Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: finn5.i
Lab File ID: SS71R.d
Lab Smp Id: SS71R
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: /chem1/finn5.i/22APR11.b/s8260b.m
Misc Info: 11-8671

Calibration Date: 22-APR-2011
Calibration Time: 09:14
Client Smp ID: LL-SB1-1.5-2-041911
Level: LOW
Sample Type: Soil

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	91022	45511	182044	64567	-29.06
34 1,4-Difluorobenze	153104	76552	306208	105391	-31.16
52 d5-Chlorobenzene	143720	71860	287440	108918	-24.22
76 d4-1,4-Dichlorobe	77398	38699	154796	53250	-31.20

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	6.43	5.93	6.93	6.43	0.00
34 1,4-Difluorobenze	7.44	6.94	7.94	7.44	0.00
52 d5-Chlorobenzene	10.57	10.07	11.07	10.58	0.10
76 d4-1,4-Dichlorobe	13.26	12.76	13.76	13.26	0.00

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

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd Snider
Sample Matrix: SOLID
Lab Smp Id: SS71R
Level: LOW
Data Type: MS DATA
SpikeList File: all.spk
Sublist File: voa.sub
Method File: /chem1/finn5.i/22APR11.b/s8260b.m
Misc Info: 11-8671

Client SDG: SS71
Fraction: VOA
Client Smp ID: LL-SB1-1.5-2-041911
Operator: PB
SampleType: SAMPLE
Quant Type: ISTD

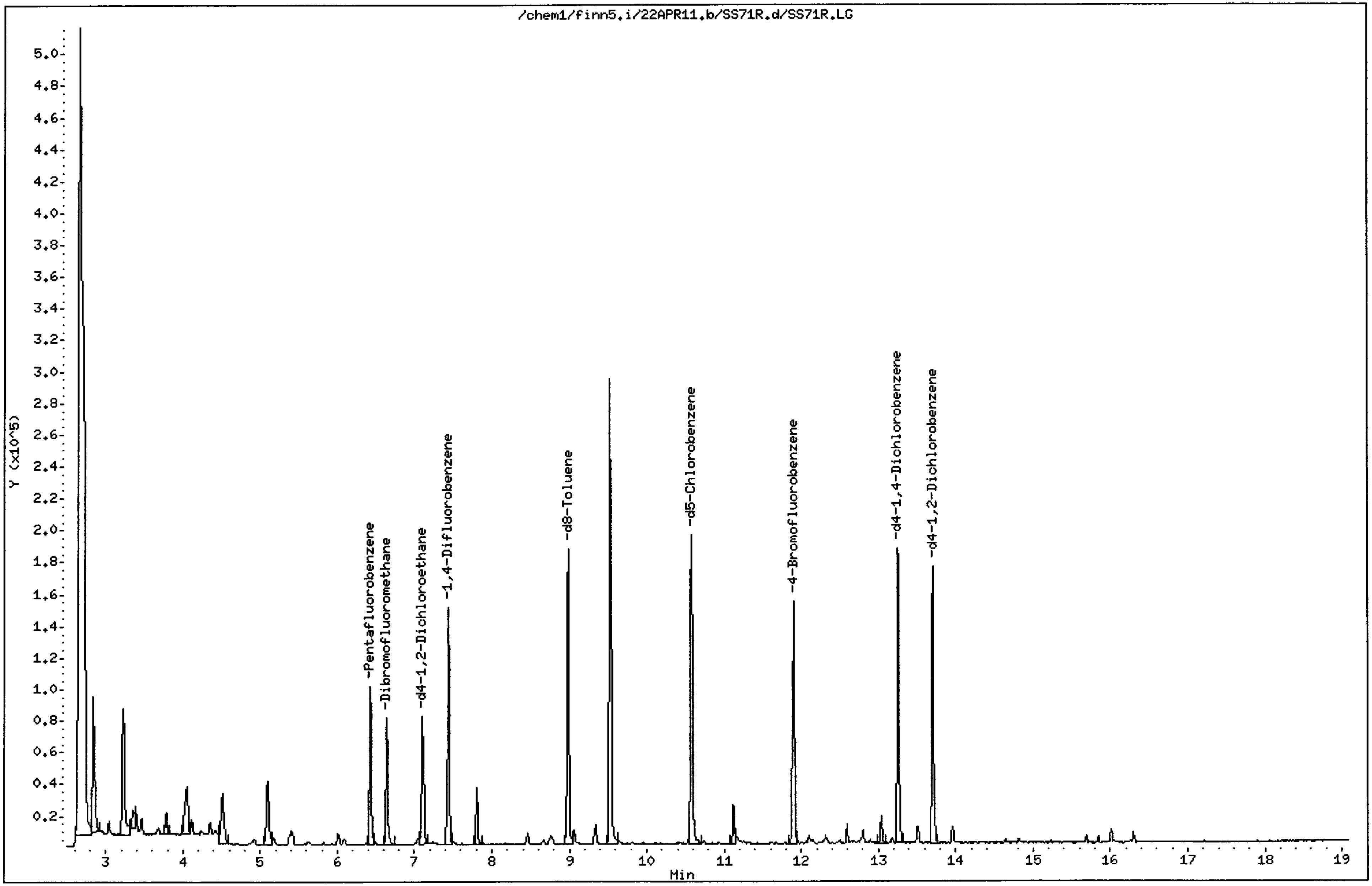
SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 25 Dibromofluorometha	50.000	56.330	112.66	30-160
$ 31 d4-1,2-Dichloroeth	50.000	62.637	125.27	75-152
$ 43 d8-Toluene	50.000	49.000	98.00	82-115
$ 62 4-Bromofluorobenze	50.000	45.481	90.96	64-120
$ 79 d4-1,2-Dichloroben	50.000	50.707	101.41	80-120

Data File: /chem1/finn5.i/22APR11.b/SS71R.d
Date : 22-APR-2011 20:37
Client ID: LL-SB1-1.5-2-041911
Sample Info: SS71R,5,5.596,0

Column phase: Rtx502.2

Instrument: finn5.i

Operator: PB
Column diameter: 0.18



CO-ELUTION SUMMARY FOR FILE - SS71R.d

Lab ID: SS71R, Method: s8260b.m, Instrument: finn5.i, Date: 22-APR-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Incorporated
Analytical Chemists and Consultants

VOA Analyst Notes / Corrective Action Log

ARI Project ID: SS71 Client ID: Floyd Snider

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

Parameter(s): _____

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

Purge Volume (mL) 5 Curve Date: 3/9/11 Analysis Start Date: 4/25/11

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):

Sample 5 run

Additional Details on Reverse: Yes / No

Analyst: _____ **Date:** 4/25/11

Reviewer: _____ **Date:** 4/25

Analytical Resources Inc.: Organics Instrument Log

FINN5 Serial No.: 5500-000421A

Date: 4/25/4 Analysis: 8260C Analyst: M

GC Program: F5 Column No: 8X124 Column Type: RTX502.2

Instrument Tune (.U or .CT.): DFB0425 EM Voltage: 1512

Calibration File: 0500425 Curve Date: 3/8/11

IS/SS	Ical/Ccal	LCS/ICV
W685-1	W685-2	W685-2

INTERNAL STANDARD SUMMARY FOR DATABATCH - /chem1/finn5.i/25APR11.b

	Time	Filename	LabID	ClientID	WT							
1	0838	BFB0425.d	BFB0425	BFB0425	0.00							
2	0957	0500425.d	CC0425	VSTD50	5.00 | 6.45	98094|| 7.46	164948||10.60	167084||13.29	93015|			
3	1027	LCS0425.d	LCS0425	LCS0425	5.00 | 6.45	100349|| 7.46	170673||10.60	167927||13.29	92454|			
4	1102	LCS0425A.d	LCS0425	LCS0425	5.00 | 6.44	101602|| 7.45	171568||10.58	166981||13.27	92006|			
5	1130	MB0425.d	MB0425	MB0425	5.00 | 6.45	89854|| 7.46	156411||10.60	148791||13.28	77028|			
6	1209	SS71S2.d	SS71S	LL-SB1-2-4-041911	5.00 | 6.45	90288|| 7.46	155792||10.60	148031||13.29	63211|			
7	1241	SS56A.d	SS56A	MW-2-S2	5.00 | 6.44	82850|| 7.45	143092||10.59	142008||13.27	69167|			
8	1309	SS56B.d	SS56B	MW-2-S3	5.00 | 6.44	77054|| 7.45	137269||10.58	140306||13.27	71998|			
9	1337	SS56C.d	SS56C	MW-2-S6	5.00 | 6.46	84621|| 7.46	152463||10.60	152715||13.29	78849|			
10	1405	SS56D.d	SS56D	MW-8-S1	5.00 | 6.44	79331|| 7.45	141990||10.58	145365||13.27	72149|			
11	1433	SS56E.d	SS56E	MW-8-S3	5.00 | 6.44	76579|| 7.44	136677||10.58	135577||13.27	58768|			
12	1507	ST61A.d	ST61A	RI-SB-PP221-0040	5.00 | 6.45	77498|| 7.46	137544||10.60	131434||13.28	54646|			
13	1528	ST61B.d	ST61B	RI-SB-PP221-0090	5.00 | 6.45	80274|| 7.45	146638||10.59	137385||13.28	54559|			
14	1556	ST61C.d	ST61C	RI-SB-PP222-0040	5.00 | 6.45	82234|| 7.46	144843||10.59	139130||13.28	57590|			
15	1624	ST61D.d	ST61D	RI-SB-PP222-0100	5.00 | 6.45	82363|| 7.46	144558||10.59	145167||13.28	73008|			
16	1652	ST61E.d	ST61E	RI-SB-PP223-0040	5.00 | 6.44	76100|| 7.45	133992||10.58	126778||13.27	44762|			
17	1720	ST61F.d	ST61F	RI-SB-PP223-0090	5.00 | 6.46	81540|| 7.47	144940||10.60	140195||13.29	60781|			
18	1747	ST61G.d	ST61G	RI-SB-PP224-0040	5.00 | 6.45	75813|| 7.46	134500||10.60	133689||13.28	59984|			
19	1818	ST61H.d	ST61H	RI-SB-PP224-0080	5.00 | 6.45	82459|| 7.46	146512||10.59	142397||13.28	62359|			
20	1843	ST61I.d	ST61I	RI-SB-PP225-0040	5.00 | 6.44	79249|| 7.45	147776||10.58	144782||13.27	66526|			
21	1911	ST61J.d	ST61J	RI-SB-PP225-0080	5.00 | 6.44	73372|| 7.45	136312||10.58	86297||13.27	21894|			

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/finn5.i/25APR11.b

ARI Job No.: BFB0 Method: bfb8260.m Instrument: finn5.i Date: 25-APR-2011

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0838	BFB0425.d	BFB0425	BFB0425	1	NO MANUAL INTEGRATION
0957	0500425.d	CC0425	VSTD50	1	NO MANUAL INTEGRATION
1027	LCS0425.d	LCS0425	LCS0425	1	NO MANUAL INTEGRATION
1102	LCS0425A.d	LCS0425	LCS0425	1	NO MANUAL INTEGRATION
1130	MB0425.d	MB0425	MB0425	1	NO MANUAL INTEGRATION
1209	SS71S2.d	SS71S	LL-SB1-2-4	1	NO MANUAL INTEGRATION

Q-FLAG SUMMARY FOR DATABATCH - /chem1/finn5.i/25APR11.b

Instrument: finn5.i Date: 25-APR-2011 Method: s8260b.m

INITIAL CAL: 09-MAR-2011

Compound	%RSD or R^2
NO Q-FLAGS	

CONTINUING CAL: 25-APR-2011

Compound	%D
Bromomethane	25.0
Iodomethane	24.3
2-Chloroethyl Vinyl Ether	43.2
Methyl tert-Butyl Ether	-28.7

Data File: /chem1/finn5.i/25APR11.b/BFB0425.d

Date : 25-APR-2011 08:38

Client ID: BFB0425

Instrument: finn5.i

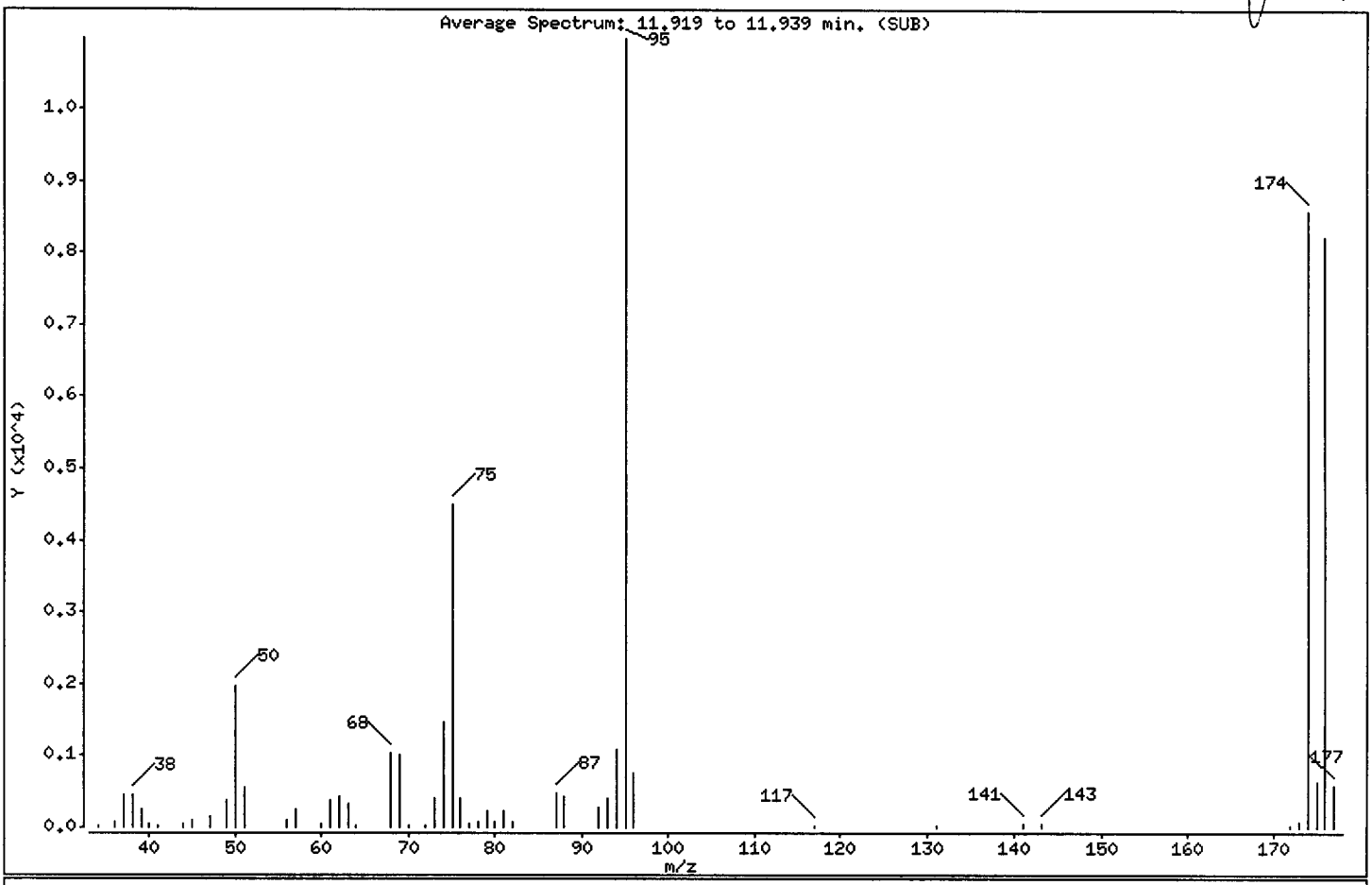
Sample Info: BFB0425,BFB0425,,1,25APR11,,

Operator: PB

Column phase: RTX502.2

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	17.98
75	30.00 - 66.00% of mass 95	40.94
96	5.00 - 9.00% of mass 95	6.91
173	Less than 2.00% of mass 174	0.59 (0.76)
174	50.00 - 101.00% of mass 95	78.12
175	4.00 - 9.00% of mass 174	5.71 (7.31)
176	93.00 - 101.00% of mass 174	74.84 (95.79)
177	5.00 - 9.00% of mass 176	5.30 (7.08)

Data File: /chem1/finn5.i/25APR11.b/BFB0425.d

Date : 25-APR-2011 08:38

Client ID: BFB0425

Instrument: finn5.i

Sample Info: BFB0425,BFB0425,,1,25APR11,,

Operator: PB

Column phase: RTX502.2

Column diameter: 0.18

Data File: BFB0425.d

Spectrum: Average Spectrum: 11.919 to 11.939 min. (SUB)

Location of Maximum: 95.00

Number of points: 51

m/z	Y	m/z	Y	m/z	Y	m/z	Y
34.00	19	56.00	103	75.00	4497	95.00	10984
36.00	77	57.00	255	76.00	415	96.00	759
37.00	449	60.00	62	77.00	54	117.00	16
38.00	459	61.00	377	78.00	64	131.00	17
39.00	241	62.00	417	79.00	221	141.00	43
40.00	63	63.00	337	80.00	67	143.00	61
41.00	18	64.00	19	81.00	221	172.00	20
44.00	43	68.00	1036	82.00	73	173.00	65
45.00	95	69.00	1019	87.00	479	174.00	8581
47.00	155	70.00	18	88.00	427	175.00	627
49.00	389	72.00	24	92.00	270	176.00	8220
50.00	1975	73.00	394	93.00	408	177.00	582
51.00	567	74.00	1454	94.00	1089		

Data File: /chem1/finn5.i/25APR11.b/BFB0425.d

Date : 25-APR-2011 08:38

Client ID: BFB0425

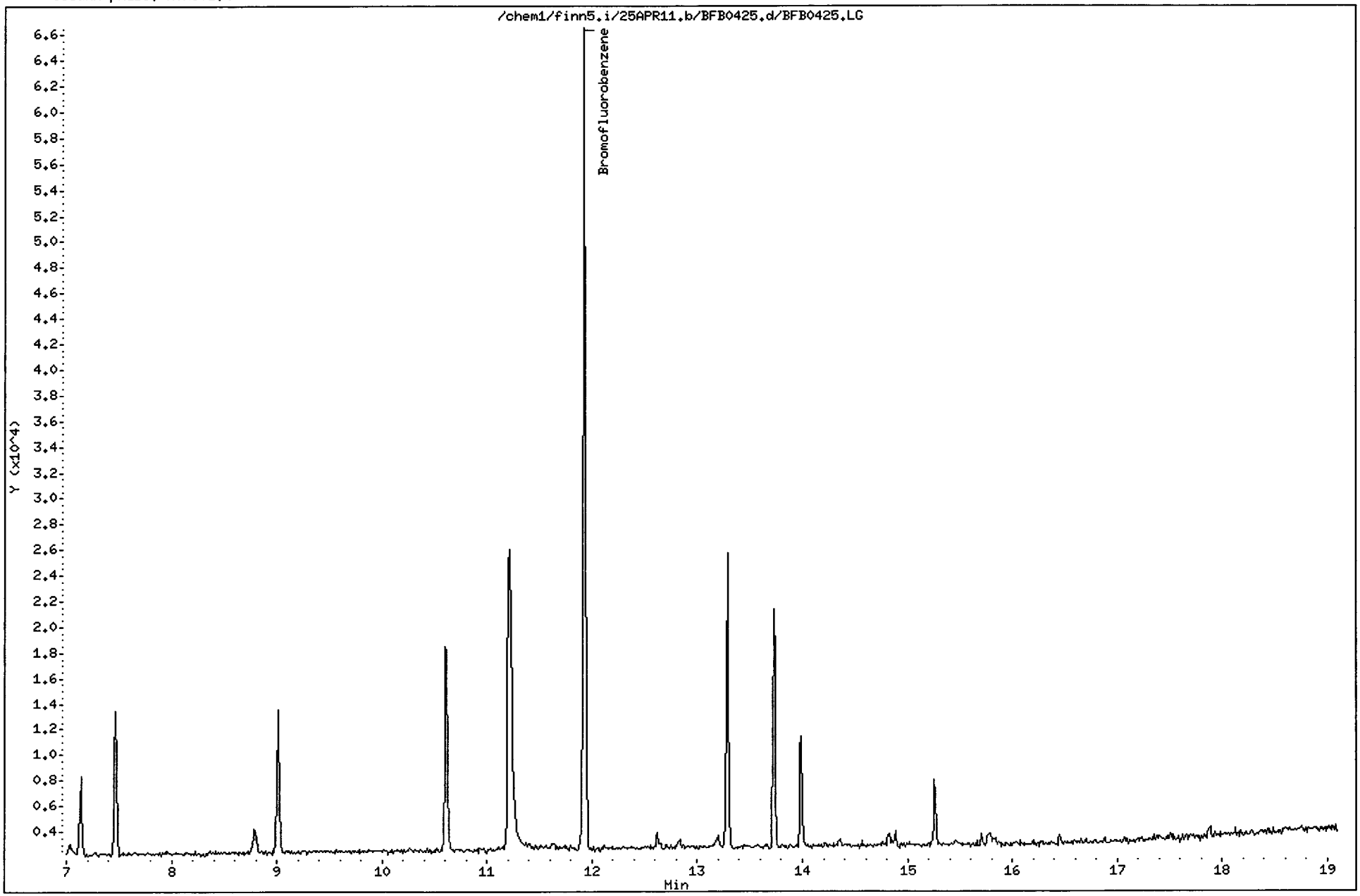
Sample Info: BFB0425,BFB0425,,1,25APR11,,

Column phase: RTX502.2

Instrument: finn5.i

Operator: PB

Column diameter: 0.18



Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/25APR11.b/0500425.d
Lab Smp Id: CC0425 Client Smp ID: VSTD50
Inj Date : 25-APR-2011 09:57
Operator : PB Inst ID: finn5.i
Smp Info : CC0425,5,5,0
Misc Info : 11-
Comment :
Method : /chem1/finn5.i/25APR11.b/s8260b.m
Meth Date : 25-Apr-2011 10:57 patrickb Quant Type: ISTD
Cal Date : 09-MAR-2011 13:53 Cal File: 2000309.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 3.50
Processing Host: cserv3

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

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

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	AMOUNTS ON-COL (ug/Kg)
1 Dichlorodifluoromethane	85	2.894	2.894	(0.449)	49661	50.0000	49.931
2 Chloromethane	50	3.186	3.186	(0.494)	91370	50.0000	52.665
3 Vinyl Chloride	62	3.286	3.286	(0.509)	103037	50.0000	47.710(Q)
4 Bromomethane	94	3.769	3.769	(0.584)	46815	50.0000	62.502
5 Chloroethane	64	3.839	3.839	(0.595)	72257	50.0000	50.227
6 Trichlorofluoromethane	101	4.090	4.090	(0.634)	107949	50.0000	55.146
7 Acrolein	56	4.482	4.482	(0.695)	87836	250.000	290.61
8 112Trichloro122Trifluoroethane	101	4.492	4.492	(0.696)	84946	50.0000	54.521
9 Acetone	43	4.533	4.533	(0.702)	114600	250.000	256.06
10 1,1-Dichloroethene	96	4.683	4.683	(0.726)	55266	50.0000	50.974
11 Bromoethane	108	4.894	4.894	(0.759)	47053	50.0000	55.255
12 Iodomethane	142	4.995	4.995	(0.774)	62997	50.0000	62.172
13 Methylene Chloride	84	5.105	5.105	(0.791)	64967	50.0000	50.148
14 Acrylonitrile	53	5.196	5.196	(0.805)	24349	50.0000	48.779(Q)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	AMOUNTS ON-COL (ug/Kg)
	16 Methyl tert-Butyl Ether	73	5.236	5.236	(0.812)	189998	50.0000	35.671(Q)
	15 Carbon Disulfide	76	5.206	5.206	(0.807)	210307	50.0000	51.288
	17 Trans-1,2-Dichloroethene	96	5.387	5.387	(0.835)	61886	50.0000	49.515
	18 Vinyl Acetate	43	5.718	5.718	(0.886)	121313	50.0000	49.916
	19 1,1-Dichloroethane	63	5.769	5.769	(0.894)	109988	50.0000	48.426
	20 2-Butanone	43	6.120	6.120	(0.949)	168908	250.000	261.37
	21 2,2-Dichloropropane	77	6.291	6.291	(0.975)	81188	50.0000	53.646
	22 Cis-1,2-Dichloroethene	96	6.321	6.321	(0.980)	66307	50.0000	50.020
*	23 Pentafluorobenzene	168	6.452	6.452	(1.000)	98094	50.0000	
	24 Chloroform	83	6.472	6.472	(1.003)	107080	50.0000	50.674
	26 Bromochloromethane	128	6.633	6.633	(1.028)	36348	50.0000	52.402
$	25 Dibromofluoromethane	111	6.673	6.673	(1.034)	59061	50.0000	50.652(Q)
	27 1,1,1-Trichloroethane	97	6.854	6.854	(1.062)	87781	50.0000	53.950
	29 1,1-Dichloropropene	75	6.995	6.995	(0.938)	82853	50.0000	46.652
	30 Carbon Tetrachloride	117	7.115	7.115	(0.954)	87093	50.0000	53.894
$	31 d4-1,2-Dichloroethane	65	7.135	7.135	(1.106)	53194	50.0000	49.251
	32 1,2-Dichloroethane	62	7.216	7.216	(0.968)	73652	50.0000	50.264
	33 Benzene	78	7.266	7.266	(0.974)	231606	50.0000	49.959
*	34 1,4-Difluorobenzene	114	7.457	7.457	(1.000)	164948	50.0000	
	35 Trichloroethene	95	7.829	7.829	(1.050)	68576	50.0000	50.428
	36 1,2-Dichloropropane	63	7.990	7.990	(1.071)	67804	50.0000	46.558
	37 Bromodichloromethane	83	8.221	8.221	(1.102)	82343	50.0000	49.895
	39 Dibromomethane	93	8.291	8.291	(1.112)	43131	50.0000	49.968
	40 2-Chloroethyl Vinyl Ether	63	8.452	8.452	(1.133)	22468	50.0000	71.619
	41 4-Methyl-2-Pentanone	58	8.482	8.482	(1.137)	137854	250.000	260.58
	42 Cis 1,3-dichloropropene	75	8.733	8.733	(1.171)	98971	50.0000	50.962
$	43 d8-Toluene	98	9.005	9.005	(1.208)	186590	50.0000	50.040
	44 Toluene	92	9.085	9.085	(1.218)	150241	50.0000	50.825
	45 Trans 1,3-Dichloropropene	75	9.226	9.226	(1.237)	85884	50.0000	52.289
	46 2-Hexanone	43	9.357	9.357	(0.882)	288298	250.000	244.38
	47 1,1,2-Trichloroethane	97	9.407	9.407	(1.261)	58605	50.0000	53.557
	48 1,3-Dichloropropane	76	9.658	9.658	(0.911)	104838	50.0000	49.328
	49 Tetrachloroethene	166	9.779	9.779	(0.922)	76237	50.0000	49.461
	50 Chlorodibromomethane	129	9.980	9.980	(0.941)	78184	50.0000	51.574
	51 1,2-Dibromoethane	107	10.211	10.211	(1.369)	67984	50.0000	53.639
*	52 d5-Chlorobenzene	117	10.603	10.603	(1.000)	167084	50.0000	
	53 Chlorobenzene	112	10.643	10.643	(1.004)	176792	50.0000	51.172
	54 Ethyl Benzene	91	10.683	10.683	(1.008)	275199	50.0000	51.878
	55 1,1,1,2-Tetrachloroethane	131	10.673	10.673	(1.007)	65168	50.0000	50.798
	56 m,p-xylene	106	10.764	10.764	(1.015)	222149	100.000	103.18
	57 o-Xylene	106	11.246	11.246	(1.061)	112513	50.0000	50.299
	58 Styrene	104	11.276	11.276	(1.063)	185354	50.0000	51.916
	59 Isopropyl Benzene	105	11.628	11.628	(0.875)	285683	50.0000	51.665
	60 Bromoform	173	11.688	11.688	(0.880)	55722	50.0000	50.696
	61 1,1,2,2-Tetrachloroethane	83	11.809	11.809	(0.889)	92786	50.0000	49.256
$	62 4-Bromofluorobenzene	95	11.929	11.929	(1.125)	82102	50.0000	47.872
	63 1,2,3-Trichloropropane	110	11.980	11.980	(0.902)	24076	50.0000	52.986

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	ON-COL (ug/Kg)
	65 Trans-1,4-Dichloro 2-Butene	53	12.030	12.030	(0.905)	23883	50.0000	48.688
	66 N-Propyl Benzene	91	12.080	12.080	(0.909)	332430	50.0000	54.053
	67 Bromobenzene	156	12.171	12.171	(0.916)	84678	50.0000	49.406
	68 1,3,5-Trimethyl Benzene	105	12.261	12.261	(0.923)	228402	50.0000	51.815
	69 2-Chloro Toluene	91	12.311	12.311	(0.927)	205363	50.0000	48.290
	70 4-Chloro Toluene	91	12.361	12.361	(0.930)	229747	50.0000	52.351
	71 T-Butyl Benzene	119	12.663	12.663	(0.953)	210065	50.0000	49.652
	72 1,2,4-Trimethylbenzene	105	12.713	12.713	(0.957)	232254	50.0000	52.491
	73 S-Butyl Benzene	105	12.914	12.914	(0.972)	315411	50.0000	53.473
	74 4-Isopropyl Toluene	119	13.065	13.065	(0.983)	251296	50.0000	54.357
	75 1,3-Dichlorobenzene	146	13.206	13.206	(0.994)	159165	50.0000	52.929
*	76 d4-1,4-Dichlorobenzene	152	13.286	13.286	(1.000)	93015	50.0000	
	77 1,4-Dichlorobenzene	146	13.316	13.316	(1.002)	156947	50.0000	52.426
	78 N-Butyl Benzene	91	13.537	13.537	(1.019)	250447	50.0000	54.926
$	79 d4-1,2-Dichlorobenzene	152	13.728	13.728	(1.033)	84293	50.0000	51.028
	80 1,2-Dichlorobenzene	146	13.758	13.758	(1.036)	146178	50.0000	51.865
	81 1,2-Dibromo 3-Chloropropane	75	14.663	14.663	(1.104)	15875	50.0000	47.066
	82 1,2,4-Trichlorobenzene	180	15.708	15.708	(1.182)	102876	50.0000	51.152
	83 Hexachloro 1,3-Butadiene	225	15.869	15.869	(1.194)	54304	50.0000	46.996
	84 Naphthalene	128	16.030	16.030	(1.206)	215594	50.0000	48.624
	85 1,2,3-Trichlorobenzene	180	16.321	16.321	(1.228)	94478	50.0000	47.650

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: finn5.i
Lab File ID: 0500425.d
Lab Smp Id: CC0425
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: /chem1/finn5.i/25APR11.b/s8260b.m
Misc Info: 11-

Calibration Date: 25-APR-2011
Calibration Time: 09:04
Client Smp ID: VSTD50
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	91022	45511	182044	98094	7.77
34 1,4-Difluorobenze	153104	76552	306208	164948	7.74
52 d5-Chlorobenzene	143720	71860	287440	167084	16.26
76 d4-1,4-Dichlorobe	77398	38699	154796	93015	20.18

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	6.44	5.94	6.94	6.45	0.16
34 1,4-Difluorobenze	7.45	6.95	7.95	7.46	0.13
52 d5-Chlorobenzene	10.59	10.09	11.09	10.60	0.09
76 d4-1,4-Dichlorobe	13.28	12.78	13.78	13.29	0.08

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

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: finn5.i Injection Date: 25-APR-2011 09:57
Lab File ID: 0500425.d Init. Cal. Date(s): 09-MAR-2011 09-MAR-2011
Analysis Type: SOIL Init. Cal. Times: 13:10 16:51
Lab Sample ID: CC0425 Quant Type: ISTD
Method: /chem1/finn5.i/25APR11.b/s8260b.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
1 Dichlorodifluoromethane	0.50697	0.50627	0.010	-0.13847	20.00000	Averaged	
2 Chloromethane	0.88433	0.93146	0.100	5.32976	20.00000	Averaged	
3 Vinyl Chloride	1.10080	1.05039	0.010	-4.57886	20.00000	Averaged	
4 Bromomethane	0.38179	0.47725	0.010	25.00308	20.00000	Averaged	<-
5 Chloroethane	0.73328	0.73661	0.010	0.45421	20.00000	Averaged	
6 Trichlorofluoromethane	0.99777	1.10047	0.010	10.29287	20.00000	Averaged	
7 Acrolein	0.15406	0.17909	0.010	16.24575	20.00000	Averaged	
8 112Trichloro122Trifluoroeth	0.79416	0.86597	0.010	9.04173	20.00000	Averaged	
9 Acetone	0.22812	0.23365	0.010	2.42353	20.00000	Averaged	
10 1,1-Dichloroethene	0.55263	0.56340	0.010	1.94782	20.00000	Averaged	
11 Bromoethane	0.43406	0.47968	0.010	10.51025	20.00000	Averaged	
12 Iodomethane	0.51648	0.64221	0.010	24.34449	20.00000	Averaged	<-
13 Methylene Chloride	0.66034	0.66229	0.010	0.29589	20.00000	Averaged	
14 Acrylonitrile	0.25443	0.24822	0.010	-2.44105	20.00000	Averaged	
16 Methyl tert-Butyl Ether	2.71491	1.93689	0.010	-28.65730	20.00000	Averaged	<-
15 Carbon Disulfide	2.09010	2.14393	0.010	2.57536	20.00000	Averaged	
17 Trans-1,2-Dichloroethene	0.63707	0.63089	0.010	-0.96986	20.00000	Averaged	
18 Vinyl Acetate	1.23877	1.23671	0.010	-0.16681	20.00000	Averaged	
19 1,1-Dichloroethane	1.15770	1.12125	0.100	-3.14825	20.00000	Averaged	
20 2-Butanone	0.32940	0.34438	0.010	4.54670	20.00000	Averaged	
21 2,2-Dichloropropane	0.77141	0.82766	0.010	7.29128	20.00000	Averaged	
22 Cis-1,2-Dichloroethene	0.67569	0.67596	0.010	0.04049	20.00000	Averaged	
24 Chloroform	1.07708	1.09160	0.010	1.34827	20.00000	Averaged	
26 Bromochloromethane	0.35356	0.37055	0.010	4.80450	20.00000	Averaged	
$ 25 Dibromofluoromethane	0.59433	0.60209	0.010	1.30476	20.00000	Averaged	
27 1,1,1-Trichloroethane	0.82934	0.89487	0.010	7.90108	20.00000	Averaged	
29 1,1-Dichloropropene	0.53834	0.50230	0.010	-6.69509	20.00000	Averaged	
30 Carbon Tetrachloride	0.48986	0.52800	0.010	7.78761	20.00000	Averaged	
$ 31 d4-1,2-Dichloroethane	0.55053	0.54228	0.010	-1.49862	20.00000	Averaged	
32 1,2-Dichloroethane	0.44417	0.44652	0.010	0.52904	20.00000	Averaged	
33 Benzene	1.40527	1.40411	0.010	-0.08272	20.00000	Averaged	
35 Trichloroethene	0.41221	0.41574	0.010	0.85603	20.00000	Averaged	
36 1,2-Dichloropropane	0.44146	0.41107	0.010	-6.88412	20.00000	Averaged	
37 Bromodichloromethane	0.50025	0.49921	0.010	-0.20914	20.00000	Averaged	
39 Dibromomethane	0.26165	0.26148	0.010	-0.06471	20.00000	Averaged	

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: finn5.i Injection Date: 25-APR-2011 09:57
Lab File ID: 0500425.d Init. Cal. Date(s): 09-MAR-2011 09-MAR-2011
Analysis Type: SOIL Init. Cal. Times: 13:10 16:51
Lab Sample ID: CC0425 Quant Type: ISTD
Method: /chem1/finn5.i/25APR11.b/s8260b.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
40 2-Chloroethyl Vinyl Ether	0.09510	0.13622	0.001	43.23844	20.00000	Averaged	<-
41 4-Methyl-2-Pentanone	0.16036	0.16715	0.010	4.23353	20.00000	Averaged	
42 Cis 1,3-dichloropropene	0.58869	0.60001	0.010	1.92396	20.00000	Averaged	
$ 43 d8-Toluene	1.13029	1.13120	0.010	0.08048	20.00000	Averaged	
44 Toluene	0.89605	0.91083	0.010	1.65030	20.00000	Averaged	
45 Trans 1,3-Dichloropropene	0.49788	0.52067	0.010	4.57791	20.00000	Averaged	
46 2-Hexanone	0.35303	0.34509	0.010	-2.24805	20.00000	Averaged	
47 1,1,2-Trichloroethane	0.33170	0.35530	0.010	7.11484	20.00000	Averaged	
48 1,3-Dichloropropane	0.63601	0.62746	0.010	-1.34450	20.00000	Averaged	
49 Tetrachloroethene	0.46125	0.45628	0.010	-1.07759	20.00000	Averaged	
50 Chlorodibromomethane	0.45366	0.46794	0.010	3.14796	20.00000	Averaged	
51 1,2-Dibromoethane	0.38419	0.41215	0.010	7.27813	20.00000	Averaged	
53 Chlorobenzene	1.03387	1.05810	0.300	2.34403	20.00000	Averaged	
54 Ethyl Benzene	1.58744	1.64707	0.010	3.75623	20.00000	Averaged	
55 1,1,1,2-Tetrachloroethane	0.38390	0.39003	0.010	1.59699	20.00000	Averaged	
56 m,p-xylene	0.64427	0.66478	0.010	3.18360	20.00000	Averaged	
57 o-Xylene	0.66938	0.67339	0.010	0.59881	20.00000	Averaged	
58 Styrene	1.06840	1.10935	0.010	3.83269	20.00000	Averaged	
59 Isopropyl Benzene	2.97240	3.07137	0.010	3.32951	20.00000	Averaged	
60 Bromoform	0.59084	0.59907	0.100	1.39317	20.00000	Averaged	
61 1,1,2,2-Tetrachloroethane	1.01261	0.99754	0.300	-1.48818	20.00000	Averaged	
$ 62 4-Bromofluorobenzene	0.51323	0.49138	0.010	-4.25695	20.00000	Averaged	
63 1,2,3-Trichloropropane	0.24426	0.25885	0.010	5.97315	20.00000	Averaged	
65 Trans-1,4-Dichloro 2-Butene	0.26369	0.25677	0.010	-2.62327	20.00000	Averaged	
66 N-Propyl Benzene	3.30593	3.57394	0.010	8.10699	20.00000	Averaged	
67 Bromobenzene	0.92132	0.91038	0.010	-1.18762	20.00000	Averaged	
68 1,3,5-Trimethyl Benzene	2.36953	2.45554	0.010	3.62991	20.00000	Averaged	
69 2-Chloro Toluene	2.28602	2.20785	0.010	-3.41948	20.00000	Averaged	
70 4-Chloro Toluene	2.35906	2.47000	0.010	4.70256	20.00000	Averaged	
71 T-Butyl Benzene	2.27420	2.25840	0.010	-0.69498	20.00000	Averaged	
72 1,2,4-Trimethylbenzene	2.37846	2.49695	0.010	4.98200	20.00000	Averaged	
73 S-Butyl Benzene	3.17074	3.39097	0.010	6.94573	20.00000	Averaged	
74 4-Isopropyl Toluene	2.48513	2.70167	0.010	8.71346	20.00000	Averaged	
75 1,3-Dichlorobenzene	1.61648	1.71118	0.010	5.85813	20.00000	Averaged	
77 1,4-Dichlorobenzene	1.60925	1.68733	0.010	4.85171	20.00000	Averaged	

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: finn5.i Injection Date: 25-APR-2011 09:57
Lab File ID: 0500425.d Init. Cal. Date(s): 09-MAR-2011 09-MAR-2011
Analysis Type: SOIL Init. Cal. Times: 13:10 16:51
Lab Sample ID: CC0425 Quant Type: ISTD
Method: /chem1/finn5.i/25APR11.b/s8260b.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
78 N-Butyl Benzene	2.45104	2.69255	0.010	9.85299	20.00000	Averaged
$ 79 d4-1,2-Dichlorobenzene	0.88798	0.90624	0.010	2.05600	20.00000	Averaged
80 1,2-Dichlorobenzene	1.51503	1.57155	0.010	3.73059	20.00000	Averaged
81 1,2-Dibromo 3-Chloropropane	0.18132	0.17068	0.010	-5.86899	20.00000	Averaged
82 1,2,4-Trichlorobenzene	1.08110	1.10601	0.010	2.30487	20.00000	Averaged
83 Hexachloro 1,3-Butadiene	0.62115	0.58383	0.010	-6.00784	20.00000	Averaged
84 Naphthalene	2.38344	2.31785	0.010	-2.75191	20.00000	Averaged
85 1,2,3-Trichlorobenzene	1.06583	1.01573	0.010	-4.70002	20.00000	Averaged

Data File: /chem1/finn5.i/25APR11.b/0500425.d

Date : 25-APR-2011 09:57

Client ID: VSTD50

Sample Info: CC0425,5,5,0

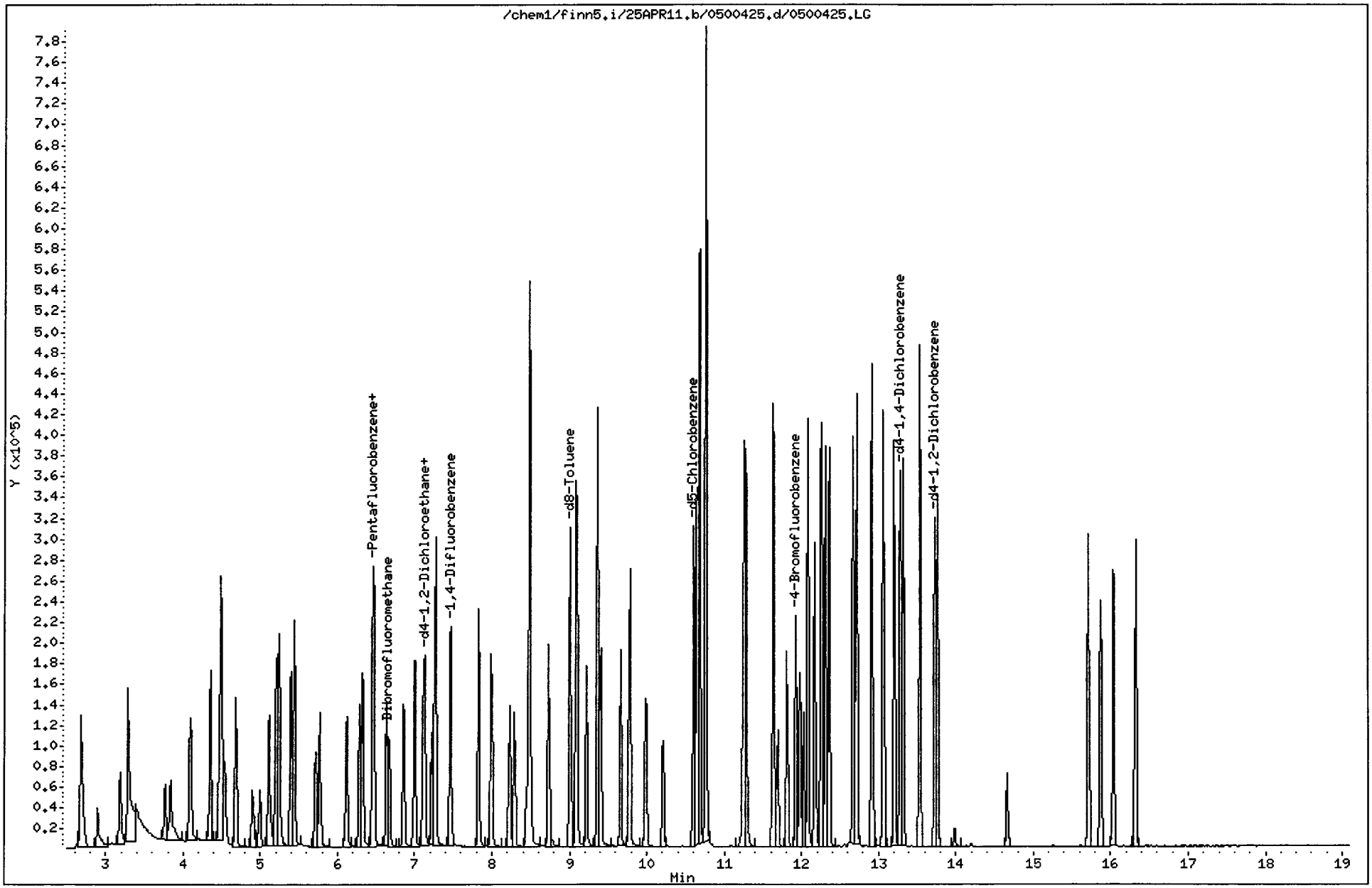
Column phase: Rtx502.2

Instrument: finn5.i

Operator: PB

Column diameter: 0.18

SS71 00641



Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/25APR11.b/LCS0425.d
Lab Smp Id: LCS0425 Client Smp ID: LCS0425
Inj Date : 25-APR-2011 10:27
Operator : PB Inst ID: finn5.i
Smp Info : LCS0425,5,5,0
Misc Info : 11-8672
Comment :
Method : /chem1/finn5.i/25APR11.b/s8260b.m
Meth Date : 25-Apr-2011 18:57 patrickb Quant Type: ISTD
Cal Date : 09-MAR-2011 13:53 Cal File: 2000309.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 3.50
Processing Host: cserv3

4/15/4

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

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

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	2.894	2.894	(0.449)	55152	54.2047	54.205
2	Chloromethane	50	3.186	3.186	(0.494)	97280	54.8110	54.811
3	Vinyl Chloride	62	3.286	3.286	(0.509)	110274	49.9140	49.914(Q)
4	Bromomethane	94	3.769	3.769	(0.584)	51059	66.6358	66.636
5	Chloroethane	64	3.839	3.839	(0.595)	82219	55.8673	55.867
6	Trichlorofluoromethane	101	4.090	4.090	(0.634)	117633	58.7429	58.743
7	Acrolein	56	4.472	4.482	(0.693)	92479	299.099	299.10
8	112Trichloro122Trifluoroethane	101	4.482	4.492	(0.695)	93001	58.3493	58.349
9	Acetone	43	4.533	4.533	(0.702)	119797	261.656	261.66
10	1,1-Dichloroethene	96	4.683	4.683	(0.726)	60763	54.7846	54.784
11	Bromoethane	108	4.894	4.894	(0.759)	51015	58.5606	58.560
12	Iodomethane	142	4.995	4.995	(0.774)	67767	65.3768	65.377
13	Methylene Chloride	84	5.105	5.105	(0.791)	70728	53.3680	53.368
14	Acrylonitrile	53	5.196	5.196	(0.805)	26089	51.0906	51.091(Q)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	16 Methyl tert-Butyl Ether	73	5.236	5.236	(0.812)	206959	37.9826	37.983 (Q)
	15 Carbon Disulfide	76	5.206	5.206	(0.807)	227774	54.2992	54.299
	17 Trans-1,2-Dichloroethene	96	5.387	5.387	(0.835)	67968	53.1590	53.159
	18 Vinyl Acetate	43	5.718	5.718	(0.886)	133035	53.5095	53.509
	19 1,1-Dichloroethane	63	5.769	5.769	(0.894)	124894	53.7530	53.753
	20 2-Butanone	43	6.120	6.120	(0.949)	178916	270.631	270.63
	21 2,2-Dichloropropane	77	6.291	6.291	(0.975)	88256	57.0052	57.005
	22 Cis-1,2-Dichloroethene	96	6.321	6.321	(0.980)	69352	51.1412	51.141
*	23 Pentafluorobenzene	168	6.452	6.452	(1.000)	100349	50.0000	
	24 Chloroform	83	6.472	6.472	(1.003)	116836	54.0486	54.049
	26 Bromochloromethane	128	6.633	6.633	(1.028)	39261	55.3288	55.329
$	25 Dibromofluoromethane	111	6.663	6.673	(1.033)	60827	50.9944	50.994 (Q)
	27 1,1,1-Trichloroethane	97	6.854	6.854	(1.062)	95027	57.0916	57.092
	29 1,1-Dichloropropene	75	6.995	6.995	(0.938)	91820	49.9673	49.967
	30 Carbon Tetrachloride	117	7.115	7.115	(0.954)	94247	56.3643	56.364
$	31 d4-1,2-Dichloroethane	65	7.135	7.135	(1.106)	55258	50.0119	50.012
	32 1,2-Dichloroethane	62	7.216	7.216	(0.968)	79997	52.7635	52.764
	33 Benzene	78	7.266	7.266	(0.974)	248154	51.7328	51.733
*	34 1,4-Difluorobenzene	114	7.457	7.457	(1.000)	170673	50.0000	
	35 Trichloroethene	95	7.829	7.829	(1.050)	73684	52.3668	52.367
	36 1,2-Dichloropropane	63	7.990	7.990	(1.071)	72838	48.3365	48.336
	37 Bromodichloromethane	83	8.221	8.221	(1.102)	89866	52.6271	52.627
	39 Dibromomethane	93	8.291	8.291	(1.112)	46731	52.3221	52.322
	40 2-Chloroethyl Vinyl Ether	63	8.442	8.452	(1.132)	23829	73.4068	73.407 (Q)
	41 4-Methyl-2-Pentanone	58	8.482	8.482	(1.137)	145859	266.468	266.47
	42 Cis 1,3-dichloropropene	75	8.733	8.733	(1.171)	106627	53.0625	53.062
$	43 d8-Toluene	98	9.005	9.005	(1.208)	191124	49.5370	49.537
	44 Toluene	92	9.085	9.085	(1.218)	162056	52.9834	52.983
	45 Trans 1,3-Dichloropropene	75	9.216	9.226	(1.236)	91496	53.8370	53.837
	46 2-Hexanone	43	9.357	9.357	(0.882)	304050	256.439	256.44
	47 1,1,2-Trichloroethane	97	9.397	9.407	(1.260)	61534	54.3476	54.348
	48 1,3-Dichloropropane	76	9.658	9.658	(0.911)	110783	51.8634	51.863
	49 Tetrachloroethene	166	9.779	9.779	(0.922)	80870	52.2032	52.203
	50 Chlorodibromomethane	129	9.980	9.980	(0.941)	82864	54.3863	54.386
	51 1,2-Dibromoethane	107	10.211	10.211	(1.369)	74029	56.4496	56.450
*	52 d5-Chlorobenzene	117	10.603	10.603	(1.000)	167927	50.0000	
	53 Chlorobenzene	112	10.643	10.643	(1.004)	186078	53.5896	53.590
	54 Ethyl Benzene	91	10.683	10.683	(1.008)	291195	54.6181	54.618
	55 1,1,1,2-Tetrachloroethane	131	10.673	10.673	(1.007)	68564	53.1776	53.178
	56 m,p-xylene	106	10.764	10.764	(1.015)	233722	108.014	108.01
	57 o-Xylene	106	11.246	11.246	(1.061)	118794	52.8409	52.841
	58 Styrene	104	11.276	11.276	(1.063)	194977	54.3375	54.337
	59 Isopropyl Benzene	105	11.628	11.628	(0.875)	301384	54.8349	54.835
	60 Bromoform	173	11.688	11.688	(0.880)	58267	53.3332	53.333
	61 1,1,2,2-Tetrachloroethane	83	11.809	11.809	(0.889)	96973	51.7907	51.791
$	62 4-Bromofluorobenzene	95	11.929	11.929	(1.125)	82788	48.0293	48.029
	63 1,2,3-Trichloropropane	110	11.980	11.980	(0.902)	25159	55.7048	55.705

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	65 Trans-1,4-Dichloro 2-Butene	53	12.030	12.030	(0.905)	25322	51.9339	51.934
	66 N-Propyl Benzene	91	12.080	12.080	(0.909)	345371	56.4985	56.498
	67 Bromobenzene	156	12.171	12.171	(0.916)	89336	52.4399	52.440
	68 1,3,5-Trimethyl Benzene	105	12.261	12.261	(0.923)	238704	54.4806	54.481
	69 2-Chloro Toluene	91	12.311	12.311	(0.927)	216246	51.1578	51.158
	70 4-Chloro Toluene	91	12.361	12.361	(0.930)	237905	54.5392	54.539
	71 T-Butyl Benzene	119	12.663	12.663	(0.953)	221030	52.5613	52.561
	72 1,2,4-Trimethylbenzene	105	12.713	12.713	(0.957)	237763	54.0621	54.062
	73 S-Butyl Benzene	105	12.914	12.914	(0.972)	328079	55.9580	55.958
	74 4-Isopropyl Toluene	119	13.055	13.065	(0.983)	258360	56.2239	56.224
	75 1,3-Dichlorobenzene	146	13.206	13.206	(0.994)	163638	54.7467	54.747
*	76 d4-1,4-Dichlorobenzene	152	13.286	13.286	(1.000)	92454	50.0000	
	77 1,4-Dichlorobenzene	146	13.316	13.316	(1.002)	160453	53.9223	53.922
	78 N-Butyl Benzene	91	13.537	13.537	(1.019)	253053	55.8347	55.835
$	79 d4-1,2-Dichlorobenzene	152	13.728	13.728	(1.033)	83019	50.5612	50.561
	80 1,2-Dichlorobenzene	146	13.758	13.758	(1.036)	151589	54.1116	54.112
	81 1,2-Dibromo 3-Chloropropane	75	14.663	14.663	(1.104)	16249	48.4643	48.464
	82 1,2,4-Trichlorobenzene	180	15.708	15.708	(1.182)	103382	51.7160	51.716
	83 Hexachloro 1,3-Butadiene	225	15.869	15.869	(1.194)	54991	47.8786	47.879
	84 Naphthalene	128	16.030	16.030	(1.206)	221449	50.2475	50.248
	85 1,2,3-Trichlorobenzene	180	16.321	16.321	(1.228)	96179	48.8020	48.802

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: finn5.i
Lab File ID: LCS0425.d
Lab Smp Id: LCS0425
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: /chem1/finn5.i/25APR11.b/s8260b.m
Misc Info: 11-8672

Calibration Date: 25-APR-2011
Calibration Time: 09:57
Client Smp ID: LCS0425
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	91022	45511	182044	100349	10.25
34 1,4-Difluorobenze	153104	76552	306208	170673	11.48
52 d5-Chlorobenzene	143720	71860	287440	167927	16.84
76 d4-1,4-Dichlorobe	77398	38699	154796	92454	19.45

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	6.45	5.95	6.95	6.45	0.00
34 1,4-Difluorobenze	7.46	6.96	7.96	7.46	0.00
52 d5-Chlorobenzene	10.60	10.10	11.10	10.60	0.00
76 d4-1,4-Dichlorobe	13.29	12.79	13.79	13.29	0.00

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

Analytical Resources, Inc.

RECOVERY REPORT

Client Name:
Sample Matrix: SOLID
Lab Smp Id: LCS0425
Level: LOW
Data Type: MS DATA
SpikeList File: all.spk
Sublist File: voa.sub
Method File: /chem1/finn5.i/25APR11.b/s8260b.m
Misc Info: 11-8672

Client SDG: 25APR11
Fraction: VOA
Client Smp ID: LCS0425
Operator: PB
SampleType: LCS
Quant Type: ISTD

SPIKE	COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
1	Dichlorodifluorome	50.000	54.205	108.41	53-148
2	Chloromethane	50.000	54.811	109.62	64-125
3	Vinyl Chloride	50.000	49.914	99.83	63-137
4	Bromomethane	50.000	66.636	133.27	57-136
5	Chloroethane	50.000	55.867	111.73	64-131
6	Trichlorofluoromet	50.000	58.743	117.49	69-132
7	Acrolein	250.00	299.10	119.64	54-137
8	112Trichloro122Tri	50.000	58.349	116.70	74-130
9	Acetone	250.00	261.66	104.66	60-131
10	1,1-Dichloroethene	50.000	54.784	109.57	75-126
11	Bromoethane	50.000	58.560	117.12	76-126
12	Iodomethane	50.000	65.377	130.75	65-139
13	Methylene Chloride	50.000	53.368	106.74	70-123
15	Carbon Disulfide	50.000	54.299	108.60	71-129
14	Acrylonitrile	50.000	51.091	102.18	67-125
16	Methyl tert-Butyl	50.000	37.983	75.97	70-120
17	Trans-1,2-Dichloro	50.000	53.159	106.32	80-120
18	Vinyl Acetate	50.000	53.509	107.02	60-136
19	1,1-Dichloroethane	50.000	53.753	107.51	80-120
20	2-Butanone	250.00	270.63	108.25	70-120
21	2,2-Dichloropropan	50.000	57.005	114.01	74-123
22	Cis-1,2-Dichloroet	50.000	51.141	102.28	80-120
24	Chloroform	50.000	54.049	108.10	80-120
26	Bromochloromethane	50.000	55.329	110.66	80-120
27	1,1,1-Trichloroeth	50.000	57.092	114.18	77-121
29	1,1-Dichloropropen	50.000	49.967	99.93	80-120
30	Carbon Tetrachlori	50.000	56.364	112.73	77-122
32	1,2-Dichloroethane	50.000	52.764	105.53	76-120
33	Benzene	50.000	51.733	103.47	80-120
35	Trichloroethene	50.000	52.367	104.73	80-120
36	1,2-Dichloropropan	50.000	48.336	96.67	80-120
37	Bromodichlorometha	50.000	52.627	105.25	77-121
39	Dibromomethane	50.000	52.322	104.64	80-120

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
40 2-Chloroethyl Viny	50.000	73.407	146.81	10-191
41 4-Methyl-2-Pentano	250.00	266.47	106.59	67-120
42 Cis 1,3-dichloropr	50.000	53.062	106.12	74-120
44 Toluene	50.000	52.983	105.97	80-120
45 Trans 1,3-Dichloro	50.000	53.837	107.67	65-120
46 2-Hexanone	250.00	256.44	102.58	65-130
47 1,1,2-Trichloroeth	50.000	54.348	108.70	80-120
48 1,3-Dichloropropan	50.000	51.863	103.73	80-120
49 Tetrachloroethene	50.000	52.203	104.41	80-121
50 Chlorodibromometha	50.000	54.386	108.77	64-120
51 1,2-Dibromoethane	50.000	56.450	112.90	75-120
53 Chlorobenzene	50.000	53.590	107.18	80-120
55 1,1,1,2-Tetrachlor	50.000	53.178	106.36	69-121
54 Ethyl Benzene	50.000	54.618	109.24	80-127
56 m,p-xylene	100.00	108.01	108.01	80-125
57 o-Xylene	50.000	52.841	105.68	78-120
58 Styrene	50.000	54.337	108.67	80-123
59 Isopropyl Benzene	50.000	54.835	109.67	80-127
60 Bromoform	50.000	53.333	106.67	60-120
61 1,1,2,2-Tetrachlor	50.000	51.791	103.58	74-120
63 1,2,3-Trichloropro	50.000	55.705	111.41	72-121
65 Trans-1,4-Dichloro	50.000	51.934	103.87	65-126
66 N-Propyl Benzene	50.000	56.498	113.00	80-132
67 Bromobenzene	50.000	52.440	104.88	80-120
68 1,3,5-Trimethyl Be	50.000	54.481	108.96	80-125
69 2-Chloro Toluene	50.000	51.158	102.32	80-125
70 4-Chloro Toluene	50.000	54.539	109.08	80-127
71 T-Butyl Benzene	50.000	52.561	105.12	87-122
72 1,2,4-Trimethylben	50.000	54.062	108.12	80-126
73 S-Butyl Benzene	50.000	55.958	111.92	80-134
74 4-Isopropyl Toluen	50.000	56.224	112.45	80-131
75 1,3-Dichlorobenzen	50.000	54.747	109.49	80-120
77 1,4-Dichlorobenzen	50.000	53.922	107.84	80-120
78 N-Butyl Benzene	50.000	55.835	111.67	80-138
80 1,2-Dichlorobenzen	50.000	54.112	108.22	80-120
81 1,2-Dibromo 3-Chlo	50.000	48.464	96.93	59-120
82 1,2,4-Trichloroben	50.000	51.716	103.43	78-130
83 Hexachloro 1,3-But	50.000	47.879	95.76	76-129
84 Naphthalene	50.000	50.248	100.50	66-120
85 1,2,3-Trichloroben	50.000	48.802	97.60	73-123

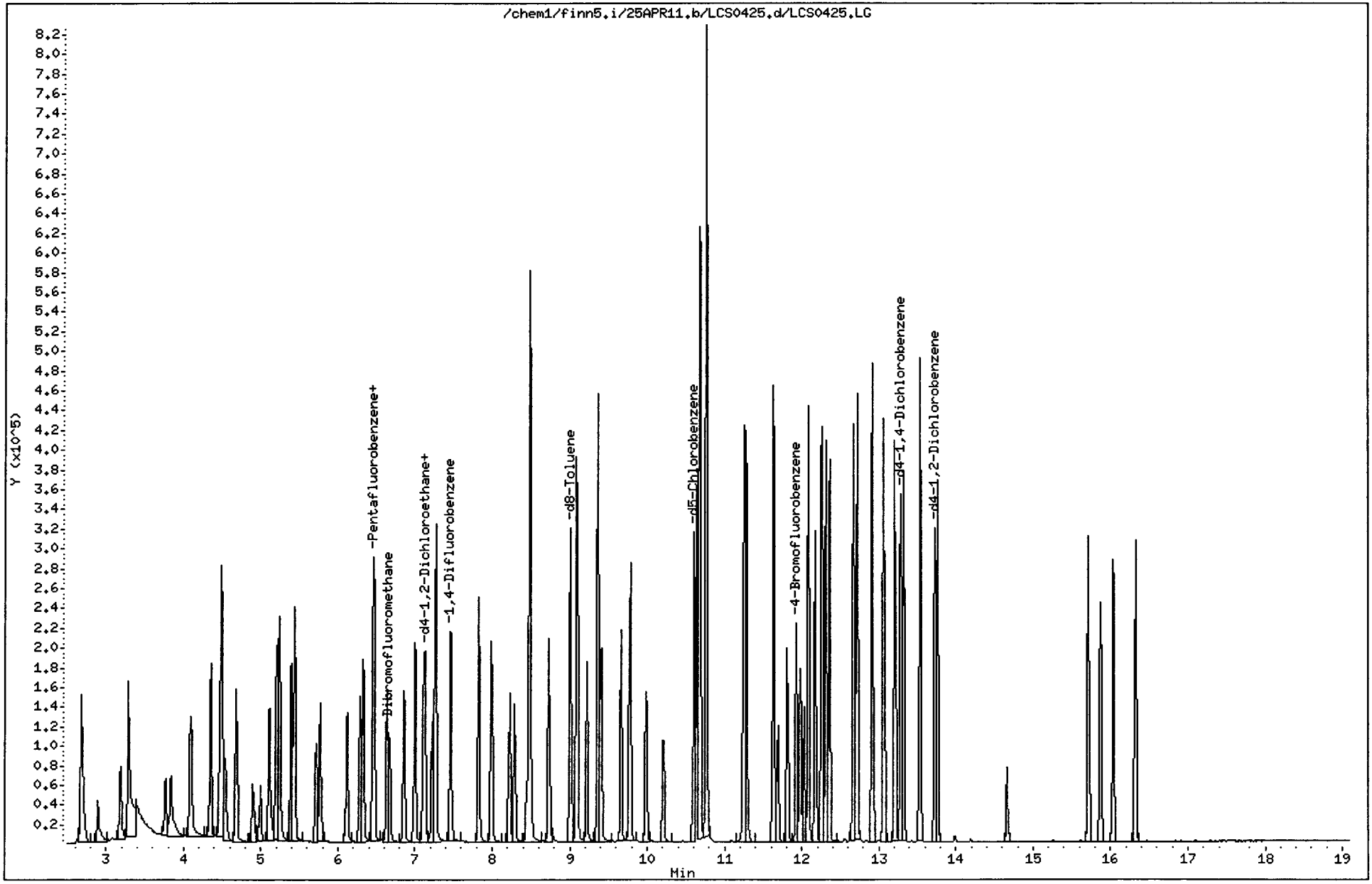
SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 25 Dibromofluorometha	50.000	50.994	101.99	30-160

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 31 d4-1,2-Dichloroeth	50.000	50.012	100.02	75-152
$ 43 d8-Toluene	50.000	49.537	99.07	82-115
$ 62 4-Bromofluorobenze	50.000	48.029	96.06	64-120
$ 79 d4-1,2-Dichloroben	50.000	50.561	101.12	80-120

Data File: /chem1/finn5.i/25APR11.b/LCS0425.d
Date : 25-APR-2011 10:27
Client ID: LCS0425
Sample Info: LCS0425,5,5,0

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

Column phase: Rtx502.2



CO-ELUTION SUMMARY FOR FILE - LCS0425.d

Lab ID: LCS0425, Method: s8260b.m, Instrument: finn5.i, Date: 25-APR-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/25APR11.b/LCS0425A.d
Lab Smp Id: LCS0425 Client Smp ID: LCS0425
Inj Date : 25-APR-2011 11:02
Operator : PB Inst ID: finn5.i
Smp Info : LCS0425,5,5,0
Misc Info : 11-8672
Comment :
Method : /chem1/finn5.i/25APR11.b/s8260b.m
Meth Date : 25-Apr-2011 18:57 patrickb Quant Type: ISTD
Cal Date : 09-MAR-2011 13:53 Cal File: 2000309.d
Als bottle: 1 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 3.50
Processing Host: cserv3

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

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

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1 Dichlorodifluoromethane	85	2.884	2.894	(0.448)	58846	57.1220	57.122
2 Chloromethane	50	3.166	3.186	(0.491)	101545	56.5085	56.508
3 Vinyl Chloride	62	3.266	3.286	(0.507)	114878	51.3567	51.357(Q)
4 Bromomethane	94	3.749	3.769	(0.582)	50555	65.1643	65.164
5 Chloroethane	64	3.819	3.839	(0.593)	84186	56.4984	56.498
6 Trichlorofluoromethane	101	4.070	4.090	(0.632)	125113	61.7078	61.708
7 Acrolein	56	4.462	4.482	(0.693)	89793	286.830	286.83
8 112Trichloro122Trifluoroethane	101	4.472	4.492	(0.694)	97359	60.3302	60.330
9 Acetone	43	4.512	4.533	(0.700)	117785	254.089	254.09
10 1,1-Dichloroethene	96	4.663	4.683	(0.724)	63354	56.4162	56.416
11 Bromoethane	108	4.874	4.894	(0.757)	53187	60.3009	60.301
12 Iodomethane	142	4.975	4.995	(0.772)	66930	63.7731	63.773
13 Methylene Chloride	84	5.095	5.105	(0.791)	72843	54.2860	54.286
14 Acrylonitrile	53	5.176	5.196	(0.803)	25237	48.8127	48.813(Q)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
	16 Methyl tert-Butyl Ether	73	5.226	5.236	(0.811)	213835	38.7606	38.760(Q)
	15 Carbon Disulfide	76	5.186	5.206	(0.805)	239227	56.3262	56.326
	17 Trans-1,2-Dichloroethene	96	5.377	5.387	(0.835)	70516	54.4716	54.472
	18 Vinyl Acetate	43	5.698	5.718	(0.885)	136464	54.2118	54.212
	19 1,1-Dichloroethane	63	5.749	5.769	(0.892)	126001	53.5606	53.561
	20 2-Butanone	43	6.100	6.120	(0.947)	173621	259.383	259.38
	21 2,2-Dichloropropane	77	6.271	6.291	(0.973)	93648	59.7420	59.742
	22 Cis-1,2-Dichloroethene	96	6.311	6.321	(0.980)	76096	55.4224	55.422
*	23 Pentafluorobenzene	168	6.442	6.452	(1.000)	101602	50.0000	
	24 Chloroform	83	6.452	6.472	(1.002)	122521	55.9795	55.980
	26 Bromochloromethane	128	6.613	6.633	(1.027)	40395	56.2248	56.225
$	25 Dibromofluoromethane	111	6.653	6.673	(1.033)	62345	51.6225	51.622(Q)
	27 1,1,1-Trichloroethane	97	6.844	6.854	(1.062)	100999	59.9312	59.931
	29 1,1-Dichloropropene	75	6.985	6.995	(0.938)	98352	53.2427	53.243
	30 Carbon Tetrachloride	117	7.095	7.115	(0.953)	99358	59.1109	59.111
$	31 d4-1,2-Dichloroethane	65	7.115	7.135	(1.105)	57687	51.5664	51.566
	32 1,2-Dichloroethane	62	7.206	7.216	(0.968)	82257	53.9711	53.971
	33 Benzene	78	7.246	7.266	(0.973)	258070	53.5193	53.519
*	34 1,4-Difluorobenzene	114	7.447	7.457	(1.000)	171568	50.0000	
	35 Trichloroethene	95	7.809	7.829	(1.049)	77032	54.4606	54.461
	36 1,2-Dichloropropane	63	7.980	7.990	(1.072)	76278	50.3552	50.355
	37 Bromodichloromethane	83	8.211	8.221	(1.103)	93448	54.4393	54.439
	39 Dibromomethane	93	8.271	8.291	(1.111)	48340	53.8412	53.841
	40 2-Chloroethyl Vinyl Ether	63	8.432	8.452	(1.132)	24223	74.2313	74.231(Q)
	41 4-Methyl-2-Pentanone	58	8.462	8.482	(1.136)	142500	258.973	258.97
	42 Cis 1,3-dichloropropene	75	8.713	8.733	(1.170)	109310	54.1139	54.114
$	43 d8-Toluene	98	8.985	9.005	(1.206)	193212	49.8169	49.817
	44 Toluene	92	9.075	9.085	(1.219)	169540	55.1411	55.141
	45 Trans 1,3-Dichloropropene	75	9.206	9.226	(1.236)	94611	55.3795	55.379
	46 2-Hexanone	43	9.346	9.357	(0.883)	296328	251.342	251.34
	47 1,1,2-Trichloroethane	97	9.387	9.407	(1.260)	63752	56.0128	56.013
	48 1,3-Dichloropropane	76	9.648	9.658	(0.912)	114354	53.8385	53.838
	49 Tetrachloroethene	166	9.759	9.779	(0.922)	83698	54.3348	54.335
	50 Chlorodibromomethane	129	9.970	9.980	(0.942)	84629	55.8594	55.859
	51 1,2-Dibromoethane	107	10.191	10.211	(1.368)	73761	55.9518	55.952
*	52 d5-Chlorobenzene	117	10.583	10.603	(1.000)	166981	50.0000	
	53 Chlorobenzene	112	10.633	10.643	(1.005)	191935	55.5895	55.589
	54 Ethyl Benzene	91	10.663	10.683	(1.008)	305899	57.7011	57.701
	55 1,1,1,2-Tetrachloroethane	131	10.653	10.673	(1.007)	71852	56.0434	56.043
	56 m,p-xylene	106	10.743	10.764	(1.015)	244049	113.426	113.43
	57 o-Xylene	106	11.236	11.246	(1.062)	123761	55.3621	55.362
	58 Styrene	104	11.266	11.276	(1.065)	202593	56.7798	56.780
	59 Isopropyl Benzene	105	11.608	11.628	(0.875)	317100	57.9752	57.975
	60 Bromoform	173	11.668	11.688	(0.880)	57528	52.9132	52.913
	61 1,1,2,2-Tetrachloroethane	83	11.789	11.809	(0.889)	96346	51.7064	51.706
$	62 4-Bromofluorobenzene	95	11.909	11.929	(1.125)	84214	49.1334	49.133
	63 1,2,3-Trichloropropane	110	11.959	11.980	(0.902)	25054	55.7424	55.742

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
65	Trans-1,4-Dichloro 2-Butene	53	12.010	12.030	(0.905)	24928	51.3748	51.375
66	N-Propyl Benzene	91	12.070	12.080	(0.910)	361285	59.3896	59.390
67	Bromobenzene	156	12.150	12.171	(0.916)	93366	55.0723	55.072
68	1,3,5-Trimethyl Benzene	105	12.241	12.261	(0.923)	250412	57.4311	57.431
69	2-Chloro Toluene	91	12.291	12.311	(0.926)	239367	56.9033	56.903
70	4-Chloro Toluene	91	12.341	12.361	(0.930)	232590	53.5804	53.580
71	T-Butyl Benzene	119	12.653	12.663	(0.954)	236950	56.6215	56.621
72	1,2,4-Trimethylbenzene	105	12.693	12.713	(0.957)	249315	56.9648	56.965
73	S-Butyl Benzene	105	12.894	12.914	(0.972)	344266	59.0048	59.005
74	4-Isopropyl Toluene	119	13.045	13.065	(0.983)	268082	58.6237	58.624
75	1,3-Dichlorobenzene	146	13.186	13.206	(0.994)	166978	56.1361	56.136
* 76	d4-1,4-Dichlorobenzene	152	13.266	13.286	(1.000)	92006	50.0000	
77	1,4-Dichlorobenzene	146	13.306	13.316	(1.003)	163298	55.1456	55.146
78	N-Butyl Benzene	91	13.517	13.537	(1.019)	260106	57.6704	57.670
$ 79	d4-1,2-Dichlorobenzene	152	13.708	13.728	(1.033)	83131	50.8760	50.876
80	1,2-Dichlorobenzene	146	13.738	13.758	(1.036)	155018	55.6051	55.605
81	1,2-Dibromo 3-Chloropropane	75	14.643	14.663	(1.104)	15860	47.5344	47.534
82	1,2,4-Trichlorobenzene	180	15.688	15.708	(1.183)	101910	51.2279	51.228
83	Hexachloro 1,3-Butadiene	225	15.849	15.869	(1.195)	56016	49.0085	49.008
84	Naphthalene	128	16.020	16.030	(1.208)	218520	49.8243	49.824
85	1,2,3-Trichlorobenzene	180	16.301	16.321	(1.229)	97967	49.9513	49.951

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: finn5.i
Lab File ID: LCS0425A.d
Lab Smp Id: LCS0425
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: /chem1/finn5.i/25APR11.b/s8260b.m
Misc Info: 11-8672

Calibration Date: 25-APR-2011
Calibration Time: 09:57
Client Smp ID: LCS0425
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	91022	45511	182044	101602	11.62
34 1,4-Difluorobenze	153104	76552	306208	171568	12.06
52 d5-Chlorobenzene	143720	71860	287440	166981	16.18
76 d4-1,4-Dichlorobe	77398	38699	154796	92006	18.87

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	6.45	5.95	6.95	6.44	-0.16
34 1,4-Difluorobenze	7.46	6.96	7.96	7.45	-0.13
52 d5-Chlorobenzene	10.60	10.10	11.10	10.58	-0.19
76 d4-1,4-Dichlorobe	13.29	12.79	13.79	13.27	-0.15

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

Analytical Resources, Inc.

RECOVERY REPORT

Client Name:
Sample Matrix: SOLID
Lab Smp Id: LCS0425
Level: LOW
Data Type: MS DATA
SpikeList File: all.spk
Sublist File: voa.sub
Method File: /chem1/finn5.i/25APR11.b/s8260b.m
Misc Info: 11-8672

Client SDG: 25APR11
Fraction: VOA
Client Smp ID: LCS0425
Operator: PB
SampleType: LCSD
Quant Type: ISTD

	SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
1	Dichlorodifluorome	50.000	57.122	114.24	53-148
2	Chloromethane	50.000	56.508	113.02	64-125
3	Vinyl Chloride	50.000	51.357	102.71	63-137
4	Bromomethane	50.000	65.164	130.33	57-136
5	Chloroethane	50.000	56.498	113.00	64-131
6	Trichlorofluoromet	50.000	61.708	123.42	69-132
7	Acrolein	250.00	286.83	114.73	54-137
8	112Trichloro122Tri	50.000	60.330	120.66	74-130
9	Acetone	250.00	254.09	101.64	60-131
10	1,1-Dichloroethene	50.000	56.416	112.83	75-126
11	Bromoethane	50.000	60.301	120.60	76-126
12	Iodomethane	50.000	63.773	127.55	65-139
13	Methylene Chloride	50.000	54.286	108.57	70-123
15	Carbon Disulfide	50.000	56.326	112.65	71-129
14	Acrylonitrile	50.000	48.813	97.63	67-125
16	Methyl tert-Butyl	50.000	38.760	77.52	70-120
17	Trans-1,2-Dichloro	50.000	54.472	108.94	80-120
18	Vinyl Acetate	50.000	54.212	108.42	60-136
19	1,1-Dichloroethane	50.000	53.561	107.12	80-120
20	2-Butanone	250.00	259.38	103.75	70-120
21	2,2-Dichloropropan	50.000	59.742	119.48	74-123
22	Cis-1,2-Dichloroet	50.000	55.422	110.84	80-120
24	Chloroform	50.000	55.980	111.96	80-120
26	Bromochloromethane	50.000	56.225	112.45	80-120
27	1,1,1-Trichloroeth	50.000	59.931	119.86	77-121
29	1,1-Dichloropropen	50.000	53.243	106.49	80-120
30	Carbon Tetrachlori	50.000	59.111	118.22	77-122
32	1,2-Dichloroethane	50.000	53.971	107.94	76-120
33	Benzene	50.000	53.519	107.04	80-120
35	Trichloroethene	50.000	54.461	108.92	80-120
36	1,2-Dichloropropan	50.000	50.355	100.71	80-120
37	Bromodichlorometha	50.000	54.439	108.88	77-121
39	Dibromomethane	50.000	53.841	107.68	80-120

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
40 2-Chloroethyl Viny	50.000	74.231	148.46	10-191
41 4-Methyl-2-Pentano	250.00	258.97	103.59	67-120
42 Cis 1,3-dichloropr	50.000	54.114	108.23	74-120
44 Toluene	50.000	55.141	110.28	80-120
45 Trans 1,3-Dichloro	50.000	55.379	110.76	65-120
46 2-Hexanone	250.00	251.34	100.54	65-130
47 1,1,2-Trichloroeth	50.000	56.013	112.03	80-120
48 1,3-Dichloropropan	50.000	53.838	107.68	80-120
49 Tetrachloroethene	50.000	54.335	108.67	80-121
50 Chlorodibromometha	50.000	55.859	111.72	64-120
51 1,2-Dibromoethane	50.000	55.952	111.90	75-120
53 Chlorobenzene	50.000	55.589	111.18	80-120
55 1,1,1,2-Tetrachlor	50.000	56.043	112.09	69-121
54 Ethyl Benzene	50.000	57.701	115.40	80-127
56 m,p-xylene	100.00	113.43	113.43	80-125
57 o-Xylene	50.000	55.362	110.72	78-120
58 Styrene	50.000	56.780	113.56	80-123
59 Isopropyl Benzene	50.000	57.975	115.95	80-127
60 Bromoform	50.000	52.913	105.83	60-120
61 1,1,2,2-Tetrachlor	50.000	51.706	103.41	74-120
63 1,2,3-Trichloropro	50.000	55.742	111.48	72-121
65 Trans-1,4-Dichloro	50.000	51.375	102.75	65-126
66 N-Propyl Benzene	50.000	59.390	118.78	80-132
67 Bromobenzene	50.000	55.072	110.14	80-120
68 1,3,5-Trimethyl Be	50.000	57.431	114.86	80-125
69 2-Chloro Toluene	50.000	56.903	113.81	80-125
70 4-Chloro Toluene	50.000	53.580	107.16	80-127
71 T-Butyl Benzene	50.000	56.621	113.24	87-122
72 1,2,4-Trimethylben	50.000	56.965	113.93	80-126
73 S-Butyl Benzene	50.000	59.005	118.01	80-134
74 4-Isopropyl Toluen	50.000	58.624	117.25	80-131
75 1,3-Dichlorobenzen	50.000	56.136	112.27	80-120
77 1,4-Dichlorobenzen	50.000	55.146	110.29	80-120
78 N-Butyl Benzene	50.000	57.670	115.34	80-138
80 1,2-Dichlorobenzen	50.000	55.605	111.21	80-120
81 1,2-Dibromo 3-Chlo	50.000	47.534	95.07	59-120
82 1,2,4-Trichloroben	50.000	51.228	102.46	78-130
83 Hexachloro 1,3-But	50.000	49.008	98.02	76-129
84 Naphthalene	50.000	49.824	99.65	66-120
85 1,2,3-Trichloroben	50.000	49.951	99.90	73-123

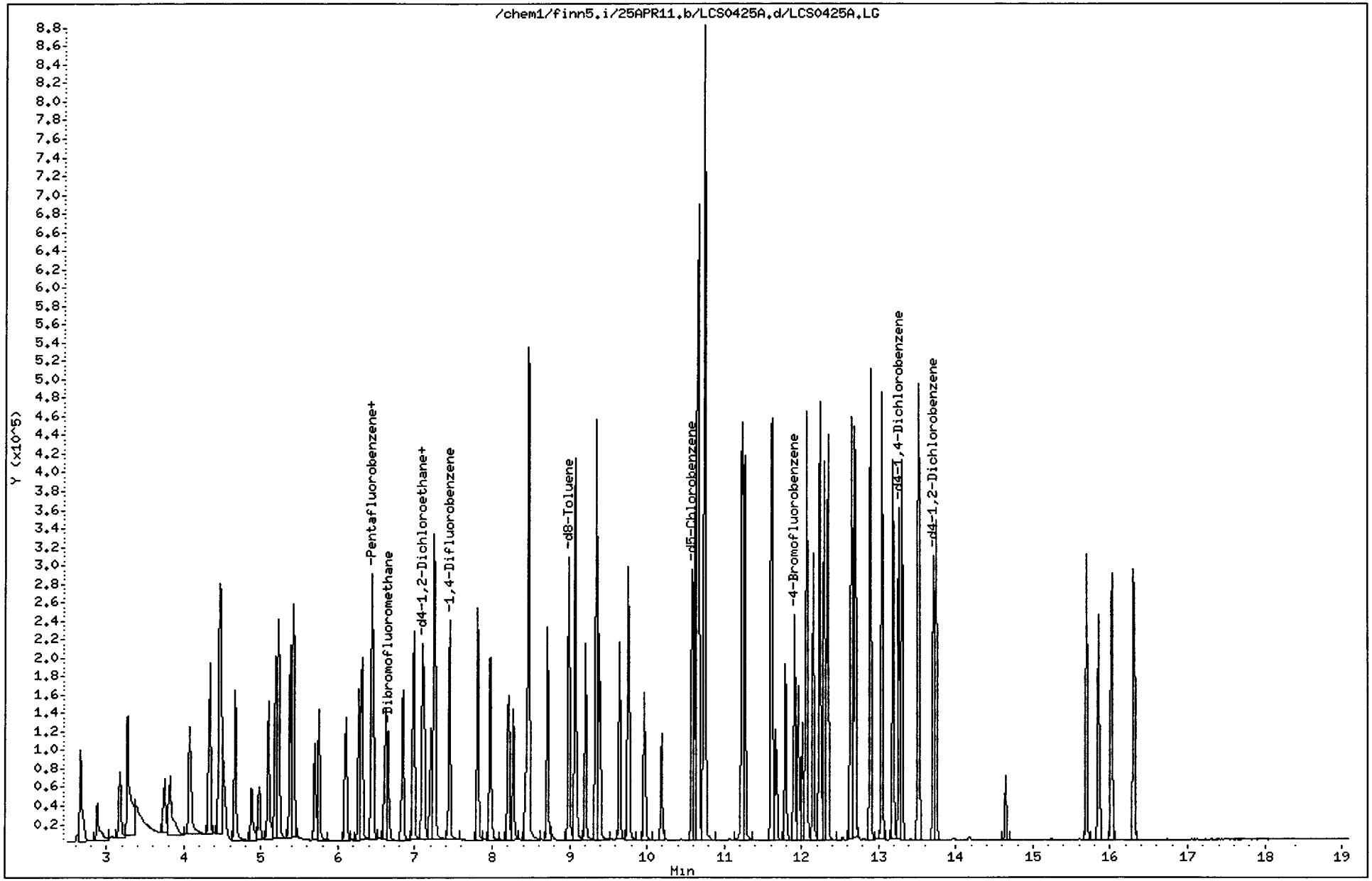
SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 25 Dibromofluorometha	50.000	51.622	103.24	30-160

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 31 d4-1,2-Dichloroeth	50.000	51.566	103.13	75-152
$ 43 d8-Toluene	50.000	49.817	99.63	82-115
$ 62 4-Bromofluorobenze	50.000	49.133	98.27	64-120
$ 79 d4-1,2-Dichloroben	50.000	50.876	101.75	80-120

Data File: /chem1/finn5.i/25APR11.b/LCS0425A.d
Date : 25-APR-2011 11:02
Client ID: LCS0425
Sample Info: LCS0425,5,5,0

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

Column phase: Rtx502.2



CO-ELUTION SUMMARY FOR FILE - LCS0425A.d

Lab ID: LCS0425, Method: s8260b.m, Instrument: finn5.i, Date: 25-APR-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/25APR11.b/MB0425.d
Lab Smp Id: MB0425 Client Smp ID: MB0425
Inj Date : 25-APR-2011 11:30
Operator : PB Inst ID: finn5.i
Smp Info : MB0425,5,5,0
Misc Info : 11-8672
Comment :
Method : /chem1/finn5.i/25APR11.b/s8260b.m
Meth Date : 25-Apr-2011 18:57 patrickb Quant Type: ISTD
Cal Date : 09-MAR-2011 13:53 Cal File: 2000309.d
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 3.50
Processing Host: cserv3

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

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

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
1 Dichlorodifluoromethane	85	Compound Not Detected.					
2 Chloromethane	50	Compound Not Detected.					
3 Vinyl Chloride	62	Compound Not Detected.					
4 Bromomethane	94	Compound Not Detected.					
5 Chloroethane	64	Compound Not Detected.					
6 Trichlorofluoromethane	101	Compound Not Detected.					
7 Acrolein	56	Compound Not Detected.					
8 112Trichloro122Trifluoroethane	101	Compound Not Detected.					
9 Acetone	43	4.522	4.533	(0.701)	1398	3.41011	3.410
10 1,1-Dichloroethene	96	Compound Not Detected.					
11 Bromoethane	108	Compound Not Detected.					
12 Iodomethane	142	Compound Not Detected.					
13 Methylene Chloride	84	Compound Not Detected.					
14 Acrylonitrile	53	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	16 Methyl tert-Butyl Ether	73	Compound Not Detected.					
	15 Carbon Disulfide	76	Compound Not Detected.					
	17 Trans-1,2-Dichloroethene	96	Compound Not Detected.					
	18 Vinyl Acetate	43	Compound Not Detected.					
	19 1,1-Dichloroethane	63	Compound Not Detected.					
	20 2-Butanone	43	Compound Not Detected.					
	21 2,2-Dichloropropane	77	Compound Not Detected.					
	22 Cis-1,2-Dichloroethene	96	Compound Not Detected.					
*	23 Pentafluorobenzene	168	6.452	6.452	(1.000)	89854	50.0000	
	24 Chloroform	83	Compound Not Detected.					
	26 Bromochloromethane	128	Compound Not Detected.					
$	25 Dibromofluoromethane	111	6.663	6.673	(1.033)	59151	55.3814	55.381(Q)
	27 1,1,1-Trichloroethane	97	Compound Not Detected.					
	29 1,1-Dichloropropene	75	Compound Not Detected.					
	30 Carbon Tetrachloride	117	Compound Not Detected.					
$	31 d4-1,2-Dichloroethane	65	7.125	7.135	(1.104)	55233	55.8280	55.828
	32 1,2-Dichloroethane	62	Compound Not Detected.					
	33 Benzene	78	Compound Not Detected.					
*	34 1,4-Difluorobenzene	114	7.457	7.457	(1.000)	156411	50.0000	
	35 Trichloroethene	95	Compound Not Detected.					
	36 1,2-Dichloropropane	63	Compound Not Detected.					
	37 Bromodichloromethane	83	Compound Not Detected.					
	39 Dibromomethane	93	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 4-Methyl-2-Pentanone	58	8.482	8.482	(1.137)	1480	2.95033	2.950(Q)
	42 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	43 d8-Toluene	98	9.005	9.005	(1.208)	170989	48.3593	48.359
	44 Toluene	92	Compound Not Detected.					
	45 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	46 2-Hexanone	43	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 1,3-Dichloropropane	76	Compound Not Detected.					
	49 Tetrachloroethene	166	Compound Not Detected.					
	50 Chlorodibromomethane	129	Compound Not Detected.					
	51 1,2-Dibromoethane	107	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	10.603	10.603	(1.000)	148791	50.0000	
	53 Chlorobenzene	112	Compound Not Detected.					
	54 Ethyl Benzene	91	Compound Not Detected.					
	55 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	56 m,p-xylene	106	Compound Not Detected.					
	57 o-Xylene	106	Compound Not Detected.					
	58 Styrene	104	Compound Not Detected.					
	59 Isopropyl Benzene	105	Compound Not Detected.					
	60 Bromoform	173	Compound Not Detected.					
	61 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	11.919	11.929	(1.124)	70166	45.9420	45.942
	63 1,2,3-Trichloropropane	110	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
65	Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
66	N-Propyl Benzene	91	Compound Not Detected.					
67	Bromobenzene	156	Compound Not Detected.					
68	1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
69	2-Chloro Toluene	91	Compound Not Detected.					
70	4-Chloro Toluene	91	Compound Not Detected.					
71	T-Butyl Benzene	119	Compound Not Detected.					
72	1,2,4-Trimethylbenzene	105	Compound Not Detected.					
73	S-Butyl Benzene	105	Compound Not Detected.					
74	4-Isopropyl Toluene	119	Compound Not Detected.					
75	1,3-Dichlorobenzene	146	13.206	13.206	(0.995)	1318	0.52926	0.5292
* 76	d4-1,4-Dichlorobenzene	152	13.276	13.286	(1.000)	77028	50.0000	
77	1,4-Dichlorobenzene	146	13.316	13.316	(1.003)	1265	0.51026	0.5102(Q)
78	N-Butyl Benzene	91	13.537	13.537	(1.020)	2169	0.57442	0.5744
$ 79	d4-1,2-Dichlorobenzene	152	13.718	13.728	(1.033)	70271	51.3681	51.368
80	1,2-Dichlorobenzene	146	13.758	13.758	(1.036)	1461	0.62596	0.6260
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
83	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
84	Naphthalene	128	Compound Not Detected.					
85	1,2,3-Trichlorobenzene	180	Compound Not Detected.					

