Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt12.i
Lab File ID: 04011102.d
Analysis Type:
Lab Sample ID: CC0401
Method: /chem1/nt12.i/20110401.b/SIMPNA0331.m

Injection Date: 01-APR-2011 15:16
Init. Cal. Date(s): 31-MAR-2011 31-MAR-2011
Init. Cal. Times: 20:27 22:47
Quant Type: ISTD

04/01/11

COMPOUND	RRF / AMOUNT	RF2	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
28 Naphthalene	0.96572	0.99248	0.010	2.77142	20.00000	Averaged
$ 190 2-Methylnaphthalene-d10	0.61149	0.59943	0.010	-1.97284	20.00000	Averaged
32 2-Methylnaphthalene	0.53666	0.53755	0.010	0.16608	20.00000	Averaged
105 1-methylnaphthalene	0.57111	0.56440	0.010	-1.17474	20.00000	Averaged
40 Acenaphthylene	1.75014	1.65924	0.010	-5.19385	20.00000	Averaged
44 Acenaphthene	1.09012	1.04028	0.010	-4.57195	20.00000	Averaged
46 Dibenzofuran	1.48211	1.43628	0.010	-3.09234	20.00000	Averaged
49 Fluorene	1.22035	1.20738	0.010	-1.06298	20.00000	Averaged
60 Phenanthrene	1.05554	1.06436	0.010	0.83613	20.00000	Averaged
61 Anthracene	1.05983	1.00991	0.010	-4.71001	20.00000	Averaged
64 Fluoranthene	1.14779	1.12978	0.010	-1.56914	20.00000	Averaged
65 Pyrene	1.07683	1.05931	0.010	-1.62731	20.00000	Averaged
68 Benzo(a)anthracene	0.96150	0.93615	0.010	-2.63646	20.00000	Averaged
71 Chrysene	0.93972	0.90677	0.010	-3.50649	20.00000	Averaged
74 Benzo(b)fluoranthene	1.12751	1.12869	0.010	0.10479	20.00000	Averaged
75 Benzo(k)fluoranthene	1.18273	1.06067	0.010	-10.32069	20.00000	Averaged
188 Benzo(j)fluoranthene	1.13014	1.06316	0.010	-5.92642	20.00000	Averaged
76 Benzo(a)pyrene	1.03519	1.01494	0.010	-1.95669	20.00000	Averaged
78 Indeno(1,2,3-cd)pyrene	1.25877	1.19563	0.010	-5.01654	20.00000	Averaged
$ 191 Dibenzo(a,h)anthracene-d14	0.93850	0.87938	0.010	-6.29954	20.00000	Averaged
79 Dibenzo(a,h)anthracene	1.02946	0.99587	0.010	-3.26314	20.00000	Averaged
80 Benzo(g,h,i)perylene	1.11645	1.04129	0.010	-6.73204	20.00000	Averaged
99 Perylene	0.87548	0.83708	0.010	-4.38603	20.00000	Averaged

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt12.i/20110401.b/04011102.d
Lab Smp Id: CC0401 Client Smp ID: CC0401
Inj Date : 01-APR-2011 15:16
Operator : JZ Inst ID: nt12.i
Smp Info : CC0401
Misc Info : 11-
Comment : 1ul Injection
Method : /chem1/nt12.i/20110401.b/SIMPNA0331.m
Meth Date : 01-Apr-2011 18:02 jianqing Quant Type: ISTD
Cal Date : 31-MAR-2011 22:47 Cal File: 03311107.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

04/01/11

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 27 Naphthalene-d8	136	4.851	4.851	(1.000)	499536	2.00000	
28 Naphthalene	128	4.879	4.879	(1.006)	619726	2.50000	2.569
$ 190 2-Methylnaphthalene-d10	152	5.586	5.586	(1.152)	374295	2.50000	2.451
32 2-Methylnaphthalene	141	5.630	5.630	(1.161)	335658	2.50000	2.504
105 1-methylnaphthalene	141	5.823	5.823	(1.200)	352422	2.50000	2.471
40 Acenaphthylene	152	6.952	6.952	(0.980)	611015	2.50000	2.370
* 42 Acenaphthene-d10	164	7.091	7.091	(1.000)	294599	2.00000	
44 Acenaphthene	153	7.139	7.139	(1.007)	383081	2.50000	2.386
46 Dibenzofuran	168	7.281	7.281	(1.027)	528908	2.50000	2.423
49 Fluorene	166	7.738	7.738	(1.091)	444617	2.50000	2.473
* 59 Phenanthrene-d10	188	9.029	9.029	(1.000)	482436	2.00000	
60 Phenanthrene	178	9.060	9.060	(1.003)	641860	2.50000	2.521
61 Anthracene	178	9.092	9.092	(1.007)	609023	2.50000	2.382
64 Fluoranthene	202	10.736	10.736	(1.189)	681309	2.50000	2.461
65 Pyrene	202	11.203	11.203	(0.819)	697057	2.50000	2.459
68 Benzo(a)anthracene	228	13.570	13.570	(0.992)	616016	2.50000	2.434
* 69 Chrysene-d12	240	13.683	13.683	(1.000)	526425	2.00000	
71 Chrysene	228	13.753	13.753	(1.005)	596684	2.50000	2.412
74 Benzo(b)fluoranthene	252	16.167	16.167	(0.933)	619485	2.50000	2.503
75 Benzo(k)fluoranthene	252	16.227	16.227	(0.937)	582152	2.50000	2.242
188 Benzo(j)fluoranthene	252	16.299	16.299	(0.941)	583521	2.50000	2.352
76 Benzo(a)pyrene	252	17.117	17.117	(0.988)	557054	2.50000	2.451
* 77 Perylene-d12	264	17.325	17.325	(1.000)	439084	2.00000	
78 Indeno(1,2,3-cd)pyrene	276	19.644	19.644	(1.134)	656226	2.50000	2.375
$ 191 Dibenzo(a,h)anthracene-d14	292	19.578	19.578	(1.130)	482652	2.50000	2.343
79 Dibenzo(a,h)anthracene	278	19.660	19.660	(1.135)	546587	2.50000	2.418
80 Benzo(g,h,i)perylene	276	20.471	20.471	(1.182)	571519	2.50000	2.332

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
99 Perylene	252	17.391	17.391	(1.004)	459437	2.50000	2.390

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt12.i
Lab File ID: 04011102.d
Lab Smp Id: CC0401
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem1/nt12.i/20110401.b/SIMPNA0331.m
Misc Info: 11-

Calibration Date: 01-APR-2011
Calibration Time: 15:16
Client Smp ID: CC0401
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

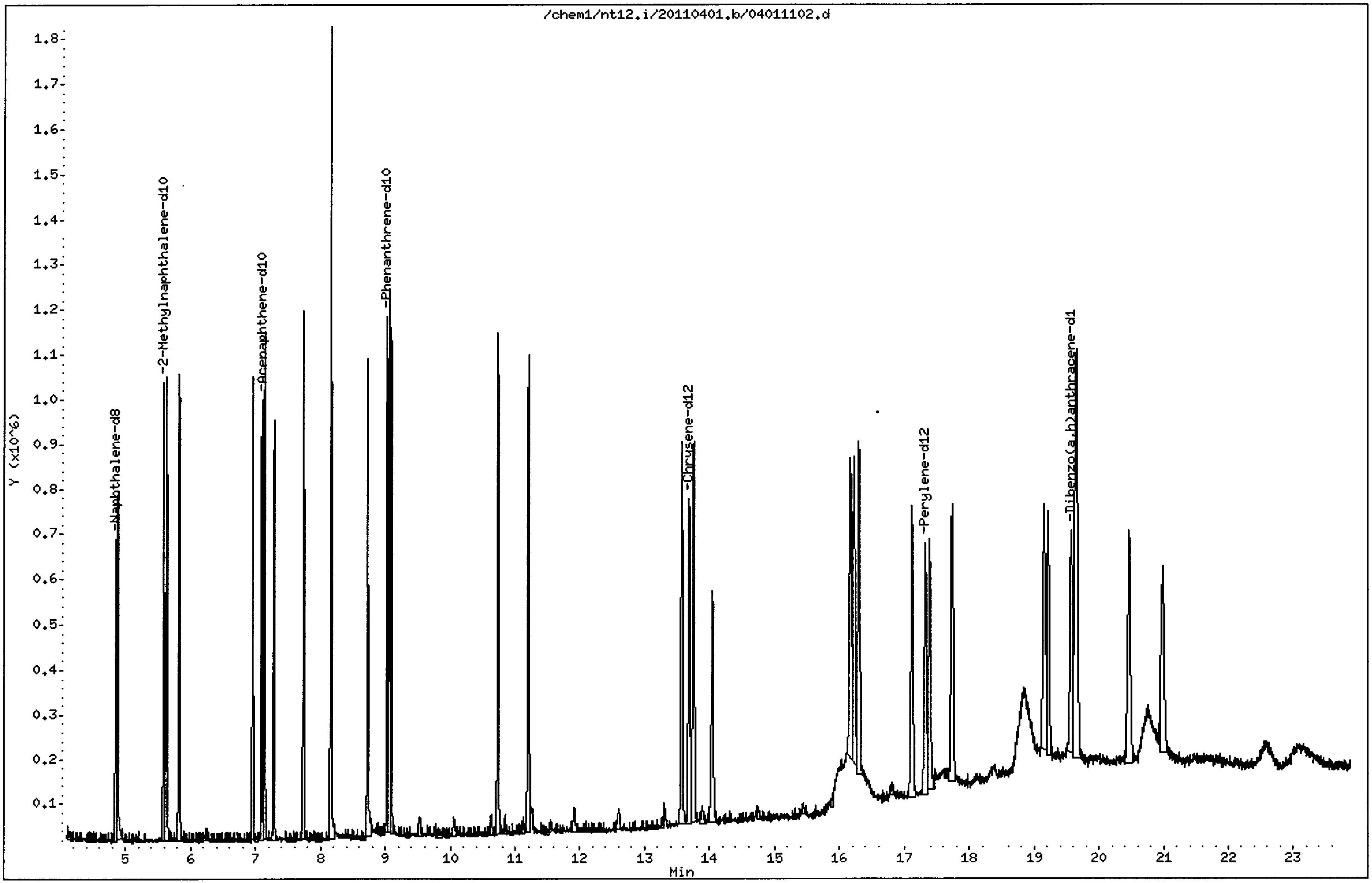
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	494112	247056	988224	499536	1.10
42 Acenaphthene-d10	280105	140052	560210	294599	5.17
59 Phenanthrene-d10	461353	230676	922706	482436	4.57
69 Chrysene-d12	503160	251580	1006320	526425	4.62
77 Perylene-d12	442215	221108	884430	439084	-0.71

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	4.85	4.35	5.35	4.85	0.00
42 Acenaphthene-d10	7.09	6.59	7.59	7.09	0.00
59 Phenanthrene-d10	9.03	8.53	9.53	9.03	0.00
69 Chrysene-d12	13.68	13.18	14.18	13.68	0.00
77 Perylene-d12	17.32	16.82	17.82	17.32	0.00

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

Data File: /chem1/nt12.i/20110401.b/04011102.d
Date : 01-APR-2011 15:16
Client ID: CC0401
Sample Info: CC0401
Column phase: ZB35

Instrument: nt12.i
Operator: JZ
Column diameter: 0.32



CO-ELUTION SUMMARY FOR FILE - 04011102.d

Lab ID: CC0401, Method: SIMPNA0331.m, Instrument: nt12.i, Date: 01-APR-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Data File: /chem1/nt12.i/20110401.b/tune.b/04011101.d

Date : 01-APR-2011 14:57

Client ID: DFTPP0401

Instrument: nt12.i

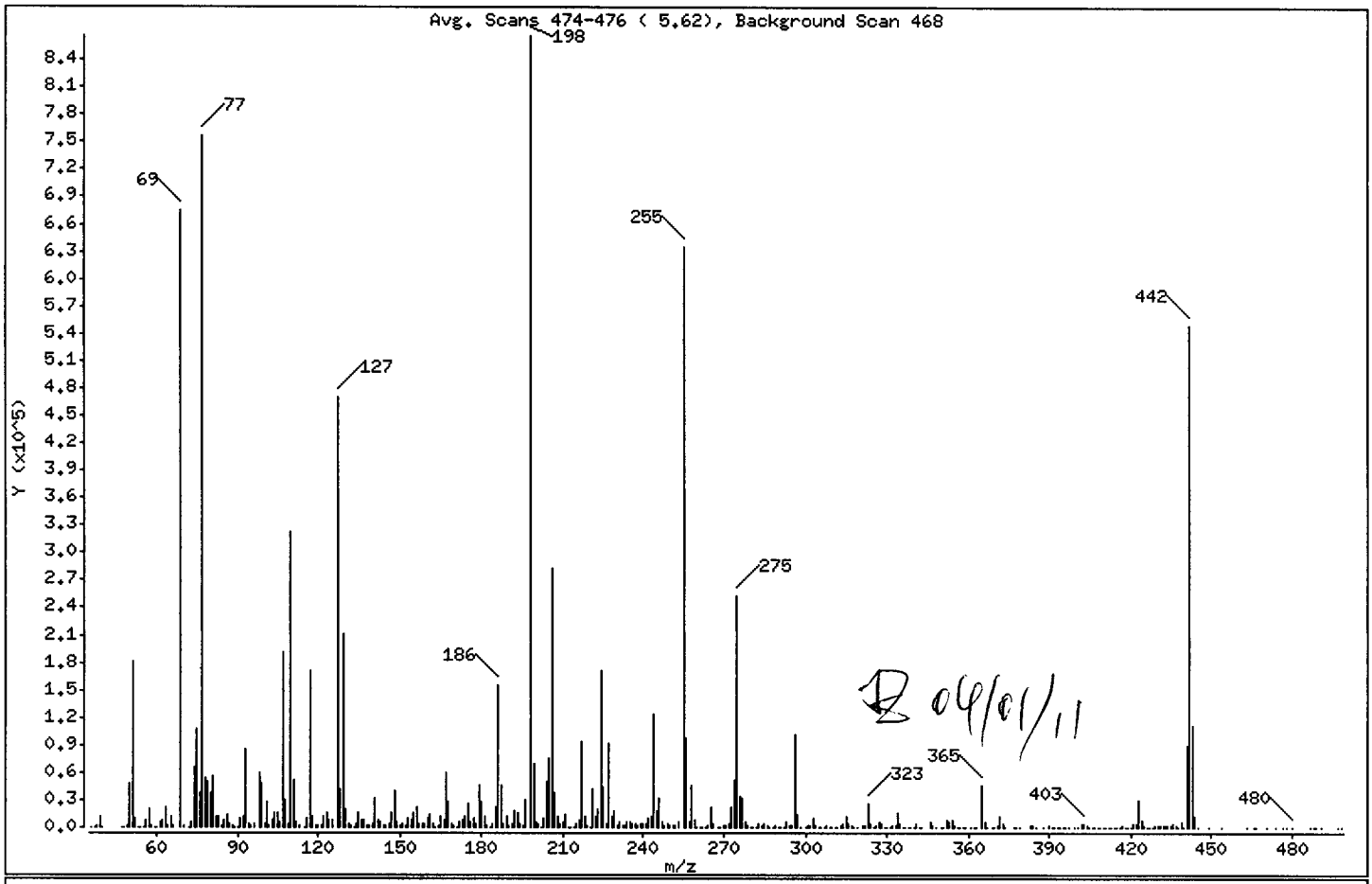
Sample Info: DFTPP0401

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	20.99
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	78.01
70	Less than 2.00% of mass 69	0.22 (0.28)
127	10.00 - 80.00% of mass 198	54.23
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	8.09
275	10.00 - 60.00% of mass 198	29.22
365	Greater than 1.00% of mass 198	5.20
441	0.01 - 24.00% of mass 442	10.29 (16.19)
442	50.00 - 200.00% of mass 198	63.54
443	15.00 - 24.00% of mass 442	12.83 (20.20)

Data File: /chem1/nt12.i/20110401.b/tune.b/04011101.d

Date : 01-APR-2011 14:57

Client ID: DFTPP0401

Instrument: nt12.i

Sample Info: DFTPP0401

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.32

Data File: 04011101.d
Spectrum: Avg. Scans 474-476 (5.62), Background Scan 468
Location of Maximum: 198.00
Number of points: 394

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	236	147.00	15969	247.00	6492	352.00	8091
37.00	289	148.00	39456	248.00	1714	353.00	6284
38.00	2772	149.00	6654	249.00	4771	354.00	7007
39.00	12194	150.00	2048	250.00	1244	355.00	2010
40.00	781	151.00	3846	251.00	1856	356.00	230
47.00	408	152.00	2714	252.00	2494	357.00	205
48.00	73	153.00	9485	253.00	5162	358.00	217
49.00	1458	154.00	7919	255.00	635520	359.00	348
50.00	48704	155.00	15245	256.00	97248	361.00	333
51.00	181824	156.00	22808	257.00	6724	362.00	369
52.00	9008	157.00	4008	258.00	45472	363.00	210
53.00	213	158.00	4743	259.00	7600	365.00	45080
54.00	421	159.00	3613	260.00	322	366.00	6859
55.00	931	160.00	9415	261.00	838	367.00	697
56.00	8089	161.00	13973	262.00	257	369.00	104
57.00	19784	162.00	3897	263.00	694	370.00	535
58.00	1243	163.00	252	264.00	1365	371.00	1631
59.00	94	164.00	1550	265.00	21888	372.00	11445
60.00	939	165.00	11493	266.00	3204	373.00	3928
61.00	6487	166.00	7989	268.00	487	374.00	404
62.00	7849	167.00	60608	269.00	278	377.00	423
63.00	21824	168.00	26952	270.00	1240	378.00	182
64.00	2295	169.00	4420	271.00	2286	379.00	114
65.00	11313	170.00	2187	272.00	3187	383.00	2959
66.00	1402	171.00	543	273.00	21080	384.00	1222
69.00	675712	172.00	5425	274.00	52192	385.00	251
70.00	1867	173.00	7522	275.00	253120	388.00	161
72.00	221	174.00	12754	276.00	34464	390.00	1399
73.00	5876	175.00	25632	277.00	31376	391.00	659
74.00	66632	176.00	5384	278.00	5656	392.00	524
75.00	106832	177.00	10487	279.00	1179	393.00	50
76.00	38336	178.00	4427	280.00	414	394.00	230
77.00	755904	179.00	45896	281.00	90	395.00	169
78.00	52944	180.00	27808	282.00	807	396.00	50
79.00	49376	181.00	12849	283.00	3313	397.00	365

Date : 01-APR-2011 14:57

Client ID: DFTPP0401 Instrument: nt12.i

Sample Info: DFTPP0401

Operator: JZ

Column phase: ZB-5msi Column diameter: 0.32

Data File: 04011101.d
Spectrum: Avg. Scans 474-476 (5.62), Background Scan 468
Location of Maximum: 198.00
Number of points: 394

m/z	Y	m/z	Y	m/z	Y	m/z	Y
80.00	38536	182.00	1942	284.00	1464	399.00	16
81.00	55624	183.00	354	285.00	4076	401.00	739
82.00	12448	184.00	3633	286.00	1002	402.00	3446
83.00	11891	185.00	21912	287.00	85	403.00	4768
84.00	1000	186.00	156160	288.00	603	404.00	2199
85.00	8568	187.00	45544	289.00	1660	405.00	353
86.00	13702	188.00	4350	290.00	675	406.00	304
87.00	4899	189.00	11859	291.00	697	407.00	78
88.00	2664	190.00	1697	292.00	841	408.00	175
89.00	701	191.00	3878	293.00	6353	409.00	170
90.00	613	192.00	17112	294.00	1929	410.00	271
91.00	10867	193.00	15599	295.00	2143	411.00	298
92.00	12585	194.00	3362	296.00	102104	412.00	327
93.00	85536	195.00	2514	297.00	13273	413.00	123
94.00	4717	196.00	30264	298.00	688	414.00	179
95.00	1208	198.00	866176	300.00	135	415.00	712
96.00	3780	199.00	70072	301.00	1671	416.00	315
98.00	60672	200.00	5236	302.00	1661	417.00	1018
99.00	47456	201.00	4296	303.00	10473	418.00	363
100.00	3833	202.00	613	304.00	2522	419.00	391
101.00	26960	203.00	10159	305.00	235	420.00	637
102.00	1667	204.00	48848	306.00	340	421.00	4660
103.00	8117	205.00	75240	307.00	104	422.00	4176
104.00	16148	206.00	283072	308.00	1251	423.00	29824
105.00	15410	207.00	37960	309.00	898	424.00	7004
106.00	5801	208.00	11752	310.00	671	425.00	1323
107.00	190848	209.00	4153	311.00	450	426.00	921
108.00	29048	210.00	6601	312.00	261	427.00	624
109.00	2990	211.00	13517	313.00	1027	428.00	979
110.00	322816	212.00	715	314.00	4796	429.00	2057
111.00	52184	213.00	561	315.00	12676	430.00	1814
112.00	6919	214.00	295	316.00	4488	431.00	2371
113.00	2293	215.00	3527	317.00	1372	432.00	1794
115.00	41	216.00	8750	318.00	267	433.00	2622
116.00	9798	217.00	94072	319.00	412	434.00	2153

Data File: /chem1/nt12.i/20110401.b/tune.b/04011101.d

Date : 01-APR-2011 14:57

Client ID: DFTPP0401

Instrument: nt12.i

Sample Info: DFTPP0401

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.32

Data File: 04011101.d

Spectrum: Avg. Scans 474-476 (5.62), Background Scan 468

Location of Maximum: 198.00

Number of points: 394

m/z	Y	m/z	Y	m/z	Y	m/z	Y
117.00	172096	218.00	11001	321.00	2886	435.00	2310
118.00	12907	219.00	1493	322.00	1854	436.00	3590
119.00	1896	220.00	346	323.00	24904	437.00	2913
120.00	1946	221.00	42600	324.00	4240	438.00	348
121.00	1397	222.00	12883	325.00	794	439.00	5323
122.00	12371	223.00	19152	326.00	1002	440.00	144
123.00	16335	224.00	171840	327.00	6470	441.00	89112
124.00	8797	225.00	43520	328.00	3228	442.00	550400
125.00	7133	226.00	4727	329.00	559	443.00	111160
127.00	469760	227.00	92552	330.00	135	444.00	11440
128.00	41280	228.00	12179	331.00	440	445.00	438
129.00	211008	229.00	17368	332.00	1956	449.00	150
130.00	19808	230.00	2545	333.00	2508	454.00	90
131.00	3381	231.00	5516	334.00	16600	463.00	121
132.00	1622	232.00	1476	335.00	4624	466.00	63
133.00	477	233.00	2416	336.00	699	467.00	57
134.00	4741	234.00	5389	337.00	61	471.00	85
135.00	15546	235.00	5944	338.00	89	474.00	71
136.00	7924	236.00	3939	339.00	368	477.00	142
137.00	8395	237.00	4863	340.00	402	478.00	69
138.00	1926	238.00	1352	341.00	3436	480.00	307
139.00	1126	239.00	3023	342.00	823	487.00	106
140.00	3152	240.00	3474	343.00	94	488.00	61
141.00	31176	241.00	4451	344.00	441	489.00	65
142.00	8852	242.00	9903	346.00	5814	491.00	116
143.00	5177	243.00	10963	347.00	1241	497.00	64
144.00	2135	244.00	123240	348.00	63	498.00	54
145.00	1339	245.00	17320	350.00	258		
146.00	4417	246.00	32576	351.00	235		

Data File: /chem1/nt12.i/20110401.b/tune.b/04011101.d

Date : 01-APR-2011 14:57

Client ID: DFTPP0401

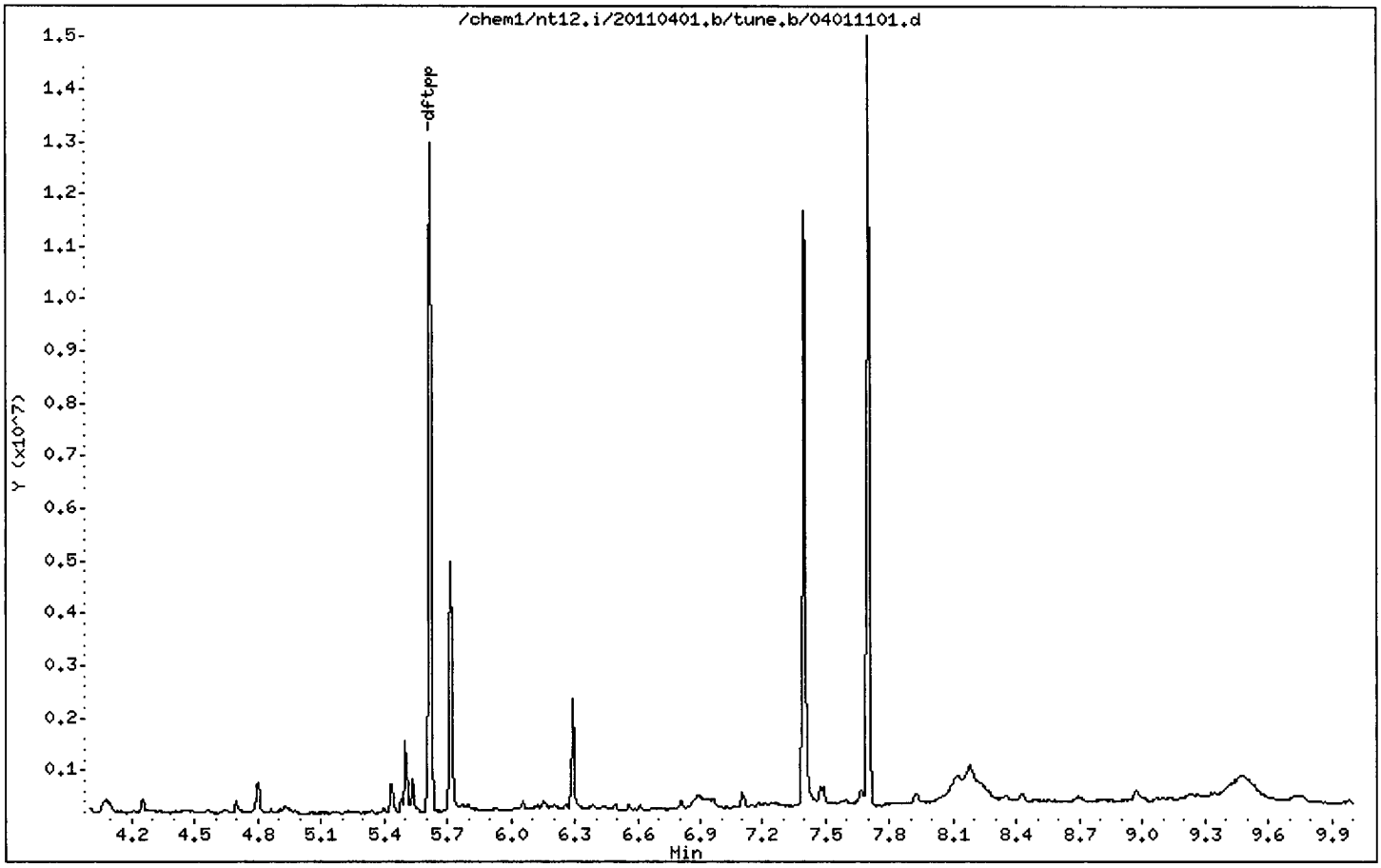
Instrument: nt12.i

Sample Info: DFTPP0401

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.32



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

Data file: /chem1/nt12.i/20110401.b/ddt.b/04011101.d ARI ID: DDT0401
Method: /chem1/nt12.i/20110401.b/ddt.b/sw846ddt.m Misc: 11-
Analysis Date: 01-APR-2011 14:57 Instrument: nt12.i

COMPOUND	RT	AREA
Pentachlorophenol	5.715	378590
Benzidine	7.404	3184701
4,4'-DDE	----	----
4,4'-DDD	7.478	74643
4,4'-DDT	7.703	1965929

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

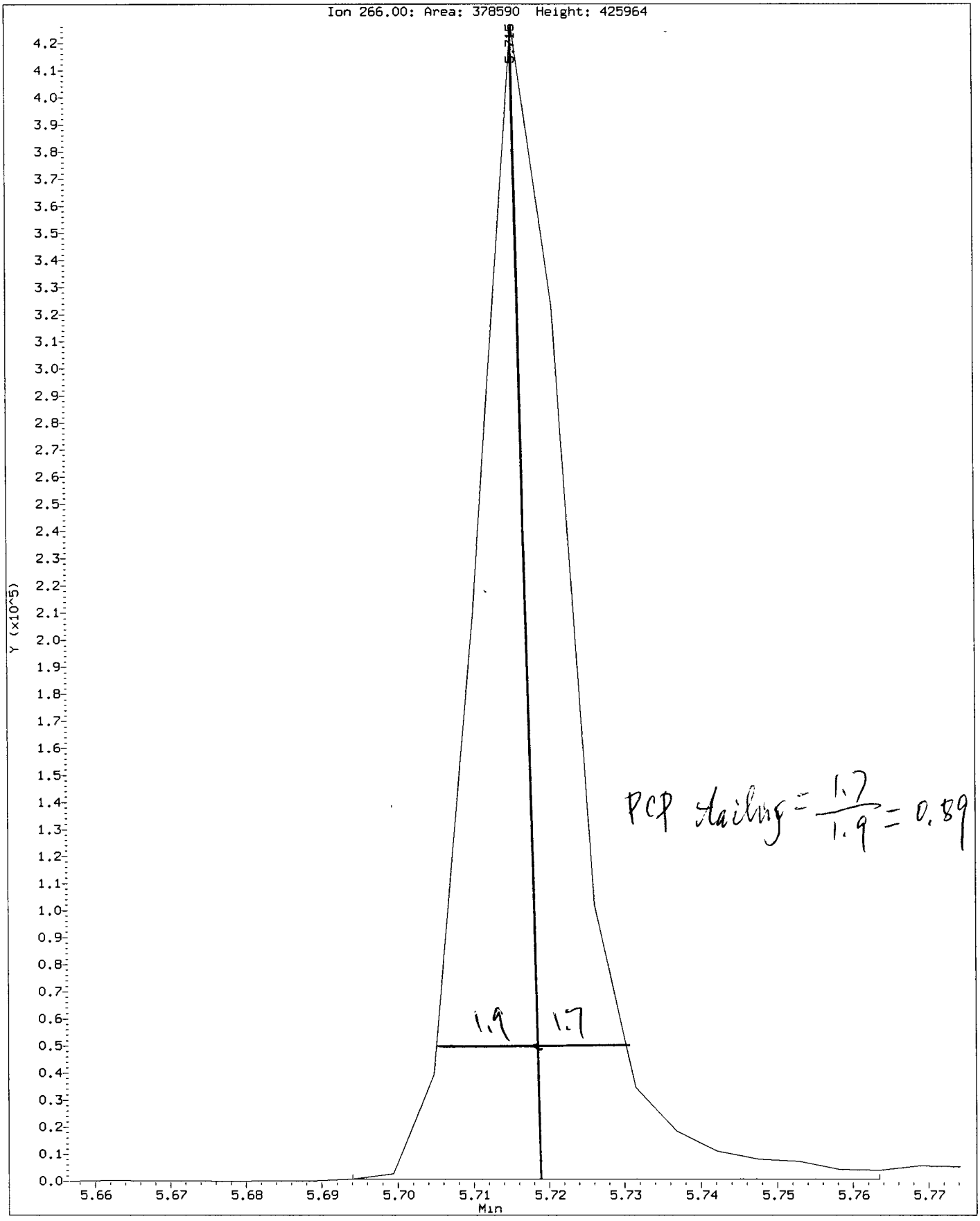
$$\text{DDT Percent Breakdown} = \frac{(0 + 74643) * 100}{(0 + 74643 + 1965929)}$$

DDT Percent Breakdown = 3.7 %

DD 12 04/01/11

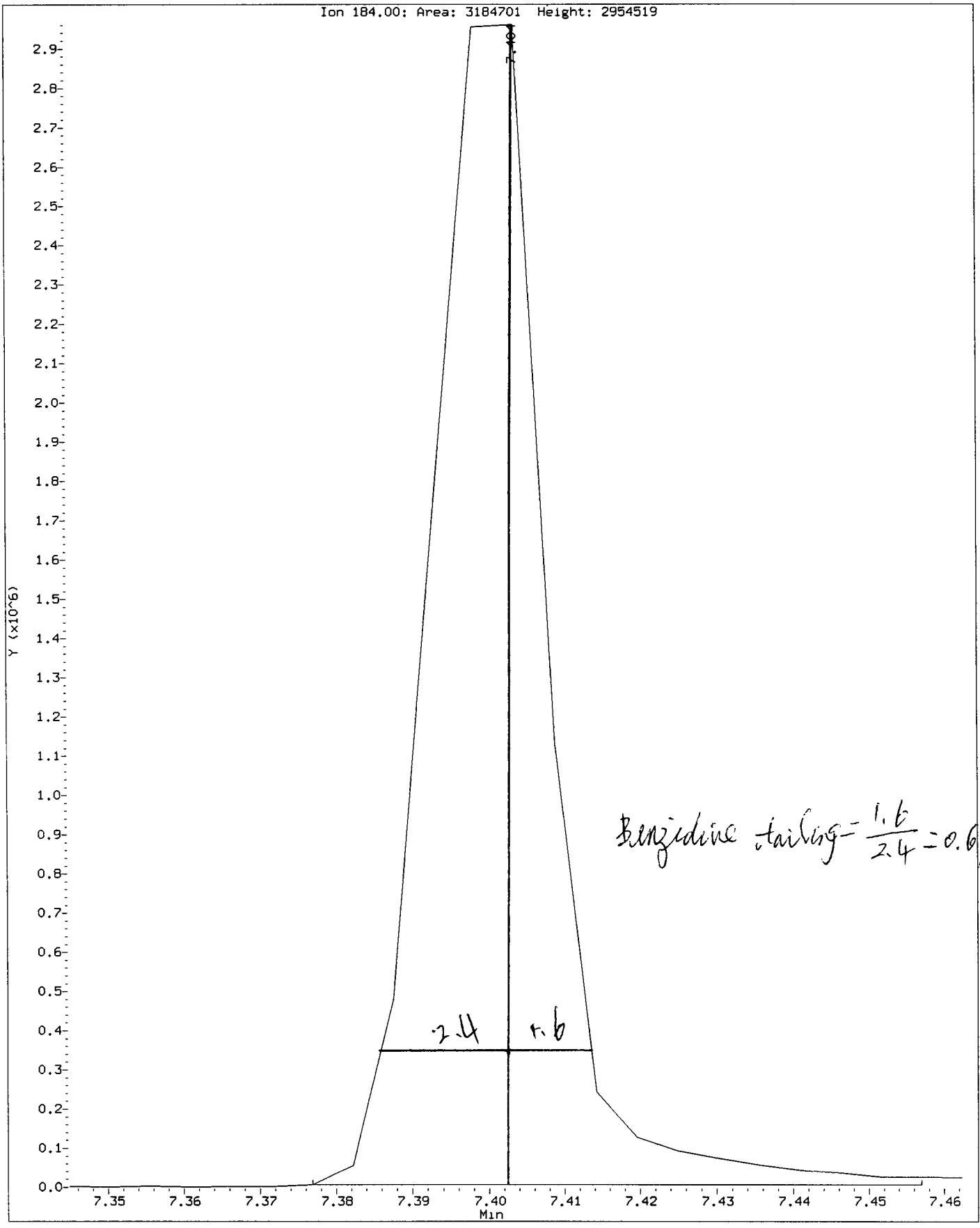
Data File: /chem1/nt12.i/20110401.b/ddt.b/04011101.d
Injection Date: 01-APR-2011 14:57
Instrument: nt12.i
Client Sample ID: DDT0401

Compound: Pentachlorophenol
CAS Number: 87-86-5



Data File: /chem1/nt12.i/20110401.b/ddt.b/04011101.d
Injection Date: 01-APR-2011 14:57
Instrument: nt12.i
Client Sample ID: DDT0401

Compound: Benzidine
CAS Number:



Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt12.i/20110401.b/04011104.d
Lab Smp Id: SN54MBS2 Client Smp ID: SN54MBS2
Inj Date : 01-APR-2011 16:21
Operator : JZ Inst ID: nt12.i
Smp Info : SN54MBS2,
Misc Info : 11-5929
Comment : 1ul Injection
Method : /chem1/nt12.i/20110401.b/SIMPNA0331.m
Meth Date : 04-Apr-2011 13:16 jianqing Quant Type: ISTD
Cal Date : 31-MAR-2011 22:47 Cal File: 03311107.d
Als bottle: 4 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

JZ 04/04/11

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)	CONCENTRATIONS FINAL (ug/kg)
* 27 Naphthalene-d8	136	4.841	4.851	(1.000)	362184	2.00000	
28 Naphthalene	128	Compound Not Detected.					
$ 190 2-Methylnaphthalene-d10	152	5.580	5.586	(1.153)	209233	1.88948	94.47
32 2-Methylnaphthalene	141	Compound Not Detected.					
105 1-methylnaphthalene	141	Compound Not Detected.					
40 Acenaphthylene	152	Compound Not Detected.					
* 42 Acenaphthene-d10	164	7.085	7.091	(1.000)	207575	2.00000	
44 Acenaphthene	153	Compound Not Detected.					
46 Dibenzofuran	168	Compound Not Detected.					
49 Fluorene	166	Compound Not Detected.					
* 59 Phenanthrene-d10	188	9.022	9.029	(1.000)	332402	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	13.683	(1.000)	371865	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	17.315	17.325	(1.000)	319297	2.00000	
78	Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
$ 191	Dibenzo(a,h)anthracene-d14	292	19.559	19.578	(1.130)	333742	2.22747	111.4
79	Dibenzo(a,h)anthracene	278	Compound Not Detected.					
80	Benzo(g,h,i)perylene	276	Compound Not Detected.					
99	Perylene	252	Compound Not Detected.					

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt12.i
Lab File ID: 04011104.d
Lab Smp Id: SN54MBS2
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem1/nt12.i/20110401.b/SIMPNA0331.m
Misc Info: 11-5929

Calibration Date: 01-APR-2011
Calibration Time: 15:16
Client Smp ID: SN54MBS2
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	494112	247056	988224	362184	-26.70
42 Acenaphthene-d10	280105	140052	560210	207575	-25.89
59 Phenanthrene-d10	461353	230676	922706	332402	-27.95
69 Chrysene-d12	503160	251580	1006320	371865	-26.09
77 Perylene-d12	442215	221108	884430	319297	-27.80

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	4.85	4.35	5.35	4.84	-0.20
42 Acenaphthene-d10	7.09	6.59	7.59	7.08	-0.09
59 Phenanthrene-d10	9.03	8.53	9.53	9.02	-0.07
69 Chrysene-d12	13.68	13.18	14.18	13.67	-0.07
77 Perylene-d12	17.32	16.82	17.82	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

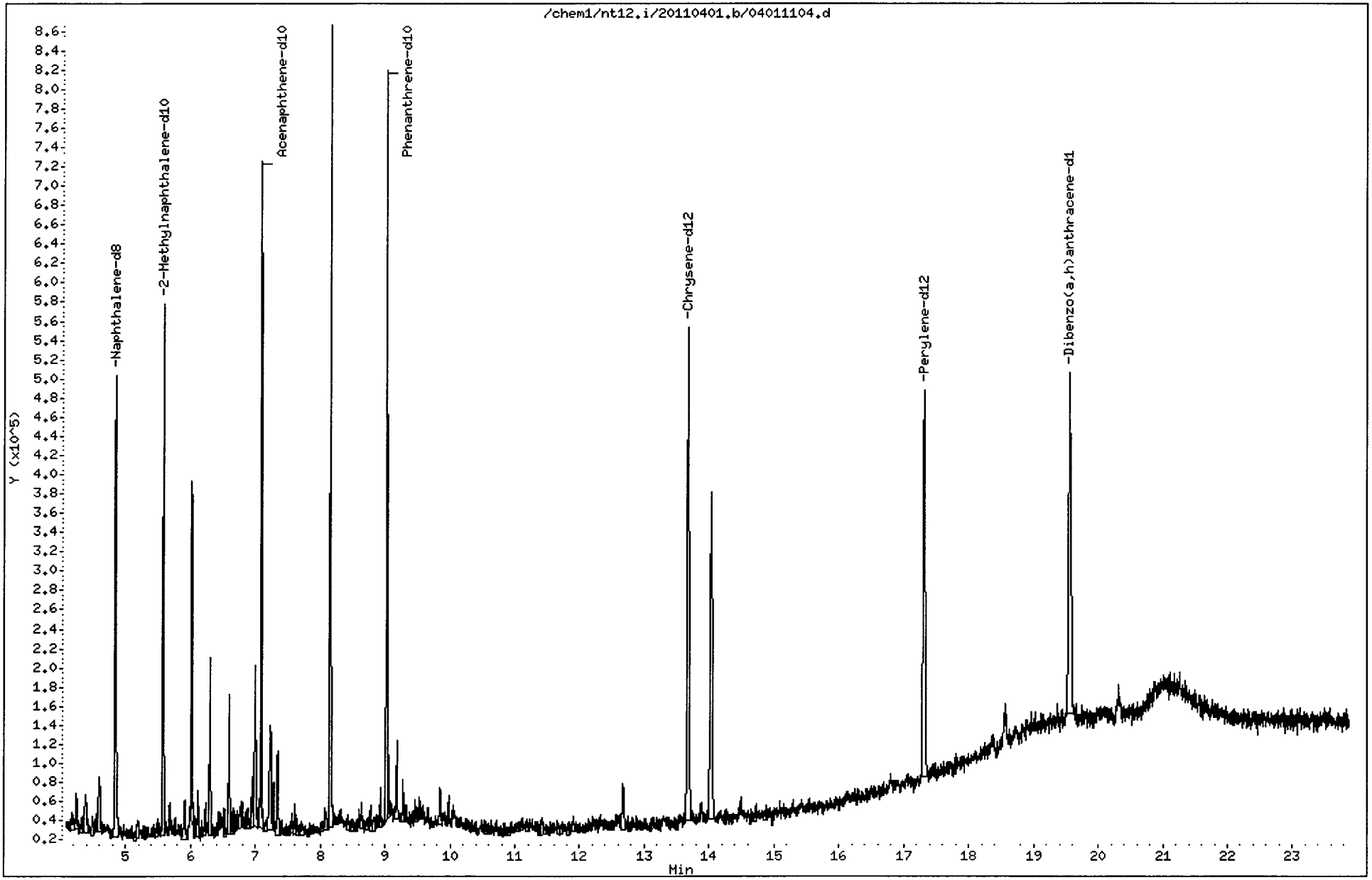
Client Name: Floyd Snider
Client SDG: SN54
Sample Matrix: SOLID
Fraction: SV
Lab Smp Id: SN54MBS2
Client Smp ID: SN54MBS2
Level: LOW
Operator: JZ
Data Type: MS DATA
SampleType: BLANK
SpikeList File: pnalcss.spk
Quant Type: ISTD
Sublist File: pnax.sub
Method File: /chem1/nt12.i/20110401.b/SIMPNA0331.m
Misc Info: 11-5929

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	150.0	94.47	62.98	34-100
$ 191 Dibenzo(a,h)anthra	150.0	111.4	74.25	10-117

Data File: /chem1/nt12.i/20110401.b/04011104.d
Date : 01-APR-2011 16:21
Client ID: SN54MBS2
Sample Info: SN54MBS2,
Volume Injected (uL): 1.0
Column phase: ZB35

Instrument: nt12.i
Operator: JZ
Column diameter: 0.32

SN54MBS2 00211



CO-ELUTION SUMMARY FOR FILE - 04011104.d

Lab ID: SN54MBS2, Method: SIMPNA0331.m, Instrument: nt12.i, Date: 01-APR-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt12.i/20110401.b/04011105.d
Lab Smp Id: SN54LCSS2 Client Smp ID: SN54LCSS2
Inj Date : 01-APR-2011 16:49
Operator : JZ Inst ID: nt12.i
Smp Info : SN54LCSS2,
Misc Info : 11-5929
Comment : 1ul Injection
Method : /chem1/nt12.i/20110401.b/SIMPNA0331.m
Meth Date : 04-Apr-2011 13:16 jianqing Quant Type: ISTD
Cal Date : 31-MAR-2011 22:47 Cal File: 03311107.d
Als bottle: 5 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

B 04/04/11

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)	CONCENTRATIONS FINAL (ug/kg)
* 27 Naphthalene-d8	136	4.841	4.851	(1.000)	366499	2.00000	
28 Naphthalene	128	4.866	4.879	(1.005)	315704	1.78397	89.20
$ 190 2-Methylnaphthalene-d10	152	5.580	5.586	(1.153)	196110	1.75011	87.51
32 2-Methylnaphthalene	141	5.624	5.630	(1.162)	181347	1.84403	92.20
105 1-methylnaphthalene	141	5.813	5.823	(1.201)	186035	1.77760	88.88
40 Acenaphthylene	152	6.946	6.952	(0.980)	200784	1.05424	52.71
* 42 Acenaphthene-d10	164	7.085	7.091	(1.000)	217644	2.00000	
44 Acenaphthene	153	7.132	7.139	(1.007)	209978	1.77005	88.50
46 Dibenzofuran	168	7.277	7.281	(1.027)	289529	1.79513	89.76
49 Fluorene	166	7.732	7.738	(1.091)	256087	1.92835	96.42
* 59 Phenanthrene-d10	188	9.022	9.029	(1.000)	347080	2.00000	
60 Phenanthrene	178	9.054	9.060	(1.003)	411753	2.24783	112.4
61 Anthracene	178	9.089	9.092	(1.007)	244412	1.32888	66.44
64 Fluoranthene	202	10.729	10.736	(1.189)	473170	2.37550	118.8
65 Pyrene	202	11.193	11.203	(0.819)	486878	2.37295	118.6

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
	68 Benzo(a)anthracene	228	13.560	13.570	(0.992)	395797	2.16042	108.0
*	69 Chrysene-d12	240	13.670	13.683	(1.000)	381079	2.00000	
	71 Chrysene	228	13.740	13.753	(1.005)	437321	2.44240	122.1
	74 Benzo(b)fluoranthene	252	16.157	16.167	(0.933)	467877	2.47382	123.7
	75 Benzo(k)fluoranthene	252	16.214	16.227	(0.936)	470759	2.37283	118.6
	188 Benzo(j)fluoranthene	252	Compound Not Detected.					
	76 Benzo(a)pyrene	252	17.104	17.117	(0.988)	245087	1.41141	70.57
*	77 Perylene-d12	264	17.315	17.325	(1.000)	335486	2.00000	
	78 Indeno(1,2,3-cd)pyrene	276	19.628	19.644	(1.134)	457066	2.16465	108.2
$	191 Dibenzo(a,h)anthracene-d14	292	19.562	19.578	(1.130)	355399	2.25755	112.9
	79 Dibenzo(a,h)anthracene	278	19.647	19.660	(1.135)	398971	2.31040	115.5
	80 Benzo(g,h,i)perylene	276	20.455	20.471	(1.181)	397687	2.12352	106.2
	99 Perylene	252	17.378	17.391	(1.004)	332162	2.26182	113 1

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt12.i
Lab File ID: 04011105.d
Lab Smp Id: SN54LCSS2
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem1/nt12.i/20110401.b/SIMPNA0331.m
Misc Info: 11-5929

Calibration Date: 01-APR-2011
Calibration Time: 15:16
Client Smp ID: SN54LCSS2
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	494112	247056	988224	366499	-25.83
42 Acenaphthene-d10	280105	140052	560210	217644	-22.30
59 Phenanthrene-d10	461353	230676	922706	347080	-24.77
69 Chrysene-d12	503160	251580	1006320	381079	-24.26
77 Perylene-d12	442215	221108	884430	335486	-24.14

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	4.85	4.35	5.35	4.84	-0.20
42 Acenaphthene-d10	7.09	6.59	7.59	7.08	-0.09
59 Phenanthrene-d10	9.03	8.53	9.53	9.02	-0.07
69 Chrysene-d12	13.68	13.18	14.18	13.67	-0.09
77 Perylene-d12	17.32	16.82	17.82	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
Sample Matrix: SOLID
Lab Smp Id: SN54LCSS2
Level: LOW
Data Type: MS DATA
SpikeList File: pnalcss.spk
Sublist File: pnax.sub
Method File: /chem1/nt12.i/20110401.b/SIMPNA0331.m
Misc Info: 11-5929

Client SDG: SN54
Fraction: SV
Client Smp ID: SN54LCSS2
Operator: JZ
SampleType: LCS
Quant Type: ISTD

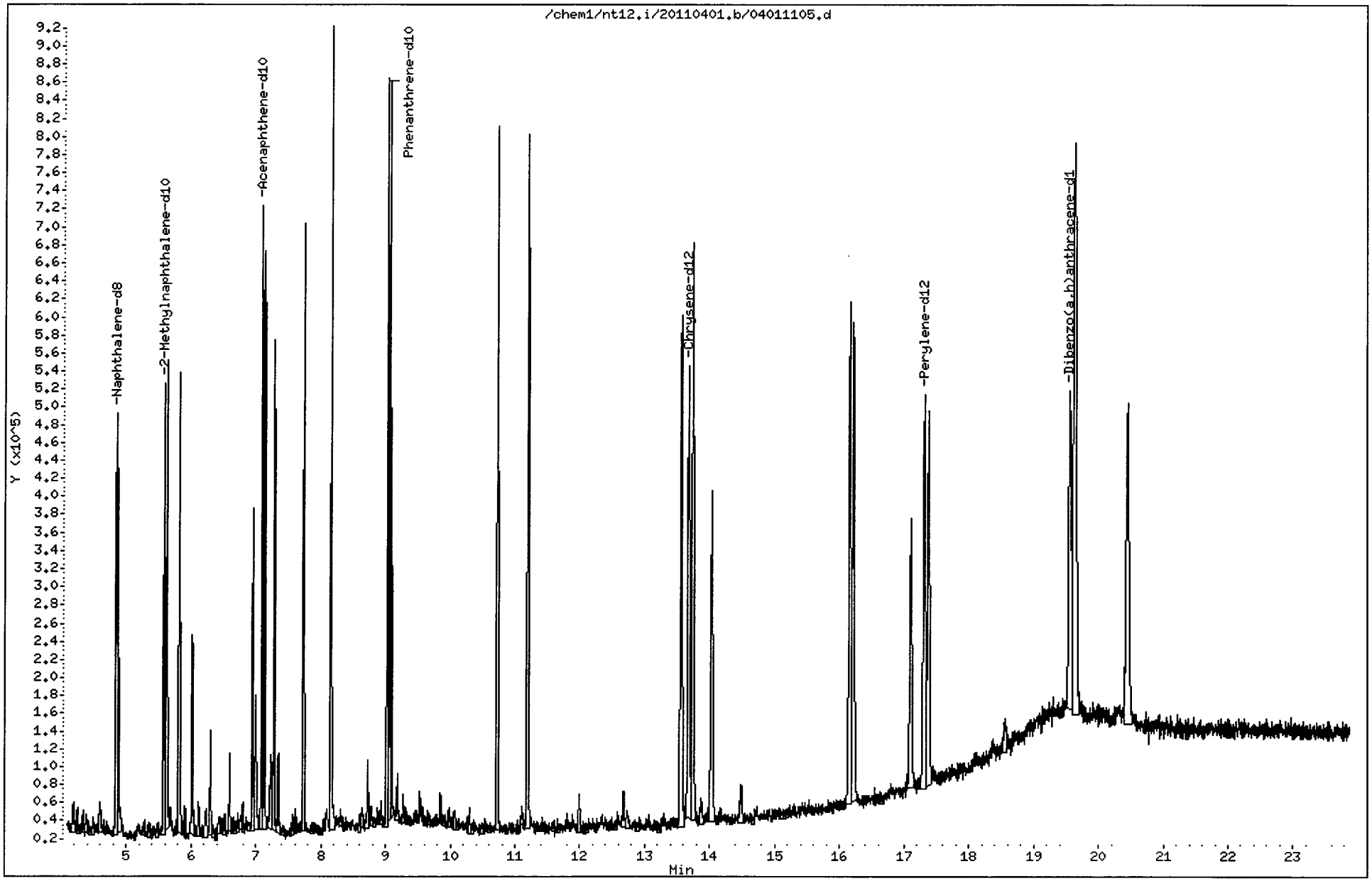
SPIKE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
28 Naphthalene	150.0	89.20	59.47	37-100
32 2-Methylnaphthalen	150.0	92.20	61.47	37-100
105 1-methylnaphthalen	150.0	88.88	59.25	30-160
40 Acenaphthylene	150.0	52.71	35.14	35-100
44 Acenaphthene	150.0	88.50	59.00	39-100
46 Dibenzofuran	150.0	89.76	59.84	39-100
49 Fluorene	150.0	96.42	64.28	42-100
60 Phenanthrene	150.0	112.4	74.93	47-100
61 Anthracene	150.0	66.44	44.30	41-106
64 Fluoranthene	150.0	118.8	79.18	52-109
65 Pyrene	150.0	118.6	79.10	47-111
68 Benzo(a)anthracene	150.0	108.0	72.01	47-114
71 Chrysene	150.0	122.1	81.41	51-106
74 Benzo(b)fluoranthe	150.0	123.7	82.46	30-160
75 Benzo(k)fluoranthe	150.0	118.6	79.09	30-160
76 Benzo(a)pyrene	150.0	70.57	47.05	44-111
78 Indeno(1,2,3-cd)py	150.0	108.2	72.15	41-114
79 Dibenzo(a,h)anthra	150.0	115.5	77.01	42-118
80 Benzo(g,h,i)peryle	150.0	106.2	70.78	37-115
99 Perylene	150.0	113.1	75.39	30-160

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	150.0	87.51	58.34	34-100
$ 191 Dibenzo(a,h)anthra	150.0	112.9	75.25	10-117

Data File: /chem1/nt12.i/20110401.b/04011105.d
Date : 01-APR-2011 16:49
Client ID: SN54LCSS2
Sample Info: SN54LCSS2,
Volume Injected (uL): 1.0
Column phase: ZB35

Instrument: nt12.i
Operator: JZ
Column diameter: 0.32

SN54 : 90229



CO-ELUTION SUMMARY FOR FILE - 04011105.d

Lab ID: SN54LCSS2, Method: SIMPNA0331.m, Instrument: nt12.i, Date: 01-APR-201

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt12.i/20110401.b/04011106.d
Lab Smp Id: SN54LCSDS2 Client Smp ID: SN54LCSDS2
Inj Date : 01-APR-2011 17:17
Operator : JZ Inst ID: nt12.i
Smp Info : SN54LCSDS2,
Misc Info : 11-5929
Comment : 1ul Injection
Method : /chem1/nt12.i/20110401.b/SIMPNA0331.m
Meth Date : 04-Apr-2011 13:16 jianqing Quant Type: ISTD
Cal Date : 31-MAR-2011 22:47 Cal File: 03311107.d
Als bottle: 6 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

JZ 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	4.841	4.851	(1.000)	364394	2.00000	
28 Naphthalene	128	4.866	4.879	(1.005)	326064	1.85315	92.66
$ 190 2-Methylnaphthalene-d10	152	5.576	5.586	(1.152)	197387	1.77169	88.58
32 2-Methylnaphthalene	141	5.620	5.630	(1.161)	185741	1.89962	94.98
105 1-methylnaphthalene	141	5.813	5.823	(1.201)	189606	1.82218	91.11
40 Acenaphthylene	152	6.946	6.952	(0.980)	177995	0.93160	46.58(R)
* 42 Acenaphthene-d10	164	7.085	7.091	(1.000)	218342	2.00000	
44 Acenaphthene	153	7.132	7.139	(1.007)	218834	1.83880	91.94
46 Dibenzofuran	168	7.274	7.281	(1.027)	298383	1.84411	92.21
49 Fluorene	166	7.732	7.738	(1.091)	262580	1.97092	98.55
* 59 Phenanthrene-d10	188	9.022	9.029	(1.000)	356245	2.00000	
60 Phenanthrene	178	9.054	9.060	(1.003)	420540	2.23673	111.8
61 Anthracene	178	9.085	9.092	(1.007)	216289	1.14572	57.29(R)
64 Fluoranthene	202	10.726	10.736	(1.189)	482155	2.35833	117.9
65 Pyrene	202	11.193	11.203	(0.818)	491335	2.38257	119.1

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
68	Benzo(a)anthracene	228	13.560	13.570	(0.991)	381245	2.07048	103.5
* 69	Chrysene-d12	240	13.677	13.683	(1.000)	383014	2.00000	
71	Chrysene	228	13.743	13.753	(1.005)	442995	2.46159	123.1
74	Benzo(b)fluoranthene	252	16.160	16.167	(0.933)	471677	2.41820	120.9
75	Benzo(k)fluoranthene	252	16.211	16.227	(0.936)	464493	2.27017	113.5
188	Benzo(j)fluoranthene	252	Compound Not Detected.					
76	Benzo(a)pyrene	252	17.107	17.117	(0.988)	222544	1.24268	62.13(R)
* 77	Perylene-d12	264	17.318	17.325	(1.000)	345990	2.00000	
78	Indeno(1,2,3-cd)pyrene	276	19.634	19.644	(1.134)	469382	2.15549	107.8
$ 191	Dibenzo(a,h)anthracene-d14	292	19.559	19.578	(1.129)	342143	2.10736	105.4
79	Dibenzo(a,h)anthracene	278	19.641	19.660	(1.134)	400371	2.24812	112.4
80	Benzo(g,h,i)perylene	276	20.452	20.471	(1.181)	420510	2.17722	108.9
99	Perylene	252	17.378	17.391	(1.003)	303692	2.00518	100.3

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt12.i
Lab File ID: 04011106.d
Lab Smp Id: SN54LCSDS2
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem1/nt12.i/20110401.b/SIMPNA0331.m
Misc Info: 11-5929

Calibration Date: 01-APR-2011
Calibration Time: 15:16
Client Smp ID: SN54LCSDS2
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	494112	247056	988224	364394	-26.25
42 Acenaphthene-d10	280105	140052	560210	218342	-22.05
59 Phenanthrene-d10	461353	230676	922706	356245	-22.78
69 Chrysene-d12	503160	251580	1006320	383014	-23.88
77 Perylene-d12	442215	221108	884430	345990	-21.76

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	4.85	4.35	5.35	4.84	-0.20
42 Acenaphthene-d10	7.09	6.59	7.59	7.08	-0.09
59 Phenanthrene-d10	9.03	8.53	9.53	9.02	-0.07
69 Chrysene-d12	13.68	13.18	14.18	13.68	-0.05
77 Perylene-d12	17.32	16.82	17.82	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: SN54LCSDS2
Level: LOW
Data Type: MS DATA
SpikeList File: pnalcss.spk
Sublist File: pnax.sub
Method File: /chem1/nt12.i/20110401.b/SIMPNA0331.m
Misc Info: 11-5929

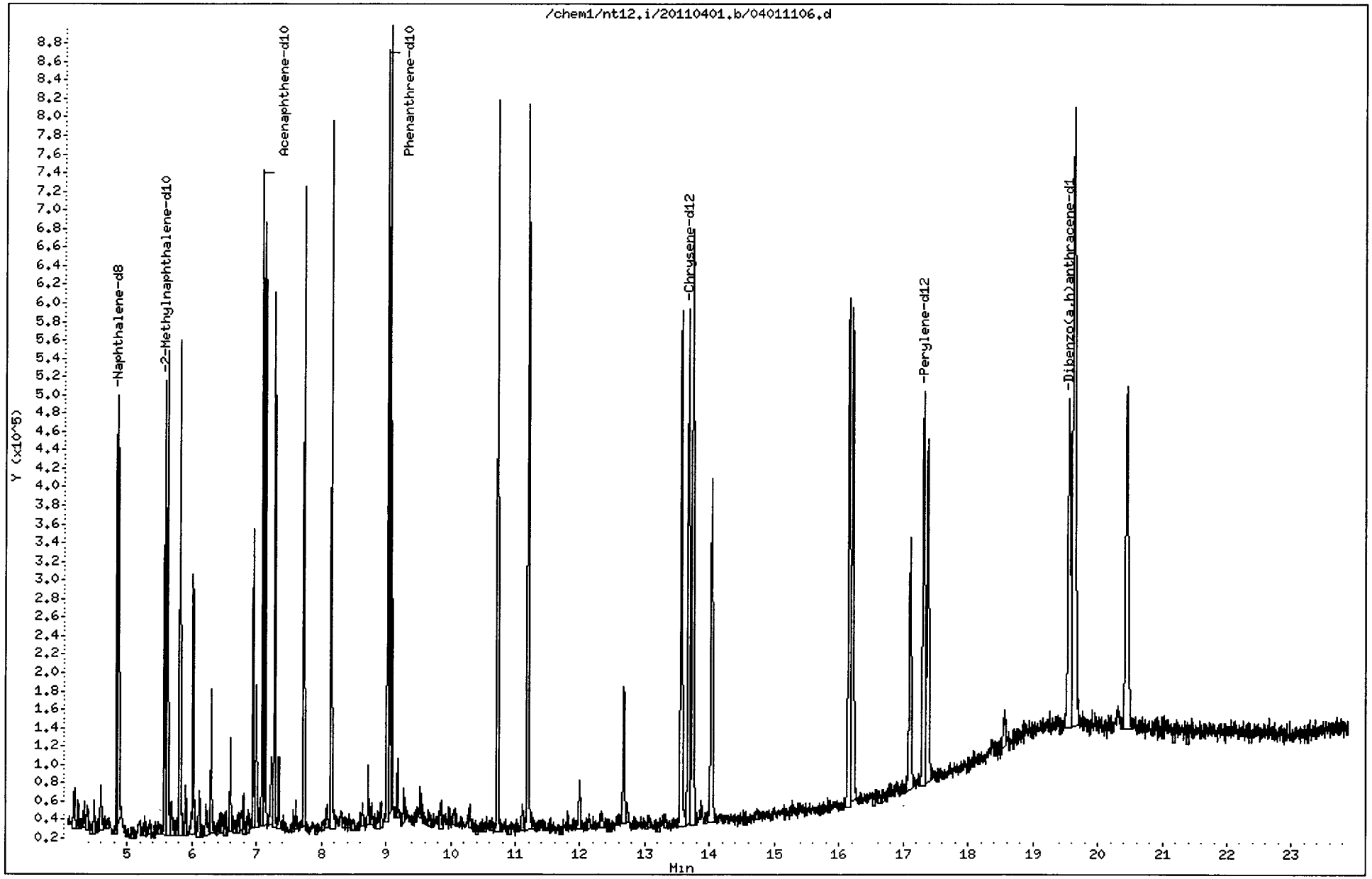
Client SDG: SN54
Fraction: SV
Client Smp ID: SN54LCSDS2
Operator: JZ
SampleType: LCSD
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
28 Naphthalene	150.0	92.66	61.77	37-100
32 2-Methylnaphthalen	150.0	94.98	63.32	37-100
105 1-methylnaphthalen	150.0	91.11	60.74	30-160
40 Acenaphthylene	150.0	46.58	31.05*	35-100
44 Acenaphthene	150.0	91.94	61.29	39-100
46 Dibenzofuran	150.0	92.21	61.47	39-100
49 Fluorene	150.0	98.55	65.70	42-100
60 Phenanthrene	150.0	111.8	74.56	47-100
61 Anthracene	150.0	57.29	38.19*	41-106
64 Fluoranthene	150.0	117.9	78.61	52-109
65 Pyrene	150.0	119.1	79.42	47-111
68 Benzo(a)anthracene	150.0	103.5	69.02	47-114
71 Chrysene	150.0	123.1	82.05	51-106
74 Benzo(b)fluoranthe	150.0	120.9	80.61	30-160
75 Benzo(k)fluoranthe	150.0	113.5	75.67	30-160
76 Benzo(a)pyrene	150.0	62.13	41.42*	44-111
78 Indeno(1,2,3-cd)py	150.0	107.8	71.85	41-114
79 Dibenzo(a,h)anthra	150.0	112.4	74.94	42-118
80 Benzo(g,h,i)peryle	150.0	108.9	72.57	37-115
99 Perylene	150.0	100.3	66.84	30-160

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	150.0	88.58	59.06	34-100
$ 191 Dibenzo(a,h)anthra	150.0	105.4	70.25	10-117

Data File: /chem1/nt12.i/20110401.b/04011106.d
Date : 01-APR-2011 17:17
Client ID: SN54LCSDS2
Sample Info: SN54LCSDS2,
Volume Injected (uL): 1.0
Column phase: ZB35

Instrument: nt12.i
Operator: JZ
Column diameter: 0.32



SN54 : 00226

CO-ELUTION SUMMARY FOR FILE - 04011106.d

Lab ID: SN54LCSDS2, Method: SIMPNA0331.m, Instrument: nt12.i, Date: 01-APR-20

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt12.i/20110401.b/04011108.d
Lab Smp Id: SN54A Client Smp ID: LL-SED3-0-36-031511
Inj Date : 01-APR-2011 18:13
Operator : JZ Inst ID: nt12.i
Smp Info : SN54A
Misc Info : 11-5925
Comment : 1ul Injection
Method : /chem1/nt12.i/20110401.b/SIMPNA0331.m
Meth Date : 04-Apr-2011 14:42 jianqing Quant Type: ISTD
Cal Date : 31-MAR-2011 22:47 Cal File: 03311107.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

04/04/11

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	24.06000	Weight of sample extracted (g)
M	75.40000	% Moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
* 27 Naphthalene-d8	136	4.845	4.851	(1.000)	342514	2.00000	
28 Naphthalene	128	4.873	4.879	(1.006)	26805	0.16208	13.69
$ 190 2-Methylnaphthalene-d10	152	5.580	5.586	(1.152)	201196	1.92124	162.3
32 2-Methylnaphthalene	141	5.627	5.630	(1.162)	11655	0.12681	10.71
105 1-methylnaphthalene	141	Compound Not Detected.					
40 Acenaphthylene	152	Compound Not Detected.					
* 42 Acenaphthene-d10	164	7.085	7.091	(1.000)	202181	2.00000	
44 Acenaphthene	153	Compound Not Detected.					
46 Dibenzofuran	168	7.278	7.281	(1.027)	11495	0.07672	6.481
49 Fluorene	166	7.732	7.738	(1.091)	24697	0.20019	16.91
* 59 Phenanthrene-d10	188	9.026	9.029	(1.000)	322755	2.00000	
60 Phenanthrene	178	9.057	9.060	(1.003)	92100	0.54068	45.68
61 Anthracene	178	9.089	9.092	(1.007)	34734	0.20308	17.16
64 Fluoranthene	202	10.784	10.736	(1.195)	444580	2.40018	202.8(H)
65 Pyrene	202	11.260	11.203	(0.820)	638279	3.17002	267.8

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
68	Benzo(a)anthracene	228	13.614	13.570	(0.991)	131500	0.73143	61.79
* 69	Chrysene-d12	240	13.734	13.683	(1.000)	373966	2.00000	
71	Chrysene	228	13.788	13.753	(1.004)	297835	1.69502	143.2
74	Benzo(b)fluoranthene	252	16.233	16.167	(0.933)	240514	1.42840	120.7
75	Benzo(k)fluoranthene	252	16.290	16.227	(0.936)	121680	0.68891	58.20(H)
188	Benzo(j)fluoranthene	252	Compound Not Detected.					
76	Benzo(a)pyrene	252	17.192	17.117	(0.988)	161544	1.04496	88.28(H)
* 77	Perylene-d12	264	17.394	17.325	(1.000)	298676	2.00000	
78	Indeno(1,2,3-cd)pyrene	276	19.720	19.644	(1.134)	150633	0.80131	67.69
$ 191	Dibenzo(a,h)anthracene-d14	292	19.648	19.578	(1.130)	242412	1.72961	146.1
79	Dibenzo(a,h)anthracene	278	Compound Not Detected.					
80	Benzo(g,h,i)perylene	276	20.553	20.471	(1.182)	188469	1.13039	95.49
99	Perylene	252	17.464	17.391	(1.004)	1466400	11.2159	947.5

QC Flag Legend

H - Operator selected an alternate compound hit.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt12.i
Lab File ID: 04011108.d
Lab Smp Id: SN54A
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem1/nt12.i/20110401.b/SIMPNA0331.m
Misc Info: 11-5925

Calibration Date: 01-APR-2011
Calibration Time: 15:16
Client Smp ID: LL-SED3-0-36-031
Level: LOW
Sample Type: Sediment

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	494112	247056	988224	342514	-30.68
42 Acenaphthene-d10	280105	140052	560210	202181	-27.82
59 Phenanthrene-d10	461353	230676	922706	322755	-30.04
69 Chrysene-d12	503160	251580	1006320	373966	-25.68
77 Perylene-d12	442215	221108	884430	298676	-32.46

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	4.85	4.35	5.35	4.84	-0.13
42 Acenaphthene-d10	7.09	6.59	7.59	7.09	-0.09
59 Phenanthrene-d10	9.03	8.53	9.53	9.03	-0.03
69 Chrysene-d12	13.68	13.18	14.18	13.73	0.37
77 Perylene-d12	17.32	16.82	17.82	17.39	0.40

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

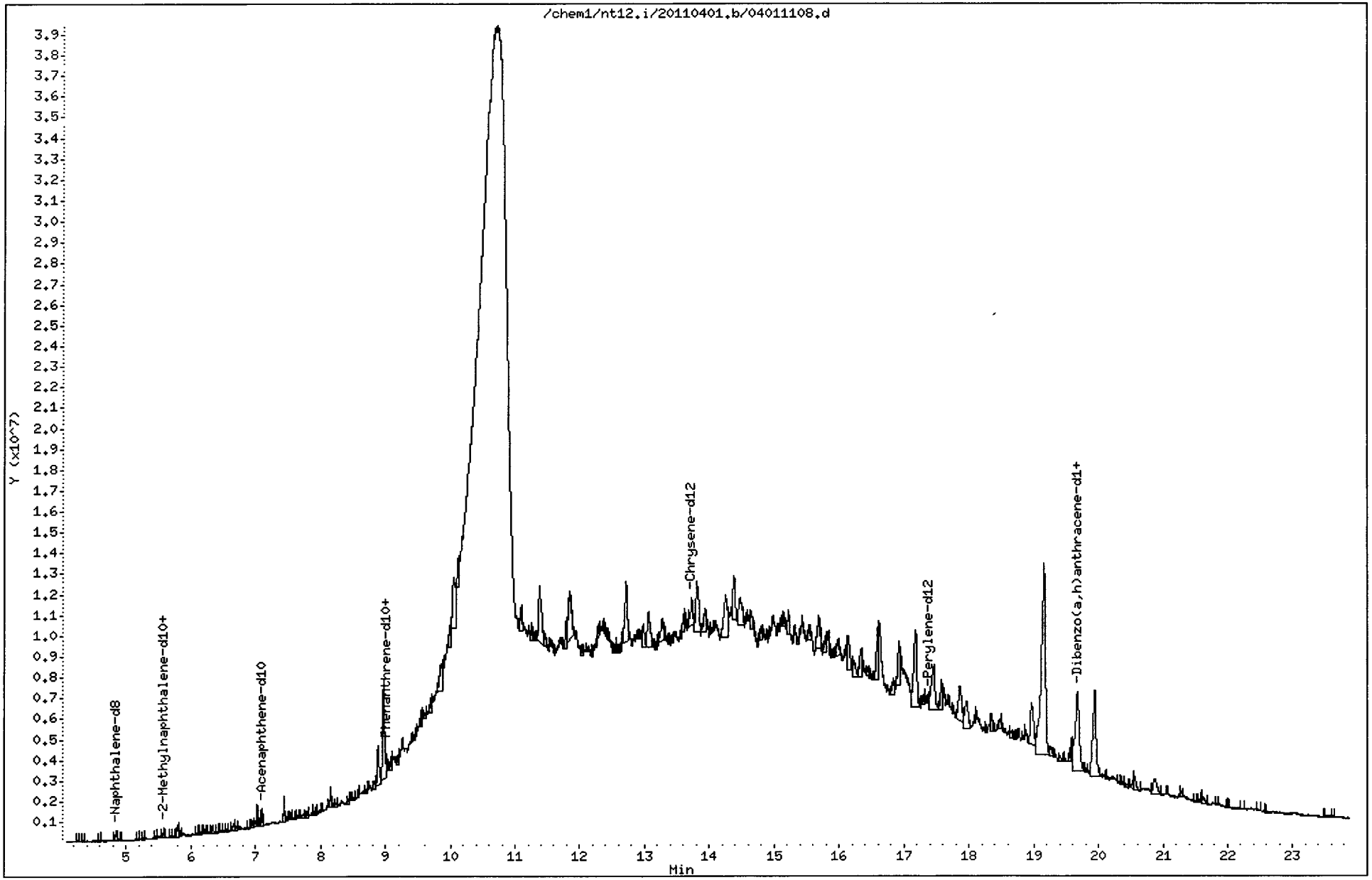
Client Name: Floyd Snider
Client SDG: SN54
Sample Matrix: SOLID
Fraction: SV
Lab Smp Id: SN54A
Client Smp ID: LL-SED3-0-36-031511
Level: LOW
Operator: JZ
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: pnalcss.spk
Quant Type: ISTD
Sublist File: pnax.sub
Method File: /chem1/nt12.i/20110401.b/SIMPNA0331.m
Misc Info: 11-5925

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	253.4	162.3	64.04	34-100
$ 191 Dibenzo(a,h)anthra	253.4	146.1	57.65	10-117

Data File: /chem1/nt12.i/20110401.b/04011108.d
Date : 01-APR-2011 18:13
Client ID: LL-SED3-0-36-031511
Sample Info: SN54A
Volume Injected (uL): 1.0
Column phase: ZB35

Instrument: nt12.i
Operator: JZ
Column diameter: 0.32

SN54 00232



Data File: /chem1/nt12.i/20110401.b/04011108.d

Date : 01-APR-2011 18:13

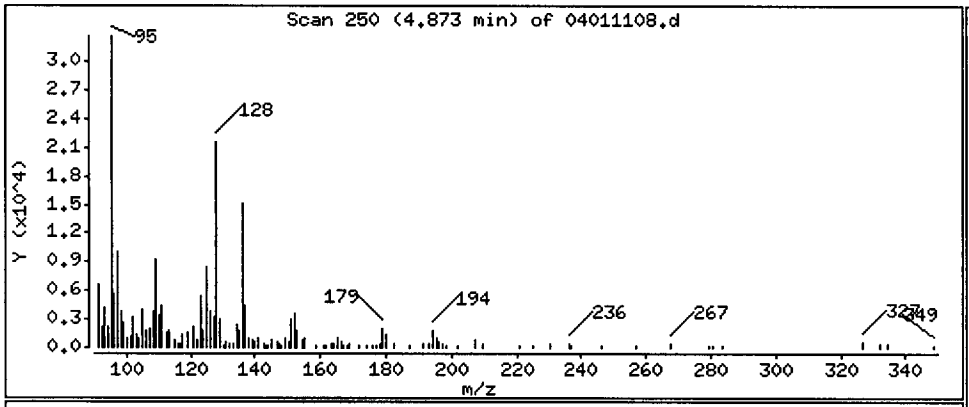
Client ID: LL-SED3-0-36-031511 Instrument: nt12.i

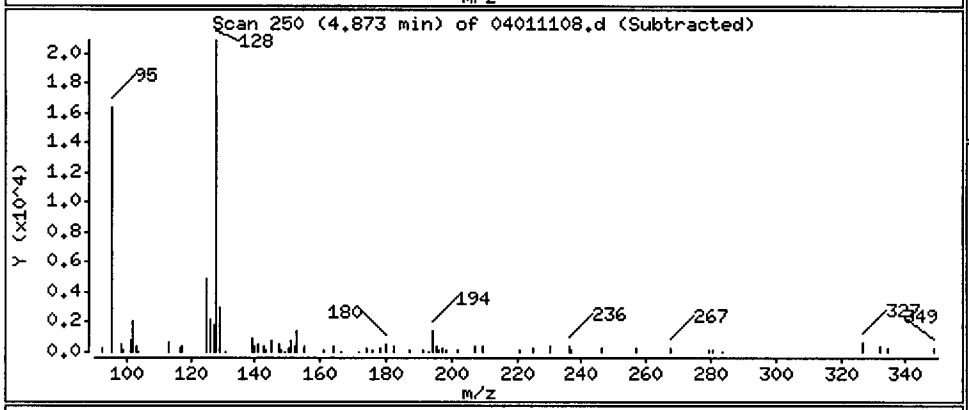
Sample Info: SN54A

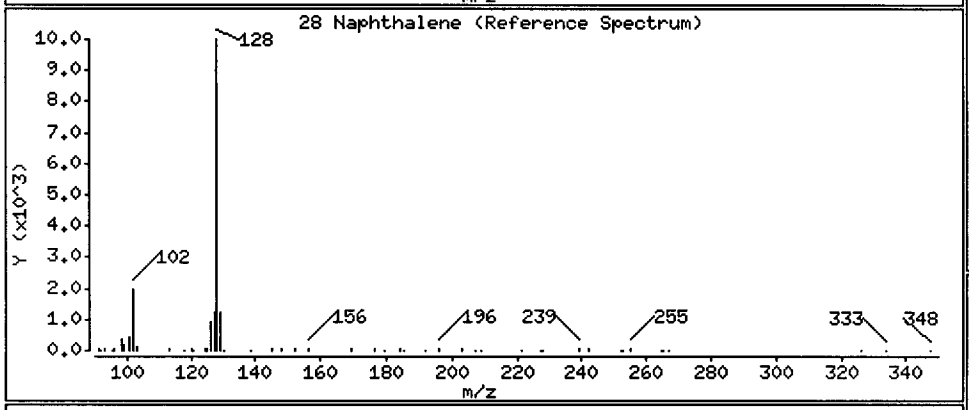
Volume Injected (uL): 1.0 Operator: JZ

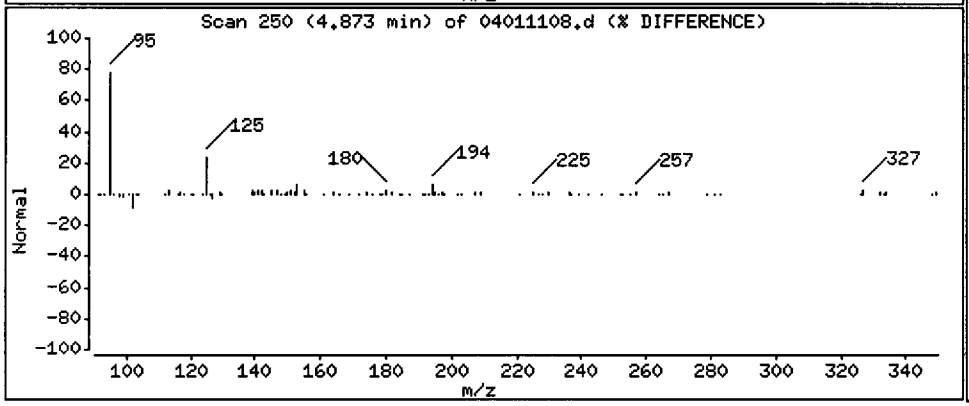
Column phase: ZB35 Column diameter: 0.32

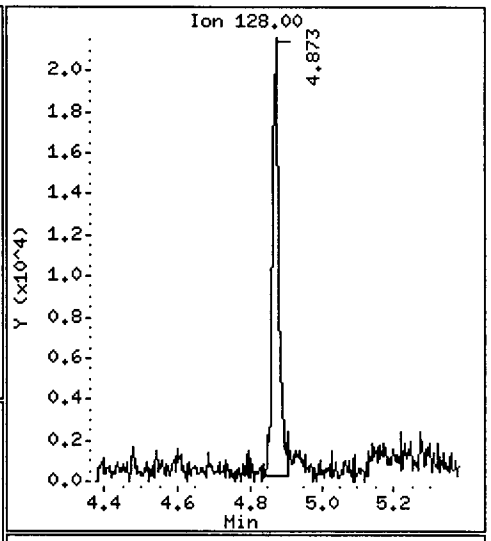
28 Naphthalene Concentration: 13.69 ug/kg

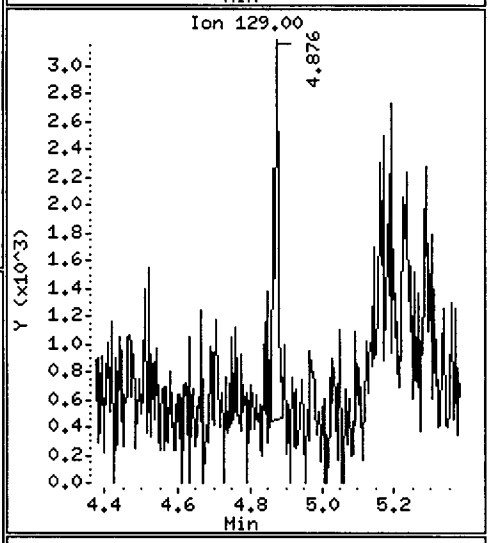


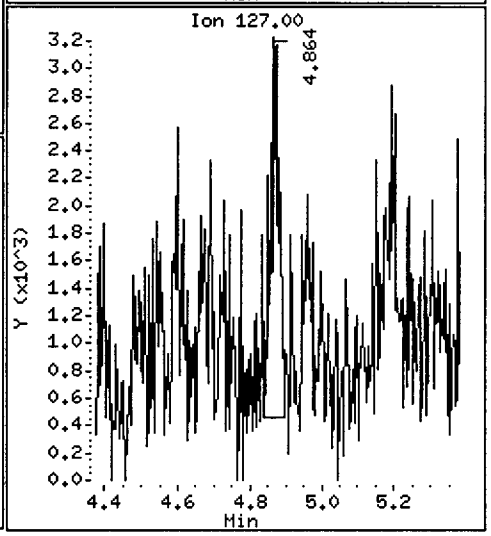












Data File: /chem1/nt12.i/20110401.b/04011108.d

Date : 01-APR-2011 18:13

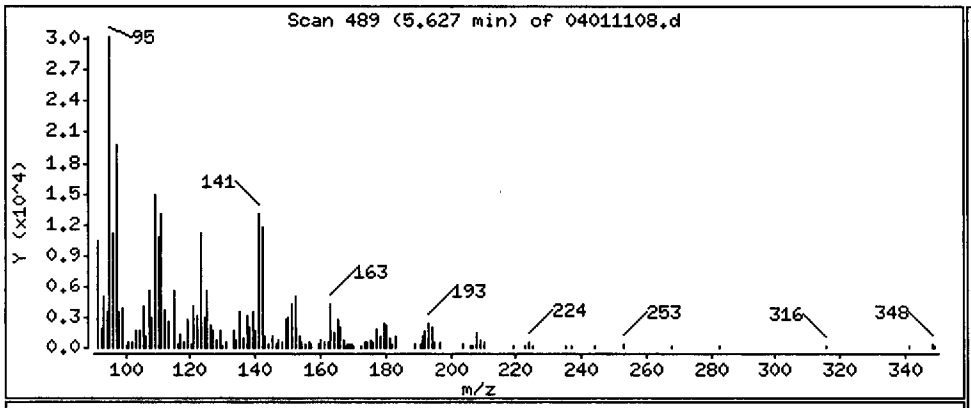
Client ID: LL-SED3-0-36-031511 Instrument: nt12.i

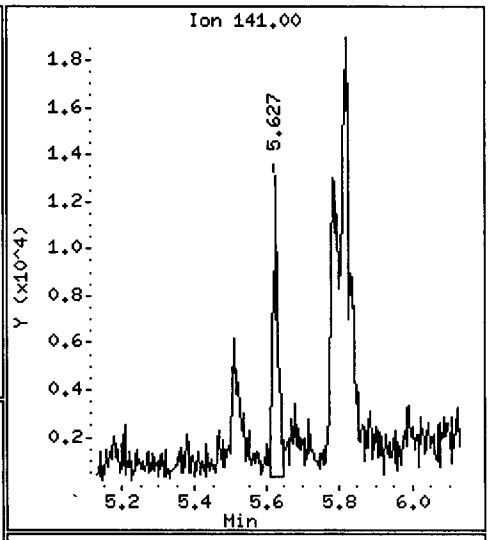
Sample Info: SN54A

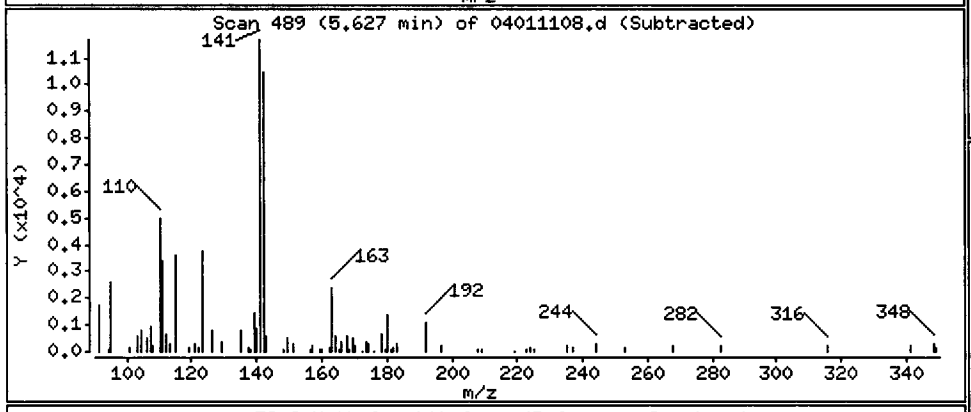
Volume Injected (uL): 1.0 Operator: JZ

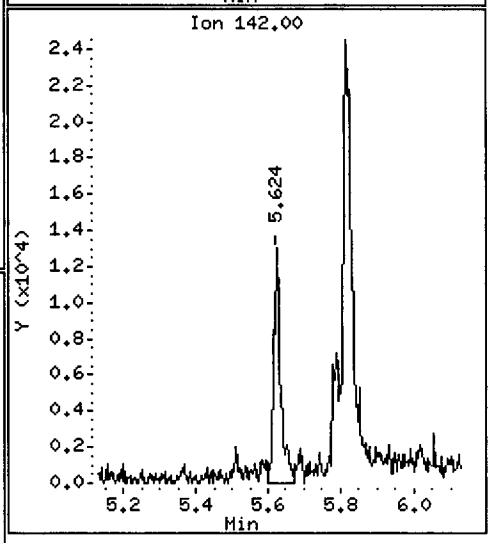
Column phase: ZB35 Column diameter: 0.32

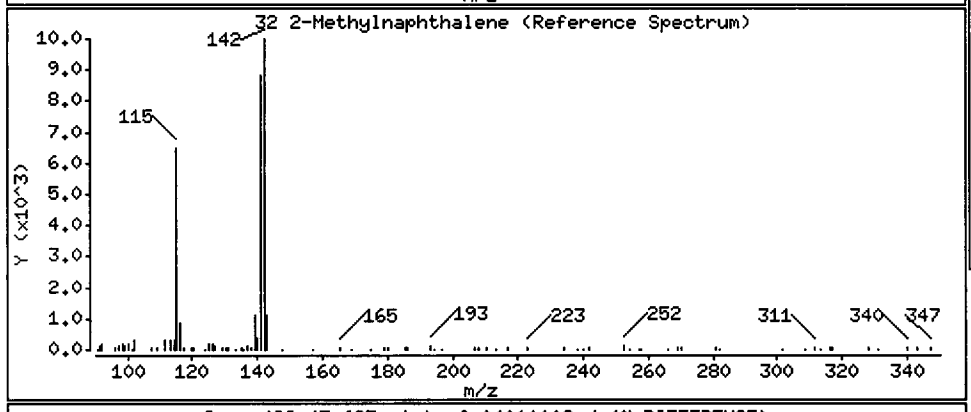
32 2-Methylnaphthalene Concentration: 10.71 ug/kg

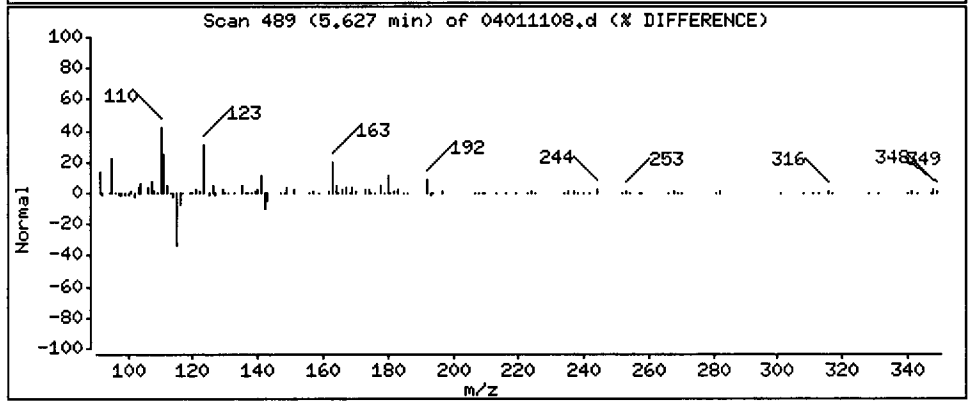












Data File: /chem1/nt12.i/20110401.b/04011108.d

Date : 01-APR-2011 18:13

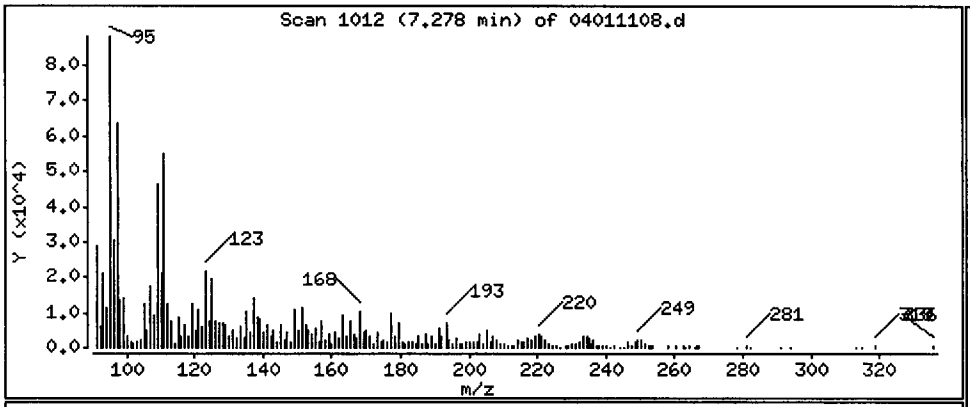
Client ID: LL-SED3-0-36-031511 Instrument: nt12.1

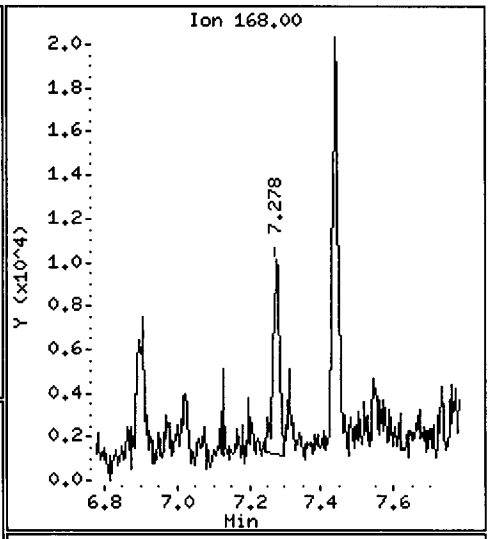
Sample Info: SN54A

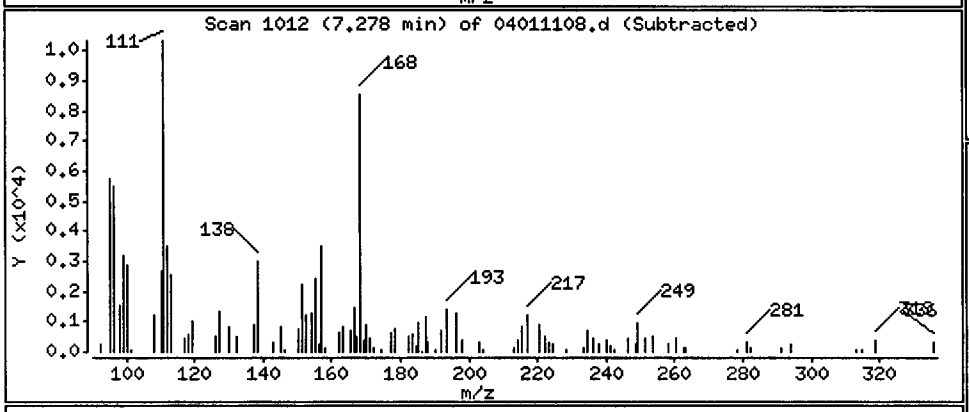
Volume Injected (uL): 1.0 Operator: JZ

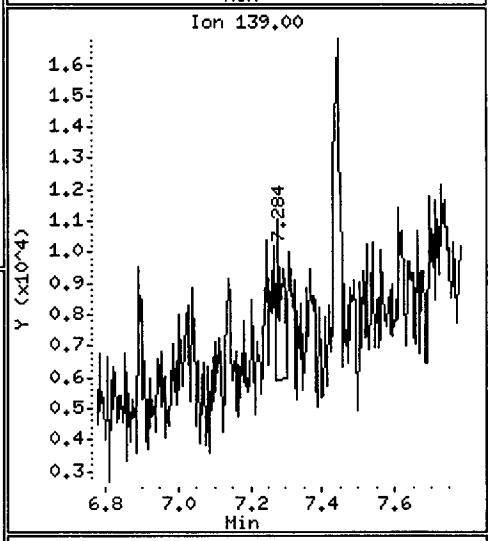
Column phase: ZB35 Column diameter: 0.32

