4B

SEMIVOLATILE METHOD BLANK SUMMARY

BLANK NO.

SU45MBW1

Lab Name: ANALYTICAL RESOURCES, INC Client: NEWFIELDS

ARI Job No: SU53 Project: LATERAL LOAD

Lab File ID: SU45MB Date Extracted: 05/04/11

Instrument ID: NT11 Date Analyzed: 05/16/11

Matrix: LIQUID Time Analyzed: 1220

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	SU45LCSW1	SU45LCSW1	SU45SB	05/16/11
02	SU45LCSDW1	SU45LCSDW1	SU45SBD	05/16/11
03	MW5042811	SU53A	SU53A	05/16/11
04	MW15042811	SU53B	SU53B	05/16/11
05	MW4042811	SU53C	SU53C	05/16/11
06	MW4042811 MS	SU53CMS	SU53CMS	05/16/11
07	MW4042811 MSD	SU53CMSD	SU53CMSD	05/16/11
08	MW17042811	SU53D	SU53D	05/16/11
09	MW14042811	SU53E	SU53E	05/16/11
10	MW16042811	SU53F	SU53F	05/16/11
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS **Sample ID: MB-050411**
Page 1 of 1 **METHOD BLANK**

Lab Sample ID: MB-050411 QC Report No: SU53-Floyd Snider
LIMS ID: 11-9623 Project: Lora Lake Apts RI
Matrix: Groundwater Event: POS-LLA
Data Release Authorized: Date Sampled: NA
Reported: 05/20/11 Date Received: NA

Date Extracted: 05/04/11 Sample Amount: 500 mL
Date Analyzed: 05/16/11 12:20 Final Extract Volume: 0.5 mL
Instrument/Analyst: NT11/YZ Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
56-55-3	Benzo(a)anthracene	0.010	< 0.010 U
218-01-9	Chrysene	0.010	< 0.010 U
50-32-8	Benzo(a)pyrene	0.010	< 0.010 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.010	< 0.010 U
53-70-3	Dibenz(a,h)anthracene	0.010	< 0.010 U
TOTBFA	Total Benzofluoranthenes	0.010	< 0.010 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	58.7%
d14-Dibenzo(a,h)anthracene	74.3%

4B

SEMIVOLATILE METHOD BLANK SUMMARY

BLANK NO.

SU73MBW1

Lab Name: ANALYTICAL RESOURCES, INC

Client: FLOYD SNIDER

ARI Job No: SU74

Project: LORA LAKE APTS RI

Lab File ID: SU73MB

Date Extracted: 05/05/11

Instrument ID: NT11

Date Analyzed: 05/19/11

Matrix: LIQUID

Time Analyzed: 1312

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	SU73LCSW1	SU73LCSW1	SU73SB	05/19/11
02	MW-01-042911	SU73A	SU73A	05/19/11
03	MW-01-042911-D	SU73B	SU73B	05/19/11
04	B312-042911	SU74A	SU74A	05/19/11
05	B312-042911 MS	SU74AMS	SU74AMS	05/19/11
06	B312-042911 MSD	SU74AMSD	SU74AMSD	05/19/11
07	B310-042911	SU74B	SU74B	05/19/11
08	B311-042911	SU74C	SU74C	05/19/11
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

FORM IV SV

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS **Sample ID: MB-050511**
Page 1 of 1 **METHOD BLANK**

Lab Sample ID: MB-050511
LIMS ID: 11-9762
Matrix: Water
Data Release Authorized:
Reported: 05/23/11

QC Report No: SU73-Floyd Snider
Project: Lora Lake Apts RI
Event: POS-LLA.4010
Date Sampled: NA
Date Received: NA

Date Extracted: 05/05/11
Date Analyzed: 05/19/11 13:12
Instrument/Analyst: NT11/VTS

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
56-55-3	Benzo(a)anthracene	0.010	< 0.010 U
218-01-9	Chrysene	0.010	< 0.010 U
50-32-8	Benzo(a)pyrene	0.010	< 0.010 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.010	< 0.010 U
53-70-3	Dibenz(a,h)anthracene	0.010	< 0.010 U
TOTBFA	Total Benzofluoranthenes	0.010	< 0.010 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	67.0%
d14-Dibenzo(a,h)anthracene	64.3%

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

Instrument ID: NT11 Project: LORA LAKE APTS RI

DFTPP Injection Date: 04/30/11 DFTPP Injection Time: 0952

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	21.3
68	Less than 2.0% of mass 69	0.2 (0.4)1
69	Mass 69 relative abundance	57.2
70	Less than 2.0% of mass 69	0.3 (0.5)1
127	10.0 - 80.0% of mass 198	55.0
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	8.9
275	10.0 - 60.0% of mass 198	28.1
365	Greater than 1.0% of mass 198	3.78
441	0.0 - 24.0% of mass 442	17.4 (18.3)2
442	50.0 - 200.0% of mass 198	95.1
443	15.0 - 24.0% of mass 442	22.2 (23.3)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		SIM250	IC0430A	04/30/11	1012
02		SIM1000	IC0430B	04/30/11	1037
03		SIM10	IC0430C	04/30/11	1102
04		SIM500	IC0430D	04/30/11	1126
05		SIM50	IC0430E	04/30/11	1151
06		SIM100	IC0430F	04/30/11	1215
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

Instrument ID: NT11 Project: LORA LAKE APTS RI

DFTPP Injection Date: 05/16/11 DFTPP Injection Time: 1004

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	17.4
68	Less than 2.0% of mass 69	0.9 (1.6)1
69	Mass 69 relative abundance	56.1
70	Less than 2.0% of mass 69	0.3 (0.5)1
127	10.0 - 80.0% of mass 198	53.0
197	Less than 2.0% of mass 198	0.4
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	8.9
275	10.0 - 60.0% of mass 198	27.7
365	Greater than 1.0% of mass 198	3.52
441	0.0 - 24.0% of mass 442	16.0 (18.1)2
442	50.0 - 200.0% of mass 198	88.0
443	15.0 - 24.0% of mass 442	20.9 (23.8)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		CC0514	CC0516	05/16/11	1019
02	SU45MBW1	SU45MBW1	SU45MB	05/16/11	1220
03	SU45LCSW1	SU45LCSW1	SU45SB	05/16/11	1244
04	SU45LCSDW1	SU45LCSDW1	SU45SBD	05/16/11	1308
05	MW5042811	SU53A	SU53A	05/16/11	1558
06	MW15042811	SU53B	SU53B	05/16/11	1623
07	MW4042811	SU53C	SU53C	05/16/11	1647
08	MW4042811 MS	SU53CMS	SU53CMS	05/16/11	1711
09	MW4042811 MSD	SU53CMSD	SU53CMSD	05/16/11	1736
10	MW17042811	SU53D	SU53D	05/16/11	1800
11	MW14042811	SU53E	SU53E	05/16/11	1824
12	MW16042811	SU53F	SU53F	05/16/11	1848
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

Instrument ID: NT11 Project: LORA LAKE APTS RI

DFTPP Injection Date: 05/19/11 DFTPP Injection Time: 0921

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	17.6
68	Less than 2.0% of mass 69	0.7 (1.3)1
69	Mass 69 relative abundance	54.3
70	Less than 2.0% of mass 69	0.3 (0.6)1
127	10.0 - 80.0% of mass 198	51.9
197	Less than 2.0% of mass 198	0.5
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	8.4
275	10.0 - 60.0% of mass 198	29.2
365	Greater than 1.0% of mass 198	3.59
441	0.0 - 24.0% of mass 442	17.2 (18.6)2
442	50.0 - 200.0% of mass 198	92.4
443	15.0 - 24.0% of mass 442	21.5 (23.3)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		CC0519	CC0519	05/19/11	0935
02	SU73MBW1	SU73MBW1	SU73MB	05/19/11	1312
03	SU73LCSW1	SU73LCSW1	SU73SB	05/19/11	1336
04	MW-01-042911	SU73A	SU73A	05/19/11	1425
05	MW-01-042911-D	SU73B	SU73B	05/19/11	1449
06	B312-042911	SU74A	SU74A	05/19/11	1513
07	B312-042911 MS	SU74AMS	SU74AMS	05/19/11	1538
08	B312-042911 MSD	SU74AMSD	SU74AMSD	05/19/11	1602
09	B310-042911	SU74B	SU74B	05/19/11	1626
10	B311-042911	SU74C	SU74C	05/19/11	1650
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

FORM V SV

6B

SEMIVOLATILE 8270-D INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No: SU53 Project: LORA LAKE APTS RI

Instrument ID: NT11 Calibration Date: 04/30/11

LAB FILE ID: RRF10 =IC0430C RRF50 =IC0430E RRF100=IC0430F
RRF250=IC0430A RRF500=IC0430D RRF1000=IC0430B

COMPOUND	RRF 10	RRF 50	RRF 100	RRF 250	RRF 500	RRF 1000	___ RRF	%RSD /R^2
Naphthalene	1.081	1.024	1.033	0.972	0.899	0.746	0.959	12.7
2-Methylnaphthalene	0.591	0.584	0.610	0.603	0.587	0.520	0.582	5.5
Acenaphthylene	1.668	1.557	1.666	1.593	1.530	1.347	1.560	7.6
Acenaphthene	1.030	0.962	1.046	1.012	0.951	0.896	0.983	5.8
Dibenzofuran	1.555	1.438	1.545	1.509	1.392	1.244	1.447	8.1
Fluorene	1.072	0.999	1.069	1.055	0.995	0.941	1.022	5.1
Phenanthrene	1.117	1.039	1.066	1.019	0.967	0.824	1.005	10.1
Anthracene	0.999	0.939	1.016	0.973	0.948	0.835	0.952	6.7
Fluoranthene	1.072	0.946	1.050	1.009	0.993	0.858	0.988	7.8
Pyrene	1.947	1.721	1.835	1.734	1.551	1.294	1.680	13.7
Benzo(a)anthracene	1.700	1.395	1.499	1.372	1.304	1.134	1.401	13.5
Chrysene	1.676	1.434	1.521	1.391	1.298	1.130	1.408	13.3
Benzo(a)pyrene	1.504	1.388	1.479	1.460	1.419	1.357	1.434	3.9
Indeno(1,2,3-cd)pyrene	1.796	1.693	1.775	1.780	1.706	1.640	1.732	3.5
Dibenzo(a,h)anthracene	1.418	1.314	1.373	1.372	1.322	1.295	1.349	3.4
Benzo(g,h,i)perylene	1.639	1.527	1.592	1.568	1.496	1.435	1.543	4.7
1-Methylnaphthalene	0.585	0.578	0.610	0.596	0.585	0.514	0.578	5.8
Total Benzofluoranthenes	1.726	1.603	1.706	1.641	1.571	1.446	1.616	6.3
2-Methylnaphthalene-d10	0.614	0.585	0.606	0.596	0.571	0.514	0.581	6.2
Dibenzo(a,h)anthracene-d14	1.353	1.198	1.302	1.276	1.196	1.191	1.253	5.4

<- Outside QC limits: %RSD <20% or R^2 > 0.990

7B

SEMIVOLATILE 8270-D CONTINUING CALIBRATION CHECK

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No: SU53 Project: LORA LAKE APTS RI

Instrument ID: NT11 Cont. Calib. Date: 05/16/11

Init. Calib. Date: 04/30/11 Cont. Calib. Time: 1019

COMPOUND	CalAmt or ARF	CC Amt or RF	MIN RRF	CURVE TYPE	%D or Drift
Naphthalene	0.959	0.969	0.700	AVRG	1.0
2-Methylnaphthalene	0.582	0.604	0.400	AVRG	3.8
Acenaphthylene	1.560	1.628	0.900	AVRG	4.4
Acenaphthene	0.983	1.002	0.900	AVRG	1.9
Dibenzofuran	1.447	1.523	0.800	AVRG	5.2
Fluorene	1.022	1.079	0.900	AVRG	5.6
Phenanthrene	1.005	0.977	0.700	AVRG	-2.8
Anthracene	0.952	0.970	0.700	AVRG	1.9
Fluoranthene	0.988	1.052	0.600	AVRG	6.5
Pyrene	1.680	1.621	0.600	AVRG	-3.5
Benzo(a)anthracene	1.401	1.357	0.800	AVRG	-3.1
Chrysene	1.408	1.380	0.700	AVRG	-2.0
Benzo(a)pyrene	1.434	1.385	0.700	AVRG	-3.4
Indeno(1,2,3-cd)pyrene	1.732	1.707	0.500	AVRG	-1.4
Dibenzo(a,h)anthracene	1.349	1.346	0.400	AVRG	-0.2
Benzo(g,h,i)perylene	1.543	1.500	0.500	AVRG	-2.8
1-Methylnaphthalene	0.578	0.615	0.010	AVRG	6.4
Total Benzofluoranthenes	1.616	1.534	0.010	AVRG	-5.1
2-Methylnaphthalene-d10	0.581	0.604	0.010	AVRG	4.0
Dibenzo(a,h)anthracene-d14	1.253	1.228	0.010	AVRG	-2.0

<- Exceeds QC limit of 20% D

* RF less than minimum RF

7B

SEMIVOLATILE 8270-D CONTINUING CALIBRATION CHECK

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No: SU74 Project: LORA LAKE APTS RI

Instrument ID: NT11 Cont. Calib. Date: 05/19/11

Init. Calib. Date: 04/30/11 Cont. Calib. Time: 0935

COMPOUND	CalAmt or ARF	CC Amt or RF	MIN RRF	CURVE TYPE	%D or Drift
Naphthalene	0.959	0.971	0.700	AVRG	1.2
2-Methylnaphthalene	0.582	0.609	0.400	AVRG	4.6
Acenaphthylene	1.560	1.609	0.900	AVRG	3.1
Acenaphthene	0.983	1.005	0.900	AVRG	2.2
Dibenzofuran	1.447	1.531	0.800	AVRG	5.8
Fluorene	1.022	1.055	0.900	AVRG	3.2
Phenanthrene	1.005	1.012	0.700	AVRG	0.7
Anthracene	0.952	0.961	0.700	AVRG	0.9
Fluoranthene	0.988	1.038	0.600	AVRG	5.1
Pyrene	1.680	1.599	0.600	AVRG	-4.8
Benzo(a)anthracene	1.401	1.349	0.800	AVRG	-3.7
Chrysene	1.408	1.404	0.700	AVRG	-0.3
Benzo(a)pyrene	1.434	1.437	0.700	AVRG	0.2
Indeno(1,2,3-cd)pyrene	1.732	1.760	0.500	AVRG	1.6
Dibenzo(a,h)anthracene	1.349	1.370	0.400	AVRG	1.6
Benzo(g,h,i)perylene	1.543	1.491	0.500	AVRG	-3.4
1-Methylnaphthalene	0.578	0.602	0.010	AVRG	4.2
Total Benzofluoranthenes	1.616	1.600	0.010	AVRG	-1.0
2-Methylnaphthalene-d10	0.581	0.603	0.010	AVRG	3.8
Dibenzo(a,h)anthracene-d14	1.253	1.264	0.010	AVRG	0.9

<- Exceeds QC limit of 20% D

* RF less than minimum RF

FORM VII SV-1

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No: SU53 Project: LORA LAKE APTS RI

Ical Midpoint ID: IC0430A Ical Date: 04/30/11

Instrument ID: NT11 Cont. Cal Date: 05/16/11

		IS1(NPT) AREA #	RT #	IS2(ANT) AREA #	RT #	IS3(PHN) AREA #	RT #
	ICAL MIDPT	129326	6.27	70573	8.47	113741	10.30
	UPPER LIMIT	258652		141146		227482	
	LOWER LIMIT	64663		35286		56870	
	CCAL	121727	6.27	69884	8.47	116143	10.30
	UPPER LIMIT		6.77		8.97		10.80
	LOWER LIMIT		5.77		7.97		9.80
01	SU45MBW1	114372	6.27	63779	8.45	101283	10.30
02	SU45LCSW1	122313	6.27	72780	8.45	119298	10.30
03	SU45LCSDW1	118073	6.27	69478	8.45	106510	10.30
04	MW5042811	118071	6.27	70065	8.47	113950	10.30
05	MW15042811	121196	6.27	70575	8.47	118974	10.30
06	MW4042811	120343	6.27	72423	8.47	123589	10.30
07	MW4042811 MS	120332	6.27	72647	8.47	120641	10.30
08	MW4042811 MS	123172	6.27	72829	8.45	121870	10.30
09	MW17042811	124759	6.27	72222	8.47	122396	10.30
10	MW14042811	121662	6.27	70080	8.45	118353	10.30
11	MW16042811	122354	6.27	68437	8.45	113162	10.30
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							

IS1 = Naphthalene-d8
IS2 = Acenaphthene-d10
IS3 = Phenanthrene-d10

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Cont. Cal
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Cont. Cal

* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No: SU53 Project: LORA LAKE APTS RI

Ical Midpoint ID: IC0430A Ical Date: 04/30/11

Instrument ID: NT11 Cont. Cal Date: 05/16/11

		IS4(CRY) AREA #	RT #	IS5(PRY) AREA #	RT #	AREA #	RT #
	ICAL MIDPT	70763	13.63	54896	15.61		
	UPPER LIMIT	141526		109792			
	LOWER LIMIT	35382		27448			
	CCAL	77816	13.63	64337	15.61		
	UPPER LIMIT		14.13		16.11		
	LOWER LIMIT		13.13		15.11		
01	SU45MBW1	66352	13.63	57382	15.61		
02	SU45LCSW1	78581	13.63	65906	15.61		
03	SU45LCSDW1	71825	13.63	60831	15.61		
04	MW5042811	77577	13.63	66676	15.61		
05	MW15042811	78241	13.63	66146	15.61		
06	MW4042811	81508	13.63	68851	15.61		
07	MW4042811 MS	83655	13.63	69114	15.61		
08	MW4042811 MS	81868	13.63	69858	15.61		
09	MW17042811	80713	13.63	66914	15.61		
10	MW14042811	78044	13.63	67186	15.61		
11	MW16042811	75098	13.63	65013	15.61		
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							

IS4 = Chrysene-d12
IS5 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Cont. Cal
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Cont. Cal

* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No: SU74 Project: LORA LAKE APTS RI

Ical Midpoint ID: IC0430A Ical Date: 04/30/11

Instrument ID: NT11 Cont. Cal Date: 05/19/11

		IS1(NPT) AREA #	RT #	IS2(ANT) AREA #	RT #	IS3(PHN) AREA #	RT #
	ICAL MIDPT	129326	6.27	70573	8.47	113741	10.30
	UPPER LIMIT	258652		141146		227482	
	LOWER LIMIT	64663		35286		56870	
	CCAL	114549	6.27	64310	8.47	104174	10.30
	UPPER LIMIT		6.77		8.97		10.80
	LOWER LIMIT		5.77		7.97		9.80
01	SU73MBW1	124138	6.27	70204	8.45	114479	10.30
02	SU73LCSW1	118038	6.27	69817	8.47	118403	10.30
03	MW-01-042911	125849	6.27	79455	8.45	124833	10.30
04	MW-01-042911	120625	6.27	76759	8.47	123762	10.30
05	B312-042911	119557	6.27	70279	8.47	120326	10.30
06	B312-042911	115311	6.27	68463	8.47	116747	10.30
07	B312-042911	116649	6.27	69292	8.47	119369	10.30
08	B310-042911	115855	6.27	68143	8.45	111834	10.30
09	B311-042911	114081	6.27	66837	8.47	111242	10.30
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							

IS1 = Naphthalene-d8
IS2 = Acenaphthene-d10
IS3 = Phenanthrene-d10

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Cont. Cal
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Cont. Cal

* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No: SU74 Project: LORA LAKE APTS RI

Ical Midpoint ID: IC0430A Ical Date: 04/30/11

Instrument ID: NT11 Cont. Cal Date: 05/19/11

		IS4(CRY) AREA #	RT #	IS5(PRY) AREA #	RT #	AREA #	RT #
	ICAL MIDPT	70763	13.63	54896	15.61		
	UPPER LIMIT	141526		109792			
	LOWER LIMIT	35382		27448			
	CCAL	70778	13.63	59638	15.61		
	UPPER LIMIT		14.13		16.11		
	LOWER LIMIT		13.13		15.11		
01	SU73MBW1	73529	13.63	64698	15.61		
02	SU73LCSW1	80682	13.63	63399	15.61		
03	MW-01-042911	77890	13.63	65588	15.61		
04	MW-01-042911	76395	13.63	61863	15.61		
05	B312-042911	77405	13.63	63881	15.61		
06	B312-042911	77009	13.63	63699	15.61		
07	B312-042911	81533	13.63	64909	15.61		
08	B310-042911	71589	13.63	61430	15.61		
09	B311-042911	75124	13.63	62191	15.61		
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							

IS4 = Chrysene-d12
IS5 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Cont. Cal
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Cont. Cal

* Values outside of QC limits.

FORM VIII SV-2

PCP/Chlorophenols Analysis
Report and Summary QC Forms

ARI Job ID: SU53, SU73, SU74

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: MW5042811
SAMPLE

Lab Sample ID: SU53A
LIMS ID: 11-9621
Matrix: Groundwater
Data Release Authorized:
Reported: 05/18/11

QC Report No: SU53-Floyd Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: 04/28/11
Date Received: 04/28/11

Date Extracted: 05/04/11
Date Analyzed: 05/16/11 17:25
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	**Pentachlorophenol**	**0.25**	**1.4**

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	66.4%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: MW15042811
SAMPLE

Lab Sample ID: SU53B
LIMS ID: 11-9622
Matrix: Groundwater
Data Release Authorized:
Reported: 05/18/11

QC Report No: SU53-Floyd Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: 04/28/11
Date Received: 04/28/11

Date Extracted: 05/04/11
Date Analyzed: 05/16/11 18:01
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	< 0.25 U

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	68.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: MW4042811
SAMPLE

Lab Sample ID: SU53C
LIMS ID: 11-9623
Matrix: Groundwater
Data Release Authorized:
Reported: 05/18/11

QC Report No: SU53-Floyd Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: 04/28/11
Date Received: 04/28/11

Date Extracted: 05/04/11
Date Analyzed: 05/16/11 21:03
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	< 0.25 U

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	55.2%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: MW17042811
SAMPLE

Lab Sample ID: SU53D
LIMS ID: 11-9624
Matrix: Groundwater
Data Release Authorized:
Reported: 05/18/11

QC Report No: SU53-Floyd Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: 04/28/11
Date Received: 04/28/11

Date Extracted: 05/04/11
Date Analyzed: 05/16/11 21:39
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	< 0.25 U

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery	
2,4,6-Tribromophenol	69.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: MW14042811
SAMPLE

Lab Sample ID: SU53E
LIMS ID: 11-9625
Matrix: Groundwater
Data Release Authorized:
Reported: 05/18/11

QC Report No: SU53-Floyd Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: 04/28/11
Date Received: 04/28/11

Date Extracted: 05/04/11
Date Analyzed: 05/16/11 22:16
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	< 0.25 U

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	67.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: MW16042811
SAMPLE

Lab Sample ID: SU53F
LIMS ID: 11-9626
Matrix: Groundwater
Data Release Authorized:
Reported: 05/18/11

QC Report No: SU53-Floyd Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: 04/28/11
Date Received: 04/28/11

Date Extracted: 05/04/11
Date Analyzed: 05/16/11 22:52
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	< 0.25 U

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	66.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: MW-01-042911
SAMPLE

Lab Sample ID: SU73A
LIMS ID: 11-9762
Matrix: Water
Data Release Authorized:
Reported: 05/18/11

QC Report No: SU73-Floyd Snider
Project: Lora Lake Apts RI
POS-LLA.4010
Date Sampled: 04/29/11
Date Received: 04/29/11

Date Extracted: 05/05/11
Date Analyzed: 05/17/11 02:29
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	**Pentachlorophenol**	**0.25**	**0.41**

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	78.8%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: MW-01-042911-D
SAMPLE

Lab Sample ID: SU73B
LIMS ID: 11-9763
Matrix: Water
Data Release Authorized:
Reported: 05/18/11

QC Report No: SU73-Floyd Snider
Project: Lora Lake Apts RI
POS-LLA.4010
Date Sampled: 04/29/11
Date Received: 04/29/11

Date Extracted: 05/05/11
Date Analyzed: 05/17/11 03:06
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	**Pentachlorophenol**	**0.25**	**0.42**

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	79.6%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: B312-042911
SAMPLE

Lab Sample ID: SU74A
LIMS ID: 11-9772
Matrix: Water
Data Release Authorized:
Reported: 05/18/11

QC Report No: SU74-Floyd Snider
Project: Lora Lake Parcel
POS-LL.4010
Date Sampled: 04/29/11
Date Received: 04/29/11

Date Extracted: 05/05/11
Date Analyzed: 05/17/11 04:54
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	< 0.25 U

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	61.6%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: B310-042911
SAMPLE

Lab Sample ID: SU74B
LIMS ID: 11-9773
Matrix: Water
Data Release Authorized:
Reported: 05/18/11

QC Report No: SU74-Floyd Snider
Project: Lora Lake Parcel
POS-LL.4010
Date Sampled: 04/29/11
Date Received: 04/29/11

Date Extracted: 05/05/11
Date Analyzed: 05/17/11 05:31
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	< 0.25 U

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	72.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: B311-042911
SAMPLE

Lab Sample ID: SU74C
LIMS ID: 11-9774
Matrix: Water
Data Release Authorized:
Reported: 05/18/11

QC Report No: SU74-Floyd Snider
Project: Lora Lake Parcel
POS-LL.4010
Date Sampled: 04/29/11
Date Received: 04/29/11

Date Extracted: 05/05/11
Date Analyzed: 05/17/11 06:07
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	< 0.25 U

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery	
2,4,6-Tribromophenol	64.8%

ANALYTICAL RESOURCES INCORPORATED

SW8041 CHLOROPHENOLICS SURROGATE RECOVERY SUMMARY

Matrix: Groundwater

QC Report No: SU53-Floyd Snider
Project: Lora Lake Apts RI
POS-LLA

Client ID	TBP	TOT OUT
MW5042811	66.4%	0
MB-050411	56.4%	0
LCS-050411	63.0%	0
MW15042811	68.0%	0
MW15042811 MS	67.6%	0
MW15042811 MSD	67.8%	0
MW4042811	55.2%	0
MW17042811	69.2%	0
MW14042811	67.2%	0
MW16042811	66.8%	0

	LCS/MB LIMITS	QC LIMITS
(TBP) = 2,4,6-Tribromophenol	(40-130)	(11-156)

Prep Method: SW3510C
Log Number Range: 11-9621 to 11-9626

FORM-II SW8041

ANALYTICAL RESOURCES INCORPORATED

SW8041 CHLOROPHENOLICS SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: SU73-Floyd Snider
Project: Lora Lake Apts RI
POS-LLA.4010

Client ID	TBP	TOT OUT
MW-01-042911	78.8%	0
MB-050511	66.8%	0
LCS-050511	68.0%	0
MW-01-042911-D	79.6%	0
MW-01-042911-D MS	71.6%	0
MW-01-042911-D MSD	70.2%	0

	LCS/MB LIMITS	QC LIMITS
(TBP) = 2,4,6-Tribromophenol	(40-130)	(11-156)

Prep Method: SW3510C
Log Number Range: 11-9762 to 11-9763

ANALYTICAL RESOURCES INCORPORATED

SW8041 CHLOROPHENOLICS SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: SU74-Floyd Snider
Project: Lora Lake Parcel
POS-LL.4010

Client ID	TBP	TOT OUT
MB-050511	66.8%	0
LCS-050511	68.0%	0
B312-042911	61.6%	0
B310-042911	72.8%	0
B311-042911	64.8%	0

	LCS/MB LIMITS	QC LIMITS
(TBP) = 2,4,6-Tribromophenol	(40-130)	(11-156)

Prep Method: SW3510C
Log Number Range: 11-9772 to 11-9774

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: MW15042811
MS/MSD

Lab Sample ID: SU53B
LIMS ID: 11-9622
Matrix: Groundwater
Data Release Authorized:
Reported: 05/18/11

QC Report No: SU53-Floyd Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: 04/28/11
Date Received: 04/28/11

Date Extracted MS/MSD: 05/04/11

Date Analyzed MS: 05/16/11 18:37
MSD: 05/16/11 19:14
Instrument/Analyst MS: ECD1/AAR
MSD: ECD1/AAR

Sample Amount MS: 500 mL
MSD: 500 mL
Final Extract Volume MS: 50 mL
MSD: 50 mL
Dilution Factor MS: 1.00
MSD: 1.00

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Pentachlorophenol	< 0.25 U	1.70	2.50	68.0%	1.65	2.50	66.0%	3.0%

Results reported in µg/L
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: MW15042811
MATRIX SPIKE

Lab Sample ID: SU53B
LIMS ID: 11-9622
Matrix: Groundwater
Data Release Authorized:
Reported: 05/18/11

QC Report No: SU53-Floyd Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: 04/28/11
Date Received: 04/28/11

Date Extracted: 05/04/11
Date Analyzed: 05/16/11 18:37
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	---

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	67.6%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: MW15042811
MATRIX SPIKE DUP

Lab Sample ID: SU53B
LIMS ID: 11-9622
Matrix: Groundwater
Data Release Authorized:
Reported: 05/18/11

QC Report No: SU53-Floyd Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: 04/28/11
Date Received: 04/28/11

Date Extracted: 05/04/11
Date Analyzed: 05/16/11 19:14
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	---

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	67.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: MW-01-042911-D
MS/MSD

Lab Sample ID: SU73B
LIMS ID: 11-9763
Matrix: Water
Data Release Authorized:
Reported: 05/18/11

QC Report No: SU73-Floyd Snider
Project: Lora Lake Apts RI
POS-LLA.4010
Date Sampled: 04/29/11
Date Received: 04/29/11

Date Extracted MS/MSD: 05/05/11

Date Analyzed MS: 05/17/11 03:42
MSD: 05/17/11 04:18
Instrument/Analyst MS: ECD1/AAR
MSD: ECD1/AAR

Sample Amount MS: 500 mL
MSD: 500 mL
Final Extract Volume MS: 50 mL
MSD: 50 mL
Dilution Factor MS: 1.00
MSD: 1.00

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Pentachlorophenol	0.42	2.35	2.50	77.2%	2.31	2.50	75.6%	1.7%

Results reported in µg/L
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: MW-01-042911-D
MATRIX SPIKE

Lab Sample ID: SU73B
LIMS ID: 11-9763
Matrix: Water
Data Release Authorized:
Reported: 05/18/11

QC Report No: SU73-Floyd Snider
Project: Lora Lake Apts RI
POS-LLA.4010
Date Sampled: 04/29/11
Date Received: 04/29/11

Date Extracted: 05/05/11
Date Analyzed: 05/17/11 03:42
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	---

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	71.6%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: MW-01-042911-D
MATRIX SPIKE DUP

Lab Sample ID: SU73B
LIMS ID: 11-9763
Matrix: Water
Data Release Authorized:
Reported: 05/18/11

QC Report No: SU73-Floyd Snider
Project: Lora Lake Apts RI
POS-LLA.4010
Date Sampled: 04/29/11
Date Received: 04/29/11

Date Extracted: 05/05/11
Date Analyzed: 05/17/11 04:18
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	---

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	70.2%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: LCS-050411
LAB CONTROL

Lab Sample ID: LCS-050411
LIMS ID: 11-9622
Matrix: Groundwater
Data Release Authorized:
Reported: 05/18/11

QC Report No: SU53-Floyd Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: 04/28/11
Date Received: 04/28/11

Date Extracted: 05/04/11
Date Analyzed: 05/16/11 16:12
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

Analyte	Lab Control	Spike Added	Recovery
Pentachlorophenol	1.65	2.50	66.0%

Chlorophenols Surrogate Recovery

2,4,6-Tribromophenol	63.0%

Results reported in µg/L

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: LCS-050511
LAB CONTROL

Lab Sample ID: LCS-050511
LIMS ID: 11-9772
Matrix: Water
Data Release Authorized:
Reported: 05/18/11

QC Report No: SU74-Floyd Snider
Project: Lora Lake Parcel
POS-LL.4010
Date Sampled: 04/29/11
Date Received: 04/29/11

Date Extracted: 05/05/11
Date Analyzed: 05/17/11 01:17
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

Analyte	Lab Control	Spike Added	Recovery
Pentachlorophenol	1.64	2.50	65.6%

Chlorophenols Surrogate Recovery

2,4,6-Tribromophenol	68.0%

Results reported in µg/L

CHLOROPHENOL METHOD BLANK SUMMARY

SAMPLE NO.

SU53MBW1

Lab Name: ANALYTICAL RESOURCES, INC
Client: FLOYD SNIDER

ARI Job No.: SU53
Project: LORA LAKE APTS RI

Lab Sample ID: SU53MBW1
Lab File ID: 0516A007

Matrix (soil/water) LIQUID
Extraction:(SepF/Cont/Sonc) SW3510C

Sulfur Cleanup (Y/N) Y
Date Extracted: 05/04/11

Date Analyzed (1): 05/16/11
Date Analyzed (2): 05/16/11

Time Analyzed (1): 1536
Time Analyzed (2): 1536

Instrument ID (1): ECD1
Instrument ID (2): ECD1

GC Column (1): STX CLP1 ID: 0.53(mm)
GC Column (2): STX CLP2 ID: 0.53(mm)

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	MW4042811	SU53C	05/16/11	05/16/11
02	SU53LCSW1	SU53LCSW1	05/16/11	05/16/11
03	MW5042811	SU53A	05/16/11	05/16/11
04	MW15042811	SU53B	05/16/11	05/16/11
05	MW15042811 M	SU53BMS	05/16/11	05/16/11
06	MW15042811 M	SU53BMSD	05/16/11	05/16/11
07	MW4042811	SU53C	05/16/11	05/16/11
08	MW17042811	SU53D	05/16/11	05/16/11
09	MW14042811	SU53E	05/16/11	05/16/11
10	MW16042811	SU53F	05/16/11	05/16/11

FORM IV HERB

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: MB-050411
METHOD BLANK

Lab Sample ID: MB-050411
LIMS ID: 11-9622
Matrix: Groundwater
Data Release Authorized:
Reported: 05/18/11

QC Report No: SU53-Floyd Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: NA
Date Received: NA

Date Extracted: 05/04/11
Date Analyzed: 05/16/11 15:36
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	< 0.25 U

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery	
2,4,6-Tribromophenol	56.4%

4

CHLOROPHENOL METHOD BLANK SUMMARY

SAMPLE NO.

SU73MBW1

Lab Name: ANALYTICAL RESOURCES, INC
Client: FLOYD SNIDER

ARI Job No.: SU73
Project: LORA LAKE PARCEL

Lab Sample ID: SU73MBW1
Lab File ID: 0516A022

Matrix (soil/water) LIQUID
Extraction:(SepF/Cont/Sonc) SW3510C

Sulfur Cleanup (Y/N) Y
Date Extracted: 05/05/11

Date Analyzed (1): 05/17/11
Date Analyzed (2): 05/17/11

Time Analyzed (1): 0041
Time Analyzed (2): 0041

Instrument ID (1): ECD1
Instrument ID (2): ECD1

GC Column (1): STX CLP1 ID: 0.53(mm)
GC Column (2): STX CLP2 ID: 0.53(mm)

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	SU73LCSW1	SU73LCSW1	05/17/11	05/17/11
02	MW-01-042911	SU73A	05/17/11	05/17/11
03	MW-01-042911	SU73B	05/17/11	05/17/11
04	MW-01-042911	SU73BMS	05/17/11	05/17/11
05	MW-01-042911	SU73BMSD	05/17/11	05/17/11
06	B312-042911	SU74A	05/17/11	05/17/11
07	B310-042911	SU74B	05/17/11	05/17/11
08	B311-042911	SU74C	05/17/11	05/17/11

FORM IV HERB

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: MB-050511
METHOD BLANK

Lab Sample ID: MB-050511
LIMS ID: 11-9772
Matrix: Water
Data Release Authorized:
Reported: 05/18/11

QC Report No: SU74-Floyd Snider
Project: Lora Lake Parcel
POS-LL.4010
Date Sampled: NA
Date Received: NA

Date Extracted: 05/05/11
Date Analyzed: 05/17/11 00:41
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	< 0.25 U

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery	
2,4,6-Tribromophenol	66.8%

6D
CHLOROPHENOL INITIAL CALIBRATION
RETENTION TIME WINDOWS

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No.: SU53 Project: LORA LAKE APTS RI

GC Column: STX CLP1 ID: 0.53 (mm) Instrument ID: ECD1

Calibration Date: 05/04/11

	RT OF STANDARDS						MEAN	RT WINDOW	
COMPOUND	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	RT	FROM	TO
Pentachlorophenol	21.00	21.00	21.00	21.00	21.00	21.00	21.00	20.93	21.07
2,4,6-Trichloropheno	13.10	13.10	13.10	13.10	13.10	13.10	13.10	13.03	13.17
2,3,6-Trichloropheno	14.10	14.10	14.10	14.10	14.10	14.10	14.10	14.03	14.17
2,4,5-Trichloropheno	15.85	15.85	15.85	15.84	15.85	15.85	15.84	15.78	15.91
2,3,4-Trichloropheno	17.36	17.35	17.35	17.35	17.35	17.35	17.35	17.28	17.42
2,3,5,6-Tetrachlorop	17.16	17.15	17.15	17.15	17.15	17.15	17.15	17.08	17.22
2,3,4,5-Tetrachlorop	20.16	20.16	20.16	20.15	20.15	20.16	20.16	20.08	20.22
2,4-Dichlorophenol	12.56	12.56	12.56	12.56	12.56	12.56	12.56	12.48	12.62
2,4,6-Tribromophenol	18.60	18.60	18.60	18.60	18.60	18.60	18.60	18.53	18.67

6D
CHLOROPHENOL INITIAL CALIBRATION
RETENTION TIME WINDOWS

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No.: SU53 Project: LORA LAKE APTS RI

GC Column: STX CLP2 ID: 0.53 (mm) Instrument ID: ECD1

Calibration Date: 05/04/11

COMPOUND	RT OF STANDARDS LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	MEAN RT	RT WINDOW FROM	TO
Pentachlorophenol	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.90	23.04
2,4,6-Trichloropheno	14.31	14.31	14.31	14.31	14.31	14.31	14.31	14.24	14.38
2,3,6-Trichloropheno	15.56	15.56	15.56	15.56	15.56	15.56	15.56	15.49	15.63
2,4,5-Trichloropheno	17.48	17.47	17.47	17.47	17.47	17.47	17.47	17.40	17.54
2,3,4-Trichloropheno	19.03	19.02	19.02	19.02	19.02	19.02	19.02	18.95	19.09
2,3,5,6-Tetrachlorop	18.82	18.81	18.81	18.81	18.81	18.81	18.81	18.74	18.88
2,3,4,5-Tetrachlorop	22.08	22.08	22.08	22.08	22.08	22.08	22.08	22.01	22.15
2,4-Dichlorophenol	13.82	13.82	13.82	13.82	13.82	13.82	13.82	13.75	13.89
2,4,6-Tribromophenol	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.87	21.01

6E
CHLOROPHENOL INITIAL CALIBRATION
CALIBRATION FACTORS

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No.: SU53 Project: LORA LAKE APTS RI

GC Column: STX CLP1 ID: 0.53 (mm) Instrument ID: ECD1

Calibration Date: 05/04/11

COMPOUND	CALIBRATION FACTORS LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	R^2/ %RSD	CT
Pentachlorophenol____	24557	22356	20781	19124	17785	16292	15.1	A
2,4,6-Trichlorophenol	15281	13835	12795	11181	10412	9532	17.9	A
2,3,6-Trichlorophenol	14259	12818	11863	10765	9925	9085	16.7	A
2,4,5-Trichlorophenol	12140	8082	7421	6534	5905	5130	0.9996	Q
2,3,4-Trichlorophenol	10565	9519	8778	7811	7138	6322	18.8	A
2,3,5,6-Tetrachloroph	20194	18565	17499	16125	15182	13876	13.7	A
2,3,4,5-Tetrachloroph	16824	14772	13475	11938	10977	9904	19.7	A
2,4-Dichlorophenol___	1040	896	796	655	559	482	0.9992	Q
2,4,6-Tribromophenol	18340	16896	15885	15230	14566	13549	10.8	A
						AVE RSD	19.4	

CT stands for Curve Types:
- A Indicates an Average Response Factor Curve
- L Indicates a Linear Curve
- Q Indicates a Quadratic Curve

CALIBRATION FILES

LVL 1: /chem2/ecd1.i/PCP20110504.b/ical-1.b/0504A010.d
LVL 2: /chem2/ecd1.i/PCP20110504.b/ical-1.b/0504A011.d
LVL 3: /chem2/ecd1.i/PCP20110504.b/ical-1.b/0504A012.d
LVL 4: /chem2/ecd1.i/PCP20110504.b/ical-1.b/0504A009.d
LVL 5: /chem2/ecd1.i/PCP20110504.b/ical-1.b/0504A013.d
LVL 6: /chem2/ecd1.i/PCP20110504.b/ical-1.b/0504A014.d

6E
CHLOROPHENOL INITIAL CALIBRATION
CALIBRATION FACTORS

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No.: SU53 Project: LORA LAKE APTS RI

GC Column: STX CLP2 ID: 0.53 (mm) Instrument ID: ECD1

Calibration Date: 05/04/11

COMPOUND	CALIBRATION FACTORS LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	R^2/ %RSD	CT
Pentachlorophenol	35686	31408	28958	26156	24465	22293	17.4	A
2,4,6-Trichlorophenol	18173	16199	15364	13872	12302	11052	18.0	A
2,3,6-Trichlorophenol	17538	16304	15194	13812	12444	10948	17.1	A
2,4,5-Trichlorophenol	10375	9203	8375	7827	6888	5906	19.8	A
2,3,4-Trichlorophenol	13793	11382	10368	9080	8182	7194	0.9997	Q
2,3,5,6-Tetrachloroph	28198	24060	22545	20410	19063	17352	17.7	A
2,3,4,5-Tetrachloroph	21700	18848	16677	15352	13827	12342	0.9998	Q
2,4-Dichlorophenol	1124	962	835	702	594	505	0.9994	Q
2,4,6-Tribromophenol	26776	22121	21311	19850	18746	17341	15.7	A
						AVE RSD	20.0	

CT stands for Curve Types:
- A Indicates an Average Response Factor Curve
- L Indicates a Linear Curve
- Q Indicates a Quadratic Curve

CALIBRATION FILES

LVL 1: /chem2/ecd1.i/PCP20110504.b/ical-2.b/0504A010.d
LVL 2: /chem2/ecd1.i/PCP20110504.b/ical-2.b/0504A011.d
LVL 3: /chem2/ecd1.i/PCP20110504.b/ical-2.b/0504A012.d
LVL 4: /chem2/ecd1.i/PCP20110504.b/ical-2.b/0504A009.d
LVL 5: /chem2/ecd1.i/PCP20110504.b/ical-2.b/0504A013.d
LVL 6: /chem2/ecd1.i/PCP20110504.b/ical-2.b/0504A014.d

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No.: SU53 Project: LORA LAKE APTS RI

GC Column: STX CLP1 ID: 0.53 (mm)

Init. Calib. Date(s): 05/04/11 05/04/11

Client Sample No.(PCP): Date Analyzed :05/16/11

Lab Sample ID (PCP): PCP CCAL Time Analyzed :1459

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	21.00	20.93	21.07	23.0	25.0	-8.0
2,4,6-Trichlorophenol	13.10	13.03	13.17	23.0	25.0	-8.0
2,3,6-Trichlorophenol	14.10	14.03	14.17	22.6	25.0	-9.6
2,4,5-Trichlorophenol	15.85	15.78	15.91	23.8	25.0	-4.8
2,3,4-Trichlorophenol	17.35	17.28	17.42	22.7	25.0	-9.2
2,3,5,6-Tetrachlorophenol	17.15	17.08	17.22	23.2	25.0	-7.2
2,3,4,5-Tetrachlorophenol	20.16	20.08	20.22	22.3	25.0	-10.8
2,4-Dichlorophenol	12.56	12.48	12.62	267	250	6.8
2,4,6-Tribromophenol (surr	18.60	18.53	18.67	22.8	25.0	-8.8

AVERAGE %D = 8.1

FORM VII PCP

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No.: SU53 Project: LORA LAKE APTS RI

GC Column: STX CLP2 ID: 0.53 (mm)

Init. Calib. Date(s): 05/04/11 05/04/11

Client Sample No.(PCP): Date Analyzed :05/16/11

Lab Sample ID (PCP): PCP CCAL Time Analyzed :1459

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	22.97	22.90	23.04	21.5	25.0	-14.0
2,4,6-Trichlorophenol	14.31	14.24	14.38	21.9	25.0	-12.4
2,3,6-Trichlorophenol	15.56	15.49	15.63	21.4	25.0	-14.4
2,4,5-Trichlorophenol	17.48	17.40	17.54	23.2	25.0	-7.2
2,3,4-Trichlorophenol	19.02	18.95	19.09	23.6	25.0	-5.6
2,3,5,6-Tetrachlorophenol	18.82	18.74	18.88	21.7	25.0	-13.2
2,3,4,5-Tetrachlorophenol	22.08	22.01	22.15	23.4	25.0	-6.4
2,4-Dichlorophenol	13.82	13.75	13.89	230	250	-8.0
2,4,6-Tribromophenol (surr	20.94	20.87	21.01	22.1	25.0	-11.6

AVERAGE %D = 10.3

FORM VII PCP

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No.: SU53 Project: LORA LAKE APTS RI

GC Column: STX CLP1 ID: 0.53 (mm)

Init. Calib. Date(s): 05/04/11 05/04/11

Client Sample No.(PCP): Date Analyzed :05/16/11

Lab Sample ID (PCP): PCP CCAL Time Analyzed :2027

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	21.00	20.93	21.07	23.1	25.0	-7.6
2,4,6-Trichlorophenol	13.10	13.03	13.17	23.1	25.0	-7.6
2,3,6-Trichlorophenol	14.10	14.03	14.17	22.7	25.0	-9.2
2,4,5-Trichlorophenol	15.85	15.78	15.91	24.2	25.0	-3.2
2,3,4-Trichlorophenol	17.36	17.28	17.42	23.0	25.0	-8.0
2,3,5,6-Tetrachlorophenol	17.16	17.08	17.22	23.5	25.0	-6.0
2,3,4,5-Tetrachlorophenol	20.16	20.08	20.22	22.2	25.0	-11.2
2,4-Dichlorophenol	12.56	12.48	12.62	269	250	7.6
2,4,6-Tribromophenol (surr	18.60	18.53	18.67	23.6	25.0	-5.6

AVERAGE %D = 7.3

FORM VII PCP

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No.: SU53 Project: LORA LAKE APTS RI

GC Column: STX CLP2 ID: 0.53 (mm)

Init. Calib. Date(s): 05/04/11 05/04/11

Client Sample No.(PCP): Date Analyzed :05/16/11

Lab Sample ID (PCP): PCP CCAL Time Analyzed :2027

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	22.97	22.90	23.04	22.5	25.0	-10.0
2,4,6-Trichlorophenol	14.31	14.24	14.38	22.1	25.0	-11.6
2,3,6-Trichlorophenol	15.56	15.49	15.63	21.8	25.0	-12.8
2,4,5-Trichlorophenol	17.48	17.40	17.54	23.5	25.0	-6.0
2,3,4-Trichlorophenol	19.03	18.95	19.09	24.0	25.0	-4.0
2,3,5,6-Tetrachlorophenol	18.82	18.74	18.88	22.1	25.0	-11.6
2,3,4,5-Tetrachlorophenol	22.08	22.01	22.15	23.8	25.0	-4.8
2,4-Dichlorophenol	13.82	13.75	13.89	232	250	-7.2
2,4,6-Tribromophenol (surr	20.94	20.87	21.01	22.3	25.0	-10.8

AVERAGE %D = 8.8

FORM VII PCP

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No.: SU74 Project: LORA LAKE PARCEL

GC Column: STX CLP1 ID: 0.53 (mm)

Init. Calib. Date(s): 05/04/11 05/04/11

Client Sample No.(PCP): Date Analyzed :05/16/11

Lab Sample ID (PCP): PCP CCAL Time Analyzed :2027

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	21.00	20.93	21.07	23.1	25.0	-7.6
2,4,6-Trichlorophenol	13.10	13.03	13.17	23.1	25.0	-7.6
2,3,6-Trichlorophenol	14.10	14.03	14.17	22.7	25.0	-9.2
2,4,5-Trichlorophenol	15.85	15.78	15.91	24.2	25.0	-3.2
2,3,4-Trichlorophenol	17.36	17.28	17.42	23.0	25.0	-8.0
2,3,5,6-Tetrachlorophenol	17.16	17.08	17.22	23.5	25.0	-6.0
2,3,4,5-Tetrachlorophenol	20.16	20.08	20.22	22.2	25.0	-11.2
2,4-Dichlorophenol	12.56	12.48	12.62	269	250	7.6
2,4,6-Tribromophenol (surr	18.60	18.53	18.67	23.6	25.0	-5.6

AVERAGE %D = 7.3

FORM VII PCP

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No.: SU74 Project: LORA LAKE PARCEL

GC Column: STX CLP2 ID: 0.53 (mm)

Init. Calib. Date(s): 05/04/11 05/04/11

Client Sample No.(PCP): Date Analyzed :05/16/11

Lab Sample ID (PCP): PCP CCAL Time Analyzed :2027

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	22.97	22.90	23.04	22.5	25.0	-10.0
2,4,6-Trichlorophenol	14.31	14.24	14.38	22.1	25.0	-11.6
2,3,6-Trichlorophenol	15.56	15.49	15.63	21.8	25.0	-12.8
2,4,5-Trichlorophenol	17.48	17.40	17.54	23.5	25.0	-6.0
2,3,4-Trichlorophenol	19.03	18.95	19.09	24.0	25.0	-4.0
2,3,5,6-Tetrachlorophenol	18.82	18.74	18.88	22.1	25.0	-11.6
2,3,4,5-Tetrachlorophenol	22.08	22.01	22.15	23.8	25.0	-4.8
2,4-Dichlorophenol	13.82	13.75	13.89	232	250	-7.2
2,4,6-Tribromophenol (surr	20.94	20.87	21.01	22.3	25.0	-10.8

AVERAGE %D = 8.8

FORM VII PCP

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No.: SU53 Project: LORA LAKE APTS RI

GC Column: STX CLP1 ID: 0.53 (mm)

Init. Calib. Date(s): 05/04/11 05/04/11

Client Sample No.(PCP): Date Analyzed :05/17/11

Lab Sample ID (PCP): PCP CCAL Time Analyzed :0004

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	21.00	20.93	21.07	23.1	25.0	-7.6
2,4,6-Trichlorophenol	13.11	13.03	13.17	23.1	25.0	-7.6
2,3,6-Trichlorophenol	14.10	14.03	14.17	22.6	25.0	-9.6
2,4,5-Trichlorophenol	15.85	15.78	15.91	23.9	25.0	-4.4
2,3,4-Trichlorophenol	17.36	17.28	17.42	22.9	25.0	-8.4
2,3,5,6-Tetrachlorophenol	17.16	17.08	17.22	23.3	25.0	-6.8
2,3,4,5-Tetrachlorophenol	20.16	20.08	20.22	22.5	25.0	-10.0
2,4-Dichlorophenol	12.56	12.48	12.62	272	250	8.8
2,4,6-Tribromophenol (surr	18.60	18.53	18.67	23.6	25.0	-5.6

AVERAGE %D = 7.6

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No.: SU53 Project: LORA LAKE APTS RI

GC Column: STX CLP2 ID: 0.53 (mm)

Init. Calib. Date(s): 05/04/11 05/04/11

Client Sample No.(PCP): Date Analyzed :05/17/11

Lab Sample ID (PCP): PCP CCAL Time Analyzed :0004

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	22.97	22.90	23.04	22.6	25.0	-9.6
2,4,6-Trichlorophenol	14.32	14.24	14.38	22.2	25.0	-11.2
2,3,6-Trichlorophenol	15.56	15.49	15.63	21.8	25.0	-12.8
2,4,5-Trichlorophenol	17.48	17.40	17.54	23.5	25.0	-6.0
2,3,4-Trichlorophenol	19.03	18.95	19.09	23.8	25.0	-4.8
2,3,5,6-Tetrachlorophenol	18.82	18.74	18.88	22.0	25.0	-12.0
2,3,4,5-Tetrachlorophenol	22.09	22.01	22.15	24.2	25.0	-3.2
2,4-Dichlorophenol	13.83	13.75	13.89	231	250	-7.6
2,4,6-Tribromophenol (surr	20.94	20.87	21.01	22.5	25.0	-10.0

AVERAGE %D = 8.6

FORM VII PCP

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No.: SU53 Project: LORA LAKE APTS RI

GC Column: STX CLP1 ID: 0.53 (mm)

Init. Calib. Date(s): 05/04/11 05/04/11

Client Sample No.(PCP): Date Analyzed :05/17/11

Lab Sample ID (PCP): PCP CCAL Time Analyzed :0719

PCP MTX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	21.00	20.93	21.07	23.8	25.0	-4.8
2,4,6-Trichlorophenol	13.10	13.03	13.17	24.0	25.0	-4.0
2,3,6-Trichlorophenol	14.10	14.03	14.17	23.5	25.0	-6.0
2,4,5-Trichlorophenol	15.85	15.78	15.91	24.8	25.0	-0.8
2,3,4-Trichlorophenol	17.36	17.28	17.42	23.7	25.0	-5.2
2,3,5,6-Tetrachlorophenol	17.16	17.08	17.22	24.1	25.0	-3.6
2,3,4,5-Tetrachlorophenol	20.16	20.08	20.22	23.0	25.0	-8.0
2,4-Dichlorophenol	12.56	12.48	12.62	285	250	14.0
2,4,6-Tribromophenol (surr	18.60	18.53	18.67	24.3	25.0	-2.8

AVERAGE %D = 5.5

FORM VII PCP

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No.: SU53 Project: LORA LAKE APTS RI

GC Column: STX CLP2 ID: 0.53 (mm)

Init. Calib. Date(s): 05/04/11 05/04/11

Client Sample No.(PCP): Date Analyzed :05/17/11

Lab Sample ID (PCP): PCP CCAL Time Analyzed :0719

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	22.97	22.90	23.04	23.2	25.0	-7.2
2,4,6-Trichlorophenol	14.32	14.24	14.38	23.1	25.0	-7.6
2,3,6-Trichlorophenol	15.56	15.49	15.63	22.6	25.0	-9.6
2,4,5-Trichlorophenol	17.48	17.40	17.54	24.4	25.0	-2.4
2,3,4-Trichlorophenol	19.03	18.95	19.09	24.8	25.0	-0.8
2,3,5,6-Tetrachlorophenol	18.82	18.74	18.88	22.8	25.0	-8.8
2,3,4,5-Tetrachlorophenol	22.08	22.01	22.15	24.5	25.0	-2.0
2,4-Dichlorophenol	13.82	13.75	13.89	242	250	-3.2
2,4,6-Tribromophenol (surr	20.94	20.87	21.01	23.2	25.0	-7.2

AVERAGE %D = 5.4

FORM VII PCP

CHLOROPHENOL ANALYTICAL SEQUENCE

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No.: SU53 Project: LORA LAKE APTS RI

GC Column: STX CLP1 ID: 0.53 (mm) Instrument ID: ECD1

Init. Calib. Date(s): 05/04/11 05/04/11

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 18.60

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	#
01		PCPD	05/04/11	1356	18.60	
02		PCPA	05/04/11	1432	18.60	
03		PCPB	05/04/11	1508	18.60	
04		PCPC	05/04/11	1544	18.60	
05		PCPE	05/04/11	1621	18.60	
06		PCPF	05/04/11	1657	18.60	
07	ZZZZZ	ZZZZZ	05/04/11	1733	18.60	
08	ZZZZZ	ZZZZZ	05/16/11	1246	----	
09	MW4042811	SU53C	05/16/11	1306	18.60	
10	ZZZZZ	ZZZZZ	05/16/11	1343	----	
11	ZZZZZ	ZZZZZ	05/16/11	1403	----	
12	ZZZZZ	ZZZZZ	05/16/11	1423	18.60	
13		PCP CCAL	05/16/11	1459	18.60	
14	SU53MBW1	SU53MBW1	05/16/11	1536	18.60	
15	SU53LCSW1	SU53LCSW1	05/16/11	1612	18.60	
16	ZZZZZ	ZZZZZ	05/16/11	1648	18.60	
17	MW5042811	SU53A	05/16/11	1725	18.60	
18	MW15042811	SU53B	05/16/11	1801	18.60	
19	MW15042811 M	SU53BMS	05/16/11	1837	18.60	
20	MW15042811 M	SU53BMSD	05/16/11	1914	18.60	
21	ZZZZZ	ZZZZZ	05/16/11	1950	18.60	
22		PCP CCAL	05/16/11	2027	18.60	
23	MW4042811	SU53C	05/16/11	2103	18.60	
24	MW17042811	SU53D	05/16/11	2139	18.60	
25	MW14042811	SU53E	05/16/11	2216	18.60	
26	MW16042811	SU53F	05/16/11	2252	18.60	
27	ZZZZZ	ZZZZZ	05/16/11	2328	18.60	
28		PCP CCAL	05/17/11	0004	18.60	
29	ZZZZZ	ZZZZZ	05/17/11	0041	18.60	
30	ZZZZZ	ZZZZZ	05/17/11	0117	18.60	
31	ZZZZZ	ZZZZZ	05/17/11	0153	18.60	
32	ZZZZZ	ZZZZZ	05/17/11	0229	18.60	

QC LIMITS

S1 = 2,4,6-Tribromophenol (+/- 0.07 MINUTES)

* Values outside of QC limits.

FORM VIII PCP

CHLOROPHENOL ANALYTICAL SEQUENCE

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No.: SU53 Project: LORA LAKE APTS RI

GC Column: STX CLP1 ID: 0.53 (mm) Instrument ID: ECD1

Init. Calib. Date(s): 05/04/11 05/04/11

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 18.60

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #
01	ZZZZZ	ZZZZZ	05/17/11	0306	18.60
02	ZZZZZ	ZZZZZ	05/17/11	0342	18.60
03	ZZZZZ	ZZZZZ	05/17/11	0418	18.60
04	ZZZZZ	ZZZZZ	05/17/11	0454	18.61
05	ZZZZZ	ZZZZZ	05/17/11	0531	18.60
06	ZZZZZ	ZZZZZ	05/17/11	0607	18.60
07	ZZZZZ	ZZZZZ	05/17/11	0643	18.60
08		PCP CCAL	05/17/11	0719	18.60

QC LIMITS

S1 = 2,4,6-Tribromophenol (+/- 0.07 MINUTES)

* Values outside of QC limits.

FORM VIII PCP

CHLOROPHENOL ANALYTICAL SEQUENCE

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No.: SU53 Project: LORA LAKE APTS RI

GC Column: STX CLP2 ID: 0.53 (mm) Instrument ID: ECD1

Init. Calib. Date(s): 05/04/11 05/04/11

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 20.94

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #
01		PCPD	05/04/11	1356	20.94
02		PCPA	05/04/11	1432	20.94
03		PCPB	05/04/11	1508	20.94
04		PCPC	05/04/11	1544	20.94
05		PCPE	05/04/11	1621	20.94
06		PCPF	05/04/11	1657	20.94
07	ZZZZZ	ZZZZZ	05/04/11	1733	20.94
08	ZZZZZ	ZZZZZ	05/16/11	1246	----
09	MW4042811	SU53C	05/16/11	1306	20.94
10	ZZZZZ	ZZZZZ	05/16/11	1343	----
11	ZZZZZ	ZZZZZ	05/16/11	1403	----
12	ZZZZZ	ZZZZZ	05/16/11	1423	20.94
13		PCP CCAL	05/16/11	1459	20.94
14	SU53MBW1	SU53MBW1	05/16/11	1536	20.94
15	SU53LCSW1	SU53LCSW1	05/16/11	1612	20.94
16	ZZZZZ	ZZZZZ	05/16/11	1648	20.94
17	MW5042811	SU53A	05/16/11	1725	20.94
18	MW15042811	SU53B	05/16/11	1801	20.94
19	MW15042811 M	SU53BMS	05/16/11	1837	20.94
20	MW15042811 M	SU53BMSD	05/16/11	1914	20.94
21	ZZZZZ	ZZZZZ	05/16/11	1950	20.94
22		PCP CCAL	05/16/11	2027	20.94
23	MW4042811	SU53C	05/16/11	2103	20.94
24	MW17042811	SU53D	05/16/11	2139	20.94
25	MW14042811	SU53E	05/16/11	2216	20.94
26	MW16042811	SU53F	05/16/11	2252	20.94
27	ZZZZZ	ZZZZZ	05/16/11	2328	20.94
28		PCP CCAL	05/17/11	0004	20.94
29	ZZZZZ	ZZZZZ	05/17/11	0041	20.94
30	ZZZZZ	ZZZZZ	05/17/11	0117	20.94
31	ZZZZZ	ZZZZZ	05/17/11	0153	20.94
32	ZZZZZ	ZZZZZ	05/17/11	0229	20.94

QC LIMITS

S1 = 2,4,6-Tribromophenol (+/- 0.07 MINUTES)

* Values outside of QC limits.

FORM VIII PCP

CHLOROPHENOL ANALYTICAL SEQUENCE

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No.: SU53 Project: LORA LAKE APTS RI

GC Column: STX CLP2 ID: 0.53 (mm) Instrument ID: ECD1

Init. Calib. Date(s): 05/04/11 05/04/11

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 20.94

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #
01	ZZZZZ	ZZZZZ	05/17/11	0306	20.94
02	ZZZZZ	ZZZZZ	05/17/11	0342	20.94
03	ZZZZZ	ZZZZZ	05/17/11	0418	20.94
04	ZZZZZ	ZZZZZ	05/17/11	0454	20.95
05	ZZZZZ	ZZZZZ	05/17/11	0531	20.94
06	ZZZZZ	ZZZZZ	05/17/11	0607	20.94
07	ZZZZZ	ZZZZZ	05/17/11	0643	20.94
08		PCP CCAL	05/17/11	0719	20.94

QC LIMITS

S1 = 2,4,6-Tribromophenol (+/- 0.07 MINUTES)

* Values outside of QC limits.

FORM VIII PCP

CHLOROPHENOL ANALYTICAL SEQUENCE

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No.: SU73 Project: LORA LAKE PARCEL

GC Column: STX CLP1 ID: 0.53 (mm) Instrument ID: ECD1

Init. Calib. Date(s): 05/04/11 05/04/11

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 18.60

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #
01		PCPD	05/04/11	1356	18.60
02		PCPA	05/04/11	1432	18.60
03		PCPB	05/04/11	1508	18.60
04		PCPC	05/04/11	1544	18.60
05		PCPE	05/04/11	1621	18.60
06		PCPF	05/04/11	1657	18.60
07	ZZZZZ	ZZZZZ	05/04/11	1733	18.60
08	ZZZZZ	ZZZZZ	05/16/11	1246	----
09	ZZZZZ	ZZZZZ	05/16/11	1306	18.60
10	ZZZZZ	ZZZZZ	05/16/11	1343	----
11	ZZZZZ	ZZZZZ	05/16/11	1403	----
12	ZZZZZ	ZZZZZ	05/16/11	1423	18.60
13		PCP CCAL	05/16/11	1459	18.60
14	ZZZZZ	ZZZZZ	05/16/11	1536	18.60
15	ZZZZZ	ZZZZZ	05/16/11	1612	18.60
16	ZZZZZ	ZZZZZ	05/16/11	1648	18.60
17	ZZZZZ	ZZZZZ	05/16/11	1725	18.60
18	ZZZZZ	ZZZZZ	05/16/11	1801	18.60
19	ZZZZZ	ZZZZZ	05/16/11	1837	18.60
20	ZZZZZ	ZZZZZ	05/16/11	1914	18.60
21	ZZZZZ	ZZZZZ	05/16/11	1950	18.60
22		PCP CCAL	05/16/11	2027	18.60
23	ZZZZZ	ZZZZZ	05/16/11	2103	18.60
24	ZZZZZ	ZZZZZ	05/16/11	2139	18.60
25	ZZZZZ	ZZZZZ	05/16/11	2216	18.60
26	ZZZZZ	ZZZZZ	05/16/11	2252	18.60
27	ZZZZZ	ZZZZZ	05/16/11	2328	18.60
28		PCP CCAL	05/17/11	0004	18.60
29	SU73MBW1	SU73MBW1	05/17/11	0041	18.60
30	SU73LCSW1	SU73LCSW1	05/17/11	0117	18.60
31	ZZZZZ	ZZZZZ	05/17/11	0153	18.60
32	MW-01-042911	SU73A	05/17/11	0229	18.60

QC LIMITS

S1 = 2,4,6-Tribromophenol (+/- 0.07 MINUTES)

* Values outside of QC limits.

FORM VIII PCP

CHLOROPHENOL ANALYTICAL SEQUENCE

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No.: SU73 Project: LORA LAKE PARCEL

GC Column: STX CLP1 ID: 0.53 (mm) Instrument ID: ECD1

Init. Calib. Date(s): 05/04/11 05/04/11

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 18.60

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #
01	MW-01-042911	SU73B	05/17/11	0306	18.60
02	MW-01-042911	SU73BMS	05/17/11	0342	18.60
03	MW-01-042911	SU73BMSD	05/17/11	0418	18.60
04	B312-042911	SU74A	05/17/11	0454	18.61
05	B310-042911	SU74B	05/17/11	0531	18.60
06	B311-042911	SU74C	05/17/11	0607	18.60
07	ZZZZZ	ZZZZZ	05/17/11	0643	18.60
08		PCP CCAL	05/17/11	0719	18.60

QC LIMITS

S1 = 2,4,6-Tribromophenol (+/- 0.07 MINUTES)

* Values outside of QC limits.

CHLOROPHENOL ANALYTICAL SEQUENCE

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No.: SU73 Project: LORA LAKE PARCEL

GC Column: STX CLP2 ID: 0.53 (mm) Instrument ID: ECD1

Init. Calib. Date(s): 05/04/11 05/04/11

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 20.94

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #
01		PCPD	05/04/11	1356	20.94
02		PCPA	05/04/11	1432	20.94
03		PCPB	05/04/11	1508	20.94
04		PCPC	05/04/11	1544	20.94
05		PCPE	05/04/11	1621	20.94
06		PCPF	05/04/11	1657	20.94
07	ZZZZZ	ZZZZZ	05/04/11	1733	20.94
08	ZZZZZ	ZZZZZ	05/16/11	1246	----
09	ZZZZZ	ZZZZZ	05/16/11	1306	20.94
10	ZZZZZ	ZZZZZ	05/16/11	1343	----
11	ZZZZZ	ZZZZZ	05/16/11	1403	----
12	ZZZZZ	ZZZZZ	05/16/11	1423	20.94
13		PCP CCAL	05/16/11	1459	20.94
14	ZZZZZ	ZZZZZ	05/16/11	1536	20.94
15	ZZZZZ	ZZZZZ	05/16/11	1612	20.94
16	ZZZZZ	ZZZZZ	05/16/11	1648	20.94
17	ZZZZZ	ZZZZZ	05/16/11	1725	20.94
18	ZZZZZ	ZZZZZ	05/16/11	1801	20.94
19	ZZZZZ	ZZZZZ	05/16/11	1837	20.94
20	ZZZZZ	ZZZZZ	05/16/11	1914	20.94
21	ZZZZZ	ZZZZZ	05/16/11	1950	20.94
22		PCP CCAL	05/16/11	2027	20.94
23	ZZZZZ	ZZZZZ	05/16/11	2103	20.94
24	ZZZZZ	ZZZZZ	05/16/11	2139	20.94
25	ZZZZZ	ZZZZZ	05/16/11	2216	20.94
26	ZZZZZ	ZZZZZ	05/16/11	2252	20.94
27	ZZZZZ	ZZZZZ	05/16/11	2328	20.94
28		PCP CCAL	05/17/11	0004	20.94
29	SU73MBW1	SU73MBW1	05/17/11	0041	20.94
30	SU73LCSW1	SU73LCSW1	05/17/11	0117	20.94
31	ZZZZZ	ZZZZZ	05/17/11	0153	20.94
32	MW-01-042911	SU73A	05/17/11	0229	20.94

QC LIMITS

S1 = 2,4,6-Tribromophenol (+/- 0.07 MINUTES)

* Values outside of QC limits.

FORM VIII PCP

CHLOROPHENOL ANALYTICAL SEQUENCE

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

ARI Job No.: SU73 Project: LORA LAKE PARCEL

GC Column: STX CLP2 ID: 0.53 (mm) Instrument ID: ECD1

Init. Calib. Date(s): 05/04/11 05/04/11

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 20.94

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	#
01	MW-01-042911	SU73B	05/17/11	0306	20.94	
02	MW-01-042911	SU73BMS	05/17/11	0342	20.94	
03	MW-01-042911	SU73BMSD	05/17/11	0418	20.94	
04	B312-042911	SU74A	05/17/11	0454	20.95	
05	B310-042911	SU74B	05/17/11	0531	20.94	
06	B311-042911	SU74C	05/17/11	0607	20.94	
07	ZZZZZ	ZZZZZ	05/17/11	0643	20.94	
08		PCP CCAL	05/17/11	0719	20.94	

QC LIMITS

S1 = 2,4,6-Tribromophenol (+/- 0.07 MINUTES)

* Values outside of QC limits.

