB5 SU21A
UVOLTS
Time (Min)
19.108
19.283
19.407
19.568
19.993
20.286
20.879
Pentachlorophenol
21.393
21.538
22.068
22.461
22.762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0512A020.cdf
ZB35 SU21A
UVOLTS
Time (Min)
20.020
20.190
20.472
20.776
2,4,6-Tribromophenol (surr)
21.138
21.267
22.602
22.760
23.073
23.291
23.658
23.875

Data File: /chem2/ecd1.i/PCP20110504.b/0512-2.b/0512A020.d

Page 1

Date : 13-MAY-2011 01:55

Client ID: MW07-042711

Instrument: ecd1.i

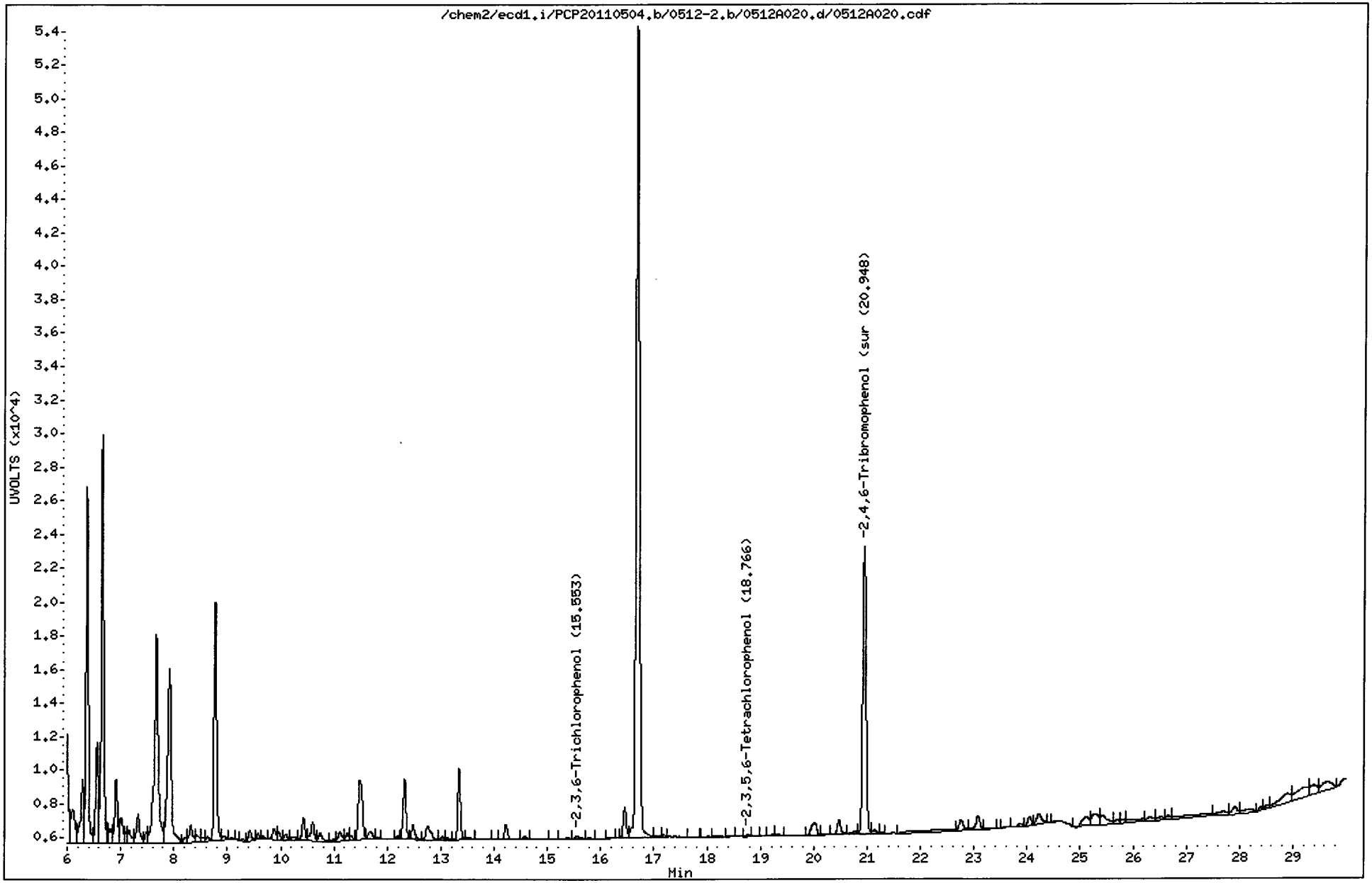
Sample Info: SU21A

Purge Volume: 500.0

Operator: ar

Column phase: STX CLP2

Column diameter: 0.53



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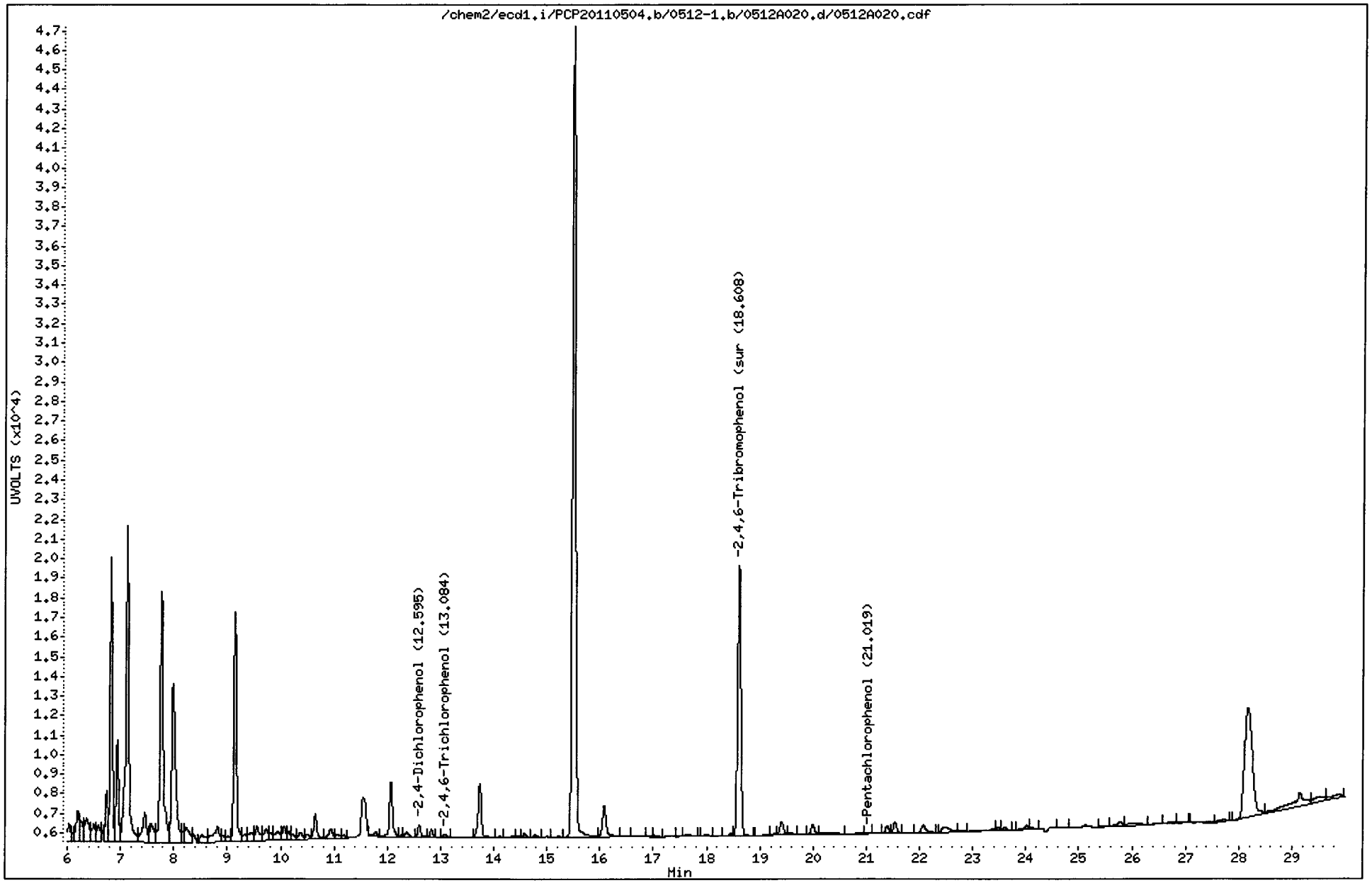
Date : 13-MAY-2011 01:55
Client ID: MW07-042711
Instrument: ecd1.i
Sample Info: SU21A
Purge Volume: 500.0
Operator: ar
Column phase: STX CLP1
Column diameter: 0.53



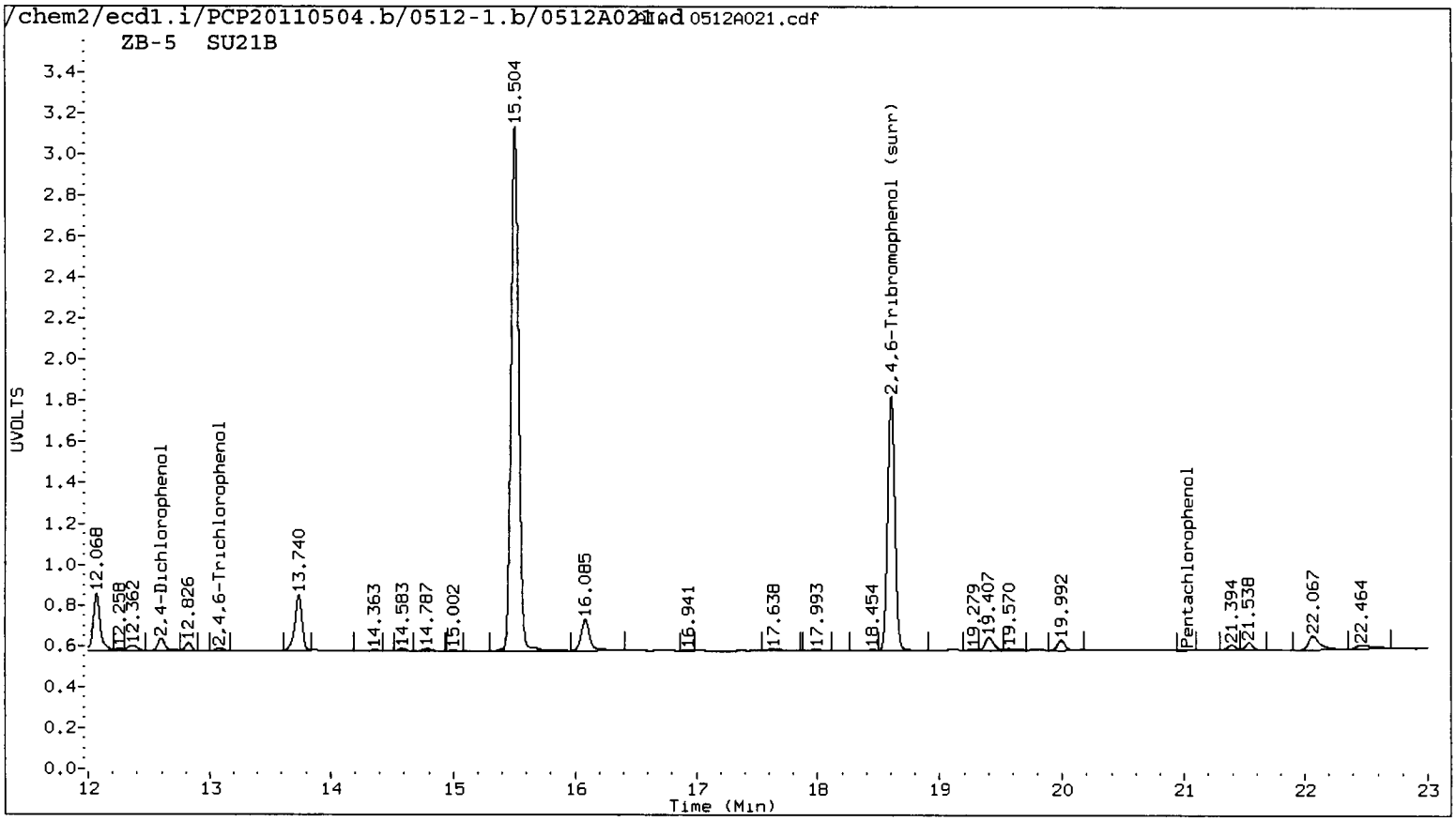
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/PCP20110504.b/0512-1.b/0512A021.d ARI ID: SU21B
Data file 2: /chem2/ecd1.i/PCP20110504.b/0512-2.b/0512A021.d Client ID: MW11-042711
Method: /chem2/ecd1.i/PCP20110504.b/PCP.m Injection Date: 13-MAY-2011 02:32
Compound Sublist: all Report Date: 05/13/2011 09:47
Instrument: ecd1.i Matrix: WATER
Operator: ar Dilution Factor: 1.000

ZB-5 Col RT	ZB-5 Col Shift	ZB-5 Col Response	ZB35 Col RT	ZB35 Col Shift	ZB35 Col Response	ZB-5 on col	ZB35 on col	RPD	Compound
21.025	0.027	1021	----			0.0507	0.0000	---	Pentachlorophenol
13.082	-0.019	3249	----			0.2670	0.0000	---	2,4,6-Trichlorophenol
----			15.553	-0.004	3538	0.0000	0.2462	---	2,3,6-Trichlorophenol
----			----			0.0000	0.0000	---	2,4,5-Trichlorophenol
----			----			0.0000	0.0000	---	2,3,4-Trichlorophenol
----			18.860	0.046	1222	0.0000	0.0557	---	2,3,5,6-Tetrachlorophenol
----			----			0.0000	0.0000	---	2,3,4,5-Tetrachlorophenol
12.596	0.041	12821	----			16.1004	0.0000	---	2,4-Dichlorophenol
18.607	0.011	261593	20.948	0.012	343949	16.6	16.4	1.5	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	66.5	65.4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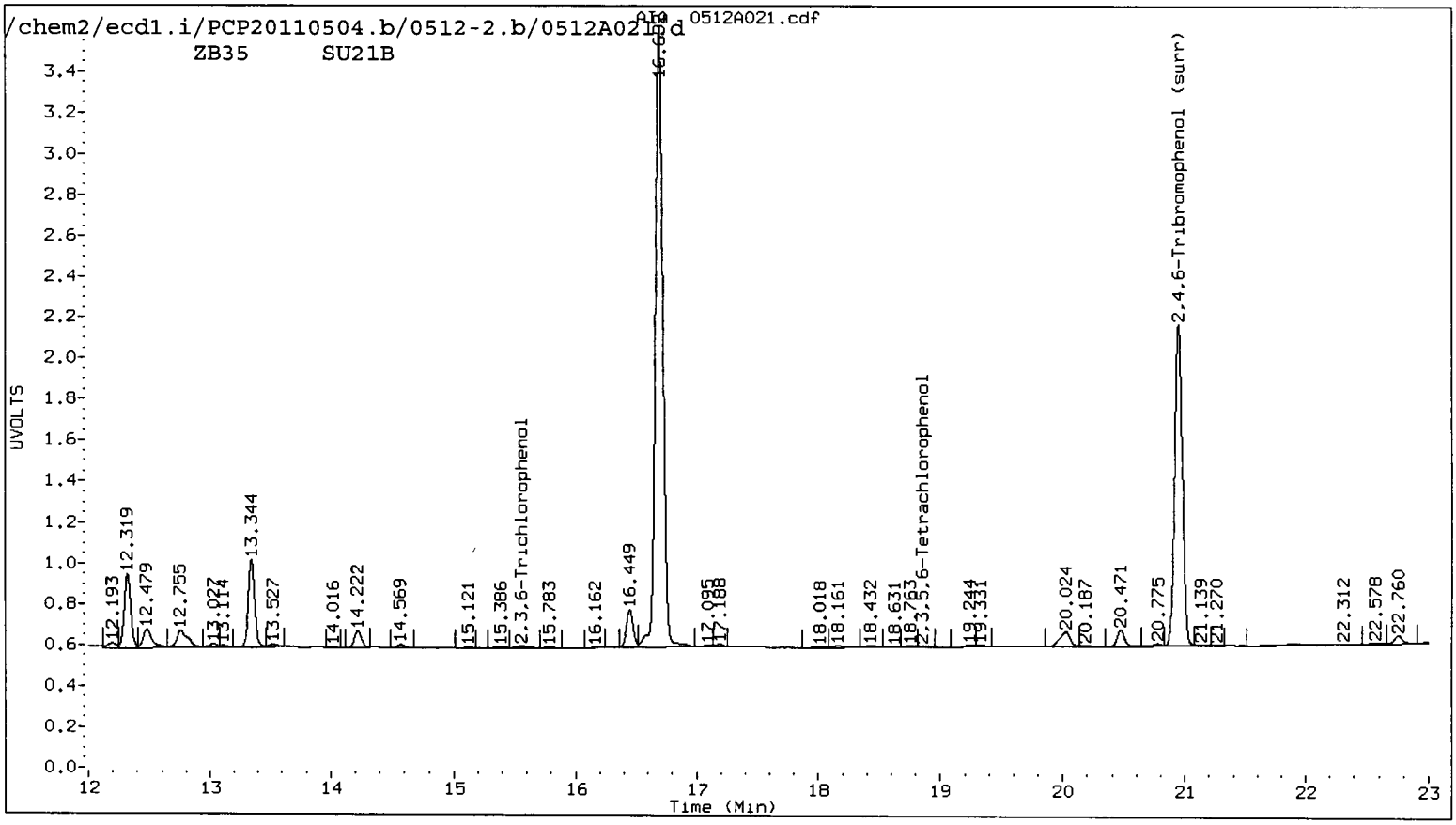
0512A021.cdf
ZB-5 SU21B
UVOLTS
Time (Min)
12.068
12.258
12.362
2,4-Dichlorophenol
12.826
2,4,6-Trichlorophenol
13.740
14.363
14.583
14.787
15.002
15.504
16.085
16.941
17.638
17.993
18.454
2,4,6-Tribromophenol (surr)
19.279
19.407
19.570
19.992
Pentachlorophenol
21.394
21.538
22.067
22.464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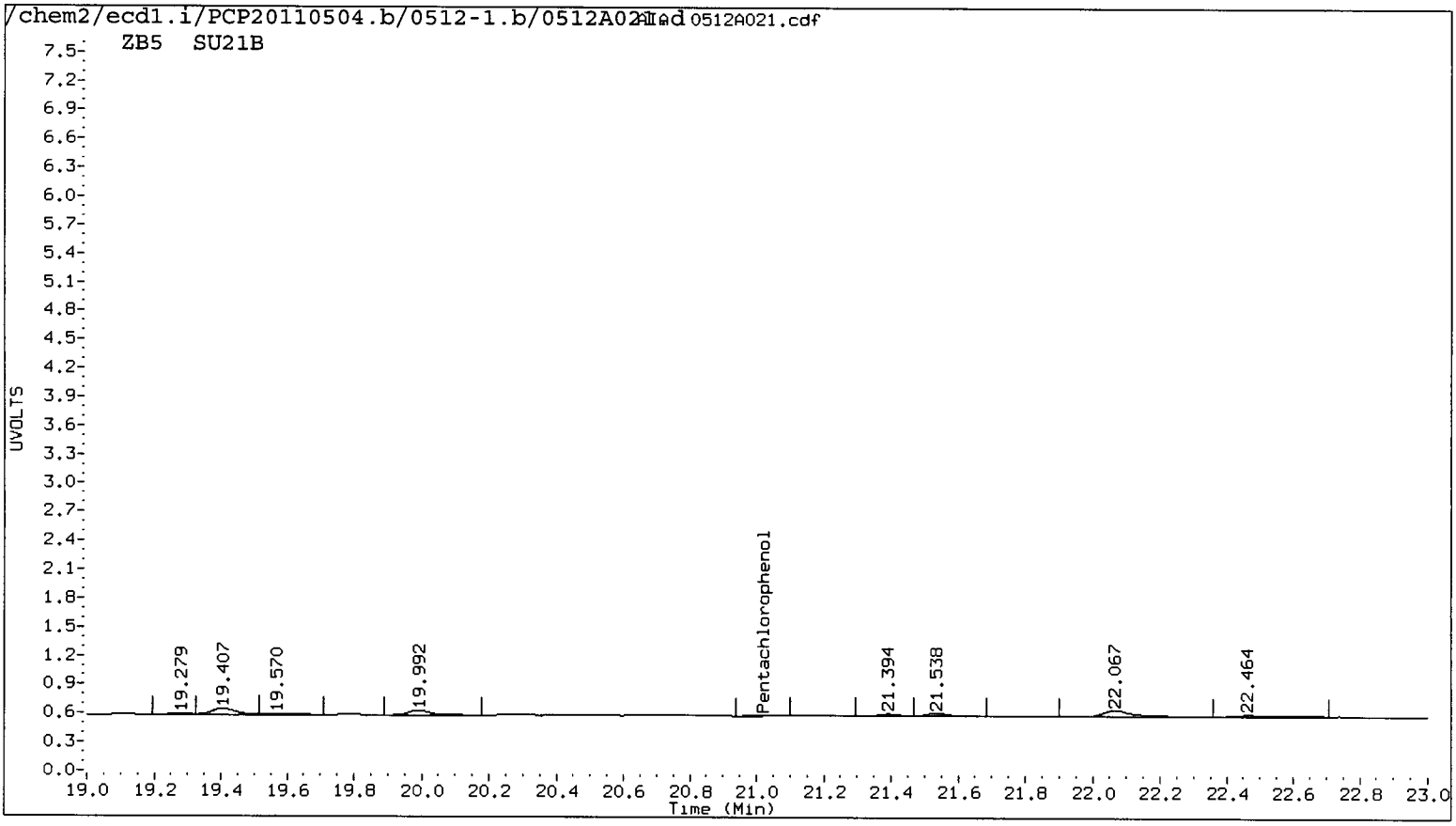
0512A021.cdf
ZB35 SU21B
UVOLTS
Time (Min)
12.193
12.319
12.479
12.755
13.344
13.527
14.016
14.222
14.569
15.121
15.386
2,3,6-Trichlorophenol
15.783
16.162
16.449
18.018
18.161
18.432
18.631
2,3,5,6-Tetrachlorophenol
20.024
20.187
20.471
20.775
2,4,6-Tribromophenol (surr)
21.139
21.270
22.312
22.578
22.760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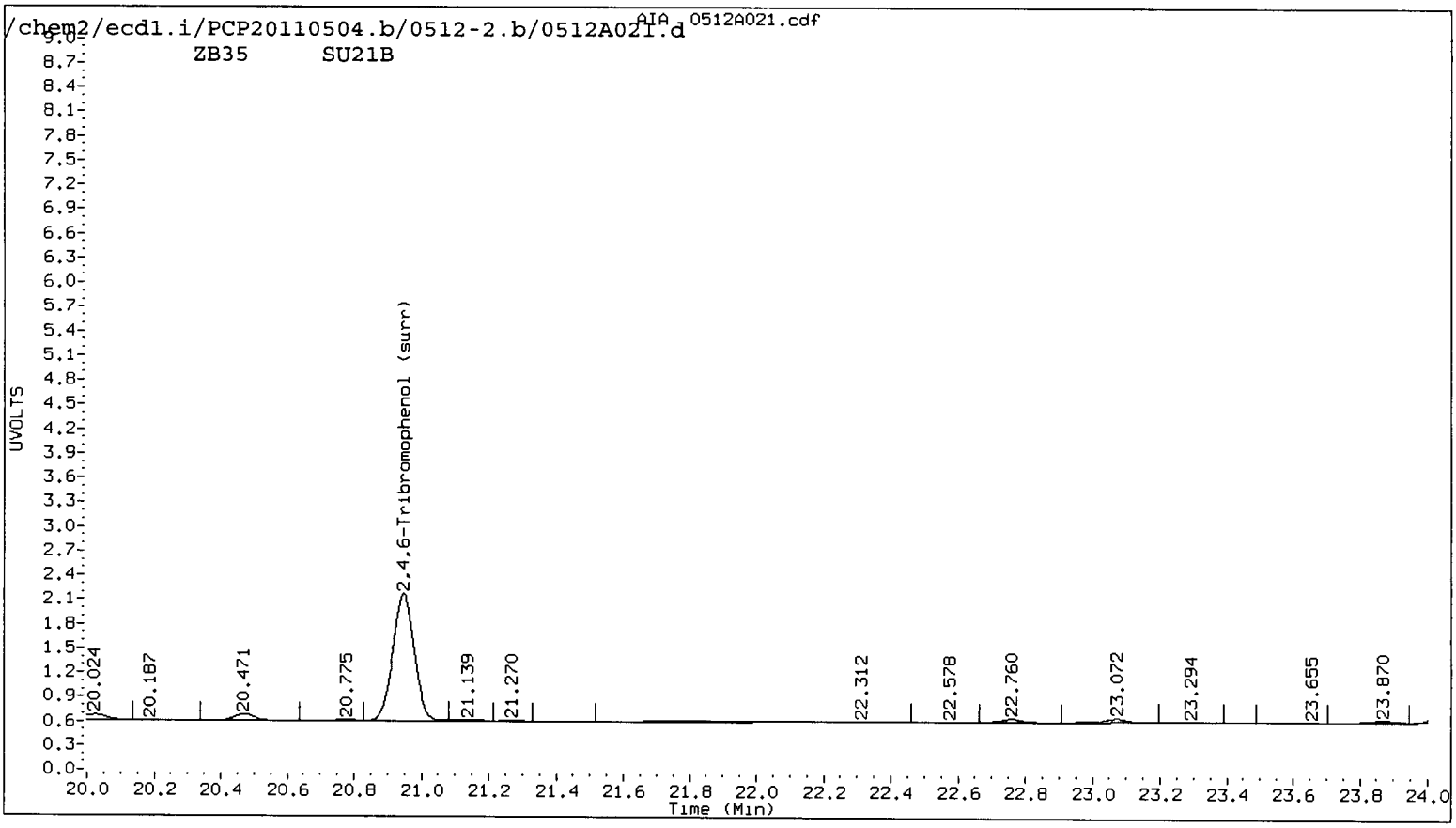
ZB5 SU21B
UVOLTS
Time (Min)
19.279
19.407
19.570
19.992
Pentachlorophenol
21.394
21.538
22.067
22.464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ZB35 SU21B
UVOLTS
Time (Min)
20.024
20.187
20.471
20.775
2,4,6-Tribromophenol (surr)
21.139
21.270
22.312
22.578
22.760
23.072
23.294
23.655
23.870

Data File: /chem2/ecd1.i/PCP20110504.b/0512-1.b/0512A021.d

Date : 13-MAY-2011 02:32

Client ID: MW11-042711

Instrument: ecd1.i

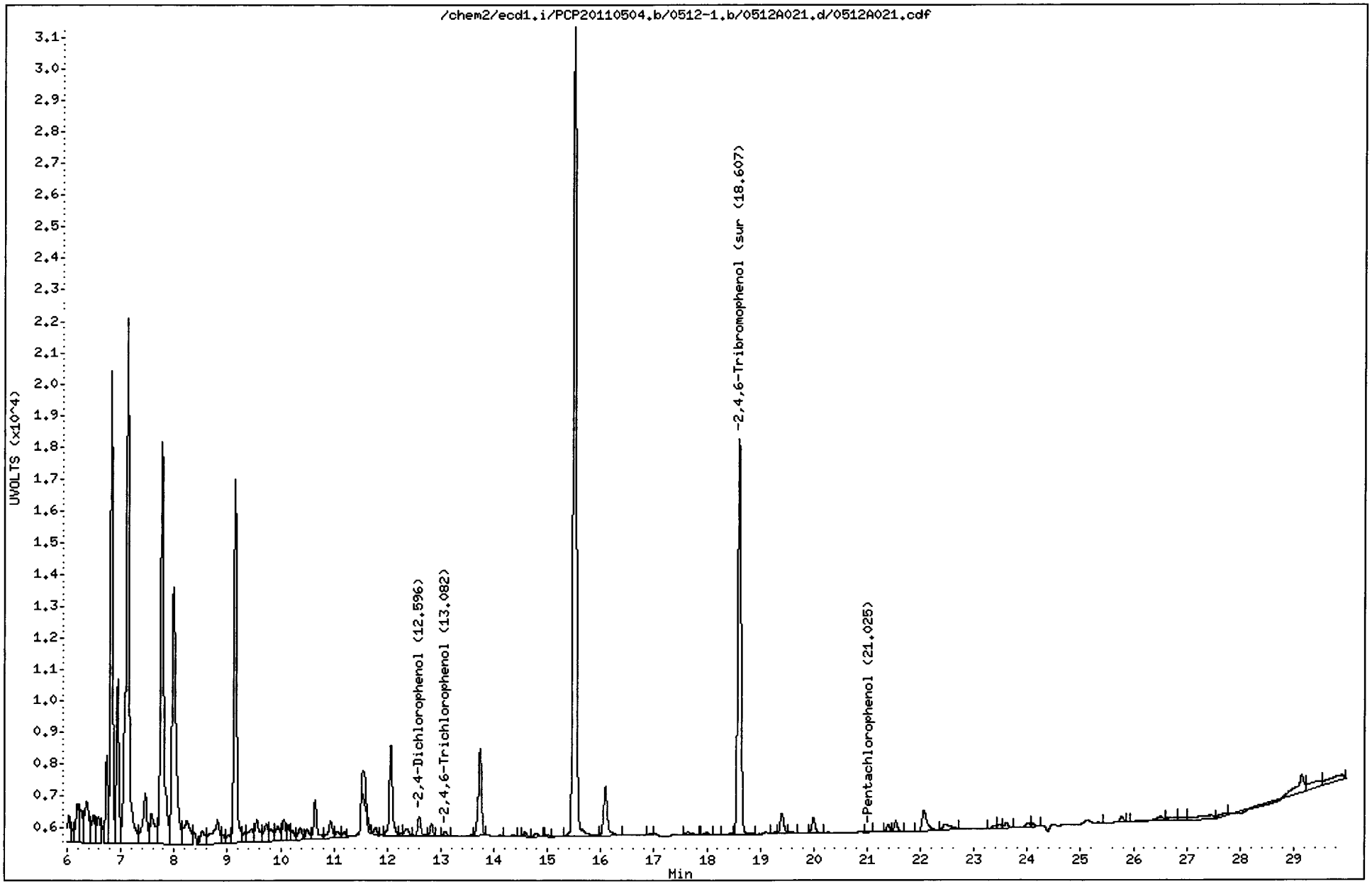
Sample Info: SU21B

Purge Volume: 500.0

Operator: ar

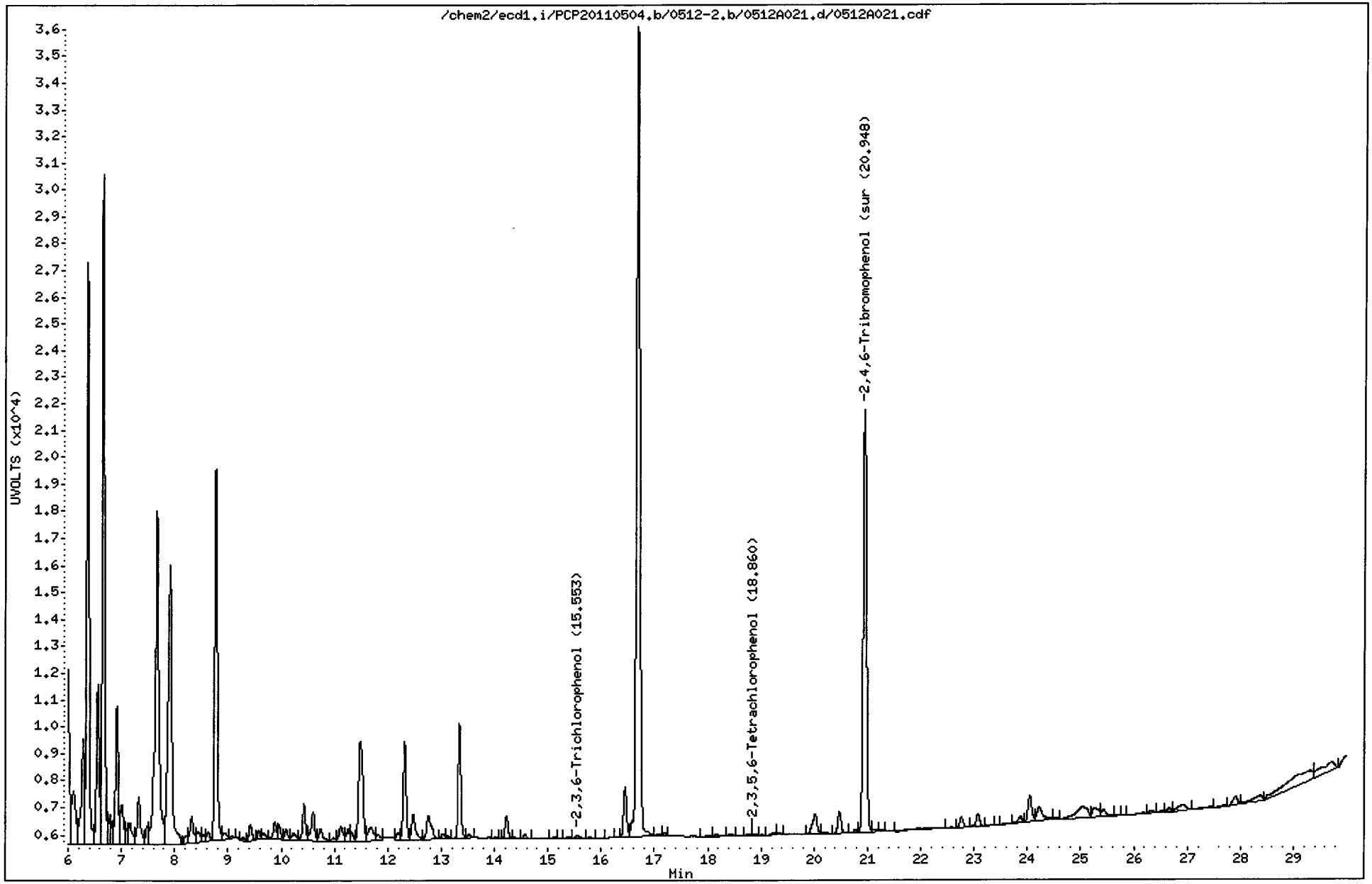
Column phase: STX CLP1

Column diameter: 0.53



Data File: /chem2/ecd1.i/PCP20110504.b/0512-2.b/0512A021.d
Date : 13-MAY-2011 02:32
Client ID: MW11-042711
Sample Info: SU21B
Purge Volume: 500.0
Column phase: STX CLP2

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



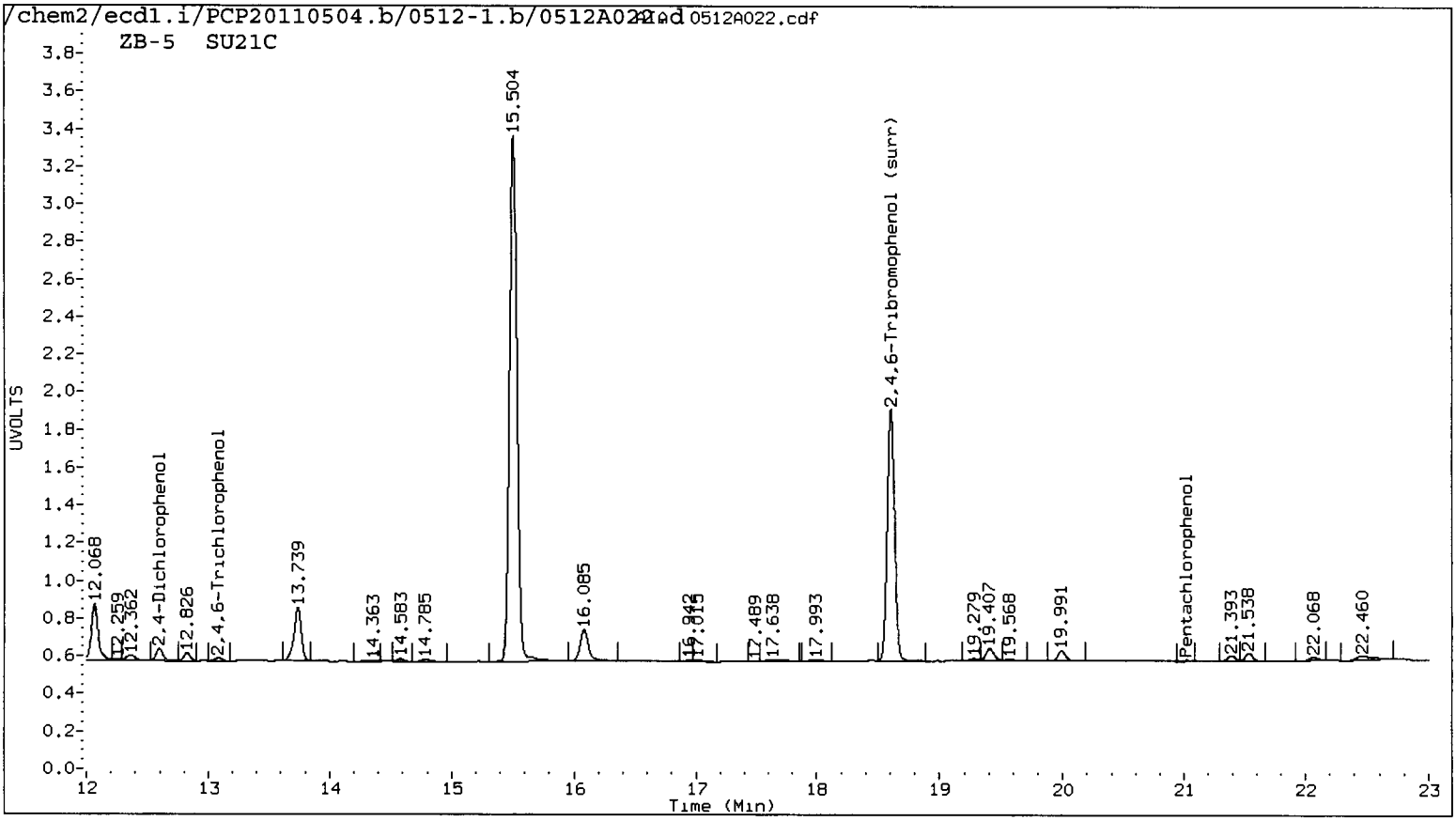
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/PCP20110504.b/0512-1.b/0512A022.d ARI ID: SU21C
Data file 2: /chem2/ecd1.i/PCP20110504.b/0512-2.b/0512A022.d Client ID: MW10-042711
Method: /chem2/ecd1.i/PCP20110504.b/PCP.m Injection Date: 13-MAY-2011 03:08
Compound Sublist: all Report Date: 05/13/2011 09:47
Instrument: ecd1.i Matrix: WATER
Operator: ar Dilution Factor: 1.000

ZB-5 Col RT	ZB-5 Col Shift	ZB-5 Col Response	ZB35 Col RT	ZB35 Col Shift	ZB35 Col Response	ZB-5 on col	ZB35 on col	RPD	Compound
21.019	0.022	1089	----			0.0541	0.0000	---	Pentachlorophenol
13.082	-0.019	3655	----			0.3003	0.0000	---	2,4,6-Trichlorophenol
----			15.553	-0.004	3734	0.0000	0.2598	---	2,3,6-Trichlorophenol
----			----			0.0000	0.0000	---	2,4,5-Trichlorophenol
----			----			0.0000	0.0000	---	2,3,4-Trichlorophenol
----			18.863	0.049	1285	0.0000	0.0586	---	2,3,5,6-Tetrachlorophenol
----			----			0.0000	0.0000	---	2,3,4,5-Tetrachlorophenol
12.595	0.040	13249	----			16.6479	0.0000	---	2,4-Dichlorophenol
18.607	0.011	280832	20.948	0.012	380492	17.8	18.1	1.5	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	71.3	72.4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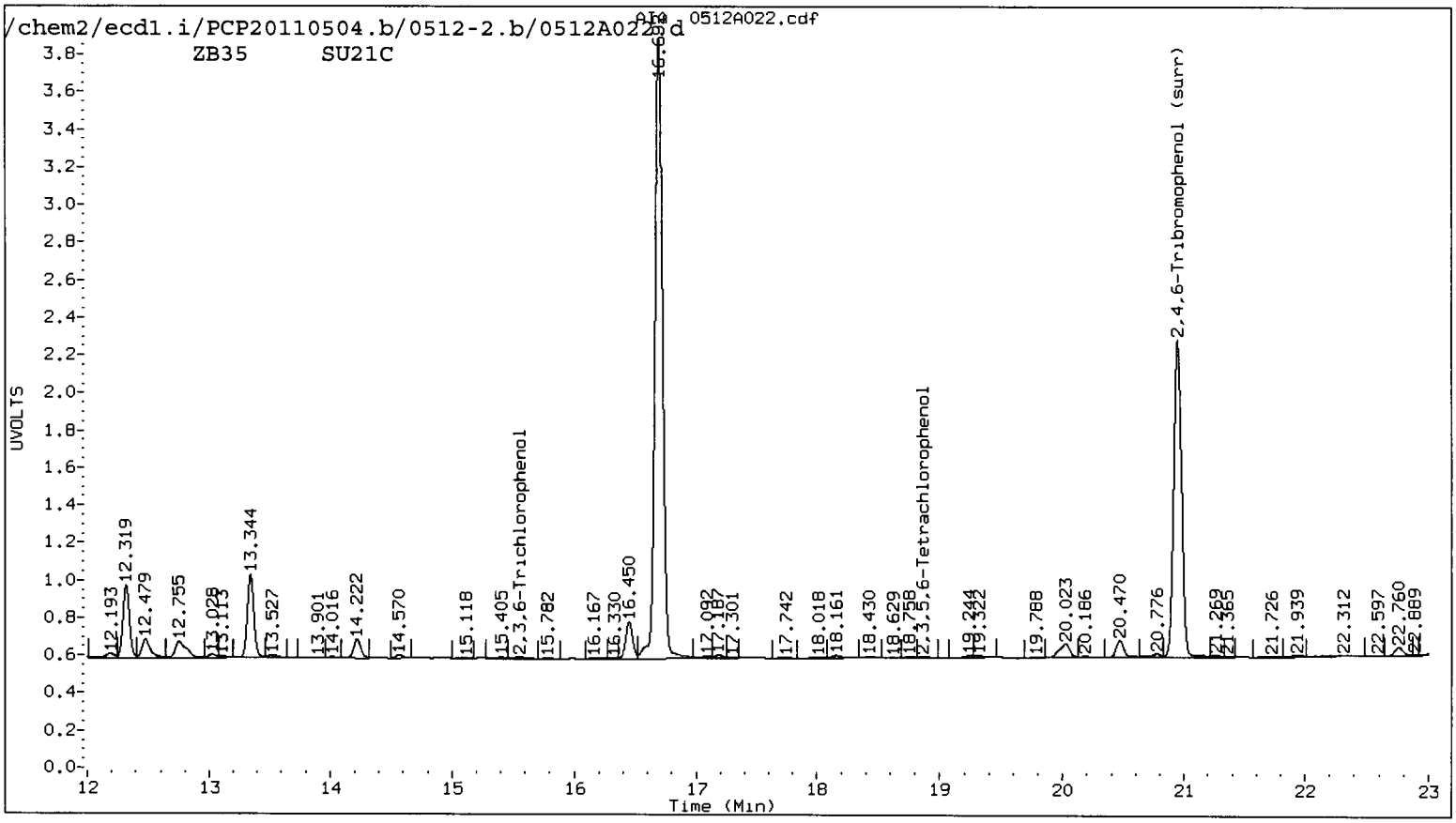
0512A022.cdf
ZB-5 SU21C
UVOLTS
Time (Min)
12.068
12.259
12.362
2,4-Dichlorophenol
12.826
2,4,6-Trichlorophenol
13.739
14.363
14.583
14.785
15.504
16.085
17.489
17.638
17.993
2,4,6-Tribromophenol (surr)
19.279
19.407
19.568
19.991
Pentachlorophenol
21.393
21.538
22.068
22.460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0512A022.cdf
ZB35 SU21C
UVOLTS
Time (Min)
12.193
12.319
12.479
12.755
13.344
13.527
13.901
14.016
14.222
14.570
15.118
15.405
2,3,6-Trichlorophenol
15.782
16.167
16.330
16.450
17.301
17.742
18.018
18.161
18.430
18.629
2,3,5,6-Tetrachlorophenol
19.788
20.023
20.186
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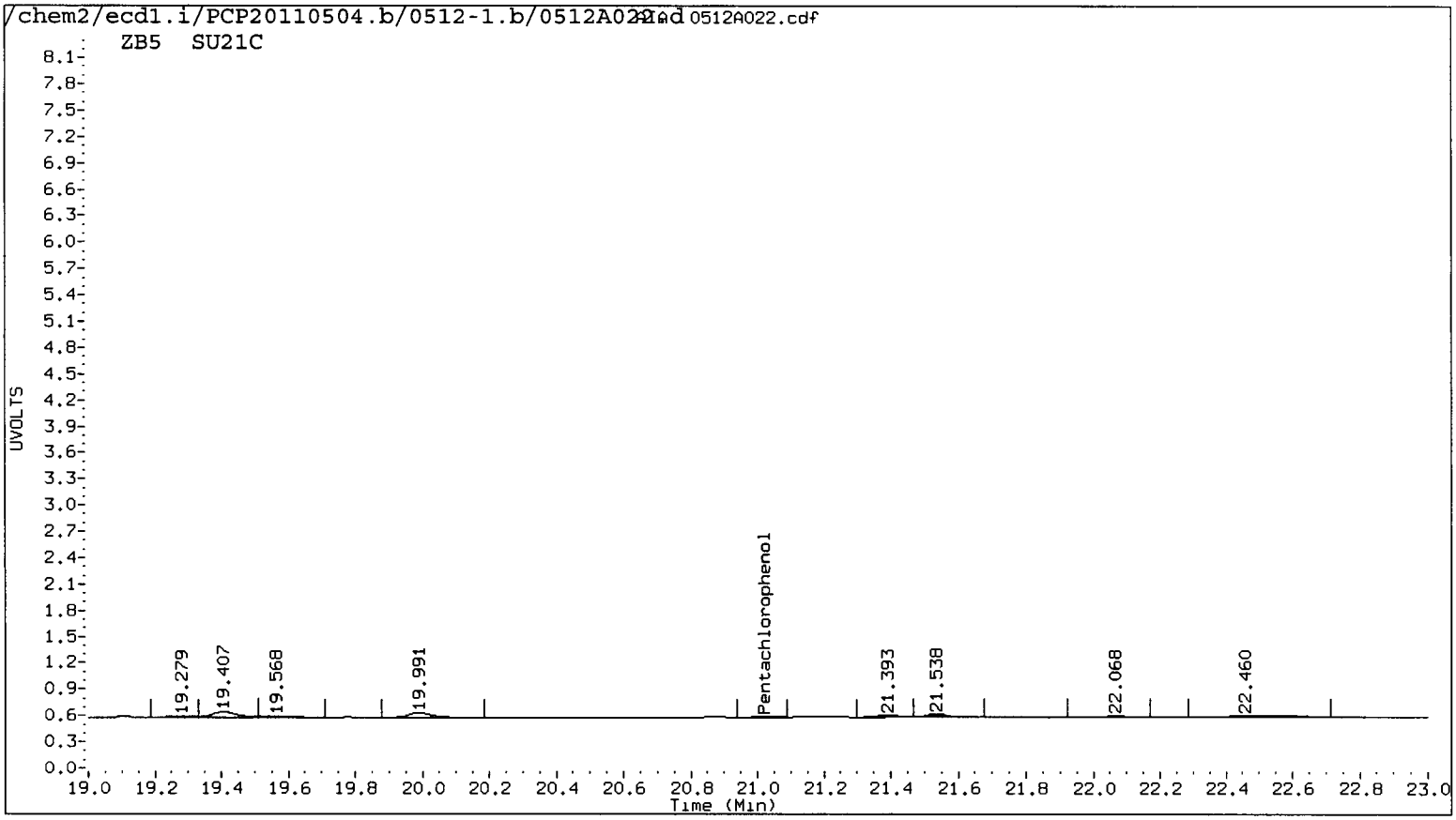
20.776
2,4,6-Tribromophenol (surr)
21.726
21.939
22.312
22.597
22.760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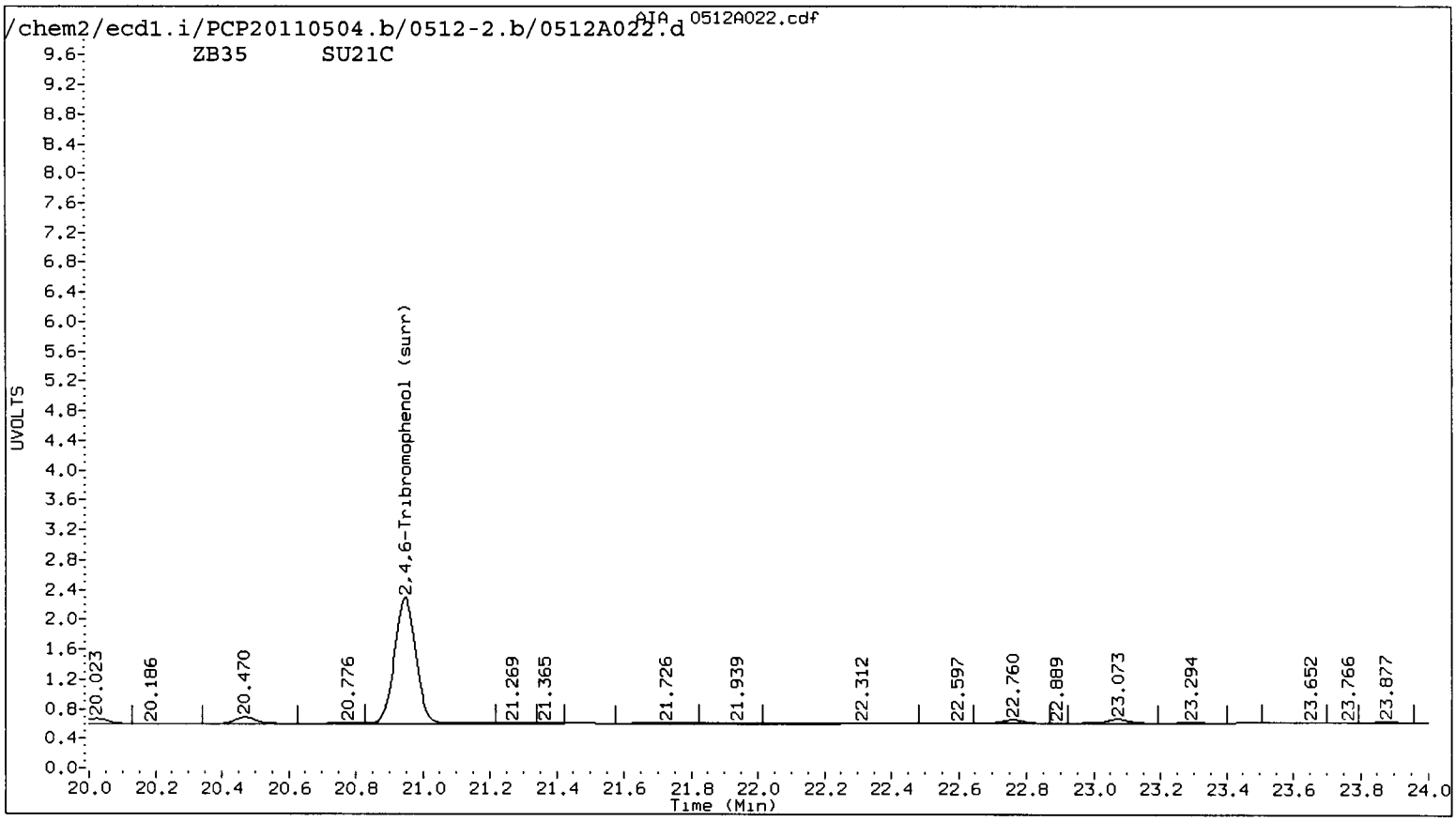
AIA 0512A022.cdf
ZB5 SU21C
UVOLTS
19.279
19.407
19.568
19.991
Pentachlorophenol
21.393
21.538
22.068
22.460
Time (Min)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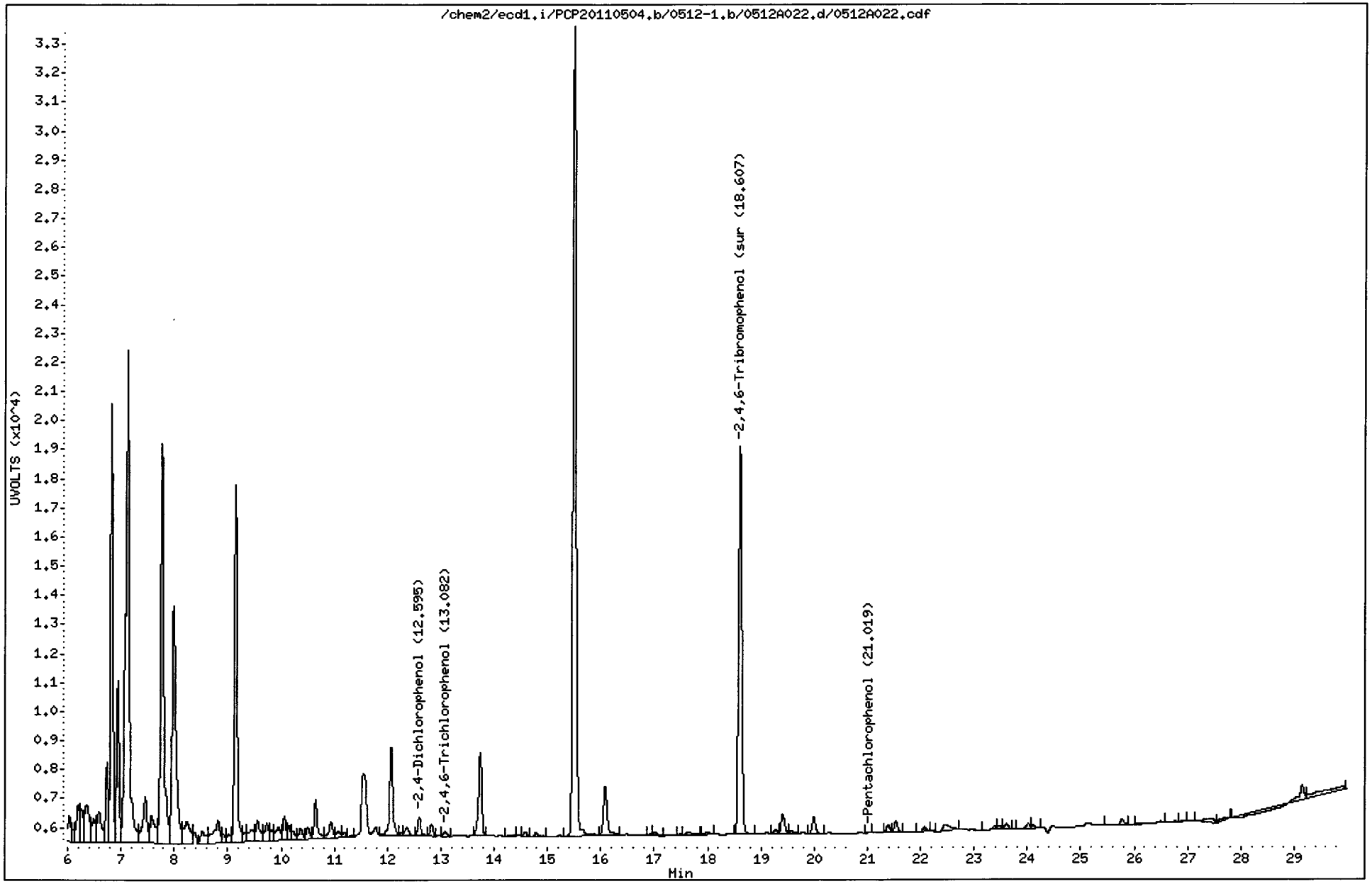
AIA 0512A022.cdf
ZB35 SU21C
UVOLTS
20.023
20.186
20.470
20.776
2,4,6-Tribromophenol (surr)
21.269
21.365
21.726
21.939
22.312
22.597
22.760
22.889
23.073
23.294
23.652
23.766
23.877
Time (Min)

Data File: /chem2/ecd1.i/PCP20110504.b/0512-1.b/0512A022.d
Date : 13-MAY-2011 03:08
Client ID: MW10-042711
Instrument: ecd1.i
Sample Info: SU21C
Purge Volume: 500.0
Operator: ar
Column phase: STX CLP1
Column diameter: 0.53



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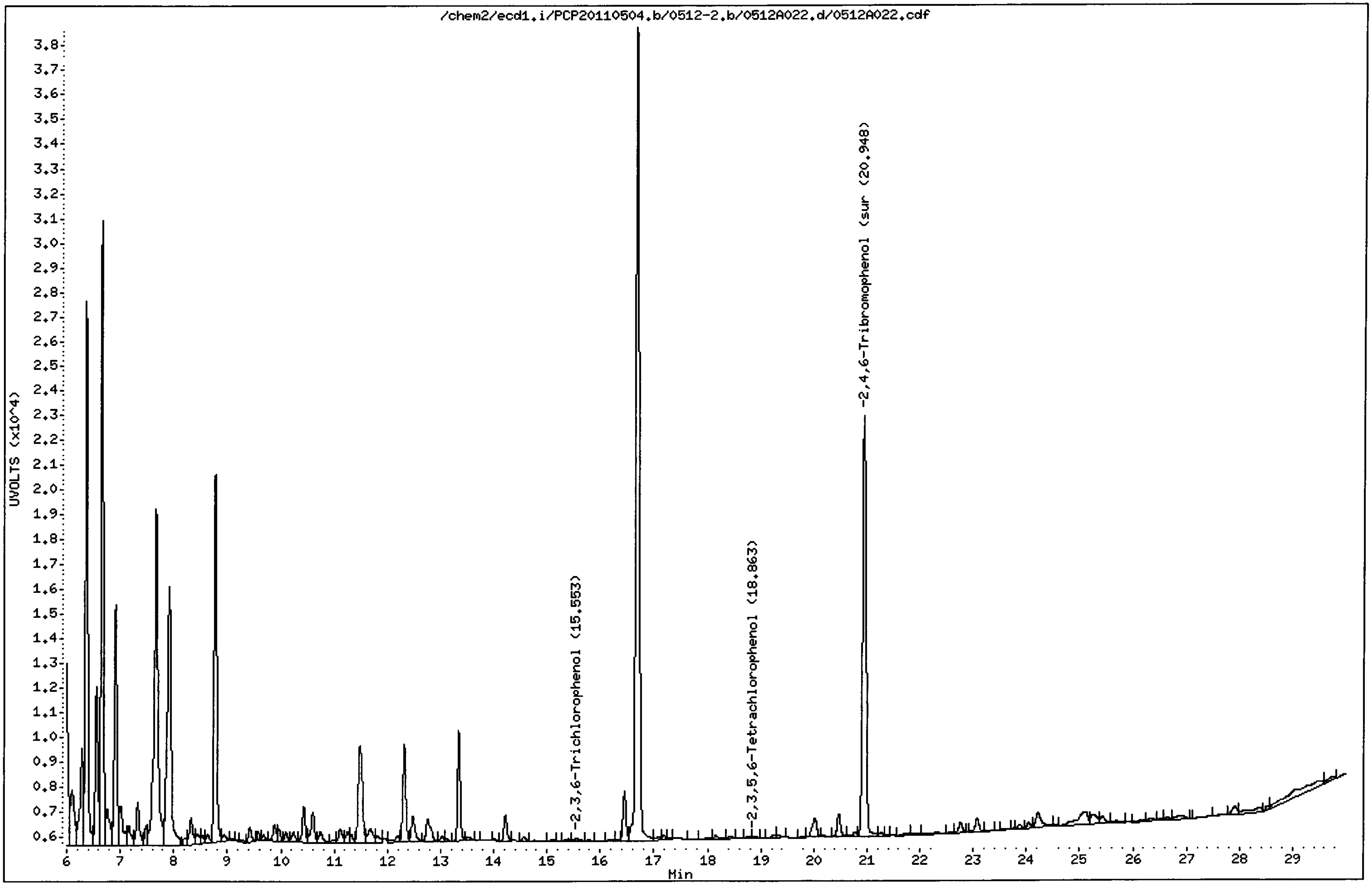
Date : 13-MAY-2011 03:08
Client ID: MW10-042711 Instrument: ecd1.i
Sample Info: SU21C
Purge Volume: 500.0 Operator: ar
Column phase: STX CLP2 Column diameter: 0.53



ST98:00780

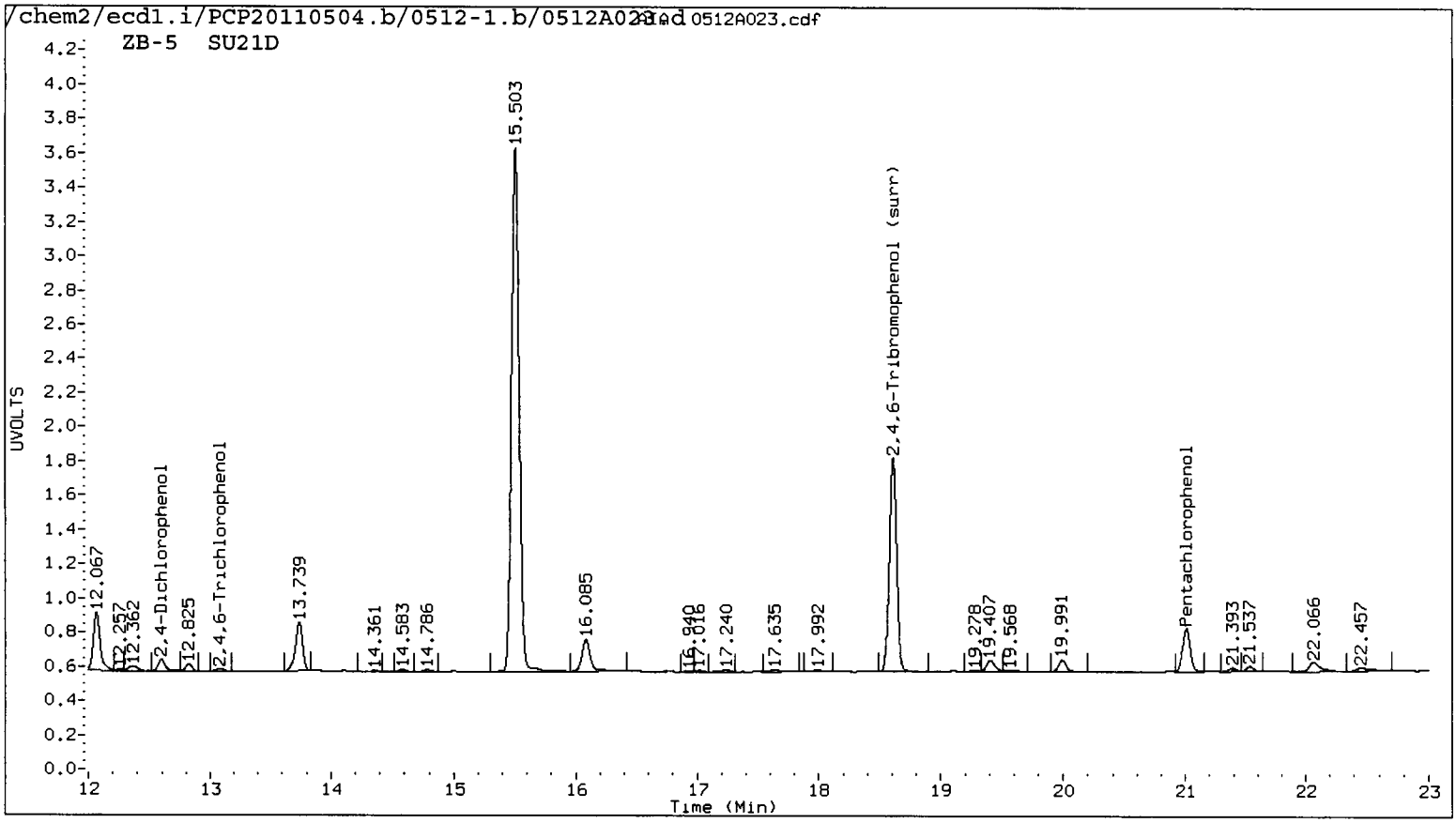
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/PCP20110504.b/0512-1.b/0512A023.d ARI ID: SU21D
Data file 2: /chem2/ecd1.i/PCP20110504.b/0512-2.b/0512A023.d Client ID: MW09-042711
Method: /chem2/ecd1.i/PCP20110504.b/PCP.m Injection Date: 13-MAY-2011 03:44
Compound Sublist: all Report Date: 05/13/2011 09:47
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
21.010	0.012	54638	22.979	0.012	87944	2.7117	3.1229	14.1	Pentachlorophenol
13.083	-0.018	3612	----			0.2968	0.0000	---	2,4,6-Trichlorophenol
----			15.554	-0.003	3898	0.0000	0.2713	---	2,3,6-Trichlorophenol
----			----			0.0000	0.0000	---	2,4,5-Trichlorophenol
----			----			0.0000	0.0000	---	2,3,4-Trichlorophenol
----			18.879	0.065	8377	0.0000	0.3819	---	2,3,5,6-Tetrachlorophenol
----			22.089	0.009	1623	0.0000	0.0948	---	2,3,4,5-Tetrachlorophenol
12.595	0.040	14037	----			17.6578	0.0000	---	2,4-Dichlorophenol
18.607	0.011	264367	20.947	0.011	355137	16.8	16.9	0.6	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	67.2	67.6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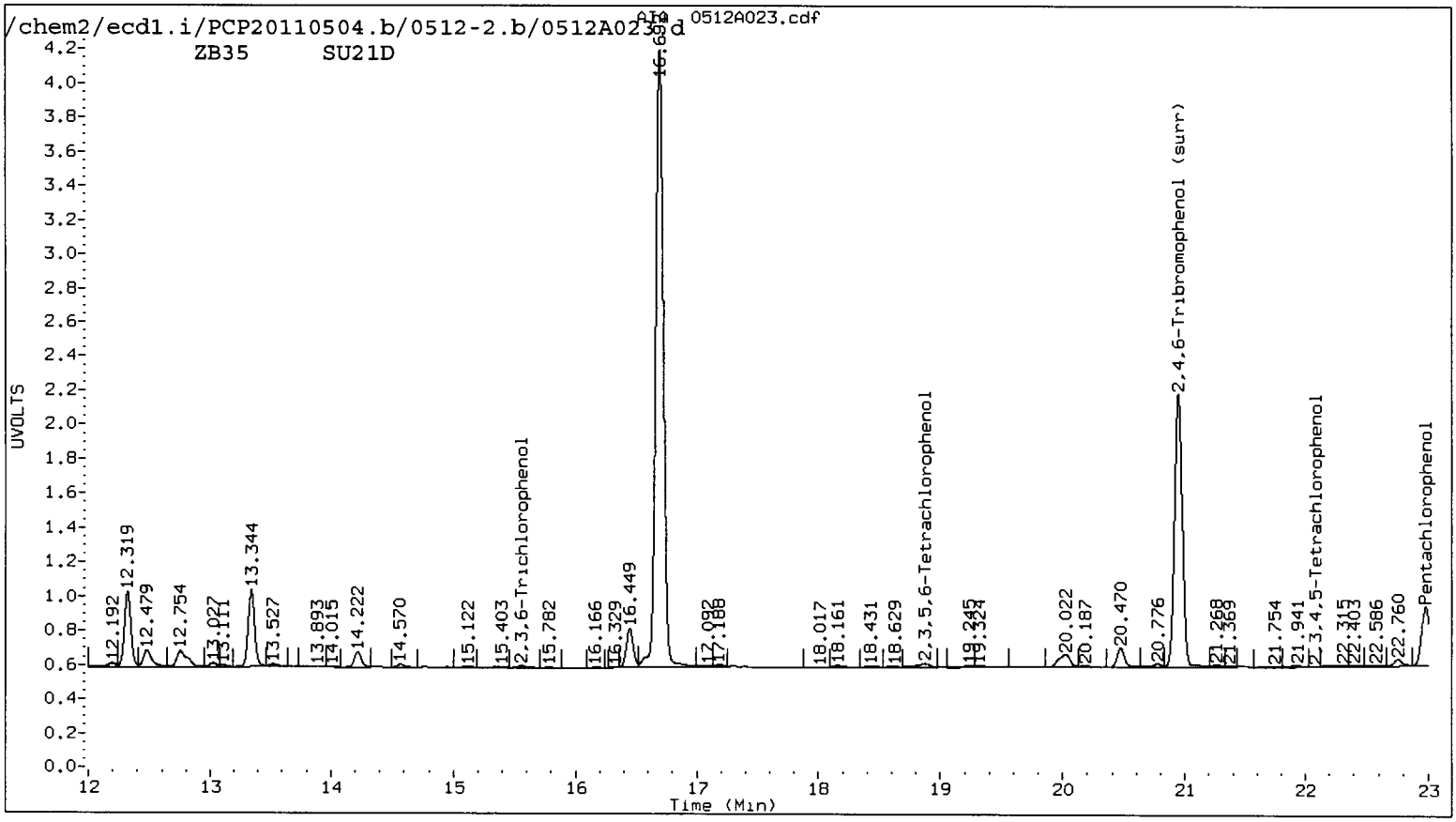
ZB-5 SU21D
UVOLTS
Time (Min)
12.067
12.257
12.362
2,4-Dichlorophenol
12.825
2,4,6-Trichlorophenol
13.739
14.361
14.583
14.786
15.503
16.085
16.940
17.016
17.240
17.635
17.992
2,4,6-Tribromophenol (surr)
19.278
19.407
19.568
19.991
Pentachlorophenol
21.393
21.537
22.066
22.457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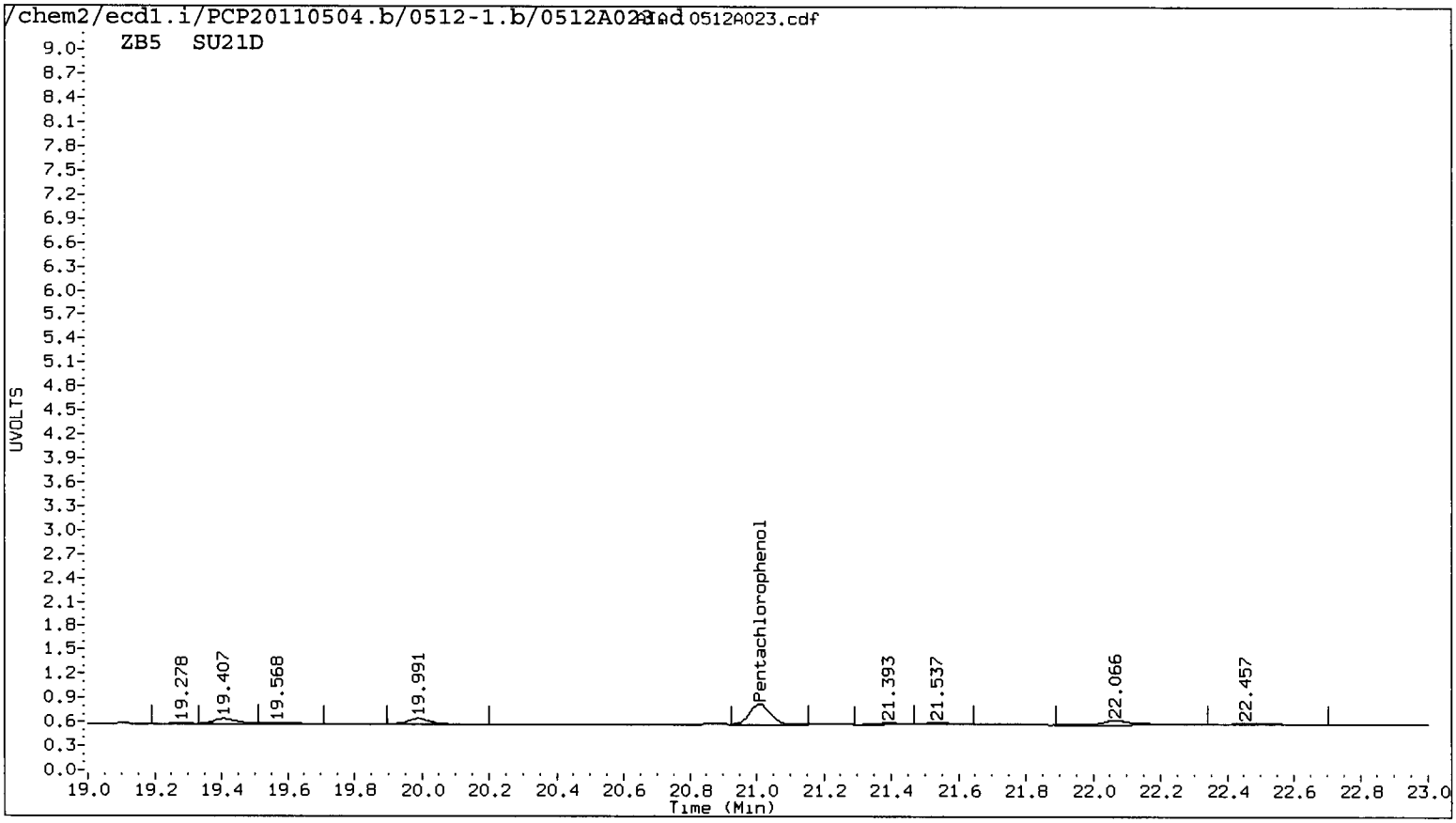
ZB35 SU21D
UVOLTS
Time (Min)
12.192
12.319
12.479
12.754
13.344
13.527
13.893
14.015
14.222
14.570
15.122
15.403
2,3,6-Trichlorophenol
15.782
16.166
16.329
16.449
16.691
17.082
17.188
18.017
18.161
18.431
18.629
2,3,5,6-Tetrachlorophenol
20.022
20.187
20.470
20.776
2,4,6-Tribromophenol (surr)
21.754
21.941
2,3,4,5-Tetrachlorophenol
22.586
22.760
Pentachlorophenol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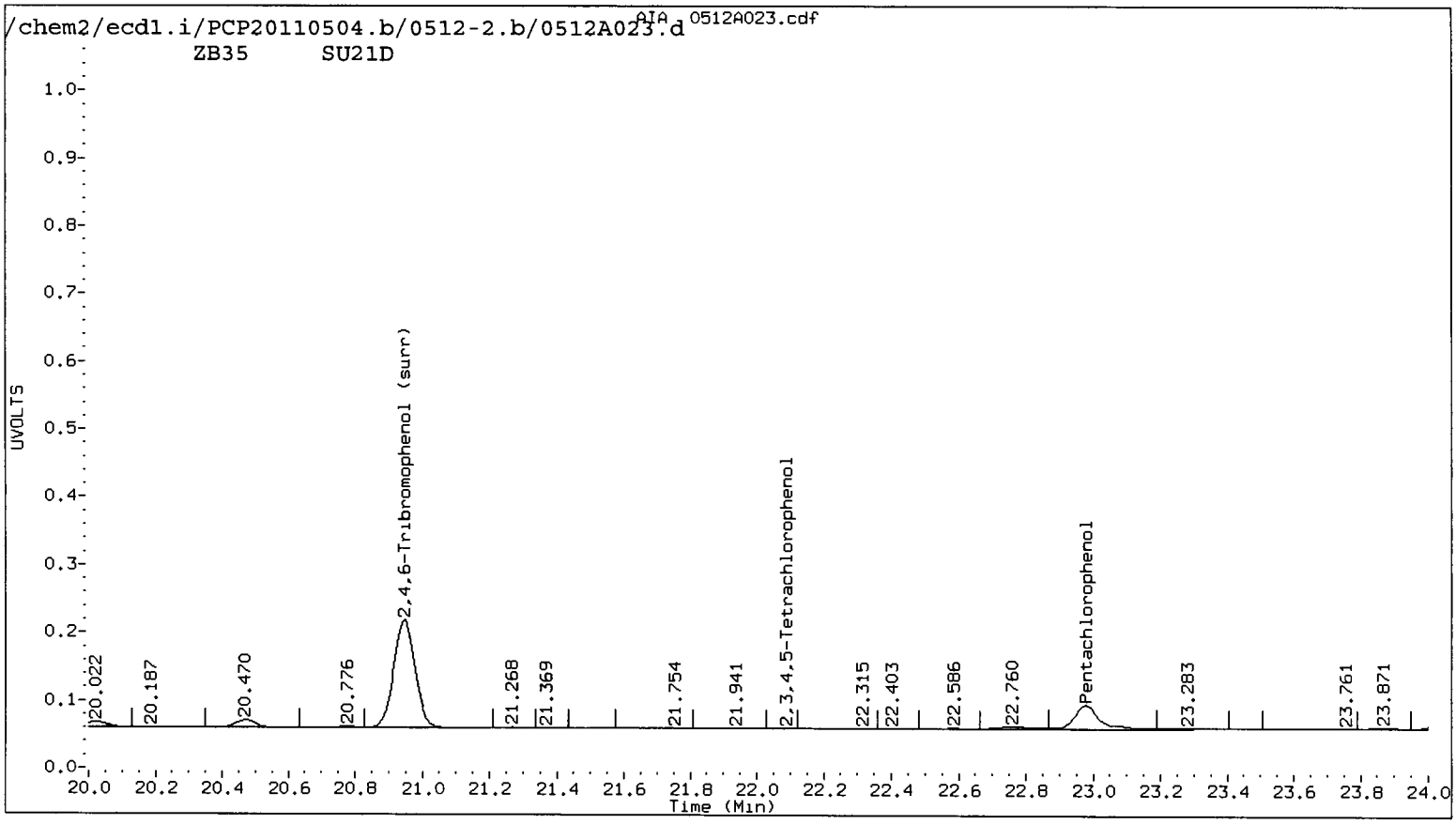
AIA 0512A023.cdf
ZB5 SU21D
UVOLTS
19.278
19.407
19.568
19.991
Pentachlorophenol
21.393
21.537
22.066
22.457
Time (Min)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AIA 0512A023.cdf
ZB35 SU21D
UVOLTS
20.022
20.187
20.470
20.776
2,4,6-Tribromophenol (surr)
21.268
21.369
21.754
21.941
2,3,4,5-Tetrachlorophenol
22.315
22.403
22.586
22.760
Pentachlorophenol
23.283
23.761
23.871
Time (Min)