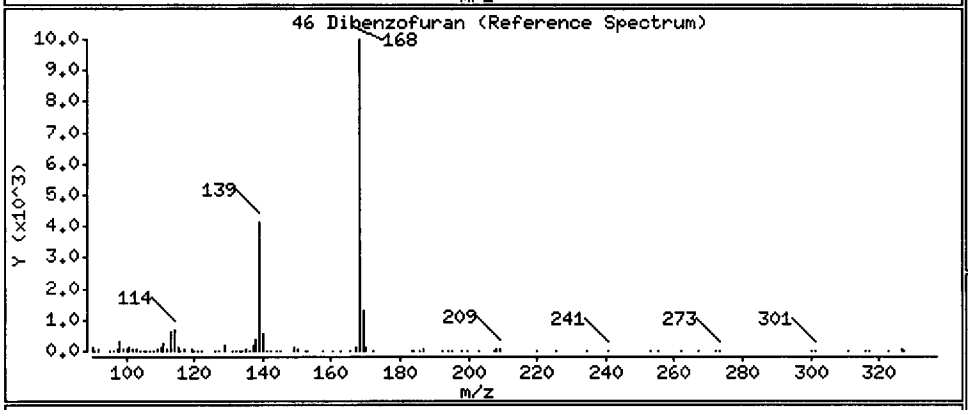
46 Dibenzofuran Concentration: 6.481 ug/kg

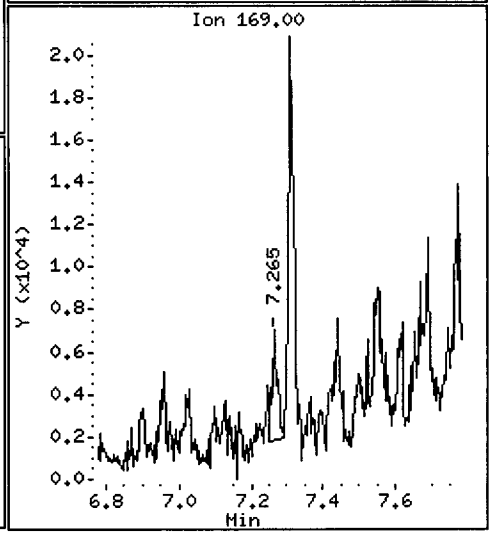


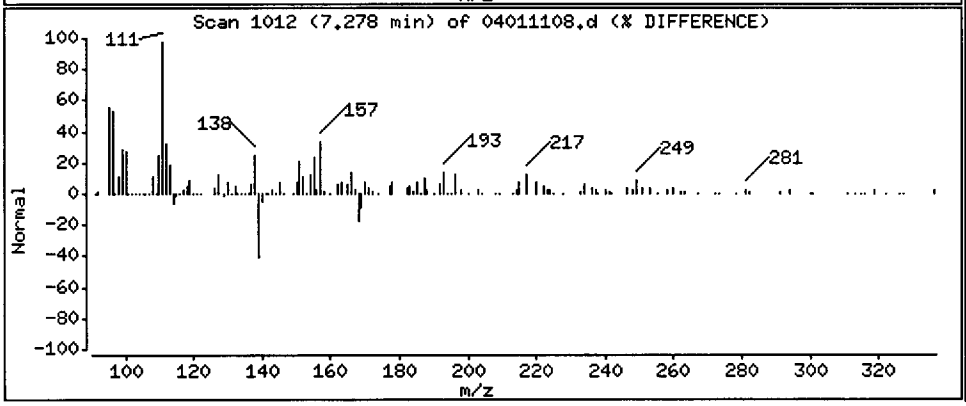












Data File: /chem1/nt12.i/20110401.b/04011108.d

Date : 01-APR-2011 18:13

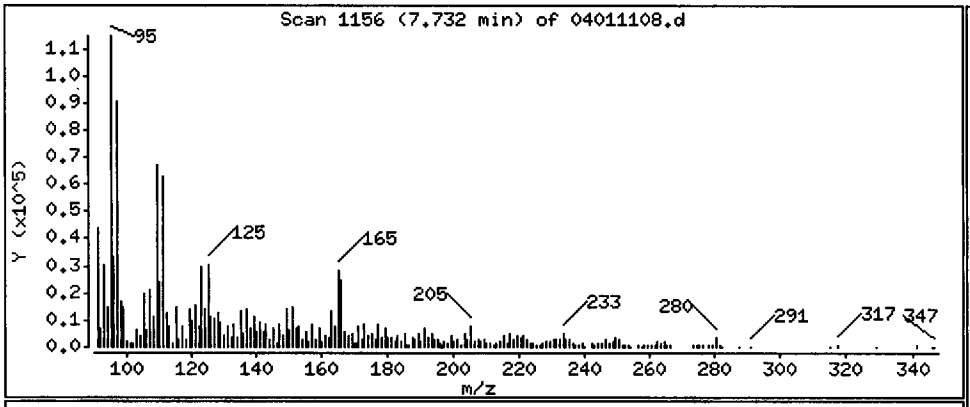
Client ID: LL-SED3-0-36-031511 Instrument: nt12.i

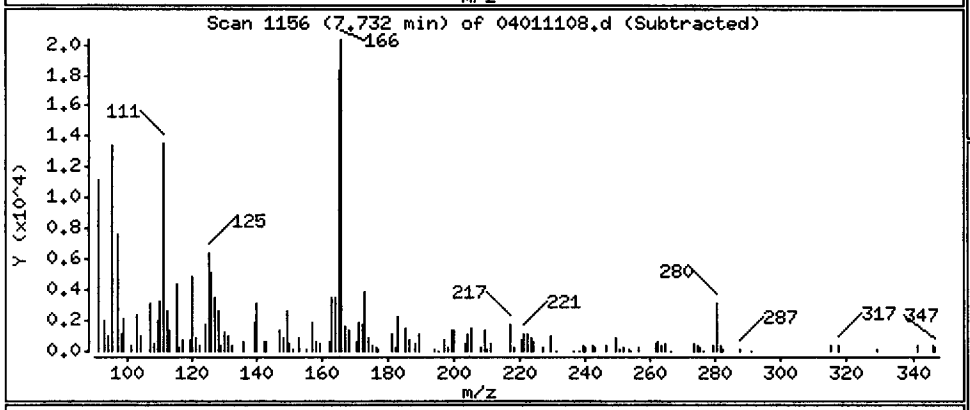
Sample Info: SN54A

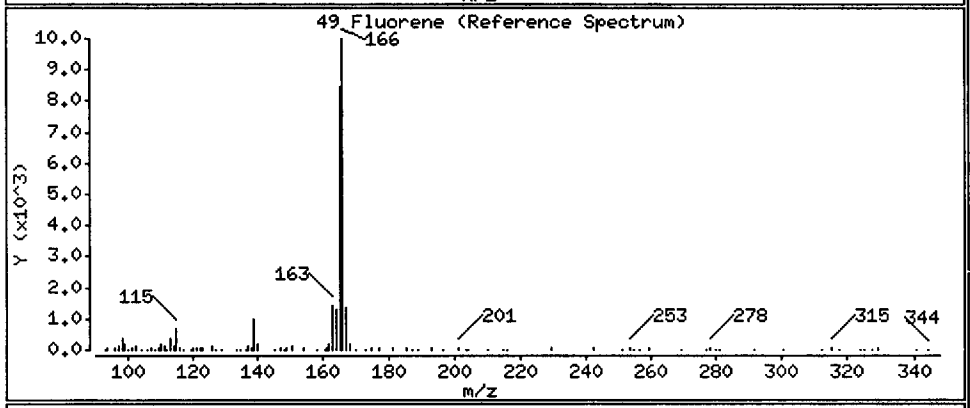
Volume Injected (uL): 1.0 Operator: JZ

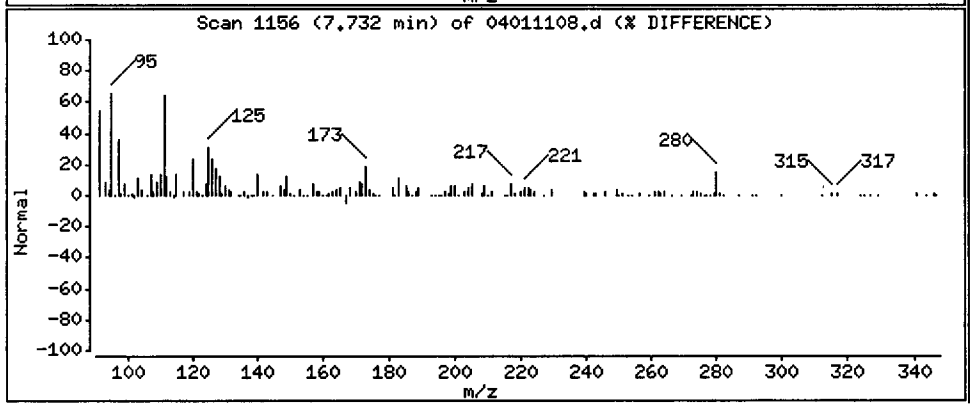
Column phase: ZB35 Column diameter: 0.32

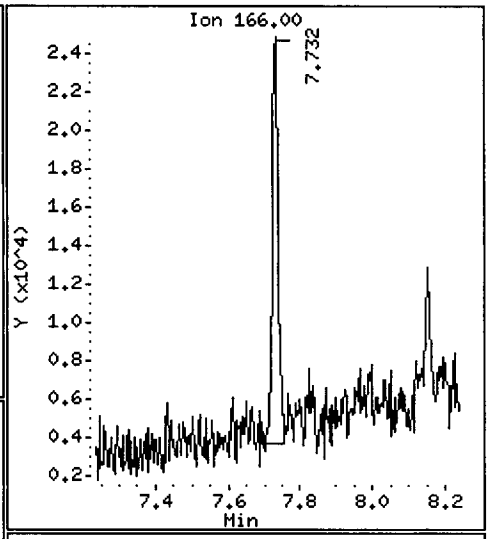
49 Fluorene Concentration: 16.91 ug/kg

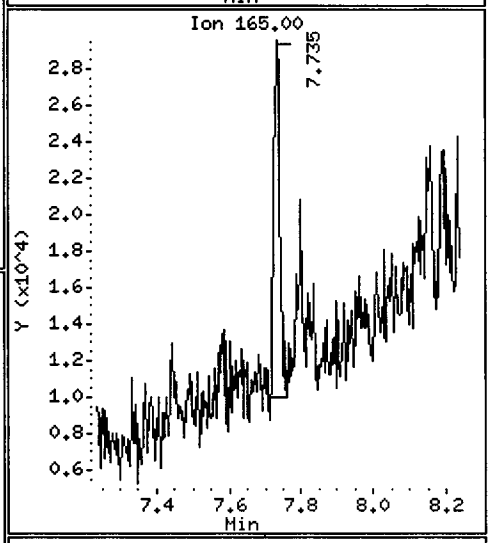


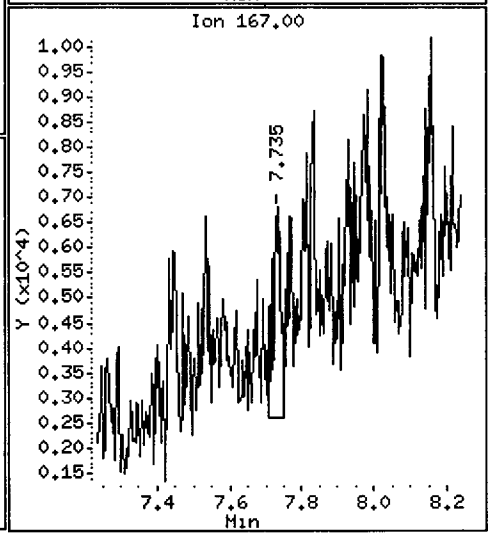












Data File: /chem1/nt12.i/20110401.b/04011108.d

Date : 01-APR-2011 18:13

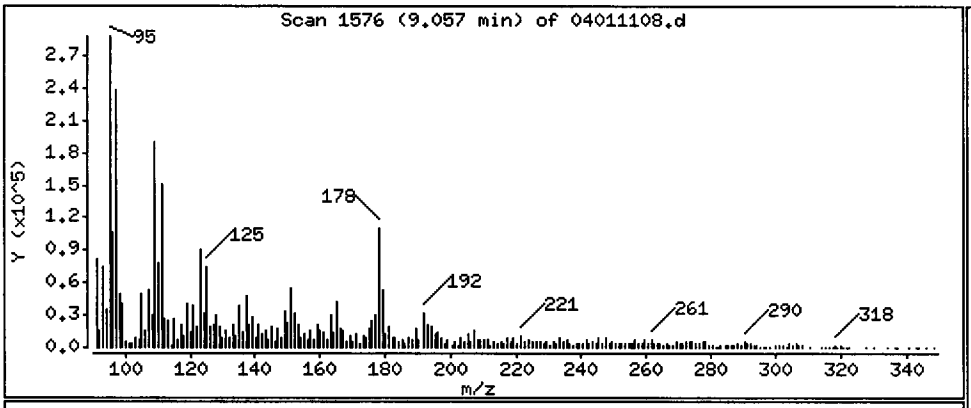
Client ID: LL-SED3-0-36-031511 Instrument: nt12.i

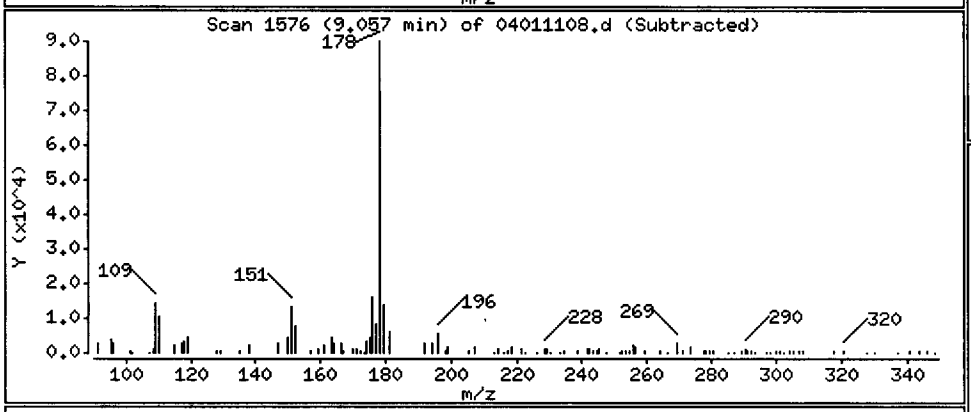
Sample Info: SN54A

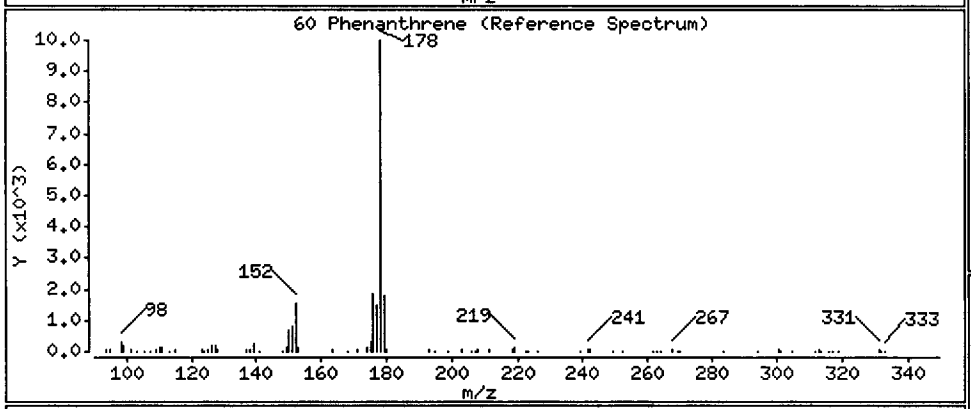
Volume Injected (uL): 1.0 Operator: JZ

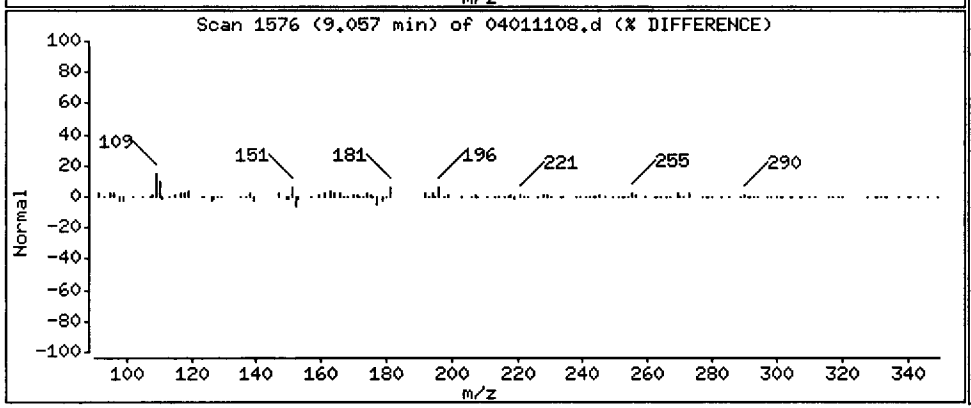
Column phase: ZB35 Column diameter: 0.32

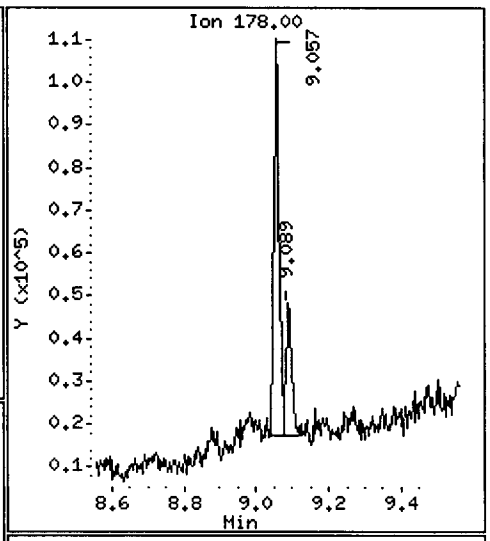
60 Phenanthrene Concentration: 45.68 ug/kg

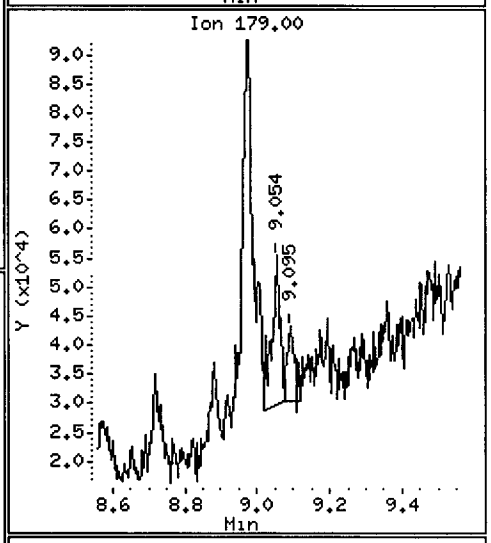


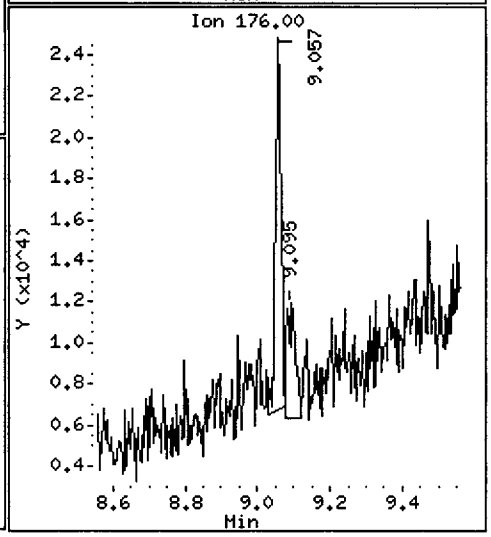












Data File: /chem1/nt12.i/20110401.b/04011108.d

Date : 01-APR-2011 18:13

Client ID: LL-SED3-0-36-031511

Instrument: nt12.i

Sample Info: SN54A

Volume Injected (uL): 1.0

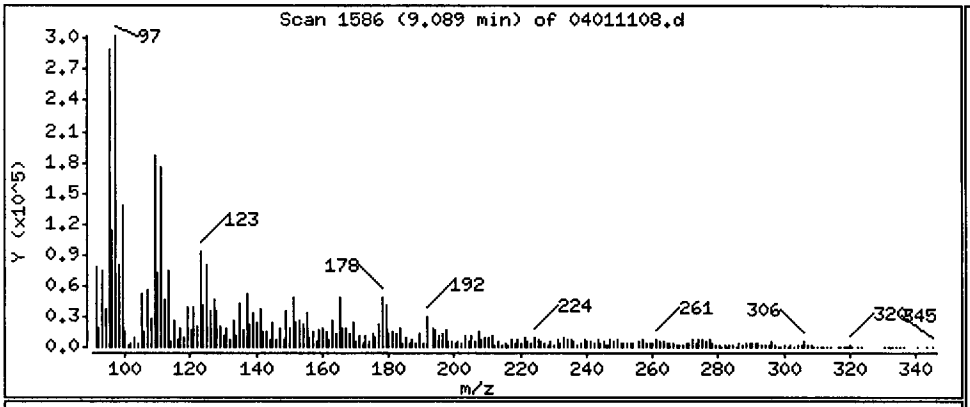
Operator: JZ

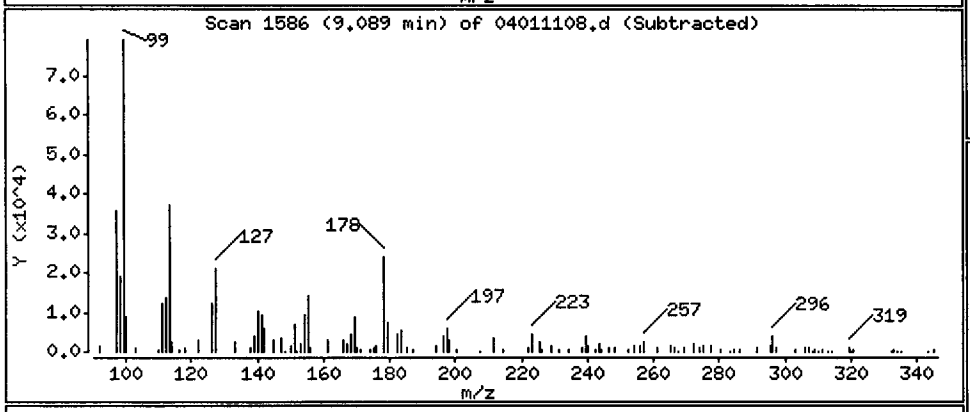
Column phase: ZB35

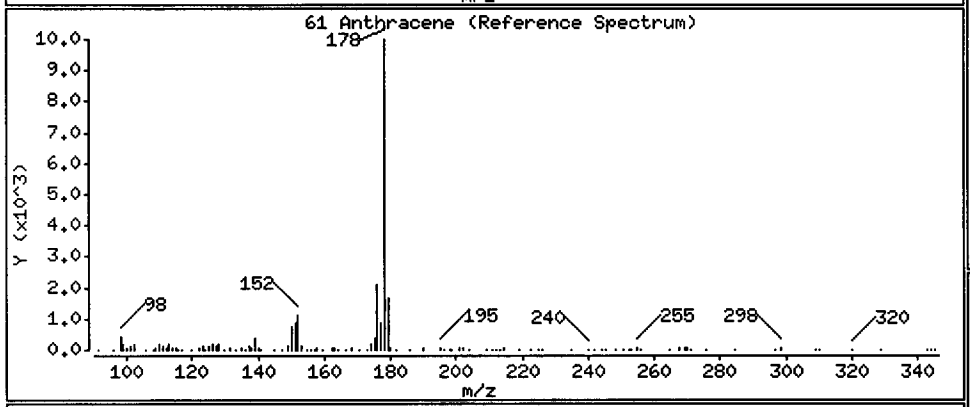
Column diameter: 0.32

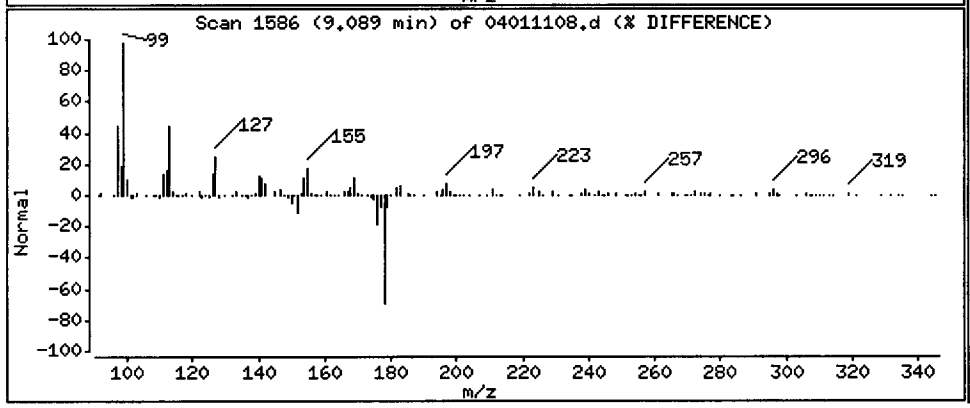
61 Anthracene

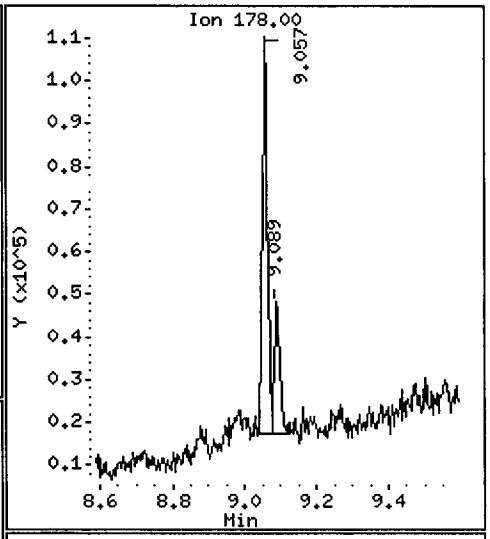
Concentration: 17.16 ug/kg

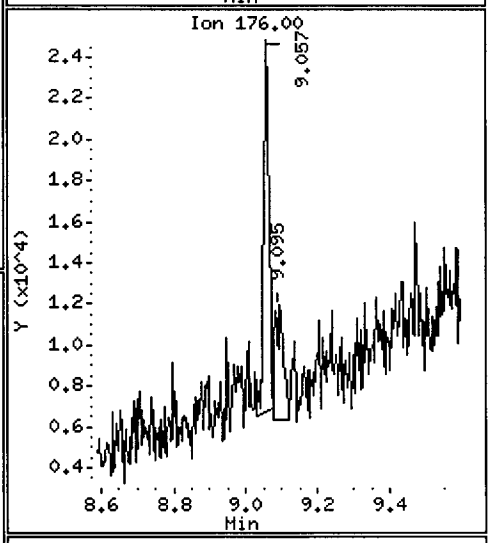


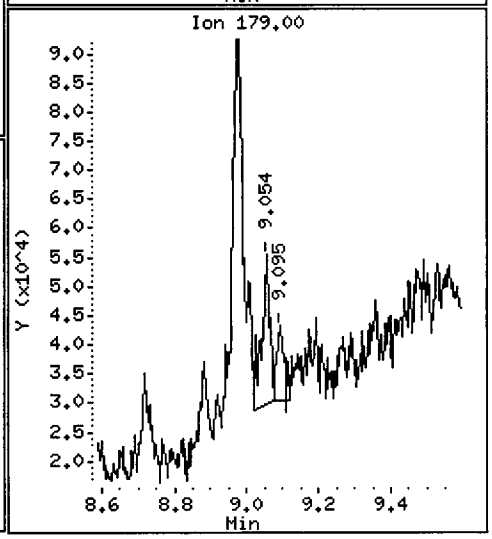












Data File: /chem1/nt12.i/20110401.b/04011108.d

Date : 01-APR-2011 18:13

Client ID: LL-SED3-0-36-031511

Instrument: nt12.i

Sample Info: SN54A

Volume Injected (uL): 1.0

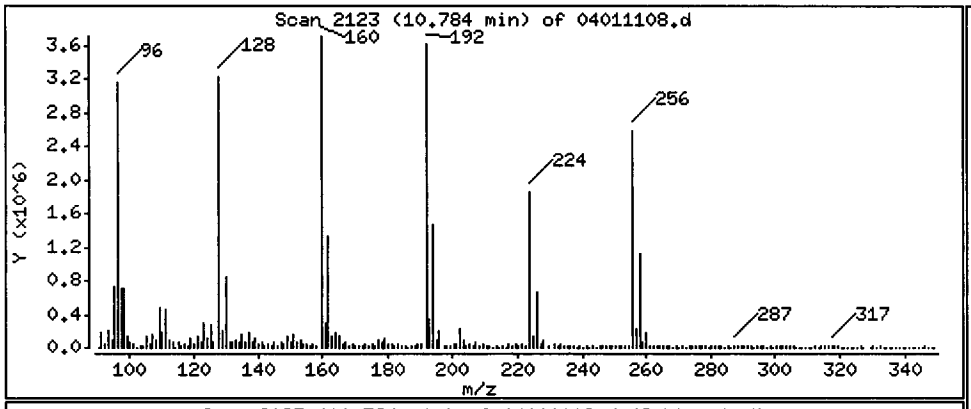
Operator: JZ

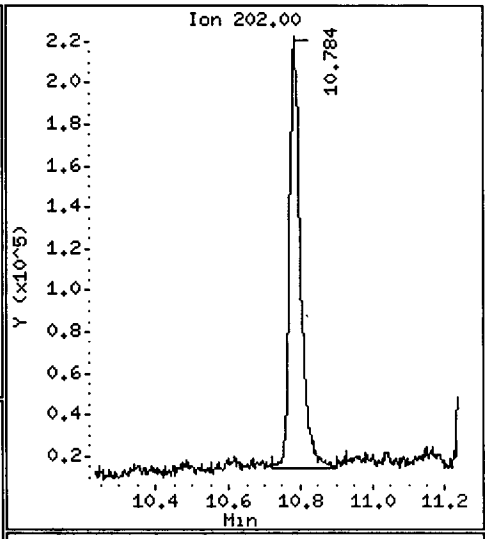
Column phase: ZB35

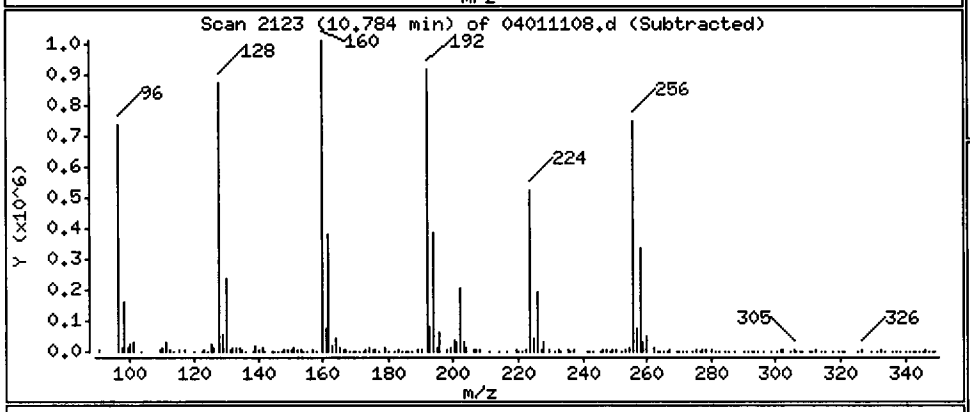
Column diameter: 0.32

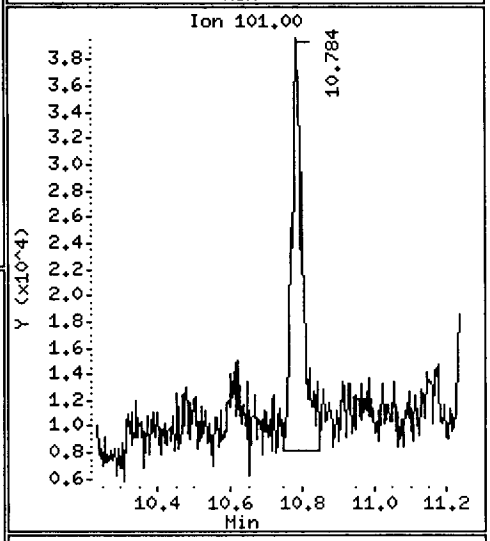
64 Fluoranthene

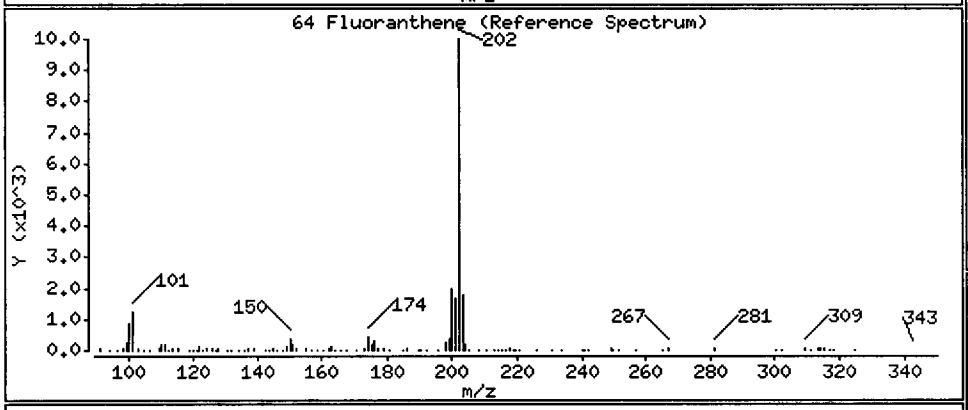
Concentration: 202.8 ug/kg

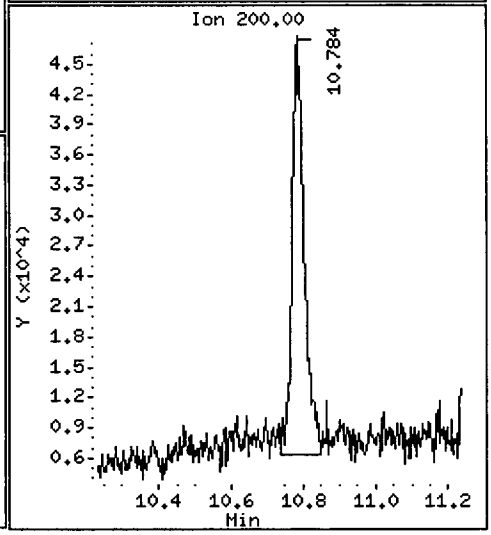


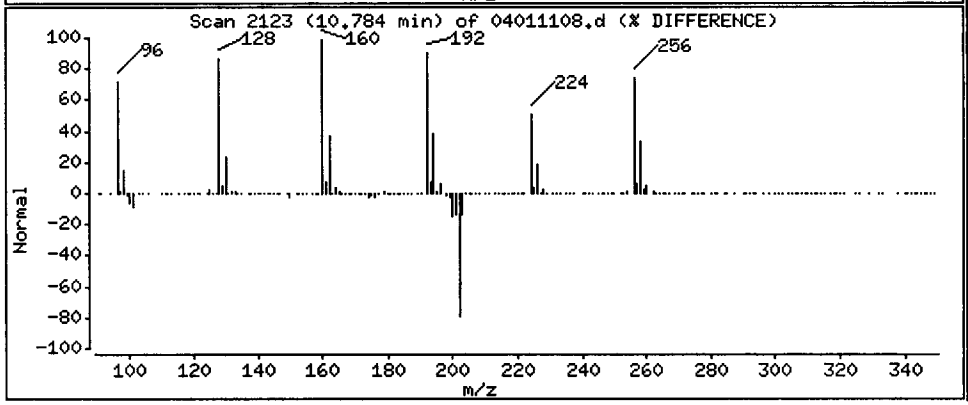












Data File: /chem1/nt12.i/20110401.b/04011108.d

Date : 01-APR-2011 18:13

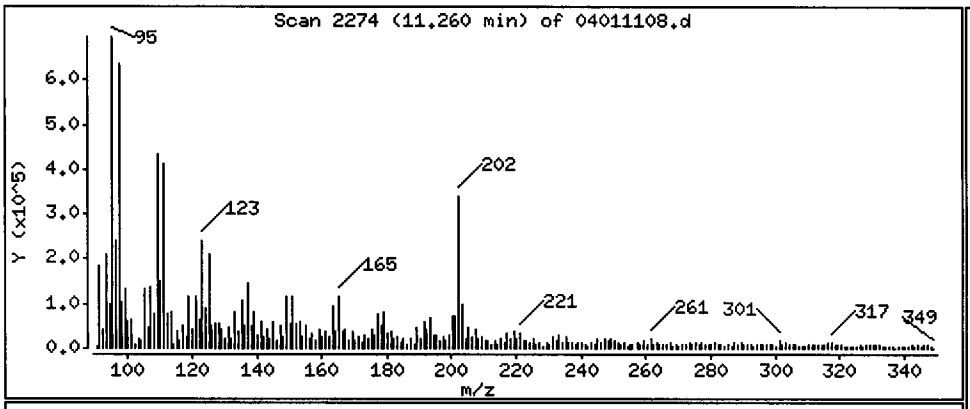
Client ID: LL-SED3-0-36-031511 Instrument: nt12.i

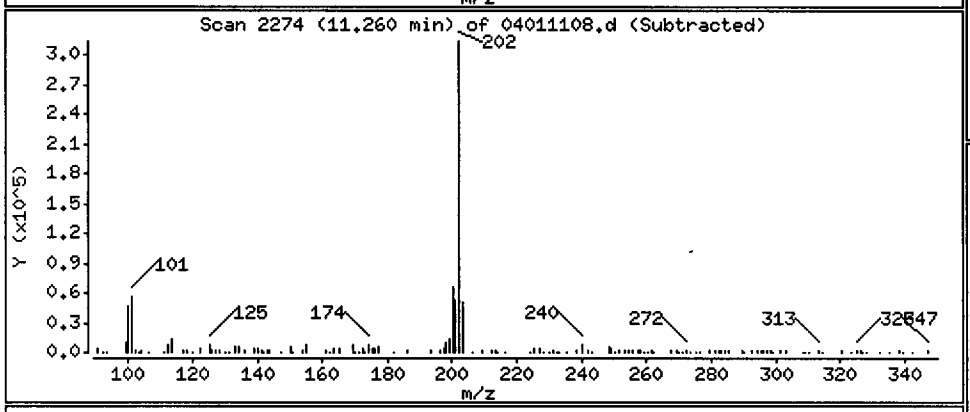
Sample Info: SN54A

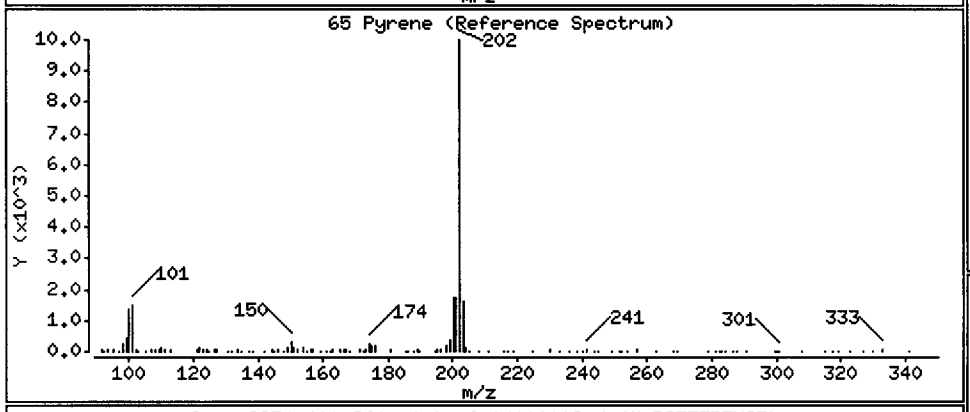
Volume Injected (uL): 1.0 Operator: JZ

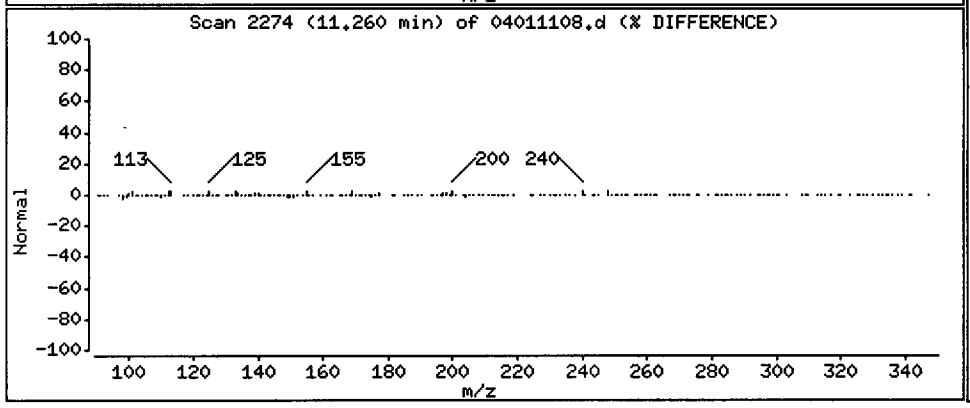
Column phase: ZB35 Column diameter: 0.32

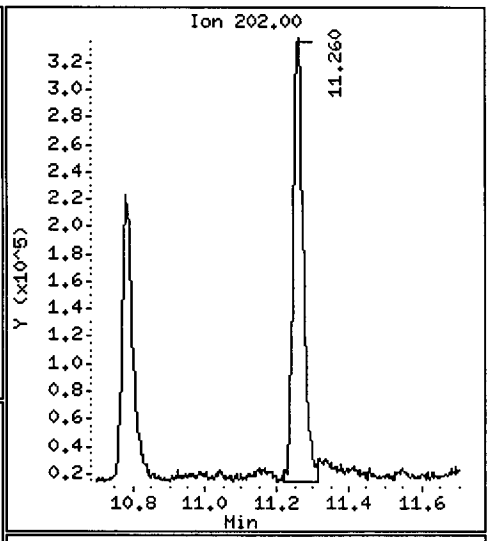
65 Pyrene Concentration: 267.8 ug/kg

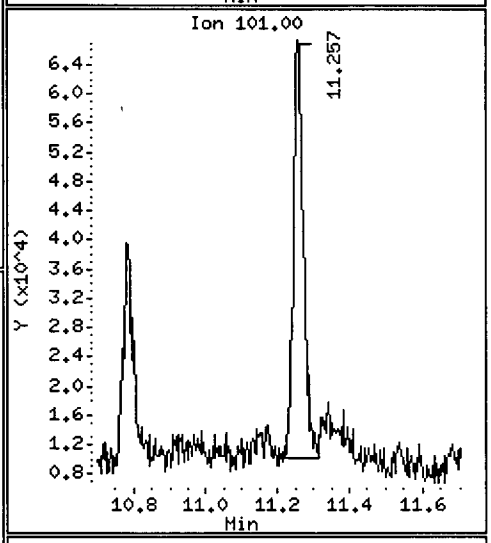


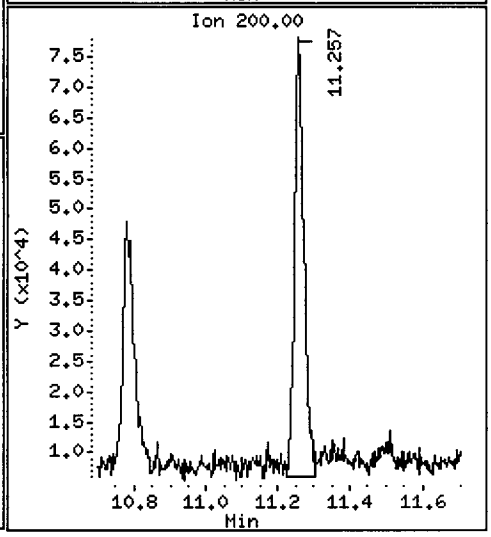












Data File: /chem1/nt12.i/20110401.b/04011108.d

Date : 01-APR-2011 18:13

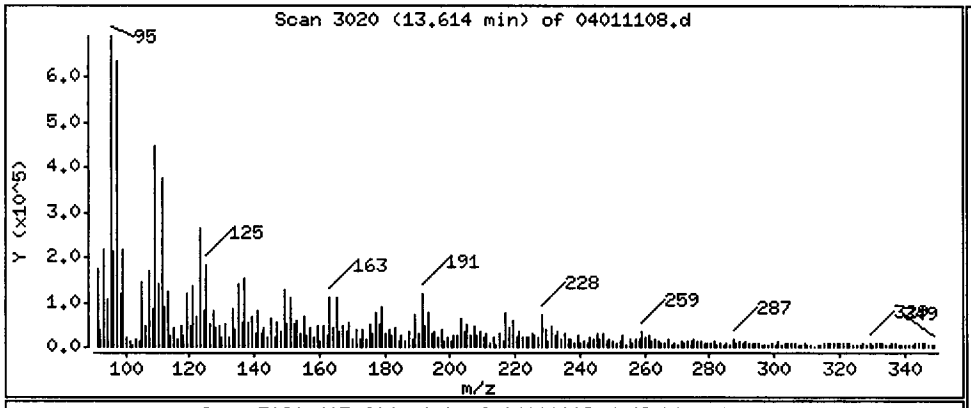
Client ID: LL-SED3-0-36-031511 Instrument: nt12.i

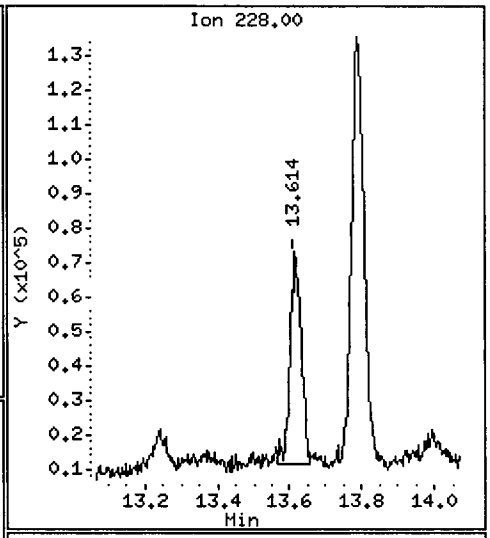
Sample Info: SN54A

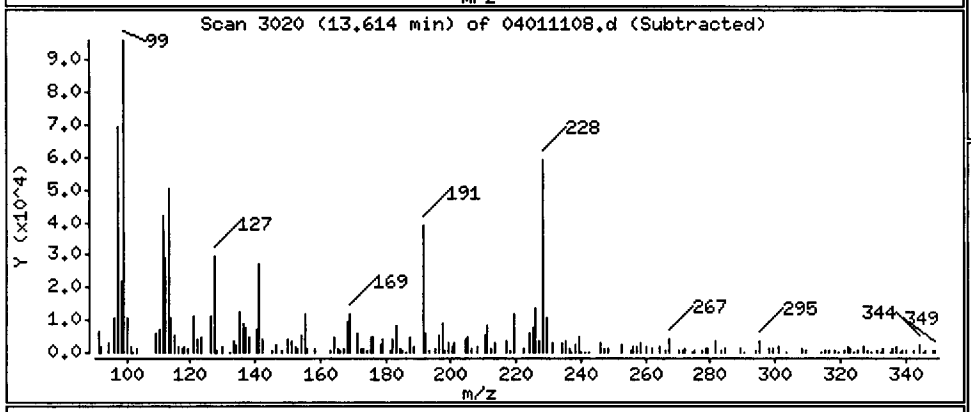
Volume Injected (uL): 1.0 Operator: JZ

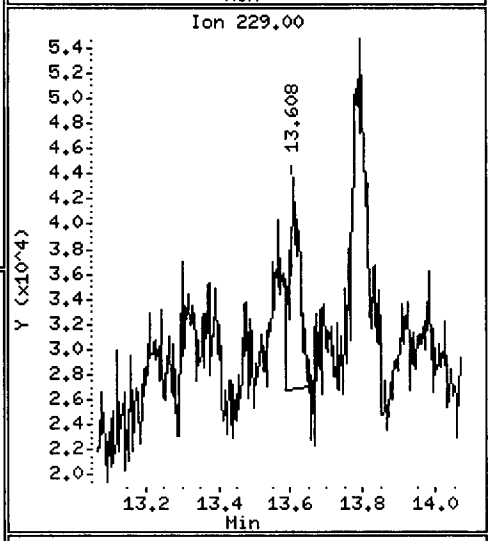
Column phase: ZB35 Column diameter: 0.32

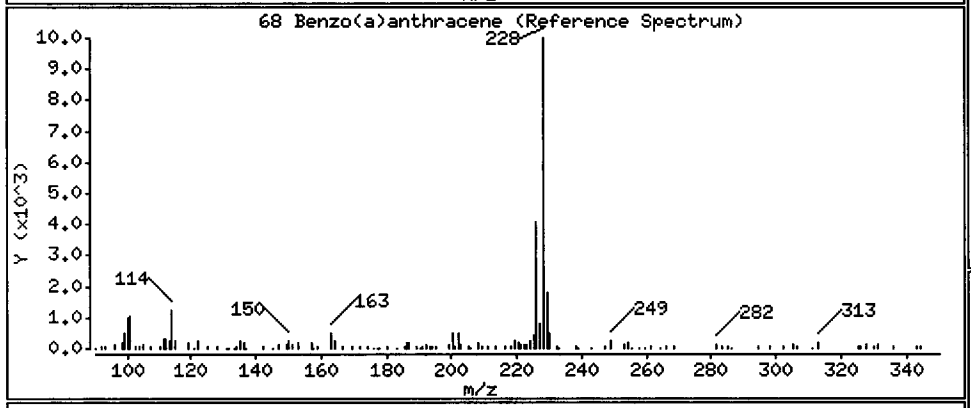
68 Benzo(a)anthracene Concentration: 61.79 ug/kg

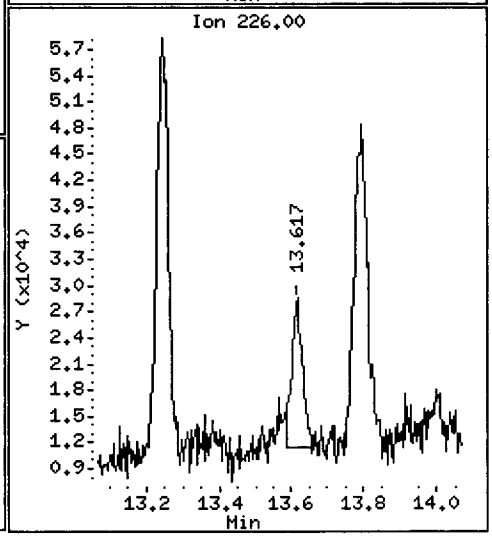


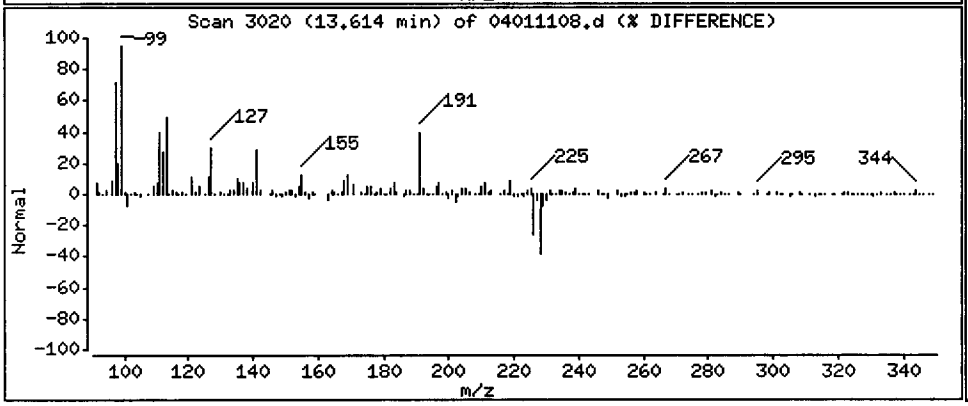












Data File: /chem1/nt12.i/20110401.b/04011108.d

Date : 01-APR-2011 18:13

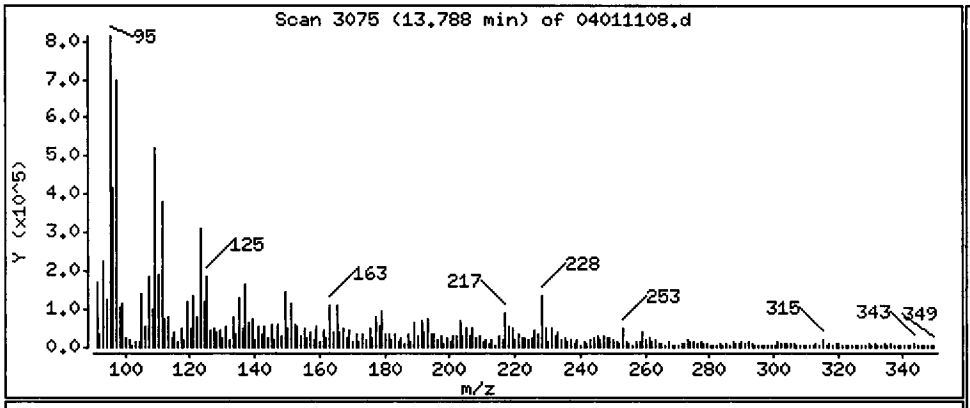
Client ID: LL-SED3-0-36-031511 Instrument: nt12.i

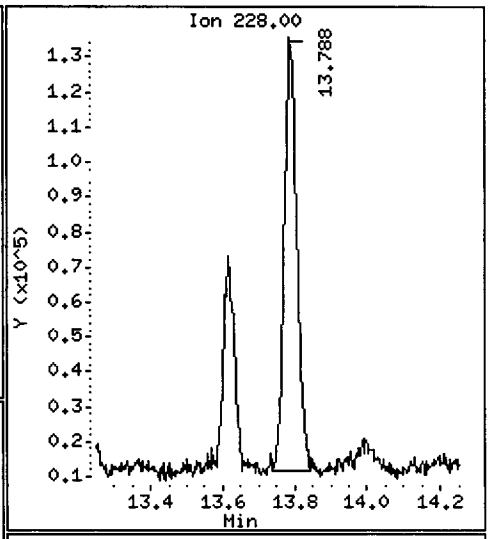
Sample Info: SN54A

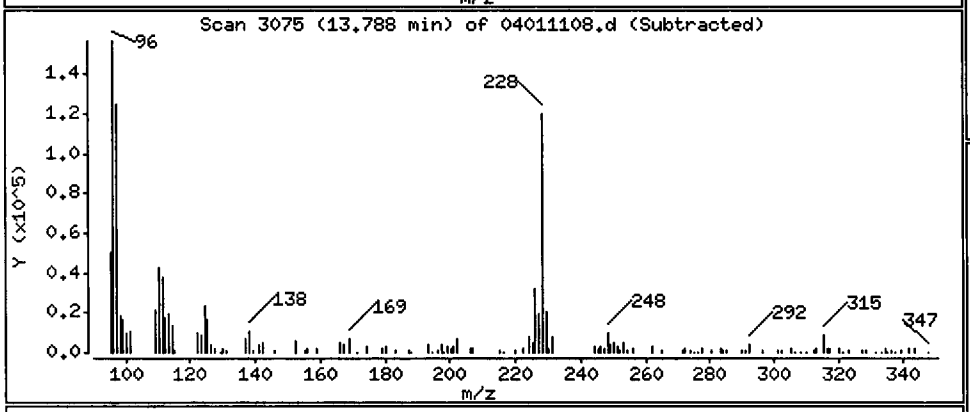
Volume Injected (uL): 1.0 Operator: JZ

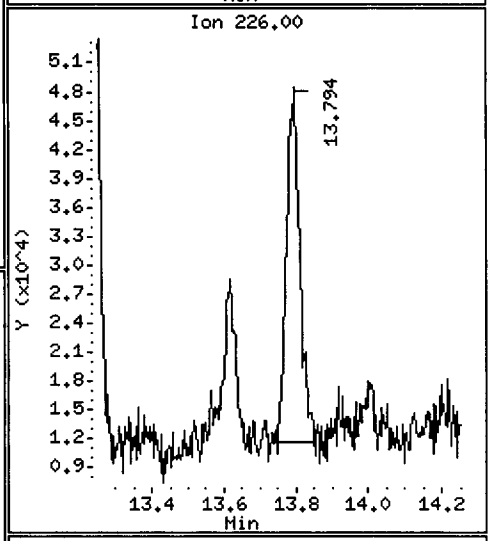
Column phase: ZB35 Column diameter: 0.32

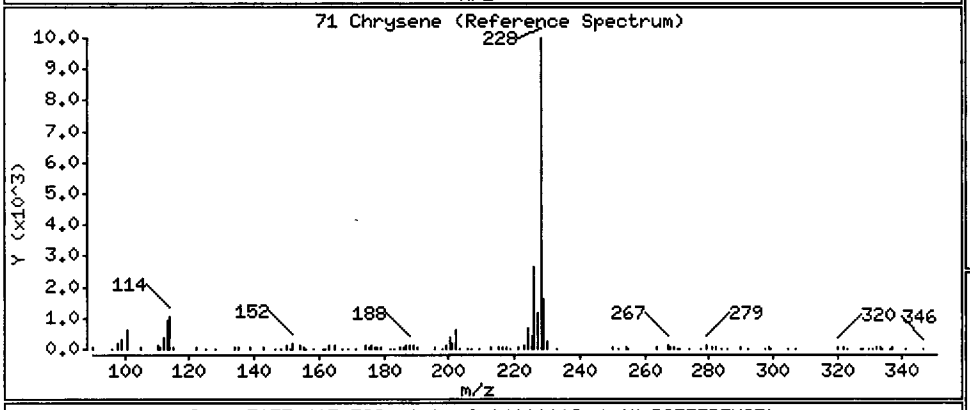
71 Chrysene Concentration: 143.2 ug/kg

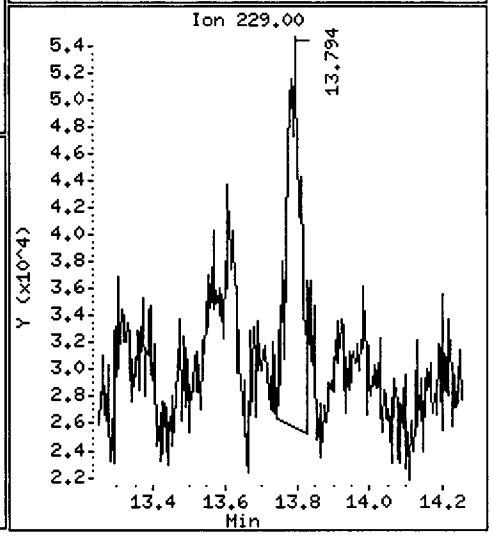


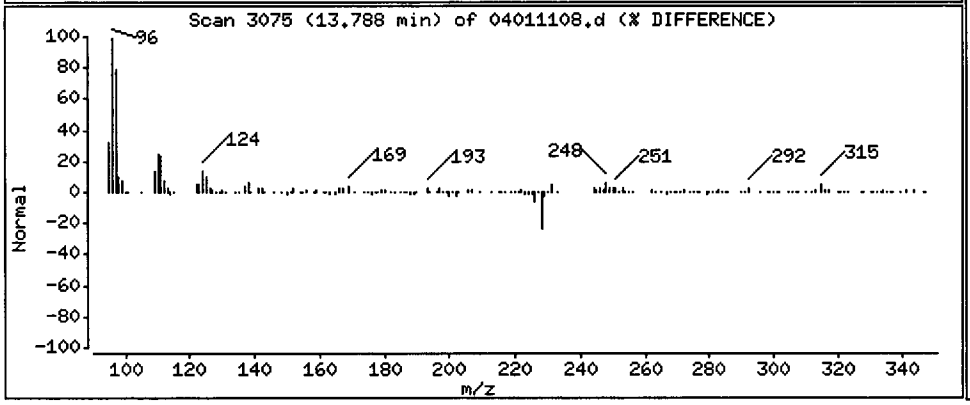












Data File: /chem1/nt12.i/20110401.b/04011108.d

Date : 01-APR-2011 18:13

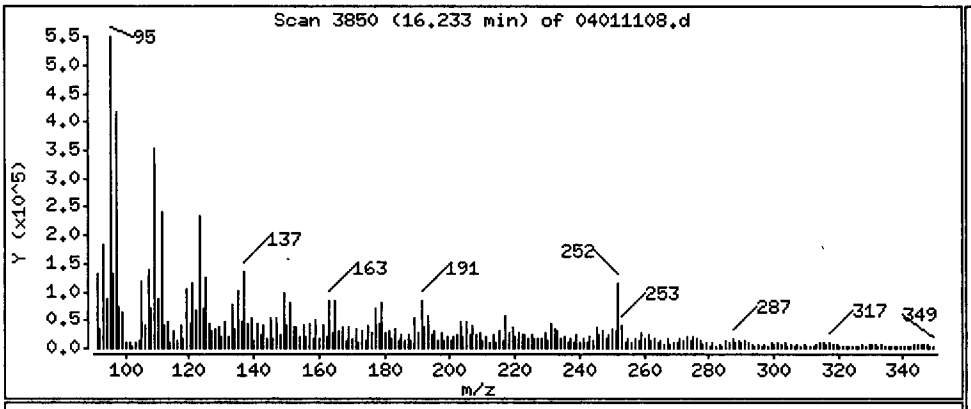
Client ID: LL-SED3-0-36-031511 Instrument: nt12.i

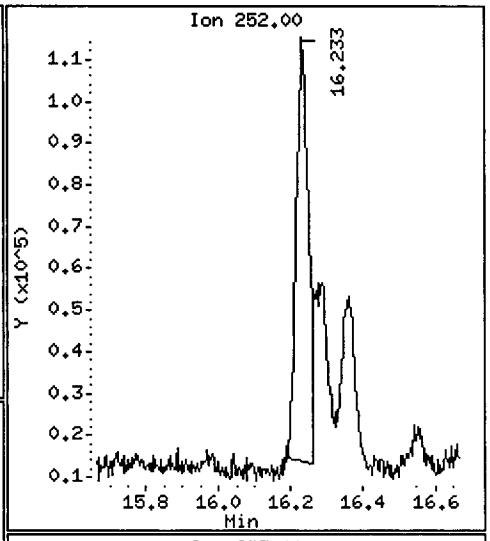
Sample Info: SN54A

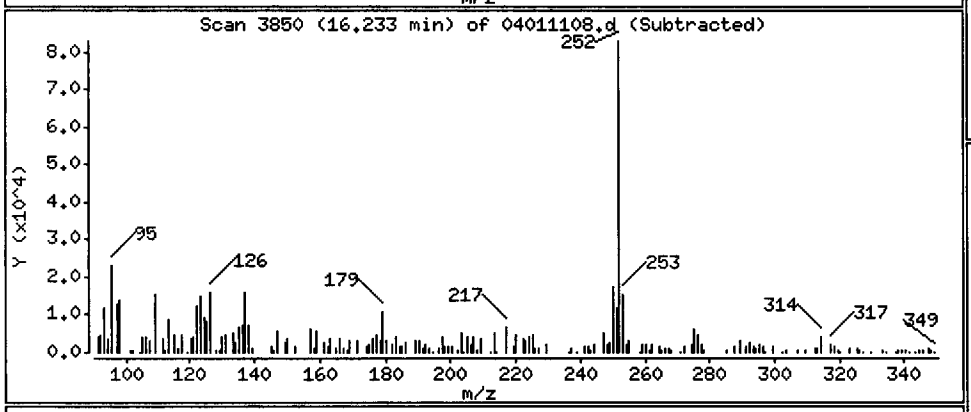
Volume Injected (uL): 1.0 Operator: JZ

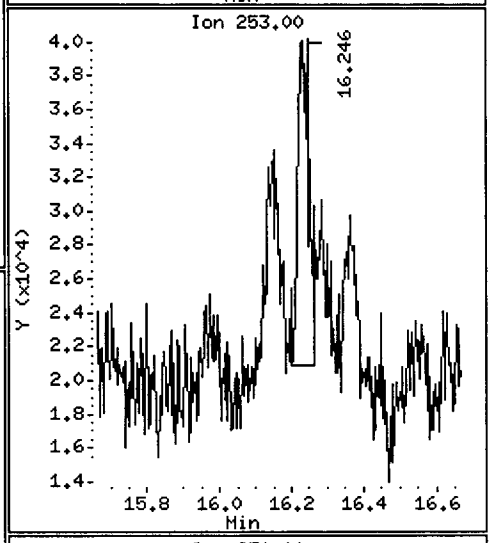
Column phase: ZB35 Column diameter: 0.32

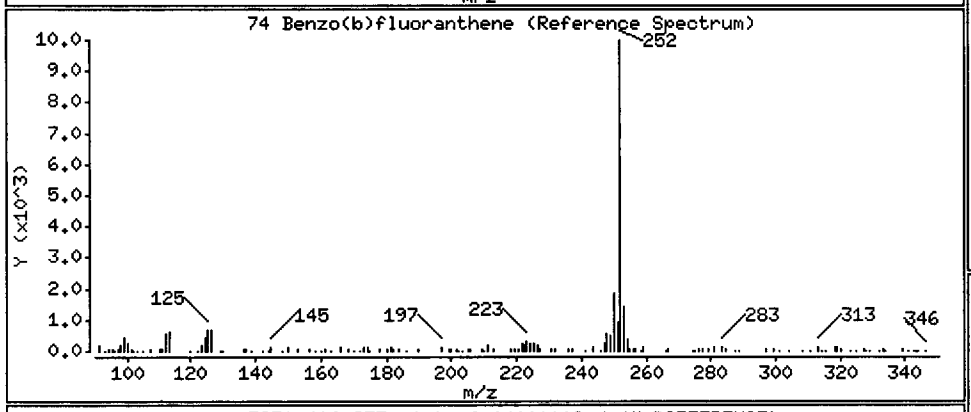
74 Benzo(b)fluoranthene Concentration: 120.7 ug/kg

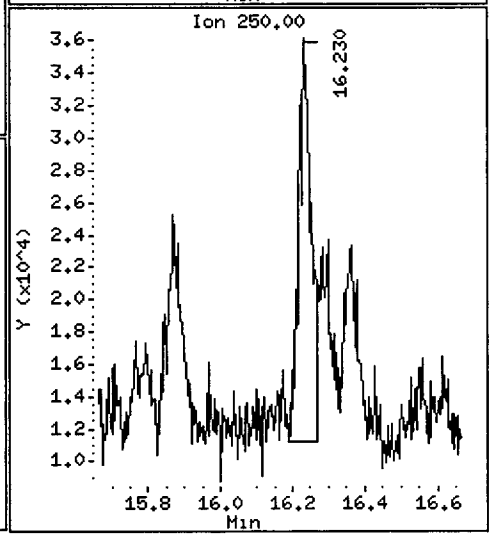


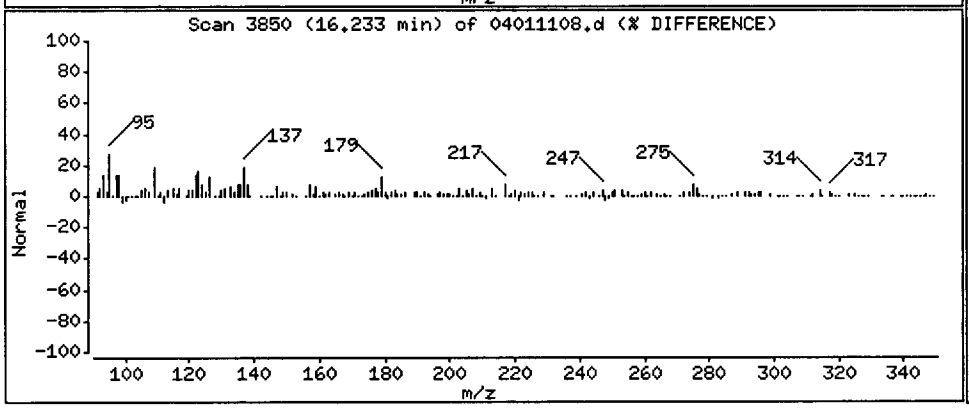












Data File: /chem1/nt12.i/20110401.b/04011108.d

Date : 01-APR-2011 18:13

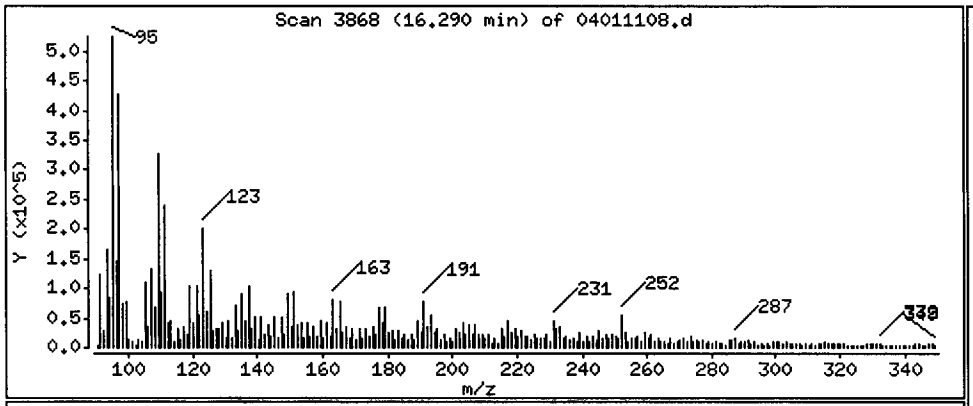
Client ID: LL-SED3-0-36-031511 Instrument: nt12.i

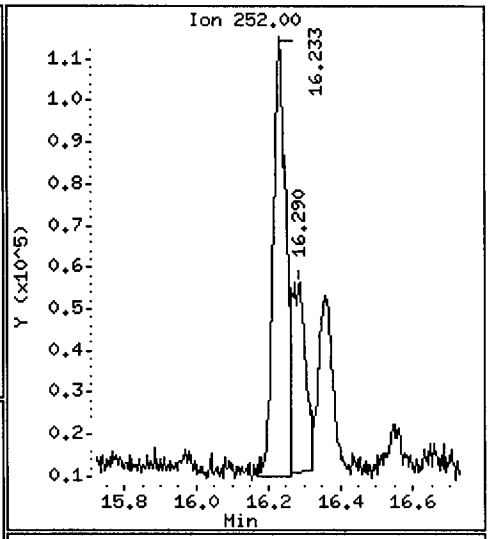
Sample Info: SN54A

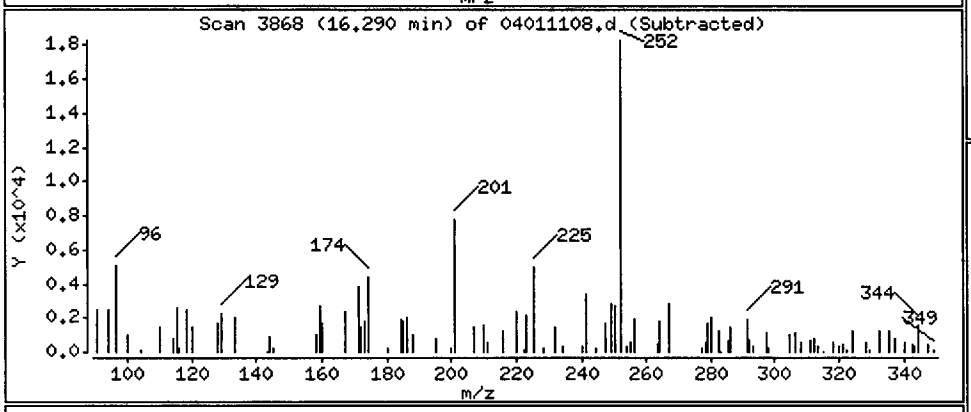
Volume Injected (uL): 1.0 Operator: JZ

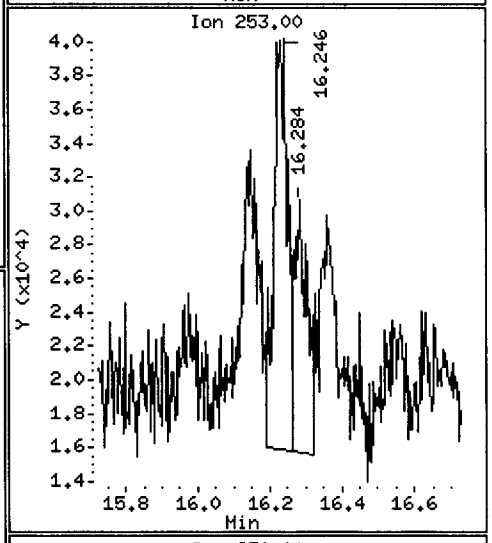
Column phase: ZB35 Column diameter: 0.32

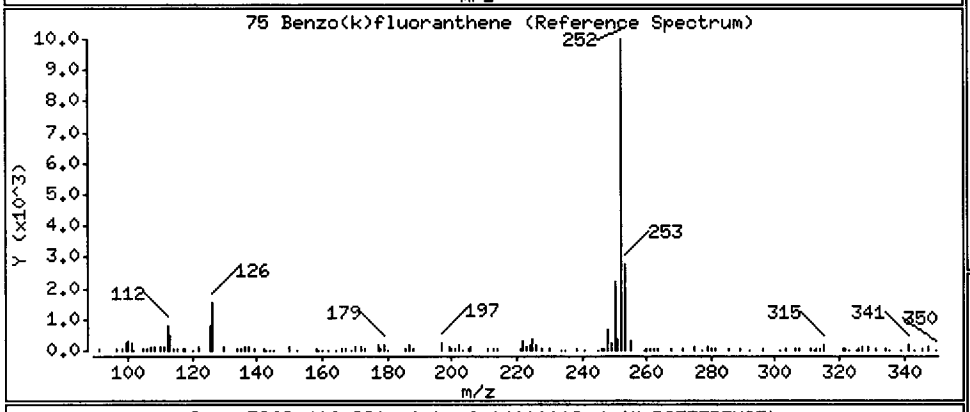
75 Benzo(k)fluoranthene Concentration: 58.20 ug/kg

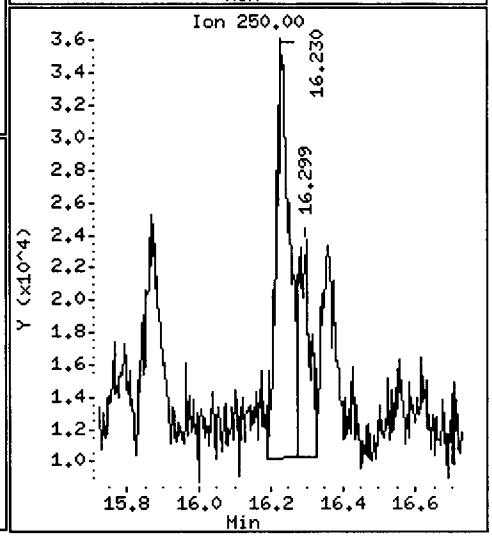


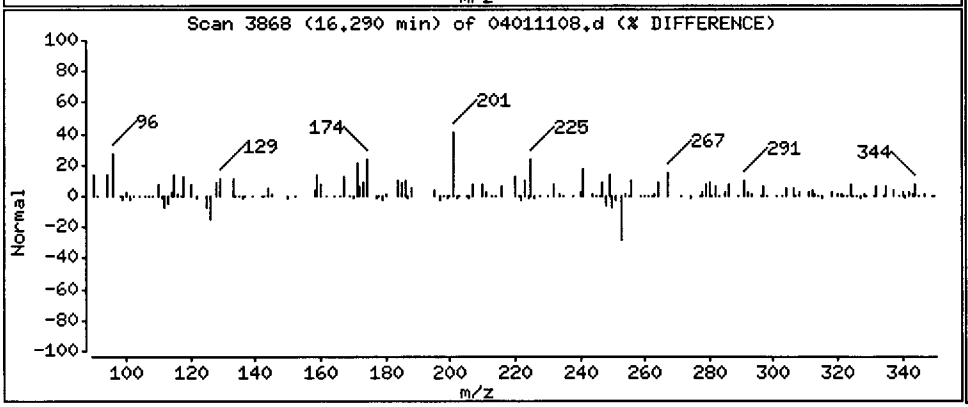












Data File: /chem1/nt12.i/20110401.b/04011108.d

Date : 01-APR-2011 18:13

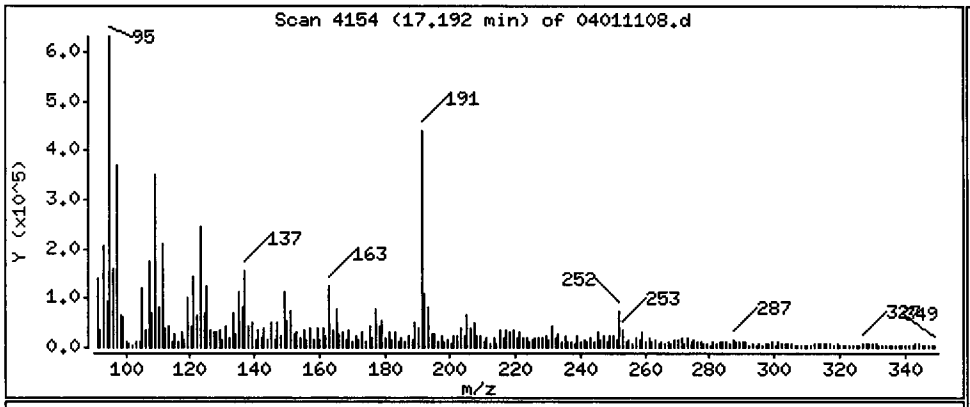
Client ID: LL-SED3-0-36-031511 Instrument: nt12.i

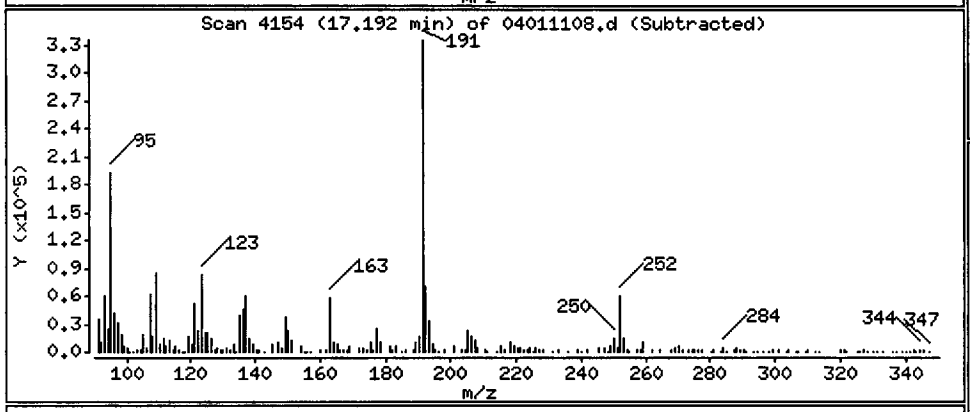
Sample Info: SN54A

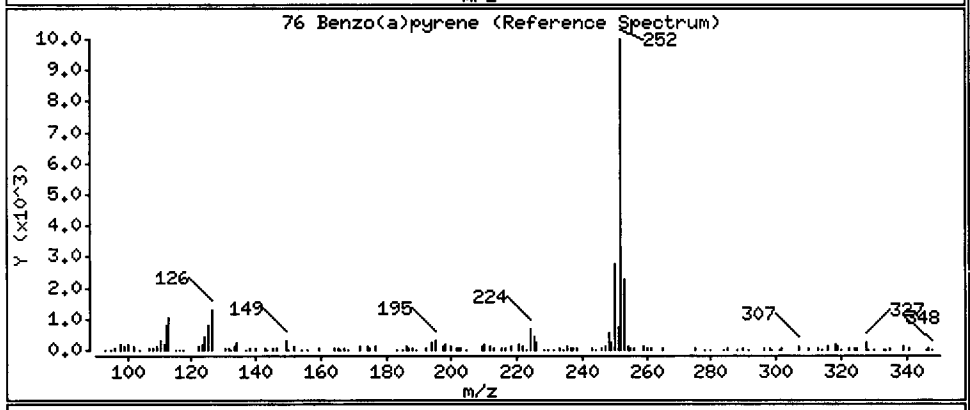
Volume Injected (uL): 1.0 Operator: JZ

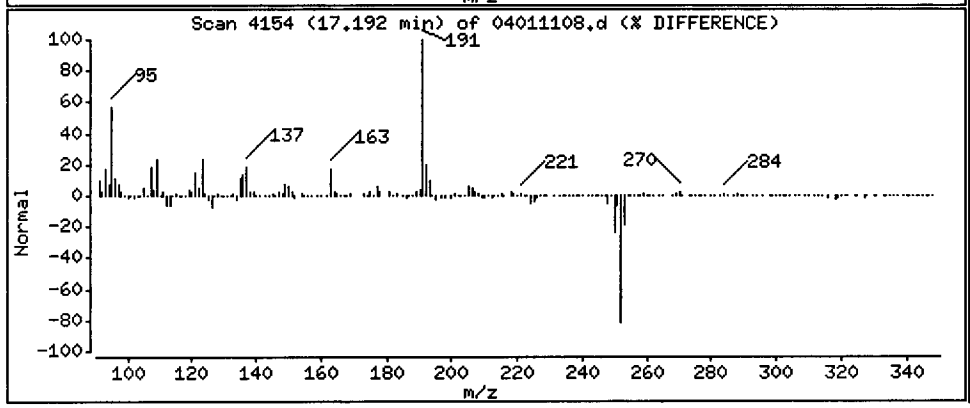
Column phase: ZB35 Column diameter: 0.32

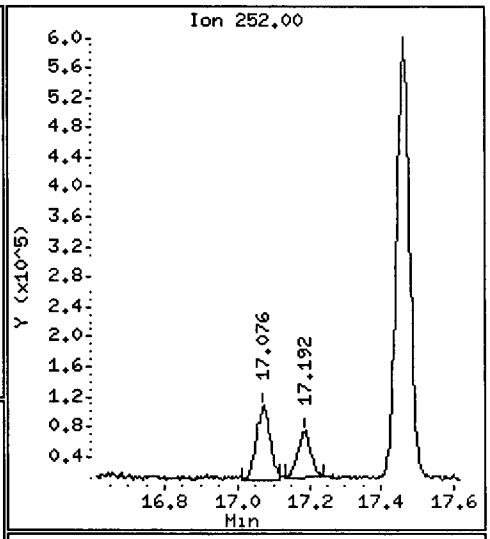
76 Benzo(a)pyrene Concentration: 88.28 ug/kg

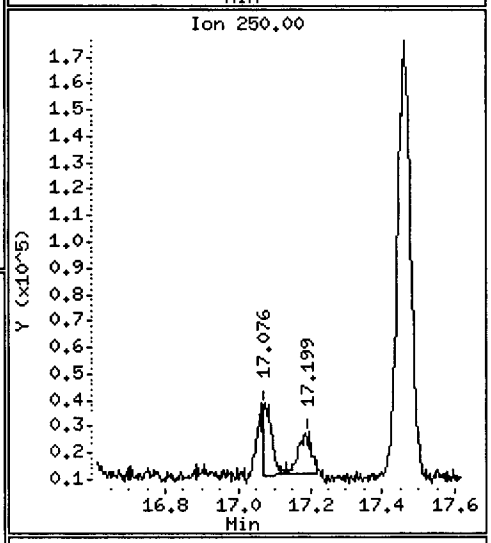


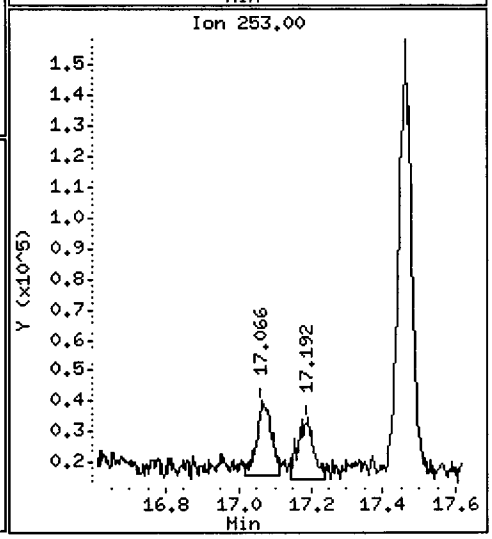












Data File: /chem1/nt12.i/20110401.b/04011108.d

Date : 01-APR-2011 18:13

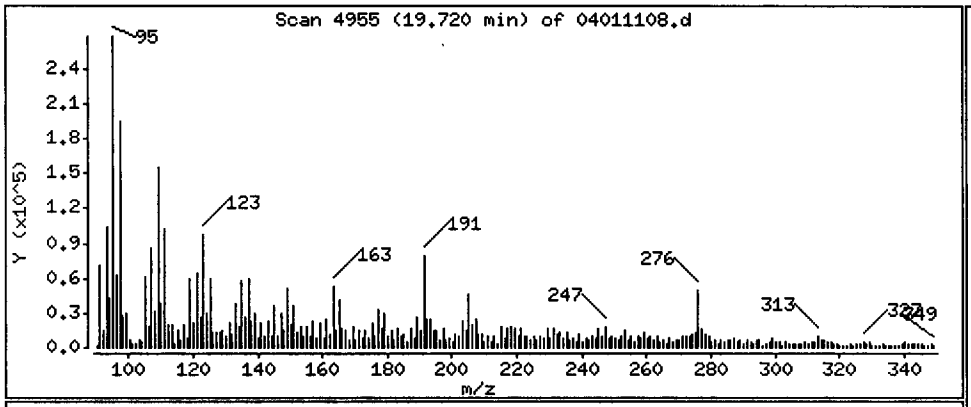
Client ID: LL-SED3-0-36-031511 Instrument: nt12.i

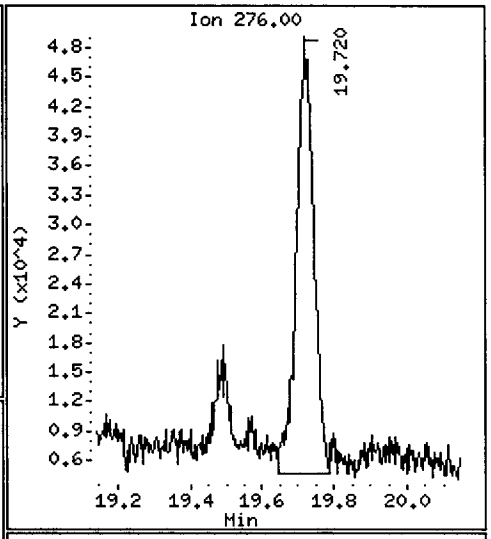
Sample Info: SN54A

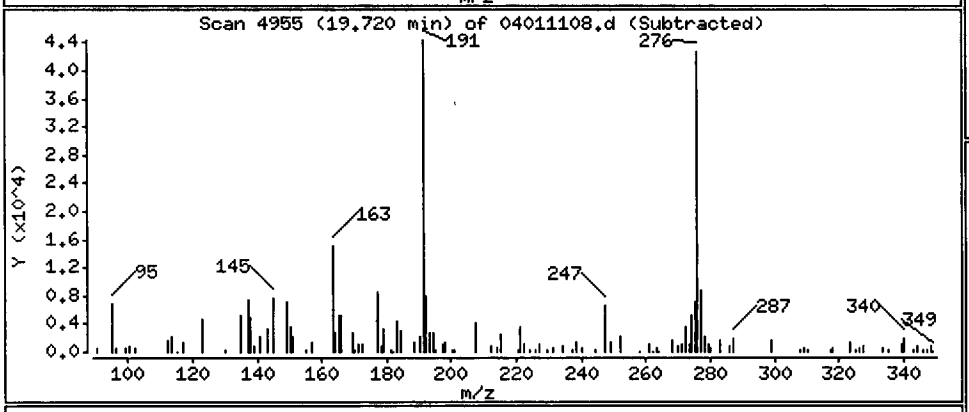
Volume Injected (uL): 1.0 Operator: JZ

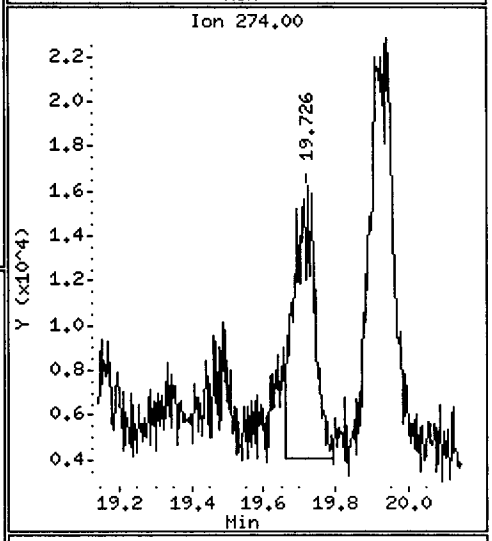
Column phase: ZB35 Column diameter: 0.32

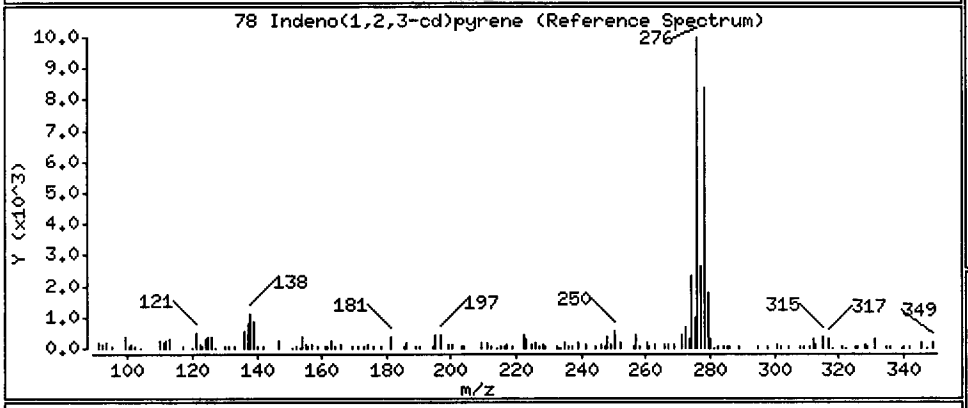
78 Indeno(1,2,3-cd)pyrene Concentration: 67.69 ug/kg