TPHD Analysis
Report and Summary QC Forms

ARI Job ID: SU53, SU73, SU74

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TOTAL DIESEL RANGE HYDROCARBONS
NWTPHD by GC/FID-Silica and Acid Cleaned
Page 1 of 1
Matrix: Groundwater

QC Report No: SU53-Floyd Snider
Project: Lora Lake Apts RI
POS-LLA

Data Release Authorized:
Reported: 05/09/11

ARI ID	Sample ID	Extraction Date	Analysis Date	EFV DL	Range	RL	Result
MB-050411	Method Blank	05/04/11	05/05/11	1.00	Diesel	0.10	< 0.10 U
11-9621	HC ID: ---		FID9	1.0	Motor Oil	0.20	< 0.20 U
					o-Terphenyl		91.1%
SU53A	MW5042811	05/04/11	05/05/11	1.00	Diesel	0.10	< 0.10 U
11-9621	HC ID: ---		FID9	1.0	Motor Oil	0.20	< 0.20 U
					o-Terphenyl		88.0%
SU53B	MW15042811	05/04/11	05/05/11	1.00	Diesel	0.10	< 0.10 U
11-9622	HC ID: ---		FID9	1.0	Motor Oil	0.20	< 0.20 U
					o-Terphenyl		94.0%
SU53C	MW4042811	05/04/11	05/05/11	1.00	Diesel	0.10	< 0.10 U
11-9623	HC ID: ---		FID9	1.0	Motor Oil	0.20	< 0.20 U
					o-Terphenyl		90.8%
SU53D	MW17042811	05/04/11	05/05/11	1.00	Diesel	0.10	< 0.10 U
11-9624	HC ID: ---		FID9	1.0	Motor Oil	0.20	< 0.20 U
					o-Terphenyl		81.9%
SU53E	MW14042811	05/04/11	05/05/11	1.00	Diesel	0.10	< 0.10 U
11-9625	HC ID: ---		FID9	1.0	Motor Oil	0.20	< 0.20 U
					o-Terphenyl		90.2%
SU53F	MW16042811	05/04/11	05/05/11	1.00	Diesel	0.10	< 0.10 U
11-9626	HC ID: ---		FID9	1.0	Motor Oil	0.20	< 0.20 U
					o-Terphenyl		95.0%

Reported in mg/L (ppm)

EFV-Effective Final Volume in mL.
DL-Dilution of extract prior to analysis.
RL-Reporting limit.

Diesel quantitation on total peaks in the range from C12 to C24.
Motor Oil quantitation on total peaks in the range from C24 to C38.
HC ID: DRO/RRO indicate results of organics or additional hydrocarbons in ranges are not identifiable.

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TOTAL DIESEL RANGE HYDROCARBONS
NWTPHD by GC/FID-Silica and Acid Cleaned
Page 1 of 1
Matrix: Water

QC Report No: SU73-Floyd Snider
Project: Lora Lake Apts RI
POS-LLA.4010

Data Release Authorized:
Reported: 05/12/11

ARI ID	Sample ID	Extraction Date	Analysis Date	EFV DL	Range	RL	Result
MB-050511	Method Blank	05/05/11	05/10/11	1.00	Diesel	0.10	< 0.10 U
11-9762	HC ID: ---		FID9	1.0	Motor Oil	0.20	< 0.20 U
					o-Terphenyl		79.2%
SU73A	MW-01-042911	05/05/11	05/10/11	1.00	Diesel	0.10	< 0.10 U
11-9762	HC ID: ---		FID9	1.0	Motor Oil	0.20	< 0.20 U
					o-Terphenyl		80.5%
SU73B	MW-01-042911-D	05/05/11	05/10/11	1.00	Diesel	0.10	< 0.10 U
11-9763	HC ID: ---		FID9	1.0	Motor Oil	0.20	< 0.20 U
					o-Terphenyl		75.9%

Reported in mg/L (ppm)

EFV-Effective Final Volume in mL.
DL-Dilution of extract prior to analysis.
RL-Reporting limit.

Diesel quantitation on total peaks in the range from C12 to C24.
Motor Oil quantitation on total peaks in the range from C24 to C38.
HC ID: DRO/RRO indicate results of organics or additional hydrocarbons in ranges are not identifiable.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TOTAL DIESEL RANGE HYDROCARBONS
NWTPHD by GC/FID-Silica and Acid Cleaned
Page 1 of 1
Matrix: Water

QC Report No: SU74-Floyd Snider
Project: Lora Lake Parcel
POS-LL.4010

Data Release Authorized:
Reported: 05/12/11

ARI ID	Sample ID	Extraction Date	Analysis Date	EFV DL	Range	RL	Result
MB-050511	Method Blank	05/05/11	05/10/11	1.00	Diesel	0.10	< 0.10 U
11-9772	HC ID: ---		FID9	1.0	Motor Oil	0.20	< 0.20 U
					o-Terphenyl		79.2%
SU74A	B312-042911	05/05/11	05/10/11	1.00	Diesel	0.10	< 0.10 U
11-9772	HC ID: ---		FID9	1.0	Motor Oil	0.20	< 0.20 U
					o-Terphenyl		50.1%
SU74B	B310-042911	05/05/11	05/10/11	1.00	Diesel	0.10	< 0.10 U
11-9773	HC ID: ---		FID9	1.0	Motor Oil	0.20	< 0.20 U
					o-Terphenyl		75.1%
SU74C	B311-042911	05/05/11	05/10/11	1.00	Diesel	0.10	< 0.10 U
11-9774	HC ID: ---		FID9	1.0	Motor Oil	0.20	< 0.20 U
					o-Terphenyl		79.0%

Reported in mg/L (ppm)

EFV-Effective Final Volume in mL.
DL-Dilution of extract prior to analysis.
RL-Reporting limit.

Diesel quantitation on total peaks in the range from C12 to C24.
Motor Oil quantitation on total peaks in the range from C24 to C38.
HC ID: DRO/RRO indicate results of organics or additional hydrocarbons in ranges are not identifiable.

ANALYTICAL RESOURCES INCORPORATED

CLEANED TPHD SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: SU73-Floyd Snider
Project: Lora Lake Apts RI
POS-LLA.4010

Client ID	OTER	TOT OUT
MB-050511	79.2%	0
LCS-050511	76.0%	0
MW-01-042911	80.5%	0
MW-01-042911 MS	82.7%	0
MW-01-042911 MSD	74.2%	0
MW-01-042911-D	75.9%	0

	LCS/MB LIMITS	QC LIMITS
(OTER) = o-Terphenyl	(53-123)	(49-118)

Prep Method: SW3510C
Log Number Range: 11-9762 to 11-9763

ANALYTICAL RESOURCES INCORPORATED

CLEANED TPHD SURROGATE RECOVERY SUMMARY

Matrix: Groundwater

QC Report No: SU53-Floyd Snider
Project: Lora Lake Apts RI
POS-LLA

Client ID	OTER	TOT OUT
MB-050411	91.1%	0
LCS-050411	92.9%	0
MW5042811	88.0%	0
MW5042811 MS	84.9%	0
MW5042811 MSD	88.0%	0
MW15042811	94.0%	0
MW4042811	90.8%	0
MW17042811	81.9%	0
MW14042811	90.2%	0
MW16042811	95.0%	0

	LCS/MB LIMITS	QC LIMITS
(OTER) = o-Terphenyl	(53-123)	(49-118)

Prep Method: SW3510C
Log Number Range: 11-9621 to 11-9626

ANALYTICAL RESOURCES INCORPORATED

CLEANED TPHD SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: SU74-Floyd Snider
Project: Lora Lake Parcel
POS-LL.4010

Client ID	OTER	TOT OUT
MB-050511	79.2%	0
LCS-050511	76.0%	0
B312-042911	50.1%	0
B310-042911	75.1%	0
B311-042911	79.0%	0

	LCS/MB LIMITS	QC LIMITS
(OTER) = o-Terphenyl	(53-123)	(49-118)

Prep Method: SW3510C
Log Number Range: 11-9772 to 11-9774

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
NWTPHD by GC/FID-Silica and Acid Cleaned **Sample ID: MW5042811**
Page 1 of 1 **MS/MSD**

Lab Sample ID: SU53A
LIMS ID: 11-9621
Matrix: Groundwater
Data Release Authorized:
Reported: 05/09/11

QC Report No: SU53-Floyd Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: 04/28/11
Date Received: 04/28/11

Date Extracted MS/MSD: 05/04/11

Sample Amount MS: 500 mL
MSD: 500 mL
Final Extract Volume MS: 1.0 mL
MSD: 1.0 mL
Dilution Factor MS: 1.00
MSD: 1.00

Date Analyzed MS: 05/05/11 18:42
MSD: 05/05/11 19:03
Instrument/Analyst MS: FID/MS
MSD: FID/MS

Range	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Diesel	< 0.10	2.71	3.00	90.3%	2.62	3.00	87.3%	3.4%

TPHD Surrogate Recovery

	MS	MSD
o-Terphenyl	84.9%	88.0%

Results reported in mg/L
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
NWTPHD by GC/FID-Silica and Acid Cleaned **Sample ID: MW-01-042911**
Page 1 of 1 **MS/MSD**

Lab Sample ID: SU73A
LIMS ID: 11-9762
Matrix: Water
Data Release Authorized:
Reported: 05/12/11

QC Report No: SU73-Floyd Snider
Project: Lora Lake Apts RI
POS-LLA.4010
Date Sampled: 04/29/11
Date Received: 04/29/11

Date Extracted MS/MSD: 05/05/11
Date Analyzed MS: 05/10/11 19:58
MSD: 05/10/11 20:20
Instrument/Analyst MS: FID/MS
MSD: FID/MS

Sample Amount MS: 500 mL
MSD: 500 mL
Final Extract Volume MS: 1.0 mL
MSD: 1.0 mL
Dilution Factor MS: 1.00
MSD: 1.00

Range	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Diesel	< 0.10	2.39	3.00	79.7%	2.31	3.00	77.0%	3.4%

TPHD Surrogate Recovery

	MS	MSD
o-Terphenyl	82.7%	74.2%

Results reported in mg/L
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
NWTPHD by GC/FID-Silica and Acid Cleaned **Sample ID: LCS-050411**
Page 1 of 1 **LAB CONTROL**

Lab Sample ID: LCS-050411
LIMS ID: 11-9621
Matrix: Groundwater
Data Release Authorized:
Reported: 05/09/11

QC Report No: SU53-Floyd Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: 04/28/11
Date Received: 04/28/11

Date Extracted: 05/04/11
Date Analyzed: 05/05/11 17:36
Instrument/Analyst: FID/MS

Sample Amount: 500 mL
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00

Range	Lab Control	Spike Added	Recovery
Diesel	2.72	3.00	90.7%

TPHD Surrogate Recovery

o-Terphenyl	92.9%

Results reported in mg/L

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
NWTPHD by GC/FID-Silica and Acid Cleaned **Sample ID: LCS-050511**
Page 1 of 1 **LAB CONTROL**

Lab Sample ID: LCS-050511
LIMS ID: 11-9762
Matrix: Water
Data Release Authorized:
Reported: 05/12/11

QC Report No: SU73-Floyd Snider
Project: Lora Lake Apts RI
POS-LLA.4010
Date Sampled: 04/29/11
Date Received: 04/29/11

Date Extracted: 05/05/11
Date Analyzed: 05/10/11 18:52
Instrument/Analyst: FID/MS

Sample Amount: 500 mL
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00

Range	Lab Control	Spike Added	Recovery
Diesel	2.23	3.00	74.3%

TPHD Surrogate Recovery

o-Terphenyl	76.0%

Results reported in mg/L

ANALYTICAL RESOURCES INCORPORATED

TOTAL DIESEL RANGE HYDROCARBONS-EXTRACTION REPORT

ARI Job: SU53
Matrix: Groundwater Project: Lora Lake Apts RI
Date Received: 04/28/11 POS-LLA

ARI ID	Client ID	Samp Amt	Final Vol	Prep Date
11-9621-050411MB1	Method Blank	500 mL	1.00 mL	05/04/11
11-9621-050411LCS1	Lab Control	500 mL	1.00 mL	05/04/11
11-9621-SU53A	MW5042811	500 mL	1.00 mL	05/04/11
11-9621-SU53AMS	MW5042811	500 mL	1.00 mL	05/04/11
11-9621-SU53AMSD	MW5042811	500 mL	1.00 mL	05/04/11
11-9622-SU53B	MW15042811	500 mL	1.00 mL	05/04/11
11-9623-SU53C	MW4042811	500 mL	1.00 mL	05/04/11
11-9624-SU53D	MW17042811	500 mL	1.00 mL	05/04/11
11-9625-SU53E	MW14042811	500 mL	1.00 mL	05/04/11
11-9626-SU53F	MW16042811	500 mL	1.00 mL	05/04/11

Diesel Extraction Report

ANALYTICAL RESOURCES INCORPORATED

TOTAL DIESEL RANGE HYDROCARBONS-EXTRACTION REPORT

ARI Job: SU73
Matrix: Water
Project: Lora Lake Apts RI
Date Received: 04/29/11
POS-LLA.4010

ARI ID	Client ID	Samp Amt	Final Vol	Prep Date
11-9762-050511MB1	Method Blank	500 mL	1.00 mL	05/05/11
11-9762-050511LCS1	Lab Control	500 mL	1.00 mL	05/05/11
11-9762-SU73A	MW-01-042911	500 mL	1.00 mL	05/05/11
11-9762-SU73AMS	MW-01-042911	500 mL	1.00 mL	05/05/11
11-9762-SU73AMSD	MW-01-042911	500 mL	1.00 mL	05/05/11
11-9763-SU73B	MW-01-042911-D	500 mL	1.00 mL	05/05/11

ANALYTICAL RESOURCES INCORPORATED

TOTAL DIESEL RANGE HYDROCARBONS-EXTRACTION REPORT

Matrix: Water
Date Received: 04/29/11

ARI Job: SU74
Project: Lora Lake Parcel
POS-LL.4010

ARI ID	Client ID	Samp Amt	Final Vol	Prep Date
11-9772-050511MB1	Method Blank	500 mL	1.00 mL	05/05/11
11-9772-050511LCS1	Lab Control	500 mL	1.00 mL	05/05/11
11-9772-SU74A	B312-042911	500 mL	1.00 mL	05/05/11
11-9773-SU74B	B310-042911	500 mL	1.00 mL	05/05/11
11-9774-SU74C	B311-042911	500 mL	1.00 mL	05/05/11

TPH METHOD BLANK SUMMARY

BLANK NO.

SU53MBW1

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

SDG No.: SU53 Project No.: LORA LAKES APTS. RI

Date Extracted: 05/04/11 Matrix: LIQUID

Date Analyzed : 05/05/11 Instrument ID : FID9

Time Analyzed : 1715

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED
01	SU53LCSW1	SU53LCSW1	05/05/11
02	MW5042811	SU53A	05/05/11
03	MW5042811 MS	SU53AMS	05/05/11
04	MW5042811 MS	SU53AMSD	05/05/11
05	MW15042811	SU53B	05/05/11
06	MW4042811	SU53C	05/05/11
07	MW17042811	SU53D	05/05/11
08	MW14042811	SU53E	05/05/11
09	MW16042811	SU53F	05/05/11
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			

FORM IV TPH

TPH METHOD BLANK SUMMARY

BLANK NO.: SU73MBW1

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

SDG No.: SU73,SU74 Project No.: LORA LAKES

Date Extracted: 05/05/11 Matrix: LIQUID

Date Analyzed : 05/10/11 Instrument ID : FID9

Time Analyzed : 1830

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED
01	SU73LCSW1	SU73LCSW1	05/10/11
02	MW-01-042911	SU73A	05/10/11
03	MW-01-042911	SU73AMS	05/10/11
04	MW-01-042911	SU73AMSD	05/10/11
05	MW-01-042911	SU73B	05/10/11
06	B312-042911	SU74A	05/10/11
07	B310-042911	SU74B	05/10/11
08	B311-042911	SU74C	05/10/11
09			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			

FORM IV TPH

6a
NW DIESEL INITIAL CALIBRATION

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

Instrument: FID9.I Project: LORA LAKES APTS. RI

Calibration Date: 20-JAN-2011 SDG No.: SU53

Diesel Range	RF1 50	RF2 100	RF3 250	RF4 500	RF5 1000	RF6 2500	Ave RF	%RSD
WA Diesel	24039	22507	22451	22137	23038	21746	22653	3.5
AK Diesel	27229	25485	25276	24857	25838	24470	25526	3.8
OR Diesel	27318	25588	25386	24978	25964	24607	25641	3.7
o-Terph	21882	20885	21247	21247	21987	21255	21417	2.0

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

Quant Ranges : WA Diesel C12-C24 (2.623-5.324)
AK Diesel C10-C25 (1.988-5.548)
OR Diesel C10-C28 (1.988-6.104)

Calibration Files	Analysis Time
0120A007.D	20-JAN-2011 16:13
0120A008.D	20-JAN-2011 16:34
0120A009.D	20-JAN-2011 16:56
0120A010.D	20-JAN-2011 17:17
0120A011.D	20-JAN-2011 17:39
0120A014.D	20-JAN-2011 18:43

6a

NW MOTOR OIL RANGE INITIAL CALIBRATION

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

Instrument: FID9.I Project: LORA LAKES APTS. RI

Calibration Date: 20-JAN-2011 SDG No.: SU53

Product Range	RF1 100	RF2 250	RF3 500	RF4 1000	RF5 2500	RF6 5000	Ave RF	%RSD
WA M.Oil C24-C38	11365	12494	12640	13320	13928	15835	13264	11.5
Triac Surr	14163	16198	16626	17913	19039	21819	17626	14.9

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

Calibration Files	Analysis Time
0120A015.D	20-JAN-2011 19:04
0120A016.D	20-JAN-2011 19:26
0120A017.D	20-JAN-2011 19:47
0120A018.D	20-JAN-2011 20:08
0120A019.D	20-JAN-2011 20:30
0120A020.D	20-JAN-2011 20:51

7a

DIESEL CONTINUING CALIBRATION VERIFICATION

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

ICal Date: 20-JAN-2011 Project: LORA LAKES APT. RI

CCal Date: 05-MAY-2011 SDG No.: SU53

Analysis Time: 16:31 Lab ID: DIESEL#2

Instrument: FID9.I Lab File Name: 0505A013.D

Diesel Range	Area*	CalcAmnt	NomAmnt	% D
WADies(C12-C24)	5690895	251.2	250	0.5
AK102 (C10-C25)	6337542	248.3	250	-0.7
Terphenyl	971488	45.4	45	0.8

* 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: 20-JAN-2011 Project: LORA LAKES APT. RI

CCal Date: 05-MAY-2011 SDG No.: SU53

Analysis Time: 16:53 Lab ID: MOIL#2

Instrument: FID9.I Lab File Name: 0505A014.D

M.oil Range	Area*	CalcAmnt	NomAmnt	% D	
WAMoil(C24-C38)	6546657	493.6	500	-1.3	
AK103 (C25-C36)	5938010	698.7	500	39.7	<-
n-Triacontane	976210	55.4	45	23.1	<-

* 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: 20-JAN-2011 Project: LORA LAKES APT. RI

CCal Date: 05-MAY-2011 SDG No.: SU53

Analysis Time: 21:14 Lab ID: DIESEL#3

Instrument: FID9.I Lab File Name: 0505A026.D

Diesel Range	Area*	CalcAmnt	NomAmnt	% D
WADies(C12-C24)	5858139	258.6	250	3.4
AK102 (C10-C25)	6529881	255.8	250	2.3
Terphenyl	995507	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: 20-JAN-2011 Project: LORA LAKES APT. RI

CCal Date: 05-MAY-2011 SDG No.: SU53

Analysis Time: 21:35 Lab ID: MOIL#3

Instrument: FID9.I Lab File Name: 0505A027.D

M.oil Range	Area*	CalcAmnt	NomAmnt	% D	
WAMoil(C24-C38)	6640060	500.6	500	0.1	
AK103 (C25-C36)	6035987	710.3	500	42.1	<-
n-Triacontane	1018277	57.8	45	28.4	<-

* Surrogate areas are subtracted from range areas
<- Indicates a %D outside QC limits

Quant Ranges : WA M.Oil C24-C38
AK M.Oil C25-C36

7a

DIESEL CONTINUING CALIBRATION VERIFICATION

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

ICal Date: 20-JAN-2011 Project: LORA LAKES

CCal Date: 10-MAY-2011 SDG No.: SU73,SU74

Analysis Time: 15:36 Lab ID: DIESEL#3

Instrument: FID9.I Lab File Name: 0510A016.D

Diesel Range	Area*	CalcAmnt	NomAmnt	% D
WADies(C12-C24)	5657168	249.7	250	-0.1
AK102 (C10-C25)	6255450	245.1	250	-2.0
Terphenyl	971292	45.4	45	0.8

* 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: 20-JAN-2011 Project: LORA LAKES

CCal Date: 10-MAY-2011 SDG No.: SU73,SU74

Analysis Time: 15:58 Lab ID: MOIL#3

Instrument: FID9.I Lab File Name: 0510A017.D

M.oil Range	Area*	CalcAmnt	NomAmnt	% D	
WAMoil(C24-C38)	6184273	466.3	500	-6.7	
AK103 (C25-C36)	5660369	666.1	500	33.2	<-
n-Triacontane	979156	55.6	45	23.4	<-

* Surrogate areas are subtracted from range areas
<- Indicates a %D outside QC limits

Quant Ranges : WA M.Oil C24-C38
AK M.Oil C25-C36

7a

DIESEL CONTINUING CALIBRATION VERIFICATION

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

ICal Date: 20-JAN-2011 Project: LORA LAKES

CCal Date: 10-MAY-2011 SDG No.: SU73,SU74

Analysis Time: 22:09 Lab ID: DIESEL#3

Instrument: FID9.I Lab File Name: 0510A031.D

Diesel Range	Area*	CalcAmnt	NomAmnt	% D
WADies(C12-C24)	5681320	250.8	250	0.3
AK102 (C10-C25)	6289982	246.4	250	-1.4
Terphenyl	972029	45.4	45	0.9

* Surrogate areas are subtracted from range areas
<- Indicates a %D outside QC limits

Quant Ranges : WA Diesel C12-C24
AK Diesel C10-C25

7a

MOTOR OIL CONTINUING CALIBRATION VERIFICATION

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

ICal Date: 20-JAN-2011 Project: LORA LAKES

CCal Date: 10-MAY-2011 SDG No.: SU73,SU74

Analysis Time: 22:30 Lab ID: MOIL#3

Instrument: FID9.I Lab File Name: 0510A032.D

M.oil Range	Area*	CalcAmnt	NomAmnt	% D	
WAMoil(C24-C38)	6494116	489.6	500	-2.1	
AK103 (C25-C36)	5907935	695.2	500	39.0	<-
n-Triacontane	992098	56.3	45	25.1	<-

* 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.: SU53 Project: LORA LAKES APTS. RI

Instrument ID: FID9 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: 4.15 TRIAC: 6.41

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TERPH RT #	TRIAC RT #
01	RT	RT	05/05/11	1047	4.15	6.41
02	IB	IB	05/05/11	1109	4.15	6.41
03	LORA LAKES A	DIESEL#2	05/05/11	1631	4.16	6.40
04	LORA LAKES A	MOIL#2	05/05/11	1653	4.14	6.41
05	SU53MBW1	SU53MBW1	05/05/11	1715	4.15	6.41
06	SU53LCSW1	SU53LCSW1	05/05/11	1736	4.16	6.41
07	ZZZZZ	ZZZZZ	05/05/11	1758	4.16	6.41
08	MW5042811	SU53A	05/05/11	1820	4.15	6.41
09	MW5042811 MS	SU53AMS	05/05/11	1842	4.16	6.41
10	MW5042811 MS	SU53AMSD	05/05/11	1903	4.16	6.41
11	MW15042811	SU53B	05/05/11	1925	4.15	6.41
12	MW4042811	SU53C	05/05/11	1947	4.15	6.41
13	MW17042811	SU53D	05/05/11	2009	4.16	6.41
14	MW14042811	SU53E	05/05/11	2030	4.15	6.41
15	MW16042811	SU53F	05/05/11	2052	4.16	6.41
16	LORA LAKES A	DIESEL#3	05/05/11	2114	4.16	6.41
17	LORA LAKES A	MOIL#3	05/05/11	2135	4.14	6.42

	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.: SU53 Project: LORA LAKES APTS. RI

Instrument ID: FID9 GC Column: RTX-1

Run Date: 01/20/11

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

SURROGATE RT FROM DAILY STANDARD
TERPH: 4.17 TRIAC: 6.42

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TERPH RT #	TRIAC RT #
01	RT	RT	01/20/11	1530	4.17	6.42
02		IB	01/20/11	1552	4.17	6.42
03	DIESEL 50	DIESEL 50	01/20/11	1613	4.16	6.41
04	DIESEL 100	DIESEL 100	01/20/11	1634	4.16	6.41
05	DIESEL 250	DIESEL 250	01/20/11	1656	4.17	6.41
06	DIESEL 500	DIESEL 500	01/20/11	1717	4.18	6.42
07	DIESEL 1000	DIESEL 1000	01/20/11	1739	4.19	6.42
08		DIESEL ICV	01/20/11	1822	4.17	6.41
09	DIESEL 2500	DIESEL 2500	01/20/11	1843	4.21	6.41

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.: SU53 Project: LORA LAKES APTS. RI

Instrument ID: FID9 GC Column: RTX-1

Run Date: 01/20/11

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

SURROGATE RT FROM DAILY STANDARD
TERPH: 4.17 TRIAC: 6.42

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TERPH RT #	TRIAC RT #
01	RT	RT	01/20/11	1530	4.17	6.42
02		IB	01/20/11	1552	4.17	6.42
03	MOIL 100	MOIL 100	01/20/11	1904	4.17	6.41
04	MOIL 250	MOIL 250	01/20/11	1926	4.17	6.42
05	MOIL 500	MOIL 500	01/20/11	1947	4.17	6.42
06	MOIL 1000	MOIL 1000	01/20/11	2008	4.17	6.44
07	MOIL 2500	MOIL 2500	01/20/11	2030	4.17	6.46
08	MOIL 5000	MOIL 5000	01/20/11	2051	4.17	6.50*
09		MOIL ICV	01/20/11	2112	4.17	6.42

QC LIMITS

TERPH = o-terph (+/- 0.05 MINUTES)
TRIAC = Triacon Surr (+/- 0.05 MINUTES)

* Values outside of QC limits.

*Peak shifting occurs when column plates are close to overloaded. Sample surrogates are spiked at 45ppm. n-Triacontane quants %14.9 RSD and meets Ical criteria. No further corrective action needed.

FORM VIII TPH

TPH ANALYTICAL SEQUENCE

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD SNIDER

SDG No.: SU73,SU74 Project: LORA LAKES

Instrument ID: FID9 GC Column: RTX-1

Run Date: 05/10/11

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

SURROGATE RT FROM DAILY STANDARD
TERPH: 4.16 TRIAC: 6.42

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TERPH RT #	TRIAC RT #
01	RT	RT	05/10/11	1026	4.16	6.42
02	IB	IB	05/10/11	1048	4.16	6.41
03	LORA LAKES	DIESEL#3	05/10/11	1536	4.16	6.42
04	LORA LAKES	MOIL#3	05/10/11	1558	4.17	6.42
05	ZZZZZ	ZZZZZ	05/10/11	1620	4.16	6.42
06	ZZZZZ	ZZZZZ	05/10/11	1642	4.16	6.41
07	ZZZZZ	ZZZZZ	05/10/11	1809	4.16	6.43
08	SU73MBW1	SU73MBW1	05/10/11	1830	4.16	6.41
09	SU73LCSW1	SU73LCSW1	05/10/11	1852	4.16	6.41
10	ZZZZZ	ZZZZZ	05/10/11	1914	4.16	6.41
11	MW-01-042911	SU73A	05/10/11	1936	4.16	6.41
12	MW-01-042911	SU73AMS	05/10/11	1958	4.16	6.41
13	MW-01-042911	SU73AMSD	05/10/11	2020	4.16	6.41
14	MW-01-042911	SU73B	05/10/11	2041	4.16	6.41
15	B312-042911	SU74A	05/10/11	2103	4.15	6.41
16	B310-042911	SU74B	05/10/11	2125	4.16	6.41
17	B311-042911	SU74C	05/10/11	2147	4.16	6.41
18	LORA LAKES	DIESEL#3	05/10/11	2209	4.16	6.42
19	LORA LAKES	MOIL#3	05/10/11	2230	4.15	6.42

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.: SU73,SU74 Project: LORA LAKES

Instrument ID: FID9 GC Column: RTX-1

Run Date: 01/20/11

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

SURROGATE RT FROM DAILY STANDARD
TERPH: 4.17 TRIAC: 6.42

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TERPH RT #	TRIAC RT #
01	RT	RT	01/20/11	1530	4.17	6.42
02		IB	01/20/11	1552	4.17	6.42
03	DIESEL 50	DIESEL 50	01/20/11	1613	4.16	6.41
04	DIESEL 100	DIESEL 100	01/20/11	1634	4.16	6.41
05	DIESEL 250	DIESEL 250	01/20/11	1656	4.17	6.41
06	DIESEL 500	DIESEL 500	01/20/11	1717	4.18	6.42
07	DIESEL 1000	DIESEL 1000	01/20/11	1739	4.19	6.42
08		DIESEL ICV	01/20/11	1822	4.17	6.41
09	DIESEL 2500	DIESEL 2500	01/20/11	1843	4.21	6.41

	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.: SU73,SU74 Project: LORA LAKES

Instrument ID: FID9 GC Column: RTX-1

Run Date: 01/20/11

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

SURROGATE RT FROM DAILY STANDARD
TERPH: 4.17 TRIAC: 6.42

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TERPH RT #	TRIAC RT #
01	RT	RT	01/20/11	1530	4.17	6.42
02		IB	01/20/11	1552	4.17	6.42
03	MOIL 100	MOIL 100	01/20/11	1904	4.17	6.41
04	MOIL 250	MOIL 250	01/20/11	1926	4.17	6.42
05	MOIL 500	MOIL 500	01/20/11	1947	4.17	6.42
06	MOIL 1000	MOIL 1000	01/20/11	2008	4.17	6.44
07	MOIL 2500	MOIL 2500	01/20/11	2030	4.17	6.46
08	MOIL 5000	MOIL 5000	01/20/11	2051	4.17	6.50*
09		MOIL ICV	01/20/11	2112	4.17	6.42

QC LIMITS

TERPH = o-terph (+/- 0.05 MINUTES)
TRIAC = Triacon Surr (+/- 0.05 MINUTES)

* Values outside of QC limits.

*Peak shifting occurs when column plates are close to overloaded. Sample surrogates are spiked at 45ppm. n-Triacontane quants %14.9 RSD and meets Ical criteria. No further corrective action needed.

FORM VIII TPH

TPHG/BETX Analysis
Report and Summary QC Forms

ARI Job ID: SU53, SU73, SU74

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TPHG by Method NWTPHG
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
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
BETX by Method SW8021BMod **Sample ID: MW5042811**
TPHG by Method NWTPHG **SAMPLE**
Page 1 of 1

Lab Sample ID: SU53A
LIMS ID: 11-9621
Matrix: Groundwater
Data Release Authorized:
Reported: 05/09/11

QC Report No: SU53-Floyd Snider
Project: Lora Lake Apts RI
Event: POS-LLA
Date Sampled: 04/28/11
Date Received: 04/28/11

Date Analyzed: 05/06/11 11:55
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	96.4%

Gasoline Surrogate Recovery

Trifluorotoluene	97.0%
Bromobenzene	97.6%

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: MW15042811**
TPHG by Method NWTPHG **SAMPLE**
Page 1 of 1

Lab Sample ID: SU53B
LIMS ID: 11-9622
Matrix: Groundwater
Data Release Authorized:
Reported: 05/09/11

QC Report No: SU53-Floyd Snider
Project: Lora Lake Apts RI
Event: POS-LLA
Date Sampled: 04/28/11
Date Received: 04/28/11

Date Analyzed: 05/06/11 13:51
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	96.4%
Bromobenzene	97.8%

Gasoline Surrogate Recovery

Trifluorotoluene	98.2%
Bromobenzene	99.0%

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 **Sample ID: MW4042811**
TPHG by Method NWTPHG **SAMPLE**

Lab Sample ID: SU53C
LIMS ID: 11-9623
Matrix: Groundwater
Data Release Authorized:
Reported: 05/09/11

QC Report No: SU53-Floyd Snider
Project: Lora Lake Apts RI
Event: POS-LLA
Date Sampled: 04/28/11
Date Received: 04/28/11

Date Analyzed: 05/06/11 14:20
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	96.0%
Bromobenzene	97.4%

Gasoline Surrogate Recovery

Trifluorotoluene	98.2%
Bromobenzene	98.4%

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: MW17042811**
TPHG by Method NWTPHG **SAMPLE**

Lab Sample ID: SU53D
LIMS ID: 11-9624
Matrix: Groundwater
Data Release Authorized:
Reported: 05/09/11

QC Report No: SU53-Floyd Snider
Project: Lora Lake Apts RI
Event: POS-LLA
Date Sampled: 04/28/11
Date Received: 04/28/11

Date Analyzed: 05/06/11 14:49
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	95.3%
Bromobenzene	95.1%

Gasoline Surrogate Recovery

Trifluorotoluene	97.4%
Bromobenzene	96.2%

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 **Sample ID: MW14042811**
TPHG by Method NWTPHG **SAMPLE**
Page 1 of 1

Lab Sample ID: SU53E
LIMS ID: 11-9625
Matrix: Groundwater
Data Release Authorized:
Reported: 05/09/11

QC Report No: SU53-Floyd Snider
Project: Lora Lake Apts RI
Event: POS-LLA
Date Sampled: 04/28/11
Date Received: 04/28/11

Date Analyzed: 05/06/11 15:18
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	93.7%
Bromobenzene	96.2%

Gasoline Surrogate Recovery

Trifluorotoluene	96.1%
Bromobenzene	98.2%

BETX values reported in µg/L (ppb)
Gasoline values reported in mg/L (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod **Sample ID: MW16042811**
TPHG by Method NWTPHG **SAMPLE**
Page 1 of 1

Lab Sample ID: SU53F
LIMS ID: 11-9626
Matrix: Groundwater
Data Release Authorized:
Reported: 05/09/11

QC Report No: SU53-Floyd Snider
Project: Lora Lake Apts RI
Event: POS-LLA
Date Sampled: 04/28/11
Date Received: 04/28/11

Date Analyzed: 05/06/11 15:47
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	95.2%
Bromobenzene	95.9%

Gasoline Surrogate Recovery

Trifluorotoluene	98.1%
Bromobenzene	97.1%

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

Sample ID: MW-01-042911
SAMPLE

Lab Sample ID: SU73A
LIMS ID: 11-9762
Matrix: Water
Data Release Authorized:
Reported: 05/09/11

QC Report No: SU73-Floyd Snider
Project: Lora Lake Apts RI
Event: POS-LLA.4010
Date Sampled: 04/29/11
Date Received: 04/29/11

Date Analyzed: 05/06/11 16:16
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**	**2.5**
179601-23-1	**m,p-Xylene**	**1.0**	**1.8**
95-47-6	o-Xylene	1.0	< 1.0 U

			GAS ID
Gasoline Range Hydrocarbons	**0.25**	**0.38**	**GRO**

BETX Surrogate Recovery

Trifluorotoluene	92.7%
Bromobenzene	94.5%

Gasoline Surrogate Recovery

Trifluorotoluene	95.8%
Bromobenzene	96.7%

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: MW-01-042911-D
SAMPLE

Lab Sample ID: SU73B
LIMS ID: 11-9763
Matrix: Water
Data Release Authorized:
Reported: 05/09/11

QC Report No: SU73-Floyd Snider
Project: Lora Lake Apts RI
Event: POS-LLA.4010
Date Sampled: 04/29/11
Date Received: 04/29/11

Date Analyzed: 05/06/11 16:45
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**	**2.5**	
179601-23-1	**m,p-Xylene**	**1.0**	**1.8**	
95-47-6	o-Xylene	1.0	< 1.0 U	
				GAS ID
	Gasoline Range Hydrocarbons	**0.25**	**0.40**	**GRO**

BETX Surrogate Recovery

Trifluorotoluene	93.6%
Bromobenzene	96.5%

Gasoline Surrogate Recovery

Trifluorotoluene	96.6%
Bromobenzene	98.6%

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: B312-042911**
TPHG by Method NWTPHG **SAMPLE**
Page 1 of 1

Lab Sample ID: SU74A
LIMS ID: 11-9772
Matrix: Water
Data Release Authorized:
Reported: 05/09/11

QC Report No: SU74-Floyd Snider
Project: Lora Lake Parcel
Event: POS-LL.4010
Date Sampled: 04/29/11
Date Received: 04/29/11

Date Analyzed: 05/06/11 17:15
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	94.8%
Bromobenzene	97.3%

Gasoline Surrogate Recovery

Trifluorotoluene	97.3%
Bromobenzene	98.5%

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: B310-042911**
TPHG by Method NWTPHG **SAMPLE**
Page 1 of 1

Lab Sample ID: SU74B
LIMS ID: 11-9773
Matrix: Water
Data Release Authorized:
Reported: 05/09/11

QC Report No: SU74-Floyd Snider
Project: Lora Lake Parcel
Event: POS-LL.4010
Date Sampled: 04/29/11
Date Received: 04/29/11

Date Analyzed: 05/06/11 17:44
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	92.9%
Bromobenzene	96.1%

Gasoline Surrogate Recovery

Trifluorotoluene	96.2%
Bromobenzene	98.4%

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: B311-042911**
TPHG by Method NWTPHG **SAMPLE**
Page 1 of 1

Lab Sample ID: SU74C
LIMS ID: 11-9774
Matrix: Water
Data Release Authorized:
Reported: 05/09/11

QC Report No: SU74-Floyd Snider
Project: Lora Lake Parcel
Event: POS-LL.4010
Date Sampled: 04/29/11
Date Received: 04/29/11

Date Analyzed: 05/06/11 18:13
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	96.0%
Bromobenzene	96.1%

Gasoline Surrogate Recovery

Trifluorotoluene	97.8%
Bromobenzene	97.6%

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: SU53
Matrix: Groundwater

QC Report No: SU53-Floyd Snider
Project: Lora Lake Apts RI
Event: POS-LLA

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
MW5042811	97.0%	97.6%	0
MW15042811	98.2%	99.0%	0
MW4042811	98.2%	98.4%	0
MW17042811	97.4%	96.2%	0
MW14042811	96.1%	98.2%	0
MW16042811	98.1%	97.1%	0

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

Log Number Range: 11-9621 to 11-9626

ANALYTICAL RESOURCES INCORPORATED

TPHG WATER SURROGATE RECOVERY SUMMARY

ARI Job: SU73
Matrix: Water

QC Report No: SU73-Floyd Snider
Project: Lora Lake Apts RI
Event: POS-LLA.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
MW-01-042911	95.8%	96.7%	0
MW-01-042911-D	96.6%	98.6%	0

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

Log Number Range: 11-9762 to 11-9763

ANALYTICAL RESOURCES INCORPORATED

TPHG WATER SURROGATE RECOVERY SUMMARY

ARI Job: SU74
Matrix: Water

QC Report No: SU74-Floyd Snider
Project: Lora Lake Parcel
Event: POS-LL.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
B312-042911	97.3%	98.5%	0
B310-042911	96.2%	98.4%	0
B311-042911	97.8%	97.6%	0

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

Log Number Range: 11-9772 to 11-9774

ANALYTICAL RESOURCES INCORPORATED

BETX WATER SURROGATE RECOVERY SUMMARY

ARI Job: SU53
Matrix: Groundwater

QC Report No: SU53-Floyd Snider
Project: Lora Lake Apts RI
Event: POS-LLA

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
MW5042811	94.4%	96.4%	0
MW15042811	96.4%	97.8%	0
MW4042811	96.0%	97.4%	0
MW17042811	95.3%	95.1%	0
MW14042811	93.7%	96.2%	0
MW16042811	95.2%	95.9%	0

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

Log Number Range: 11-9621 to 11-9626

ANALYTICAL RESOURCES INCORPORATED

BETX WATER SURROGATE RECOVERY SUMMARY

ARI Job: SU73
Matrix: Water

QC Report No: SU73-Floyd Snider
Project: Lora Lake Apts RI
Event: POS-LLA.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
MW-01-042911	92.7%	94.5%	0
MW-01-042911-D	93.6%	96.5%	0

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

Log Number Range: 11-9762 to 11-9763

ANALYTICAL RESOURCES INCORPORATED

BETX WATER SURROGATE RECOVERY SUMMARY

ARI Job: SU74
Matrix: Water

QC Report No: SU74-Floyd Snider
Project: Lora Lake Parcel
Event: POS-LL.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
B312-042911	94.8%	97.3%	0
B310-042911	92.9%	96.1%	0
B311-042911	96.0%	96.1%	0

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

Log Number Range: 11-9772 to 11-9774

ANALYTICAL RESOURCES INCORPORATED

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

Sample ID: LCS-050611
LAB CONTROL SAMPLE

Lab Sample ID: LCS-050611
LIMS ID: 11-9621
Matrix: Groundwater
Data Release Authorized:
Reported: 05/09/11

QC Report No: SU53-Floyd Snider
Project: Lora Lake Apts RI
Event: POS-LLA
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
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: 11-9621
Matrix: Groundwater
Data Release Authorized:
Reported: 05/09/11

QC Report No: SU53-Floyd Snider
Project: Lora Lake Apts RI
Event: POS-LLA
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%

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			
29			
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: 11-9621
Matrix: Groundwater
Data Release Authorized:
Reported: 05/09/11

QC Report No: SU53-Floyd Snider
Project: Lora Lake Apts RI
Event: POS-LLA
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

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.: 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

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: 0506A028.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	23.67	25.00	-5.3
Toluene	9.95	9.90	10.00	23.40	25.00	-6.4
Ethylbenzene	12.85	12.80	12.90	24.37	25.00	-2.5
M/P-Xylene	13.02	12.96	13.06	46.68	50.00	-6.6
O-Xylene	13.97	13.94	14.00	24.38	25.00	-2.5
MTBE	4.54	4.49	4.59	16.67	25.00	-33.3
TFT(Surr)	7.91	7.85	7.95	90.89	100.0	-9.1
BB(Surr)	15.45	15.40	15.50	98.37	100.0	-1.6

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: 0506a029.d Inst/Det: PID1.I/RTX 502-2 FID

Gas Range	Area*	CalcAmnt	NomAmnt	%D
WAGas (Tol-C12)	744514	2.33	2.50	-6.8
AKGas (C6-C10)	1151000	2.18	2.50	-12.7
NWGas (Tol-Nap)	786908	2.31	2.50	-7.4
8015B (2MP-TMB)	1442588	2.21	2.50	-11.5

* 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: 0506a029.d
Inst/Det: PID1.I/RTX 502-2 FID

Surrogate	Area	CalcAmnt	NomAmnt	RPD
Trifluorotol	45710	101.1	100.0	1.1
Bromoflrbenz	16863	99.6	100.0	-0.4

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 #	S2 RT #
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: SU53, SU73, SU74

Cover Page

INORGANIC ANALYSIS DATA PACKAGE

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd Snider

PROJECT: Lora Lake Apts RI

SDG: SU53

CLIENT ID	ARI ID	ARI LIMS ID	REPREP
MW5042811	SU53A	11-9621	
MW5042811D	SU53ADUP	11-9621	
MW5042811S	SU53ASPK	11-9621	
MW4042811	SU53C	11-9623	
PBW	SU53MB1	11-9623	
LCSW	SU53MB1SPK	11-9623	
MW14042811	SU53E	11-9625	

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: Jay Kuhn Name: Jay Kuhn

Date: 5/10/11 Title: Inorganics Director

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: MW5042811
SAMPLE

Lab Sample ID: SU53A
LIMS ID: 11-9621
Matrix: Groundwater
Data Release Authorized:
Reported: 05/10/11

QC Report No: SU53-Floyd Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: 04/28/11
Date Received: 04/28/11

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/03/11	200.8	05/09/11	**7440-38-2**	**Arsenic**	0.2	**4.6**	
200.8	05/03/11	200.8	05/09/11	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: MW4042811
SAMPLE

Lab Sample ID: SU53C
LIMS ID: 11-9623
Matrix: Groundwater
Data Release Authorized:
Reported: 05/10/11

QC Report No: SU53-Floyd Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: 04/28/11
Date Received: 04/28/11

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/03/11	200.8	05/09/11	**7440-38-2**	**Arsenic**	0.2	**0.4**	
200.8	05/03/11	200.8	05/09/11	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: MW14042811
SAMPLE

Lab Sample ID: SU53E
LIMS ID: 11-9625
Matrix: Groundwater
Data Release Authorized:
Reported: 05/10/11

QC Report No: SU53-Floyd Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: 04/28/11
Date Received: 04/28/11

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/03/11	200.8	05/09/11	**7440-38-2**	**Arsenic**	0.2	**0.4**	
200.8	05/03/11	200.8	05/09/11	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: MW5042811
MATRIX SPIKE

Lab Sample ID: SU53A
LIMS ID: 11-9621
Matrix: Groundwater
Data Release Authorized:
Reported: 05/10/11

QC Report No: SU53-Floyd Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: 04/28/11
Date Received: 04/28/11

MATRIX SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Spike	Spike Added	% Recovery	Q
Arsenic	200.8	4.55	30.0	25.0	102%	
Lead	200.8	0.100 U	24.4	25.0	97.6%	

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: MW5042811
DUPLICATE

Lab Sample ID: SU53A
LIMS ID: 11-9621
Matrix: Groundwater
Data Release Authorized:
Reported: 05/10/11

QC Report No: SU53-Floyd Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: 04/28/11
Date Received: 04/28/11

MATRIX DUPLICATE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Duplicate	RPD	Control Limit	Q
Arsenic	200.8	4.6	4.5	2.2%	+/- 20%	
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
Page 1 of 1

Sample ID: LAB CONTROL

Lab Sample ID: SU53LCS
LIMS ID: 11-9623
Matrix: Groundwater
Data Release Authorized:
Reported: 05/10/11

QC Report No: SU53-Floyd Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: NA
Date Received: NA

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Arsenic	200.8	25.6	25.0	102%	
Lead	200.8	25.8	25.0	103%	

Reported in µg/L

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

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: METHOD BLANK

Lab Sample ID: SU53MB
LIMS ID: 11-9623
Matrix: Groundwater
Data Release Authorized:
Reported: 05/10/11

QC Report No: SU53-Floyd Snider
Project: Lora Lake Apts RI
POS-LLA
Date Sampled: NA
Date Received: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/03/11	200.8	05/09/11	7440-38-2	Arsenic	0.2	0.2	U
200.8	05/03/11	200.8	05/09/11	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: SU53

ANALYTE	EL	M	RUN	ICVTV	ICV	%R	CCVTV	CCV1	%R	CCV2	%R	CCV3	%R	CCV4	%R	CCV5	%R
Arsenic	AS	PMS	MS050981	50.0	49.86	**99.7**	50.0	50.42	**100.8**	50.15	**100.3**	50.26	**100.5**	50.30	**100.6**	50.19	**100.4**
Lead	PB	PMS	MS050981	50.0	49.27	**98.5**	50.0	49.80	**99.6**	50.03	**100.1**	50.48	**101.0**	49.97	**99.9**	48.64	**97.3**

SU53 : 00232

2753

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

Calibration Verification

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd Snider

PROJECT: Lora Lake Apts RI

UNITS:ug/L

SDG: SU53

ANALYTE	EL	M	RUN	CCVTV	CCV6	%R	CCV7	%R	CCV8	%R	CCV9	%R	CCV10	%R	CCV11	%R
Arsenic	AS	PMS	MS050981	50.0	50.57	**101.1**										
Lead	PB	PMS	MS050981	50.0	47.91	**95.8**										

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: SU53

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	MS050981	0.2	0.23	**115.0**										
Lead	PB	PMS	MS050981	0.1	0.11	**110.0**										

Control Limits: no control limits have been established by the EPA at this time.

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd Snider

PROJECT: Lora Lake Apts RI

UNITS:ug/L

SDG: SU53

ANALYTE	EL	METH	RUN	CRDL	IDL	ICB	C	CCB1	C	CCB2	C	CCB3	C	CCB4	C	CCB5	C
Arsenic	AS	PMS	MS050981	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	MS050981	3.0	0.1	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd Snider

PROJECT: Lora Lake Apts RI

UNITS: ug/L

SDG: SU53

ANALYTE	EL	METH	RUN	CRDL	IDL	CCB6	C	CCB7	C	CCB8	C	CCB9	C	CCB10	C	CCB11	C
Arsenic	AS	PMS	MS050981	10.0	0.2	0.2	U										
Lead	PB	PMS	MS050981	3.0	0.1	0.1	U										

ICP Interference Check Sample

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd Snider

PROJECT: Lora Lake Apts RI

SDG: SU53

ICS SOURCE: I.V.

RUNID: MS050981

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	20.8	**104.0**						
Copper		20	0.5	20.4	**102.0**						
Manganese		20	0.1	20.7	**103.5**						
Molybdenum	400	400	433.0	431.4	**107.9**						
Nickel		20	0.5	20.6	**103.0**						
Silver		20	0.0	19.1	**95.5**						
Vanadium			0.0	-0.4							
Zinc		20	1.2	20.3	**101.5**						

SU53:00237

2758

IDLs and ICP Linear Ranges

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd Snider

PROJECT: Lora Lake Apts RI

SDG: SU53

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: SU53

ANALYSIS METHOD: PMS

ARI PREP CODE: REN

PREPDATE: 5/3/2011

CLIENT ID	ARI ID	MASS (g)	INITIAL VOLUME (mL)	FINAL VOLUME (mL)
MW5042811	SU53A	0.000	50.0	25.0
MW5042811D	SU53ADUP	0.000	50.0	25.0
MW5042811S	SU53ASPK	0.000	50.0	25.0
MW4042811	SU53C	0.000	50.0	25.0
MW14042811	SU53E	0.000	50.0	25.0
PBW	SU53MB1	0.000	50.0	25.0
LCSW	SU53MB1SPK	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: 5/9/2011

SDG: SU53 | RUNID: MS050981 METHOD: PMS | END DATE: 5/9/2011

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	11390				X																	X									
S1	S1	1.00	11470				X																	X									
S2	S2	1.00	11540				X																	X									
S3	S3	1.00	12020				X																	X									
S4	S4	1.00	12100				X																	X									
ZZZZZZ	Rinse Sampl	1.00	12180																														
ICV	MICV	1.00	12250				X																	X									
ICB	ICB	1.00	12320				X																	X									
CCV	MCCV1	1.00	12390				X																	X									
CCB	CCB1	1.00	12470				X																	X									
CRI	MCRI	1.00	12540				X																	X									
ICSA	ICSAI	1.00	13010				X																	X									
ICSAB	ICSABI	1.00	13080				X																	X									
ZZZZZZ	LR200	1.00	13160																														
ZZZZZZ	LR300	1.00	13230																														
CCV	MCCV2	1.00	13310				X																	X									
CCB	CCB2	1.00	13380				X																	X									
ZZZZZZ	SU15P	2.00	13450																														
ZZZZZZ	SU15PDUP	2.00	13520																														
ZZZZZZ	SU13E	2.00	13580																														
ZZZZZZ	SU13K	2.00	14050																														
ZZZZZZ	SU15O	20.00	14120																														
ZZZZZZ	SU15O	5.00	14180																														
ZZZZZZ	SU15M	5.00	14250																														
ZZZZZZ	SU15N	5.00	14310																														
ZZZZZZ	SU15E	50.00	14380																														
ZZZZZZ	SU15F	50.00	14450																														
CCV	MCCV3	1.00	14510				X																	X									
CCB	CCB3	1.00	14580				X																	X									
ZZZZZZ	SU59MB1	20.00	15070																														
ZZZZZZ	SU59MB1SPK	20.00	15130																														
ZZZZZZ	SU13D	10.00	15200																														
ZZZZZZ	SU13J	10.00	15260																														
ZZZZZZ	SU13L	10.00	15330																														
ZZZZZZ	SU13F	20.00	15390																														

FORM XIV

SU53 : 09219

2761

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd Snider

PROJECT: Lora Lake Apts RI | INSTRUMENT ID: PE ELAN 6000 MS | START DATE: 5/9/2011

SDG: SU53 | RUNID: MS050981 METHOD: PMS | END DATE: 5/9/2011

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	SU15G	20.00	15460																														
ZZZZZZ	SU59ADUP	20.00	15520																														
ZZZZZZ	SU59A	20.00	15590																														
ZZZZZZ	SU59ASPK	20.00	16050																														
CCV	MCCV4	1.00	16120				X																	X									
CCB	CCB4	1.00	16190				X																	X									
ZZZZZZ	SU27MB1	2.00	16260																														
ZZZZZZ	SU27MB2	2.00	16330																														
ZZZZZZ	SU27MB2SPK	2.00	16400																														
ZZZZZZ	SU27MB1SPK	2.00	16460																														
ZZZZZZ	SU27A	2.00	16530																														
ZZZZZZ	SU27B	2.00	16590																														
ZZZZZZ	SU27C	2.00	17060																														
ZZZZZZ	SU27D	2.00	17130																														
ZZZZZZ	SU27E	2.00	17190																														
ZZZZZZ	SU59B	20.00	17260																														
CCV	MCCV5	1.00	17320				X																	X									
CCB	CCB5	1.00	17390				X																	X									
PBW	SU53MB1	2.00	17570				X																	X									
LCSW	SU53MB1SPK	2.00	18040				X																	X									
MW5042811D	SU53ADUP	2.00	18100				X																	X									
MW5042811	SU53A	2.00	18170				X																	X									
MW5042811S	SU53ASPK	2.00	18230				X																	X									
MW4042811	SU53C	2.00	18300				X																	X									
MW14042811	SU53E	2.00	18360				X																	X									
ZZZZZZ	SU45A	2.00	18430																														
ZZZZZZ	SU45B	2.00	18490																														
ZZZZZZ	SU27F	2.00	18560																														
CCV	MCCV6	1.00	19030				X																	X									
CCB	CCB6	1.00	19100				X																	X									

SU53:00211

2762

Cover Page

INORGANIC ANALYSIS DATA PACKAGE

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd Snider

PROJECT: Lora Lake Apts RI

SDG: SU73

CLIENT ID	ARI ID	ARI LIMS ID	REPREP
MW-01-042911	SU73A	11-9762	
MW-01-042911D	SU73ADUP	11-9762	
MW-01-042911S	SU73ASPK	11-9762	
MW-01-042911-D	SU73B	11-9763	
PBW	SU73MB1	11-9763	
LCSW	SU73MB1SPK	11-9763	
B312-042911	SU74A	11-9772	
B310-042911	SU74B	11-9773	
B311-042911	SU74C	11-9774	

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: 5/4/11 Title: Inorganics Director

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: MW-01-042911
SAMPLE

Lab Sample ID: SU73A
LIMS ID: 11-9762
Matrix: Water
Data Release Authorized:
Reported: 08/29/11

QC Report No: SU73-Floyd Snider
Project: Lora Lake Apts RI
POS-LLA.4010
Date Sampled: 04/29/11
Date Received: 04/29/11

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/05/11	200.8	05/10/11	**7440-38-2**	**Arsenic**	0.2	**14.2**	
200.8	05/05/11	200.8	05/10/11	7439-92-1	Lead	0.1	0.1	U

U-Analyte undetected at given RL
RL-Reporting Limit

2764 8/31/11
SU73: 243R

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: MW-01-042911-D
SAMPLE

Lab Sample ID: SU73B
LIMS ID: 11-9763
Matrix: Water
Data Release Authorized:
Reported: 08/29/11

QC Report No: SU73-Floyd Snider
Project: Lora Lake Apts RI
POS-LLA.4010
Date Sampled: 04/29/11
Date Received: 04/29/11

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/05/11	200.8	05/10/11	**7440-38-2**	**Arsenic**	0.2	**13.4**	
200.8	05/05/11	200.8	05/10/11	7439-92-1	Lead	0.1	0.1	U

U-Analyte undetected at given RL
RL-Reporting Limit

SU53: 244R 276B c 8/30/11

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: B312-042911
SAMPLE

Lab Sample ID: SU74A
LIMS ID: 11-9772
Matrix: Water
Data Release Authorized:
Reported: 08/29/11

QC Report No: SU74-Floyd Snider
Project: Lora Lake Parcel
POS-LL.4010
Date Sampled: 04/29/11
Date Received: 04/29/11

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/05/11	200.8	05/10/11	**7440-38-2**	**Arsenic**	0.2	**0.3**	
200.8	05/05/11	200.8	05/10/11	7439-92-1	Lead	0.1	0.1	U

U-Analyte undetected at given RL
RL-Reporting Limit

2766 3c 8/30/11
SU53: 245R

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: B310-042911
SAMPLE

Lab Sample ID: SU74B
LIMS ID: 11-9773
Matrix: Water
Data Release Authorized:
Reported: 08/29/11

QC Report No: SU74-Floyd Snider
Project: Lora Lake Parcel
POS-LL.4010
Date Sampled: 04/29/11
Date Received: 04/29/11

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/05/11	200.8	05/10/11	**7440-38-2**	**Arsenic**	0.2	**0.7**	
200.8	05/05/11	200.8	05/10/11	7439-92-1	Lead	0.1	0.1	U

U-Analyte undetected at given RL
RL-Reporting Limit

FORM-I

2767 13C 8/30/11
SU53: 246R

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: B311-042911
SAMPLE

Lab Sample ID: SU74C
LIMS ID: 11-9774
Matrix: Water
Data Release Authorized:
Reported: 08/29/11

QC Report No: SU74-Floyd Snider
Project: Lora Lake Parcel
POS-LL.4010
Date Sampled: 04/29/11
Date Received: 04/29/11

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/05/11	200.8	05/10/11	**7440-38-2**	**Arsenic**	0.2	**0.4**	
200.8	05/05/11	200.8	05/10/11	7439-92-1	Lead	0.1	0.1	U

U-Analyte undetected at given RL
RL-Reporting Limit

FORM-I

SU53: 247R BC 8/30/11

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: MW-01-042911
MATRIX SPIKE

Lab Sample ID: SU73A
LIMS ID: 11-9762
Matrix: Water
Data Release Authorized: NV
Reported: 08/29/11

QC Report No: SU73-Floyd Snider
Project: Lora Lake Apts RI
POS-LLA.4010
Date Sampled: 04/29/11
Date Received: 04/29/11

MATRIX SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Spike	Spike Added	% Recovery	Q
Arsenic	200.8	14.2	39.3	25.0	100%	
Lead	200.8	0.100 U	23.6	25.0	94.4%	

Reported in µg/L

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

Percent Recovery Limits: 75-125%

2769

SU53: 248R BC 8/30/11

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: MW-01-042911
DUPLICATE

Lab Sample ID: SU73A
LIMS ID: 11-9762
Matrix: Water
Data Release Authorized:
Reported: 08/29/11

QC Report No: SU73-Floyd Snider
Project: Lora Lake Apts RI
POS-LLA.4010
Date Sampled: 04/29/11
Date Received: 04/29/11

MATRIX DUPLICATE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Duplicate	RPD	Control Limit	Q
Arsenic	200.8	14.2	14.2	0.0%	+/- 20%	
Lead	200.8	0.1 U	0.1	0.0%	+/- 0.1	L

Reported in µg/L

*-Control Limit Not Met
L-RPD Invalid, Limit = Detection Limit

SU53: 249R 2770 Bc 8/30/11

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: LAB CONTROL

Lab Sample ID: SU73LCS
LIMS ID: 11-9763
Matrix: Water
Data Release Authorized:
Reported: 08/29/11

QC Report No: SU73-Floyd Snider
Project: Lora Lake Apts RI
POS-LLA.4010
Date Sampled: NA
Date Received: NA

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Arsenic	200.8	25.6	25.0	102%	
Lead	200.8	24.3	25.0	97.2%	

Reported in µg/L

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

FORM-VII

2771

SU53:250R BC 8/30/11

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: METHOD BLANK

Lab Sample ID: SU73MB
LIMS ID: 11-9763
Matrix: Water
Data Release Authorized: dw
Reported: 08/29/11

QC Report No: SU73-Floyd Snider
Project: Lora Lake Apts RI
POS-LLA.4010
Date Sampled: NA
Date Received: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/05/11	200.8	05/10/11	7440-38-2	Arsenic	0.2	0.2	U
200.8	05/05/11	200.8	05/10/11	7439-92-1	Lead	0.1	0.1	U

U-Analyte undetected at given RL
RL-Reporting Limit

2772
SU53: 251R BC 8/31/11

Calibration Verification

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd Snider

PROJECT: Lora Lake Apts RI

SDG: SU73

UNITS: ug/L

ANALYTE	EL	M	RUN	ICVTV	ICV	%R	CCVTV	CCV1	%R	CCV2	%R	CCV3	%R	CCV4	%R	CCV5	%R
Arsenic	AS	PMS	MS051081	50.0	50.12	**100.2**	50.0	50.17	**100.3**	50.50	**101.0**	50.84	**101.7**	50.57	**101.1**	50.54	**101.1**
Lead	PB	PMS	MS051081	50.0	48.85	**97.7**	50.0	48.87	**97.7**	48.85	**97.7**	47.20	**94.4**	46.07	**92.1**	46.67	**93.3**

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

Calibration Verification

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd Snider

PROJECT: Lora Lake Apts RI

UNITS: ug/L

SDG: SU73

ANALYTE	EL	M	RUN	CCVTV	CCV6	%R	CCV7	%R	CCV8	%R	CCV9	%R	CCV10	%R	CCV11	%R
Arsenic	AS	PMS	MS051081	50.0	49.98	**100.0**	50.49	**101.0**	49.65	**99.3**						
Lead	PB	PMS	MS051081	50.0	47.27	**94.5**	47.07	**94.1**	46.95	**93.9**						

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: SU73

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	MS051081	0.2	0.18	**90.0**										
Lead	PB	PMS	MS051081	0.1	0.11	**110.0**										

Control Limits: no control limits have been established by the EPA at this time.

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd Snider

PROJECT: Lora Lake Apts RI

SDG: SU73

UNITS: ug/L

ANALYTE	EL	METH	RUN	CRDL	IDL	ICB	C	CCB1	C	CCB2	C	CCB3	C	CCB4	C	CCB5	C
Arsenic	AS	PMS	MS051081	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	MS051081	3.0	0.1	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd Snider

PROJECT: Lora Lake Apts RI

SDG: SU73

UNITS: ug/L

ANALYTE	EL	METH	RUN	CRDL	IDL	CCB6	C	CCB7	C	CCB8	C	CCB9	C	CCB10	C	CCB11	C
Arsenic	AS	PMS	MS051081	10.0	0.2	0.2	U	0.2	U	0.2	U						
Lead	PB	PMS	MS051081	3.0	0.1	0.1	U	0.1	U	0.1	U						

ICP Interference Check Sample

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd Snider

PROJECT: Lora Lake Apts RI

SDG: SU73

ICS SOURCE: I.V.