Data File: /chem2/ecd1.i/PCP20110504.b/0512-1.b/0512A023.d

Page 1

Date : 13-MAY-2011 03:44

Client ID: MW09-042711

Instrument: ecd1.i

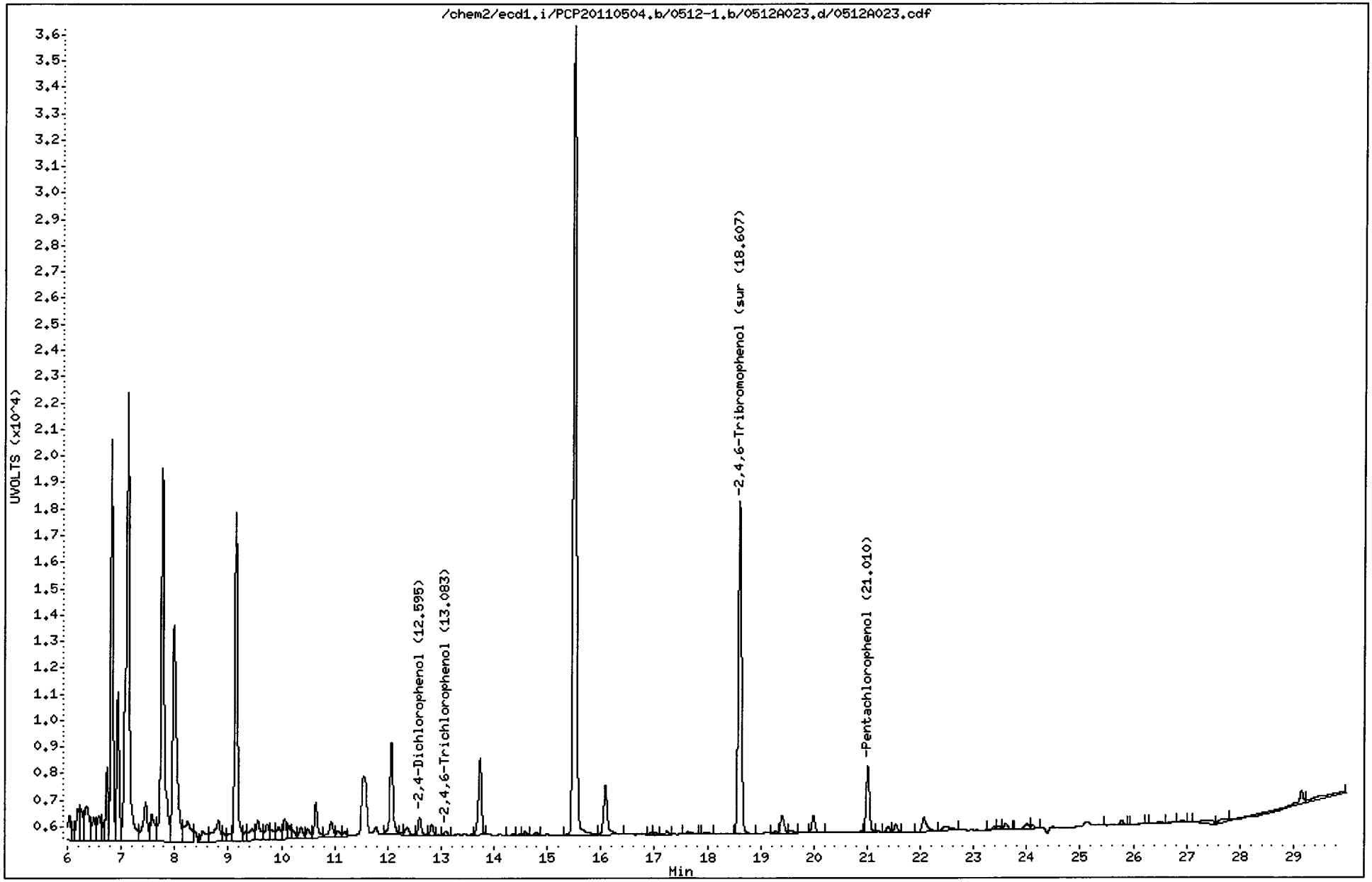
Sample Info: SU21D

Purge Volume: 500.0

Operator: ar

Column phase: STX CLP1

Column diameter: 0.53



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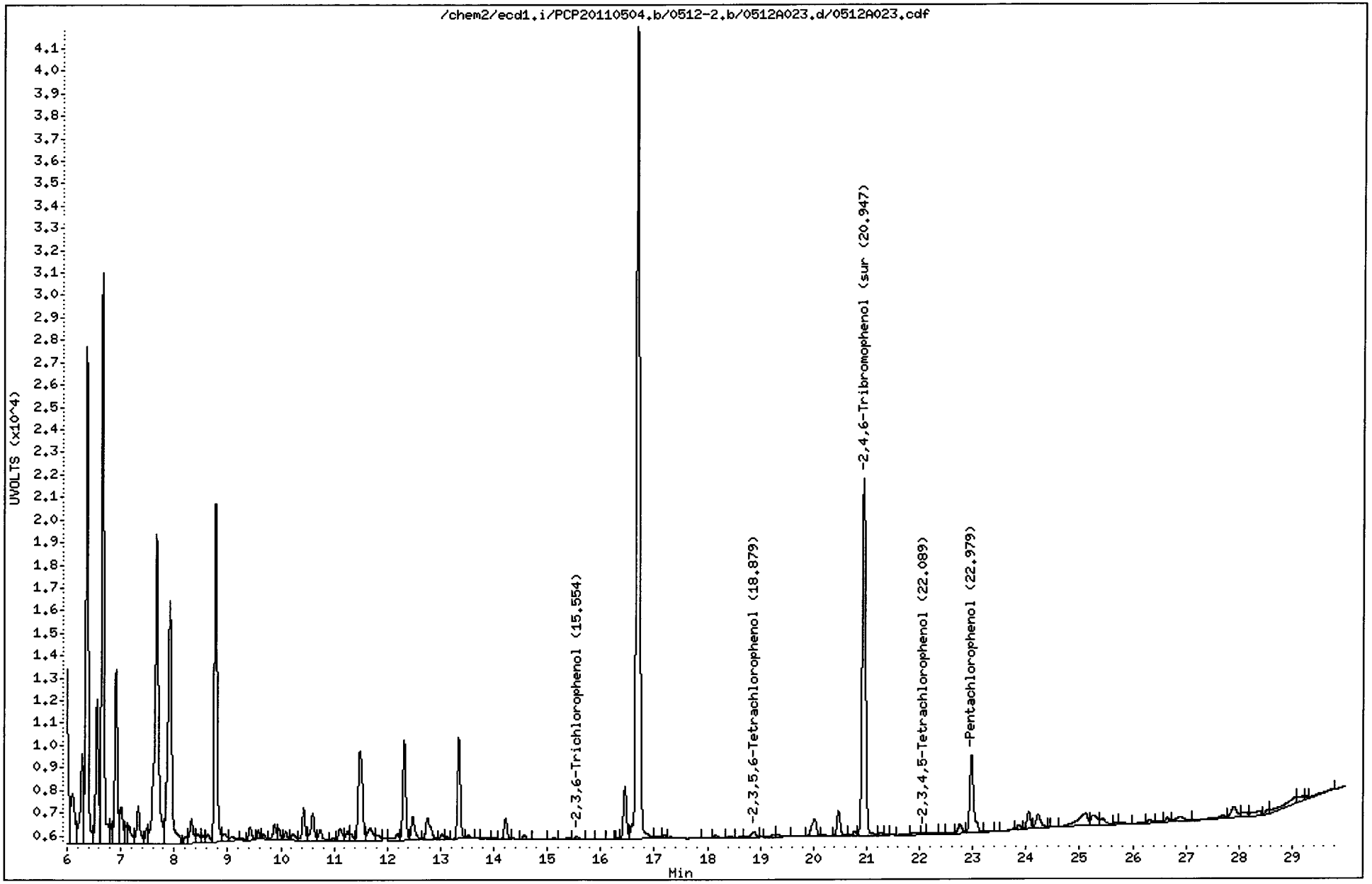
Data File: /chem2/ecd1.i/PCP20110504.b/0512-2.b/0512A023.d
Date : 13-MAY-2011 03:44
Client ID: MW09-042711
Sample Info: SU21D
Purge Volume: 500.0
Column phase: STX CLP2

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



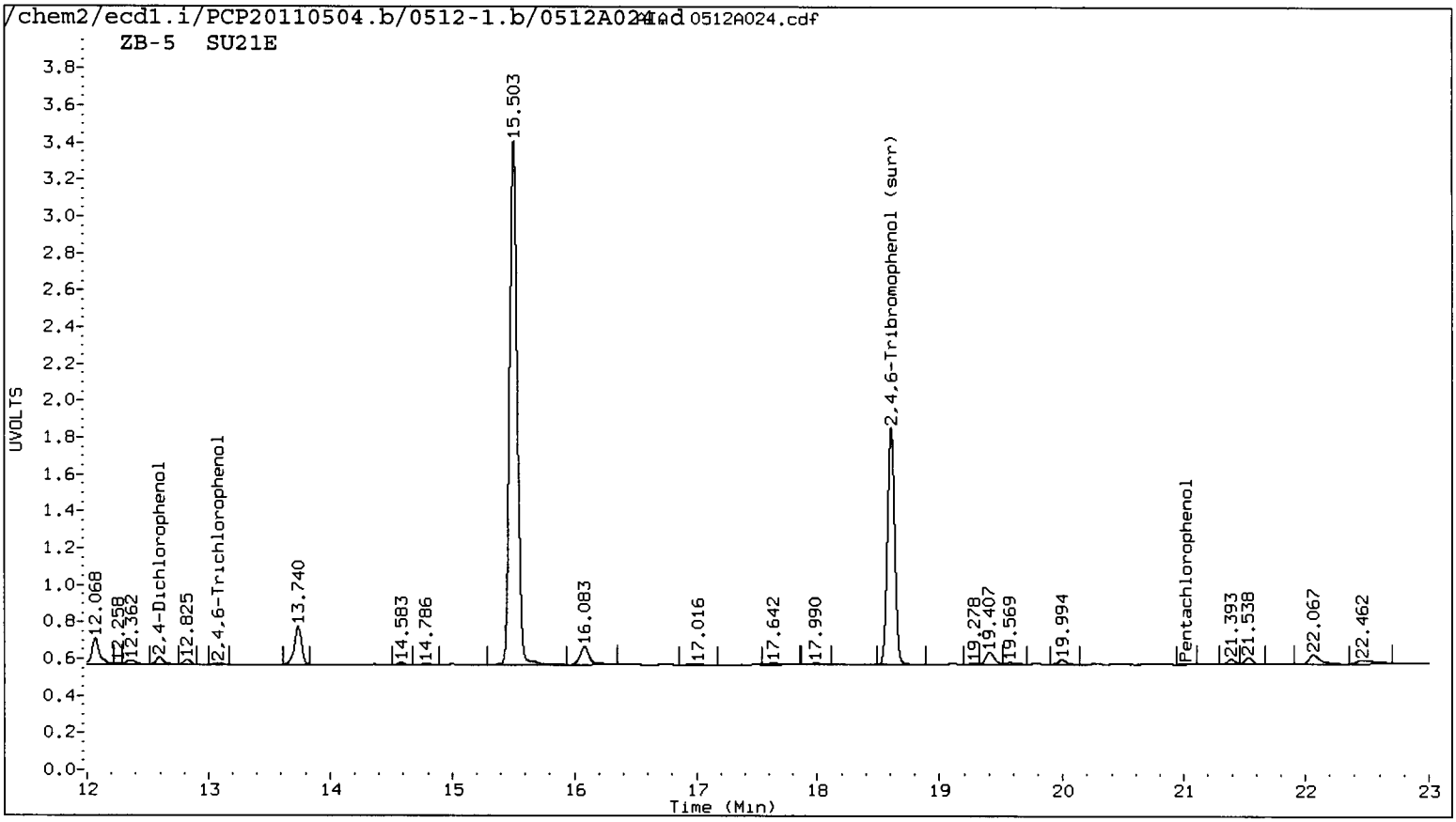
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/PCP20110504.b/0512-1.b/0512A024.d ARI ID: SU21E
Data file 2: /chem2/ecd1.i/PCP20110504.b/0512-2.b/0512A024.d Client ID: MW08-042711
Method: /chem2/ecd1.i/PCP20110504.b/PCP.m Injection Date: 13-MAY-2011 04:20
Compound Sublist: all Report Date: 05/13/2011 09:47
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
21.021	0.023	1250	----			0.0621	0.0000	---	Pentachlorophenol
13.082	-0.019	2359	----			0.1939	0.0000	---	2,4,6-Trichlorophenol
----			15.552	-0.005	3293	0.0000	0.2291	---	2,3,6-Trichlorophenol
----			----			0.0000	0.0000	---	2,4,5-Trichlorophenol
----			----			0.0000	0.0000	---	2,3,4-Trichlorophenol
----			18.865	0.051	1195	0.0000	0.0545	---	2,3,5,6-Tetrachlorophenol
----			22.085	0.005	1320	0.0000	0.0771	---	2,3,4,5-Tetrachlorophenol
12.594	0.039	8290	----			10.3446	0.0000	---	2,4-Dichlorophenol
18.607	0.011	269496	20.947	0.011	363620	17.1	17.3	1.0	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	68.5	69.2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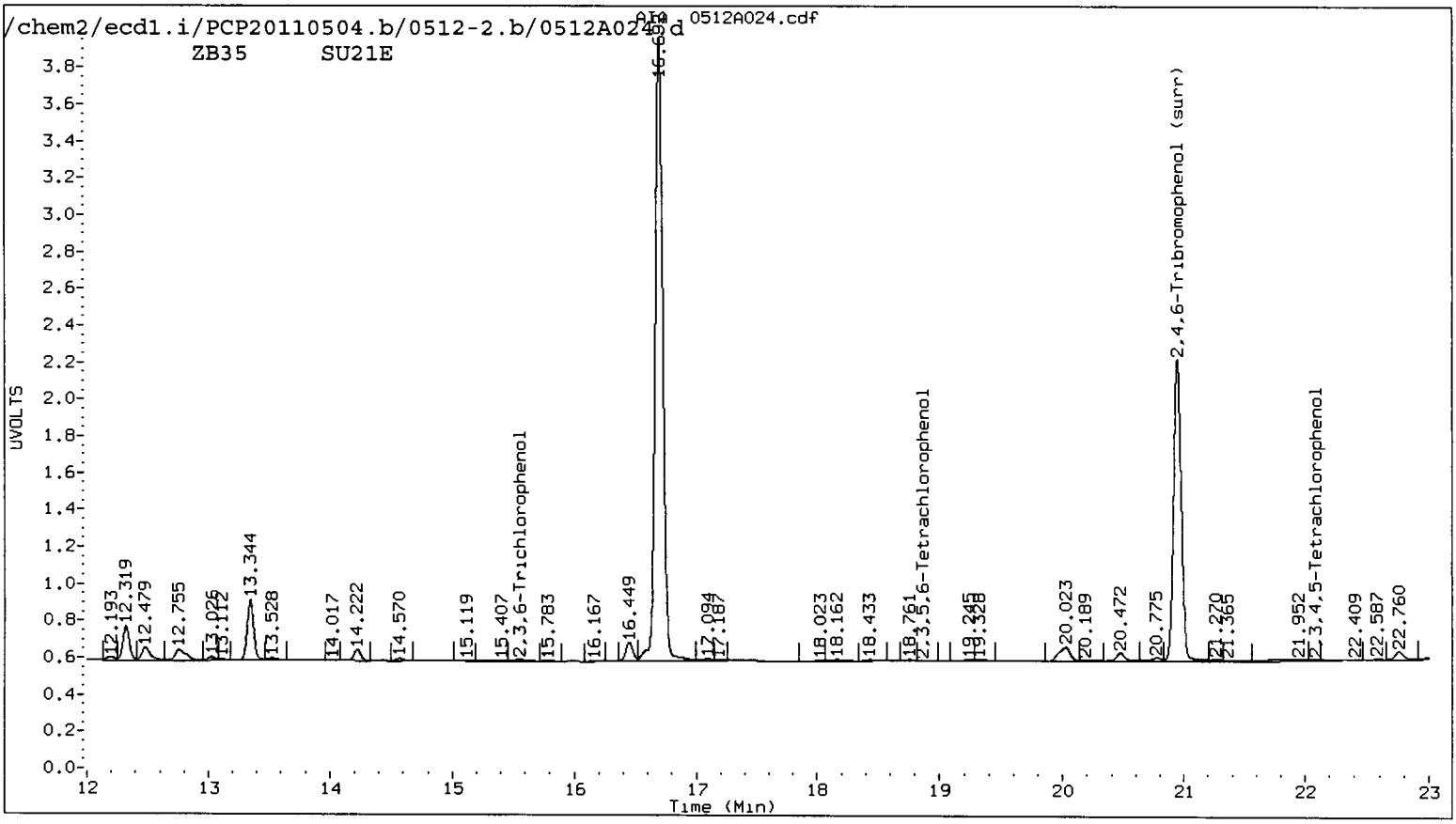
0512A024.cdf
ZB-5 SU21E
UVOLTS
Time (Min)
12.068
12.258
12.362
2,4-Dichlorophenol
12.825
2,4,6-Trichlorophenol
13.740
14.583
14.786
15.503
16.083
17.016
17.642
17.990
2,4,6-Tribromophenol (surr)
19.278
19.407
19.569
19.994
Pentachlorophenol
21.393
21.538
22.067
22.462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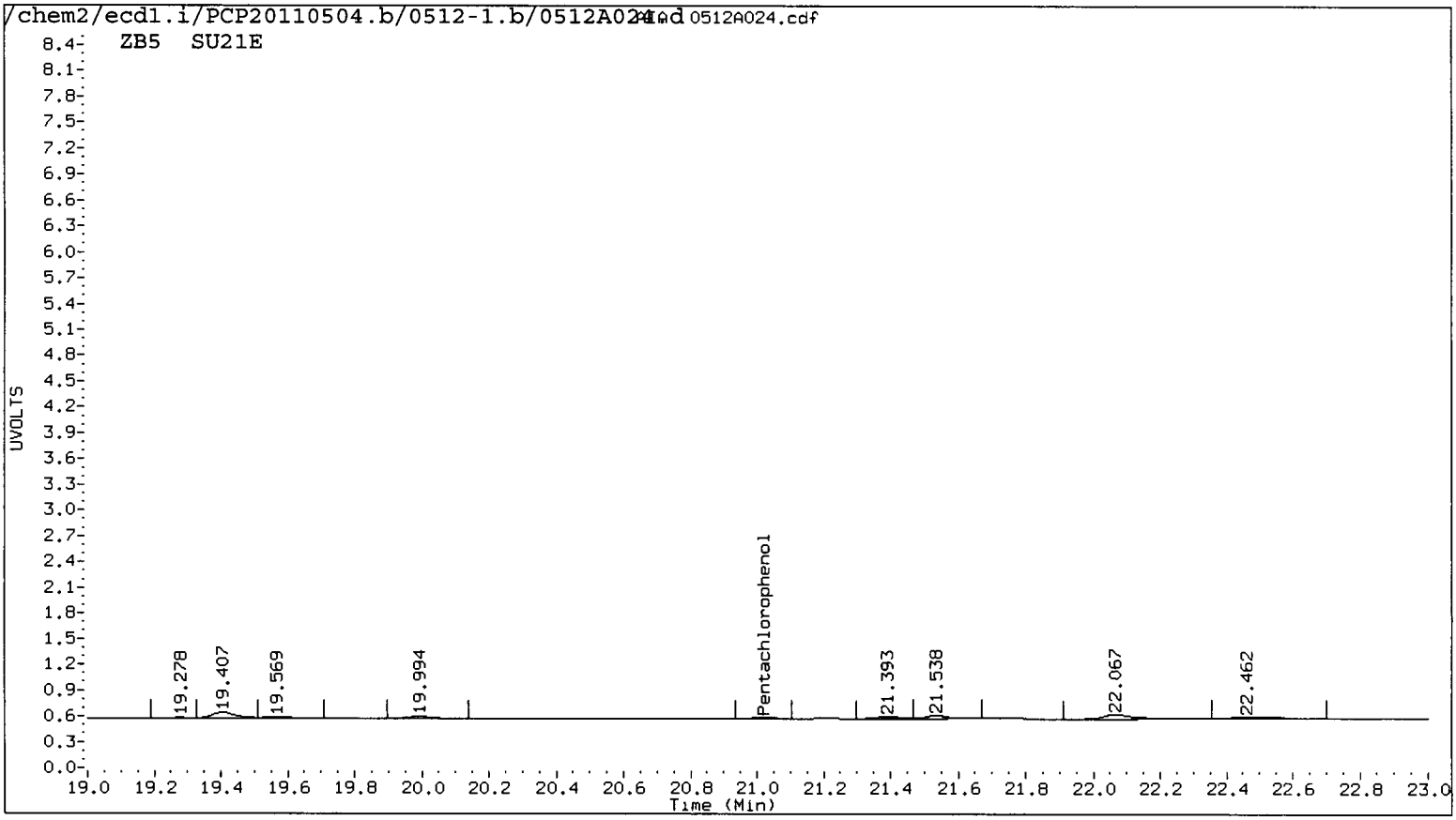
0512A024.cdf
ZB35 SU21E
UVOLTS
Time (Min)
12.193
12.319
12.479
12.755
13.344
13.528
14.017
14.222
14.570
15.119
15.407
2,3,6-Trichlorophenol
15.783
16.167
16.449
17.084
17.187
18.023
18.162
18.433
18.761
2,3,5,6-Tetrachlorophenol
19.345
19.528
20.023
20.189
20.472
20.775
2,4,6-Tribromophenol (surr)
21.220
21.365
21.952
2,3,4,5-Tetrachlorophenol
22.409
22.587
22.760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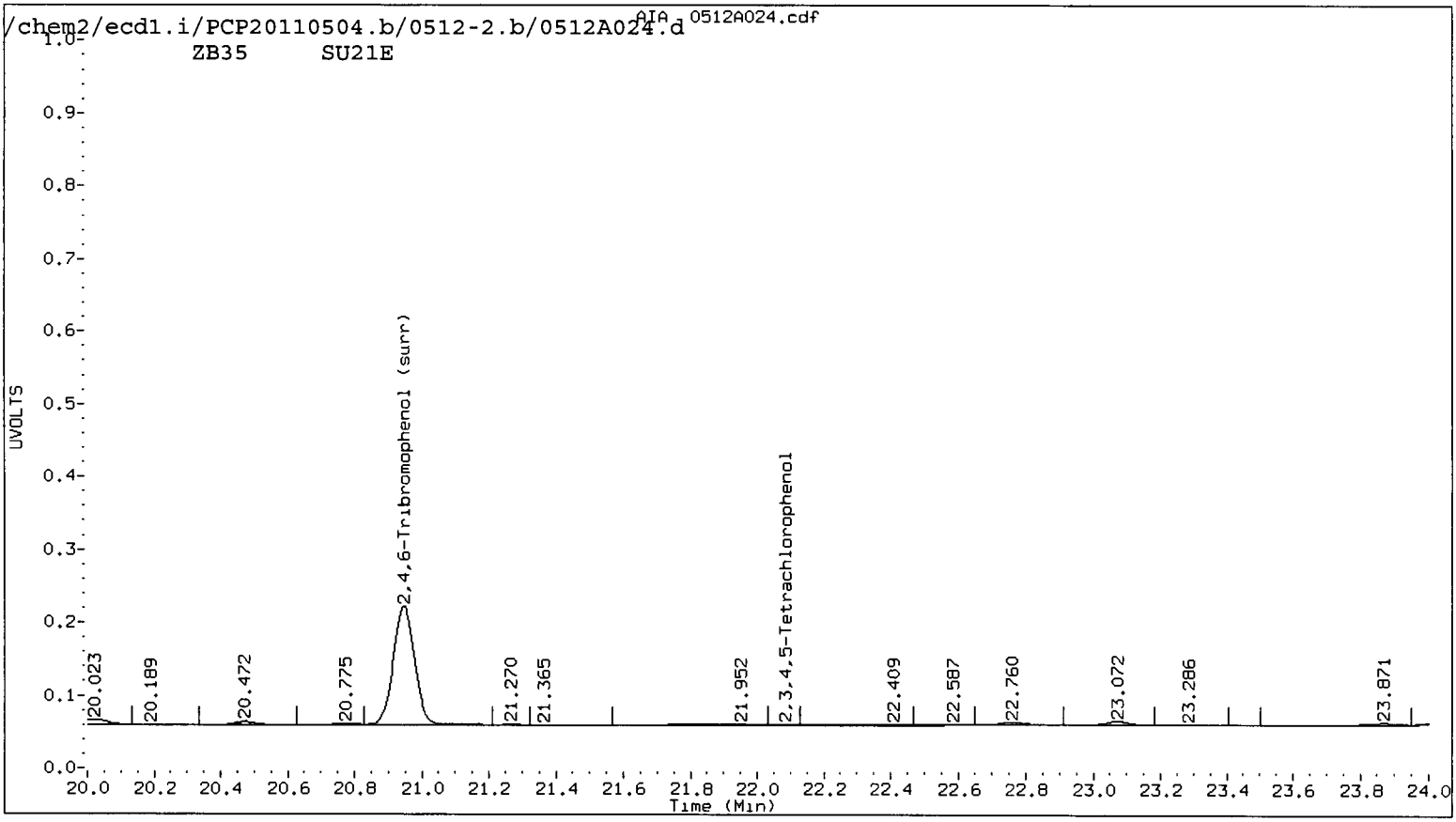
AIA 0512A024.cdf
ZB5 SU21E
UVOLTS
19.278
19.407
19.569
19.994
Pentachlorophenol
21.393
21.538
22.067
22.462
Time (Min)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AIA 0512A024.cdf
ZB35 SU21E
UVOLTS
20.023
20.189
20.472
20.775
2,4,6-Tribromophenol (surr)
21.270
21.365
21.952
2,3,4,5-Tetrachlorophenol
22.409
22.587
22.760
23.072
23.286
23.871
Time (Min)

Data File: /chem2/ecd1.i/PCP20110504.b/0512-1.b/0512A024.d

Page 1

Date : 13-MAY-2011 04:20

Client ID: MW08-042711

Instrument: ecd1.i

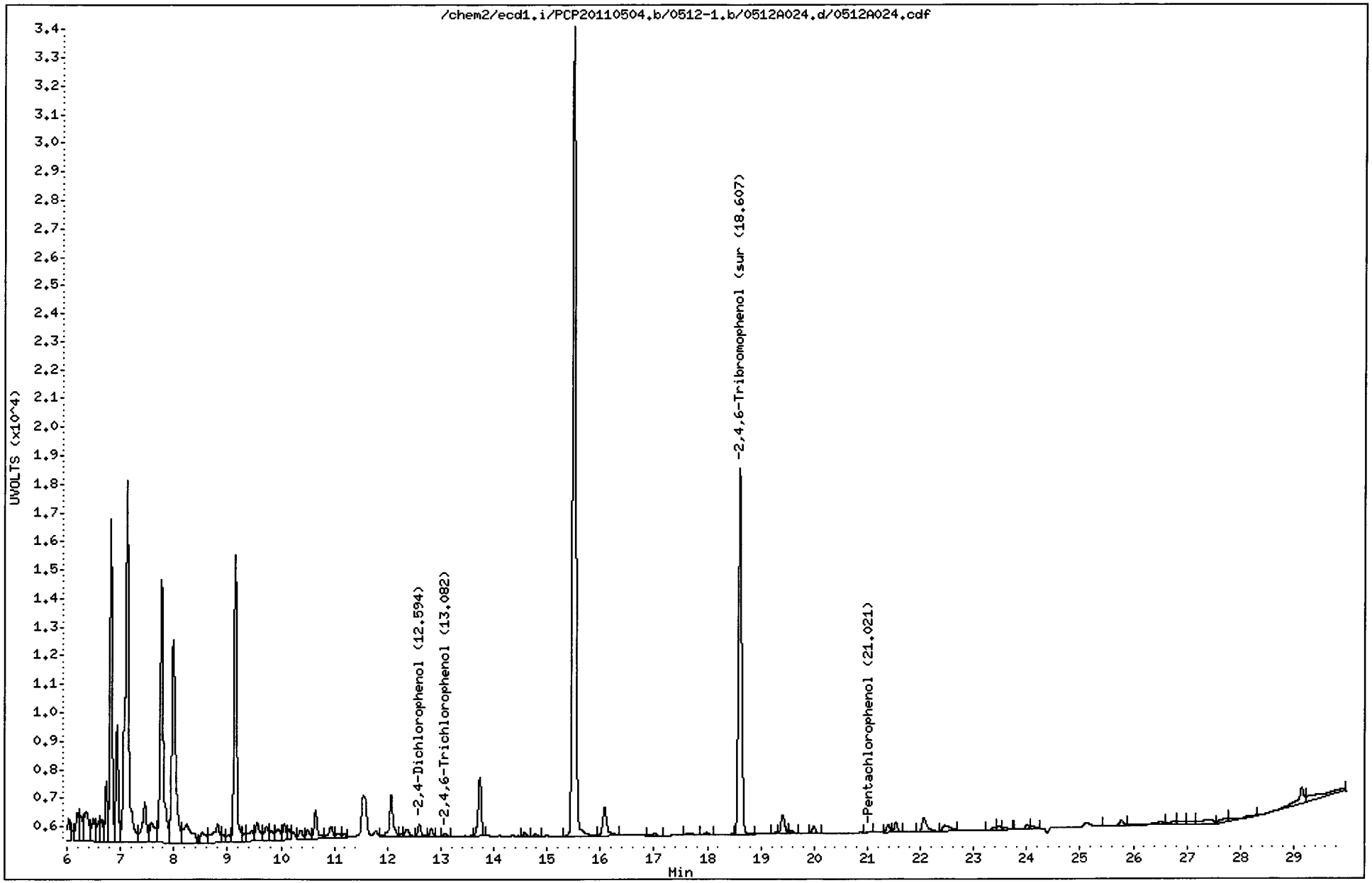
Sample Info: SU21E

Purge Volume: 500.0

Operator: ar

Column phase: STX CLP1

Column diameter: 0.53



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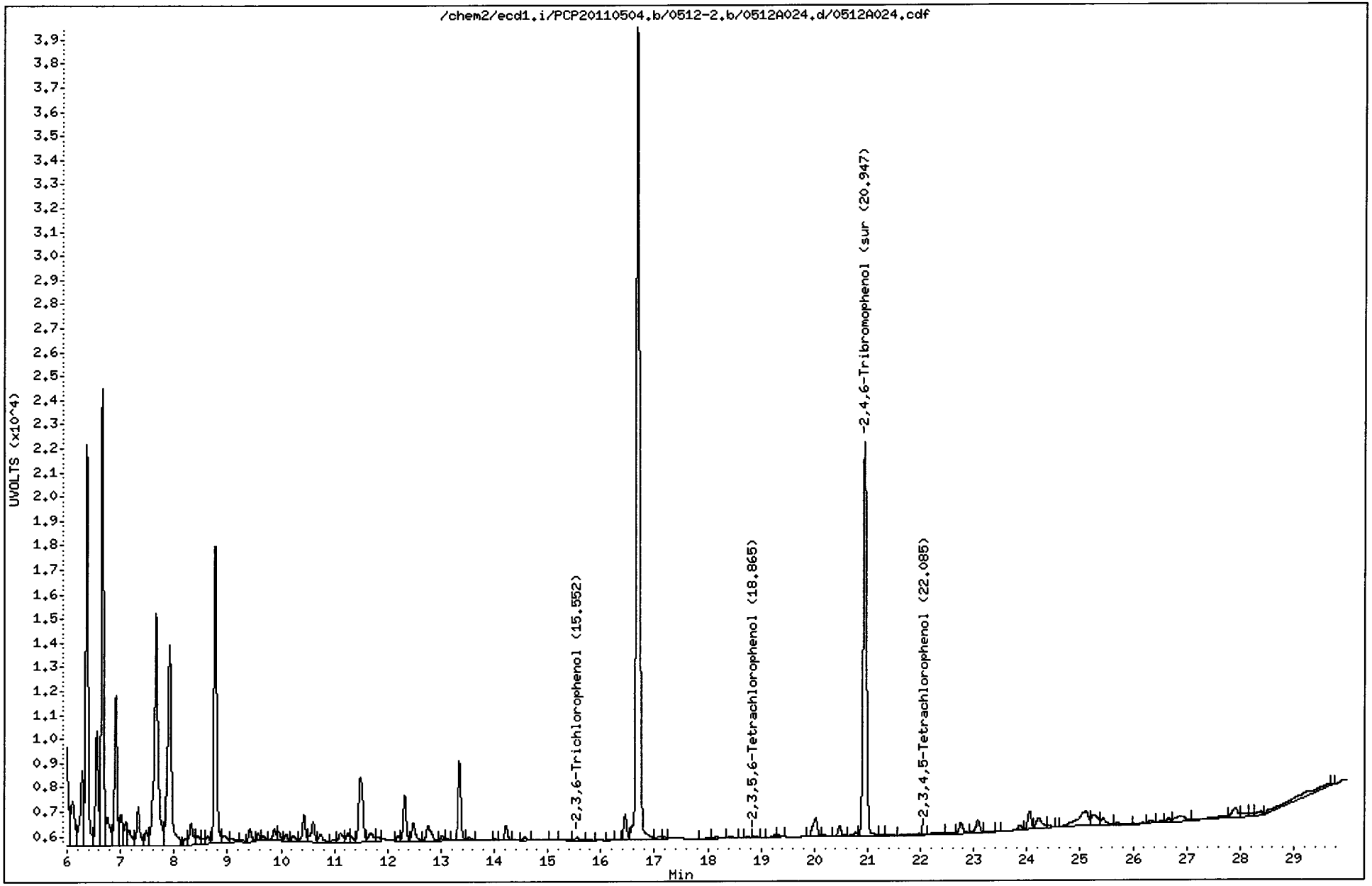
Date : 13-MAY-2011 04:20
Client ID: MW08-042711
Sample Info: SU21E
Purge Volume: 500.0
Column phase: STX CLP2

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



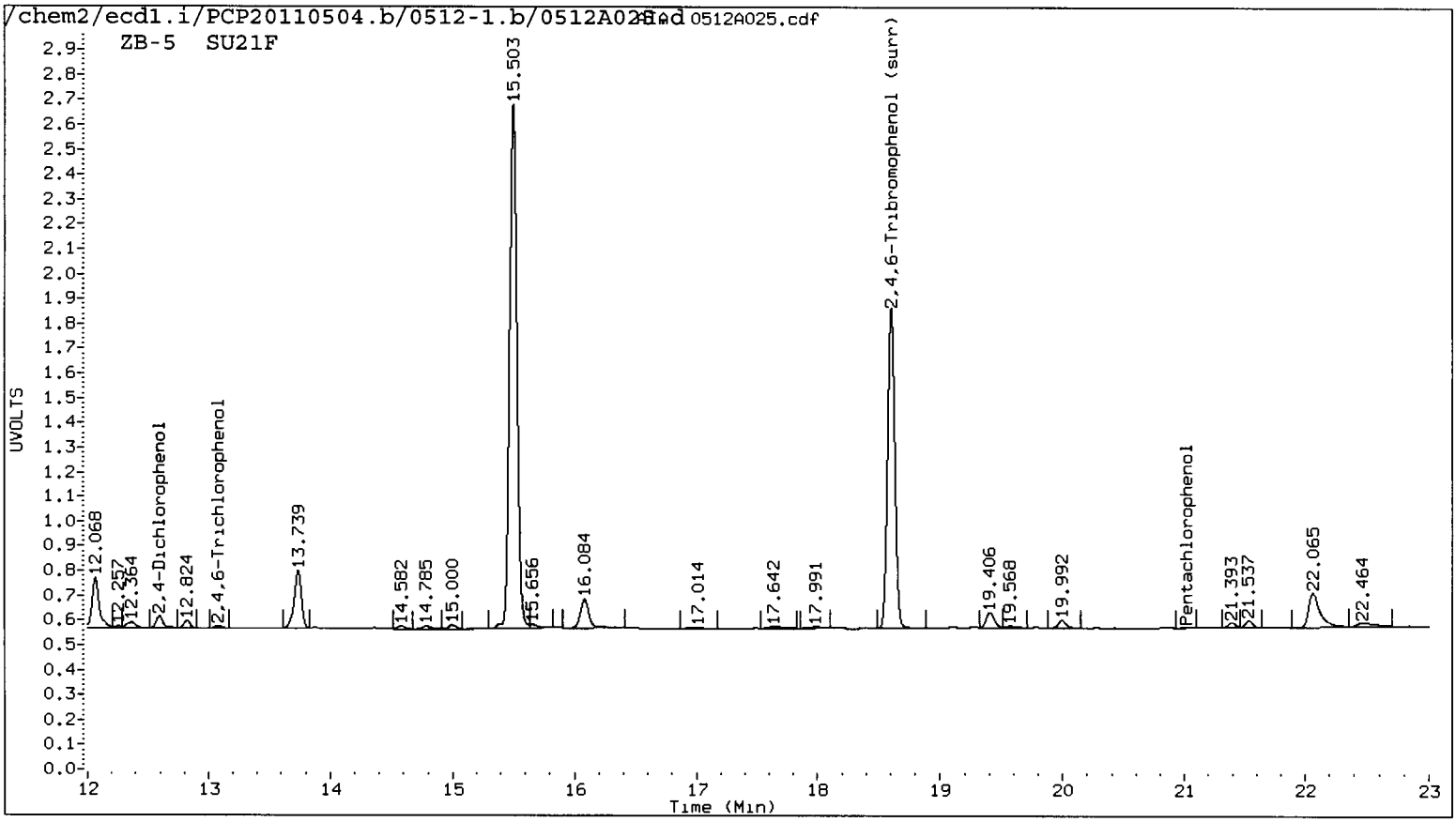
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/PCP20110504.b/0512-1.b/0512A025.d ARI ID: SU21F
Data file 2: /chem2/ecd1.i/PCP20110504.b/0512-2.b/0512A025.d Client ID: MW12-042711
Method: /chem2/ecd1.i/PCP20110504.b/PCP.m Injection Date: 13-MAY-2011 04:56
Compound Sublist: all Report Date: 05/13/2011 09:47
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
21.021	0.023	1056	----			0.0524	0.0000	---	Pentachlorophenol
13.083	-0.018	2643	----			0.2171	0.0000	---	2,4,6-Trichlorophenol
----			15.552	-0.005	3145	0.0000	0.2189	---	2,3,6-Trichlorophenol
----			----			0.0000	0.0000	---	2,4,5-Trichlorophenol
----			----			0.0000	0.0000	---	2,3,4-Trichlorophenol
----			18.859	0.045	1122	0.0000	0.0512	---	2,3,5,6-Tetrachlorophenol
----			----			0.0000	0.0000	---	2,3,4,5-Tetrachlorophenol
12.594	0.039	10152	----			12.7007	0.0000	---	2,4-Dichlorophenol
18.606	0.010	272469	20.947	0.011	364886	17.3	17.4	0.3	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	69.2	69.4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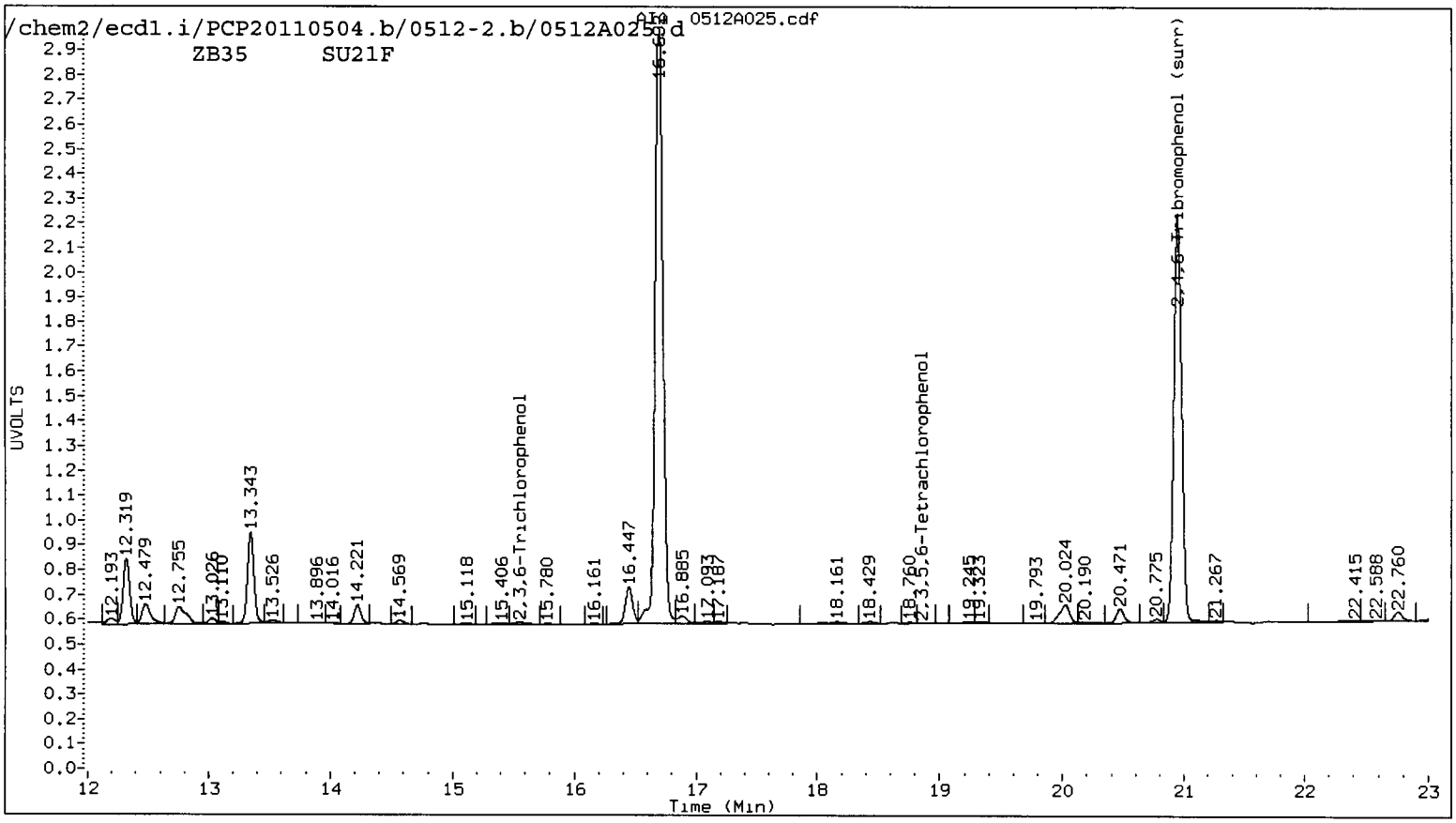
0512A025.cdf
ZB-5 SU21F
UVOLTS
Time (Min)
12.068
12.257
12.364
2,4-Dichlorophenol
12.824
2,4,6-Trichlorophenol
13.739
14.582
14.785
15.000
15.503
15.656
16.084
17.014
17.642
17.991
2,4,6-Tribromophenol (surr)
19.406
19.568
19.992
Pentachlorophenol
21.393
21.537
22.065
22.464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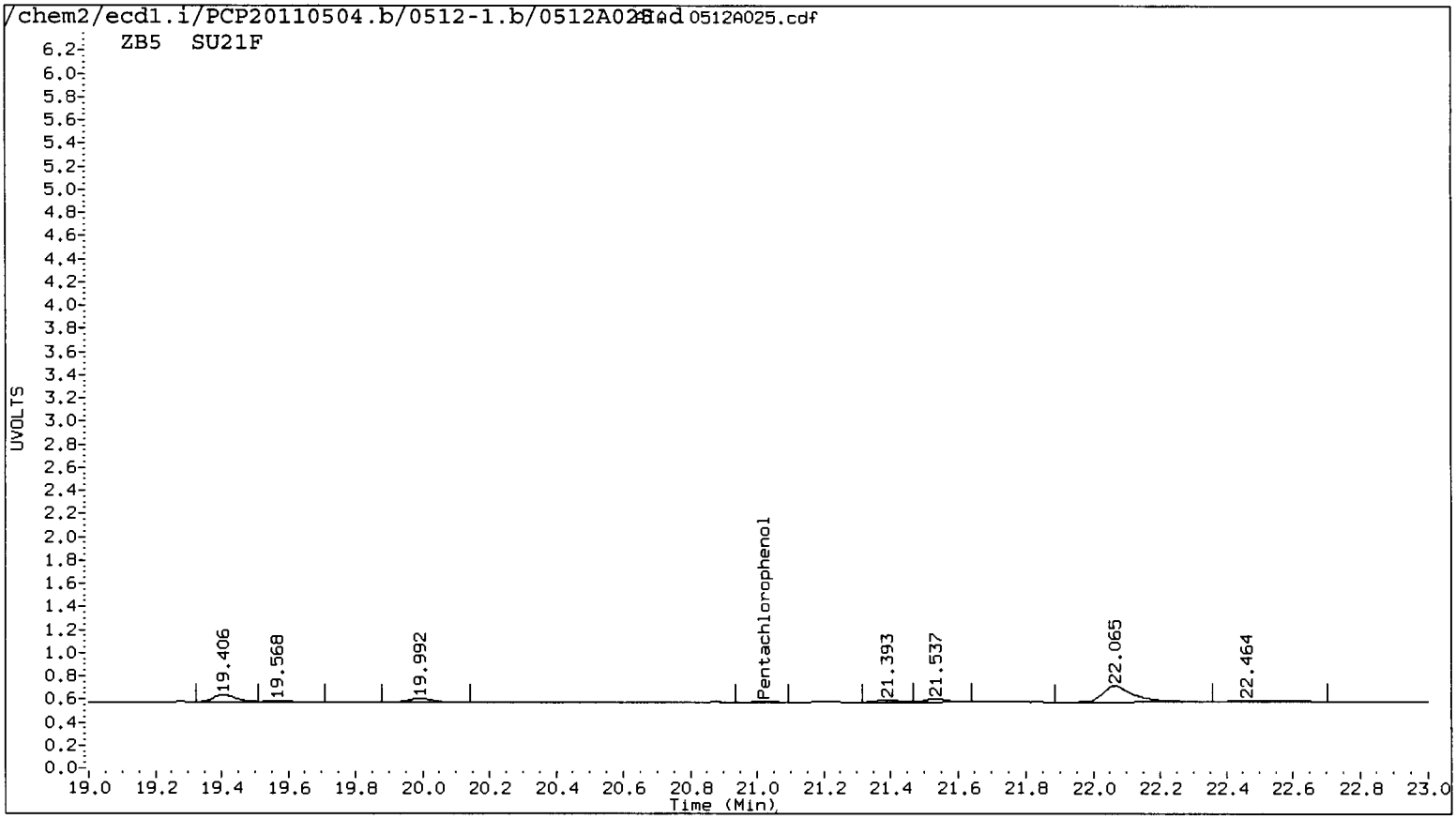
0512A025.cdf
ZB35 SU21F
UVOLTS
Time (Min)
12.193
12.319
12.479
12.755
13.343
13.526
13.896
14.016
14.221
14.569
15.118
15.406
2,3,6-Trichlorophenol
15.780
16.161
16.447
16.885
17.093
17.187
18.161
18.429
18.760
2,3,5,6-Tetrachlorophenol
19.245
19.323
19.793
20.024
20.190
20.471
20.775
2,4,6-Tribromophenol (surr)
21.267
22.415
22.588
22.760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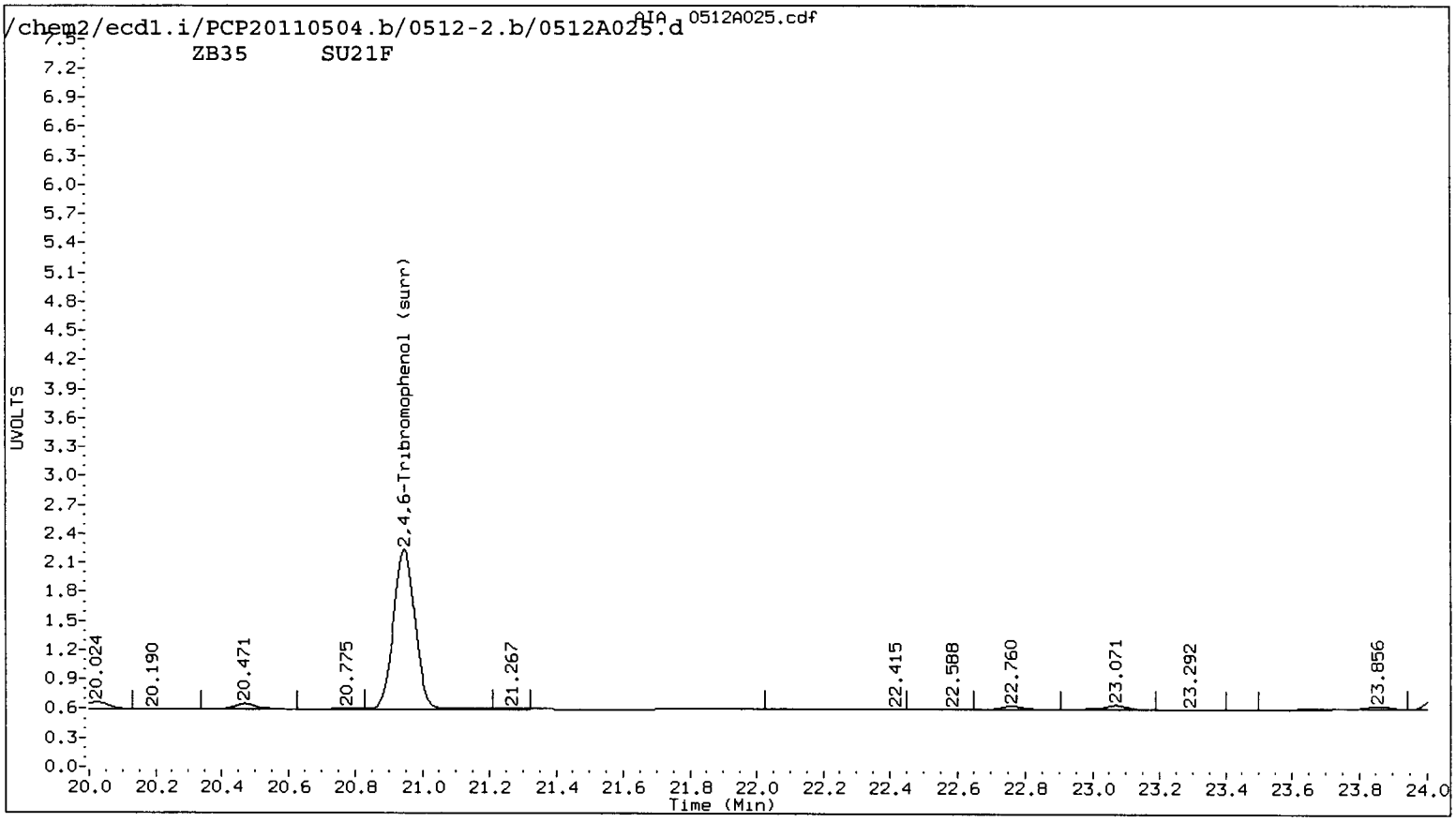
ZB5 SU21F
UVOLTS
19.406
19.568
19.992
Pentachlorophenol
21.393
21.537
22.065
22.464
Time (Min)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ZB35 SU21F
UVOLTS
20.024
20.190
20.471
20.775
2,4,6-Tribromophenol (surr)
21.267
22.415
22.588
22.760
23.071
23.292
23.856
Time (Min)

Data File: /chem2/ecd1.i/PCP20110504.b/0512-1.b/0512A025.d

Page 1

Date : 13-MAY-2011 04:56

Client ID: MW12-042711

Instrument: ecd1.i

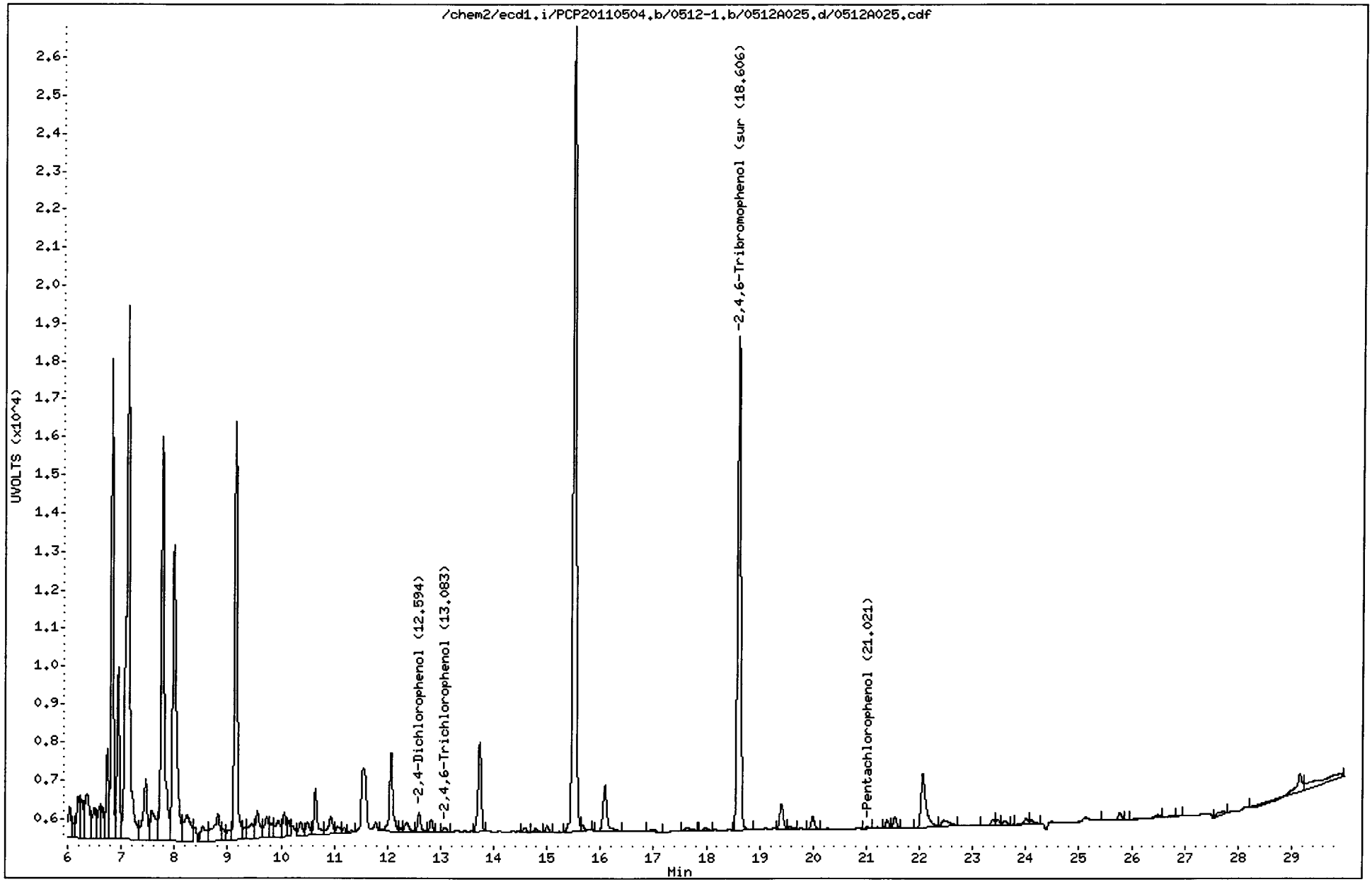
Sample Info: SU21F

Purge Volume: 500.0

Operator: ar

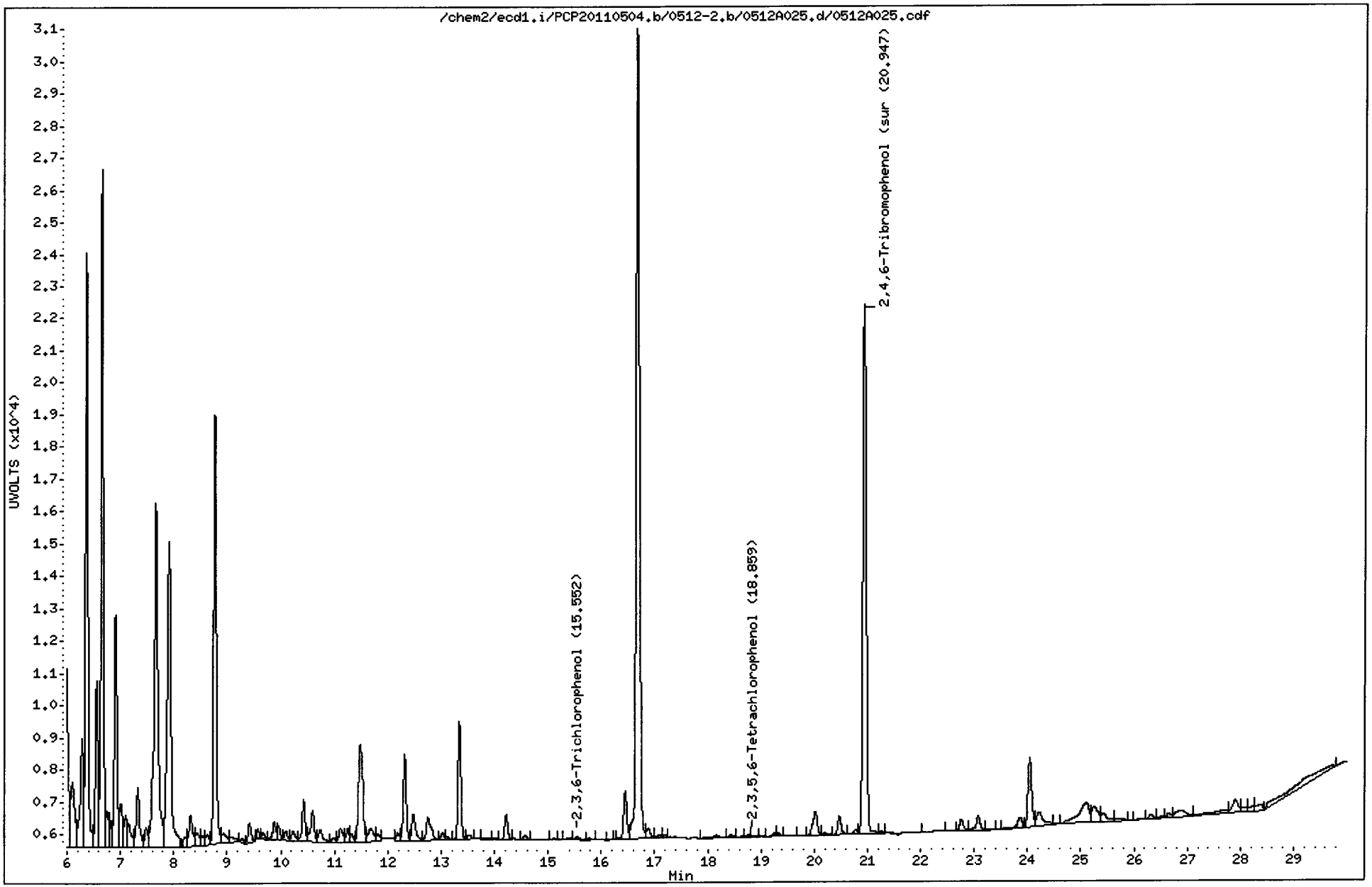
Column phase: STX CLP1

Column diameter: 0.53



Data File: /chem2/ecd1.i/PCP20110504.b/0512-2.b/0512A025.d
Date : 13-MAY-2011 04:56
Client ID: MW12-042711
Sample Info: SU21F
Purge Volume: 500.0
Column phase: STX CLP2

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



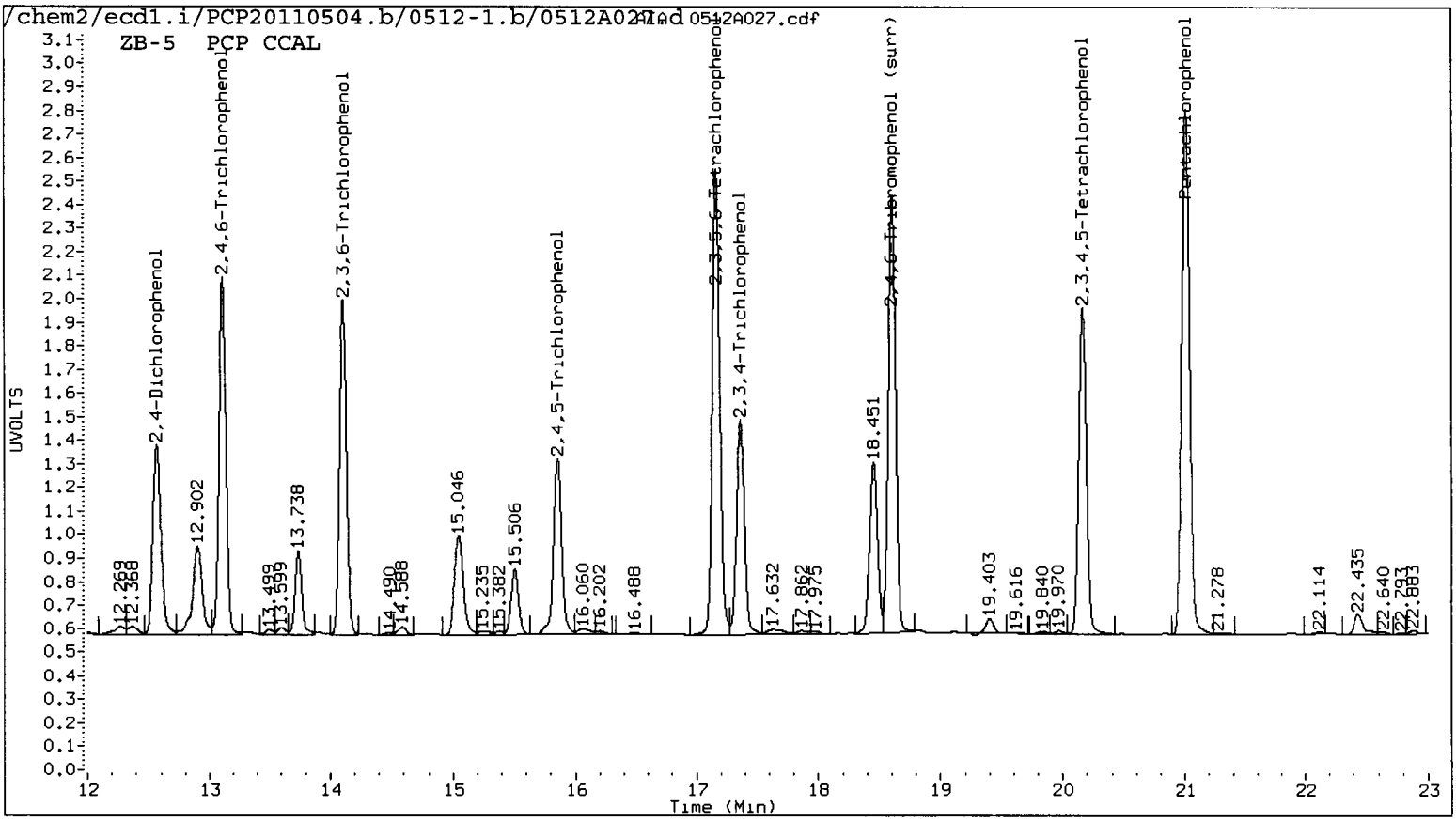
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/PCP20110504.b/0512-1.b/0512A027.d ARI ID: PCP CCAL
Data file 2: /chem2/ecd1.i/PCP20110504.b/0512-2.b/0512A027.d Client ID:
Method: /chem2/ecd1.i/PCP20110504.b/PCP.m Injection Date: 13-MAY-2011 06:09
Compound Sublist: all Report Date: 05/13/2011 09:42
Instrument: ecd1.i Matrix: WATER
Operator: ar Dilution Factor: 1.000

ZB-5 Col RT	ZB-5 Col Shift	ZB-5 Col Response	ZB35 Col RT	ZB35 Col Shift	ZB35 Col Response	ZB-5 on col	ZB35 on col	RPD	Compound
21.007	0.009	503473	22.976	0.009	710882	24.9873	25.2436	1.0	Pentachlorophenol
13.109	0.008	301904	14.320	0.009	356687	24.8016	24.6097	0.8	2,4,6-Trichlorophenol
14.105	0.008	283912	15.566	0.009	343938	24.7901	23.9288	3.5	2,3,6-Trichlorophenol
15.854	0.009	171494	17.483	0.009	196205	25.9848	24.2358	7.0	2,4,5-Trichlorophenol
17.360	0.009	204911	19.031	0.008	239212	24.5246	26.2823	6.9	2,3,4-Trichlorophenol
17.162	0.009	425845	18.822	0.008	541442	25.1879	24.6806	2.0	2,3,5,6-Tetrachlorophenol
20.164	0.009	310277	22.089	0.009	403779	23.9010	26.5816	10.6	2,3,4,5-Tetrachlorophenol
12.565	0.010	182981	13.829	0.009	180873	284.9395	259.5022	9.3	2,4-Dichlorophenol
18.605	0.009	389277	20.945	0.009	526801	24.7	25.1	1.3	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
Pentachlorophenol	99.9	101.0
2,4,6-Trichlorophenol	99.2	98.4
2,3,6-Trichlorophenol	99.2	95.7
2,4,5-Trichlorophenol	103.9	96.9
2,3,4-Trichlorophenol	98.1	105.1
2,3,5,6-Tetrachlorophenol	100.8	98.7
2,3,4,5-Tetrachlorophenol	95.6	106.3
2,4-Dichlorophenol	114.0	103.8
2,4,6-TBP (surr)	98.9	100.2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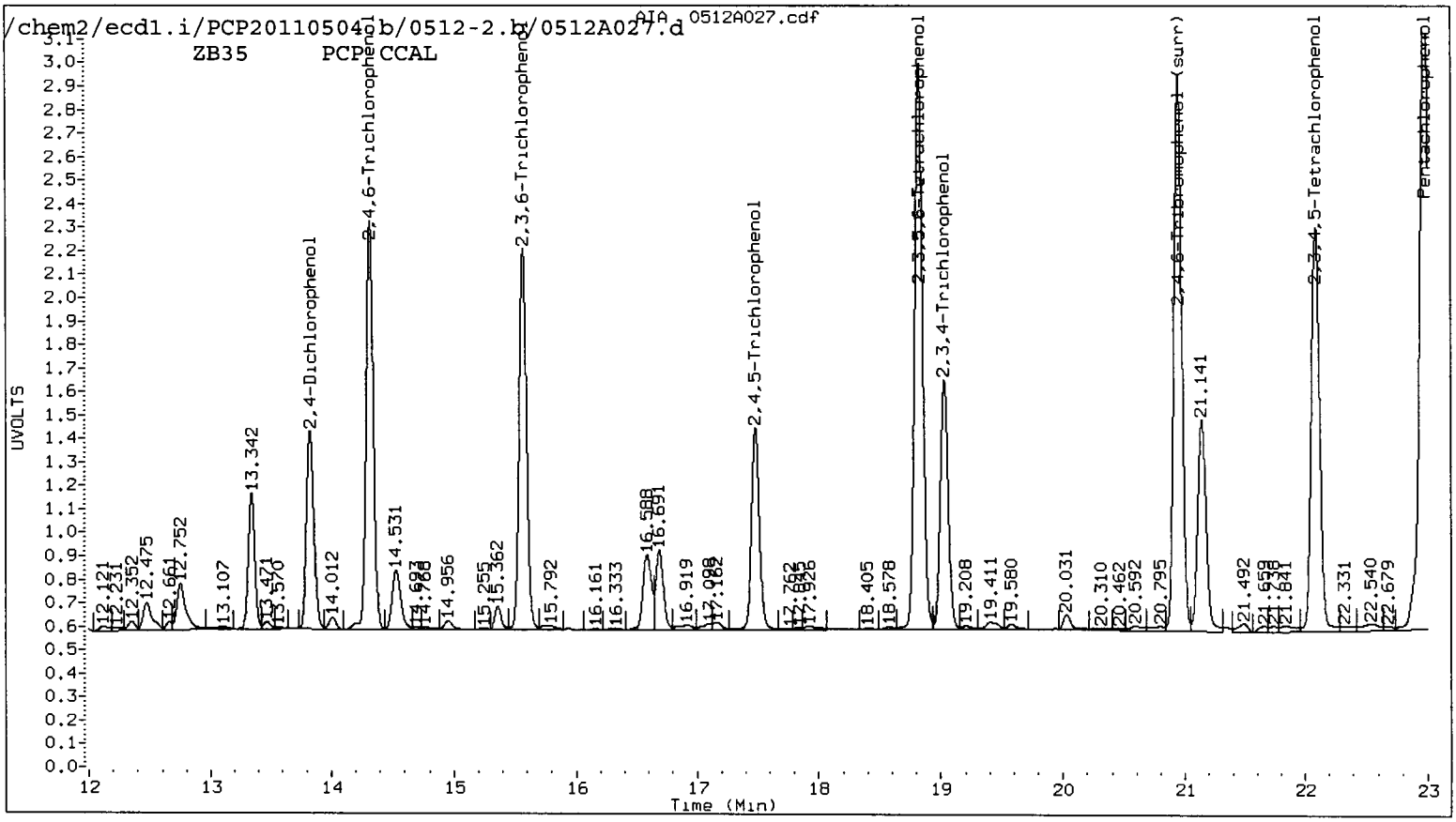
AIA 0512A027.cdf
ZB-5 PCP CCAL
UVOLTS
Time (Min)
2,4-Dichlorophenol
2,4,6-Trichlorophenol
2,3,6-Trichlorophenol
2,4,5-Trichlorophenol
2,3,5,6-Tetrachlorophenol
2,3,4-Trichlorophenol
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol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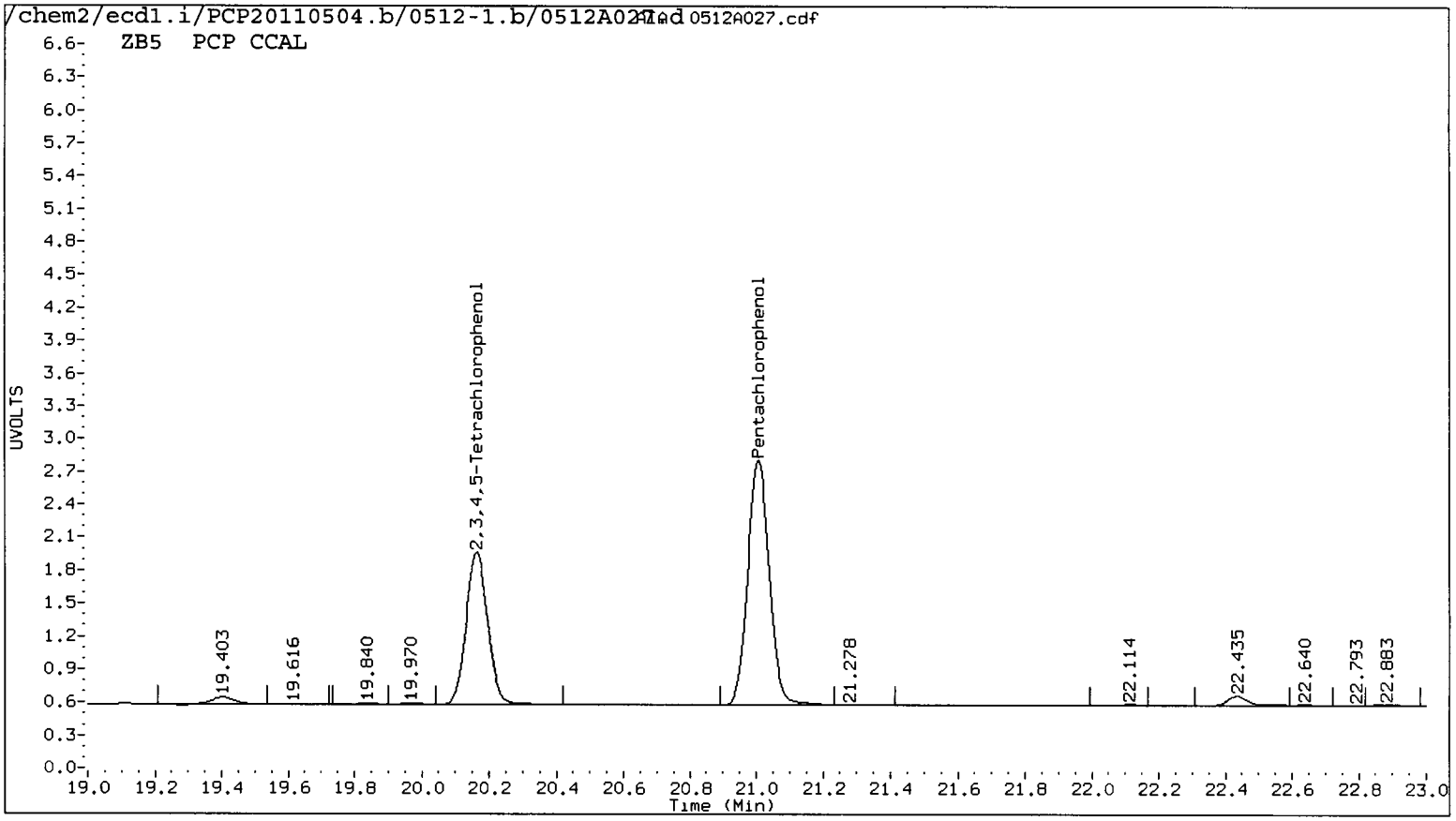
AIA 0512A027.cdf
ZB35 PCP CCAL
UVOLTS
Time (Min)
2,4-Dichlorophenol
2,4,6-Trichlorophenol
2,3,6-Trichlorophenol
2,4,5-Trichlorophenol
2,3,5,6-Tetrachlorophenol
2,3,4-Trichlorophenol
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol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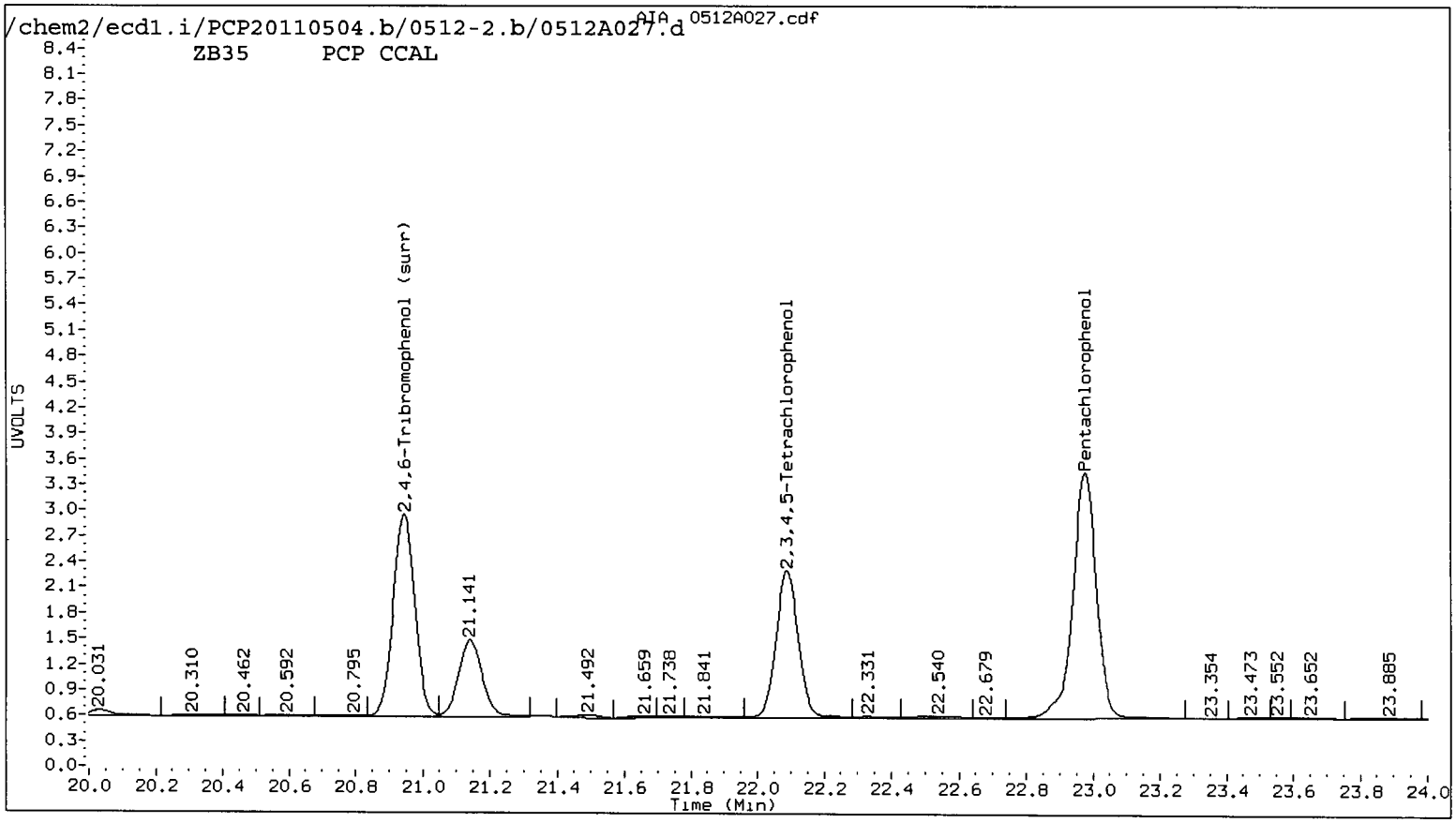
AIA 0512A027.cdf
ZB5 PCP CCAL
UVOLTS
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
19.403
19.616
19.840
19.970
21.278
22.114
22.435
22.640
22.793
22.883
Time (Min)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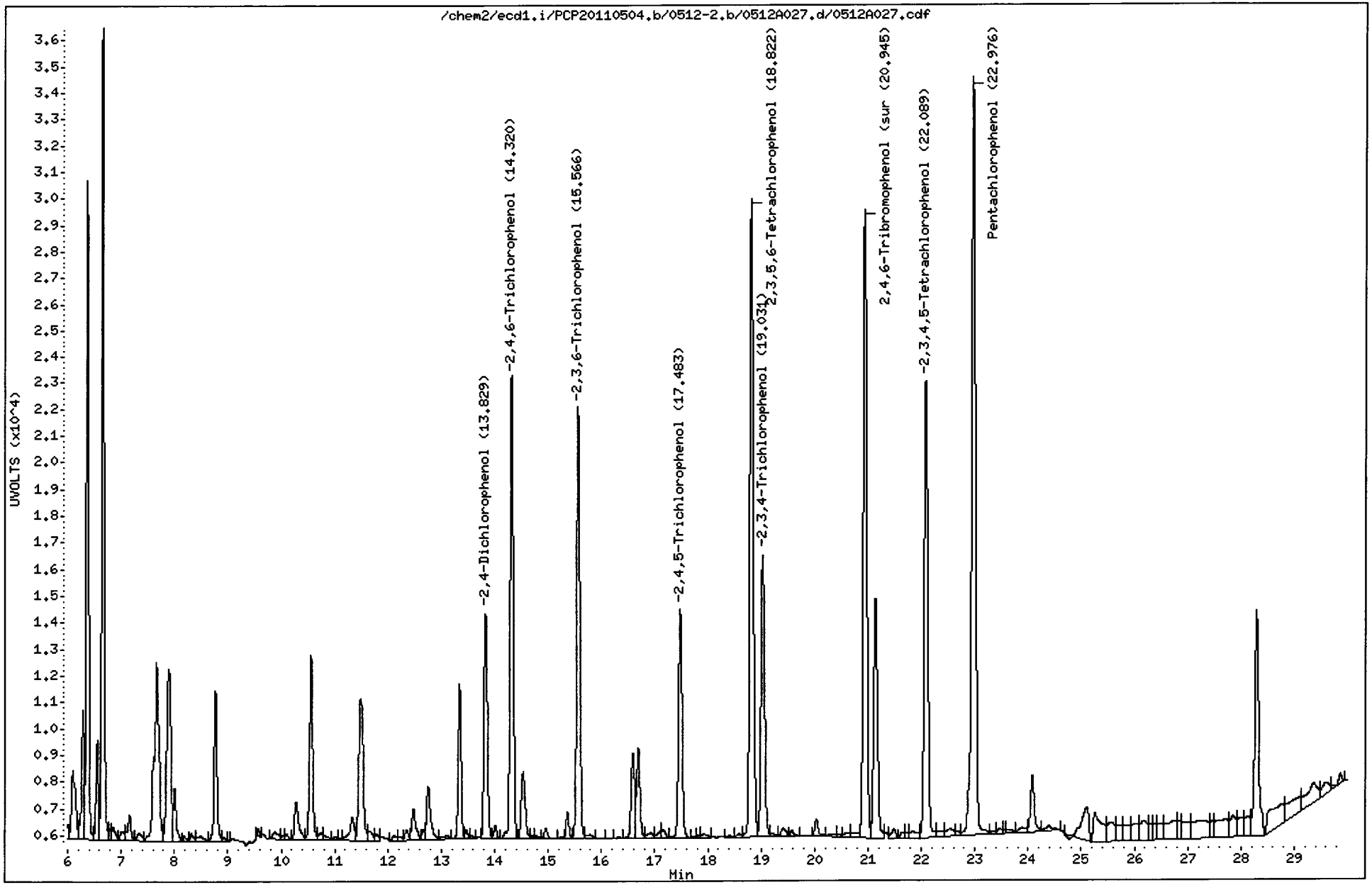
AIA 0512A027.cdf
ZB35 PCP CCAL
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
20.031
20.310
20.462
20.592
20.795
21.141
21.492
21.659
21.738
21.841
22.331
22.540
22.679
23.354
23.473
23.552
23.652
23.885
Time (Min)

