Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC/MS SVOA Analyst Notes / Corrective Action Log

ARI Project ID: CWRM 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:** 4/22/11

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

SS83 : 00599

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

	0.10000	0.50000	1.000	2.500	5 000	10.000	___	
Compound	Level 1	Level 2	Level 3	Level 4	Level 5	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

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	+++++	+++++

Analytical Resources Inc.: Organics Instrument Log

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

Date: 4/21/11 Analysis: SimPAH Analyst: AR

GC Program: SimPAH35 Column No: 186782 Column Type: ZB-35

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

Calibration File: 0421102 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
				wrong 2.5 added AR											
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

Maintenance / Comments

AR 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

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

Date : 21-APR-2011 19:52

Client ID: DFTPP0421

Instrument: nt4.i

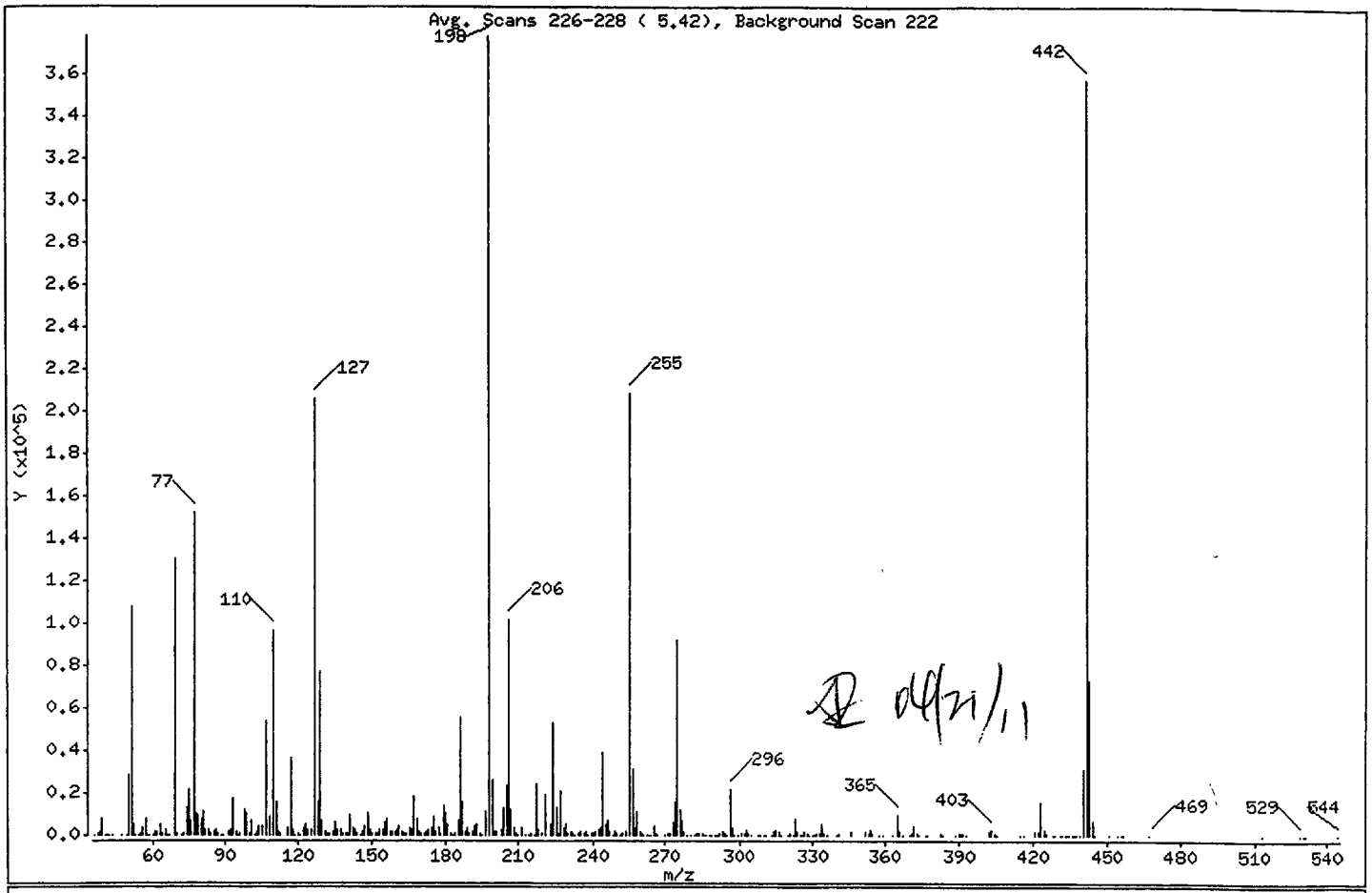
Sample Info: DFTPP0421

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

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
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

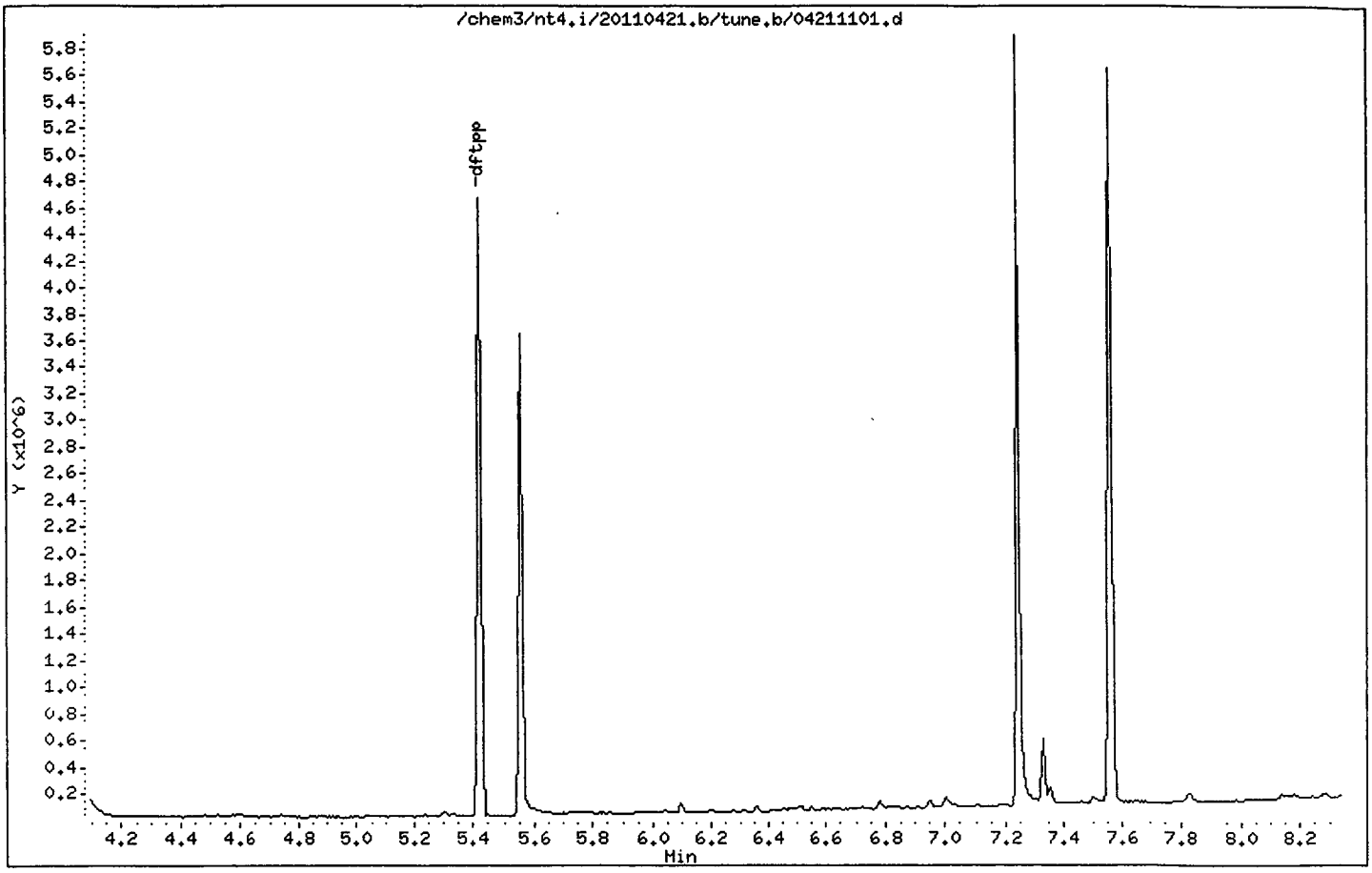
Instrument: nt4.i

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

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

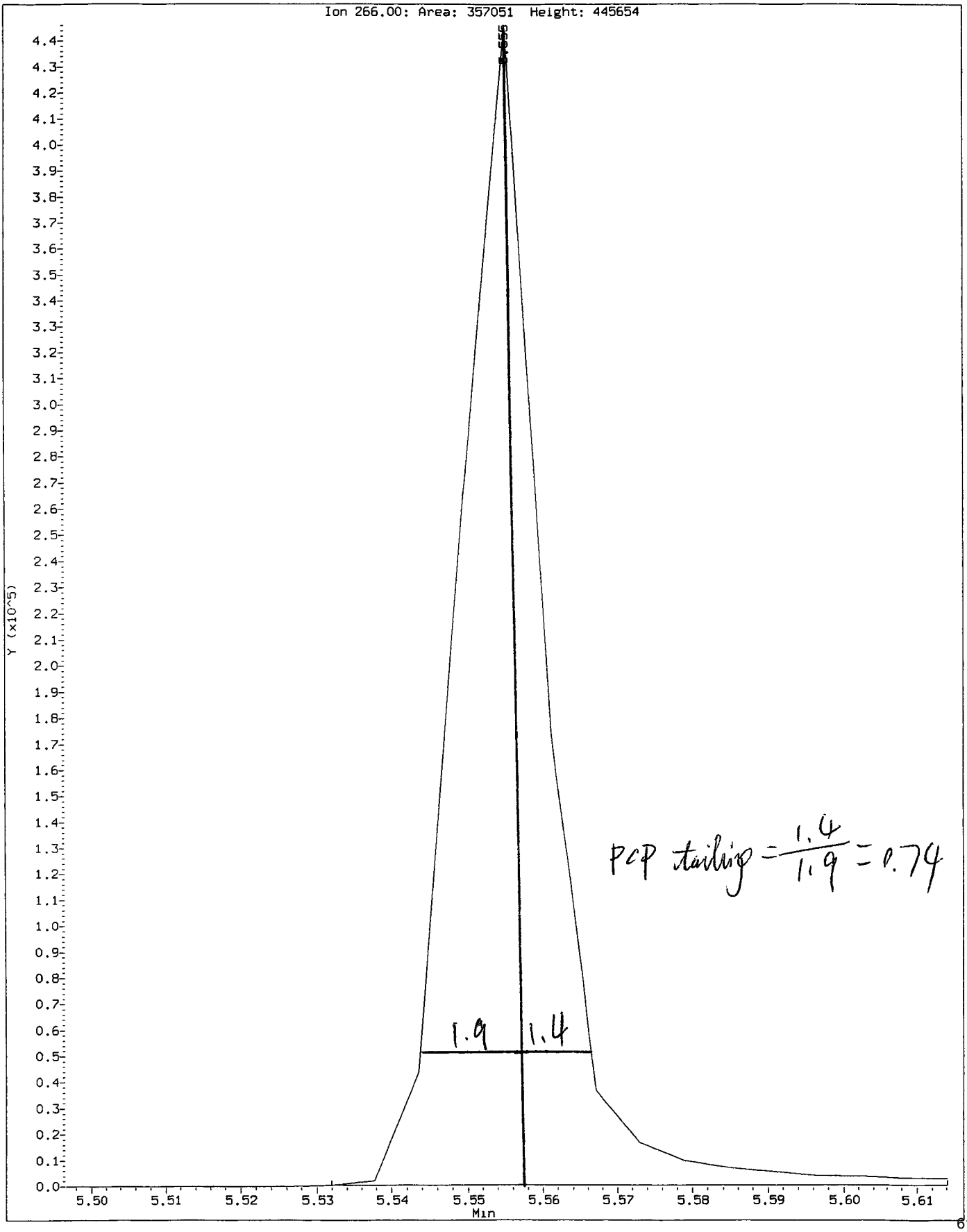
$$\text{DDT Percent Breakdown} = \frac{(0 + 75148) * 100}{(0 + 75148 + 894515)}$$

DDT Percent Breakdown = 7.7 %

OK RB 04/22/11

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

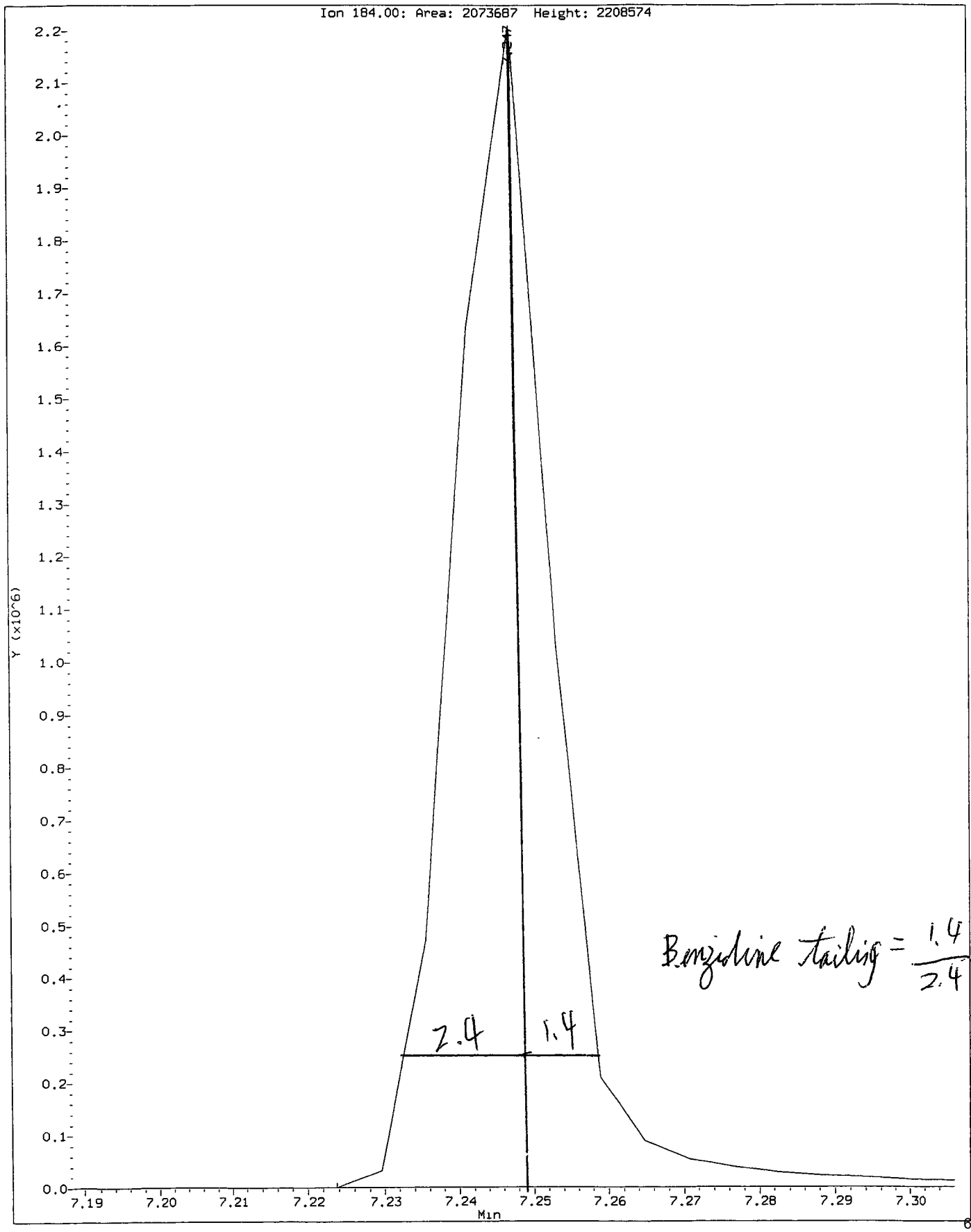
Compound: Pentachlorophenol
CAS Number: 87-86-5



SS83 : 00612

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:



SS83:00613

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

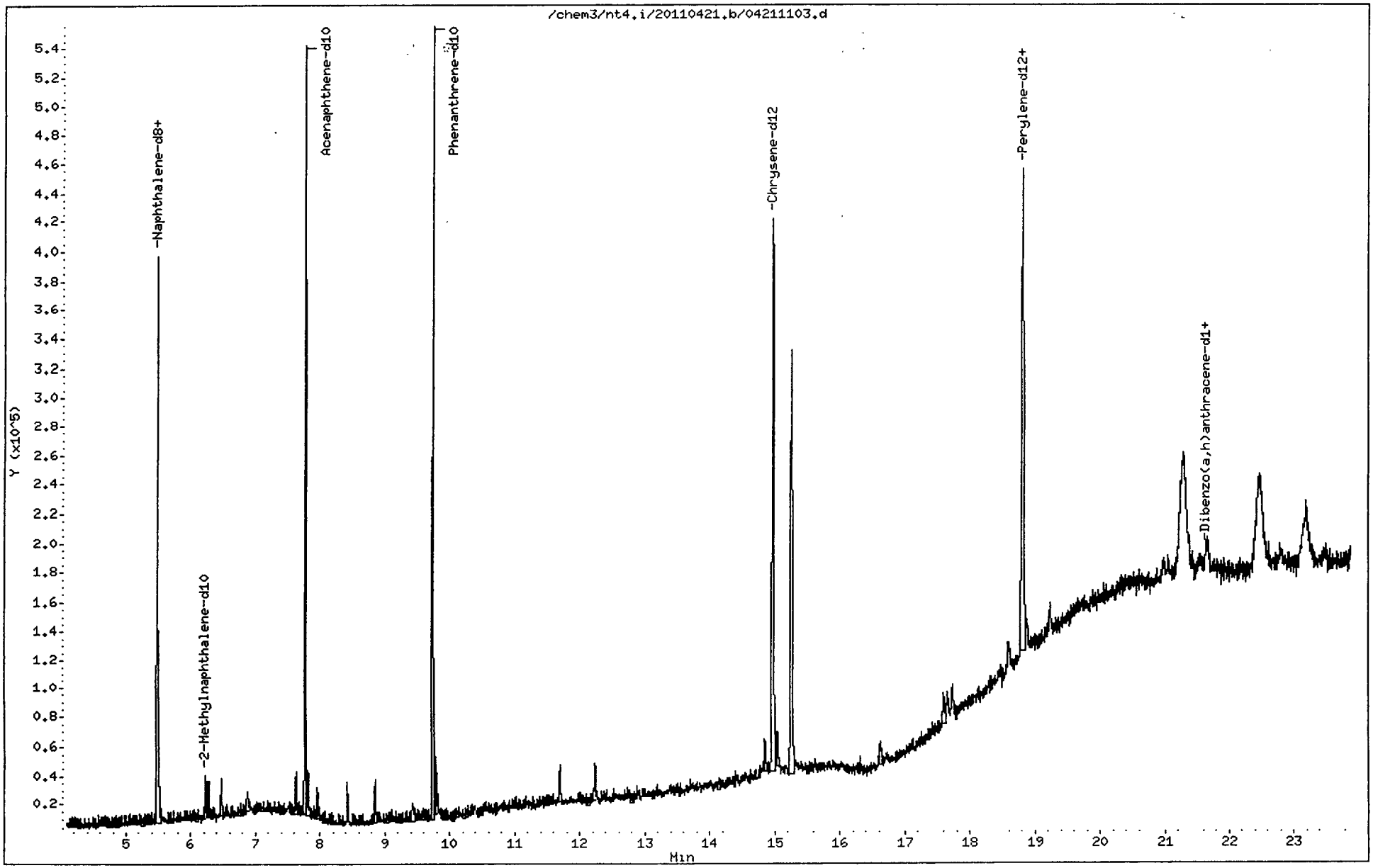
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	5.49	4.99	5.99	5.49	-0.06
42 Acenaphthene-d10	7.77	7.27	8.27	7.77	-0.04
59 Phenanthrene-d10	9.74	9.24	10.24	9.74	-0.06
69 Chrysene-d12	14.98	14.48	15.48	14.97	-0.06
77 Perylene-d12	18.83	18.33	19.33	18.82	-0.07

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)	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.

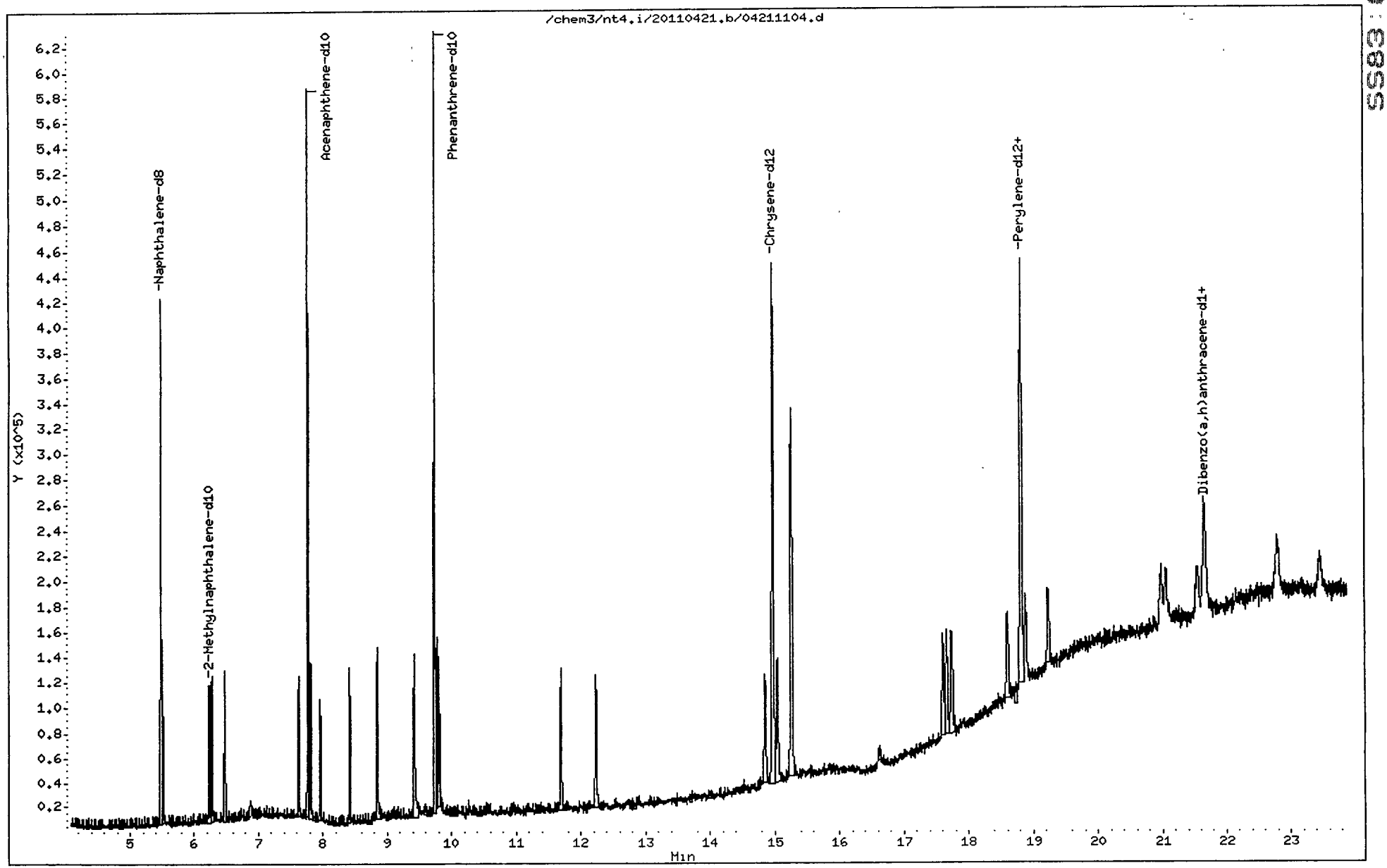
Data File: /chem3/nt4.i/20110421.b/04211104.d
Date : 21-APR-2011 21:02
Client ID: IC050421
Sample Info: IC050421,

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

Column phase: ZB35

625

SS83:88622



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

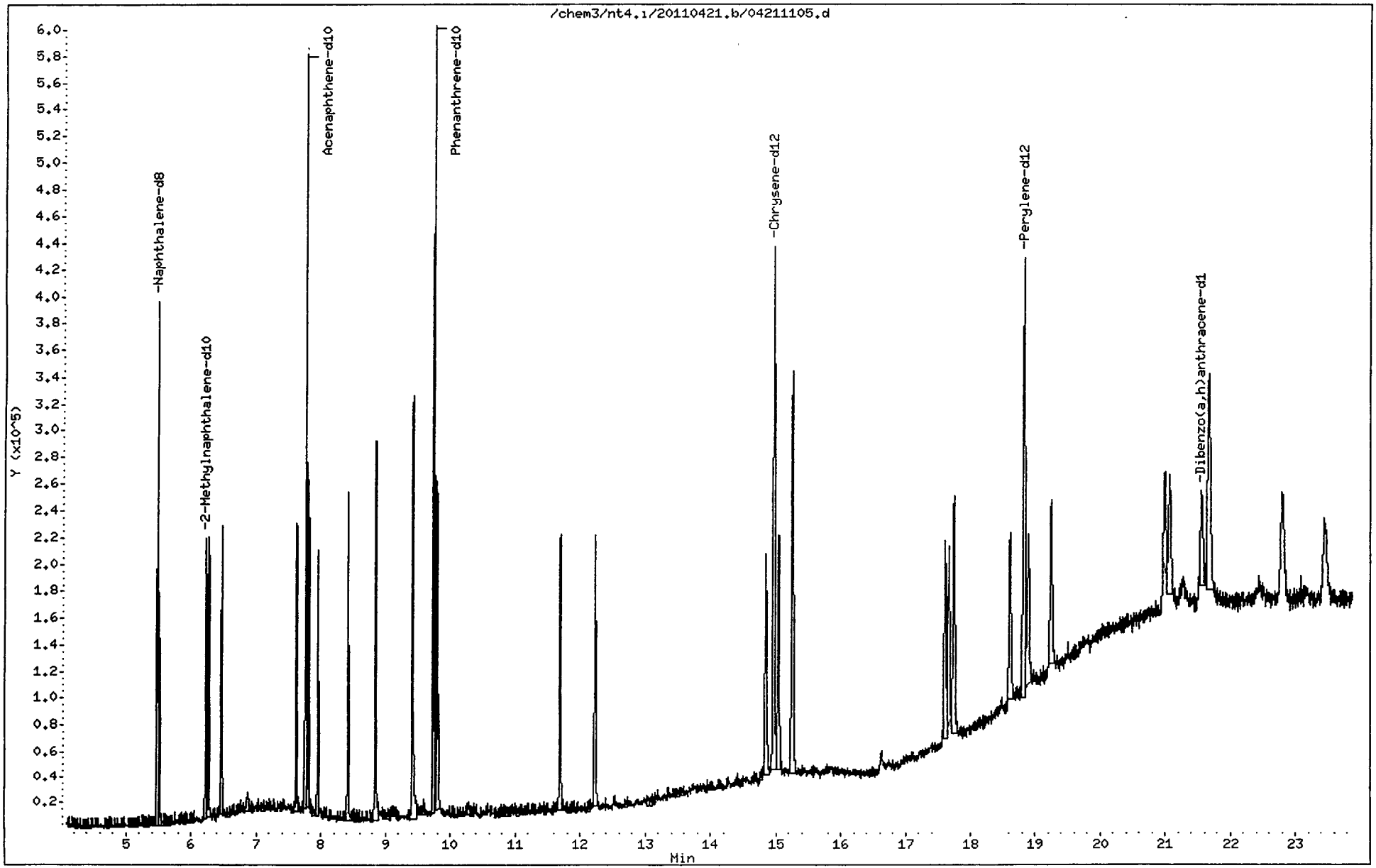
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

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

Column phase: ZB35

Instrument: nt4.i

Operator: JZ
Column diameter: 0.32



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

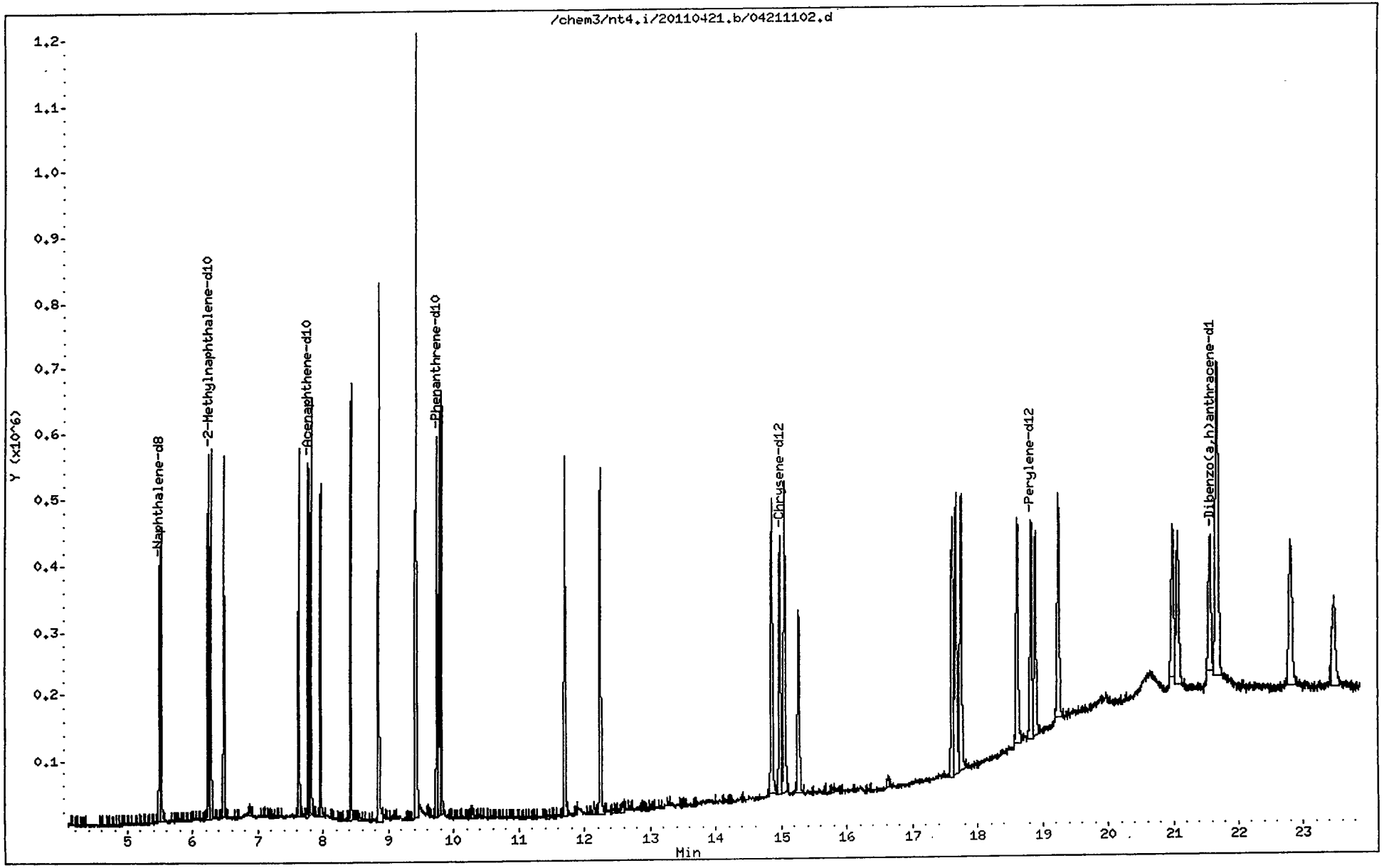
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	5.49	4.99	5.99	5.49	0.00
42 Acenaphthene-d10	7.77	7.27	8.27	7.77	0.00
59 Phenanthrene-d10	9.74	9.24	10.24	9.74	0.00
69 Chrysene-d12	14.98	14.48	15.48	14.98	0.00
77 Perylene-d12	18.83	18.33	19.33	18.83	0.00

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

AZ 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

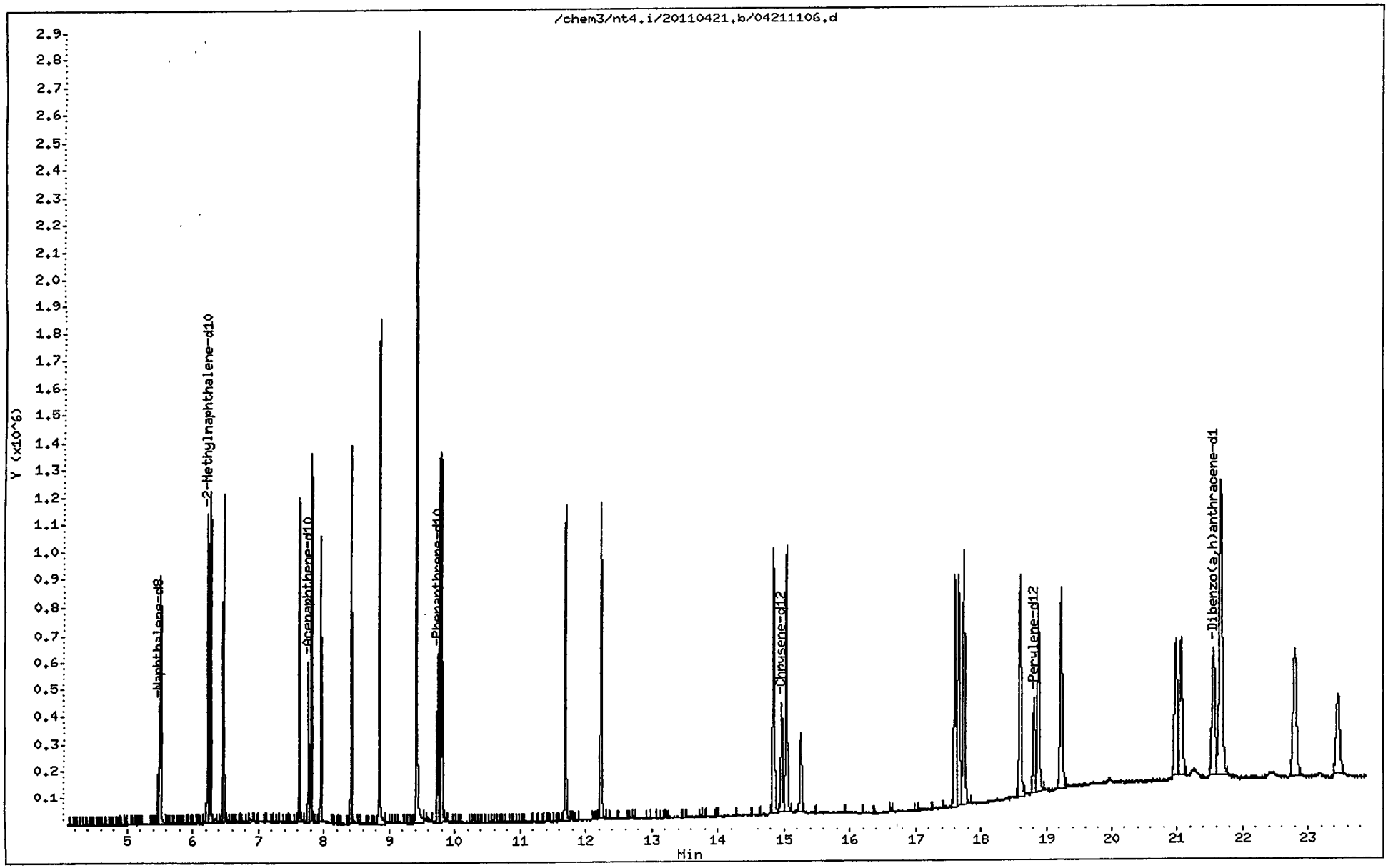
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	5.49	4.99	5.99	5.49	-0.04
42 Acenaphthene-d10	7.77	7.27	8.27	7.76	-0.07
59 Phenanthrene-d10	9.74	9.24	10.24	9.74	-0.05
69 Chrysene-d12	14.98	14.48	15.48	14.97	-0.08
77 Perylene-d12	18.83	18.33	19.33	18.82	-0.04

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 diameter: 0.32

Column phase: ZB35



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

09/22/11

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)	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

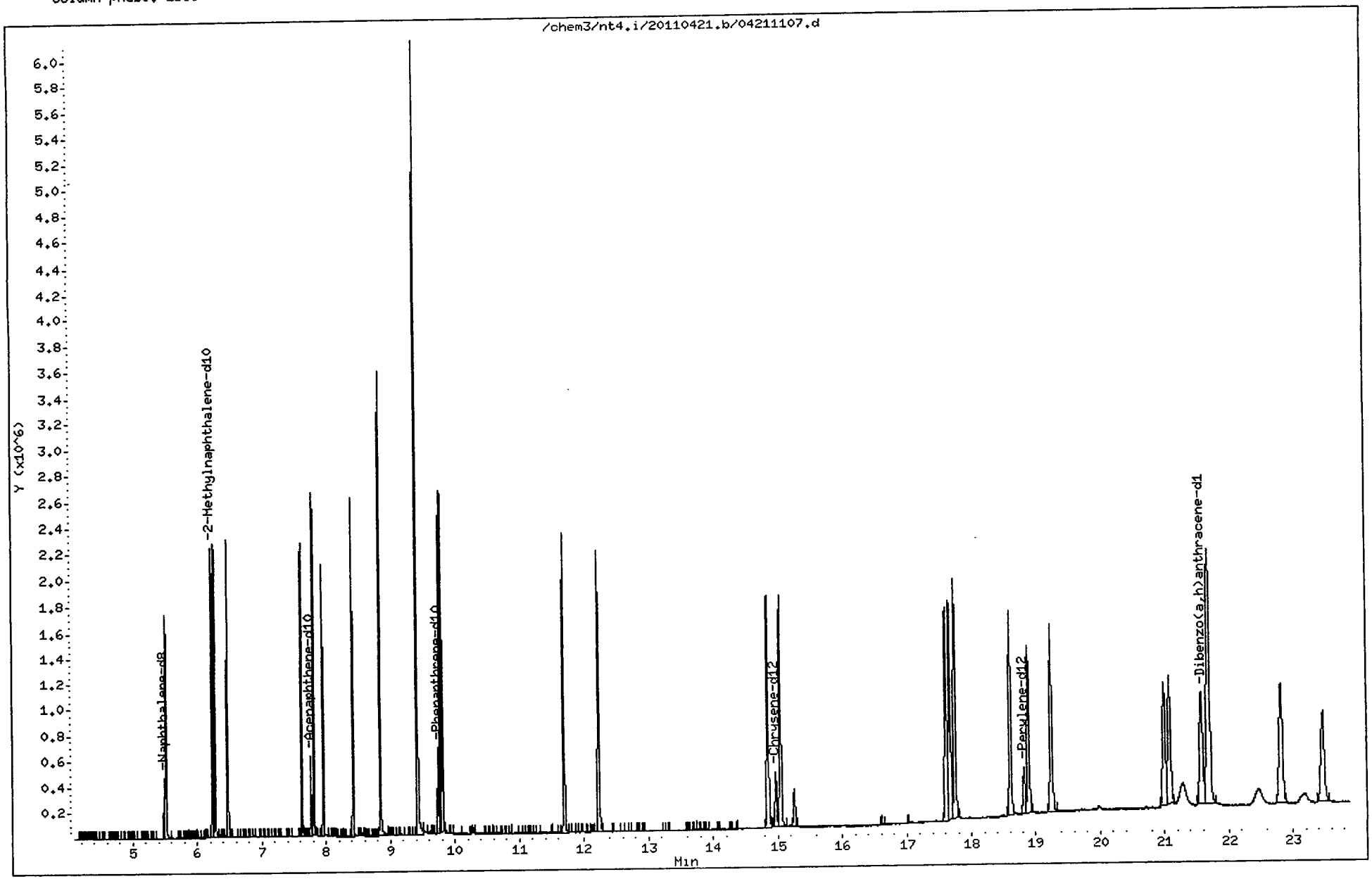
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

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

Instrument: nt4.i

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.					

Data File: /chem3/nt4.i/20110421.b/04211108.d
Report Date: 22-Apr-2011 13:01

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	

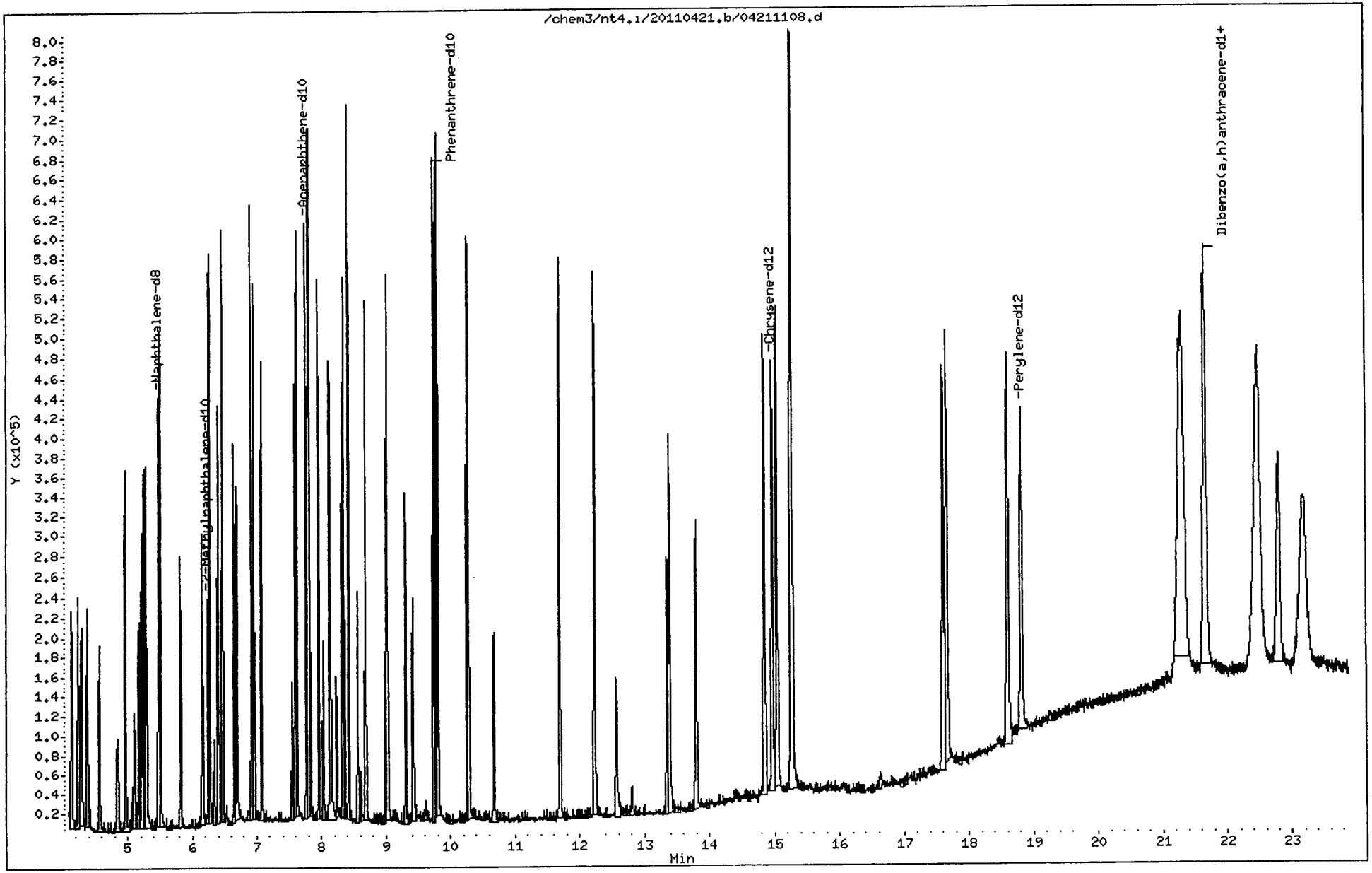
04/27/11

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

Column phase: ZB35

Instrument: nt4.i

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: SS83

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC/MS SVOA Analyst Notes / Corrective Action Log

ARI Project ID: SS83 Client ID: Floyd Snider

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

Parameter(s): 8270

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

Curve Date: 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 PF MB/LCS/LCSD

Batch QC with SS71

Additional Details on Reverse: Yes / No

Analyst: _____ **Date:** 04/29/11

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

Analytical Resources Inc.: Organics Instrument Log

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

Date: 4/27/11 Analysis: SimPAH Analyst: JZ

GC Program: SimPAH35 Column No: 18F782 Column Type: ZB-35

Instrument Tune (.U or .CT.): 100716 EM Voltage: 1647

Calibration File: 04271102 Curve Date: 4/21/11

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

INTERNAL STANDARD SUMMARY FOR DATABATCH - /chem3/nt4.i/20110427.b

	Time	Filename	LabID	ClientId	DF									
1	1125	04271101.d	DDT0427	DDT0427	1	NO ISTDS FOUND								
2	1500	04271102 d	CC0427	CC0427	1	5 17	249565	7.44	144429	9.40	246904	14.40	250091	18 17	213372
3	1533	04271103 d	SP69A 3X	HC-WB-SS-005	3	5 17	212580	7.44	137499	9 40	240705	14 40	263296	18 18	232673
4	1601	04271104 d	SP69B	HC-WB-SS-006	3	5.17	220518	7 43	136968	9 40	236944	14.39	252510	18.17	221371
5	1629	04271105.d	SP69C	HC-WB-SS-007	3	5.17	219960	7 43	137458	9 40	238724	14 39	257695	18 17	226503
6	1656	04271106.d	SP69D	HC-WB-SS-008	3	5 17	230524	7.44	147486	9 39	252392	14 39	278036	18.17	241752
7	1724	04271107 d	SS71MBW1	SS71MBW1	1	5 16	232939	7 43	143495	9 39	237941	14.38	240655	18 16	202907
8	1752	04271108.d	SS71LCSW1	SS71LCSW1	1	5 16	246394	7 44	148712	9.39	252927	14 38	260036	18 16	212958
9	1819	04271109.d	SS71LCSDW1	SS71LCSDW1	1	5 16	244820	7 43	148105	9 40	247522	14 38	260450	18 16	215888
10	1847	04271110 d	SS71QLS	SS71QLS	1	5 16	248741	7 43	152370	9 40	255263	14 38	266179	18.16	211286
11	1915	04271111.d	SS71T	LL-ER-041911	1	5.16	245337	7 43	148022	9.39	245996	14 38	257042	18 16	209525
12	1943	04271112 d	SS83P	DMA-RB-04201	1	5 16	228702	7.43	134991	9.39	227818	14 38	236394	18 16	187726
13	2010	04271113 d	SS21A	SS-4-15-2011	1	5 16	227400	7 44	143876	9 39	244266	14 38	254438	18 16	202747
14	2038	04271114 d	SS53A	SP-2	1	5 16	240920	7 44	144635	9 39	244655	14.38	255876	18 16	199501

04/28/11

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 p

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
1943	04271112.d	SS83P	DMA-RB-042	1	NO MANUAL INTEGRATION

04/28/11

SS83 : 09553

656

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 Injection Date: 28-APR-2011 13:38
Lab File ID: 04281102.d Init. Cal. Date(s): 21-APR-2011 21-APR-2011
Analysis Type: Init. Cal. Times: 20:07 22:25
Lab Sample ID: CC0428 Quant Type: ISTD
Method: /chem3/nt4.i/20110428.b/SIMPNA0421.m

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

R 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)	289041	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

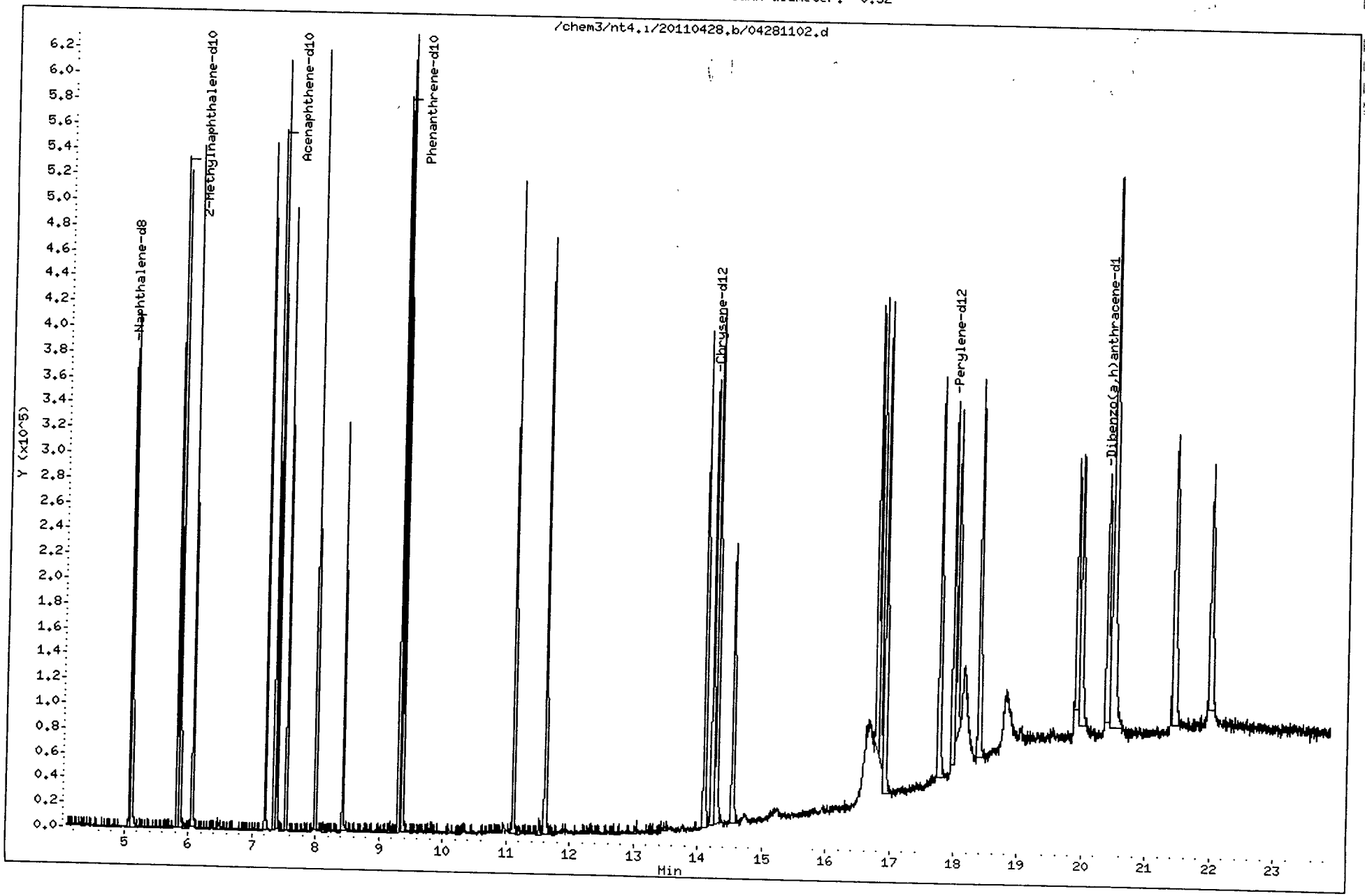
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

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

Column phase: ZB35

Instrument: nt4.i

Operator: JZ
Column diameter: 0.32



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

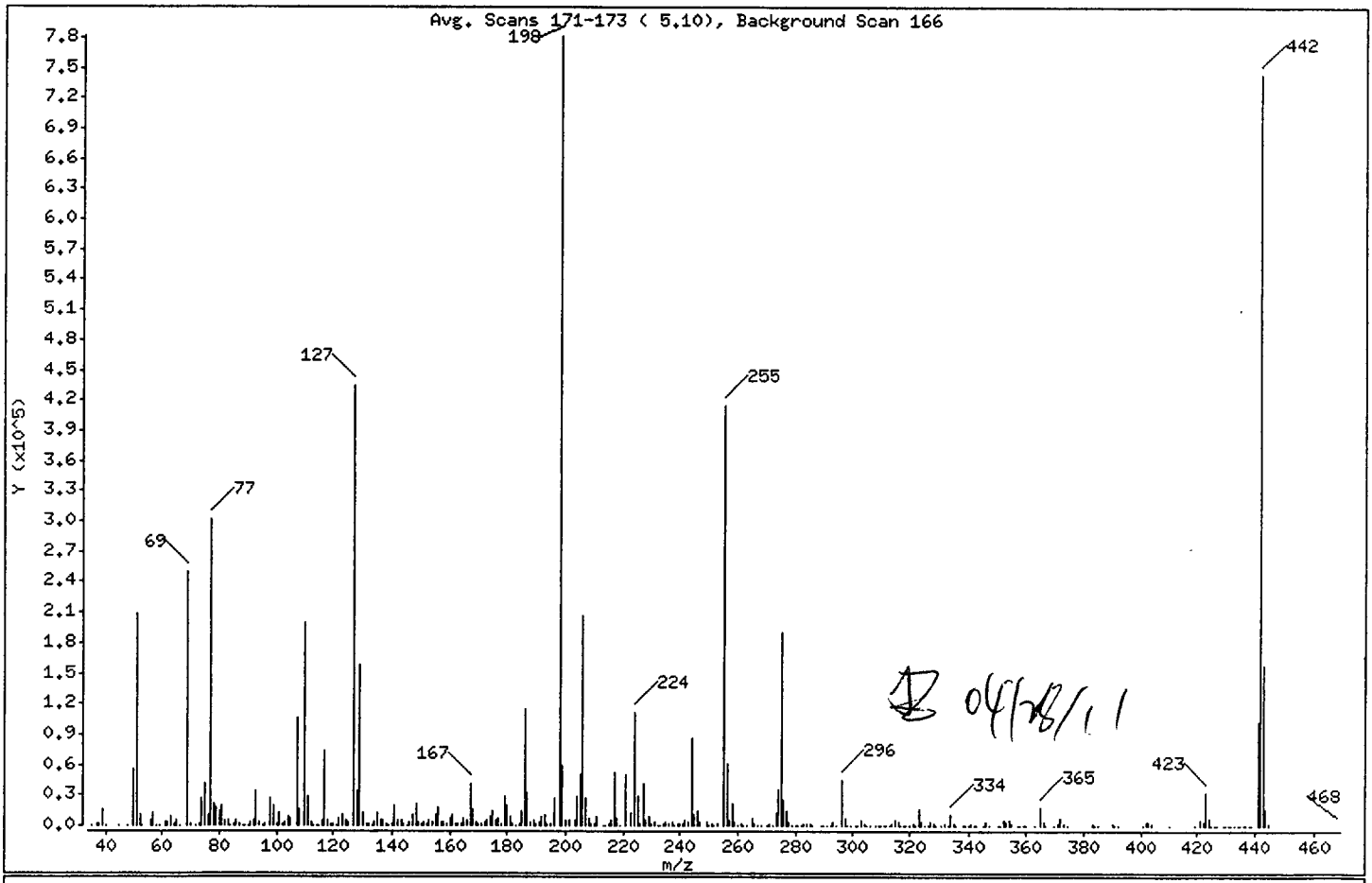
Sample Info: DFTPP0428

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

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: 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

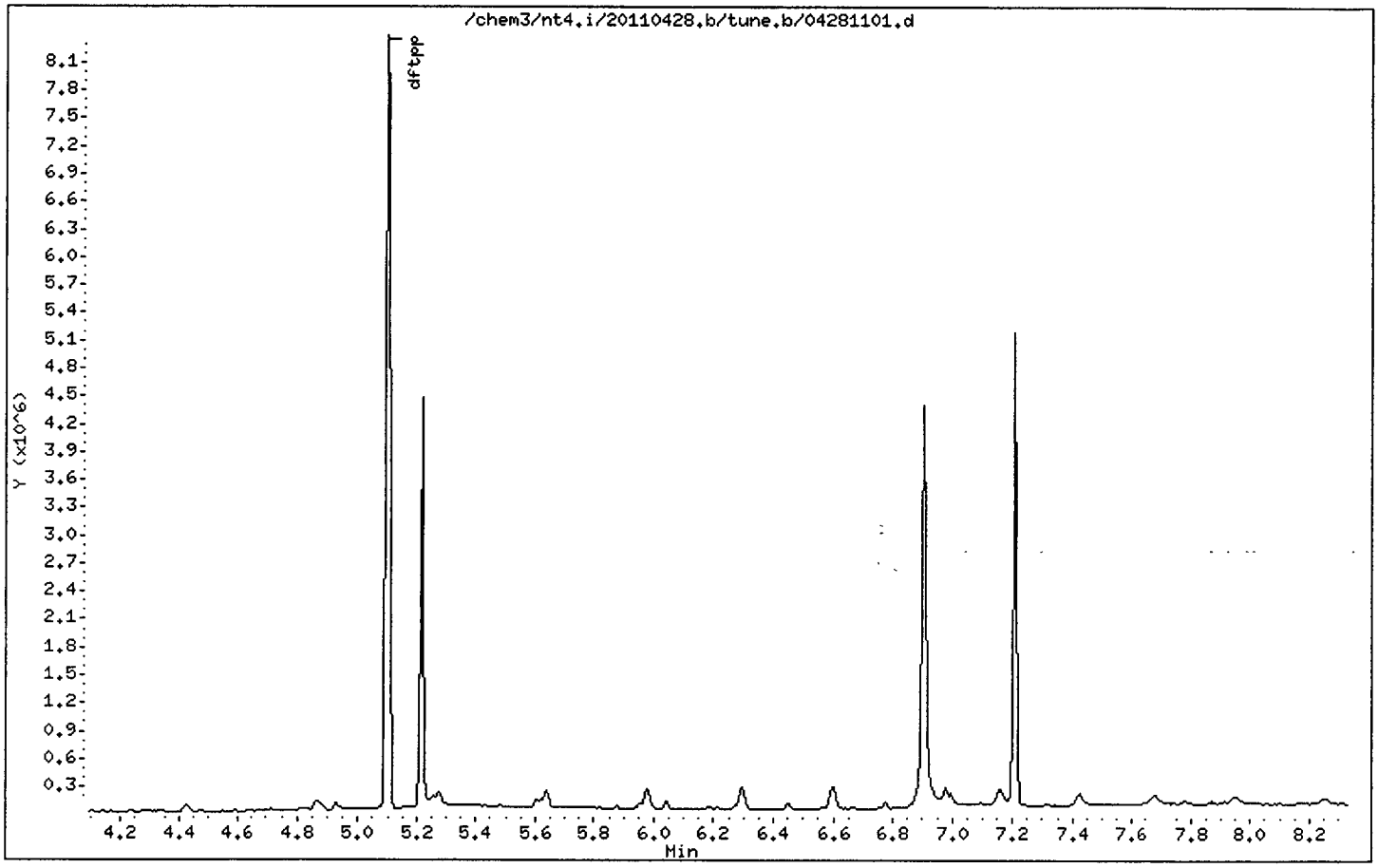
Instrument: nt4.i

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

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

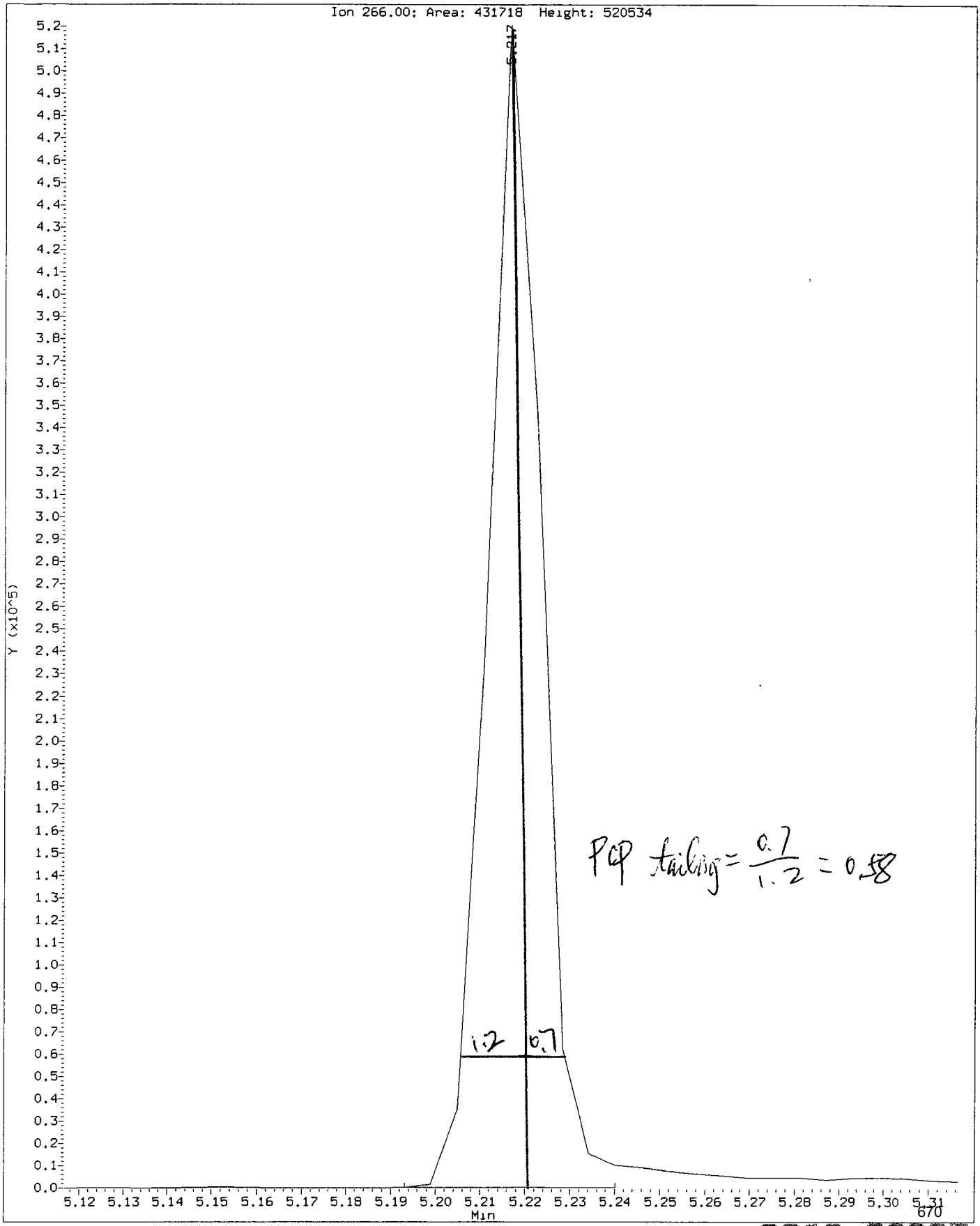
$$\text{DDT Percent Breakdown} = \frac{(0 + 37904) * 100}{(0 + 37904 + 877102)}$$

DDT Percent Breakdown = 4.1 %

04/28/11

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

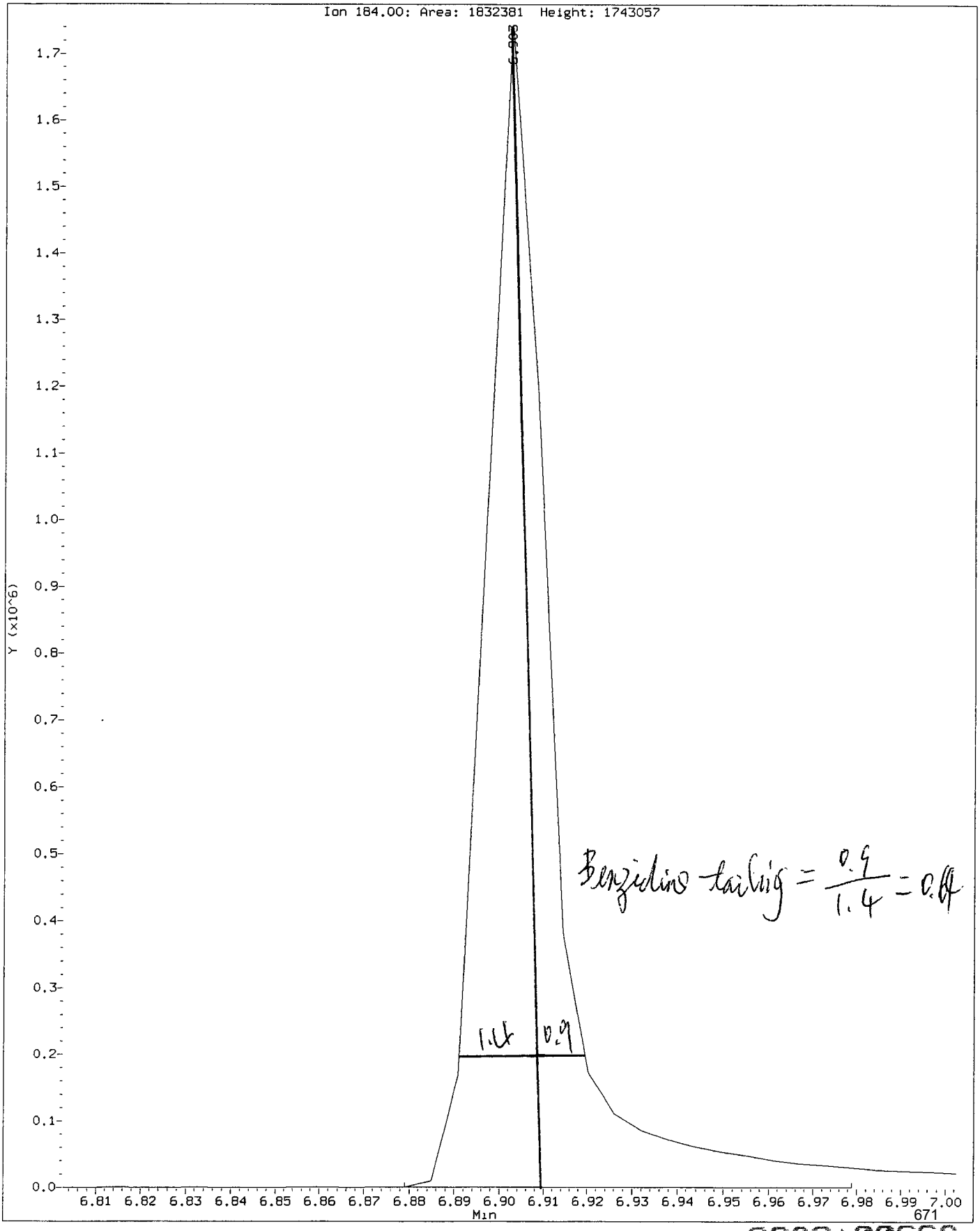
Compound: Pentachlorophenol
CAS Number: 87-86-5



SS83:00667

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 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 11-8726
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 04/28/11

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

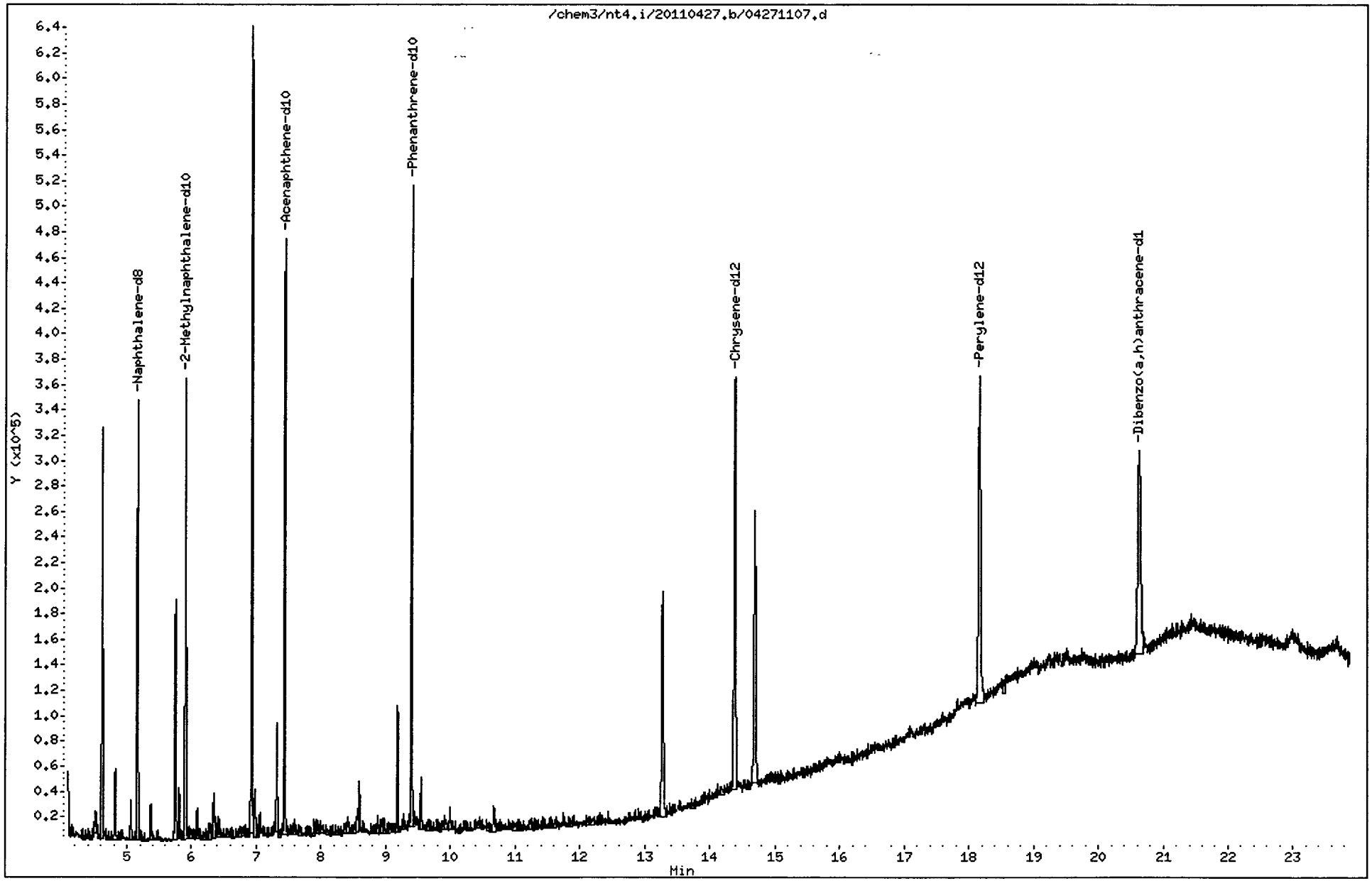
Client SDG: SS71
Fraction: SV
Client Smp ID: SS71MBW1
Operator: JZ
SampleType: BLANK
Quant Type: ISTD

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

676
SS83:00673



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 SS83LCSW1 Client Smp ID: SS71LCSW1
Inj Date : 27-APR-2011 17:52
Operator : JZ Inst ID: nt4.i
Smp Info : SS71LCSW1,
Misc Info : 11-8673 11-8726
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)	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)	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

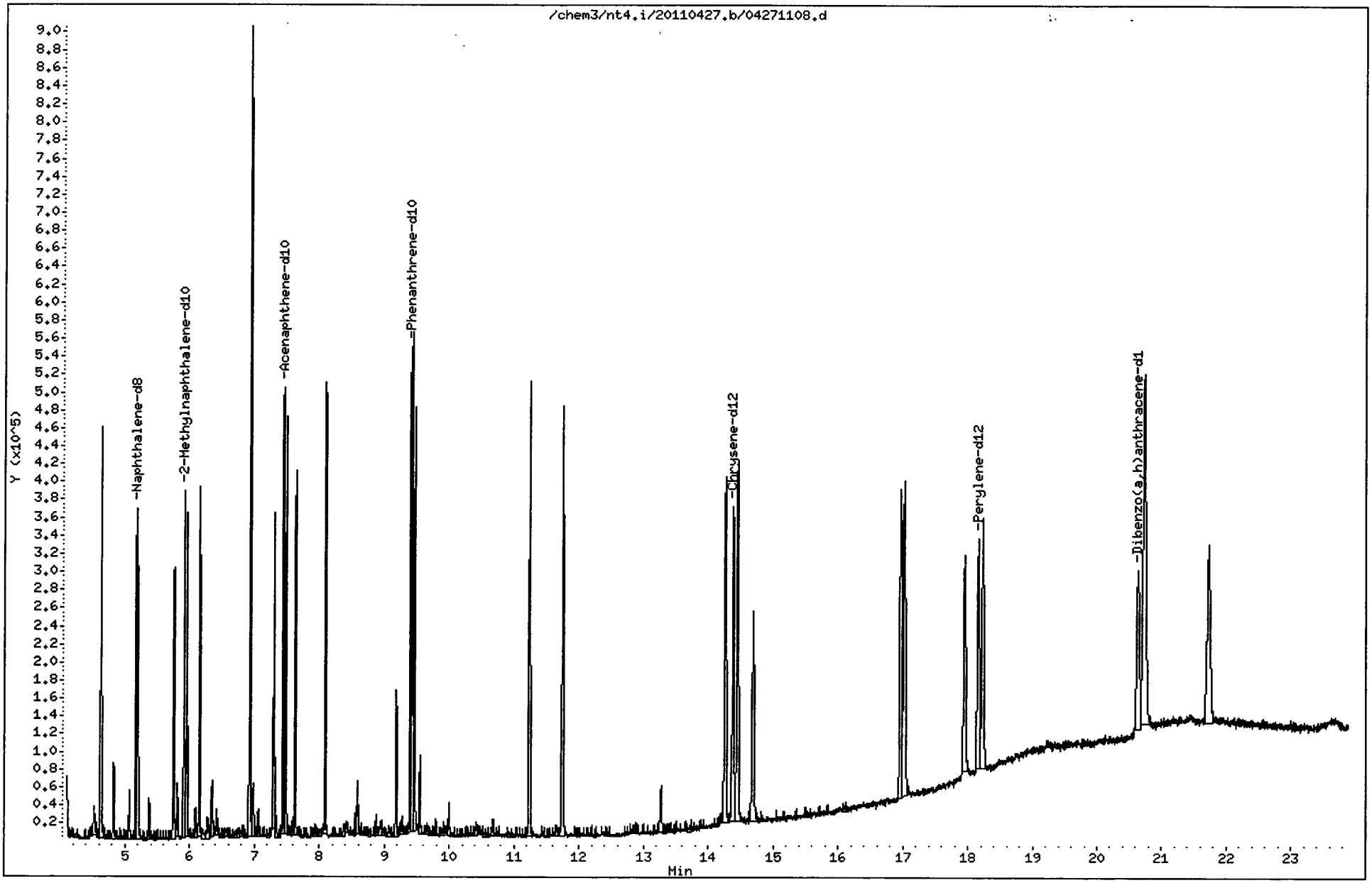
SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	3.000	2.054	68.48	30-106
$ 191 Dibenzo(a,h)anthra	3.000	2.452	81.72	10-130

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

682

SS83:00679



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 SS83LCSDW1 Client Smp ID: SS71LCSDW1
Inj Date : 27-APR-2011 18:13
Operator : JZ Inst ID: nt4.i
Smp Info : SS71LCSDW1,
Misc Info : 11-8673 11-8726
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

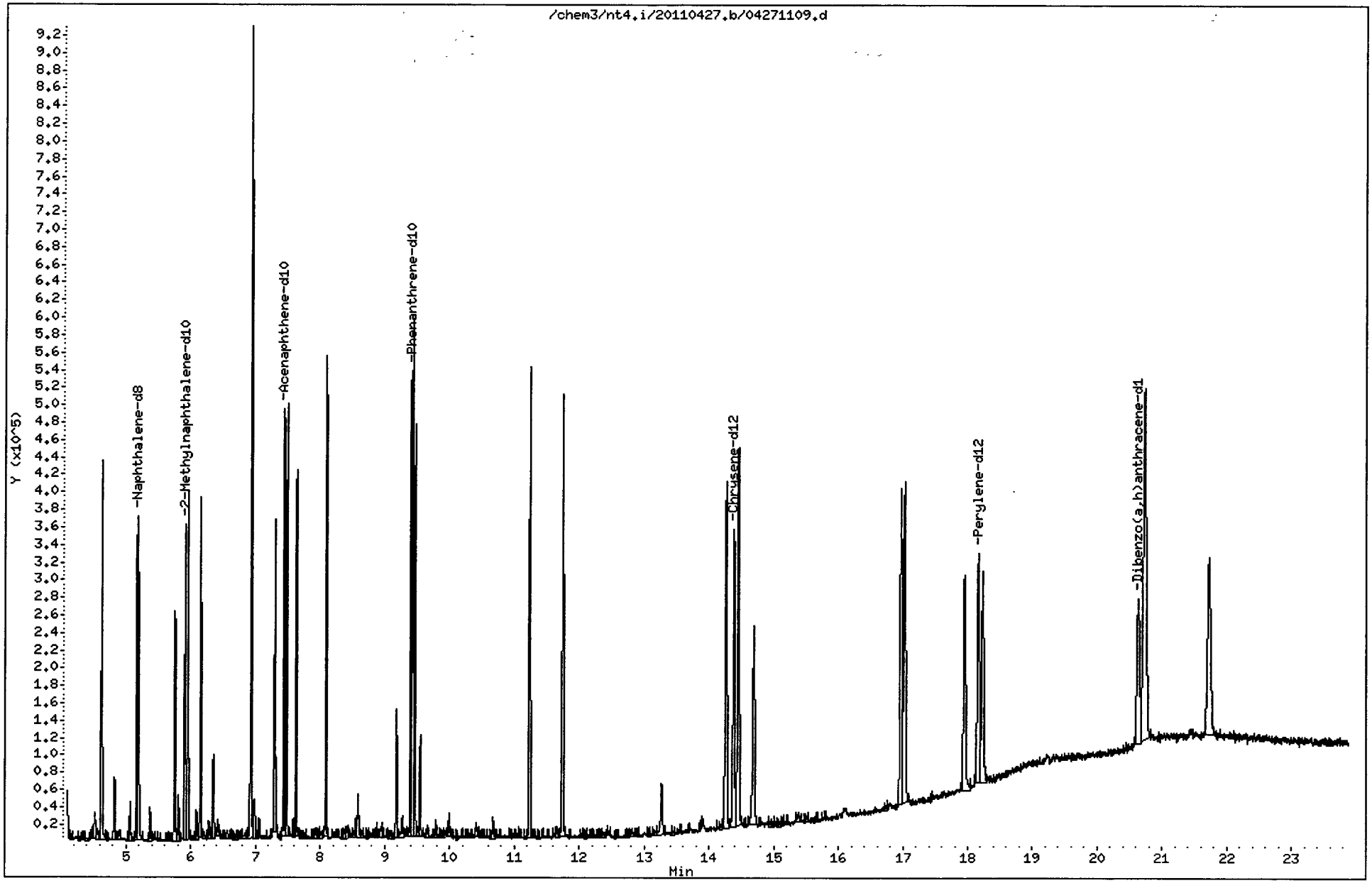
Client Name: Floyd Snider
Client SDG: SS71
Sample Matrix: LIQUID
Fraction: SV
Lab Smp Id: SS71LCSDW1
Client Smp ID: SS71LCSDW1
Level: LOW
Operator: JZ
Data Type: MS DATA
SampleType: LCSD
SpikeList File: pnalcss.spk
Quant Type: ISTD
Sublist File: pnax.sub
Method File: /chem3/nt4.i/20110427.b/SIMPNA0421.m
Misc Info: 11-8673

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/04271112.d
Lab Smp Id: SS83P Client Smp ID: DMA-RB-042011
Inj Date : 27-APR-2011 19:43
Operator : JZ Inst ID: nt4.i
Smp Info : SS83P
Misc Info : 11-8726
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: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

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)	FINAL (ug/L)
* 27 Naphthalene-d8	136	5.163	5.174	(1.000)	228702	2.00000	
28 Naphthalene	128	Compound Not Detected.					
$ 190 2-Methylnaphthalene-d10	152	5.908	5.915	(1.144)	133344	2.08600	2.086
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)	134991	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)	227818	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)	236394	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	18.160	18.173	(1.000)	187726	2.00000	
78 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
$ 191 Dibenzo(a,h)anthracene-d14	292	20.623	20.650	(1.136)	153728	1.97950	1.979
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: 04271112.d
Lab Smp Id: SS83P
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20110427.b/SIMPNA0421.m
Misc Info: 11-8726

Calibration Date: 27-APR-2011
Calibration Time: 15:00
Client Smp ID: DMA-RB-042011
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	228702	-17.15
42 Acenaphthene-d10	158527	79264	317054	134991	-14.85
59 Phenanthrene-d10	277528	138764	555056	227818	-17.91
69 Chrysene-d12	304115	152058	608230	236394	-22.27
77 Perylene-d12	257833	128916	515666	187726	-27.19

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	-0.08

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

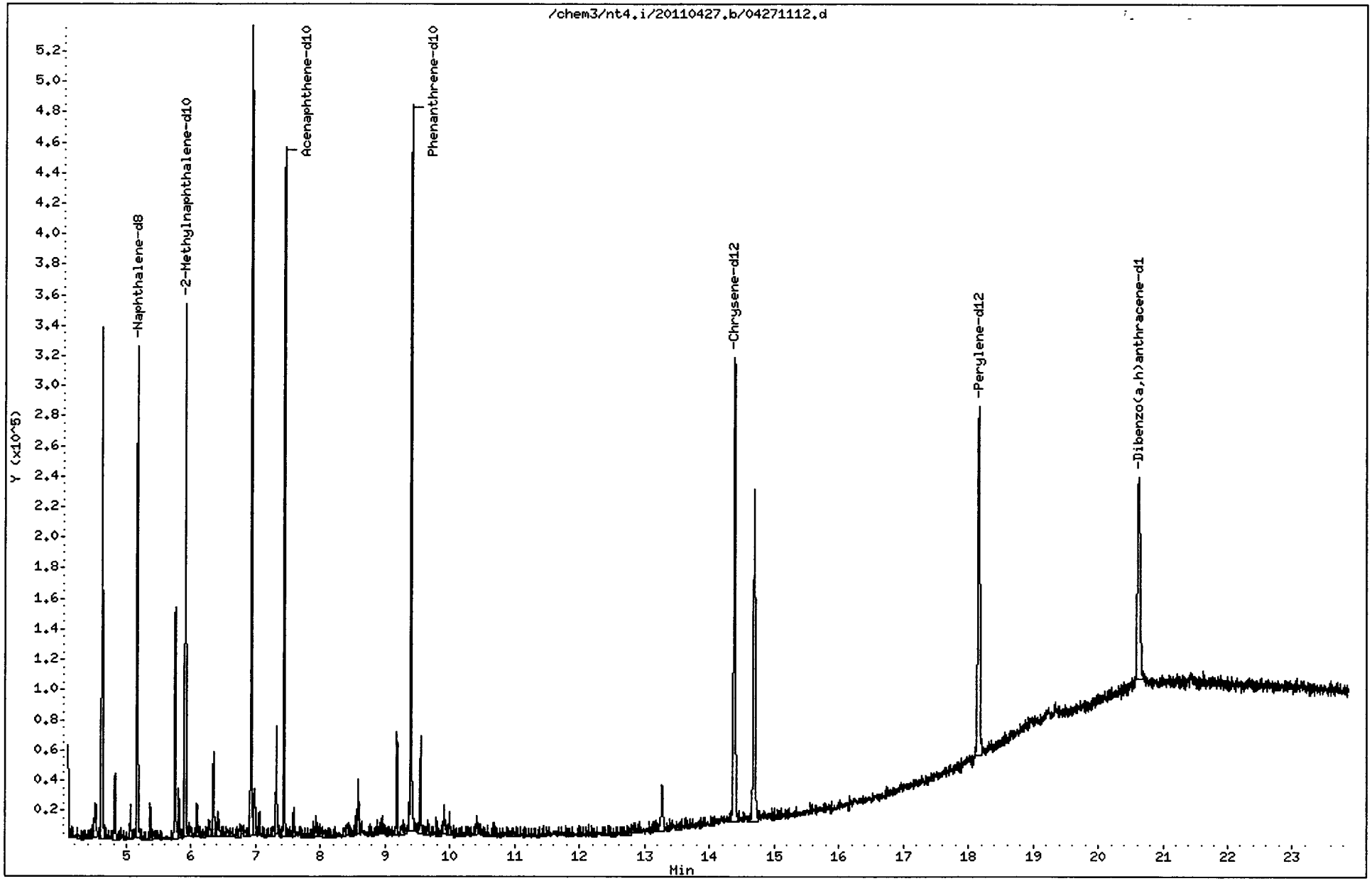
Client Name: Floyd Snider
Client SDG: SS83
Sample Matrix: LIQUID
Fraction: SV
Lab Smp Id: SS83P
Client Smp ID: DMA-RB-042011
Level: LOW
Operator: JZ
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: pnalcss.spk
Quant Type: ISTD
Sublist File: pnax.sub
Method File: /chem3/nt4.i/20110427.b/SIMPNA0421.m
Misc Info: 11-8726

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	3.000	2.086	69.53	30-106
$ 191 Dibenzo(a,h)anthra	3.000	1.979	65.98	10-130

Data File: /chem3/nt4.i/20110427.b/04271112.d
Date : 27-APR-2011 19:43
Client ID: DMA-RB-042011
Sample Info: SS83P
Volume Injected (uL): 1.0
Column phase: ZB35

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

SS83:00631



CO-ELUTION SUMMARY FOR FILE - 04271112.d

Lab ID: SS83P, 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: SS83 Client ID: Floyd Snider

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

Parameter(s): _____

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

Curve Date: SimPAH Analysis Start Date: _____

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

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

Samples A-D + MB/LCS/LCSD + MS/MSD.

Forms included

Curve copy in "water sample folder".