RUNID: MS051081

INSTRUMENT ID: PE ELAN 6000

UNITS: ug/L

ANALYTE	ICSA TV	ICSAB TV	ICSA1	ICSAB1	%R	ICSA2	ICSAB2	%R	ICSA3	ICSAB3	%R
Arsenic		20	0.0	19.8	**99.0**						
Barium			0.0	0.1							
Cadmium		20	0.1	19.3	**96.5**						
Chromium		20	0.6	20.5	**102.5**						
Cobalt		20	0.0	20.2	**101.0**						
Copper		20	0.5	20.0	**100.0**						
Manganese		20	0.0	20.1	**100.5**						
Molybdenum	400	400	429.4	427.1	**106.8**						
Nickel		20	0.7	20.4	**102.0**						
Selenium			0.0	0.1							
Silver		20	0.0	18.9	**94.5**						
Vanadium			0.0	-0.5							
Zinc		20	1.2	20.5	**102.5**						

SU53 : 00257

2778

IDLs and ICP Linear Ranges

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd Snider

PROJECT: Lora Lake Apts RI

SDG: SU73 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: SU73

ANALYSIS METHOD: PMS

ARI PREP CODE: REN

PREPDATE: 5/5/2011

CLIENT ID	ARI ID	MASS (g)	INITIAL VOLUME (mL)	FINAL VOLUME (mL)
MW-01-042911	SU73A	0.000	50.0	25.0
MW-01-042911D	SU73ADUP	0.000	50.0	25.0
MW-01-042911S	SU73ASPK	0.000	50.0	25.0
MW-01-042911-D	SU73B	0.000	50.0	25.0
PBW	SU73MB1	0.000	50.0	25.0
LCSW	SU73MB1SPK	0.000	50.0	25.0
B312-042911	SU74A	0.000	50.0	25.0
B310-042911	SU74B	0.000	50.0	25.0
B311-042911	SU74C	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: 5/10/2011

SDG: SU73 | RUNID: MS051081 | METHOD: PMS | END DATE: 5/10/2011

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	11310				X																	X									
S1	S1	1.00	11390				X																	X									
S2	S2	1.00	11470				X																	X									
S3	S3	1.00	11550				X																	X									
S4	S4	1.00	12020				X																	X									
ZZZZZZ	Rinse Sampl	1.00	12100																														
ICV	MICV	1.00	12170				X																	X									
ICB	ICB	1.00	12250				X																	X									
CCV	MCCV1	1.00	12320				X																	X									
CCB	CCB1	1.00	12390				X																	X									
CRI	MCRI	1.00	12460				X																	X									
ICSA	ICSAI	1.00	12530				X																	X									
ICSAB	ICSABI	1.00	13010				X																	X									
ZZZZZZ	LR200	1.00	13080																														
ZZZZZZ	LR300	1.00	13160																														
CCV	MCCV2	1.00	13230				X																	X									
CCB	CCB2	1.00	13310				X																	X									
ZZZZZZ	SU14MB1	2.00	13380																														
ZZZZZZ	SU14MB2	2.00	13440																														
ZZZZZZ	SU14MB2SPK	2.00	13510																														
ZZZZZZ	SU14MB1SPK	2.00	13580																														
ZZZZZZ	SU14A-L	10.00	14040																														
ZZZZZZ	SU14A	2.00	14110																														
ZZZZZZ	SU14ADUP	2.00	14170																														
ZZZZZZ	SU14ASPK	2.00	14240																														
ZZZZZZ	ZZZZZZ	2.00	14310																														
ZZZZZZ	SU14B	2.00	14370																														
CCV	MCCV3	1.00	14440				X																	X									
CCB	CCB3	1.00	14510				X																	X									
ZZZZZZ	SU14F-L	10.00	14580																														
ZZZZZZ	SU14F	2.00	15050																														
ZZZZZZ	SU14FDUP	2.00	15110																														
ZZZZZZ	SU14FSPK	2.00	15180																														
ZZZZZZ	ZZZZZZ	2.00	15240																														
ZZZZZZ	SU14C	2.00	15310																														

FORM XIV

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd Snider

PROJECT: Lora Lake Apts RI | INSTRUMENT ID: PE ELAN 6000 MS | START DATE: 5/10/2011

SDG: SU73 | RUNID: MS051081 METHOD: PMS | END DATE: 5/10/2011

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	SU14D	2.00	15370																														
ZZZZZZ	SU14E	2.00	15440																														
ZZZZZZ	SU14G	2.00	15510																														
ZZZZZZ	SU14H	2.00	15570																														
CCV	MCCV4	1.00	16040				X																	X									
CCB	CCB4	1.00	16110				X																	X									
ZZZZZZ	SU57ADUP	50.00	16180																														
ZZZZZZ	SU57A	50.00	16250																														
ZZZZZZ	SU57ASPK	50.00	16310																														
ZZZZZZ	SU57KDUP	50.00	16380																														
ZZZZZZ	SU57K	50.00	16440																														
ZZZZZZ	SU57KSPK	50.00	16510																														
ZZZZZZ	SU57B	50.00	16580																														
ZZZZZZ	SU57L	50.00	17040																														
ZZZZZZ	SU14I	2.00	17110																														
ZZZZZZ	SU14J	2.00	17170																														
CCV	MCCV5	1.00	17240				X																	X									
CCB	CCB5	1.00	17310				X																	X									
ZZZZZZ	SU57D	2.00	17410																														
ZZZZZZ	SU57D	10.00	17480																														
ZZZZZZ	SU57F	2.00	17540																														
ZZZZZZ	SU57G	2.00	18010																														
ZZZZZZ	SU57G	10.00	18080																														
ZZZZZZ	SU57J	2.00	18140																														
ZZZZZZ	SU57N	2.00	18210																														
ZZZZZZ	SU57N	10.00	18270																														
ZZZZZZ	SU57Q	2.00	18340																														
ZZZZZZ	SU57Q	20.00	18400																														
CCV	MCCV6	1.00	18470				X																	X									
CCB	CCB6	1.00	18540				X																	X									
ZZZZZZ	SU58MB1	2.00	19010																														
ZZZZZZ	SU58MB2	2.00	19080																														
ZZZZZZ	SU58MB2SPK	2.00	19150																														
ZZZZZZ	SU58MB1SPK	2.00	19210																														
ZZZZZZ	SU58A	2.00	19280																														

FORM XIV

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd Snider

PROJECT: Lora Lake Apts RI | INSTRUMENT ID: PE ELAN 6000 MS | START DATE: 5/10/2011

SDG: SU73 | RUNID: MS051081 | METHOD: PMS | END DATE: 5/10/2011

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	SU58B	2.00	19340																														
ZZZZZZ	SU58C	2.00	19410																														
ZZZZZZ	SU58D	2.00	19470																														
ZZZZZZ	SU57P	2.00	19540																														
ZZZZZZ	SU57T	2.00	20000																														
CCV	MCCV7	1.00	20070				X																	X									
CCB	CCB7	1.00	20140				X																	X									
PBW	SU73MB1	2.00	20210				X																	X									
LCSW	SU73MB1SPK	2.00	20280				X																	X									
MW-01-042911D	SU73ADUP	2.00	20340				X																	X									
MW-01-042911	SU73A	2.00	20410				X																	X									
MW-01-042911S	SU73ASPK	2.00	20470				X																	X									
MW-01-042911-D	SU73B	2.00	20540				X																	X									
B312-042911	SU74A	2.00	21010				X																	X									
B310-042911	SU74B	2.00	21070				X																	X									
B311-042911	SU74C	2.00	21140				X																	X									
ZZZZZZ	SU14I	5.00	21200																														
CCV	MCCV8	1.00	21270				X																	X									
CCB	CCB8	1.00	21340				X																	X									

General Chemistry Analysis
Report and Summary QC Forms

ARI Job ID: SU53, SU73, SU74

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
pH by Method EPA 150.1

Data Release Authorized:
Reported: 05/04/11
Date Received: 04/28/11
Page 1 of 1

QC Report No: SU53-Floyd Snider
Project: Lora Lake Apts RI
POS-LLA

Client/ ARI ID	Date Sampled	Matrix	Analysis Date & Batch	RL	Result
MW5042811 SU53A 11-9621	04/28/11	Groundwat	04/28/11 12:10 042811#1	0.01	6.30
MW15042811 SU53B 11-9622	04/28/11	Groundwat	04/28/11 12:10 042811#1	0.01	7.45
MW4042811 SU53C 11-9623	04/28/11	Groundwat	04/28/11 12:10 042811#1	0.01	6.51
MW17042811 SU53D 11-9624	04/28/11	Groundwat	04/28/11 12:10 042811#1	0.01	7.63
MW14042811 SU53E 11-9625	04/28/11	Groundwat	04/28/11 12:10 042811#1	0.01	6.55
MW16042811 SU53F 11-9626	04/28/11	Groundwat	04/28/11 12:10 042811#1	0.01	6.75

Reported in std units

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

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
Total Suspended Solids by Method EPA 160.2

Data Release Authorized:
Reported: 05/04/11
Date Received: 04/28/11
Page 1 of 1

QC Report No: SU53-Floyd Snider
Project: Lora Lake Apts RI
POS-LLA

Client/ ARI ID	Date Sampled	Matrix	Analysis Date & Batch	RL	Result
MW5042811 SU53A 11-9621	04/28/11	Groundwat	05/03/11 14:25 050311#1	1.1	4.2
MW15042811 SU53B 11-9622	04/28/11	Groundwat	05/03/11 14:25 050311#1	1.0	4.1
MW4042811 SU53C 11-9623	04/28/11	Groundwat	05/03/11 14:25 050311#1	1.1	2.6
MW17042811 SU53D 11-9624	04/28/11	Groundwat	05/03/11 14:25 050311#1	1.0	12.0
MW14042811 SU53E 11-9625	04/28/11	Groundwat	05/03/11 14:25 050311#1	1.0	2.2
MW16042811 SU53F 11-9626	04/28/11	Groundwat	05/03/11 14:25 050311#1	1.7	23.2

Reported in mg/L

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

REPLICATE RESULTS-CONVENTIONALS
SU53-Floyd Snider

ANALYTICAL RESOURCES INCORPORATED

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

Project: Lora Lake Apts RI
Event: POS-LLA
Date Sampled: 04/28/11
Date Received: 04/28/11

Analyte	Date	Units	Sample	Replicate(s)	RPD/RSD
ARI ID: SU53A Client ID: MW5042811					
pH	04/28/11	std units	6.30	6.31	0.01

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

LAB CONTROL RESULTS-CONVENTIONALS
SU53-Floyd Snider

ANALYTICAL RESOURCES INCORPORATED

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

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

Analyte	Date/Time	Units	LCS	Spike Added	Recovery
pH	04/28/11	std units	7.03	7.00	0.03
Total Suspended Solids	05/03/11 14:25	mg/L	49.6	50.0	99.2%

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

METHOD BLANK RESULTS-CONVENTIONALS
SU53-Floyd Snider

ANALYTICAL RESOURCES INCORPORATED

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

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

Analyte	Date/Time	Units	Blank
Total Suspended Solids	05/03/11 14:25	mg/L	< 1.0 U

SAMPLE RESULTS-CONVENTIONALS
SU73-Floyd Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 05/10/11

Project: Lora Lake Apts RI
Event: POS-LLA.4010
Date Sampled: 04/29/11
Date Received: 04/29/11

Client ID: MW-01-042911
ARI ID: 11-9762 SU73A

Analyte	Date Batch	Method	Units	RL	Sample
pH	04/29/11 042911#1	EPA 150.1	std units	0.01	6.92
Total Suspended Solids	05/04/11 050411#1	EPA 160.2	mg/L	1.1	7.0

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
SU73-Floyd Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 05/10/11

Project: Lora Lake Apts RI
Event: POS-LLA.4010
Date Sampled: 04/29/11
Date Received: 04/29/11

Client ID: MW-01-042911-D
ARI ID: 11-9763 SU73B

Analyte	Date Batch	Method	Units	RL	Sample
pH	04/29/11 042911#1	EPA 150.1	std units	0.01	6.94
Total Suspended Solids	05/04/11 050411#1	EPA 160.2	mg/L	1.1	6.9

RL Analytical reporting limit
U Undetected at reported detection limit

REPLICATE RESULTS-CONVENTIONALS
SU73-Floyd Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 05/10/11

Project: Lora Lake Apts RI
Event: POS-LLA.4010
Date Sampled: 04/29/11
Date Received: 04/29/11

Analyte	Method	Date	Units	Sample	Replicate(s)	RPD/RSD
ARI ID: SU73A Client ID: MW-01-042911						
pH	EPA 150.1	04/29/11	std units	6.92	6.94	0.02

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

LAB CONTROL RESULTS-CONVENTIONALS
SU73-Floyd Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 05/10/11

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

Analyte/Method	QC ID	Date	Units	LCS	Spike Added	Recovery
pH EPA 150.1	ICVL	04/29/11	std units	6.98	7.00	0.02
Total Suspended Solids EPA 160.2	ICVL	05/04/11	mg/L	48.4	50.0	96.8%

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

METHOD BLANK RESULTS-CONVENTIONALS
SU73-Floyd Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 05/10/11

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

Analyte	Method	Date	Units	Blank	ID
Total Suspended Solids	EPA 160.2	05/04/11	mg/L	< 1.0 U	

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
pH by Method EPA 150.1

Data Release Authorized:
Reported: 05/04/11
Date Received: 04/29/11
Page 1 of 1

QC Report No: SU74-Floyd Snider
Project: Lora Lake Parcel
POS-LL.4010

Client/ ARI ID	Date Sampled	Matrix	Analysis Date & Batch	RL	Result
B312-042911 SU74A 11-9772	04/29/11	Water	04/29/11 17:12 042911#1	0.01	5.91
B310-042911 SU74B 11-9773	04/29/11	Water	04/29/11 17:12 042911#1	0.01	6.02
B311-042911 SU74C 11-9774	04/29/11	Water	04/29/11 17:12 042911#1	0.01	5.87

Reported in std units

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

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
Total Suspended Solids by Method EPA 160.2

Data Release Authorized:
Reported: 05/04/11
Date Received: 04/29/11
Page 1 of 1

QC Report No: SU74-Floyd Snider
Project: Lora Lake Parcel
POS-LL.4010

Client/ ARI ID	Date Sampled	Matrix	Analysis Date & Batch	RL	Result
B312-042911 SU74A 11-9772	04/29/11	Water	05/03/11 14:25 050311#1	1.1	3.5
B310-042911 SU74B 11-9773	04/29/11	Water	05/03/11 14:25 050311#1	1.1	2.4
B311-042911 SU74C 11-9774	04/29/11	Water	05/03/11 14:25 050311#1	1.1	3.7

Reported in mg/L

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

REPLICATE RESULTS-CONVENTIONALS
SU74-Floyd Snider

ANALYTICAL RESOURCES INCORPORATED

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

Project: Lora Lake Parcel
Event: POS-LL.4010
Date Sampled: 04/29/11
Date Received: 04/29/11

Analyte	Date	Units	Sample	Replicate(s)	RPD/RSD
ARI ID: SU74A Client ID: B312-042911					
pH	04/29/11	std units	5.91	5.91	0.00

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

LAB CONTROL RESULTS-CONVENTIONALS
SU74-Floyd Snider

ANALYTICAL RESOURCES INCORPORATED

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

Project: Lora Lake Parcel
Event: POS-LL.4010
Date Sampled: NA
Date Received: NA

Analyte	Date/Time	Units	LCS	Spike Added	Recovery
pH	04/29/11	std units	6.98	7.00	0.02
Total Suspended Solids	05/03/11 14:25	mg/L	49.6	50.0	99.2%

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

METHOD BLANK RESULTS-CONVENTIONALS
SU74-Floyd Snider

ANALYTICAL RESOURCES INCORPORATED

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

Project: Lora Lake Parcel
Event: POS-LL.4010
Date Sampled: NA
Date Received: NA

Analyte	Date/Time	Units	Blank
Total Suspended Solids	05/03/11 14:25	mg/L	< 1.0 U

SIM Volatile Raw Data
Initial Calibration Notes and Raw Data

ARI Job ID: SU53, SU73, SU74

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

SU53 : 00280

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: RTX VMS

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

Calibration File: 042601Y Curve Date: 4/28/11

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	367755|	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

Date : 26-APR-2011 06:07

Client ID: BFB0426

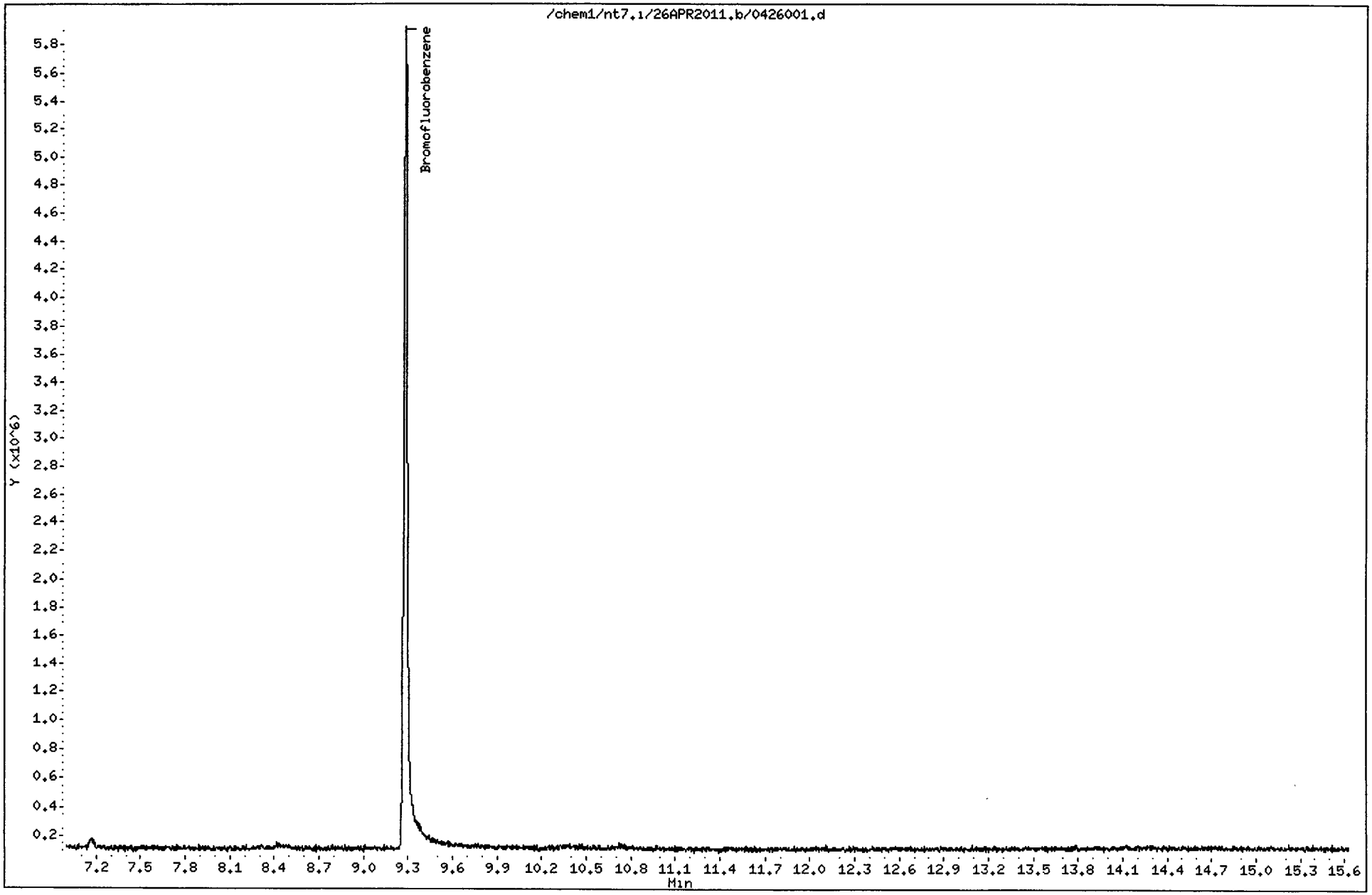
Instrument: nt7.i

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

Operator: MH

Column phase: RTXVMS

Column diameter: 0.18



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

Date : 26-APR-2011 06:07

Client ID: BFB0426

Instrument: nt7.i

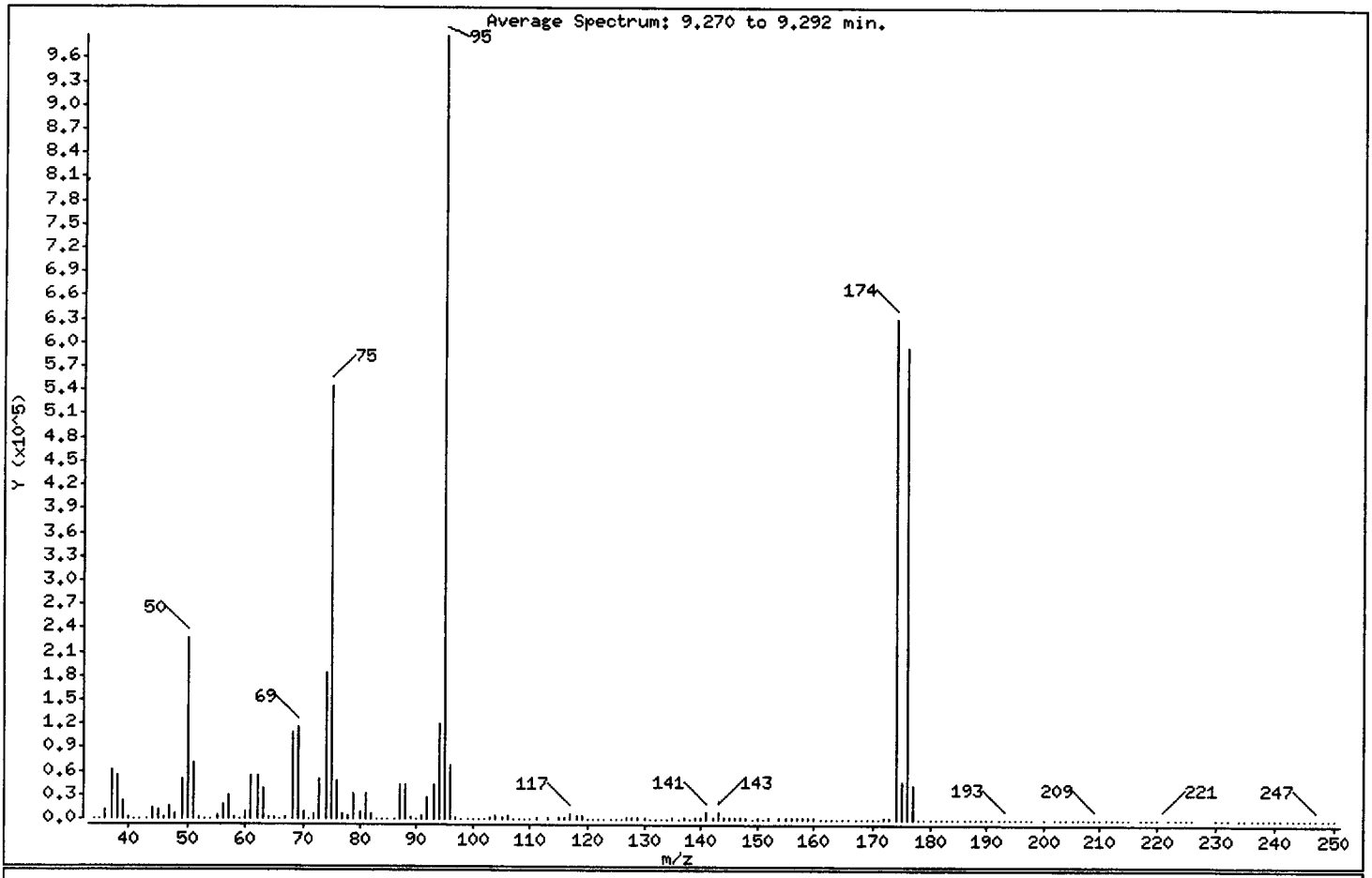
Sample Info: BFB0426,BFB0426,1,26APR2011,,

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: nt7.1

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
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.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
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)	AMOUNTS 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

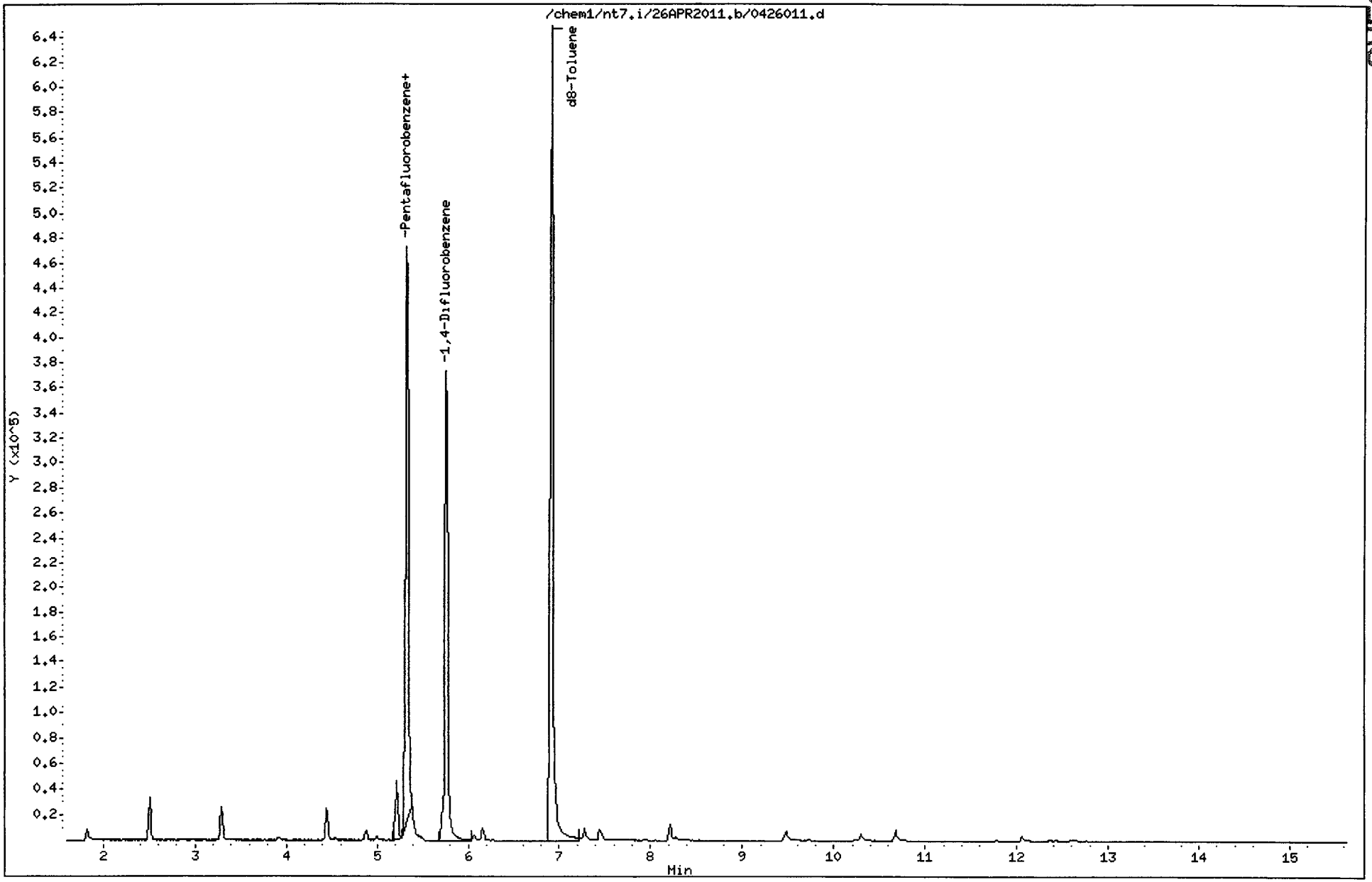
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.33	4.83	5.83	5.33	-0.01
7 1,4-Difluorobenze	5.75	5.25	6.25	5.77	0.20

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,

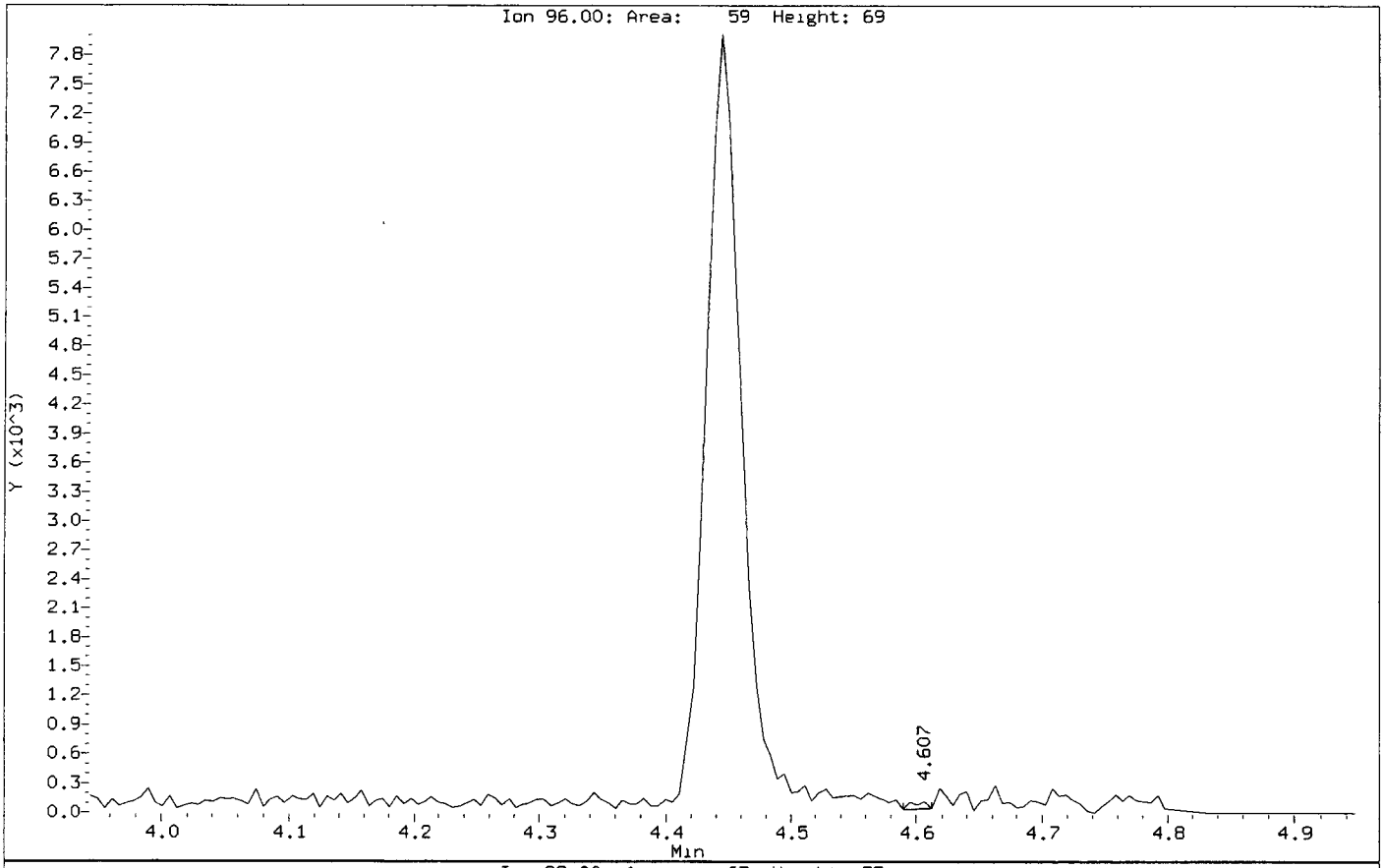
Instrument: nt7.i
Operator: MH
Column diameter: 0.18

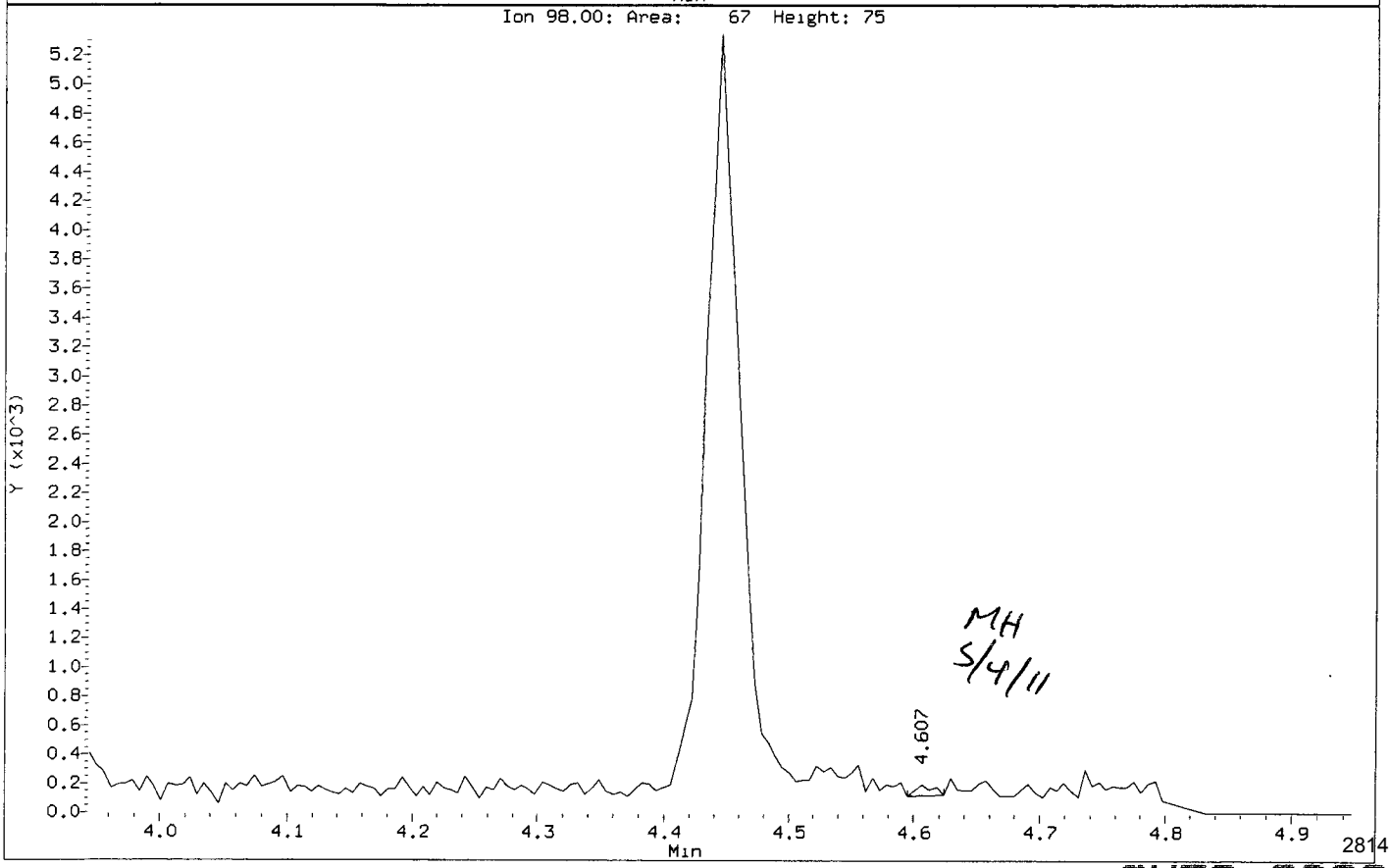
Column phase: RTXVMS



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:



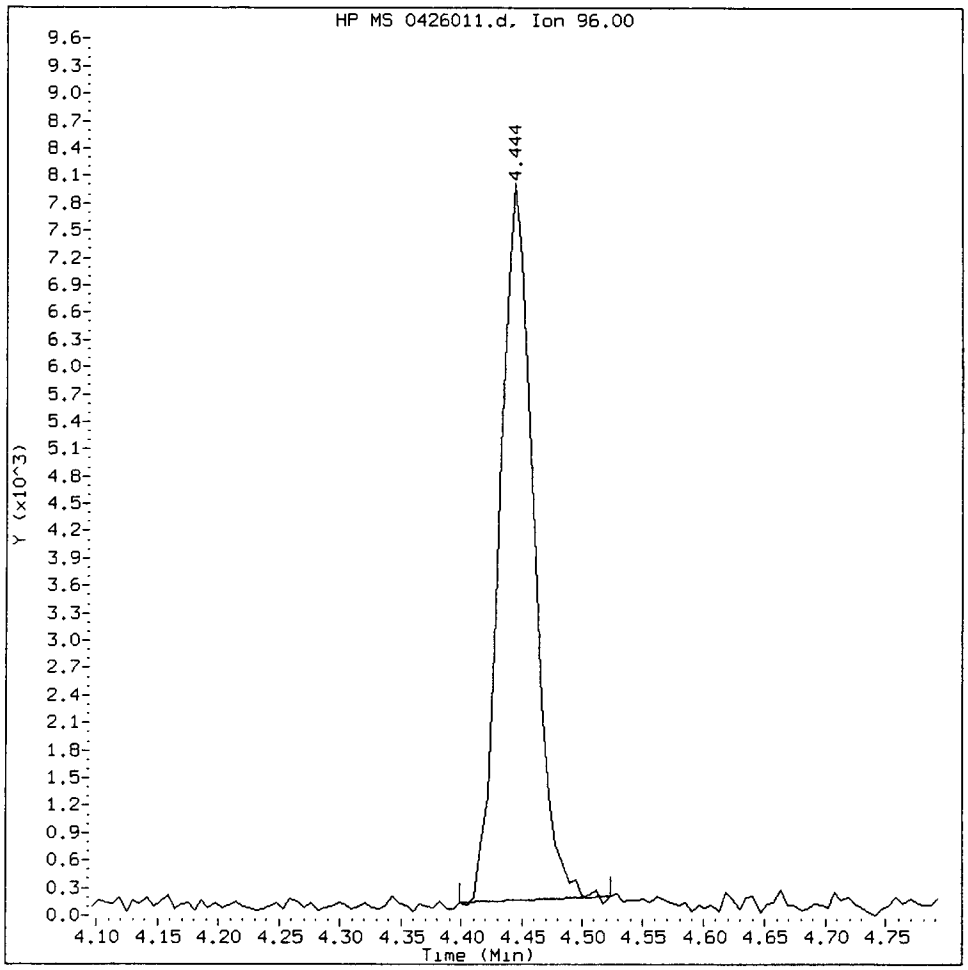


MH
5/4/11

SU53:00293

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

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



MANUAL INTEGRATION for cis-1,2-dichloroethene

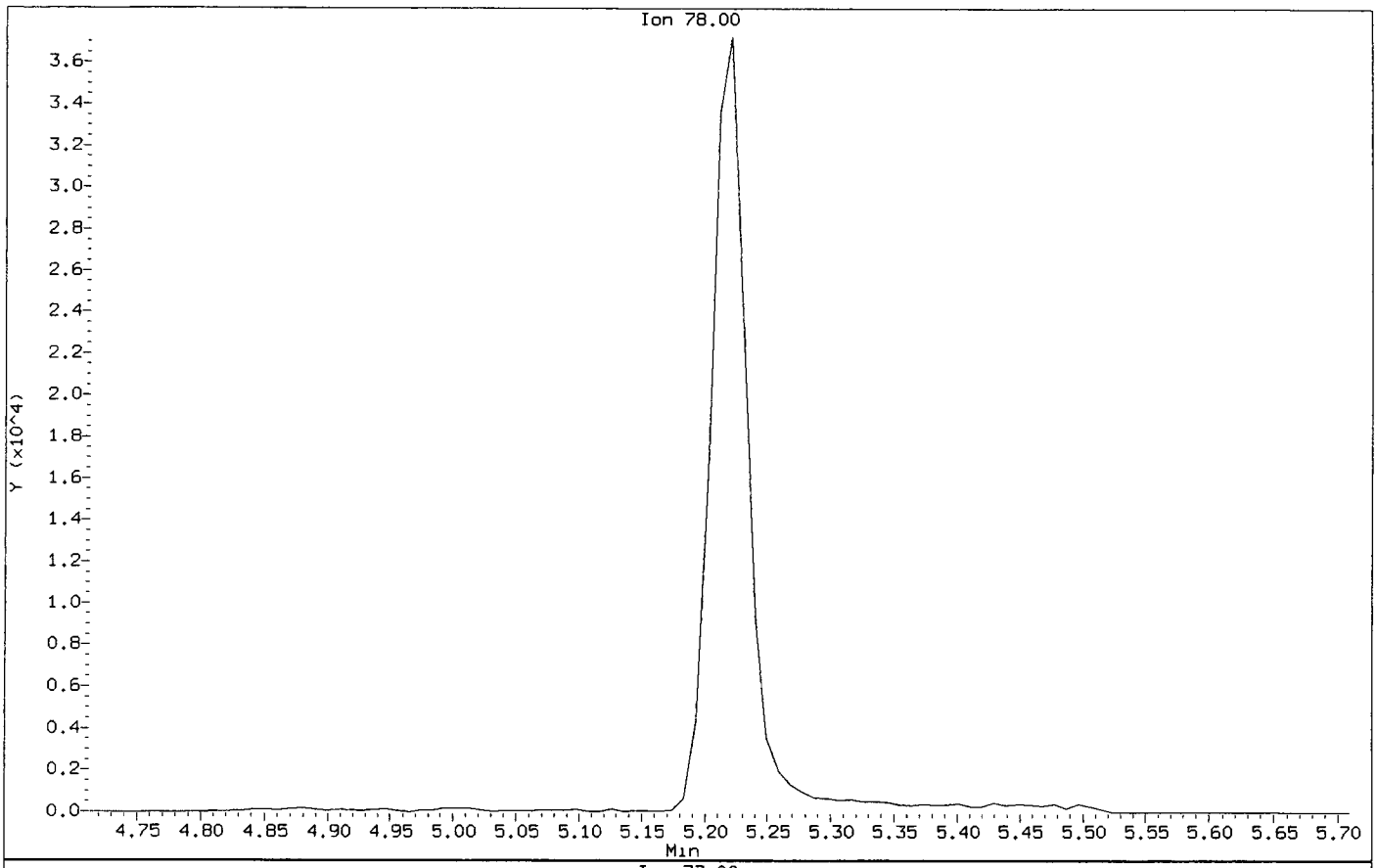
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

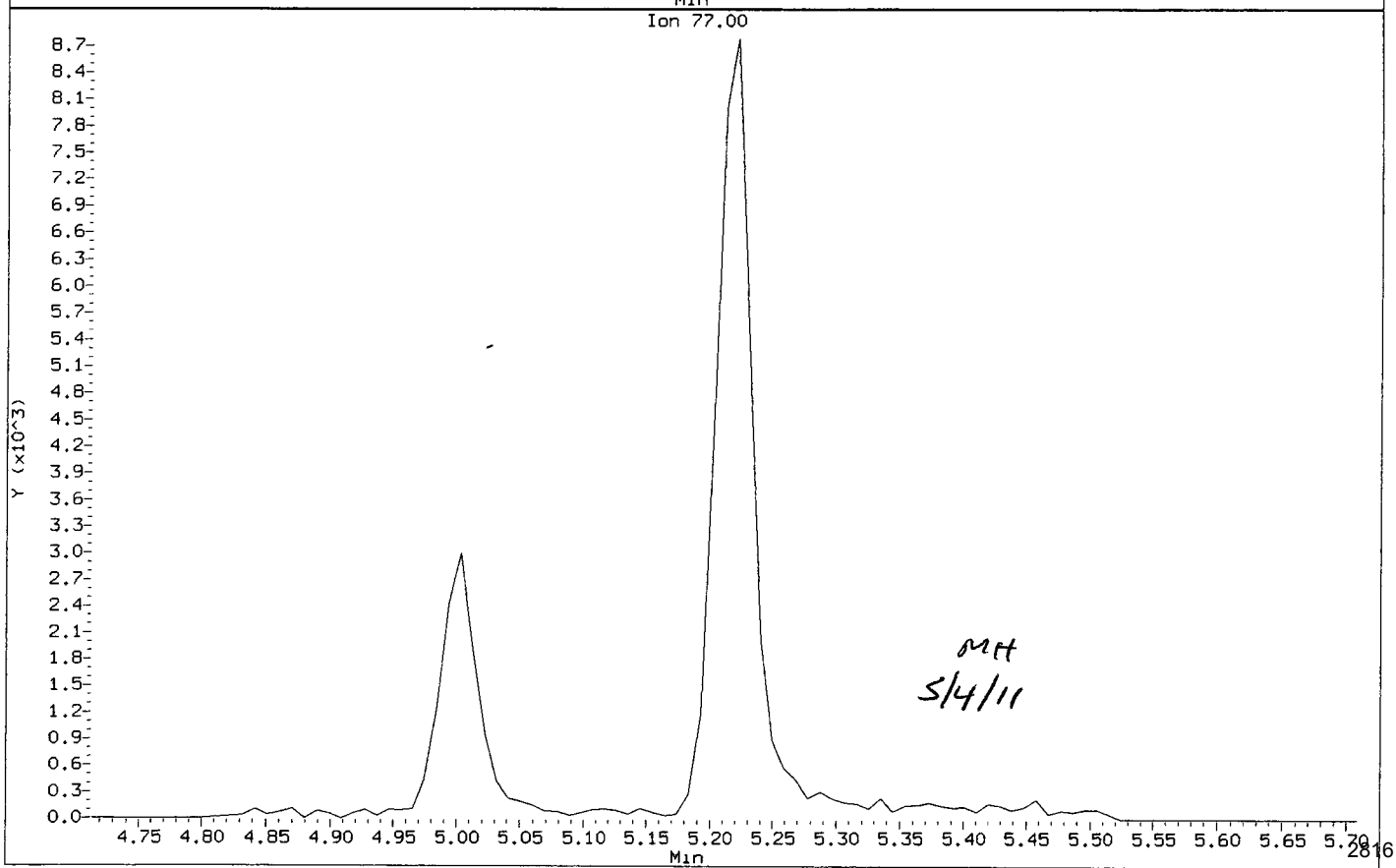
5. Other _____

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:



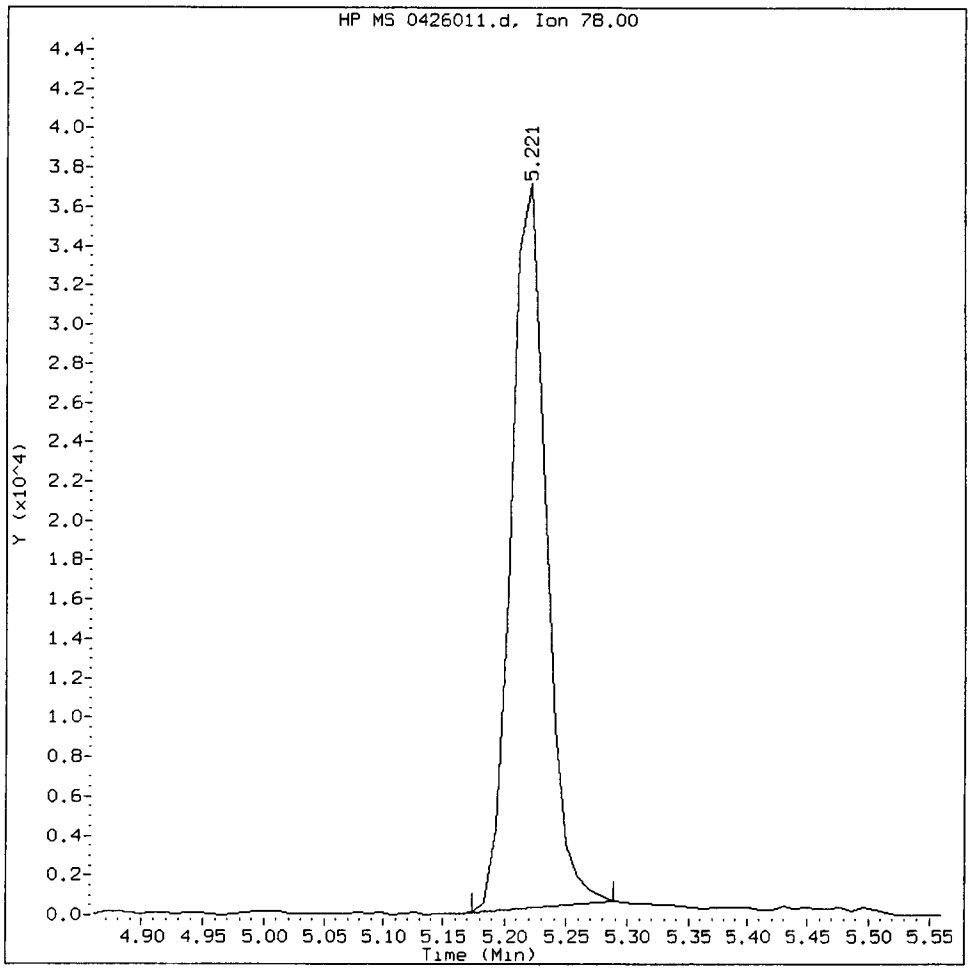


MH
5/4/11

SU53 : 00295

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

Benzene Amount: 51.50 Area: 73464



MANUAL INTEGRATION for Benzene

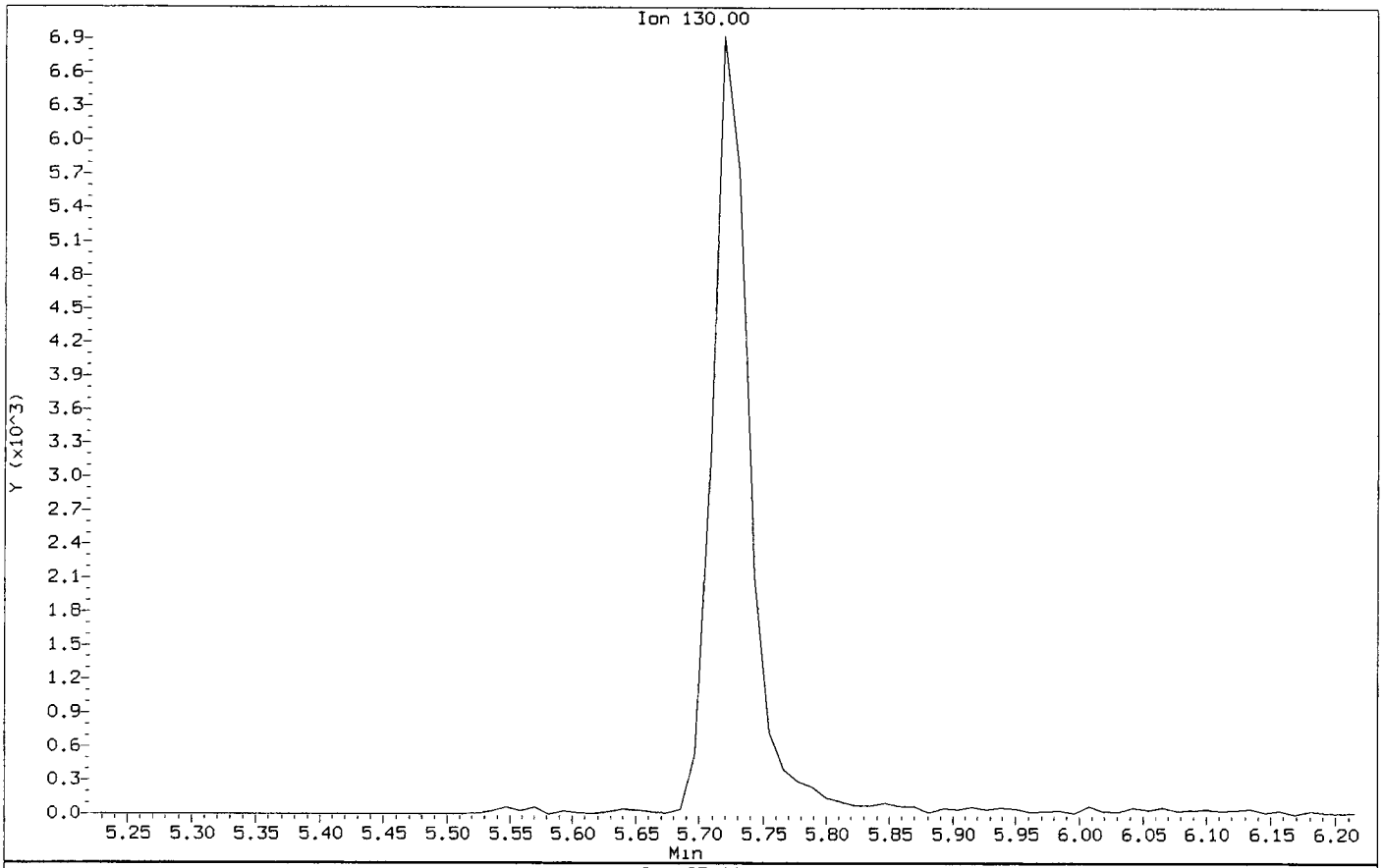
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

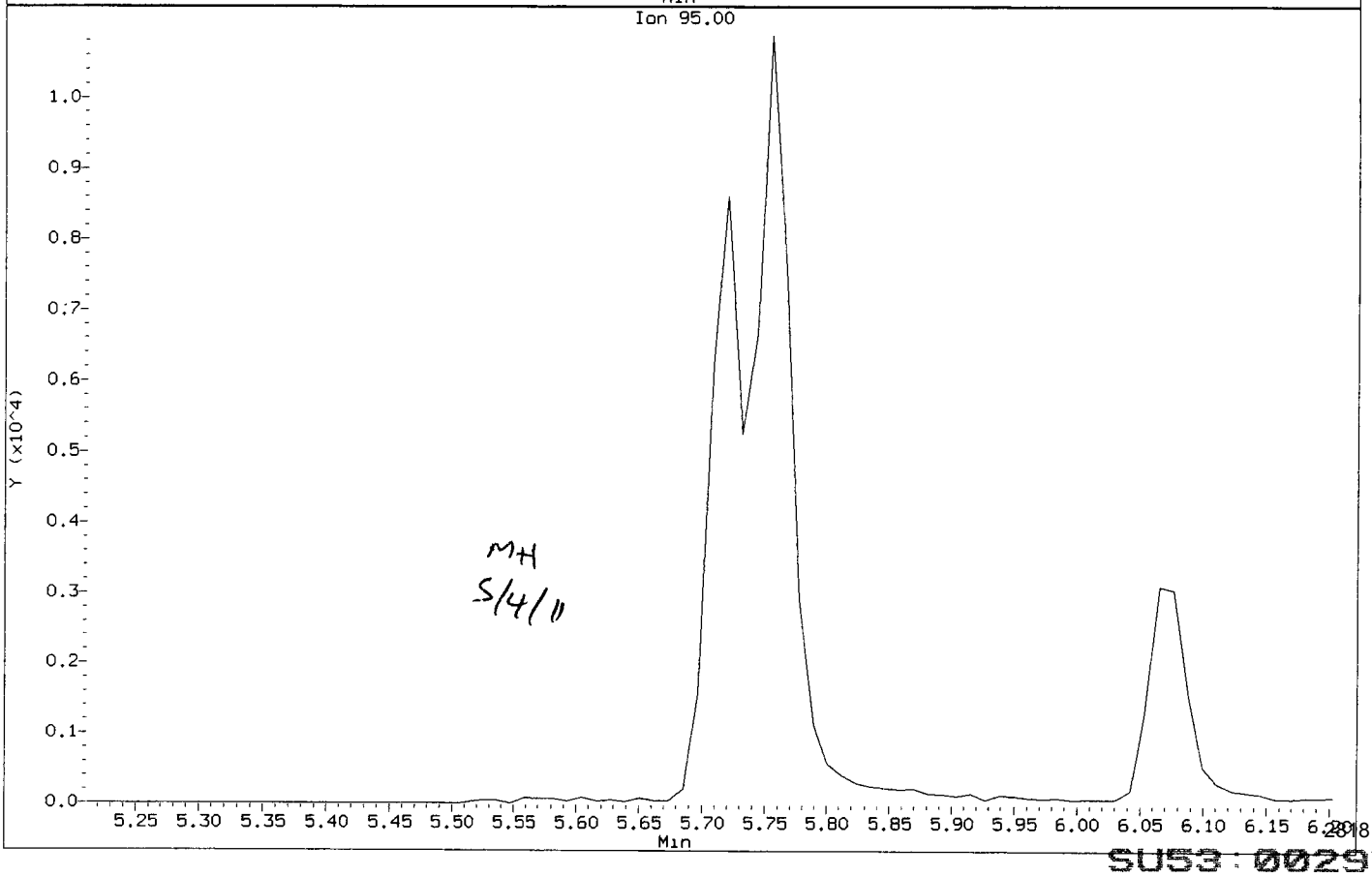
5. Other _____

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:

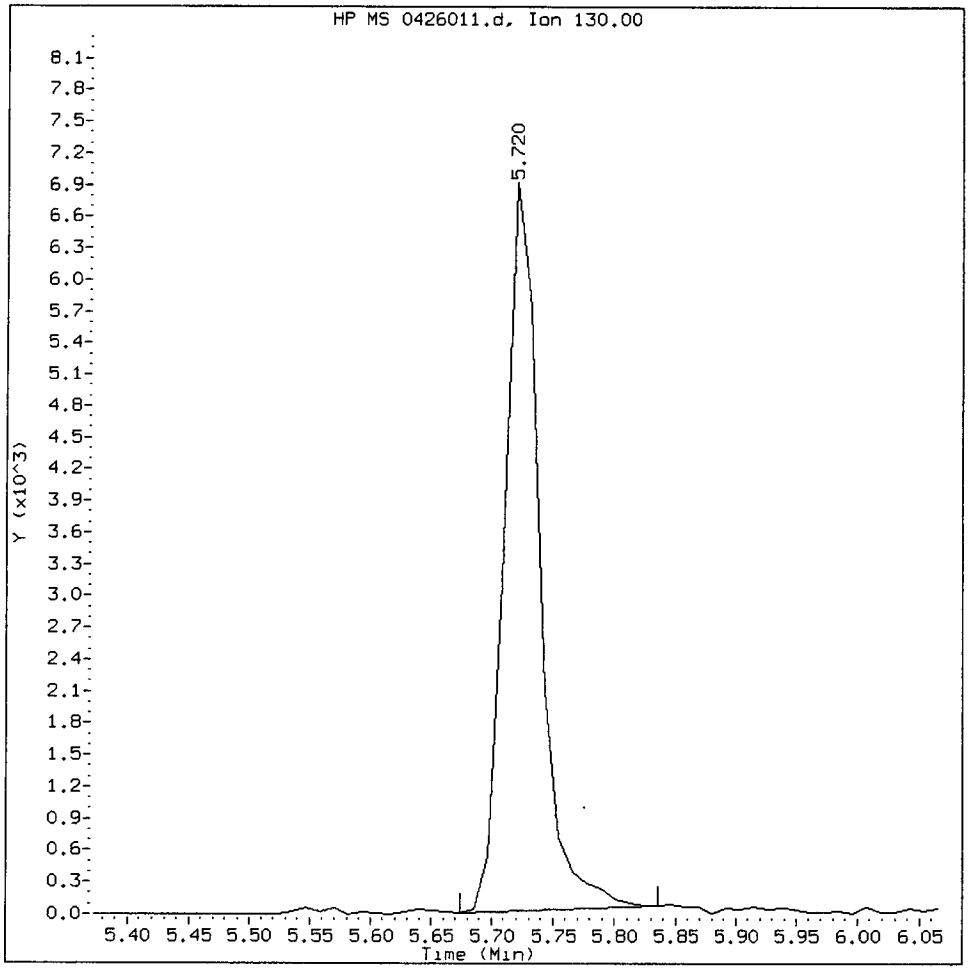




MH
5/4/11

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

Trichloroethene Amount: 53.40 Area: 13046



MANUAL INTEGRATION for Trichloroethene

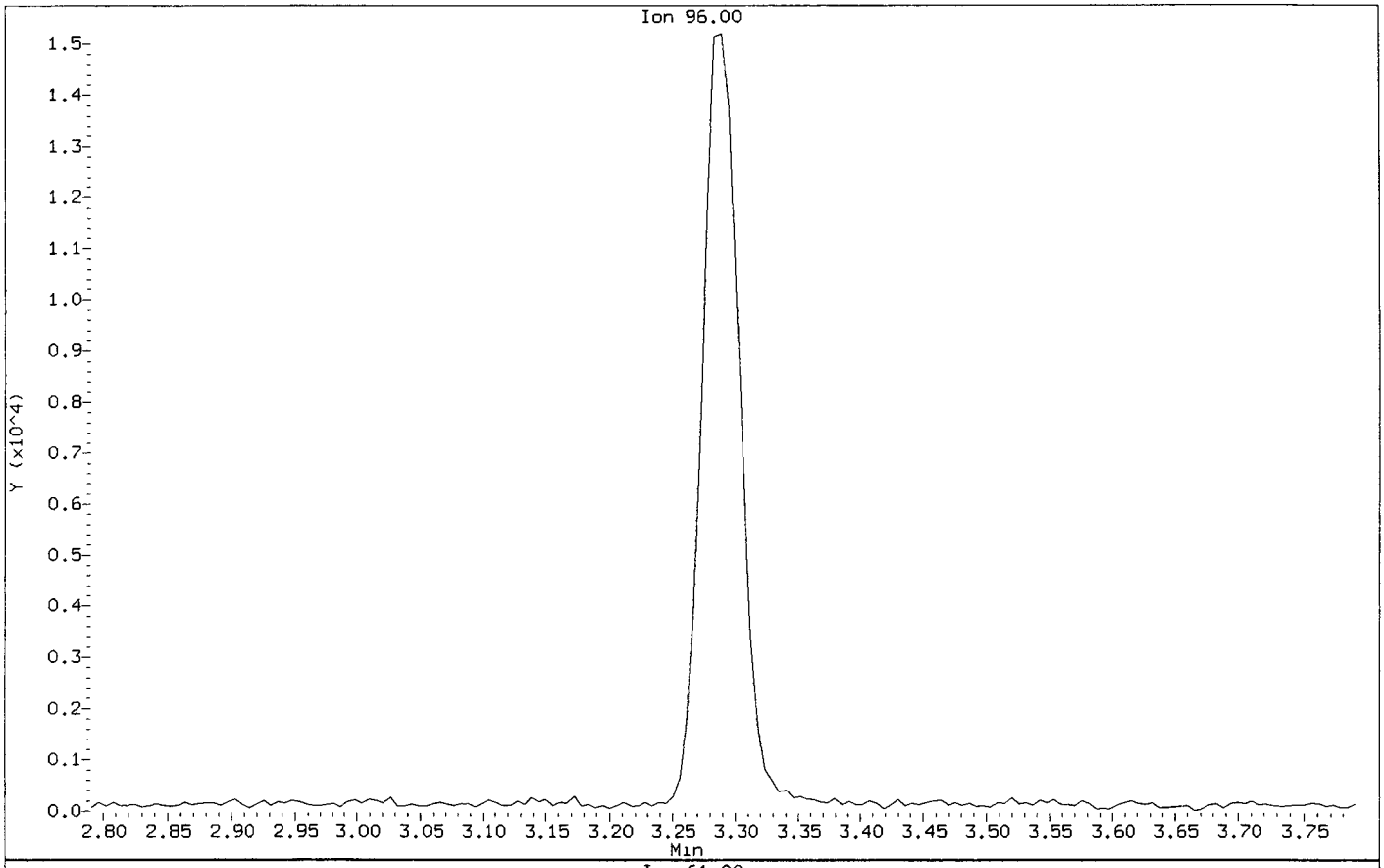
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

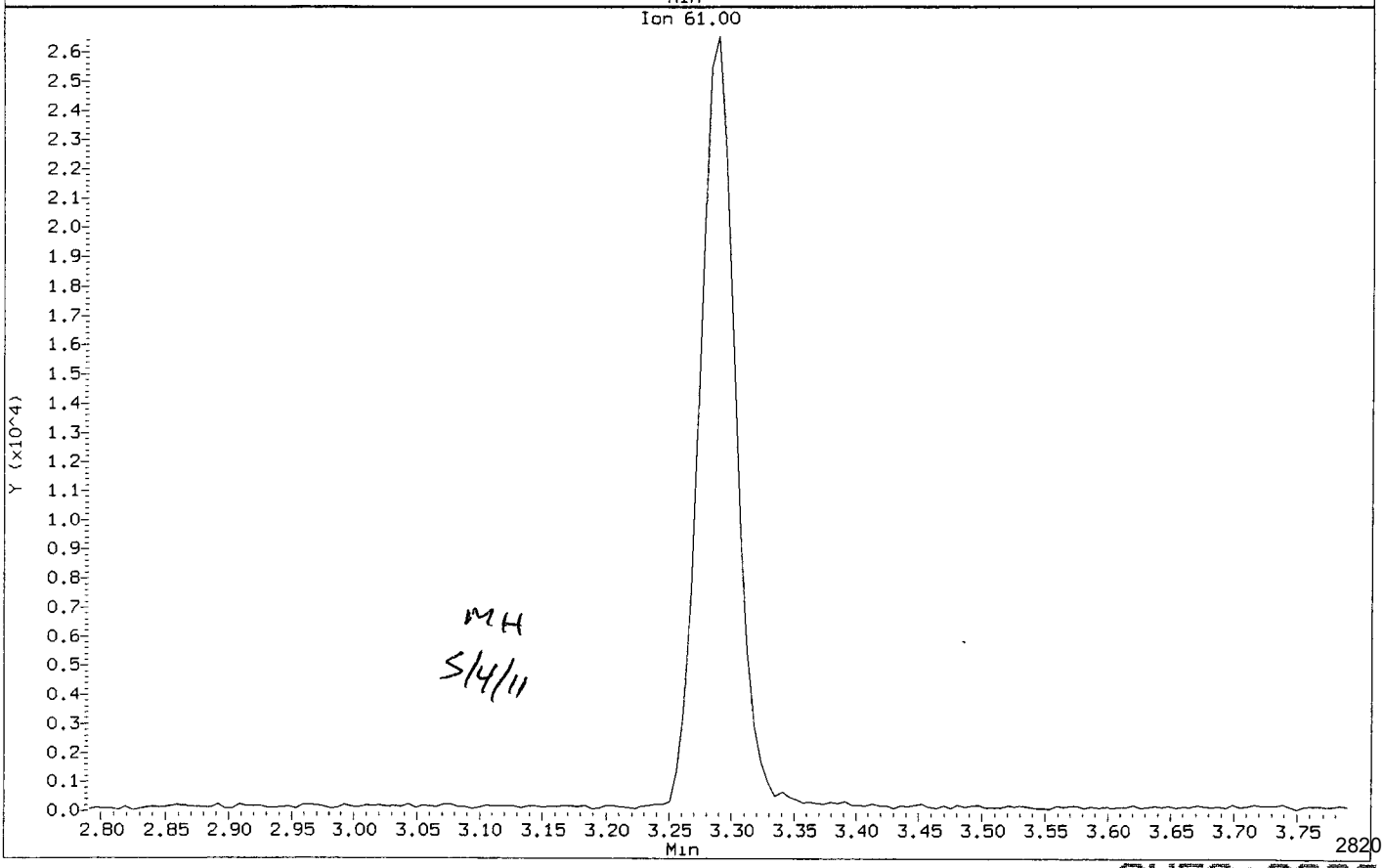
5. Other _____

Analyst: MH Date: 5/4/11

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

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



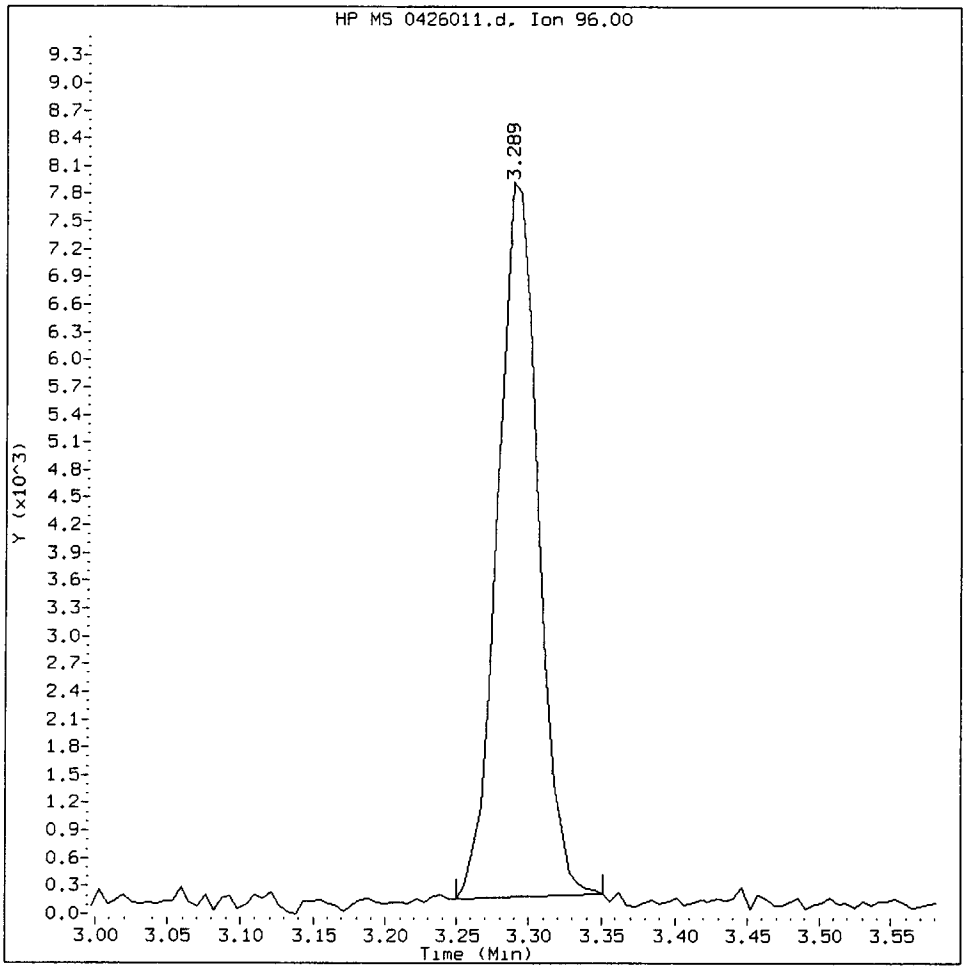


MH
5/4/11

SU53 : 00299

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

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



MANUAL INTEGRATION for Trans-1,2-Dichloroethene

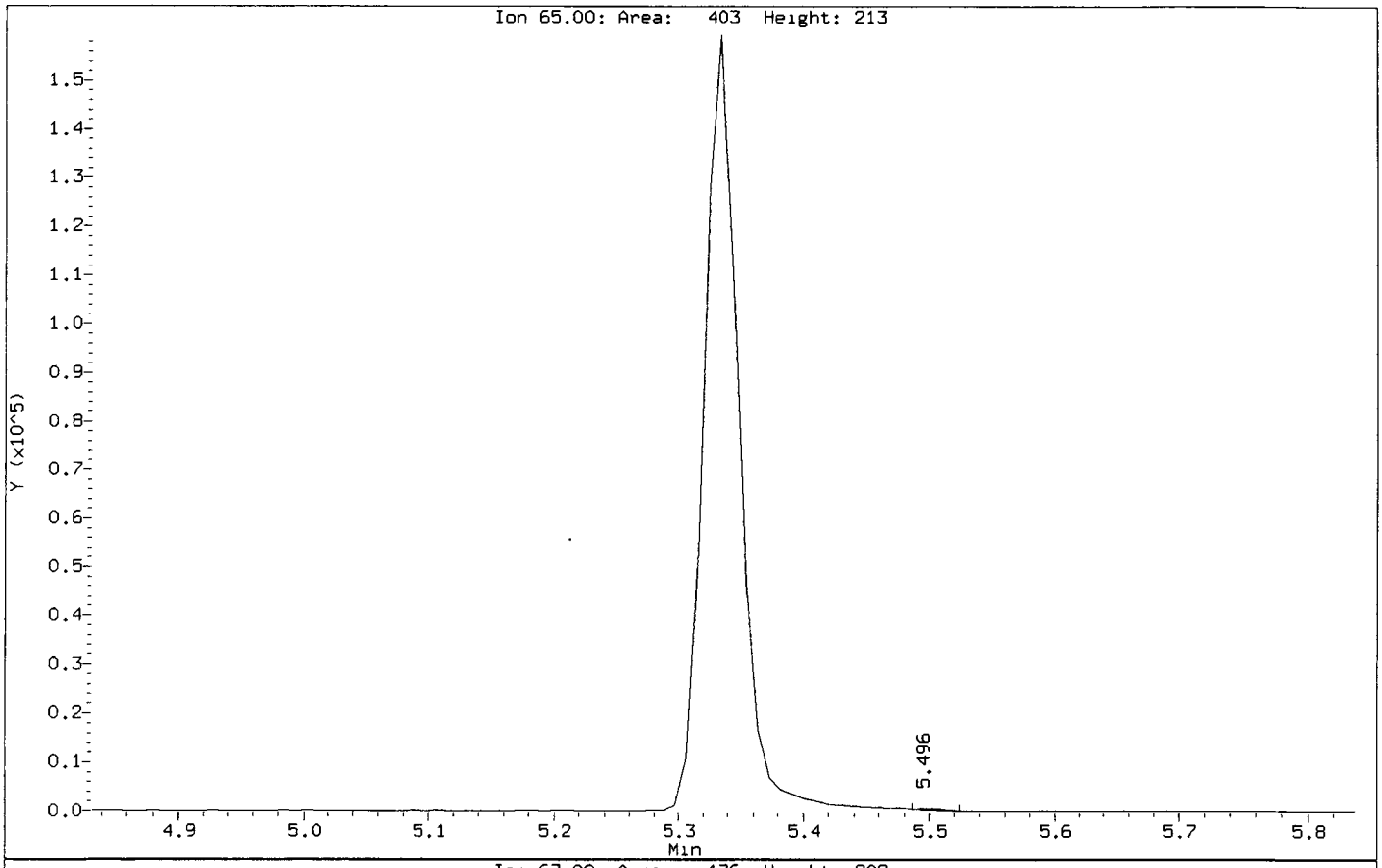
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

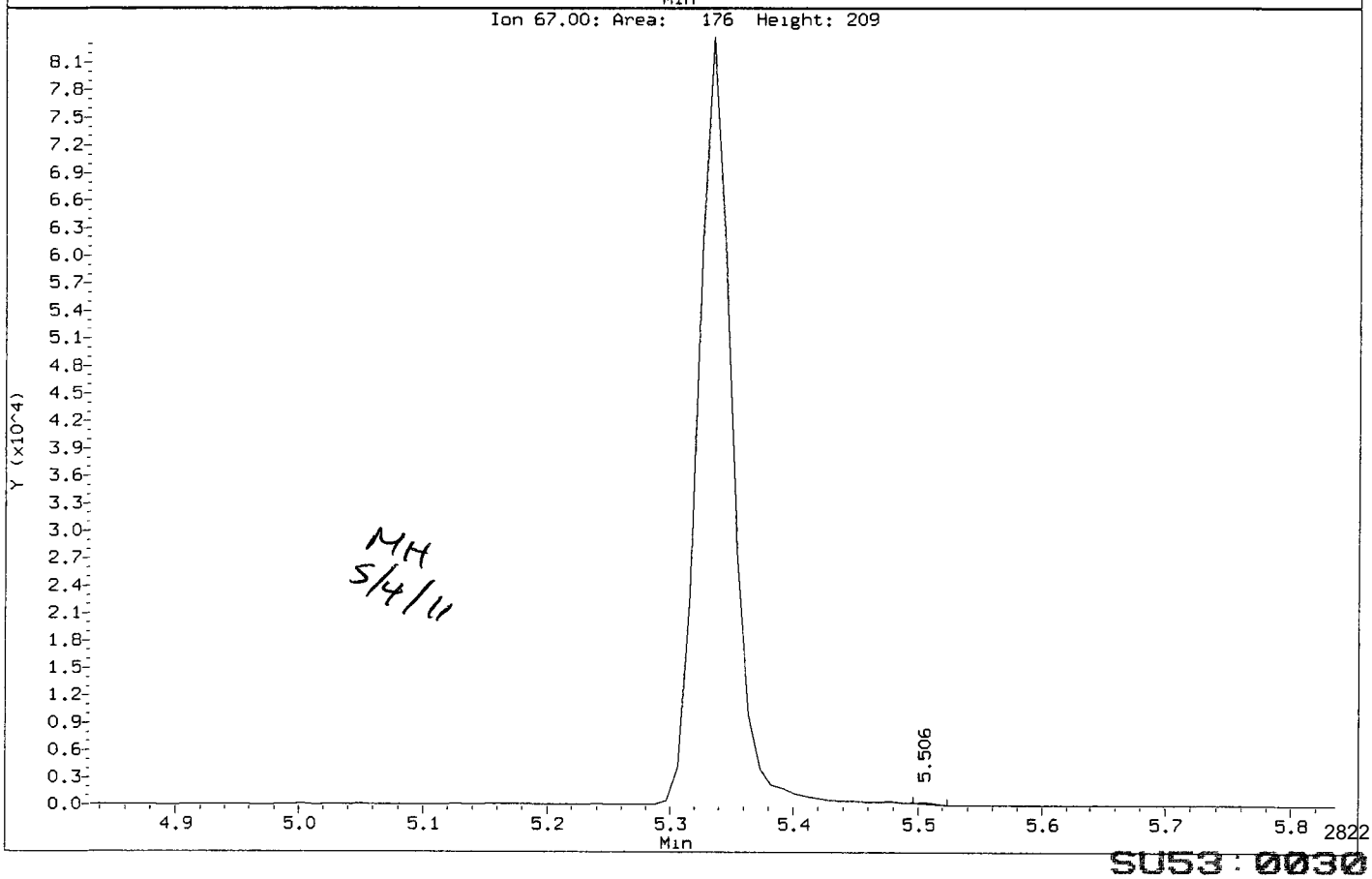
5. Other _____

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:



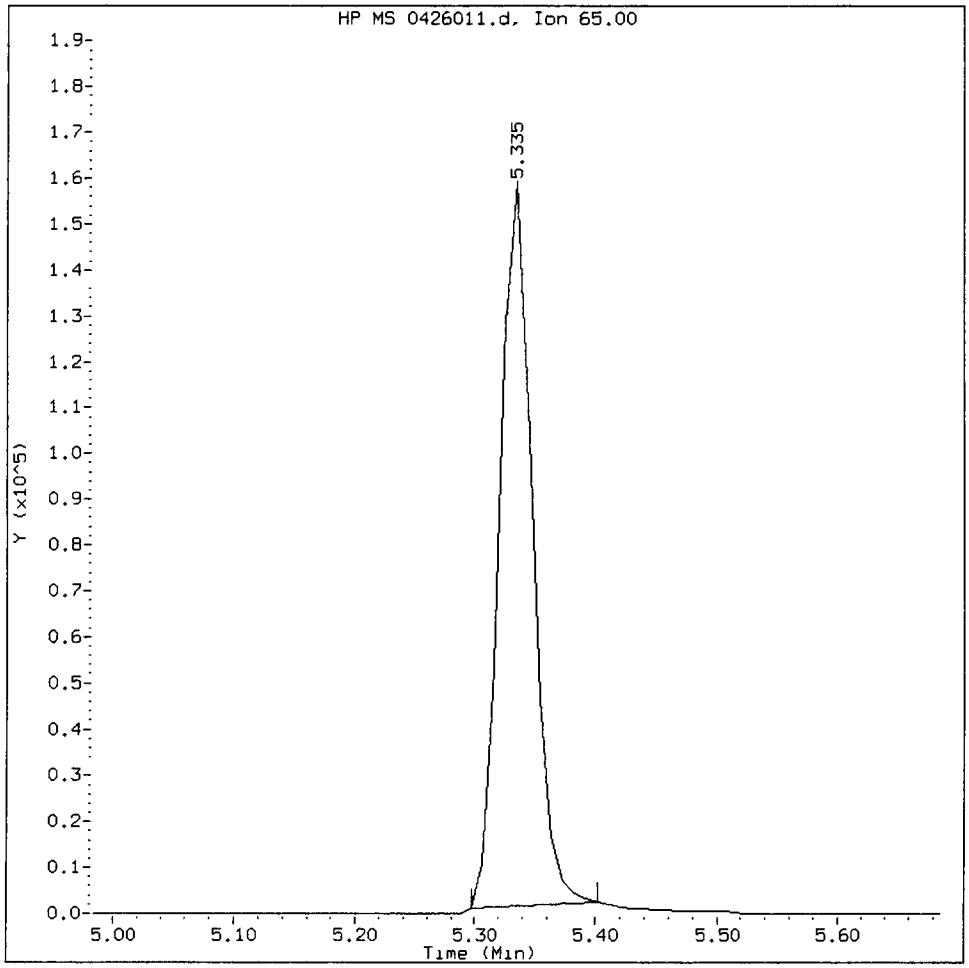


MH
5/4/11

SU53:00301

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

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)	AMOUNTS 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

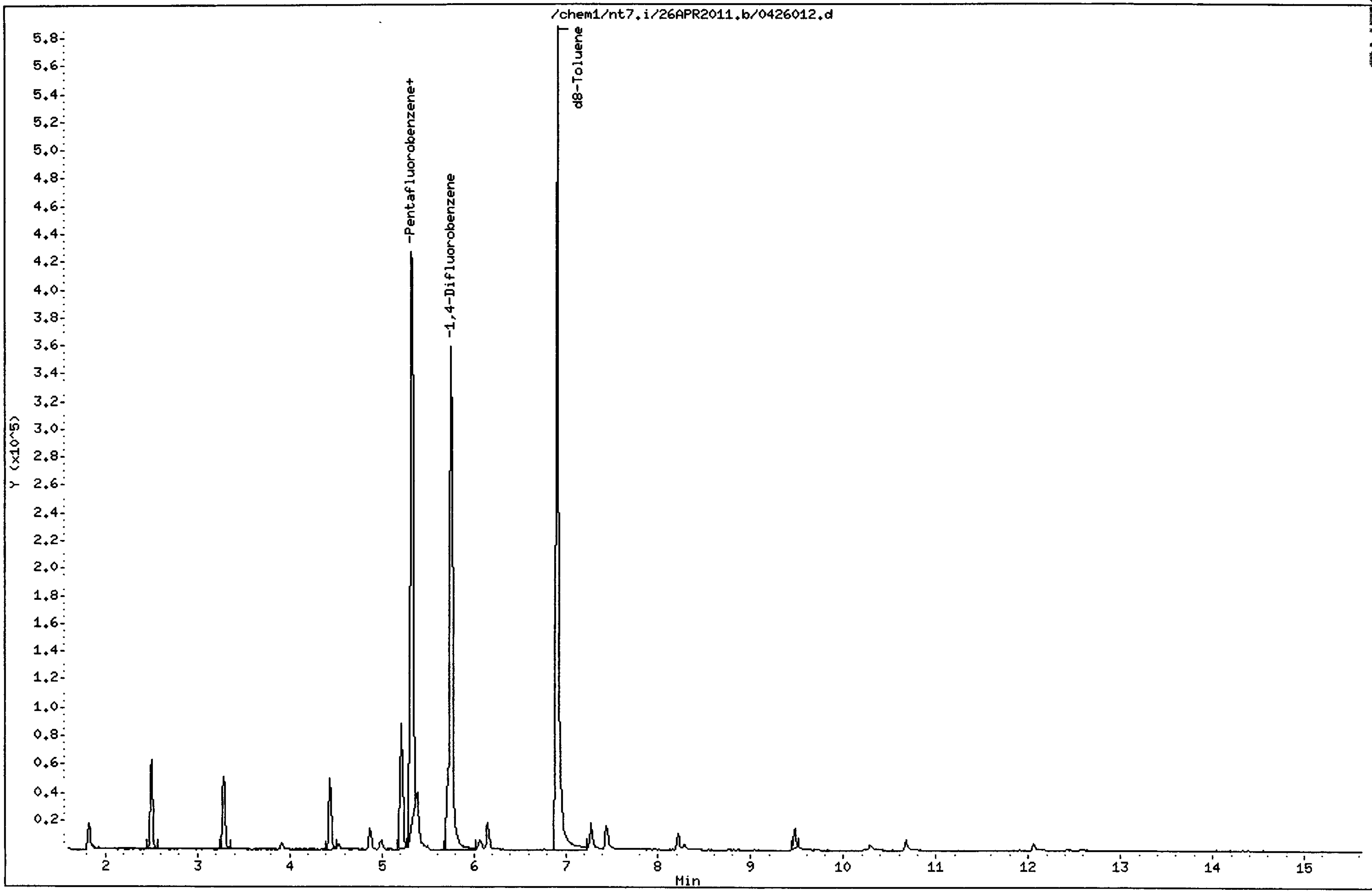
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

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

Column phase: RTXVMS

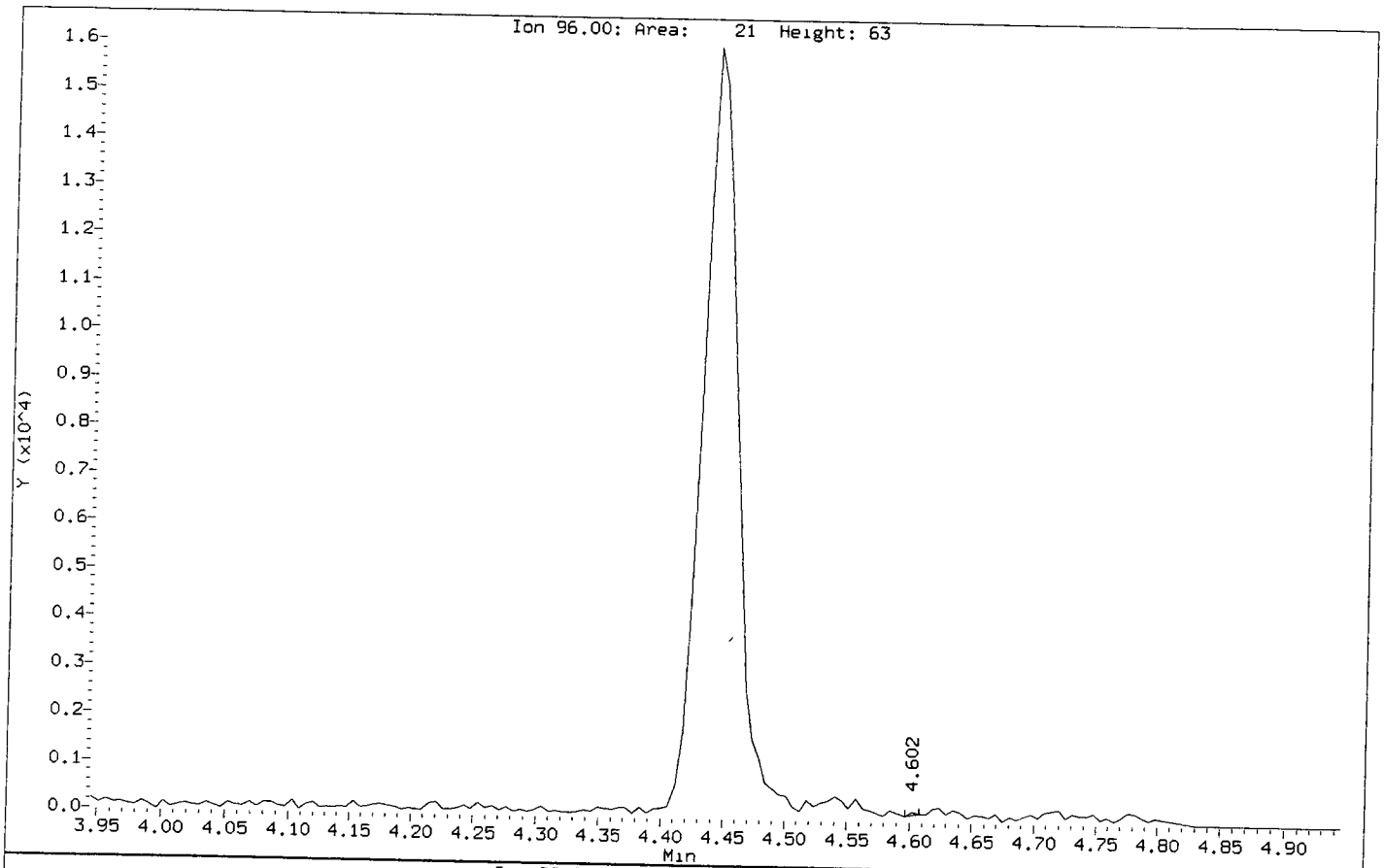
Instrument: nt7.i

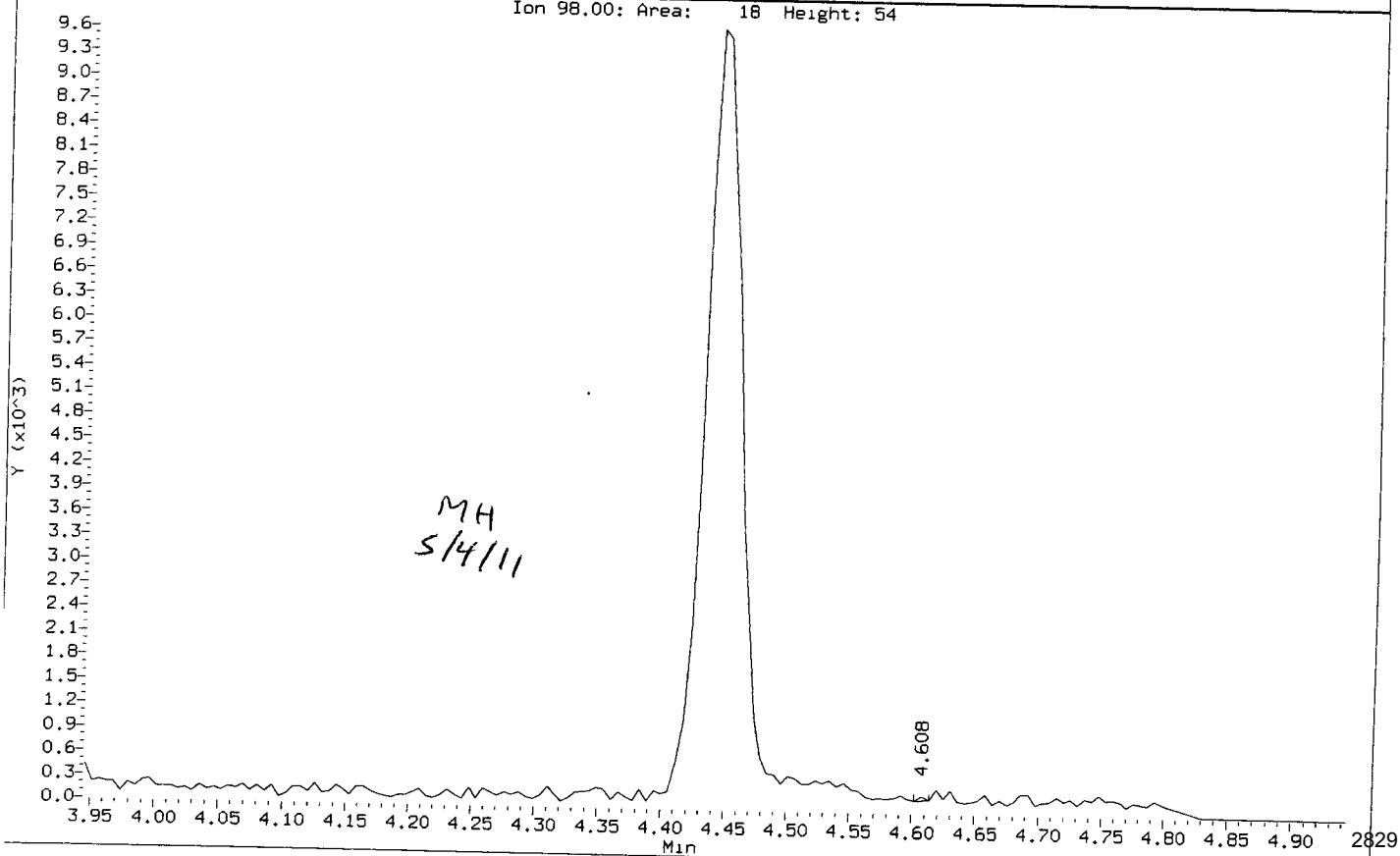
Operator: MH
Column diameter: 0.18



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:

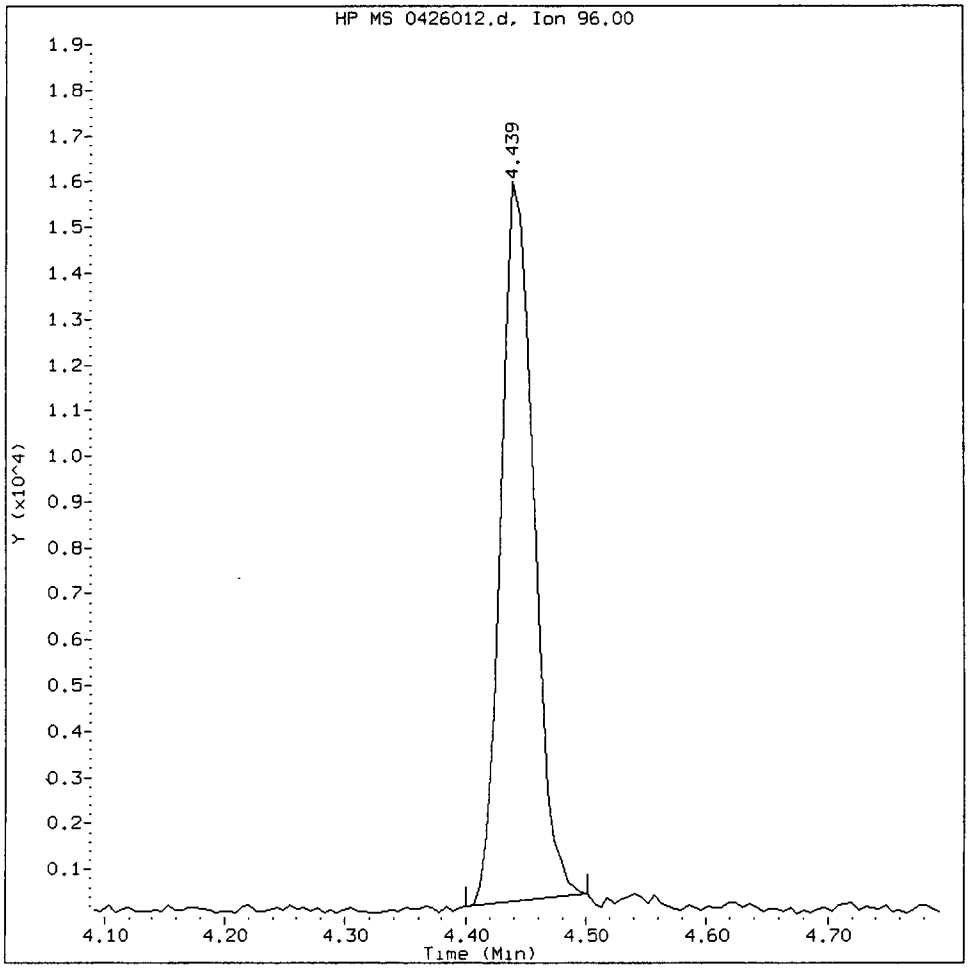




MH
5/4/11

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

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



MANUAL INTEGRATION for cis-1,2-dichloroethene

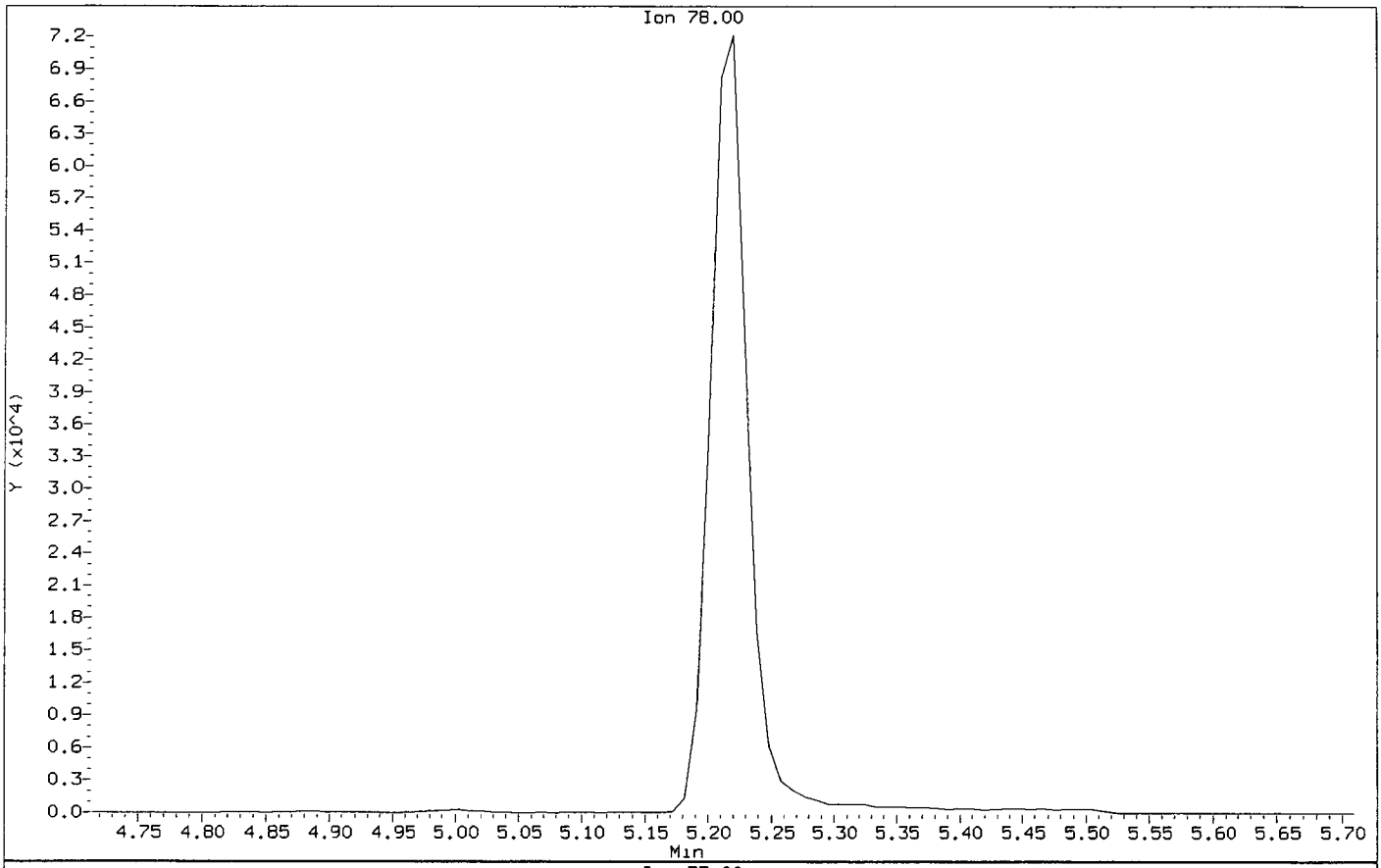
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

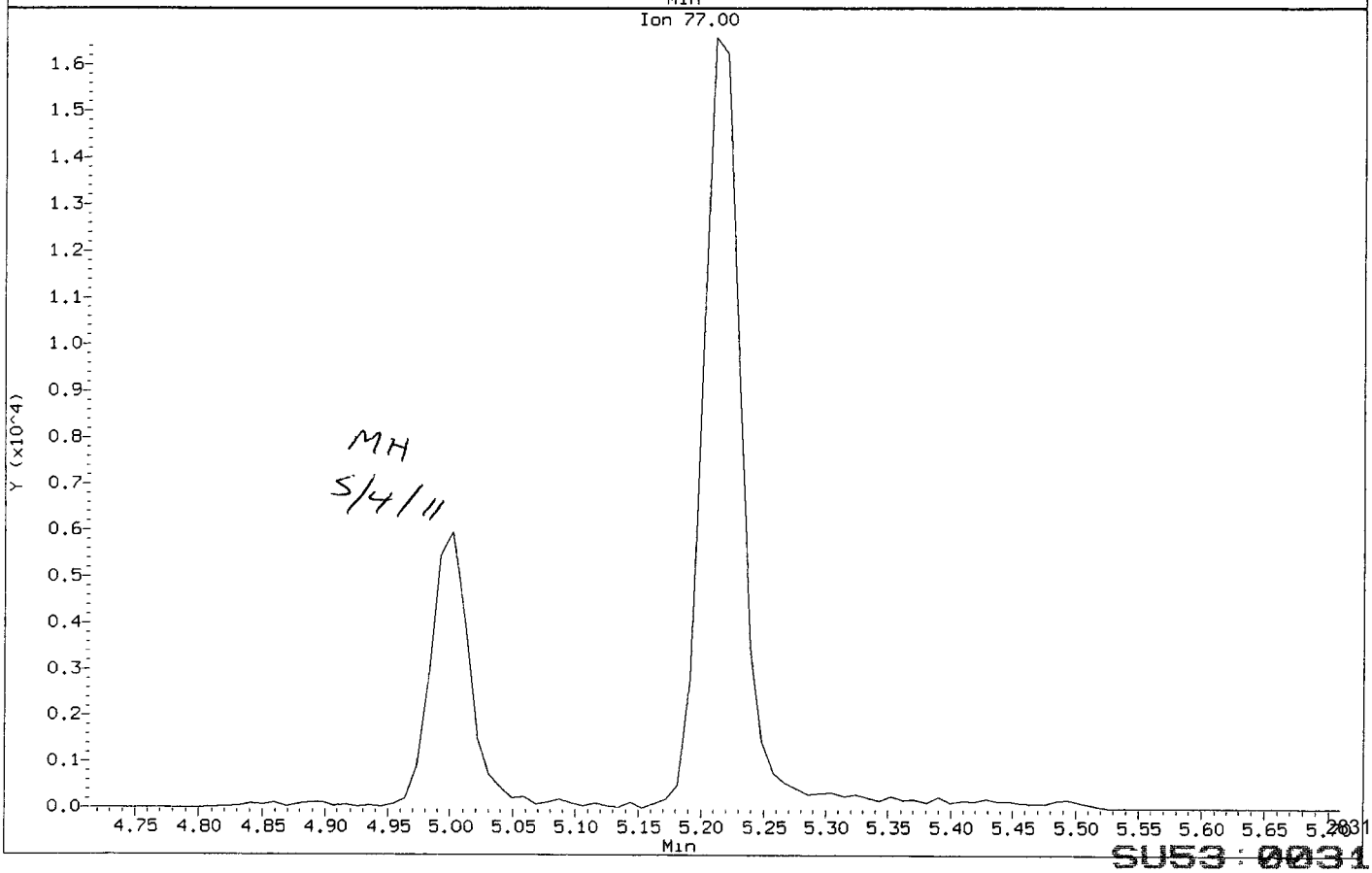
5. Other _____

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:

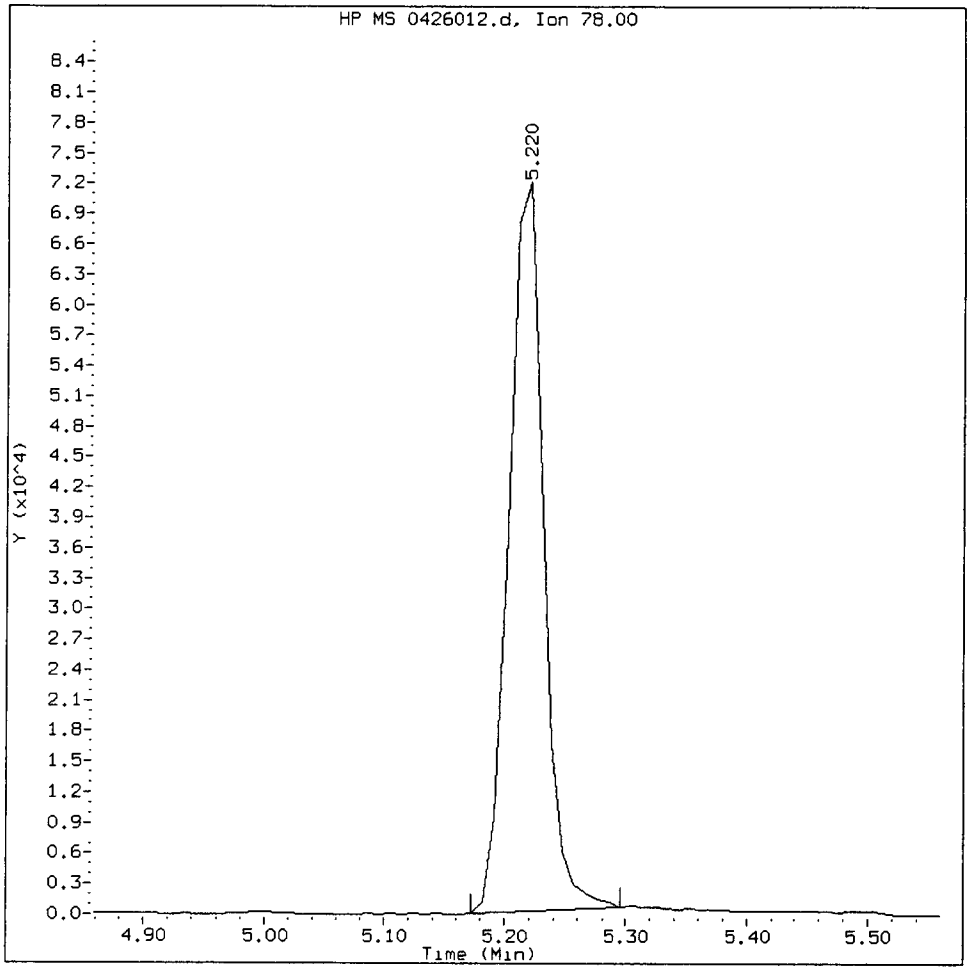




SU53:00310

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

Benzene Amount: 110.36 Area: 144563



MANUAL INTEGRATION for Benzene

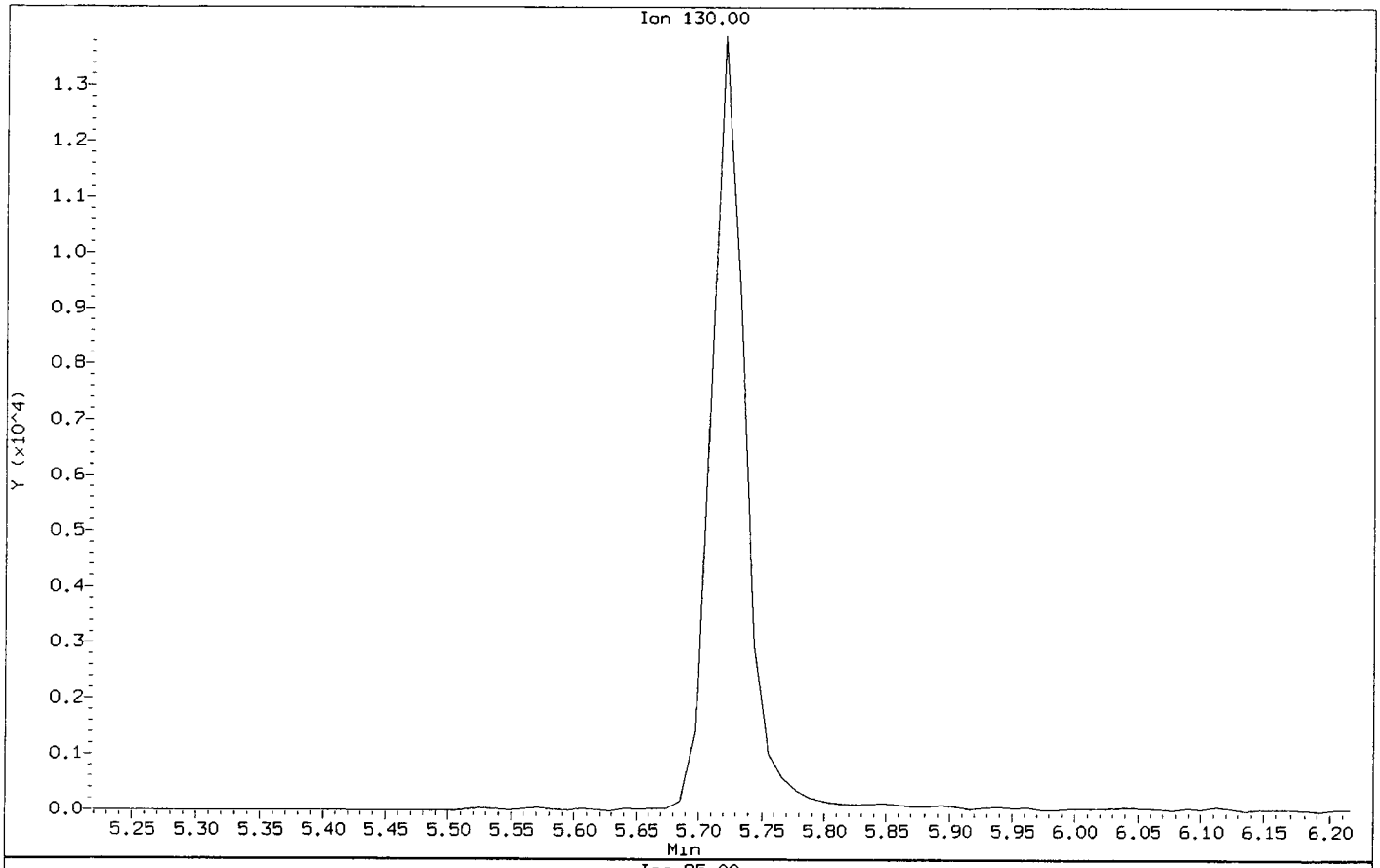
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

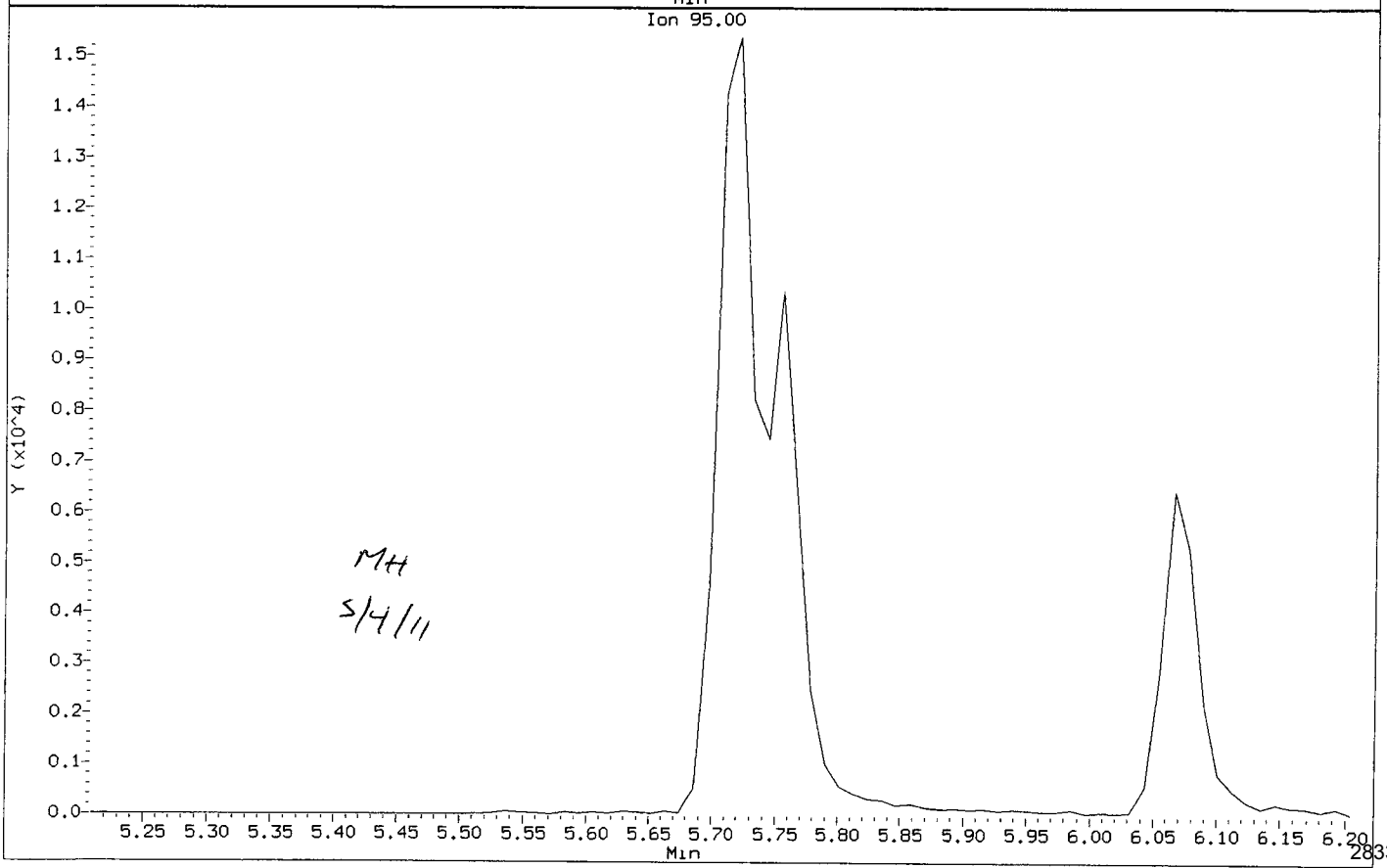
5. Other _____

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:

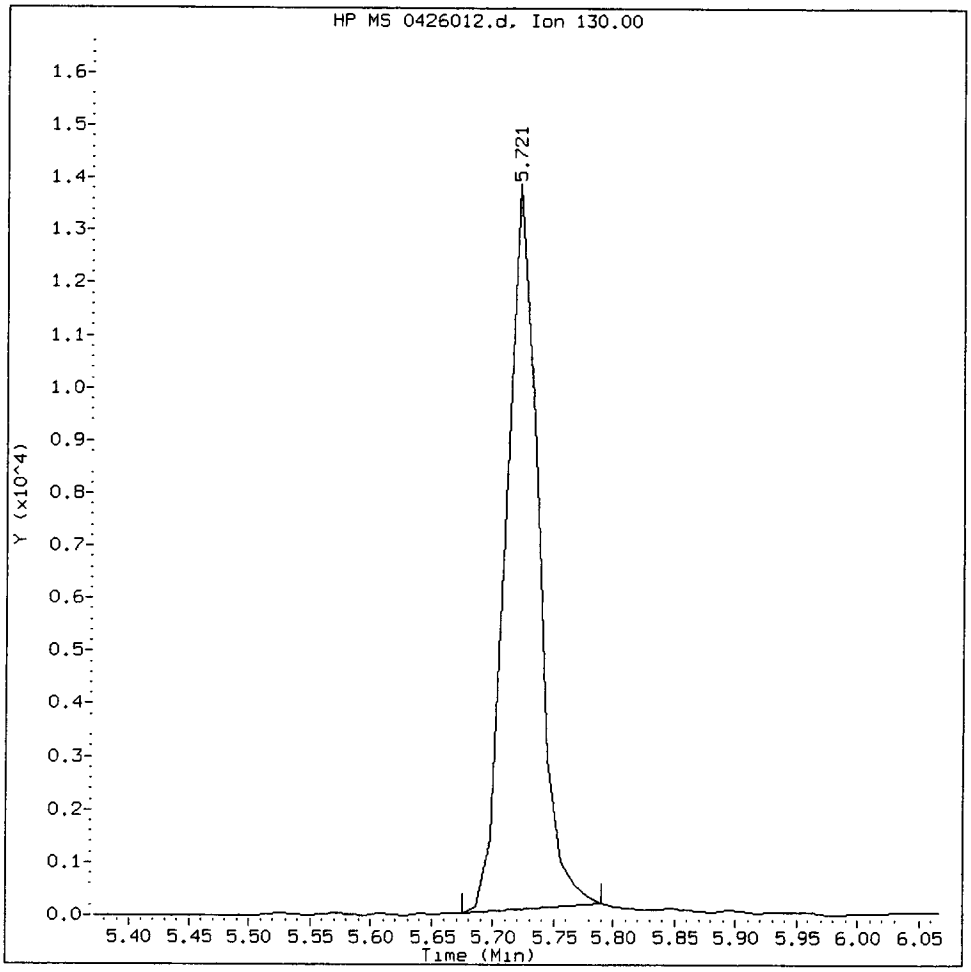




MH
5/4/11

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

Trichloroethene Amount: 106.61 Area: 23915



MANUAL INTEGRATION for Trichloroethene

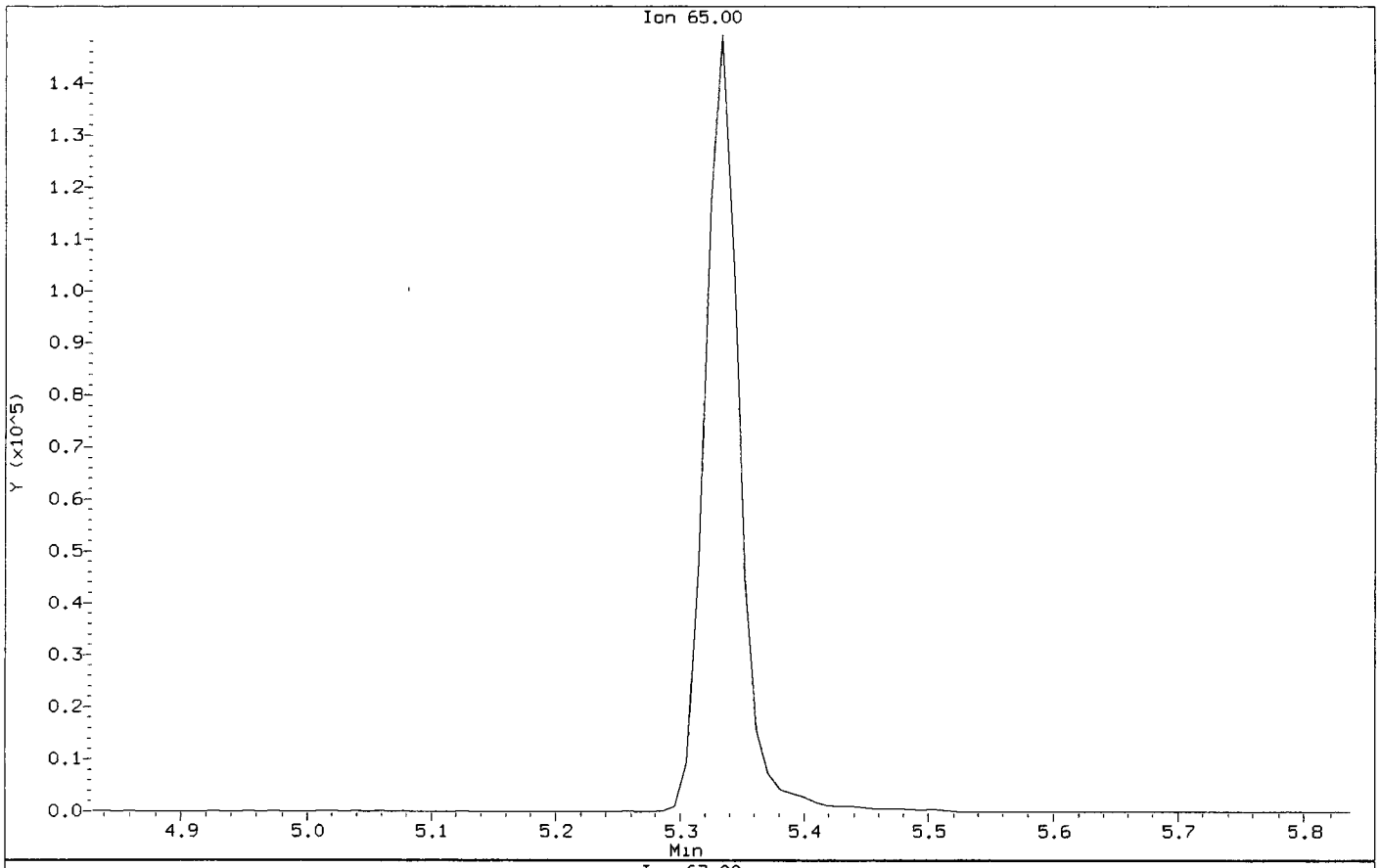
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

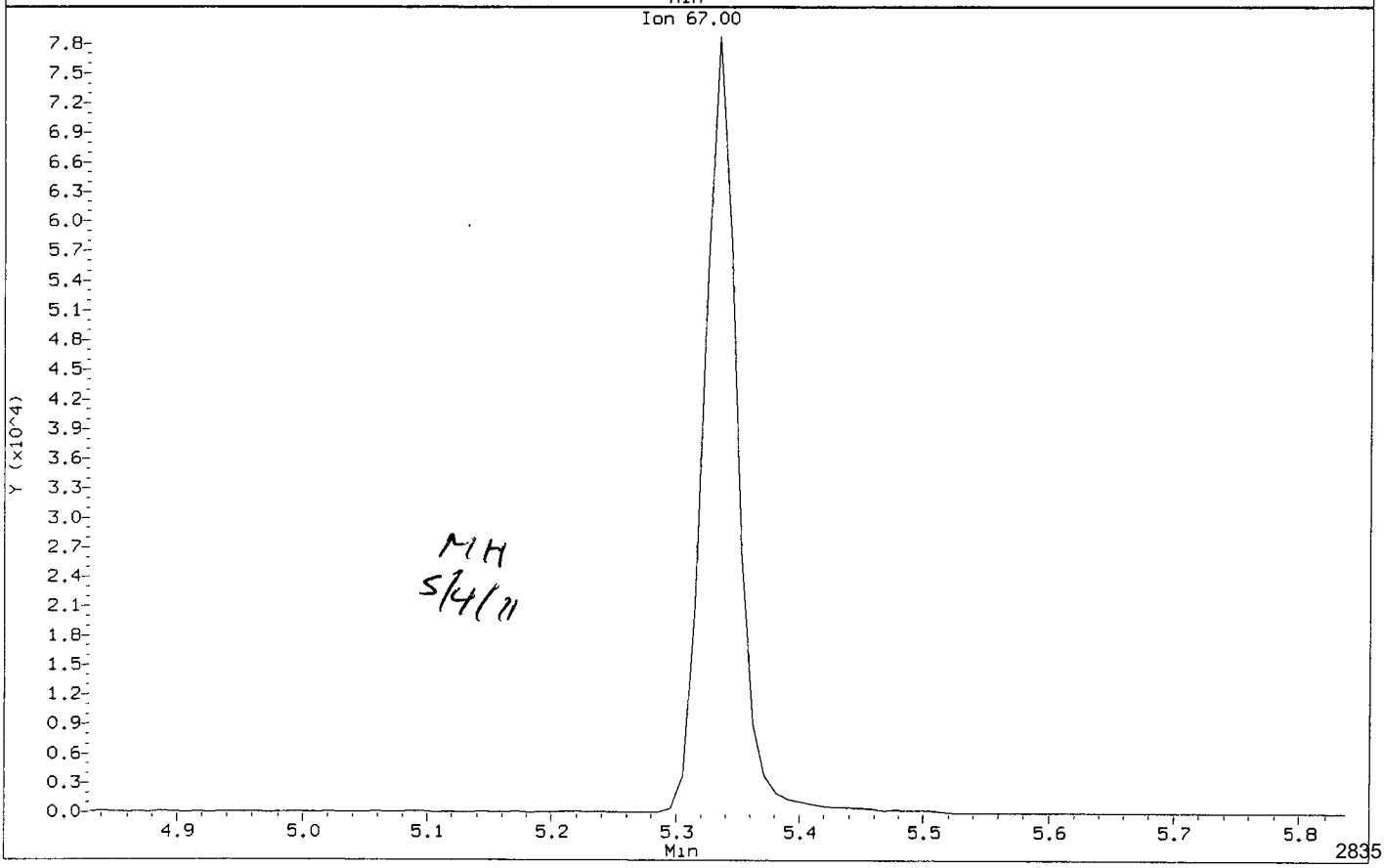
5. Other _____

Analyst: MH Date: 5/4/11

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

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



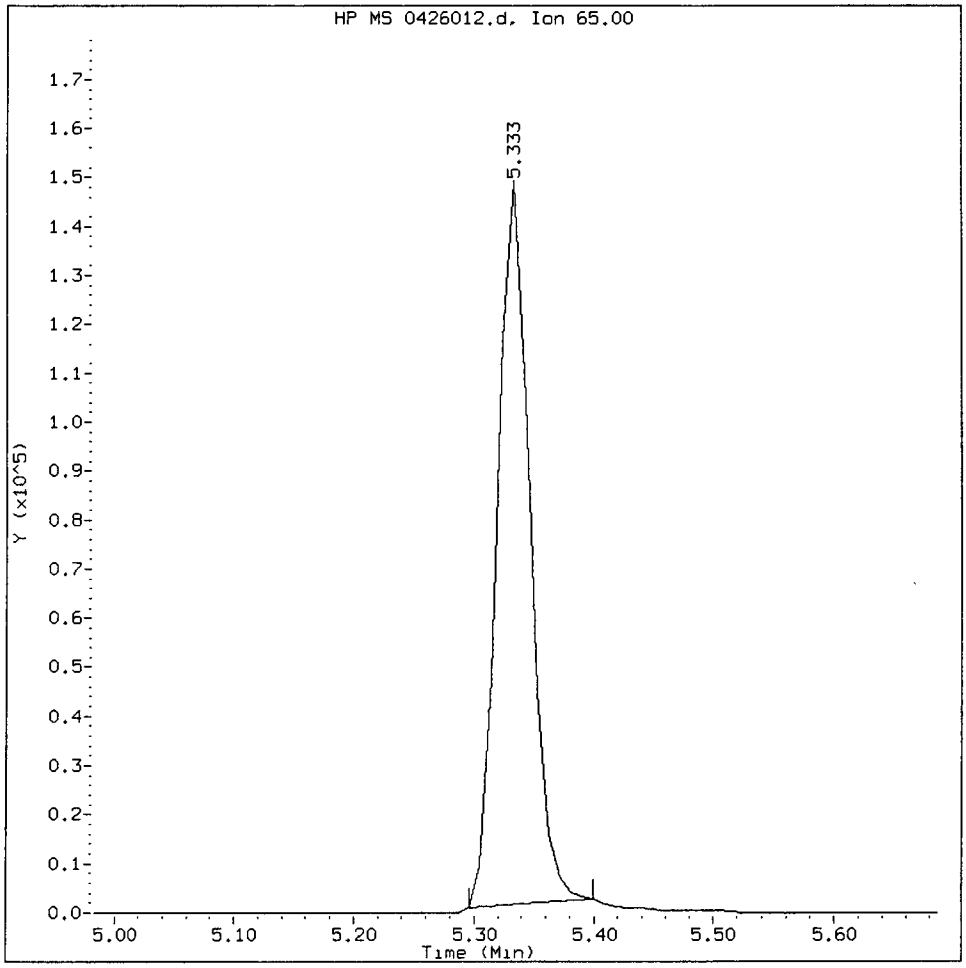


MH
5/4/11

SU53 : 00314

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

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

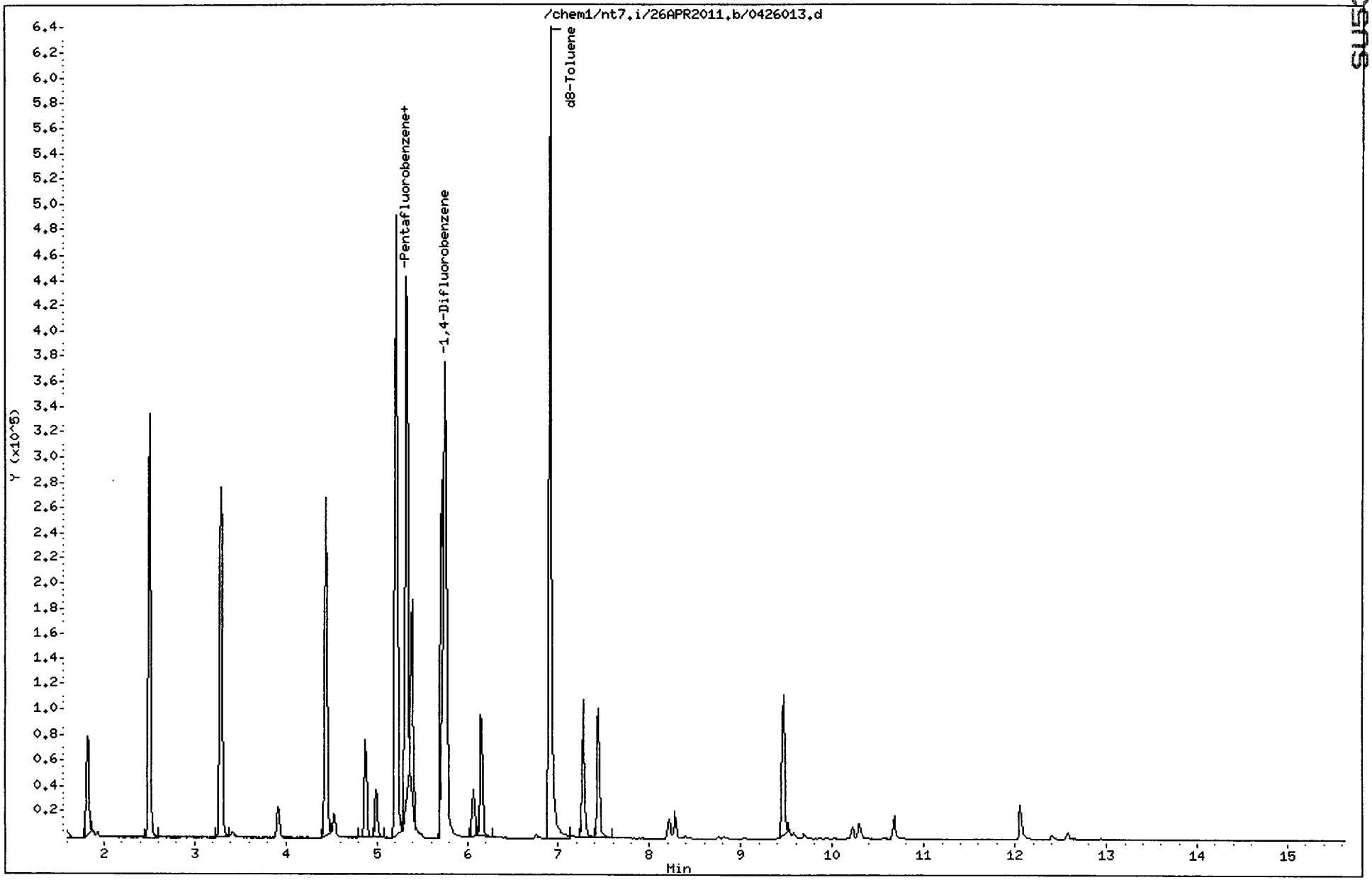
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

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

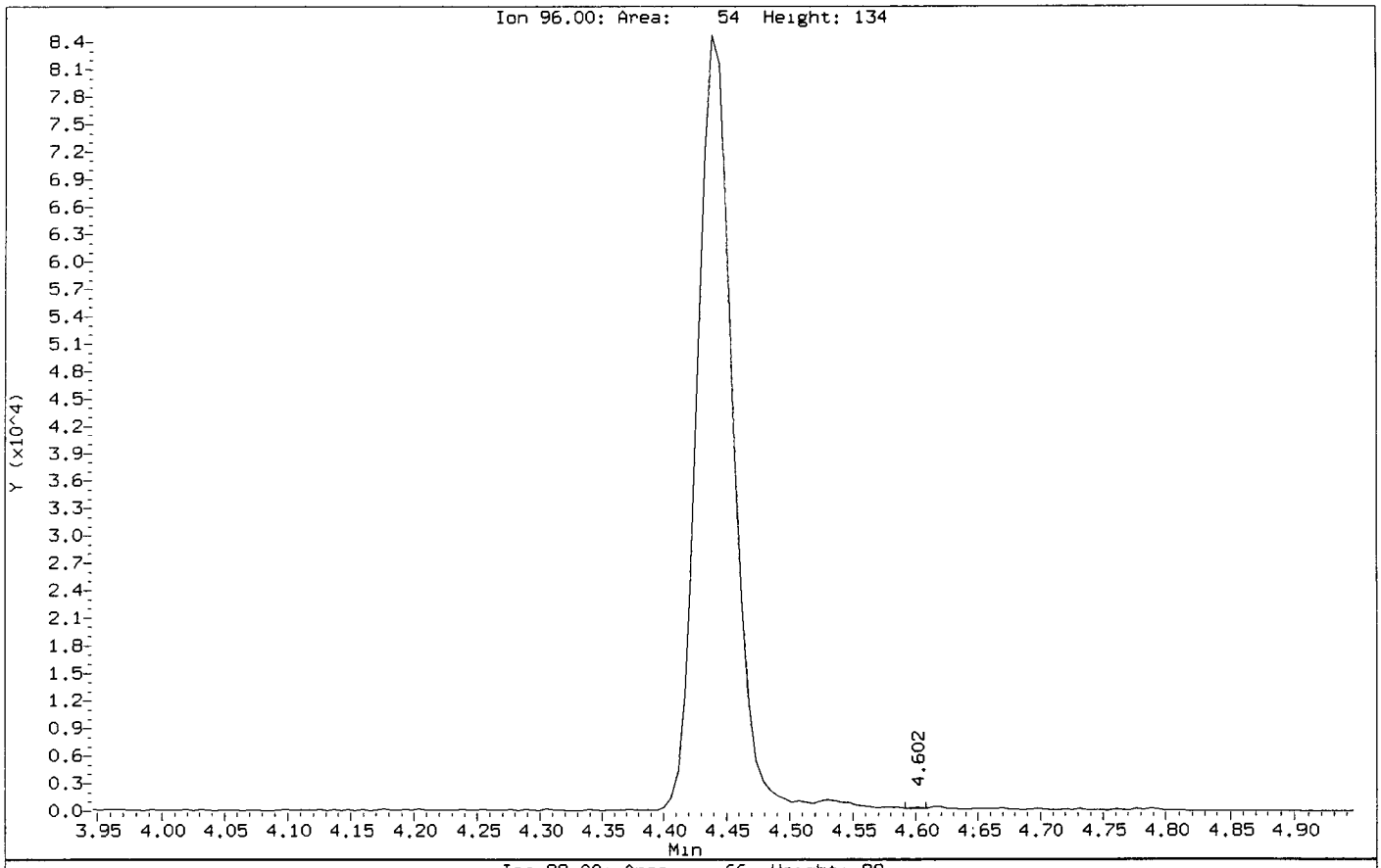
Operator: MH
Column diameter: 0.18

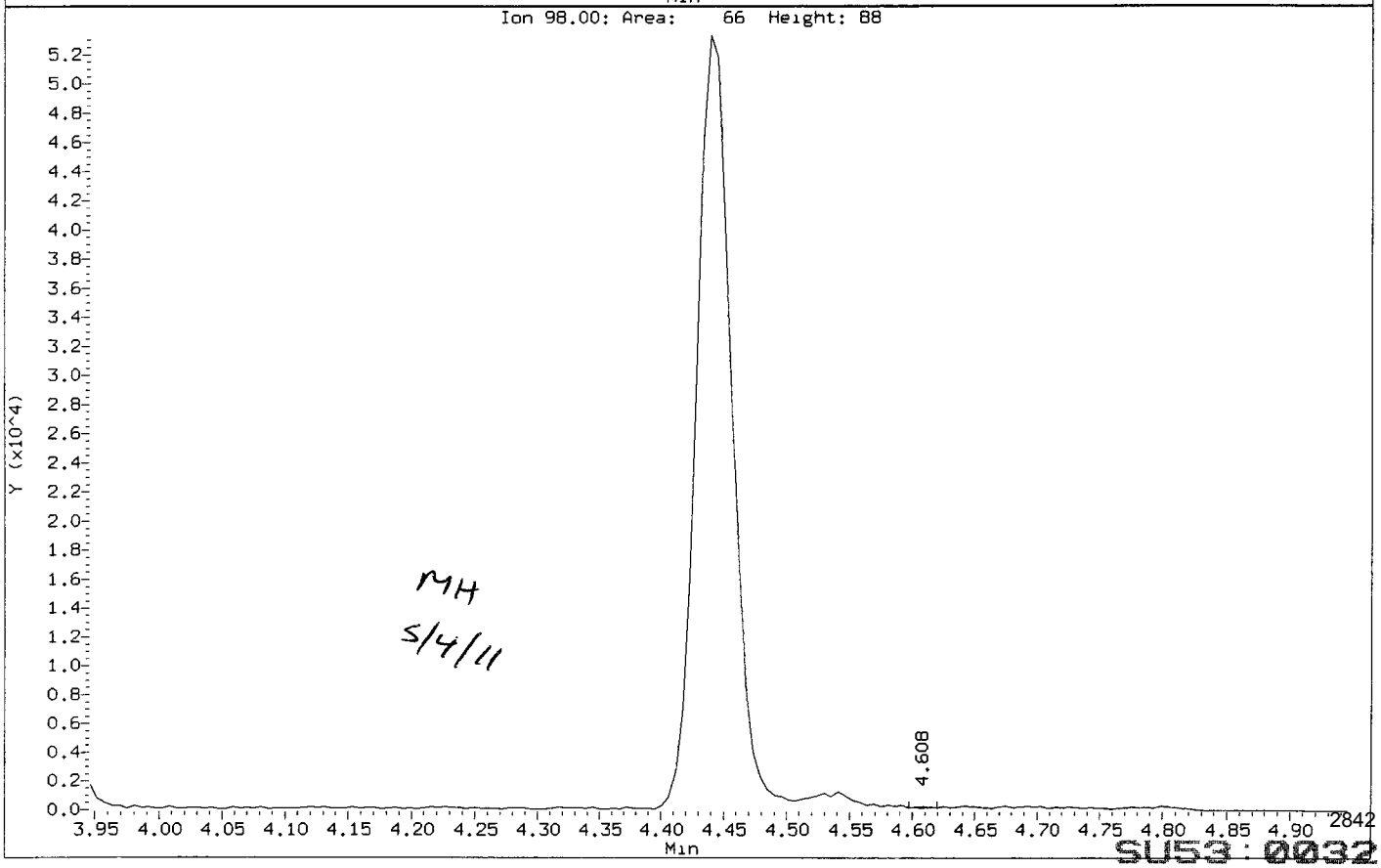
Column phase: RTXVMS



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:





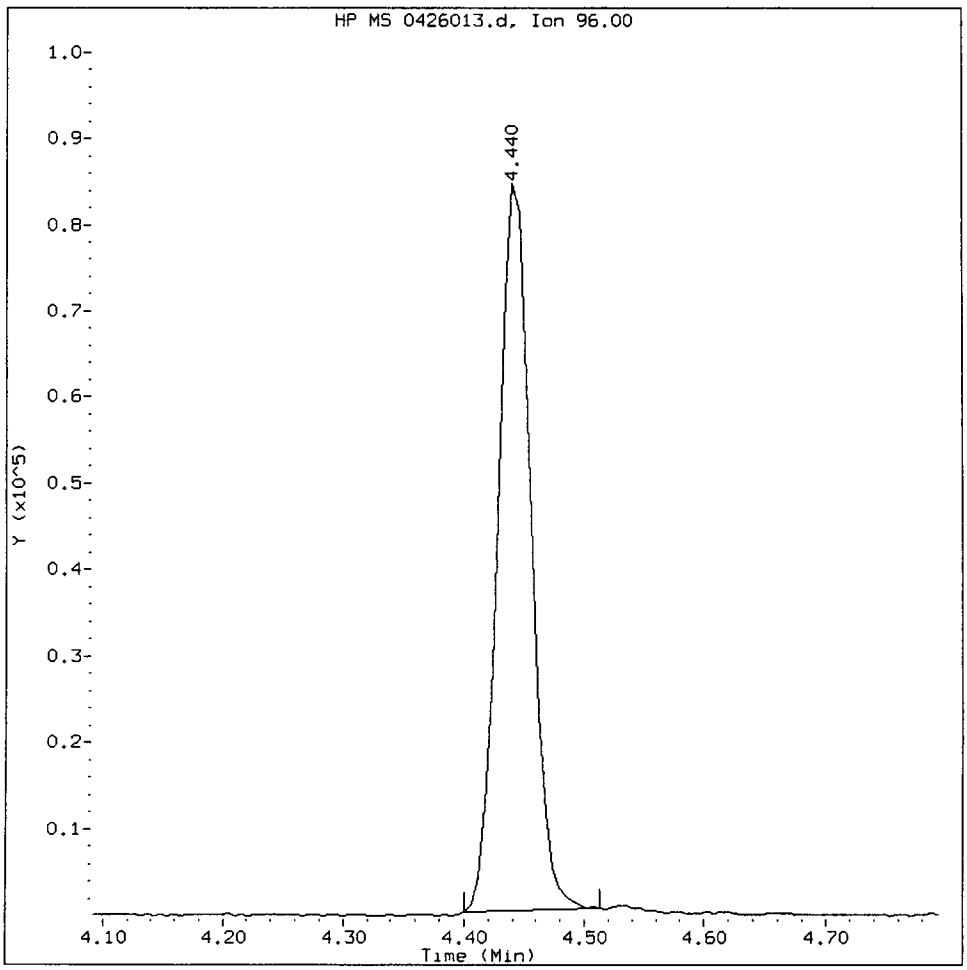
MH
5/4/11

2842

SU53:00321

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

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



MANUAL INTEGRATION for cis-1,2-dichloroethene

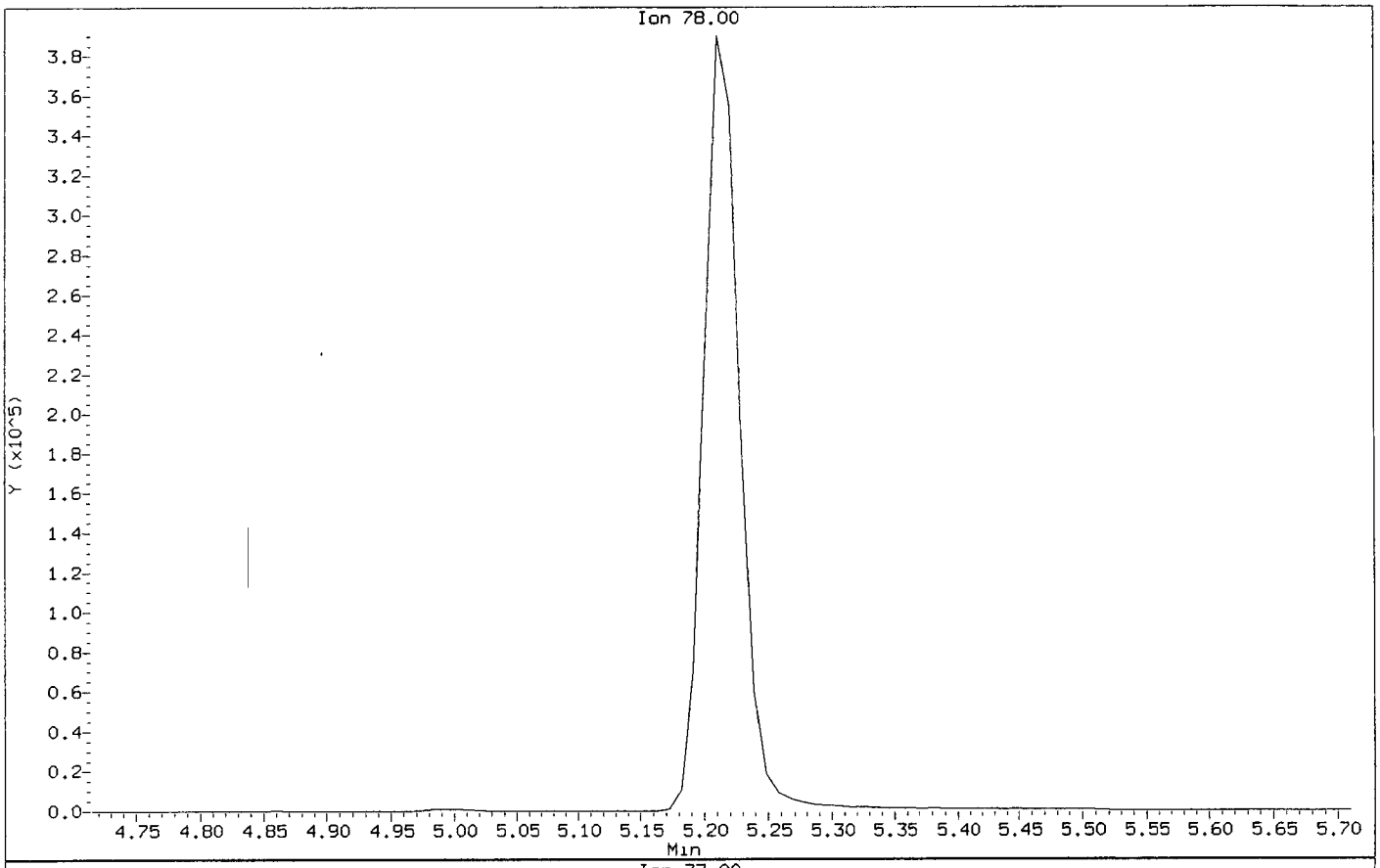
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

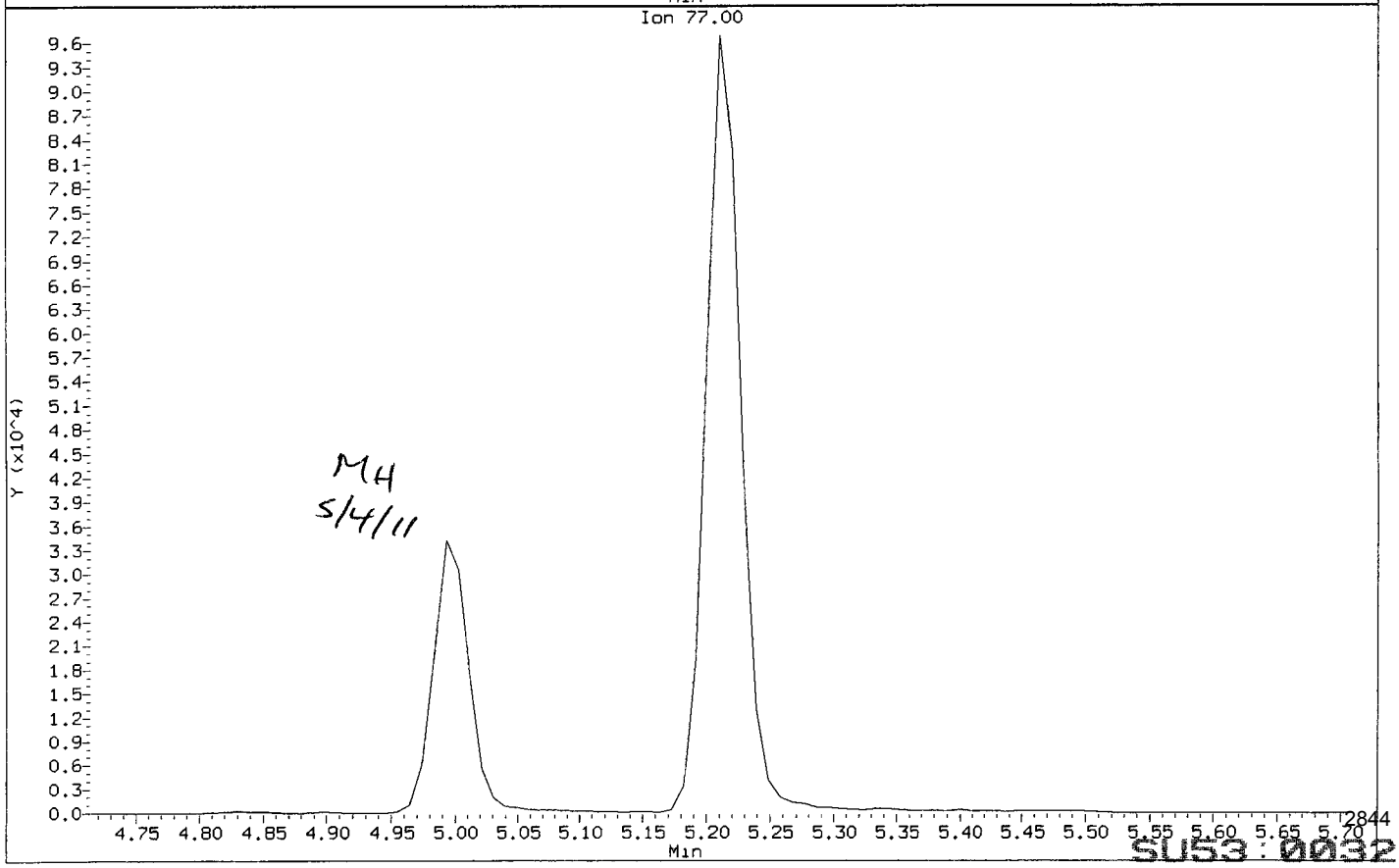
5. Other _____

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:

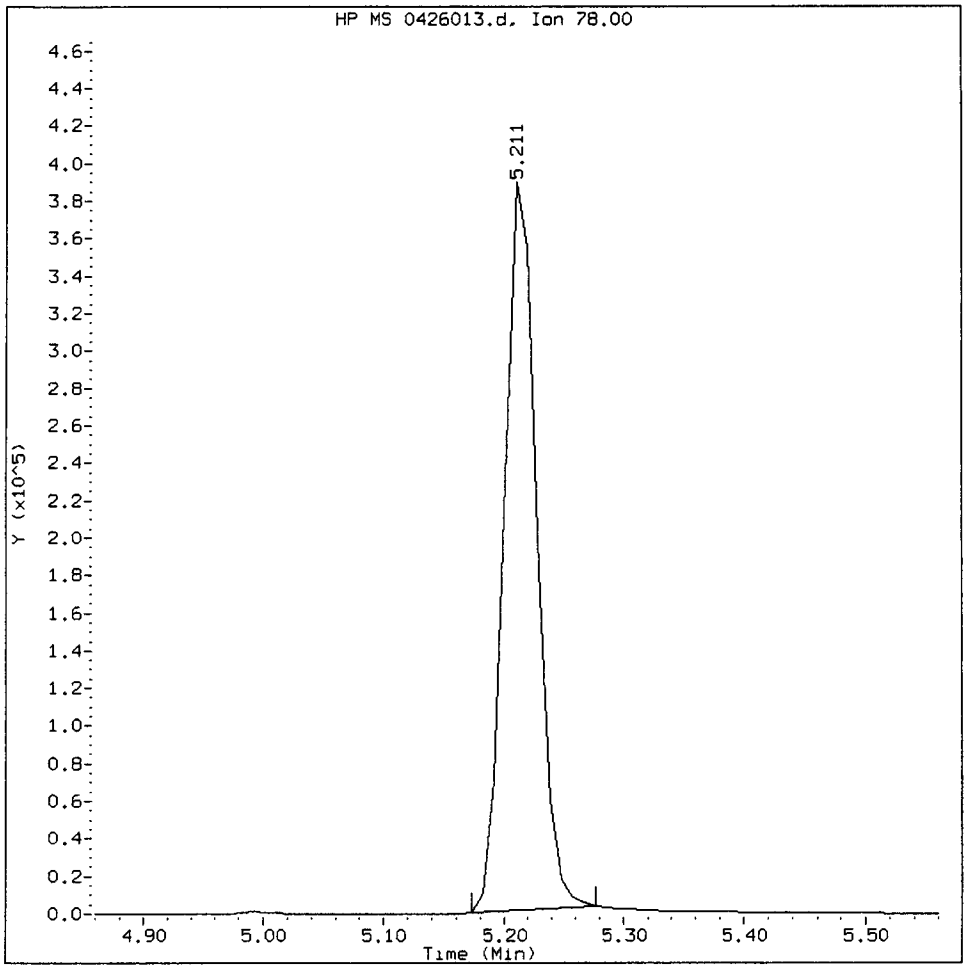




SU53 : 00323

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

Benzene Amount: 565.06 Area: 747086



MANUAL INTEGRATION for Benzene

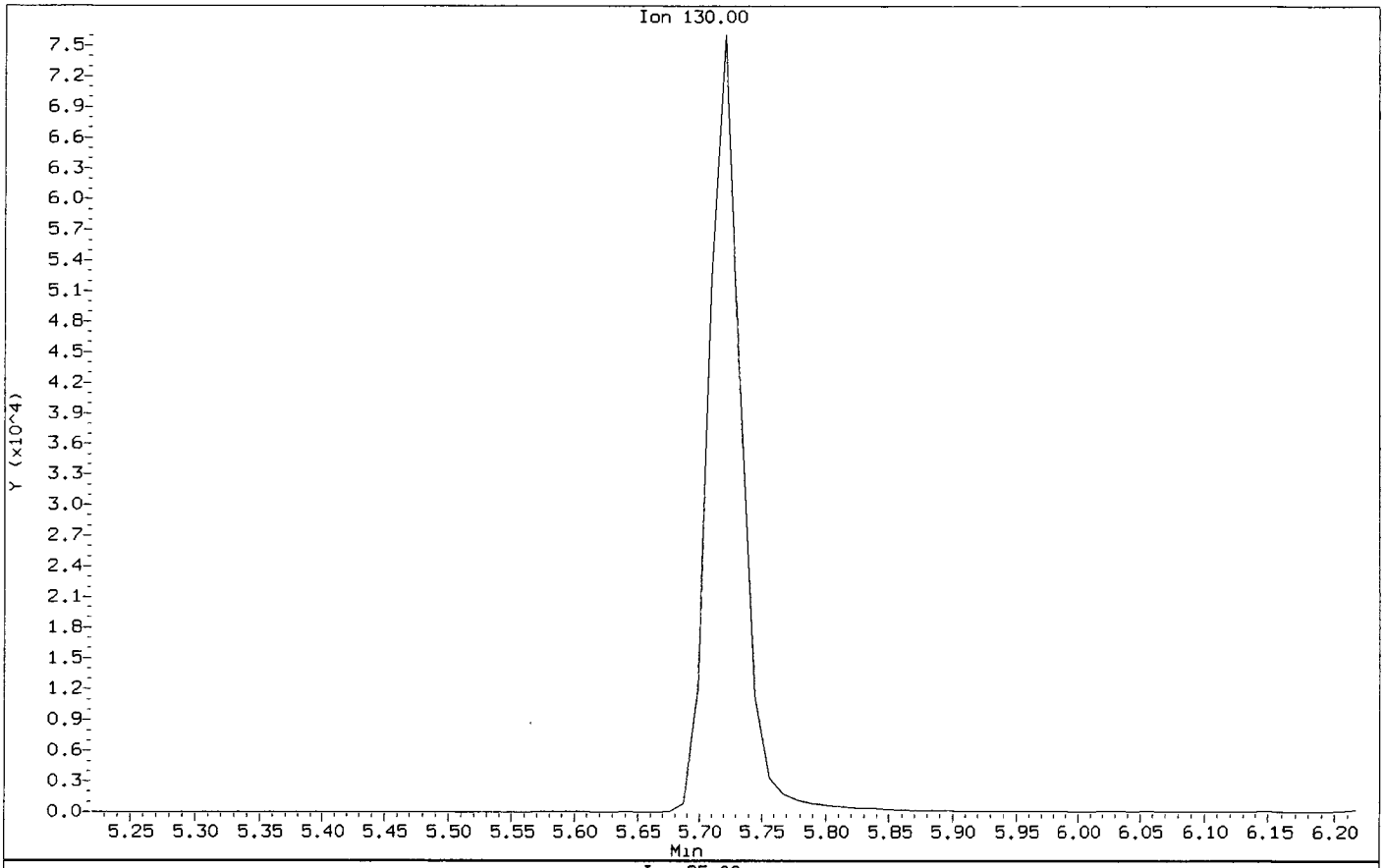
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

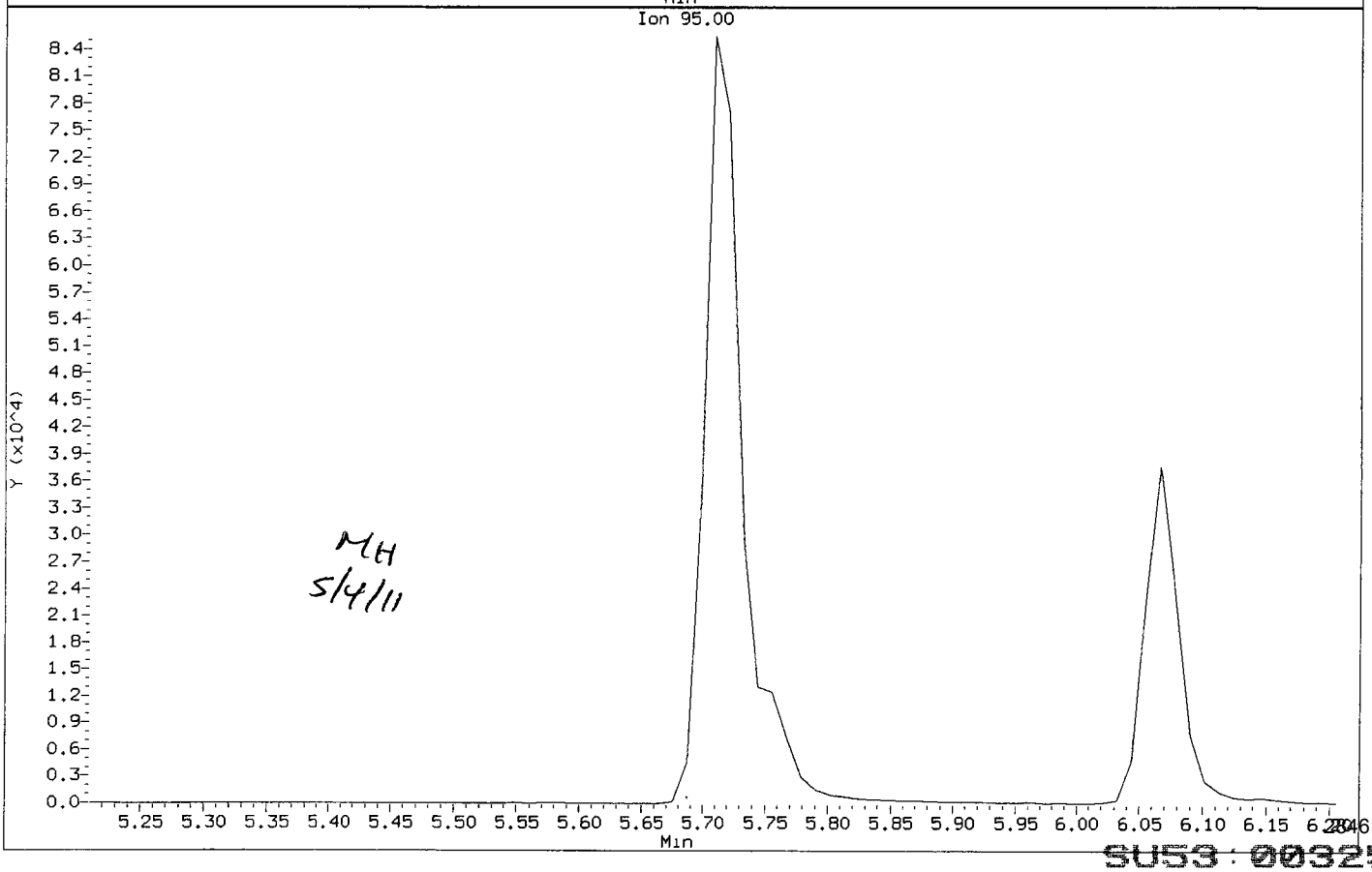
5. Other _____

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:

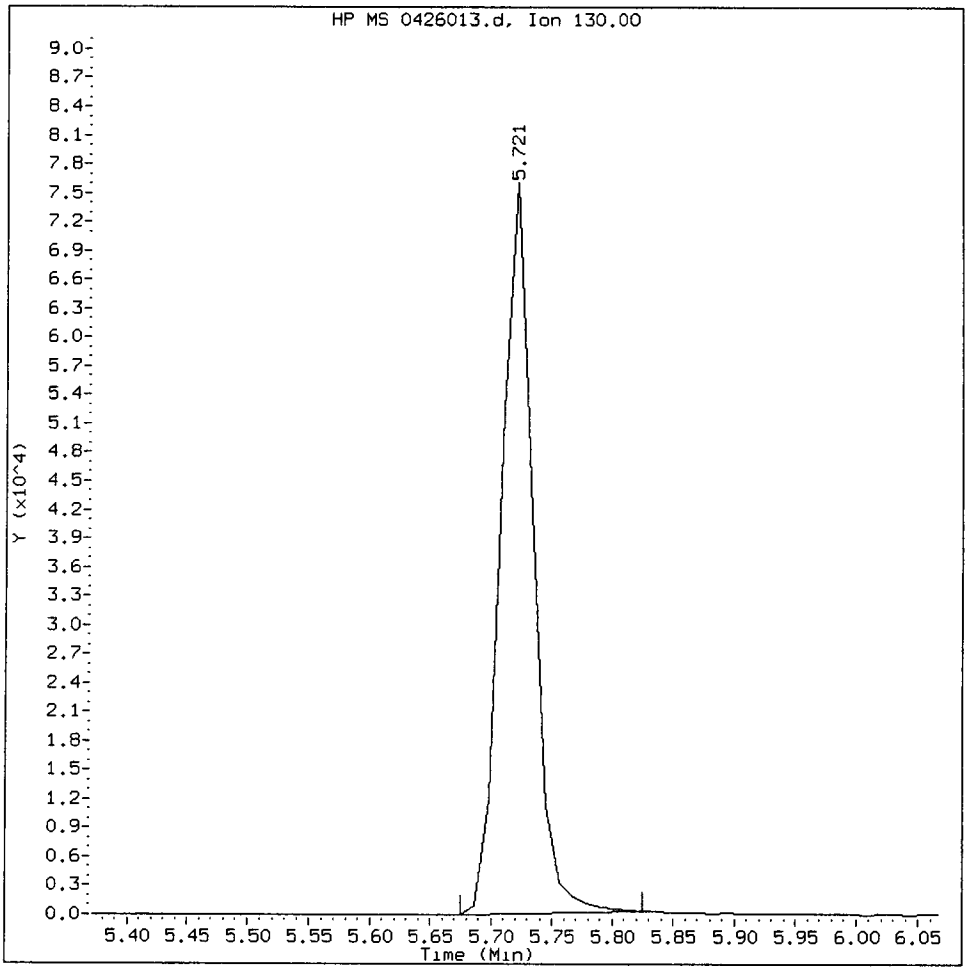




MH
5/4/11

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

Trichloroethene Amount: 579.48 Area: 131207



MANUAL INTEGRATION for Trichloroethene

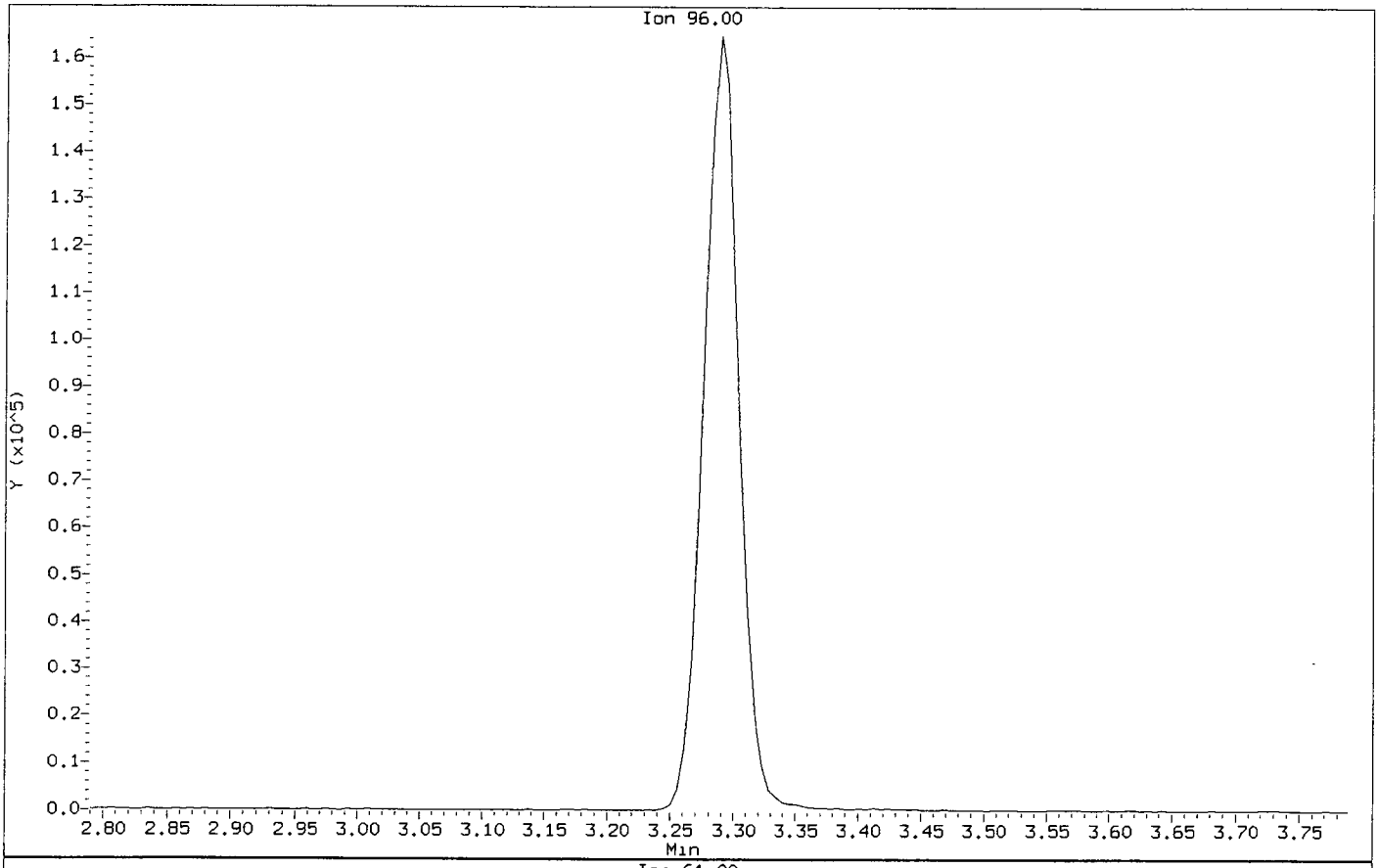
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

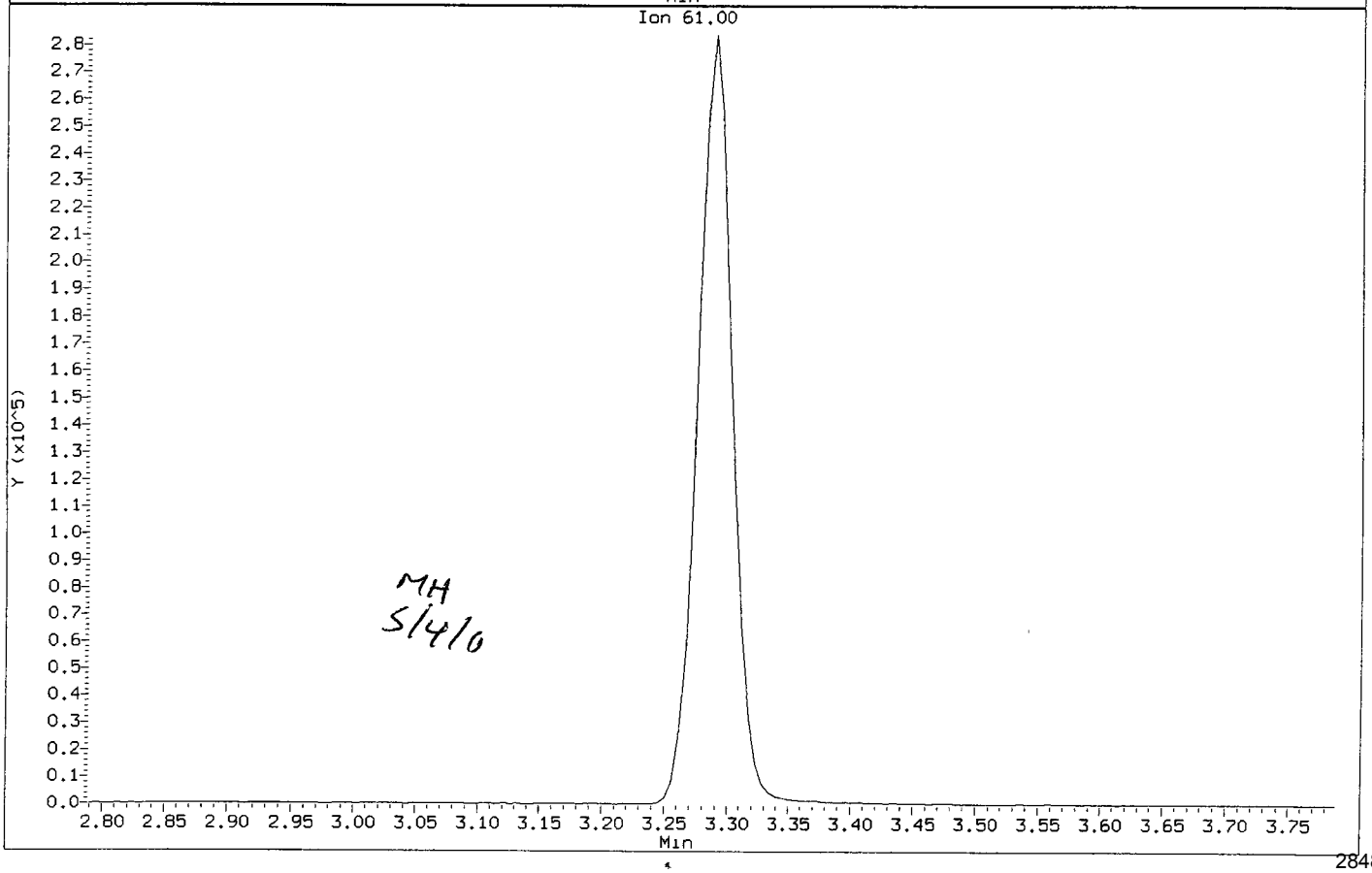
5. Other _____

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:

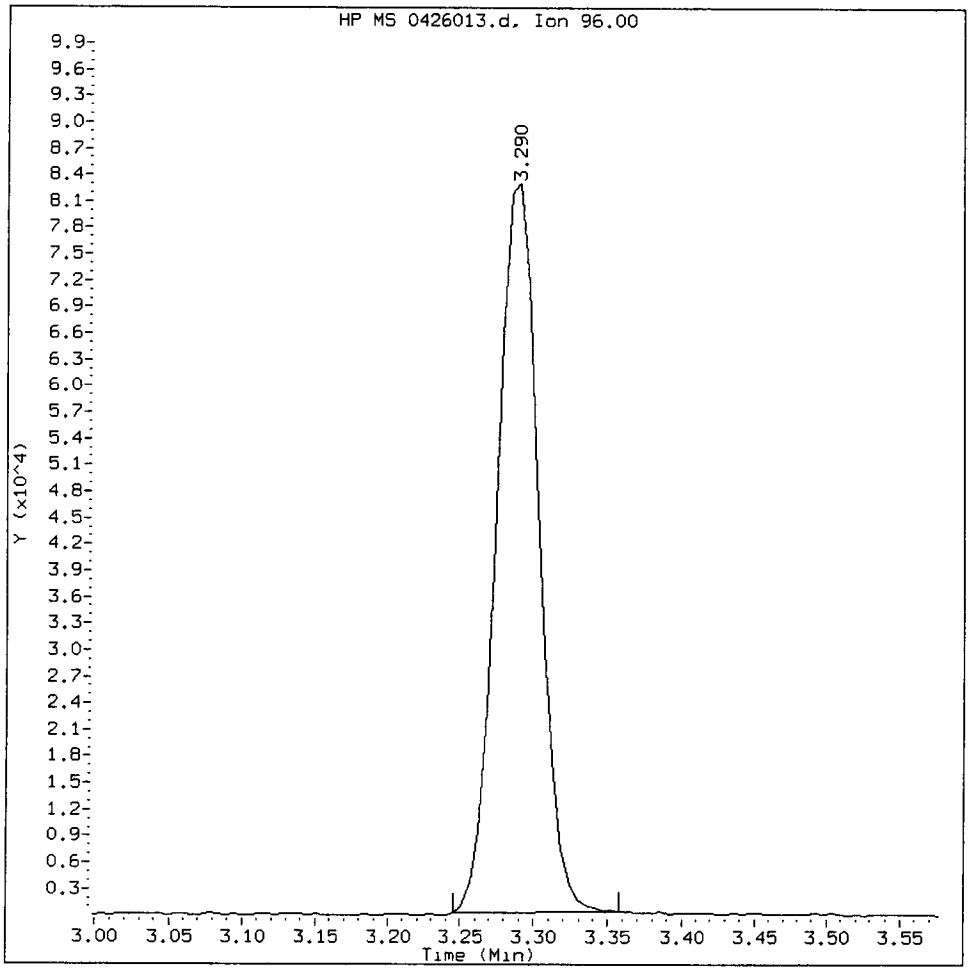




MH
5/4/10

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

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



MANUAL INTEGRATION for Trans-1,2-Dichloroethene

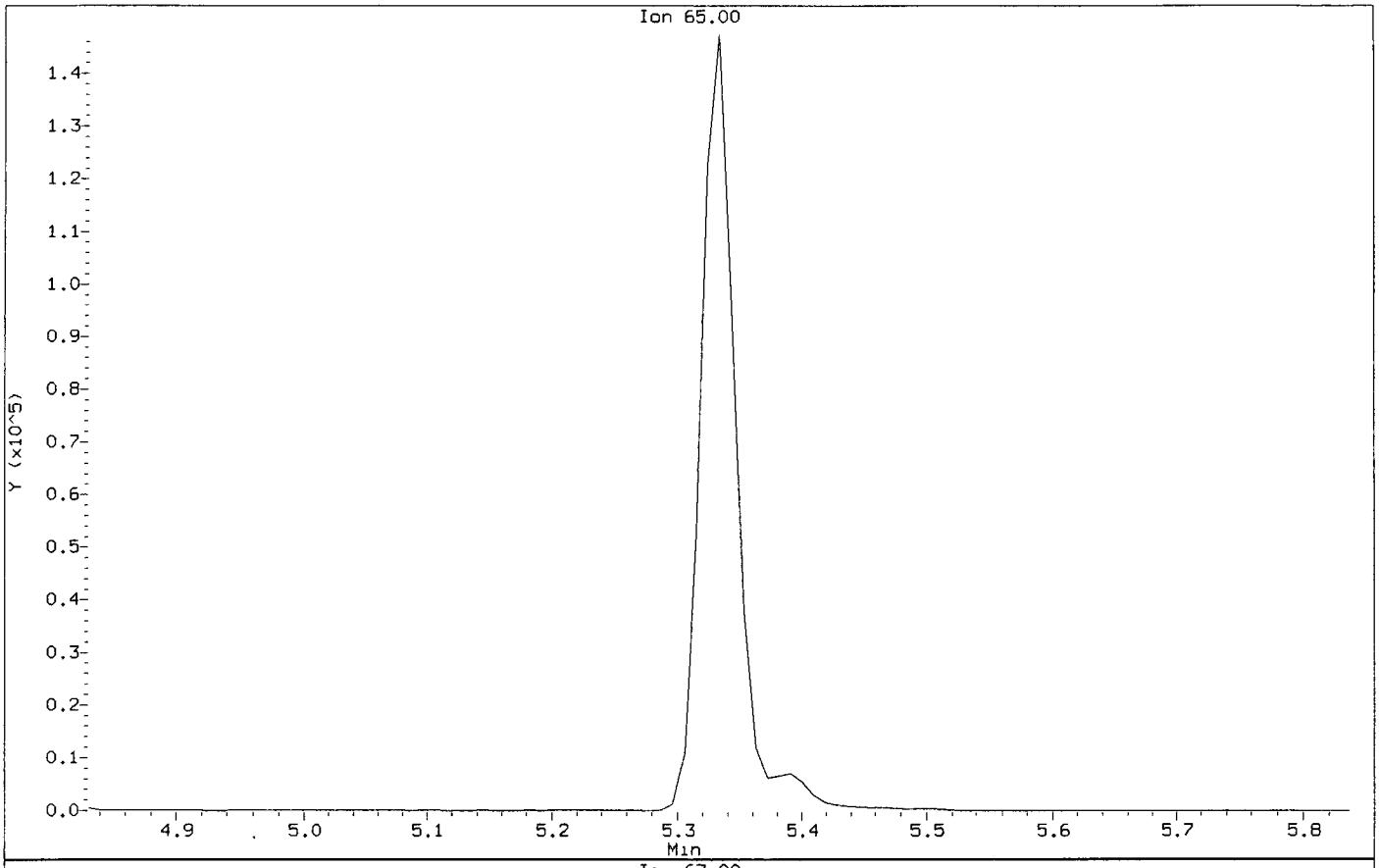
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

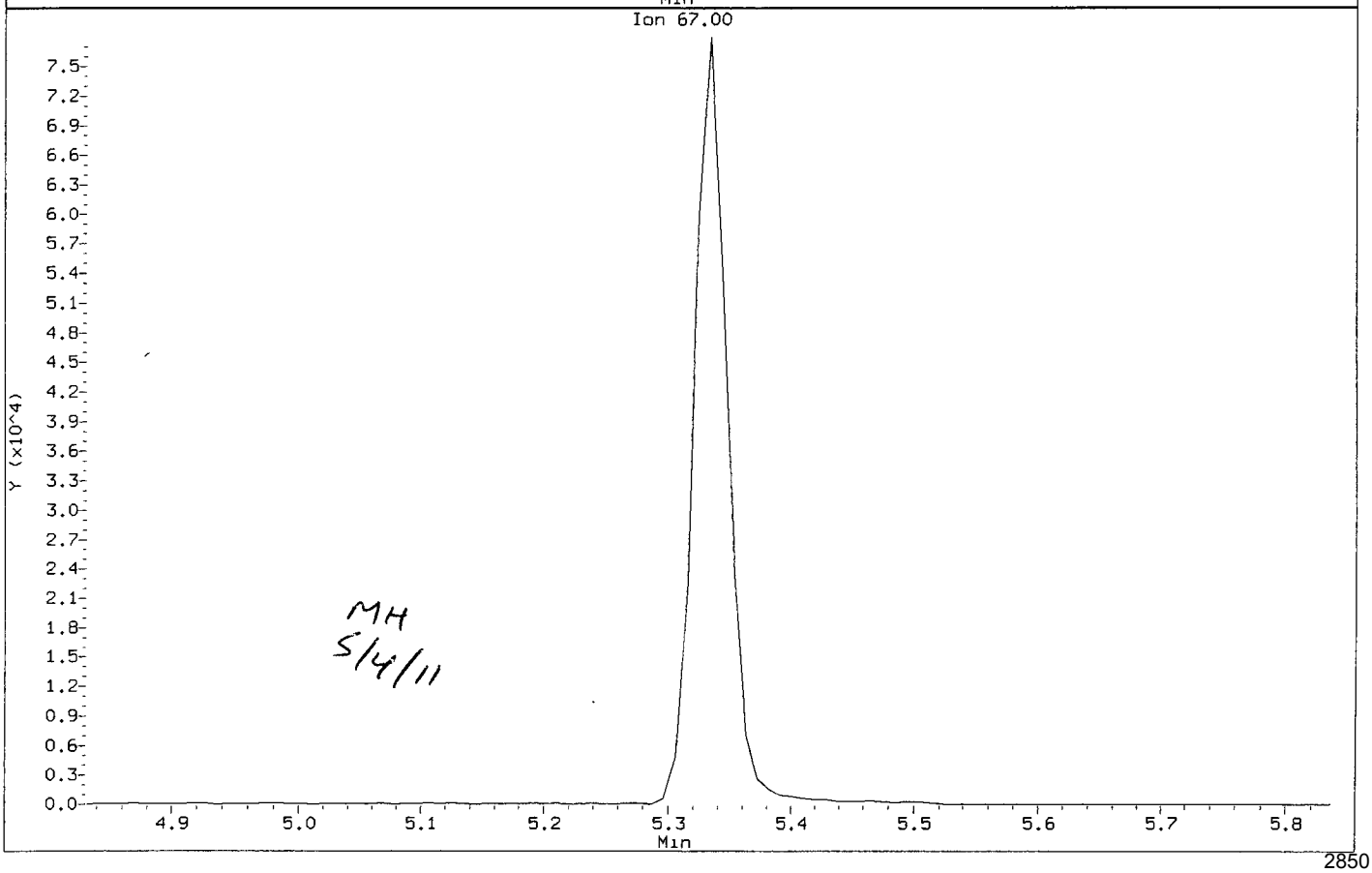
5. Other _____

Analyst: MH Date: 5/4/11

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

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

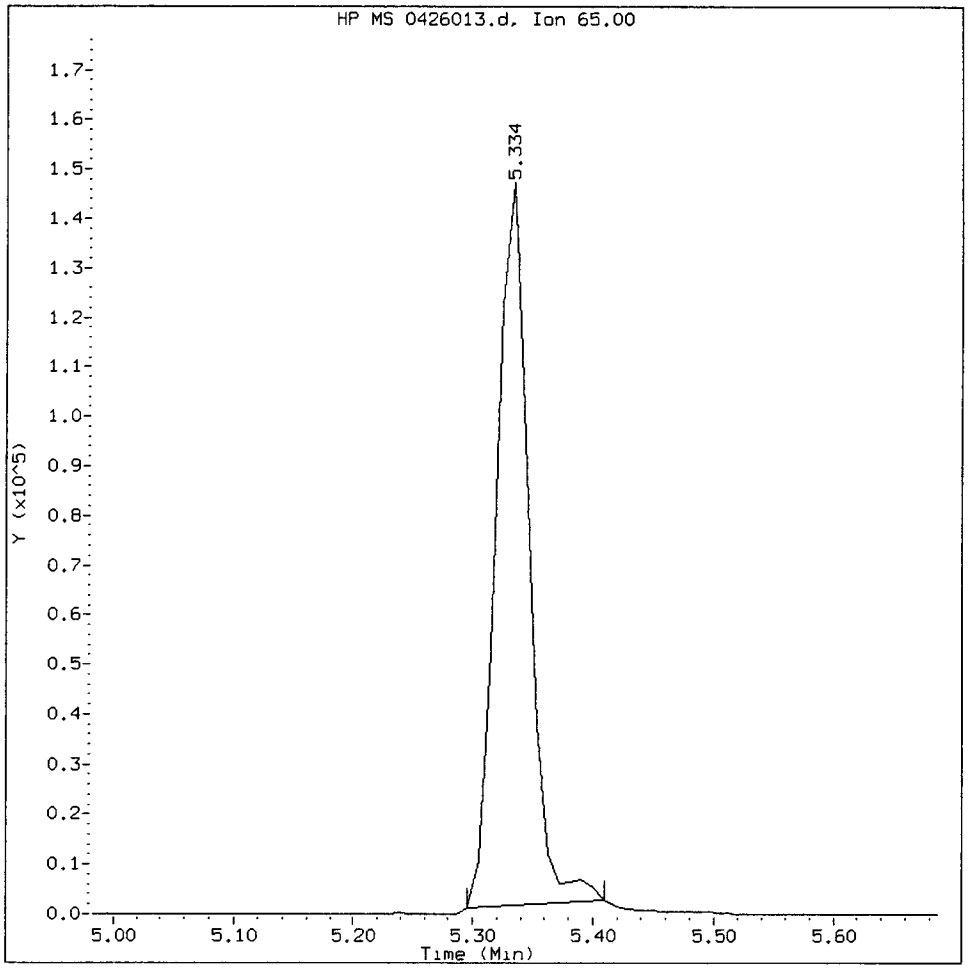




MH
5/4/11

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

ÇO-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

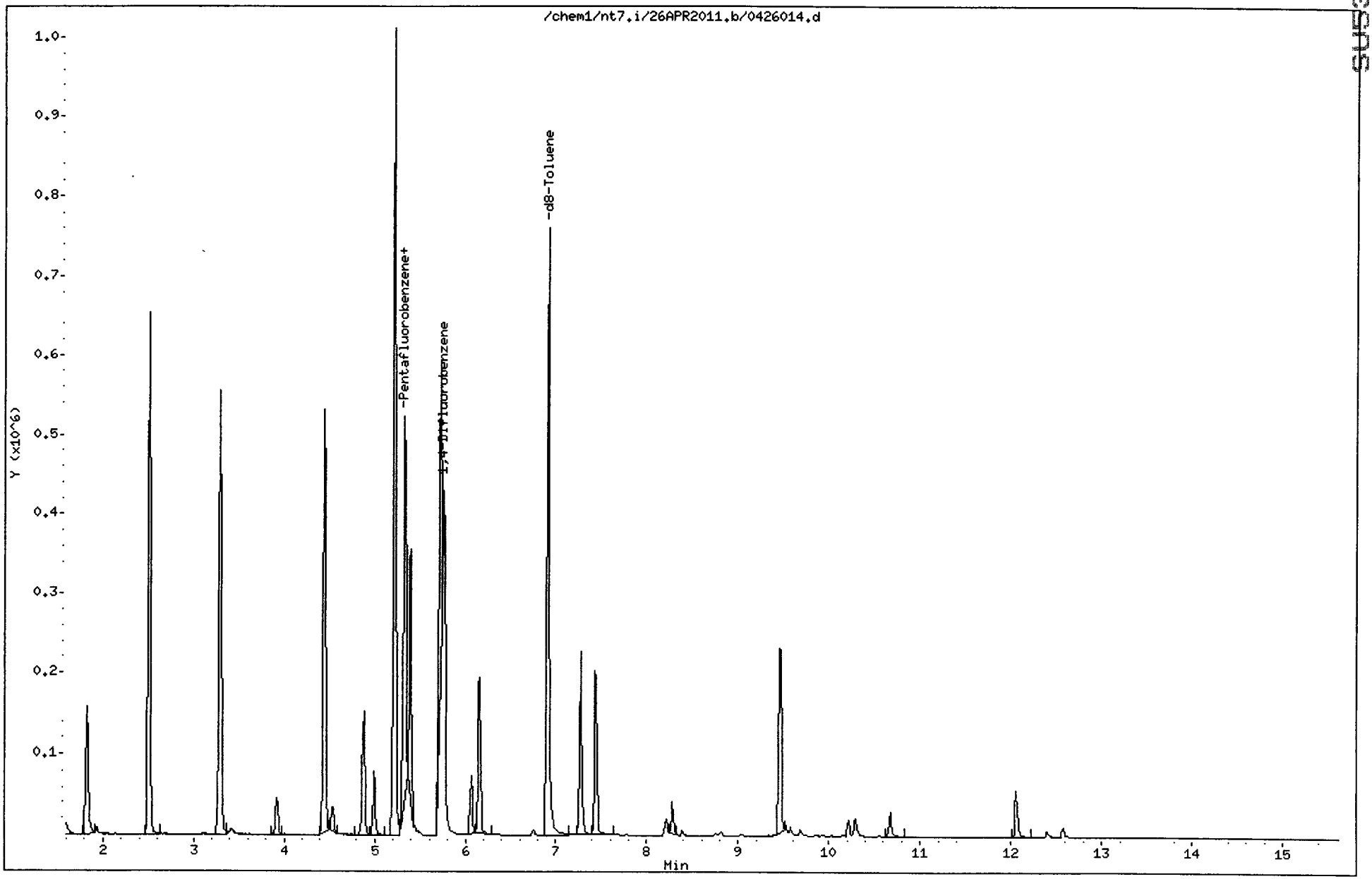
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

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

Instrument: nt7.i

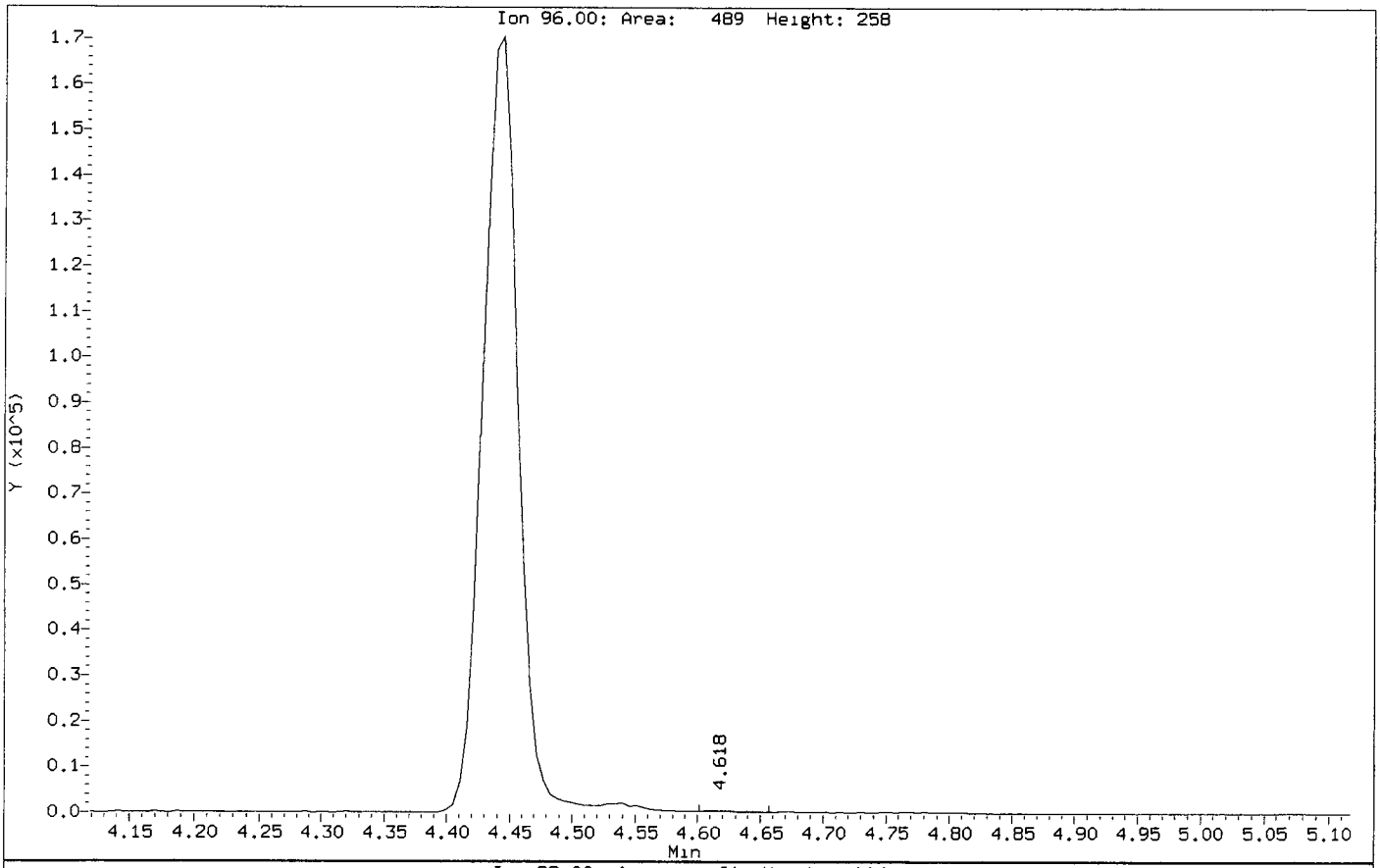
Operator: MH
Column diameter: 0.18

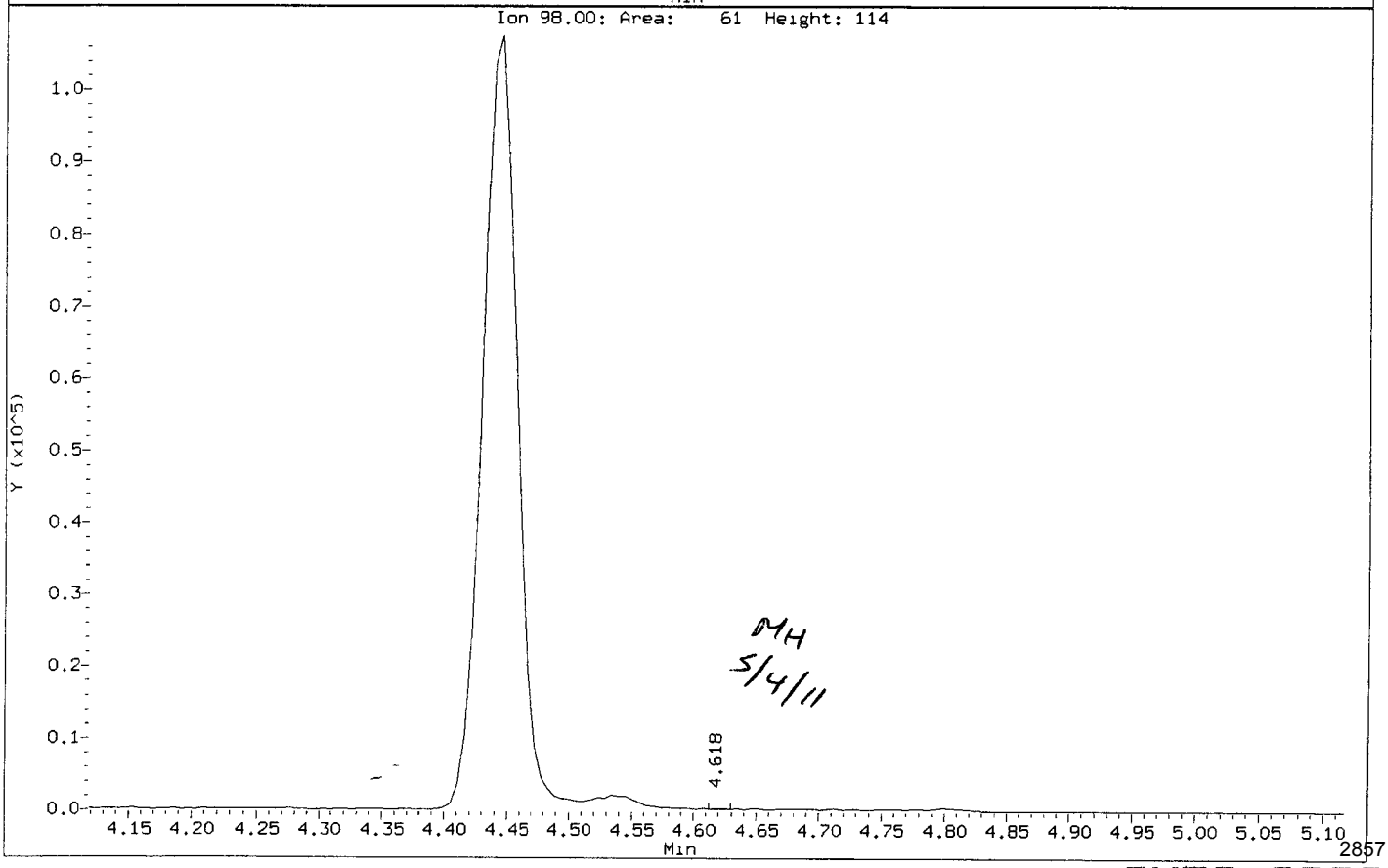
Column phase: RTXVMS



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:

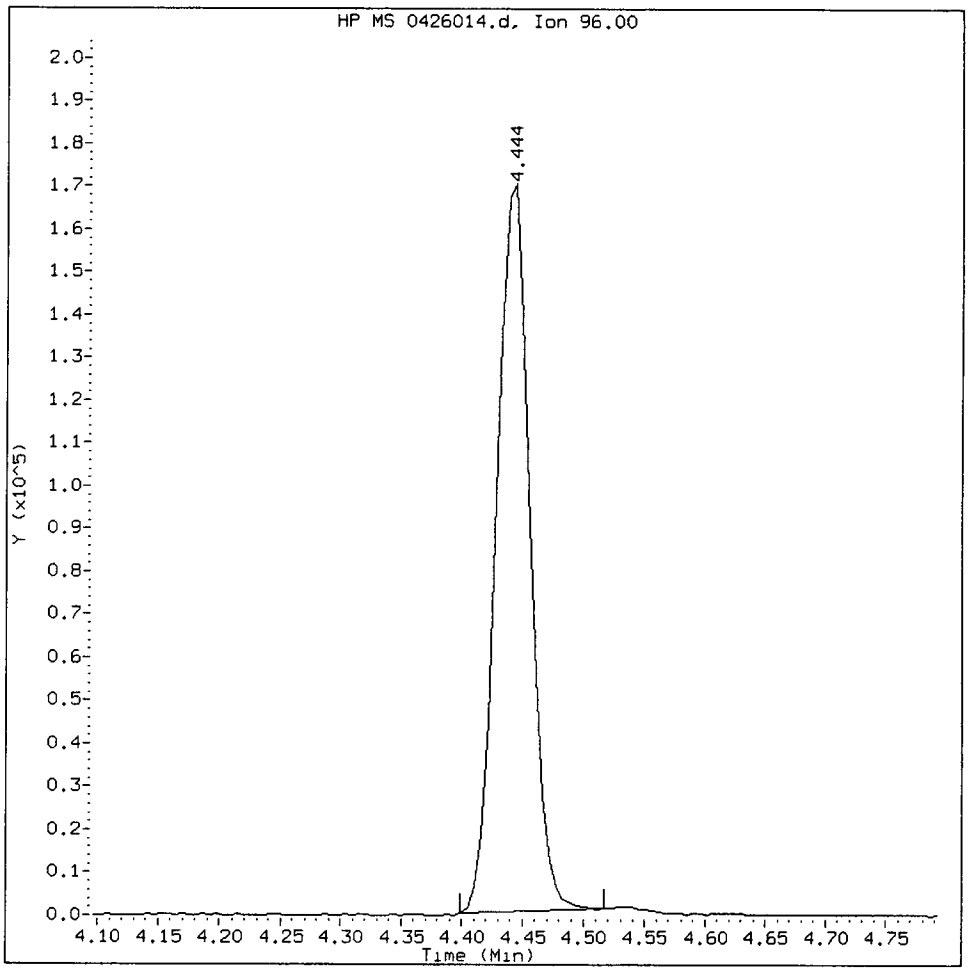




MH
5/4/11

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

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



MANUAL INTEGRATION for cis-1,2-dichloroethene

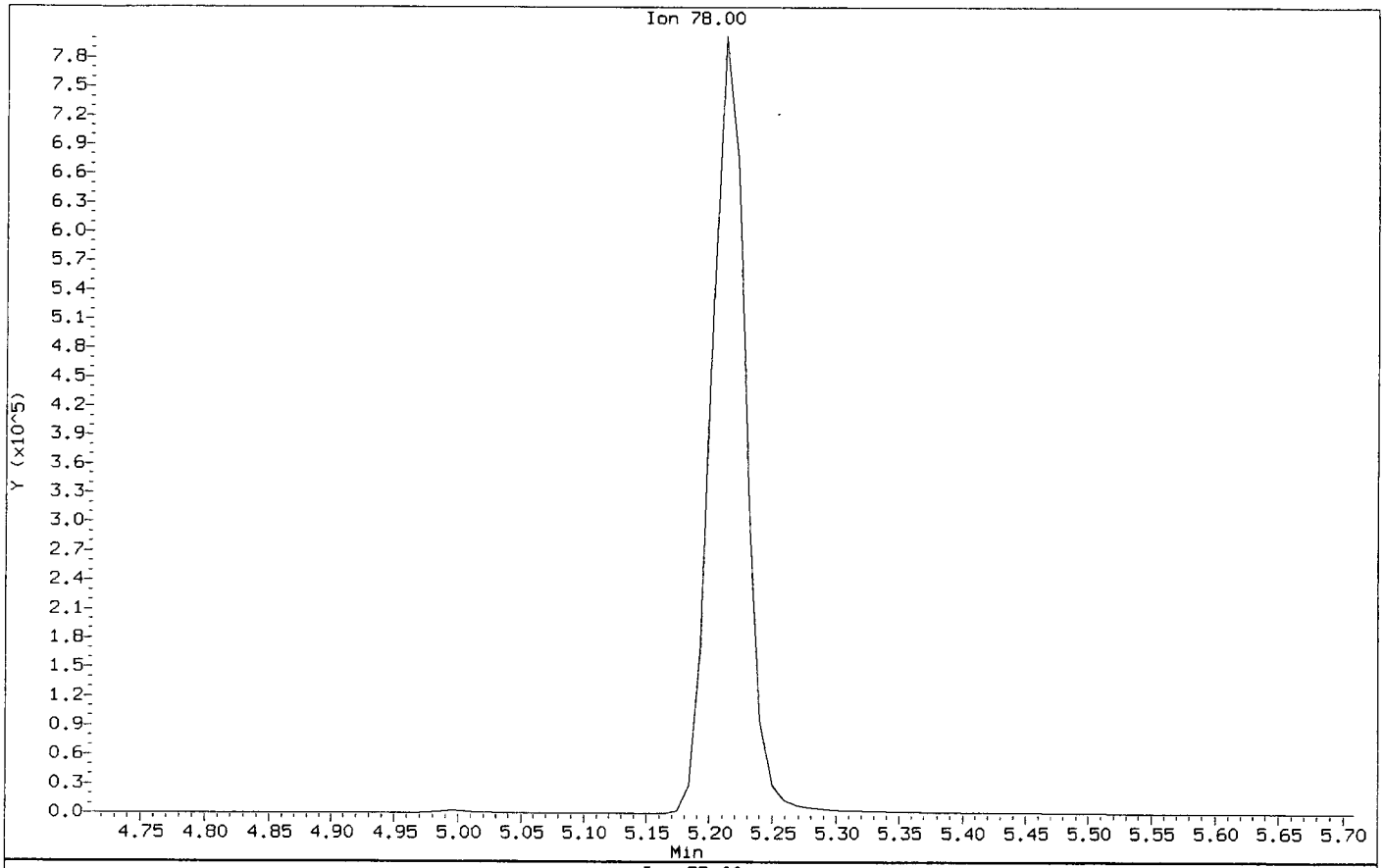
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

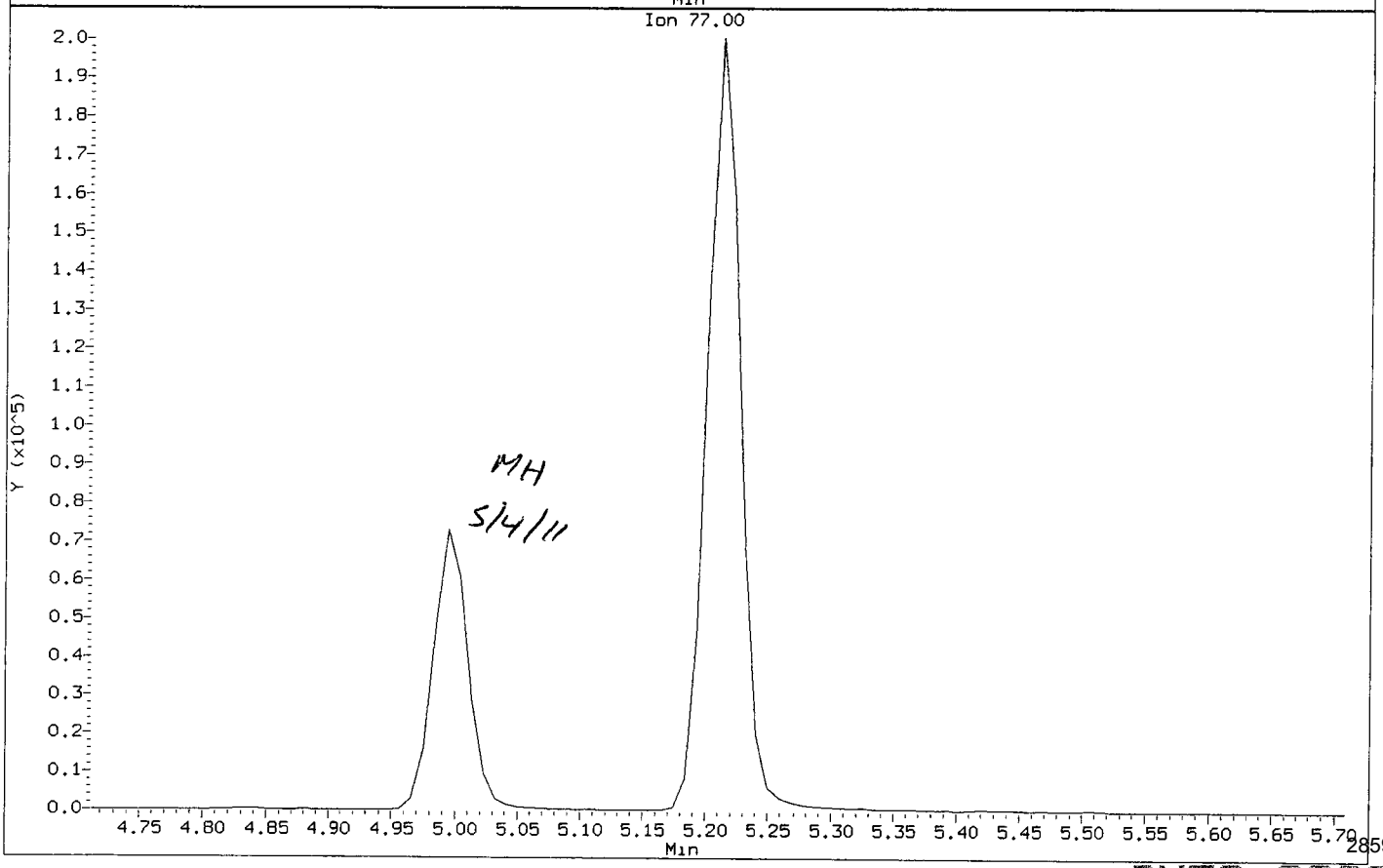
5. Other _____

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:



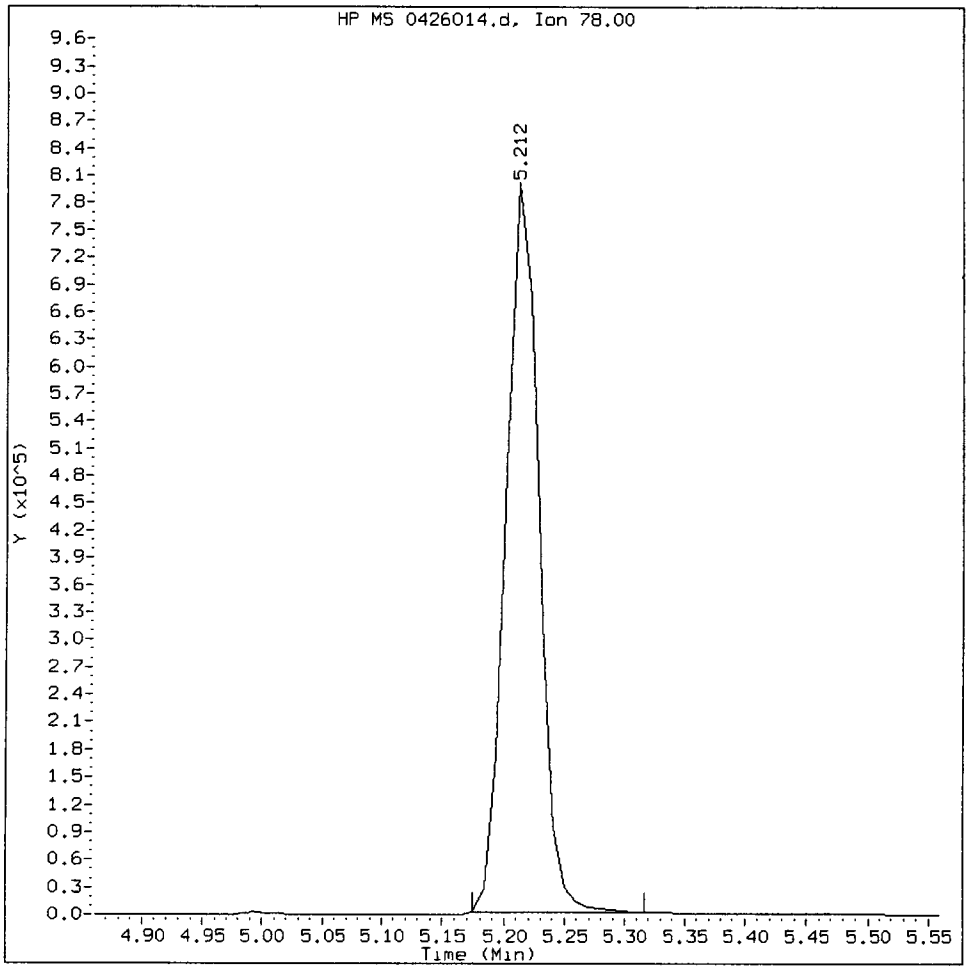


MH
5/4/11

SU53 : 00338

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

Benzene Amount: 993.97 Area: 1519641



MANUAL INTEGRATION for Benzene

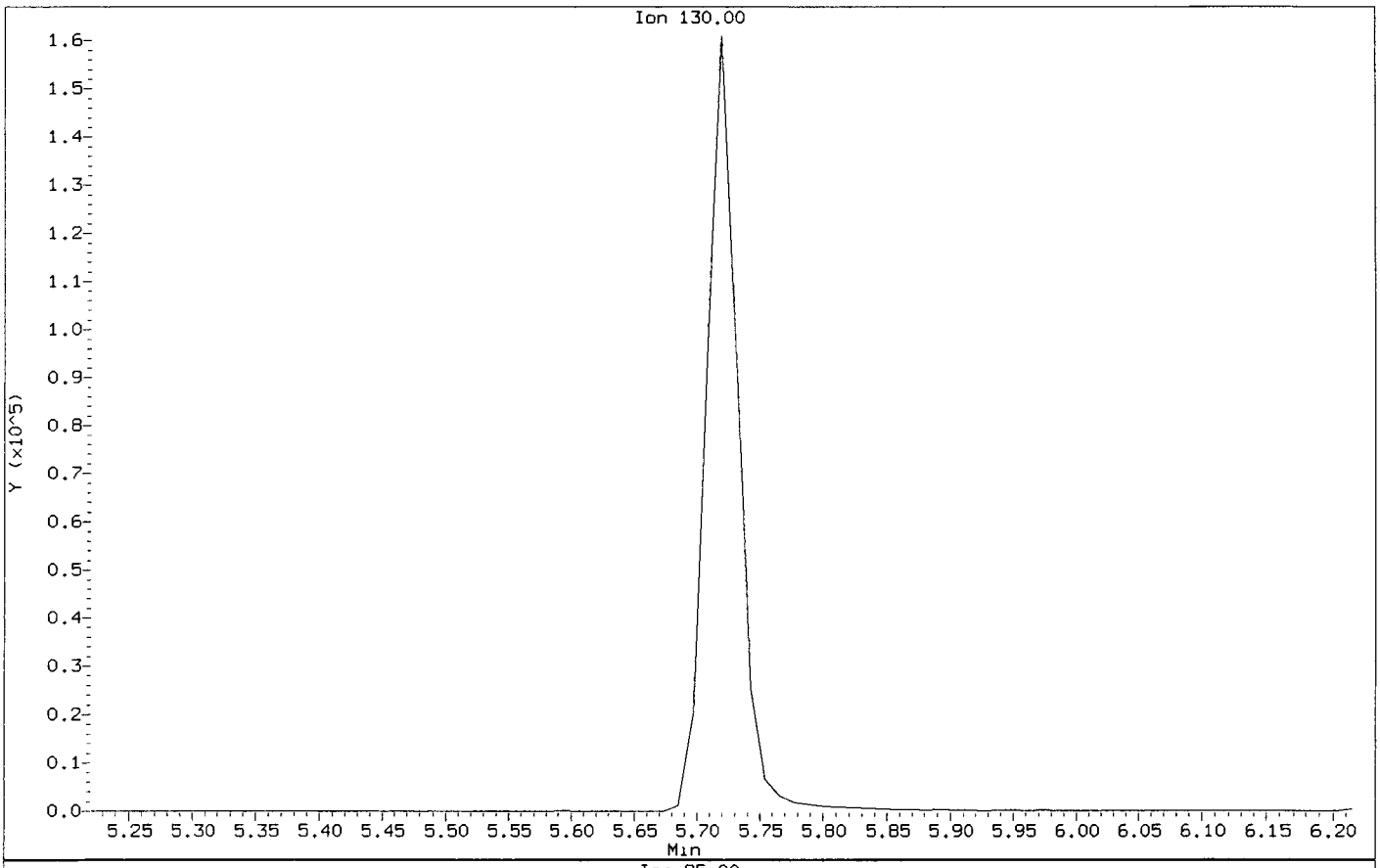
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

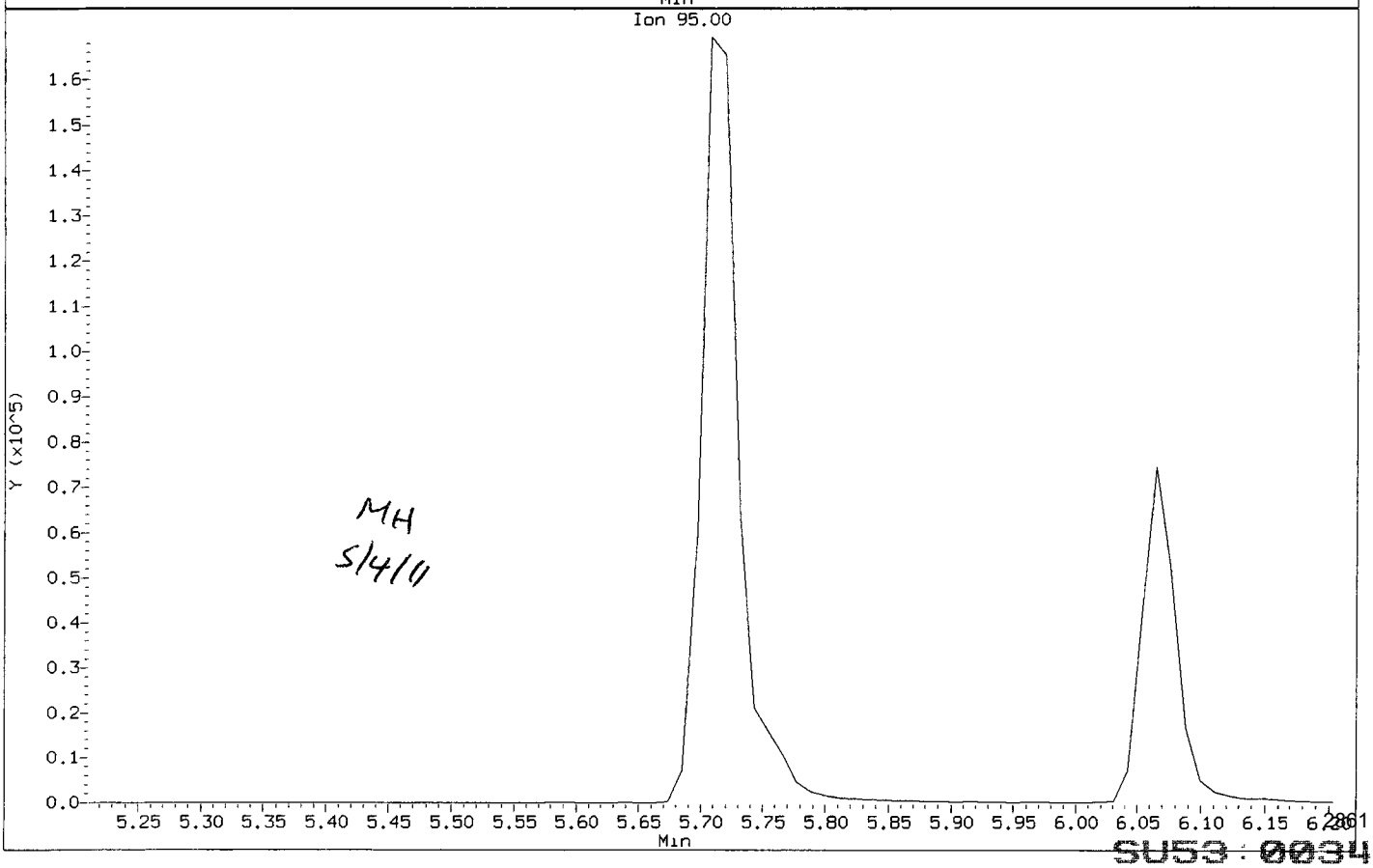
5. Other _____

Analyst: MH Date: 5/4/11

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

Compound: Trichloroethene
CAS Number:



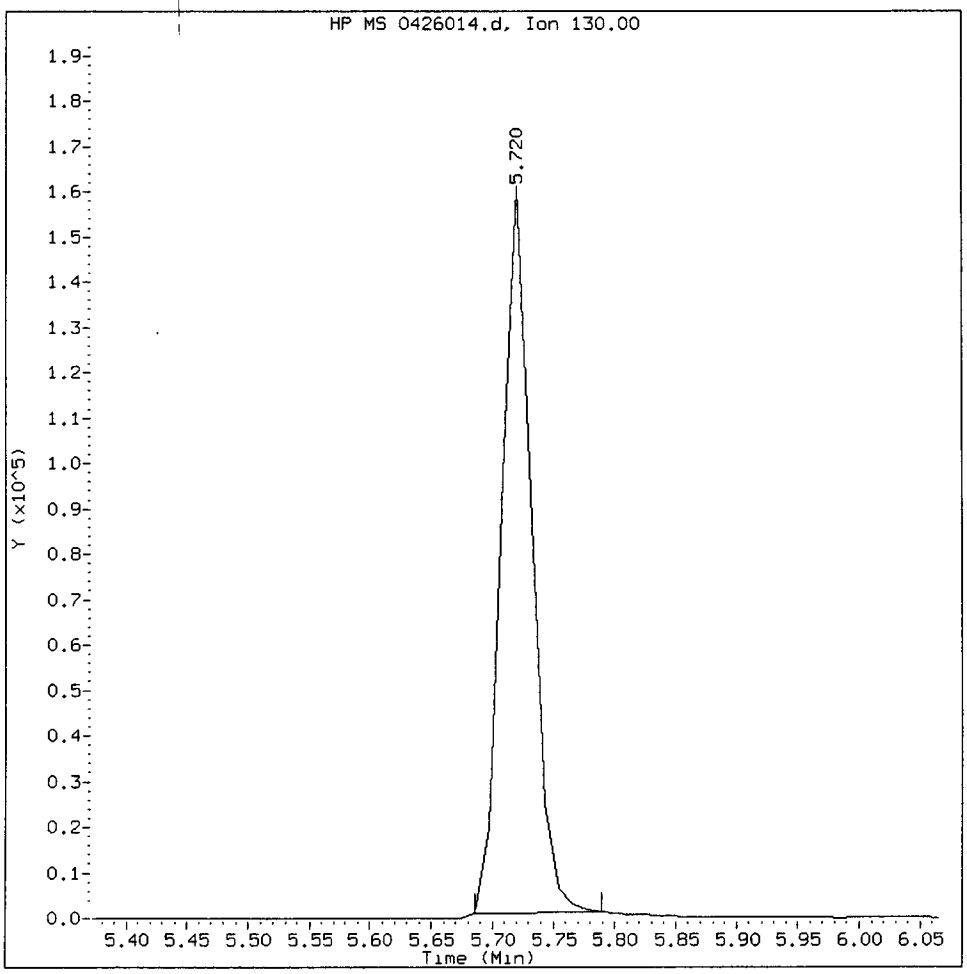


MH
5/4/11

SU53 : 00340

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

Trichloroethene Amount: 996.47 Area: 260900



MANUAL INTEGRATION for Trichloroethene

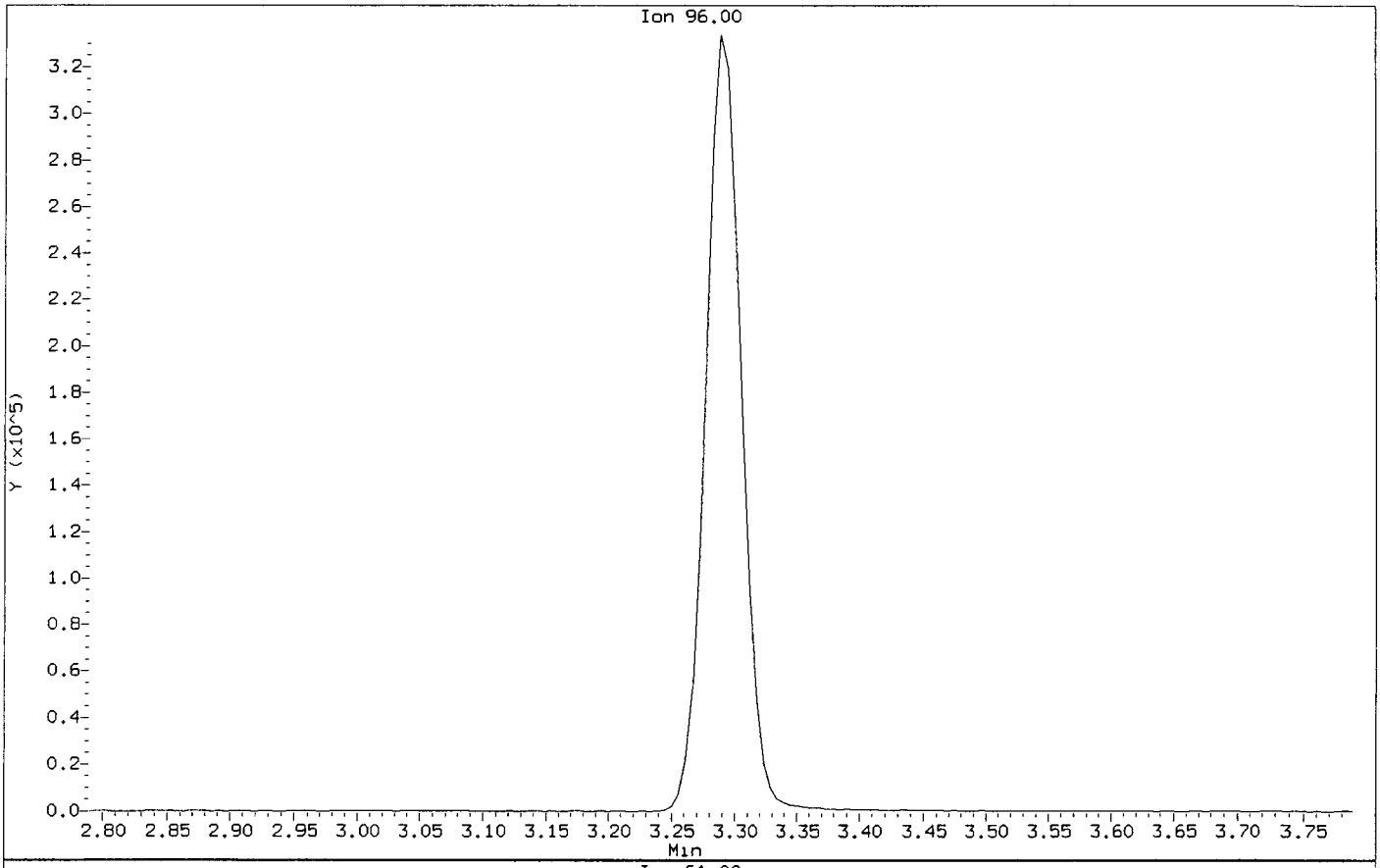
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

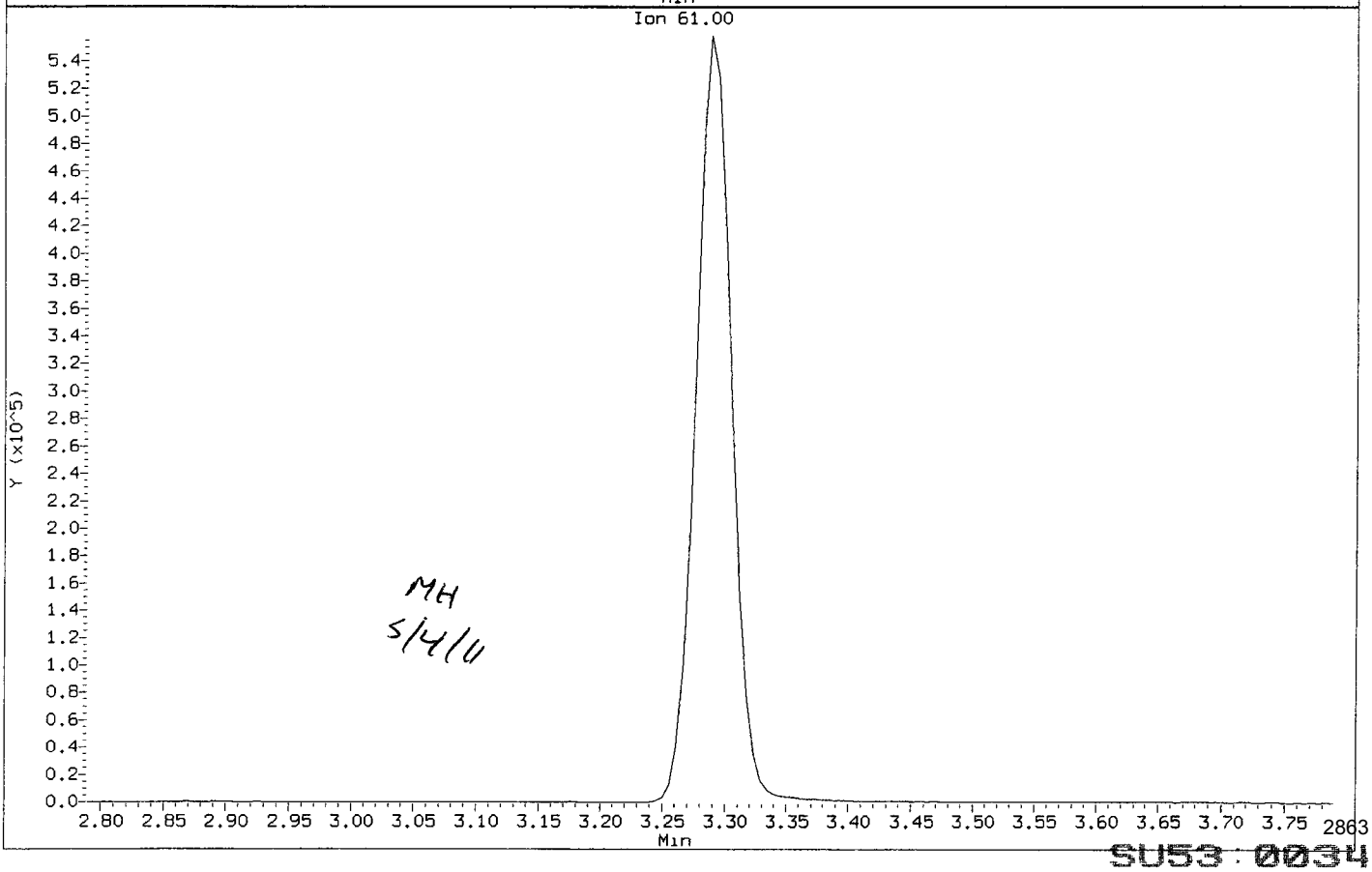
5. Other _____

Analyst: MH Date: 5/4/11

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

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

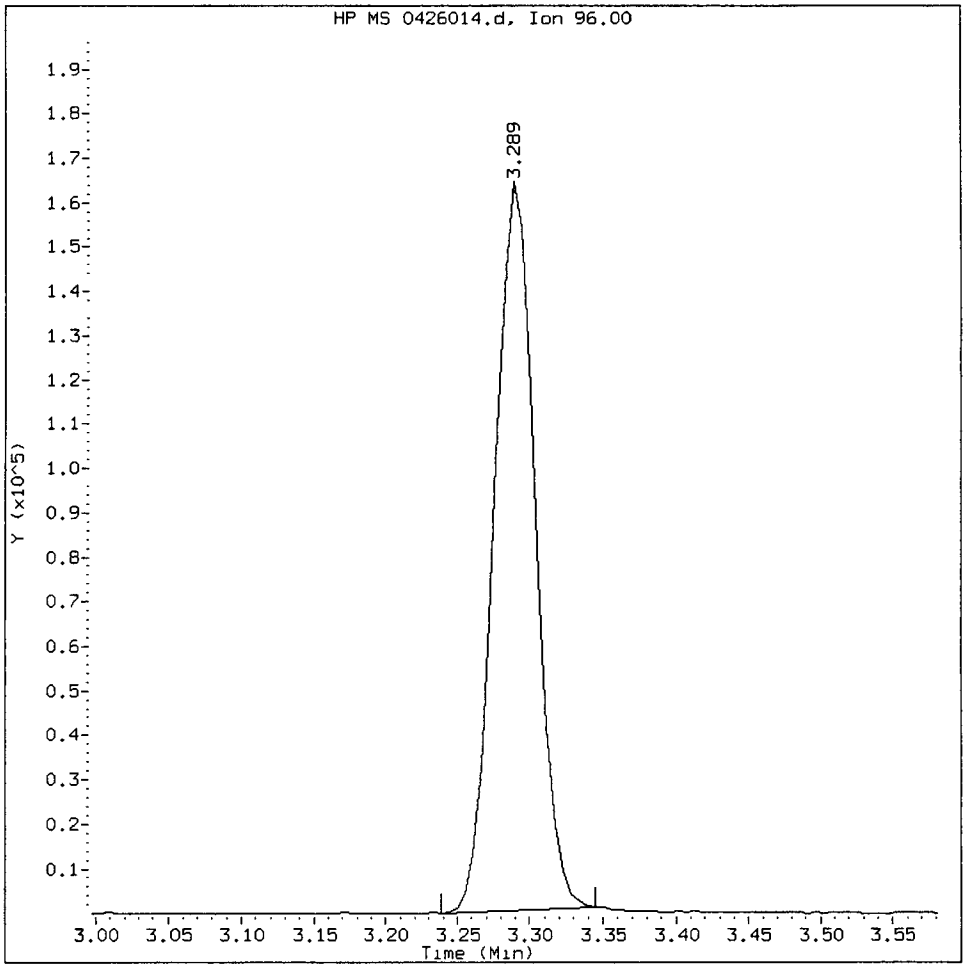




MH
5/4/11

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

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



MANUAL INTEGRATION for Trans-1,2-Dichloroethene

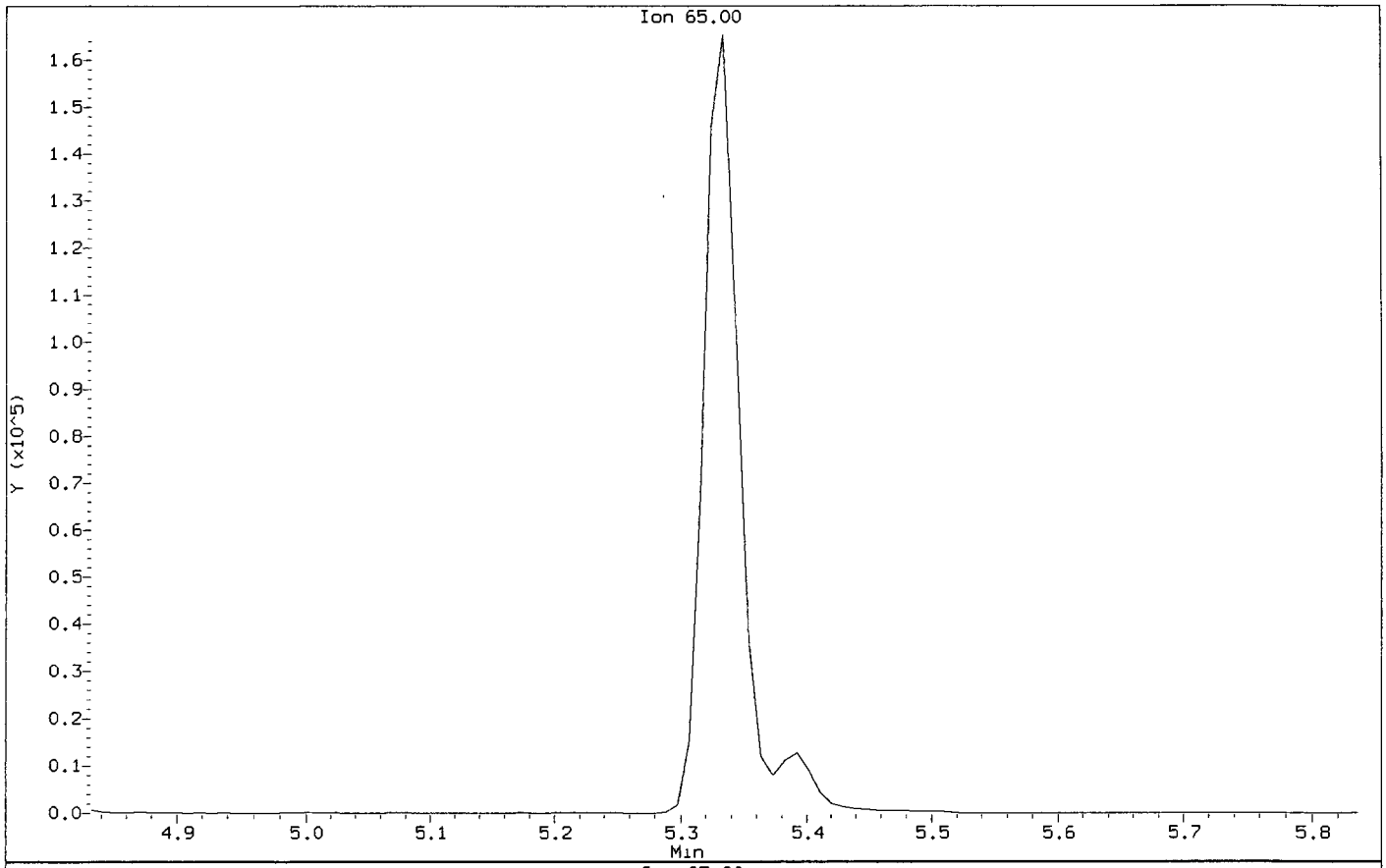
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

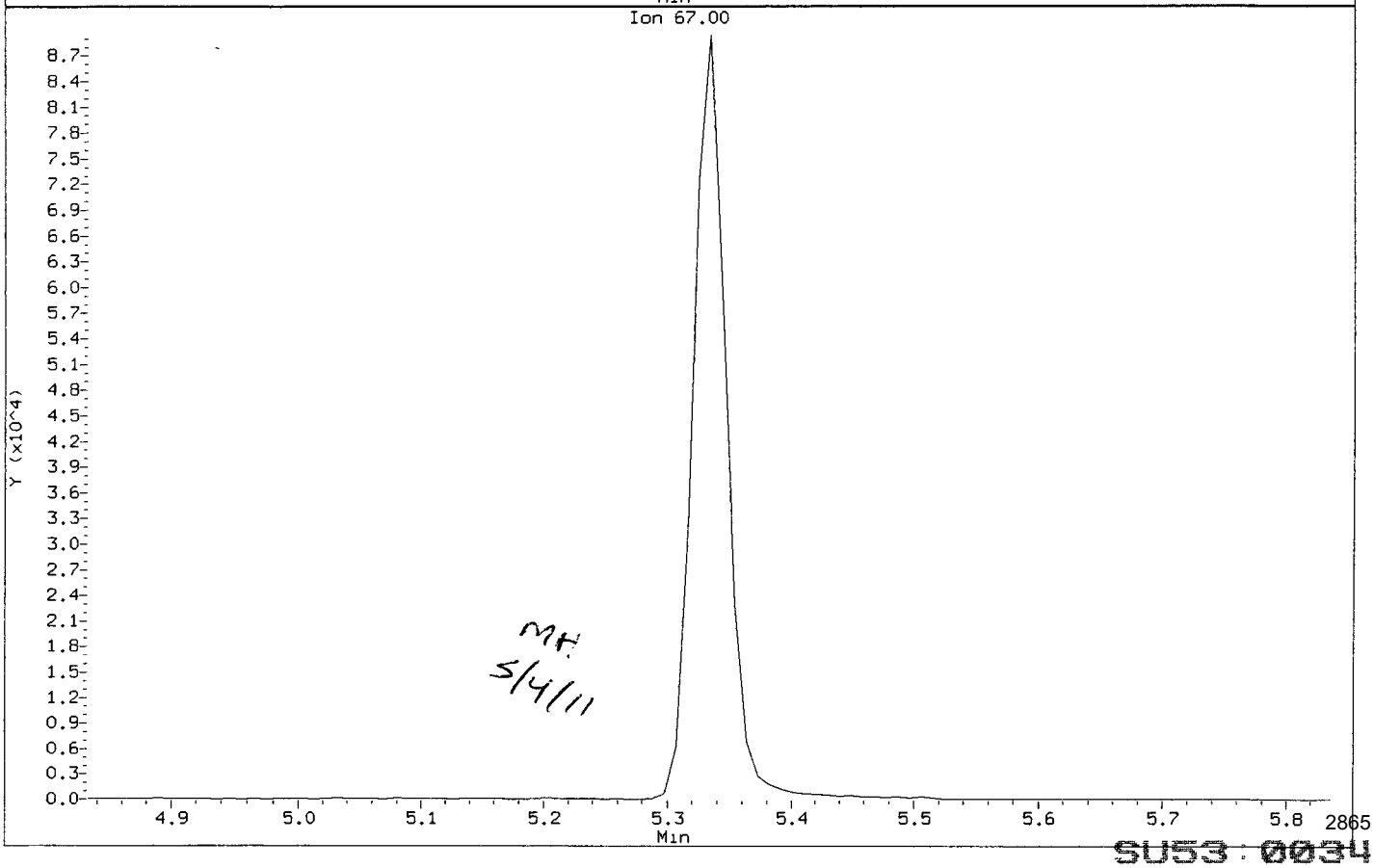
5. Other _____

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:



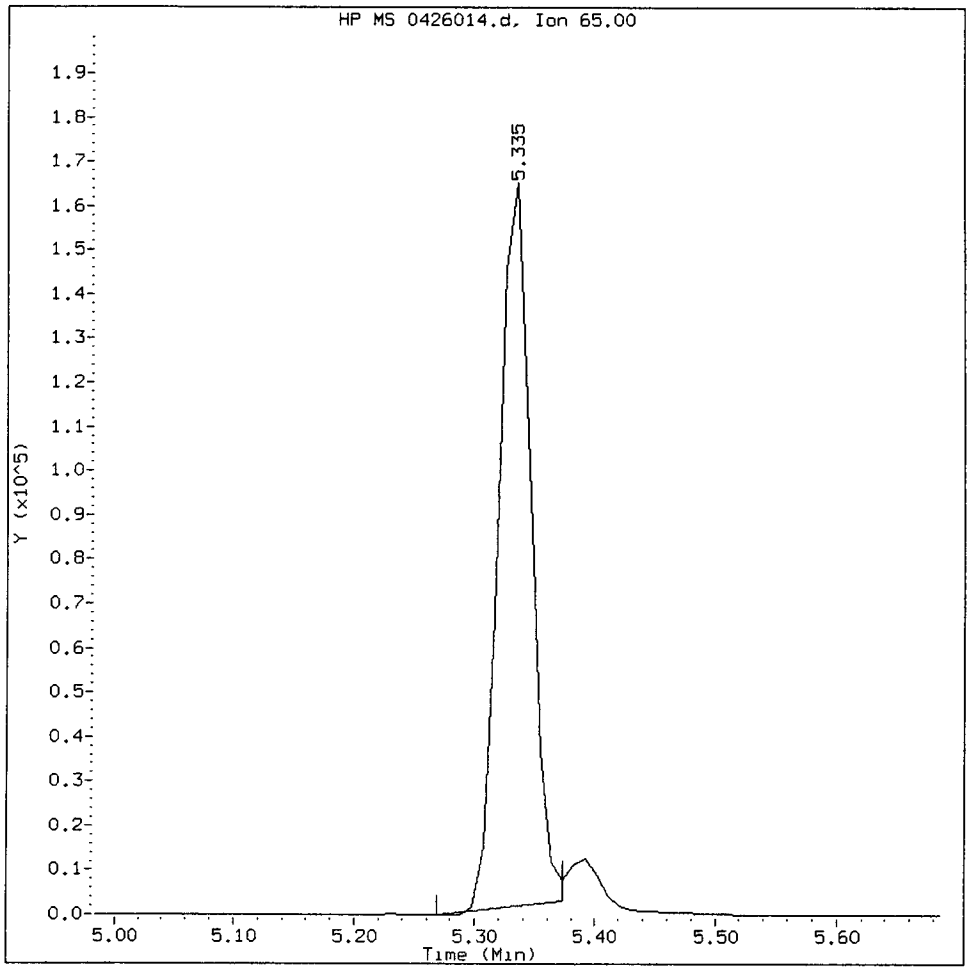


MH
5/4/11

SU53:00344

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

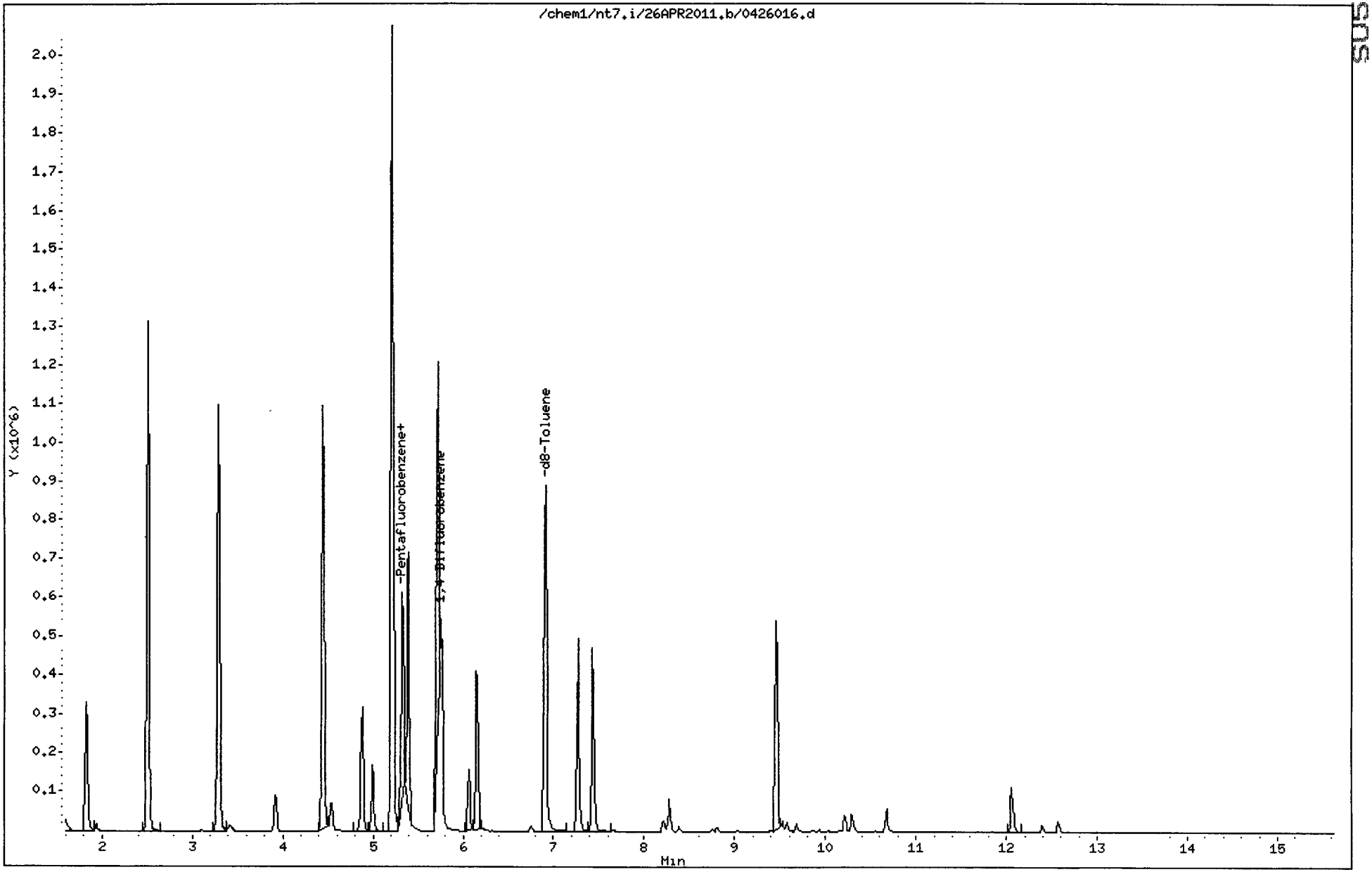
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/nt7.i/26APR2011.b/0426016.d
Date : 26-APR-2011 13:37
Client ID: 2000
Sample Info: 20000426,10,10,0,

Instrument: nt7.i

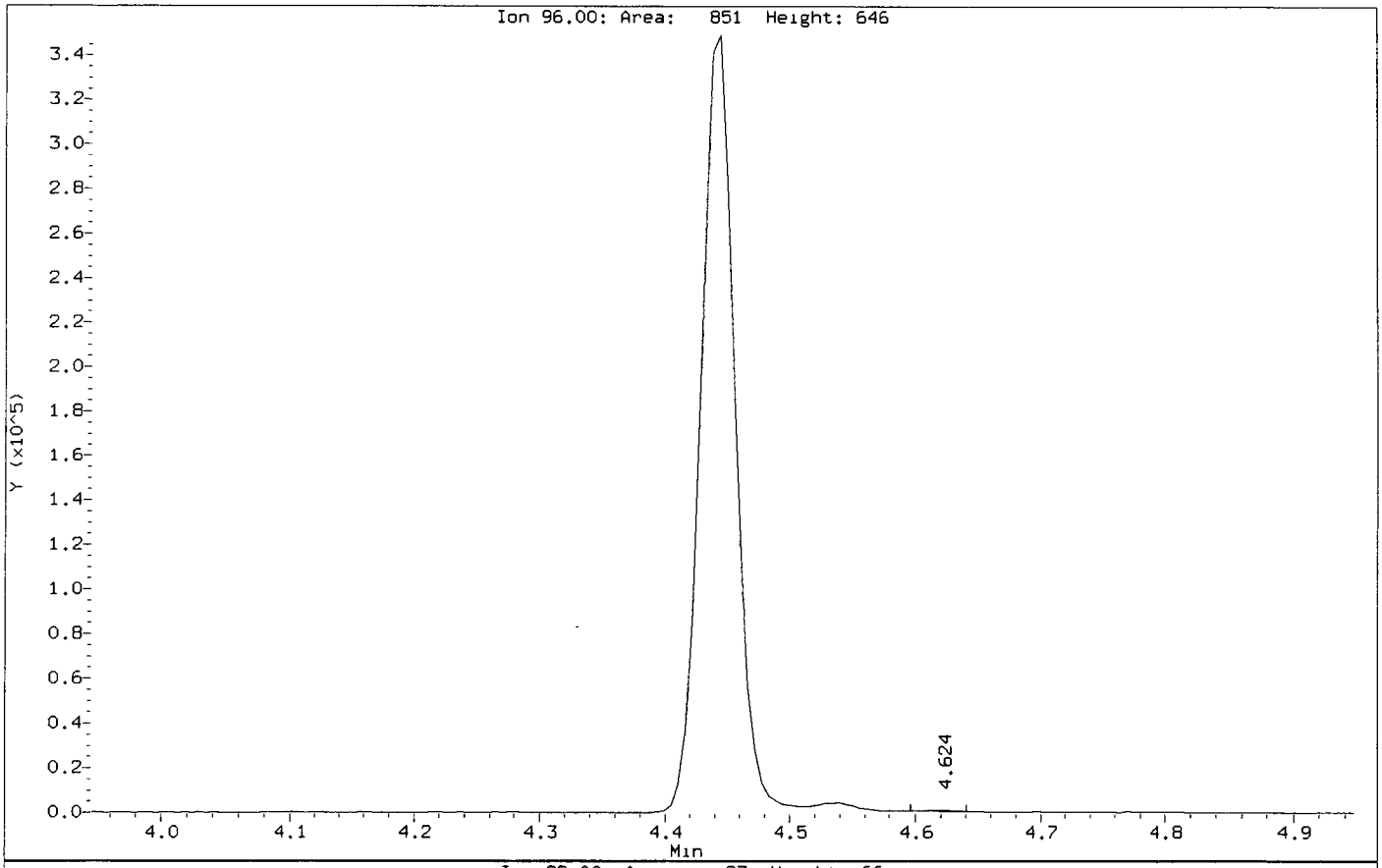
Operator: MH
Column diameter: 0.18

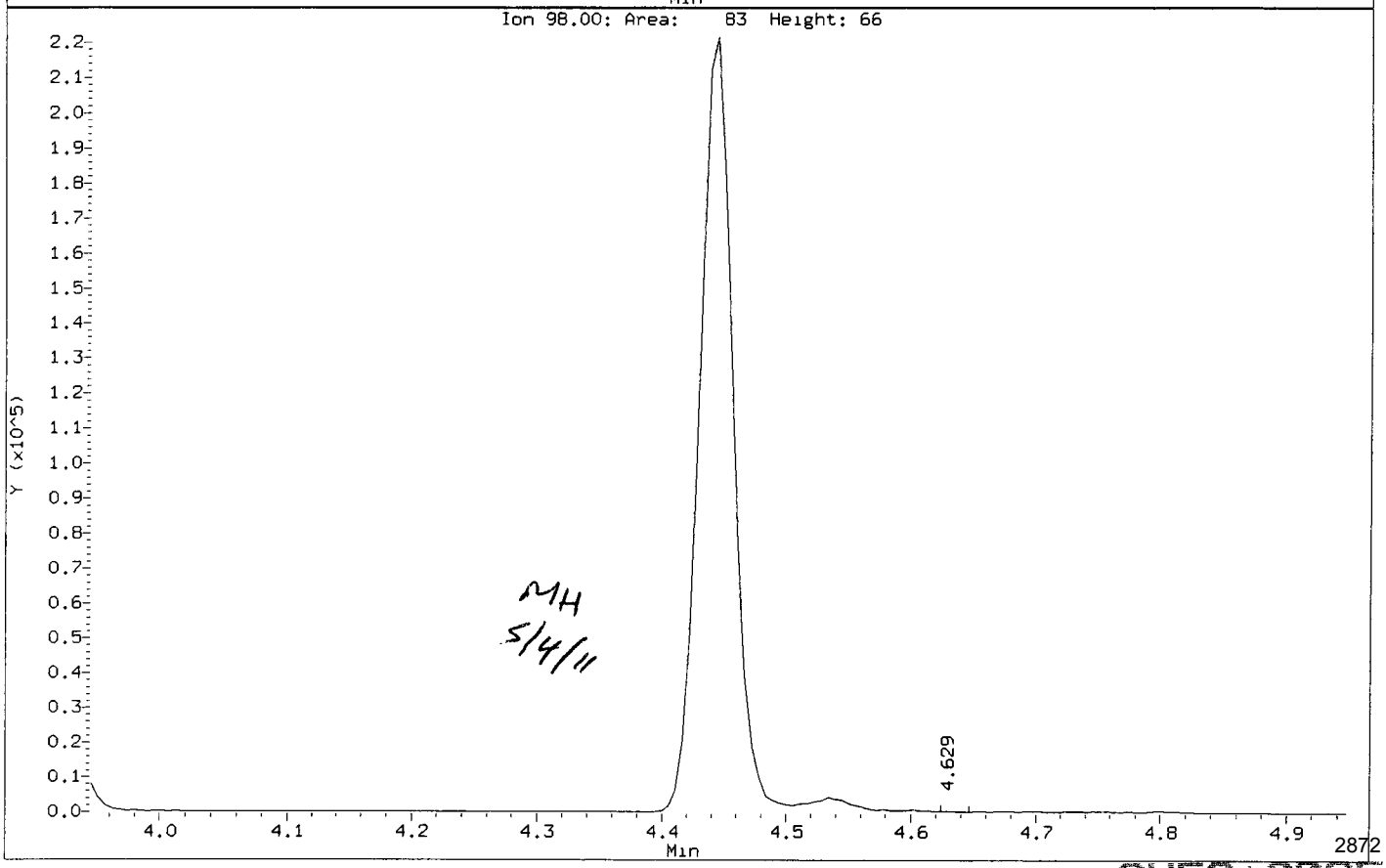
Column phase: RTXVMS



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

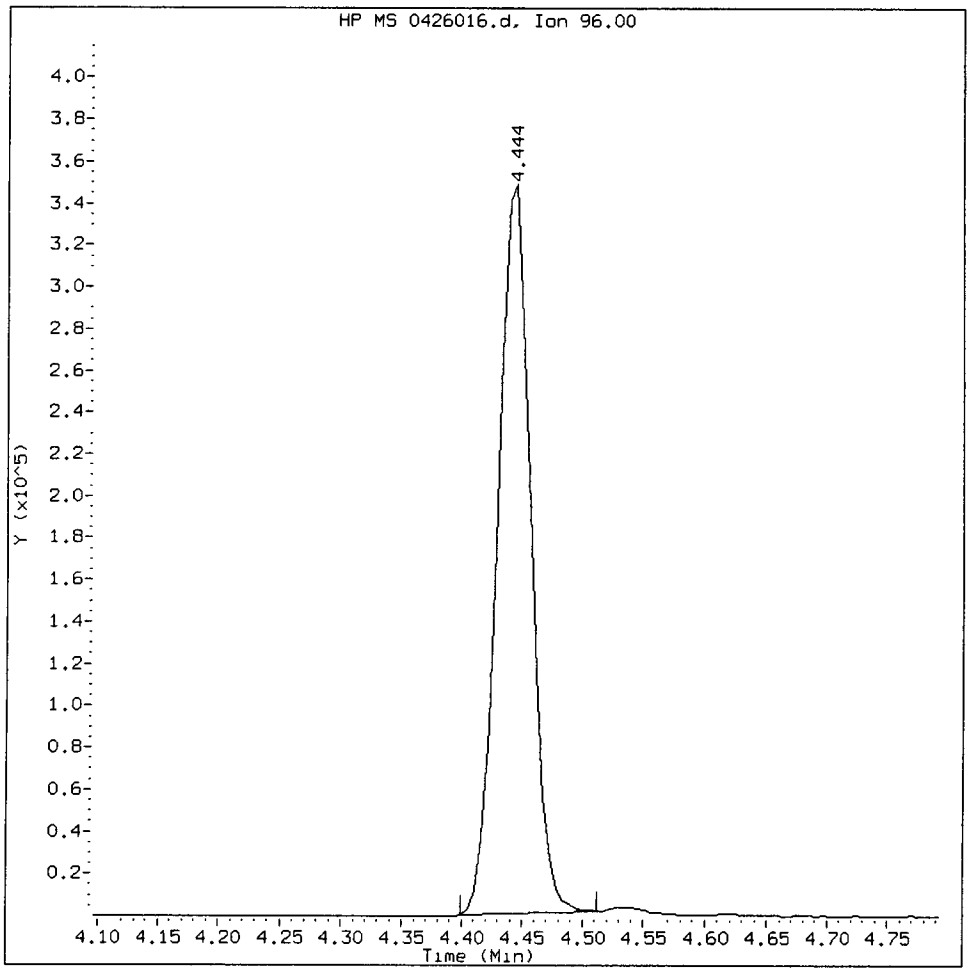
Compound: cis-1,2-dichloroethene
CAS Number:





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

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



MANUAL INTEGRATION for cis-1,2-dichloroethene

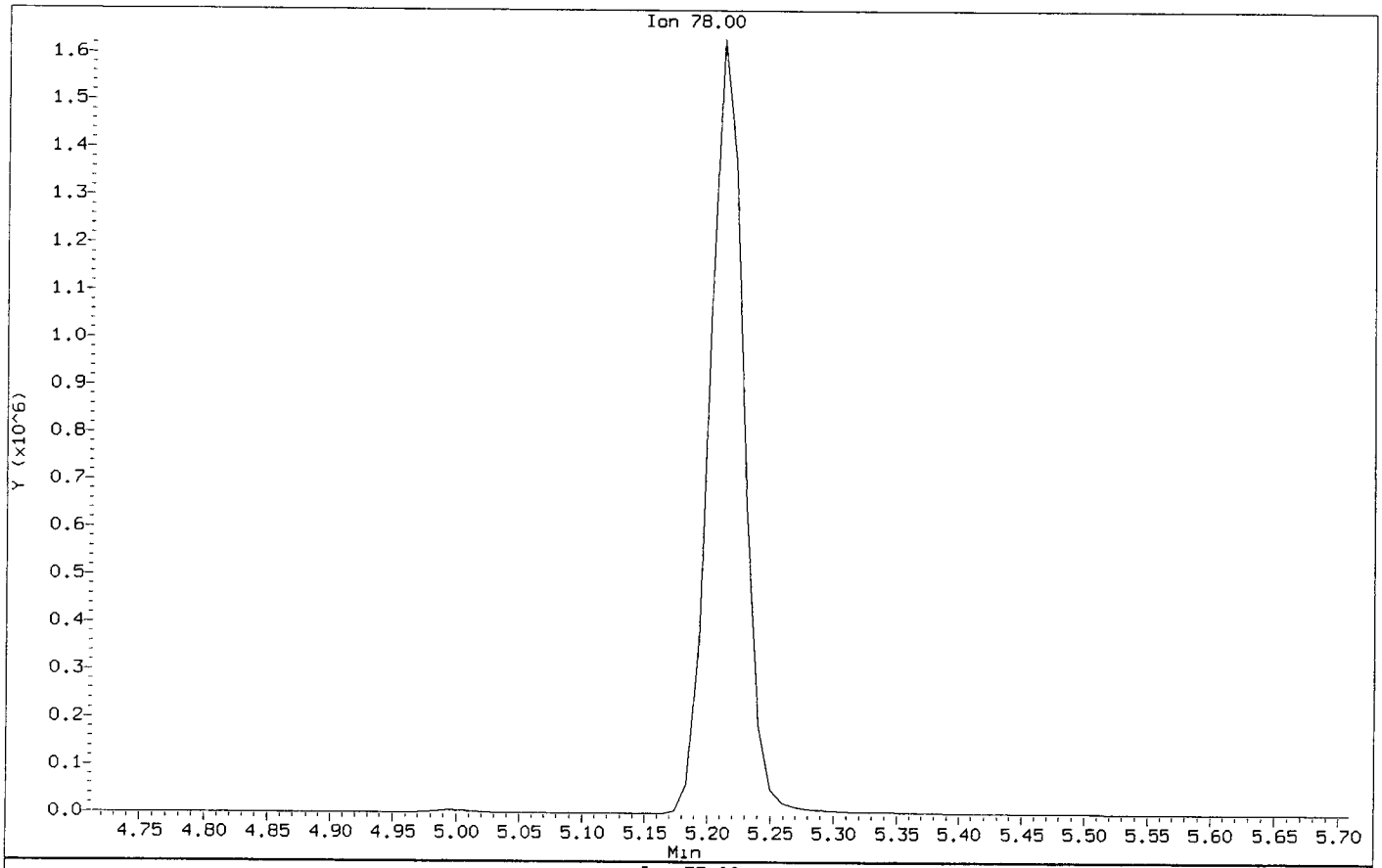
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

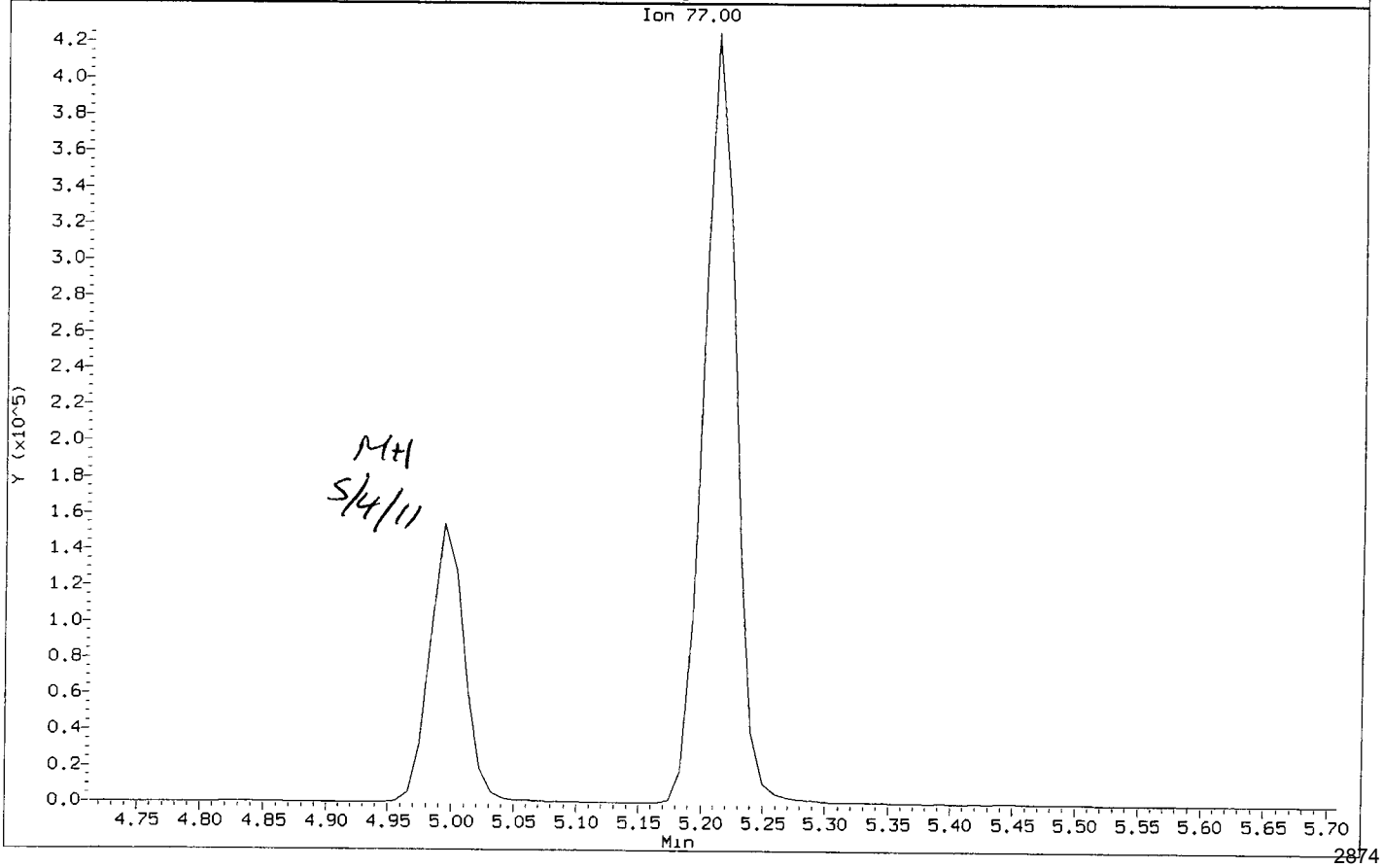
5. Other _____

Analyst: MH Date: 5/4/11

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

Compound: Benzene
CAS Number:

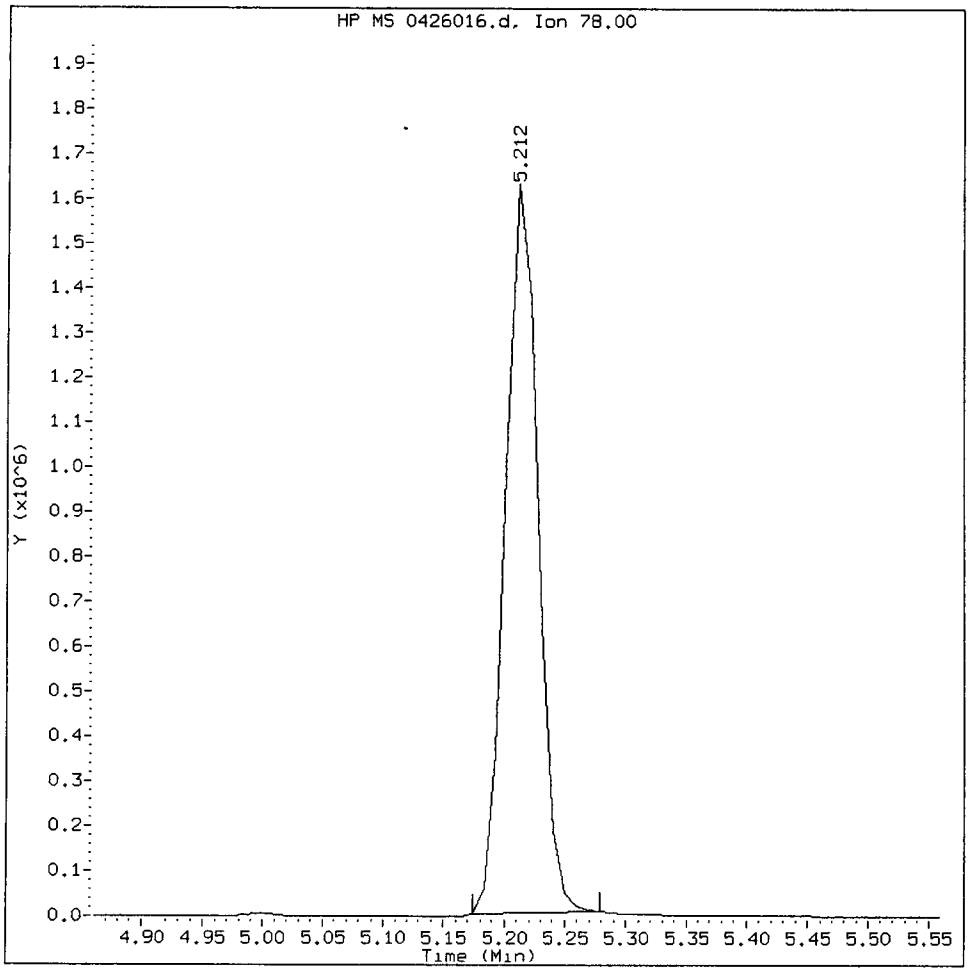




SU53 : 00353

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

Benzene Amount: 1676.43 Area: 3063572



MANUAL INTEGRATION for Benzene

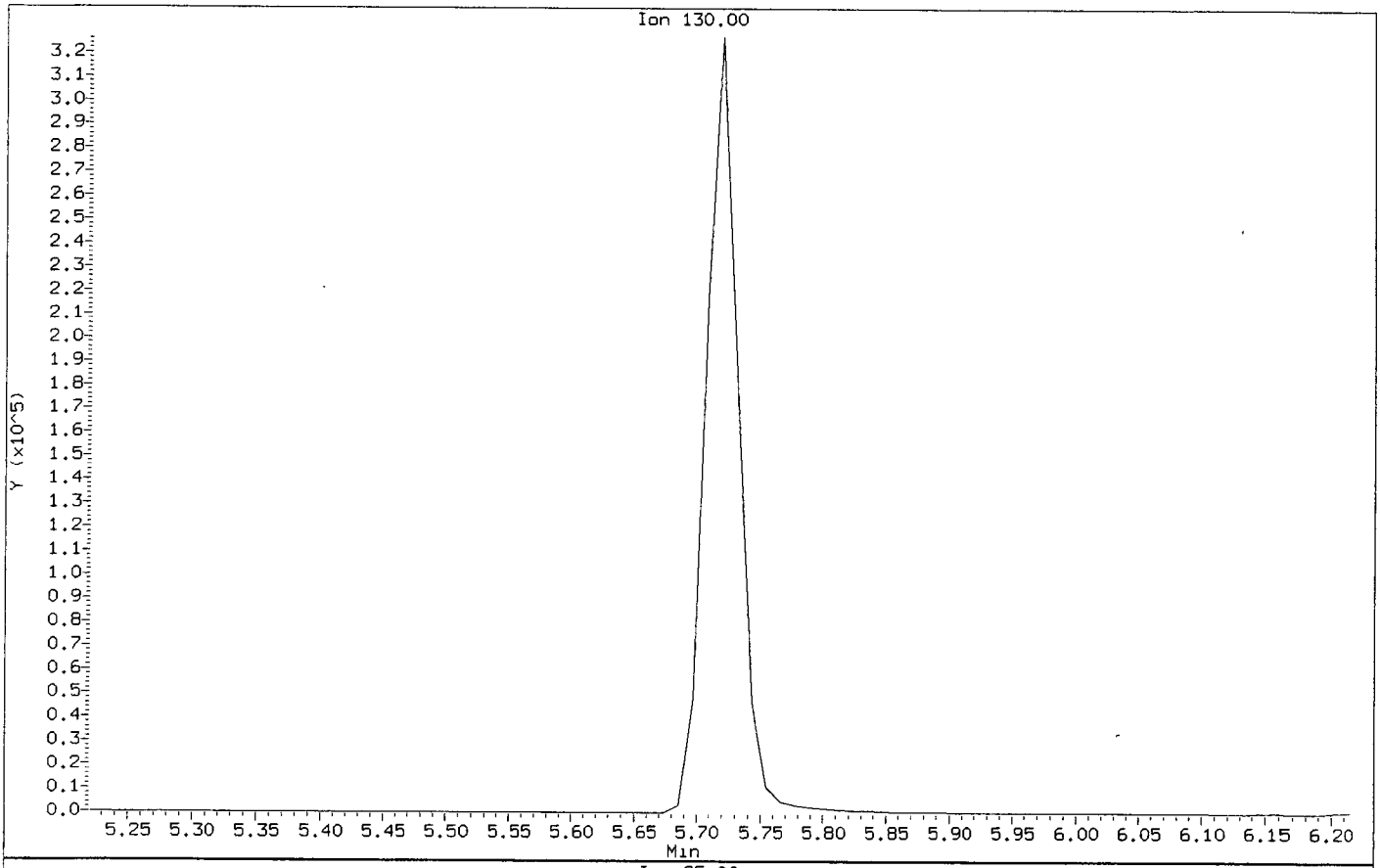
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

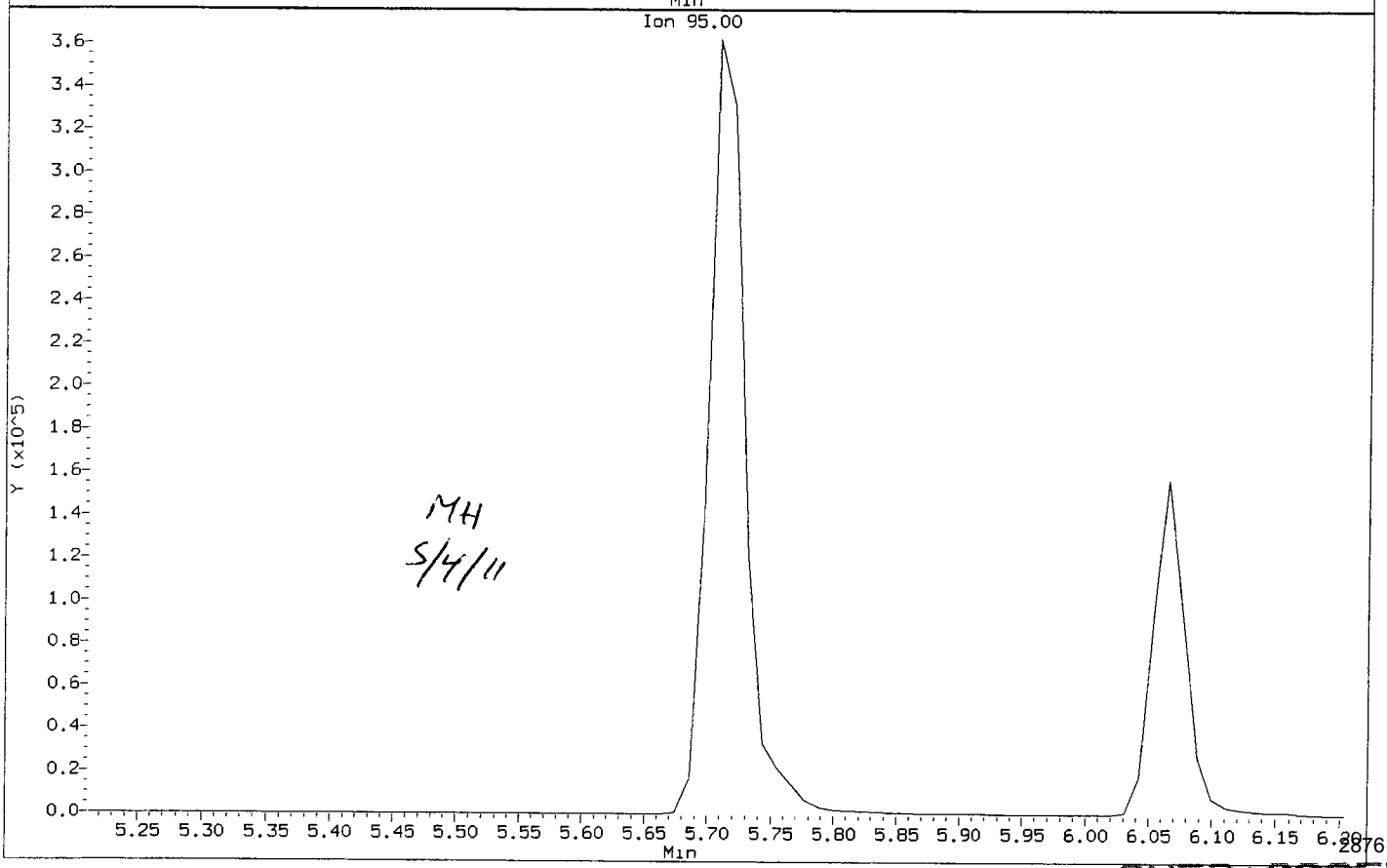
5. Other _____

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:



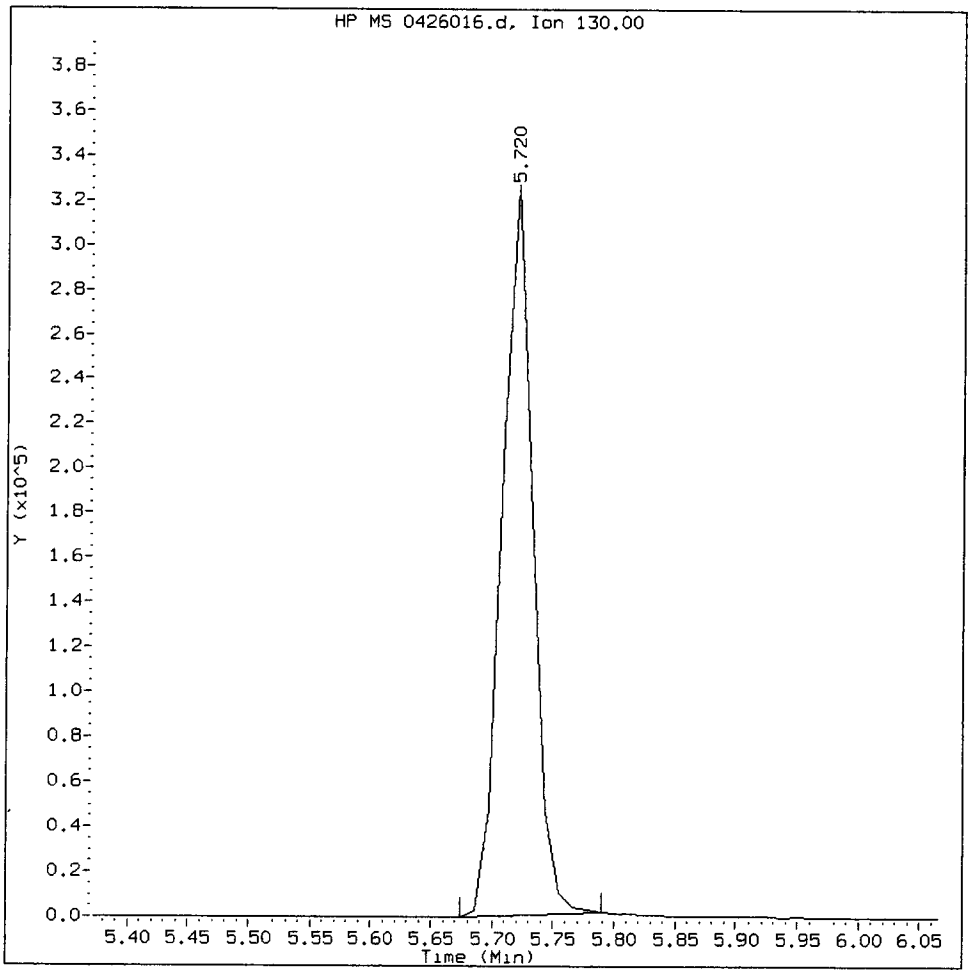


MH
5/4/11

SU53:00355

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

Trichloroethene Amount: 1734.77 Area: 542909



MANUAL INTEGRATION for Trichloroethene

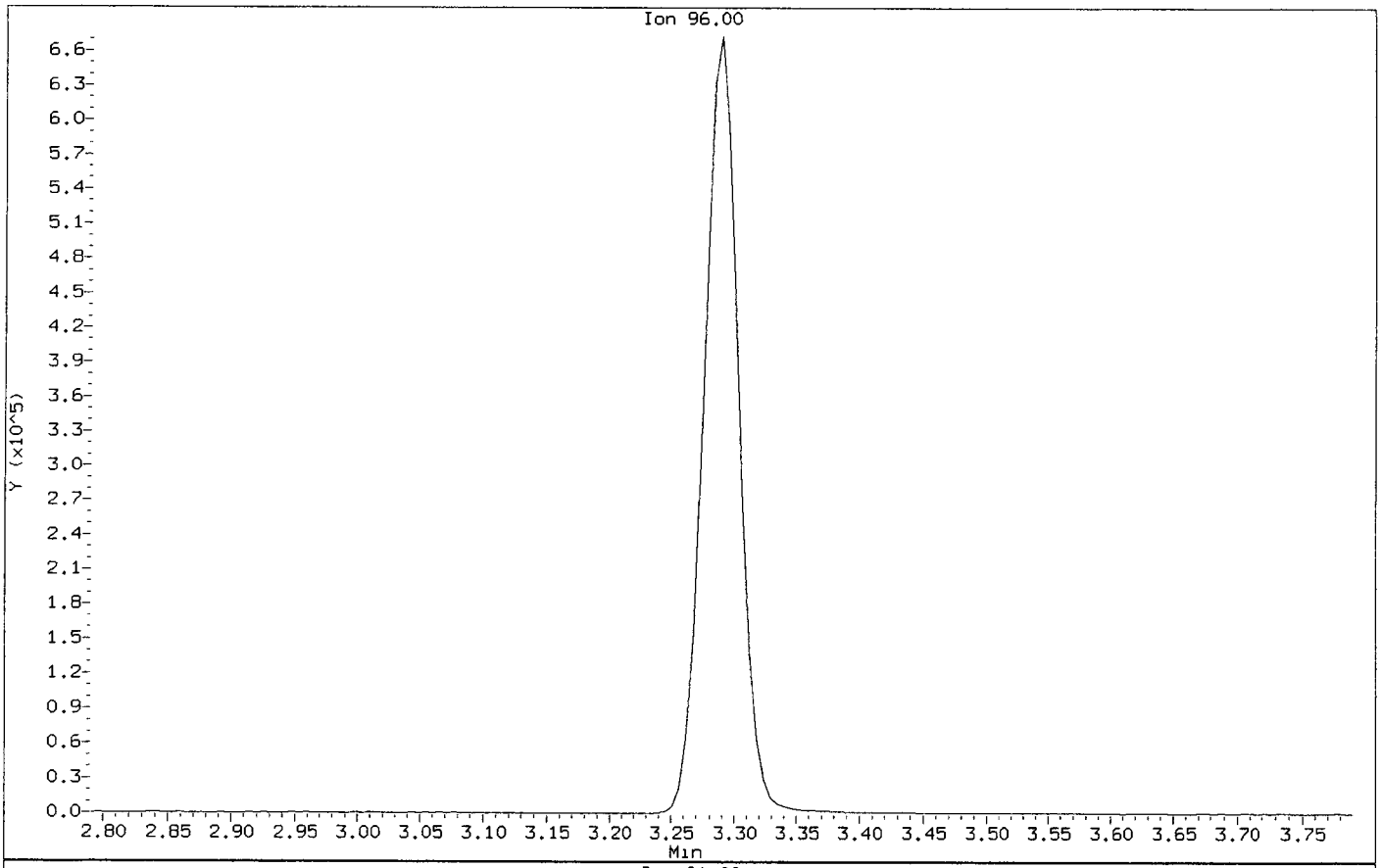
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

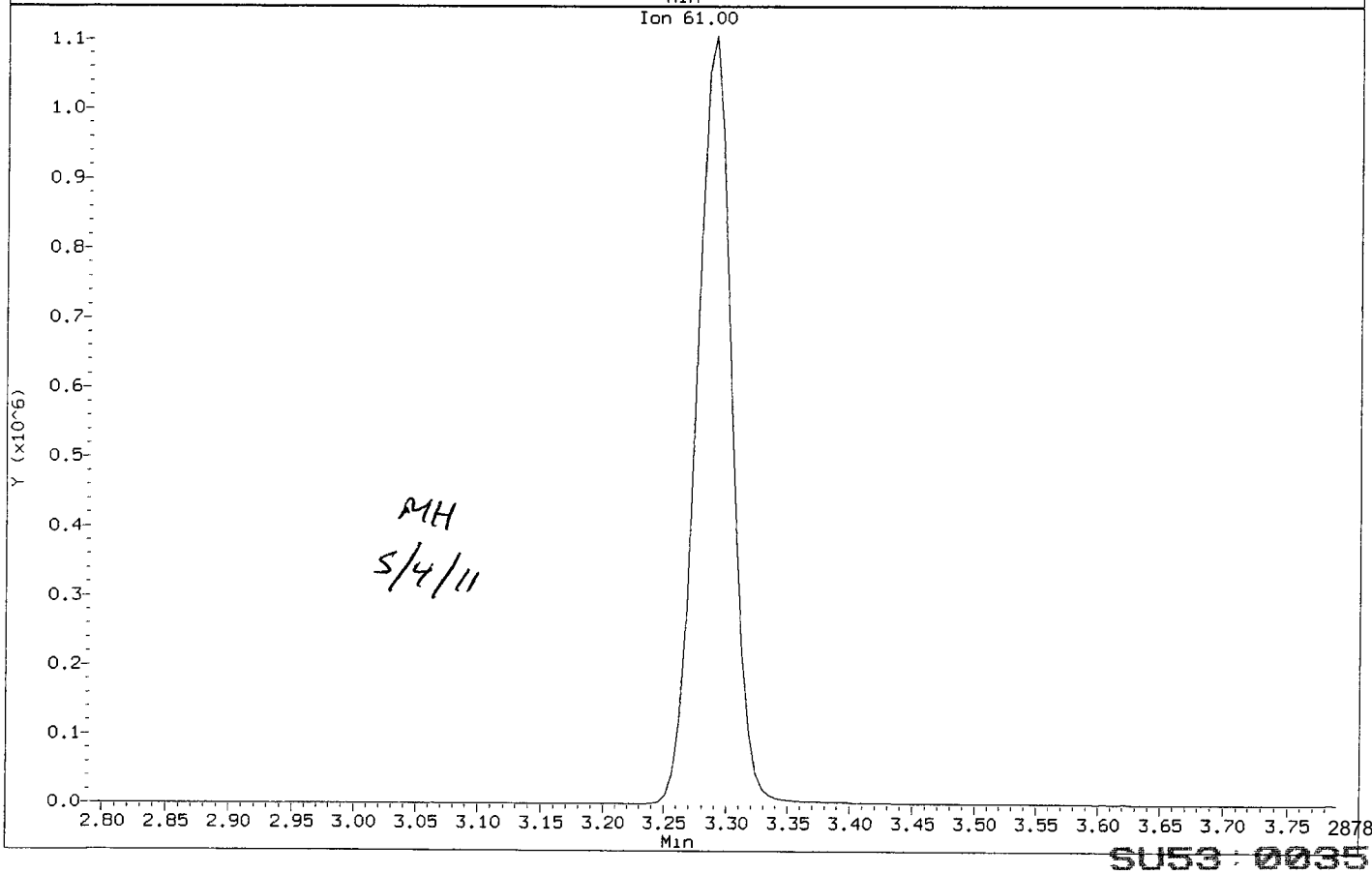
5. Other _____

Analyst: MH Date: 5/4/11

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

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





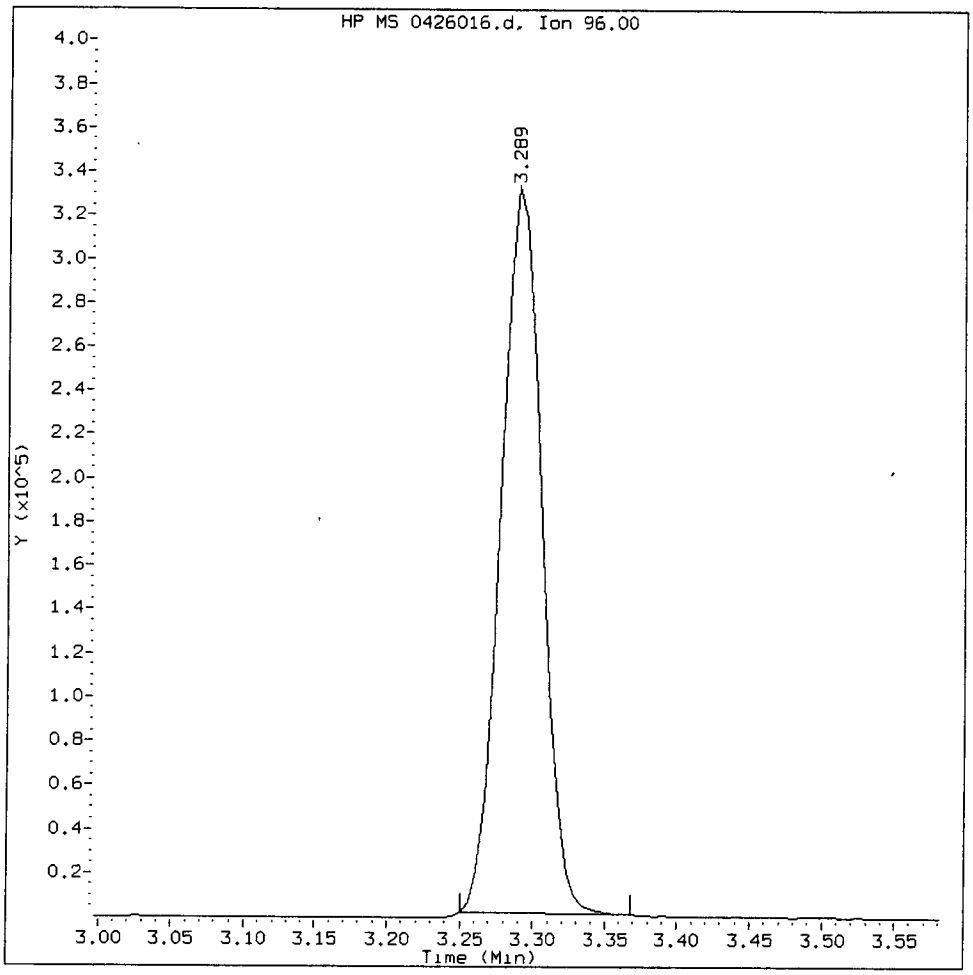
MH
5/4/11

2878

SU53:00357

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

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



MANUAL INTEGRATION for Trans-1,2-Dichloroethene

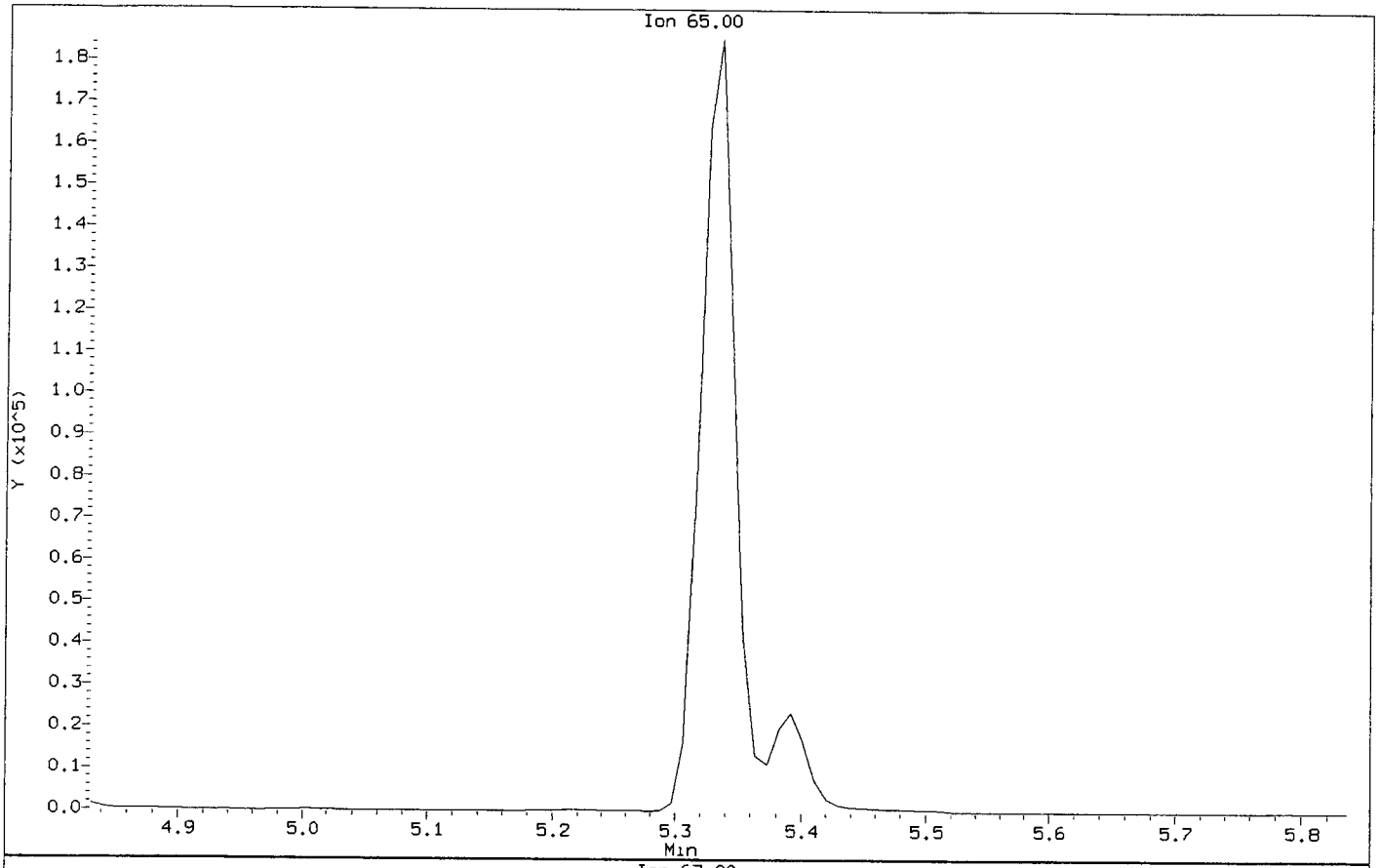
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