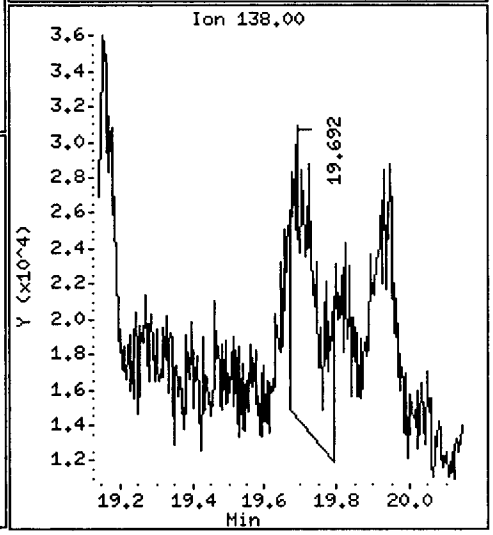


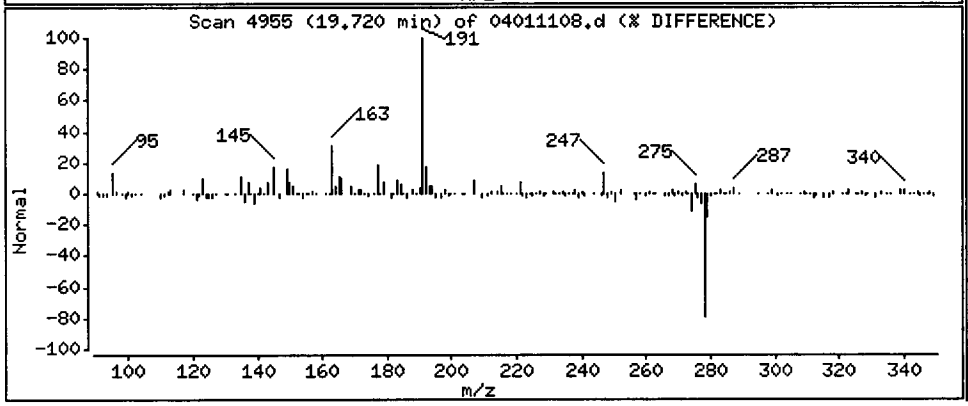












Data File: /chem1/nt12.i/20110401.b/04011108.d

Date : 01-APR-2011 18:13

Client ID: LL-SED3-0-36-031511

Instrument: nt12.i

Sample Info: SN54A

Volume Injected (uL): 1.0

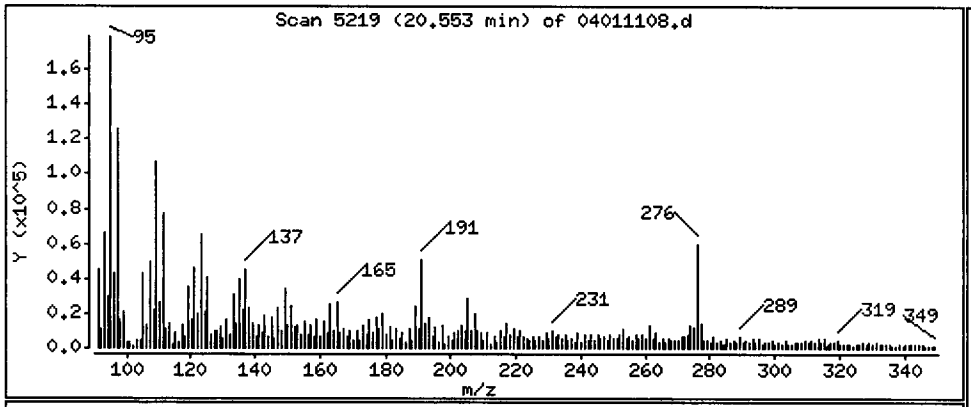
Operator: JZ

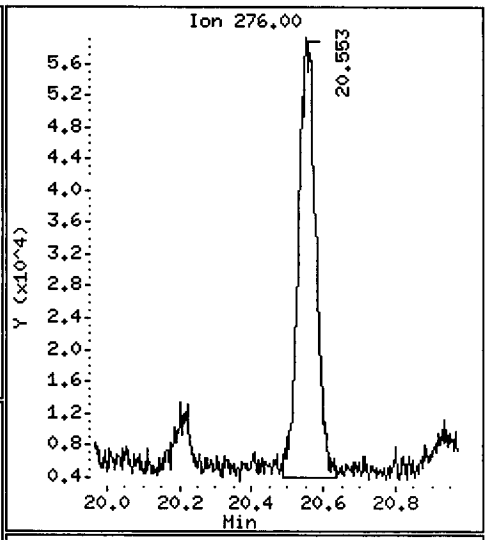
Column phase: ZB35

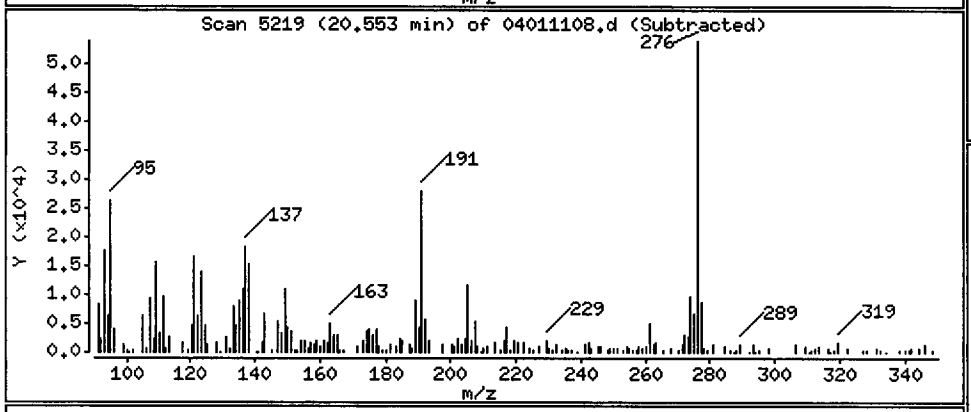
Column diameter: 0.32

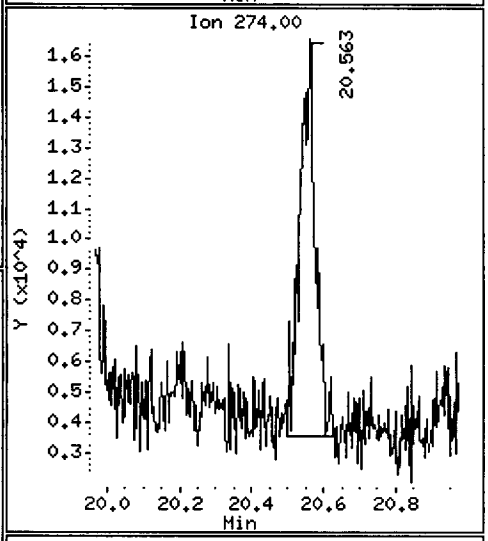
80 Benzo(g,h,i)perylene

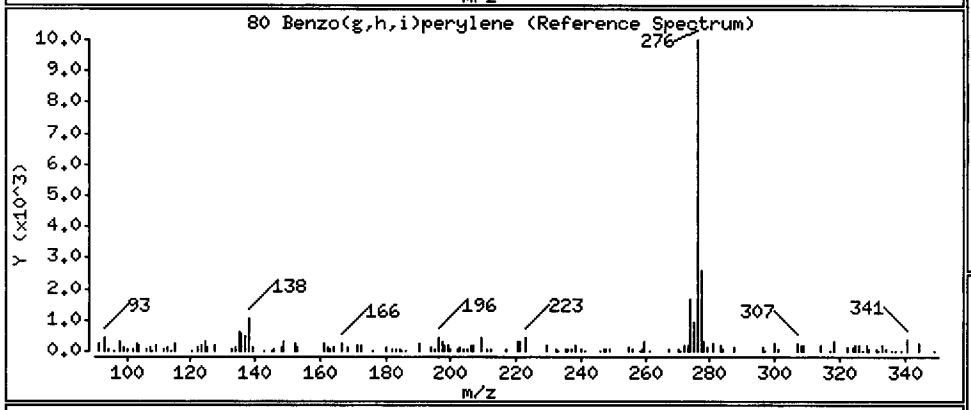
Concentration: 95.49 ug/kg

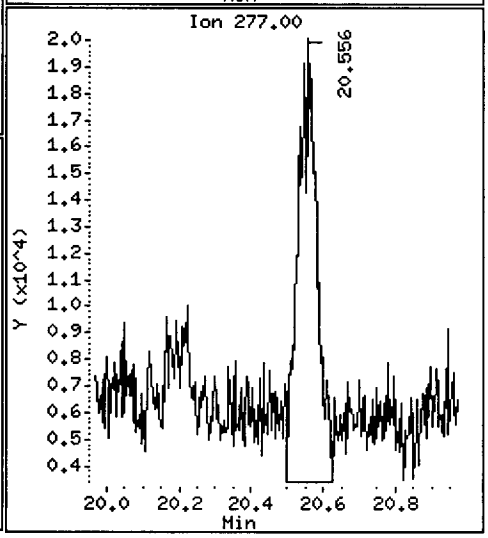


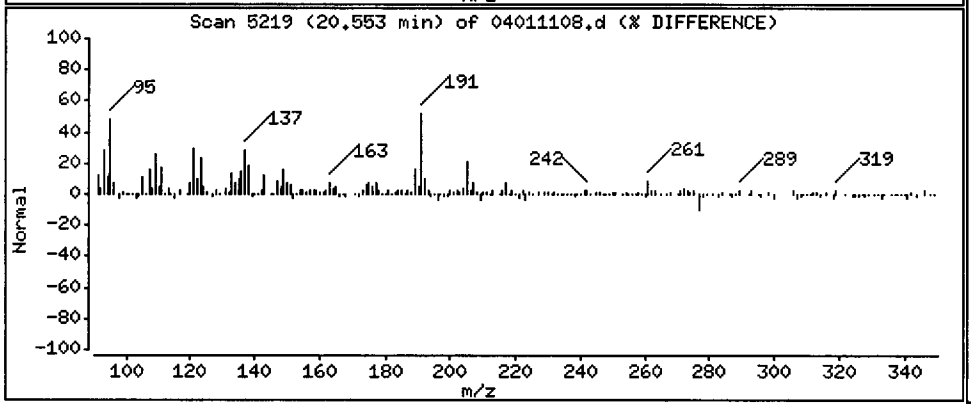












Data File: /chem1/nt12.i/20110401.b/04011108.d

Date : 01-APR-2011 18:13

Client ID: LL-SED3-0-36-031511

Instrument: nt12.i

Sample Info: SN54A

Volume Injected (uL): 1.0

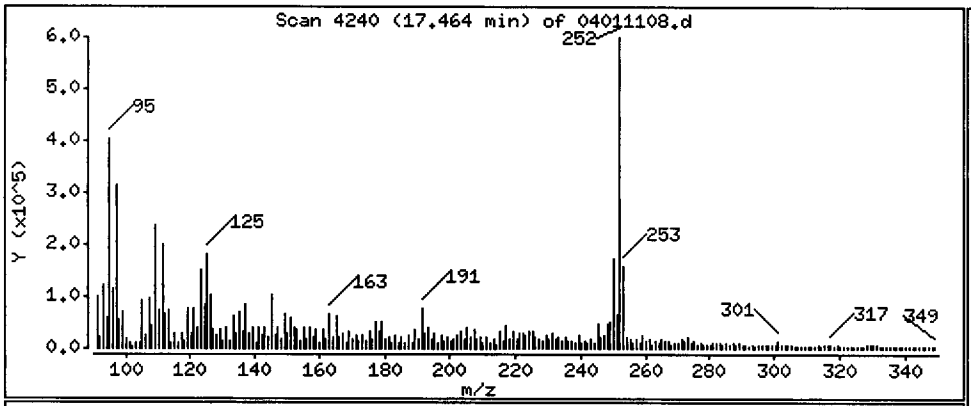
Operator: JZ

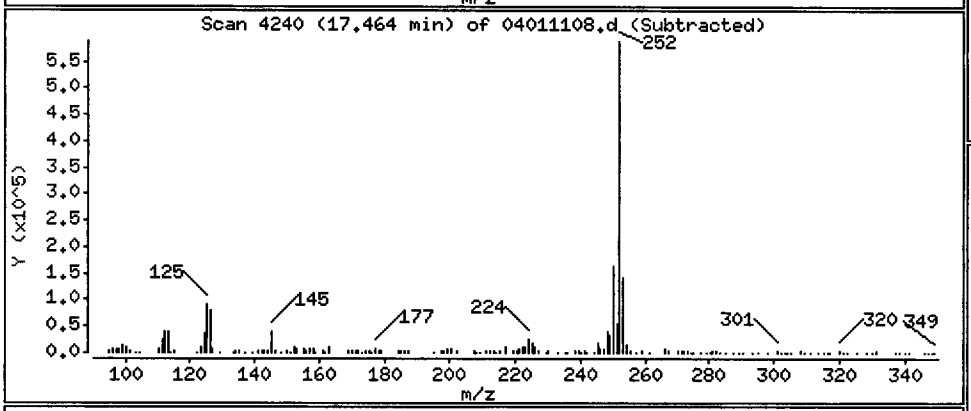
Column phase: ZB35

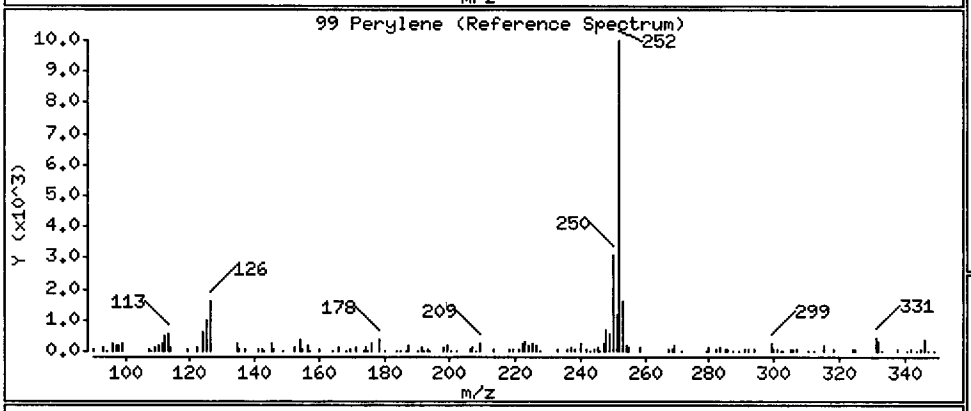
Column diameter: 0.32

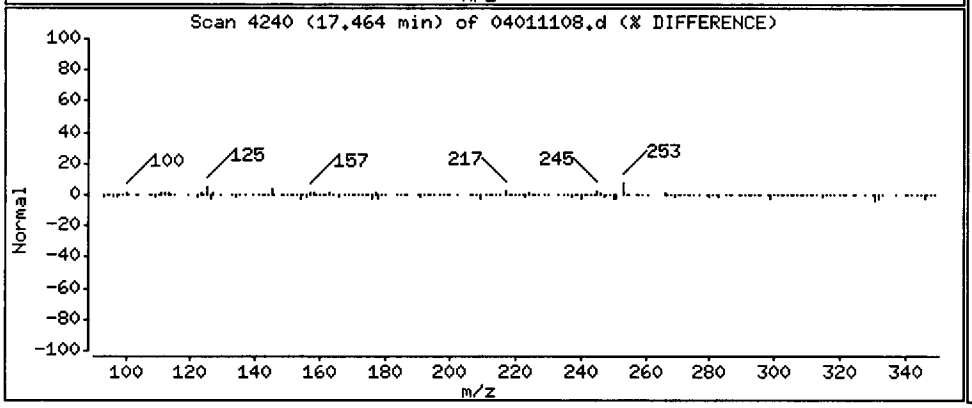
99 Perylene

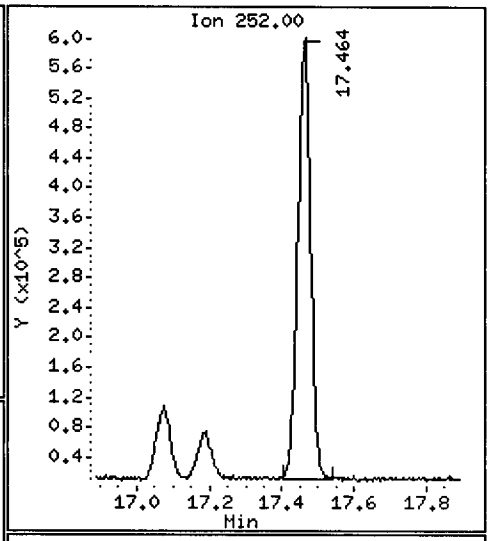
Concentration: 947.5 ug/kg

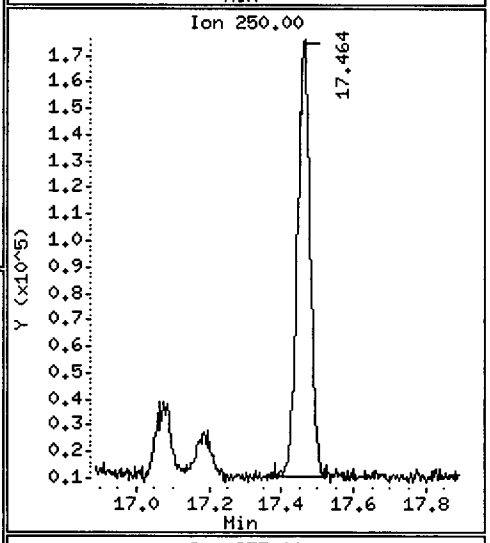


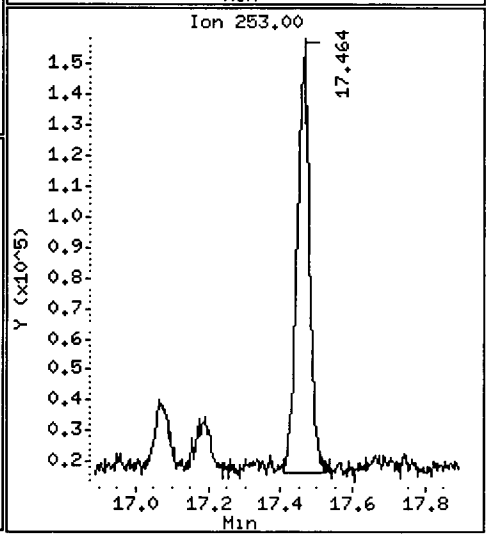












CO-ELUTION SUMMARY FOR FILE - 04011108.d

Lab ID: SN54A, Method: SIMPNA0331.m, Instrument: nt12.i, Date: 01-APR-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt12.i/20110401.b/04011109.d
Lab Smp Id: SN54B Client Smp ID: LL-SED3-36-141-0315
Inj Date : 01-APR-2011 18:41
Operator : JZ Inst ID: nt12.i
Smp Info : SN54B,3
Misc Info : 11-5926
Comment : 1ul Injection
Method : /chem1/nt12.i/20110401.b/SIMPNA0331.m
Meth Date : 04-Apr-2011 15:15 jianqing Quant Type: ISTD
Cal Date : 31-MAR-2011 22:47 Cal File: 03311107.d
Als bottle: 9
Dil Factor: 3.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

JZ 04/06/11

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

Name	Value	Description
DF	3.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Ws	86.07000	Weight of sample extracted (g)
M	88.30000	% 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	4.844	4.851	(1.000)	301159	2.00000	
28 Naphthalene	128	Compound Not Detected.					
$ 190 2-Methylnaphthalene-d10	152	5.583	5.586	(1.152)	67875	0.73715	109.8(a)
32 2-Methylnaphthalene	141	Compound Not Detected.					
105 1-methylnaphthalene	141	5.820	5.823	(1.201)	21466	0.24961	37.18(H)
40 Acenaphthylene	152	Compound Not Detected.					
* 42 Acenaphthene-d10	164	7.088	7.091	(1.000)	187766	2.00000	
44 Acenaphthene	153	Compound Not Detected.					
46 Dibenzofuran	168	Compound Not Detected.					
49 Fluorene	166	Compound Not Detected.					
* 59 Phenanthrene-d10	188	9.022	9.029	(1.000)	301621	2.00000	
60 Phenanthrene	178	9.057	9.060	(1.004)	13386	0.08409	12.53
61 Anthracene	178	Compound Not Detected.					
64 Fluoranthene	202	10.733	10.736	(1.190)	30078	0.17376	25.88
65 Pyrene	202	11.200	11.203	(0.818)	31295	0.18049	26.89

	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	13.570	(0.991)	8456	0.05462	8.136
* 69	Chrysene-d12	240	13.690	13.683	(1.000)	322033	2.00000	
71	Chrysene	228	13.756	13.753	(1.005)	18815	0.12435	18.52
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	17.353	17.325	(1.000)	280959	2.00000	
78	Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
$ 191	Dibenzo(a,h)anthracene-d14	292	19.609	19.578	(1.130)	72762	0.55190	82.21(a)
79	Dibenzo(a,h)anthracene	278	Compound Not Detected.					
80	Benzo(g,h,i)perylene	276	Compound Not Detected.					
99	Perylene	252	17.423	17.391	(1.004)	653833	5.31626	791.9

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt12.i
Lab File ID: 04011109.d
Lab Smp Id: SN54B
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem1/nt12.i/20110401.b/SIMPNA0331.m
Misc Info: 11-5926

Calibration Date: 01-APR-2011
Calibration Time: 15:16
Client Smp ID: LL-SED3-36-141-0
Level: LOW
Sample Type: Sediment

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	494112	247056	988224	301159	-39.05
42 Acenaphthene-d10	280105	140052	560210	187766	-32.97
59 Phenanthrene-d10	461353	230676	922706	301621	-34.62
69 Chrysene-d12	503160	251580	1006320	322033	-36.00
77 Perylene-d12	442215	221108	884430	280959	-36.47

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	4.85	4.35	5.35	4.84	-0.13
42 Acenaphthene-d10	7.09	6.59	7.59	7.09	-0.04
59 Phenanthrene-d10	9.03	8.53	9.53	9.02	-0.07
69 Chrysene-d12	13.68	13.18	14.18	13.69	0.05
77 Perylene-d12	17.32	16.82	17.82	17.35	0.16

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

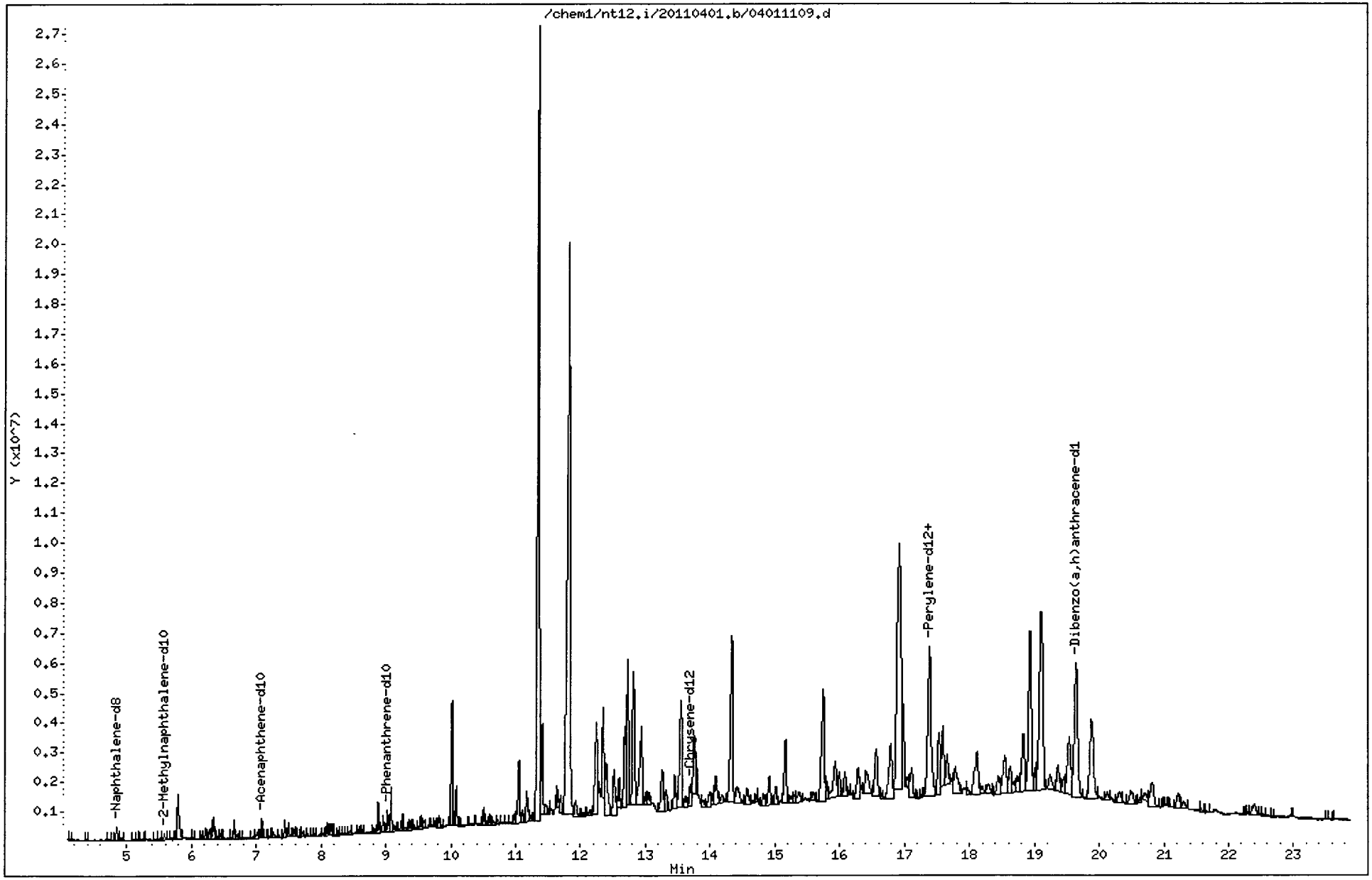
Client Name: Floyd Snider
Client SDG: SN54
Sample Matrix: SOLID
Fraction: SV
Lab Smp Id: SN54B
Client Smp ID: LL-SED3-36-141-0315
Level: LOW
Operator: JZ
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: pnalcss.spk
Quant Type: ISTD
Sublist File: pnax.sub
Method File: /chem1/nt12.i/20110401.b/SIMPNA0331.m
Misc Info: 11-5926

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	149.0	109.8	73.71	34-100
$ 191 Dibenzo(a,h)anthra	149.0	82.21	55.19	10-117

Data File: /chem1/nt12.i/20110401.b/04011109.d
Date : 01-APR-2011 18:41
Client ID: LL-SED3-36-141-0315
Sample Info: SN54B,3
Volume Injected (uL): 1.0
Column phase: ZB35

Instrument: nt12.i
Operator: JZ
Column diameter: 0.32

SN54-090254



Data File: /chem1/nt12.i/20110401.b/04011109.d

Date : 01-APR-2011 18:41

Client ID: LL-SED3-36-141-0315

Instrument: nt12.i

Sample Info: SN54B,3

Volume Injected (uL): 1.0

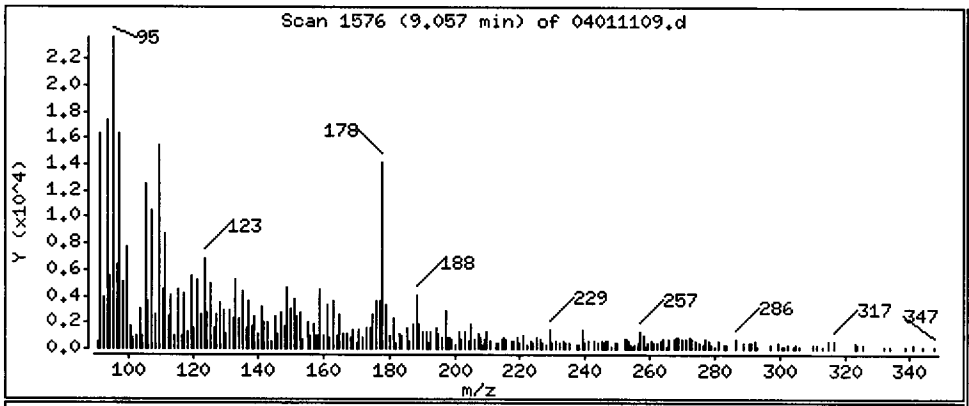
Operator: JZ

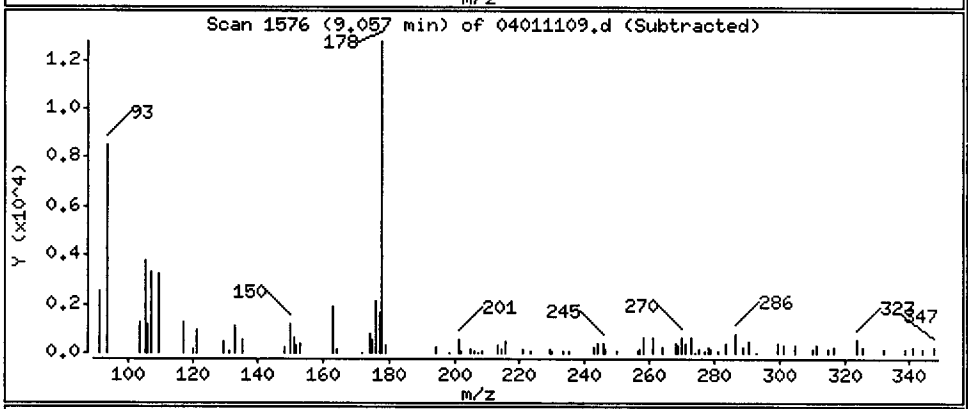
Column phase: ZB35

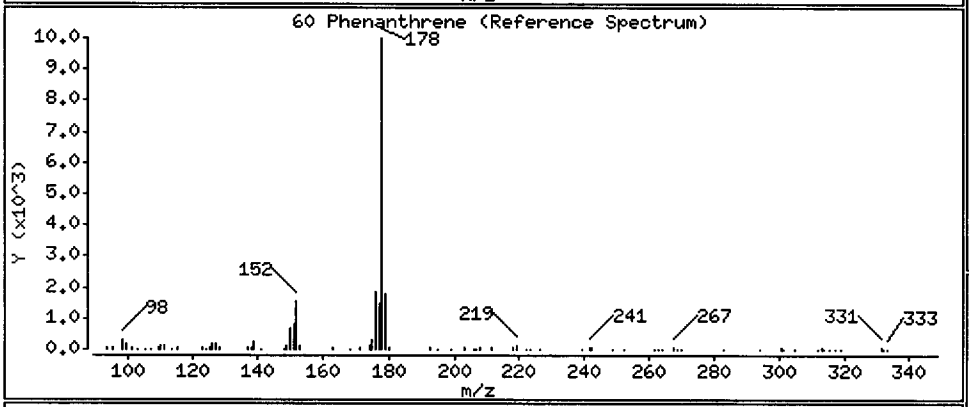
Column diameter: 0.32

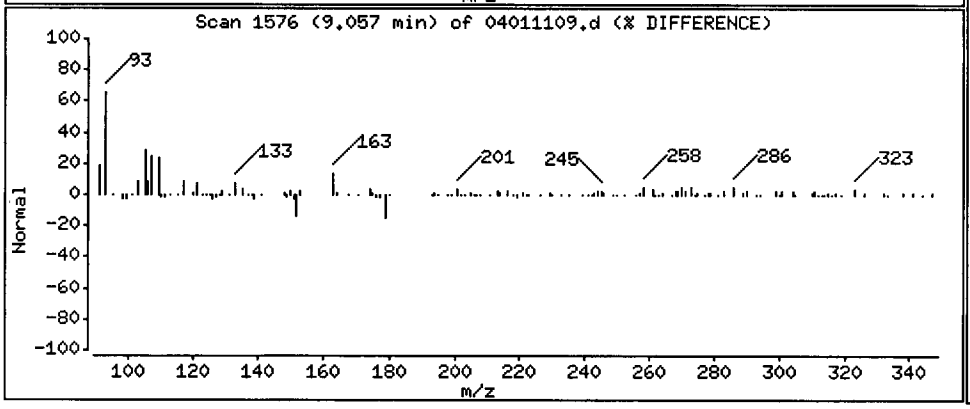
60 Phenanthrene

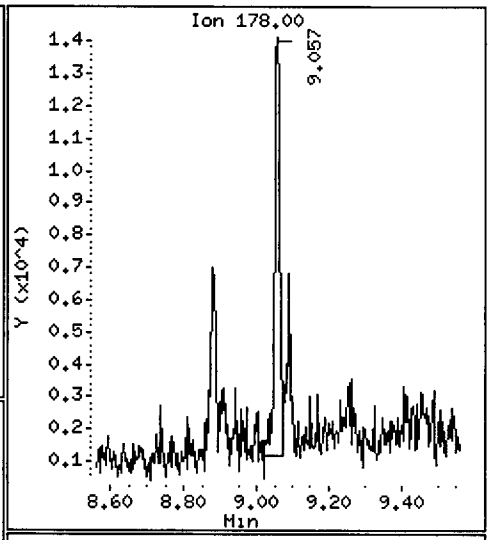
Concentration: 12.53 ug/kg

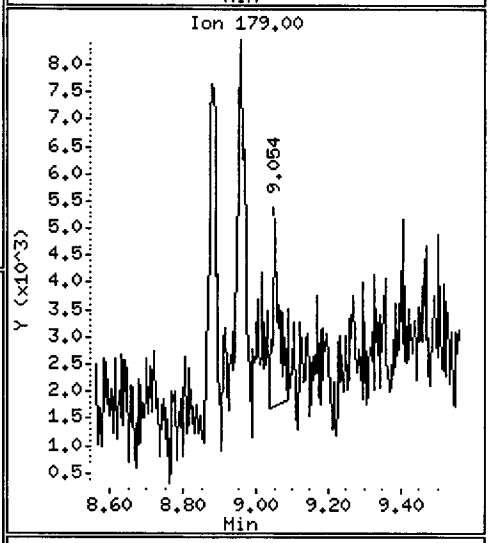


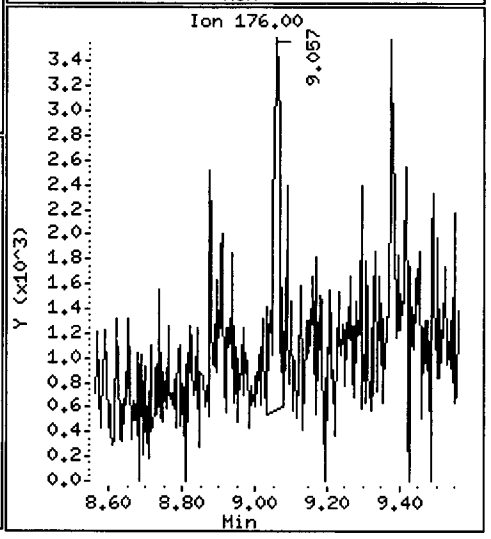












Data File: /chem1/nt12.i/20110401.b/04011109.d

Date : 01-APR-2011 18:41

Client ID: LL-SED3-36-141-0315

Instrument: nt12.i

Sample Info: SN54B,3

Volume Injected (uL): 1.0

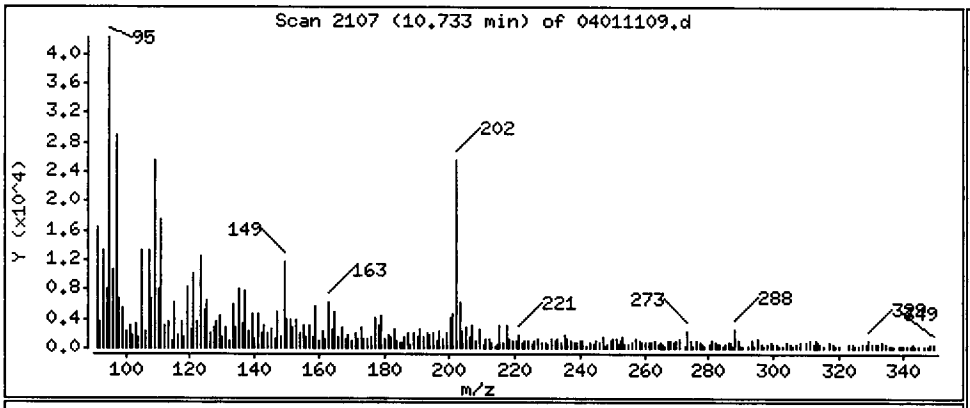
Operator: JZ

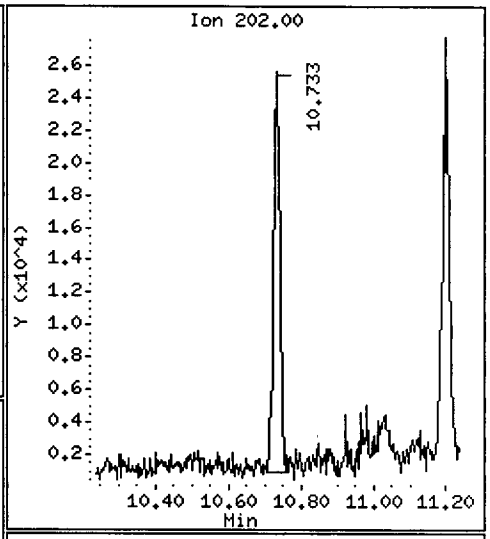
Column phase: ZB35

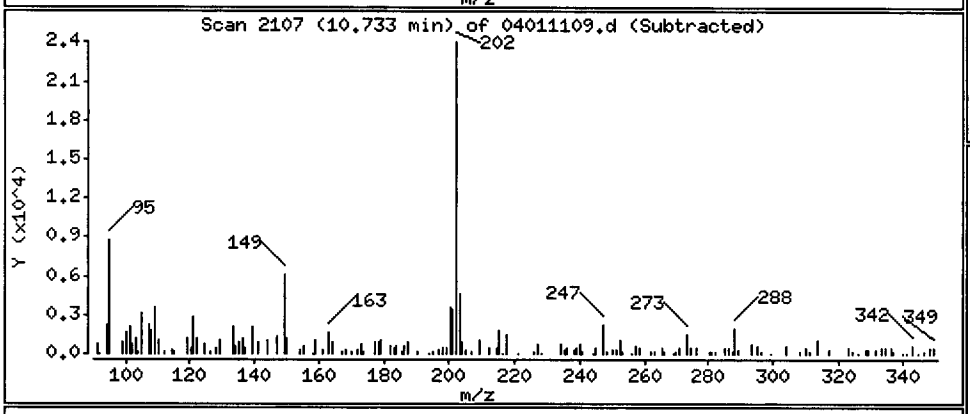
Column diameter: 0.32

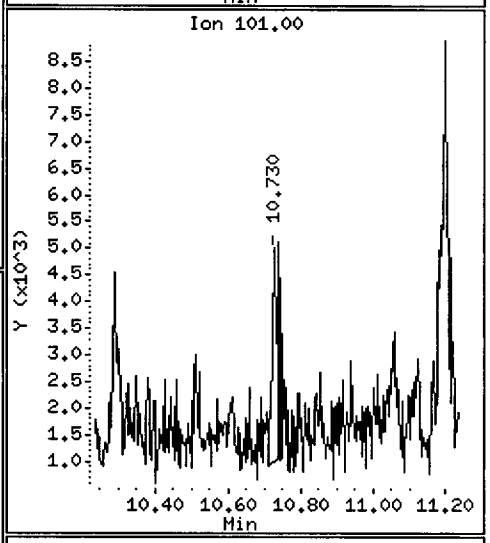
64 Fluoranthene

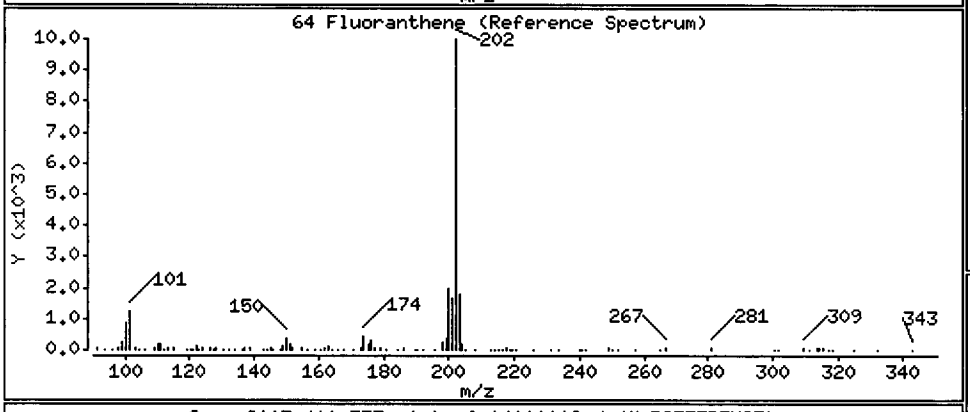
Concentration: 25.88 ug/kg

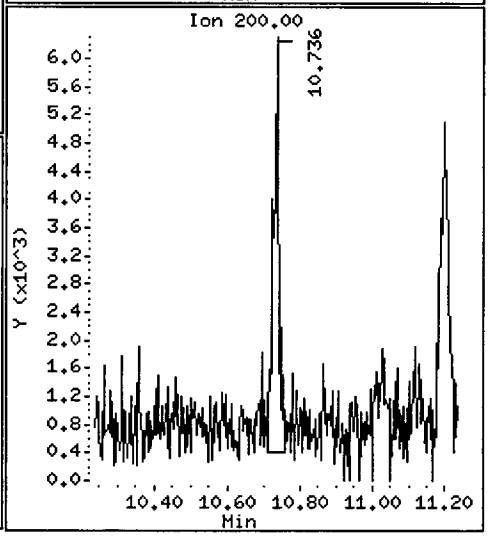


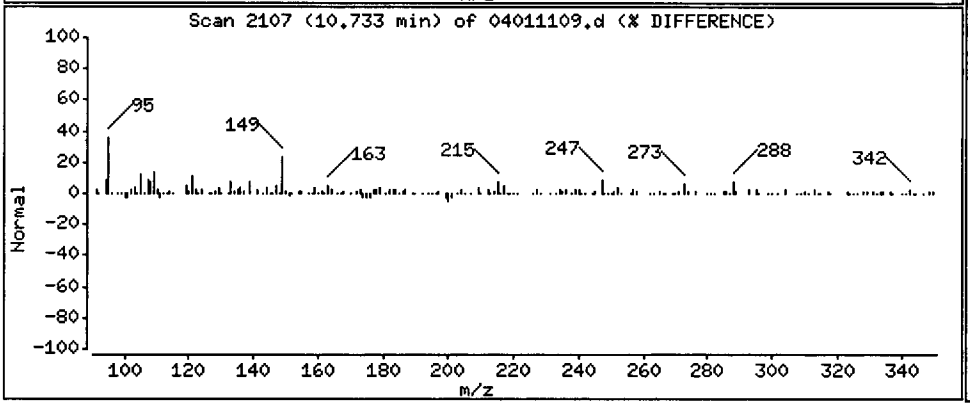












Data File: /chem1/nt12.i/20110401.b/04011109.d

Date : 01-APR-2011 18:41

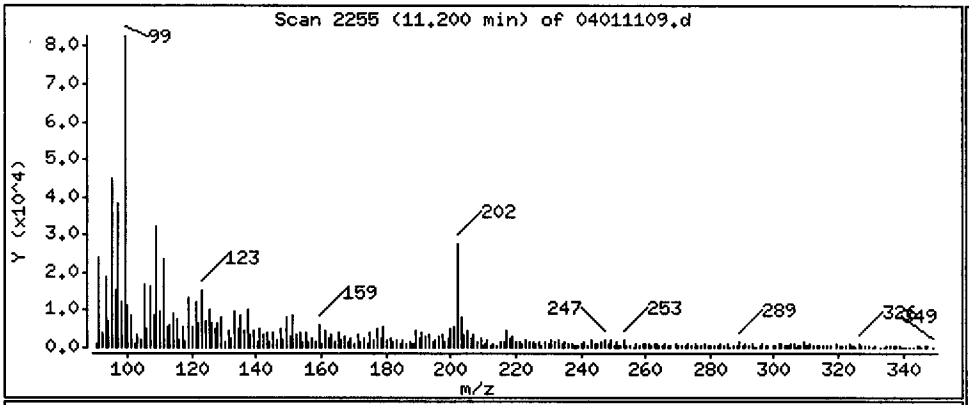
Client ID: LL-SED3-36-141-0315 Instrument: nt12.i

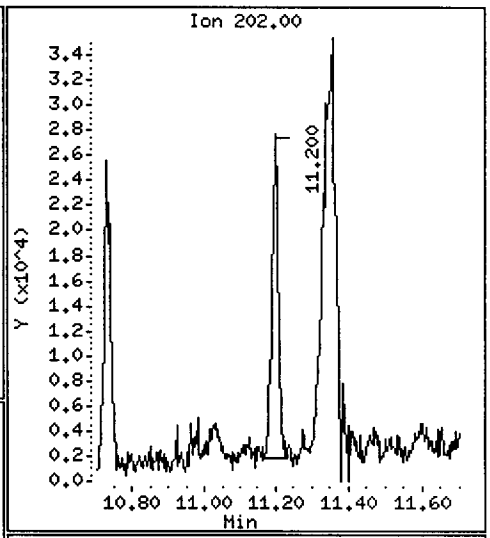
Sample Info: SN54B,3

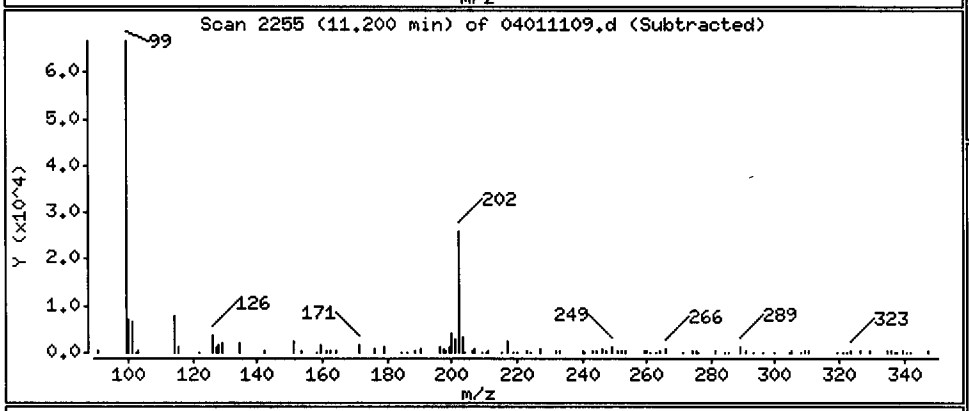
Volume Injected (uL): 1.0 Operator: JZ

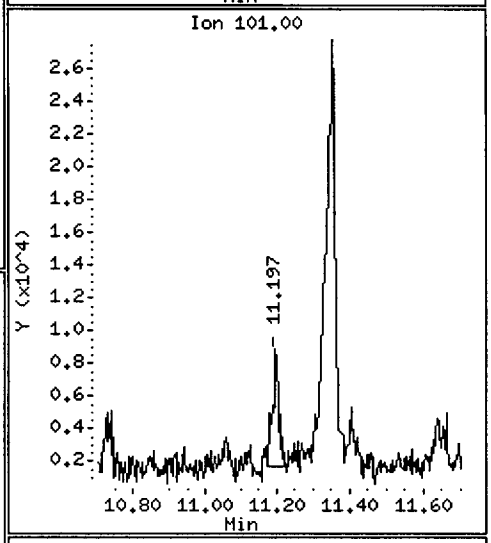
Column phase: ZB35 Column diameter: 0.32

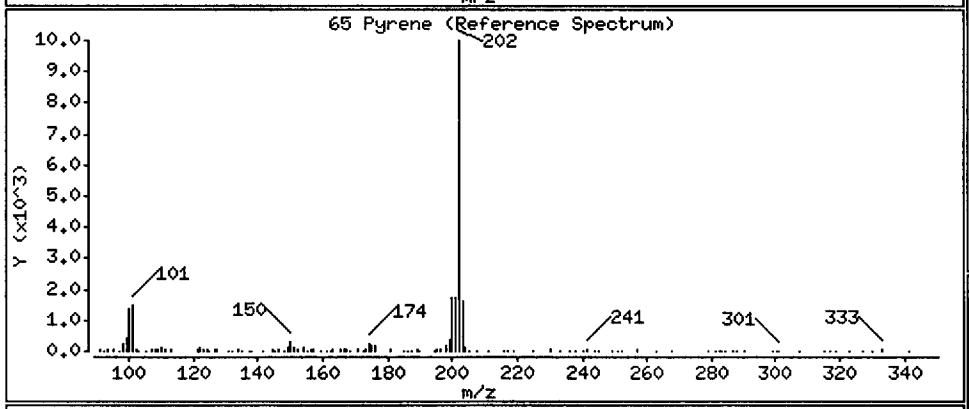
65 Pyrene Concentration: 26.89 ug/kg

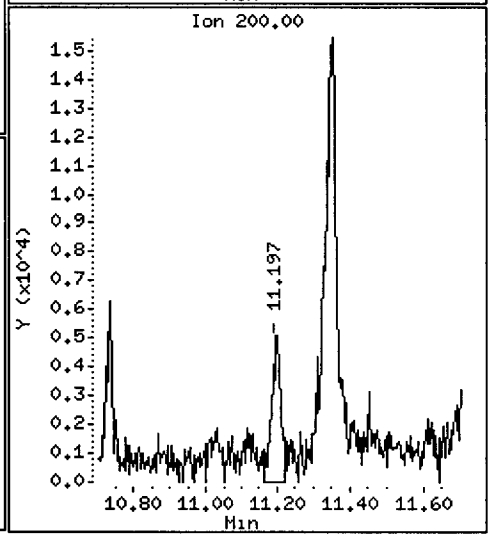


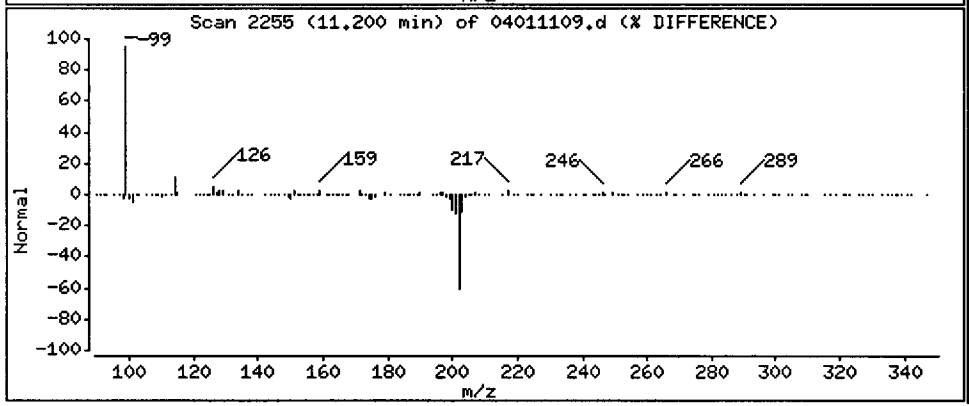












Data File: /chem1/nt12.i/20110401.b/04011109.d

Date : 01-APR-2011 18:41

Client ID: LL-SED3-36-141-0315

Instrument: nt12.i

Sample Info: SN54B,3

Volume Injected (uL): 1.0

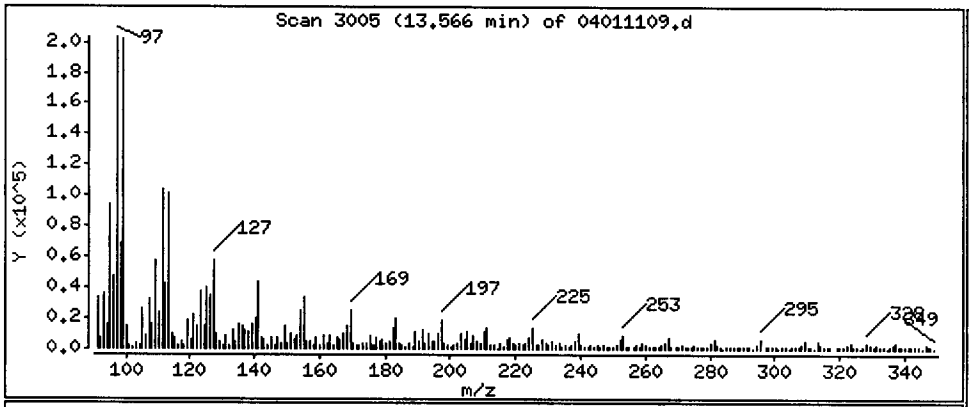
Operator: JZ

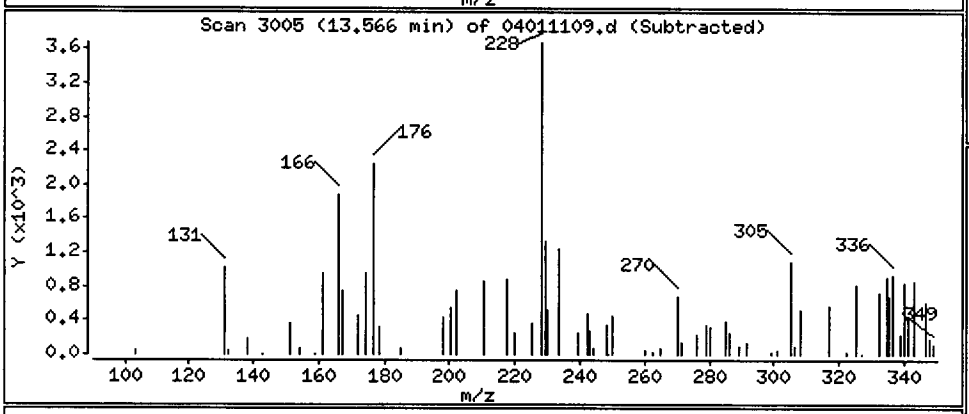
Column phase: ZB35

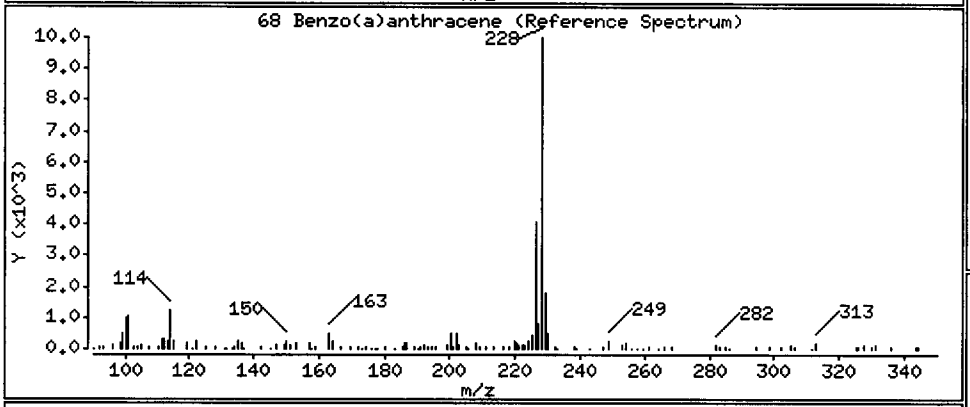
Column diameter: 0.32

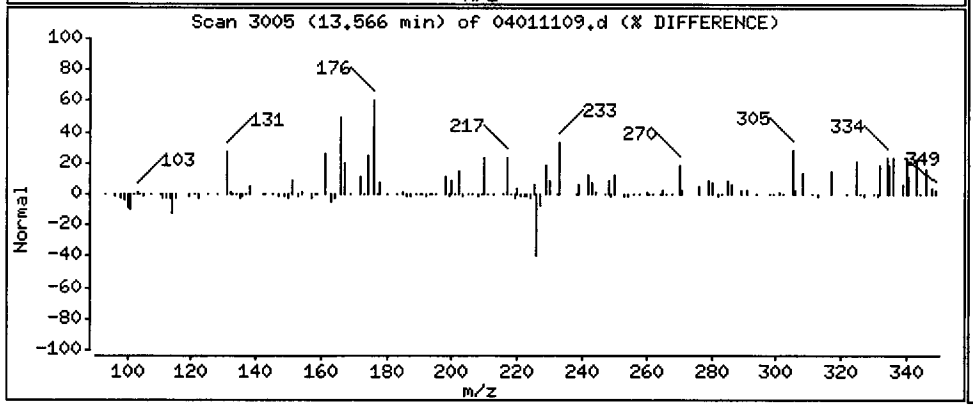
68 Benzo(a)anthracene

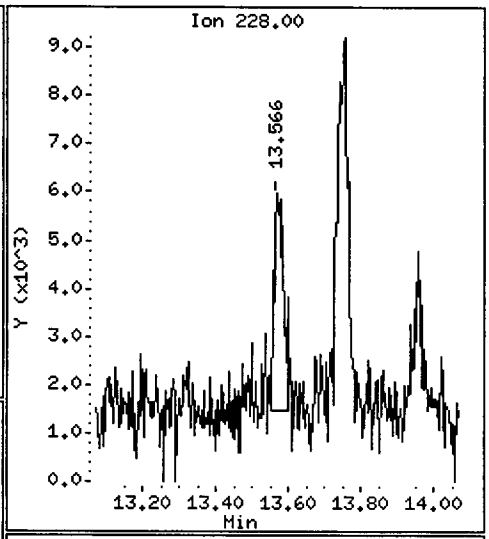
Concentration: 8.136 ug/kg

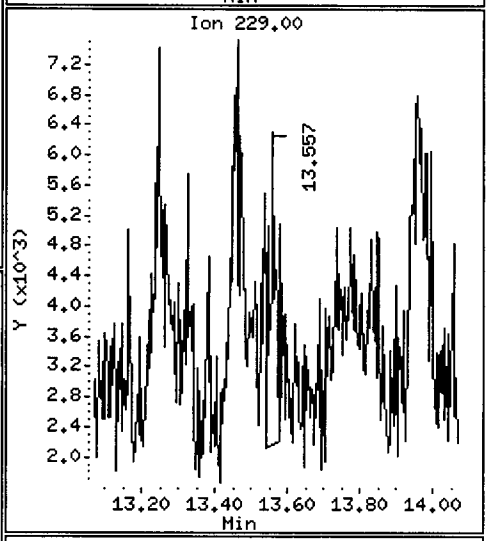


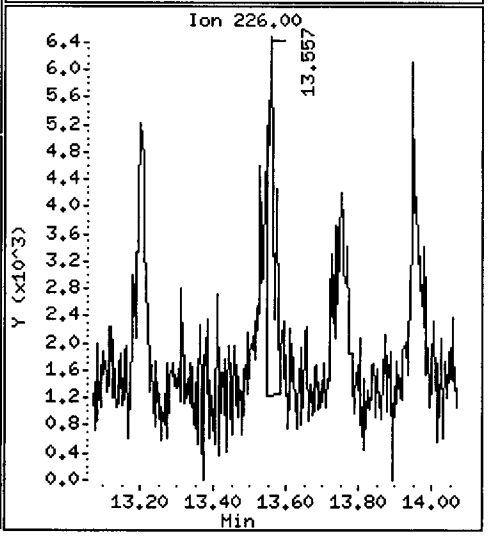












Data File: /chem1/nt12.i/20110401.b/04011109.d

Date : 01-APR-2011 18:41

Client ID: LL-SED3-36-141-0315

Instrument: nt12.i

Sample Info: SN54B,3

Volume Injected (uL): 1.0

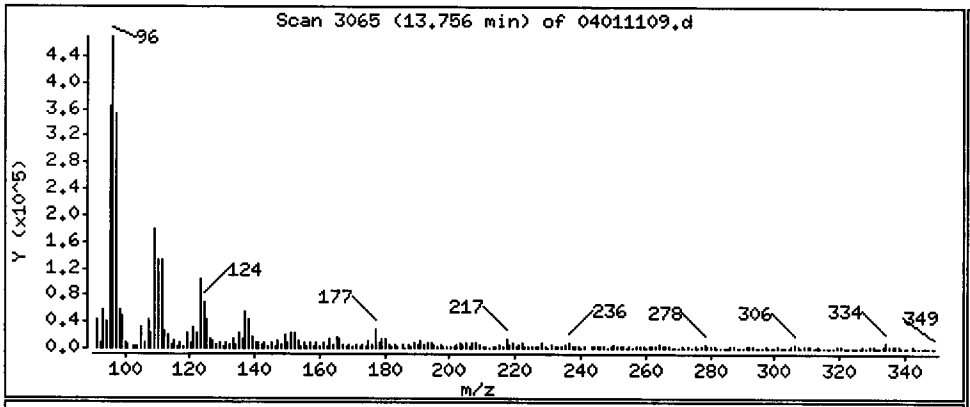
Operator: JZ

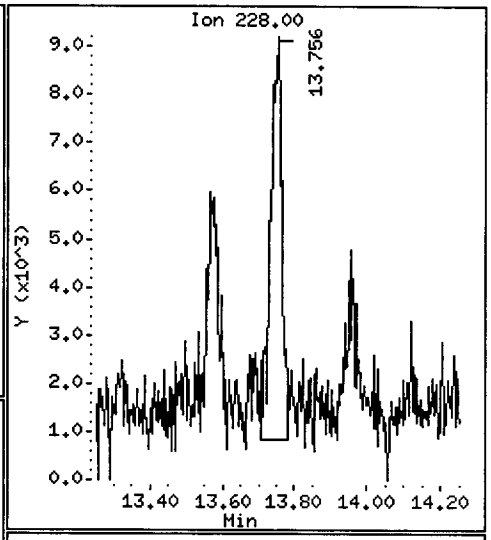
Column phase: ZB35

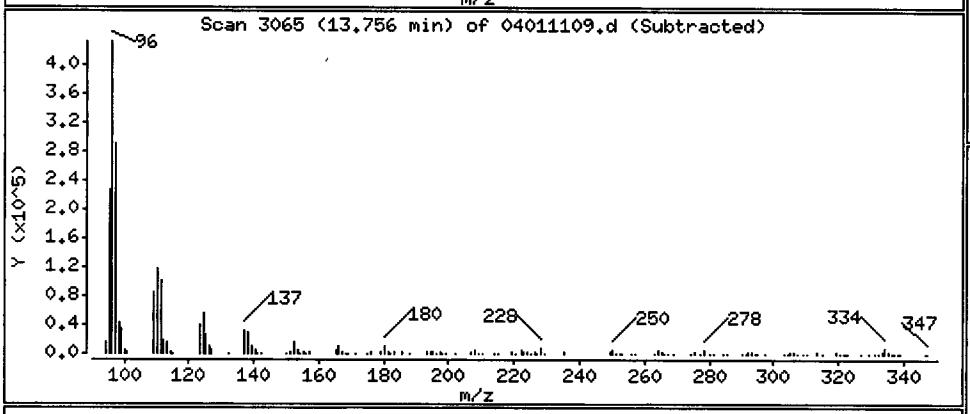
Column diameter: 0.32

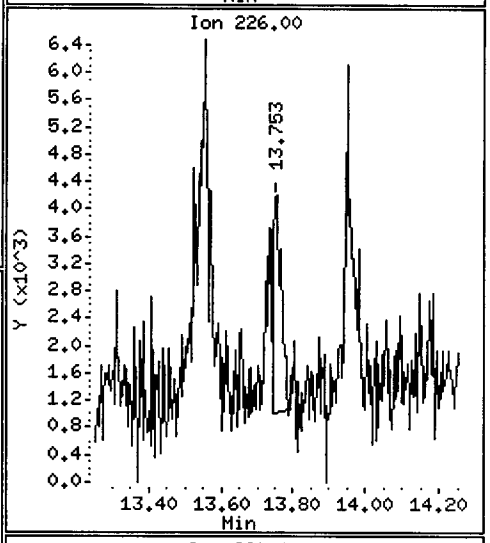
71 Chrysene

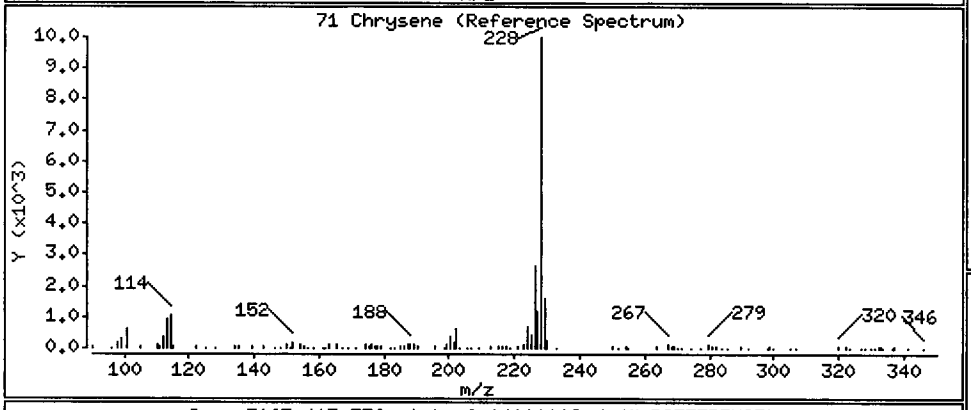
Concentration: 18.52 ug/kg

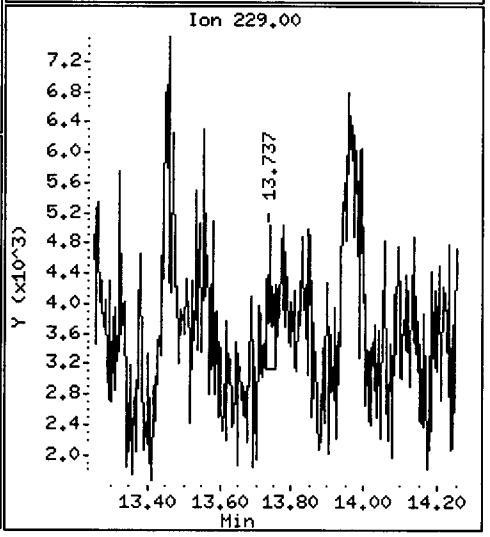


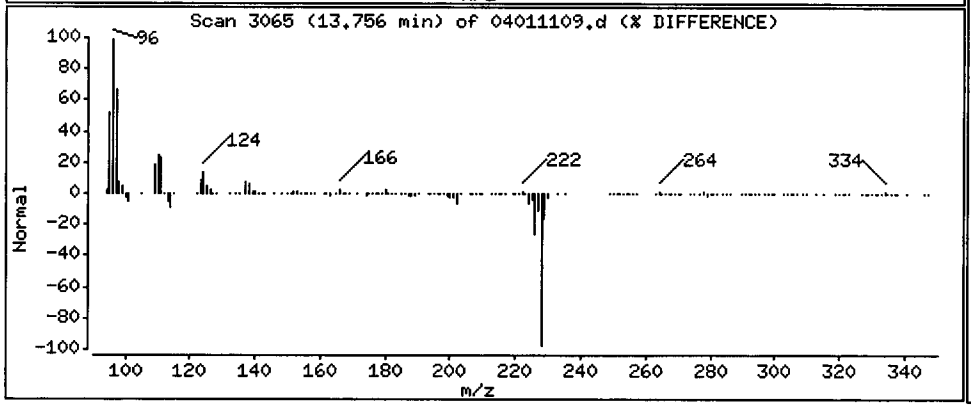












Data File: /chem1/nt12.i/20110401.b/04011109.d

Date : 01-APR-2011 18:41

Client ID: LL-SED3-36-141-0315

Instrument: nt12.i

Sample Info: SN54B,3

Volume Injected (uL): 1.0

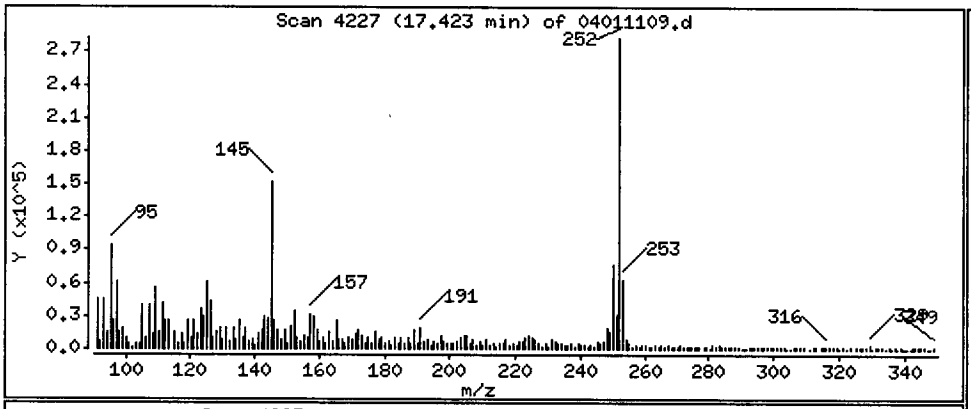
Operator: JZ

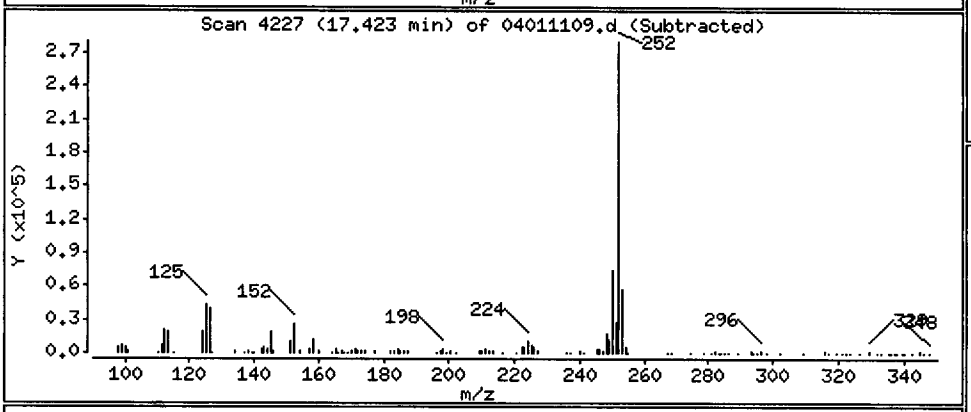
Column phase: ZB35

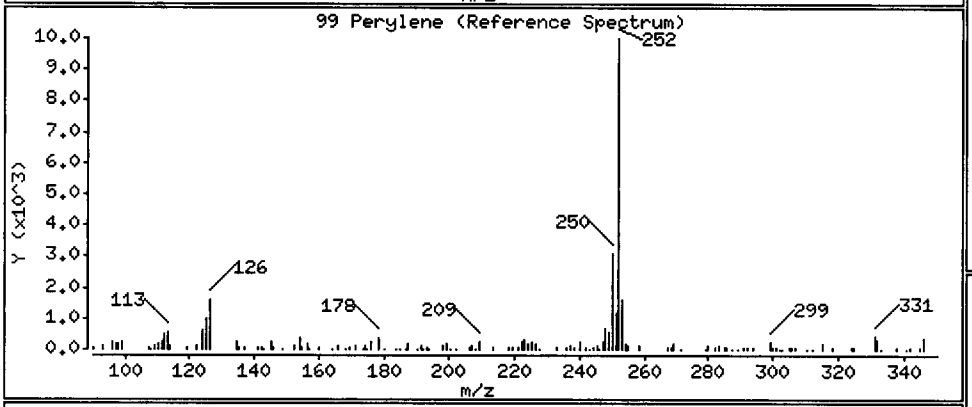
Column diameter: 0.32

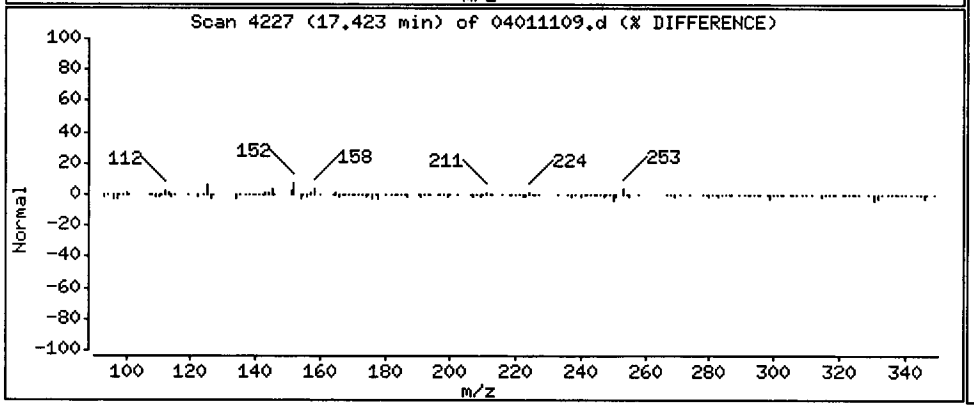
99 Perylene

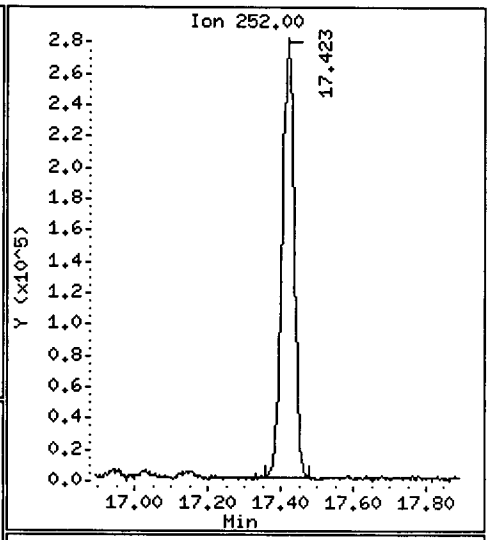
Concentration: 791.9 ug/kg

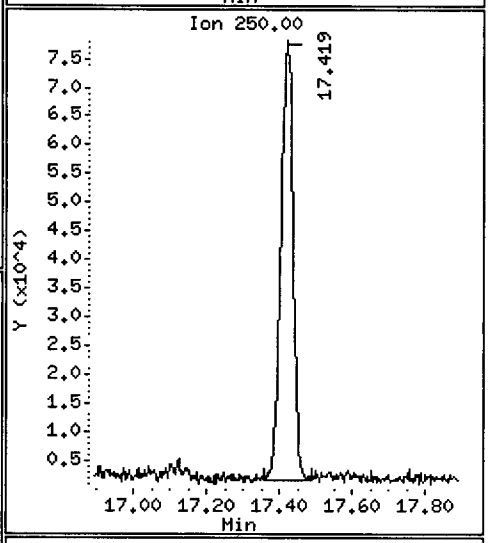


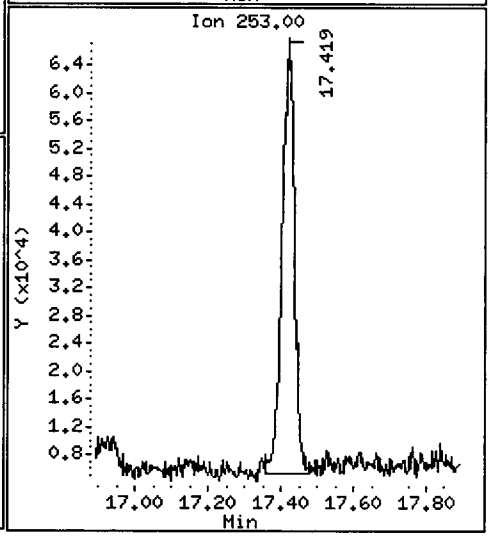












CO-ELUTION SUMMARY FOR FILE - 04011109.d

Lab ID: SN54B, Method: SIMPNA0331.m, Instrument: nt12.i, Date: 01-APR-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt12.i/20110401.b/04011110.d
Lab Smp Id: SN54C Client Smp ID: LL-SED3-141-167-031
Inj Date : 01-APR-2011 19:09
Operator : JZ Inst ID: nt12.i
Smp Info : SN54C,3
Misc Info : 11-5927
Comment : 1ul Injection
Method : /chem1/nt12.i/20110401.b/SIMPNA0331.m
Meth Date : 04-Apr-2011 14:42 jianqing Quant Type: ISTD
Cal Date : 31-MAR-2011 22:47 Cal File: 03311107.d
Als bottle: 10
Dil Factor: 3.00000
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	3.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Ws	83.14000	Weight of sample extracted (g)
M	87.90000	% 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	4.848	4.851	(1.000)	262380	2.00000	
28 Naphthalene	128	Compound Not Detected.					
$ 190 2-Methylnaphthalene-d10	152	5.586	5.586	(1.152)	52313	0.65211	97.23(a)
32 2-Methylnaphthalene	141	Compound Not Detected.					
105 1-methylnaphthalene	141	Compound Not Detected.					
40 Acenaphthylene	152	Compound Not Detected.					
* 42 Acenaphthene-d10	164	7.091	7.091	(1.000)	167023	2.00000	
44 Acenaphthene	153	Compound Not Detected.					
46 Dibenzofuran	168	Compound Not Detected.					
49 Fluorene	166	Compound Not Detected.					
* 59 Phenanthrene-d10	188	9.026	9.029	(1.000)	271187	2.00000	
60 Phenanthrene	178	Compound Not Detected.					
61 Anthracene	178	Compound Not Detected.					
64 Fluoranthene	202	10.730	10.736	(1.189)	10988	0.07060	10 53
65 Pyrene	202	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
68	Benzo(a)anthracene	228	Compound Not Detected.					
* 69	Chrysene-d12	240	13.690	13.683	(1.000)	293472	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	17.356	17.325	(1.000)	247444	2.00000	
78	Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
$ 191	Dibenzo(a,h)anthracene-d14	292	19.609	19.578	(1.130)	58885	0.50713	75.62(a)
79	Dibenzo(a,h)anthracene	278	Compound Not Detected.					
80	Benzo(g,h,i)perylene	276	Compound Not Detected.					
99	Perylene	252	17.419	17.391	(1.004)	520976	4.80976	717.2

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt12.i
Lab File ID: 04011110.d
Lab Smp Id: SN54C
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem1/nt12.i/20110401.b/SIMPNA0331.m
Misc Info: 11-5927

Calibration Date: 01-APR-2011
Calibration Time: 15:16
Client Smp ID: LL-SED3-141-167-
Level: LOW
Sample Type: Sediment

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	494112	247056	988224	262380	-46.90
42 Acenaphthene-d10	280105	140052	560210	167023	-40.37
59 Phenanthrene-d10	461353	230676	922706	271187	-41.22
69 Chrysene-d12	503160	251580	1006320	293472	-41.67
77 Perylene-d12	442215	221108	884430	247444	-44.04

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	4.85	4.35	5.35	4.85	-0.06
42 Acenaphthene-d10	7.09	6.59	7.59	7.09	0.00
59 Phenanthrene-d10	9.03	8.53	9.53	9.03	-0.03
69 Chrysene-d12	13.68	13.18	14.18	13.69	0.05
77 Perylene-d12	17.32	16.82	17.82	17.36	0.18

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

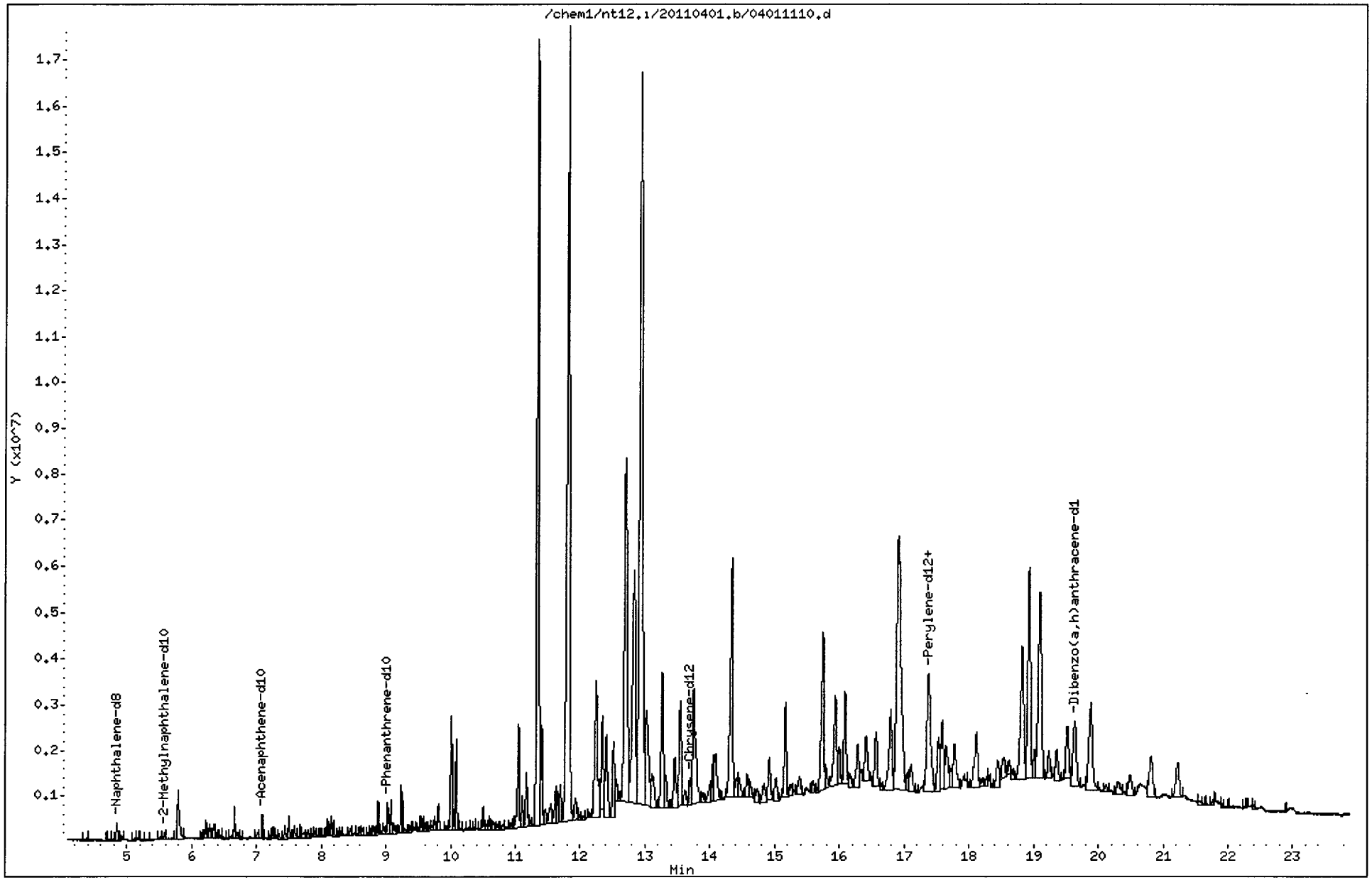
Client Name: Floyd Snider
Client SDG: SN54
Sample Matrix: SOLID
Fraction: SV
Lab Smp Id: SN54C
Client Smp ID: LL-SED3-141-167-031
Level: LOW
Operator: JZ
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: pnalcss.spk
Quant Type: ISTD
Sublist File: pnax.sub
Method File: /chem1/nt12.i/20110401.b/SIMPNA0331.m
Misc Info: 11-5927

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	149.1	97.23	65.21	34-100
$ 191 Dibenzo(a,h)anthra	149.1	75.62	50.71	10-117

Data File: /chem1/nt12.i/20110401.b/04011110.d
Date : 01-APR-2011 19:09
Client ID: LL-SED3-141-167-031
Sample Info: SN54C,3
Volume Injected (uL): 1.0
Column phase: ZB35

Instrument: nt12.i
Operator: JZ
Column diameter: 0.32

SN54 : 00266



Data File: /chem1/nt12.i/20110401.b/04011110.d

Date : 01-APR-2011 19:09

Client ID: LL-SED3-141-167-031

Instrument: nt12.i

Sample Info: SN54C,3

Volume Injected (uL): 1.0

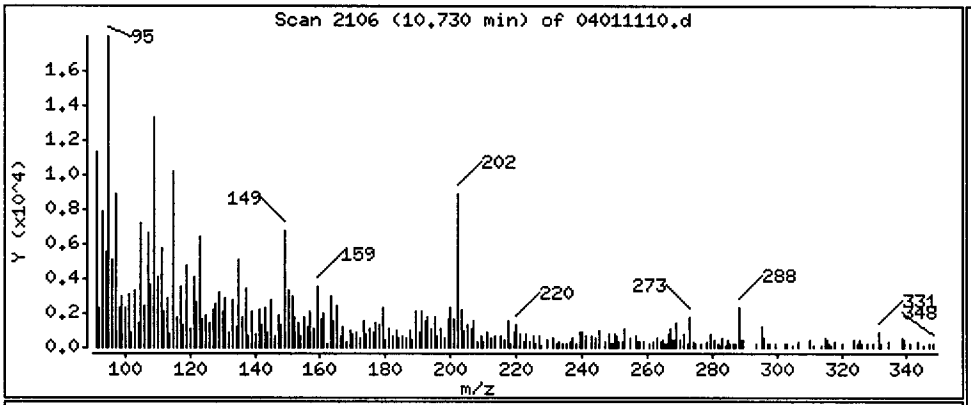
Operator: JZ

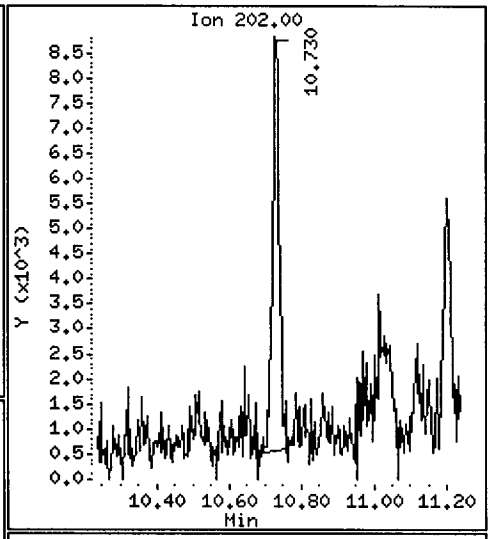
Column phase: ZB35

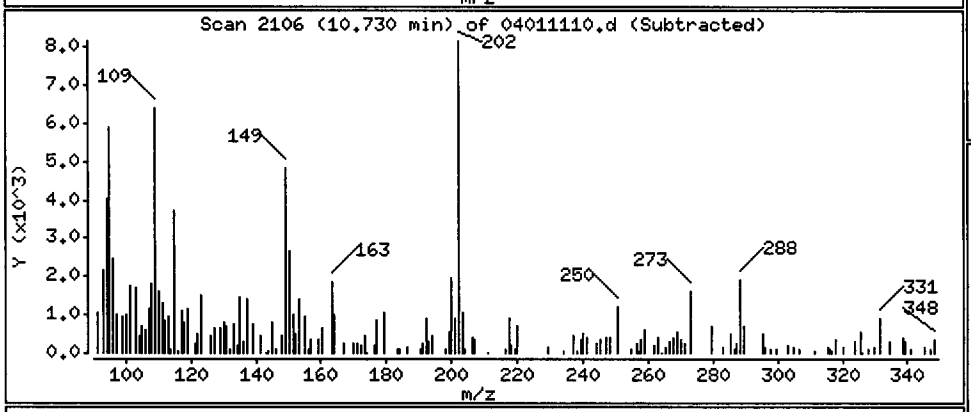
Column diameter: 0.32

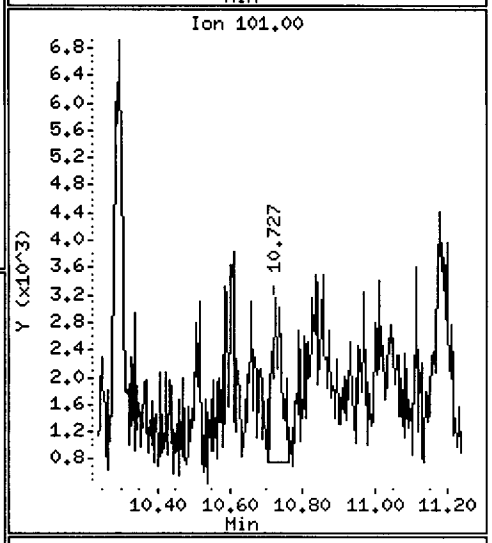
64 Fluoranthene

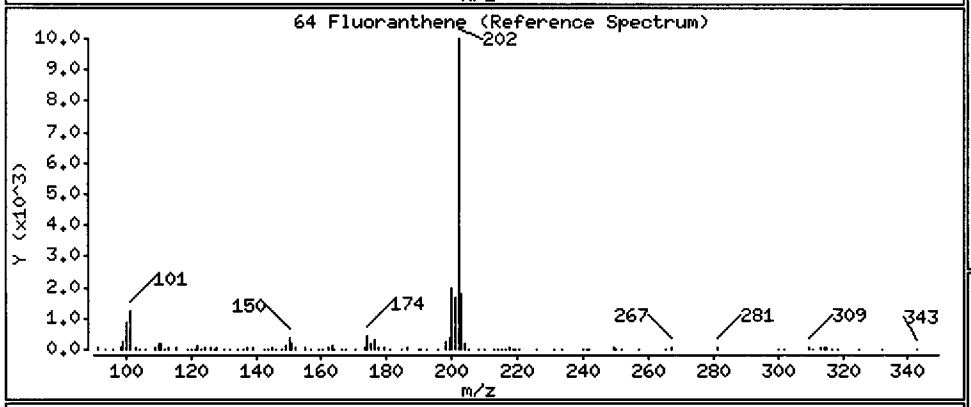
Concentration: 10.53 ug/kg

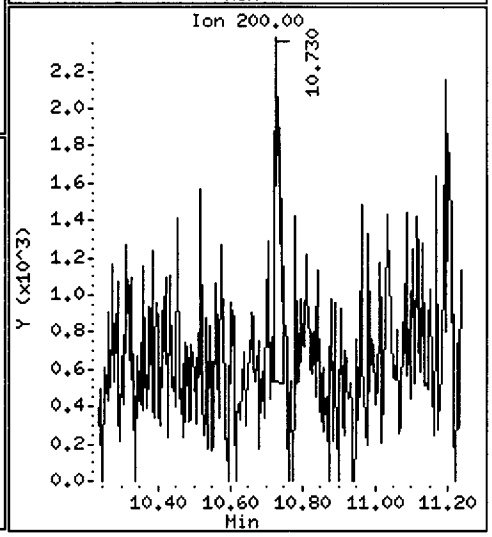


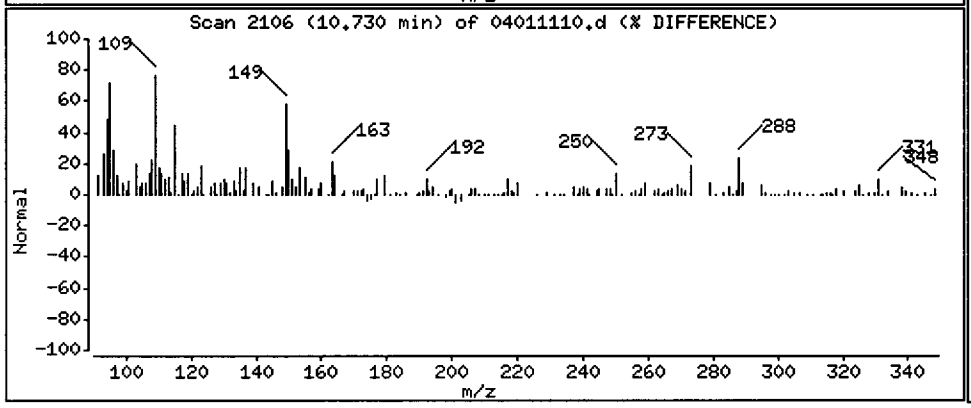












Data File: /chem1/nt12.i/20110401.b/04011110.d

Date : 01-APR-2011 19:09

Client ID: LL-SED3-141-167-031

Instrument: nt12.i

Sample Info: SN54C,3

Volume Injected (uL): 1.0

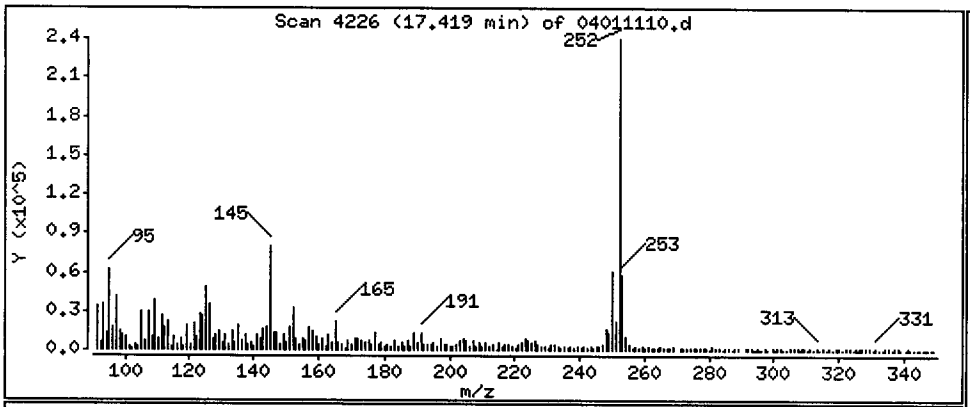
Operator: JZ

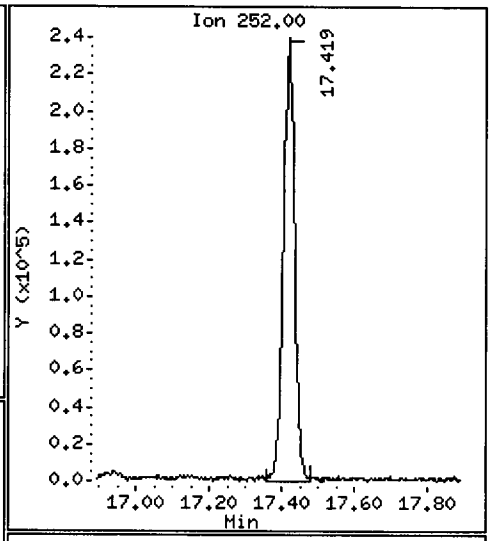
Column phase: ZB35

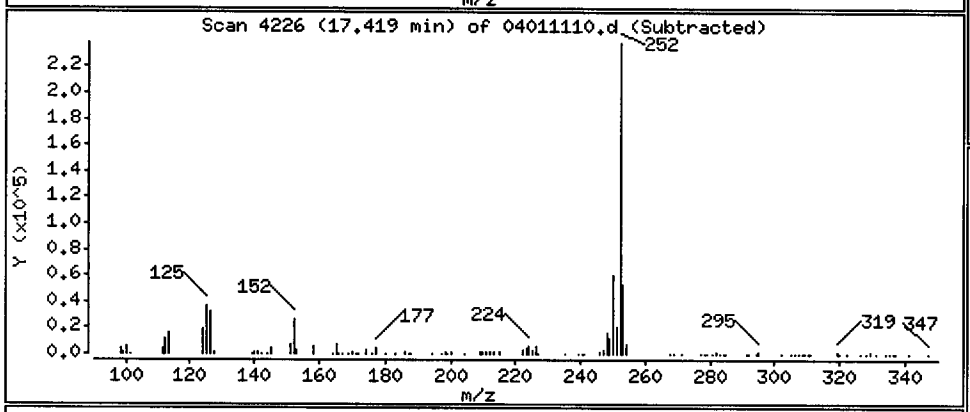
Column diameter: 0.32

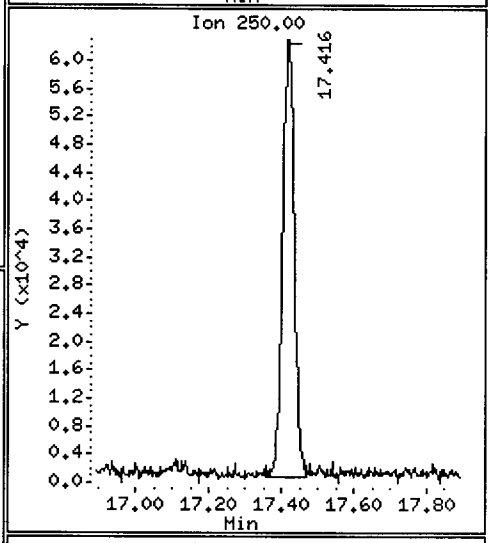
99 Perylene

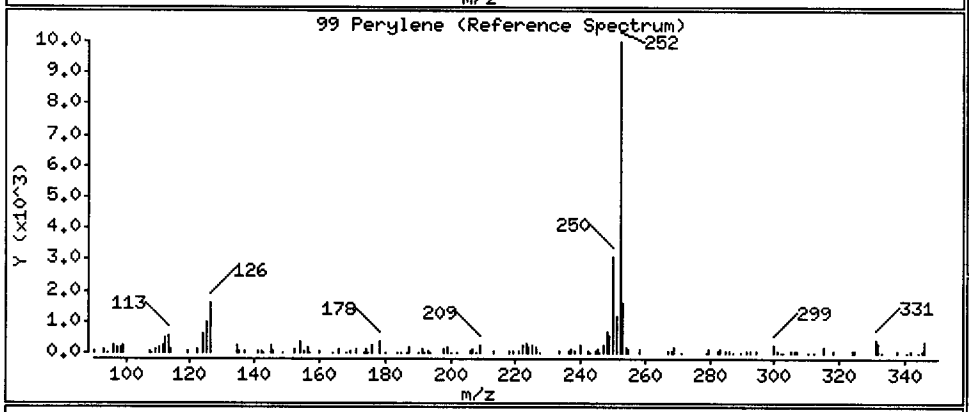
Concentration: 717.2 ug/kg

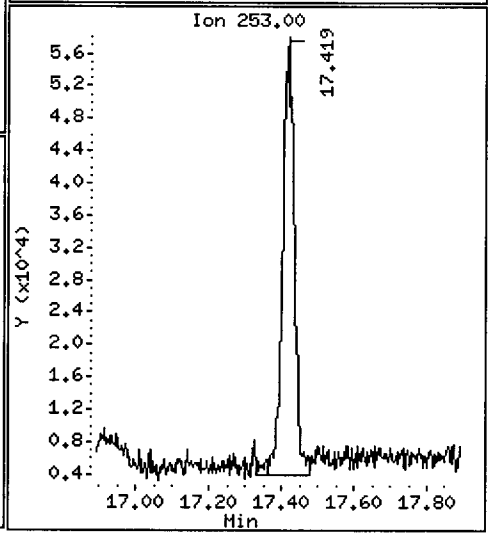


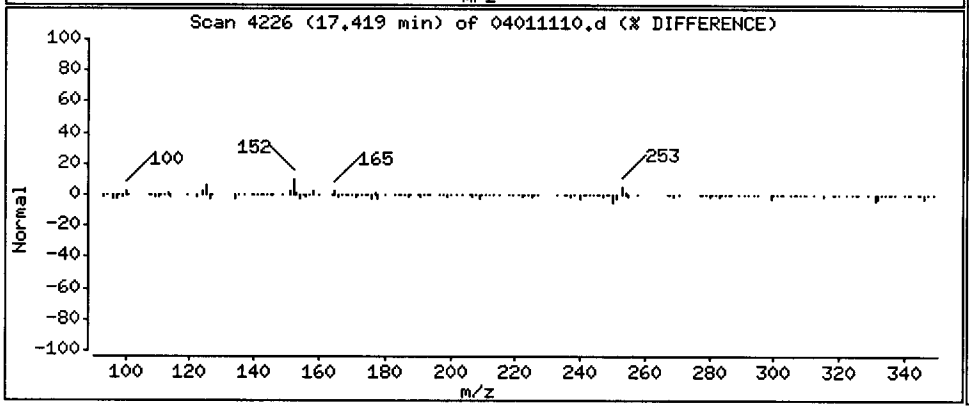












CO-ELUTION SUMMARY FOR FILE - 04011110.d

Lab ID: SN54C, Method: SIMPNA0331.m, Instrument: nt12.i, Date: 01-APR-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt12.i/20110401.b/04011111.d
Lab Smp Id: SN54D Client Smp ID: LL-SED2-0-56-031511
Inj Date : 01-APR-2011 19:37
Operator : JZ Inst ID: nt12.i
Smp Info : SN54D
Misc Info : 11-5928
Comment : 1ul Injection
Method : /chem1/nt12.i/20110401.b/SIMPNA0331.m
Meth Date : 04-Apr-2011 14:42 jianqing Quant Type: ISTD
Cal Date : 31-MAR-2011 22:47 Cal File: 03311107.d
Als bottle: 11
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	23.33000	Weight of sample extracted (g)
M	85.90000	% 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	4.844	4.851	(1.000)	249435	2.00000	
28 Naphthalene	128	4.870	4.879	(1.005)	10457	0.08682	13.20
$ 190 2-Methylnaphthalene-d10	152	5.583	5.586	(1.152)	160869	2.10938	320.6
32 2-Methylnaphthalene	141	5.633	5.630	(1.163)	6588	0.09843	14.96
105 1-methylnaphthalene	141	5.823	5.823	(1.202)	64186	0.90114	137.0
40 Acenaphthylene	152	Compound Not Detected.					
* 42 Acenaphthene-d10	164	7.091	7.091	(1.000)	163363	2.00000	
44 Acenaphthene	153	7.135	7.139	(1.006)	8609	0.09668	14.70
46 Dibenzofuran	168	Compound Not Detected.					
49 Fluorene	166	7.735	7.738	(1.091)	12509	0.12549	19.07
* 59 Phenanthrene-d10	188	9.029	9.029	(1.000)	258445	2.00000	
60 Phenanthrene	178	9.060	9.060	(1.003)	99264	0.72775	110.6
61 Anthracene	178	9.092	9.092	(1.007)	24109	0.17604	26.76
64 Fluoranthene	202	10.783	10.736	(1.194)	449933	3.03352	461.1
65 Pyrene	202	11.256	11.203	(0.820)	480208	2.62325	398.7