Data File: /chem2/ecd1.i/PCP20110504.b/0512-2.b/0512A027.d
Date : 13-MAY-2011 06:09
Client ID:
Sample Info: PCP CCAL
Purge Volume: 500.0
Column phase: STX CLP2

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



ST98:00799

Data File: /chem2/ecd1.i/PCP20110504.b/0512-1.b/0512A027.d

Date : 13-MAY-2011 06:09

Client ID:

Instrument: ecd1.i

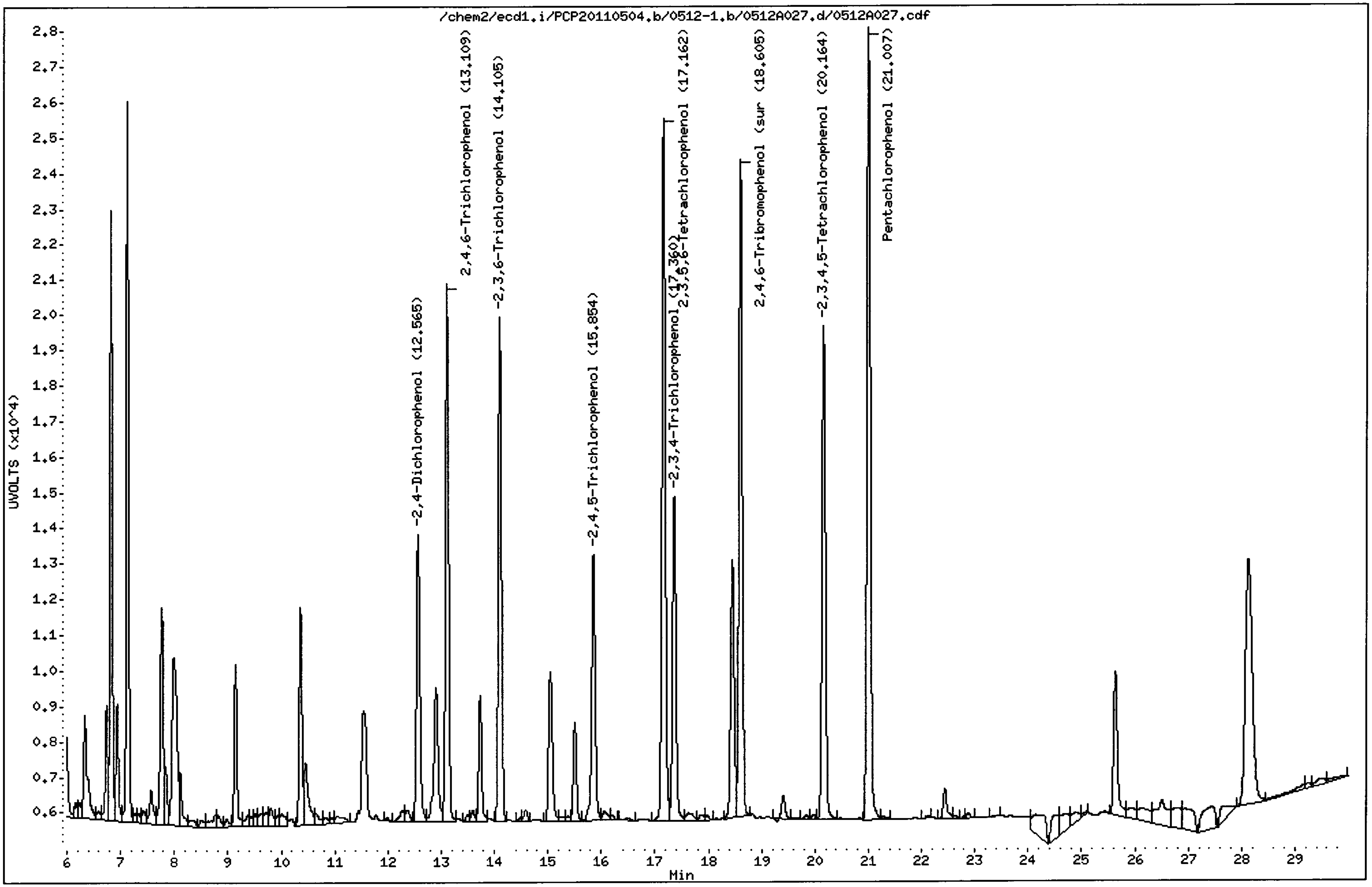
Sample Info: PCP CCAL

Purge Volume: 500.0

Operator: ar

Column phase: STX CLP1

Column diameter: 0.53



TPHD Raw Data
Extraction Bench Sheets and Notes

ARI Job ID: ST98, SU21

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) ST89, ST98, SU21, SU14

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

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
	ST89 MBW	Date 5-2-11	500mL			1mL	1mL	1mL	
	SBW	↓	↓			↓	↓	↓	
	SBW Dup.		↓			↓	↓	↓	
	QLS	↓	↓			↓	↓	↓	
4	A	verified	500mL						
4	B								
16	ST98 A								
	B								
	C								
31,32,33	D								
	Dms								
	Dmsd								
12	SU21 A								
	B								
	C								
	D								
	E								
	F								
14,13,16	SU14 A								
	Ams								
	Amsd								
7	B								
7	C								
16	D								
7	E			TS/					
Analyst/Date:		PD 5-2-11		5-2-11	SP 5/4/11	SP 5/4/11	SP 5/4/11	SP 5/4/11	

Standard	Standard ID	Volume	Expiration Date	Analyst	Witness
Surrogate	O_2	100µL	2/04/12	ML	PD
Spike	11	100µL	11/01/11	ML	PD
QLS Spike	18_O	50µL	6/02/11	ML	PD

Extraction Time: 08:56

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
ST89 only

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

ARI Job No.: ST98/Su21 Client ID: Floyd Snider

Parameter: TPHD w/Acisi Client Project: Loon Lake 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 ST98 A-C. Su21 A-F.	PD 5-2-11
☑ Turbid/Color= ST98 D is tan and not turbid.	PD 5-2-11
☐ Particulates=	
☑ Emulsions= ST98D, used centrifuge to break up.	PD 5-2-11
☐ Other (Details)=	
☐ Other Notes/Comments=	

TPHD Raw Data
Initial Calibration

ARI Job ID: ST98, SU21

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC Analyst Notes / Corrective Action Log

ARI Project ID: Diesel #2, AK102. Client ID: ART
5 temp. CURVE

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 #2, AK102, o-Terphenyl

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

Dates: Curve: 4/7/11 Analysis Start: 4/7/11

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 / (N/A)

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: MQ **Date:** 4/25/11

Reviewer: [signature] **Date:** 4/26/11

Analytical Resources Inc.: Organics Instrument Log

FID-3B Serial No.: US00003232

Date: 4/7/11 Analysis: NWTPHD Analyst: MO

GC Program: TRB Column No: 972444 Column Type: HP-1

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

Calibration File: / Curve Date: 4/7/11

IS/SS	Ical/Ccal	LCS/ICV
/	1786-1 1701-2 1722-3 1255-2	/

	Inject Date/Time	Filename	DF	LabID
1	07-APR-2011 13:33	0407b001.d	1	RINSE
2	07-APR-2011 13:54	0407b002.d	1	RINSE
3	07-APR-2011 14:16	0407b003.d	1	RT
4	07-APR-2011 14:38	0407b004.d	1	IB
5	07-APR-2011 15:00	0407b005.d	1	DIESEL 50
6	07-APR-2011 15:22	0407b006.d	1	DIESEL 100
7	07-APR-2011 15:45	0407b007.d	1	DIESEL 250
8	07-APR-2011 16:07	0407b008.d	1	DIESEL 500
9	07-APR-2011 16:29	0407b009.d	1	DIESEL 1000
10	07-APR-2011 16:52	0407b010.d	1	DIESEL 2500
11	07-APR-2011 17:14	0407b011.d	1	DIESEL ICV
12	07-APR-2011 17:36	0407b012.d	1	MOIL 100
13	07-APR-2011 17:58	0407b013.d	1	MOIL 250
14	07-APR-2011 18:20	0407b014.d	1	MOIL 500
15	07-APR-2011 18:42	0407b015.d	1	MOIL 1000
16	07-APR-2011 19:04	0407b016.d	1	MOIL 2500
17	07-APR-2011 19:26	0407b017.d	1	MOIL 5000
18	07-APR-2011 19:48	0407b018.d	1	MOIL ICV
19	07-APR-2011 20:10	0407b019.d	1	IB
20	07-APR-2011 20:31	0407b020.d	1	DIESEL#1
21	07-APR-2011 20:53	0407b021.d	1	MOIL#1

MO

MO 4/25/11

Maintenance / Comments N/a

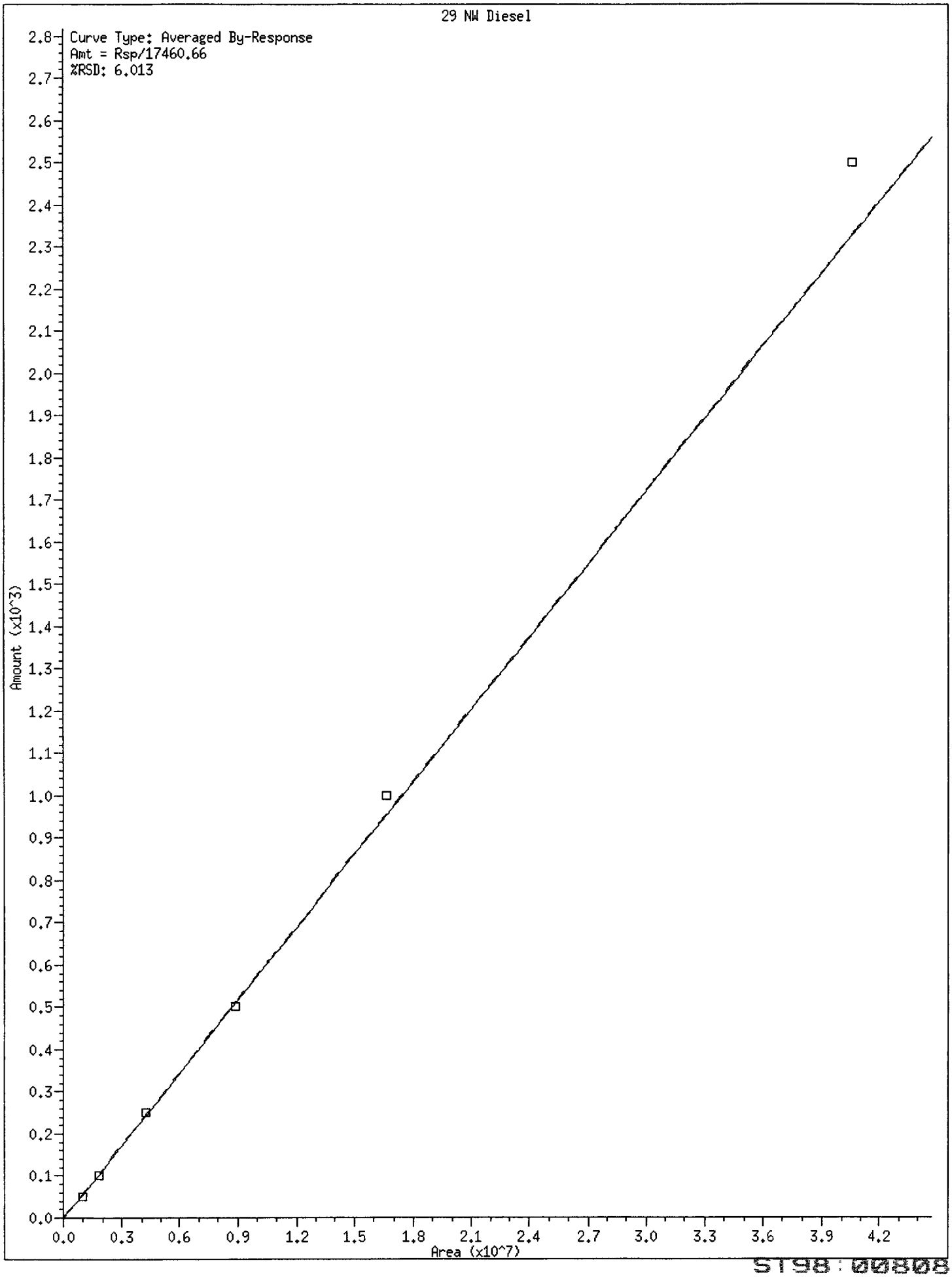
Maintenance Verification (Identify ICal or CCal that demonstrates the instrument is in control):

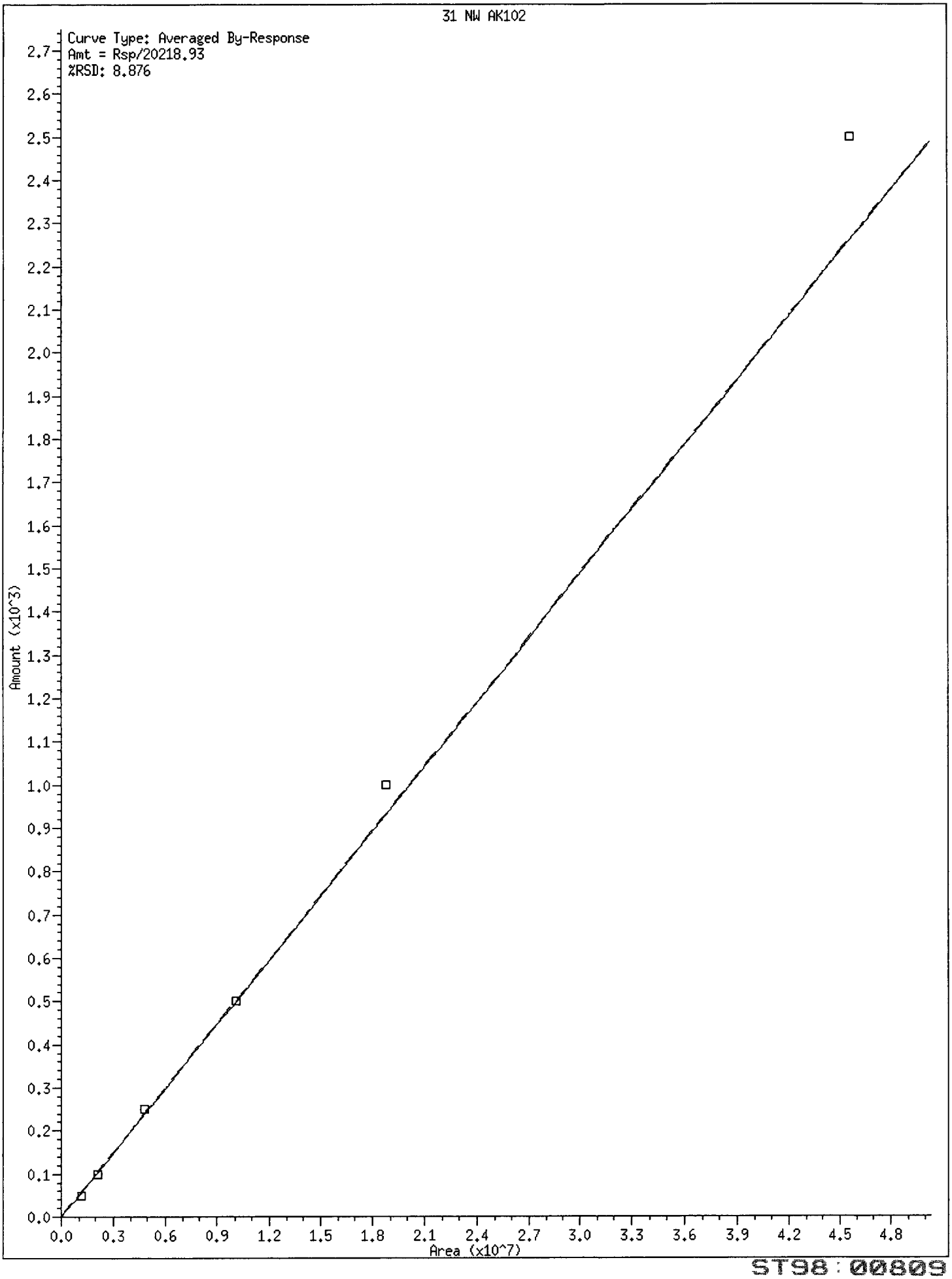
Every line must contain information or be lined out. Make all entries legible. Start a new page for each QC period.

MANUAL INTEGRATION SUMMARY FOR DATABATCH - /chem3/fid3b.i/20110407.b

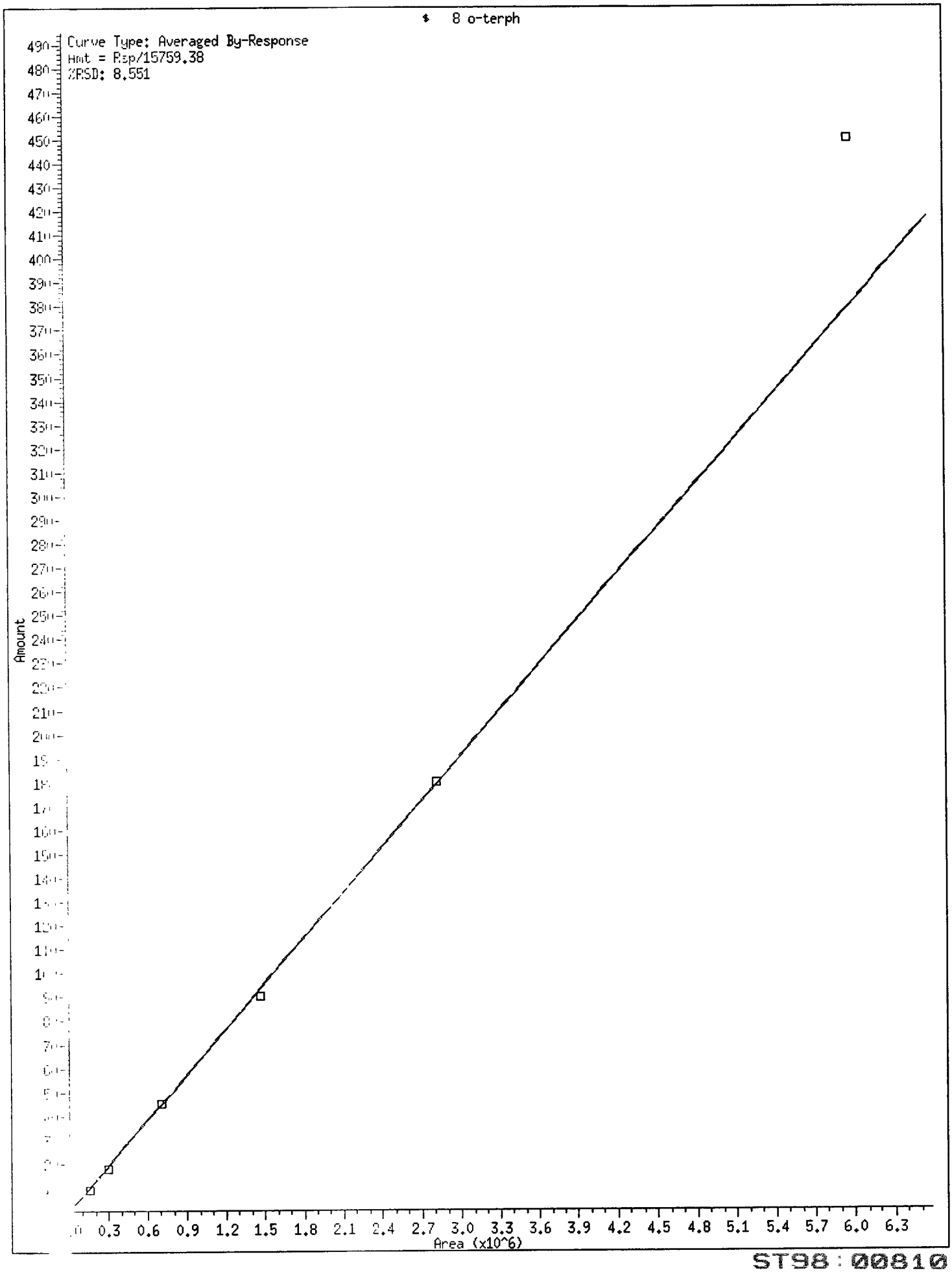
ARI Job No.: RT Method: i/20110407.b/ftphfid3b.m Instrument: fid3b.i Date: 07-APR-2011

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1416	0407b003 d	RT		1	NO MANUAL INTEGRATION
1438	0407b004.d	IB		1	NO MANUAL INTEGRATION
1500	0407b005.d	DIESEL	50	1	o-terph,
1522	0407b006.d	DIESEL	100	1	o-terph,
1545	0407b007.d	DIESEL	250	1	o-terph,
1607	0407b008 d	DIESEL	500	1	o-terph,
1629	0407b009.d	DIESEL	1000	1	o-terph,
1652	0407b010.d	DIESEL	2500	1	o-terph,
1714	0407b011.d	DIESEL	ICV	1	o-terph,


29 NW Diesel
Curve Type: Averaged By-Response
Amt = Rsp/17460.66
%RSD: 6.013
Amount (x10^3)
Area (x10^7)
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
0.1
0.2
0.4
0.5
0.7
0.8
1.0
1.1
1.3
1.4
1.6
1.7
1.9
2.0
2.2
2.3
2.5
2.6
2.8


31 NW AK102
Curve Type: Averaged By-Response
Amt = Rsp/20218.93
%RSD: 8.876
Amount (x10^3)
Area (x10^7)
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
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

ST98:00809


$ 8 o-terph
Curve Type: Averaged By-Response
Amt = Rsp/15759.38
%RSD: 8.551
Amount
Area (x10^6)
0.3 0.6 0.9 1.2 1.5 1.8 2.1 2.4 2.7 3.0 3.3 3.6 3.9 4.2 4.5 4.8 5.1 5.4 5.7 6.0 6.3

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem3/fid3b.i/20110407.b/ftphfid3b.m
Batch File: /chem3/fid3b.i/20110407.b
Inst ID: fid3b.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06
FILENAME	0407b005	0407b006	0407b007	0407b008	0407b009	0407b010
INJ.DATE:	07-APR-2011	07-APR-2011	07-APR-2011	07-APR-2011	07-APR-2011	07-APR-2011
INJ.TIME:	15:00	15:22	15:45	16:07	16:29	16:52

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	1 Toluene	0.947	0.937	0.946	0.945	0.946	0.949	0.945	0.845-1.045	0.945	0.004
	35 Mineral Oil	0.829	0.831	0.826	0.824	0.827	0.824	0.825	0.775-0.875	0.827	0.003
	2 C8	1.097	1.097	1.095	1.095	1.094	1.094	1.093	0.993-1.193	1.095	0.001
	3 C10	1.493	1.493	1.493	1.496	1.495	1.502	1.495	1 445-1.545	1.495	0.004
	4 C12	2.228	2.227	2.228	2.232	2.231	2 237	2.230	2 180-2.280	2 231	0.004
	5 C14	2.948	2.948	2.949	2.953	2.953	2.962	2.950	2.900-3.000	2 952	0.005
	6 C16	3.605	3.605	3.608	3.611	3.614	3.595	3 607	3.557-3.657	3 606	0.007
	7 C18	4.214	4.215	4.218	4.223	4.226	4.207	4.218	4.168-4.268	4.217	0.007
$	8 o-terph	4.350	4.353	4.360	4.371	4.381	4.344	4.358	4.308-4.408	4.360	0.014
	9 C20	4.802	4.803	4.803	4.807	4.807	4.819	4.806	4.756-4.856	4.807	0.006
	10 C22	5.362	5.363	5.364	5.366	5.365	5.374	5.367	5.317-5 417	5.366	0.004
	11 C24	5.889	5.891	5.890	5.892	5.889	5.895	5.894	5.844-5.944	5.891	0.002
	12 C25	6.141	6.141	6.141	6.141	6.141	6.144	6.146	6.096-6.196	6.141	0.001
	13 C26	6.382	6.384	6.383	6.383	6.382	6.384	6.387	6.337-6.437	6.383	0.001
	14 C28	6.861	6.851	6.852	6.853	6.851	6.855	6.857	6.807-6.907	6 854	0.004
$	15 Triacon Surr	7.356	7.356	7.356	7.361	7 366	7 369	7.355	7.305-7.405	7.360	0.006
	16 C32	7.841	7.843	7.843	7.844	7 843	7.846	7.847	7.797-7.897	7.843	0.002

Reviewer 1 _____ Date: 4/20/11
Reviewer 2 _____ Date: 4/26/11

STR 0908.1

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem3/fid3b.i/20110407.b/ftphfid3b.m
Batch File: /chem3/fid3b.i/20110407.b
Inst ID: fid3b.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
17 C34	8.360	8.358	8.354	8.353	8.357	8.360	8.353	8.303-8.403	8.357	0.003
18 Filter Peak	11.355	11.346	11.345	11.349	11 341	11.347	11.348	11.248-11.448	11.347	0.005
19 C36	8.845	8.848	8.851	8.852	8.843	8.855	8.853	8.803-8.903	8.849	0.005
20 C38	9.341	9.332	9.338	9 341	9.337	9.340	9.339	9.289-9.389	9.338	0.003
21 C40	9.819	9.801	9.799	9.798	9.824	9.826	9.810	9.760-9.860	9.811	0.013
29 NW Diesel	0.928	0.918	0.925	0.926	0.934	0.924	0.923	0.873-0.973	0.926	0.005
34 Jet A	0.994	0.995	0.991	0.995	0.993	0.988	0 994	0.944-1.044	0.993	0.003
30 NW Moil	0.847	0.848	0.844	0.833	0.852	0.842	0.842	0.792-0.892	0.844	0.007
31 NW AK102	0.911	0.911	0.914	0.912	0.912	0.905	0.911	0.861-0.961	0.911	0.003
32 Bunker C	0.986	0.986	0.984	0.976	0.974	0.968	0.981	0.931-1.031	0.979	0.007
33 AK103	1.165	1.172	1.170	1.163	1.161	1.157	1.170	1.120-1.220	1.165	0.006

Analytical Resources Inc.
407S TPH Quantitation Report

Data file: /chem3/fid3b.i/20110407.b/0407b003.d
Method: /chem3/fid3b.i/20110407.b/ftphfid3b.m
Instrument: fid3b.i
Operator: MS
Report Date: 04/25/2011
Macro: FID:3B040711

ARI ID: RT
Client ID:
Injection: 07-APR-2011 14:16
Dilution Factor: 1

FID:3B RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	0.945	0.000	976865	264529	GAS (Tol-C12)	1141785	71.47
C8	1.093	0.000	305223	91381	DIESEL (C12-C24)	1353151	77.50
C10	1.495	0.000	606677	246250	M.OIL (C24-C38)	1394556	150.18
C12	2.230	0.000	395396	239913	AK-102 (C10-C25)	1917088	94.82
C14	2.950	0.000	336619	233085	AK-103 (C25-C36)	1217103	139.46
C16	3.607	0.000	322356	226073	OR.DIES (C10-C28)	2557644	100.69
C18	4.218	0.000	279366	219765	OR.MOIL (C28-C40)	929548	82.45
C20	4.806	0.000	276459	208232	MIN.OIL (C24-C38)	1394556	216.60
C22	5.367	0.000	261352	198804	STODDARD (C8-C12)	805605	29.12
C24	5.894	0.000	237918	194101			
C25	6.146	0.000	319067	261892			
C26	6.387	0.000	240451	188695			
C28	6.857	0.000	218406	182975			
C32	7.847	0.000	181679	179126			
C34	8.353	0.000	168860	176578	CREOSOT (C8-C22)	1153326	180.32
Filter Peak	11.348	0.000	4118	10438			
C36	8.853	0.000	163941	179404	BUNKERC (C10-C38)	3307558	388.11
o-terph	4.358	0.000	793359	714195	JET-A (C10-C18)	1281410	248.44
Triacon Surr	7.355	0.000	517951	549447	IT.MOIL (C24-C40)	2123637	98.83

Range Times: NW Diesel(2.280 - 5.944) NW Gas(0.895 - 2.280) NW M.Oil(5.944 - 9.389)
AK102(1.445 - 6.096) AK103(6.096 - 8.903) Jet A(1.445 - 4.268)

Surrogate	Area	Amount	%Rec
o-Terphenyl	714195	45.3	100.7
Triacontane	549447	42.8	95.1

ms 4/20/11

Analyte	RF	Curve Date
o-Terph Surr	15759.4	07-APR-2011
Triacon Surr	12836.6	07-APR-2011
Gas	15975.0	20-OCT-2010
Diesel	17461.0	07-APR-2011
Motor Oil	9285.7	07-APR-2011
AK102	20219.0	07-APR-2011
AK103	8727.5	29-SEPT-2010
JetA	5157.9	13-JAN-2011
Min Oil	6438.5	20-JAN-2011
OR Diesel	25401.0	
OR M.Oil	11274.0	
IT M.Oil	21488.2	
Bunker C	8522.1	20-SEP-2010
Creosote	6396.0	17-JAN-2009

Data File: /chem3/fid3b.i/20110407.b/0407b003.d

Date : 07-APR-2011 14:16

Client ID:

Sample Info: RT

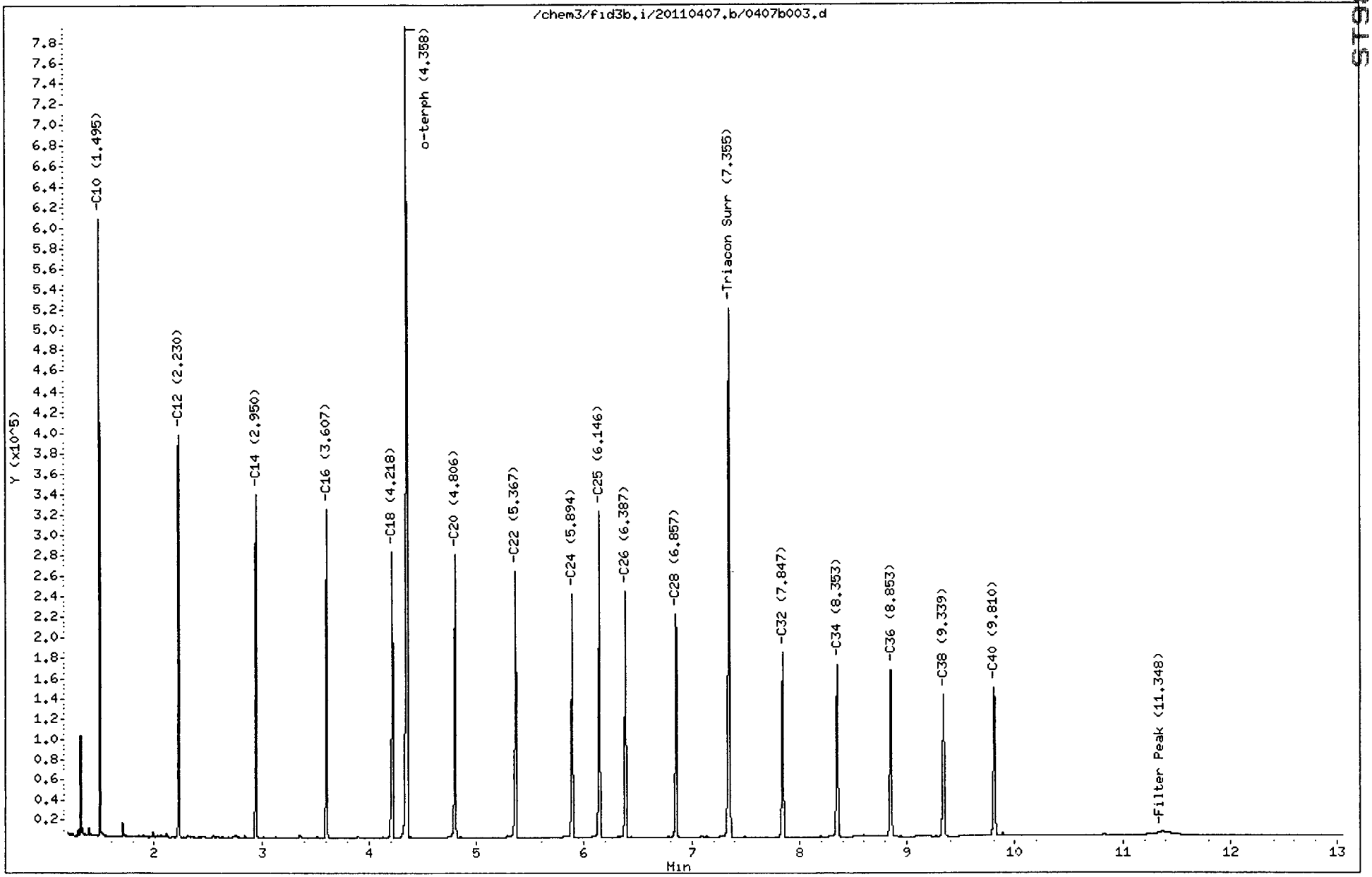
Column phase: RTX-1

Instrument: fid3b.i

Operator: MS

Column diameter: 0.25

ST98 : 00814



Analytical Resources Inc.
407S TPH Quantitation Report

Data file: /chem3/fid3b.i/20110407.b/0407b004.d
Method: /chem3/fid3b.i/20110407.b/ftphfid3b.m
Instrument: fid3b.i
Operator: MS
Report Date: 04/25/2011
Macro: FID:3B040711

ARI ID: IB
Client ID:
Injection: 07-APR-2011 14:38
Dilution Factor: 1

FID:3B RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	0.945	0.000	21057	10979	GAS (Tol-C12)	358391	22.43
C8	1.096	0.002	94558	35535	DIESEL (C12-C24)	47281	2.71
C10	1.492	-0.002	3930	4676	M.OIL (C24-C38)	47511	5.12
C12	2.227	-0.003	978	1017	AK-102 (C10-C25)	129106	6.39
C14	2.944	-0.006	591	421	AK-103 (C25-C36)	33061	3.79
C16	3.602	-0.006	450	569	OR.DIES (C10-C28)	133441	5.25
C18	4.215	-0.003	259	249	OR.MOIL (C28-C40)	67712	6.01
C20	4.801	-0.005	233	175	MIN.OIL (C24-C38)	47511	7.38
C22	5.363	-0.004	211	154	STODDARD (C8-C12)	242475	8.76
C24	5.889	-0.005	206	162			
C25	6.139	-0.007	265	282			
C26	6.381	-0.006	224	191			
C28	6.852	-0.005	506	452			
C32	7.841	-0.006	1921	2566			
C34	8.344	-0.009	486	843	CREOSOT (C8-C22)	45821	7.16
Filter Peak	11.349	0.002	1410	477			
C36	8.845	-0.008	612	788	BUNKERC (C10-C38)	176018	20.65
o-terph	4.358	0.000	906663	840113	JET-A (C10-C18)	121769	23.61
Triacon Surr	7.355	0.000	519268	557765	IT.MOIL (C24-C40)	630411	29.34

Range Times: NW Diesel(2.280 - 5.944) NW Gas(0.895 - 2.280) NW M.Oil(5.944 - 9.389)
AK102(1.445 - 6.096) AK103(6.096 - 8.903) Jet A(1.445 - 4.268)

Surrogate	Area	Amount	%Rec
o-Terphenyl	840113	53.3	118.5
Triacontane	557765	43.5	96.6

Analyte	RF	Curve Date
o-Terph Surr	15759.4	07-APR-2011
Triacon Surr	12836.6	07-APR-2011
Gas	15975.0	20-OCT-2010
Diesel	17461.0	07-APR-2011
Motor Oil	9285.7	07-APR-2011
AK102	20219.0	07-APR-2011
AK103	8727.5	29-SEPT-2010
JetA	5157.9	13-JAN-2011
Min Oil	6438.5	20-JAN-2011
OR Diesel	25401.0	
OR M.Oil	11274.0	
IT M.Oil	21488.2	
Bunker C	8522.1	20-SEP-2010
Creosote	6396.0	17-JAN-2009

4/25/11

Data File: /chem3/fid3b.i/20110407.b/0407b004.d

Date : 07-APR-2011 14:38

Client ID:

Sample Info: IB

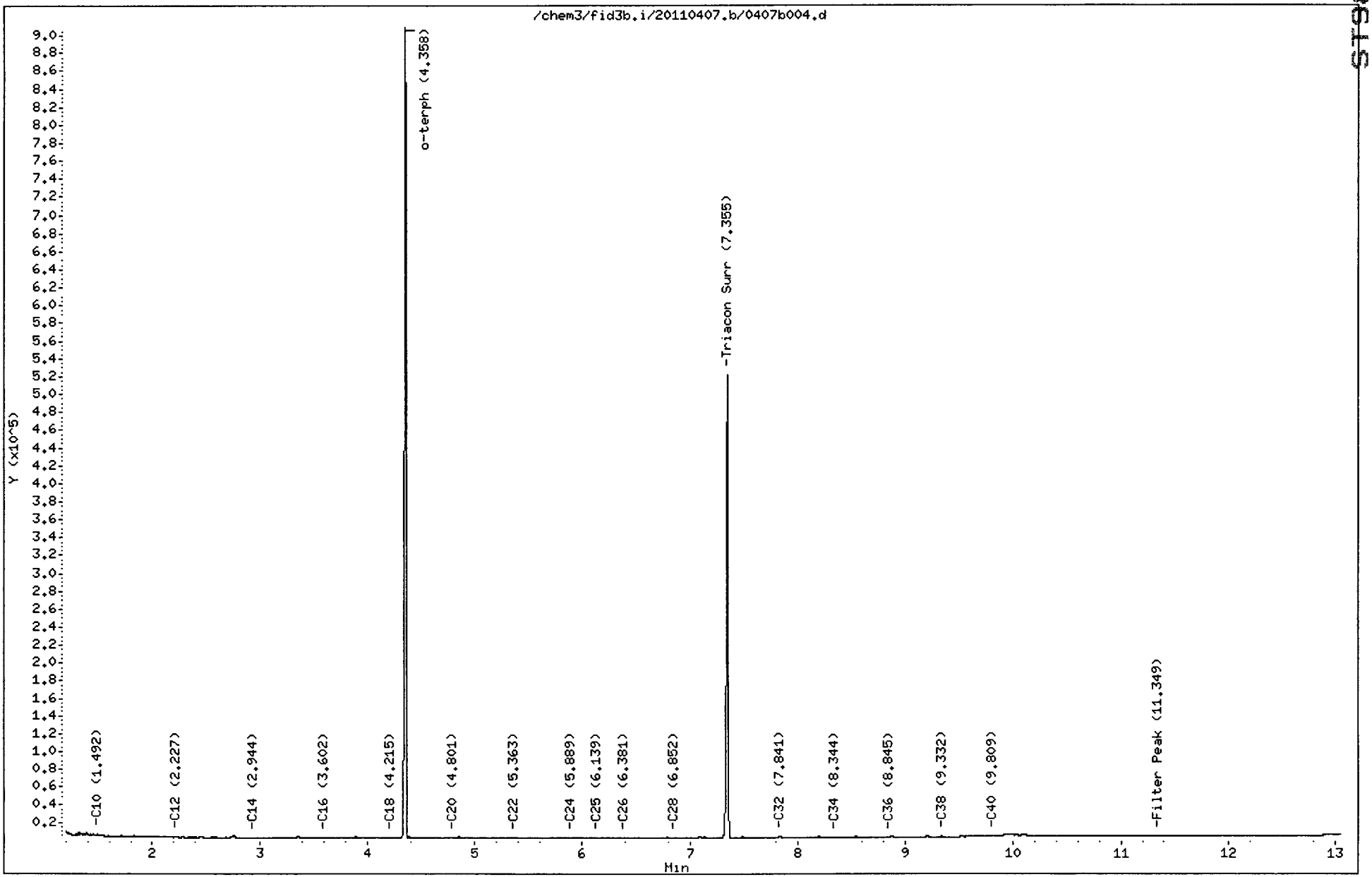
Column phase: RTX-1

Instrument: fid3b.i

Operator: MS

Column diameter: 0.25

ST98:00816



Analytical Resources Inc.
407S TPH Quantitation Report

Data file: /chem3/fid3b.i/20110407.b/0407b005.d
Method: /chem3/fid3b.i/20110407.b/ftphfid3b.m
Instrument: fid3b.i
Operator: MS
Report Date: 04/25/2011
Macro: FID:3B040711

ARI ID: DIESEL 50
Client ID:
Injection: 07-APR-2011 15:00
Dilution Factor: 1

FID:3B RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc	
Toluene	0.947	0.001	20793	9212	GAS (Tol-C12)	514884	32.23	
C8	1.097	0.003	45508	19963	DIESEL (C12-C24)	951947	54.52	
C10	1.493	-0.002	10256	7854	M.OIL (C24-C38)	35325	3.80	
C12	2.228	-0.002	11454	10982	AK-102 (C10-C25)	1157094	57.23	M
C14	2.948	-0.001	18436	17702	AK-103 (C25-C36)	21410	2.45	
C16	3.605	-0.003	31626	26214	OR.DIES (C10-C28)	1161607	45.73	M
C18	4.214	-0.004	27687	25872	OR.MOIL (C28-C40)	44538	3.95	
C20	4.802	-0.004	15470	17200	MIN.OIL (C24-C38)	35325	5.49	
C22	5.362	-0.005	6891	7042	STODDARD (C8-C12)	387707	14.01	
C24	5.889	-0.005	2089	2301				
C25	6.141	-0.005	860	1054				
C26	6.382	-0.005	345	351				
C28	6.861	0.004	30	8				
C32	7.841	-0.005	637	921				
C34	8.360	0.007	197	34	CREOSOT (C8-C22)	924448	144.54	
Filter Peak	11.355	0.008	1289	918				
C36	8.845	-0.008	313	103	BUNKERC (C10-C38)	1189324	139.56	
o-terph	4.350	-0.008	228727	154125	JET-A (C10-C18)	901534	174.79	
Triacon Surr	7.356	0.001	69	14	IT.MOIL (C24-C40)	52159	2.43	

Range Times: NW Diesel(2.280 - 5.944) NW Gas(0.895 - 2.280) NW M.Oil(5.944 - 9.389)
AK102(1.445 - 6.096) AK103(6.096 - 8.903) Jet A(1.445 - 4.268)

Surrogate	Area	Amount	%Rec
o-Terphenyl	154125	9.8	21.7
Triacontane	14	0.0	0.0

Analyte	RF	Curve Date
o-Terph Surr	15759.4	07-APR-2011
Triacon Surr	12836.6	07-APR-2011
Gas	15975.0	20-OCT-2010
Diesel	17461.0	07-APR-2011
Motor Oil	9285.7	07-APR-2011
AK102	20219.0	07-APR-2011
AK103	8727.5	29-SEPT-2010
JetA	5157.9	13-JAN-2011
Min Oil	6438.5	20-JAN-2011
OR Diesel	25401.0	
OR M.Oil	11274.0	
IT M.Oil	21488.2	
Bunker C	8522.1	20-SEP-2010
Creosote	6396.0	17-JAN-2009

Data File: /chem3/fid3b.i/20110407.b/0407b005.d

Date : 07-APR-2011 15:00

Client ID:

Sample Info: DIESEL 50

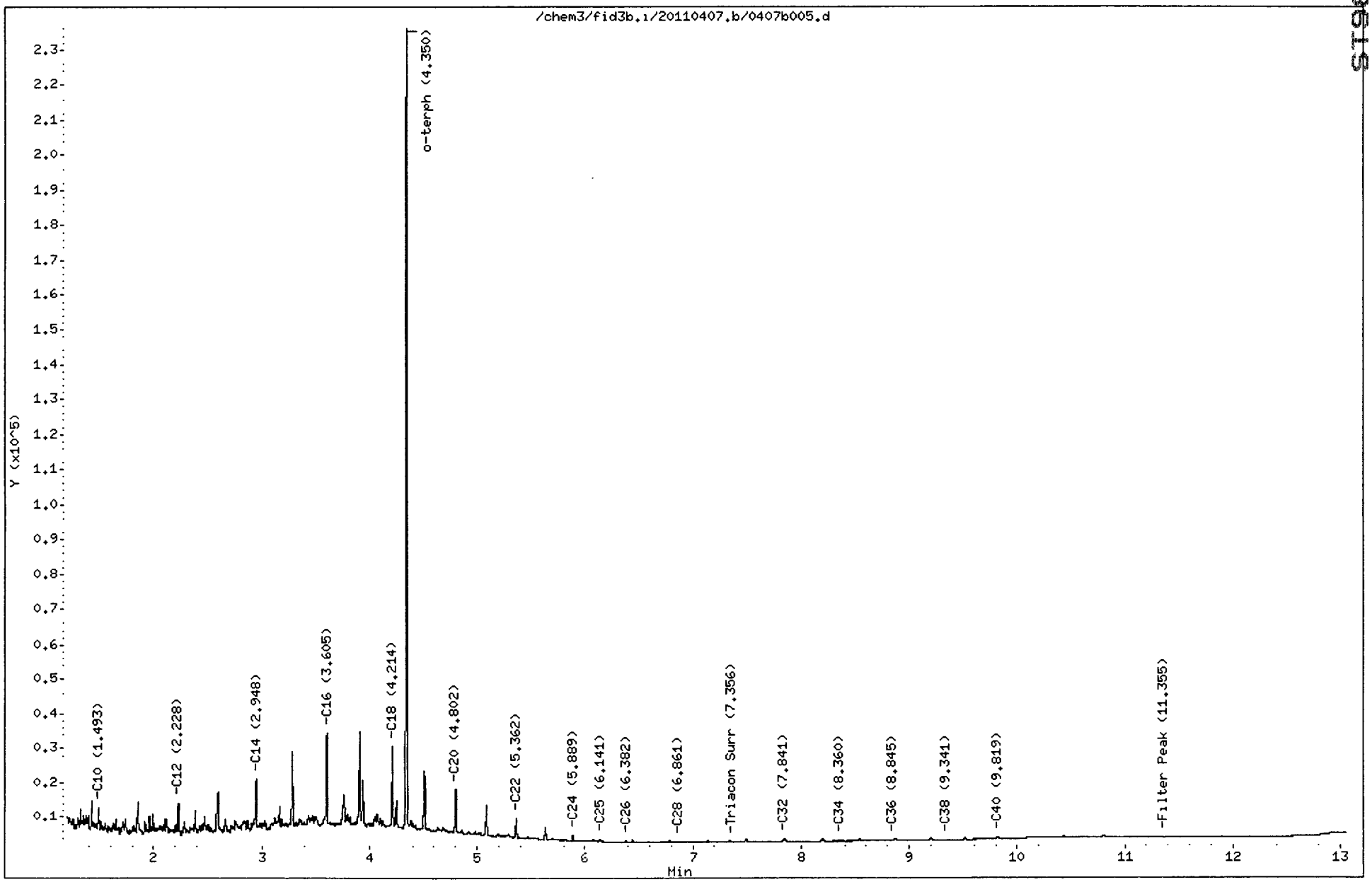
Column phase: RTX-1

Instrument: fid3b.i

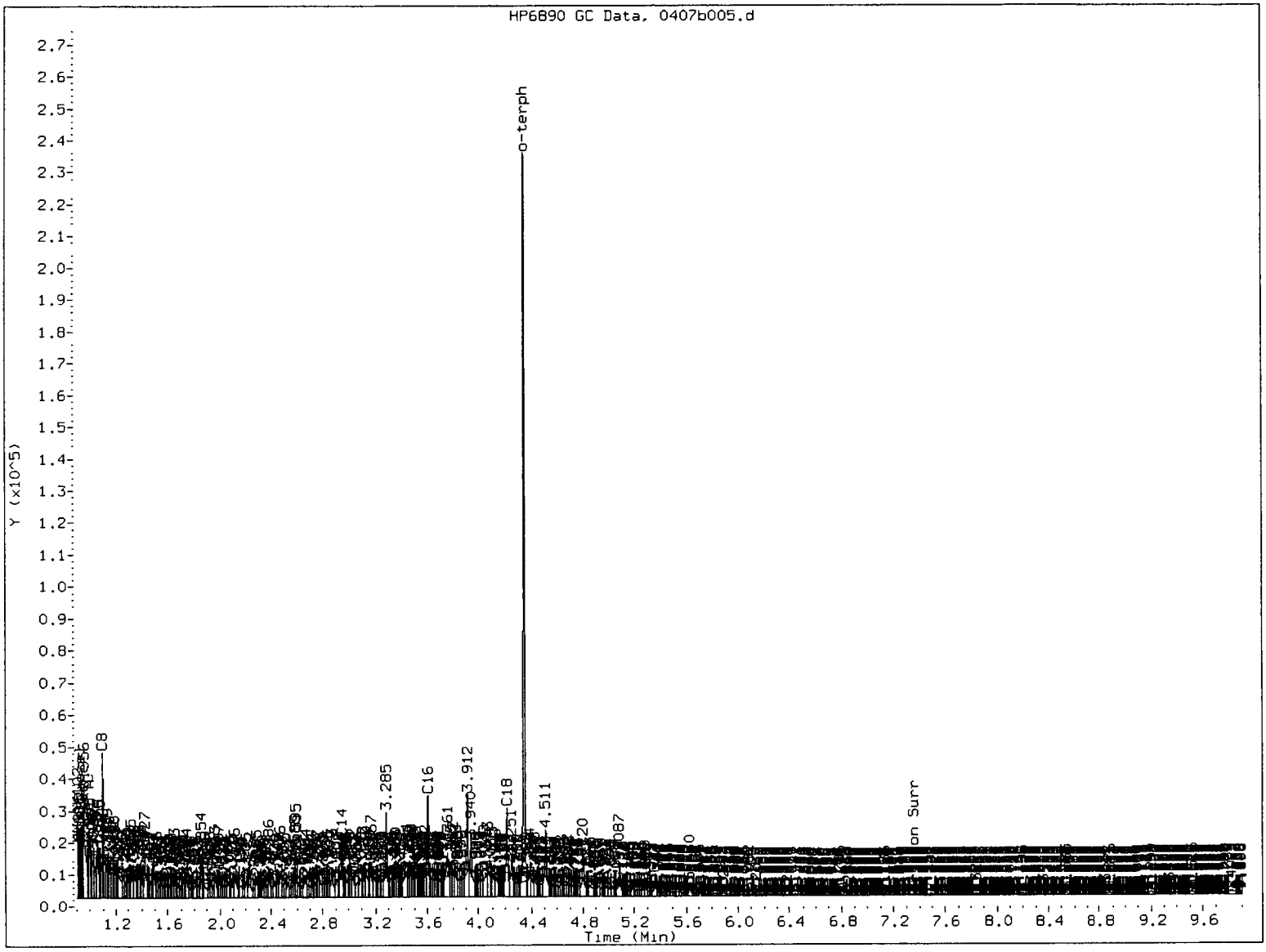
Operator: MS

Column diameter: 0.25

ST98 : 00818



FID:3B-2C/RTX-1 DIESEL 50 FID:3B SIGNAL



MANUAL INTEGRATION

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

5. Other _____

Analyst: _____ Date: 4/20/11

Analytical Resources Inc.
407S TPH Quantitation Report

Data file: /chem3/fid3b.i/20110407.b/0407b006.d
Method: /chem3/fid3b.i/20110407.b/ftphfid3b.m
Instrument: fid3b.i
Operator: MS
Report Date: 04/25/2011
Macro: FID:3B040711

ARI ID: DIESEL 100
Client ID:
Injection: 07-APR-2011 15:22
Dilution Factor: 1

FID:3B RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc	
Toluene	0.937	-0.008	23348	9889	GAS (Tol-C12)	694489	43.47	
C8	1.097	0.004	33616	15321	DIESEL (C12-C24)	1812969	103.83	
C10	1.493	-0.002	17396	11530	M.OIL (C24-C38)	37855	4.08	
C12	2.227	-0.003	22267	20070	AK-102 (C10-C25)	2137188	105.70	M
C14	2.948	-0.002	35494	32834	AK-103 (C25-C36)	22790	2.61	
C16	3.605	-0.002	63956	49820	OR.DIES (C10-C28)	2145798	84.48	M
C18	4.215	-0.003	52700	47440	OR.MOIL (C28-C40)	36496	3.24	
C20	4.803	-0.003	30626	29802	MIN.OIL (C24-C38)	37855	5.88	
C22	5.363	-0.004	13995	13635	STODDARD (C8-C12)	552986	19.99	
C24	5.891	-0.003	4118	4311				
C25	6.141	-0.005	1699	1983				
C26	6.384	-0.003	671	829				
C28	6.851	-0.006	66	51				
C32	7.843	-0.004	674	940				
C34	8.358	0.005	154	105	CREOSOT (C8-C22)	1757600	274.80	
Filter Peak	11.346	-0.002	1184	353				
C36	8.848	-0.005	264	192	BUNKERC (C10-C38)	2169020	254.52	
o-terph	4.353	-0.005	401061	297588	JET-A (C10-C18)	1640440	318.05	
Triacon Surr	7.356	0.001	75	27	IT.MOIL (C24-C40)	51156	2.38	

Range Times: NW Diesel(2.280 - 5.944) NW Gas(0.895 - 2.280) NW M.Oil(5.944 - 9.389)
AK102(1.445 - 6.096) AK103(6.096 - 8.903) Jet A(1.445 - 4.268)

Surrogate	Area	Amount	%Rec
o-Terphenyl	297588	18.9	42.0
Triacontane	27	0.0	0.0

Analyte	RF	Curve Date
o-Terph Surr	15759.4	07-APR-2011
Triacon Surr	12836.6	07-APR-2011
Gas	15975.0	20-OCT-2010
Diesel	17461.0	07-APR-2011
Motor Oil	9285.7	07-APR-2011
AK102	20219.0	07-APR-2011
AK103	8727.5	29-SEPT-2010
JetA	5157.9	13-JAN-2011
Min Oil	6438.5	20-JAN-2011
OR Diesel	25401.0	
OR M.Oil	11274.0	
IT M.Oil	21488.2	
Bunker C	8522.1	20-SEP-2010
Creosote	6396.0	17-JAN-2009

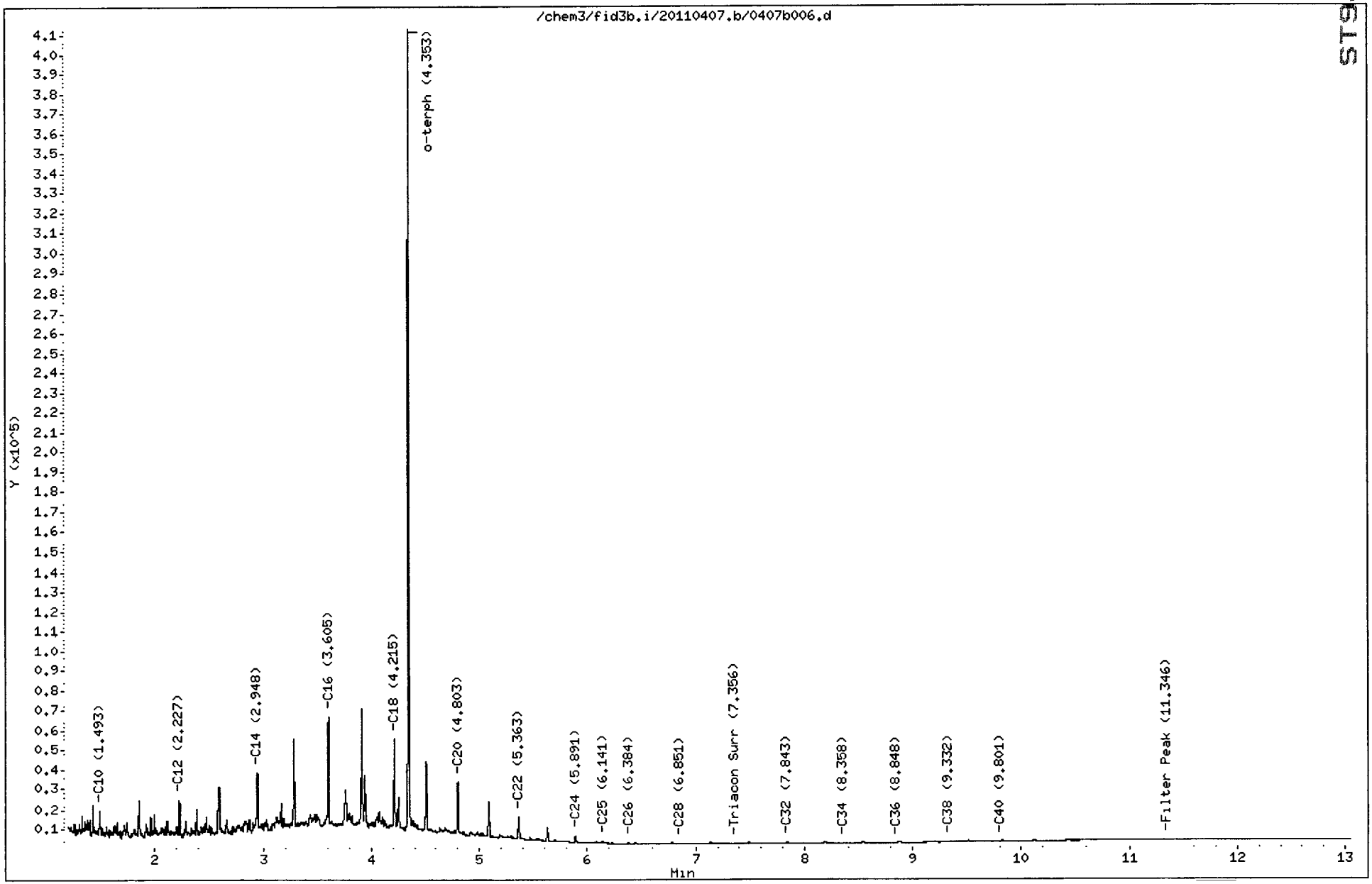
Data File: /chem3/fid3b.i/20110407.b/0407b006.d
Date : 07-APR-2011 15:22
Client ID:
Sample Info: DIESEL 100

Column phase: RTX-1

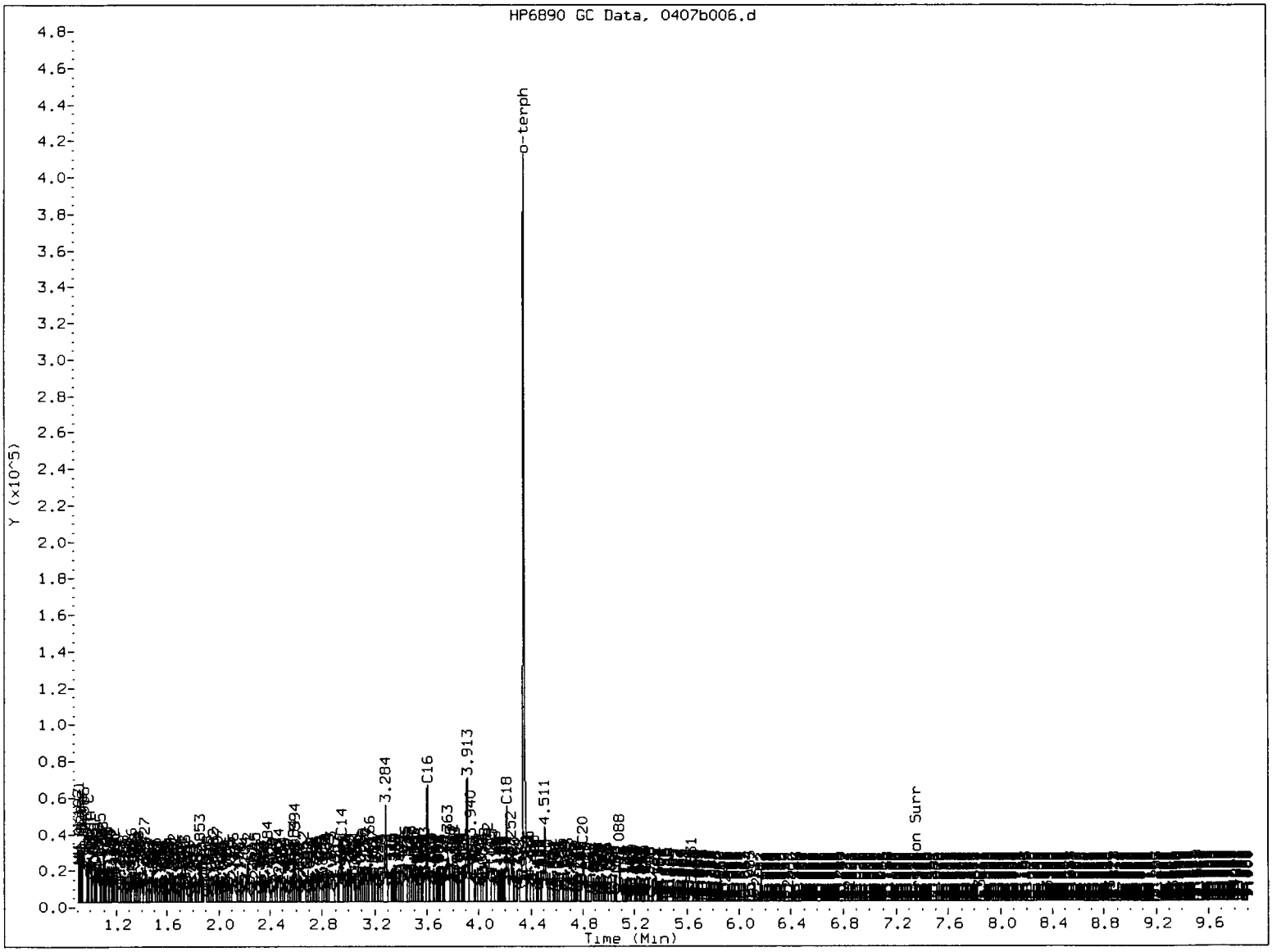
Instrument: fid3b.i

Operator: MS
Column diameter: 0.25

ST98 : 00821



FID:3B-2C/RTX-1 DIESEL 100 FID:3B SIGNAL



MANUAL INTEGRATION

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

5. Other _____

Analyst: _____ Date: 4/20/11

Analytical Resources Inc.
407S TPH Quantitation Report

Data file: /chem3/fid3b.i/20110407.b/0407b007.d
Method: /chem3/fid3b.i/20110407.b/ftphfid3b.m
Instrument: fid3b.i
Operator: MS
Report Date: 04/25/2011
Macro: FID:3B040711

ARI ID: DIESEL 250
Client ID:
Injection: 07-APR-2011 15:45
Dilution Factor: 1

FID:3B RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc	
Toluene	0.946	0.001	28516	8724	GAS (Tol-C12)	1099378	68.82	
C8	1.095	0.001	25215	11552	DIESEL (C12-C24)	4230805	242.30	
C10	1.493	-0.002	36559	19868	M.OIL (C24-C38)	52067	5.61	
C12	2.228	-0.002	51975	44014	AK-102 (C10-C25)	4861814	240.46	M
C14	2.949	0.000	86644	78603	AK-103 (C25-C36)	30635	3.51	
C16	3.608	0.000	150400	117571	OR.DIES (C10-C28)	4883355	192.25	M
C18	4.218	0.000	113772	117793	OR.MOIL (C28-C40)	33095	2.94	
C20	4.803	-0.003	73579	69215	MIN.OIL (C24-C38)	52067	8.09	
C22	5.364	-0.003	34085	31020	STODDARD (C8-C12)	933218	33.73	
C24	5.890	-0.004	9973	10297				
C25	6.141	-0.005	4380	5069				
C26	6.383	-0.004	1638	1694				
C28	6.852	-0.005	191	156				
C32	7.843	-0.004	494	453				
C34	8.354	0.001	113	54	CREOSOT (C8-C22)	4097939	640.71	
Filter Peak	11.345	-0.002	1128	917				
C36	8.851	-0.002	196	87	BUNKERC (C10-C38)	4899700	574.94	
o-terph	4.360	0.002	844565	702341	JET-A (C10-C18)	3711709	719.62	
Triacon Surr	7.356	0.001	28	5	IT.MOIL (C24-C40)	68822	3.20	

Range Times: NW Diesel(2.280 - 5.944) NW Gas(0.895 - 2.280) NW M.Oil(5.944 - 9.389)
AK102(1.445 - 6.096) AK103(6.096 - 8.903) Jet A(1.445 - 4.268)

Surrogate	Area	Amount	%Rec
o-Terphenyl	702341	44.6	99.0
Triacontane	5	0.0	0.0

Analyte	RF	Curve Date
o-Terph Surr	15759.4	07-APR-2011
Triacon Surr	12836.6	07-APR-2011
Gas	15975.0	20-OCT-2010
Diesel	17461.0	07-APR-2011
Motor Oil	9285.7	07-APR-2011
AK102	20219.0	07-APR-2011
AK103	8727.5	29-SEPT-2010
JetA	5157.9	13-JAN-2011
Min Oil	6438.5	20-JAN-2011
OR Diesel	25401.0	
OR M.Oil	11274.0	
IT M.Oil	21488.2	
Bunker C	8522.1	20-SEP-2010
Creosote	6396.0	17-JAN-2009

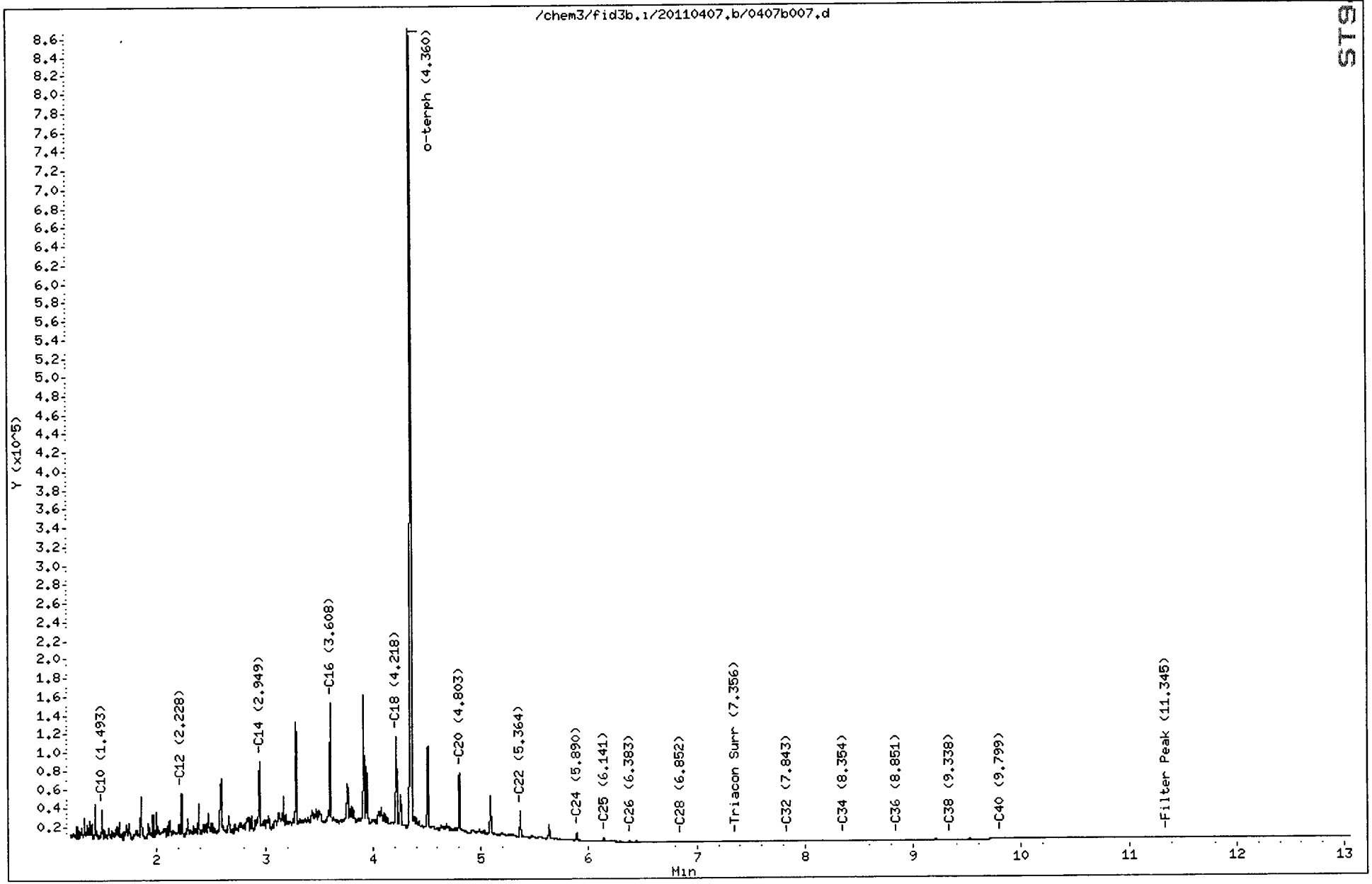
Data File: /chem3/fid3b.i/20110407.b/0407b007.d
Date : 07-APR-2011 15:45
Client ID:
Sample Info: DIESEL 250