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: finn5.i
Lab File ID: MB0425.d
Lab Smp Id: MB0425
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: /chem1/finn5.i/25APR11.b/s8260b.m
Misc Info: 11-8672

Calibration Date: 25-APR-2011
Calibration Time: 09:57
Client Smp ID: MB0425
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	91022	45511	182044	89854	-1.28
34 1,4-Difluorobenze	153104	76552	306208	156411	2.16
52 d5-Chlorobenzene	143720	71860	287440	148791	3.53
76 d4-1,4-Dichlorobe	77398	38699	154796	77028	-0.48

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	6.45	5.95	6.95	6.45	0.00
34 1,4-Difluorobenze	7.46	6.96	7.96	7.46	0.00
52 d5-Chlorobenzene	10.60	10.10	11.10	10.60	0.00
76 d4-1,4-Dichlorobe	13.29	12.79	13.79	13.28	-0.08

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: 25APR11
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: MB0425 Client Smp ID: MB0425
Level: LOW Operator: PB
Data Type: MS DATA SampleType: BLANK
SpikeList File: all.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: /chem1/finn5.i/25APR11.b/s8260b.m
Misc Info: 11-8672

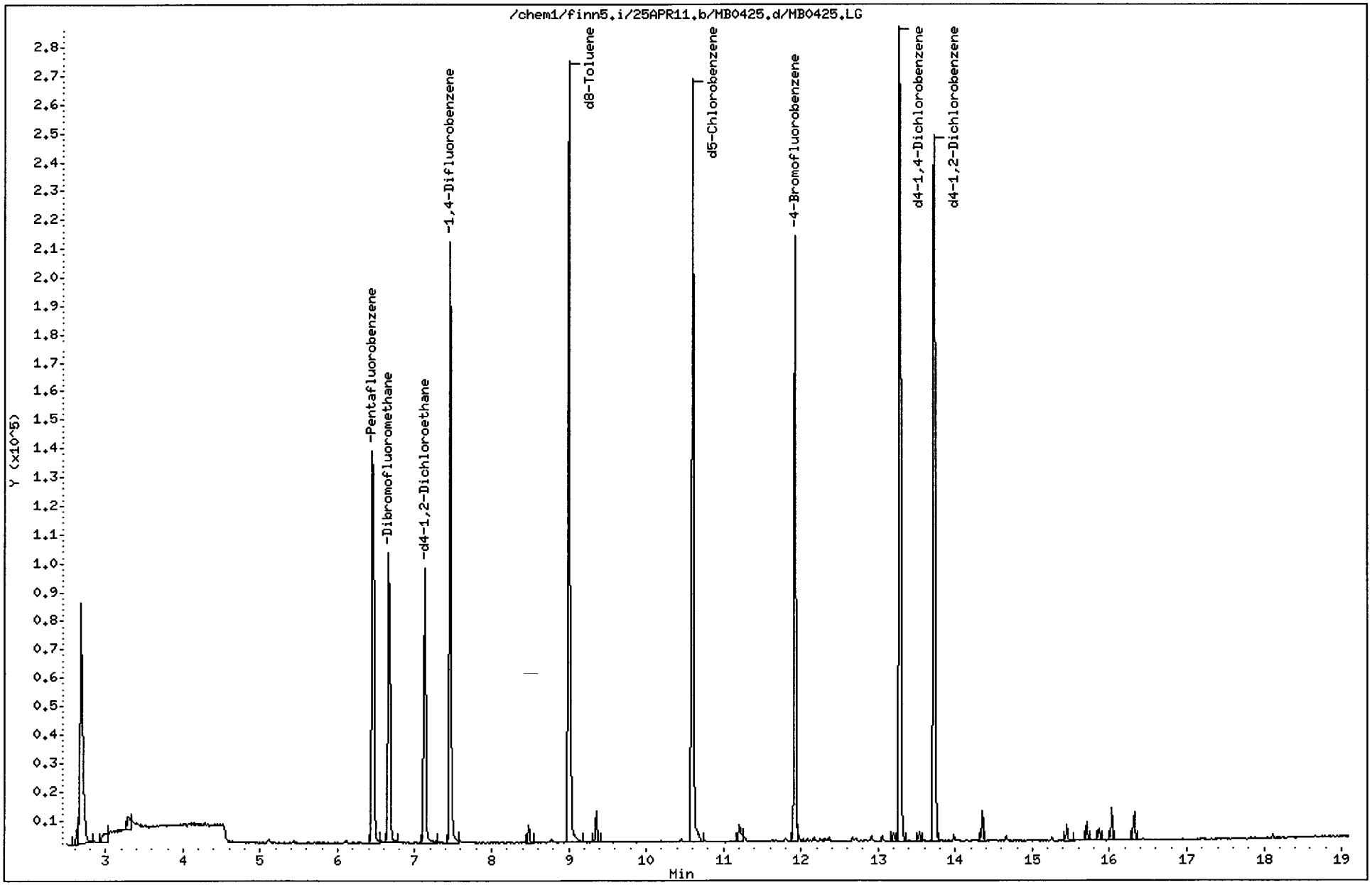
SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 25 Dibromofluorometha	50.000	55.381	110.76	30-160
$ 31 d4-1,2-Dichloroeth	50.000	55.828	111.66	75-152
$ 43 d8-Toluene	50.000	48.359	96.72	82-115
$ 62 4-Bromofluorobenze	50.000	45.942	91.88	64-120
$ 79 d4-1,2-Dichloroben	50.000	51.368	102.74	80-120

Data File: /chem1/finn5.i/25APR11.b/MB0425.d
Date : 25-APR-2011 11:30
Client ID: MB0425
Sample Info: MB0425,5,5,0

Instrument: finn5.i

Operator: PB
Column diameter: 0.18

Column phase: Rtx502.2



CO-ELUTION SUMMARY FOR FILE - MB0425.d

Lab ID: MB0425, Method: s8260b.m, Instrument: finn5.i, Date: 25-APR-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/25APR11.b/SS71S2.d
Lab Smp Id: SS71S
Client Smp ID: LL-SB1-2-4-041911
Inj Date : 25-APR-2011 12:09
Operator : PB
Inst ID: finn5.i
Smp Info : SS71S,5,5.734,0
Misc Info : 11-8672
Comment :
Method : /chem1/finn5.i/25APR11.b/s8260b.m
Meth Date : 25-Apr-2011 18:57 patrickb
Quant Type: ISTD
Cal Date : 09-MAR-2011 13:53
Cal File: 2000309.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: voa.sub
Target Version: 3.50
Processing Host: cserv3

4/25/11

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

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	5.00000	Purge Volume
Sa	5.73400	Sample Amount
M	9.10000	Moisture (%)

Cpnd Variable — Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	Acrolein	56	Compound Not Detected.					
8	112Trichloro122Trifluoroethane	101	Compound Not Detected.					
9	Acetone	43	4.533	4.533	(0.702)	34071	82.7090	79.342
10	1,1-Dichloroethene	96	Compound Not Detected.					
11	Bromoethane	108	Compound Not Detected.					
12	Iodomethane	142	Compound Not Detected.					
13	Methylene Chloride	84	5.115	5.105	(0.793)	9240	7.74898	7.433
14	Acrylonitrile	53	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	16 Methyl tert-Butyl Ether	73	Compound Not Detected.					
	15 Carbon Disulfide	76	5.206	5.206	(0.807)	5864	1.55370	1.490
	17 Trans-1,2-Dichloroethene	96	Compound Not Detected.					
	18 Vinyl Acetate	43	Compound Not Detected.					
	19 1,1-Dichloroethane	63	Compound Not Detected.					
	20 2-Butanone	43	6.110	6.120	(0.947)	7504	12.6155	12.102
	21 2,2-Dichloropropane	77	Compound Not Detected.					
	22 Cis-1,2-Dichloroethene	96	Compound Not Detected.					
*	23 Pentafluorobenzene	168	6.452	6.452	(1.000)	90288	50.0000	
	24 Chloroform	83	Compound Not Detected.					
	26 Bromochloromethane	128	Compound Not Detected.					
$	25 Dibromofluoromethane	111	6.663	6.673	(1.033)	61916	57.6915	55.343(Q)
	27 1,1,1-Trichloroethane	97	Compound Not Detected.					
	29 1,1-Dichloropropene	75	Compound Not Detected.					
	30 Carbon Tetrachloride	117	Compound Not Detected.					
$	31 d4-1,2-Dichloroethane	65	7.125	7.135	(1.104)	62557	62.9270	60.365
	32 1,2-Dichloroethane	62	Compound Not Detected.					
	33 Benzene	78	Compound Not Detected.					
*	34 1,4-Difluorobenzene	114	7.457	7.457	(1.000)	155792	50.0000	
	35 Trichloroethene	95	Compound Not Detected.					
	36 1,2-Dichloropropane	63	Compound Not Detected.					
	37 Bromodichloromethane	83	Compound Not Detected.					
	39 Dibromomethane	93	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	42 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	43 d8-Toluene	98	9.005	9.005	(1.208)	169400	48.1003	46.142
	44 Toluene	92	9.085	9.085	(1.218)	5419	1.94095	1.862
	45 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	46 2-Hexanone	43	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 1,3-Dichloropropane	76	Compound Not Detected.					
	49 Tetrachloroethene	166	Compound Not Detected.					
	50 Chlorodibromomethane	129	Compound Not Detected.					
	51 1,2-Dibromoethane	107	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	10.603	10.603	(1.000)	148031	50.0000	
	53 Chlorobenzene	112	Compound Not Detected.					
	54 Ethyl Benzene	91	10.683	10.683	(1.008)	4634	0.98600	0.9458
	55 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	56 m,p-xylene	106	Compound Not Detected.					
	57 o-Xylene	106	Compound Not Detected.					
	58 Styrene	104	Compound Not Detected.					
	59 Isopropyl Benzene	105	Compound Not Detected.					
	60 Bromoform	173	Compound Not Detected.					
	61 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	11.929	11.929	(1.125)	65605	43.1762	41.418
	63 1,2,3-Trichloropropane	110	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
65	Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
66	N-Propyl Benzene	91	Compound Not Detected.					
67	Bromobenzene	156	Compound Not Detected.					
68	1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
69	2-Chloro Toluene	91	Compound Not Detected.					
70	4-Chloro Toluene	91	Compound Not Detected.					
71	T-Butyl Benzene	119	Compound Not Detected.					
72	1,2,4-Trimethylbenzene	105	Compound Not Detected.					
73	S-Butyl Benzene	105	Compound Not Detected.					
74	4-Isopropyl Toluene	119	13.055	13.065	(0.983)	3741	1.19074	1.142
75	1,3-Dichlorobenzene	146	Compound Not Detected.					
* 76	d4-1,4-Dichlorobenzene	152	13.286	13.286	(1.000)	63211	50.0000	
77	1,4-Dichlorobenzene	146	Compound Not Detected.					
78	N-Butyl Benzene	91	Compound Not Detected.					
$ 79	d4-1,2-Dichlorobenzene	152	13.728	13.728	(1.033)	55829	49.7317	47.707
80	1,2-Dichlorobenzene	146	Compound Not Detected.					
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
83	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
84	Naphthalene	128	Compound Not Detected.					
85	1,2,3-Trichlorobenzene	180	Compound Not Detected.					

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: finn5.i
Lab File ID: SS71S2.d
Lab Smp Id: SS71S
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: /chem1/finn5.i/25APR11.b/s8260b.m
Misc Info: 11-8672

Calibration Date: 25-APR-2011
Calibration Time: 09:57
Client Smp ID: LL-SB1-2-4-041911
Level: LOW
Sample Type: Soil

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	91022	45511	182044	90288	-0.81
34 1,4-Difluorobenze	153104	76552	306208	155792	1.76
52 d5-Chlorobenzene	143720	71860	287440	148031	3.00
76 d4-1,4-Dichlorobe	77398	38699	154796	63211	-18.33

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	6.45	5.95	6.95	6.45	0.00
34 1,4-Difluorobenze	7.46	6.96	7.96	7.46	0.00
52 d5-Chlorobenzene	10.60	10.10	11.10	10.60	0.00
76 d4-1,4-Dichlorobe	13.29	12.79	13.79	13.29	0.00

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

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd Snider
Sample Matrix: SOLID
Lab Smp Id: SS71S
Level: LOW
Data Type: MS DATA
SpikeList File: all.spk
Sublist File: voa.sub
Method File: /chem1/finn5.i/25APR11.b/s8260b.m
Misc Info: 11-8672

Client SDG: SS71
Fraction: VOA
Client Smp ID: LL-SB1-2-4-041911
Operator: PB
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 25 Dibromofluorometha	50.000	57.692	115.38	30-160
$ 31 d4-1,2-Dichloroeth	50.000	62.927	125.85	75-152
$ 43 d8-Toluene	50.000	48.100	96.20	82-115
$ 62 4-Bromofluorobenze	50.000	43.176	86.35	64-120
$ 79 d4-1,2-Dichloroben	50.000	49.732	99.46	80-120

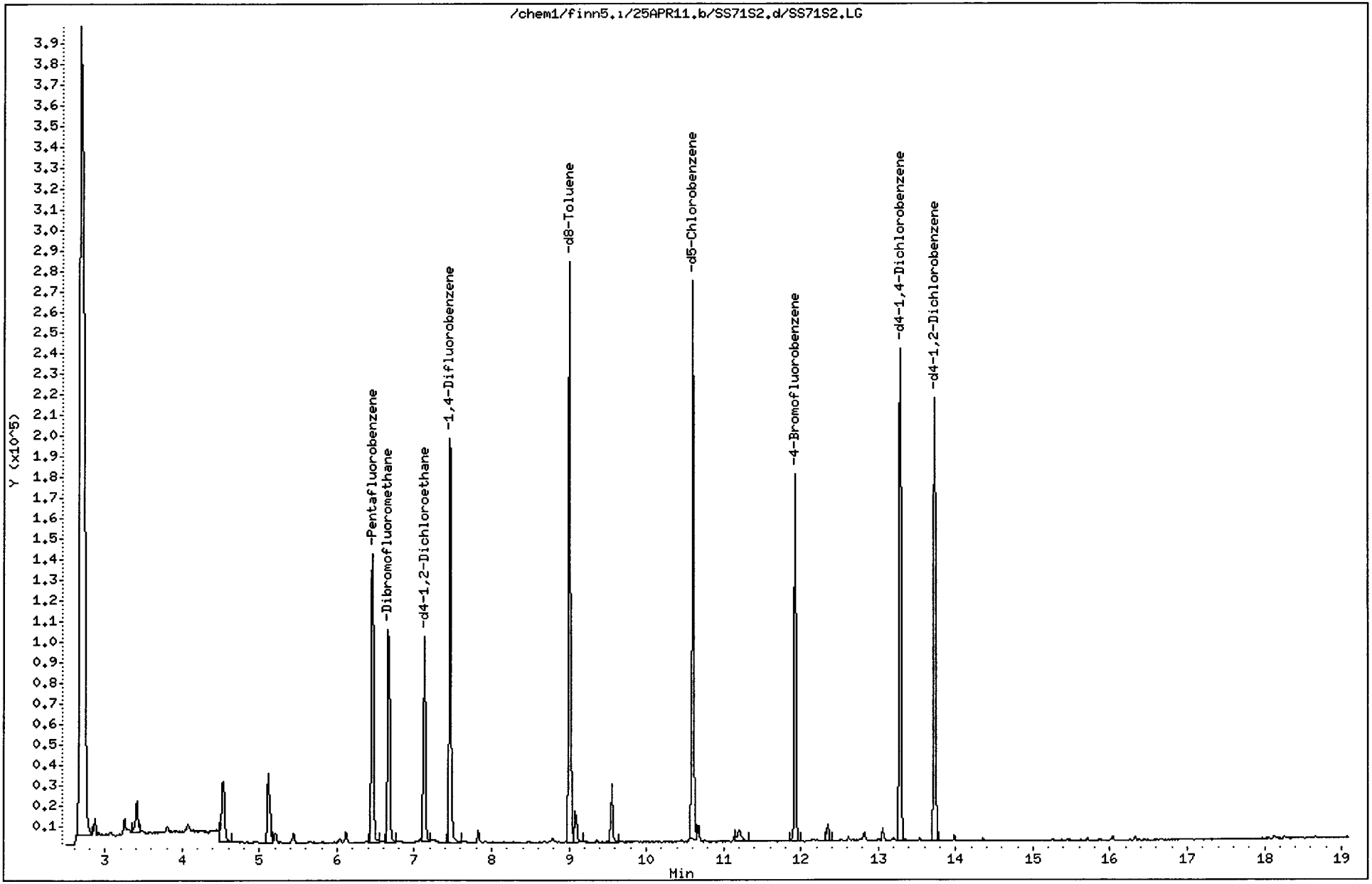
Data File: /chem1/finn5.i/25APR11.b/SS71S2.d
Date : 25-APR-2011 12:09
Client ID: LL-SB1-2-4-041911
Sample Info: SS71S,5,5.734,0

Column phase: Rtx502.2

Instrument: finn5.i

Operator: PB
Column diameter: 0.18

SS71S-000672



CO-ELUTION SUMMARY FOR FILE - SS71S2.d

Lab ID: SS71S, Method: s8260b.m, Instrument: finn5.i, Date: 25-APR-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

SIM PAH Raw Data
Extraction Bench Sheets and Notes

ARI Job ID: SS71

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Benchsheet

SIM PNA (Soil) Sediment
Microwave (3546) (SOP # 3304S)

Preparation Test SIM PNA # 5
ARI Job No(s) 5571

In-House (5ppb)
Batch set up by: ~~JH~~

Bottle #	Extraction Requirements	Verify Client ID	Volume Extracted (dry wt)	Turbo Vap ~~1~~ 2 ~~3~~ **Exchange 5mL Hexane**	(Opt) Silica Gel Clean (1:1) (Y)/ N	TurboVap 1 2 3	Final Effective Volume	Volume to Lab	Comments
	5571 MBS	Date	10.00g				0.5mL	0.5mL	
	SBS	4/28/11	↓	↓	↓	↓	↓	↓	
	~~SBS Dup.~~		↓				↓	↓	
	5571 QLS	↓	↓				↓	↓	
9	A	checked	13.22 g						
	B		12.42						
	C		12.50						
	D		15.56						
	E		12.26						
	F		13.15						
	G		13.36						
↓	H		12.30						
25	I		12.62						
↓	Ims		12.69						
↓	Imsd		12.62						
9	J		12.59						
	K		12.47						
	L		12.26						
	M		12.26						
	N		11.70						
	O		12.33						
	P		11.48						
	Q		11.44						
	R		11.15						
↓	S	↓	11.61	CJZ					
Analyst/Date:			4/28/11 YL	4/29/11 →					

Standard	Standard ID	Volume	Expiration Date	Analyst	Witness
Surrogate	B2	100µL	10/05/11	YL	TH
Spike	15	100µL	11/04/12	YL	TH
QLS Spike	4	50µL	11/04/12	YL	TH
Extraction Time:	15:32		Balance ID:	2175452	

SPECIAL INSTRUCTIONS: 1. Weigh into 100mL beakers-dry with Sodium Sulfate. 2. Transfer to microwave vessel.
3. Add 20mL ~~DCM~~ 1:1 DCM/Ace to the vessel (if needed-Add 5mL increments until solvent is 1" above soil layer). 4. Add surr/spike.
5. Mix samples thoroughly before microwaving. 6. Microwave on appropriate power setting determined by # of samples. (1x) DCM (1x)
7. After microwave-let cool 10-15 min. 8. Collect into turbo tube with sm. funnel containing glasswool and 1" sodium sulfate.
9. Add (2) 10mL DCM rinses to vessel and transfer to turbo tube. 10. TurboVap to 4mL then Add 5mL Hexane and turbovap. 11. Silica Clean-up Opt-Any Color=REQ (All or none). 12. TurboVap (if Silica Clean). 13. Vial in DCM.
A. Need Total Solids Y (N) B. ~~Archive~~/Freeze Y/ N

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

ARI Job No.: 5571 Client ID: Floyd Snider

Parameter: SIM PNA Client Project: Lora Lake Parcel

Note problems, concerns, corrective actions	Analyst/Date
Screens: Soil/Sediment/Solid/Other:	YL 4/21/11
☑ **No Anomalies (standard soil/sediment)** A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S	↓
☐ **Wet sediment/sludge=**	
☐ **Standing Water Decanted=**	
☐ **Standing Water Homogenized (Shared samples)=**	
☐ **Clay (Difficult to homogenize/Mixed with Kitchen Aid)=**	
☐ **Rocks/Organics=**	
☐ **Oily, obvious fuel/sulfur odors=**	
☐ **Other (Details)=**	
Aqueous:	
☐ **No Anomalies**	
☐ **Turbid/Color=**	
☐ **Particulates=**	
☐ **Emulsions=**	
☐ **Other (Details)=**	
☐ **Other Notes/Comments=**	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Benchsheet

SIM PNA-Water
Liquid/Liquid (3520C) (SOP # 3311S)

Preparation Test SIM PNA # 3 In-House (0.1ppb)

ARI Job No(s) 5571, 5583, 5521, 5553 Batch set up by: ~~SH~~

Bottle #	Extraction Requirements	Verify Client ID	Volume Extracted	Disassemble Liq/Liq (Mantle ID)	KD Hex X	Turbo Vap (1) 2 3	(Opt) Silica Gel Clean (1:1) (Y) / N	Turbo Vap 1 2 (3)	Final Effective Volume	Volume to Lab	Comments
	5571 MBW	Date 4-21-11	500mL	23	↓	↓	↓	↓	0.5mL	0.5mL	
	SBW	↓	↓	24					↓	↓	
	SBW Dup.		↓	25					↓	↓	
	QLS		↓	26					↓	↓	
3	T	Verified	500mL	27							
16	5583 P			28							
4	5521 A			29							
1	5553 A	↓	↓	30	↓	↓	↓	↓	↓	↓	
Analyst/Date:		PD 4-21-11		RR 4/22/11	YL 4/22/11	WW 4/27/11					

Standard	Standard ID	Volume	Expiration Date	Analyst	Witness
Surrogate	**B2**	**100µL**	10/05/11	NL	PD
Spike	**15**	**100µL**	1/04/12	NL	PD
QLS Spike	**4**	**50µL**	1/04/12	NL	PD
Extraction Time: 10:18		**Liq/Liq Start:** 10:27		**Liq/Liq Stop:**	

SPECIAL INSTRUCTIONS: 1. Use 500mL Liq/Liq Body 2. Add 20-25mL Hexane. 3. Add ~200mL DCM to Liq/Liq.
4. Add surr/spik. 5. Extract minimum 8 hrs. 6. KD (no drying column) to ~8mL at 80°.
7. Exchange (2 X with 10mL) to Hexane at 100°. 8. TurboVap. 9. Silica Clean-up Opt-Any Color=REQ (All or none).
10. TurboVap (if Silica Clean). 11. Vial in DCM. A. Archive Y (N)

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

ARI Job No.: 5571 Client ID: Floyd Snider

Parameter: SIM PNA Client Project: Lora Lake Parcel

Note problems, concerns, corrective actions	Analyst/Date
Screens: Soil/Sediment/Solid/Other:	
☐ **No Anomalies (standard soil/sediment)**	
☐ **Wet sediment/sludge=**	
☐ **Standing Water Decanted=**	
☐ **Standing Water Homogenized (Shared samples)=**	
☐ **Clay (Difficult to homogenize/Mixed with Kitchen Aid)=**	
☐ **Rocks/Organics=**	
☐ **Oily, obvious fuel/sulfur odors=**	
☐ **Other (Details)=**	
Aqueous:	
☑ **No Anomalies** T.	PD 4-21-11
☐ **Turbid/Color=**	
☐ **Particulates=**	
☐ **Emulsions=**	
☐ **Other (Details)=**	
☐ **Other Notes/Comments=**	

SIM PAH Raw Data
Initial Calibration

ARI Job ID: SS71

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC/MS SVOA Analyst Notes / Corrective Action Log

ARI Project ID: CVRMC Client ID: _____

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

Parameter(s): SIM PNA

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

Curve Date: 4/21/11 Analysis Start Date: 4/21/11

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

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

Additional Details on Reverse: Yes / No

Analyst: _____ **Date:** 04/22/11

Reviewer: _____ **Date:** 4/22/11

Analytical Resources Inc.: Organics Instrument Log

NT-4 Serial No.: GC = US00010849; MS = US72821113

Date: 4/21/11 Analysis: Sim7/VA Analyst: RE

GC Program: Sim7AA35 Column No: 186782 Column Type: ZB-35

Instrument Tune (.U or .CT.): 100716 EM Voltage: 1400

Calibration File: 04211102 Curve Date: 4/21/11

IS/SS	Ical/Ccal	LCS/ICV
1754-5	1818-1	1831-1
	1788-3	

INTERNAL STANDARD SUMMARY FOR DATABATCH - /chem3/nt4.i/20110421.b

	Time	Filename	LabID	ClientId	DF									
1	1952	04211101.d	DFTPP0421	DFTPP0421	1	NO ISTDS FOUND								
2	2007	04211102.d	IC250421	IC240521	1	5.49	279997	7.77	158527	9.74	277528	14.98	304025	18.83	257984
3	2034	04211103.d	IC010421	IC010421	1	5.49	269016	7.77	155017	9.74	267353	14.97	302074	18.82	272243
4	2102	04211104.d	IC050421	IC050421	1	5.48	285586	7.77	162508	9.74	289006	14.97	311905	18.82	266515
5	2130	04211105.d	IC10421	IC10421	1	5.48	281575	7.76	162334	9.74	279365	14.97	309638	18.82	250606
6	2158	04211106.d	IC50421	IC50421	1	5.49	308773	7.76	170082	9.74	292758	14.97	321087	18.82	281010
7	2225	04211107.d	IC100421	IC100421	1	5.48	330884	7.76	176929	9.74	306617	14.97	317868	18.82	290025
8	2253	04211108.d	ICV0421	ICV0421	1	5.48	297226	7.76	176343	9.74	303675	14.97	321553	18.82	257892
9	2321	04211109.d	SS32MBS1	SS32MBS1	1	5.48	2545611	7.77	1616921	9.74	2484686	14.98	2989230	18.84	2566815
10	2348	04211110.d	SS32LCSS1	SS32LCSS1	1	5.48	2711380	7.76	1707595	9.74	2625134	14.98	3167657	18.83	2824021
11	0016	04211111.d	SS32LCSDS1	SS32LCSDS1	1	5.48	2645816	7.77	1667773	9.74	2617051	14.98	3117278	18.83	2813058
12	0044	04211112.d	SS32A 3X	HC-WB-SS-001	3	5.49	2717227	7.77	1799849	9.74	2783108	14.99	3344465	18.85	2986229
13	0111	04211113.d	SR07MBS1	SR07MBS1	1	5.48	306681	7.76	174011	9.74	288510	14.97	318688	18.82	272912
14	0139	04211114.d	SR07LCSS1	SR07LCSS1	1	5.48	316261	7.76	180616	9.74	301556	14.97	324298	18.82	293496
15	0207	04211115.d	SR07LCSDS1	SR07LCSDS1	1	5.48	312317	7.76	177756	9.74	309265	14.97	333928	18.82	279231
16	0234	04211116.d	SR07QLS	SR07QLS	1	5.48	303227	7.76	175844	9.74	297939	14.97	327122	18.82	264642
17	0302	04211117.d	SR07J 3X	LDW/AST DK30	3	5.48	308291	7.76	180312	9.74	297663	14.98	335510	18.85	269574
18	0330	04211118.d	SS32A 10X	HC-WB-SS-001	10	5.48	277283	7.77	165755	9.74	276644	14.98	297914	18.82	252478
19	0357	04211119.d	SR07J 10X	LDW/AST DK30	10	5.48	284425	7.76	169592	9.74	283444	14.98	321762	18.83	250548

Wrong 3.5 added in IR

Maintenance / Comments

04/22/11

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

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

MANUAL INTEGRATION SUMMARY FOR DATABATCH - /chem3/nt4.i/20110421.b

ARI Job No.: IC25 Method: SIMPNA0421.m Instrument: nt4.i Date: 21-APR-2011

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2007	04211102.d	IC250421	IC240521	1	NO MANUAL INTEGRATION
2034	04211103.d	IC010421	IC010421	1	NO MANUAL INTEGRATION
2102	04211104.d	IC050421	IC050421	1	NO MANUAL INTEGRATION
2130	04211105.d	IC10421	IC10421	1	NO MANUAL INTEGRATION
2158	04211106.d	IC50421	IC50421	1	NO MANUAL INTEGRATION
2225	04211107.d	IC100421	IC100421	1	NO MANUAL INTEGRATION
2253	04211108.d	ICV0421	ICV0421	1	NO MANUAL INTEGRATION

04/22/11

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 21-APR-2011 20:07
End Cal Date : 21-APR-2011 22:25
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem3/nt4.i/20110421.b/SIMPNA0421.m
Cal Date : 22-Apr-2011 12:47 jianqing
Curve Type : Average

Calibration File Names:
Level 1: /chem3/nt4.i/20110421.b/04211103.d
Level 2: /chem3/nt4.i/20110421.b/04211104.d
Level 3: /chem3/nt4.i/20110421.b/04211105.d
Level 4: /chem3/nt4.i/20110421.b/04211102.d
Level 5: /chem3/nt4.i/20110421.b/04211106.d
Level 6: /chem3/nt4.i/20110421.b/04211107.d

04/22/11

	Compound	0.10000 Level 1	0.50000 Level 2	1.000 Level 3	2.500 Level 4	5.000 Level 5	10.000 Level 6	RRF	% RSD
28	Naphthalene	1 07258	0.88878	0.85760	0.93340	0.87221	0.78485	0 90157	10 736
32	2-Methylnaphthalene	0.58926	0.49512	0.48510	0.52566	0.49516	0.44552	0 50597	9.540
105	1-methylnaphthalene	0.61126	0.51697	0.50517	0.54720	0.51285	0.46172	0.52586	9 524
40	Acenaphthylene	1 90818	1.52022	1.56015	1.67418	1.62084	1 49541	1.62983	9.283
44	Acenaphthene	1.14194	0.97681	0.96399	1.01719	0.98983	0.92288	1 00211	7.508
46	Dibenzofuran	1.53570	1.30443	1.31528	1.41558	1.37601	1.27847	1.37091	6 938
49	Fluorene	1.33056	1.13119	1.10858	1.20325	1.17672	1.10773	1.17634	7.198
60	Phenanthrene	1.17328	0.92974	0.92869	0.97667	0.96602	0.89818	0.97876	10.156
61	Anthracene	1.16774	0.98365	0.97424	1.04210	1.00317	0.91579	1 01445	8 444
64	Fluoranthene	1.27824	1.03007	1.00978	1.07882	1.07364	1.01622	1.08113	9 325
65	Pyrene	1.14250	0.95688	0.90605	1.01074	1.02544	0.99239	1 00567	7.908
68	Benzo(a)anthracene	1.03610	0.87530	0.87400	0.96151	0.93722	0.91288	0.93284	6.552
71	Chrysene	1.03405	0.85217	0.83954	0.92199	0.90620	0.86976	0.90395	7.862
74	Benzo(b)fluoranthene	1.24690	1.01179	1.05503	1.08755	1.07683	1.03251	1 08510	7.743
75	Benzo(k)fluoranthene	1 23786	1.13823	1 04749	1.10742	1.08578	1 08326	1.11668	5.953
188	Benzo(j)fluoranthene	1.25821	1.03395	1.19619	1.07929	1.01836	0.98490	1.09515	9.906
76	Benzo(a)pyrene	1.10798	0.91554	0.88922	0.99153	0.98150	0 93972	0.97092	7.983
78	Indeno(1,2,3-cd)pyrene	1.20128	1.00673	1.11012	1.21924	1.18428	1.13187	1.14225	6.858
79	Dibenzo(a,h)anthracene	0.91132	0.82880	0 91178	0.99769	0.98287	0.92513	0.92626	6.520
80	Benzo(g,h,i)perylene	1.07345	0.89853	0 92160	1.00831	0.99943	0 95240	0.97562	6.580
99	Perylene	0.94247	0.77318	0.77182	0.84627	0.82262	0.78395	0.82338	7.953

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 21-APR-2011 20:07
End Cal Date : 21-APR-2011 22:25
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem3/nt4.i/20110421.b/SIMPNA0421.m
Cal Date : 22-Apr-2011 12:47 jianqing
Curve Type : Average

Compound	0.10000 Level 1	0.50000 Level 2	1.000 Level 3	2 500 Level 4	5.000 Level 5	10.000 Level 6	___ RRF	% RSD
58 Pentachlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
187 Total Benzofluoranthenes	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
152 Benzo(e)pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 190 2-Methylnaphthalene-d10	0.63126	0.54164	0.55559	0.58063	0.54860	0.49634	0 55901	8.015
$ 191 Dibenzo(a,h)anthracene-d14	0.82353	0.74894	0.79929	0.88974	0.87133	0 83145	0.82738	6.114
$ 55 2,4,6-Tribromophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem3/nt4.i/20110421.b/SIMPNA0421.m
Batch File: /chem3/nt4.i/20110421.b
Inst ID: nt4.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06
FILENAME:	04211102	04211103	04211104	04211105	04211106	04211107
INJ.DATE:	21-APR-2011	21-APR-2011	21-APR-2011	21-APR-2011	21-APR-2011	21-APR-2011
INJ.TIME:	20:07	20:34	21:02	21:30	21:58	22:25

AB 04/22/11

Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
* 27 Naphthalene-d8	5.488	5.485	5.485	5.484	5 486	5.484	5.488	5.388-5.588	5.485	0.002
28 Naphthalene	5.517	5.514	5.513	5.512	5.512	5.515	5.517	5.417-5.617	5.514	0.002
$ 190 2-Methylnaphthalene-d1	6.236	6.230	6.229	6.232	6.231	6.231	6.236	6.136-6.336	6.231	0 002
32 2-Methylnaphthalene	6.280	6.277	6.277	6 276	6.275	6.275	6.280	6.180-6.380	6 277	0.002
105 1-methylnaphthalene	6.476	6.473	6.472	6.471	6.471	6.474	6.476	6.376-6.576	6.473	0.002
40 Acenaphthylene	7.630	7.624	7 624	7.626	7.622	7.625	7.630	7.530-7.730	7.625	0.003
* 42 Acenaphthene-d10	7.769	7.766	7.766	7.765	7.764	7.764	7.769	7.669-7.869	7.766	0.002
44 Acenaphthene	7.816	7.813	7.813	7.812	7.811	7.812	7.816	7.716-7.916	7.813	0.002
46 Dibenzofuran	7.961	7.955	7.958	7.954	7.956	7.957	7.961	7.861-8.061	7.957	0.003
49 Fluorene	8.425	8.419	8.418	8.418	8.420	8.420	8.425	8.325-8.525	8.420	0.003
* 59 Phenanthrene-d10	9.744	9.737	9.737	9.736	9.739	9.739	9.744	9.644-9.844	9.739	0.003
60 Phenanthrene	9.778	9.775	9.772	9.771	9.773	9.774	9.778	9.678-9.878	9.774	0.003
61 Anthracene	9.813	9.807	9.806	9.806	9.808	9.808	9.813	9.713-9.913	9.808	0.003
64 Fluoranthene	11.703	11.696	11.693	11.689	11.694	11.698	11.703	11.603-11.803	11.695	0.005
65 Pyrene	12.242	12.229	12.232	12.231	12 234	12.234	12.242	12.142-12.342	12.234	0.004
68 Benzo(a)anthracene	14.857	14.848	14.847	14.843	14.849	14.849	14.857	14.757-14.957	14.849	0 005
* 69 Chrysene-d12	14.980	14.971	14.970	14.966	14.969	14.972	14.980	14.880-15.080	14.971	0.005

Reviewer 1 _____ Date: _____
Reviewer 2 _____ Date: 4/22/11

SDG: 9555

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem3/nt4.i/20110421.b/SIMPNA0421.m
Batch File: /chem3/nt4.i/20110421.b
Inst ID: nt4.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
71	Chrysene	15.053	15.037	15.040	15.039	15.044	15.048	15.053	14 953-15.153	15.043	0.006
74	Benzo(b)fluoranthene	17 617	17.605	17.604	17.606	17.609	17.612	17.617	17.517-17.717	17.609	0.005
75	Benzo(k)fluoranthene	17.674	17.661	17.661	17.660	17.672	17.672	17.674	17.574-17.774	17.667	0.007
188	Benzo(j)fluoranthene	17.756	17.734	17.740	17.742	17.744	17.751	17.756	17.656-17.856	17.745	0.008
76	Benzo(a)pyrene	18.617	18.604	18.604	18.603	18.606	18.609	18.617	18.517-18.717	18.607	0.005
* 77	Perylene-d12	18.828	18.816	18.815	18.818	18.820	18.817	18.828	18.728-18.928	18.819	0.005
78	Indeno(1,2,3-cd)pyrene	21.674	21.648	21.654	21.657	21.665	21.681	21.674	21.574-21.774	21.663	0.013
$ 191	Dibenzo(a,h)anthracene	21.573	21.554	21.550	21.546	21.558	21.574	21.573	21.473-21.673	21.559	0.012
79	Dibenzo(a,h)anthracene	21.680	21.664	21.670	21.669	21.675	21.691	21.680	21.580-21.780	21.675	0 010
80	Benzo(g,h,i)perylene	22.806	22.787	22.787	22.789	22.804	22.814	22.806	22.706-22.906	22.798	0.012
$ 55	2,4,6-Tribromophenol	+++++	+++++	+++++	+++++	+++++	+++++	14.264	14.164-14.364	+++++	+++++
99	Perylene	18.895	18.879	18.885	18 884	18.889	18.890	18 895	18.795-18.995	18.887	0.006
58	Pentachlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	10.007	9.907-10.107	+++++	+++++
187	Total Benzofluoranthen	+++++	+++++	+++++	+++++	+++++	+++++	17.639	17.539-17.739	+++++	+++++
152	Benzo(e)pyrene	+++++	+++++	+++++	+++++	+++++	+++++	30.943	30.843-31.043	+++++	+++++

Data File: /chem3/nt4.i/20110421.b/tune.b/04211101.d

Date : 21-APR-2011 19:52

Client ID: DFTPP0421

Instrument: nt4.i

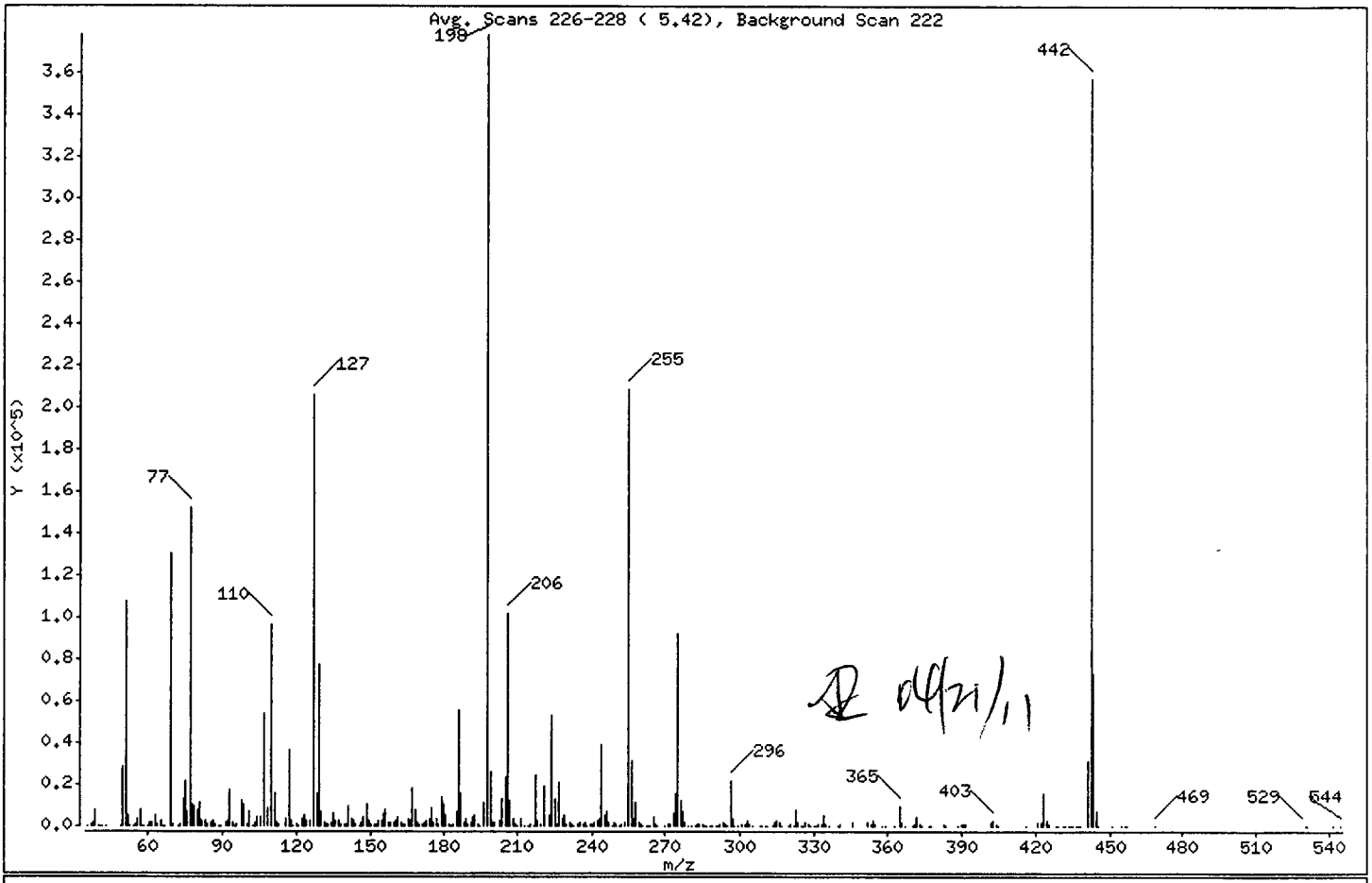
Sample Info: DFTPP0421

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.32

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	28.62
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	34.58
70	Less than 2.00% of mass 69	0.22 (0.63)
127	10.00 - 80.00% of mass 198	54.38
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.96
275	10.00 - 60.00% of mass 198	24.34
365	Greater than 1.00% of mass 198	2.54
441	0.01 - 24.00% of mass 442	8.30 (8.79)
442	50.00 - 200.00% of mass 198	94.43
443	15.00 - 24.00% of mass 442	19.25 (20.38)

Data File: /chem3/nt4.i/20110421.b/tune.b/04211101.d

Date : 21-APR-2011 19:52

Client ID: DFTPP0421 Instrument: nt4.i

Sample Info: DFTPP0421

Operator: JZ

Column phase: ZB-5msi Column diameter: 0.32

Data File: 04211101.d
Spectrum: Avg. Scans 226-228 (5.42), Background Scan 222
Location of Maximum: 198.00
Number of points: 343

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	233	135.00	6244	226.00	1006	322.00	136
37.00	608	136.00	2683	227.00	20512	323.00	7716
38.00	1596	137.00	2480	228.00	3219	324.00	1400
39.00	8093	138.00	768	229.00	4844	325.00	190
40.00	299	139.00	523	230.00	502	326.00	122
41.00	15	140.00	1004	231.00	2134	327.00	1311
42.00	21	141.00	9707	232.00	467	328.00	893
43.00	92	142.00	3200	233.00	337	329.00	182
47.00	107	143.00	2234	234.00	1241	330.00	76
49.00	247	144.00	704	235.00	1552	331.00	200
50.00	29032	145.00	349	236.00	1041	332.00	508
51.00	108208	146.00	1929	237.00	1901	333.00	669
52.00	5621	147.00	4596	238.00	277	334.00	4856
53.00	103	148.00	10261	239.00	1129	335.00	1103
54.00	149	149.00	2489	240.00	744	336.00	177
55.00	681	150.00	466	241.00	1355	340.00	158
56.00	3599	151.00	1297	242.00	2502	341.00	746
57.00	7828	152.00	549	243.00	3085	342.00	241
58.00	428	153.00	2857	244.00	38880	346.00	1569
59.00	245	154.00	2193	245.00	5197	347.00	245
60.00	342	155.00	5722	246.00	7283	352.00	1979
61.00	1508	156.00	8044	247.00	1512	353.00	1281
62.00	1917	157.00	1487	248.00	373	354.00	2455
63.00	4882	158.00	1905	249.00	1569	355.00	480
64.00	643	159.00	1396	250.00	504	358.00	54
65.00	2575	160.00	2803	251.00	205	359.00	206
66.00	158	161.00	4428	252.00	479	363.00	88
67.00	256	162.00	1326	253.00	1469	365.00	9615
69.00	130752	163.00	445	255.00	209024	366.00	1413
70.00	824	164.00	732	256.00	31272	367.00	60
72.00	69	165.00	3093	257.00	3044	370.00	323
73.00	654	166.00	3038	258.00	10973	371.00	553
74.00	12965	167.00	17944	259.00	1767	372.00	4003
75.00	21976	168.00	7475	260.00	544	373.00	803
76.00	7033	169.00	1527	261.00	235	374.00	151

Data File: /chem3/nt4.i/20110421.b/tune.b/04211101.d

Date : 21-APR-2011 19:52

Client ID: DFTPP0421 Instrument: nt4.i

Sample Info: DFTPP0421

Operator: JZ

Column phase: ZB-5ms1 Column diameter: 0.32

Data File: 04211101.d
Spectrum: Avg. Scans 226-228 (5.42), Background Scan 222
Location of Maximum: 198.00
Number of points: 343

m/z	Y	m/z	Y	m/z	Y	m/z	Y
77.00	152384	170.00	709	262.00	57	377.00	36
78.00	10312	171.00	950	263.00	60	378.00	9
79.00	9548	172.00	1741	264.00	239	383.00	999
80.00	7749	173.00	2441	265.00	4360	384.00	340
81.00	11333	174.00	3829	266.00	598	389.00	165
82.00	2317	175.00	8373	267.00	93	390.00	692
83.00	2384	176.00	2097	270.00	273	391.00	603
84.00	633	177.00	3352	271.00	470	392.00	442
85.00	1994	178.00	1174	272.00	620	393.00	52
86.00	3041	179.00	14296	273.00	5754	401.00	133
87.00	1192	180.00	10006	274.00	16005	402.00	1568
88.00	316	181.00	5051	275.00	92024	403.00	2481
89.00	254	182.00	700	276.00	12279	404.00	941
91.00	2109	183.00	394	277.00	7175	405.00	294
92.00	2587	184.00	1017	278.00	1484	415.00	116
93.00	17320	185.00	6658	279.00	241	416.00	51
94.00	1329	186.00	55904	281.00	271	421.00	1781
95.00	115	187.00	15662	282.00	353	422.00	2019
96.00	1168	188.00	1727	283.00	729	423.00	15704
98.00	12365	189.00	3653	284.00	633	424.00	3010
99.00	10502	190.00	624	285.00	1293	425.00	676
100.00	940	191.00	1835	286.00	321	428.00	130
101.00	6657	192.00	4606	287.00	55	429.00	63
102.00	411	193.00	4998	288.00	60	431.00	141
103.00	2080	194.00	852	289.00	400	432.00	109
104.00	4517	195.00	275	290.00	339	433.00	78
105.00	4123	196.00	11474	291.00	188	434.00	169
107.00	53544	198.00	378112	292.00	514	435.00	295
108.00	8452	199.00	26328	293.00	1925	436.00	260
110.00	96160	200.00	2042	294.00	545	437.00	206
111.00	15823	201.00	2130	295.00	341	438.00	267
112.00	1788	203.00	2807	296.00	21976	439.00	430
113.00	702	204.00	13200	297.00	3051	441.00	31376
116.00	3239	205.00	23840	298.00	135	442.00	357056
117.00	36928	206.00	101616	299.00	50	443.00	72784

Data File: /chem3/nt4.i/20110421.b/tune.b/04211101.d

Date : 21-APR-2011 19:52

Client ID: DFTPP0421

Instrument: nt4.i

Sample Info: DFTPP0421

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.32

Data File: 04211101.d
Spectrum: Avg. Scans 226-228 (5.42), Background Scan 222
Location of Maximum: 198.00
Number of points: 343

m/z	Y	m/z	Y	m/z	Y	m/z	Y
118.00	2721	207.00	12433	301.00	438	444.00	6815
119.00	392	208.00	3417	302.00	468	445.00	361
120.00	814	209.00	977	303.00	2796	451.00	276
121.00	8	210.00	267	304.00	846	455.00	44
122.00	3378	211.00	3599	305.00	57	456.00	72
123.00	5636	213.00	312	308.00	335	457.00	55
124.00	2604	214.00	64	309.00	301	467.00	133
125.00	2860	215.00	850	310.00	348	469.00	197
127.00	205632	216.00	418	311.00	66	472.00	52
128.00	16018	217.00	24336	313.00	299	513.00	60
129.00	76968	218.00	3007	314.00	1413	529.00	138
130.00	6792	219.00	442	315.00	2386	530.00	120
131.00	1434	221.00	19432	316.00	1359	531.00	52
132.00	858	223.00	5408	317.00	392	541.00	93
133.00	561	224.00	53232	320.00	59	544.00	60
134.00	1899	225.00	13369	321.00	681		

Data File: /chem3/nt4.i/20110421.b/tune.b/04211101.d

Date : 21-APR-2011 19:52

Client ID: DFTPP0421

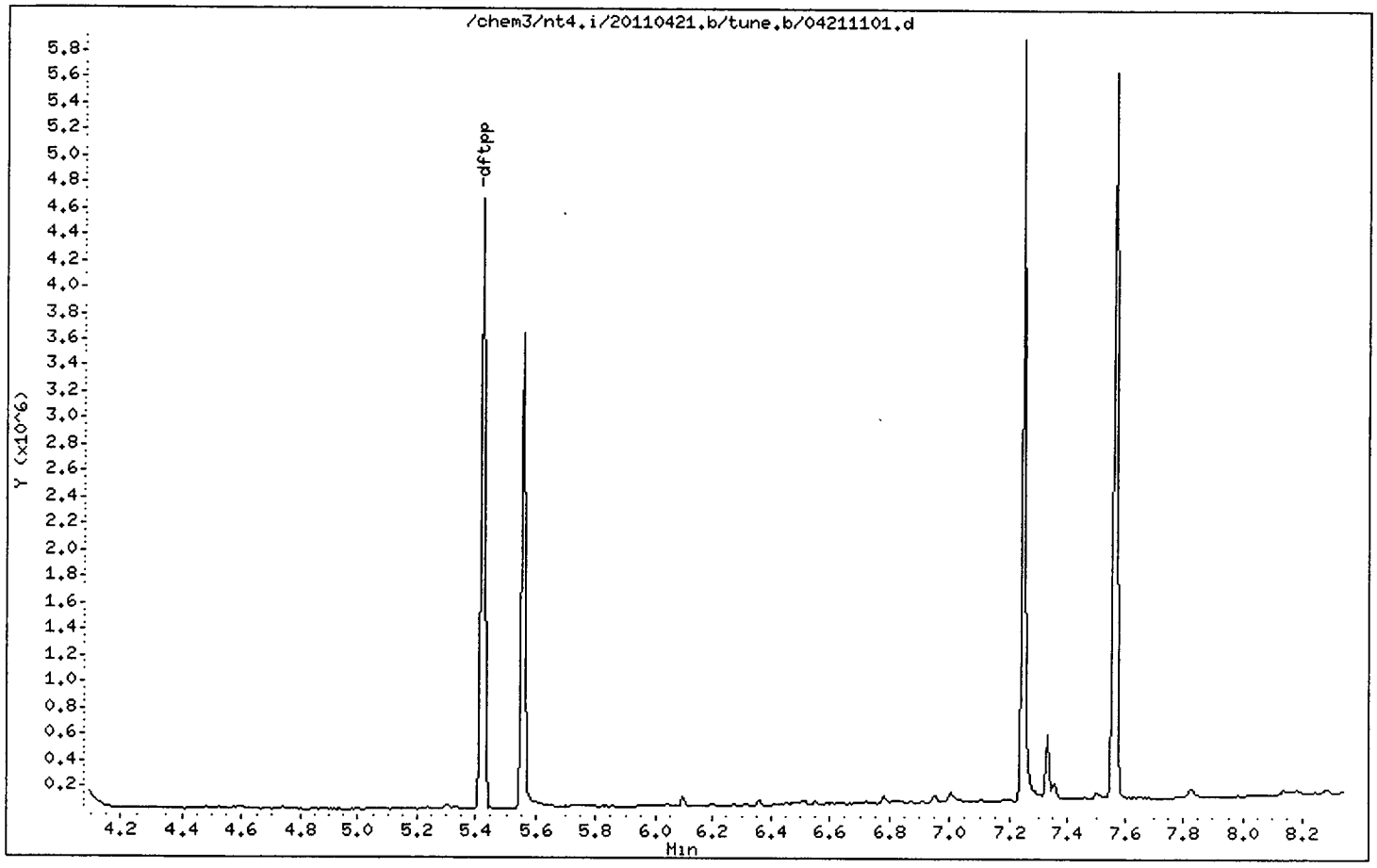
Instrument: nt4.i

Sample Info: DFTPP0421

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.32



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

Data file: /chem3/nt4.i/20110421.b/ddt.b/04211101.d ARI ID: DDT
Method: /chem3/nt4.i/20110421.b/ddt.b/sw846ddt.m Misc: 11-
Analysis Date: 21-APR-2011 19:52 Instrument: nt4.i

COMPOUND	RT	AREA
Pentachlorophenol	5.555	357051
Benzidine	7.247	2073687
4,4'-DDE	----	----
4,4'-DDD	7.329	75148
4,4'-DDT	7.564	894515

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

$$\text{DDT Percent Breakdown} = \frac{(0 + 75148) * 100}{(0 + 75148 + 894515)}$$

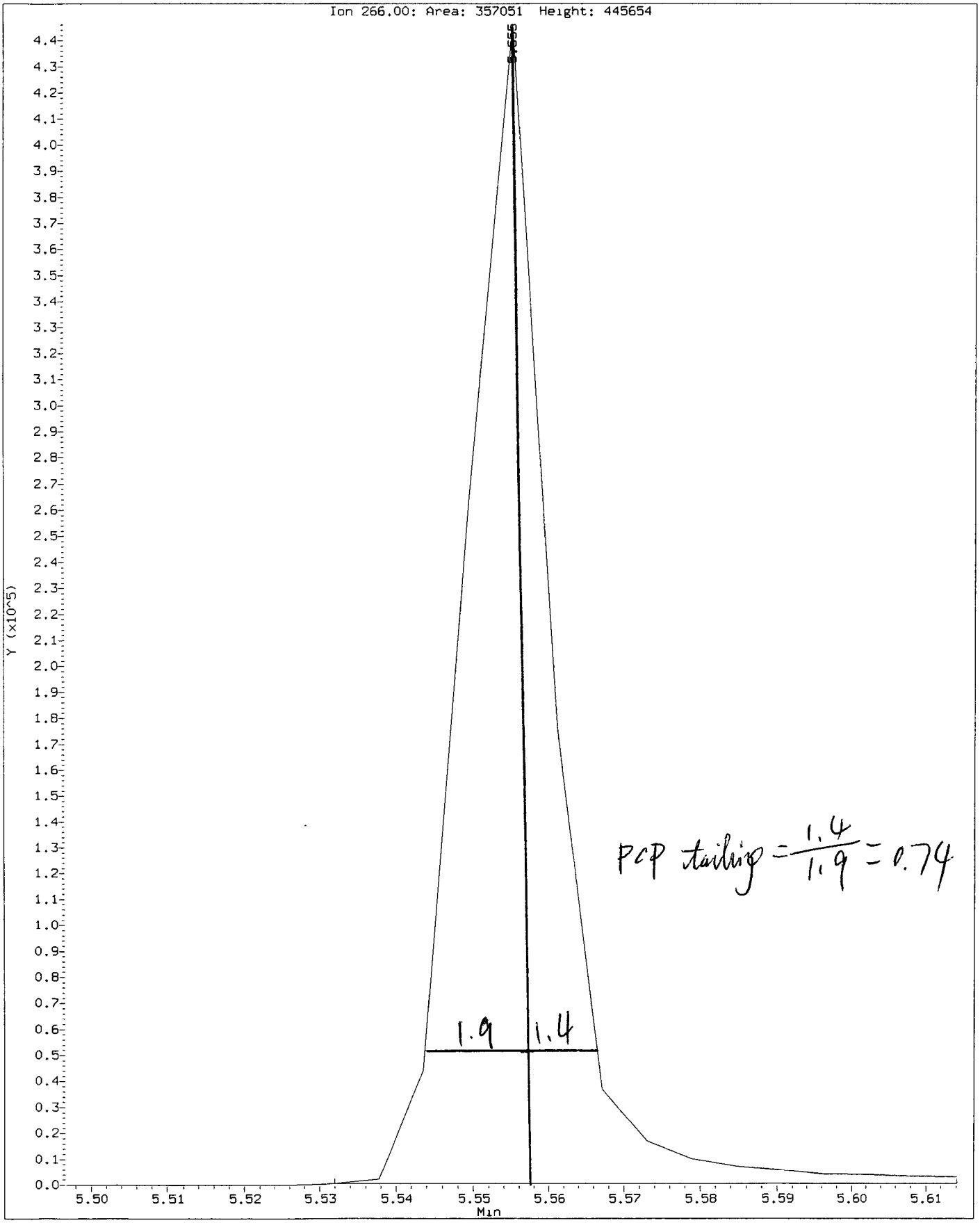
DDT Percent Breakdown = 7.7 %

OK JB 04/22/11

SS71 : 00692

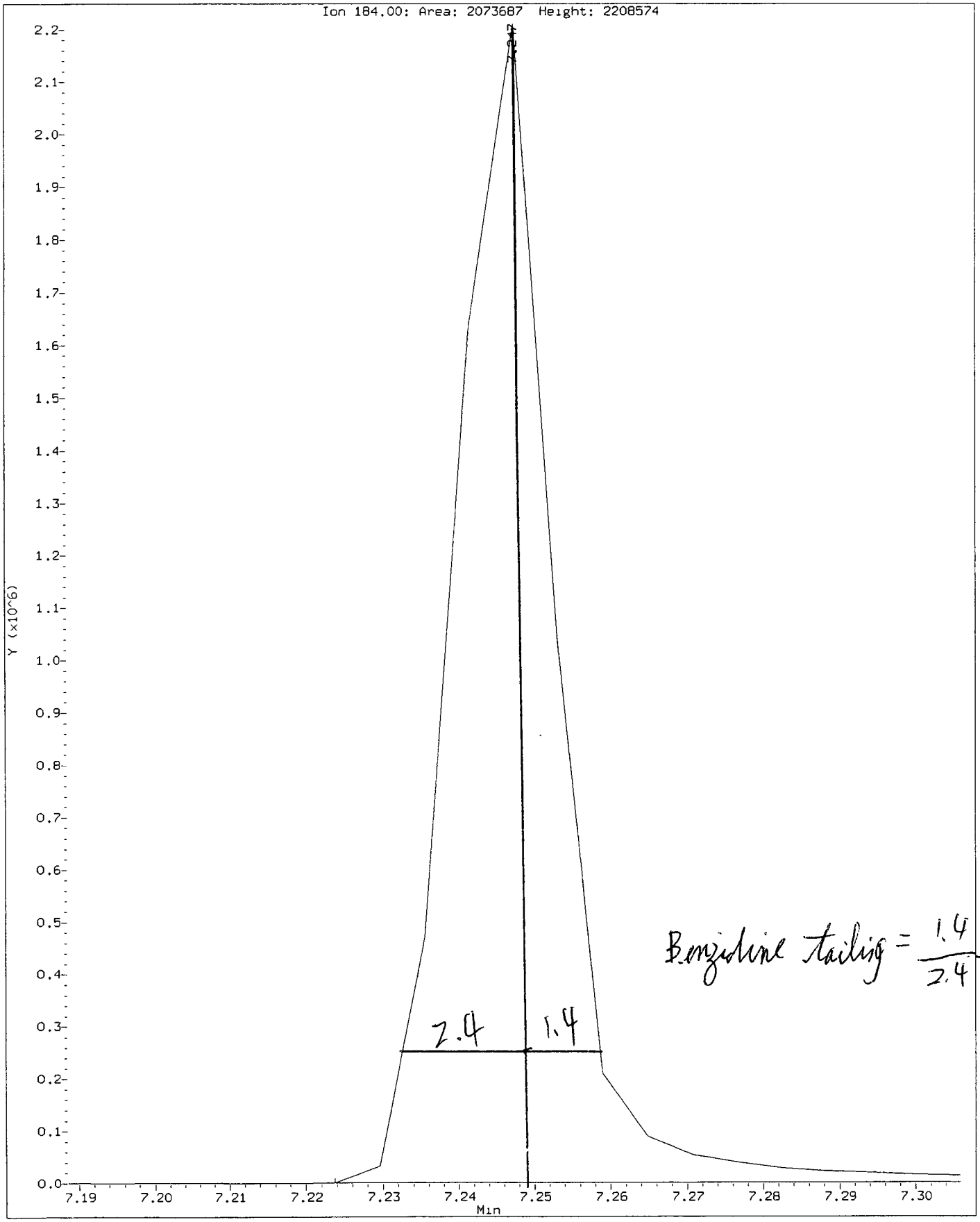
Data File: /chem3/nt4.i/20110421.b/ddt.b/04211101.d
Injection Date: 21-APR-2011 19:52
Instrument: nt4.i
Client Sample ID: DDT0420

Compound: Pentachlorophenol
CAS Number: 87-86-5



Data File: /chem3/nt4.i/20110421.b/ddt.b/04211101.d
Injection Date: 21-APR-2011 19:52
Instrument: nt4.i
Client Sample ID: DDT0420

Compound: Benzidine
CAS Number:



Benzidine tailing = $\frac{1.4}{2.4} = 0.58$

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20110421.b/04211103.d
Lab Smp Id: IC010421 Client Smp ID: IC010421
Inj Date : 21-APR-2011 20:34
Operator : JZ Inst ID: nt4.i
Smp Info : IC010421,
Misc Info : 11-
Comment : 1ul Injection
Method : /chem3/nt4.i/20110421.b/SIMPNA0421.m
Meth Date : 22-Apr-2011 12:47 jianqing Quant Type: ISTD
Cal Date : 21-APR-2011 20:34 Cal File: 04211103.d
Als bottle: 3 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

R 04/22/11

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
* 27 Naphthalene-d8	136	5.485	5.484	(1.000)	269016	2.00000	
28 Naphthalene	128	5.514	5.515	(1.005)	14427	0.10000	0.1000
$ 190 2-Methylnaphthalene-d10	152	6.230	6.231	(1.136)	8491	0.10000	0.1000
32 2-Methylnaphthalene	141	6.277	6 275	(1.144)	7926	0 10000	0.1000
105 1-methylnaphthalene	141	6.473	6.474	(1.180)	8222	0.10000	0.1000
40 Acenaphthylene	152	7.624	7.625	(0 982)	14790	0.10000	0.1000
* 42 Acenaphthene-d10	164	7.766	7.764	(1.000)	155017	2.00000	
44 Acenaphthene	153	7 813	7.812	(1 006)	8851	0.10000	0.1000
46 Dibenzofuran	168	7.955	7.957	(1.024)	11903	0.10000	0.1000
49 Fluorene	166	8.419	8.420	(1.084)	10313	0.10000	0.1000
* 59 Phenanthrene-d10	188	9.737	9.739	(1.000)	267353	2.00000	
60 Phenanthrene	178	9.775	9.774	(1.004)	15684	0.10000	0 1000
61 Anthracene	178	9.807	9.808	(1.007)	15610	0.10000	0.1000
64 Fluoranthene	202	11.696	11.698	(1.201)	17087	0.10000	0.1000
65 Pyrene	202	12.229	12.234	(0.817)	17256	0.10000	0.1000
68 Benzo(a)anthracene	228	14 848	14.849	(0.992)	15649	0.10000	0 1000
* 69 Chrysene-d12	240	14.971	14.972	(1.000)	302074	2.00000	
71 Chrysene	228	15.037	15.048	(1.004)	15618	0.10000	0.1000
74 Benzo(b)fluoranthene	252	17.605	17.612	(0.936)	16973	0.10000	0.1000
75 Benzo(k)fluoranthene	252	17.661	17.672	(0.939)	16850	0 10000	0.1000
188 Benzo(j)fluoranthene	252	17.734	17.751	(0.942)	17127	0.10000	0.1000
76 Benzo(a)pyrene	252	18.604	18.609	(0.989)	15082	0.10000	0.1000
* 77 Perylene-d12	264	18.816	18.817	(1.000)	272243	2.00000	
78 Indeno(1,2,3-cd)pyrene	276	21.648	21.681	(1.151)	16352	0.10000	0.1000
$ 191 Dibenzo(a,h)anthracene-d14	292	21.554	21.574	(1.146)	11210	0.10000	0.1000
79 Dibenzo(a,h)anthracene	278	21.664	21.691	(1.151)	12405	0.10000	0.1000
80 Benzo(g,h,i)perylene	276	22.787	22.814	(1.211)	14612	0.10000	0.1000

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
99 Perylene	252	18.879	18.890	(1 003)	12829	0 10000	0 1000

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 04211103.d
Lab Smp Id: IC010421
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20110421.b/SIMPNA0421.m
Misc Info: 11-

Calibration Date: 21-APR-2011
Calibration Time: 20:07
Client Smp ID: IC010421
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	276036	138018	552072	269016	-2.54
42 Acenaphthene-d10	158527	79264	317054	155017	-2.21
59 Phenanthrene-d10	277528	138764	555056	267353	-3.67
69 Chrysene-d12	304115	152058	608230	302074	-0.67
77 Perylene-d12	257833	128916	515666	272243	5.59

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	5.49	4.99	5.99	5.49	-0.06
42 Acenaphthene-d10	7.77	7.27	8.27	7.77	-0.04
59 Phenanthrene-d10	9.74	9.24	10.24	9.74	-0.06
69 Chrysene-d12	14.98	14.48	15.48	14.97	-0.06
77 Perylene-d12	18.83	18.33	19.33	18.82	-0.07

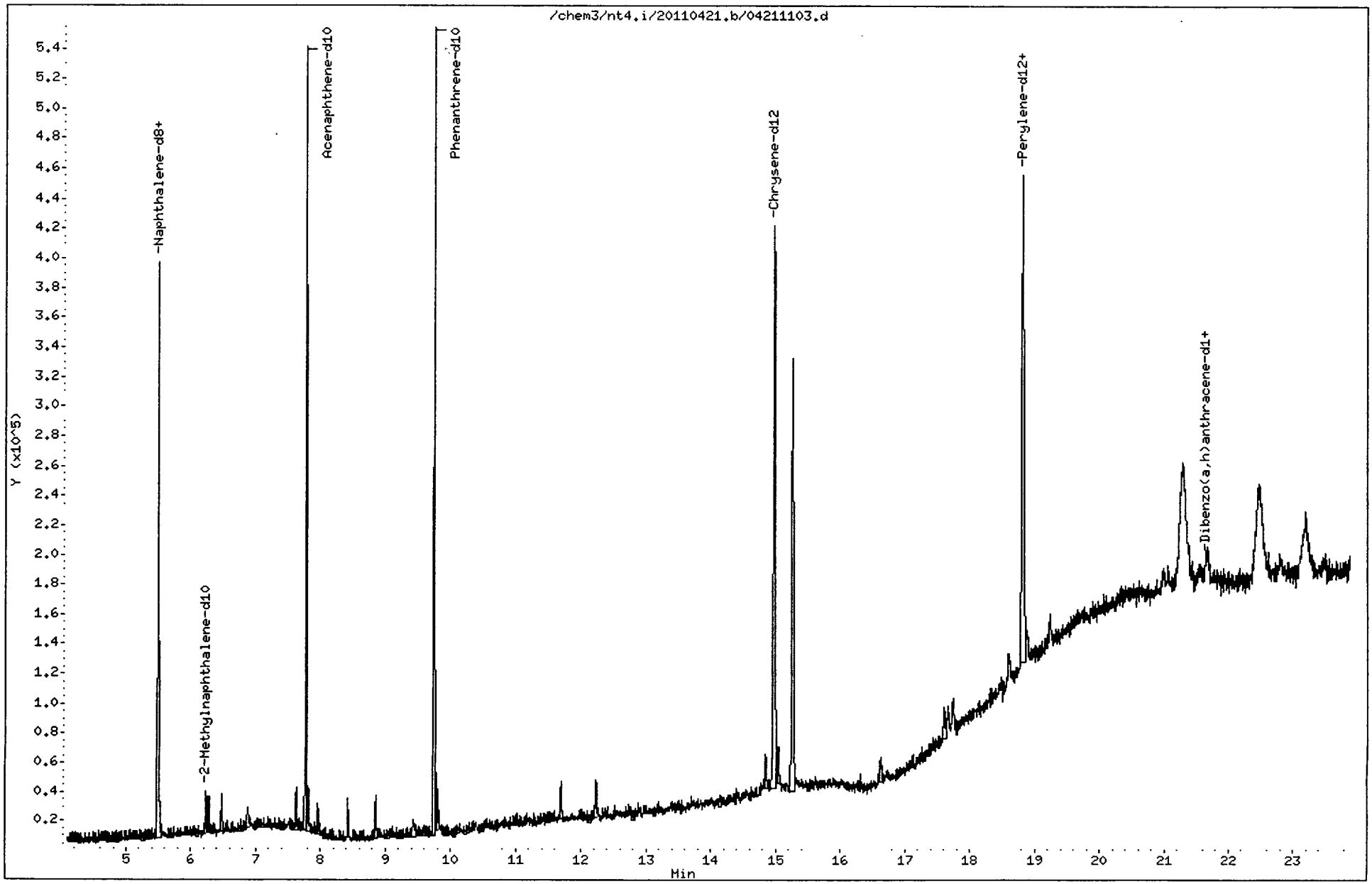
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem3/nt4.i/20110421.b/04211103.d
Date : 21-APR-2011 20:34
Client ID: IC010421
Sample Info: IC010421,

Instrument: nt4.i

Operator: JZ
Column diameter: 0.32

Column phase: ZB35



CO-ELUTION SUMMARY FOR FILE - 04211103.d

Lab ID: IC010421, Method: SIMPNA0421.m, Instrument: nt4.i, Date: 21-APR-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20110421.b/04211104.d
Lab Smp Id: IC050421 Client Smp ID: IC050421
Inj Date : 21-APR-2011 21:02
Operator : JZ Inst ID: nt4.i
Smp Info : IC050421,
Misc Info : 11-
Comment : 1ul Injection
Method : /chem3/nt4.i/20110421.b/SIMPNA0421.m
Meth Date : 22-Apr-2011 12:47 jianqing Quant Type: ISTD
Cal Date : 21-APR-2011 21:02 Cal File: 04211104.d
Als bottle: 4 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

JZ 04/22/11

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
* 27 Naphthalene-d8	136	5.485	5.484	(1.000)	285586	2.00000	
28 Naphthalene	128	5.513	5.515	(1.005)	63456	0.50000	0 4531
$ 190 2-Methylnaphthalene-d10	152	6.229	6 231	(1.136)	38671	0.50000	0 4618
32 2-Methylnaphthalene	141	6.277	6.275	(1.144)	35350	0 50000	0.4566
105 1-methylnaphthalene	141	6.472	6.474	(1.180)	36910	0.50000	0 4582
40 Acenaphthylene	152	7.624	7.625	(0.982)	61762	0.50000	0.4434
* 42 Acenaphthene-d10	164	7.766	7.764	(1.000)	162508	2.00000	
44 Acenaphthene	153	7.813	7.812	(1.006)	39685	0.50000	0.4610
46 Dibenzofuran	168	7.958	7.957	(1.025)	52995	0.50000	0.4593
49 Fluorene	166	8.418	8 420	(1.084)	45957	0.50000	0 4595
* 59 Phenanthrene-d10	188	9.737	9.739	(1.000)	289006	2.00000	
60 Phenanthrene	178	9.772	9.774	(1.004)	67175	0.50000	0.4421
61 Anthracene	178	9.806	9.808	(1.007)	71070	0 50000	0.4572
64 Fluoranthene	202	11.693	11.698	(1.201)	74424	0.50000	0.4462
65 Pyrene	202	12.232	12 234	(0.817)	74614	0.50000	0.4558
68 Benzo(a)anthracene	228	14.847	14.849	(0.992)	68253	0.50000	0 4579
* 69 Chrysene-d12	240	14.970	14 972	(1.000)	311905	2 00000	
71 Chrysene	228	15.040	15.048	(1.005)	66449	0 50000	0.4518
74 Benzo(b)fluoranthene	252	17.604	17.612	(0 936)	67414	0.50000	0.4480
75 Benzo(k)fluoranthene	252	17.661	17.672	(0.939)	75839	0.50000	0.4790
188 Benzo(j)fluoranthene	252	17.740	17.751	(0.943)	68891	0.50000	0.4511
76 Benzo(a)pyrene	252	18.604	18.609	(0.989)	61001	0.50000	0.4524
* 77 Perylene-d12	264	18.815	18.817	(1.000)	266515	2.00000	
78 Indeno(1,2,3-cd)pyrene	276	21.654	21.681	(1.151)	67077	0.50000	0.4559
$ 191 Dibenzo(a,h)anthracene-d14	292	21.550	21.574	(1.145)	49901	0.50000	0.4763
79 Dibenzo(a,h)anthracene	278	21.670	21.691	(1.152)	55222	0.50000	0.4763
80 Benzo(g,h,i)perylene	276	22.787	22.814	(1.211)	59868	0.50000	0 4556

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
99 Perylene	252	18.885	18.890	(1.004)	51516	0.50000	0.4507

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 04211104.d
Lab Smp Id: IC050421
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20110421.b/SIMPNA0421.m
Misc Info: 11-

Calibration Date: 21-APR-2011
Calibration Time: 20:07
Client Smp ID: IC050421
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	276036	138018	552072	285586	3.46
42 Acenaphthene-d10	158527	79264	317054	162508	2.51
59 Phenanthrene-d10	277528	138764	555056	289006	4.14
69 Chrysene-d12	304115	152058	608230	311905	2.56
77 Perylene-d12	257833	128916	515666	266515	3.37

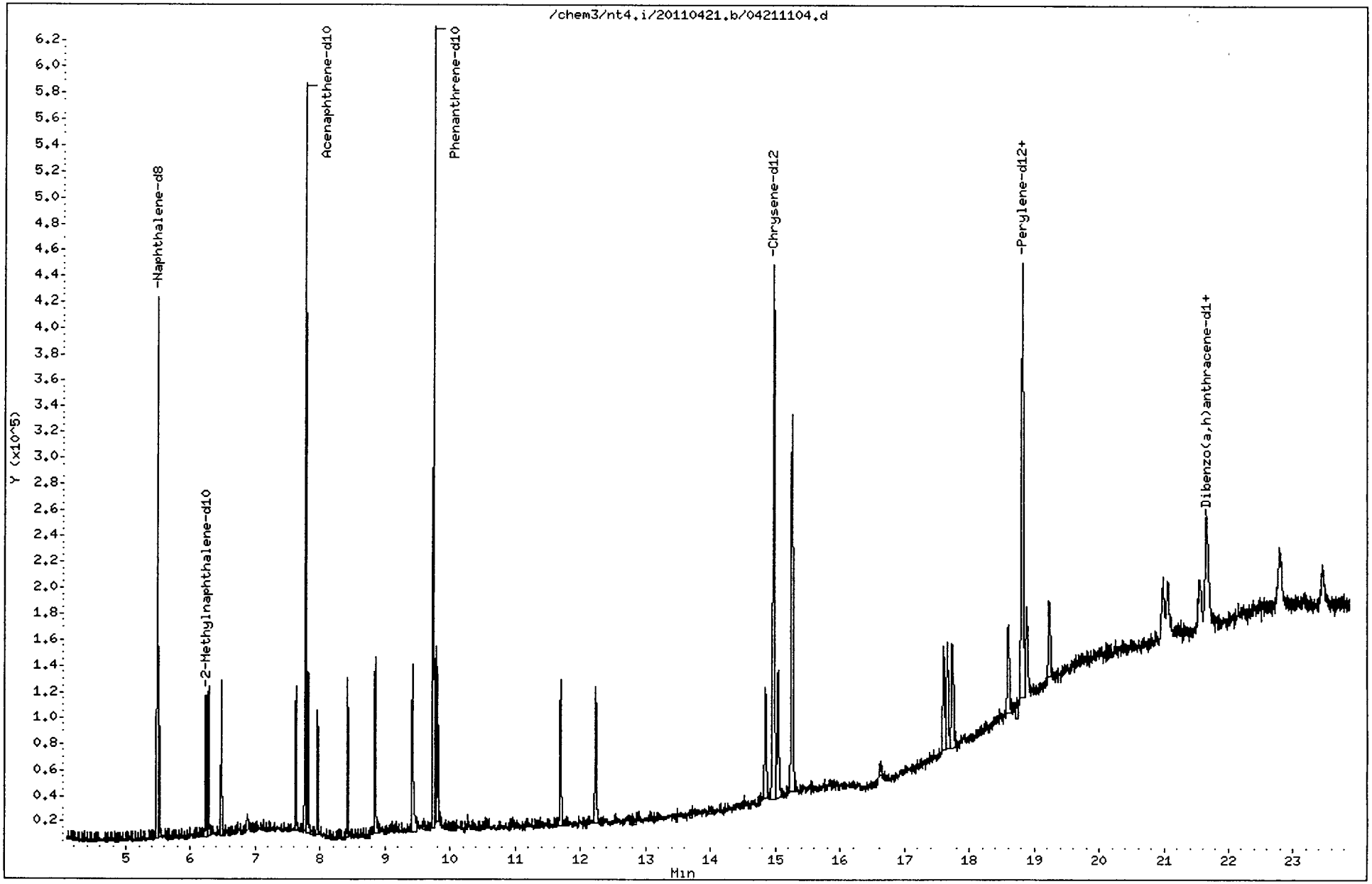
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	5.49	4.99	5.99	5.48	-0.06
42 Acenaphthene-d10	7.77	7.27	8.27	7.77	-0.05
59 Phenanthrene-d10	9.74	9.24	10.24	9.74	-0.07
69 Chrysene-d12	14.98	14.48	15.48	14.97	-0.07
77 Perylene-d12	18.83	18.33	19.33	18.82	-0.07

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

Data File: /chem3/nt4.i/20110421.b/04211104.d
Date : 21-APR-2011 21:02
Client ID: IC050421
Sample Info: IC050421,

Instrument: nt4.i
Operator: JZ
Column diameter: 0.32

Column phase: ZB35



5571.20703

CO-ELUTION SUMMARY FOR FILE - 04211104.d

Lab ID: IC050421, Method: SIMPNA0421.m, Instrument: nt4.i, Date: 21-APR-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20110421.b/04211105.d
Lab Smp Id: IC10421 Client Smp ID: IC10421
Inj Date : 21-APR-2011 21:30
Operator : JZ Inst ID: nt4.i
Smp Info : IC10421,
Misc Info : 11-
Comment : 1ul Injection
Method : /chem3/nt4.i/20110421.b/SIMPNA0421.m
Meth Date : 22-Apr-2011 12:47 jianqing Quant Type: ISTD
Cal Date : 21-APR-2011 21:30 Cal File: 04211105.d
Als bottle: 5 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

04/22/11

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
* 27 Naphthalene-d8	136	5.484	5.484	(1.000)	281575	2.00000	
28 Naphthalene	128	5.512	5 515	(1.005)	120739	1.00000	0.9127
$ 190 2-Methylnaphthalene-d10	152	6.232	6 231	(1.136)	78220	1.00000	0 9643
32 2-Methylnaphthalene	141	6.276	6.275	(1.144)	68296	1.00000	0.9272
105 1-methylnaphthalene	141	6.471	6.474	(1.180)	71121	1.00000	0.9278
40 Acenaphthylene	152	7.626	7.625	(0.982)	126633	1.00000	0.9382
* 42 Acenaphthene-d10	164	7.765	7.764	(1.000)	162334	2.00000	
44 Acenaphthene	153	7.812	7.812	(1.006)	78244	1.00000	0.9381
46 Dibenzofuran	168	7.954	7.957	(1.024)	106757	1.00000	0.9496
49 Fluorene	166	8.418	8.420	(1.084)	89980	1.00000	0.9315
* 59 Phenanthrene-d10	188	9.736	9.739	(1.000)	279365	2.00000	
60 Phenanthrene	178	9.771	9.774	(1.004)	129722	1 00000	0.9190
61 Anthracene	178	9.806	9.808	(1.007)	136084	1.00000	0.9351
64 Fluoranthene	202	11.689	11.698	(1.201)	141048	1.00000	0 9130
65 Pyrene	202	12.231	12 234	(0 817)	140273	1.00000	0.9044
68 Benzo(a)anthracene	228	14.843	14.849	(0.992)	135312	1.00000	0 9413
* 69 Chrysene-d12	240	14.966	14.972	(1.000)	309638	2.00000	
71 Chrysene	228	15.039	15.048	(1.005)	129977	1.00000	0.9240
74 Benzo(b)fluoranthene	252	17.606	17.612	(0.936)	132198	1.00000	0.9551
75 Benzo(k)fluoranthene	252	17.660	17.672	(0.938)	131254	1.00000	0.9179
188 Benzo(j)fluoranthene	252	17.742	17.751	(0 943)	149886	1.00000	1.029
76 Benzo(a)pyrene	252	18.603	18.609	(0.989)	111422	1.00000	0.9159
* 77 Perylene-d12	264	18.818	18.817	(1.000)	250606	2.00000	
78 Indeno(1,2,3-cd)pyrene	276	21.657	21.681	(1.151)	139101	1 00000	1.004
$ 191 Dibenzo(a,h)anthracene-d14	292	21.546	21.574	(1.145)	100153	1.00000	1.011
79 Dibenzo(a,h)anthracene	278	21.669	21.691	(1.152)	114249	1.00000	1.031
80 Benzo(g,h,i)perylene	276	22.789	22 814	(1.211)	115479	1.00000	0.9555

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
99 Perylene	252	18.884	18.890	(1 004)	96711	1.00000	0.9308

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 04211105.d
Lab Smp Id: IC10421
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20110421.b/SIMPNA0421.m
Misc Info: 11-

Calibration Date: 21-APR-2011
Calibration Time: 20:07
Client Smp ID: IC10421
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	276036	138018	552072	281575	2.01
42 Acenaphthene-d10	158527	79264	317054	162334	2.40
59 Phenanthrene-d10	277528	138764	555056	279365	0.66
69 Chrysene-d12	304115	152058	608230	309638	1.82
77 Perylene-d12	257833	128916	515666	250606	-2.80

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	5.49	4.99	5.99	5.48	-0.08
42 Acenaphthene-d10	7.77	7.27	8.27	7.76	-0.06
59 Phenanthrene-d10	9.74	9.24	10.24	9.74	-0.08
69 Chrysene-d12	14.98	14.48	15.48	14.97	-0.09
77 Perylene-d12	18.83	18.33	19.33	18.82	-0.06

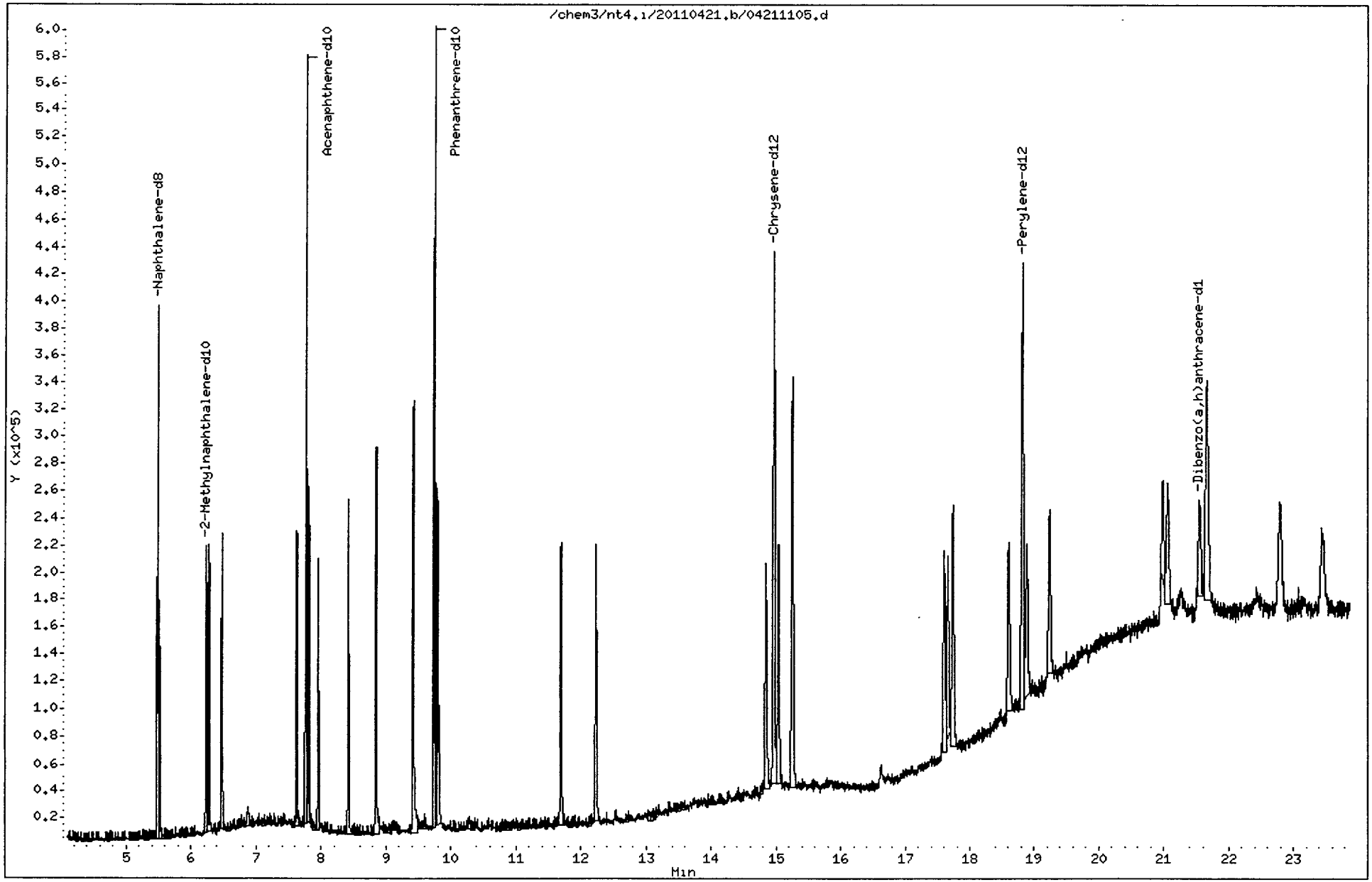
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem3/nt4.i/20110421.b/04211105.d
Date : 21-APR-2011 21:30
Client ID: IC10421
Sample Info: IC10421,

Instrument: nt4.i

Operator: JZ
Column diameter: 0.32

Column phase: ZB35



CO-ELUTION SUMMARY FOR FILE - 04211105.d

Lab ID: IC10421, Method: SIMPNA0421.m, Instrument: nt4.i, Date: 21-APR-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20110421.b/04211102.d
Lab Smp Id: IC250421 Client Smp ID: IC240521
Inj Date : 21-APR-2011 20:07
Operator : JZ Inst ID: nt4.i
Smp Info : IC250421
Misc Info : 11-
Comment : 1ul Injection
Method : /chem3/nt4.i/20110421.b/SIMPNA0421.m
Meth Date : 22-Apr-2011 12:47 jianqing Quant Type: ISTD
Cal Date : 21-APR-2011 20:07 Cal File: 04211102.d
Als bottle: 2 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

04/22/11

AMOUNTS

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
* 27 Naphthalene-d8	136	5.488	5.484	(1.000)	276036	2 00000	
28 Naphthalene	128	5.517	5.515	(1.005)	322066	2.50000	2 488
$ 190 2-Methylnaphthalene-d10	152	6.236	6.231	(1.136)	200342	2.50000	2 514
32 2-Methylnaphthalene	141	6.280	6.275	(1.144)	181377	2.50000	2.509
105 1-methylnaphthalene	141	6.476	6.474	(1.180)	188808	2 50000	2 509
40 Acenaphthylene	152	7.630	7.625	(0.982)	331753	2 50000	2.513
* 42 Acenaphthene-d10	164	7.769	7.764	(1.000)	158527	2 00000	
44 Acenaphthene	153	7.816	7.812	(1.006)	201566	2.50000	2.481
46 Dibenzofuran	168	7.961	7.957	(1.025)	280510	2 50000	2.541
49 Fluorene	166	8.425	8.420	(1.084)	238434	2 50000	2.521
* 59 Phenanthrene-d10	188	9.744	9.739	(1.000)	277528	2 00000	
60 Phenanthrene	178	9.778	9.774	(1.004)	338815	2.50000	2.437
61 Anthracene	178	9.813	9 808	(1.007)	361516	2.50000	2.500
64 Fluoranthene	202	11.703	11.698	(1.201)	374252	2.50000	2.454
65 Pyrene	202	12.242	12.234	(0.817)	384228	2.50000	2.517
68 Benzo(a)anthracene	228	14.857	14.849	(0.992)	365512	2.50000	2.566
* 69 Chrysene-d12	240	14.980	14.972	(1.000)	304115	2.00000	
71 Chrysene	228	15.053	15.048	(1.005)	350487	2.50000	2.528
74 Benzo(b)fluoranthene	252	17.617	17.612	(0.936)	350507	2.50000	2.471
75 Benzo(k)fluoranthene	252	17.674	17.672	(0.939)	356913	2.50000	2.444
188 Benzo(j)fluoranthene	252	17.756	17.751	(0.943)	347847	2 50000	2.363
76 Benzo(a)pyrene	252	18.617	18.609	(0.989)	319561	2.50000	2.540
* 77 Perylene-d12	264	18.828	18.817	(1.000)	257833	2.00000	
78 Indeno(1,2,3-cd)pyrene	276	21.674	21.681	(1.151)	392949	2.50000	2 687
$ 191 Dibenzo(a,h)anthracene-d14	292	21.573	21.574	(1.146)	286754	2.50000	2.728
79 Dibenzo(a,h)anthracene	278	21.680	21.691	(1.151)	321546	2.50000	2.734
80 Benzo(g,h,i)perylene	276	22.806	22.814	(1.211)	324971	2.50000	2.584

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
99 Perylene	252	18.895	18.890	(1 004)	272745	2.50000	2 539

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 04211102.d
Lab Smp Id: IC250421
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20110421.b/SIMPNA0421.m
Misc Info: 11-

Calibration Date: 21-APR-2011
Calibration Time: 20:07
Client Smp ID: IC240521
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	276036	138018	552072	276036	0.00
42 Acenaphthene-d10	158527	79264	317054	158527	0.00
59 Phenanthrene-d10	277528	138764	555056	277528	0.00
69 Chrysene-d12	304115	152058	608230	304115	0.00
77 Perylene-d12	257833	128916	515666	257833	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	5.49	4.99	5.99	5.49	0.00
42 Acenaphthene-d10	7.77	7.27	8.27	7.77	0.00
59 Phenanthrene-d10	9.74	9.24	10.24	9.74	0.00
69 Chrysene-d12	14.98	14.48	15.48	14.98	0.00
77 Perylene-d12	18.83	18.33	19.33	18.83	0.00

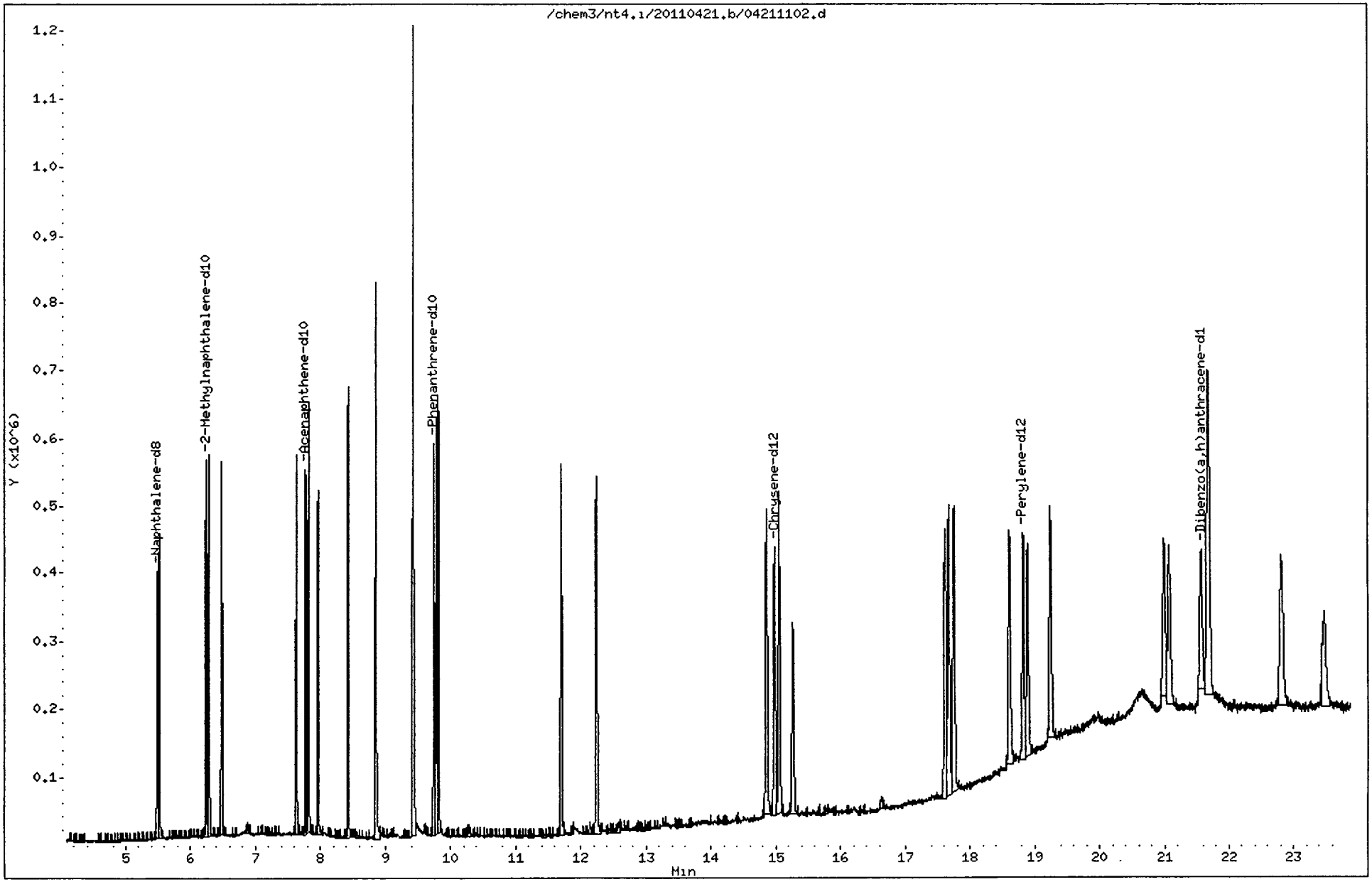
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem3/nt4.i/20110421.b/04211102.d
Date : 21-APR-2011 20:07
Client ID: IC240521
Sample Info: IC250421

Instrument: nt4.i

Operator: JZ
Column diameter: 0.32

Column phase: ZB35



CO-ELUTION SUMMARY FOR FILE - 04211102.d

Lab ID: IC250421, Method: SIMPNA0421.m, Instrument: nt4.i, Date: 21-APR-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20110421.b/04211106.d
Lab Smp Id: IC50421 Client Smp ID: IC50421
Inj Date : 21-APR-2011 21:58
Operator : JZ Inst ID: nt4.i
Smp Info : IC50421,
Misc Info : 11-
Comment : 1ul Injection
Method : /chem3/nt4.i/20110421.b/SIMPNA0421.m
Meth Date : 22-Apr-2011 12:47 jianqing Quant Type: ISTD
Cal Date : 21-APR-2011 21:58 Cal File: 04211106.d
Als bottle: 6 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

04/27/11

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 27 Naphthalene-d8	136	5.486	5 484	(1.000)	308773	2.00000	
28 Naphthalene	128	5.512	5.515	(1.005)	673285	5.00000	4.715
$ 190 2-Methylnaphthalene-d10	152	6.231	6.231	(1.136)	423480	5 00000	4.799
32 2-Methylnaphthalene	141	6.275	6.275	(1.144)	382228	5.00000	4 779
105 1-methylnaphthalene	141	6.471	6.474	(1.179)	395883	5.00000	4.760
40 Acenaphthylene	152	7.622	7.625	(0.982)	689188	5.00000	4.892
* 42 Acenaphthene-d10	164	7.764	7 764	(1.000)	170082	2.00000	
44 Acenaphthene	153	7.811	7.812	(1.006)	420882	5.00000	4.862
46 Dibenzofuran	168	7.956	7.957	(1.025)	585085	5.00000	4.952
49 Fluorene	166	8.420	8 420	(1.085)	500347	5.00000	4.944
* 59 Phenanthrene-d10	188	9 739	9 739	(1.000)	292758	2.00000	
60 Phenanthrene	178	9.773	9 774	(1.004)	707024	5.00000	4.855
61 Anthracene	178	9.808	9.808	(1.007)	734212	5.00000	4.850
64 Fluoranthene	202	11 694	11 698	(1.201)	785791	5.00000	4.906
65 Pyrene	202	12.234	12.234	(0.817)	823140	5.00000	5 085
68 Benzo(a)anthracene	228	14 849	14.849	(0.992)	752320	5.00000	5.002
* 69 Chrysene-d12	240	14.969	14.972	(1.000)	321087	2.00000	
71 Chrysene	228	15.044	15.048	(1.005)	727422	5.00000	4.975
74 Benzo(b)fluoranthene	252	17.609	17.612	(0.936)	756497	5.00000	4.914
75 Benzo(k)fluoranthene	252	17.672	17.672	(0.939)	762786	5.00000	4 833
188 Benzo(j)fluoranthene	252	17.744	17.751	(0.943)	715422	5.00000	4.558
76 Benzo(a)pyrene	252	18.606	18 609	(0.989)	689531	5.00000	5 022
* 77 Perylene-d12	264	18.820	18.817	(1.000)	281010	2 00000	
78 Indeno(1,2,3-cd)pyrene	276	21.665	21.681	(1.151)	831989	5.00000	5 175
$ 191 Dibenzo(a,h)anthracene-d14	292	21.558	21.574	(1.145)	612131	5.00000	5.271
79 Dibenzo(a,h)anthracene	278	21 675	21 691	(1.152)	690491	5.00000	5.304
80 Benzo(g,h,i)perylene	276	22.804	22.814	(1.212)	702126	5.00000	5.098