Additional Details on Reverse: Yes / No

Analyst: _____ **Date:** 5/10/11

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

SS83 : 00693

Analytical Resources Inc.: Organics Instrument Log

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

Date: 5/3/11 Analysis: SIM PAH Analyst: [illegible]

GC Program: SIMPAH35 Column No: 185782 Column Type: ZB-35

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

Calibration File: 05031102 Curve Date: 4/21/11

IS/SS	Ical/Ccal	LCS/ICV
1744-1	1818-1	
	1788-3	

INTERNAL STANDARD SUMMARY FOR DATABATCH - /chem3/nt4.i/20110503.b

	Time	Filename	LabID	ClientId	DF								
1	1620	05031101.d	DFTPP0503	DFTPP0503	1	NO ISTDS FOUND							
2	1633	05031102.d	CC0503	CC0503	1	4.80	230643	7.05	128869	8.99	220116	13.67	222690	17.33	208231
3	1707	05031103.d	SS83MBS1	SS83MBS1	1	4.80	235806	7.05	133181	8.99	229718	13.68	228531	17.34	206704
4	1734	05031104.d	SS83LCSS1	SS83LCSS1	1	4.79	245903	7.04	139349	8.99	244642	13.66	241954	17.33	214147
5	1802	05031105.d	SS83LCSDS1	SS83LCSDS1	1	4.79	246666	7.04	138225	8.99	237712	13.67	240296	17.32	214827
6	1830	05031106.d	SS83QLS	SS83QLS	1	4.79	260098	7.04	148012	8.99	252472	13.66	254833	17.32	223810
7	1857	05031107.d	SS83A	DMA-TP1-0-3-	1	4.79	252741	7.05	148707	8.99	245414	13.67	246170	17.32	218245
8	1925	05031108.d	SS83B	DMA-TP1-3-4.	1	4.79	247467	7.04	141335	8.99	239255	13.67	240422	17.33	218746
9	1953	05031109.d	SS83C	DMA-TP1-4.5-	1	4.79	275821	7.04	158486	8.99	264064	13.67	260406	17.32	243764
10	2020	05031110.d	SS83D	DMA-TP2-1.5-	1	4.79	272221	7.04	161246	8.99	263626	13.67	270942	17.33	239371
11	2048	05031111.d	SS83E	DMA-TP2-3-4-	1	4.79	271406	7.04	155134	8.99	260660	13.66	264008	17.33	229433
12	2116	05031112.d	SS83F	DMA-TP6-0-2	1	4.79	253566	7.04	145190	8.99	239228	13.67	248606	17.33	215772
13	2143	05031113.d	SS83G	DMA-TP6-2.5-	1	4.79	258457	7.04	150940	8.99	248035	13.66	255344	17.33	225094
14	2211	05031114.d	SS83H	DMA-TP4-0-1.	1	4.79	251052	7.04	152257	8.99	247679	13.68	279328	17.36	239515
15	2239	05031115.d	SS83I	DMA-TP4-1.5-	1	4.79	265412	7.04	159329	8.99	266793	13.67	275370	17.33	235139
16	2306	05031116.d	SS83J	DMA-TP5-1.5-	1	4.79	252929	7.05	158060	8.99	256690	13.69	292839	17.37	249846
17	2334	05031117.d	SS83K	DMA-TP5-1.5-	1	4.80	257541	7.05	164638	8.99	268030	13.69	290193	17.37	240258
18	0002	05031118.d	SS83L	DMA-TP5-2-3-	1	4.79	265370	7.05	154938	8.99	266029	13.67	272076	17.34	236441
19	0029	05031119.d	SS83M	DMA-TP3-2-3-	1	4.80	269185	7.05	155785	8.99	268836	13.68	272819	17.35	249784
20	0057	05031120.d	SS83N	DMA-TP3-3-4-	1	4.80	267120	7.05	158696	8.99	261321	13.69	283157	17.35	246265
21	0124	05031121.d	SS83O	DMA-TP3-5-6-	1	4.80	274253	7.05	160074	8.99	272916	13.68	282901	17.33	242471
22	0152	05031122.d	SS83OMS	DMA-TP3-5-6-	1	4.79	270585	7.05	156375	8.99	270564	13.67	283383	17.34	241320
23	0220	05031123.d	SS83OMSD	DMA-TP3-5-6-	1	4.79	263739	7.05	155039	8.99	262291	13.67	281086	17.34	242617

Maintenance / Comments

[illegible] 05/04/11

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/20110503.b

ARI Job No.: SS83 Method: SIMPNA0421.m Instrument: nt4.i Date: 03-MAY-2011

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1707	05031103.d	SS83MBS1	SS83MBS1	1	NO MANUAL INTEGRATION
1734	05031104.d	SS83LCSS1	SS83LCSS1	1	NO MANUAL INTEGRATION
1802	05031105.d	SS83LCSDS1	SS83LCSDS1	1	NO MANUAL INTEGRATION
1857	05031107.d	SS83A	DMA-TP1-0-	1	NO MANUAL INTEGRATION
1925	05031108.d	SS83B	DMA-TP1-3-	1	NO MANUAL INTEGRATION
1953	05031109.d	SS83C	DMA-TP1-4.	1	NO MANUAL INTEGRATION
2020	05031110.d	SS83D	DMA-TP2-1.	1	NO MANUAL INTEGRATION
2048	05031111.d	SS83E	DMA-TP2-3-	1	NO MANUAL INTEGRATION
2116	05031112.d	SS83F	DMA-TP6-0-	1	NO MANUAL INTEGRATION
2143	05031113.d	SS83G	DMA-TP6-2.	1	NO MANUAL INTEGRATION
2211	05031114.d	SS83H	DMA-TP4-0-	1	NO MANUAL INTEGRATION
2239	05031115.d	SS83I	DMA-TP4-1.	1	NO MANUAL INTEGRATION
2306	05031116.d	SS83J	DMA-TP5-1.	1	NO MANUAL INTEGRATION
2334	05031117.d	SS83K	DMA-TP5-1.	1	NO MANUAL INTEGRATION
0002	05031118.d	SS83L	DMA-TP5-2-	1	NO MANUAL INTEGRATION
0029	05031119.d	SS83M	DMA-TP3-2-	1	NO MANUAL INTEGRATION
0057	05031120.d	SS83N	DMA-TP3-3-	1	Benzo(a)pyrene,
0124	05031121.d	SS83O	DMA-TP3-5-	1	NO MANUAL INTEGRATION
0[illegible]	05031122.d	SS83OMS	DMA-TP3-5-	1	NO MANUAL INTEGRATION
0220	05031123.d	SS83OMSD	DMA-TP3-5-	1	NO MANUAL INTEGRATION

05/10/11

SS83 00695

698

Q-FLAG SUMMARY FOR DATABATCH - /chem3/nt4.i/20110503.b

Instrument: nt4.i Date: 03-MAY-2011 Method: SIMPNA0421.m

INITIAL CAL: 21-APR-2011

Compound	%RSD or R^2
NO Q-FLAGS	

CONTINUING CAL: 03-MAY-2011

Compound	%D
NO Q-FLAGS	

05/04/11

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt4.i Injection Date: 03-MAY-2011 16:33
Lab File ID: 05031102.d Init. Cal. Date(s): 21-APR-2011 21-APR-2011
Analysis Type: Init. Cal. Times: 20:07 22:25
Lab Sample ID: CC0503 Quant Type: ISTD
Method: /chem3/nt4.i/20110503.b/SIMPNA0421.m

D 05/04/11

COMPOUND	RRF / AMOUNT	RF2	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
28 Naphthalene	0.90157	0.88791	0.010	-1.51463	20.00000	Averaged
$ 190 2-Methylnaphthalene-d10	0.55901	0.55730	0.010	-0.30565	20.00000	Averaged
32 2-Methylnaphthalene	0.50597	0.49238	0.010	-2.68603	20.00000	Averaged
105 1-methylnaphthalene	0.52586	0.51033	0.010	-2.95364	20.00000	Averaged
40 Acenaphthylene	1.62983	1.62078	0.010	-0.55527	20.00000	Averaged
44 Acenaphthene	1.00211	0.97006	0.010	-3.19843	20.00000	Averaged
46 Dibenzofuran	1.37091	1.43076	0.010	4.36557	20.00000	Averaged
49 Fluorene	1.17634	1.20311	0.010	2.27598	20.00000	Averaged
60 Phenanthrene	0.97876	0.97266	0.010	-0.62325	20.00000	Averaged
61 Anthracene	1.01445	0.98231	0.010	-3.16786	20.00000	Averaged
64 Fluoranthene	1.08113	1.03896	0.010	-3.90005	20.00000	Averaged
65 Pyrene	1.00567	1.05787	0.010	5.19120	20.00000	Averaged
68 Benzo(a)anthracene	0.93284	0.94637	0.010	1.45099	20.00000	Averaged
71 Chrysene	0.90395	0.93560	0.010	3.50115	20.00000	Averaged
74 Benzo(b)fluoranthene	1.08510	1.12370	0.010	3.55710	20.00000	Averaged
75 Benzo(k)fluoranthene	1.11668	1.12237	0.010	0.50969	20.00000	Averaged
188 Benzo(j)fluoranthene	1.09515	1.07458	0.010	-1.87849	20.00000	Averaged
76 Benzo(a)pyrene	0.97092	0.99737	0.010	2.72433	20.00000	Averaged
78 Indeno(1,2,3-cd)pyrene	1.14225	1.18373	0.010	3.63120	20.00000	Averaged
$ 191 Dibenzo(a,h)anthracene-d14	0.82738	0.85611	0.010	3.47274	20.00000	Averaged
79 Dibenzo(a,h)anthracene	0.92626	0.97699	0.010	5.47651	20.00000	Averaged
80 Benzo(g,h,i)perylene	0.97562	1.03134	0.010	5.71097	20.00000	Averaged
99 Perylene	0.82338	0.83130	0.010	0.96097	20.00000	Averaged

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20110503.b/05031102.d
Lab Smp Id: CC0503 Client Smp ID: CC0503
Inj Date : 03-MAY-2011 16:33
Operator : JZ Inst ID: nt4.i
Smp Info : CC0503
Misc Info : 11-
Comment : 1ul Injection
Method : /chem3/nt4.i/20110503.b/SIMPNA0421.m
Meth Date : 04-May-2011 13:33 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

DB 05/04/11

AMOUNTS

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
* 27 Naphthalene-d8	136	4.800	4.800	(1.000)	230643	2.00000	
28 Naphthalene	128	4.826	4.826	(1.005)	255989	2.50000	2.462
$ 190 2-Methylnaphthalene-d10	152	5.539	5.539	(1.154)	160671	2.50000	2.492
32 2-Methylnaphthalene	141	5.583	5.583	(1.163)	141954	2.50000	2.433
105 1-methylnaphthalene	141	5.775	5.775	(1.203)	147129	2.50000	2.426
40 Acenaphthylene	152	6.908	6.908	(0.980)	261086	2.50000	2.486
* 42 Acenaphthene-d10	164	7.046	7.046	(1.000)	128869	2.00000	
44 Acenaphthene	153	7.094	7.094	(1.007)	156263	2.50000	2.420
46 Dibenzofuran	168	7.239	7.239	(1.027)	230476	2.50000	2.609
49 Fluorene	166	7.696	7.696	(1.092)	193805	2.50000	2.557
* 59 Phenanthrene-d10	188	8.993	8.993	(1.000)	220116	2.00000	
60 Phenanthrene	178	9.024	9.024	(1.004)	267624	2.50000	2.484
61 Anthracene	178	9.059	9.059	(1.007)	270279	2.50000	2.421
64 Fluoranthene	202	10.705	10.705	(1.190)	285866	2.50000	2.402
65 Pyrene	202	11.175	11.175	(0.817)	294473	2.50000	2.630
68 Benzo(a)anthracene	228	13.557	13.557	(0.992)	263435	2.50000	2.536
* 69 Chrysene-d12	240	13.671	13.671	(1.000)	222690	2.00000	
71 Chrysene	228	13.743	13.743	(1.005)	260437	2.50000	2.588
74 Benzo(b)fluoranthene	252	16.172	16.172	(0.933)	292487	2.50000	2.589
75 Benzo(k)fluoranthene	252	16.229	16.229	(0.936)	292140	2.50000	2.513
188 Benzo(j)fluoranthene	252	16.298	16.298	(0.940)	279702	2.50000	2.453
76 Benzo(a)pyrene	252	17.125	17.125	(0.988)	259604	2.50000	2.568
* 77 Perylene-d12	264	17.330	17.330	(1.000)	208231	2.00000	
78 Indeno(1,2,3-cd)pyrene	276	19.667	19.667	(1.135)	308113	2.50000	2.591
$ 191 Dibenzo(a,h)anthracene-d14	292	19.595	19.595	(1.131)	222837	2.50000	2.587
79 Dibenzo(a,h)anthracene	278	19.680	19.680	(1.136)	254300	2.50000	2.637
80 Benzo(g,h,i)perylene	276	20.503	20.503	(1.183)	268447	2.50000	2.643

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
99 Perylene	252	17.399	17.399	(1.004)	216378	2.50000	2.524

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 05031102.d
Lab Smp Id: CC0503
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20110503.b/SIMPNA0421.m
Misc Info: 11-

Calibration Date: 03-MAY-2011
Calibration Time: 16:33
Client Smp ID: CC0503
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	230643	-16.44
42 Acenaphthene-d10	158527	79264	317054	128869	-18.71
59 Phenanthrene-d10	277528	138764	555056	220116	-20.69
69 Chrysene-d12	304115	152058	608230	222690	-26.77
77 Perylene-d12	257833	128916	515666	208231	-19.24

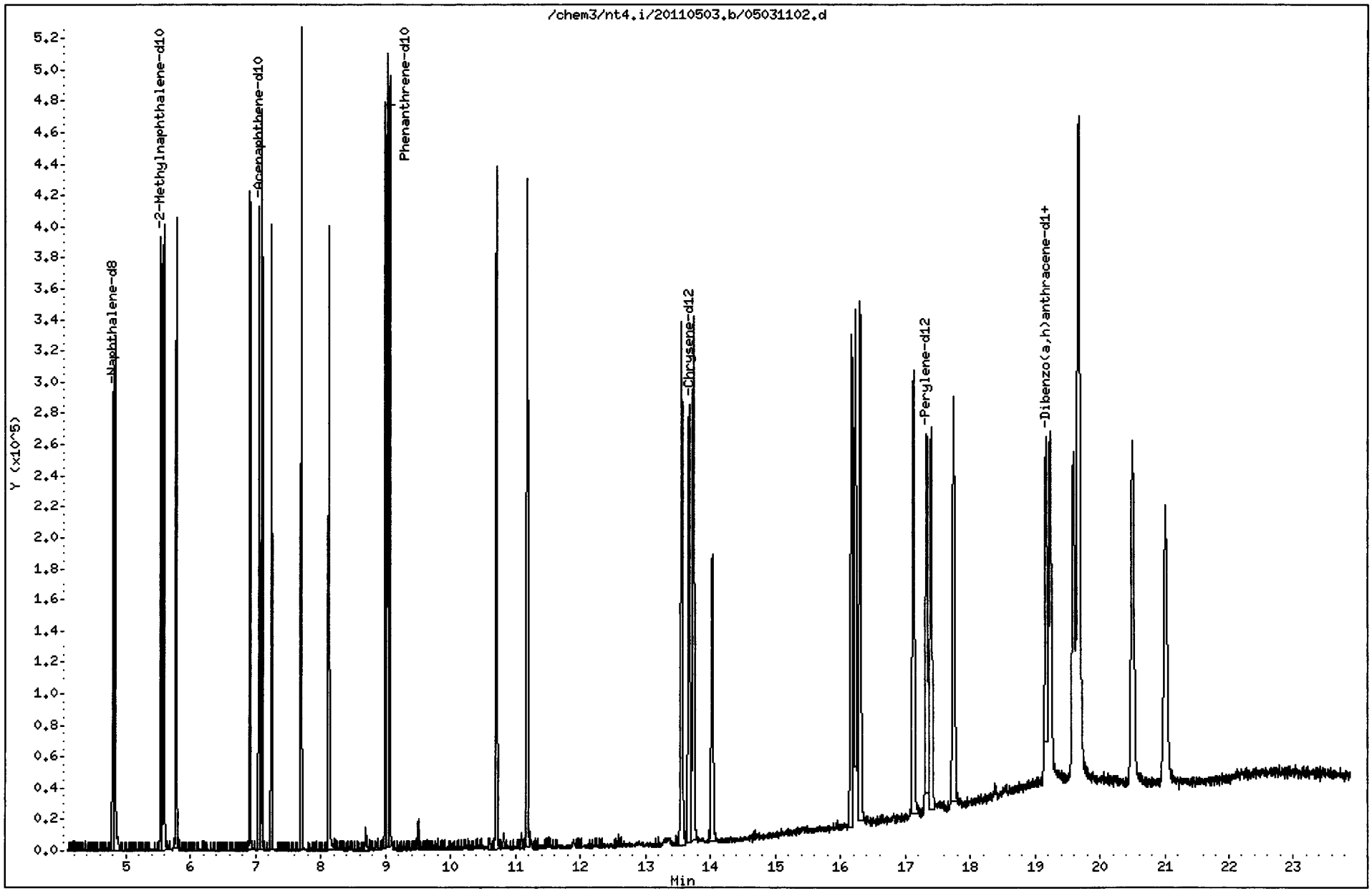
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	4.80	4.30	5.30	4.80	0.00
42 Acenaphthene-d10	7.05	6.55	7.55	7.05	0.00
59 Phenanthrene-d10	8.99	8.49	9.49	8.99	0.00
69 Chrysene-d12	13.67	13.17	14.17	13.67	0.00
77 Perylene-d12	17.33	16.83	17.83	17.33	0.00

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/20110503.b/05031102.d
Date : 03-MAY-2011 16:33
Client ID: CC0503
Sample Info: CC0503

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

Column phase: ZB35



CO-ELUTION SUMMARY FOR FILE - 05031102.d

Lab ID: CC0503, Method: SIMPNA0421.m, Instrument: nt4.i, Date: 03-MAY-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Data File: /chem3/nt4.i/20110503.b/tune.b/05031101.d

Date : 03-MAY-2011 16:20

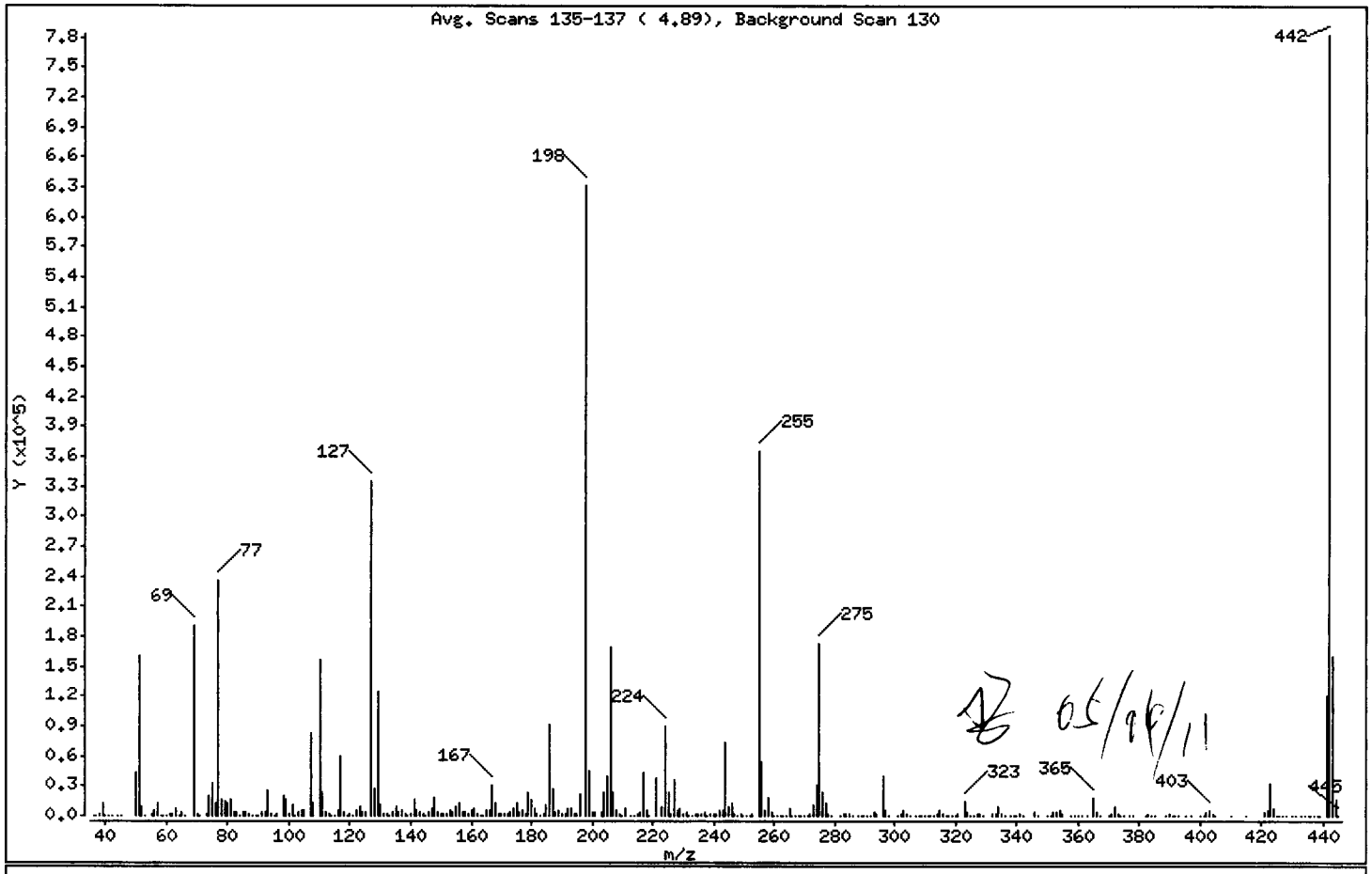
Client ID: DFTPP0503 Instrument: nt4.i

Sample Info: DFTPP0503

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	25.35
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	30.16
70	Less than 2.00% of mass 69	0.15 (0.48)
127	10.00 - 80.00% of mass 198	52.93
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	7.20
275	10.00 - 60.00% of mass 198	27.24
365	Greater than 1.00% of mass 198	2.86
441	0.01 - 24.00% of mass 442	19.05 (15.36)
442	50.00 - 200.00% of mass 198	124.04
443	15.00 - 24.00% of mass 442	25.24 (20.34)

Data File: /chem3/nt4.i/20110503.b/tune.b/05031101.d

Date : 03-MAY-2011 16:20

Client ID: DFTPP0503 Instrument: nt4.i

Sample Info: DFTPP0503

Operator: JZ

Column phase: ZB-5msi Column diameter: 0.32

Data File: 05031101.d
Spectrum: Avg. Scans 135-137 (4.89), Background Scan 130
Location of Maximum: 442.00
Number of points: 342

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	193	135.00	9551	226.00	2324	320.00	252
37.00	719	136.00	4223	227.00	35400	321.00	1301
38.00	2068	137.00	4777	228.00	5395	323.00	14187
39.00	12044	138.00	1218	229.00	7321	324.00	2957
40.00	465	139.00	643	230.00	1116	325.00	266
41.00	402	140.00	1593	231.00	3502	326.00	468
42.00	104	141.00	15307	232.00	653	327.00	2682
44.00	104	142.00	5100	233.00	490	328.00	1450
45.00	238	143.00	3540	234.00	2530	329.00	425
50.00	42936	144.00	1052	235.00	2552	332.00	1073
51.00	160000	145.00	868	236.00	1744	333.00	1491
52.00	8468	146.00	2750	237.00	3200	334.00	9188
53.00	348	147.00	7896	238.00	468	335.00	2302
55.00	1004	148.00	17680	239.00	1240	336.00	248
56.00	4979	149.00	3401	240.00	1037	338.00	70
57.00	11829	150.00	1146	241.00	1892	339.00	130
58.00	465	151.00	2305	242.00	4955	340.00	152
59.00	55	152.00	1542	243.00	4622	341.00	1696
60.00	73	153.00	4724	244.00	73128	342.00	658
61.00	2153	154.00	3820	245.00	9779	346.00	3322
62.00	2370	155.00	8422	246.00	12525	347.00	565
63.00	6726	156.00	13286	247.00	2354	350.00	84
64.00	870	157.00	2806	248.00	498	351.00	168
65.00	3643	158.00	2815	249.00	2599	352.00	4111
66.00	262	159.00	2120	250.00	615	353.00	2930
69.00	190400	160.00	4577	251.00	632	354.00	4849
70.00	920	161.00	7127	252.00	849	355.00	913
71.00	95	162.00	2056	253.00	1866	358.00	110
73.00	1833	163.00	785	255.00	364864	359.00	371
74.00	19976	164.00	890	256.00	53728	360.00	50
75.00	32096	165.00	5450	257.00	4630	361.00	159
76.00	12230	166.00	4591	258.00	17960	363.00	148
77.00	235840	167.00	30776	259.00	2851	365.00	18072
78.00	16031	168.00	13201	260.00	542	366.00	2775
79.00	14063	169.00	2250	261.00	754	367.00	180

Date : 03-MAY-2011 16:20

Client ID: DFTPP0503 Instrument: nt4.i

Sample Info: DFTPP0503

Operator: JZ

Column phase: ZB-5msi Column diameter: 0.32

Data File: 05031101.d
Spectrum: Avg. Scans 135-137 (4.89), Background Scan 130
Location of Maximum: 442.00
Number of points: 342

m/z	Y	m/z	Y	m/z	Y	m/z	Y
80.00	11844	170.00	985	262.00	66	370.00	575
81.00	17080	171.00	1348	263.00	137	371.00	1180
82.00	3702	172.00	2321	264.00	69	372.00	8383
83.00	3664	173.00	3268	265.00	6819	373.00	1735
84.00	196	174.00	6502	266.00	881	374.00	219
85.00	2983	175.00	11924	267.00	71	375.00	50
86.00	4426	176.00	3983	268.00	130	377.00	153
87.00	2442	177.00	5519	269.00	131	378.00	52
88.00	736	178.00	1847	270.00	468	382.00	60
89.00	475	179.00	22544	271.00	642	383.00	2057
90.00	255	180.00	15962	272.00	1039	384.00	536
91.00	3815	181.00	7929	273.00	11314	385.00	213
92.00	4243	182.00	1358	274.00	31264	389.00	64
93.00	25192	183.00	716	275.00	171968	390.00	1110
94.00	1671	184.00	1952	276.00	22888	391.00	771
95.00	304	185.00	10904	277.00	12738	392.00	725
96.00	1553	186.00	92168	278.00	2005	393.00	61
98.00	20136	187.00	26416	279.00	439	395.00	105
99.00	16256	188.00	2765	282.00	426	397.00	86
100.00	1591	189.00	4919	283.00	1458	400.00	54
101.00	10128	190.00	921	284.00	1068	401.00	502
102.00	698	191.00	2438	285.00	2331	402.00	3421
103.00	3410	192.00	7175	286.00	590	403.00	4653
104.00	6103	193.00	8071	288.00	72	404.00	1598
105.00	5739	194.00	1759	289.00	630	405.00	380
107.00	83464	195.00	1481	290.00	374	410.00	53
108.00	13006	196.00	21320	291.00	233	415.00	213
110.00	155712	198.00	631232	292.00	625	421.00	4223
111.00	23688	199.00	45456	293.00	3315	422.00	4755
112.00	2753	200.00	3381	294.00	976	423.00	32896
113.00	969	201.00	3697	296.00	38800	424.00	7307
114.00	197	203.00	4384	297.00	5839	425.00	667
115.00	381	204.00	22648	298.00	396	426.00	113
116.00	4996	205.00	39312	301.00	480	427.00	152
117.00	59592	206.00	169536	302.00	948	428.00	64

Date : 03-MAY-2011 16:20

Client ID: DFTPP0503 Instrument: nt4.i

Sample Info: DFTPP0503

Operator: JZ

Column phase: ZB-5ms1 Column diameter: 0.32

Data File: 05031101.d
Spectrum: Avg. Scans 135-137 (4.89), Background Scan 130
Location of Maximum: 442.00
Number of points: 342

m/z	Y	m/z	Y	m/z	Y	m/z	Y
118.00	4427	207.00	22520	303.00	5055	430.00	62
119.00	742	208.00	5135	304.00	1499	431.00	301
120.00	1056	209.00	1518	305.00	128	433.00	359
121.00	533	210.00	362	307.00	50	434.00	319
122.00	5480	211.00	6639	308.00	637	435.00	307
123.00	8472	213.00	544	309.00	459	436.00	699
124.00	3619	214.00	52	310.00	551	437.00	377
125.00	3386	215.00	1689	311.00	164	438.00	537
127.00	334080	216.00	3319	312.00	92	439.00	811
128.00	26408	217.00	43112	313.00	436	441.00	120232
129.00	123912	218.00	5475	314.00	2171	442.00	782976
130.00	10678	219.00	659	315.00	4515	443.00	159296
131.00	2099	221.00	38640	316.00	2687	444.00	16241
132.00	1208	223.00	9693	317.00	618	445.00	880
133.00	495	224.00	90528	318.00	55		
134.00	3450	225.00	23480	319.00	67		

Data File: /chem3/nt4.i/20110503.b/tune.b/05031101.d

Date : 03-MAY-2011 16:20

Client ID: DFTPP0503

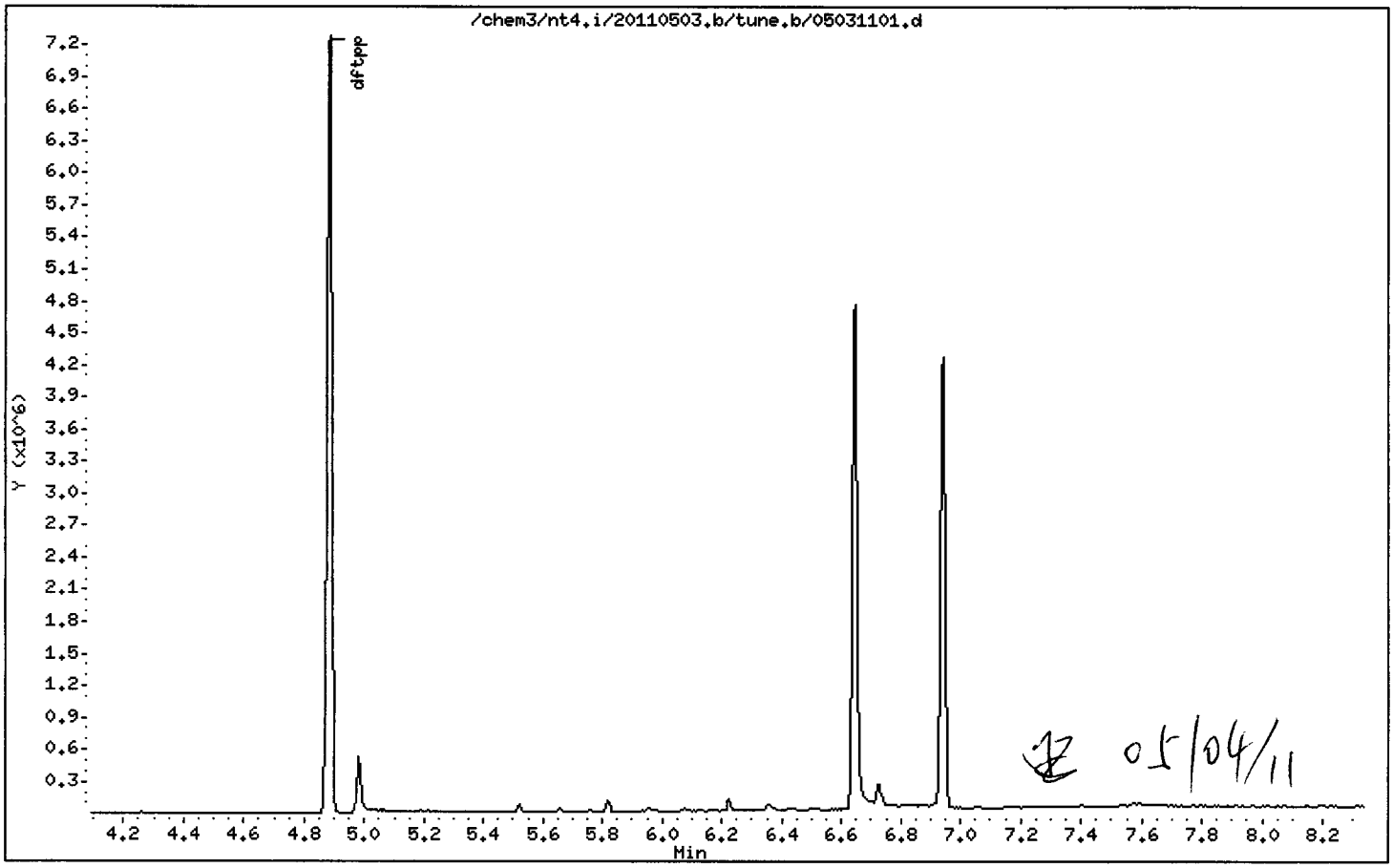
Instrument: nt4.i

Sample Info: DFTPP0503

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/20110503.b/ddt.b/05031101.d ARI ID: DDT0503
Method: /chem3/nt4.i/20110503.b/ddt.b/sw846ddt.m Misc: 11-
Analysis Date: 03-MAY-2011 16:20 Instrument: nt4.i

COMPOUND	RT	AREA
Pentachlorophenol	4.986	58202
Benzidine	6.649	2020003
4,4'-DDE	----	----
4,4'-DDD	6.725	47965
4,4'-DDT	6.943	833261

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

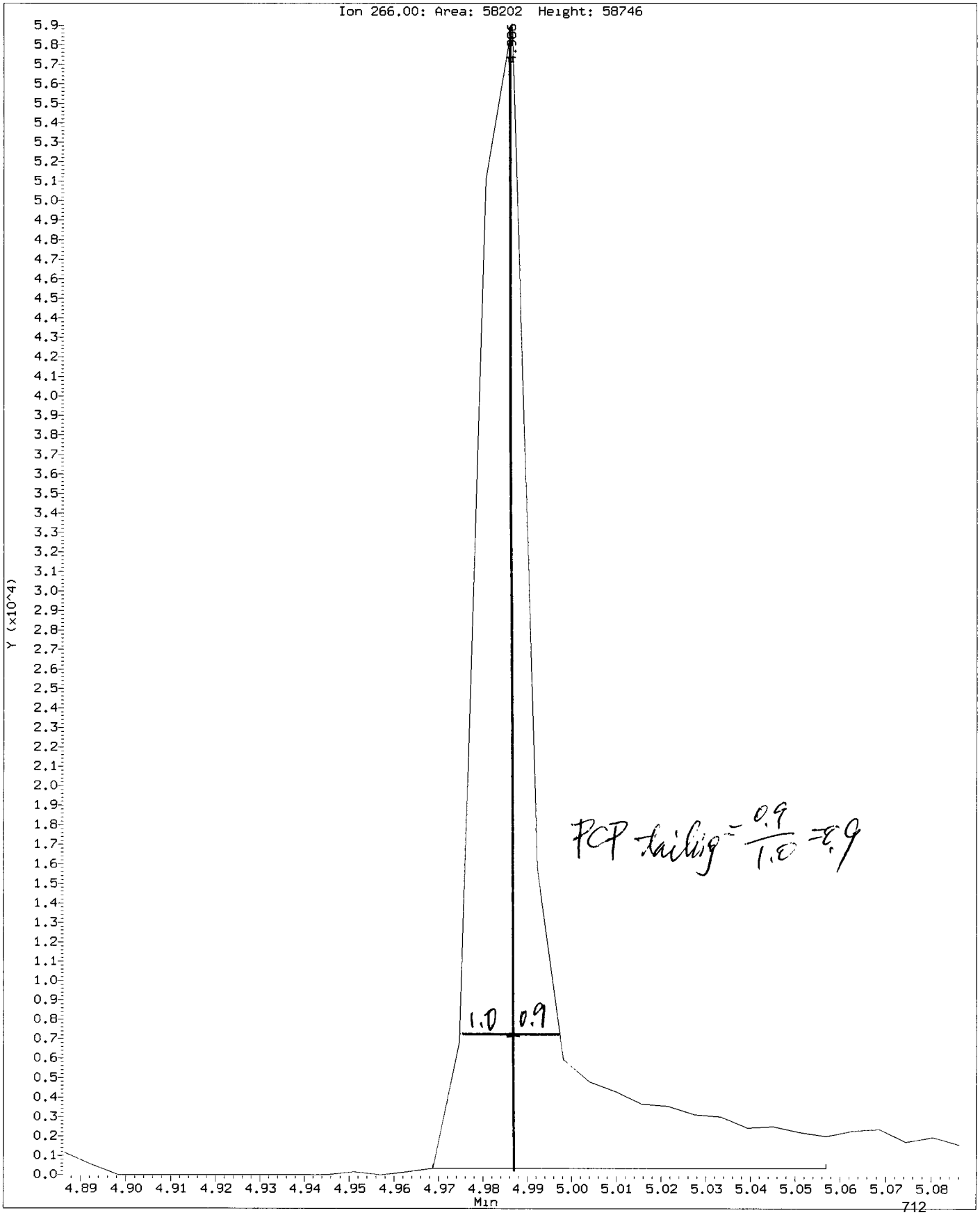
$$\text{DDT Percent Breakdown} = \frac{(0 + 47965) * 100}{(0 + 47965 + 833261)}$$

DDT Percent Breakdown = 5.4 %

05/04/11

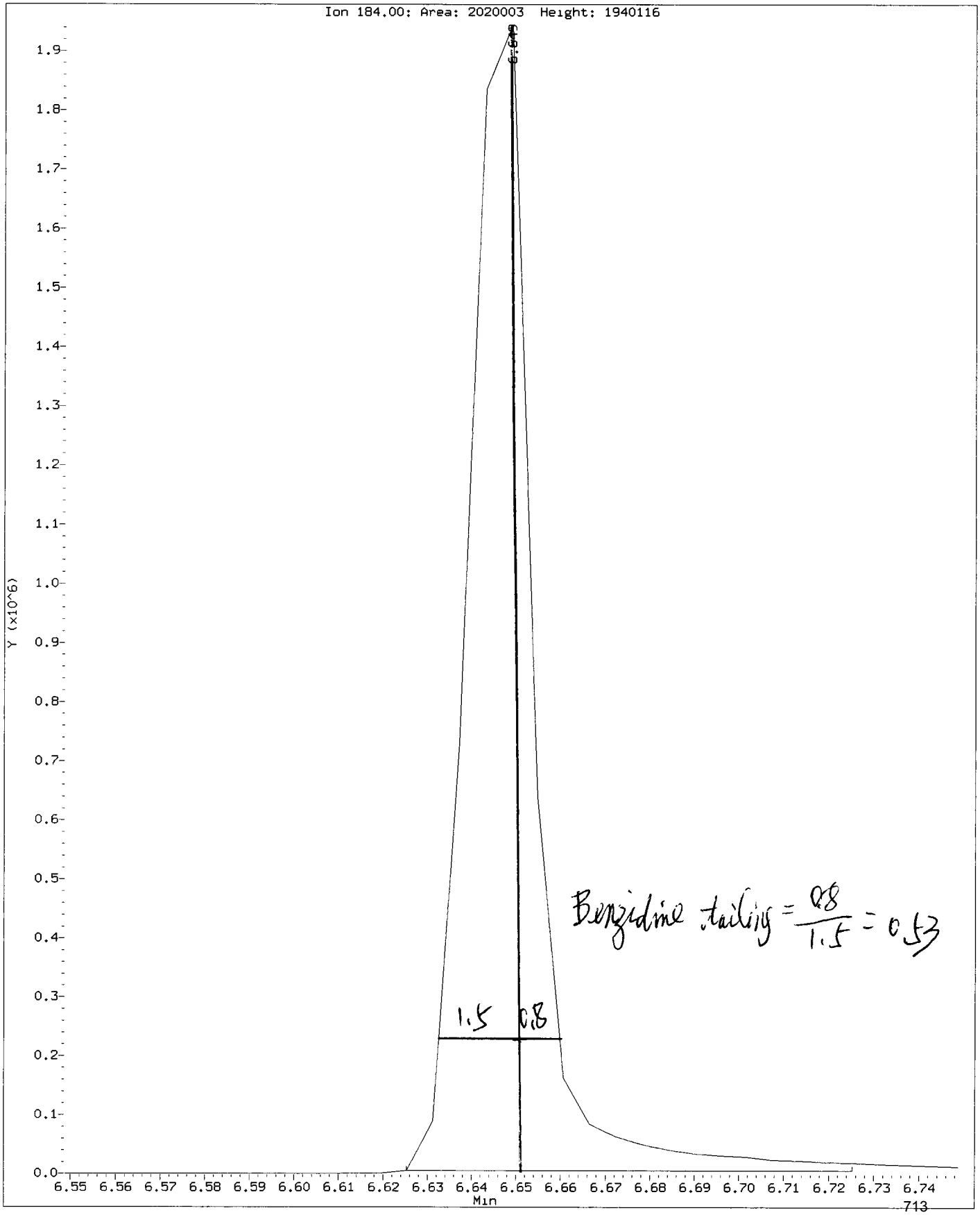
Data File: /chem3/nt4.i/20110503.b/ddt.b/05031101.d
Injection Date: 03-MAY-2011 16:20
Instrument: nt4.i
Client Sample ID: DDT0503

Compound: Pentachlorophenol
CAS Number: 87-86-5



Data File: /chem3/nt4.i/20110503.b/ddt.b/05031101.d
Injection Date: 03-MAY-2011 16:20
Instrument: nt4.i
Client Sample ID: DDT0503

Compound: Benzidine
CAS Number:



SS83 : 00710

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20110503.b/05031103.d
Lab Smp Id: SS83MBS1 Client Smp ID: SS83MBS1
Inj Date : 03-MAY-2011 17:07
Operator : JZ Inst ID: nt4.i
Smp Info : SS83MBS1,
Misc Info : 11-8725
Comment : 1ul Injection
Method : /chem3/nt4.i/20110503.b/SIMPNA0421.m
Meth Date : 04-May-2011 16:19 jianqing Quant Type: ISTD
Cal Date : 21-APR-2011 22:25 Cal File: 04211107.d
Als bottle: 3 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	4.796	4.800	(1.000)	235806	2.00000	
28 Naphthalene	128	Compound Not Detected.					
$ 190 2-Methylnaphthalene-d10	152	5.538	5.539	(1.155)	112280	1.70357	85.18
32 2-Methylnaphthalene	141	Compound Not Detected.					
105 1-methylnaphthalene	141	Compound Not Detected.					
40 Acenaphthylene	152	Compound Not Detected.					
* 42 Acenaphthene-d10	164	7.049	7.046	(1.000)	133181	2.00000	
44 Acenaphthene	153	Compound Not Detected.					
46 Dibenzofuran	168	Compound Not Detected.					
49 Fluorene	166	Compound Not Detected.					
* 59 Phenanthrene-d10	188	8.992	8.993	(1.000)	229718	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	13.676	13.671	(1.000)	228531	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	17.335	17.330	(1.000)	206704	2.00000	
	78 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
$	191 Dibenzo(a,h)anthracene-d14	292	19.594	19.595	(1.130)	191649	2.24122	112.1
	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: 05031103.d
Lab Smp Id: SS83MBS1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20110503.b/SIMPNA0421.m
Misc Info: 11-8725

Calibration Date: 03-MAY-2011
Calibration Time: 16:33
Client Smp ID: SS83MBS1
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	235806	-14.57
42 Acenaphthene-d10	158527	79264	317054	133181	-15.99
59 Phenanthrene-d10	277528	138764	555056	229718	-17.23
69 Chrysene-d12	304115	152058	608230	228531	-24.85
77 Perylene-d12	257833	128916	515666	206704	-19.83

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	4.80	4.30	5.30	4.80	-0.08
42 Acenaphthene-d10	7.05	6.55	7.55	7.05	0.03
59 Phenanthrene-d10	8.99	8.49	9.49	8.99	-0.01
69 Chrysene-d12	13.67	13.17	14.17	13.68	0.04
77 Perylene-d12	17.33	16.83	17.83	17.34	0.03

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

Analytical Resources, Inc.

RECOVERY REPORT

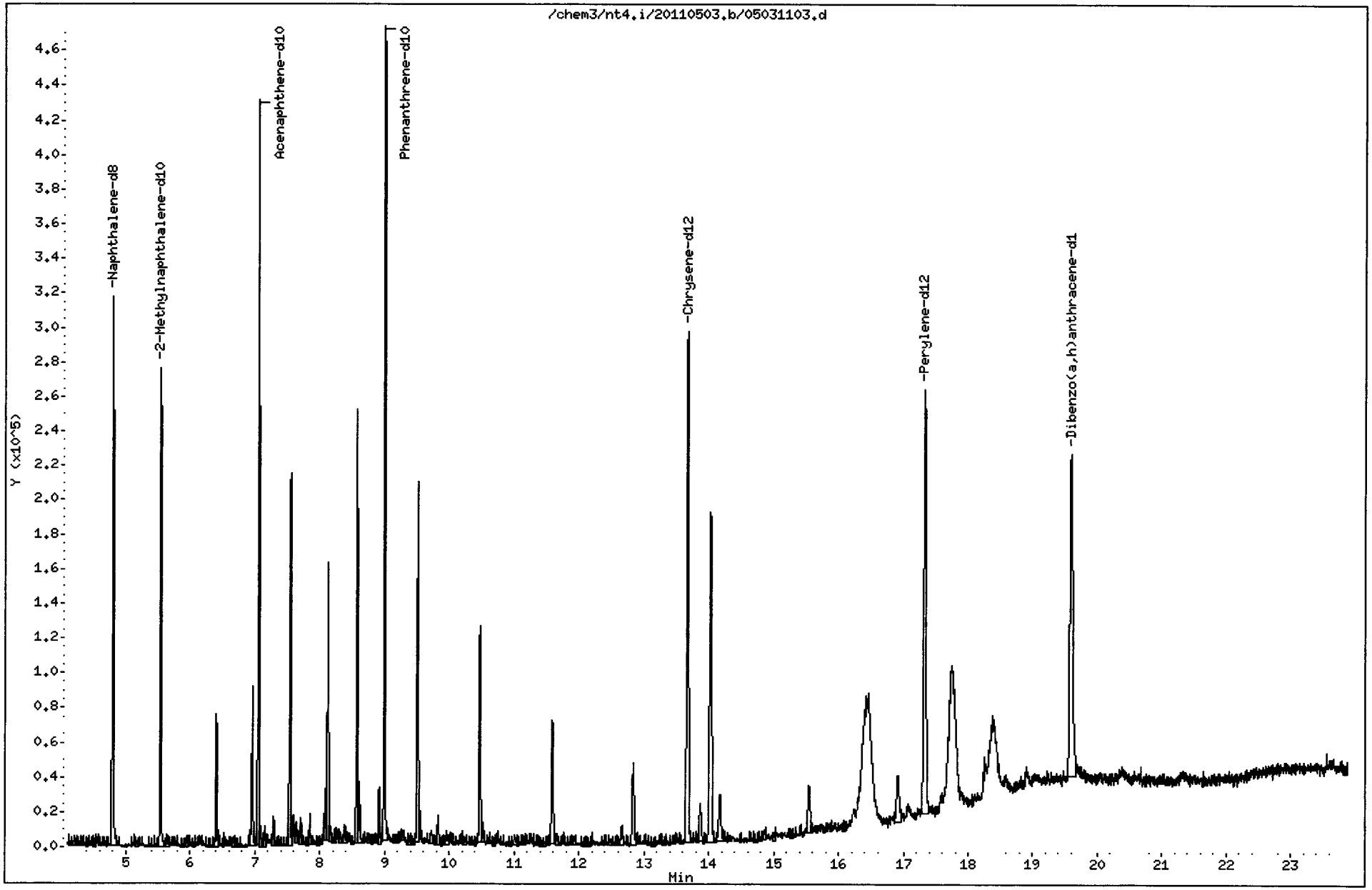
Client Name: Floyd Snider
Client SDG: SS83
Sample Matrix: SOLID
Fraction: SV
Lab Smp Id: SS83MBS1
Client Smp ID: SS83MBS1
Level: LOW
Operator: JZ
Data Type: MS DATA
SampleType: BLANK
SpikeList File: pnalcss.spk
Quant Type: ISTD
Sublist File: pnax.sub
Method File: /chem3/nt4.i/20110503.b/SIMPNA0421.m
Misc Info: 11-8725

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	150.0	85.18	56.79	34-100
$ 191 Dibenzo(a,h)anthra	150.0	112.1	74.71	10-117

Data File: /chem3/nt4.i/20110503.b/05031103.d
Date : 03-MAY-2011 17:07
Client ID: SS83MBS1
Sample Info: SS83MBS1,
Volume Injected (uL): 1.0
Column phase: ZB35

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

718
SS83:09715



CO-ELUTION SUMMARY FOR FILE - 05031103.d

Lab ID: SS83MBS1, Method: SIMPNA0421.m, Instrument: nt4.i, Date: 03-MAY-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20110503.b/05031104.d
Lab Smp Id: SS83LCSS1 Client Smp ID: SS83LCSS1
Inj Date : 03-MAY-2011 17:34
Operator : JZ Inst ID: nt4.i
Smp Info : SS83LCSS1,
Misc Info : 11-8725
Comment : 1ul Injection
Method : /chem3/nt4.i/20110503.b/SIMPNA0421.m
Meth Date : 04-May-2011 15:58 jianqing Quant Type: ISTD
Cal Date : 21-APR-2011 22:25 Cal File: 04211107.d
Als bottle: 4 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

04/06/11

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)	FINAL (ug/kg)
* 27 Naphthalene-d8	136	4.794	4.800	(1.000)	245903	2.00000	
28 Naphthalene	128	4.823	4.826	(1.006)	205991	1.85830	92.91
$ 190 2-Methylnaphthalene-d10	152	5.532	5.539	(1.154)	136141	1.98078	99.04
32 2-Methylnaphthalene	141	5.577	5.583	(1.163)	115887	1.86284	93.14
105 1-methylnaphthalene	141	5.769	5.775	(1.203)	122287	1.89137	94.57
40 Acenaphthylene	152	6.905	6.908	(0.980)	219926	1.93669	96.83
* 42 Acenaphthene-d10	164	7.043	7.046	(1.000)	139349	2.00000	
44 Acenaphthene	153	7.091	7.094	(1.007)	133502	1.91205	95.60
46 Dibenzofuran	168	7.236	7.239	(1.027)	198734	2.08060	104.0
49 Fluorene	166	7.693	7.696	(1.092)	171613	2.09384	104.7
* 59 Phenanthrene-d10	188	8.990	8.993	(1.000)	244642	2.00000	
60 Phenanthrene	178	9.021	9.024	(1.004)	262950	2.19632	109.8
61 Anthracene	178	9.053	9.059	(1.007)	268579	2.16442	108.2
64 Fluoranthene	202	10.703	10.705	(1.191)	315044	2.38228	119.1
65 Pyrene	202	11.169	11.175	(0.817)	320643	2.63551	131.8

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
68 Benzo(a)anthracene	228	13.551	13.557	(0.992)	286959	2.54280	127.1
* 69 Chrysene-d12	240	13.665	13.671	(1.000)	241954	2.00000	
71 Chrysene	228	13.731	13.743	(1.005)	283212	2.58978	129.5
74 Benzo(b)fluoranthene	252	16.163	16.172	(0.933)	300621	2.58743	129.4
75 Benzo(k)fluoranthene	252	16.220	16.229	(0.936)	302533	2.53025	126.5
188 Benzo(j)fluoranthene	252	Compound Not Detected.					
76 Benzo(a)pyrene	252	17.119	17.125	(0.988)	245259	2.35918	118.0
* 77 Perylene-d12	264	17.327	17.330	(1.000)	214147	2.00000	
78 Indeno(1,2,3-cd)pyrene	276	19.661	19.667	(1.135)	282430	2.30923	115.5
$ 191 Dibenzo(a,h)anthracene-d14	292	19.582	19.595	(1.130)	218685	2.46850	123.4
79 Dibenzo(a,h)anthracene	278	19.674	19.680	(1.135)	236256	2.38213	119.1
80 Benzo(g,h,i)perylene	276	20.494	20.503	(1.183)	238858	2.28653	114.3
99 Perylene	252	17.393	17.399	(1.004)	273972	3.10758	155.4

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 05031104.d
Lab Smp Id: SS83LCSS1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20110503.b/SIMPNA0421.m
Misc Info: 11-8725

Calibration Date: 03-MAY-2011
Calibration Time: 16:33
Client Smp ID: SS83LCSS1
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	245903	-10.92
42 Acenaphthene-d10	158527	79264	317054	139349	-12.10
59 Phenanthrene-d10	277528	138764	555056	244642	-11.85
69 Chrysene-d12	304115	152058	608230	241954	-20.44
77 Perylene-d12	257833	128916	515666	214147	-16.94

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	4.80	4.30	5.30	4.79	-0.13
42 Acenaphthene-d10	7.05	6.55	7.55	7.04	-0.04
59 Phenanthrene-d10	8.99	8.49	9.49	8.99	-0.03
69 Chrysene-d12	13.67	13.17	14.17	13.66	-0.04
77 Perylene-d12	17.33	16.83	17.83	17.33	-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: SS83LCSS1
Level: LOW
Data Type: MS DATA
SpikeList File: pnalcss.spk
Sublist File: pnax.sub
Method File: /chem3/nt4.i/20110503.b/SIMPNA0421.m
Misc Info: 11-8725

Client SDG: SS83
Fraction: SV
Client Smp ID: SS83LCSS1
Operator: JZ
SampleType: LCS
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
28 Naphthalene	150.0	92.91	61.94	37-100
32 2-Methylnaphthalen	150.0	93.14	62.09	37-100
105 1-methylnaphthalen	150.0	94.57	63.05	30-160
40 Acenaphthylene	150.0	96.83	64.56	35-100
44 Acenaphthene	150.0	95.60	63.73	39-100
46 Dibenzofuran	150.0	104.0	69.35	39-100
49 Fluorene	150.0	104.7	69.79	42-100
60 Phenanthrene	150.0	109.8	73.21	47-100
61 Anthracene	150.0	108.2	72.15	41-106
64 Fluoranthene	150.0	119.1	79.41	52-109
65 Pyrene	150.0	131.8	87.85	47-111
68 Benzo(a)anthracene	150.0	127.1	84.76	47-114
71 Chrysene	150.0	129.5	86.33	51-106
74 Benzo(b)fluoranthe	150.0	129.4	86.25	30-160
75 Benzo(k)fluoranthe	150.0	126.5	84.34	30-160
76 Benzo(a)pyrene	150.0	118.0	78.64	44-111
78 Indeno(1,2,3-cd)py	150.0	115.5	76.97	41-114
79 Dibenzo(a,h)anthra	150.0	119.1	79.40	42-118
80 Benzo(g,h,i)peryle	150.0	114.3	76.22	37-115
99 Perylene	150.0	155.4	103.59	30-160

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	150.0	99.04	66.03	34-100
$ 191 Dibenzo(a,h)anthra	150.0	123.4	82.28	10-117

Data File: /chem3/nt4.i/20110503.b/05031104.d

Date : 03-MAY-2011 17:34

Client ID: SS83LCSS1

Sample Info: SS83LCSS1,

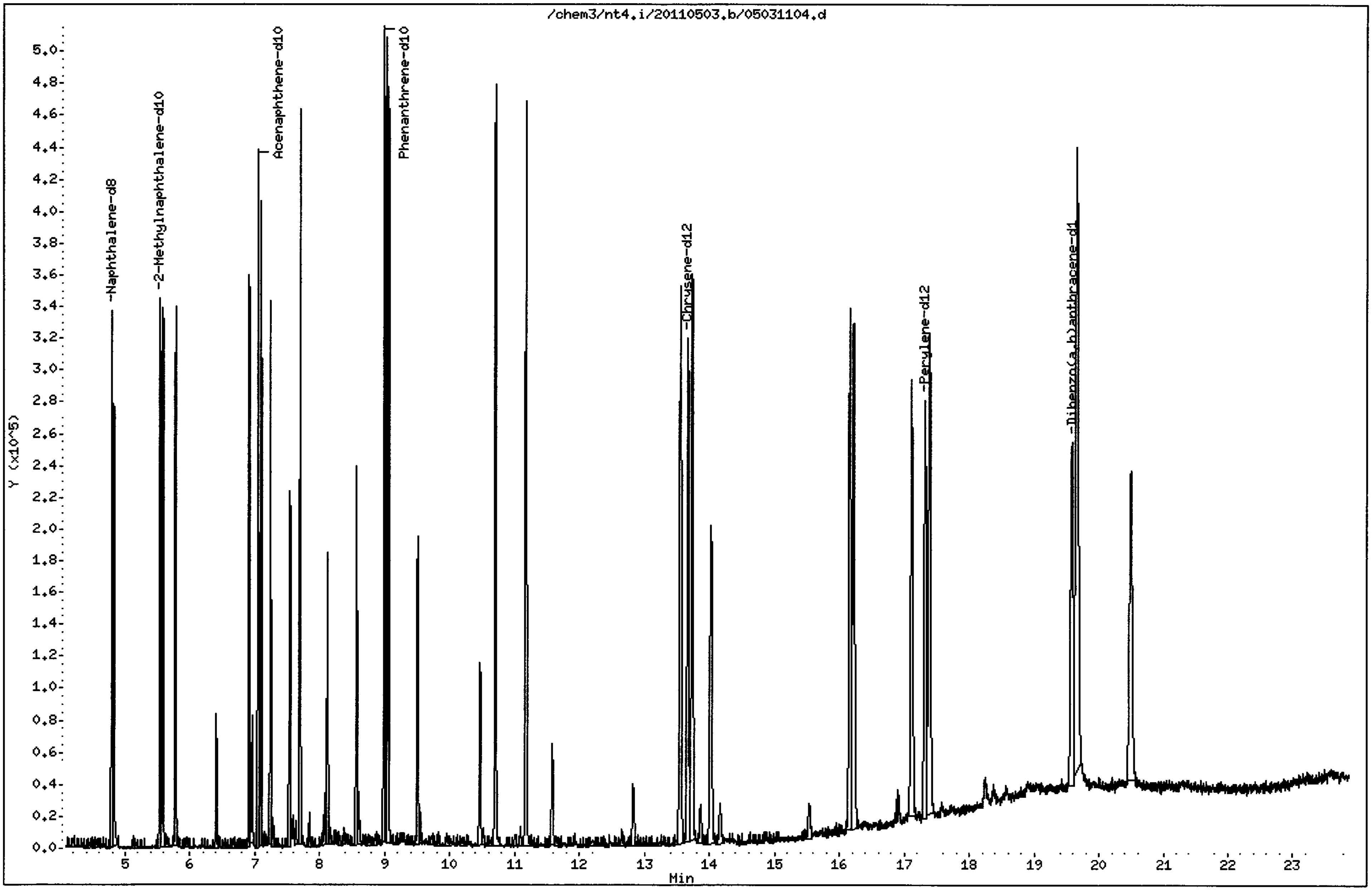
Volume Injected (uL): 1.0

Column phase: ZB35

Instrument: nt4.i

Operator: JZ

Column diameter: 0.32



CO-ELUTION SUMMARY FOR FILE - 05031104.d

Lab ID: SS83LCSS1, Method: SIMPNA0421.m, Instrument: nt4.i, Date: 03-MAY-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20110503.b/05031105.d
Lab Smp Id: SS83LCSDS1 Client Smp ID: SS83LCSDS1
Inj Date : 03-MAY-2011 18:02
Operator : JZ Inst ID: nt4.i
Smp Info : SS83LCSDS1,
Misc Info : 11-8725
Comment : 1ul Injection
Method : /chem3/nt4.i/20110503.b/SIMPNA0421.m
Meth Date : 04-May-2011 15:58 jianqing Quant Type: ISTD
Cal Date : 21-APR-2011 22:25 Cal File: 04211107.d
Als bottle: 5 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

AZ 05/04/11

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)	FINAL (ug/kg)
* 27 Naphthalene-d8	136	4.794	4.800	(1.000)	246666	2.00000	
28 Naphthalene	128	4.820	4.826	(1.005)	204851	1.84230	92.11
$ 190 2-Methylnaphthalene-d10	152	5.536	5.539	(1.155)	126531	1.83527	91.76
32 2-Methylnaphthalene	141	5.577	5.583	(1.163)	115155	1.84535	92.27
105 1-methylnaphthalene	141	5.769	5.775	(1.203)	119519	1.84284	92.14
40 Acenaphthylene	152	6.905	6.908	(0.980)	220121	1.95417	97.71
* 42 Acenaphthene-d10	164	7.043	7.046	(1.000)	138225	2.00000	
44 Acenaphthene	153	7.091	7.094	(1.007)	133986	1.93459	96.73
46 Dibenzofuran	168	7.236	7.239	(1.027)	196523	2.07418	103.7
49 Fluorene	166	7.693	7.696	(1.092)	170299	2.09471	104.7
* 59 Phenanthrene-d10	188	8.990	8.993	(1.000)	237712	2.00000	
60 Phenanthrene	178	9.021	9.024	(1.004)	268663	2.30946	115.5
61 Anthracene	178	9.053	9.059	(1.007)	263583	2.18608	109.3
64 Fluoranthene	202	10.699	10.705	(1.190)	298968	2.32663	116.3
65 Pyrene	202	11.169	11.175	(0.817)	306283	2.53485	126.7

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
68	Benzo(a)anthracene	228	13.551	13.557	(0.991)	275789	2.46068	123.0
* 69	Chrysene-d12	240	13.668	13.671	(1.000)	240296	2.00000	
71	Chrysene	228	13.731	13.743	(1.005)	270575	2.49130	124.6
74	Benzo(b)fluoranthene	252	16.166	16.172	(0.933)	293589	2.51890	125.9
75	Benzo(k)fluoranthene	252	16.223	16.229	(0.936)	292388	2.43766	121.9
188	Benzo(j)fluoranthene	252	Compound Not Detected.					
76	Benzo(a)pyrene	252	17.119	17.125	(0.988)	241607	2.31670	115.8
* 77	Perylene-d12	264	17.324	17.330	(1.000)	214827	2.00000	
78	Indeno(1,2,3-cd)pyrene	276	19.658	19.667	(1.135)	285210	2.32458	116.2
$ 191	Dibenzo(a,h)anthracene-d14	292	19.588	19.595	(1.131)	208613	2.34735	117.4
79	Dibenzo(a,h)anthracene	278	19.677	19.680	(1.136)	236631	2.37836	118.9
80	Benzo(g,h,i)perylene	276	20.497	20.503	(1.183)	239515	2.28556	114.3
99	Perylene	252	17.393	17.399	(1.004)	271487	3.06964	153.5

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 05031105.d
Lab Smp Id: SS83LCSDS1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20110503.b/SIMPNA0421.m
Misc Info: 11-8725

Calibration Date: 03-MAY-2011
Calibration Time: 16:33
Client Smp ID: SS83LCSDS1
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	246666	-10.64
42 Acenaphthene-d10	158527	79264	317054	138225	-12.81
59 Phenanthrene-d10	277528	138764	555056	237712	-14.35
69 Chrysene-d12	304115	152058	608230	240296	-20.99
77 Perylene-d12	257833	128916	515666	214827	-16.68

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	4.80	4.30	5.30	4.79	-0.13
42 Acenaphthene-d10	7.05	6.55	7.55	7.04	-0.04
59 Phenanthrene-d10	8.99	8.49	9.49	8.99	-0.03
69 Chrysene-d12	13.67	13.17	14.17	13.67	-0.02
77 Perylene-d12	17.33	16.83	17.83	17.32	-0.04

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

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd Snider
Client SDG: SS83
Sample Matrix: SOLID
Fraction: SV
Lab Smp Id: SS83LCSDS1
Client Smp ID: SS83LCSDS1
Level: LOW
Operator: JZ
Data Type: MS DATA
SampleType: LCSD
SpikeList File: pnalcss.spk
Quant Type: ISTD
Sublist File: pnax.sub
Method File: /chem3/nt4.i/20110503.b/SIMPNA0421.m
Misc Info: 11-8725

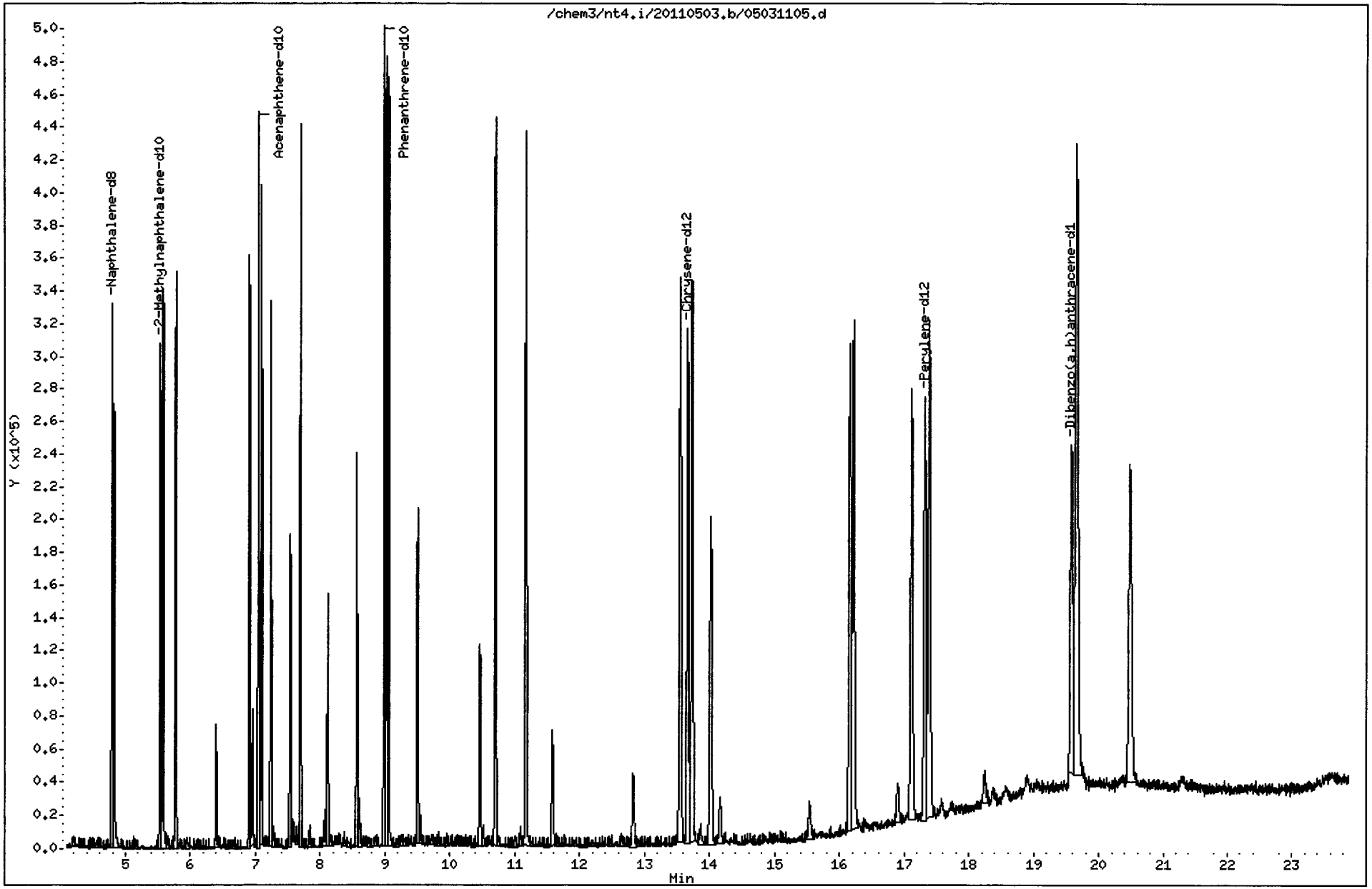
SPIKE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
28 Naphthalene	150.0	92.11	61.41	37-100
32 2-Methylnaphthalen	150.0	92.27	61.51	37-100
105 1-methylnaphthalen	150.0	92.14	61.43	30-160
40 Acenaphthylene	150.0	97.71	65.14	35-100
44 Acenaphthene	150.0	96.73	64.49	39-100
46 Dibenzofuran	150.0	103.7	69.14	39-100
49 Fluorene	150.0	104.7	69.82	42-100
60 Phenanthrene	150.0	115.5	76.98	47-100
61 Anthracene	150.0	109.3	72.87	41-106
64 Fluoranthene	150.0	116.3	77.55	52-109
65 Pyrene	150.0	126.7	84.49	47-111
68 Benzo(a)anthracene	150.0	123.0	82.02	47-114
71 Chrysene	150.0	124.6	83.04	51-106
74 Benzo(b)fluoranthe	150.0	125.9	83.96	30-160
75 Benzo(k)fluoranthe	150.0	121.9	81.26	30-160
76 Benzo(a)pyrene	150.0	115.8	77.22	44-111
78 Indeno(1,2,3-cd)py	150.0	116.2	77.49	41-114
79 Dibenzo(a,h)anthra	150.0	118.9	79.28	42-118
80 Benzo(g,h,i)peryle	150.0	114.3	76.19	37-115
99 Perylene	150.0	153.5	102.32	30-160

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	150.0	91.76	61.18	34-100
$ 191 Dibenzo(a,h)anthra	150.0	117.4	78.25	10-117

Data File: /chem3/nt4.i/20110503.b/05031105.d
Date : 03-MAY-2011 18:02
Client ID: SS83LCSDS1
Sample Info: SS83LCSDS1,
Volume Injected (uL): 1.0
Column phase: ZB35

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

730
SS83:08727



CO-ELUTION SUMMARY FOR FILE - 05031105.d

Lab ID: SS83LCSDS1, Method: SIMPNA0421.m, Instrument: nt4.i, Date: 03-MAY-201

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20110503.b/05031107.d
Lab Smp Id: SS83A Client Smp ID: DMA-TP1-0-3-041911
Inj Date : 03-MAY-2011 18:57
Operator : JZ Inst ID: nt4.i
Smp Info : SS83A
Misc Info : 11-8711
Comment : 1ul Injection
Method : /chem3/nt4.i/20110503.b/SIMPNA0421.m
Meth Date : 04-May-2011 16:19 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

04/06/11

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	12.25000	Weight of sample extracted (g)
M	10.80000	% 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	4.793	4.800	(1.000)	252741	2.00000	
28 Naphthalene	128	4.818	4.826	(1.005)	7141	0.06268	2.868
$ 190 2-Methylnaphthalene-d10	152	5.534	5.539	(1.155)	132979	1.88243	86.14
32 2-Methylnaphthalene	141	Compound Not Detected.					
105 1-methylnaphthalene	141	Compound Not Detected.					
40 Acenaphthylene	152	Compound Not Detected.					
* 42 Acenaphthene-d10	164	7.045	7.046	(1.000)	148707	2.00000	
44 Acenaphthene	153	7.089	7.094	(1.006)	6743	0.09050	4.141
46 Dibenzofuran	168	Compound Not Detected.					
49 Fluorene	166	7.692	7.696	(1.092)	4519	0.05167	2.364
* 59 Phenanthrene-d10	188	8.988	8.993	(1.000)	245414	2.00000	
60 Phenanthrene	178	9.020	9.024	(1.004)	11759	0.09791	4.480
61 Anthracene	178	Compound Not Detected.					
64 Fluoranthene	202	10.704	10.705	(1.191)	7183	0.05415	2.478
65 Pyrene	202	11.165	11.175	(0.817)	7625	0.06160	2.819(H)
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	13.666	13.671	(1.000)	246170	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	17.319	17.330	(1.000)	218245	2.00000	
78 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
$ 191 Dibenzo(a,h)anthracene-d14	292	19.587	19.595	(1.131)	203964	2.25910	103.4
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.					

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: 05031107.d
Lab Smp Id: SS83A
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20110503.b/SIMPNA0421.m
Misc Info: 11-8711

Calibration Date: 03-MAY-2011
Calibration Time: 16:33
Client Smp ID: DMA-TP1-0-3-0419
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	252741	-8.44
42 Acenaphthene-d10	158527	79264	317054	148707	-6.19
59 Phenanthrene-d10	277528	138764	555056	245414	-11.57
69 Chrysene-d12	304115	152058	608230	246170	-19.05
77 Perylene-d12	257833	128916	515666	218245	-15.35

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	4.80	4.30	5.30	4.79	-0.16
42 Acenaphthene-d10	7.05	6.55	7.55	7.05	-0.02
59 Phenanthrene-d10	8.99	8.49	9.49	8.99	-0.05
69 Chrysene-d12	13.67	13.17	14.17	13.67	-0.03
77 Perylene-d12	17.33	16.83	17.83	17.32	-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

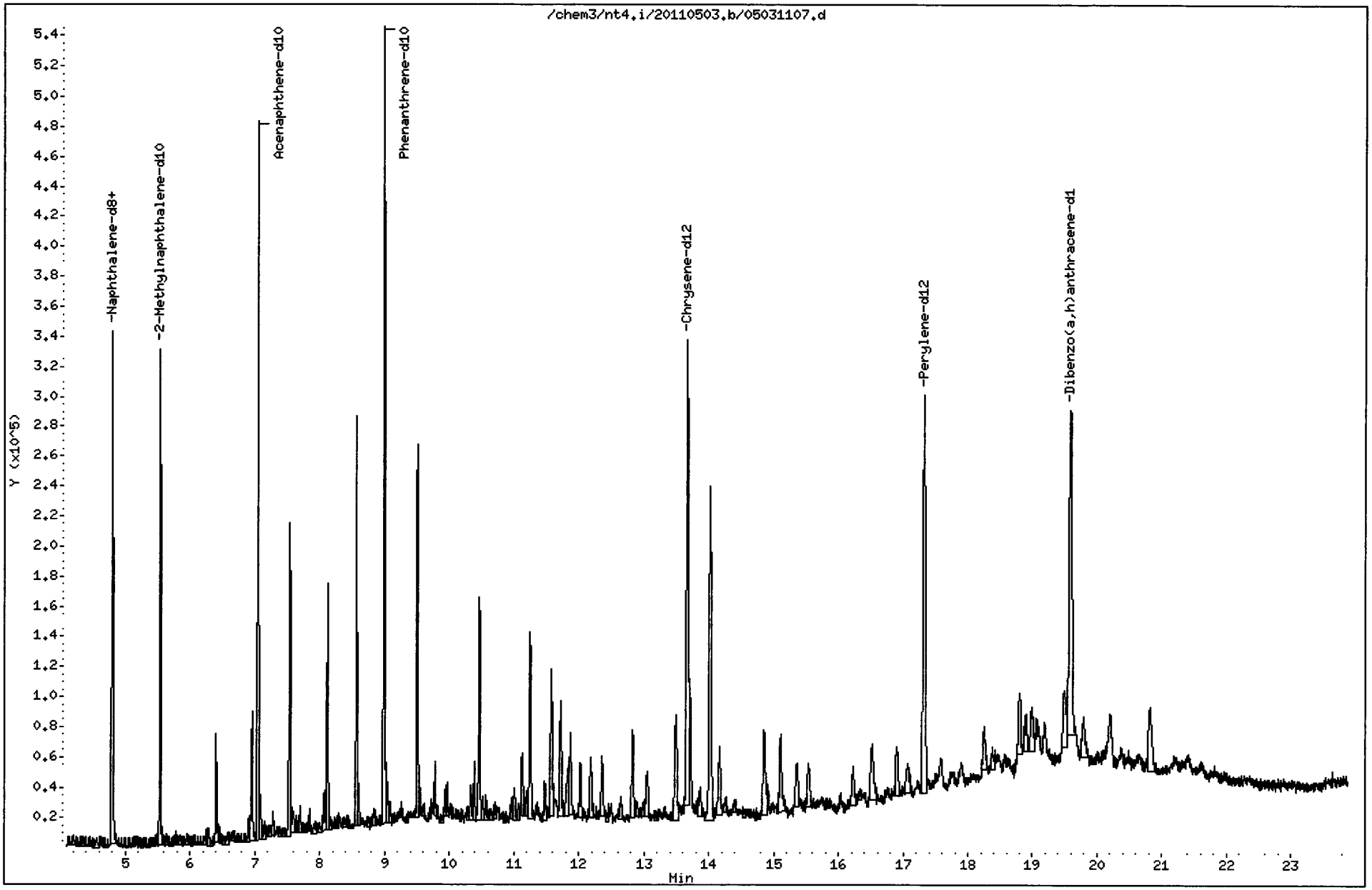
Client Name: Floyd Snider
Client SDG: SS83
Sample Matrix: SOLID
Fraction: SV
Lab Smp Id: SS83A
Client Smp ID: DMA-TP1-0-3-041911
Level: LOW
Operator: JZ
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: pnalcss.spk
Quant Type: ISTD
Sublist File: pnax.sub
Method File: /chem3/nt4.i/20110503.b/SIMPNA0421.m
Misc Info: 11-8711

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	137.3	86.14	62.75	34-100
$ 191 Dibenzo(a,h)anthra	137.3	103.4	75.30	10-117

Data File: /chem3/nt4.i/20110503.b/05031107.d
Date : 03-MAY-2011 18:57
Client ID: DMA-TP1-0-3-041911
Sample Info: SS83A
Volume Injected (uL): 1.0
Column phase: ZB35

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

736
SS83:09733



CO-ELUTION SUMMARY FOR FILE - 05031107.d

Lab ID: SS83A, Method: SIMPNA0421.m, Instrument: nt4.i, Date: 03-MAY-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20110503.b/05031108.d
Lab Smp Id: SS83B Client Smp ID: DMA-TP1-3-4.5-04191
Inj Date : 03-MAY-2011 19:25
Operator : JZ Inst ID: nt4.i
Smp Info : SS83B
Misc Info : 11-8712
Comment : 1ul Injection
Method : /chem3/nt4.i/20110503.b/SIMPNA0421.m
Meth Date : 04-May-2011 16:19 jianqing Quant Type: ISTD
Cal Date : 21-APR-2011 22:25 Cal File: 04211107.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

05/04/11

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	13.81000	Weight of sample extracted (g)
M	18.10000	% 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	4.793	4.800	(1.000)	247467	2.00000	
28 Naphthalene	128	4.821	4.826	(1.006)	6970	0.06248	2.762
$ 190 2-Methylnaphthalene-d10	152	5.534	5.539	(1.155)	135405	1.95762	86.54
32 2-Methylnaphthalene	141	Compound Not Detected.					
105 1-methylnaphthalene	141	Compound Not Detected.					
40 Acenaphthylene	152	Compound Not Detected.					
* 42 Acenaphthene-d10	164	7.045	7.046	(1.000)	141335	2.00000	
44 Acenaphthene	153	Compound Not Detected.					
46 Dibenzofuran	168	Compound Not Detected.					
49 Fluorene	166	Compound Not Detected.					
* 59 Phenanthrene-d10	188	8.988	8.993	(1.000)	239255	2.00000	
60 Phenanthrene	178	9.019	9.024	(1.004)	32134	0.27445	12.13
61 Anthracene	178	Compound Not Detected.					
64 Fluoranthene	202	10.707	10.705	(1.191)	52219	0.40376	17.85
65 Pyrene	202	11.177	11.175	(0.818)	49304	0.40783	18.03

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
	68 Benzo(a)anthracene	228	13.552	13.557	(0.991)	14496	0.12927	5.715
*	69 Chrysene-d12	240	13.669	13.671	(1.000)	240422	2.00000	
	71 Chrysene	228	13.726	13.743	(1.004)	32996	0.30365	13.42
	74 Benzo(b)fluoranthene	252	16.170	16.172	(0.933)	26041	0.21942	9.700
	75 Benzo(k)fluoranthene	252	16.224	16.229	(0.936)	12273	0.10049	4.442
	188 Benzo(j)fluoranthene	252	16.294	16.298	(0.940)	10511	0.08775	3.879
	76 Benzo(a)pyrene	252	17.126	17.125	(0.988)	16459	0.15499	6.852
*	77 Perylene-d12	264	17.331	17.330	(1.000)	218746	2.00000	
	78 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
$	191 Dibenzo(a,h)anthracene-d14	292	19.593	19.595	(1.130)	236482	2.61327	115.5
	79 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	80 Benzo(g,h,i)perylene	276	20.505	20.503	(1.183)	22615	0.21194	9.369
	99 Perylene	252	17.394	17.399	(1.004)	15597	0.17319	7.656

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 05031108.d
Lab Smp Id: SS83B
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20110503.b/SIMPNA0421.m
Misc Info: 11-8712

Calibration Date: 03-MAY-2011
Calibration Time: 16:33
Client Smp ID: DMA-TP1-3-4.5-04
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	247467	-10.35
42 Acenaphthene-d10	158527	79264	317054	141335	-10.84
59 Phenanthrene-d10	277528	138764	555056	239255	-13.79
69 Chrysene-d12	304115	152058	608230	240422	-20.94
77 Perylene-d12	257833	128916	515666	218746	-15.16

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	4.80	4.30	5.30	4.79	-0.16
42 Acenaphthene-d10	7.05	6.55	7.55	7.04	-0.02
59 Phenanthrene-d10	8.99	8.49	9.49	8.99	-0.05
69 Chrysene-d12	13.67	13.17	14.17	13.67	-0.01
77 Perylene-d12	17.33	16.83	17.83	17.33	0.01

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

Analytical Resources, Inc.