Instrument: fid3b.i

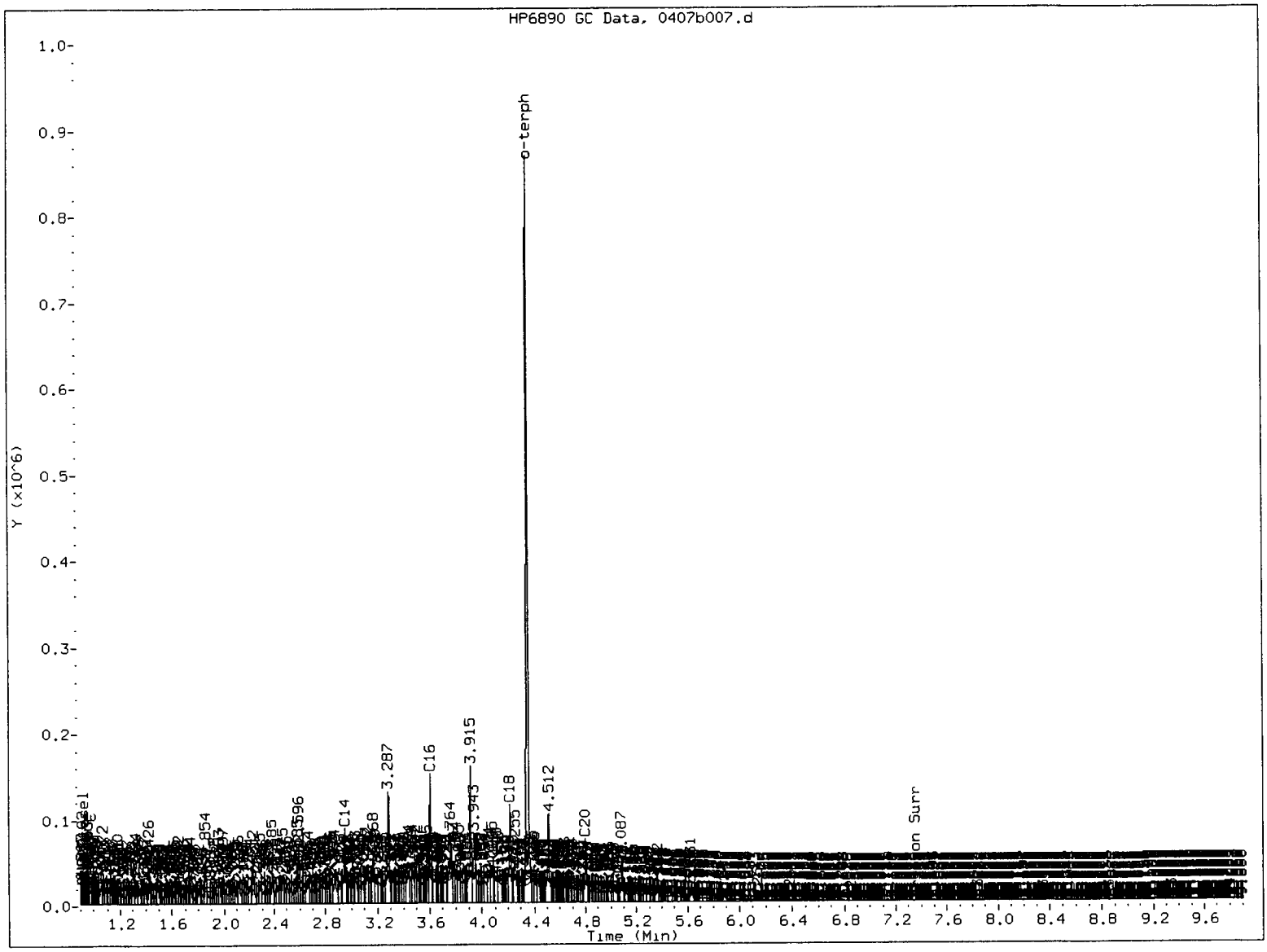
Operator: MS
Column diameter: 0.25

Column phase: RTX-1

ST98:00824



FID:3B-2C/RTX-1 DIESEL 250 FID:3B SIGNAL



MANUAL INTEGRATION

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

5. Other _____

Analyst: _____ Date: 4/25/11

Analytical Resources Inc.
407S TPH Quantitation Report

Data file: /chem3/fid3b.i/20110407.b/0407b008.d
Method: /chem3/fid3b.i/20110407.b/ftphfid3b.m
Instrument: fid3b.i
Operator: MS
Report Date: 04/25/2011
Macro: FID:3B040711

ARI ID: DIESEL 500
Client ID:
Injection: 07-APR-2011 16:07
Dilution Factor: 1

FID:3B RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc	
Toluene	0.945	-0.001	26206	10172	GAS (Tol-C12)	1865973	116.81	
C8	1.095	0.001	23769	13900	DIESEL (C12-C24)	8900911	509.76	
C10	1.496	0.002	72824	38018	M.OIL (C24-C38)	94763	10.21	
C12	2.232	0.002	104297	89997	AK-102 (C10-C25)	10115836	500.31	M
C14	2.953	0.003	172946	168271	AK-103 (C25-C36)	59350	6.80	
C16	3.611	0.003	304312	249212	OR.DIES (C10-C28)	10164621	400.17	M
C18	4.223	0.005	234835	250839	OR.MOIL (C28-C40)	30649	2.72	
C20	4.807	0.000	143838	142416	MIN.OIL (C24-C38)	94763	14.72	
C22	5.366	-0.002	67012	66803	STODDARD (C8-C12)	1664164	60.15	
C24	5.892	-0.002	19358	22145				
C25	6.141	-0.006	8734	9572				
C26	6.383	-0.004	3495	3662				
C28	6.853	-0.004	428	488				
C32	7.844	-0.003	640	601				
C34	8.353	0.000	96	36	CREOSOT (C8-C22)	8626083	1348.68	
Filter Peak	11.349	0.001	1157	505				
C36	8.852	-0.001	173	42	BUNKERC (C10-C38)	10181971	1194.77	
o-terph	4.371	0.012	1331028	1474196	JET-A (C10-C18)	7620223	1477.40	
Triacon Surr	7.361	0.006	36	13	IT.MOIL (C24-C40)	108076	5.03	

Range Times: NW Diesel(2.280 - 5.944) NW Gas(0.895 - 2.280) NW M.Oil(5.944 - 9.389)
AK102(1.445 - 6.096) AK103(6.096 - 8.903) Jet A(1.445 - 4.268)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1474196	93.5	207.9
Triacontane	13	0.0	0.0

Analyte	RF	Curve Date
o-Terph Surr	15759.4	07-APR-2011
Triacon Surr	12836.6	07-APR-2011
Gas	15975.0	20-OCT-2010
Diesel	17461.0	07-APR-2011
Motor Oil	9285.7	07-APR-2011
AK102	20219.0	07-APR-2011
AK103	8727.5	29-SEPT-2010
JetA	5157.9	13-JAN-2011
Min Oil	6438.5	20-JAN-2011
OR Diesel	25401.0	
OR M.Oil	11274.0	
IT M.Oil	21488.2	
Bunker C	8522.1	20-SEP-2010
Creosote	6396.0	17-JAN-2009

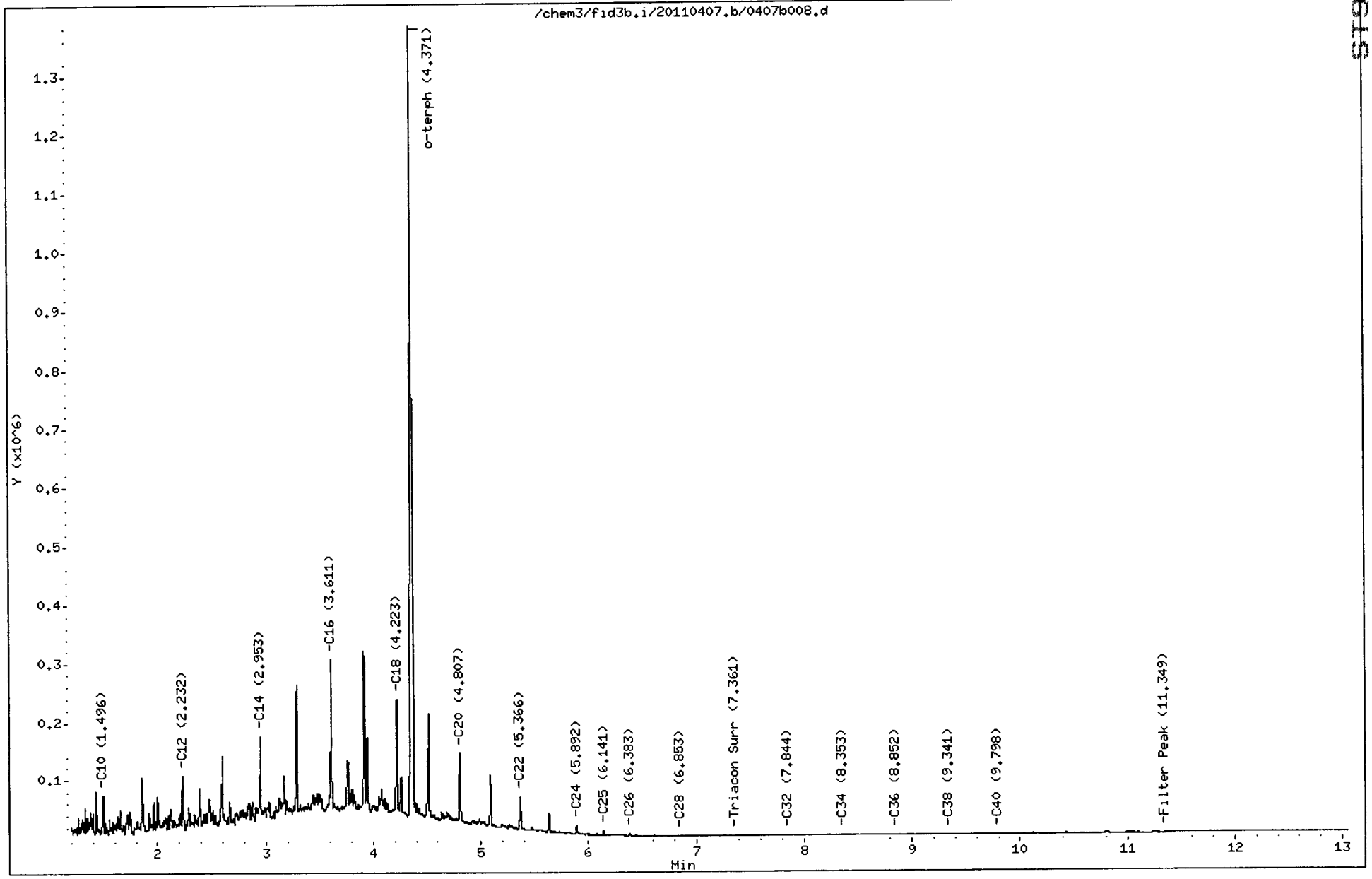
Data File: /chem3/fid3b.i/20110407.b/0407b008.d
Date : 07-APR-2011 16:07
Client ID:
Sample Info: DIESEL 500

Instrument: fid3b.i

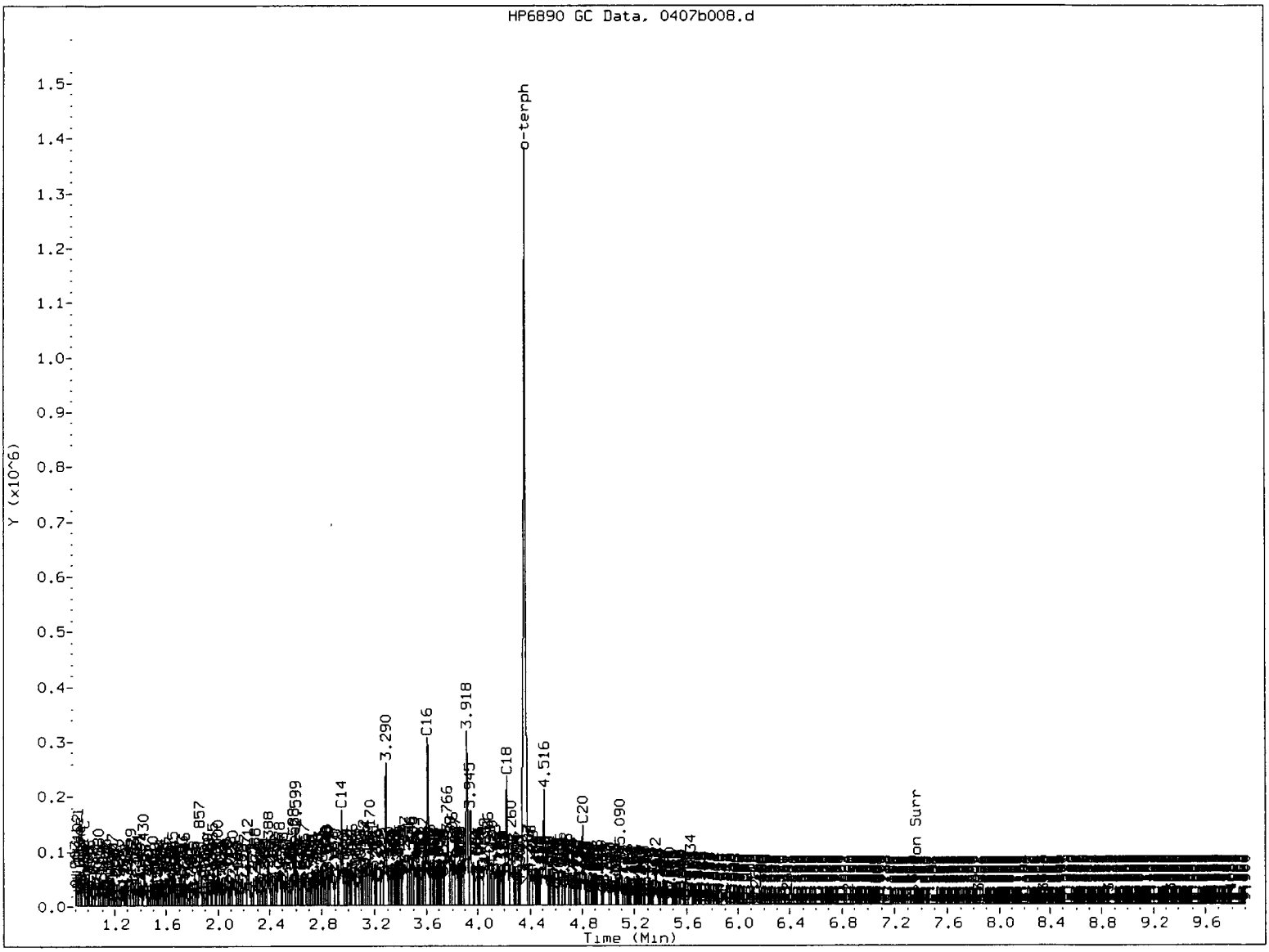
Operator: MS
Column diameter: 0.25

Column phase: RTX-1

ST98:00827



FID:3B-2C/RTX-1 DIESEL 500 FID:3B SIGNAL



MANUAL INTEGRATION

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

5. Other _____

Analyst: _____ Date 4/20/11

Analytical Resources Inc.
407S TPH Quantitation Report

Data file: /chem3/fid3b.i/20110407.b/0407b009.d
Method: /chem3/fid3b.i/20110407.b/ftphfid3b.m
Instrument: fid3b.i
Operator: MS
Report Date: 04/25/2011
Macro: FID:3B040711

ARI ID: DIESEL 1000
Client ID:
Injection: 07-APR-2011 16:29
Dilution Factor: 1

FID:3B RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc	
Toluene	0.946	0.001	31351	11349	GAS (Tol-C12)	3134816	196.23	
C8	1.094	0.001	34003	21065	DIESEL (C12-C24)	16613468	951.46	
C10	1.495	0.000	132367	66786	M.OIL (C24-C38)	167973	18.09	
C12	2.231	0.001	194494	164606	AK-102 (C10-C25)	18819186	930.77	M
C14	2.953	0.004	312096	243928	AK-103 (C25-C36)	108546	12.44	
C16	3.614	0.006	531089	468504	OR.DIES (C10-C28)	18912868	744.57	M
C18	4.226	0.008	383052	482884	OR.MOIL (C28-C40)	38915	3.45	
C20	4.807	0.001	274277	286574	MIN.OIL (C24-C38)	167973	26.09	
C22	5.365	-0.003	125150	137750	STODDARD (C8-C12)	2897217	104.72	
C24	5.889	-0.005	38496	39989				
C25	6.141	-0.005	17045	21006				
C26	6.382	-0.005	6682	8722				
C28	6.851	-0.006	834	934				
C32	7.843	-0.003	1072	1248				
C34	8.357	0.004	63	36	CREOSOT (C8-C22)	16098868	2517.04	
Filter Peak	11.341	-0.006	1786	992				
C36	8.843	-0.010	154	59	BUNKERC (C10-C38)	18934599	2221.82	
o-terph	4.381	0.022	1967106	2815277	JET-A (C10-C18)	14271410	2766.93	
Triacon Surr	7.366	0.011	55	32	IT.MOIL (C24-C40)	185189	8.62	

Range Times: NW Diesel(2.280 - 5.944) NW Gas(0.895 - 2.280) NW M.Oil(5.944 - 9.389)
AK102(1.445 - 6.096) AK103(6.096 - 8.903) Jet A(1.445 - 4.268)

Surrogate	Area	Amount	%Rec
o-Terphenyl	2815277	178.6	397.0
Triacontane	32	0.0	0.0

Analyte	RF	Curve Date
o-Terph Surr	15759.4	07-APR-2011
Triacon Surr	12836.6	07-APR-2011
Gas	15975.0	20-OCT-2010
Diesel	17461.0	07-APR-2011
Motor Oil	9285.7	07-APR-2011
AK102	20219.0	07-APR-2011
AK103	8727.5	29-SEPT-2010
JetA	5157.9	13-JAN-2011
Min Oil	6438.5	20-JAN-2011
OR Diesel	25401.0	
OR M.Oil	11274.0	
IT M.Oil	21488.2	
Bunker C	8522.1	20-SEP-2010
Creosote	6396.0	17-JAN-2009

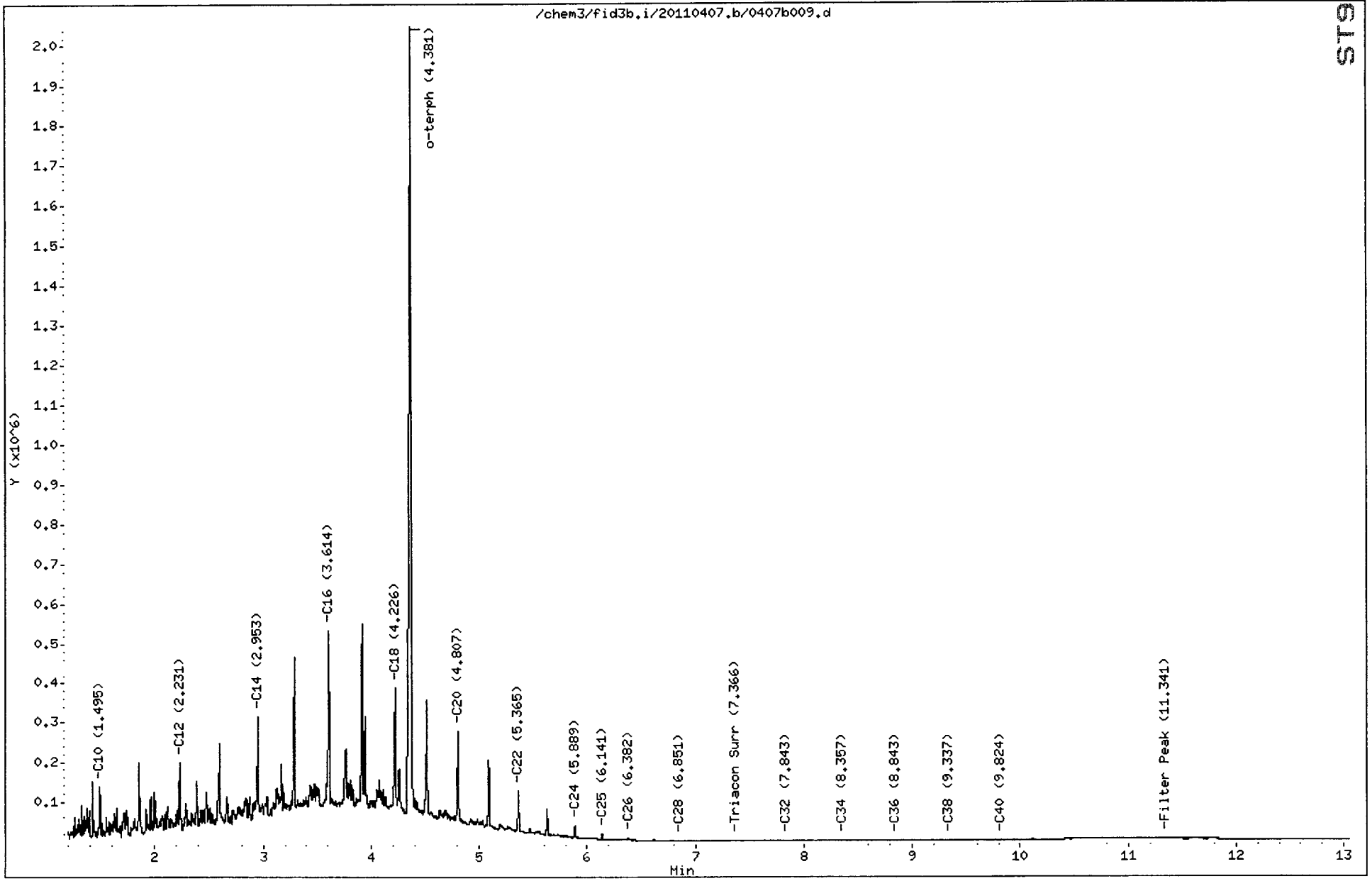
Data File: /chem3/fid3b.i/20110407.b/0407b009.d
Date : 07-APR-2011 16:29
Client ID:
Sample Info: DIESEL 1000

Column phase: RTX-1

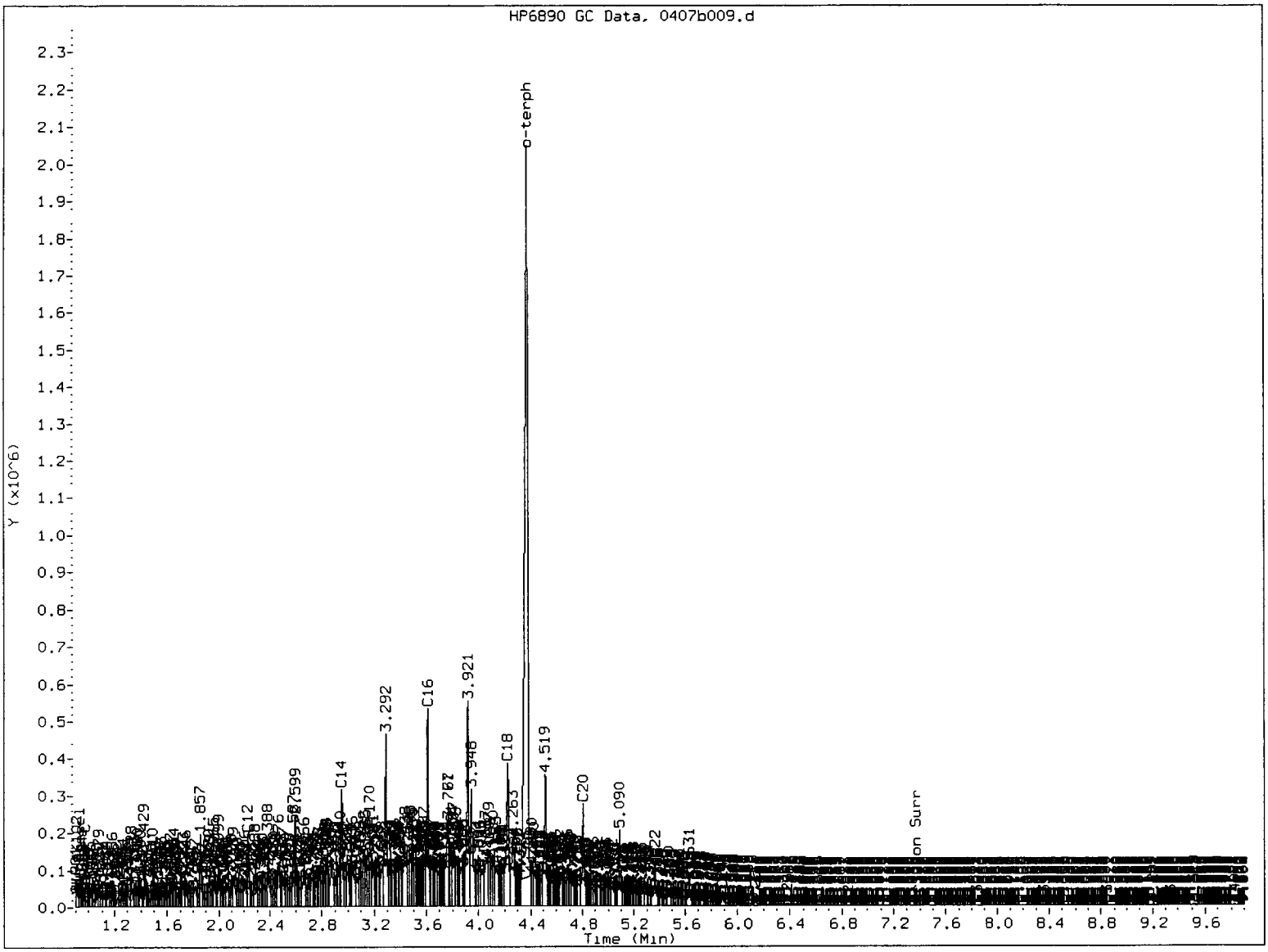
Instrument: fid3b.i

Operator: MS
Column diameter: 0.25

ST98.00830



FID:3B-2C/RTX-1 DIESEL 1000 FID:3B SIGNAL



MANUAL INTEGRATION

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

5. Other _____

Analyst: _____ Date: 4/25/11

Analytical Resources Inc.
407S TPH Quantitation Report

Data file: /chem3/fid3b.i/20110407.b/0407b010.d
Method: /chem3/fid3b.i/20110407.b/ftphfid3b.m
Instrument: fid3b.i
Operator: MS
Report Date: 04/25/2011
Macro: FID:3B040711

ARI ID: DIESEL 2500
Client ID:
Injection: 07-APR-2011 16:52
Dilution Factor: 1

FID:3B RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc	
Toluene	0.949	0.003	43482	39192	GAS (Tol-C12)	6955292	435.39	
C8	1.094	0.000	143209	86545	DIESEL (C12-C24)	40642031	2327.59	
C10	1.502	0.007	266212	204251	M.OIL (C24-C38)	393239	42.35	
C12	2.237	0.007	402257	390194	AK-102 (C10-C25)	45754208	2262.93	M
C14	2.962	0.012	648391	686859	AK-103 (C25-C36)	249135	28.55	
C16	3.595	-0.013	392001	515955	OR.DIES (C10-C28)	45985363	1810.38	M
C18	4.207	-0.012	282510	262939	OR.MOIL (C28-C40)	34254	3.04	
C20	4.819	0.013	596078	611712	MIN.OIL (C24-C38)	393239	61.08	
C22	5.374	0.006	288646	260912	STODDARD (C8-C12)	6545002	236.57	
C24	5.895	0.001	92060	85501				
C25	6.144	-0.002	41024	45089				
C26	6.384	-0.003	16292	16814				
C28	6.855	-0.003	2004	2260				
C32	7.846	-0.001	511	631				
C34	8.360	0.007	49	21	CREOSOT (C8-C22)	39395150	6159.38	
Filter Peak	11.347	-0.001	1320	262				
C36	8.855	0.002	115	15	BUNKERC (C10-C38)	46008170	5398.67	
o-terph	4.406	0.048	3175948	5971791	JET-A (C10-C18)	33535683	6501.87	
Triacon Surr	7.369	0.013	147	42	IT.MOIL (C24-C40)	404729	18.83	

Range Times: NW Diesel(2.280 - 5.944) NW Gas(0.895 - 2.280) NW M.Oil(5.944 - 9.389)
AK102(1.445 - 6.096) AK103(6.096 - 8.903) Jet A(1.445 - 4.268)

Surrogate	Area	Amount	%Rec
o-Terphenyl	5971791	378.9	842.1
Triacontane	42	0.0	0.0

Analyte	RF	Curve Date
o-Terph Surr	15759.4	07-APR-2011
Triacon Surr	12836.6	07-APR-2011
Gas	15975.0	20-OCT-2010
Diesel	17461.0	07-APR-2011
Motor Oil	9285.7	07-APR-2011
AK102	20219.0	07-APR-2011
AK103	8727.5	29-SEPT-2010
JetA	5157.9	13-JAN-2011
Min Oil	6438.5	20-JAN-2011
OR Diesel	25401.0	
OR M.Oil	11274.0	
IT M.Oil	21488.2	
Bunker C	8522.1	20-SEP-2010
Creosote	6396.0	17-JAN-2009

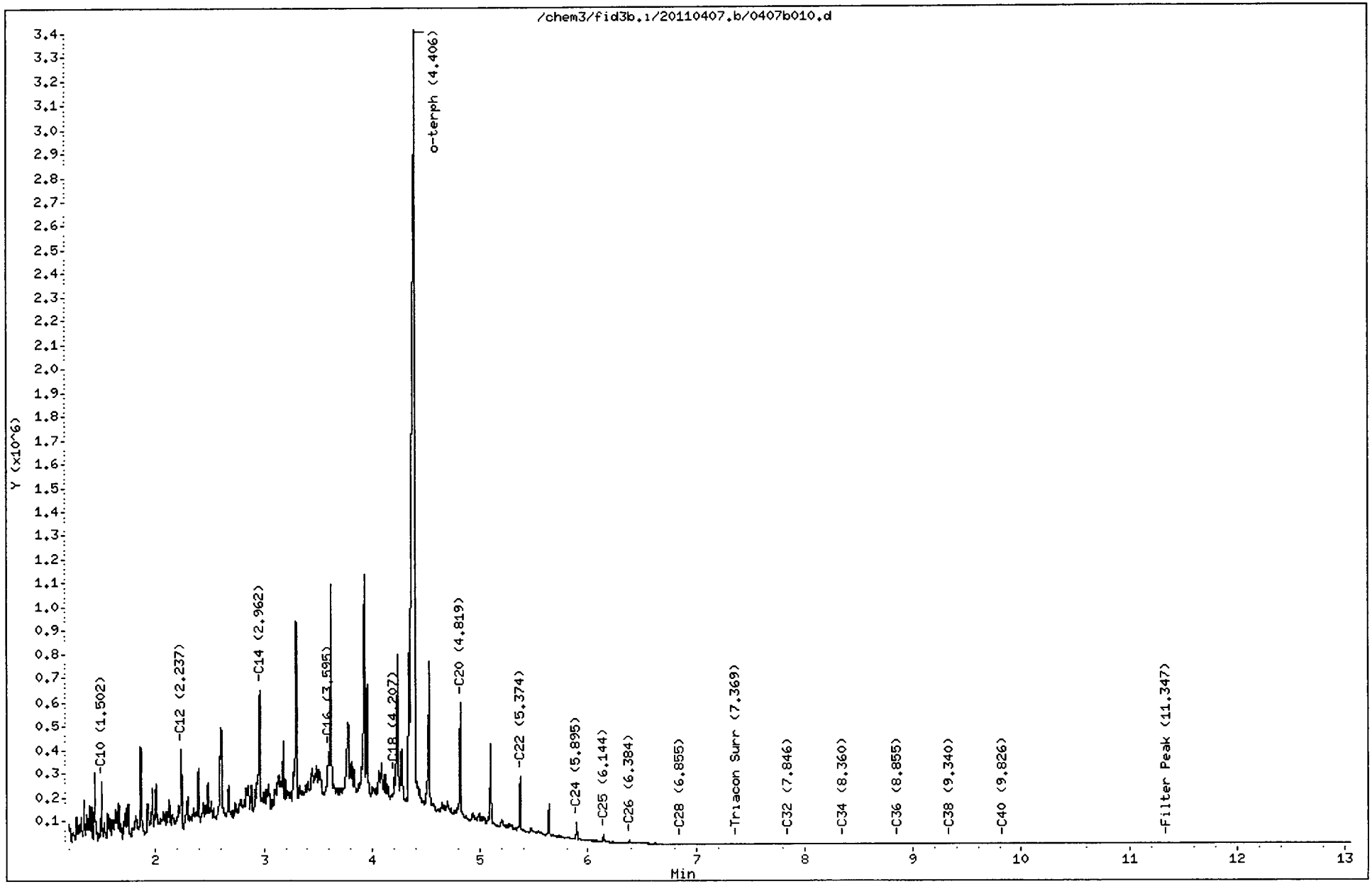
Data File: /chem3/fid3b.i/20110407.b/0407b010.d
Date : 07-APR-2011 16:52
Client ID:
Sample Info: DIESEL 2500

Column phase: RTX-1

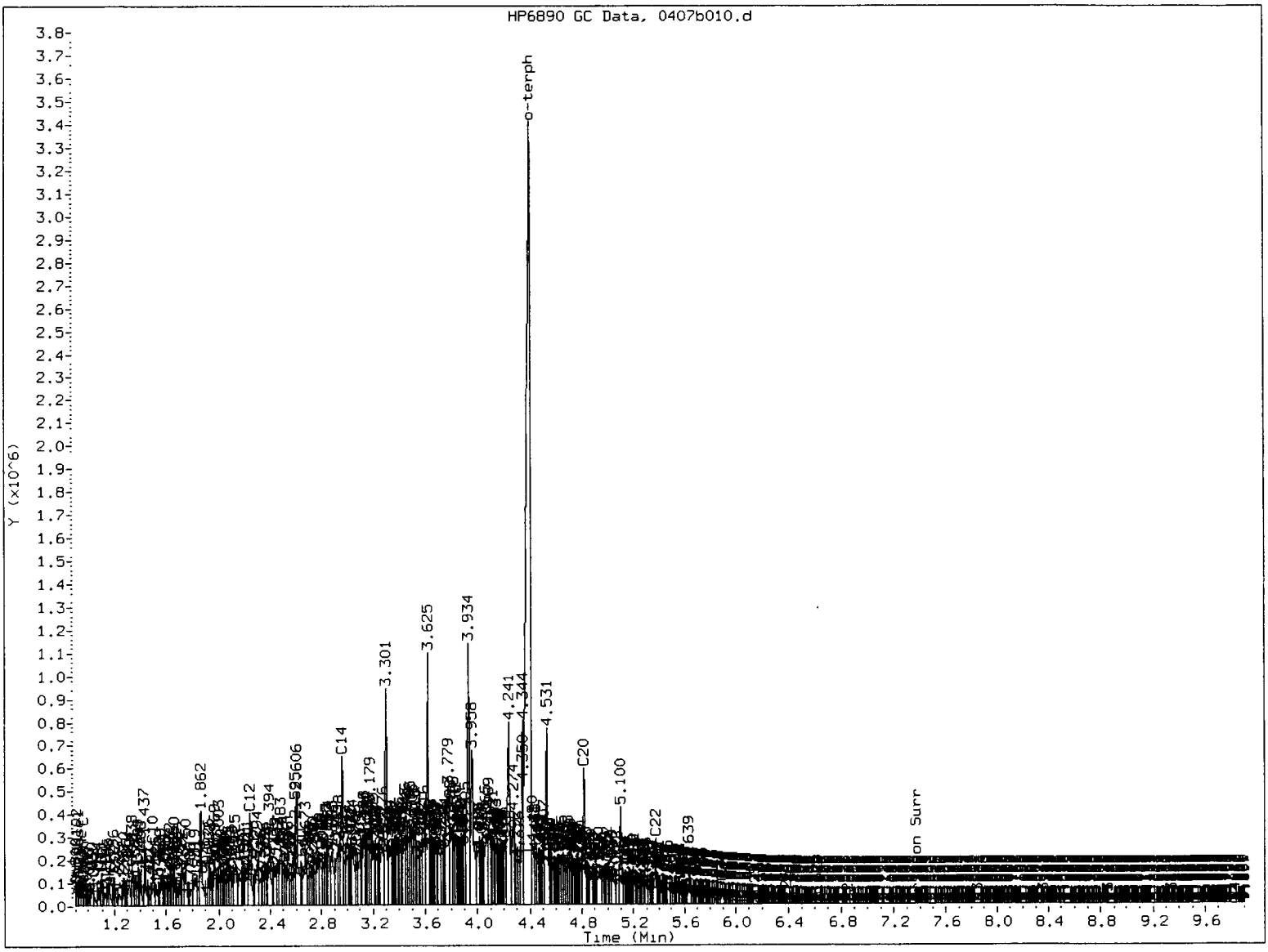
Instrument: fid3b.1

Operator: MS
Column diameter: 0.25

ST98:00833



FID:3B-2C/RTX-1 DIESEL 2500 FID:3B SIGNAL



MANUAL INTEGRATION

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

5. Other _____

Analyst: _____ Date: 4/20/11

Analytical Resources Inc.
407S TPH Quantitation Report

Data file: /chem3/fid3b.i/20110407.b/0407b011.d
Method: /chem3/fid3b.i/20110407.b/ftphfid3b.m
Instrument: fid3b.i
Operator: MS
Report Date: 04/25/2011
Macro: FID:3B040711

ARI ID: DIESEL ICV
Client ID:
Injection: 07-APR-2011 17:14
Dilution Factor: 1

FID:3B RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc	
Toluene	0.957	0.012	30494	33047	GAS (Tol-C12)	1113888	69.73	
C8	1.092	-0.001	17906	10900	DIESEL (C12-C24)	4119844	235.95	
C10	1.496	0.002	34954	20687	M.OIL (C24-C38)	51853	5.58	
C12	2.231	0.001	48943	41232	AK-102 (C10-C25)	4749158	234.89	M
C14	2.950	0.000	80091	74372	AK-103 (C25-C36)	29995	3.44	
C16	3.607	0.000	148126	112467	OR.DIES (C10-C28)	4770772	187.82	M
C18	4.218	0.000	110571	113501	OR.MOIL (C28-C40)	27994	2.48	
C20	4.804	-0.002	68886	70559	MIN.OIL (C24-C38)	51853	8.05	
C22	5.365	-0.002	30677	31897	STODDARD (C8-C12)	937847	33.90	
C24	5.890	-0.003	9525	10228				
C25	6.142	-0.004	4255	4891				
C26	6.383	-0.004	1705	1902				
C28	6.854	-0.003	194	215				
C32	7.847	0.000	490	604				
C34	8.355	0.002	84	51	CREOSOT (C8-C22)	3994433	624.52	
Filter Peak	11.344	-0.003	1042	597				
C36	8.858	0.005	187	73	BUNKERC (C10-C38)	4785824	561.58	
o-terph	4.361	0.003	809848	678204	JET-A (C10-C18)	3617339	701.33	
Triacon Surr	7.362	0.007	24	4	IT.MOIL (C24-C40)	64799	3.02	

Range Times: NW Diesel(2.280 - 5.944) NW Gas(0.895 - 2.280) NW M.Oil(5.944 - 9.389)
AK102(1.445 - 6.096) AK103(6.096 - 8.903) Jet A(1.445 - 4.268)

Surrogate	Area	Amount	%Rec
o-Terphenyl	678204	43.0	95.6
Triacontane	4	0.0	0.0

Analyte	RF	Curve Date
o-Terph Surr	15759.4	07-APR-2011
Triacon Surr	12836.6	07-APR-2011
Gas	15975.0	20-OCT-2010
Diesel	17461.0	07-APR-2011
Motor Oil	9285.7	07-APR-2011
AK102	20219.0	07-APR-2011
AK103	8727.5	29-SEPT-2010
JetA	5157.9	13-JAN-2011
Min Oil	6438.5	20-JAN-2011
OR Diesel	25401.0	
OR M.Oil	11274.0	
IT M.Oil	21488.2	
Bunker C	8522.1	20-SEP-2010
Creosote	6396.0	17-JAN-2009

Data File: /chem3/fid3b.i/20110407.b/0407b011.d

Date : 07-APR-2011 17:14

Client ID:

Sample Info: DIESEL ICV

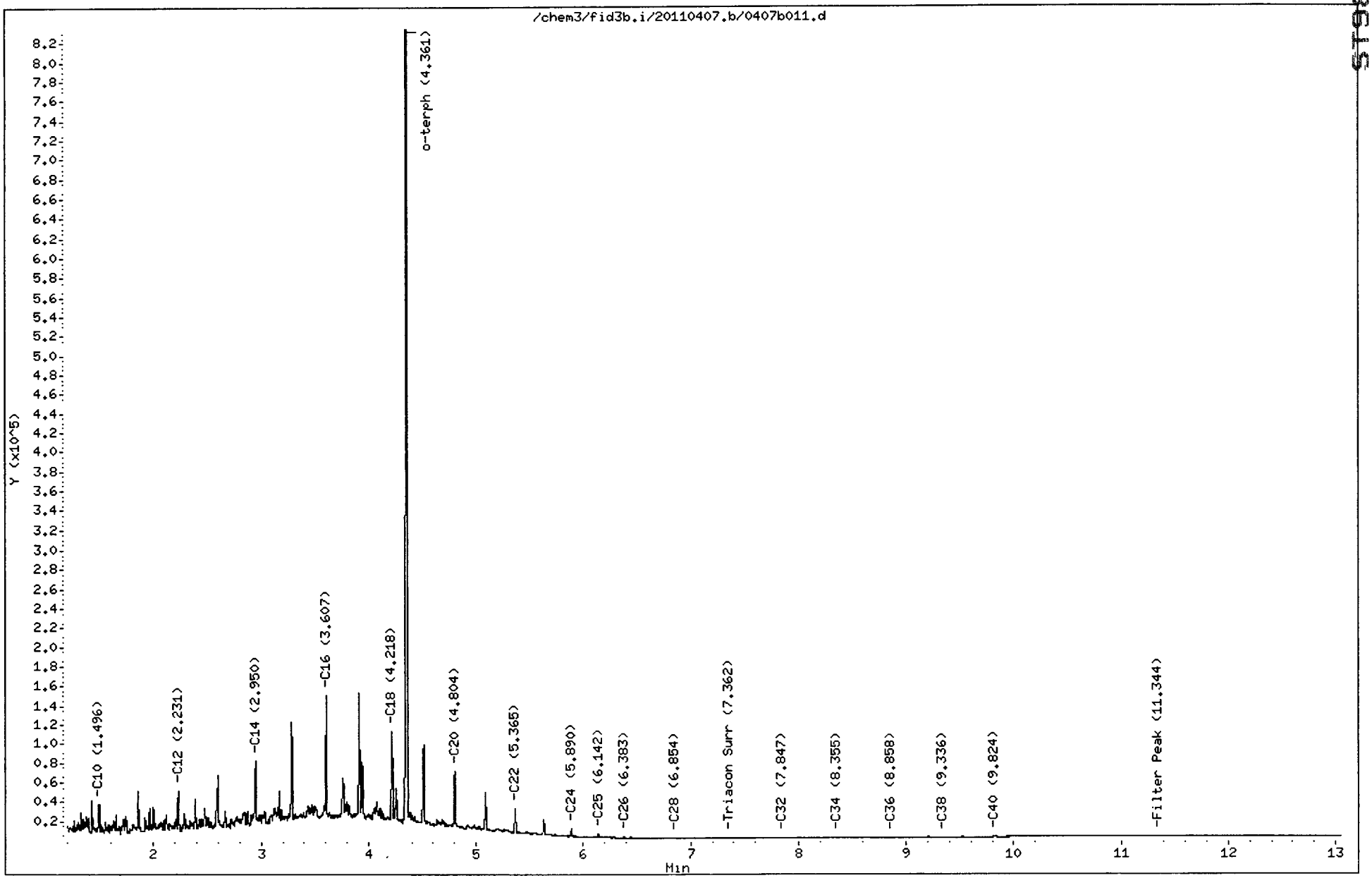
Column phase: RTX-1

Instrument: fid3b.i

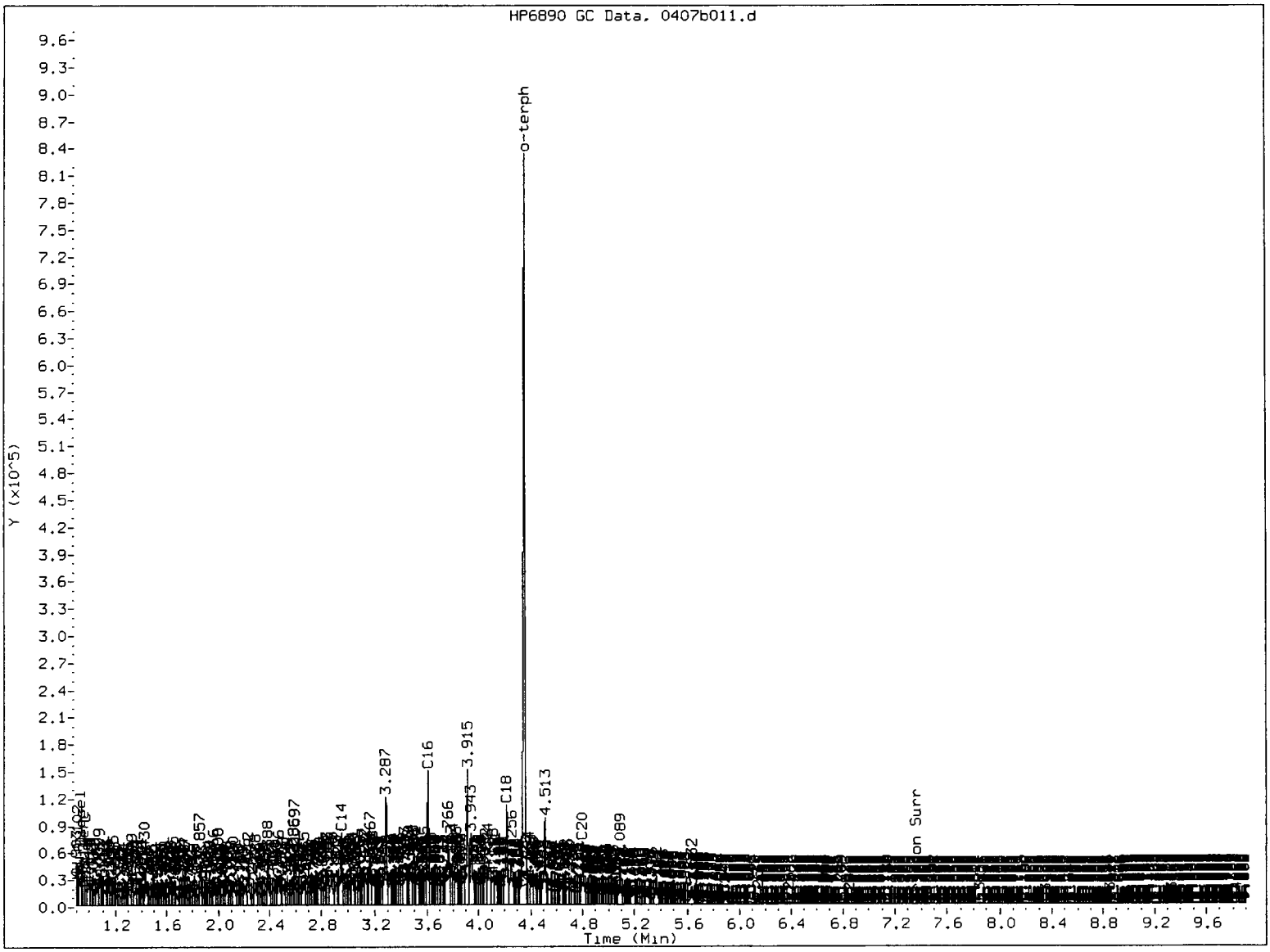
Operator: MS

Column diameter: 0.25

ST98 : 00836



FID:3B-2C/RTX-1 DIESEL ICV FID:3B SIGNAL



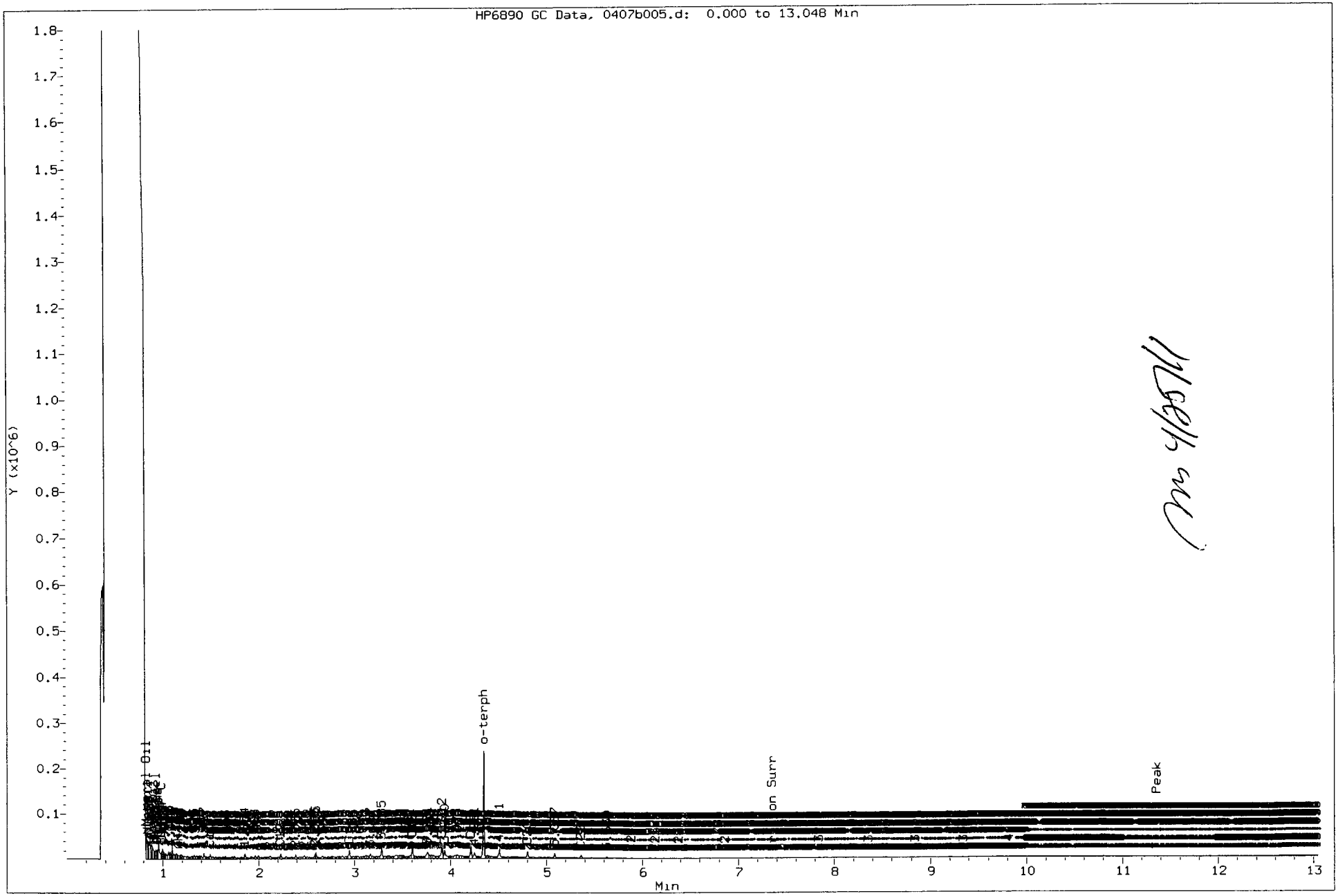
MANUAL INTEGRATION

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

5. Other _____

Analyst: _____ Date: 4/25/14

Data File: /chem3/fid3b.i/20110407.b/0407b005.d
Injection Date: 07-APR-2011 15:00
Instrument: fid3b.i
Client Sample ID:



ST98:00838

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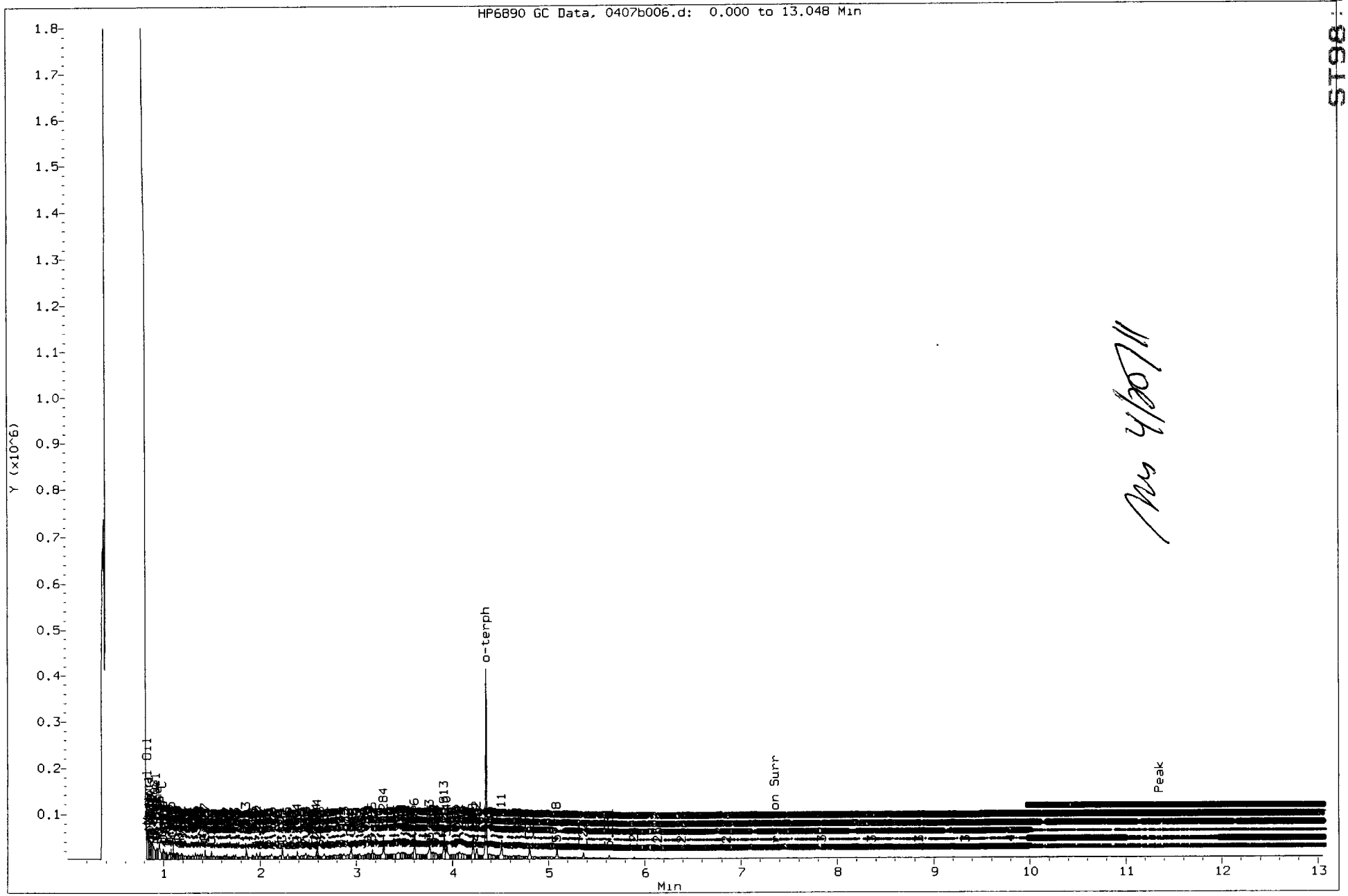
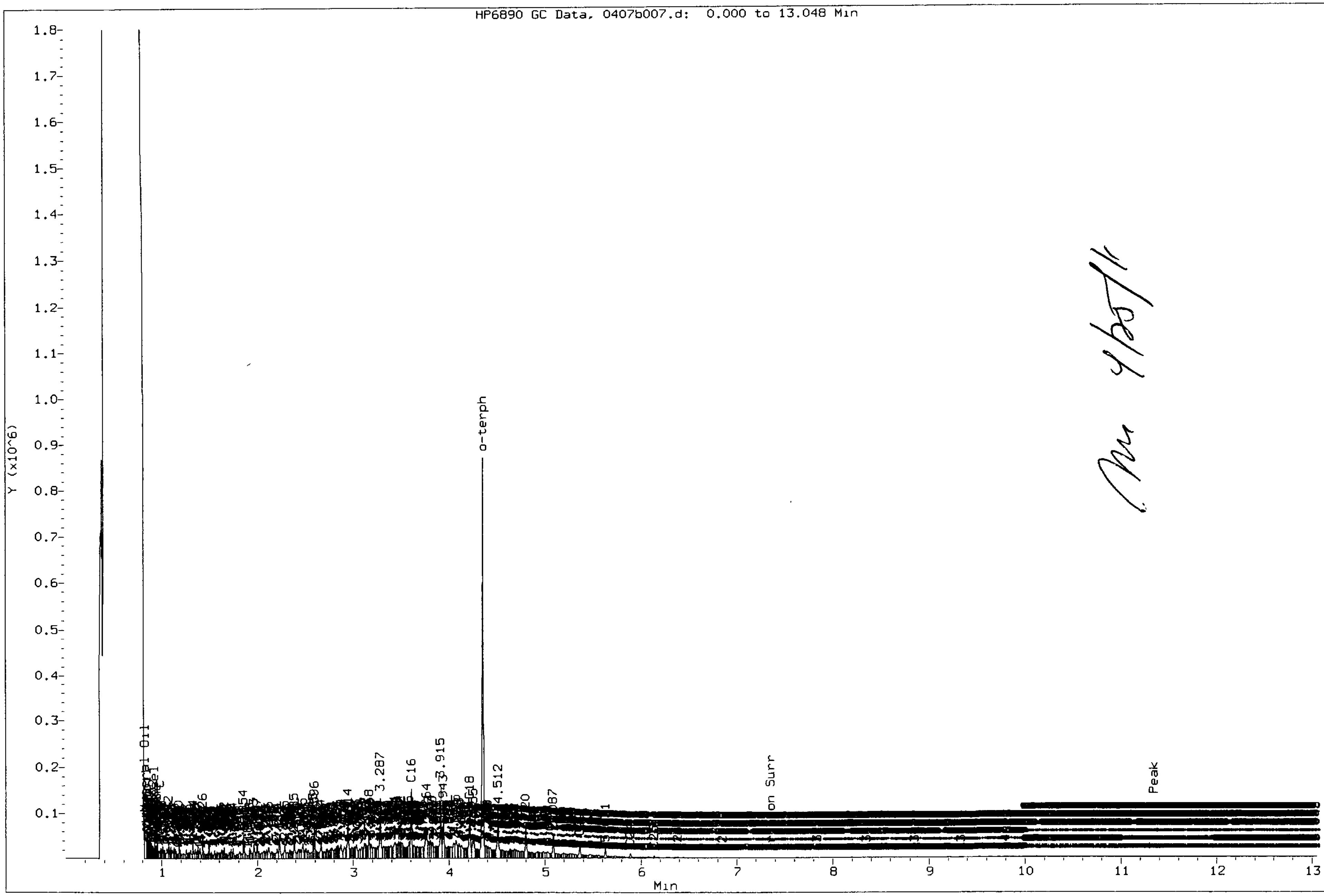
Injection Date: 07-APR-2011 15:22
Instrument: fid3b.i
Client Sample ID:



ST98-00839

My 4/20/11

Data File: /chem3/fid3b.i/20110407.b/0407b007.d
Injection Date: 07-APR-2011 15:45
Instrument: fid3b.i
Client Sample ID:



ST98 00840

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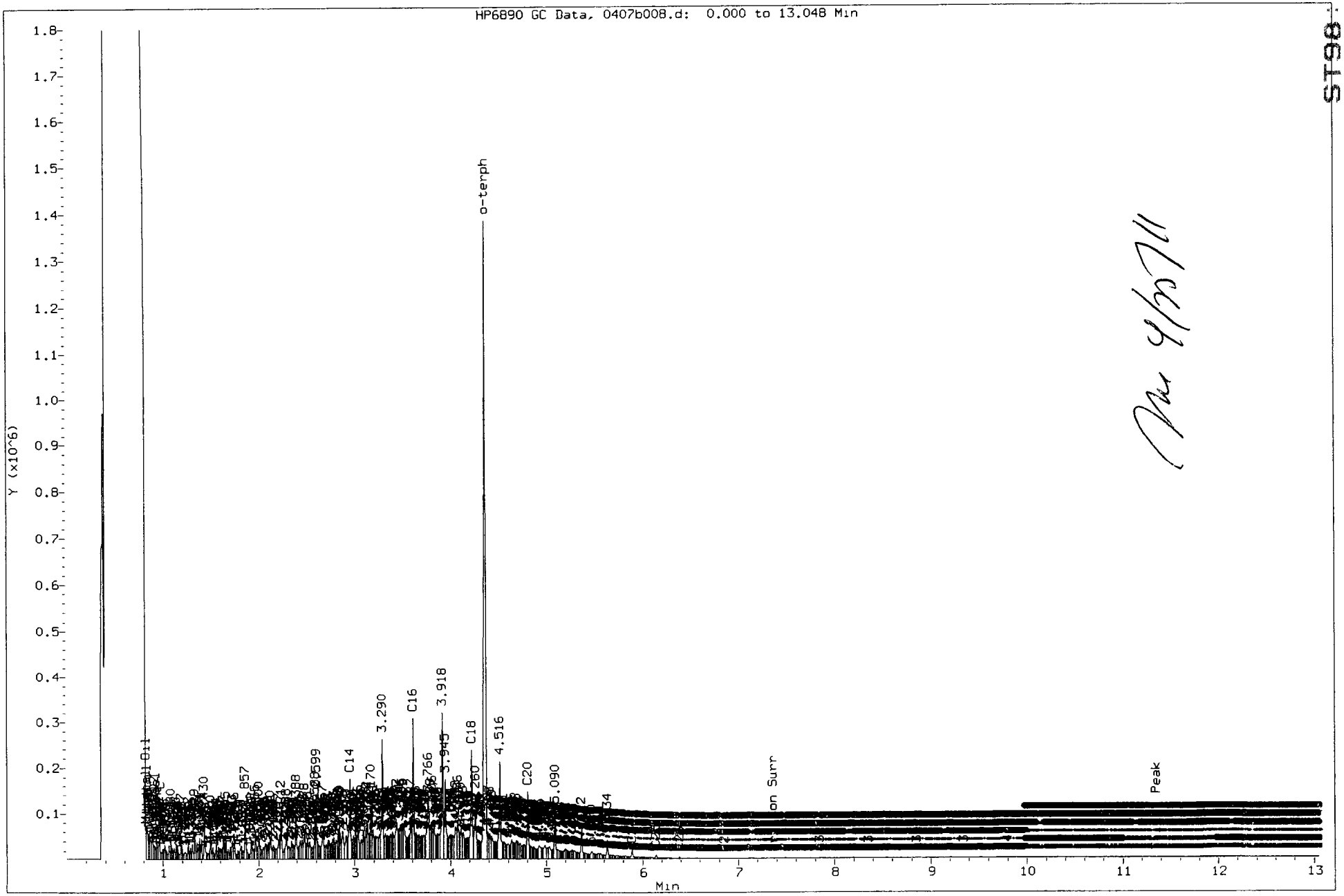
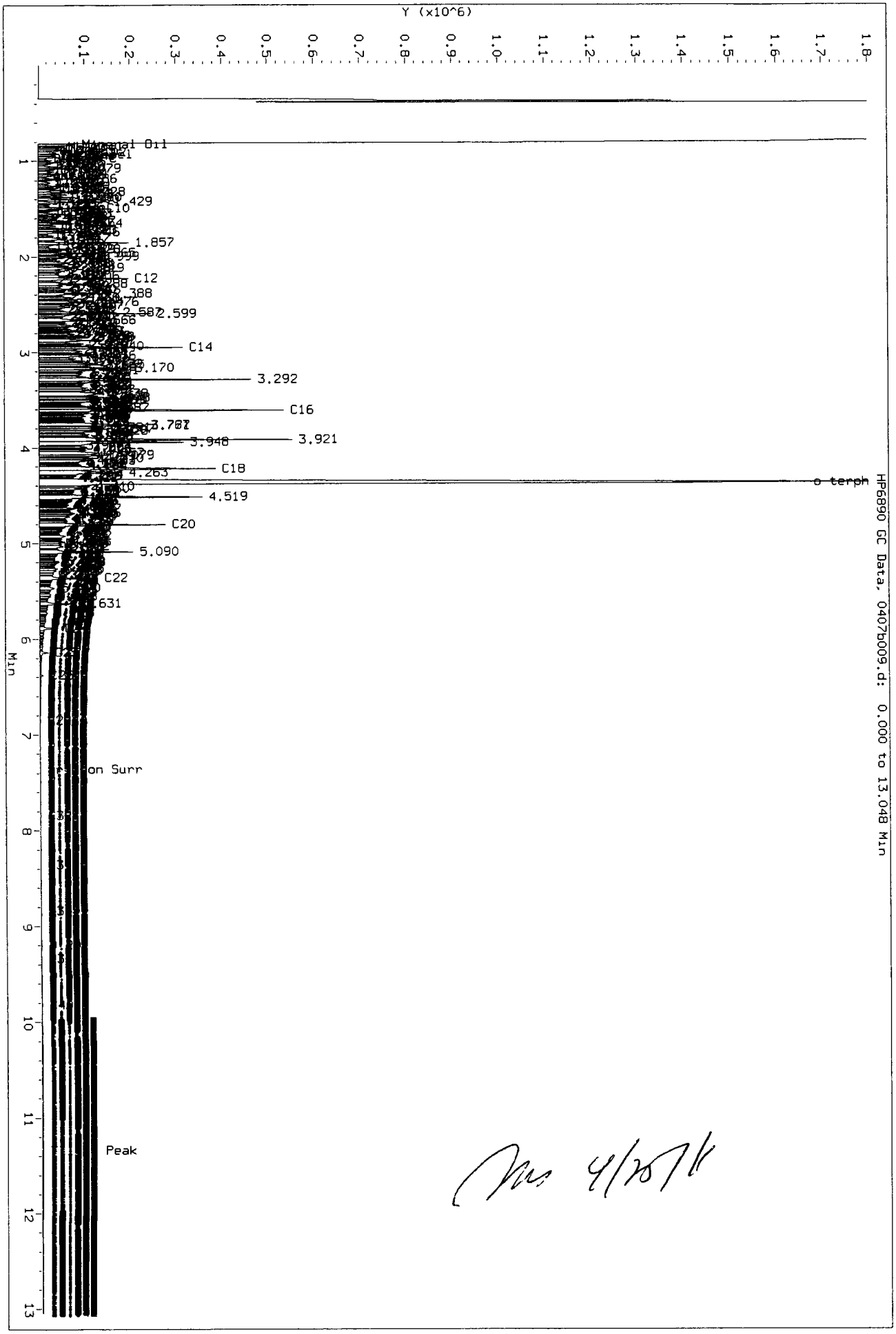
Injection Date: 07-APR-2011 16:07
Instrument: fid3b.i
Client Sample ID:

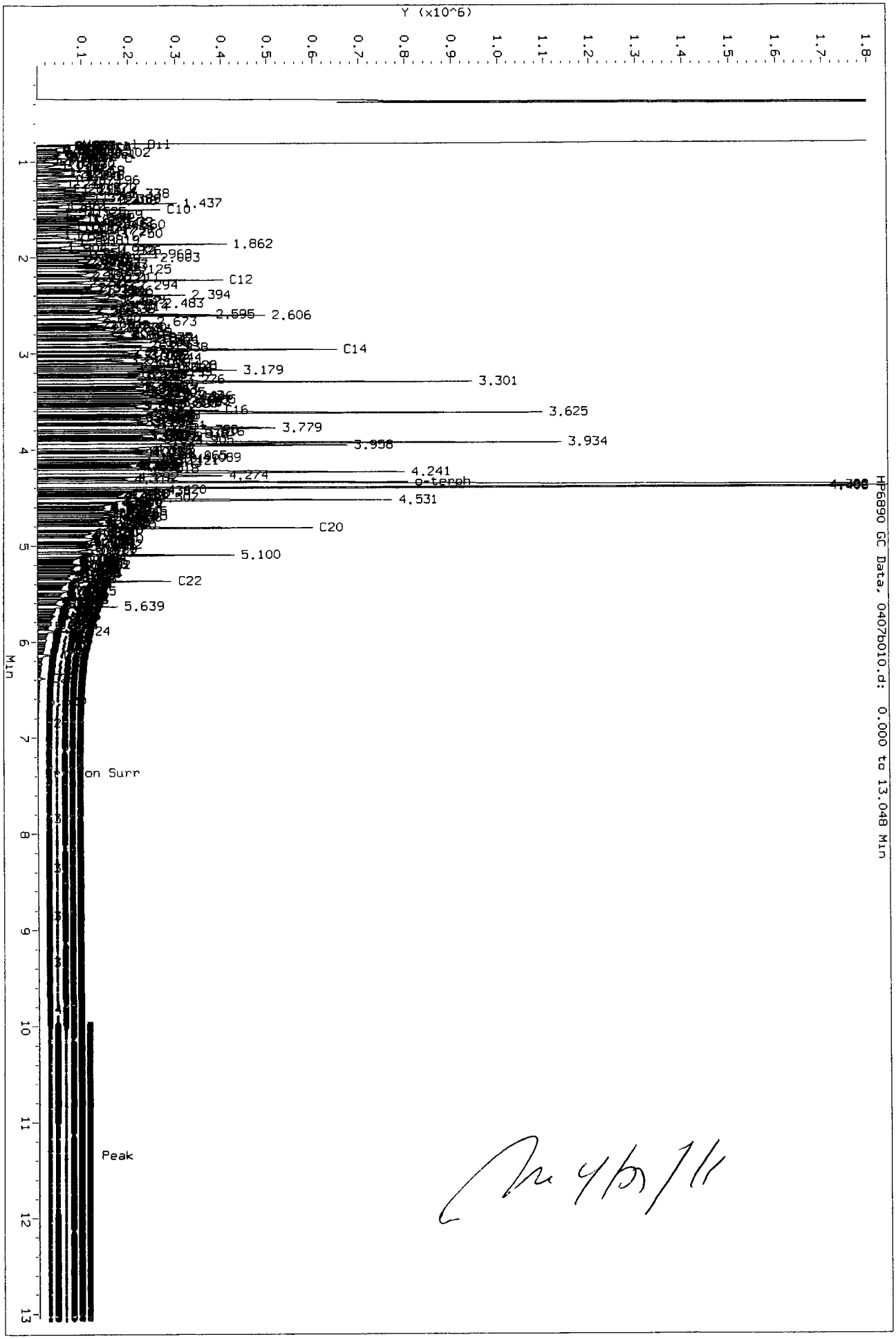


Mar 4/5/11

ST98.00811


Data File: /chem3/fid3b.i/20110407.b/0407b009.d
Injection Date: 07-APR-2011 16:29
Instrument: fid3b.i
Client Sample ID:
Y (x10^6)
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
1.429
1.857
C12
2.599
C14
3.292
C16
3.921
C18
o terph
4.519
C20
5.090
C22
Min
Peak
HP6890 GC Data, 0407b009.d: 0.000 to 13.048 Min

4/20/11


Data File: /chem3/fid3b.i/20110407.b/0407b010.d
Injection Date: 07-APR-2011 16:52
Instrument: fid3b.i
Client Sample ID:
Y (x10^6)
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
Min
1
2
3
4
5
6
7
8
9
10
11
12
13
C10
1.437
1.862
C12
2.394
2.595
2.606
C14
3.179
3.301
3.625
3.779
3.934
4.241
4.274
o-terph
4.531
C20
5.100
C22
5.639
on Surr
Peak
HP6890 GC Data, 0407b010.d: 0.000 to 13.048 Min

4/5/11

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC Analyst Notes / Corrective Action Log

ARI Project ID: 30wt Motor Oil Curve n-Triacontane 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): 30wt. Motor Oil, n-Triacontane

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

Dates: Curve: 4/7/11 Analysis Start: 4/7/11

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 (N/A)

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):

WA 30wt Motor Oil is curved from 100ppm → 2500ppm. The 5,000ppm point mishjected. Only 5 points are required for calibration. -mo 4/25/11

Additional Details on Reverse: Yes / (No)

Analyst: mo **Date:** 4/25/11

Reviewer: [signature] **Date:** 4/26/11

Analytical Resources Inc.: Organics Instrument Log

FID-3B Serial No.: US00003232

Date: 4/7/11 Analysis: NWTPHD Analyst: MO

GC Program: TPHB Column No: 972444 Column Type: HP-1

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

Calibration File: / Curve Date: 4/7/11

IS/SS	Ical/Ccal	LCS/ICV
/	1786-1	
	1701-2	
	1722-3	
	1705-2	/

	Inject Date/Time	Filename	DF	LabID
1	07-APR-2011 13:33	0407b001.d	1	RINSE
2	07-APR-2011 13:54	0407b002.d	1	RINSE
3	07-APR-2011 14:16	0407b003.d	1	RT
4	07-APR-2011 14:38	0407b004.d	1	IB
5	07-APR-2011 15:00	0407b005.d	1	DIESEL 50
6	07-APR-2011 15:22	0407b006.d	1	DIESEL 100
7	07-APR-2011 15:45	0407b007.d	1	DIESEL 250
8	07-APR-2011 16:07	0407b008.d	1	DIESEL 500
9	07-APR-2011 16:29	0407b009.d	1	DIESEL 1000
10	07-APR-2011 16:52	0407b010.d	1	DIESEL 2500
11	07-APR-2011 17:14	0407b011.d	1	DIESEL ICV
12	07-APR-2011 17:36	0407b012.d	1	MOIL 100
13	07-APR-2011 17:58	0407b013.d	1	MOIL 250
14	07-APR-2011 18:20	0407b014.d	1	MOIL 500
15	07-APR-2011 18:42	0407b015.d	1	MOIL 1000
16	07-APR-2011 19:04	0407b016.d	1	MOIL 2500
17	07-APR-2011 19:26	0407b017.d	1	MOIL 5000
18	07-APR-2011 19:48	0407b018.d	1	MOIL ICV
19	07-APR-2011 20:10	0407b019.d	1	IB
20	07-APR-2011 20:31	0407b020.d	1	DIESEL#1
21	07-APR-2011 20:53	0407b021.d	1	MOIL#1

MO

MO 4/25/11

Maintenance / Comments N/a

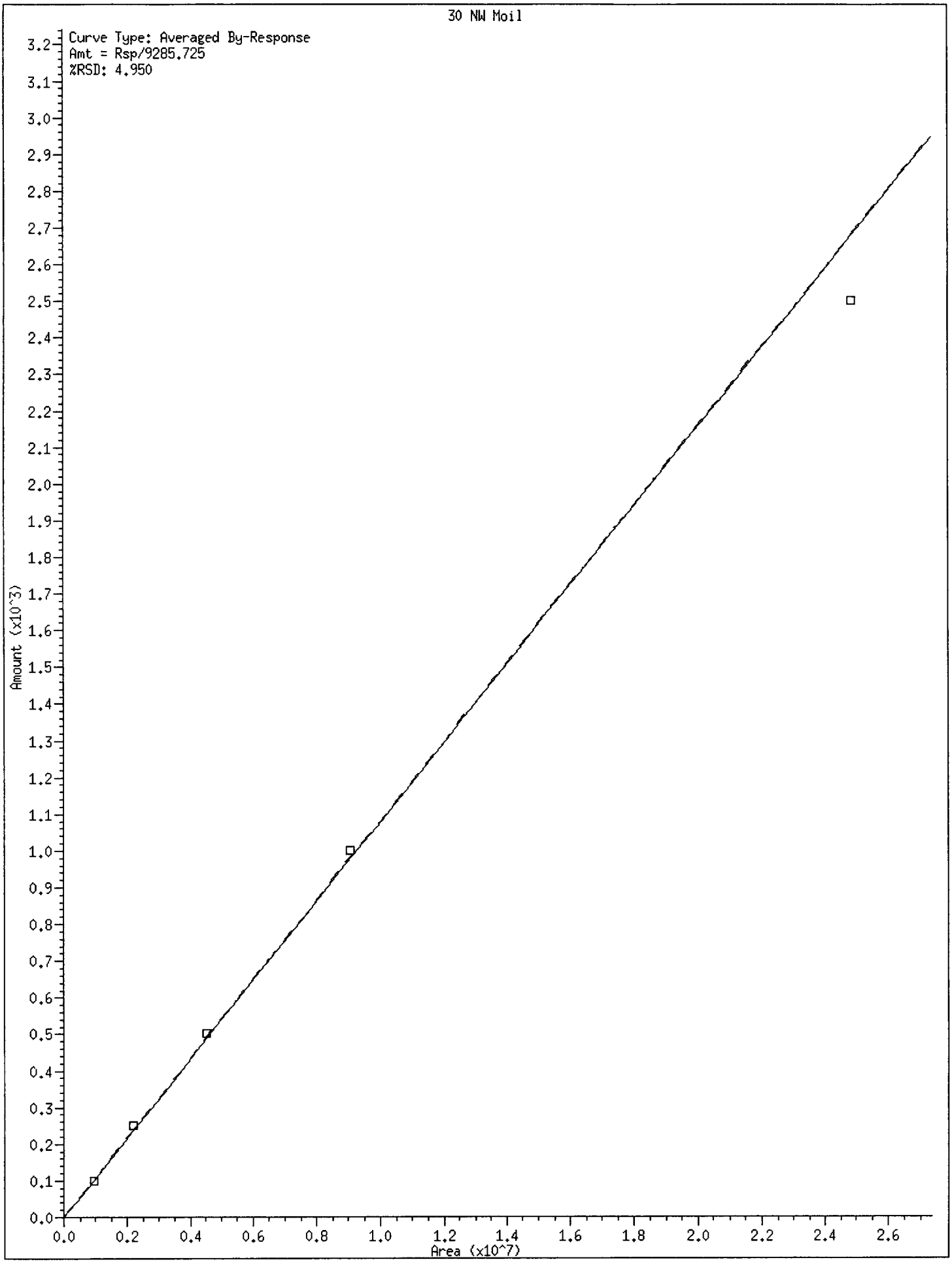
Maintenance Verification (Identify ICal or CCal that demonstrates the instrument is in control):

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/fid3b.i/20110407.b

ARI Job No.: RT Method: i/20110407.b/ftphfid3b.m Instrument: fid3b.i Date: 07-APR-2011

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1416	0407b003.d	RT		1	NO MANUAL INTEGRATION
1438	0407b004.d	IB		1	NO MANUAL INTEGRATION
1736	0407b012.d	MOIL 100		1	Triacon Surr,
1758	0407b013.d	MOIL 250		1	Triacon Surr,
1820	0407b014.d	MOIL 500		1	Triacon Surr,
1842	0407b015.d	MOIL 1000		1	Triacon Surr,
1904	0407b016.d	MOIL 2500		1	Triacon Surr,
1948	0407b018.d	MOIL ICV		1	Triacon Surr,