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
99 Perylene	252	18.889	18.890	(1.004)	577912	5.00000	4.948

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 04211106.d
Lab Smp Id: IC50421
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20110421.b/SIMPNA0421.m
Misc Info: 11-

Calibration Date: 21-APR-2011
Calibration Time: 20:07
Client Smp ID: IC50421
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	276036	138018	552072	308773	11.86
42 Acenaphthene-d10	158527	79264	317054	170082	7.29
59 Phenanthrene-d10	277528	138764	555056	292758	5.49
69 Chrysene-d12	304115	152058	608230	321087	5.58
77 Perylene-d12	257833	128916	515666	281010	8.99

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	5.49	4.99	5.99	5.49	-0.04
42 Acenaphthene-d10	7.77	7.27	8.27	7.76	-0.07
59 Phenanthrene-d10	9.74	9.24	10.24	9.74	-0.05
69 Chrysene-d12	14.98	14.48	15.48	14.97	-0.08
77 Perylene-d12	18.83	18.33	19.33	18.82	-0.04

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

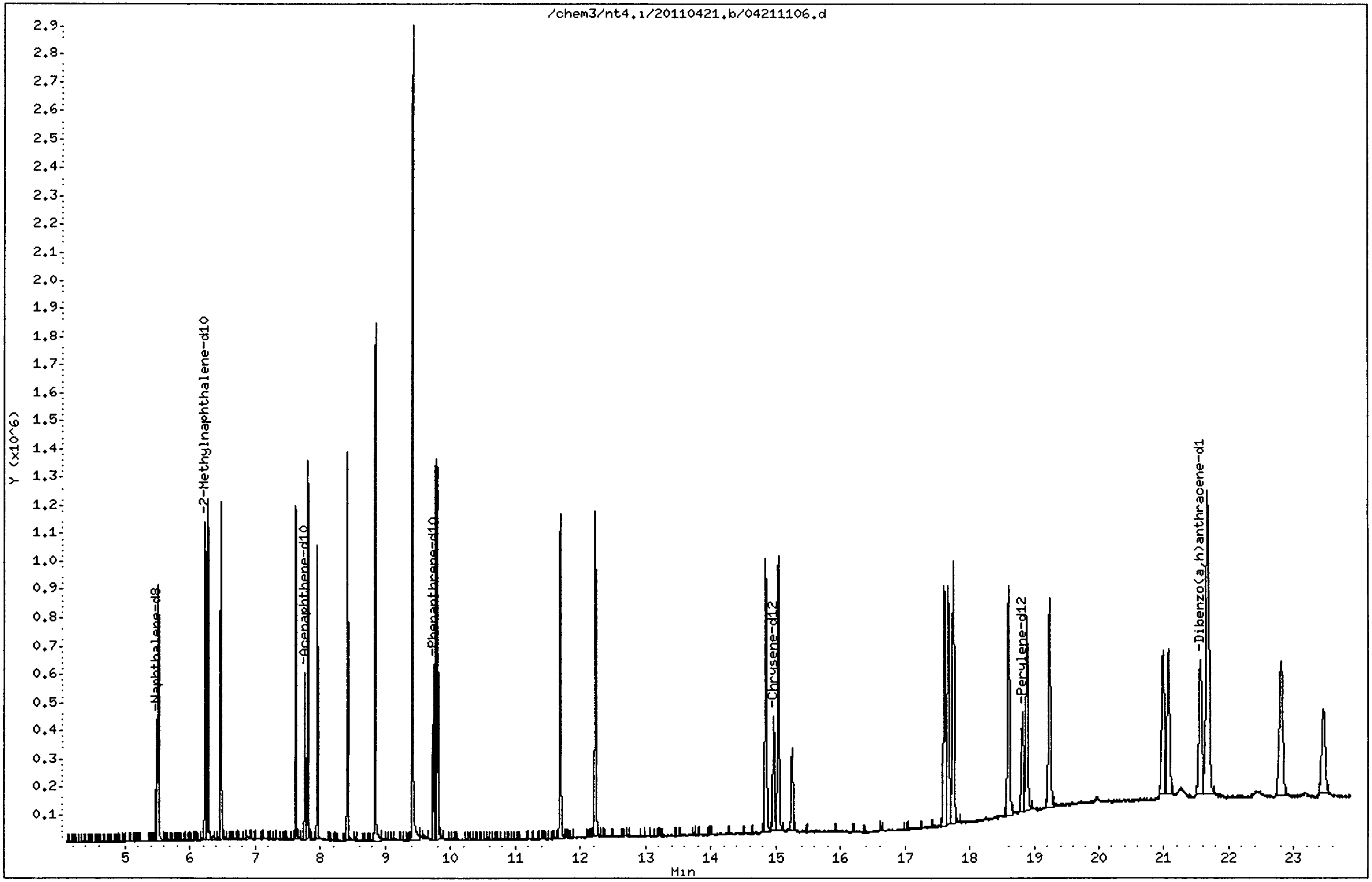
Data File: /chem3/nt4.i/20110421.b/04211106.d
Date : 21-APR-2011 21:58
Client ID: IC50421
Sample Info: IC50421,

Instrument: nt4.i

Operator: JZ

Column phase: ZB35

Column diameter: 0.32



CO-ELUTION SUMMARY FOR FILE - 04211106.d

Lab ID: IC50421, Method: SIMPNA0421.m, Instrument: nt4.i, Date: 21-APR-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20110421.b/04211107.d
Lab Smp Id: IC100421 Client Smp ID: IC100421
Inj Date : 21-APR-2011 22:25
Operator : JZ Inst ID: nt4.i
Smp Info : IC100421,
Misc Info : 11-
Comment : 1ul Injection
Method : /chem3/nt4.i/20110421.b/SIMPNA0421.m
Meth Date : 22-Apr-2011 12:47 jianqing Quant Type: ISTD
Cal Date : 21-APR-2011 22:25 Cal File: 04211107.d
Als bottle: 7 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

04/27/11

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 27 Naphthalene-d8	136	5.484	5.484	(1.000)	330884	2.00000	
28 Naphthalene	128	5.515	5.515	(1.006)	1298466	10.0000	8.705
$ 190 2-Methylnaphthalene-d10	152	6 231	6.231	(1 136)	821155	10.0000	8.879
32 2-Methylnaphthalene	141	6.275	6.275	(1.144)	737075	10.0000	8.805
105 1-methylnaphthalene	141	6.474	6.474	(1 181)	763872	10.0000	8.780
40 Acenaphthylene	152	7.625	7.625	(0.982)	1322910	10.0000	9.175
* 42 Acenaphthene-d10	164	7.764	7.764	(1.000)	176929	2.00000	
44 Acenaphthene	153	7.812	7.812	(1.006)	816424	10 0000	9.209
46 Dibenzofuran	168	7.957	7.957	(1.025)	1130996	10 0000	9 326
49 Fluorene	166	8.420	8.420	(1.085)	979945	10.0000	9.417
* 59 Phenanthrene-d10	188	9.739	9.739	(1.000)	306617	2.00000	
60 Phenanthrene	178	9.774	9.774	(1.004)	1376980	10.0000	9.177
61 Anthracene	178	9.808	9.808	(1.007)	1403980	10.0000	9.027
64 Fluoranthene	202	11.698	11.698	(1 201)	1557959	10 0000	9.400
65 Pyrene	202	12.234	12 234	(0.817)	1577241	10.0000	9.868
68 Benzo(a)anthracene	228	14.849	14.849	(0.992)	1450875	10.0000	9.786
* 69 Chrysene-d12	240	14.972	14.972	(1.000)	317868	2.00000	
71 Chrysene	228	15.048	15.048	(1.005)	1382347	10.0000	9.622
74 Benzo(b)fluoranthene	252	17.612	17.612	(0.936)	1497269	10.0000	9 515
75 Benzo(k)fluoranthene	252	17.672	17.672	(0.939)	1570865	10.0000	9 701
188 Benzo(j)fluoranthene	252	17.751	17 751	(0.943)	1428224	10.0000	8.993
76 Benzo(a)pyrene	252	18.609	18.609	(0.989)	1362715	10.0000	9 679
* 77 Perylene-d12	264	18.817	18.817	(1.000)	290025	2.00000	
78 Indeno(1,2,3-cd)pyrene	276	21.681	21.681	(1.152)	1641355	10.0000	9.909
$ 191 Dibenzo(a,h)anthracene-d14	292	21.574	21.574	(1.147)	1205702	10.0000	10.05
79 Dibenzo(a,h)anthracene	278	21.691	21.691	(1.153)	1341547	10.0000	9.988
80 Benzo(g,h,i)perylene	276	22.814	22.814	(1.212)	1381105	10.0000	9.762

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
99 Perylene	252	18.890	18.890	(1.004)	1136828	10.0000	9.521

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 04211107.d
Lab Smp Id: IC100421
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20110421.b/SIMPNA0421.m
Misc Info: 11-

Calibration Date: 21-APR-2011
Calibration Time: 20:07
Client Smp ID: IC100421
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	276036	138018	552072	330884	19.87
42 Acenaphthene-d10	158527	79264	317054	176929	11.61
59 Phenanthrene-d10	277528	138764	555056	306617	10.48
69 Chrysene-d12	304115	152058	608230	317868	4.52
77 Perylene-d12	257833	128916	515666	290025	12.49

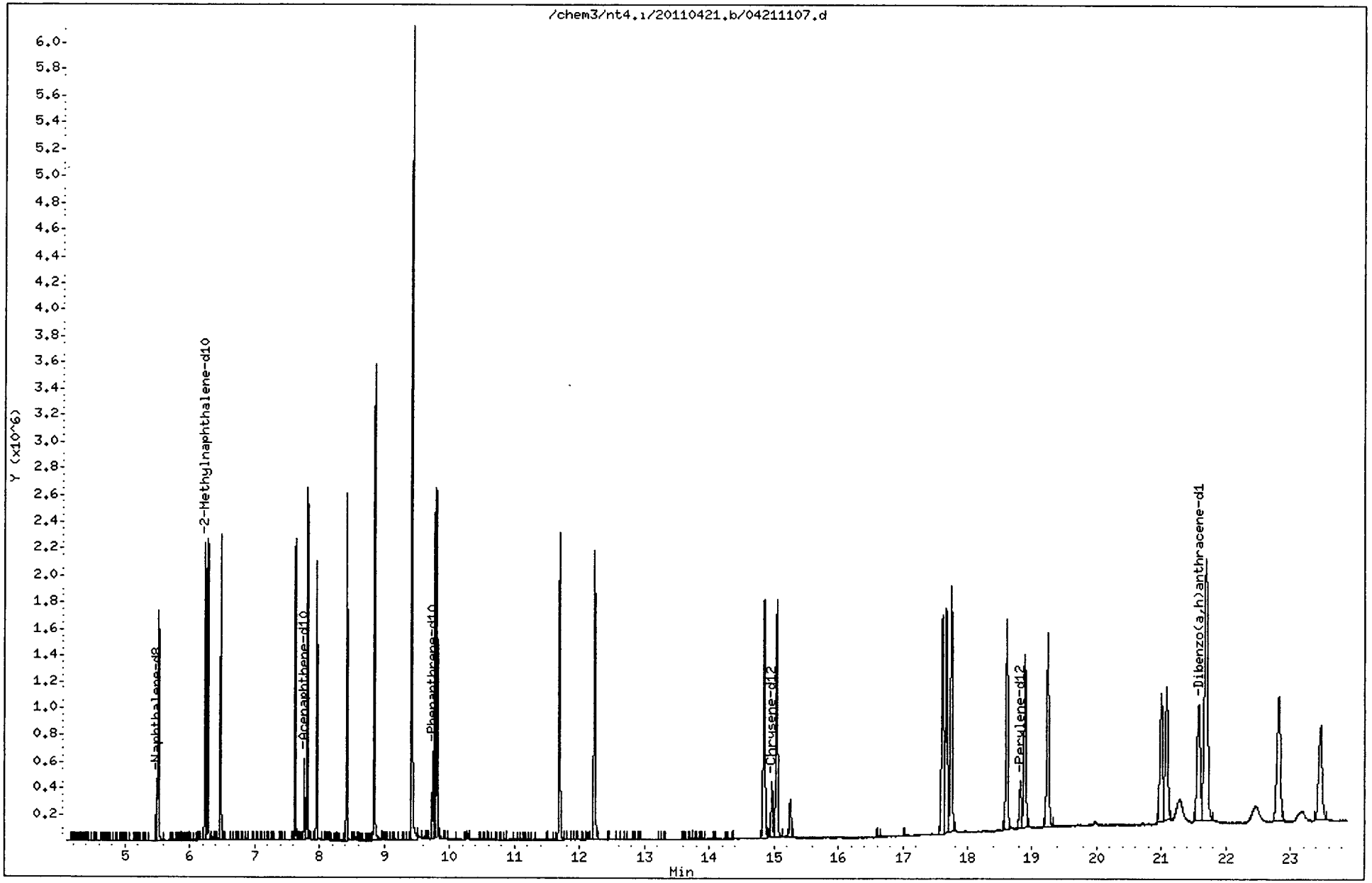
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	5.49	4.99	5.99	5.48	-0.09
42 Acenaphthene-d10	7.77	7.27	8.27	7.76	-0.06
59 Phenanthrene-d10	9.74	9.24	10.24	9.74	-0.05
69 Chrysene-d12	14.98	14.48	15.48	14.97	-0.05
77 Perylene-d12	18.83	18.33	19.33	18.82	-0.06

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

Data File: /chem3/nt4.1/20110421.b/04211107.d
Date : 21-APR-2011 22:25
Client ID: IC100421
Sample Info: IC100421,

Instrument: nt4.1
Operator: JZ
Column diameter: 0.32

Column phase: ZB35



CO-ELUTION SUMMARY FOR FILE - 04211107.d

Lab ID: IC100421, Method: SIMPNA0421.m, Instrument: nt4.i, Date: 21-APR-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20110421.b/04211108.d
Lab Smp Id: ICV0421 Client Smp ID: ICV0421
Inj Date : 21-APR-2011 22:53
Operator : JZ Inst ID: nt4.i
Smp Info : ICV0421,
Misc Info : 11-
Comment : 1ul Injection
Method : /chem3/nt4.i/20110421.b/SIMPNA0421.m
Meth Date : 22-Apr-2011 12:52 jianqing Quant Type: ISTD
Cal Date : 21-APR-2011 22:25 Cal File: 04211107.d
Als bottle: 8 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

04/26/11

CONCENTRATIONS

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
* 27 Naphthalene-d8	136	5.484	5.484	(1.000)	297226	2.00000	
28 Naphthalene	128	5.513	5.515	(1.005)	333639	2.49012	2.490
32 2-Methylnaphthalene	141	6.276	6.275	(1.144)	183549	2.44102	2.441
105 1-methylnaphthalene	141	6.471	6.474	(1 180)	198108	2.53498	2.535
40 Acenaphthylene	152	7.623	7.625	(0.982)	342509	2.38342	2 383
* 42 Acenaphthene-d10	164	7.765	7.764	(1.000)	176343	2.00000	
44 Acenaphthene	153	7.812	7.812	(1.006)	217589	2.46260	2.463
46 Dibenzofuran	168	7.954	7.957	(1.024)	295187	2.44208	2.442
49 Fluorene	166	8.418	8.420	(1.084)	261390	2.52016	2.520(R)
* 59 Phenanthrene-d10	188	9.736	9.739	(1.000)	303675	2.00000	
60 Phenanthrene	178	9.771	9 774	(1.004)	350829	2.36069	2.361
61 Anthracene	178	9.806	9.808	(1.007)	389607	2.52940	2.529
64 Fluoranthene	202	11.692	11 698	(1.201)	386755	2.35603	2.356
65 Pyrene	202	12.231	12.234	(0.817)	395578	2.44656	2.447
68 Benzo(a)anthracene	228	14.846	14.849	(0.992)	373008	2.48708	2.487
* 69 Chrysene-d12	240	14.969	14.972	(1.000)	321553	2.00000	
71 Chrysene	228	15.042	15.048	(1.005)	358126	2.46416	2 464
74 Benzo(b)fluoranthene	252	17.607	17.612	(0.936)	364619	2.60592	2.606
75 Benzo(k)fluoranthene	252	17.666	17.672	(0.939)	369029	2.56286	2.563
188 Benzo(j)fluoranthene	252	Compound Not Detected.					
76 Benzo(a)pyrene	252	18.603	18.609	(0.989)	342593	2.73646	2.736
* 77 Perylene-d12	264	18.818	18.817	(1.000)	257892	2.00000	
78 Indeno(1,2,3-cd)pyrene	276	21.657	21.681	(1.151)	366341	2.48723	2.487
79 Dibenzo(a,h)anthracene	278	21.666	21.691	(1.151)	302636	2.53383	2.534
80 Benzo(g,h,i)perylene	276	22.796	22.814	(1.211)	309618	2.46114	2.461
99 Perylene	252	Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 04211108.d
Lab Smp Id: ICV0421
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20110421.b/SIMPNA0421.m
Misc Info: 11-

Calibration Date: 21-APR-2011
Calibration Time: 20:07
Client Smp ID: ICV0421
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	276036	138018	552072	297226	7.68
42 Acenaphthene-d10	158527	79264	317054	176343	11.24
59 Phenanthrene-d10	277528	138764	555056	303675	9.42
69 Chrysene-d12	304115	152058	608230	321553	5.73
77 Perylene-d12	257833	128916	515666	257892	0.02

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	5.49	4.99	5.99	5.48	-0.08
42 Acenaphthene-d10	7.77	7.27	8.27	7.76	-0.05
59 Phenanthrene-d10	9.74	9.24	10.24	9.74	-0.08
69 Chrysene-d12	14.98	14.48	15.48	14.97	-0.07
77 Perylene-d12	18.83	18.33	19.33	18.82	-0.06

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

Analytical Resources, Inc.

RECOVERY REPORT

Client Name:
Sample Matrix: NONE
Lab Smp Id: ICV0421
Level:
Data Type: MS DATA
SpikeList File: pnalcss.spk
Sublist File: pnax.sub
Method File: /chem3/nt4.i/20110421.b/SIMPNA0421.m
Misc Info: 11-

Client SDG: 20110421
Fraction: SV
Client Smp ID: ICV0421
Operator: JZ
SampleType: LCS
Quant Type: ISTD

SPIKE COMPOUND	AMOUNT ADDED ug/mL	AMOUNT RECOVERED ug/mL	% RECOVERED	LIMITS
28 Naphthalene	2.501	2.490	99.59	
32 2-Methylnaphthalen	2.501	2.441	97.62	
105 1-methylnaphthalen	2.501	2.535	101.38	
40 Acenaphthylene	2.501	2.383	95.32	
44 Acenaphthene	2.501	2.463	98.48	
46 Dibenzofuran	2.501	2.442	97.66	
49 Fluorene	2.501	2.520	100.79*	
60 Phenanthrene	2.501	2.361	94.41	
61 Anthracene	2.501	2.529	101.16	
64 Fluoranthene	2.501	2.356	94.22	
65 Pyrene	2.501	2.447	97.84	
68 Benzo(a)anthracene	2.501	2.487	99.46	
71 Chrysene	2.501	2.464	98.55	
74 Benzo(b)fluoranthe	2.501	2.606	104.22	
75 Benzo(k)fluoranthe	2.501	2.563	102.49	
76 Benzo(a)pyrene	2.501	2.736	109.44	
78 Indeno(1,2,3-cd)py	2.501	2.487	99.47	
79 Dibenzo(a,h)anthra	2.501	2.534	101.33	
80 Benzo(g,h,i)peryle	2.501	2.461	98.43	
99 Perylene	2.501	0.000	NR *	

SURROGATE COMPOUND	AMOUNT ADDED ug/mL	AMOUNT RECOVERED ug/mL	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	1.875	0.01288	0.69	
$ 191 Dibenzo(a,h)anthra	1.875	0.02425	1.29	

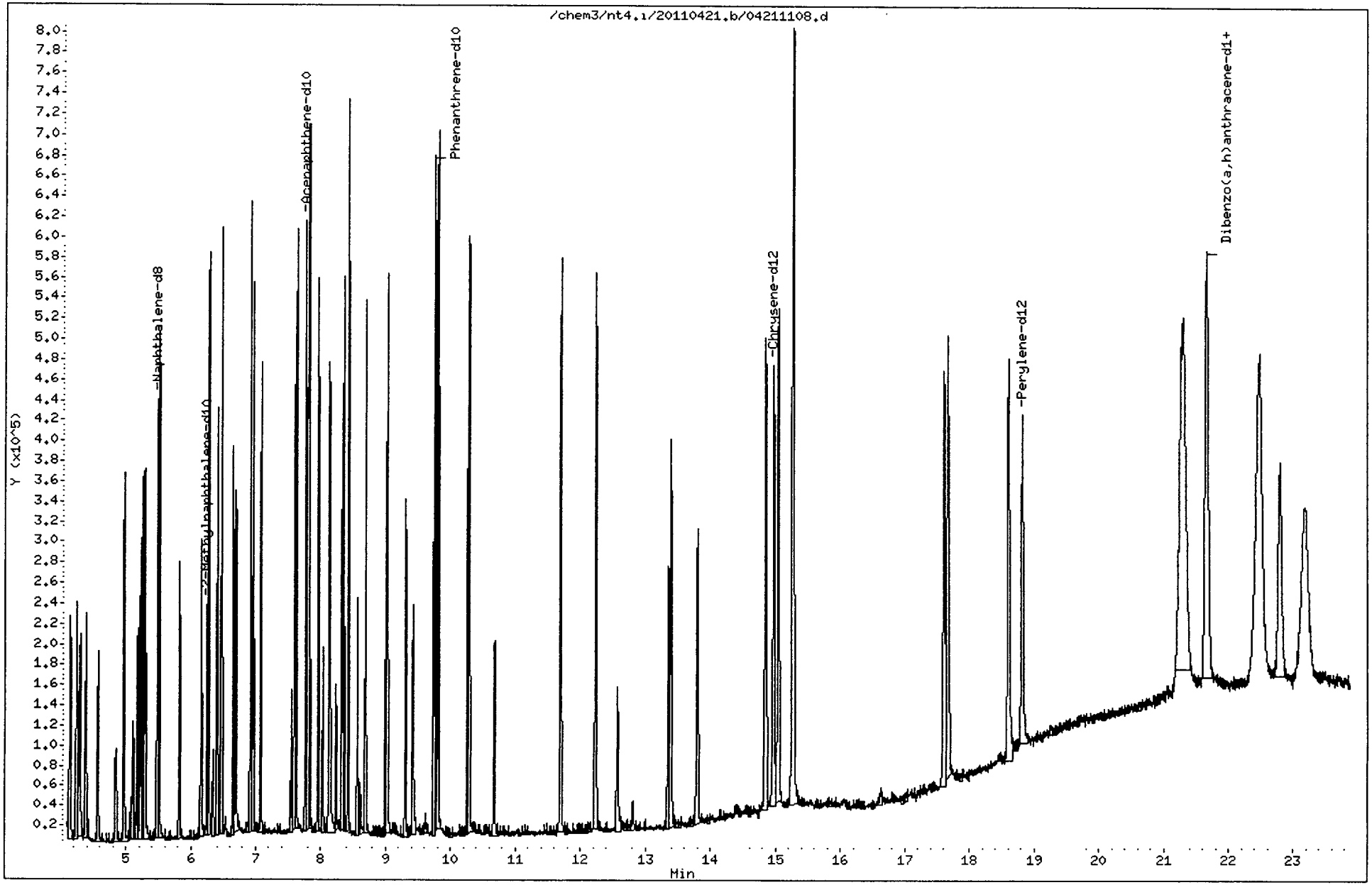
04/27/11

Data File: /chem3/nt4.1/20110421.b/04211108.d
Date : 21-APR-2011 22:53
Client ID: ICV0421
Sample Info: ICV0421,

Column phase: ZB35

Instrument: nt4.1

Operator: JZ
Column diameter: 0.32



CO-ELUTION SUMMARY FOR FILE - 04211108.d

Lab ID: ICV0421, Method: SIMPNA0421.m, Instrument: nt4.i, Date: 21-APR-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

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

ARI Job ID: SS71

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC/MS SVOA Analyst Notes / Corrective Action Log

ARI Project ID: SS71 Client ID: Floyd Snider

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

Parameter(s): SimPNA

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

Curve Date: 4/21/11 Analysis Start Date: 4/27/11

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

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

Sample T + MB/LCS/LCSD

forms included

Additional Details on Reverse: Yes / No

Analyst: _____ **Date:** 04/28/11

Reviewer: _____ **Date:** 4/29/11

Analytical Resources Inc.: Organics Instrument Log

NT-4 Serial No.: GC = US00010849; MS = US72821113

Date: 4/28/11 Analysis: SimPNA Analyst: [illegible]

GC Program: SimPNA35 Column No: 186782 Column Type: ZB-35

Instrument Tune (.U or .CT.): 100716 EM Voltage: 1682

Calibration File: 04280102 Curve Date: 4/21/11

IS/SS	Ical/Ccal	LCS/ICV
1764-5	1818-1	
	1788-3	

INTERNAL STANDARD SUMMARY FOR DATABATCH - /chem3/nt4.i/20110428.b

	Time	Filename	LabID	ClientId	DF										
1	1326	04281101.d	DFTPP0428	DFTPP0428	1	|NO ISTDS FOUND||									
2	1338	04281102 d	CC0428	CC0428	1	| 5 08	285867||	7 34	161572||	9.30	267854||	14.22	267303||	17 97	234539|
3	1406	04281103 d	IC01CHECK	IC01CHECK	1	| 5.08	273148||	7 34	162167||	9 30	262911||	14 21	270004||	17 96	220135|
4	1437	04281104 d	SS21MBW1	SS21MBW1	1	| 5 07	278558||	7 34	158792||	9.30	258914||	14 21	257992||	17 97	226085|
5	1504	04281105 d	SS21A	SS-4-15-2011	1	| 5 07	256207||	7 34	160361||	9 30	264966||	14.21	277373||	17 96	226637|
6	1532	04281106.d	SO75MBS1	SO75MBS1	1	| 5 07	454843||	7 34	272992||	9 30	455821||	14.21	478565||	17 97	401221|
7	1600	04281107 d	SO75LCSS1	SO75LCSS1	1	| 5 07	330109||	7 34	194788||	9.30	321205||	14 21	346848||	17.97	293899|
8	1628	04281108 d	SO75LCSDS1	SO75LCSDS1	1	| 5 07	275986||	7.34	163843||	9 30	277618||	14 21	284436||	17.96	241771|
9	1655	04281109 d	SO75QLS	SO75QLS	1	| 5 07	316274||	7.34	187747||	9 30	317214||	14 21	326802||	17.96	286434|
10	1723	04281110.d	SO75E	HC-WB-SS-002	1	| 5 07	277672||	7 34	165830||	9.30	273608||	14.23	303875||	17 99	266023|
11	1751	04281111.d	SO75F	HC-WB-SS-003	1	| 5 07	285053||	7.34	169887||	9 30	275607||	14 23	296341||	17 98	260253|
12	1818	04281112 d	SO75G 5X	HC-WB-SS-004	5	| 5 08	267448||	7.34	157219||	9.30	246576||	14.22	270907||	17.99	249130|
13	1846	04281113 d	SO75MBS1	SO75MBS1	1	| 5 07	228952||	7 34	138642||	9 30	230790||	14 21	232243||	17 97	209890|
14	1914	04281114 d	SO75G 1X	HC-WB-SS-004	1	| 5 07	2696[illegible]9||	7 34	155641||	9 30	265326||	14.24	289723||	18.03	213355|

IS out (inject [illegible]) NR - Re-[illegible]

[illegible] 04/29/11

Maintenance / Comments

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

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

MANUAL INTEGRATION SUMMARY FOR DATABATCH - /chem3/nt4.i/20110427.b

ARI Job No.: DDT0 Method: ddt.b/sw846ddt.m Instrument: nt4.i Date: 27-APR-2011

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1125	04271101.d	DDT0427	DDT0427	1	4,4'-DDD,
1724	04271107.d	SS71MBW1	SS71MBW1	1	NO MANUAL INTEGRATION
1752	04271108.d	SS71LCSW1	SS71LCSW1	1	NO MANUAL INTEGRATION
1819	04271109.d	SS71LCSDW1	SS71LCSDW1	1	NO MANUAL INTEGRATION
1915	04271111.d	SS71T	LL-ER-0419	1	NO MANUAL INTEGRATION

04/28/11

SS71.xls

Q-FLAG SUMMARY FOR DATABATCH - /chem3/nt4.i/20110428.b

Instrument: nt4.i Date: 28-APR-2011 Method: SIMPNA0421.m

INITIAL CAL: 21-APR-2011

Compound	%RSD or R^2
NO Q-FLAGS	

CONTINUING CAL: 28-APR-2011

Compound	%D
NO Q-FLAGS	

04/28/11

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt4.i
Lab File ID: 04281102.d
Analysis Type:
Lab Sample ID: CC0428
Method: /chem3/nt4.i/20110428.b/SIMPNA0421.m

Injection Date: 28-APR-2011 13:38
Init. Cal. Date(s): 21-APR-2011 21-APR-2011
Init. Cal. Times: 20:07 22:25
Quant Type: ISTD

D 04/28/11

COMPOUND	RRF / AMOUNT	RF2	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
28 Naphthalene	0.90157	0.88167	0.010	-2.20701	20.00000	Averaged
$ 190 2-Methylnaphthalene-d10	0.55901	0.55907	0.010	0.01127	20.00000	Averaged
32 2-Methylnaphthalene	0.50597	0.49017	0.010	-3.12219	20.00000	Averaged
105 1-methylnaphthalene	0.52586	0.51321	0.010	-2.40662	20.00000	Averaged
40 Acenaphthylene	1.62983	1.59265	0.010	-2.28115	20.00000	Averaged
44 Acenaphthene	1.00211	0.97037	0.010	-3.16689	20.00000	Averaged
46 Dibenzofuran	1.37091	1.43115	0.010	4.39369	20.00000	Averaged
49 Fluorene	1.17634	1.18220	0.010	0.49837	20.00000	Averaged
60 Phenanthrene	0.97876	0.97264	0.010	-0 62572	20.00000	Averaged
61 Anthracene	1.01445	0.98705	0.010	-2.70029	20.00000	Averaged
64 Fluoranthene	1.08113	1.03027	0.010	-4.70384	20.00000	Averaged
65 Pyrene	1.00567	1.04949	0.010	4.35788	20.00000	Averaged
68 Benzo(a)anthracene	0.93284	0.93786	0.010	0.53888	20.00000	Averaged
71 Chrysene	0.90395	0.92456	0.010	2.28007	20.00000	Averaged
74 Benzo(b)fluoranthene	1.08510	1.13825	0.010	4.89795	20.00000	Averaged
75 Benzo(k)fluoranthene	1.11668	1.11508	0.010	-0.14249	20.00000	Averaged
188 Benzo(j)fluoranthene	1.09515	1.06060	0.010	-3.15457	20.00000	Averaged
76 Benzo(a)pyrene	0.97092	0.99417	0.010	2.39480	20.00000	Averaged
78 Indeno(1,2,3-cd)pyrene	1.14225	1.18597	0.010	3.82704	20.00000	Averaged
$ 191 Dibenzo(a,h)anthracene-d14	0.82738	0.86284	0.010	4.28586	20.00000	Averaged
79 Dibenzo(a,h)anthracene	0.92626	0.95856	0.010	3.48667	20.00000	Averaged
80 Benzo(g,h,i)perylene	0.97562	1.06955	0.010	9.62701	20.00000	Averaged
99 Perylene	0.82338	0.81516	0.010	-0.99892	20.00000	Averaged

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20110428.b/04281102.d
Lab Smp Id: CC0428 Client Smp ID: CC0428
Inj Date : 28-APR-2011 13:38
Operator : JZ Inst ID: nt4.i
Smp Info : CC0428
Misc Info : 11-
Comment : 1ul Injection
Method : /chem3/nt4.i/20110428.b/SIMPNA0421.m
Meth Date : 28-Apr-2011 14:35 jianqing Quant Type: ISTD
Cal Date : 21-APR-2011 22:25 Cal File: 04211107.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

04/28/11

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
* 27 Naphthalene-d8	136	5.077	5.077	(1.000)	285867	2.00000	
28 Naphthalene	128	5.102	5.102	(1.005)	315051	2.50000	2.445
$ 190 2-Methylnaphthalene-d10	152	5.818	5.818	(1.146)	199775	2.50000	2.500
32 2-Methylnaphthalene	141	5.862	5.862	(1.155)	175155	2.50000	2.422
105 1-methylnaphthalene	141	6.058	6.058	(1.193)	183385	2 50000	2.440
40 Acenaphthylene	152	7.203	7.203	(0.981)	321659	2.50000	2.443
* 42 Acenaphthene-d10	164	7.342	7.342	(1.000)	161572	2.00000	
44 Acenaphthene	153	7 389	7.389	(1.006)	195981	2.50000	2.421
46 Dibenzofuran	168	7.534	7.534	(1.026)	269041	2.50000	2.610
49 Fluorene	166	7.995	7.995	(1.089)	238763	2.50000	2.512
* 59 Phenanthrene-d10	188	9.301	9.301	(1.000)	267854	2.00000	
60 Phenanthrene	178	9.332	9.332	(1.003)	325656	2.50000	2.484
61 Anthracene	178	9.367	9.367	(1.007)	330483	2.50000	2.432
64 Fluoranthene	202	11.108	11.108	(1.194)	344953	2.50000	2.382
65 Pyrene	202	11.610	11.610	(0.817)	350666	2.50000	2.609
68 Benzo(a)anthracene	228	14.098	14.098	(0.992)	313367	2.50000	2.513
* 69 Chrysene-d12	240	14.218	14.218	(1.000)	267303	2.00000	
71 Chrysene	228	14.288	14.288	(1.005)	308923	2.50000	2.557
74 Benzo(b)fluoranthene	252	16.786	16.786	(0.934)	333704	2.50000	2.622
75 Benzo(k)fluoranthene	252	16.843	16.843	(0.937)	326914	2.50000	2.496
188 Benzo(j)fluoranthene	252	16.918	16.918	(0.942)	310941	2.50000	2.421
76 Benzo(a)pyrene	252	17.761	17.761	(0.988)	291464	2.50000	2.560
* 77 Perylene-d12	264	17.969	17.969	(1.000)	234539	2 00000	
78 Indeno(1,2,3-cd)pyrene	276	20.470	20.470	(1.139)	347694	2.50000	2.596
$ 191 Dibenzo(a,h)anthracene-d14	292	20.382	20.382	(1.134)	252962	2.50000	2.607
79 Dibenzo(a,h)anthracene	278	20.483	20.483	(1.140)	281025	2.50000	2.587
80 Benzo(g,h,i)perylene	276	21.429	21.429	(1.193)	313563	2.50000	2.741

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
99 Perylene	252	18.038	18.038	(1.004)	238983	2.50000	2.475

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 04281102.d
Lab Smp Id: CC0428
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20110428.b/SIMPNA0421.m
Misc Info: 11-

Calibration Date: 28-APR-2011
Calibration Time: 12:50
Client Smp ID: CC0428
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	276036	138018	552072	285867	3.56
42 Acenaphthene-d10	158527	79264	317054	161572	1.92
59 Phenanthrene-d10	277528	138764	555056	267854	-3.49
69 Chrysene-d12	304115	152058	608230	267303	-12.10
77 Perylene-d12	257833	128916	515666	234539	-9.03

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	5.08	4.58	5.58	5.08	0.00
42 Acenaphthene-d10	7.34	6.84	7.84	7.34	0.00
59 Phenanthrene-d10	9.30	8.80	9.80	9.30	0.00
69 Chrysene-d12	14.22	13.72	14.72	14.22	0.00
77 Perylene-d12	17.97	17.47	18.47	17.97	0.00

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

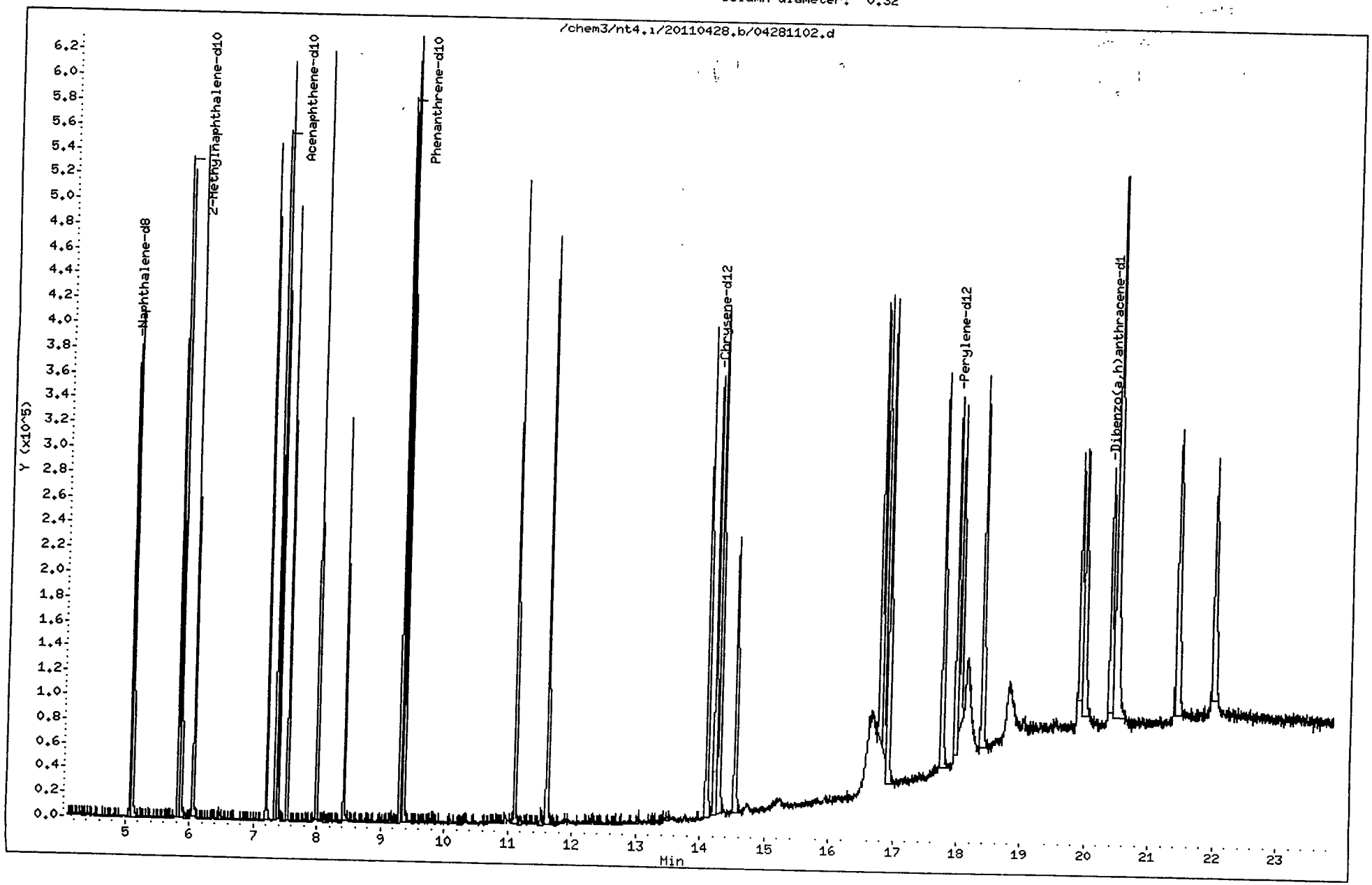
Data File: /chem3/nt4.i/20110428.b/04281102.d
Date : 28-APR-2011 13:38
Client ID: CC0428
Sample Info: CC0428

Instrument: nt4.i

Operator: JZ
Column diameter: 0.32

Column phase: ZB35

SS71 08719



CO-ELUTION SUMMARY FOR FILE - 04281102.d

Lab ID: CC0428, Method: SIMPNA0421.m, Instrument: nt4.i, Date: 28-APR-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Data File: /chem3/nt4.i/20110428.b/tune.b/04281101.d

Date : 28-APR-2011 13:26

Client ID: DFTPP0428

Instrument: nt4.i

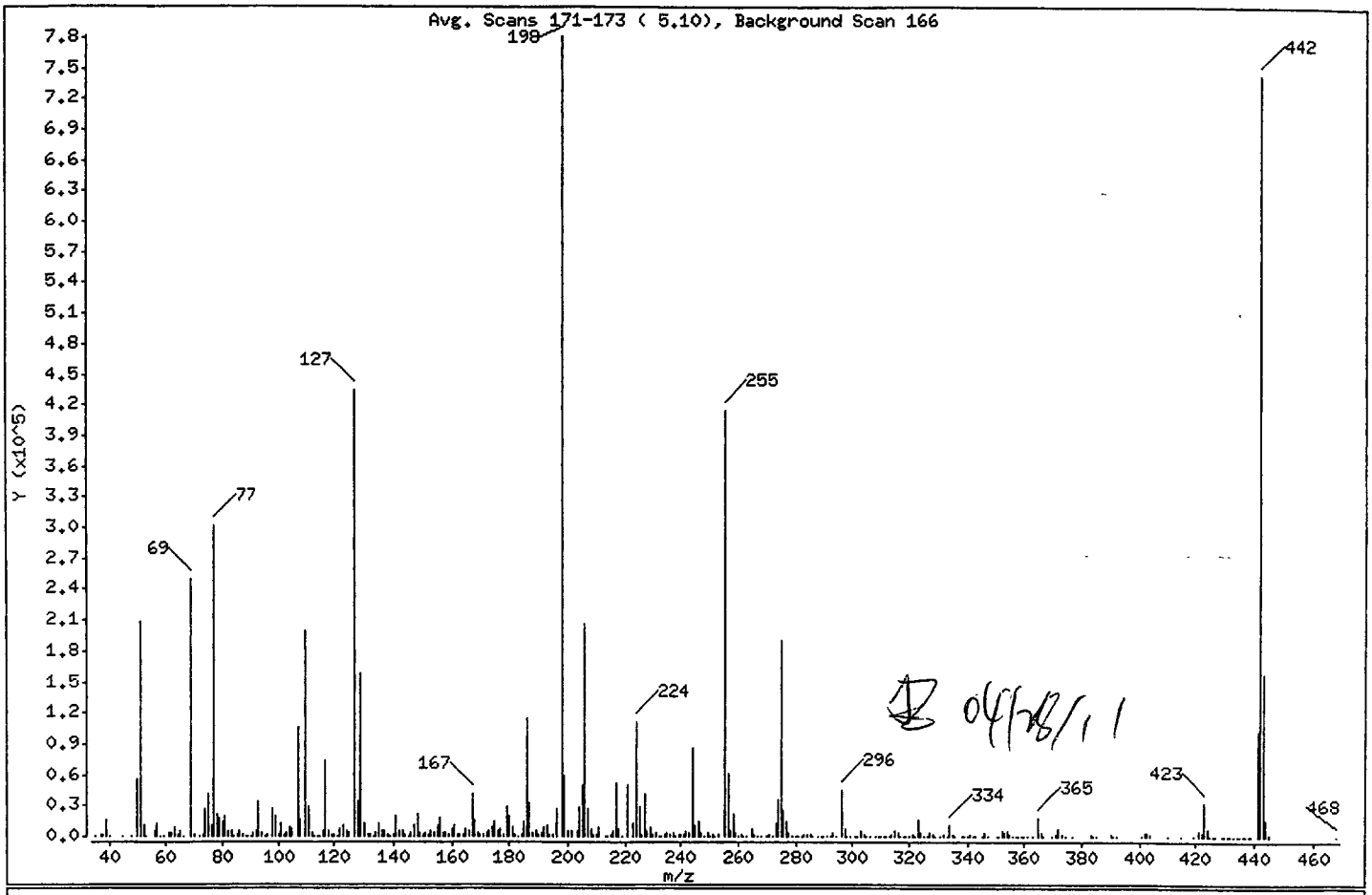
Sample Info: DFTPP0428

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.32

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	26.70
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	31.92
70	Less than 2.00% of mass 69	0.13 (0.41)
127	10.00 - 80.00% of mass 198	55.70
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	7.54
275	10.00 - 60.00% of mass 198	24.37
365	Greater than 1.00% of mass 198	2.32
441	0.01 - 24.00% of mass 442	13.02 (13.69)
442	50.00 - 200.00% of mass 198	95.06
443	15.00 - 24.00% of mass 442	20.23 (21.28)

Data File: /chem3/nt4.i/20110428.b/tune.b/04281101.d

Date : 28-APR-2011 13:26

Client ID: DFTPP0428

Instrument: nt4.i

Sample Info: DFTPP0428

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.32

Data File: 04281101.d
Spectrum: Avg. Scans 171-173 (5.10), Background Scan 166
Location of Maximum: 198.00
Number of points: 340

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	64	139.00	522	230.00	1142	323.00	16384
37.00	984	140.00	1976	231.00	4378	324.00	3105
38.00	2436	141.00	19784	232.00	421	325.00	218
39.00	15923	142.00	6072	233.00	881	326.00	203
40.00	705	143.00	4674	234.00	2570	327.00	2935
45.00	420	144.00	1389	235.00	3244	328.00	1373
48.00	98	145.00	873	236.00	2232	329.00	222
50.00	56120	146.00	3555	237.00	3609	331.00	111
51.00	208704	147.00	10075	238.00	490	332.00	1265
52.00	10869	148.00	20768	239.00	1851	333.00	867
53.00	354	149.00	4396	240.00	1254	334.00	9982
56.00	6072	150.00	1316	241.00	2417	335.00	2208
57.00	13361	151.00	2723	242.00	6030	336.00	311
58.00	802	152.00	1080	243.00	3656	338.00	87
59.00	47	153.00	5662	244.00	86488	339.00	116
61.00	2909	154.00	4446	245.00	11113	340.00	199
62.00	3572	155.00	10784	246.00	14943	341.00	1591
63.00	9666	156.00	17560	247.00	3397	342.00	566
64.00	1221	157.00	3414	248.00	830	343.00	142
65.00	4860	158.00	3446	249.00	3238	345.00	64
66.00	352	159.00	2588	250.00	659	346.00	3106
69.00	249472	160.00	6484	251.00	954	347.00	620
70.00	1032	161.00	9996	252.00	888	350.00	268
72.00	120	162.00	2606	253.00	1882	351.00	391
73.00	1833	163.00	999	255.00	414336	352.00	4580
74.00	26152	164.00	1156	256.00	61664	353.00	3256
75.00	42192	165.00	6907	257.00	4765	354.00	4892
76.00	11469	166.00	5653	258.00	21328	355.00	1434
77.00	301248	167.00	40624	259.00	3542	356.00	154
78.00	21680	168.00	16608	260.00	779	357.00	255
79.00	18368	169.00	2978	261.00	1062	358.00	82
80.00	14947	170.00	1253	262.00	149	359.00	515
81.00	20656	171.00	1467	263.00	312	360.00	148
82.00	5384	172.00	3345	265.00	7831	361.00	223
83.00	4764	173.00	4717	266.00	1450	363.00	424

Data File: /chem3/nt4.i/20110428.b/tune.b/04281101.d

Date : 28-APR-2011 13:26

Client ID: DFTPP0428 Instrument: nt4.i

Sample Info: DFTPP0428

Operator: JZ

Column phase: ZB-5msi Column diameter: 0.32

Data File: 04281101.d

Spectrum: Avg. Scans 171-173 (5.10), Background Scan 166

Location of Maximum: 198.00

Number of points: 340

m/z	Y	m/z	Y	m/z	Y	m/z	Y
84.00	74	174.00	8582	267.00	9	365.00	18136
85.00	2132	175.00	14590	268.00	203	366.00	2901
86.00	5328	176.00	5235	270.00	278	367.00	163
87.00	2454	177.00	6959	271.00	1026	370.00	561
88.00	729	178.00	2260	272.00	842	371.00	1201
89.00	451	179.00	28544	273.00	13215	372.00	7668
90.00	56	180.00	20032	274.00	35928	373.00	2319
91.00	4330	181.00	9650	275.00	190464	374.00	297
92.00	5693	182.00	1614	276.00	25600	377.00	195
93.00	33920	183.00	804	277.00	14557	383.00	1895
94.00	2848	184.00	2225	278.00	2949	384.00	522
95.00	539	185.00	14002	279.00	635	385.00	209
96.00	1510	186.00	114392	280.00	164	390.00	1216
98.00	26640	187.00	32880	281.00	293	391.00	731
99.00	20152	188.00	3717	282.00	410	392.00	676
100.00	1858	189.00	6245	283.00	1671	401.00	361
101.00	13044	190.00	1253	284.00	1077	402.00	2973
102.00	1131	191.00	3314	285.00	2586	403.00	4297
103.00	4431	192.00	8803	286.00	585	404.00	1820
104.00	8769	193.00	10116	288.00	187	405.00	315
105.00	7519	194.00	2072	289.00	612	410.00	76
107.00	106392	195.00	1210	290.00	426	415.00	228
108.00	16744	196.00	27216	291.00	410	419.00	147
110.00	198848	198.00	781632	292.00	487	421.00	4529
111.00	29288	199.00	58944	293.00	3635	422.00	3962
112.00	3524	200.00	4770	294.00	801	423.00	31928
113.00	873	201.00	5202	296.00	44184	424.00	6644
114.00	275	203.00	4962	297.00	6616	425.00	836
115.00	179	204.00	28416	298.00	404	426.00	183
116.00	6169	205.00	50168	299.00	281	427.00	131
117.00	73872	206.00	207360	301.00	799	429.00	71
118.00	6060	207.00	27816	302.00	543	430.00	110
119.00	987	208.00	6383	303.00	5802	431.00	148
120.00	1522	209.00	1866	304.00	1568	432.00	52
121.00	223	210.00	2026	305.00	162	433.00	237

Data File: /chem3/nt4.i/20110428.b/tune.b/04281101.d

Date : 28-APR-2011 13:26

Client ID: DFTPP0428

Instrument: nt4.i

Sample Info: DFTPP0428

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.32

Data File: 04281101.d

Spectrum: Avg. Scans 171-173 (5.10), Background Scan 166

Location of Maximum: 198.00

Number of points: 340

m/z	Y	m/z	Y	m/z	Y	m/z	Y
122.00	7033	211.00	8129	306.00	55	434.00	399
123.00	10074	213.00	591	308.00	814	435.00	125
124.00	4601	214.00	295	309.00	554	436.00	454
125.00	3970	215.00	2158	310.00	630	437.00	526
127.00	435392	216.00	4771	311.00	82	438.00	626
128.00	33720	217.00	51640	312.00	241	439.00	855
129.00	157248	218.00	6763	313.00	554	441.00	101744
130.00	13010	219.00	586	314.00	2285	442.00	743040
131.00	2685	221.00	50944	315.00	5306	443.00	158144
132.00	1147	223.00	12351	316.00	2876	444.00	15412
133.00	471	224.00	110776	317.00	628	445.00	1020
134.00	4454	225.00	28592	318.00	107	468.00	66
135.00	12521	226.00	1015	319.00	150		
136.00	4880	227.00	41792	320.00	172		
137.00	5602	228.00	5773	321.00	1636		
138.00	1464	229.00	9473	322.00	723		

Data File: /chem3/nt4.i/20110428.b/tune.b/04281101.d

Date : 28-APR-2011 13:26

Client ID: DFTPP0428

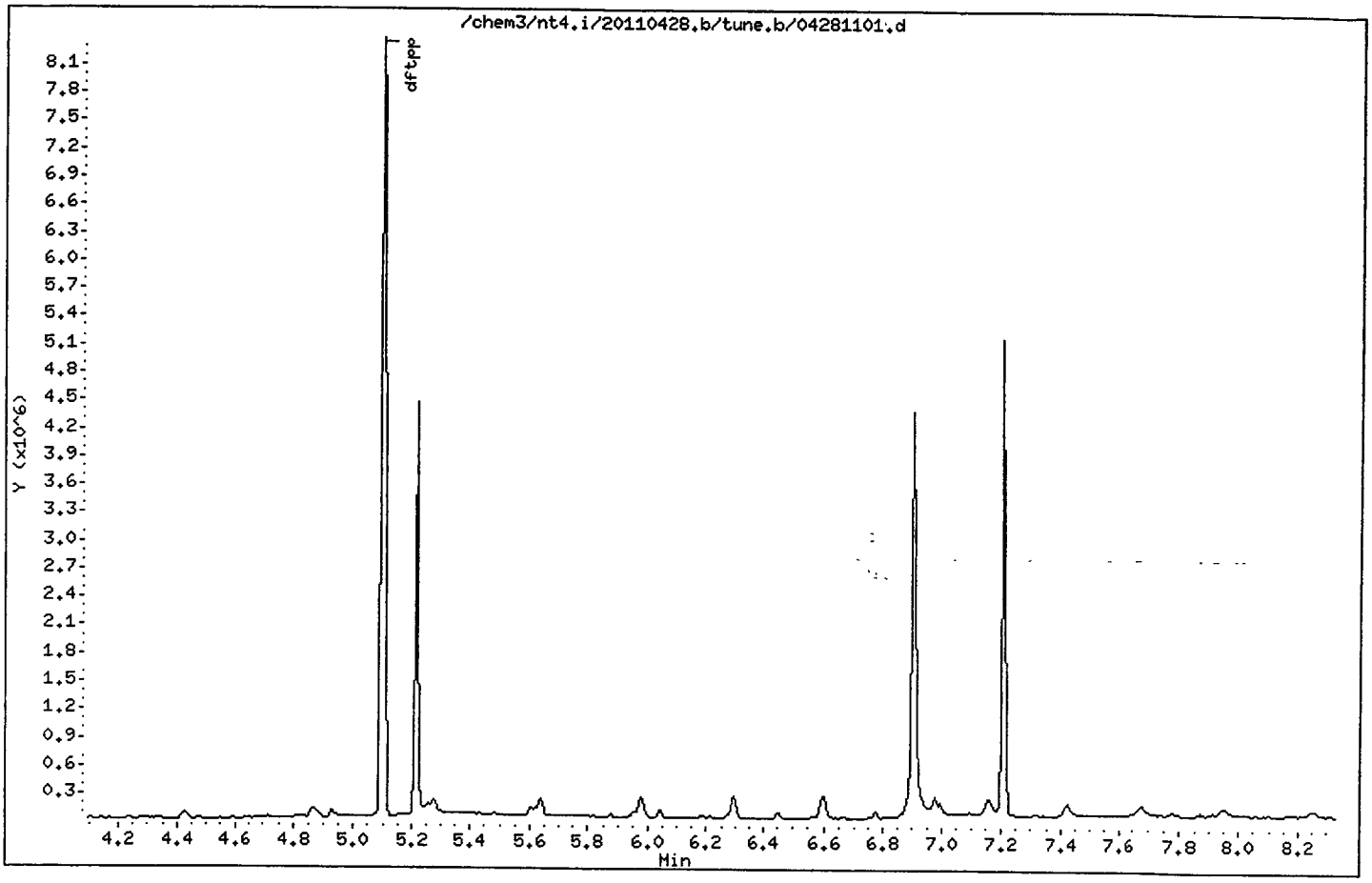
Instrument: nt4.i

Sample Info: DFTPP0428

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.32



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

Data file: /chem3/nt4.i/20110428.b/ddt.b/04281101.d ARI ID: DDT0428
Method: /chem3/nt4.i/20110428.b/ddt.b/sw846ddt.m Misc: 11-
Analysis Date: 28-APR-2011 13:26 Instrument: nt4.i

COMPOUND	RT	AREA
Pentachlorophenol	5.217	431718
Benzidine	6.903	1832381
4,4'-DDE	----	----
4,4'-DDD	6.979	37904
4,4'-DDT	7.208	877102

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

$$\text{DDT Percent Breakdown} = \frac{(0 + 37904) * 100}{(0 + 37904 + 877102)}$$

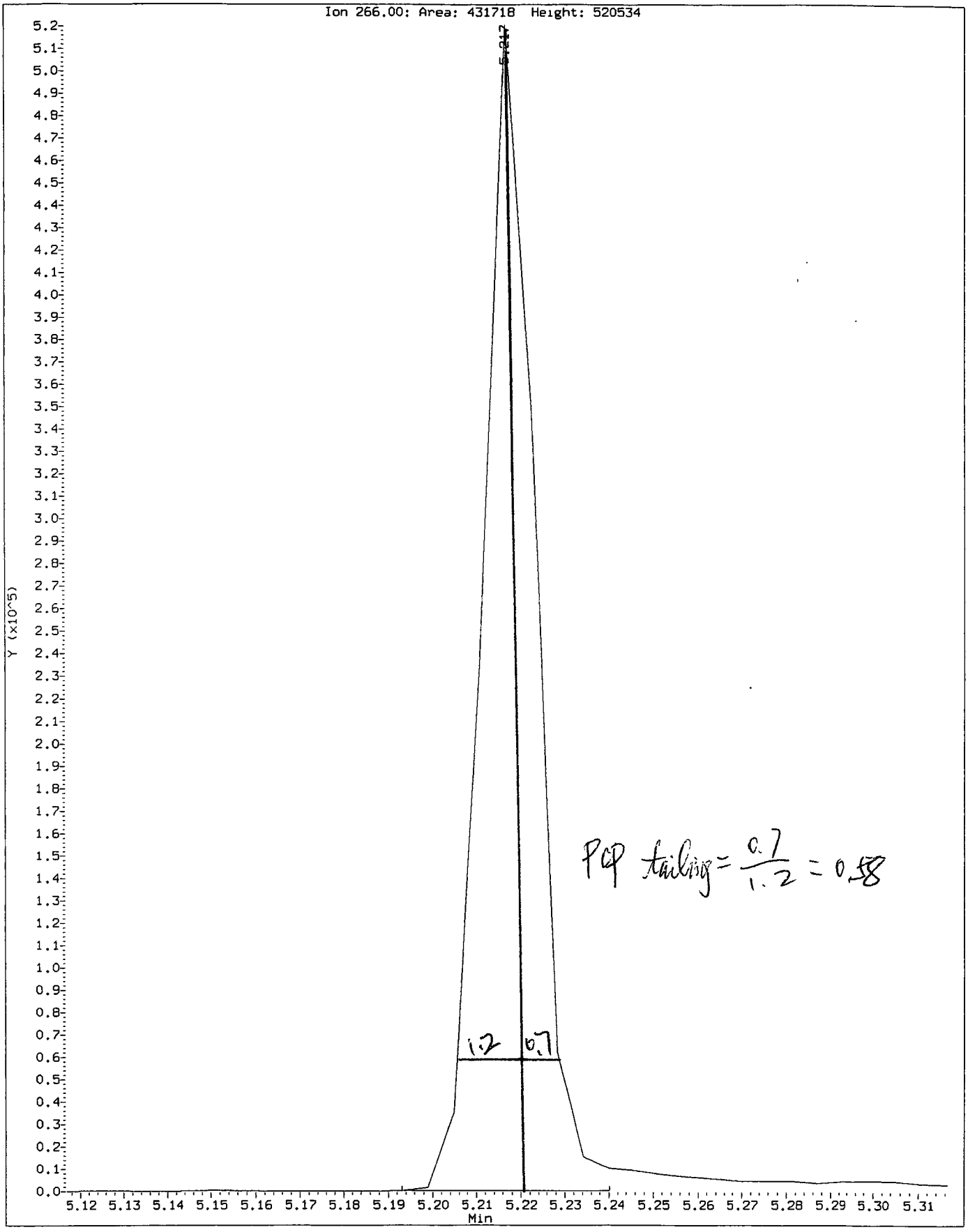
DDT Percent Breakdown = 4.1 %

04/28/11

SS71 : 00747

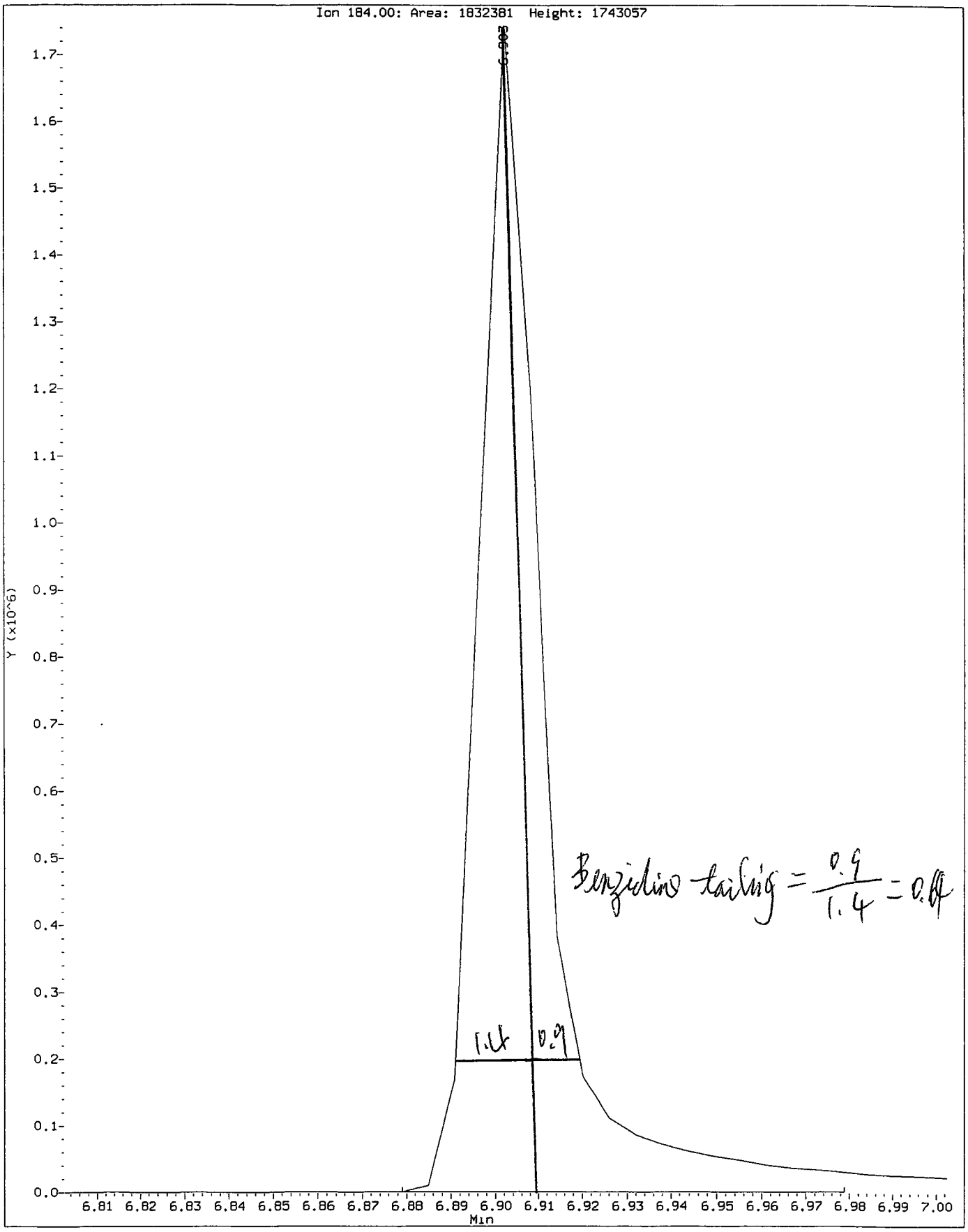
Data File: /chem3/nt4.i/20110428.b/ddt.b/04281101.d
Injection Date: 28-APR-2011 13:26
Instrument: nt4.i
Client Sample ID: DDT0428

Compound: Pentachlorophenol
CAS Number: 87-86-5



Data File: /chem3/nt4.i/20110428.b/ddt.b/04281101.d
Injection Date: 28-APR-2011 13:26
Instrument: nt4.i
Client Sample ID: DDT0428

Compound: Benzidine
CAS Number:



Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20110427.b/04271107.d
Lab Smp Id: SS71MBW1 Client Smp ID: SS71MBW1
Inj Date : 27-APR-2011 17:24
Operator : JZ Inst ID: nt4.i
Smp Info : SS71MBW1,
Misc Info : 11-8673
Comment : 1ul Injection
Method : /chem3/nt4.i/20110427.b/SIMPNA0421.m
Meth Date : 28-Apr-2011 18:38 jianqing Quant Type: ISTD
Cal Date : 21-APR-2011 22:25 Cal File: 04211107.d
Als bottle: 7 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Vo	500.00000	Volume of sample extracted (mL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
* 27 Naphthalene-d8	136	5.163	5.174	(1.000)	232939	2.00000	
28 Naphthalene	128	Compound Not Detected.					
$ 190 2-Methylnaphthalene-d10	152	5.908	5.915	(1.144)	133112	2.04451	2.045
32 2-Methylnaphthalene	141	Compound Not Detected.					
105 1-methylnaphthalene	141	Compound Not Detected.					
40 Acenaphthylene	152	Compound Not Detected.					
* 42 Acenaphthene-d10	164	7.434	7.442	(1.000)	143495	2.00000	
44 Acenaphthene	153	Compound Not Detected.					
46 Dibenzofuran	168	Compound Not Detected.					
49 Fluorene	166	Compound Not Detected.					
* 59 Phenanthrene-d10	188	9.393	9.404	(1.000)	237941	2.00000	
60 Phenanthrene	178	Compound Not Detected.					
61 Anthracene	178	Compound Not Detected.					
64 Fluoranthene	202	Compound Not Detected.					
65 Pyrene	202	Compound Not Detected.					
68 Benzo(a)anthracene	228	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
* 69 Chrysene-d12	240	14.383	14.401	(1.000)	240655	2.00000	
71 Chrysene	228	Compound Not Detected.					
74 Benzo(b)fluoranthene	252	Compound Not Detected.					
75 Benzo(k)fluoranthene	252	Compound Not Detected.					
188 Benzo(j)fluoranthene	252	Compound Not Detected.					
76 Benzo(a)pyrene	252	Compound Not Detected.					
* 77 Perylene-d12	264	18.162	18.173	(1.000)	202907	2.00000	
78 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
$ 191 Dibenzo(a,h)anthracene-d14	292	20.629	20.650	(1.136)	195205	2.32553	2.326
79 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
80 Benzo(g,h,i)perylene	276	Compound Not Detected.					
99 Perylene	252	Compound Not Detected.					

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 04271107.d
Lab Smp Id: SS71MBW1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20110427.b/SIMPNA0421.m
Misc Info: 11-8673

Calibration Date: 27-APR-2011
Calibration Time: 15:00
Client Smp ID: SS71MBW1
Level: LOW
Sample Type: Liquid

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	276036	138018	552072	232939	-15.61
42 Acenaphthene-d10	158527	79264	317054	143495	-9.48
59 Phenanthrene-d10	277528	138764	555056	237941	-14.26
69 Chrysene-d12	304115	152058	608230	240655	-20.87
77 Perylene-d12	257833	128916	515666	202907	-21.30

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	5.17	4.67	5.67	5.16	-0.21
42 Acenaphthene-d10	7.44	6.94	7.94	7.43	-0.11
59 Phenanthrene-d10	9.40	8.90	9.90	9.39	-0.12
69 Chrysene-d12	14.40	13.90	14.90	14.38	-0.12
77 Perylene-d12	18.17	17.67	18.67	18.16	-0.06

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

Analytical Resources, Inc.

RECOVERY REPORT

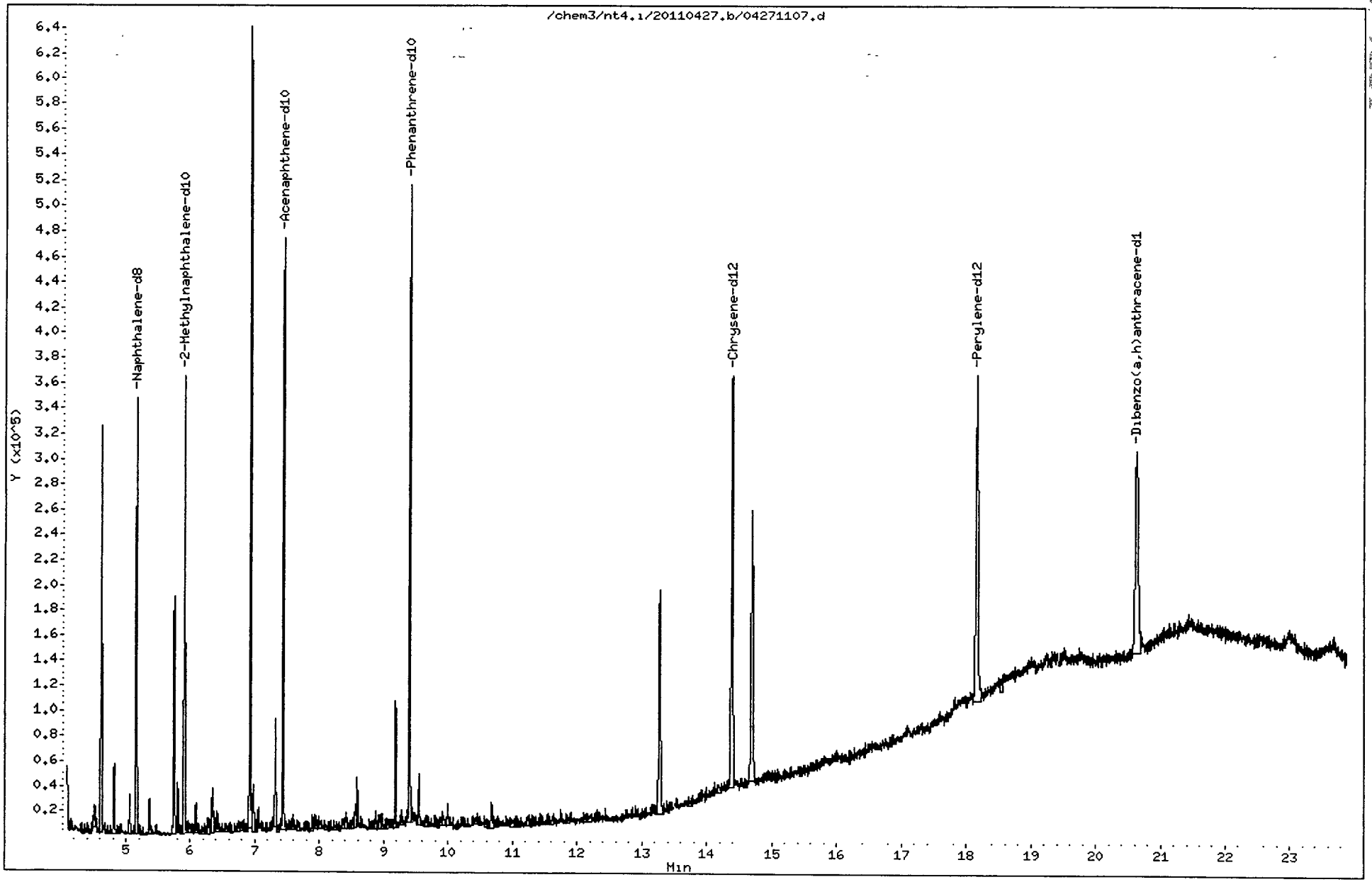
Client Name: Floyd Snider
Sample Matrix: LIQUID
Lab Smp Id: SS71MBW1
Level: LOW
Data Type: MS DATA
SpikeList File: pnalcss.spk
Sublist File: pnax.sub
Method File: /chem3/nt4.i/20110427.b/SIMPNA0421.m
Misc Info: 11-8673

Client SDG: SS71
Fraction: SV
Client Smp ID: SS71MBW1
Operator: JZ
SampleType: BLANK
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	3.000	2.045	68.15	30-106
$ 191 Dibenzo(a,h)anthra	3.000	2.326	77.52	10-130

Data File: /chem3/nt4.i/20110427.b/04271107.d
Date : 27-APR-2011 17:24
Client ID: SS71MBW1
Sample Info: SS71MBW1,
Volume Injected (uL): 1.0
Column phase: ZB35

Instrument: nt4.i
Operator: JZ
Column diameter: 0.32



CO-ELUTION SUMMARY FOR FILE - 04271107.d

Lab ID: SS71MBW1, Method: SIMPNA0421.m, Instrument: nt4.i, Date: 27-APR-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20110427.b/04271108.d
Lab Smp Id: SS71LCSW1 Client Smp ID: SS71LCSW1
Inj Date : 27-APR-2011 17:52
Operator : JZ Inst ID: nt4.i
Smp Info : SS71LCSW1,
Misc Info : 11-8673
Comment : 1ul Injection
Method : /chem3/nt4.i/20110427.b/SIMPNA0421.m
Meth Date : 28-Apr-2011 18:38 jianqing Quant Type: ISTD
Cal Date : 21-APR-2011 22:25 Cal File: 04211107.d
Als bottle: 8 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Vo	500.00000	Volume of sample extracted (mL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
* 27 Naphthalene-d8	136	5.161	5.174	(1.000)	246394	2.00000	
28 Naphthalene	128	5.190	5.199	(1.005)	205991	1.85460	1.855
$ 190 2-Methylnaphthalene-d10	152	5.906	5.915	(1.144)	141476	2.05430	2.054
32 2-Methylnaphthalene	141	5.950	5.960	(1.153)	122097	1.95876	1.959
105 1-methylnaphthalene	141	6.145	6.155	(1.191)	128289	1.98024	1.980
40 Acenaphthylene	152	7.294	7.303	(0.981)	212605	1.75435	1.754
* 42 Acenaphthene-d10	164	7.436	7.442	(1.000)	148712	2.00000	
44 Acenaphthene	153	7.480	7.489	(1.006)	153533	2.06049	2.060
46 Dibenzofuran	168	7.625	7.635	(1.025)	226389	2.22090	2.221
49 Fluorene	166	8.085	8.095	(1 087)	193690	2.21441	2.214
* 59 Phenanthrene-d10	188	9.394	9.404	(1.000)	252927	2.00000	
60 Phenanthrene	178	9.429	9.436	(1.004)	293179	2.36859	2.369
61 Anthracene	178	9.461	9.470	(1.007)	257556	2.00760	2.008
64 Fluoranthene	202	11.237	11.246	(1.196)	342045	2.50174	2.502
65 Pyrene	202	11.745	11.757	(0.816)	345669	2.64364	2.644
68 Benzo(a)anthracene	228	14.262	14.278	(0.991)	307178	2.53269	2.533

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
* 69 Chrysene-d12	240	14.385	14.401	(1.000)	260036	2.00000	
71 Chrysene	228	14.454	14.467	(1.005)	317181	2.69872	2.699
74 Benzo(b)fluoranthene	252	16.968	16.984	(0.934)	313740	2.71542	2.715
75 Benzo(k)fluoranthene	252	17.025	17.041	(0.937)	320888	2.69875	2.699
188 Benzo(j)fluoranthene	252	Compound Not Detected.					
76 Benzo(a)pyrene	252	17.956	17.965	(0.989)	226089	2.18693	2.187
* 77 Perylene-d12	264	18.164	18.173	(1.000)	212958	2.00000	
78 Indeno(1,2,3-cd)pyrene	276	20.725	20.741	(1.141)	299849	2.46534	2.465
$ 191 Dibenzo(a,h)anthracene-d14	292	20.634	20.650	(1.136)	215976	2.45153	2.452
79 Dibenzo(a,h)anthracene	278	20.735	20.751	(1.142)	248750	2.52211	2.522
80 Benzo(g,h,i)perylene	276	21.725	21.747	(1.196)	256370	2.46787	2.468
99 Perylene	252	18.230	18.243	(1.004)	239462	2 73130	2.731

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 04271108.d
Lab Smp Id: SS71LCSW1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20110427.b/SIMPNA0421.m
Misc Info: 11-8673

Calibration Date: 27-APR-2011
Calibration Time: 15:00
Client Smp ID: SS71LCSW1
Level: LOW
Sample Type: Liquid

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	276036	138018	552072	246394	-10.74
42 Acenaphthene-d10	158527	79264	317054	148712	-6.19
59 Phenanthrene-d10	277528	138764	555056	252927	-8.86
69 Chrysene-d12	304115	152058	608230	260036	-14.49
77 Perylene-d12	257833	128916	515666	212958	-17.40

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	5.17	4.67	5.67	5.16	-0.25
42 Acenaphthene-d10	7.44	6.94	7.94	7.44	-0.09
59 Phenanthrene-d10	9.40	8.90	9.90	9.39	-0.10
69 Chrysene-d12	14.40	13.90	14.90	14.38	-0.11
77 Perylene-d12	18.17	17.67	18.67	18.16	-0.05

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

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd Snider
Sample Matrix: LIQUID
Lab Smp Id: SS71LCSW1
Level: LOW
Data Type: MS DATA
SpikeList File: pnalcss.spk
Sublist File: pnax.sub
Method File: /chem3/nt4.i/20110427.b/SIMPNA0421.m
Misc Info: 11-8673

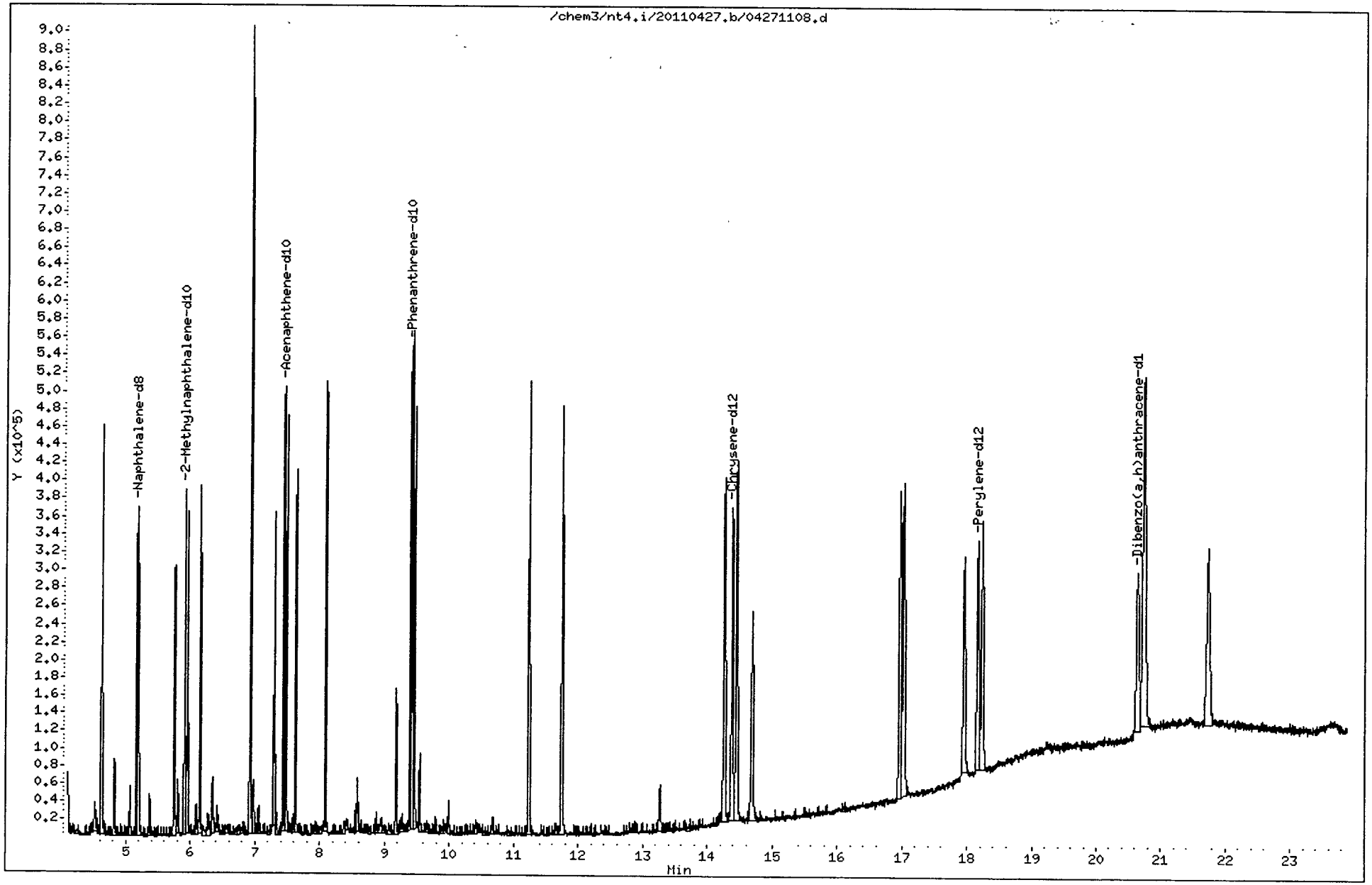
Client SDG: SS71
Fraction: SV
Client Smp ID: SS71LCSW1
Operator: JZ
SampleType: LCS
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
28 Naphthalene	3.000	1.855	61.82	37-100
32 2-Methylnaphthalen	3.000	1.959	65.29	37-100
105 1-methylnaphthalen	3.000	1.980	66.01	30-160
40 Acenaphthylene	3.000	1.754	58.48	35-100
44 Acenaphthene	3.000	2.060	68.68	39-100
46 Dibenzofuran	3.000	2.221	74.03	39-100
49 Fluorene	3.000	2.214	73.81	42-100
60 Phenanthrene	3.000	2.369	78.95	47-100
61 Anthracene	3.000	2.008	66.92	41-106
64 Fluoranthene	3.000	2.502	83.39	52-109
65 Pyrene	3.000	2.644	88.12	47-111
68 Benzo(a)anthracene	3.000	2.533	84.42	47-114
71 Chrysene	3.000	2.699	89.96	51-106
74 Benzo(b)fluoranthe	3.000	2.715	90.51	30-160
75 Benzo(k)fluoranthe	3.000	2.699	89.96	30-160
76 Benzo(a)pyrene	3.000	2.187	72.90	44-111
78 Indeno(1,2,3-cd)py	3.000	2.465	82.18	41-114
79 Dibenzo(a,h)anthra	3.000	2.522	84.07	42-118
80 Benzo(g,h,i)peryle	3.000	2.468	82.26	37-115
99 Perylene	3.000	2.731	91.04	30-160

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	3.000	2.054	68.48	30-106
$ 191 Dibenzo(a,h)anthra	3.000	2.452	81.72	10-130

Data File: /chem3/nt4.i/20110427.b/04271108.d
Date : 27-APR-2011 17:52
Client ID: SS71LCSW1
Sample Info: SS71LCSW1,
Volume Injected (uL): 1.0
Column phase: ZB35

Instrument: nt4.i
Operator: JZ
Column diameter: 0.32



CO-ELUTION SUMMARY FOR FILE - 04271108.d

Lab ID: SS71LCSW1, Method: SIMPNA0421.m, Instrument: nt4.i, Date: 27-APR-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20110427.b/04271109.d
Lab Smp Id: SS71LCSDW1 Client Smp ID: SS71LCSDW1
Inj Date : 27-APR-2011 18:19
Operator : JZ Inst ID: nt4.i
Smp Info : SS71LCSDW1,
Misc Info : 11-8673
Comment : 1ul Injection
Method : /chem3/nt4.i/20110427.b/SIMPNA0421.m
Meth Date : 28-Apr-2011 18:38 jianqing Quant Type: ISTD
Cal Date : 21-APR-2011 22:25 Cal File: 04211107.d
Als bottle: 9 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

JZ 04/28/11

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Vo	500.00000	Volume of sample extracted (mL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
* 27 Naphthalene-d8	136	5.162	5.174	(1.000)	244820	2.00000	
28 Naphthalene	128	5.191	5.199	(1.005)	209545	1.89872	1.899
$ 190 2-Methylnaphthalene-d10	152	5.907	5.915	(1.144)	139185	2.03403	2.034
32 2-Methylnaphthalene	141	5.951	5.960	(1.153)	121526	1.96213	1.962
105 1-methylnaphthalene	141	6.147	6.155	(1.191)	130988	2.03490	2 035
40 Acenaphthylene	152	7.295	7.303	(0.981)	218748	1.81243	1.812
* 42 Acenaphthene-d10	164	7.434	7.442	(1.000)	148105	2.00000	
44 Acenaphthene	153	7.481	7.489	(1.006)	156106	2.10361	2.104
46 Dibenzofuran	168	7.626	7.635	(1.026)	235726	2.32198	2.322
49 Fluorene	166	8.087	8.095	(1.088)	203623	2.33752	2.338
* 59 Phenanthrene-d10	188	9.396	9.404	(1.000)	247522	2.00000	
60 Phenanthrene	178	9.427	9.436	(1.003)	313690	2.58964	2.590
61 Anthracene	178	9.459	9.470	(1.007)	262517	2.09095	2.091
64 Fluoranthene	202	11.235	11.246	(1.196)	354695	2.65091	2.651
65 Pyrene	202	11.742	11.757	(0.816)	352936	2.69493	2.695
68 Benzo(a)anthracene	228	14.263	14.278	(0.992)	307153	2.52845	2 528

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
* 69 Chrysene-d12	240	14.383	14.401	(1.000)	260450	2.00000	
71 Chrysene	228	14.452	14.467	(1.005)	325779	2.76747	2.767
74 Benzo(b)fluoranthene	252	16.969	16.984	(0.934)	315996	2.69782	2.698
75 Benzo(k)fluoranthene	252	17.023	17.041	(0.937)	326953	2.71244	2.712
188 Benzo(j)fluoranthene	252	Compound Not Detected.					
76 Benzo(a)pyrene	252	17.954	17.965	(0.989)	220651	2.10536	2.105
* 77 Perylene-d12	264	18.159	18.173	(1.000)	215888	2.00000	
78 Indeno(1,2,3-cd)pyrene	276	20.723	20.741	(1.141)	312457	2.53413	2.534
$ 191 Dibenzo(a,h)anthracene-d14	292	20.625	20.650	(1.136)	198552	2.22317	2.223
79 Dibenzo(a,h)anthracene	278	20.733	20.751	(1.142)	249275	2.49313	2.493
80 Benzo(g,h,i)perylene	276	21.726	21.747	(1.196)	272959	2.59189	2 592
99 Perylene	252	18.228	18.243	(1.004)	210703	2.37066	2.371

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 04271109.d
Lab Smp Id: SS71LCSDW1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20110427.b/SIMPNA0421.m
Misc Info: 11-8673

Calibration Date: 27-APR-2011
Calibration Time: 15:00
Client Smp ID: SS71LCSDW1
Level: LOW
Sample Type: Liquid

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	276036	138018	552072	244820	-11.31
42 Acenaphthene-d10	158527	79264	317054	148105	-6.57
59 Phenanthrene-d10	277528	138764	555056	247522	-10.81
69 Chrysene-d12	304115	152058	608230	260450	-14.36
77 Perylene-d12	257833	128916	515666	215888	-16.27

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	5.17	4.67	5.67	5.16	-0.23
42 Acenaphthene-d10	7.44	6.94	7.94	7.43	-0.11
59 Phenanthrene-d10	9.40	8.90	9.90	9.40	-0.09
69 Chrysene-d12	14.40	13.90	14.90	14.38	-0.13
77 Perylene-d12	18.17	17.67	18.67	18.16	-0.08

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: SS71LCSDW1
Level: LOW
Data Type: MS DATA
SpikeList File: pnalcss.spk
Sublist File: pnax.sub
Method File: /chem3/nt4.i/20110427.b/SIMPNA0421.m
Misc Info: 11-8673

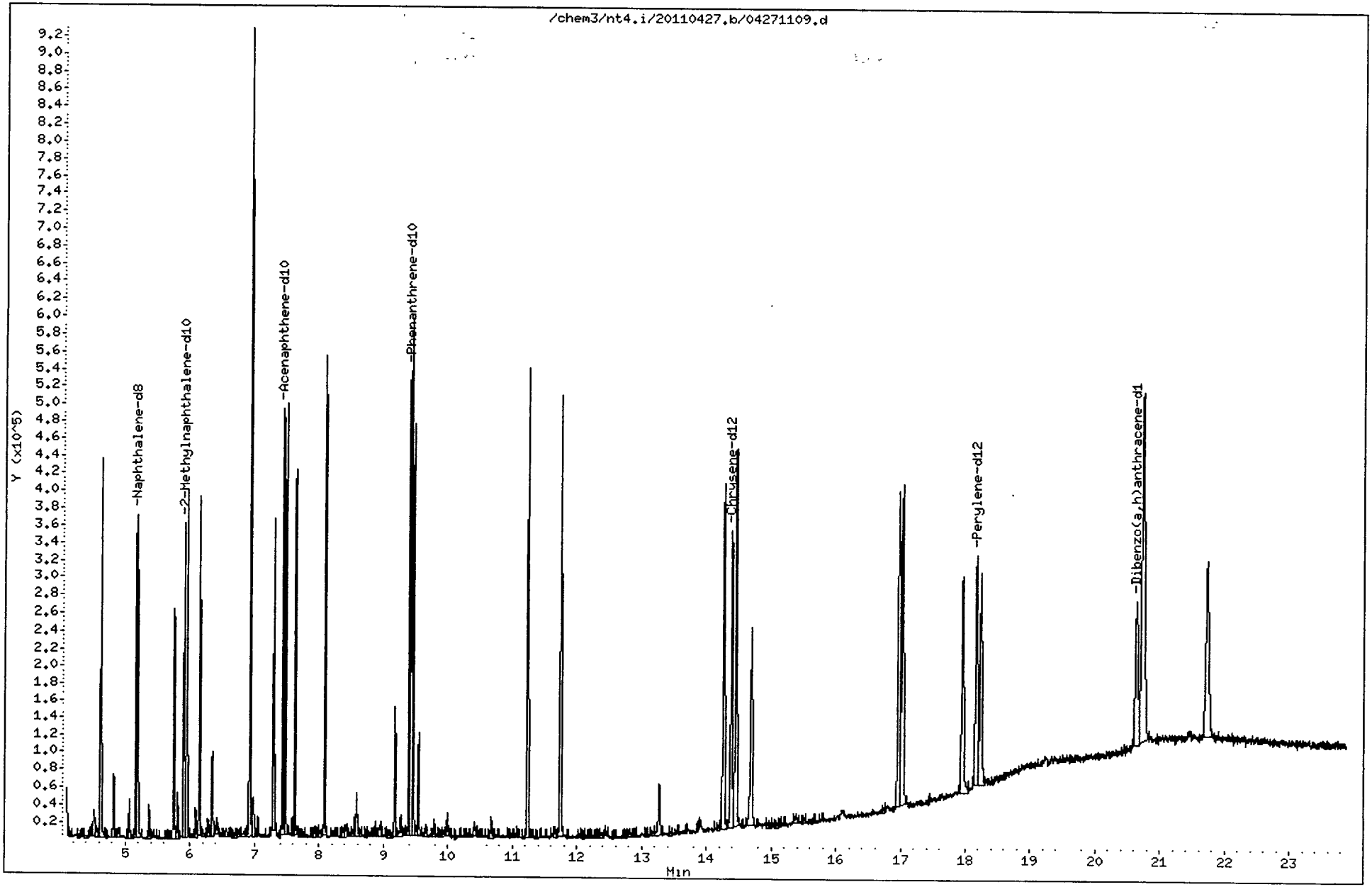
Client SDG: SS71
Fraction: SV
Client Smp ID: SS71LCSDW1
Operator: JZ
SampleType: LCSD
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
28 Naphthalene	3.000	1.899	63.29	37-100
32 2-Methylnaphthalen	3.000	1.962	65.40	37-100
105 1-methylnaphthalen	3.000	2.035	67.83	30-160
40 Acenaphthylene	3.000	1.812	60.41	35-100
44 Acenaphthene	3.000	2.104	70.12	39-100
46 Dibenzofuran	3.000	2.322	77.40	39-100
49 Fluorene	3.000	2.338	77.92	42-100
60 Phenanthrene	3.000	2.590	86.32	47-100
61 Anthracene	3.000	2.091	69.70	41-106
64 Fluoranthene	3.000	2.651	88.36	52-109
65 Pyrene	3.000	2.695	89.83	47-111
68 Benzo(a)anthracene	3.000	2.528	84.28	47-114
71 Chrysene	3.000	2.767	92.25	51-106
74 Benzo(b)fluoranthe	3.000	2.698	89.93	30-160
75 Benzo(k)fluoranthe	3.000	2.712	90.41	30-160
76 Benzo(a)pyrene	3.000	2.105	70.18	44-111
78 Indeno(1,2,3-cd)py	3.000	2.534	84.47	41-114
79 Dibenzo(a,h)anthra	3.000	2.493	83.10	42-118
80 Benzo(g,h,i)peryle	3.000	2.592	86.40	37-115
99 Perylene	3.000	2.371	79.02	30-160

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	3.000	2.034	67.80	30-106
$ 191 Dibenzo(a,h)anthra	3.000	2.223	74.11	10-130

Data File: /chem3/nt4.i/20110427.b/04271109.d
Date : 27-APR-2011 18:19
Client ID: SS71LCSDW1
Sample Info: SS71LCSDW1,
Volume Injected (uL): 1.0
Column phase: ZB35

Instrument: nt4.i
Operator: JZ
Column diameter: 0.32



CO-ELUTION SUMMARY FOR FILE - 04271109.d

Lab ID: SS71LCSDW1, Method: SIMPNA0421.m, Instrument: nt4.i, Date: 27-APR-201

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20110427.b/04271111.d
Lab Smp Id: SS71T Client Smp ID: LL-ER-041911
Inj Date : 27-APR-2011 19:15
Operator : JZ Inst ID: nt4.i
Smp Info : SS71T
Misc Info : 11-8673
Comment : 1ul Injection
Method : /chem3/nt4.i/20110427.b/SIMPNA0421.m
Meth Date : 28-Apr-2011 18:41 jianqing Quant Type: ISTD
Cal Date : 21-APR-2011 22:25 Cal File: 04211107.d
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

JZ 04/28/11

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Vo	500.00000	Volume of sample extracted (mL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
* 27 Naphthalene-d8	136	5.163	5.174	(1.000)	245337	2.00000	
28 Naphthalene	128	Compound Not Detected.					
$ 190 2-Methylnaphthalene-d10	152	5.908	5.915	(1.144)	137205	2.00087	2.001
32 2-Methylnaphthalene	141	Compound Not Detected.					
105 1-methylnaphthalene	141	Compound Not Detected.					
40 Acenaphthylene	152	Compound Not Detected.					
* 42 Acenaphthene-d10	164	7.435	7.442	(1.000)	148022	2.00000	
44 Acenaphthene	153	Compound Not Detected.					
46 Dibenzofuran	168	Compound Not Detected.					
49 Fluorene	166	Compound Not Detected.					
* 59 Phenanthrene-d10	188	9.394	9.404	(1.000)	245996	2.00000	
60 Phenanthrene	178	Compound Not Detected.					
61 Anthracene	178	Compound Not Detected.					
64 Fluoranthene	202	Compound Not Detected.					
65 Pyrene	202	Compound Not Detected.					
68 Benzo(a)anthracene	228	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
* 69 Chrysene-d12	240	14.384	14.401	(1.000)	257042	2.00000	
71 Chrysene	228	Compound Not Detected.					
74 Benzo(b)fluoranthene	252	Compound Not Detected.					
75 Benzo(k)fluoranthene	252	Compound Not Detected.					
188 Benzo(j)fluoranthene	252	Compound Not Detected.					
76 Benzo(a)pyrene	252	Compound Not Detected.					
* 77 Perylene-d12	264	18.163	18.173	(1.000)	209525	2.00000	
78 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
$ 191 Dibenzo(a,h)anthracene-d14	292	20.630	20.650	(1.136)	198288	2.28764	2.288
79 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
80 Benzo(g,h,i)perylene	276	Compound Not Detected.					
99 Perylene	252	Compound Not Detected.					