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
68	Benzo(a)anthracene	228	13.617	13.570	(0.992)	143869	0.88019	133.8
* 69	Chrysene-d12	240	13.730	13.683	(1.000)	339995	2.00000	
71	Chrysene	228	13.794	13.753	(1.005)	318131	1.99143	302.7
74	Benzo(b)fluoranthene	252	16.236	16.167	(0.934)	228844	1.67066	253.9
75	Benzo(k)fluoranthene	252	16.293	16.227	(0.937)	103669	0.72149	109.7(H)
188	Benzo(j)fluoranthene	252	16.356	16.299	(0.941)	98908	0.72039	109.5(aH)
76	Benzo(a)pyrene	252	17.183	17.117	(0.988)	138656	1.10252	167.6(H)
* 77	Perylene-d12	264	17.385	17.325	(1.000)	242975	2.00000	
78	Indeno(1,2,3-cd)pyrene	276	19.723	19.644	(1.135)	114407	0.74812	113.7
$ 191	Dibenzo(a,h)anthracene-d14	292	19.650	19.578	(1.130)	183897	1.61290	245.2
79	Dibenzo(a,h)anthracene	278	19.726	19.660	(1.135)	24902	0.19912	30.27(M)
80	Benzo(g,h,i)perylene	276	20.546	20.471	(1.182)	136007	1.00275	152.4(M)
99	Perylene	252	17.460	17.391	(1.004)	402445	3.78380	575.1

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt12.i
Lab File ID: 04011111.d
Lab Smp Id: SN54D
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem1/nt12.i/20110401.b/SIMPNA0331.m
Misc Info: 11-5928

Calibration Date: 01-APR-2011
Calibration Time: 15:16
Client Smp ID: LL-SED2-0-56-031
Level: LOW
Sample Type: Sediment

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	494112	247056	988224	249435	-49.52
42 Acenaphthene-d10	280105	140052	560210	163363	-41.68
59 Phenanthrene-d10	461353	230676	922706	258445	-43.98
69 Chrysene-d12	503160	251580	1006320	339995	-32.43
77 Perylene-d12	442215	221108	884430	242975	-45.06

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	4.85	4.35	5.35	4.84	-0.13
42 Acenaphthene-d10	7.09	6.59	7.59	7.09	0.00
59 Phenanthrene-d10	9.03	8.53	9.53	9.03	0.00
69 Chrysene-d12	13.68	13.18	14.18	13.73	0.34
77 Perylene-d12	17.32	16.82	17.82	17.38	0.35

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

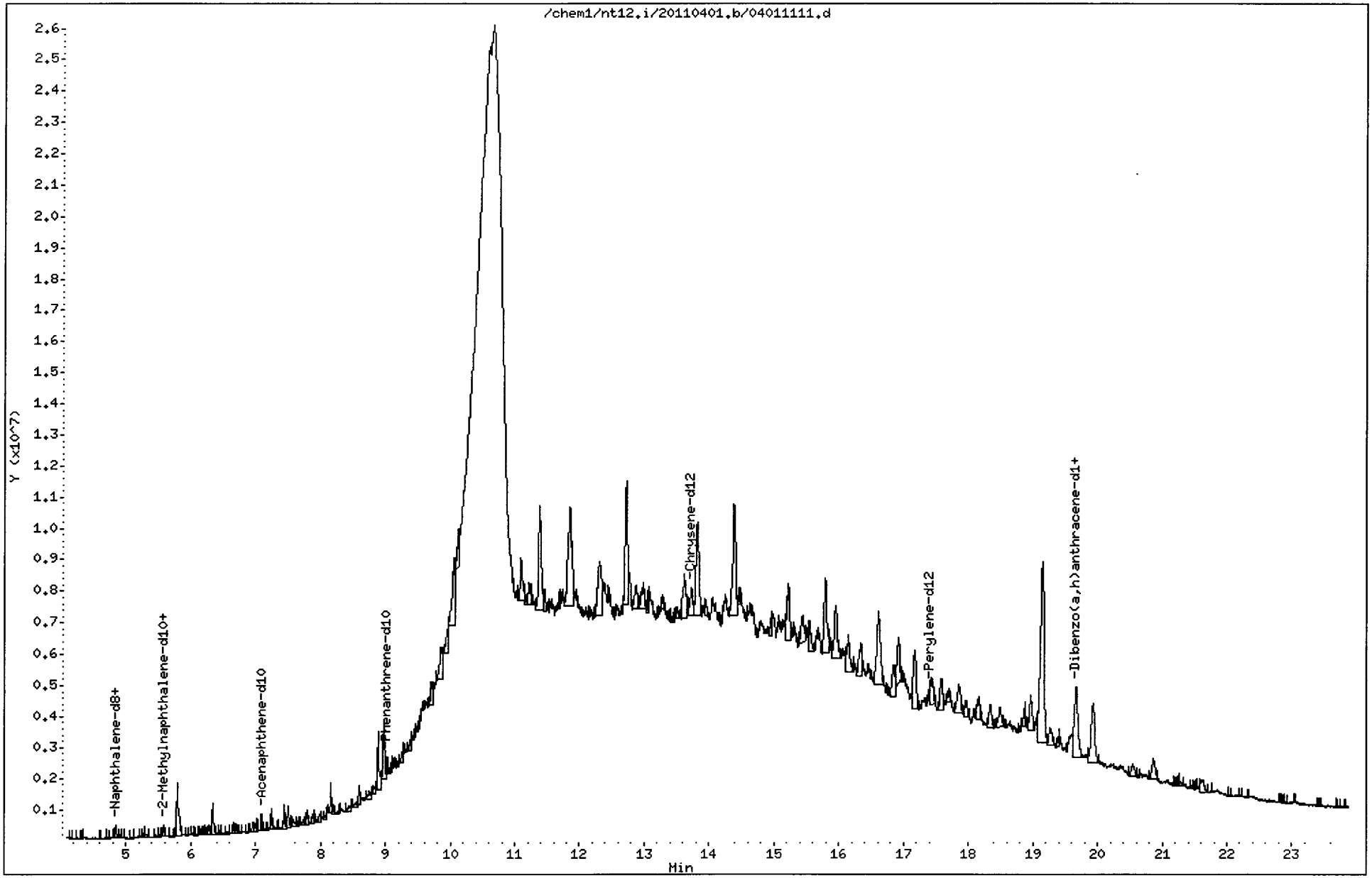
Client Name: Floyd Snider
Client SDG: SN54
Sample Matrix: SOLID
Fraction: SV
Lab Smp Id: SN54D
Client Smp ID: LL-SED2-0-56-031511
Level: LOW
Operator: JZ
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: pnalcss.spk
Quant Type: ISTD
Sublist File: pnax.sub
Method File: /chem1/nt12.i/20110401.b/SIMPNA0331.m
Misc Info: 11-5928

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	456.0	320.6	70.31	34-100
$ 191 Dibenzo(a,h)anthra	456.0	245.2	53.76	10-117

Data File: /chem1/nt12.i/20110401.b/04011111.d
Date : 01-APR-2011 19:37
Client ID: LL-SED2-0-56-031511
Sample Info: SN54D
Volume Injected (uL): 1.0
Column phase: ZB35

Instrument: nt12.i
Operator: JZ
Column diameter: 0.32

SN54 : 002711



Data File: /chem1/nt12.i/20110401.b/04011111.d

Date : 01-APR-2011 19:37

Client ID: LL-SED2-0-56-031511

Instrument: nt12.i

Sample Info: SN54D

Volume Injected (uL): 1.0

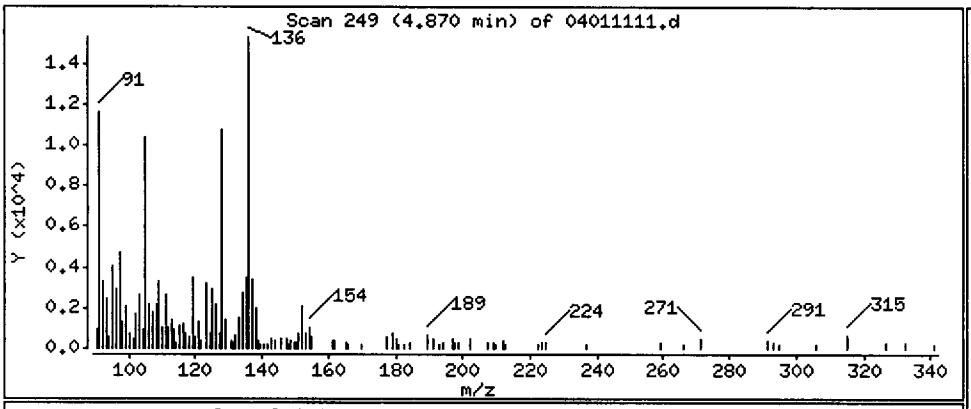
Operator: JZ

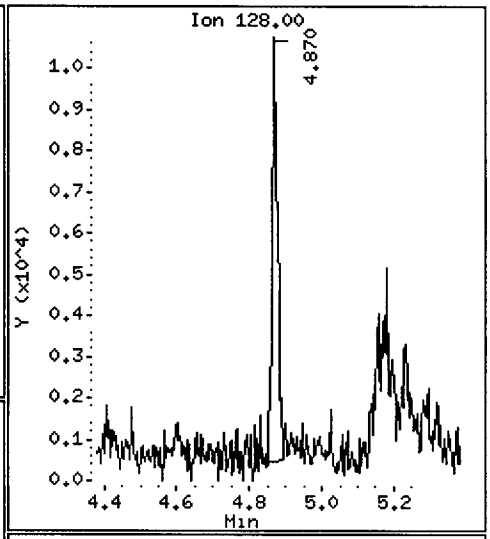
Column phase: ZB35

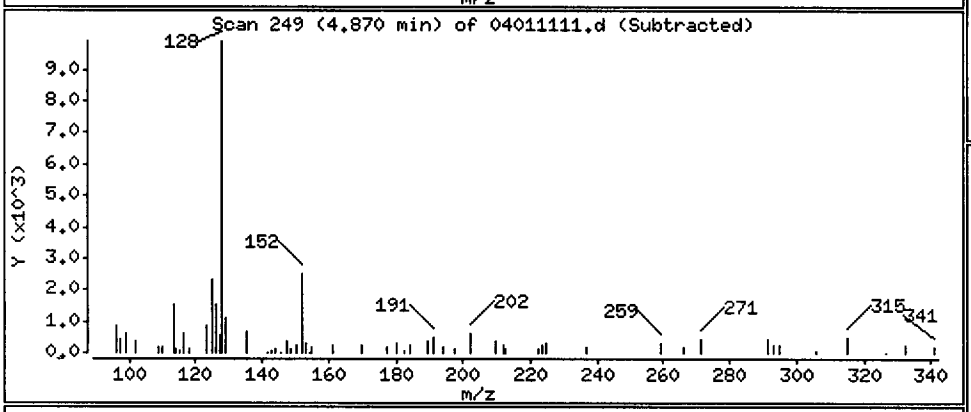
Column diameter: 0.32

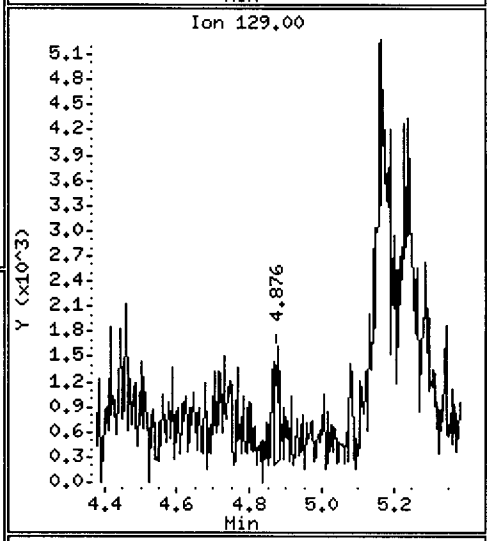
28 Naphthalene

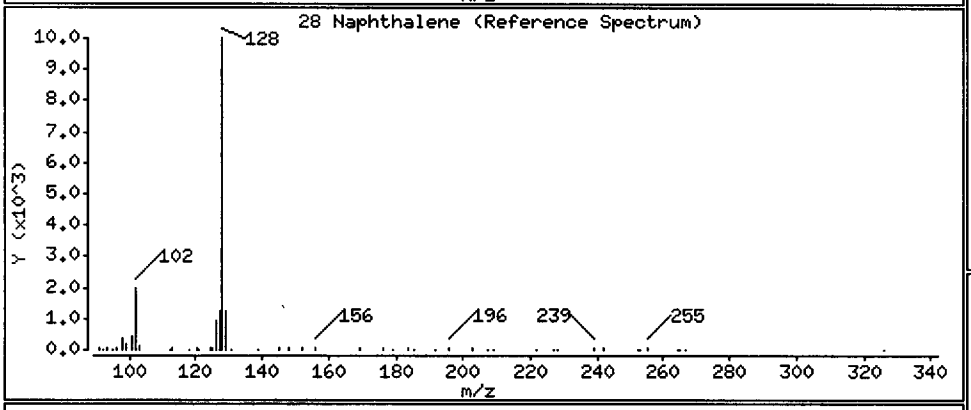
Concentration: 13.20 ug/kg

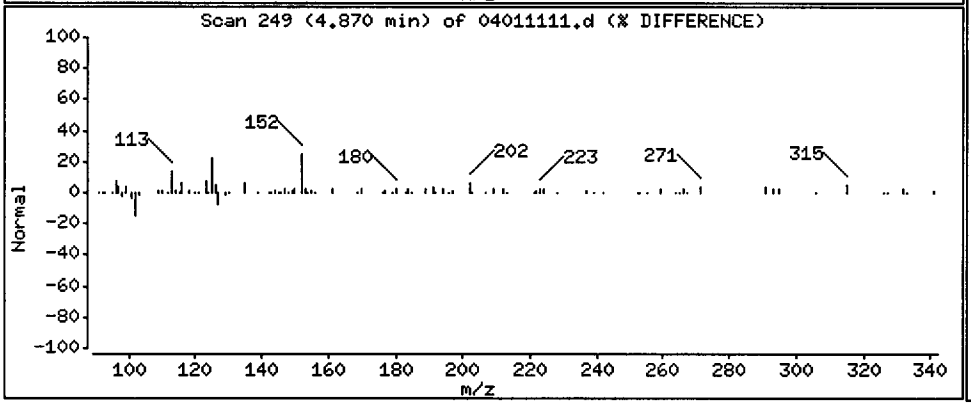


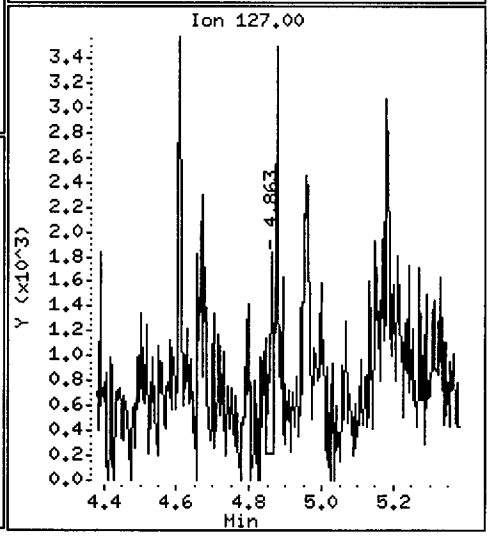












Data File: /chem1/nt12.i/20110401.b/04011111.d

Date : 01-APR-2011 19:37

Client ID: LL-SED2-0-56-031511

Instrument: nt12.i

Sample Info: SN54D

Volume Injected (uL): 1.0

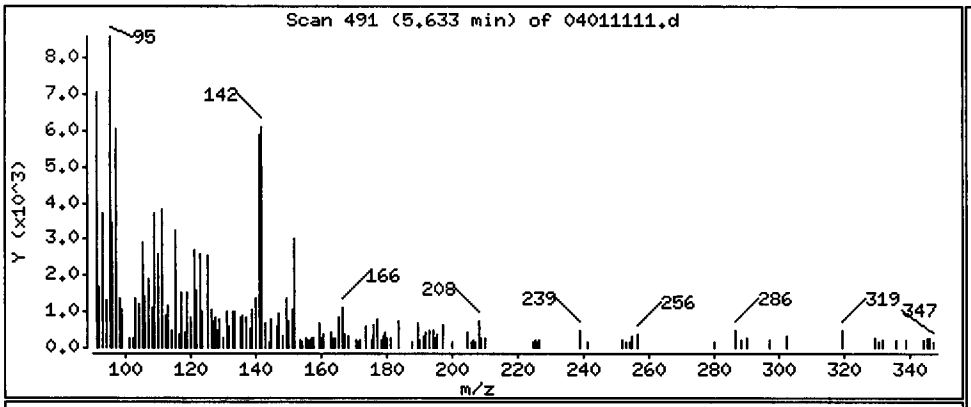
Operator: JZ

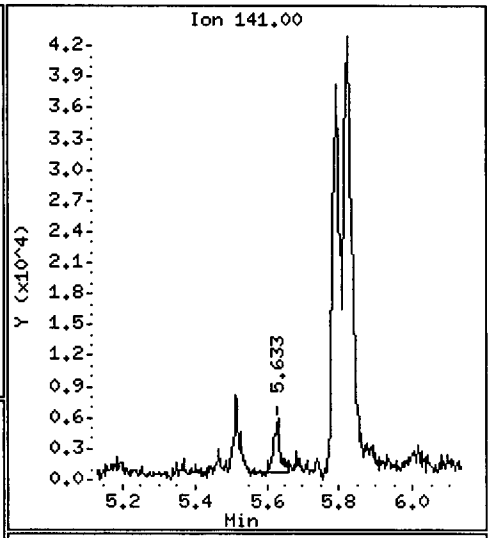
Column phase: ZB35

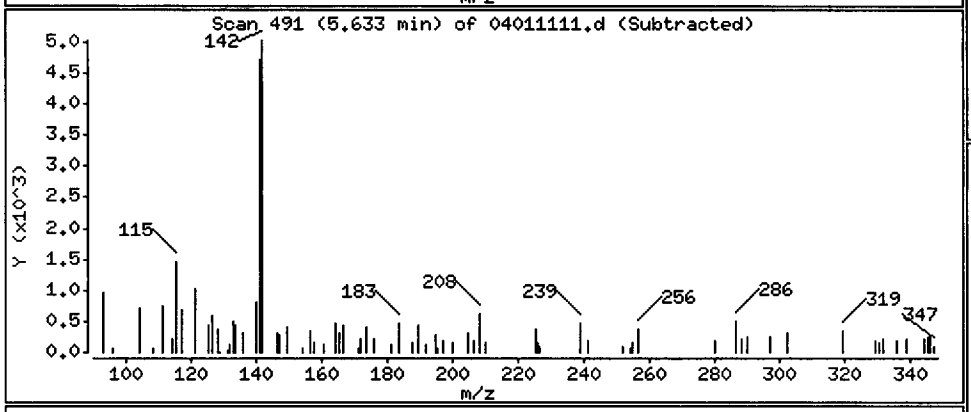
Column diameter: 0.32

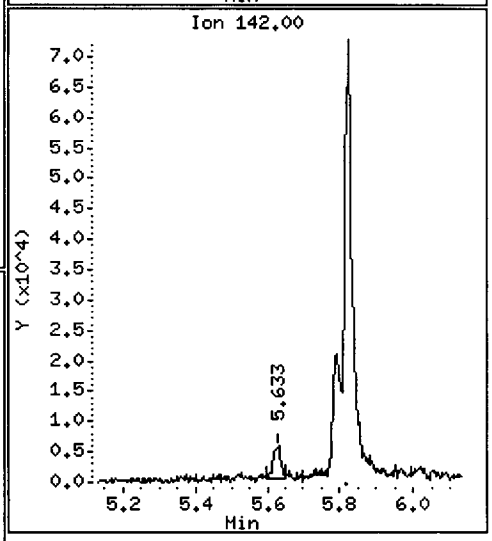
32 2-Methylnaphthalene

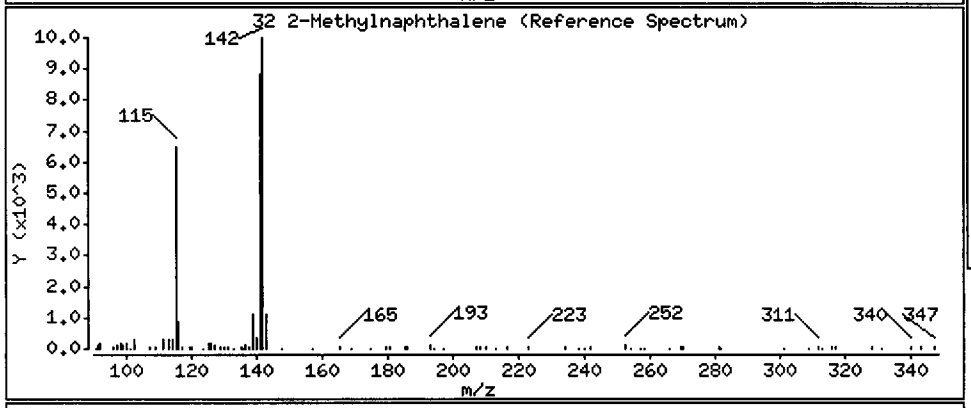
Concentration: 14.96 ug/kg

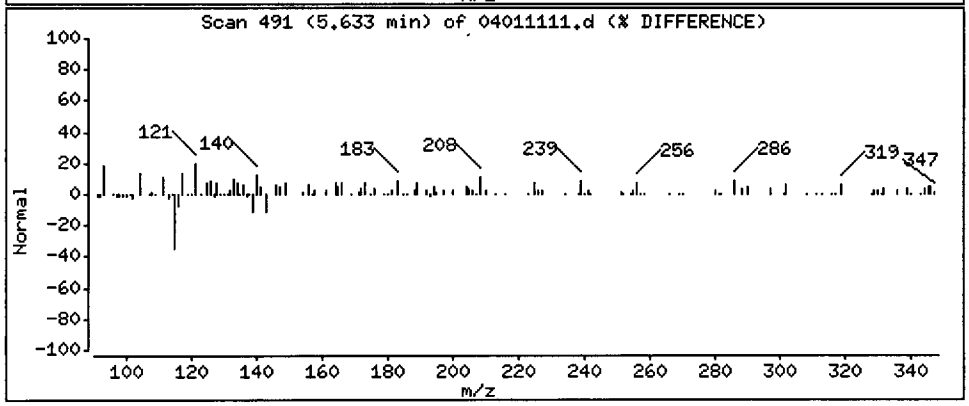












Data File: /chem1/nt12.i/20110401.b/04011111.d

Date : 01-APR-2011 19:37

Client ID: LL-SED2-0-56-031511

Instrument: nt12.i

Sample Info: SN54D

Volume Injected (uL): 1.0

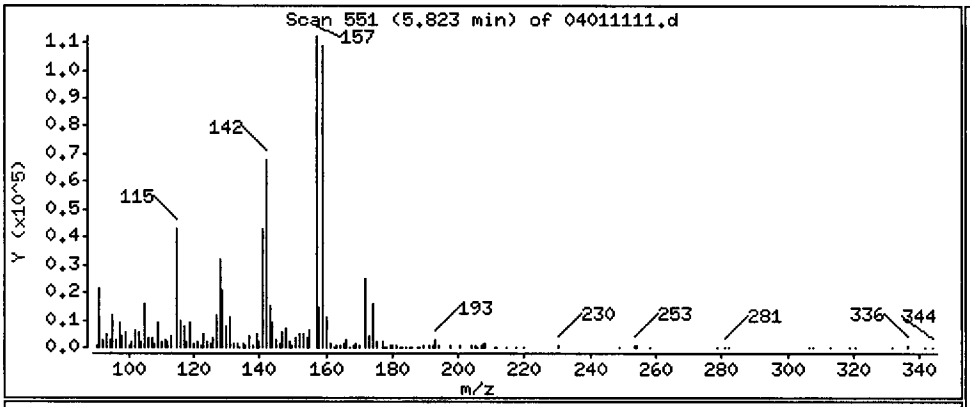
Operator: JZ

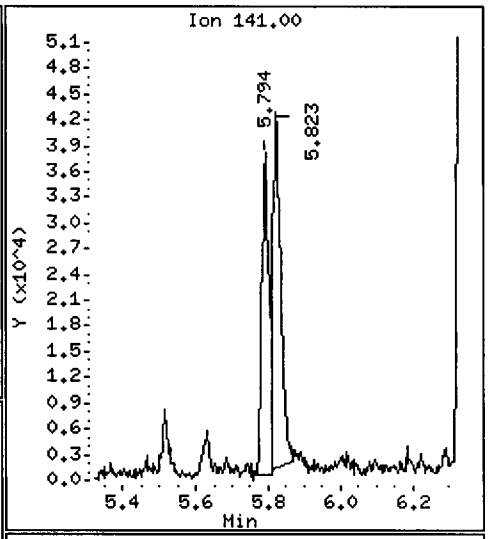
Column phase: ZB35

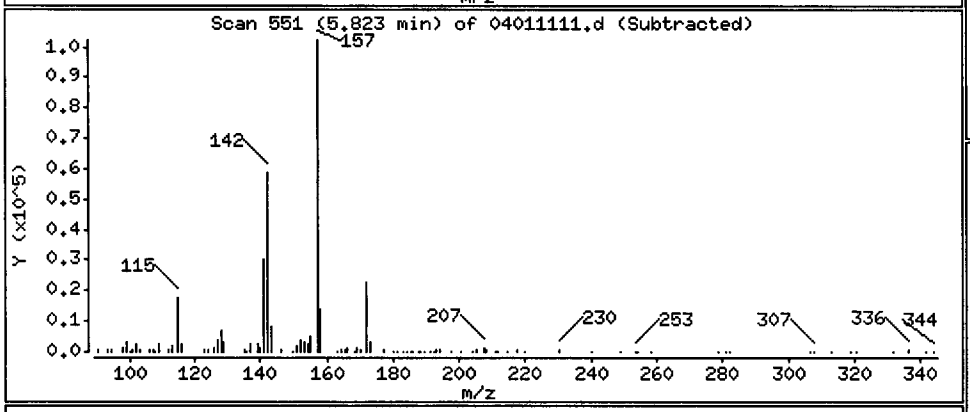
Column diameter: 0.32

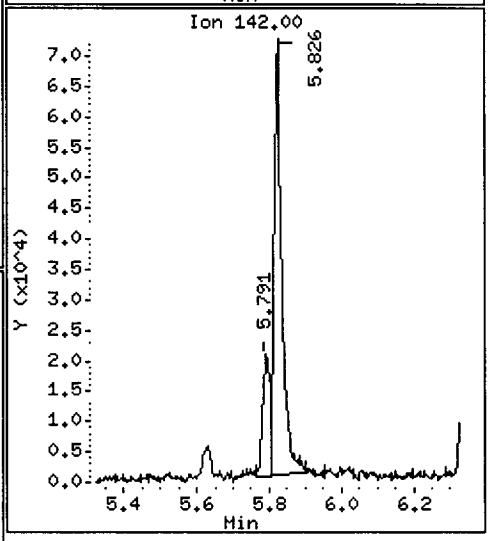
105 1-methylnaphthalene

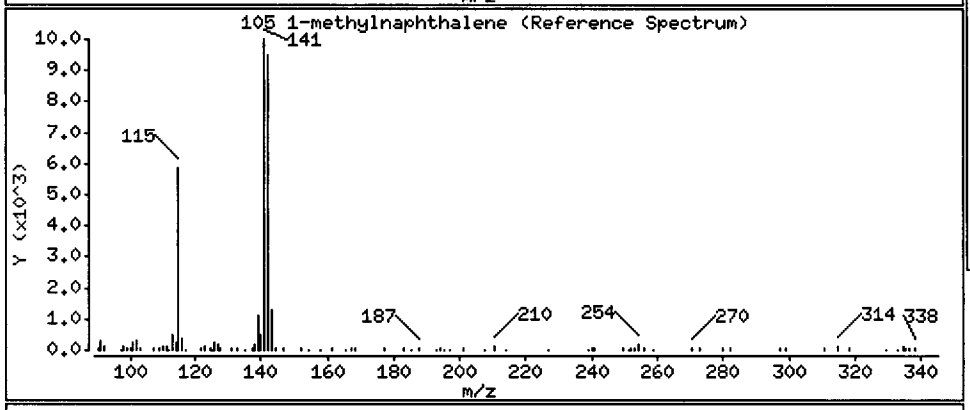
Concentration: 137.0 ug/kg

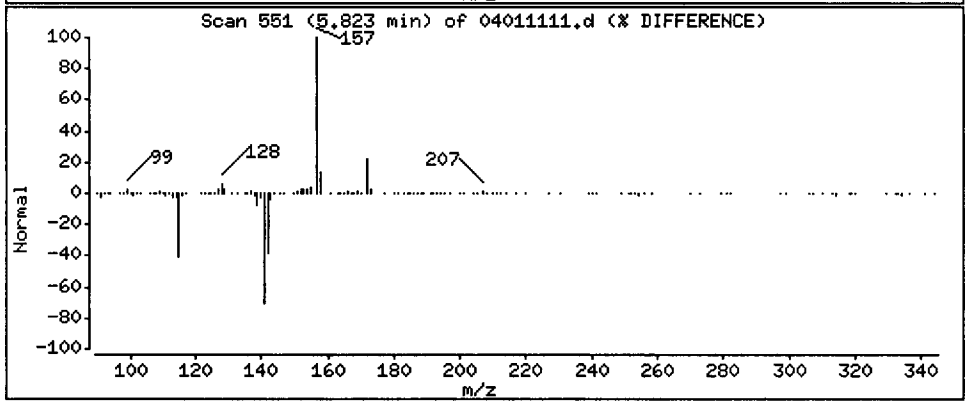












Data File: /chem1/nt12.i/20110401.b/04011111.d

Date : 01-APR-2011 19:37

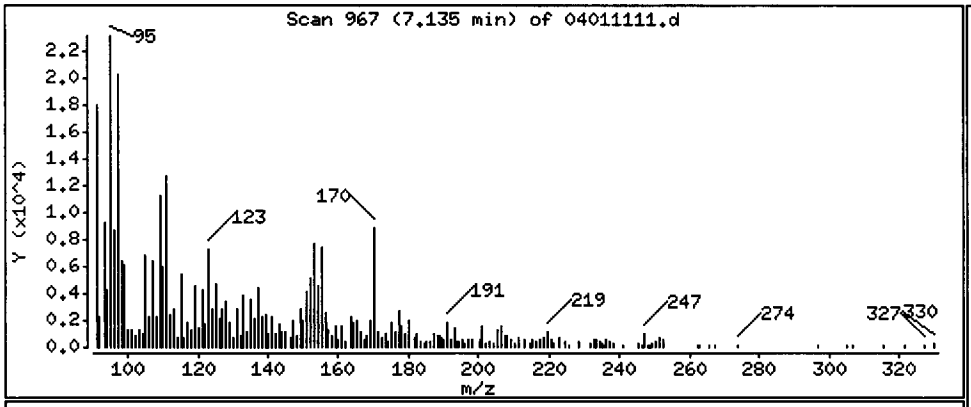
Client ID: LL-SED2-0-56-031511 Instrument: nt12.i

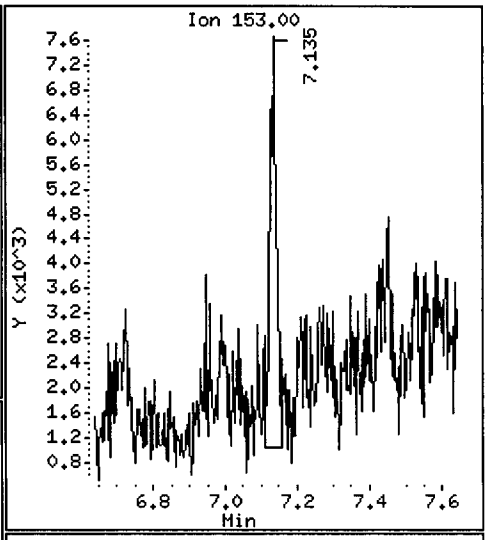
Sample Info: SN54D

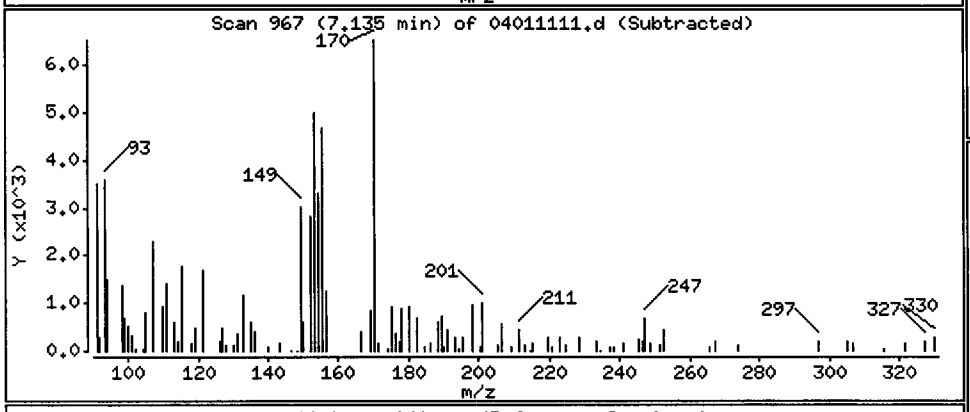
Volume Injected (uL): 1.0 Operator: JZ

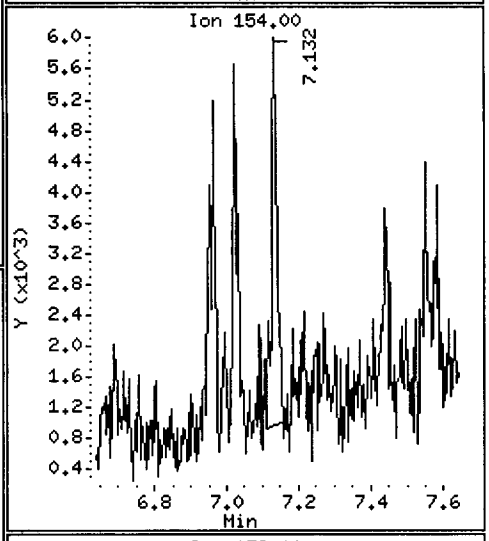
Column phase: ZB35 Column diameter: 0.32

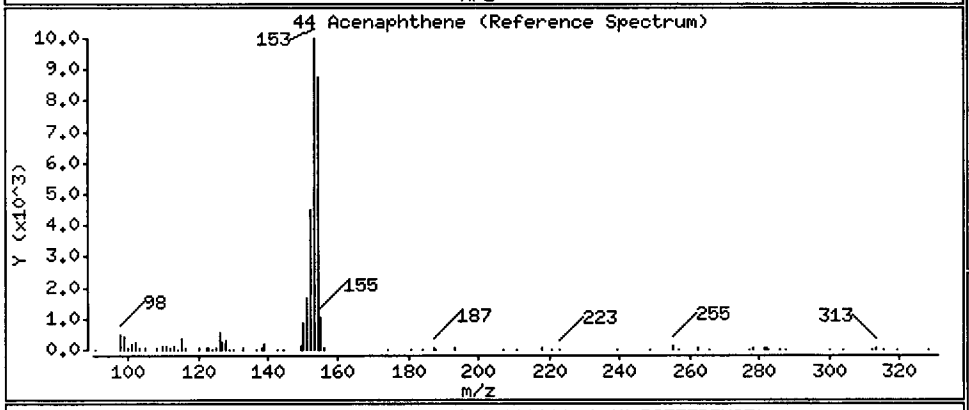
44 Acenaphthene Concentration: 14.70 ug/kg

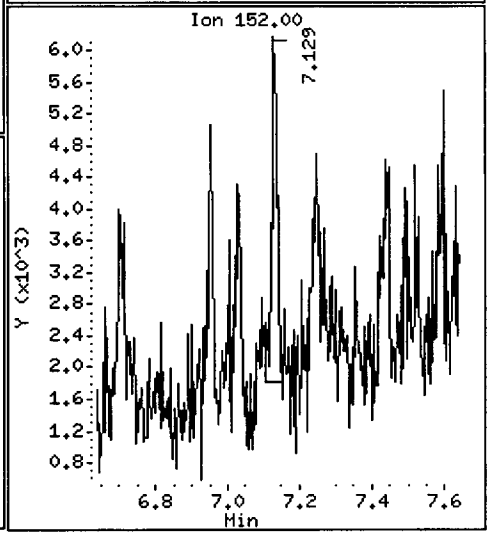


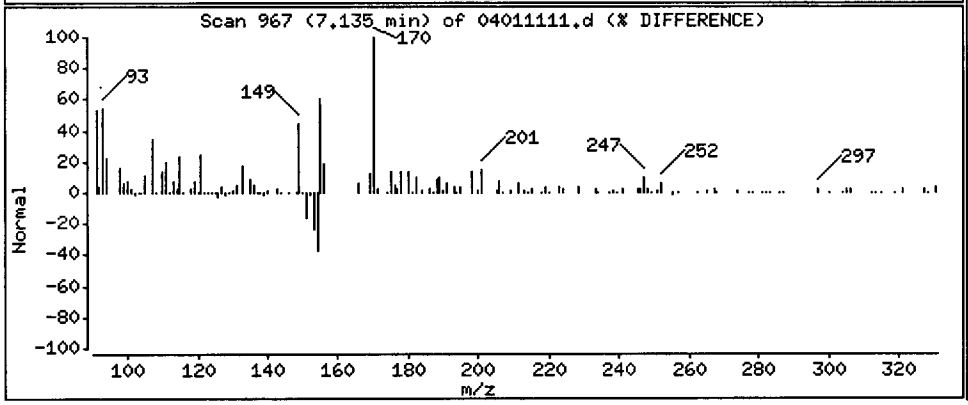












Data File: /chem1/nt12.i/20110401.b/04011111.d

Date : 01-APR-2011 19:37

Client ID: LL-SED2-0-56-031511

Instrument: nt12.i

Sample Info: SN54D

Volume Injected (uL): 1.0

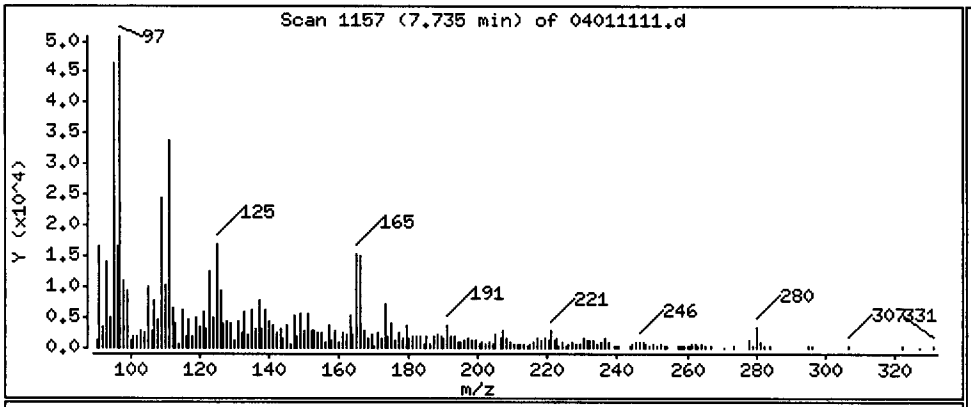
Operator: JZ

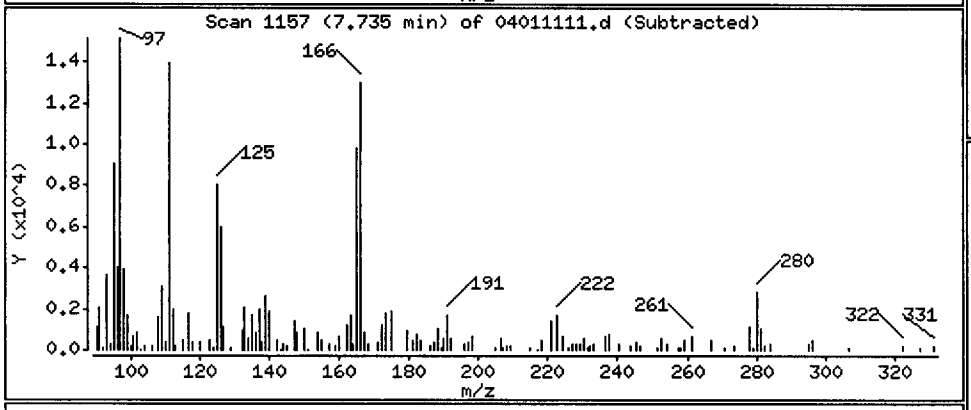
Column phase: ZB35

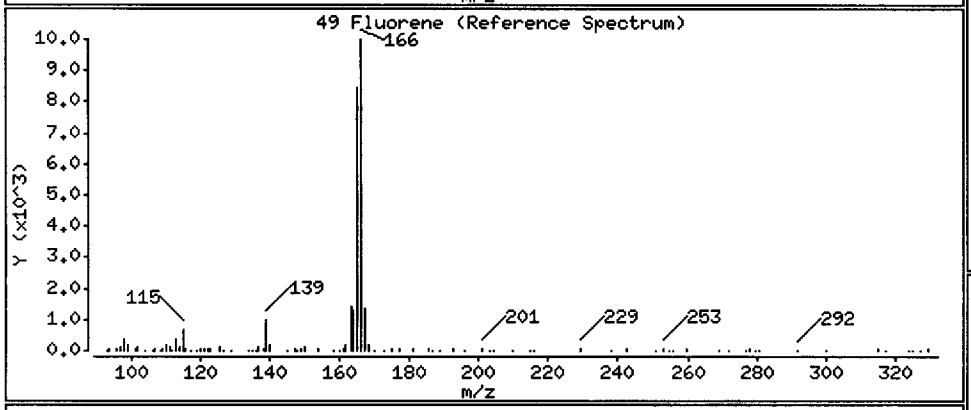
Column diameter: 0.32

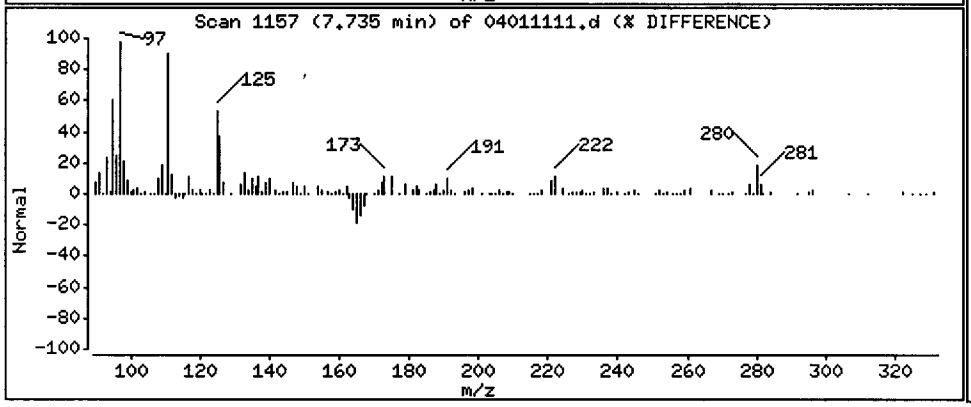
49 Fluorene

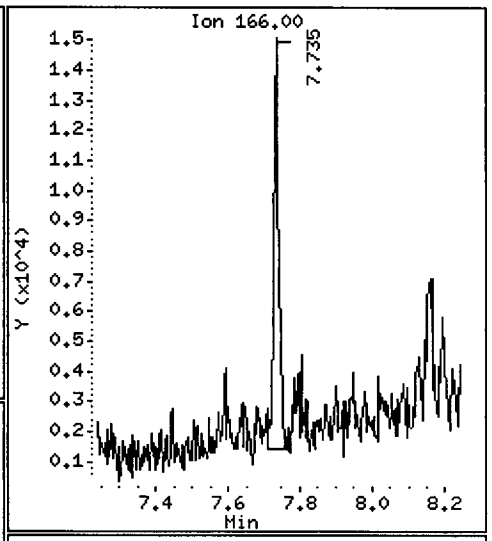
Concentration: 19.07 ug/kg

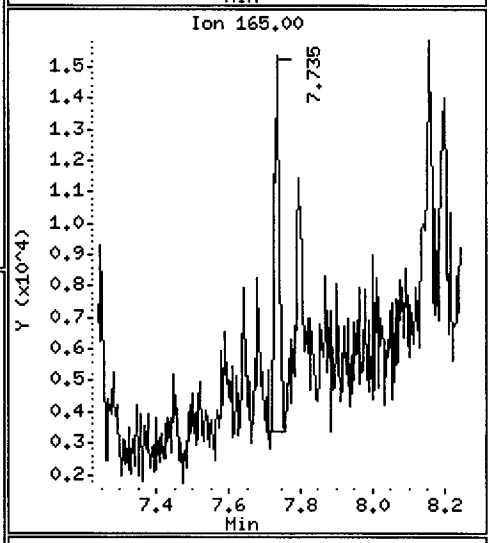


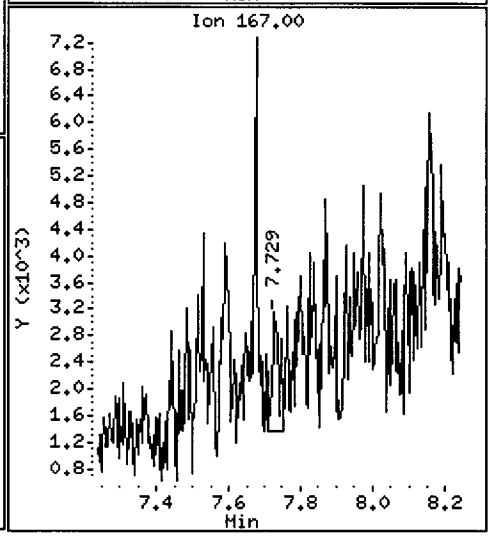












Data File: /chem1/nt12.i/20110401.b/04011111.d

Date : 01-APR-2011 19:37

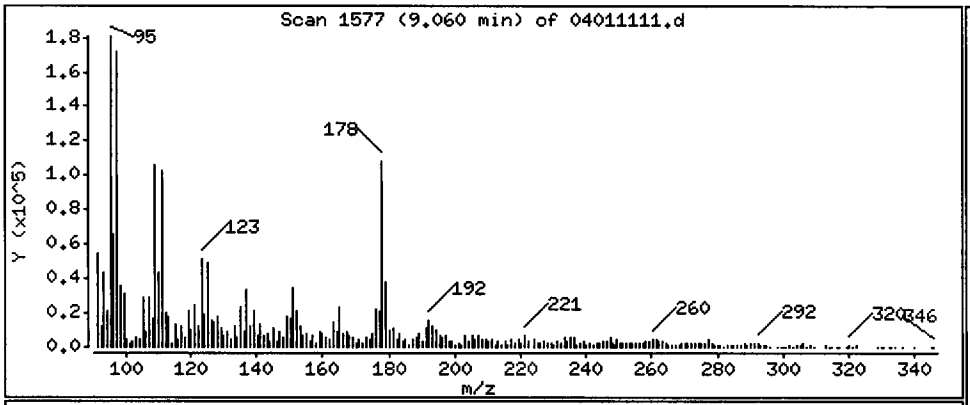
Client ID: LL-SED2-0-56-031511 Instrument: nt12.i

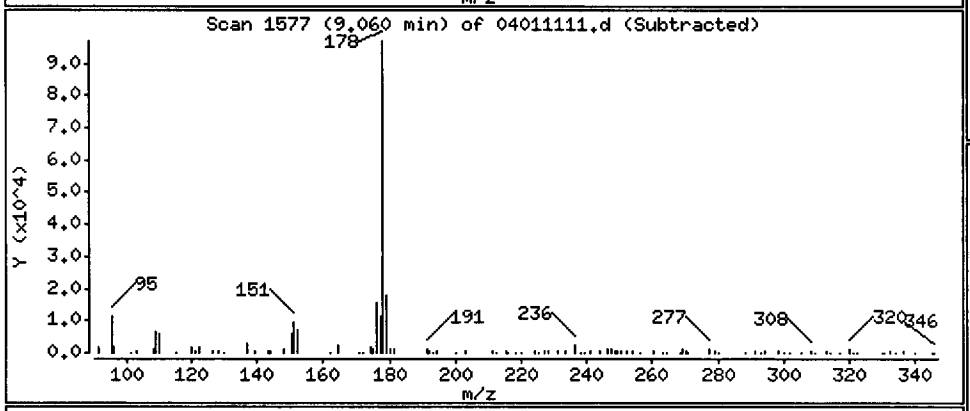
Sample Info: SN54D

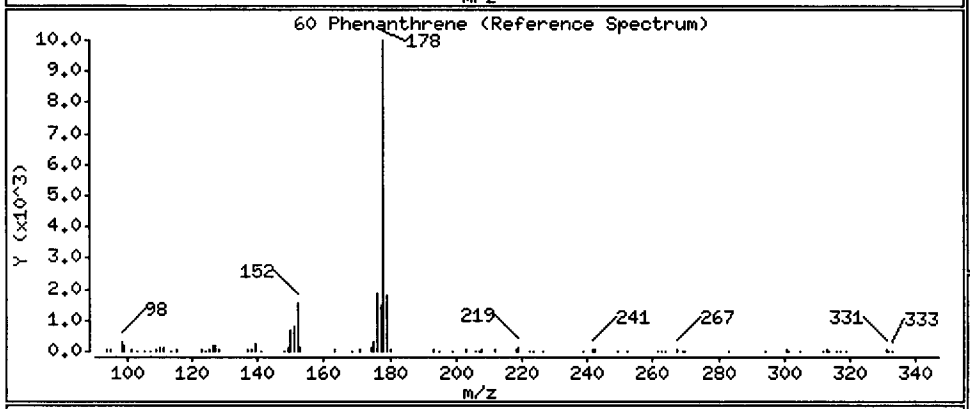
Volume Injected (uL): 1.0 Operator: JZ

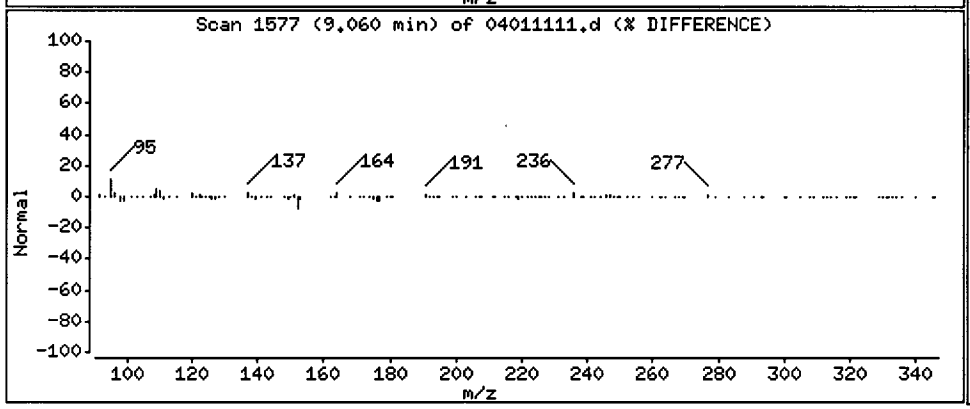
Column phase: ZB35 Column diameter: 0.32

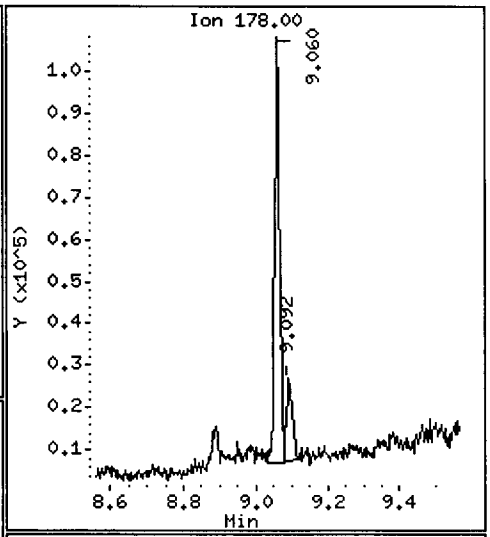
60 Phenanthrene Concentration: 110.6 ug/kg

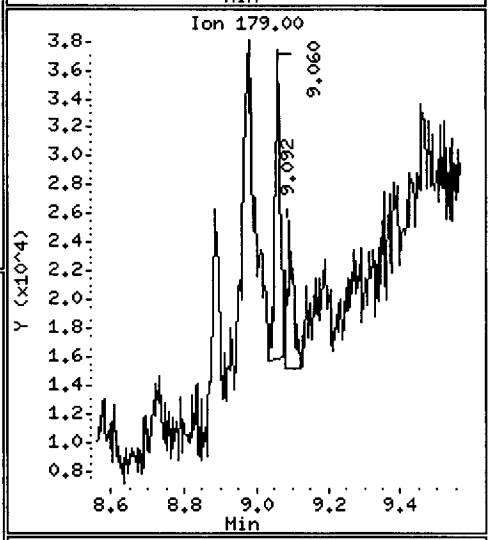


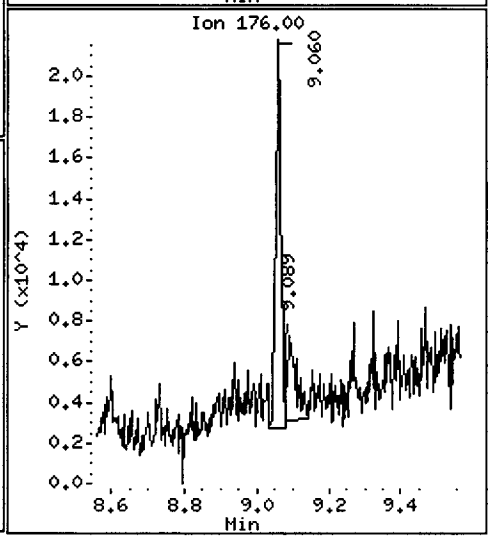












Data File: /chem1/nt12.i/20110401.b/04011111.d

Date : 01-APR-2011 19:37

Client ID: LL-SED2-0-56-031511

Instrument: nt12.i

Sample Info: SN54D

Volume Injected (uL): 1.0

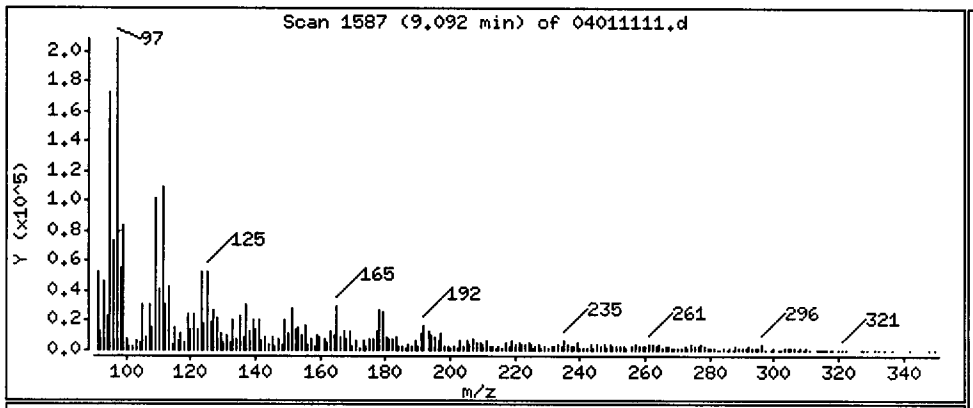
Operator: JZ

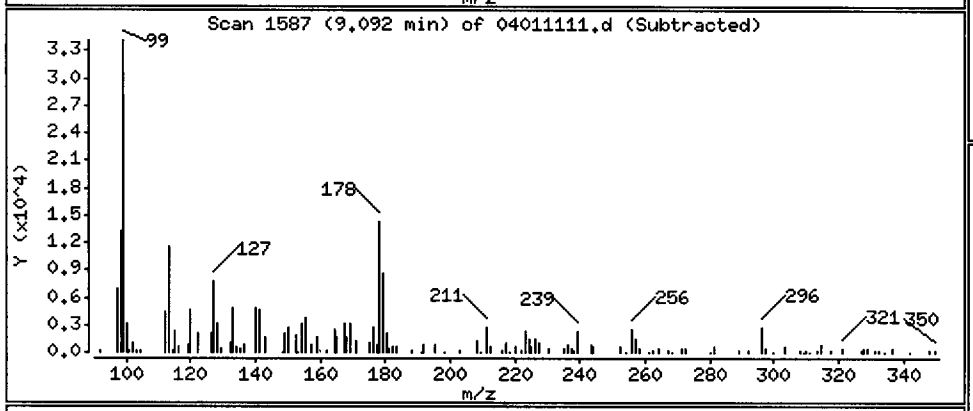
Column phase: ZB35

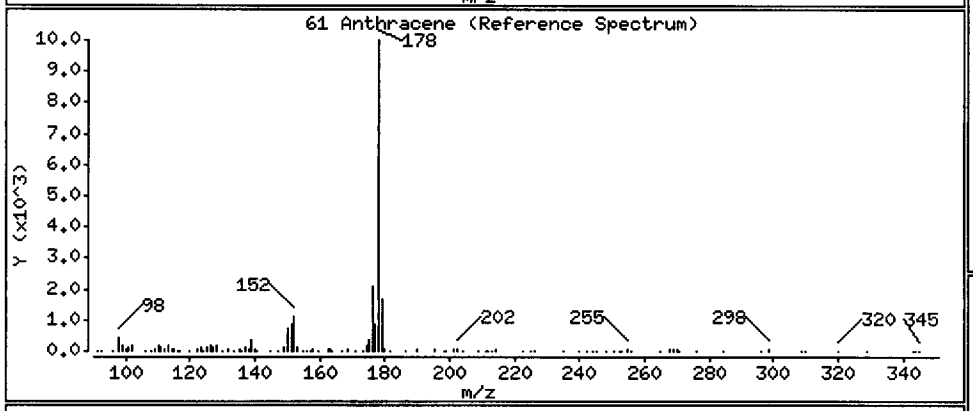
Column diameter: 0.32

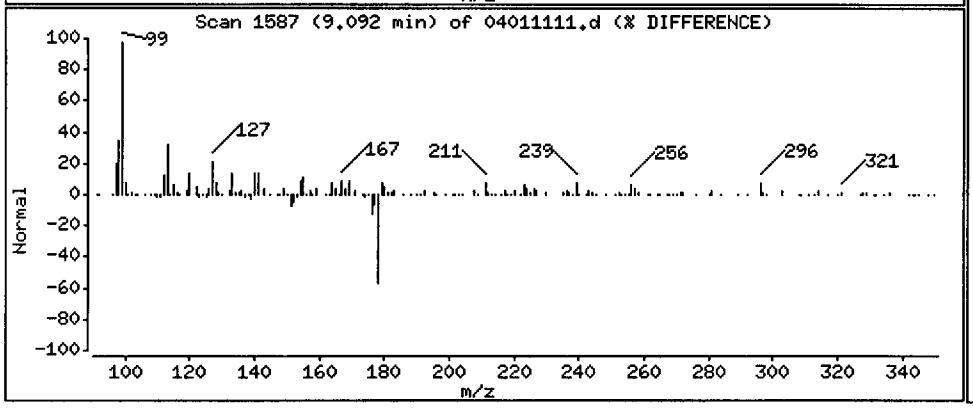
61 Anthracene

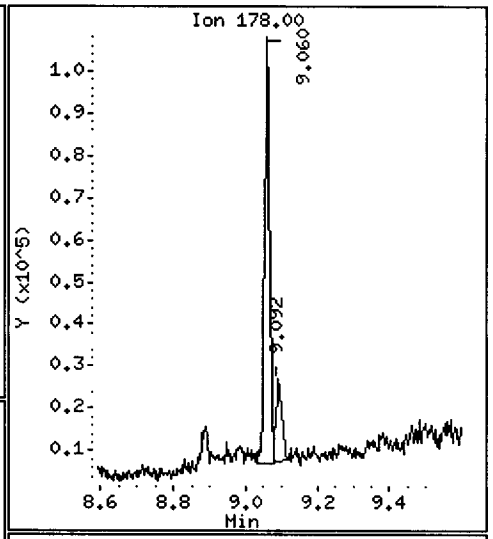
Concentration: 26.76 ug/kg

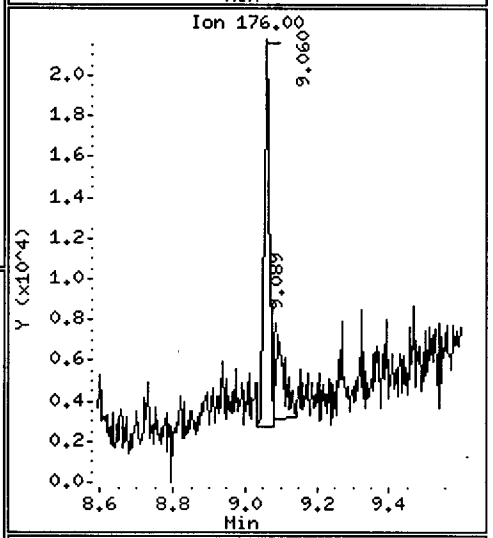


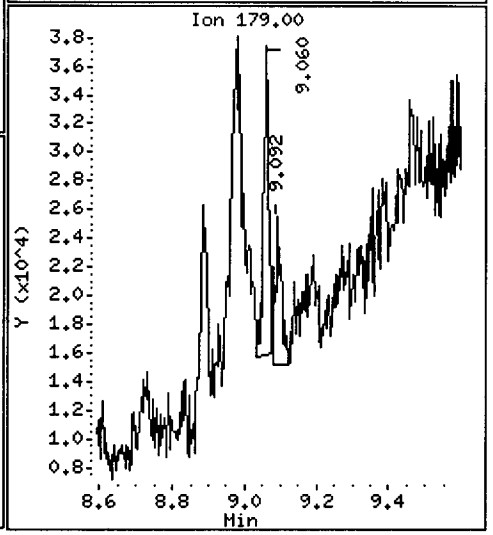












Data File: /chem1/nt12.i/20110401.b/04011111.d

Date : 01-APR-2011 19:37

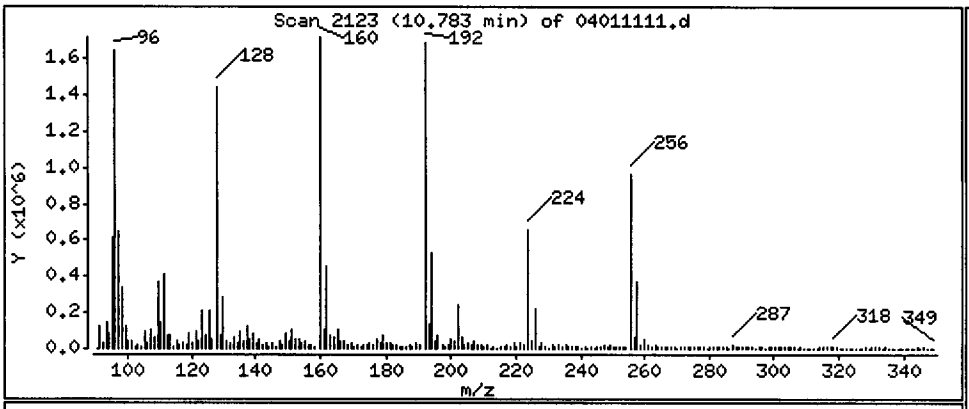
Client ID: LL-SED2-0-56-031511 Instrument: nt12.i

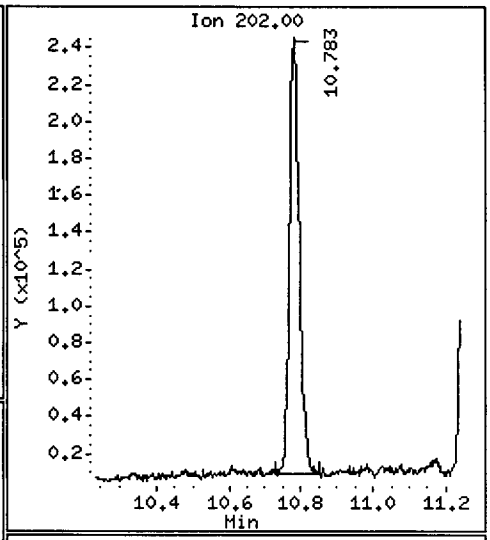
Sample Info: SN54D

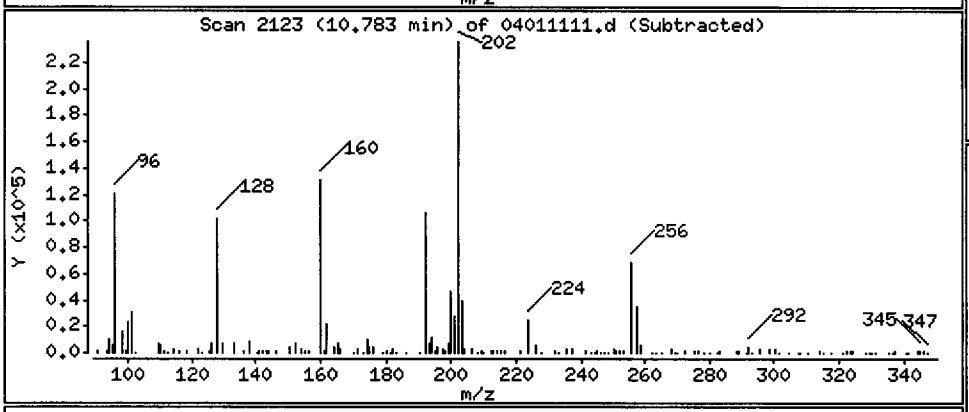
Volume Injected (uL): 1.0 Operator: JZ

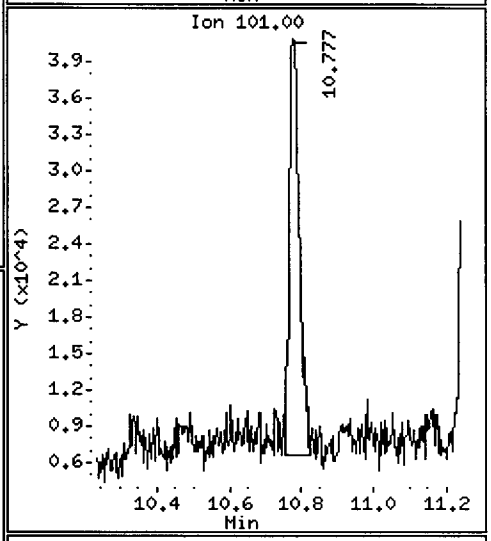
Column phase: ZB35 Column diameter: 0.32

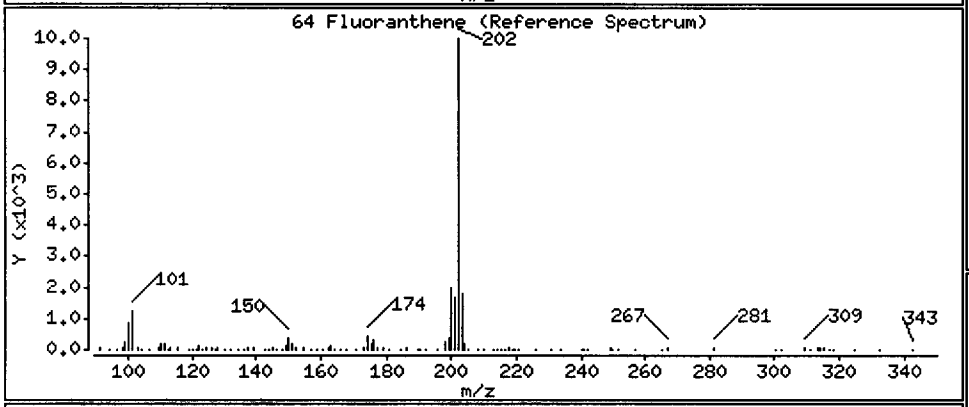
64 Fluoranthene Concentration: 461.1 ug/kg

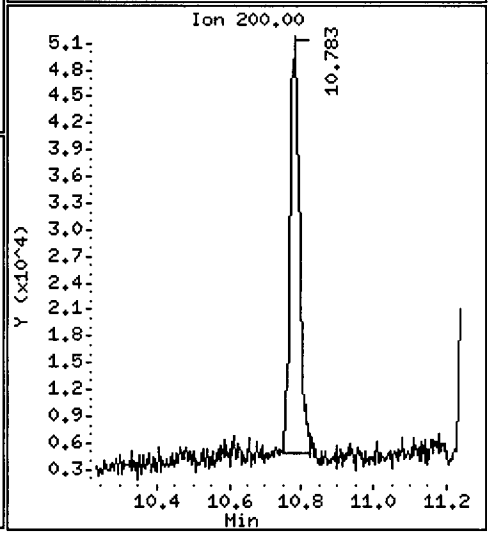


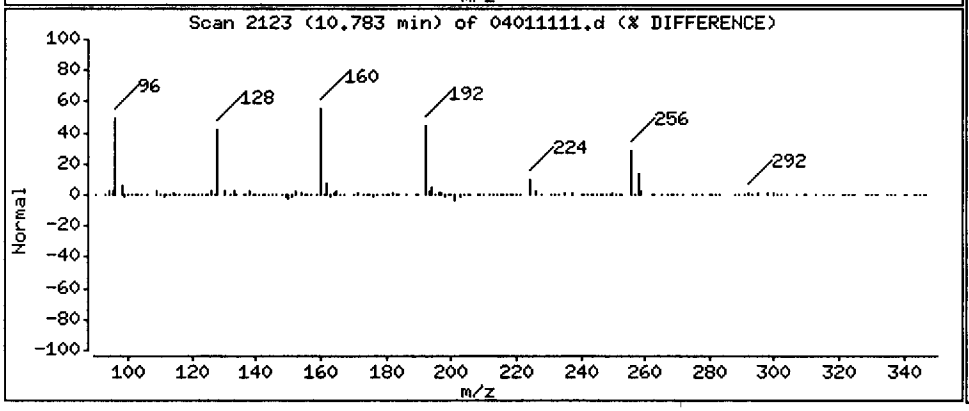












Data File: /chem1/nt12.i/20110401.b/04011111.d

Date : 01-APR-2011 19:37

Client ID: LL-SED2-0-56-031511

Instrument: nt12.i

Sample Info: SN54D

Volume Injected (uL): 1.0

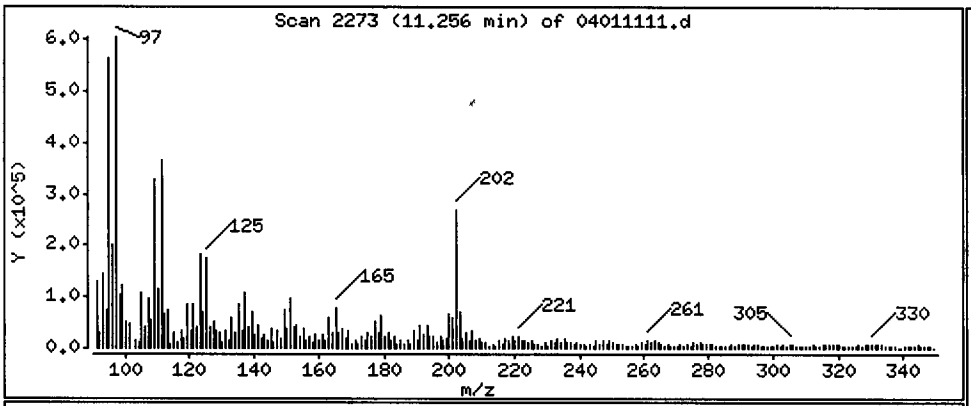
Operator: JZ

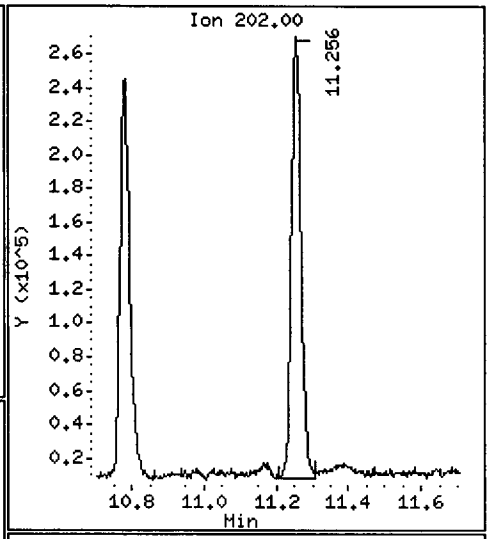
Column phase: ZB35

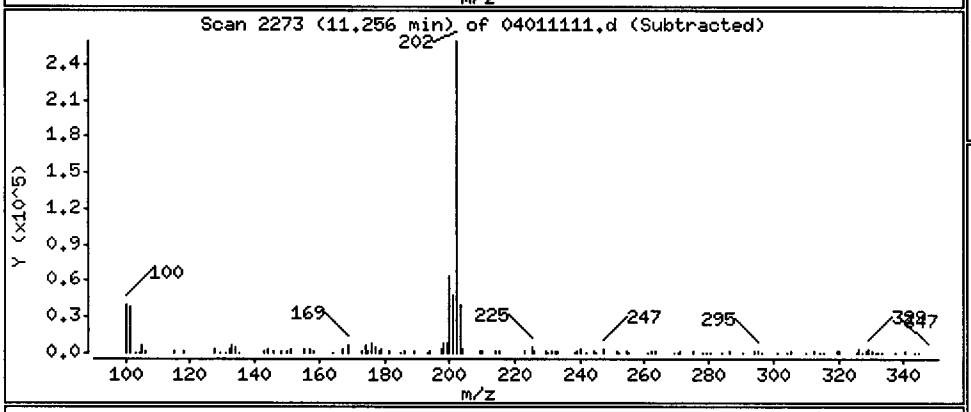
Column diameter: 0.32

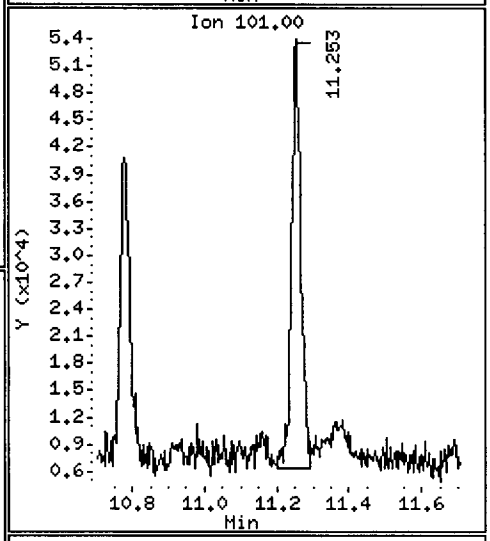
65 Pyrene

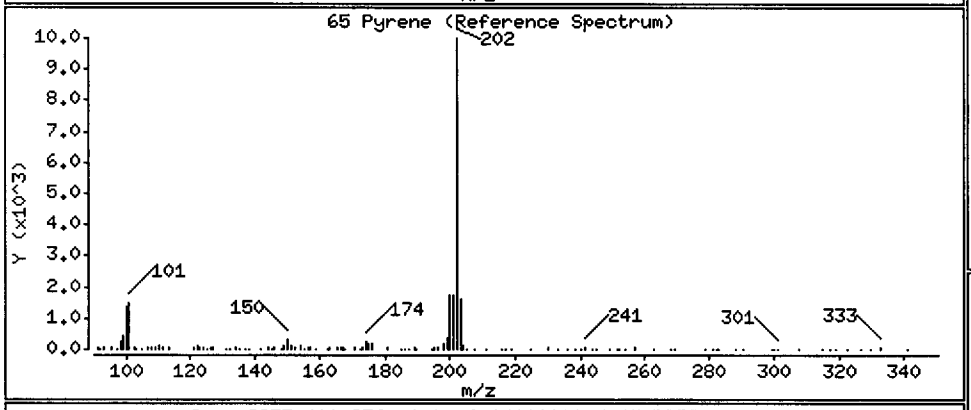
Concentration: 398.7 ug/kg

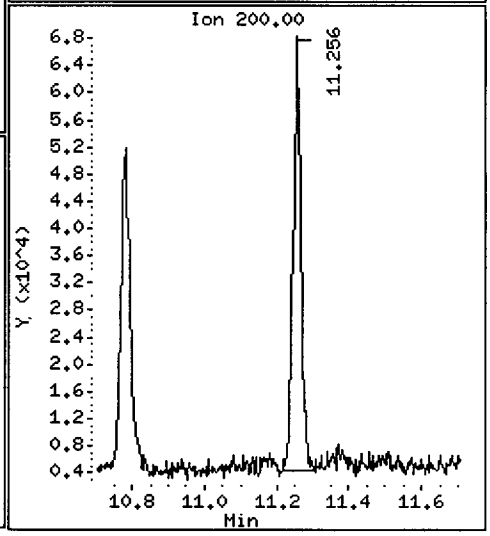


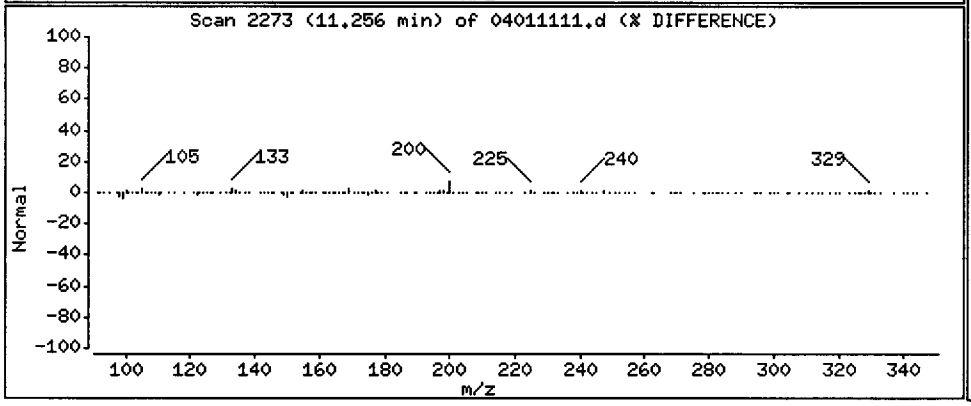












Data File: /chem1/nt12.i/20110401.b/04011111.d

Date : 01-APR-2011 19:37

Client ID: LL-SED2-0-56-031511

Instrument: nt12.i

Sample Info: SN54D

Volume Injected (uL): 1.0

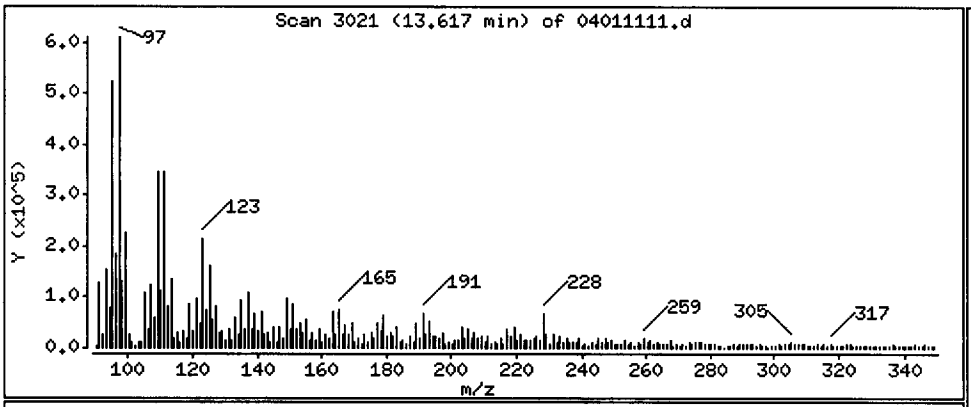
Operator: JZ

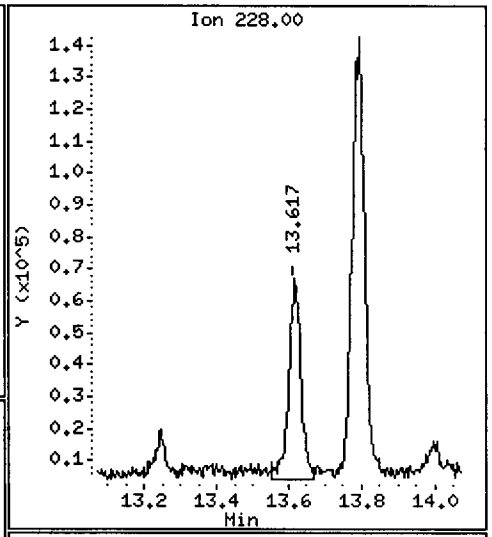
Column phase: ZB35

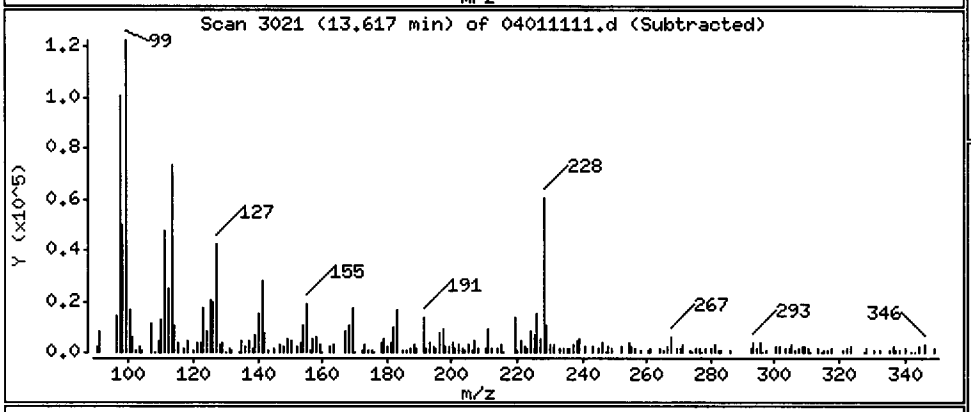
Column diameter: 0.32

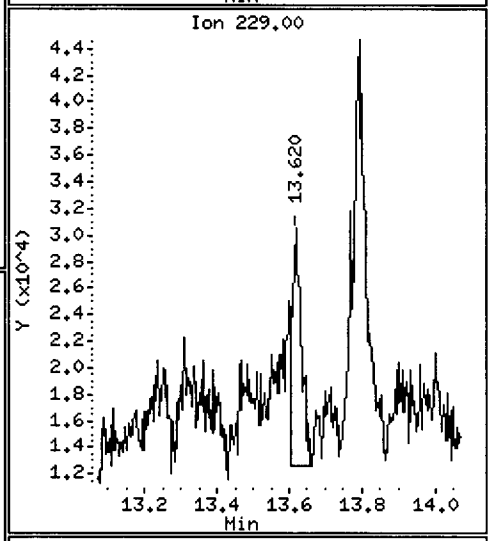
68 Benzo(a)anthracene

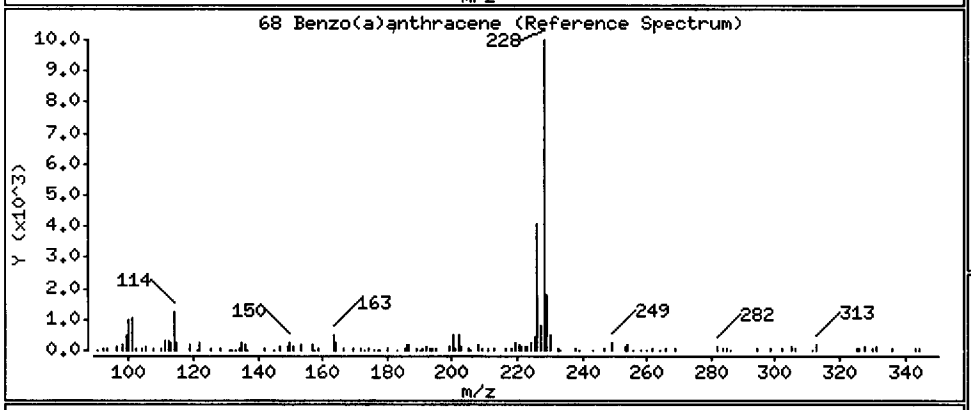
Concentration: 133.8 ug/kg

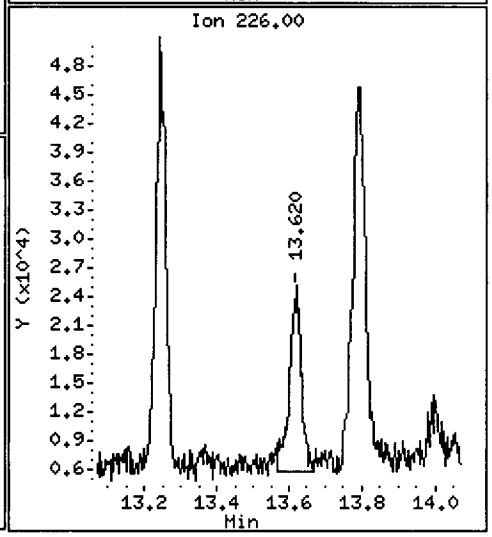


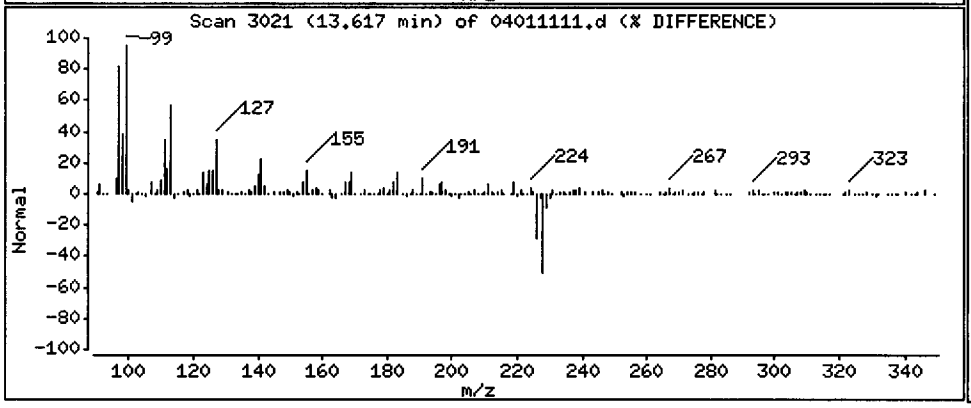












Data File: /chem1/nt12.i/20110401.b/04011111.d

Date : 01-APR-2011 19:37

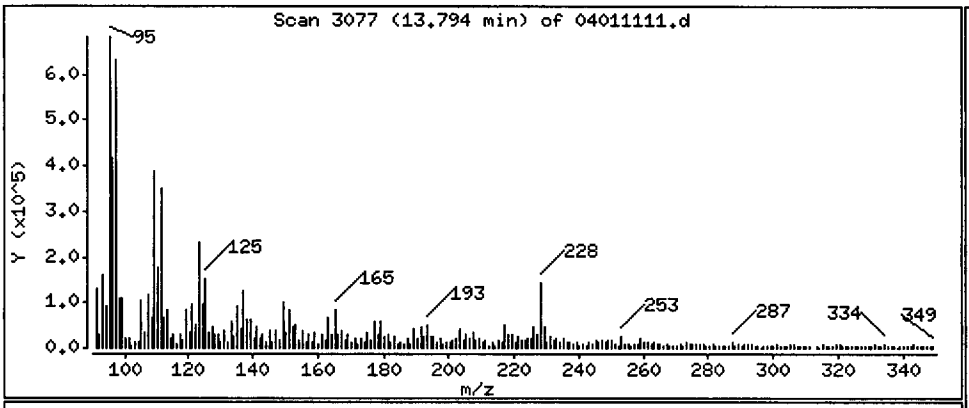
Client ID: LL-SED2-0-56-031511 Instrument: nt12.i