30 NW Moil
Curve Type: Averaged By-Response
Amt = Rsp/9285.725
%RSD: 4.950
Amount (x10^3)
Area (x10^7)
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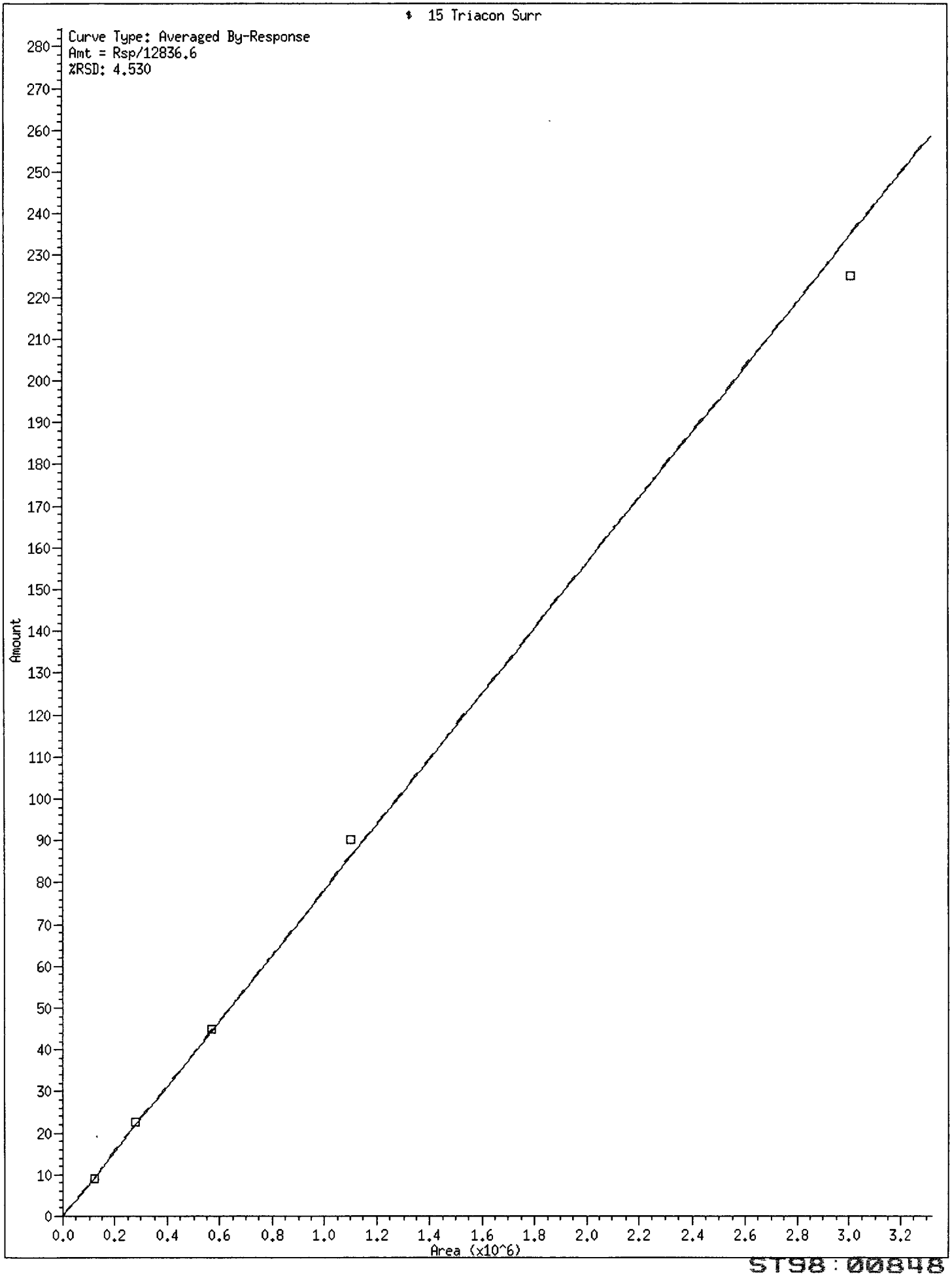
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
1.6
1.7
1.8
1.9
2.0
2.1
2.2
2.3
2.4
2.5
2.6
2.7
2.8
2.9
3.0
3.1
3.2
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
2.0
2.2
2.4
2.6

ST98 : 00847


$ 15 Triacon Surr
Curve Type: Averaged By-Response
Amt = Rsp/12836.6
%RSD: 4.530
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
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

ST98:00848

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem3/fid3b.i/20110407.b/ftphfid3b.m
Batch File: /chem3/fid3b.i/20110407.b
Inst ID: fid3b.i

ID:	RT01	RT02	RT03	RT04	RT05
FILENAME:	0407b012	0407b013	0407b014	0407b015	0407b016
INJ.DATE:	07-APR-2011	07-APR-2011	07-APR-2011	07-APR-2011	07-APR-2011
INJ.TIME:	17:36	17:58	18.20	18:42	19:04

	Compound	RT01	RT02	RT03	RT04	RT05	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	1 Toluene	0.941	0 939	0.956	0.953	0.954	0.945	0.845-1 045	0 949	0.008
	35 Mineral Oil	0.825	0.830	0.830	0.826	0.831	0.825	0.775-0.875	0.828	0.003
	2 C8	1.096	1.089	1.090	1.098	1.098	1.093	0.993-1.193	1.094	0.004
	3 C10	1.488	1.488	1.490	1.493	1.493	1.495	1.445-1.545	1.490	0.003
	4 C12	2.230	2.232	2.229	2.232	2 231	2.230	2.180-2.280	2.231	0.001
	5 C14	2.952	2.952	2.950	2.950	2.949	2.950	2.900-3.000	2.951	0.001
	6 C16	3.602	3 602	3.604	3.606	3.605	3 607	3.557-3.657	3 604	0.002
	7 C18	4.215	4.213	4.215	4.215	4.215	4.218	4.168-4.268	4.215	0.001
$	8 o-terph	4.348	4.347	4.363	4.349	4.349	4.358	4.308-4.408	4.351	0.007
	9 C20	4.802	4.801	4.802	4.804	4.805	4.806	4.756-4 856	4.803	0.001
	10 C22	5.369	5.367	5.366	5.366	5.363	5.367	5.317-5.417	5.366	0.002
	11 C24	5.893	5.894	5.891	5.892	5.894	5.894	5.844-5.944	5.893	0.001
	12 C25	6.144	6.150	6.143	6.147	6.145	6.146	6.096-6.196	6.146	0.003
	13 C26	6.389	6.392	6.391	6.388	6.388	6.387	6.337-6.437	6.390	0.002
	14 C28	6.856	6 854	6.854	6.859	6 860	6 857	6.807-6.907	6.857	0.003
$	15 Triacon Surr	7.344	7.350	7.361	7.368	7.400	7.355	7.305-7.405	7.365	0.022
	16 C32	7.843	7.848	7.845	7.842	7.849	7.847	7.797-7.897	7.845	0.003

Reviewer 1 _____ Date: 4/25/11
Reviewer 2 _____ Date: 4/26/11

6h899.6515

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem3/fid3b.i/20110407.b/ftphfid3b.m
Batch File: /chem3/fid3b.i/20110407.b
Inst ID: fid3b.i

Compound	RT01	RT02	RT03	RT04	RT05	EXPEC RT	RT WINDOW	AVG RT	STD DEV
17 C34	8.358	8.356	8.352	8.354	8.352	8.353	8.303-8.403	8.354	0.003
18 Filter Peak	11.345	11.345	11.347	11.350	11.344	11.348	11.248-11.448	11.346	0.002
19 C36	8.854	8.853	8.856	8.857	8.859	8.853	8.803-8.903	8.856	0.002
20 C38	9.341	9.343	9.339	9.340	9.341	9.339	9.289-9.389	9.341	0.001
21 C40	9.811	9.813	9.812	9.808	9.811	9.810	9.760-9.860	9.811	0.002
29 NW Diesel	0.925	0.930	0.930	0.927	0.928	0.923	0.873-0.973	0.928	0 002
34 Jet A	0.995	0.999	0.991	0.995	0.997	0 994	0.944-1.044	0.995	0.003
30 NW Moil	0.843	0.849	0.848	0.845	0.847	0.842	0.792-0.892	0.847	0.002
31 NW AK102	0.913	0.913	0.916	0.912	0.911	0.911	0.861-0.961	0.913	0.002
32 Bunker C	0.983	0.988	0.973	0.986	0.985	0.981	0.931-1.031	0.983	0.006
33 AK103	1.170	1.167	1.169	1.165	1.172	1.170	1.120-1.220	1.169	0.003

Analytical Resources Inc.
407S TPH Quantitation Report

Data file: /chem3/fid3b.i/20110407.b/0407b003.d
Method: /chem3/fid3b.i/20110407.b/ftphfid3b.m
Instrument: fid3b.i
Operator: MS
Report Date: 04/25/2011
Macro: FID:3B040711

ARI ID: RT
Client ID:
Injection: 07-APR-2011 14:16
Dilution Factor: 1

FID:3B RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	0.945	0.000	976865	264529	GAS (Tol-C12)	1141785	71.47
C8	1.093	0.000	305223	91381	DIESEL (C12-C24)	1353151	77.50
C10	1.495	0.000	606677	246250	M.OIL (C24-C38)	1394556	150.18
C12	2.230	0.000	395396	239913	AK-102 (C10-C25)	1917088	94.82
C14	2.950	0.000	336619	233085	AK-103 (C25-C36)	1217103	139.46
C16	3.607	0.000	322356	226073	OR.DIES (C10-C28)	2557644	100.69
C18	4.218	0.000	279366	219765	OR.MOIL (C28-C40)	929548	82.45
C20	4.806	0.000	276459	208232	MIN.OIL (C24-C38)	1394556	216.60
C22	5.367	0.000	261352	198804	STODDARD (C8-C12)	805605	29.12
C24	5.894	0.000	237918	194101			
C25	6.146	0.000	319067	261892			
C26	6.387	0.000	240451	188695			
C28	6.857	0.000	218406	182975			
C32	7.847	0.000	181679	179126			
C34	8.353	0.000	168860	176578	CREOSOT (C8-C22)	1153326	180.32
Filter Peak	11.348	0.000	4118	10438			
C36	8.853	0.000	163941	179404	BUNKERC (C10-C38)	3307558	388.11
o-terph	4.358	0.000	793359	714195	JET-A (C10-C18)	1281410	248.44
Triacon Surr	7.355	0.000	517951	549447	IT.MOIL (C24-C40)	2123637	98.83

Range Times: NW Diesel(2.280 - 5.944) NW Gas(0.895 - 2.280) NW M.Oil(5.944 - 9.389)
AK102(1.445 - 6.096) AK103(6.096 - 8.903) Jet A(1.445 - 4.268)

Surrogate	Area	Amount	%Rec
o-Terphenyl	714195	45.3	100.7
Triacontane	549447	42.8	95.1

Analyte	RF	Curve Date
o-Terph Surr	15759.4	07-APR-2011
Triacon Surr	12836.6	07-APR-2011
Gas	15975.0	20-OCT-2010
Diesel	17461.0	07-APR-2011
Motor Oil	9285.7	07-APR-2011
AK102	20219.0	07-APR-2011
AK103	8727.5	29-SEPT-2010
JetA	5157.9	13-JAN-2011
Min Oil	6438.5	20-JAN-2011
OR Diesel	25401.0	
OR M.Oil	11274.0	
IT M.Oil	21488.2	
Bunker C	8522.1	20-SEP-2010
Creosote	6396.0	17-JAN-2009

MS 4/25/11

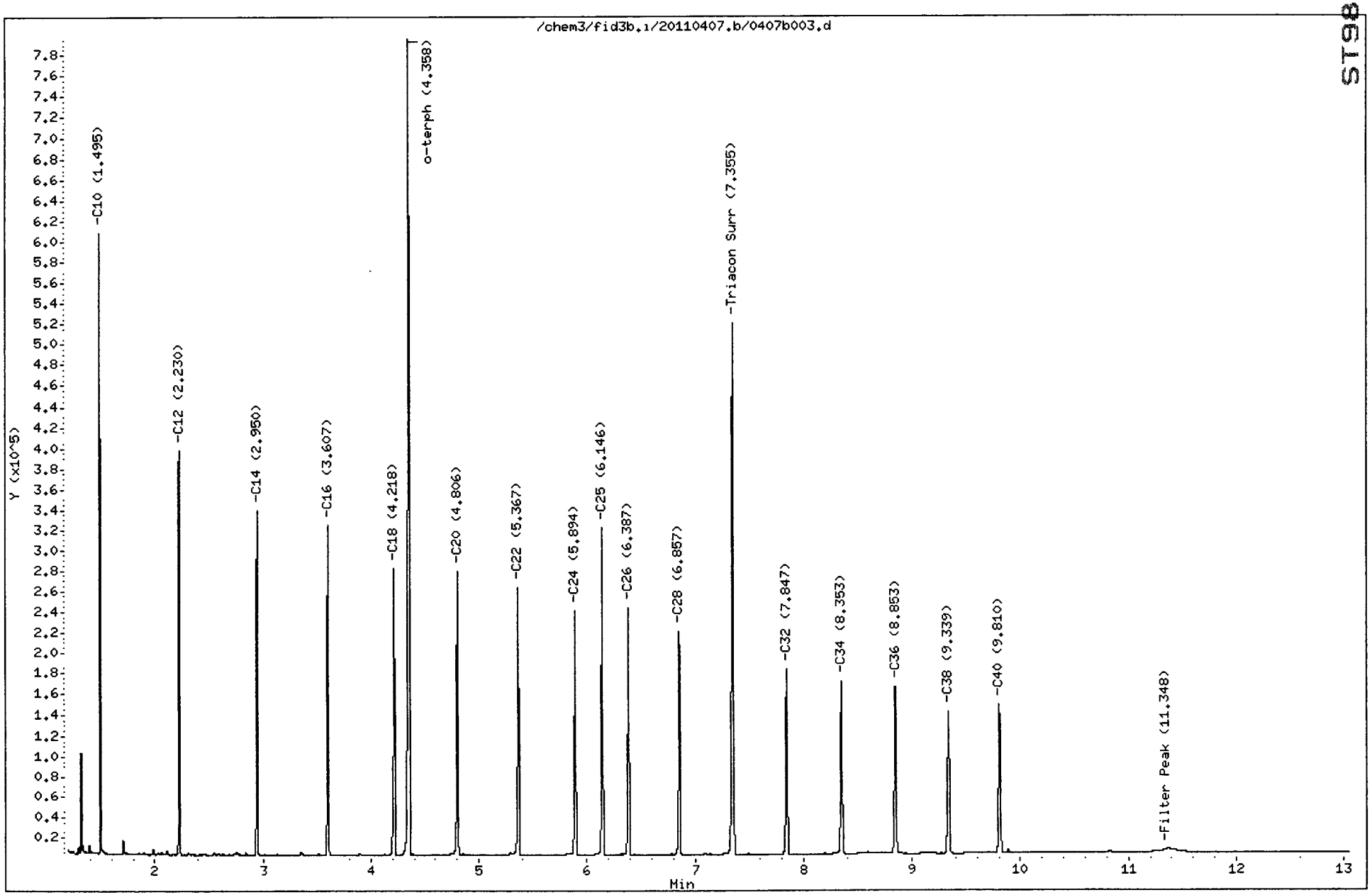
Data File: /chem3/fid3b.1/20110407.b/0407b003.d
Date : 07-APR-2011 14:16
Client ID:
Sample Info: RT

Column phase: RTX-1

Instrument: fid3b.1

Operator: MS
Column diameter: 0.25

ST98:00852



Analytical Resources Inc.
407S TPH Quantitation Report

Data file: /chem3/fid3b.i/20110407.b/0407b004.d
Method: /chem3/fid3b.i/20110407.b/ftphfid3b.m
Instrument: fid3b.i
Operator: MS
Report Date: 04/25/2011
Macro: FID:3B040711

ARI ID: IB
Client ID:
Injection: 07-APR-2011 14:38
Dilution Factor: 1

FID:3B RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	0.945	0.000	21057	10979	GAS (Tol-C12)	358391	22.43
C8	1.096	0.002	94558	35535	DIESEL (C12-C24)	47281	2.71
C10	1.492	-0.002	3930	4676	M.OIL (C24-C38)	47511	5.12
C12	2.227	-0.003	978	1017	AK-102 (C10-C25)	129106	6.39
C14	2.944	-0.006	591	421	AK-103 (C25-C36)	33061	3.79
C16	3.602	-0.006	450	569	OR.DIES (C10-C28)	133441	5.25
C18	4.215	-0.003	259	249	OR.MOIL (C28-C40)	67712	6.01
C20	4.801	-0.005	233	175	MIN.OIL (C24-C38)	47511	7.38
C22	5.363	-0.004	211	154	STODDARD (C8-C12)	242475	8.76
C24	5.889	-0.005	206	162			
C25	6.139	-0.007	265	282			
C26	6.381	-0.006	224	191			
C28	6.852	-0.005	506	452			
C32	7.841	-0.006	1921	2566			
C34	8.344	-0.009	486	843	CREOSOT (C8-C22)	45821	7.16
Filter Peak	11.349	0.002	1410	477			
C36	8.845	-0.008	612	788	BUNKERC (C10-C38)	176018	20.65
o-terph	4.358	0.000	906663	840113	JET-A (C10-C18)	121769	23.61
Triacon Surr	7.355	0.000	519268	557765	IT.MOIL (C24-C40)	630411	29.34

Range Times: NW Diesel(2.280 - 5.944) NW Gas(0.895 - 2.280) NW M.Oil(5.944 - 9.389)
AK102(1.445 - 6.096) AK103(6.096 - 8.903) Jet A(1.445 - 4.268)

Surrogate	Area	Amount	%Rec
o-Terphenyl	840113	53.3	118.5
Triacontane	557765	43.5	96.6

Analyte	RF	Curve Date
o-Terph Surr	15759.4	07-APR-2011
Triacon Surr	12836.6	07-APR-2011
Gas	15975.0	20-OCT-2010
Diesel	17461.0	07-APR-2011
Motor Oil	9285.7	07-APR-2011
AK102	20219.0	07-APR-2011
AK103	8727.5	29-SEPT-2010
JetA	5157.9	13-JAN-2011
Min Oil	6438.5	20-JAN-2011
OR Diesel	25401.0	
OR M.Oil	11274.0	
IT M.Oil	21488.2	
Bunker C	8522.1	20-SEP-2010
Creosote	6396.0	17-JAN-2009

MS 4/25/11

Data File: /chem3/fid3b.i/20110407.b/0407b004.d

Date : 07-APR-2011 14:38

Client ID:

Sample Info: IB

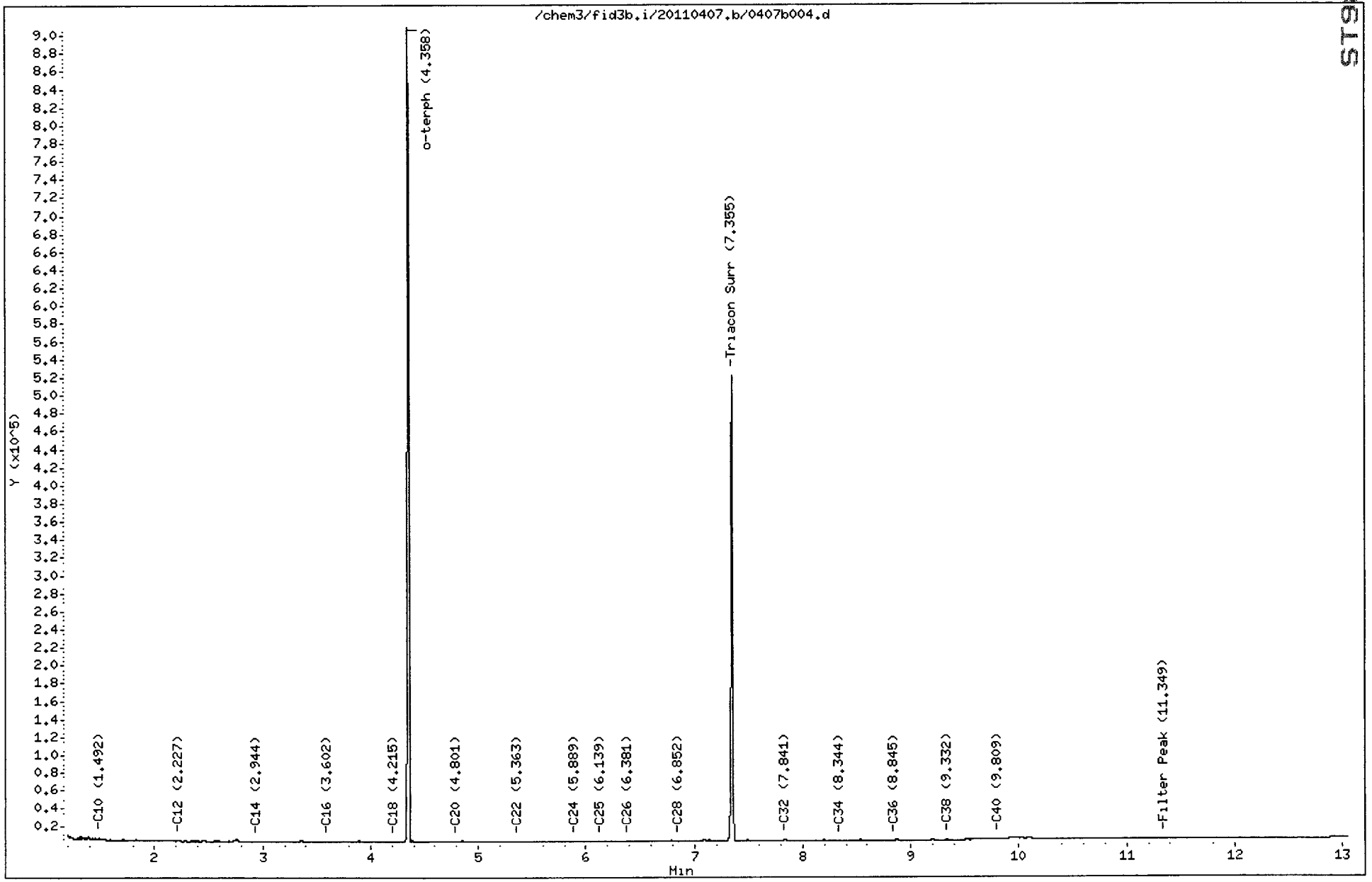
Column phase: RTX-1

Instrument: fid3b.i

Operator: MS

Column diameter: 0.25

ST98:00854



Analytical Resources Inc.
407S TPH Quantitation Report

Data file: /chem3/fid3b.i/20110407.b/0407b012.d
Method: /chem3/fid3b.i/20110407.b/ftphfid3b.m
Instrument: fid3b.i
Operator: MS
Report Date: 04/25/2011
Macro: FID:3B040711

ARI ID: MOIL 100
Client ID:
Injection: 07-APR-2011 17:36
Dilution Factor: 1

FID:3B RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc	
Toluene	0.941	-0.004	20914	5751	GAS (Tol-C12)	449241	28.12	
C8	1.096	0.002	14367	8955	DIESEL (C12-C24)	176518	10.11	
C10	1.488	-0.007	5598	7366	M.OIL (C24-C38)	954451	102.79	
C12	2.230	0.000	1189	371	AK-102 (C10-C25)	328398	16.24	
C14	2.952	0.002	606	229	AK-103 (C25-C36)	802921	92.00	M
C16	3.602	-0.005	292	168	OR.DIES (C10-C28)	551172	21.70	
C18	4.215	-0.003	171	156	OR.MOIL (C28-C40)	807697	71.64	M
C20	4.802	-0.004	510	593	MIN.OIL (C24-C38)	954451	148.24	M
C22	5.369	0.001	1602	505	STODDARD (C8-C12)	298331	10.78	
C24	5.893	-0.001	3135	1903				
C25	6.144	-0.002	4007	1989				
C26	6.389	0.002	4522	806				
C28	6.856	-0.001	5144	2403				
C32	7.843	-0.003	5800	6758				
C34	8.358	0.005	4958	976	CREOSOT (C8-C22)	98164	15.35	
Filter Peak	11.345	-0.002	1821	1334				
C36	8.854	0.001	4653	2234	BUNKERC (C10-C38)	1251290	146.83	
o-terph	4.348	-0.011	531	468	JET-A (C10-C18)	176369	34.19	
Triacon Surr	7.344	-0.011	136435	121432	IT.MOIL (C24-C40)	1183462	55.07	

Range Times: NW Diesel(2.280 - 5.944) NW Gas(0.895 - 2.280) NW M.Oil(5.944 - 9.389)
AK102(1.445 - 6.096) AK103(6.096 - 8.903) Jet A(1.445 - 4.268)

Surrogate	Area	Amount	%Rec
o-Terphenyl	468	0.0	0.1
Triacontane	121432	9.5	21.0

Analyte	RF	Curve Date
o-Terph Surr	15759.4	07-APR-2011
Triacon Surr	12836.6	07-APR-2011
Gas	15975.0	20-OCT-2010
Diesel	17461.0	07-APR-2011
Motor Oil	9285.7	07-APR-2011
AK102	20219.0	07-APR-2011
AK103	8727.5	29-SEPT-2010
JetA	5157.9	13-JAN-2011
Min Oil	6438.5	20-JAN-2011
OR Diesel	25401.0	
OR M.Oil	11274.0	
IT M.Oil	21488.2	
Bunker C	8522.1	20-SEP-2010
Creosote	6396.0	17-JAN-2009

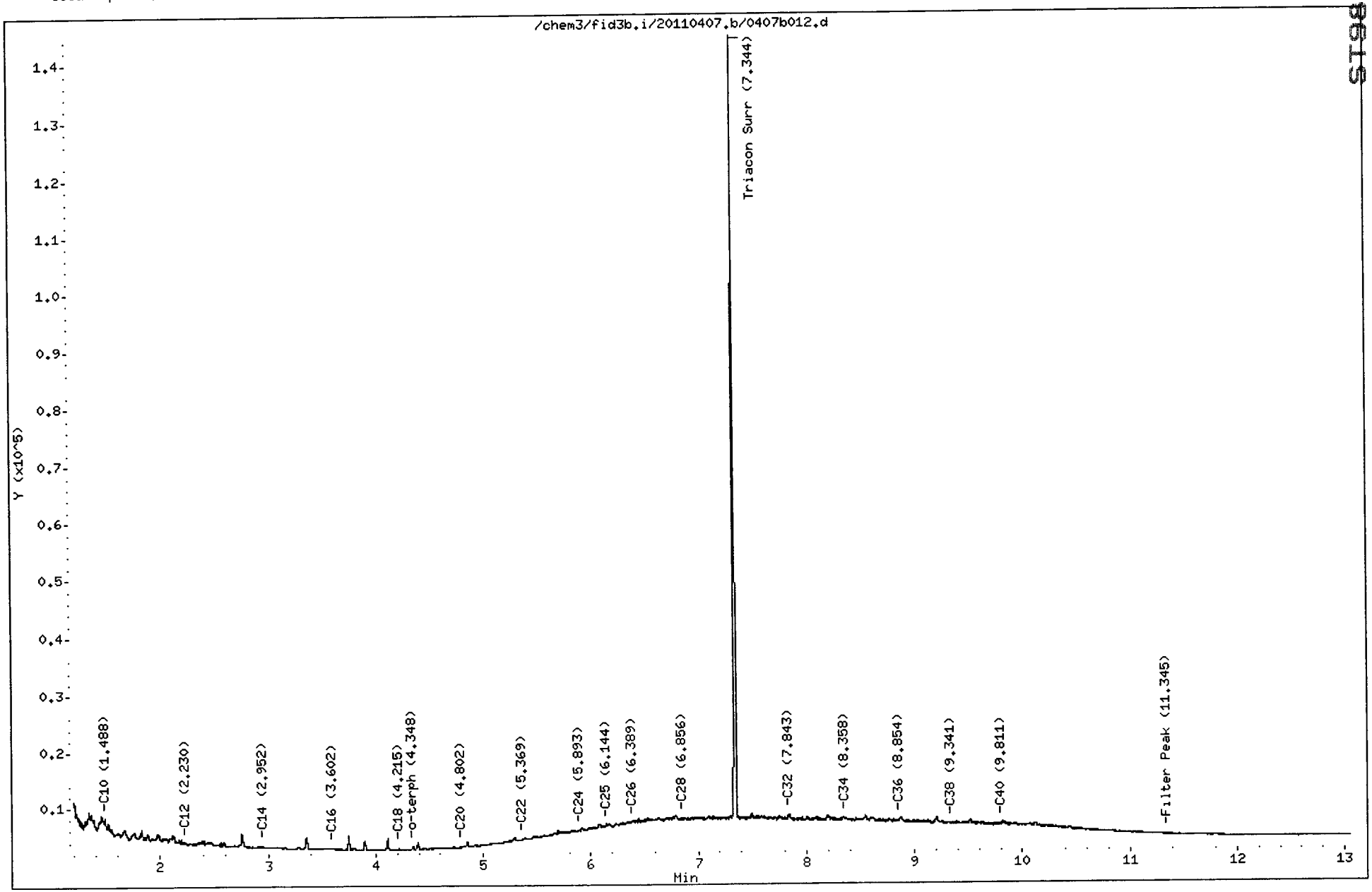
Data File: /chem3/fid3b.i/20110407.b/0407b012.d
Date : 07-APR-2011 17:36
Client ID:
Sample Info: MOIL 100

Column phase: RTX-1

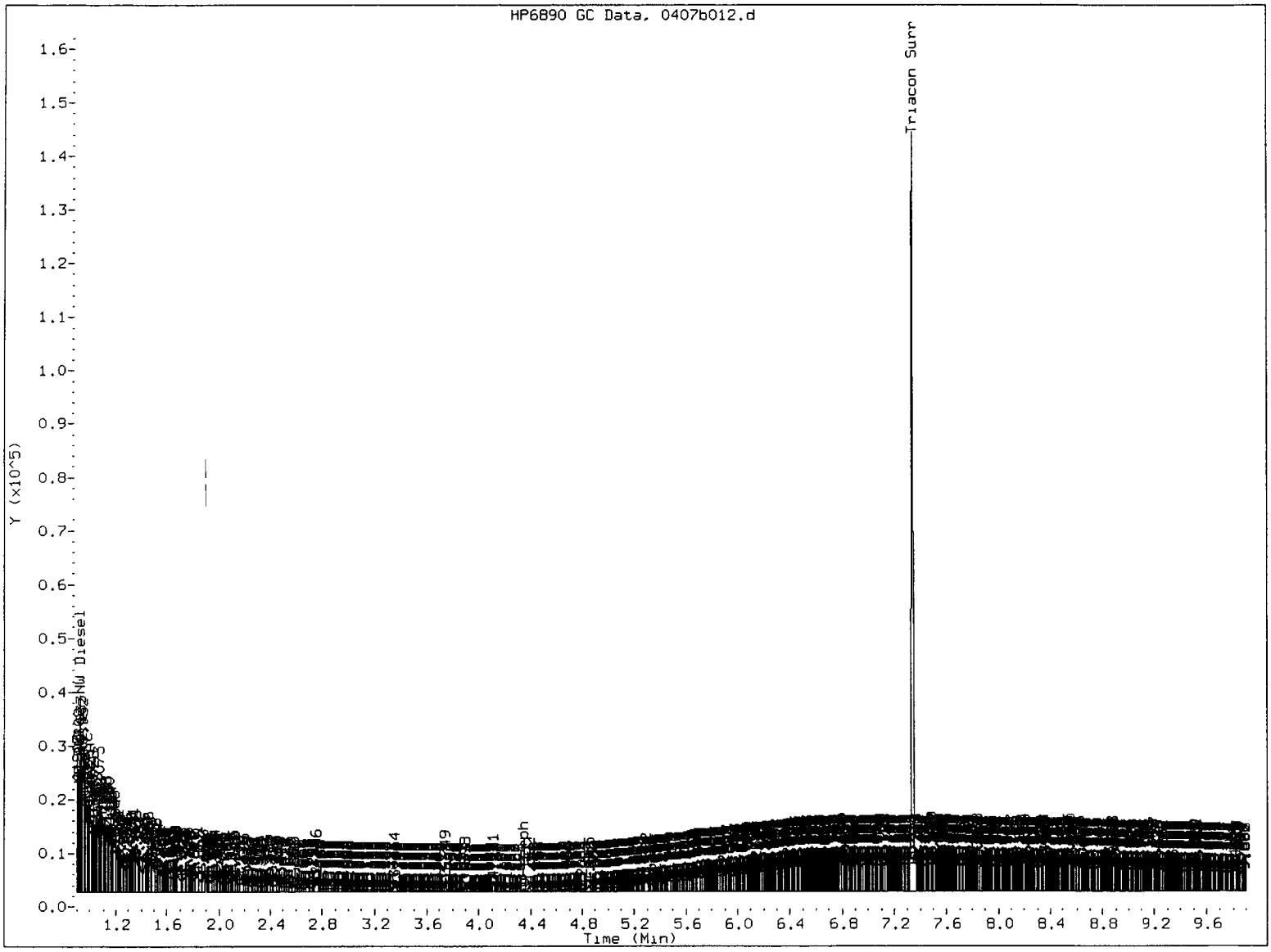
Instrument: fid3b.i

Operator: MS
Column diameter: 0.25

STD: 00856



FID:3B-2C/RTX-1 MOIL 100 FID:3B SIGNAL



MANUAL INTEGRATION

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

5. Other _____

Analyst: _____ Date: 4/25/11

Analytical Resources Inc.
407S TPH Quantitation Report

Data file: /chem3/fid3b.i/20110407.b/0407b013.d
Method: /chem3/fid3b.i/20110407.b/ftphfid3b.m
Instrument: fid3b.i
Operator: MS
Report Date: 04/25/2011
Macro: FID:3B040711

ARI ID: MOIL 250
Client ID:
Injection: 07-APR-2011 17:58
Dilution Factor: 1

FID:3B RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc	
Toluene	0.939	-0.007	25983	13194	GAS (Tol-C12)	434855	27.22	
C8	1.089	-0.004	12443	6310	DIESEL (C12-C24)	339806	19.46	
C10	1.488	-0.007	5671	7145	M.OIL (C24-C38)	2200876	237.02	
C12	2.232	0.002	1292	1042	AK-102 (C10-C25)	531547	26.29	
C14	2.952	0.002	600	354	AK-103 (C25-C36)	1846988	211.63	M
C16	3.602	-0.005	277	81	OR.DIES (C10-C28)	1042975	41.06	
C18	4.213	-0.005	242	160	OR.MOIL (C28-C40)	1864650	165.39	M
C20	4.801	-0.005	1114	1053	MIN.OIL (C24-C38)	2200876	341.83	M
C22	5.367	0.000	3856	3736	STODDARD (C8-C12)	302018	10.92	
C24	5.894	0.001	7302	4043				
C25	6.150	0.004	9308	5856				
C26	6.392	0.005	10605	4169				
C28	6.854	-0.003	11992	3918				
C32	7.848	0.001	12768	7997				
C34	8.356	0.003	11914	5833	CREOSOT (C8-C22)	158166	24.73	
Filter Peak	11.345	-0.003	3339	2857				
C36	8.853	0.000	10763	5392	BUNKERC (C10-C38)	2659974	312.13	
o-terph	4.347	-0.011	592	644	JET-A (C10-C18)	178502	34.61	
Triacon Surr	7.350	-0.005	287785	278195	IT.MOIL (C24-C40)	2726723	126.89	

Range Times: NW Diesel(2.280 - 5.944) NW Gas(0.895 - 2.280) NW M.Oil(5.944 - 9.389)
AK102(1.445 - 6.096) AK103(6.096 - 8.903) Jet A(1.445 - 4.268)

Surrogate	Area	Amount	%Rec
o-Terphenyl	644	0.0	0.1
Triacontane	278195	21.7	48.2

Analyte	RF	Curve Date
o-Terph Surr	15759.4	07-APR-2011
Triacon Surr	12836.6	07-APR-2011
Gas	15975.0	20-OCT-2010
Diesel	17461.0	07-APR-2011
Motor Oil	9285.7	07-APR-2011
AK102	20219.0	07-APR-2011
AK103	8727.5	29-SEPT-2010
JetA	5157.9	13-JAN-2011
Min Oil	6438.5	20-JAN-2011
OR Diesel	25401.0	
OR M.Oil	11274.0	
IT M.Oil	21488.2	
Bunker C	8522.1	20-SEP-2010
Creosote	6396.0	17-JAN-2009

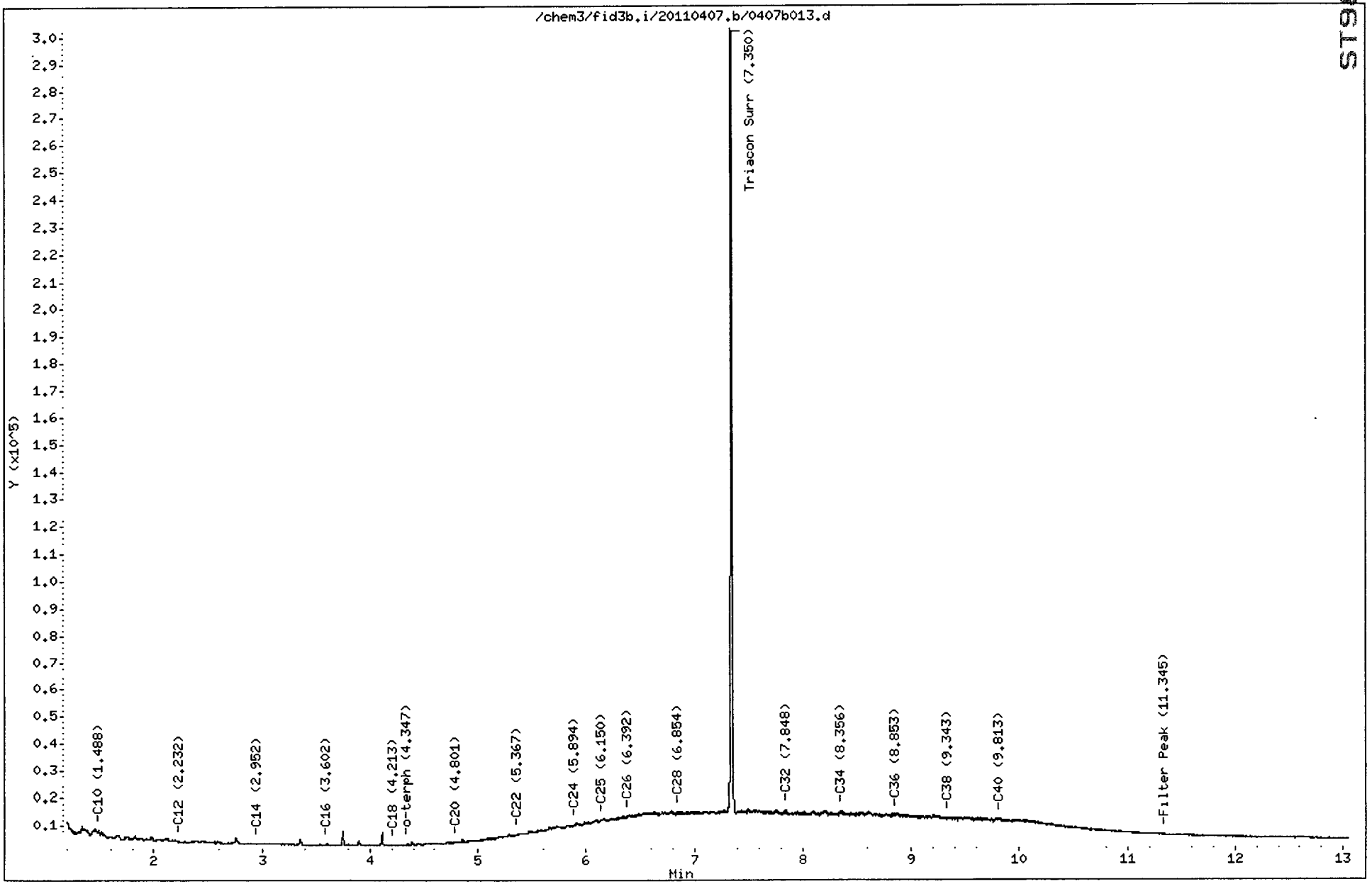
Data File: /chem3/fid3b.i/20110407.b/0407b013.d
Date : 07-APR-2011 17:58
Client ID:
Sample Info: MOIL 250

Column phase: RTX-1

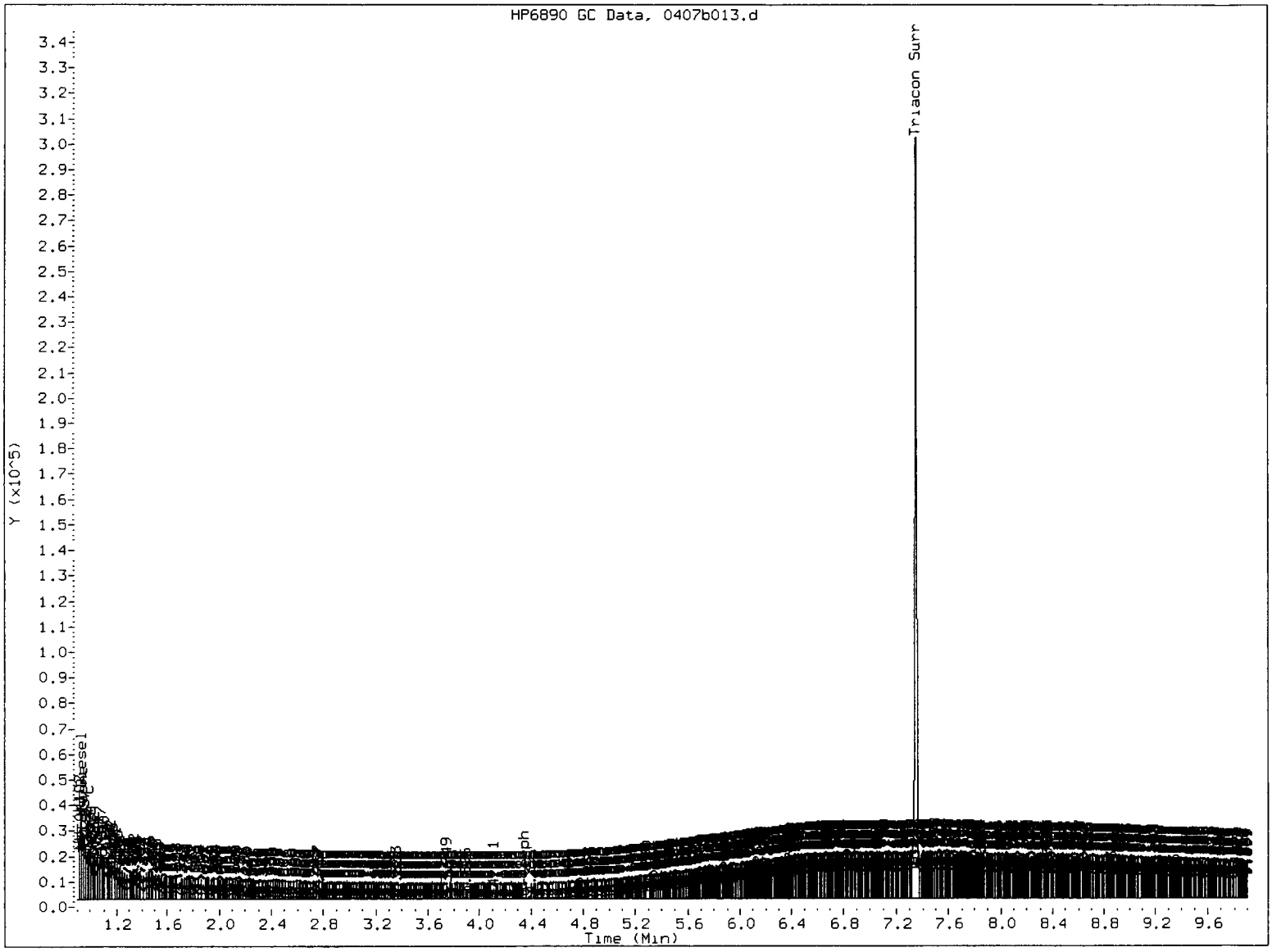
Instrument: fid3b.i

Operator: MS
Column diameter: 0.25

ST98:00859



FID:3B-2C/RTX-1 MOIL 250 FID:3B SIGNAL



MANUAL INTEGRATION

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

5. Other _____

Analyst: MS Date: 4/20/11

Analytical Resources Inc.
407S TPH Quantitation Report

Data file: /chem3/fid3b.i/20110407.b/0407b014.d
Method: /chem3/fid3b.i/20110407.b/ftphfid3b.m
Instrument: fid3b.i
Operator: MS
Report Date: 04/25/2011
Macro: FID:3B040711

ARI ID: MOIL 500
Client ID:
Injection: 07-APR-2011 18:20
Dilution Factor: 1

FID:3B RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc	
Toluene	0.956	0.011	23076	26150	GAS (Tol-C12)	416074	26.05	
C8	1.090	-0.003	12219	6544	DIESEL (C12-C24)	650232	37.24	
C10	1.490	-0.005	5781	7468	M.OIL (C24-C38)	4519944	486.76	
C12	2.229	-0.001	1284	347	AK-102 (C10-C25)	916653	45.34	
C14	2.950	0.000	686	674	AK-103 (C25-C36)	3790393	434.31	M
C16	3.604	-0.003	310	323	OR.DIES (C10-C28)	1967103	77.44	
C18	4.215	-0.003	442	483	OR.MOIL (C28-C40)	3836306	340.28	M
C20	4.802	-0.004	2279	2845	MIN.OIL (C24-C38)	4519944	702.02	M
C22	5.366	-0.001	7686	914	STODDARD (C8-C12)	297096	10.74	
C24	5.891	-0.002	14952	7992				
C25	6.143	-0.003	18437	7941				
C26	6.391	0.004	21195	4203				
C28	6.854	-0.003	24496	17687				
C32	7.845	-0.001	24436	7660				
C34	8.352	-0.001	25064	19189	CREOSOT (C8-C22)	273853	42.82	
Filter Peak	11.347	-0.001	5491	874				
C36	8.856	0.003	22394	13354	BUNKERC (C10-C38)	5288975	620.62	
o-terph	4.363	0.005	364	124	JET-A (C10-C18)	185758	36.01	
Triacon Surr	7.361	0.006	509069	570157	IT.MOIL (C24-C40)	5604536	260.82	

Range Times: NW Diesel(2.280 - 5.944) NW Gas(0.895 - 2.280) NW M.Oil(5.944 - 9.389)
AK102(1.445 - 6.096) AK103(6.096 - 8.903) Jet A(1.445 - 4.268)

Surrogate	Area	Amount	%Rec
o-Terphenyl	124	0.0	0.0
Triacontane	570157	44.4	98.7

Analyte	RF	Curve Date
o-Terph Surr	15759.4	07-APR-2011
Triacon Surr	12836.6	07-APR-2011
Gas	15975.0	20-OCT-2010
Diesel	17461.0	07-APR-2011
Motor Oil	9285.7	07-APR-2011
AK102	20219.0	07-APR-2011
AK103	8727.5	29-SEPT-2010
JetA	5157.9	13-JAN-2011
Min Oil	6438.5	20-JAN-2011
OR Diesel	25401.0	
OR M.Oil	11274.0	
IT M.Oil	21488.2	
Bunker C	8522.1	20-SEP-2010
Creosote	6396.0	17-JAN-2009

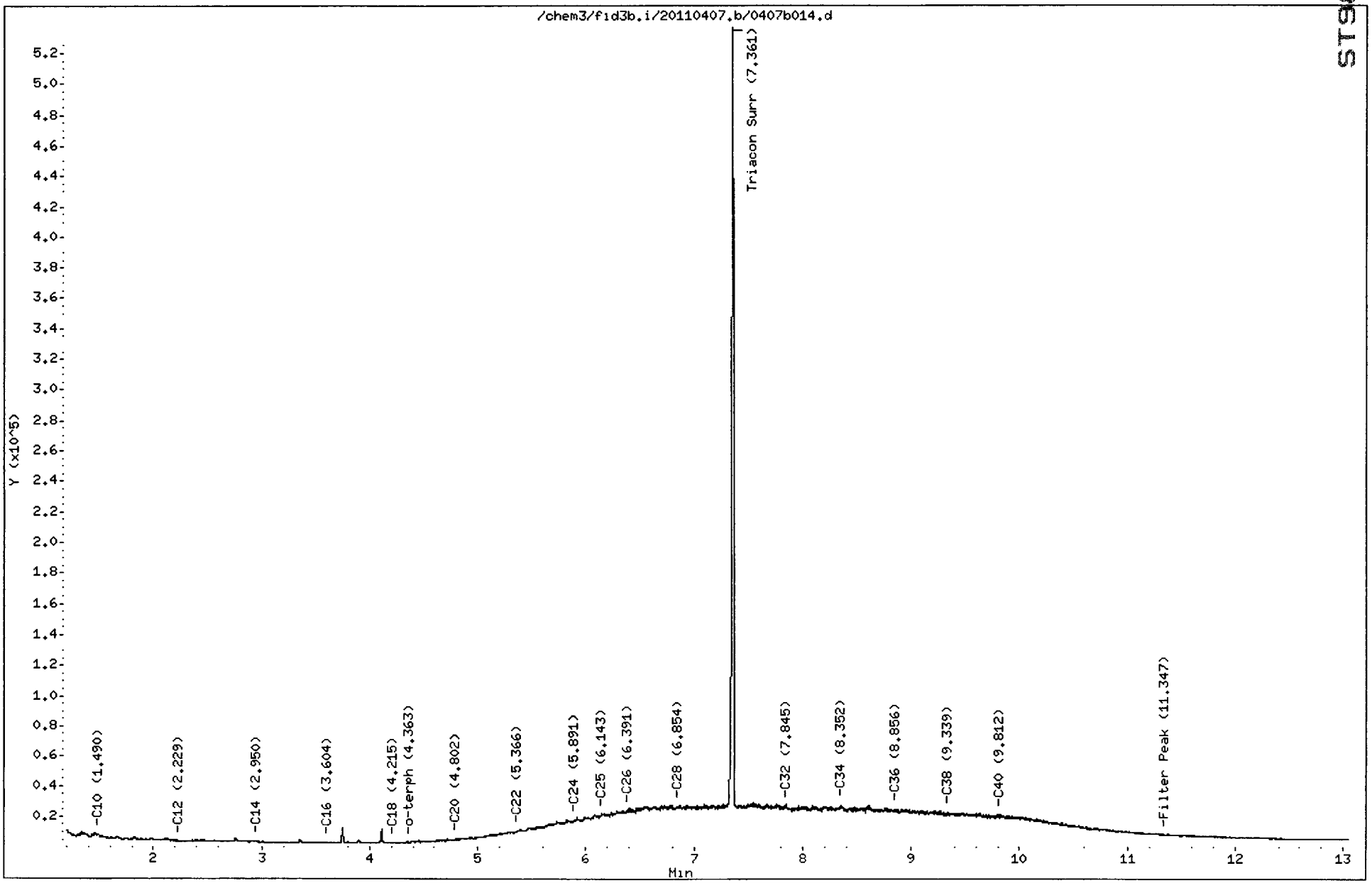
Data File: /chem3/fid3b.i/20110407.b/0407b014.d
Date : 07-APR-2011 18:20
Client ID:
Sample Info: MOIL 500

Column phase: RTX-1

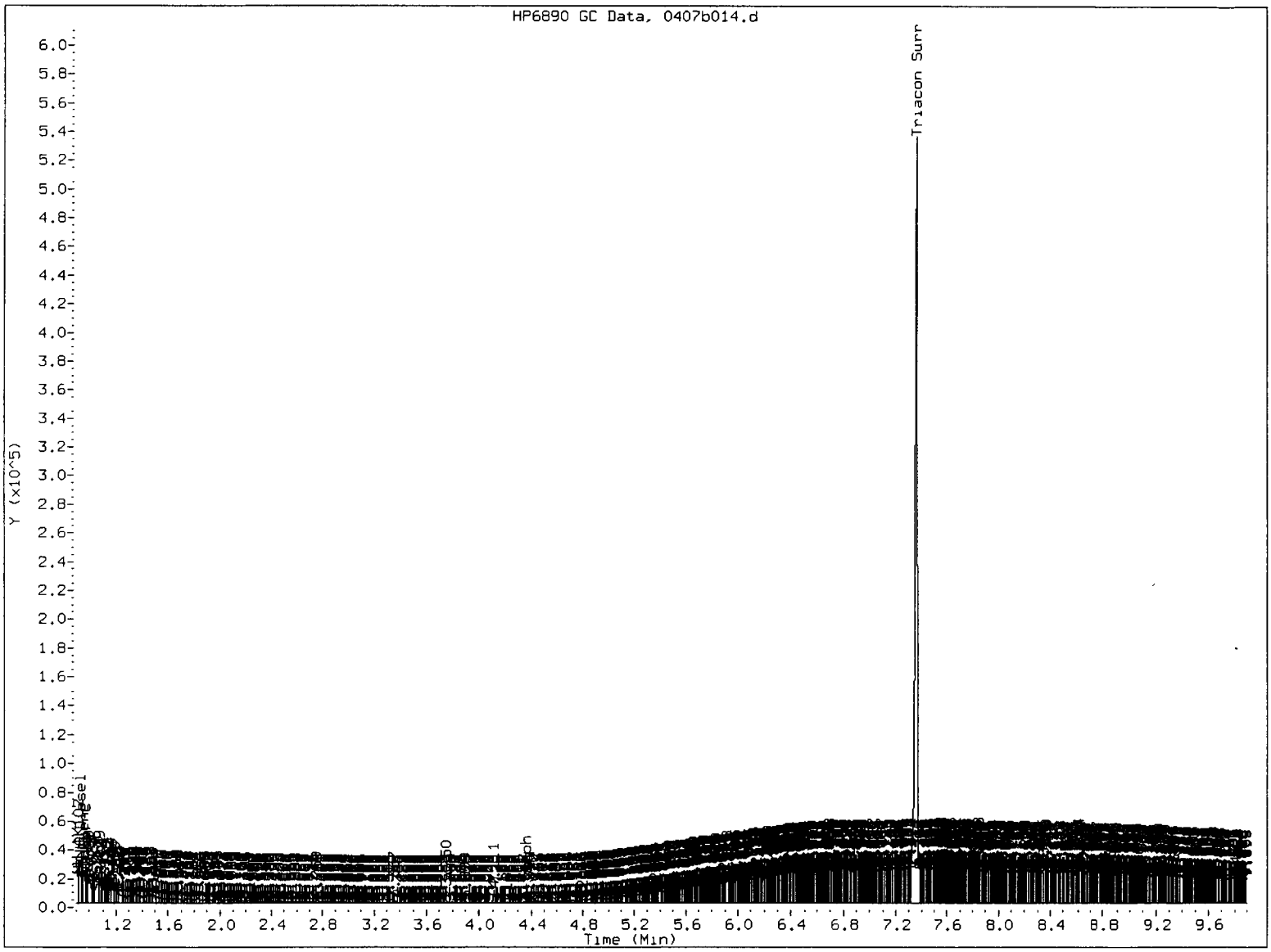
Instrument: fid3b.i

Operator: MS
Column diameter: 0.25

ST98:00862



FID:3B-2C/RTX-1 MOIL 500 FID:3B SIGNAL



MANUAL INTEGRATION

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

5. Other _____

Analyst: _____ Date: 4/25/11

Analytical Resources Inc.
407S TPH Quantitation Report

Data file: /chem3/fid3b.i/20110407.b/0407b015.d
Method: /chem3/fid3b.i/20110407.b/ftphfid3b.m
Instrument: fid3b.i
Operator: MS
Report Date: 04/25/2011
Macro: FID:3B040711

ARI ID: MOIL 1000
Client ID:
Injection: 07-APR-2011 18:42
Dilution Factor: 1

FID:3B RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc	
Toluene	0.953	0.007	23191	29989	GAS (Tol-C12)	429687	26.90	
C8	1.098	0.004	13017	8240	DIESEL (C12-C24)	1144004	65.52	
C10	1.493	-0.002	6207	8118	M.OIL (C24-C38)	9059005	975.58	
C12	2.232	0.002	1595	2335	AK-102 (C10-C25)	1532967	75.82	
C14	2.950	0.001	866	1184	AK-103 (C25-C36)	7548871	864.95	M
C16	3.606	-0.001	392	341	OR.DIES (C10-C28)	3492705	137.50	
C18	4.215	-0.003	808	936	OR.MOIL (C28-C40)	7897270	700.49	M
C20	4.804	-0.002	4155	3758	MIN.OIL (C24-C38)	9059005	1407.01	M
C22	5.366	-0.002	13837	4596	STODDARD (C8-C12)	291950	10.55	
C24	5.892	-0.002	27724	12784				
C25	6.147	0.001	34959	17629				
C26	6.388	0.001	40479	8760				
C28	6.859	0.002	45766	17967				
C32	7.842	-0.005	49971	41113				
C34	8.354	0.001	50429	15018	CREOSOT (C8-C22)	458678	71.71	
Filter Peak	11.350	0.002	10854	3664				
C36	8.857	0.004	47329	17235	BUNKERC (C10-C38)	10320914	1211.07	
o-terph	4.349	-0.009	1296	1873	JET-A (C10-C18)	196199	38.04	
Triacon Surr	7.374	0.019	830433	1102372	IT.MOIL (C24-C40)	11230439	522.63	

Range Times: NW Diesel(2.280 - 5.944) NW Gas(0.895 - 2.280) NW M.Oil(5.944 - 9.389)
AK102(1.445 - 6.096) AK103(6.096 - 8.903) Jet A(1.445 - 4.268)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1873	0.1	0.3
Triacontane	1102372	85.9	190.8

Analyte	RF	Curve Date
o-Terph Surr	15759.4	07-APR-2011
Triacon Surr	12836.6	07-APR-2011
Gas	15975.0	20-OCT-2010
Diesel	17461.0	07-APR-2011
Motor Oil	9285.7	07-APR-2011
AK102	20219.0	07-APR-2011
AK103	8727.5	29-SEPT-2010
JetA	5157.9	13-JAN-2011
Min Oil	6438.5	20-JAN-2011
OR Diesel	25401.0	
OR M.Oil	11274.0	
IT M.Oil	21488.2	
Bunker C	8522.1	20-SEP-2010
Creosote	6396.0	17-JAN-2009

Data File: /chem3/fid3b.i/20110407.b/0407b015.d

Date : 07-APR-2011 18:42

Client ID:

Sample Info: MOIL 1000

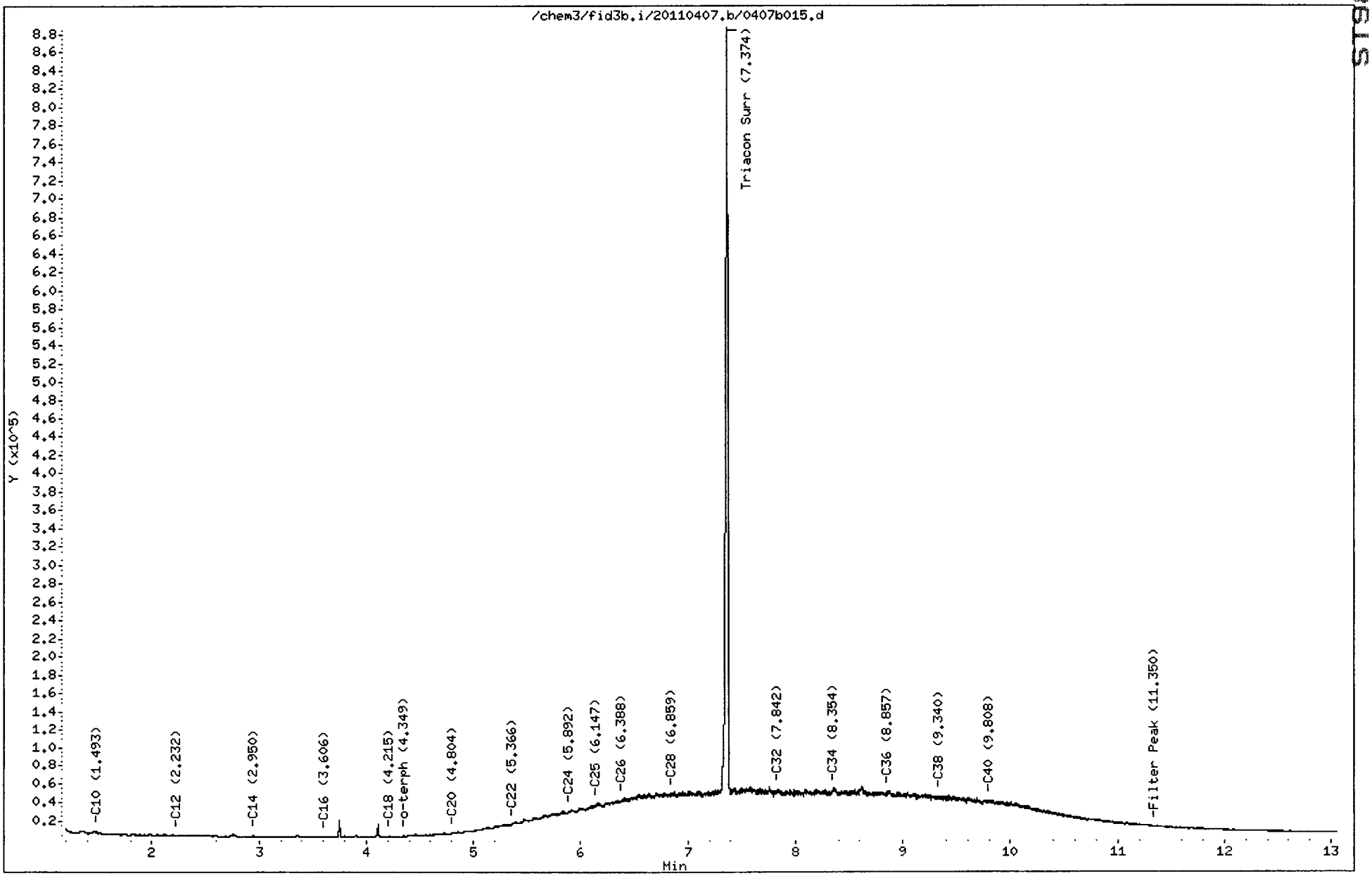
Column phase: RTX-1

Instrument: fid3b.i

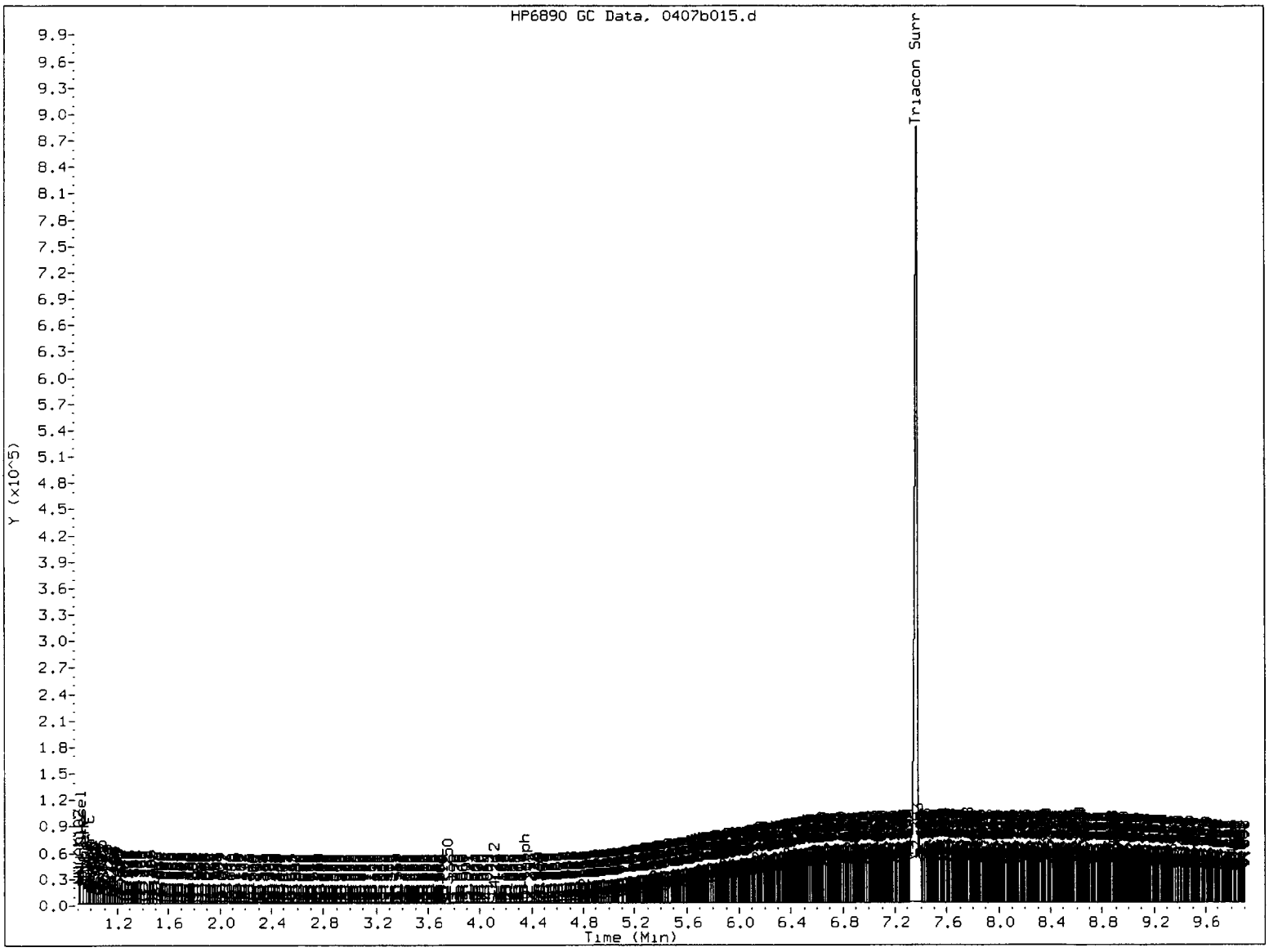
Operator: MS

Column diameter: 0.25

ST98:00865



FID:3B-2C/RTX-1 MOIL 1000 FID:3B SIGNAL



MANUAL INTEGRATION

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

5. Other _____

Analyst: _____ Date: 4/25/11

Analytical Resources Inc.
407S TPH Quantitation Report

Data file: /chem3/fid3b.i/20110407.b/0407b016.d
Method: /chem3/fid3b.i/20110407.b/ftphfid3b.m
Instrument: fid3b.i
Operator: MS
Report Date: 04/25/2011
Macro: FID:3B040711

ARI ID: MOIL 2500
Client ID:
Injection: 07-APR-2011 19:04
Dilution Factor: 1

FID:3B RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc	
Toluene	0.954	0.009	22613	17244	GAS (Tol-C12)	409400	25.63	
C8	1.098	0.005	12516	7999	DIESEL (C12-C24)	2769456	158.61	
C10	1.493	-0.002	7808	7049	M.OIL (C24-C38)	24838485	2674.91	
C12	2.231	0.001	2236	2131	AK-102 (C10-C25)	3592899	177.70	
C14	2.949	0.000	1390	1686	AK-103 (C25-C36)	20718294	2373.91	M
C16	3.605	-0.002	646	567	OR.DIES (C10-C28)	8667426	341.22	
C18	4.215	-0.003	1919	2681	OR.MOIL (C28-C40)	22060877	1956.79	M
C20	4.805	-0.001	10912	9966	MIN.OIL (C24-C38)	24838485	3857.82	M
C22	5.363	-0.004	35109	13668	STODDARD (C8-C12)	275949	9.97	
C24	5.894	0.001	68570	29442				
C25	6.145	-0.001	89406	50638				
C26	6.388	0.001	103959	52931				
C28	6.860	0.003	124998	50044				
C32	7.849	0.003	142938	44366				
C34	8.352	-0.001	138291	65402	CREOSOT (C8-C22)	1086146	169.82	
Filter Peak	11.344	-0.003	26459	18758				
C36	8.859	0.006	127697	49080	BUNKERC (C10-C38)	27719431	3252.64	
o-terph	4.349	-0.009	2941	5803	JET-A (C10-C18)	239012	46.34	
Triacon Surr	7.400	0.045	1530809	3016705	IT.MOIL (C24-C40)	30864061	1436.32	

Range Times: NW Diesel(2.280 - 5.944) NW Gas(0.895 - 2.280) NW M.Oil(5.944 - 9.389)
AK102(1.445 - 6.096) AK103(6.096 - 8.903) Jet A(1.445 - 4.268)

Surrogate	Area	Amount	%Rec
o-Terphenyl	5803	0.4	0.8
Triacontane	3016705	235.0	522.2

Analyte	RF	Curve Date
o-Terph Surr	15759.4	07-APR-2011
Triacon Surr	12836.6	07-APR-2011
Gas	15975.0	20-OCT-2010
Diesel	17461.0	07-APR-2011
Motor Oil	9285.7	07-APR-2011
AK102	20219.0	07-APR-2011
AK103	8727.5	29-SEPT-2010
JetA	5157.9	13-JAN-2011
Min Oil	6438.5	20-JAN-2011
OR Diesel	25401.0	
OR M.Oil	11274.0	
IT M.Oil	21488.2	
Bunker C	8522.1	20-SEP-2010
Creosote	6396.0	17-JAN-2009

Data File: /chem3/fid3b.i/20110407.b/0407b016.d

Date : 07-APR-2011 19:04

Client ID:

Sample Info: MOIL 2500

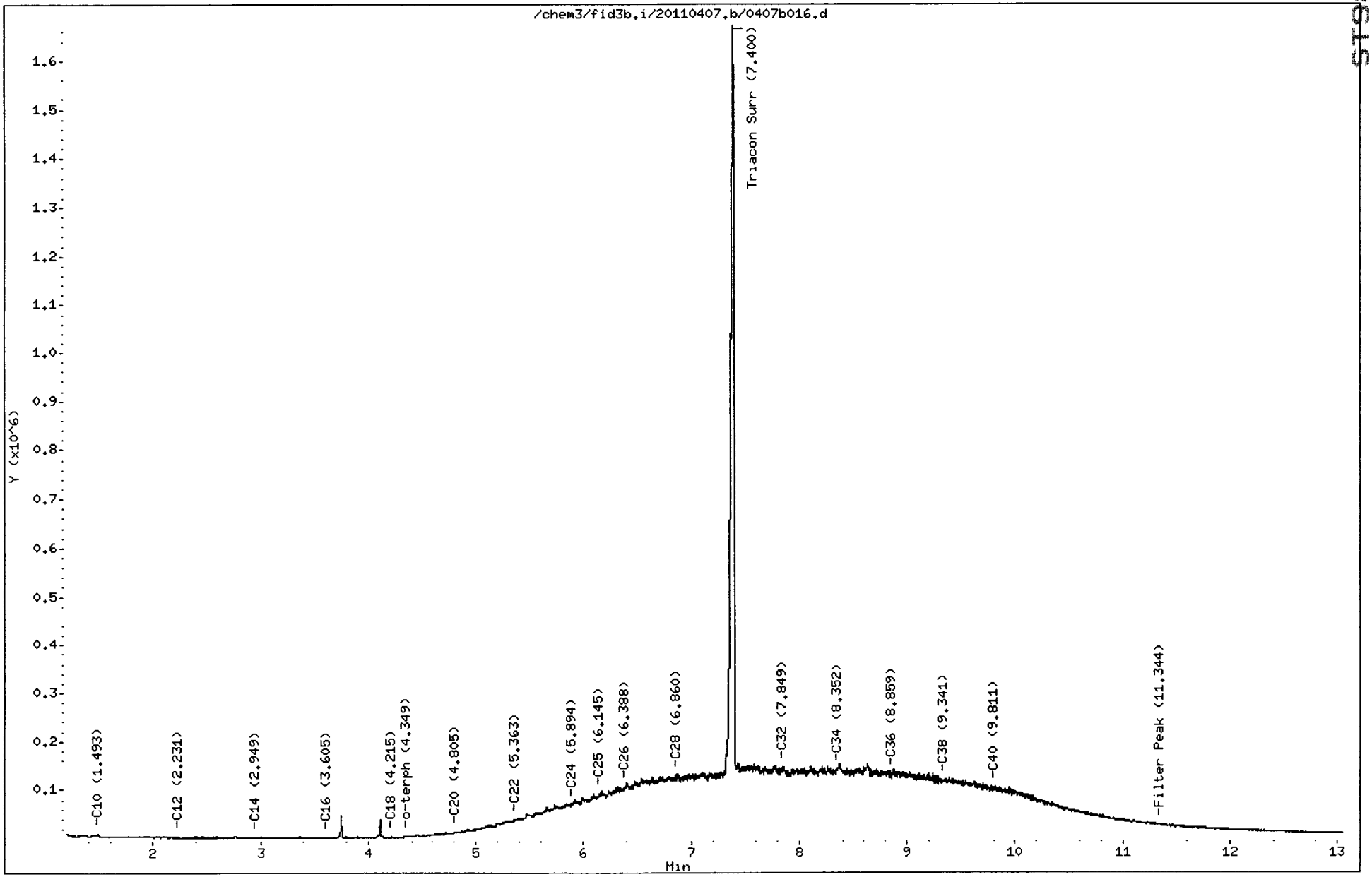
Column phase: RTX-1

Instrument: fid3b.i

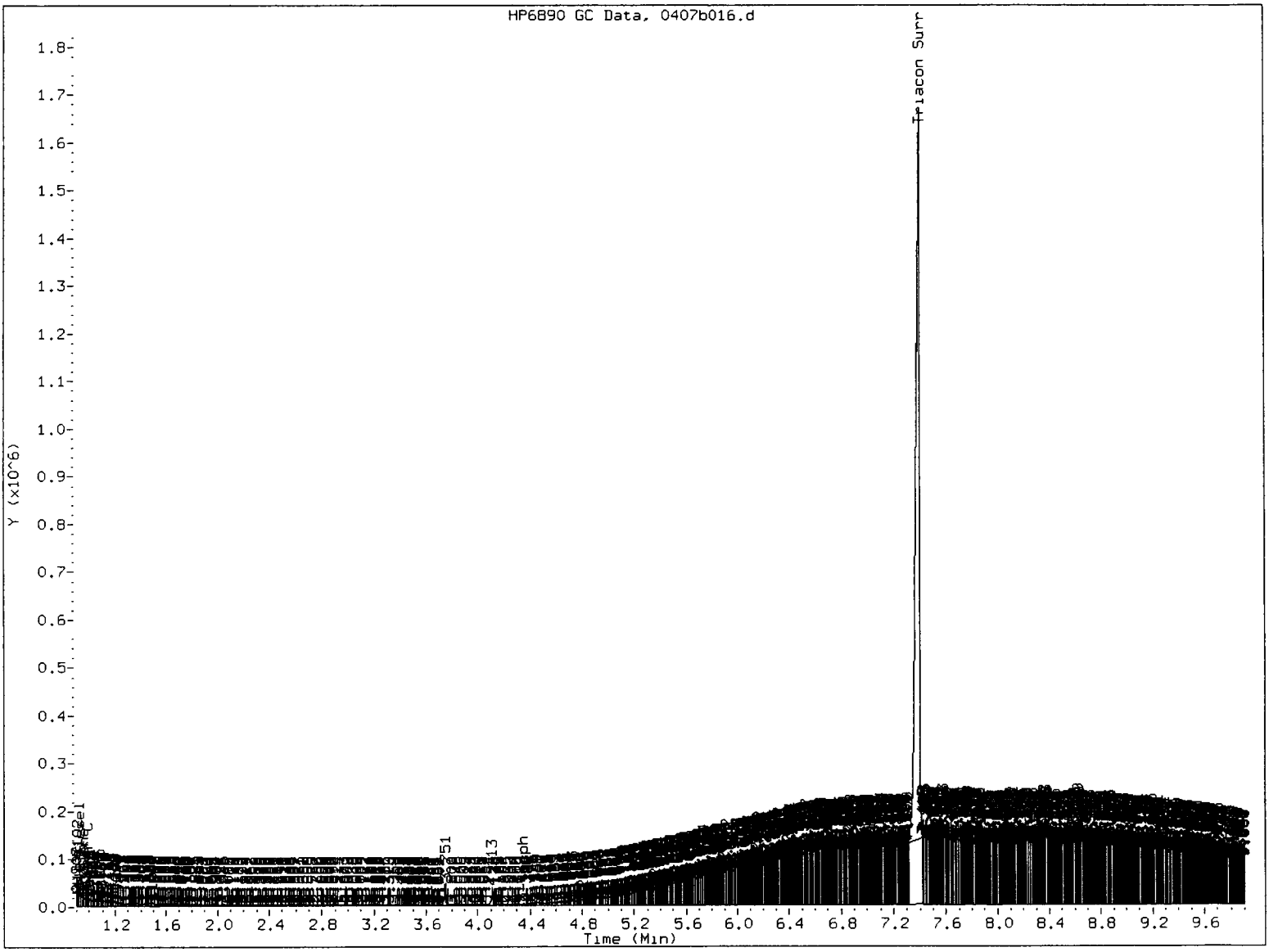
Operator: MS

Column diameter: 0.25

ST98 : 00868



FID:3B-2C/RTX-1 MOIL 2500 FID:3B SIGNAL



MANUAL INTEGRATION

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

5. Other _____

Analyst: _____ Date: 4/25/11

Analytical Resources Inc.
407S TPH Quantitation Report

Data file: /chem3/fid3b.i/20110407.b/0407b018.d
Method: /chem3/fid3b.i/20110407.b/ftphfid3b.m
Instrument: fid3b.i
Operator: MS
Report Date: 04/25/2011
Macro: FID:3B040711