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 04271111.d
Lab Smp Id: SS71T
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20110427.b/SIMPNA0421.m
Misc Info: 11-8673

Calibration Date: 27-APR-2011
Calibration Time: 15:00
Client Smp ID: LL-ER-041911
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	276036	138018	552072	245337	-11.12
42 Acenaphthene-d10	158527	79264	317054	148022	-6.63
59 Phenanthrene-d10	277528	138764	555056	245996	-11.36
69 Chrysene-d12	304115	152058	608230	257042	-15.48
77 Perylene-d12	257833	128916	515666	209525	-18.74

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	5.17	4.67	5.67	5.16	-0.21
42 Acenaphthene-d10	7.44	6.94	7.94	7.43	-0.10
59 Phenanthrene-d10	9.40	8.90	9.90	9.39	-0.11
69 Chrysene-d12	14.40	13.90	14.90	14.38	-0.12
77 Perylene-d12	18.17	17.67	18.67	18.16	-0.06

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

Analytical Resources, Inc.

RECOVERY REPORT

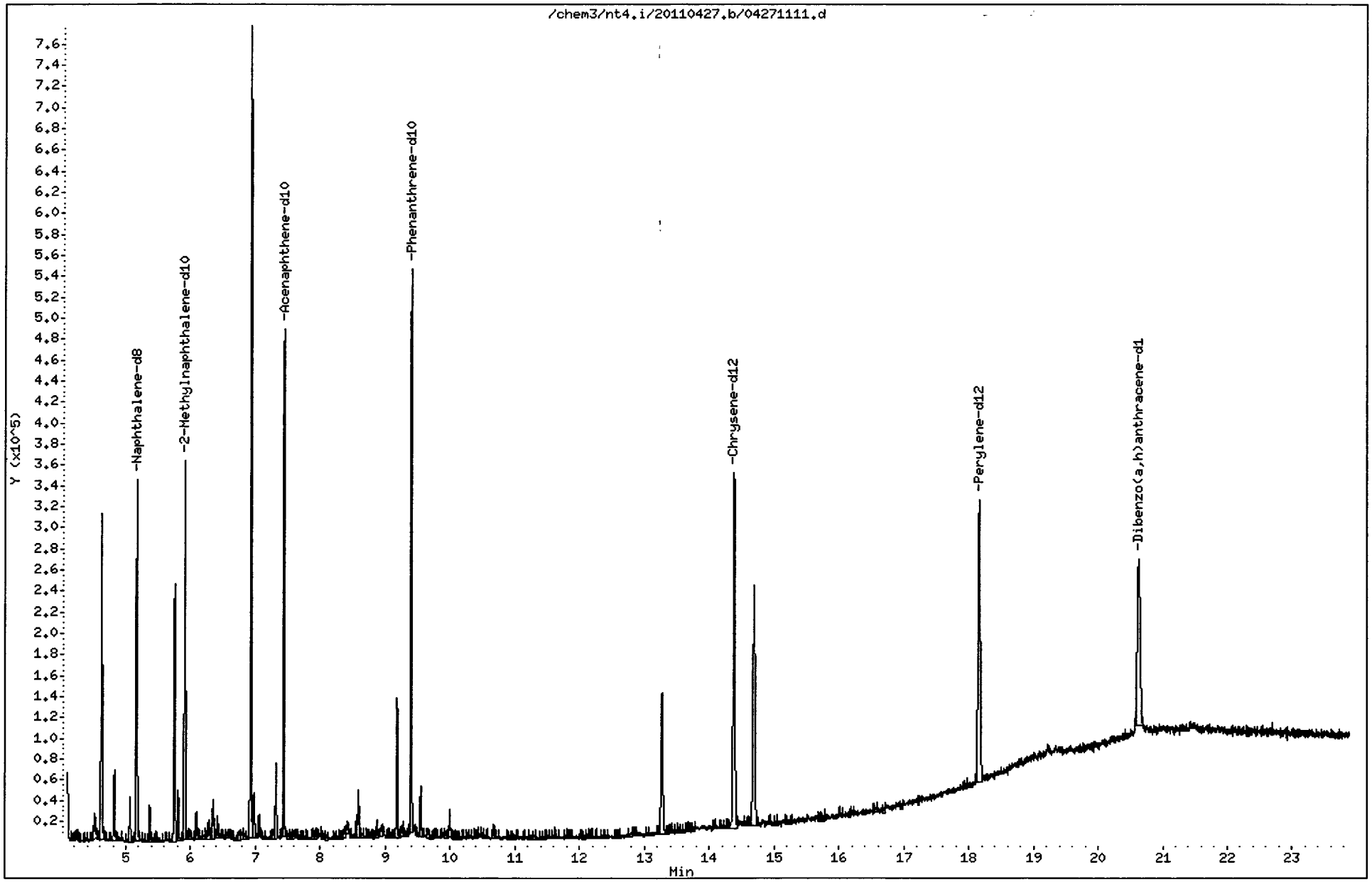
Client Name: Floyd Snider
Client SDG: SS71
Sample Matrix: LIQUID
Fraction: SV
Lab Smp Id: SS71T
Client Smp ID: LL-ER-041911
Level: LOW
Operator: JZ
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: pnalcss.spk
Quant Type: ISTD
Sublist File: pnax.sub
Method File: /chem3/nt4.i/20110427.b/SIMPNA0421.m
Misc Info: 11-8673

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	3.000	2.001	66.70	30-106
$ 191 Dibenzo(a,h)anthra	3.000	2.288	76.25	10-130

Data File: /chem3/nt4.i/20110427.b/04271111.d
Date : 27-APR-2011 19:15
Client ID: LL-ER-041911
Sample Info: SS71T
Volume Injected (uL): 1.0
Column phase: ZB35

Instrument: nt4.i
Operator: JZ
Column diameter: 0.32

SS71 : 00772



CO-ELUTION SUMMARY FOR FILE - 04271111.d

Lab ID: SS71T, Method: SIMPNA0421.m, Instrument: nt4.i, Date: 27-APR-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC/MS SVOA Analyst Notes / Corrective Action Log

ARI Project ID: SS71 Client ID: Floyd Snider

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

Parameter(s): SimPNA

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

Curve Date: 4/21/11 Analysis Start Date: 4/29 ; 05/02/11

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

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

4/29: Samples A-E + MB/LCS

5/2: Samples 7-S + MS/MSD

Forms included.

Additional Details on Reverse: Yes / No

Analyst: _____ **Date:** 5/3/11

Reviewer: _____ **Date:** 5/3/11

Analytical Resources Inc.: Organics Instrument Log

NT-4 Serial No.: GC = US00010849; MS = US72821113

Date: 4/29/11 Analysis: SIMPAH Analyst: B

GC Program: SIMPAH35 Column No: 18F782 Column Type: ZB-35

Instrument Tune (.U or .CT.): 100716 EM Voltage: 1682

Calibration File: 04291102 Curve Date: 4/29/11

IS/SS	Ical/Ccal	LCS/ICV
1764-5	1818-1	
	1788-3	

INTERNAL STANDARD SUMMARY FOR DATABATCH - /chem3/nt4.i/20110429.b

	Time	Filename	LabID	ClientId	DF											
1	1611	04291101.d	DFTPP0429	DFTPP0429	1	NO ISTDS FOUND										
2	1626	04291102.d	CC0429	CC0429	1	4.99	265017	7.25	151334	9.20	265313	14.04	261826	17.76	225077	
3	1712	04291103.d	SS56MBS1	SS56MBS1	1	4.99	258245	7.25	148845	9.20	247038	14.04	253556	17.77	197781	
4	1740	04291104.d	SS56LCSS1	SS56LCSS1	1	4.98	265387	7.24	153852	9.19	257363	14.03	268767	17.75	219092	
5	1808	04291105.d	SS56LCSDS1	SS56LCSDS1	1	4.98	269815	7.25	154353	9.19	264192	14.03	271435	17.75	230533	
6	1835	04291106.d	SS56QLS	SS56QLS	1	4.98	247762	7.24	144006	9.19	245291	14.03	246755	17.75	203500	
7	1903	04291107.d	SS56A	MW-2-S2	1	4.98	263255	7.24	156379	9.19	256391	14.03	266423	17.75	219650	
8	1931	04291108.d	SS56B	MW-2-S3	1	4.98	263825	7.24	158780	9.19	254123	14.03	272876	17.75	231514	
9	1959	04291109.d	SS56C	MW-2-S6	1	4.98	270611	7.24	159705	9.20	268950	14.03	277402	17.75	223823	
10	2026	04291110.d	SS56D	MW-8-S1	1	4.98	279690	7.24	160296	9.19	266673	14.03	269972	17.75	227545	
11	2054	04291111.d	SS56E	MW-8-S3	1	4.98	261632	7.24	155982	9.19	254582	14.03	256482	17.75	226123	
12	2122	04291112.d	SS56EMS	MW-8-S3 MS	1	4.98	272179	7.24	158684	9.19	270179	14.03	266269	17.75	238086	
13	2149	04291113.d	SS56EMSD	MW-8-S3 MSD	1	4.98	263886	7.24	160300	9.20	264068	14.03	266819	17.75	231706	
14	2217	04291114.d	SS56F	MW-8-S6	1	4.98	247257	7.24	150414	9.19	253292	14.03	256007	17.75	212409	
15	2245	04291115.d	SS56G	MW-7-S1	1	4.98	268537	7.24	159984	9.19	257629	14.03	269140	17.75	216465	
16	2312	04291116.d	SS56H	MW-7-S4	1	4.98	273733	7.24	161919	9.19	266399	14.03	268739	17.75	223986	
17	2340	04291117.d	SS56I	MW-7-S7	1	4.98	268470	7.24	157914	9.19	259363	14.03	265257	17.75	227711	
18	0008	04291118.d	SS71MBS1	SS71MBS1	1	4.98	251039	7.24	145779	9.19	248170	14.03	252352	17.75	212784	
19	0035	04291119.d	SS71LCSS1	SS71LCSS1	1	4.98	263020	7.24	153946	9.19	262393	14.03	269071	17.75	224278	
20	0103	04291120.d	SS71QLS	SS71QLS	1	4.98	254942	7.24	154923	9.19	258713	14.03	273121	17.75	219603	
21	0131	04291121.d	SS71A	LL-SB6-0-0.5	1	4.98	259755	7.24	152649	9.20	250096	14.03	272070	17.76	230054	
22	0158	04291122.d	SS71B	LL-SB6-1.5-2	1	4.98	268430	7.24	157403	9.20	260551	14.03	265649	17.75	214824	
23	0226	04291123.d	SS71C	LL-SB6-2-4-0	1	4.98	281581	7.24	166857	9.19	275077	14.03	279591	17.76	230145	
24	0253	04291124.d	SS71D	LL-SB5-0-0.5	1	4.98	281155	7.24	166978	9.20	273628	14.06	291253	17.80	178009	
25	0321	04291125.d	SS71E	LL-SB5-1.5-2	1	4.99	282215	7.25	163961	9.20	275518	14.05	281758	17.78	206595	

Maint

05/07/11

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

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

MANUAL INTEGRATION SUMMARY FOR DATABATCH - /chem3/nt4.i/20110429.b

ARI Job No.: CC04 Method: SIMPNA0421.m Instrument: nt4.i Date: 29-APR-2011

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1626	04291102.d	CC0429	CC0429	1	NO MANUAL INTEGRATION
0008	04291118.d	SS71MBS1	SS71MBS1	1	NO MANUAL INTEGRATION
0035	04291119.d	SS71LCSS1	SS71LCSS1	1	NO MANUAL INTEGRATION
0131	04291121.d	SS71A	LL-SB6-0-0	1	NO MANUAL INTEGRATION
0158	04291122.d	SS71B	LL-SB6-1.5	1	NO MANUAL INTEGRATION
0226	04291123.d	SS71C	LL-SB6-2-4	1	NO MANUAL INTEGRATION
0253	04291124.d	SS71D	LL-SB5-0-0	1	NO MANUAL INTEGRATION
0321	04291125.d	SS71E	LL-SB5-1.5	1	NO MANUAL INTEGRATION

05/02/11

SS71.9070

Q-FLAG SUMMARY FOR DATABATCH - /chem3/nt4.i/20110429.b

Instrument: nt4.i Date: 29-APR-2011 Method: SIMPNA0421.m

INITIAL CAL: 21-APR-2011

Compound	%RSD or R^2
NO Q-FLAGS	

04/02/11

CONTINUING CAL: 29-APR-2011

Compound	%D
NO Q-FLAGS	

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt4.i
Lab File ID: 04291102.d
Analysis Type:
Lab Sample ID: CC0429
Method: /chem3/nt4.i/20110429.b/SIMPNA0421.m

Injection Date: 29-APR-2011 16:26
Init. Cal. Date(s): 21-APR-2011 21-APR-2011
Init. Cal. Times: 20:07 22:25
Quant Type: ISTD

AZ 05/02/11

COMPOUND	RRF / AMOUNT	RF2	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
28 Naphthalene	0.90157	0.90446	0.010	0.32022	20.00000	Averaged
$ 190 2-Methylnaphthalene-d10	0.55901	0.57280	0.010	2.46624	20.00000	Averaged
32 2-Methylnaphthalene	0.50597	0.49693	0.010	-1.78687	20.00000	Averaged
105 1-methylnaphthalene	0.52586	0.52807	0.010	0.41991	20.00000	Averaged
40 Acenaphthylene	1.62983	1.59130	0.010	-2.36399	20.00000	Averaged
44 Acenaphthene	1.00211	0.99027	0.010	-1.18088	20.00000	Averaged
46 Dibenzofuran	1.37091	1.43769	0.010	4.87135	20.00000	Averaged
49 Fluorene	1.17634	1.21331	0.010	3.14335	20.00000	Averaged
60 Phenanthrene	0.97876	0.96376	0.010	-1.53291	20.00000	Averaged
61 Anthracene	1.01445	0.98958	0.010	-2.45157	20.00000	Averaged
64 Fluoranthene	1.08113	1.03287	0.010	-4.46354	20.00000	Averaged
65 Pyrene	1.00567	1.06788	0.010	6.18606	20.00000	Averaged
68 Benzo(a)anthracene	0.93284	0.94840	0.010	1.66882	20.00000	Averaged
71 Chrysene	0.90395	0.93308	0.010	3.22282	20.00000	Averaged
74 Benzo(b)fluoranthene	1.08510	1.16353	0.010	7.22823	20.00000	Averaged
75 Benzo(k)fluoranthene	1.11668	1.19248	0.010	6.78824	20.00000	Averaged
188 Benzo(j)fluoranthene	1.09515	1.11448	0.010	1.76533	20.00000	Averaged
76 Benzo(a)pyrene	0.97092	1.01397	0.010	4.43403	20.00000	Averaged
78 Indeno(1,2,3-cd)pyrene	1.14225	1.17076	0.010	2.49534	20.00000	Averaged
$ 191 Dibenzo(a,h)anthracene-d14	0.82738	0.83845	0.010	1.33814	20.00000	Averaged
79 Dibenzo(a,h)anthracene	0.92626	0.94894	0.010	2.44765	20.00000	Averaged
80 Benzo(g,h,i)perylene	0.97562	1.00633	0.010	3.14792	20.00000	Averaged
99 Perylene	0.82338	0.83833	0.010	1.81488	20.00000	Averaged

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20110429.b/04291102.d
Lab Smp Id: CC0429 Client Smp ID: CC0429
Inj Date : 29-APR-2011 16:26
Operator : JZ Inst ID: nt4.i
Smp Info : CC0429
Misc Info : 11-
Comment : 1ul Injection
Method : /chem3/nt4.i/20110429.b/SIMPNA0421.m
Meth Date : 02-May-2011 12:04 jianqing Quant Type: ISTD
Cal Date : 21-APR-2011 22:25 Cal File: 04211107.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

05/02/11

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
* 27 Naphthalene-d8	136	4.988	4.988	(1.000)	265017	2.00000	
28 Naphthalene	128	5.017	5.017	(1.006)	299621	2.50000	2.508
$ 190 2-Methylnaphthalene-d10	152	5.729	5.729	(1.149)	189751	2.50000	2.562
32 2-Methylnaphthalene	141	5.774	5.774	(1.157)	164618	2.50000	2.455
105 1-methylnaphthalene	141	5.969	5.969	(1.197)	174934	2.50000	2.510
40 Acenaphthylene	152	7.111	7.111	(0.981)	301022	2.50000	2.441
* 42 Acenaphthene-d10	164	7.250	7.250	(1.000)	151334	2 00000	
44 Acenaphthene	153	7.294	7.294	(1.006)	187327	2.50000	2.470
46 Dibenzofuran	168	7.439	7.439	(1.026)	271964	2.50000	2.622
49 Fluorene	166	7.897	7.897	(1.089)	229519	2.50000	2.579
* 59 Phenanthrene-d10	188	9.202	9.202	(1.000)	265313	2.00000	
60 Phenanthrene	178	9.234	9.234	(1.003)	319621	2.50000	2.462
61 Anthracene	178	9.266	9.266	(1.007)	328184	2.50000	2 439
64 Fluoranthene	202	10.975	10.975	(1.193)	342542	2.50000	2.388
65 Pyrene	202	11.467	11.467	(0.817)	349498	2.50000	2.655
68 Benzo(a)anthracene	228	13.925	13.925	(0.992)	310396	2.50000	2.542
* 69 Chrysene-d12	240	14.041	14.041	(1.000)	261826	2.00000	
71 Chrysene	228	14.111	14.111	(1.005)	305382	2.50000	2.581
74 Benzo(b)fluoranthene	252	16.584	16.584	(0.934)	327355	2.50000	2.681
75 Benzo(k)fluoranthene	252	16.637	16.637	(0.937)	335499	2.50000	2.670
188 Benzo(j)fluoranthene	252	16.716	16.716	(0.941)	313556	2.50000	2.544
76 Benzo(a)pyrene	252	17.552	17.552	(0.988)	285275	2.50000	2.611
* 77 Perylene-d12	264	17.763	17.763	(1.000)	225077	2.00000	
78 Indeno(1,2,3-cd)pyrene	276	20.199	20.199	(1.137)	329388	2.50000	2.562
$ 191 Dibenzo(a,h)anthracene-d14	292	20.110	20.110	(1.132)	235894	2.50000	2.533
79 Dibenzo(a,h)anthracene	278	20.205	20.205	(1.137)	266979	2.50000	2.561
80 Benzo(g,h,i)perylene	276	21.110	21.110	(1.188)	283128	2.50000	2.579

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
99 Perylene	252	17.827	17.827	(1.004)	235860	2.50000	2.545

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 04291102.d
Lab Smp Id: CC0429
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20110429.b/SIMPNA0421.m
Misc Info: 11-

Calibration Date: 29-APR-2011
Calibration Time: 16:26
Client Smp ID: CC0429
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	276036	138018	552072	265017	-3.99
42 Acenaphthene-d10	158527	79264	317054	151334	-4.54
59 Phenanthrene-d10	277528	138764	555056	265313	-4.40
69 Chrysene-d12	304115	152058	608230	261826	-13.91
77 Perylene-d12	257833	128916	515666	225077	-12.70

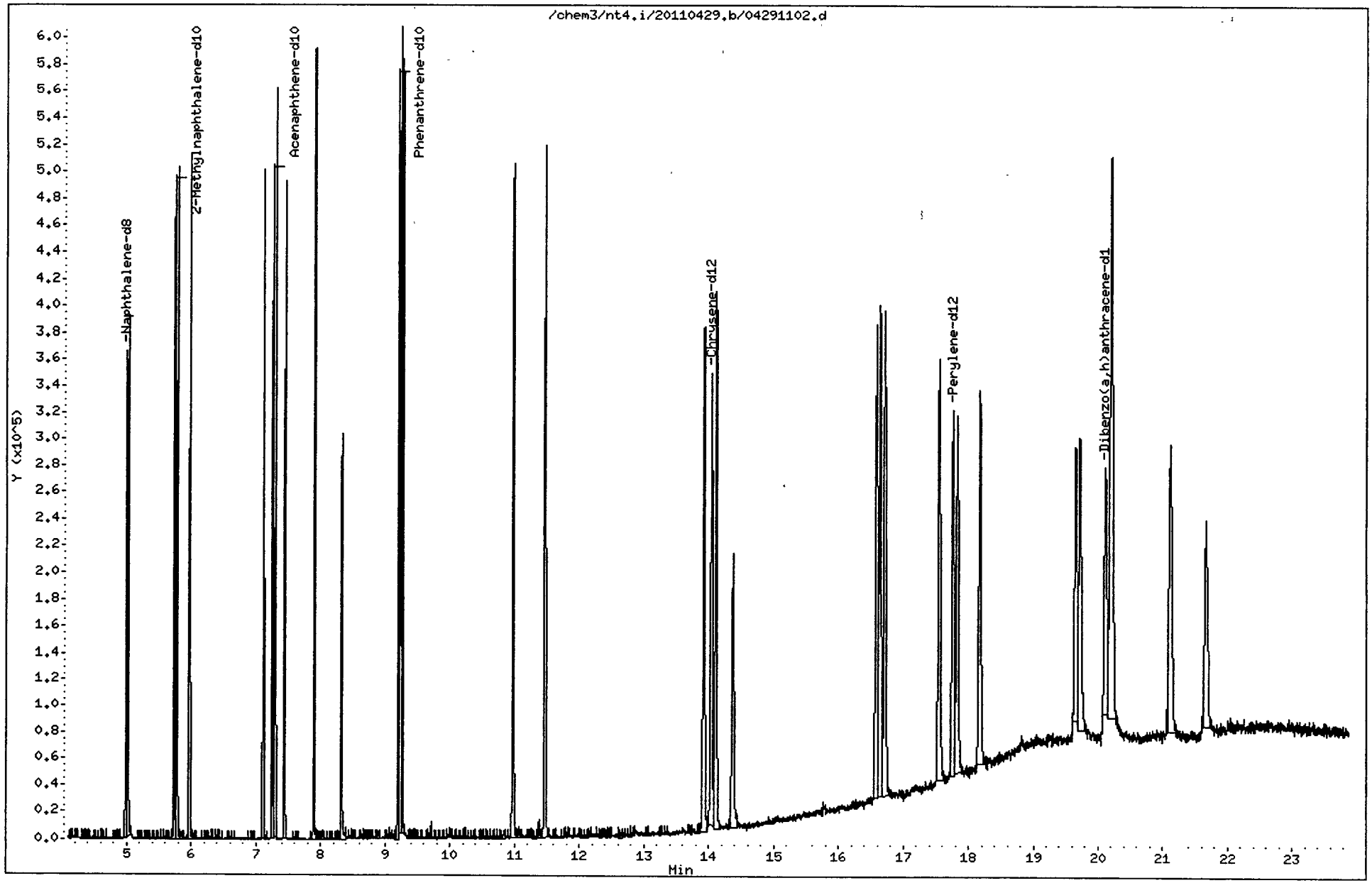
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	4.99	4.49	5.49	4.99	0.00
42 Acenaphthene-d10	7.25	6.75	7.75	7.25	0.00
59 Phenanthrene-d10	9.20	8.70	9.70	9.20	0.00
69 Chrysene-d12	14.04	13.54	14.54	14.04	0.00
77 Perylene-d12	17.76	17.26	18.26	17.76	0.00

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

Data File: /chem3/nt4.i/20110429.b/04291102.d
Date : 29-APR-2011 16:26
Client ID: CC0429
Sample Info: CC0429

Instrument: nt4.i
Operator: JZ
Column diameter: 0.32

Column phase: ZB35



CO-ELUTION SUMMARY FOR FILE - 04291102.d

Lab ID: CC0429, Method: SIMPNA0421.m, Instrument: nt4.i, Date: 29-APR-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

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

Data file: /chem3/nt4.i/20110429.b/ddt.b/04291101.d ARI ID: DDT0429
Method: /chem3/nt4.i/20110429.b/ddt.b/sw846ddt.m Misc: 11-
Analysis Date: 29-APR-2011 16:11 Instrument: nt4.i

COMPOUND	RT	AREA
Pentachlorophenol	5.147	224425
Benzidine	6.838	1975413
4,4'-DDE	----	----
4,4'-DDD	6.915	55701
4,4'-DDT	7.144	889718

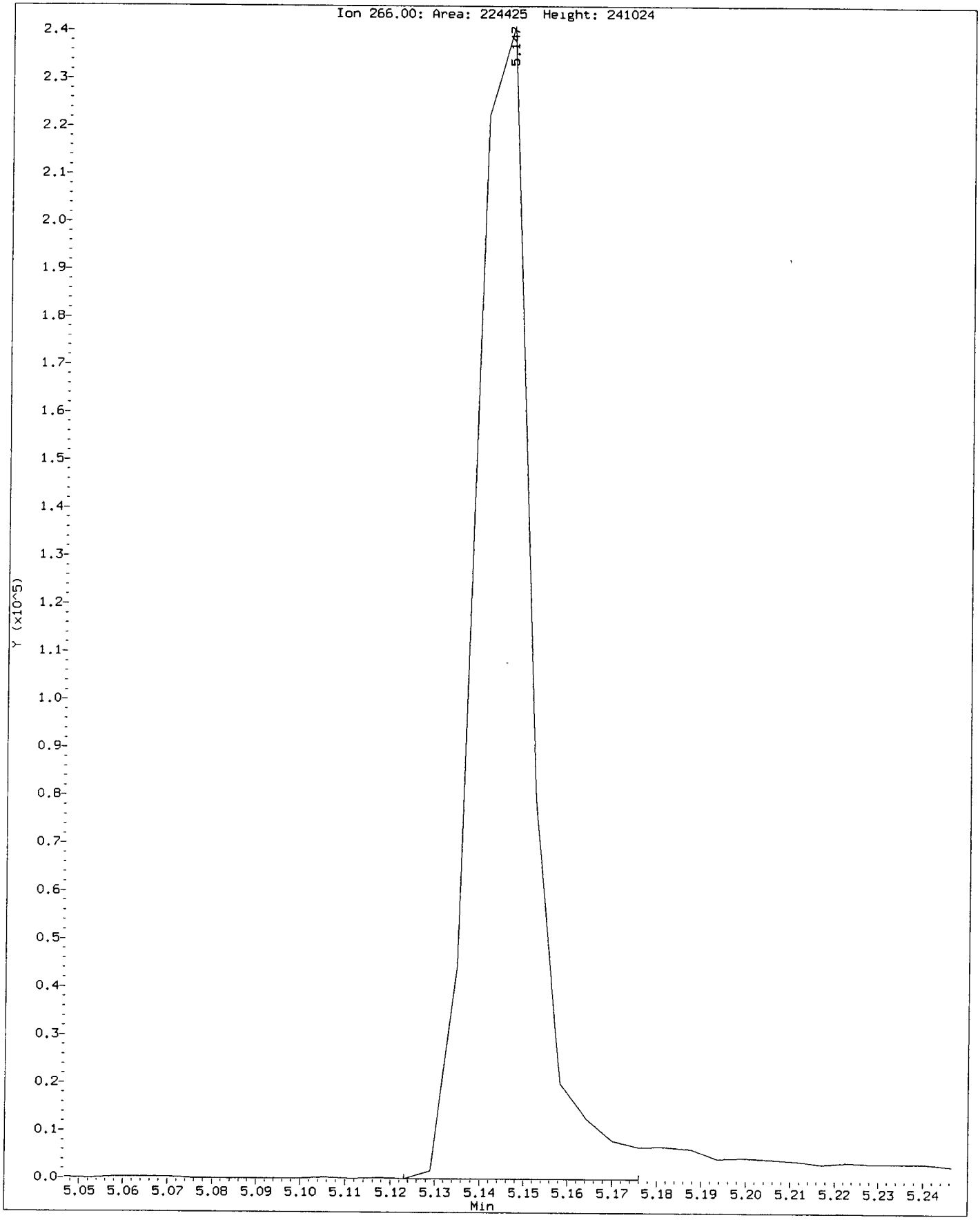
$$\text{DDT Percent Breakdown} = \frac{(\text{DDE Area} + \text{DDD Area}) * 100}{(\text{DDE Area} + \text{DDD Area} + \text{DDT Area})}$$

$$\text{DDT Percent Breakdown} = \frac{(\ 0 + 55701) * 100}{(\ 0 + 55701 + 889718)}$$

DDT Percent Breakdown = 5.9 %

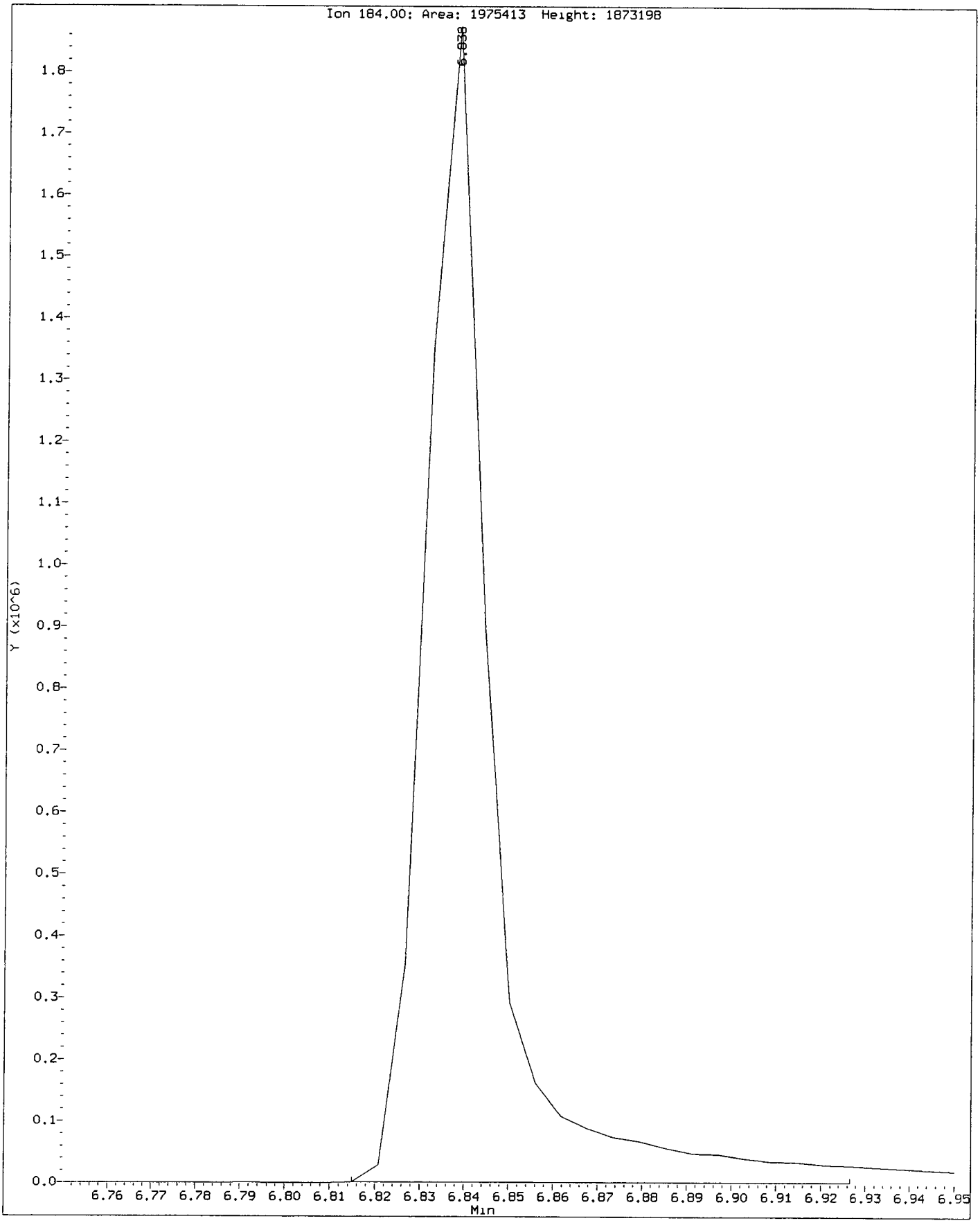
Data File: /chem3/nt4.i/20110429.b/ddt.b/04291101.d
Injection Date: 29-APR-2011 16:11
Instrument: nt4.i
Client Sample ID: DDT0429

Compound: Pentachlorophenol
CAS Number: 87-86-5



Data File: /chem3/nt4.i/20110429.b/ddt.b/04291101.d
Injection Date: 29-APR-2011 16:11
Instrument: nt4.i
Client Sample ID: DDT0429

Compound: Benzidine
CAS Number:



Data File: /chem3/nt4.i/20110429.b/tune.b/04291101.d

Date : 29-APR-2011 16:11

Client ID: DFTPP0429

Instrument: nt4.i

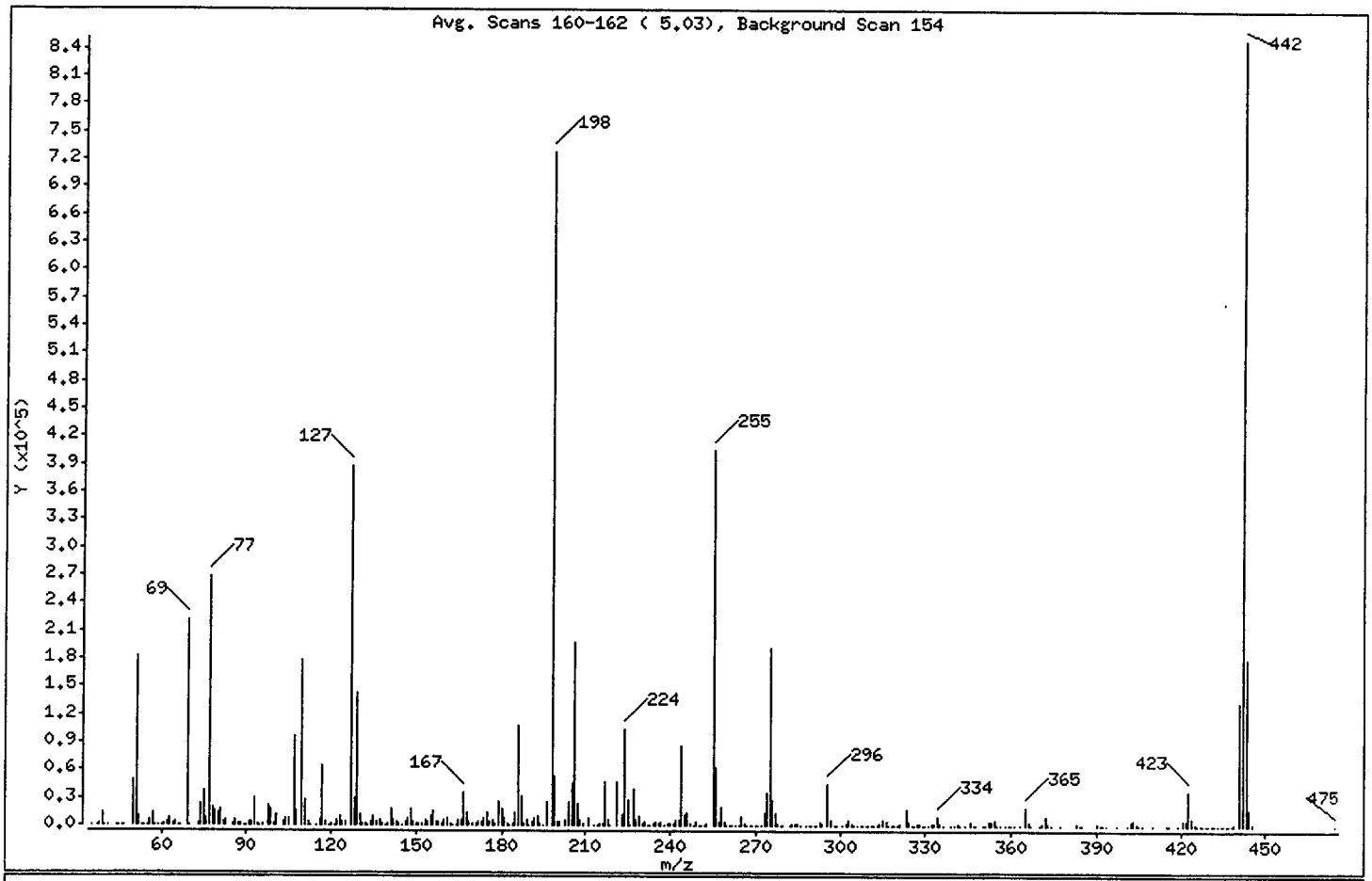
Sample Info: DFTPP0429

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.32

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	25.10
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	30.34
70	Less than 2.00% of mass 69	0.12 (0.39)
127	10.00 - 80.00% of mass 198	53.22
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	7.34
275	10.00 - 60.00% of mass 198	26.46
365	Greater than 1.00% of mass 198	2.79
441	0.01 - 24.00% of mass 442	18.25 (15.59)
442	50.00 - 200.00% of mass 198	117.06
443	15.00 - 24.00% of mass 442	24.88 (21.25)

Data File: /chem3/nt4.i/20110429.b/tune.b/04291101.d

Date : 29-APR-2011 16:11

Client ID: DFTPP0429

Instrument: nt4.i

Sample Info: DFTPP0429

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.32

Data File: 04291101.d

Spectrum: Avg. Scans 160-162 (5.03), Background Scan 154

Location of Maximum: 442.00

Number of points: 349

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	123	136.00	4086	230.00	1452	324.00	2967
37.00	800	137.00	5038	231.00	4044	325.00	379
38.00	2478	138.00	1429	232.00	410	326.00	246
39.00	13337	139.00	914	233.00	794	327.00	2769
40.00	435	140.00	1531	234.00	2801	328.00	1418
41.00	57	141.00	17120	235.00	3140	329.00	337
44.00	131	142.00	6324	236.00	1919	330.00	137
45.00	208	143.00	3489	237.00	3381	331.00	141
46.00	50	144.00	1209	238.00	454	332.00	1004
47.00	176	145.00	594	239.00	1627	333.00	1587
50.00	49192	146.00	3130	240.00	1320	334.00	9888
51.00	182528	147.00	8607	241.00	2365	335.00	2511
52.00	9645	148.00	18560	242.00	5403	336.00	353
53.00	361	149.00	4092	243.00	6664	339.00	102
54.00	115	150.00	1159	244.00	85144	340.00	375
55.00	765	151.00	2054	245.00	11054	341.00	1954
56.00	5391	152.00	1531	246.00	14126	342.00	444
57.00	12935	153.00	5307	247.00	2813	344.00	53
58.00	406	154.00	4075	248.00	843	346.00	3214
59.00	67	155.00	8925	249.00	3308	347.00	675
60.00	247	156.00	15879	250.00	703	348.00	56
61.00	2536	157.00	3561	251.00	919	350.00	224
62.00	3117	158.00	2937	252.00	779	351.00	333
63.00	7766	159.00	1965	253.00	2046	352.00	4521
64.00	1057	160.00	5637	255.00	404288	353.00	3903
65.00	4141	161.00	8415	256.00	62568	354.00	5397
66.00	141	162.00	2340	257.00	4597	355.00	874
67.00	245	163.00	491	258.00	20512	356.00	124
69.00	220672	164.00	834	259.00	3437	358.00	209
70.00	856	165.00	6101	260.00	674	359.00	256
73.00	1799	166.00	5449	261.00	748	360.00	216
74.00	22656	167.00	35376	262.00	156	361.00	182
75.00	36480	168.00	14659	263.00	317	363.00	161
76.00	7810	169.00	3312	264.00	475	365.00	20280
77.00	268928	170.00	1156	265.00	8959	366.00	3241

Data File: /chem3/nt4.i/20110429.b/tune.b/04291101.d

Date : 29-APR-2011 16:11

Client ID: DFTPP0429 Instrument: nt4.i

Sample Info: DFTPP0429

Operator: JZ

Column phase: ZB-5msi Column diameter: 0.32

Data File: 04291101.d
Spectrum: Avg. Scans 160-162 (5.03), Background Scan 154
Location of Maximum: 442.00
Number of points: 349

m/z	Y	m/z	Y	m/z	Y	m/z	Y
78.00	18640	171.00	1369	266.00	1363	367.00	196
79.00	16568	172.00	3291	267.00	239	370.00	485
80.00	13105	173.00	3858	268.00	305	371.00	1190
81.00	18544	174.00	7880	269.00	278	372.00	8822
82.00	4269	175.00	14288	270.00	537	373.00	2181
83.00	5034	176.00	4710	271.00	850	374.00	191
84.00	211	177.00	6208	272.00	747	377.00	241
85.00	2929	178.00	1237	273.00	13064	383.00	2554
86.00	5129	179.00	25944	274.00	35536	384.00	745
87.00	2422	180.00	18392	275.00	192448	385.00	344
88.00	1013	181.00	8773	276.00	26984	390.00	1296
89.00	531	182.00	1197	277.00	13360	391.00	759
90.00	229	183.00	854	278.00	2388	392.00	495
91.00	3934	184.00	1861	279.00	689	393.00	137
92.00	4865	185.00	13225	280.00	73	397.00	58
93.00	30312	186.00	108320	282.00	327	401.00	551
94.00	1991	187.00	30528	283.00	1484	402.00	3718
95.00	408	188.00	2933	284.00	1238	403.00	4955
96.00	1467	189.00	5587	285.00	2784	404.00	1768
98.00	22304	190.00	881	286.00	640	405.00	348
99.00	18432	191.00	3132	288.00	106	406.00	50
100.00	1943	192.00	7699	289.00	593	410.00	215
101.00	11540	193.00	9311	290.00	554	415.00	328
102.00	834	194.00	1832	291.00	221	416.00	55
103.00	3495	195.00	573	292.00	914	419.00	108
104.00	7424	196.00	25408	293.00	3255	421.00	5232
105.00	7186	198.00	727232	294.00	1026	422.00	5112
107.00	95800	199.00	53344	296.00	45352	423.00	37584
108.00	15171	200.00	3917	297.00	5761	424.00	7573
110.00	177536	201.00	4424	298.00	461	425.00	1003
111.00	27520	203.00	5054	299.00	148	426.00	60
112.00	3206	204.00	25304	301.00	619	427.00	117
113.00	944	205.00	44728	302.00	1002	428.00	50
115.00	243	206.00	197760	303.00	5820	429.00	118
116.00	5239	207.00	24288	304.00	1509	430.00	293

Data File: /chem3/nt4.i/20110429.b/tune.b/04291101.d

Date : 29-APR-2011 16:11

Client ID: DFTPP0429 Instrument: nt4.i

Sample Info: DFTPP0429

Operator: JZ

Column phase: ZB-5msi Column diameter: 0.32

Data File: 04291101.d
Spectrum: Avg. Scans 160-162 (5.03), Background Scan 154
Location of Maximum: 442.00
Number of points: 349

m/z	Y	m/z	Y	m/z	Y	m/z	Y
117.00	64792	208.00	6121	305.00	288	431.00	277
118.00	4891	209.00	1790	306.00	57	432.00	351
119.00	595	211.00	7640	307.00	63	433.00	374
120.00	1102	213.00	667	308.00	697	434.00	156
121.00	200	214.00	191	309.00	546	435.00	474
122.00	6248	215.00	1972	310.00	885	436.00	783
123.00	10438	216.00	1858	311.00	206	437.00	279
124.00	4890	217.00	46272	312.00	108	438.00	589
125.00	4158	218.00	6673	313.00	540	439.00	1685
127.00	387008	219.00	723	314.00	2078	441.00	132736
128.00	29104	221.00	46872	315.00	5031	442.00	851264
129.00	142464	223.00	11617	316.00	2962	443.00	180928
130.00	11808	224.00	103136	317.00	540	444.00	17480
131.00	2118	225.00	26624	318.00	57	445.00	1104
132.00	1318	226.00	418	319.00	59	475.00	50
133.00	592	227.00	38232	320.00	231		
134.00	3791	228.00	5912	321.00	1544		
135.00	10533	229.00	9145	323.00	17584		

Data File: /chem3/nt4.i/20110429.b/tune.b/04291101.d

Date : 29-APR-2011 16:11

Client ID: DFTPP0429

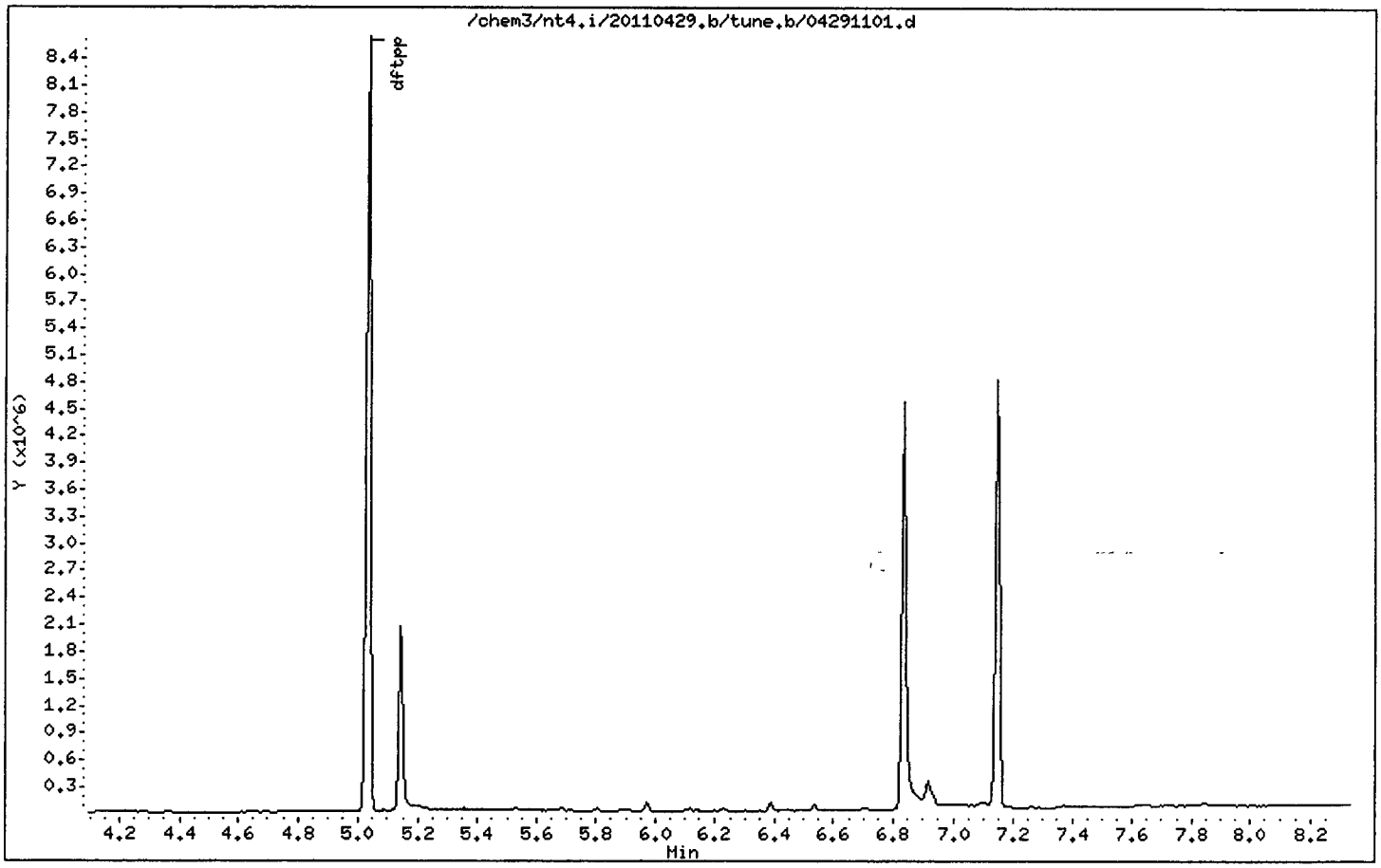
Instrument: nt4.i

Sample Info: DFTPP0429

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.32



Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20110429.b/04291118.d
Lab Smp Id: SS71MBS1 Client Smp ID: SS71MBS1
Inj Date : 30-APR-2011 00:08
Operator : JZ Inst ID: nt4.i
Smp Info : SS71MBS1,
Misc Info : 11-8662
Comment : 1ul Injection
Method : /chem3/nt4.i/20110429.b/SIMPNA0421.m
Meth Date : 02-May-2011 13:38 jianqing Quant Type: ISTD
Cal Date : 21-APR-2011 22:25 Cal File: 04211107.d
Als bottle: 18 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

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

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Ws	10.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
* 27 Naphthalene-d8	136	4.980	4.988	(1.000)	251039	2.00000	
28 Naphthalene	128	Compound Not Detected.					
$ 190 2-Methylnaphthalene-d10	152	5.722	5.729	(1.149)	132835	1.89314	94.66
32 2-Methylnaphthalene	141	Compound Not Detected.					
105 1-methylnaphthalene	141	Compound Not Detected.					
40 Acenaphthylene	152	Compound Not Detected.					
* 42 Acenaphthene-d10	164	7.242	7.250	(1.000)	145779	2.00000	
44 Acenaphthene	153	Compound Not Detected.					
46 Dibenzofuran	168	Compound Not Detected.					
49 Fluorene	166	Compound Not Detected.					
* 59 Phenanthrene-d10	188	9.195	9.202	(1.000)	248170	2.00000	
60 Phenanthrene	178	Compound Not Detected.					
61 Anthracene	178	Compound Not Detected.					
64 Fluoranthene	202	Compound Not Detected.					
65 Pyrene	202	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
	68 Benzo(a)anthracene	228	Compound Not Detected.					
*	69 Chrysene-d12	240	14.027	14.041	(1.000)	252352	2.00000	
	71 Chrysene	228	Compound Not Detected.					
	74 Benzo(b)fluoranthene	252	Compound Not Detected.					
	75 Benzo(k)fluoranthene	252	Compound Not Detected.					
	188 Benzo(j)fluoranthene	252	Compound Not Detected.					
	76 Benzo(a)pyrene	252	Compound Not Detected.					
*	77 Perylene-d12	264	17.746	17.763	(1.000)	212784	2.00000	
	78 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
$	191 Dibenzo(a,h)anthracene-d14	292	20.096	20.110	(1.132)	163712	1.85980	92.99
	79 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	80 Benzo(g,h,i)perylene	276	Compound Not Detected.					
	99 Perylene	252	Compound Not Detected.					

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 04291118.d
Lab Smp Id: SS71MBS1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20110429.b/SIMPNA0421.m
Misc Info: 11-8662

Calibration Date: 29-APR-2011
Calibration Time: 16:26
Client Smp ID: SS71MBS1
Level: LOW
Sample Type: Solid

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	276036	138018	552072	251039	-9.06
42 Acenaphthene-d10	158527	79264	317054	145779	-8.04
59 Phenanthrene-d10	277528	138764	555056	248170	-10.58
69 Chrysene-d12	304115	152058	608230	252352	-17.02
77 Perylene-d12	257833	128916	515666	212784	-17.47

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	4.99	4.49	5.49	4.98	-0.16
42 Acenaphthene-d10	7.25	6.75	7.75	7.24	-0.11
59 Phenanthrene-d10	9.20	8.70	9.70	9.19	-0.08
69 Chrysene-d12	14.04	13.54	14.54	14.03	-0.10
77 Perylene-d12	17.76	17.26	18.26	17.75	-0.10

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

Analytical Resources, Inc.

RECOVERY REPORT

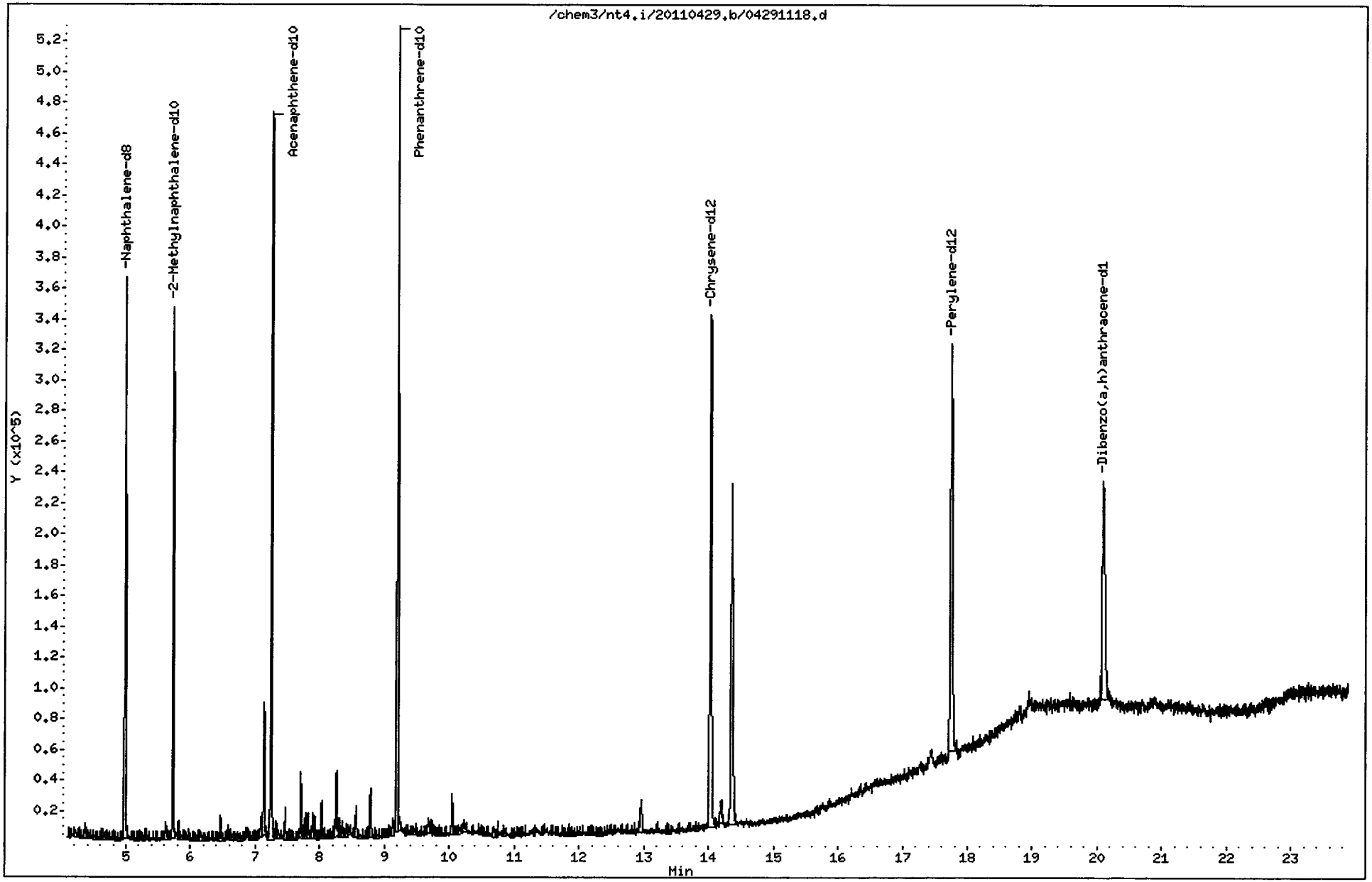
Client Name: Floyd Snider
Sample Matrix: SOLID
Lab Smp Id: SS71MBS1
Level: LOW
Data Type: MS DATA
SpikeList File: pnalcss.spk
Sublist File: pnax.sub
Method File: /chem3/nt4.i/20110429.b/SIMPNA0421.m
Misc Info: 11-8662

Client SDG: SS71
Fraction: SV
Client Smp ID: SS71MBS1
Operator: JZ
SampleType: BLANK
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	150.0	94.66	63.10	34-100
$ 191 Dibenzo(a,h)anthra	150.0	92.99	61.99	10-117

Data File: /chem3/nt4.i/20110429.b/04291118.d
Date : 30-APR-2011 00:08
Client ID: SS71MBS1
Sample Info: SS71MBS1,
Volume Injected (uL): 1.0
Column phase: ZB35

Instrument: nt4.i
Operator: JZ
Column diameter: 0.32



CO-ELUTION SUMMARY FOR FILE - 04291118.d

Lab ID: SS71MBS1, Method: SIMPNA0421.m, Instrument: nt4.i, Date: 30-APR-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20110429.b/04291119.d
Lab Smp Id: SS71LCSS1 Client Smp ID: SS71LCSS1
Inj Date : 30-APR-2011 00:35
Operator : JZ Inst ID: nt4.i
Smp Info : SS71LCSS1,
Misc Info : 11-8662
Comment : 1ul Injection
Method : /chem3/nt4.i/20110429.b/SIMPNA0421.m
Meth Date : 02-May-2011 13:37 jianqing Quant Type: ISTD
Cal Date : 21-APR-2011 22:25 Cal File: 04211107.d
Als bottle: 19 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

05/07/11

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

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Ws	10.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
* 27 Naphthalene-d8	136	4.979	4.988	(1.000)	263020	2.00000	
28 Naphthalene	128	5.008	5.017	(1.006)	205553	1.73367	86.68
$ 190 2-Methylnaphthalene-d10	152	5.724	5.729	(1.149)	135775	1.84690	92.34
32 2-Methylnaphthalene	141	5.768	5.774	(1.158)	118448	1.78010	89.00
105 1-methylnaphthalene	141	5.960	5.969	(1.197)	122378	1.76960	88.48
40 Acenaphthylene	152	7.102	7.111	(0.980)	230176	1.83476	91.74
* 42 Acenaphthene-d10	164	7.244	7.250	(1.000)	153946	2.00000	
44 Acenaphthene	153	7.288	7.294	(1.006)	139537	1.80899	90.45
46 Dibenzofuran	168	7.433	7.439	(1.026)	209160	1.98212	99.11
49 Fluorene	166	7.891	7.897	(1.089)	177676	1.96227	98.11
* 59 Phenanthrene-d10	188	9.194	9.202	(1.000)	262393	2.00000	
60 Phenanthrene	178	9.228	9.234	(1.004)	276043	2.14970	107.5
61 Anthracene	178	9.260	9.266	(1.007)	282405	2.12188	106.1
64 Fluoranthene	202	10.966	10.975	(1.193)	327245	2.30714	115.4
65 Pyrene	202	11.455	11.467	(0.817)	330379	2.44186	122.1

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
68	Benzo(a)anthracene	228	13.909	13.925	(0.991)	310301	2.47253	123.6
* 69	Chrysene-d12	240	14.029	14.041	(1.000)	269071	2.00000	
71	Chrysene	228	14.099	14.111	(1.005)	307248	2.52643	126.3
74	Benzo(b)fluoranthene	252	16.569	16.584	(0.934)	313427	2.57579	128.8
75	Benzo(k)fluoranthene	252	16.625	16.637	(0.937)	314204	2.50916	125.5
188	Benzo(j)fluoranthene	252	Compound Not Detected.					
76	Benzo(a)pyrene	252	17.540	17.552	(0.988)	257556	2.36556	118.3
* 77	Perylene-d12	264	17.748	17.763	(1.000)	224278	2.00000	
78	Indeno(1,2,3-cd)pyrene	276	20.177	20.199	(1.137)	225025	1.75676	87.84
$ 191	Dibenzo(a,h)anthracene-d14	292	20.095	20.110	(1.132)	175250	1.88885	94.44
79	Dibenzo(a,h)anthracene	278	20.190	20.205	(1.138)	190225	1.83137	91.57
80	Benzo(g,h,i)perylene	276	21.098	21.110	(1.189)	172270	1.57460	78.73
99	Perylene	252	17.818	17.827	(1.004)	292404	3.16683	158.3

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 04291119.d
Lab Smp Id: SS71LCSS1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20110429.b/SIMPNA0421.m
Misc Info: 11-8662

Calibration Date: 29-APR-2011
Calibration Time: 16:26
Client Smp ID: SS71LCSS1
Level: LOW
Sample Type: Solid

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	276036	138018	552072	263020	-4.72
42 Acenaphthene-d10	158527	79264	317054	153946	-2.89
59 Phenanthrene-d10	277528	138764	555056	262393	-5.45
69 Chrysene-d12	304115	152058	608230	269071	-11.52
77 Perylene-d12	257833	128916	515666	224278	-13.01

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	4.99	4.49	5.49	4.98	-0.18
42 Acenaphthene-d10	7.25	6.75	7.75	7.24	-0.08
59 Phenanthrene-d10	9.20	8.70	9.70	9.19	-0.10
69 Chrysene-d12	14.04	13.54	14.54	14.03	-0.09
77 Perylene-d12	17.76	17.26	18.26	17.75	-0.09

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

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd Snider
Sample Matrix: SOLID
Lab Smp Id: SS71LCSS1
Level: LOW
Data Type: MS DATA
SpikeList File: pnalcss.spk
Sublist File: pnax.sub
Method File: /chem3/nt4.i/20110429.b/SIMPNA0421.m
Misc Info: 11-8662

Client SDG: SS71
Fraction: SV
Client Smp ID: SS71LCSS1
Operator: JZ
SampleType: LCS
Quant Type: ISTD

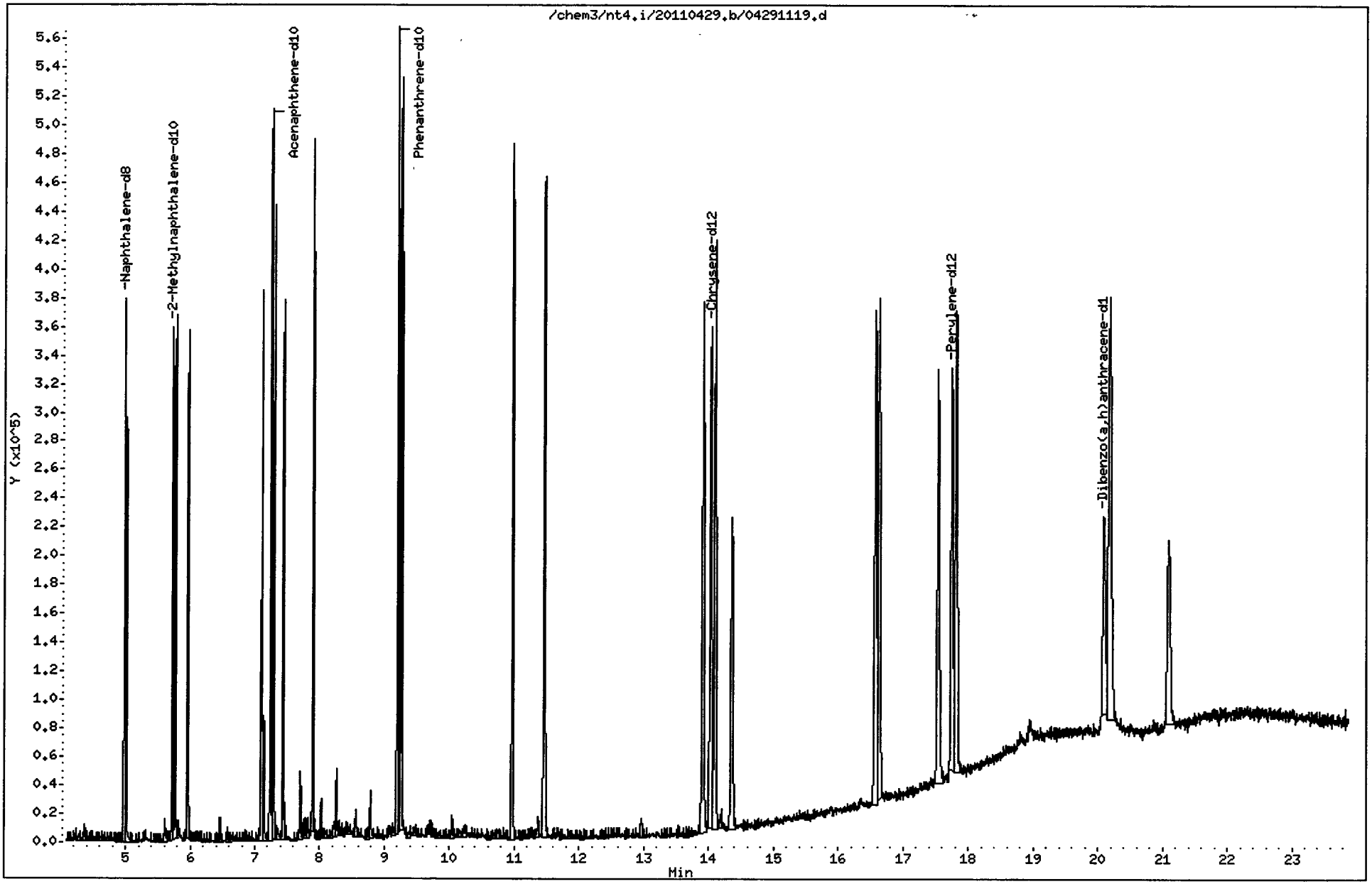
SPIKE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
28 Naphthalene	150.0	86.68	57.79	37-100
32 2-Methylnaphthalen	150.0	89.00	59.34	37-100
105 1-methylnaphthalen	150.0	88.48	58.99	30-160
40 Acenaphthylene	150.0	91.74	61.16	35-100
44 Acenaphthene	150.0	90.45	60.30	39-100
46 Dibenzofuran	150.0	99.11	66.07	39-100
49 Fluorene	150.0	98.11	65.41	42-100
60 Phenanthrene	150.0	107.5	71.66	47-100
61 Anthracene	150.0	106.1	70.73	41-106
64 Fluoranthene	150.0	115.4	76.90	52-109
65 Pyrene	150.0	122.1	81.40	47-111
68 Benzo(a)anthracene	150.0	123.6	82.42	47-114
71 Chrysene	150.0	126.3	84.21	51-106
74 Benzo(b)fluoranthe	150.0	128.8	85.86	30-160
75 Benzo(k)fluoranthe	150.0	125.5	83.64	30-160
76 Benzo(a)pyrene	150.0	118.3	78.85	44-111
78 Indeno(1,2,3-cd)py	150.0	87.84	58.56	41-114
79 Dibenzo(a,h)anthra	150.0	91.57	61.05	42-118
80 Benzo(g,h,i)peryle	150.0	78.73	52.49	37-115
99 Perylene	150.0	158.3	105.56	30-160

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	150.0	92.34	61.56	34-100
$ 191 Dibenzo(a,h)anthra	150.0	94.44	62.96	10-117

Data File: /chem3/nt4.i/20110429.b/04291119.d
Date : 30-APR-2011 00:35
Client ID: SS71LCSS1
Sample Info: SS71LCSS1,
Volume Injected (uL): 1.0
Column phase: ZB35

Instrument: nt4.i
Operator: JZ
Column diameter: 0.32

SS71 : 08802



CO-ELUTION SUMMARY FOR FILE - 04291119.d

Lab ID: SS71LCSS1, Method: SIMPNA0421.m, Instrument: nt4.i, Date: 30-APR-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20110429.b/04291121.d
Lab Smp Id: SS71A Client Smp ID: LL-SB6-0-0.5-041811
Inj Date : 30-APR-2011 01:31
Operator : JZ Inst ID: nt4.i
Smp Info : SS71A
Misc Info : 11-8654
Comment : 1ul Injection
Method : /chem3/nt4.i/20110429.b/SIMPNA0421.m
Meth Date : 02-May-2011 13:38 jianqing Quant Type: ISTD
Cal Date : 21-APR-2011 22:25 Cal File: 04211107.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

AB 05/02/11

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

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Ws	13.22000	Weight of sample extracted (g)
M	17.60000	% Moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
* 27 Naphthalene-d8	136	4.981	4.988	(1.000)	259755	2.00000	
28 Naphthalene	128	5.009	5.017	(1.006)	6534	0.05580	2.561
$ 190 2-Methylnaphthalene-d10	152	5.722	5.729	(1.149)	130324	1.79503	82.39
32 2-Methylnaphthalene	141	Compound Not Detected.					
105 1-methylnaphthalene	141	Compound Not Detected.					
40 Acenaphthylene	152	Compound Not Detected.					
* 42 Acenaphthene-d10	164	7.243	7.250	(1.000)	152649	2.00000	
44 Acenaphthene	153	Compound Not Detected.					
46 Dibenzofuran	168	Compound Not Detected.					
49 Fluorene	166	Compound Not Detected.					
* 59 Phenanthrene-d10	188	9.195	9.202	(1.000)	250096	2.00000	
60 Phenanthrene	178	9.227	9.234	(1.003)	18686	0.15267	7.008
61 Anthracene	178	Compound Not Detected.					
64 Fluoranthene	202	10.965	10.975	(1.192)	35894	0.26550	12.19
65 Pyrene	202	11.457	11.467	(0.816)	39863	0.29138	13.37

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
	68 Benzo(a)anthracene	228	13.917	13.925	(0.992)	16188	0.12757	5.855
*	69 Chrysene-d12	240	14.034	14.041	(1.000)	272070	2.00000	
	71 Chrysene	228	14.094	14.111	(1.004)	40891	0.33253	15.26
	74 Benzo(b)fluoranthene	252	16.580	16.584	(0.933)	34975	0.28021	12.86
	75 Benzo(k)fluoranthene	252	16.633	16.637	(0.936)	13380	0.10417	4.781
	188 Benzo(j)fluoranthene	252	16.718	16.716	(0.941)	14869	0.11803	5.418
	76 Benzo(a)pyrene	252	17.558	17.552	(0.988)	21593	0.19334	8.874
*	77 Perylene-d12	264	17.763	17.763	(1.000)	230054	2.00000	
	78 Indeno(1,2,3-cd)pyrene	276	20.198	20.199	(1.137)	22990	0.17498	8.031
$	191 Dibenzo(a,h)anthracene-d14	292	20.109	20.110	(1.132)	163235	1.71518	78.73
	79 Dibenzo(a,h)anthracene	278	20.207	20.205	(1.138)	9105	0.08546	3.922
	80 Benzo(g,h,i)perylene	276	21.125	21.110	(1.189)	35409	0.31552	14.48
	99 Perylene	252	17.829	17.827	(1.004)	23318	0.24620	11.30

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 04291121.d
Lab Smp Id: SS71A
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20110429.b/SIMPNA0421.m
Misc Info: 11-8654

Calibration Date: 29-APR-2011
Calibration Time: 16:26
Client Smp ID: LL-SB6-0-0.5-041
Level: LOW
Sample Type: Soil

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	276036	138018	552072	259755	-5.90
42 Acenaphthene-d10	158527	79264	317054	152649	-3.71
59 Phenanthrene-d10	277528	138764	555056	250096	-9.88
69 Chrysene-d12	304115	152058	608230	272070	-10.54
77 Perylene-d12	257833	128916	515666	230054	-10.77

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	4.99	4.49	5.49	4.98	-0.14
42 Acenaphthene-d10	7.25	6.75	7.75	7.24	-0.10
59 Phenanthrene-d10	9.20	8.70	9.70	9.20	-0.08
69 Chrysene-d12	14.04	13.54	14.54	14.03	-0.05
77 Perylene-d12	17.76	17.26	18.26	17.76	0.00

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

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd Snider
Client SDG: SS71
Sample Matrix: SOLID
Fraction: SV
Lab Smp Id: SS71A
Client Smp ID: LL-SB6-0-0.5-041811
Level: LOW
Operator: JZ
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: pnalcss.spk
Quant Type: ISTD
Sublist File: pnax.sub
Method File: /chem3/nt4.i/20110429.b/SIMPNA0421.m
Misc Info: 11-8654

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	137.7	82.39	59.83	34-100
$ 191 Dibenzo(a,h)anthra	137.7	78.73	57.17	10-117