RECOVERY REPORT

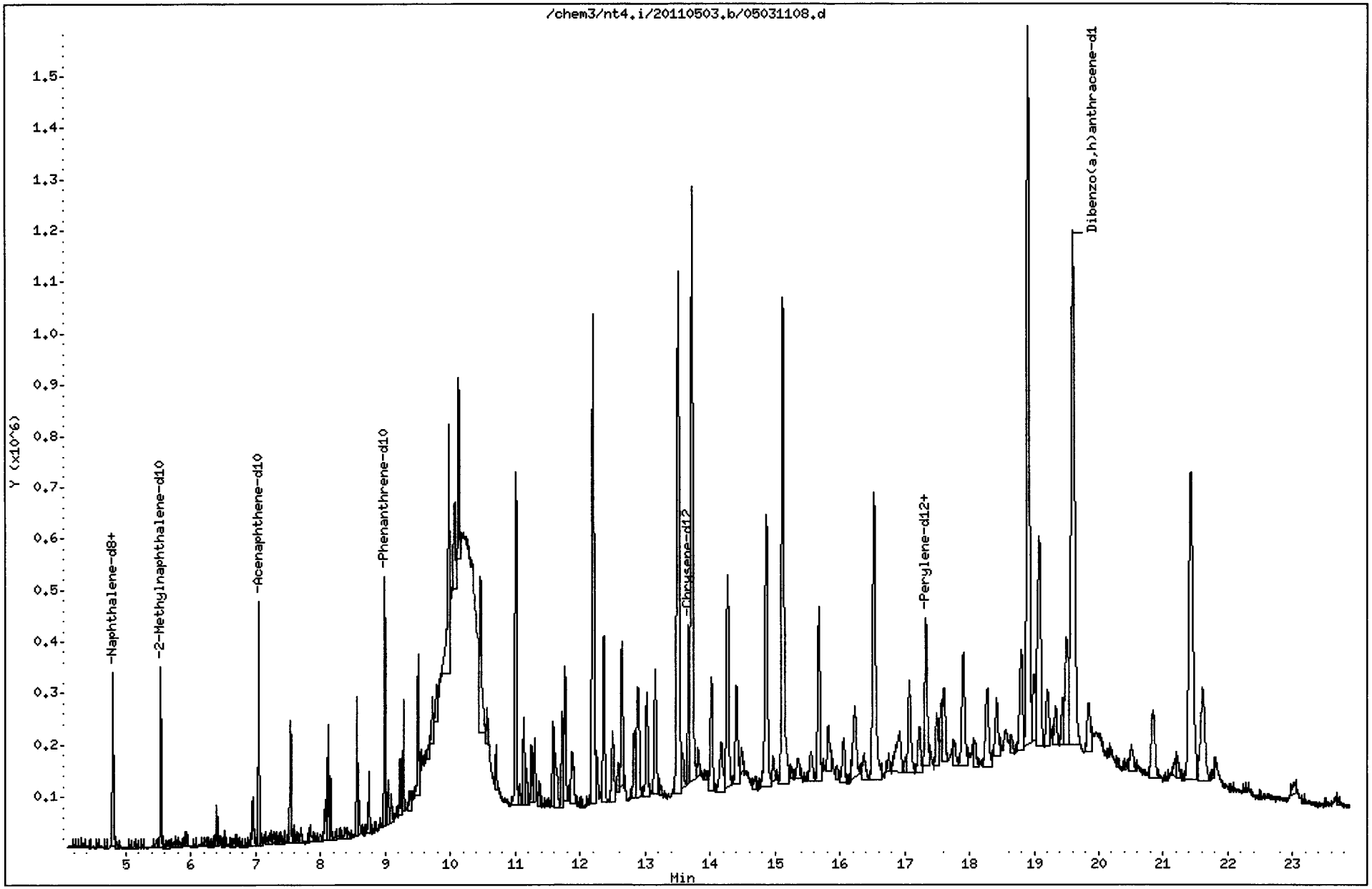
Client Name: Floyd Snider
Client SDG: SS83
Sample Matrix: SOLID
Fraction: SV
Lab Smp Id: SS83B
Client Smp ID: DMA-TP1-3-4.5-04191
Level: LOW
Operator: JZ
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: pnalcss.spk
Quant Type: ISTD
Sublist File: pnax.sub
Method File: /chem3/nt4.i/20110503.b/SIMPNA0421.m
Misc Info: 11-8712

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	132.6	86.54	65.25	34-100
$ 191 Dibenzo(a,h)anthra	132.6	115.5	87.11	10-117

Data File: /chem3/nt4.i/20110503.b/05031108.d
Date : 03-MAY-2011 19:25
Client ID: DMA-TP1-3-4.5-04191
Sample Info: SS83B
Volume Injected (uL): 1.0
Column phase: ZB35

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

742
SS83:05735



Data File: /chem3/nt4.i/20110503.b/05031108.d

Date : 03-MAY-2011 19:25

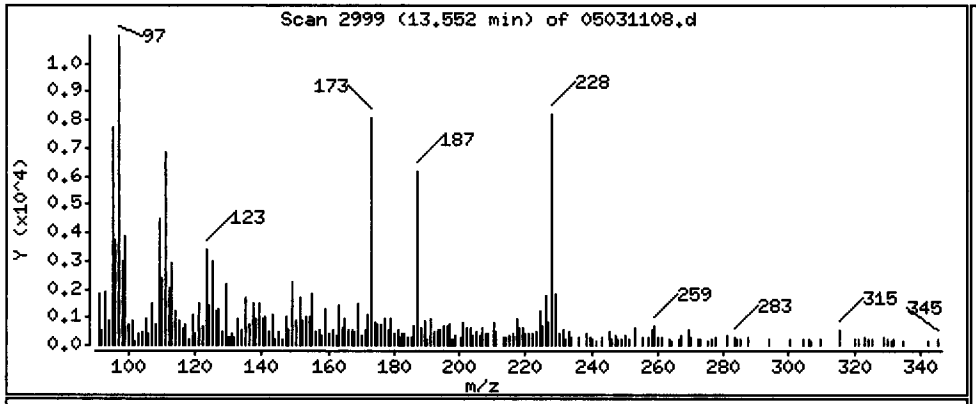
Client ID: DMA-TP1-3-4.5-04191 Instrument: nt4.i

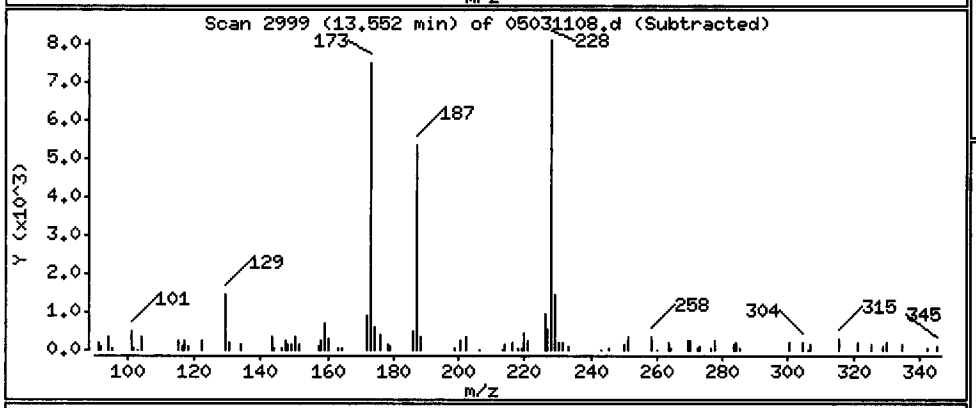
Sample Info: SS83B

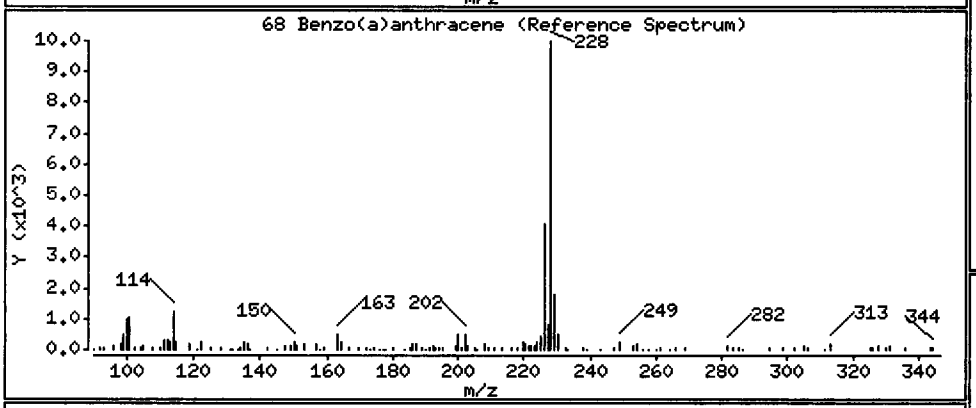
Volume Injected (uL): 1.0 Operator: JZ

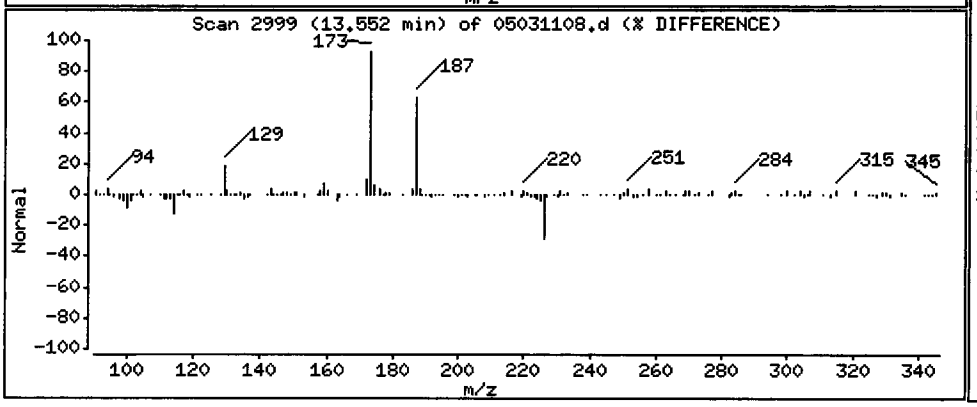
Column phase: ZB35 Column diameter: 0.32

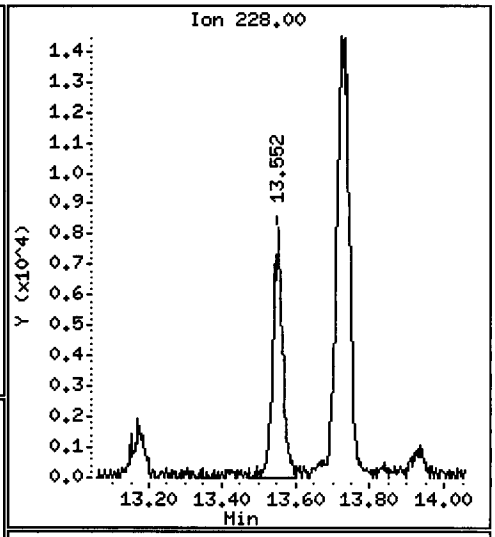
68 Benzo(a)anthracene Concentration: 5.715 ug/kg

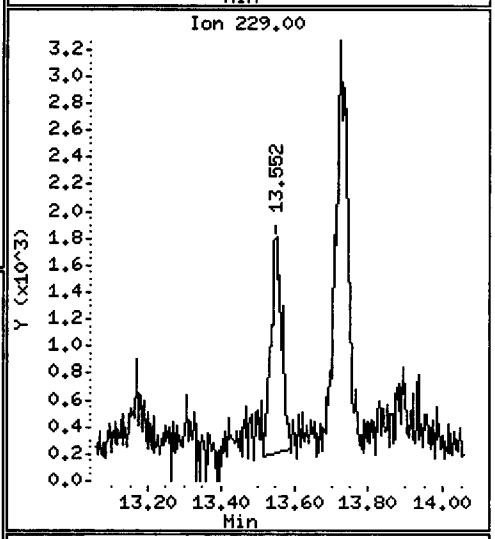


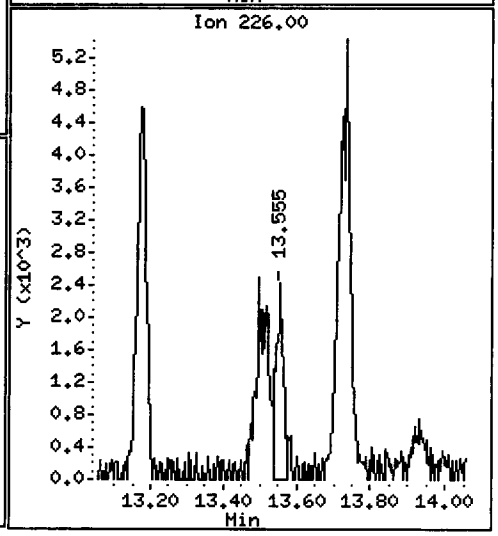












Data File: /chem3/nt4.i/20110503.b/05031108.d

Date : 03-MAY-2011 19:25

Client ID: DMA-TP1-3-4.5-04191

Instrument: nt4.i

Sample Info: SS83B

Volume Injected (uL): 1.0

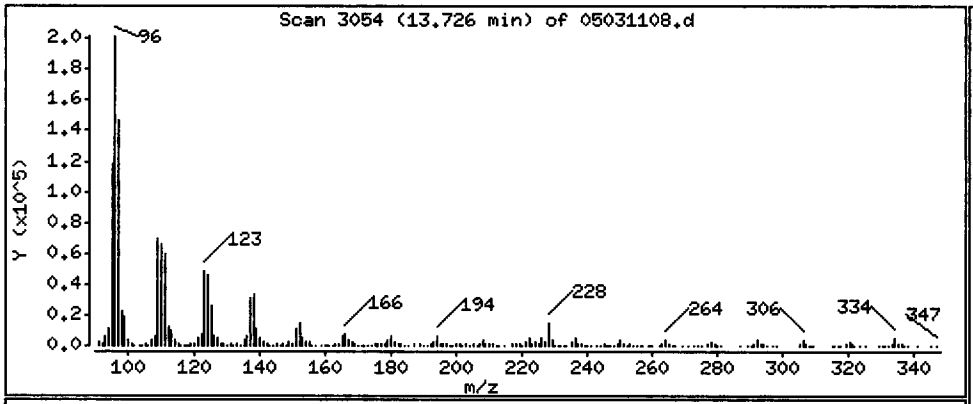
Operator: JZ

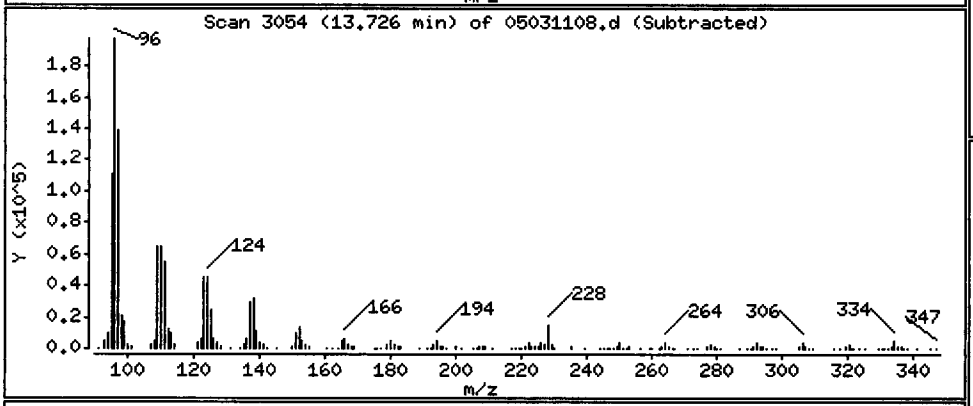
Column phase: ZB35

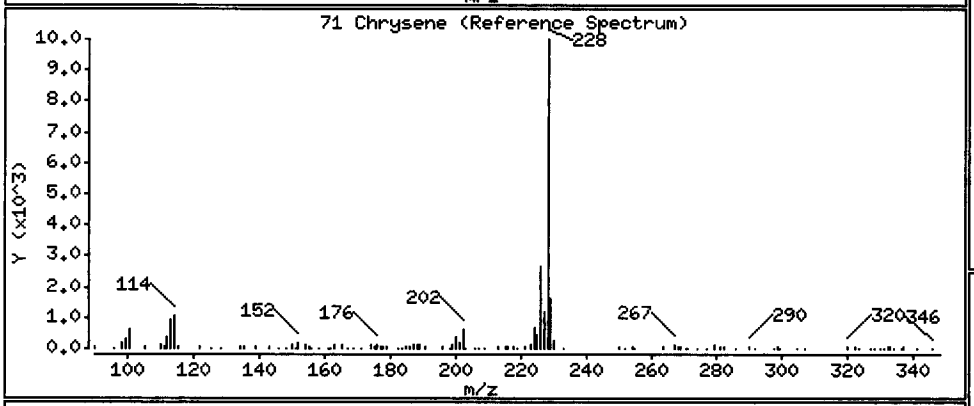
Column diameter: 0.32

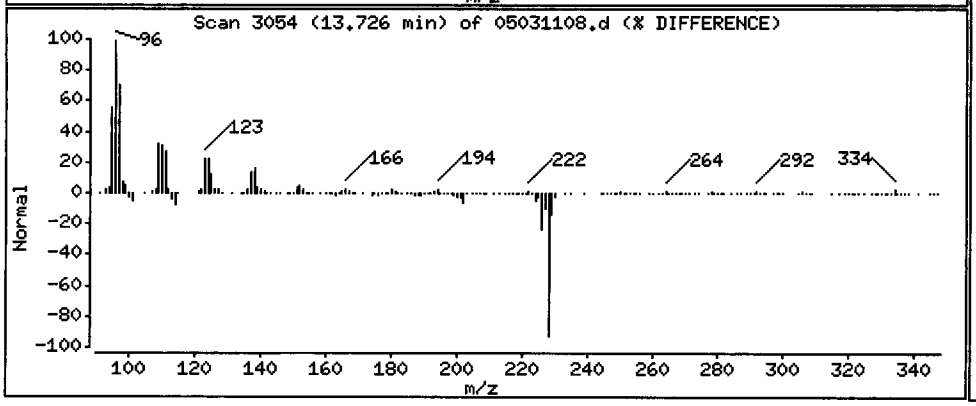
71 Chrysene

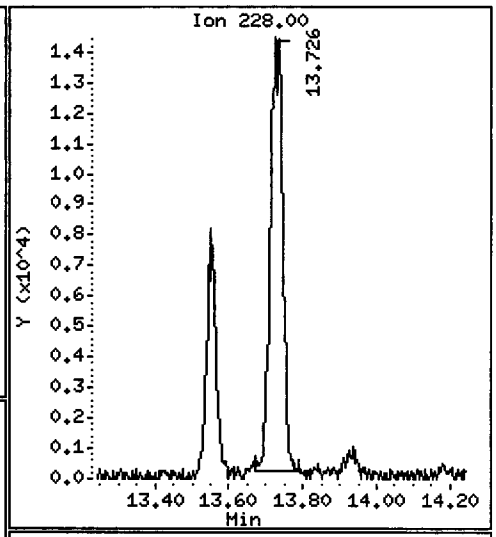
Concentration: 13.42 ug/kg

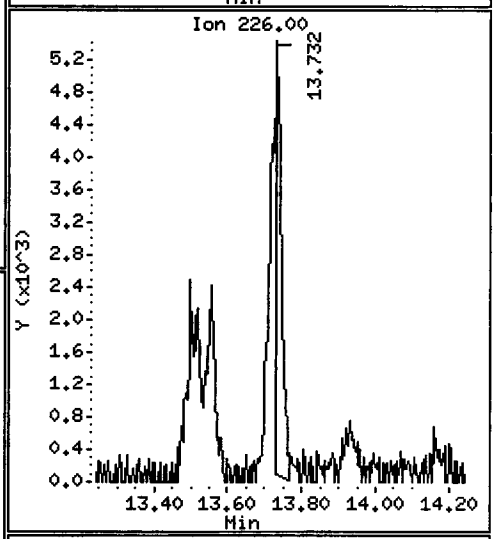


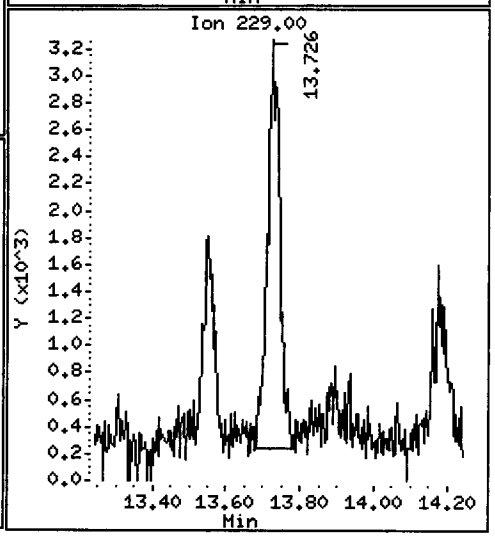












Data File: /chem3/nt4.i/20110503.b/05031108.d

Date : 03-MAY-2011 19:25

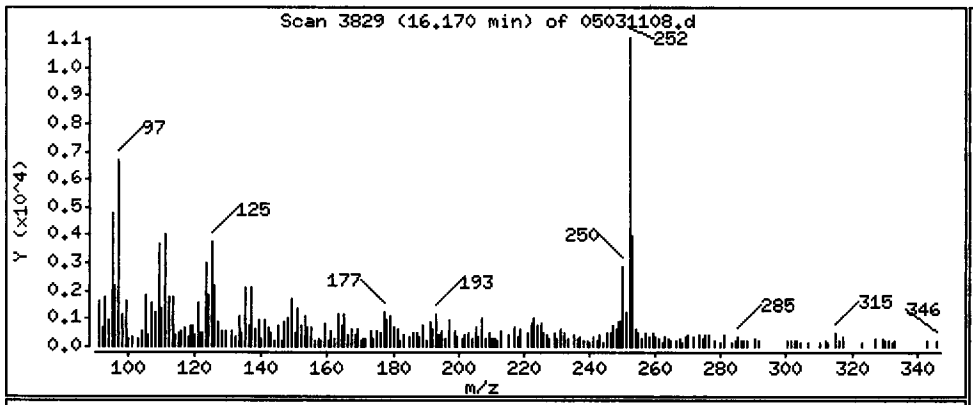
Client ID: DMA-TP1-3-4.5-04191 Instrument: nt4.i

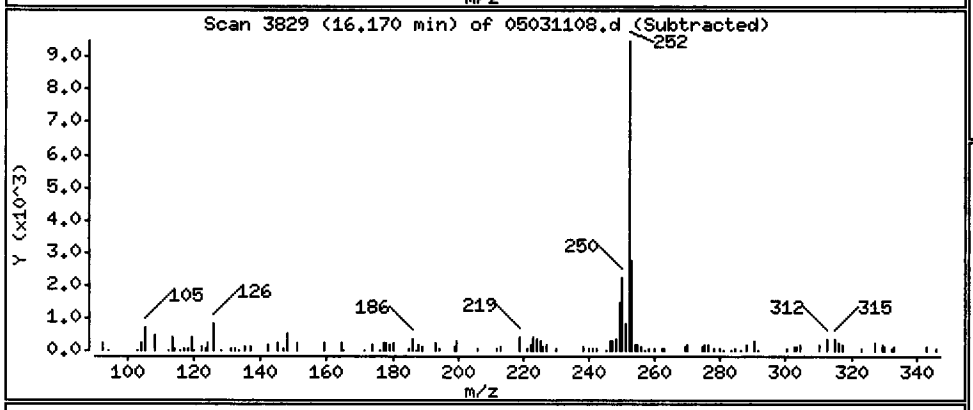
Sample Info: SS83B

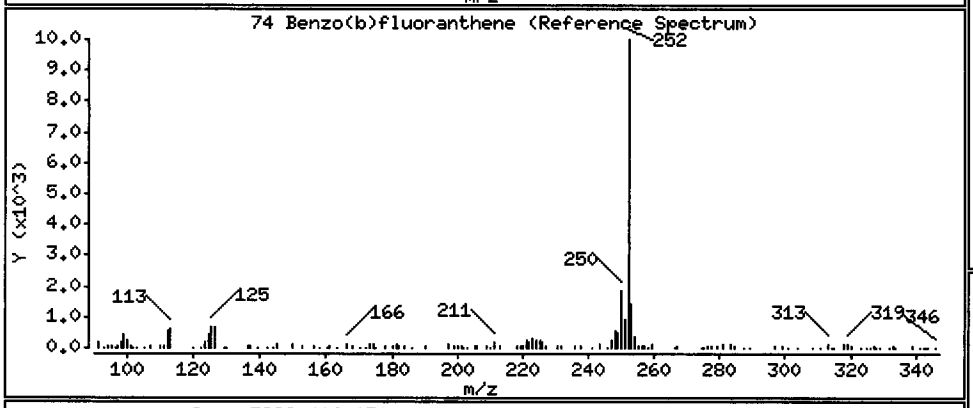
Volume Injected (uL): 1.0 Operator: JZ

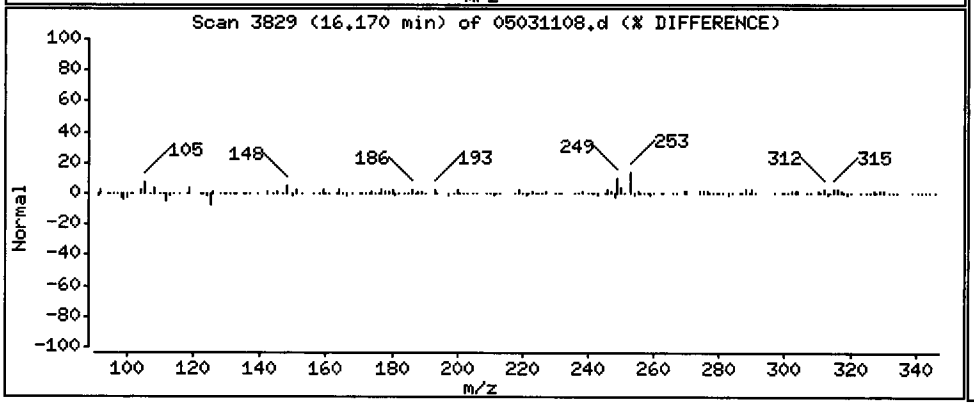
Column phase: ZB35 Column diameter: 0.32

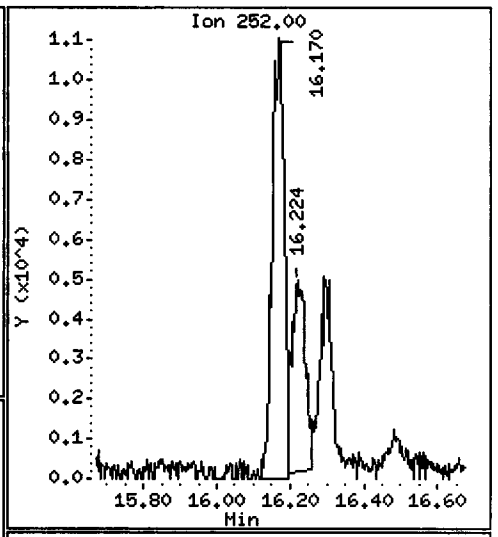
74 Benzo(b)fluoranthene Concentration: 9.700 ug/kg

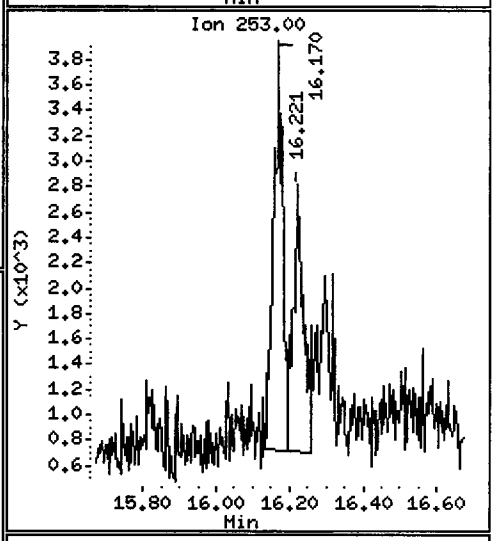


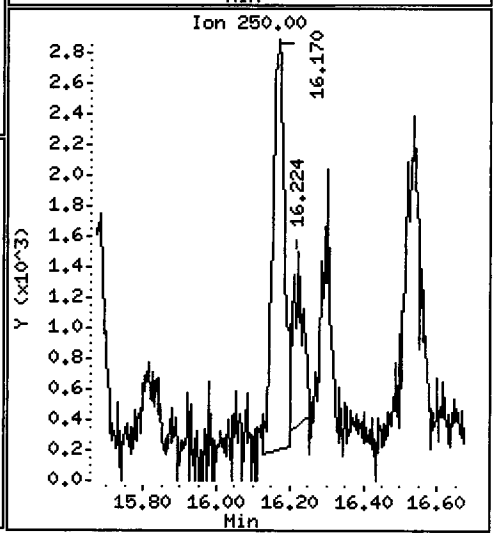












Data File: /chem3/nt4.i/20110503.b/05031108.d

Date : 03-MAY-2011 19:25

Client ID: DMA-TP1-3-4.5-04191

Instrument: nt4.i

Sample Info: SS83B

Volume Injected (uL): 1.0

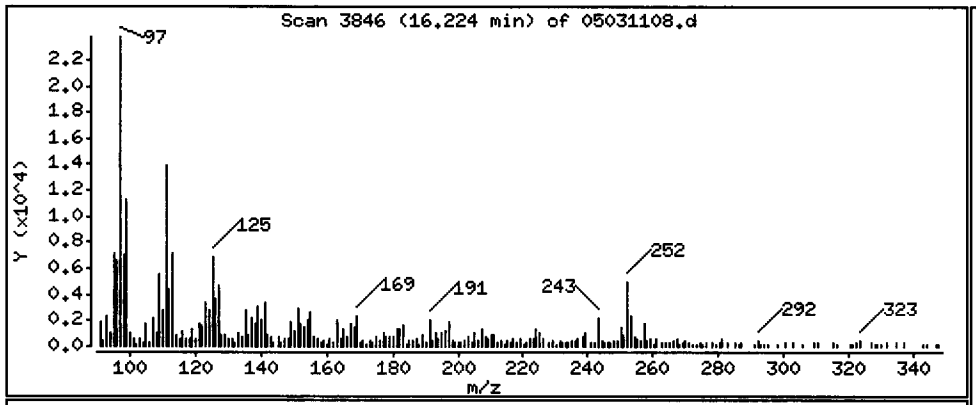
Operator: JZ

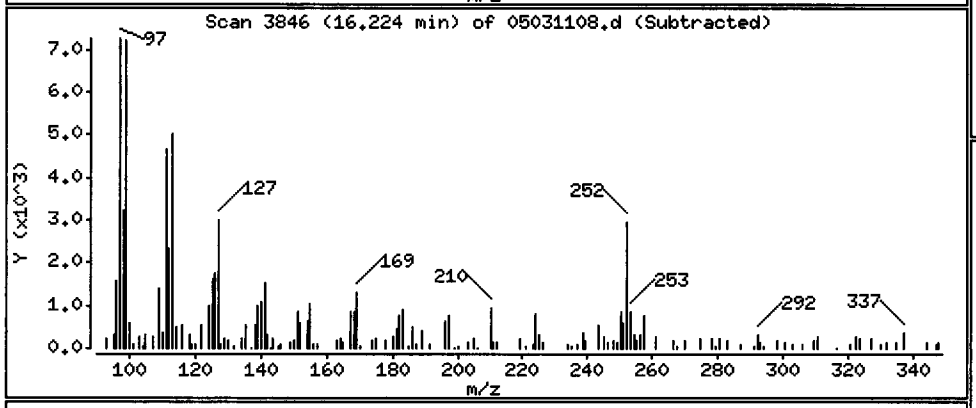
Column phase: ZB35

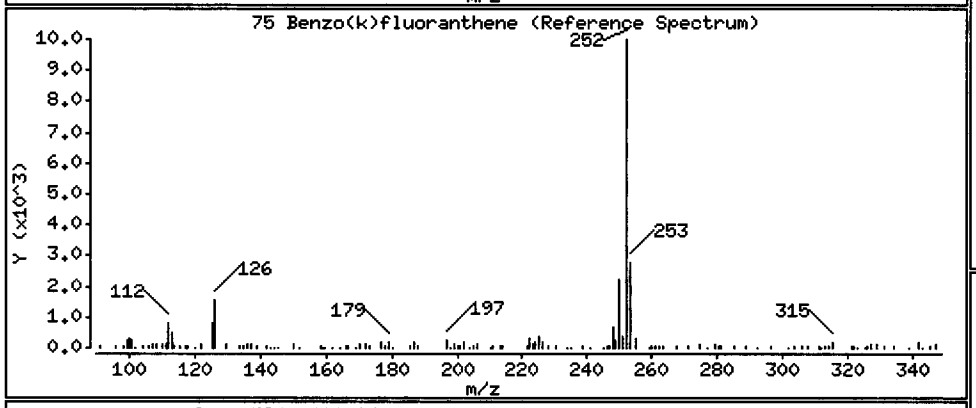
Column diameter: 0.32

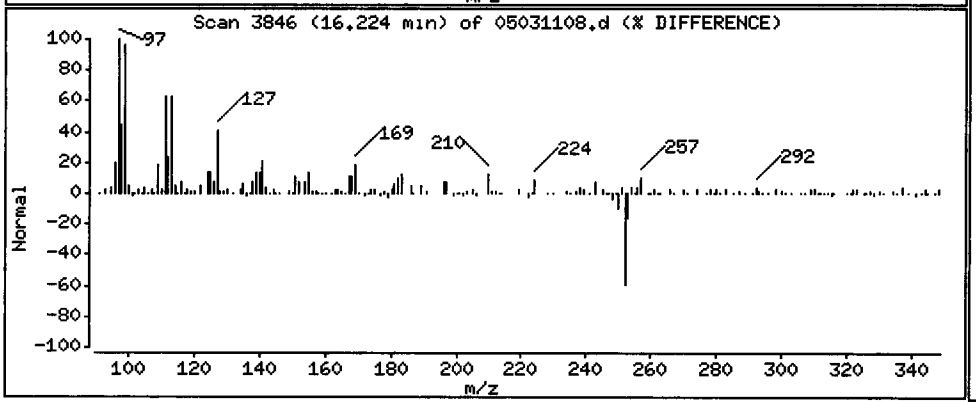
75 Benzo(k)fluoranthene

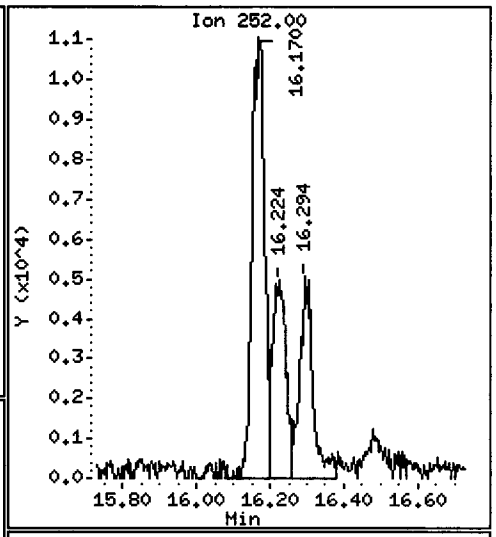
Concentration: 4.442 ug/kg

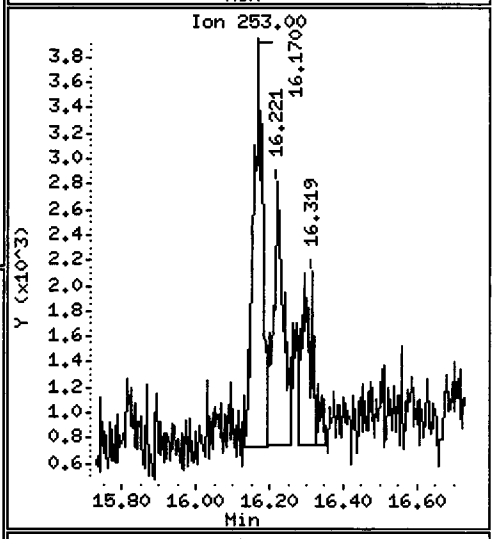


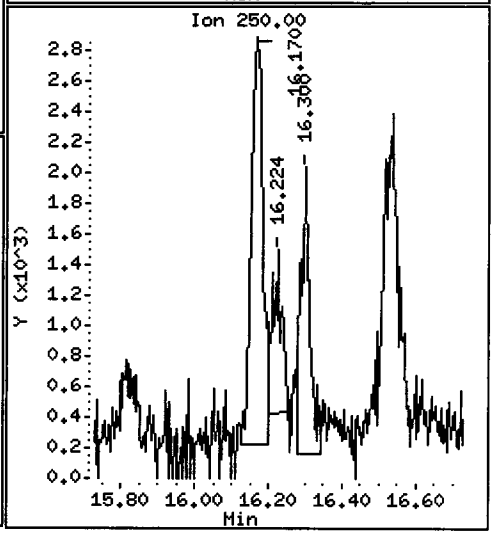












Data File: /chem3/nt4.i/20110503.b/05031108.d

Date : 03-MAY-2011 19:25

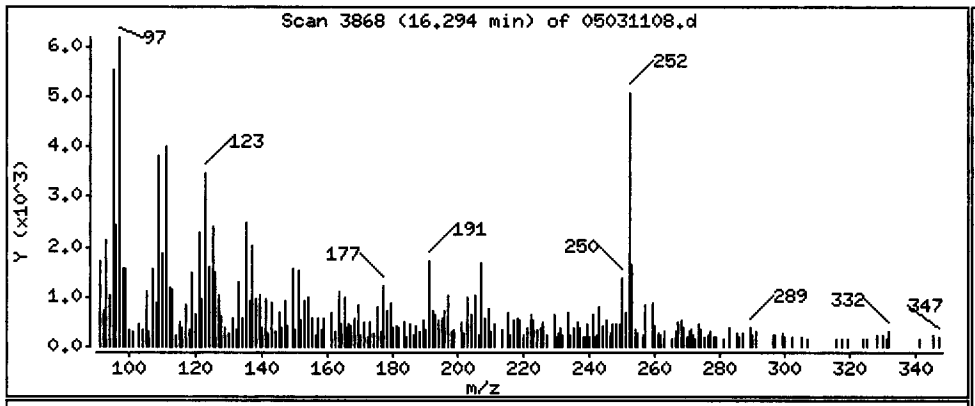
Client ID: DMA-TP1-3-4.5-04191 Instrument: nt4.i

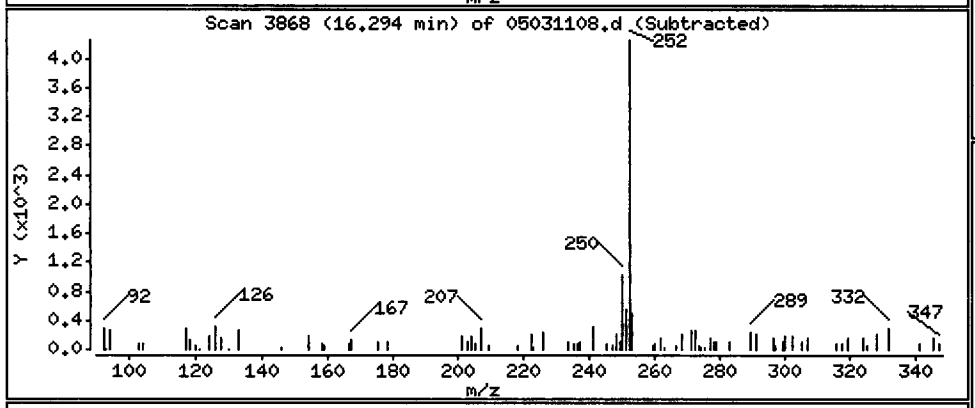
Sample Info: SS83B

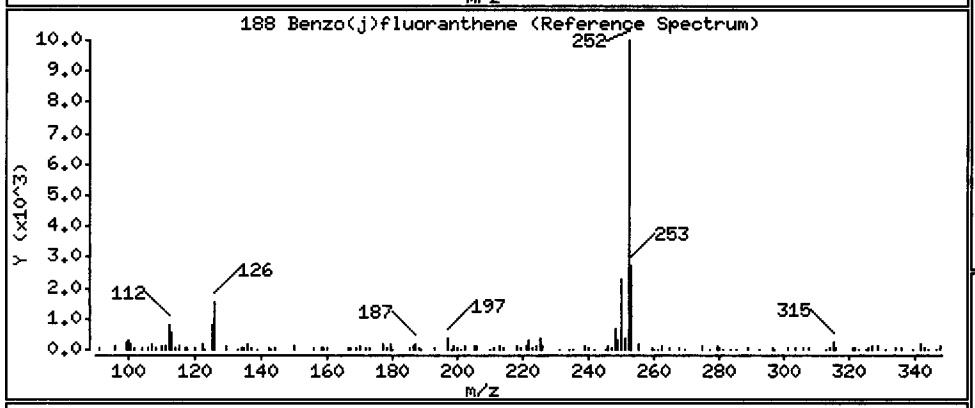
Volume Injected (uL): 1.0 Operator: JZ

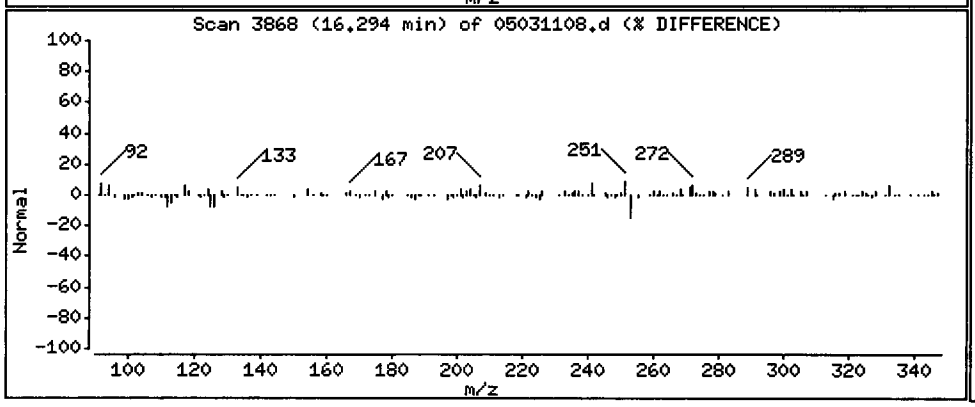
Column phase: ZB35 Column diameter: 0.32

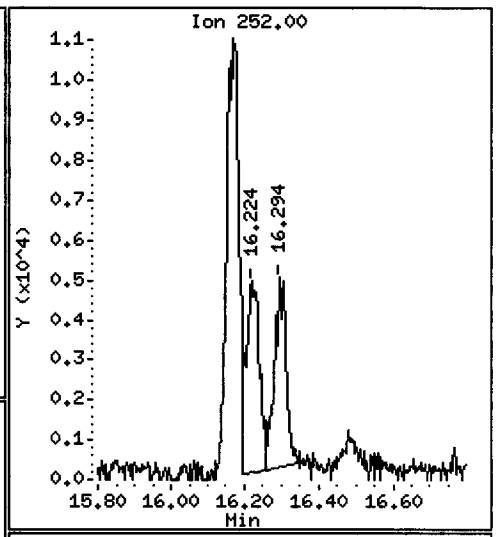
188 Benzo(j)fluoranthene Concentration: 3.879 ug/kg

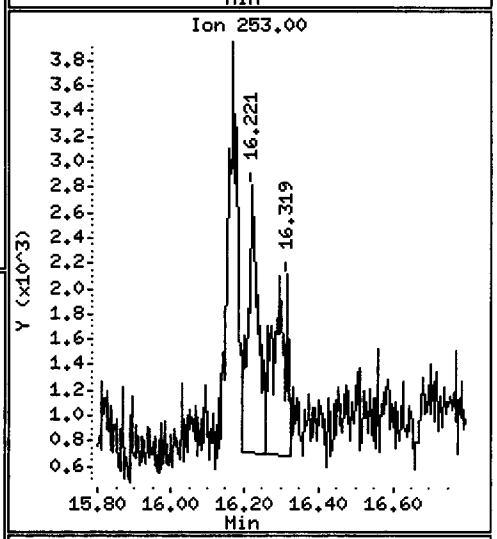


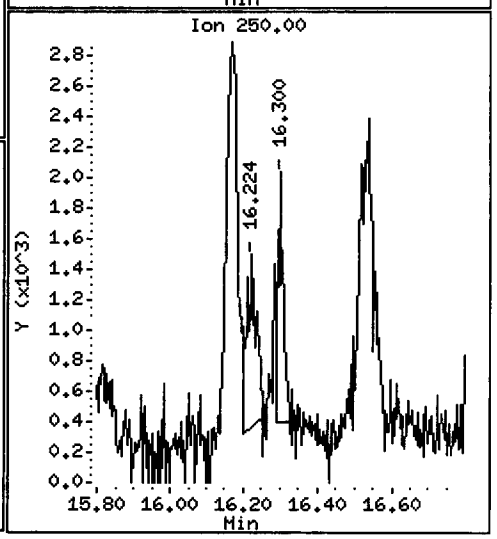












Data File: /chem3/nt4.i/20110503.b/05031108.d

Date : 03-MAY-2011 19:25

Client ID: DMA-TP1-3-4.5-04191

Instrument: nt4.i

Sample Info: SS83B

Volume Injected (uL): 1.0

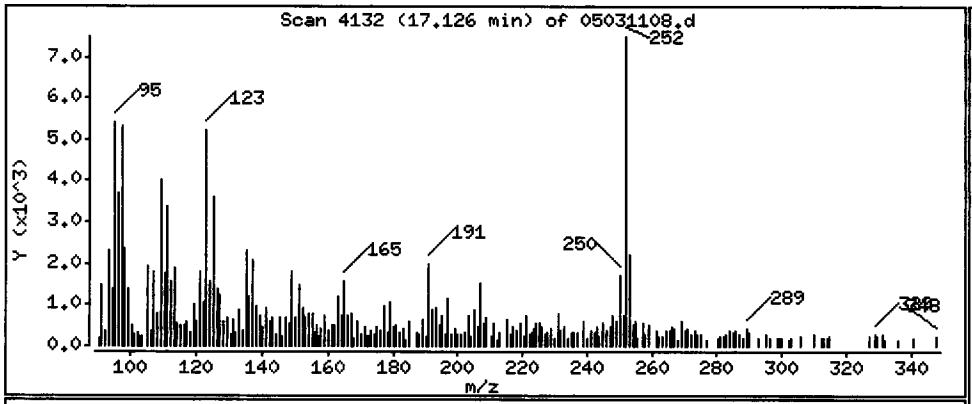
Operator: JZ

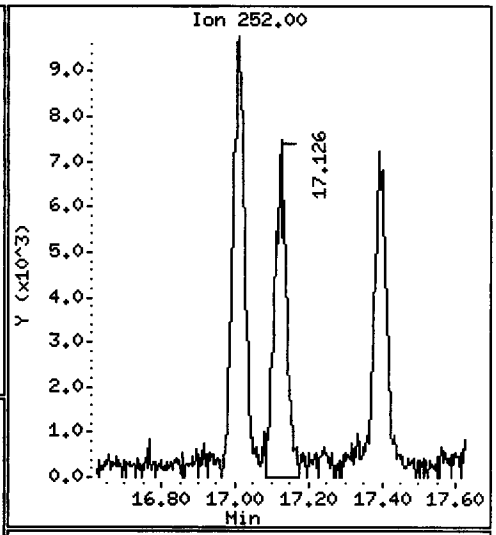
Column phase: ZB35

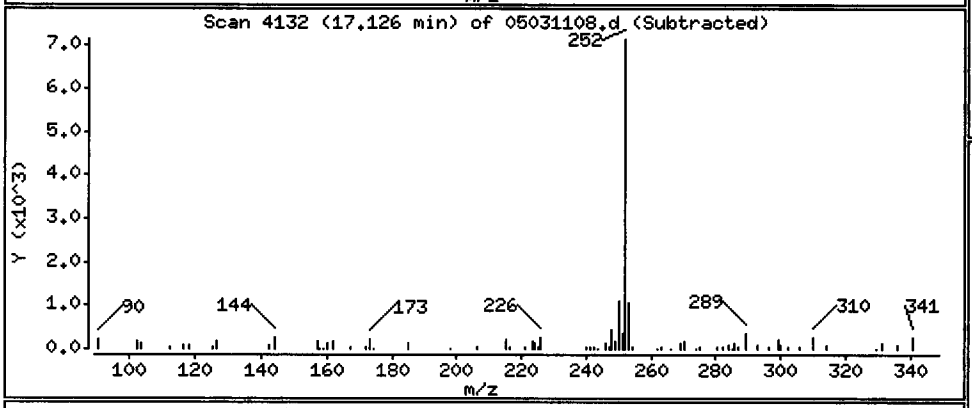
Column diameter: 0.32

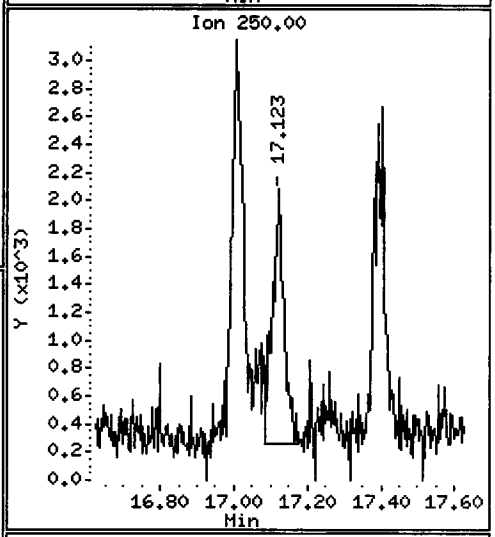
76 Benzo(a)pyrene

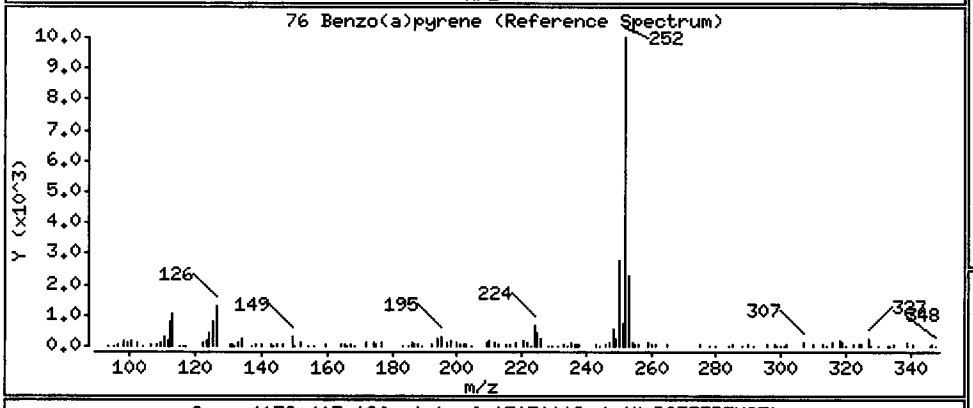
Concentration: 6.852 ug/kg

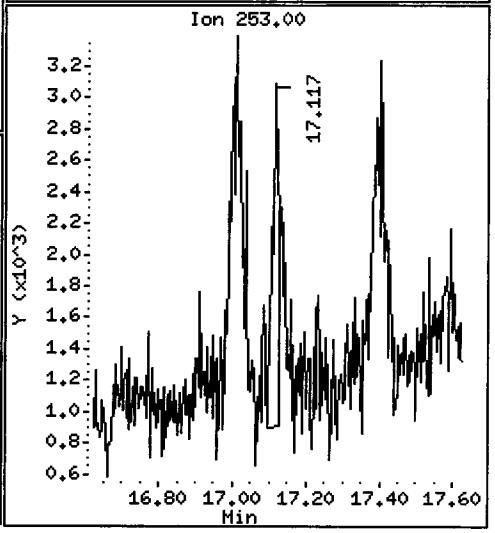


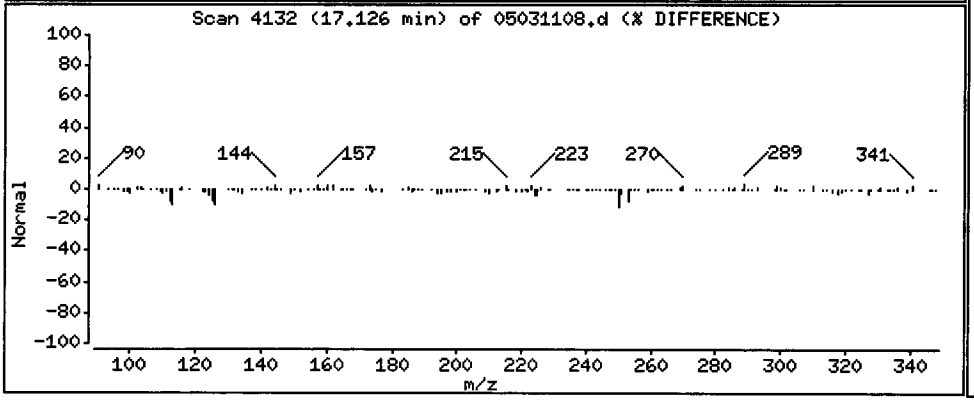












CO-ELUTION SUMMARY FOR FILE - 05031108.d

Lab ID: SS83B, Method: SIMPNA0421.m, Instrument: nt4.i, Date: 03-MAY-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20110503.b/05031109.d
Lab Smp Id: SS83C Client Smp ID: DMA-TP1-4.5-5.5-041
Inj Date : 03-MAY-2011 19:53
Operator : JZ Inst ID: nt4.i
Smp Info : SS83C
Misc Info : 11-8713
Comment : 1ul Injection
Method : /chem3/nt4.i/20110503.b/SIMPNA0421.m
Meth Date : 04-May-2011 16:19 jianqing Quant Type: ISTD
Cal Date : 21-APR-2011 22:25 Cal File: 04211107.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

05/06/11

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	12.28000	Weight of sample extracted (g)
M	10.80000	% 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	4.793	4.800	(1.000)	275821	2.00000	
28 Naphthalene	128	Compound Not Detected.					
$ 190 2-Methylnaphthalene-d10	152	5.535	5.539	(1.155)	137813	1.78762	81.60
32 2-Methylnaphthalene	141	Compound Not Detected.					
105 1-methylnaphthalene	141	Compound Not Detected.					
40 Acenaphthylene	152	Compound Not Detected.					
* 42 Acenaphthene-d10	164	7.042	7.046	(1.000)	158486	2.00000	
44 Acenaphthene	153	7.090	7.094	(1.007)	6168	0.07767	3.545
46 Dibenzofuran	168	Compound Not Detected.					
49 Fluorene	166	Compound Not Detected.					
* 59 Phenanthrene-d10	188	8.989	8.993	(1.000)	264064	2.00000	
60 Phenanthrene	178	9.020	9.024	(1.004)	17810	0.13782	6.291
61 Anthracene	178	Compound Not Detected.					
64 Fluoranthene	202	10.698	10.705	(1.190)	16018	0.11222	5.122
65 Pyrene	202	11.168	11.175	(0.817)	16674	0.12734	5.813

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
68 Benzo(a)anthracene	228	13.553	13.557	(0.992)	6846	0.05637	2.573
* 69 Chrysene-d12	240	13.667	13.671	(1.000)	260406	2.00000	
71 Chrysene	228	13.727	13.743	(1.004)	11511	0.09780	4.464
74 Benzo(b)fluoranthene	252	16.168	16.172	(0.933)	9437	0.07136	3.257
75 Benzo(k)fluoranthene	252	Compound Not Detected.					
188 Benzo(j)fluoranthene	252	Compound Not Detected.					
76 Benzo(a)pyrene	252	17.114	17.125	(0.988)	7483	0.06323	2.886
* 77 Perylene-d12	264	17.323	17.330	(1.000)	243764	2.00000	
78 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
$ 191 Dibenzo(a,h)anthracene-d14	292	19.587	19.595	(1.131)	265642	2.63423	120.2
79 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
80 Benzo(g,h,i)perylene	276	20.499	20.503	(1.183)	9034	0.07597	3.468
99 Perylene	252	Compound Not Detected.					

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 05031109.d
Lab Smp Id: SS83C
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20110503.b/SIMPNA0421.m
Misc Info: 11-8713

Calibration Date: 03-MAY-2011
Calibration Time: 16:33
Client Smp ID: DMA-TP1-4.5-5.5-
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	275821	-0.08
42 Acenaphthene-d10	158527	79264	317054	158486	-0.03
59 Phenanthrene-d10	277528	138764	555056	264064	-4.85
69 Chrysene-d12	304115	152058	608230	260406	-14.37
77 Perylene-d12	257833	128916	515666	243764	-5.46

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	4.80	4.30	5.30	4.79	-0.15
42 Acenaphthene-d10	7.05	6.55	7.55	7.04	-0.06
59 Phenanthrene-d10	8.99	8.49	9.49	8.99	-0.04
69 Chrysene-d12	13.67	13.17	14.17	13.67	-0.03
77 Perylene-d12	17.33	16.83	17.83	17.32	-0.04

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

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd Snider
Sample Matrix: SOLID
Lab Smp Id: SS83C
Level: LOW
Data Type: MS DATA
SpikeList File: pnalcss.spk
Sublist File: pnax.sub
Method File: /chem3/nt4.i/20110503.b/SIMPNA0421.m
Misc Info: 11-8713

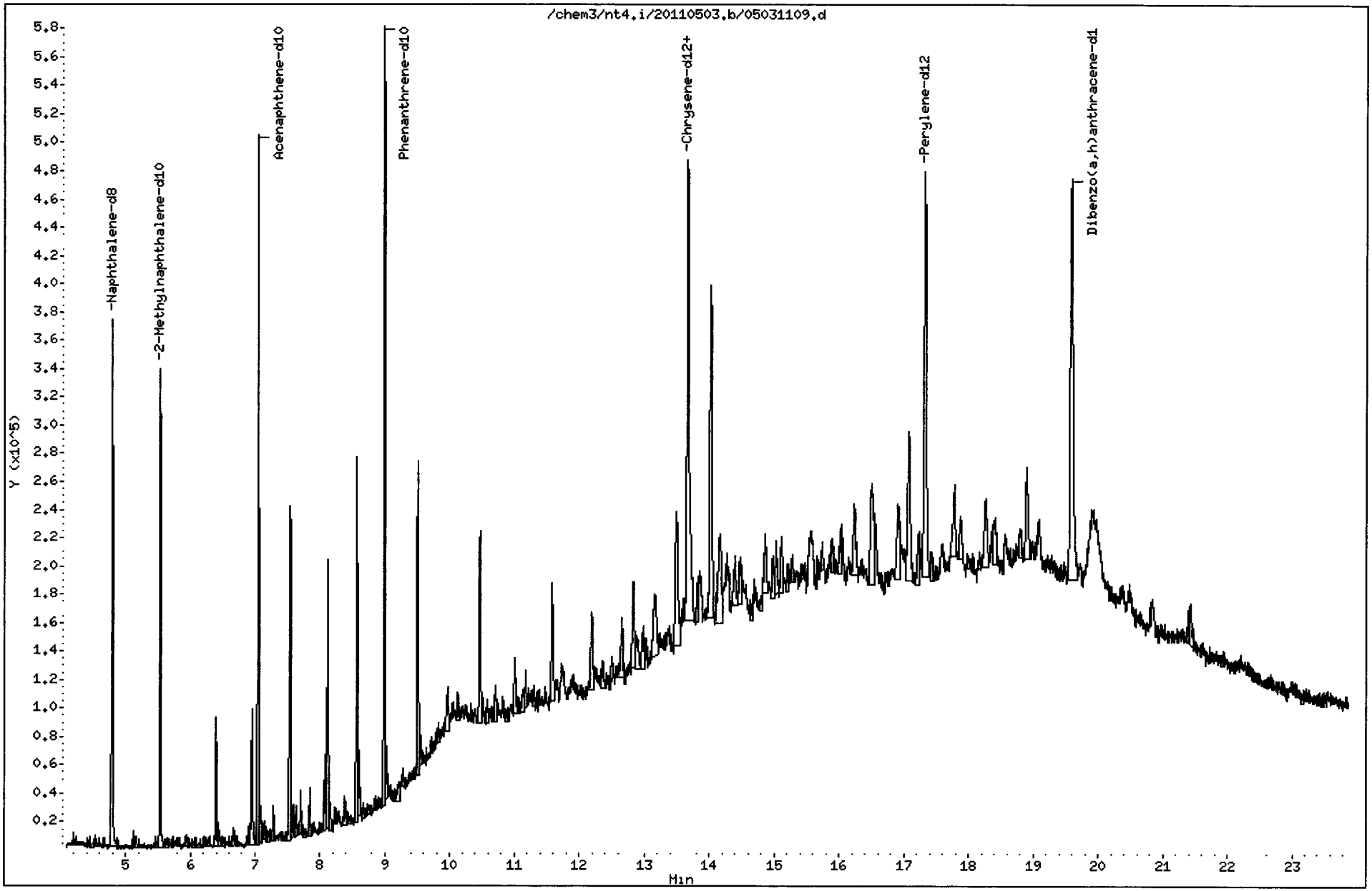
Client SDG: SS83
Fraction: SV
Client Smp ID: DMA-TP1-4.5-5.5-041
Operator: JZ
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	136.9	81.60	59.59	34-100
$ 191 Dibenzo(a,h)anthra	136.9	120.2	87.81	10-117

Data File: /chem3/nt4.i/20110503.b/05031109.d
Date : 03-MAY-2011 19:53
Client ID: DMA-TP1-4.5-5.5-041
Sample Info: SS83C
Volume Injected (uL): 1.0
Column phase: ZB35

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

754
SS83:86751



Data File: /chem3/nt4.i/20110503.b/05031109.d

Date : 03-MAY-2011 19:53

Client ID: DMA-TP1-4.5-5.5-041

Instrument: nt4.i

Sample Info: SS83C

Volume Injected (uL): 1.0

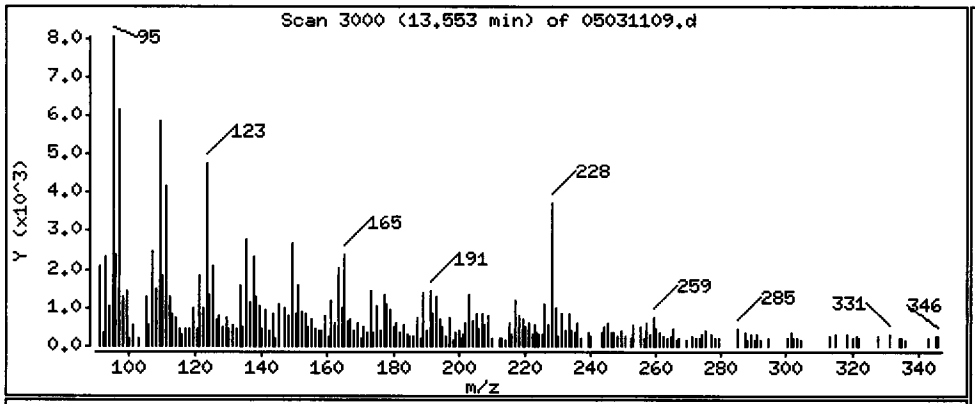
Operator: JZ

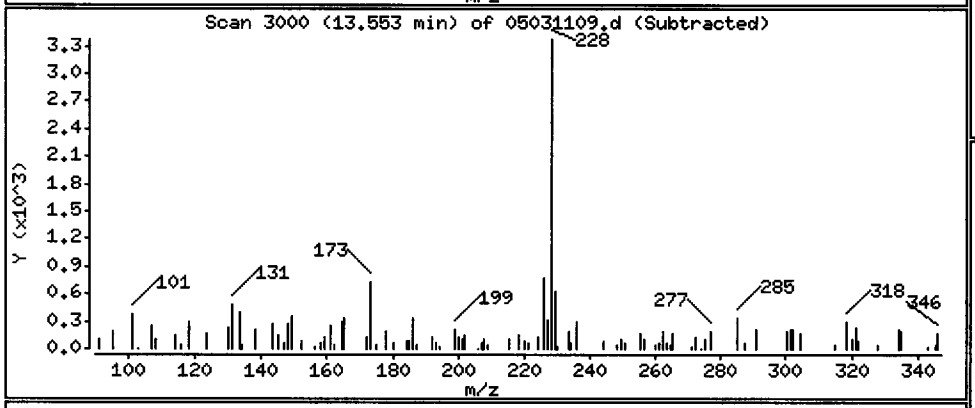
Column phase: ZB35

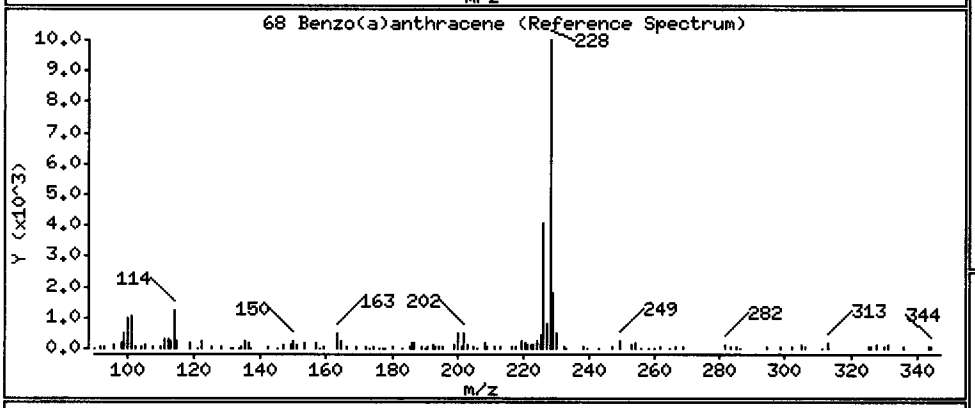
Column diameter: 0.32

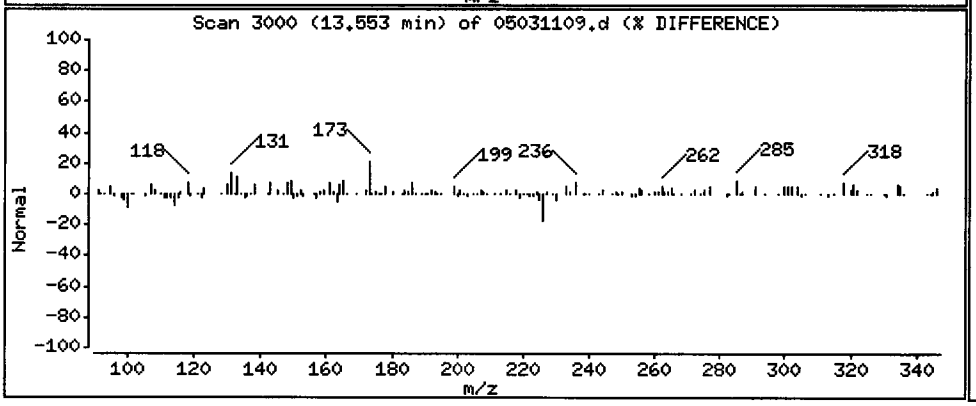
68 Benzo(a)anthracene

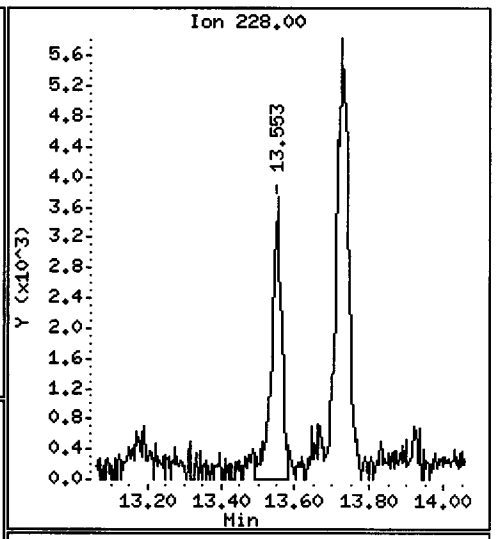
Concentration: 2.573 ug/kg

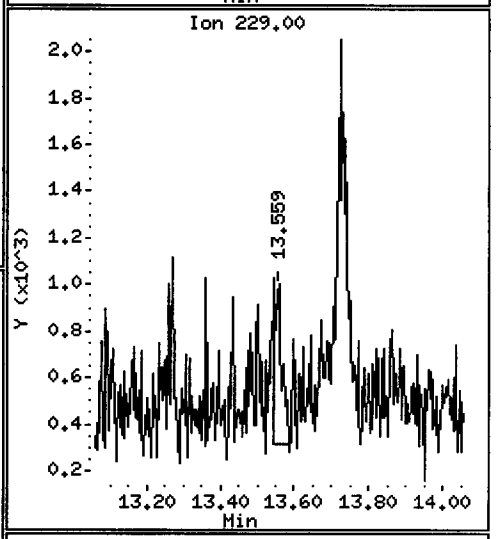


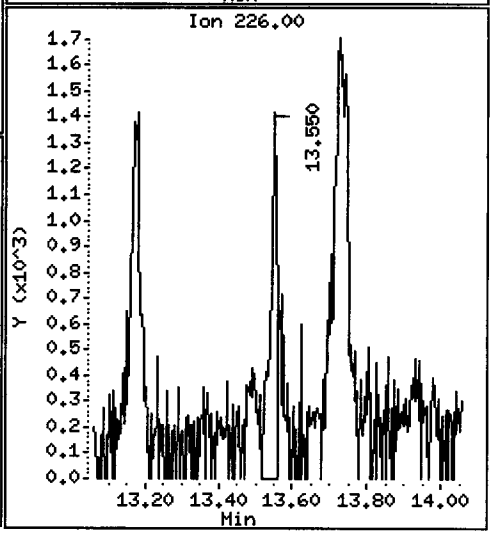












Data File: /chem3/nt4.i/20110503.b/05031109.d

Date : 03-MAY-2011 19:53

Client ID: DMA-TP1-4.5-5.5-041

Instrument: nt4.i

Sample Info: SS83C

Volume Injected (uL): 1.0

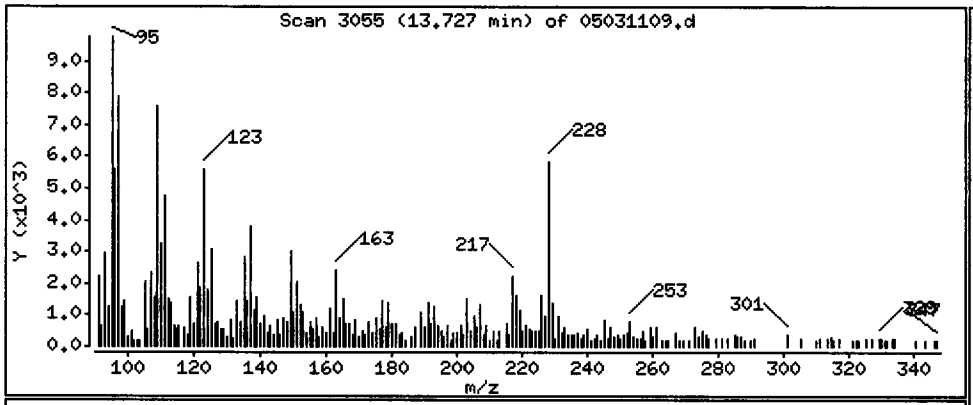
Operator: JZ

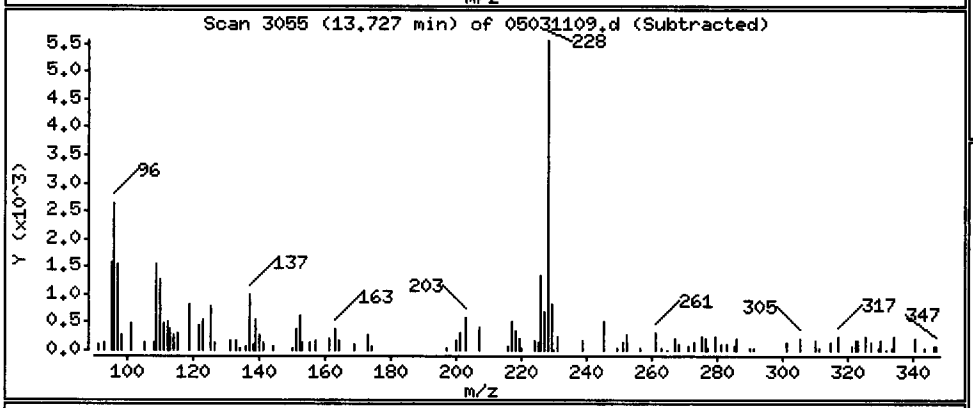
Column phase: ZB35

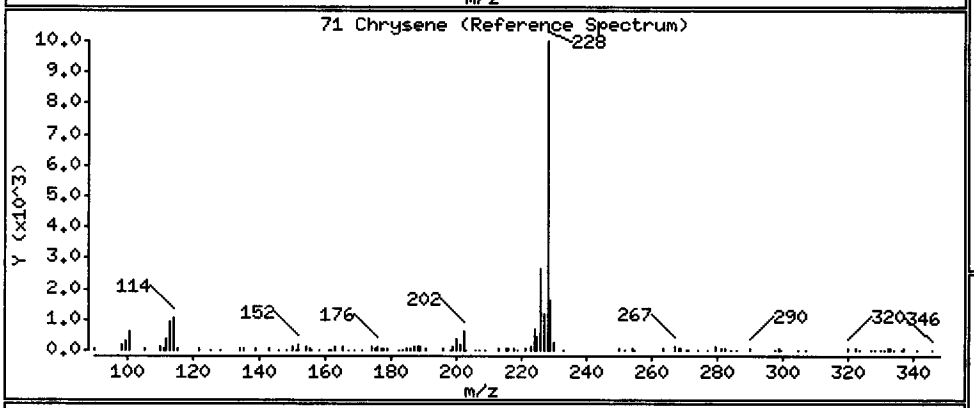
Column diameter: 0.32

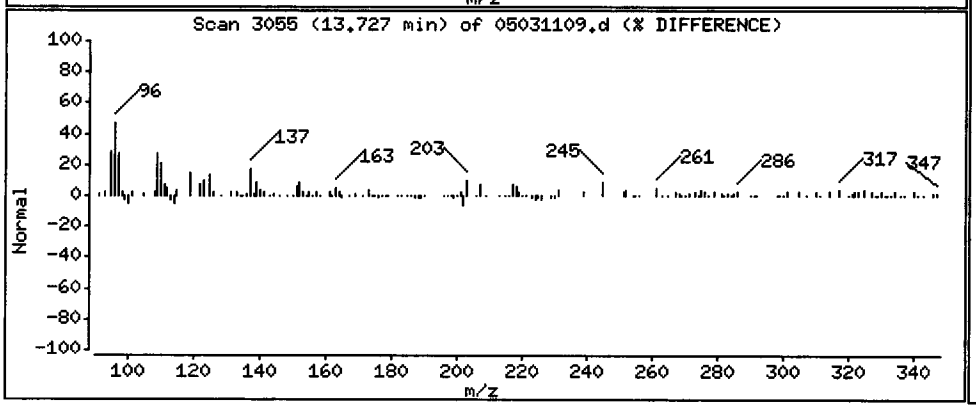
71 Chrysene

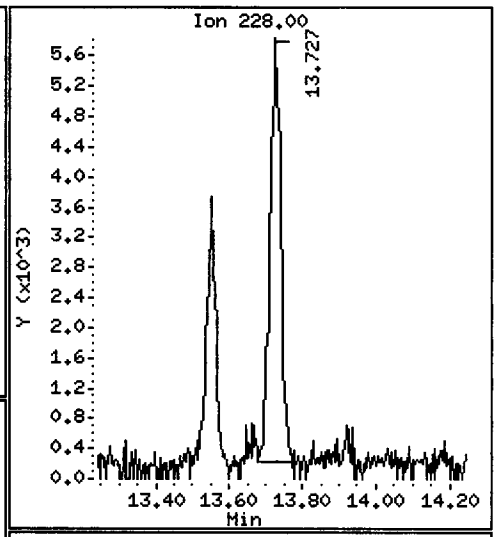
Concentration: 4.464 ug/kg

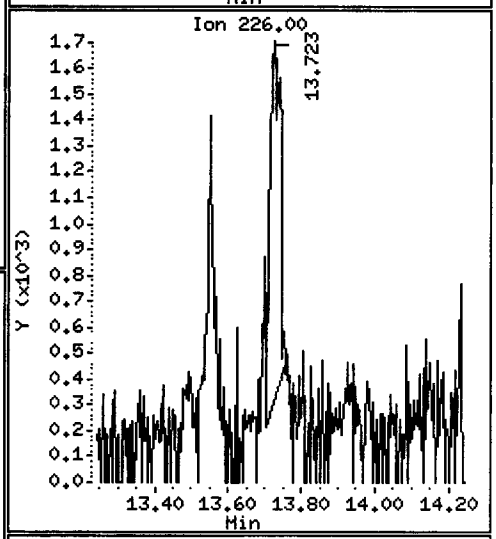


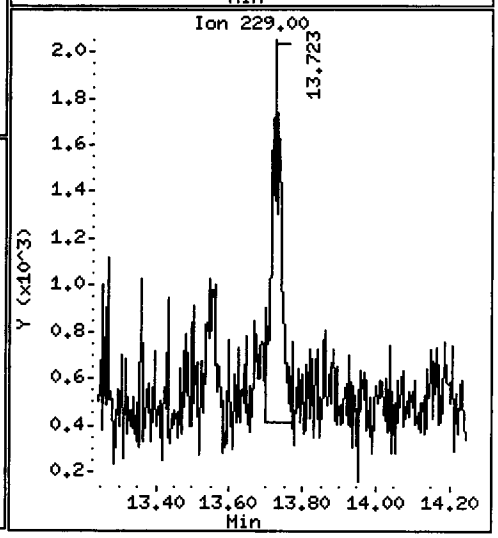












SS83 : 00753

Data File: /chem3/nt4.i/20110503.b/05031109.d

Date : 03-MAY-2011 19:53

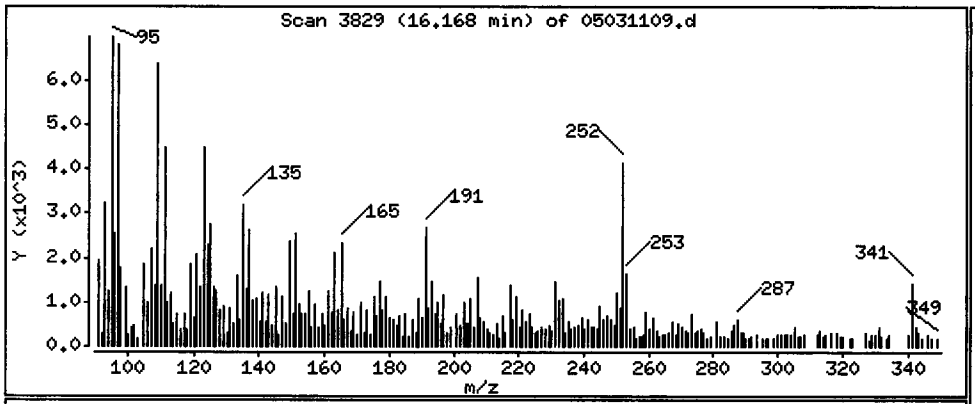
Client ID: DMA-TP1-4.5-5.5-041 Instrument: nt4.i

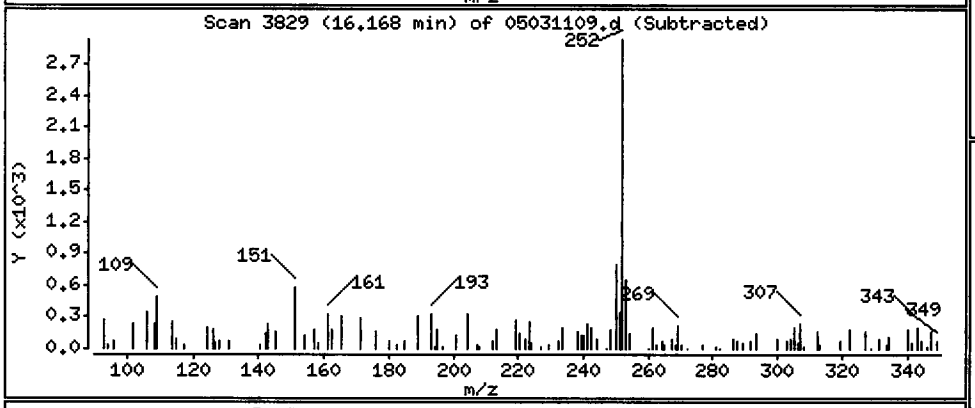
Sample Info: SS83C

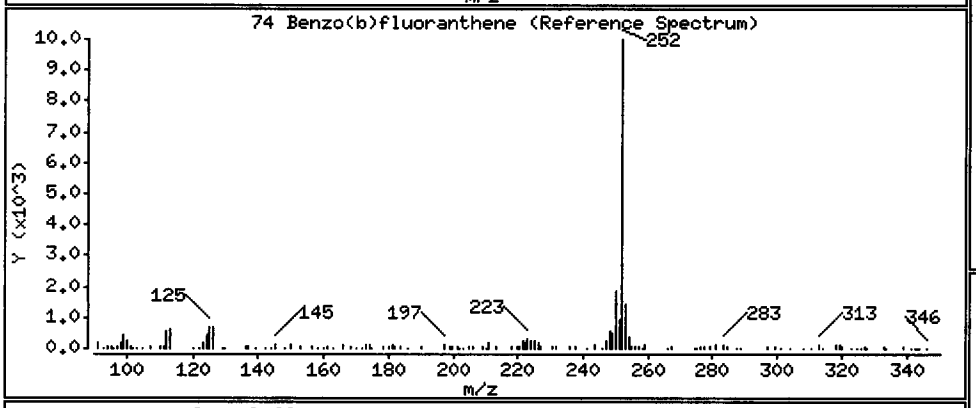
Volume Injected (uL): 1.0 Operator: JZ

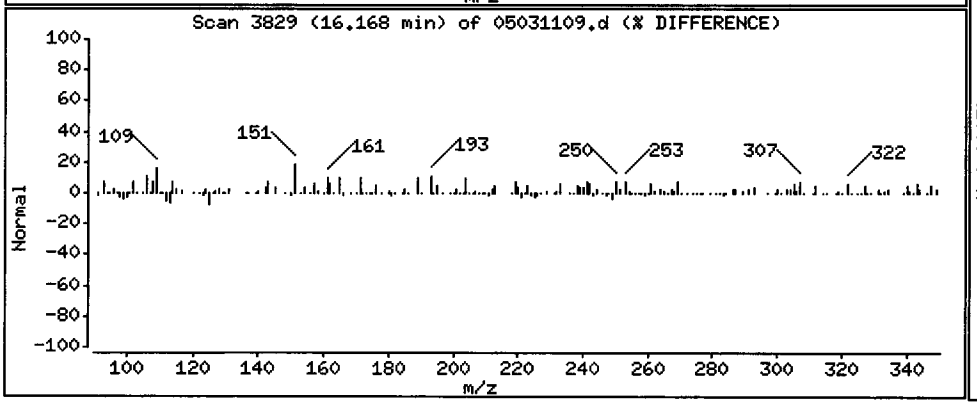
Column phase: ZB35 Column diameter: 0.32

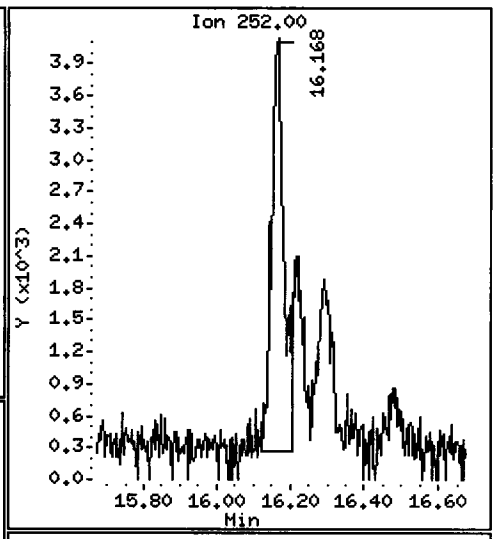
74 Benzo(b)fluoranthene Concentration: 3.257 ug/kg

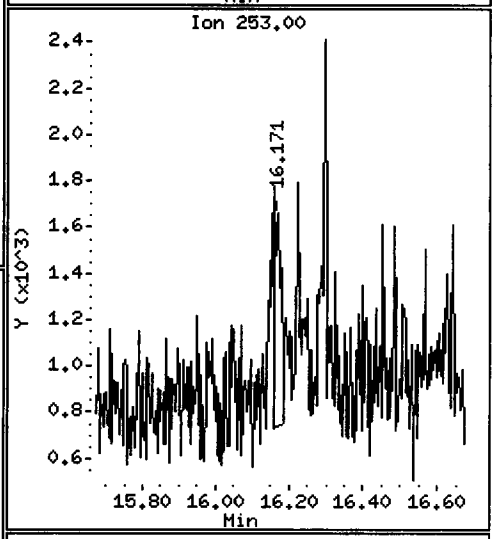


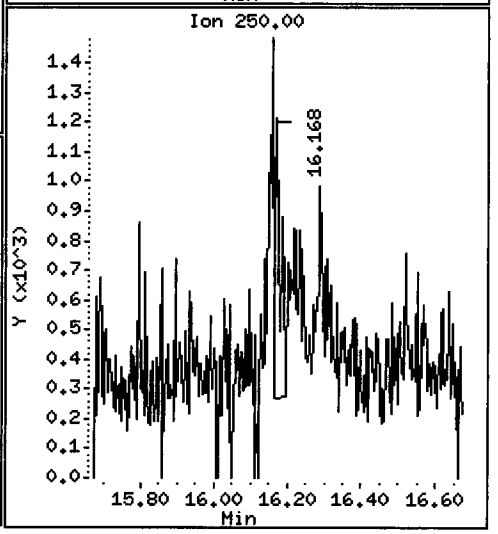












Data File: /chem3/nt4.i/20110503.b/05031109.d

Date : 03-MAY-2011 19:53

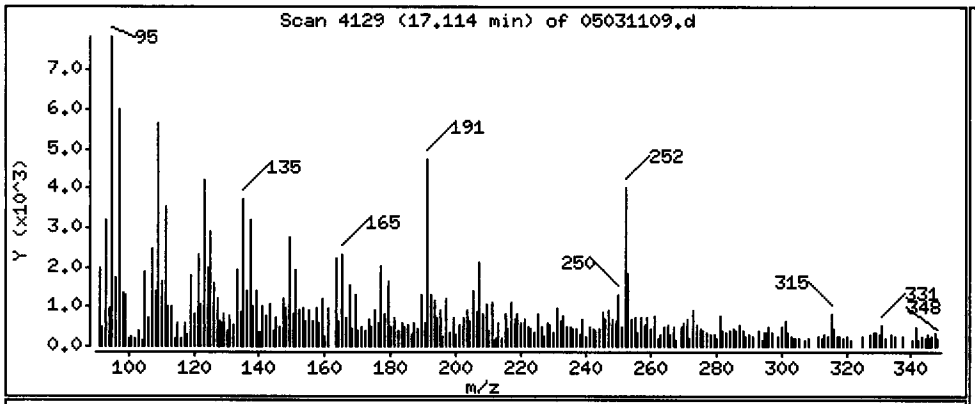
Client ID: DMA-TP1-4.5-5.5-041 Instrument: nt4.i

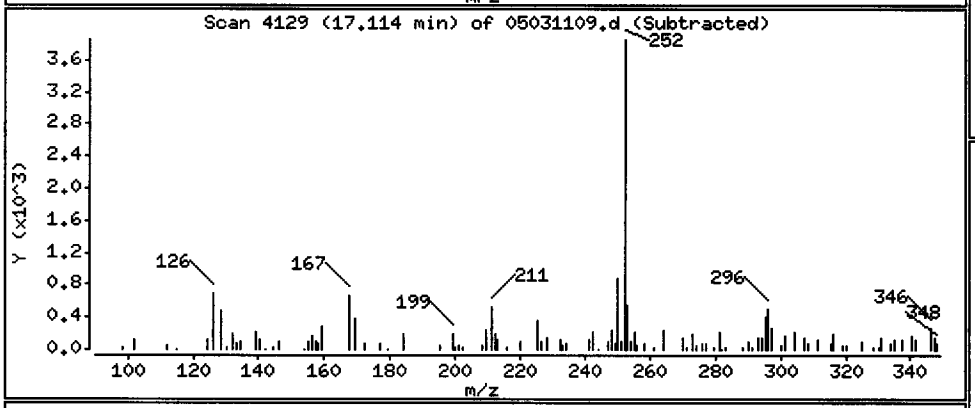
Sample Info: SS83C

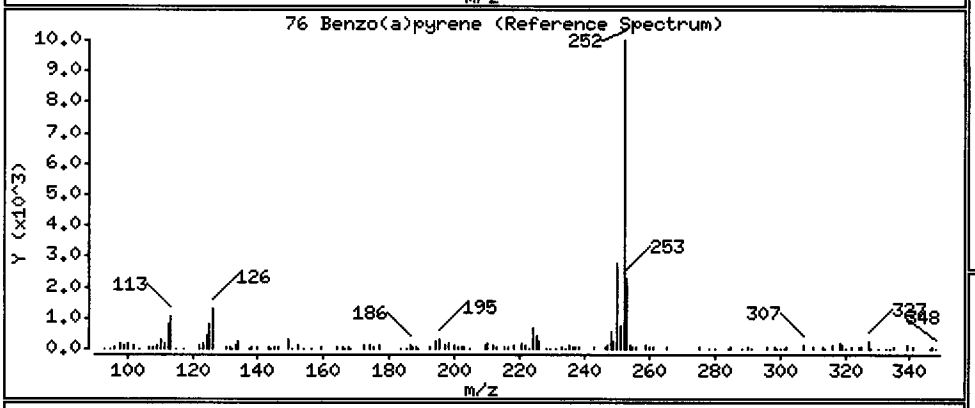
Volume Injected (uL): 1.0 Operator: JZ

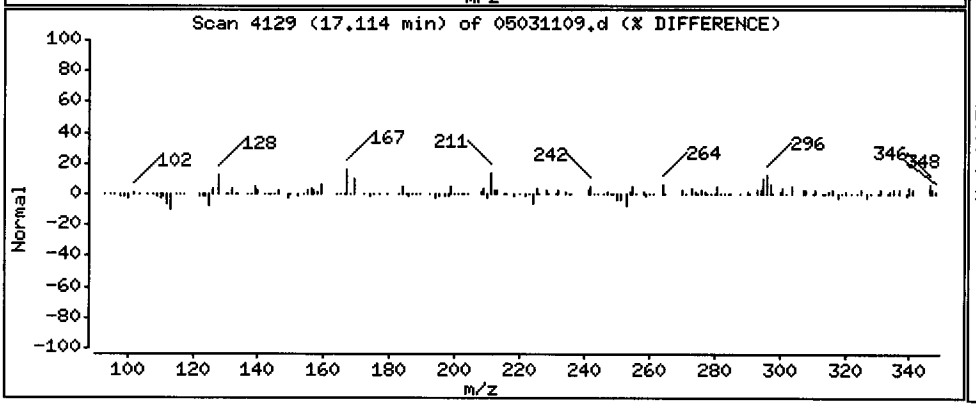
Column phase: ZB35 Column diameter: 0.32

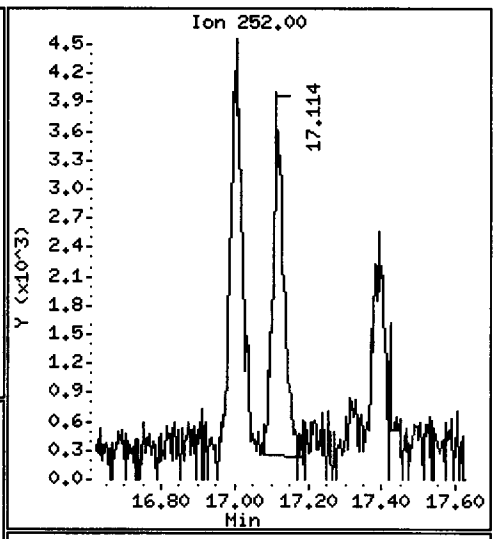
76 Benzo(a)pyrene Concentration: 2.886 ug/kg

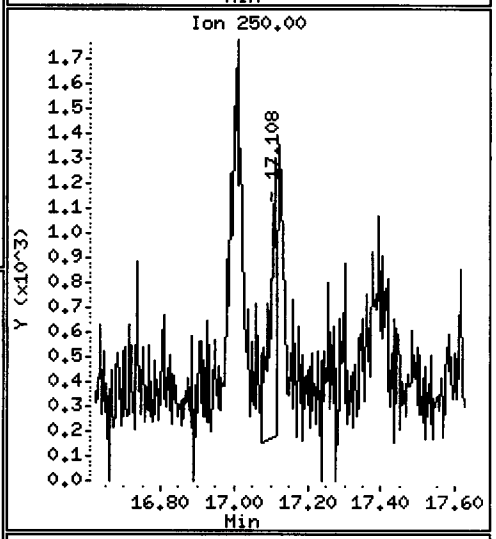


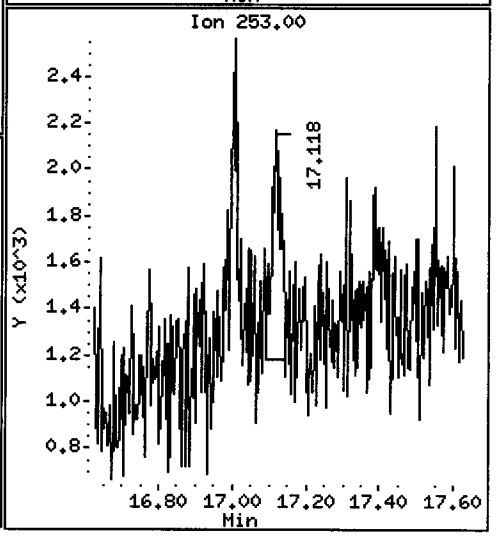












CO-ELUTION SUMMARY FOR FILE - 05031109.d

Lab ID: SS83C, Method: SIMPNA0421.m, Instrument: nt4.i, Date: 03-MAY-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20110503.b/05031110.d
Lab Smp Id: SS83D Client Smp ID: DMA-TP2-1.5-3-04191
Inj Date : 03-MAY-2011 20:20
Operator : JZ Inst ID: nt4.i
Smp Info : SS83D
Misc Info : 11-8714
Comment : 1ul Injection
Method : /chem3/nt4.i/20110503.b/SIMPNA0421.m
Meth Date : 04-May-2011 16:19 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

05/06/11

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	12.78000	Weight of sample extracted (g)
M	13.80000	% 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	4.791	4.800	(1.000)	272221	2.00000	
28 Naphthalene	128	Compound Not Detected.					
$ 190 2-Methylnaphthalene-d10	152	5.533	5.539	(1.155)	136020	1.78769	81.14
32 2-Methylnaphthalene	141	Compound Not Detected.					
105 1-methylnaphthalene	141	Compound Not Detected.					
40 Acenaphthylene	152	Compound Not Detected.					
* 42 Acenaphthene-d10	164	7.044	7.046	(1.000)	161246	2.00000	
44 Acenaphthene	153	Compound Not Detected.					
46 Dibenzofuran	168	Compound Not Detected.					
49 Fluorene	166	Compound Not Detected.					
* 59 Phenanthrene-d10	188	8.987	8.993	(1.000)	263626	2.00000	
60 Phenanthrene	178	9.022	9.024	(1.004)	9558	0.07409	3.363
61 Anthracene	178	Compound Not Detected.					
64 Fluoranthene	202	10.703	10.705	(1.191)	14054	0.09862	4.476
65 Pyrene	202	11.176	11.175	(0.818)	15691	0.11517	5.227
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	13.668	13.671	(1.000)	270942	2.00000	
71 Chrysene	228	13.734	13.743	(1.005)	13253	0.10822	4.912
74 Benzo(b)fluoranthene	252	16.166	16.172	(0.933)	10086	0.07766	3.525
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	17.330	17.330	(1.000)	239371	2.00000	
78 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
$ 191 Dibenzo(a,h)anthracene-d14	292	19.598	19.595	(1.131)	249395	2.51850	114.3
79 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
80 Benzo(g,h,i)perylene	276	20.507	20.503	(1.183)	9496	0.08132	3.691
99 Perylene	252	17.393	17.399	(1.004)	22251	0.22579	10.25

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 05031110.d
Lab Smp Id: SS83D
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20110503.b/SIMPNA0421.m
Misc Info: 11-8714

Calibration Date: 03-MAY-2011
Calibration Time: 16:33
Client Smp ID: DMA-TP2-1.5-3-04
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	272221	-1.38
42 Acenaphthene-d10	158527	79264	317054	161246	1.72
59 Phenanthrene-d10	277528	138764	555056	263626	-5.01
69 Chrysene-d12	304115	152058	608230	270942	-10.91
77 Perylene-d12	257833	128916	515666	239371	-7.16

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	4.80	4.30	5.30	4.79	-0.19
42 Acenaphthene-d10	7.05	6.55	7.55	7.04	-0.04
59 Phenanthrene-d10	8.99	8.49	9.49	8.99	-0.06
69 Chrysene-d12	13.67	13.17	14.17	13.67	-0.02
77 Perylene-d12	17.33	16.83	17.83	17.33	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.