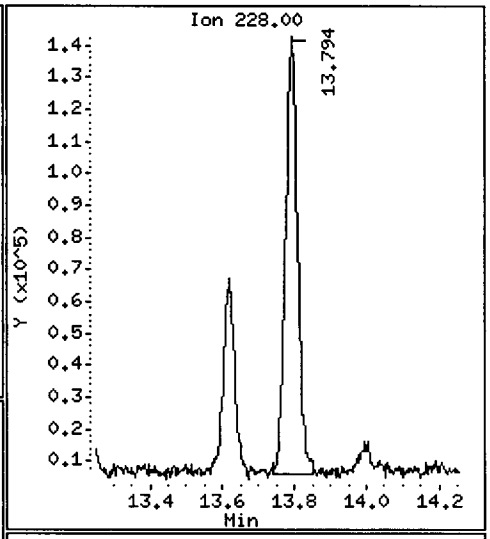
Sample Info: SN54D

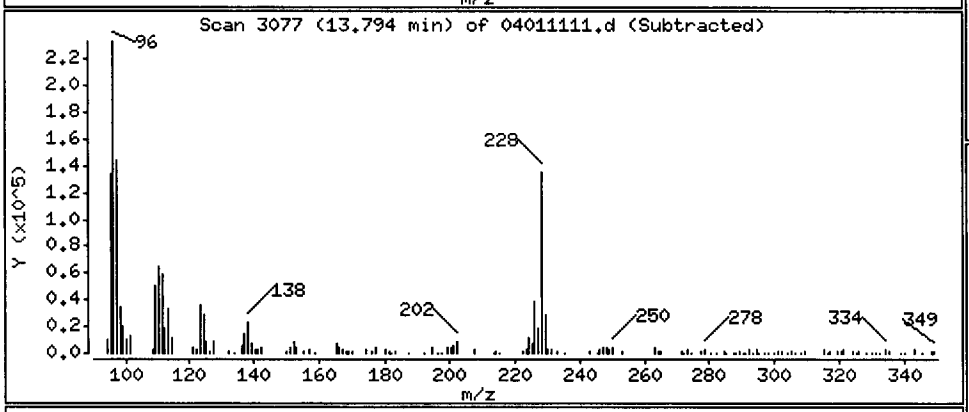
Volume Injected (uL): 1.0 Operator: JZ

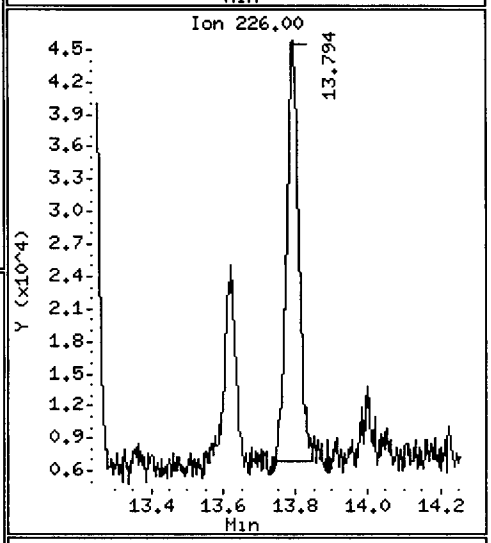
Column phase: ZB35 Column diameter: 0.32

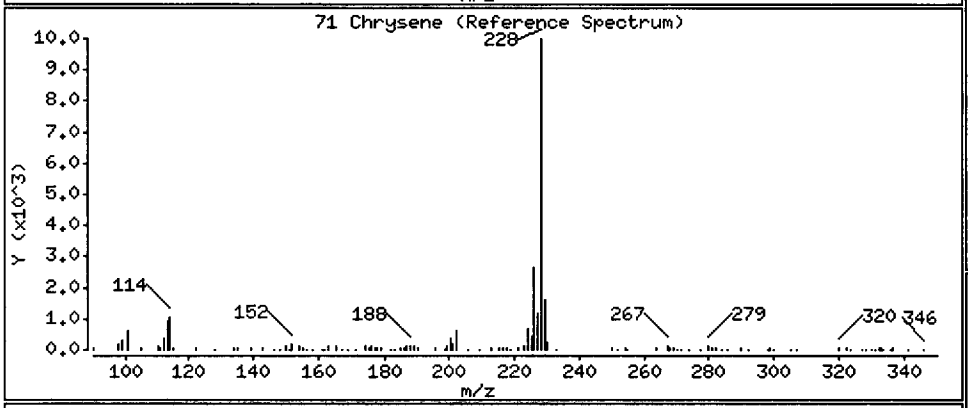
71 Chrysene Concentration: 302.7 ug/kg

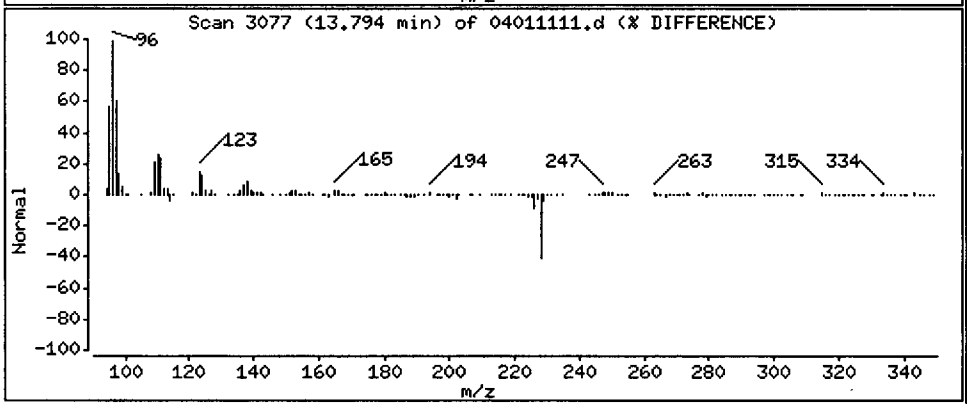


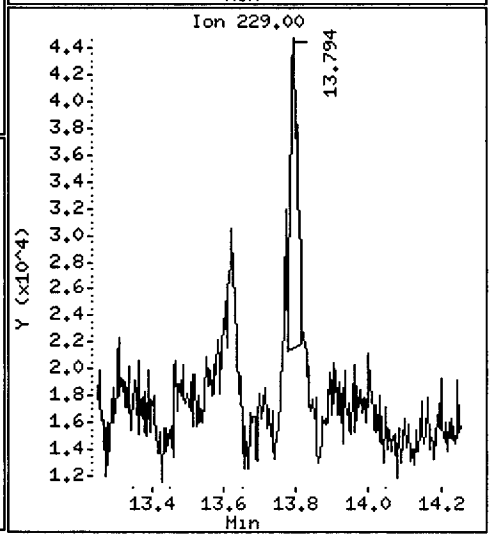












Data File: /chem1/nt12.i/20110401.b/04011111.d

Date : 01-APR-2011 19:37

Client ID: LL-SED2-0-56-031511

Instrument: nt12.i

Sample Info: SN54D

Volume Injected (uL): 1.0

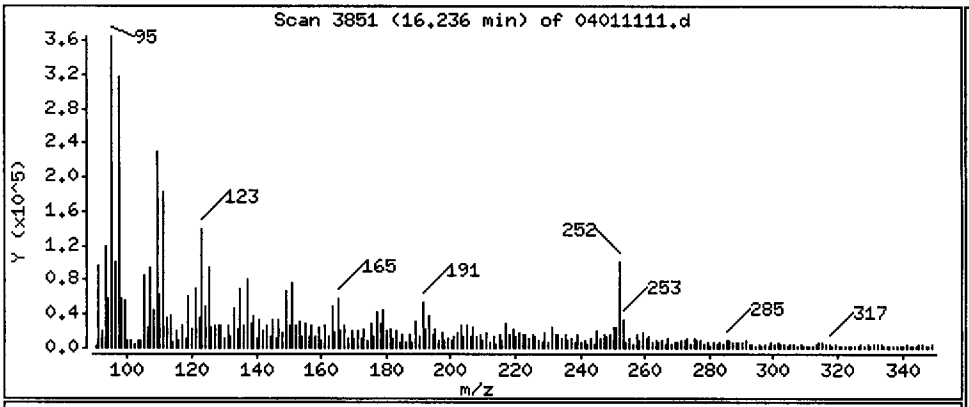
Operator: JZ

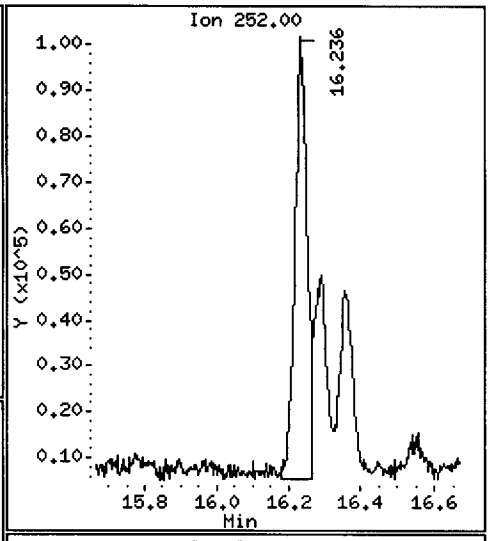
Column phase: ZB35

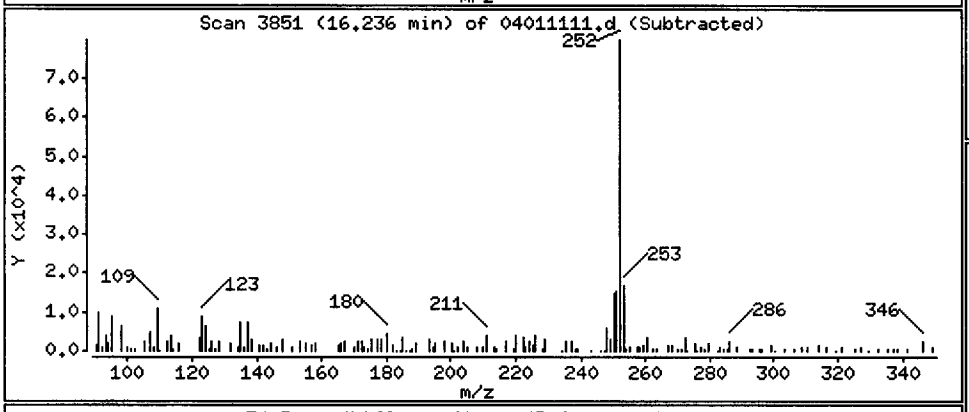
Column diameter: 0.32

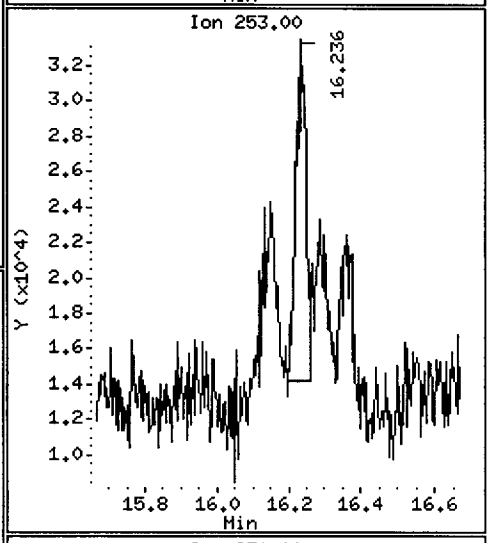
74 Benzo(b)fluoranthene

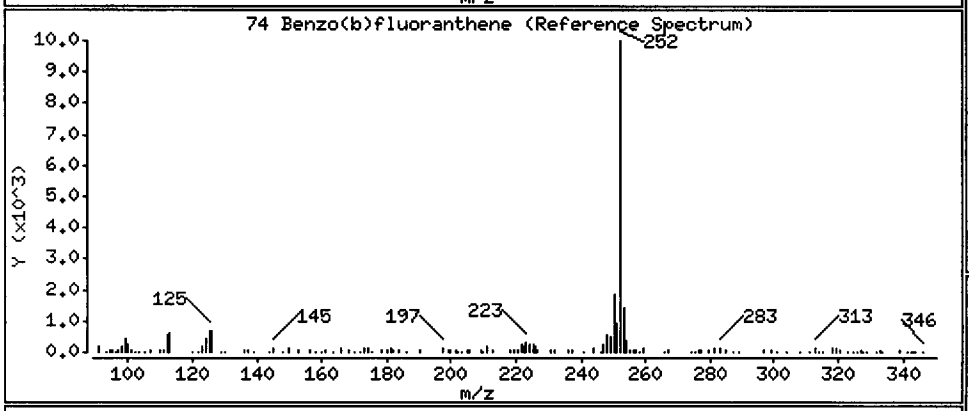
Concentration: 253.9 ug/kg

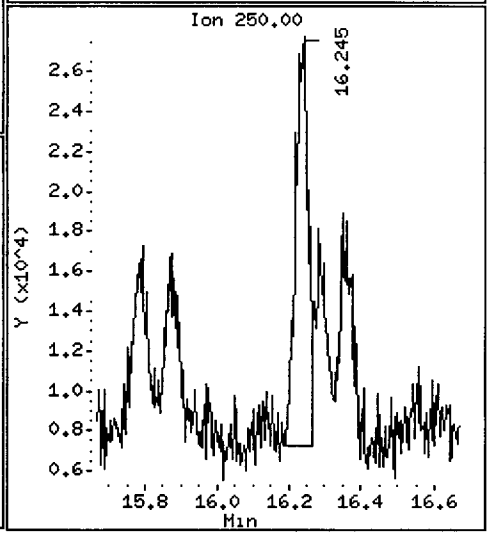


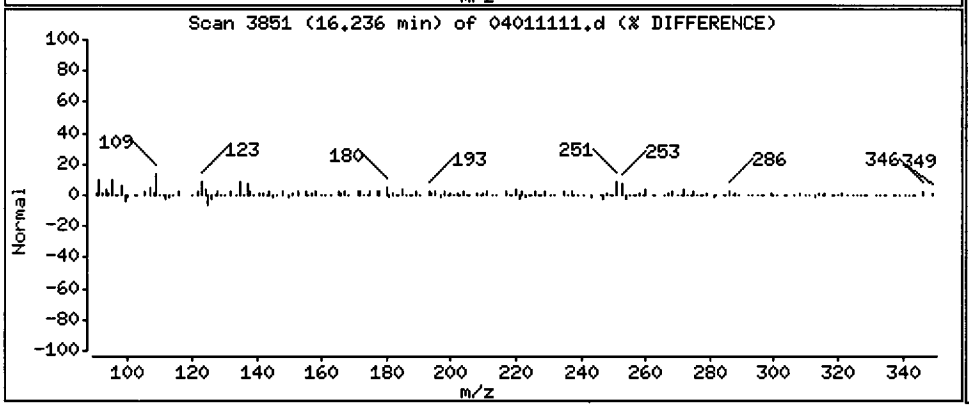












Data File: /chem1/nt12.i/20110401.b/04011111.d

Date : 01-APR-2011 19:37

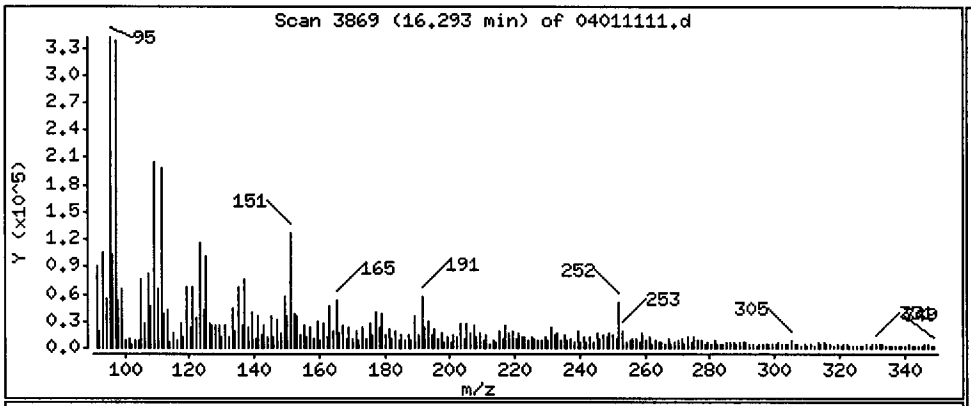
Client ID: LL-SED2-0-56-031511 Instrument: nt12.i

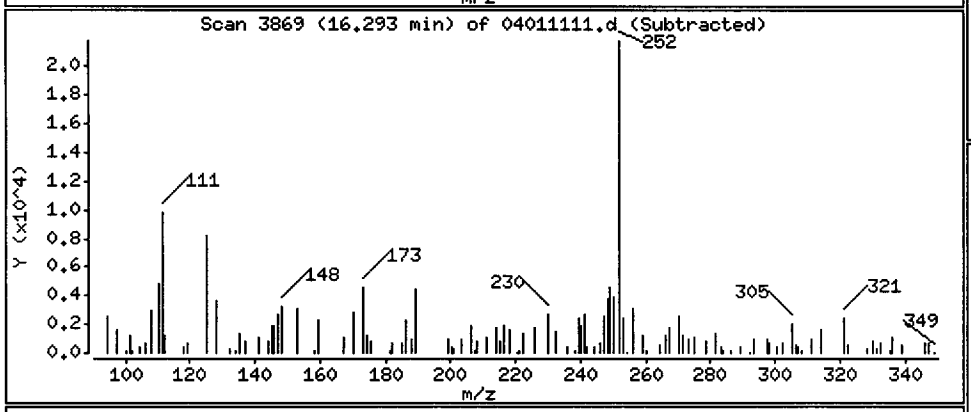
Sample Info: SN54D

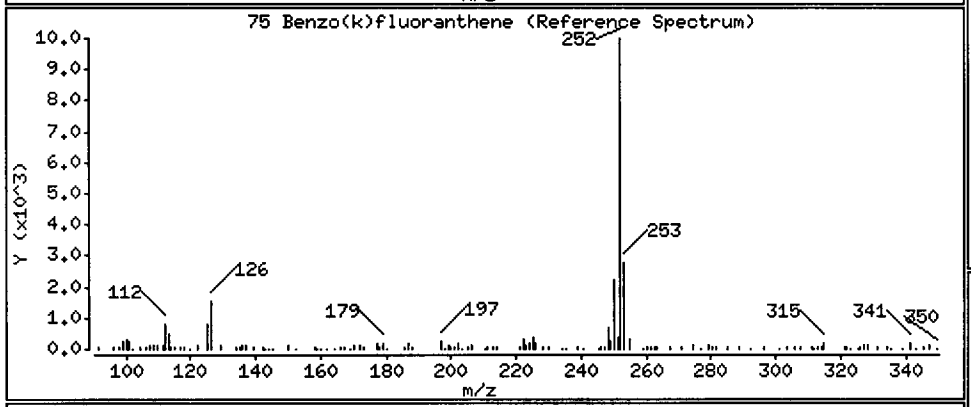
Volume Injected (uL): 1.0 Operator: JZ

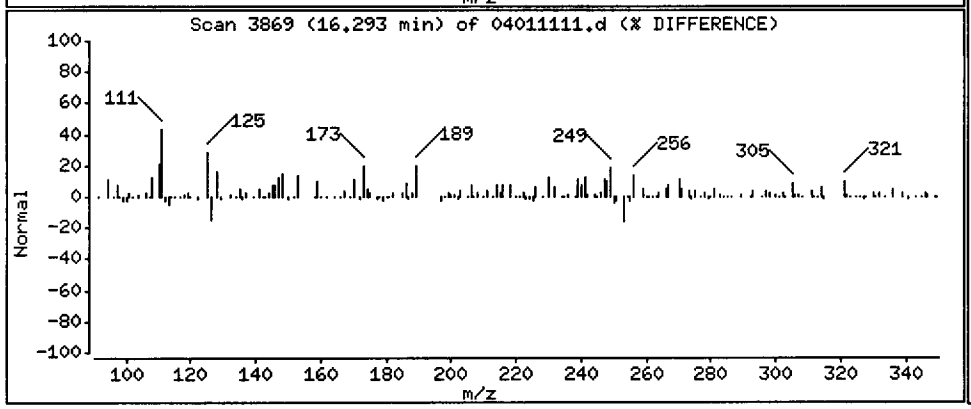
Column phase: ZB35 Column diameter: 0.32

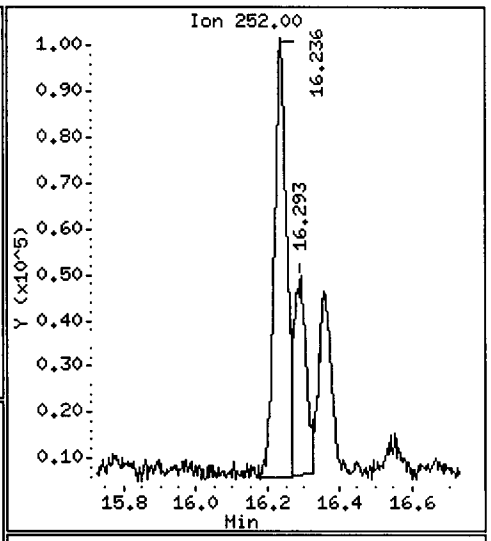
75 Benzo(k)fluoranthene Concentration: 109.7 ug/kg

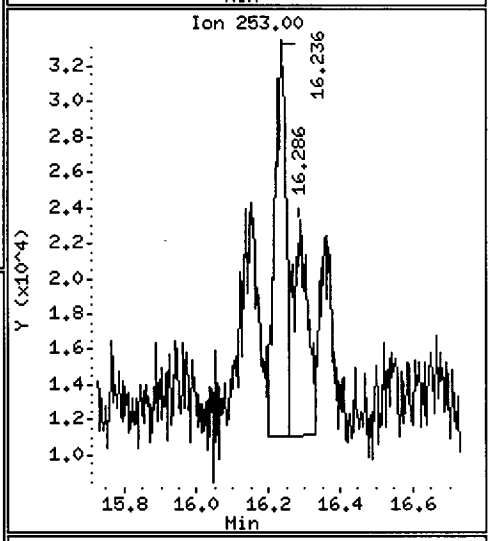


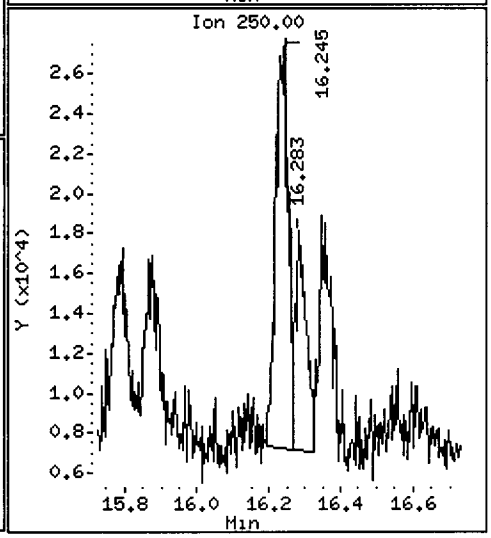












Data File: /chem1/nt12.i/20110401.b/04011111.d

Date : 01-APR-2011 19:37

Client ID: LL-SED2-0-56-031511

Instrument: nt12.i

Sample Info: SN54D

Volume Injected (uL): 1.0

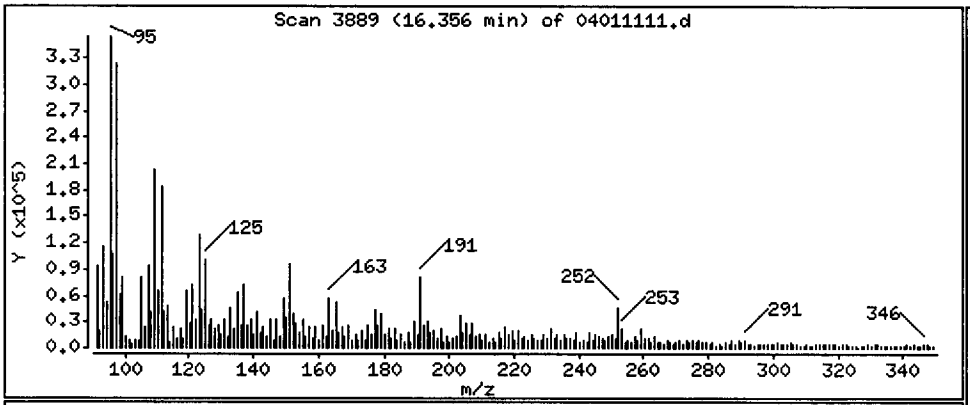
Operator: JZ

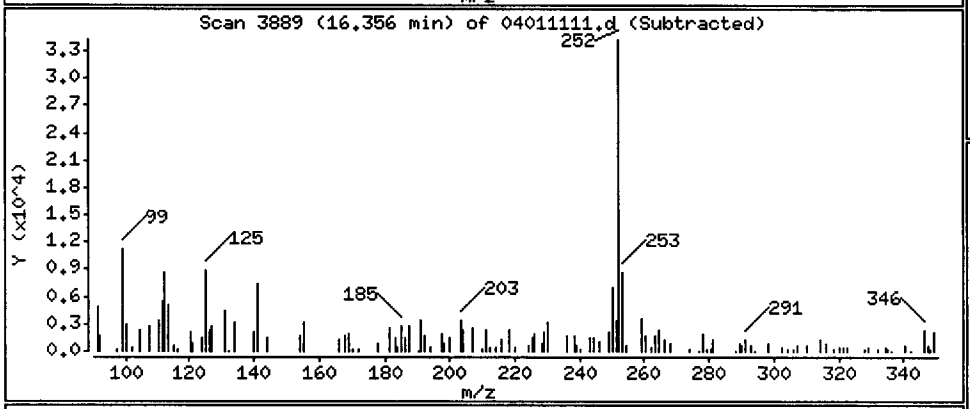
Column phase: ZB35

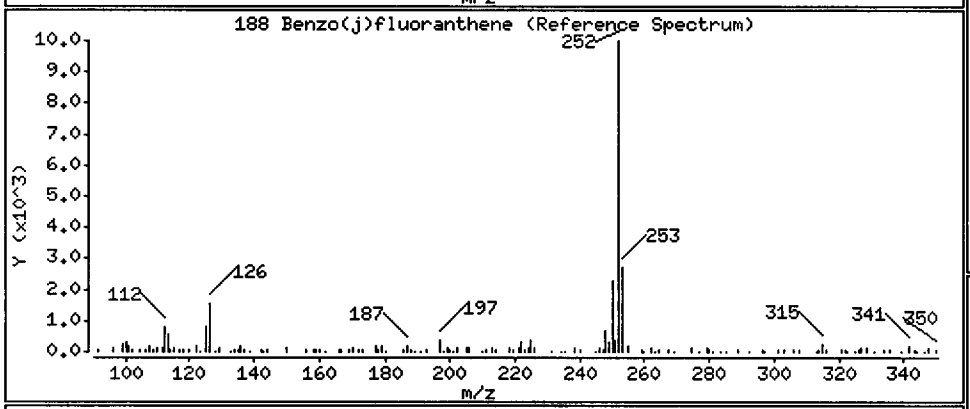
Column diameter: 0.32

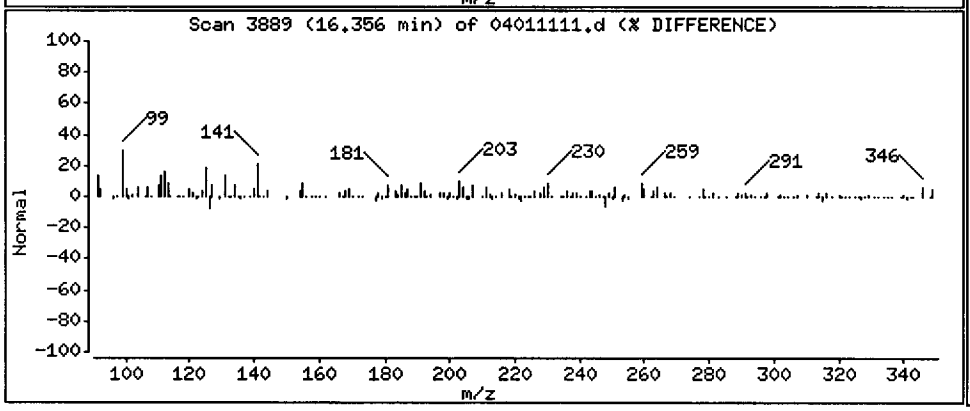
188 Benzo(j)fluoranthene

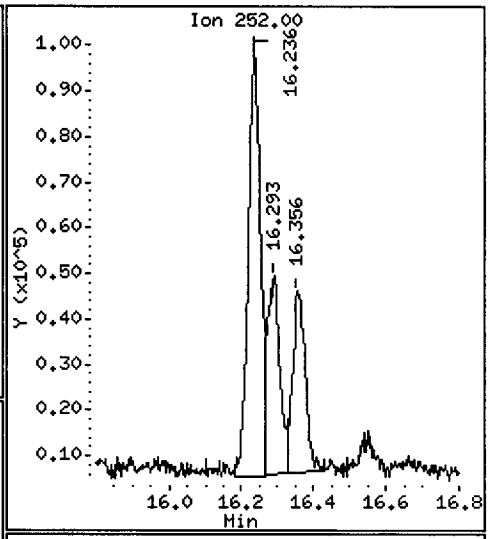
Concentration: 109.5 ug/kg

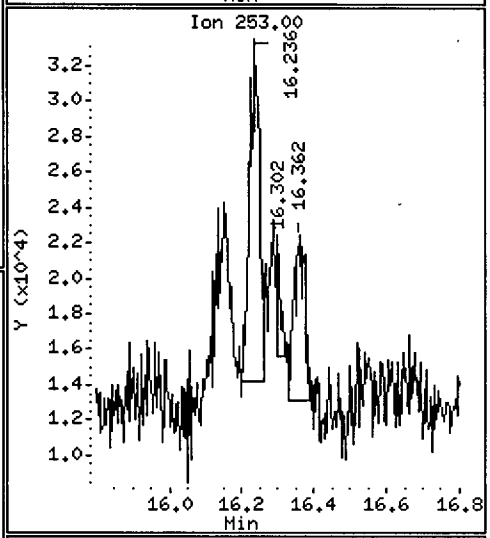


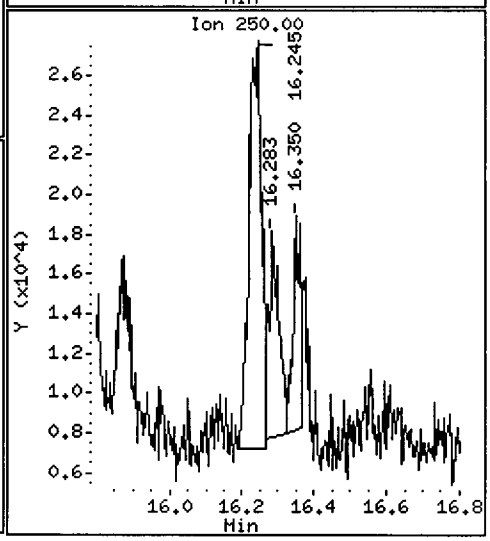












Data File: /chem1/nt12.i/20110401.b/04011111.d

Date : 01-APR-2011 19:37

Client ID: LL-SED2-0-56-031511

Instrument: nt12.i

Sample Info: SN54D

Volume Injected (uL): 1.0

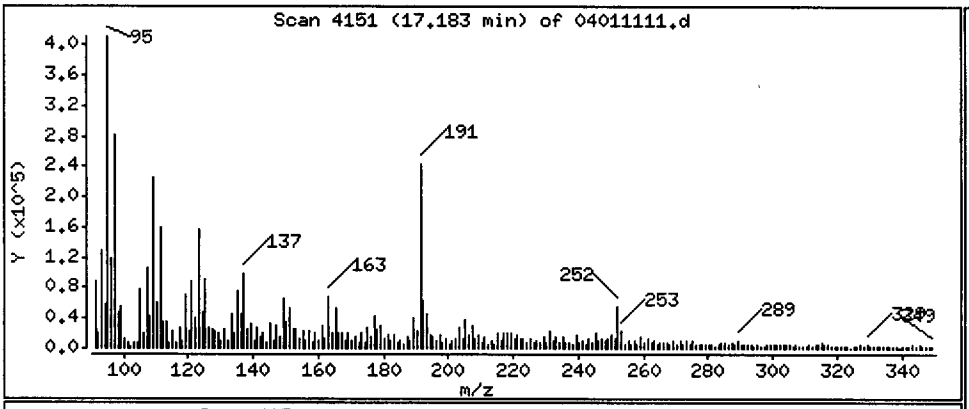
Operator: JZ

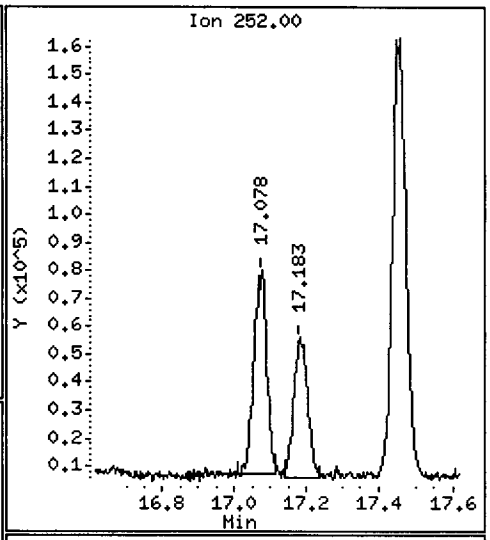
Column phase: ZB35

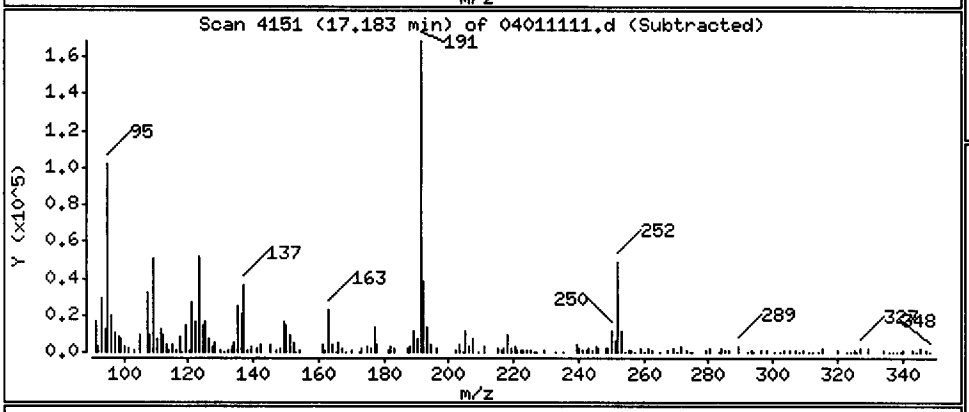
Column diameter: 0.32

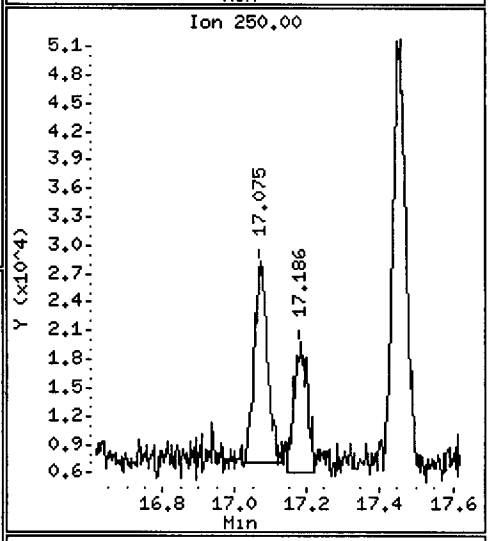
76 Benzo(a)pyrene

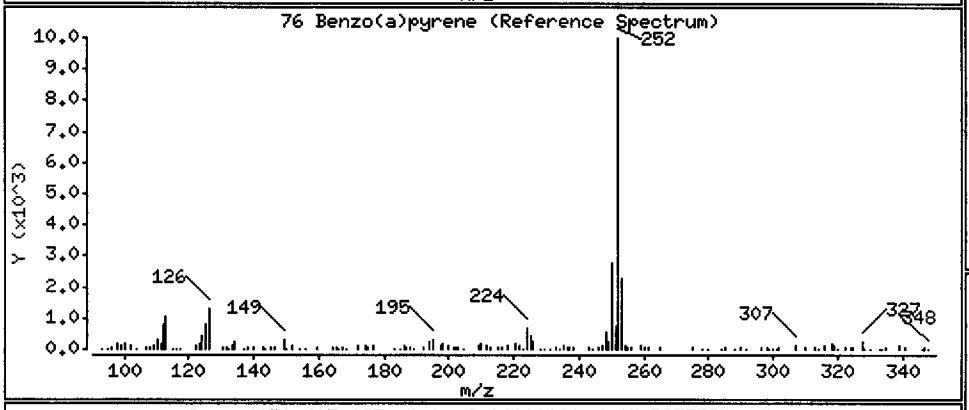
Concentration: 167.6 ug/kg

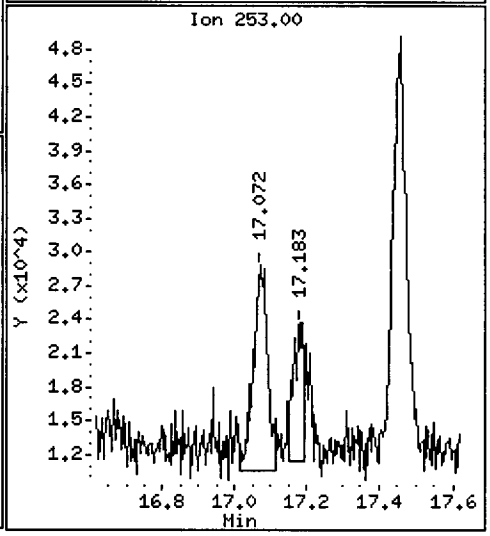


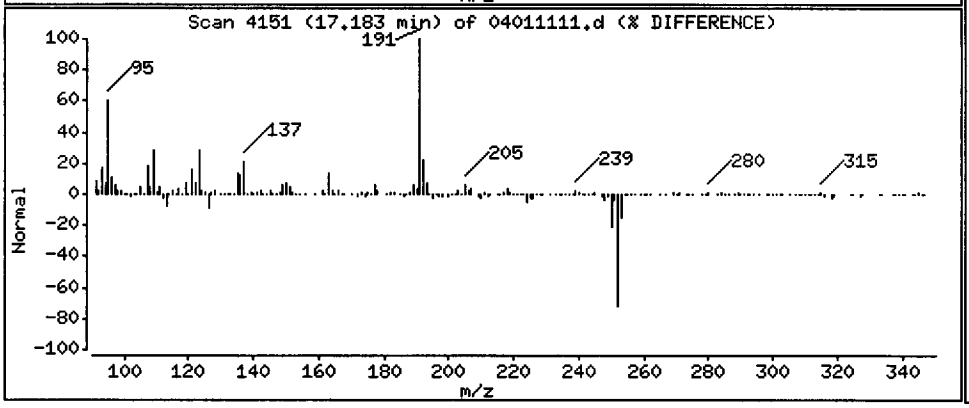












Data File: /chem1/nt12.i/20110401.b/04011111.d

Date : 01-APR-2011 19:37

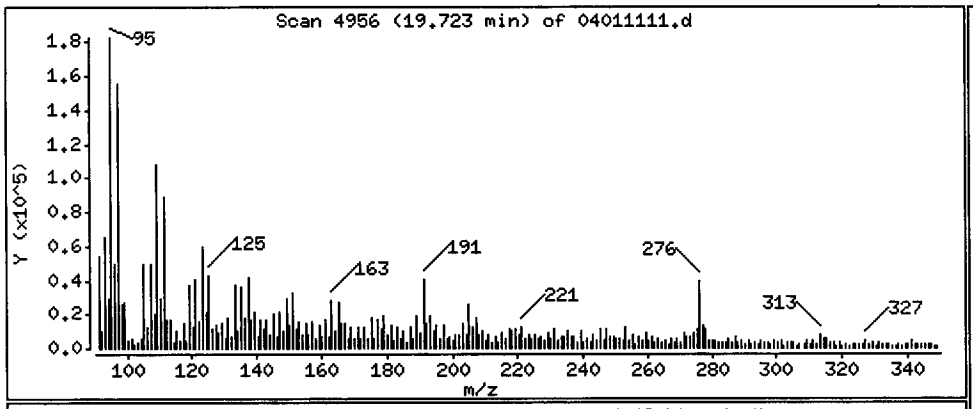
Client ID: LL-SED2-0-56-031511 Instrument: nt12.i

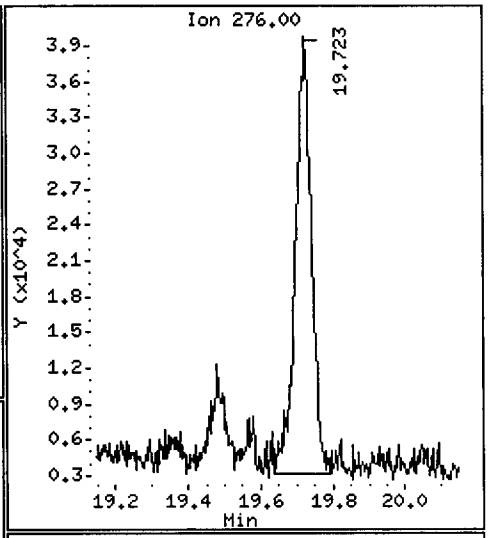
Sample Info: SN54D

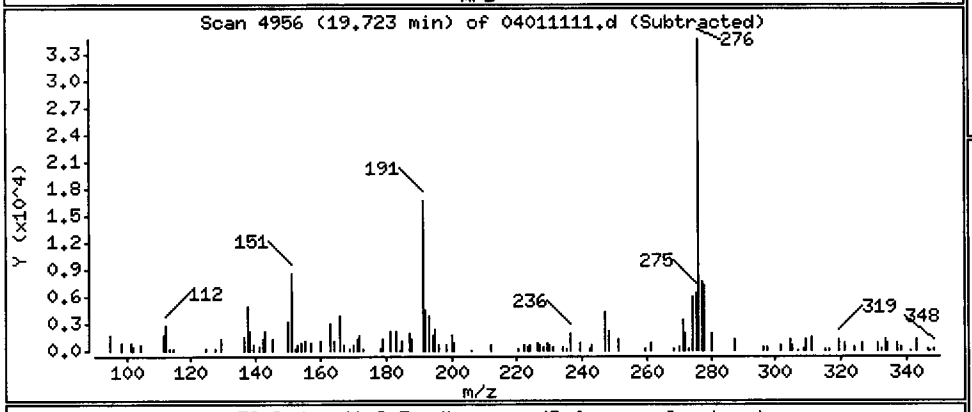
Volume Injected (uL): 1.0 Operator: JZ

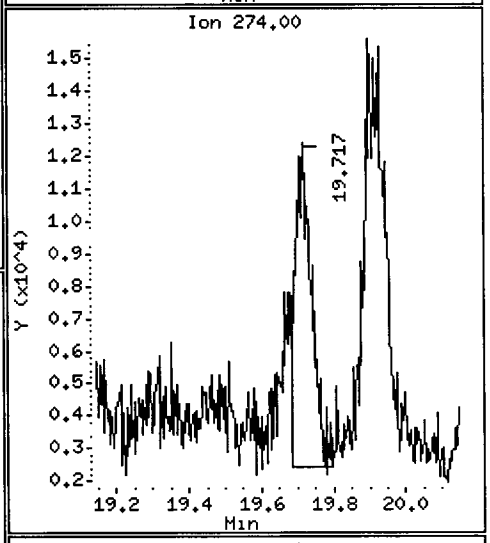
Column phase: ZB35 Column diameter: 0.32

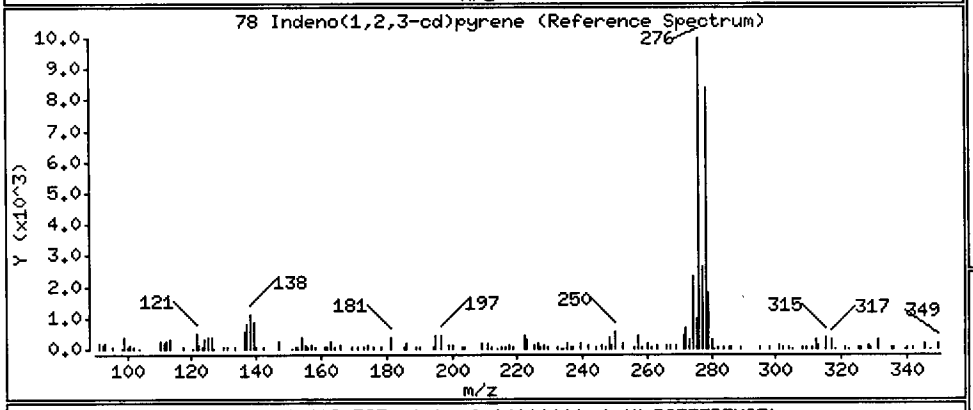
78 Indeno(1,2,3-cd)pyrene Concentration: 113.7 ug/kg

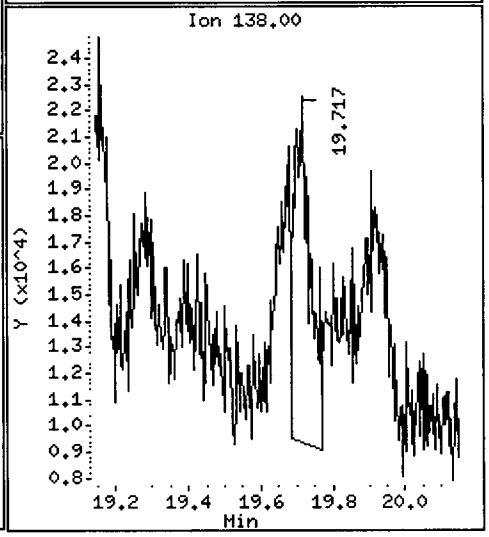


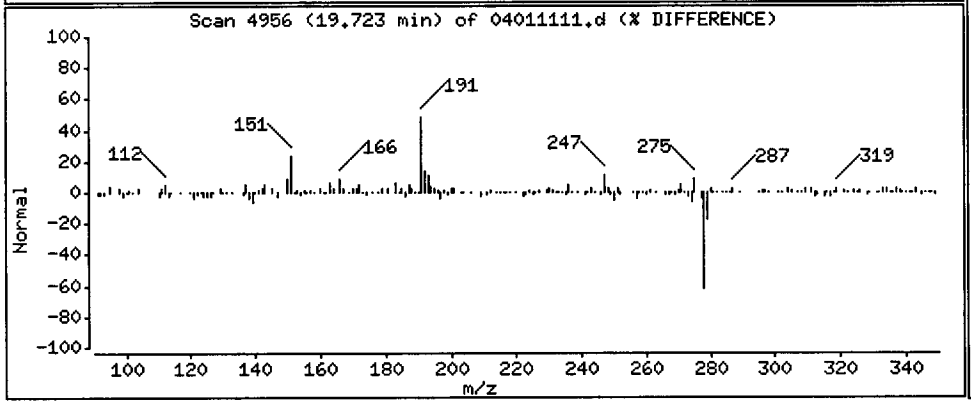












Data File: /chem1/nt12.i/20110401.b/04011111.d

Date : 01-APR-2011 19:37

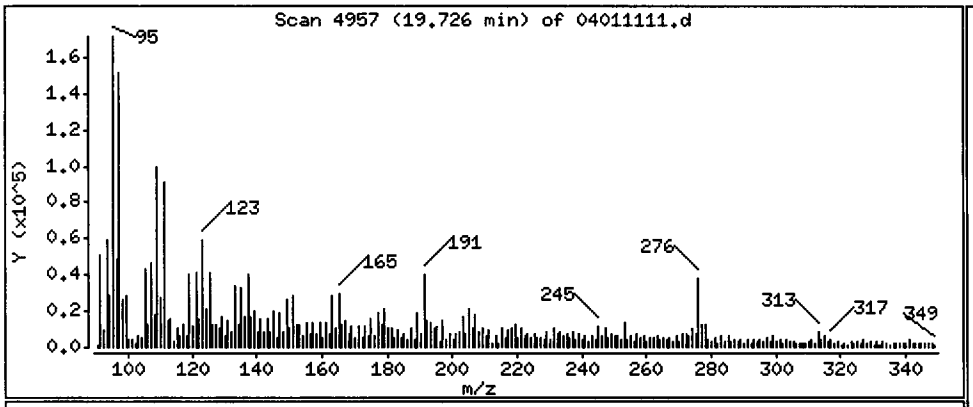
Client ID: LL-SED2-0-56-031511 Instrument: nt12.i

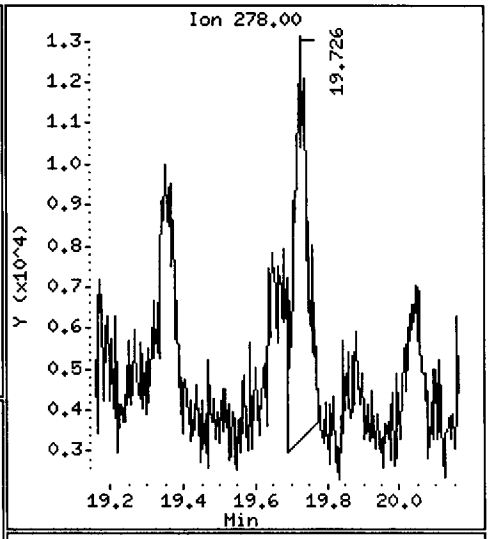
Sample Info: SN54D

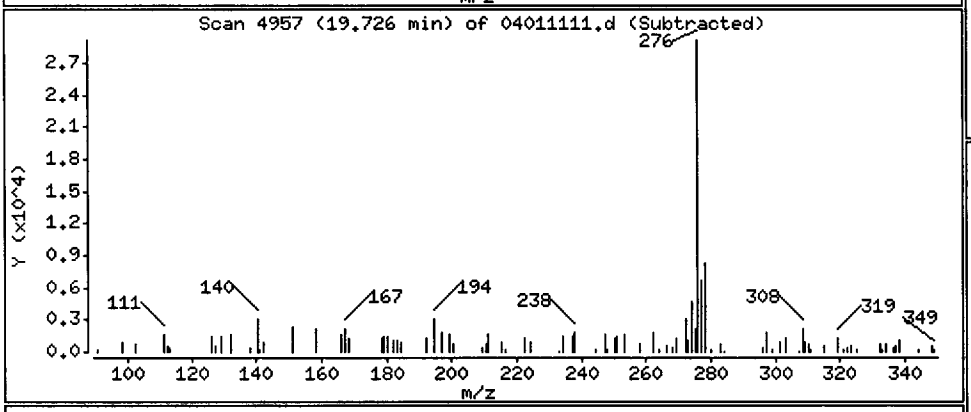
Volume Injected (uL): 1.0 Operator: JZ

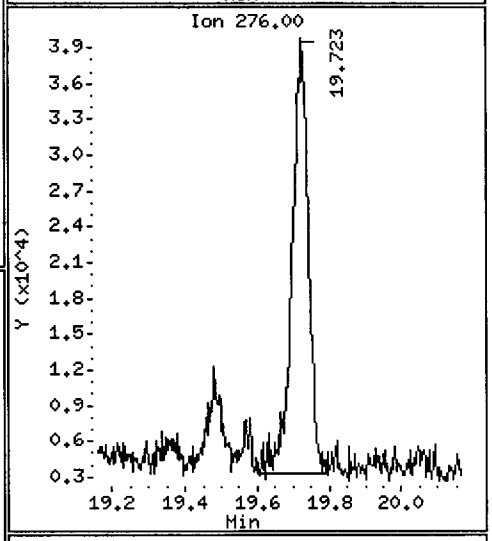
Column phase: ZB35 Column diameter: 0.32

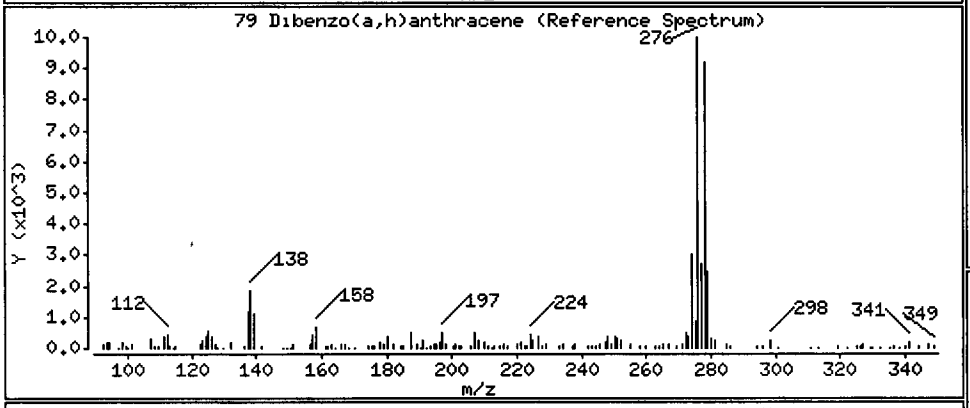
79 Dibenzo(a,h)anthracene Concentration: 30.27 ug/kg

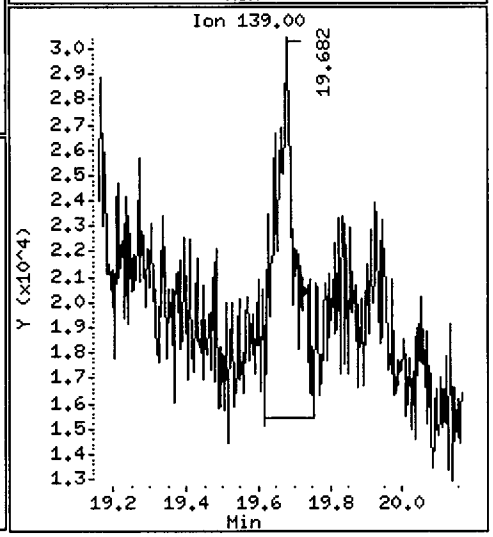


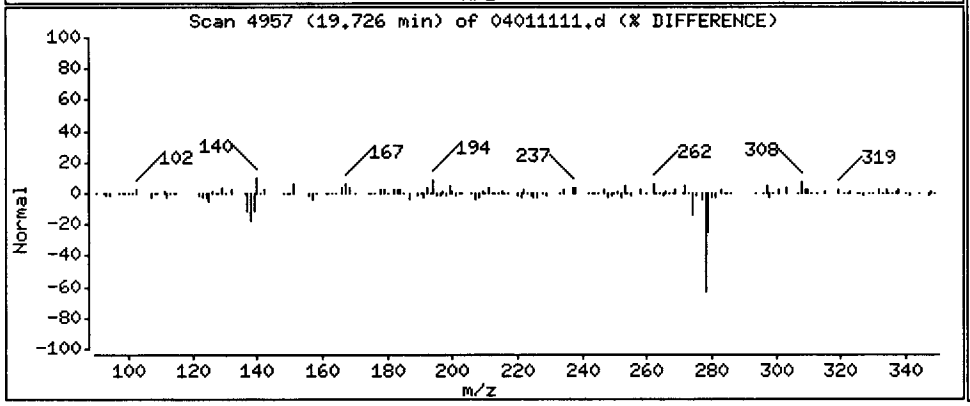






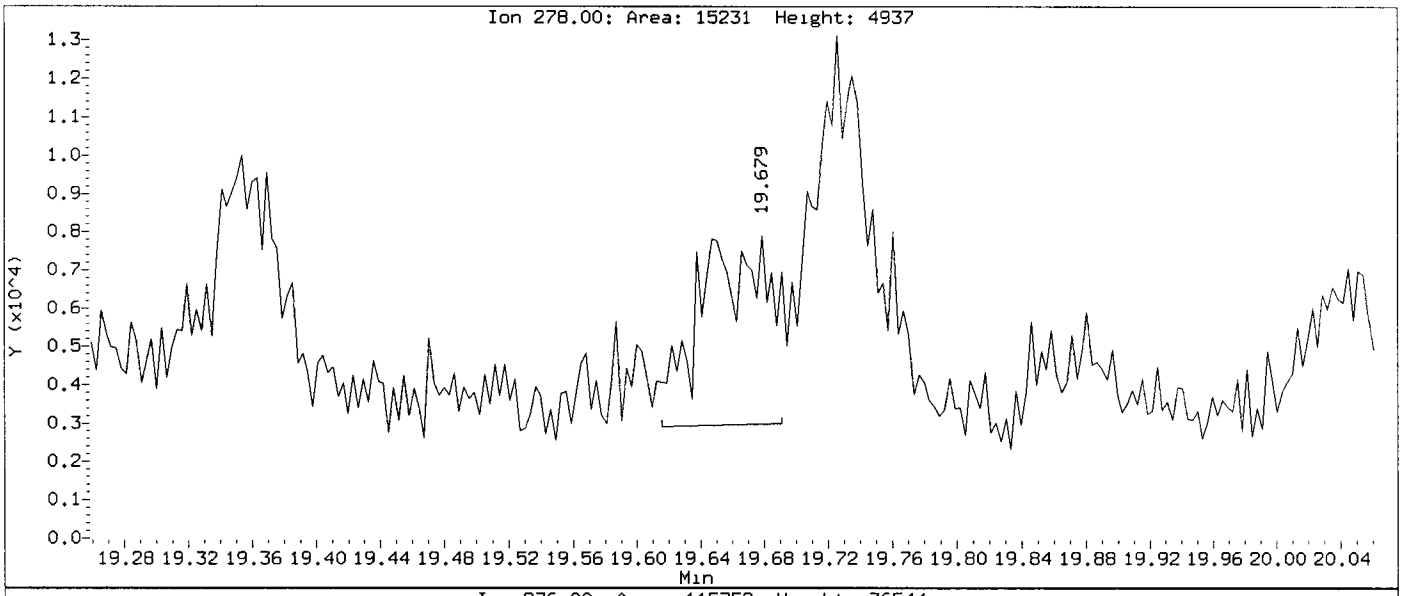


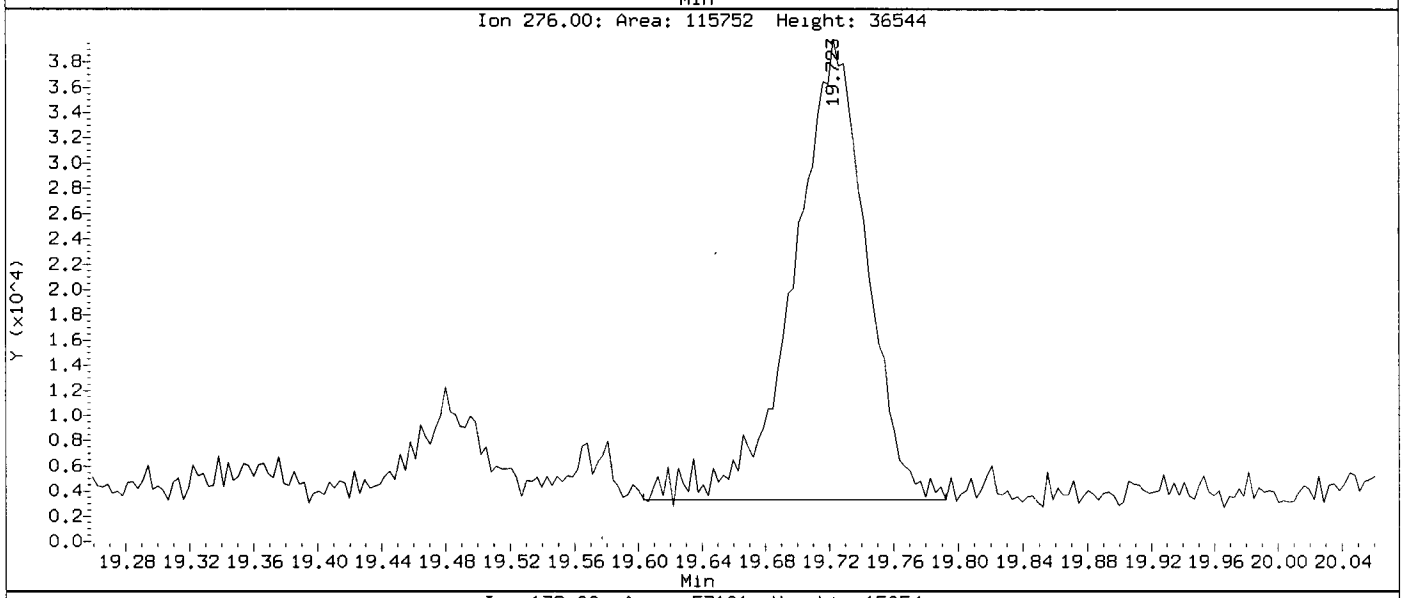


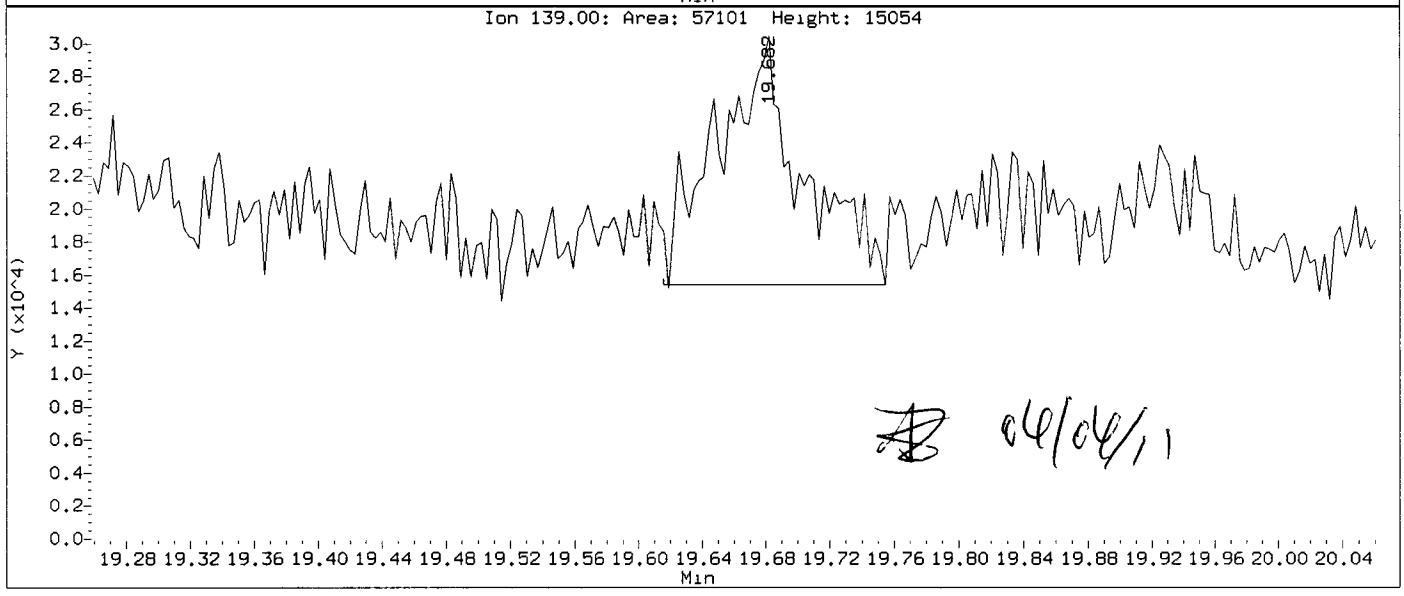


Data File: /chem1/nt12.1/20110401.b/04011111.d
Injection Date: 01-APR-2011 19:37
Instrument: nt12.1
Client Sample ID: LL-SED2-0-56-031511

Compound: Dibenzo(a,h)anthracene
CAS Number: 53-70-3





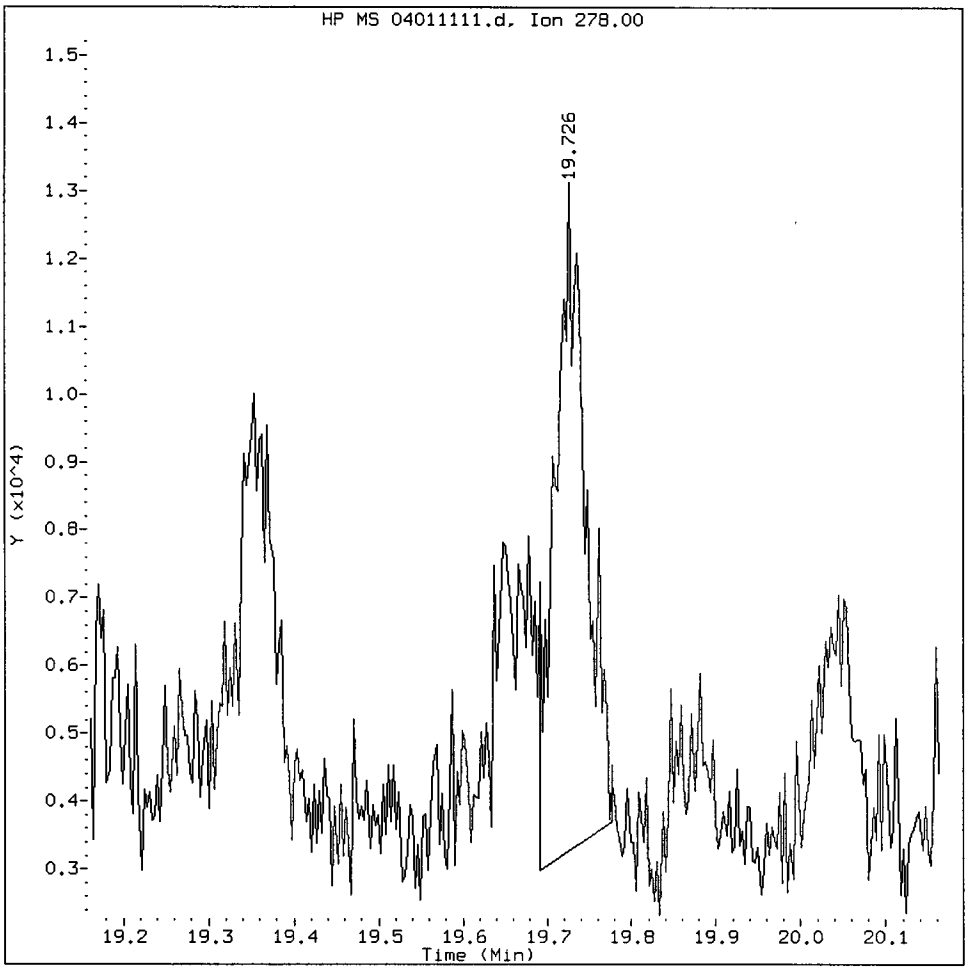


04/04/11

SN54 : 00292

SN54D, /chem1/nt12.i/20110401.b/04011111.d

Dibenzo(a,h)anthracene Amount: 0.20 Area: 24902



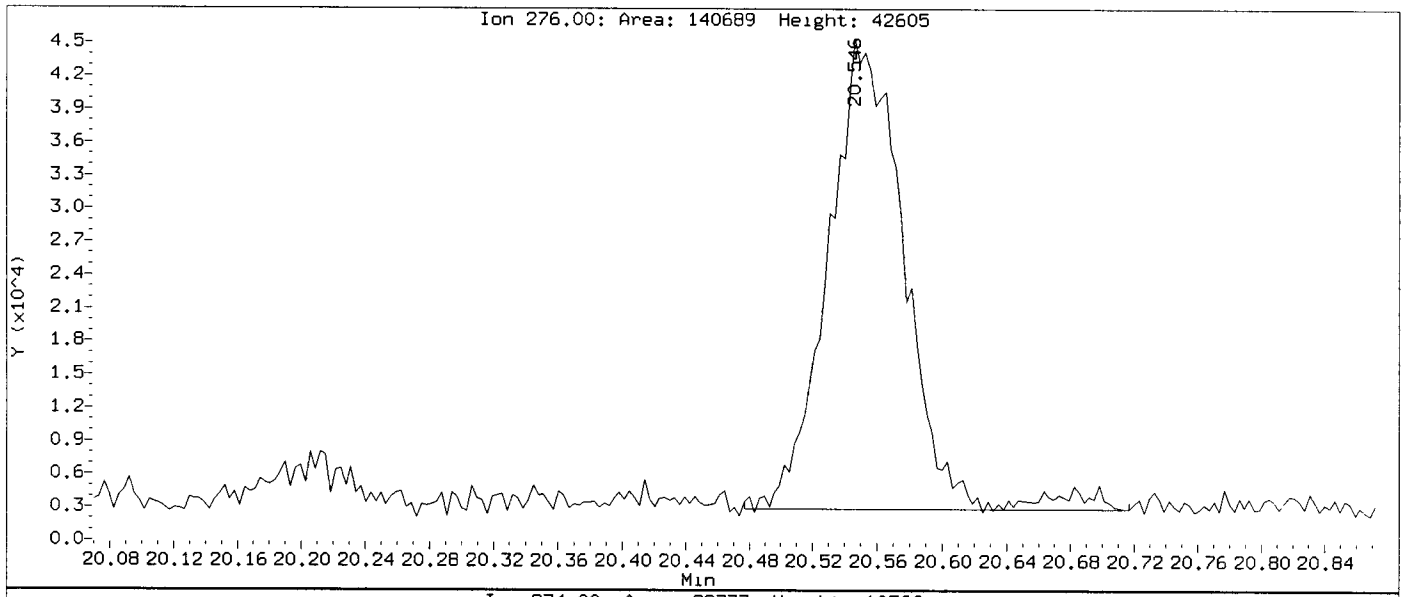
MANUAL INTEGRATION for Dibenzo(a,h)anthracene

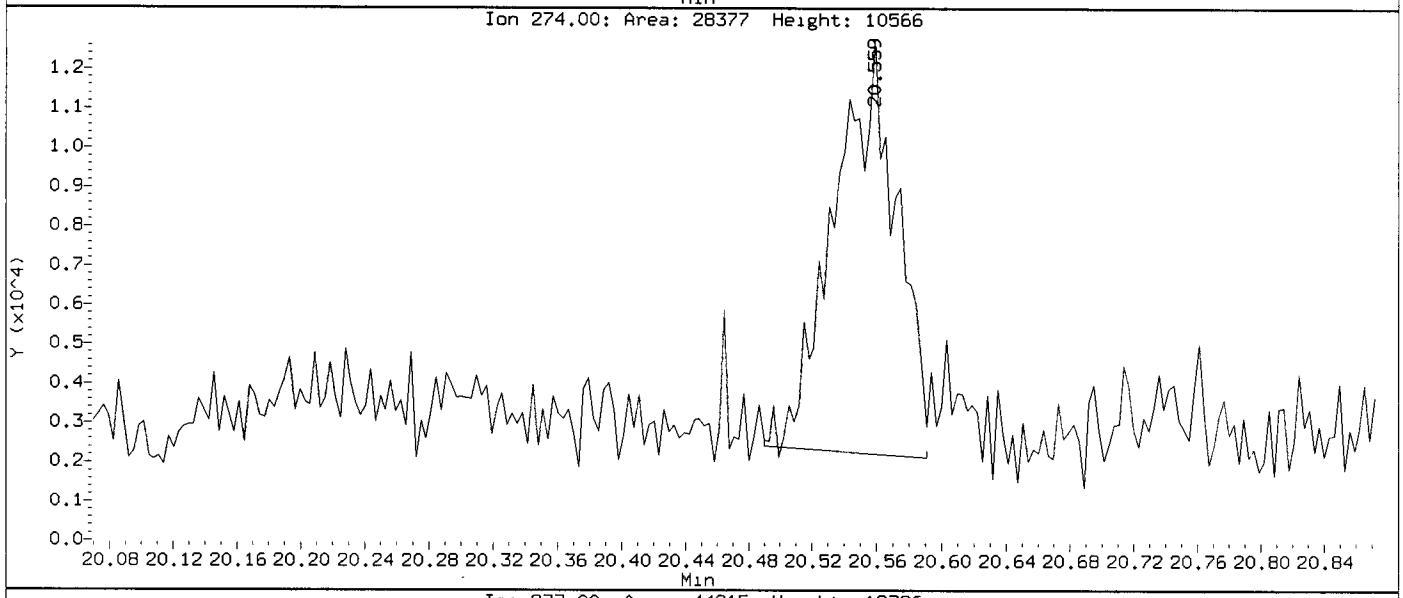
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation
5. Other RT correction

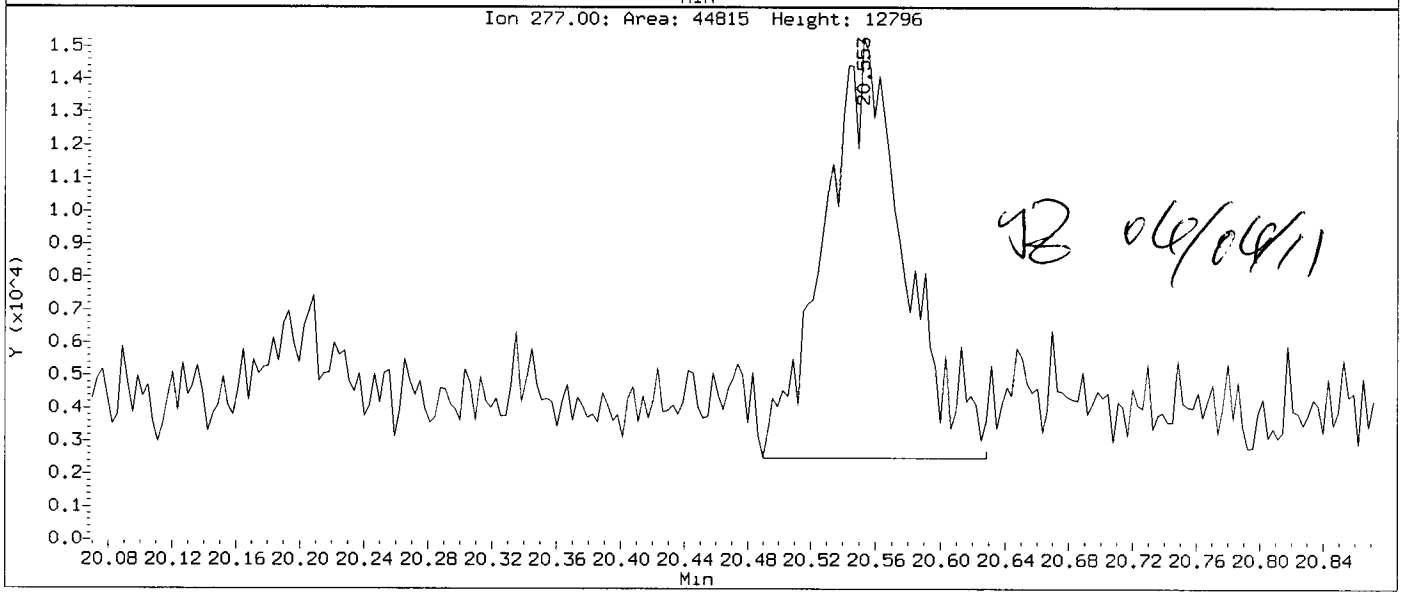
Analyst: _____ Date: 06/04/11

Data File: /chem1/nt12.i/20110401.b/04011111.d
Injection Date: 01-APR-2011 19:37
Instrument: nt12.i
Client Sample ID: LL-SED2-0-56-031511

Compound: Benzo(g,h,i)perylene
CAS Number: 191-24-2





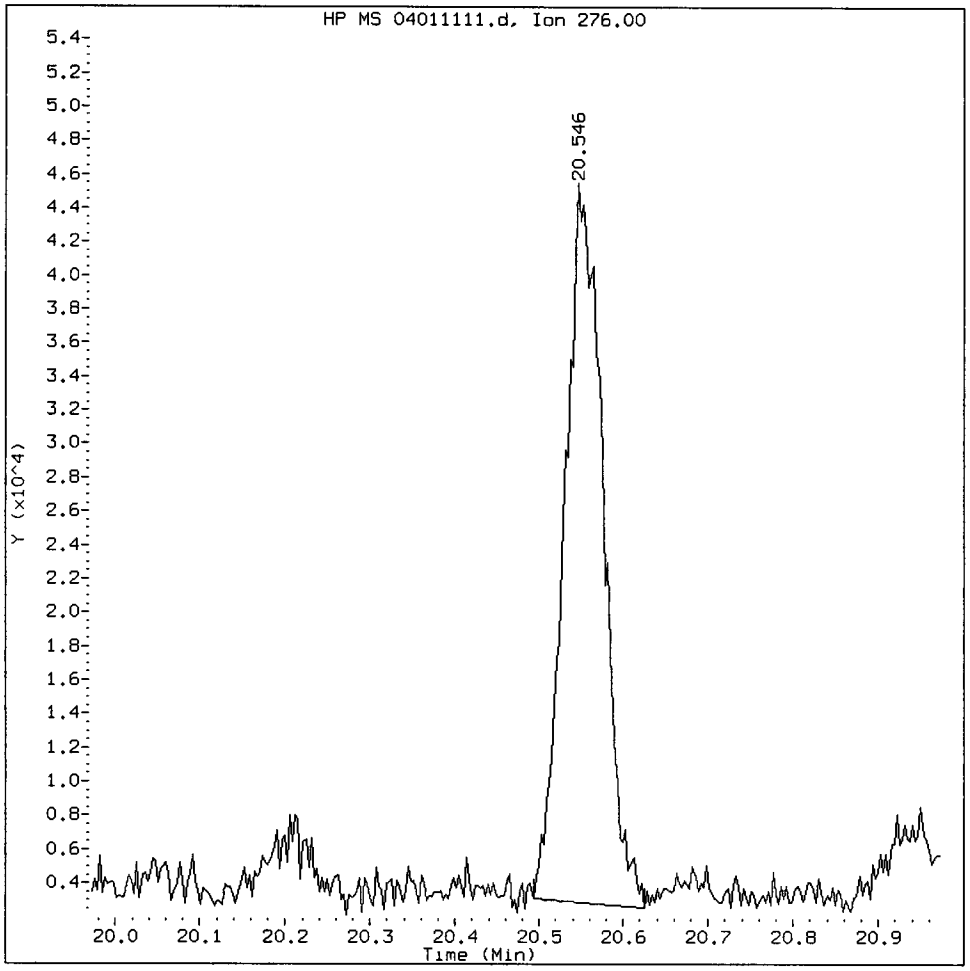


JB 06/04/11

SN54 : 00294

SN54D, /chem1/nt12.i/20110401.b/04011111.d

Benzo(g,h,i)perylene Amount: 1.00 Area: 136007



MANUAL INTEGRATION for Benzo(g,h,i)perylene

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

5. Other _____

Analyst: _____ Date: 04/06/11

Data File: /chem1/nt12.i/20110401.b/04011111.d

Date : 01-APR-2011 19:37

Client ID: LL-SED2-0-56-031511

Instrument: nt12.i

Sample Info: SN54D

Volume Injected (uL): 1.0

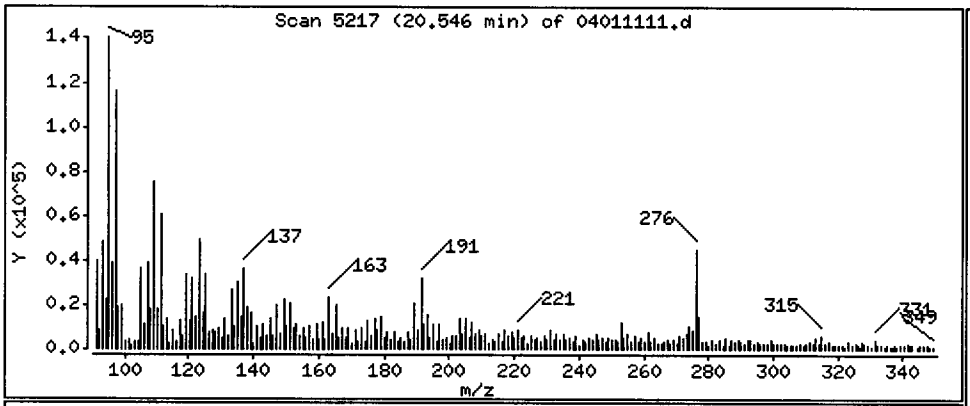
Operator: JZ

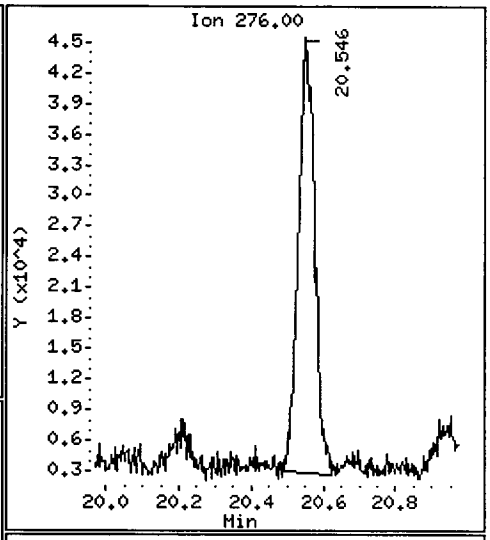
Column phase: ZB35

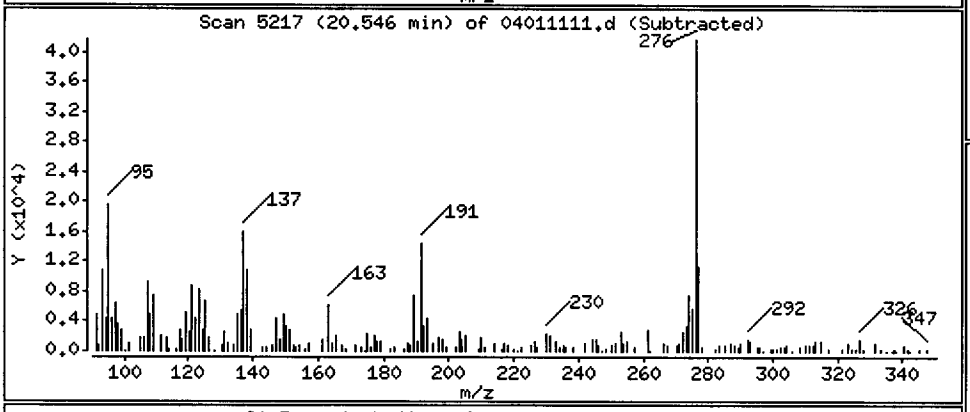
Column diameter: 0.32

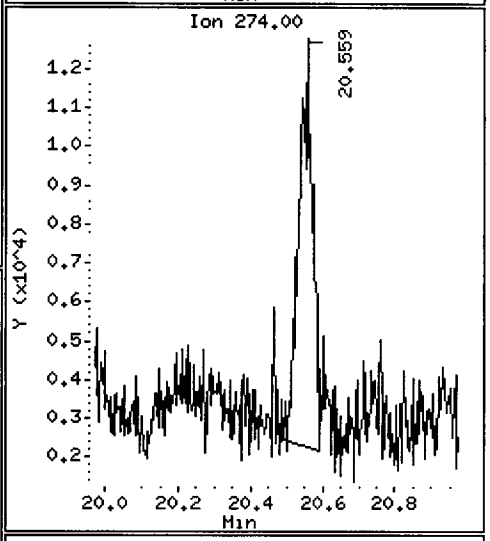
80 Benzo(g,h,i)perylene

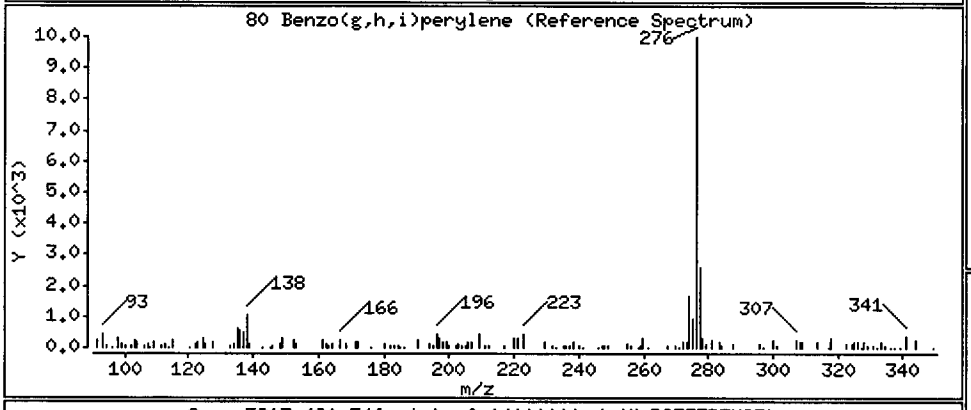
Concentration: 152.4 ug/kg

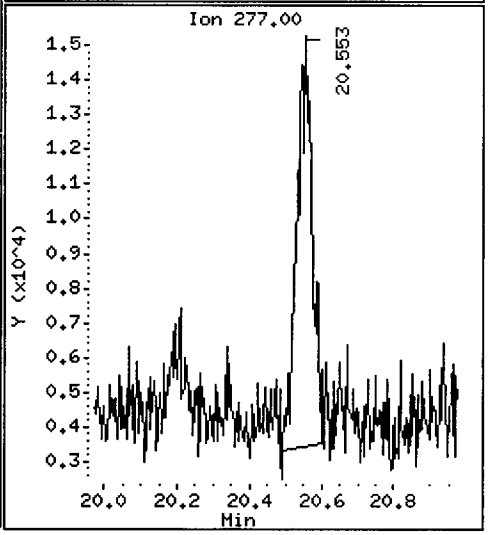


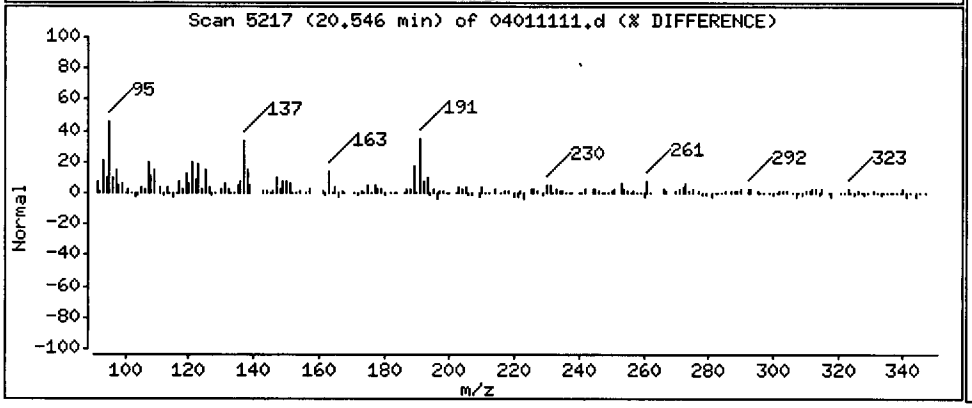












Data File: /chem1/nt12.i/20110401.b/04011111.d

Date : 01-APR-2011 19:37

Client ID: LL-SED2-0-56-031511

Instrument: nt12.1

Sample Info: SN54D

Volume Injected (uL): 1.0

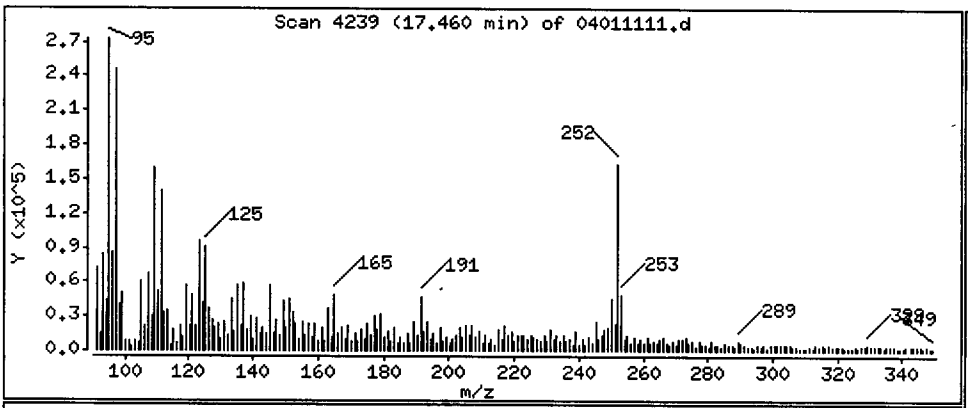
Operator: JZ

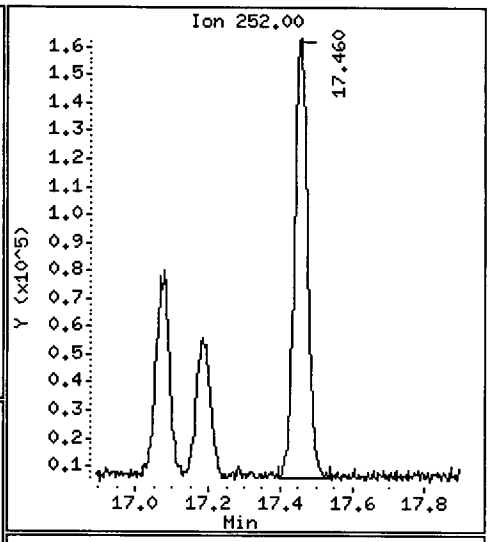
Column phase: ZB35

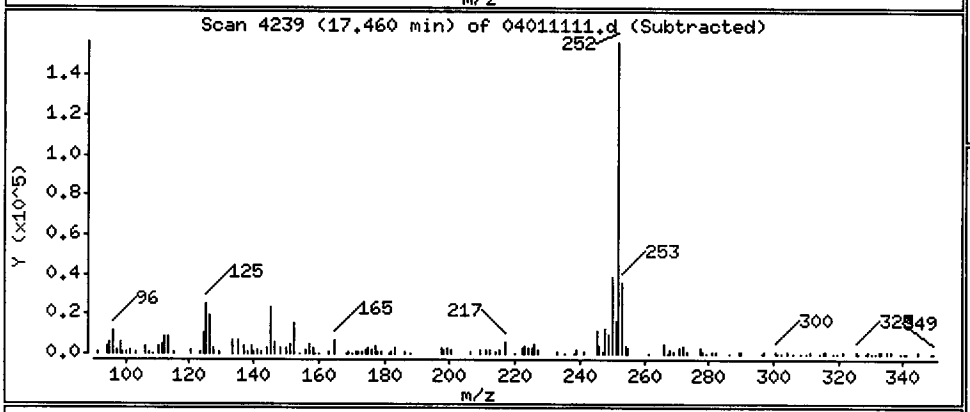
Column diameter: 0.32

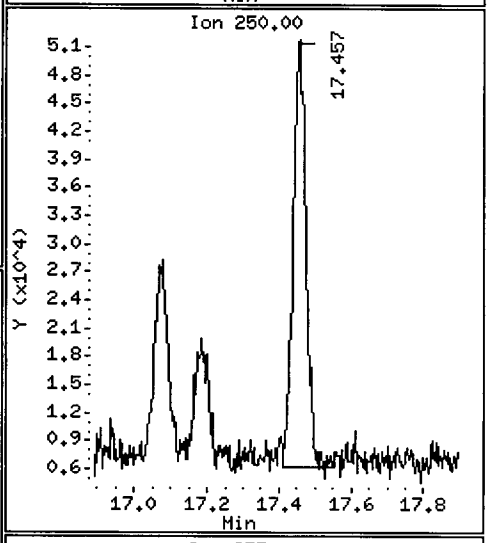
99 Perylene

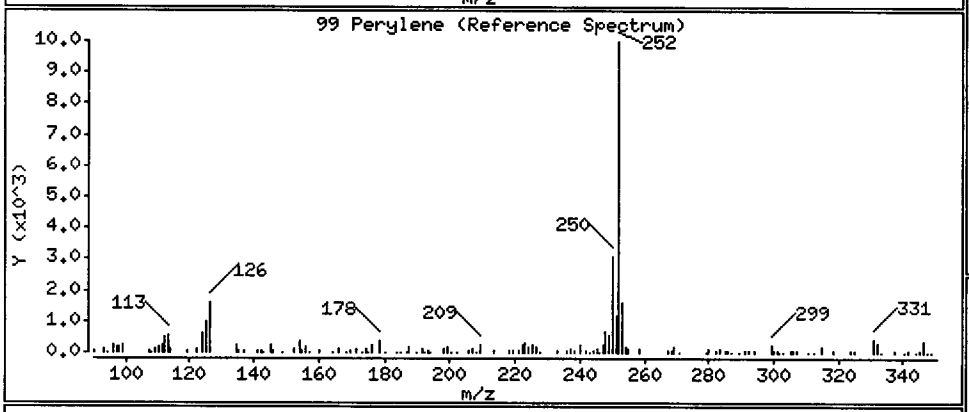
Concentration: 575.1 ug/kg

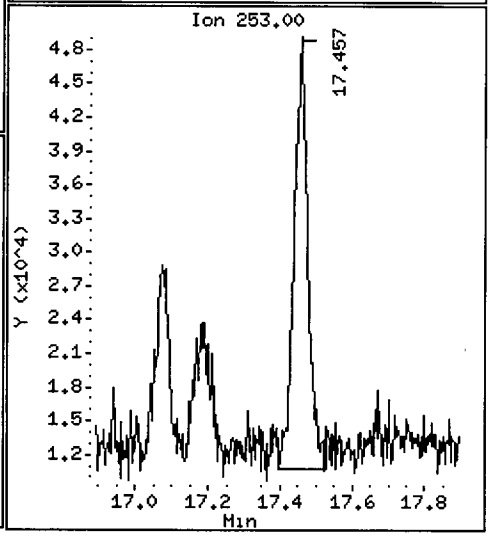


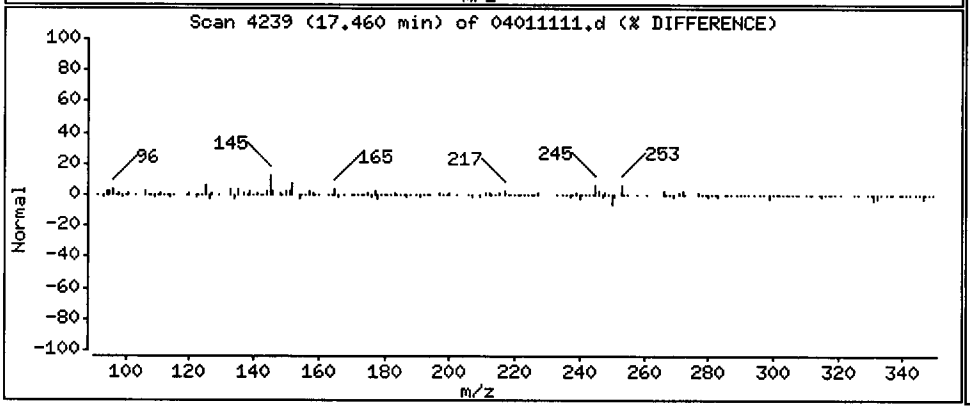












CO-ELUTION SUMMARY FOR FILE - 04011111.d

Lab ID: SN54D, Method: SIMPNA0331.m, Instrument: nt12.i, Date: 01-APR-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources Inc.: Organics Instrument Log