ARI ID: MOIL ICV
Client ID:
Injection: 07-APR-2011 19:48
Dilution Factor: 1

FID:3B RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc	
Toluene	0.947	0.002	18977	4903	GAS (Tol-C12)	374196	23.42	
C8	1.089	-0.005	11024	5752	DIESEL (C12-C24)	668451	38.28	
C10	1.487	-0.008	5038	5389	M.OIL (C24-C38)	4768575	513.54	
C12	2.231	0.000	1207	826	AK-102 (C10-C25)	914216	45.22	
C14	2.949	-0.001	637	881	AK-103 (C25-C36)	4045050	463.48	M
C16	3.604	-0.003	303	286	OR.DIES (C10-C28)	2047332	80.60	
C18	4.213	-0.005	449	426	OR.MOIL (C28-C40)	4002424	355.01	M
C20	4.803	-0.003	2388	2745	MIN.OIL (C24-C38)	4768575	740.64	M
C22	5.369	0.001	8198	3217	STODDARD (C8-C12)	259267	9.37	
C24	5.895	0.001	15233	2414				
C25	6.148	0.002	19738	3917				
C26	6.389	0.001	22688	5402				
C28	6.855	-0.002	26143	5626				
C32	7.848	0.001	27211	10712				
C34	8.354	0.000	26202	7158	CREOSOT (C8-C22)	274271	42.88	
Filter Peak	11.345	-0.003	5875	2207				
C36	8.853	0.000	21984	5664	BUNKERC (C10-C38)	5541100	650.20	
o-terph	4.347	-0.012	850	1235	JET-A (C10-C18)	163526	31.70	
Triacon Surr	7.360	0.005	584574	608857	IT.MOIL (C24-C40)	5886088	273.92	

Range Times: NW Diesel(2.280 - 5.944) NW Gas(0.895 - 2.280) NW M.Oil(5.944 - 9.389)
AK102(1.445 - 6.096) AK103(6.096 - 8.903) Jet A(1.445 - 4.268)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1235	0.1	0.2
Triacontane	608857	47.4	105.4

Analyte	RF	Curve Date
o-Terph Surr	15759.4	07-APR-2011
Triacon Surr	12836.6	07-APR-2011
Gas	15975.0	20-OCT-2010
Diesel	17461.0	07-APR-2011
Motor Oil	9285.7	07-APR-2011
AK102	20219.0	07-APR-2011
AK103	8727.5	29-SEPT-2010
JetA	5157.9	13-JAN-2011
Min Oil	6438.5	20-JAN-2011
OR Diesel	25401.0	
OR M.Oil	11274.0	
IT M.Oil	21488.2	
Bunker C	8522.1	20-SEP-2010
Creosote	6396.0	17-JAN-2009

Data File: /chem3/fid3b.i/20110407.b/0407b018.d

Date : 07-APR-2011 19:48

Client ID:

Sample Info: MOIL ICV

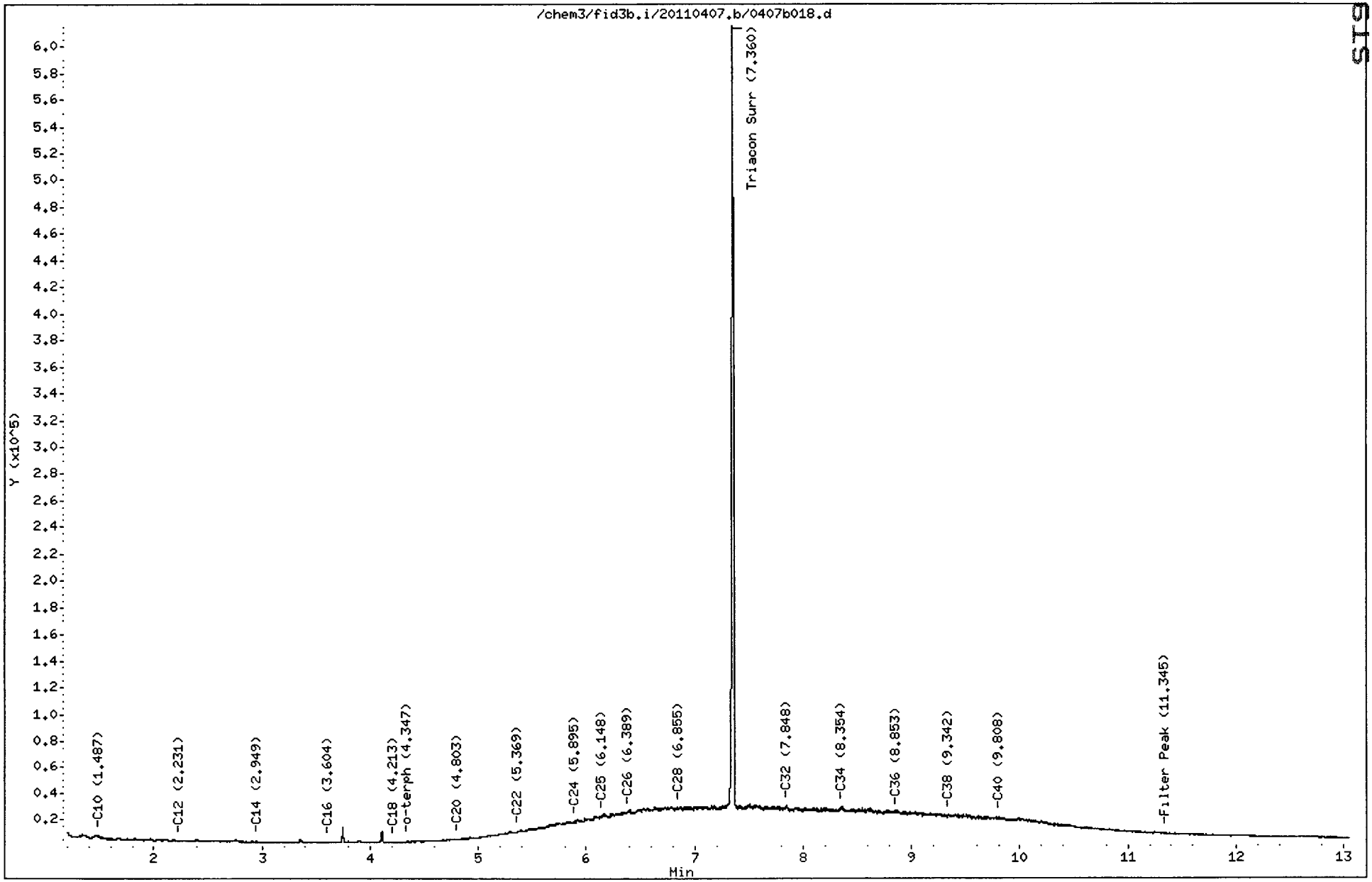
Column phase: RTX-1

Instrument: fid3b.1

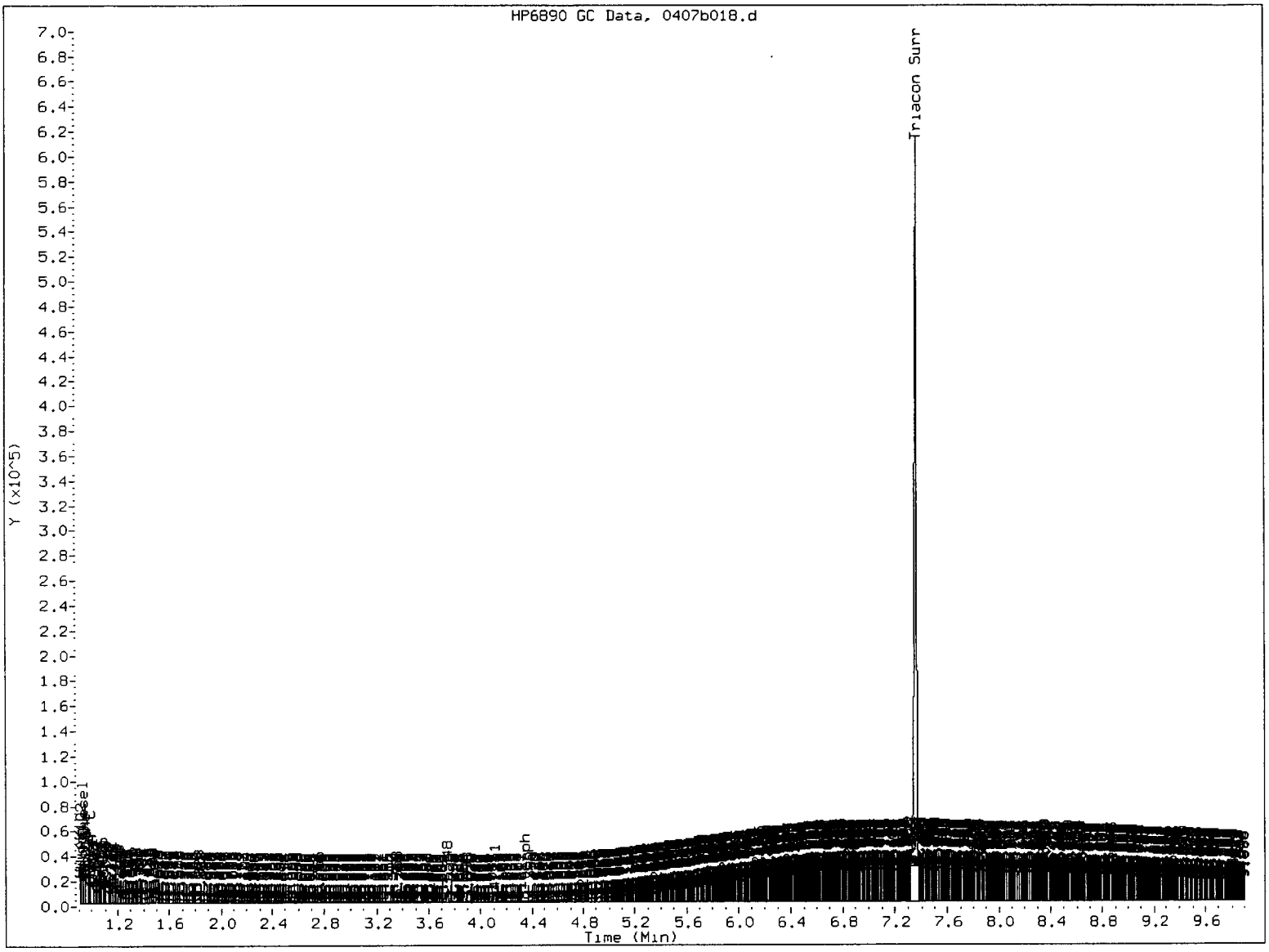
Operator: MS

Column diameter: 0.25

ST98:00871



FID:3B-2C/RTX-1 MOIL ICV FID:3B SIGNAL



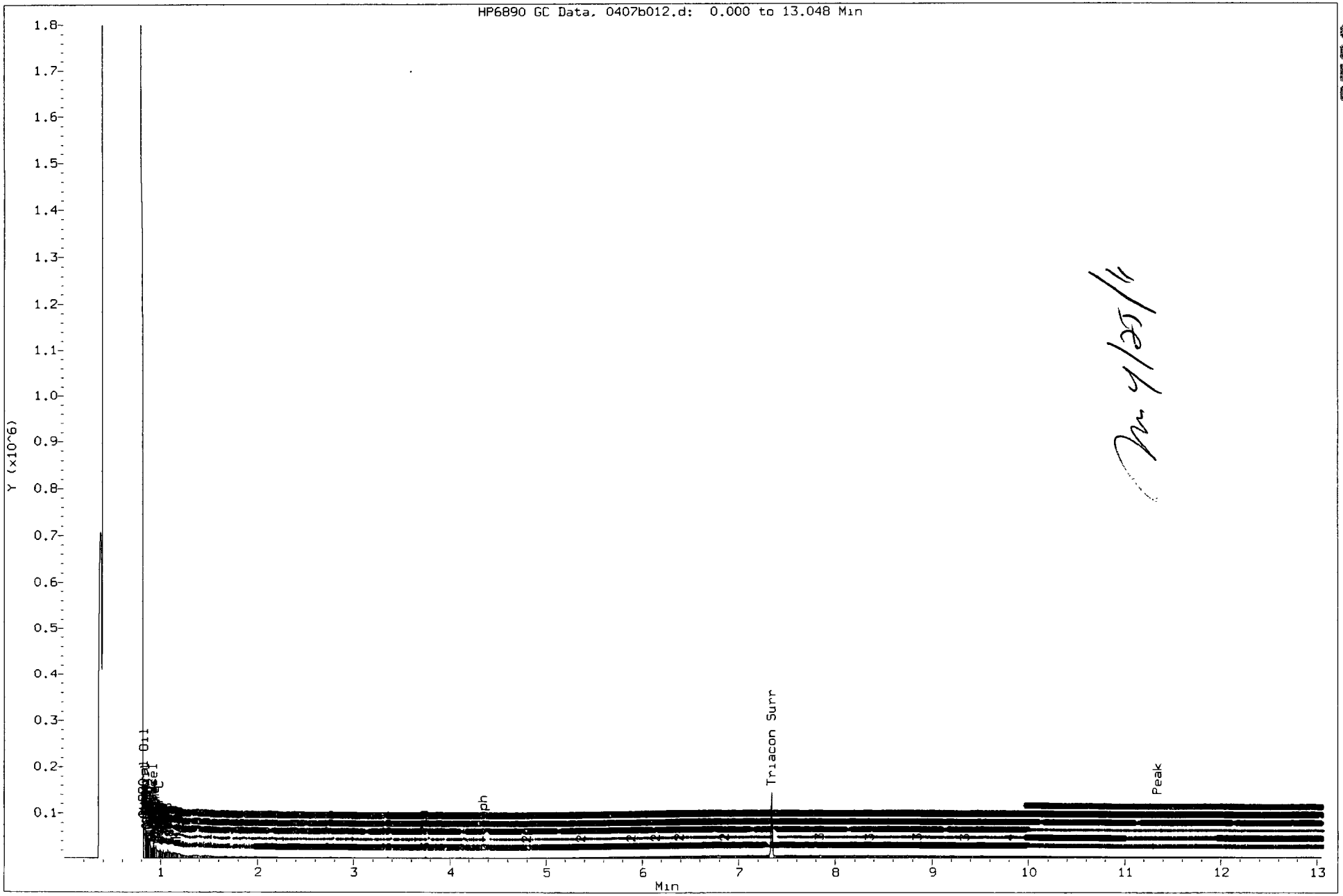
MANUAL INTEGRATION

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

5. Other _____

Analyst: MS Date: 4/25/11

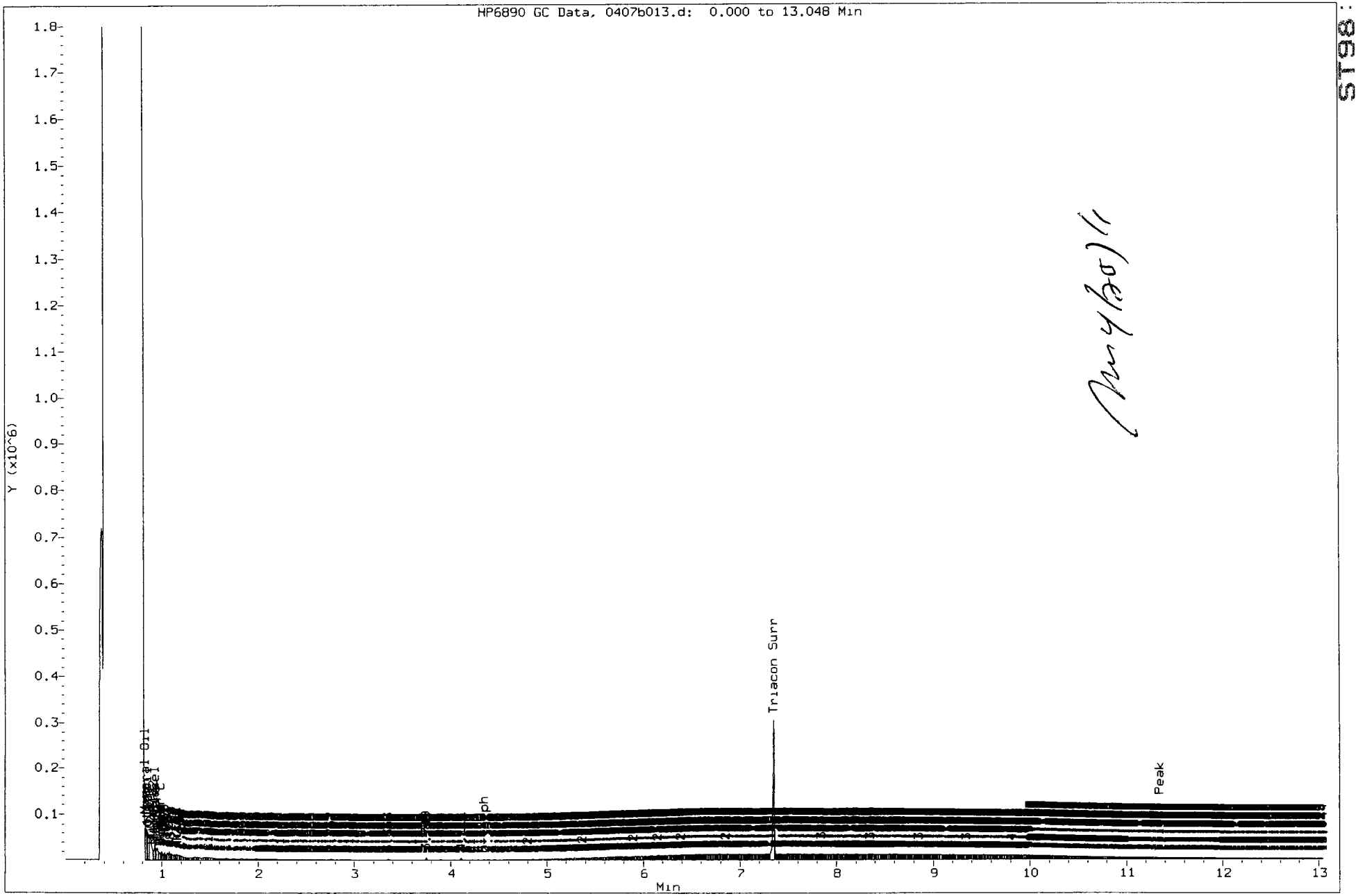
Data File: /chem3/fid3b.i/20110407.b/0407b012.d
Injection Date: 07-APR-2011 17:36
Instrument: fid3b.i
Client Sample ID:



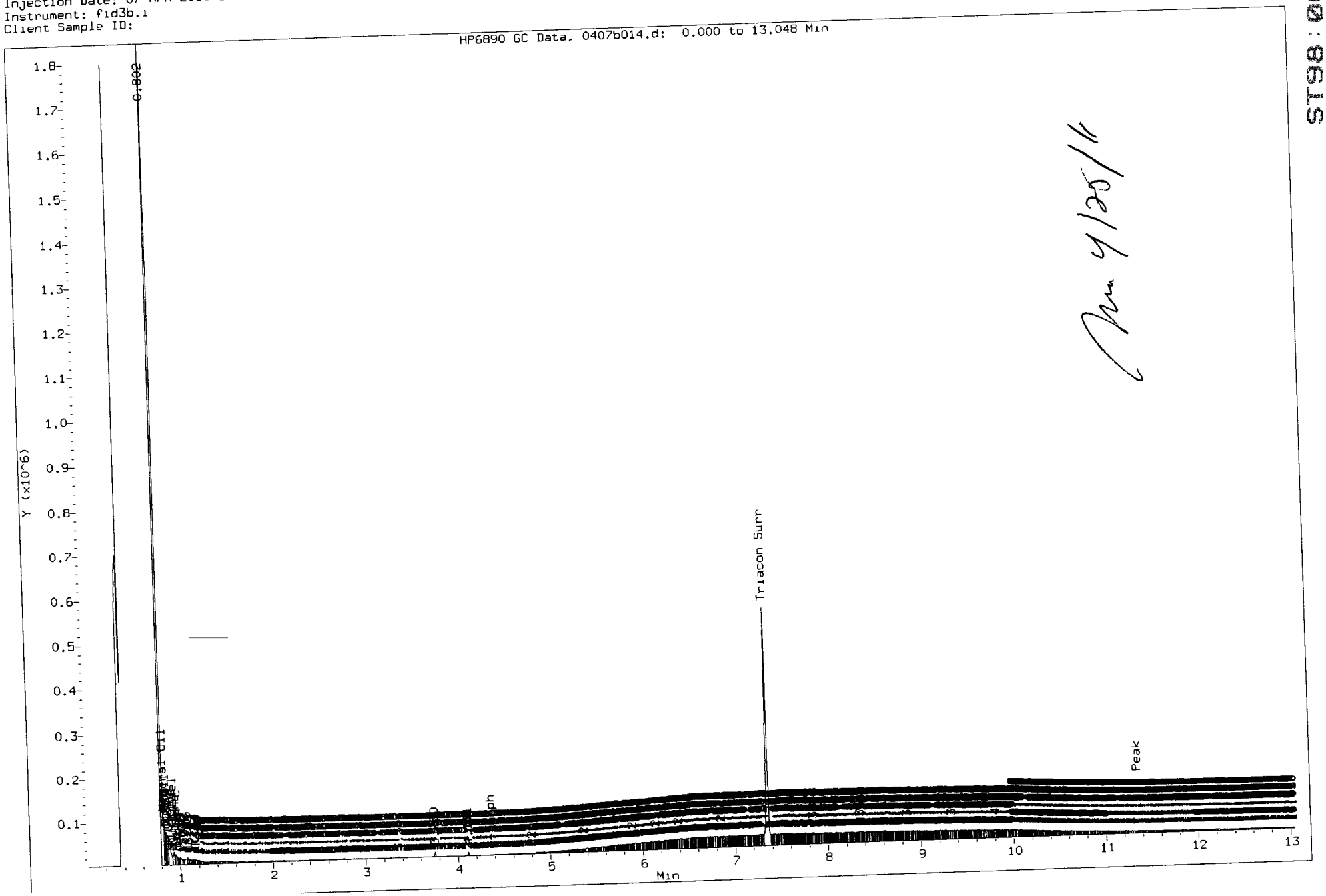
ST98 00873

Data File: /chem3/fid3b.i/20110407.b/0407b013.d
Injection Date: 07-APR-2011 17:58
Instrument: fid3b.i
Client Sample ID:

ST98:068871

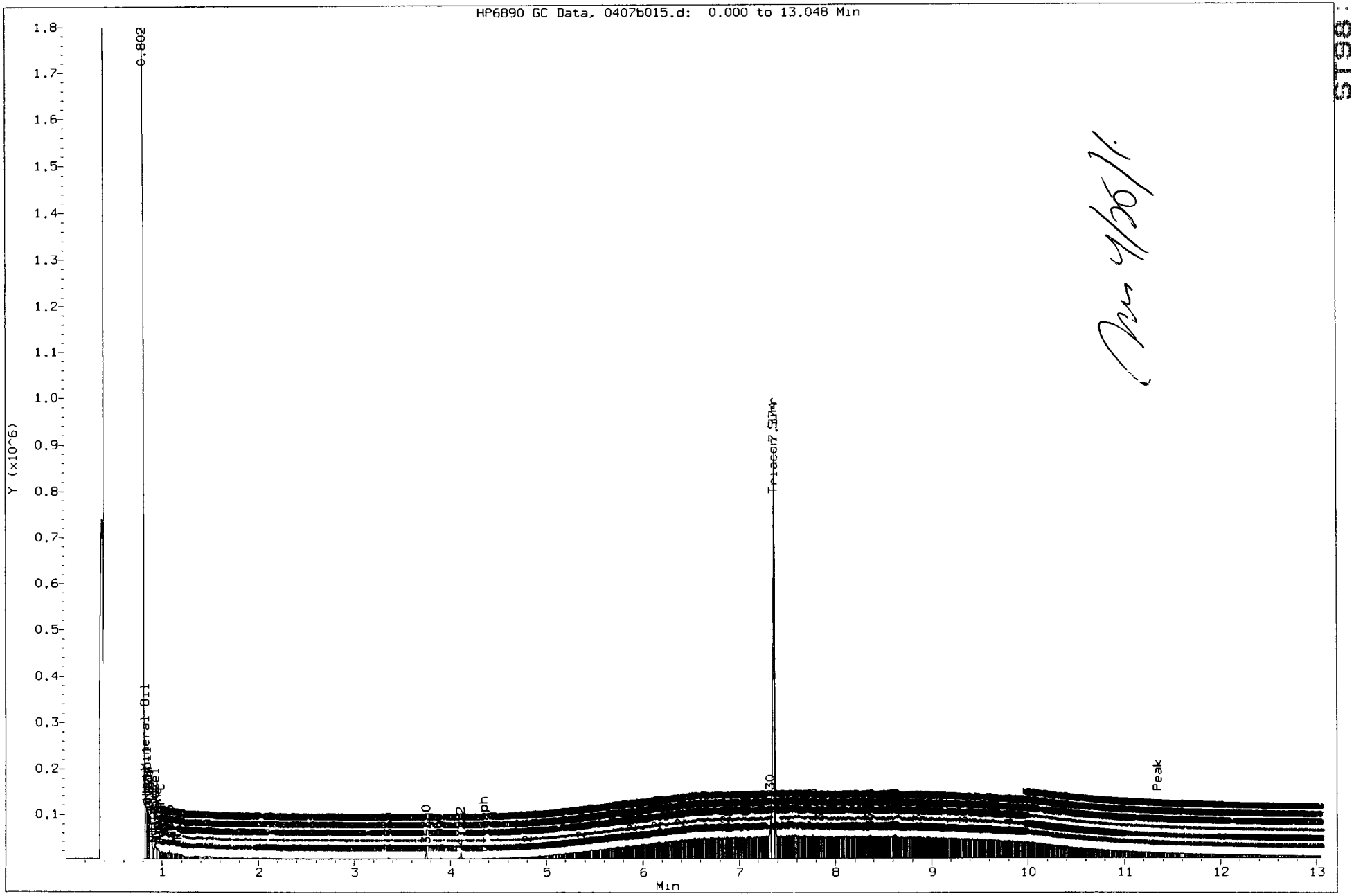


Data File: /chem3/fid3b.i/20110407.b/0407b014.d
Injection Date: 07-APR-2011 18:20
Instrument: fid3b.i
Client Sample ID:



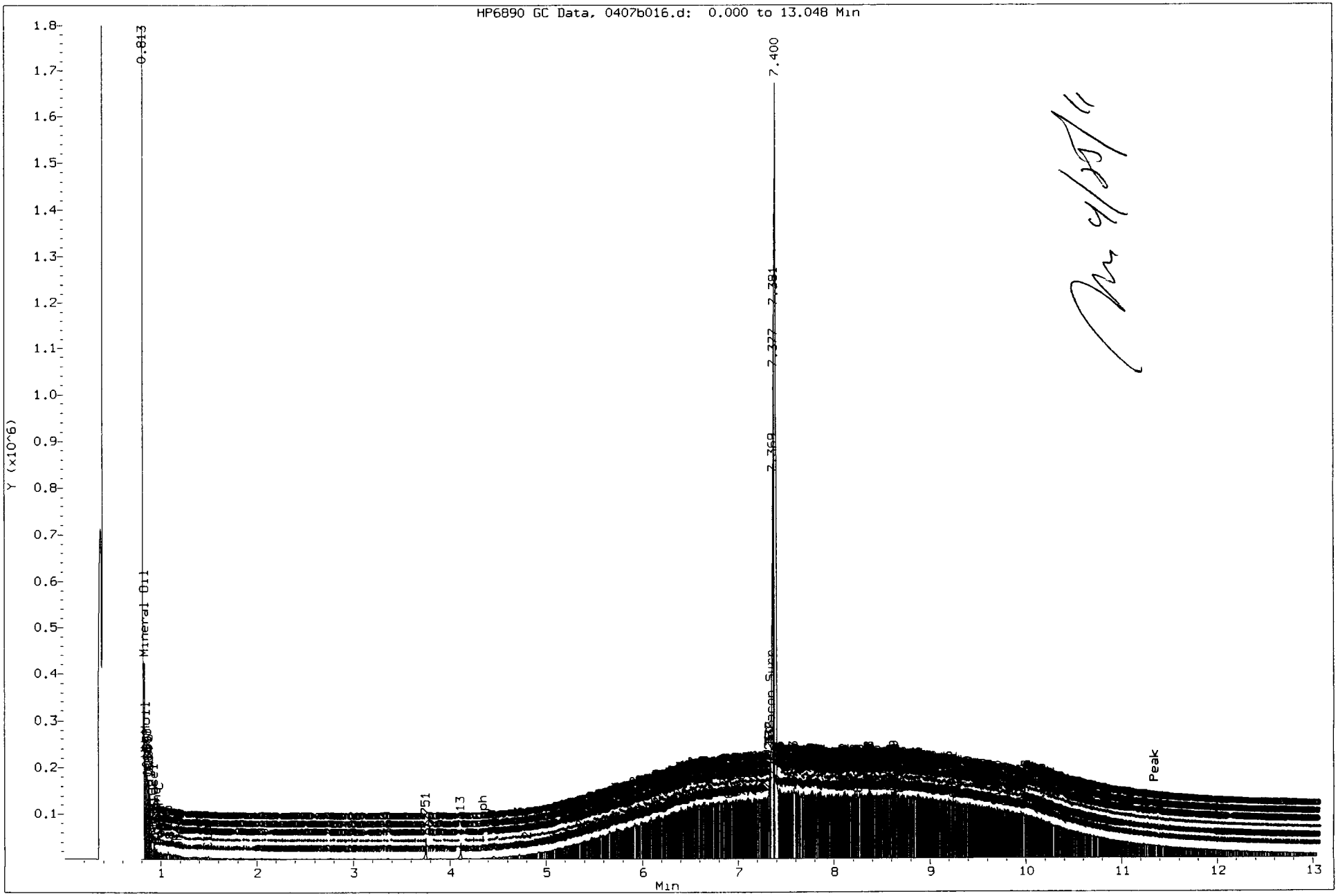
ST98:00875

Data File: /chem3/fid3b.i/20110407.b/0407b015.d
Injection Date: 07-APR-2011 18:42
Instrument: fid3b.i
Client Sample ID:



ST98:008879

Data File: /chem3/fid3b.i/20110407.b/0407b016.d
Injection Date: 07-APR-2011 19:04
Instrument: fid3b.i
Client Sample ID:



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

ARI Job ID: ST98, SU21

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC Analyst Notes / Corrective Action Log

ARI Project ID: ST98, SU21 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, Motor-Engine

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

Dates: Curve: 4/7/11 Analysis Start: 5/6/11

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):

Sample ST98D is weathered diesel.
MP 5/6/11

Additional Details on Reverse: Yes / (No)

Analyst: MP **Date:** 5/6/11

Reviewer: [signature] **Date:** 5/6/11

Analytical Resources Inc.: Organics Instrument Log

FID-3B Serial No.: US00003232

Date: 5/5/11 Analysis: NWTPHD Analyst: MS

GC Program: TMZLB Column No: 923444 Column Type: rtx-1

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

Calibration File: — Curve Date: 4/7/11

IS/SS

Ical/Ccal

1706-1
1701-2
1727-3
1705-2

LCS/ICV

	Inject Date/Time	Filename	DF	LabID
1	05-MAY-2011 09:47	0505b007.d	1	RINSE
2	05-MAY-2011 10:10	0505b008.d	1	RINSE
3	05-MAY-2011 10:32	0505b009.d	1	RT
4	05-MAY-2011 10:55	0505b010.d	1	IB
5	05-MAY-2011 11:17	0505b011.d	1	DIESEL#1
6	05-MAY-2011 11:40	0505b012.d	1	MOIL#1
7	05-MAY-2011 12:03	0505b013.d	1	ST89MBW1
8	05-MAY-2011 12:26	0505b014.d	1	ST89LCSW1
9	05-MAY-2011 12:49	0505b015.d	1	ST89LCSDW1
10	05-MAY-2011 13:12	0505b016.d	1	ST89QLS
11	05-MAY-2011 13:36	0505b017.d	1	ST89A
12	05-MAY-2011 13:59	0505b018.d	1	ST89B
13	05-MAY-2011 14:23	0505b019.d	1	ST98A
14	05-MAY-2011 14:46	0505b020.d	1	ST98B
15	05-MAY-2011 15:09	0505b021.d	1	ST98C
16	05-MAY-2011 15:32	0505b022.d	1	ST98D
17	05-MAY-2011 15:55	0505b023.d	1	ST98DMS
18	05-MAY-2011 16:19	0505b024.d	1	ST98DMSD
19	05-MAY-2011 16:42	0505b025.d	1	DIESEL#2
20	05-MAY-2011 17:05	0505b026.d	1	MOIL#2
21	05-MAY-2011 17:28	0505b027.d	1	SU21A
22	05-MAY-2011 17:51	0505b028.d	1	SU21B
23	05-MAY-2011 18:14	0505b029.d	1	SU21C
24	05-MAY-2011 18:36	0505b030.d	1	SU21D
25	05-MAY-2011 18:59	0505b031.d	1	SU21E
26	05-MAY-2011 19:22	0505b032.d	1	SU21F
27	05-MAY-2011 19:45	0505b033.d	1	DIESEL#3
28	05-MAY-2011 20:08	0505b034.d	1	MOIL#3
29	05-MAY-2011 20:31	0505b035.d	1	SU14A
30	05-MAY-2011 20:53	0505b036.d	1	SU14AMS
31	05-MAY-2011 21:16	0505b037.d	1	SU14AMSD
32	05-MAY-2011 21:39	0505b038.d	1	SU14B
33	05-MAY-2011 22:02	0505b039.d	1	SU14C
34	05-MAY-2011 22:24	0505b040.d	1	SU14D
35	05-MAY-2011 22:47	0505b041.d	1	SU14E
36	06-MAY-2011 23:10	0505b042.d	1	DIESEL#4
37	06-MAY-2011 23:32	0505b043.d	1	MOIL#4

MS

5/6/11

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/fid3b.i/20110505.b

ARI Job No.: ST89 Method: i/20110505.b/ftphfid3b.m Instrument: fid3b.i Date: 05-MAY-2011

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1203	0505b013.d	ST89MBW1	ST89MBW1	1	NO MANUAL INTEGRATION
1226	0505b014.d	ST89LCSW1	ST89LCSW1	1	o-terph,
1249	0505b015.d	ST89LCSDW1	ST89LCSDW1	1	o-terph,
1423	0505b019.d	ST98A	MW02-04261	1	NO MANUAL INTEGRATION
1446	0505b020.d	ST98B	MW03-04261	1	NO MANUAL INTEGRATION
1509	0505b021.d	ST98C	MW13-04261	1	NO MANUAL INTEGRATION
1532	0505b022.d	ST98D	MW06-04261	1	o-terph,
1555	0505b023.d	ST98DMS	MW06-04261	1	o-terph,
1619	0505b024.d	ST98DMSD	MW06-04261	1	o-terph,
1728	0505b027.d	SU21A	MW07-04271	1	NO MANUAL INTEGRATION
1751	0505b028.d	SU21B	MW11-04271	1	NO MANUAL INTEGRATION
1814	0505b029.d	SU21C	MW10-04271	1	NO MANUAL INTEGRATION
1836	0505b030.d	SU21D	MW09-04271	1	NO MANUAL INTEGRATION
1859	0505b031.d	SU21E	MW08-04271	1	NO MANUAL INTEGRATION
1922	0505b032.d	SU21F	MW12-04271	1	NO MANUAL INTEGRATION

Analytical Resources Inc.
407S TPH Quantitation Report

Data file: /chem3/fid3b.i/20110505.b/0505b009.d
Method: /chem3/fid3b.i/20110505.b/ftphfid3b.m
Instrument: fid3b.i
Operator: MS
Report Date: 05/06/2011
Macro: FID:3B040711

ARI ID: RT
Client ID: RT
Injection: 05-MAY-2011 10:32
Dilution Factor: 1

FID:3B RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc	
Toluene	0.877	0.000	2413270	587990	GAS (Tol-C12)	2358240	147.62	
C8	0.949	0.000	1320217	351578	DIESEL (C12-C24)	2738038	156.81	
C10	1.496	0.000	922718	415503	M.OIL (C24-C38)	2848947	306.81	
C12	2.233	0.000	648858	422595	AK-102 (C10-C25)	3684635	182.24	
C14	2.952	0.000	583719	411193	AK-103 (C25-C36)	2457780	281.61	M
C16	3.609	0.000	505627	401697	OR.DIES (C10-C28)	4933268	194.22	
C18	4.219	0.000	428097	313399	OR.MOIL (C28-C40)	1962478	174.07	M
C20	4.807	0.000	432949	359683	MIN.OIL (C24-C38)	2848947	442.49	M
C22	5.369	0.000	419061	355984	STODDARD (C8-C12)	1543855	55.80	
C24	5.896	0.000	416343	361379				
C25	6.151	0.000	548827	493527				
C26	6.390	0.000	423940	361986				
C28	6.861	0.000	389079	360442				
C32	7.854	0.000	323207	375775				
C34	8.360	0.000	326908	381580	CREOSOT (C8-C22)	2350928	367.56	
Filter Peak	11.361	0.000	1986	1750				
C36	8.859	0.000	335428	397534	BUNKERC (C10-C38)	6516869	764.70	
o-terph	4.363	0.000	1155696	985130	JET-A (C10-C18)	2184556	423.54	
Triacon Surr	7.365	0.000	802691	1116071	IT.MOIL (C24-C40)	4343895	202.15	

Range Times: NW Diesel(2.283 - 5.946) NW Gas(0.827 - 2.283) NW M.Oil(5.946 - 9.397)
AK102(1.446 - 6.101) AK103(6.101 - 8.909) Jet A(1.446 - 4.269)

Surrogate	Area	Amount	%Rec
o-Terphenyl	985130	62.5	138.9
Triacontane	1116071	86.9	193.2

Analyte	RF	Curve Date
o-Terph Surr	15759.4	07-APR-2011
Triacon Surr	12836.6	07-APR-2011
Gas	15975.0	20-OCT-2010
Diesel	17461.0	07-APR-2011
Motor Oil	9285.7	07-APR-2011
AK102	20219.0	07-APR-2011
AK103	8727.5	29-SEPT-2010
JetA	5157.9	13-JAN-2011
Min Oil	6438.5	20-JAN-2011
OR Diesel	25401.0	
OR M.Oil	11274.0	
IT M.Oil	21488.2	
Bunker C	8522.1	20-SEP-2010
Creosote	6396.0	17-JAN-2009

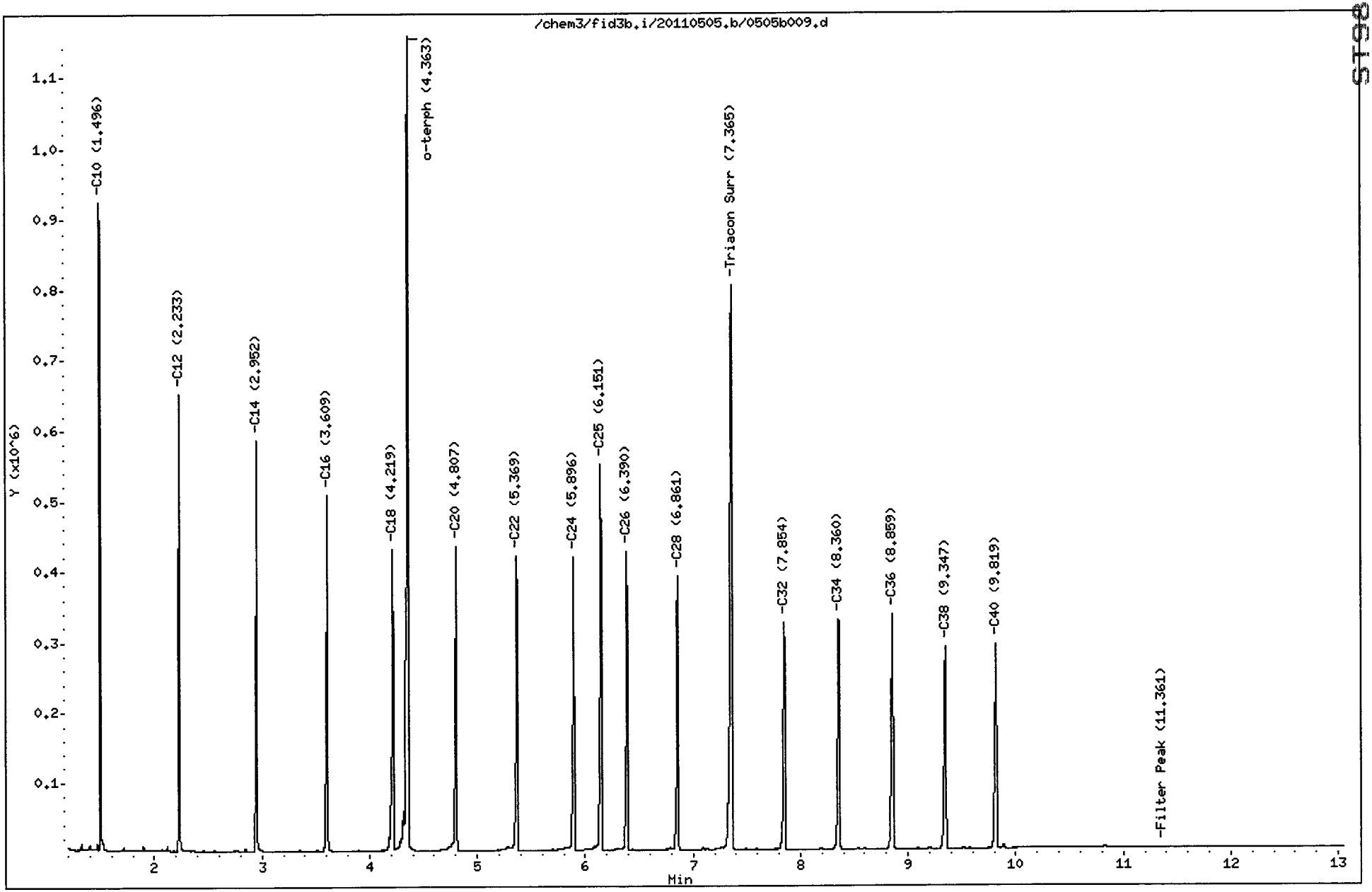
Data File: /chem3/fid3b.i/20110505.b/0505b009.d
Date : 05-MAY-2011 10:32
Client ID: RT
Sample Info: RT

Column phase: RTX-1

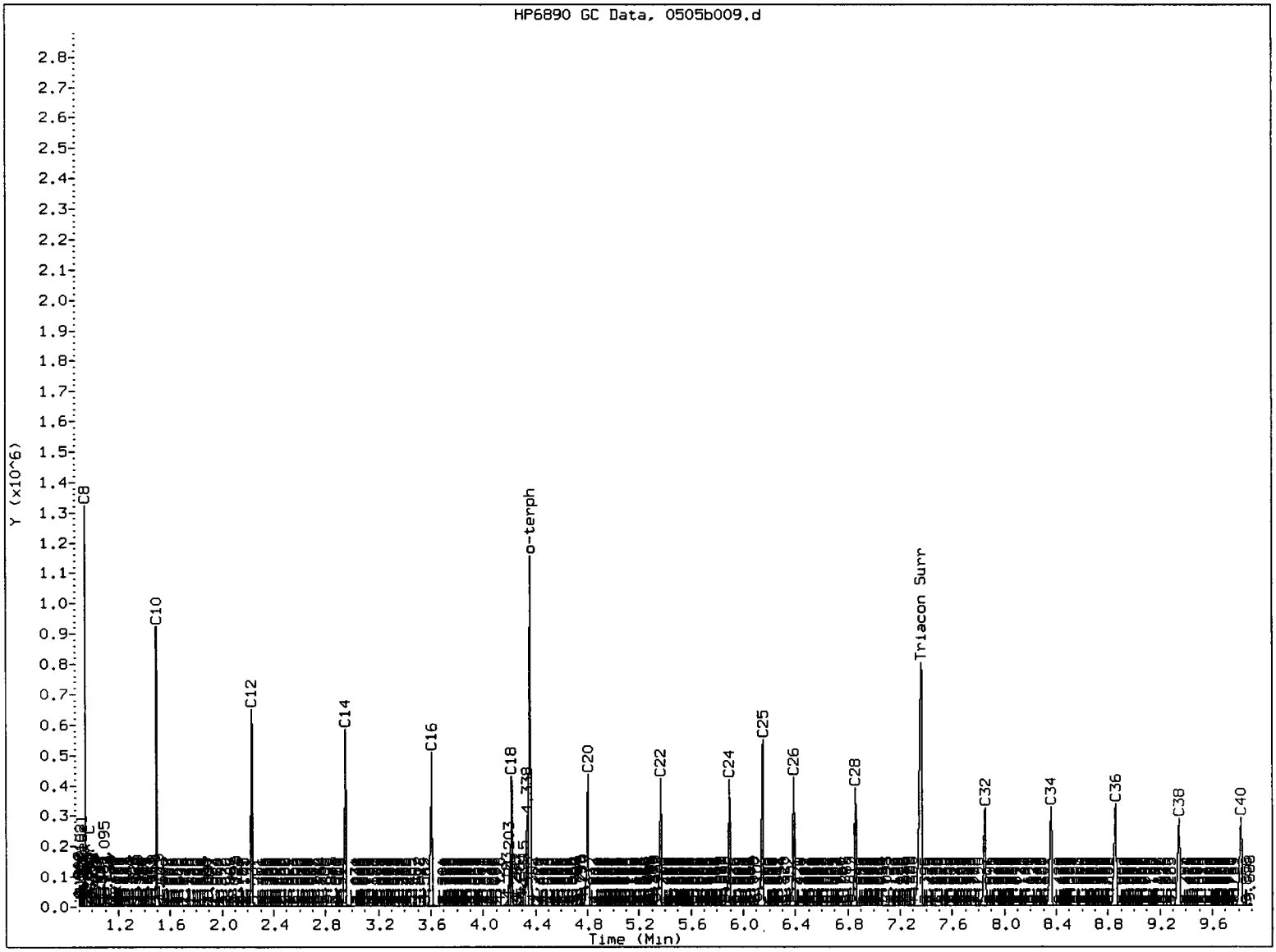
Instrument: fid3b.i

Operator: MS
Column diameter: 0.25

ST98 : 00883



FID:3B-2C/RTX-1 RT FID:3B SIGNAL



MANUAL INTEGRATION

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

5. Other _____

Analyst: MA Date: 5/16/11

Analytical Resources Inc.
407S TPH Quantitation Report

Data file: /chem3/fid3b.i/20110505.b/0505b010.d
Method: /chem3/fid3b.i/20110505.b/ftphfid3b.m
Instrument: fid3b.i
Operator: MS
Report Date: 05/06/2011
Macro: FID:3B040711

ARI ID: IB
Client ID: IB
Injection: 05-MAY-2011 10:55
Dilution Factor: 1

FID:3B RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc	
Toluene	0.880	0.004	83114	103485	GAS (Tol-C12)	712251	44.59	
C8	0.948	-0.001	14295	7197	DIESEL (C12-C24)	55757	3.19	
C10	1.493	-0.003	3883	4518	M.OIL (C24-C38)	59129	6.37	
C12	2.231	-0.002	978	1006	AK-102 (C10-C25)	128306	6.35	
C14	2.948	-0.005	512	726	AK-103 (C25-C36)	45449	5.21	M
C16	3.603	-0.005	356	353	OR.DIES (C10-C28)	134023	5.28	
C18	4.216	-0.003	275	241	OR.MOIL (C28-C40)	79539	7.06	M
C20	4.802	-0.005	282	269	MIN.OIL (C24-C38)	59129	9.18	M
C22	5.363	-0.006	243	230	STODDARD (C8-C12)	273350	9.88	
C24	5.891	-0.006	234	196				
C25	6.140	-0.011	306	289				
C26	6.382	-0.008	254	244				
C28	6.868	0.007	781	663				
C32	7.839	-0.015	3789	4530				
C34	8.371	0.010	225	30	CREOSOT (C8-C22)	53847	8.42	
Filter Peak	11.359	-0.002	1325	554				
C36	8.869	0.010	2207	3307	BUNKERC (C10-C38)	186588	21.89	
o-terph	4.365	0.002	1278672	1381466	JET-A (C10-C18)	106266	20.60	
Triacon Surr	7.364	-0.002	782558	1048599	IT.MOIL (C24-C40)	1134701	52.81	

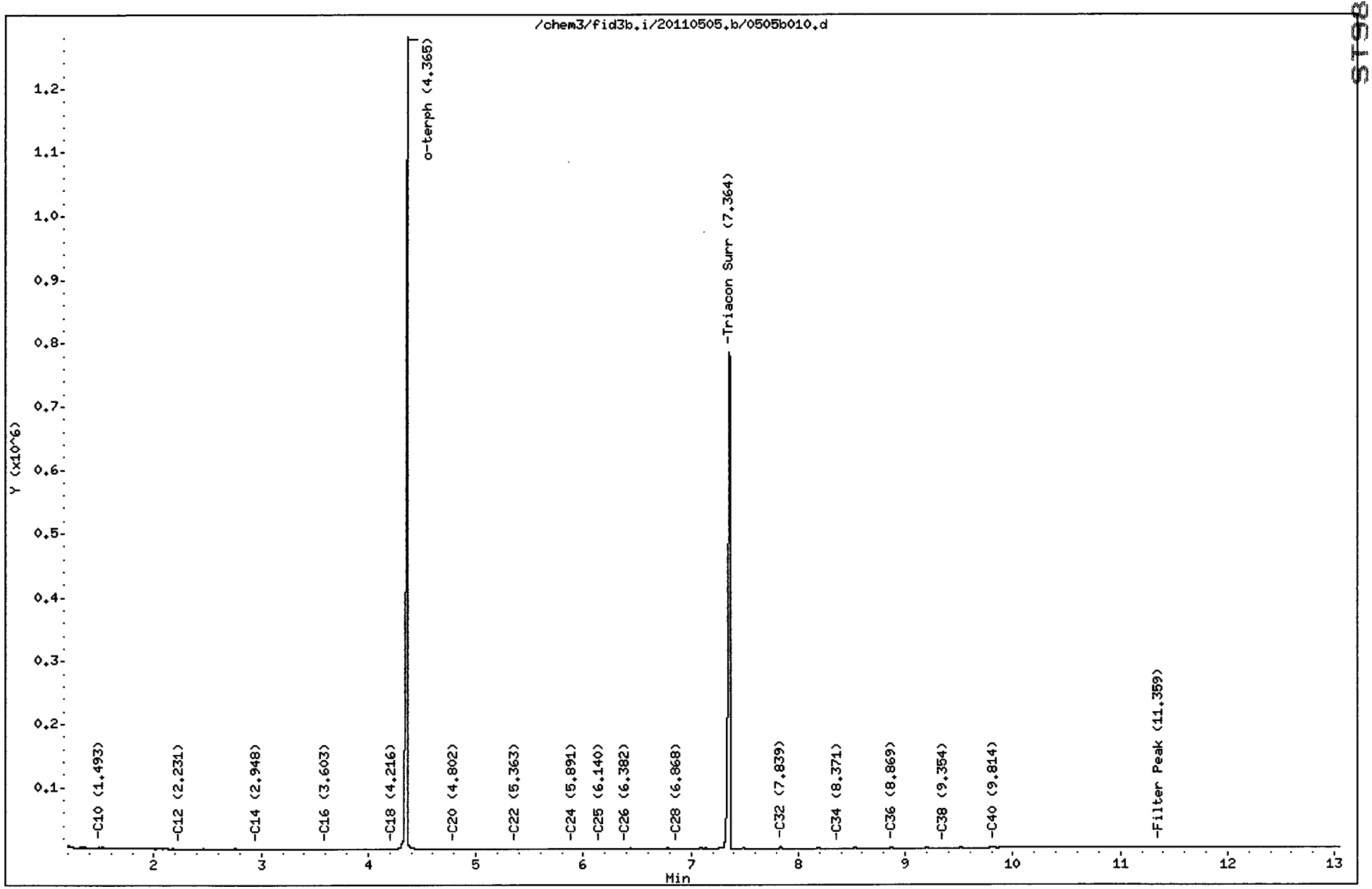
Range Times: NW Diesel(2.283 - 5.946) NW Gas(0.827 - 2.283) NW M.Oil(5.946 - 9.397)
AK102(1.446 - 6.101) AK103(6.101 - 8.909) Jet A(1.446 - 4.269)

Surrogate	Area	Amount	%Rec
o-Terphenyl	1381466	87.7	194.8
Triacontane	1048599	81.7	181.5

Analyte	RF	Curve Date
o-Terph Surr	15759.4	07-APR-2011
Triacon Surr	12836.6	07-APR-2011
Gas	15975.0	20-OCT-2010
Diesel	17461.0	07-APR-2011
Motor Oil	9285.7	07-APR-2011
AK102	20219.0	07-APR-2011
AK103	8727.5	29-SEPT-2010
JetA	5157.9	13-JAN-2011
Min Oil	6438.5	20-JAN-2011
OR Diesel	25401.0	
OR M.Oil	11274.0	
IT M.Oil	21488.2	
Bunker C	8522.1	20-SEP-2010
Creosote	6396.0	17-JAN-2009

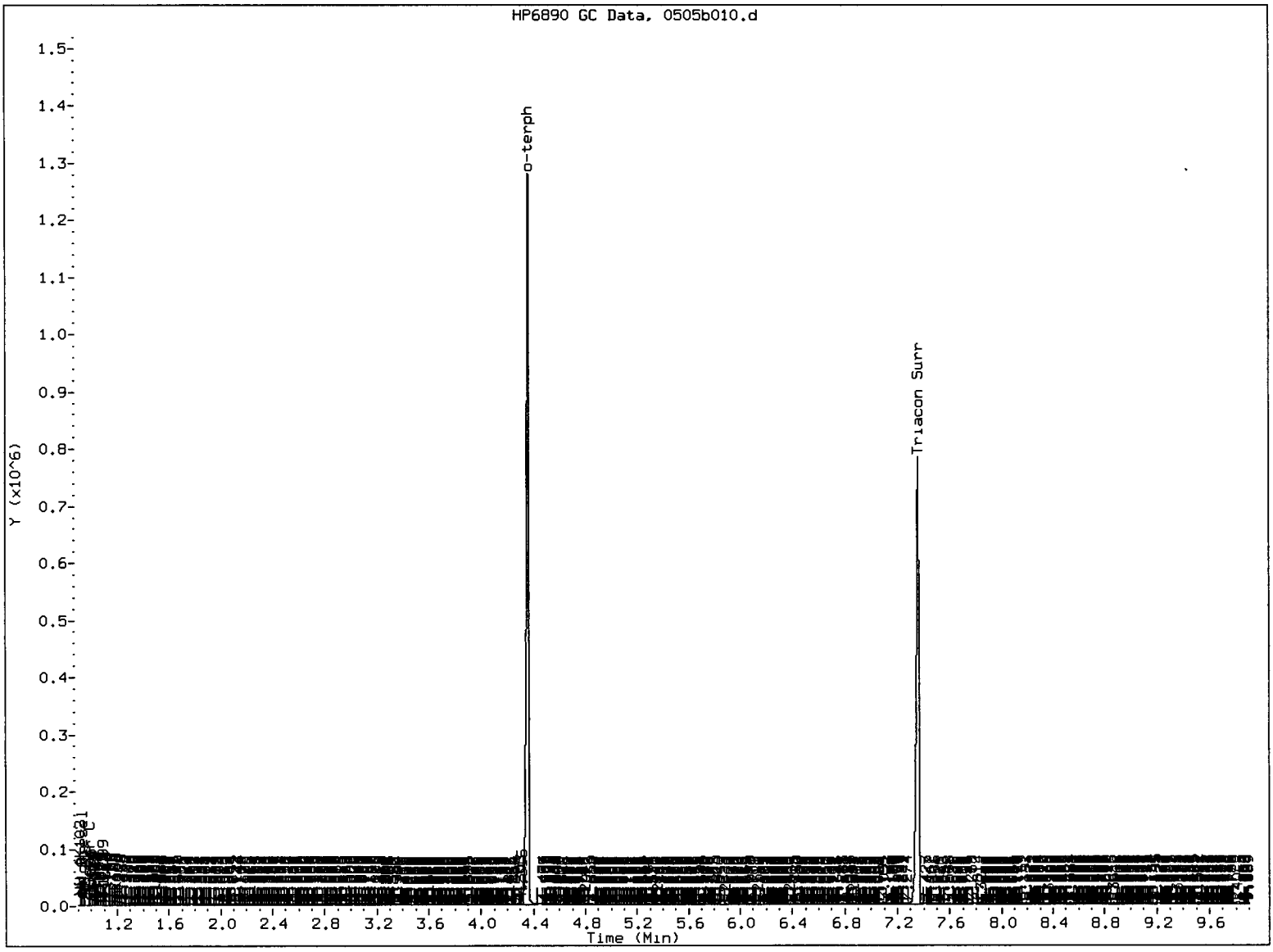
Data File: /chem3/fid3b.i/20110505.b/0505b010.d
Date : 05-MAY-2011 10:55
Client ID: IB
Sample Info: IB

Instrument: fid3b.i
Operator: MS
Column phase: RTX-1
Column diameter: 0.25



FID:3B-2C/RTX-1 IB

FID:3B SIGNAL



MANUAL INTEGRATION

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

5. Other _____

Analyst: _____ Date: 5/6/11

Analytical Resources Inc.
407S TPH Quantitation Report

Data file: /chem3/fid3b.i/20110505.b/0505b011.d
Method: /chem3/fid3b.i/20110505.b/ftphfid3b.m
Instrument: fid3b.i
Operator: MS
Report Date: 05/06/2011
Macro: FID:3B040711

ARI ID: DIESEL#1
Client ID: LORA LAKE APTS. RI
Injection: 05-MAY-2011 11:17
Dilution Factor: 1

FID:3B RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc	
Toluene	0.877	0.000	25794	7326	GAS (Tol-C12)	1101537	68.95	
C8	0.950	0.001	18529	6305	DIESEL (C12-C24)	4486420	256.94	
C10	1.497	0.001	32179	18690	M.OIL (C24-C38)	69001	7.43	
C12	2.230	-0.002	50060	43842	AK-102 (C10-C25)	5089895	251.74	M
C14	2.950	-0.003	86604	78201	AK-103 (C25-C36)	44639	5.11	
C16	3.606	-0.003	151378	120731	OR.DIES (C10-C28)	5117224	201.46	M
C18	4.217	-0.002	129154	125007	OR.MOIL (C28-C40)	41785	3.71	
C20	4.803	-0.003	75536	81183	MIN.OIL (C24-C38)	69001	10.72	
C22	5.364	-0.005	35200	35264	STODDARD (C8-C12)	964562	34.86	
C24	5.891	-0.005	10877	11156				
C25	6.143	-0.008	4446	5659				
C26	6.386	-0.004	1686	2505				
C28	6.856	-0.005	218	173				
C32	7.841	-0.013	1746	1957				
C34	8.364	0.003	88	33	CREOSOT (C8-C22)	4348347	679.86	
Filter Peak	11.364	0.003	1232	415				
C36	8.872	0.012	1849	2635	BUNKERC (C10-C38)	5143425	603.54	
o-terph	4.361	-0.002	875502	734009	JET-A (C10-C18)	3797492	736.25	
Triacon Surr	7.369	0.004	33	10	IT.MOIL (C24-C40)	84595	3.94	

Range Times: NW Diesel(2.283 - 5.946) NW Gas(0.827 - 2.283) NW M.Oil(5.946 - 9.397)
AK102(1.446 - 6.101) AK103(6.101 - 8.909) Jet A(1.446 - 4.269)

Surrogate	Area	Amount	%Rec
o-Terphenyl	734009	46.6	103.5
Triacontane	10	0.0	0.0

Analyte	RF	Curve Date
o-Terph Surr	15759.4	07-APR-2011
Triacon Surr	12836.6	07-APR-2011
Gas	15975.0	20-OCT-2010
Diesel	17461.0	07-APR-2011
Motor Oil	9285.7	07-APR-2011
AK102	20219.0	07-APR-2011
AK103	8727.5	29-SEPT-2010
JetA	5157.9	13-JAN-2011
Min Oil	6438.5	20-JAN-2011
OR Diesel	25401.0	
OR M.Oil	11274.0	
IT M.Oil	21488.2	
Bunker C	8522.1	20-SEP-2010
Creosote	6396.0	17-JAN-2009

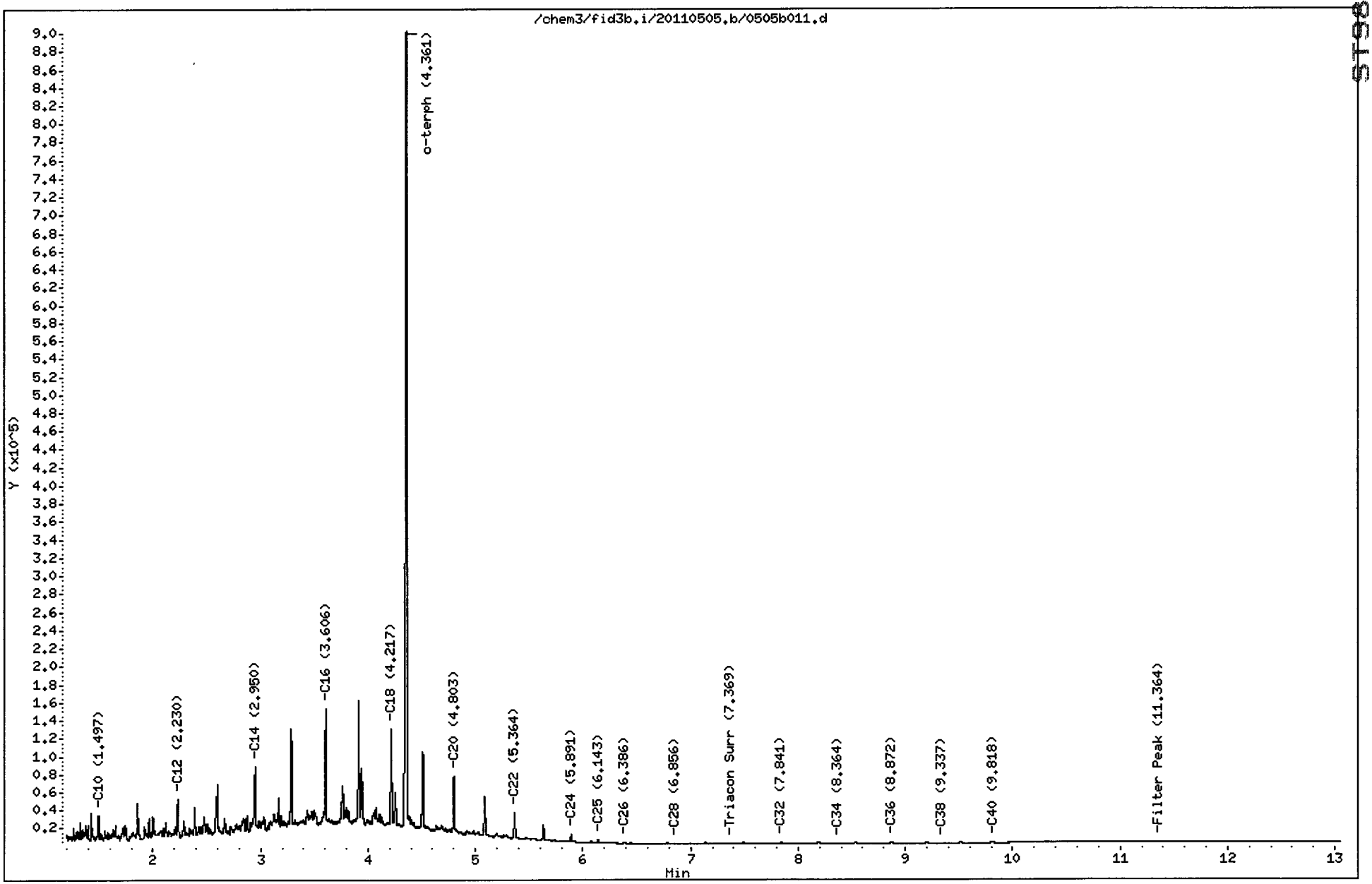
Data File: /chem3/fid3b.i/20110505.b/0505b011.d
Date : 05-MAY-2011 11:17
Client ID: LORA LAKE APTS. RI
Sample Info: DIESEL#1

Column phase: RTX-1

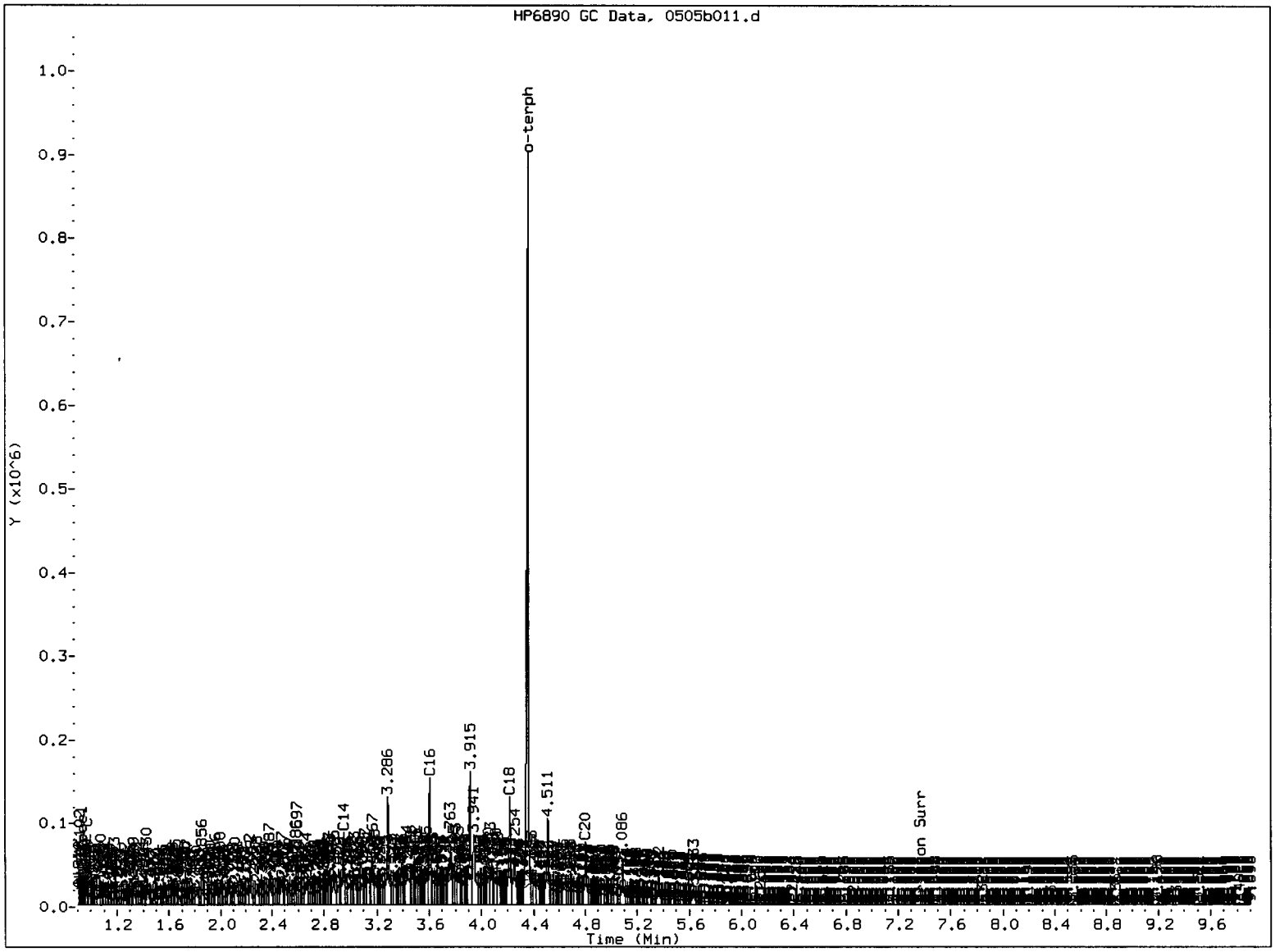
Instrument: fid3b.i

Operator: MS
Column diameter: 0.25

ST98 : 00889



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



MANUAL INTEGRATION

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

5. Other _____

Analyst: _____ Date: 5/6/11

Analytical Resources Inc.
407S TPH Quantitation Report

Data file: /chem3/fid3b.i/20110505.b/0505b012.d
Method: /chem3/fid3b.i/20110505.b/ftphfid3b.m
Instrument: fid3b.i
Operator: MS
Report Date: 05/06/2011
Macro: FID:3B040711

ARI ID: MOIL#1
Client ID: LORA LAKE APTS. RI
Injection: 05-MAY-2011 11:40
Dilution Factor: 1

FID:3B RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc	
Toluene	0.884	0.007	68467	87092	GAS (Tol-C12)	607137	38.01	
C8	0.961	0.012	20938	26579	DIESEL (C12-C24)	614352	35.18	
C10	1.493	-0.003	4232	6692	M.OIL (C24-C38)	5025714	541.23	
C12	2.233	0.000	1079	754	AK-102 (C10-C25)	851633	42.12	
C14	2.949	-0.003	482	665	AK-103 (C25-C36)	4193152	480.45	M
C16	3.603	-0.005	163	121	OR.DIES (C10-C28)	1924218	75.75	
C18	4.214	-0.005	367	409	OR.MOIL (C28-C40)	4368869	387.52	M
C20	4.801	-0.006	2149	3459	MIN.OIL (C24-C38)	5025714	780.58	M
C22	5.372	0.003	7633	2859	STODDARD (C8-C12)	311990	11.28	
C24	5.897	0.001	14540	3458				
C25	6.154	0.003	18821	2976				
C26	6.390	0.000	21867	6925				
C28	6.860	-0.001	25340	6980				
C32	7.854	0.000	27349	15110				
C34	8.363	0.002	27301	4865	CREOSOT (C8-C22)	246638	38.56	
Filter Peak	11.353	-0.008	5910	5664				
C36	8.865	0.006	27188	12445	BUNKERC (C10-C38)	5728751	672.22	
o-terph	4.366	0.003	339	59	JET-A (C10-C18)	137062	26.57	
Triacon Surr	7.360	-0.005	561554	609657	IT.MOIL (C24-C40)	6199708	288.52	

Range Times: NW Diesel(2.283 - 5.946) NW Gas(0.827 - 2.283) NW M.Oil(5.946 - 9.397)
AK102(1.446 - 6.101) AK103(6.101 - 8.909) Jet A(1.446 - 4.269)

Surrogate	Area	Amount	%Rec
o-Terphenyl	59	0.0	0.0
Triacontane	609657	47.5	105.5

Analyte	RF	Curve Date
o-Terph Surr	15759.4	07-APR-2011
Triacon Surr	12836.6	07-APR-2011
Gas	15975.0	20-OCT-2010
Diesel	17461.0	07-APR-2011
Motor Oil	9285.7	07-APR-2011
AK102	20219.0	07-APR-2011
AK103	8727.5	29-SEPT-2010
JetA	5157.9	13-JAN-2011
Min Oil	6438.5	20-JAN-2011
OR Diesel	25401.0	
OR M.Oil	11274.0	
IT M.Oil	21488.2	
Bunker C	8522.1	20-SEP-2010
Creosote	6396.0	17-JAN-2009

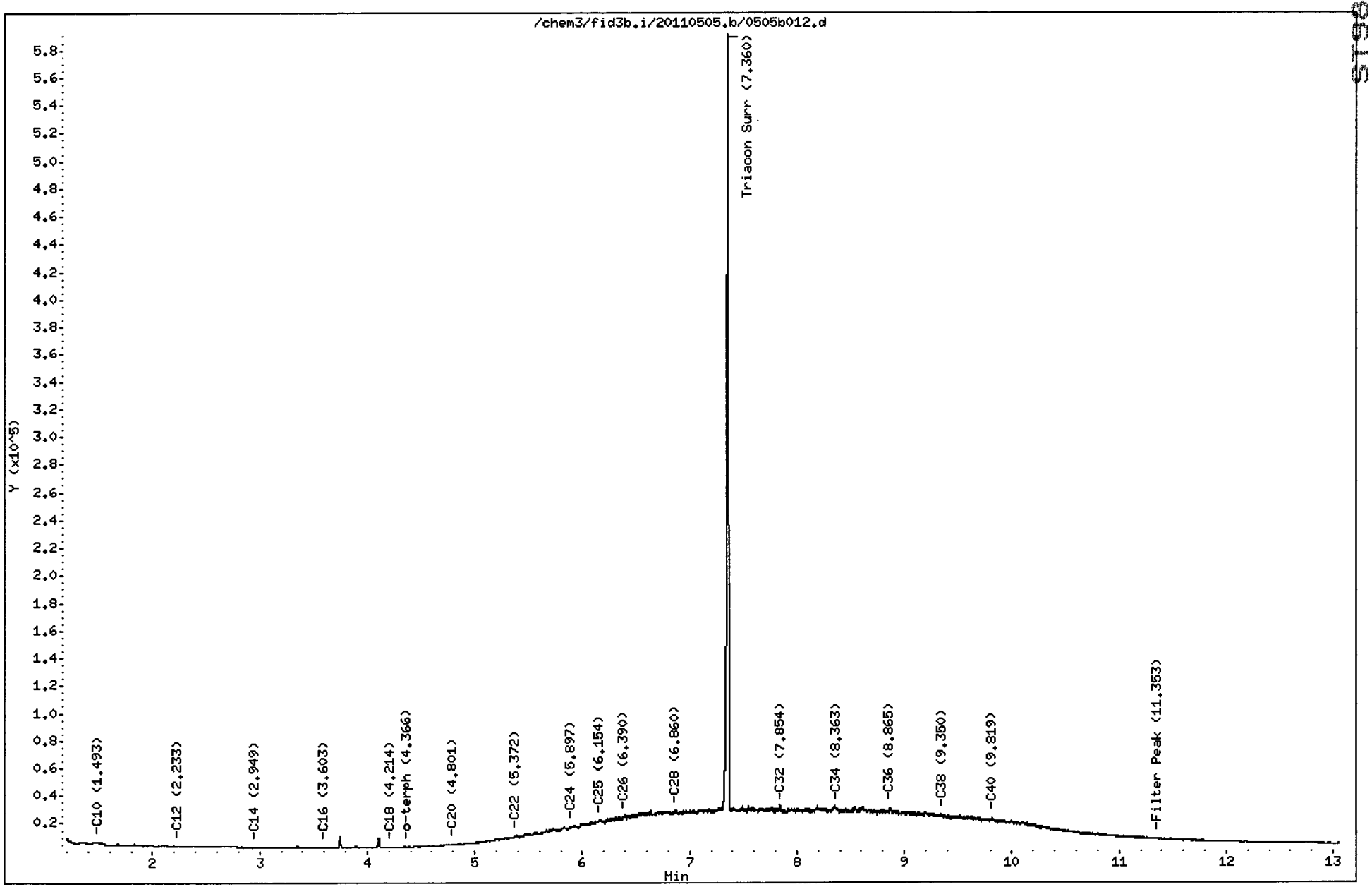
Data File: /chem3/fid3b.i/20110505.b/0505b012.d
Date : 05-MAY-2011 11:40
Client ID: LORA LAKE APTS. RI
Sample Info: MOIL#1