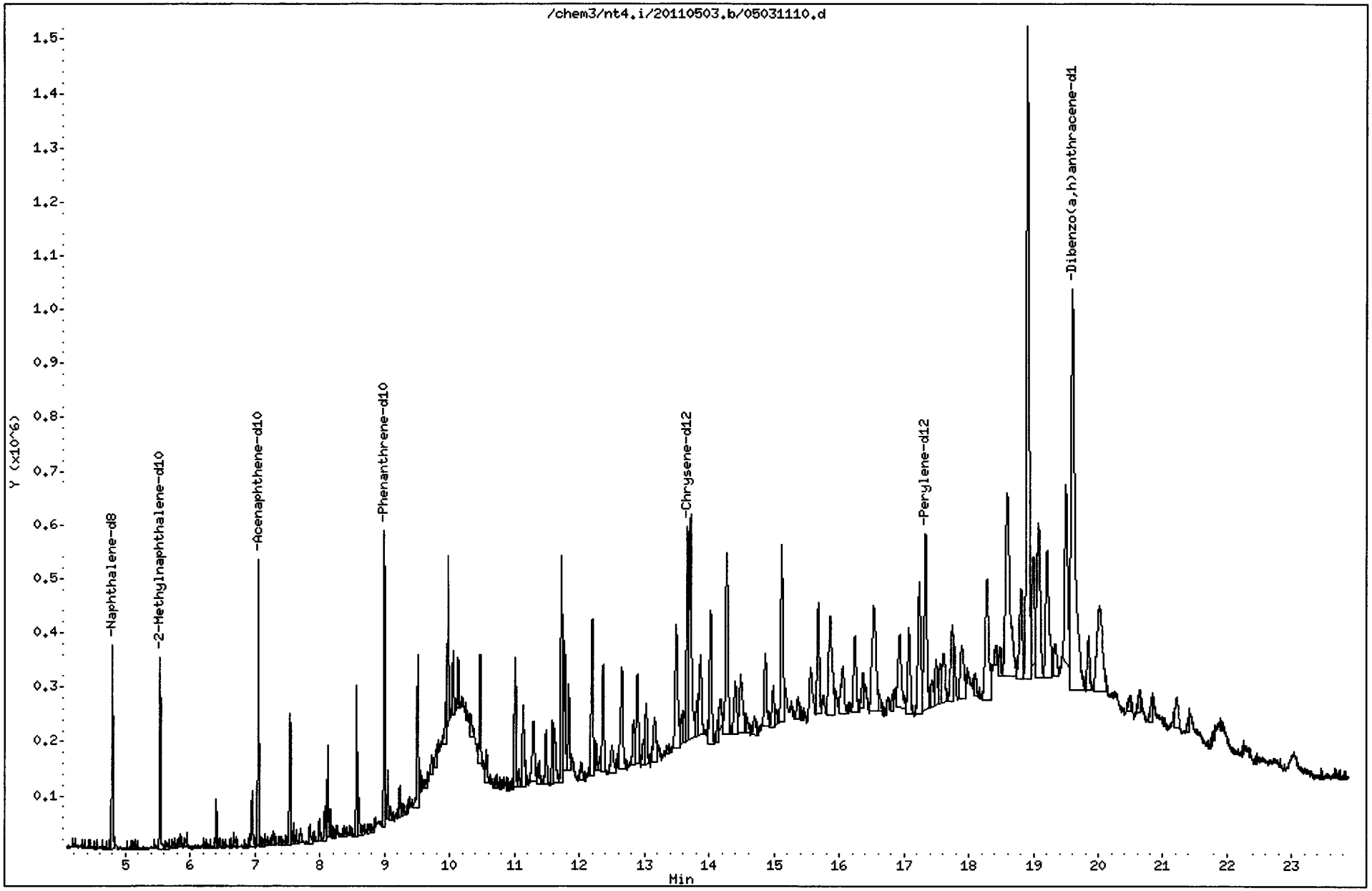
RECOVERY REPORT

Client Name: Floyd Snider
Client SDG: SS83
Sample Matrix: SOLID
Fraction: SV
Lab Smp Id: SS83D
Client Smp ID: DMA-TP2-1.5-3-04191
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/20110503.b/SIMPNA0421.m
Misc Info: 11-8714

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	136.2	81.14	59.59	34-100
$ 191 Dibenzo(a,h)anthra	136.2	114.3	83.95	10-117

Data File: /chem3/nt4.i/20110503.b/05031110.d
Date : 03-MAY-2011 20:20
Client ID: DMA-TP2-1.5-3-04191
Instrument: nt4.i
Sample Info: SS83D
Volume Injected (uL): 1.0
Operator: JZ
Column phase: ZB35
Column diameter: 0.32

764
SS83:69751



Data File: /chem3/nt4.i/20110503.b/05031110.d

Date : 03-MAY-2011 20:20

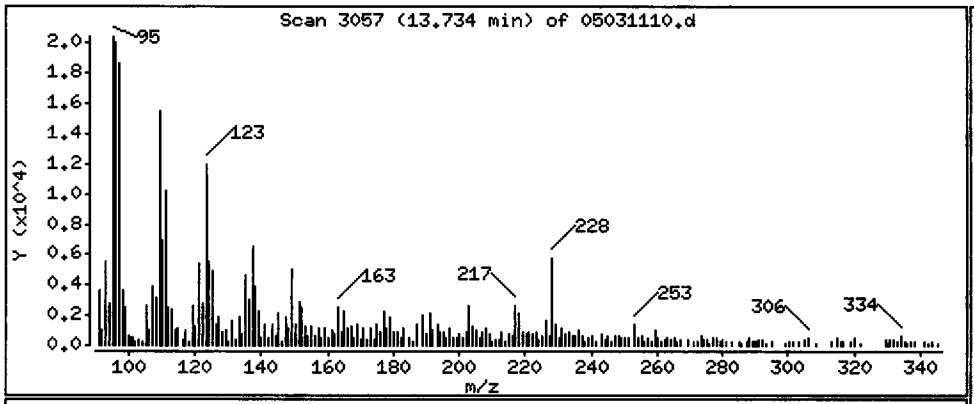
Client ID: DMA-TP2-1.5-3-04191 Instrument: nt4.i

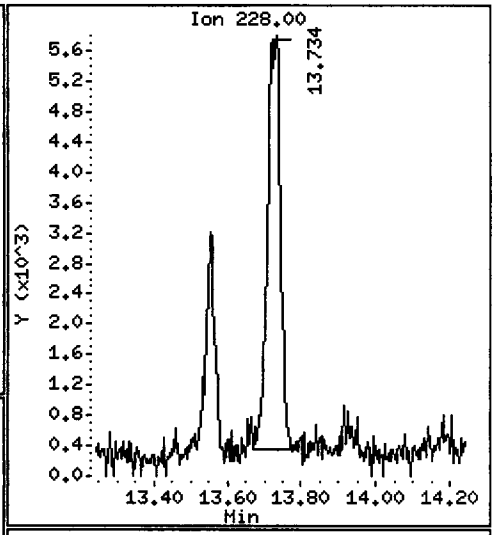
Sample Info: SS83D

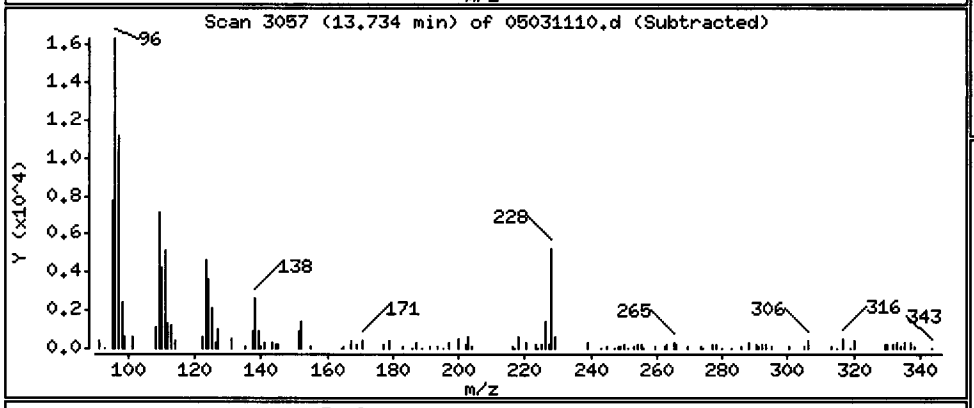
Volume Injected (uL): 1.0 Operator: JZ

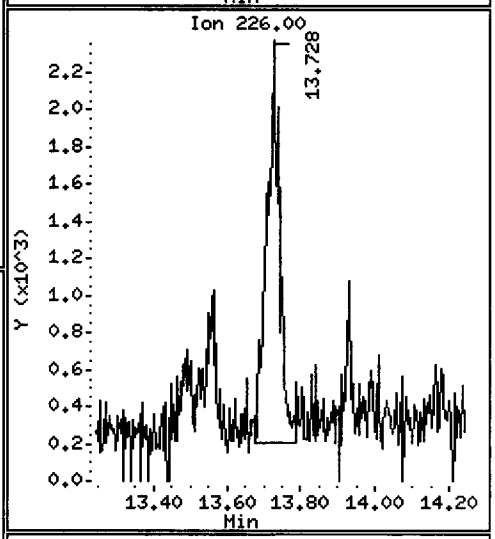
Column phase: ZB35 Column diameter: 0.32

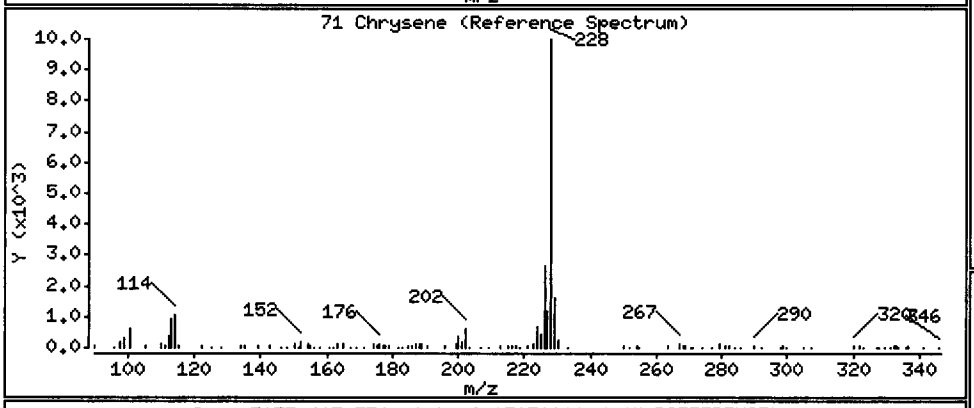
71 Chrysene Concentration: 4.912 ug/kg

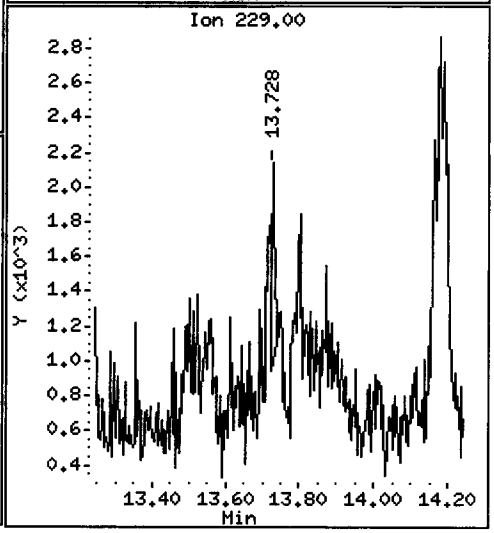


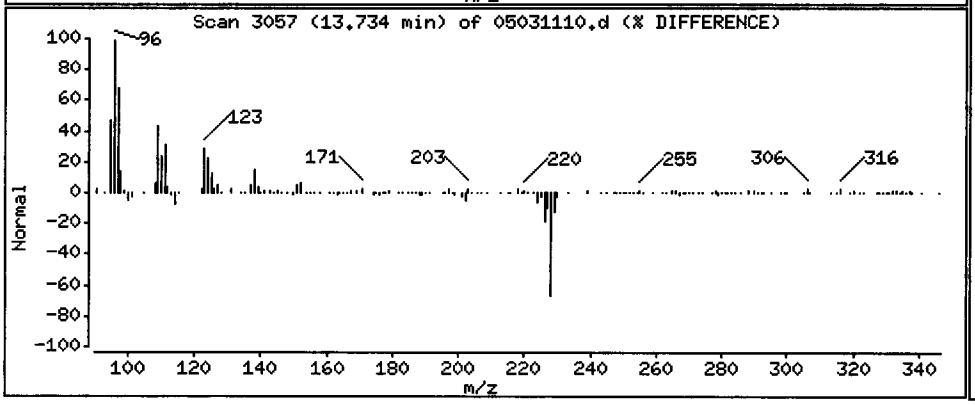












Data File: /chem3/nt4.i/20110503.b/05031110.d

Date : 03-MAY-2011 20:20

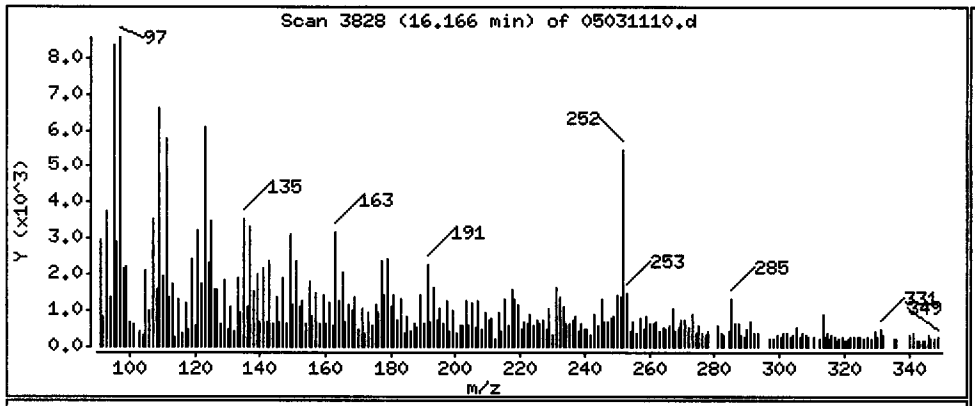
Client ID: DMA-TP2-1.5-3-04191 Instrument: nt4.i

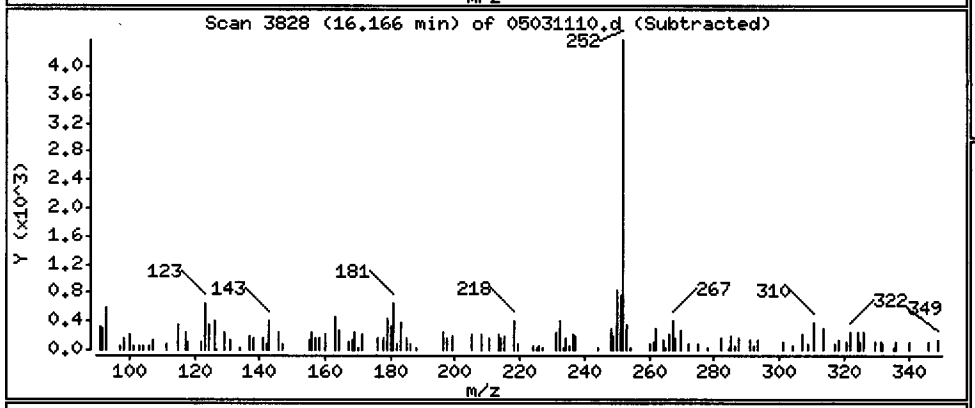
Sample Info: SS83D

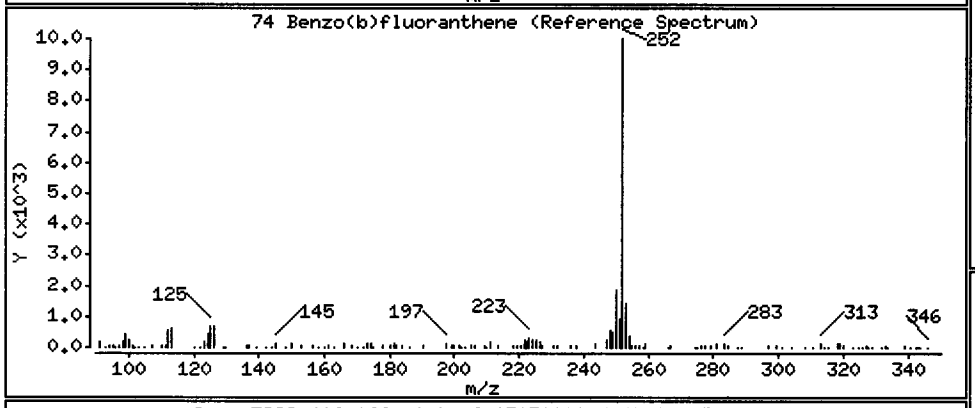
Volume Injected (uL): 1.0 Operator: JZ

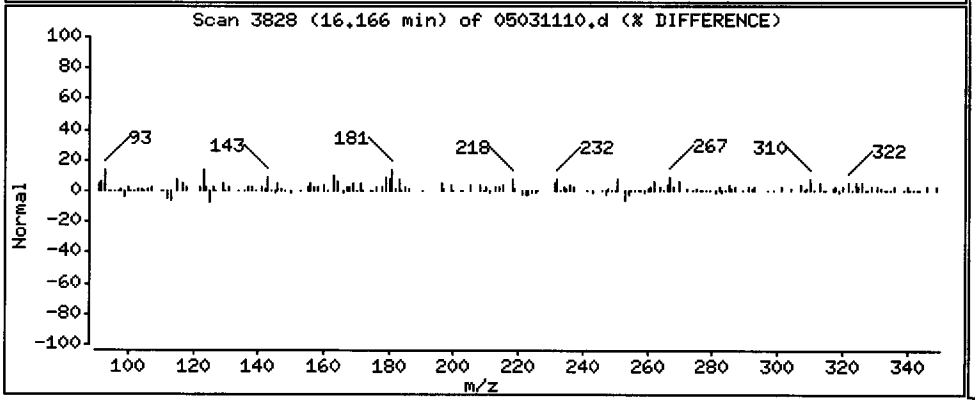
Column phase: ZB35 Column diameter: 0.32

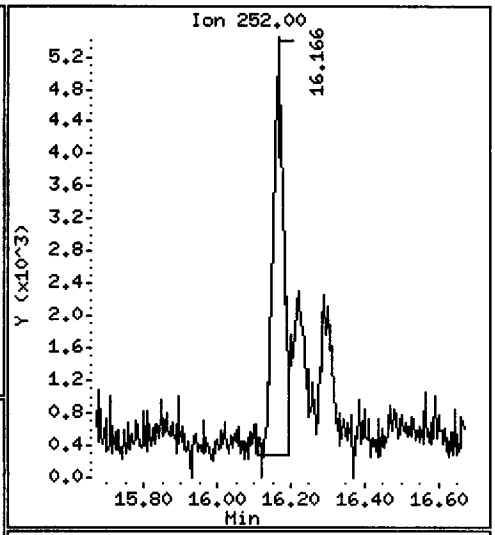
74 Benzo(b)fluoranthene Concentration: 3.525 ug/kg

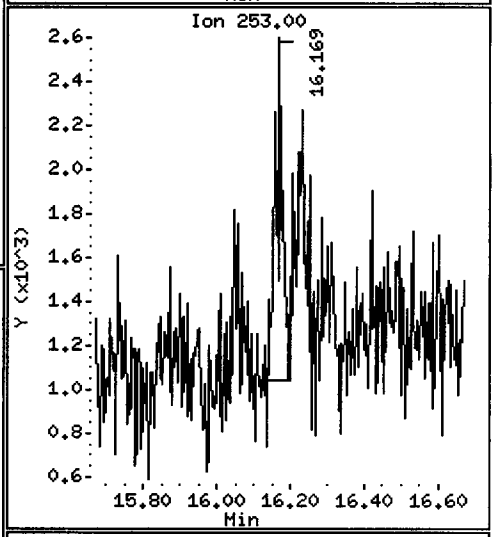


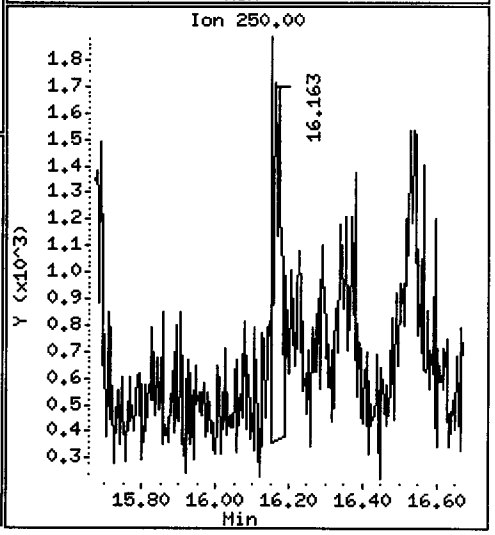












CO-ELUTION SUMMARY FOR FILE - 05031110.d

Lab ID: SS83D, Method: SIMPNA0421.m, Instrument: nt4.i, Date: 03-MAY-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20110503.b/05031111.d
Lab Smp Id: SS83E Client Smp ID: DMA-TP2-3-4-041911
Inj Date : 03-MAY-2011 20:48
Operator : JZ Inst ID: nt4.i
Smp Info : SS83E
Misc Info : 11-8715
Comment : 1ul Injection
Method : /chem3/nt4.i/20110503.b/SIMPNA0421.m
Meth Date : 04-May-2011 16:19 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

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	12.37000	Weight of sample extracted (g)
M	10.30000	% 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	4.793	4.800	(1.000)	271406	2.00000	
28 Naphthalene	128	Compound Not Detected.					
$ 190 2-Methylnaphthalene-d10	152	5.534	5.539	(1.155)	131672	1.73575	78.22
32 2-Methylnaphthalene	141	Compound Not Detected.					
105 1-methylnaphthalene	141	Compound Not Detected.					
40 Acenaphthylene	152	Compound Not Detected.					
* 42 Acenaphthene-d10	164	7.045	7.046	(1.000)	155134	2.00000	
44 Acenaphthene	153	Compound Not Detected.					
46 Dibenzofuran	168	Compound Not Detected.					
49 Fluorene	166	Compound Not Detected.					
* 59 Phenanthrene-d10	188	8.988	8.993	(1.000)	260660	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	13.663	13.671	(1.000)	264008	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	17.328	17.330	(1.000)	229433	2.00000	
	78 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
$	191 Dibenzo(a,h)anthracene-d14	292	19.584	19.595	(1.130)	223826	2.35819	106.3
	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: 05031111.d
Lab Smp Id: SS83E
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20110503.b/SIMPNA0421.m
Misc Info: 11-8715

Calibration Date: 03-MAY-2011
Calibration Time: 16:33
Client Smp ID: DMA-TP2-3-4-0419
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	271406	-1.68
42 Acenaphthene-d10	158527	79264	317054	155134	-2.14
59 Phenanthrene-d10	277528	138764	555056	260660	-6.08
69 Chrysene-d12	304115	152058	608230	264008	-13.19
77 Perylene-d12	257833	128916	515666	229433	-11.01

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	4.80	4.30	5.30	4.79	-0.16
42 Acenaphthene-d10	7.05	6.55	7.55	7.04	-0.02
59 Phenanthrene-d10	8.99	8.49	9.49	8.99	-0.05
69 Chrysene-d12	13.67	13.17	14.17	13.66	-0.06
77 Perylene-d12	17.33	16.83	17.83	17.33	-0.01

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

Analytical Resources, Inc.

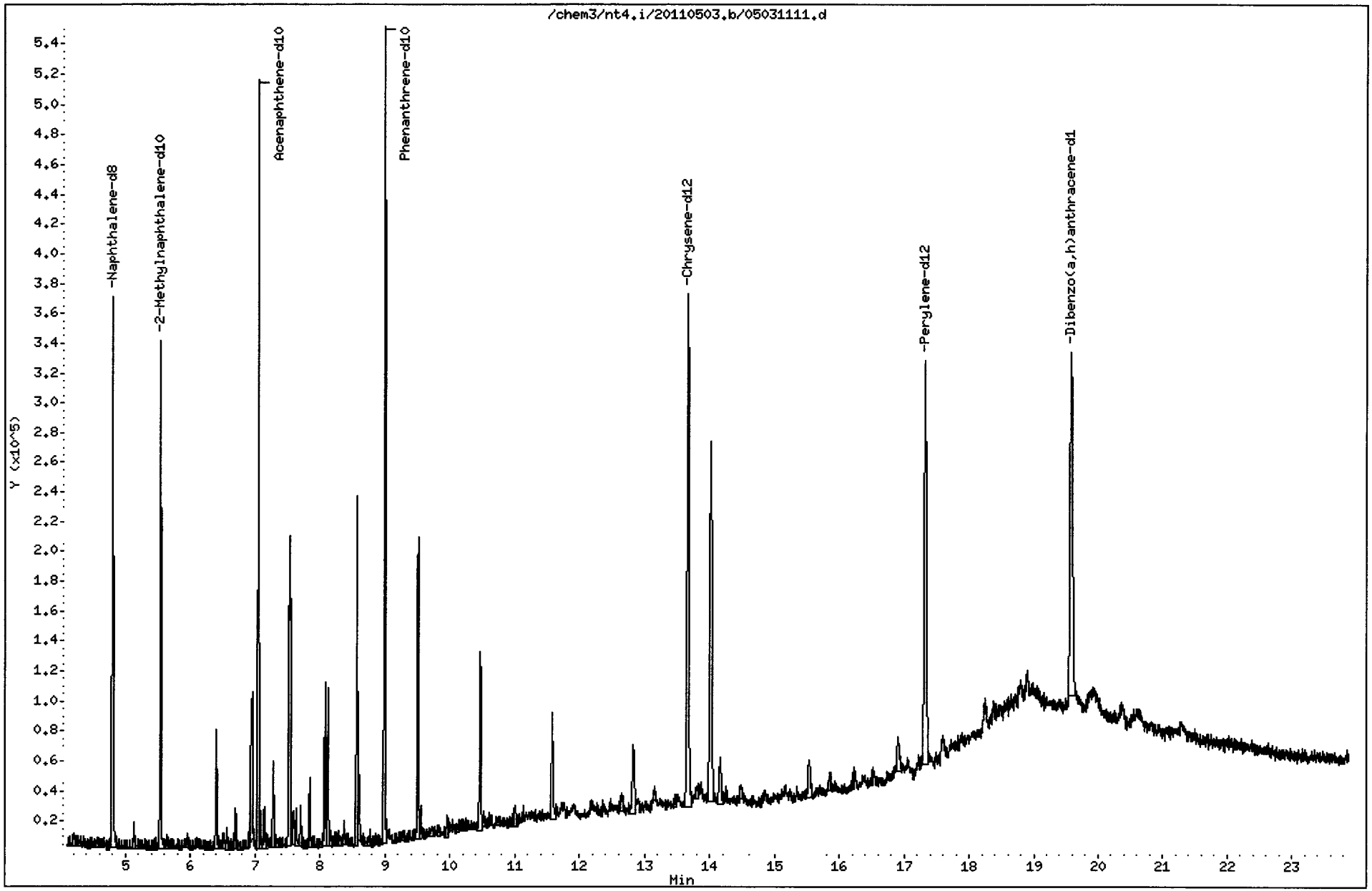
RECOVERY REPORT

Client Name: Floyd Snider
Client SDG: SS83
Sample Matrix: SOLID
Fraction: SV
Lab Smp Id: SS83E
Client Smp ID: DMA-TP2-3-4-041911
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/20110503.b/SIMPNA0421.m
Misc Info: 11-8715

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	135.2	78.22	57.86	34-100
$ 191 Dibenzo(a,h)anthra	135.2	106.3	78.61	10-117

Data File: /chem3/nt4.i/20110503.b/05031111.d
Date : 03-MAY-2011 20:48
Client ID: DMA-TP2-3-4-041911
Instrument: nt4.i
Sample Info: SS83E
Volume Injected (uL): 1.0
Operator: JZ
Column phase: ZB35
Column diameter: 0.32

772
SS83:60769



CO-ELUTION SUMMARY FOR FILE - 05031111.d

Lab ID: SS83E, Method: SIMPNA0421.m, Instrument: nt4.i, Date: 03-MAY-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

SIM PNA Sample-sm117s
Data By: Jianqing Zhou
Created: 5/ 4/11

Worklist: 2122
Analyst: JZ
Comments:

6. SS83F Soil 11-8716 DMA-TP6-0-2.5-041911

Method: 8270D-SIM
Ext Date: 5/ 1/11
Ext Meth: SW3580A-Waste Dil.
Instrument: NT4

Sample Amt: 11.23 g-dry-wt
EFV (mL): 0.50
Dilution: 1.0
Date/Time: 5/ 3/11 21:16

Surrogate	On Col (ug/mL)	Spiked (ug/mL)	LCL-UCL (%)	Rec (%)	Q
d10-2-Methylnaphthalene	1.85	3.00	34-100	61.7	
d14-Dibenzo(a,h)anthrace	2.48	3.00	10-117	82.7	

Analyte	On Col (ug/mL)	MDL (ug/kg)	RL (ug/kg)	Final (ug/kg)	Q
Benzo(a)anthracene	0.000	1.959	4.452	< 4.45	U
Chrysene	0.000	1.549	4.452	< 4.45	U
Benzo(a)pyrene	0.000	1.968	4.452	< 4.45	U
Indeno(1,2,3-cd)pyrene	0.000	1.487	4.452	< 4.45	U
Dibenz(a,h)anthracene	0.000	1.968	4.452	< 4.45	U
Total Benzofluoranthenes	0.000	2.983	4.452	< 4.45	U

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20110503.b/05031112.d
Lab Smp Id: SS83F Client Smp ID: DMA-TP6-0-2.5-04191
Inj Date : 03-MAY-2011 21:16
Operator : JZ Inst ID: nt4.i
Smp Info : SS83F
Misc Info : 11-8716
Comment : 1ul Injection
Method : /chem3/nt4.i/20110503.b/SIMPNA0421.m
Meth Date : 04-May-2011 16:19 jianqing Quant Type: ISTD
Cal Date : 21-APR-2011 22:25 Cal File: 04211107.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

05/06/11

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	12.75000	Weight of sample extracted (g)
M	11.90000	% 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	4.794	4.800	(1.000)	253566	2.00000	
28 Naphthalene	128	Compound Not Detected.					
$ 190 2-Methylnaphthalene-d10	152	5.532	5.539	(1.154)	131040	1.84895	82.30
32 2-Methylnaphthalene	141	Compound Not Detected.					
105 1-methylnaphthalene	141	Compound Not Detected.					
40 Acenaphthylene	152	Compound Not Detected.					
* 42 Acenaphthene-d10	164	7.043	7.046	(1.000)	145190	2.00000	
44 Acenaphthene	153	Compound Not Detected.					
46 Dibenzofuran	168	Compound Not Detected.					
49 Fluorene	166	Compound Not Detected.					
* 59 Phenanthrene-d10	188	8.989	8.993	(1.000)	239228	2.00000	
60 Phenanthrene	178	9.020	9.024	(1.004)	7765	0.06633	2.952
61 Anthracene	178	Compound Not Detected.					
64 Fluoranthene	202	10.702	10.705	(1.191)	13988	0.10817	4.815
65 Pyrene	202	11.172	11.175	(0.817)	15680	0.12543	5.583
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	13.667	13.671	(1.000)	248606	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	17.329	17.330	(1.000)	215772	2.00000	
78 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
$ 191 Dibenzo(a,h)anthracene-d14	292	19.578	19.595	(1.130)	221727	2.48399	110.6
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: 05031112.d
Lab Smp Id: SS83F
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20110503.b/SIMPNA0421.m
Misc Info: 11-8716

Calibration Date: 03-MAY-2011
Calibration Time: 16:33
Client Smp ID: DMA-TP6-0-2.5-04
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	253566	-8.14
42 Acenaphthene-d10	158527	79264	317054	145190	-8.41
59 Phenanthrene-d10	277528	138764	555056	239228	-13.80
69 Chrysene-d12	304115	152058	608230	248606	-18.25
77 Perylene-d12	257833	128916	515666	215772	-16.31

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	4.80	4.30	5.30	4.79	-0.14
42 Acenaphthene-d10	7.05	6.55	7.55	7.04	-0.05
59 Phenanthrene-d10	8.99	8.49	9.49	8.99	-0.04
69 Chrysene-d12	13.67	13.17	14.17	13.67	-0.03
77 Perylene-d12	17.33	16.83	17.83	17.33	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

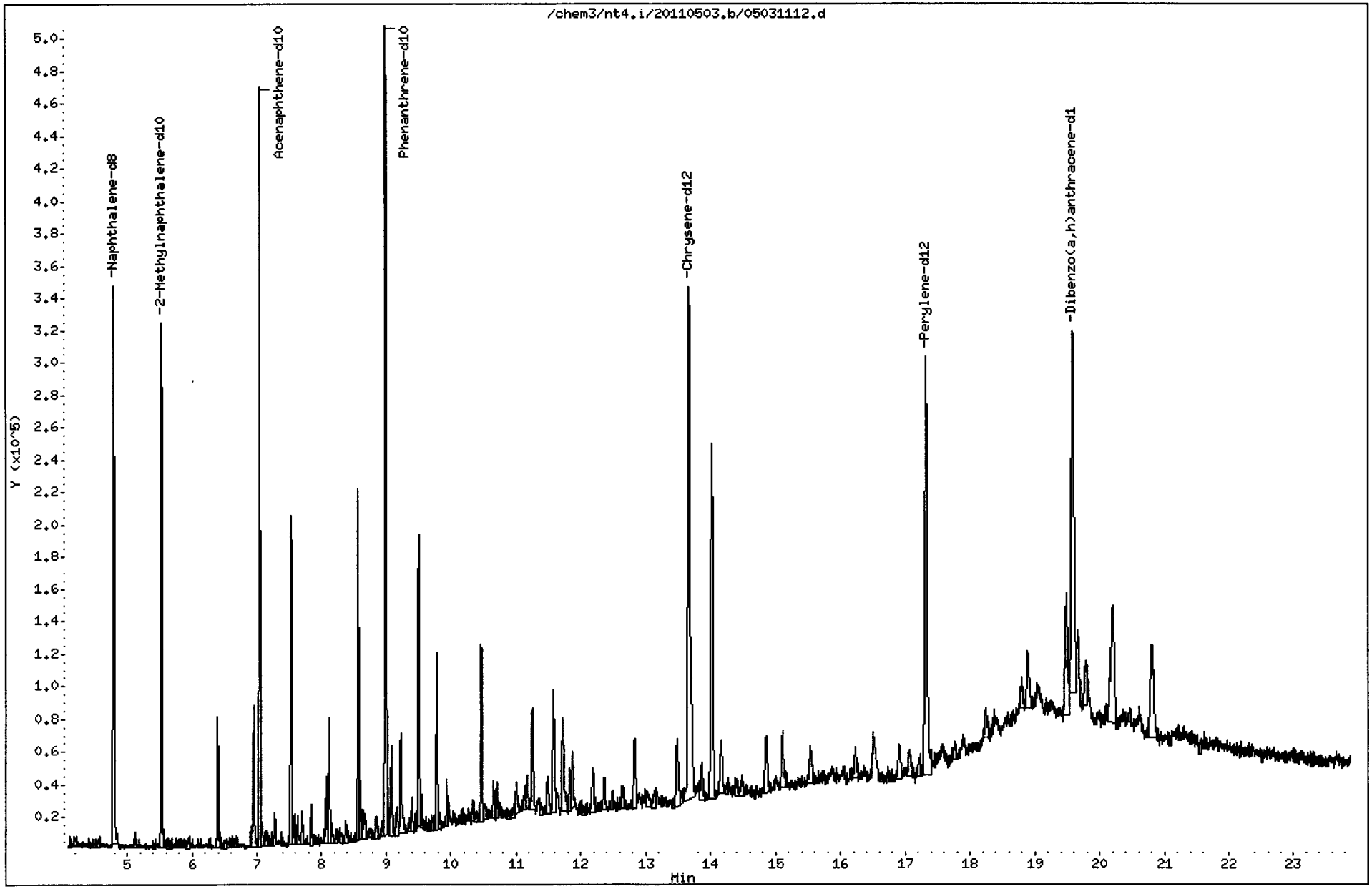
Client Name: Floyd Snider
Client SDG: SS83
Sample Matrix: SOLID
Fraction: SV
Lab Smp Id: SS83F
Client Smp ID: DMA-TP6-0-2.5-04191
Level: LOW
Operator: JZ
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: pnalcss.spk
Quant Type: ISTD
Sublist File: pnax.sub
Method File: /chem3/nt4.i/20110503.b/SIMPNA0421.m
Misc Info: 11-8716

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	133.5	82.30	61.63	34-100
$ 191 Dibenzo(a,h)anthra	133.5	110.6	82.80	10-117

Data File: /chem3/nt4.i/20110503.b/05031112.d
Date : 03-MAY-2011 21:16
Client ID: DMA-TP6-0-2.5-04191
Sample Info: SS83F
Volume Injected (uL): 1.0
Column phase: ZB35

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

779
SS83:09776



CO-ELUTION SUMMARY FOR FILE - 05031112.d

Lab ID: SS83F, Method: SIMPNA0421.m, Instrument: nt4.i, Date: 03-MAY-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20110503.b/05031113.d
Lab Smp Id: SS83G Client Smp ID: DMA-TP6-2.5-5-04191
Inj Date : 03-MAY-2011 21:43
Operator : JZ Inst ID: nt4.i
Smp Info : SS83G
Misc Info : 11-8717
Comment : 1ul Injection
Method : /chem3/nt4.i/20110503.b/SIMPNA0421.m
Meth Date : 04-May-2011 16:19 jianqing Quant Type: ISTD
Cal Date : 21-APR-2011 22:25 Cal File: 04211107.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

AR 05/04/11

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	12.93000	Weight of sample extracted (g)
M	11.70000	% 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	4.794	4.800	(1.000)	258457	2.00000	
28 Naphthalene	128	Compound Not Detected.					
$ 190 2-Methylnaphthalene-d10	152	5.532	5.539	(1.154)	137005	1.89653	83.06
32 2-Methylnaphthalene	141	Compound Not Detected.					
105 1-methylnaphthalene	141	Compound Not Detected.					
40 Acenaphthylene	152	Compound Not Detected.					
* 42 Acenaphthene-d10	164	7.043	7.046	(1.000)	150940	2.00000	
44 Acenaphthene	153	Compound Not Detected.					
46 Dibenzofuran	168	Compound Not Detected.					
49 Fluorene	166	Compound Not Detected.					
* 59 Phenanthrene-d10	188	8.986	8.993	(1.000)	248035	2.00000	
60 Phenanthrene	178	9.021	9.024	(1.004)	13966	0.11506	5.039
61 Anthracene	178	Compound Not Detected.					
64 Fluoranthene	202	10.699	10.705	(1.191)	15669	0.11686	5.118
65 Pyrene	202	11.166	11.175	(0.817)	16809	0.13092	5.733
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	13.664	13.671	(1.000)	255344	2.00000	
71 Chrysene	228	13.730	13.743	(1.005)	11389	0.09868	4.322
74 Benzo(b)fluoranthene	252	16.169	16.172	(0.933)	6630	0.05429	2.378
75 Benzo(k)fluoranthene	252	Compound Not Detected.					
188 Benzo(j)fluoranthene	252	Compound Not Detected.					
76 Benzo(a)pyrene	252	17.115	17.125	(0.988)	7791	0.07130	3.122
* 77 Perylene-d12	264	17.329	17.330	(1.000)	225094	2.00000	
78 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
$ 191 Dibenzo(a,h)anthracene-d14	292	19.588	19.595	(1.130)	253175	2.71883	119.1
79 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
80 Benzo(g,h,i)perylene	276	20.496	20.503	(1.183)	7679	0.06993	3.063
99 Perylene	252	17.389	17.399	(1.003)	7144	0.07709	3.376

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 05031113.d
Lab Smp Id: SS83G
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20110503.b/SIMPNA0421.m
Misc Info: 11-8717

Calibration Date: 03-MAY-2011
Calibration Time: 16:33
Client Smp ID: DMA-TP6-2.5-5-04
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	258457	-6.37
42 Acenaphthene-d10	158527	79264	317054	150940	-4.79
59 Phenanthrene-d10	277528	138764	555056	248035	-10.63
69 Chrysene-d12	304115	152058	608230	255344	-16.04
77 Perylene-d12	257833	128916	515666	225094	-12.70

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	4.80	4.30	5.30	4.79	-0.14
42 Acenaphthene-d10	7.05	6.55	7.55	7.04	-0.05
59 Phenanthrene-d10	8.99	8.49	9.49	8.99	-0.07
69 Chrysene-d12	13.67	13.17	14.17	13.66	-0.05
77 Perylene-d12	17.33	16.83	17.83	17.33	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: SS83G
Level: LOW
Data Type: MS DATA
SpikeList File: pnalcss.spk
Sublist File: pnax.sub
Method File: /chem3/nt4.i/20110503.b/SIMPNA0421.m
Misc Info: 11-8717

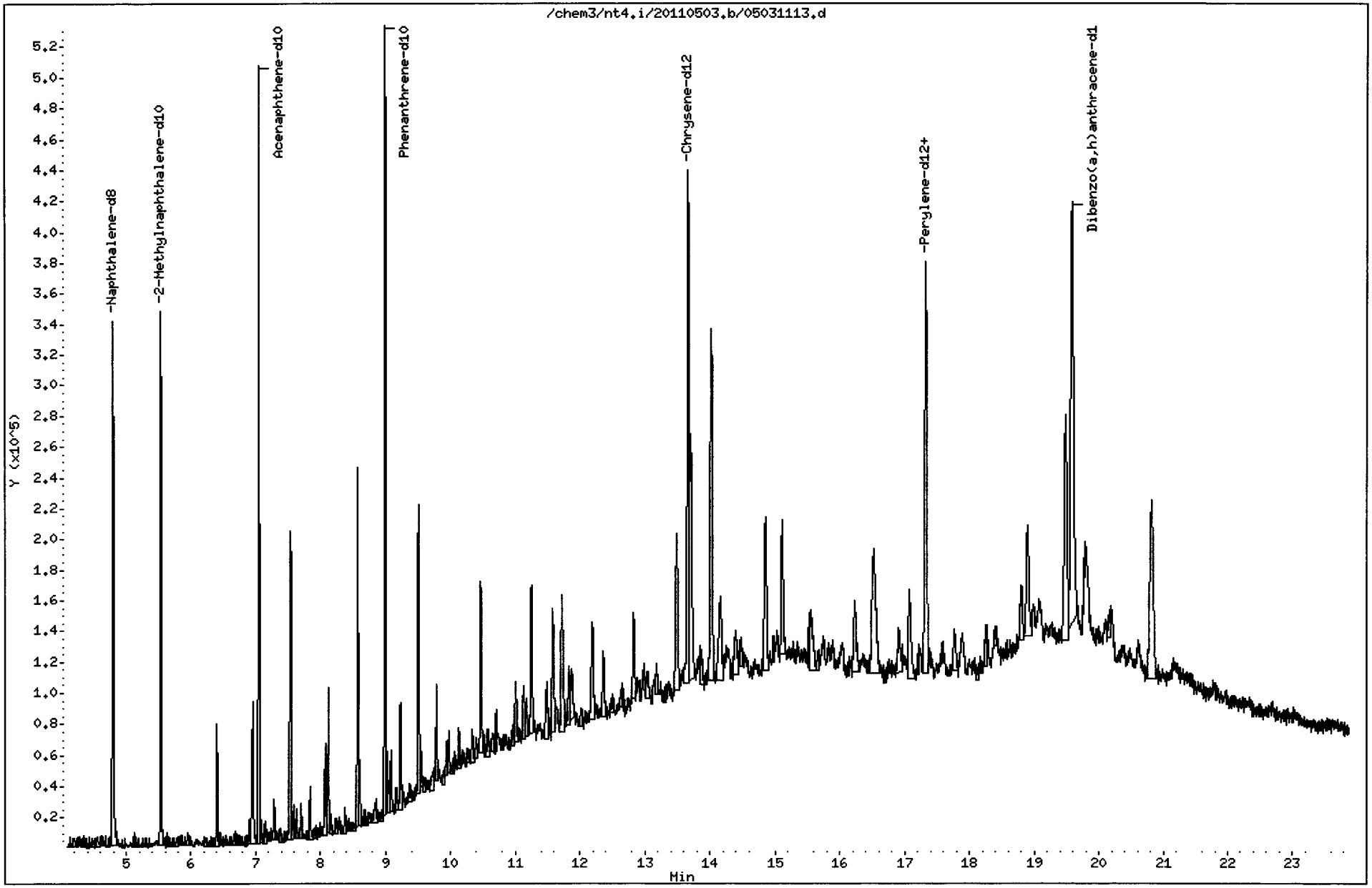
Client SDG: SS83
Fraction: SV
Client Smp ID: DMA-TP6-2.5-5-04191
Operator: JZ
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	131.4	83.06	63.22	34-100
$ 191 Dibenzo(a,h)anthra	131.4	119.1	90.63	10-117

Data File: /chem3/nt4.i/20110503.b/05031113.d
Date : 03-MAY-2011 21:43
Client ID: DMA-TP6-2.5-5-04191
Sample Info: SS83G
Volume Injected (uL): 1.0
Column phase: ZB35

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

785
SS83:007782



Data File: /chem3/nt4.i/20110503.b/05031113.d

Date : 03-MAY-2011 21:43

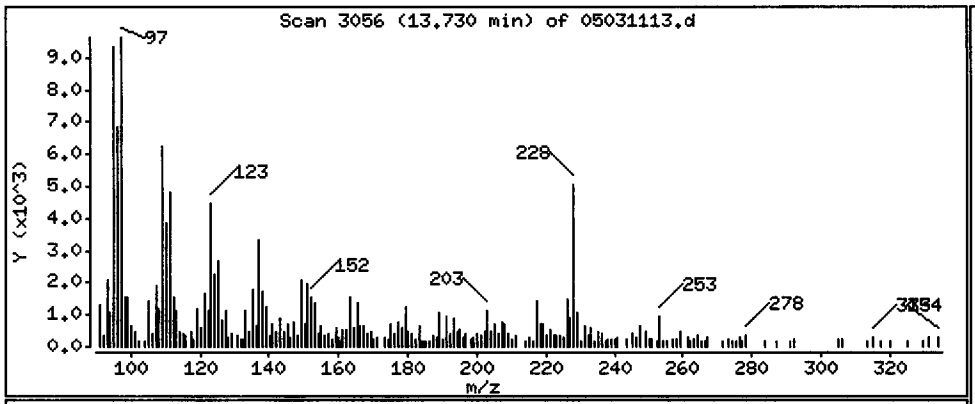
Client ID: DMA-TP6-2.5-5-04191 Instrument: nt4.i

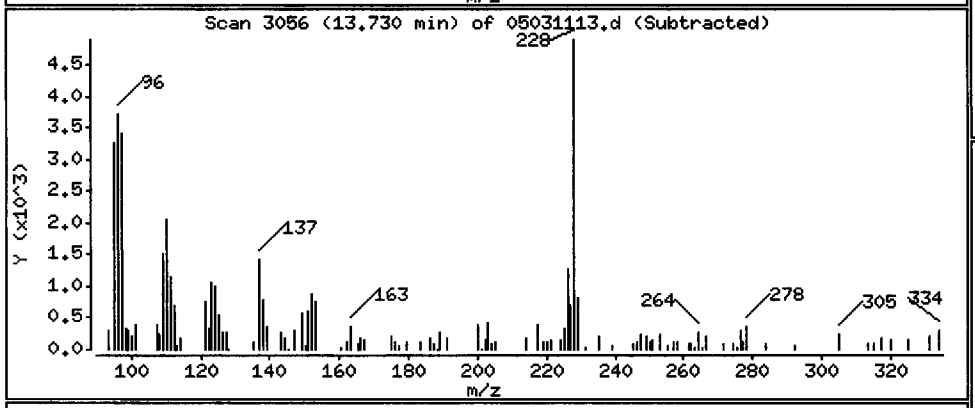
Sample Info: SS83G

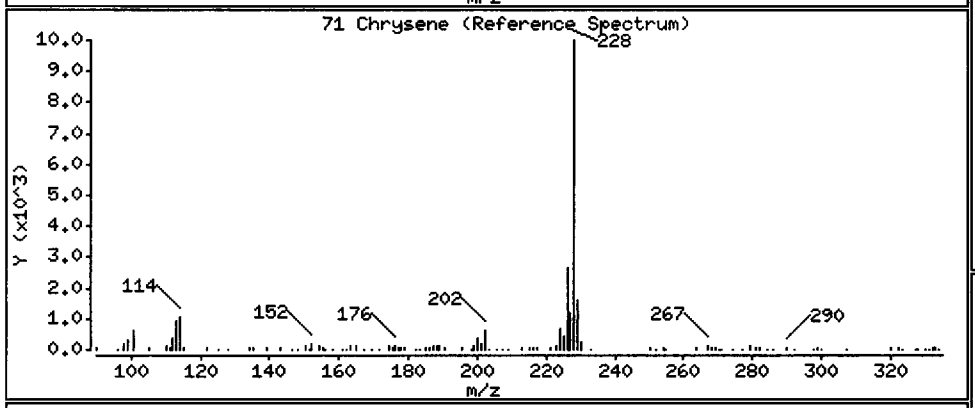
Volume Injected (uL): 1.0 Operator: JZ

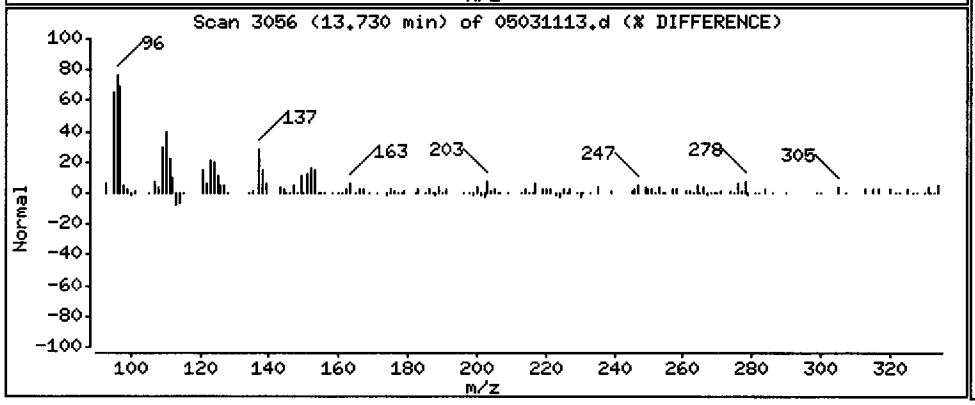
Column phase: ZB35 Column diameter: 0.32

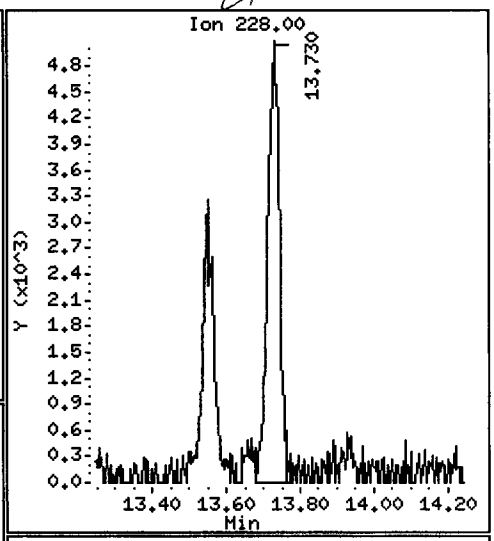
71 Chrysene Concentration: 4.322 ug/kg

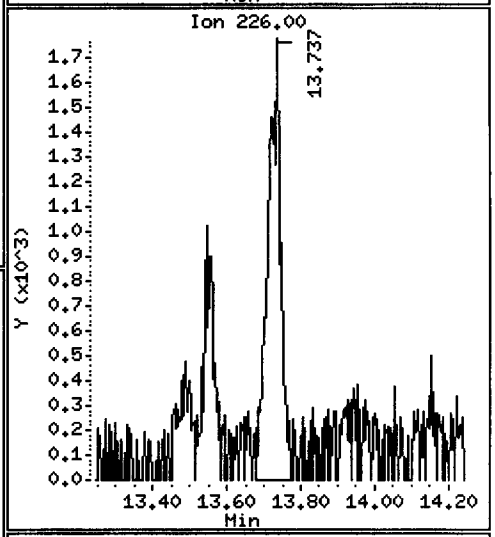


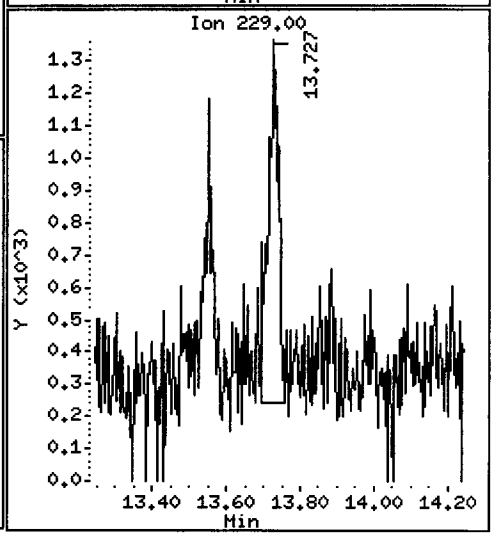












SS83 : 00783

Data File: /chem3/nt4.i/20110503.b/05031113.d

Date : 03-MAY-2011 21:43

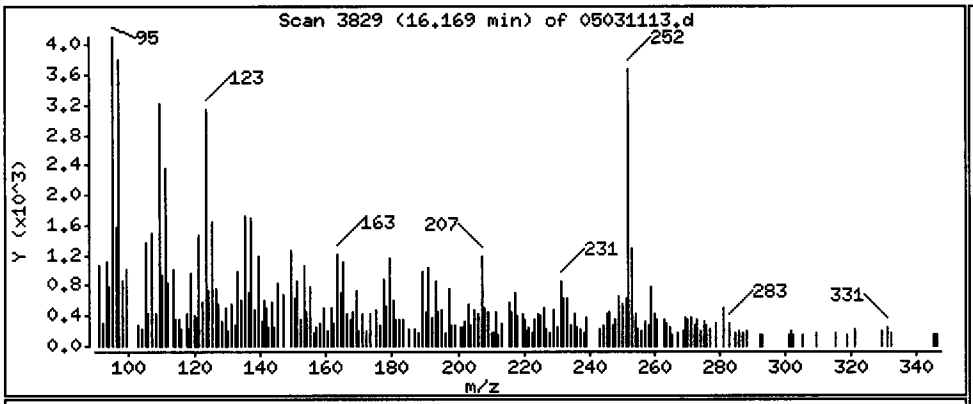
Client ID: DMA-TP6-2.5-5-04191 Instrument: nt4.i

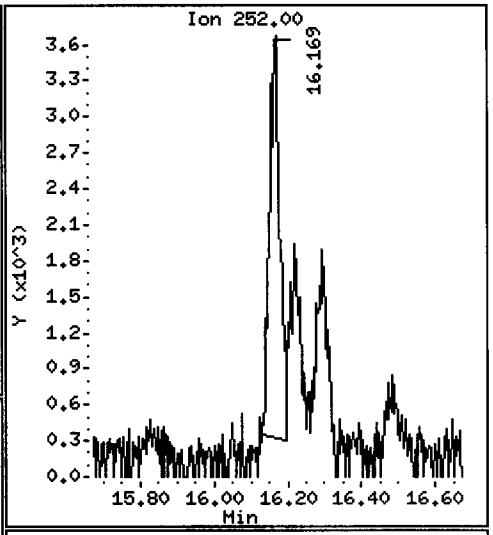
Sample Info: SS83G

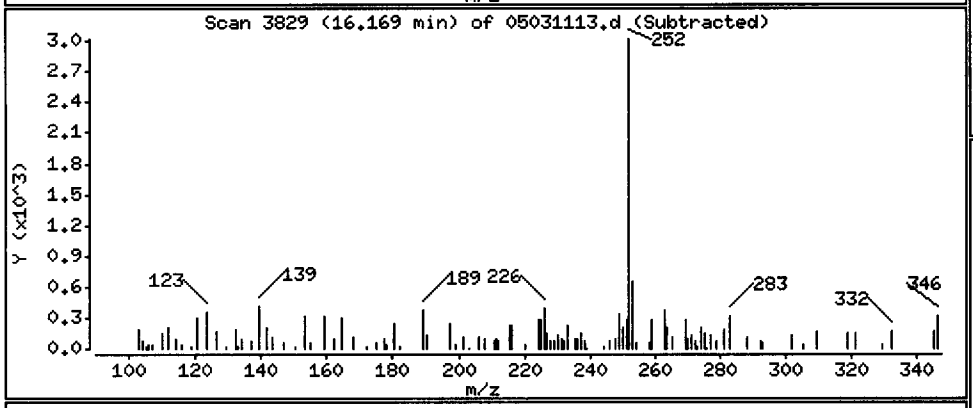
Volume Injected (uL): 1.0 Operator: JZ

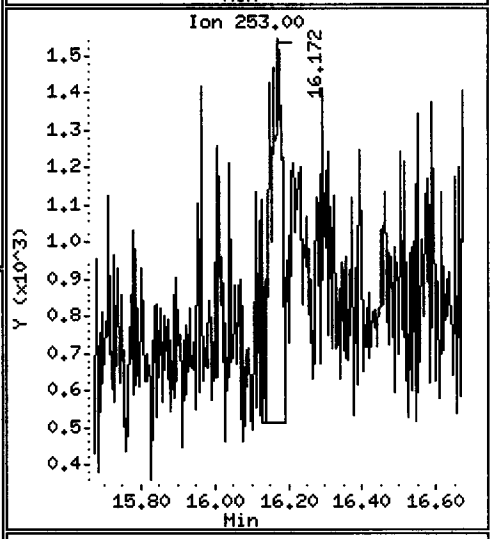
Column phase: ZB35 Column diameter: 0.32

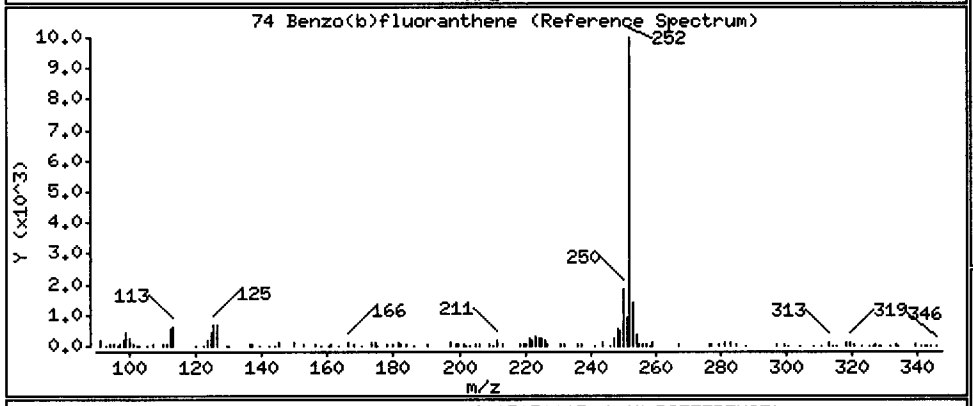
74 Benzo(b)fluoranthene Concentration: 2.378 ug/kg

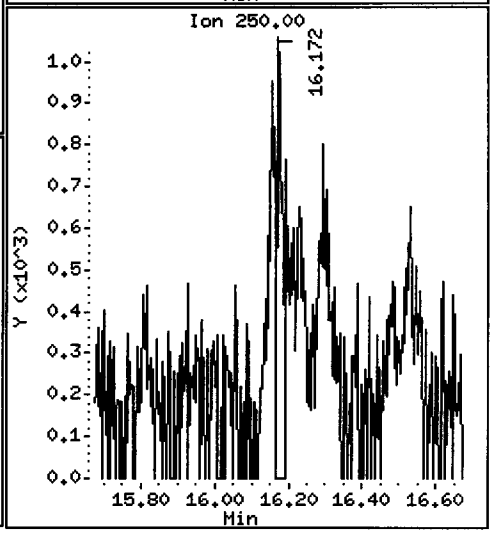


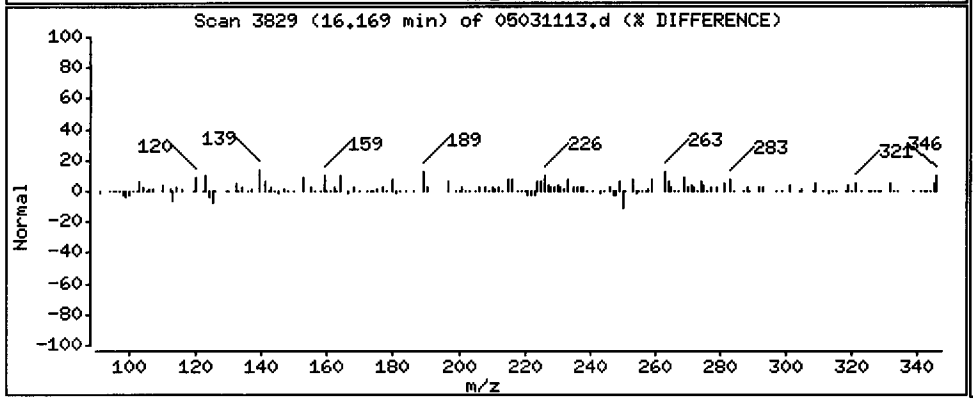












Data File: /chem3/nt4.i/20110503.b/05031113.d

Date : 03-MAY-2011 21:43

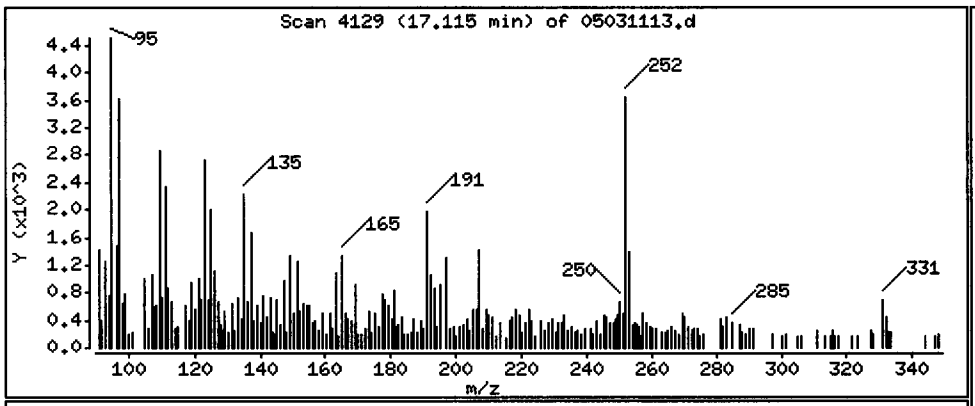
Client ID: DMA-TP6-2.5-5-04191 Instrument: nt4.i

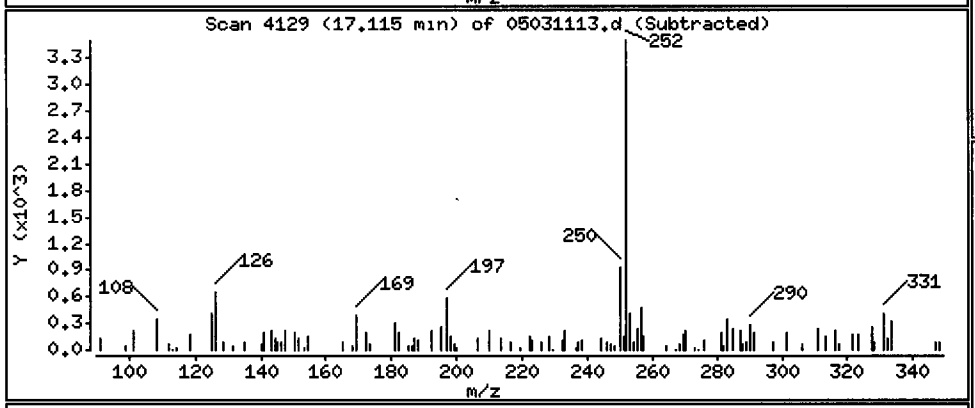
Sample Info: SS83G

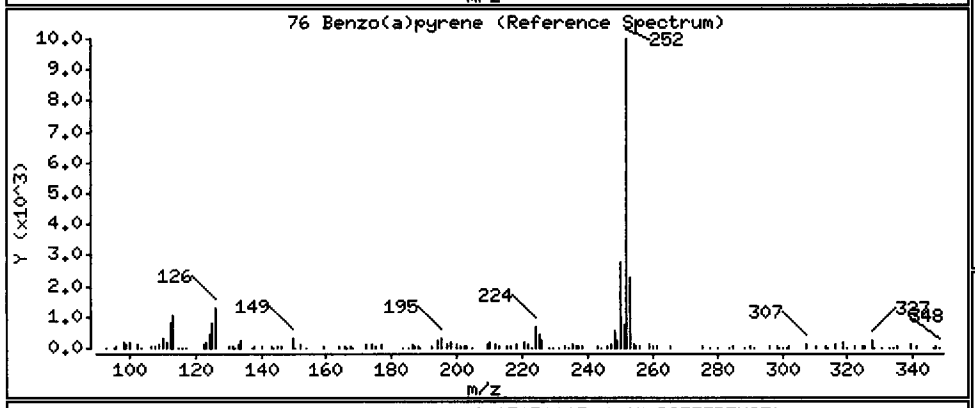
Volume Injected (uL): 1.0 Operator: JZ

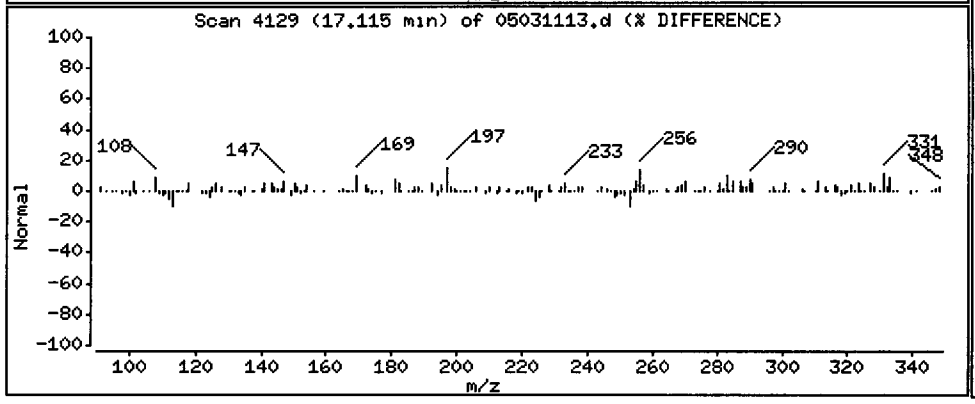
Column phase: ZB35 Column diameter: 0.32

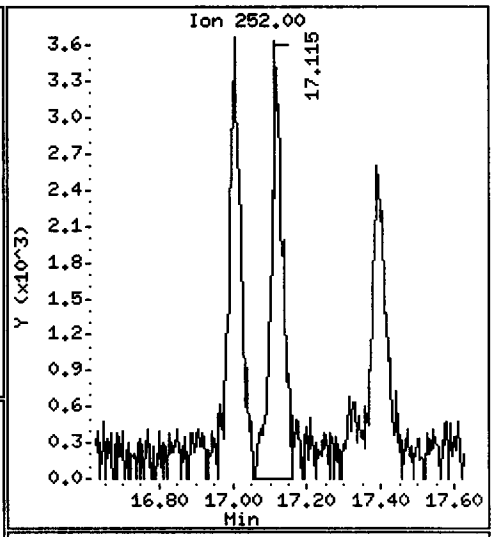
76 Benzo(a)pyrene Concentration: 3.122 ug/kg

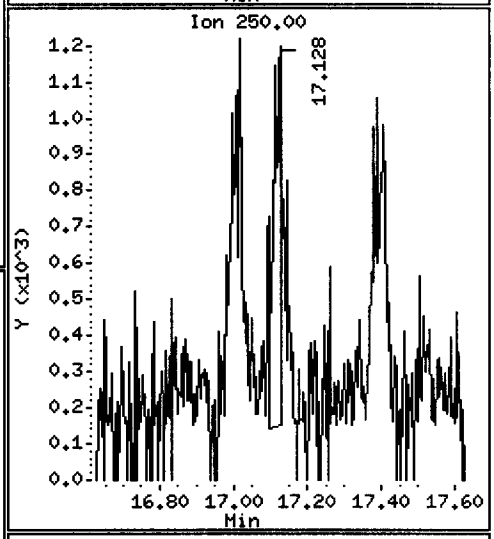


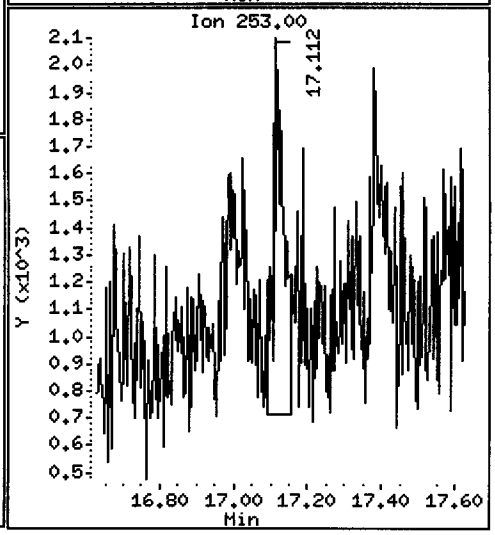












CO-ELUTION SUMMARY FOR FILE - 05031113.d

Lab ID: SS83G, Method: SIMPNA0421.m, Instrument: nt4.i, Date: 03-MAY-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20110503.b/05031114.d
Lab Smp Id: SS83H Client Smp ID: DMA-TP4-0-1.5-04201
Inj Date : 03-MAY-2011 22:11
Operator : JZ Inst ID: nt4.i
Smp Info : SS83H
Misc Info : 11-8718
Comment : 1ul Injection
Method : /chem3/nt4.i/20110503.b/SIMPNA0421.m
Meth Date : 04-May-2011 16:19 jianqing Quant Type: ISTD
Cal Date : 21-APR-2011 22:25 Cal File: 04211107.d
Als bottle: 14
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	30.68000	Weight of sample extracted (g)
M	66.00000	% 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	4.794	4.800	(1.000)	251052	2.00000	
28 Naphthalene	128	4.823	4.826	(1.006)	29595	0.26151	12.54
$ 190 2-Methylnaphthalene-d10	152	5.532	5.539	(1.154)	131685	1.87665	89.95
32 2-Methylnaphthalene	141	5.577	5.583	(1.163)	9403	0.14806	7.097
105 1-methylnaphthalene	141	5.772	5.775	(1.204)	9690	0.14680	7.037
40 Acenaphthylene	152	Compound Not Detected.					
* 42 Acenaphthene-d10	164	7.043	7.046	(1.000)	152257	2.00000	
44 Acenaphthene	153	7.091	7.094	(1.007)	10456	0.13707	6.570
46 Dibenzofuran	168	7.233	7.239	(1.027)	13779	0.13203	6.329
49 Fluorene	166	7.693	7.696	(1.092)	8855	0.09888	4.740
* 59 Phenanthrene-d10	188	8.990	8.993	(1.000)	247679	2.00000	
60 Phenanthrene	178	9.021	9.024	(1.004)	80152	0.66128	31.70
61 Anthracene	178	9.056	9.059	(1.007)	10448	0.08317	3.987
64 Fluoranthene	202	10.706	10.705	(1.191)	94597	0.70655	33.87
65 Pyrene	202	11.176	11.175	(0.817)	101390	0.72187	34.60

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
	68 Benzo(a)anthracene	228	13.563	13.557	(0.991)	30165	0.23154	11.10
*	69 Chrysene-d12	240	13.680	13.671	(1.000)	279328	2.00000	
	71 Chrysene	228	13.737	13.743	(1.004)	84471	0.66909	32.07
	74 Benzo(b)fluoranthene	252	16.201	16.172	(0.933)	65298	0.50249	24.09
	75 Benzo(k)fluoranthene	252	16.254	16.229	(0.936)	29787	0.22275	10.68
	188 Benzo(j)fluoranthene	252	16.327	16.298	(0.940)	25664	0.19569	9.380
	76 Benzo(a)pyrene	252	17.153	17.125	(0.988)	28463	0.24480	11.73
*	77 Perylene-d12	264	17.365	17.330	(1.000)	239515	2.00000	
	78 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
$	191 Dibenzo(a,h)anthracene-d14	292	19.633	19.595	(1.131)	165767	1.67299	80.19
	79 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	80 Benzo(g,h,i)perylene	276	20.544	20.503	(1.183)	42410	0.36298	17.40
	99 Perylene	252	17.424	17.399	(1.003)	92356	0.93661	44.89

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 05031114.d
Lab Smp Id: SS83H
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20110503.b/SIMPNA0421.m
Misc Info: 11-8718

Calibration Date: 03-MAY-2011
Calibration Time: 16:33
Client Smp ID: DMA-TP4-0-1.5-04
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	251052	-9.05
42 Acenaphthene-d10	158527	79264	317054	152257	-3.96
59 Phenanthrene-d10	277528	138764	555056	247679	-10.76
69 Chrysene-d12	304115	152058	608230	279328	-8.15
77 Perylene-d12	257833	128916	515666	239515	-7.10

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	4.80	4.30	5.30	4.79	-0.13
42 Acenaphthene-d10	7.05	6.55	7.55	7.04	-0.04
59 Phenanthrene-d10	8.99	8.49	9.49	8.99	-0.03
69 Chrysene-d12	13.67	13.17	14.17	13.68	0.07
77 Perylene-d12	17.33	16.83	17.83	17.36	0.20

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

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd Snider
Sample Matrix: SOLID
Lab Smp Id: SS83H
Level: LOW
Data Type: MS DATA
SpikeList File: pnalcss.spk
Sublist File: pnax.sub
Method File: /chem3/nt4.i/20110503.b/SIMPNA0421.m
Misc Info: 11-8718

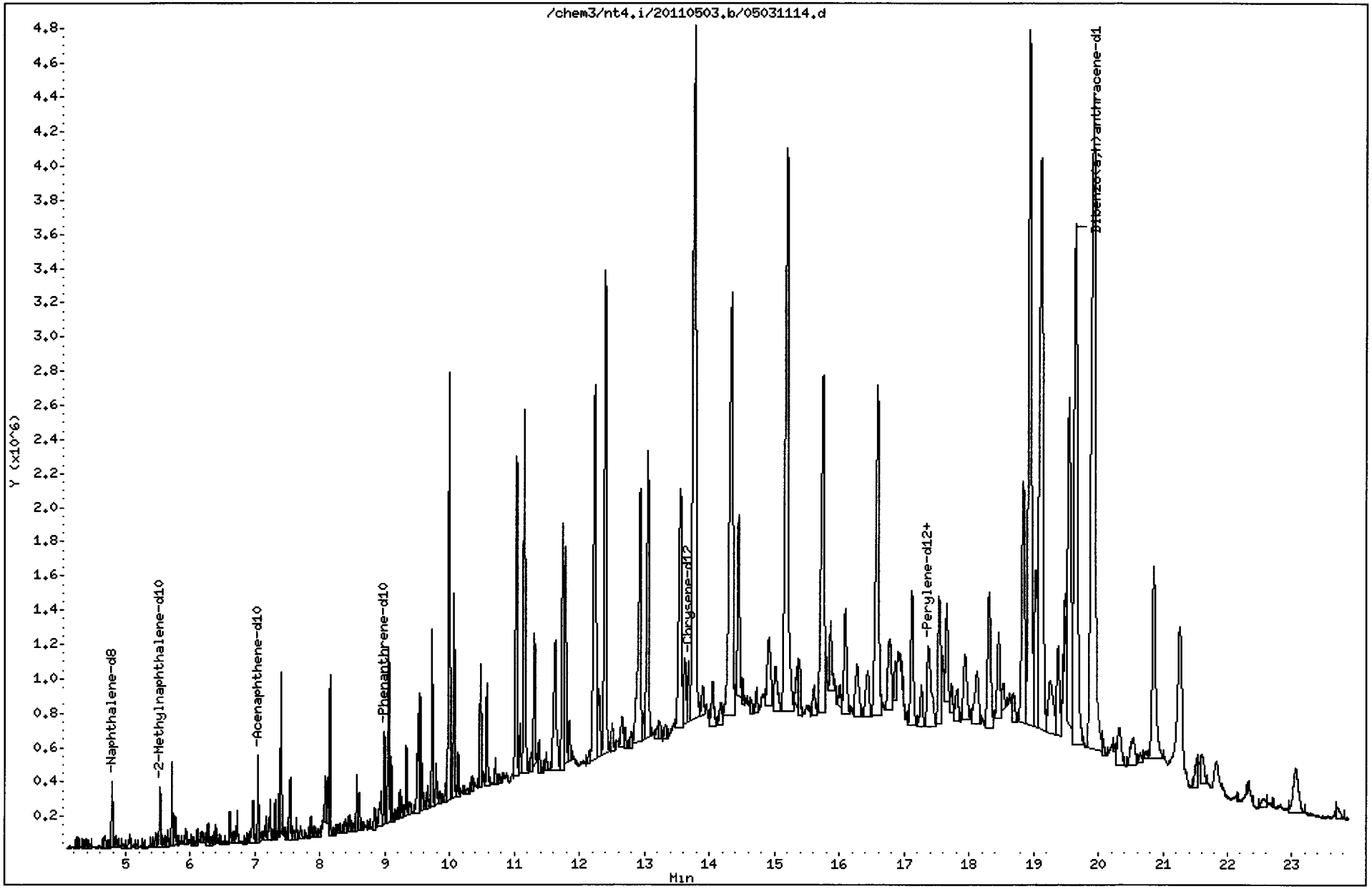
Client SDG: SS83
Fraction: SV
Client Smp ID: DMA-TP4-0-1.5-04201
Operator: JZ
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	143.8	89.95	62.56	34-100
$ 191 Dibenzo(a,h)anthra	143.8	80.19	55.77	10-117

Data File: /chem3/nt4.i/20110503.b/05031114.d
Date : 03-MAY-2011 22:11
Client ID: DMA-TP4-0-1.5-04201
Sample Info: SS83H
Volume Injected (uL): 1.0
Column phase: ZB35

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

794
SS83:00791



Data File: /chem3/nt4.i/20110503.b/05031114.d

Date : 03-MAY-2011 22:11

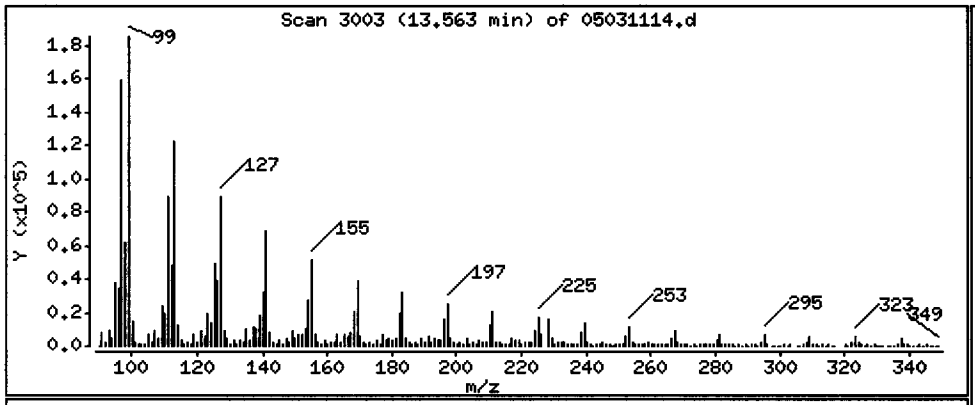
Client ID: DMA-TP4-0-1.5-04201 Instrument: nt4.i

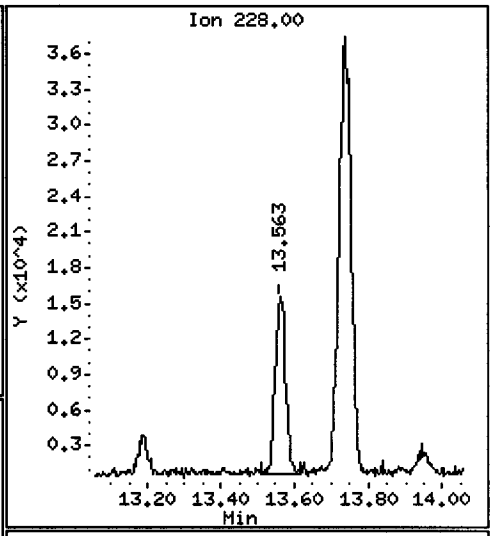
Sample Info: SS83H

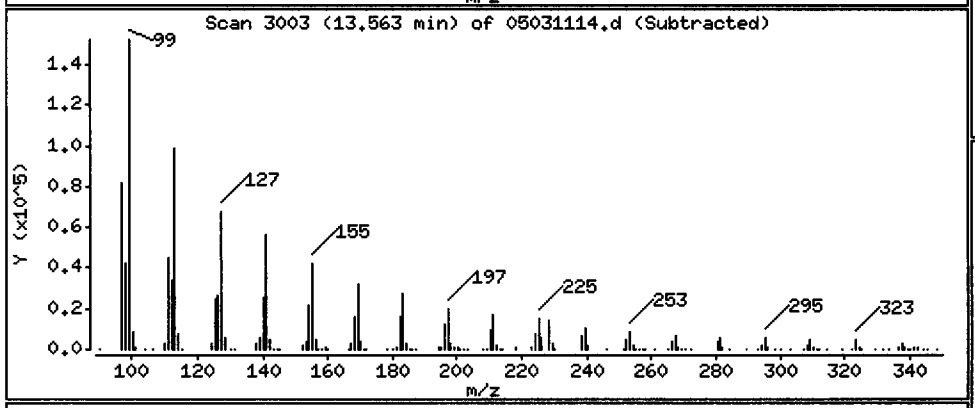
Volume Injected (uL): 1.0 Operator: JZ

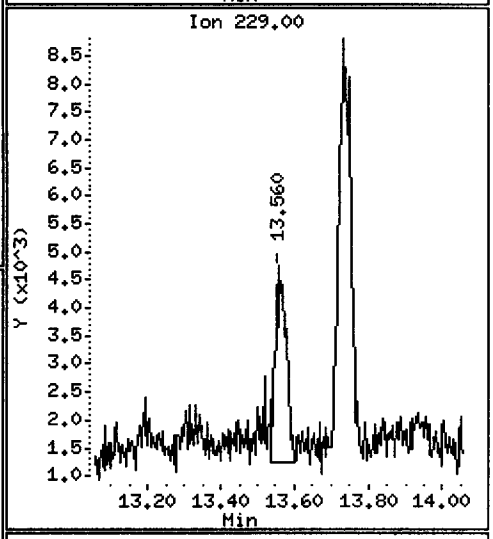
Column phase: ZB35 Column diameter: 0.32

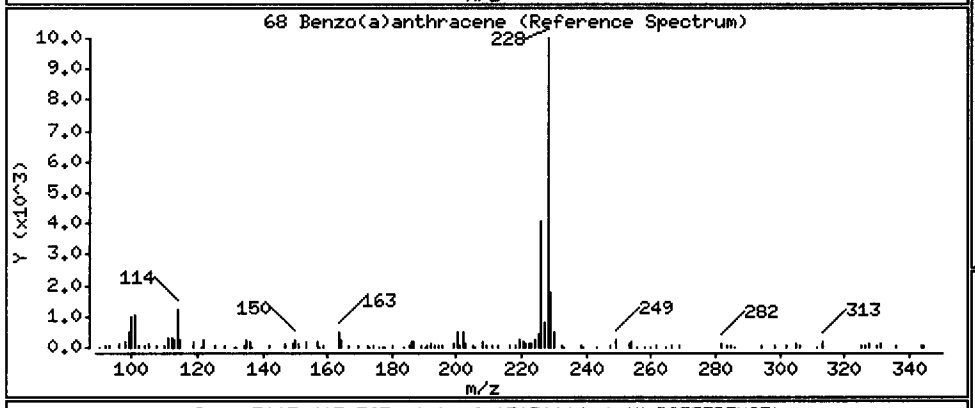
68 Benzo(a)anthracene Concentration: 11.10 ug/kg

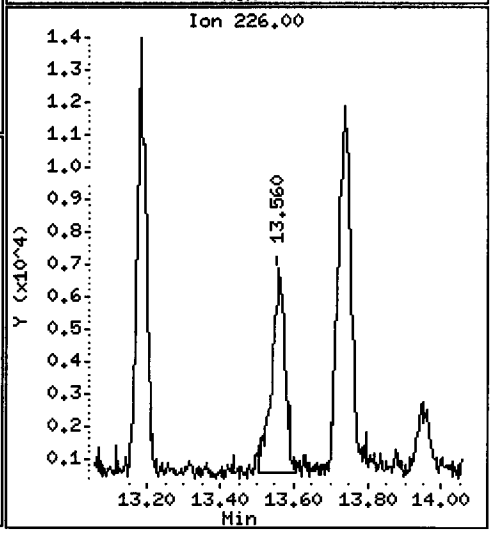


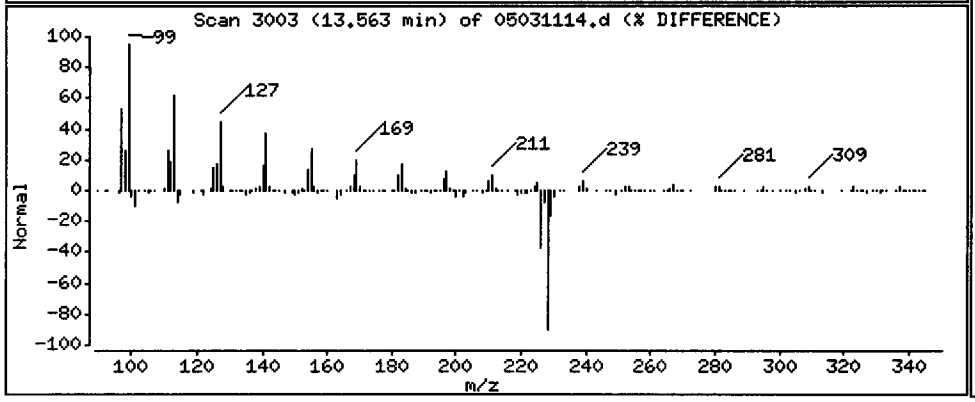












Data File: /chem3/nt4.i/20110503.b/05031114.d

Date : 03-MAY-2011 22:11

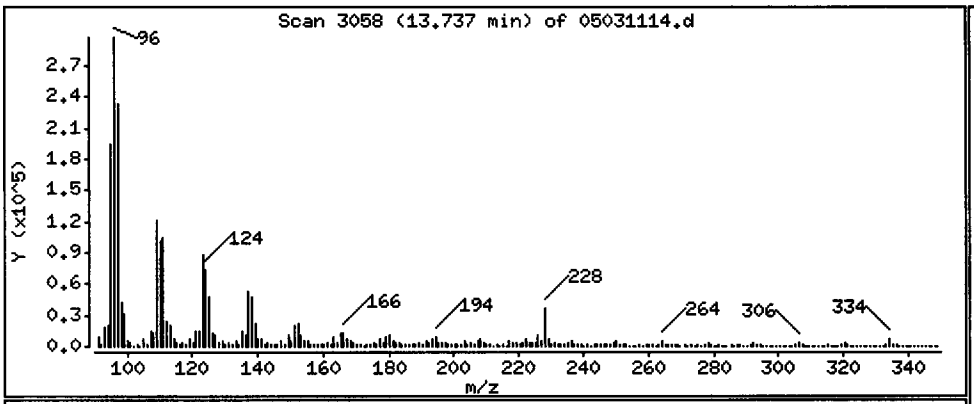
Client ID: DMA-TP4-0-1.5-04201 Instrument: nt4.i

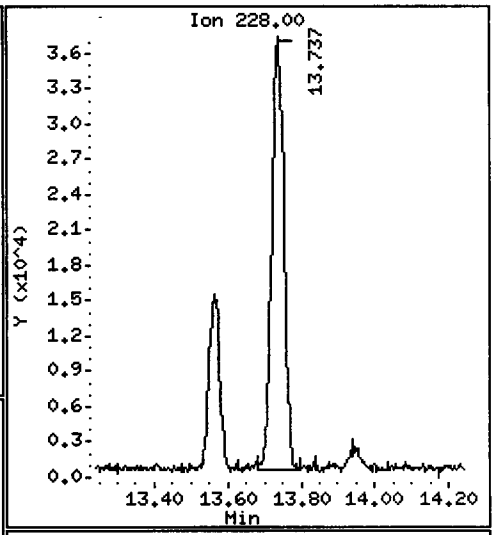
Sample Info: SS83H

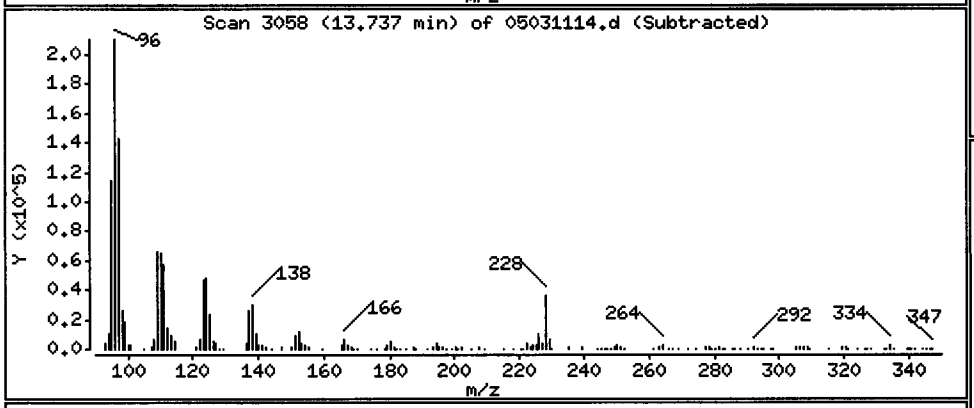
Volume Injected (uL): 1.0 Operator: JZ

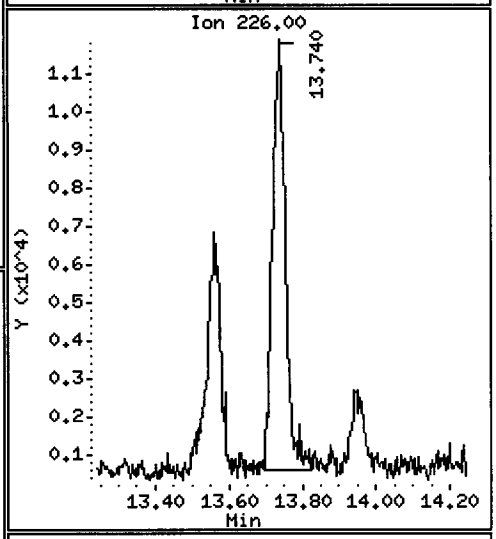
Column phase: ZB35 Column diameter: 0.32