Data File: /chem3/nt4.i/20110429.b/04291121.d

Date : 30-APR-2011 01:31

Client ID: LL-SB6-0-0.5-041811

Sample Info: SS71A

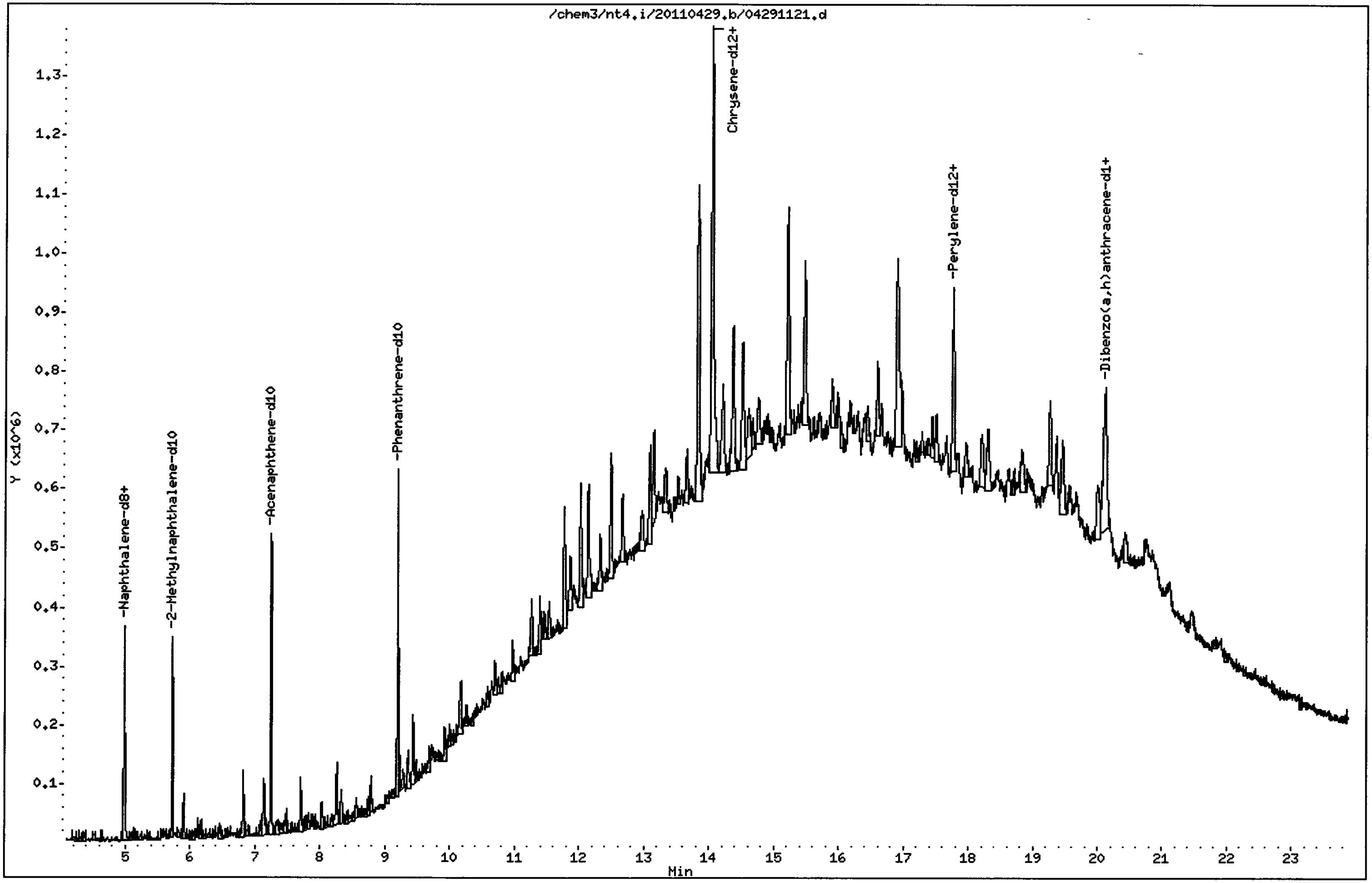
Volume Injected (uL): 1.0

Column phase: ZB35

Instrument: nt4.i

Operator: JZ

Column diameter: 0.32



Data File: /chem3/nt4.i/20110429.b/04291121.d

Date : 30-APR-2011 01:31

Client ID: LL-SB6-0-0.5-041811

Instrument: nt4.i

Sample Info: SS71A

Volume Injected (uL): 1.0

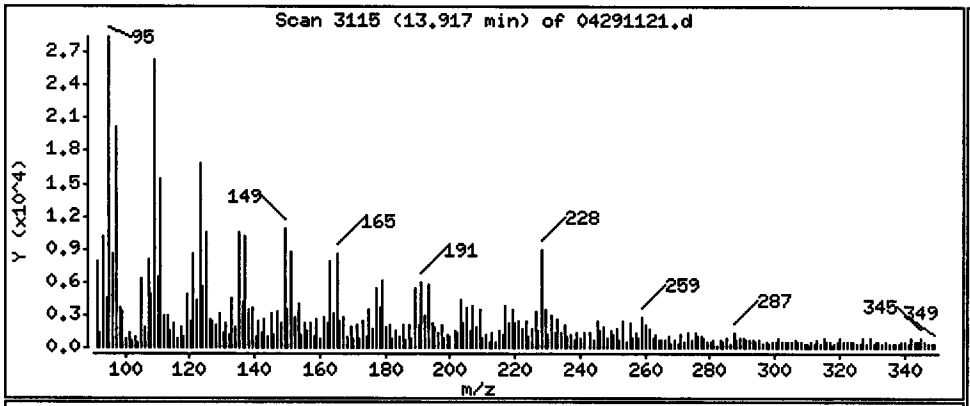
Operator: JZ

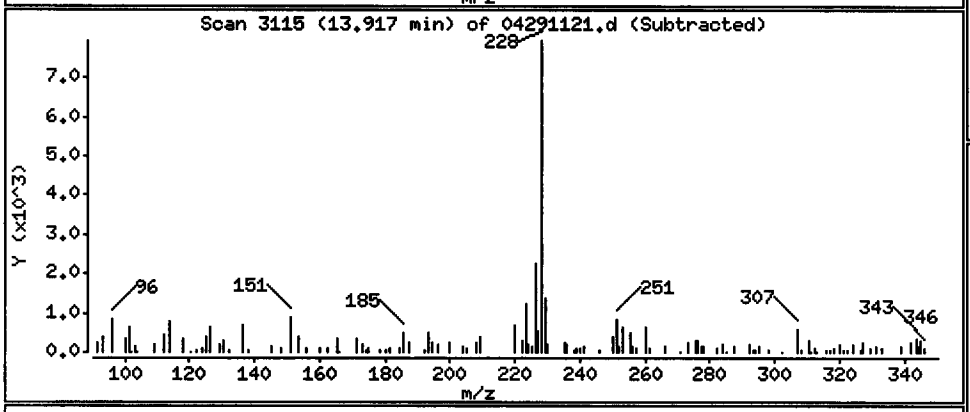
Column phase: ZB35

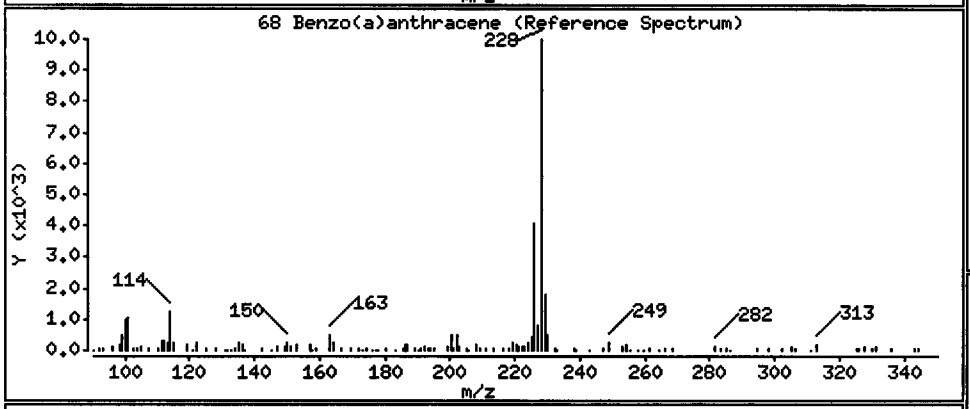
Column diameter: 0.32

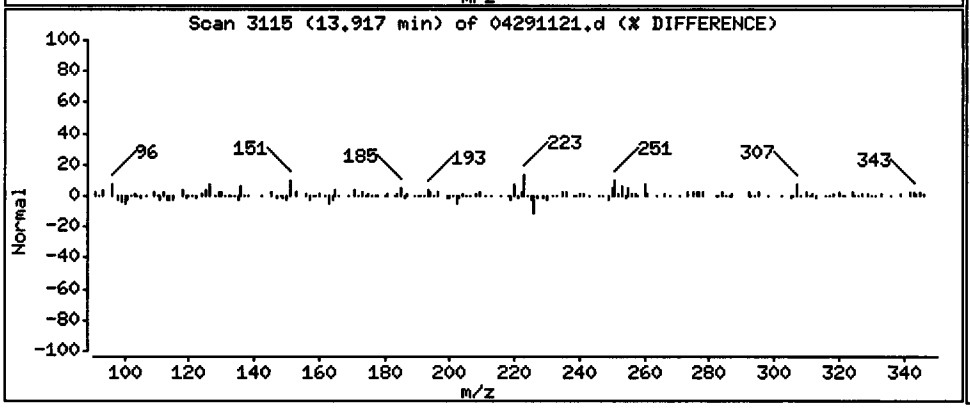
68 Benzo(a)anthracene

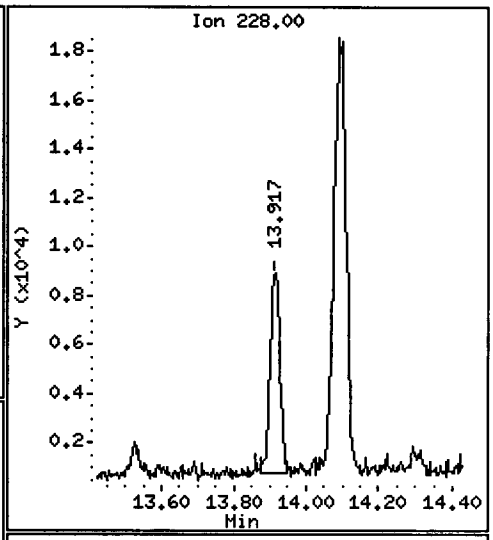
Concentration: 5.855 ug/kg

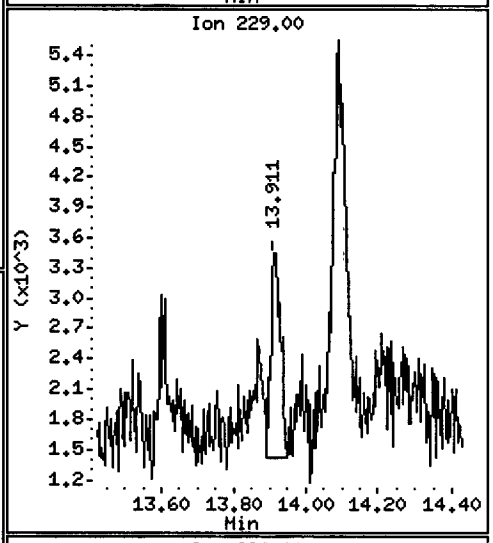


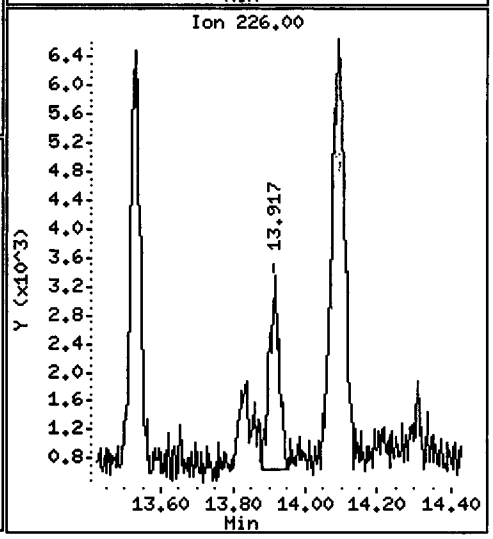












Data File: /chem3/nt4.i/20110429.b/04291121.d

Date : 30-APR-2011 01:31

Client ID: LL-SB6-0-0.5-041811

Instrument: nt4.i

Sample Info: SS71A

Volume Injected (uL): 1.0

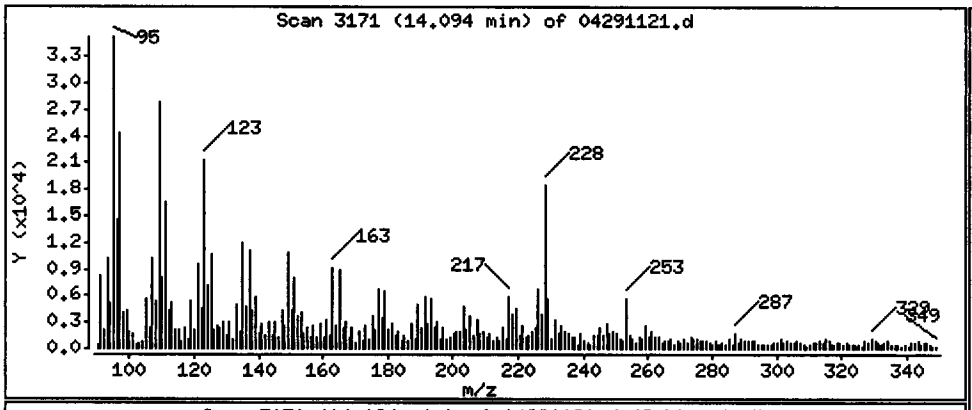
Operator: JZ

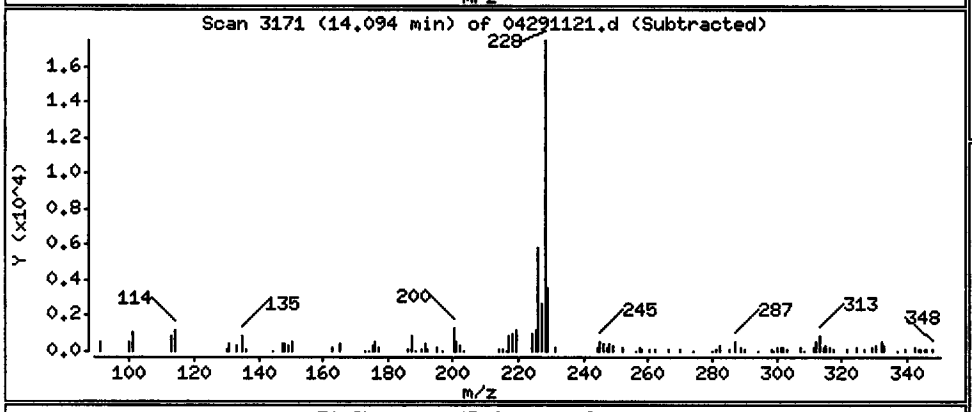
Column phase: ZB35

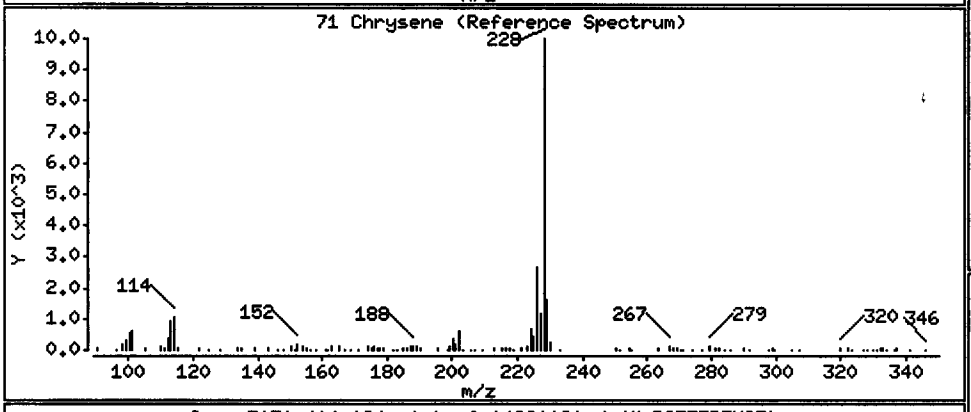
Column diameter: 0.32

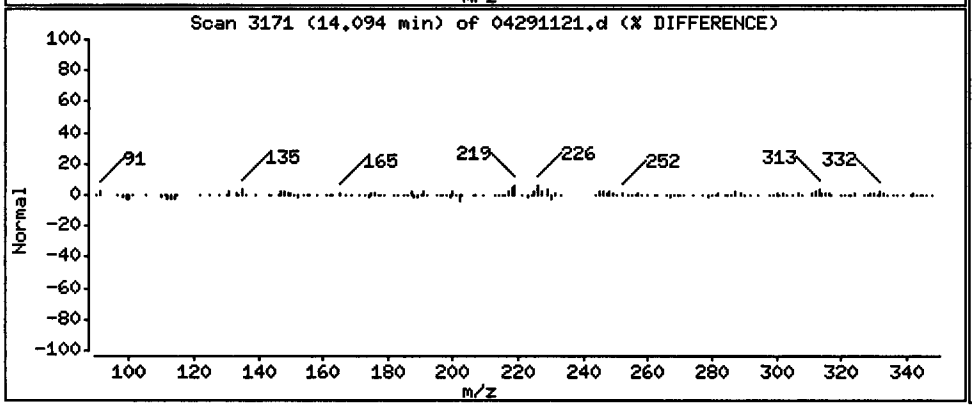
71 Chrysene

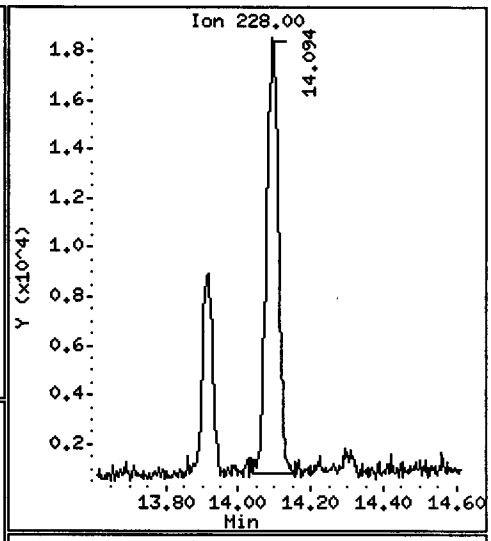
Concentration: 15.26 ug/kg

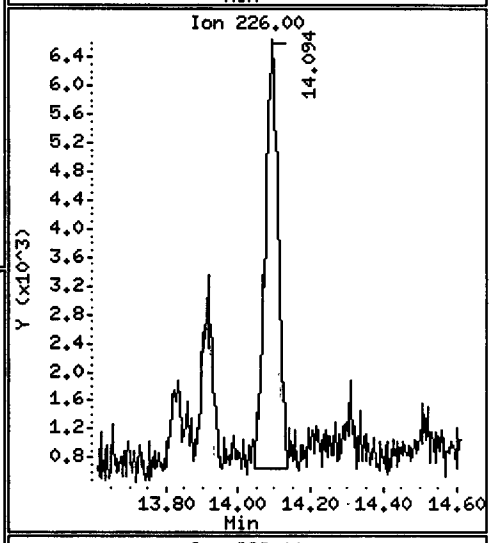


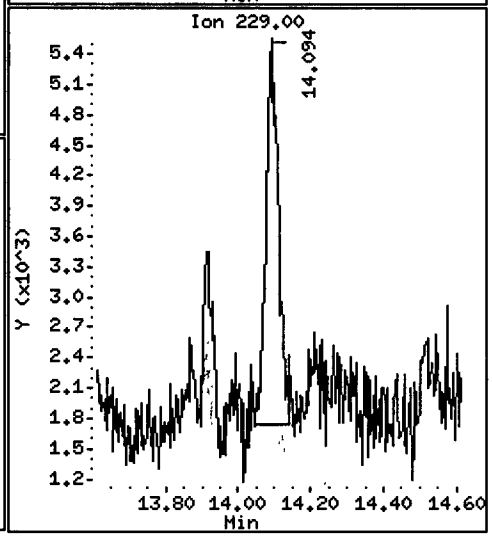












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Date : 30-APR-2011 01:31

Client ID: LL-SB6-0-0.5-041811

Instrument: nt4.i

Sample Info: SS71A

Volume Injected (uL): 1.0

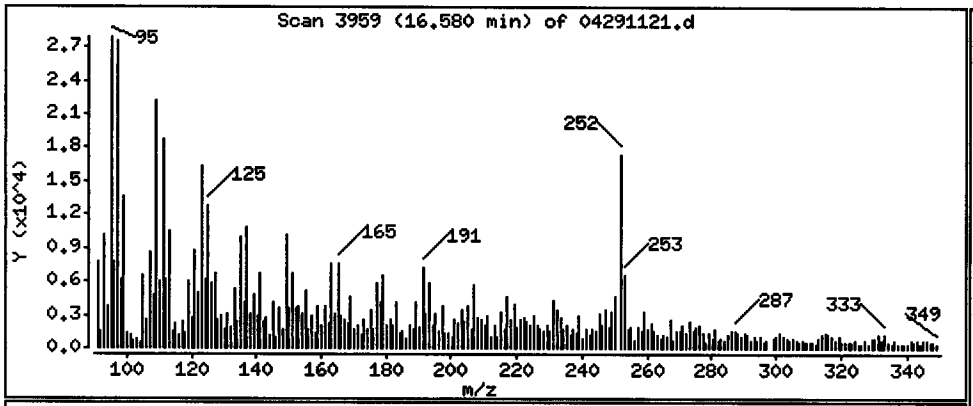
Operator: JZ

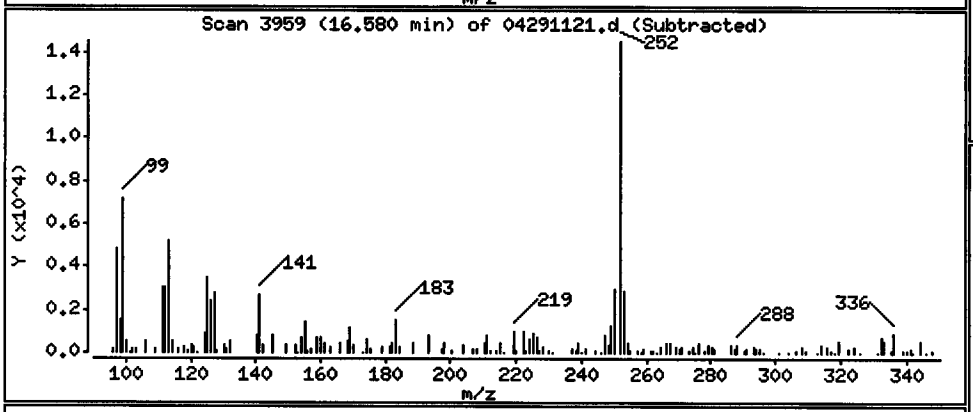
Column phase: ZB35

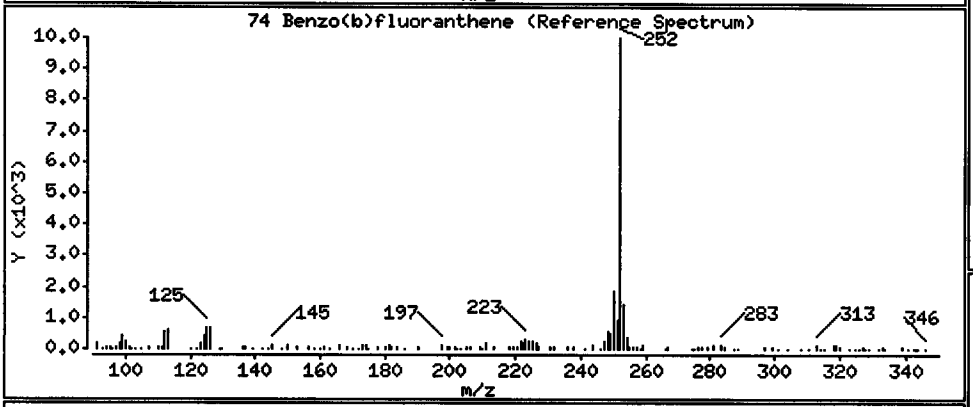
Column diameter: 0.32

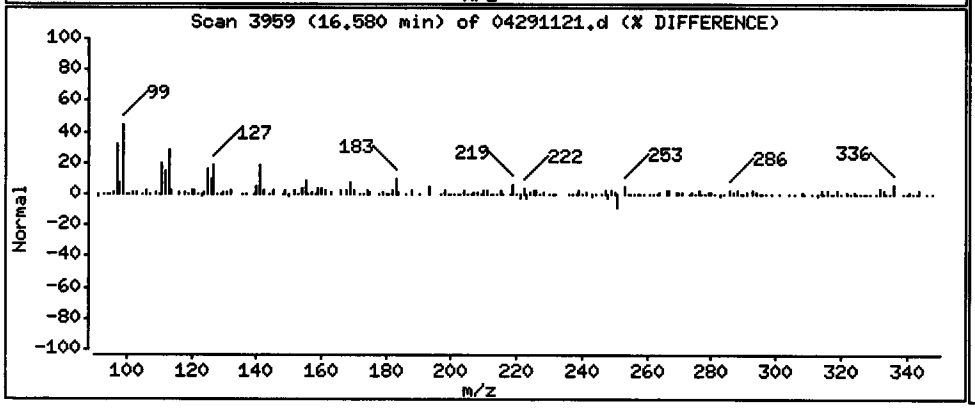
74 Benzo(b)fluoranthene

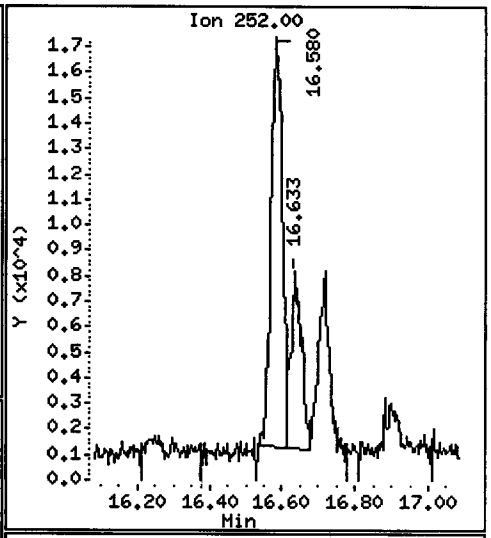
Concentration: 12.86 ug/kg

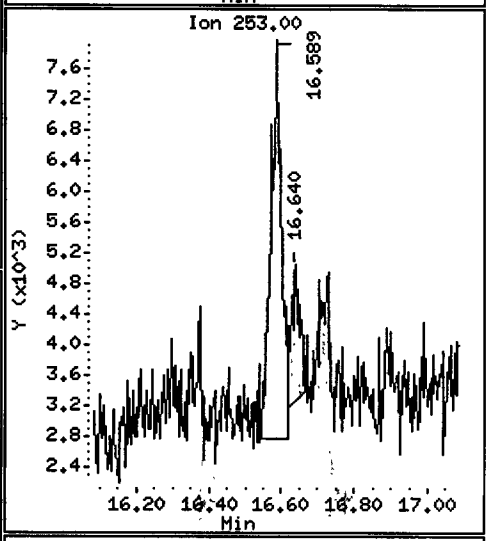


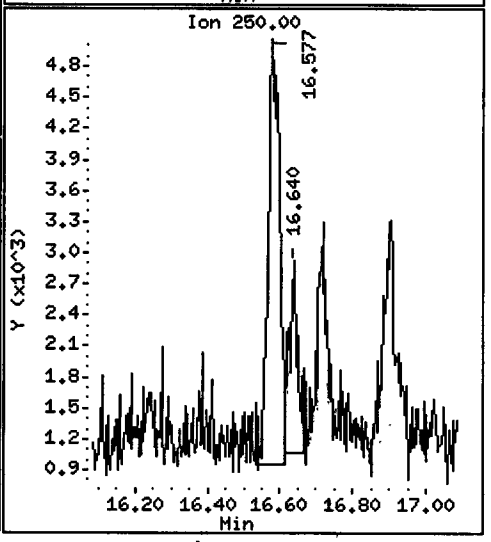












Data File: /chem3/nt4.i/20110429.b/04291121.d

Date : 30-APR-2011 01:31

Client ID: LL-SB6-0-0.5-041811

Instrument: nt4.i

Sample Info: SS71A

Volume Injected (uL): 1.0

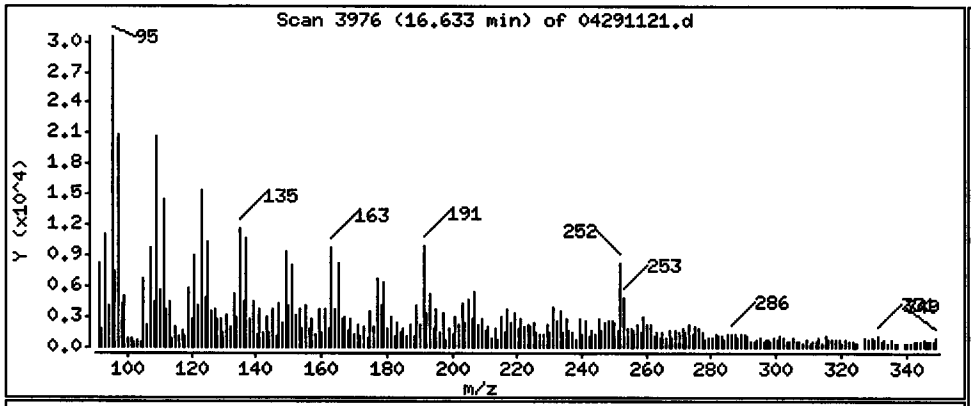
Operator: JZ

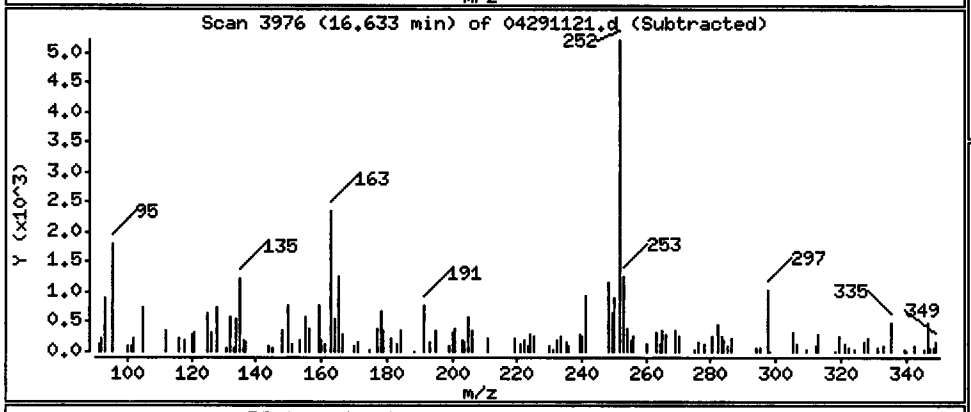
Column phase: ZB35

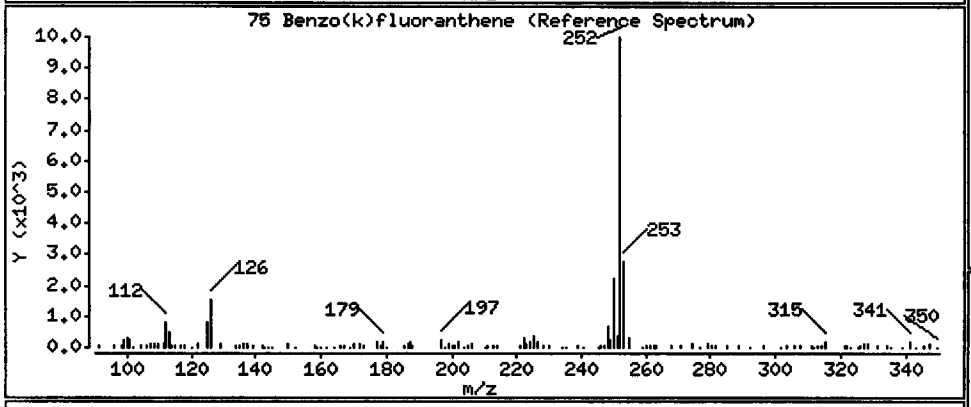
Column diameter: 0.32

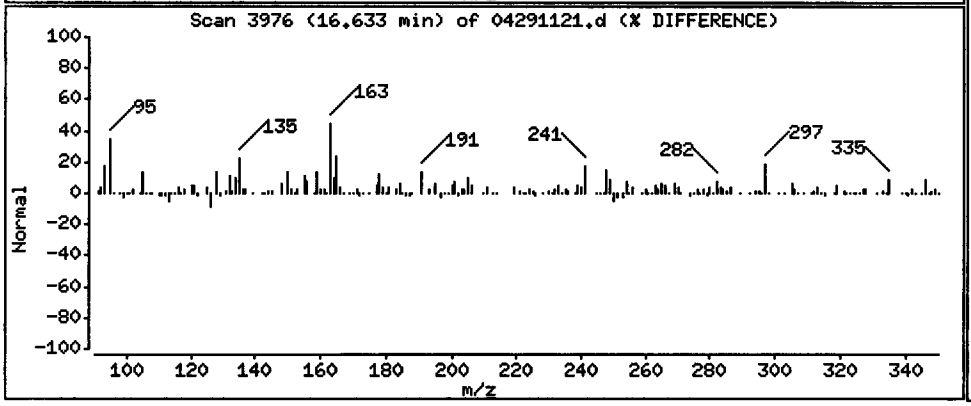
75 Benzo(k)fluoranthene

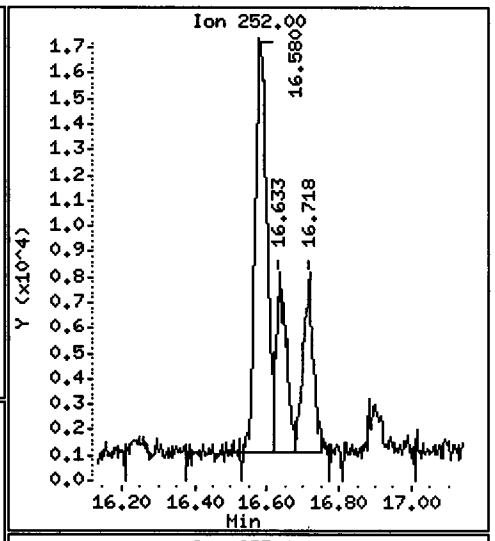
Concentration: 4.781 ug/kg

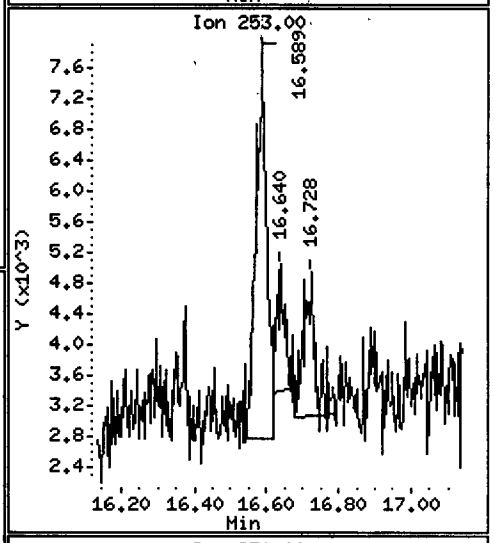


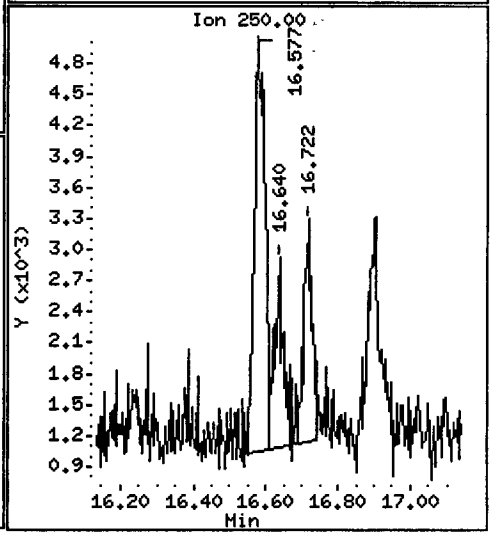












Data File: /chem3/nt4.i/20110429.b/04291121.d

Date : 30-APR-2011 01:31

Client ID: LL-SB6-0-0.5-041811

Instrument: nt4.i

Sample Info: SS71A

Volume Injected (uL): 1.0

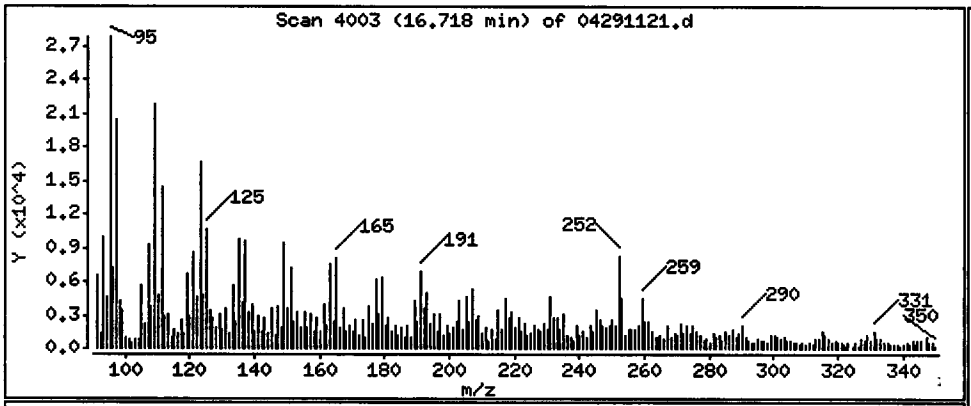
Operator: JZ

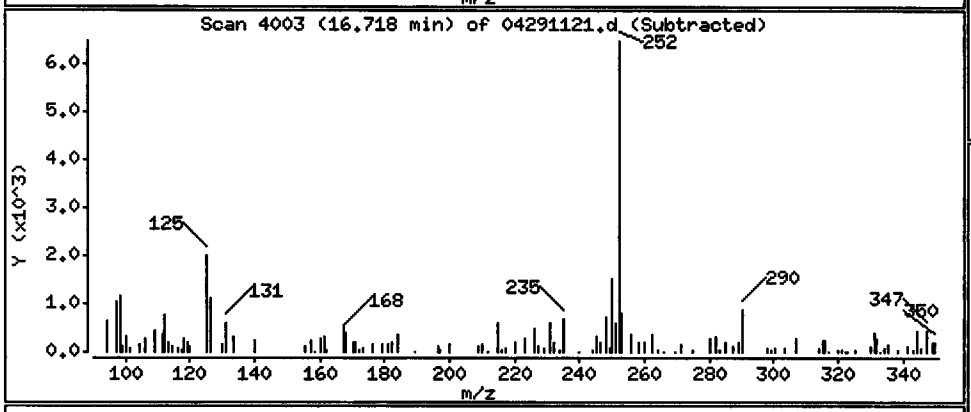
Column phase: ZB35

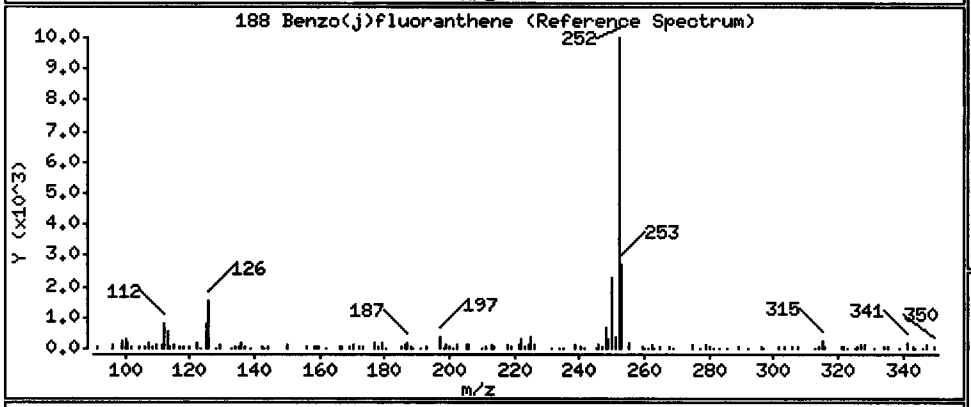
Column diameter: 0.32

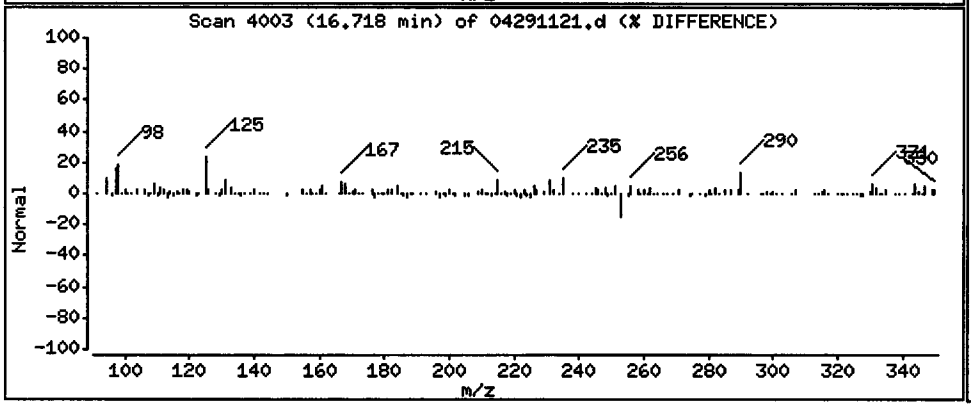
188 Benzo(j)fluoranthene

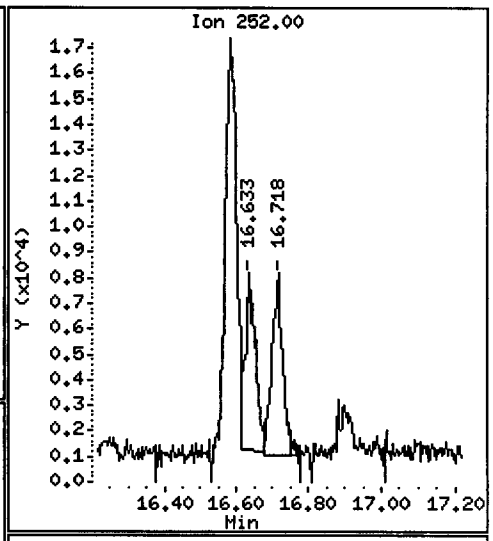
Concentration: 5.418 ug/kg

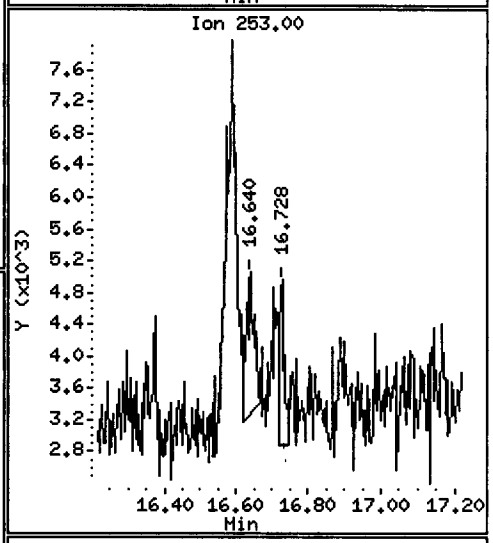


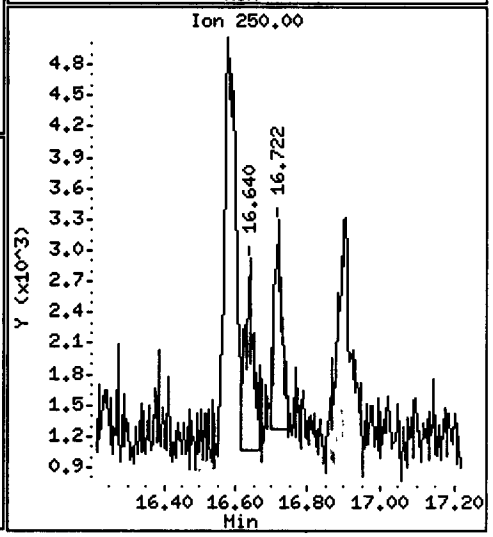












Data File: /chem3/nt4.i/20110429.b/04291121.d

Date : 30-APR-2011 01:31

Client ID: LL-SB6-0-0.5-041811

Instrument: nt4.i

Sample Info: SS71A

Volume Injected (uL): 1.0

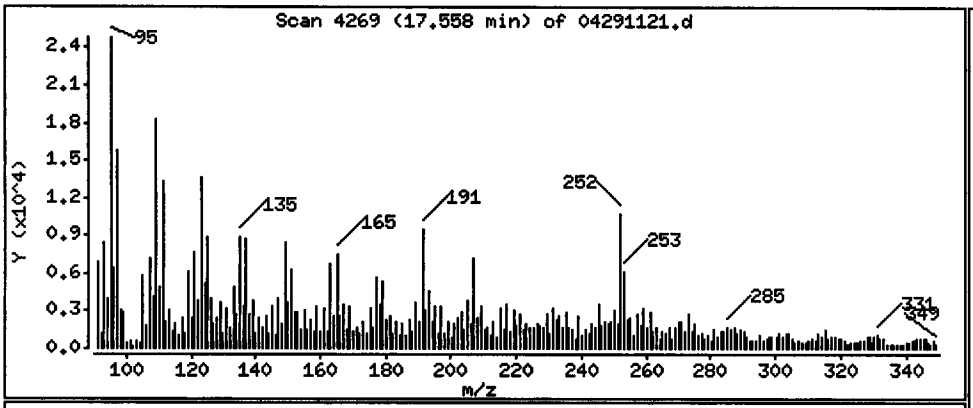
Operator: JZ

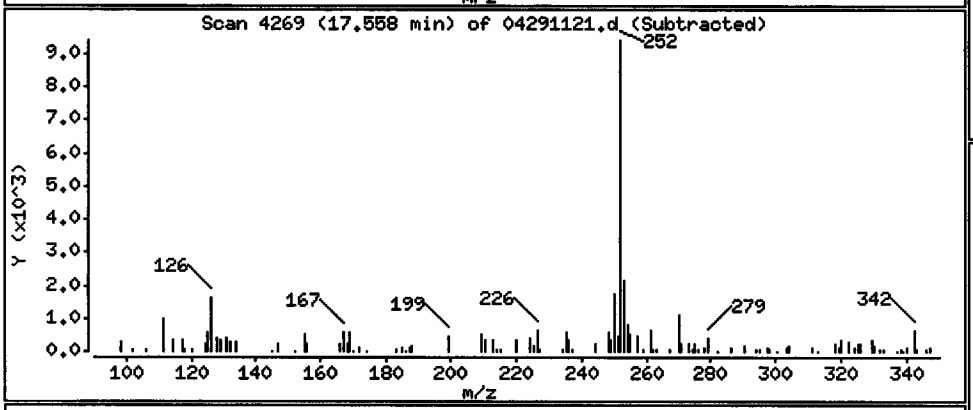
Column phase: ZB35

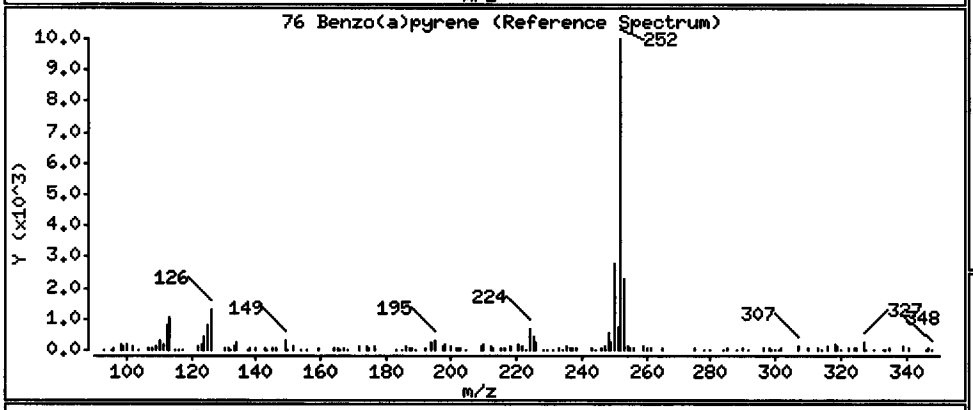
Column diameter: 0.32

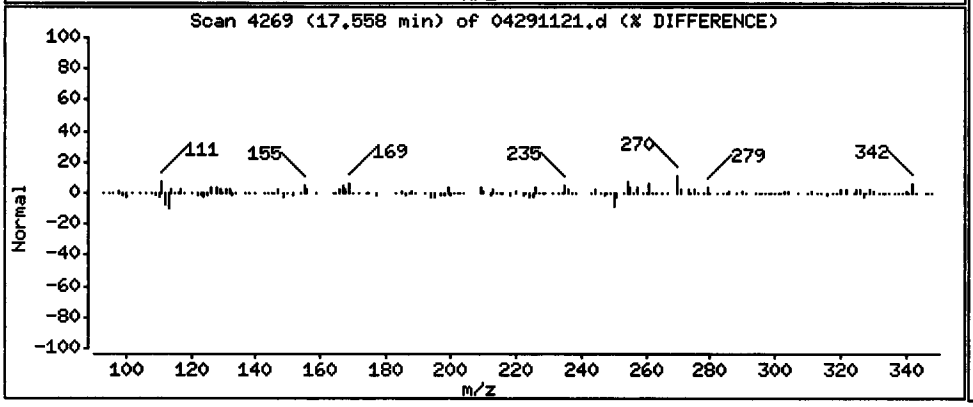
76 Benzo(a)pyrene

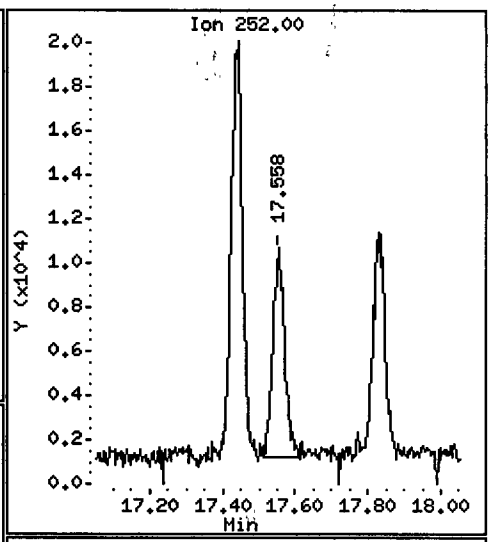
Concentration: 8.874 ug/kg

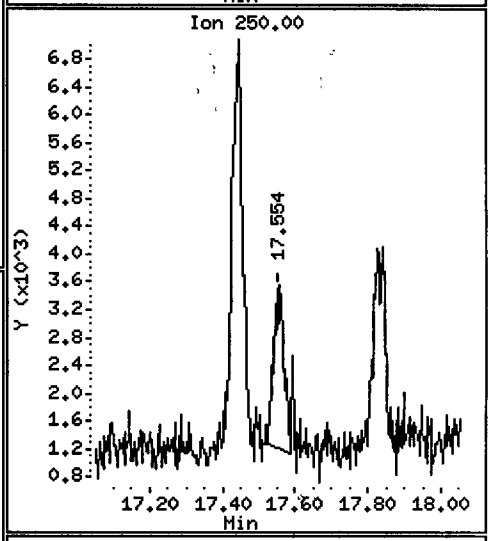


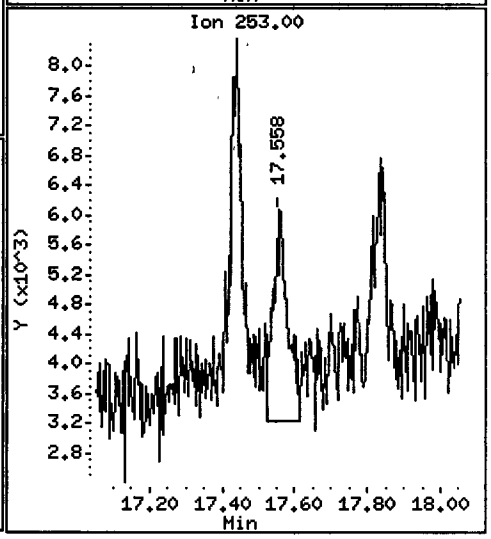












Data File: /chem3/nt4.i/20110429.b/04291121.d

Date : 30-APR-2011 01:31

Client ID: LL-SB6-0-0.5-041811

Instrument: nt4.i

Sample Info: SS71A

Volume Injected (uL): 1.0

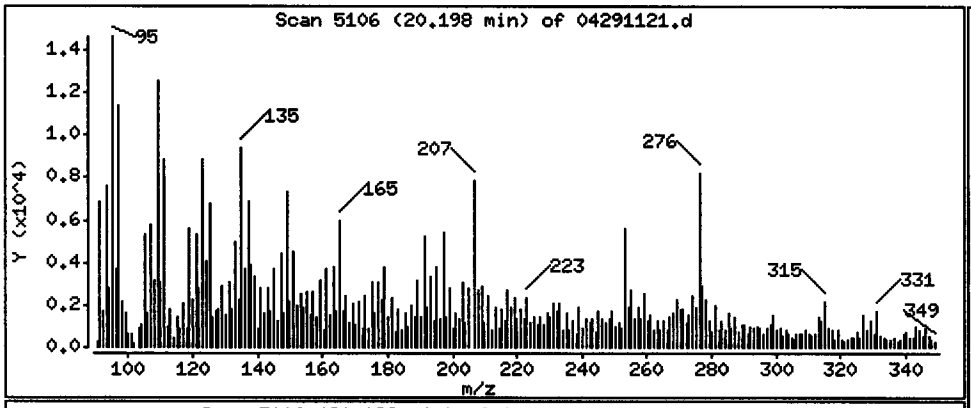
Operator: JZ

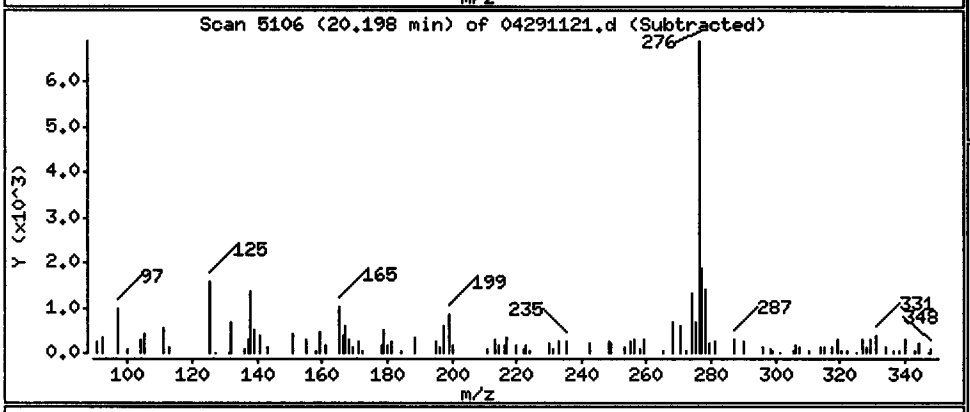
Column phase: ZB35

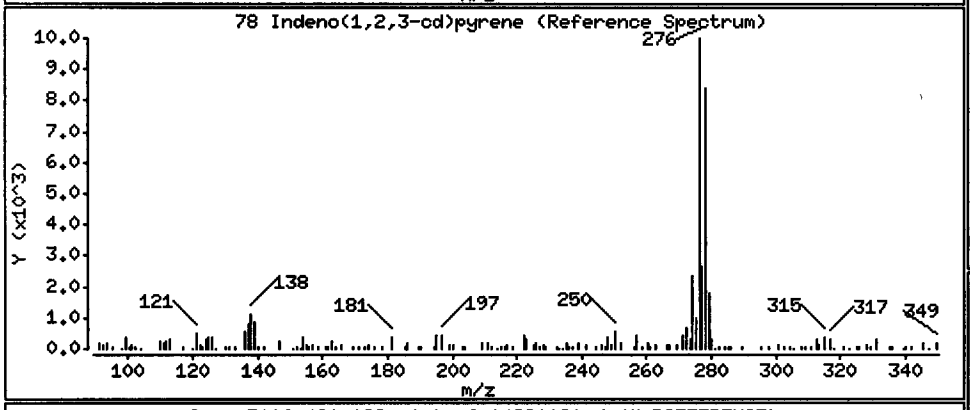
Column diameter: 0.32

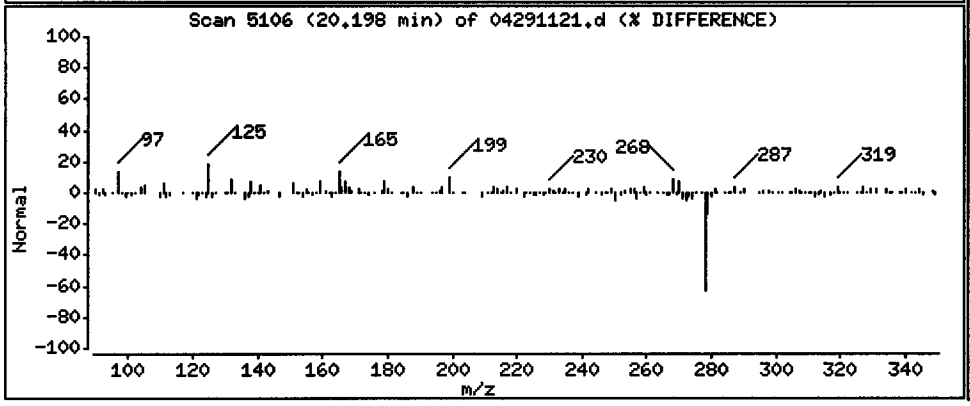
78 Indeno(1,2,3-cd)pyrene

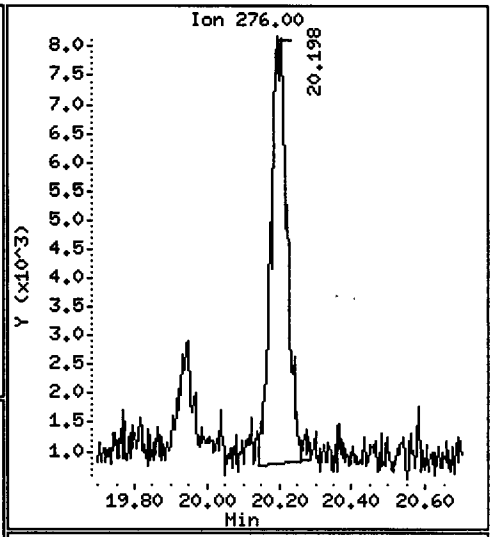
Concentration: 8.031 ug/kg

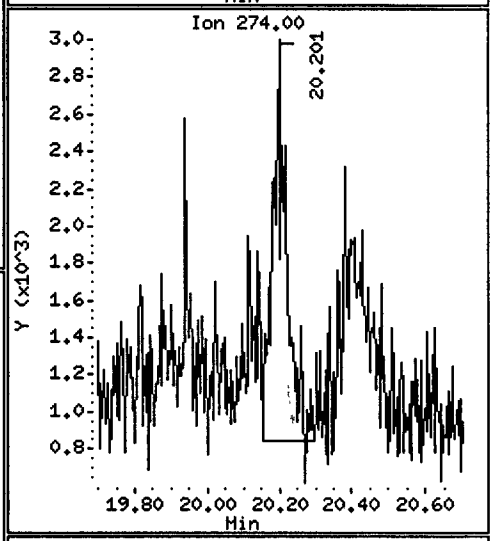


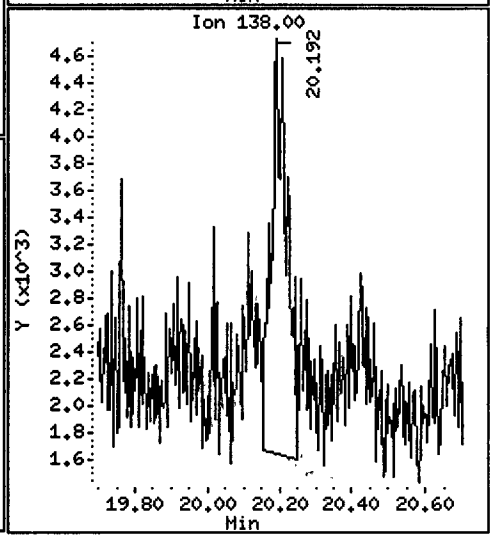












CO-ELUTION SUMMARY FOR FILE - 04291121.d

Lab ID: SS71A, Method: SIMPNA0421.m, Instrument: nt4.i, Date: 30-APR-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20110429.b/04291122.d
Lab Smp Id: SS71B
Client Smp ID: LL-SB6-1.5-2-041811
Inj Date : 30-APR-2011 01:58
Operator : JZ
Inst ID: nt4.i
Smp Info : SS71B
Misc Info : 11-8655
Comment : 1ul Injection
Method : /chem3/nt4.i/20110429.b/SIMPNA0421.m
Meth Date : 02-May-2011 13:38 jianqing
Quant Type: ISTD
Cal Date : 21-APR-2011 22:25
Cal File: 04211107.d
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: pnax.sub
Target Version: 3.50

05/07/11

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

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Ws	12.41000	Weight of sample extracted (g)
M	12.20000	% Moisture

Cpnd Variable — Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
* 27 Naphthalene-d8	136	4.979	4.988	(1.000)	268430	2.00000	
28 Naphthalene	128	Compound Not Detected.					
$ 190 2-Methylnaphthalene-d10	152	5.724	5.729	(1.149)	136832	1.82376	83.69
32 2-Methylnaphthalene	141	Compound Not Detected.					
105 1-methylnaphthalene	141	Compound Not Detected.					
40 Acenaphthylene	152	Compound Not Detected.					
* 42 Acenaphthene-d10	164	7.244	7.250	(1.000)	157403	2.00000	
44 Acenaphthene	153	Compound Not Detected.					
46 Dibenzofuran	168	Compound Not Detected.					
49 Fluorene	166	Compound Not Detected.					
* 59 Phenanthrene-d10	188	9.197	9.202	(1.000)	260551	2.00000	
60 Phenanthrene	178	Compound Not Detected.					
61 Anthracene	178	Compound Not Detected.					
64 Fluoranthene	202	10.966	10.975	(1.192)	11075	0.07863	3.608
65 Pyrene	202	11.455	11.467	(0.817)	11354	0.08500	3.901
68 Benzo(a)anthracene	228	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
* 69 Chrysene-d12	240	14.029	14.041	(1.000)	265649	2.00000	
71 Chrysene	228	14.099	14.111	(1.005)	11869	0.09885	4.536
74 Benzo(b)fluoranthene	252	16.572	16.584	(0.933)	8687	0.07453	3.420
75 Benzo(k)fluoranthene	252	Compound Not Detected.					
188 Benzo(j)fluoranthene	252	Compound Not Detected.					
76 Benzo(a)pyrene	252	17.546	17.552	(0.988)	5768	0.05531	2.538
* 77 Perylene-d12	264	17.755	17.763	(1.000)	214824	2.00000	
78 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
$ 191 Dibenzo(a,h)anthracene-d14	292	20.101	20.110	(1.132)	144471	1.62564	74.60
79 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
80 Benzo(g,h,i)perylene	276	Compound Not Detected.					
99 Perylene	252	17.818	17.827	(1.004)	11265	0.12737	5.845

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 04291122.d
Lab Smp Id: SS71B
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20110429.b/SIMPNA0421.m
Misc Info: 11-8655

Calibration Date: 29-APR-2011
Calibration Time: 16:26
Client Smp ID: LL-SB6-1.5-2-041
Level: LOW
Sample Type: Soil

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	276036	138018	552072	268430	-2.76
42 Acenaphthene-d10	158527	79264	317054	157403	-0.71
59 Phenanthrene-d10	277528	138764	555056	260551	-6.12
69 Chrysene-d12	304115	152058	608230	265649	-12.65
77 Perylene-d12	257833	128916	515666	214824	-16.68

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	4.99	4.49	5.49	4.98	-0.18
42 Acenaphthene-d10	7.25	6.75	7.75	7.24	-0.08
59 Phenanthrene-d10	9.20	8.70	9.70	9.20	-0.06
69 Chrysene-d12	14.04	13.54	14.54	14.03	-0.09
77 Perylene-d12	17.76	17.26	18.26	17.75	-0.05

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

Analytical Resources, Inc.

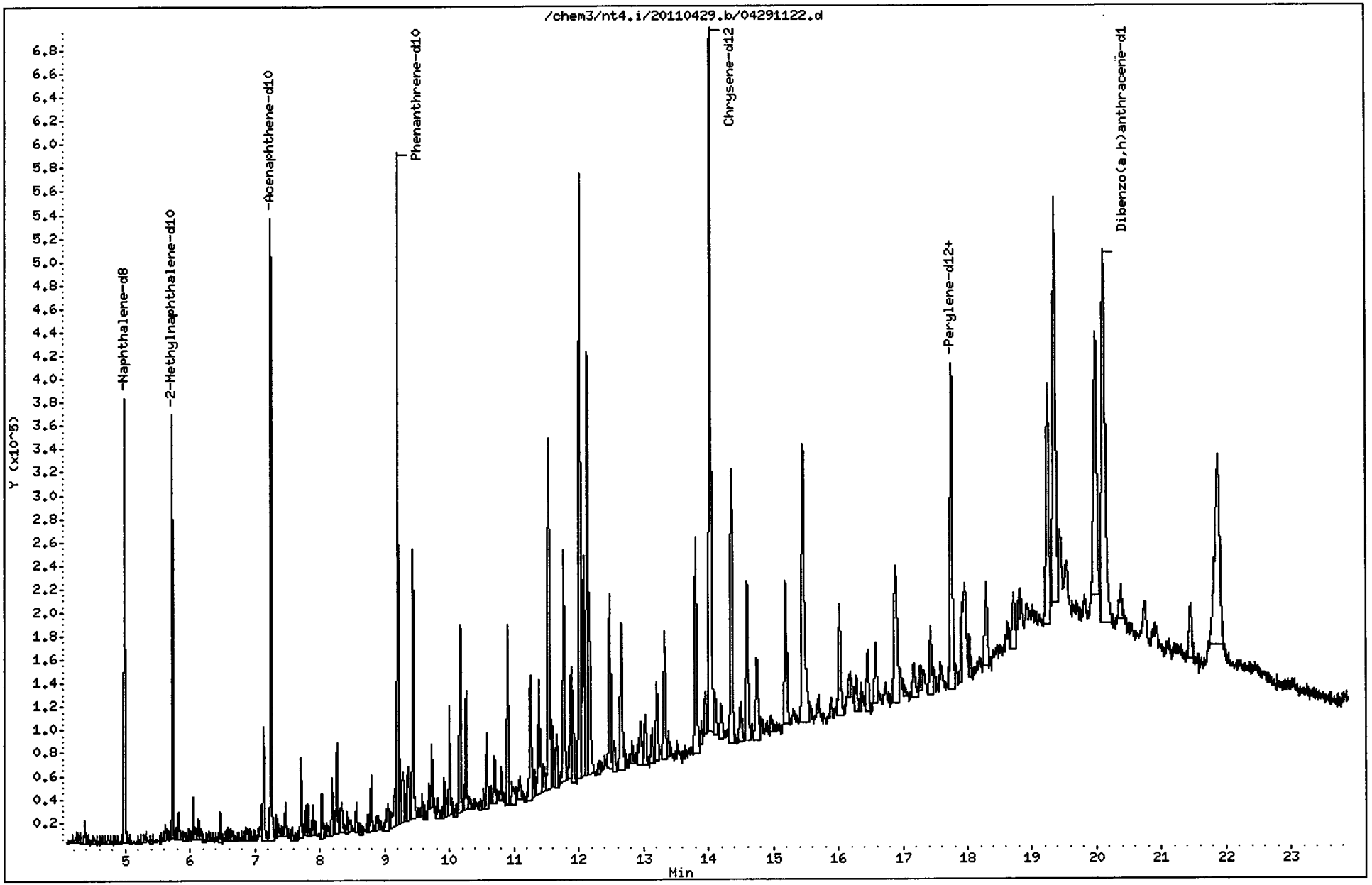
RECOVERY REPORT

Client Name: Floyd Snider
Client SDG: SS71
Sample Matrix: SOLID
Fraction: SV
Lab Smp Id: SS71B
Client Smp ID: LL-SB6-1.5-2-041811
Level: LOW
Operator: JZ
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: pnalcss.spk
Quant Type: ISTD
Sublist File: pnax.sub
Method File: /chem3/nt4.i/20110429.b/SIMPNA0421.m
Misc Info: 11-8655

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	137.7	83.69	60.79	34-100
$ 191 Dibenzo(a,h)anthra	137.7	74.60	54.19	10-117

Data File: /chem3/nt4.i/20110429.b/04291122.d
Date : 30-APR-2011 01:58
Client ID: LL-SB6-1.5-2-041811
Sample Info: SS71B
Volume Injected (uL): 1.0
Column phase: ZB35

Instrument: nt4.i
Operator: JZ
Column diameter: 0.32



SS71 06821

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20110429.b/04291123.d
Lab Smp Id: SS71C Client Smp ID: LL-SB6-2-4-041811
Inj Date : 30-APR-2011 02:26
Operator : JZ Inst ID: nt4.i
Smp Info : SS71C
Misc Info : 11-8656
Comment : 1ul Injection
Method : /chem3/nt4.i/20110429.b/SIMPNA0421.m
Meth Date : 02-May-2011 13:38 jianqing Quant Type: ISTD
Cal Date : 21-APR-2011 22:25 Cal File: 04211107.d
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

04/07/11

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

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Ws	12.49000	Weight of sample extracted (g)
M	11.00000	% Moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
* 27 Naphthalene-d8	136	4.981	4.988	(1.000)	281581	2.00000	
28 Naphthalene	128	Compound Not Detected.					
$ 190 2-Methylnaphthalene-d10	152	5.725	5.729	(1.149)	160011	2.03310	91.45
32 2-Methylnaphthalene	141	Compound Not Detected.					
105 1-methylnaphthalene	141	Compound Not Detected.					
40 Acenaphthylene	152	Compound Not Detected.					
* 42 Acenaphthene-d10	164	7.242	7.250	(1.000)	166857	2.00000	
44 Acenaphthene	153	Compound Not Detected.					
46 Dibenzofuran	168	Compound Not Detected.					
49 Fluorene	166	Compound Not Detected.					
* 59 Phenanthrene-d10	188	9.195	9.202	(1.000)	275077	2.00000	
60 Phenanthrene	178	Compound Not Detected.					
61 Anthracene	178	Compound Not Detected.					
64 Fluoranthene	202	10.971	10.975	(1.193)	9947	0.06689	3.009
65 Pyrene	202	11.457	11.467	(0.817)	12675	0.09016	4.055
68 Benzo(a)anthracene	228	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
* 69 Chrysene-d12	240	14.031	14.041	(1.000)	279591	2.00000	
71 Chrysene	228	14.094	14.111	(1.004)	13654	0.10805	4.860
74 Benzo(b)fluoranthene	252	16.576	16.584	(0.934)	12261	0.09819	4.417
75 Benzo(k)fluoranthene	252	Compound Not Detected.					
188 Benzo(j)fluoranthene	252	Compound Not Detected.					
76 Benzo(a)pyrene	252	17.551	17.552	(0.988)	13217	0.11830	5.321
* 77 Perylene-d12	264	17.756	17.763	(1.000)	230145	2.00000	
78 Indeno(1,2,3-cd)pyrene	276	20.185	20.199	(1.137)	7672	0.05837	2.625
$ 191 Dibenzo(a,h)anthracene-d14	292	20.103	20.110	(1.132)	171652	1.80291	81.09
79 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
80 Benzo(g,h,i)perylene	276	21.106	21.110	(1.189)	10176	0.09064	4.077
99 Perylene	252	17.832	17.827	(1.004)	15725	0.16597	7.465

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 04291123.d
Lab Smp Id: SS71C
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20110429.b/SIMPNA0421.m
Misc Info: 11-8656

Calibration Date: 29-APR-2011
Calibration Time: 16:26
Client Smp ID: LL-SB6-2-4-04181
Level: LOW
Sample Type: Soil

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	276036	138018	552072	281581	2.01
42 Acenaphthene-d10	158527	79264	317054	166857	5.25
59 Phenanthrene-d10	277528	138764	555056	275077	-0.88
69 Chrysene-d12	304115	152058	608230	279591	-8.06
77 Perylene-d12	257833	128916	515666	230145	-10.74

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	4.99	4.49	5.49	4.98	-0.15
42 Acenaphthene-d10	7.25	6.75	7.75	7.24	-0.10
59 Phenanthrene-d10	9.20	8.70	9.70	9.19	-0.08
69 Chrysene-d12	14.04	13.54	14.54	14.03	-0.08
77 Perylene-d12	17.76	17.26	18.26	17.76	-0.04

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

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd Snider
Sample Matrix: SOLID
Lab Smp Id: SS71C
Level: LOW
Data Type: MS DATA
SpikeList File: pnalcss.spk
Sublist File: pnax.sub
Method File: /chem3/nt4.i/20110429.b/SIMPNA0421.m
Misc Info: 11-8656

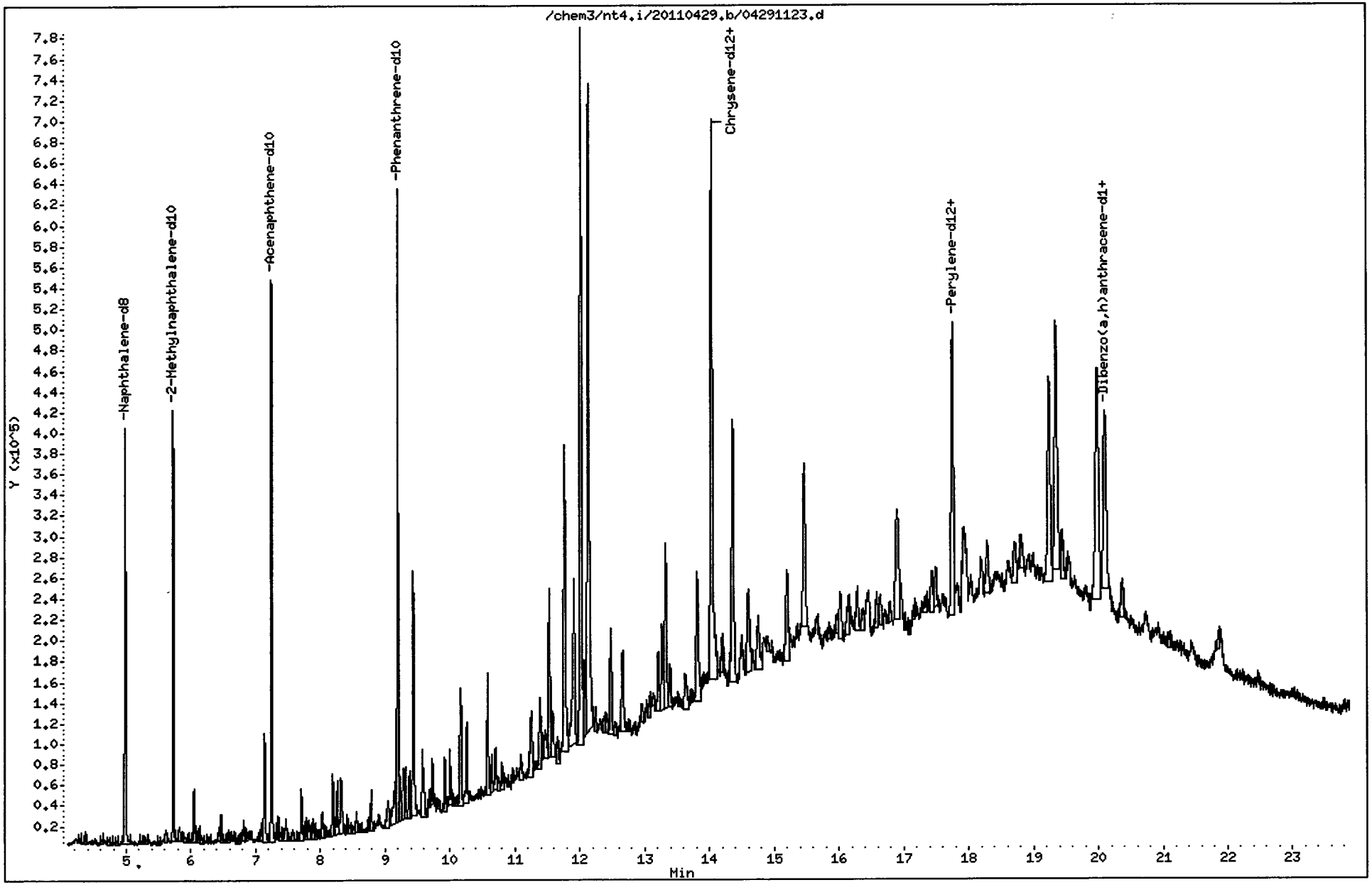
Client SDG: SS71
Fraction: SV
Client Smp ID: LL-SB6-2-4-041811
Operator: JZ
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	134.9	91.45	67.77	34-100
$ 191 Dibenzo(a,h)anthra	134.9	81.09	60.10	10-117

Data File: /chem3/nt4.i/20110429.b/04291123.d
Date : 30-APR-2011 02:26
Client ID: LL-SB6-2-4-041811
Sample Info: SS71C
Volume Injected (uL): 1.0
Column phase: ZB35

Instrument: nt4.i
Operator: JZ
Column diameter: 0.32

SS71 : 006826



Data File: /chem3/nt4.i/20110429.b/04291123.d

Date : 30-APR-2011 02:26

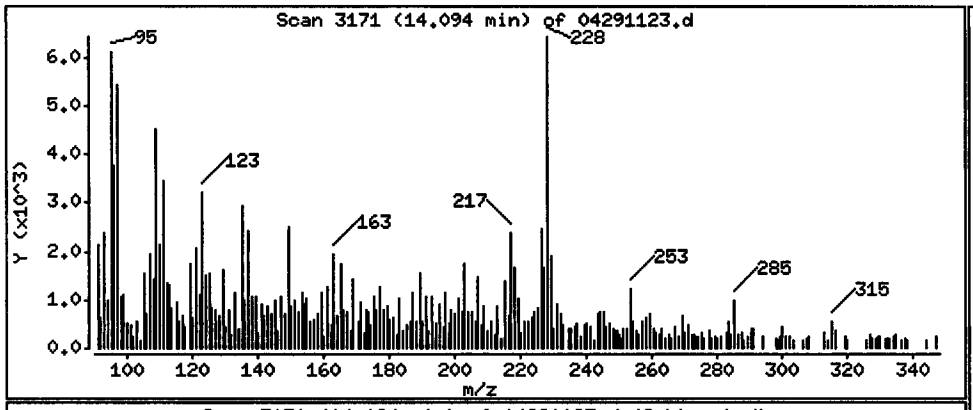
Client ID: LL-SB6-2-4-041811 Instrument: nt4.i

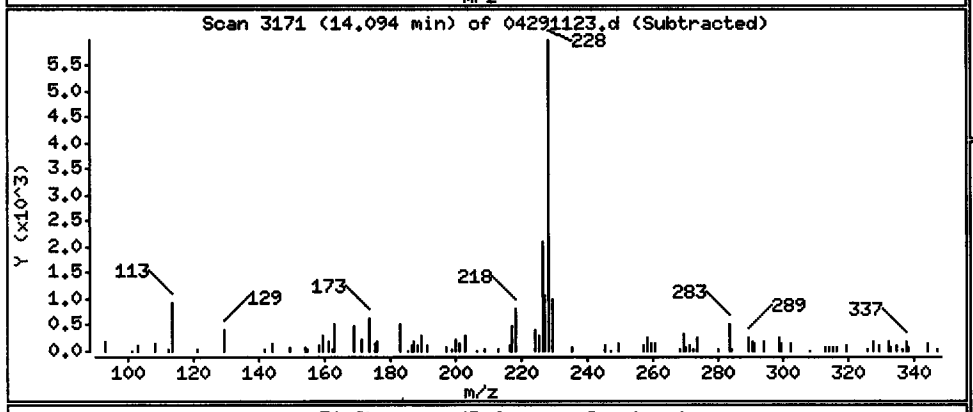
Sample Info: SS71C

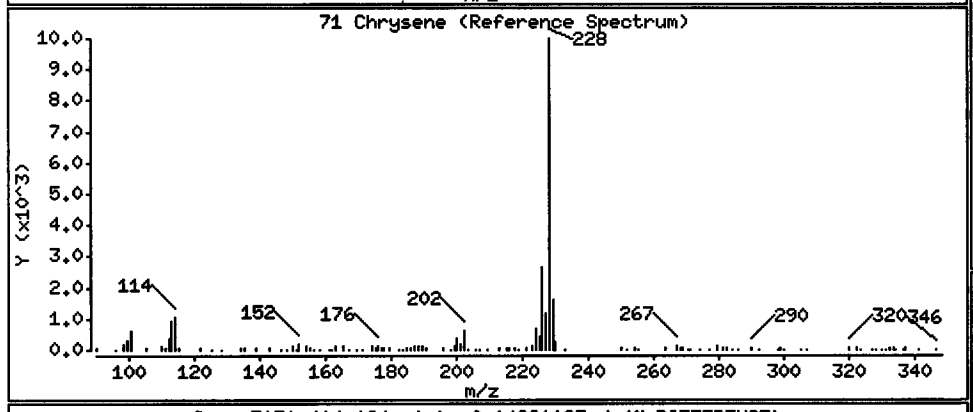
Volume Injected (uL): 1.0 Operator: JZ

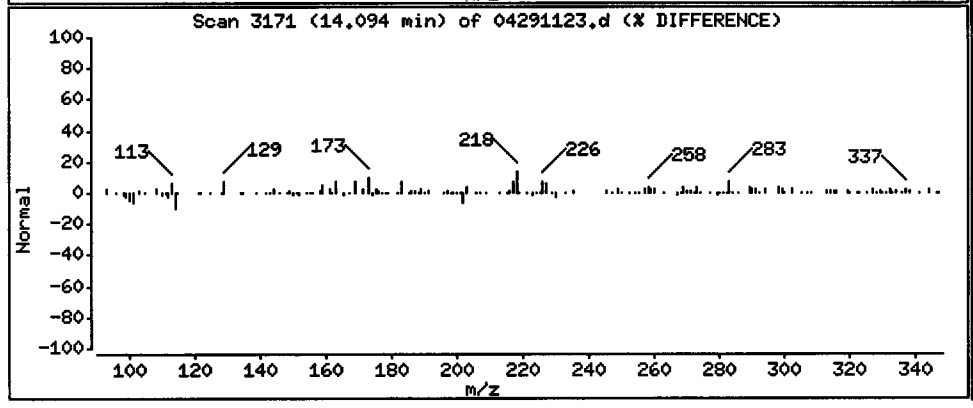
Column phase: ZB35 Column diameter: 0.32

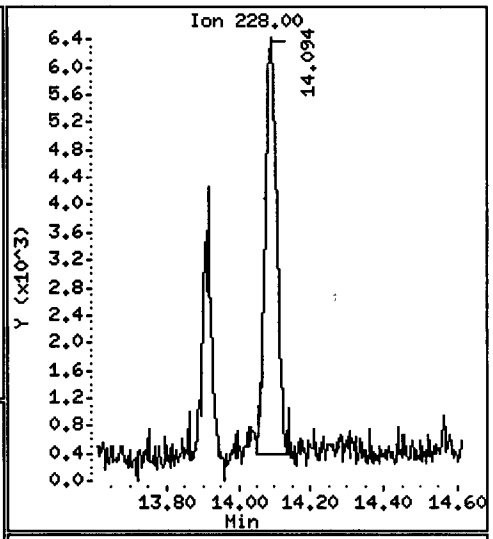
71 Chrysene Concentration: 4.860 ug/kg

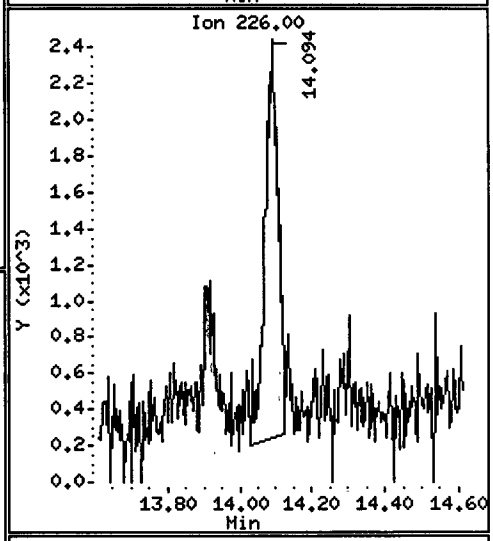


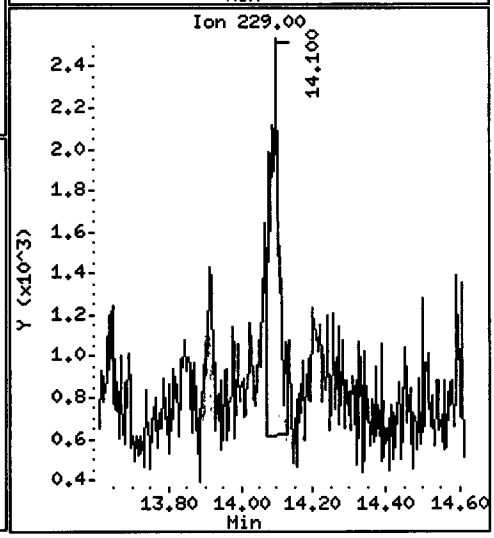












Data File: /chem3/nt4.i/20110429.b/04291123.d

Date : 30-APR-2011 02:26

Client ID: LL-SB6-2-4-041811

Instrument: nt4.i

Sample Info: SS71C

Volume Injected (uL): 1.0

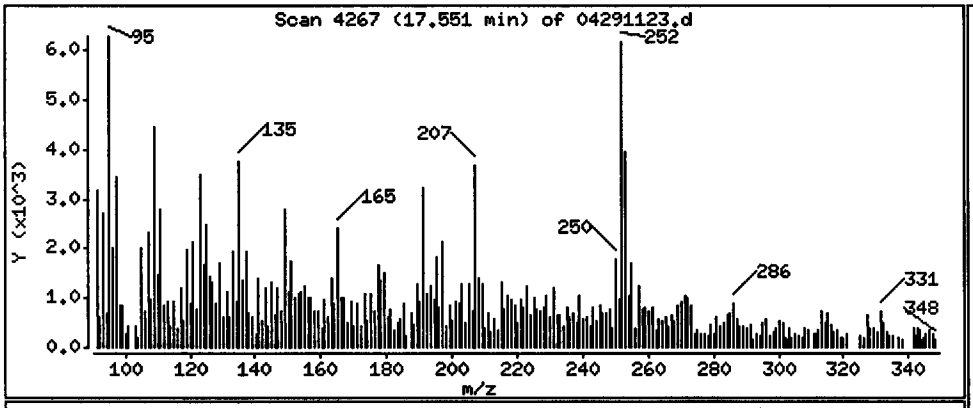
Operator: JZ

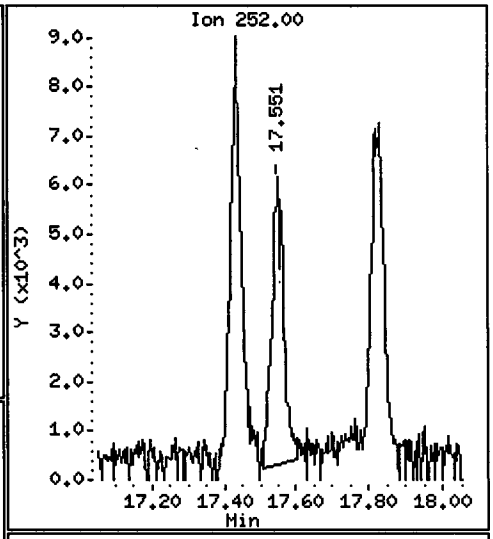
Column phase: ZB35

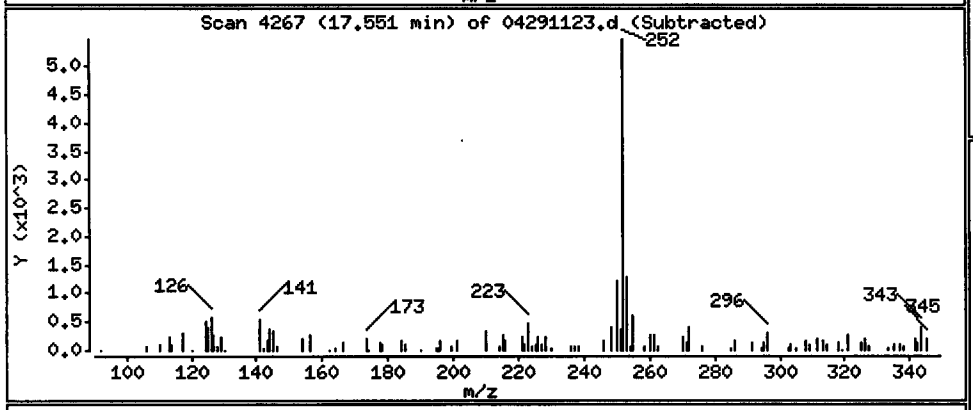
Column diameter: 0.32

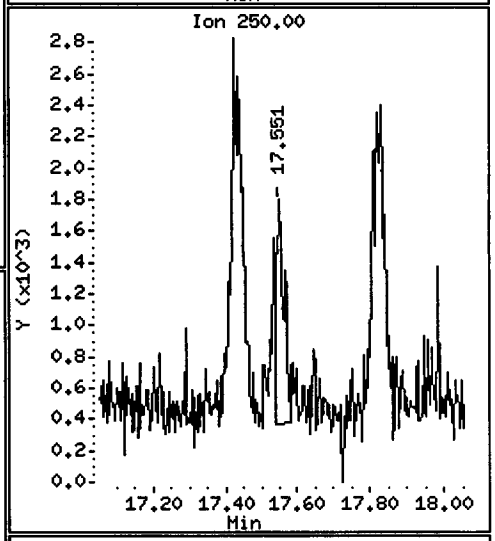
76 Benzo(a)pyrene

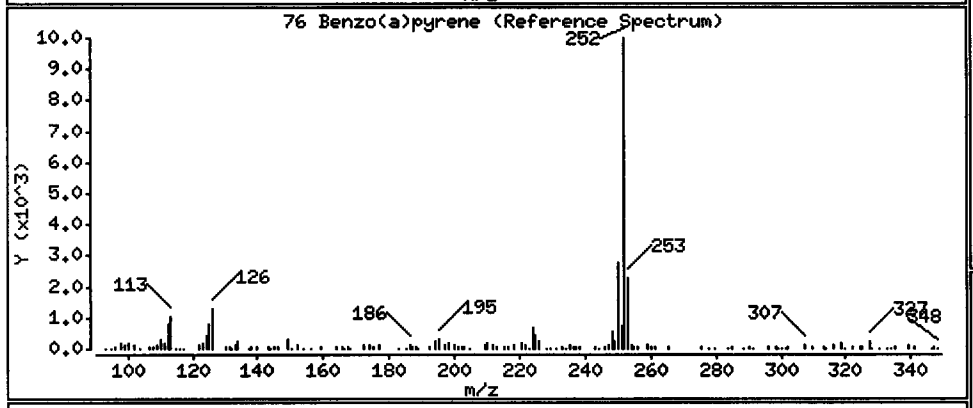
Concentration: 5.321 ug/kg

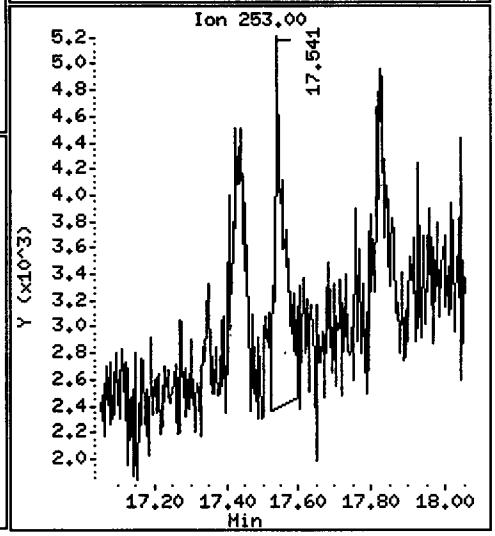


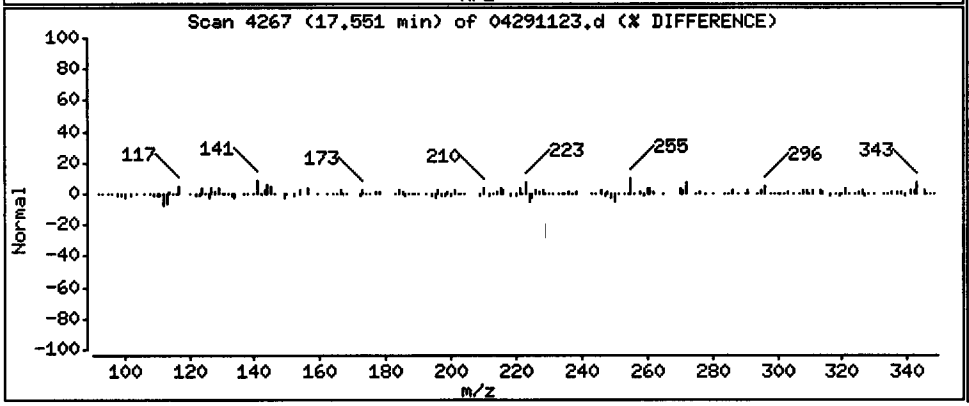












CO-ELUTION SUMMARY FOR FILE - 04291123.d

Lab ID: SS71C, Method: SIMPNA0421.m, Instrument: nt4.i, Date: 30-APR-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20110429.b/04291124.d
Lab Smp Id: SS71D Client Smp ID: LL-SB5-0-0.5-041811
Inj Date : 30-APR-2011 02:53
Operator : JZ Inst ID: nt4.i
Smp Info : SS71D
Misc Info : 11-8657
Comment : 1ul Injection
Method : /chem3/nt4.i/20110429.b/SIMPNA0421.m
Meth Date : 02-May-2011 13:38 jianqing Quant Type: ISTD
Cal Date : 21-APR-2011 22:25 Cal File: 04211107.d
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

05/02/11

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

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Ws	15.55000	Weight of sample extracted (g)
M	28.70000	% Moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
* 27 Naphthalene-d8	136	4.983	4.988	(1.000)	281155	2.00000	
28 Naphthalene	128	5.014	5.017	(1.006)	17467	0.13782	6.215
$ 190 2-Methylnaphthalene-d10	152	5.724	5.729	(1.149)	207735	2.64347	119.2
32 2-Methylnaphthalene	141	5.774	5.774	(1.159)	6464	0.09088	4.098
105 1-methylnaphthalene	141	Compound Not Detected.					
40 Acenaphthylene	152	Compound Not Detected.					
* 42 Acenaphthene-d10	164	7.244	7.250	(1.000)	166978	2.00000	
44 Acenaphthene	153	Compound Not Detected.					
46 Dibenzofuran	168	7.437	7.439	(1.027)	6156	0.05378	2.426
49 Fluorene	166	Compound Not Detected.					
* 59 Phenanthrene-d10	188	9.197	9.202	(1.000)	273628	2.00000	
60 Phenanthrene	178	9.228	9.234	(1.003)	51489	0.38451	17.34
61 Anthracene	178	9.263	9.266	(1.007)	8482	0.06111	2.756
64 Fluoranthene	202	10.973	10.975	(1.193)	101448	0.68586	30.93
65 Pyrene	202	11.465	11.467	(0.815)	91818	0.62695	28.27

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
68	Benzo(a)anthracene	228	13.944	13.925	(0.992)	36975	0.27218	12.27
* 69	Chrysene-d12	240	14.061	14.041	(1.000)	291253	2.00000	
71	Chrysene	228	14.124	14.111	(1.004)	107643	0.81771	36.88
74	Benzo(b)fluoranthene	252	16.638	16.584	(0.935)	78000	0.80763	36.42
75	Benzo(k)fluoranthene	252	16.685	16.637	(0.937)	27111	0.27278	12.30(H)
188	Benzo(j)fluoranthene	252	16.761	16.716	(0.942)	27282	0.27989	12.62(H)
76	Benzo(a)pyrene	252	17.597	17.552	(0.988)	31758	0.36750	16.57
* 77	Perylene-d12	264	17.802	17.763	(1.000)	178009	2.00000	
78	Indeno(1,2,3-cd)pyrene	276	20.247	20.199	(1.137)	16258	0.15992	7.212
$ 191	Dibenzo(a,h)anthracene-d14	292	20.165	20.110	(1.133)	67435	0.91573	41.30
79	Dibenzo(a,h)anthracene	278	Compound Not Detected.					
80	Benzo(g,h,i)perylene	276	21.187	21.110	(1.190)	20716	0.23857	10.76
99	Perylene	252	17.872	17.827	(1.004)	23733	0.32385	14.60

QC Flag Legend

H - Operator selected an alternate compound hit.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 04291124.d
Lab Smp Id: SS71D
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20110429.b/SIMPNA0421.m
Misc Info: 11-8657

Calibration Date: 29-APR-2011
Calibration Time: 16:26
Client Smp ID: LL-SB5-0-0.5-041
Level: LOW
Sample Type: Soil

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	276036	138018	552072	281155	1.85
42 Acenaphthene-d10	158527	79264	317054	166978	5.33
59 Phenanthrene-d10	277528	138764	555056	273628	-1.41
69 Chrysene-d12	304115	152058	608230	291253	-4.23
77 Perylene-d12	257833	128916	515666	178009	-30.96

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	4.99	4.49	5.49	4.98	-0.11
42 Acenaphthene-d10	7.25	6.75	7.75	7.24	-0.08
59 Phenanthrene-d10	9.20	8.70	9.70	9.20	-0.06
69 Chrysene-d12	14.04	13.54	14.54	14.06	0.14
77 Perylene-d12	17.76	17.26	18.26	17.80	0.22

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

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd Snider
Sample Matrix: SOLID
Lab Smp Id: SS71D
Level: LOW
Data Type: MS DATA
SpikeList File: pnalcss.spk
Sublist File: pnax.sub
Method File: /chem3/nt4.i/20110429.b/SIMPNA0421.m
Misc Info: 11-8657

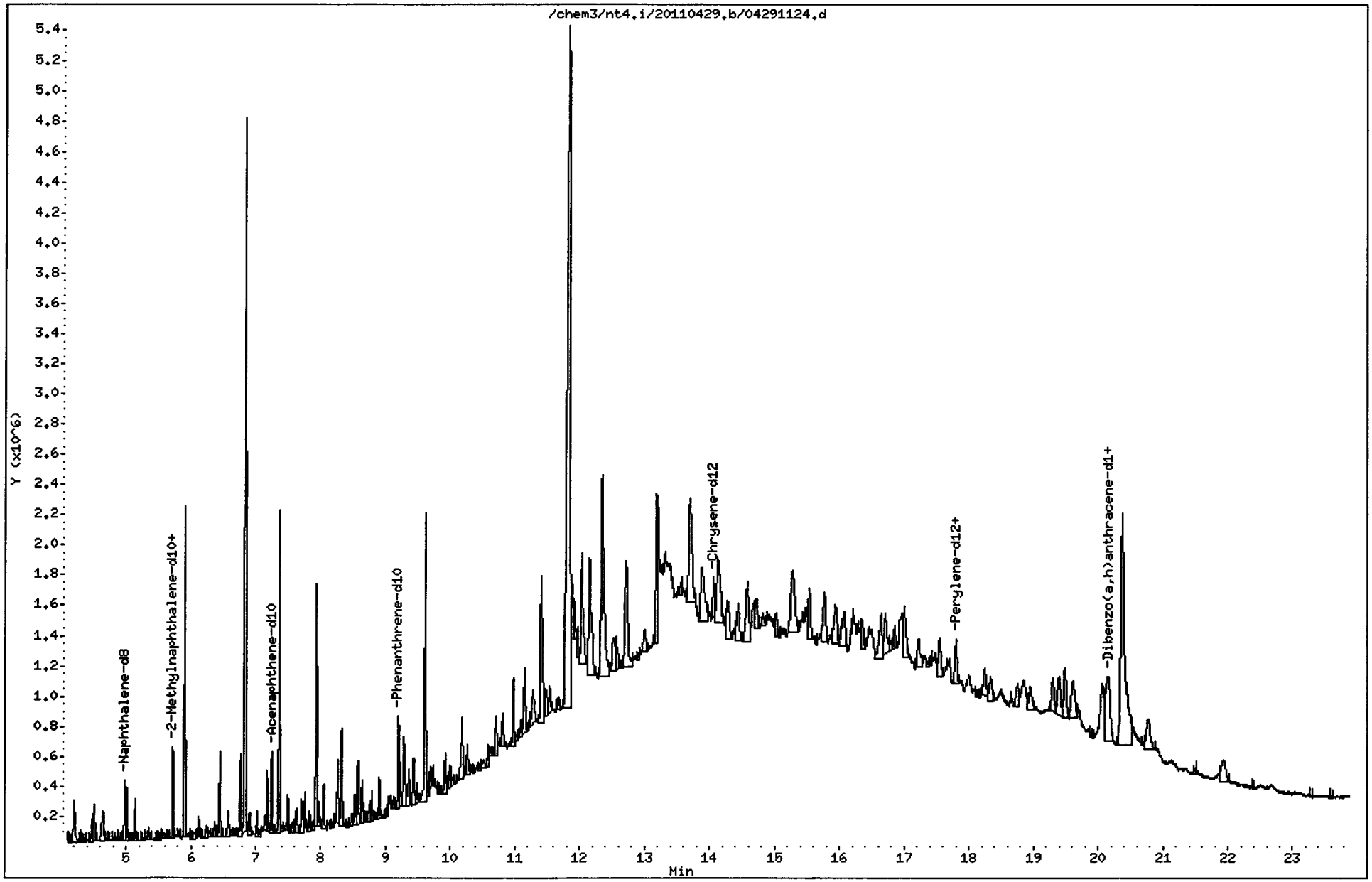
Client SDG: SS71
Fraction: SV
Client Smp ID: LL-SB5-0-0.5-041811
Operator: JZ
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	135.3	119.2	88.12	34-100
$ 191 Dibenzo(a,h)anthra	135.3	41.30	30.52	10-117

Data File: /chem3/nt4.i/20110429.b/04291124.d
Date : 30-APR-2011 02:53
Client ID: LL-SB5-0-0.5-041811
Sample Info: SS71D
Volume Injected (uL): 1.0
Column phase: ZB35