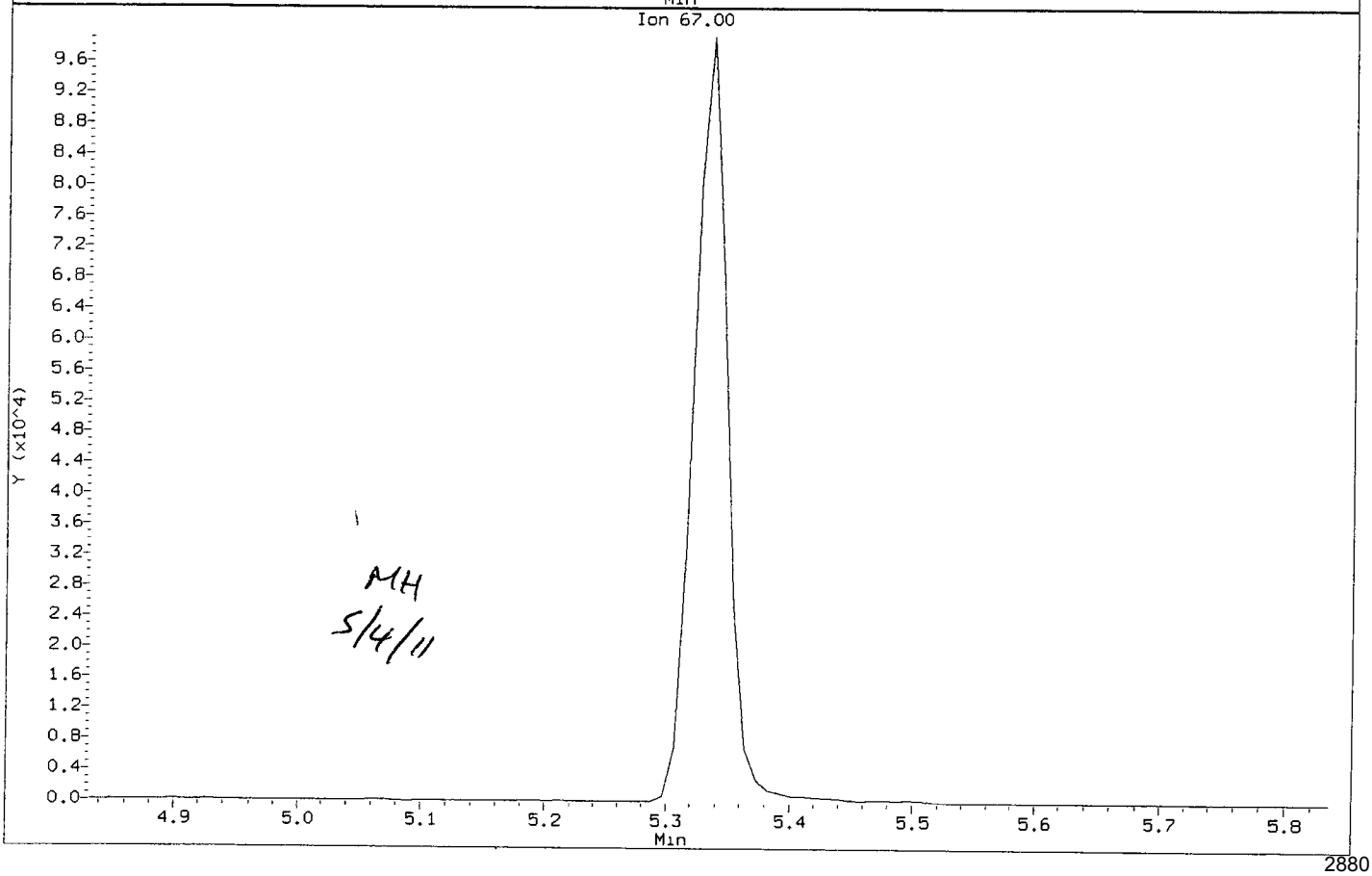
5. Other _____

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:



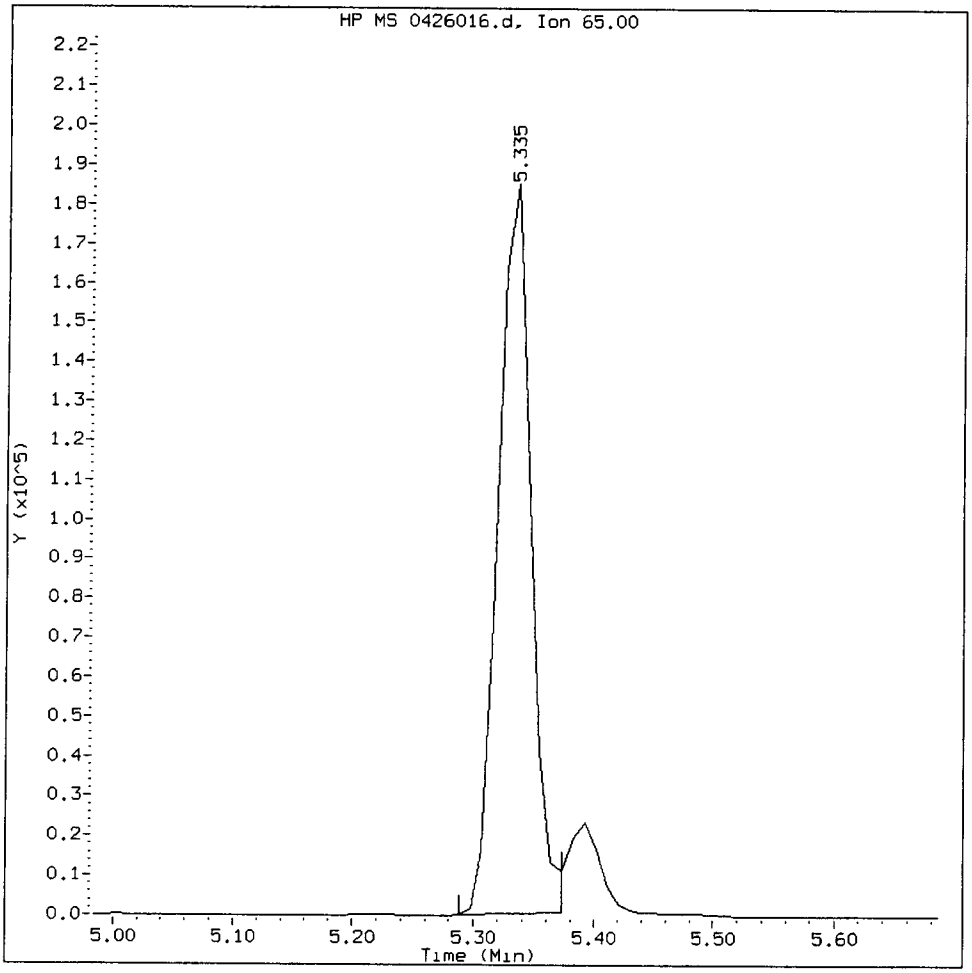


MH
5/4/11

SU53 : 00359

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

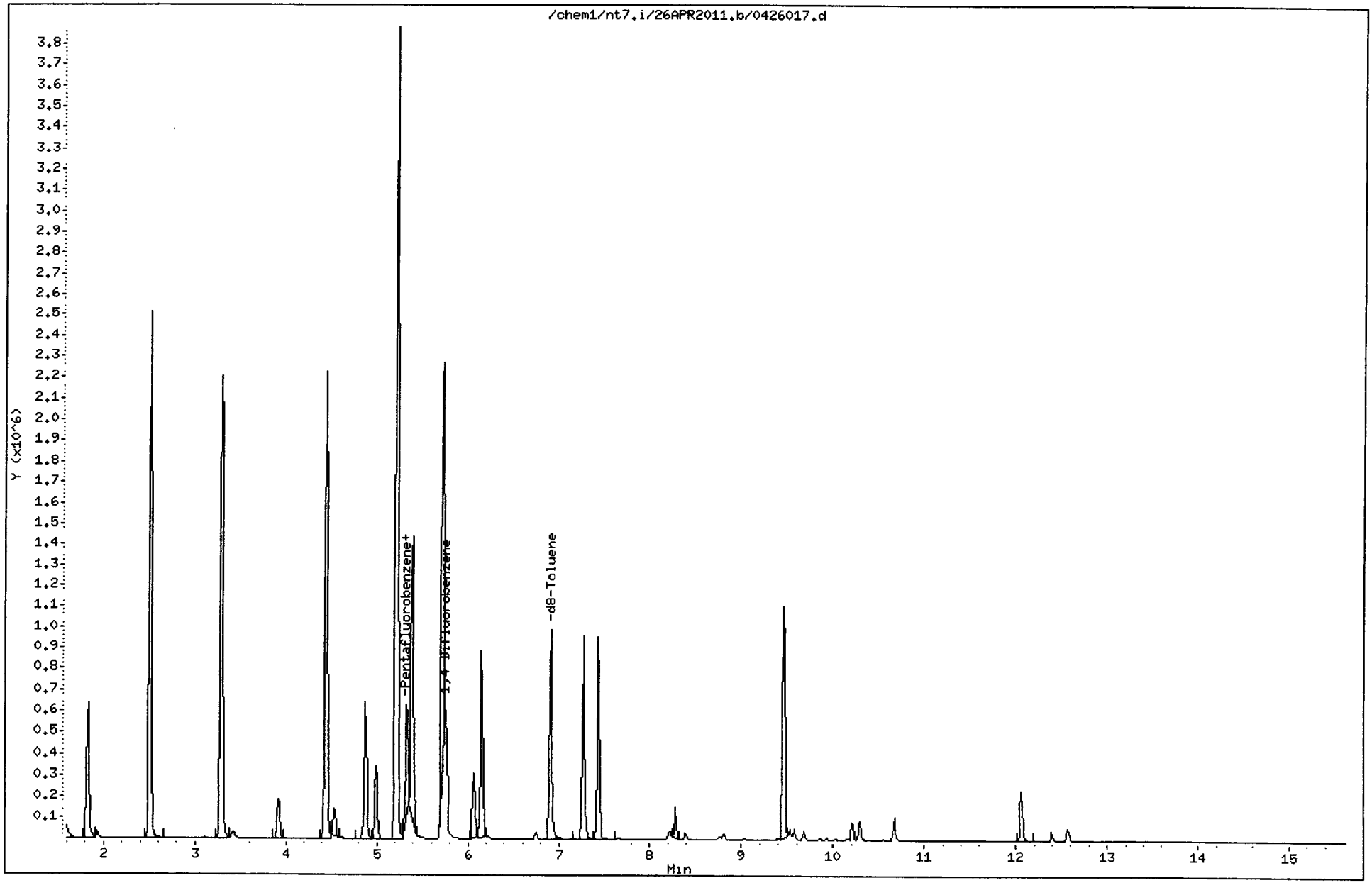
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	5.33	4.83	5.83	5.32	-0.03
7 1,4-Difluorobenze	5.75	5.25	6.25	5.76	0.02

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,

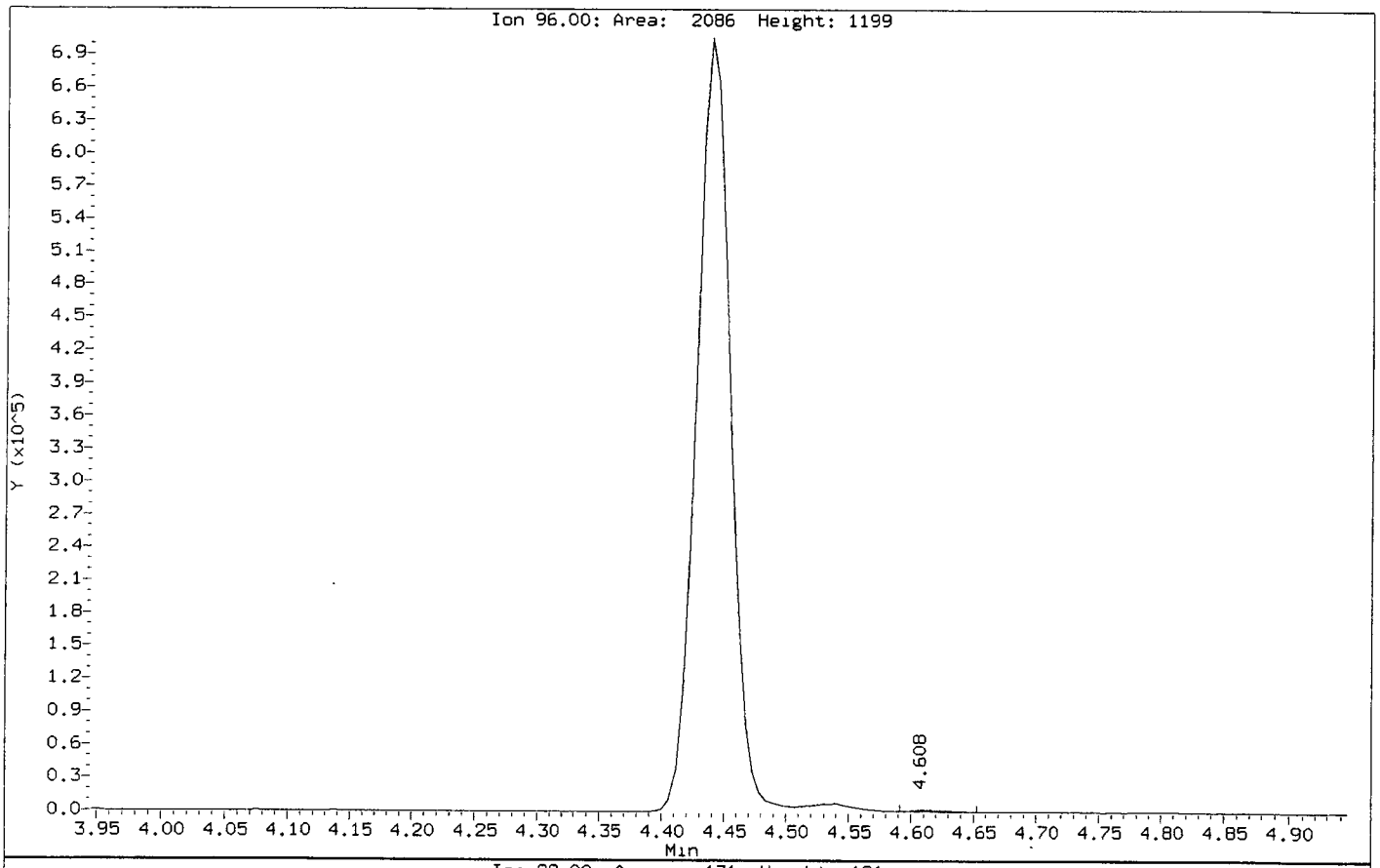
Instrument: nt7.i

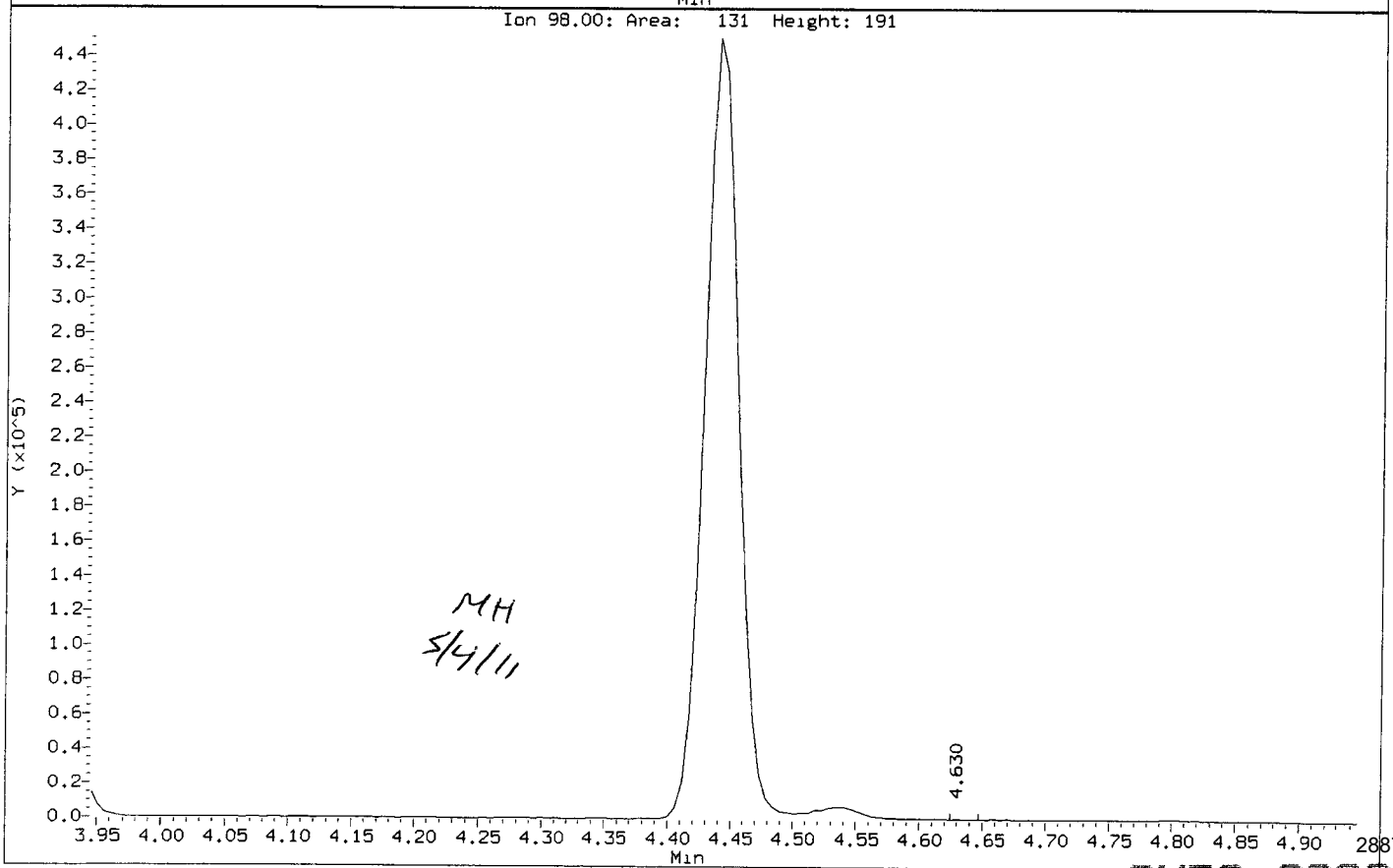
Operator: MH
Column phase: RTXVMS
Column diameter: 0.18



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:

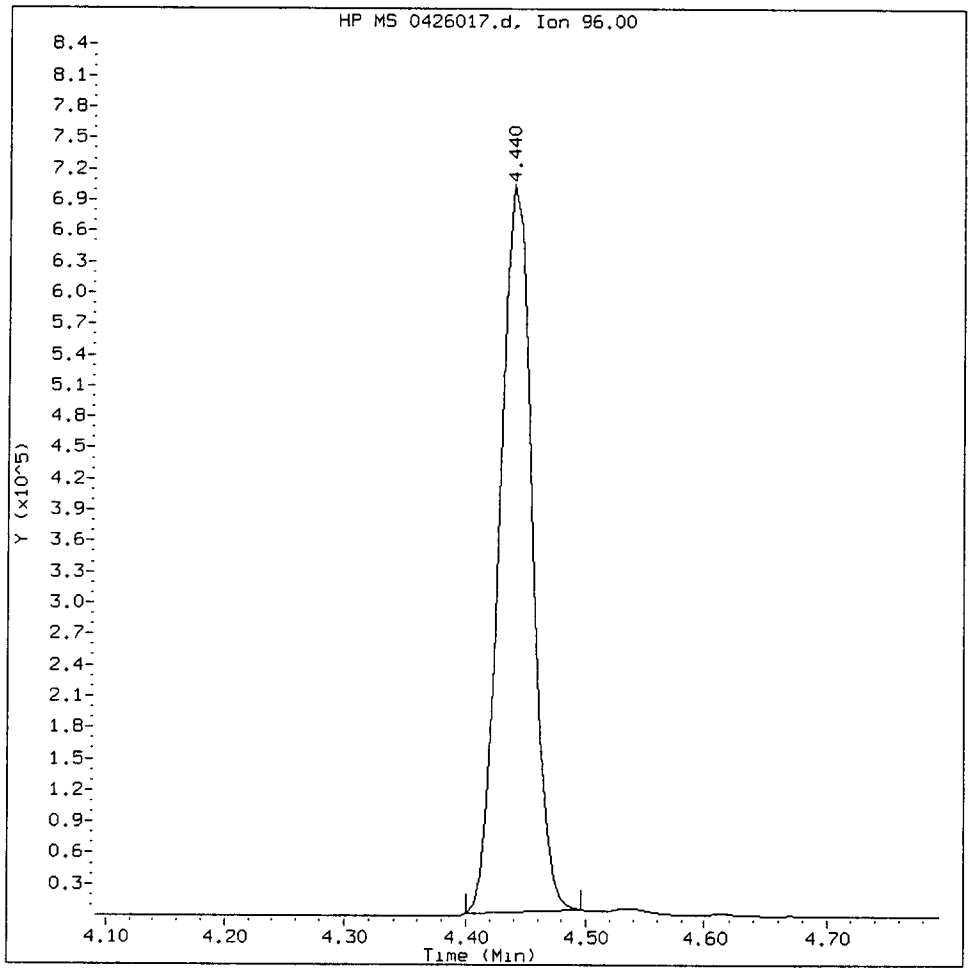




MH
5/4/11

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

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



MANUAL INTEGRATION for cis-1,2-dichloroethene

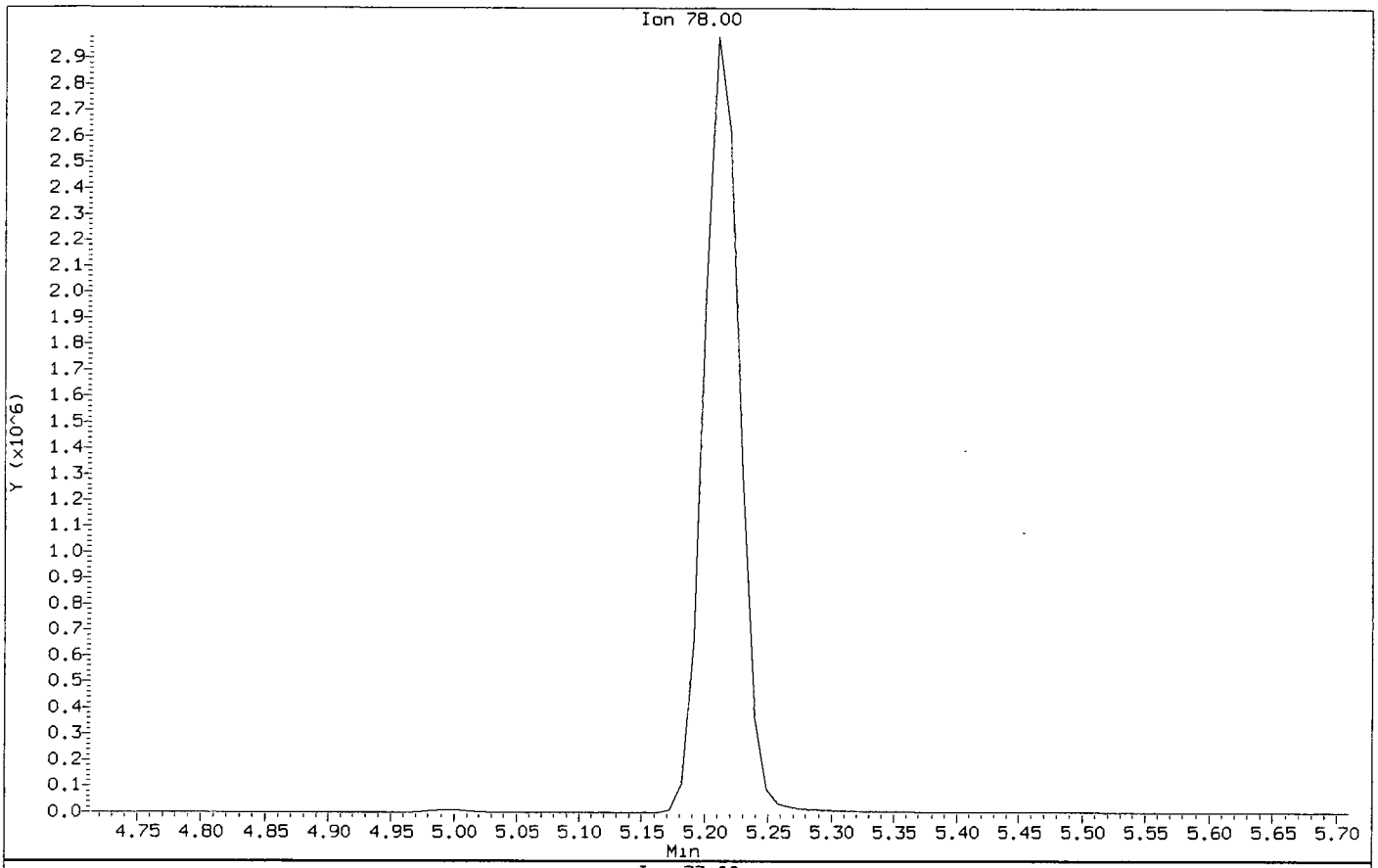
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

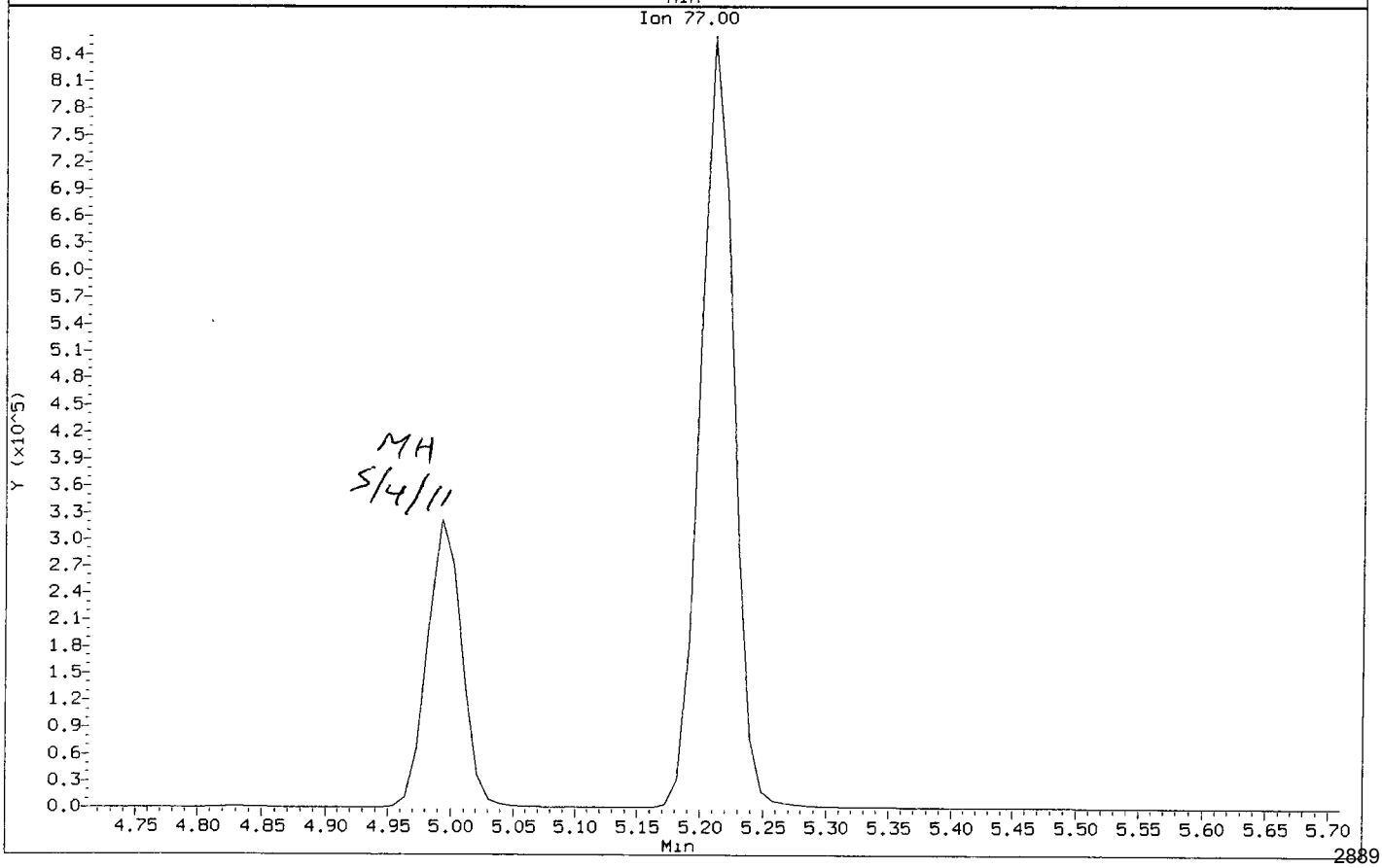
5. Other _____

Analyst: MH Date: 5/4/11

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

Compound: Benzene
CAS Number:

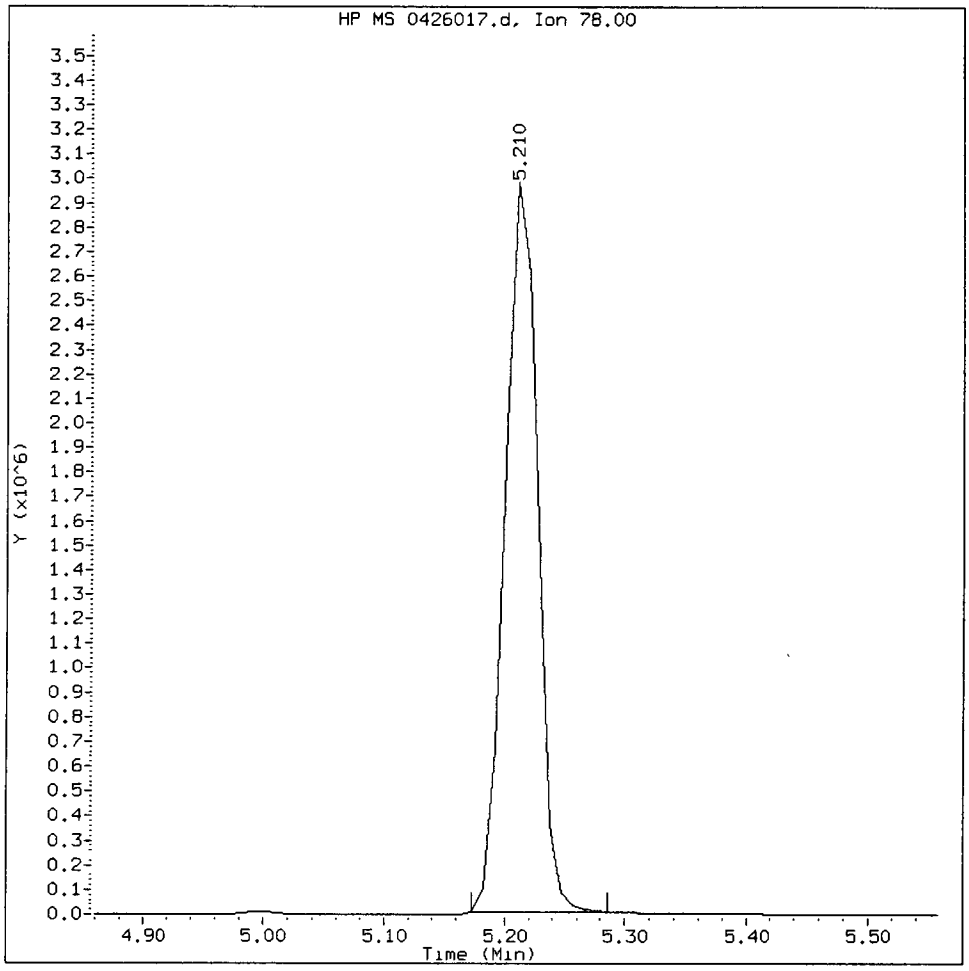




SU53 : 00368

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

Benzene Amount: 2963.06 Area: 5754348



MANUAL INTEGRATION for Benzene

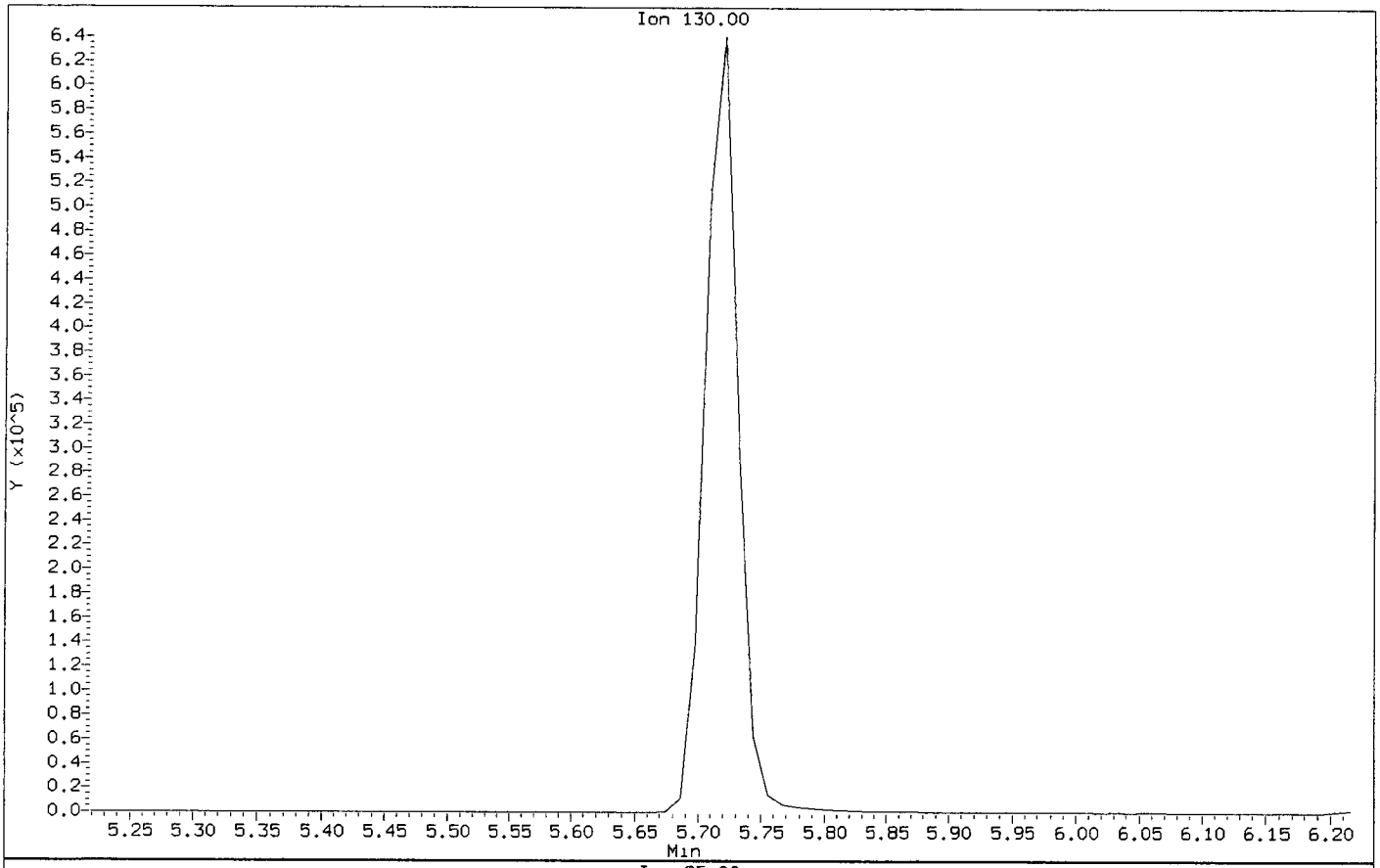
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

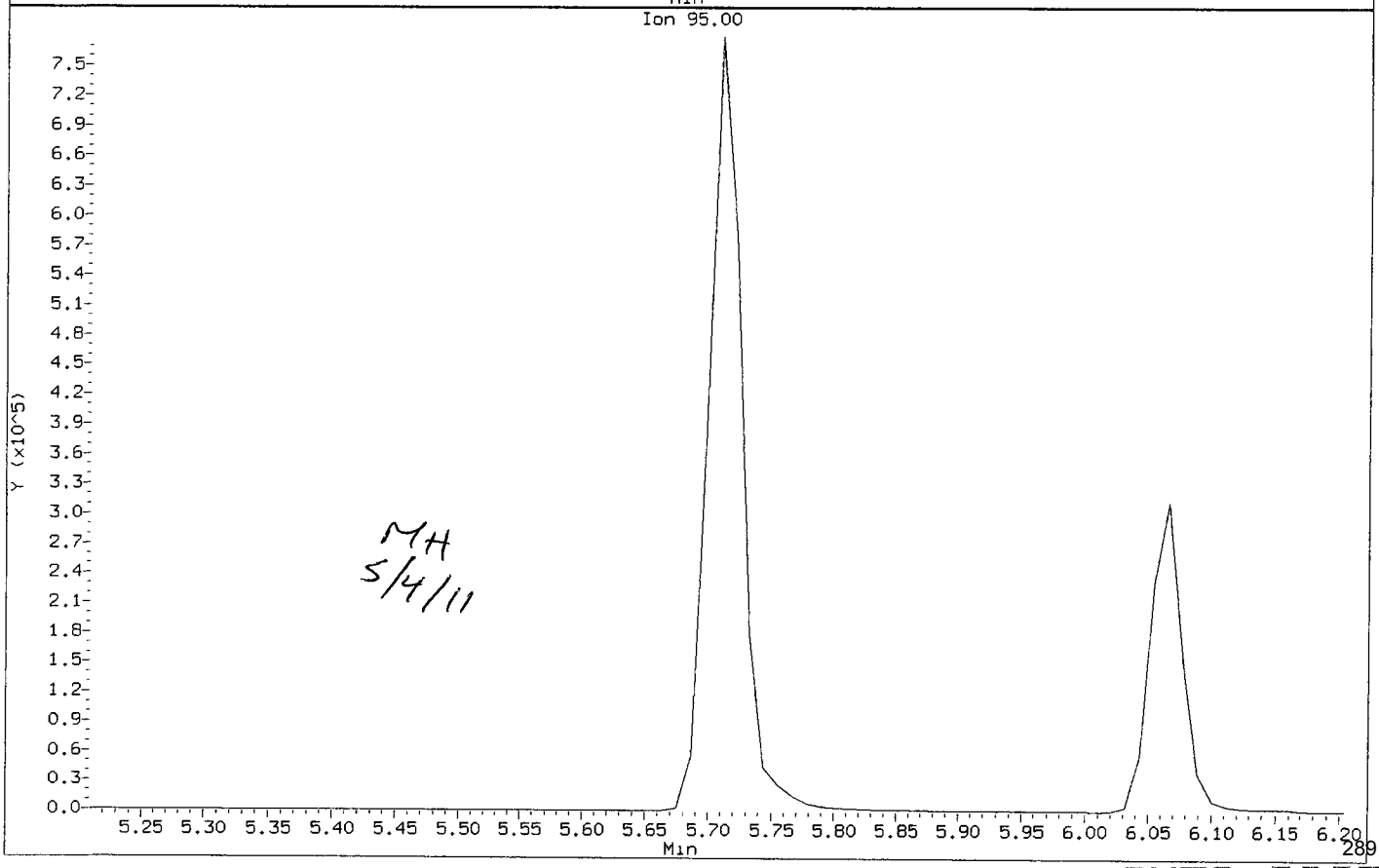
5. Other _____

Analyst: MH Date: 5/4/11

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

Compound: Trichloroethene
CAS Number:

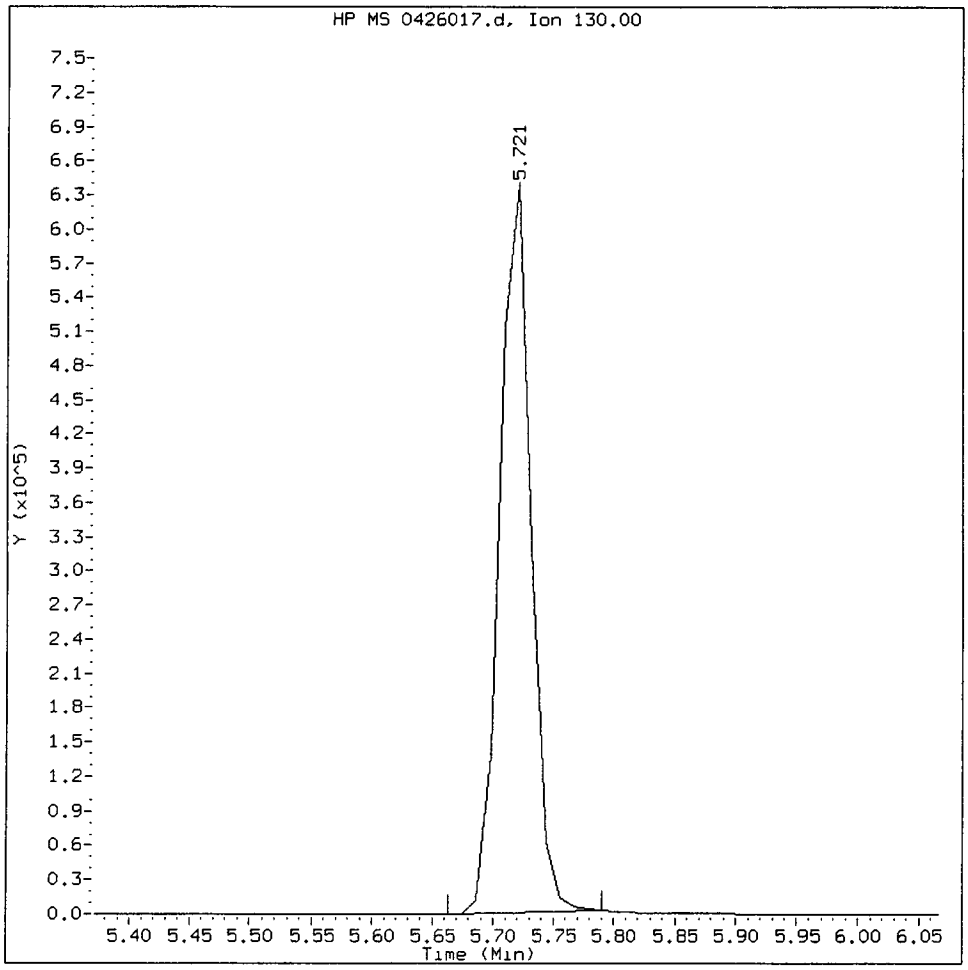




MH
5/4/11

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

Trichloroethene Amount: 3298.64 Area: 1097065



MANUAL INTEGRATION for Trichloroethene

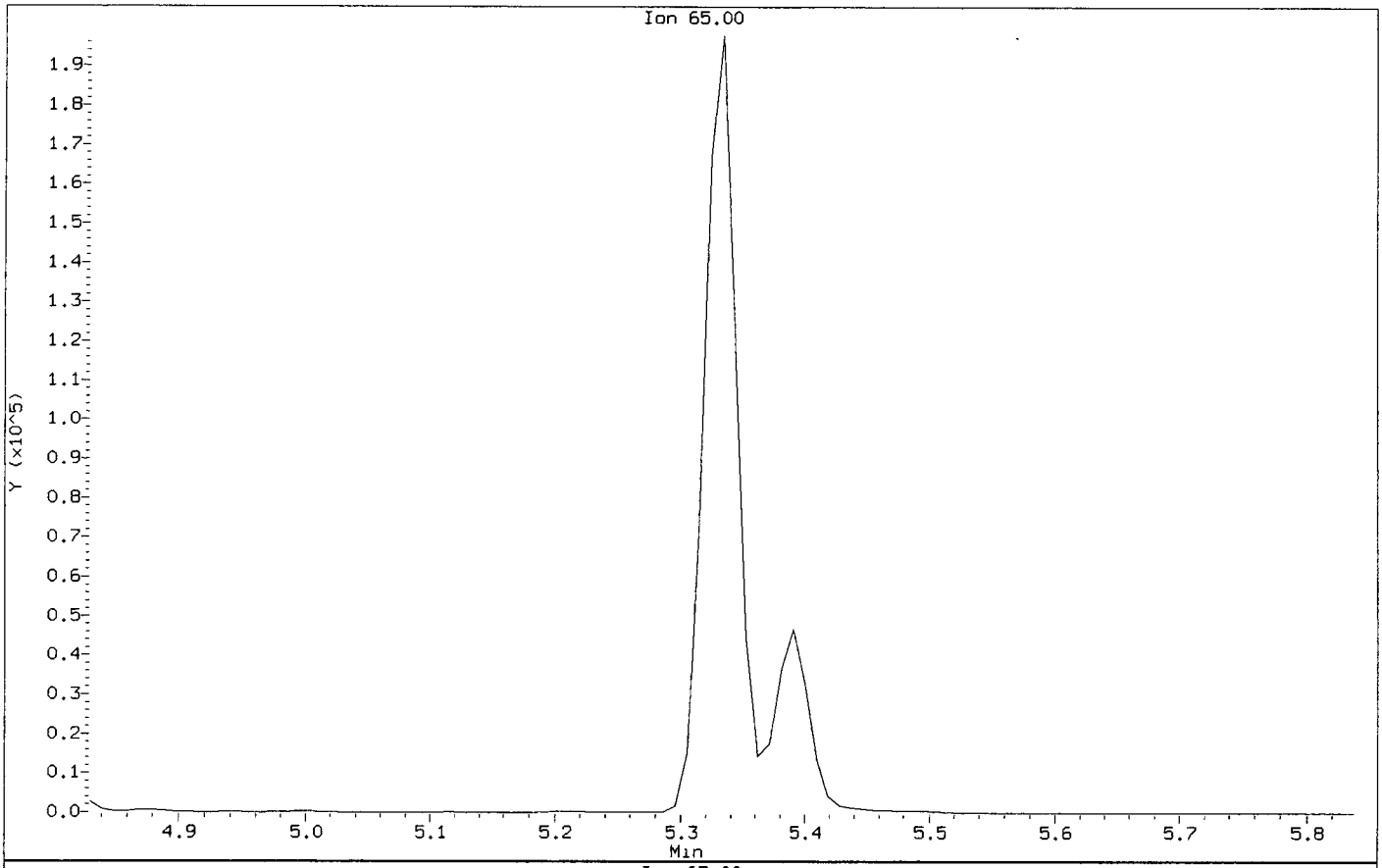
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

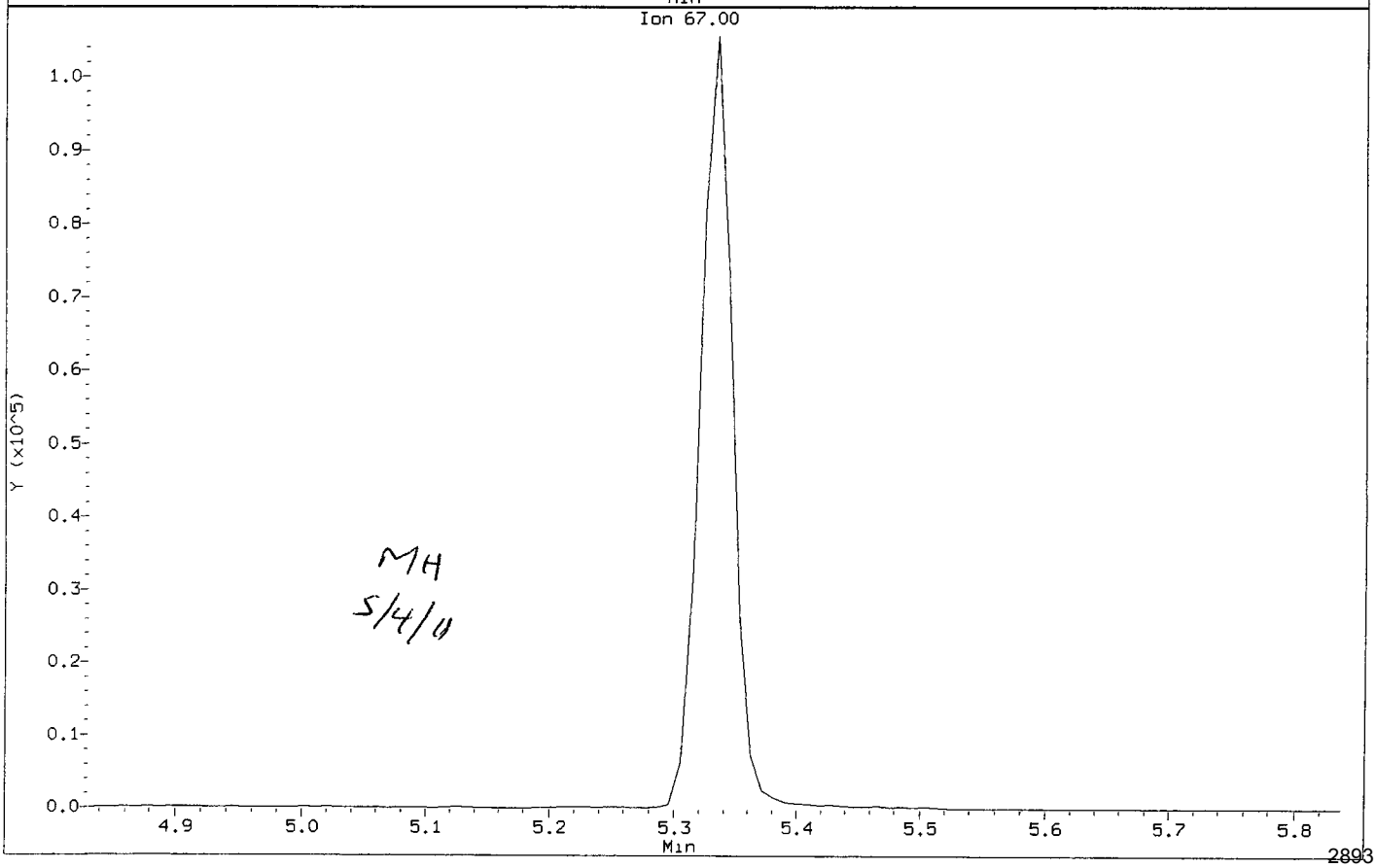
5. Other _____

Analyst: MH Date: 5/4/11

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

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



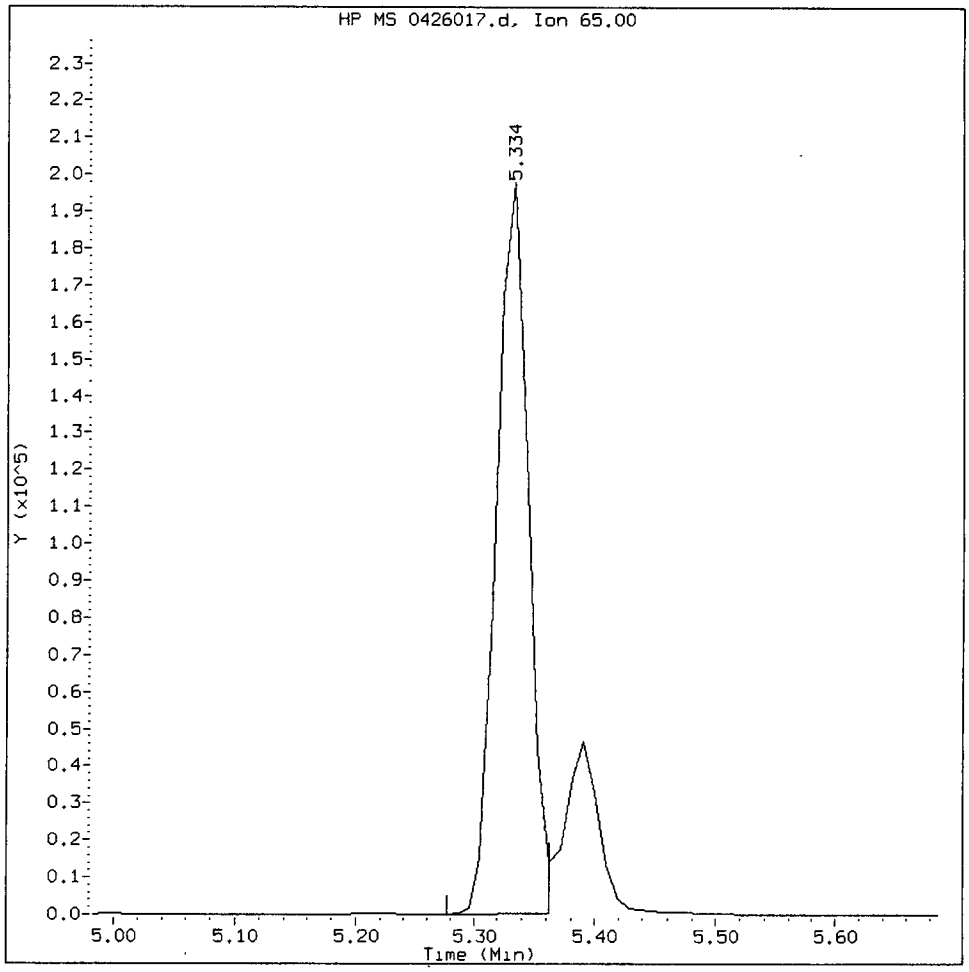


MH
5/4/11

SU53 : 00372

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)	AMOUNTS 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

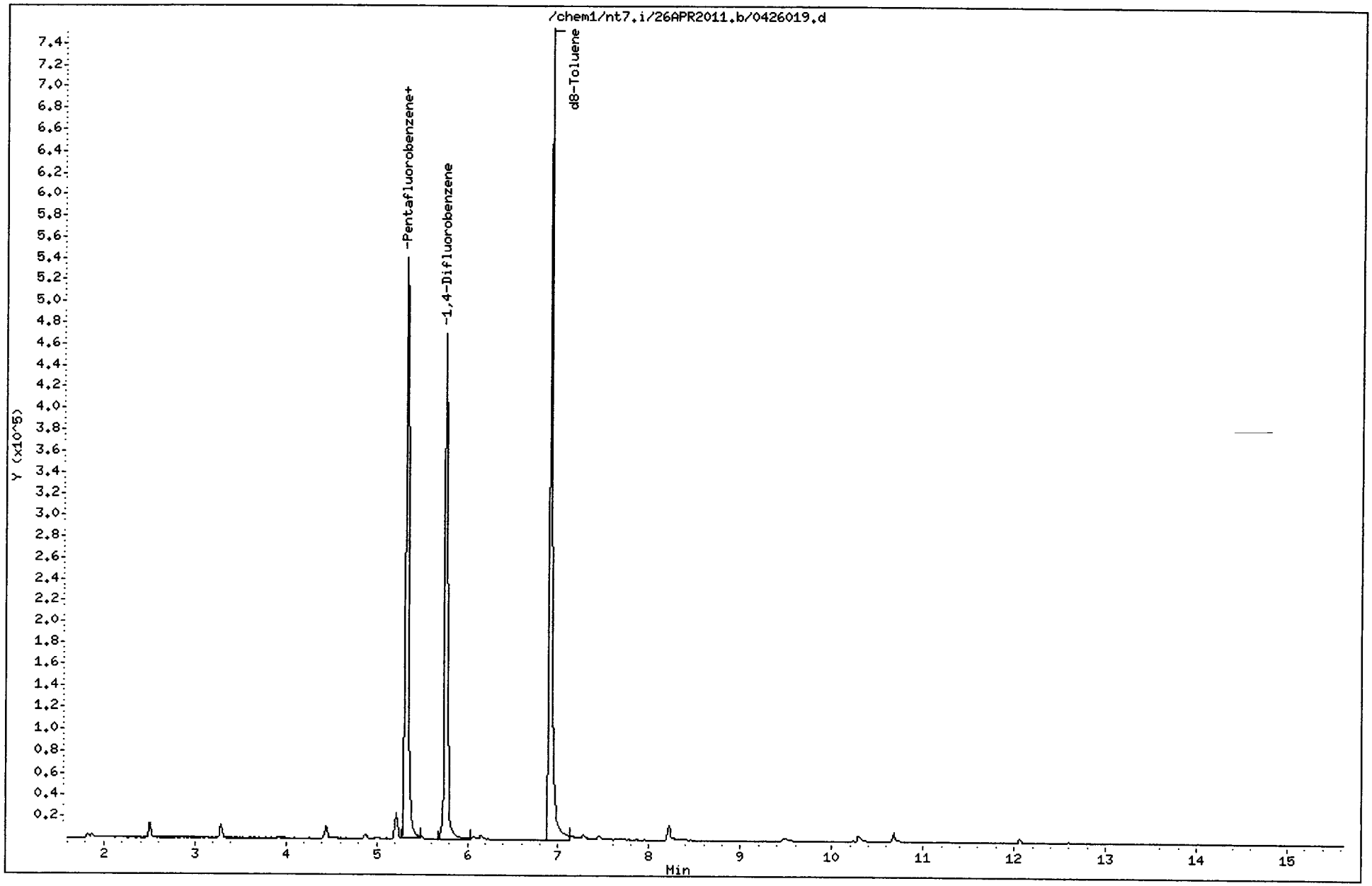
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/nt7.i/26APR2011.b/0426019.d
Date : 26-APR-2011 15:00
Client ID: 20
Sample Info: 00200426,10,10,0,

Column phase: RTXVMS

Instrument: nt7.i

Operator: MH
Column diameter: 0.18



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

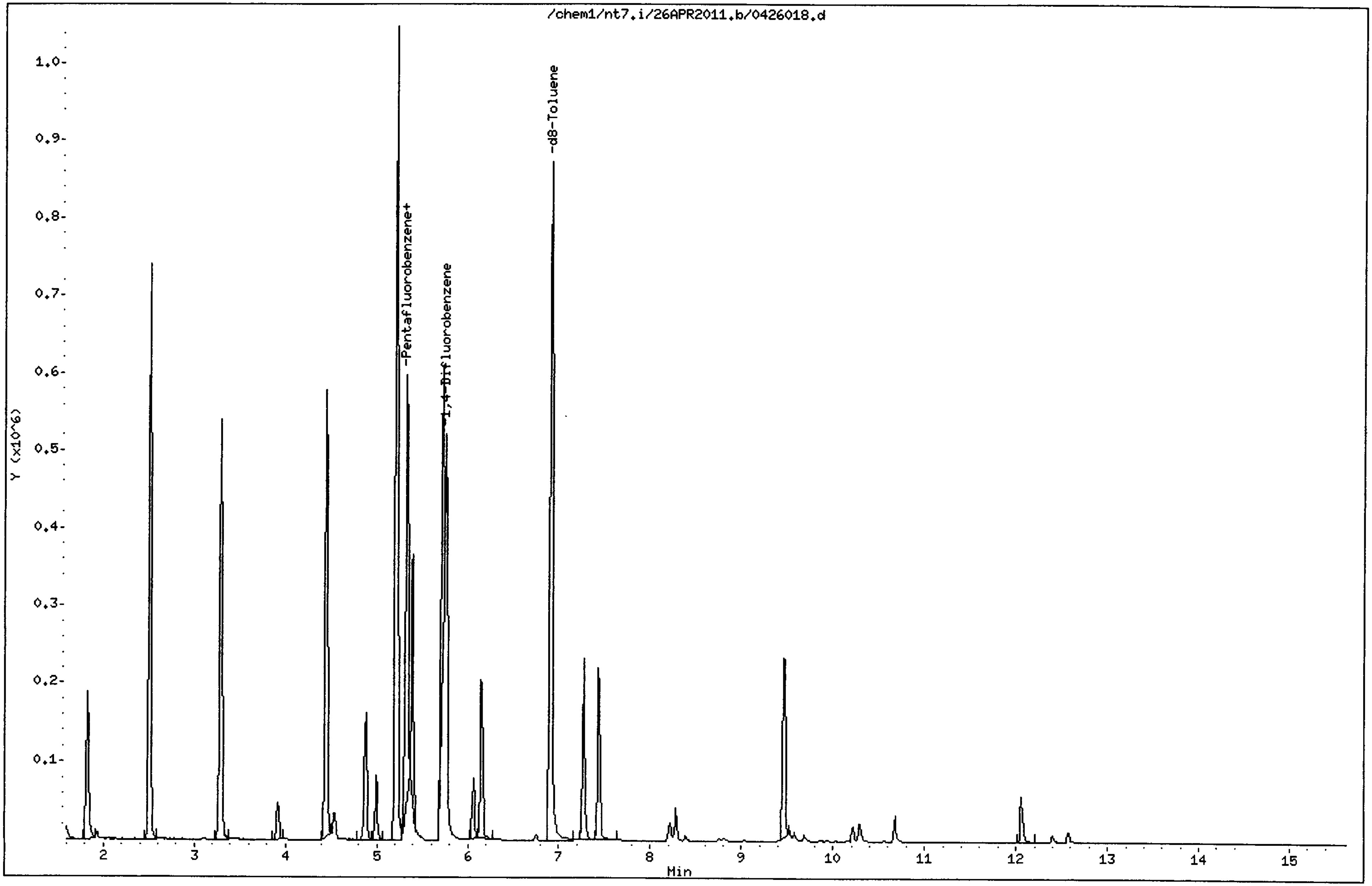
	SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 5	d4-1,2-Dichloroeth	1000.0	832.19	83.22	80-126
$ 9	d8-Toluene	1000.0	1003.8	100.38	80-120

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



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

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

ARI Job ID: SU53, SU73, SU74

Analytical Resources, Incorporated
Analytical Chemists and Consultants

VOA Analyst Notes / Corrective Action Log

ARI Project ID: 5453 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: 4/26/11 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

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

c is 1,2 DCE 79.399% in 5/3/11 LCSD

Additional Details on Reverse: Yes / No

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

Reviewer: [signature] **Date:** 5/6/11

Analytical Resources Inc.: Volatile Organics Instrument Log

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

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

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

Instrument Tune (.U or .CT.): bfb0503 EM Voltage: 1647

Calibration File: cc0503a 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/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	mbsinject	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	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	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.