Column phase: RTX-1

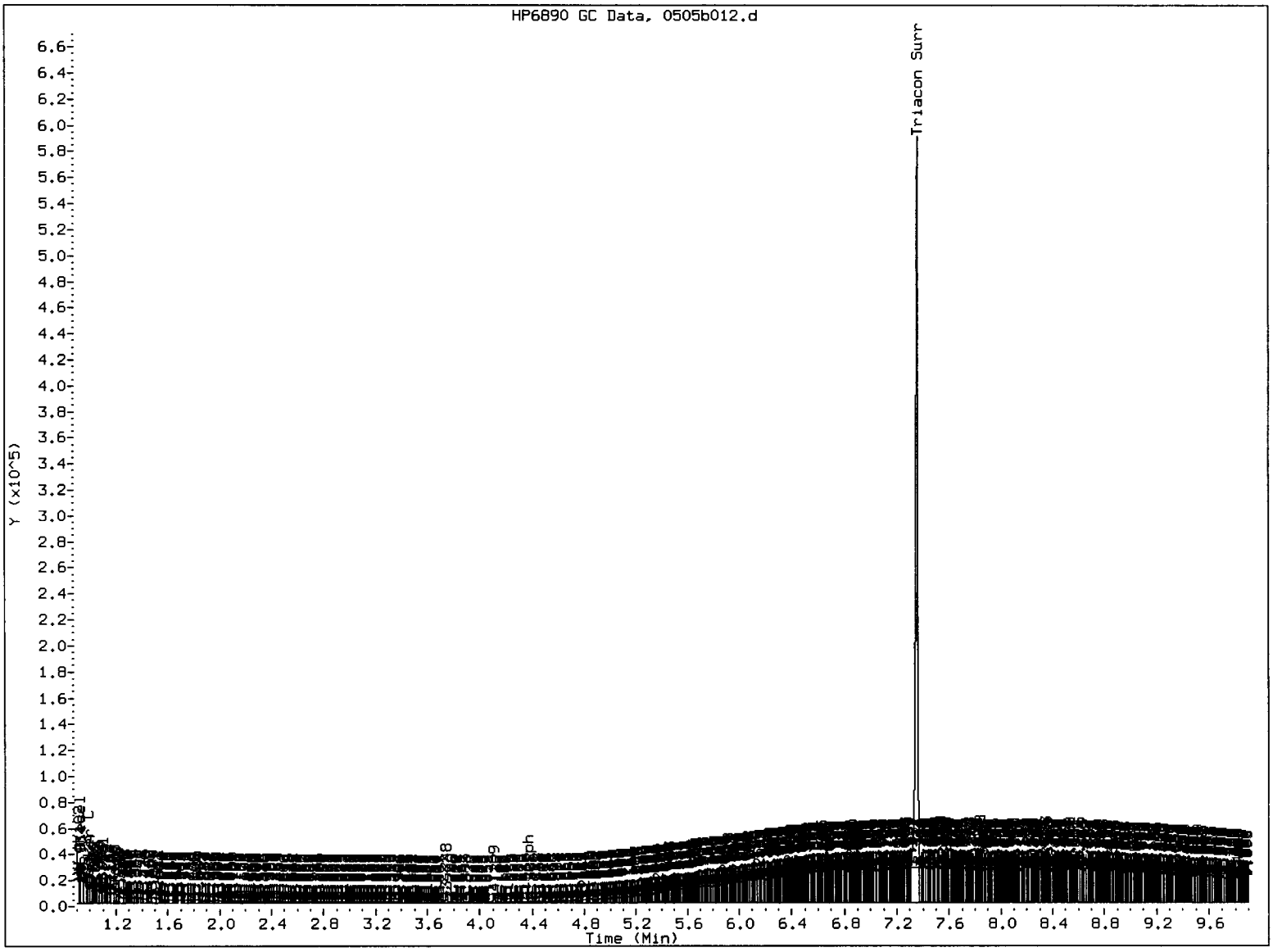
Instrument: fid3b.i

Operator: MS
Column diameter: 0.25

ST98 00892



FID:3B-2C/RTX-1 MOIL#1 FID:3B SIGNAL



MANUAL INTEGRATION

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

5. Other _____

Analyst: _____ Date: 8/16/4

Analytical Resources Inc.
407S TPH Quantitation Report

Data file: /chem3/fid3b.i/20110505.b/0505b013.d
Method: /chem3/fid3b.i/20110505.b/ftphfid3b.m
Instrument: fid3b.i
Operator: MS
Report Date: 05/06/2011
Macro: FID:3B040711

ARI ID: ST89MBW1
Client ID: ST89MBW1
Injection: 05-MAY-2011 12:03
Dilution Factor: 1

FID:3B RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	0.873	-0.003	37720	10175	GAS (Tol-C12)	538514	33.71
C8	0.948	-0.001	16942	4982	DIESEL (C12-C24)	261475	14.97
C10	1.491	-0.005	4352	6410	M.OIL (C24-C38)	220891	23.79
C12	2.237	0.004	1123	680	AK-102 (C10-C25)	371275	18.36
C14	2.949	-0.003	690	482	AK-103 (C25-C36)	195324	22.38
C16	3.605	-0.004	1273	1901	OR.DIES (C10-C28)	385416	15.17
C18	4.216	-0.003	945	716	OR.MOIL (C28-C40)	234869	20.83
C20	4.800	-0.006	733	725	MIN.OIL (C24-C38)	220891	34.31
C22	5.364	-0.005	699	638	STODDARD (C8-C12)	367475	13.28
C24	5.889	-0.007	436	487			
C25	6.151	0.000	1100	1055			
C26	6.387	-0.003	264	323			
C28	6.853	-0.008	508	815			
C32	7.840	-0.014	2547	3098			
C34	8.364	0.003	344	73	CREOSOT (C8-C22)	252504	39.48
Filter Peak	11.359	-0.001	1401	389			
C36	8.872	0.013	1851	3337	BUNKERC (C10-C38)	588825	69.09
o-terph	4.358	-0.005	803636	589523	JET-A (C10-C18)	244864	47.47
Triacon Surr	7.355	-0.010	503473	568631	IT.MOIL (C24-C40)	820982	38.21

Range Times: NW Diesel(2.283 - 5.946) NW Gas(0.827 - 2.283) NW M.Oil(5.946 - 9.397)
AK102(1.446 - 6.101) AK103(6.101 - 8.909) Jet A(1.446 - 4.269)

Surrogate	Area	Amount	%Rec
o-Terphenyl	589523	37.4	83.1
Triacontane	568631	44.3	98.4

Analyte	RF	Curve Date
o-Terph Surr	15759.4	07-APR-2011
Triacon Surr	12836.6	07-APR-2011
Gas	15975.0	20-OCT-2010
Diesel	17461.0	07-APR-2011
Motor Oil	9285.7	07-APR-2011
AK102	20219.0	07-APR-2011
AK103	8727.5	29-SEPT-2010
JetA	5157.9	13-JAN-2011
Min Oil	6438.5	20-JAN-2011
OR Diesel	25401.0	
OR M.Oil	11274.0	
IT M.Oil	21488.2	
Bunker C	8522.1	20-SEP-2010
Creosote	6396.0	17-JAN-2009

5/6/11

Data File: /chem3/fid3b.i/20110505.b/0505b013.d

Date : 05-MAY-2011 12:03

Client ID: ST89MBW1

Sample Info: ST89MBW1

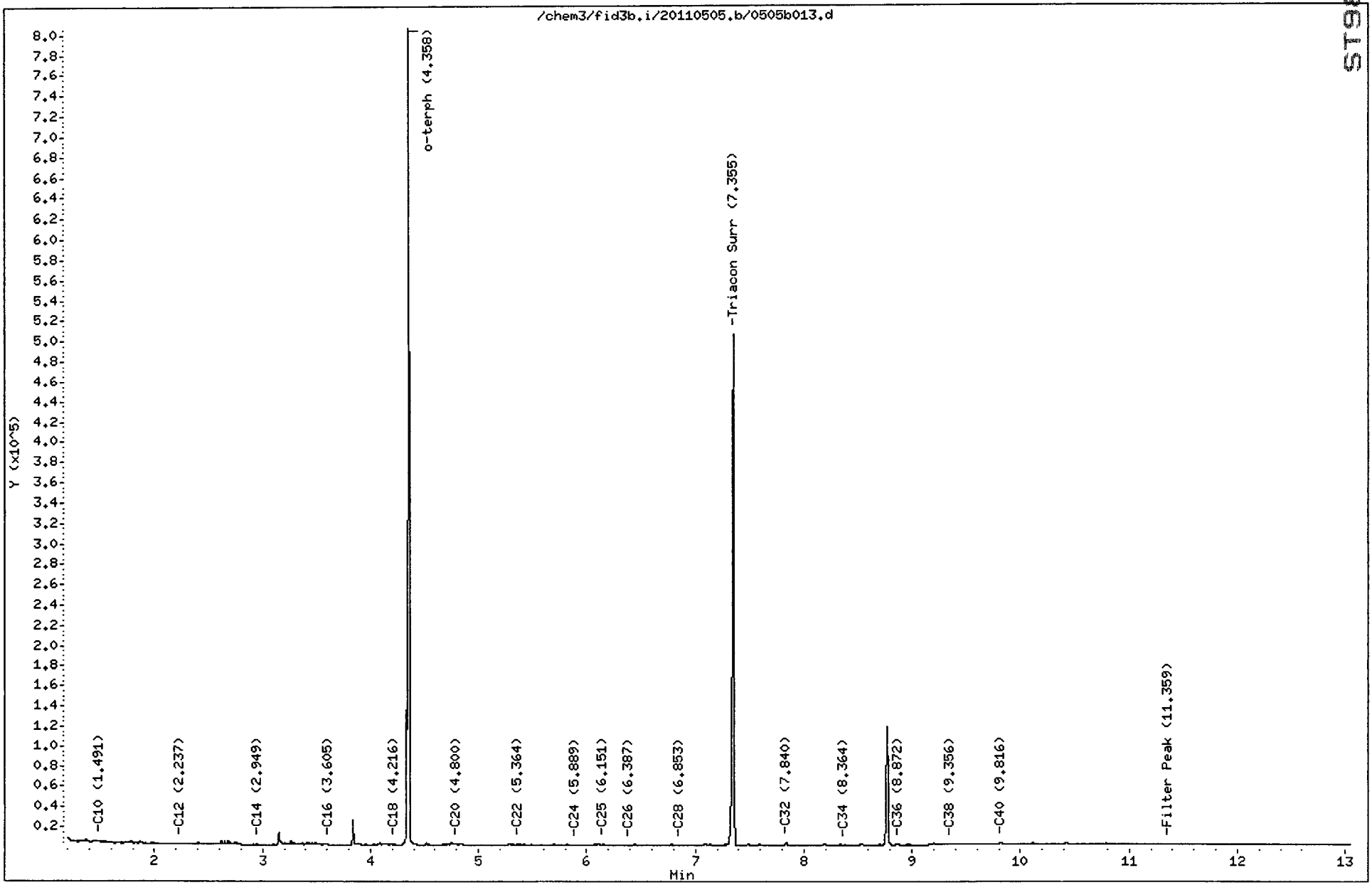
Column phase: RTX-1

Instrument: fid3b.i

Operator: MS

Column diameter: 0.25

ST98:00895



Analytical Resources Inc.
407S TPH Quantitation Report

Data file: /chem3/fid3b.i/20110505.b/0505b014.d
Method: /chem3/fid3b.i/20110505.b/ftphfid3b.m
Instrument: fid3b.i
Operator: MS
Report Date: 05/06/2011
Macro: FID:3B040711

ARI ID: ST89LCSW1
Client ID: ST89LCSW1
Injection: 05-MAY-2011 12:26
Dilution Factor: 1

FID:3B RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	0.880	0.004	97604	33630	GAS (Tol-C12)	2887170	180.73
C8	0.946	-0.003	26124	8330	DIESEL (C12-C24)	20639293	1182.02
C10	1.496	0.000	107433	55313	M.OIL (C24-C38)	721399	77.69
C12	2.234	0.001	175534	176569	AK-102 (C10-C25)	22654721	1120.47
C14	2.956	0.004	370523	236694	AK-103 (C25-C36)	593124	67.96
C16	3.614	0.006	628938	482413	OR.DIES (C10-C28)	22823006	898.51
C18	4.225	0.006	546470	500847	OR.MOIL (C28-C40)	524270	46.50
C20	4.809	0.002	341704	381772	MIN.OIL (C24-C38)	721399	112.05
C22	5.366	-0.003	157214	135047	STODDARD (C8-C12)	2693167	97.34
C24	5.891	-0.005	51704	44622			
C25	6.141	-0.010	21749	25936			
C26	6.381	-0.009	8567	9637			
C28	6.852	-0.009	1517	2122			
C32	7.842	-0.012	42676	48442			
C34	8.383	0.023	458	533	CREOSOT (C8-C22)	19954762	3119.90
Filter Peak	11.363	0.002	911	126			
C36	8.872	0.013	35002	44651	BUNKERC (C10-C38)	23290968	2733.00
o-terph	4.361	-0.002	866098	711566	JET-A (C10-C18)	16662972	3230.60
Triacon Surr	7.353	-0.012	475696	510511	IT.MOIL (C24-C40)	1288218	59.95

Range Times: NW Diesel(2.283 - 5.946) NW Gas(0.827 - 2.283) NW M.Oil(5.946 - 9.397)
AK102(1.446 - 6.101) AK103(6.101 - 8.909) Jet A(1.446 - 4.269)

Surrogate	Area	Amount	%Rec
o-Terphenyl	711566	45.2	100.3
Triacontane	510511	39.8	88.4

Analyte	RF	Curve Date
o-Terph Surr	15759.4	07-APR-2011
Triacon Surr	12836.6	07-APR-2011
Gas	15975.0	20-OCT-2010
Diesel	17461.0	07-APR-2011
Motor Oil	9285.7	07-APR-2011
AK102	20219.0	07-APR-2011
AK103	8727.5	29-SEPT-2010
JetA	5157.9	13-JAN-2011
Min Oil	6438.5	20-JAN-2011
OR Diesel	25401.0	
OR M.Oil	11274.0	
IT M.Oil	21488.2	
Bunker C	8522.1	20-SEP-2010
Creosote	6396.0	17-JAN-2009

5/6/11

Data File: /chem3/fid3b.i/20110505.b/0505b014.d

Date : 05-MAY-2011 12:26

Client ID: ST89LCSW1

Sample Info: ST89LCSW1

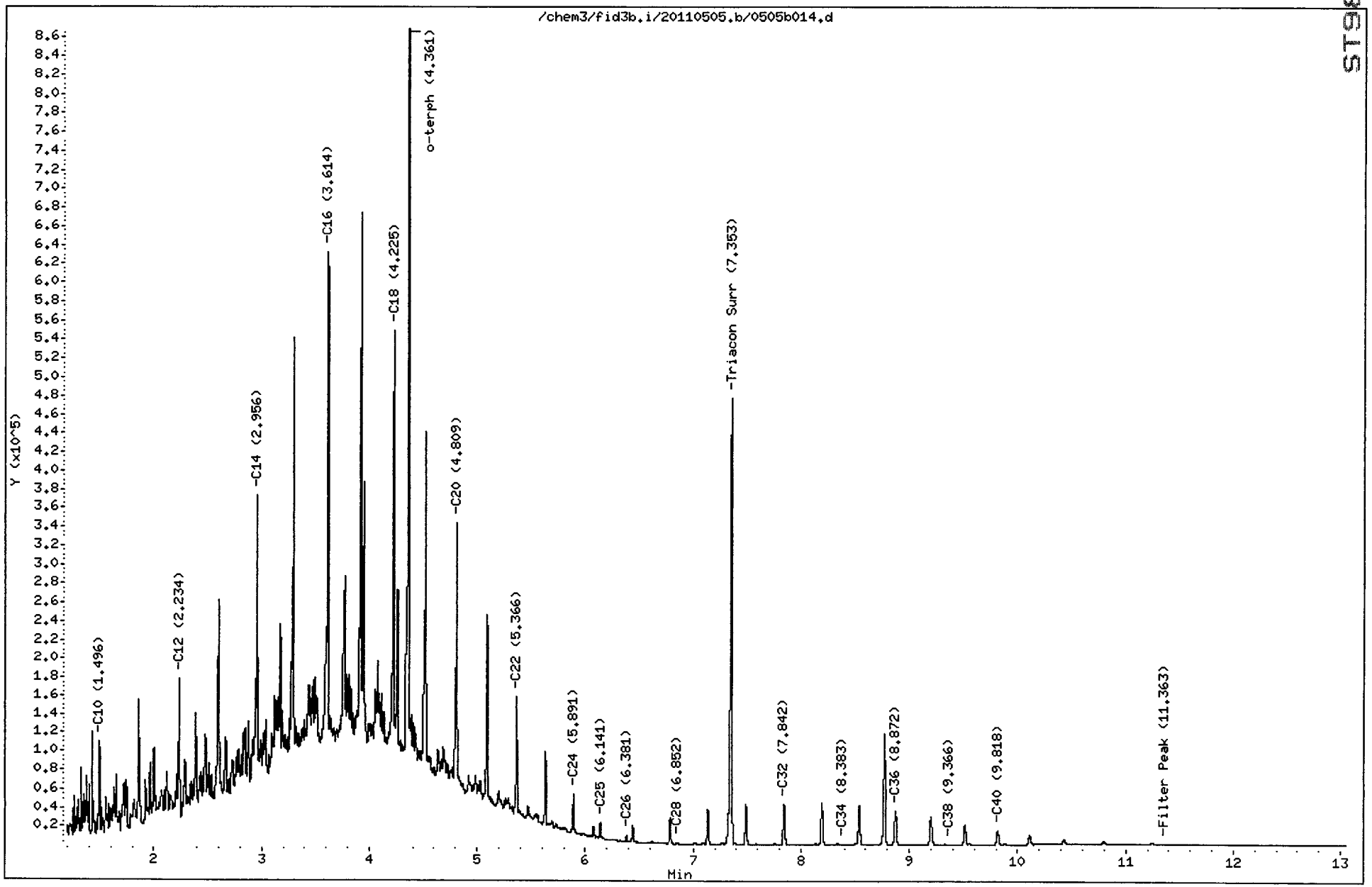
Column phase: RTX-1

Instrument: fid3b.i

Operator: MS

Column diameter: 0.25

ST89:00897



Analytical Resources Inc.
407S TPH Quantitation Report

Data file: /chem3/fid3b.i/20110505.b/0505b014.d
Method: /chem3/fid3b.i/20110505.b/ftphfid3b.m
Instrument: fid3b.i
Operator: MS
Report Date: 05/06/2011
Macro: FID:3B040711

ARI ID: ST89LCSW1
Client ID: ST89LCSW1
Injection: 05-MAY-2011 12:26
Dilution Factor: 1

FID:3B RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc	
Toluene	0.880	0.004	97604	33630	GAS (Tol-C12)	2887170	180.73	
C8	0.946	-0.003	26124	8330	DIESEL (C12-C24)	20833523	1193.15	
C10	1.496	0.000	107433	55313	M.OIL (C24-C38)	721399	77.69	
C12	2.234	0.001	175534	176569	AK-102 (C10-C25)	22848951	1130.07	M
C14	2.956	0.004	370523	236694	AK-103 (C25-C36)	593124	67.96	
C16	3.614	0.006	628938	482413	OR.DIES (C10-C28)	23017236	906.15	M
C18	4.225	0.006	546470	500847	OR.MOIL (C28-C40)	524270	46.50	
C20	4.809	0.002	341704	381772	MIN.OIL (C24-C38)	721399	112.05	
C22	5.366	-0.003	157214	135047	STODDARD (C8-C12)	2693167	97.34	
C24	5.891	-0.005	51704	44622				
C25	6.141	-0.010	21749	25936				
C26	6.381	-0.009	8567	9637				
C28	6.852	-0.009	1517	2122				
C32	7.842	-0.012	42676	48442				
C34	8.383	0.023	458	533	CREOSOT (C8-C22)	20148992	3150.27	
Filter Peak	11.363	0.002	911	126				
C36	8.872	0.013	35002	44651	BUNKERC (C10-C38)	23485198	2755.79	
o-terph	4.361	-0.002	744712	520583	JET-A (C10-C18)	16662972	3230.60	
Triacon Surr	7.353	-0.012	475696	510511	IT.MOIL (C24-C40)	1288218	59.95	

Range Times: NW Diesel(2.283 - 5.946) NW Gas(0.827 - 2.283) NW M.Oil(5.946 - 9.397)
AK102(1.446 - 6.101) AK103(6.101 - 8.909) Jet A(1.446 - 4.269)

Surrogate	Area	Amount	%Rec
o-Terphenyl	520583	33.0	73.4
Triacontane	510511	39.8	88.4

Analyte	RF	Curve Date
o-Terph Surr	15759.4	07-APR-2011
Triacon Surr	12836.6	07-APR-2011
Gas	15975.0	20-OCT-2010
Diesel	17461.0	07-APR-2011
Motor Oil	9285.7	07-APR-2011
AK102	20219.0	07-APR-2011
AK103	8727.5	29-SEPT-2010
JetA	5157.9	13-JAN-2011
Min Oil	6438.5	20-JAN-2011
OR Diesel	25401.0	
OR M.Oil	11274.0	
IT M.Oil	21488.2	
Bunker C	8522.1	20-SEP-2010
Creosote	6396.0	17-JAN-2009

Data File: /chem3/fid3b.i/20110505.b/0505b014.d

Date : 05-MAY-2011 12:26

Client ID: ST89LCSW1

Sample Info: ST89LCSW1

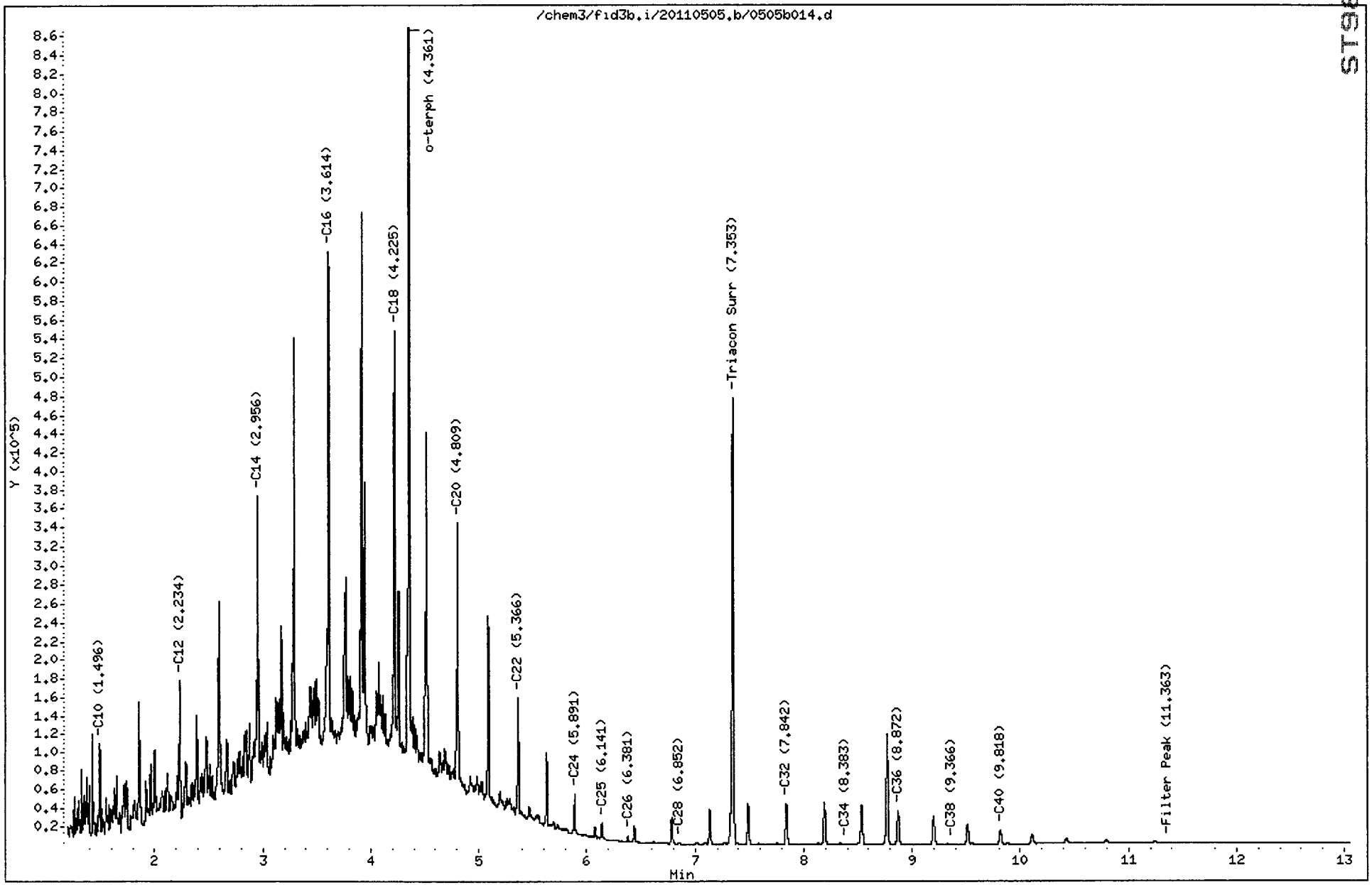
Column phase: RTX-1

Instrument: fid3b.i

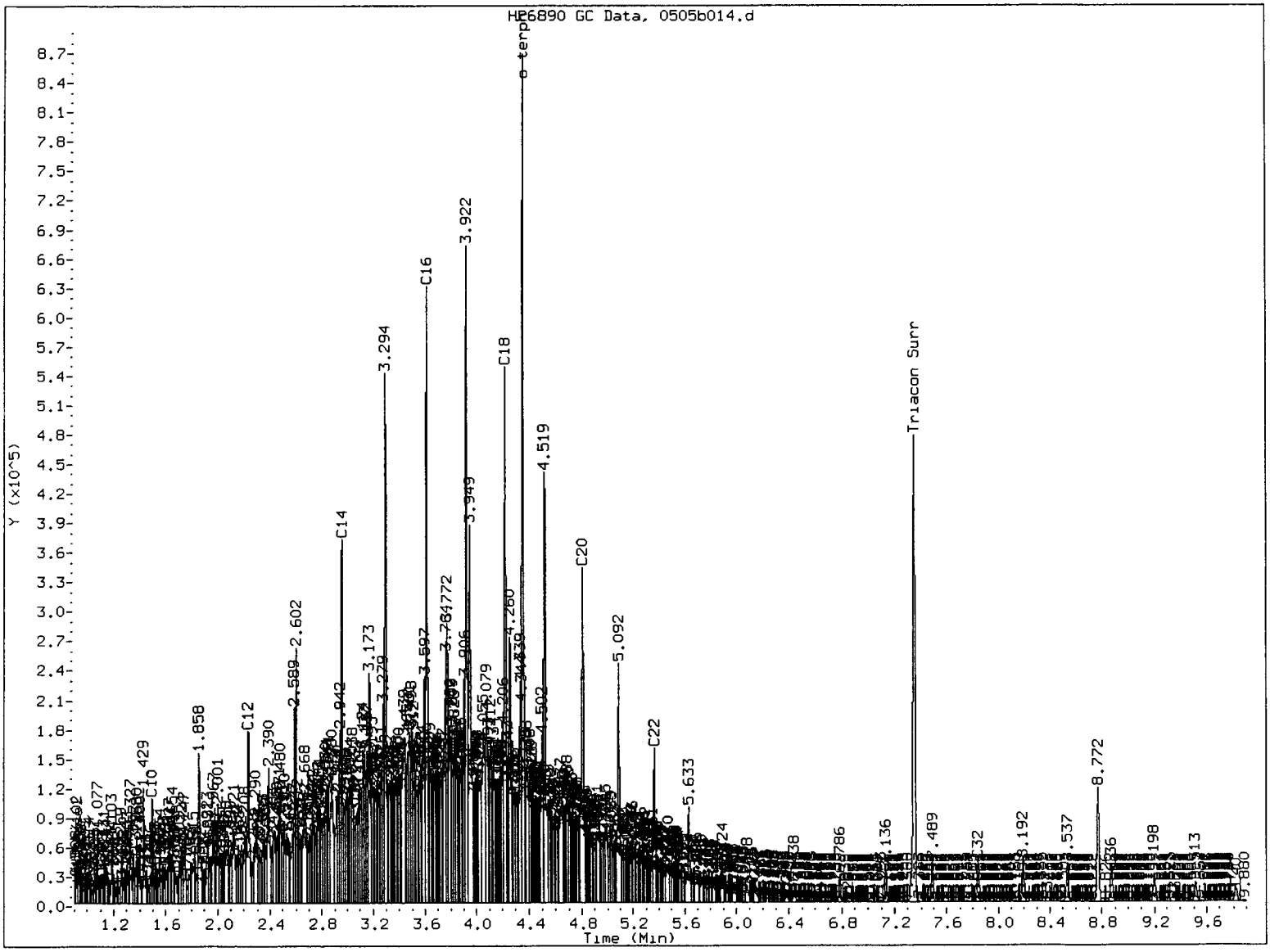
Operator: MS

Column diameter: 0.25

ST89:00899



FID:3B-2C/RTX-1 ST89LCSW1 FID:3B SIGNAL



MANUAL INTEGRATION

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

5. Other _____

Analyst: _____ Date: 5/6/11

Analytical Resources Inc.
407S TPH Quantitation Report

Data file: /chem3/fid3b.i/20110505.b/0505b015.d
Method: /chem3/fid3b.i/20110505.b/ftphfid3b.m
Instrument: fid3b.i
Operator: MS
Report Date: 05/06/2011
Macro: FID:3B040711

ARI ID: ST89LCSDW1
Client ID: ST89LCSDW1
Injection: 05-MAY-2011 12:49
Dilution Factor: 1

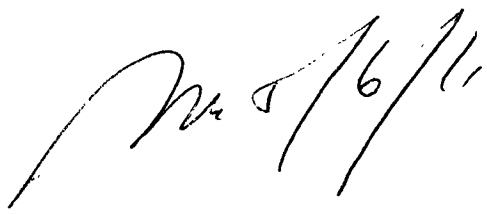
FID:3B RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	0.880	0.004	101423	34584	GAS (Tol-C12)	2984281	186.81
C8	0.951	0.003	34914	11378	DIESEL (C12-C24)	21430489	1227.33
C10	1.497	0.001	107936	58107	M.OIL (C24-C38)	420066	45.24
C12	2.234	0.002	179443	177716	AK-102 (C10-C25)	23518011	1163.16
C14	2.956	0.004	343792	243918	AK-103 (C25-C36)	331324	37.96
C16	3.604	-0.004	255649	50797	OR.DIES (C10-C28)	23660836	931.49
C18	4.212	-0.007	215775	159060	OR.MOIL (C28-C40)	211330	18.74
C20	4.810	0.003	355028	392415	MIN.OIL (C24-C38)	420066	65.24
C22	5.368	-0.001	162707	177469	STODDARD (C8-C12)	2785209	100.67
C24	5.892	-0.004	51821	59054			
C25	6.142	-0.009	23033	31639			
C26	6.384	-0.006	9024	11060			
C28	6.853	-0.008	1524	1978			
C32	7.843	-0.011	3663	4182			
C34	8.362	0.001	103	53	CREOSOT (C8-C22)	20728508	3240.87
Filter Peak	11.365	0.004	824	410			
C36	8.849	-0.010	287	62	BUNKERC (C10-C38)	23857130	2799.43
o-terph	4.363	0.000	837611	710682	JET-A (C10-C18)	17293159	3352.78
Triacon Surr	7.356	-0.009	498663	525974	IT.MOIL (C24-C40)	961076	44.73

Range Times: NW Diesel(2.283 - 5.946) NW Gas(0.827 - 2.283) NW M.Oil(5.946 - 9.397)
AK102(1.446 - 6.101) AK103(6.101 - 8.909) Jet A(1.446 - 4.269)

Surrogate	Area	Amount	%Rec
o-Terphenyl	710682	45.1	100.2
Triacontane	525974	41.0	91.1

Analyte	RF	Curve Date
o-Terph Surr	15759.4	07-APR-2011
Triacon Surr	12836.6	07-APR-2011
Gas	15975.0	20-OCT-2010
Diesel	17461.0	07-APR-2011
Motor Oil	9285.7	07-APR-2011
AK102	20219.0	07-APR-2011
AK103	8727.5	29-SEPT-2010
JetA	5157.9	13-JAN-2011
Min Oil	6438.5	20-JAN-2011
OR Diesel	25401.0	
OR M.Oil	11274.0	
IT M.Oil	21488.2	
Bunker C	8522.1	20-SEP-2010
Creosote	6396.0	17-JAN-2009



Data File: /chem3/fid3b.i/20110505.b/0505b015.d

Date : 05-MAY-2011 12:49

Client ID: ST89LCSDW1

Sample Info: ST89LCSDW1

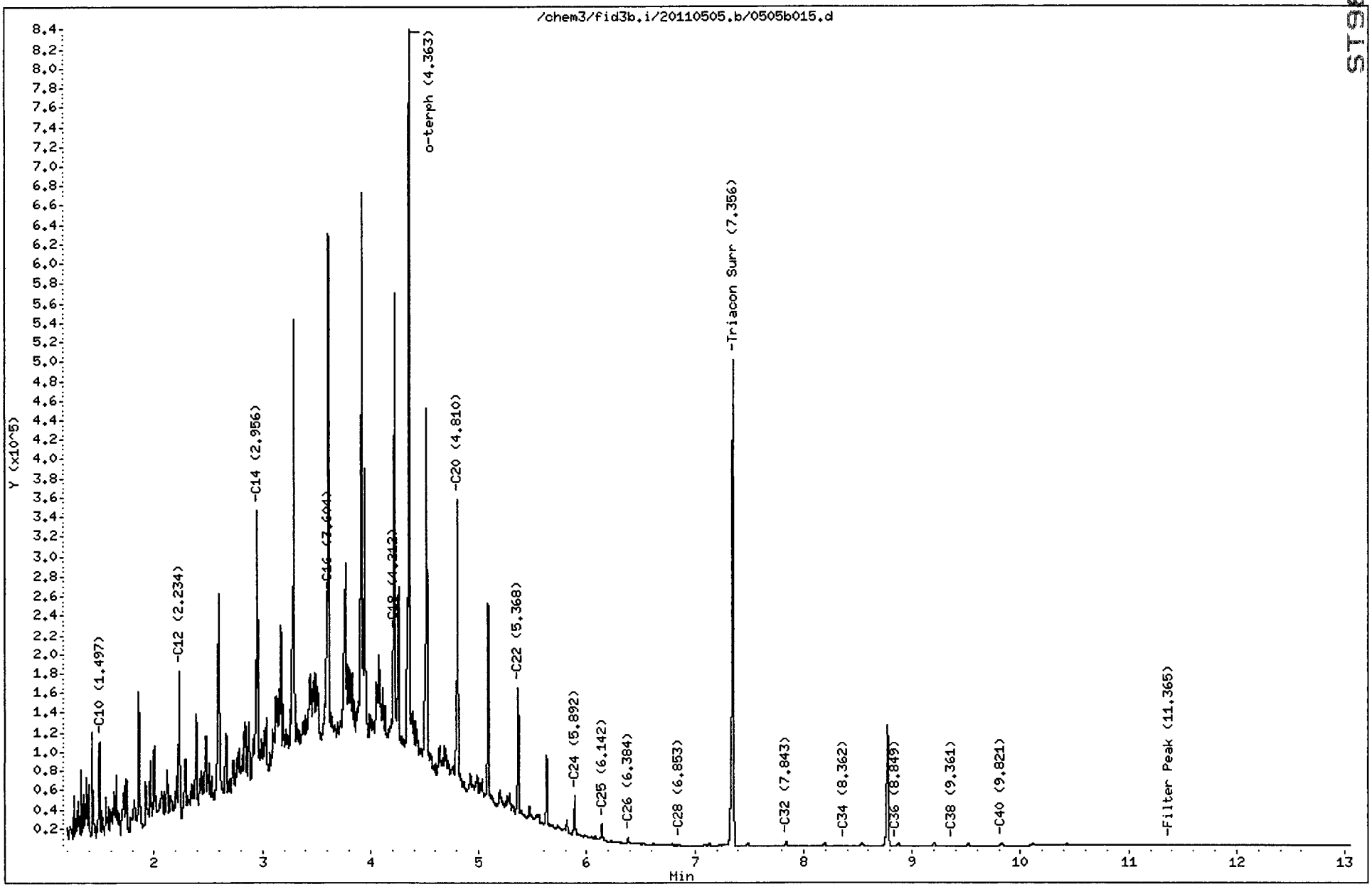
Column phase: RTX-1

Instrument: fid3b.i

Operator: MS

Column diameter: 0.25

ST98:00902



Analytical Resources Inc.
407S TPH Quantitation Report

Data file: /chem3/fid3b.i/20110505.b/0505b015.d
Method: /chem3/fid3b.i/20110505.b/ftphfid3b.m
Instrument: fid3b.i
Operator: MS
Report Date: 05/06/2011
Macro: FID:3B040711

ARI ID: ST89LCSDW1
Client ID: ST89LCSDW1
Injection: 05-MAY-2011 12:49
Dilution Factor: 1

FID:3B RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc	
Toluene	0.880	0.004	101423	34584	GAS (Tol-C12)	2984281	186.81	
C8	0.951	0.003	34914	11378	DIESEL (C12-C24)	21630239	1238.77	
C10	1.497	0.001	107936	58107	M.OIL (C24-C38)	420066	45.24	
C12	2.234	0.002	179443	177716	AK-102 (C10-C25)	23717762	1173.04	M
C14	2.956	0.004	343792	243918	AK-103 (C25-C36)	331324	37.96	
C16	3.604	-0.004	255649	50797	OR.DIES (C10-C28)	23860586	939.36	M
C18	4.212	-0.007	215775	159060	OR.MOIL (C28-C40)	211330	18.74	
C20	4.810	0.003	355028	392415	MIN.OIL (C24-C38)	420066	65.24	
C22	5.368	-0.001	162707	177469	STODDARD (C8-C12)	2785209	100.67	
C24	5.892	-0.004	51821	59054				
C25	6.142	-0.009	23033	31639				
C26	6.384	-0.006	9024	11060				
C28	6.853	-0.008	1524	1978				
C32	7.843	-0.011	3663	4182				
C34	8.362	0.001	103	53	CREOSOT (C8-C22)	20928259	3272.10	
Filter Peak	11.365	0.004	824	410				
C36	8.849	-0.010	287	62	BUNKERC (C10-C38)	24056880	2822.87	
o-terph	4.363	0.000	711194	514585	JET-A (C10-C18)	17293159	3352.78	
Triacon Surr	7.356	-0.009	498663	525974	IT.MOIL (C24-C40)	961076	44.73	

Range Times: NW Diesel(2.283 - 5.946) NW Gas(0.827 - 2.283) NW M.Oil(5.946 - 9.397)
AK102(1.446 - 6.101) AK103(6.101 - 8.909) Jet A(1.446 - 4.269)

Surrogate	Area	Amount	%Rec
o-Terphenyl	514585	32.7	72.6
Triacontane	525974	41.0	91.1

Analyte	RF	Curve Date
o-Terph Surr	15759.4	07-APR-2011
Triacon Surr	12836.6	07-APR-2011
Gas	15975.0	20-OCT-2010
Diesel	17461.0	07-APR-2011
Motor Oil	9285.7	07-APR-2011
AK102	20219.0	07-APR-2011
AK103	8727.5	29-SEPT-2010
JetA	5157.9	13-JAN-2011
Min Oil	6438.5	20-JAN-2011
OR Diesel	25401.0	
OR M.Oil	11274.0	
IT M.Oil	21488.2	
Bunker C	8522.1	20-SEP-2010
Creosote	6396.0	17-JAN-2009

Data File: /chem3/fid3b.i/20110505.b/0505b015.d

Date : 05-MAY-2011 12:49

Client ID: ST89LCSDW1

Sample Info: ST89LCSDW1

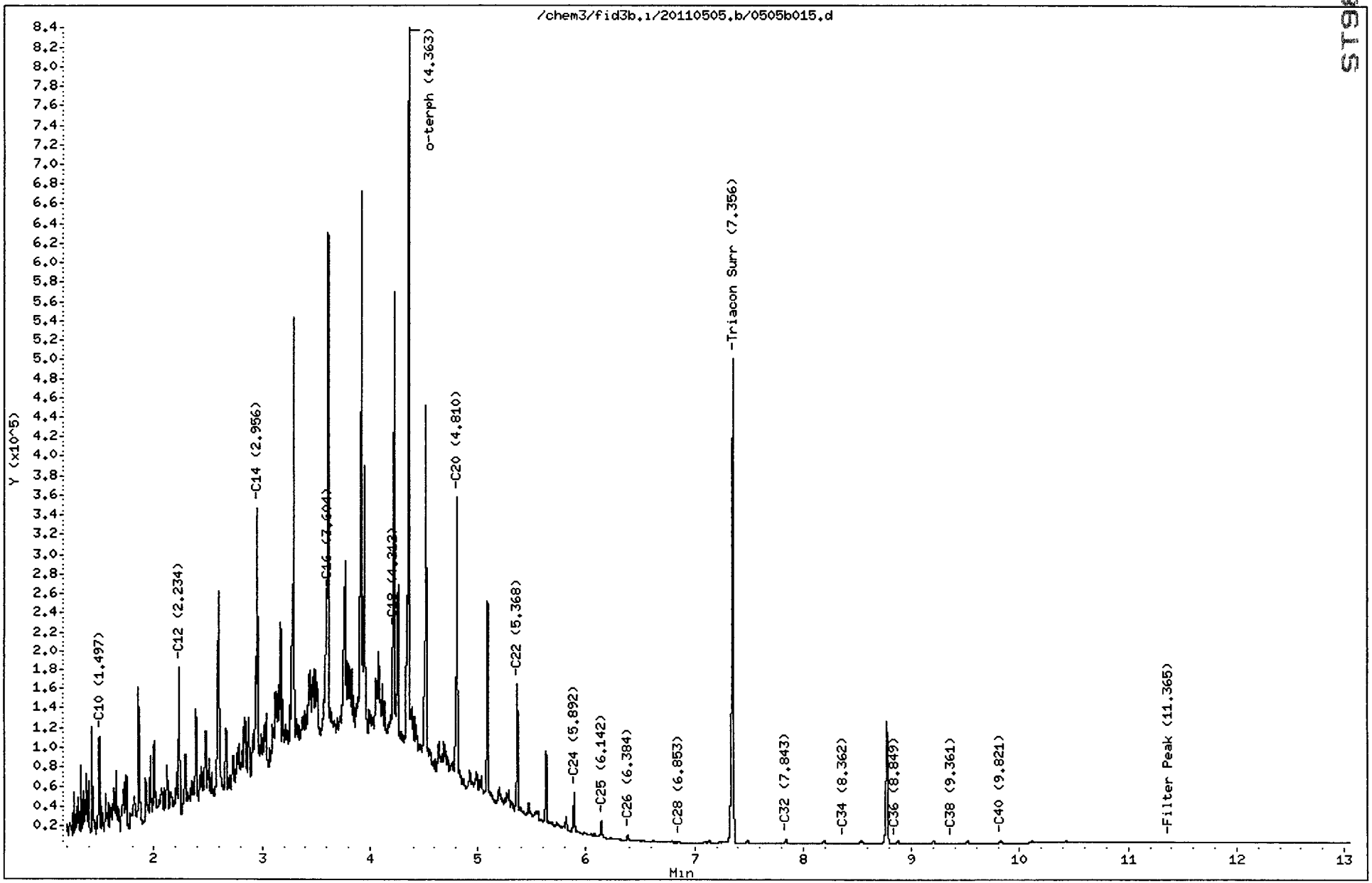
Column phase: RTX-1

Instrument: fid3b.i

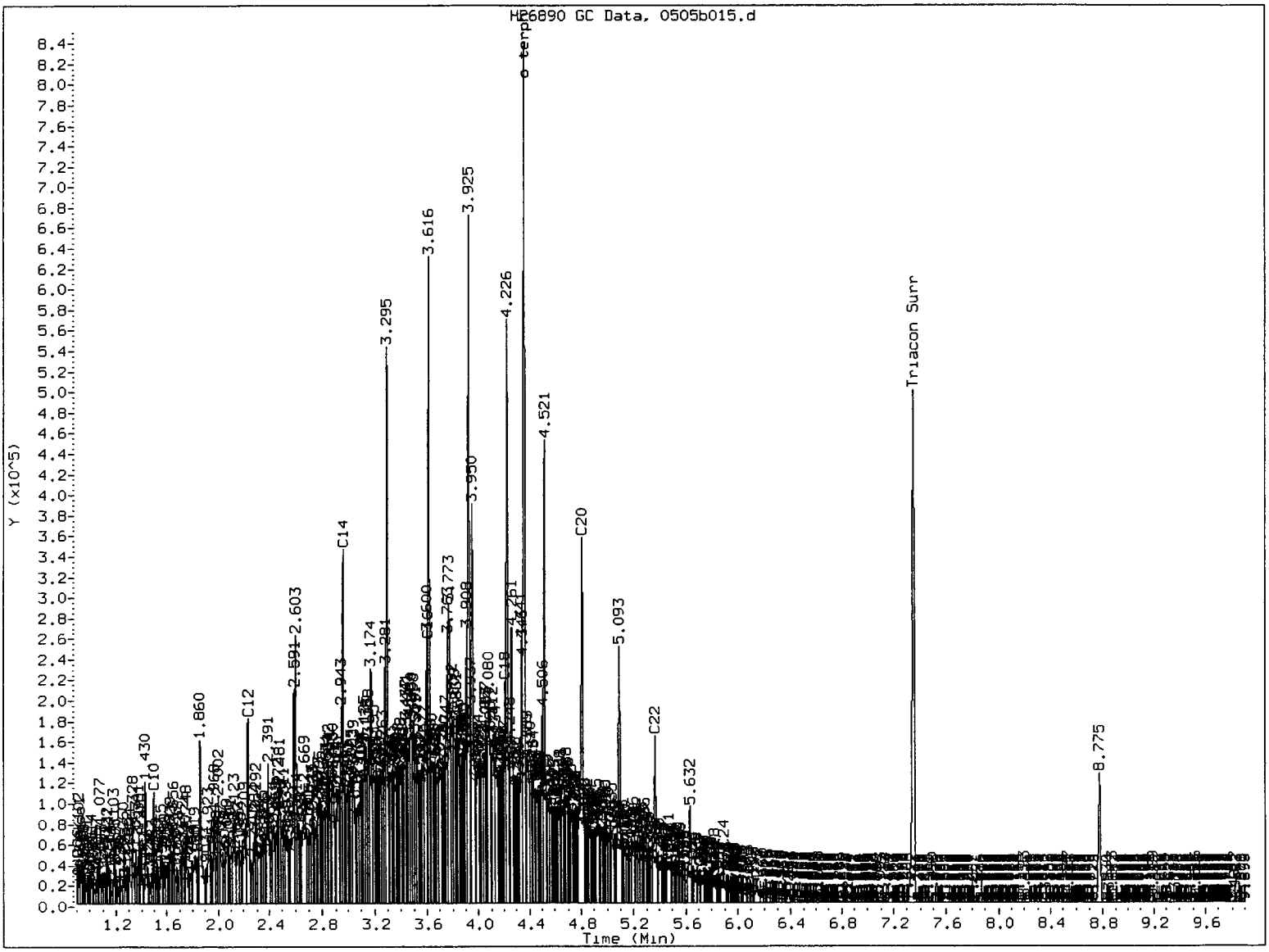
Operator: MS

Column diameter: 0.25

ST98:00904



FID:3B-2C/RTX-1 ST89LCSDW1 FID:3B SIGNAL



MANUAL INTEGRATION

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

5. Other _____

Analyst: MM Date: 5/16/11

Analytical Resources Inc.
407S TPH Quantitation Report

Data file: /chem3/fid3b.i/20110505.b/0505b019.d
Method: /chem3/fid3b.i/20110505.b/ftphfid3b.m
Instrument: fid3b.i
Operator: MS
Report Date: 05/06/2011
Macro: FID:3B040711

ARI ID: ST98A
Client ID: MW02-042611
Injection: 05-MAY-2011 14:23
Dilution Factor: 1

FID:3B RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	0.874	-0.003	41152	10254	GAS (Tol-C12)	600373	37.58
C8	0.948	-0.001	20044	5932	DIESEL (C12-C24)	297226	17.02
C10	1.490	-0.007	5586	7411	M.OIL (C24-C38)	197987	21.32
C12	2.242	0.009	1334	1712	AK-102 (C10-C25)	424273	20.98
C14	2.950	-0.003	675	434	AK-103 (C25-C36)	186876	21.41
C16	3.603	-0.006	1279	1791	OR.DIES (C10-C28)	435591	17.15
C18	4.216	-0.004	996	725	OR.MOIL (C28-C40)	196935	17.47
C20	4.814	0.007	685	243	MIN.OIL (C24-C38)	197987	30.75
C22	5.363	-0.006	754	539	STODDARD (C8-C12)	419135	15.15
C24	5.890	-0.007	396	372			
C25	6.151	0.000	814	729			
C26	6.388	-0.002	202	120			
C28	6.854	-0.007	424	419			
C32	7.843	-0.011	2121	2462			
C34	8.365	0.004	89	59	CREOSOT (C8-C22)	287393	44.93
Filter Peak	11.360	-0.001	914	380			
C36	8.845	-0.014	344	153	BUNKERC (C10-C38)	619183	72.66
o-terph	4.358	-0.006	763629	565797	JET-A (C10-C18)	302468	58.64
Triacon Surr	7.356	-0.009	517772	542539	IT.MOIL (C24-C40)	753869	35.08

Range Times: NW Diesel(2.283 - 5.946) NW Gas(0.827 - 2.283) NW M.Oil(5.946 - 9.397)
AK102(1.446 - 6.101) AK103(6.101 - 8.909) Jet A(1.446 - 4.269)

Surrogate	Area	Amount	%Rec
o-Terphenyl	565797	35.9	79.8
Triacontane	542539	42.3	93.9

Analyte	RF	Curve Date
o-Terph Surr	15759.4	07-APR-2011
Triacon Surr	12836.6	07-APR-2011
Gas	15975.0	20-OCT-2010
Diesel	17461.0	07-APR-2011
Motor Oil	9285.7	07-APR-2011
AK102	20219.0	07-APR-2011
AK103	8727.5	29-SEPT-2010
JetA	5157.9	13-JAN-2011
Min Oil	6438.5	20-JAN-2011
OR Diesel	25401.0	
OR M.Oil	11274.0	
IT M.Oil	21488.2	
Bunker C	8522.1	20-SEP-2010
Creosote	6396.0	17-JAN-2009

5/6/11

Data File: /chem3/fid3b.i/20110505.b/0505b019.d

Date : 05-MAY-2011 14:23

Client ID: MW02-042611

Sample Info: ST98A

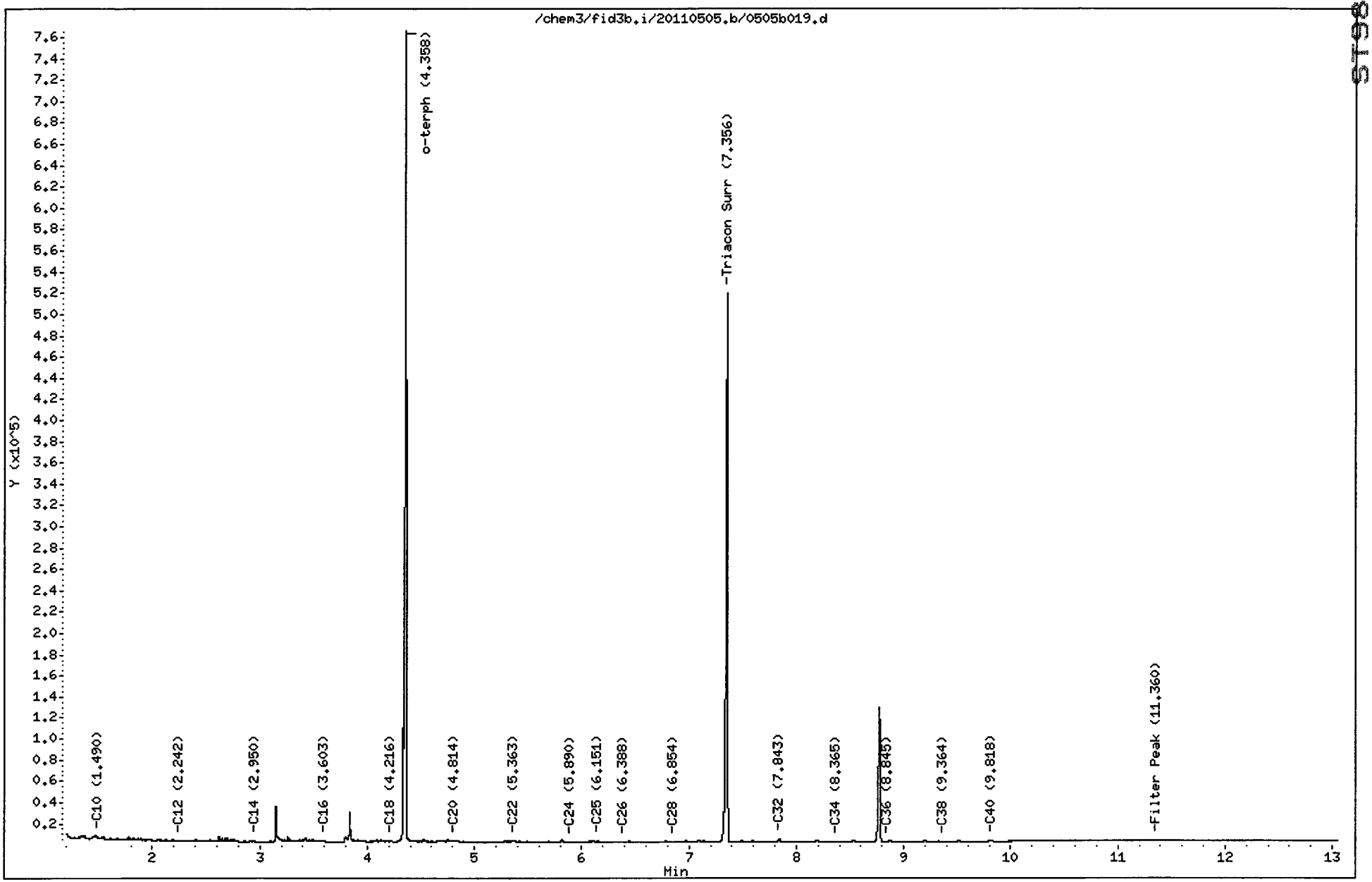
Column phase: RTX-1

Instrument: fid3b.i

Operator: MS

Column diameter: 0.25

ST98 : 000907



Analytical Resources Inc.
407S TPH Quantitation Report

Data file: /chem3/fid3b.i/20110505.b/0505b020.d
Method: /chem3/fid3b.i/20110505.b/ftphfid3b.m
Instrument: fid3b.i
Operator: MS
Report Date: 05/06/2011
Macro: FID:3B040711

ARI ID: ST98B
Client ID: MW03-042611
Injection: 05-MAY-2011 14:46
Dilution Factor: 1

FID:3B RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	0.875	-0.002	36483	10756	GAS (Tol-C12)	546011	34.18
C8	0.954	0.006	18299	4360	DIESEL (C12-C24)	242550	13.89
C10	1.490	-0.006	5269	5655	M.OIL (C24-C38)	171761	18.50
C12	2.239	0.006	1142	1458	AK-102 (C10-C25)	355851	17.60
C14	2.961	0.008	490	241	AK-103 (C25-C36)	160464	18.39
C16	3.603	-0.005	1155	1639	OR.DIES (C10-C28)	366283	14.42
C18	4.216	-0.003	909	749	OR.MOIL (C28-C40)	172165	15.27
C20	4.813	0.006	587	278	MIN.OIL (C24-C38)	171761	26.68
C22	5.366	-0.003	683	402	STODDARD (C8-C12)	380821	13.76
C24	5.902	0.006	264	71			
C25	6.151	0.000	773	828			
C26	6.385	-0.005	213	229			
C28	6.870	0.009	344	235			
C32	7.867	0.014	131	133			
C34	8.372	0.012	89	22	CREOSOT (C8-C22)	234816	36.71
Filter Peak	11.359	-0.001	951	113			
C36	8.873	0.014	988	1569	BUNKERC (C10-C38)	524854	61.59
o-terph	4.357	-0.006	758396	543926	JET-A (C10-C18)	246933	47.88
Triacon Surr	7.355	-0.010	480092	520144	IT.MOIL (C24-C40)	705499	32.83

Range Times: NW Diesel(2.283 - 5.946) NW Gas(0.827 - 2.283) NW M.Oil(5.946 - 9.397)
AK102(1.446 - 6.101) AK103(6.101 - 8.909) Jet A(1.446 - 4.269)

Surrogate	Area	Amount	%Rec
o-Terphenyl	543926	34.5	76.7
Triacontane	520144	40.5	90.0

Analyte	RF	Curve Date
o-Terph Surr	15759.4	07-APR-2011
Triacon Surr	12836.6	07-APR-2011
Gas	15975.0	20-OCT-2010
Diesel	17461.0	07-APR-2011
Motor Oil	9285.7	07-APR-2011
AK102	20219.0	07-APR-2011
AK103	8727.5	29-SEPT-2010
JetA	5157.9	13-JAN-2011
Min Oil	6438.5	20-JAN-2011
OR Diesel	25401.0	
OR M.Oil	11274.0	
IT M.Oil	21488.2	
Bunker C	8522.1	20-SEP-2010
Creosote	6396.0	17-JAN-2009

5/6/11

Data File: /chem3/fid3b.i/20110505.b/0505b020.d

Date : 05-MAY-2011 14:46

Client ID: MW03-042611

Sample Info: ST98B

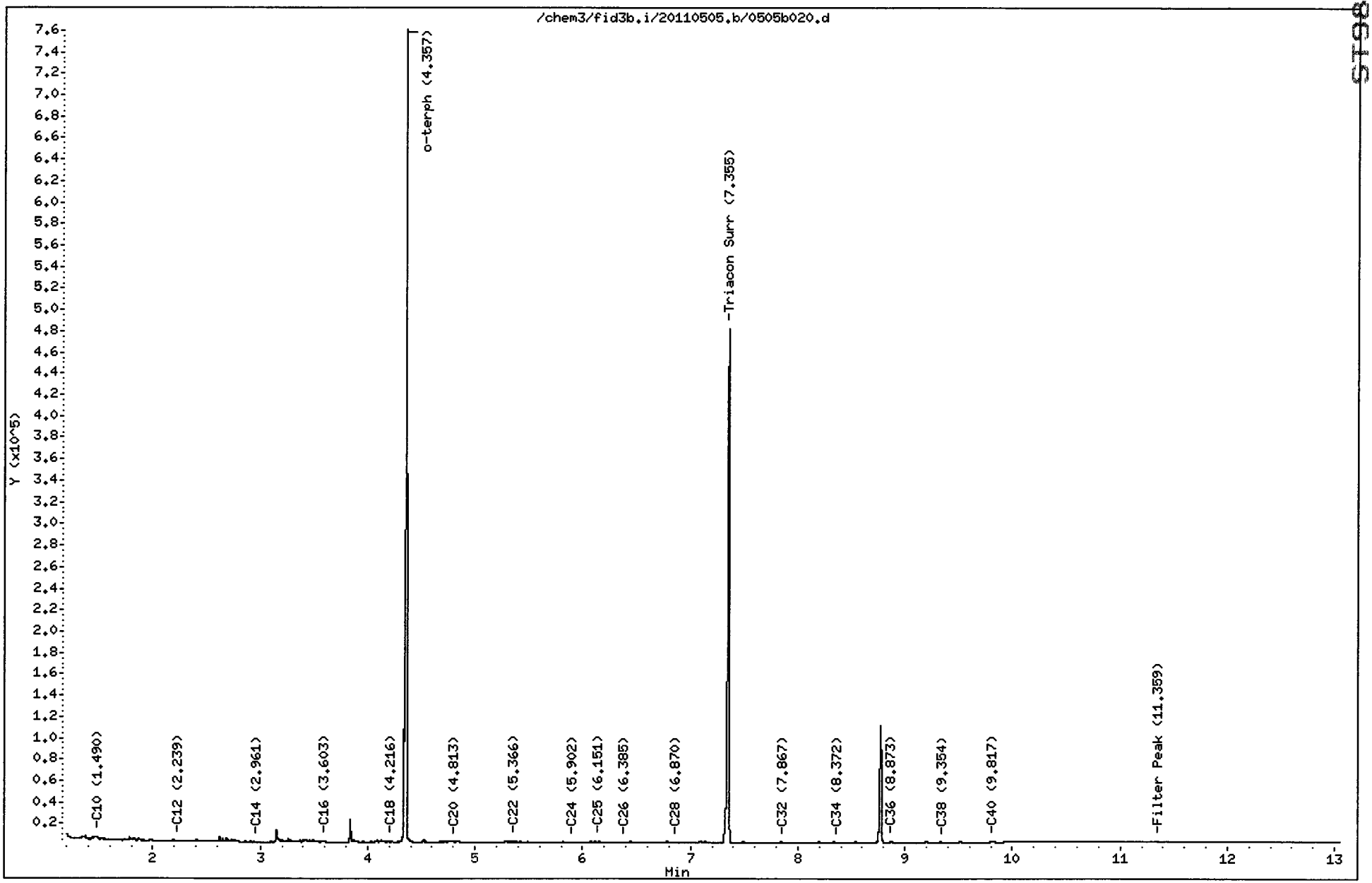
Column phase: RTX-1

Instrument: fid3b.i

Operator: MS

Column diameter: 0.25

ST98 : 000909



Analytical Resources Inc.
407S TPH Quantitation Report

Data file: /chem3/fid3b.i/20110505.b/0505b021.d
Method: /chem3/fid3b.i/20110505.b/ftphfid3b.m
Instrument: fid3b.i
Operator: MS
Report Date: 05/06/2011
Macro: FID:3B040711

ARI ID: ST98C
Client ID: MW13-042611
Injection: 05-MAY-2011 15:09
Dilution Factor: 1

FID:3B RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	0.873	-0.004	40360	10816	GAS (Tol-C12)	609084	38.13
C8	0.953	0.004	20445	7511	DIESEL (C12-C24)	247947	14.20
C10	1.490	-0.006	5753	7769	M.OIL (C24-C38)	173483	18.68
C12	2.238	0.005	1403	1003	AK-102 (C10-C25)	377786	18.68
C14	2.962	0.009	596	438	AK-103 (C25-C36)	163345	18.72
C16	3.605	-0.004	1220	1789	OR.DIES (C10-C28)	388445	15.29
C18	4.216	-0.003	928	685	OR.MOIL (C28-C40)	173041	15.35
C20	4.803	-0.004	686	247	MIN.OIL (C24-C38)	173483	26.94
C22	5.365	-0.004	704	466	STODDARD (C8-C12)	415006	15.00
C24	5.902	0.006	298	238			
C25	6.152	0.001	751	683			
C26	6.389	-0.001	198	134			
C28	6.867	0.006	327	298			
C32	7.843	-0.011	1456	1638			
C34	8.370	0.009	111	49	CREOSOT (C8-C22)	240112	37.54
Filter Peak	11.363	0.003	910	126			
C36	8.874	0.015	816	1296	BUNKERC (C10-C38)	548436	64.35
o-terph	4.358	-0.005	753179	530940	JET-A (C10-C18)	278124	53.92
Triacon Surr	7.354	-0.011	448762	485821	IT.MOIL (C24-C40)	672354	31.29

Range Times: NW Diesel(2.283 - 5.946) NW Gas(0.827 - 2.283) NW M.Oil(5.946 - 9.397)
AK102(1.446 - 6.101) AK103(6.101 - 8.909) Jet A(1.446 - 4.269)

Surrogate	Area	Amount	%Rec
o-Terphenyl	530940	33.7	74.9
Triacontane	485821	37.8	84.1

Analyte	RF	Curve Date
o-Terph Surr	15759.4	07-APR-2011
Triacon Surr	12836.6	07-APR-2011
Gas	15975.0	20-OCT-2010
Diesel	17461.0	07-APR-2011
Motor Oil	9285.7	07-APR-2011
AK102	20219.0	07-APR-2011
AK103	8727.5	29-SEPT-2010
JetA	5157.9	13-JAN-2011
Min Oil	6438.5	20-JAN-2011
OR Diesel	25401.0	
OR M.Oil	11274.0	
IT M.Oil	21488.2	
Bunker C	8522.1	20-SEP-2010
Creosote	6396.0	17-JAN-2009

Data File: /chem3/fid3b.i/20110505.b/0505b021.d

Date : 05-MAY-2011 15:09

Client ID: MW13-042611

Sample Info: ST98C

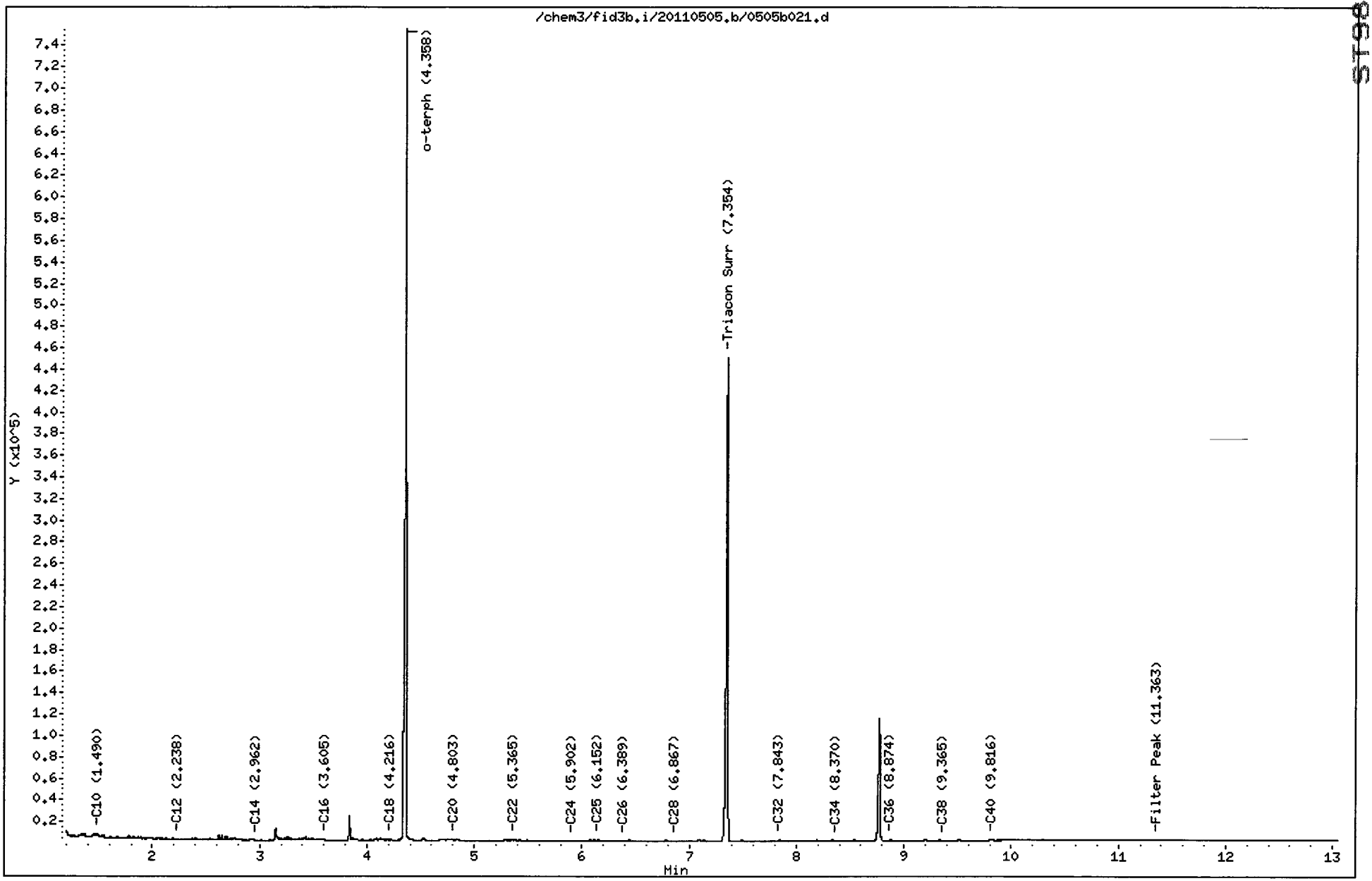
Column phase: RTX-1

Instrument: fid3b.i

Operator: MS

Column diameter: 0.25

ST98 : 60911



Analytical Resources Inc.
407S TPH Quantitation Report

Data file: /chem3/fid3b.i/20110505.b/0505b022.d
Method: /chem3/fid3b.i/20110505.b/ftphfid3b.m
Instrument: fid3b.i
Operator: MS
Report Date: 05/06/2011
Macro: FID:3B040711

ARI ID: ST98D
Client ID: MW06-042611
Injection: 05-MAY-2011 15:32
Dilution Factor: 1

FID:3B RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	0.880	0.004	66672	27861	GAS (Tol-C12)	721293	45.15
C8	0.952	0.003	21765	7993	DIESEL (C12-C24)	1547343	88.62
C10	1.489	-0.007	5918	5764	M.OIL (C24-C38)	193327	20.82
C12	2.238	0.006	1803	2062	AK-102 (C10-C25)	1775445	87.81
C14	2.950	-0.002	2685	1084	AK-103 (C25-C36)	176603	20.24
C16	3.607	-0.001	7989	4395	OR.DIES (C10-C28)	1804035	71.02
C18	4.214	-0.005	13344	13722	OR.MOIL (C28-C40)	157084	13.93
C20	4.805	-0.002	11088	4337	MIN.OIL (C24-C38)	193327	30.03
C22	5.366	-0.003	5101	2319	STODDARD (C8-C12)	533009	19.27
C24	5.891	-0.005	1971	1606			
C25	6.151	0.000	2111	2489			
C26	6.387	-0.003	610	270			
C28	6.853	-0.008	561	755			
C32	7.842	-0.012	1514	1666			
C34	8.360	0.000	68	33	CREOSOT (C8-C22)	1463156	228.76
Filter Peak	11.361	0.000	431	59			
C36	8.873	0.014	697	1024	BUNKERC (C10-C38)	1955755	229.49
o-terph	4.360	-0.003	731746	550236	JET-A (C10-C18)	991854	192.30
Triacon Surr	7.355	-0.010	504132	512187	IT.MOIL (C24-C40)	710877	33.08

Range Times: NW Diesel(2.283 - 5.946) NW Gas(0.827 - 2.283) NW M.Oil(5.946 - 9.397)
AK102(1.446 - 6.101) AK103(6.101 - 8.909) Jet A(1.446 - 4.269)

Surrogate	Area	Amount	%Rec
o-Terphenyl	550236	34.9	77.6
Triacontane	512187	39.9	88.7

Analyte	RF	Curve Date
o-Terph Surr	15759.4	07-APR-2011
Triacon Surr	12836.6	07-APR-2011
Gas	15975.0	20-OCT-2010
Diesel	17461.0	07-APR-2011
Motor Oil	9285.7	07-APR-2011
AK102	20219.0	07-APR-2011
AK103	8727.5	29-SEPT-2010
JetA	5157.9	13-JAN-2011
Min Oil	6438.5	20-JAN-2011
OR Diesel	25401.0	
OR M.Oil	11274.0	
IT M.Oil	21488.2	
Bunker C	8522.1	20-SEP-2010
Creosote	6396.0	17-JAN-2009

5/6/11

Data File: /chem3/fid3b.i/20110505.b/0505b022.d

Date : 05-MAY-2011 15:32

Client ID: MW06-042611

Sample Info: ST98D

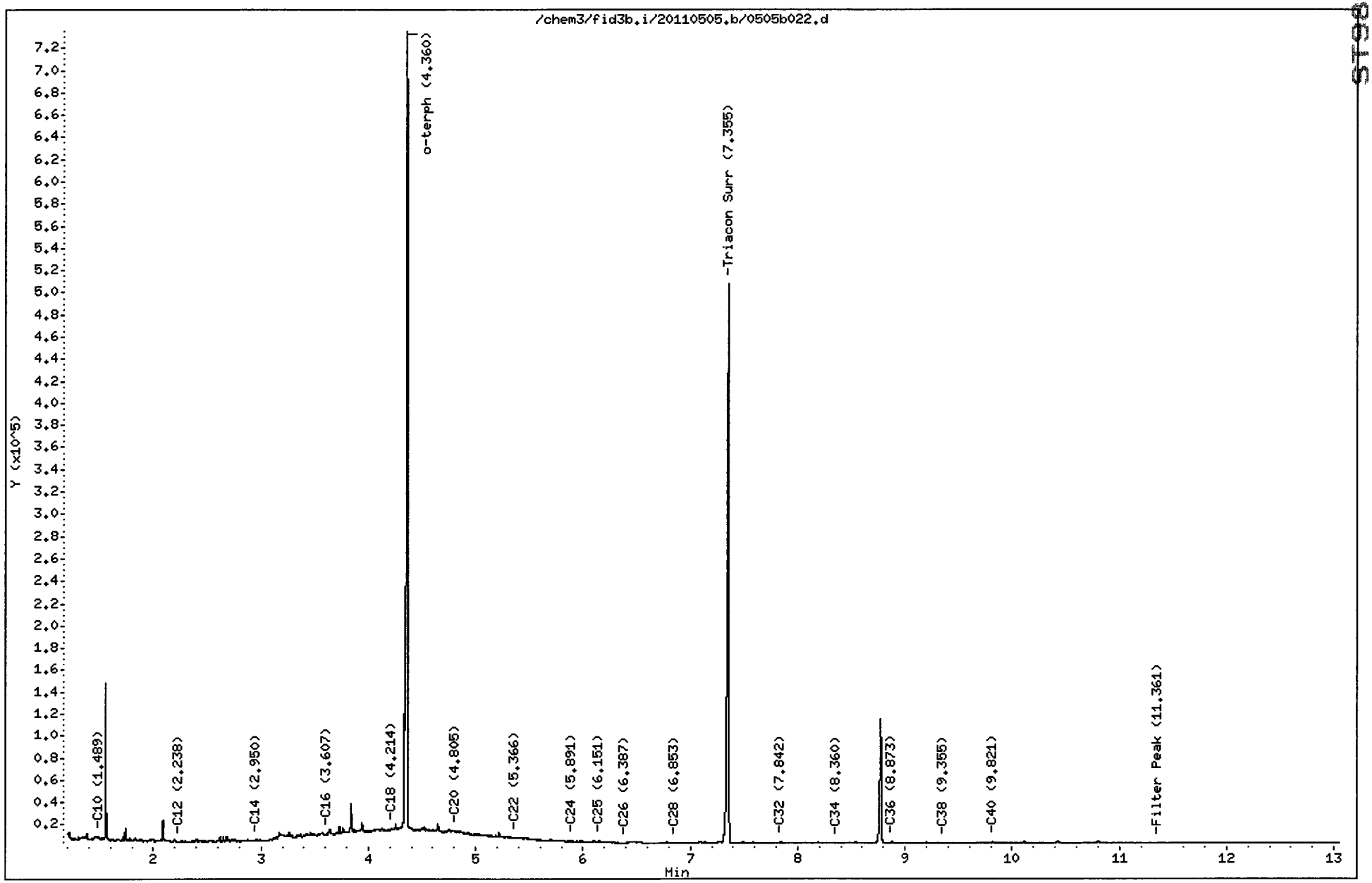
Column phase: RTX-1

Instrument: fid3b.i

Operator: MS

Column diameter: 0.25

ST98:00913



Analytical Resources Inc.
407S TPH Quantitation Report

Data file: /chem3/fid3b.i/20110505.b/0505b022.d
Method: /chem3/fid3b.i/20110505.b/ftphfid3b.m
Instrument: fid3b.i
Operator: MS
Report Date: 05/06/2011
Macro: FID:3B040711

ARI ID: ST98D
Client ID: MW06-042611
Injection: 05-MAY-2011 15:32
Dilution Factor: 1

FID:3B RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc	
Toluene	0.880	0.004	66672	27861	GAS (Tol-C12)	721293	45.15	
C8	0.952	0.003	21765	7993	DIESEL (C12-C24)	1579843	90.48	
C10	1.489	-0.007	5918	5764	M.OIL (C24-C38)	193327	20.82	
C12	2.238	0.006	1803	2062	AK-102 (C10-C25)	1807945	89.42	M
C14	2.950	-0.002	2685	1084	AK-103 (C25-C36)	176603	20.24	
C16	3.607	-0.001	7989	4395	OR.DIES (C10-C28)	1836535	72.30	M
C18	4.214	-0.005	13344	13722	OR.MOIL (C28-C40)	157084	13.93	
C20	4.805	-0.002	11088	4337	MIN.OIL (C24-C38)	193327	30.03	
C22	5.366	-0.003	5101	2319	STODDARD (C8-C12)	533009	19.27	
C24	5.891	-0.005	1971	1606				
C25	6.151	0.000	2111	2489				
C26	6.387	-0.003	610	270				
C28	6.853	-0.008	561	755				
C32	7.842	-0.012	1514	1666				
C34	8.360	0.000	68	33	CREOSOT (C8-C22)	1495656	233.84	
Filter Peak	11.361	0.000	431	59				
C36	8.873	0.014	697	1024	BUNKERC (C10-C38)	1988256	233.31	
o-terph	4.360	-0.003	716275	518891	JET-A (C10-C18)	991854	192.30	
Triacon Surr	7.355	-0.010	504132	512187	IT.MOIL (C24-C40)	710877	33.08	

Range Times: NW Diesel(2.283 - 5.946) NW Gas(0.827 - 2.283) NW M.Oil(5.946 - 9.397)
AK102(1.446 - 6.101) AK103(6.101 - 8.909) Jet A(1.446 - 4.269)

Surrogate	Area	Amount	%Rec
o-Terphenyl	518891	32.9	73.2
Triacontane	512187	39.9	88.7