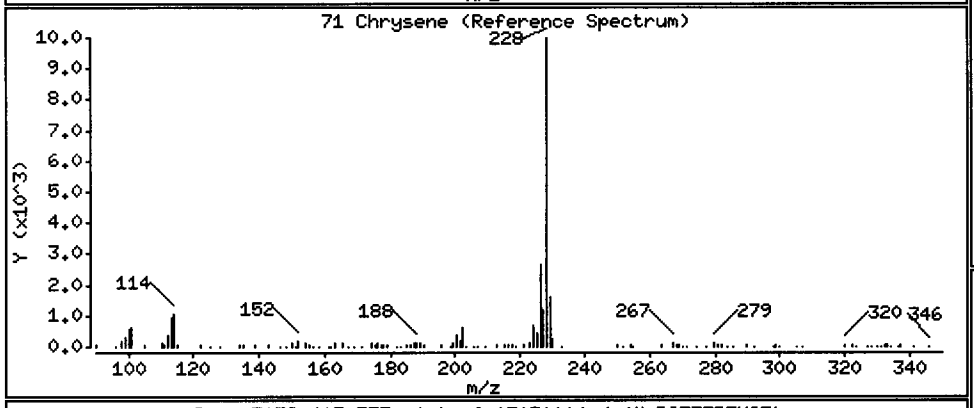
71 Chrysene Concentration: 32.07 ug/kg

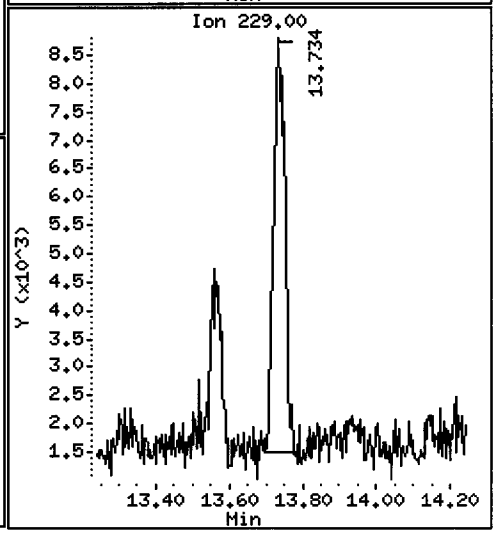


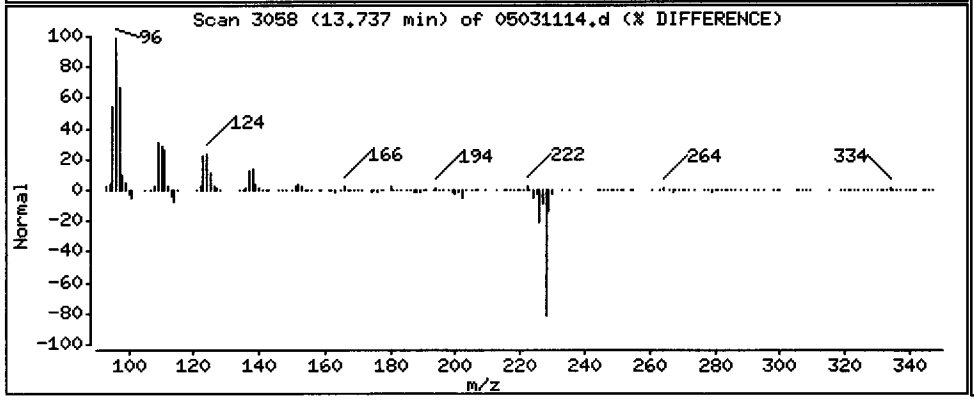












SS83:00793

Data File: /chem3/nt4.i/20110503.b/05031114.d

Date : 03-MAY-2011 22:11

Client ID: DMA-TP4-0-1.5-04201

Instrument: nt4.i

Sample Info: SS83H

Volume Injected (uL): 1.0

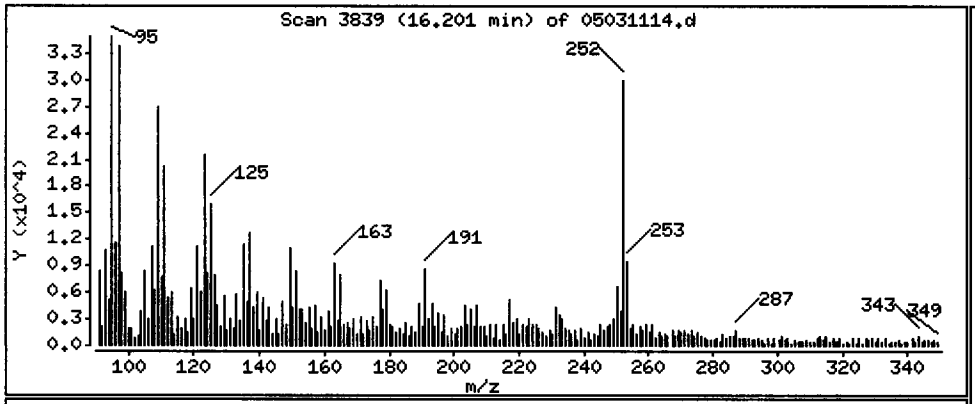
Operator: JZ

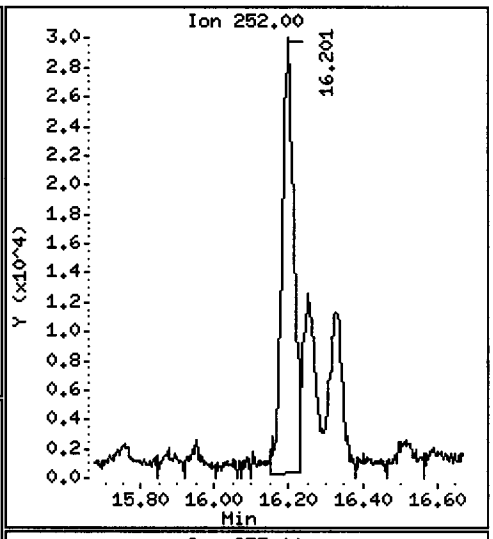
Column phase: ZB35

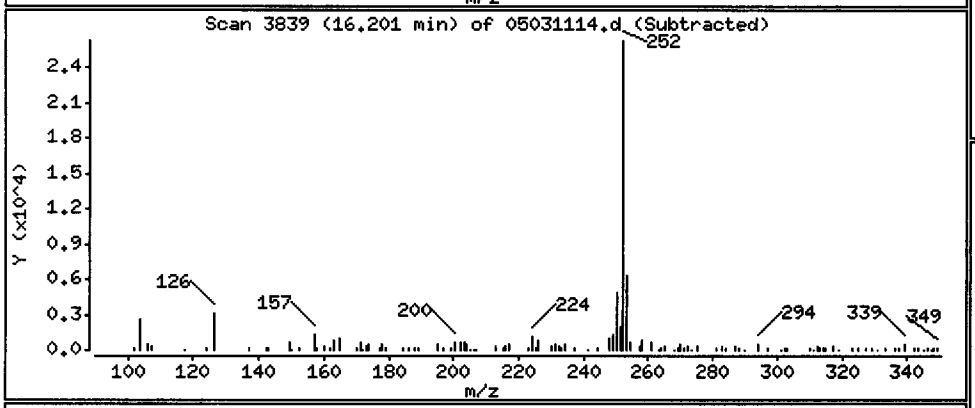
Column diameter: 0.32

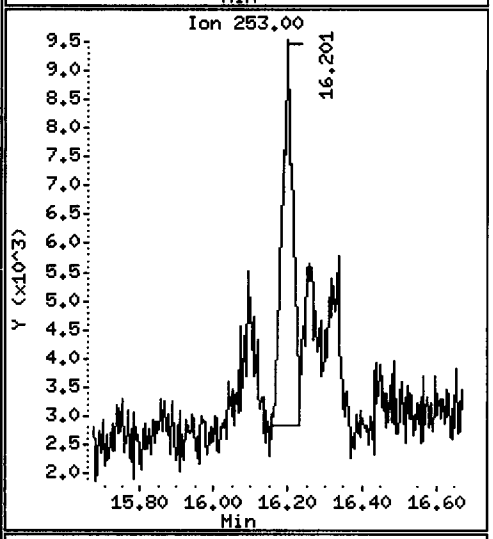
74 Benzo(b)fluoranthene

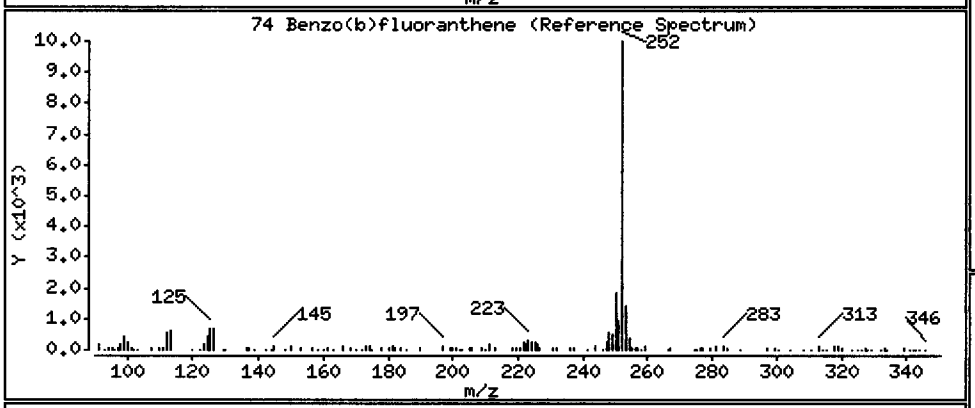
Concentration: 24.09 ug/kg

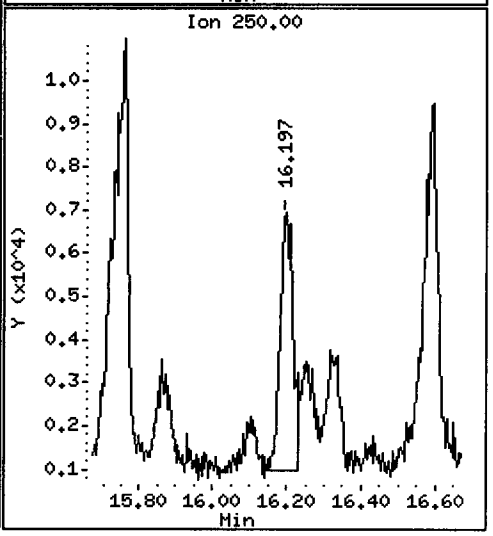


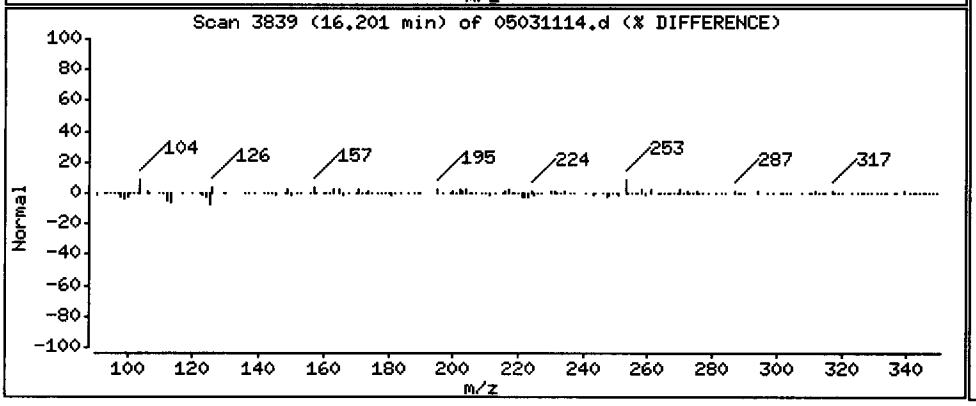












Data File: /chem3/nt4.i/20110503.b/05031114.d

Date : 03-MAY-2011 22:11

Client ID: DMA-TP4-0-1.5-04201

Instrument: nt4.i

Sample Info: SS83H

Volume Injected (uL): 1.0

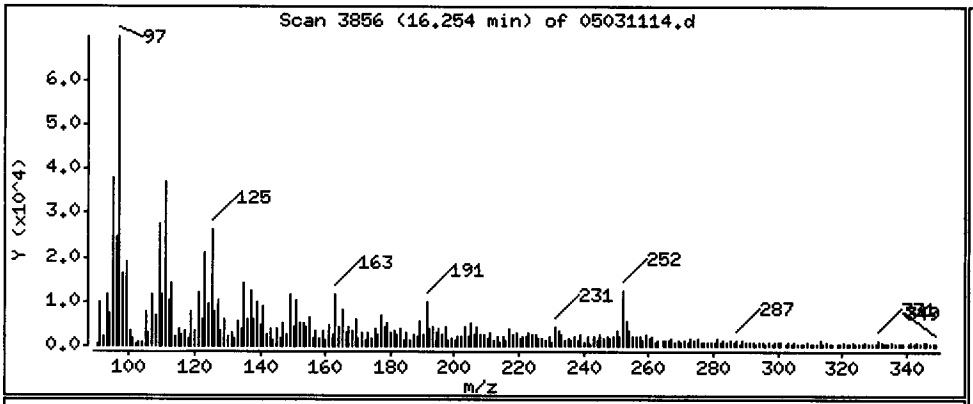
Operator: JZ

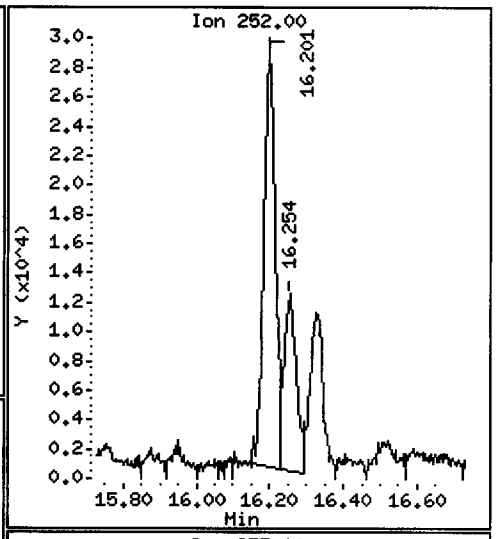
Column phase: ZB35

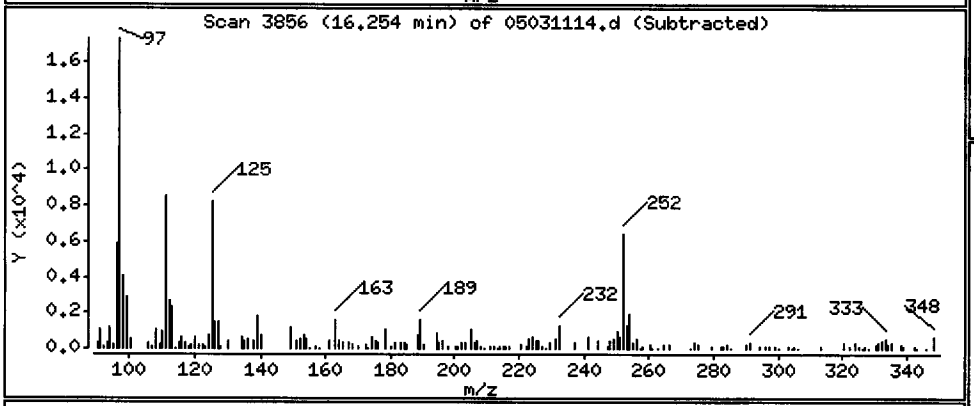
Column diameter: 0.32

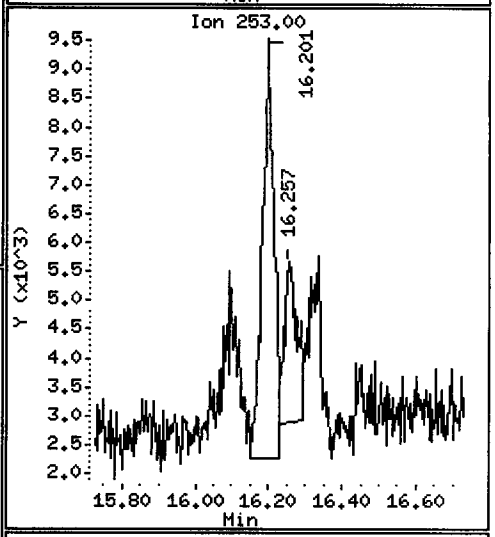
75 Benzo(k)fluoranthene

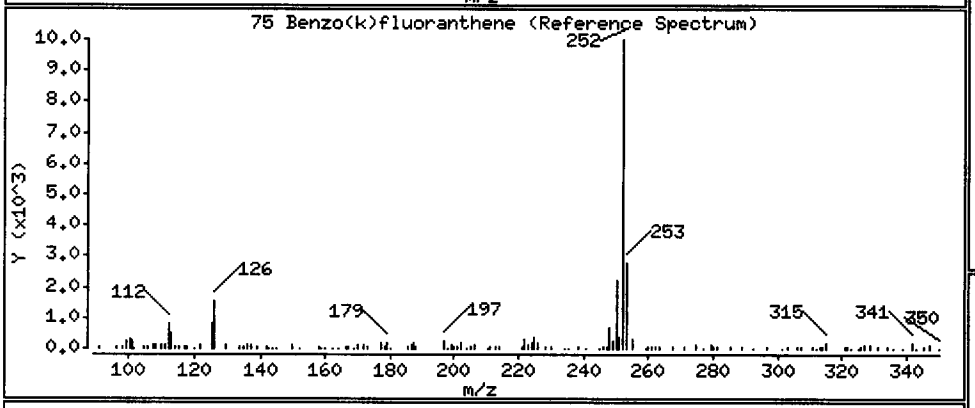
Concentration: 10.68 ug/kg

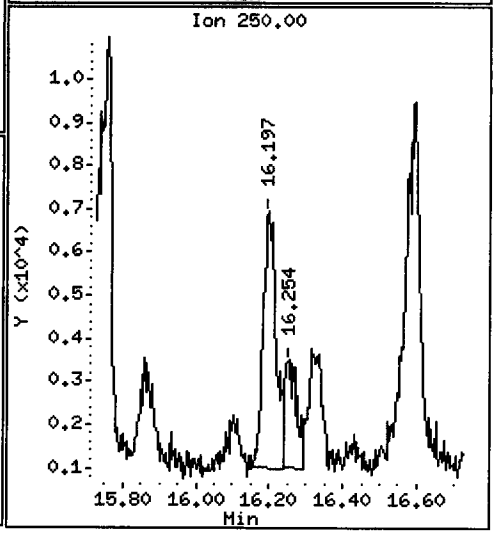


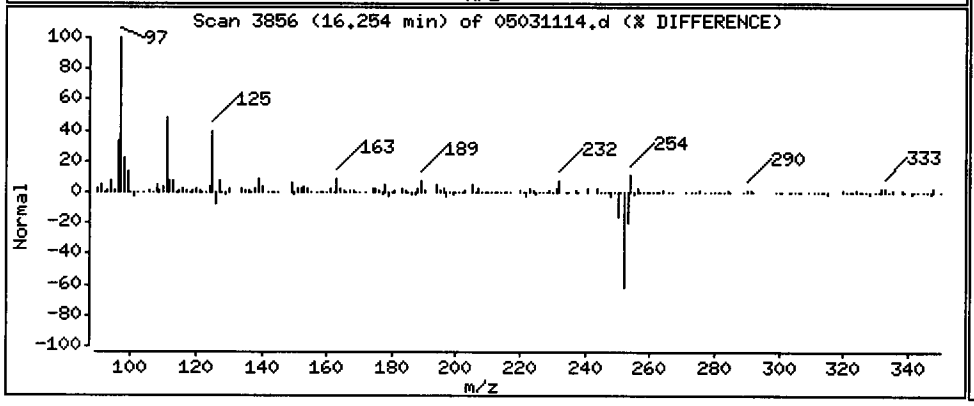












Data File: /chem3/nt4.i/20110503.b/05031114.d

Date : 03-MAY-2011 22:11

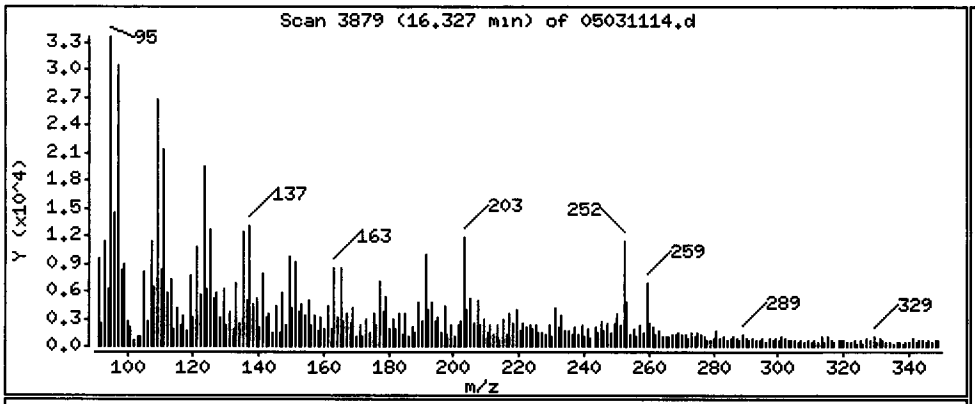
Client ID: DMA-TP4-0-1.5-04201 Instrument: nt4.i

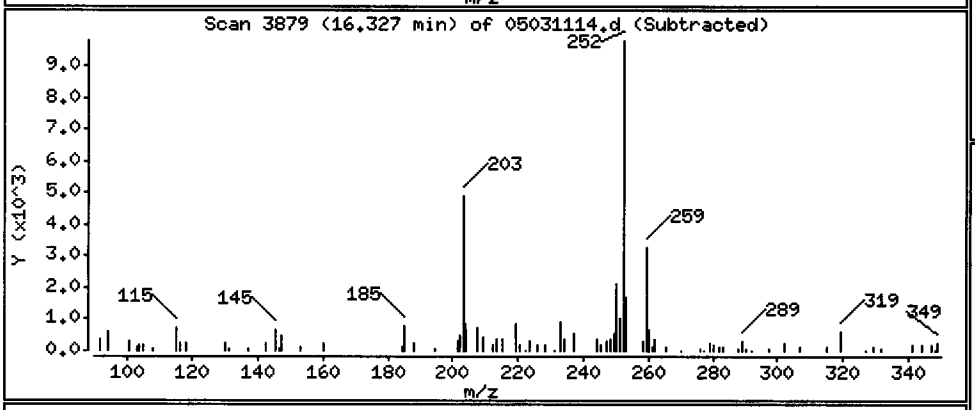
Sample Info: SS83H

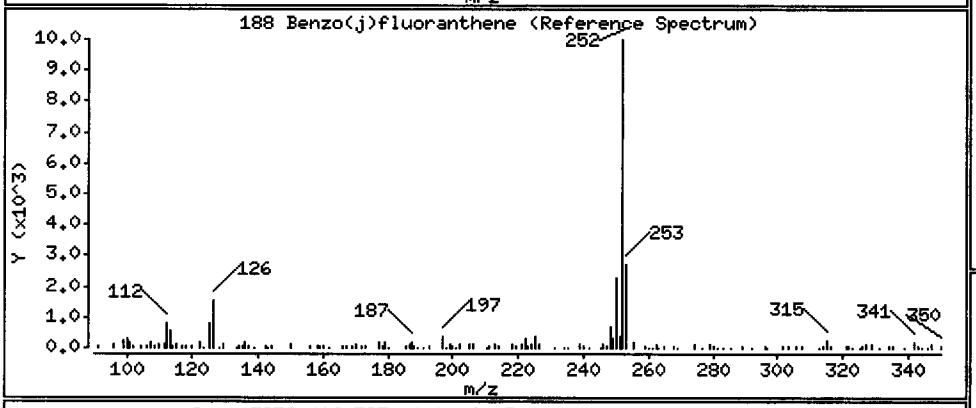
Volume Injected (uL): 1.0 Operator: JZ

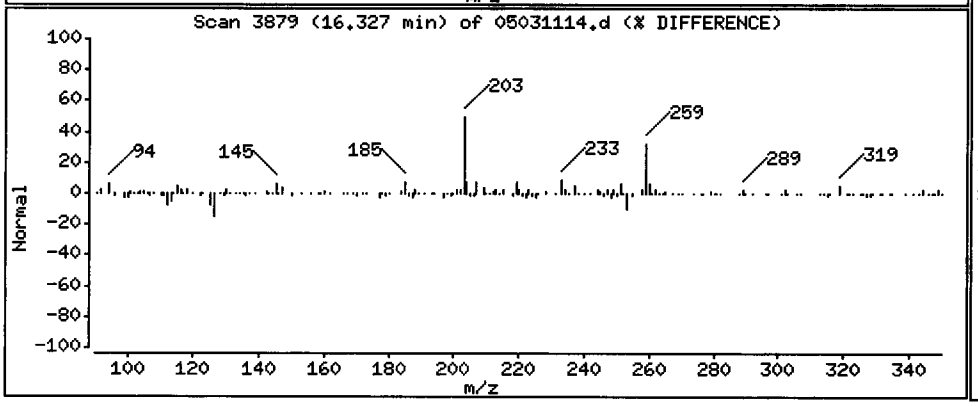
Column phase: ZB35 Column diameter: 0.32

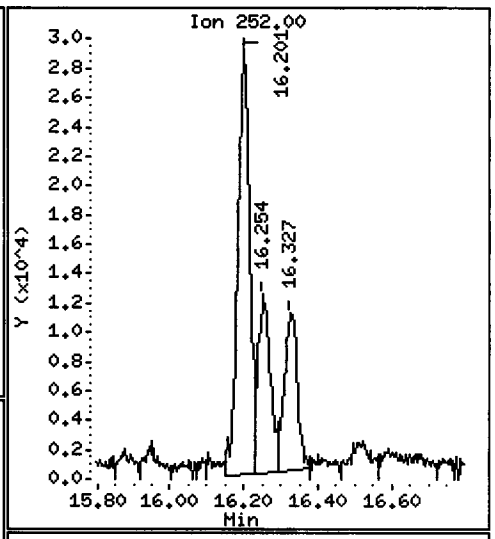
188 Benzo(j)fluoranthene Concentration: 9.380 ug/kg

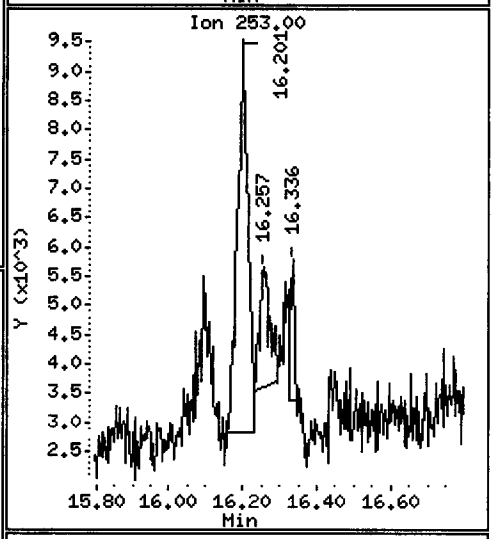


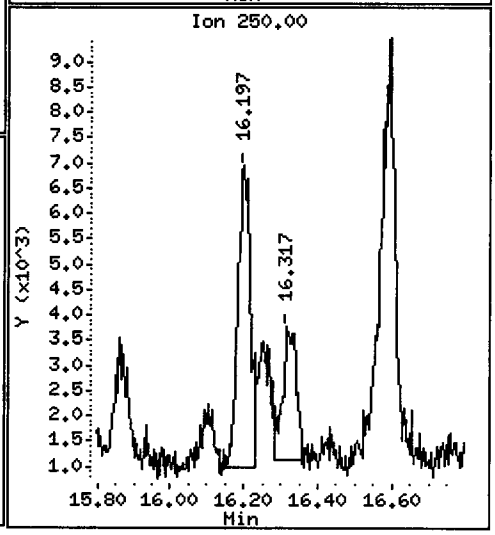












Data File: /chem3/nt4.i/20110503.b/05031114.d

Date : 03-MAY-2011 22:11

Client ID: DMA-TP4-0-1.5-04201

Instrument: nt4.i

Sample Info: SS83H

Volume Injected (uL): 1.0

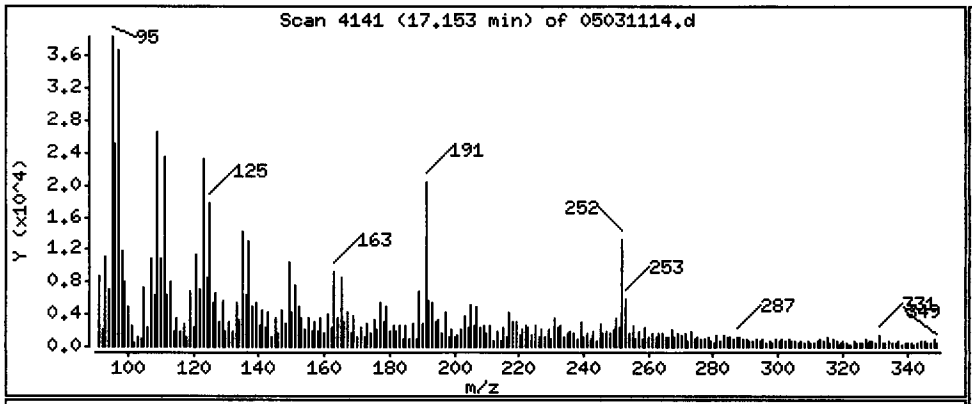
Operator: JZ

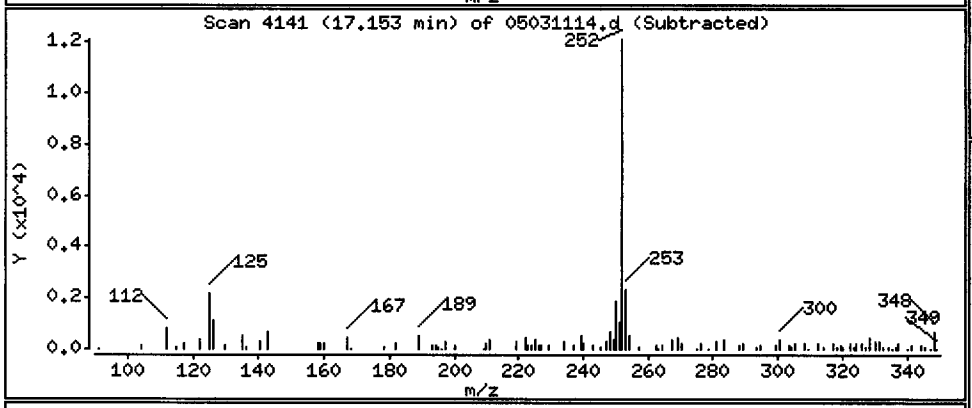
Column phase: ZB35

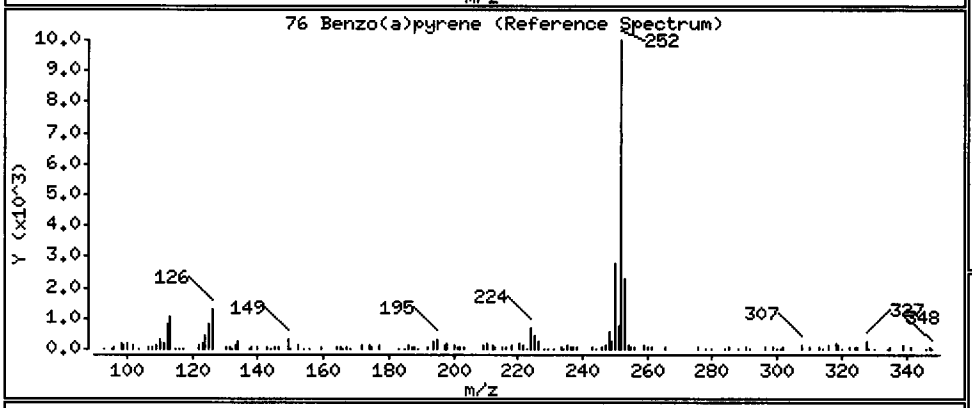
Column diameter: 0.32

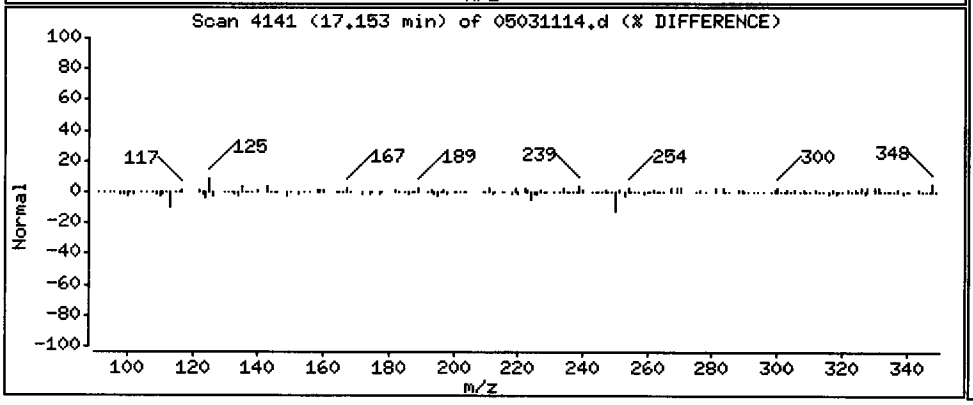
76 Benzo(a)pyrene

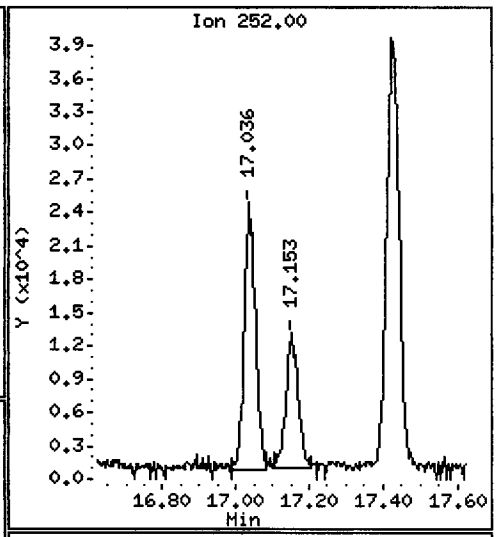
Concentration: 11.73 ug/kg

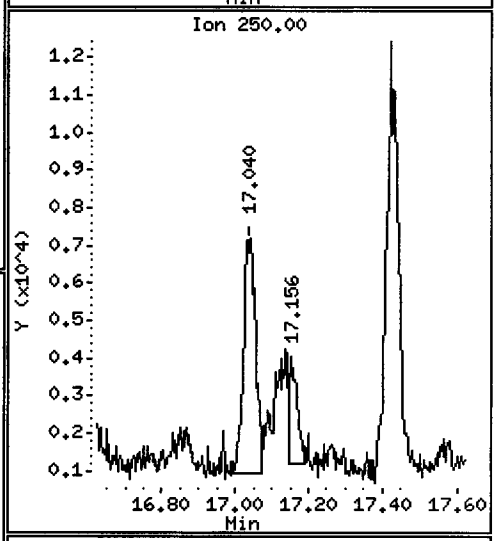


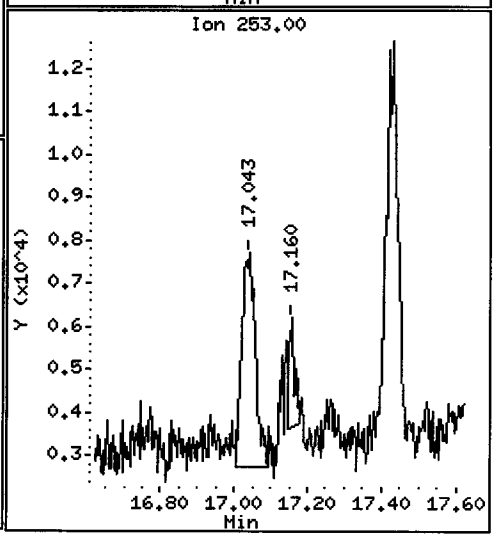












CO-ELUTION SUMMARY FOR FILE - 05031114.d

Lab ID: SS83H, Method: SIMPNA0421.m, Instrument: nt4.i, Date: 03-MAY-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20110503.b/05031115.d
Lab Smp Id: SS83I Client Smp ID: DMA-TP4-1.5-2-04201
Inj Date : 03-MAY-2011 22:39
Operator : JZ Inst ID: nt4.i
Smp Info : SS83I
Misc Info : 11-8719
Comment : 1ul Injection
Method : /chem3/nt4.i/20110503.b/SIMPNA0421.m
Meth Date : 04-May-2011 16:19 jianqing Quant Type: ISTD
Cal Date : 21-APR-2011 22:25 Cal File: 04211107.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

05/04/11

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	13.06000	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)	FINAL (ug/kg)
* 27 Naphthalene-d8	136	4.794	4.800	(1.000)	265412	2.00000	
28 Naphthalene	128	Compound Not Detected.					
$ 190 2-Methylnaphthalene-d10	152	5.535	5.539	(1.155)	138374	1.86529	86.35
32 2-Methylnaphthalene	141	Compound Not Detected.					
105 1-methylnaphthalene	141	Compound Not Detected.					
40 Acenaphthylene	152	Compound Not Detected.					
* 42 Acenaphthene-d10	164	7.043	7.046	(1.000)	159329	2.00000	
44 Acenaphthene	153	Compound Not Detected.					
46 Dibenzofuran	168	Compound Not Detected.					
49 Fluorene	166	Compound Not Detected.					
* 59 Phenanthrene-d10	188	8.989	8.993	(1.000)	266793	2.00000	
60 Phenanthrene	178	9.024	9.024	(1.004)	16160	0.12377	5.730
61 Anthracene	178	Compound Not Detected.					
64 Fluoranthene	202	10.699	10.705	(1.190)	10415	0.07222	3.343
65 Pyrene	202	11.172	11.175	(0.817)	12708	0.09178	4.249
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	13.670	13.671	(1.000)	275370	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	17.330	17.330	(1.000)	235139	2.00000	
78 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
$ 191 Dibenzo(a,h)anthracene-d14	292	19.591	19.595	(1.131)	233483	2.40025	111.1
79 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
80 Benzo(g,h,i)perylene	276	Compound Not Detected.					
99 Perylene	252	17.399	17.399	(1.004)	231293	2.38927	110.6

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 05031115.d
Lab Smp Id: SS83I
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20110503.b/SIMPNA0421.m
Misc Info: 11-8719

Calibration Date: 03-MAY-2011
Calibration Time: 16:33
Client Smp ID: DMA-TP4-1.5-2-04
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	265412	-3.85
42 Acenaphthene-d10	158527	79264	317054	159329	0.51
59 Phenanthrene-d10	277528	138764	555056	266793	-3.87
69 Chrysene-d12	304115	152058	608230	275370	-9.45
77 Perylene-d12	257833	128916	515666	235139	-8.80

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	4.80	4.30	5.30	4.79	-0.13
42 Acenaphthene-d10	7.05	6.55	7.55	7.04	-0.05
59 Phenanthrene-d10	8.99	8.49	9.49	8.99	-0.04
69 Chrysene-d12	13.67	13.17	14.17	13.67	0.00
77 Perylene-d12	17.33	16.83	17.83	17.33	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.

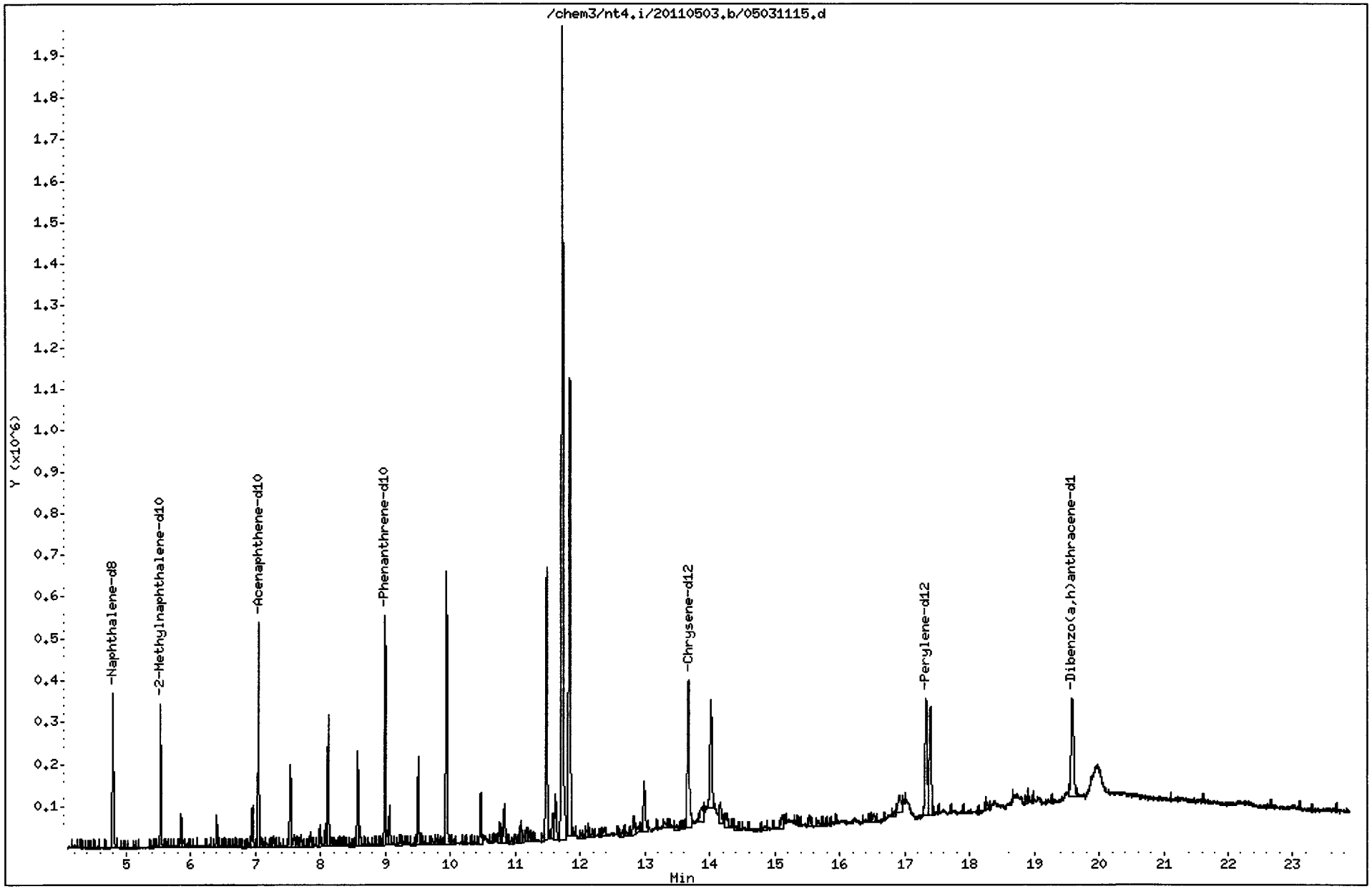
RECOVERY REPORT

Client Name: Floyd Snider
Client SDG: SS83
Sample Matrix: SOLID
Fraction: SV
Lab Smp Id: SS83I
Client Smp ID: DMA-TP4-1.5-2-04201
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/20110503.b/SIMPNA0421.m
Misc Info: 11-8719

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	138.9	86.35	62.18	34-100
$ 191 Dibenzo(a,h)anthra	138.9	111.1	80.01	10-117

Data File: /chem3/nt4.i/20110503.b/05031115.d
Date : 03-MAY-2011 22:39
Client ID: DMA-TP4-1.5-2-04201
Instrument: nt4.i
Sample Info: SS83I
Volume Injected (uL): 1.0
Operator: JZ
Column phase: ZB35
Column diameter: 0.32

806
SS83:00003



CO-ELUTION SUMMARY FOR FILE - 05031115.d

Lab ID: SS83I, Method: SIMPNA0421.m, Instrument: nt4.i, Date: 03-MAY-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20110503.b/05031116.d
Lab Smp Id: SS83J Client Smp ID: DMA-TP5-1.5-2-04201
Inj Date : 03-MAY-2011 23:06
Operator : JZ Inst ID: nt4.i
Smp Info : SS83J
Misc Info : 11-8720
Comment : 1ul Injection
Method : /chem3/nt4.i/20110503.b/SIMPNA0421.m
Meth Date : 04-May-2011 16:19 jianqing Quant Type: ISTD
Cal Date : 21-APR-2011 22:25 Cal File: 04211107.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

05/04/11

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	20.28000	Weight of sample extracted (g)
M	49.80000	% 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	4.795	4.800	(1.000)	252929	2.00000	
28 Naphthalene	128	4.820	4.826	(1.005)	33104	0.29034	14.26
$ 190 2-Methylnaphthalene-d10	152	5.536	5.539	(1.155)	121846	1.72355	84.65
32 2-Methylnaphthalene	141	5.577	5.583	(1.163)	11724	0.18322	8.999
105 1-methylnaphthalene	141	5.773	5.775	(1.204)	12681	0.19068	9.365
40 Acenaphthylene	152	Compound Not Detected.					
* 42 Acenaphthene-d10	164	7.047	7.046	(1.000)	158060	2.00000	
44 Acenaphthene	153	7.091	7.094	(1.006)	5391	0.06807	3.343
46 Dibenzofuran	168	7.236	7.239	(1.027)	14670	0.13540	6.650
49 Fluorene	166	7.694	7.696	(1.092)	7352	0.07908	3.884
* 59 Phenanthrene-d10	188	8.990	8.993	(1.000)	256690	2.00000	
60 Phenanthrene	178	9.025	9.024	(1.004)	76839	0.61168	30.04
61 Anthracene	178	9.056	9.059	(1.007)	11519	0.08847	4.345
64 Fluoranthene	202	10.709	10.705	(1.191)	120261	0.86670	42.57
65 Pyrene	202	11.179	11.175	(0.817)	137343	0.93272	45.81

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
	68 Benzo(a)anthracene	228	13.570	13.557	(0.991)	38200	0.27968	13.74
*	69 Chrysene-d12	240	13.687	13.671	(1.000)	292839	2.00000	
	71 Chrysene	228	13.741	13.743	(1.004)	118462	0.89502	43.96
	74 Benzo(b)fluoranthene	252	16.201	16.172	(0.933)	84118	0.62055	30.48
	75 Benzo(k)fluoranthene	252	16.258	16.229	(0.936)	32772	0.23493	11.54(H)
	188 Benzo(j)fluoranthene	252	16.327	16.298	(0.940)	33977	0.24835	12.20
	76 Benzo(a)pyrene	252	17.160	17.125	(0.988)	29270	0.24132	11.85
*	77 Perylene-d12	264	17.368	17.330	(1.000)	249846	2.00000	
	78 Indeno(1,2,3-cd)pyrene	276	19.715	19.667	(1.135)	37741	0.26449	12.99
$	191 Dibenzo(a,h)anthracene-d14	292	19.636	19.595	(1.131)	121570	1.17620	57.77
	79 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	80 Benzo(g,h,i)perylene	276	20.554	20.503	(1.183)	48243	0.39583	19.44
	99 Perylene	252	17.435	17.399	(1.004)	164467	1.59895	78.53

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: 05031116.d
Lab Smp Id: SS83J
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20110503.b/SIMPNA0421.m
Misc Info: 11-8720

Calibration Date: 03-MAY-2011
Calibration Time: 16:33
Client Smp ID: DMA-TP5-1.5-2-04
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	252929	-8.37
42 Acenaphthene-d10	158527	79264	317054	158060	-0.29
59 Phenanthrene-d10	277528	138764	555056	256690	-7.51
69 Chrysene-d12	304115	152058	608230	292839	-3.71
77 Perylene-d12	257833	128916	515666	249846	-3.10

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	4.80	4.30	5.30	4.79	-0.12
42 Acenaphthene-d10	7.05	6.55	7.55	7.05	0.01
59 Phenanthrene-d10	8.99	8.49	9.49	8.99	-0.03
69 Chrysene-d12	13.67	13.17	14.17	13.69	0.12
77 Perylene-d12	17.33	16.83	17.83	17.37	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: SS83J
Level: LOW
Data Type: MS DATA
SpikeList File: pnalcss.spk
Sublist File: pnax.sub
Method File: /chem3/nt4.i/20110503.b/SIMPNA0421.m
Misc Info: 11-8720

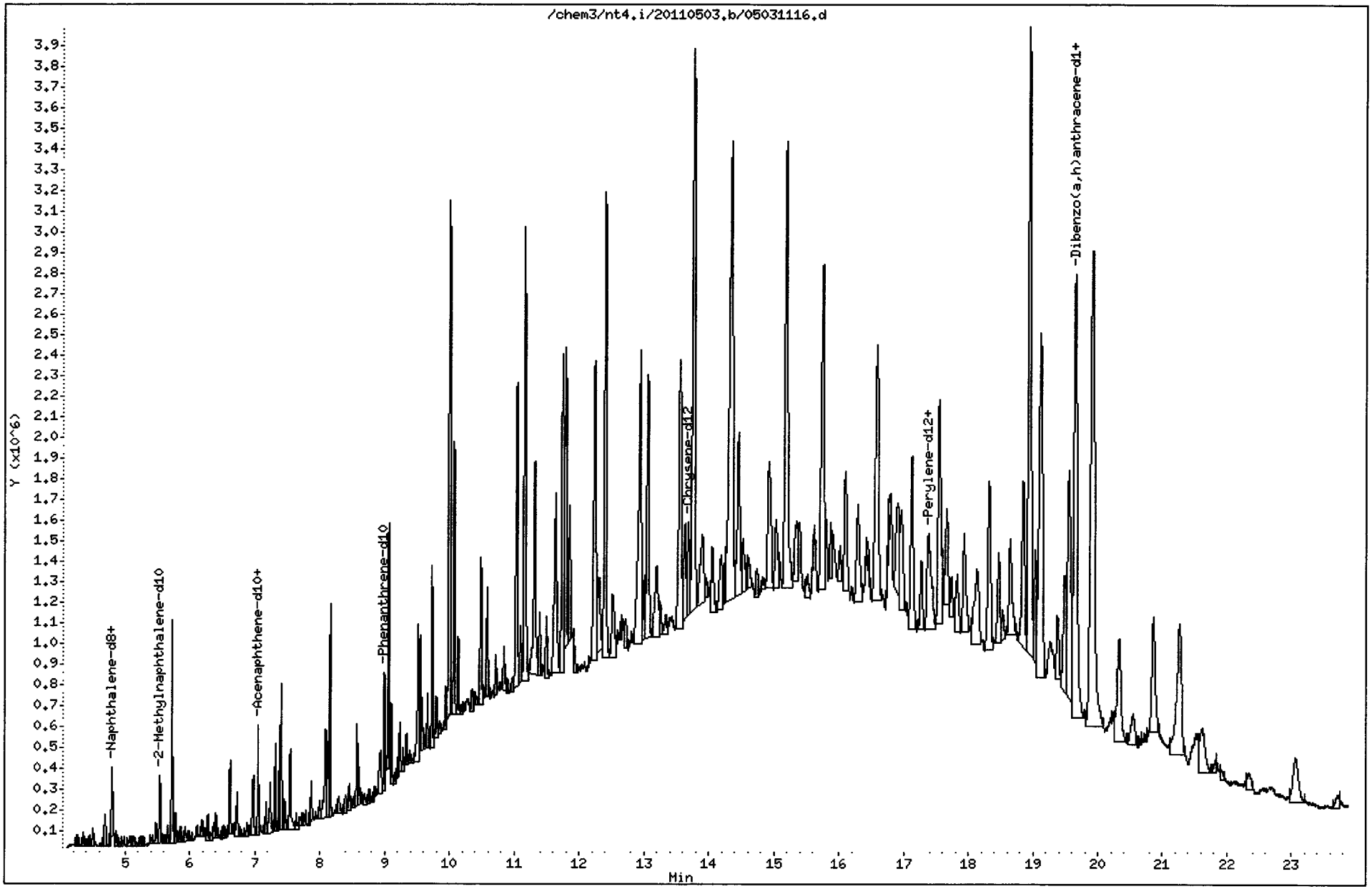
Client SDG: SS83
Fraction: SV
Client Smp ID: DMA-TP5-1.5-2-04201
Operator: JZ
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	147.3	84.65	57.45	34-100
$ 191 Dibenzo(a,h)anthra	147.3	57.77	39.21	10-117

Data File: /chem3/nt4.i/20110503.b/05031116.d
Date : 03-MAY-2011 23:06
Client ID: DMA-TP5-1.5-2-04201
Sample Info: SS83J
Volume Injected (uL): 1.0
Column phase: ZB35

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

812
SS83:00803



Data File: /chem3/nt4.i/20110503.b/05031116.d

Date : 03-MAY-2011 23:06

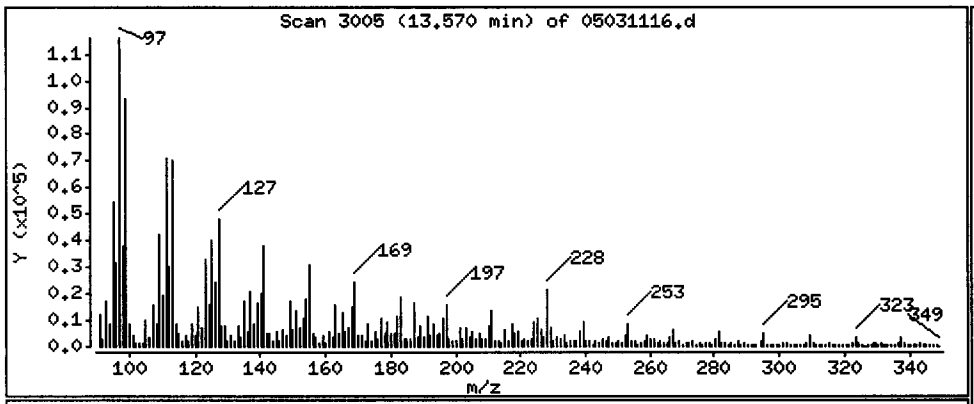
Client ID: DMA-TP5-1.5-2-04201 Instrument: nt4.i

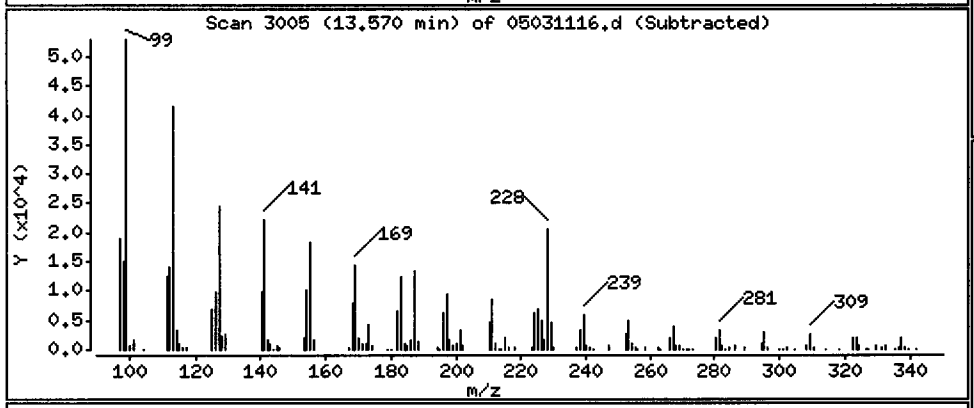
Sample Info: SS83J

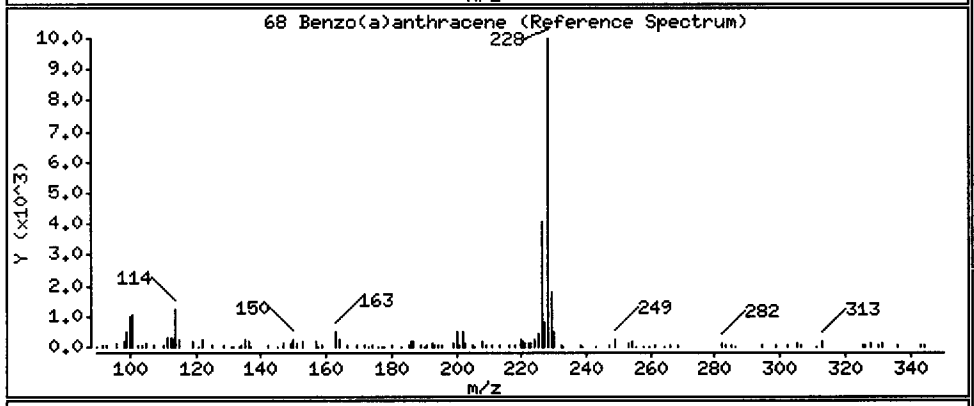
Volume Injected (uL): 1.0 Operator: JZ

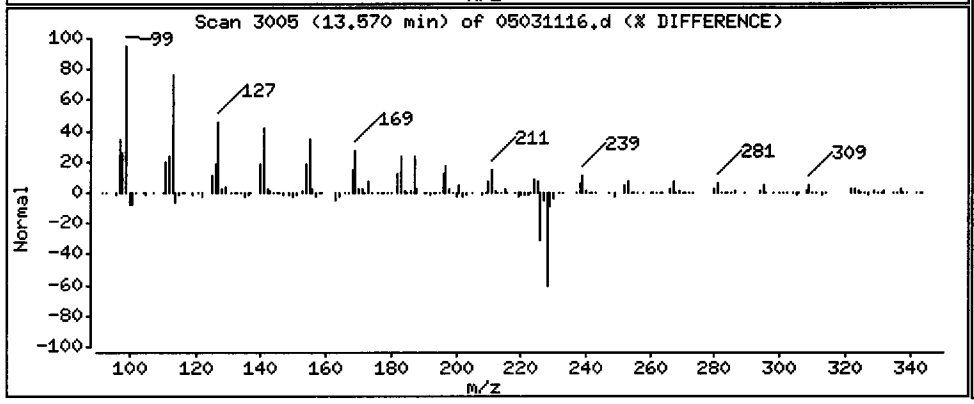
Column phase: ZB35 Column diameter: 0.32

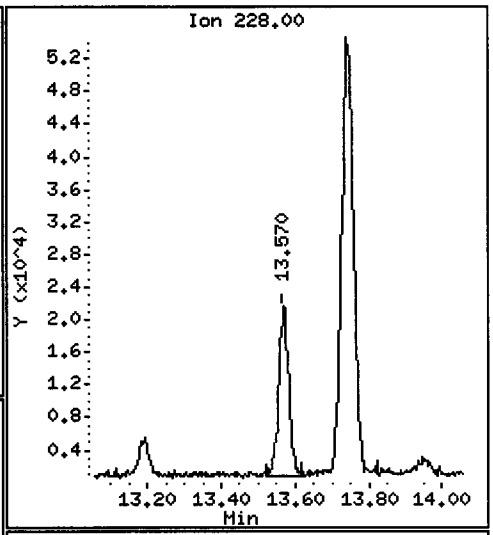
68 Benzo(a)anthracene Concentration: 13.74 ug/kg

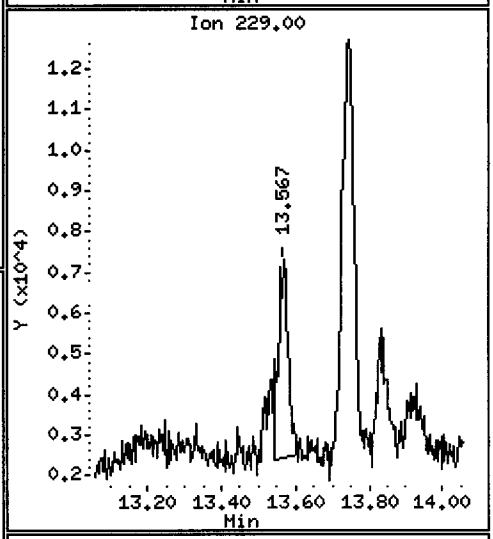


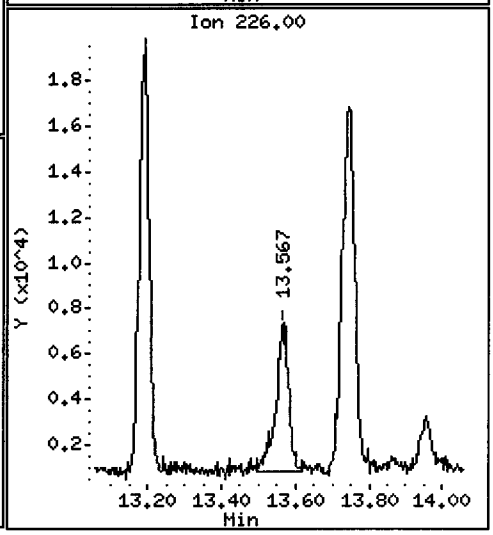












SS83:00810

Data File: /chem3/nt4.i/20110503.b/05031116.d

Date : 03-MAY-2011 23:06

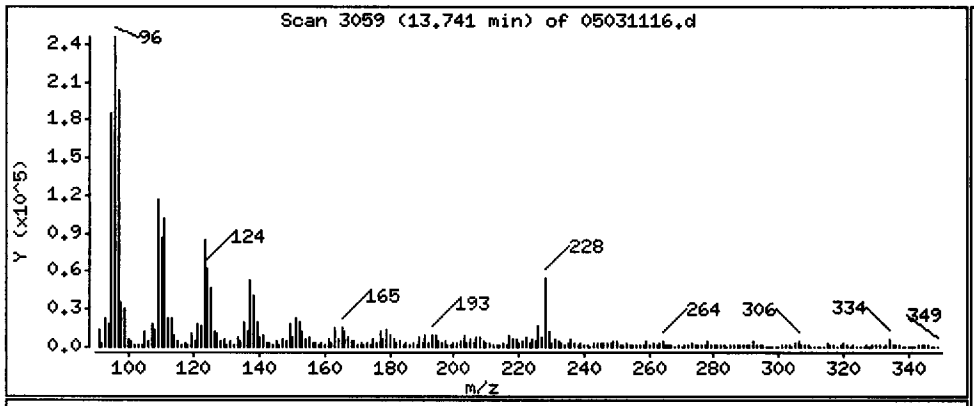
Client ID: DMA-TP5-1.5-2-04201 Instrument: nt4.i

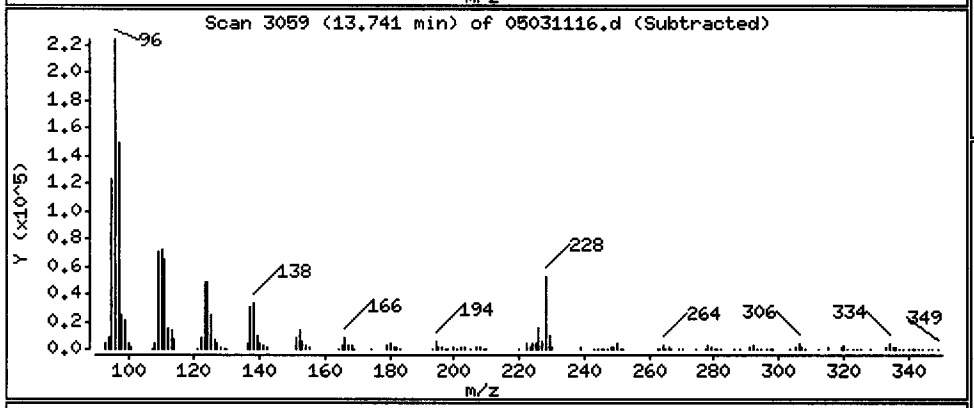
Sample Info: SS83J

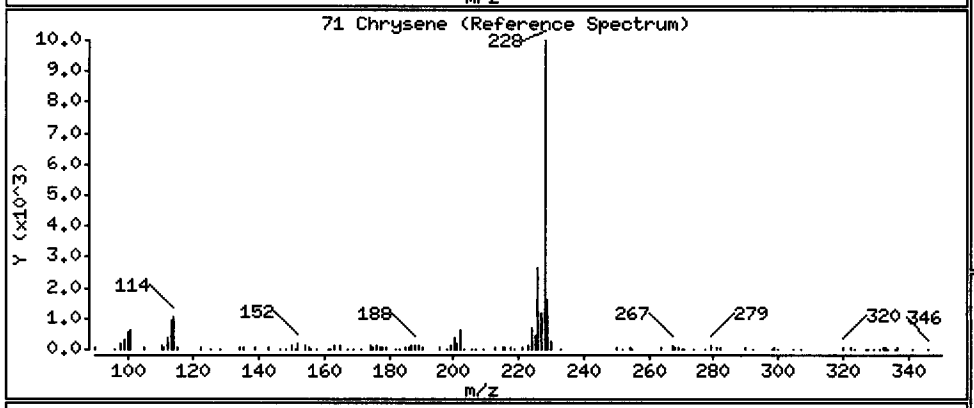
Volume Injected (uL): 1.0 Operator: JZ

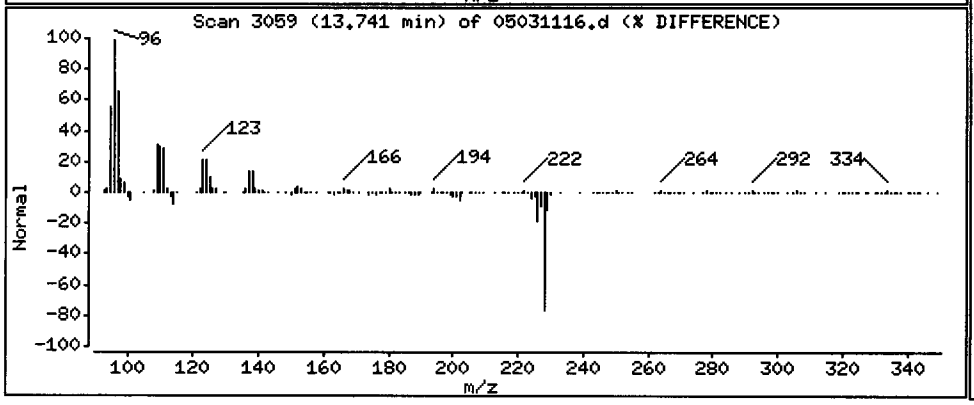
Column phase: ZB35 Column diameter: 0.32

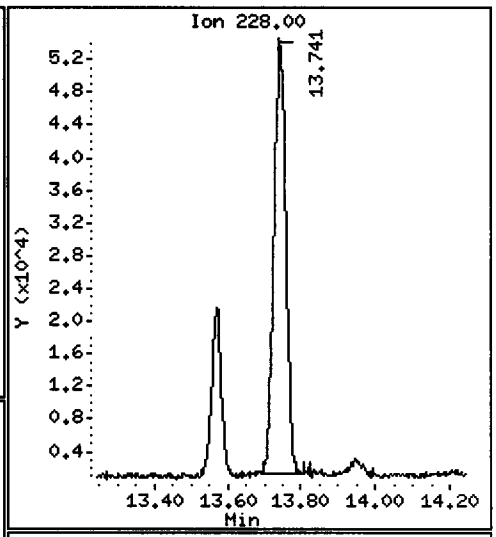
71 Chrysene Concentration: 43.96 ug/kg

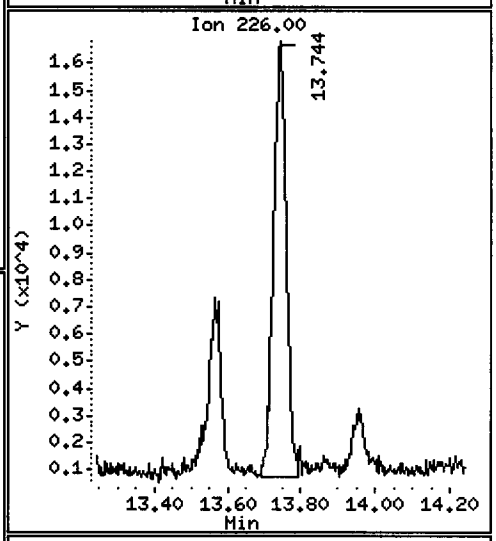


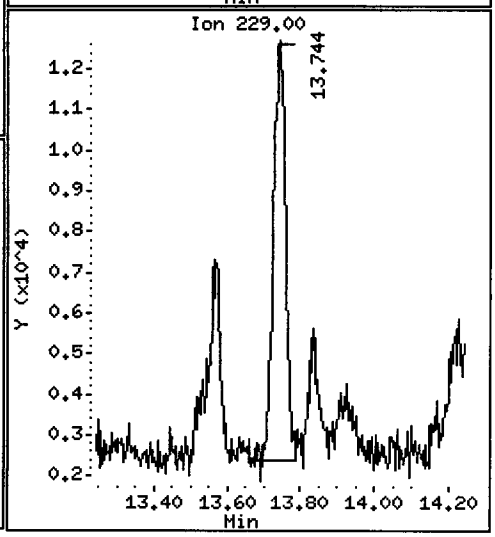












Data File: /chem3/nt4.i/20110503.b/05031116.d

Date : 03-MAY-2011 23:06

Client ID: DMA-TP5-1.5-2-04201

Instrument: nt4.i

Sample Info: SS83J

Volume Injected (uL): 1.0

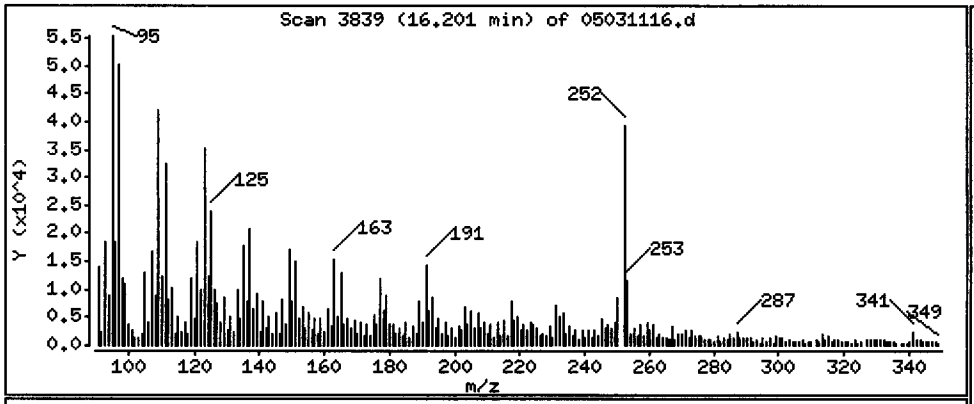
Operator: JZ

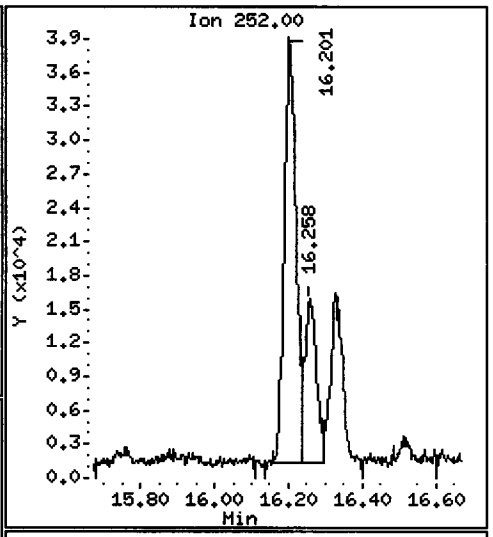
Column phase: ZB35

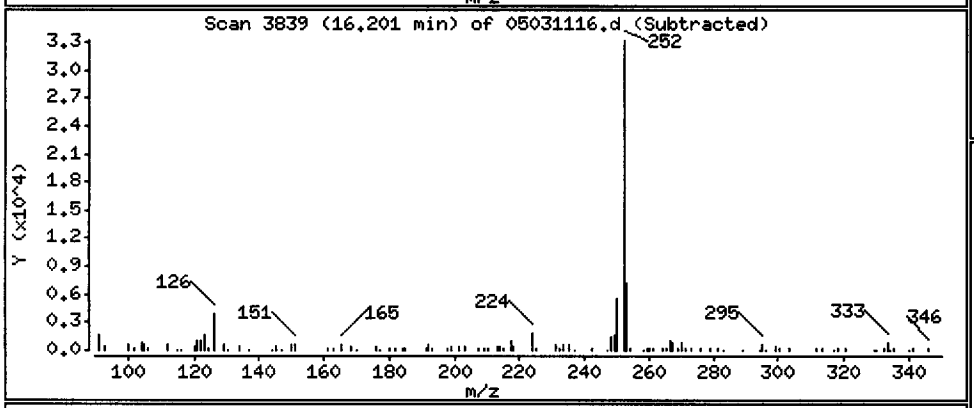
Column diameter: 0.32

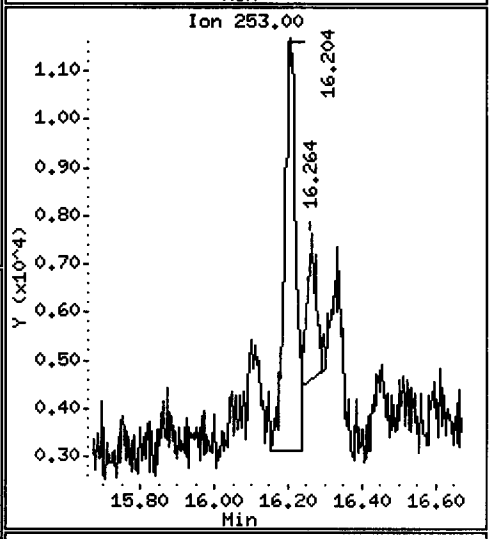
74 Benzo(b)fluoranthene

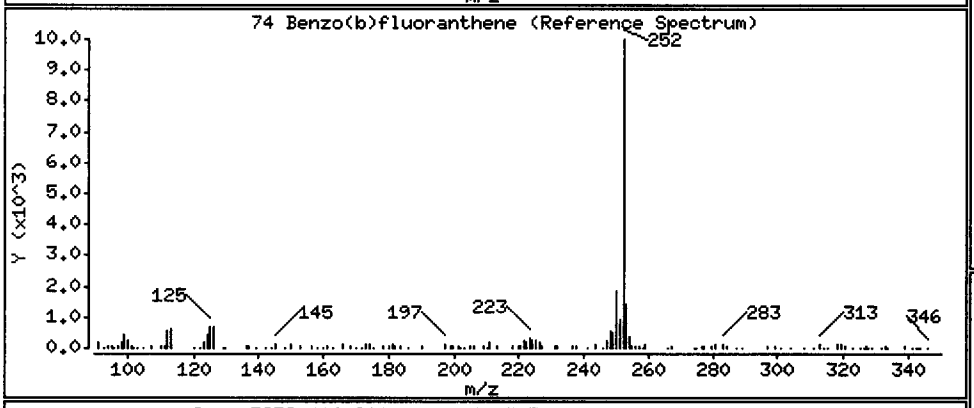
Concentration: 30.48 ug/kg

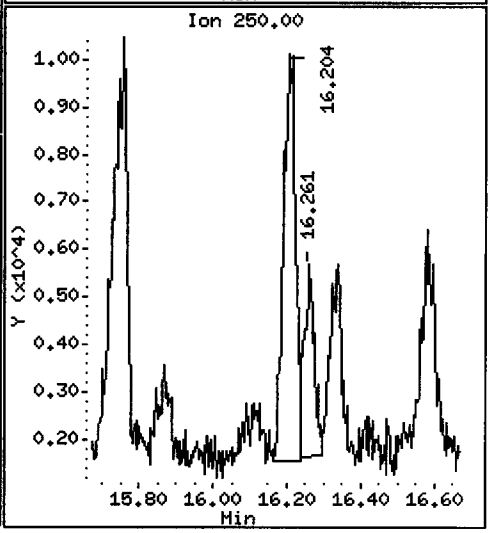


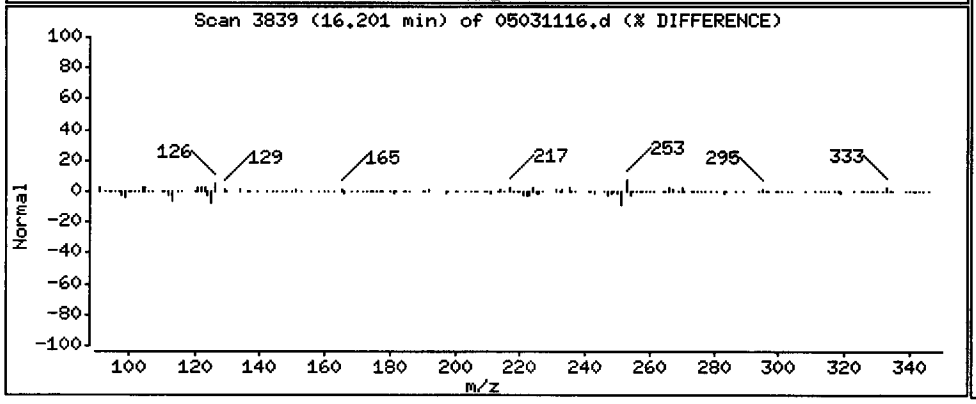












Data File: /chem3/nt4.i/20110503.b/05031116.d

Date : 03-MAY-2011 23:06

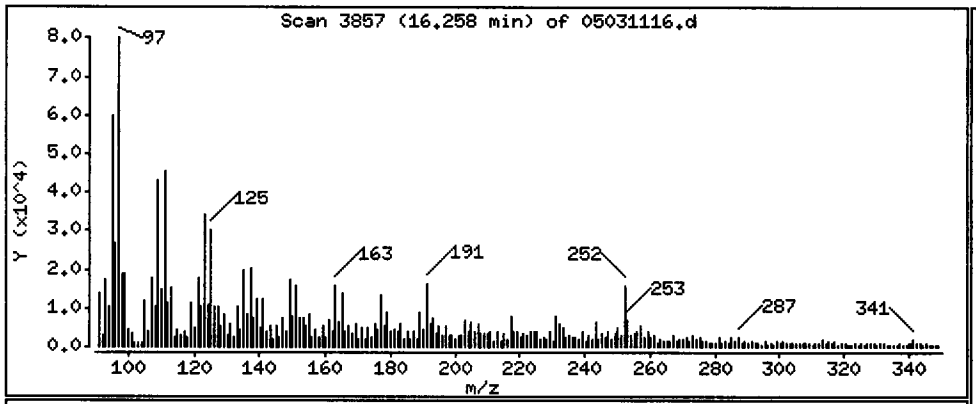
Client ID: DMA-TP5-1.5-2-04201 Instrument: nt4.i

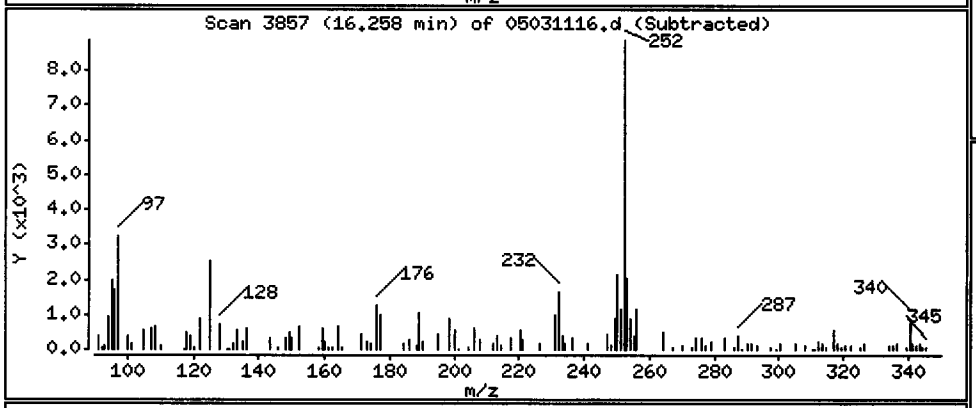
Sample Info: SS83J

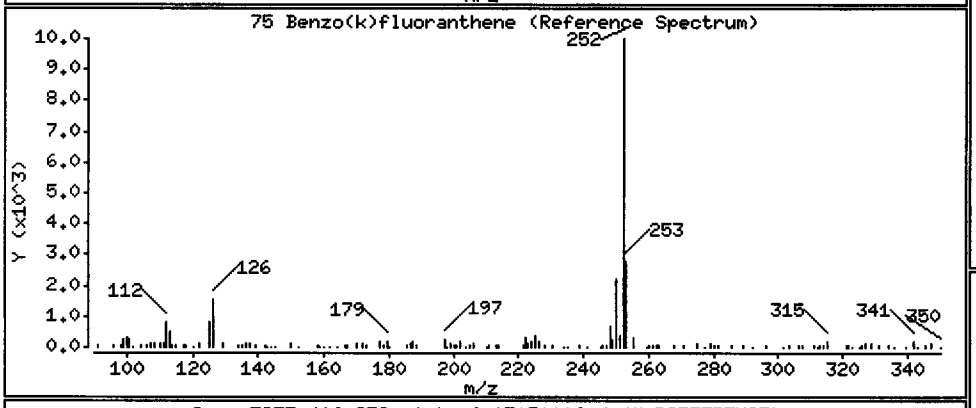
Volume Injected (uL): 1.0 Operator: JZ

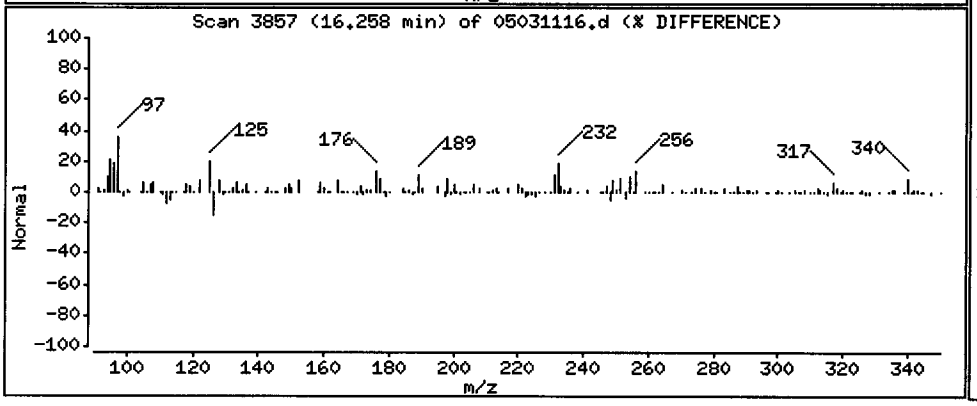
Column phase: ZB35 Column diameter: 0.32

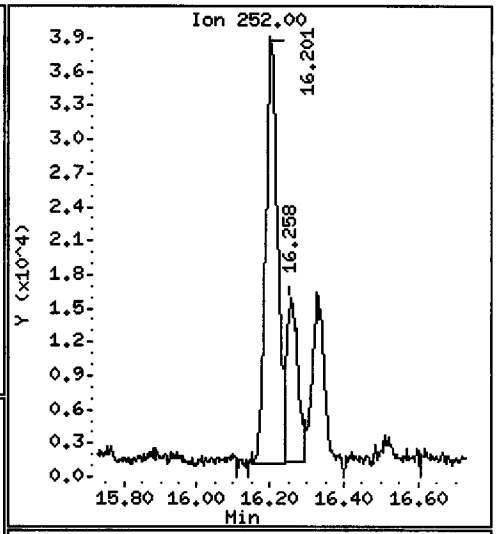
75 Benzo(k)fluoranthene Concentration: 11.54 ug/kg

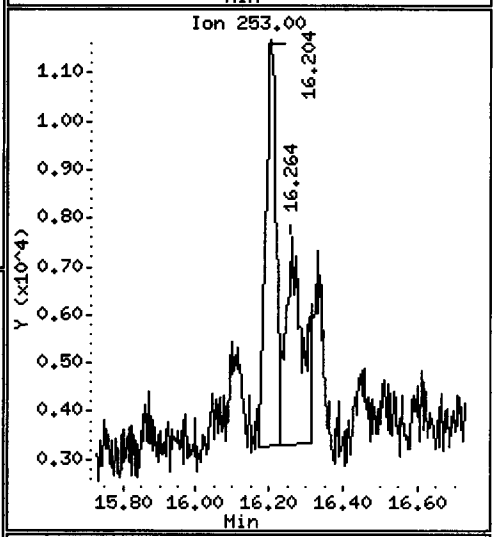


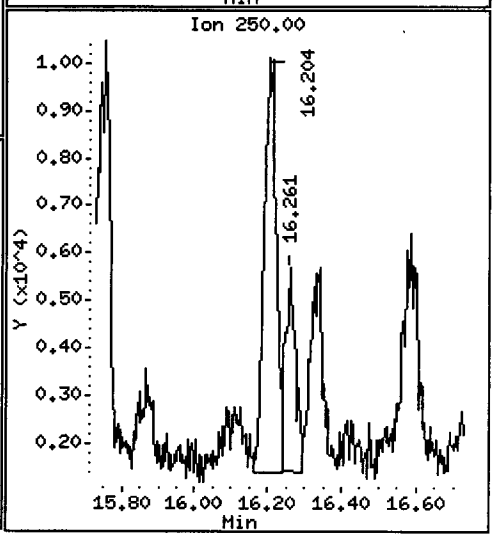












Data File: /chem3/nt4.i/20110503.b/05031116.d

Date : 03-MAY-2011 23:06

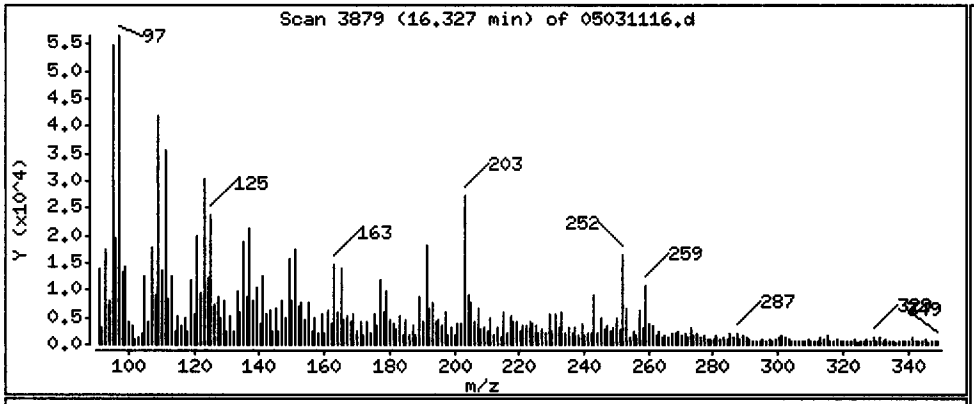
Client ID: DMA-TP5-1.5-2-04201 Instrument: nt4.i