NT-12 Serial No.:GC=US00032558, MS= US01180091

Date: 4/4/11 Analysis: SimPNA Analyst: JB

GC Program: SimPNA35 Column No: 16772 Column Type: ZB5+

Instrument Tune (.U or .CT.): 110331 EM Voltage: 2790

Calibration File: 04041102 Curve Date: 3/31/11 Injection Vol.: 1µl

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

Document All Maintenance Tasks In StarLIMS

INTERNAL STANDARD SUMMARY FOR DATABATCH - /chem1/nt12.i/20110404.b

	Time	Filename	LabID	ClientId	DF									
1	0949	04041101.d	DFTPP0404	DFTPP0404	1	NO ISTDS FOUND								
2	1118	04041102.d	CC0404	CC0404	1	4.80	401183	7.04	270252	8.98	455484	13.60	430701	17.23	334445
3	1159	04041103.d	SN54E	LL-SED2-56-1 3X	3	4.80	327676	7.04	205193	8.98	322531	13.61	332757	17.26	295718
4	1237	04041104.d	SN54EMS	LL-SED2-56-1	3	4.80	303192	7.04	192063	8.98	293988	13.61	320215	17.26	271011
5	1305	04041105.d	SN54EMSD	LL-SED2-56-1	3	4.80	262660	7.04	181702	8.98	299869	13.61	326706	17 26	267412
6	1333	04041106.d	SN54B	LL-SED3-141- 1X	1	4.80	244173	7.04	164040	8.98	254237	13 63	293414	17.30	224343
7	1401	04041107.d	SN54C	LL-SED3-141- 1X	1	4.80	244271	7.04	165036	8.98	273045	13.64	294044	17.30	210679
8	1508	04041108.d	SN54F	LL-SED2-112- 3X	3	4.80	223462	7.05	148879	8.98	248837	13.62	266485	17.27	175502
9	1536	04041109.d	SN54G	LL-SED2-0-56 1X	1	4.80	210690	7.04	140224	8 99	232179	13.66	292600	17.31	173734
10	1603	04041110.d	SN54H	LL-SED1-0-56 1X	1	4.80	208943	7.05	140371	8.98	227824	13.65	279926	17.30	163012
11	1654	04041111.d	SN54F	LL-SED2-112- 10X	10	4.81	279245	7.05	163464	8.99	238822	13.63	238965	17.27	166665
12	1722	04041112.d	SN54G	LL-SED2-0-56 3X	3	4.81	261511	7.05	166500	8.99	238192	13 64	263188	17.28	165436
13	1750	04041113.d	SN54H	LL-SED1-0-56 3X	3	4.81	269407	7.05	163401	8.98	239810	13.63	272758	17.26	171762
14	1924	04041114.d	SN54F	LL-SED2-112- 30X	30	4.81	305119	7 05	194866	8.99	291590	13 62	253711	17.27	174659
15	1951	04041115.d	SN54G	LL-SED2-0-56 10X	10	4.81	323519	7.05	208543	8.98	267860	13.62	264963	17.26	184530
16	2019	04041116.d	SN54H	LL-SED1-0-56 10X	10	4.81	312045	7.05	200739	8.98	273776	13.62	269519	17.26	183654

JB 04/05/11

Every line must contain information or be lined out. Make all entries legible.
Start a new page for each QC period. Document All Maintenance Tasks In StarLIMS

MANUAL INTEGRATION SUMMARY FOR DATABATCH - /chem1/nt12.i/20110404.b

ARI Job No.: CC04 Method: SIMPNA0331.m Instrument: nt12.i Date: 04-APR-2011

04/05/11

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1118	04041102.d	CC0404	CC0404	1	NO MANUAL INTEGRATION
1159	04041103.d	SN54E	LL-SED2-56	3	NO MANUAL INTEGRATION
1237	04041104.d	SN54EMS	LL-SED2-56	3	NO MANUAL INTEGRATION
1305	04041105.d	SN54EMSD	LL-SED2-56	3	NO MANUAL INTEGRATION
1508	04041108.d	SN54F	LL-SED2-11	3	NO MANUAL INTEGRATION
1536	04041109.d	SN54G	LL-SED2-0-	1	Dibenzo(a,h)anthracene, Benzo(g,h,i)perylene,
1603	04041110.d	SN54H	LL-SED1-0-	1	Dibenzo(a,h)anthracene,
1722	04041112.d	SN54G	LL-SED2-0-	3	NO MANUAL INTEGRATION
1750	04041113.d	SN54H	LL-SED1-0-	3	NO MANUAL INTEGRATION
1924	04041114.d	SN54F	LL-SED2-11	30	NO MANUAL INTEGRATION

SN54 : 00300

Q-FLAG SUMMARY FOR DATABATCH - /chem1/nt12.i/20110404.b

Instrument: nt12.i Date: 04-APR-2011 Method: SIMPNA0331.m

INITIAL CAL: 31-MAR-2011

Compound	%RSD or R^2
NO Q-FLAGS	

CONTINUING CAL: 04-APR-2011

Compound	%D
NO Q-FLAGS	

04/04/11

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt12.i Injection Date: 04-APR-2011 11:18
Lab File ID: 04041102.d Init. Cal. Date(s): 31-MAR-2011 31-MAR-2011
Analysis Type: SOIL Init. Cal. Times: 20:27 22:47
Lab Sample ID: CC0404 Quant Type: ISTD
Method: /chem1/nt12.i/20110404.b/SIMPNA0331.m

04/05/11

COMPOUND	RRF / AMOUNT	RF2	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
28 Naphthalene	0.96572	0.94120	0.010	-2.53846	20.00000	Averaged
$ 190 2-Methylnaphthalene-d10	0.61149	0.65667	0.010	7.38816	20.00000	Averaged
32 2-Methylnaphthalene	0.53666	0.56595	0.010	5.45821	20.00000	Averaged
105 1-methylnaphthalene	0.57111	0.58081	0.010	1.69876	20.00000	Averaged
40 Acenaphthylene	1.75014	1.64790	0.010	-5.84164	20.00000	Averaged
44 Acenaphthene	1.09012	0.99765	0.010	-8.48218	20.00000	Averaged
46 Dibenzofuran	1.48211	1.35557	0.010	-8.53755	20.00000	Averaged
49 Fluorene	1.22035	1.15865	0.010	-5.05652	20.00000	Averaged
60 Phenanthrene	1.05554	0.99375	0.010	-5.85408	20.00000	Averaged
61 Anthracene	1.05983	1.03733	0.010	-2.12351	20.00000	Averaged
64 Fluoranthene	1.14779	1.07446	0.010	-6.38920	20.00000	Averaged
65 Pyrene	1.07683	1.15561	0.010	7.31601	20.00000	Averaged
68 Benzo(a)anthracene	0.96150	0.96239	0.010	0.09232	20.00000	Averaged
71 Chrysene	0.93972	0.89284	0.010	-4.98907	20.00000	Averaged
74 Benzo(b)fluoranthene	1.12751	1.17192	0.010	3.93948	20.00000	Averaged
75 Benzo(k)fluoranthene	1.18273	1.09594	0.010	-7.33797	20.00000	Averaged
188 Benzo(j)fluoranthene	1.13014	1.09048	0.010	-3.50946	20.00000	Averaged
76 Benzo(a)pyrene	1.03519	1.00383	0.010	-3.02975	20.00000	Averaged
78 Indeno(1,2,3-cd)pyrene	1.25877	1.19819	0.010	-4.81277	20.00000	Averaged
$ 191 Dibenzo(a,h)anthracene-d14	0.93850	0.90267	0.010	-3.81811	20.00000	Averaged
79 Dibenzo(a,h)anthracene	1.02946	1.00834	0.010	-2.05130	20.00000	Averaged
80 Benzo(g,h,i)perylene	1.11645	1.05294	0.010	-5.68936	20.00000	Averaged
99 Perylene	0.87548	0.81995	0.010	-6.34271	20.00000	Averaged

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt12.i/20110404.b/04041102.d
Lab Smp Id: CC0404 Client Smp ID: CC0404
Inj Date : 04-APR-2011 11:18
Operator : JZ Inst ID: nt12.i
Smp Info : CC0404
Misc Info : 11-
Comment : 1ul Injection
Method : /chem1/nt12.i/20110404.b/SIMPNA0331.m
Meth Date : 05-Apr-2011 16:54 jianqing Quant Type: ISTD
Cal Date : 31-MAR-2011 22:47 Cal File: 03311107.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

04/05/11

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	7.50000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 27 Naphthalene-d8	136	4.803	4.803	(1.000)	401183	2.00000	
28 Naphthalene	128	4.832	4.832	(1.006)	471993	2.50000	2.437
$ 190 2-Methylnaphthalene-d10	152	5.542	5.542	(1.154)	329306	2.50000	2.685
32 2-Methylnaphthalene	141	5.583	5.583	(1.162)	283813	2.50000	2.636
105 1-methylnaphthalene	141	5.775	5.775	(1.202)	291264	2.50000	2.542
40 Acenaphthylene	152	6.905	6.905	(0.980)	556687	2.50000	2.354
* 42 Acenaphthene-d10	164	7.044	7.044	(1.000)	270252	2.00000	
44 Acenaphthene	153	7.091	7.091	(1.007)	337021	2.50000	2.288
46 Dibenzofuran	168	7.236	7.236	(1.027)	457933	2.50000	2.287
49 Fluorene	166	7.691	7.691	(1.092)	391407	2.50000	2.374
* 59 Phenanthrene-d10	188	8.981	8.981	(1.000)	455484	2.00000	
60 Phenanthrene	178	9.013	9.013	(1.004)	565794	2.50000	2.354
61 Anthracene	178	9.044	9.044	(1.007)	590606	2.50000	2.447
64 Fluoranthene	202	10.673	10.673	(1.188)	611747	2.50000	2.340
65 Pyrene	202	11.137	11.137	(0.819)	622153	2.50000	2.683

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
68	Benzo(a)anthracene	228	13.491	13.491	(0.992)	518126	2.50000	2.502
* 69	Chrysene-d12	240	13.604	13.604	(1.000)	430701	2.00000	
71	Chrysene	228	13.671	13.671	(1.005)	480683	2.50000	2.375
74	Benzo(b)fluoranthene	252	16.078	16.078	(0.933)	489931	2.50000	2.598
75	Benzo(k)fluoranthene	252	16.132	16.132	(0.936)	458167	2.50000	2.317
188	Benzo(j)fluoranthene	252	16.208	16.208	(0.941)	455881	2.50000	2.412
76	Benzo(a)pyrene	252	17.025	17.025	(0.988)	419658	2.50000	2.424
* 77	Perylene-d12	264	17.230	17.230	(1.000)	334445	2.00000	
78	Indeno(1,2,3-cd)pyrene	276	19.537	19.537	(1.134)	500913	2.50000	2.380
$ 191	Dibenzo(a,h)anthracene-d14	292	19.470	19.470	(1.130)	377367	2.50000	2.405
79	Dibenzo(a,h)anthracene	278	19.553	19.553	(1.135)	421545	2.50000	2.449
80	Benzo(g,h,i)perylene	276	20.348	20.348	(1.181)	440187	2.50000	2.358
99	Perylene	252	17.296	17.296	(1.004)	342787	2.50000	2.341

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt12.i
Lab File ID: 04041102.d
Lab Smp Id: CC0404
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem1/nt12.i/20110404.b/SIMPNA0331.m
Misc Info: 11-

Calibration Date: 04-APR-2011
Calibration Time: 10:40
Client Smp ID: CC0404
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	494112	247056	988224	401183	-18.81
42 Acenaphthene-d10	280105	140052	560210	270252	-3.52
59 Phenanthrene-d10	461353	230676	922706	455484	-1.27
69 Chrysene-d12	503160	251580	1006320	430701	-14.40
77 Perylene-d12	442215	221108	884430	334445	-24.37

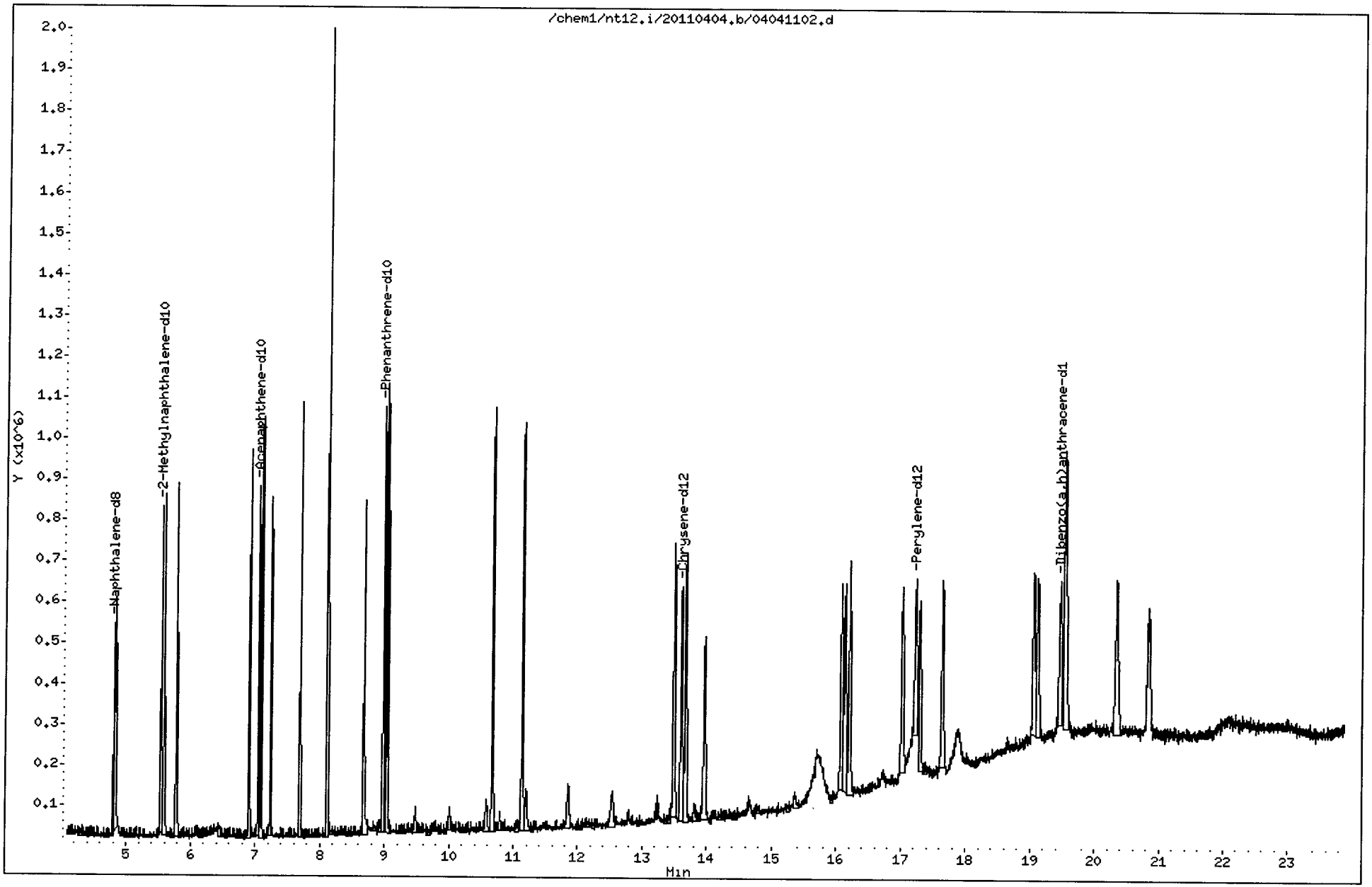
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	4.80	4.30	5.30	4.80	0.00
42 Acenaphthene-d10	7.04	6.54	7.54	7.04	0.00
59 Phenanthrene-d10	8.98	8.48	9.48	8.98	0.00
69 Chrysene-d12	13.60	13.10	14.10	13.60	0.00
77 Perylene-d12	17.23	16.73	17.73	17.23	0.00

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

Data File: /chem1/nt12.i/20110404.b/04041102.d
Date : 04-APR-2011 11:18
Client ID: CC0404
Sample Info: CC0404
Volume Injected (uL): 1.0
Column phase: ZB35

Instrument: nt12.i

Operator: JZ
Column diameter: 0.32



CO-ELUTION SUMMARY FOR FILE - 04041102.d

Lab ID: CC0404, Method: SIMPNA0331.m, Instrument: nt12.i, Date: 04-APR-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Data File: /chem1/nt12.i/20110404.b/tune.b/04041101.d

Date : 04-APR-2011 09:49

Client ID: DFTPP0404

Instrument: nt12.i

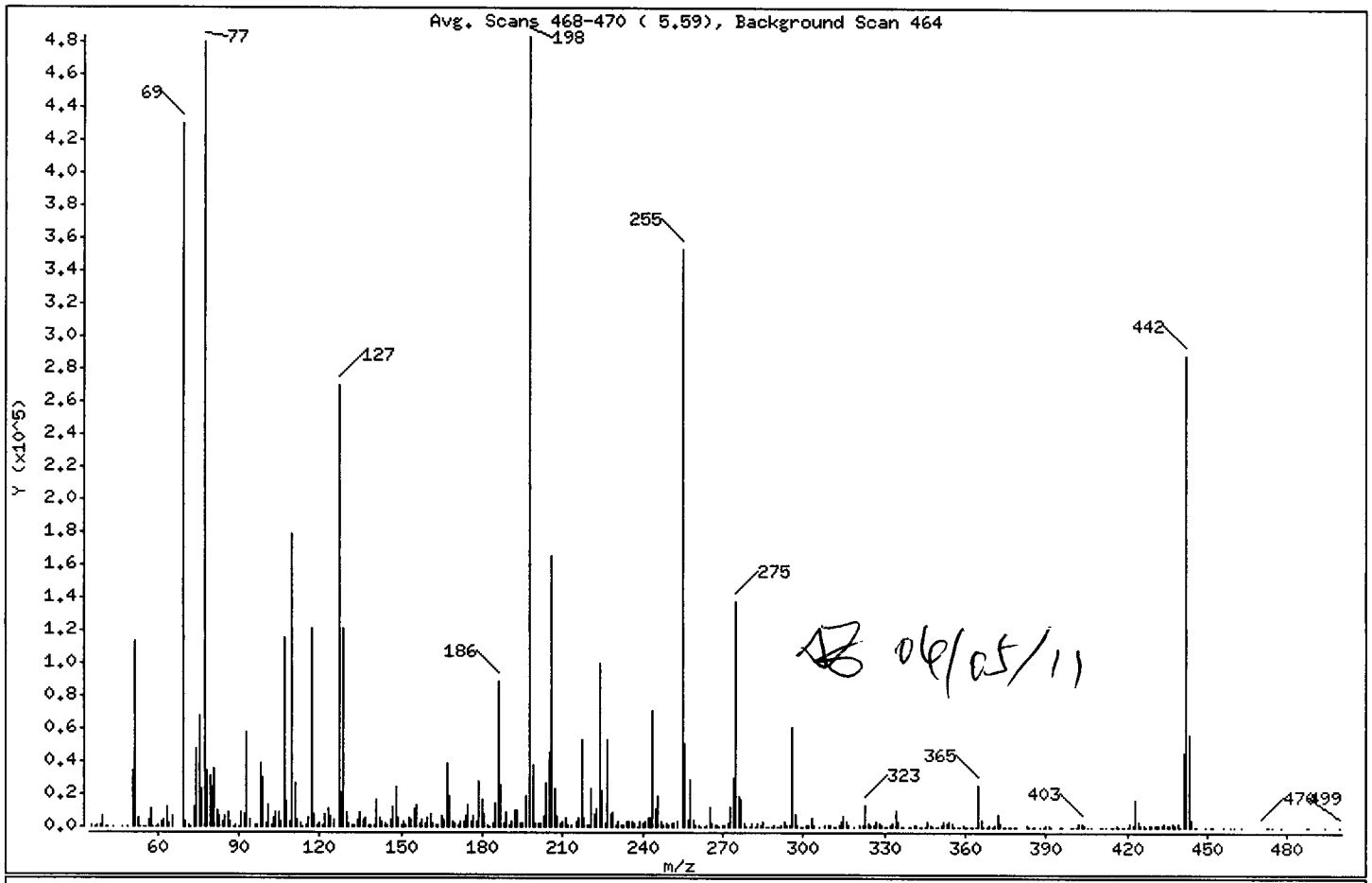
Sample Info: DFTPP0404

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	23.40
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	89.02
70	Less than 2.00% of mass 69	0.60 (0.67)
127	10.00 - 80.00% of mass 198	55.84
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	7.75
275	10.00 - 60.00% of mass 198	28.42
365	Greater than 1.00% of mass 198	5.30
441	0.01 - 24.00% of mass 442	9.47 (15.85)
442	50.00 - 200.00% of mass 198	59.74
443	15.00 - 24.00% of mass 442	11.82 (19.79)

Data File: /chem1/nt12.i/20110404.b/tune.b/04041101.d

Date : 04-APR-2011 09:49

Client ID: DFTPP0404

Instrument: nt12.i

Sample Info: DFTPP0404

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.32

Data File: 04041101.d

Spectrum: Avg. Scans 468-470 (5.59), Background Scan 464

Location of Maximum: 198.00

Number of points: 400

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	878	146.00	4243	249.00	2359	356.00	399
36.00	179	147.00	12589	250.00	915	357.00	115
37.00	1308	148.00	24896	251.00	2026	358.00	390
38.00	1427	149.00	5416	252.00	2117	359.00	648
39.00	7059	150.00	1355	253.00	3311	360.00	319
40.00	159	151.00	2902	255.00	352768	361.00	282
41.00	253	152.00	1484	256.00	51456	362.00	198
43.00	60	153.00	5873	257.00	4549	363.00	279
46.00	61	154.00	4044	258.00	28912	364.00	207
48.00	136	155.00	11447	259.00	4167	365.00	25584
50.00	34712	156.00	13104	260.00	952	366.00	3947
51.00	113040	157.00	2081	261.00	756	367.00	389
52.00	5553	158.00	4128	262.00	228	368.00	164
53.00	491	159.00	1863	263.00	460	369.00	583
54.00	144	160.00	6050	264.00	735	370.00	334
55.00	358	161.00	7399	265.00	12364	371.00	791
56.00	4841	162.00	2483	266.00	1679	372.00	7315
57.00	11450	163.00	1283	267.00	1109	373.00	1886
58.00	443	164.00	1284	268.00	573	374.00	174
59.00	280	165.00	6486	269.00	429	375.00	116
60.00	942	166.00	4824	270.00	1034	376.00	111
61.00	3131	167.00	39176	271.00	1649	377.00	295
62.00	4060	168.00	18680	272.00	2107	378.00	222
63.00	12414	169.00	3574	273.00	12092	379.00	71
64.00	2072	170.00	1681	274.00	29456	383.00	1373
65.00	6797	171.00	1196	275.00	137280	384.00	435
69.00	430016	172.00	3538	276.00	18432	385.00	179
70.00	2880	173.00	3803	277.00	16984	386.00	65
71.00	1525	174.00	7031	278.00	2627	388.00	75
72.00	75	175.00	13021	279.00	495	389.00	83
73.00	12480	176.00	3082	280.00	185	390.00	1026
74.00	48104	177.00	6171	281.00	1951	391.00	1153
75.00	68008	178.00	3096	282.00	281	392.00	436
76.00	23352	179.00	27984	283.00	2527	395.00	229
77.00	479360	180.00	16325	284.00	1471	396.00	364

Data File: /chem1/nt12.i/20110404.b/tune.b/04041101.d

Date : 04-APR-2011 09:49

Client ID: DFTPP0404

Sample Info: DFTPP0404

Instrument: nt12.i

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.32

Data File: 04041101.d

Spectrum: Avg. Scans 468-470 (5.59), Background Scan 464

Location of Maximum: 198.00

Number of points: 400

m/z	Y	m/z	Y	m/z	Y	m/z	Y
78.00	34640	181.00	7690	285.00	3122	399.00	204
79.00	30720	182.00	1269	286.00	468	400.00	115
80.00	23928	183.00	307	287.00	73	401.00	468
81.00	35048	184.00	2179	288.00	236	402.00	2525
82.00	9761	185.00	14422	289.00	1140	403.00	2772
83.00	6215	186.00	88760	290.00	352	404.00	945
84.00	3045	187.00	26008	291.00	398	405.00	237
85.00	6702	188.00	1926	292.00	752	407.00	66
86.00	9123	189.00	8358	293.00	3586	410.00	226
87.00	3371	190.00	790	294.00	1124	411.00	164
88.00	124	191.00	3766	295.00	1084	412.00	331
89.00	1368	192.00	10128	296.00	61136	414.00	343
90.00	383	193.00	10174	297.00	8026	415.00	326
91.00	9248	194.00	2183	298.00	612	416.00	646
92.00	7370	195.00	2379	299.00	370	417.00	421
93.00	57672	196.00	18808	300.00	106	418.00	34
94.00	4444	198.00	483072	301.00	1179	419.00	86
96.00	1124	199.00	37424	302.00	1131	420.00	332
97.00	672	200.00	2608	303.00	5972	421.00	2315
98.00	38384	201.00	2308	304.00	1596	422.00	1544
99.00	29488	202.00	1962	306.00	123	423.00	16225
100.00	2100	203.00	6548	308.00	889	424.00	3445
101.00	13725	204.00	26408	309.00	556	425.00	1110
102.00	763	205.00	46008	310.00	675	426.00	1218
103.00	5708	206.00	164928	311.00	62	427.00	340
104.00	9122	207.00	23696	312.00	376	428.00	787
105.00	9301	208.00	6882	313.00	1043	429.00	1431
106.00	2930	209.00	2143	314.00	3111	430.00	865
107.00	115920	210.00	3208	315.00	6820	431.00	1569
108.00	16081	211.00	5964	316.00	2987	432.00	1301
109.00	3083	212.00	736	317.00	1049	433.00	1619
110.00	179200	213.00	814	319.00	82	434.00	2229
111.00	27104	215.00	3007	321.00	1251	435.00	893
112.00	4058	216.00	5079	322.00	970	436.00	1194
113.00	1709	217.00	53784	323.00	13256	437.00	1967

Data File: /chem1/nt12.i/20110404.b/tune.b/04041101.d

Date : 04-APR-2011 09:49

Client ID: DFTPP0404 Instrument: nt12.i

Sample Info: DFTPP0404

Operator: JZ

Column phase: ZB-5msi Column diameter: 0.32

Data File: 04041101.d
Spectrum: Avg. Scans 468-470 (5.59), Background Scan 464
Location of Maximum: 198.00
Number of points: 400

m/z	Y	m/z	Y	m/z	Y	m/z	Y
114.00	169	218.00	5892	324.00	2426	438.00	885
115.00	1364	219.00	788	325.00	1200	439.00	2201
116.00	5642	220.00	781	326.00	849	440.00	152
117.00	120960	221.00	23728	327.00	3079	441.00	45744
118.00	8027	222.00	8152	328.00	2124	442.00	288576
119.00	1111	223.00	11517	329.00	629	443.00	57104
120.00	2040	224.00	99832	330.00	184	444.00	4831
121.00	825	225.00	22464	331.00	162	445.00	429
122.00	8218	226.00	2105	332.00	1352	446.00	62
123.00	11384	227.00	53112	333.00	1948	449.00	148
124.00	6350	228.00	7490	334.00	9609	451.00	118
125.00	4730	229.00	8496	335.00	3289	452.00	78
127.00	269760	230.00	1294	336.00	188	456.00	250
128.00	21408	231.00	3241	337.00	57	459.00	257
129.00	120504	232.00	985	339.00	360	460.00	64
130.00	8953	233.00	1501	340.00	469	463.00	116
131.00	2280	234.00	3663	341.00	1147	470.00	150
132.00	596	235.00	3860	342.00	998	472.00	61
133.00	951	236.00	3089	343.00	13	473.00	75
134.00	4361	237.00	2775	344.00	82	474.00	140
135.00	9077	238.00	88	345.00	104	478.00	109
136.00	3988	239.00	3310	346.00	3257	483.00	114
137.00	5903	240.00	1953	347.00	896	487.00	93
138.00	979	241.00	3348	348.00	185	488.00	74
139.00	1011	242.00	5845	349.00	61	489.00	150
140.00	1268	243.00	5370	350.00	93	494.00	60
141.00	17024	244.00	71384	351.00	853	499.00	60
142.00	5421	245.00	10727	352.00	3508		
143.00	3300	246.00	18512	353.00	2682		
144.00	1693	247.00	3495	354.00	3665		
145.00	816	248.00	1105	355.00	1859		

Data File: /chem1/nt12.i/20110404.b/tune.b/04041101.d

Date : 04-APR-2011 09:49

Client ID: DFTPP0404

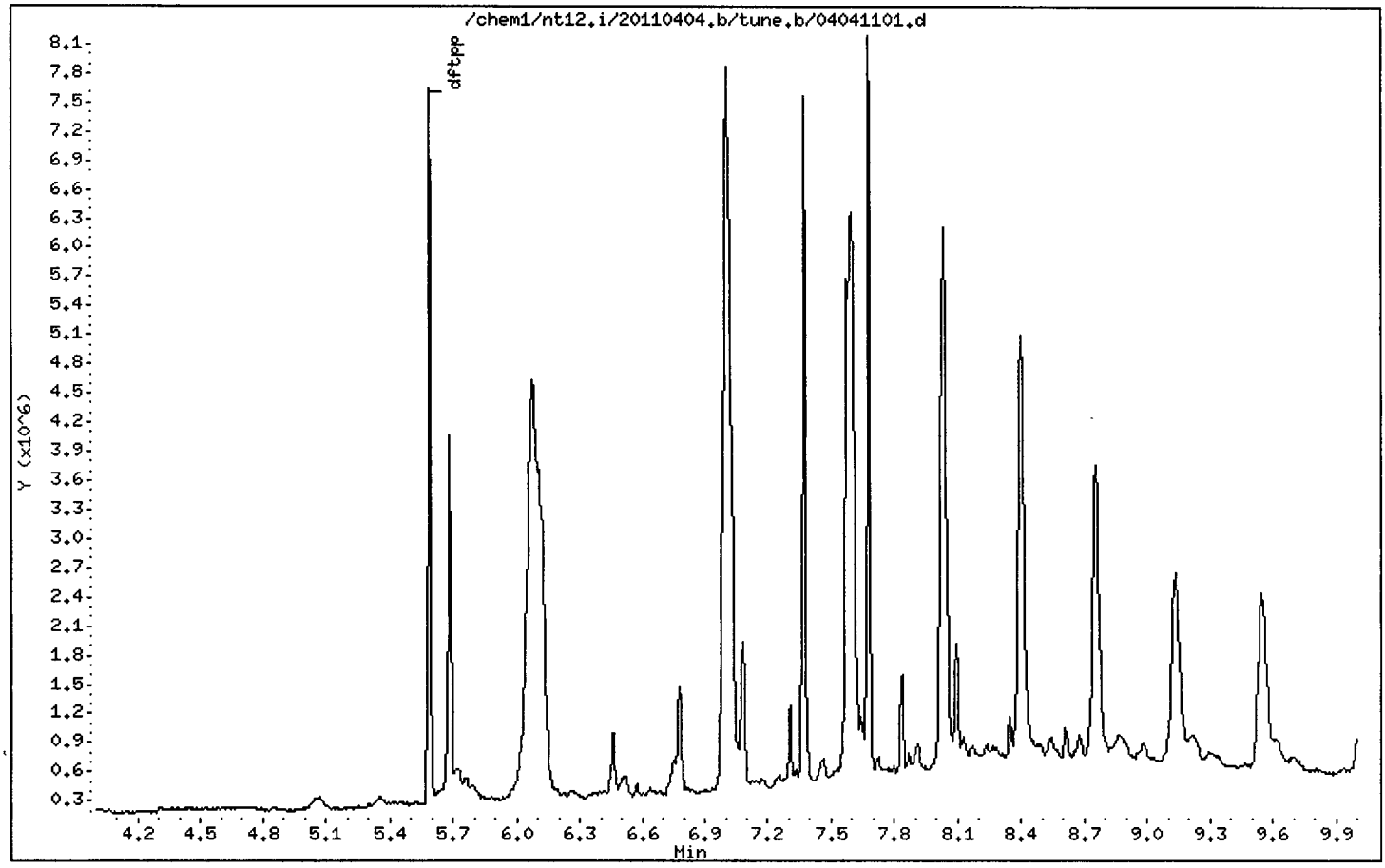
Instrument: nt12.i

Sample Info: DFTPP0404

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.32



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

Data file: /chem1/nt12.i/20110404.b/ddt.b/04041101.d ARI ID: DDT0404
Method: /chem1/nt12.i/20110404.b/ddt.b/sw846ddt.m Misc: 11-
Analysis Date: 04-APR-2011 09:49 Instrument: nt12.i

COMPOUND	RT	AREA
Pentachlorophenol	5.683	290307
Benzidine	7.372	1593579
4,4'-DDE	----	----
4,4'-DDD	7.452	38090
4,4'-DDT	7.676	1054219

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

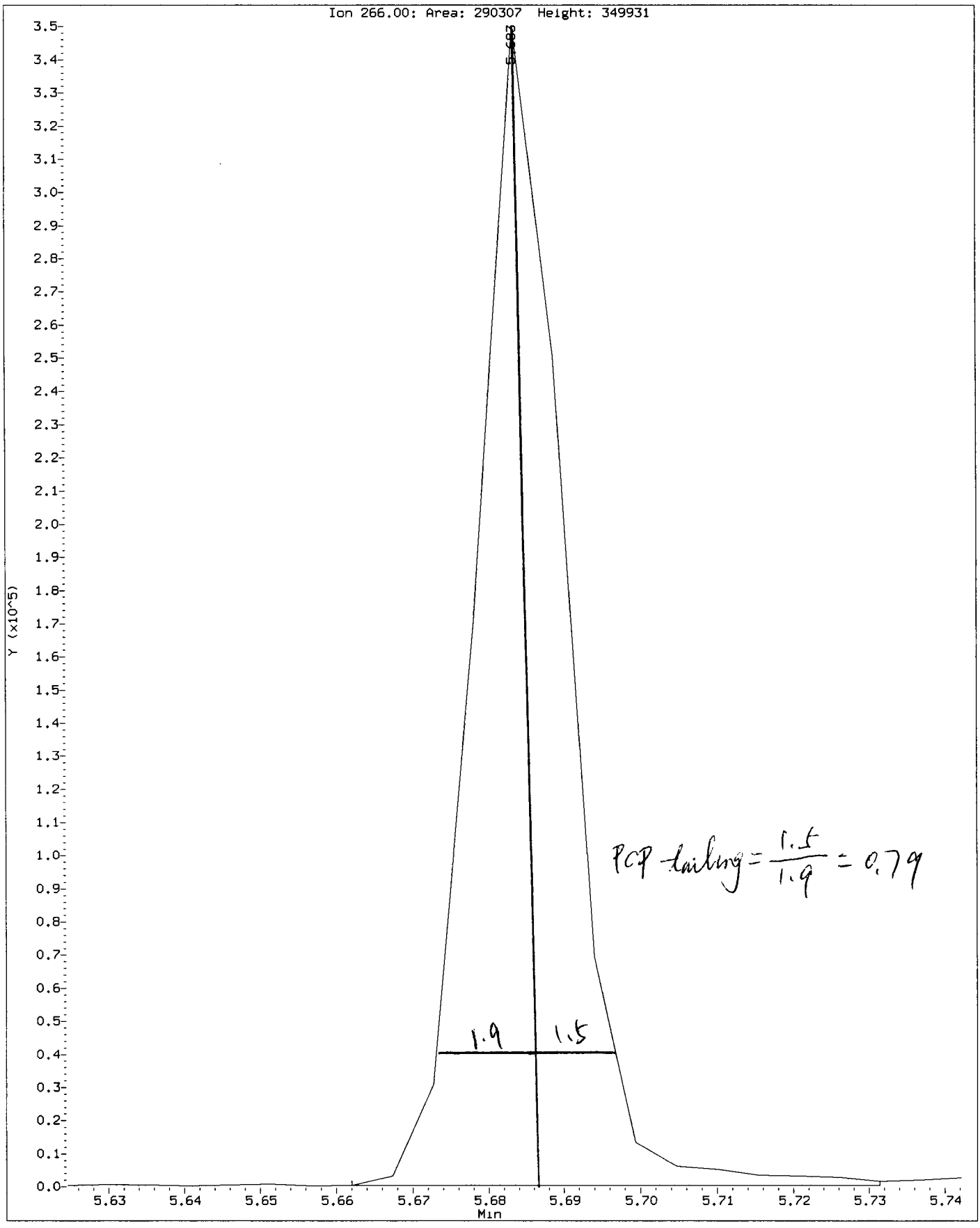
$$\text{DDT Percent Breakdown} = \frac{(0 + 38090) * 100}{(0 + 38090 + 1054219)}$$

DDT Percent Breakdown = 3.5 % ok

4/04/11

Data File: /chem1/nt12.i/20110404.b/ddt.b/04041101.d
Injection Date: 04-APR-2011 09:49
Instrument: nt12.i
Client Sample ID: DDT0404

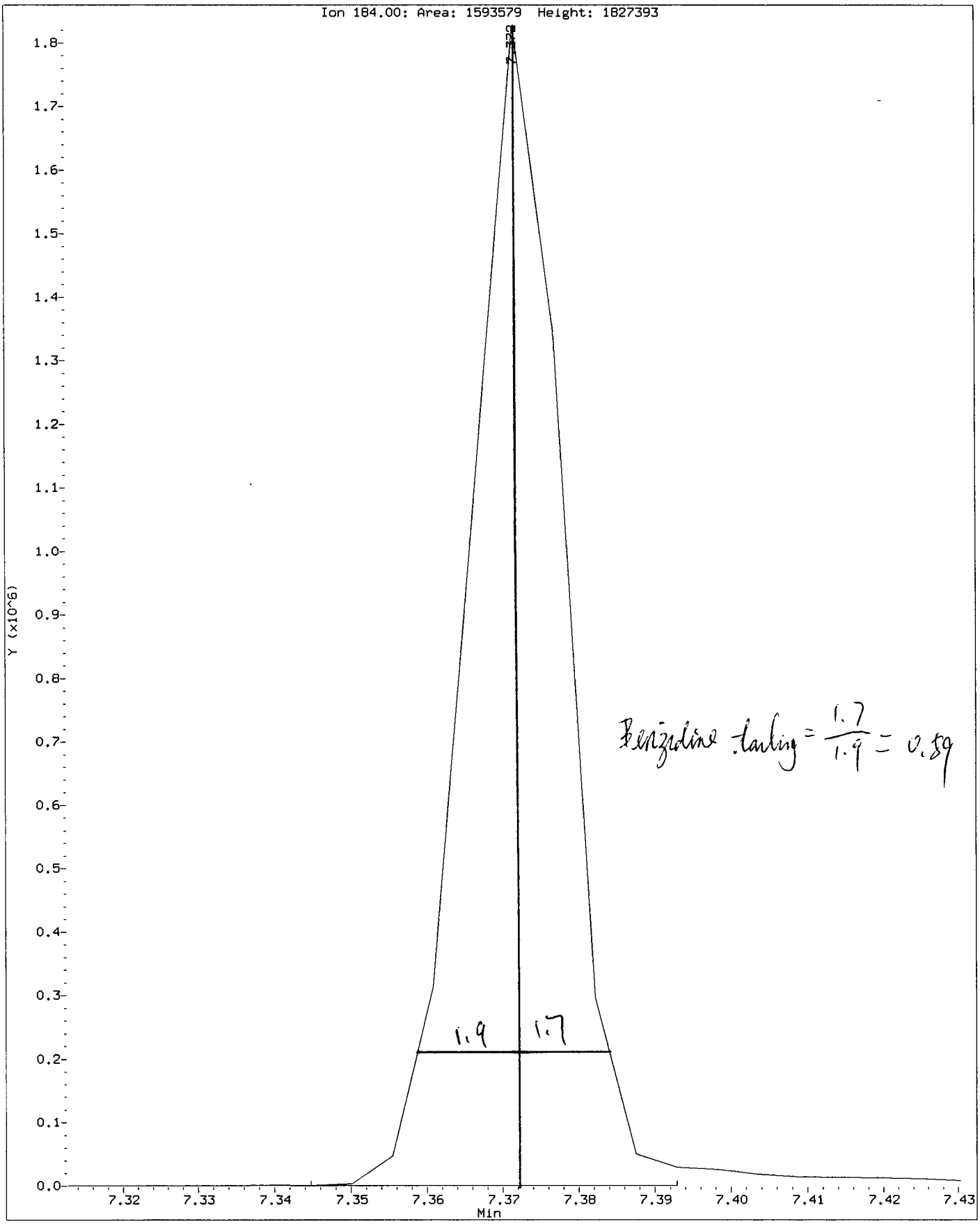
Compound: Pentachlorophenol
CAS Number: 87-86-5



SN54 : 00314

Data File: /chem1/nt12.i/20110404.b/ddt.b/04041101.d
Injection Date: 04-APR-2011 09:49
Instrument: nt12.i
Client Sample ID: DDT0404

Compound: Benzidine
CAS Number:



Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt12.i/20110404.b/04041103.d
Lab Smp Id: SN54E Client Smp ID: LL-SED2-56-112-0315
Inj Date : 04-APR-2011 11:59
Operator : JZ Inst ID: nt12.i
Smp Info : SN54E,3
Misc Info : 11-5929
Comment : 1ul Injection
Method : /chem1/nt12.i/20110404.b/SIMPNA0331.m
Meth Date : 05-Apr-2011 17:45 jianqing Quant Type: ISTD
Cal Date : 31-MAR-2011 22:47 Cal File: 03311107.d
Als bottle: 3
Dil Factor: 3.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

04/04/11

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

Name	Value	Description
DF	3.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Ws	73.55000	Weight of sample extracted (g)
M	86.20000	% Moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
* 27 Naphthalene-d8	136	4.803	4.803	(1.000)	327676	2.00000	
28 Naphthalene	128	4.832	4.832	(1.006)	11173	0.07062	10.44
$ 190 2-Methylnaphthalene-d10	152	5.539	5.542	(1.153)	71664	0.71531	105.7
32 2-Methylnaphthalene	141	Compound Not Detected.					
105 1-methylnaphthalene	141	5.782	5.775	(1.204)	129051	1.37920	203.8
40 Acenaphthylene	152	Compound Not Detected.					
* 42 Acenaphthene-d10	164	7.044	7.044	(1.000)	205193	2.00000	
44 Acenaphthene	153	Compound Not Detected.					
46 Dibenzofuran	168	Compound Not Detected.					
49 Fluorene	166	Compound Not Detected.					
* 59 Phenanthrene-d10	188	8.981	8.981	(1.000)	322531	2.00000	
60 Phenanthrene	178	Compound Not Detected.					
61 Anthracene	178	Compound Not Detected.					
64 Fluoranthene	202	10.682	10.673	(1.189)	17526	0.09468	13.99
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	13.608	13.604	(1.000)	332757	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	17.255	17.230	(1.000)	295718	2.00000	
78	Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
$ 191	Dibenzo(a,h)anthracene-d14	292	19.499	19.470	(1.130)	76160	0.54884	81.11
79	Dibenzo(a,h)anthracene	278	Compound Not Detected.					
80	Benzo(g,h,i)perylene	276	Compound Not Detected.					
99	Perylene	252	17.322	17.296	(1.004)	553306	4.27435	631.7

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt12.i
Lab File ID: 04041103.d
Lab Smp Id: SN54E
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem1/nt12.i/20110404.b/SIMPNA0331.m
Misc Info: 11-5929

Calibration Date: 04-APR-2011
Calibration Time: 11:18
Client Smp ID: LL-SED2-56-112-0
Level: LOW
Sample Type: Sediment

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	494112	247056	988224	327676	-33.68
42 Acenaphthene-d10	280105	140052	560210	205193	-26.74
59 Phenanthrene-d10	461353	230676	922706	322531	-30.09
69 Chrysene-d12	503160	251580	1006320	332757	-33.87
77 Perylene-d12	442215	221108	884430	295718	-33.13

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	7.04	6.54	7.54	7.04	0.00
59 Phenanthrene-d10	8.98	8.48	9.48	8.98	0.00
69 Chrysene-d12	13.60	13.10	14.10	13.61	0.02
77 Perylene-d12	17.23	16.73	17.73	17.26	0.15

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

Analytical Resources, Inc.

RECOVERY REPORT

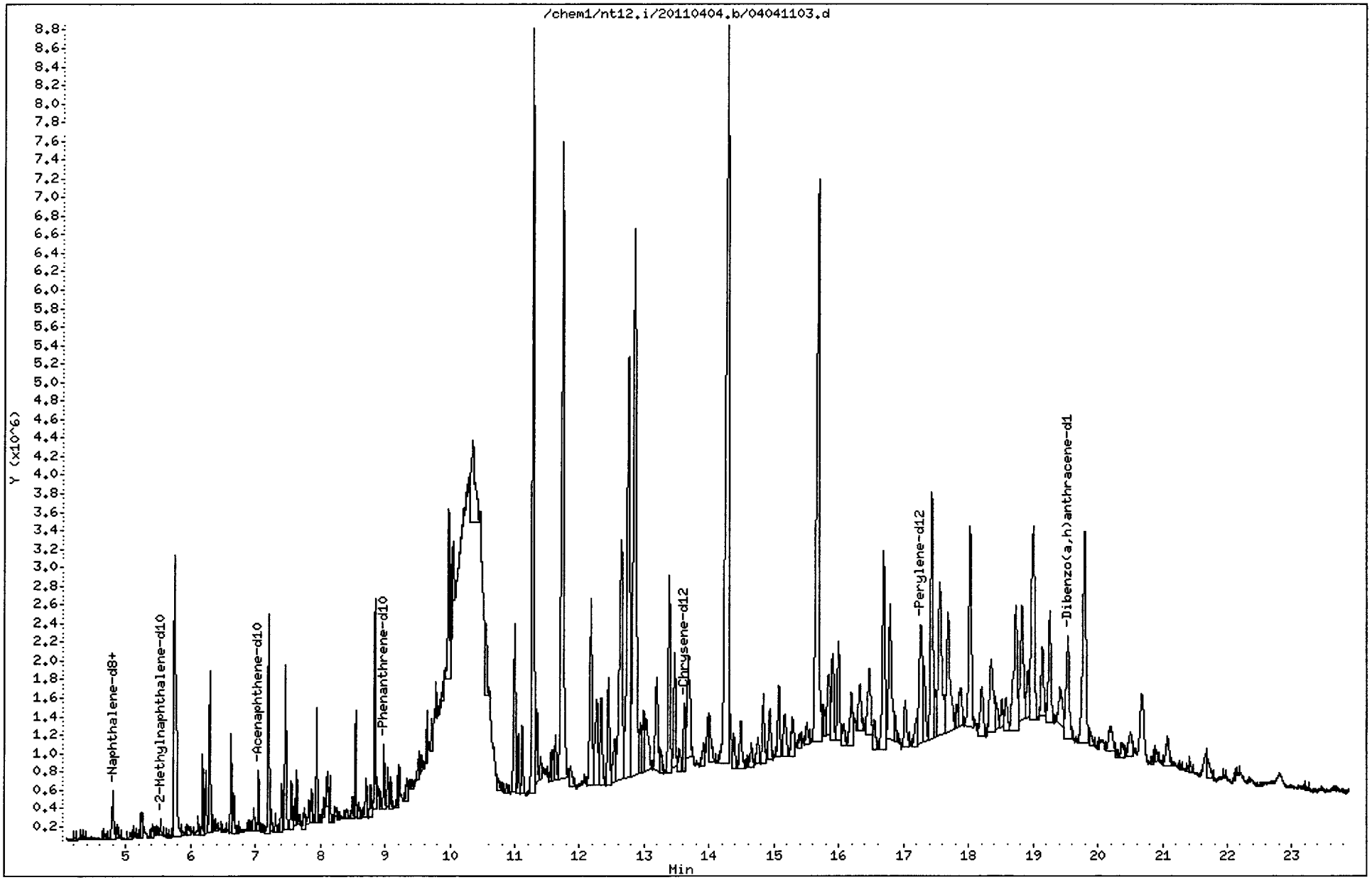
Client Name: Floyd Snider
Client SDG: SN54
Sample Matrix: SOLID
Fraction: SV
Lab Smp Id: SN54E
Client Smp ID: LL-SED2-56-112-0315
Level: LOW
Operator: JZ
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: pnalcss.spk
Quant Type: ISTD
Sublist File: pnax.sub
Method File: /chem1/nt12.i/20110404.b/SIMPNA0331.m
Misc Info: 11-5929

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	147.8	105.7	71.53	34-100
$ 191 Dibenzo(a,h)anthra	147.8	81.11	54.88	10-117

Data File: /chem1/nt12.i/20110404.b/04041103.d
Date : 04-APR-2011 11:59
Client ID: LL-SED2-56-112-0315
Sample Info: SN54E,3
Volume Injected (uL): 1.0
Column phase: ZB35

Instrument: nt12.i
Operator: JZ
Column diameter: 0.32

SN54 : 00320



Data File: /chem1/nt12.i/20110404.b/04041103.d

Date : 04-APR-2011 11:59

Client ID: LL-SED2-56-112-0315

Instrument: nt12.i

Sample Info: SN54E,3

Volume Injected (uL): 1.0

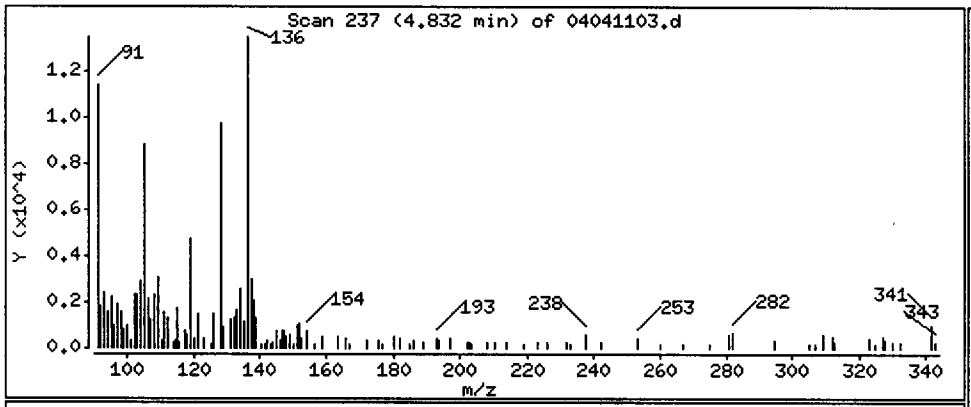
Operator: JZ

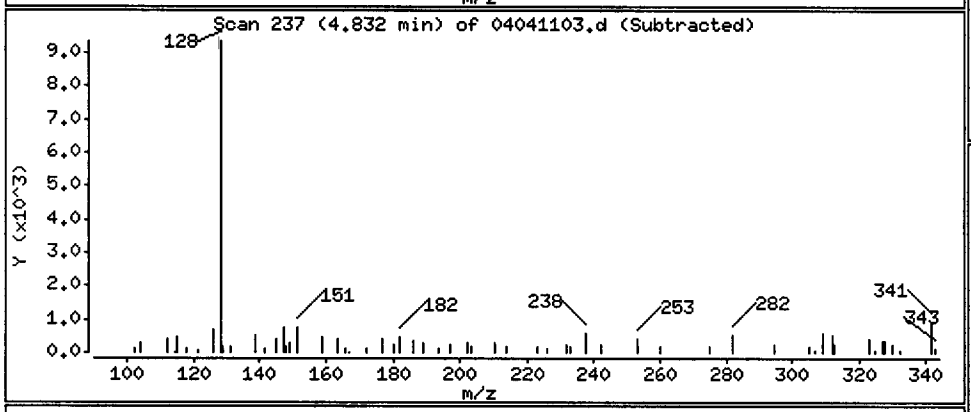
Column phase: ZB35

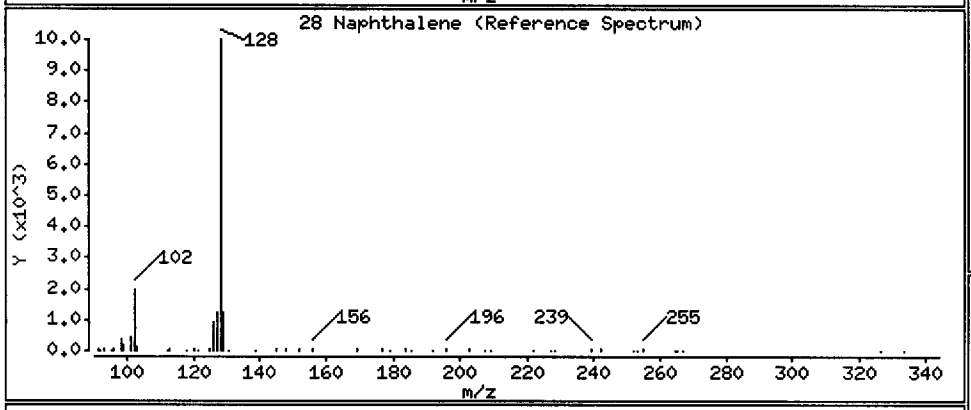
Column diameter: 0.32

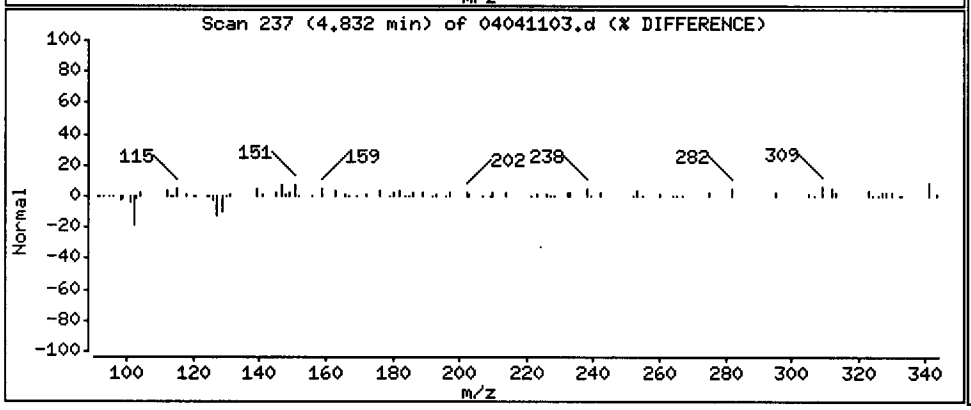
28 Naphthalene

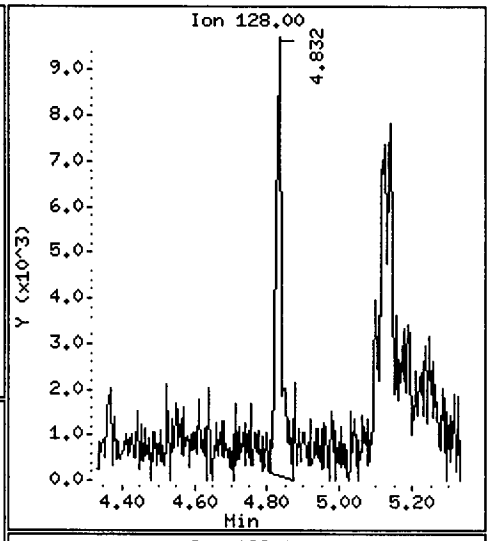
Concentration: 10.44 ug/kg

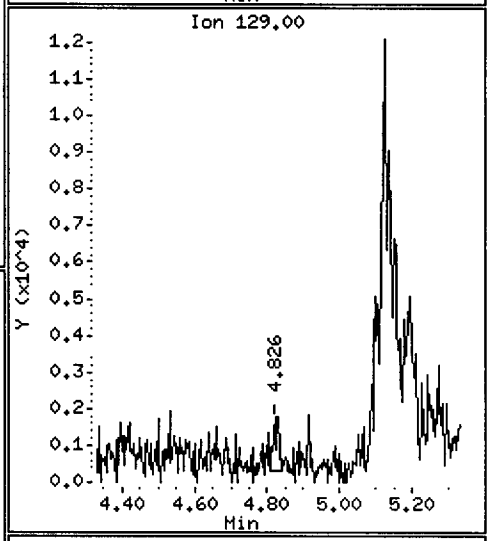


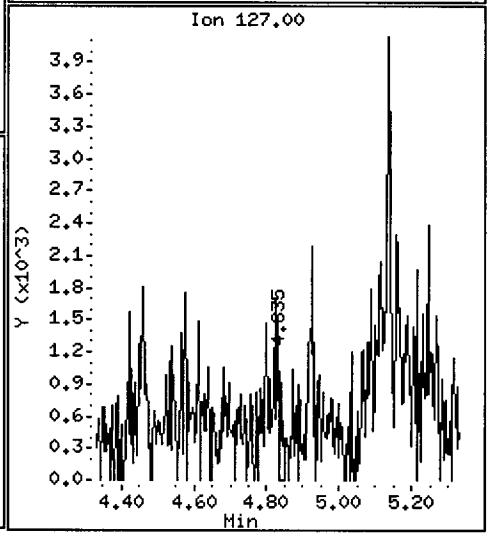












Data File: /chem1/nt12.i/20110404.b/04041103.d

Date : 04-APR-2011 11:59

Client ID: LL-SED2-56-112-0315

Instrument: nt12.i

Sample Info: SN54E,3

Volume Injected (uL): 1.0

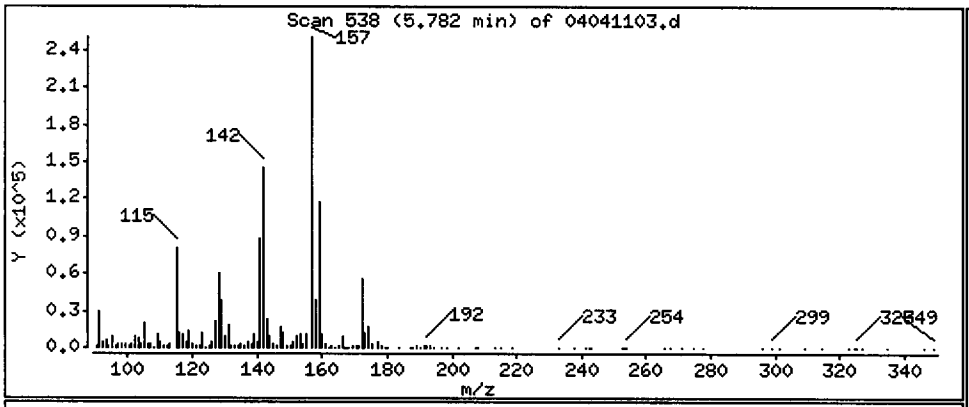
Operator: JZ

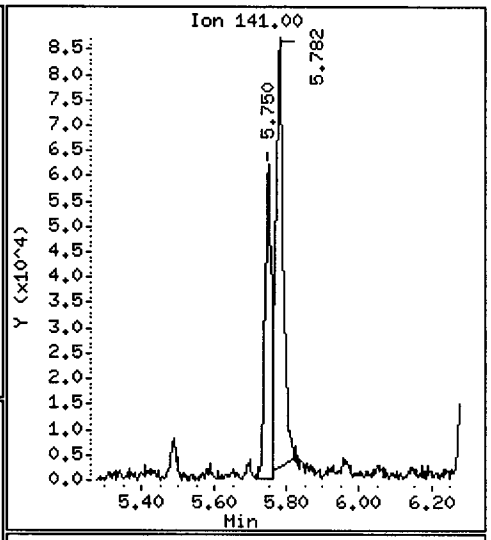
Column phase: ZB35

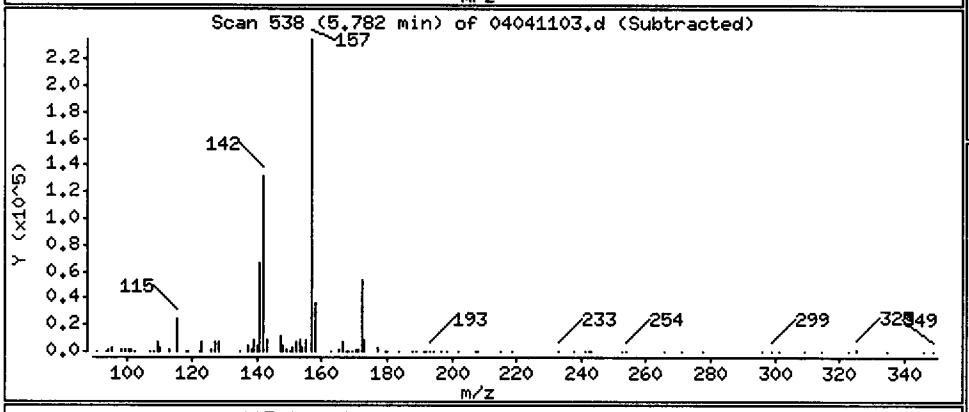
Column diameter: 0.32

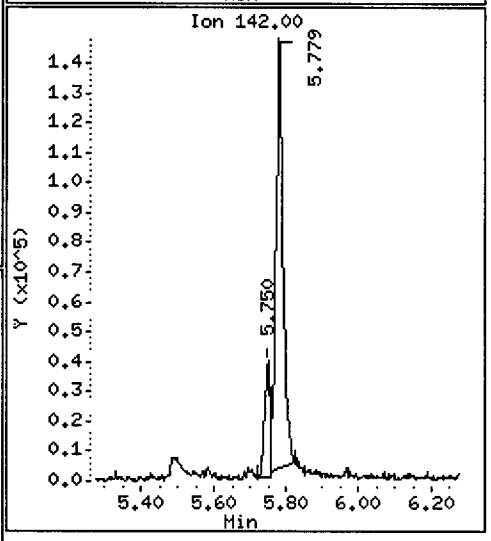
105 1-methylnaphthalene

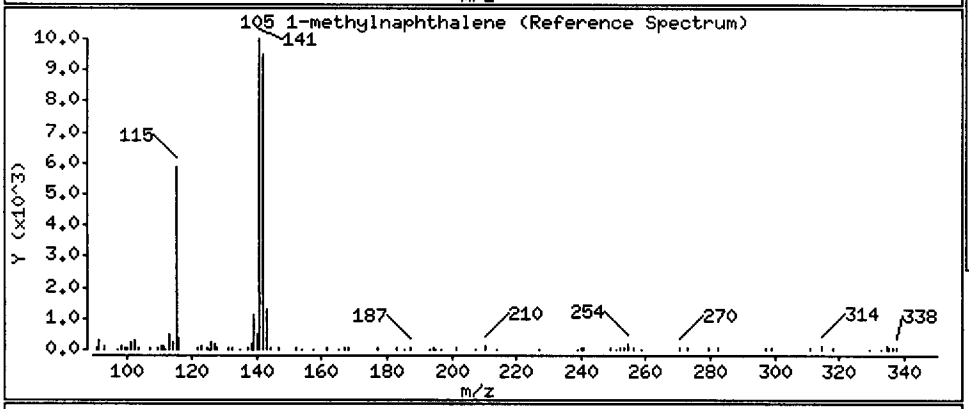
Concentration: 203.8 ug/kg

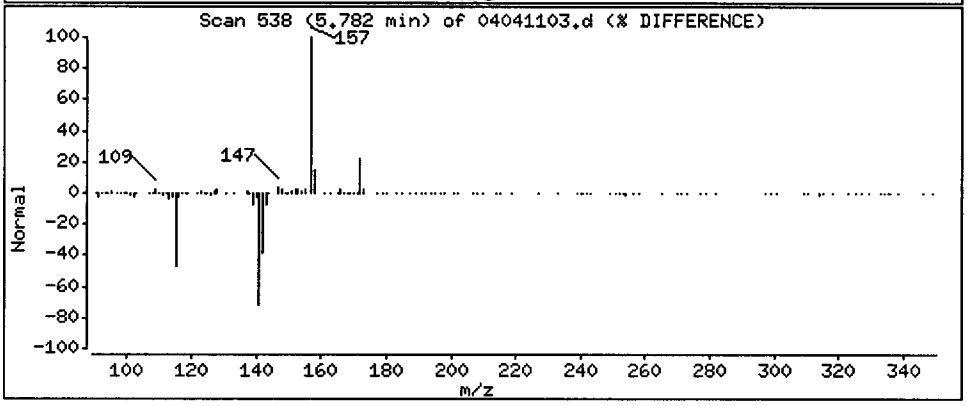












Data File: /chem1/nt12.i/20110404.b/04041103.d

Date : 04-APR-2011 11:59

Client ID: LL-SED2-56-112-0315

Instrument: nt12.i

Sample Info: SN54E,3

Volume Injected (uL): 1.0

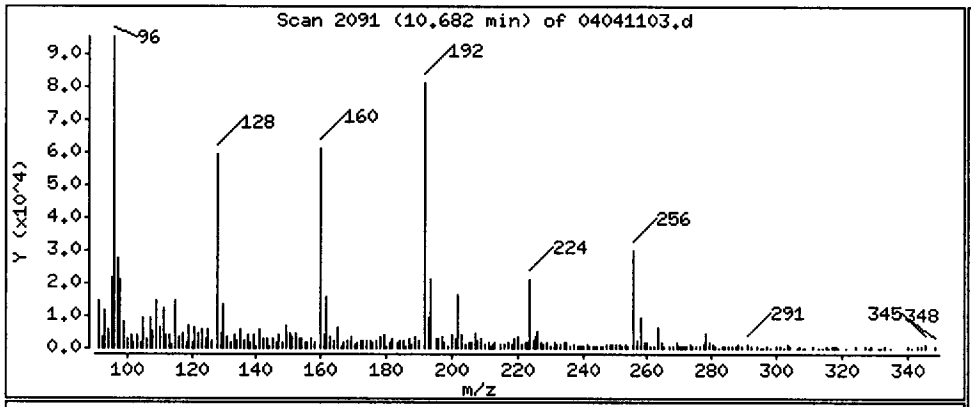
Operator: JZ

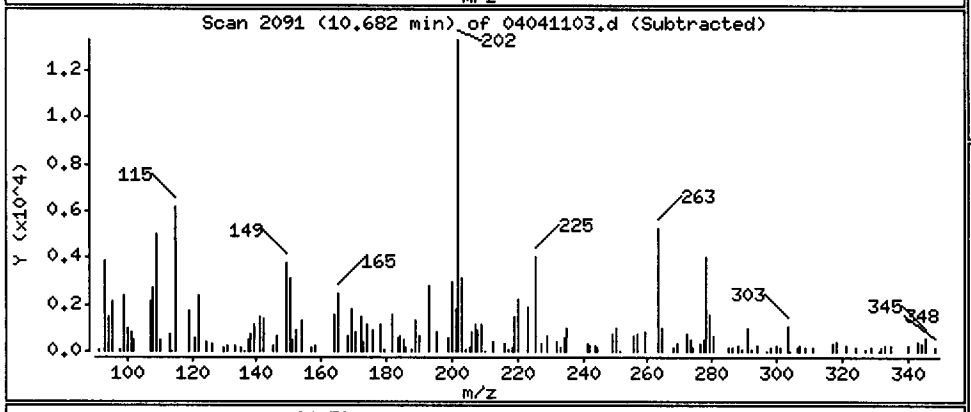
Column phase: ZB35

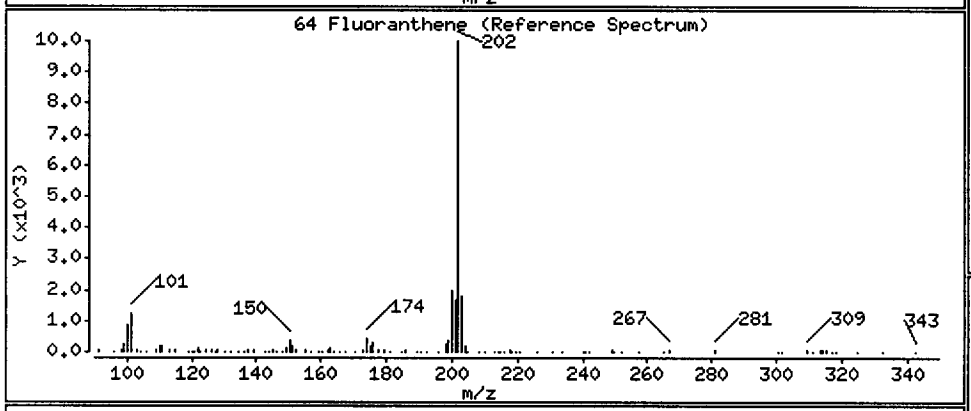
Column diameter: 0.32

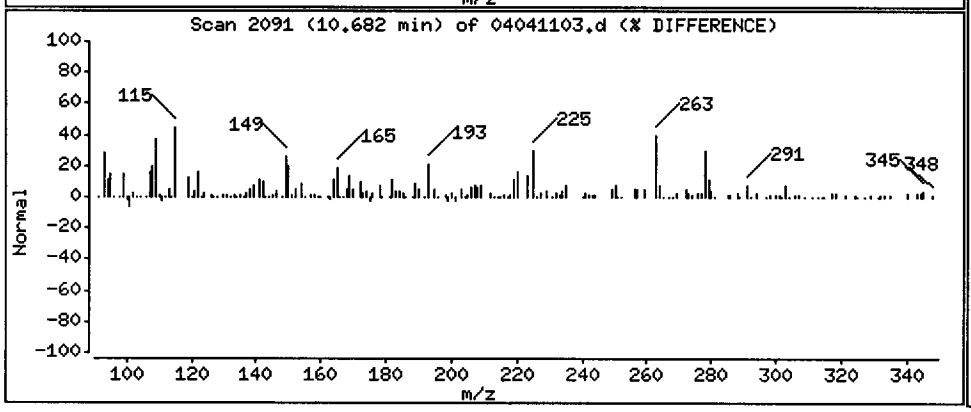
64 Fluoranthene

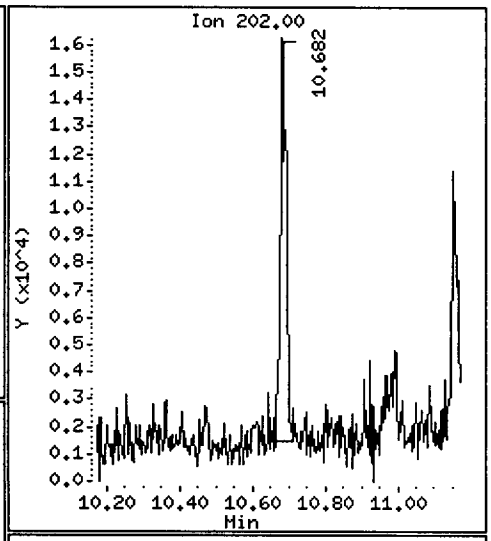
Concentration: 13.99 ug/kg

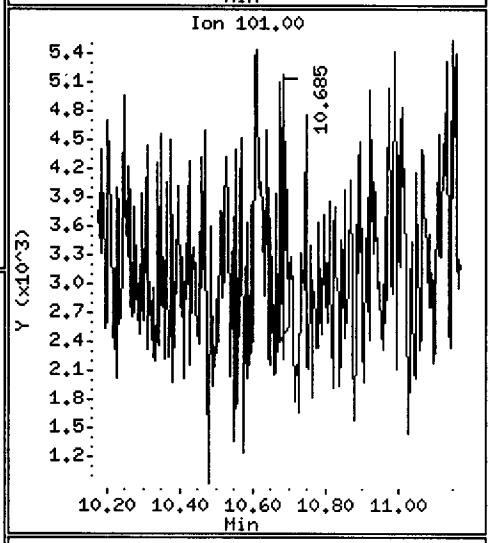


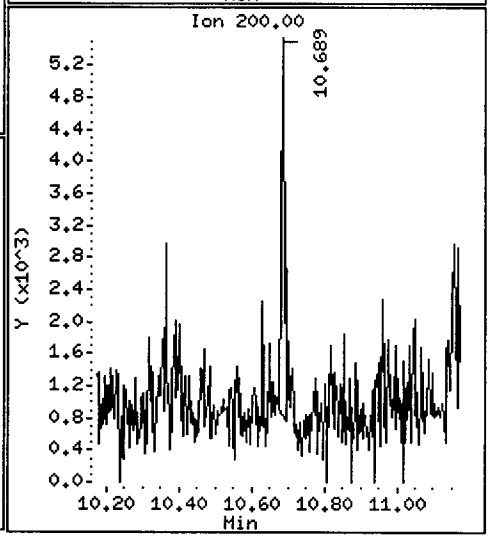












Data File: /chem1/nt12.i/20110404.b/04041103.d

Date : 04-APR-2011 11:59

Client ID: LL-SED2-56-112-0315

Instrument: nt12.i

Sample Info: SN54E,3

Volume Injected (uL): 1.0

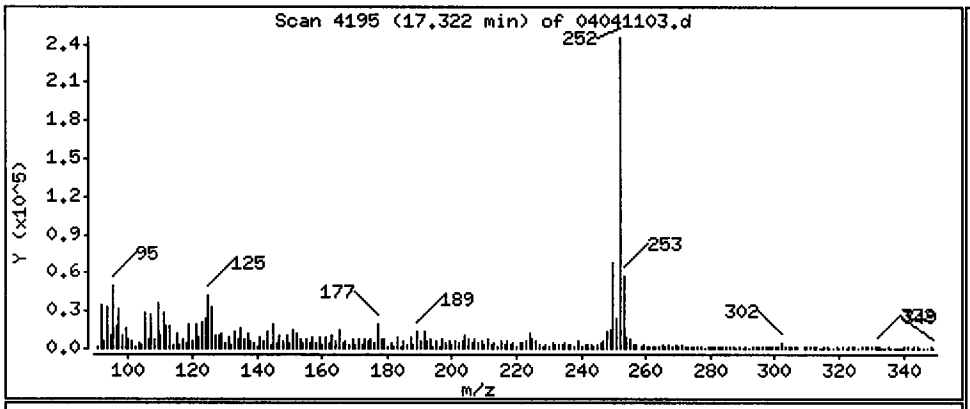
Operator: JZ

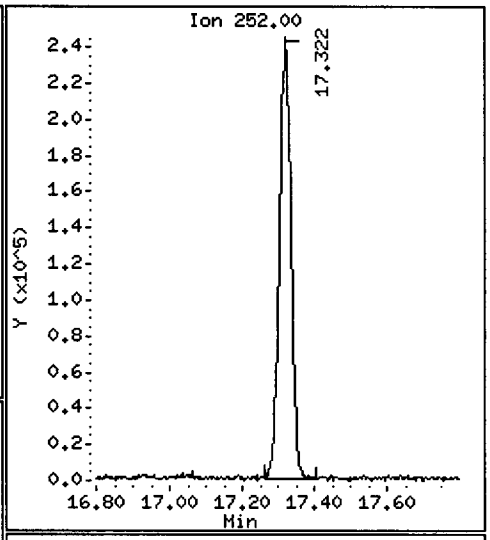
Column phase: ZB35

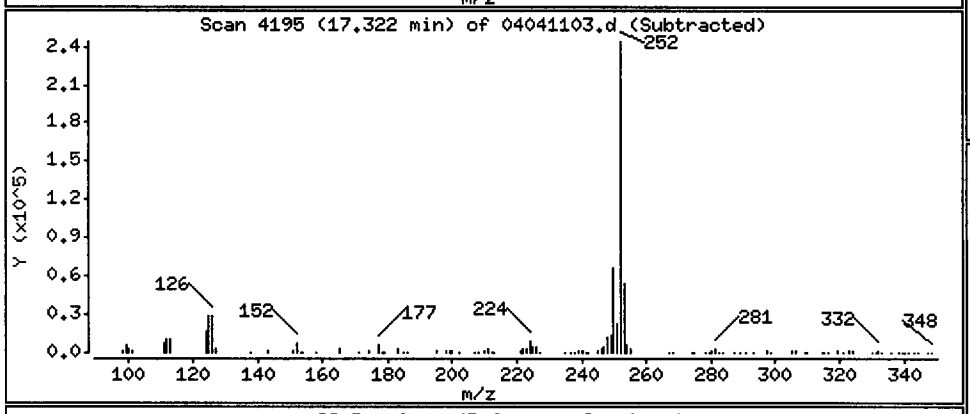
Column diameter: 0.32

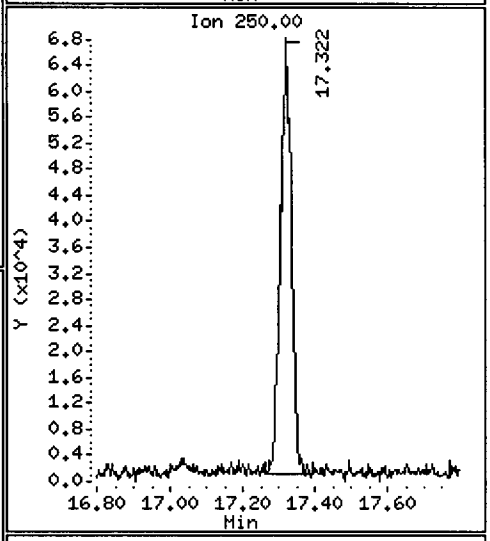
99 Perylene

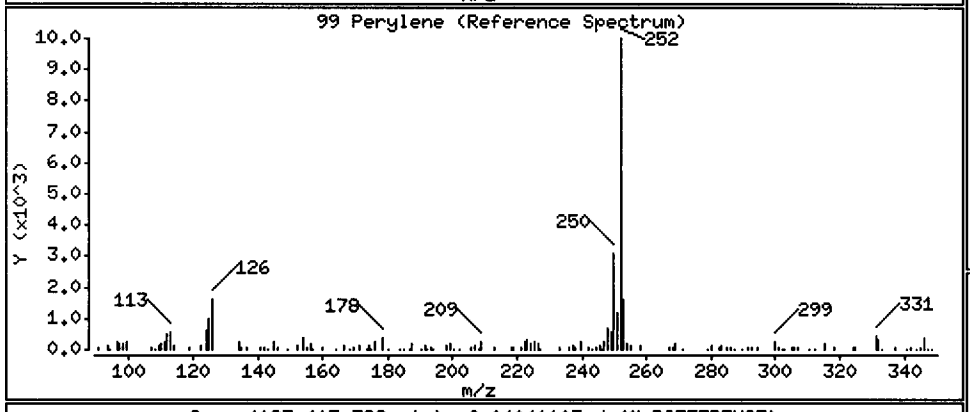
Concentration: 631.7 ug/kg

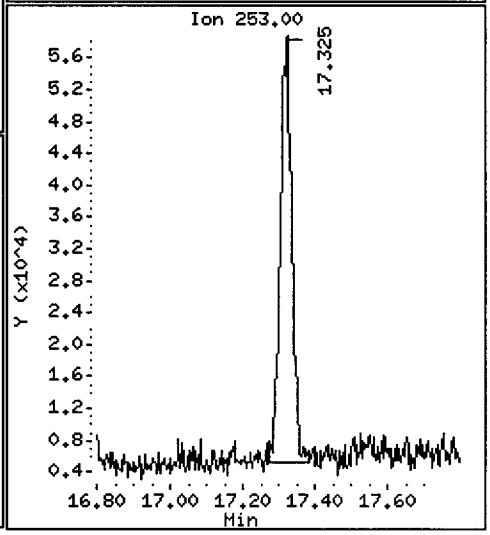


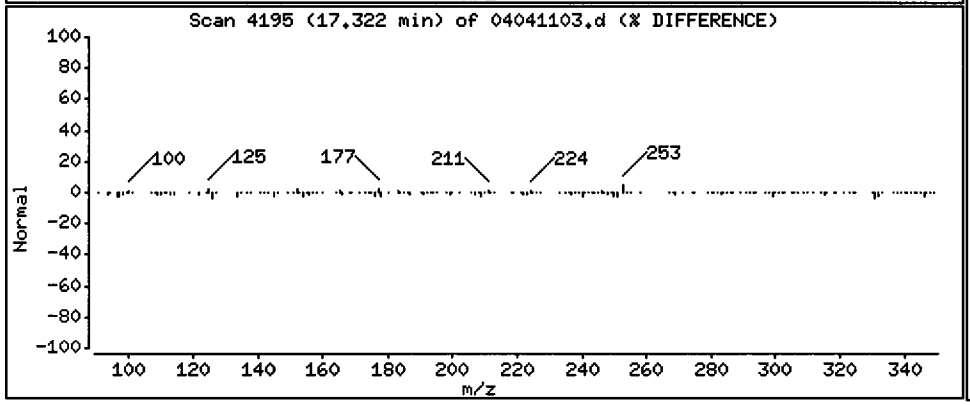












CO-ELUTION SUMMARY FOR FILE - 04041103.d

Lab ID: SN54E, Method: SIMPNA0331.m, Instrument: nt12.i, Date: 04-APR-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt12.i/20110404.b/04041104.d
Lab Smp Id: SN54EMS Client Smp ID: LL-SED2-56-112- MS
Inj Date : 04-APR-2011 12:37
Operator : JZ Inst ID: nt12.i
Smp Info : SN54EMS,3,
Misc Info : 11-5929
Comment : 1ul Injection
Method : /chem1/nt12.i/20110404.b/SIMPNA0331.m
Meth Date : 05-Apr-2011 17:45 jianqing Quant Type: ISTD
Cal Date : 31-MAR-2011 22:47 Cal File: 03311107.d
Als bottle: 4 QC Sample: MS
Dil Factor: 3.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

JZ 04/05/11

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

Name	Value	Description
DF	3.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Ws	73.00000	Weight of sample extracted (g)
M	86.20000	% 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	4.803	4.803	(1.000)	303192	2.00000	
28 Naphthalene	128	4.832	4.832	(1.006)	86123	0.58828	87.59
$ 190 2-Methylnaphthalene-d10	152	5.539	5.542	(1.153)	61811	0.66679	99.28
32 2-Methylnaphthalene	141	5.586	5.583	(1.163)	59644	0.73313	109.2
105 1-methylnaphthalene	141	5.778	5.775	(1.203)	182475	2.10764	313.8(R)
40 Acenaphthylene	152	6.905	6.905	(0.980)	101274	0.60257	89.72
* 42 Acenaphthene-d10	164	7.044	7.044	(1.000)	192063	2.00000	
44 Acenaphthene	153	7.091	7.091	(1.007)	62446	0.59651	88.82
46 Dibenzofuran	168	7.236	7.236	(1.027)	85278	0.59916	89.21
49 Fluorene	166	7.691	7.691	(1.092)	74548	0.63612	94 72
* 59 Phenanthrene-d10	188	8.981	8.981	(1.000)	293988	2.00000	
60 Phenanthrene	178	9.013	9.013	(1.004)	110100	0.70960	105.7
61 Anthracene	178	9.048	9.044	(1.007)	106417	0.68309	101.7
64 Fluoranthene	202	10.685	10.673	(1.190)	130658	0.77441	115.3
65 Pyrene	202	11.159	11.137	(0.820)	117999	0.68442	101.9

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
68	Benzo(a)anthracene	228	13.497	13.491	(0.991)	98923	0.64259	95.68
* 69	Chrysene-d12	240	13.614	13.604	(1.000)	320215	2.00000	
71	Chrysene	228	13.680	13.671	(1.005)	99243	0.65961	98.22
74	Benzo(b)fluoranthene	252	16.100	16.078	(0.933)	102391	0.67017	99.79
75	Benzo(k)fluoranthene	252	16.157	16.132	(0.936)	105313	0.65711	97.84
188	Benzo(j)fluoranthene	252	Compound Not Detected.					
76	Benzo(a)pyrene	252	17.047	17.025	(0.988)	85305	0.60813	90.55
* 77	Perylene-d12	264	17.255	17.230	(1.000)	271011	2.00000	
78	Indeno(1,2,3-cd)pyrene	276	19.578	19.537	(1.135)	94063	0.55146	82.11
$ 191	Dibenzo(a,h)anthracene-d14	292	19.496	19.470	(1.130)	69066	0.54309	80.87
79	Dibenzo(a,h)anthracene	278	19.590	19.553	(1.135)	83383	0.59774	89.00
80	Benzo(g,h,i)perylene	276	20.386	20.348	(1.181)	77095	0.50960	75.88
99	Perylene	252	17.328	17.296	(1.004)	614936	5.18353	771.8(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt12.i
Lab File ID: 04041104.d
Lab Smp Id: SN54EMS
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem1/nt12.i/20110404.b/SIMPNA0331.m
Misc Info: 11-5929

Calibration Date: 04-APR-2011
Calibration Time: 11:18
Client Smp ID: LL-SED2-56-112-
Level: LOW
Sample Type: Sediment

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	494112	247056	988224	303192	-38.64
42 Acenaphthene-d10	280105	140052	560210	192063	-31.43
59 Phenanthrene-d10	461353	230676	922706	293988	-36.28
69 Chrysene-d12	503160	251580	1006320	320215	-36.36
77 Perylene-d12	442215	221108	884430	271011	-38.72

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	7.04	6.54	7.54	7.04	0.00
59 Phenanthrene-d10	8.98	8.48	9.48	8.98	0.00
69 Chrysene-d12	13.60	13.10	14.10	13.61	0.07
77 Perylene-d12	17.23	16.73	17.73	17.26	0.15

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

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: FSI
Sample Matrix: SOLID
Lab Smp Id: SN54EMS
Level: LOW
Data Type: MS DATA
SpikeList File: pnalcss.spk
Sublist File: pnax.sub
Method File: /chem1/nt12.i/20110404.b/SIMPNA0331.m
Misc Info: 11-5929

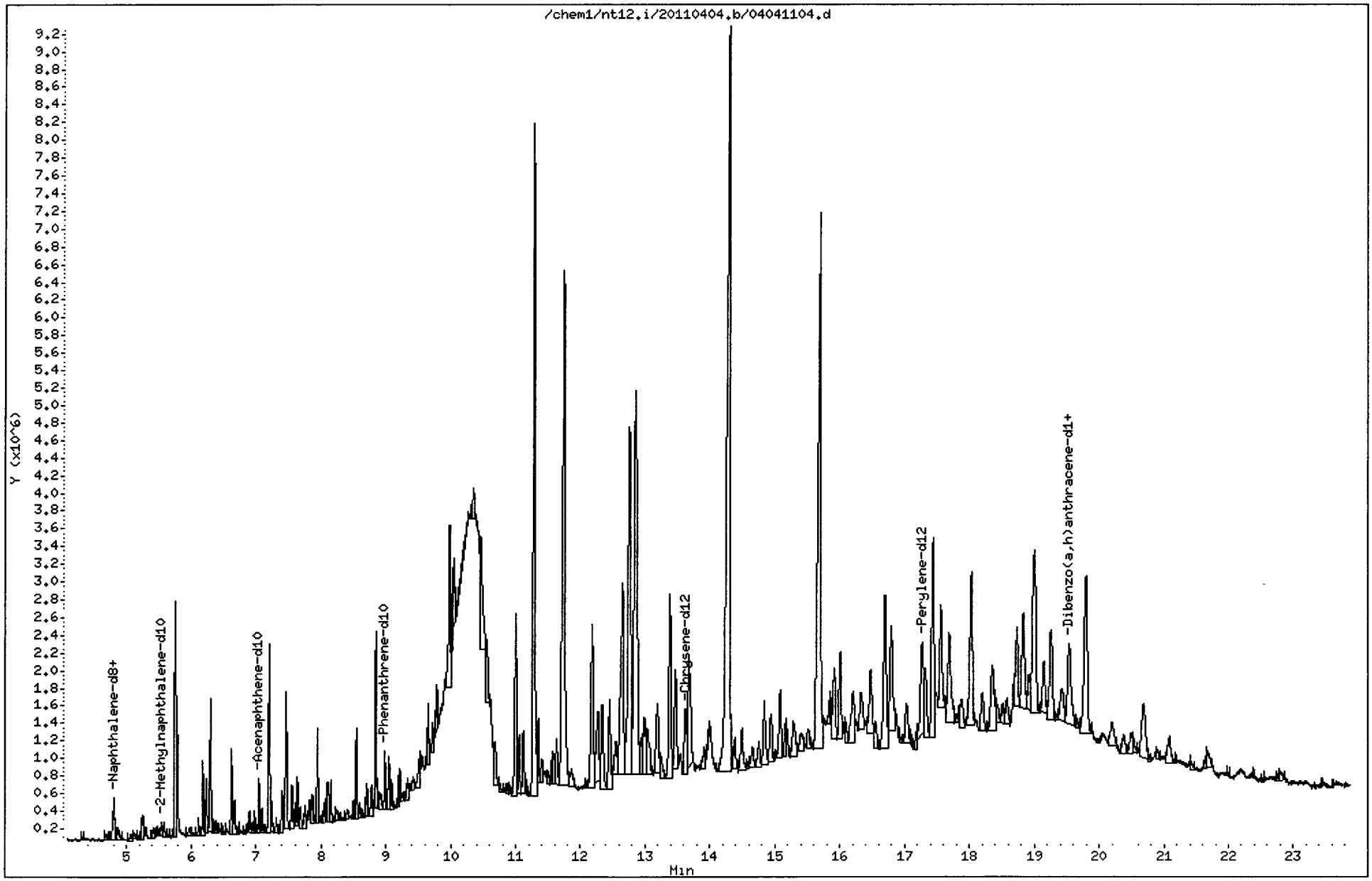
Client SDG: SN54
Fraction: SV
Client Smp ID: LL-SED2-56-112- MS
Operator: JZ
SampleType: MS
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
28 Naphthalene	148.9	87.59	58.83	37-100
32 2-Methylnaphthalen	148.9	109.2	73.31	37-100
105 1-methylnaphthalen	148.9	313.8	210.76*	30-160
40 Acenaphthylene	148.9	89.72	60.26	35-100
44 Acenaphthene	148.9	88.82	59.65	39-100
46 Dibenzofuran	148.9	89.21	59.92	39-100
49 Fluorene	148.9	94.72	63.61	42-100
60 Phenanthrene	148.9	105.7	70.96	47-100
61 Anthracene	148.9	101.7	68.31	41-106
64 Fluoranthene	148.9	115.3	77.44	52-109
65 Pyrene	148.9	101.9	68.44	47-111
68 Benzo(a)anthracene	148.9	95.68	64.26	47-114
71 Chrysene	148.9	98.22	65.96	51-106
74 Benzo(b)fluoranthe	148.9	99.79	67.02	30-160
75 Benzo(k)fluoranthe	148.9	97.84	65.71	30-160
76 Benzo(a)pyrene	148.9	90.55	60.81	44-111
78 Indeno(1,2,3-cd)py	148.9	82.11	55.15	41-114
79 Dibenzo(a,h)anthra	148.9	89.00	59.77	42-118
80 Benzo(g,h,i)peryle	148.9	75.88	50.96	37-115
99 Perylene	148.9	771.8	518.35*	30-160

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	148.9	99.28	66.68	34-100
$ 191 Dibenzo(a,h)anthra	148.9	80.87	54.31	10-117