Instrument: nt4.i
Operator: JZ
Column diameter: 0.32

SS71 : 69834



Data File: /chem3/nt4.i/20110429.b/04291124.d

Date : 30-APR-2011 02:53

Client ID: LL-SB5-0-0.5-041811

Instrument: nt4.i

Sample Info: SS71D

Volume Injected (uL): 1.0

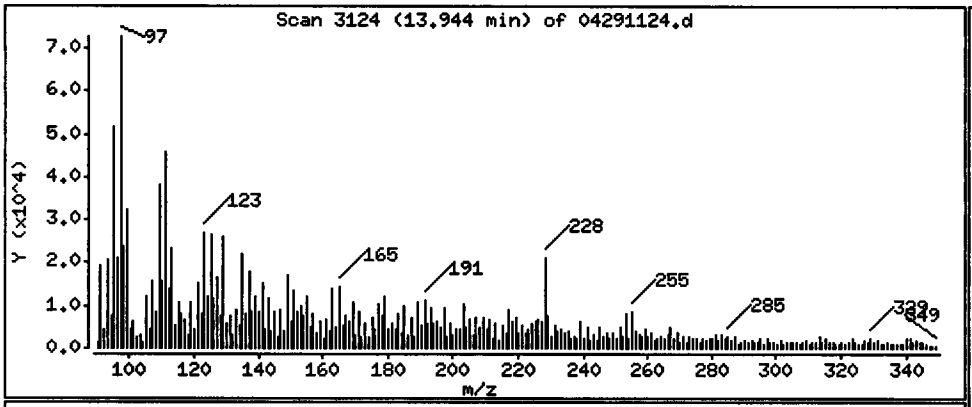
Operator: JZ

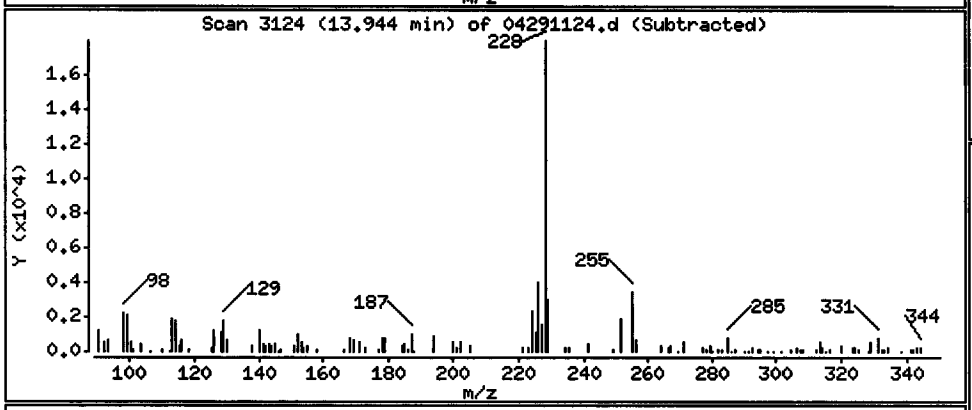
Column phase: ZB35

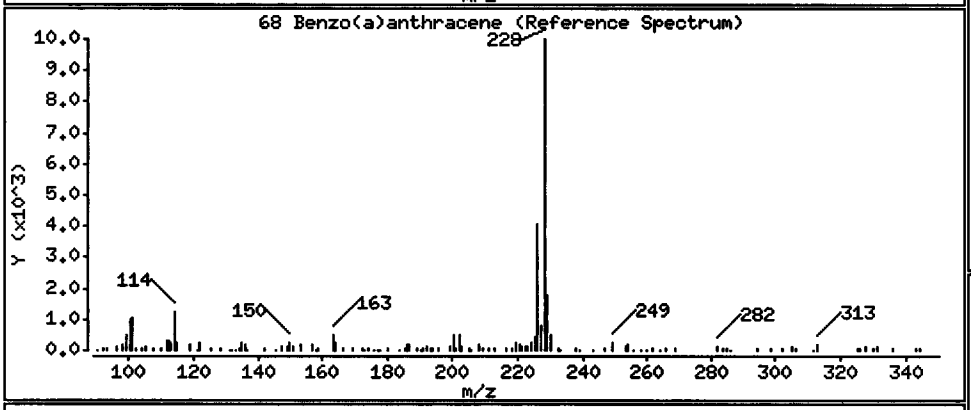
Column diameter: 0.32

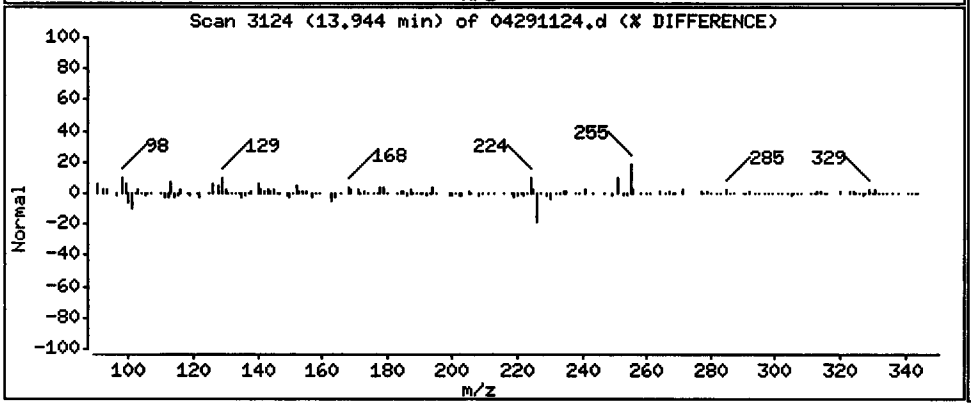
68 Benzo(a)anthracene

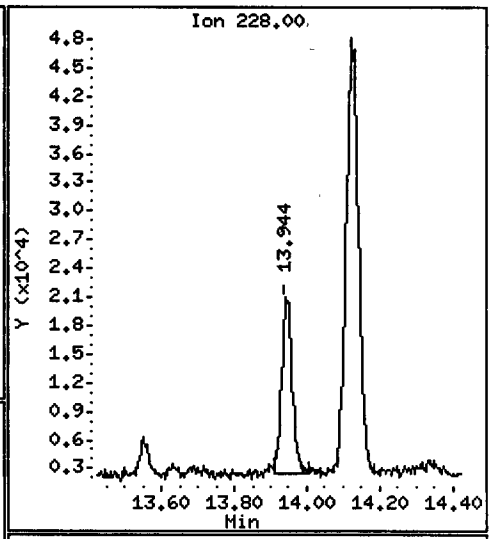
Concentration: 12.27 ug/kg

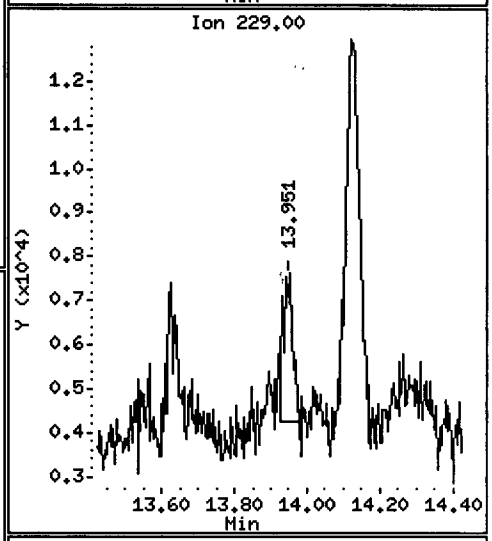


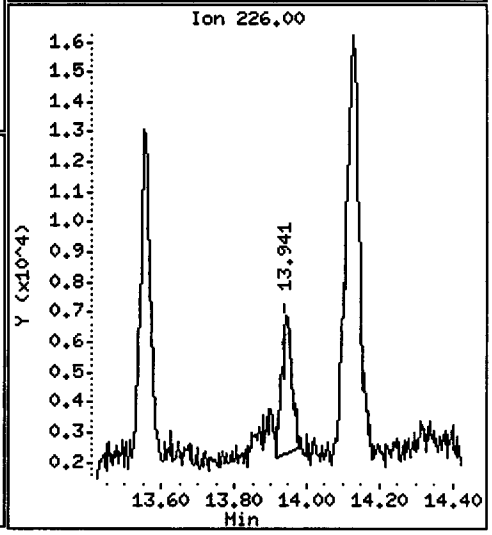












Data File: /chem3/nt4.i/20110429.b/04291124.d

Date : 30-APR-2011 02:53

Client ID: LL-SB5-0-0.5-041811

Instrument: nt4.i

Sample Info: SS71D

Volume Injected (uL): 1.0

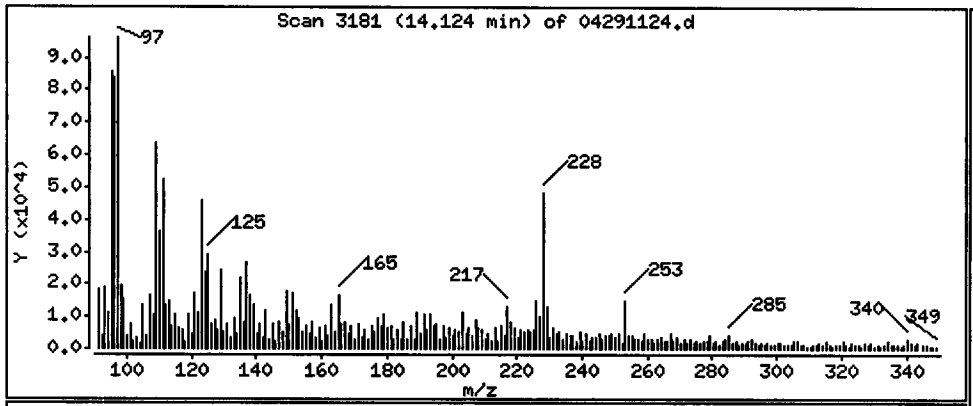
Operator: JZ

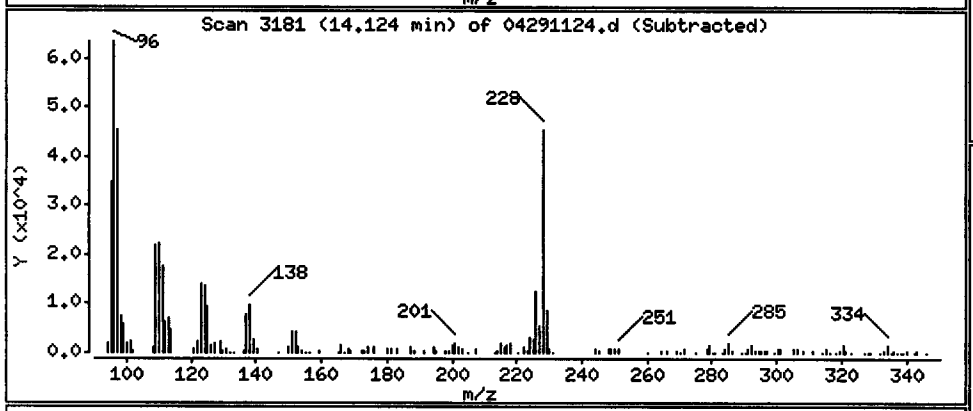
Column phase: ZB35

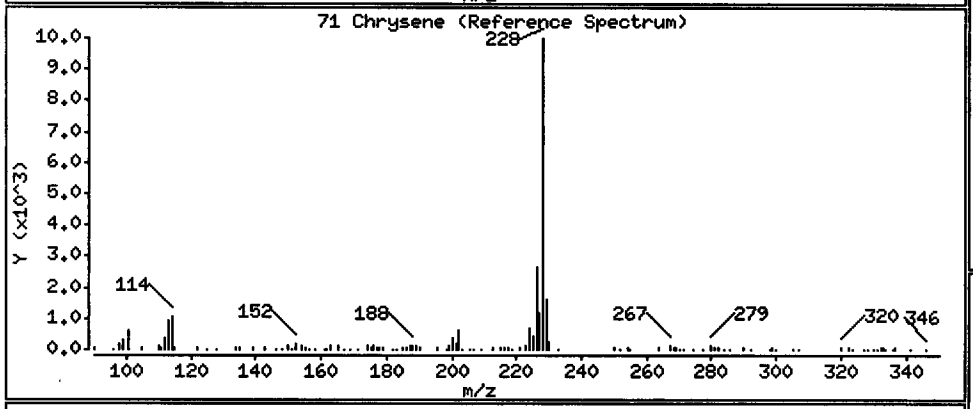
Column diameter: 0.32

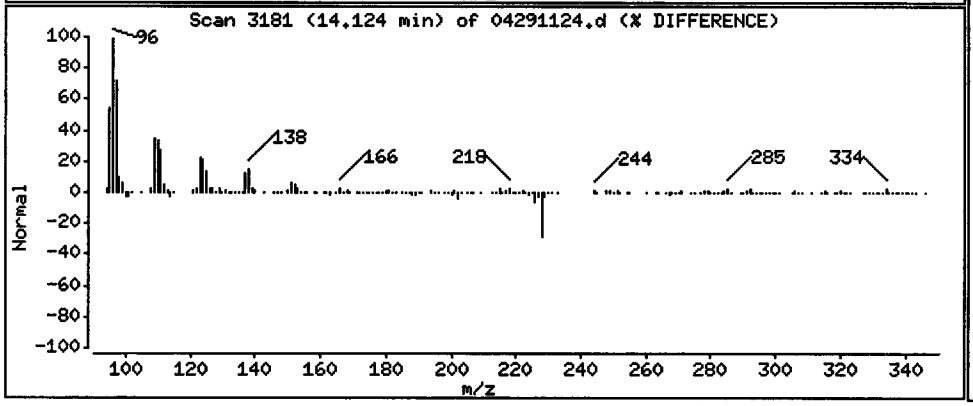
71 Chrysene

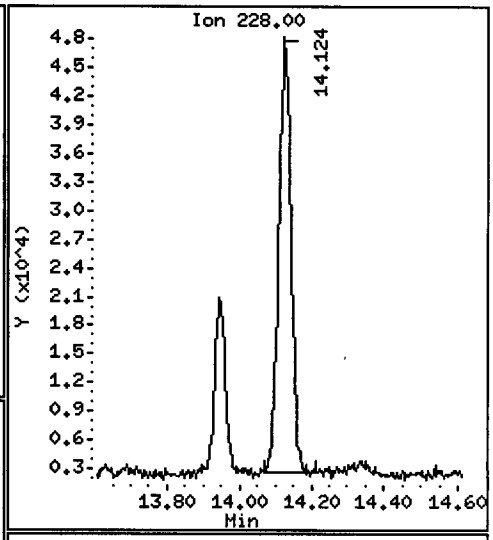
Concentration: 36.88 ug/kg

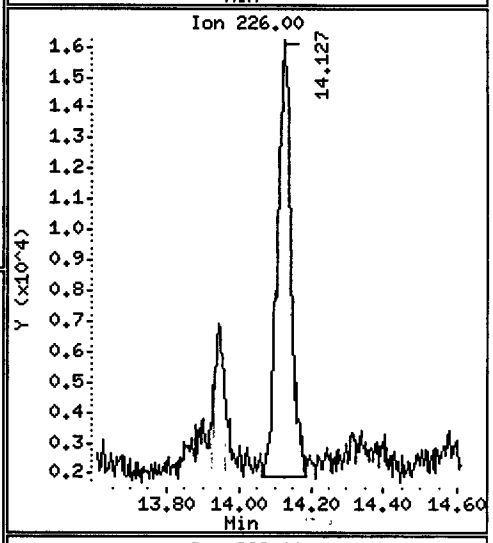


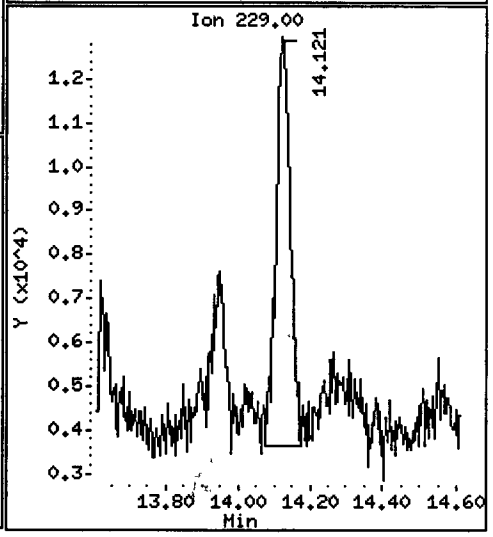












Data File: /chem3/nt4.i/20110429.b/04291124.d

Date : 30-APR-2011 02:53

Client ID: LL-SB5-0-0.5-041811

Instrument: nt4.i

Sample Info: SS71D

Volume Injected (uL): 1.0

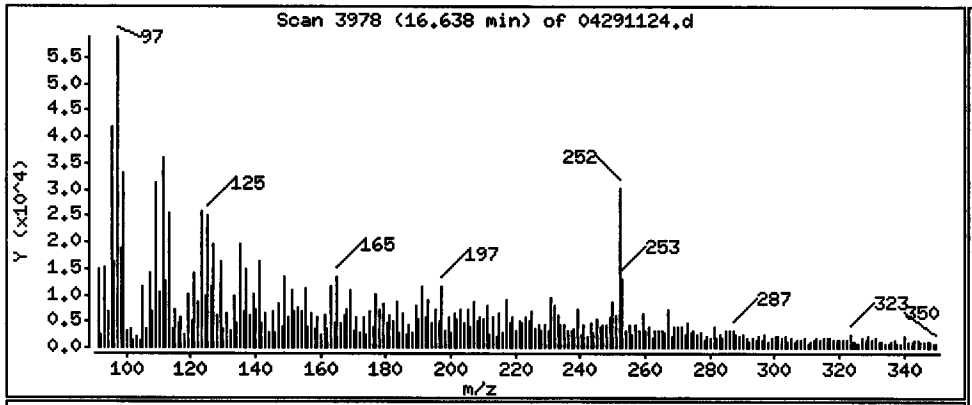
Operator: JZ

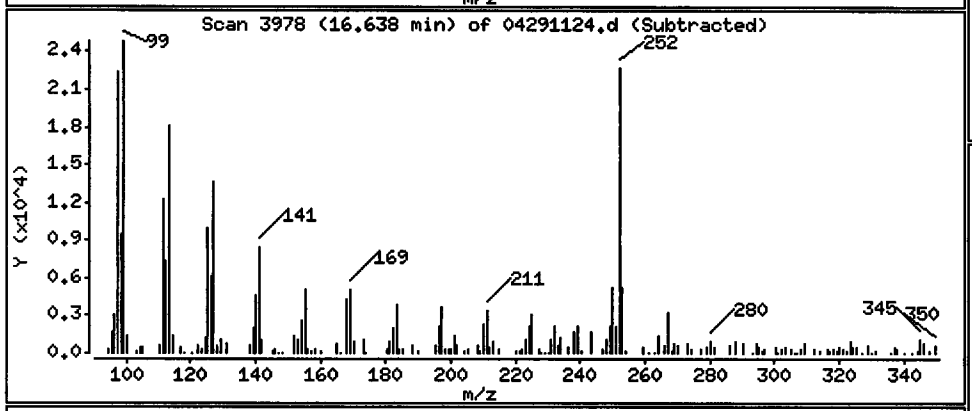
Column phase: ZB35

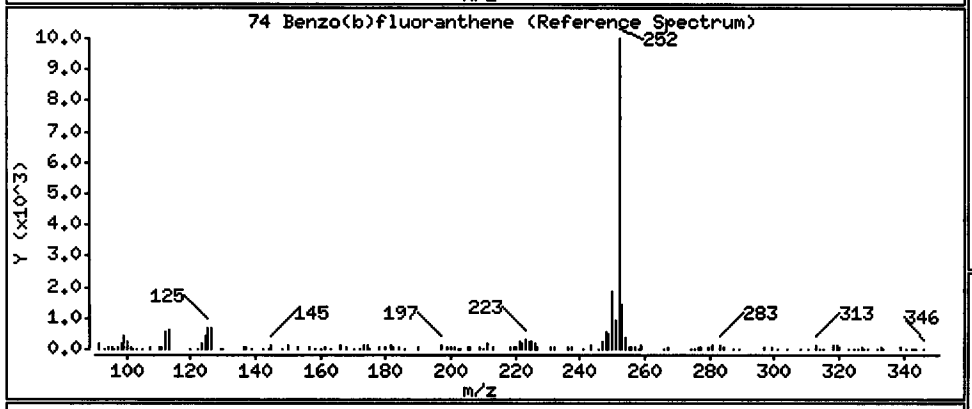
Column diameter: 0.32

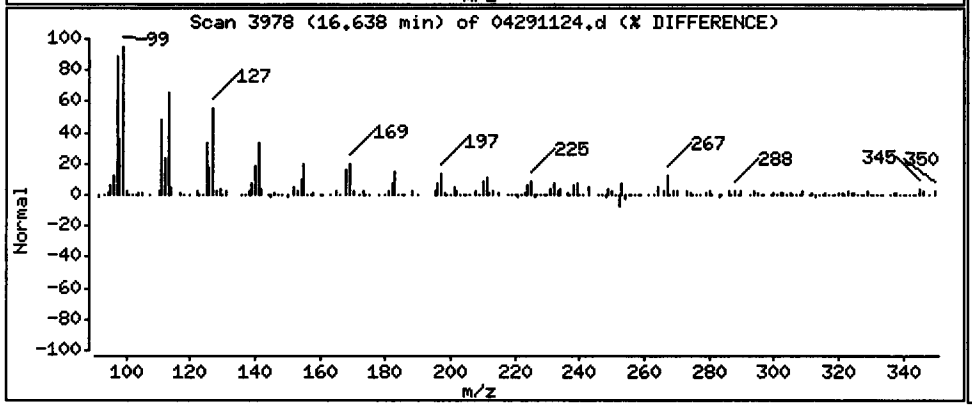
74 Benzo(b)fluoranthene

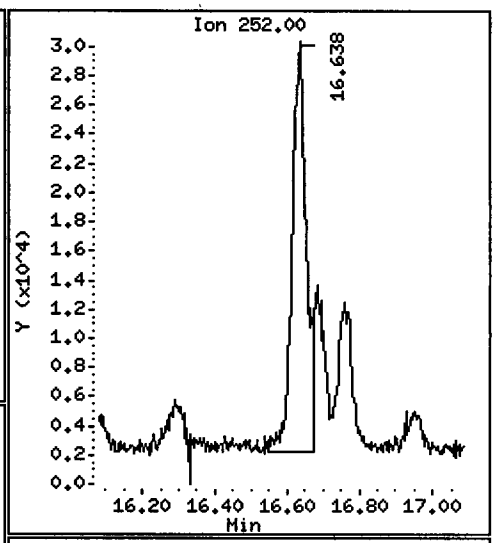
Concentration: 36.42 ug/kg

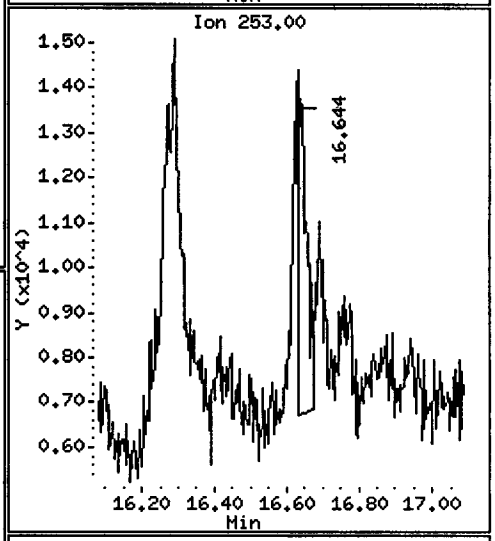


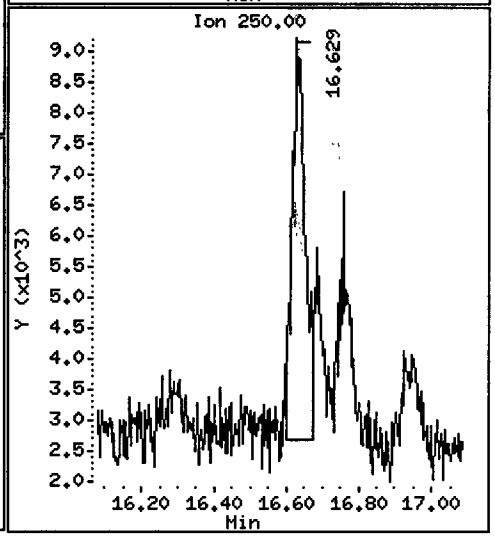












Data File: /chem3/nt4.i/20110429.b/04291124.d

Date : 30-APR-2011 02:53

Client ID: LL-SB5-0-0.5-041811

Instrument: nt4.i

Sample Info: SS71D

Volume Injected (uL): 1.0

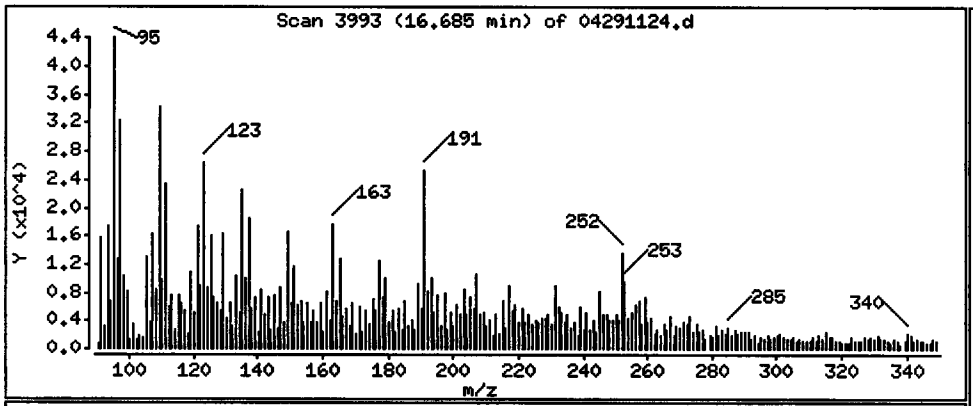
Operator: JZ

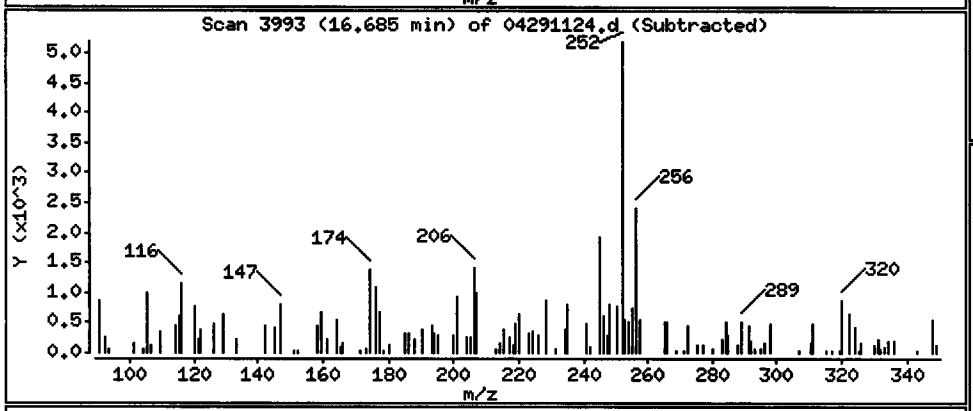
Column phase: ZB35

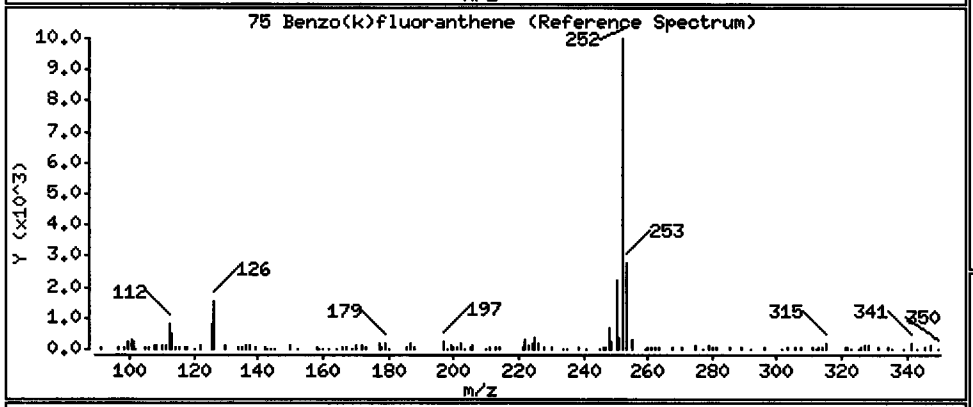
Column diameter: 0.32

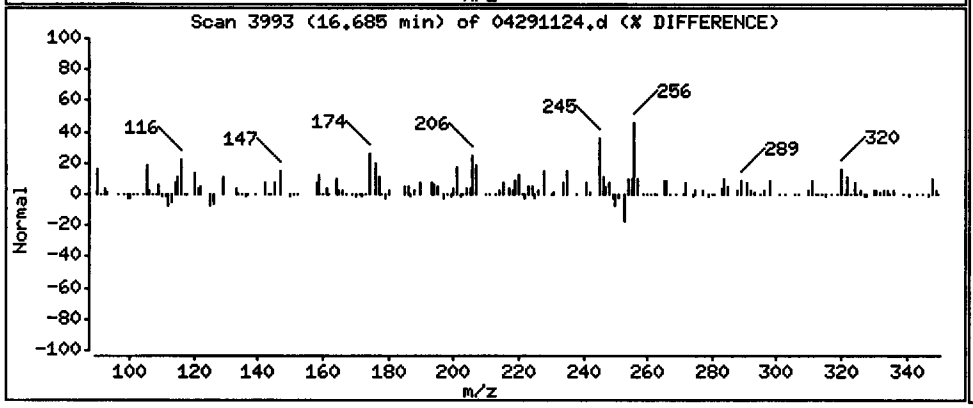
75 Benzo(k)fluoranthene

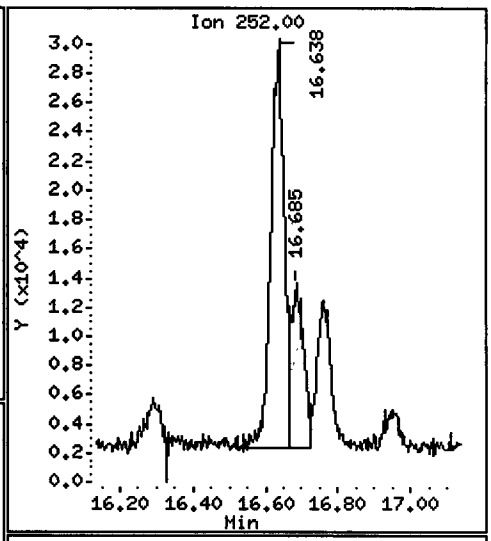
Concentration: 12.30 ug/kg

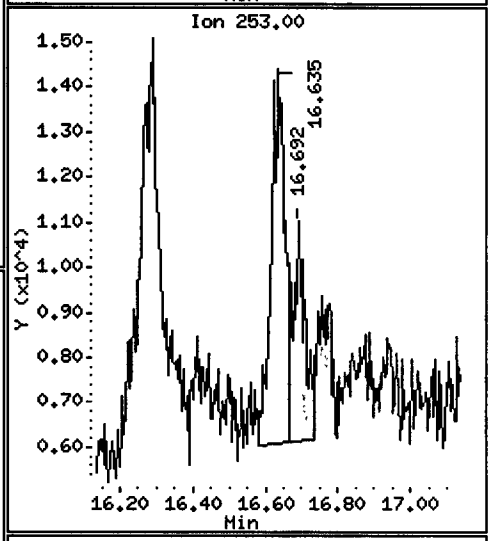


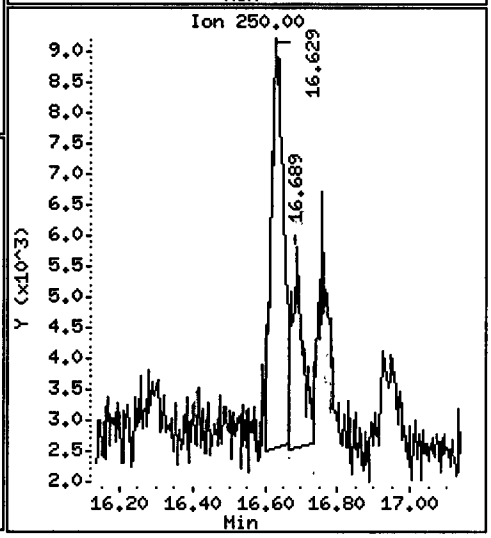












Data File: /chem3/nt4.i/20110429.b/04291124.d

Date : 30-APR-2011 02:53

Client ID: LL-SB5-0-0.5-041811

Instrument: nt4.i

Sample Info: SS71D

Volume Injected (uL): 1.0

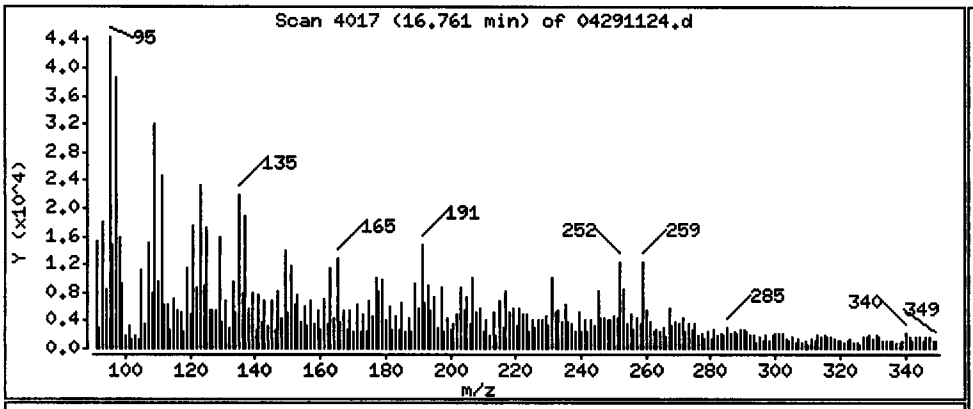
Operator: JZ

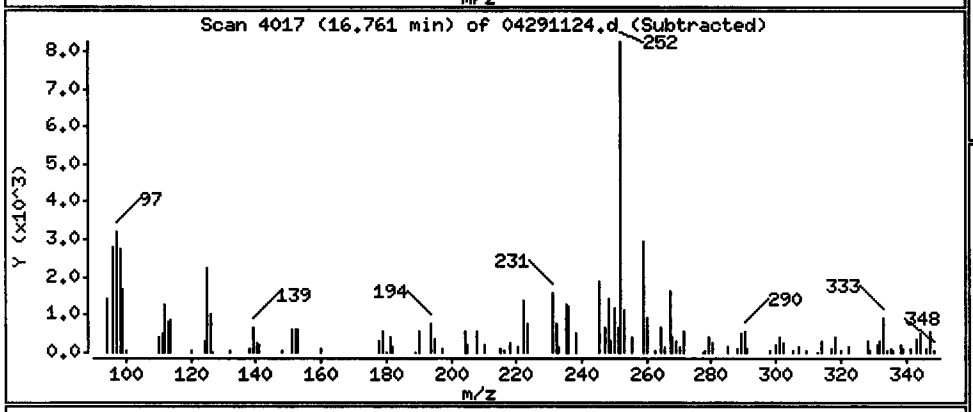
Column phase: ZB35

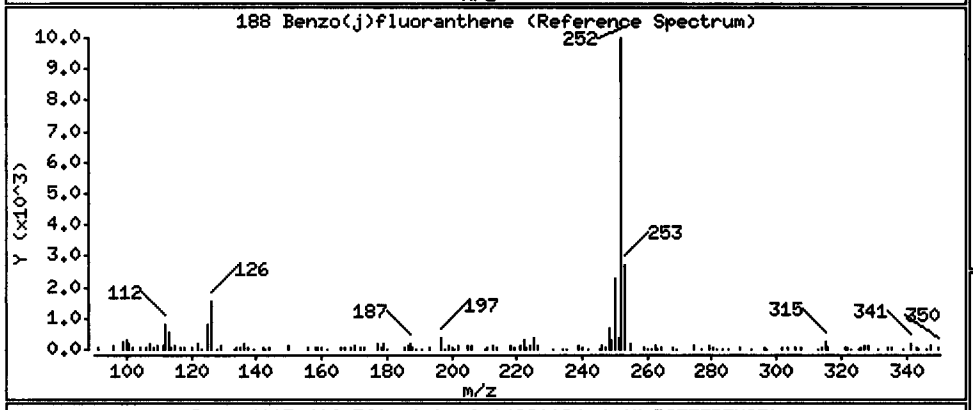
Column diameter: 0.32

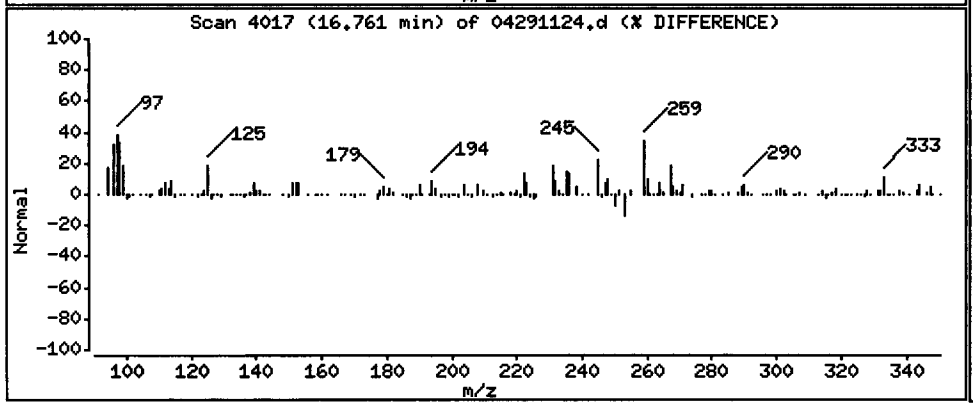
188 Benzo(j)fluoranthene

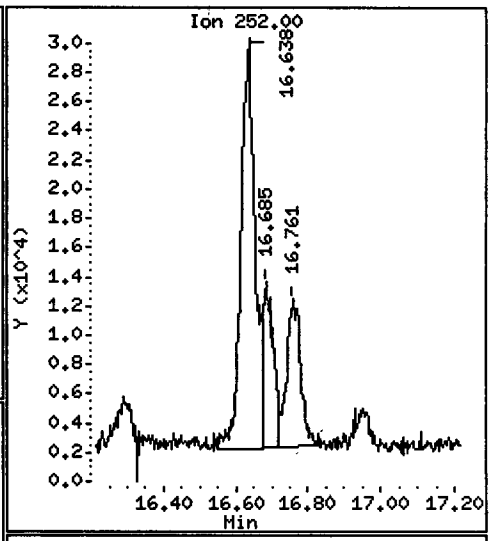
Concentration: 12.62 ug/kg

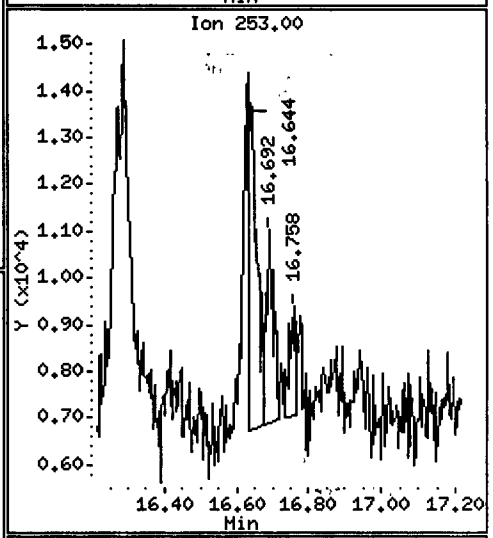


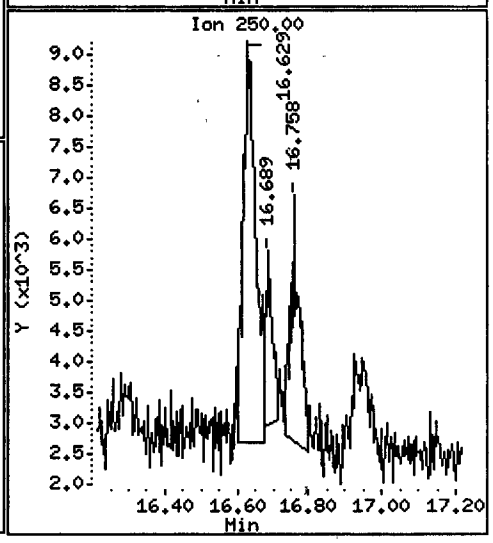












Data File: /chem3/nt4.i/20110429.b/04291124.d

Date : 30-APR-2011 02:53

Client ID: LL-SB5-0-0.5-041811

Instrument: nt4.i

Sample Info: SS71D

Volume Injected (uL): 1.0

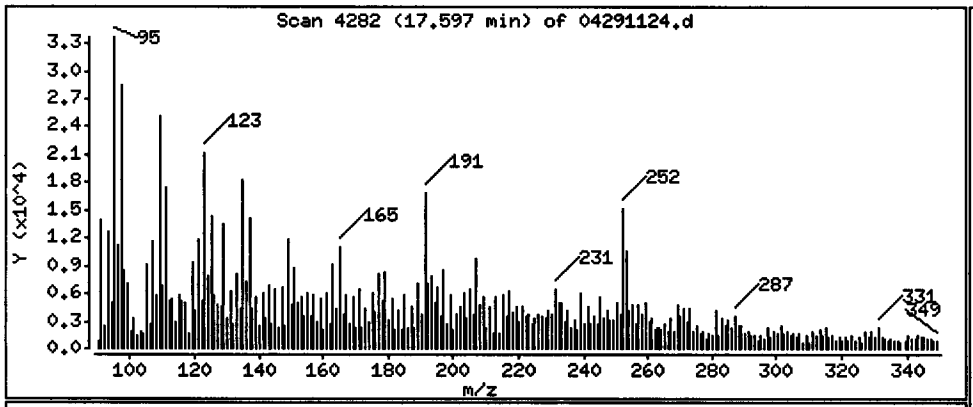
Operator: JZ

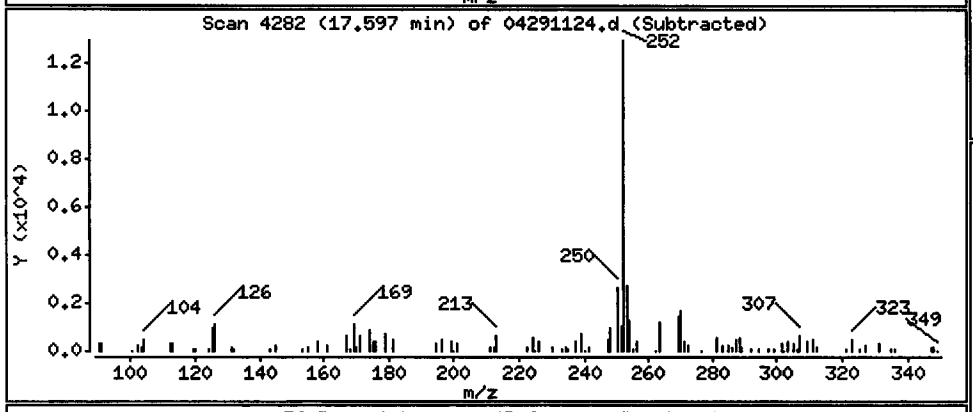
Column phase: ZB35

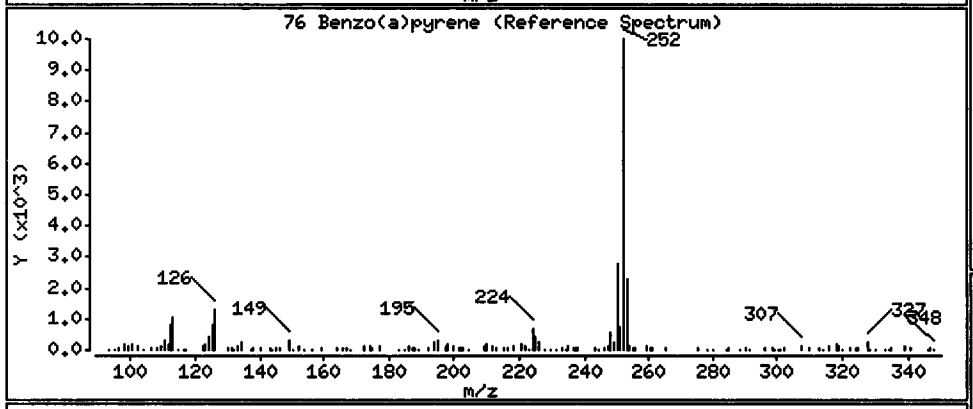
Column diameter: 0.32

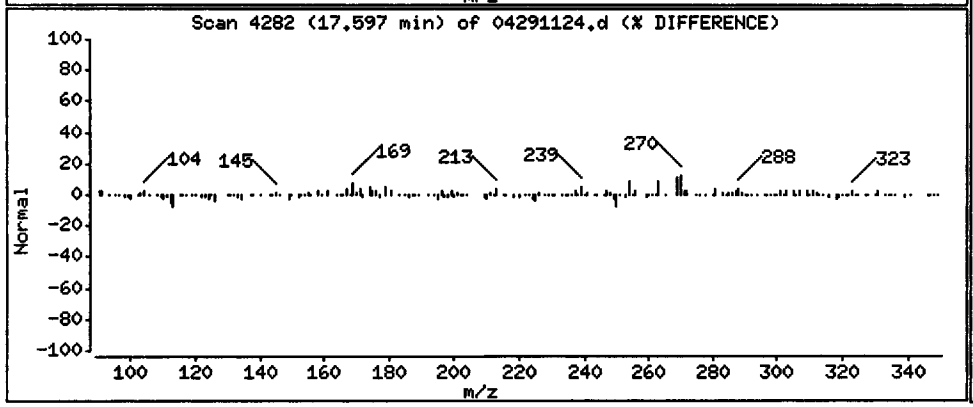
76 Benzo(a)pyrene

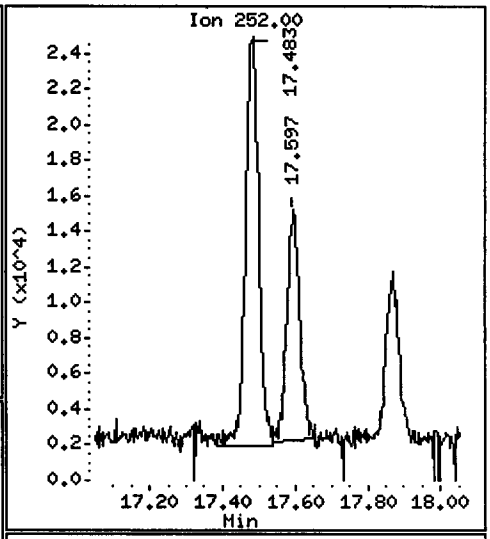
Concentration: 16.57 ug/kg

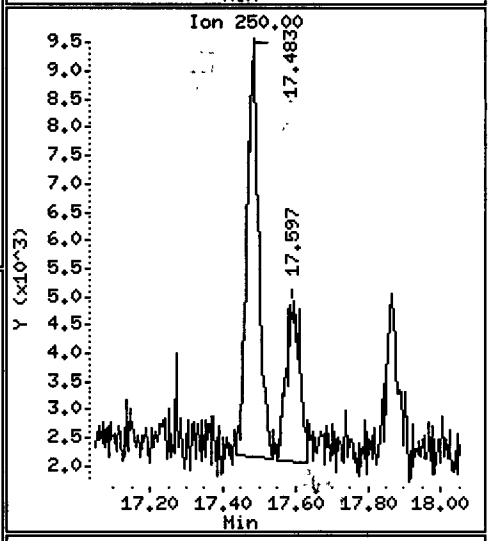


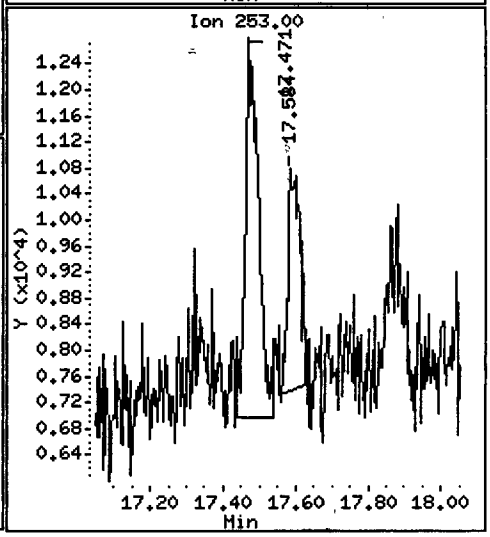












Data File: /chem3/nt4.i/20110429.b/04291124.d

Date : 30-APR-2011 02:53

Client ID: LL-SB5-0-0.5-041811

Instrument: nt4.i

Sample Info: SS71D

Volume Injected (uL): 1.0

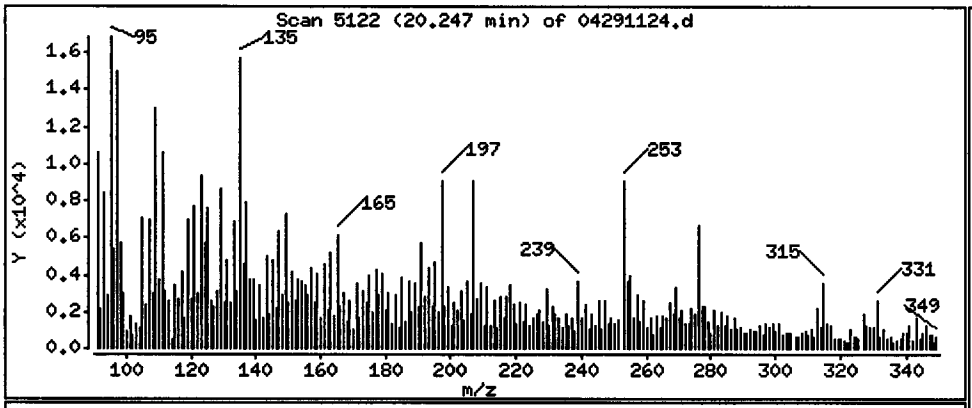
Operator: JZ

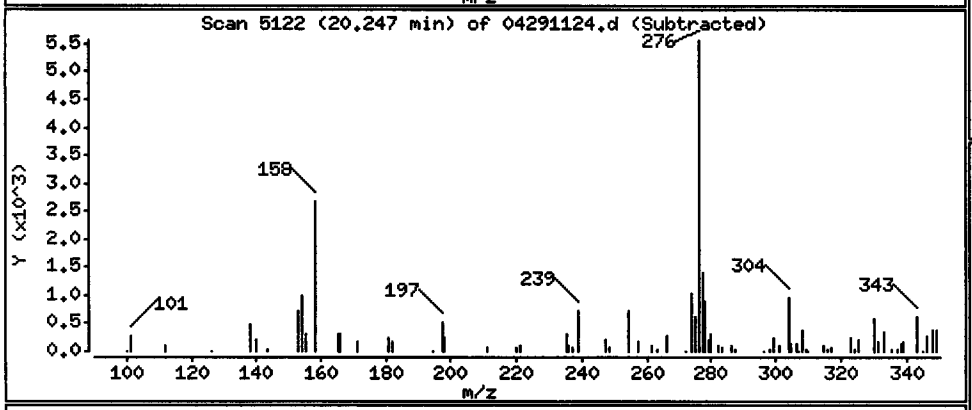
Column phase: ZB35

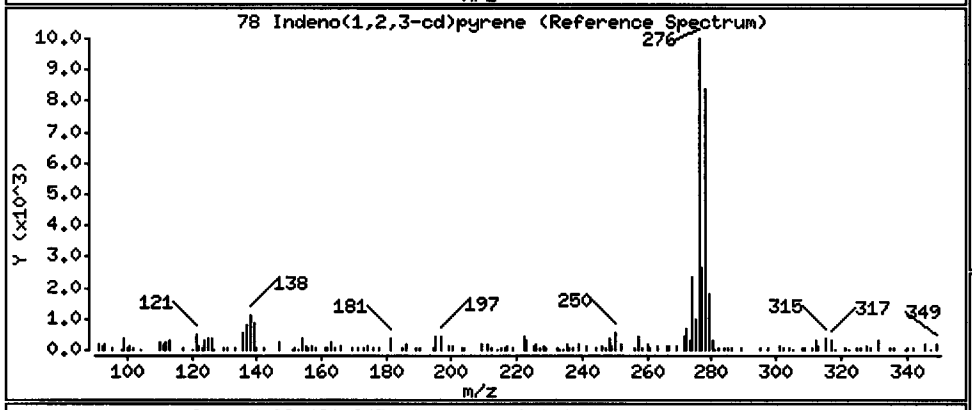
Column diameter: 0.32

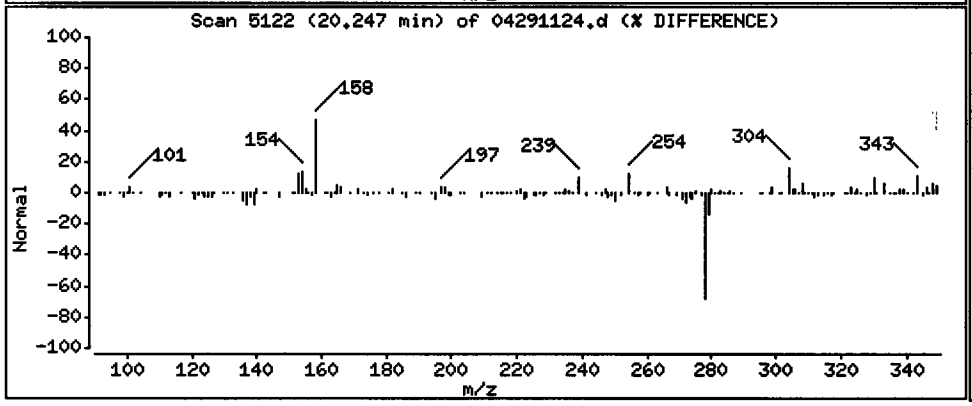
78 Indeno(1,2,3-cd)pyrene

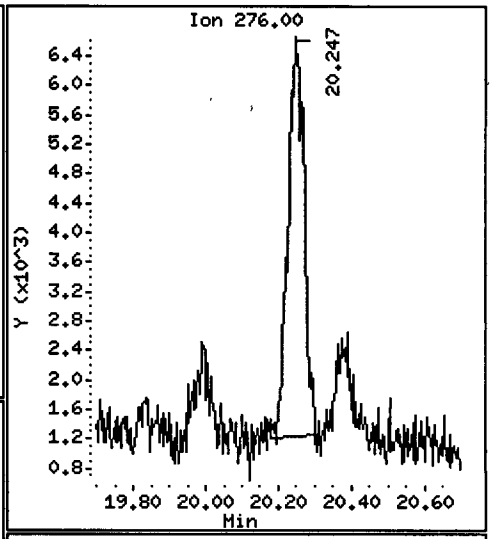
Concentration: 7.212 ug/kg

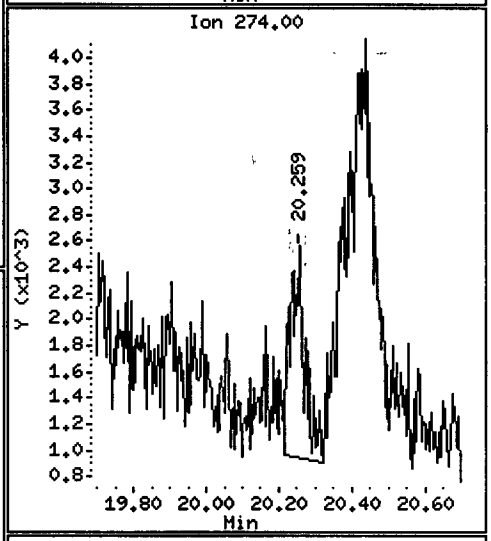


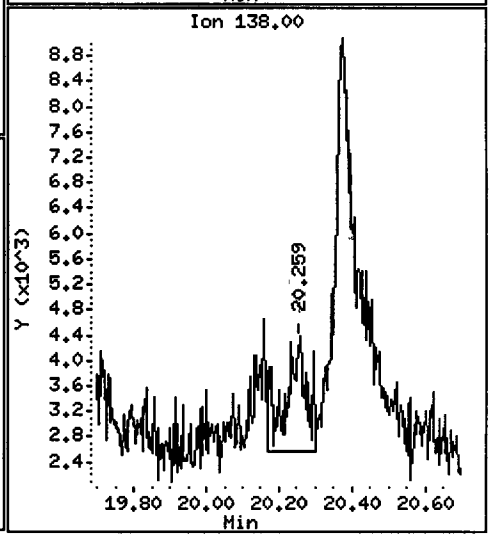












CO-ELUTION SUMMARY FOR FILE - 04291124.d

Lab ID: SS71D, Method: SIMPNA0421.m, Instrument: nt4.i, Date: 30-APR-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20110429.b/04291125.d
Lab Smp Id: SS71E Client Smp ID: LL-SB5-1.5-2-041811
Inj Date : 30-APR-2011 03:21
Operator : JZ Inst ID: nt4.i
Smp Info : SS71E
Misc Info : 11-8658
Comment : 1ul Injection
Method : /chem3/nt4.i/20110429.b/SIMPNA0421.m
Meth Date : 02-May-2011 13:38 jianqing Quant Type: ISTD
Cal Date : 21-APR-2011 22:25 Cal File: 04211107.d
Als bottle: 25
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

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

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Ws	12.26000	Weight of sample extracted (g)
M	12.80000	% Moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
* 27 Naphthalene-d8	136	4.989	4.988	(1.000)	282215	2.00000	
28 Naphthalene	128	Compound Not Detected.					
$ 190 2-Methylnaphthalene-d10	152	5.730	5.729	(1.149)	142396	1.80522	84.43
32 2-Methylnaphthalene	141	Compound Not Detected.					
105 1-methylnaphthalene	141	Compound Not Detected.					
40 Acenaphthylene	152	Compound Not Detected.					
* 42 Acenaphthene-d10	164	7.247	7.250	(1.000)	163961	2.00000	
44 Acenaphthene	153	Compound Not Detected.					
46 Dibenzofuran	168	Compound Not Detected.					
49 Fluorene	166	Compound Not Detected.					
* 59 Phenanthrene-d10	188	9.200	9.202	(1.000)	275518	2.00000	
60 Phenanthrene	178	9.231	9.234	(1.003)	16437	0.12191	5.701
61 Anthracene	178	Compound Not Detected.					
64 Fluoranthene	202	10.976	10.975	(1.193)	25215	0.16930	7.918
65 Pyrene	202	11.468	11.467	(0.816)	25484	0.17987	8.413

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
68	Benzo(a)anthracene	228	13.925	13.925	(0.991)	9727	0.07402	3.462
* 69	Chrysene-d12	240	14.048	14.041	(1.000)	281758	2.00000	
71	Chrysene	228	14.111	14.111	(1.004)	20624	0.16195	7.574
74	Benzo(b)fluoranthene	252	16.600	16.584	(0.934)	15383	0.13724	6.419
75	Benzo(k)fluoranthene	252	16.654	16.637	(0.937)	7603	0.06591	3.083
188	Benzo(j)fluoranthene	252	16.729	16.716	(0.941)	8442	0.07462	3.490
76	Benzo(a)pyrene	252	17.559	17.552	(0.988)	12023	0.11988	5.607
* 77	Perylene-d12	264	17.777	17.763	(1.000)	206595	2.00000	
78	Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
$ 191	Dibenzo(a,h)anthracene-d14	292	20.127	20.110	(1.132)	118545	1.38704	64.87
79	Dibenzo(a,h)anthracene	278	Compound Not Detected.					
80	Benzo(g,h,i)perylene	276	Compound Not Detected.					
99	Perylene	252	17.840	17.827	(1.004)	28980	0.34073	15.94

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 04291125.d
Lab Smp Id: SS71E
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20110429.b/SIMPNA0421.m
Misc Info: 11-8658

Calibration Date: 29-APR-2011
Calibration Time: 16:26
Client Smp ID: LL-SB5-1.5-2-041
Level: LOW
Sample Type: Soil

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	276036	138018	552072	282215	2.24
42 Acenaphthene-d10	158527	79264	317054	163961	3.43
59 Phenanthrene-d10	277528	138764	555056	275518	-0.72
69 Chrysene-d12	304115	152058	608230	281758	-7.35
77 Perylene-d12	257833	128916	515666	206595	-19.87

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	4.99	4.49	5.49	4.99	0.01
42 Acenaphthene-d10	7.25	6.75	7.75	7.25	-0.04
59 Phenanthrene-d10	9.20	8.70	9.70	9.20	-0.03
69 Chrysene-d12	14.04	13.54	14.54	14.05	0.05
77 Perylene-d12	17.76	17.26	18.26	17.78	0.07

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

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd Snider
Sample Matrix: SOLID
Lab Smp Id: SS71E
Level: LOW
Data Type: MS DATA
SpikeList File: pnalcss.spk
Sublist File: pnax.sub
Method File: /chem3/nt4.i/20110429.b/SIMPNA0421.m
Misc Info: 11-8658

Client SDG: SS71
Fraction: SV
Client Smp ID: LL-SB5-1.5-2-041811
Operator: JZ
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	140.3	84.43	60.17	34-100
$ 191 Dibenzo(a,h)anthra	140.3	64.87	46.23	10-117

Data File: /chem3/nt4.i/20110429.b/04291125.d

Date : 30-APR-2011 03:21

Client ID: LL-SB5-1.5-2-041811

Sample Info: SS71E

Volume Injected (uL): 1.0

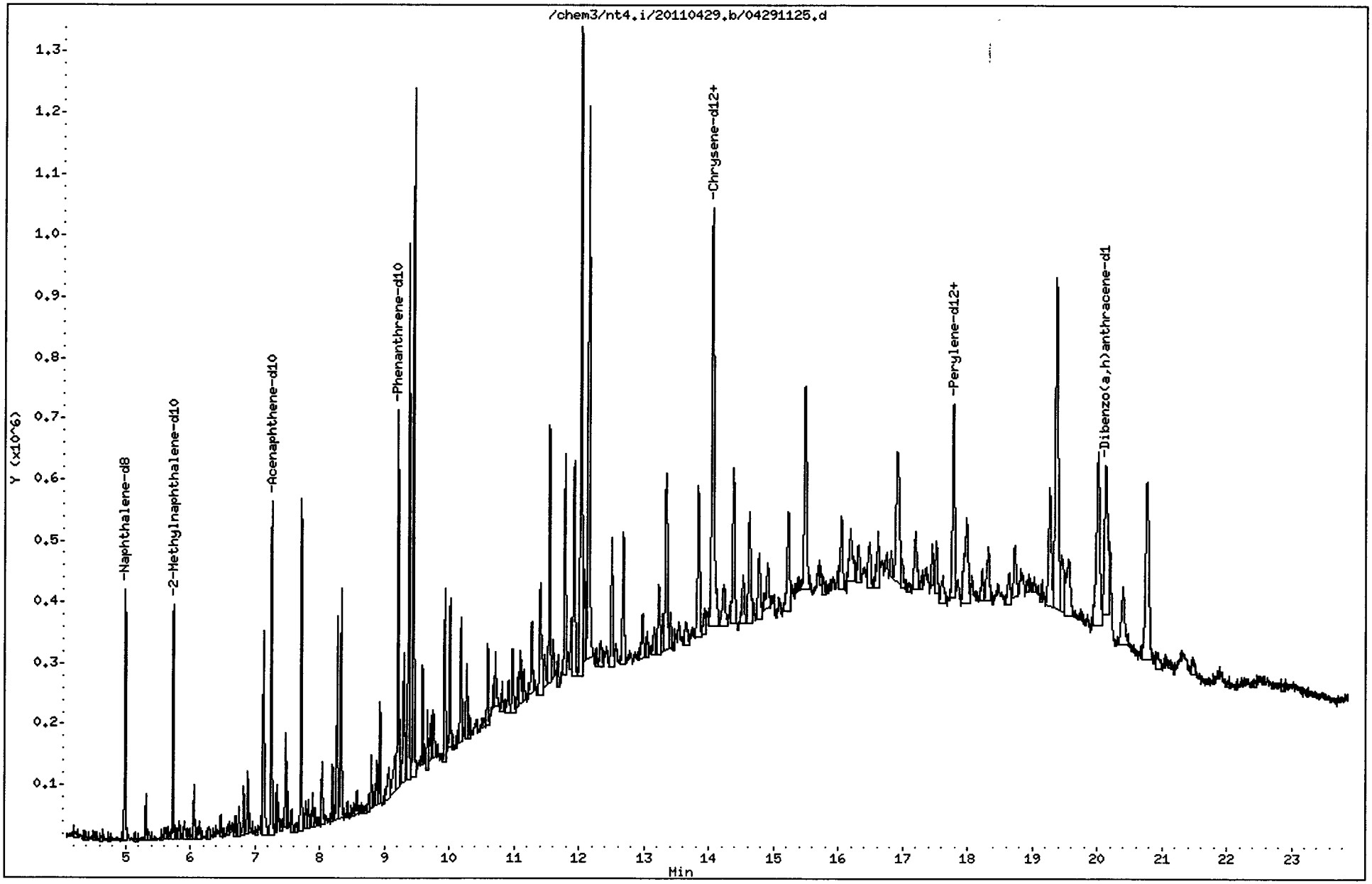
Column phase: ZB35

Instrument: nt4.i

Operator: JZ

Column diameter: 0.32

SS71 198417



Data File: /chem3/nt4.i/20110429.b/04291125.d

Date : 30-APR-2011 03:21

Client ID: LL-SB5-1.5-2-041811

Instrument: nt4.i

Sample Info: SS71E

Volume Injected (uL): 1.0

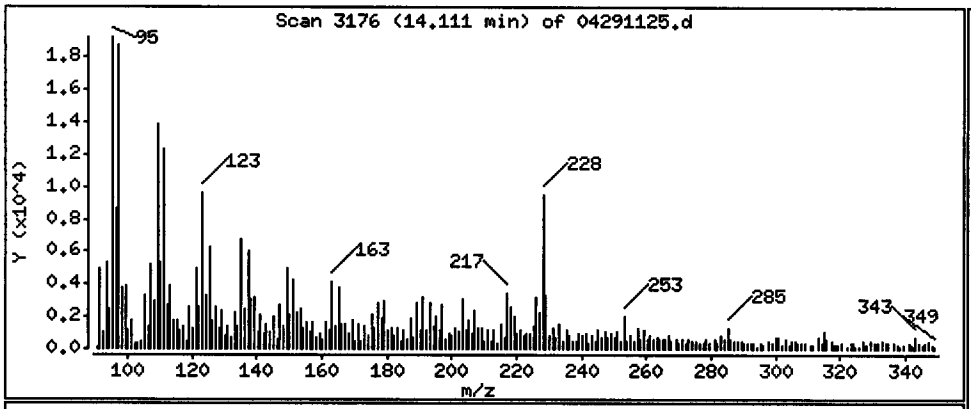
Operator: JZ

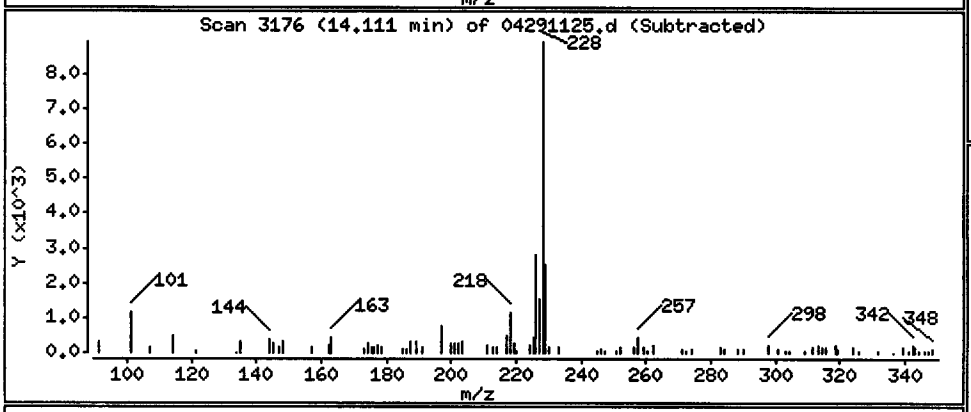
Column phase: ZB35

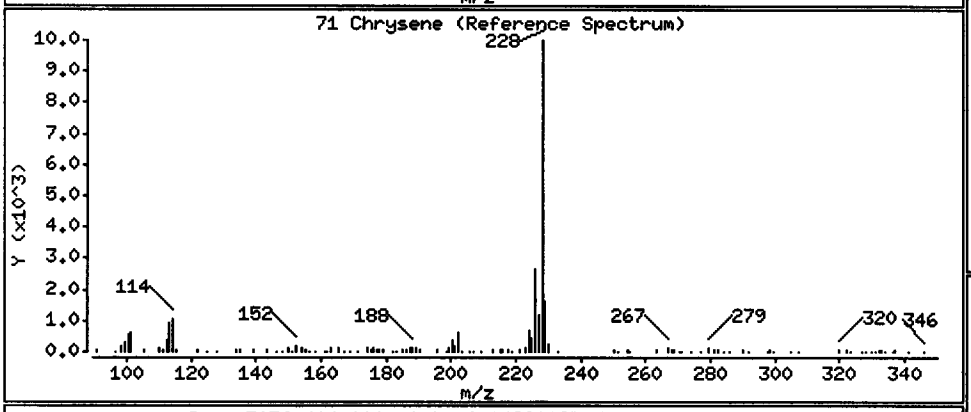
Column diameter: 0.32

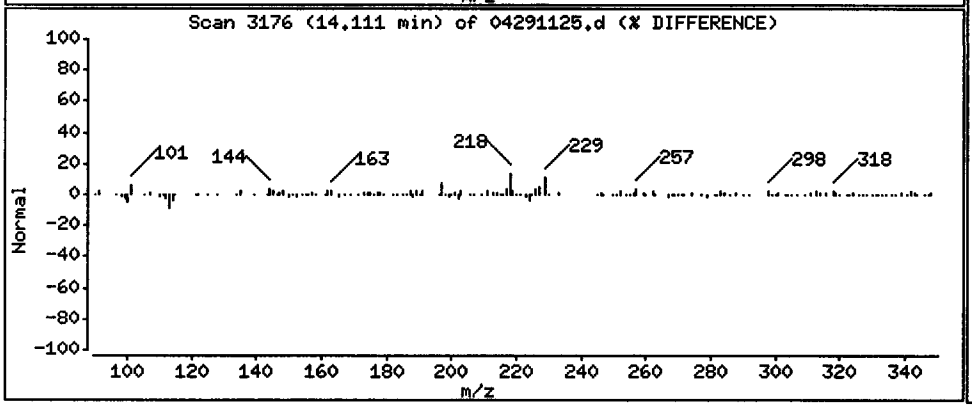
71 Chrysene

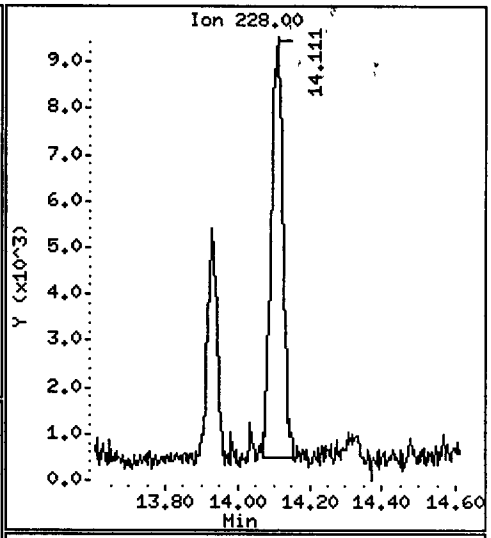
Concentration: 7.574 ug/kg

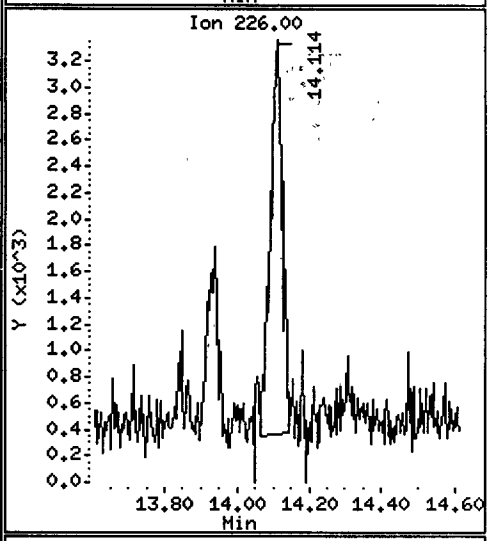


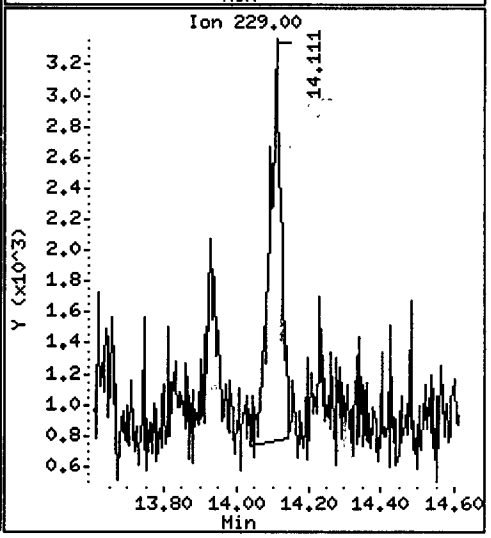












Data File: /chem3/nt4.i/20110429.b/04291125.d

Date : 30-APR-2011 03:21

Client ID: LL-SB5-1.5-2-041811

Instrument: nt4.i

Sample Info: SS71E

Volume Injected (uL): 1.0

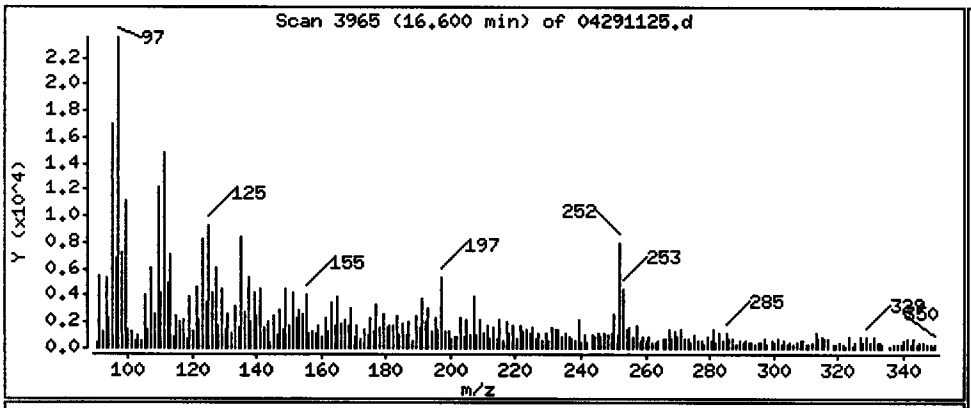
Operator: JZ

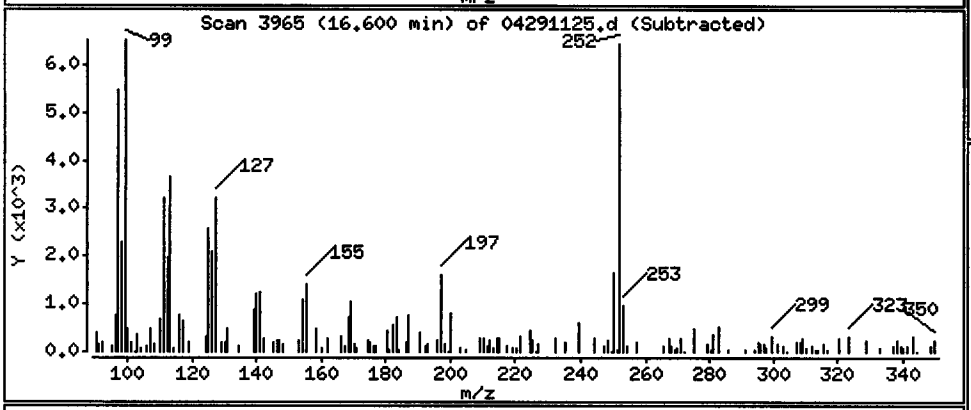
Column phase: ZB35

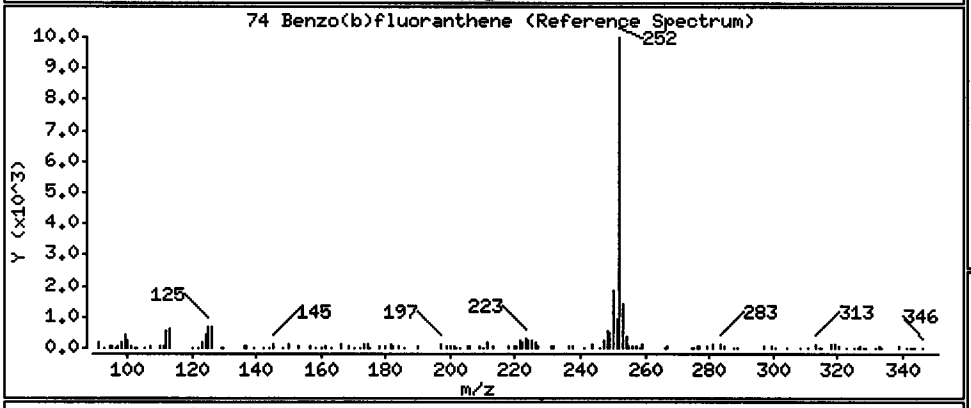
Column diameter: 0.32

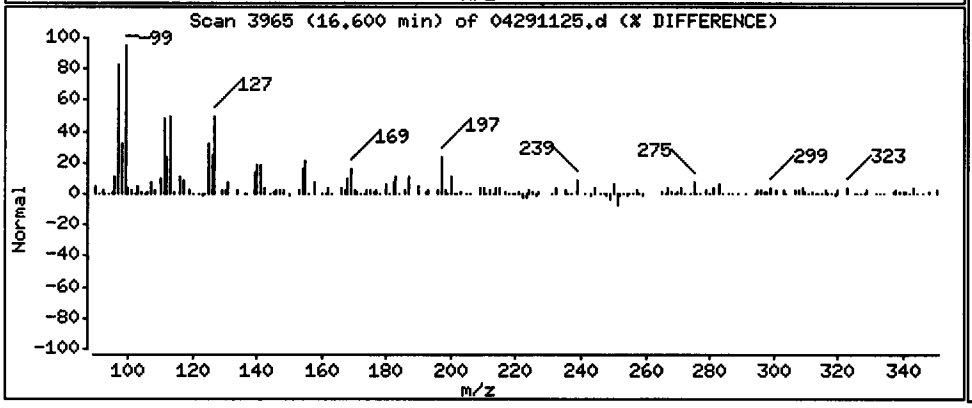
74 Benzo(b)fluoranthene

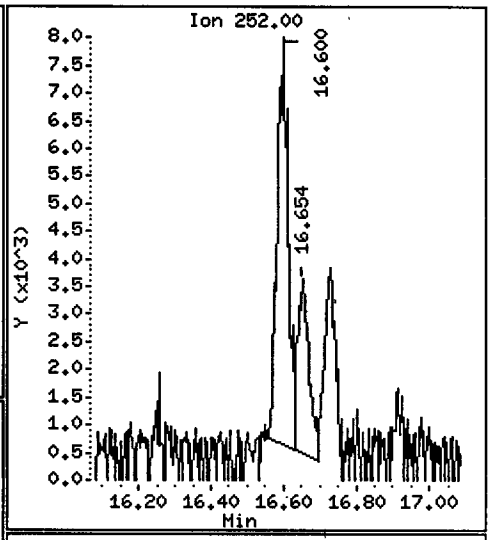
Concentration: 6.419 ug/kg

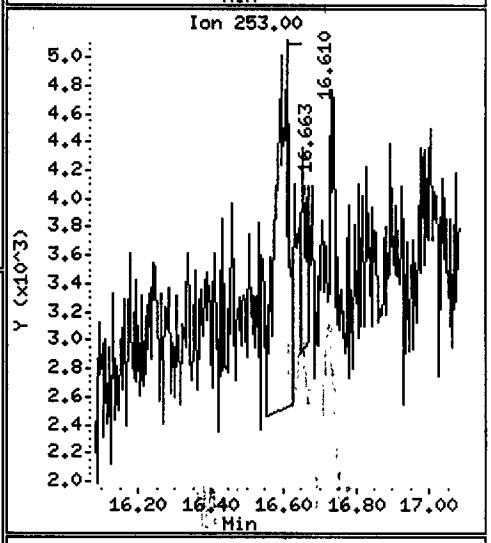


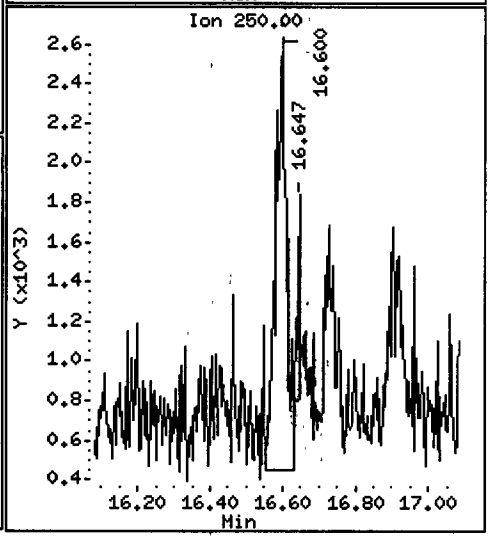












Data File: /chem3/nt4.i/20110429.b/04291125.d

Date : 30-APR-2011 03:21

Client ID: LL-SB5-1.5-2-041811

Instrument: nt4.i

Sample Info: SS71E

Volume Injected (uL): 1.0

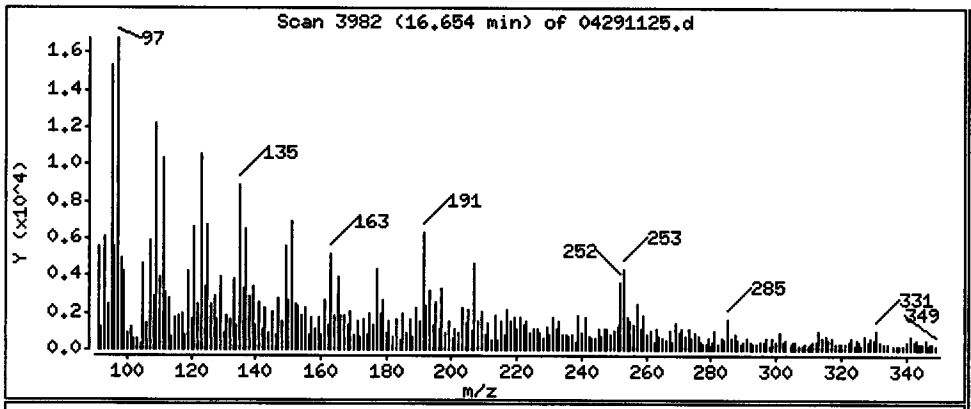
Operator: JZ

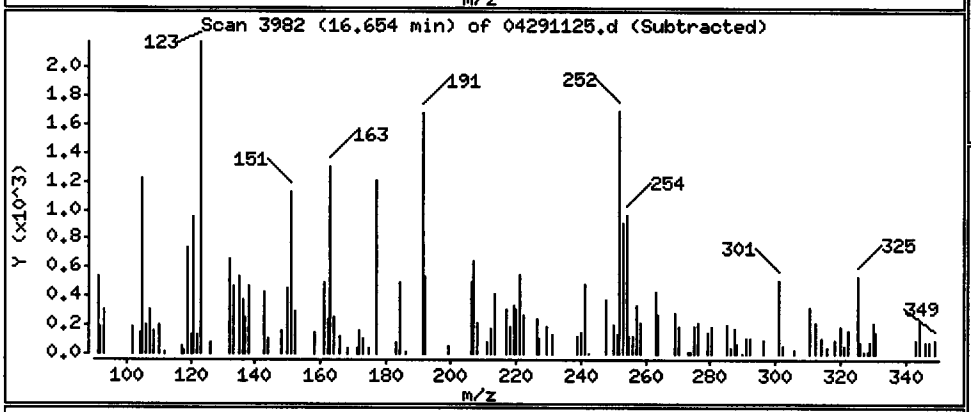
Column phase: ZB35

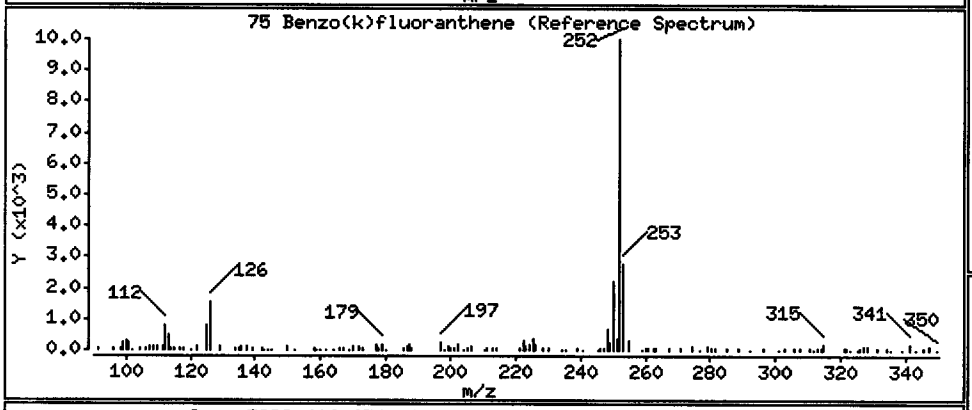
Column diameter: 0.32

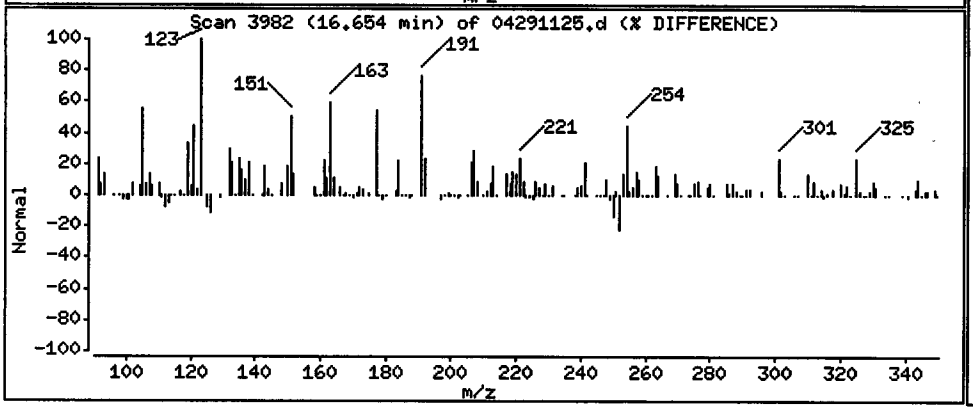
75 Benzo(k)fluoranthene

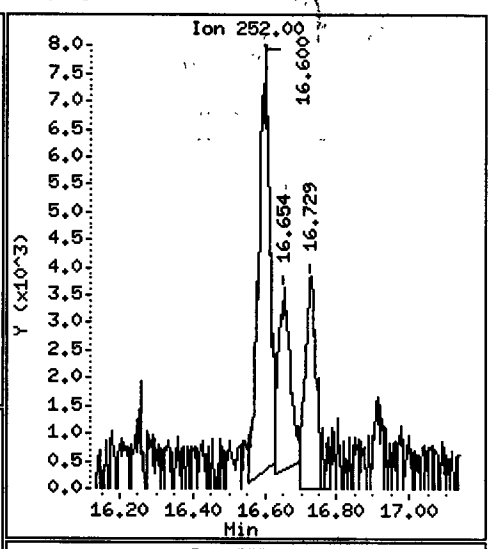
Concentration: 3.083 ug/kg

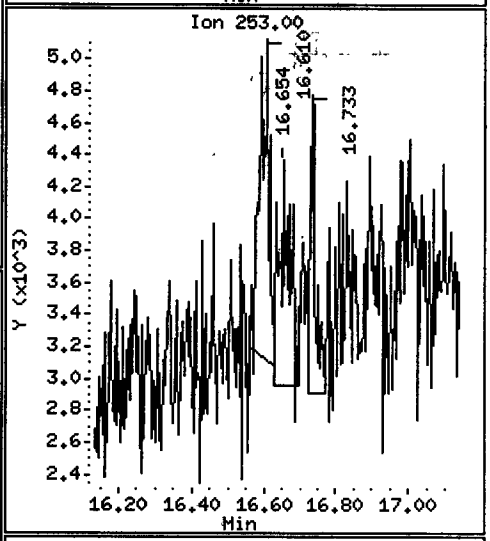


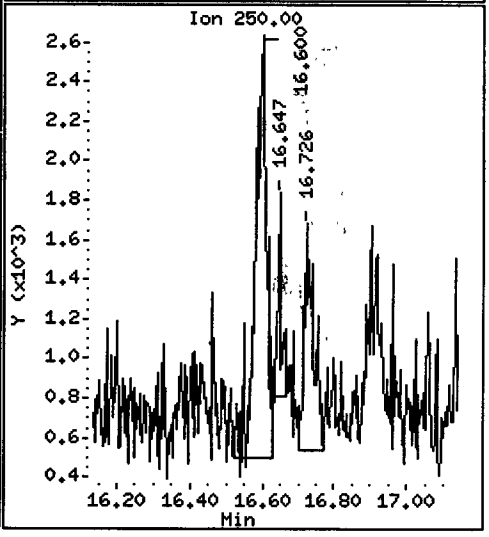












Data File: /chem3/nt4.i/20110429.b/04291125.d

Date : 30-APR-2011 03:21

Client ID: LL-SB5-1.5-2-041811

Instrument: nt4.i

Sample Info: SS71E

Volume Injected (uL): 1.0

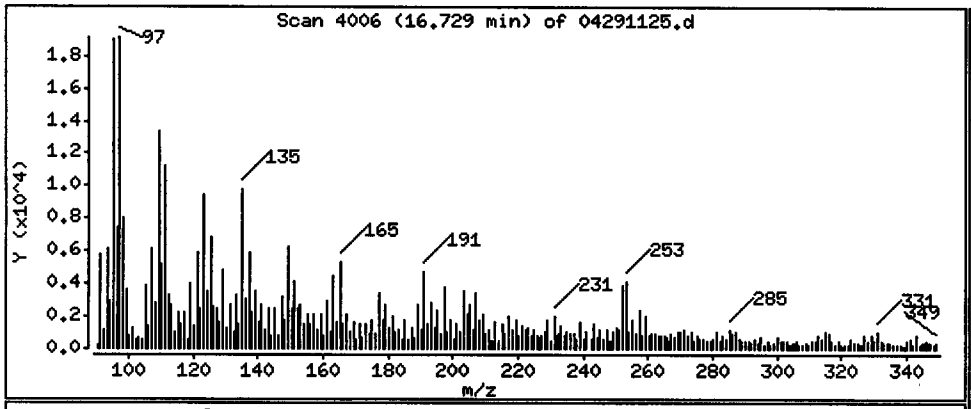
Operator: JZ

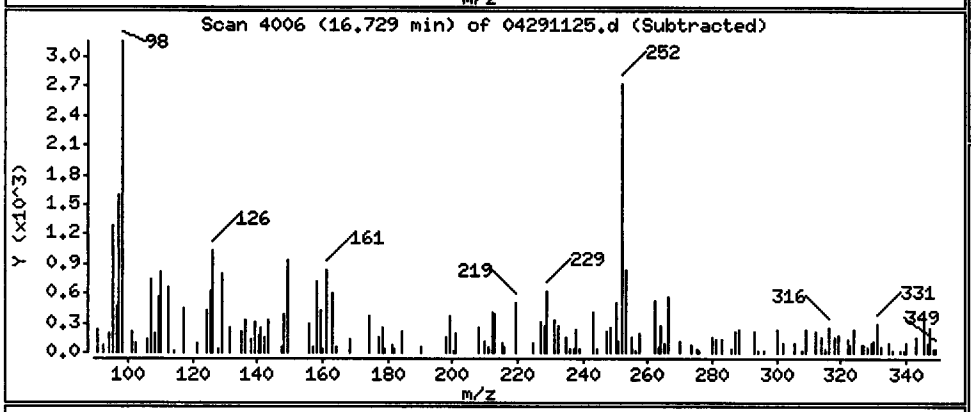
Column phase: ZB35

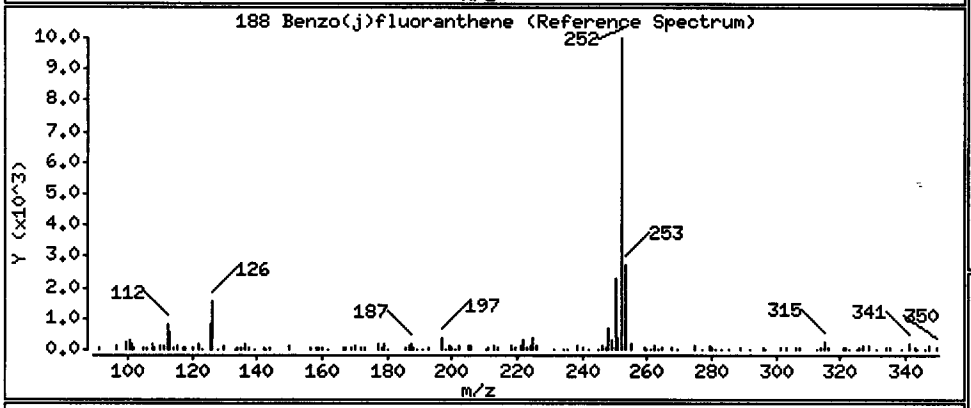
Column diameter: 0.32

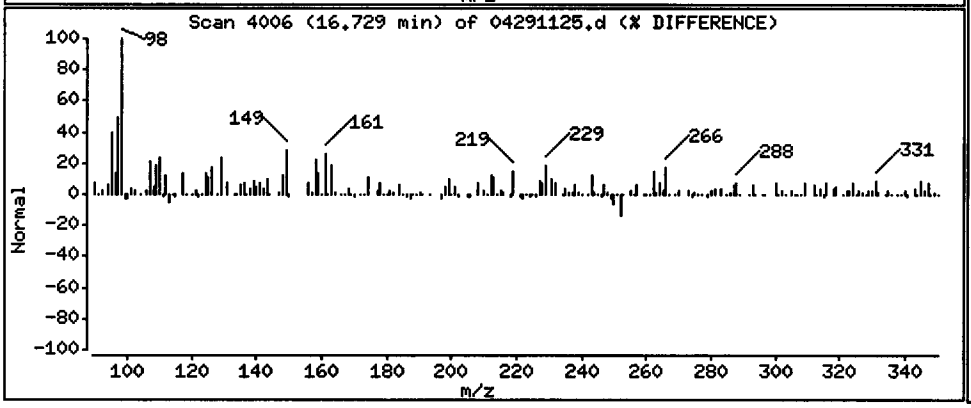
188 Benzo(j)fluoranthene

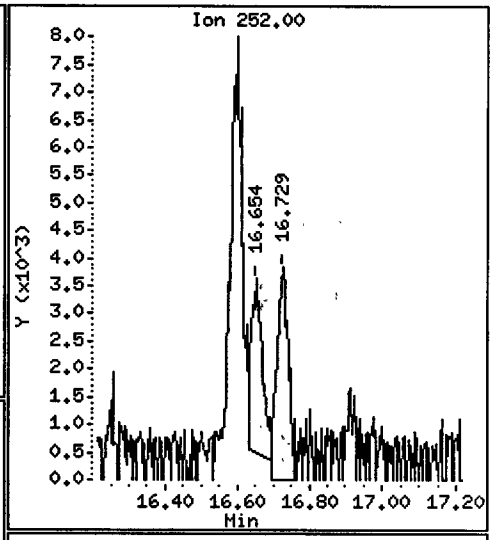
Concentration: 3.490 ug/kg

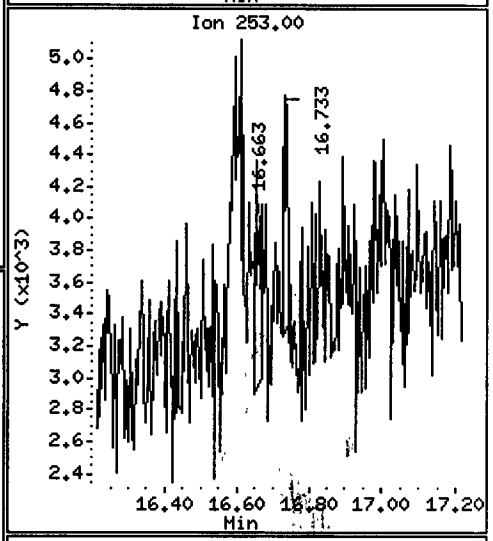


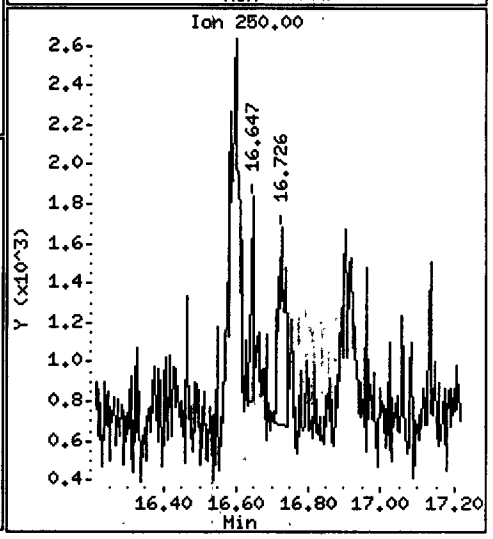












Data File: /chem3/nt4.i/20110429.b/04291125.d

Date : 30-APR-2011 03:21

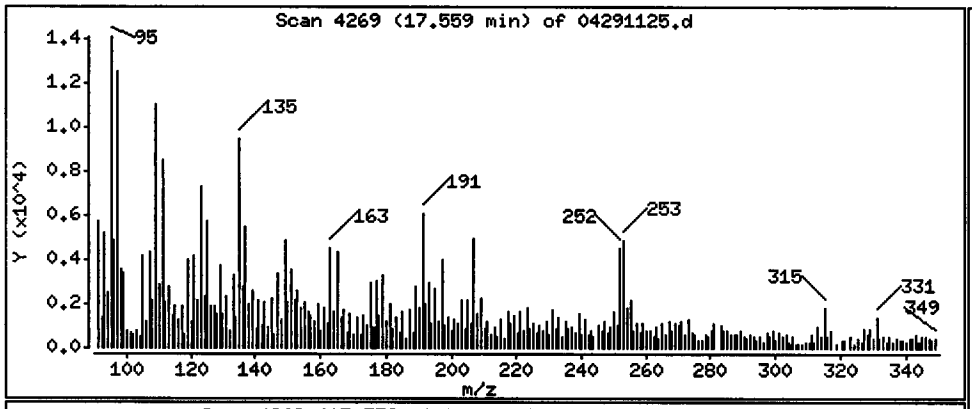
Client ID: LL-SB5-1.5-2-041811 Instrument: nt4.i

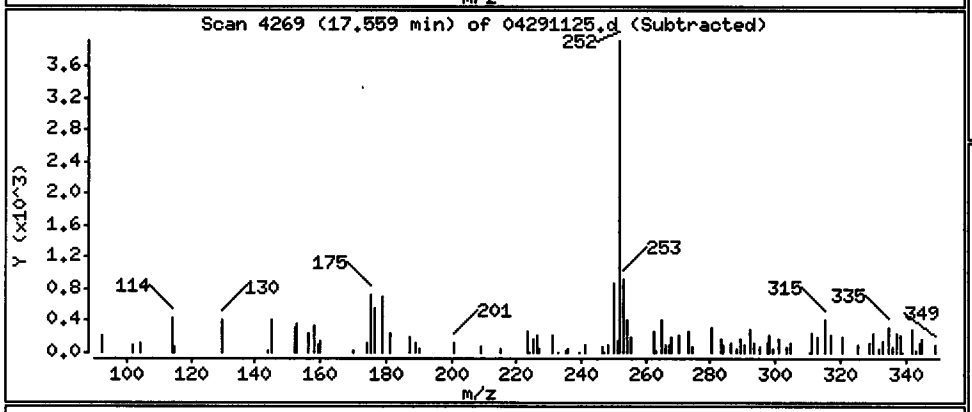
Sample Info: SS71E

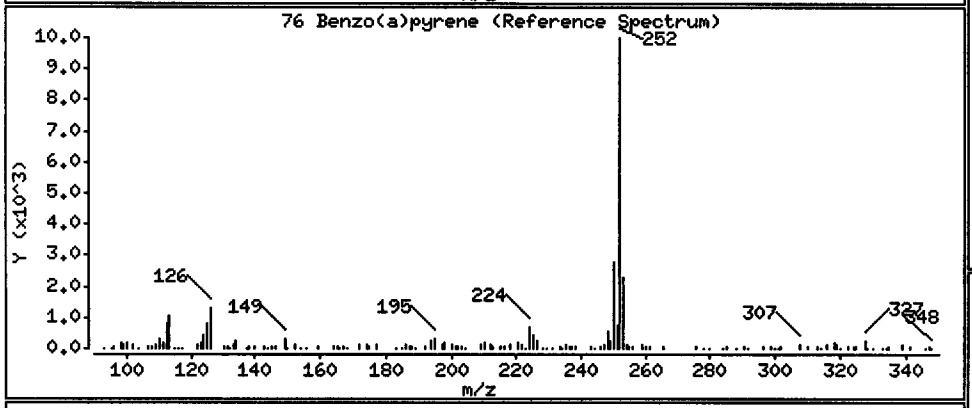
Volume Injected (uL): 1.0 Operator: JZ

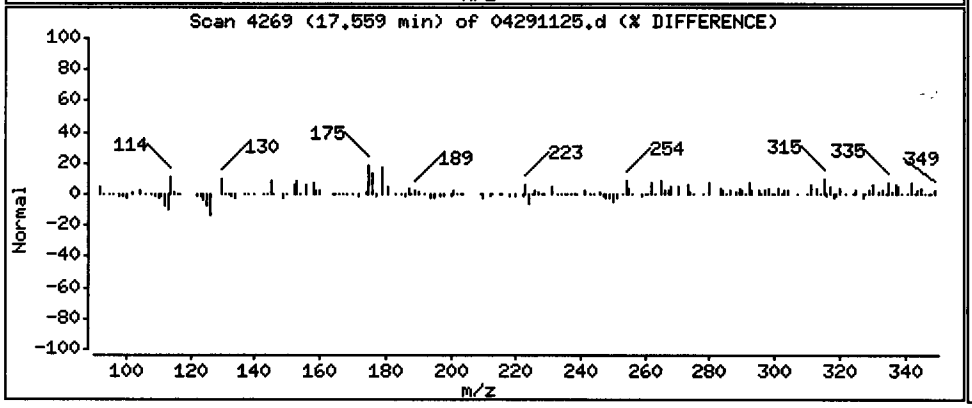
Column phase: ZB35 Column diameter: 0.32

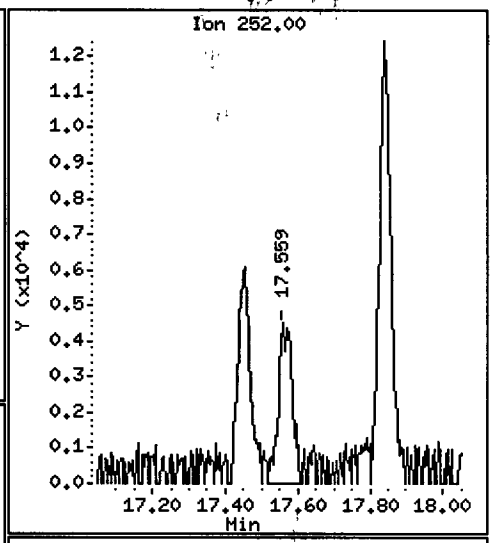
76 Benzo(a)pyrene Concentration: 5.607 ug/kg

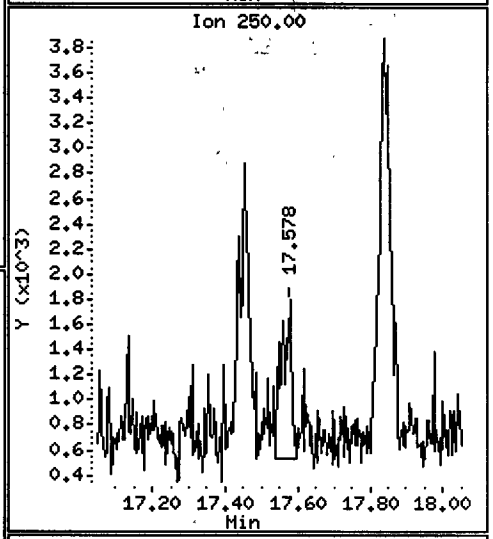


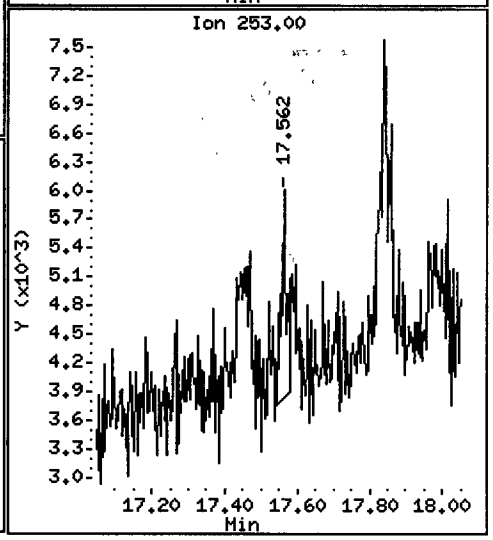












CO-ELUTION SUMMARY FOR FILE - 04291125.d

Lab ID: SS71E, Method: SIMPNA0421.m, Instrument: nt4.i, Date: 30-APR-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources Inc.: Organics Instrument Log