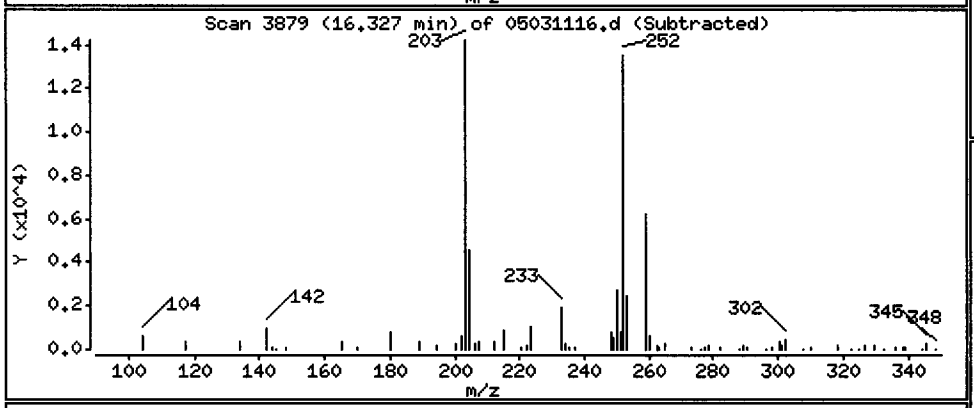
Sample Info: SS83J

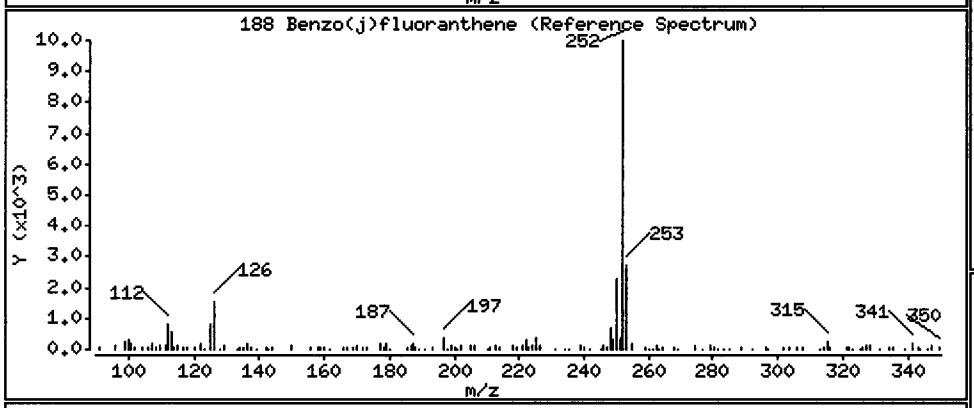
Volume Injected (uL): 1.0 Operator: JZ

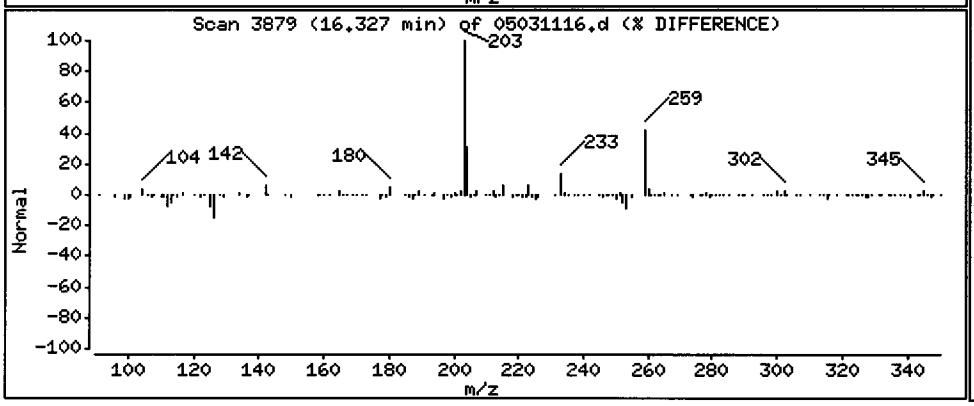
Column phase: ZB35 Column diameter: 0.32

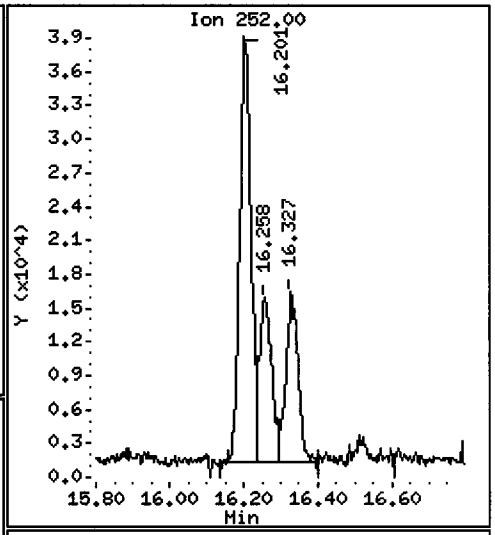
188 Benzo(j)fluoranthene Concentration: 12.20 ug/kg

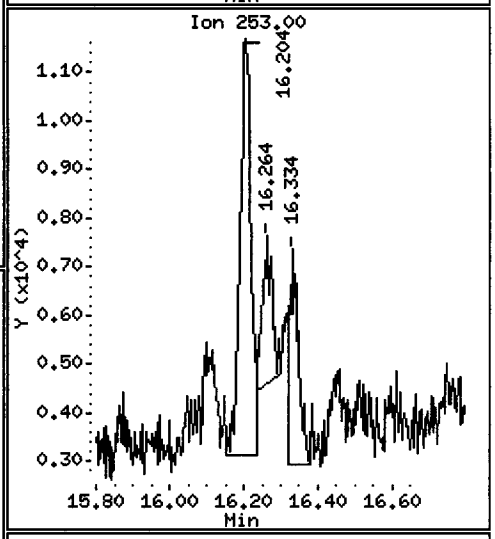


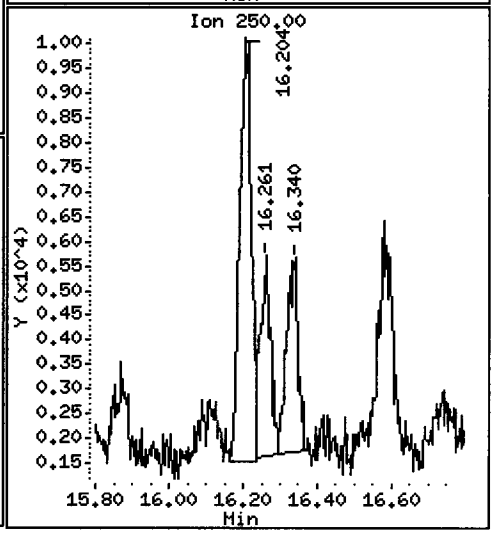












Data File: /chem3/nt4.i/20110503.b/05031116.d

Date : 03-MAY-2011 23:06

Client ID: DMA-TP5-1.5-2-04201

Instrument: nt4.i

Sample Info: SS83J

Volume Injected (uL): 1.0

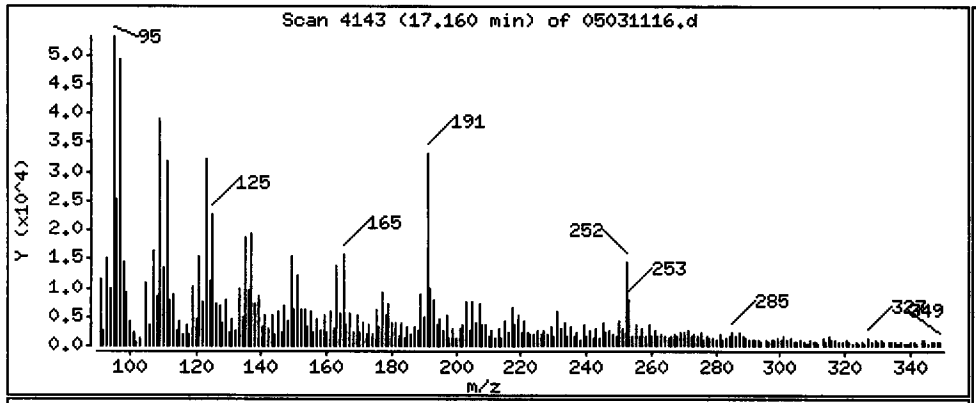
Operator: JZ

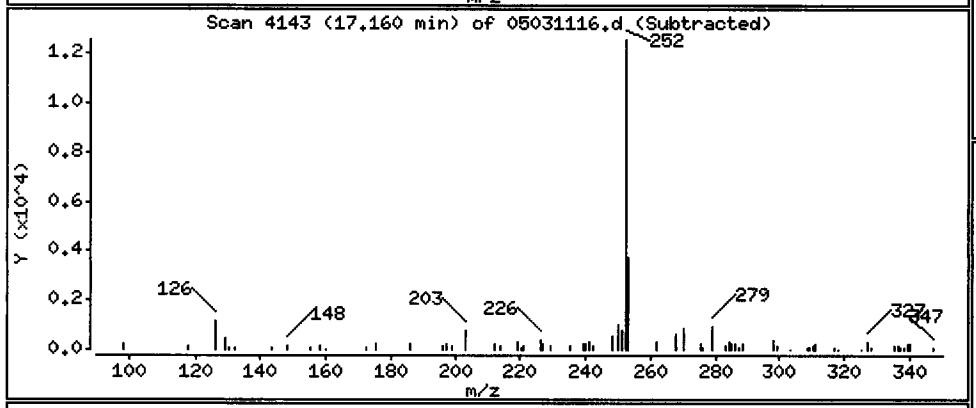
Column phase: ZB35

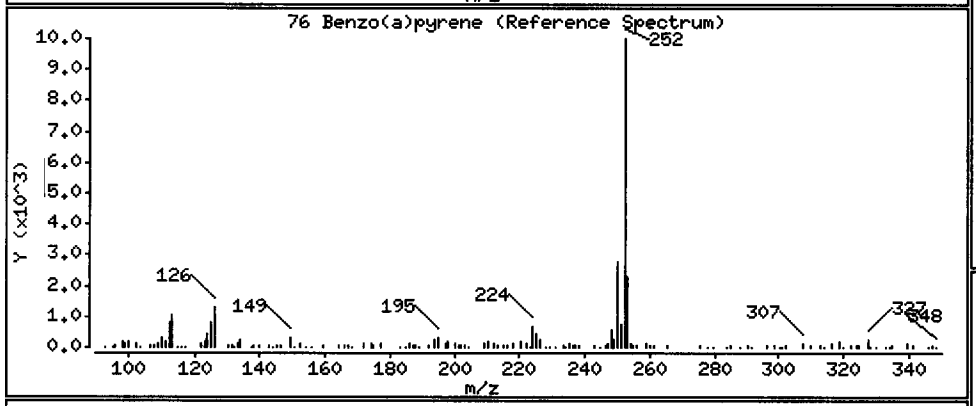
Column diameter: 0.32

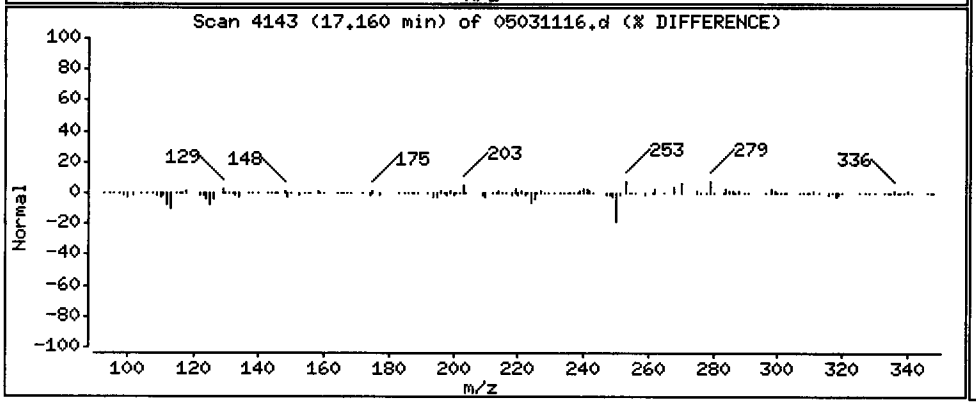
76 Benzo(a)pyrene

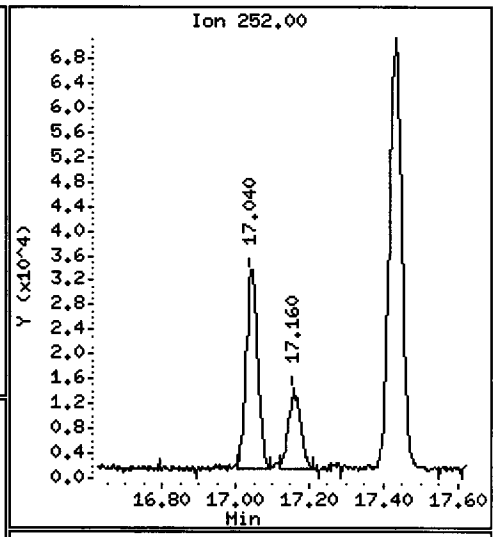
Concentration: 11.85 ug/kg

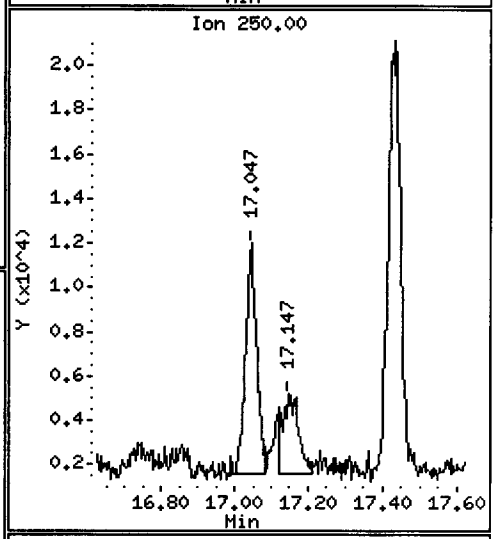


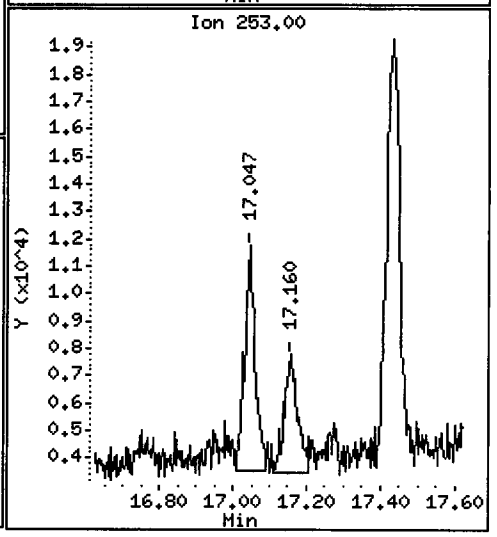












Data File: /chem3/nt4.i/20110503.b/05031116.d

Date : 03-MAY-2011 23:06

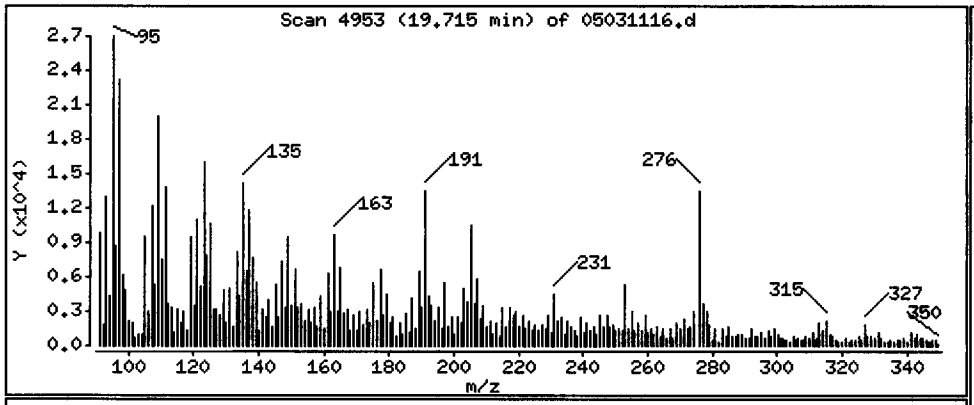
Client ID: DMA-TP5-1.5-2-04201 Instrument: nt4.i

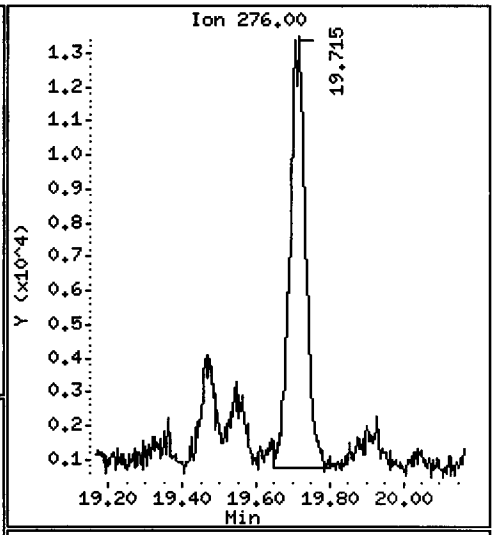
Sample Info: SS83J

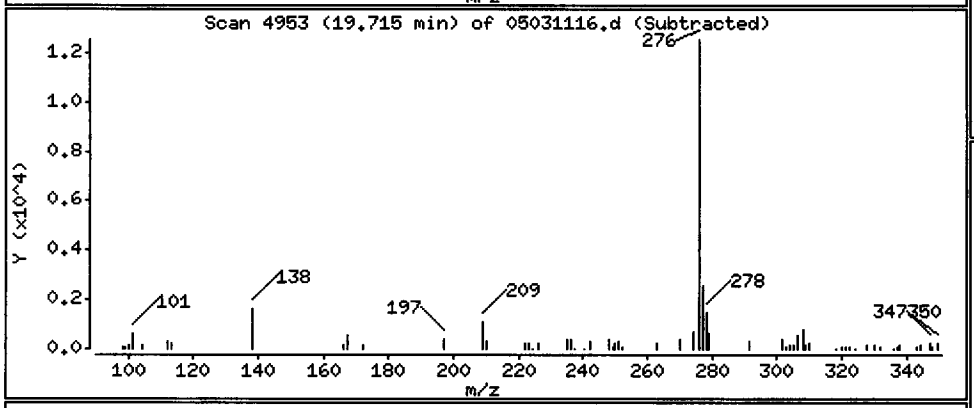
Volume Injected (uL): 1.0 Operator: JZ

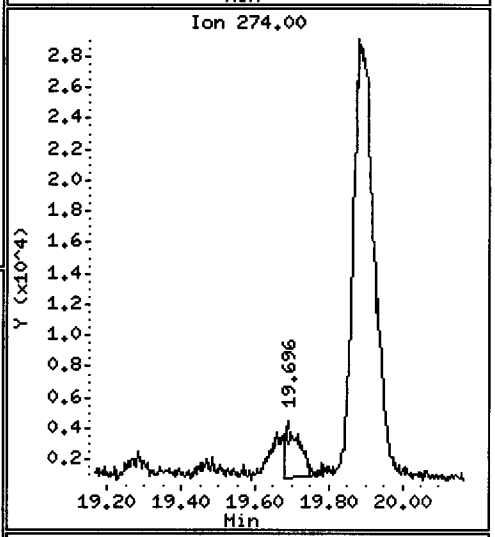
Column phase: ZB35 Column diameter: 0.32

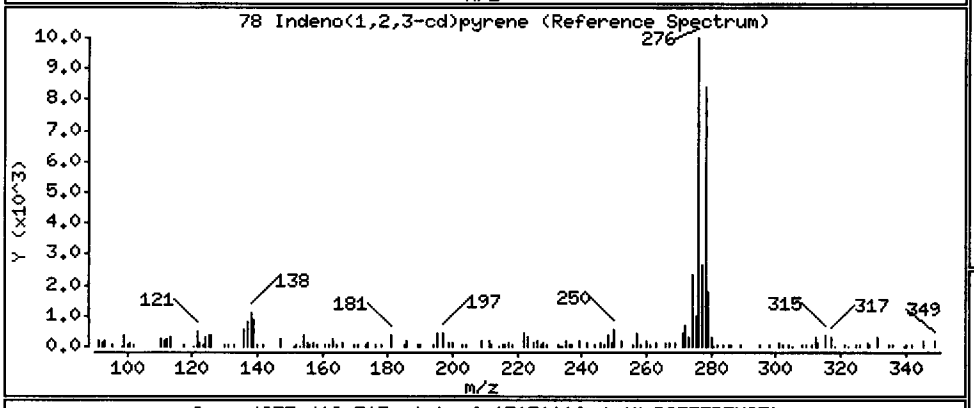
78 Indeno(1,2,3-cd)pyrene Concentration: 12.99 ug/kg

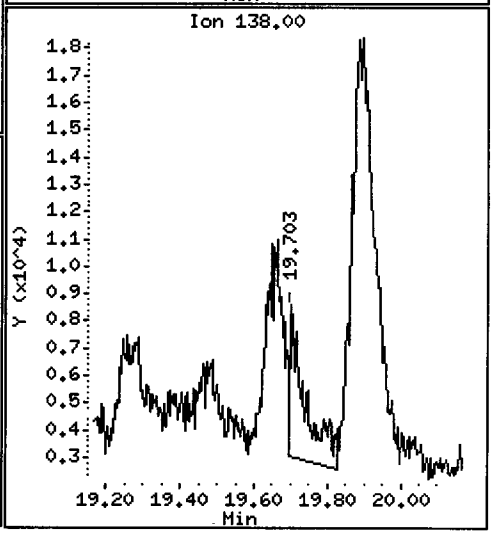


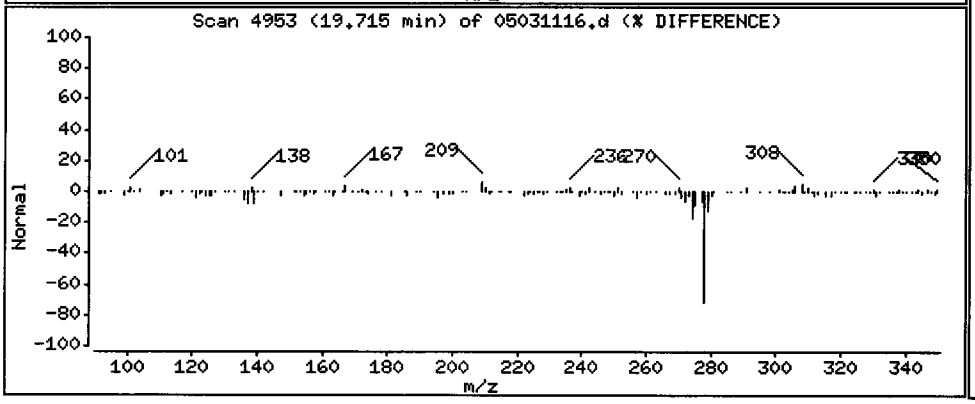












CO-ELUTION SUMMARY FOR FILE - 05031116.d

Lab ID: SS83J, Method: SIMPNA0421.m, Instrument: nt4.i, Date: 03-MAY-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20110503.b/05031117.d
Lab Smp Id: SS83K Client Smp ID: DMA-TP5-1.5-2-04201
Inj Date : 03-MAY-2011 23:34
Operator : JZ Inst ID: nt4.i
Smp Info : SS83K
Misc Info : 11-8721
Comment : 1ul Injection
Method : /chem3/nt4.i/20110503.b/SIMPNA0421.m
Meth Date : 04-May-2011 16:19 jianqing Quant Type: ISTD
Cal Date : 21-APR-2011 22:25 Cal File: 04211107.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

05/04/11

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	21.01000	Weight of sample extracted (g)
M	50.70000	% 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	4.797	4.800	(1.000)	257541	2.00000	
28 Naphthalene	128	4.822	4.826	(1.005)	38416	0.33090	15.97
$ 190 2-Methylnaphthalene-d10	152	5.538	5.539	(1.155)	126834	1.76198	85.05
32 2-Methylnaphthalene	141	5.579	5.583	(1.163)	12309	0.18892	9.120
105 1-methylnaphthalene	141	5.772	5.775	(1.203)	13358	0.19727	9.523
40 Acenaphthylene	152	6.907	6.908	(0.980)	8551	0.06373	3.077
* 42 Acenaphthene-d10	164	7.049	7.046	(1.000)	164638	2.00000	
44 Acenaphthene	153	Compound Not Detected.					
46 Dibenzofuran	168	7.238	7.239	(1.027)	16136	0.14298	6.902
49 Fluorene	166	7.696	7.696	(1.092)	6537	0.06751	3.259
* 59 Phenanthrene-d10	188	8.992	8.993	(1.000)	268030	2.00000	
60 Phenanthrene	178	9.027	9.024	(1.004)	71402	0.54435	26.28
61 Anthracene	178	9.058	9.059	(1.007)	10337	0.07603	3.670
64 Fluoranthene	202	10.711	10.705	(1.191)	121941	0.84163	40.63
65 Pyrene	202	11.181	11.175	(0.817)	144181	0.98809	47.70

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
68 Benzo(a)anthracene	228	13.572	13.557	(0.991)	38309	0.28303	13.66
* 69 Chrysene-d12	240	13.692	13.671	(1.000)	290193	2.00000	
71 Chrysene	228	13.749	13.743	(1.004)	128552	0.98011	47.31
74 Benzo(b)fluoranthene	252	16.216	16.172	(0.934)	90810	0.69665	33.63
75 Benzo(k)fluoranthene	252	16.273	16.229	(0.937)	32425	0.24172	11.67(H)
188 Benzo(j)fluoranthene	252	16.339	16.298	(0.941)	32089	0.24391	11.77(H)
76 Benzo(a)pyrene	252	17.172	17.125	(0.989)	28078	0.24073	11.62
* 77 Perylene-d12	264	17.370	17.330	(1.000)	240258	2.00000	
78 Indeno(1,2,3-cd)pyrene	276	19.714	19.667	(1.135)	35482	0.25858	12.48
$ 191 Dibenzo(a,h)anthracene-d14	292	19.645	19.595	(1.131)	103920	1.04556	50.47
79 Dibenzo(a,h)anthracene	278	19.727	19.680	(1.136)	9979	0.08968	4.329
80 Benzo(g,h,i)perylene	276	20.556	20.503	(1.183)	40340	0.34420	16.62
99 Perylene	252	17.446	17.399	(1.004)	182310	1.84315	88.97

QC Flag Legend

H - Operator selected an alternate compound hit.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd Snider
Sample Matrix: SOLID
Lab Smp Id: SS83K
Level: LOW
Data Type: MS DATA
SpikeList File: pnalcss.spk
Sublist File: pnax.sub
Method File: /chem3/nt4.i/20110503.b/SIMPNA0421.m
Misc Info: 11-8721

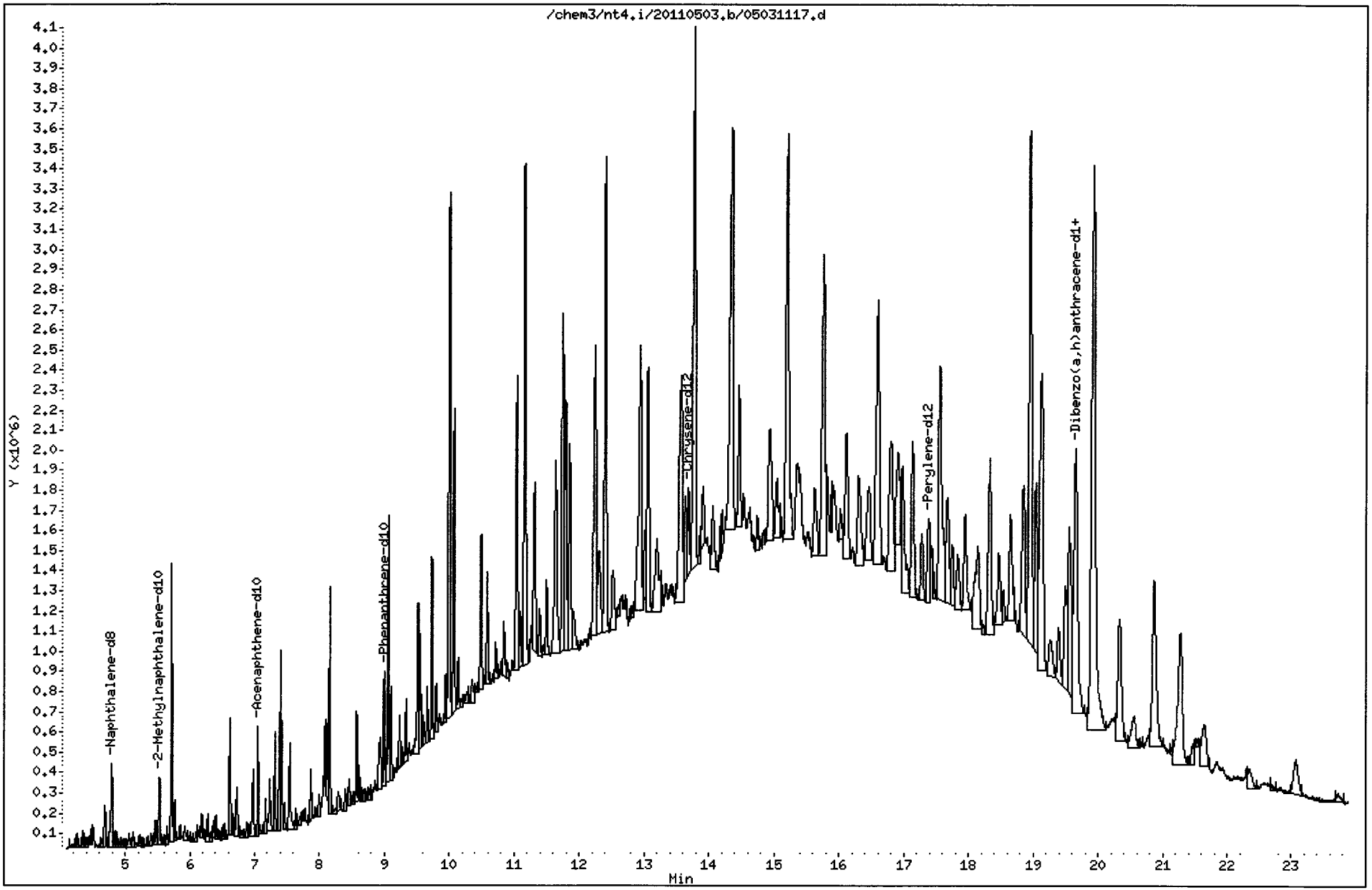
Client SDG: SS83
Fraction: SV
Client Smp ID: DMA-TP5-1.5-2-04201
Operator: JZ
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	144.8	85.05	58.73	34-100
$ 191 Dibenzo(a,h)anthra	144.8	50.47	34.85	10-117

Data File: /chem3/nt4.i/20110503.b/05031117.d
Date : 03-MAY-2011 23:34
Client ID: DMA-TP5-1.5-2-04201
Sample Info: SS83K
Volume Injected (uL): 1.0
Column phase: ZB35

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

824
SS83:008821



Data File: /chem3/nt4.i/20110503.b/05031117.d

Date : 03-MAY-2011 23:34

Client ID: DMA-TP5-1.5-2-04201

Instrument: nt4.i

Sample Info: SS83K

Volume Injected (uL): 1.0

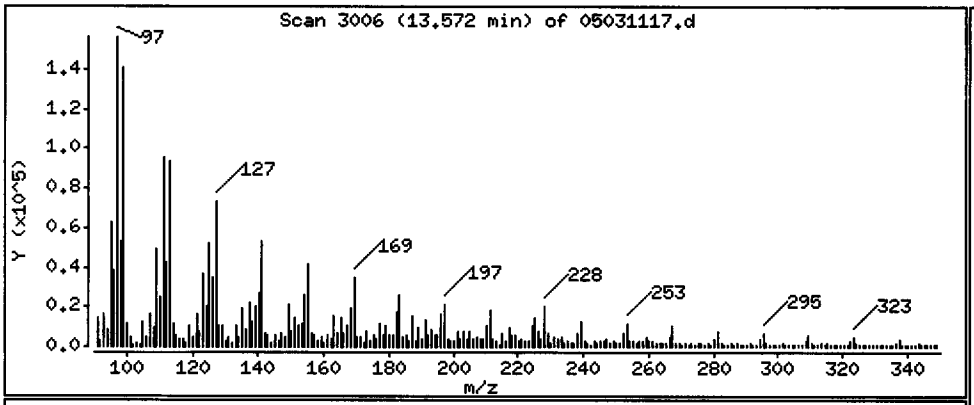
Operator: JZ

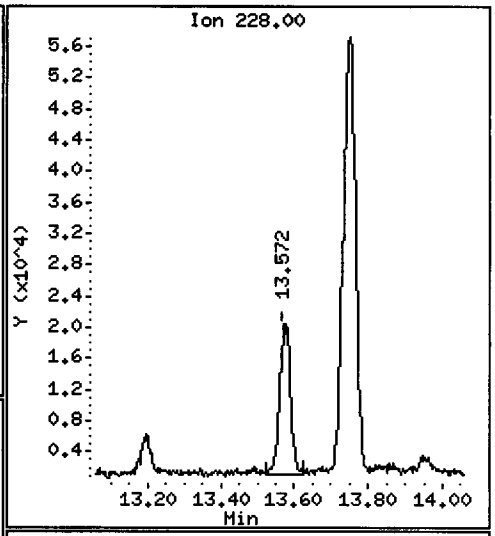
Column phase: ZB35

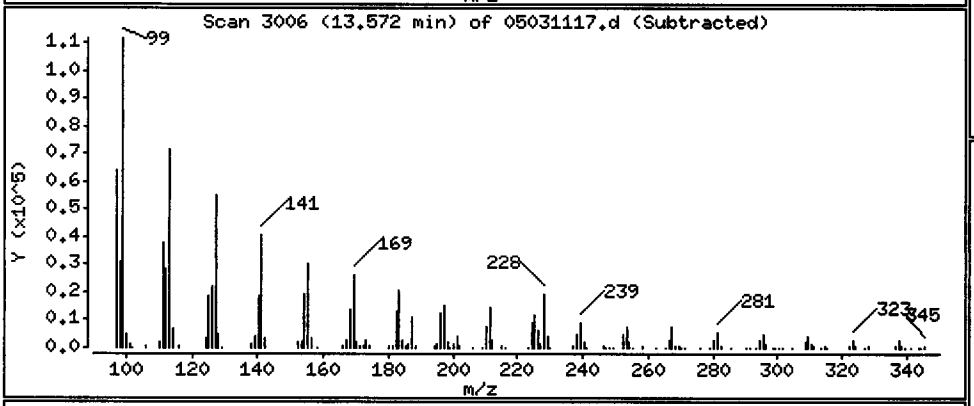
Column diameter: 0.32

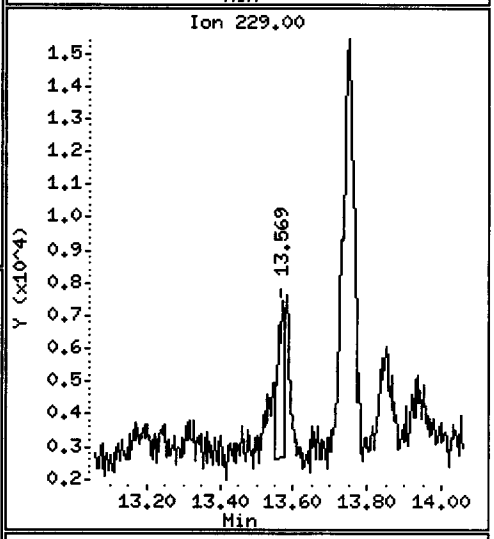
68 Benzo(a)anthracene

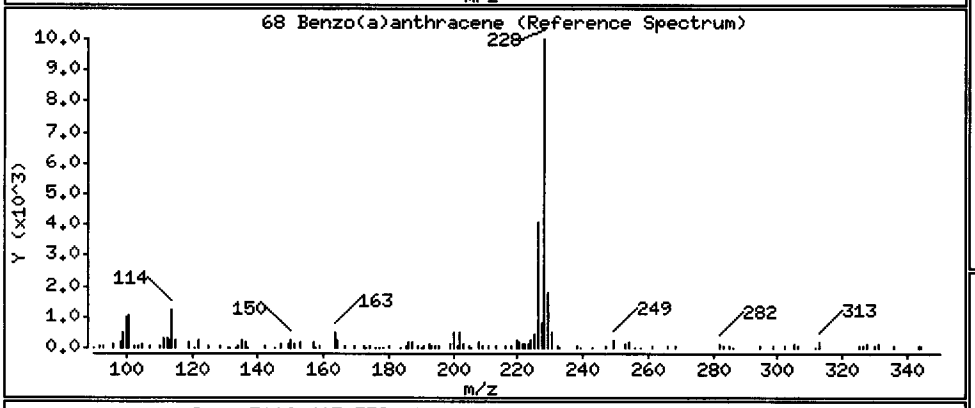
Concentration: 13.66 ug/kg

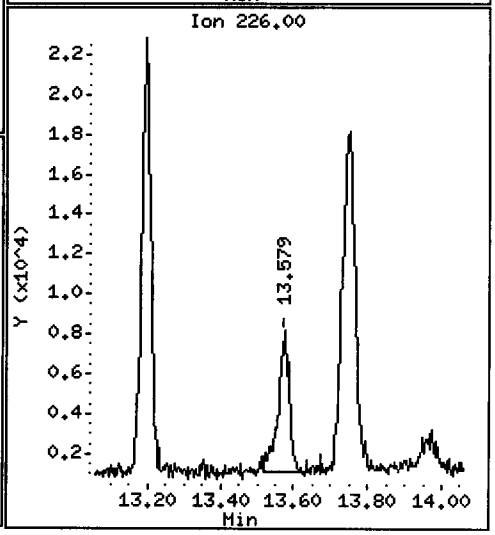


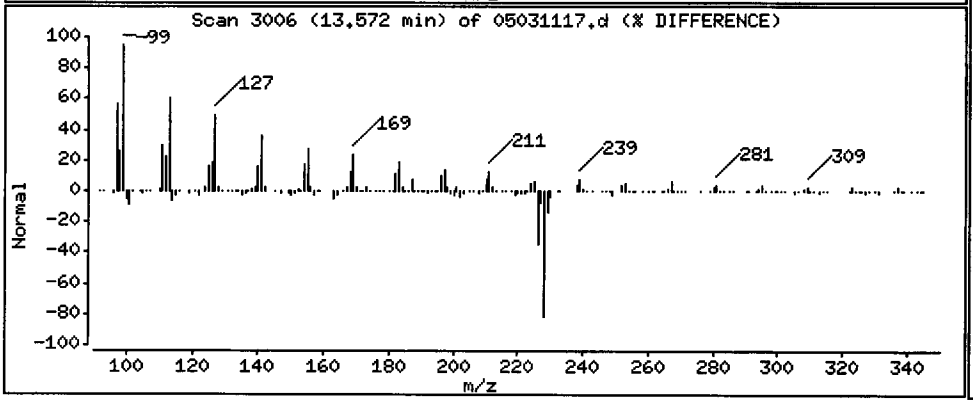












Data File: /chem3/nt4.i/20110503.b/05031117.d

Date : 03-MAY-2011 23:34

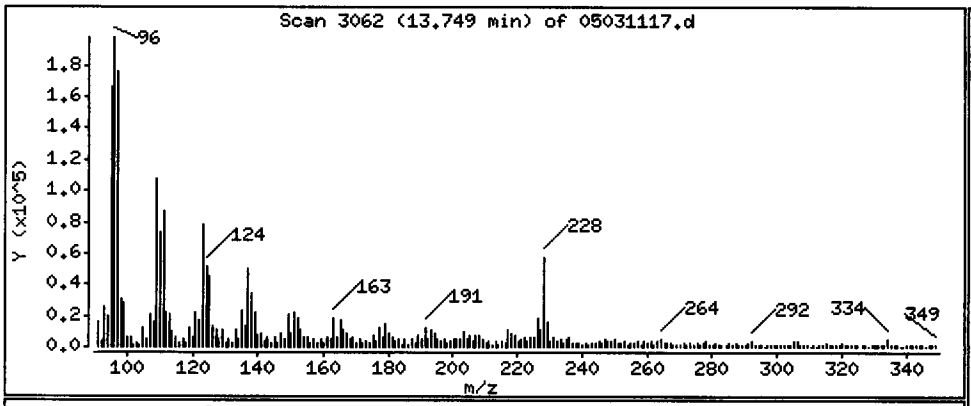
Client ID: DMA-TP5-1.5-2-04201 Instrument: nt4.i

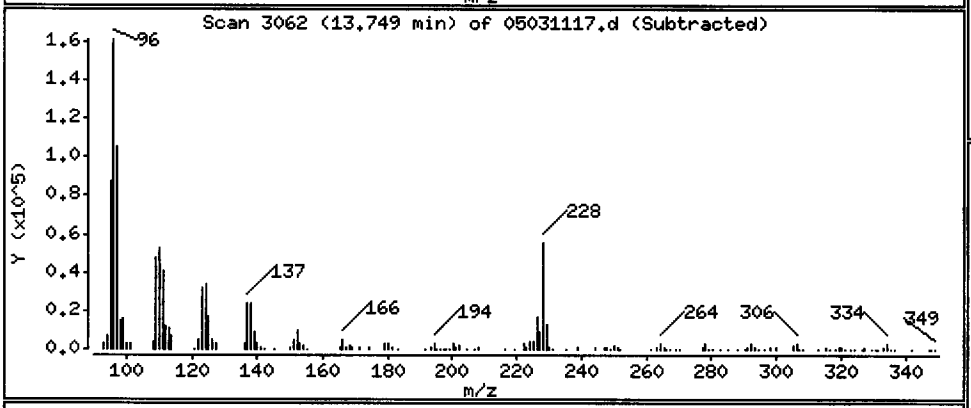
Sample Info: SS83K

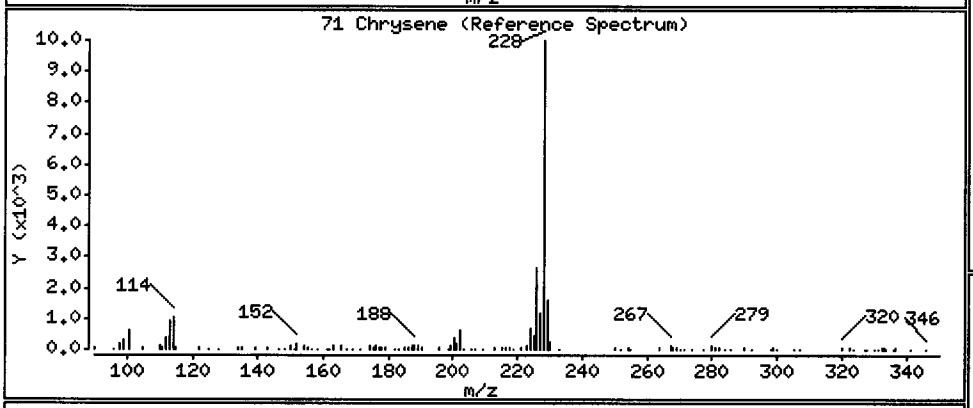
Volume Injected (uL): 1.0 Operator: JZ

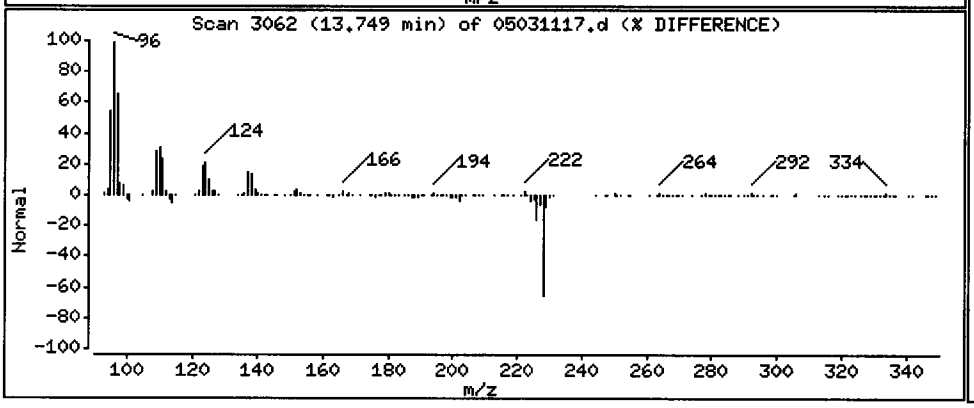
Column phase: ZB35 Column diameter: 0.32

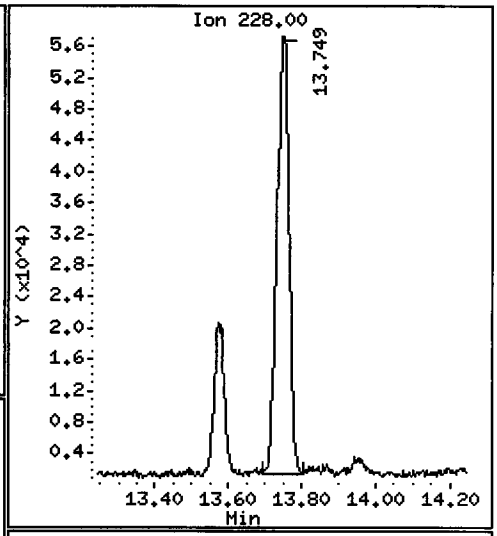
71 Chrysene Concentration: 47.31 ug/kg

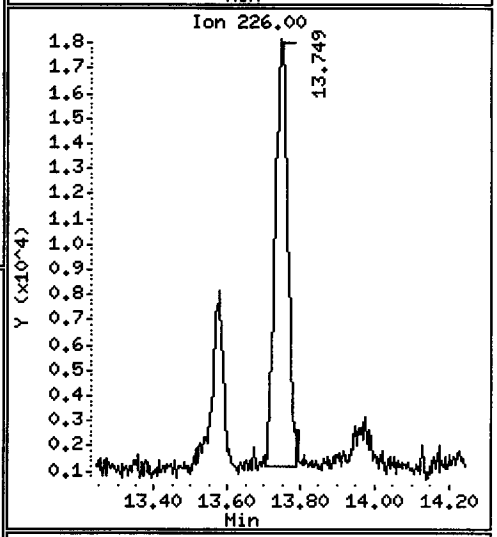


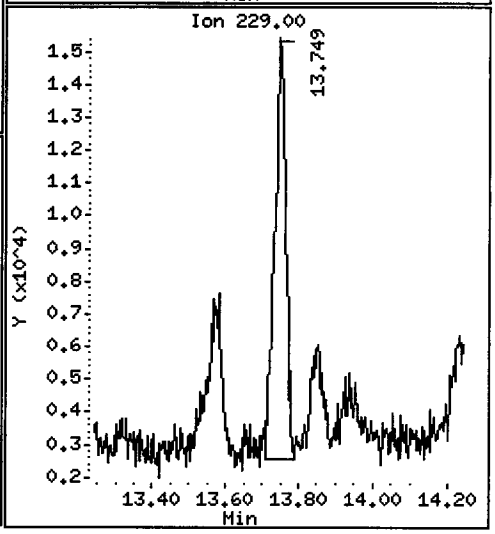












Data File: /chem3/nt4.i/20110503.b/05031117.d

Date : 03-MAY-2011 23:34

Client ID: DMA-TP5-1.5-2-04201

Instrument: nt4.i

Sample Info: SS83K

Volume Injected (uL): 1.0

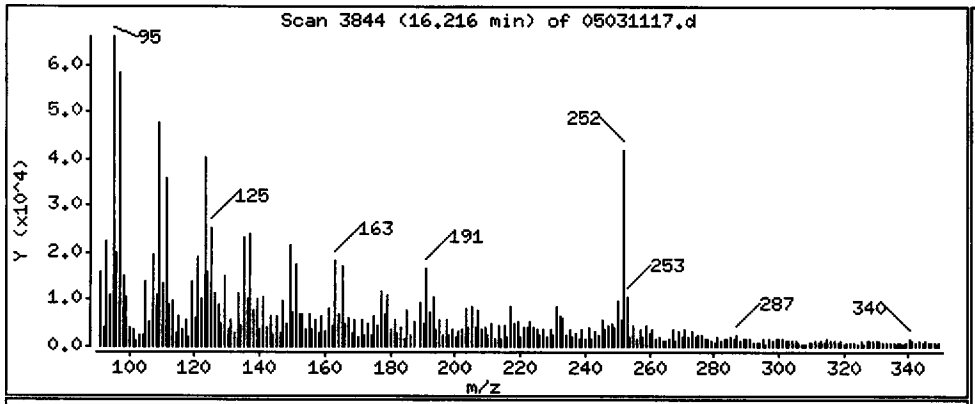
Operator: JZ

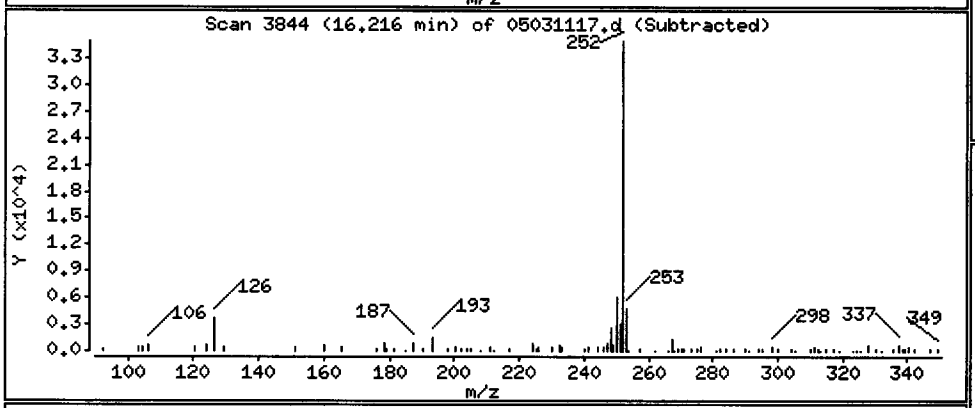
Column phase: ZB35

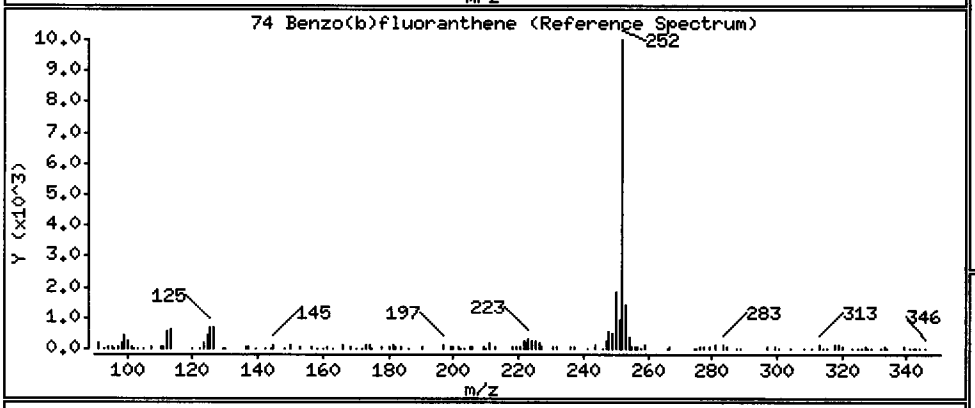
Column diameter: 0.32

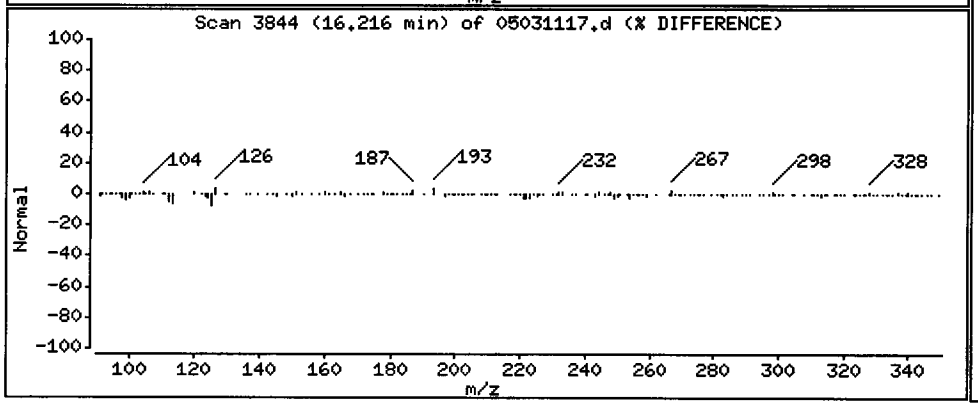
74 Benzo(b)fluoranthene

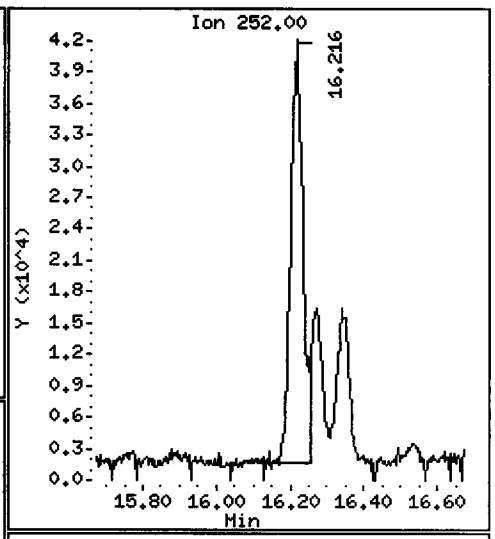
Concentration: 33.63 ug/kg

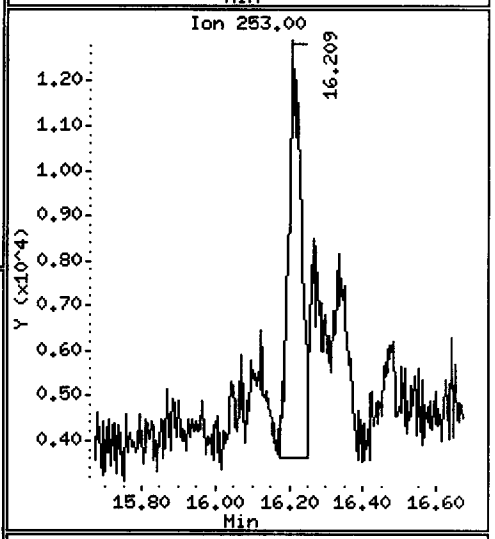


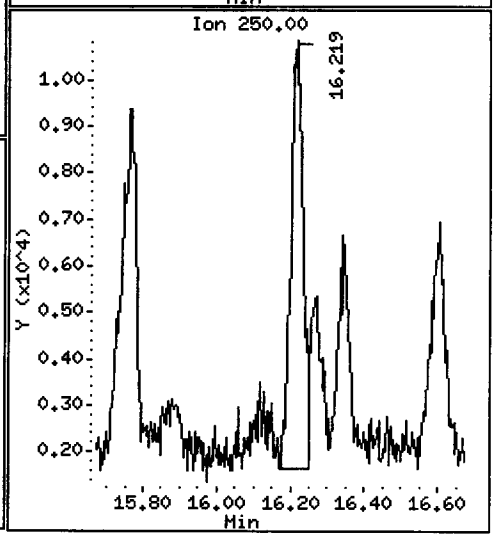












Data File: /chem3/nt4.i/20110503.b/05031117.d

Date : 03-MAY-2011 23:34

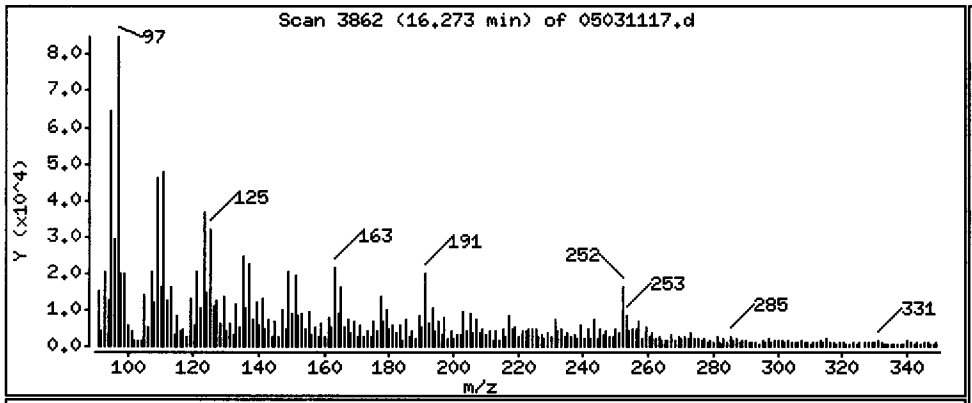
Client ID: DMA-TP5-1.5-2-04201 Instrument: nt4.i

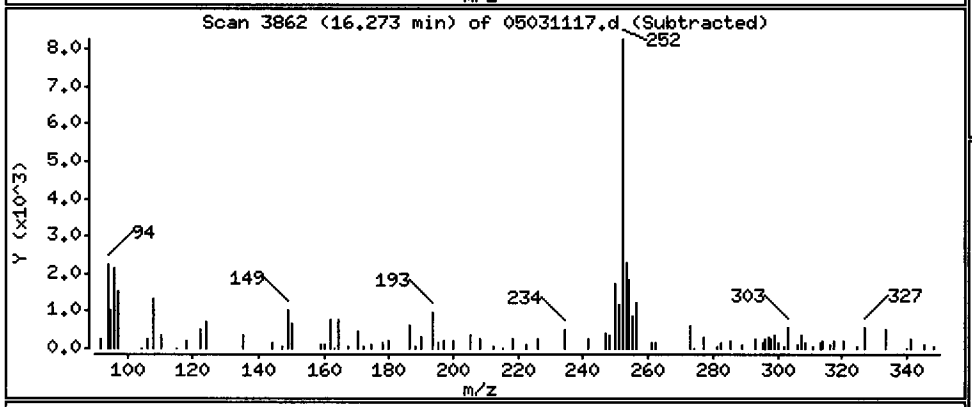
Sample Info: SS83K

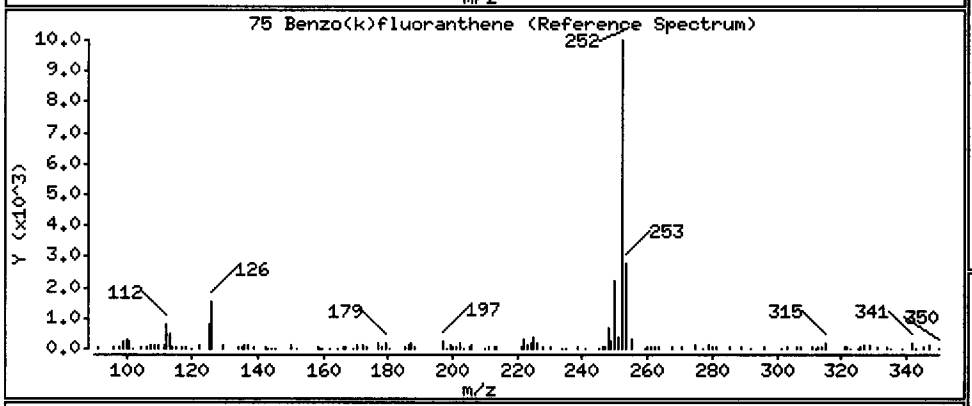
Volume Injected (uL): 1.0 Operator: JZ

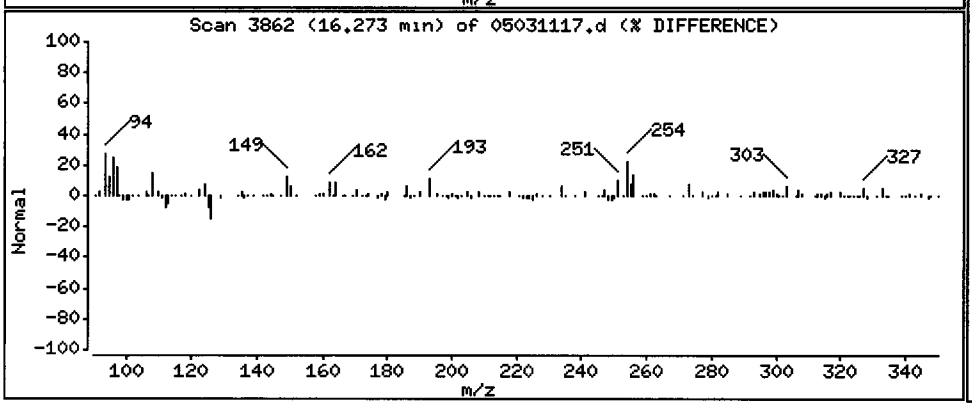
Column phase: ZB35 Column diameter: 0.32

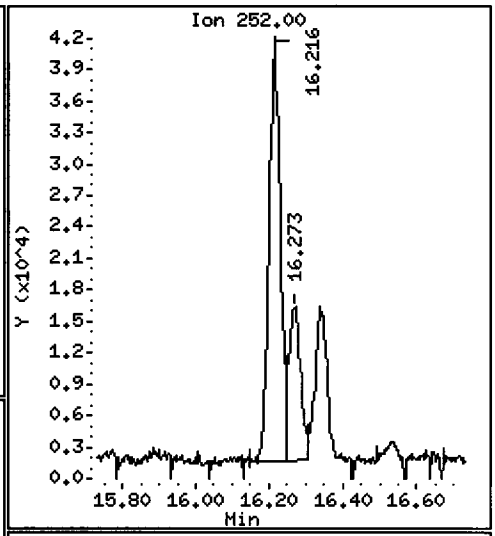
75 Benzo(k)fluoranthene Concentration: 11.67 ug/kg

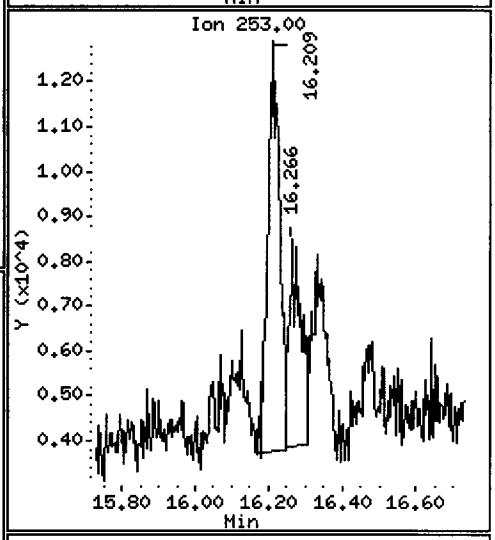


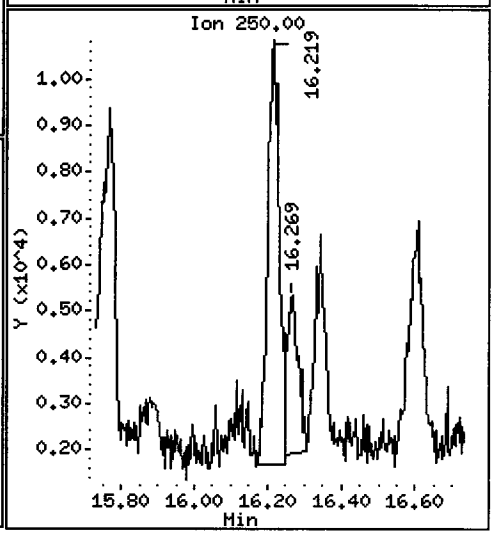












Data File: /chem3/nt4.i/20110503.b/05031117.d

Date : 03-MAY-2011 23:34

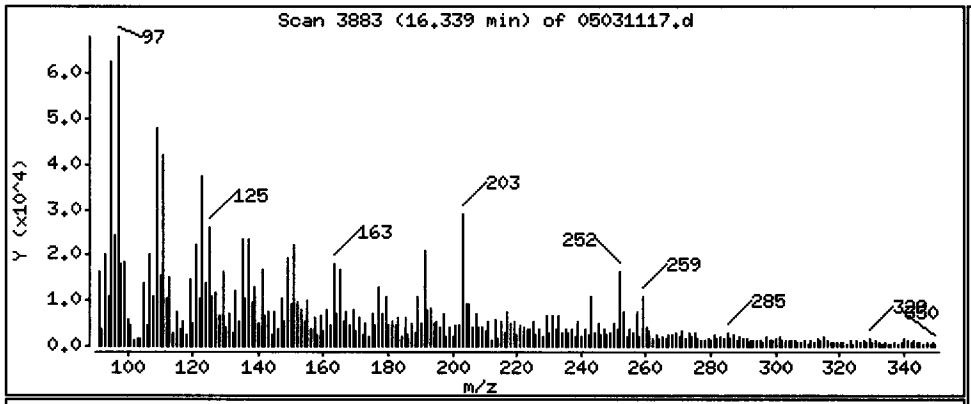
Client ID: DMA-TP5-1.5-2-04201 Instrument: nt4.i

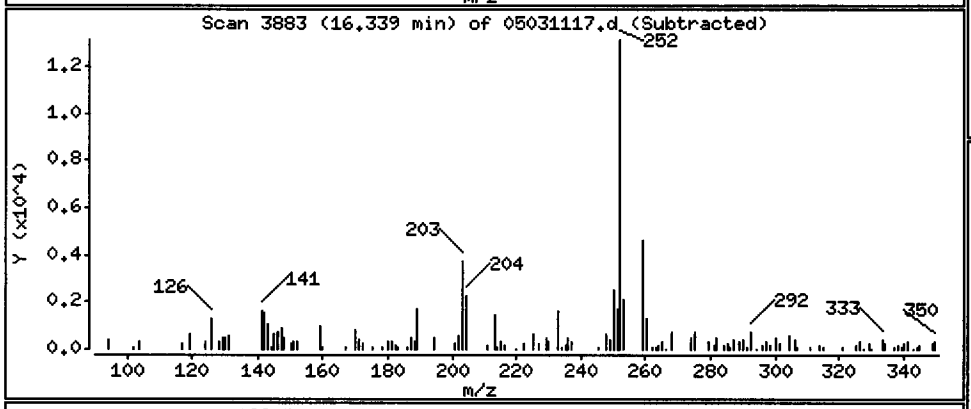
Sample Info: SS83K

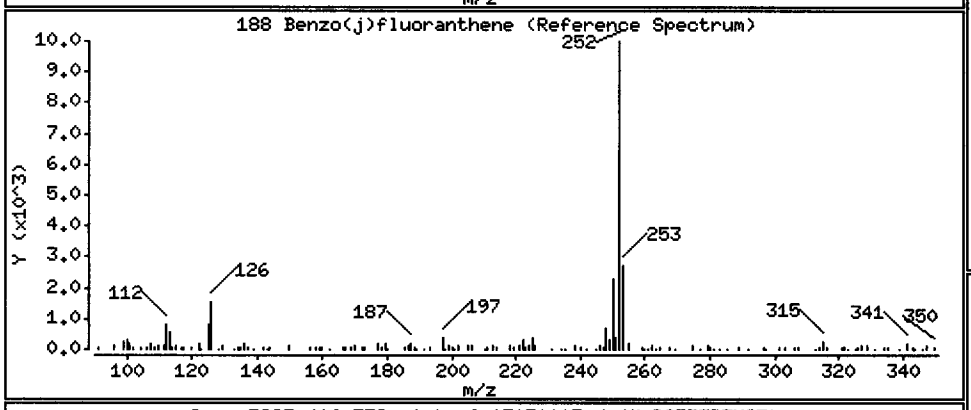
Volume Injected (uL): 1.0 Operator: JZ

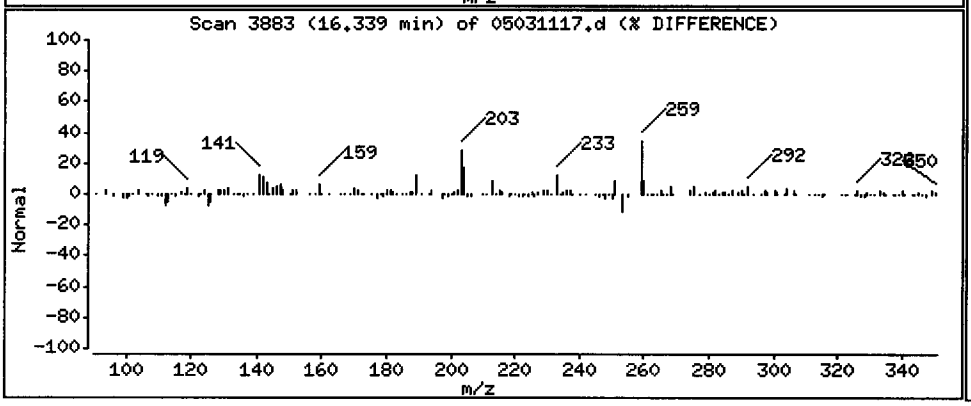
Column phase: ZB35 Column diameter: 0.32

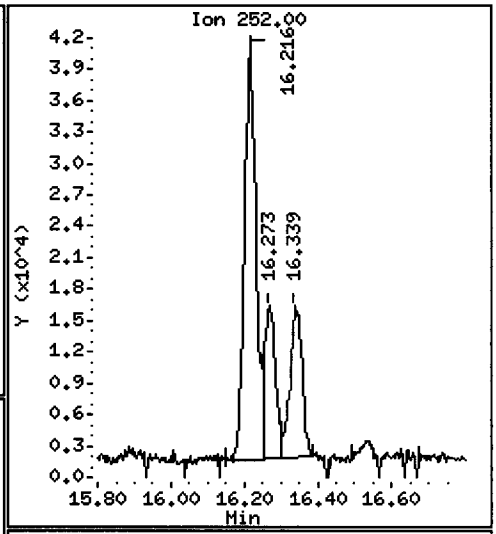
188 Benzo(j)fluoranthene Concentration: 11.77 ug/kg

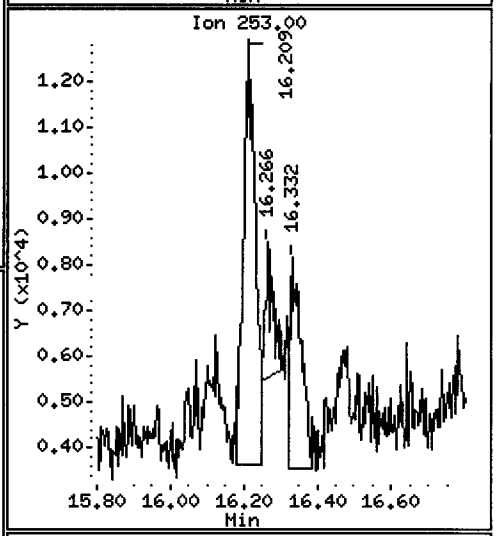


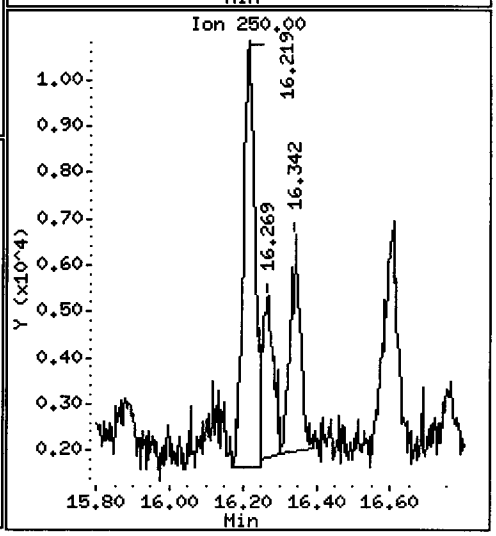












Data File: /chem3/nt4.i/20110503.b/05031117.d

Date : 03-MAY-2011 23:34

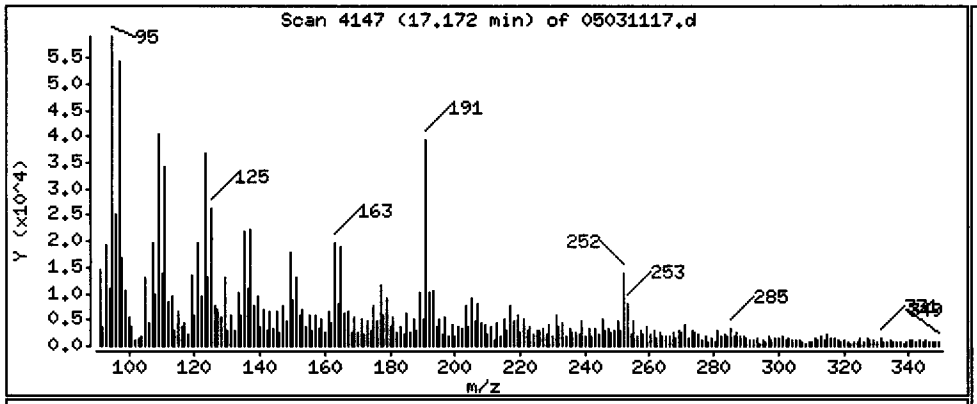
Client ID: DMA-TP5-1.5-2-04201 Instrument: nt4.i

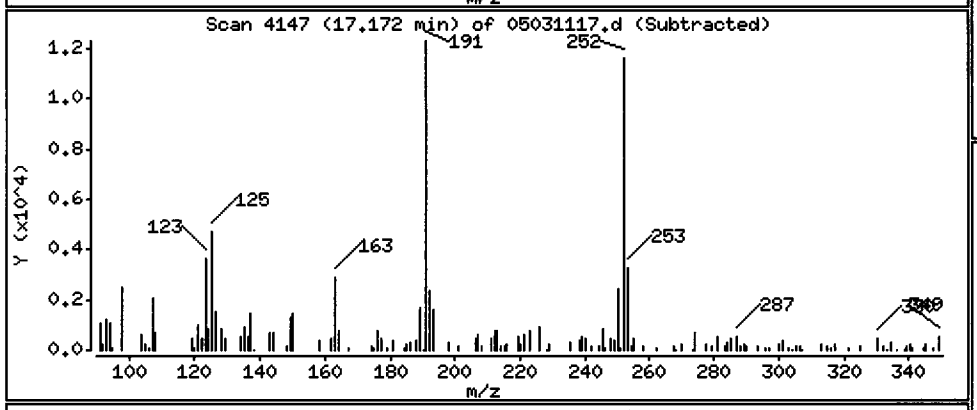
Sample Info: SS83K

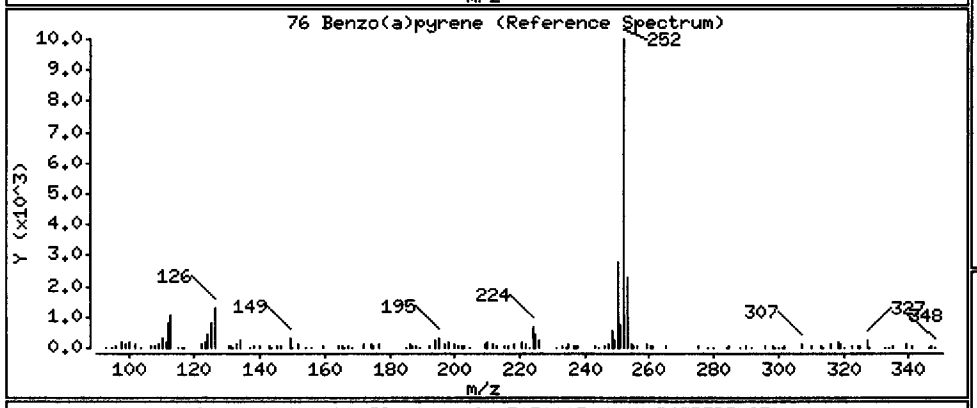
Volume Injected (uL): 1.0 Operator: JZ

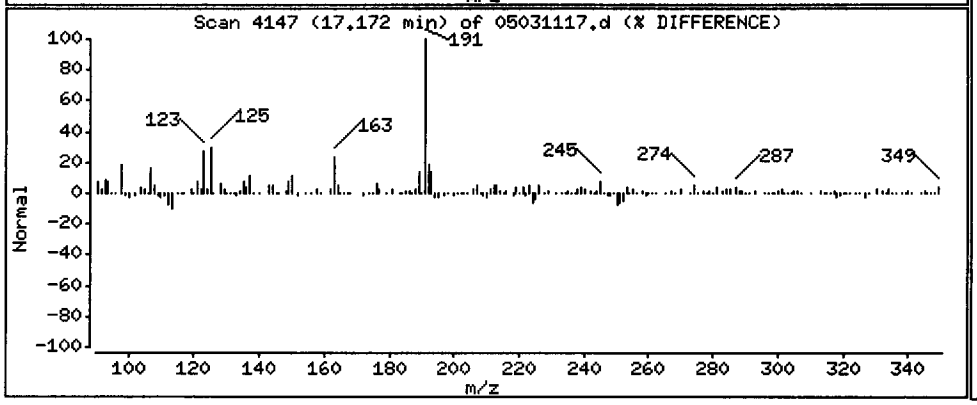
Column phase: ZB35 Column diameter: 0.32

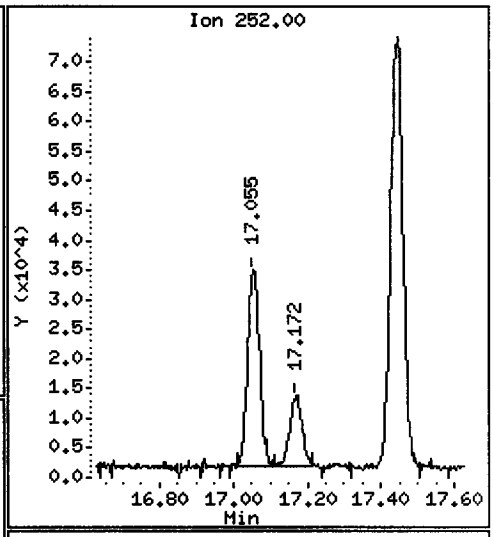
76 Benzo(a)pyrene Concentration: 11.62 ug/kg

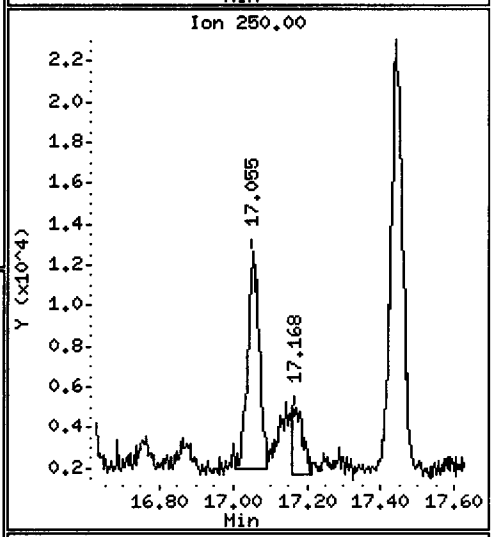


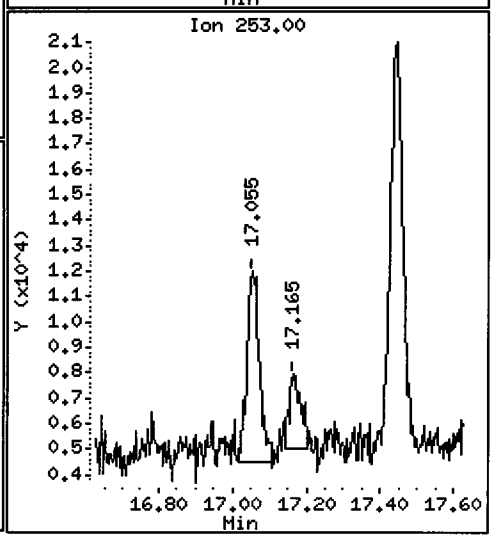












Data File: /chem3/nt4.i/20110503.b/05031117.d

Date : 03-MAY-2011 23:34

Client ID: DMA-TP5-1.5-2-04201

Instrument: nt4.i

Sample Info: SS83K

Volume Injected (uL): 1.0

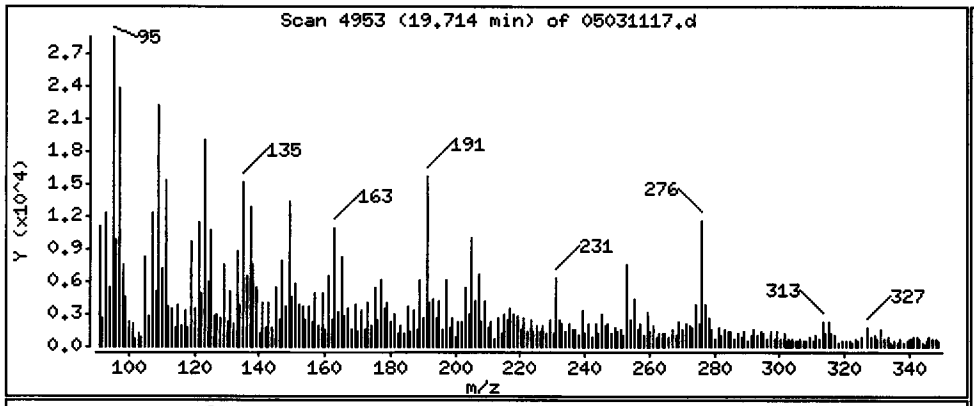
Operator: JZ

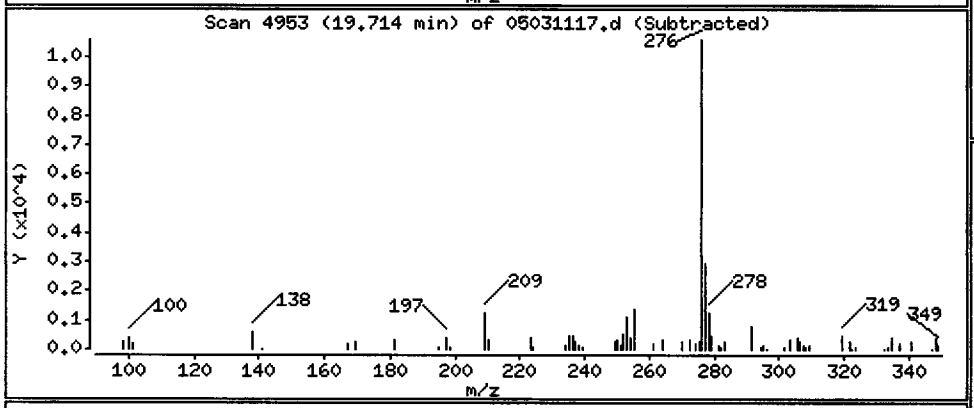
Column phase: ZB35

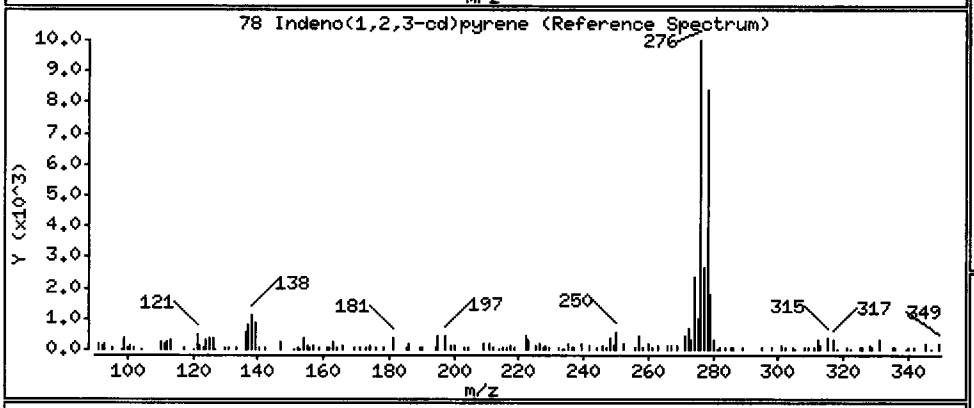
Column diameter: 0.32

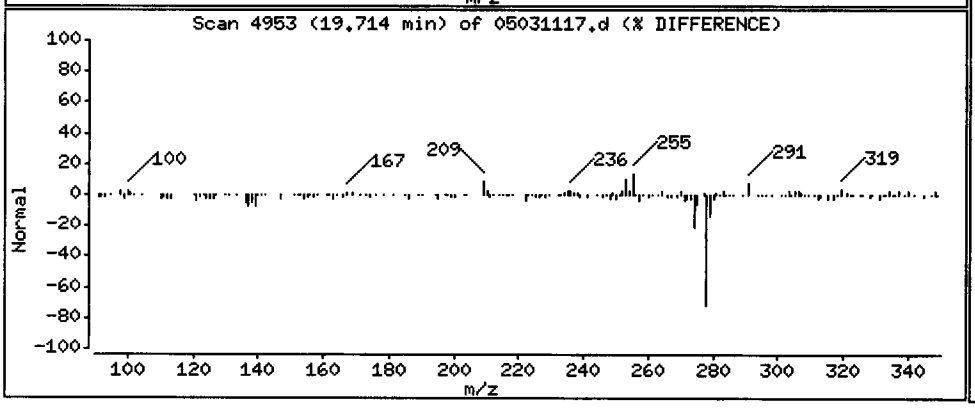
78 Indeno(1,2,3-cd)pyrene

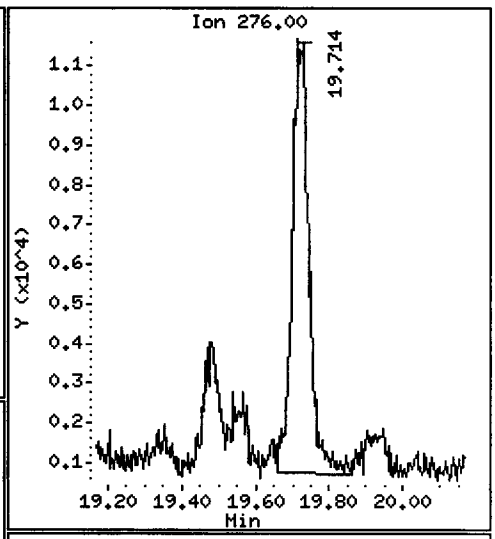
Concentration: 12.48 ug/kg

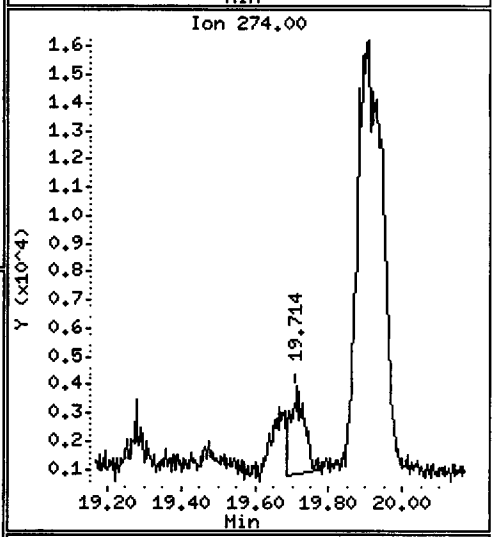


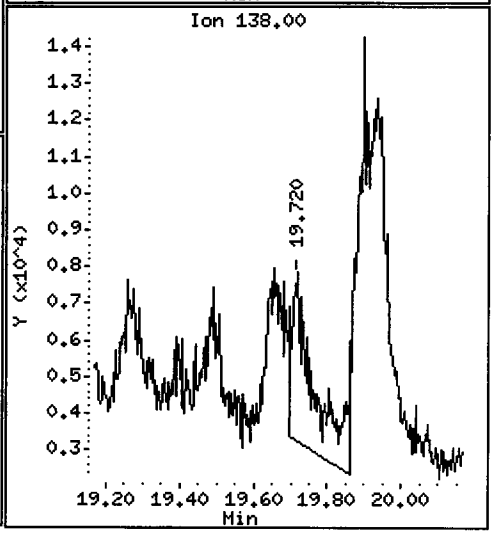












Data File: /chem3/nt4.i/20110503.b/05031117.d

Date : 03-MAY-2011 23:34

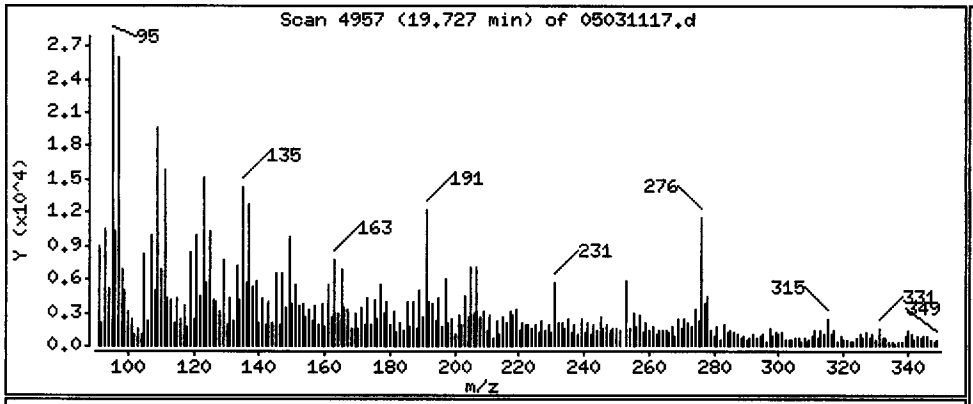
Client ID: DMA-TP5-1.5-2-04201 Instrument: nt4.i