Data File: /chem1/nt12.i/20110404.b/04041104.d
Date : 04-APR-2011 12:37
Client ID: LL-SED2-56-112- MS
Instrument: nt12.i
Sample Info: SN54EMS,3,
Volume Injected (uL): 1.0
Operator: JZ
Column phase: ZB35
Column diameter: 0.32

SN54 : 00330



CO-ELUTION SUMMARY FOR FILE - 04041104.d

Lab ID: SN54EMS, Method: SIMPNA0331.m, Instrument: nt12.i, Date: 04-APR-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt12.i/20110404.b/04041105.d
Lab Smp Id: SN54EMSD Client Smp ID: LL-SED2-56-112- MSD
Inj Date : 04-APR-2011 13:05
Operator : JZ Inst ID: nt12.i
Smp Info : SN54EMSD,3,
Misc Info : 11-5929
Comment : 1ul Injection
Method : /chem1/nt12.i/20110404.b/SIMPNA0331.m
Meth Date : 05-Apr-2011 17:45 jianqing Quant Type: ISTD
Cal Date : 31-MAR-2011 22:47 Cal File: 03311107.d
Als bottle: 5 QC Sample: MS
Dil Factor: 3.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

04/04/11

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

Name	Value	Description
DF	3.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Ws	73.30000	Weight of sample extracted (g)
M	86.20000	% 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	4.800	4.803	(1.000)	262660	2.00000	
28 Naphthalene	128	4.829	4.832	(1.006)	101829	0.80289	119.1
$ 190 2-Methylnaphthalene-d10	152	5.539	5.542	(1.154)	66577	0.82903	122.9
32 2-Methylnaphthalene	141	5.583	5.583	(1.163)	57436	0.81493	120.8
105 1-methylnaphthalene	141	5.775	5.775	(1.203)	200356	2.67128	396.1(R)
40 Acenaphthylene	152	6.902	6.905	(0.980)	113094	0.71127	105.5
* 42 Acenaphthene-d10	164	7.044	7.044	(1.000)	181702	2.00000	
44 Acenaphthene	153	7.088	7.091	(1.006)	79216	0.79985	118.6
46 Dibenzofuran	168	7.233	7.236	(1.027)	98173	0.72909	108.1
49 Fluorene	166	7.688	7.691	(1.091)	84069	0.75826	112.4
* 59 Phenanthrene-d10	188	8.978	8.981	(1.000)	299869	2.00000	
60 Phenanthrene	178	9.010	9.013	(1.004)	119050	0.75224	111.5
61 Anthracene	178	9.045	9.044	(1.007)	124166	0.78138	115.9
64 Fluoranthene	202	10.682	10.673	(1.190)	146915	0.85369	126.6
65 Pyrene	202	11.156	11.137	(0.819)	136332	0.77504	114.9

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
68 Benzo(a)anthracene	228	13.497	13.491	(0.991)	125120	0.79662	118.1
* 69 Chrysene-d12	240	13.614	13.604	(1.000)	326706	2.00000	
71 Chrysene	228	13.683	13.671	(1.005)	118403	0.77132	114.4
74 Benzo(b)fluoranthene	252	16.100	16.078	(0.933)	122123	0.81008	120.1
75 Benzo(k)fluoranthene	252	16.154	16.132	(0.936)	112060	0.70862	105.1
188 Benzo(j)fluoranthene	252	Compound Not Detected.					
76 Benzo(a)pyrene	252	17.050	17.025	(0.988)	107890	0.77949	115.6
* 77 Perylene-d12	264	17.259	17.230	(1.000)	267412	2.00000	
78 Indeno(1,2,3-cd)pyrene	276	19.572	19.537	(1.134)	98175	0.58331	86.50
$ 191 Dibenzo(a,h)anthracene-d14	292	19.502	19.470	(1.130)	71536	0.57008	84.54
79 Dibenzo(a,h)anthracene	278	19.594	19.553	(1.135)	86838	0.63088	93.55
80 Benzo(g,h,i)perylene	276	20.395	20.348	(1.182)	79367	0.53168	78.84
99 Perylene	252	17.328	17.296	(1.004)	681506	5.82199	863.3(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt12.i
Lab File ID: 04041105.d
Lab Smp Id: SN54EMSD
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem1/nt12.i/20110404.b/SIMPNA0331.m
Misc Info: 11-5929

Calibration Date: 04-APR-2011
Calibration Time: 11:18
Client Smp ID: LL-SED2-56-112-
Level: LOW
Sample Type: Sediment

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	494112	247056	988224	262660	-46.84
42 Acenaphthene-d10	280105	140052	560210	181702	-35.13
59 Phenanthrene-d10	461353	230676	922706	299869	-35.00
69 Chrysene-d12	503160	251580	1006320	326706	-35.07
77 Perylene-d12	442215	221108	884430	267412	-39.53

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	4.80	4.30	5.30	4.80	-0.06
42 Acenaphthene-d10	7.04	6.54	7.54	7.04	0.00
59 Phenanthrene-d10	8.98	8.48	9.48	8.98	-0.03
69 Chrysene-d12	13.60	13.10	14.10	13.61	0.07
77 Perylene-d12	17.23	16.73	17.73	17.26	0.17

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: FSI
Client SDG: SN54
Sample Matrix: SOLID
Fraction: SV
Lab Smp Id: SN54EMSD
Client Smp ID: LL-SED2-56-112- MSD
Level: LOW
Operator: JZ
Data Type: MS DATA
SampleType: MS
SpikeList File: pnalcss.spk
Quant Type: ISTD
Sublist File: pnax.sub
Method File: /chem1/nt12.i/20110404.b/SIMPNA0331.m
Misc Info: 11-5929

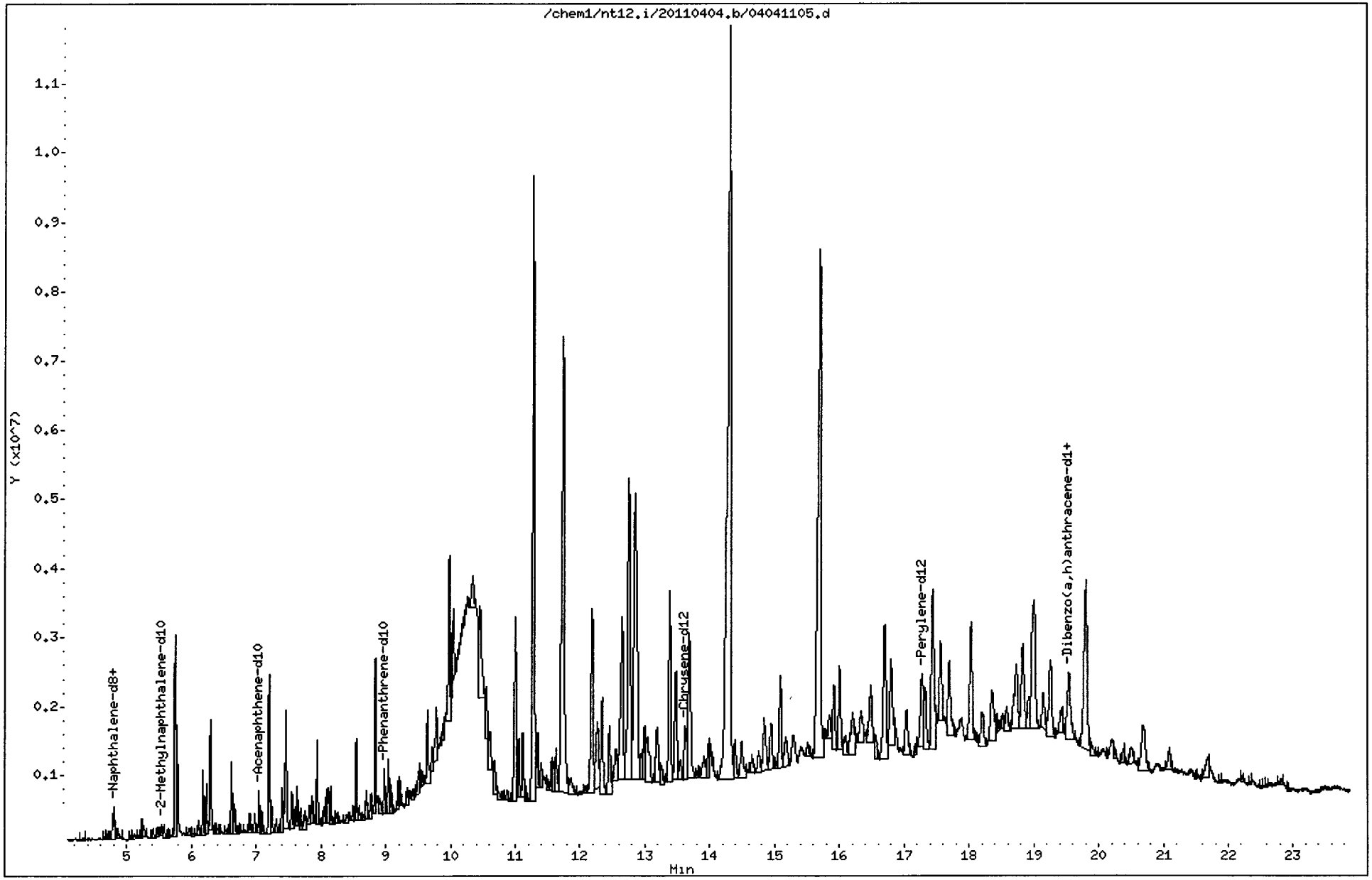
SPIKE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
28 Naphthalene	148.3	119.1	80.29	37-100
32 2-Methylnaphthalen	148.3	120.8	81.49	37-100
105 1-methylnaphthalen	148.3	396.1	267.13*	30-160
40 Acenaphthylene	148.3	105.5	71.13	35-100
44 Acenaphthene	148.3	118.6	79.99	39-100
46 Dibenzofuran	148.3	108.1	72.91	39-100
49 Fluorene	148.3	112.4	75.83	42-100
60 Phenanthrene	148.3	111.5	75.22	47-100
61 Anthracene	148.3	115.9	78.14	41-106
64 Fluoranthene	148.3	126.6	85.37	52-109
65 Pyrene	148.3	114.9	77.50	47-111
68 Benzo(a)anthracene	148.3	118.1	79.66	47-114
71 Chrysene	148.3	114.4	77.13	51-106
74 Benzo(b)fluoranthe	148.3	120.1	81.01	30-160
75 Benzo(k)fluoranthe	148.3	105.1	70.86	30-160
76 Benzo(a)pyrene	148.3	115.6	77.95	44-111
78 Indeno(1,2,3-cd)py	148.3	86.50	58.33	41-114
79 Dibenzo(a,h)anthra	148.3	93.55	63.09	42-118
80 Benzo(g,h,i)peryle	148.3	78.84	53.17	37-115
99 Perylene	148.3	863.3	582.20*	30-160

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	148.3	122.9	82.90	34-100
$ 191 Dibenzo(a,h)anthra	148.3	84.54	57.01	10-117

Data File: /chem1/nt12.i/20110404.b/04041105.d
Date : 04-APR-2011 13:05
Client ID: LL-SED2-56-112- MSD
Sample Info: SN54EMSD,3,
Volume Injected (uL): 1.0
Column phase: ZB35

Instrument: nt12.i
Operator: JZ
Column diameter: 0.32

SN54 00336



CO-ELUTION SUMMARY FOR FILE - 04041105.d

Lab ID: SN54EMSD, Method: SIMPNA0331.m, Instrument: nt12.i, Date: 04-APR-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt12.i/20110404.b/04041108.d
Lab Smp Id: SN54F Client Smp ID: LL-SED2-112-168-031
Inj Date : 04-APR-2011 15:08
Operator : JZ Inst ID: nt12.i
Smp Info : SN54F,3,
Misc Info : 11-5930
Comment : 1ul Injection
Method : /chem1/nt12.i/20110404.b/SIMPNA0331.m
Meth Date : 05-Apr-2011 17:45 jianqing Quant Type: ISTD
Cal Date : 31-MAR-2011 22:47 Cal File: 03311107.d
Als bottle: 9
Dil Factor: 3.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

04/05/11

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

Name	Value	Description
DF	3.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Ws	82.03000	Weight of sample extracted (g)
M	87.70000	% Moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
* 27 Naphthalene-d8	136	4.804	4.803	(1.000)	223462	2.00000	
28 Naphthalene	128	4.829	4.832	(1.005)	5708	0.05290	7.865
$ 190 2-Methylnaphthalene-d10	152	5.542	5.542	(1.154)	57483	0.84135	125.1
32 2-Methylnaphthalene	141	Compound Not Detected.					
105 1-methylnaphthalene	141	5.785	5.775	(1.204)	64930	1.01755	151.3
40 Acenaphthylene	152	Compound Not Detected.					
* 42 Acenaphthene-d10	164	7.047	7.044	(1.000)	148879	2.00000	
44 Acenaphthene	153	Compound Not Detected.					
46 Dibenzofuran	168	Compound Not Detected.					
49 Fluorene	166	Compound Not Detected.					
* 59 Phenanthrene-d10	188	8.985	8.981	(1.000)	248837	2.00000	
60 Phenanthrene	178	Compound Not Detected.					
61 Anthracene	178	Compound Not Detected.					
64 Fluoranthene	202	10.682	10.673	(1.189)	8540	0.05980	8.891
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	13.620	13.604	(1.000)	266485	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	17.268	17.230	(1.000)	175502	2.00000	
78	Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
$ 191	Dibenzo(a,h)anthracene-d14	292	19.509	19.470	(1.130)	52890	0.64223	95.48
79	Dibenzo(a,h)anthracene	278	Compound Not Detected.					
80	Benzo(g,h,i)perylene	276	Compound Not Detected.					
99	Perylene	252	17.341	17.296	(1.004)	283471	3.68986	548.6

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt12.i
Lab File ID: 04041108.d
Lab Smp Id: SN54F
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem1/nt12.i/20110404.b/SIMPNA0331.m
Misc Info: 11-5930

Calibration Date: 04-APR-2011
Calibration Time: 11:18
Client Smp ID: LL-SED2-112-168-
Level: LOW
Sample Type: Sediment

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF	
27 Naphthalene-d8	494112	247056	988224	223462	-54.78	NR. <-
42 Acenaphthene-d10	280105	140052	560210	148879	-46.85	
59 Phenanthrene-d10	461353	230676	922706	248837	-46.06	
69 Chrysene-d12	503160	251580	1006320	266485	-47.04	
77 Perylene-d12	442215	221108	884430	175502	-60.31	<-

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	7.04	6.54	7.54	7.05	0.05
59 Phenanthrene-d10	8.98	8.48	9.48	8.98	0.04
69 Chrysene-d12	13.60	13.10	14.10	13.62	0.12
77 Perylene-d12	17.23	16.73	17.73	17.27	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
Client SDG: SN54
Sample Matrix: SOLID
Fraction: SV
Lab Smp Id: SN54F
Client Smp ID: LL-SED2-112-168-031
Level: LOW
Operator: JZ
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: pnalcss.spk
Quant Type: ISTD
Sublist File: pnax.sub
Method File: /chem1/nt12.i/20110404.b/SIMPNA0331.m
Misc Info: 11-5930

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	148.7	125.1	84.14	34-100
$ 191 Dibenzo(a,h)anthra	148.7	95.48	64.22	10-117

Data File: /chem1/nt12.i/20110404.b/04041108.d

Date : 04-APR-2011 15:08

Client ID: LL-SED2-112-168-031

Instrument: nt12.i

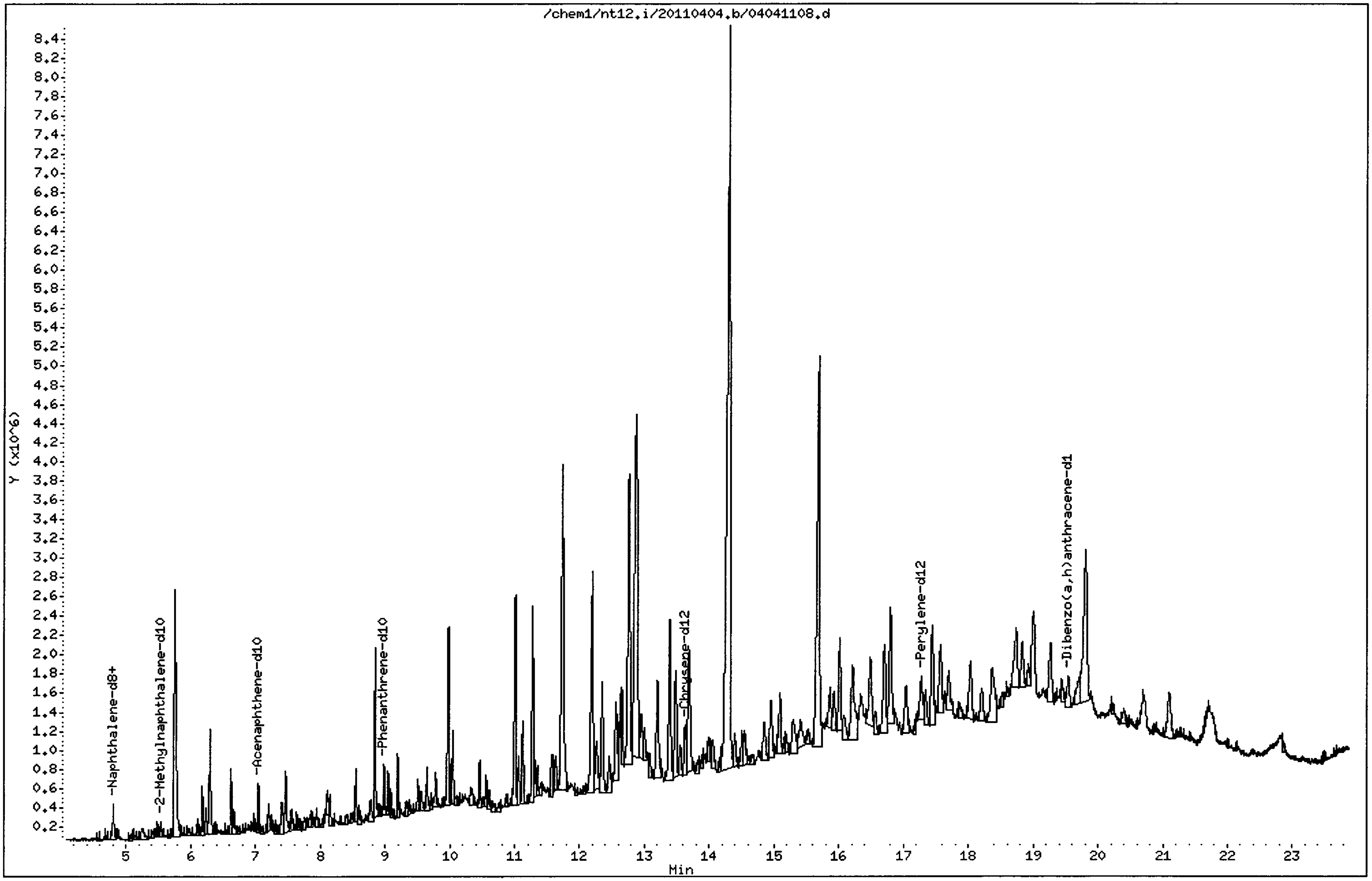
Sample Info: SN54F,3,

Volume Injected (uL): 1.0

Operator: JZ

Column phase: ZB35

Column diameter: 0.32



SN54 : 00342

Data File: /chem1/nt12.i/20110404.b/04041108.d

Date : 04-APR-2011 15:08

Client ID: LL-SED2-112-168-031

Instrument: nt12.i

Sample Info: SN54F,3,

Volume Injected (uL): 1.0

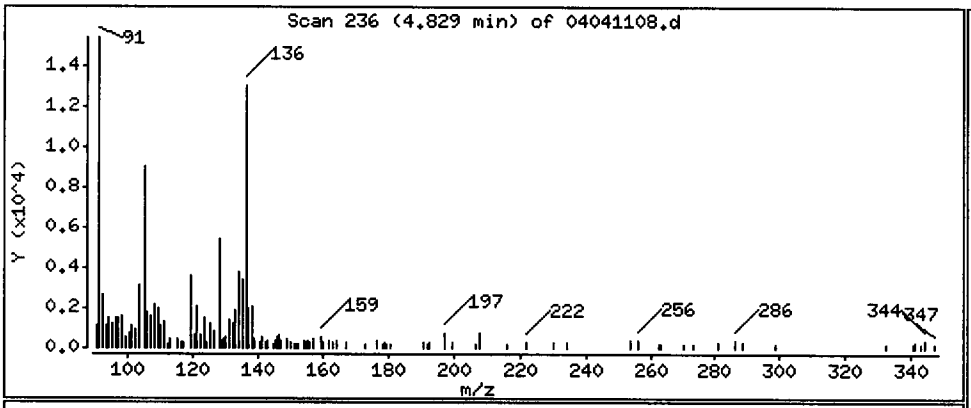
Operator: JZ

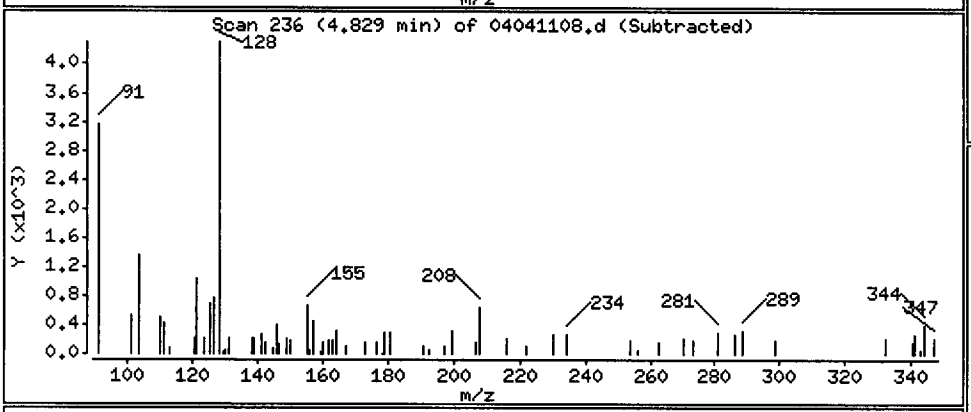
Column phase: ZB35

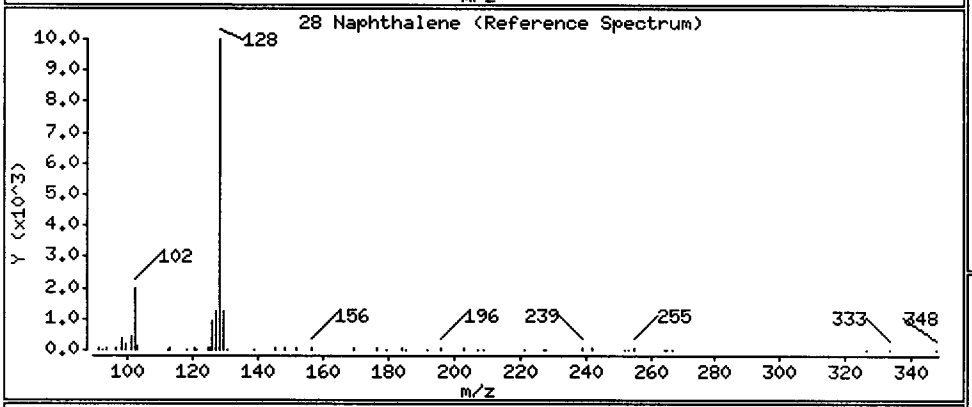
Column diameter: 0.32

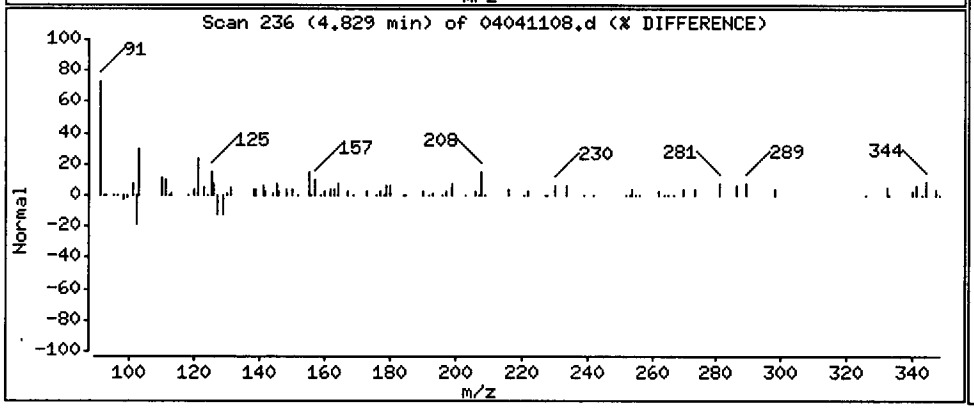
28 Naphthalene

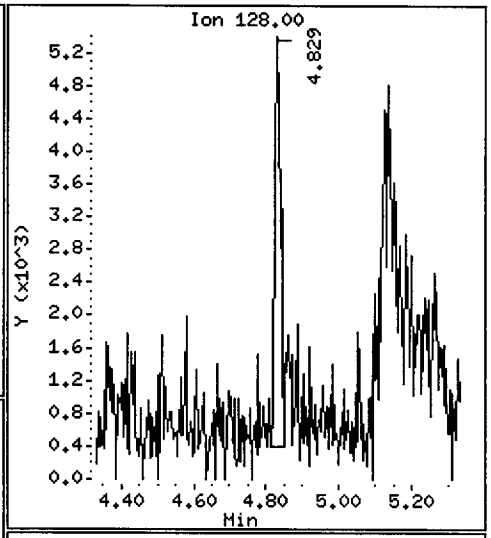
Concentration: 7.865 ug/kg

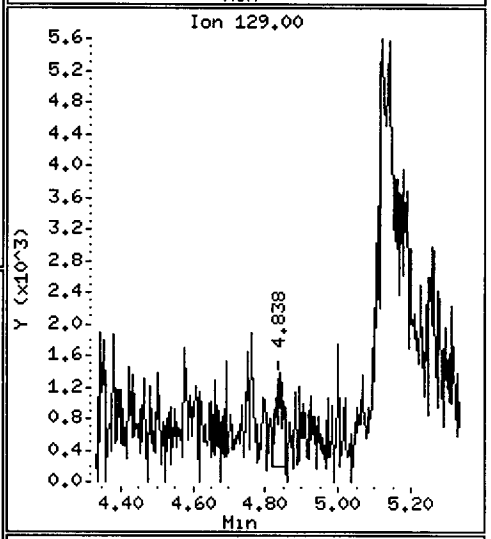


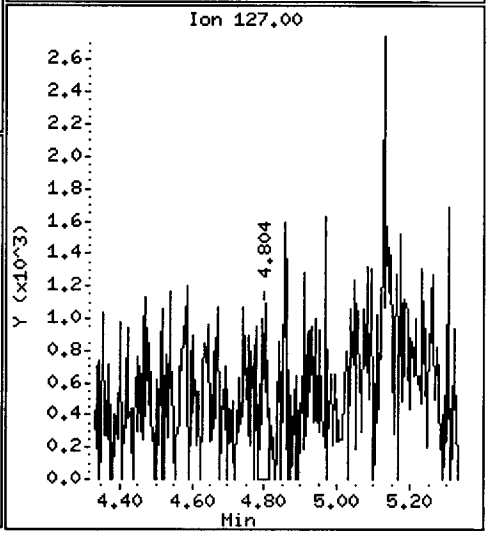












Data File: /chem1/nt12.i/20110404.b/04041108.d

Date : 04-APR-2011 15:08

Client ID: LL-SED2-112-168-031

Instrument: nt12.i

Sample Info: SN54F,3,

Volume Injected (uL): 1.0

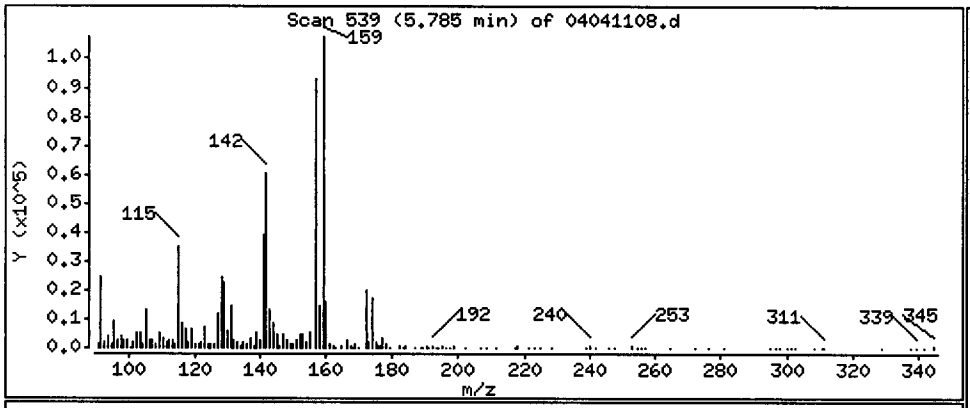
Operator: JZ

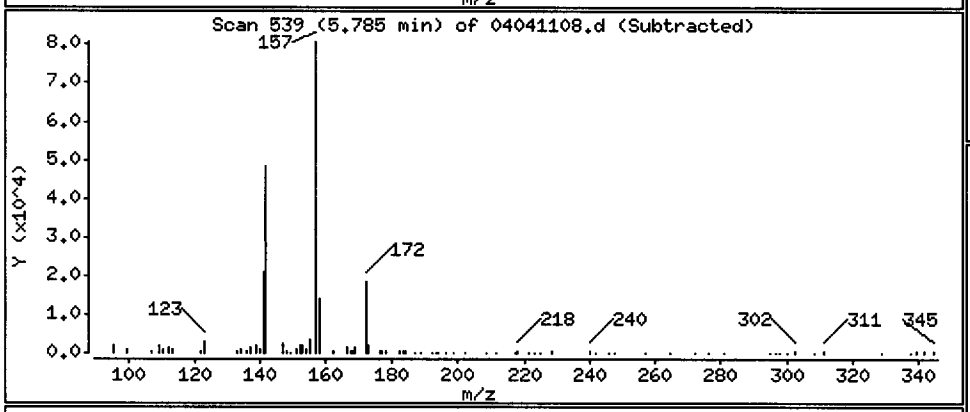
Column phase: ZB35

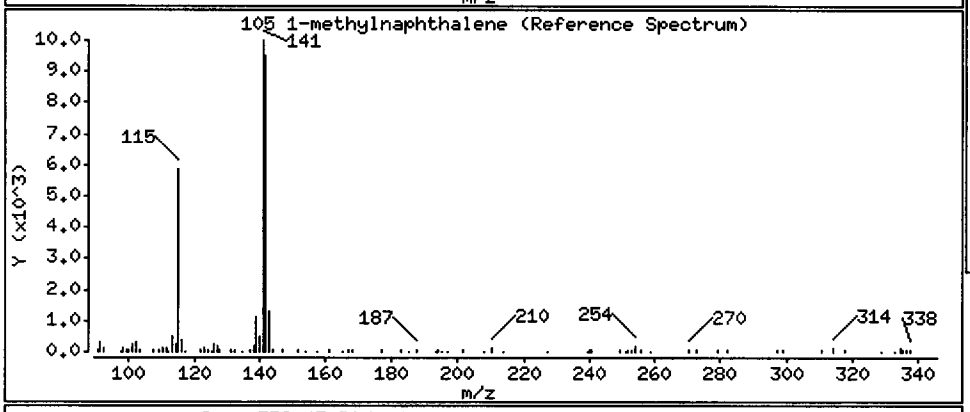
Column diameter: 0.32

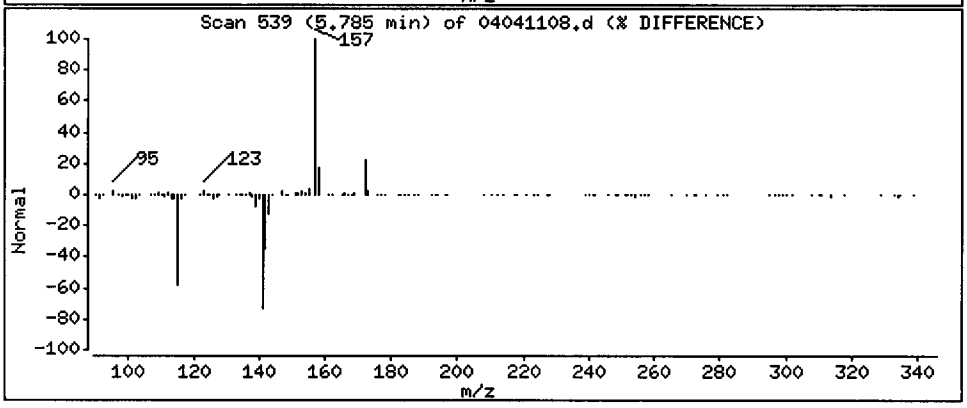
105 1-methylnaphthalene

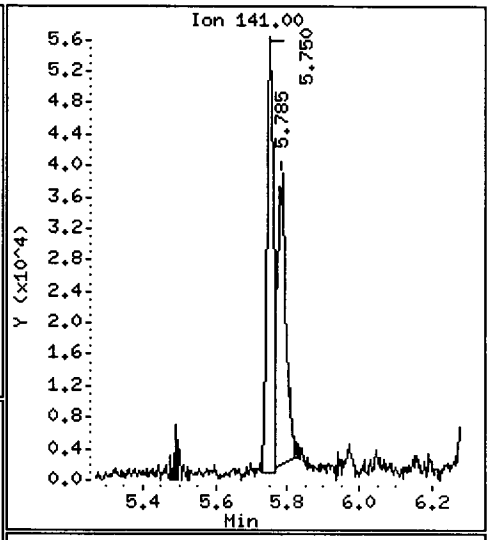
Concentration: 151.3 ug/kg

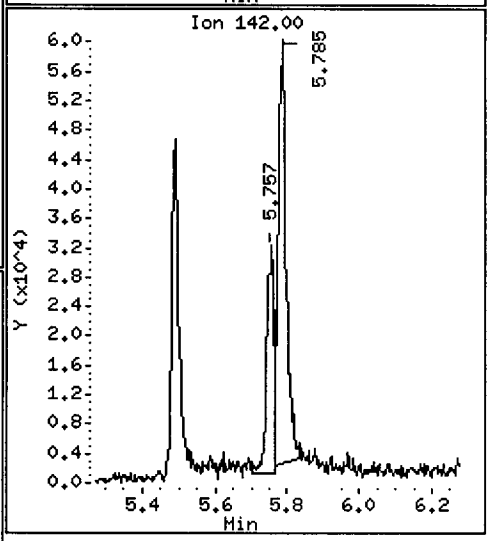












Data File: /chem1/nt12.i/20110404.b/04041108.d

Date : 04-APR-2011 15:08

Client ID: LL-SED2-112-168-031

Instrument: nt12.i

Sample Info: SN54F,3,

Volume Injected (uL): 1.0

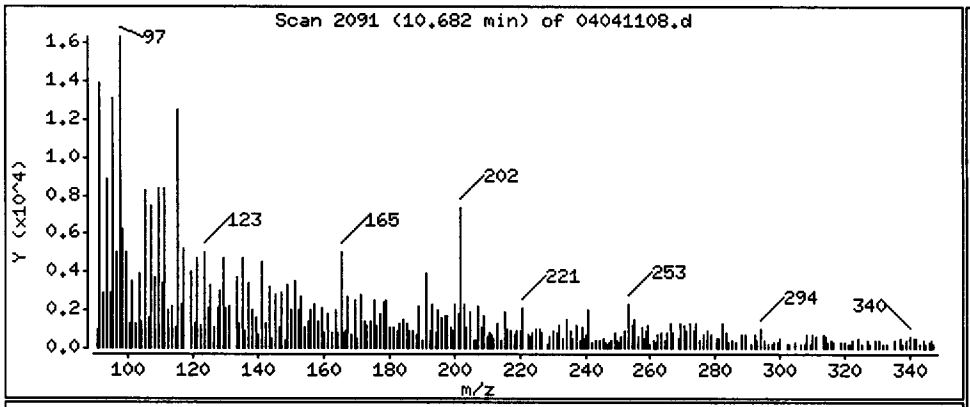
Operator: JZ

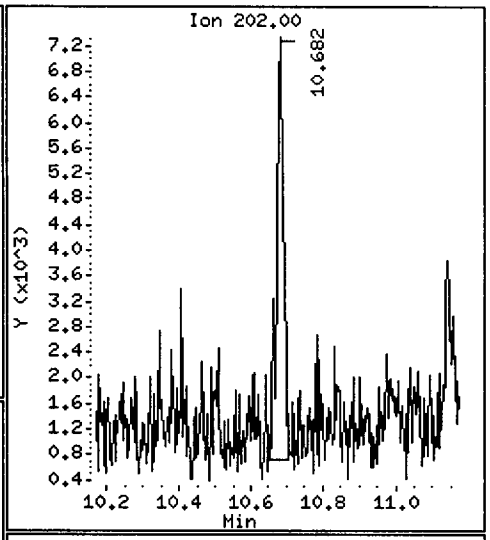
Column phase: ZB35

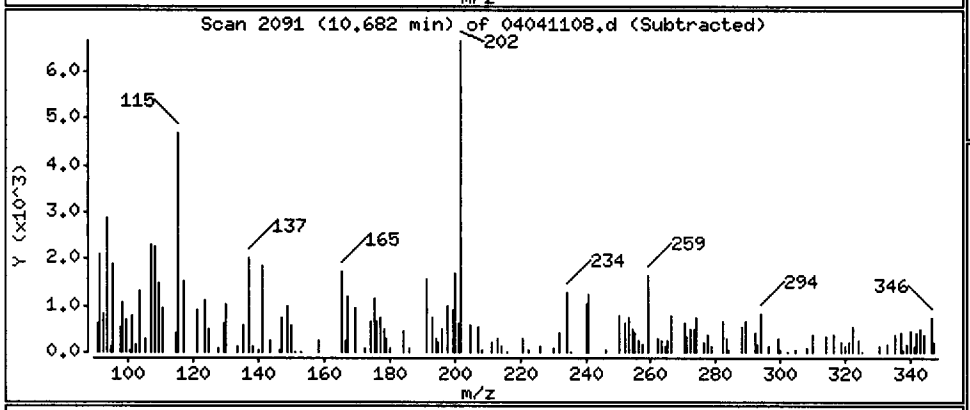
Column diameter: 0.32

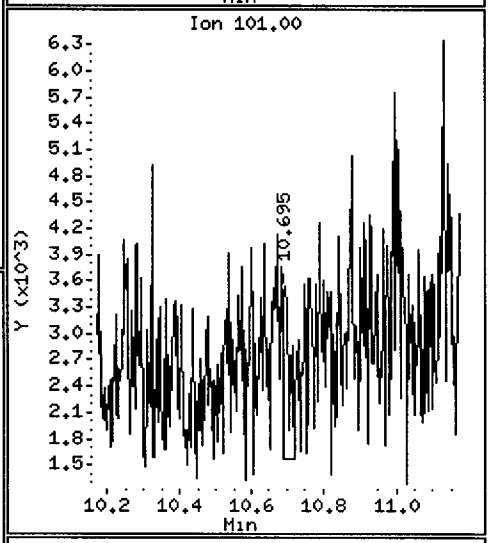
64 Fluoranthene

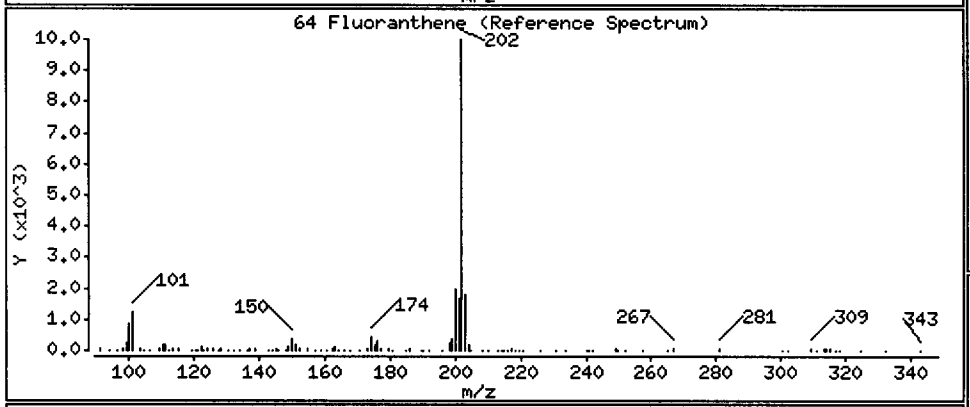
Concentration: 8.891 ug/kg

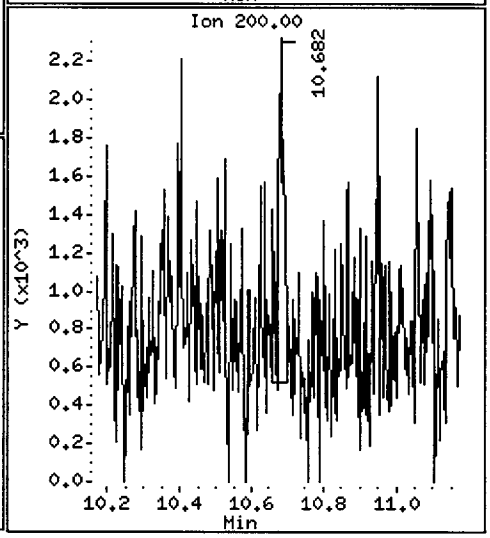


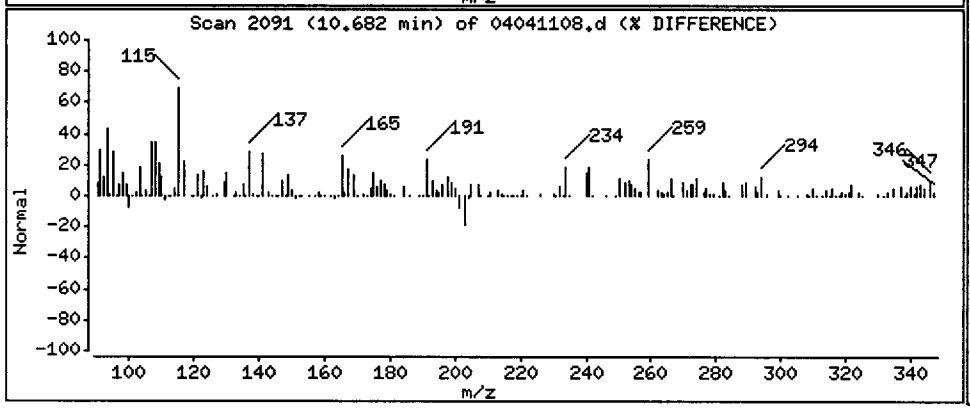












Data File: /chem1/nt12.i/20110404.b/04041108.d

Date : 04-APR-2011 15:08

Client ID: LL-SED2-112-168-031

Instrument: nt12.i

Sample Info: SN54F,3,

Volume Injected (uL): 1.0

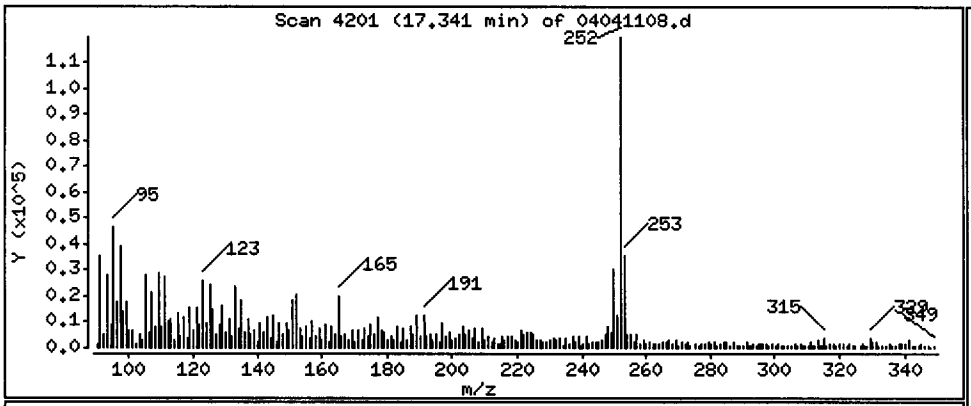
Operator: JZ

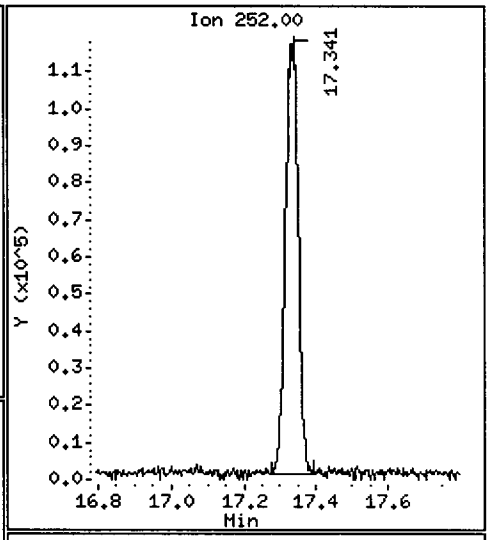
Column phase: ZB35

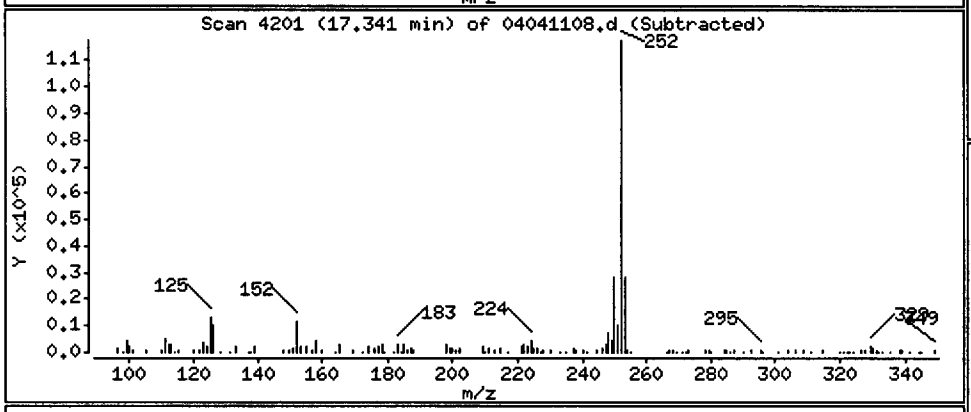
Column diameter: 0.32

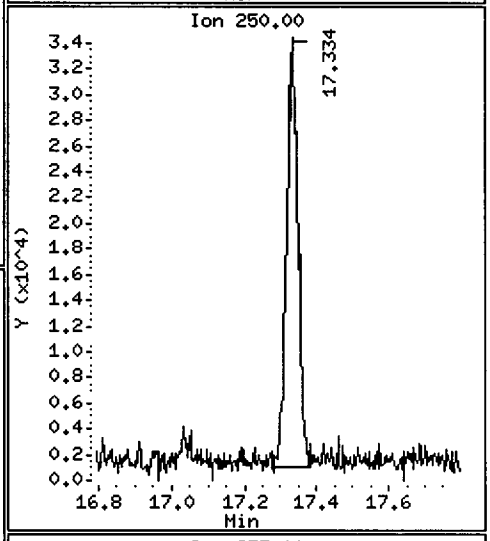
99 Perylene

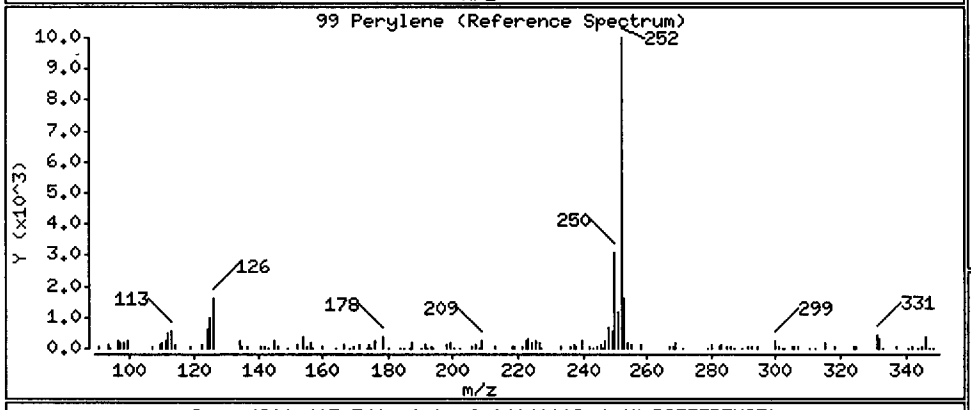
Concentration: 548.6 ug/kg

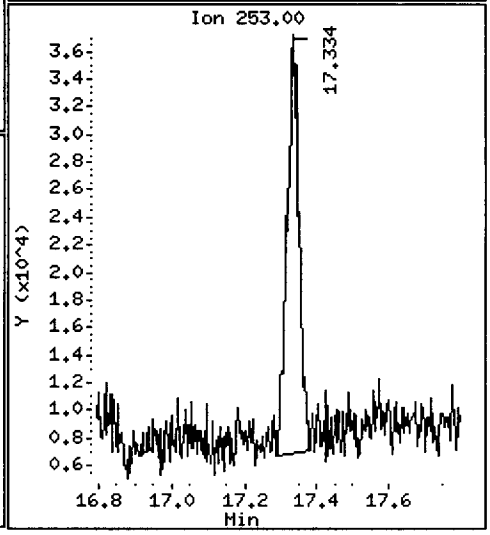


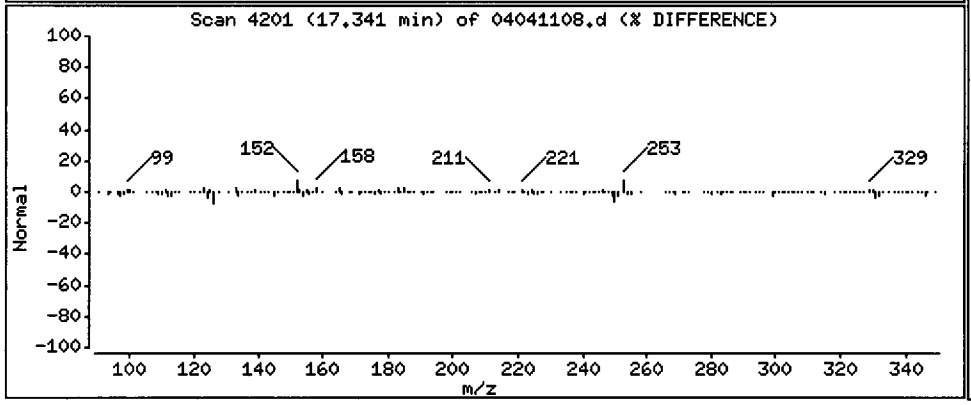












CO-ELUTION SUMMARY FOR FILE - 04041108.d

Lab ID: SN54F, Method: SIMPNA0331.m, Instrument: nt12.i, Date: 04-APR-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt12.i/20110404.b/04041109.d
Lab Smp Id: SN54G Client Smp ID: LL-SED2-0-56-031511
Inj Date : 04-APR-2011 15:36
Operator : JZ Inst ID: nt12.i
Smp Info : SN54G
Misc Info : 11-5931
Comment : 1ul Injection
Method : /chem1/nt12.i/20110404.b/SIMPNA0331.m
Meth Date : 05-Apr-2011 17:45 jianqing Quant Type: ISTD
Cal Date : 31-MAR-2011 22:47 Cal File: 03311107.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

04/05/11

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	19.03000	Weight of sample extracted (g)
M	88.70000	% 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	4.800	4.803	(1.000)	210690	2.00000	
28 Naphthalene	128	4.829	4.832	(1.006)	12638	0.12423	28.88
$ 190 2-Methylnaphthalene-d10	152	5.542	5.542	(1.154)	145113	2.25269	523.8
32 2-Methylnaphthalene	141	5.583	5.583	(1.163)	5897	0.10431	24.25
105 1-methylnaphthalene	141	5.785	5.775	(1.205)	71317	1.18539	275.6
40 Acenaphthylene	152	Compound Not Detected.					
* 42 Acenaphthene-d10	164	7.044	7.044	(1.000)	140224	2.00000	
44 Acenaphthene	153	7.091	7.091	(1.007)	10120	0.13241	30.79
46 Dibenzofuran	168	7.239	7.236	(1.028)	10529	0.10132	23.56
49 Fluorene	166	7.694	7.691	(1.092)	17265	0.20178	46.92
* 59 Phenanthrene-d10	188	8.988	8.981	(1.000)	232179	2.00000	
60 Phenanthrene	178	9.016	9.013	(1.003)	115186	0.94001	218.6
61 Anthracene	178	9.051	9.044	(1.007)	21910	0.17808	41.41
64 Fluoranthene	202	10.726	10.673	(1.193)	516554	3.87668	901.4
65 Pyrene	202	11.190	11.137	(0.819)	576317	3.65823	850.6

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
68	Benzo(a)anthracene	228	13.547	13.491	(0.992)	164746	1.17118	272.3
* 69	Chrysene-d12	240	13.661	13.604	(1.000)	292600	2.00000	
71	Chrysene	228	13.724	13.671	(1.005)	367464	2.67283	621.5
74	Benzo(b)fluoranthene	252	16.160	16.078	(0.934)	245496	2.50652	582 8
75	Benzo(k)fluoranthene	252	16.214	16.132	(0.937)	110259	1.07318	249.5(H)
188	Benzo(j)fluoranthene	252	16.283	16.208	(0.941)	111071	1.13140	263.1(H)
76	Benzo(a)pyrene	252	17.101	17.025	(0.988)	155745	1.73196	402.7(H)
* 77	Perylene-d12	264	17.306	17.230	(1.000)	173734	2.00000	
78	Indeno(1,2,3-cd)pyrene	276	19.625	19.537	(1.134)	132742	1.21396	282.3
$ 191	Dibenzo(a,h)anthracene-d14	292	19.553	19.470	(1.130)	144378	1.77097	411.8
79	Dibenzo(a,h)anthracene	278	19.631	19.553	(1.134)	28576	0.31956	74.30(M)
80	Benzo(g,h,i)perylene	276	20.449	20.348	(1.182)	145273	1.49793	348.3(M)
99	Perylene	252	17.378	17.296	(1.004)	252490	3.32003	772.0

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt12.i
Lab File ID: 04041109.d
Lab Smp Id: SN54G
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem1/nt12.i/20110404.b/SIMPNA0331.m
Misc Info: 11-5931

Calibration Date: 04-APR-2011
Calibration Time: 11:18
Client Smp ID: LL-SED2-0-56-031
Level: LOW
Sample Type: Sediment

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF	
27 Naphthalene-d8	494112	247056	988224	210690	-57.36	<-
42 Acenaphthene-d10	280105	140052	560210	140224	-49.94	
59 Phenanthrene-d10	461353	230676	922706	232179	-49.67	
69 Chrysene-d12	503160	251580	1006320	292600	-41.85	
77 Perylene-d12	442215	221108	884430	173734	-60.71	<-

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	7.04	6.54	7.54	7.04	0.00
59 Phenanthrene-d10	8.98	8.48	9.48	8.99	0.07
69 Chrysene-d12	13.60	13.10	14.10	13.66	0.42
77 Perylene-d12	17.23	16.73	17.73	17.31	0.44

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.

04/05/11

Analytical Resources, Inc.

RECOVERY REPORT

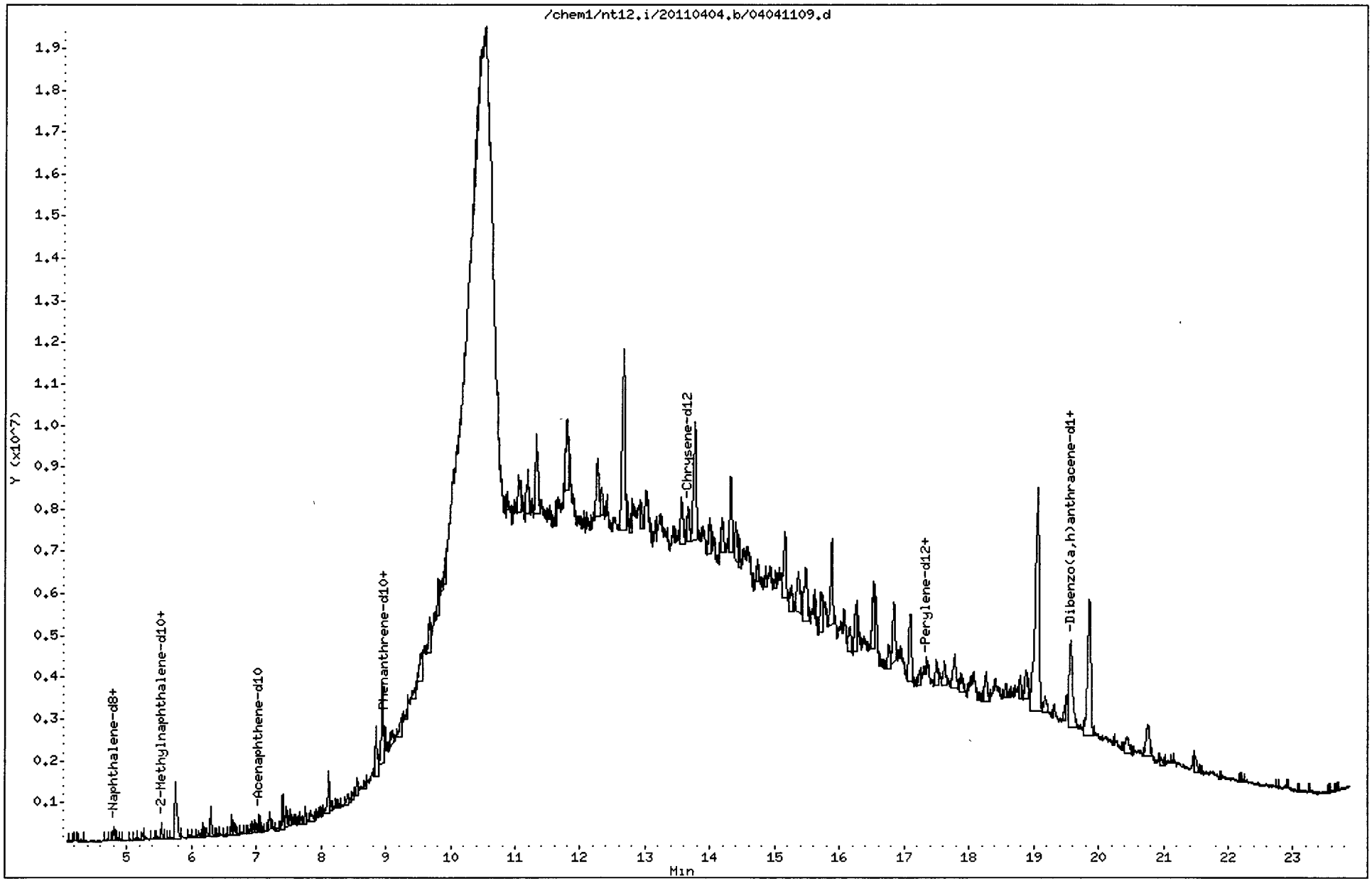
Client Name: Floyd Snider
Client SDG: SN54
Sample Matrix: SOLID
Fraction: SV
Lab Smp Id: SN54G
Client Smp ID: LL-SED2-0-56-031511
Level: LOW
Operator: JZ
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: pnalcss.spk
Quant Type: ISTD
Sublist File: pnax.sub
Method File: /chem1/nt12.i/20110404.b/SIMPNA0331.m
Misc Info: 11-5931

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	697.5	523.8	75.09	34-100
$ 191 Dibenzo(a,h)anthra	697.5	411.8	59.03	10-117

Data File: /chem1/nt12.i/20110404.b/04041109.d
Date : 04-APR-2011 15:36
Client ID: LL-SED2-0-56-031511
Sample Info: SN54G
Volume Injected (uL): 1.0
Column phase: ZB35