NT-4 Serial No.: GC = US00010849; MS = US72821113

Date: 5/02/11 Analysis: SimPAH Analyst: [illegible]

GC Program: SimPAH Column No: 185782 Column Type: ZB-35

Instrument Tune (.U or .CT.): 100716 EM Voltage: 1682

Calibration File: 0502H02 Curve Date: 4/27/11

IS/SS	Ical/Ccal	LCS/ICV
1754-5	1818-1	
	1788-3	

INTERNAL STANDARD SUMMARY FOR DATABATCH - /chem3/nt4.i/20110502.b

	Time	Filename	LabID	ClientId	DF								
1	1144	05021101.d	DFTPP0502	DFTPP0502	1	NO ISTDS FOUND							
2	1206	05021102 d	CC0502	CC0502	1	4 88	270718	7 14	151770	9.08	259984	13 83	277425	17 52	235578
3	1256	05021103.d	SS71F	LL-SB5-2-4-0	1	4 88	272094	7 14	157446	9 08	258735	13.84	269213	17.53	244261
4	1323	05021104.d	SS71G	LL-SB4-0-0 5	1	4 87	244161	7 13	144533	9 08	233714	13 83	248988	17.52	216732
5	1351	05021105.d	SS56I	MW-7-S7	1	4 87	259754	7.13	156274	9 08	258607	13.82	263946	17 51	229387
6	1419	05021106.d	SS71H	LL-SB4-1 5-2	1	4 87	263692	7.13	155268	9 08	259071	13 82	265384	17 51	218331
7	1450	05021107.d	SS71I	LL-SB4-2-4-0	1	4.88	262700	7 13	155429	9 08	260916	13 82	268105	17.51	229624
8	1518	05021108.d	SS71IMS	LL-SB4-2-4-0	1	4 87	244684	7 13	145430	9.08	251307	13.82	251059	17 51	224082
9	1546	05021109.d	SS71IMSD	LL-SB4-2-4-0	1	4.87	256491	7 13	150228	9.07	258810	13 82	267676	17 51	228753
10	1613	05021110.d	SS71J	LL-SB3-0-0 5	1	4.87	244543	7.13	145688	9 07	241477	13.82	248117	17.51	220424
11	1641	05021111.d	SS71K	LL-SB3-1 5-2	1	4.87	252640	7 13	152058	9.07	252074	13 82	258113	17.50	225005
12	1709	05021112 d	SS71L	LL-SB3-2-4-0	1	4 87	257926	7 12	151824	9 07	257714	13 82	262559	17.51	229636
13	1736	05021113.d	SS71M	LL-SB2-0-0.5	1	4 87	258494	7.13	153505	9 07	252652	13 82	263940	17.51	225665
14	1804	05021114 d	SS71N	LL-SB2-1.5-2	1	4.87	252693	7.12	152200	9 07	255533	13.82	269043	17.51	227743
15	1832	05021115.d	SS71O	LL-SB2-2-3 5	1	4.87	257573	7 13	153518	9 07	256039	13.82	277006	17.50	229557
16	1859	05021116 d	SS71P	LL-SB1-0-0 5	1	4.87	255712	7 13	153567	9 07	259503	13.82	270905	17.51	223897
17	1927	05021117.d	SS71Q	LL-SB1-0-0.5	1	4.87	258077	7 13	151829	9 07	256536	13.82	270476	17.51	224539
18	1955	05021118 d	SS71R	LL-SB1-1 5-2	1	4 87	260204	7.13	153705	9.07	257202	13.82	268298	17.51	228949
19	2022	05021119 d	SS71S	LL-SB1-2-4-0	1	4 87	261780	7.13	156393	9 07	259469	13 82	271074	17.51	235916

Maintenance / Comments [signature] 5/03/11

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

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

MANUAL INTEGRATION SUMMARY FOR DATABATCH - /chem3/nt4.i/20110502.b

ARI Job No.: CC05 Method: SIMPNA0421.m Instrument: nt4.i Date: 02-MAY-2011

05/03/11

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1206	05021102.d	CC0502	CC0502	1	NO MANUAL INTEGRATION
1256	05021103.d	SS71F	LL-SB5-2-4	1	NO MANUAL INTEGRATION
1323	05021104.d	SS71G	LL-SB4-0-0	1	NO MANUAL INTEGRATION
1419	05021106.d	SS71H	LL-SB4-1.5	1	NO MANUAL INTEGRATION
1450	05021107.d	SS71I	LL-SB4-2-4	1	NO MANUAL INTEGRATION
1518	05021108.d	SS71IMS	LL-SB4-2-4	1	NO MANUAL INTEGRATION
1546	05021109.d	SS71IMSD	LL-SB4-2-4	1	NO MANUAL INTEGRATION
1613	05021110.d	SS71J	LL-SB3-0-0	1	NO MANUAL INTEGRATION
1641	05021111.d	SS71K	LL-SB3-1.5	1	NO MANUAL INTEGRATION
1709	05021112.d	SS71L	LL-SB3-2-4	1	NO MANUAL INTEGRATION
1736	05021113.d	SS71M	LL-SB2-0-0	1	NO MANUAL INTEGRATION
1804	05021114.d	SS71N	LL-SB2-1.5	1	NO MANUAL INTEGRATION
1832	05021115.d	SS71O	LL-SB2-2-3	1	NO MANUAL INTEGRATION
1859	05021116.d	SS71P	LL-SB1-0-0	1	NO MANUAL INTEGRATION
1927	05021117.d	SS71Q	LL-SB1-0-0	1	NO MANUAL INTEGRATION
1955	05021118.d	SS71R	LL-SB1-1.5	1	NO MANUAL INTEGRATION
2022	05021119.d	SS71S	LL-SB1-2-4	1	NO MANUAL INTEGRATION

Q-FLAG SUMMARY FOR DATABATCH - /chem3/nt4.i/20110502.b

Instrument: nt4.i Date: 02-MAY-2011 Method: SIMPNA0421.m

INITIAL CAL: 21-APR-2011

Compound	%RSD or R^2
NO Q-FLAGS	

CONTINUING CAL: 02-MAY-2011

Compound	%D
NO Q-FLAGS	

05/02/11

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt4.i
Lab File ID: 05021102.d
Analysis Type:
Lab Sample ID: CC0502
Method: /chem3/nt4.i/20110502.b/SIMPNA0421.m

Injection Date: 02-MAY-2011 12:06
Init. Cal. Date(s): 21-APR-2011 21-APR-2011
Init. Cal. Times: 20:07 22:25
Quant Type: ISTD

05/07/11

COMPOUND	RRF / AMOUNT	RF2	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
28 Naphthalene	0.90157	0.88386	0.010	-1.96379	20.00000	Averaged
$ 190 2-Methylnaphthalene-d10	0.55901	0.56741	0.010	1.50375	20.00000	Averaged
32 2-Methylnaphthalene	0.50597	0.48955	0.010	-3.24493	20.00000	Averaged
105 1-methylnaphthalene	0.52586	0.51137	0.010	-2.75483	20.00000	Averaged
40 Acenaphthylene	1.62983	1.64012	0.010	0.63111	20.00000	Averaged
44 Acenaphthene	1.00211	0.97148	0.010	-3.05648	20.00000	Averaged
46 Dibenzofuran	1.37091	1.40695	0.010	2.62851	20.00000	Averaged
49 Fluorene	1.17634	1.18424	0.010	0.67136	20.00000	Averaged
60 Phenanthrene	0.97876	0.98440	0.010	0.57657	20.00000	Averaged
61 Anthracene	1.01445	0.99886	0.010	-1.53657	20.00000	Averaged
64 Fluoranthene	1.08113	1.07883	0.010	-0.21223	20.00000	Averaged
65 Pyrene	1.00567	1.03899	0.010	3.31345	20.00000	Averaged
68 Benzo(a)anthracene	0.93284	0.94578	0.010	1.38749	20.00000	Averaged
71 Chrysene	0.90395	0.92325	0.010	2.13525	20.00000	Averaged
74 Benzo(b)fluoranthene	1.08510	1.12324	0.010	3.51503	20.00000	Averaged
75 Benzo(k)fluoranthene	1.11668	1.11218	0.010	-0.40237	20.00000	Averaged
188 Benzo(j)fluoranthene	1.09515	1.07154	0.010	-2.15565	20.00000	Averaged
76 Benzo(a)pyrene	0.97092	1.01090	0.010	4.11830	20.00000	Averaged
78 Indeno(1,2,3-cd)pyrene	1.14225	1.18494	0.010	3.73751	20.00000	Averaged
$ 191 Dibenzo(a,h)anthracene-d14	0.82738	0.86070	0.010	4.02755	20.00000	Averaged
79 Dibenzo(a,h)anthracene	0.92626	0.98240	0.010	6.06047	20.00000	Averaged
80 Benzo(g,h,i)perylene	0.97562	1.02844	0.010	5.41344	20.00000	Averaged
99 Perylene	0.82338	0.84021	0.010	2.04367	20.00000	Averaged

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20110502.b/05021102.d
Lab Smp Id: CC0502
Inj Date : 02-MAY-2011 12:06
Operator : JZ Inst ID: nt4.i
Smp Info : CC0502
Misc Info : 11-
Comment : 1ul Injection
Method : /chem3/nt4.i/20110502.b/SIMPNA0421.m
Meth Date : 02-May-2011 15:23 jianqing Quant Type: ISTD
Cal Date : 21-APR-2011 22:25 Cal File: 04211107.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

05/02/11

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
* 27 Naphthalene-d8	136	4.881	4.881	(1.000)	270718	2.00000	
28 Naphthalene	128	4.910	4.910	(1.006)	299098	2.50000	2.451
$ 190 2-Methylnaphthalene-d10	152	5.623	5.623	(1.152)	192012	2.50000	2.538
32 2-Methylnaphthalene	141	5.667	5.667	(1.161)	165663	2.50000	2.419
105 1-methylnaphthalene	141	5.859	5.859	(1.200)	173048	2.50000	2.431
40 Acenaphthylene	152	6.998	6.998	(0.981)	311150	2.50000	2.516
* 42 Acenaphthene-d10	164	7.137	7.137	(1.000)	151770	2.00000	
44 Acenaphthene	153	7.181	7.181	(1.006)	184301	2.50000	2.424
46 Dibenzofuran	168	7.326	7.326	(1.027)	266915	2.50000	2.566
49 Fluorene	166	7.787	7.787	(1.091)	224664	2.50000	2.517
* 59 Phenanthrene-d10	188	9.083	9.083	(1.000)	259984	2.00000	
60 Phenanthrene	178	9.118	9.118	(1.004)	319912	2.50000	2.514
61 Anthracene	178	9.149	9.149	(1.007)	324609	2.50000	2.462
64 Fluoranthene	202	10.824	10.824	(1.192)	350599	2.50000	2.495
65 Pyrene	202	11.301	11.301	(0.817)	360301	2.50000	2.583
68 Benzo(a)anthracene	228	13.717	13.717	(0.992)	327978	2.50000	2.535
* 69 Chrysene-d12	240	13.834	13.834	(1.000)	277425	2.00000	
71 Chrysene	228	13.903	13.903	(1.005)	320166	2.50000	2.553
74 Benzo(b)fluoranthene	252	16.354	16.354	(0.933)	330764	2.50000	2.588
75 Benzo(k)fluoranthene	252	16.411	16.411	(0.937)	327507	2.50000	2.490
188 Benzo(j)fluoranthene	252	16.483	16.483	(0.941)	315540	2.50000	2.446
76 Benzo(a)pyrene	252	17.316	17.316	(0.988)	297683	2.50000	2.603
* 77 Perylene-d12	264	17.521	17.521	(1.000)	235578	2.00000	
78 Indeno(1,2,3-cd)pyrene	276	19.893	19.893	(1.135)	348934	2.50000	2.593
$ 191 Dibenzo(a,h)anthracene-d14	292	19.821	19.821	(1.131)	253453	2.50000	2.601
79 Dibenzo(a,h)anthracene	278	19.909	19.909	(1.136)	289290	2.50000	2.652
80 Benzo(g,h,i)perylene	276	20.767	20.767	(1.185)	302846	2.50000	2.635

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
99 Perylene	252	17.587	17.587	(1.004)	247419	2.50000	2.551

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 05021102.d
Lab Smp Id: CC0502
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20110502.b/SIMPNA0421.m
Misc Info: 11-

Calibration Date: 02-MAY-2011
Calibration Time: 12:06
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	276036	138018	552072	270718	-1.93
42 Acenaphthene-d10	158527	79264	317054	151770	-4.26
59 Phenanthrene-d10	277528	138764	555056	259984	-6.32
69 Chrysene-d12	304115	152058	608230	277425	-8.78
77 Perylene-d12	257833	128916	515666	235578	-8.63

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	4.88	4.38	5.38	4.88	0.00
42 Acenaphthene-d10	7.14	6.64	7.64	7.14	0.00
59 Phenanthrene-d10	9.08	8.58	9.58	9.08	0.00
69 Chrysene-d12	13.83	13.33	14.33	13.83	0.00
77 Perylene-d12	17.52	17.02	18.02	17.52	0.00

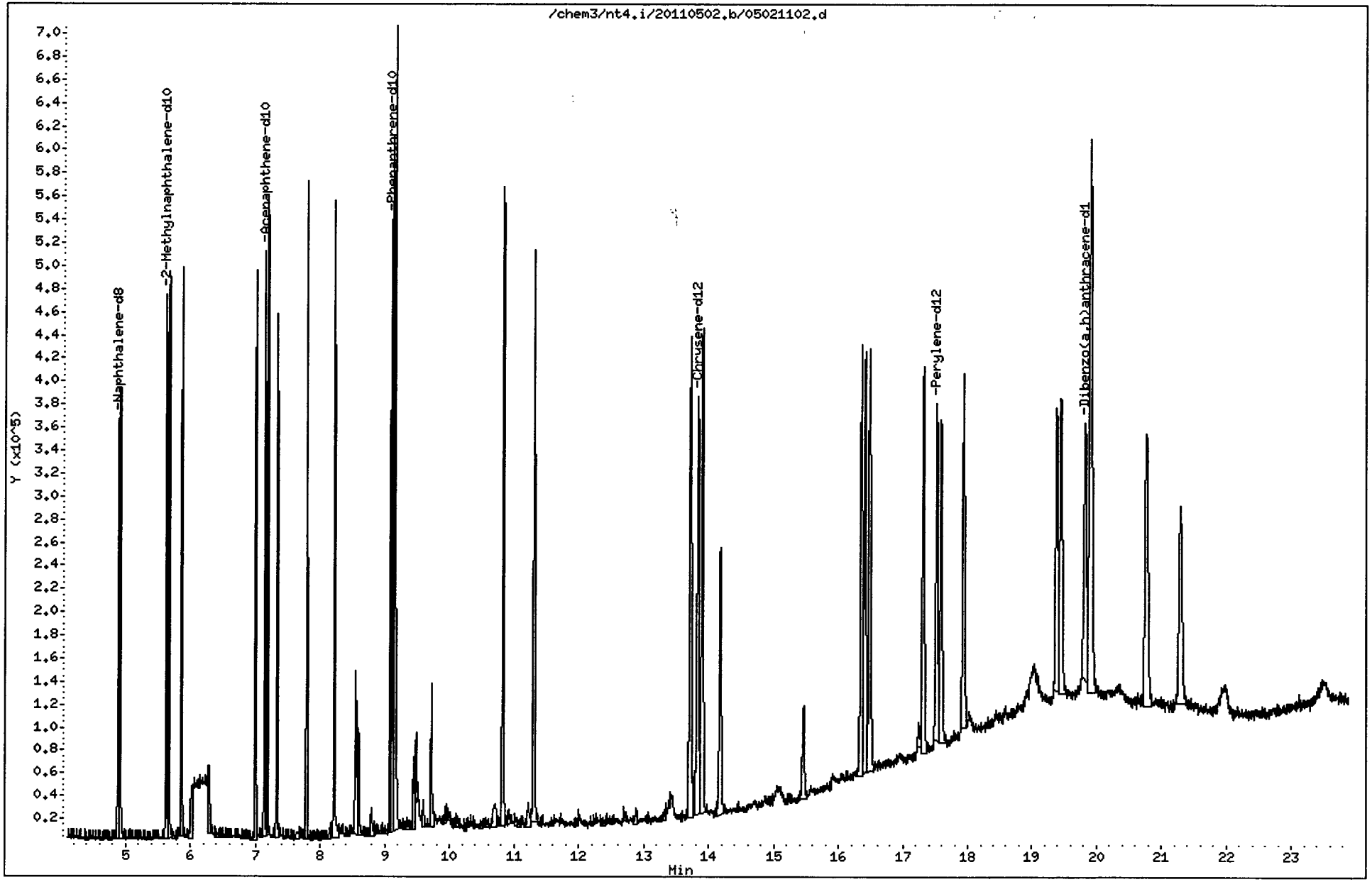
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem3/nt4.i/20110502.b/05021102.d
Date : 02-MAY-2011 12:06
Client ID:
Sample Info: CC0502

Instrument: nt4.i

Operator: JZ
Column diameter: 0.32

Column phase: ZB35



CO-ELUTION SUMMARY FOR FILE - 05021102.d

Lab ID: CC0502, Method: SIMPNA0421.m, Instrument: nt4.i, Date: 02-MAY-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Data File: /chem3/nt4.i/20110502.b/tune.b/05021101.d

Date : 02-MAY-2011 11:44

Client ID: DFTPP0502

Instrument: nt4.i

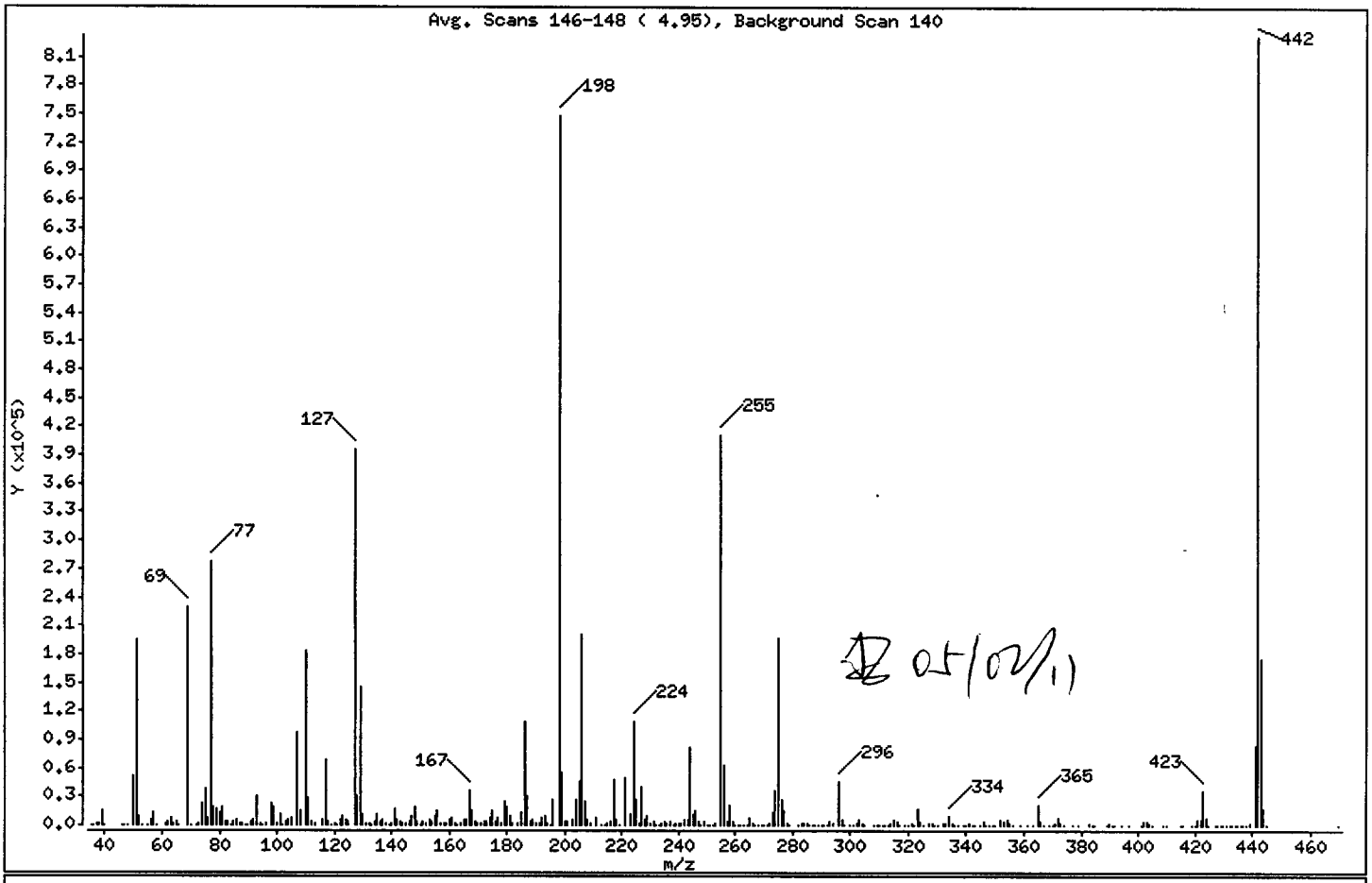
Sample Info: DFTPP0502

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.32

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	26.06
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	30.83
70	Less than 2.00% of mass 69	0.13 (0.41)
127	10.00 - 80.00% of mass 198	52.95
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	7.43
275	10.00 - 60.00% of mass 198	26.31
365	Greater than 1.00% of mass 198	2.69
441	0.01 - 24.00% of mass 442	11.20 (10.06)
442	50.00 - 200.00% of mass 198	111.34
443	15.00 - 24.00% of mass 442	23.59 (21.19)

05/02/11

Data File: /chem3/nt4.i/20110502.b/tune.b/05021101.d

Date : 02-MAY-2011 11:44

Client ID: DFTPP0502

Instrument: nt4.i

Sample Info: DFTPP0502

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.32

Data File: 05021101.d

Spectrum: Avg. Scans 146-148 (4.95), Background Scan 140

Location of Maximum: 442.00

Number of points: 342

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	62	139.00	759	232.00	667	327.00	2858
36.00	80	140.00	1416	233.00	909	328.00	1668
37.00	988	141.00	17816	234.00	2396	329.00	65
38.00	2817	142.00	6116	235.00	3259	330.00	60
39.00	14545	143.00	3742	236.00	2186	332.00	1328
40.00	711	144.00	1147	237.00	3199	333.00	1134
46.00	53	145.00	1090	238.00	640	334.00	9889
47.00	199	146.00	3086	239.00	1593	335.00	2652
48.00	149	147.00	9082	240.00	1444	336.00	375
50.00	51848	148.00	19056	241.00	2416	337.00	51
51.00	194752	149.00	3563	242.00	5205	339.00	156
52.00	10187	150.00	926	243.00	4889	340.00	207
53.00	369	151.00	2961	244.00	82592	341.00	1912
55.00	296	152.00	1637	245.00	11011	342.00	517
56.00	5584	153.00	5687	246.00	14631	343.00	194
57.00	12924	154.00	4244	247.00	3290	345.00	81
58.00	286	155.00	10506	248.00	665	346.00	3064
61.00	2357	156.00	15362	249.00	3134	347.00	688
62.00	3366	157.00	2833	250.00	720	348.00	169
63.00	8426	158.00	2851	251.00	727	349.00	60
64.00	1411	159.00	2529	252.00	776	350.00	140
65.00	4381	160.00	5707	253.00	2279	352.00	4802
66.00	472	161.00	8429	255.00	411200	353.00	3609
69.00	230400	162.00	1453	256.00	64072	354.00	5448
70.00	953	163.00	798	257.00	4645	355.00	1036
72.00	253	164.00	1089	258.00	21112	356.00	55
73.00	1622	165.00	6205	259.00	3447	359.00	310
74.00	22864	166.00	5371	260.00	616	361.00	58
75.00	37712	167.00	36600	261.00	849	363.00	112
76.00	7564	168.00	15527	262.00	189	365.00	20112
77.00	277376	169.00	3166	263.00	196	366.00	2972
78.00	19512	170.00	1222	264.00	453	367.00	375
79.00	17624	171.00	1403	265.00	8194	369.00	50
80.00	13164	172.00	2986	266.00	1356	370.00	598
81.00	19136	173.00	3998	267.00	237	371.00	1341

Data File: /chem3/nt4.i/20110502.b/tune.b/05021101.d

Date : 02-MAY-2011 11:44

Client ID: DFTPP0502 Instrument: nt4.i

Sample Info: DFTPP0502

Operator: JZ

Column phase: ZB-5msi Column diameter: 0.32

Data File: 05021101.d
Spectrum: Avg. Scans 146-148 (4.95), Background Scan 140
Location of Maximum: 442.00
Number of points: 342

m/z	Y	m/z	Y	m/z	Y	m/z	Y
82.00	4652	174.00	7567	268.00	249	372.00	8294
83.00	4364	175.00	15269	269.00	87	373.00	2196
84.00	361	176.00	4530	270.00	540	374.00	243
85.00	2932	177.00	6912	271.00	740	377.00	316
86.00	5271	178.00	2186	272.00	1528	379.00	60
87.00	2294	179.00	24648	273.00	13108	383.00	2227
88.00	1033	180.00	19512	274.00	36632	384.00	658
89.00	501	181.00	9481	275.00	196608	385.00	295
90.00	106	182.00	1502	276.00	26216	389.00	61
91.00	4374	184.00	2048	277.00	14690	390.00	1123
92.00	4885	185.00	12795	278.00	2098	391.00	768
93.00	29960	186.00	108544	279.00	676	392.00	509
94.00	1790	187.00	31496	282.00	443	394.00	83
95.00	676	188.00	3276	283.00	2267	397.00	74
96.00	1489	189.00	5896	284.00	1276	401.00	393
98.00	22104	190.00	1158	285.00	2721	402.00	3229
99.00	18624	191.00	2646	286.00	583	403.00	4660
100.00	1616	192.00	8534	287.00	115	404.00	1676
101.00	11802	193.00	9200	288.00	253	405.00	372
102.00	611	194.00	2012	289.00	568	409.00	53
103.00	3763	195.00	578	290.00	712	410.00	132
104.00	6562	196.00	27328	291.00	346	415.00	244
105.00	6966	198.00	747328	292.00	761	416.00	58
107.00	97000	199.00	55512	293.00	3760	419.00	116
108.00	14870	200.00	3647	294.00	1074	420.00	55
110.00	184192	201.00	4591	296.00	46368	421.00	5042
111.00	28560	203.00	5255	297.00	6487	422.00	4981
112.00	3341	204.00	26752	298.00	482	423.00	36656
113.00	1119	205.00	46128	300.00	51	424.00	7326
116.00	5182	206.00	200832	301.00	741	425.00	828
117.00	68384	207.00	25056	302.00	1136	427.00	57
118.00	4405	208.00	5539	303.00	5999	428.00	123
119.00	762	209.00	1986	304.00	1620	429.00	184
120.00	1460	211.00	7713	305.00	262	430.00	154
121.00	384	213.00	628	308.00	744	431.00	137

Data File: /chem3/nt4.i/20110502.b/tune.b/05021101.d

Date : 02-MAY-2011 11:44

Client ID: DFTPP0502

Instrument: nt4.i

Sample Info: DFTPP0502

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.32

Data File: 05021101.d
Spectrum: Avg. Scans 146-148 (4.95), Background Scan 140
Location of Maximum: 442.00
Number of points: 342

m/z	Y	m/z	Y	m/z	Y	m/z	Y
122.00	6341	214.00	26	309.00	622	432.00	236
123.00	9678	215.00	2117	310.00	639	433.00	112
124.00	4847	216.00	4031	311.00	64	434.00	368
125.00	4437	217.00	47512	312.00	175	435.00	371
127.00	395712	218.00	6229	313.00	528	436.00	475
128.00	30544	219.00	579	314.00	2328	437.00	535
129.00	145024	221.00	49112	315.00	5016	438.00	890
130.00	11606	223.00	11779	316.00	3161	439.00	978
131.00	1916	224.00	108752	317.00	610	441.00	83704
132.00	1127	225.00	27120	319.00	69	442.00	832064
133.00	304	226.00	2160	320.00	372	443.00	176320
134.00	3950	227.00	40600	321.00	1486	444.00	16648
135.00	10895	228.00	5742	322.00	321	445.00	920
136.00	4189	229.00	9129	323.00	16456	470.00	53
137.00	5273	230.00	1474	324.00	2931		
138.00	1138	231.00	4350	325.00	345		

Data File: /chem3/nt4.i/20110502.b/tune.b/05021101.d

Date : 02-MAY-2011 11:44

Client ID: DFTPP0502

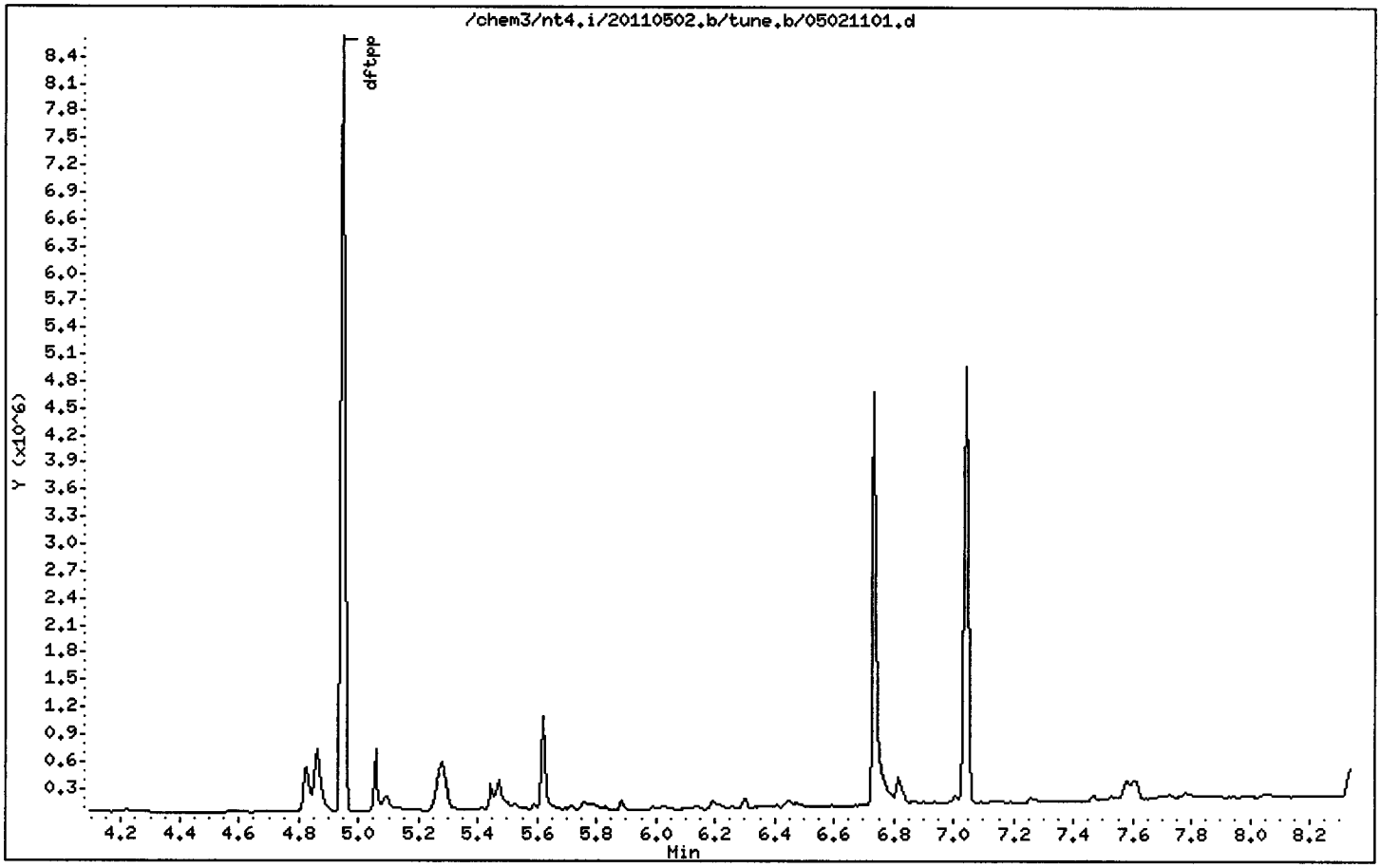
Instrument: nt4.i

Sample Info: DFTPP0502

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.32



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

Data file: /chem3/nt4.i/20110502.b/ddt.b/05021101.d ARI ID: DDT0502
Method: /chem3/nt4.i/20110502.b/ddt.b/sw846ddt.m Misc: 11-
Analysis Date: 02-MAY-2011 11:44 Instrument: nt4.i

COMPOUND	RT	AREA
Pentachlorophenol	5.057	86157
Benzidine	6.737	2010621
4,4'-DDE	----	----
4,4'-DDD	6.813	62587
4,4'-DDT	7.042	901382

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

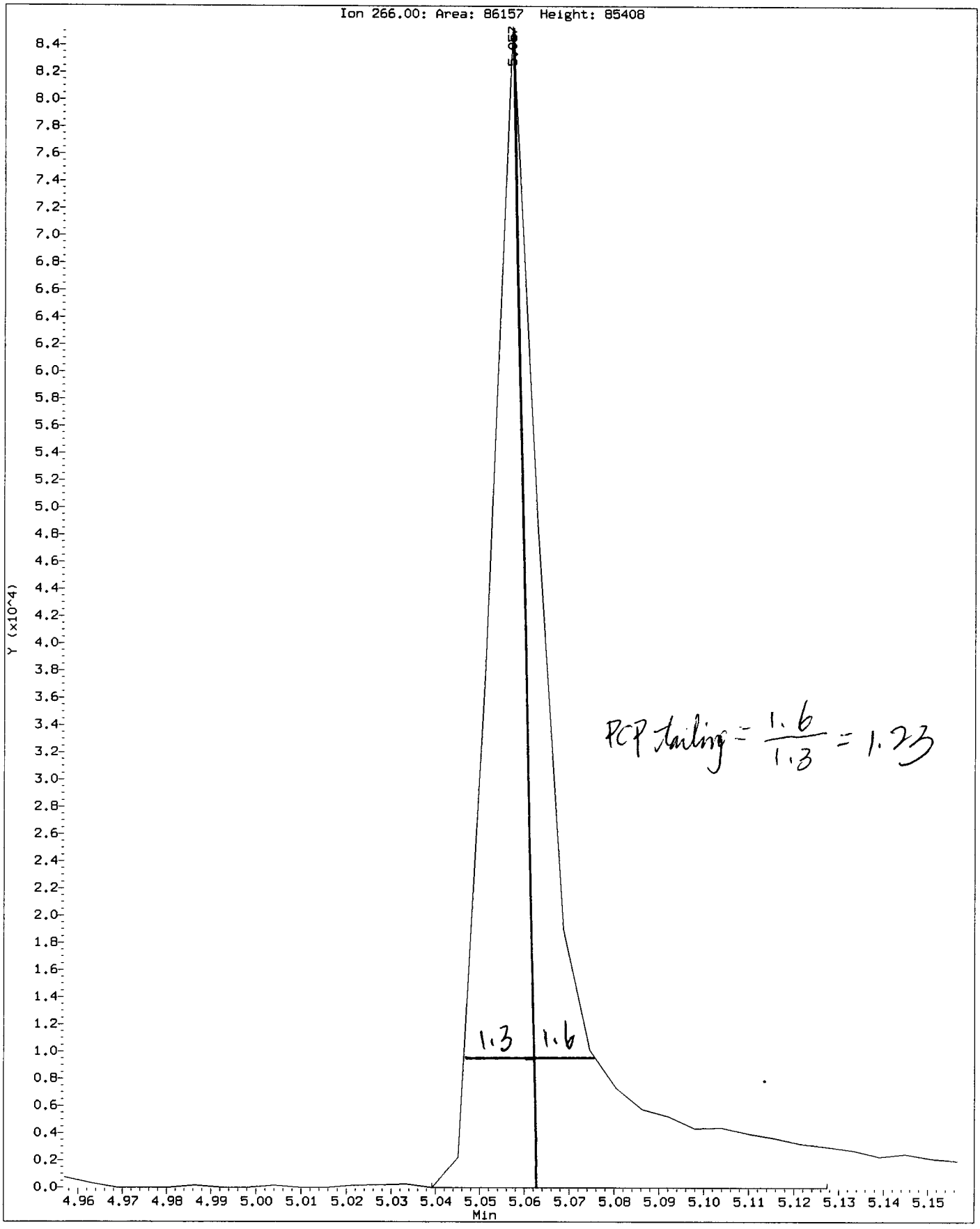
$$\text{DDT Percent Breakdown} = \frac{(0 + 62587) * 100}{(0 + 62587 + 901382)}$$

DDT Percent Breakdown = 6.5 %

05/02/11

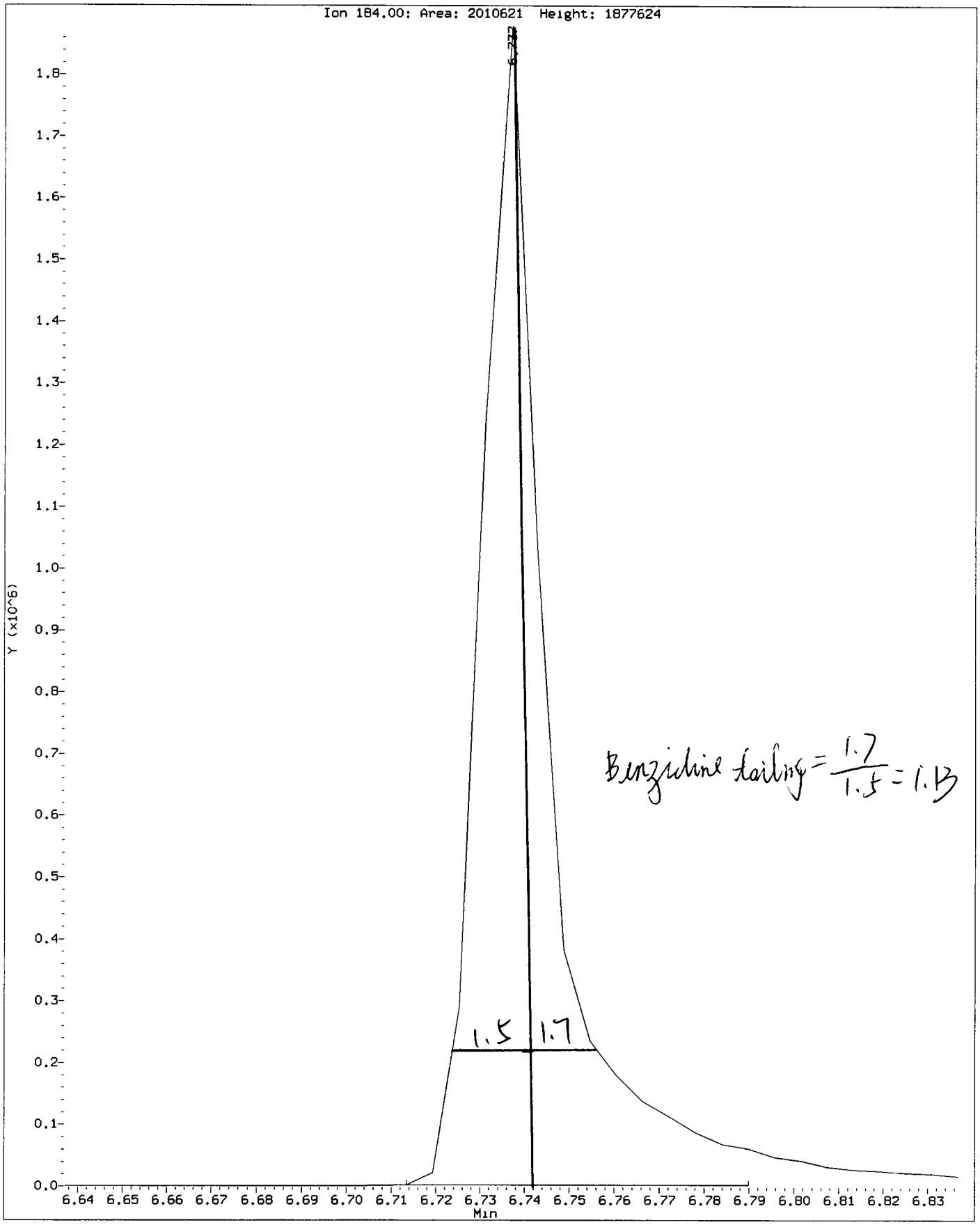
Data File: /chem3/nt4.i/20110502.b/ddt.b/05021101.d
Injection Date: 02-MAY-2011 11:44
Instrument: nt4.i
Client Sample ID: DDT0502

Compound: Pentachlorophenol
CAS Number: 87-86-5



Data File: /chem3/nt4.i/20110502.b/ddt.b/05021101.d
Injection Date: 02-MAY-2011 11:44
Instrument: nt4.i
Client Sample ID: DDT0502

Compound: Benzidine
CAS Number:



Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20110502.b/05021103.d
Lab Smp Id: SS71F Client Smp ID: LL-SB5-2-4-041811
Inj Date : 02-MAY-2011 12:56
Operator : JZ Inst ID: nt4.i
Smp Info : SS71F
Misc Info : 11-8659
Comment : 1ul Injection
Method : /chem3/nt4.i/20110502.b/SIMPNA0421.m
Meth Date : 02-May-2011 19:51 jianqing Quant Type: ISTD
Cal Date : 21-APR-2011 22:25 Cal File: 04211107.d
Als bottle: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

XB 05/07/11

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

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Ws	13.15000	Weight of sample extracted (g)
M	18.70000	% Moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
* 27 Naphthalene-d8	136	4.879	4.881	(1.000)	272094	2.00000	
28 Naphthalene	128	Compound Not Detected.					
$ 190 2-Methylnaphthalene-d10	152	5.620	5.623	(1.152)	117191	1.54094	72.07
32 2-Methylnaphthalene	141	Compound Not Detected.					
105 1-methylnaphthalene	141	Compound Not Detected.					
40 Acenaphthylene	152	Compound Not Detected.					
* 42 Acenaphthene-d10	164	7.138	7.137	(1.000)	157446	2.00000	
44 Acenaphthene	153	Compound Not Detected.					
46 Dibenzofuran	168	Compound Not Detected.					
49 Fluorene	166	Compound Not Detected.					
* 59 Phenanthrene-d10	188	9.084	9.083	(1.000)	258735	2.00000	
60 Phenanthrene	178	9.118	9.118	(1.004)	9520	0.07519	3.516
61 Anthracene	178	Compound Not Detected.					
64 Fluoranthene	202	10.825	10.824	(1.192)	16491	0.11791	5.514
65 Pyrene	202	11.301	11.301	(0.817)	17788	0.13140	6.146

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
68	Benzo(a)anthracene	228	13.724	13.717	(0.992)	7675	0.06112	2.859
* 69	Chrysene-d12	240	13.841	13.834	(1.000)	269213	2.00000	
71	Chrysene	228	13.907	13.903	(1.005)	15690	0.12895	6.031
74	Benzo(b)fluoranthene	252	16.361	16.354	(0.933)	12544	0.09465	4.427
75	Benzo(k)fluoranthene	252	Compound Not Detected.					
188	Benzo(j)fluoranthene	252	Compound Not Detected.					
76	Benzo(a)pyrene	252	17.317	17.316	(0.988)	8942	0.07541	3.527
* 77	Perylene-d12	264	17.528	17.521	(1.000)	244261	2.00000	
78	Indeno(1,2,3-cd)pyrene	276	19.897	19.893	(1.135)	8141	0.05836	2.729
$ 191	Dibenzo(a,h)anthracene-d14	292	19.828	19.821	(1.131)	181436	1.79554	83.97
79	Dibenzo(a,h)anthracene	278	Compound Not Detected.					
80	Benzo(g,h,i)perylene	276	20.783	20.767	(1.186)	7977	0.06695	3.131
99	Perylene	252	17.591	17.587	(1.004)	24349	0.24213	11.32

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 05021103.d
Lab Smp Id: SS71F
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20110502.b/SIMPNA0421.m
Misc Info: 11-8659

Calibration Date: 02-MAY-2011
Calibration Time: 12:06
Client Smp ID: LL-SB5-2-4-04181
Level: LOW
Sample Type: Soil

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	276036	138018	552072	272094	-1.43
42 Acenaphthene-d10	158527	79264	317054	157446	-0.68
59 Phenanthrene-d10	277528	138764	555056	258735	-6.77
69 Chrysene-d12	304115	152058	608230	269213	-11.48
77 Perylene-d12	257833	128916	515666	244261	-5.26

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	4.88	4.38	5.38	4.88	-0.05
42 Acenaphthene-d10	7.14	6.64	7.64	7.14	0.01
59 Phenanthrene-d10	9.08	8.58	9.58	9.08	0.01
69 Chrysene-d12	13.83	13.33	14.33	13.84	0.05
77 Perylene-d12	17.52	17.02	18.02	17.53	0.04

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

Analytical Resources, Inc.

RECOVERY REPORT

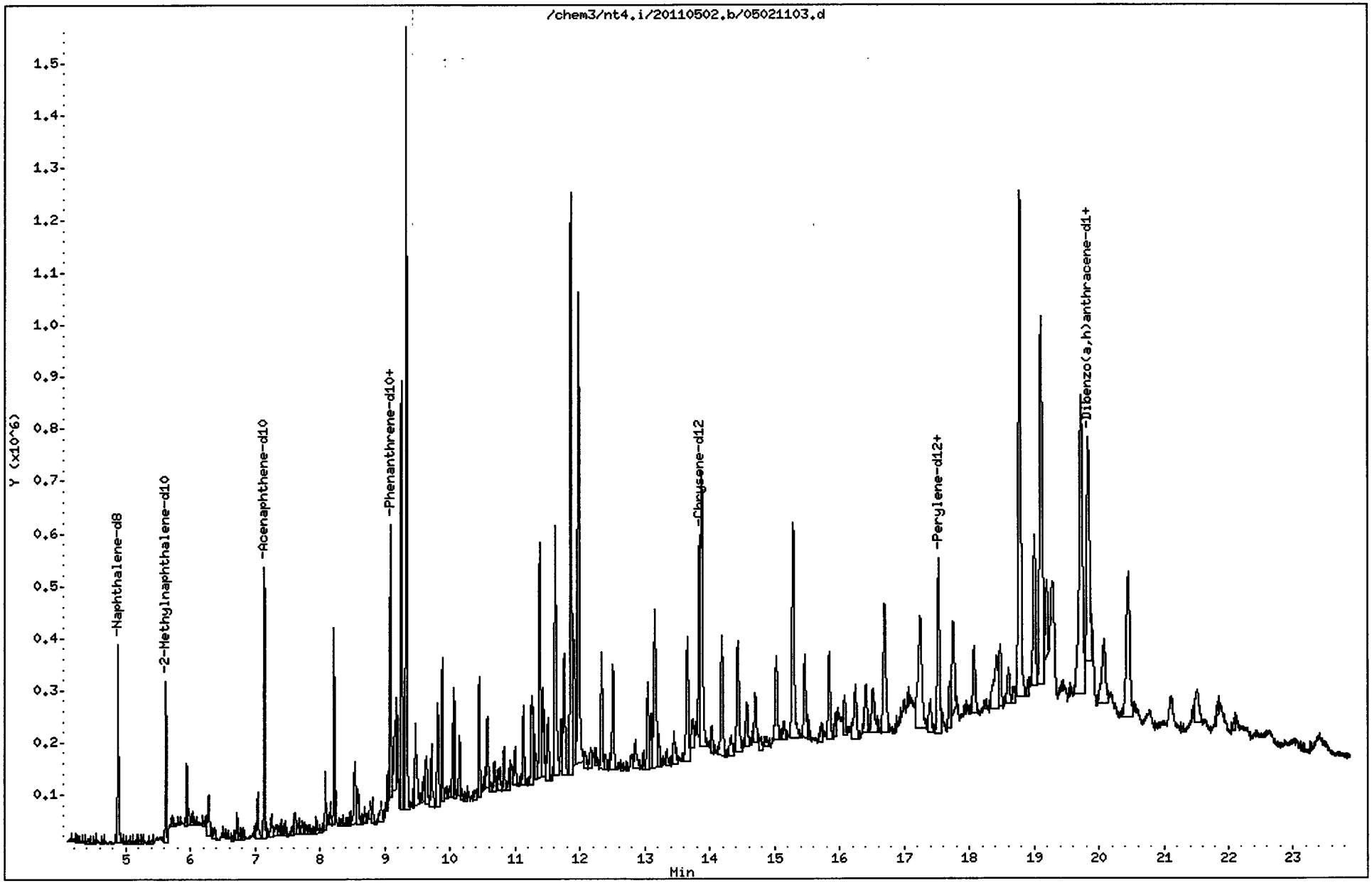
Client Name: Floyd Snider
Client SDG: SS71
Sample Matrix: SOLID
Fraction: SV
Lab Smp Id: SS71F
Client Smp ID: LL-SB5-2-4-041811
Level: LOW
Operator: JZ
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: pnalcss.spk
Quant Type: ISTD
Sublist File: pnax.sub
Method File: /chem3/nt4.i/20110502.b/SIMPNA0421.m
Misc Info: 11-8659

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	140.3	72.07	51.36	34-100
$ 191 Dibenzo(a,h)anthra	140.3	83.97	59.85	10-117

Data File: /chem3/nt4.i/20110502.b/05021103.d
Date : 02-MAY-2011 12:56
Client ID: LL-SB5-2-4-041811
Sample Info: SS71F
Volume Injected (uL): 1.0
Column phase: ZB35

Instrument: nt4.i
Operator: JZ
Column diameter: 0.32

SS71 : 00875



Data File: /chem3/nt4.i/20110502.b/05021103.d

Date : 02-MAY-2011 12:56

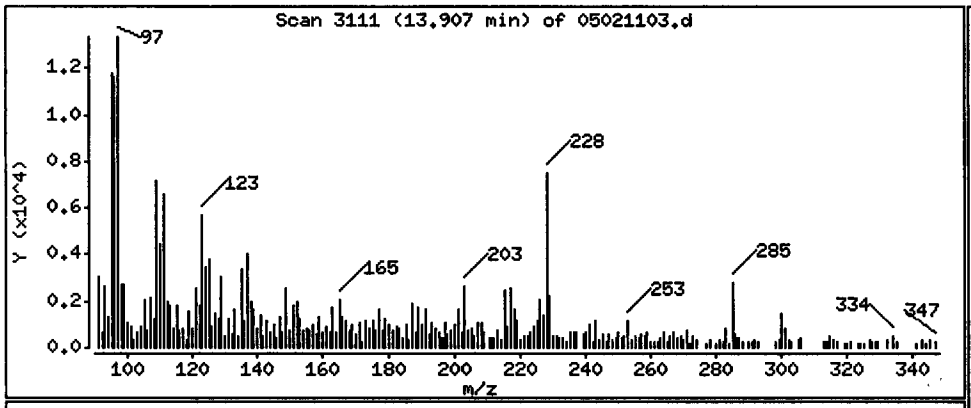
Client ID: LL-SB5-2-4-041811 Instrument: nt4.i

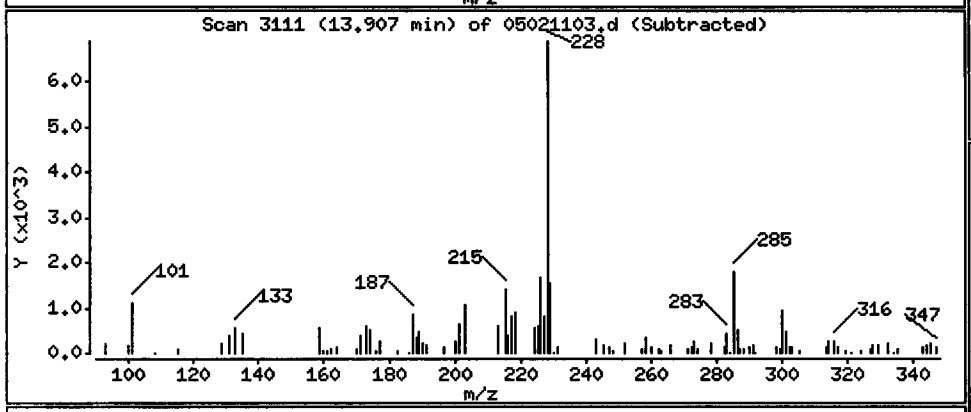
Sample Info: SS71F

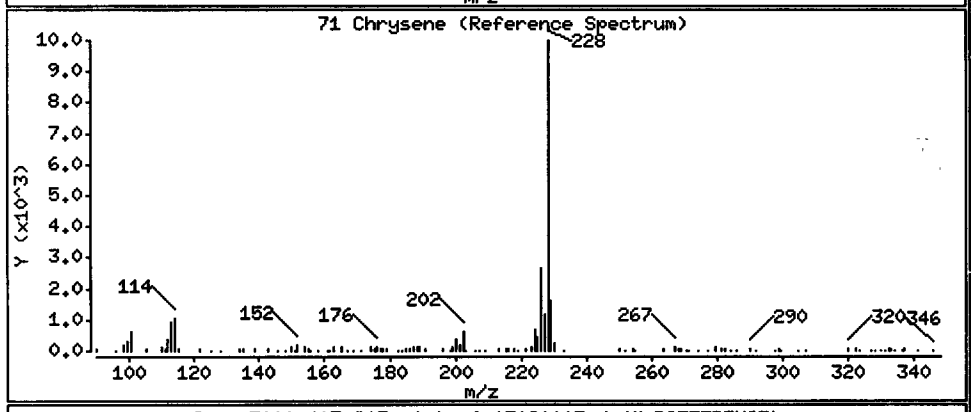
Volume Injected (uL): 1.0 Operator: JZ

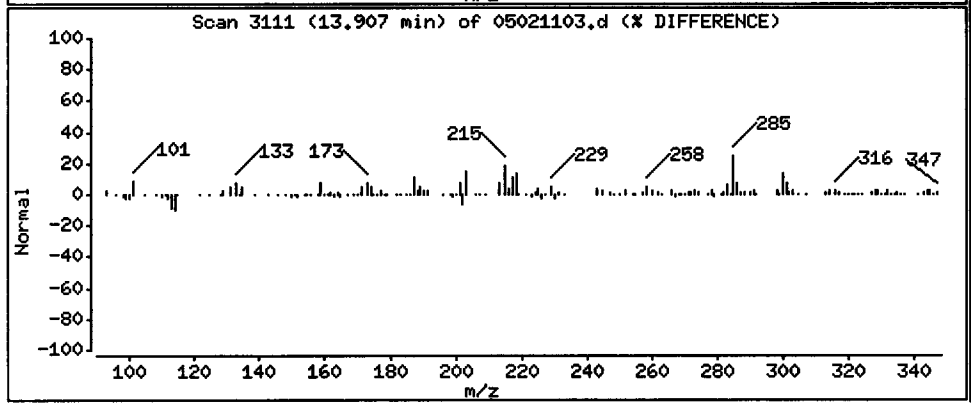
Column phase: ZB35 Column diameter: 0.32

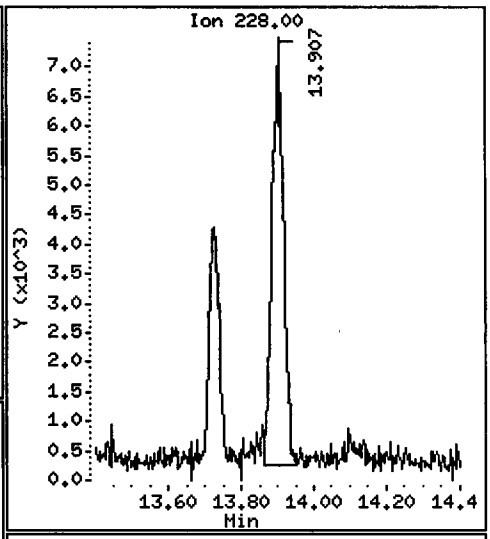
71 Chrysene Concentration: 6.031 ug/kg

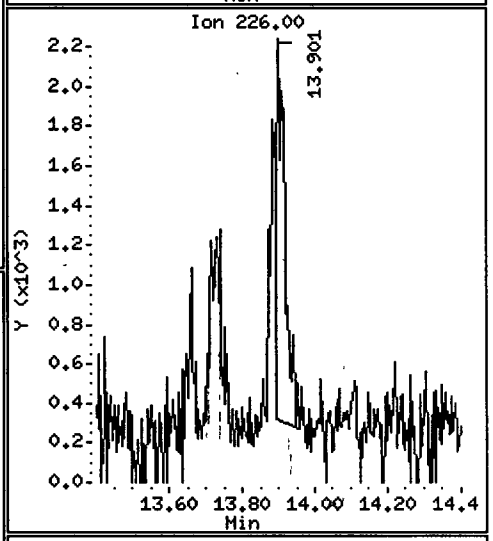


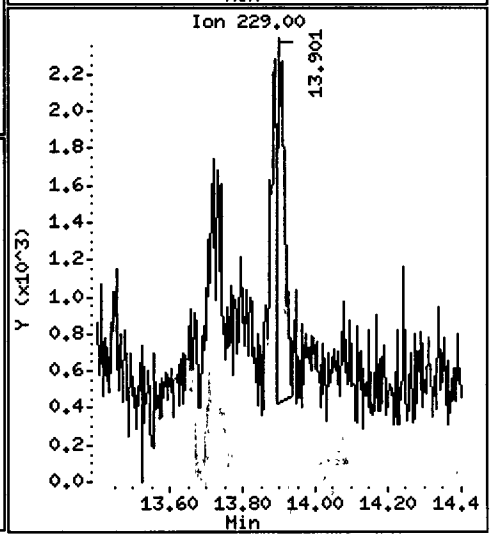












CO-ELUTION SUMMARY FOR FILE - 05021103.d

Lab ID: SS71F, Method: SIMPNA0421.m, Instrument: nt4.i, Date: 02-MAY-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

SIM PNA Sample-sm117s
Data By: Jianqing Zhou
Created: 5/ 2/11

Worklist: 1186
Analyst: JZ
Comments:

2. SS71G Soil 11-8660 LL-SB4-0-0.5-041911

Method: 8270D-SIM
Ext Date: 4/28/11
Ext Meth: SW3580A-Waste Dil.
Instrument: NT4

Sample Amt: 11.05 g-dry-wt
EFV (mL): 0.50
Dilution: 1.0
Date/Time: 5/ 2/11 13:23

Surrogate	On Col (ug/mL)	Spiked (ug/mL)	LCL-UCL (%)	Rec (%)	Q
d10-2-Methylnaphthalene	1.75	3.00	34-100	58.3	
d14-Dibenzo(a,h)anthrace	1.95	3.00	10-117	65.0	

Analyte	On Col (ug/mL)	MDL (ug/kg)	RL (ug/kg)	Final (ug/kg)	Q
Benzo(a)anthracene	0.202	1.991	4.525	9.14	
Chrysene	0.389	1.575	4.525	17.6	
Benzo(a)pyrene	0.276	2.000	4.525	12.5	
Indeno(1,2,3-cd)pyrene	0.174	1.511	4.525	7.87	
Dibenz(a,h)anthracene	0.000	2.000	4.525	< 4.52	U
Total Benzofluoranthenes	0.648	3.032	4.525	29.3	

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20110502.b/05021104.d
Lab Smp Id: SS71G Client Smp ID: LL-SB4-0-0.5-041911
Inj Date : 02-MAY-2011 13:23
Operator : JZ Inst ID: nt4.i
Smp Info : SS71G
Misc Info : 11-8660
Comment : 1ul Injection
Method : /chem3/nt4.i/20110502.b/SIMPNA0421.m
Meth Date : 02-May-2011 19:51 jianqing Quant Type: ISTD
Cal Date : 21-APR-2011 22:25 Cal File: 04211107.d
Als bottle: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

05/07/11

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

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Ws	13.36000	Weight of sample extracted (g)
M	17.30000	% Moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
* 27 Naphthalene-d8	136	4.872	4.881	(1.000)	244161	2.00000	
28 Naphthalene	128	4.898	4.910	(1.005)	10411	0.09459	4.281
$ 190 2-Methylnaphthalene-d10	152	5.614	5.623	(1.152)	119388	1.74943	79.17
32 2-Methylnaphthalene	141	5.658	5.667	(1.161)	4388	0.07104	3.215
105 1-methylnaphthalene	141	Compound Not Detected.					
40 Acenaphthylene	152	Compound Not Detected.					
* 42 Acenaphthene-d10	164	7.128	7.137	(1.000)	144533	2.00000	
44 Acenaphthene	153	Compound Not Detected.					
46 Dibenzofuran	168	Compound Not Detected.					
49 Fluorene	166	Compound Not Detected.					
* 59 Phenanthrene-d10	188	9.077	9.083	(1.000)	233714	2.00000	
60 Phenanthrene	178	9.109	9.118	(1.003)	36124	0.31584	14.29
61 Anthracene	178	Compound Not Detected.					
64 Fluoranthene	202	10.815	10.824	(1.191)	71217	0.56371	25.51
65 Pyrene	202	11.292	11.301	(0.817)	62002	0.49523	22.41

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
68	Benzo(a)anthracene	228	13.711	13.717	(0.992)	23501	0.20236	9.158
* 69	Chrysene-d12	240	13.828	13.834	(1.000)	248988	2.00000	
71	Chrysene	228	13.897	13.903	(1.005)	43804	0.38924	17.61
74	Benzo(b)fluoranthene	252	16.354	16.354	(0.933)	40048	0.34058	15.41
75	Benzo(k)fluoranthene	252	16.411	16.411	(0.936)	19404	0.16035	7.257
188	Benzo(j)fluoranthene	252	16.481	16.483	(0.940)	17460	0.14712	6.658
76	Benzo(a)pyrene	252	17.316	17.316	(0.988)	29068	0.27627	12.50
* 77	Perylene-d12	264	17.525	17.521	(1.000)	216732	2.00000	
78	Indeno(1,2,3-cd)pyrene	276	19.894	19.893	(1.135)	21585	0.17438	7.891
$ 191	Dibenzo(a,h)anthracene-d14	292	19.827	19.821	(1.131)	174928	1.95102	88.29
79	Dibenzo(a,h)anthracene	278	Compound Not Detected.					
80	Benzo(g,h,i)perylene	276	20.767	20.767	(1.185)	28672	0.27120	12.27
99	Perylene	252	17.594	17.587	(1.004)	53136	0.59552	26.95

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 05021104.d
Lab Smp Id: SS71G
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20110502.b/SIMPNA0421.m
Misc Info: 11-8660

Calibration Date: 02-MAY-2011
Calibration Time: 12:06
Client Smp ID: LL-SB4-0-0.5-041
Level: LOW
Sample Type: Soil

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	276036	138018	552072	244161	-11.55
42 Acenaphthene-d10	158527	79264	317054	144533	-8.83
59 Phenanthrene-d10	277528	138764	555056	233714	-15.79
69 Chrysene-d12	304115	152058	608230	248988	-18.13
77 Perylene-d12	257833	128916	515666	216732	-15.94

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	4.88	4.38	5.38	4.87	-0.19
42 Acenaphthene-d10	7.14	6.64	7.64	7.13	-0.13
59 Phenanthrene-d10	9.08	8.58	9.58	9.08	-0.07
69 Chrysene-d12	13.83	13.33	14.33	13.83	-0.04
77 Perylene-d12	17.52	17.02	18.02	17.52	0.02

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

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd Snider
Sample Matrix: SOLID
Lab Smp Id: SS71G
Level: LOW
Data Type: MS DATA
SpikeList File: pnalcss.spk
Sublist File: pnax.sub
Method File: /chem3/nt4.i/20110502.b/SIMPNA0421.m
Misc Info: 11-8660

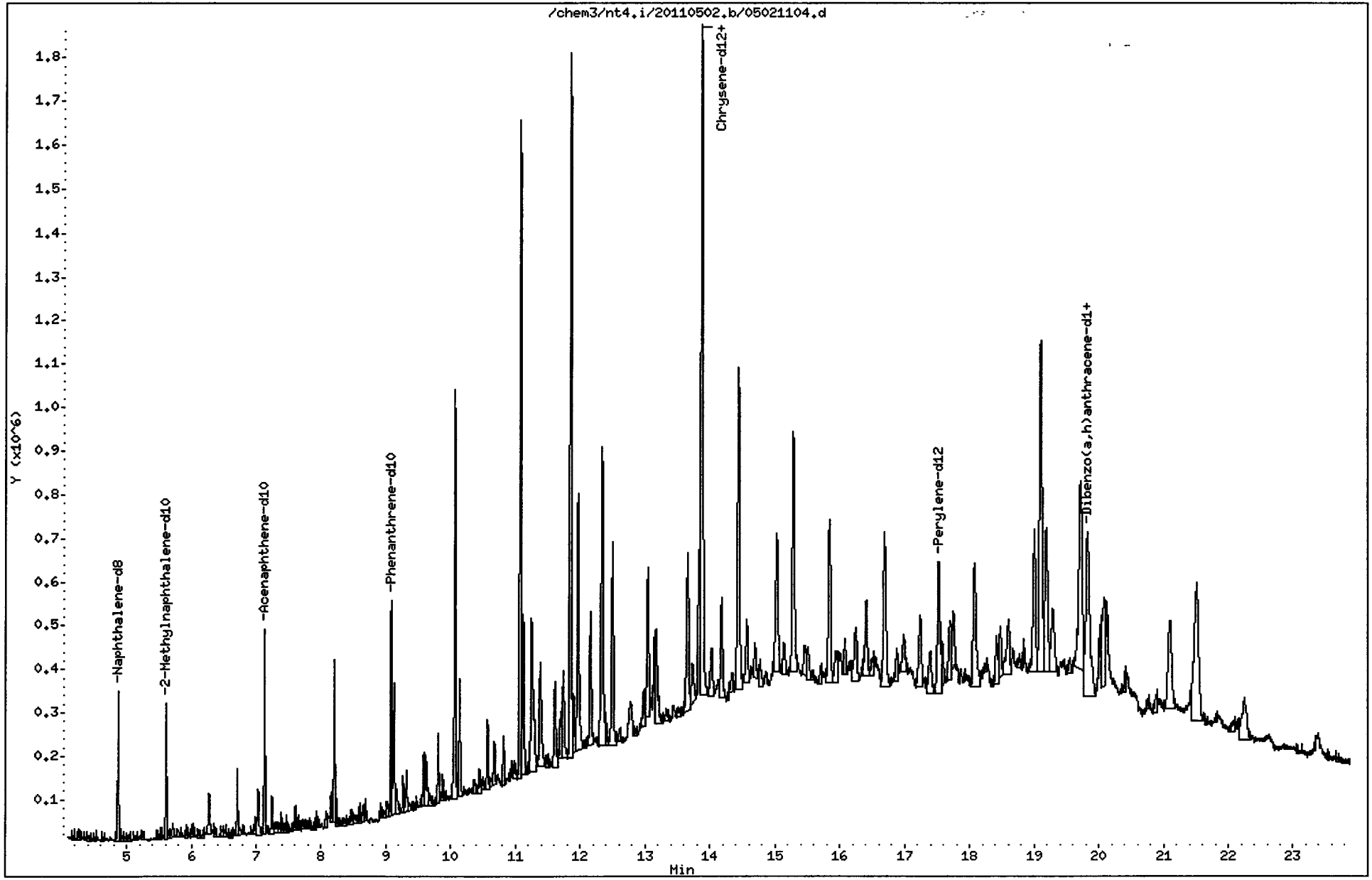
Client SDG: SS71
Fraction: SV
Client Smp ID: LL-SB4-0-0.5-041911
Operator: JZ
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	135.8	79.17	58.31	34-100
$ 191 Dibenzo(a,h)anthra	135.8	88.29	65.03	10-117

Data File: /chem3/nt4.i/20110502.b/05021104.d
Date : 02-MAY-2011 13:23
Client ID: LL-SB4-0-0.5-041911
Sample Info: SS71G
Volume Injected (uL): 1.0
Column phase: ZB35

Instrument: nt4.i
Operator: JZ
Column diameter: 0.32

SS71:60883



Data File: /chem3/nt4.i/20110502.b/05021104.d

Date : 02-MAY-2011 13:23

Client ID: LL-SB4-0-0.5-041911

Instrument: nt4.i

Sample Info: SS71G

Volume Injected (uL): 1.0

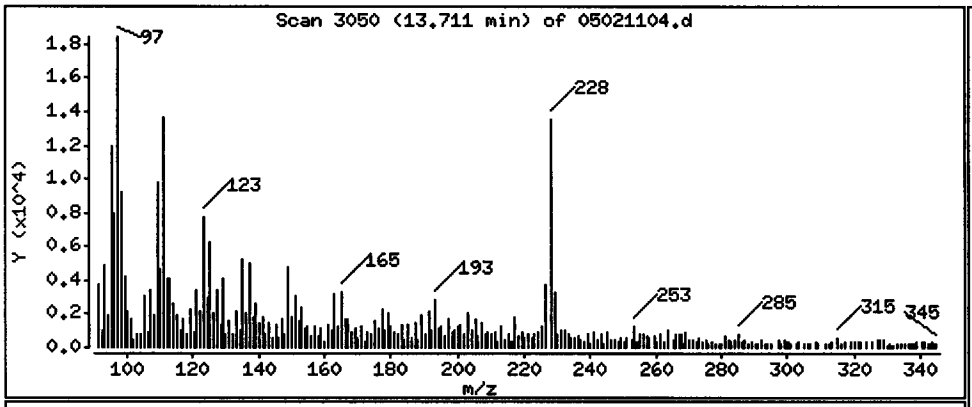
Operator: JZ

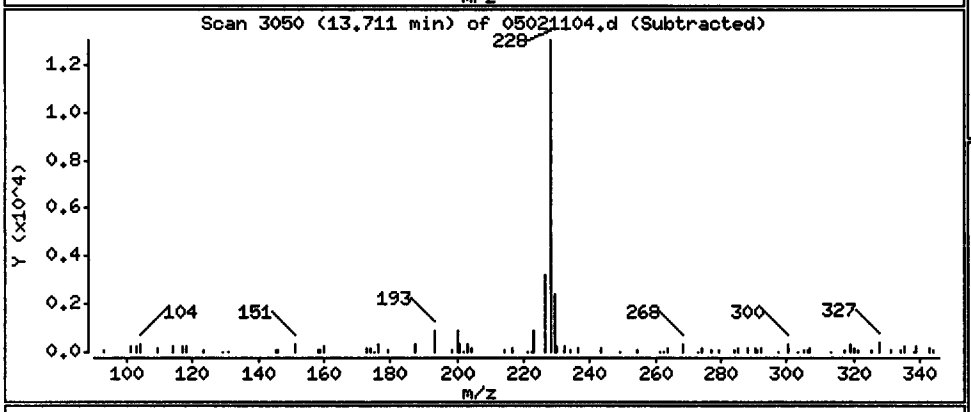
Column phase: ZB35

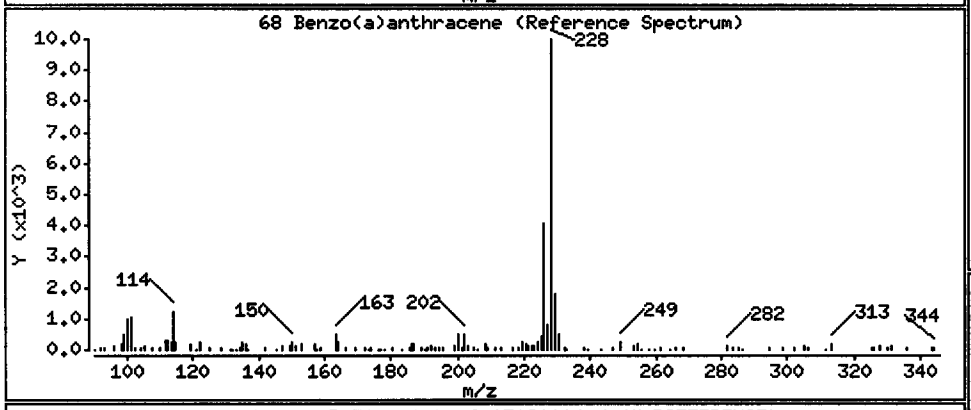
Column diameter: 0.32

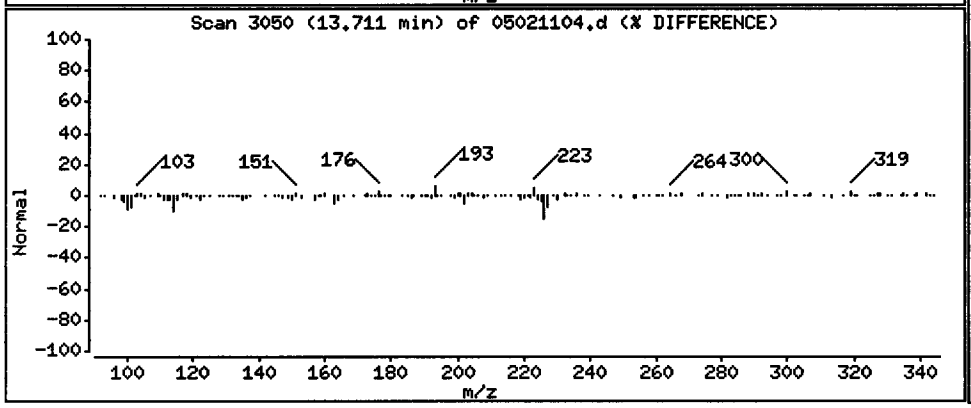
68 Benzo(a)anthracene

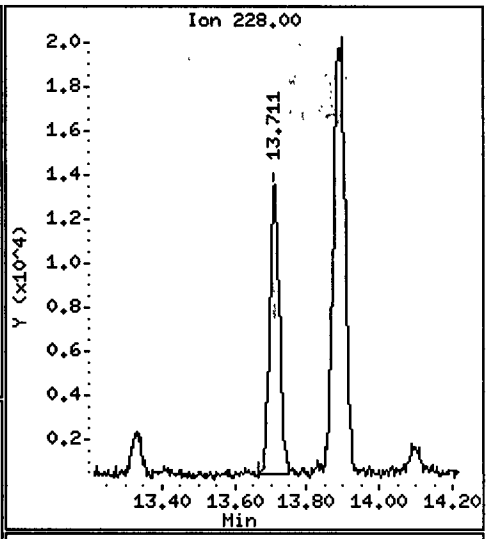
Concentration: 9.158 ug/kg

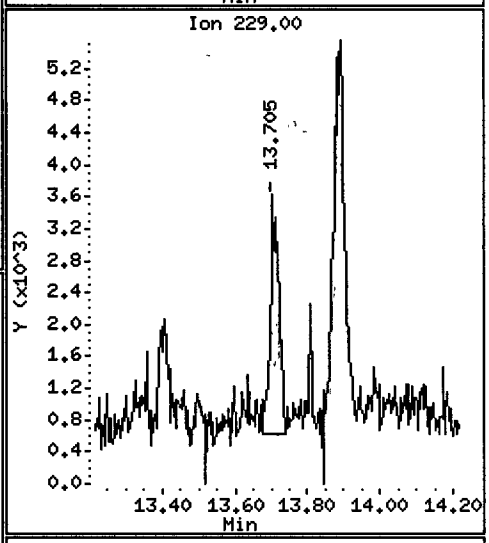


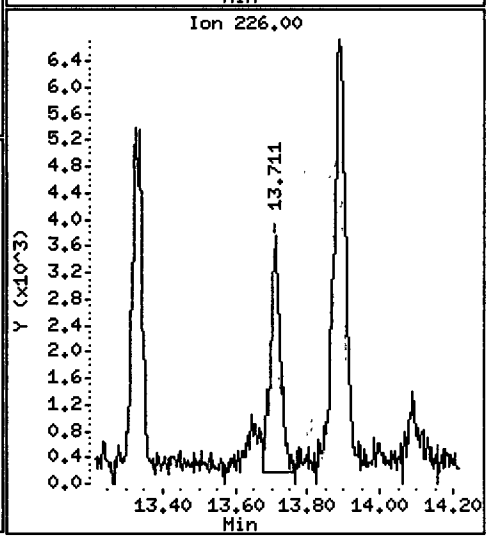












Data File: /chem3/nt4.i/20110502.b/05021104.d

Date : 02-MAY-2011 13:23

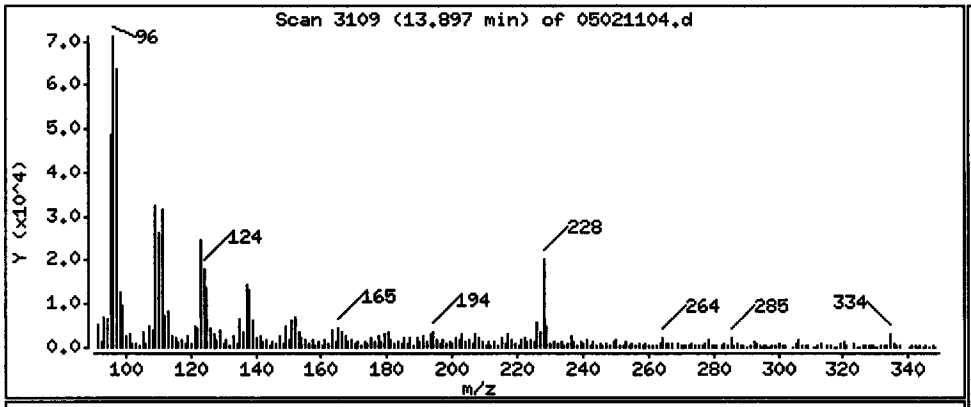
Client ID: LL-SB4-0-0.5-041911 Instrument: nt4.i

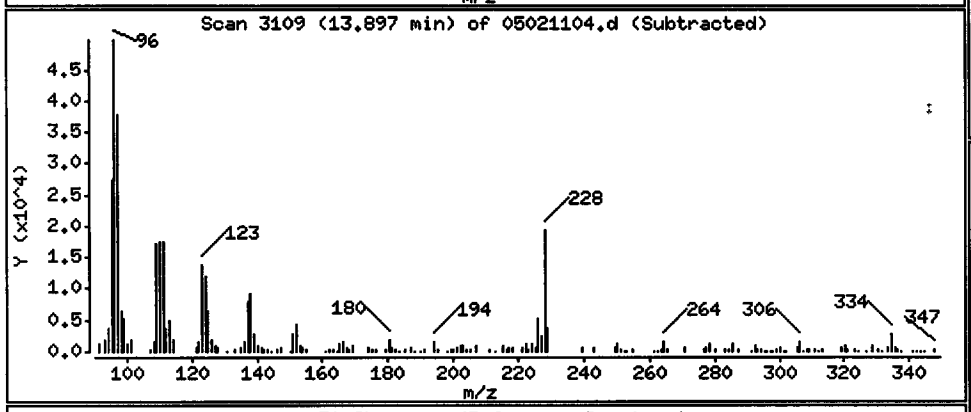
Sample Info: SS71G

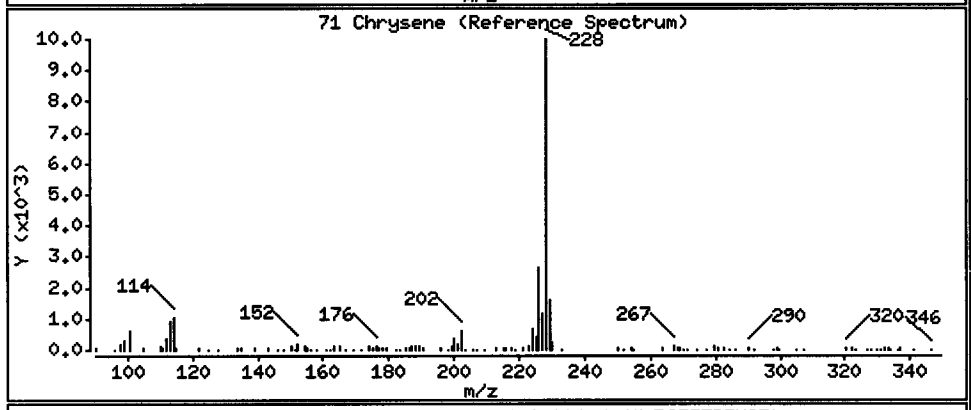
Volume Injected (uL): 1.0 Operator: JZ

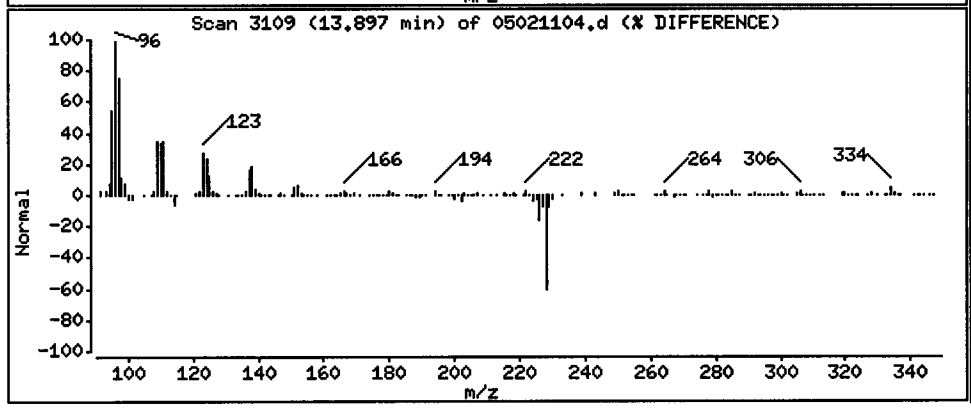
Column phase: ZB35 Column diameter: 0.32