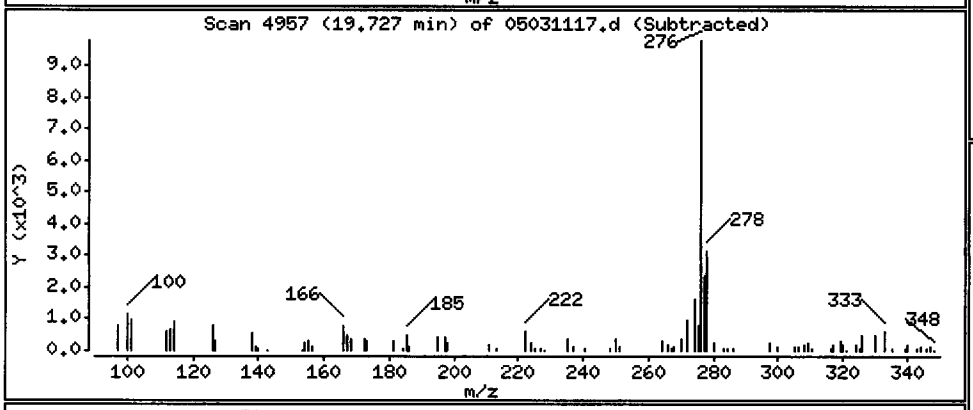
Sample Info: SS83K

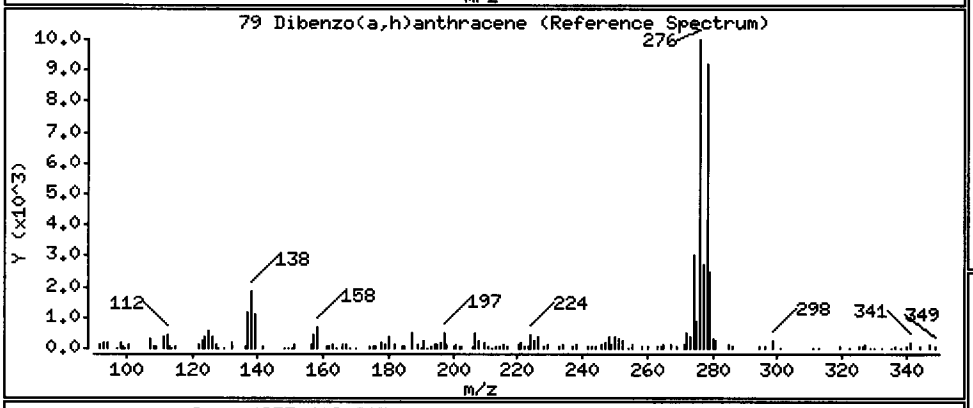
Volume Injected (uL): 1.0 Operator: JZ

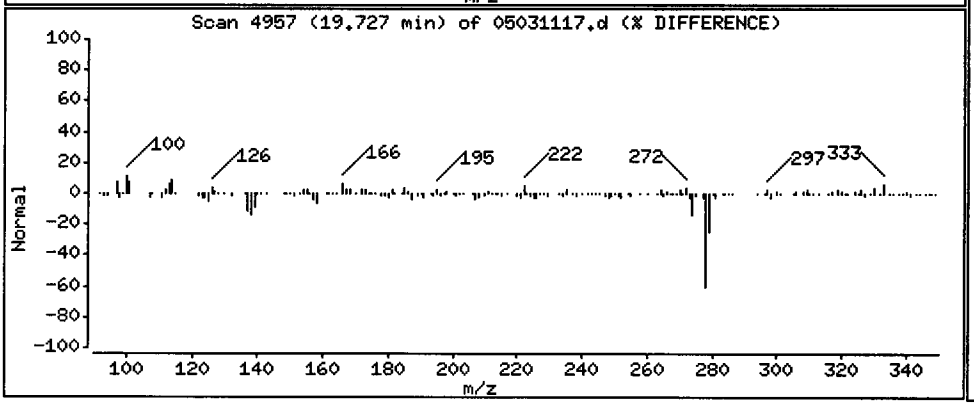
Column phase: ZB35 Column diameter: 0.32

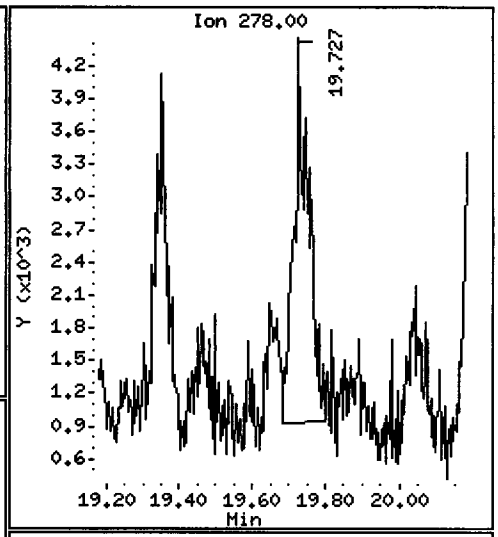
79 Dibenzo(a,h)anthracene Concentration: 4.329 ug/kg

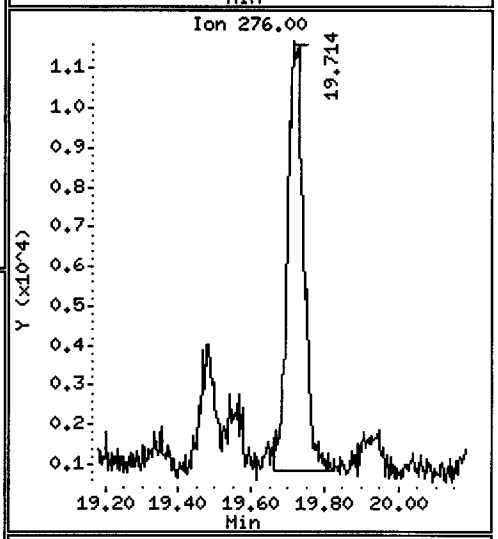


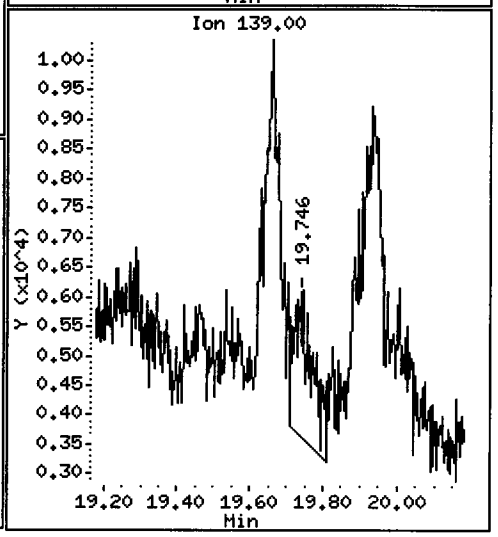












CO-ELUTION SUMMARY FOR FILE - 05031117.d

Lab ID: SS83K, Method: SIMPNA0421.m, Instrument: nt4.i, Date: 03-MAY-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20110503.b/05031118.d
Lab Smp Id: SS83L Client Smp ID: DMA-TP5-2-3-042011
Inj Date : 04-MAY-2011 00:02
Operator : JZ Inst ID: nt4.i
Smp Info : SS83L
Misc Info : 11-8722
Comment : 1ul Injection
Method : /chem3/nt4.i/20110503.b/SIMPNA0421.m
Meth Date : 04-May-2011 16:19 jianqing Quant Type: ISTD
Cal Date : 21-APR-2011 22:25 Cal File: 04211107.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

JZ 05/04/11

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	13.02000	Weight of sample extracted (g)
M	18.00000	% 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	4.794	4.800	(1.000)	265370	2.00000	
28 Naphthalene	128	Compound Not Detected.					
$ 190 2-Methylnaphthalene-d10	152	5.536	5.539	(1.155)	149816	2.01985	94.59
32 2-Methylnaphthalene	141	Compound Not Detected.					
105 1-methylnaphthalene	141	Compound Not Detected.					
40 Acenaphthylene	152	Compound Not Detected.					
* 42 Acenaphthene-d10	164	7.050	7.046	(1.000)	154938	2.00000	
44 Acenaphthene	153	Compound Not Detected.					
46 Dibenzofuran	168	Compound Not Detected.					
49 Fluorene	166	Compound Not Detected.					
* 59 Phenanthrene-d10	188	8.993	8.993	(1.000)	266029	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	13.674	13.671	(1.000)	272076	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	17.336	17.330	(1.000)	236441	2.00000	
78	Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
$ 191	Dibenzo(a,h)anthracene-d14	292	19.598	19.595	(1.130)	228710	2.33824	109.5
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: 05031118.d
Lab Smp Id: SS83L
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20110503.b/SIMPNA0421.m
Misc Info: 11-8722

Calibration Date: 03-MAY-2011
Calibration Time: 16:33
Client Smp ID: DMA-TP5-2-3-0420
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	265370	-3.86
42 Acenaphthene-d10	158527	79264	317054	154938	-2.26
59 Phenanthrene-d10	277528	138764	555056	266029	-4.14
69 Chrysene-d12	304115	152058	608230	272076	-10.54
77 Perylene-d12	257833	128916	515666	236441	-8.30

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	4.80	4.30	5.30	4.79	-0.12
42 Acenaphthene-d10	7.05	6.55	7.55	7.05	0.05
59 Phenanthrene-d10	8.99	8.49	9.49	8.99	0.00
69 Chrysene-d12	13.67	13.17	14.17	13.67	0.03
77 Perylene-d12	17.33	16.83	17.83	17.34	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: SS83
Sample Matrix: SOLID
Fraction: SV
Lab Smp Id: SS83L
Client Smp ID: DMA-TP5-2-3-042011
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/20110503.b/SIMPNA0421.m
Misc Info: 11-8722

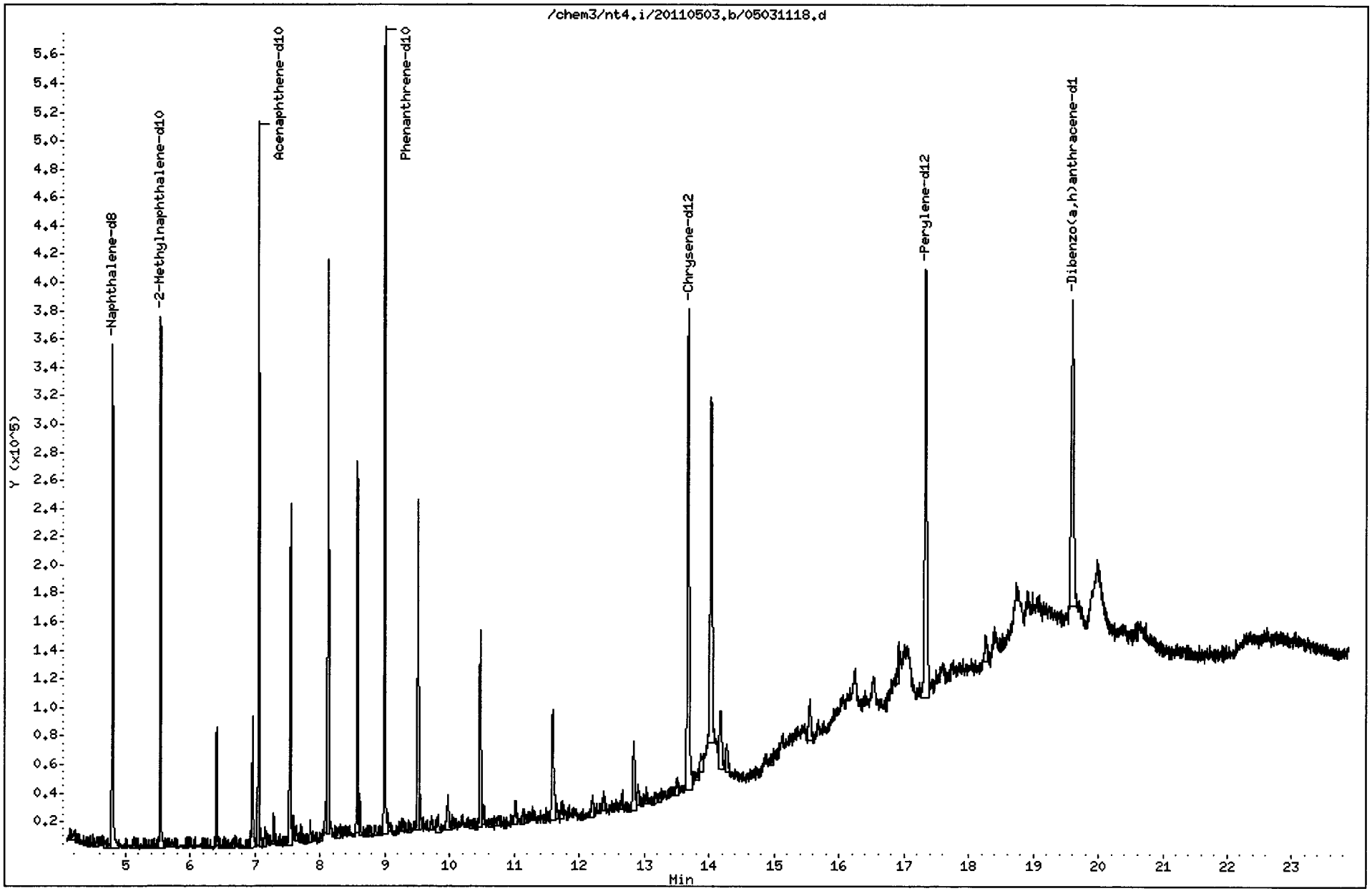
SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	140.5	94.59	67.33	34-100
$ 191 Dibenzo(a,h)anthra	140.5	109.5	77.94	10-117

Data File: /chem3/nt4.i/20110503.b/05031118.d
Date : 04-MAY-2011 00:02
Client ID: DMA-TP5-2-3-042011
Sample Info: SS83L
Volume Injected (uL): 1.0
Column phase: ZB35

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

838

SS83:05035



CO-ELUTION SUMMARY FOR FILE - 05031118.d

Lab ID: SS83L, Method: SIMPNA0421.m, Instrument: nt4.i, Date: 04-MAY-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20110503.b/05031119.d
Lab Smp Id: SS83M Client Smp ID: DMA-TP3-2-3-042011
Inj Date : 04-MAY-2011 00:29
Operator : JZ Inst ID: nt4.i
Smp Info : SS83M
Misc Info : 11-8723
Comment : 1ul Injection
Method : /chem3/nt4.i/20110503.b/SIMPNA0421.m
Meth Date : 04-May-2011 16:19 jianqing Quant Type: ISTD
Cal Date : 21-APR-2011 22:25 Cal File: 04211107.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

05/04/11

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	12.22000	Weight of sample extracted (g)
M	16.70000	% 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	4.797	4.800	(1.000)	269185	2.00000	
28 Naphthalene	128	Compound Not Detected.					
$ 190 2-Methylnaphthalene-d10	152	5.538	5.539	(1.155)	144090	1.91511	94.07
32 2-Methylnaphthalene	141	Compound Not Detected.					
105 1-methylnaphthalene	141	Compound Not Detected.					
40 Acenaphthylene	152	Compound Not Detected.					
* 42 Acenaphthene-d10	164	7.046	7.046	(1.000)	155785	2.00000	
44 Acenaphthene	153	Compound Not Detected.					
46 Dibenzofuran	168	Compound Not Detected.					
49 Fluorene	166	Compound Not Detected.					
* 59 Phenanthrene-d10	188	8.992	8.993	(1.000)	268836	2.00000	
60 Phenanthrene	178	9.024	9.024	(1.004)	7097	0.05394	2.650
61 Anthracene	178	Compound Not Detected.					
64 Fluoranthene	202	10.705	10.705	(1.190)	14823	0.10200	5.010
65 Pyrene	202	11.175	11.175	(0.817)	17606	0.12834	6.304

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
68	Benzo(a)anthracene	228	13.566	13.557	(0.992)	7189	0.05650	2.775
* 69	Chrysene-d12	240	13.680	13.671	(1.000)	272819	2.00000	
71	Chrysene	228	13.733	13.743	(1.004)	25277	0.20499	10.07
74	Benzo(b)fluoranthene	252	16.184	16.172	(0.933)	17463	0.12886	6.329
75	Benzo(k)fluoranthene	252	Compound Not Detected.					
188	Benzo(j)fluoranthene	252	Compound Not Detected.					
76	Benzo(a)pyrene	252	17.143	17.125	(0.988)	10005	0.08251	4.053
* 77	Perylene-d12	264	17.348	17.330	(1.000)	249784	2.00000	
78	Indeno(1,2,3-cd)pyrene	276	19.682	19.667	(1.135)	7220	0.05061	2.486
$ 191	Dibenzo(a,h)anthracene-d14	292	19.613	19.595	(1.131)	218031	2.10999	103.6
79	Dibenzo(a,h)anthracene	278	Compound Not Detected.					
80	Benzo(g,h,i)perylene	276	20.518	20.503	(1.183)	13412	0.11007	5.407
99	Perylene	252	17.414	17.399	(1.004)	22074	0.21466	10.54

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 05031119.d
Lab Smp Id: SS83M
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20110503.b/SIMPNA0421.m
Misc Info: 11-8723

Calibration Date: 03-MAY-2011
Calibration Time: 16:33
Client Smp ID: DMA-TP3-2-3-0420
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	269185	-2.48
42 Acenaphthene-d10	158527	79264	317054	155785	-1.73
59 Phenanthrene-d10	277528	138764	555056	268836	-3.13
69 Chrysene-d12	304115	152058	608230	272819	-10.29
77 Perylene-d12	257833	128916	515666	249784	-3.12

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	4.80	4.30	5.30	4.80	-0.08
42 Acenaphthene-d10	7.05	6.55	7.55	7.05	-0.01
59 Phenanthrene-d10	8.99	8.49	9.49	8.99	-0.01
69 Chrysene-d12	13.67	13.17	14.17	13.68	0.07
77 Perylene-d12	17.33	16.83	17.83	17.35	0.11

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

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd Snider
Sample Matrix: SOLID
Lab Smp Id: SS83M
Level: LOW
Data Type: MS DATA
SpikeList File: pnalcss.spk
Sublist File: pnax.sub
Method File: /chem3/nt4.i/20110503.b/SIMPNA0421.m
Misc Info: 11-8723

Client SDG: SS83
Fraction: SV
Client Smp ID: DMA-TP3-2-3-042011
Operator: JZ
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	147.4	94.07	63.84	34-100
$ 191 Dibenzo(a,h)anthra	147.4	103.6	70.33	10-117

Data File: /chem3/nt4.i/20110503.b/05031119.d

Date : 04-MAY-2011 00:29

Client ID: DMA-TP3-2-3-042011

Sample Info: SS83M

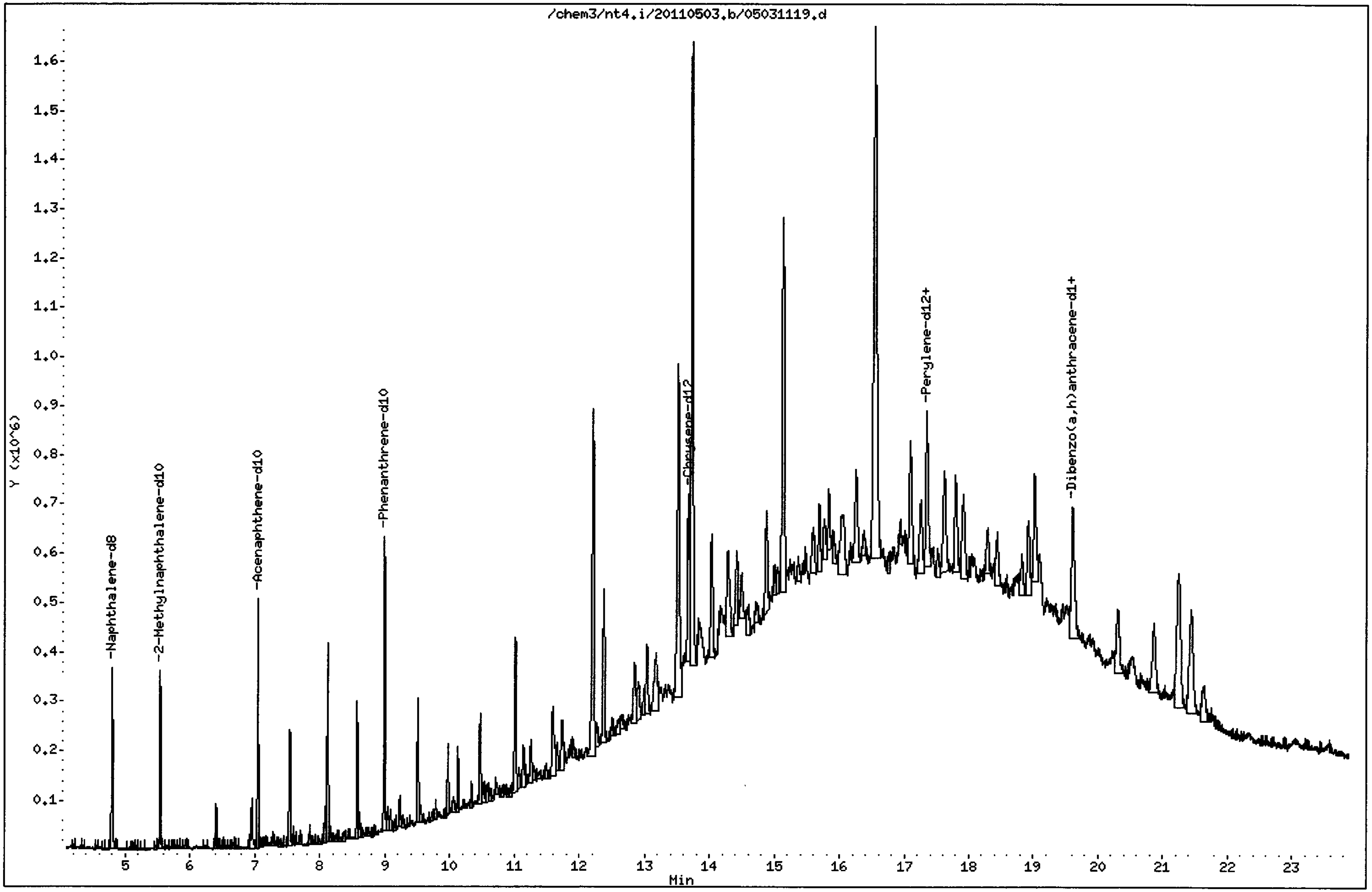
Volume Injected (uL): 1.0

Column phase: ZB35

Instrument: nt4.i

Operator: JZ

Column diameter: 0.32



Data File: /chem3/nt4.i/20110503.b/05031119.d

Date : 04-MAY-2011 00:29

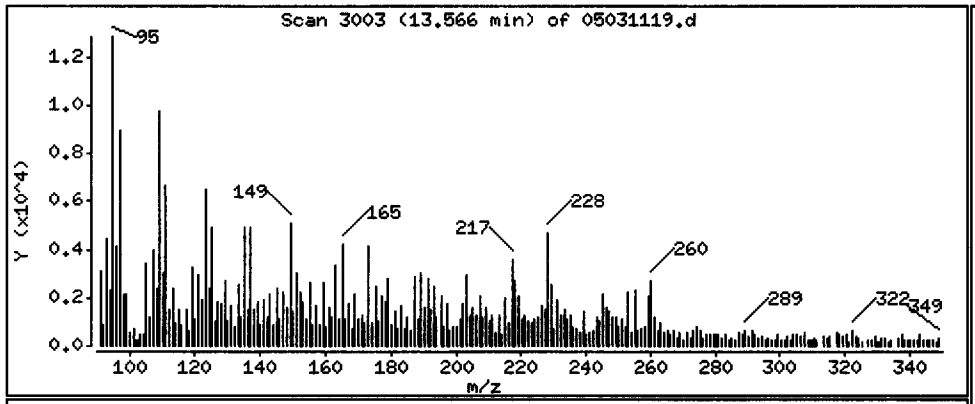
Client ID: DMA-TP3-2-3-042011 Instrument: nt4.i

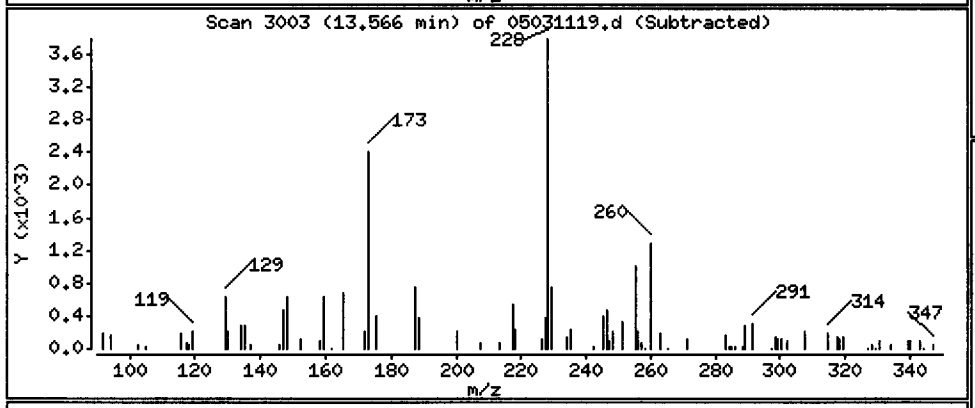
Sample Info: SS83M

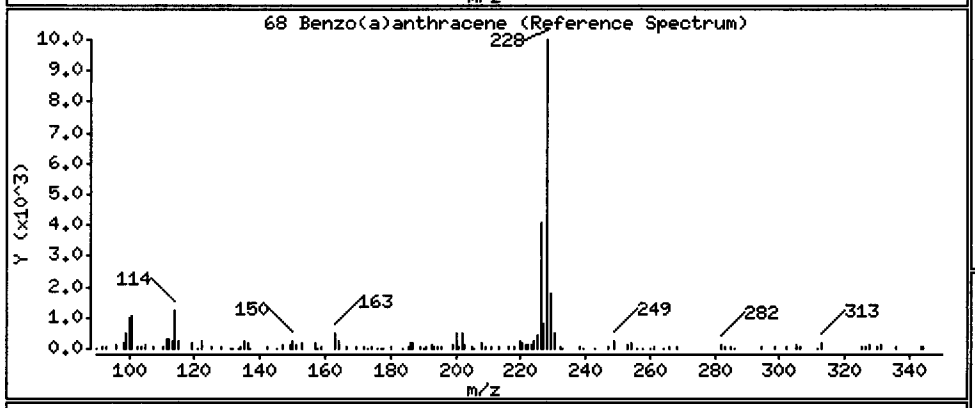
Volume Injected (uL): 1.0 Operator: JZ

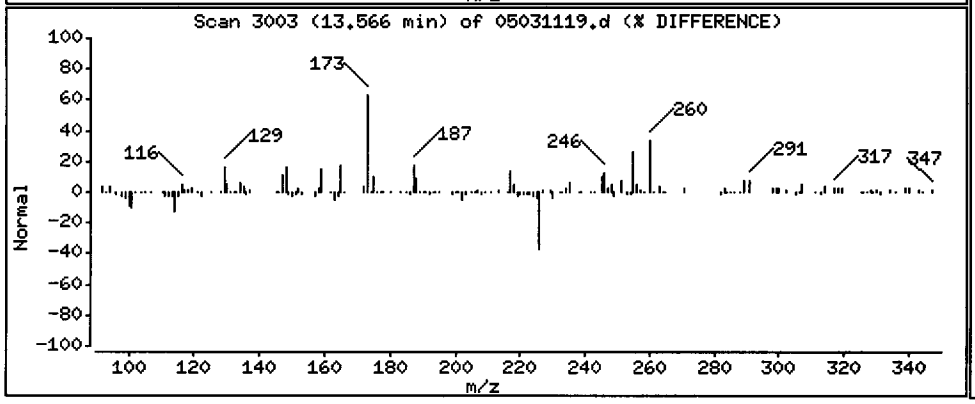
Column phase: ZB35 Column diameter: 0.32

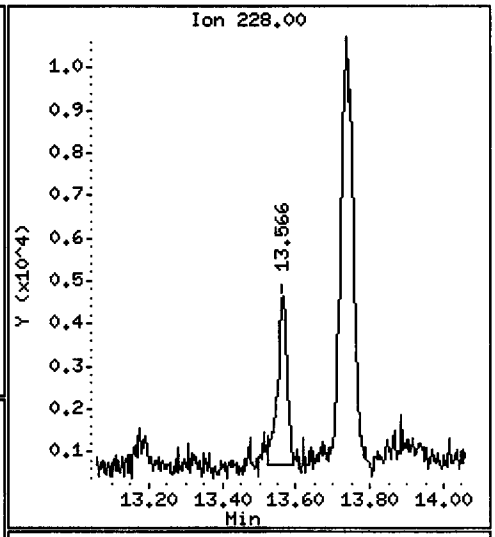
68 Benzo(a)anthracene Concentration: 2.775 ug/kg

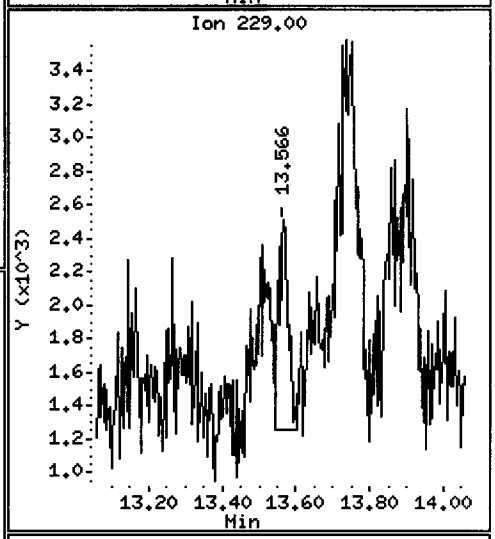


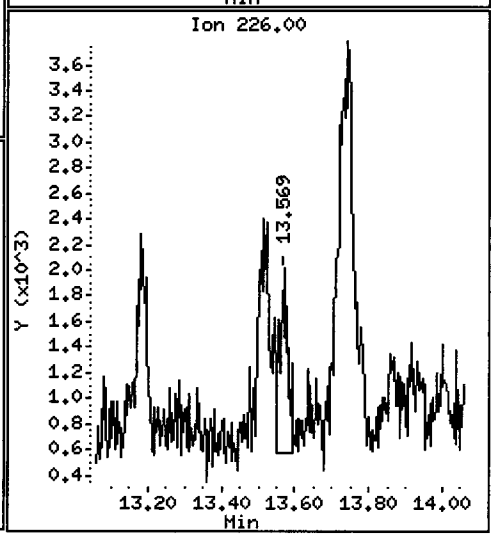












SS83:00842

Data File: /chem3/nt4.i/20110503.b/05031119.d

Date : 04-MAY-2011 00:29

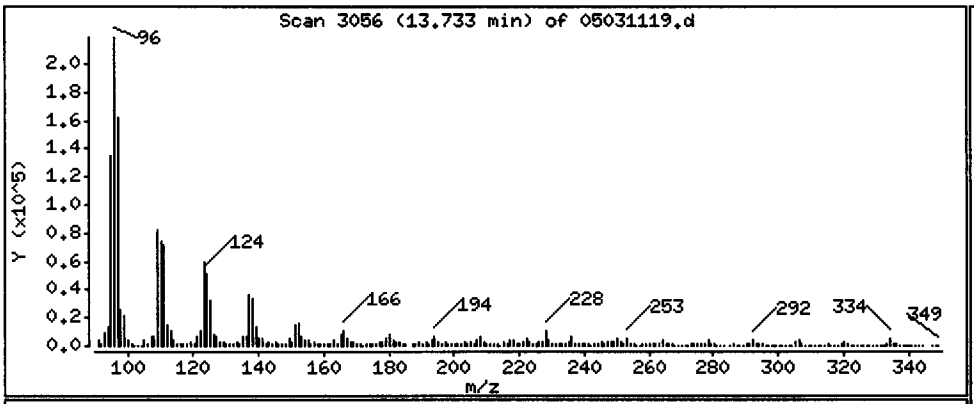
Client ID: DMA-TP3-2-3-042011 Instrument: nt4.i

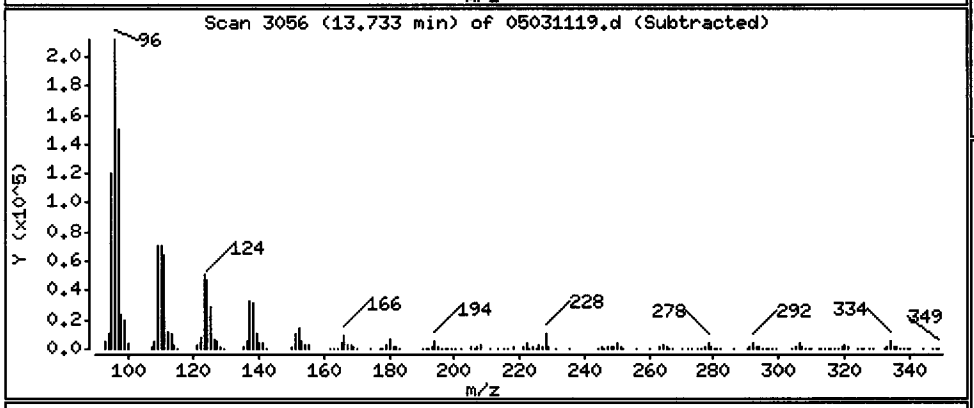
Sample Info: SS83M

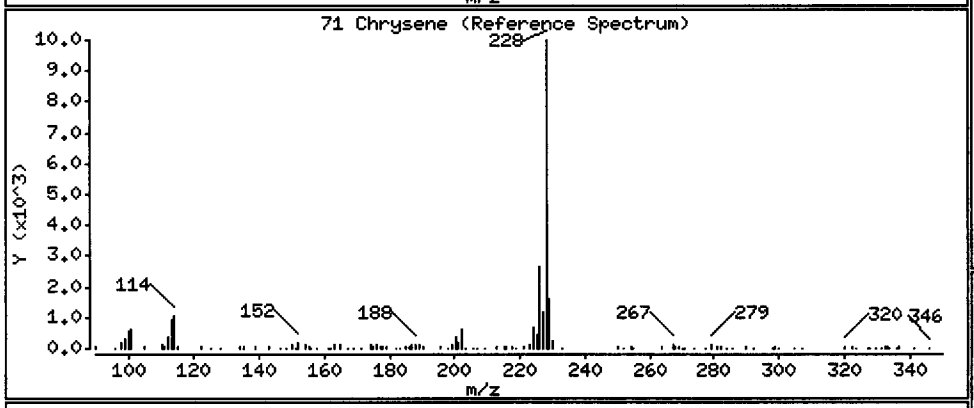
Volume Injected (uL): 1.0 Operator: JZ

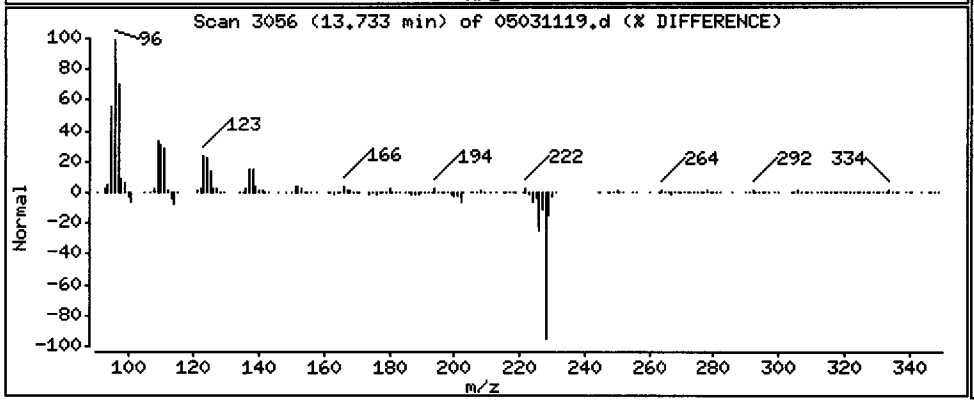
Column phase: ZB35 Column diameter: 0.32

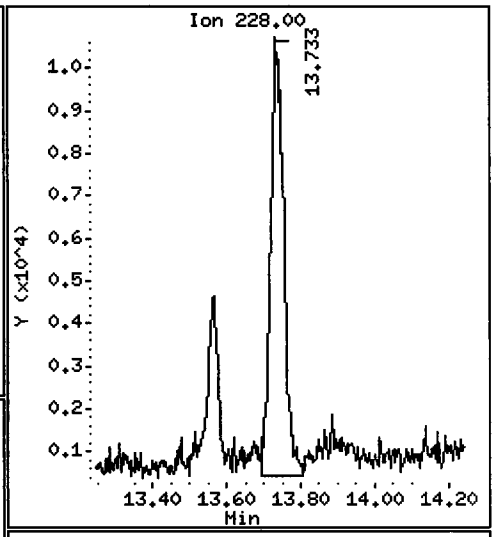
71 Chrysene Concentration: 10.07 ug/kg

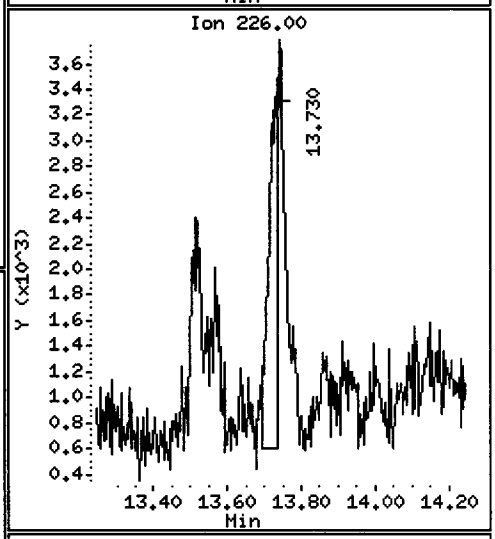


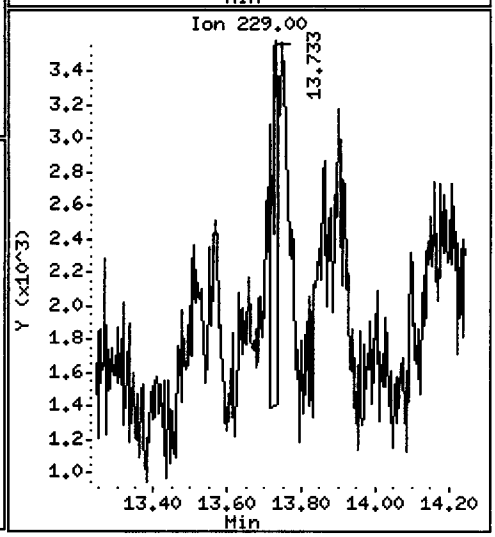












Data File: /chem3/nt4.i/20110503.b/05031119.d

Date : 04-MAY-2011 00:29

Client ID: DMA-TP3-2-3-042011

Instrument: nt4.i

Sample Info: SS83M

Volume Injected (uL): 1.0

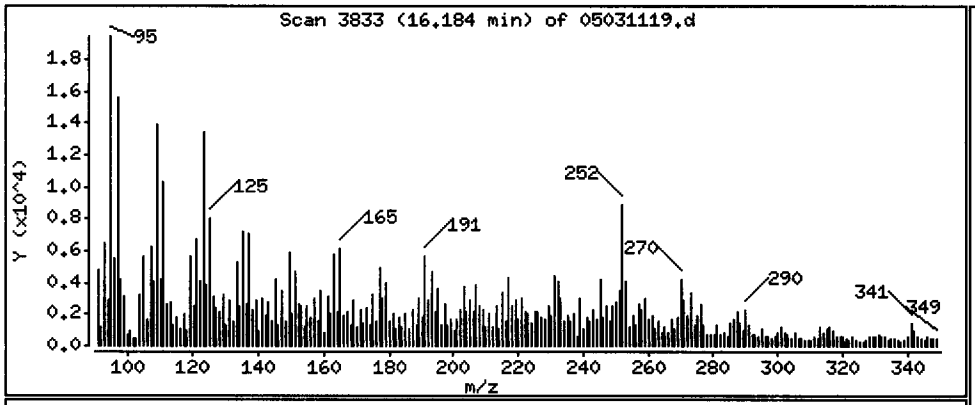
Operator: JZ

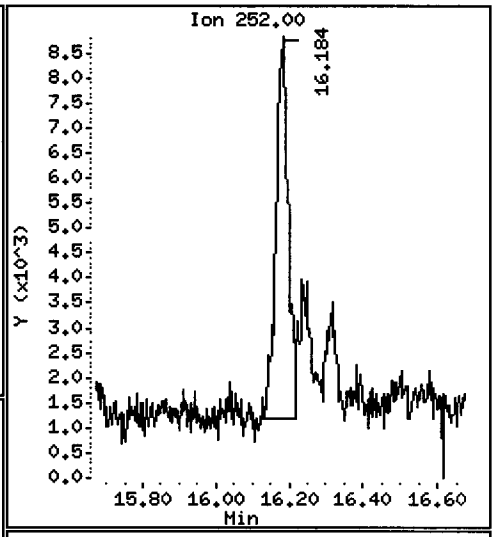
Column phase: ZB35

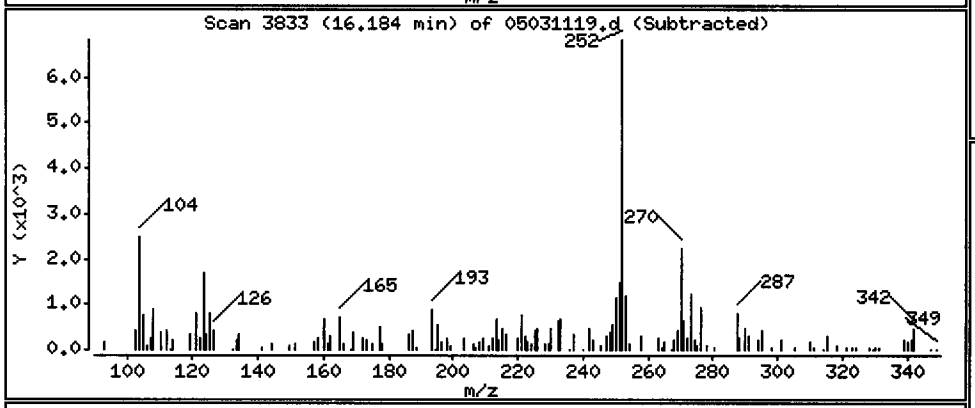
Column diameter: 0.32

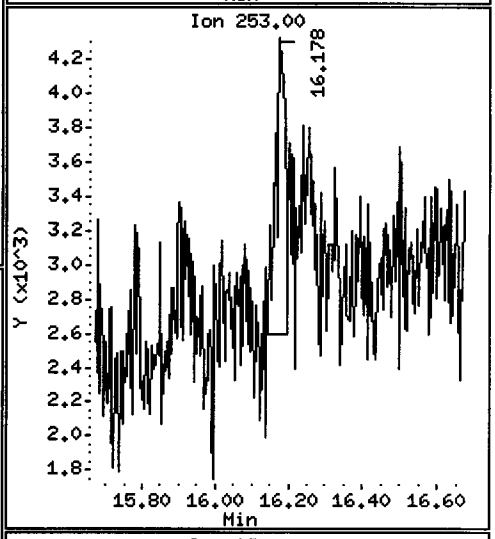
74 Benzo(b)fluoranthene

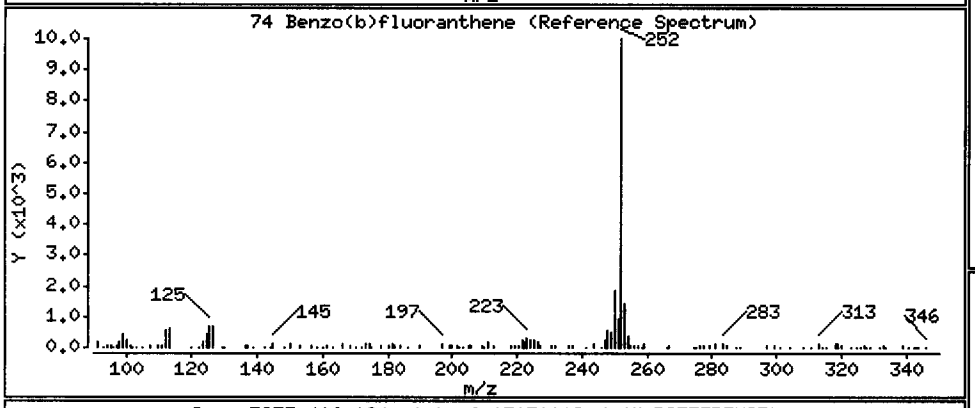
Concentration: 6.329 ug/kg

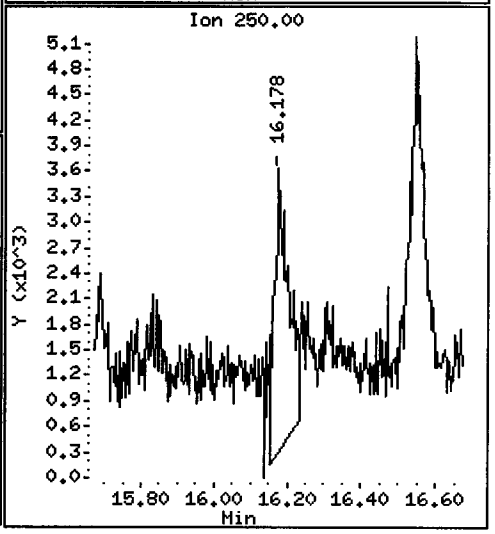


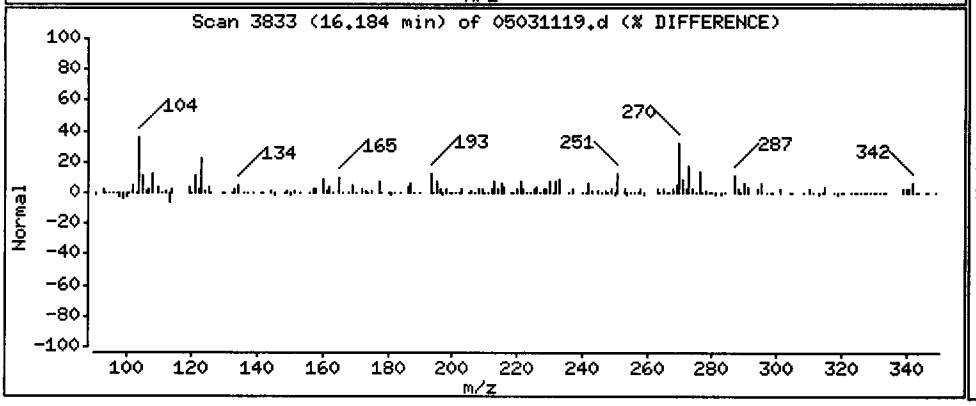












Data File: /chem3/nt4.i/20110503.b/05031119.d

Date : 04-MAY-2011 00:29

Client ID: DMA-TP3-2-3-042011

Instrument: nt4.i

Sample Info: SS83M

Volume Injected (uL): 1.0

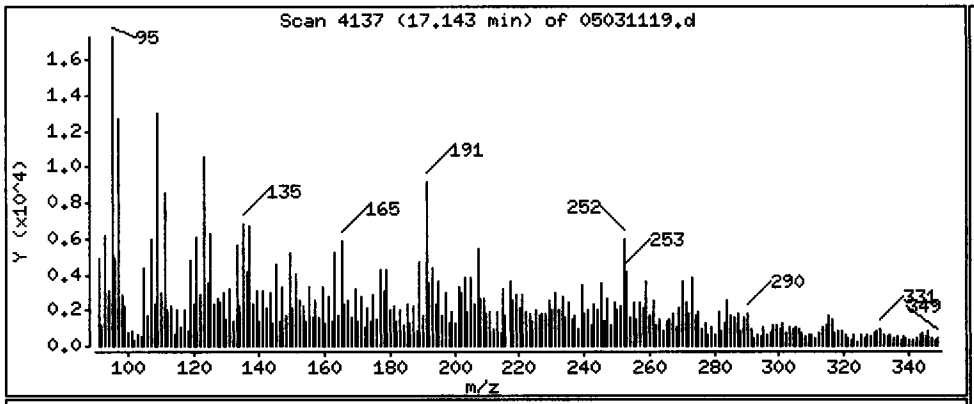
Operator: JZ

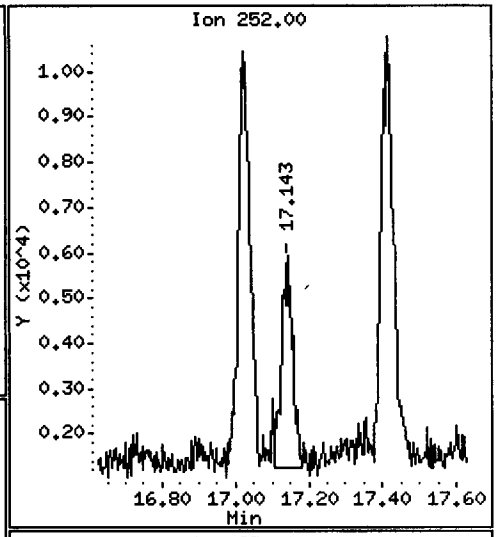
Column phase: ZB35

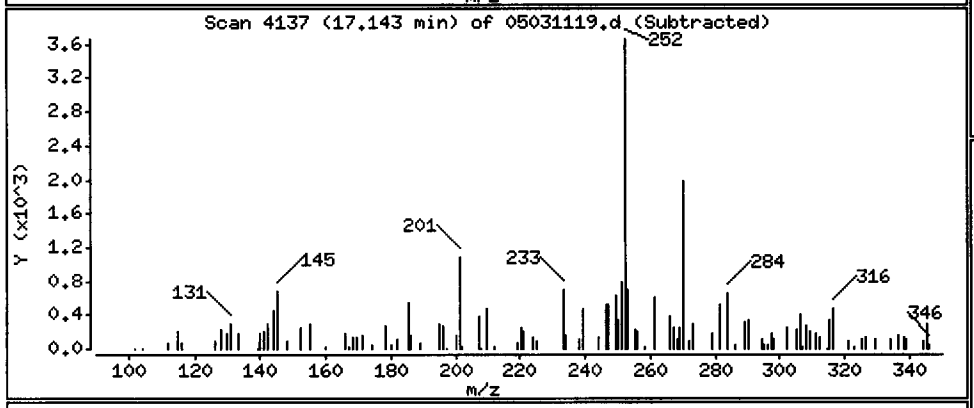
Column diameter: 0.32

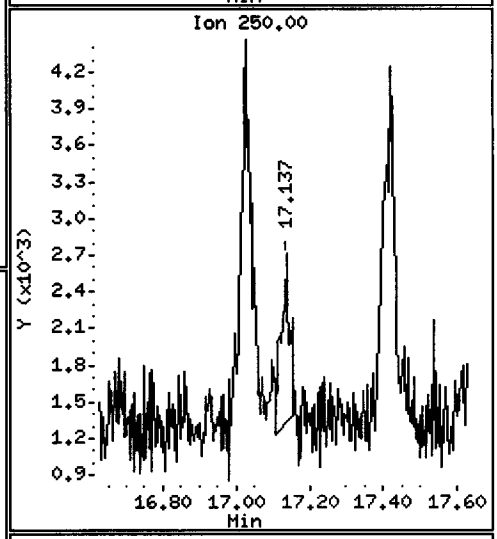
76 Benzo(a)pyrene

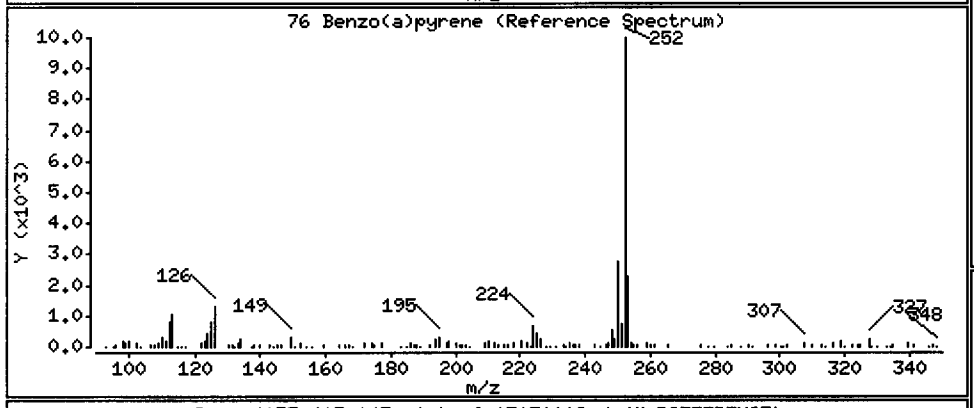
Concentration: 4.053 ug/kg

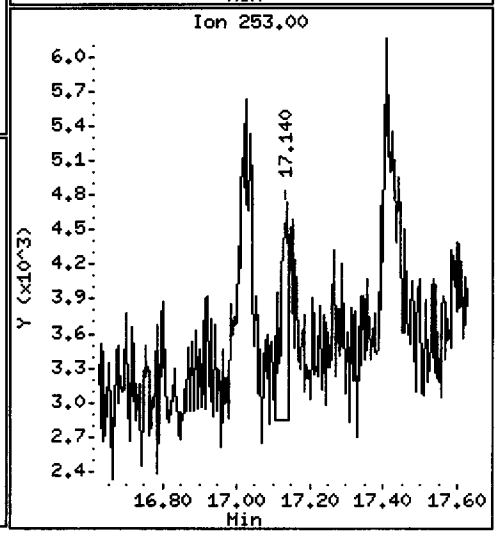


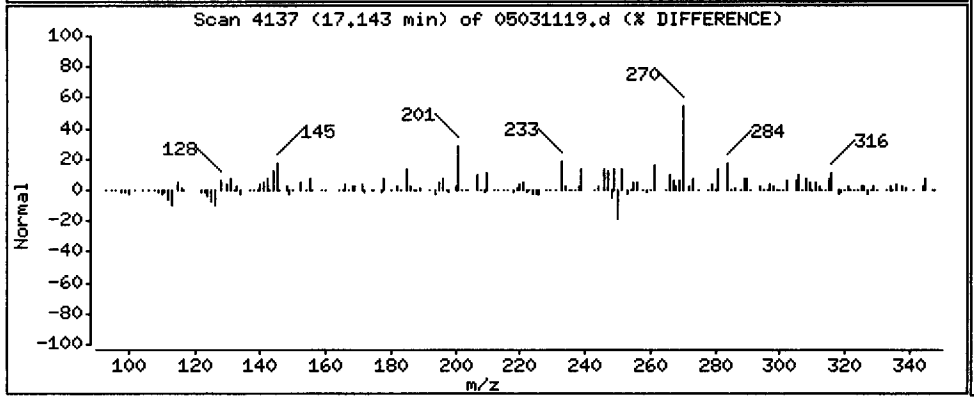












Data File: /chem3/nt4.i/20110503.b/05031119.d

Date : 04-MAY-2011 00:29

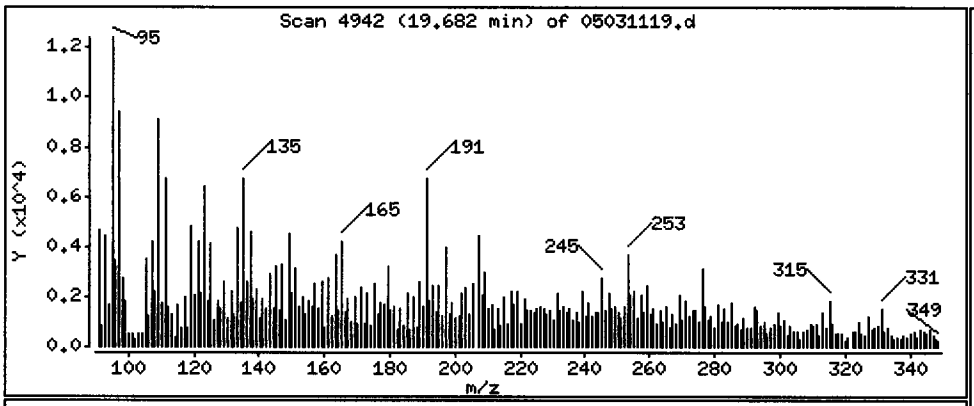
Client ID: DMA-TP3-2-3-042011 Instrument: nt4.i

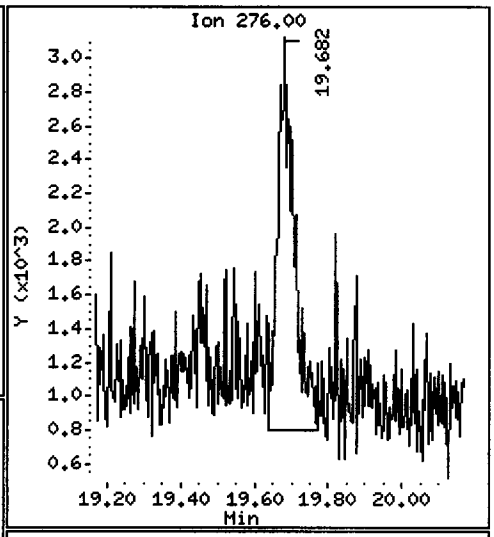
Sample Info: SS83M

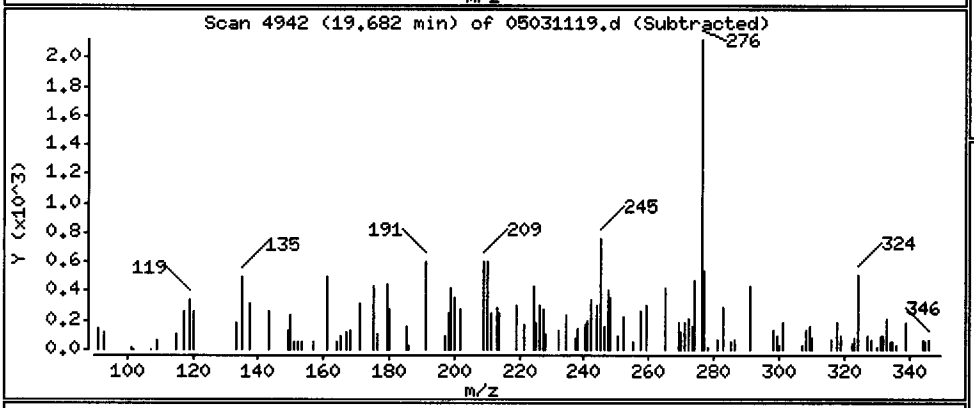
Volume Injected (uL): 1.0 Operator: JZ

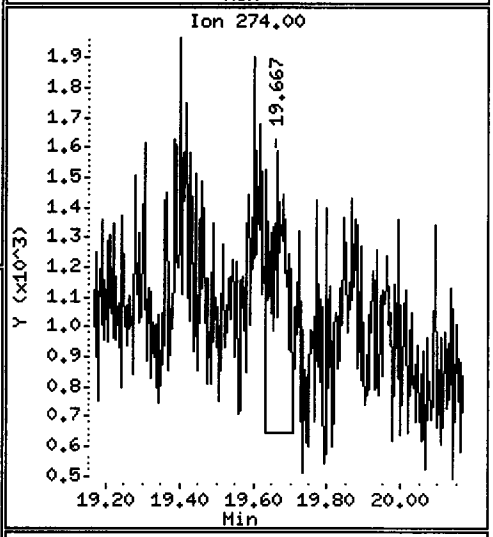
Column phase: ZB35 Column diameter: 0.32

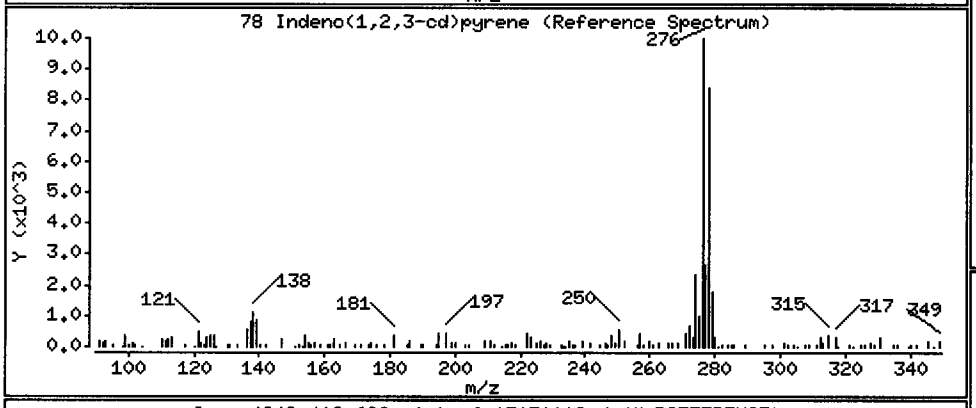
78 Indeno(1,2,3-cd)pyrene Concentration: 2.486 ug/kg

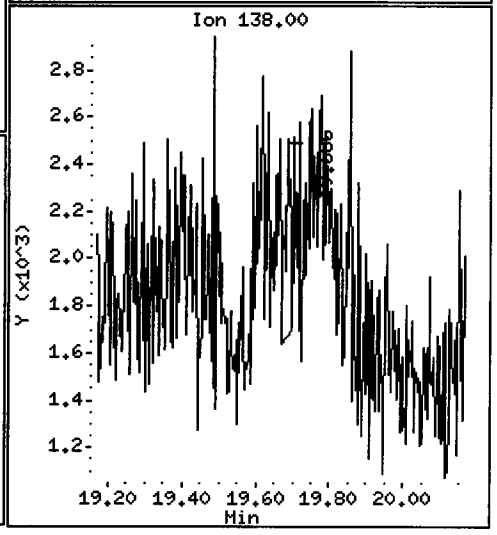


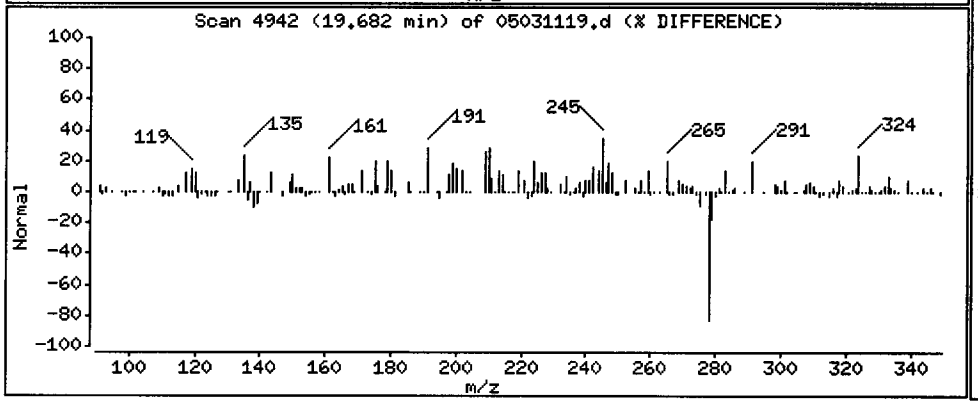












CO-ELUTION SUMMARY FOR FILE - 05031119.d

Lab ID: SS83M, Method: SIMPNA0421.m, Instrument: nt4.i, Date: 04-MAY-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20110503.b/05031120.d
Lab Smp Id: SS83N Client Smp ID: DMA-TP3-3-4-042011
Inj Date : 04-MAY-2011 00:57
Operator : JZ Inst ID: nt4.i
Smp Info : SS83N
Misc Info : 11-8724
Comment : 1ul Injection
Method : /chem3/nt4.i/20110503.b/SIMPNA0421.m
Meth Date : 04-May-2011 16:19 jianqing Quant Type: ISTD
Cal Date : 21-APR-2011 22:25 Cal File: 04211107.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

05/04/11

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	21.02000	Weight of sample extracted (g)
M	51.10000	% 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	4.796	4.800	(1.000)	267120	2.00000	
28 Naphthalene	128	4.821	4.826	(1.005)	16184	0.13440	6.538
$ 190 2-Methylnaphthalene-d10	152	5.537	5.539	(1.155)	120247	1.61057	78.34
32 2-Methylnaphthalene	141	5.581	5.583	(1.164)	5462	0.08083	3.932
105 1-methylnaphthalene	141	5.771	5.775	(1.203)	9225	0.13135	6.389
40 Acenaphthylene	152	Compound Not Detected.					
* 42 Acenaphthene-d10	164	7.048	7.046	(1.000)	158696	2.00000	
44 Acenaphthene	153	Compound Not Detected.					
46 Dibenzofuran	168	7.238	7.239	(1.027)	8845	0.08131	3.955
49 Fluorene	166	Compound Not Detected.					
* 59 Phenanthrene-d10	188	8.991	8.993	(1.000)	261321	2.00000	
60 Phenanthrene	178	9.026	9.024	(1.004)	32567	0.25466	12.39
61 Anthracene	178	Compound Not Detected.					
64 Fluoranthene	202	10.711	10.705	(1.191)	53468	0.37851	18.41
65 Pyrene	202	11.181	11.175	(0.817)	59349	0.41683	20.28

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
	68 Benzo(a)anthracene	228	13.572	13.557	(0.992)	15467	0.11711	5.697
*	69 Chrysene-d12	240	13.685	13.671	(1.000)	283157	2.00000	
	71 Chrysene	228	13.748	13.743	(1.005)	47723	0.37289	18.14
	74 Benzo(b)fluoranthene	252	16.190	16.172	(0.933)	35164	0.26318	12.80
	75 Benzo(k)fluoranthene	252	16.247	16.229	(0.936)	16386	0.11917	5.797
	188 Benzo(j)fluoranthene	252	16.316	16.298	(0.940)	12569	0.09321	4.534
	76 Benzo(a)pyrene	252	17.146	17.125	(0.988)	11434	0.09565	4.653(M)
*	77 Perylene-d12	264	17.354	17.330	(1.000)	246265	2.00000	
	78 Indeno(1,2,3-cd)pyrene	276	19.688	19.667	(1.135)	15942	0.11335	5.514
$	191 Dibenzo(a,h)anthracene-d14	292	19.622	19.595	(1.131)	122432	1.20176	58.46
	79 Dibenzo(a,h)anthracene	278	19.713	19.680	(1.136)	5927	0.05197	2.528
	80 Benzo(g,h,i)perylene	276	20.533	20.503	(1.183)	19489	0.16223	7.892
	99 Perylene	252	17.423	17.399	(1.004)	70755	0.69788	33.95

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 05031120.d
Lab Smp Id: SS83N
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20110503.b/SIMPNA0421.m
Misc Info: 11-8724

Calibration Date: 03-MAY-2011
Calibration Time: 16:33
Client Smp ID: DMA-TP3-3-4-0420
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	267120	-3.23
42 Acenaphthene-d10	158527	79264	317054	158696	0.11
59 Phenanthrene-d10	277528	138764	555056	261321	-5.84
69 Chrysene-d12	304115	152058	608230	283157	-6.89
77 Perylene-d12	257833	128916	515666	246265	-4.49

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	4.80	4.30	5.30	4.80	-0.09
42 Acenaphthene-d10	7.05	6.55	7.55	7.05	0.03
59 Phenanthrene-d10	8.99	8.49	9.49	8.99	-0.01
69 Chrysene-d12	13.67	13.17	14.17	13.69	0.11
77 Perylene-d12	17.33	16.83	17.83	17.35	0.14

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

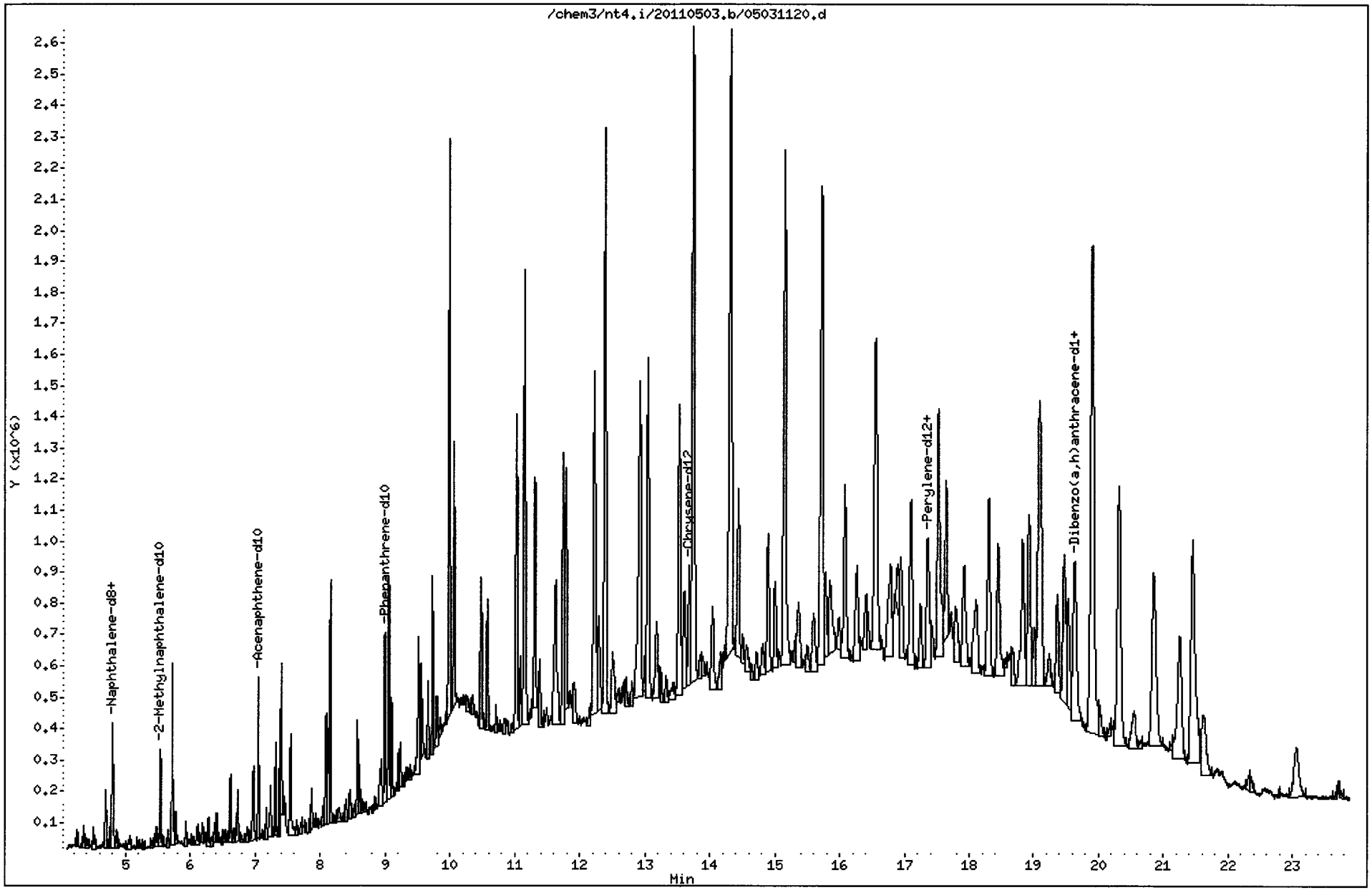
Client Name: Floyd Snider
Client SDG: SS83
Sample Matrix: SOLID
Fraction: SV
Lab Smp Id: SS83N
Client Smp ID: DMA-TP3-3-4-042011
Level: LOW
Operator: JZ
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: pnalcss.spk
Quant Type: ISTD
Sublist File: pnax.sub
Method File: /chem3/nt4.i/20110503.b/SIMPNA0421.m
Misc Info: 11-8724

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	145.9	78.34	53.69	34-100
$ 191 Dibenzo(a,h)anthra	145.9	58.46	40.06	10-117

Data File: /chem3/nt4.i/20110503.b/05031120.d
Date : 04-MAY-2011 00:57
Client ID: DMA-TP3-3-4-042011
Sample Info: SS83N
Volume Injected (uL): 1.0
Column phase: ZB35

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

855
SS83:099852



Data File: /chem3/nt4.i/20110503.b/05031120.d

Date : 04-MAY-2011 00:57

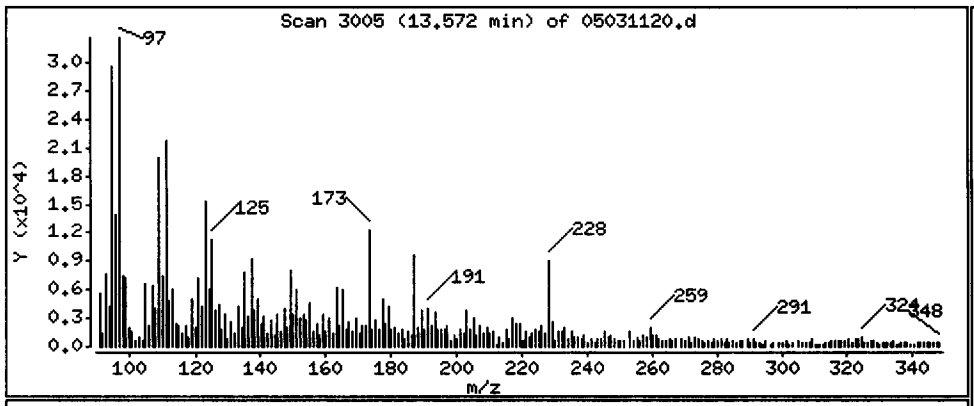
Client ID: DMA-TP3-3-4-042011 Instrument: nt4.i

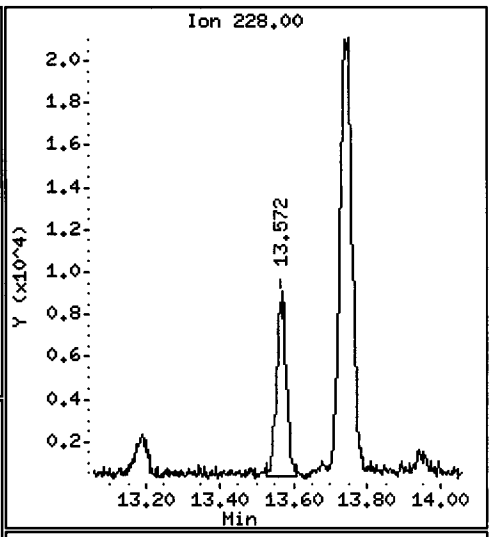
Sample Info: SS83N

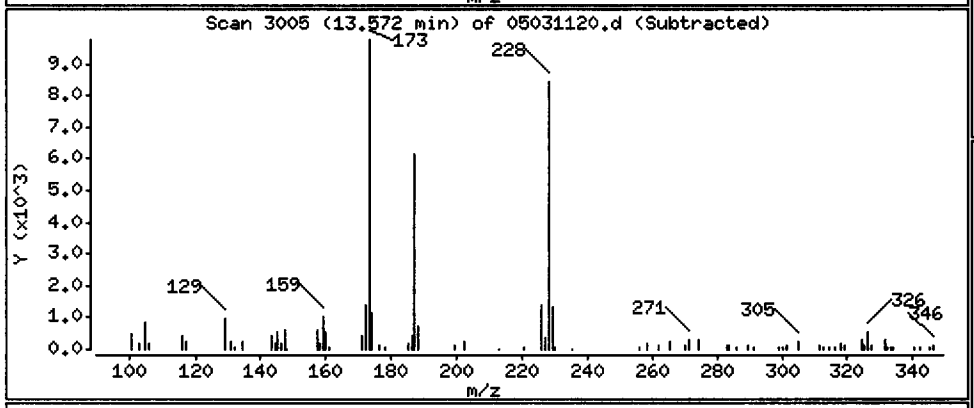
Volume Injected (uL): 1.0 Operator: JZ

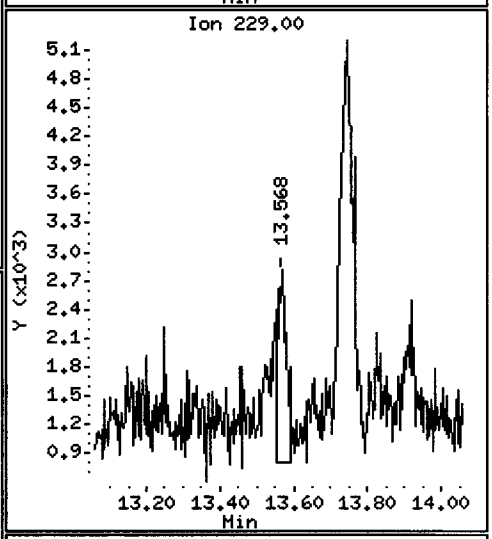
Column phase: ZB35 Column diameter: 0.32

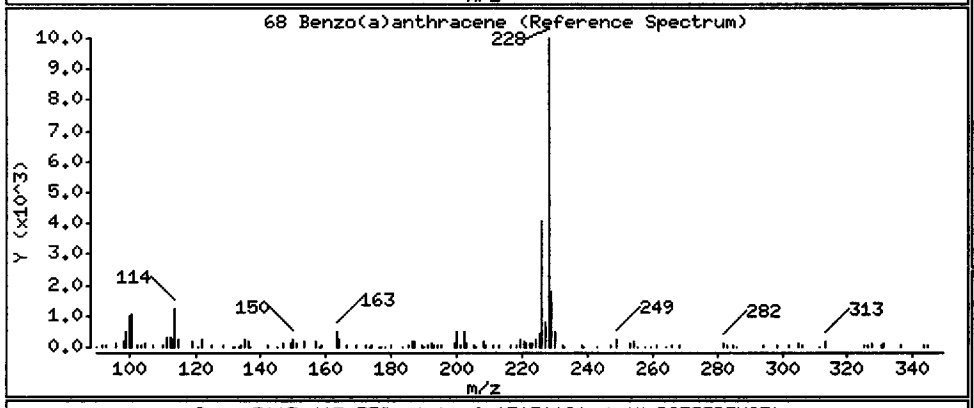
68 Benzo(a)anthracene Concentration: 5.697 ug/kg

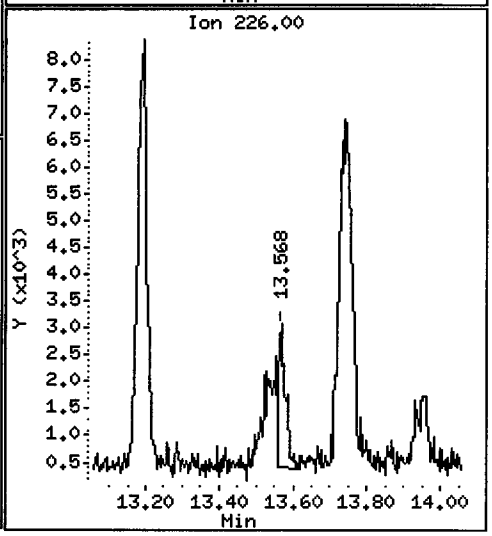


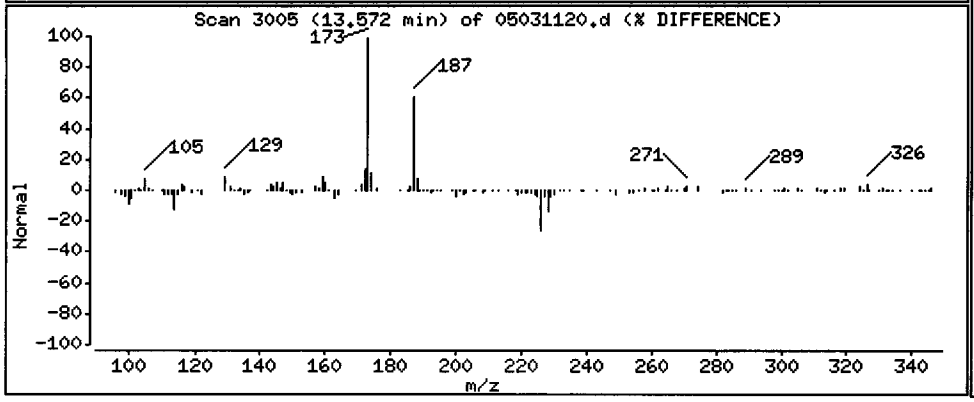












Data File: /chem3/nt4.i/20110503.b/05031120.d

Date : 04-MAY-2011 00:57

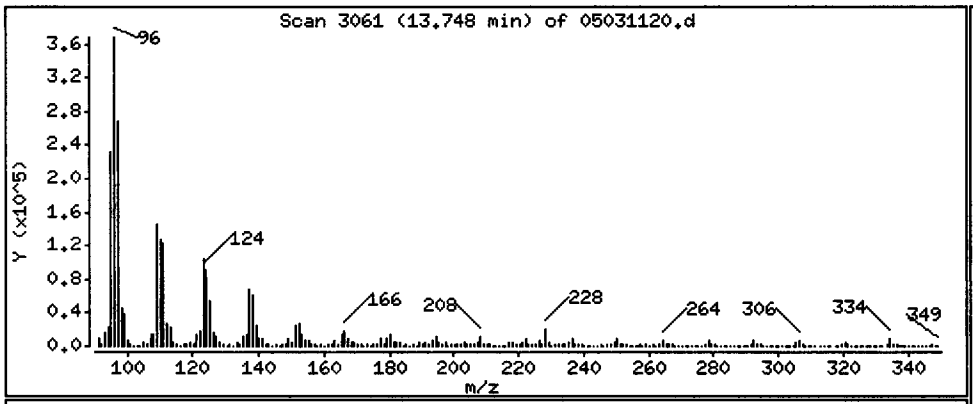
Client ID: DMA-TP3-3-4-042011 Instrument: nt4.i

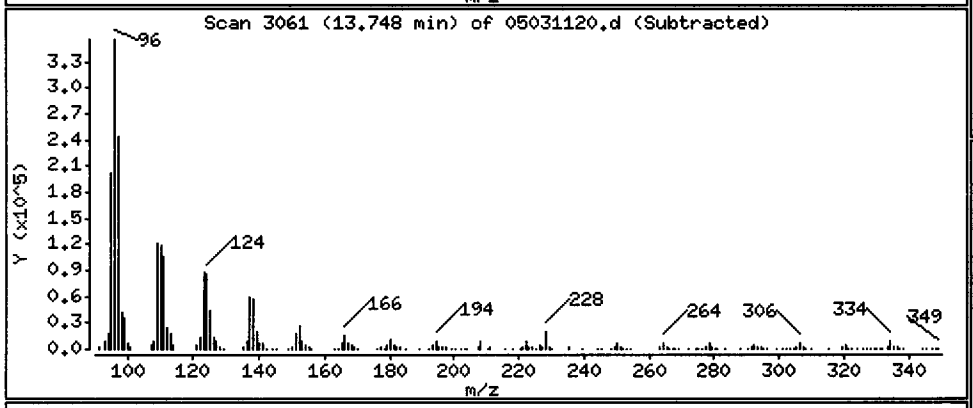
Sample Info: SS83N

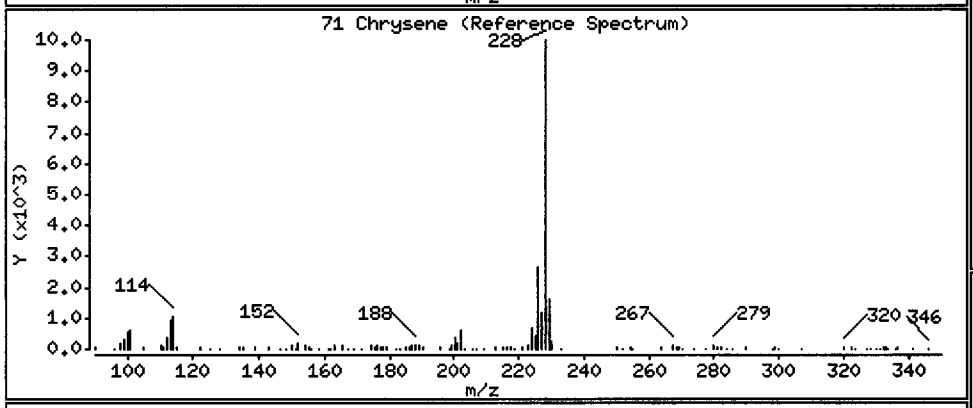
Volume Injected (uL): 1.0 Operator: JZ

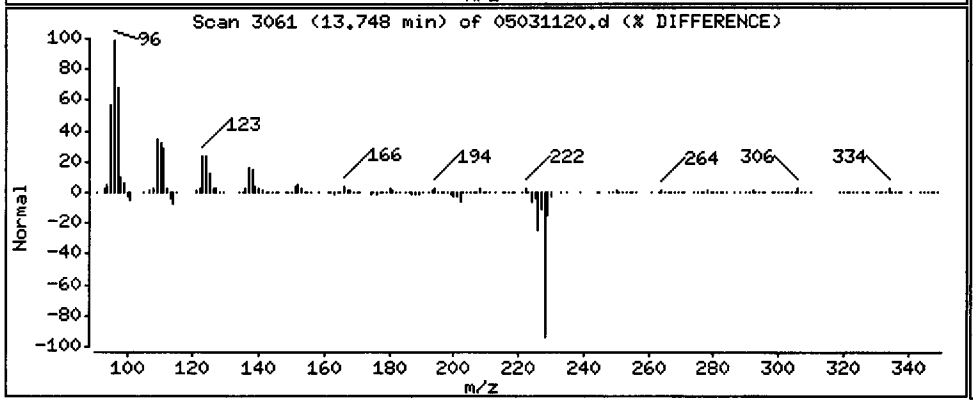
Column phase: ZB35 Column diameter: 0.32

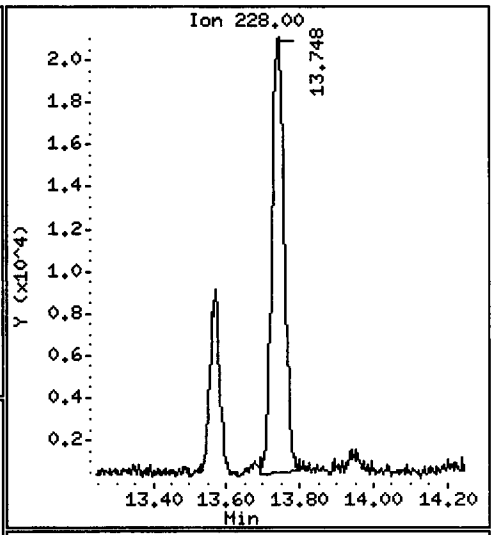
71 Chrysene Concentration: 18.14 ug/kg

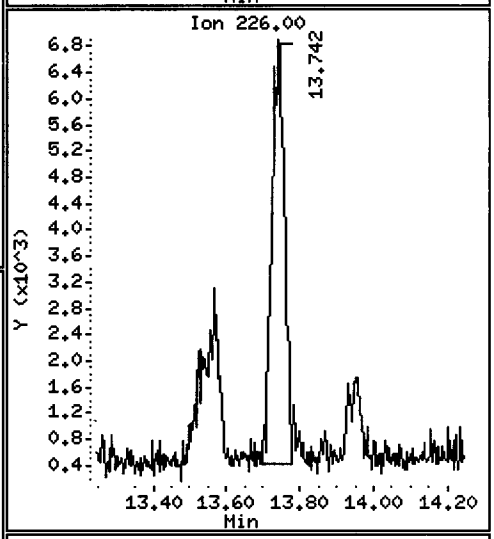


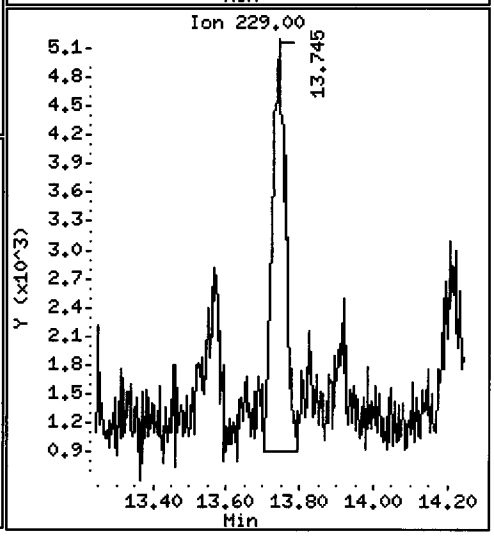












SS83:00854

Data File: /chem3/nt4.i/20110503.b/05031120.d

Date : 04-MAY-2011 00:57

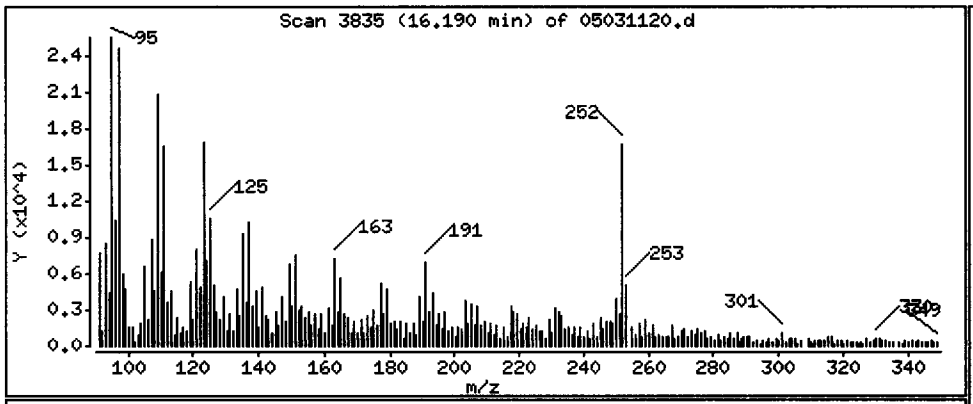
Client ID: DMA-TP3-3-4-042011 Instrument: nt4.i