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
2039	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

2156 su53e.d SU53E MW14042811 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

SU53 : 00391

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	

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

Date : 03-MAY-2011 10:25

Client ID: BFB0503

Instrument: nt7.i

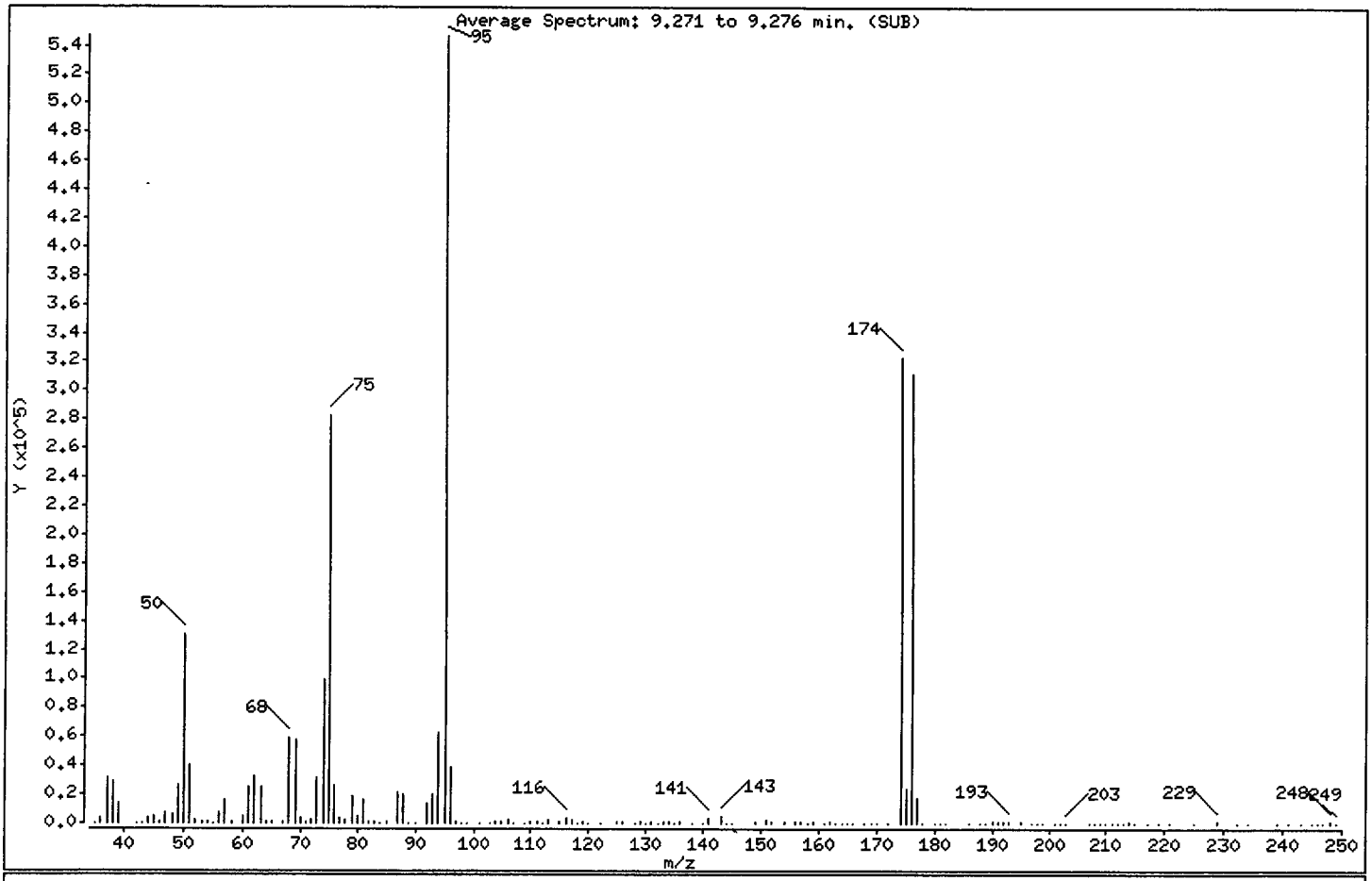
Sample Info: BFB0503,BFB0503,1,03MAY2011,,

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

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
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

Page 1

Date : 03-MAY-2011 10:25

Client ID: BFB0503

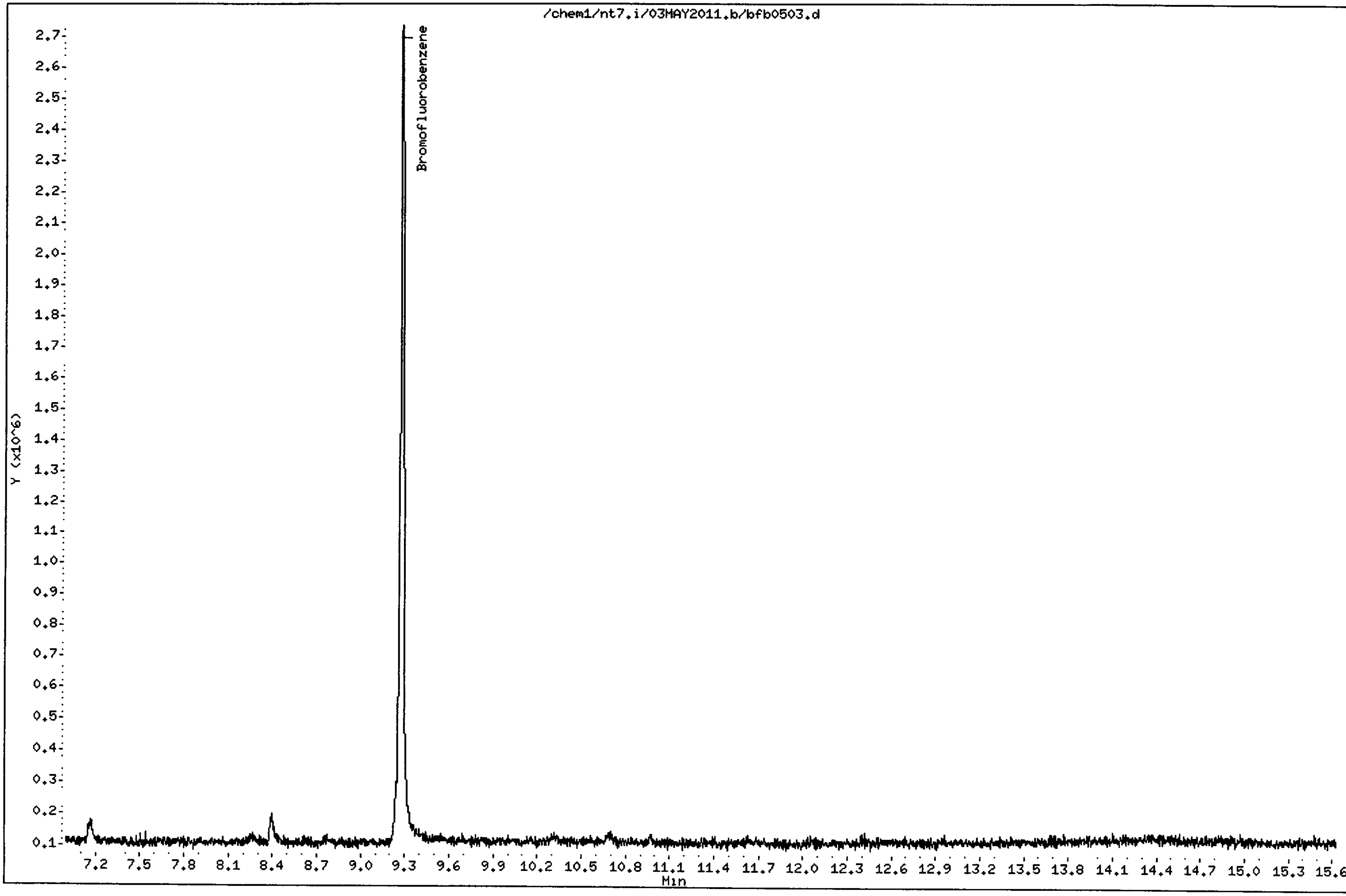
Instrument: nt7.i

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

Operator: PC

Column phase: RTXVMS

Column diameter: 0.18



2917

SU53 : 00396

PG 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)	AMOUNTS 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.

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

Page 4

Date : 03-MAY-2011 11:29

Client ID: CC0503

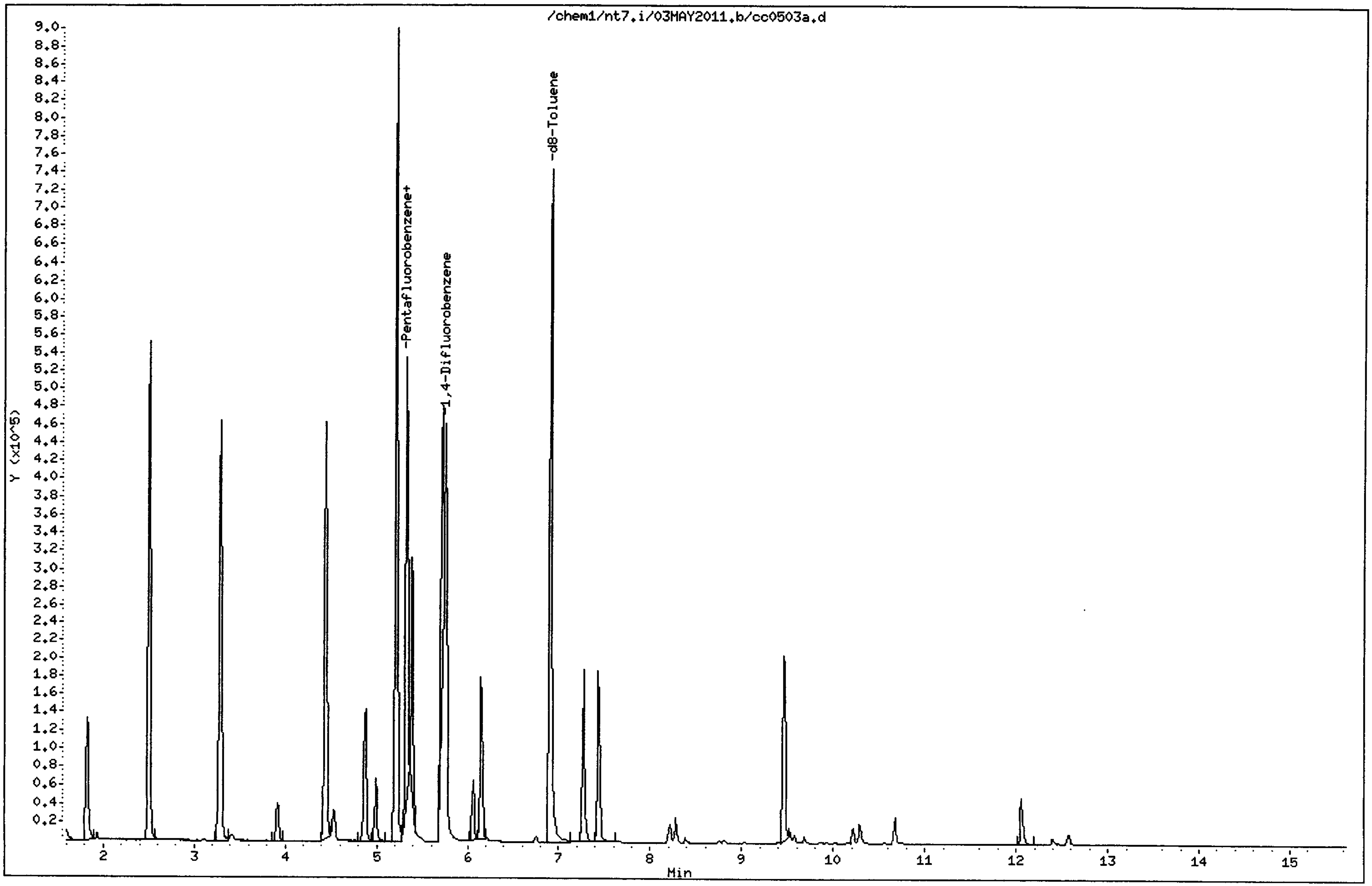
Instrument: nt7.i

Sample Info: CC0503,10,10,0,

Operator: PC

Column phase: RTXVMS

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.

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

		RT LIMIT			
COMPOUND	STANDARD	LOWER	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

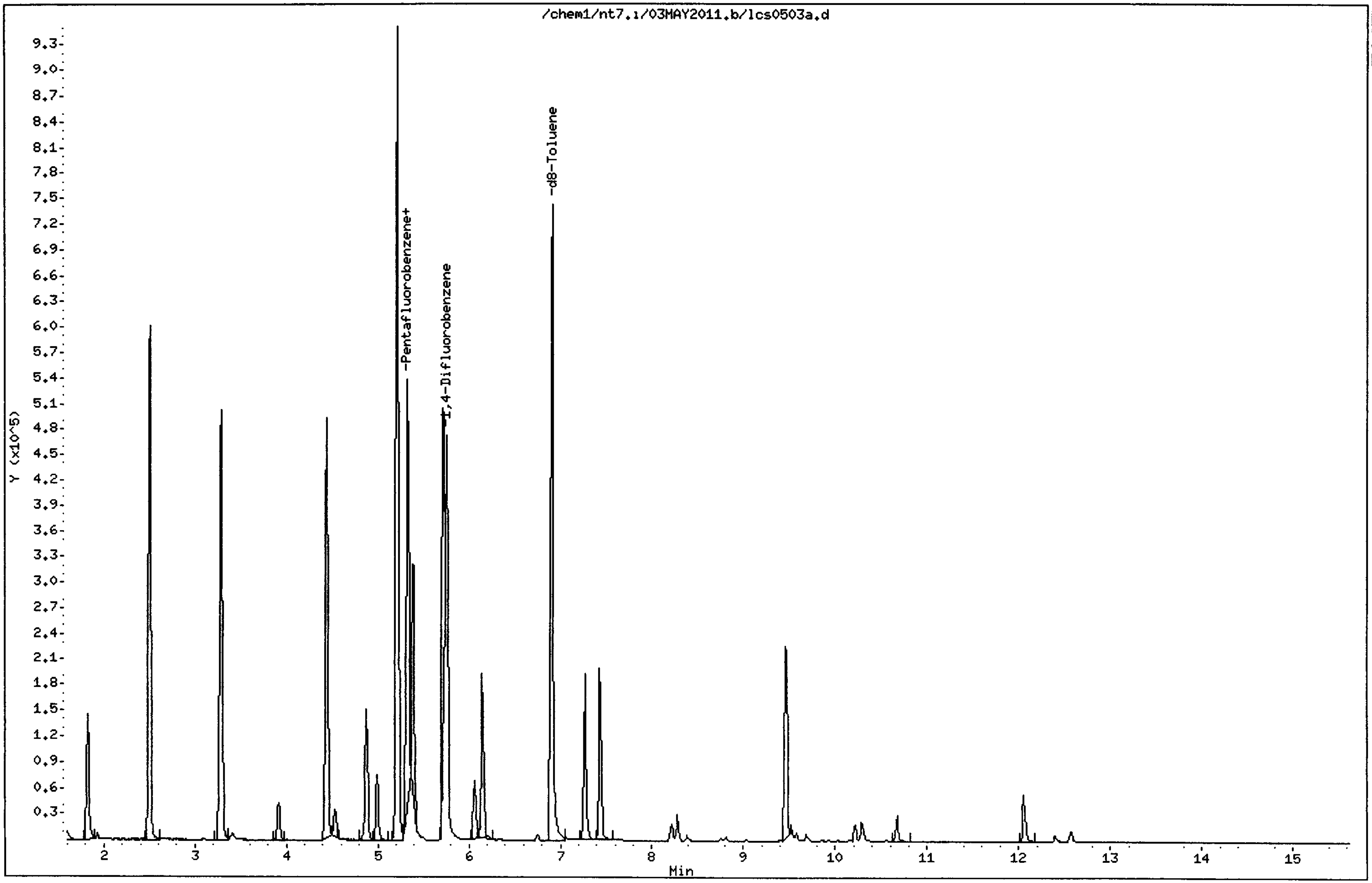
	SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 5	d4-1,2-Dichloroeth	1000.0	860.38	86.04	80-126
$ 9	d8-Toluene	1000.0	986.96	98.70	80-120

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



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

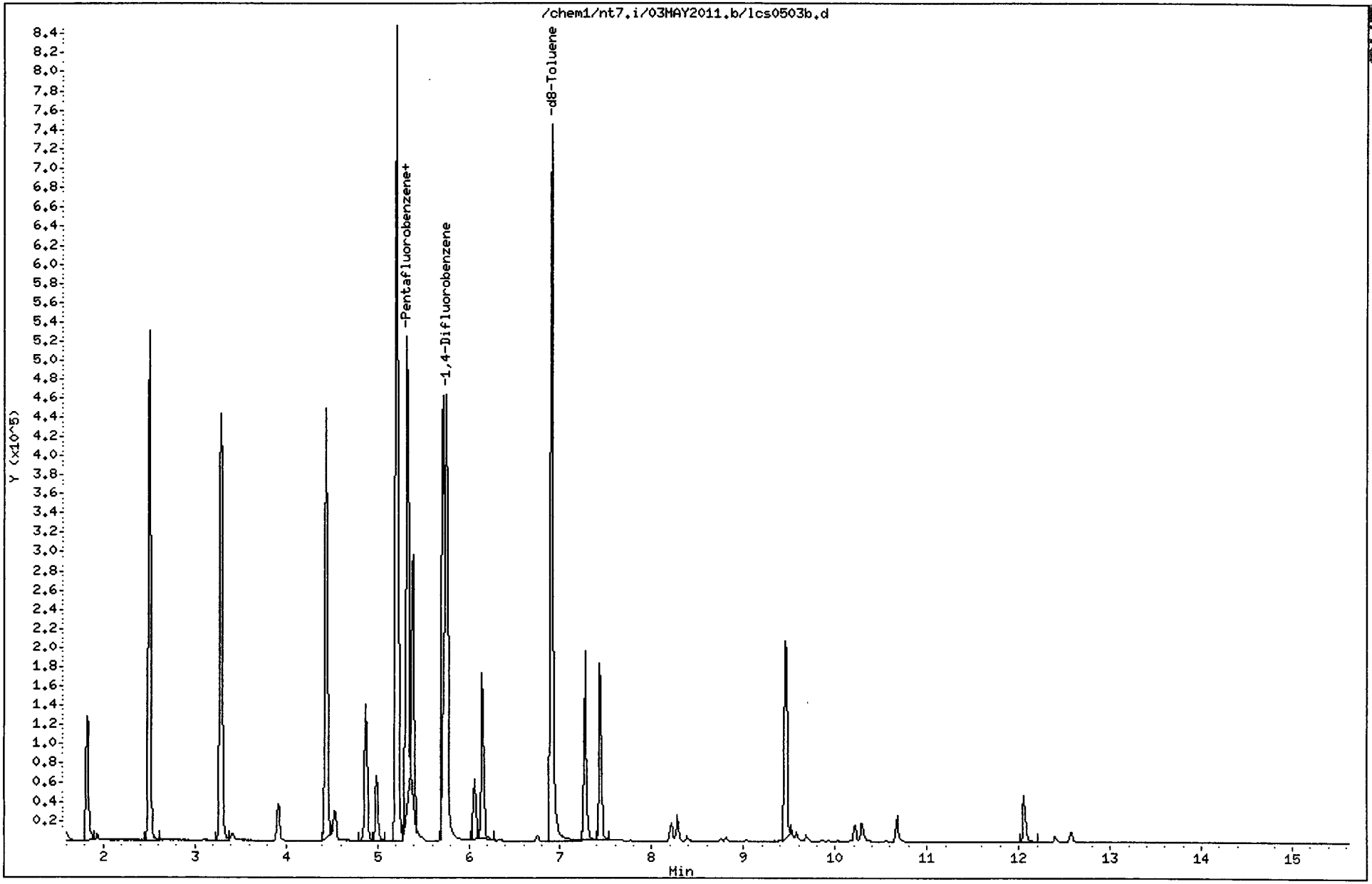
Client Name: Client SDG: 03MAY2011
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: LCS0503 Client Smp ID: LCS0503
Level: LOW Operator: PC
Data Type: MS DATA SampleType: LCS
SpikeList File: special.spk Quant Type: ISTD
Sublist File: sim12dca.sub
Method File: /chem1/nt7.i/03MAY2011.b/sim042611.m
Misc Info: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

	SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
1	Vinyl Chloride	1000.0	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

	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)	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:
Sample Matrix: LIQUID
Lab Smp Id: MB0503
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: MB0503
Operator: PC
SampleType: BLANK
Quant Type: ISTD

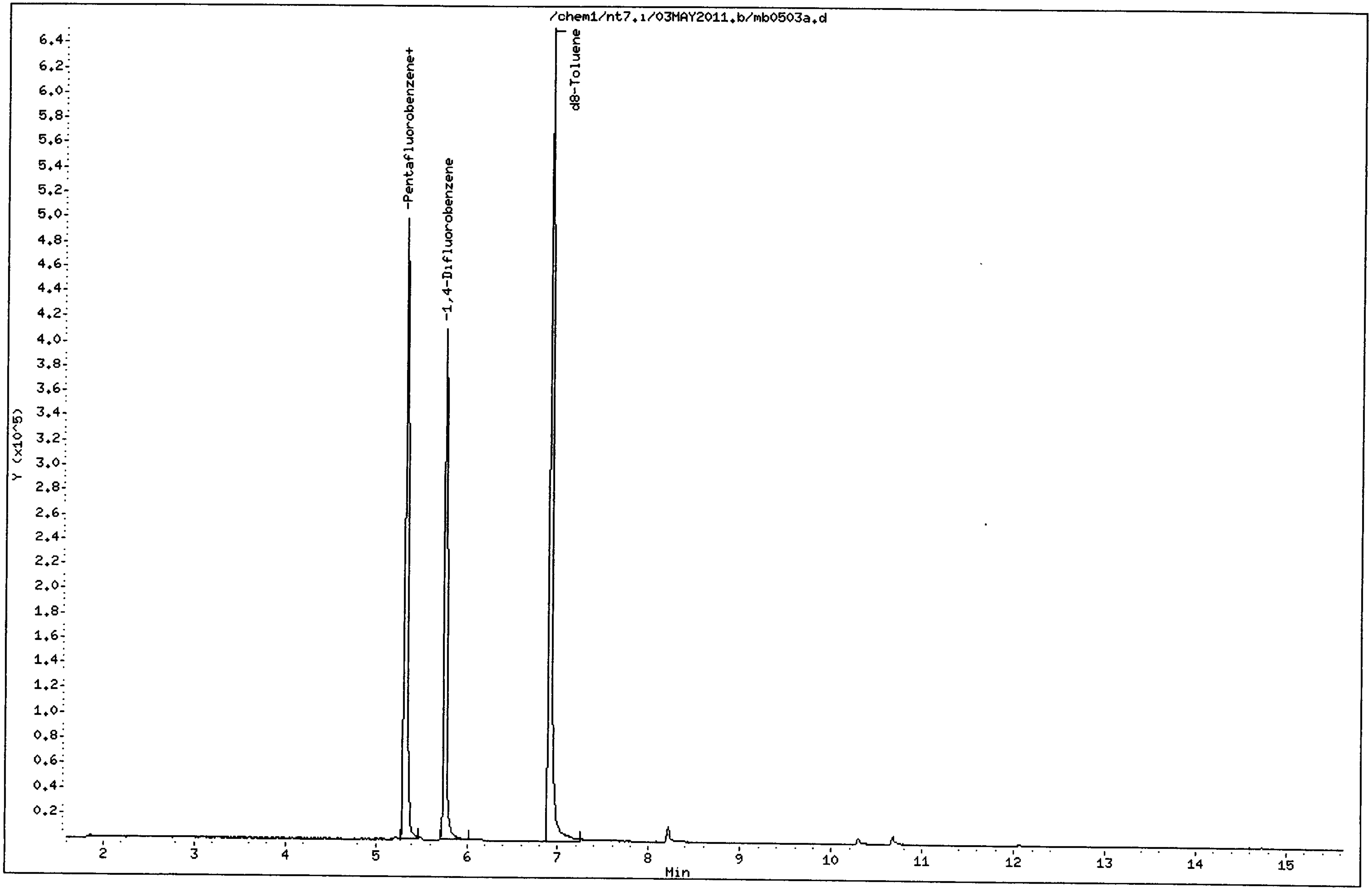
SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 5 d4-1,2-Dichloroeth	1000.0	907.60	90.76	80-126
$ 9 d8-Toluene	1000.0	951.47	95.15	80-120

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

Column phase: RTXVMS

Instrument: nt7.i

Operator: PC
Column diameter: 0.18



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/su53g.d
Lab Smp Id: SU53G Client Smp ID: TB-042811
Inj Date : 03-MAY-2011 14:40
Operator : PC Inst ID: nt7.i
Smp Info : SU53G,10,10,0,
Misc Info : 11-9627
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)	334355	1000.00	
$	5 d4-1,2-Dichloroethane	65	5.335	5.326	(1.002)	298259	989.890	989.89
	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)	617379	1000.00	
$	9 d8-Toluene	98	6.914	6.913	(1.202)	783013	995.578	995.58
	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: su53g.d
Lab Smp Id: SU53G
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: /chem1/nt7.i/03MAY2011.b/sim042611.m
Misc Info: 11-9627

Calibration Date: 03-MAY-2011
Calibration Time: 11:29
Client Smp ID: TB-042811
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	334355	-7.99
7 1,4-Difluorobenze	667797	333898	1335594	617379	-7.55

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
Client SDG: SU53
Sample Matrix: LIQUID
Fraction: VOA
Lab Smp Id: SU53G
Client Smp ID: TB-042811
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: 11-9627

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 5 d4-1,2-Dichloroeth	1000.0	989.89	98.99	80-126
$ 9 d8-Toluene	1000.0	995.58	99.56	80-120

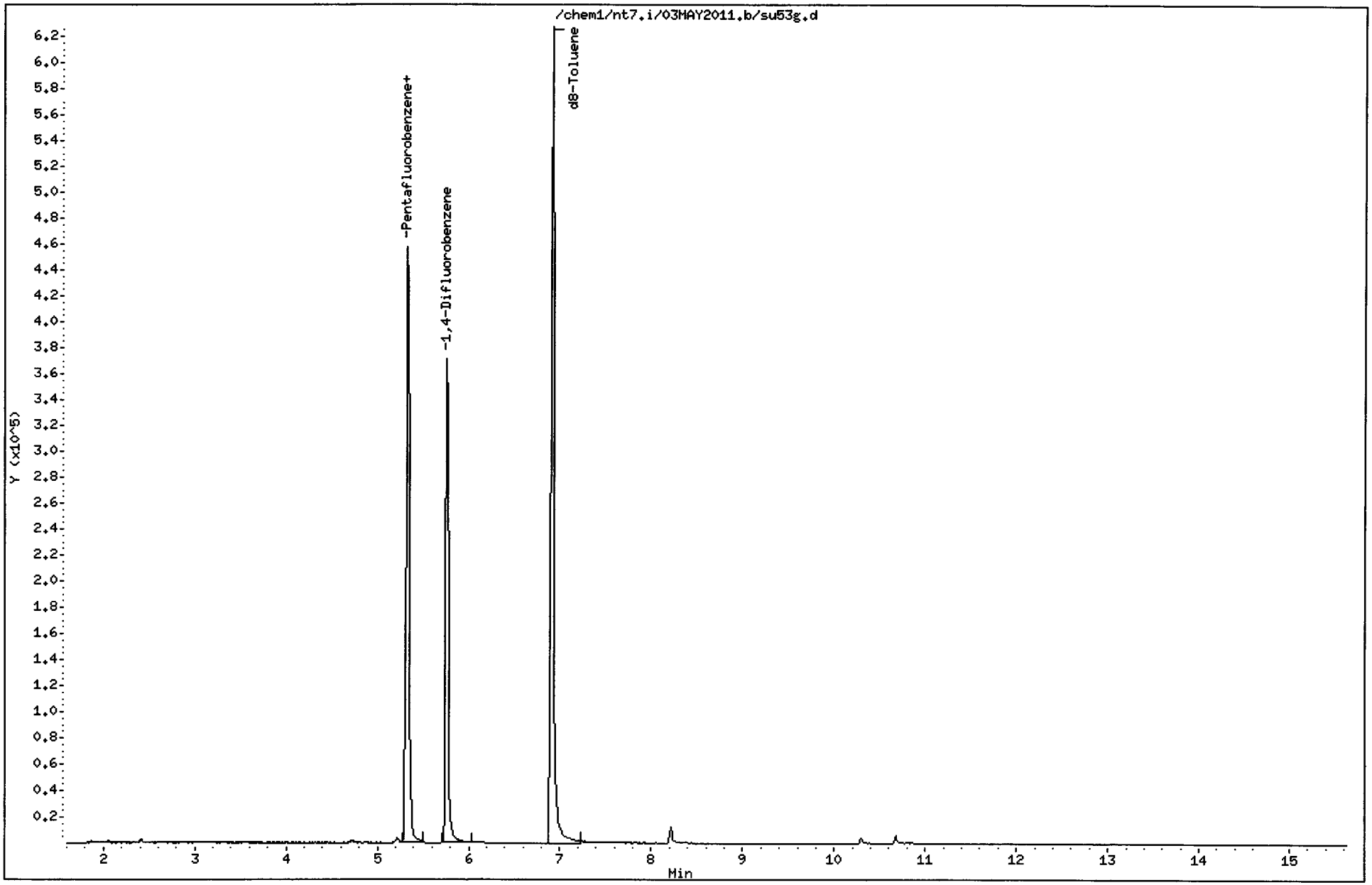
Data File: /chem1/nt7.i/03MAY2011.b/su53g.d
Date : 03-MAY-2011 14:40
Client ID: TB-042811
Sample Info: SU53G,10,10,0,

Instrument: nt7.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS

2943
SU53:00422



CO-ELUTION SUMMARY FOR FILE - su53g.d

Lab ID: SU53G, Method: sim042611.m, Instrument: nt7.i, Date: 03-MAY-2011

RT	CO-ELUTION COMPOUNDS

PC 5/13/11

Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/03MAY2011.b/su53b.d
Lab Smp Id: SU53B Client Smp ID: MW15042811
Inj Date : 03-MAY-2011 20:39
Operator : PC Inst ID: nt7.i
Smp Info : SU53B,10,10,0,
Misc Info : 11-9622
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)	320598	1000.00	
$	5	d4-1,2-Dichloroethane	65	5.335	5.326	(1.002)	286153	990.465	990.46
	176	1,2-Dichloroethane	62	Compound Not Detected.					
	8	Trichloroethene	130	Compound Not Detected.					
*	7	1,4-Difluorobenzene	114	5.768	5.754	(1.000)	566633	1000.00	
$	9	d8-Toluene	98	6.914	6.913	(1.199)	696126	964.372	964.37
	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: su53b.d
Lab Smp Id: SU53B
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: /chem1/nt7.i/03MAY2011.b/sim042611.m
Misc Info: 11-9622

Calibration Date: 03-MAY-2011
Calibration Time: 11:29
Client Smp ID: MW15042811
Level: LOW
Sample Type: Groundwater

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	363407	181704	726814	320598	-11.78
7 1,4-Difluorobenze	667797	333898	1335594	566633	-15.15

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	0.23

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: SU53
Sample Matrix: LIQUID
Fraction: VOA
Lab Smp Id: SU53B
Client Smp ID: MW15042811
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: 11-9622

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 5 d4-1,2-Dichloroeth	1000.0	990.46	99.05	80-126
$ 9 d8-Toluene	1000.0	964.37	96.44	80-120

Data File: /chem1/nt7.i/03MAY2011.b/su53b.d

Date : 03-MAY-2011 20:39

Client ID: MW15042811

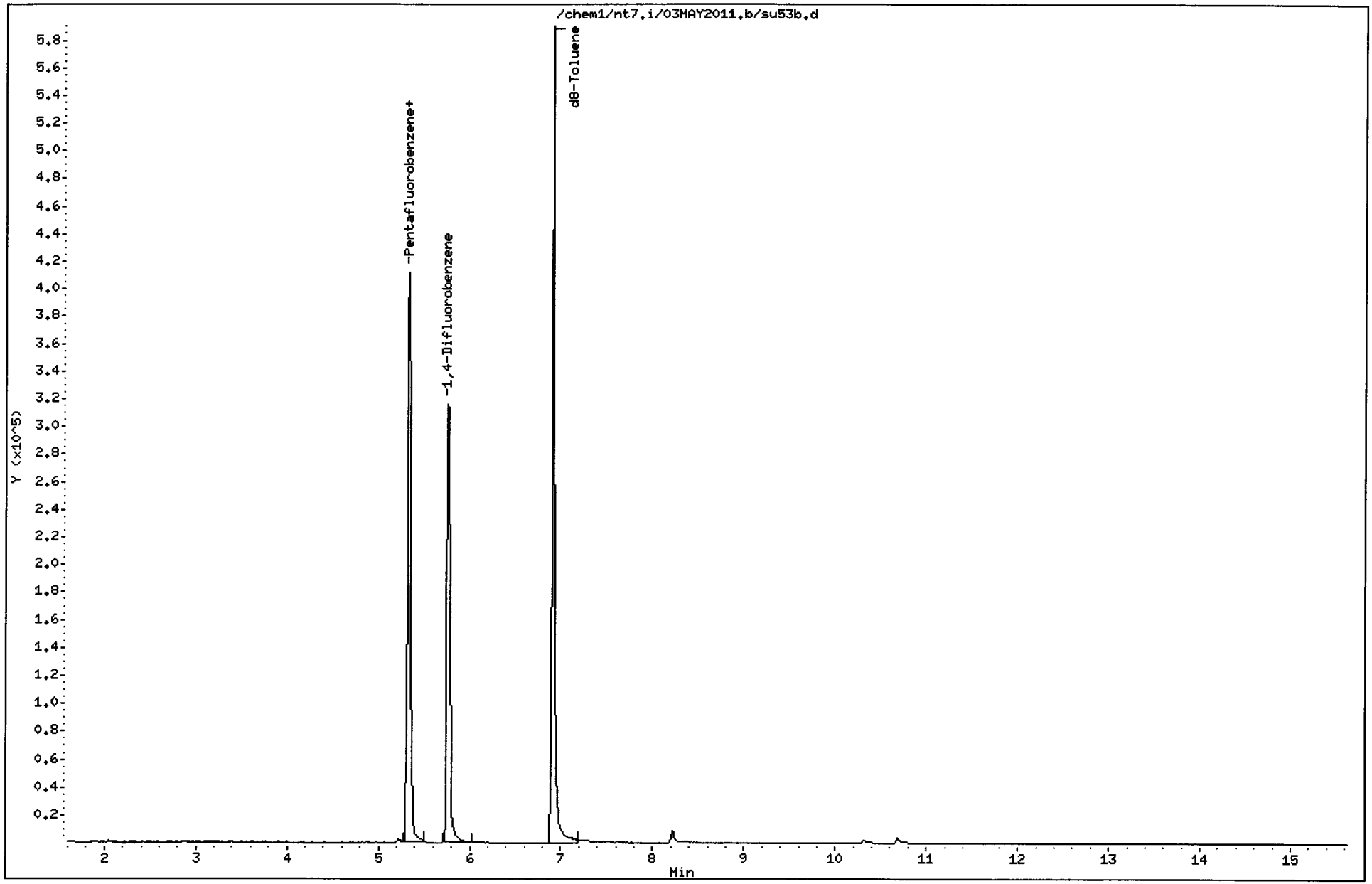
Sample Info: SU53B,10,10,0,

Column phase: RTXVMS

Instrument: nt7.i

Operator: PC

Column diameter: 0.18



CO-ELUTION SUMMARY FOR FILE - su53b.d

Lab ID: SU53B, 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/su53c.d
Lab Smp Id: SU53C Client Smp ID: MW4042811
Inj Date : 03-MAY-2011 21:04
Operator : PC Inst ID: nt7.i
Smp Info : SU53C,10,10,0,
Misc Info : 11-9623
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	5.326	5.326	(1.000)	324280	1000.00	
$	5 d4-1,2-Dichloroethane	65	5.335	5.326	(1.002)	286627	980.838	980.84
	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)	565886	1000.00	
$	9 d8-Toluene	98	6.913	6.913	(1.199)	685332	950.672	950.67
	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: su53c.d
Lab Smp Id: SU53C
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: /chem1/nt7.i/03MAY2011.b/sim042611.m
Misc Info: 11-9623

Calibration Date: 03-MAY-2011
Calibration Time: 11:29
Client Smp ID: MW4042811
Level: LOW
Sample Type: Groundwater

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	363407	181704	726814	324280	-10.77
7 1,4-Difluorobenze	667797	333898	1335594	565886	-15.26

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
Sample Matrix: LIQUID
Lab Smp Id: SU53C
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: 11-9623

Client SDG: SU53
Fraction: VOA
Client Smp ID: MW4042811
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	980.84	98.08	80-126
$ 9 d8-Toluene	1000.0	950.67	95.07	80-120

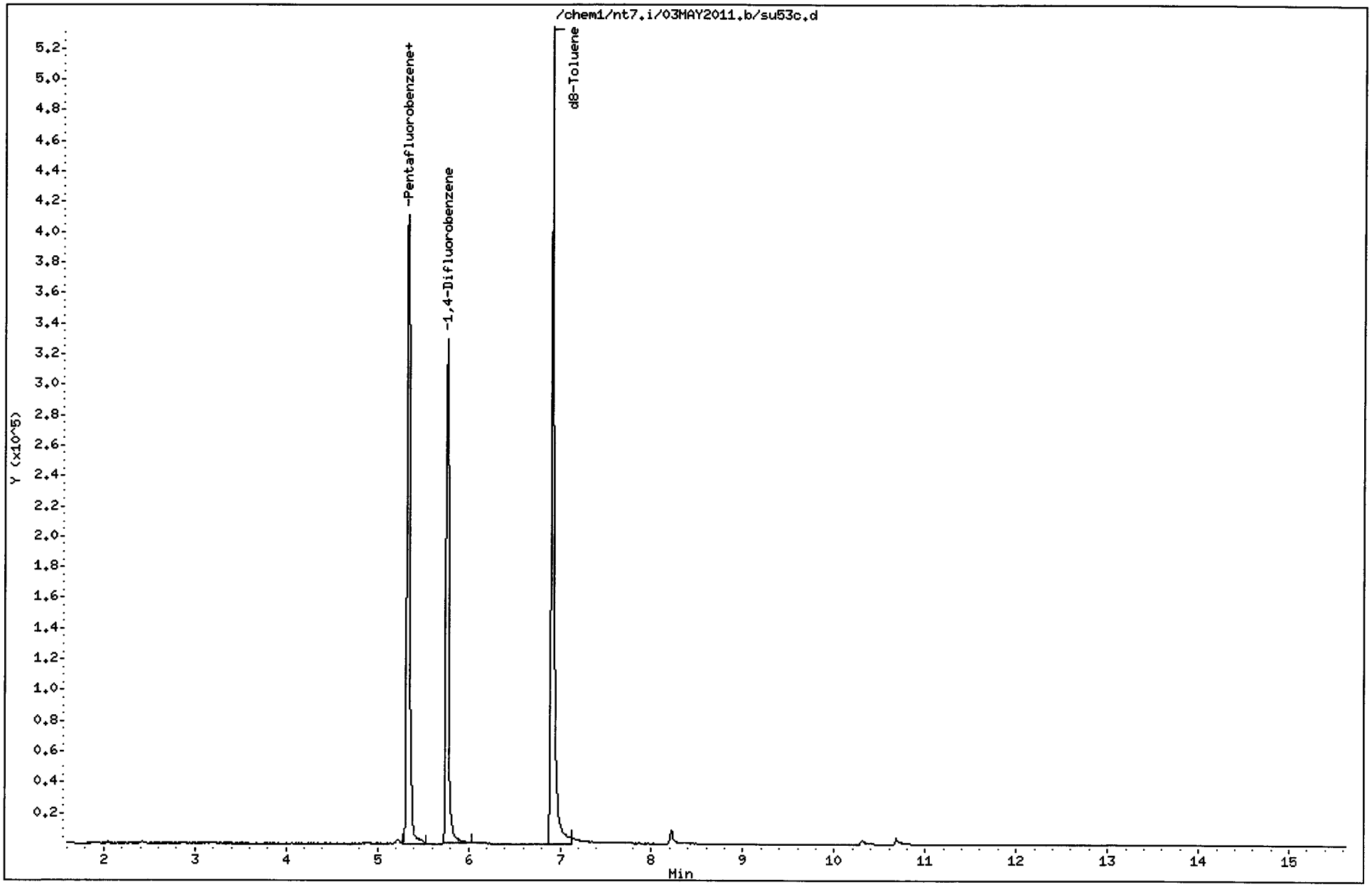
Data File: /chem1/nt7.i/03MAY2011.b/su53c.d
Date : 03-MAY-2011 21:04
Client ID: MW4042811
Sample Info: SU53C,10,10,0,

Instrument: nt7.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS

2953
SU53 : 004432



CO-ELUTION SUMMARY FOR FILE - su53c.d

Lab ID: SU53C, 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/su53d.d
Lab Smp Id: SU53D Client Smp ID: MW17042811
Inj Date : 03-MAY-2011 21:30
Operator : PC Inst ID: nt7.i
Smp Info : SU53D,10,10,0,
Misc Info : 11-9624
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)	291433	1000.00	
$	5	d4-1,2-Dichloroethane	65	5.336	5.326	(1.002)	275609	1049.44	1049.4
	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)	551688	1000.00	
$	9	d8-Toluene	98	6.913	6.913	(1.199)	674137	959.208	959.21
	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: su53d.d
Lab Smp Id: SU53D
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: /chem1/nt7.i/03MAY2011.b/sim042611.m
Misc Info: 11-9624

Calibration Date: 03-MAY-2011
Calibration Time: 11:29
Client Smp ID: MW17042811
Level: LOW
Sample Type: Groundwater

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	363407	181704	726814	291433	-19.81
7 1,4-Difluorobenze	667797	333898	1335594	551688	-17.39

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	0.21

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

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd Snider
Client SDG: SU53
Sample Matrix: LIQUID
Fraction: VOA
Lab Smp Id: SU53D
Client Smp ID: MW17042811
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: 11-9624

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 5 d4-1,2-Dichloroeth	1000.0	1049.4	104.94	80-126
$ 9 d8-Toluene	1000.0	959.21	95.92	80-120

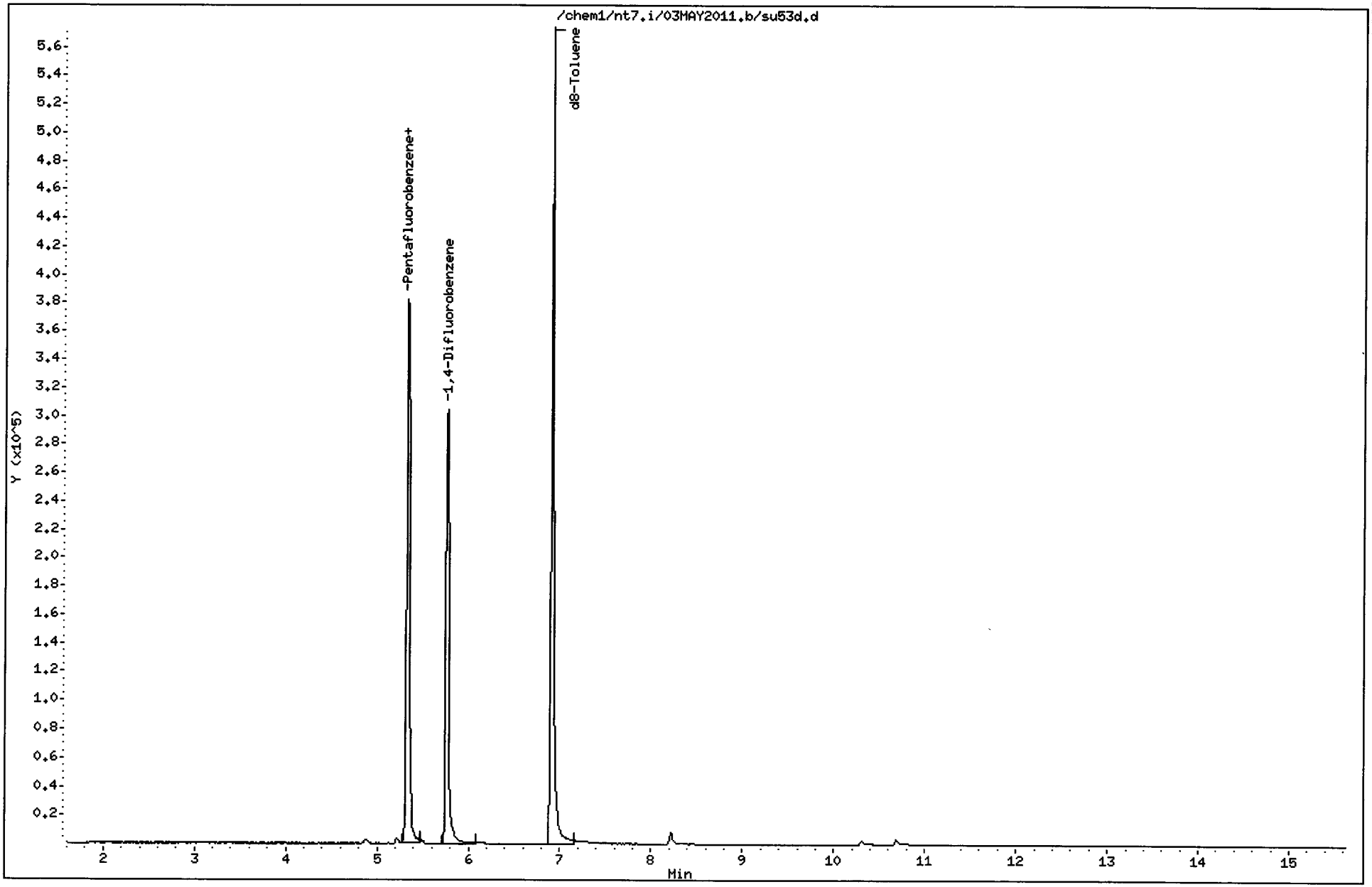
Data File: /chem1/nt7.i/03MAY2011.b/su53d.d
Date : 03-MAY-2011 21:30
Client ID: MW17042811
Sample Info: SU53D,10,10,0,

Instrument: nt7.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS

2958 SU53:004437



CO-ELUTION SUMMARY FOR FILE - su53d.d

Lab ID: SU53D, Method: sim042611.m, Instrument: nt7.i, Date: 03-MAY-2011

RT	CO-ELUTION COMPOUNDS

PC 3/4/11

Analytical Resources, Inc.

SW8260C SIM

Data file : /chem1/nt7.i/03MAY2011.b/su53e.d
Lab Smp Id: SU53E Client Smp ID: MW14042811
Inj Date : 03-MAY-2011 21:56
Operator : PC Inst ID: nt7.i
Smp Info : SU53E,10,10,0,
Misc Info : 11-9625
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)	307760	1000.00	
$	5 d4-1,2-Dichloroethane	65	5.335	5.326	(1.002)	279037	1006.12	1006.1
	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)	551825	1000.00	
$	9 d8-Toluene	98	6.914	6.913	(1.199)	673498	958.062	958.06
	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: su53e.d
Lab Smp Id: SU53E
Analysis Type: VOA
Quant Type: ISTD
Operator: PC
Method File: /chem1/nt7.i/03MAY2011.b/sim042611.m
Misc Info: 11-9625

Calibration Date: 03-MAY-2011
Calibration Time: 11:29
Client Smp ID: MW14042811
Level: LOW
Sample Type: Groundwater

Test Mode:
Use Initial Calibration Level 5.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Pentafluorobenzen	363407	181704	726814	307760	-15.31
7 1,4-Difluorobenze	667797	333898	1335594	551825	-17.37

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
Client SDG: SU53
Sample Matrix: LIQUID
Fraction: VOA
Lab Smp Id: SU53E
Client Smp ID: MW14042811
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: 11-9625

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 5 d4-1,2-Dichloroeth	1000.0	1006.1	100.61	80-126
$ 9 d8-Toluene	1000.0	958.06	95.81	80-120

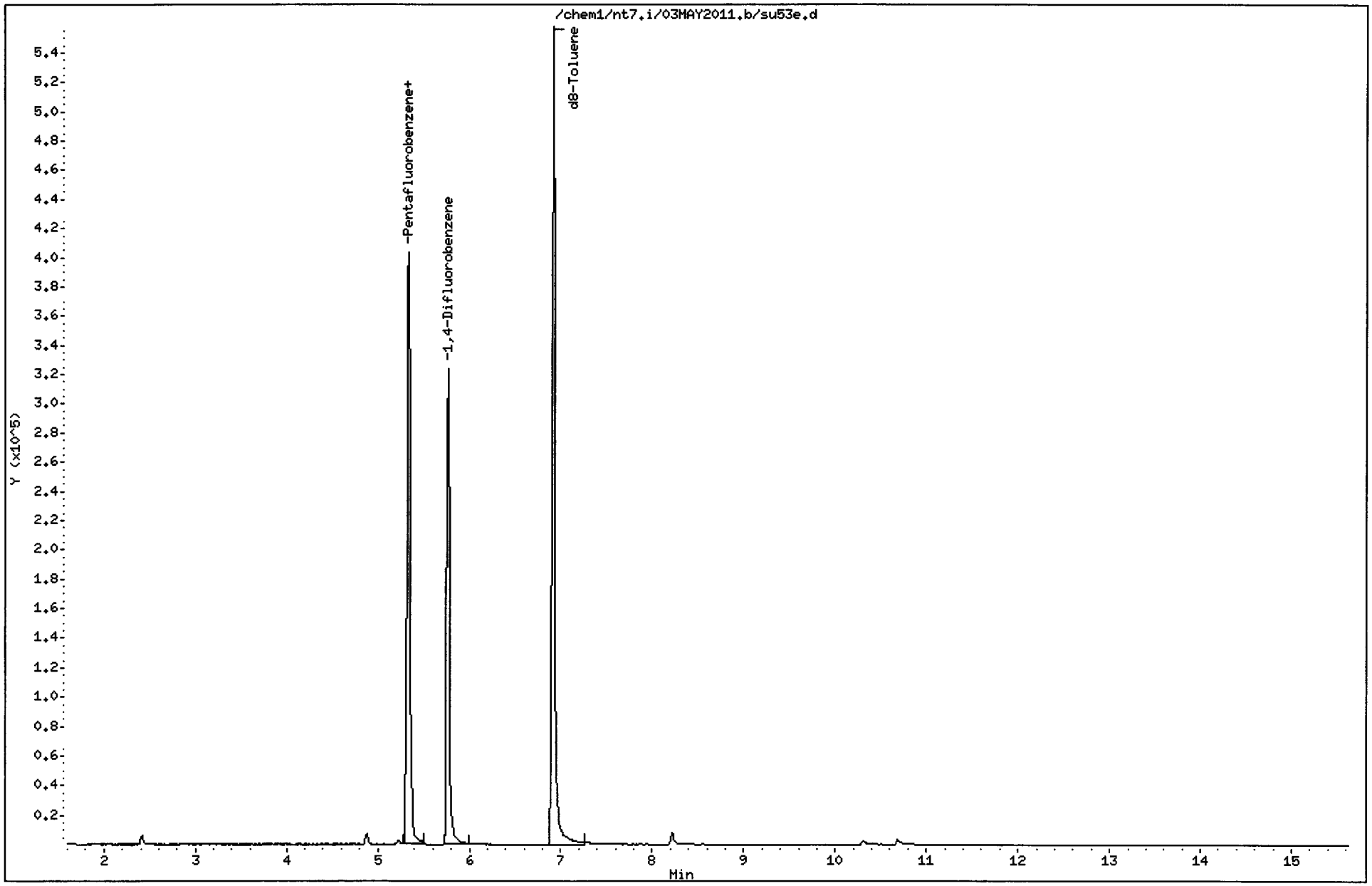
Data File: /chem1/nt7.i/03MAY2011.b/su53e.d
Date : 03-MAY-2011 21:56
Client ID: MW14042811
Sample Info: SU53E,10,10,0,

Instrument: nt7.i

Operator: PC
Column diameter: 0.18

Column phase: RTXVMS

2963
SU53 : 09442



CO-ELUTION SUMMARY FOR FILE - su53e.d

Lab ID: SU53E, Method: sim042611.m, Instrument: nt7.i, Date: 03-MAY-2011

RT	CO-ELUTION COMPOUNDS

Analytical Resources, Incorporated
Analytical Chemists and Consultants

VOA Analyst Notes / Corrective Action Log

ARI Project ID: 5473 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 m 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: 5/4/11

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):

Additional Details on Reverse: Yes / No

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

Reviewer: _____ **Date:** _____

Analytical Resources, Incorporated
Analytical Chemists and Consultants

VOA Analyst Notes / Corrective Action Log

ARI Project ID: 5474 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: 4/26/11 Analysis Start Date: 5/4/11

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):

Additional Details on Reverse: Yes / No

Analyst: PL **Date:** 5/5/11

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

Analytical Resources Inc.: Volatile Organics Instrument Log

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

Date: 5/4/11 Analysis: 5/IM VOA Analyst: RC

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

Instrument Tune (.U or .CT.): bfb0504 EM Voltage: 1647

Calibration File: cc0504b Curve Date: 4/26/11

IS/SS	Ical/Ccal	LCS/ICV
VW885-1	VW882-2	VW882-2

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 329558 | 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 358815 | 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 cc0504, 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	

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

Date : 04-MAY-2011 09:18

Client ID: BFB0504

Instrument: nt7.i

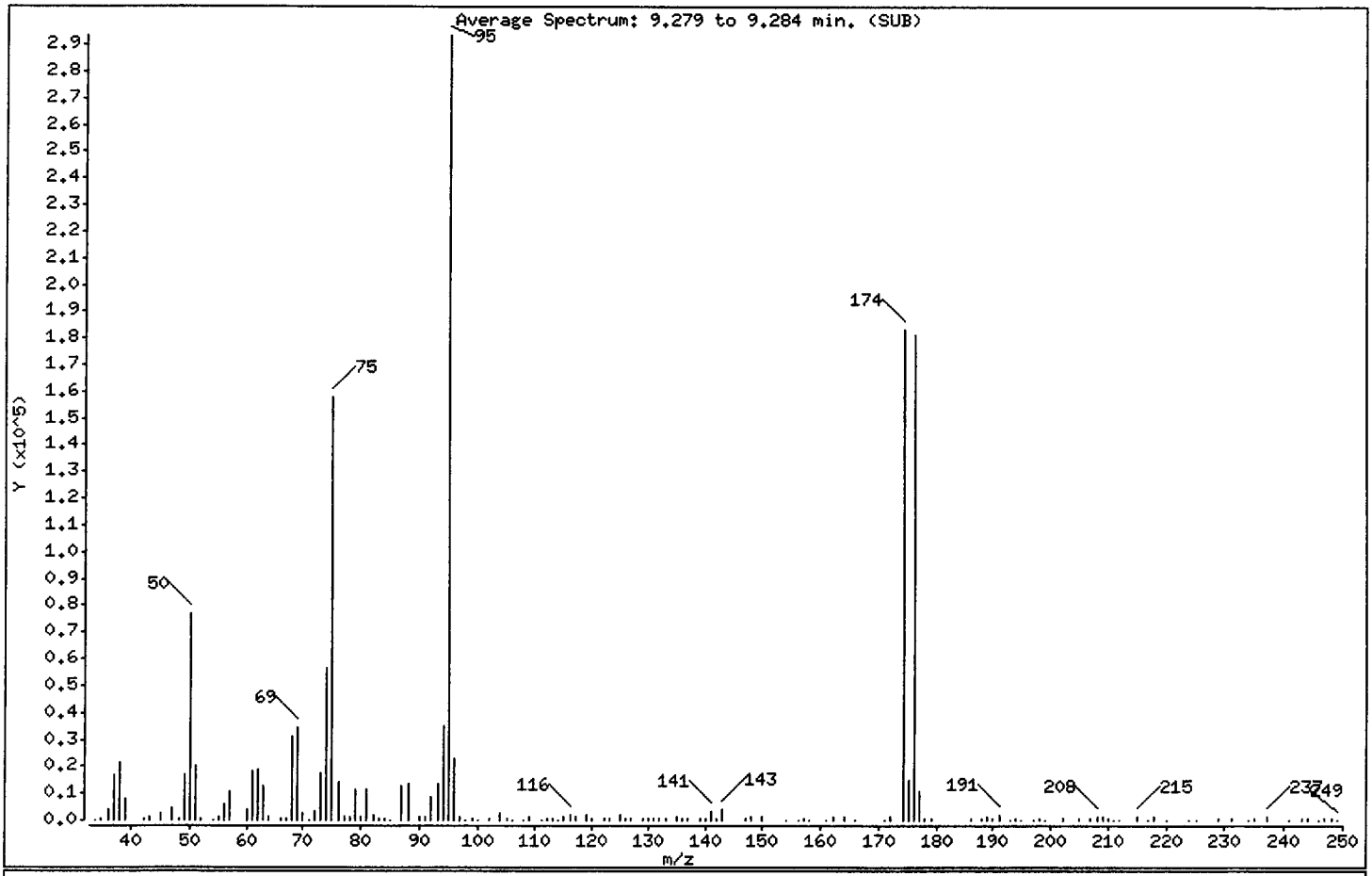
Sample Info: BFB0504,BFB0504,1,04MAY2011,,

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

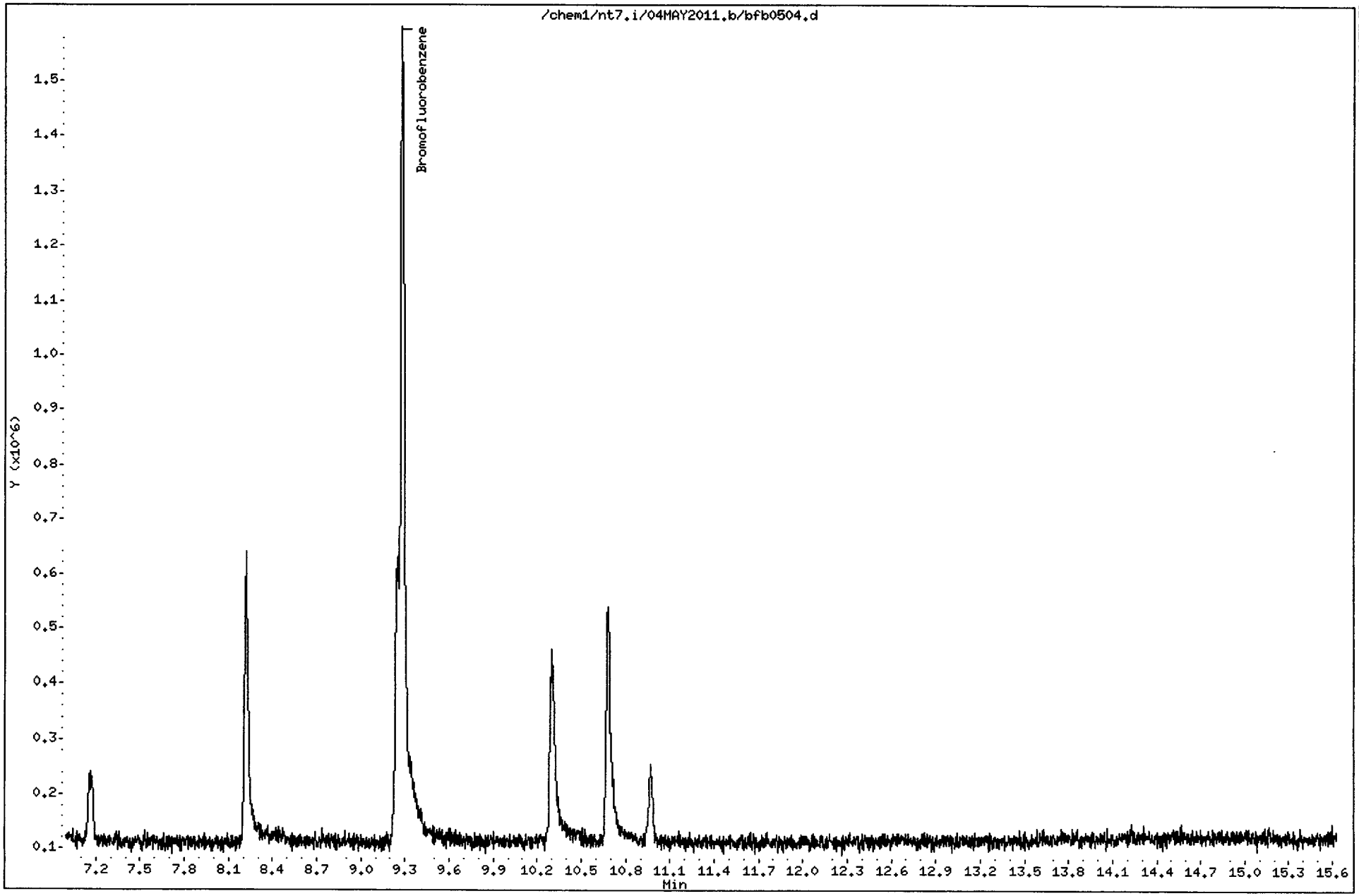
m/z	Y	m/z	Y	m/z	Y	m/z	Y
77.00	1422	123.00	678	189.00	1101		
78.00	1212	125.00	1963	190.00	624		
79.00	11190	126.00	467	191.00	1703		
80.00	1045	127.00	773	193.00	309		

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



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

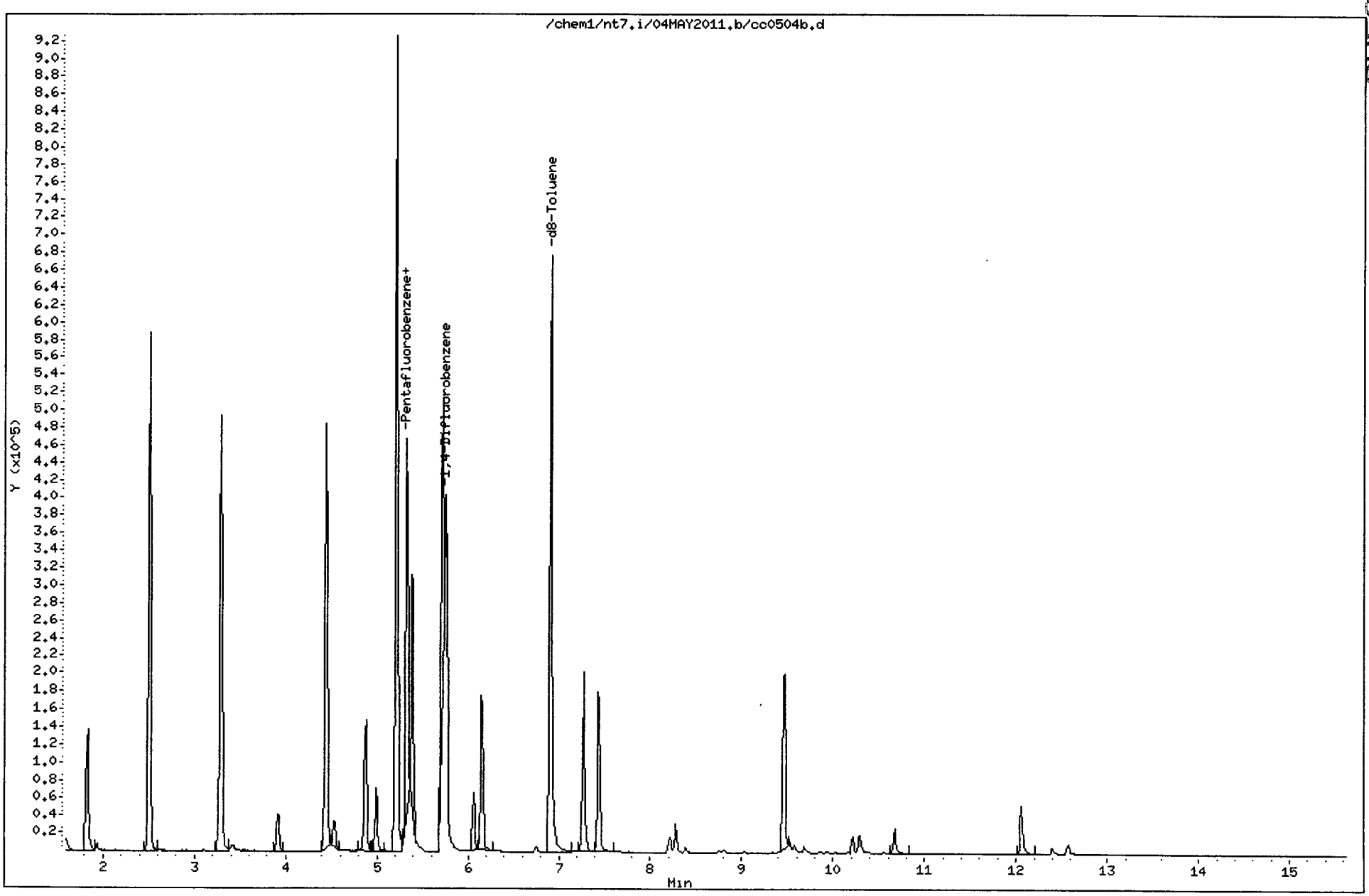
Sample Info: CC0504,10,10,0,,

Column phase: RTXVMS

Instrument: nt7.i

Operator: PC

Column diameter: 0.18



CO-ELUTION SUMMARY FOR FILE - cc0504b.d

Lab ID: CC0504, 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/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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/L)	FINAL (ug/L)
	1 Vinyl Chloride	62	1.551	1.551	(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

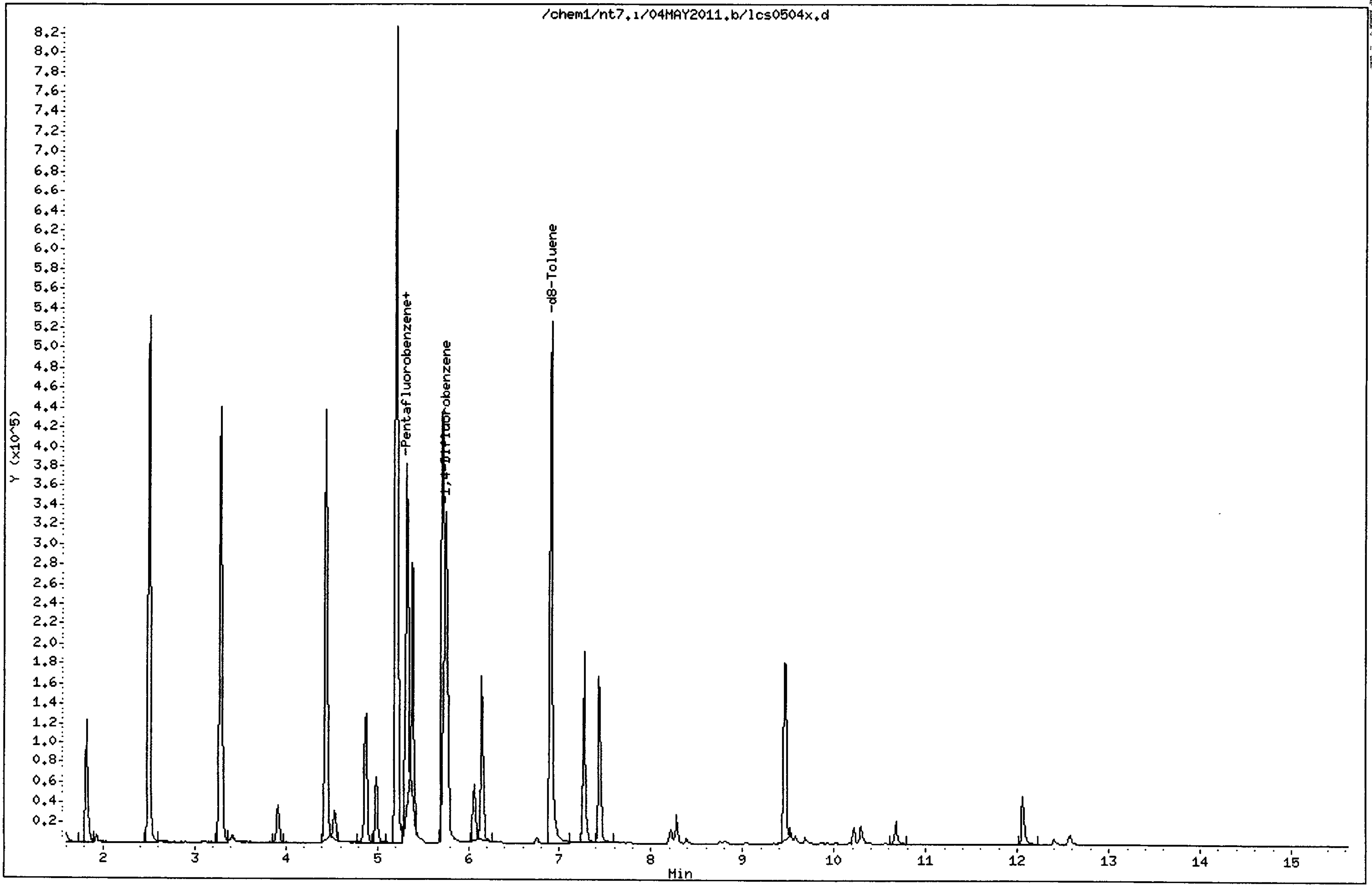
SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 5 d4-1,2-Dichloroeth	1000.0	877.49	87.75	80-126
$ 9 d8-Toluene	1000.0	995.53	99.55	80-120

Data File: /chem1/nt7.i/04MAY2011.b/lcs0504x.d
Date : 04-MAY-2011 11:21
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 - 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)	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

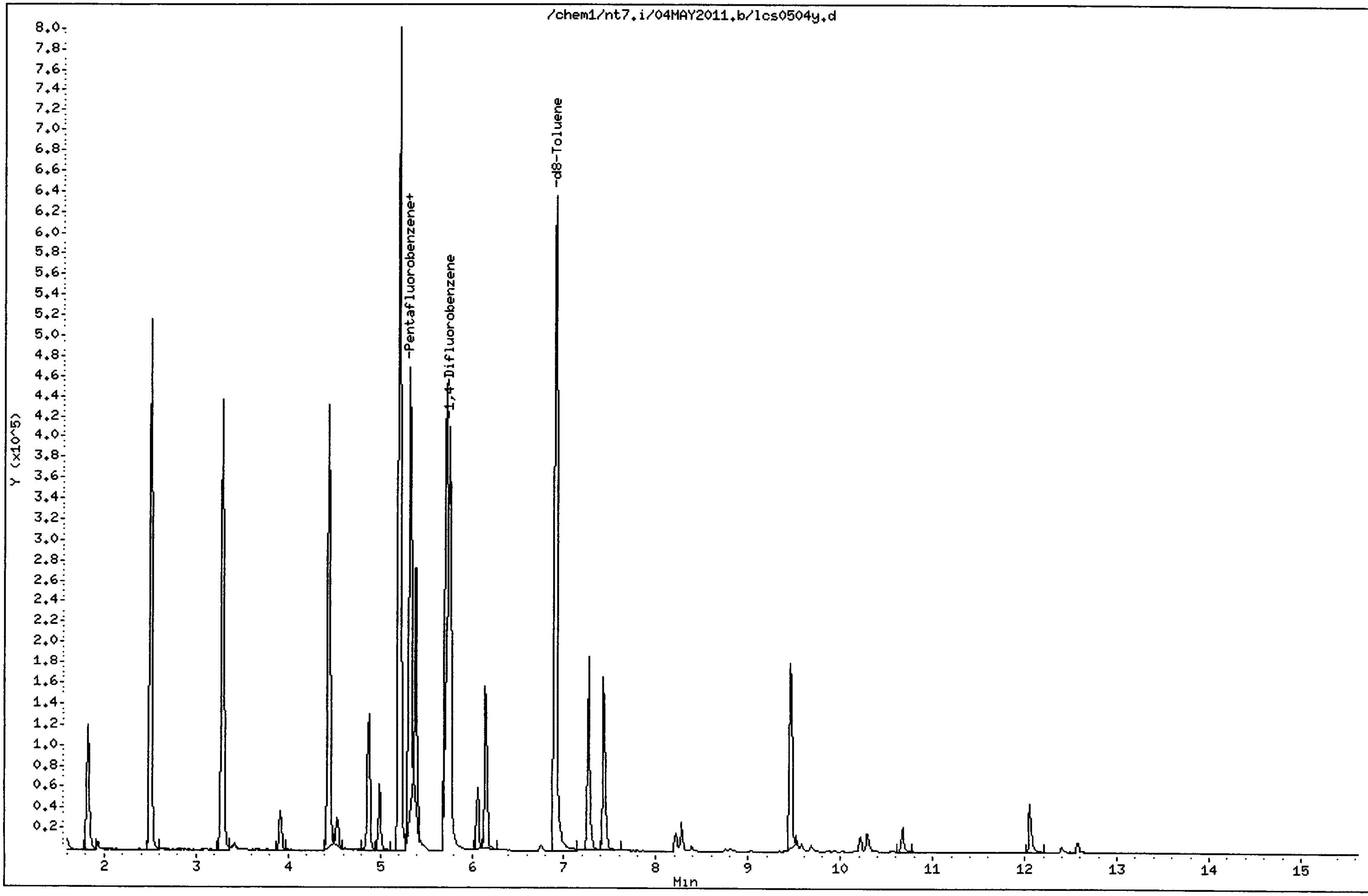
	SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 5	d4-1,2-Dichloroeth	1000.0	847.60	84.76	80-126
$ 9	d8-Toluene	1000.0	984.43	98.44	80-120

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	
	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)	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.					