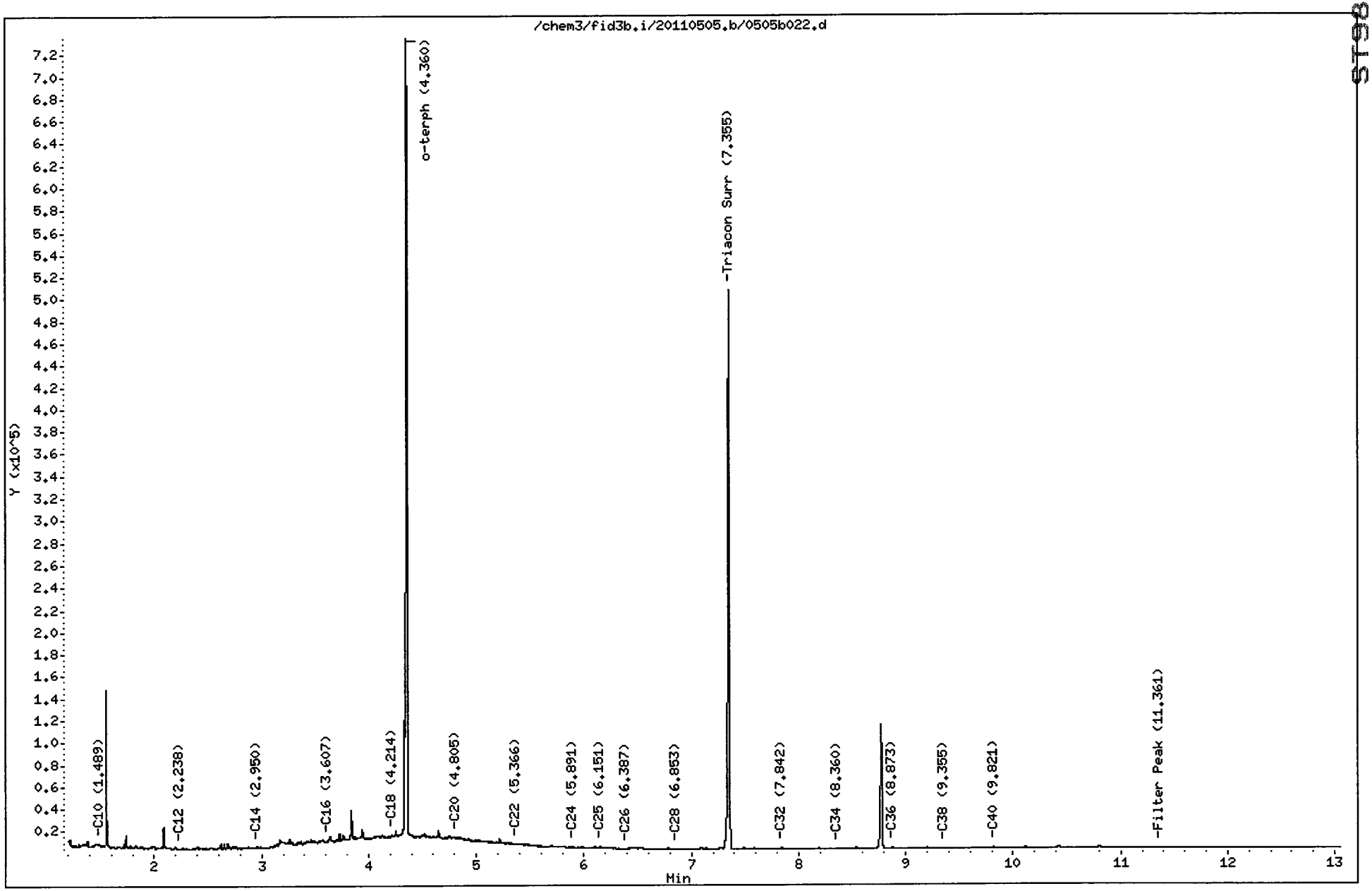
Analyte	RF	Curve Date
o-Terph Surr	15759.4	07-APR-2011
Triacon Surr	12836.6	07-APR-2011
Gas	15975.0	20-OCT-2010
Diesel	17461.0	07-APR-2011
Motor Oil	9285.7	07-APR-2011
AK102	20219.0	07-APR-2011
AK103	8727.5	29-SEPT-2010
JetA	5157.9	13-JAN-2011
Min Oil	6438.5	20-JAN-2011
OR Diesel	25401.0	
OR M.Oil	11274.0	
IT M.Oil	21488.2	
Bunker C	8522.1	20-SEP-2010
Creosote	6396.0	17-JAN-2009

Data File: /chem3/fid3b.i/20110505.b/0505b022.d
Date : 05-MAY-2011 15:32
Client ID: MW06-042611
Sample Info: ST98D

Instrument: fid3b.i
Operator: MS
Column diameter: 0.25

Column phase: RTX-1

ST98:00915



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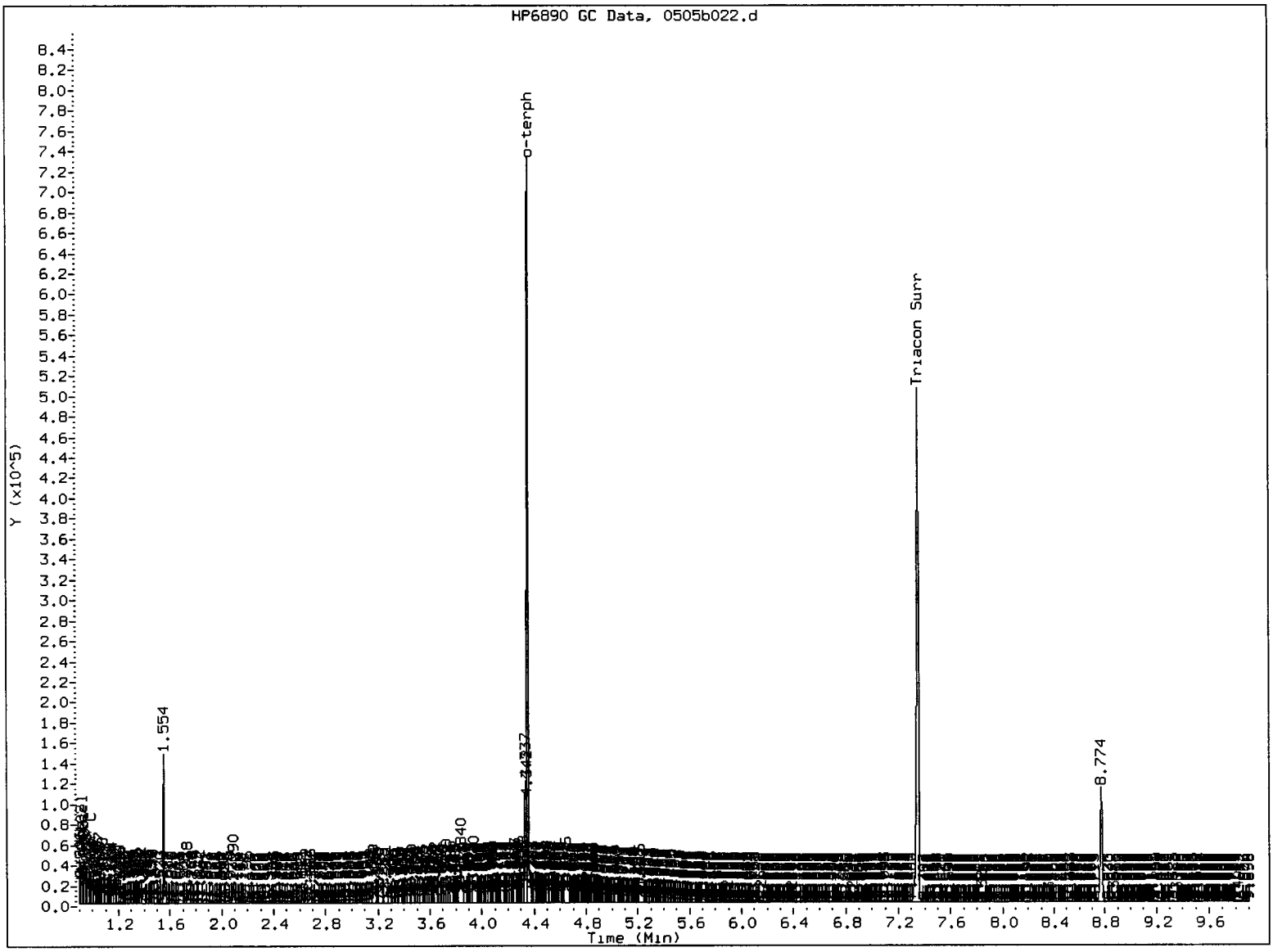


MANUAL INTEGRATION

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

5. Other _____

Analyst: _____ Date: 5/6/14

Analytical Resources Inc.
407S TPH Quantitation Report

Data file: /chem3/fid3b.i/20110505.b/0505b023.d
Method: /chem3/fid3b.i/20110505.b/ftphfid3b.m
Instrument: fid3b.i
Operator: MS
Report Date: 05/06/2011
Macro: FID:3B040711

ARI ID: ST98DMS
Client ID: MW06-042611 MS
Injection: 05-MAY-2011 15:55
Dilution Factor: 1

FID:3B RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	0.877	0.000	43646	15264	GAS (Tol-C12)	3065130	191.87
C8	0.959	0.010	32119	23803	DIESEL (C12-C24)	20841650	1193.61
C10	1.498	0.002	104863	56223	M.OIL (C24-C38)	418456	45.06
C12	2.234	0.001	179765	175134	AK-102 (C10-C25)	22966007	1135.86
C14	2.956	0.003	328255	233122	AK-103 (C25-C36)	336762	38.59
C16	3.616	0.007	601367	422855	OR.DIES (C10-C28)	23113332	909.94
C18	4.226	0.007	531507	614117	OR.MOIL (C28-C40)	198082	17.57
C20	4.809	0.002	326575	373270	MIN.OIL (C24-C38)	418456	64.99
C22	5.366	-0.003	153031	144412	STODDARD (C8-C12)	2848171	102.95
C24	5.890	-0.006	47339	51711			
C25	6.141	-0.010	22717	29334			
C26	6.383	-0.008	8938	11102			
C28	6.853	-0.009	1644	1937			
C32	7.840	-0.014	1609	1894			
C34	8.361	0.001	102	24	CREOSOT (C8-C22)	20104494	3143.31
Filter Peak	11.362	0.001	287	62			
C36	8.849	-0.011	239	58	BUNKERC (C10-C38)	23306816	2734.86
o-terph	4.363	-0.001	740854	649610	JET-A (C10-C18)	16609134	3220.16
Triacon Surr	7.354	-0.012	419535	444522	IT.MOIL (C24-C40)	867576	40.37

Range Times: NW Diesel(2.283 - 5.946) NW Gas(0.827 - 2.283) NW M.Oil(5.946 - 9.397)
AK102(1.446 - 6.101) AK103(6.101 - 8.909) Jet A(1.446 - 4.269)

Surrogate	Area	Amount	%Rec
o-Terphenyl	649610	41.2	91.6
Triacontane	444522	34.6	77.0

Analyte	RF	Curve Date
o-Terph Surr	15759.4	07-APR-2011
Triacon Surr	12836.6	07-APR-2011
Gas	15975.0	20-OCT-2010
Diesel	17461.0	07-APR-2011
Motor Oil	9285.7	07-APR-2011
AK102	20219.0	07-APR-2011
AK103	8727.5	29-SEPT-2010
JetA	5157.9	13-JAN-2011
Min Oil	6438.5	20-JAN-2011
OR Diesel	25401.0	
OR M.Oil	11274.0	
IT M.Oil	21488.2	
Bunker C	8522.1	20-SEP-2010
Creosote	6396.0	17-JAN-2009

5/6/11

Data File: /chem3/fid3b.i/20110505.b/0505b023.d

Date : 05-MAY-2011 15:55

Client ID: MW06-042611 MS

Sample Info: ST98DMS

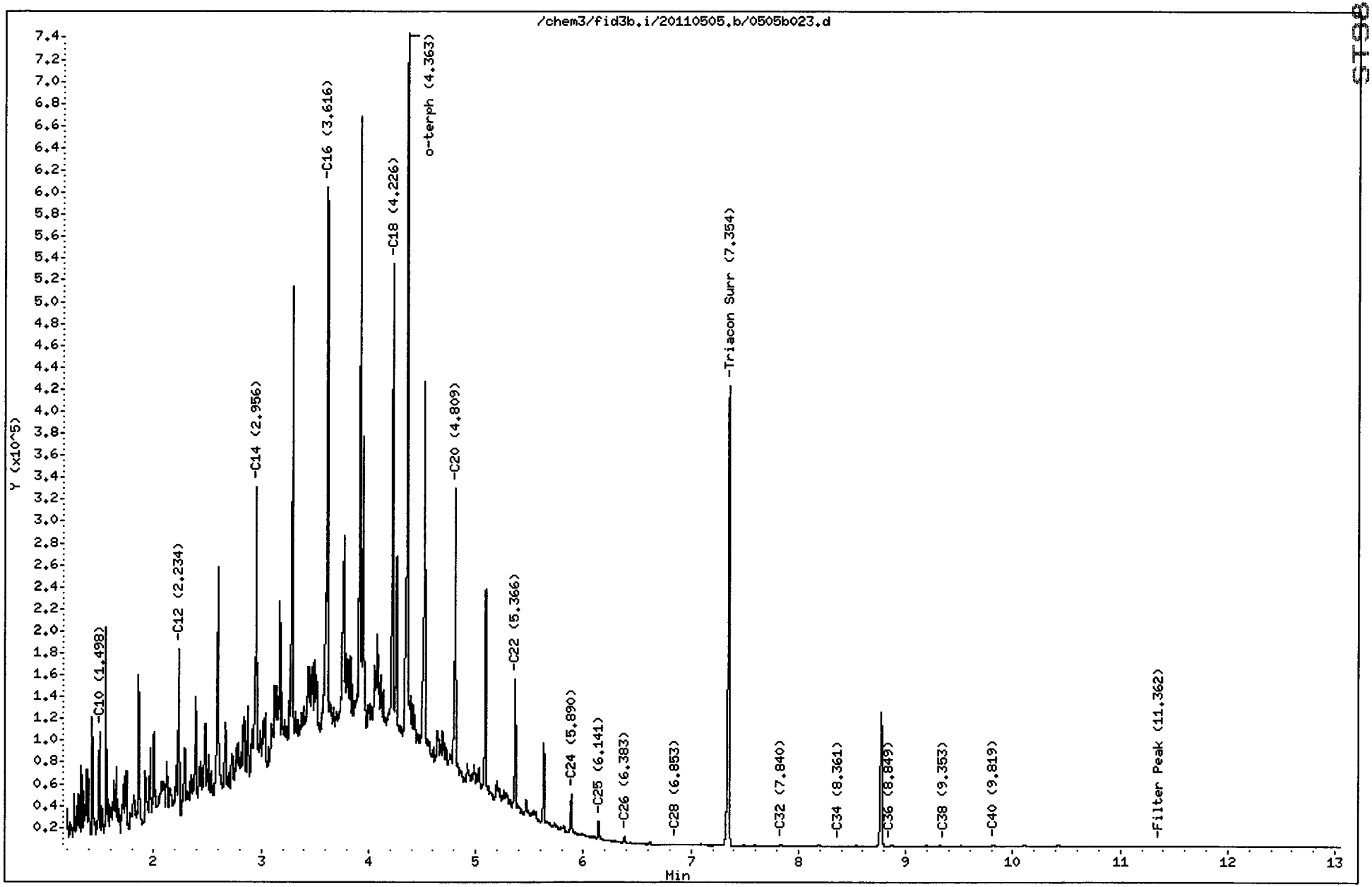
Column phase: RTX-1

Instrument: fid3b.i

Operator: MS

Column diameter: 0.25

ST98:00918



Analytical Resources Inc.
407S TPH Quantitation Report

Data file: /chem3/fid3b.i/20110505.b/0505b023.d
Method: /chem3/fid3b.i/20110505.b/ftphfid3b.m
Instrument: fid3b.i
Operator: MS
Report Date: 05/06/2011
Macro: FID:3B040711

ARI ID: ST98DMS
Client ID: MW06-042611 MS
Injection: 05-MAY-2011 15:55
Dilution Factor: 1

FID:3B RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc	
Toluene	0.877	0.000	43646	15264	GAS (Tol-C12)	3065130	191.87	
C8	0.959	0.010	32119	23803	DIESEL (C12-C24)	21047480	1205.40	
C10	1.498	0.002	104863	56223	M.OIL (C24-C38)	418456	45.06	
C12	2.234	0.001	179765	175134	AK-102 (C10-C25)	23171837	1146.04	M
C14	2.956	0.003	328255	233122	AK-103 (C25-C36)	336762	38.59	
C16	3.616	0.007	601367	422855	OR.DIES (C10-C28)	23319162	918.04	M
C18	4.226	0.007	531507	614117	OR.MOIL (C28-C40)	198082	17.57	
C20	4.809	0.002	326575	373270	MIN.OIL (C24-C38)	418456	64.99	
C22	5.366	-0.003	153031	144412	STODDARD (C8-C12)	2848171	102.95	
C24	5.890	-0.006	47339	51711				
C25	6.141	-0.010	22717	29334				
C26	6.383	-0.008	8938	11102				
C28	6.853	-0.009	1644	1937				
C32	7.840	-0.014	1609	1894				
C34	8.361	0.001	102	24	CREOSOT (C8-C22)	20310324	3175.49	
Filter Peak	11.362	0.001	287	62				
C36	8.849	-0.011	239	58	BUNKERC (C10-C38)	23512646	2759.01	
o-terph	4.363	-0.001	612211	447304	JET-A (C10-C18)	16609134	3220.16	
Triacon Surr	7.354	-0.012	419535	444522	IT.MOIL (C24-C40)	867576	40.37	

Range Times: NW Diesel(2.283 - 5.946) NW Gas(0.827 - 2.283) NW M.Oil(5.946 - 9.397)
AK102(1.446 - 6.101) AK103(6.101 - 8.909) Jet A(1.446 - 4.269)

Surrogate	Area	Amount	%Rec
o-Terphenyl	447304	28.4	63.1
Triacontane	444522	34.6	77.0

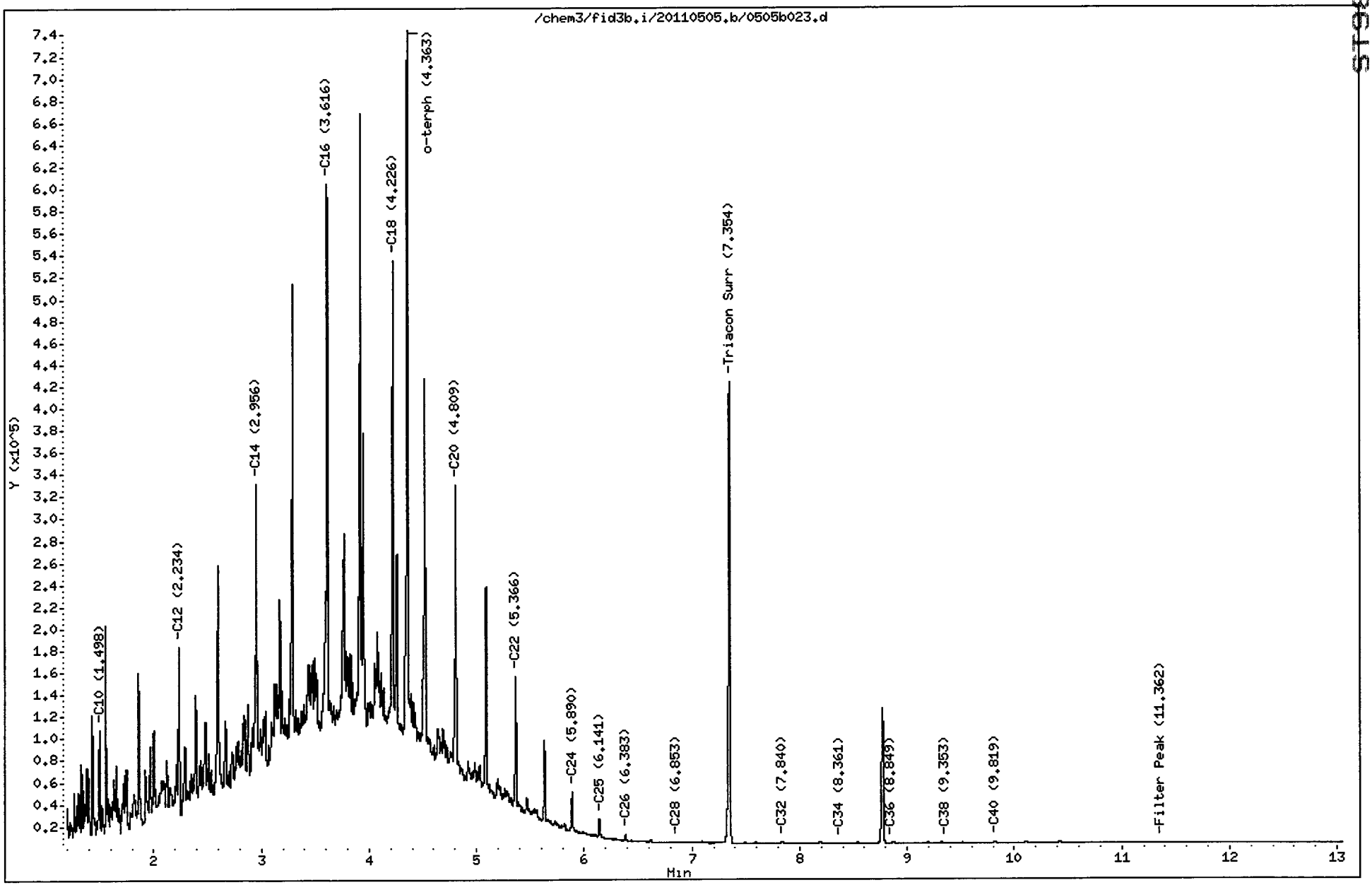
Analyte	RF	Curve Date
o-Terph Surr	15759.4	07-APR-2011
Triacon Surr	12836.6	07-APR-2011
Gas	15975.0	20-OCT-2010
Diesel	17461.0	07-APR-2011
Motor Oil	9285.7	07-APR-2011
AK102	20219.0	07-APR-2011
AK103	8727.5	29-SEPT-2010
JetA	5157.9	13-JAN-2011
Min Oil	6438.5	20-JAN-2011
OR Diesel	25401.0	
OR M.Oil	11274.0	
IT M.Oil	21488.2	
Bunker C	8522.1	20-SEP-2010
Creosote	6396.0	17-JAN-2009

Data File: /chem3/fid3b.i/20110505.b/0505b023.d
Date : 05-MAY-2011 15:55
Client ID: MW06-042611 MS
Sample Info: ST98DMS

Instrument: fid3b.i
Operator: MS
Column diameter: 0.25

Column phase: RTX-1

ST98 : 00920



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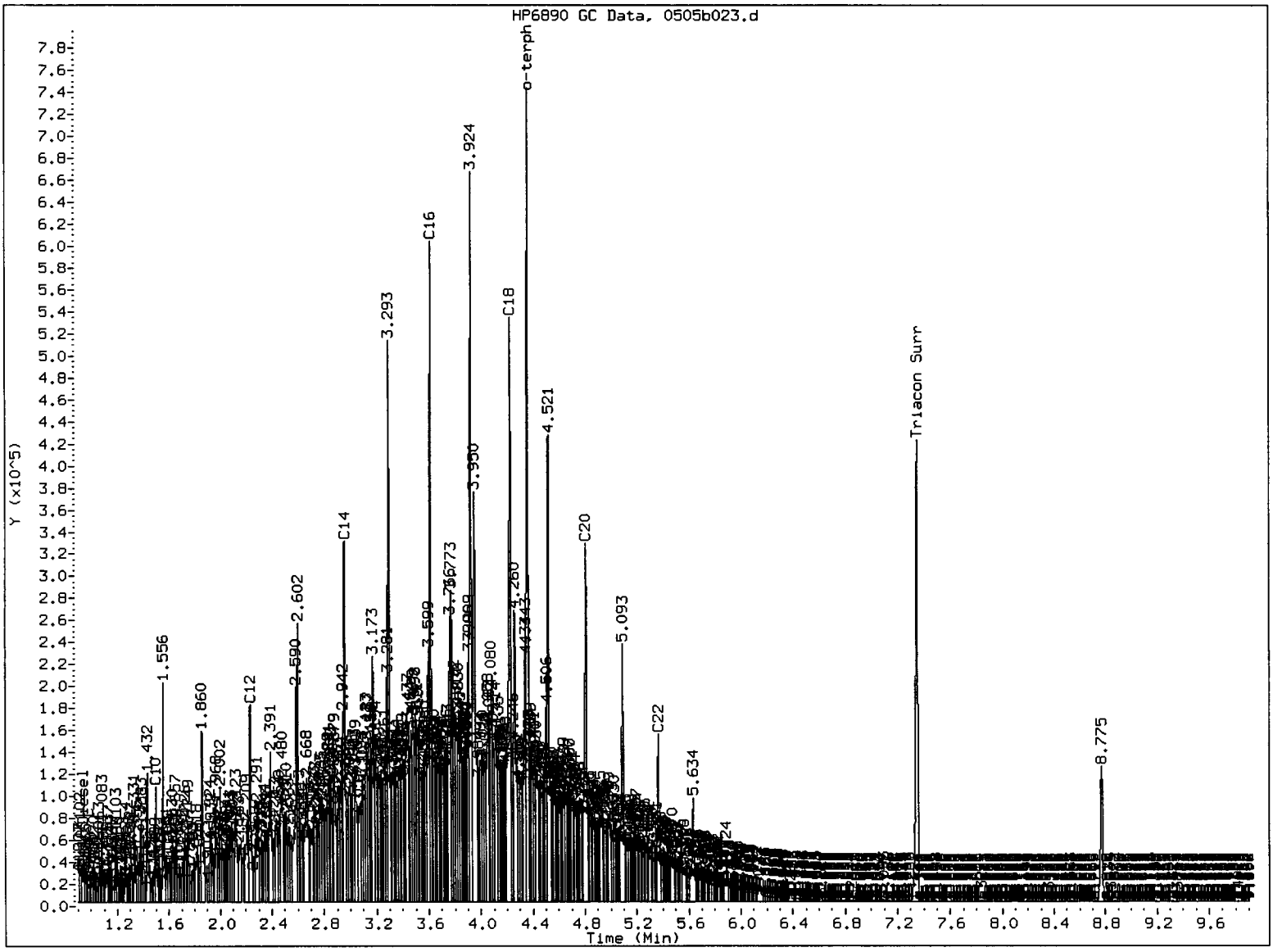


MANUAL INTEGRATION

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

5. Other _____

Analyst: _____ Date: 5/6/11

Analytical Resources Inc.
407S TPH Quantitation Report

Data file: /chem3/fid3b.i/20110505.b/0505b024.d
Method: /chem3/fid3b.i/20110505.b/ftphfid3b.m
Instrument: fid3b.i
Operator: MS
Report Date: 05/06/2011
Macro: FID:3B040711

ARI ID: ST98DMSD
Client ID: MW06-042611 MSD
Injection: 05-MAY-2011 16:19
Dilution Factor: 1

FID:3B RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	0.876	0.000	41511	10401	GAS (Tol-C12)	3246370	203.22
C8	0.949	0.000	30711	10286	DIESEL (C12-C24)	21557804	1234.63
C10	1.497	0.001	110916	58579	M.OIL (C24-C38)	399376	43.01
C12	2.234	0.001	193369	181829	AK-102 (C10-C25)	23826608	1178.43
C14	2.957	0.004	366348	247106	AK-103 (C25-C36)	311371	35.68
C16	3.615	0.007	633627	477764	OR.DIES (C10-C28)	23979825	944.05
C18	4.226	0.007	529625	481848	OR.MOIL (C28-C40)	166171	14.74
C20	4.810	0.003	344015	418952	MIN.OIL (C24-C38)	399376	62.03
C22	5.366	-0.003	157043	142502	STODDARD (C8-C12)	3028650	109.47
C24	5.892	-0.004	49947	55923			
C25	6.141	-0.010	22744	30229			
C26	6.383	-0.007	9172	10963			
C28	6.852	-0.009	1736	2800			
C32	7.864	0.011	227	75			
C34	8.356	-0.005	157	101	CREOSOT (C8-C22)	20794954	3251.26
Filter Peak	11.360	-0.001	293	152			
C36	8.851	-0.009	217	42	BUNKERC (C10-C38)	24141234	2832.77
o-terph	4.362	-0.001	811434	709497	JET-A (C10-C18)	17356353	3365.03
Triacon Surr	7.354	-0.011	460424	477091	IT.MOIL (C24-C40)	881229	41.01

Range Times: NW Diesel(2.283 - 5.946) NW Gas(0.827 - 2.283) NW M.Oil(5.946 - 9.397)
AK102(1.446 - 6.101) AK103(6.101 - 8.909) Jet A(1.446 - 4.269)

Surrogate	Area	Amount	%Rec
o-Terphenyl	709497	45.0	100.0
Triacontane	477091	37.2	82.6

Analyte	RF	Curve Date
o-Terph Surr	15759.4	07-APR-2011
Triacon Surr	12836.6	07-APR-2011
Gas	15975.0	20-OCT-2010
Diesel	17461.0	07-APR-2011
Motor Oil	9285.7	07-APR-2011
AK102	20219.0	07-APR-2011
AK103	8727.5	29-SEPT-2010
JetA	5157.9	13-JAN-2011
Min Oil	6438.5	20-JAN-2011
OR Diesel	25401.0	
OR M.Oil	11274.0	
IT M.Oil	21488.2	
Bunker C	8522.1	20-SEP-2010
Creosote	6396.0	17-JAN-2009

5/6/11

Data File: /chem3/fid3b.i/20110505.b/0505b024.d

Date : 05-MAY-2011 16:19

Client ID: MW06-042611 MSD

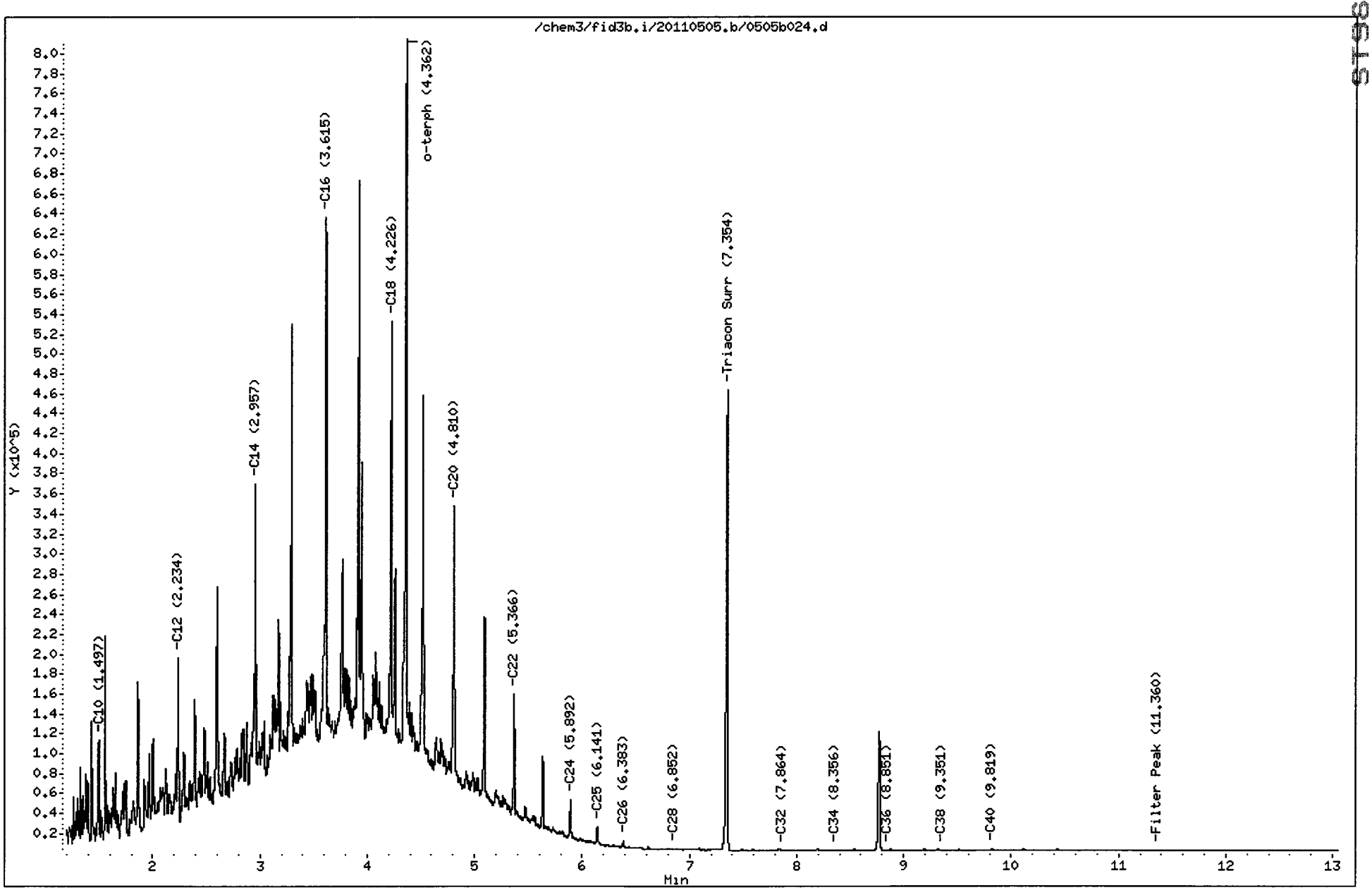
Sample Info: ST98DMSD

Column phase: RTX-1

Instrument: fid3b.i

Operator: MS

Column diameter: 0.25



Analytical Resources Inc.
407S TPH Quantitation Report

Data file: /chem3/fid3b.i/20110505.b/0505b024.d
Method: /chem3/fid3b.i/20110505.b/ftphfid3b.m
Instrument: fid3b.i
Operator: MS
Report Date: 05/06/2011
Macro: FID:3B040711

ARI ID: ST98DMSD
Client ID: MW06-042611 MSD
Injection: 05-MAY-2011 16:19
Dilution Factor: 1

FID:3B RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc	
Toluene	0.876	0.000	41511	10401	GAS (Tol-C12)	3246370	203.22	
C8	0.949	0.000	30711	10286	DIESEL (C12-C24)	21783199	1247.53	
C10	1.497	0.001	110916	58579	M.OIL (C24-C38)	399376	43.01	
C12	2.234	0.001	193369	181829	AK-102 (C10-C25)	24052002	1189.57	M
C14	2.957	0.004	366348	247106	AK-103 (C25-C36)	311371	35.68	
C16	3.615	0.007	633627	477764	OR.DIES (C10-C28)	24205219	952.92	M
C18	4.226	0.007	529625	481848	OR.MOIL (C28-C40)	166171	14.74	
C20	4.810	0.003	344015	418952	MIN.OIL (C24-C38)	399376	62.03	
C22	5.366	-0.003	157043	142502	STODDARD (C8-C12)	3028650	109.47	
C24	5.892	-0.004	49947	55923				
C25	6.141	-0.010	22744	30229				
C26	6.383	-0.007	9172	10963				
C28	6.852	-0.009	1736	2800				
C32	7.864	0.011	227	75				
C34	8.356	-0.005	157	101	CREOSOT (C8-C22)	21020349	3286.50	
Filter Peak	11.360	-0.001	293	152				
C36	8.851	-0.009	217	42	BUNKERC (C10-C38)	24366628	2859.22	
o-terph	4.362	-0.001	678854	487383	JET-A (C10-C18)	17356353	3365.03	
Triacon Surr	7.354	-0.011	460424	477091	IT.MOIL (C24-C40)	881229	41.01	

Range Times: NW Diesel(2.283 - 5.946) NW Gas(0.827 - 2.283) NW M.Oil(5.946 - 9.397)
AK102(1.446 - 6.101) AK103(6.101 - 8.909) Jet A(1.446 - 4.269)

Surrogate	Area	Amount	%Rec
o-Terphenyl	487383	30.9	68.7
Triacontane	477091	37.2	82.6

Analyte	RF	Curve Date
o-Terph Surr	15759.4	07-APR-2011
Triacon Surr	12836.6	07-APR-2011
Gas	15975.0	20-OCT-2010
Diesel	17461.0	07-APR-2011
Motor Oil	9285.7	07-APR-2011
AK102	20219.0	07-APR-2011
AK103	8727.5	29-SEPT-2010
JetA	5157.9	13-JAN-2011
Min Oil	6438.5	20-JAN-2011
OR Diesel	25401.0	
OR M.Oil	11274.0	
IT M.Oil	21488.2	
Bunker C	8522.1	20-SEP-2010
Creosote	6396.0	17-JAN-2009

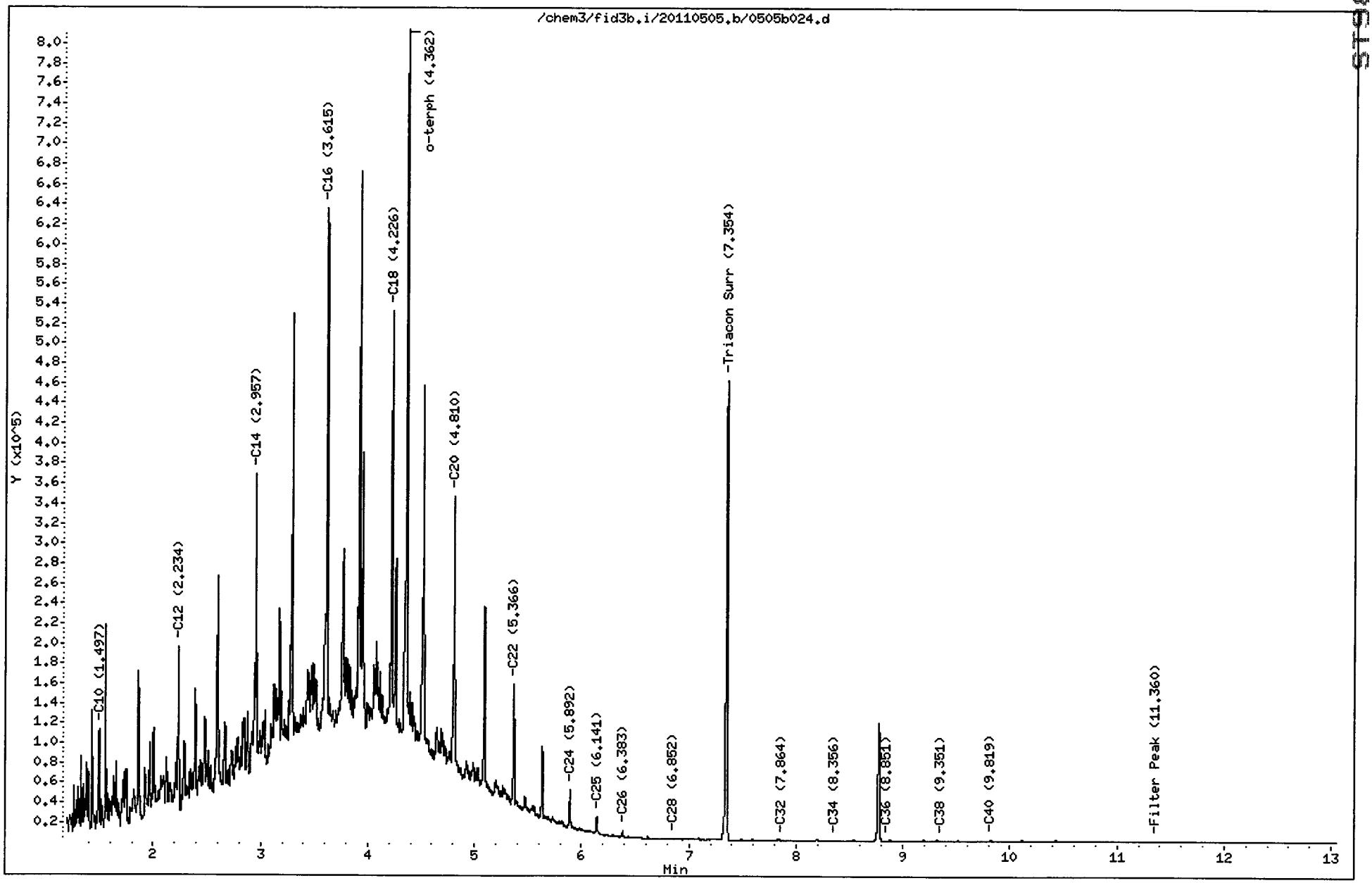
Data File: /chem3/fid3b.i/20110505.b/0505b024.d
Date : 05-MAY-2011 16:19
Client ID: MW06-042611 MSD
Sample Info: ST98DMSD

Column phase: RTX-1

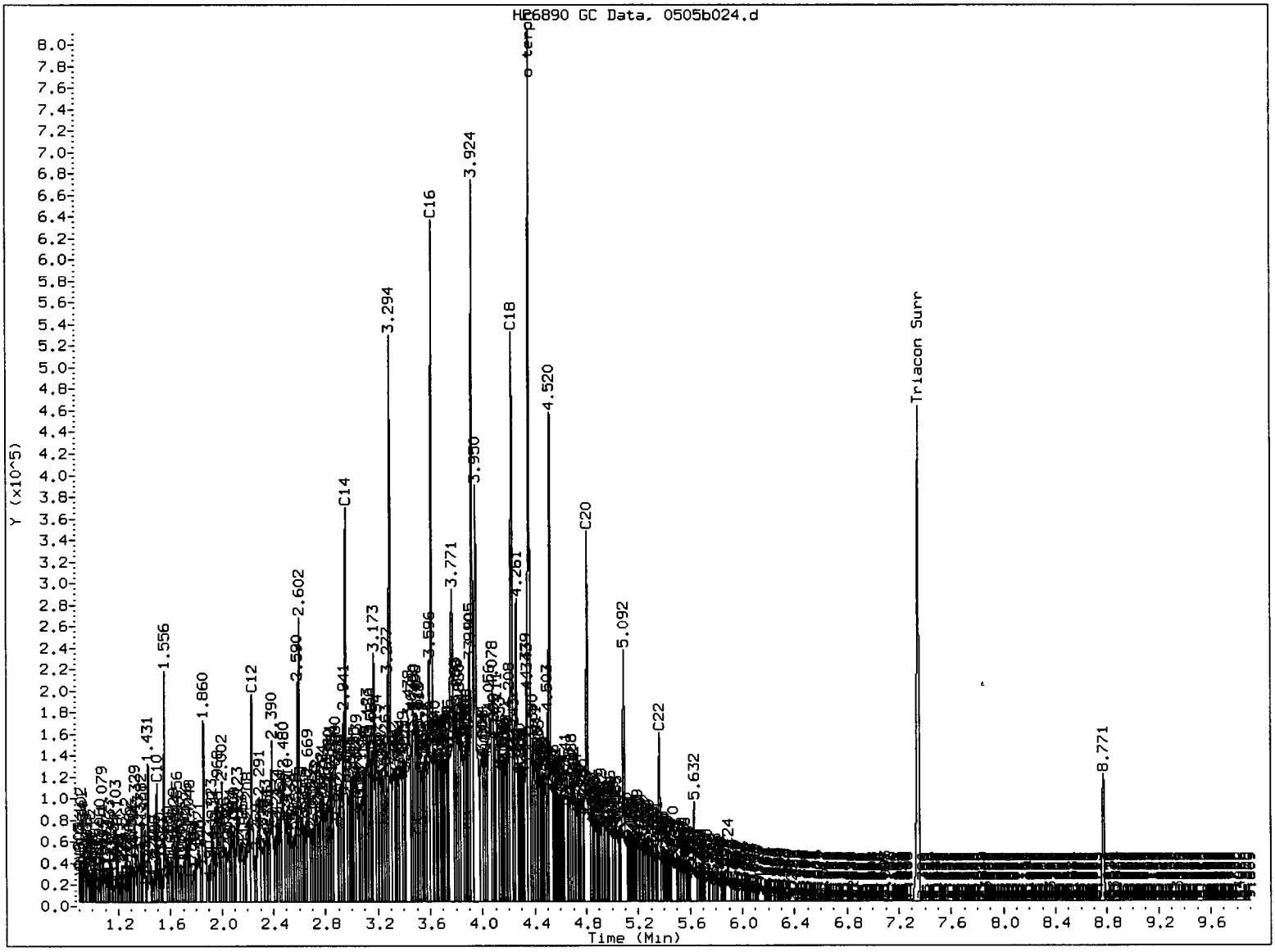
Instrument: fid3b.i

Operator: MS
Column diameter: 0.25

ST98 : 00925



FID:3B-2C/RTX-1 ST98DMSD FID:3B SIGNAL



MANUAL INTEGRATION

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

5. Other _____

Analyst: _____ Date: _____

Analytical Resources Inc.
407S TPH Quantitation Report

Data file: /chem3/fid3b.i/20110505.b/0505b025.d
Method: /chem3/fid3b.i/20110505.b/ftphfid3b.m
Instrument: fid3b.i
Operator: MS
Report Date: 05/06/2011
Macro: FID:3B040711

ARI ID: DIESEL#2
Client ID: LORA LAKE APTS. RI
Injection: 05-MAY-2011 16:42
Dilution Factor: 1

FID:3B RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc	
Toluene	0.877	0.001	34126	8525	GAS (Tol-C12)	1253670	78.48	
C8	0.950	0.001	24633	8361	DIESEL (C12-C24)	4411738	252.66	
C10	1.497	0.001	33325	19818	M.OIL (C24-C38)	74851	8.06	
C12	2.232	-0.001	49211	45361	AK-102 (C10-C25)	5054715	250.00	M
C14	2.950	-0.002	85380	78819	AK-103 (C25-C36)	49899	5.72	
C16	3.607	-0.002	146498	122816	OR.DIES (C10-C28)	5081998	200.07	M
C18	4.217	-0.002	130878	121421	OR.MOIL (C28-C40)	45789	4.06	
C20	4.803	-0.003	76210	72951	MIN.OIL (C24-C38)	74851	11.63	
C22	5.362	-0.007	33035	33206	STODDARD (C8-C12)	1090732	39.42	
C24	5.889	-0.007	9833	10781				
C25	6.141	-0.010	4225	5822				
C26	6.384	-0.006	1543	2254				
C28	6.865	0.004	161	94				
C32	7.841	-0.013	2541	2895				
C34	8.356	-0.005	86	38	CREOSOT (C8-C22)	4269668	667.56	
Filter Peak	11.360	-0.001	1016	523				
C36	8.872	0.012	2729	3773	BUNKERC (C10-C38)	5113796	600.06	
o-terph	4.361	-0.002	851938	724701	JET-A (C10-C18)	3815239	739.70	
Triacon Surr	7.370	0.005	33	16	IT.MOIL (C24-C40)	88858	4.14	

Range Times: NW Diesel(2.283 - 5.946) NW Gas(0.827 - 2.283) NW M.Oil(5.946 - 9.397)
AK102(1.446 - 6.101) AK103(6.101 - 8.909) Jet A(1.446 - 4.269)

Surrogate	Area	Amount	%Rec
o-Terphenyl	724701	46.0	102.2
Triacontane	16	0.0	0.0

Analyte	RF	Curve Date
o-Terph Surr	15759.4	07-APR-2011
Triacon Surr	12836.6	07-APR-2011
Gas	15975.0	20-OCT-2010
Diesel	17461.0	07-APR-2011
Motor Oil	9285.7	07-APR-2011
AK102	20219.0	07-APR-2011
AK103	8727.5	29-SEPT-2010
JetA	5157.9	13-JAN-2011
Min Oil	6438.5	20-JAN-2011
OR Diesel	25401.0	
OR M.Oil	11274.0	
IT M.Oil	21488.2	
Bunker C	8522.1	20-SEP-2010
Creosote	6396.0	17-JAN-2009

Data File: /chem3/fid3b.i/20110505.b/0505b025.d

Date : 05-MAY-2011 16:42

Client ID: LORA LAKE APTS, RI

Sample Info: DIESEL#2

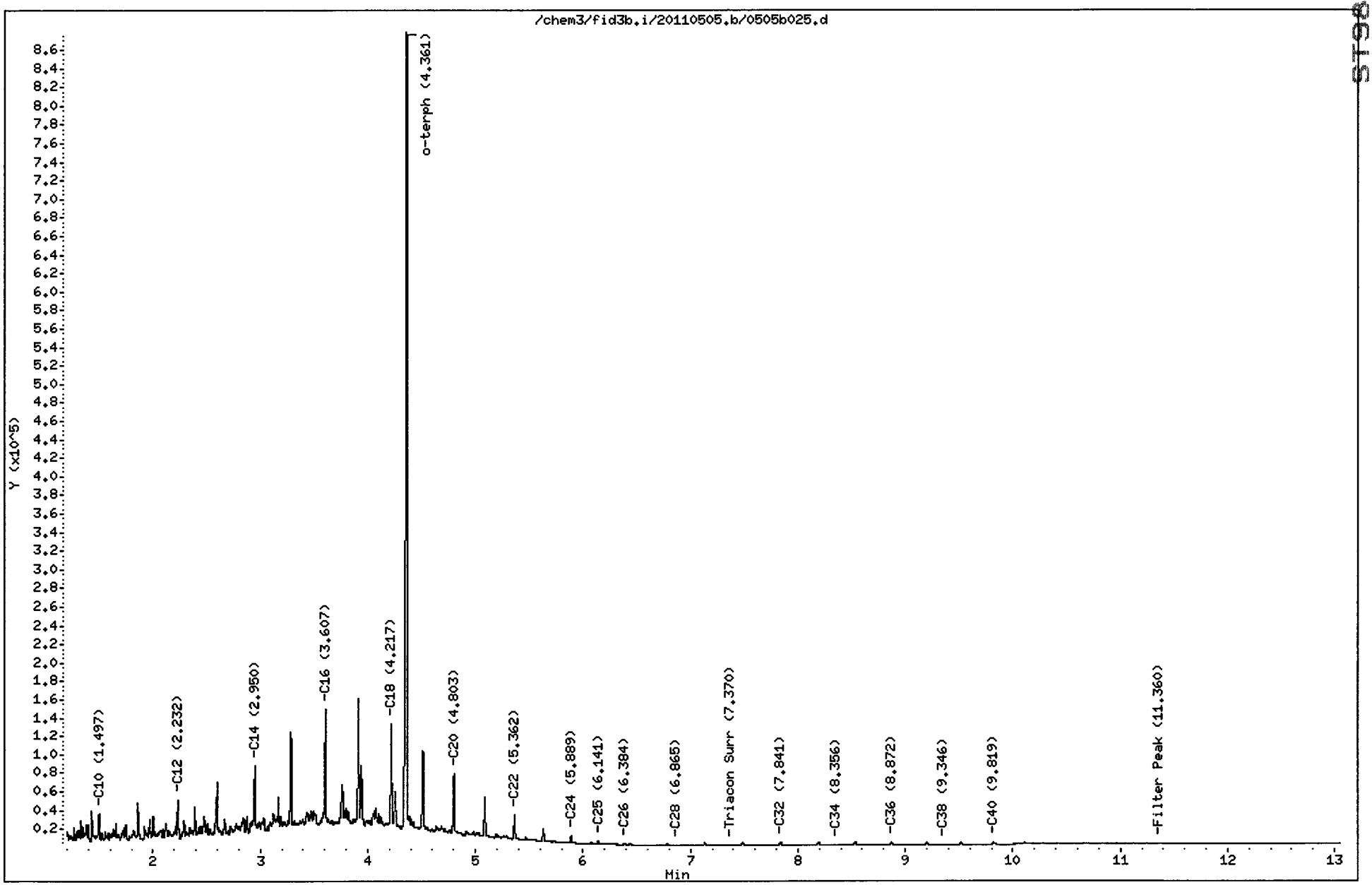
Column phase: RTX-1

Instrument: fid3b.i

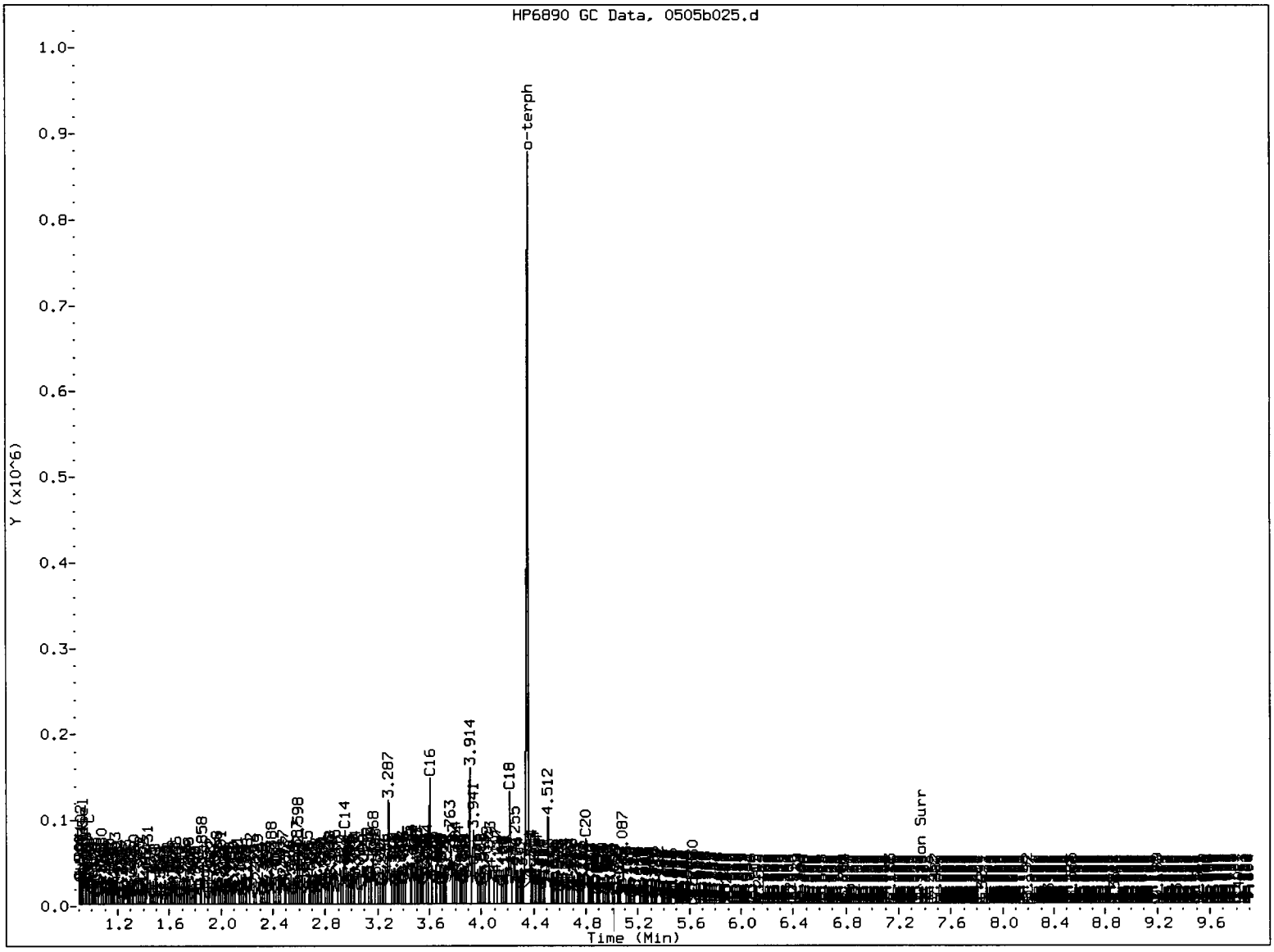
Operator: MS

Column diameter: 0.25

ST98:00928



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



MANUAL INTEGRATION

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

5. Other _____

Analyst: _____ Date: 5/26/11

Analytical Resources Inc.
407S TPH Quantitation Report

Data file: /chem3/fid3b.i/20110505.b/0505b026.d
Method: /chem3/fid3b.i/20110505.b/ftphfid3b.m
Instrument: fid3b.i
Operator: MS
Report Date: 05/06/2011
Macro: FID:3B040711

ARI ID: MOIL#2
Client ID: LORA LAKE APTS. RI
Injection: 05-MAY-2011 17:05
Dilution Factor: 1

FID:3B RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc	
Toluene	0.878	0.002	73410	26042	GAS (Tol-C12)	690985	43.25	
C8	0.958	0.009	19361	12523	DIESEL (C12-C24)	615700	35.26	
C10	1.492	-0.004	5762	5562	M.OIL (C24-C38)	4911485	528.93	
C12	2.234	0.001	1324	946	AK-102 (C10-C25)	883266	43.68	
C14	2.948	-0.004	623	934	AK-103 (C25-C36)	4102025	470.01	M
C16	3.604	-0.004	239	218	OR.DIES (C10-C28)	1936802	76.25	
C18	4.213	-0.006	385	362	OR.MOIL (C28-C40)	4265316	378.33	M
C20	4.813	0.006	2080	648	MIN.OIL (C24-C38)	4911485	762.83	M
C22	5.368	-0.001	7635	4321	STODDARD (C8-C12)	390332	14.11	
C24	5.900	0.004	14737	8047				
C25	6.152	0.001	18977	5935				
C26	6.389	-0.001	22072	8656				
C28	6.857	-0.004	24696	9747				
C32	7.851	-0.002	27972	15521				
C34	8.362	0.002	27998	8233	CREOSOT (C8-C22)	253468	39.63	
Filter Peak	11.361	0.000	5375	3390				
C36	8.860	0.001	25918	12020	BUNKERC (C10-C38)	5643120	662.17	
o-terph	4.367	0.004	331	51	JET-A (C10-C18)	174964	33.92	
Triacon Surr	7.359	-0.006	535762	600169	IT.MOIL (C24-C40)	6070652	282.51	

Range Times: NW Diesel(2.283 - 5.946) NW Gas(0.827 - 2.283) NW M.Oil(5.946 - 9.397)
AK102(1.446 - 6.101) AK103(6.101 - 8.909) Jet A(1.446 - 4.269)

Surrogate	Area	Amount	%Rec
o-Terphenyl	51	0.0	0.0
Triacontane	600169	46.8	103.9

Analyte	RF	Curve Date
o-Terph Surr	15759.4	07-APR-2011
Triacon Surr	12836.6	07-APR-2011
Gas	15975.0	20-OCT-2010
Diesel	17461.0	07-APR-2011
Motor Oil	9285.7	07-APR-2011
AK102	20219.0	07-APR-2011
AK103	8727.5	29-SEPT-2010
JetA	5157.9	13-JAN-2011
Min Oil	6438.5	20-JAN-2011
OR Diesel	25401.0	
OR M.Oil	11274.0	
IT M.Oil	21488.2	
Bunker C	8522.1	20-SEP-2010
Creosote	6396.0	17-JAN-2009

Data File: /chem3/fid3b.i/20110505.b/0505b026.d

Date : 05-MAY-2011 17:05

Client ID: LORA LAKE APTS, RI

Sample Info: MOIL#2

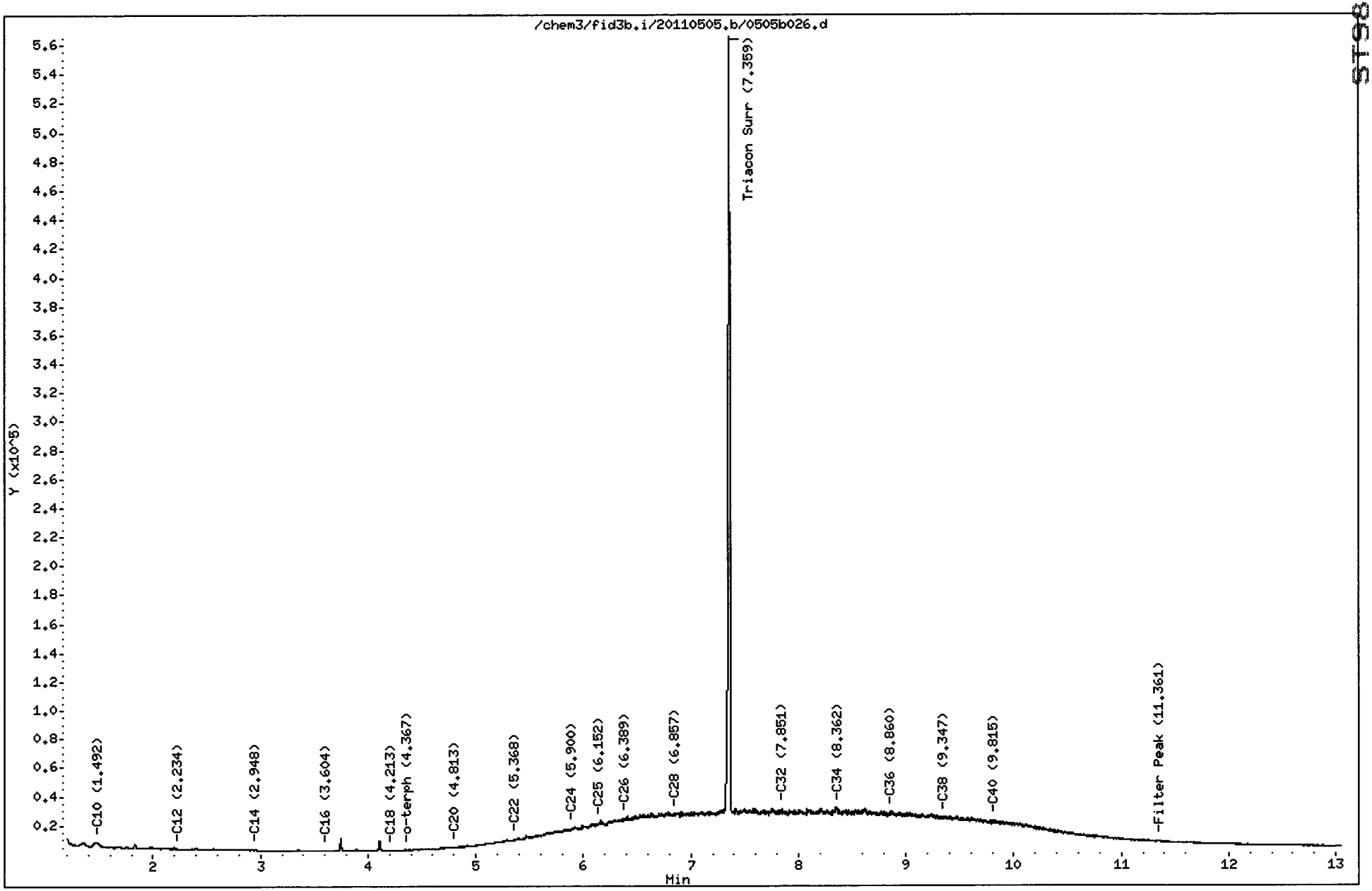
Column phase: RTX-1

Instrument: fid3b.i

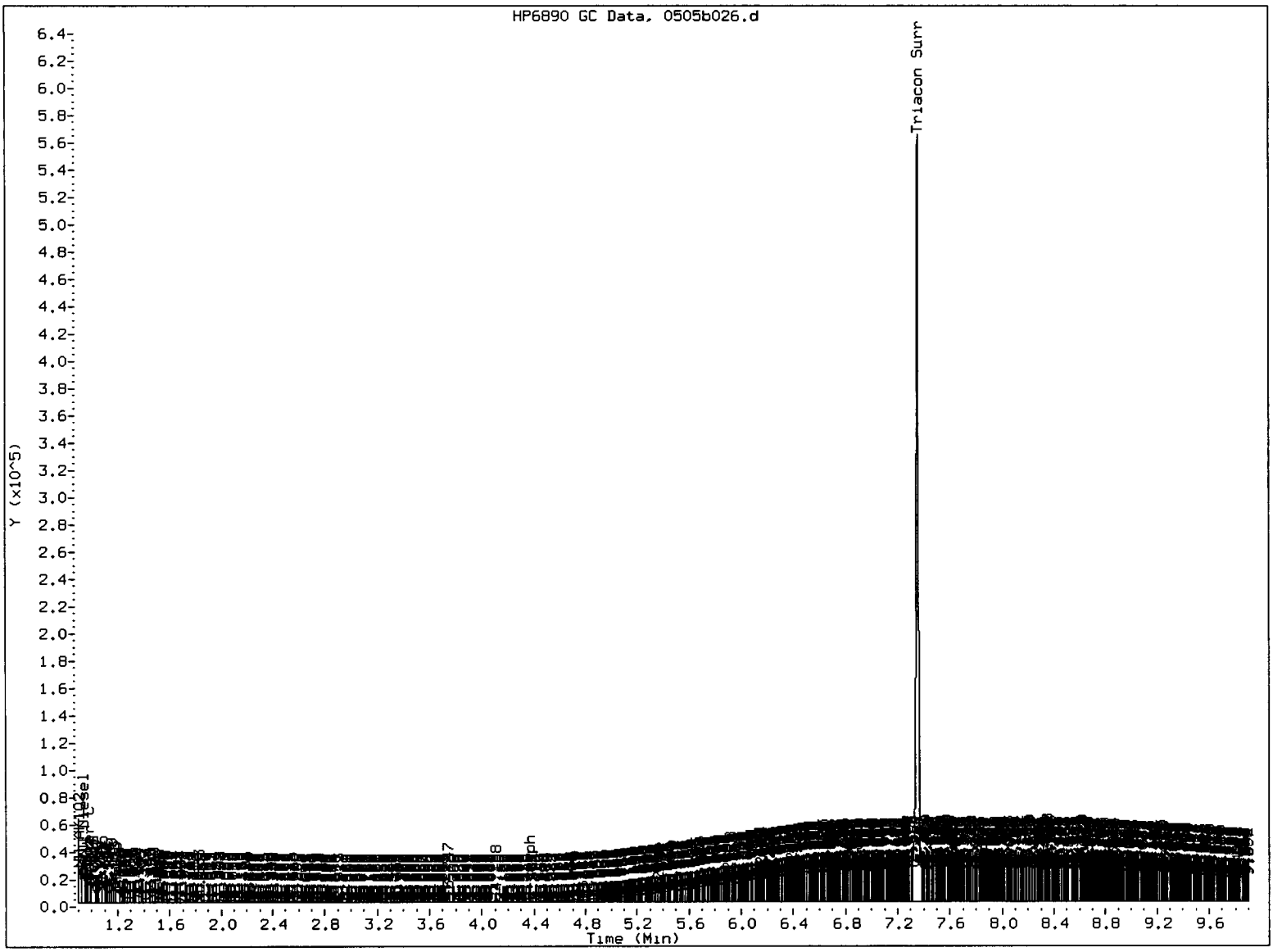
Operator: MS

Column diameter: 0.25

ST98 : 00931



FID:3B-2C/RTX-1 MOIL#2 FID:3B SIGNAL



MANUAL INTEGRATION

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

5. Other _____

Analyst: MM Date: 5/16/11

Analytical Resources Inc.
407S TPH Quantitation Report

Data file: /chem3/fid3b.i/20110505.b/0505b027.d
Method: /chem3/fid3b.i/20110505.b/ftphfid3b.m
Instrument: fid3b.i
Operator: MS
Report Date: 05/06/2011
Macro: FID:3B040711

ARI ID: SU21A
Client ID: MW07-042711
Injection: 05-MAY-2011 17:28
Dilution Factor: 1

FID:3B RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	0.874	-0.003	42804	14379	GAS (Tol-C12)	575746	36.04
C8	0.943	-0.005	24747	15749	DIESEL (C12-C24)	243928	13.97
C10	1.489	-0.007	6340	7432	M.OIL (C24-C38)	232792	25.07
C12	2.239	0.006	1421	1657	AK-102 (C10-C25)	380023	18.80
C14	2.948	-0.004	935	926	AK-103 (C25-C36)	212239	24.32
C16	3.604	-0.004	1629	2066	OR.DIES (C10-C28)	391785	15.42
C18	4.215	-0.004	1398	1037	OR.MOIL (C28-C40)	241594	21.43
C20	4.800	-0.006	878	582	MIN.OIL (C24-C38)	232792	36.16
C22	5.362	-0.007	764	640	STODDARD (C8-C12)	441967	15.97
C24	5.902	0.006	318	69			
C25	6.152	0.001	1018	931			
C26	6.387	-0.003	202	155			
C28	6.868	0.007	353	334			
C32	7.843	-0.011	1824	2252			
C34	8.375	0.014	253	126	CREOSOT (C8-C22)	235941	36.89
Filter Peak	11.356	-0.005	1161	955			
C36	8.854	-0.005	598	311	BUNKERC (C10-C38)	609723	71.55
o-terph	4.357	-0.006	689375	493735	JET-A (C10-C18)	286962	55.64
Triacon Surr	7.355	-0.010	443341	457899	IT.MOIL (C24-C40)	714347	33.24

Range Times: NW Diesel(2.283 - 5.946) NW Gas(0.827 - 2.283) NW M.Oil(5.946 - 9.397)
AK102(1.446 - 6.101) AK103(6.101 - 8.909) Jet A(1.446 - 4.269)

Surrogate	Area	Amount	%Rec
o-Terphenyl	493735	31.3	69.6
Triacontane	457899	35.7	79.3

Analyte	RF	Curve Date
o-Terph Surr	15759.4	07-APR-2011
Triacon Surr	12836.6	07-APR-2011
Gas	15975.0	20-OCT-2010
Diesel	17461.0	07-APR-2011
Motor Oil	9285.7	07-APR-2011
AK102	20219.0	07-APR-2011
AK103	8727.5	29-SEPT-2010
JetA	5157.9	13-JAN-2011
Min Oil	6438.5	20-JAN-2011
OR Diesel	25401.0	
OR M.Oil	11274.0	
IT M.Oil	21488.2	
Bunker C	8522.1	20-SEP-2010
Creosote	6396.0	17-JAN-2009

5/6/11

Data File: /chem3/fid3b.i/20110505.b/0505b027.d

Date : 05-MAY-2011 17:28

Client ID: MW07-042711

Sample Info: SU21A

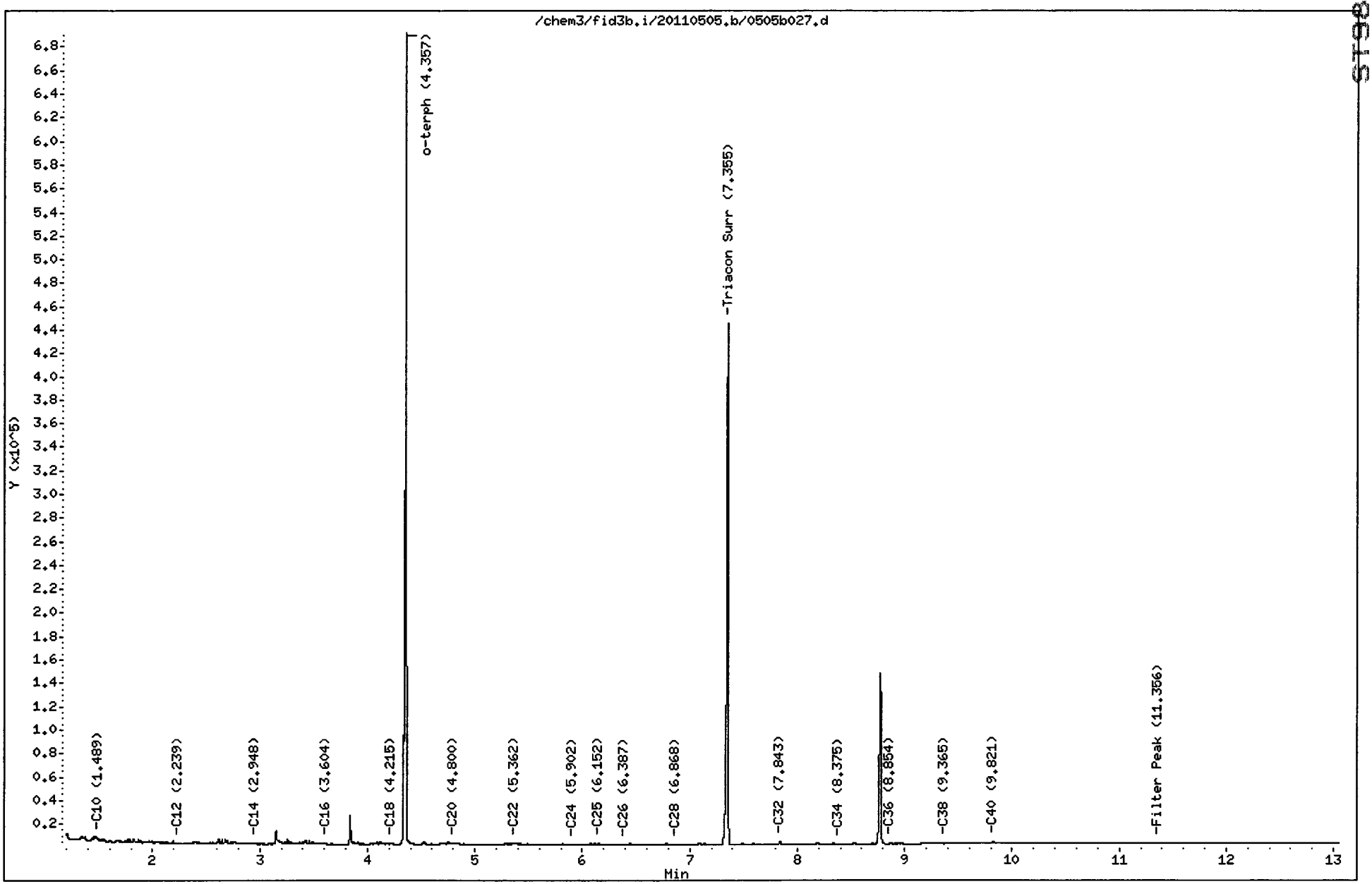
Column phase: RTX-1

Instrument: fid3b.i

Operator: MS

Column diameter: 0.25

ST98 : 00931



Analytical Resources Inc.
407S TPH Quantitation Report

Data file: /chem3/fid3b.i/20110505.b/0505b028.d
Method: /chem3/fid3b.i/20110505.b/ftphfid3b.m
Instrument: fid3b.i
Operator: MS
Report Date: 05/06/2011
Macro: FID:3B040711

ARI ID: SU21B
Client ID: MW11-042711
Injection: 05-MAY-2011 17:51
Dilution Factor: 1

FID:3B RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	0.874	-0.003	40654	10142	GAS (Tol-C12)	640035	40.06
C8	0.947	-0.001	21274	6279	DIESEL (C12-C24)	229707	13.16
C10	1.490	-0.006	6231	7586	M.OIL (C24-C38)	254961	27.46
C12	2.242	0.009	1439	1861	AK-102 (C10-C25)	368008	18.20
C14	2.943	-0.010	836	669	AK-103 (C25-C36)	241250	27.64
C16	3.605	-0.004	1472	1998	OR.DIES (C10-C28)	383468	15.10
C18	4.215	-0.004	1260	927	OR.MOIL (C28-C40)	249403	22.12
C20	4.800	-0.006	963	971	MIN.OIL (C24-C38)	254961	39.60
C22	5.364	-0.005	987	617	STODDARD (C8-C12)	449023	16.23
C24	5.889	-0.007	544	665			
C25	6.151	0.000	1072	1105			
C26	6.386	-0.004	297	315			
C28	6.852	-0.009	572	839			
C32	7.863	0.009	194	75			
C34	8.366	0.005	305	46	CREOSOT (C8-C22)	217684	34.03
Filter Peak	11.365	0.005	906	395			
C36	8.855	-0.004	390	136	BUNKERC (C10-C38)	618657	72.59
o-terph	4.358	-0.005	817677	644451	JET-A (C10-C18)	315028	61.08
Triacon Surr	7.354	-0.011	525822	546438	IT.MOIL (C24-C40)	815613	37.96

Range Times: NW Diesel(2.283 - 5.946) NW Gas(0.827 - 2.283) NW M.Oil(5.946 - 9.397)
AK102(1.446 - 6.101) AK103(6.101 - 8.909) Jet A(1.446 - 4.269)

Surrogate	Area	Amount	%Rec
o-Terphenyl	644451	40.9	90.9
Triacontane	546438	42.6	94.6

Analyte	RF	Curve Date
o-Terph Surr	15759.4	07-APR-2011
Triacon Surr	12836.6	07-APR-2011
Gas	15975.0	20-OCT-2010
Diesel	17461.0	07-APR-2011
Motor Oil	9285.7	07-APR-2011
AK102	20219.0	07-APR-2011
AK103	8727.5	29-SEPT-2010
JetA	5157.9	13-JAN-2011
Min Oil	6438.5	20-JAN-2011
OR Diesel	25401.0	
OR M.Oil	11274.0	
IT M.Oil	21488.2	
Bunker C	8522.1	20-SEP-2010
Creosote	6396.0	17-JAN-2009

5/6/11

Data File: /chem3/fid3b.i/20110505.b/0505b028.d

Date : 05-MAY-2011 17:51

Client ID: MW11-042711

Sample Info: SU21B

Column phase: RTX-1

Instrument: fid3b.i

Operator: MS

Column diameter: 0.25

ST98:00936