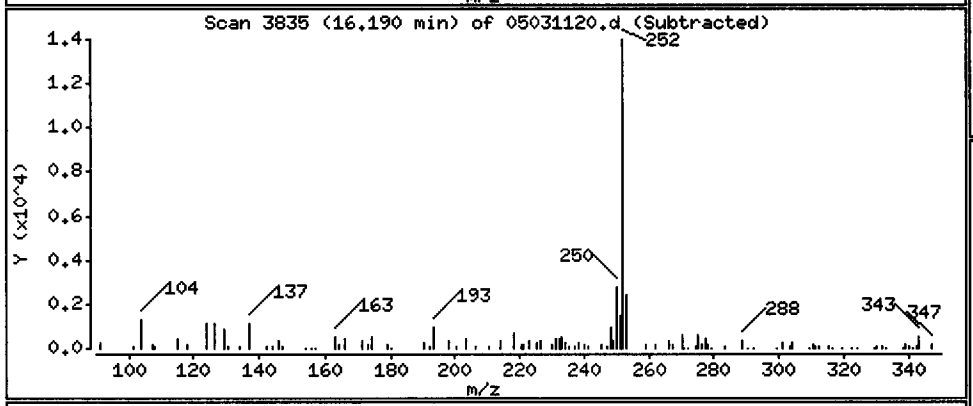
Sample Info: SS83N

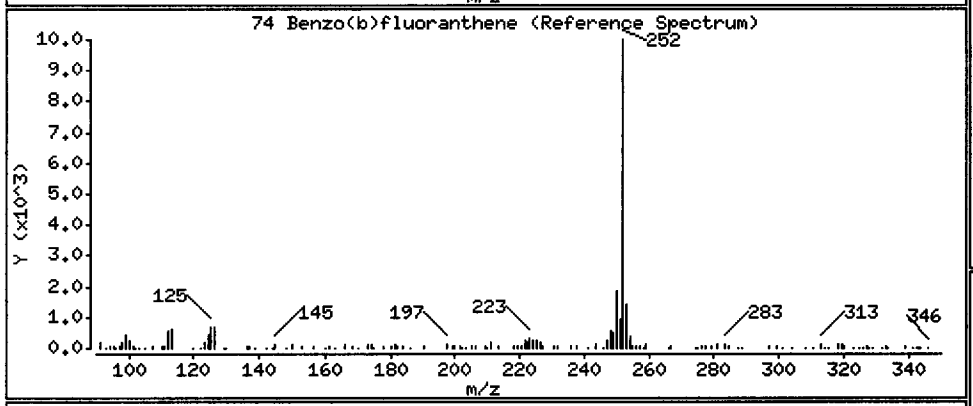
Volume Injected (uL): 1.0 Operator: JZ

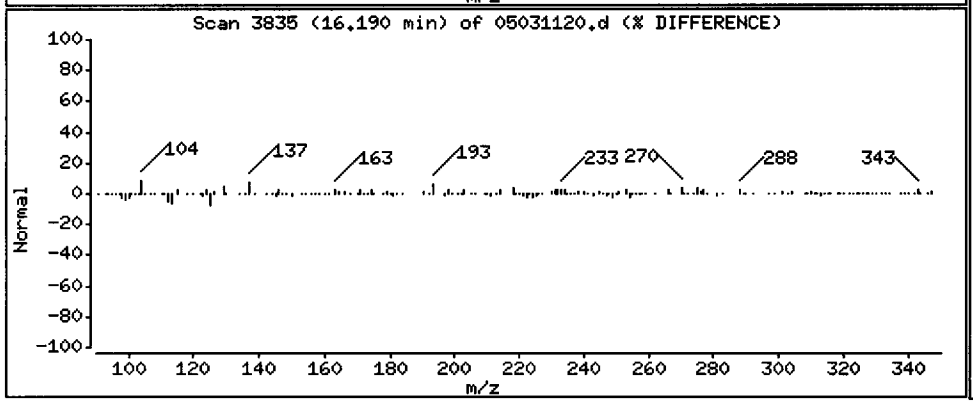
Column phase: ZB35 Column diameter: 0.32

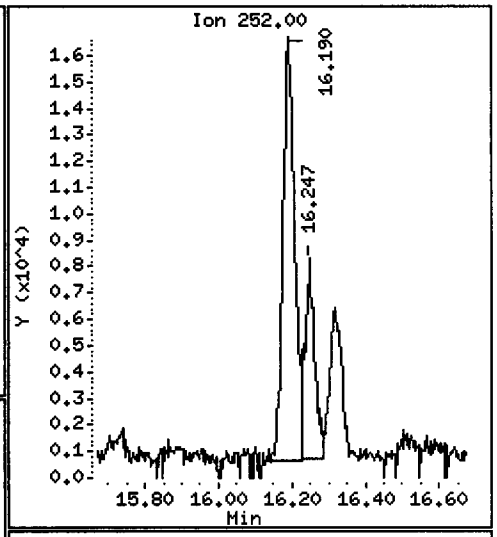
74 Benzo(b)fluoranthene Concentration: 12.80 ug/kg

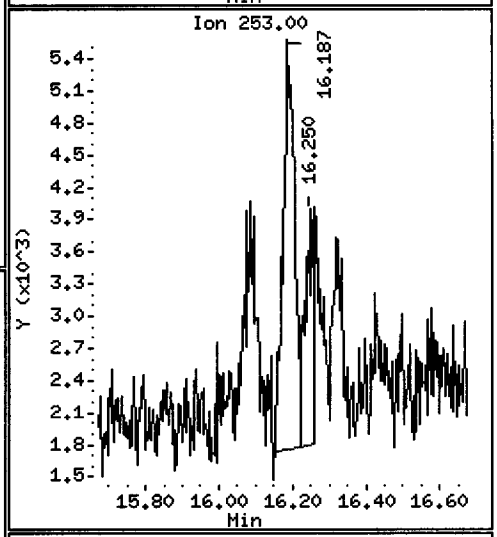


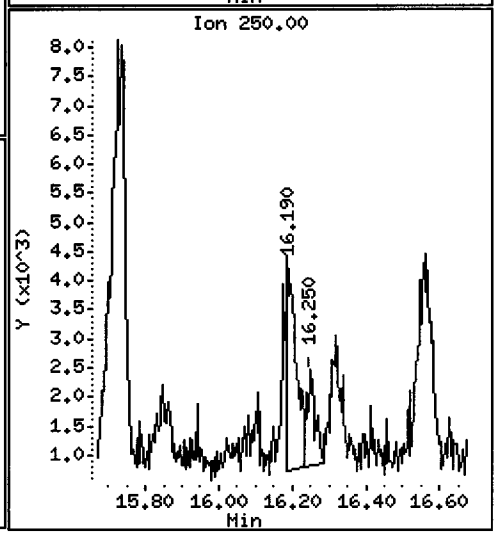












Data File: /chem3/nt4.i/20110503.b/05031120.d

Date : 04-MAY-2011 00:57

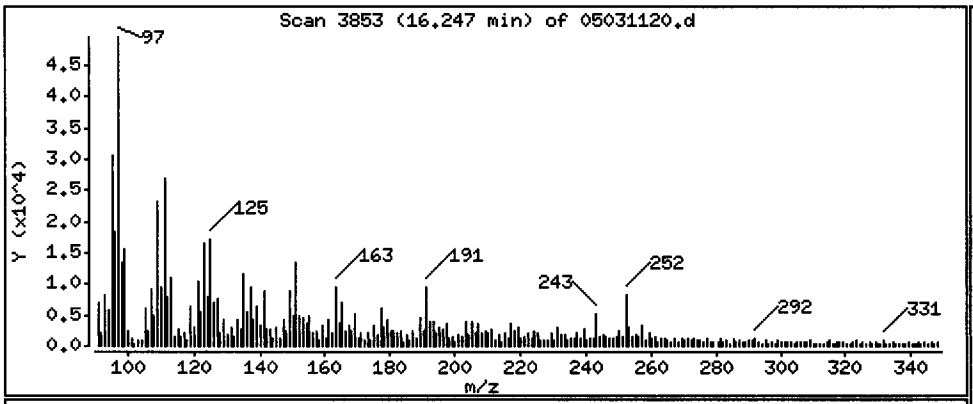
Client ID: DMA-TP3-3-4-042011 Instrument: nt4.i

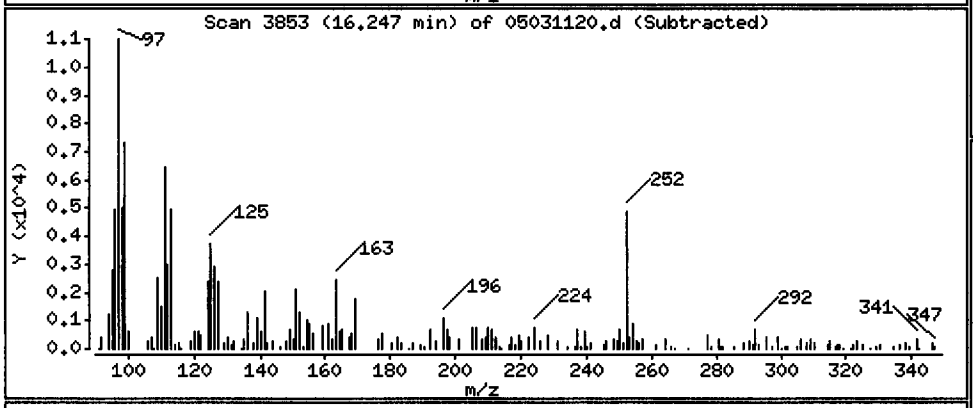
Sample Info: SS83N

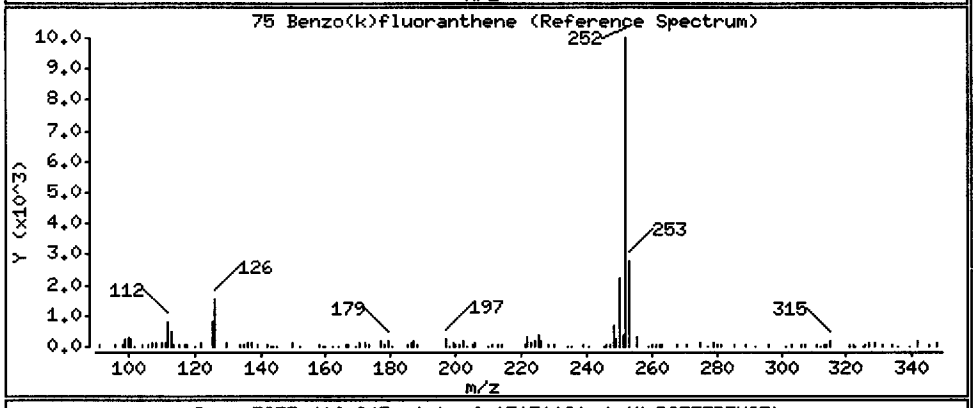
Volume Injected (uL): 1.0 Operator: JZ

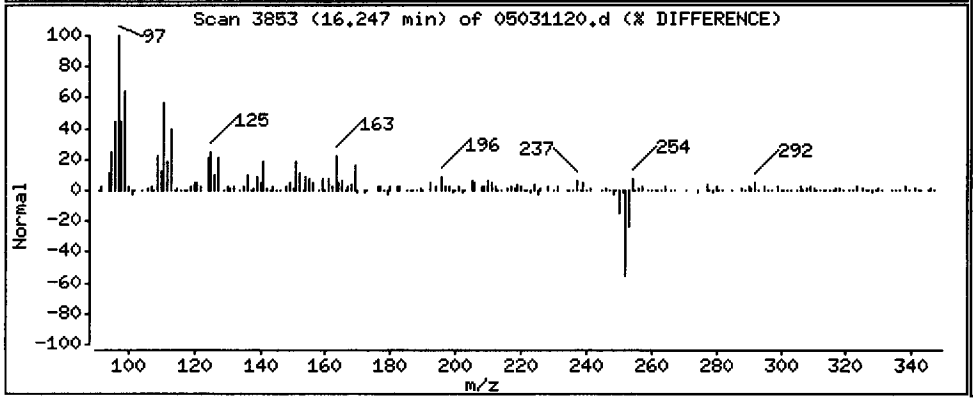
Column phase: ZB35 Column diameter: 0.32

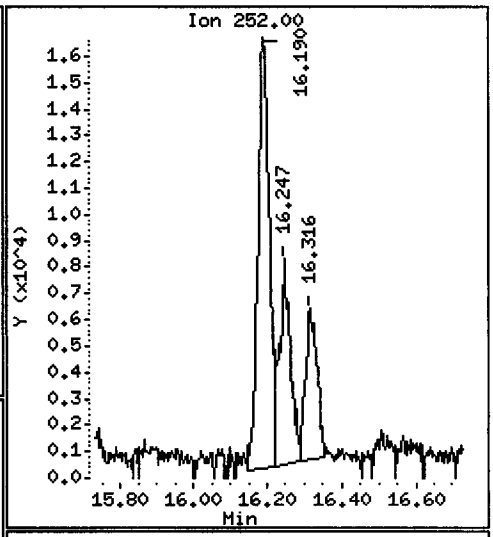
75 Benzo(k)fluoranthene Concentration: 5.797 ug/kg

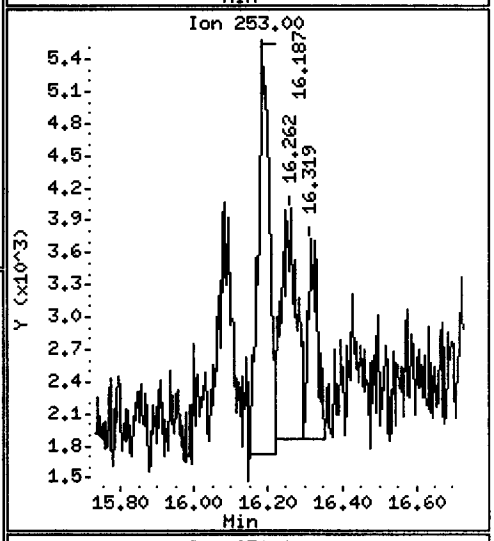


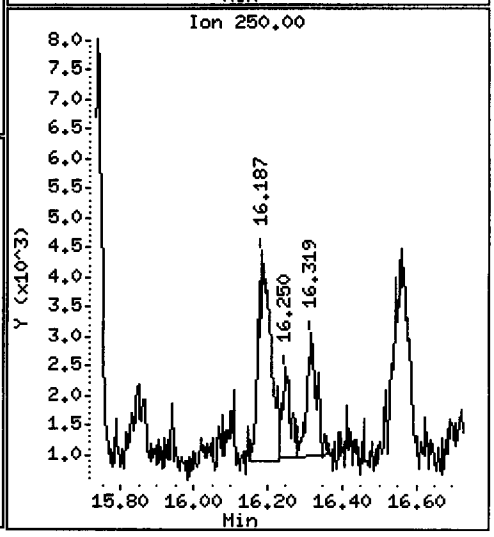












SS83:00856

Data File: /chem3/nt4.i/20110503.b/05031120.d

Date : 04-MAY-2011 00:57

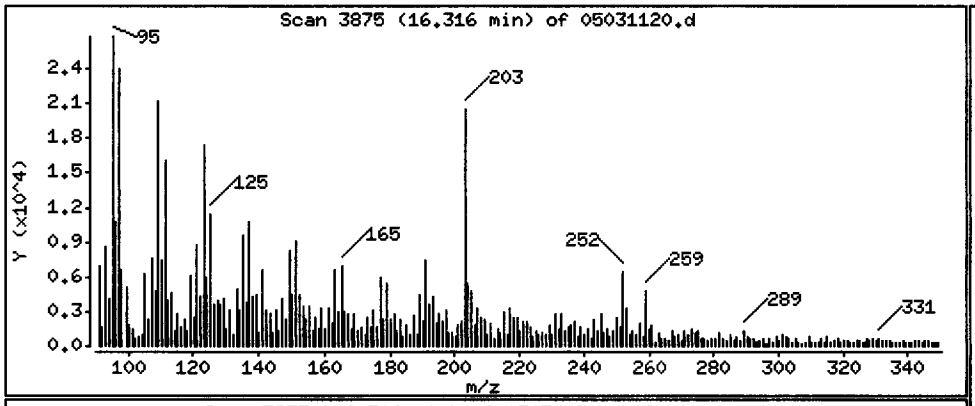
Client ID: DMA-TP3-3-4-042011 Instrument: nt4.i

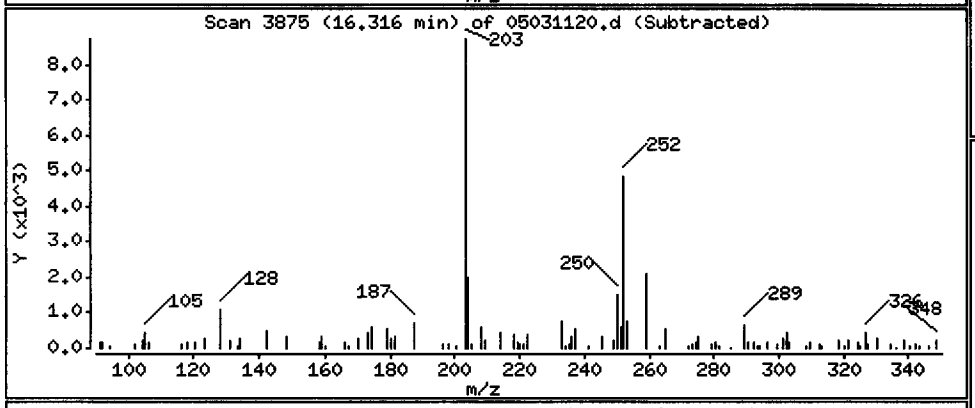
Sample Info: SS83N

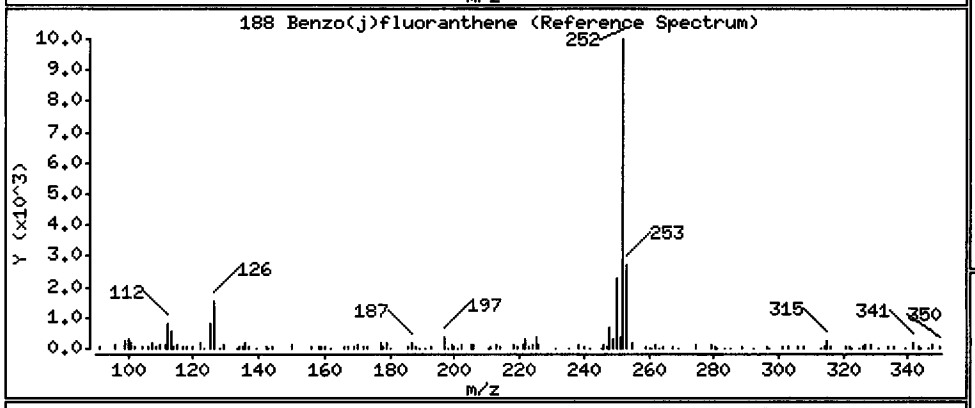
Volume Injected (uL): 1.0 Operator: JZ

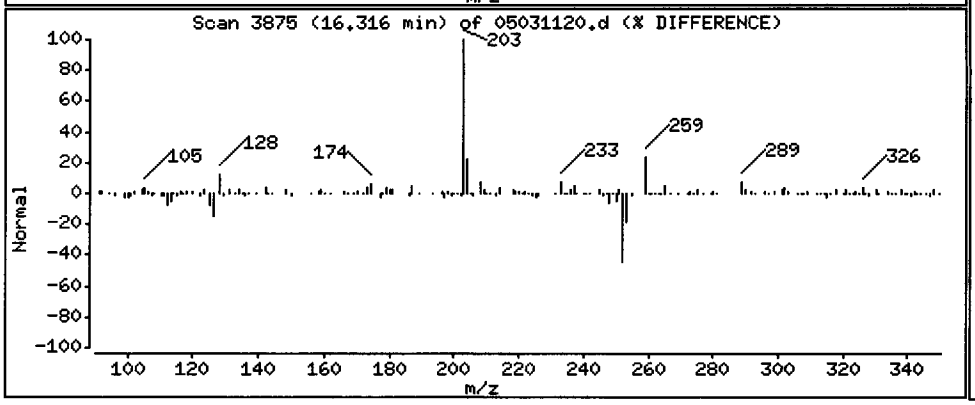
Column phase: ZB35 Column diameter: 0.32

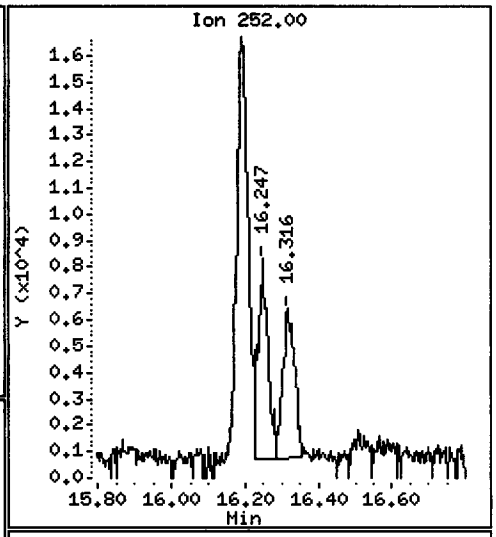
188 Benzo(j)fluoranthene Concentration: 4.534 ug/kg

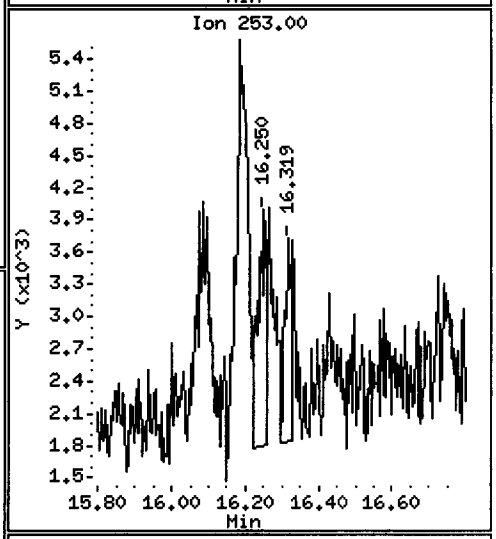


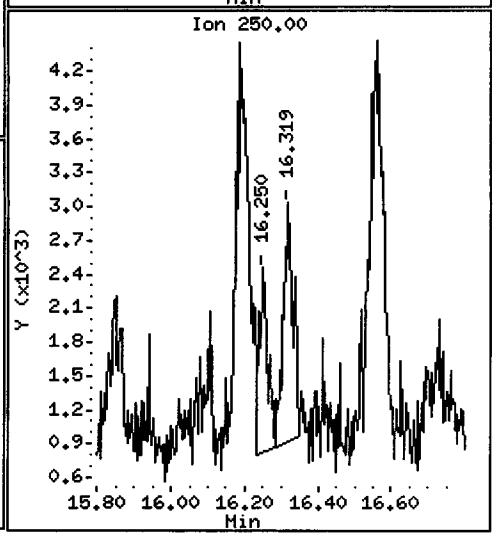






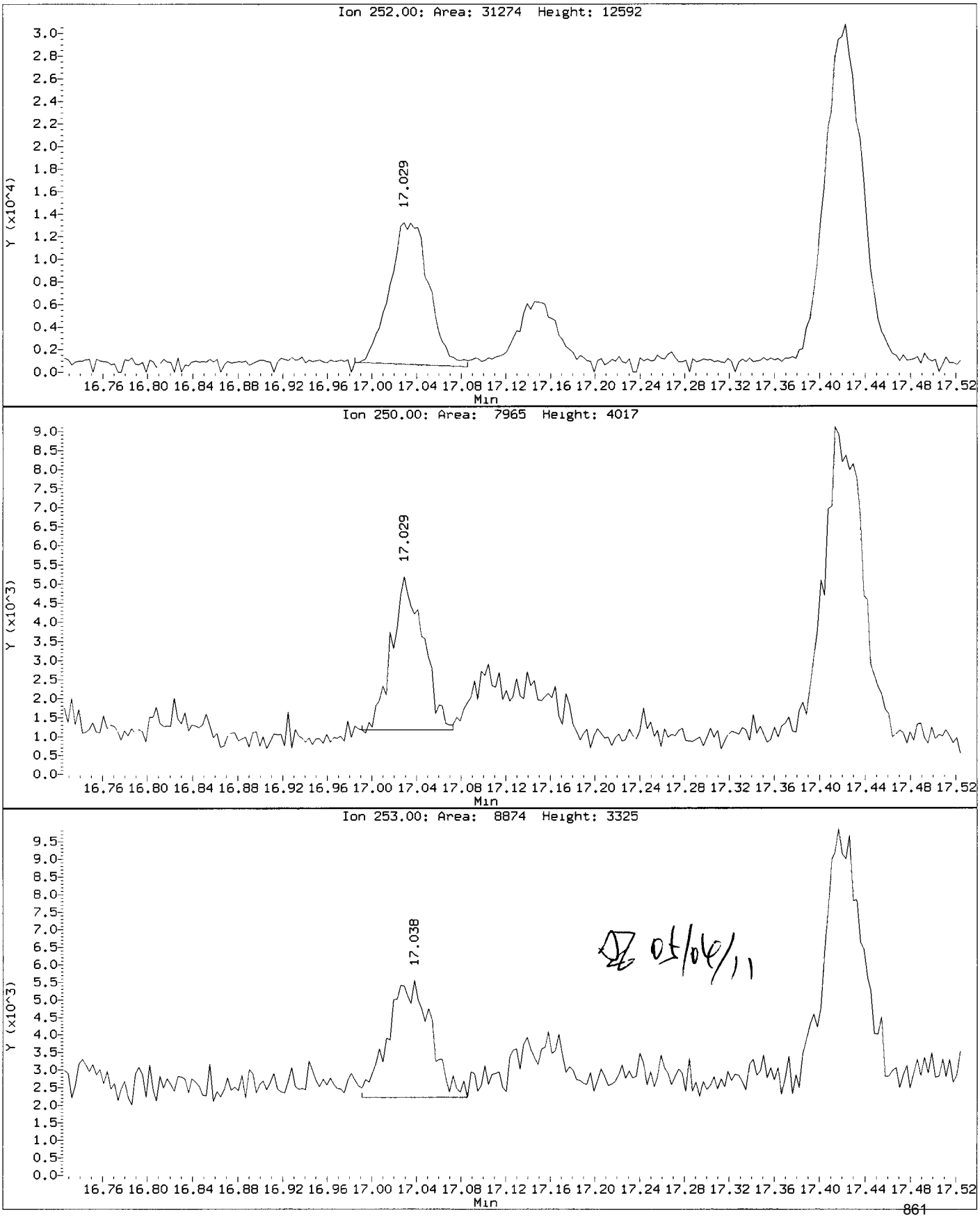






Data File: /chem3/nt4.i/20110503.b/05031120.d
Injection Date: 04-MAY-2011 00:57
Instrument: nt4.i
Client Sample ID: DMA-TP3-3-4-042011

Compound: Benzo(a)pyrene
CAS Number: 50-32-8

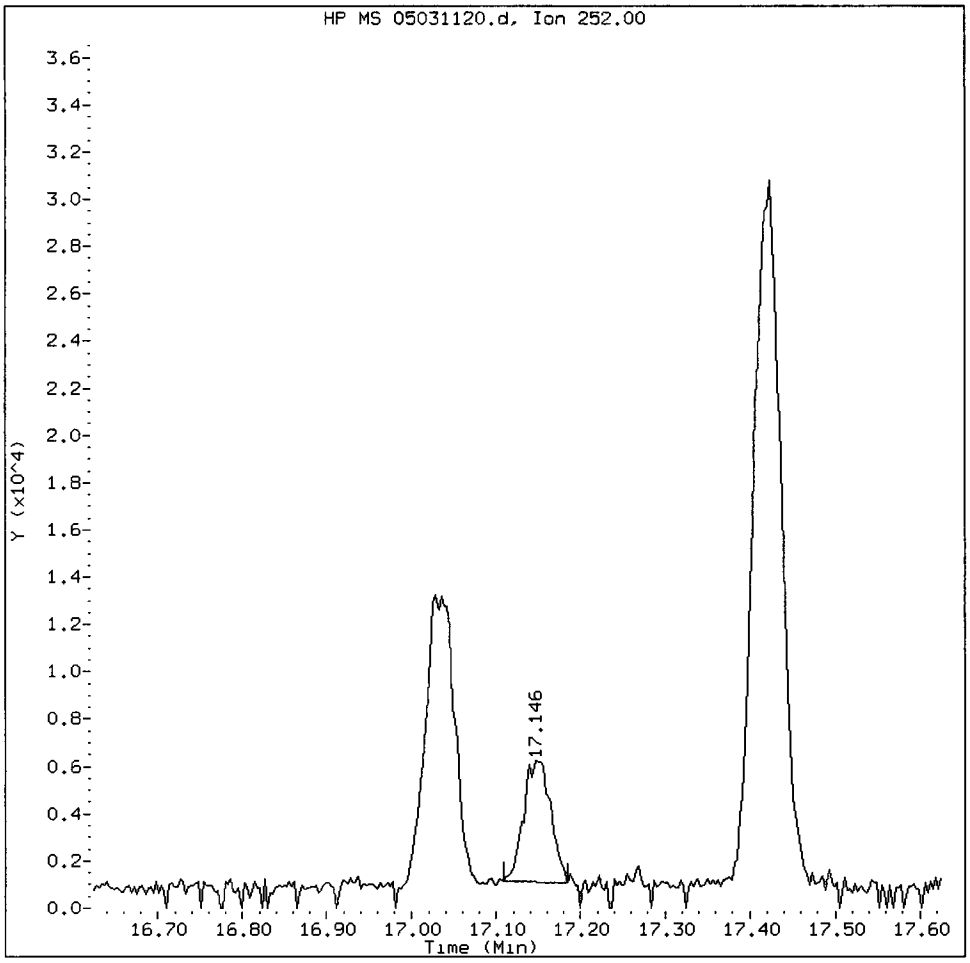


04/04/11

SS83:00858

SS83N, /chem3/nt4.i/20110503.b/05031120.d

Benzo(a)pyrene Amount: 0.10 Area: 11434



MANUAL INTEGRATION for Benzo(a)pyrene

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

Analyst: _____ Date: 8/7/11

Data File: /chem3/nt4.i/20110503.b/05031120.d

Date : 04-MAY-2011 00:57

Client ID: DMA-TP3-3-4-042011

Instrument: nt4.i

Sample Info: SS83N

Volume Injected (uL): 1.0

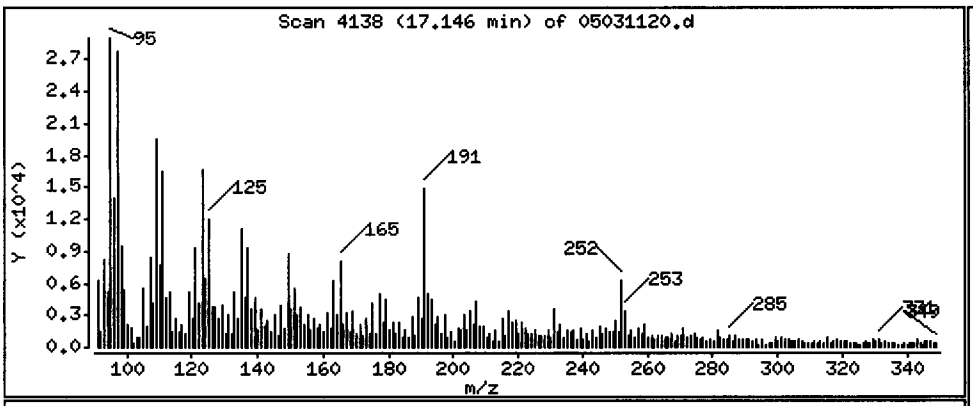
Operator: JZ

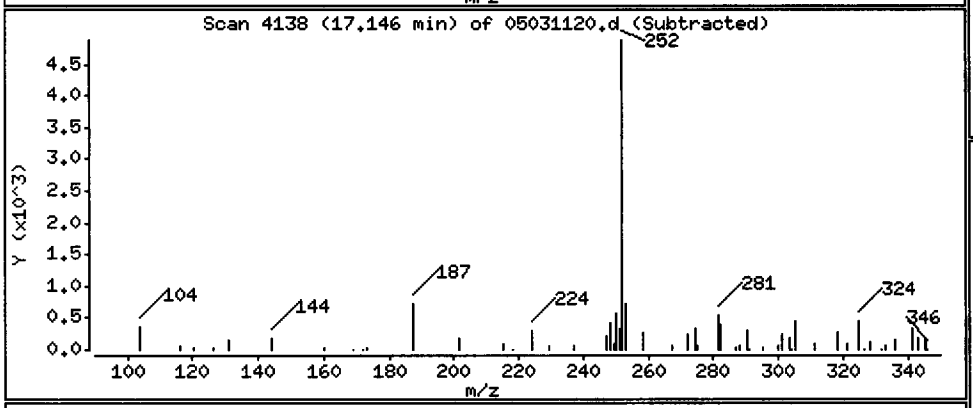
Column phase: ZB35

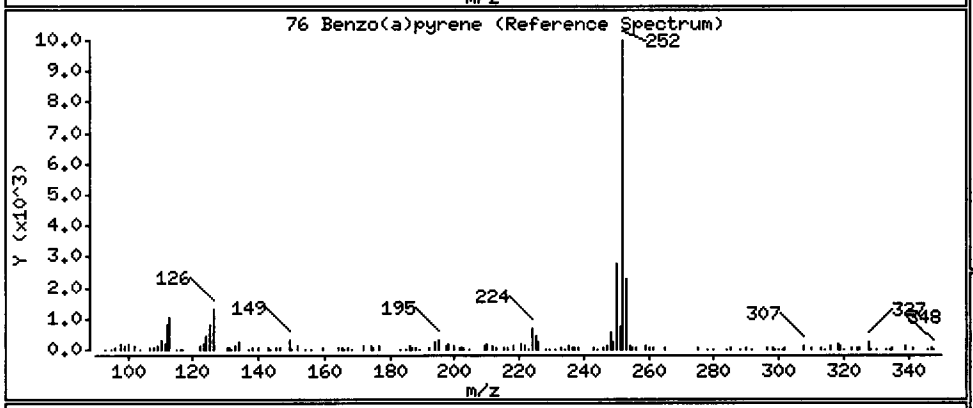
Column diameter: 0.32

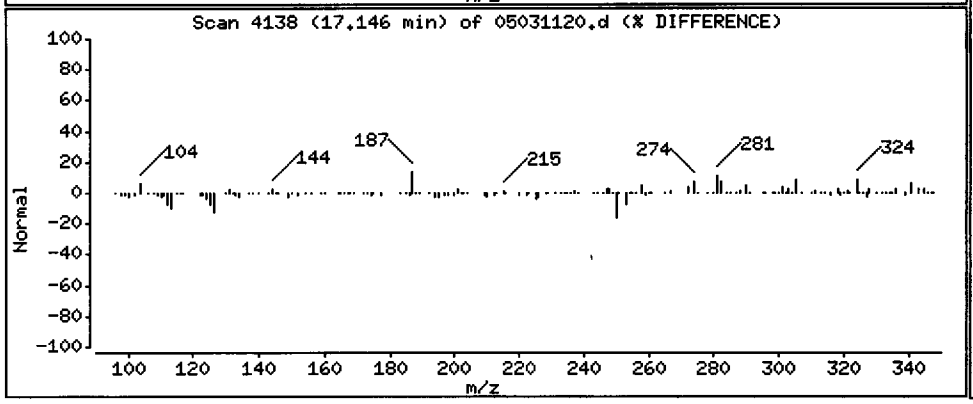
76 Benzo(a)pyrene

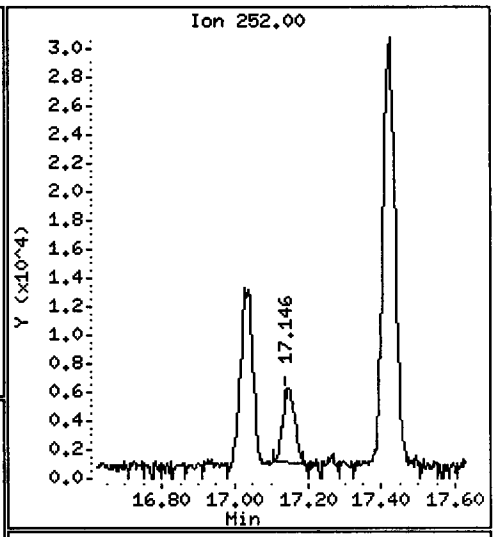
Concentration: 4.653 ug/kg

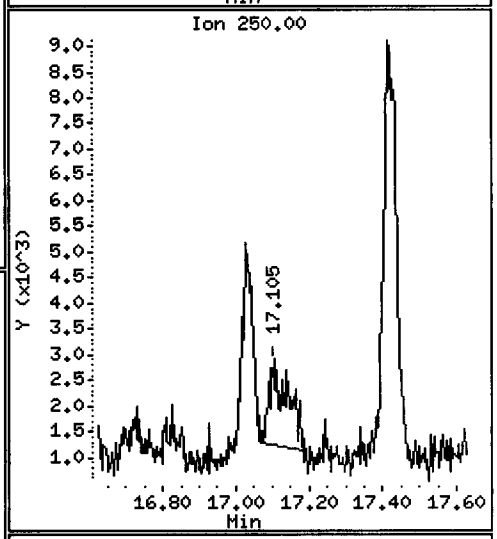


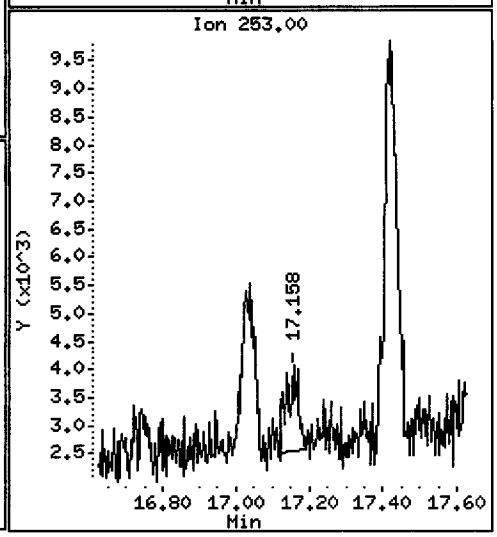












Data File: /chem3/nt4.i/20110503.b/05031120.d

Date : 04-MAY-2011 00:57

Client ID: DMA-TP3-3-4-042011

Instrument: nt4.i

Sample Info: SS83N

Volume Injected (uL): 1.0

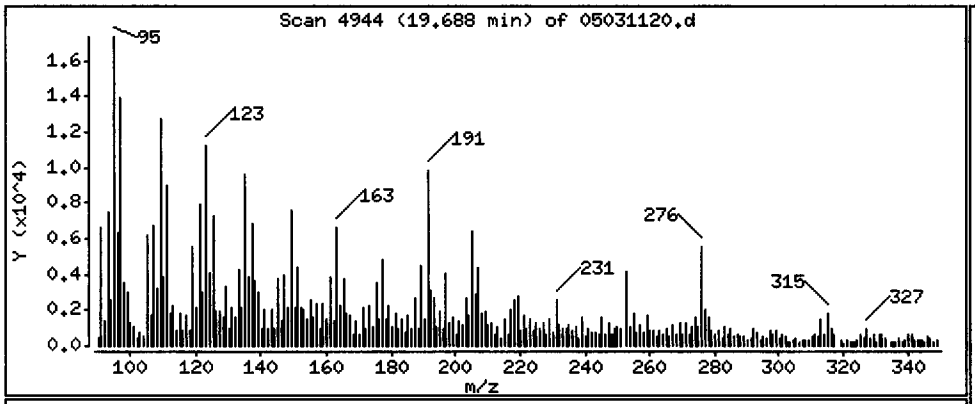
Operator: JZ

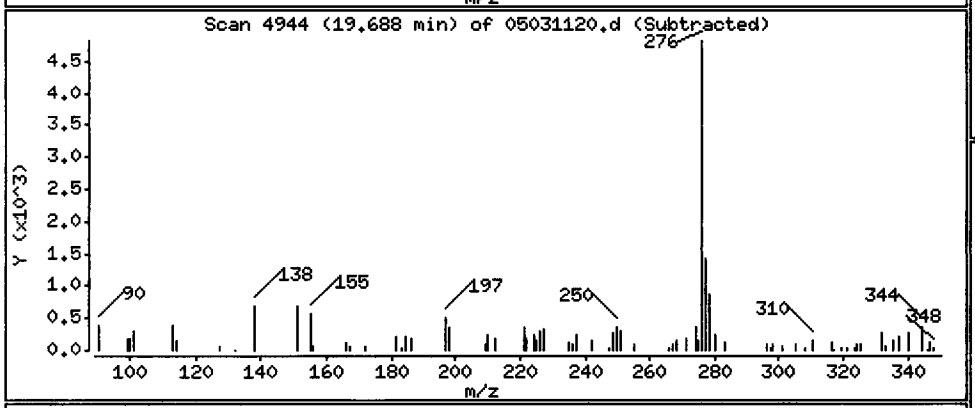
Column phase: ZB35

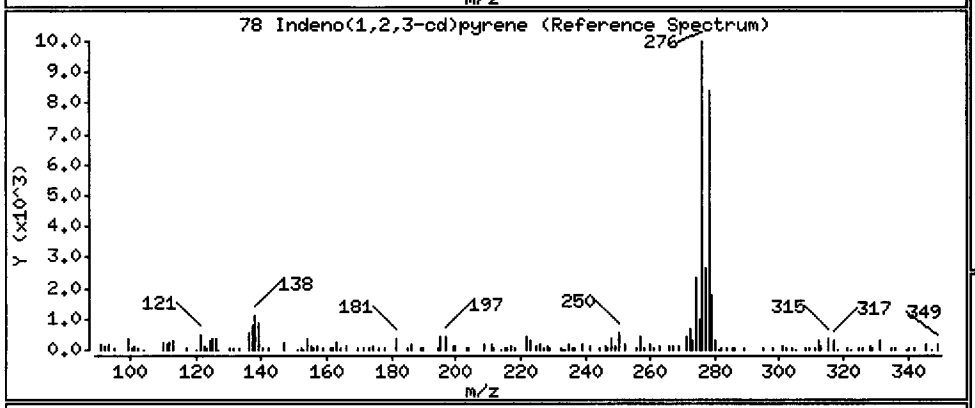
Column diameter: 0.32

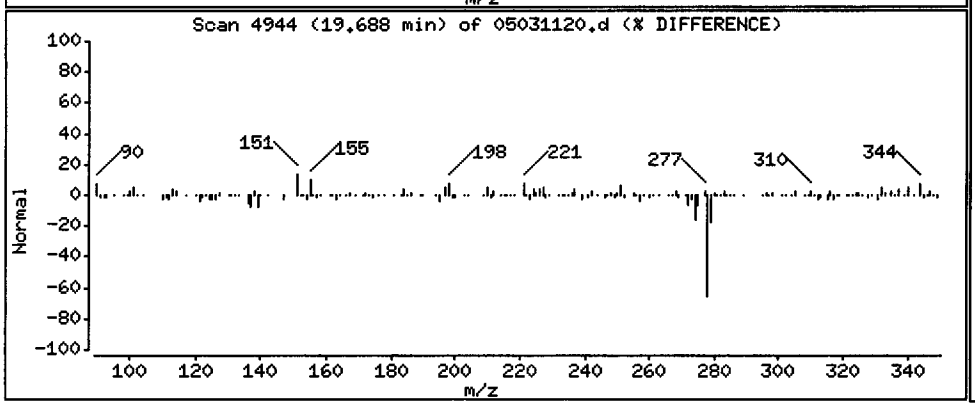
78 Indeno(1,2,3-cd)pyrene

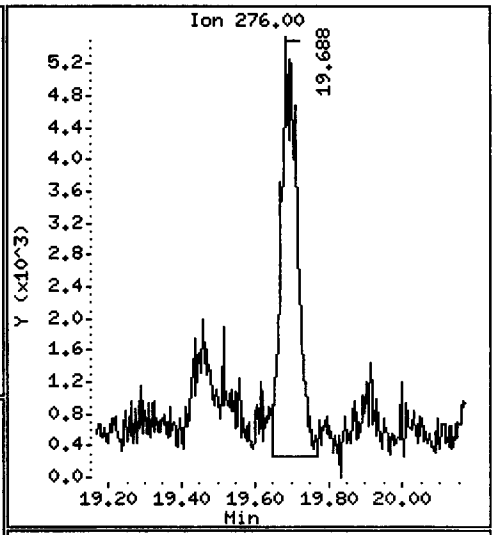
Concentration: 5.514 ug/kg

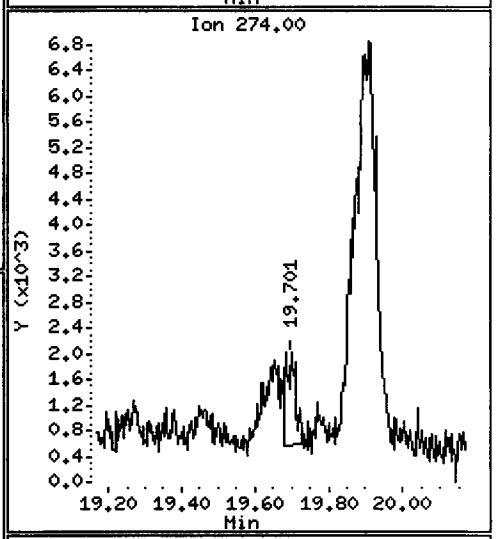


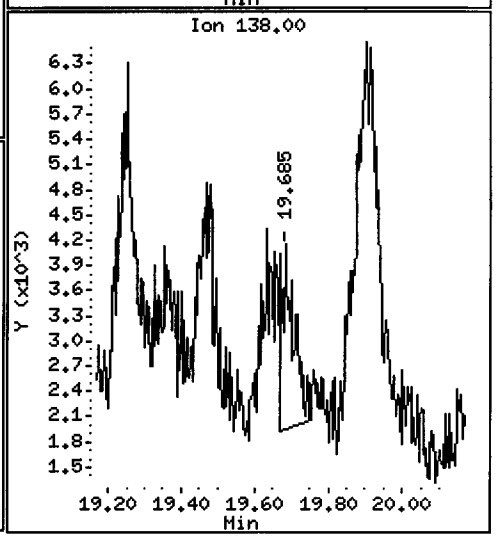












Data File: /chem3/nt4.i/20110503.b/05031120.d

Date : 04-MAY-2011 00:57

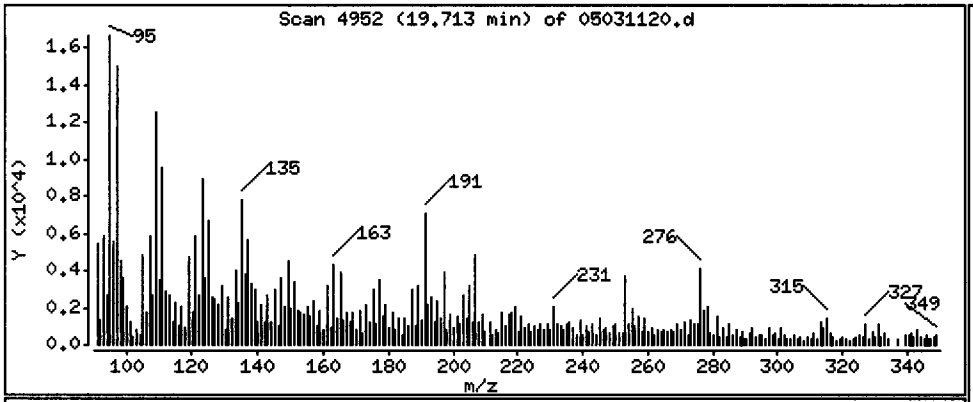
Client ID: DMA-TP3-3-4-042011 Instrument: nt4.i

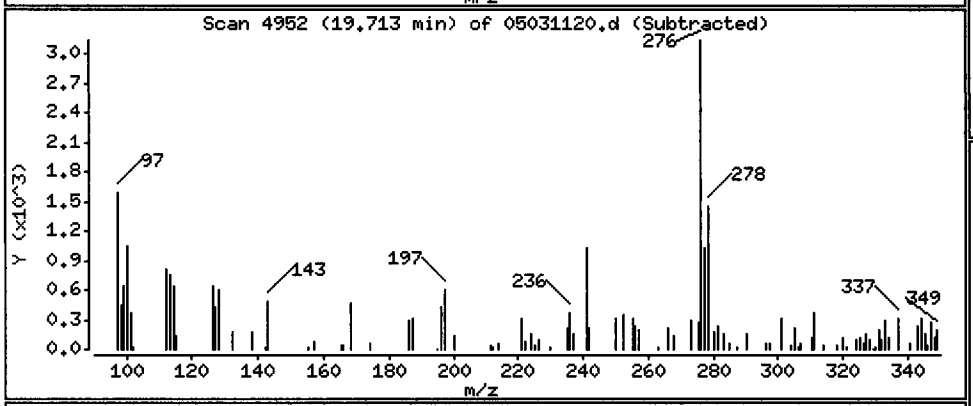
Sample Info: SS83N

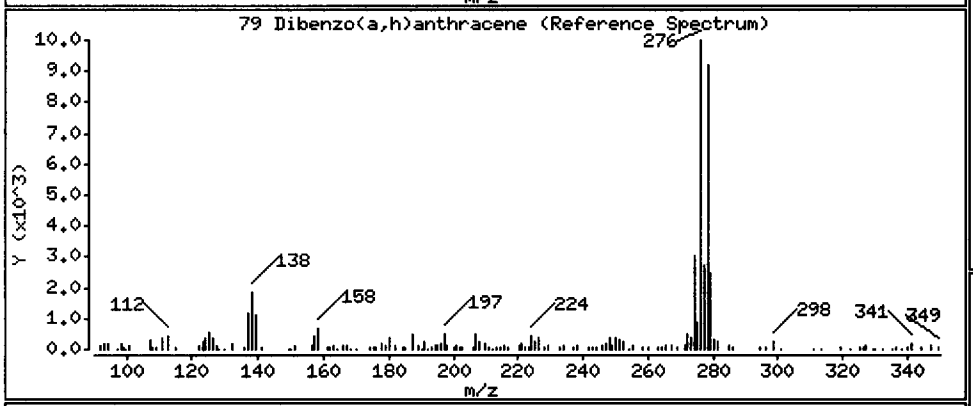
Volume Injected (uL): 1.0 Operator: JZ

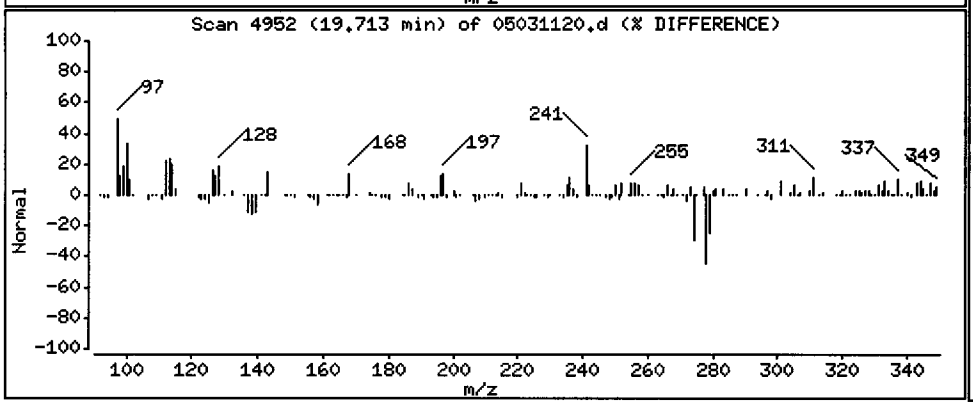
Column phase: ZB35 Column diameter: 0.32

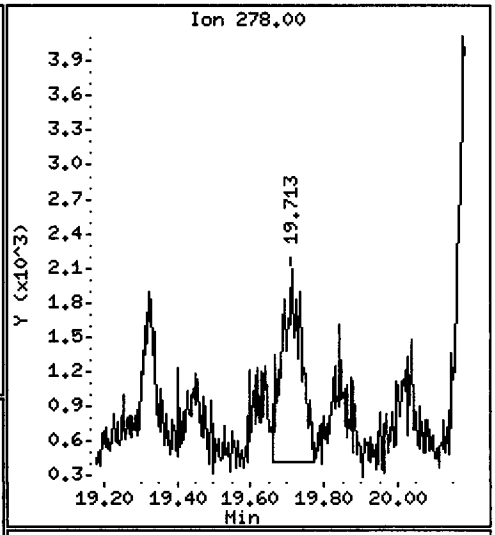
79 Dibenzo(a,h)anthracene Concentration: 2.528 ug/kg

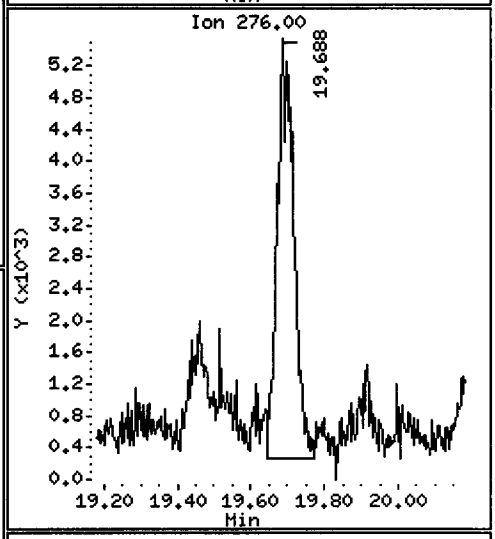


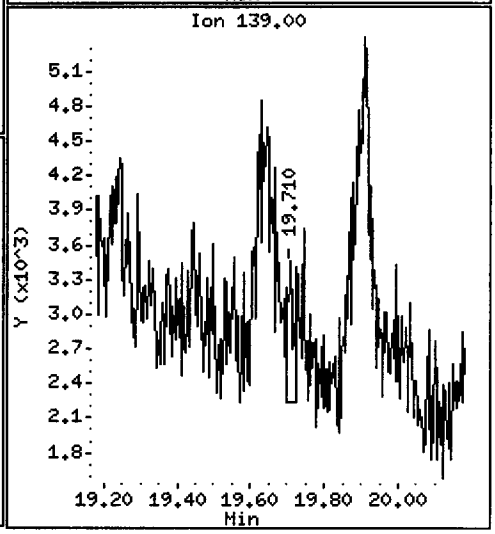












CO-ELUTION SUMMARY FOR FILE - 05031120.d

Lab ID: SS83N, Method: SIMPNA0421.m, Instrument: nt4.i, Date: 04-MAY-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20110503.b/05031121.d
Lab Smp Id: SS83O Client Smp ID: DMA-TP3-5-6-042011
Inj Date : 04-MAY-2011 01:24
Operator : JZ Inst ID: nt4.i
Smp Info : SS83O
Misc Info : 11-8725
Comment : 1ul Injection
Method : /chem3/nt4.i/20110503.b/SIMPNA0421.m
Meth Date : 04-May-2011 16:19 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

5/04/11

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	12.28000	Weight of sample extracted (g)
M	12.60000	% 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	4.797	4.800	(1.000)	274253	2.00000	
28 Naphthalene	128	Compound Not Detected.					
$ 190 2-Methylnaphthalene-d10	152	5.535	5.539	(1.154)	134496	1.75457	81.74
32 2-Methylnaphthalene	141	Compound Not Detected.					
105 1-methylnaphthalene	141	Compound Not Detected.					
40 Acenaphthylene	152	Compound Not Detected.					
* 42 Acenaphthene-d10	164	7.046	7.046	(1.000)	160074	2.00000	
44 Acenaphthene	153	Compound Not Detected.					
46 Dibenzofuran	168	Compound Not Detected.					
49 Fluorene	166	Compound Not Detected.					
* 59 Phenanthrene-d10	188	8.992	8.993	(1.000)	272916	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	13.677	13.671	(1.000)	282901	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	17.333	17.330	(1.000)	242471	2.00000	
78	Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
$ 191	Dibenzo(a,h)anthracene-d14	292	19.601	19.595	(1.131)	223847	2.23161	104.0
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: 05031121.d
Lab Smp Id: SS830
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20110503.b/SIMPNA0421.m
Misc Info: 11-8725

Calibration Date: 03-MAY-2011
Calibration Time: 16:33
Client Smp ID: DMA-TP3-5-6-0420
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	274253	-0.65
42 Acenaphthene-d10	158527	79264	317054	160074	0.98
59 Phenanthrene-d10	277528	138764	555056	272916	-1.66
69 Chrysene-d12	304115	152058	608230	282901	-6.98
77 Perylene-d12	257833	128916	515666	242471	-5.96

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	4.80	4.30	5.30	4.80	-0.07
42 Acenaphthene-d10	7.05	6.55	7.55	7.05	0.00
59 Phenanthrene-d10	8.99	8.49	9.49	8.99	0.00
69 Chrysene-d12	13.67	13.17	14.17	13.68	0.04
77 Perylene-d12	17.33	16.83	17.83	17.33	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: SS83O
Level: LOW
Data Type: MS DATA
SpikeList File: pnalcss.spk
Sublist File: pnax.sub
Method File: /chem3/nt4.i/20110503.b/SIMPNA0421.m
Misc Info: 11-8725

Client SDG: SS83
Fraction: SV
Client Smp ID: DMA-TP3-5-6-042011
Operator: JZ
SampleType: SAMPLE
Quant Type: ISTD

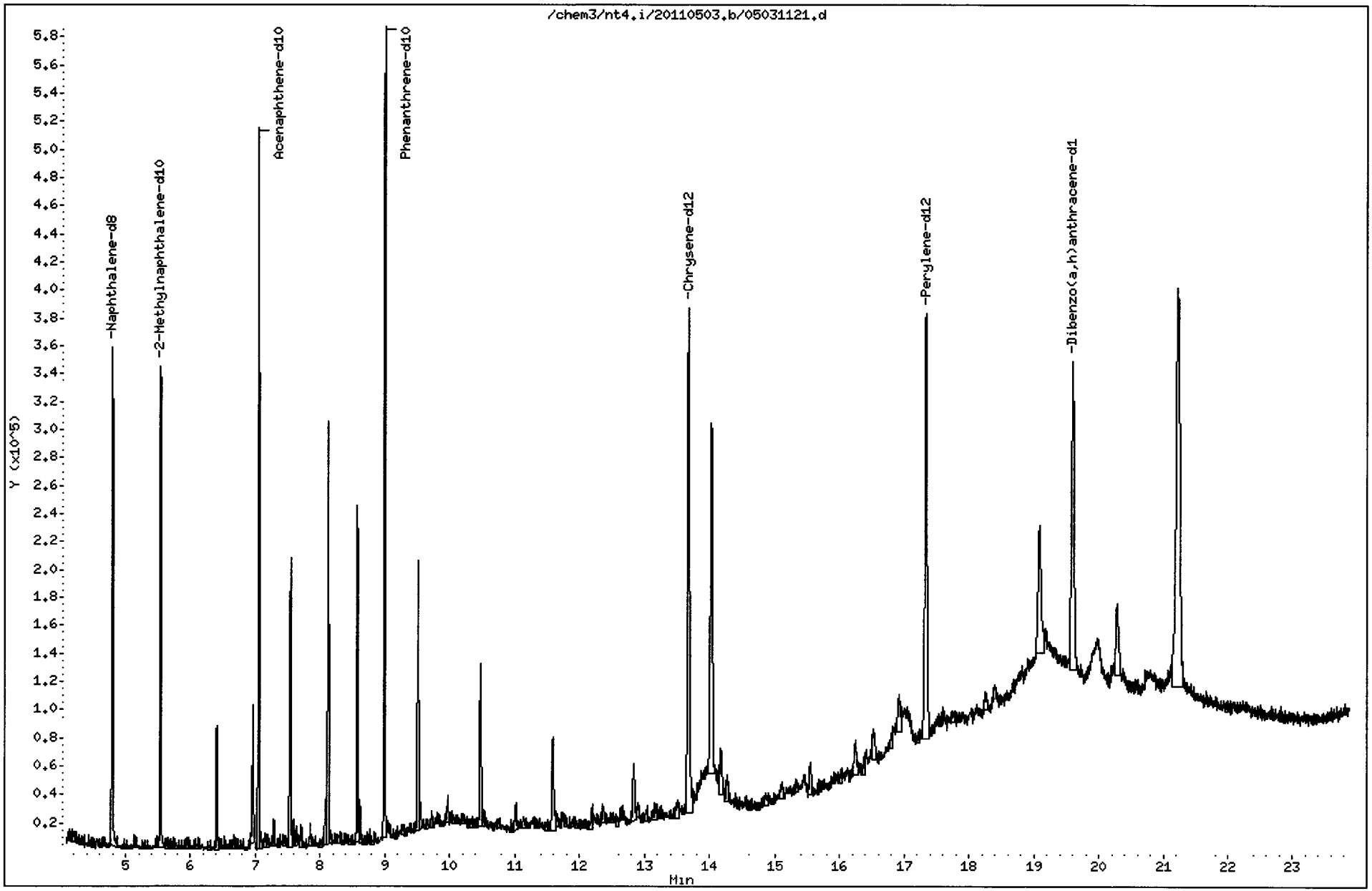
SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	139.8	81.74	58.49	34-100
$ 191 Dibenzo(a,h)anthra	139.8	104.0	74.39	10-117

Data File: /chem3/nt4.i/20110503.b/05031121.d
Date : 04-MAY-2011 01:24
Client ID: DMA-TP3-5-6-042011
Sample Info: SS830
Volume Injected (uL): 1.0
Column phase: ZB35

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

871

SS83 : 66668



CO-ELUTION SUMMARY FOR FILE - 05031121.d

Lab ID: SS83O, Method: SIMPNA0421.m, Instrument: nt4.i, Date: 04-MAY-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20110503.b/05031122.d
Lab Smp Id: SS83OMS Client Smp ID: DMA-TP3-5-6-042 MS
Inj Date : 04-MAY-2011 01:52
Operator : JZ Inst ID: nt4.i
Smp Info : SS83OMS
Misc Info : 11-8725
Comment : 1ul Injection
Method : /chem3/nt4.i/20110503.b/SIMPNA0421.m
Meth Date : 04-May-2011 15:58 jianqing Quant Type: ISTD
Cal Date : 21-APR-2011 22:25 Cal File: 04211107.d
Als bottle: 22 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

05/04/11

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	12.47000	Weight of sample extracted (g)
M	12.60000	% 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	4.794	4.800	(1.000)	270585	2.00000	
28 Naphthalene	128	4.823	4.826	(1.006)	232702	1.90778	87.52
$ 190 2-Methylnaphthalene-d10	152	5.536	5.539	(1.155)	149134	1.97190	90.46
32 2-Methylnaphthalene	141	5.580	5.583	(1.164)	131962	1.92775	88.44
105 1-methylnaphthalene	141	5.772	5.775	(1.204)	139457	1.96018	89.93
40 Acenaphthylene	152	6.908	6.908	(0.980)	257849	2.02342	92.83
* 42 Acenaphthene-d10	164	7.047	7.046	(1.000)	156375	2.00000	
44 Acenaphthene	153	7.094	7.094	(1.007)	155628	1.98626	91.12
46 Dibenzofuran	168	7.239	7.239	(1.027)	226976	2.11755	97.15
49 Fluorene	166	7.697	7.696	(1.092)	193152	2.10005	96.34
* 59 Phenanthrene-d10	188	8.993	8.993	(1.000)	270564	2.00000	
60 Phenanthrene	178	9.024	9.024	(1.004)	307863	2.32509	106.7
61 Anthracene	178	9.056	9.059	(1.007)	297674	2.16906	99.51
64 Fluoranthene	202	10.709	10.705	(1.191)	353279	2.41547	110.8
65 Pyrene	202	11.176	11.175	(0.817)	364682	2.55927	117.4

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
68 Benzo(a)anthracene	228	13.561	13.557	(0.992)	329787	2.49508	114.5
* 69 Chrysene-d12	240	13.674	13.671	(1.000)	283383	2.00000	
71 Chrysene	228	13.740	13.743	(1.005)	318134	2.48383	113.9
74 Benzo(b)fluoranthene	252	16.179	16.172	(0.933)	330764	2.52630	115.9
75 Benzo(k)fluoranthene	252	16.235	16.229	(0.936)	344299	2.55532	117.2
188 Benzo(j)fluoranthene	252	Compound Not Detected.					
76 Benzo(a)pyrene	252	17.131	17.125	(0.988)	290730	2.48168	113.9
* 77 Perylene-d12	264	17.340	17.330	(1.000)	241320	2.00000	
78 Indeno(1,2,3-cd)pyrene	276	19.680	19.667	(1.135)	303099	2.19917	100.9
$ 191 Dibenzo(a,h)anthracene-d14	292	19.604	19.595	(1.131)	224608	2.24987	103.2
79 Dibenzo(a,h)anthracene	278	19.690	19.680	(1.136)	256217	2.29250	105.2
80 Benzo(g,h,i)perylene	276	20.516	20.503	(1.183)	245837	2.08835	95.81
99 Perylene	252	17.403	17.399	(1.004)	331342	3.33511	153.0

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 05031122.d
Lab Smp Id: SS83OMS
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20110503.b/SIMPNA0421.m
Misc Info: 11-8725

Calibration Date: 03-MAY-2011
Calibration Time: 16:33
Client Smp ID: DMA-TP3-5-6-042
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	270585	-1.97
42 Acenaphthene-d10	158527	79264	317054	156375	-1.36
59 Phenanthrene-d10	277528	138764	555056	270564	-2.51
69 Chrysene-d12	304115	152058	608230	283383	-6.82
77 Perylene-d12	257833	128916	515666	241320	-6.40

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	4.80	4.30	5.30	4.79	-0.12
42 Acenaphthene-d10	7.05	6.55	7.55	7.05	0.00
59 Phenanthrene-d10	8.99	8.49	9.49	8.99	0.00
69 Chrysene-d12	13.67	13.17	14.17	13.67	0.03
77 Perylene-d12	17.33	16.83	17.83	17.34	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 Snid
Sample Matrix: SOLID
Lab Smp Id: SS83OMS
Level: LOW
Data Type: MS DATA
SpikeList File: pnalcss.spk
Sublist File: pnax.sub
Method File: /chem3/nt4.i/20110503.b/SIMPNA0421.m
Misc Info: 11-8725

Client SDG: SS83
Fraction: SV
Client Smp ID: DMA-TP3-5-6-042 MS
Operator: JZ
SampleType: MS
Quant Type: ISTD

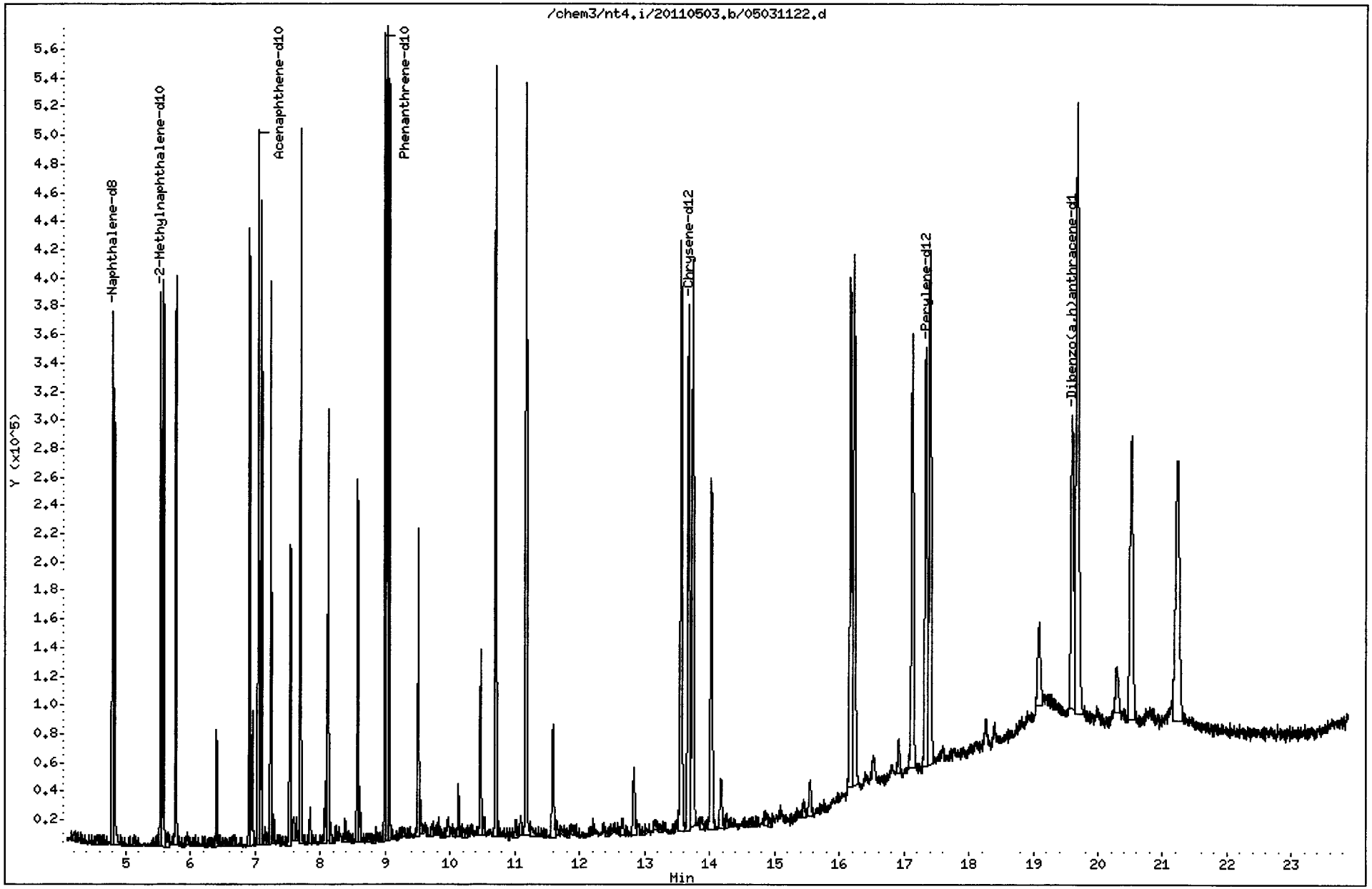
SPIKE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
28 Naphthalene	137.6	87.52	63.59	37-100
32 2-Methylnaphthalen	137.6	88.44	64.26	37-100
105 1-methylnaphthalen	137.6	89.93	65.34	30-160
40 Acenaphthylene	137.6	92.83	67.45	35-100
44 Acenaphthene	137.6	91.12	66.21	39-100
46 Dibenzofuran	137.6	97.15	70.58	39-100
49 Fluorene	137.6	96.34	70.00	42-100
60 Phenanthrene	137.6	106.7	77.50	47-100
61 Anthracene	137.6	99.51	72.30	41-106
64 Fluoranthene	137.6	110.8	80.52	52-109
65 Pyrene	137.6	117.4	85.31	47-111
68 Benzo(a)anthracene	137.6	114.5	83.17	47-114
71 Chrysene	137.6	113.9	82.79	51-106
74 Benzo(b)fluoranthe	137.6	115.9	84.21	30-160
75 Benzo(k)fluoranthe	137.6	117.2	85.18	30-160
76 Benzo(a)pyrene	137.6	113.9	82.72	44-111
78 Indeno(1,2,3-cd)py	137.6	100.9	73.31	41-114
79 Dibenzo(a,h)anthra	137.6	105.2	76.42	42-118
80 Benzo(g,h,i)peryle	137.6	95.81	69.61	37-115
99 Perylene	137.6	153.0	111.17	30-160

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	137.6	90.46	65.73	34-100
$ 191 Dibenzo(a,h)anthra	137.6	103.2	75.00	10-117

Data File: /chem3/nt4.i/20110503.b/05031122.d
Date : 04-MAY-2011 01:52
Client ID: DMA-TP3-5-6-042 MS
Sample Info: SS830MS
Volume Injected (uL): 1.0
Column phase: ZB35

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

877
SS83:066714



CO-ELUTION SUMMARY FOR FILE - 05031122.d

Lab ID: SS83OMS, Method: SIMPNA0421.m, Instrument: nt4.i, Date: 04-MAY-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20110503.b/05031123.d
Lab Smp Id: SS83OMSD Client Smp ID: DMA-TP3-5-6-042 MSD
Inj Date : 04-MAY-2011 02:20
Operator : JZ Inst ID: nt4.i
Smp Info : SS83OMSD
Misc Info : 11-8725
Comment : 1ul Injection
Method : /chem3/nt4.i/20110503.b/SIMPNA0421.m
Meth Date : 04-May-2011 15:58 jianqing Quant Type: ISTD
Cal Date : 21-APR-2011 22:25 Cal File: 04211107.d
Als bottle: 23 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

05/04/11

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	12.43000	Weight of sample extracted (g)
M	12.60000	% 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	4.794	4.800	(1.000)	263739	2.00000	
28 Naphthalene	128	4.823	4.826	(1.006)	241439	2.03079	93.47
$ 190 2-Methylnaphthalene-d10	152	5.536	5.539	(1.155)	152604	2.07016	95.28
32 2-Methylnaphthalene	141	5.580	5.583	(1.164)	138680	2.07848	95.66
105 1-methylnaphthalene	141	5.772	5.775	(1.204)	141662	2.04286	94.02
40 Acenaphthylene	152	6.908	6.908	(0.980)	265619	2.10235	96.76
* 42 Acenaphthene-d10	164	7.047	7.046	(1.000)	155039	2.00000	
44 Acenaphthene	153	7.094	7.094	(1.007)	167730	2.15916	99.37
46 Dibenzofuran	168	7.239	7.239	(1.027)	242186	2.27892	104.9
49 Fluorene	166	7.696	7.696	(1.092)	213877	2.34542	107.9
* 59 Phenanthrene-d10	188	8.993	8.993	(1.000)	262291	2.00000	
60 Phenanthrene	178	9.024	9.024	(1.004)	350061	2.72718	125.5
61 Anthracene	178	9.056	9.059	(1.007)	318183	2.39163	110.1
64 Fluoranthene	202	10.706	10.705	(1.190)	373673	2.63549	121.3
65 Pyrene	202	11.176	11.175	(0.817)	377526	2.67106	122.9

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
	68 Benzo(a)anthracene	228	13.557	13.557	(0.991)	342107	2.60944	120.1
*	69 Chrysene-d12	240	13.674	13.671	(1.000)	281086	2.00000	
	71 Chrysene	228	13.740	13.743	(1.005)	332992	2.62108	120.6
	74 Benzo(b)fluoranthene	252	16.179	16.172	(0.933)	345613	2.62560	120.8
	75 Benzo(k)fluoranthene	252	16.229	16.229	(0.936)	349766	2.58202	118.8
	188 Benzo(j)fluoranthene	252	Compound Not Detected.					
	76 Benzo(a)pyrene	252	17.131	17.125	(0.988)	299118	2.53963	116.9
*	77 Perylene-d12	264	17.336	17.330	(1.000)	242617	2.00000	
	78 Indeno(1,2,3-cd)pyrene	276	19.674	19.667	(1.135)	322547	2.32777	107.1
$	191 Dibenzo(a,h)anthracene-d14	292	19.598	19.595	(1.130)	233119	2.32264	106.9
	79 Dibenzo(a,h)anthracene	278	19.683	19.680	(1.135)	268360	2.38832	109.9
	80 Benzo(g,h,i)perylene	276	20.513	20.503	(1.183)	261665	2.21092	101.8
	99 Perylene	252	17.406	17.399	(1.004)	339302	3.39698	156.3

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 05031123.d
Lab Smp Id: SS83OMSD
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20110503.b/SIMPNA0421.m
Misc Info: 11-8725

Calibration Date: 03-MAY-2011
Calibration Time: 16:33
Client Smp ID: DMA-TP3-5-6-042
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	263739	-4.45
42 Acenaphthene-d10	158527	79264	317054	155039	-2.20
59 Phenanthrene-d10	277528	138764	555056	262291	-5.49
69 Chrysene-d12	304115	152058	608230	281086	-7.57
77 Perylene-d12	257833	128916	515666	242617	-5.90

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	4.80	4.30	5.30	4.79	-0.13
42 Acenaphthene-d10	7.05	6.55	7.55	7.05	0.00
59 Phenanthrene-d10	8.99	8.49	9.49	8.99	0.00
69 Chrysene-d12	13.67	13.17	14.17	13.67	0.02
77 Perylene-d12	17.33	16.83	17.83	17.34	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 Snid
Sample Matrix: SOLID
Lab Smp Id: SS83OMSD
Level: LOW
Data Type: MS DATA
SpikeList File: pnalcss.spk
Sublist File: pnax.sub
Method File: /chem3/nt4.i/20110503.b/SIMPNA0421.m
Misc Info: 11-8725

Client SDG: SS83
Fraction: SV
Client Smp ID: DMA-TP3-5-6-042 MSD
Operator: JZ
SampleType: MS
Quant Type: ISTD

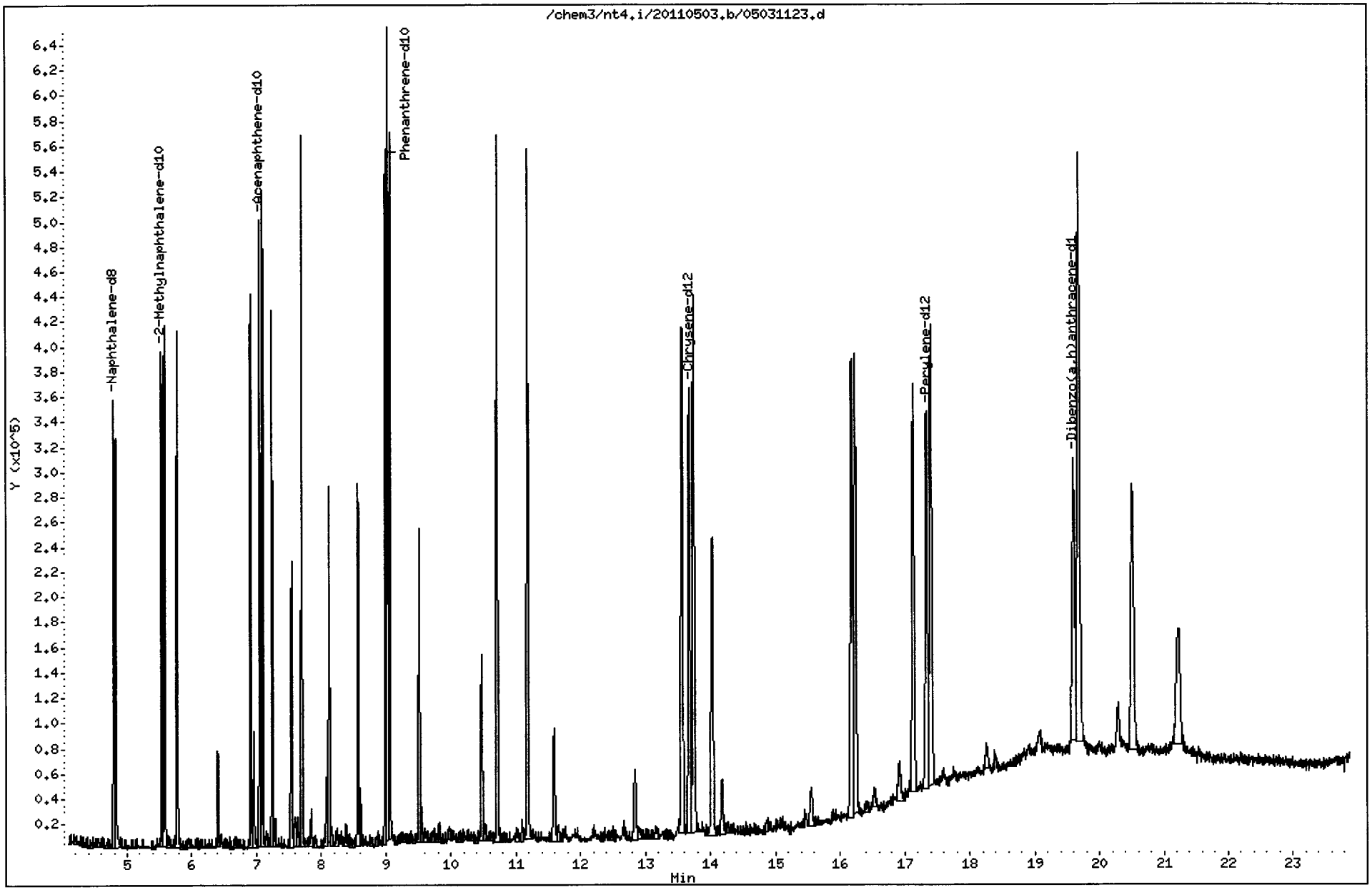
SPIKE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
28 Naphthalene	138.1	93.47	67.69	37-100
32 2-Methylnaphthalen	138.1	95.66	69.28	37-100
105 1-methylnaphthalen	138.1	94.02	68.10	30-160
40 Acenaphthylene	138.1	96.76	70.08	35-100
44 Acenaphthene	138.1	99.37	71.97	39-100
46 Dibenzofuran	138.1	104.9	75.96	39-100
49 Fluorene	138.1	107.9	78.18	42-100
60 Phenanthrene	138.1	125.5	90.91	47-100
61 Anthracene	138.1	110.1	79.72	41-106
64 Fluoranthene	138.1	121.3	87.85	52-109
65 Pyrene	138.1	122.9	89.04	47-111
68 Benzo(a)anthracene	138.1	120.1	86.98	47-114
71 Chrysene	138.1	120.6	87.37	51-106
74 Benzo(b)fluoranthe	138.1	120.8	87.52	30-160
75 Benzo(k)fluoranthe	138.1	118.8	86.07	30-160
76 Benzo(a)pyrene	138.1	116.9	84.65	44-111
78 Indeno(1,2,3-cd)py	138.1	107.1	77.59	41-114
79 Dibenzo(a,h)anthra	138.1	109.9	79.61	42-118
80 Benzo(g,h,i)peryle	138.1	101.8	73.70	37-115
99 Perylene	138.1	156.3	113.23	30-160

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	138.1	95.28	69.01	34-100
$ 191 Dibenzo(a,h)anthra	138.1	106.9	77.42	10-117

Data File: /chem3/nt4.i/20110503.b/05031123.d
Date : 04-MAY-2011 02:20
Client ID: DMA-TP3-5-6-042 MSD
Sample Info: SS830MSD
Volume Injected (uL): 1.0
Column phase: ZB35

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

883
SS830MSD



CO-ELUTION SUMMARY FOR FILE - 05031123.d

Lab ID: SS83OMSD, Method: SIMPNA0421.m, Instrument: nt4.i, Date: 04-MAY-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

PCP/Chlorophenols Raw Data
Extraction Bench Sheets and Notes

ARI Job ID: SS83

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Benchsheet

8041 PCP - Soil / Sediment
Sonication (3550C) (SOP # 3304S)

Preparation Test PCP # 3

ARI Job No(s) SS 83

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

Bottle #	Extraction Requirements	Verify Client ID	Volume Extracted (wet wt)	Sonic Horn ID + Check	KD Exchange To Hexane (X 2)	Turbo Vap (1 2 3)	Volume to Lab	Derivitize	Final Effective Volume	Comments
	SS83 MBS	Date 5-2-11	10.00g	1			10mL	400µL Surr 1600µL Drv. Hex.	25mL	
	SBS	↓	↓	2			↓		↓	
	SBSdup	↓	↓	3			↓		↓	
	QLS	↓	↓	4			↓		↓	
8	A	verified	10.18	5						
	B		10.40	6						
	C		10.21	7						
	D		10.06	8						
	E		10.02	9						
	F		10.15	10						
	G		10.08	1						
	H		10.13	2						
	I		10.18	3						
	J		10.14	4						
	K		10.18	5						
	L		10.27	6						
	M		10.08	7						
	N		10.12	8						
	O		10.15	a						
	OMS		10.29	10						
	OMSD		10.20	1						
Analyst/Date		AC 5-2-11		AC 5-5-11	RP 5/16/11	SP 5/6/11		AR 5/6/2011	SP 5/6/11	

Standard	Standard ID	Volume	Expiration Date	Analyst	Witness
Surrogate	F 1791-3	50µL 12.5	12/9/11	AC	SP
Spike	6 1791-5	50µL 12.5/12.5	12/10/11	AC	SP
QLS Spike	16	25µL	12/10/11	AC	SP
Extraction Time: 1305	Balance ID: 2175452Ø	Derivitized by: AR 5/6/2011	Diazald ID:		

SPECIAL INSTRUCTIONS: 1. Weigh into 100mL beakers. 2. Use neutral sulfate to dry samples.

3. Acidify all with ¼ pipet conc. Sulfuric Acid. 4. Add surr/spike. 5. Leave in DCM overnight. 6. Extract 3X DCM.

7. Pour directly into KD (NO Glasswool). 8. KD to 5mL at 80°. 9. Exchange (2 X with 20mL) Hexane at 100°.

10. *Note: Do not filter extracts: Centrifuge and leave particulates behind-Note on Analyst Notes.

11. Turbo Vap 12. Vial at 10mL into Herb Tubes using Hexane. 13. GC Analyst to Derivitize.

3835

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

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Organic Extractions Laboratory Analyst Notes

ARI Job No.: 5583 Client ID: Floyd Snider

Parameter: PCP Client Project: Lora Lake Parcel: DMA

Note problems, concerns, corrective actions	Analyst/Date
Screens: Soil/Sediment/Solid/Other:	
☒ **No Anomalies (standard soil/sediment)** A-e	WC 4/22/11
☐ **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=**	

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Organic Extractions Benchsheet

8041 PCP – Water
Separatory Funnel (3510C) (SOP # 3311S)

Preparation Test PCP # 1

In-House (0.25ppb)

ARI Job No(s) 5571, 5583, 5552

Batch set up by: JG

Bottle #	Extraction Requirements	Verify Client ID	Volume Extracted	KD Exchange To Hexane (X2)	Turbo Vap (1) 2 3	Volume to Lab	Derivitize	Final Effective Volume	Comments
	5571 MBW	Date 4-22-11	500mL			10mL		50mL	
	SBW	↓	↓			↓		↓	
	SBWDup.	↓	↓			↓		↓	
	QLS	↓	↓			↓		↓	
7	T	verified	500mL						
8	5583 P								
1	5552 A								
	B								
	C								
	D								
	E								
	F								
↓	G	↓	↓	↓	↓	↓		↓	
				YC	SP	SP			
Analyst/Date:		PD 4-22-11		4/22/11	4/27/11	4/27/11		SP 4/27/11	

Standard	Standard ID	Volume	Expiration Date	Analyst	Witness
Surrogate	F 1791-3	100µL 12.5	12/29/11	AR	PD
Spike	6 1791-5	100µL 12.5	25 12/19/11	AR	PD
QLS Spike	16	50µL	12/19/11	AR	PD
Extraction Time: 13:41			Derivitized by:		Diazald ID:

SPECIAL INSTRUCTIONS: 1. Add surr/spike. 2. Acidify all with 1:1 Sulfuric Acid 3. Extract 3X with 30mL DCM.

4. KD (NO Drying Column) at 80° to 5mL. 5. Exchange (2 X with 20mL) Hexane at 100°. 6. Turbo Vap.

7. Vial at 10mL into Herb tubes using Hexane. 8. GC Analyst to Derivitize.

A. Archive Y N
5552 only

2787

SS83 : 00885

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Organic Extractions Laboratory Analyst Notes

ARI Job No.: 5583 Client ID: Floyd Snider

Parameter: PCP Client Project: Lora Lake Parcel = DMA

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 P.	PD 4-22-11
☑ Turbid/Color=	
☐ Particulates=	
☐ Emulsions=	
☐ Other (Details)=	
☐ Other Notes/Comments=	

PD 4-22-11

PCP/Chlorophenols Raw Data
Initial Calibration

ARI Job ID: SS83