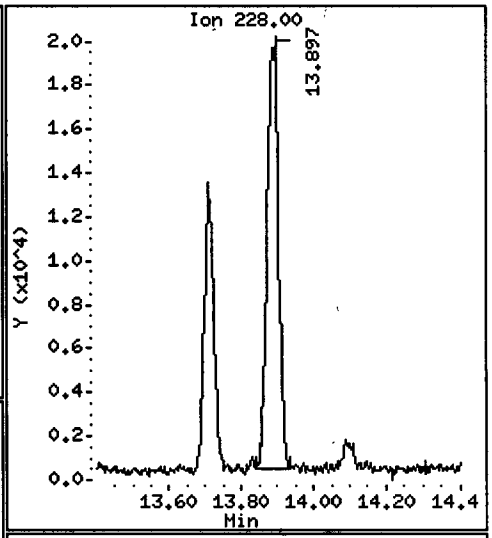
71 Chrysene Concentration: 17.61 ug/kg

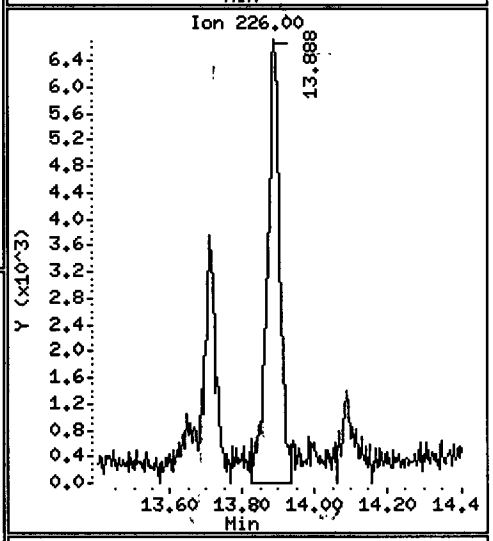


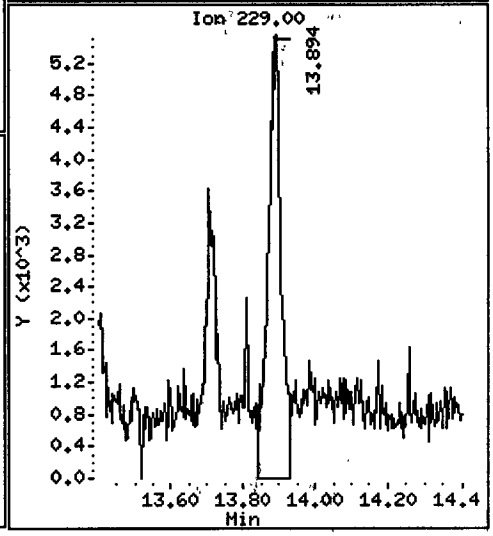












Data File: /chem3/nt4.i/20110502.b/05021104.d

Date : 02-MAY-2011 13:23

Client ID: LL-SB4-0-0.5-041911

Instrument: nt4.i

Sample Info: SS71G

Volume Injected (uL): 1.0

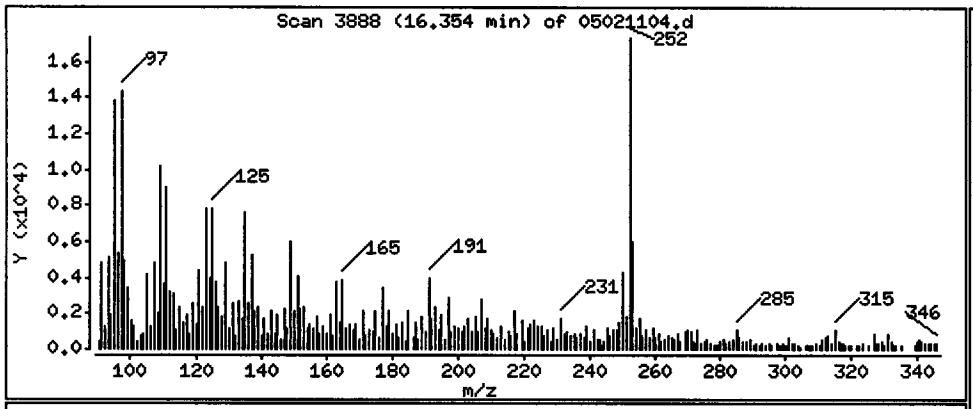
Operator: JZ

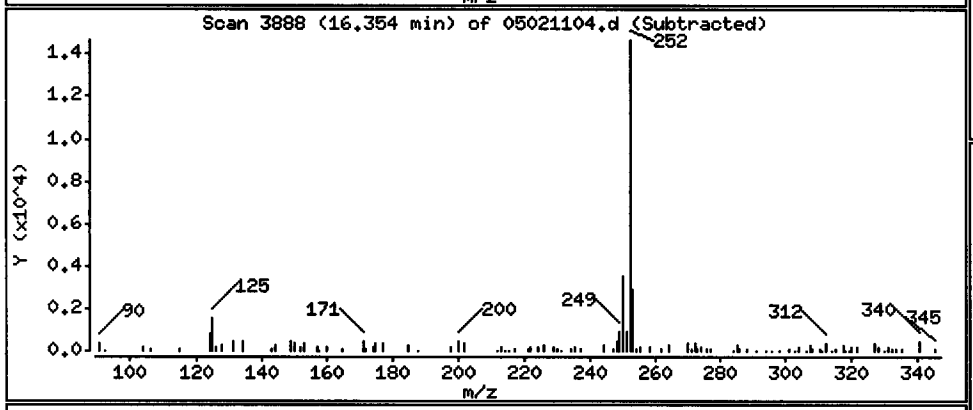
Column phase: ZB35

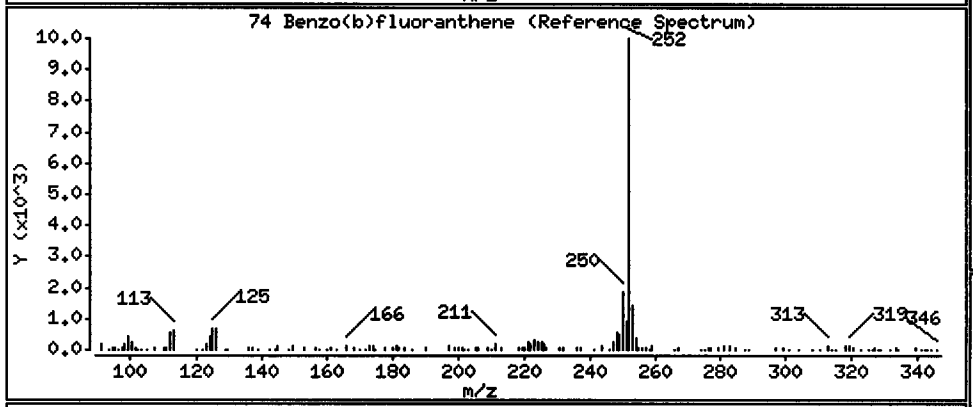
Column diameter: 0.32

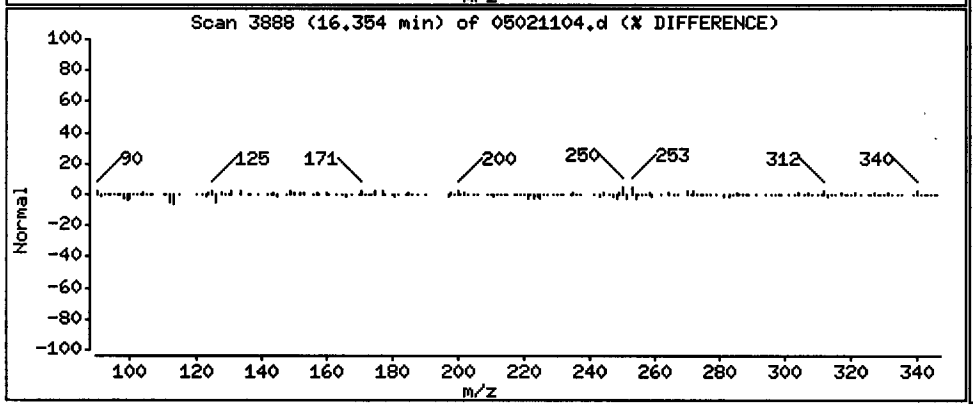
74 Benzo(b)fluoranthene

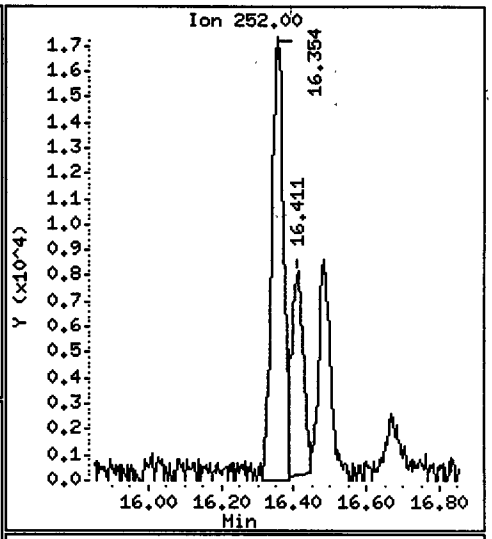
Concentration: 15.41 ug/kg

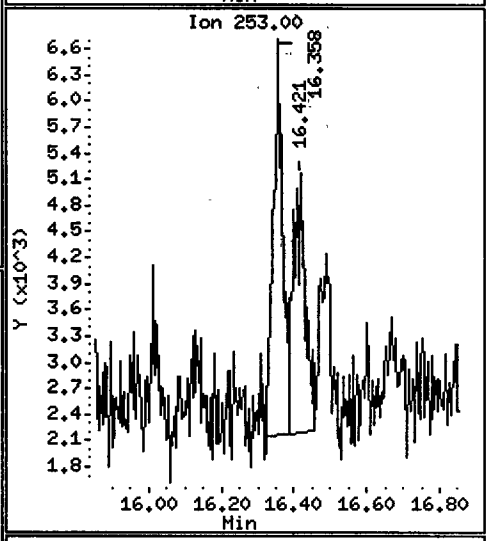


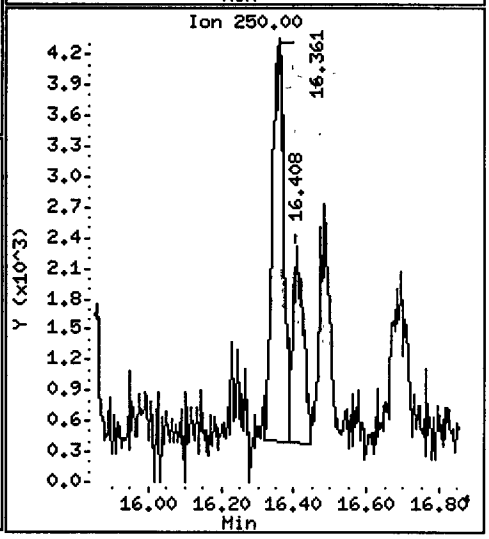












Data File: /chem3/nt4.i/20110502.b/05021104.d

Date : 02-MAY-2011 13:23

Client ID: LL-SB4-0-0.5-041911

Instrument: nt4.i

Sample Info: SS71G

Volume Injected (uL): 1.0

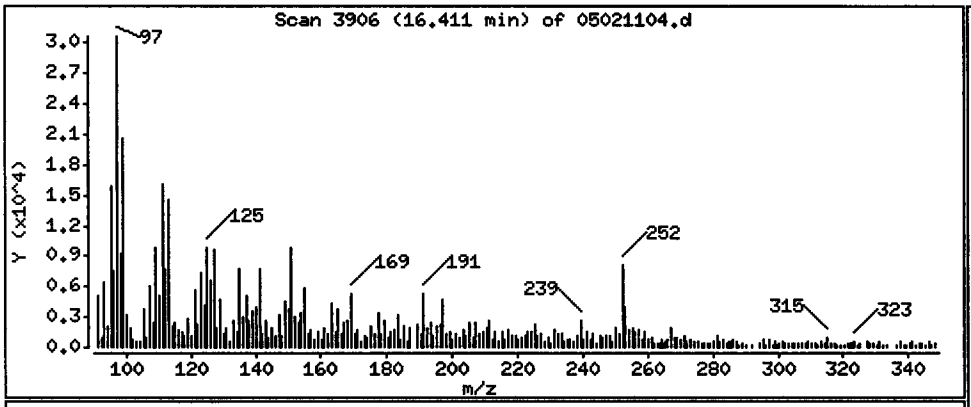
Operator: JZ

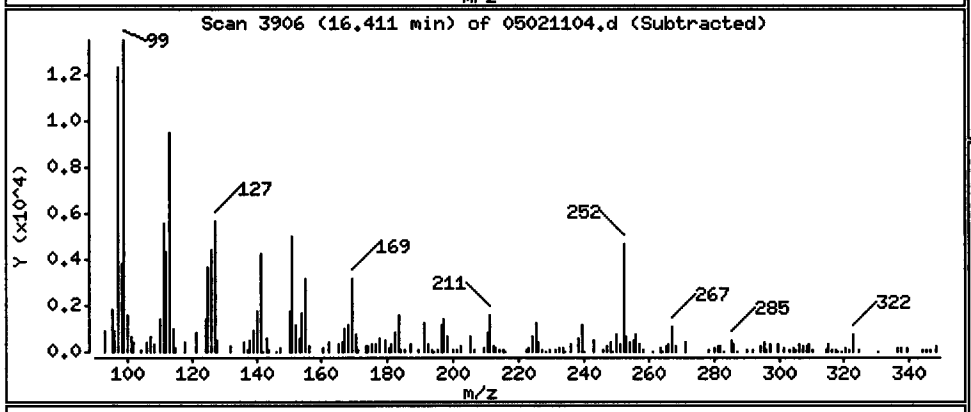
Column phase: ZB35

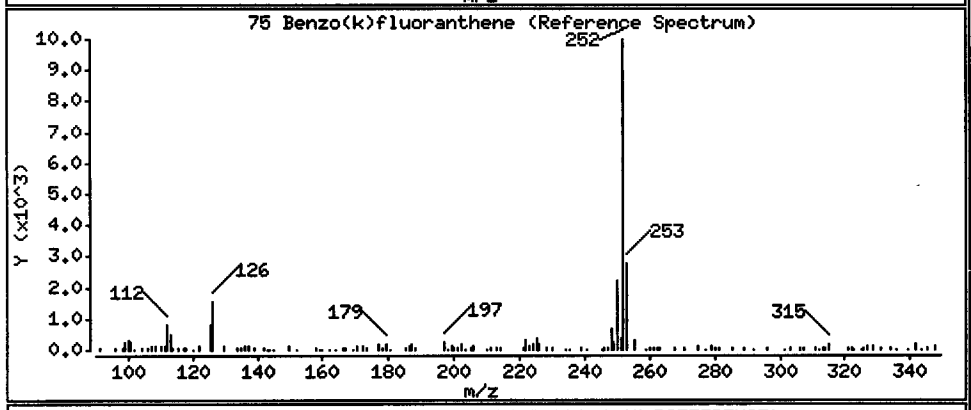
Column diameter: 0.32

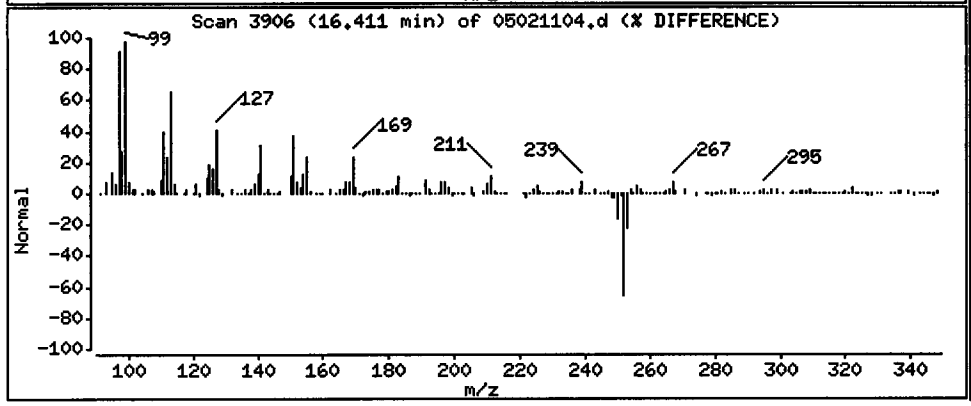
75 Benzo(k)fluoranthene

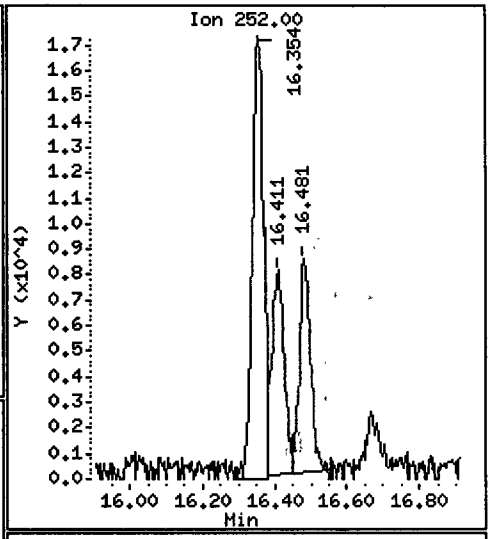
Concentration: 7.257 ug/kg

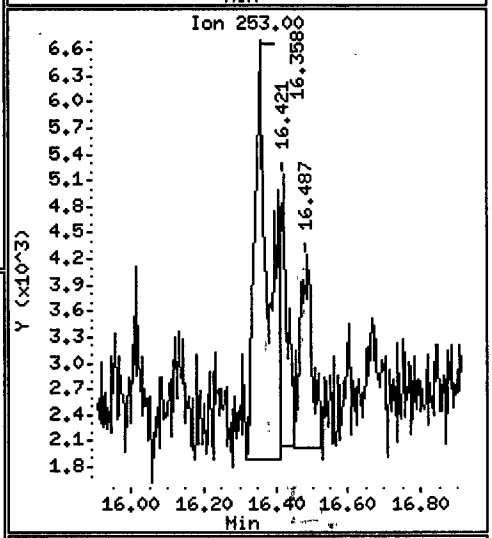


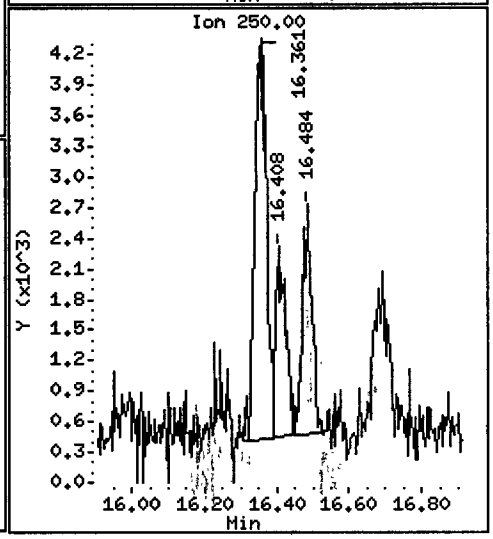












Data File: /chem3/nt4.i/20110502.b/05021104.d

Date : 02-MAY-2011 13:23

Client ID: LL-SB4-0-0.5-041911

Instrument: nt4.i

Sample Info: SS71G

Volume Injected (uL): 1.0

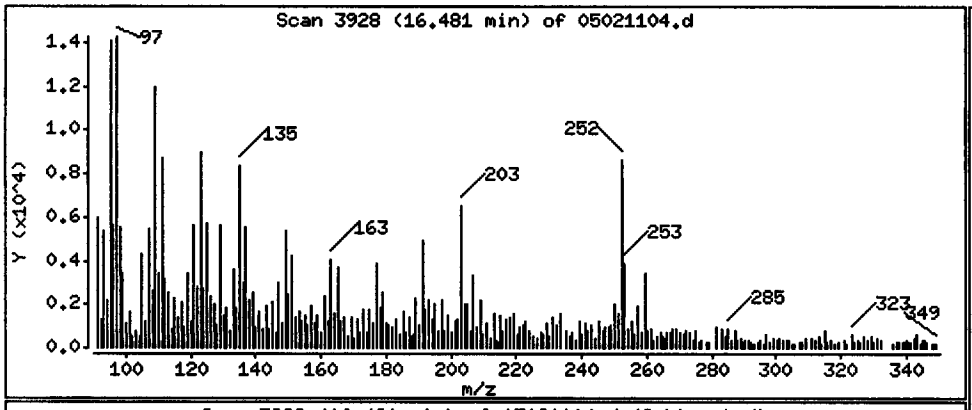
Operator: JZ

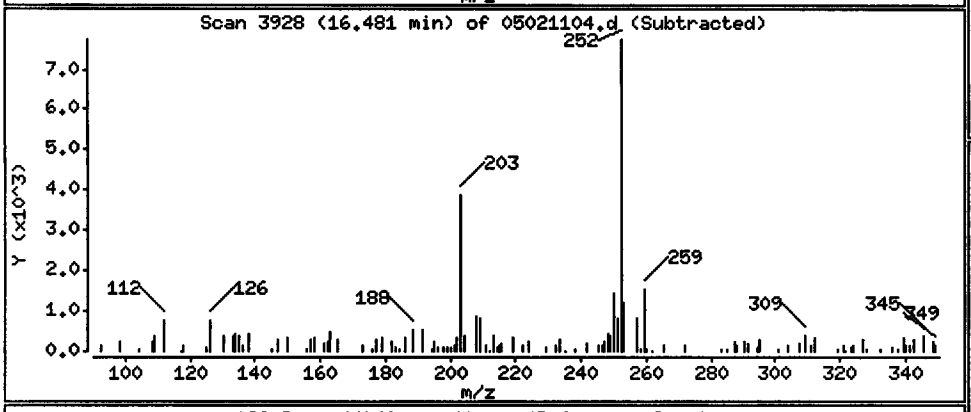
Column phase: ZB35

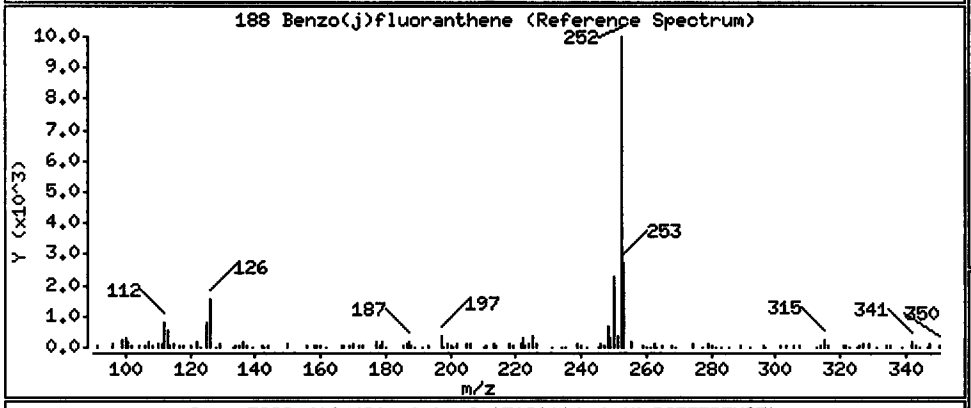
Column diameter: 0.32

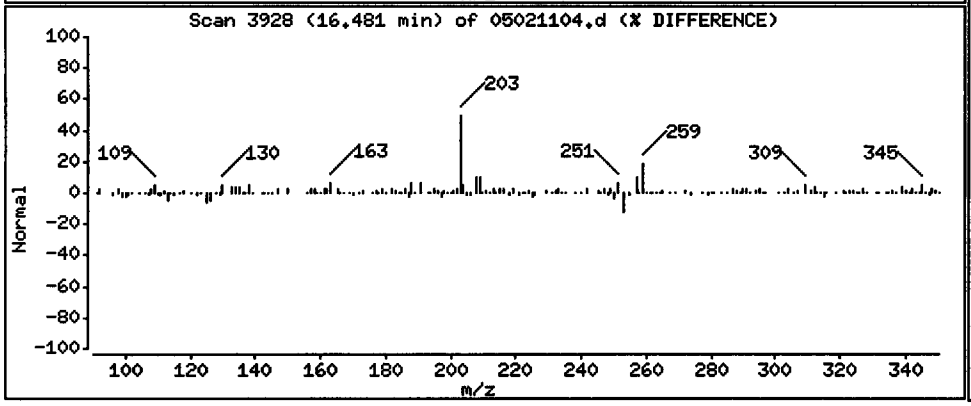
188 Benzo(j)fluoranthene

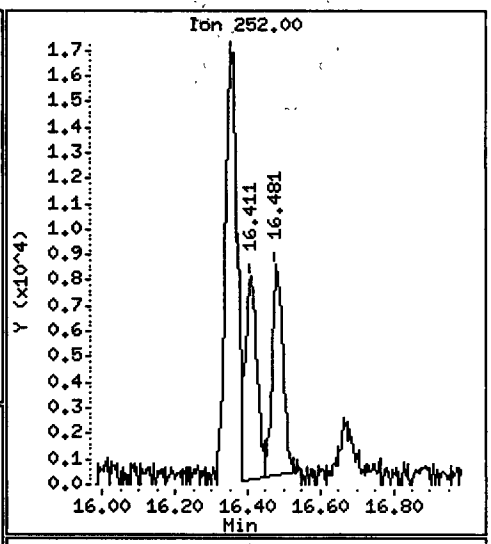
Concentration: 6.658 ug/kg

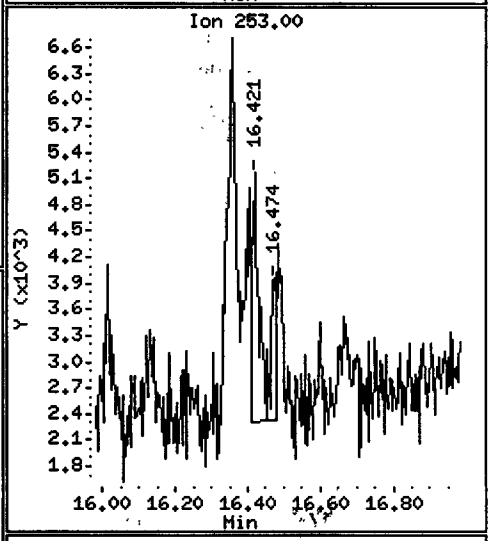


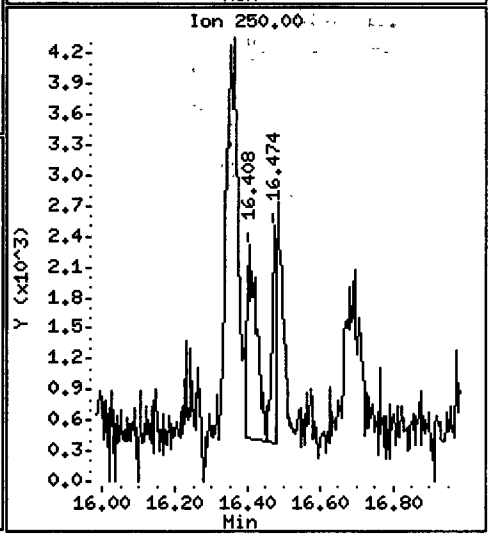












Data File: /chem3/nt4.i/20110502.b/05021104.d

Date : 02-MAY-2011 13:23

Client ID: LL-SB4-0-0.5-041911

Instrument: nt4.i

Sample Info: SS71G

Volume Injected (uL): 1.0

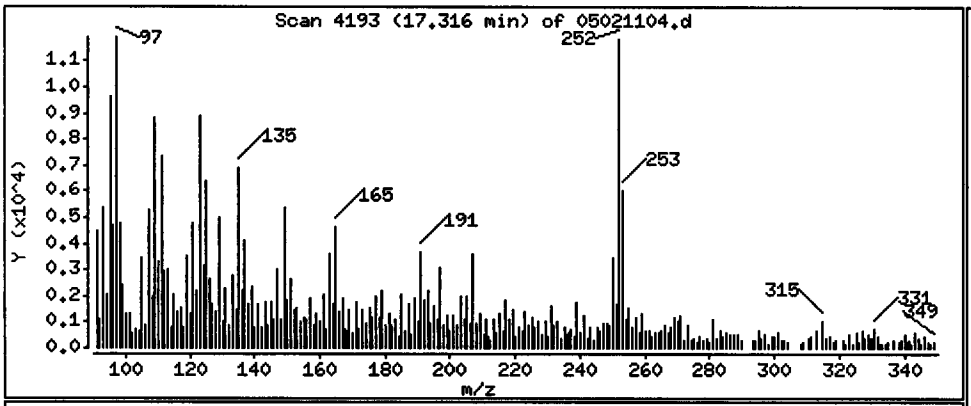
Operator: JZ

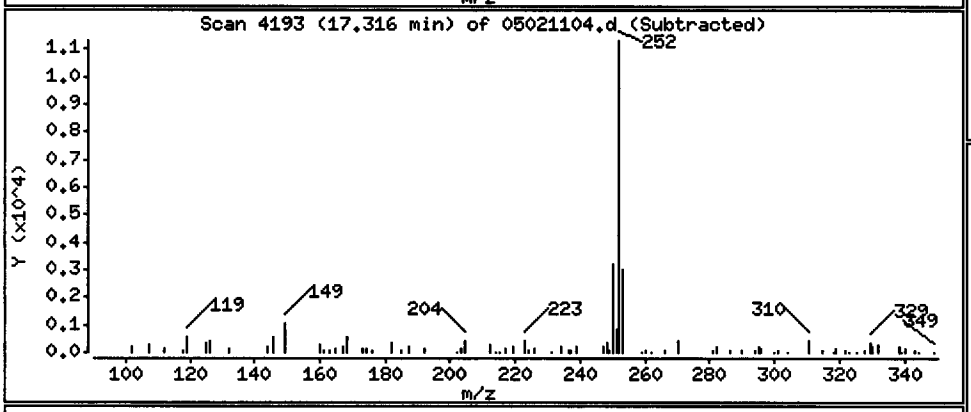
Column phase: ZB35

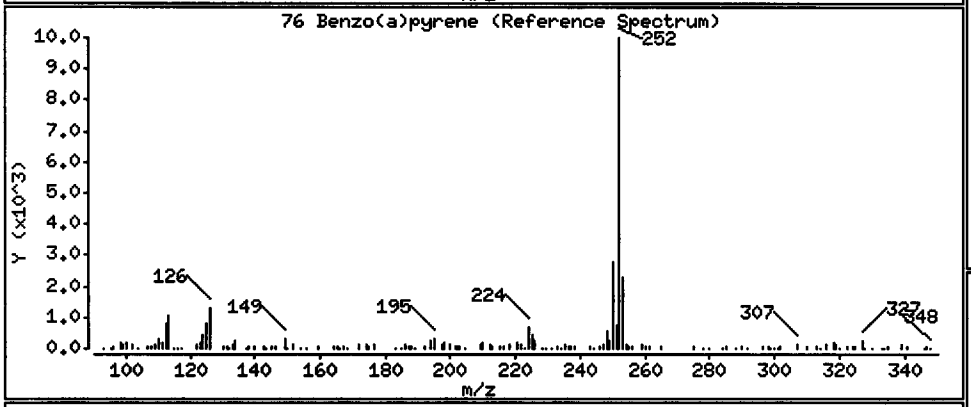
Column diameter: 0.32

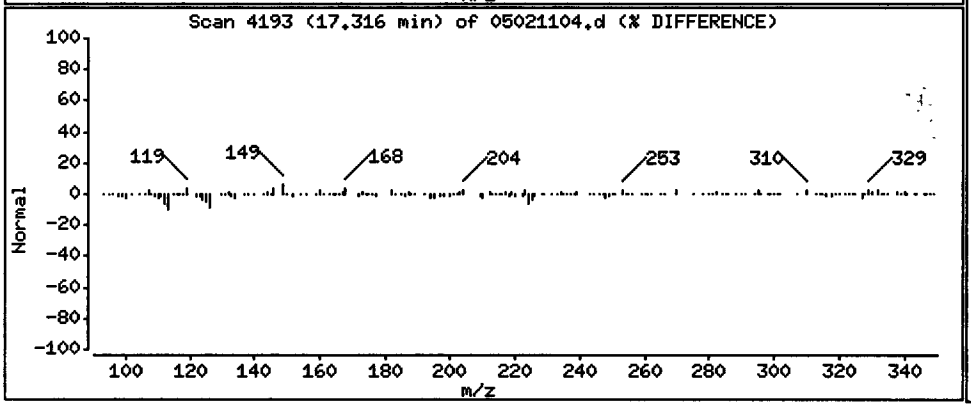
76 Benzo(a)pyrene

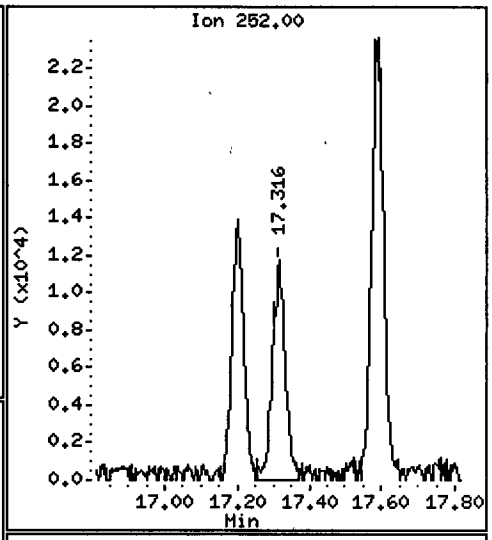
Concentration: 12.50 ug/kg

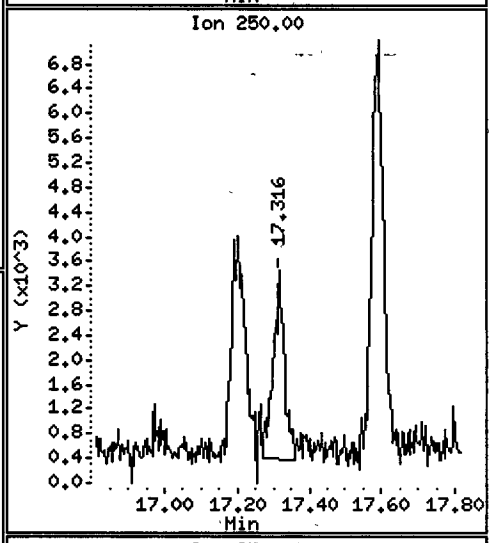


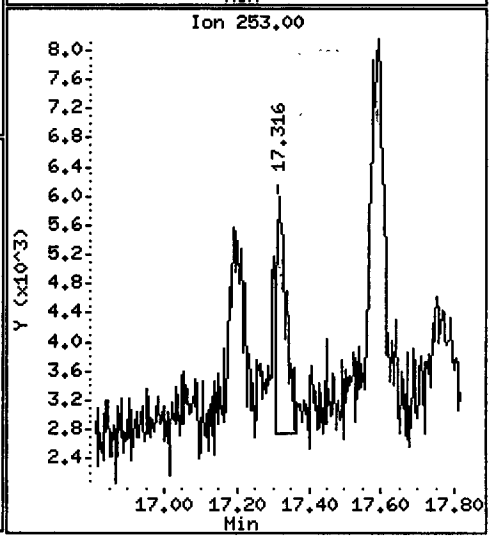












Data File: /chem3/nt4.i/20110502.b/05021104.d

Date : 02-MAY-2011 13:23

Client ID: LL-SB4-0-0.5-041911

Instrument: nt4.i

Sample Info: SS71G

Volume Injected (uL): 1.0

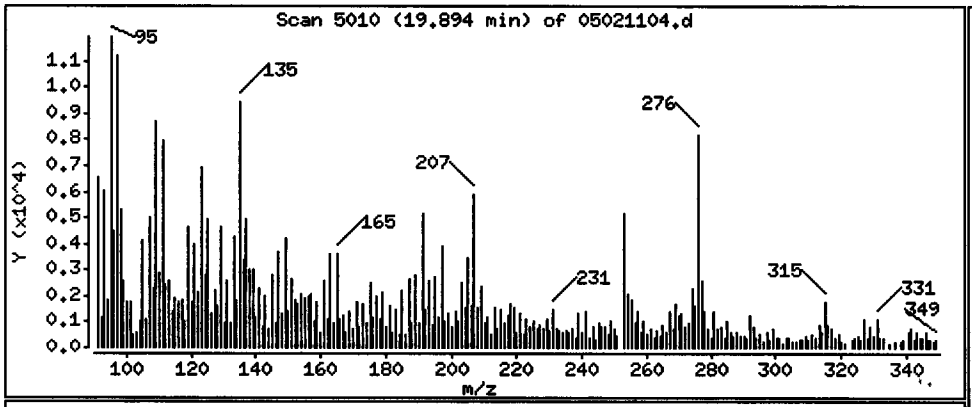
Operator: JZ

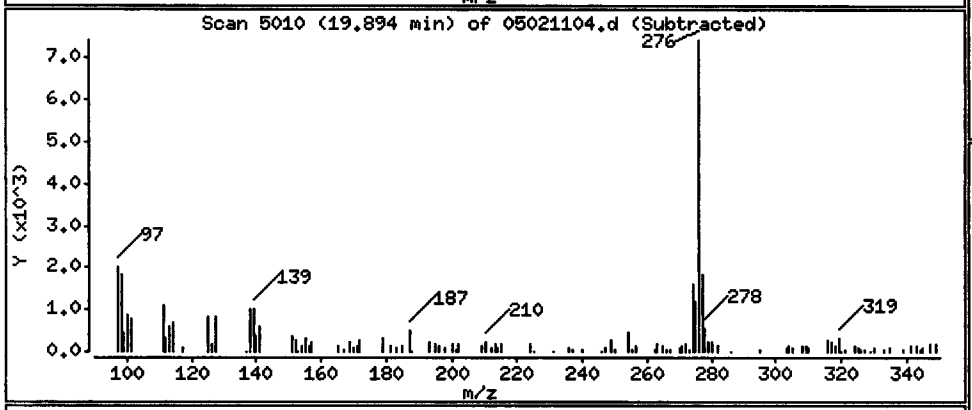
Column phase: ZB35

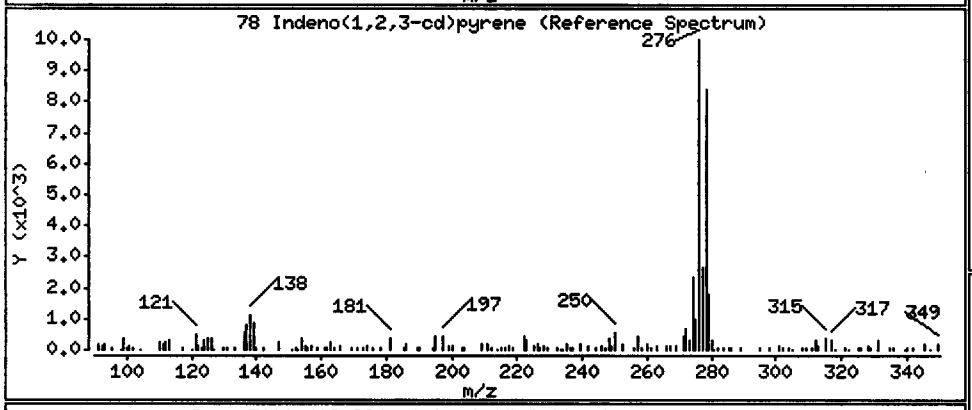
Column diameter: 0.32

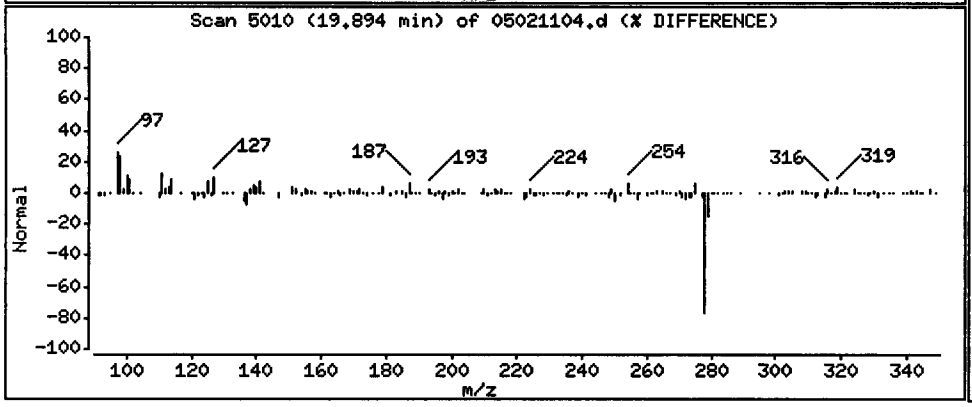
78 Indeno(1,2,3-cd)pyrene

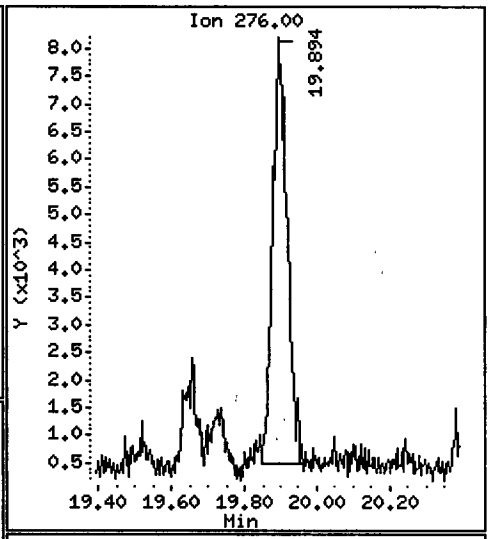
Concentration: 7.891 ug/kg

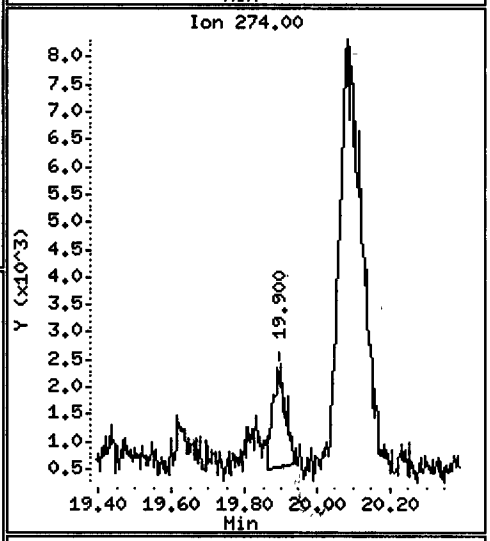


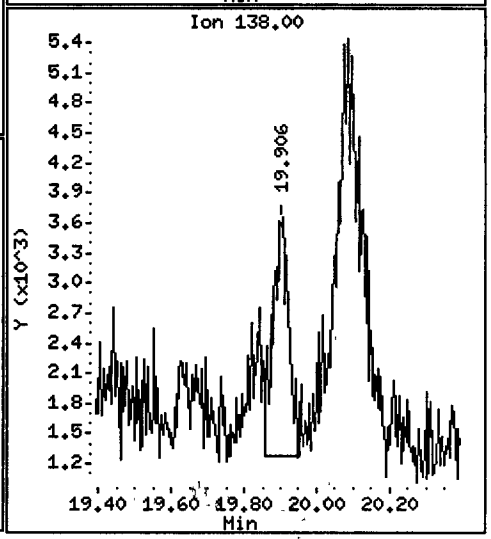












CO-ELUTION SUMMARY FOR FILE - 05021104.d

Lab ID: SS71G, Method: SIMPNA0421.m, Instrument: nt4.i, Date: 02-MAY-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20110502.b/05021106.d
Lab Smp Id: SS71H Client Smp ID: LL-SB4-1.5-2-041911
Inj Date : 02-MAY-2011 14:19
Operator : JZ Inst ID: nt4.i
Smp Info : SS71H
Misc Info : 11-8661
Comment : 1ul Injection
Method : /chem3/nt4.i/20110502.b/SIMPNA0421.m
Meth Date : 02-May-2011 19:51 jianqing Quant Type: ISTD
Cal Date : 21-APR-2011 22:25 Cal File: 04211107.d
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

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

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Ws	12.30000	Weight of sample extracted (g)
M	11.40000	% Moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
* 27 Naphthalene-d8	136	4.872	4.881	(1.000)	263692	2.00000	
28 Naphthalene	128	Compound Not Detected.					
$ 190 2-Methylnaphthalene-d10	152	5.614	5.623	(1.152)	121496	1.64846	75.63
32 2-Methylnaphthalene	141	Compound Not Detected.					
105 1-methylnaphthalene	141	Compound Not Detected.					
40 Acenaphthylene	152	Compound Not Detected.					
* 42 Acenaphthene-d10	164	7.128	7.137	(1.000)	155268	2.00000	
44 Acenaphthene	153	Compound Not Detected.					
46 Dibenzofuran	168	Compound Not Detected.					
49 Fluorene	166	Compound Not Detected.					
* 59 Phenanthrene-d10	188	9.077	9.083	(1.000)	259071	2.00000	
60 Phenanthrene	178	Compound Not Detected.					
61 Anthracene	178	Compound Not Detected.					
64 Fluoranthene	202	Compound Not Detected.					
65 Pyrene	202	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
68	Benzo(a)anthracene	228	Compound Not Detected.					
* 69	Chrysene-d12	240	13.821	13.834	(1.000)	265384	2.00000	
71	Chrysene	228	Compound Not Detected.					
74	Benzo(b)fluoranthene	252	Compound Not Detected.					
75	Benzo(k)fluoranthene	252	Compound Not Detected.					
188	Benzo(j)fluoranthene	252	Compound Not Detected.					
76	Benzo(a)pyrene	252	Compound Not Detected.					
* 77	Perylene-d12	264	17.509	17.521	(1.000)	218331	2.00000	
78	Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
$ 191	Dibenzo(a,h)anthracene-d14	292	19.799	19.821	(1.131)	225153	2.49281	114.4
79	Dibenzo(a,h)anthracene	278	Compound Not Detected.					
80	Benzo(g,h,i)perylene	276	Compound Not Detected.					
99	Perylene	252	Compound Not Detected.					

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 05021106.d
Lab Smp Id: SS71H
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20110502.b/SIMPNA0421.m
Misc Info: 11-8661

Calibration Date: 02-MAY-2011
Calibration Time: 12:06
Client Smp ID: LL-SB4-1.5-2-041
Level: LOW
Sample Type: Soil

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	276036	138018	552072	263692	-4.47
42 Acenaphthene-d10	158527	79264	317054	155268	-2.06
59 Phenanthrene-d10	277528	138764	555056	259071	-6.65
69 Chrysene-d12	304115	152058	608230	265384	-12.74
77 Perylene-d12	257833	128916	515666	218331	-15.32

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	4.88	4.38	5.38	4.87	-0.19
42 Acenaphthene-d10	7.14	6.64	7.64	7.13	-0.13
59 Phenanthrene-d10	9.08	8.58	9.58	9.08	-0.06
69 Chrysene-d12	13.83	13.33	14.33	13.82	-0.09
77 Perylene-d12	17.52	17.02	18.02	17.51	-0.07

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

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd Snider
Sample Matrix: SOLID
Lab Smp Id: SS71H
Level: LOW
Data Type: MS DATA
SpikeList File: pnalcss.spk
Sublist File: pnax.sub
Method File: /chem3/nt4.i/20110502.b/SIMPNA0421.m
Misc Info: 11-8661

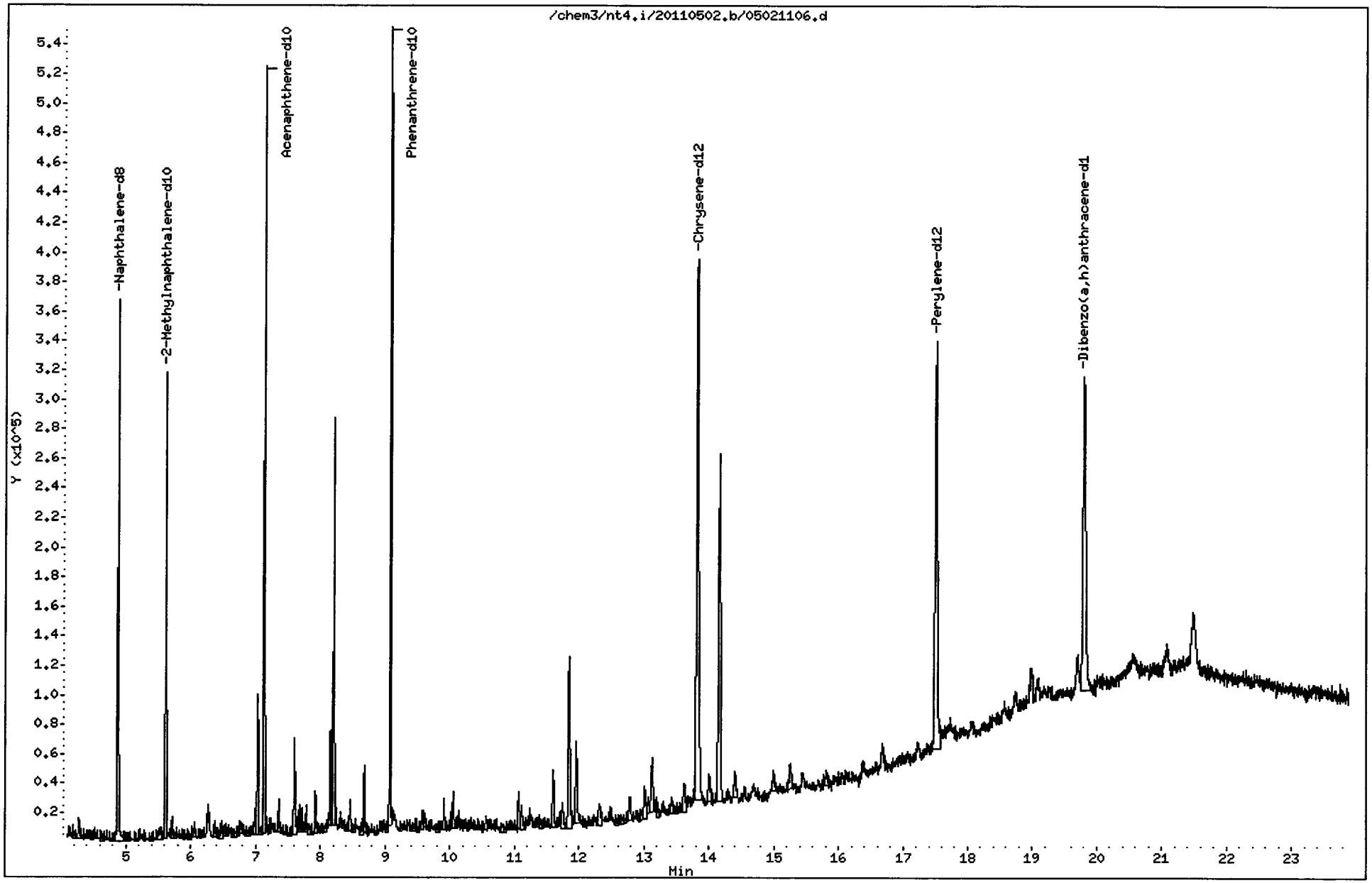
Client SDG: SS71
Fraction: SV
Client Smp ID: LL-SB4-1.5-2-041911
Operator: JZ
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	137.6	75.63	54.95	34-100
$ 191 Dibenzo(a,h)anthra	137.6	114.4	83.09	10-117

Data File: /chem3/nt4.i/20110502.b/05021106.d
Date : 02-MAY-2011 14:19
Client ID: LL-SB4-1.5-2-041911
Sample Info: SS71H
Volume Injected (uL): 1.0
Column phase: ZB35

Instrument: nt4.i
Operator: JZ
Column diameter: 0.32

SS71 60850



CO-ELUTION SUMMARY FOR FILE - 05021106.d

Lab ID: SS71H, Method: SIMPNA0421.m, Instrument: nt4.i, Date: 02-MAY-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20110502.b/05021107.d
Lab Smp Id: SS71I Client Smp ID: LL-SB4-2-4-041911
Inj Date : 02-MAY-2011 14:50
Operator : JZ Inst ID: nt4.i
Smp Info : SS71I
Misc Info : 11-8662
Comment : 1ul Injection
Method : /chem3/nt4.i/20110502.b/SIMPNA0421.m
Meth Date : 02-May-2011 19:51 jianqing Quant Type: ISTD
Cal Date : 21-APR-2011 22:25 Cal File: 04211107.d
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

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

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Ws	12.62000	Weight of sample extracted (g)
M	13.90000	% Moisture

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
*	27 Naphthalene-d8	136	4.876	4.881	(1.000)	262700	2.00000	
	28 Naphthalene	128	Compound Not Detected.					
$	190 2-Methylnaphthalene-d10	152	5.617	5.623	(1.152)	114233	1.55577	71.59
	32 2-Methylnaphthalene	141	Compound Not Detected.					
	105 1-methylnaphthalene	141	Compound Not Detected.					
	40 Acenaphthylene	152	Compound Not Detected.					
*	42 Acenaphthene-d10	164	7.131	7.137	(1.000)	155429	2.00000	
	44 Acenaphthene	153	Compound Not Detected.					
	46 Dibenzofuran	168	Compound Not Detected.					
	49 Fluorene	166	Compound Not Detected.					
*	59 Phenanthrene-d10	188	9.077	9.083	(1.000)	260916	2.00000	
	60 Phenanthrene	178	Compound Not Detected.					
	61 Anthracene	178	Compound Not Detected.					
	64 Fluoranthene	202	Compound Not Detected.					
	65 Pyrene	202	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
68	Benzo(a)anthracene	228	Compound Not Detected.					
* 69	Chrysene-d12	240	13.822	13.834	(1.000)	268105	2.00000	
71	Chrysene	228	Compound Not Detected.					
74	Benzo(b)fluoranthene	252	Compound Not Detected.					
75	Benzo(k)fluoranthene	252	Compound Not Detected.					
188	Benzo(j)fluoranthene	252	Compound Not Detected.					
76	Benzo(a)pyrene	252	Compound Not Detected.					
* 77	Perylene-d12	264	17.512	17.521	(1.000)	229624	2.00000	
78	Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
$ 191	Dibenzo(a,h)anthracene-d14	292	19.809	19.821	(1.131)	217076	2.28518	105.2
79	Dibenzo(a,h)anthracene	278	Compound Not Detected.					
80	Benzo(g,h,i)perylene	276	Compound Not Detected.					
99	Perylene	252	Compound Not Detected.					

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 05021107.d
Lab Smp Id: SS71I
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20110502.b/SIMPNA0421.m
Misc Info: 11-8662

Calibration Date: 02-MAY-2011
Calibration Time: 12:06
Client Smp ID: LL-SB4-2-4-04191
Level: LOW
Sample Type: Soil

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	276036	138018	552072	262700	-4.83
42 Acenaphthene-d10	158527	79264	317054	155429	-1.95
59 Phenanthrene-d10	277528	138764	555056	260916	-5.99
69 Chrysene-d12	304115	152058	608230	268105	-11.84
77 Perylene-d12	257833	128916	515666	229624	-10.94

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	4.88	4.38	5.38	4.88	-0.12
42 Acenaphthene-d10	7.14	6.64	7.64	7.13	-0.08
59 Phenanthrene-d10	9.08	8.58	9.58	9.08	-0.06
69 Chrysene-d12	13.83	13.33	14.33	13.82	-0.09
77 Perylene-d12	17.52	17.02	18.02	17.51	-0.05

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

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd Snider
Sample Matrix: SOLID
Lab Smp Id: SS71I
Level: LOW
Data Type: MS DATA
SpikeList File: pnalcss.spk
Sublist File: pnax.sub
Method File: /chem3/nt4.i/20110502.b/SIMPNA0421.m
Misc Info: 11-8662

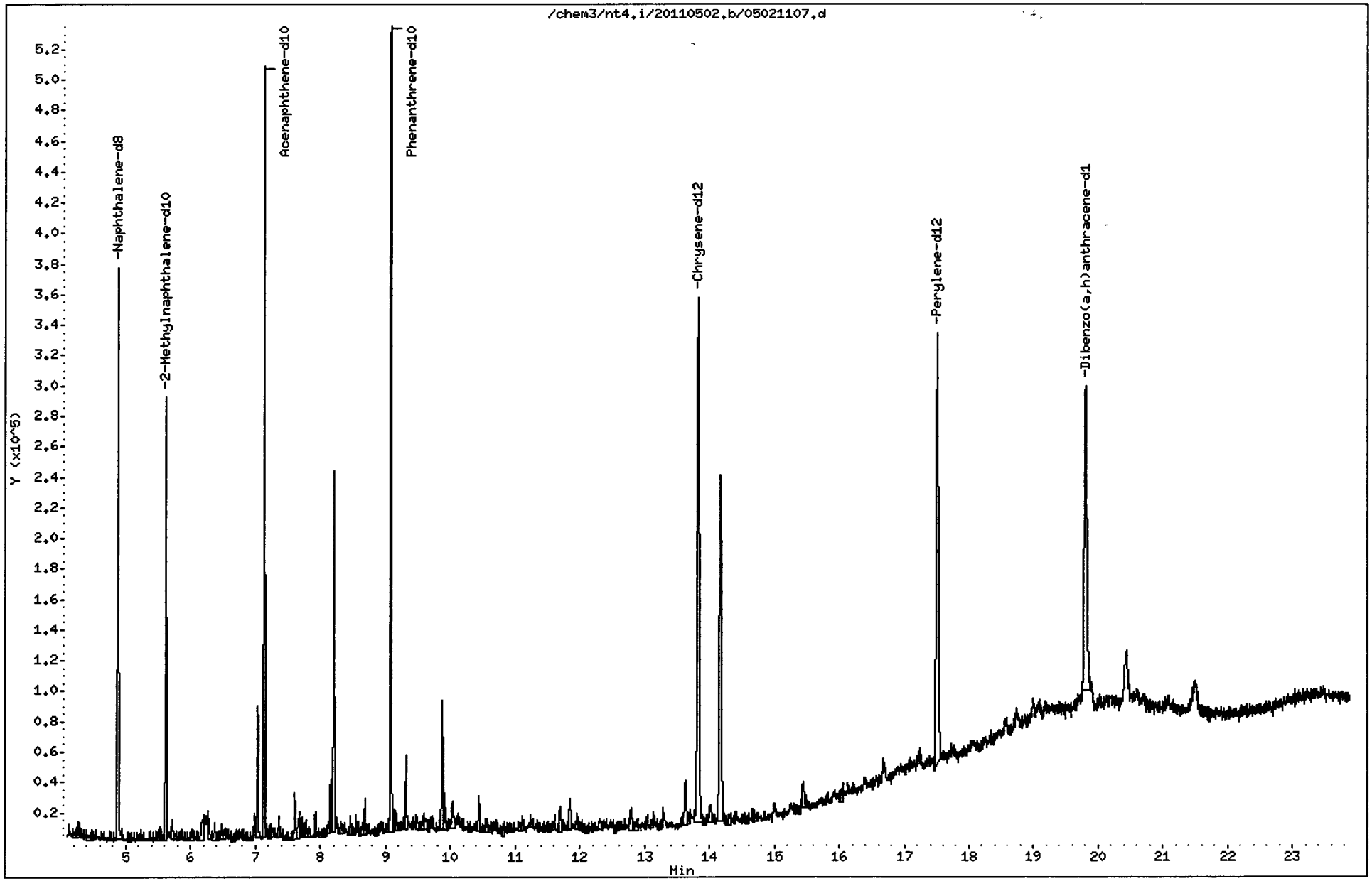
Client SDG: SS71
Fraction: SV
Client Smp ID: LL-SB4-2-4-041911
Operator: JZ
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	138.0	71.59	51.86	34-100
$ 191 Dibenzo(a,h)anthra	138.0	105.2	76.17	10-117

Data File: /chem3/nt4.i/20110502.b/05021107.d
Date : 02-MAY-2011 14:50
Client ID: LL-SB4-2-4-041911
Sample Info: SS71I
Volume Injected (uL): 1.0
Column phase: ZB35

Instrument: nt4.i
Operator: JZ
Column diameter: 0.32

SS71 26992



CO-ELUTION SUMMARY FOR FILE - 05021107.d

Lab ID: SS71I, Method: SIMPNA0421.m, Instrument: nt4.i, Date: 02-MAY-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20110502.b/05021108.d
Lab Smp Id: SS71IMS Client Smp ID: LL-SB4-2-4-0419 MS
Inj Date : 02-MAY-2011 15:18
Operator : JZ Inst ID: nt4.i
Smp Info : SS71IMS
Misc Info : 11-8662
Comment : 1ul Injection
Method : /chem3/nt4.i/20110502.b/SIMPNA0421.m
Meth Date : 02-May-2011 19:49 jianqing Quant Type: ISTD
Cal Date : 21-APR-2011 22:25 Cal File: 04211107.d
Als bottle: 8 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

05/02/11

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

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Ws	12.69000	Weight of sample extracted (g)
M	13.90000	% Moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
* 27 Naphthalene-d8	136	4.872	4.881	(1.000)	244684	2.00000	
28 Naphthalene	128	4.897	4.910	(1.005)	187231	1.69747	77.68
$ 190 2-Methylnaphthalene-d10	152	5.613	5.623	(1.152)	121987	1.78369	81.63
32 2-Methylnaphthalene	141	5.657	5.667	(1.161)	107008	1.72869	79.11
105 1-methylnaphthalene	141	5.850	5.859	(1.201)	110890	1.72364	78.88
40 Acenaphthylene	152	6.988	6.998	(0.981)	204936	1.72923	79.13
* 42 Acenaphthene-d10	164	7.127	7.137	(1.000)	145430	2.00000	
44 Acenaphthene	153	7.171	7.181	(1.006)	124802	1.71271	78.38
46 Dibenzofuran	168	7.319	7.326	(1.027)	187650	1.88241	86.14
49 Fluorene	166	7.777	7.787	(1.091)	161180	1.88432	86.23
* 59 Phenanthrene-d10	188	9.076	9.083	(1.000)	251307	2.00000	
60 Phenanthrene	178	9.108	9.118	(1.003)	245057	1.99258	91.18
61 Anthracene	178	9.143	9.149	(1.007)	246215	1.93157	88.39
64 Fluoranthene	202	10.815	10.824	(1.191)	285590	2.10229	96.20
65 Pyrene	202	11.291	11.301	(0.817)	289010	2.28935	104.8

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
68	Benzo(a)anthracene	228	13.704	13.717	(0.992)	260992	2.22883	102.0
* 69	Chrysene-d12	240	13.821	13.834	(1.000)	251059	2.00000	
71	Chrysene	228	13.887	13.903	(1.005)	252251	2.22301	101.7
74	Benzo(b)fluoranthene	252	16.341	16.354	(0.933)	275997	2.27017	103.9
75	Benzo(k)fluoranthene	252	16.395	16.411	(0.936)	279007	2.23003	102.1
188	Benzo(j)fluoranthene	252	Compound Not Detected.					
76	Benzo(a)pyrene	252	17.297	17.316	(0.988)	236279	2.17203	99.40
* 77	Perylene-d12	264	17.508	17.521	(1.000)	224082	2.00000	
78	Indeno(1,2,3-cd)pyrene	276	19.880	19.893	(1.135)	272117	2.12626	97.30
$ 191	Dibenzo(a,h)anthracene-d14	292	19.801	19.821	(1.131)	204659	2.20775	101.0
79	Dibenzo(a,h)anthracene	278	19.890	19.909	(1.136)	228009	2.19705	100.5
80	Benzo(g,h,i)perylene	276	20.748	20.767	(1.185)	238379	2.18077	99.80
99	Perylene	252	17.574	17.587	(1.004)	266694	2.89090	132.3

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 05021108.d
Lab Smp Id: SS71IMS
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20110502.b/SIMPNA0421.m
Misc Info: 11-8662

Calibration Date: 02-MAY-2011
Calibration Time: 12:06
Client Smp ID: LL-SB4-2-4-0419
Level: LOW
Sample Type: Soil

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	276036	138018	552072	244684	-11.36
42 Acenaphthene-d10	158527	79264	317054	145430	-8.26
59 Phenanthrene-d10	277528	138764	555056	251307	-9.45
69 Chrysene-d12	304115	152058	608230	251059	-17.45
77 Perylene-d12	257833	128916	515666	224082	-13.09

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	4.88	4.38	5.38	4.87	-0.20
42 Acenaphthene-d10	7.14	6.64	7.64	7.13	-0.14
59 Phenanthrene-d10	9.08	8.58	9.58	9.08	-0.07
69 Chrysene-d12	13.83	13.33	14.33	13.82	-0.09
77 Perylene-d12	17.52	17.02	18.02	17.51	-0.07

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

Analytical Resources, Inc.

RECOVERY REPORT

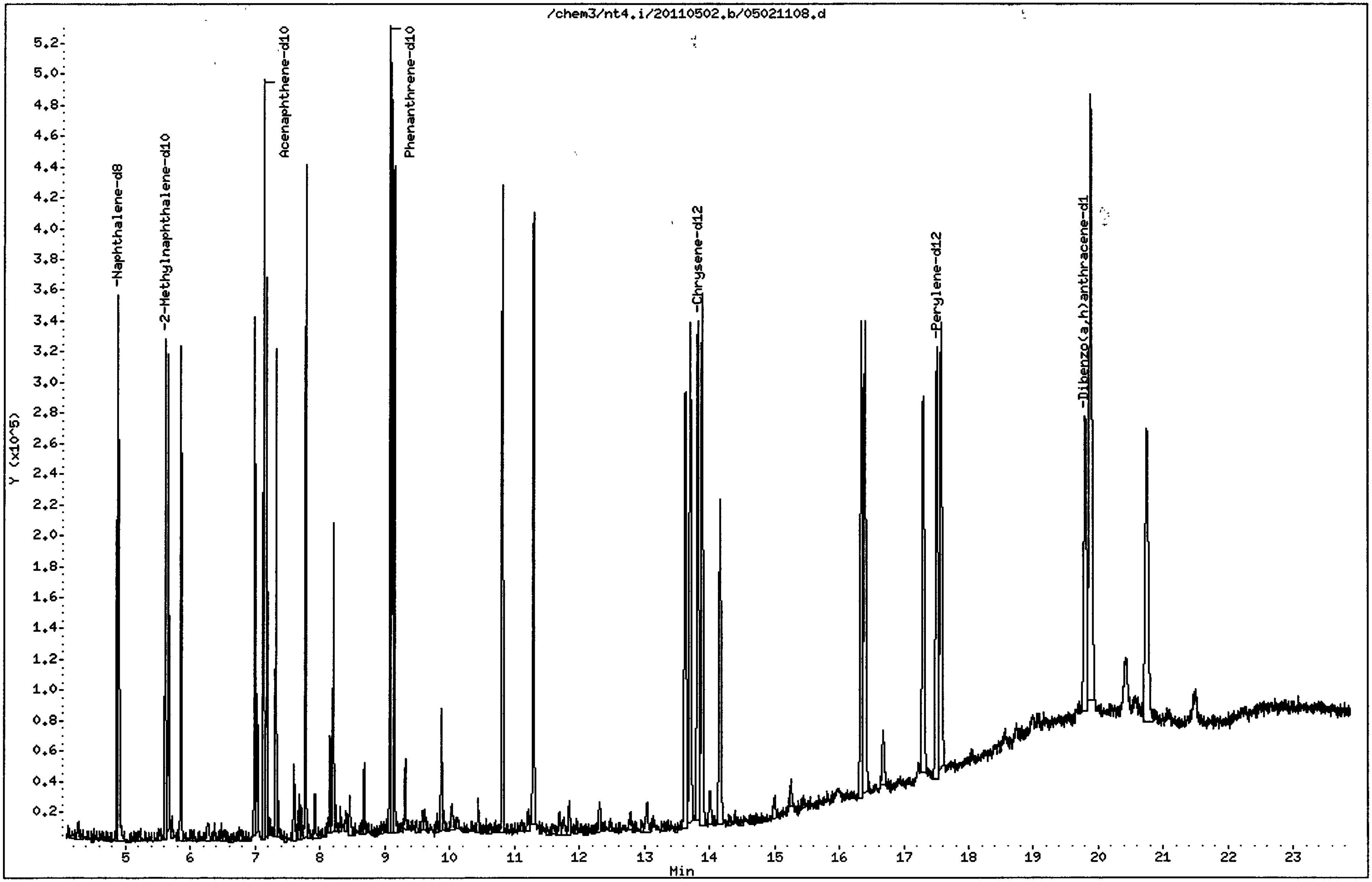
Client Name: Floyd Snid
Sample Matrix: SOLID
Lab Smp Id: SS71IMS
Level: LOW
Data Type: MS DATA
SpikeList File: pnalcss.spk
Sublist File: pnax.sub
Method File: /chem3/nt4.i/20110502.b/SIMPNA0421.m
Misc Info: 11-8662

Client SDG: SS71
Fraction: SV
Client Smp ID: LL-SB4-2-4-0419 MS
Operator: JZ
SampleType: MS
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
28 Naphthalene	137.3	77.68	56.58	37-100
32 2-Methylnaphthalen	137.3	79.11	57.62	37-100
105 1-methylnaphthalen	137.3	78.88	57.45	30-160
40 Acenaphthylene	137.3	79.13	57.64	35-100
44 Acenaphthene	137.3	78.38	57.09	39-100
46 Dibenzofuran	137.3	86.14	62.75	39-100
49 Fluorene	137.3	86.23	62.81	42-100
60 Phenanthrene	137.3	91.18	66.42	47-100
61 Anthracene	137.3	88.39	64.39	41-106
64 Fluoranthene	137.3	96.20	70.08	52-109
65 Pyrene	137.3	104.8	76.31	47-111
68 Benzo(a)anthracene	137.3	102.0	74.29	47-114
71 Chrysene	137.3	101.7	74.10	51-106
74 Benzo(b)fluoranthe	137.3	103.9	75.67	30-160
75 Benzo(k)fluoranthe	137.3	102.1	74.33	30-160
76 Benzo(a)pyrene	137.3	99.40	72.40	44-111
78 Indeno(1,2,3-cd)py	137.3	97.30	70.88	41-114
79 Dibenzo(a,h)anthra	137.3	100.5	73.24	42-118
80 Benzo(g,h,i)peryle	137.3	99.80	72.69	37-115
99 Perylene	137.3	132.3	96.36	30-160

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	137.3	81.63	59.46	34-100
$ 191 Dibenzo(a,h)anthra	137.3	101.0	73.59	10-117

Data File: /chem3/nt4.i/20110502.b/05021108.d
Date : 02-MAY-2011 15:18
Client ID: LL-SB4-2-4-0419 MS
Instrument: nt4.i
Sample Info: SS71IMS
Volume Injected (uL): 1.0
Operator: JZ
Column phase: ZB35
Column diameter: 0.32



CO-ELUTION SUMMARY FOR FILE - 05021108.d

Lab ID: SS71IMS, Method: SIMPNA0421.m, Instrument: nt4.i, Date: 02-MAY-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20110502.b/05021109.d
Lab Smp Id: SS71IMSD Client Smp ID: LL-SB4-2-4-0419 MSD
Inj Date : 02-MAY-2011 15:46
Operator : JZ Inst ID: nt4.i
Smp Info : SS71IMSD
Misc Info : 11-8662
Comment : 1ul Injection
Method : /chem3/nt4.i/20110502.b/SIMPNA0421.m
Meth Date : 02-May-2011 19:49 jianqing Quant Type: ISTD
Cal Date : 21-APR-2011 22:25 Cal File: 04211107.d
Als bottle: 9 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

05/02/11

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

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Ws	12.62000	Weight of sample extracted (g)
M	13.90000	% Moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
* 27 Naphthalene-d8	136	4.869	4.881	(1.000)	256491	2.00000	
28 Naphthalene	128	4.898	4.910	(1.006)	179956	1.55641	71.62
$ 190 2-Methylnaphthalene-d10	152	5.611	5.623	(1.152)	114777	1.60101	73.67
32 2-Methylnaphthalene	141	5.655	5.667	(1.161)	102095	1.57339	72.40
105 1-methylnaphthalene	141	5.850	5.859	(1.201)	105697	1.56729	72.12
40 Acenaphthylene	152	6.989	6.998	(0.981)	200745	1.63976	75.46
* 42 Acenaphthene-d10	164	7.128	7.137	(1.000)	150228	2.00000	
44 Acenaphthene	153	7.172	7.181	(1.006)	123541	1.64125	75.52
46 Dibenzofuran	168	7.317	7.326	(1.027)	186061	1.80686	83.14
49 Fluorene	166	7.778	7.787	(1.091)	158074	1.78899	82.32
* 59 Phenanthrene-d10	188	9.074	9.083	(1.000)	258810	2.00000	
60 Phenanthrene	178	9.109	9.118	(1.004)	246038	1.94256	89.39
61 Anthracene	178	9.140	9.149	(1.007)	251460	1.91553	88.14
64 Fluoranthene	202	10.812	10.824	(1.192)	293482	2.09775	96.53
65 Pyrene	202	11.289	11.301	(0.817)	298798	2.21995	102.2

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
68	Benzo(a)anthracene	228	13.702	13.717	(0.992)	276034	2.21094	101.7
* 69	Chrysene-d12	240	13.818	13.834	(1.000)	267676	2.00000	
71	Chrysene	228	13.888	13.903	(1.005)	269301	2.22594	102.4
74	Benzo(b)fluoranthene	252	16.339	16.354	(0.933)	283655	2.28552	105.2
75	Benzo(k)fluoranthene	252	16.395	16.411	(0.937)	294331	2.30448	106.0
188	Benzo(j)fluoranthene	252	Compound Not Detected.					
76	Benzo(a)pyrene	252	17.301	17.316	(0.988)	242152	2.18057	100.3
* 77	Perylene-d12	264	17.506	17.521	(1.000)	228753	2.00000	
78	Indeno(1,2,3-cd)pyrene	276	19.875	19.893	(1.135)	286497	2.19291	100.9
$ 191	Dibenzo(a,h)anthracene-d14	292	19.799	19.821	(1.131)	204448	2.16044	99.41
79	Dibenzo(a,h)anthracene	278	19.891	19.909	(1.136)	236469	2.23204	102.7
80	Benzo(g,h,i)perylene	276	20.745	20.767	(1.185)	245788	2.20263	101.4
99	Perylene	252	17.575	17.587	(1.004)	275349	2.92378	134.5

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 05021109.d
Lab Smp Id: SS71IMSD
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20110502.b/SIMPNA0421.m
Misc Info: 11-8662

Calibration Date: 02-MAY-2011
Calibration Time: 12:06
Client Smp ID: LL-SB4-2-4-0419
Level: LOW
Sample Type: Soil

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	276036	138018	552072	256491	-7.08
42 Acenaphthene-d10	158527	79264	317054	150228	-5.24
59 Phenanthrene-d10	277528	138764	555056	258810	-6.74
69 Chrysene-d12	304115	152058	608230	267676	-11.98
77 Perylene-d12	257833	128916	515666	228753	-11.28

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	4.88	4.38	5.38	4.87	-0.25
42 Acenaphthene-d10	7.14	6.64	7.64	7.13	-0.13
59 Phenanthrene-d10	9.08	8.58	9.58	9.07	-0.10
69 Chrysene-d12	13.83	13.33	14.33	13.82	-0.11
77 Perylene-d12	17.52	17.02	18.02	17.51	-0.09

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

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd Snid
Sample Matrix: SOLID
Lab Smp Id: SS71IMSD
Level: LOW
Data Type: MS DATA
SpikeList File: pnalcss.spk
Sublist File: pnax.sub
Method File: /chem3/nt4.i/20110502.b/SIMPNA0421.m
Misc Info: 11-8662

Client SDG: SS71
Fraction: SV
Client Smp ID: LL-SB4-2-4-0419 MSD
Operator: JZ
SampleType: MS
Quant Type: ISTD

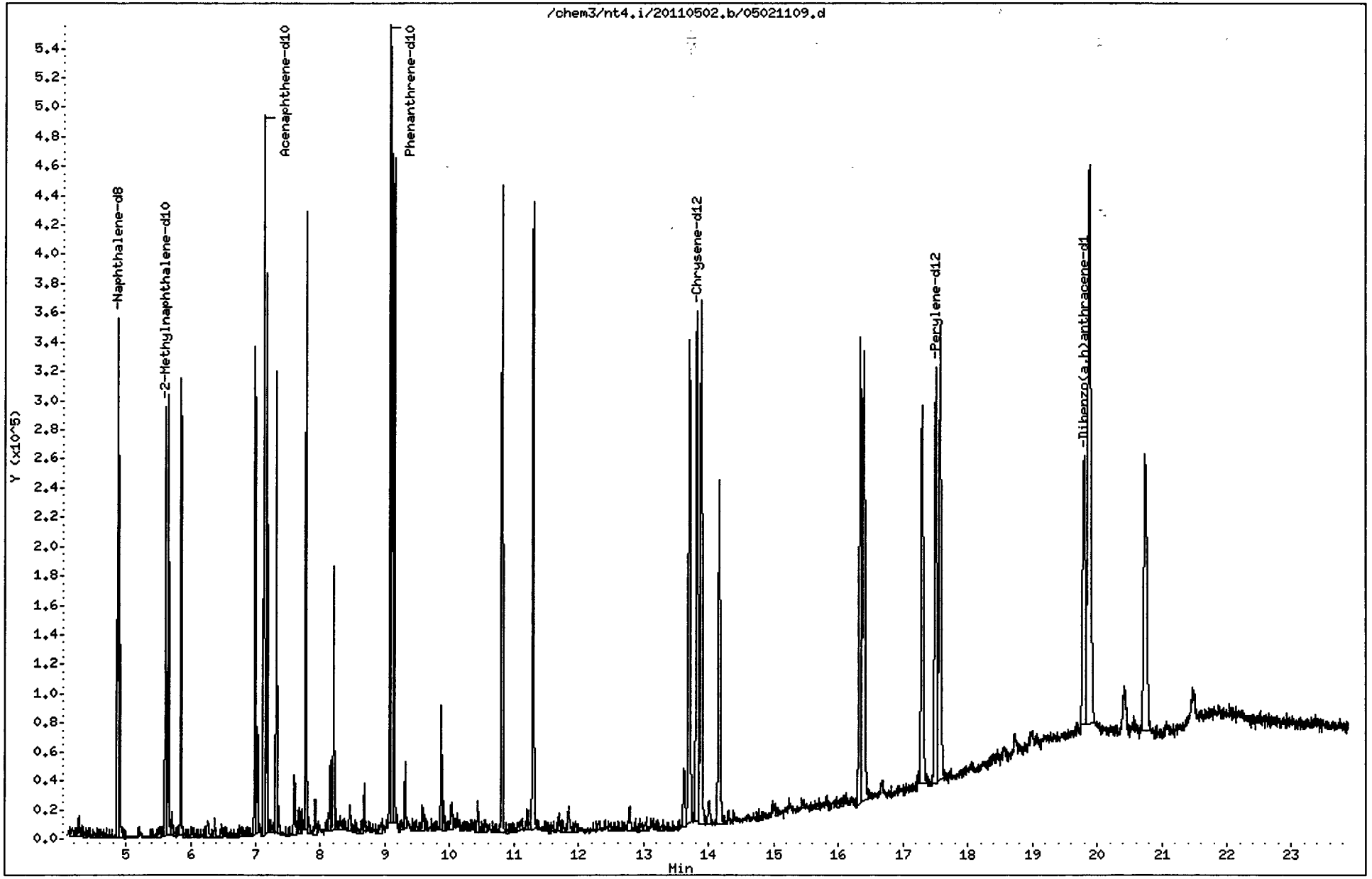
SPIKE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
28 Naphthalene	138.0	71.62	51.88	37-100
32 2-Methylnaphthalen	138.0	72.40	52.45	37-100
105 1-methylnaphthalen	138.0	72.12	52.24	30-160
40 Acenaphthylene	138.0	75.46	54.66	35-100
44 Acenaphthene	138.0	75.52	54.71	39-100
46 Dibenzofuran	138.0	83.14	60.23	39-100
49 Fluorene	138.0	82.32	59.63	42-100
60 Phenanthrene	138.0	89.39	64.75	47-100
61 Anthracene	138.0	88.14	63.85	41-106
64 Fluoranthene	138.0	96.53	69.93	52-109
65 Pyrene	138.0	102.2	74.00	47-111
68 Benzo(a)anthracene	138.0	101.7	73.70	47-114
71 Chrysene	138.0	102.4	74.20	51-106
74 Benzo(b)fluoranthe	138.0	105.2	76.18	30-160
75 Benzo(k)fluoranthe	138.0	106.0	76.82	30-160
76 Benzo(a)pyrene	138.0	100.3	72.69	44-111
78 Indeno(1,2,3-cd)py	138.0	100.9	73.10	41-114
79 Dibenzo(a,h)anthra	138.0	102.7	74.40	42-118
80 Benzo(g,h,i)peryle	138.0	101.4	73.42	37-115
99 Perylene	138.0	134.5	97.46	30-160

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	138.0	73.67	53.37	34-100
$ 191 Dibenzo(a,h)anthra	138.0	99.41	72.01	10-117

Data File: /chem3/nt4.i/20110502.b/05021109.d
Date : 02-MAY-2011 15:46
Client ID: LL-SB4-2-4-0419 MSD
Sample Info: SS71IMSD
Volume Injected (uL): 1.0
Column phase: ZB35

Instrument: nt4.i
Operator: JZ
Column diameter: 0.32

SS71:89911



CO-ELUTION SUMMARY FOR FILE - 05021109.d

Lab ID: SS71IMSD, Method: SIMPNA0421.m, Instrument: nt4.i, Date: 02-MAY-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20110502.b/05021110.d
Lab Smp Id: SS71J Client Smp ID: LL-SB3-0-0.5-041911
Inj Date : 02-MAY-2011 16:13
Operator : JZ Inst ID: nt4.i
Smp Info : SS71J
Misc Info : 11-8663
Comment : 1ul Injection
Method : /chem3/nt4.i/20110502.b/SIMPNA0421.m
Meth Date : 02-May-2011 19:51 jianqing Quant Type: ISTD
Cal Date : 21-APR-2011 22:25 Cal File: 04211107.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

05/02/11

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

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Ws	12.60000	Weight of sample extracted (g)
M	13.30000	% Moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
* 27 Naphthalene-d8	136	4.873	4.881	(1.000)	244543	2.00000	
28 Naphthalene	128	4.904	4.910	(1.006)	6175	0.05602	2.564
$ 190 2-Methylnaphthalene-d10	152	5.614	5.623	(1.152)	117978	1.72606	79.00
32 2-Methylnaphthalene	141	Compound Not Detected.					
105 1-methylnaphthalene	141	Compound Not Detected.					
40 Acenaphthylene	152	Compound Not Detected.					
* 42 Acenaphthene-d10	164	7.128	7.137	(1.000)	145688	2.00000	
44 Acenaphthene	153	Compound Not Detected.					
46 Dibenzofuran	168	Compound Not Detected.					
49 Fluorene	166	Compound Not Detected.					
* 59 Phenanthrene-d10	188	9.074	9.083	(1.000)	241477	2.00000	
60 Phenanthrene	178	9.109	9.118	(1.004)	15199	0.12862	5.887
61 Anthracene	178	Compound Not Detected.					
64 Fluoranthene	202	10.816	10.824	(1.192)	31848	0.24398	11.17
65 Pyrene	202	11.292	11.301	(0.817)	30813	0.24698	11.30

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
	68 Benzo(a)anthracene	228	13.708	13.717	(0.992)	17763	0.15349	7.025
*	69 Chrysene-d12	240	13.822	13.834	(1.000)	248117	2.00000	
	71 Chrysene	228	13.888	13.903	(1.005)	29089	0.25939	11.87
	74 Benzo(b)fluoranthene	252	16.339	16.354	(0.933)	27789	0.23237	10.64
	75 Benzo(k)fluoranthene	252	16.393	16.411	(0.936)	13211	0.10734	4.913
	188 Benzo(j)fluoranthene	252	16.465	16.483	(0.940)	10739	0.08897	4.072
	76 Benzo(a)pyrene	252	17.298	17.316	(0.988)	20317	0.18987	8.690
*	77 Perylene-d12	264	17.509	17.521	(1.000)	220424	2.00000	
	78 Indeno(1,2,3-cd)pyrene	276	19.878	19.893	(1.135)	18867	0.14987	6.859
$	191 Dibenzo(a,h)anthracene-d14	292	19.806	19.821	(1.131)	193246	2.11923	97.00
	79 Dibenzo(a,h)anthracene	278	19.903	19.909	(1.137)	7969	0.07806	3.573
	80 Benzo(g,h,i)perylene	276	20.749	20.767	(1.185)	23213	0.21588	9.881
	99 Perylene	252	17.575	17.587	(1.004)	26848	0.29586	13.54

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 05021110.d
Lab Smp Id: SS71J
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20110502.b/SIMPNA0421.m
Misc Info: 11-8663

Calibration Date: 02-MAY-2011
Calibration Time: 12:06
Client Smp ID: LL-SB3-0-0.5-041
Level: LOW
Sample Type: Soil

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	276036	138018	552072	244543	-11.41
42 Acenaphthene-d10	158527	79264	317054	145688	-8.10
59 Phenanthrene-d10	277528	138764	555056	241477	-12.99
69 Chrysene-d12	304115	152058	608230	248117	-18.41
77 Perylene-d12	257833	128916	515666	220424	-14.51

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	4.88	4.38	5.38	4.87	-0.18
42 Acenaphthene-d10	7.14	6.64	7.64	7.13	-0.12
59 Phenanthrene-d10	9.08	8.58	9.58	9.07	-0.10
69 Chrysene-d12	13.83	13.33	14.33	13.82	-0.09
77 Perylene-d12	17.52	17.02	18.02	17.51	-0.07

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

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd Snider
Sample Matrix: SOLID
Lab Smp Id: SS71J
Level: LOW
Data Type: MS DATA
SpikeList File: pnalcss.spk
Sublist File: pnax.sub
Method File: /chem3/nt4.i/20110502.b/SIMPNA0421.m
Misc Info: 11-8663

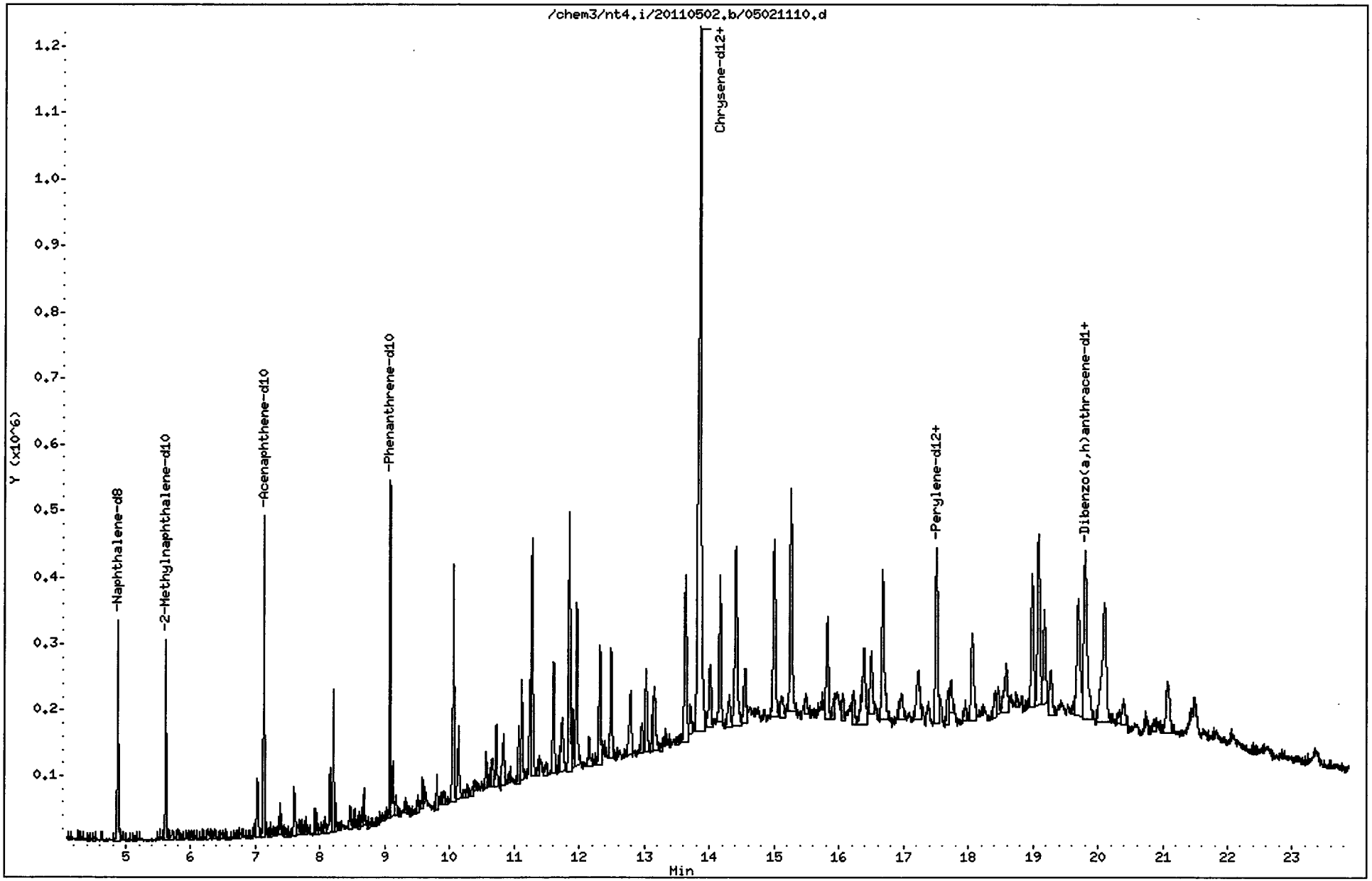
Client SDG: SS71
Fraction: SV
Client Smp ID: LL-SB3-0-0.5-041911
Operator: JZ
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	137.3	79.00	57.54	34-100
$ 191 Dibenzo(a,h)anthra	137.3	97.00	70.64	10-117

Data File: /chem3/nt4.i/20110502.b/05021110.d
Date : 02-MAY-2011 16:13
Client ID: LL-SB3-0-0.5-041911
Sample Info: SS71J
Volume Injected (uL): 1.0
Column phase: ZB35

Instrument: nt4.i
Operator: JZ
Column diameter: 0.32

SS71:86928



Data File: /chem3/nt4.i/20110502.b/05021110.d

Date : 02-MAY-2011 16:13

Client ID: LL-SB3-0-0.5-041911

Instrument: nt4.i

Sample Info: SS71J

Volume Injected (uL): 1.0

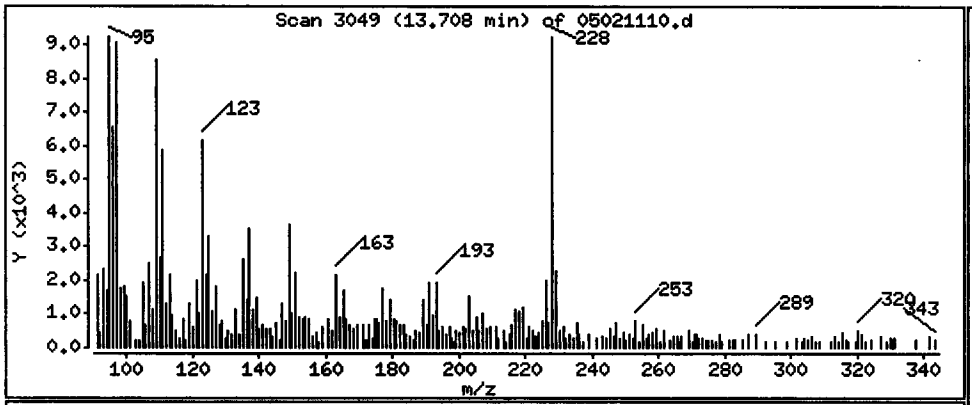
Operator: JZ

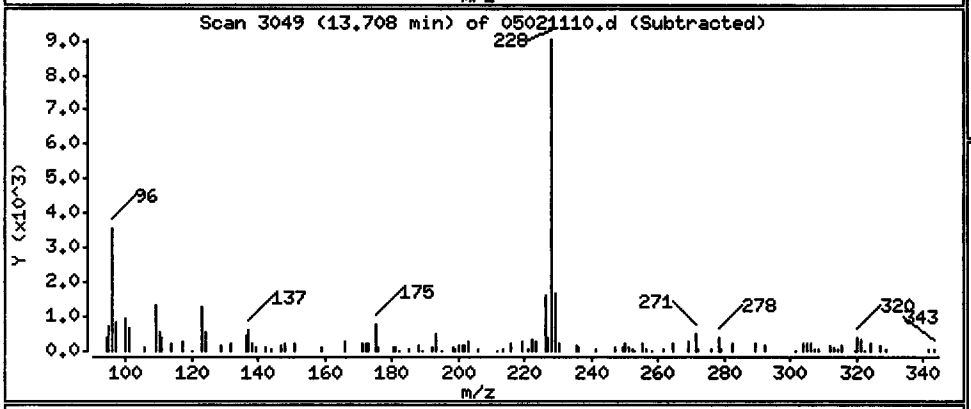
Column phase: ZB35

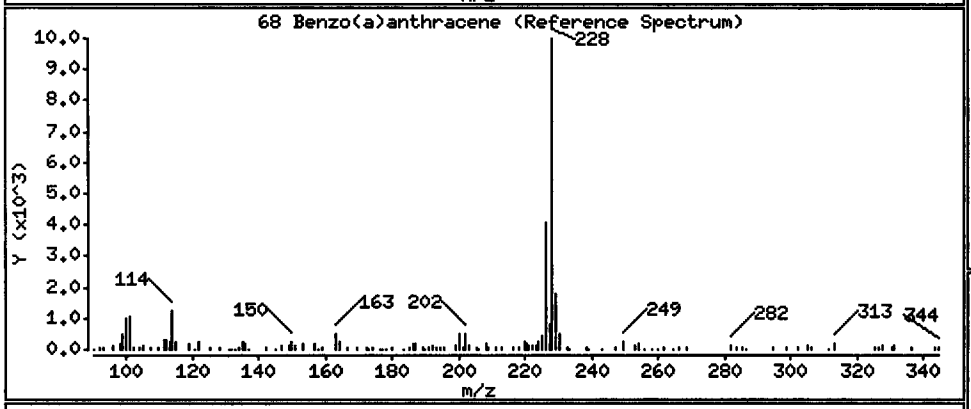
Column diameter: 0.32

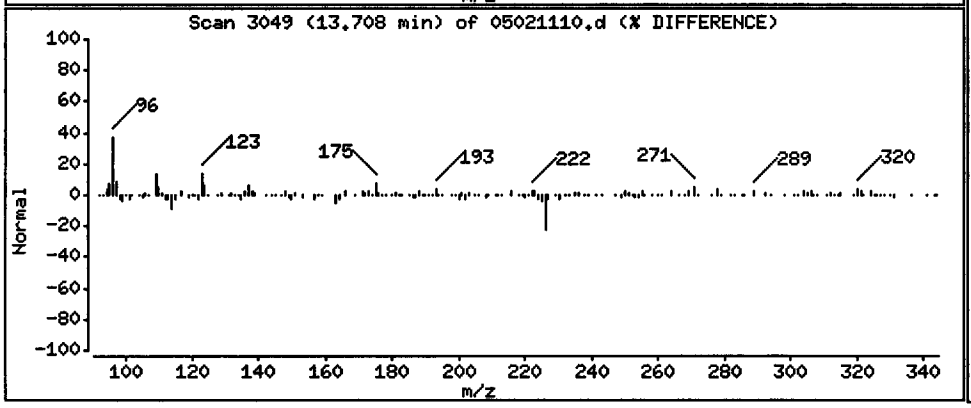
68 Benzo(a)anthracene

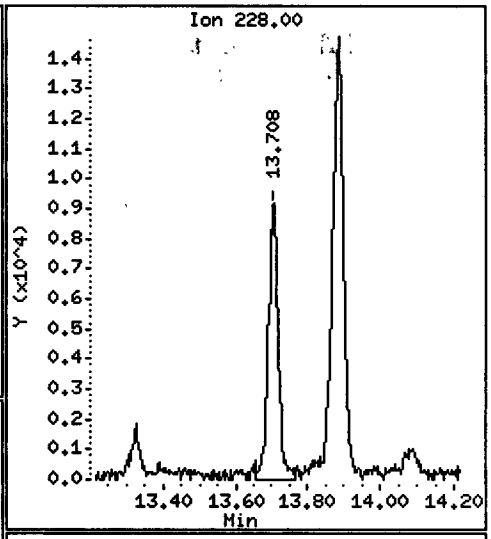
Concentration: 7.025 ug/kg

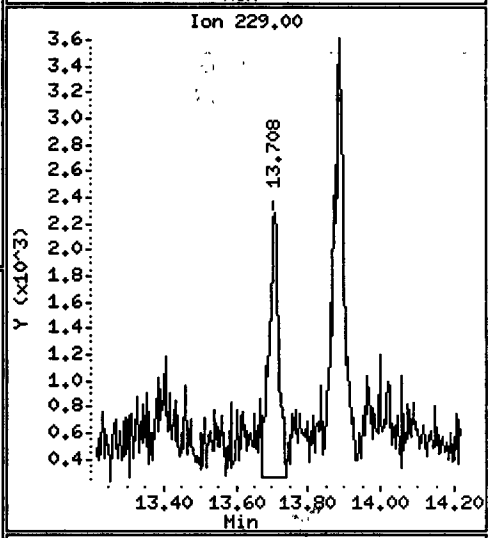


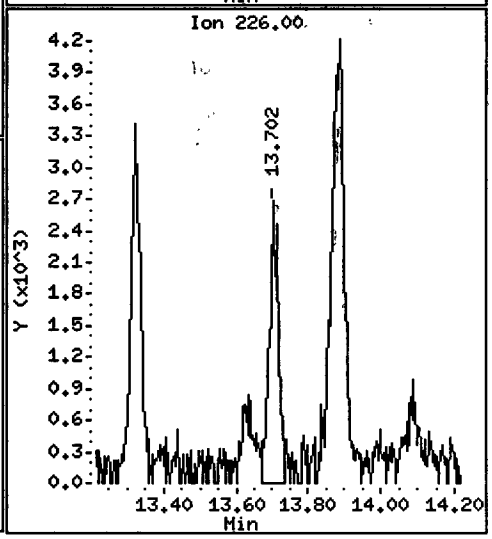












Data File: /chem3/nt4.i/20110502.b/05021110.d

Date : 02-MAY-2011 16:13

Client ID: LL-SB3-0-0.5-041911

Instrument: nt4.i

Sample Info: SS71J

Volume Injected (uL): 1.0

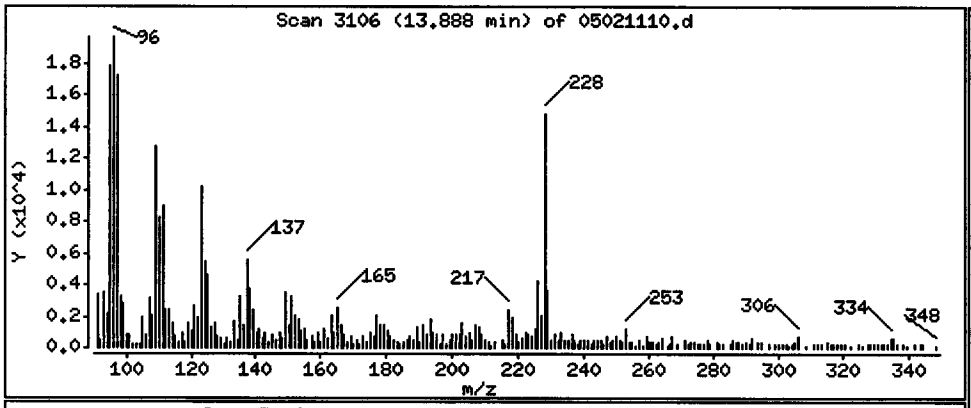
Operator: JZ

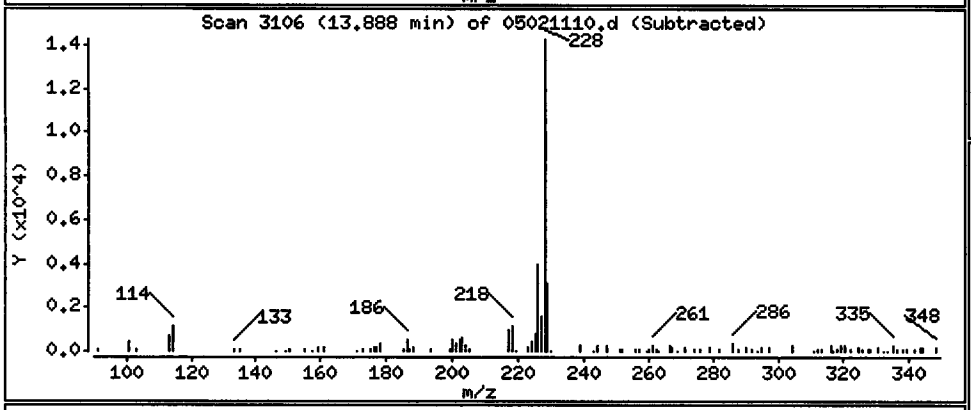
Column phase: ZB35

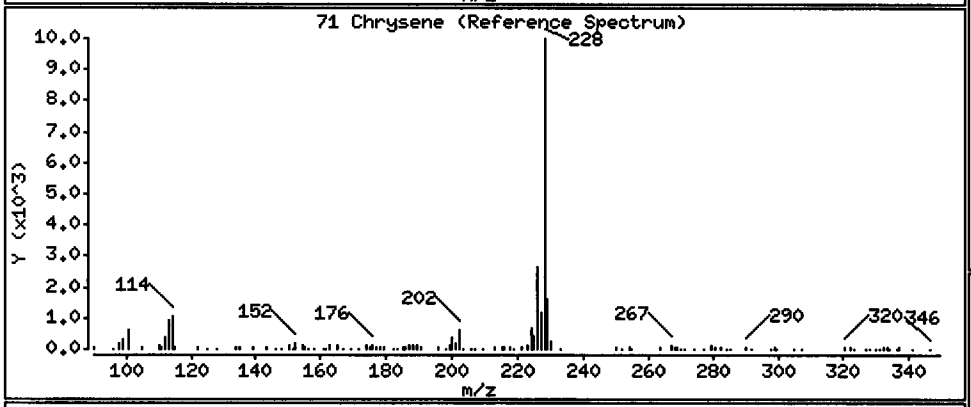
Column diameter: 0.32

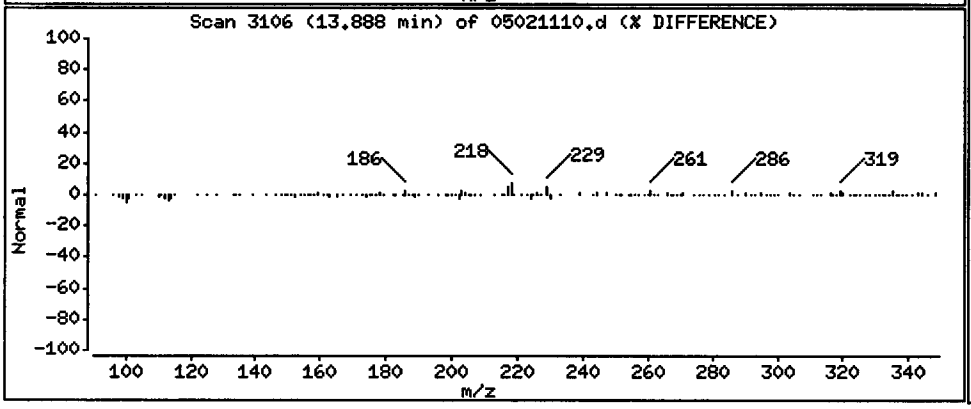
71 Chrysene

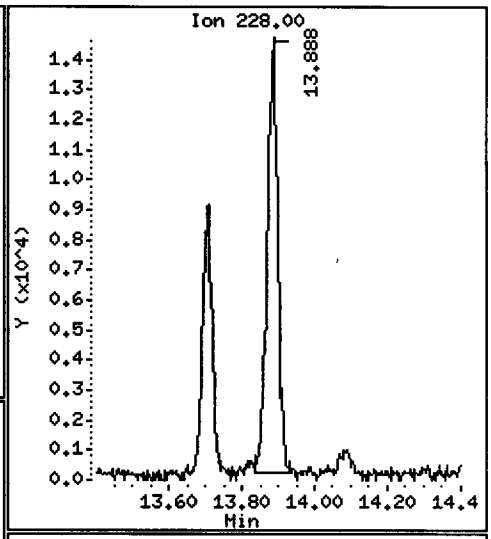
Concentration: 11.87 ug/kg

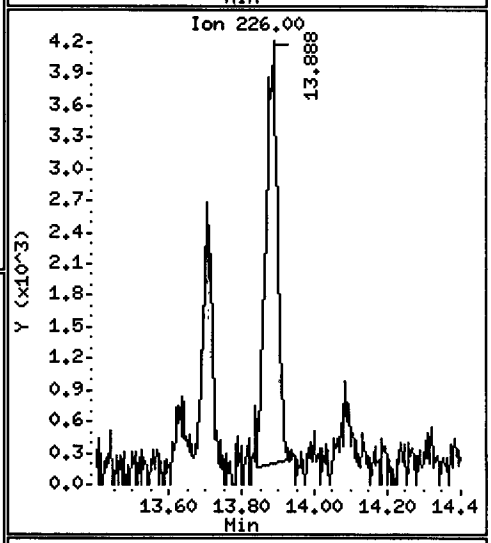


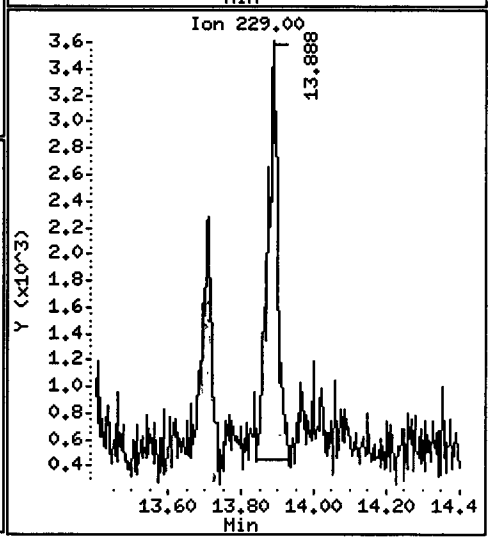












Data File: /chem3/nt4.i/20110502.b/05021110.d

Date : 02-MAY-2011 16:13

Client ID: LL-SB3-0-0.5-041911

Instrument: nt4.i

Sample Info: SS71J

Volume Injected (uL): 1.0

Operator: JZ

Column phase: ZB35

Column diameter: 0.32

74 Benzo(b)fluoranthene

Concentration: 10.64 ug/kg