Instrument: nt12.i
Operator: JZ
Column diameter: 0.32

SN54 99352



Data File: /chem1/nt12.i/20110404.b/04041109.d

Date : 04-APR-2011 15:36

Client ID: LL-SED2-0-56-031511

Instrument: nt12.i

Sample Info: SN54G

Volume Injected (uL): 1.0

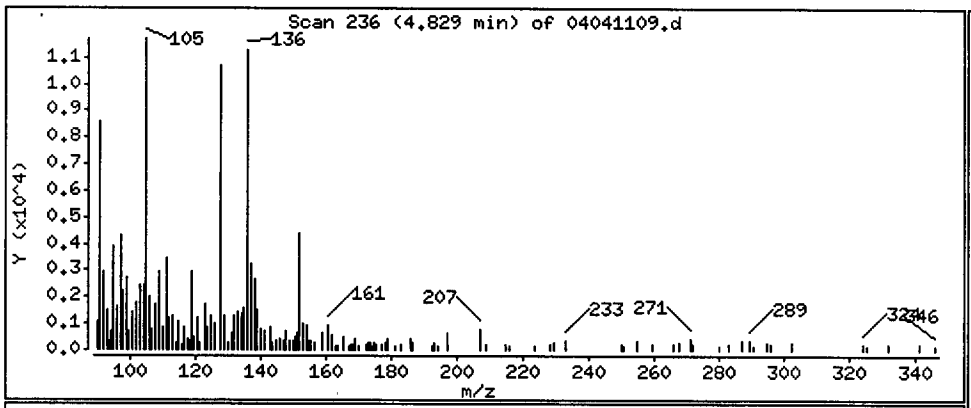
Operator: JZ

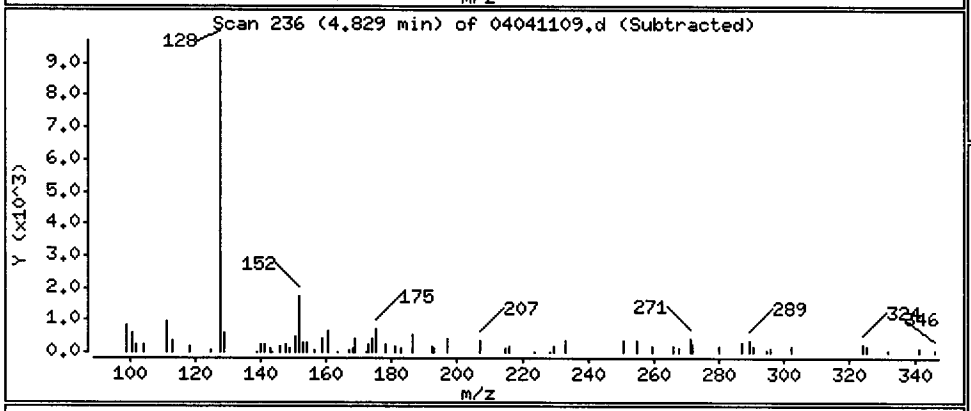
Column phase: ZB35

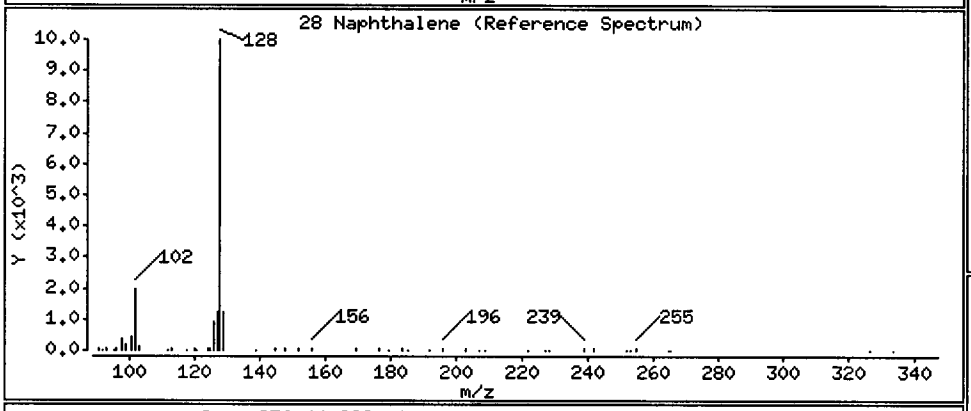
Column diameter: 0.32

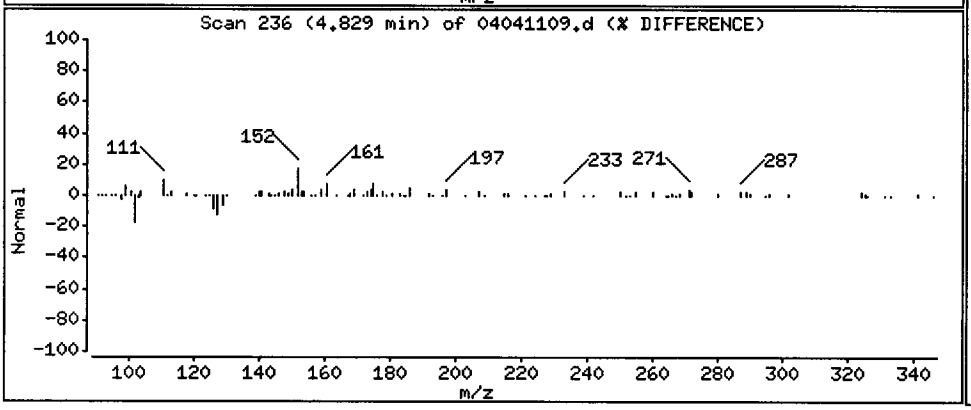
28 Naphthalene

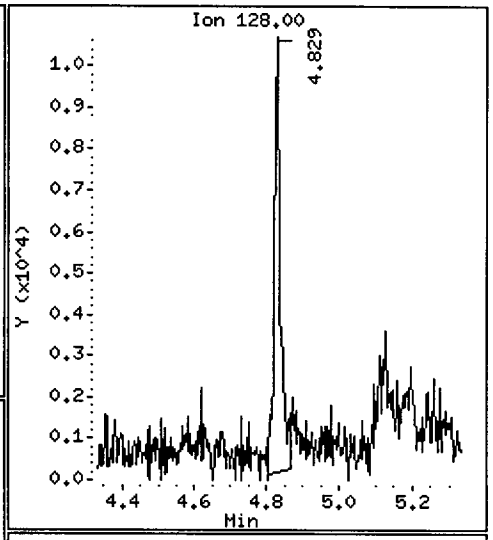
Concentration: 28.88 ug/kg

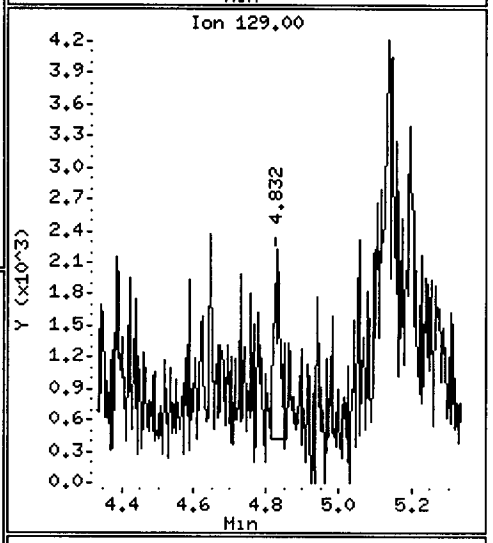


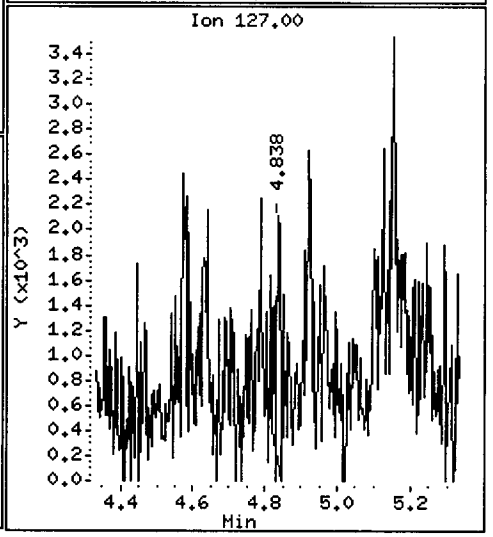












Data File: /chem1/nt12.i/20110404.b/04041109.d

Date : 04-APR-2011 15:36

Client ID: LL-SED2-0-56-031511

Instrument: nt12.i

Sample Info: SN54G

Volume Injected (uL): 1.0

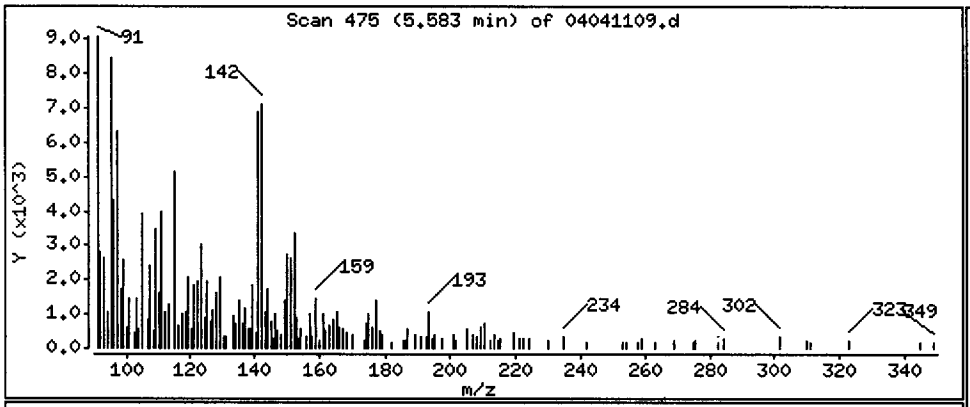
Operator: JZ

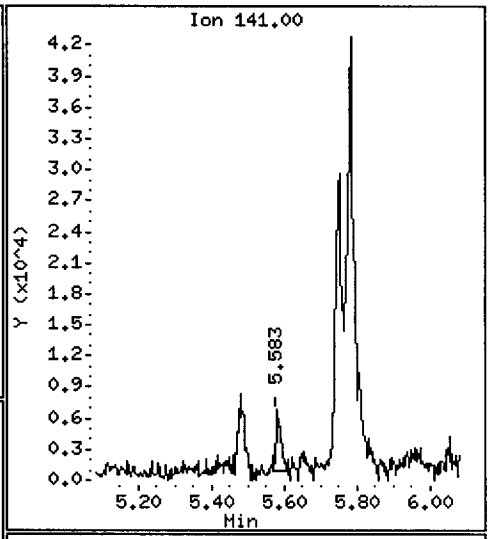
Column phase: ZB35

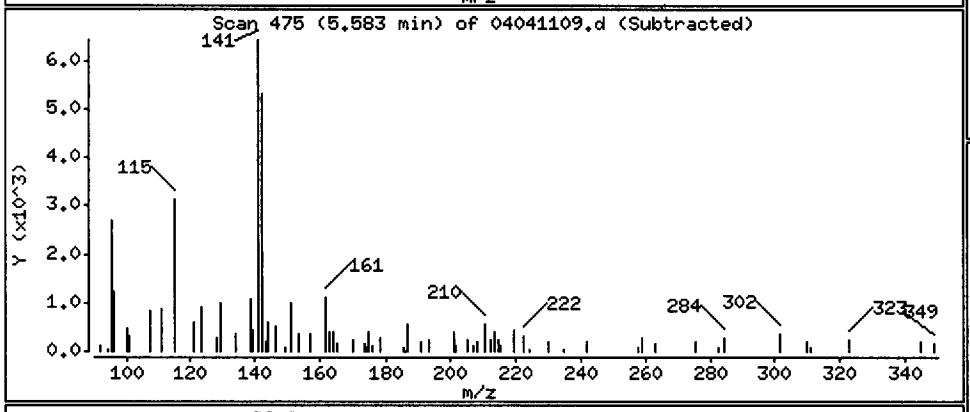
Column diameter: 0.32

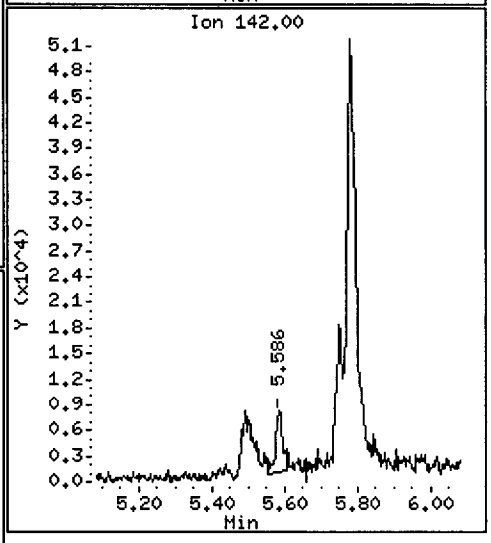
32 2-Methylnaphthalene

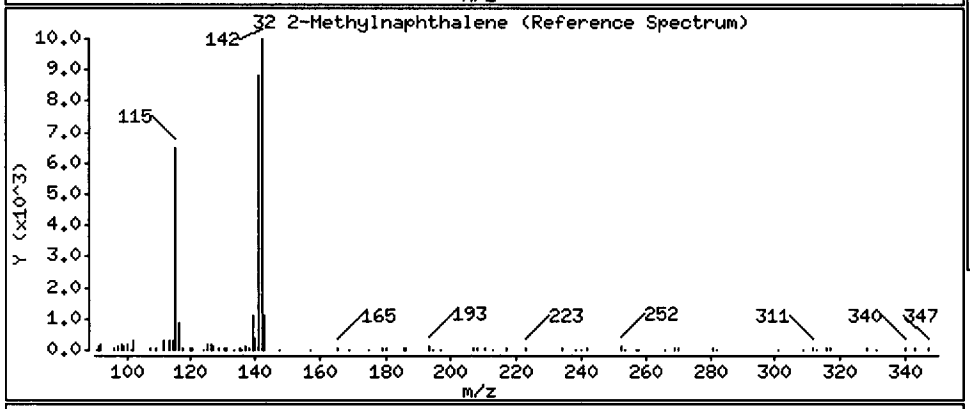
Concentration: 24.25 ug/kg

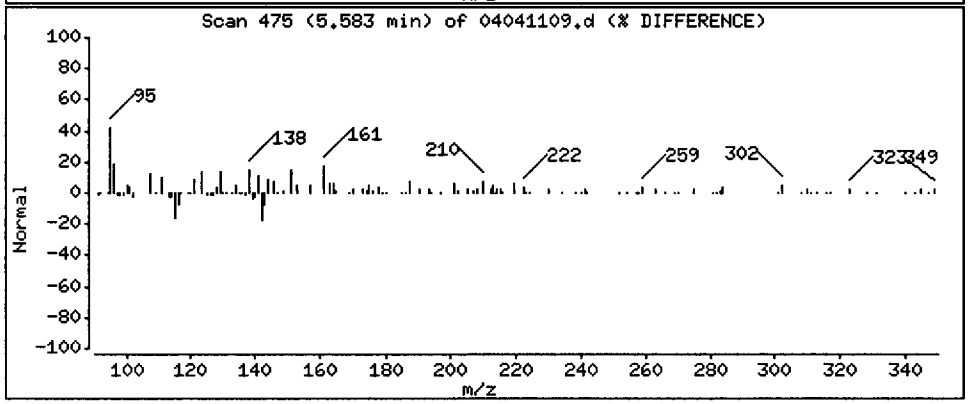












Data File: /chem1/nt12.i/20110404.b/04041109.d

Date : 04-APR-2011 15:36

Client ID: LL-SED2-0-56-031511

Instrument: nt12.i

Sample Info: SN54G

Volume Injected (uL): 1.0

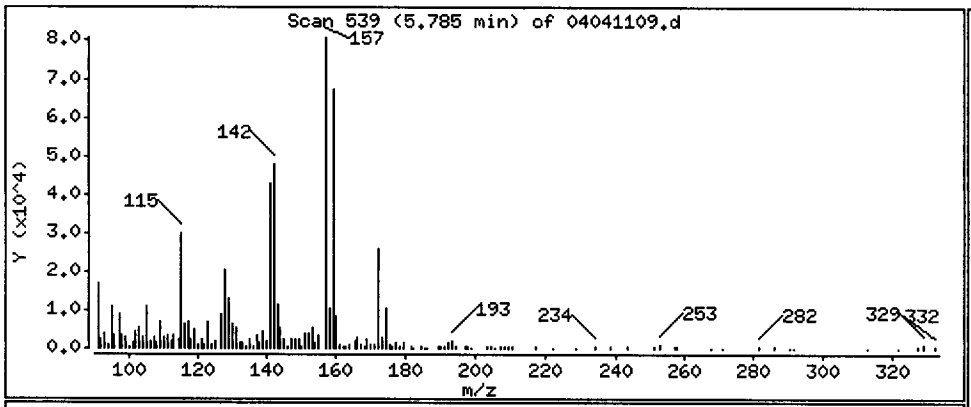
Operator: JZ

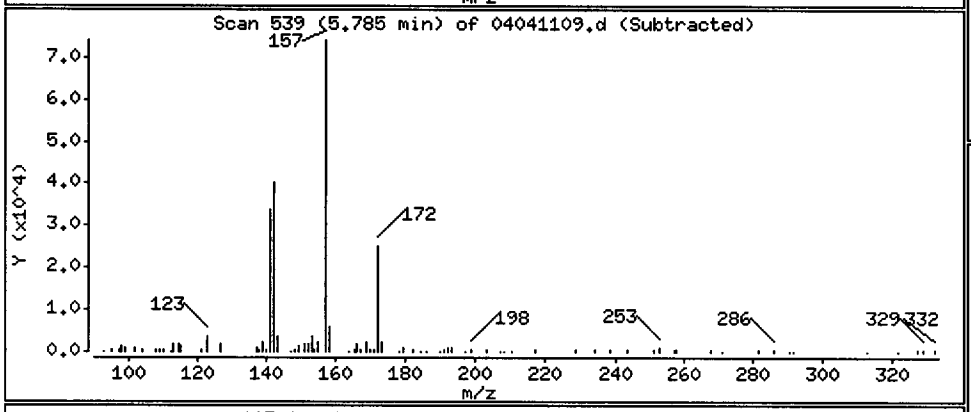
Column phase: ZB35

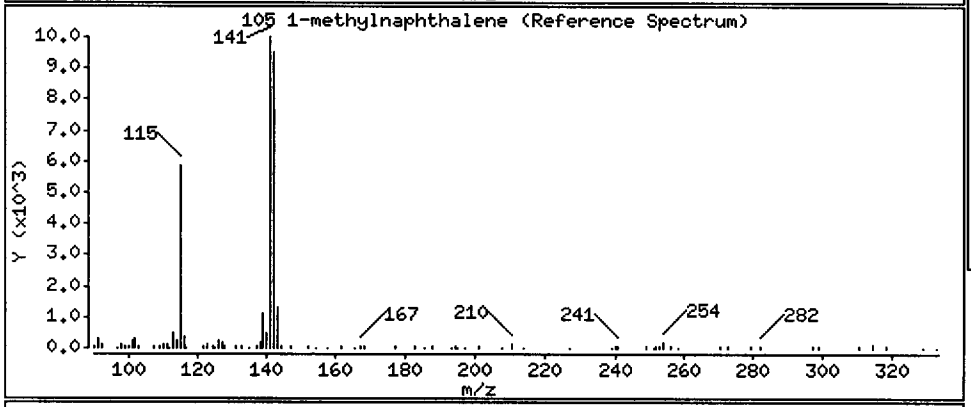
Column diameter: 0.32

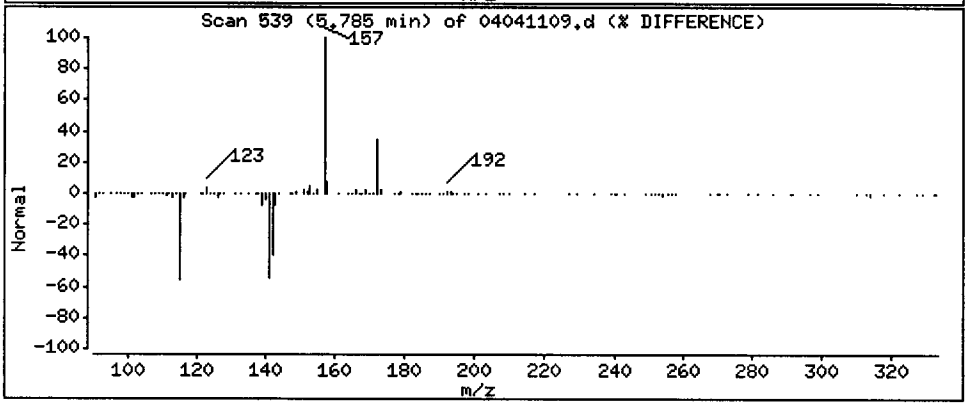
105 1-methylnaphthalene

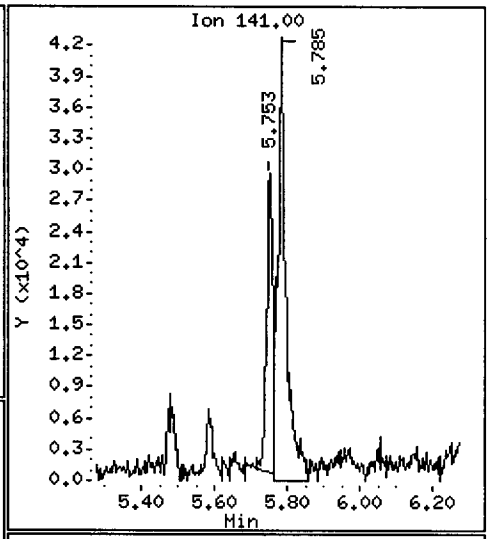
Concentration: 275.6 ug/kg

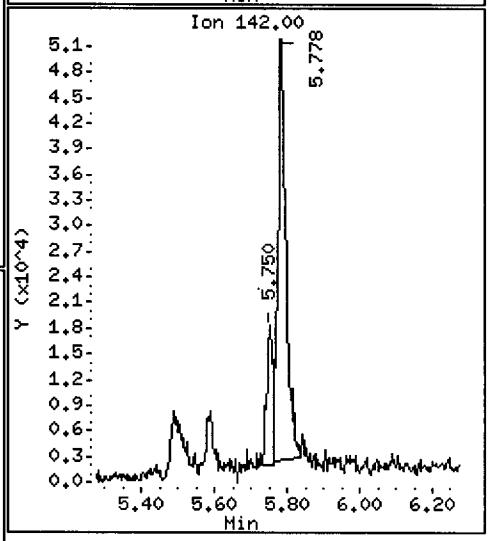












Data File: /chem1/nt12.i/20110404.b/04041109.d

Date : 04-APR-2011 15:36

Client ID: LL-SED2-0-56-031511

Instrument: nt12.i

Sample Info: SN54G

Volume Injected (uL): 1.0

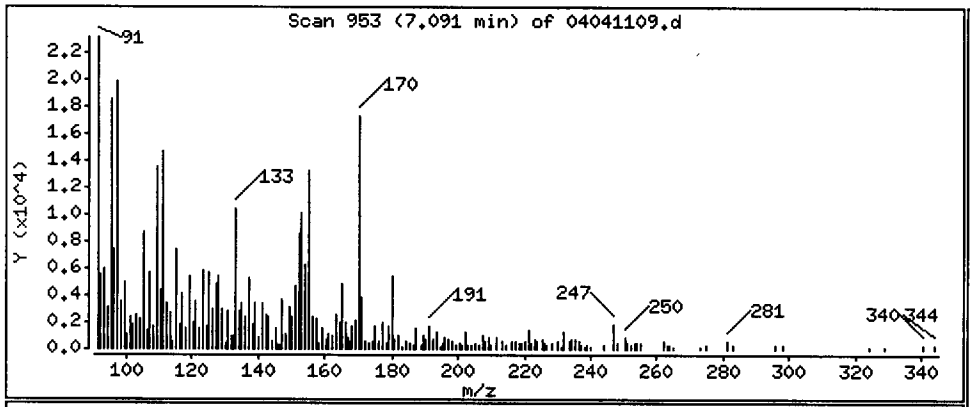
Operator: JZ

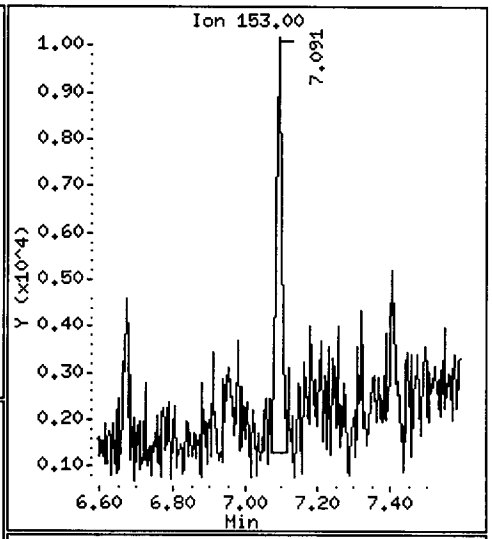
Column phase: ZB35

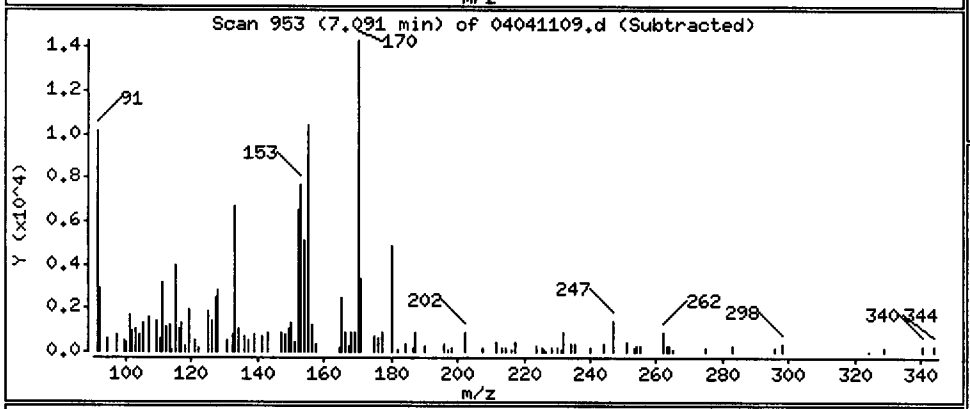
Column diameter: 0.32

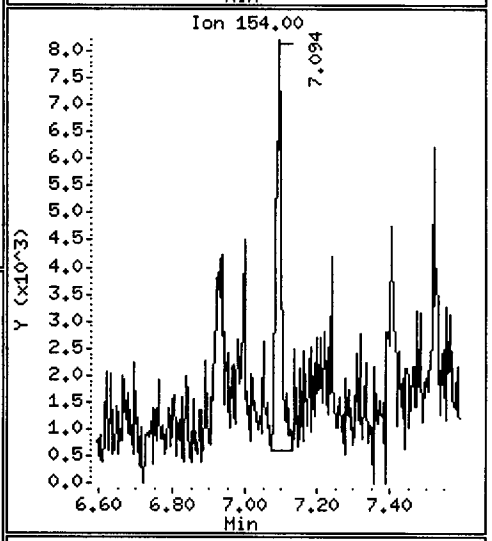
44 Acenaphthene

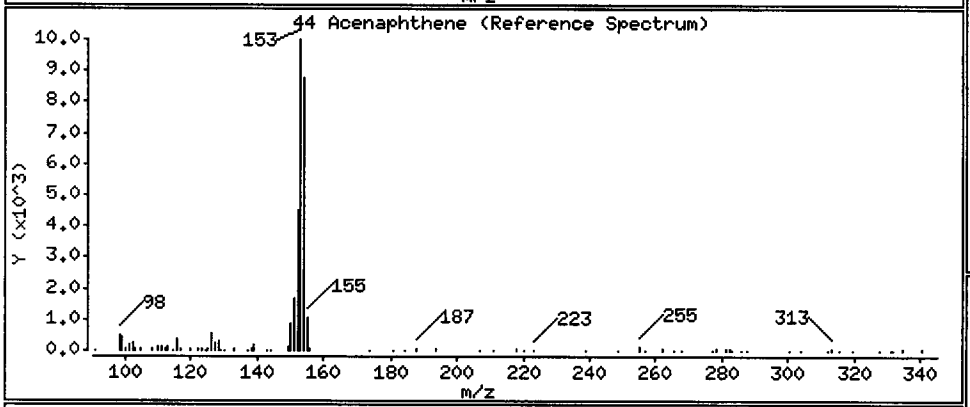
Concentration: 30.79 ug/kg

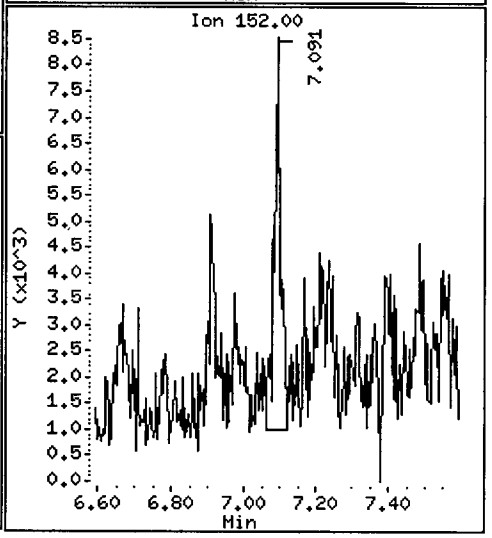


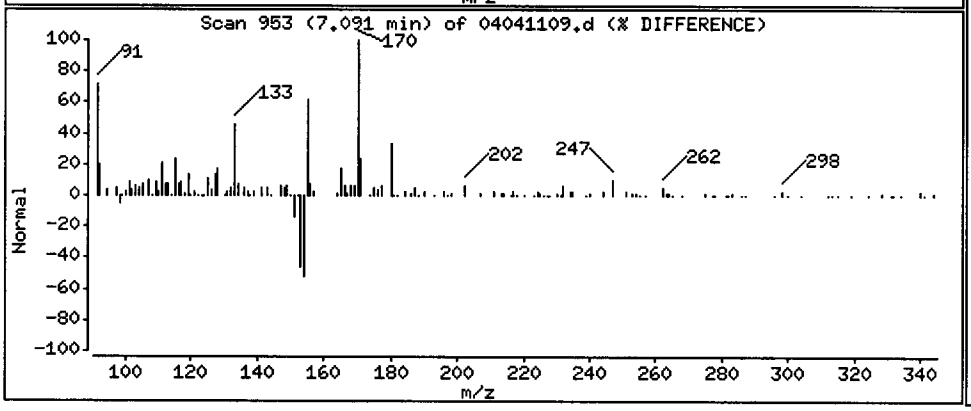












Data File: /chem1/nt12.i/20110404.b/04041109.d

Date : 04-APR-2011 15:36

Client ID: LL-SED2-0-56-031511

Instrument: nt12.i

Sample Info: SN54G

Volume Injected (uL): 1.0

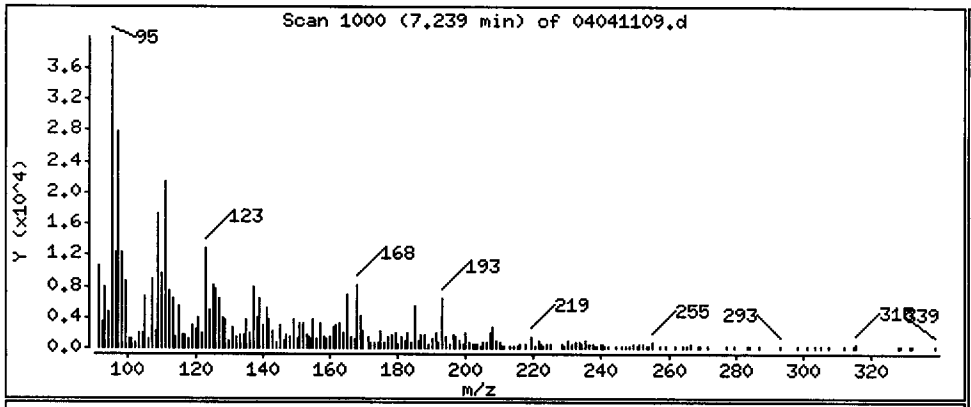
Operator: JZ

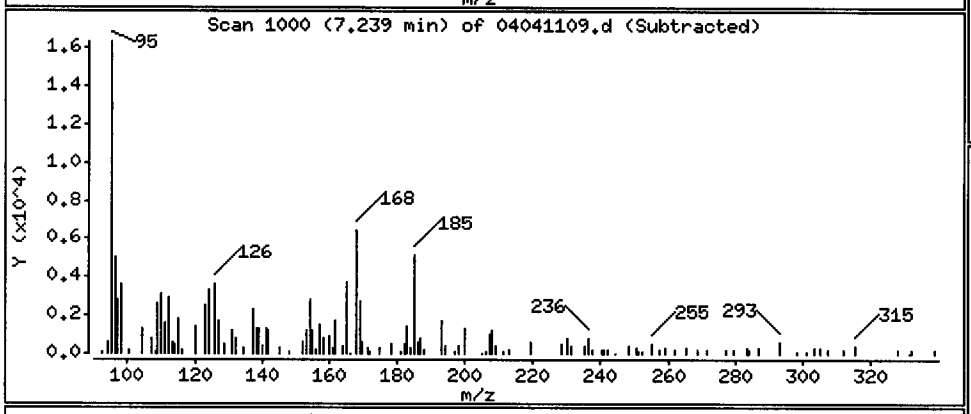
Column phase: ZB35

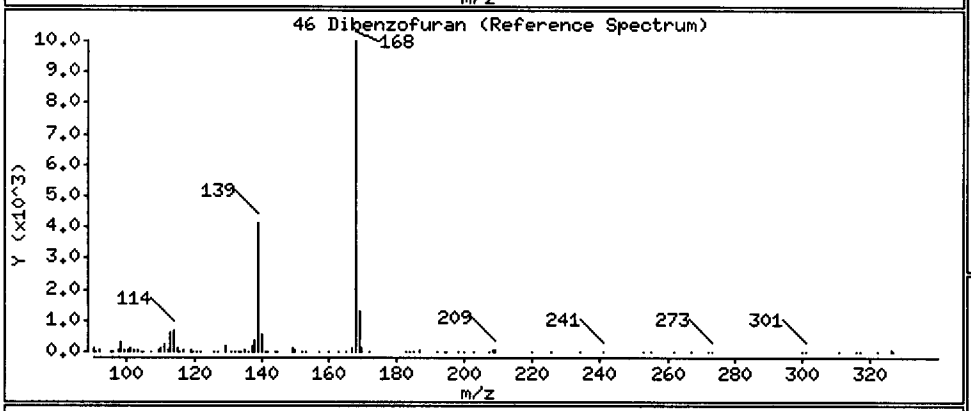
Column diameter: 0.32

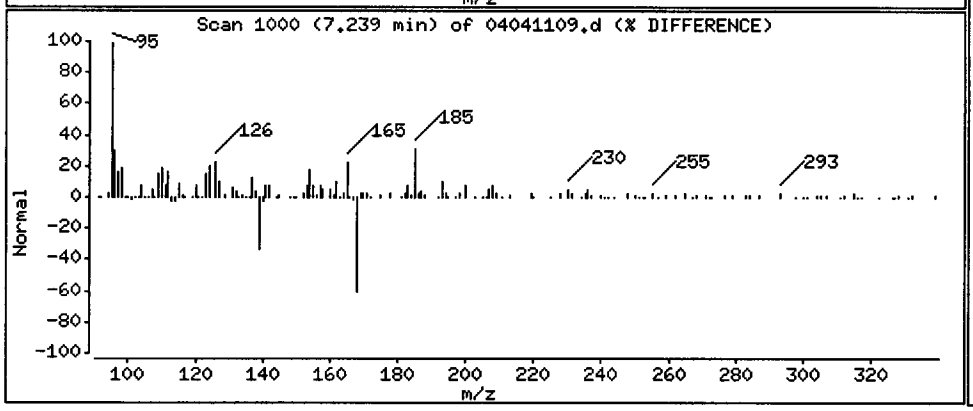
46 Dibenzofuran

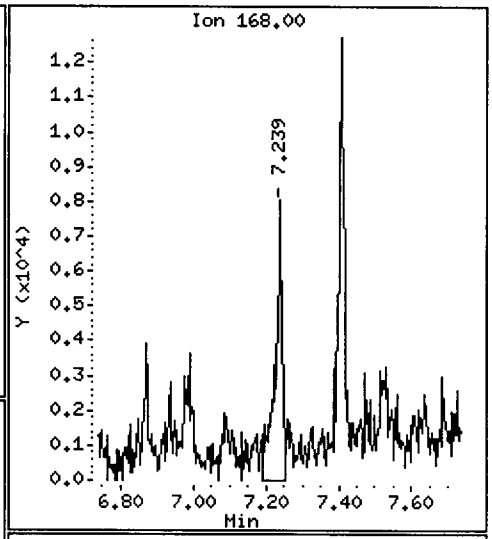
Concentration: 23.56 ug/kg

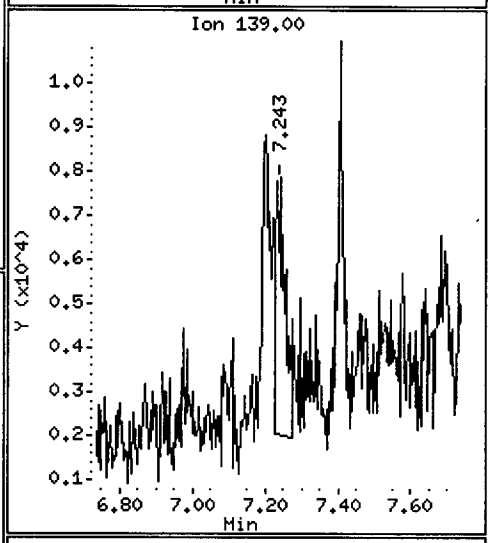


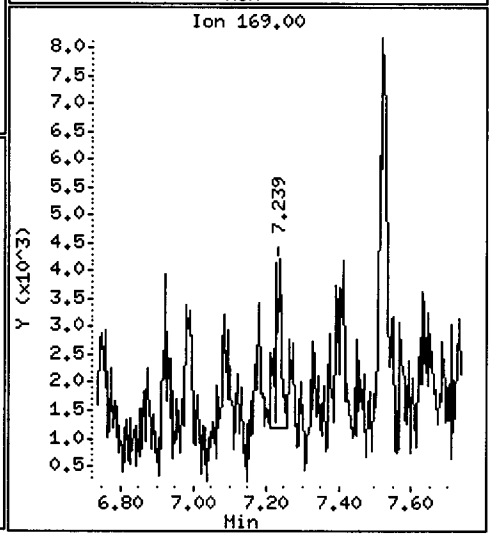












Data File: /chem1/nt12.i/20110404.b/04041109.d

Date : 04-APR-2011 15:36

Client ID: LL-SED2-0-56-031511

Instrument: nt12.i

Sample Info: SN54C

Volume Injected (uL): 1.0

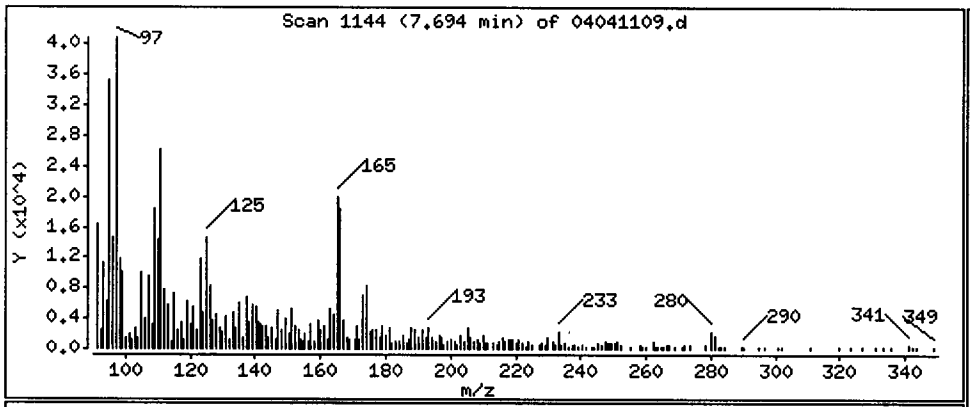
Operator: JZ

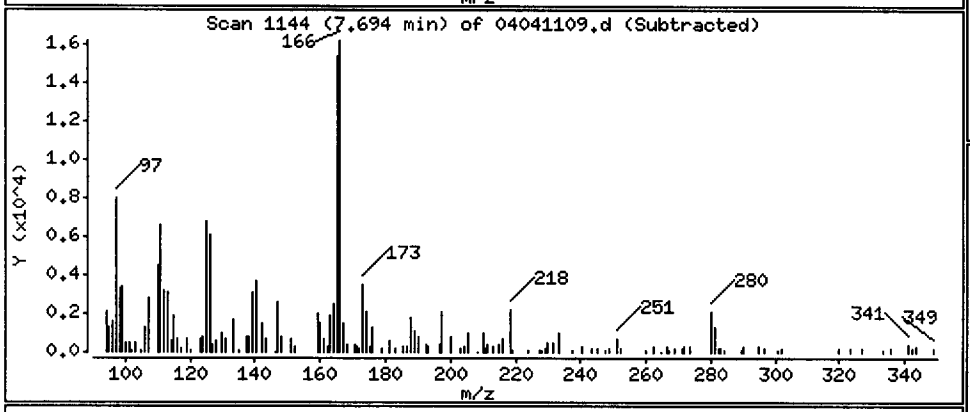
Column phase: ZB35

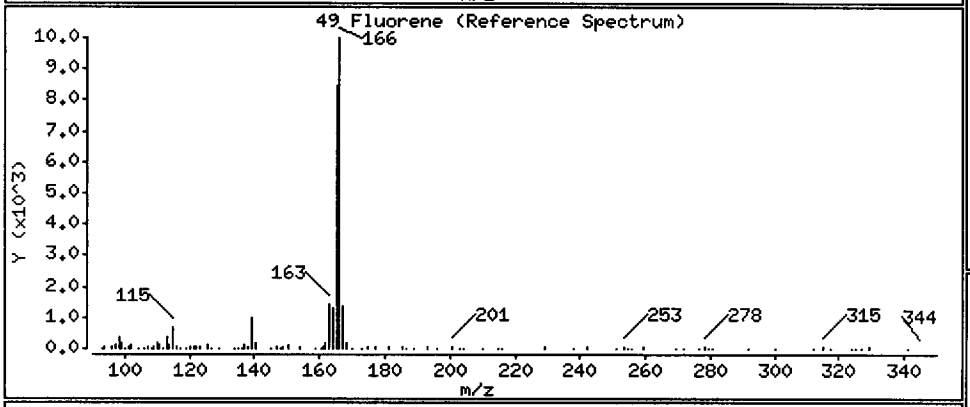
Column diameter: 0.32

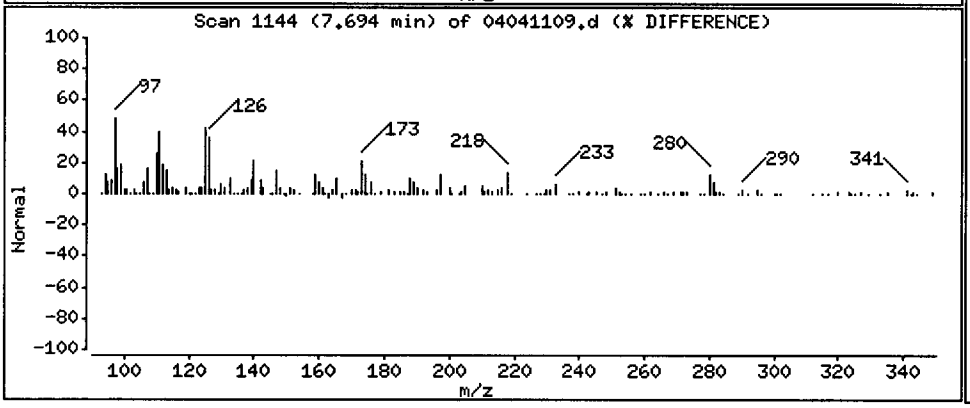
49 Fluorene

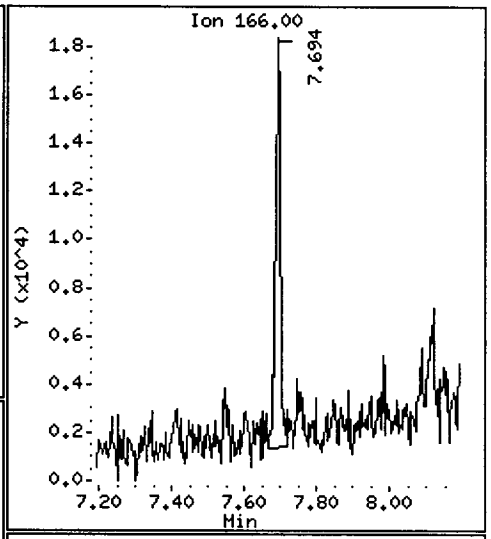
Concentration: 46.92 ug/kg

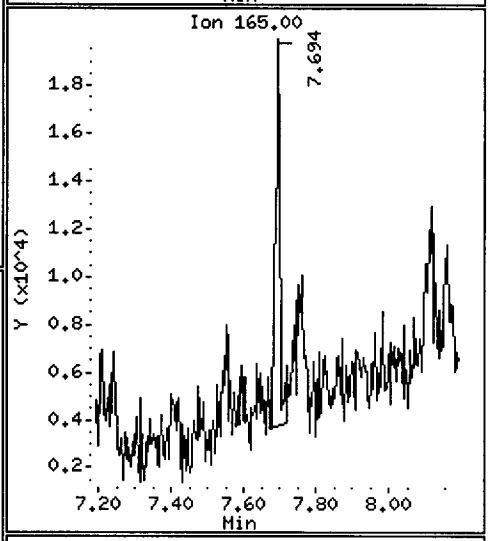


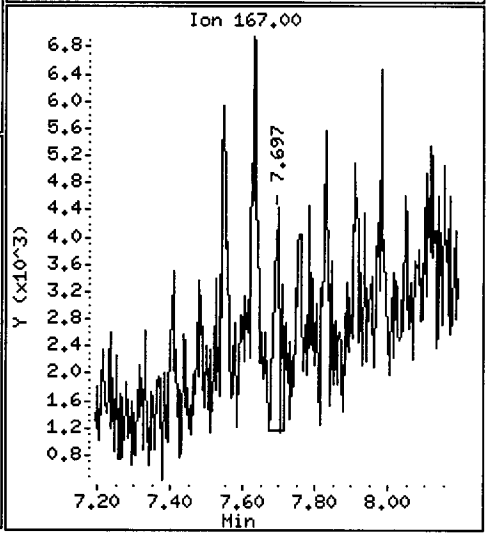












Data File: /chem1/nt12.i/20110404.b/04041109.d

Date : 04-APR-2011 15:36

Client ID: LL-SED2-0-56-031511

Instrument: nt12.i

Sample Info: SN54C

Volume Injected (uL): 1.0

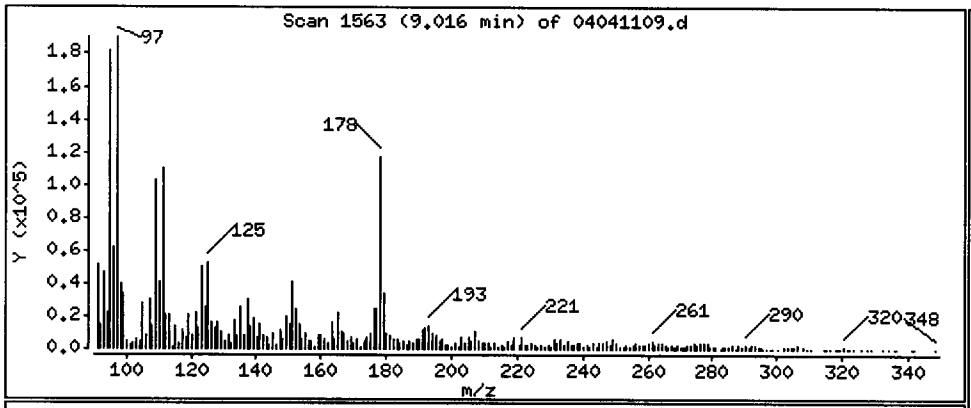
Operator: JZ

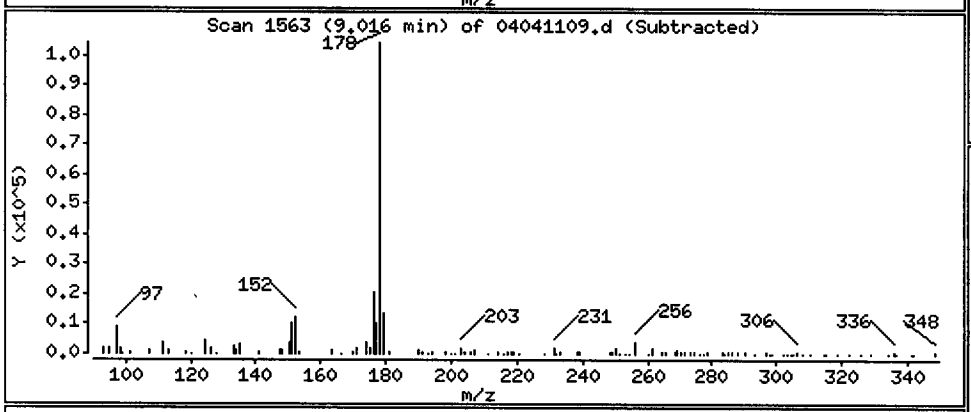
Column phase: ZB35

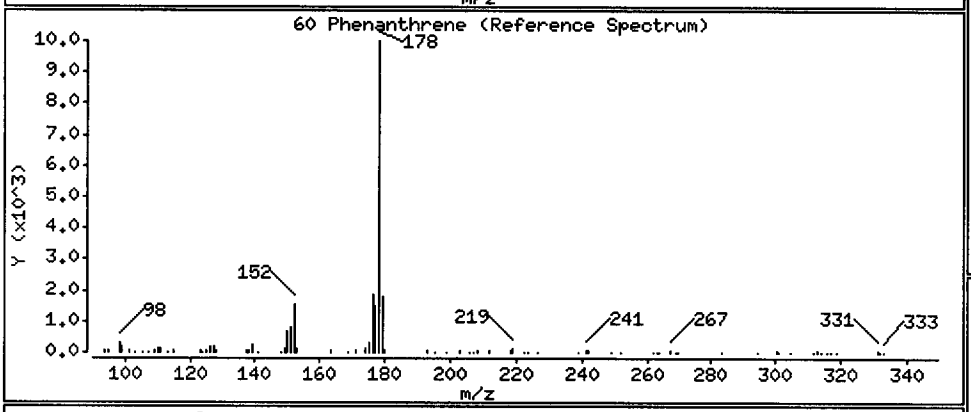
Column diameter: 0.32

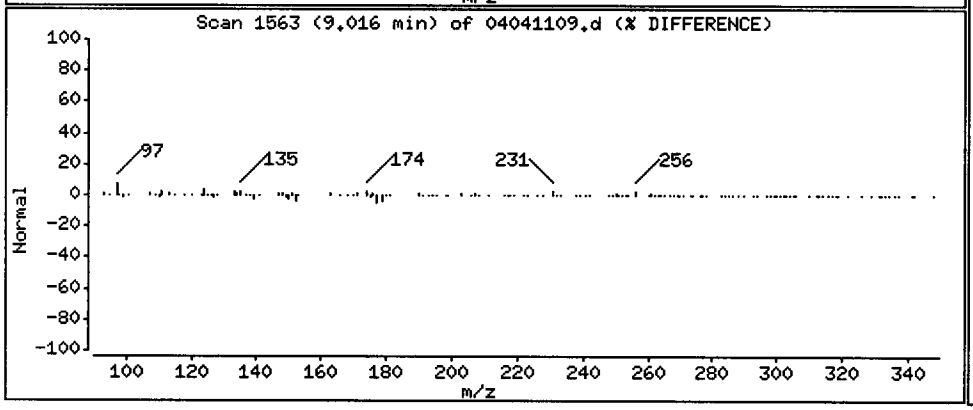
60 Phenanthrene

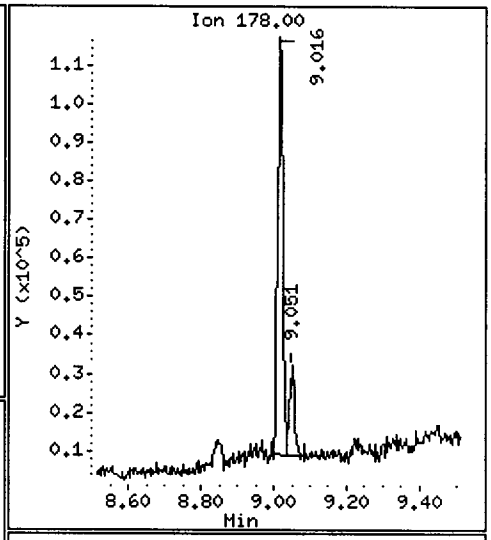
Concentration: 218.6 ug/kg

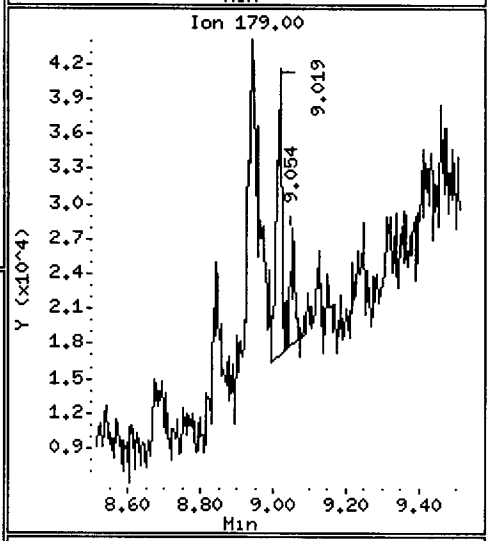


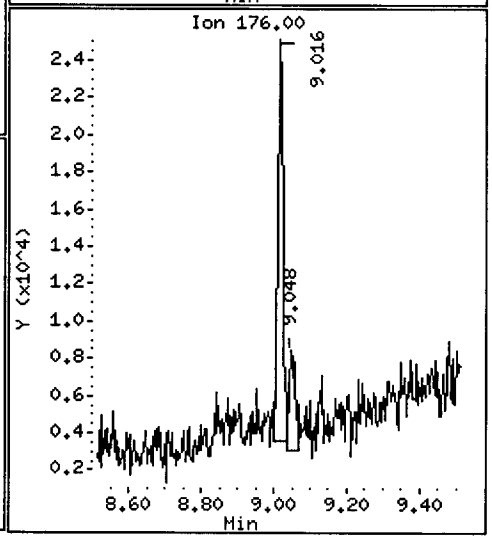












Data File: /chem1/nt12.i/20110404.b/04041109.d

Date : 04-APR-2011 15:36

Client ID: LL-SED2-0-56-031511

Instrument: nt12.i

Sample Info: SN54G

Volume Injected (uL): 1.0

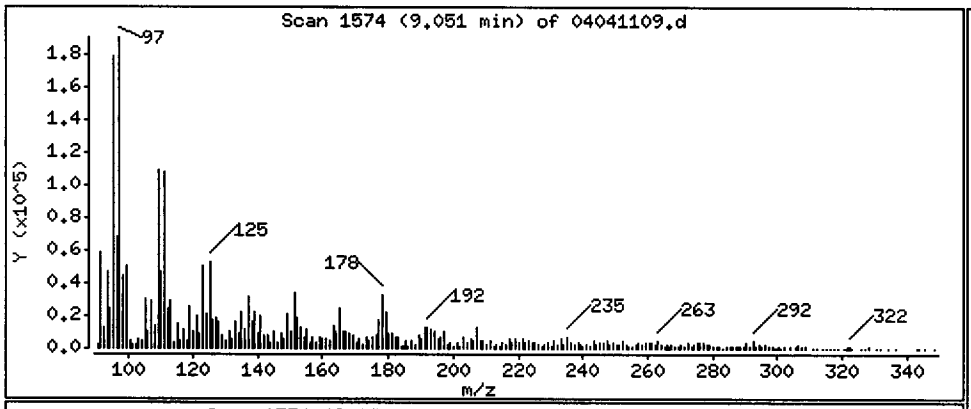
Operator: JZ

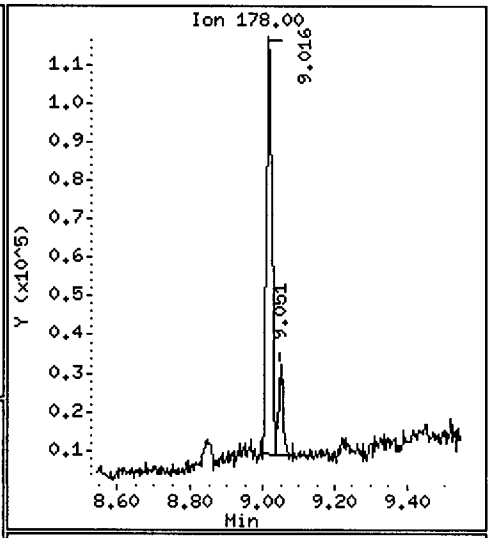
Column phase: ZB35

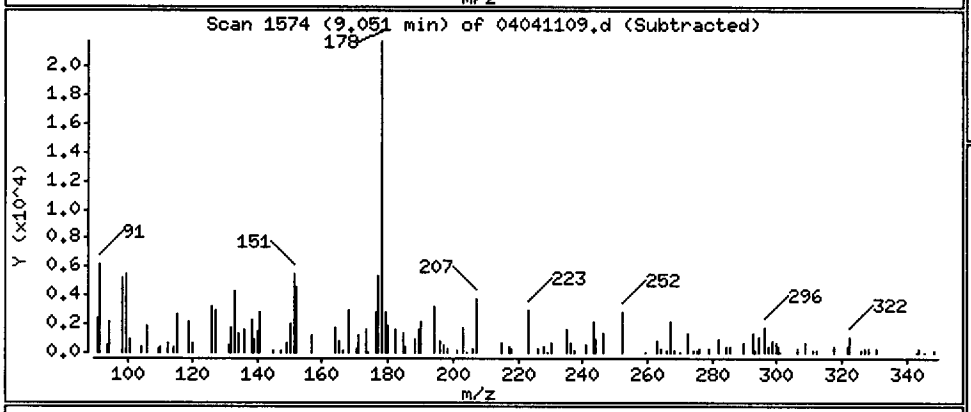
Column diameter: 0.32

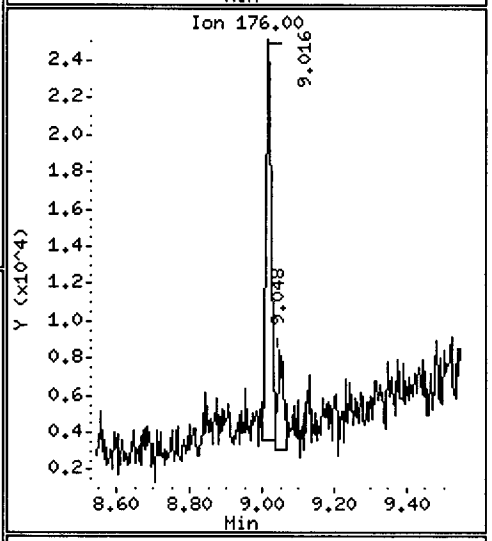
61 Anthracene

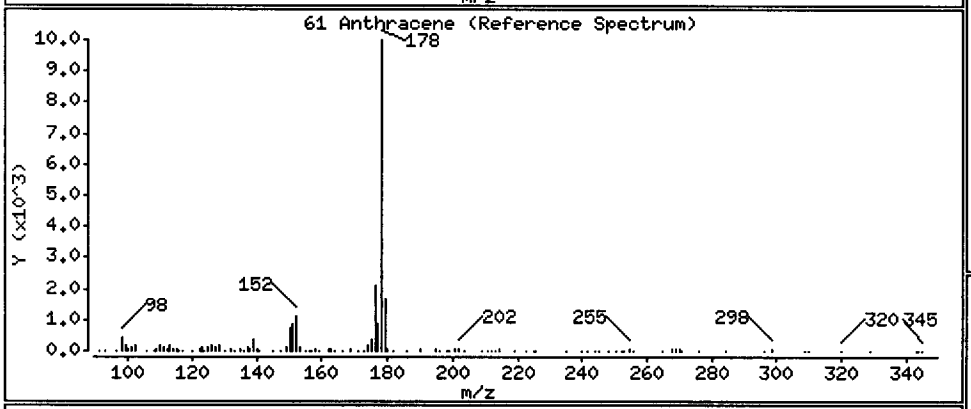
Concentration: 41.41 ug/kg

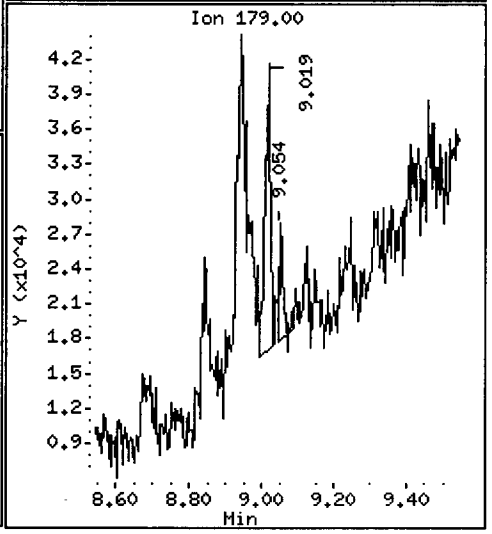


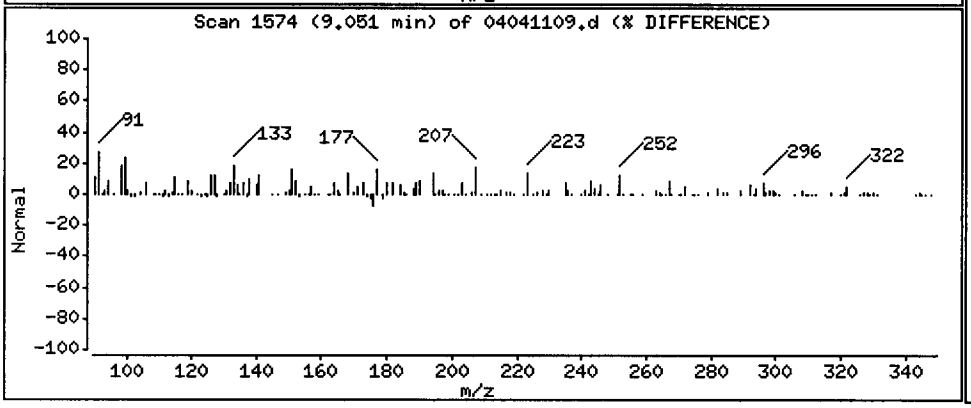












Data File: /chem1/nt12.i/20110404.b/04041109.d

Date : 04-APR-2011 15:36

Client ID: LL-SED2-0-56-031511

Instrument: nt12.i

Sample Info: SN54G

Volume Injected (uL): 1.0

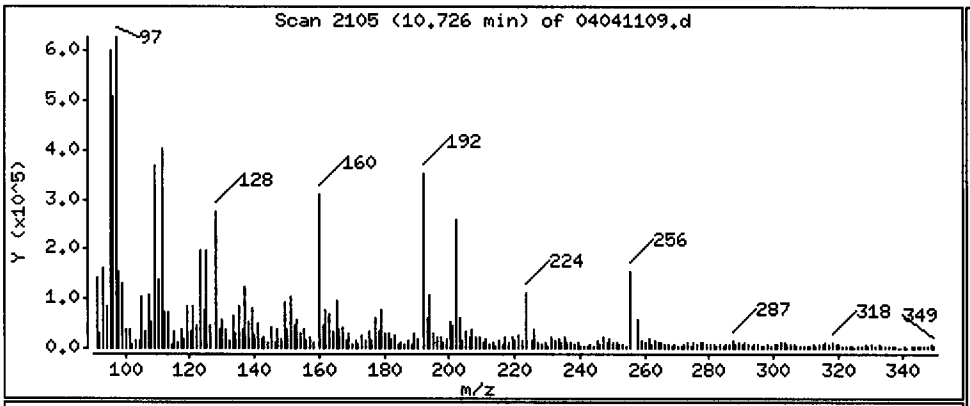
Operator: JZ

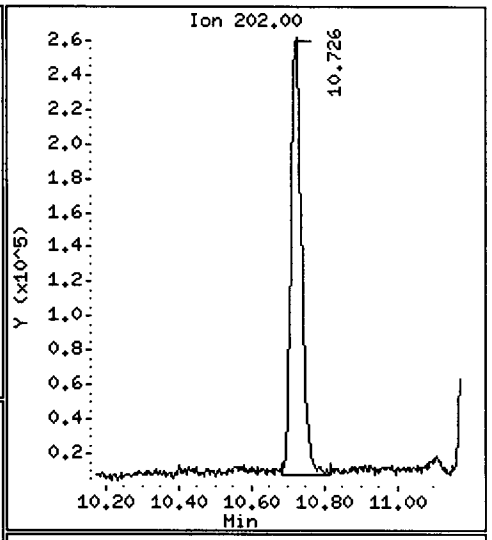
Column phase: ZB35

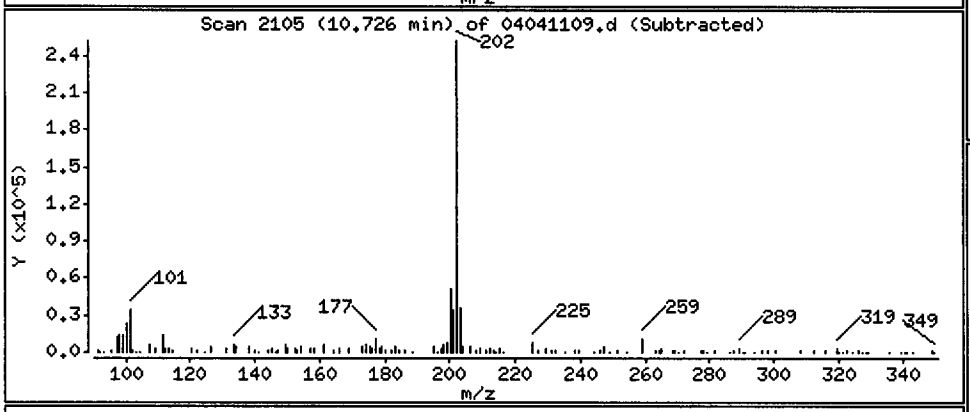
Column diameter: 0.32

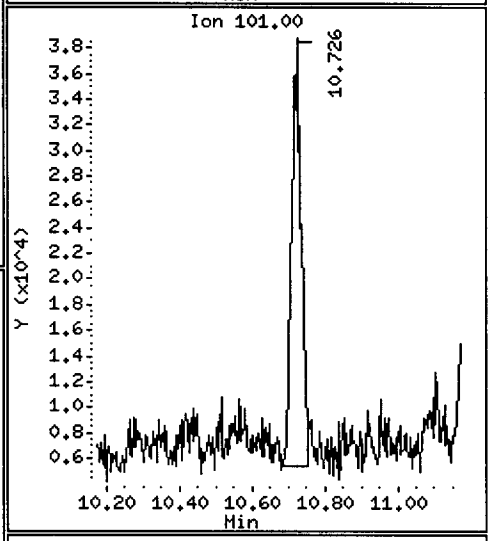
64 Fluoranthene

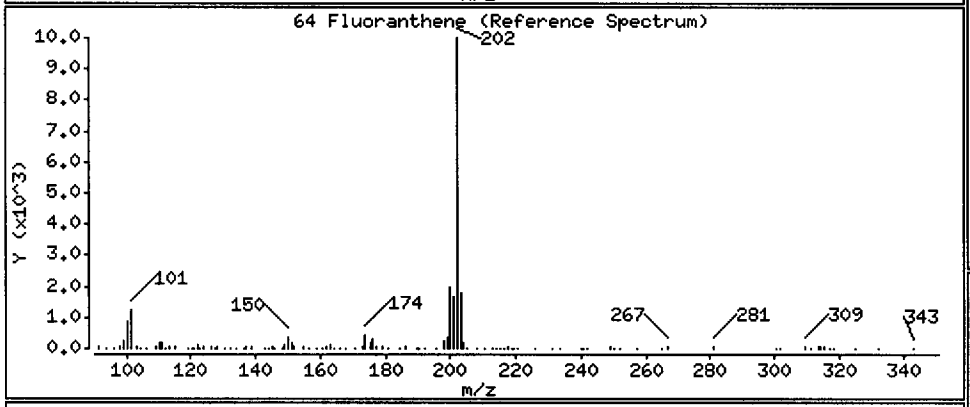
Concentration: 901.4 ug/kg

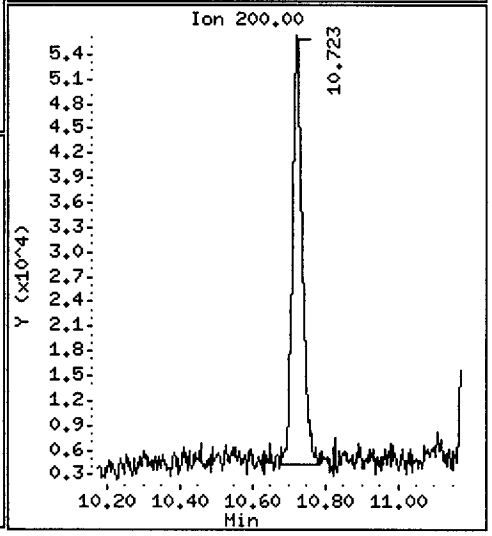


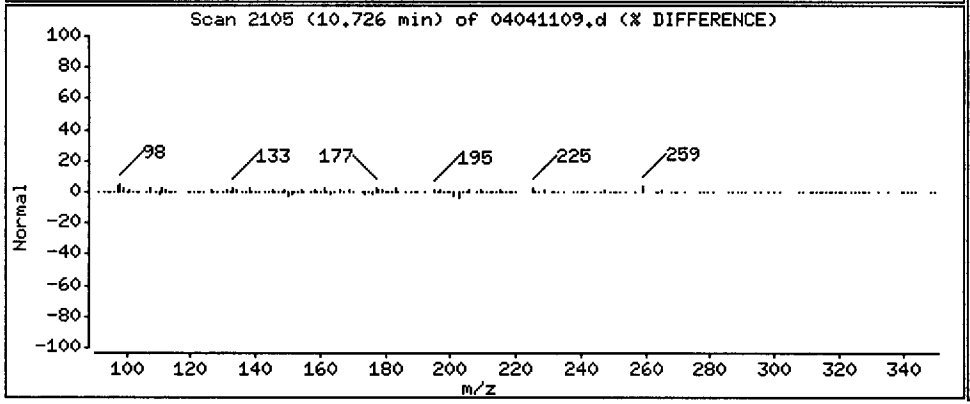












Data File: /chem1/nt12.i/20110404.b/04041109.d

Date : 04-APR-2011 15:36

Client ID: LL-SED2-0-56-031511

Instrument: nt12.i

Sample Info: SN54G

Volume Injected (uL): 1.0

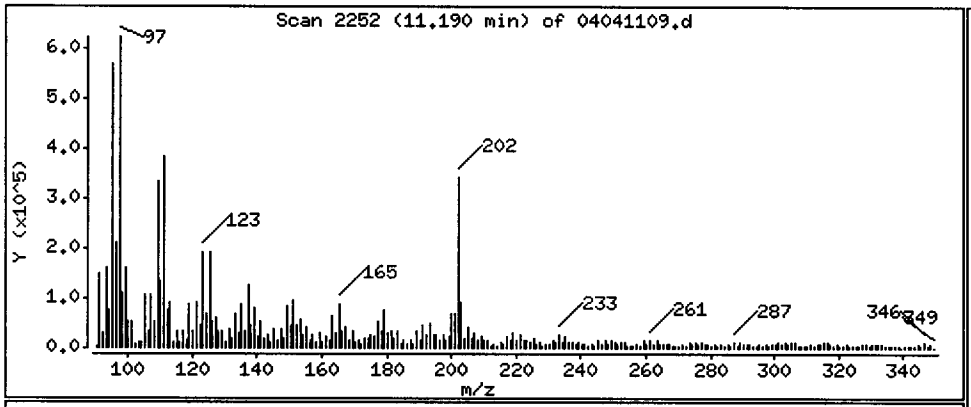
Operator: JZ

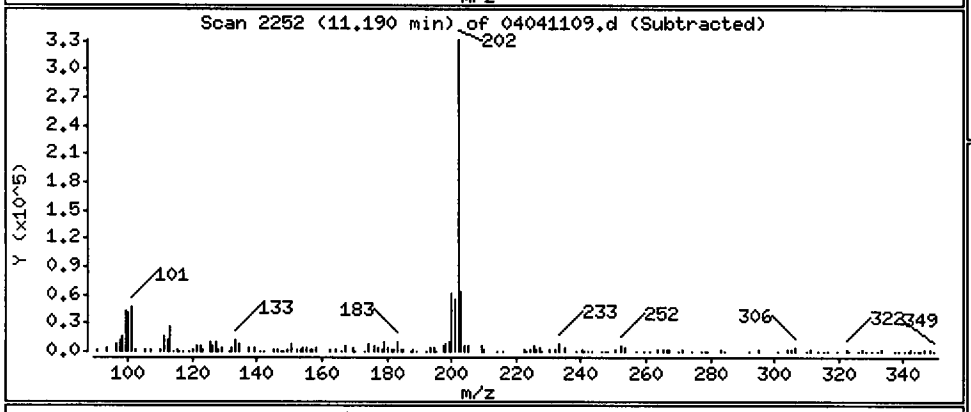
Column phase: ZB35

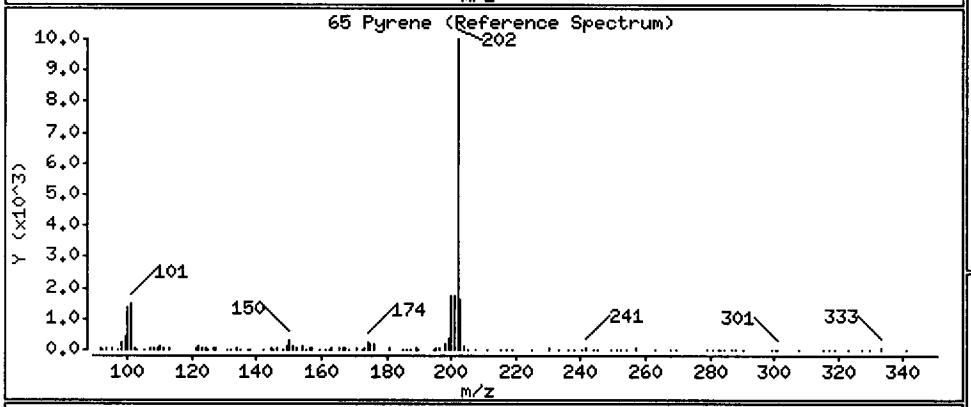
Column diameter: 0.32

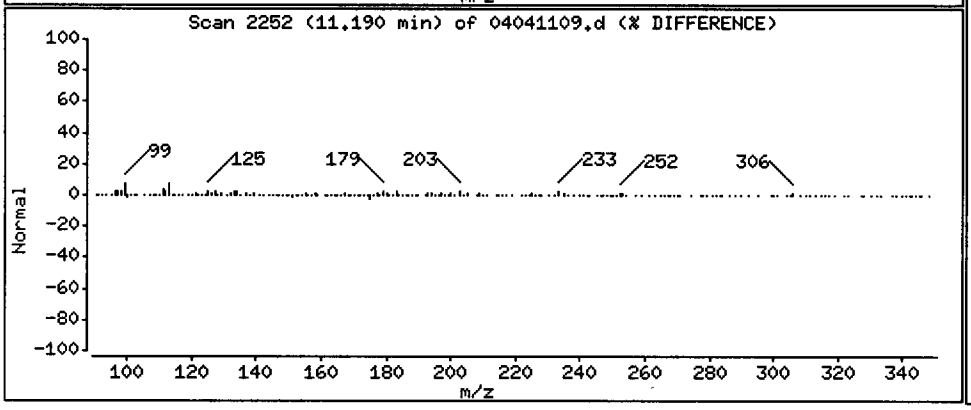
65 Pyrene

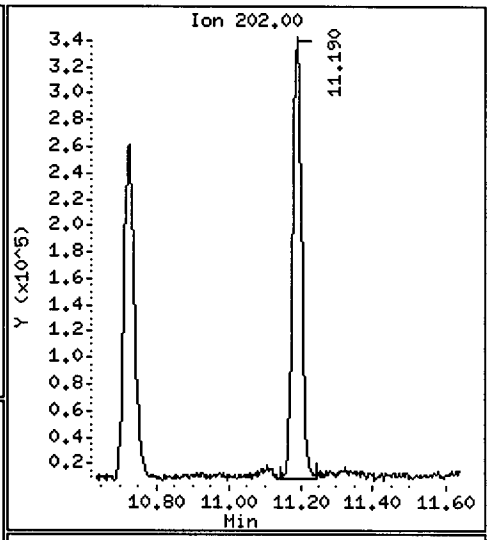
Concentration: 850.6 ug/kg

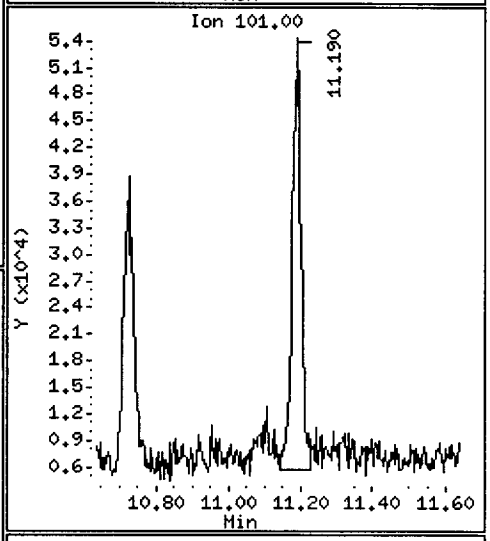


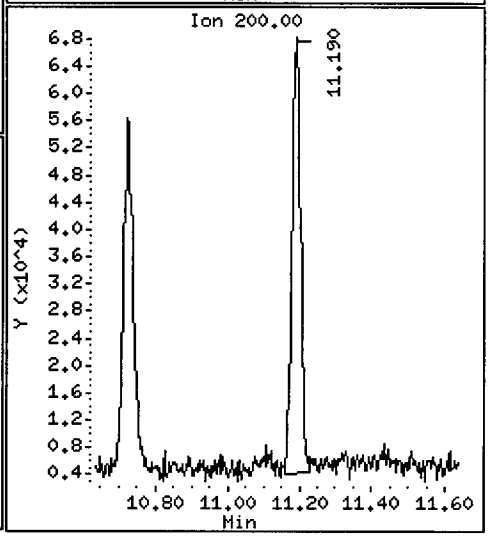












Data File: /chem1/nt12.i/20110404.b/04041109.d

Date : 04-APR-2011 15:36

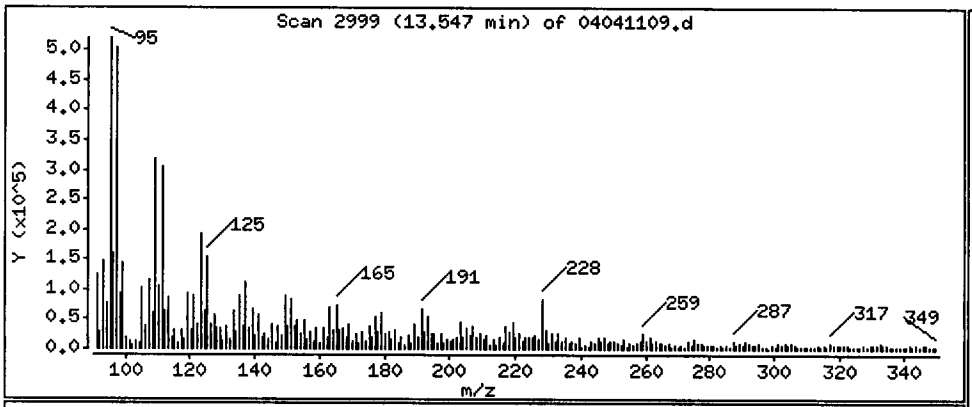
Client ID: LL-SED2-0-56-031511 Instrument: nt12.i

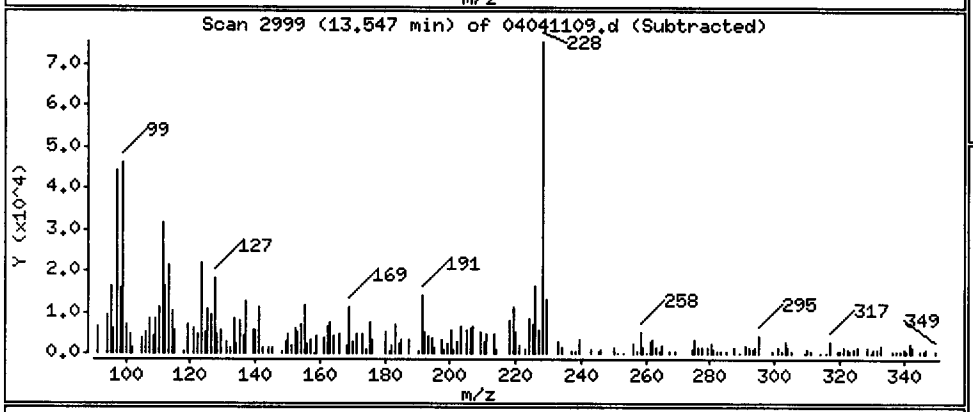
Sample Info: SN54C

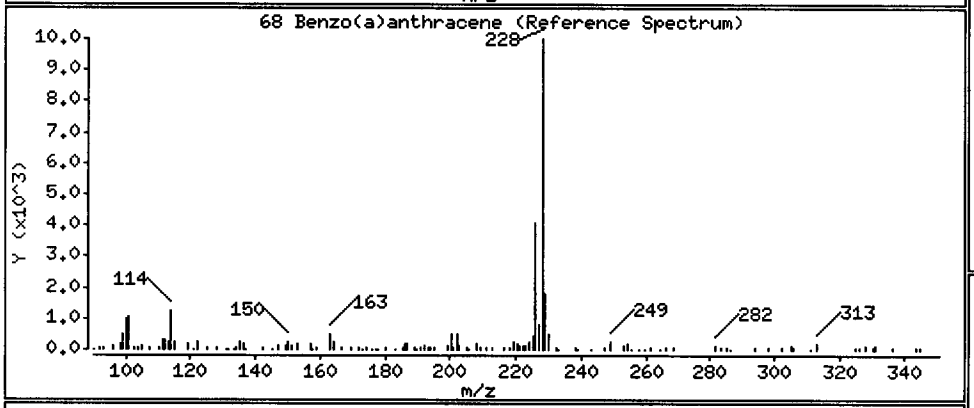
Volume Injected (uL): 1.0 Operator: JZ

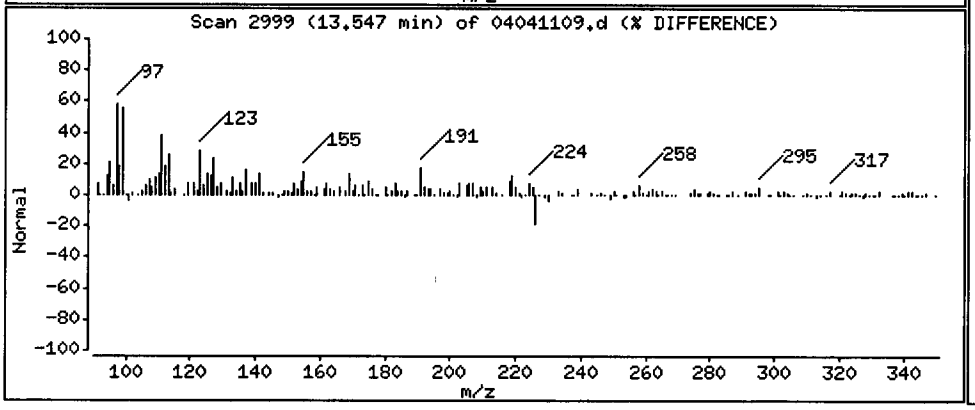
Column phase: ZB35 Column diameter: 0.32

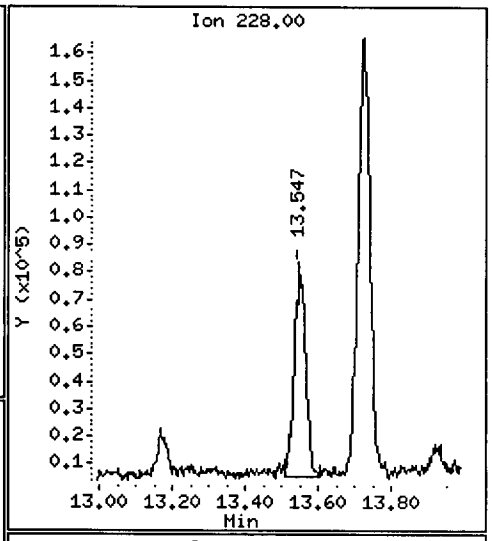
68 Benzo(a)anthracene Concentration: 272.3 ug/kg

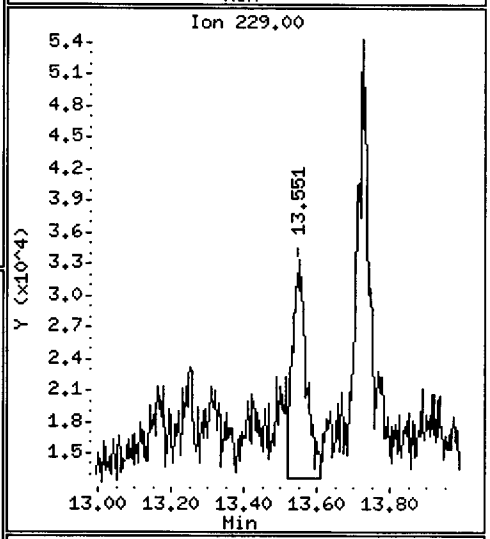


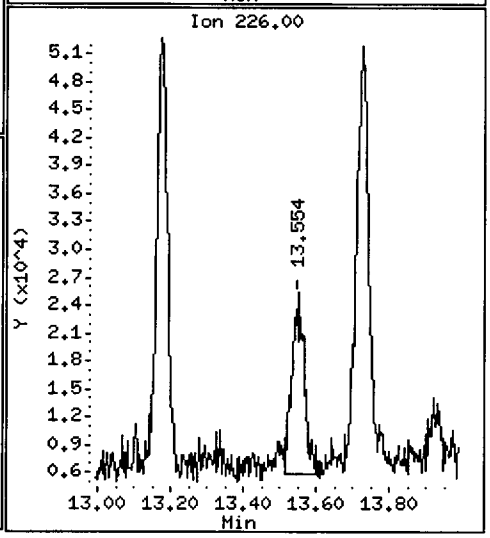












Data File: /chem1/nt12.i/20110404.b/04041109.d

Date : 04-APR-2011 15:36

Client ID: LL-SED2-0-56-031511

Instrument: nt12.i

Sample Info: SN54G

Volume Injected (uL): 1.0

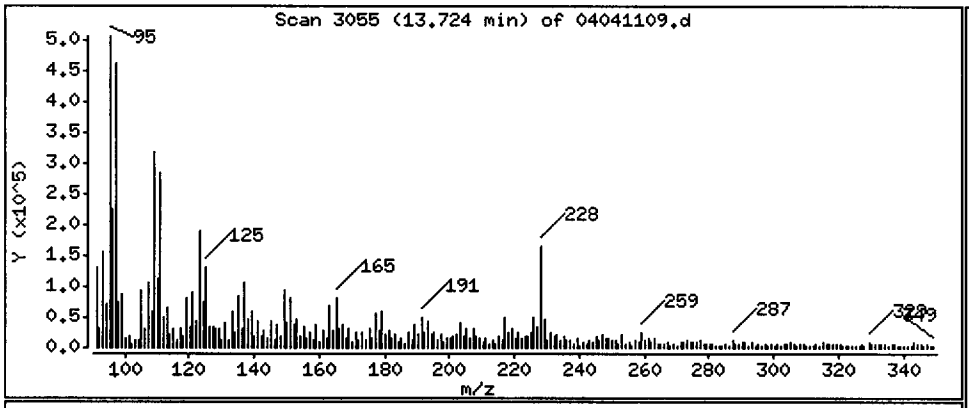
Operator: JZ

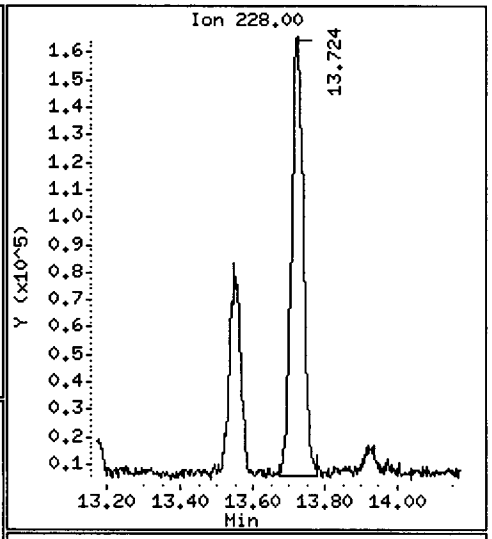
Column phase: ZB35

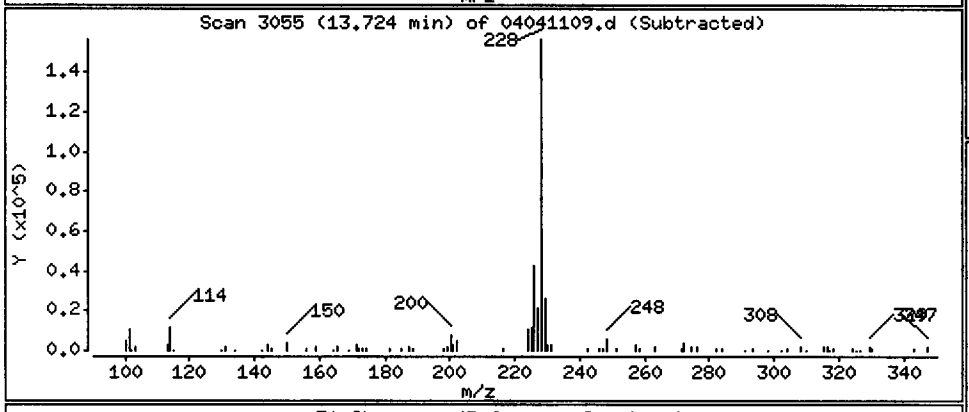
Column diameter: 0.32

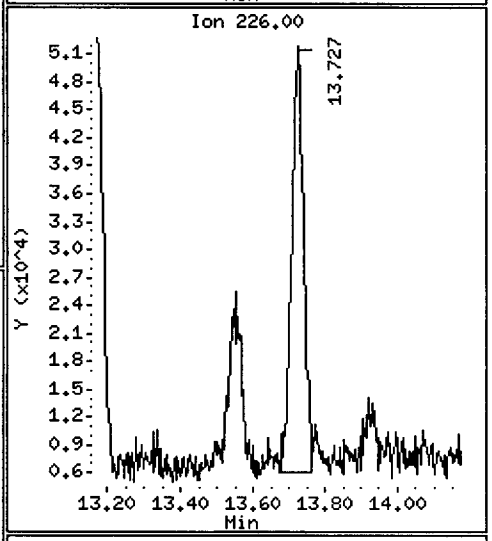
71 Chrysene

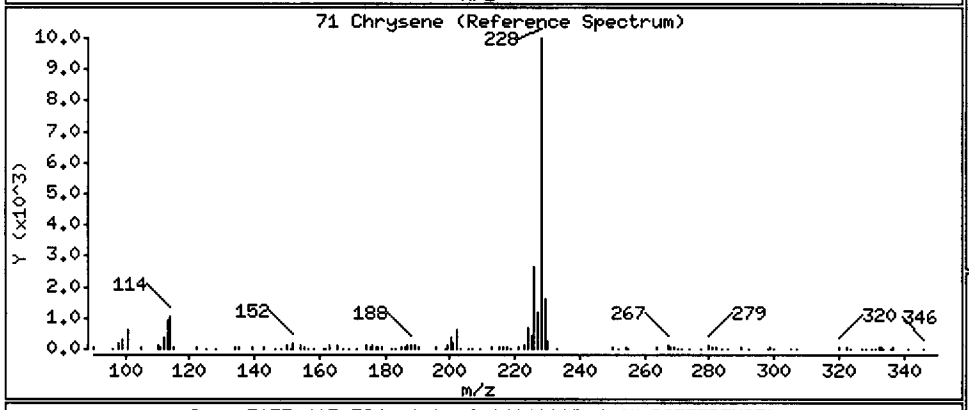
Concentration: 621.5 ug/kg

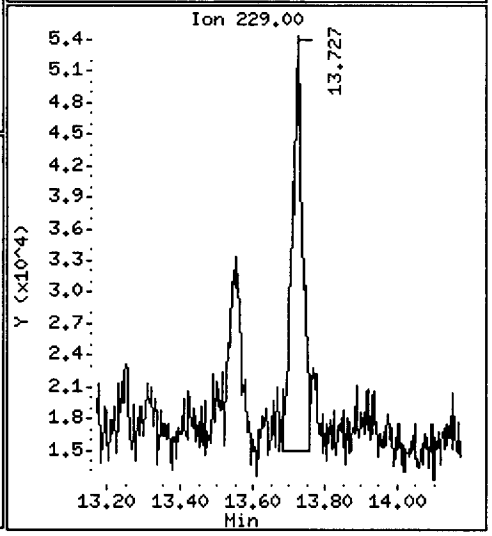


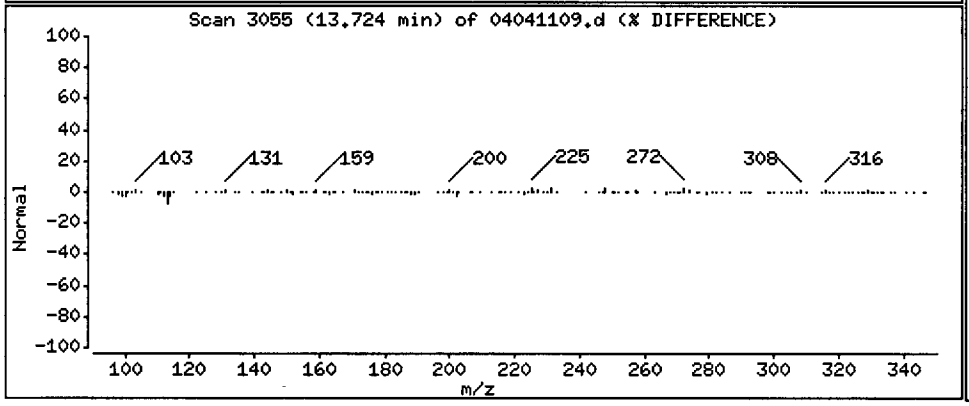












Data File: /chem1/nt12.i/20110404.b/04041109.d

Date : 04-APR-2011 15:36

Client ID: LL-SED2-0-56-031511

Instrument: nt12.i

Sample Info: SN54G

Volume Injected (uL): 1.0

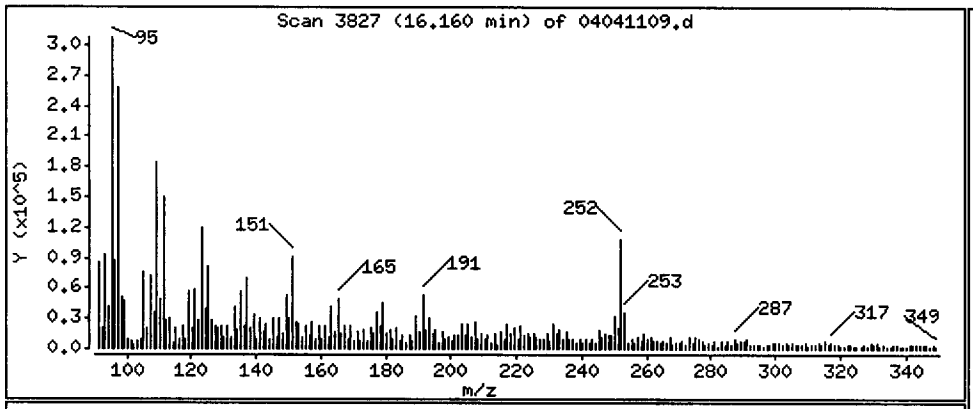
Operator: JZ

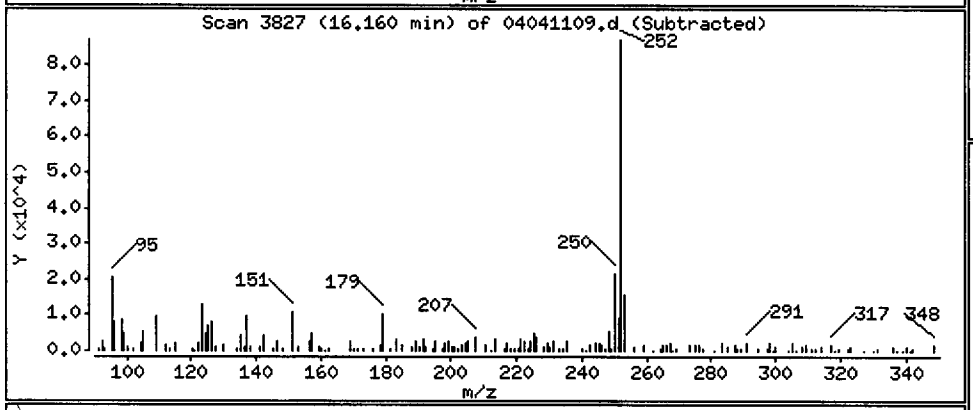
Column phase: ZB35

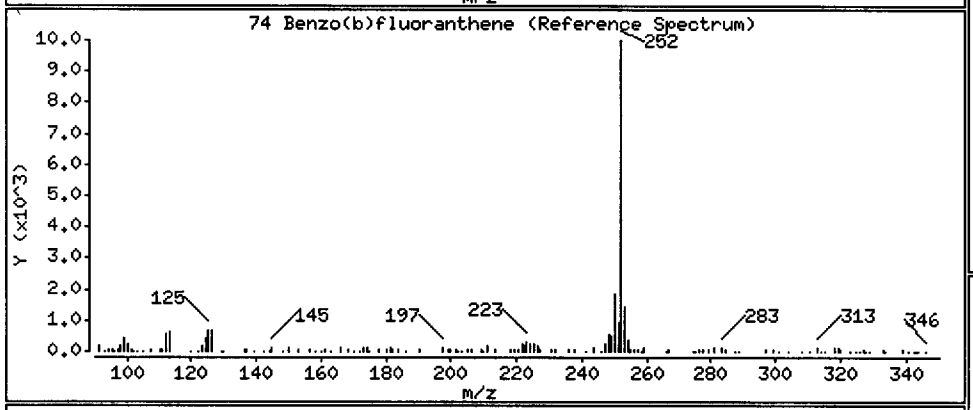
Column diameter: 0.32

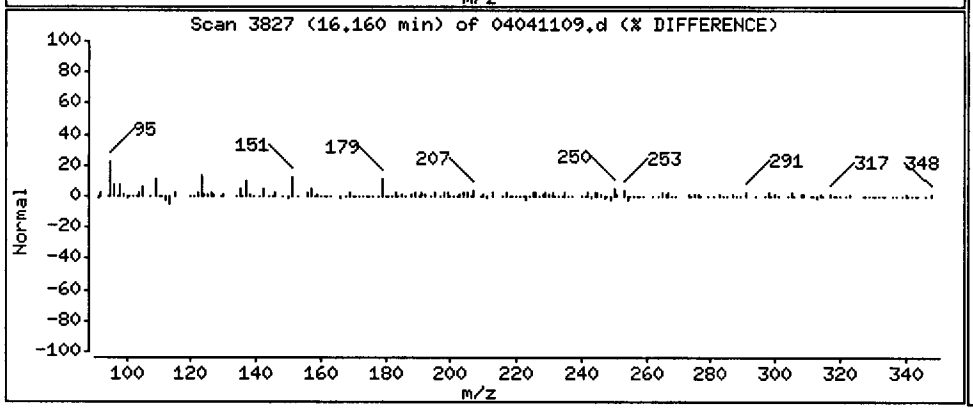
74 Benzo(b)fluoranthene

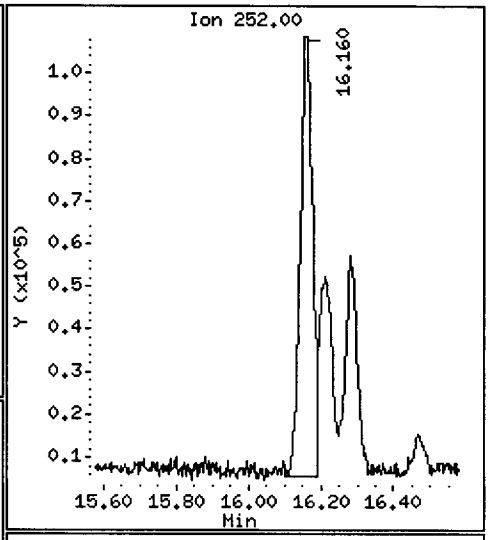
Concentration: 582.8 ug/kg

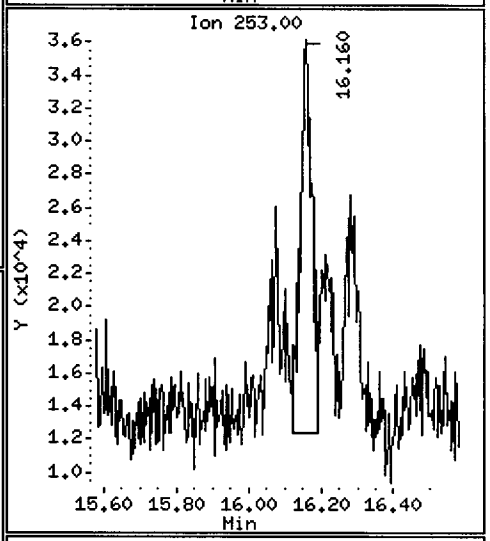


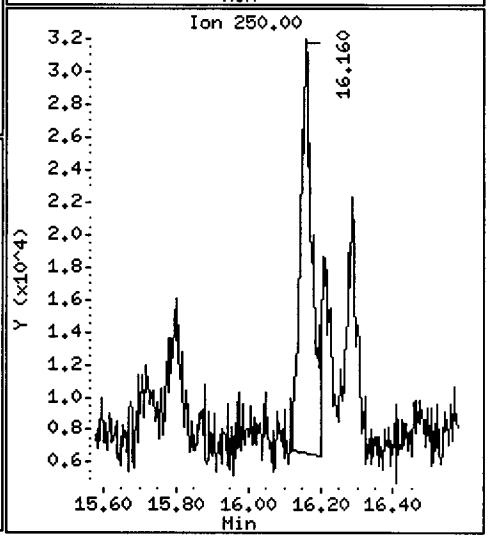












Data File: /chem1/nt12.i/20110404.b/04041109.d

Date : 04-APR-2011 15:36

Client ID: LL-SED2-0-56-031511

Instrument: nt12.i

Sample Info: SN54G

Volume Injected (uL): 1.0

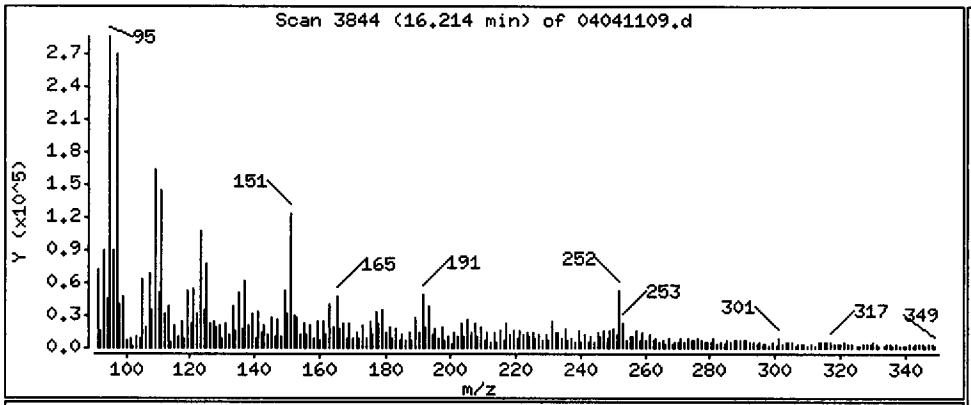
Operator: JZ

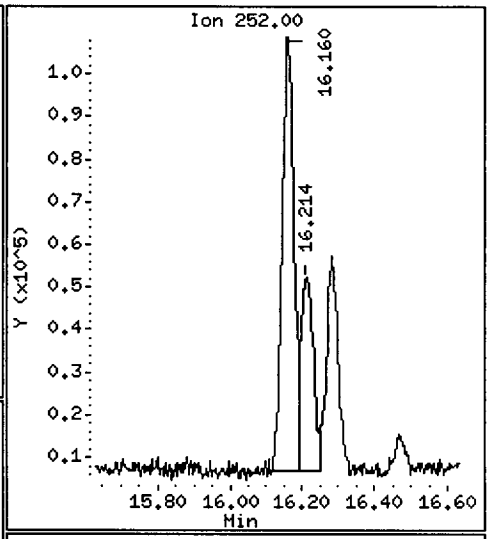
Column phase: ZB35

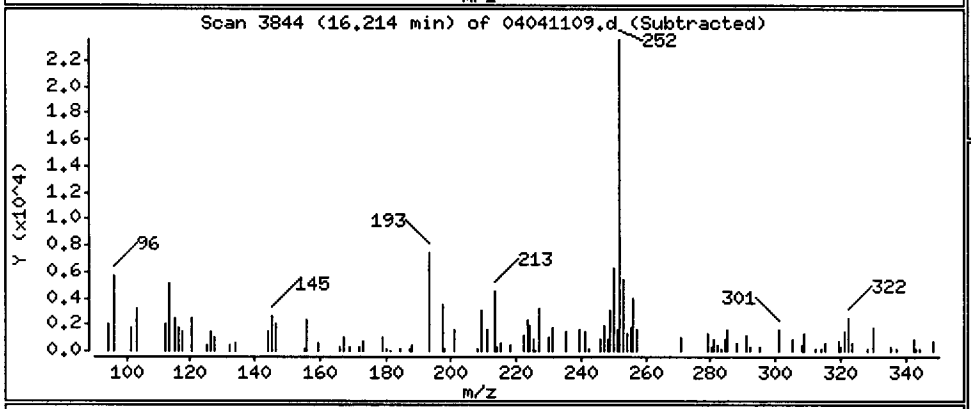
Column diameter: 0.32

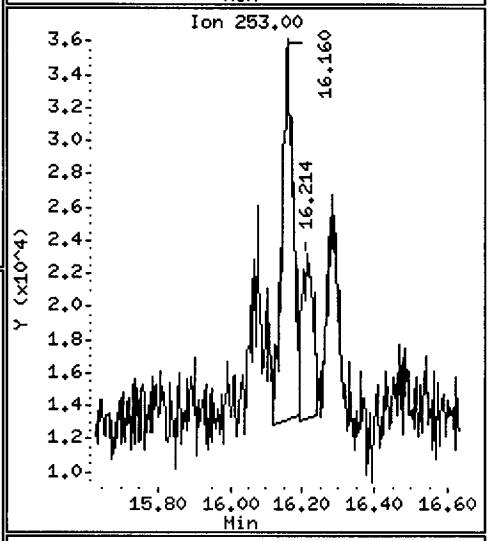
75 Benzo(k)fluoranthene

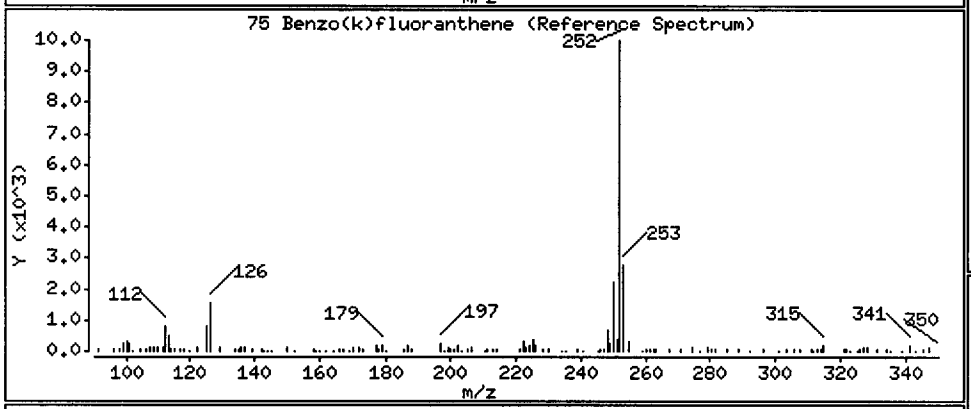
Concentration: 249.5 ug/kg

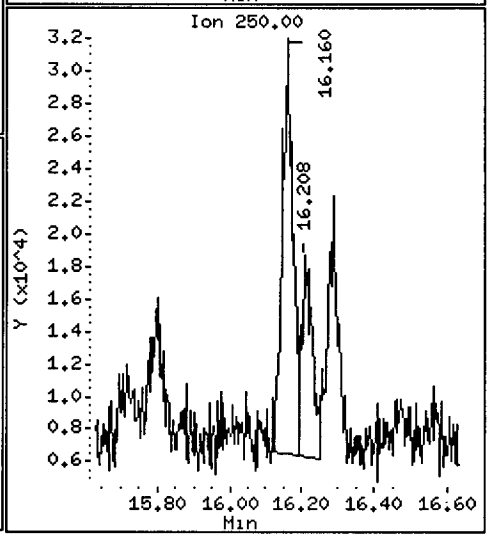


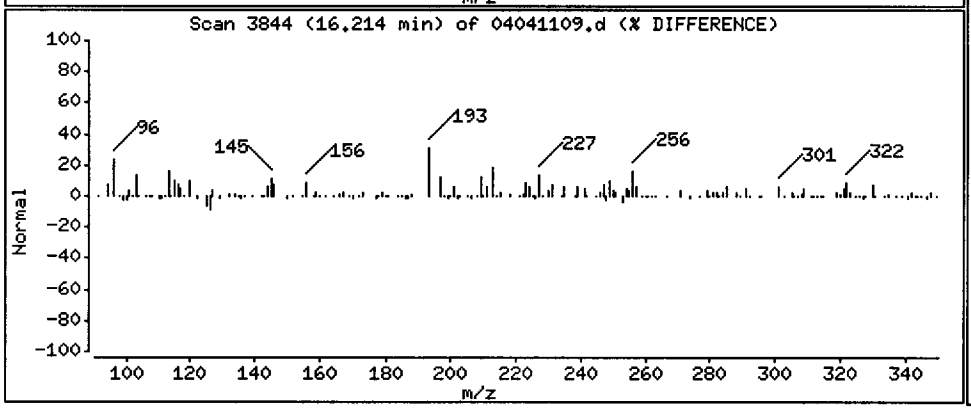












Data File: /chem1/nt12.i/20110404.b/04041109.d

Date : 04-APR-2011 15:36

Client ID: LL-SED2-0-56-031511

Instrument: nt12.i

Sample Info: SN54G

Volume Injected (uL): 1.0

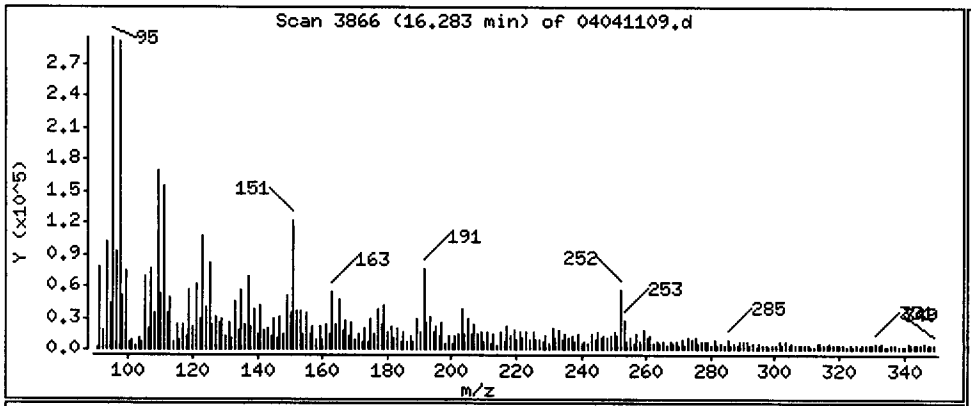
Operator: JZ

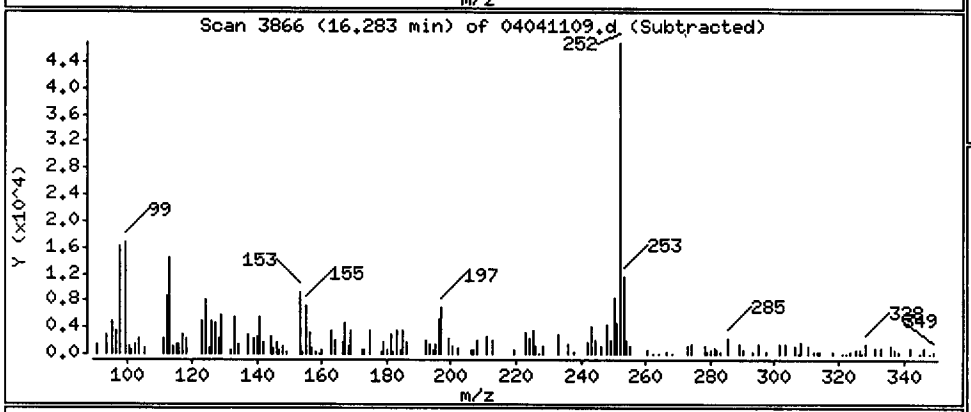
Column phase: ZB35

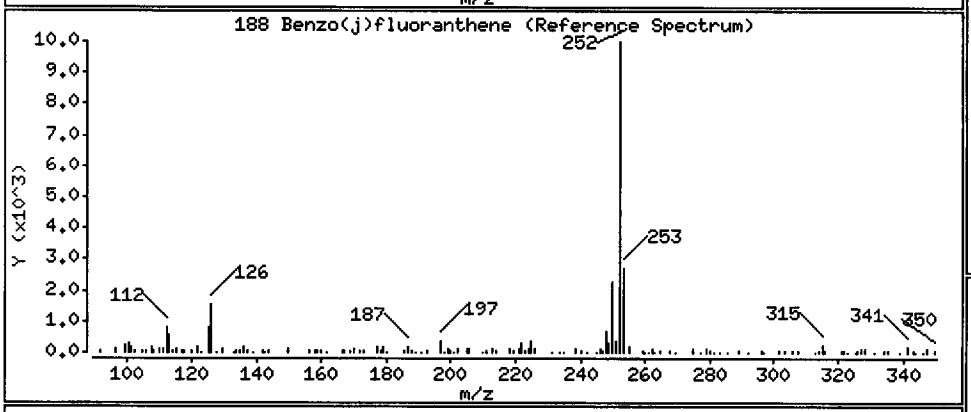
Column diameter: 0.32

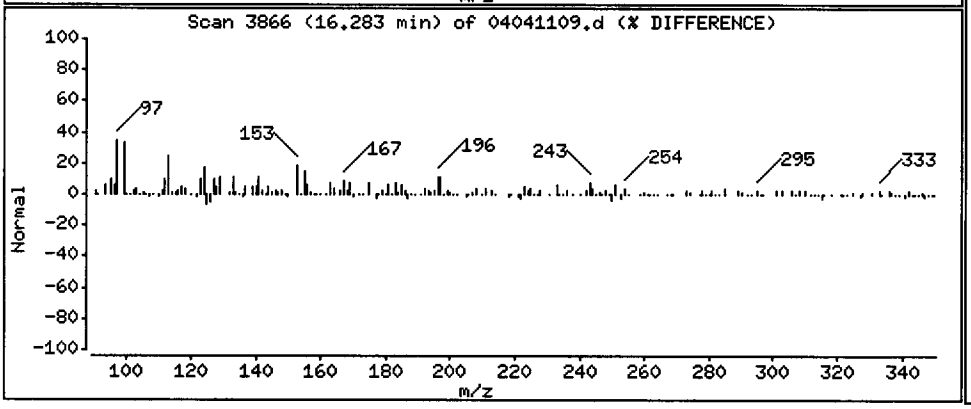
188 Benzo(j)fluoranthene

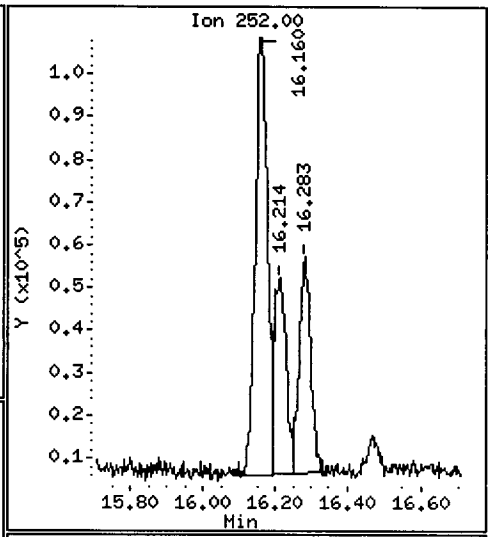
Concentration: 263.1 ug/kg

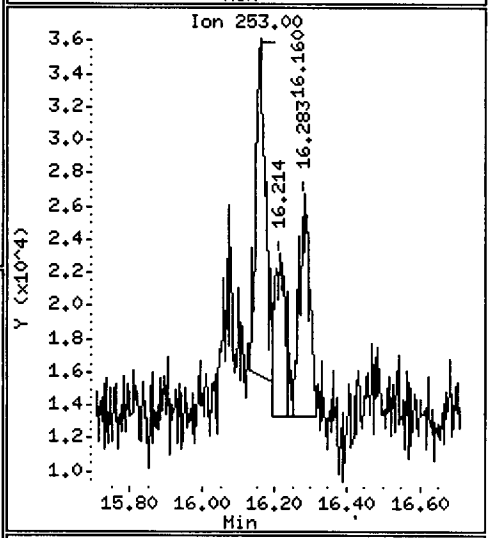


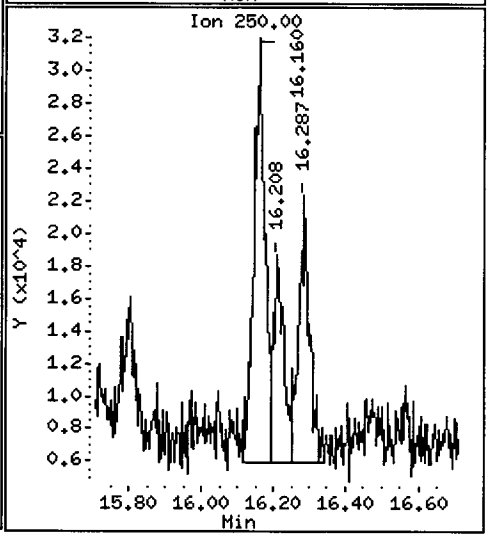












Data File: /chem1/nt12.i/20110404.b/04041109.d

Date : 04-APR-2011 15:36

Client ID: LL-SED2-0-56-031511

Instrument: nt12.i

Sample Info: SN54G

Volume Injected (uL): 1.0

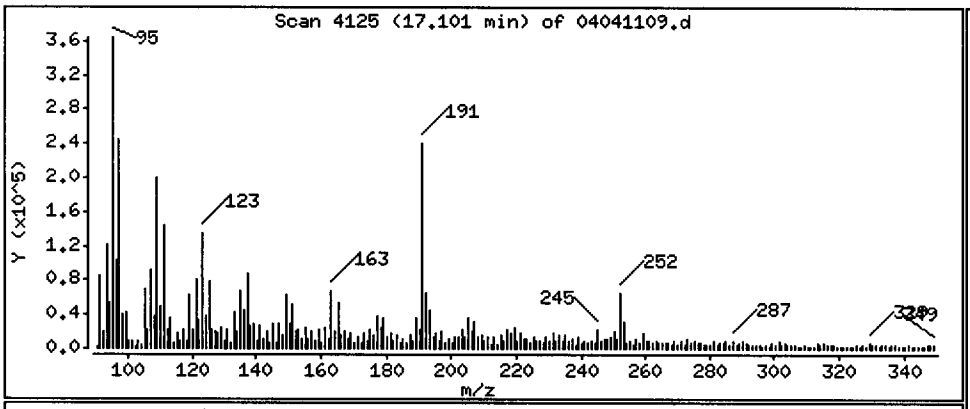
Operator: JZ

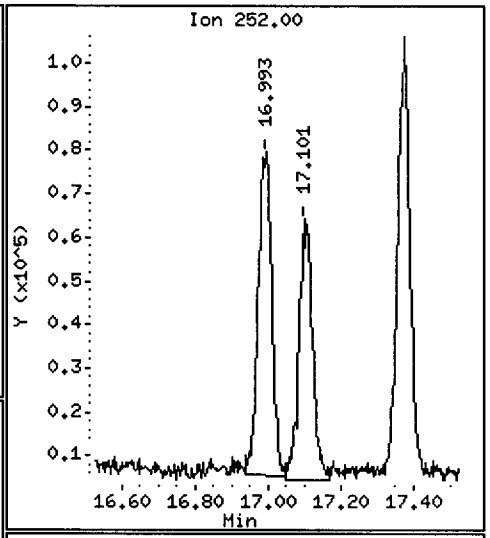
Column phase: ZB35

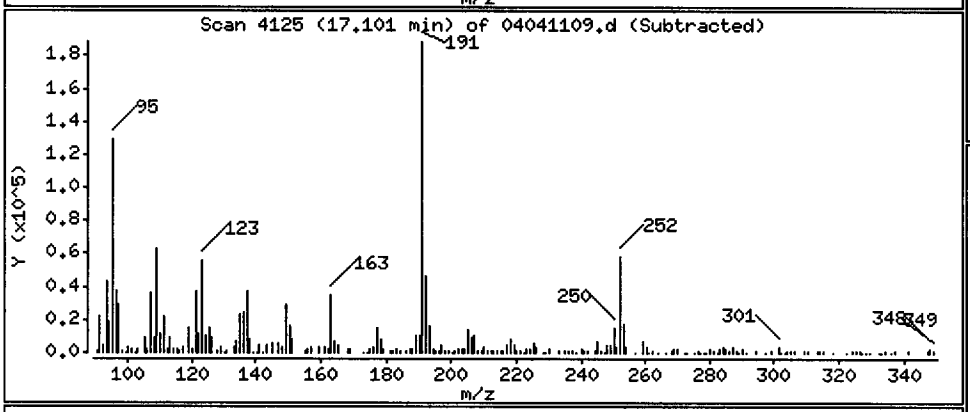
Column diameter: 0.32

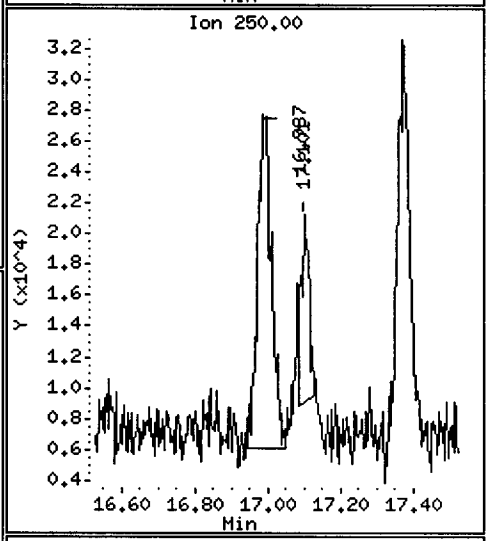
76 Benzo(a)pyrene

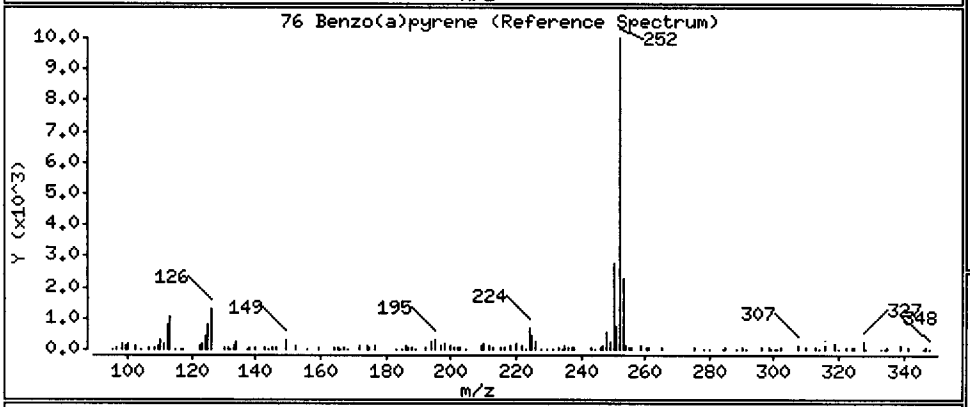
Concentration: 402.7 ug/kg

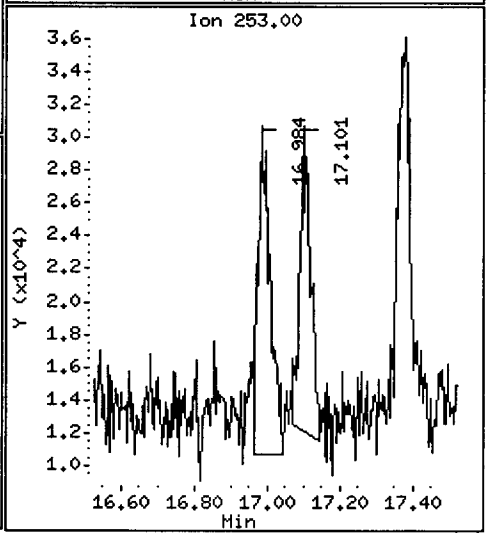


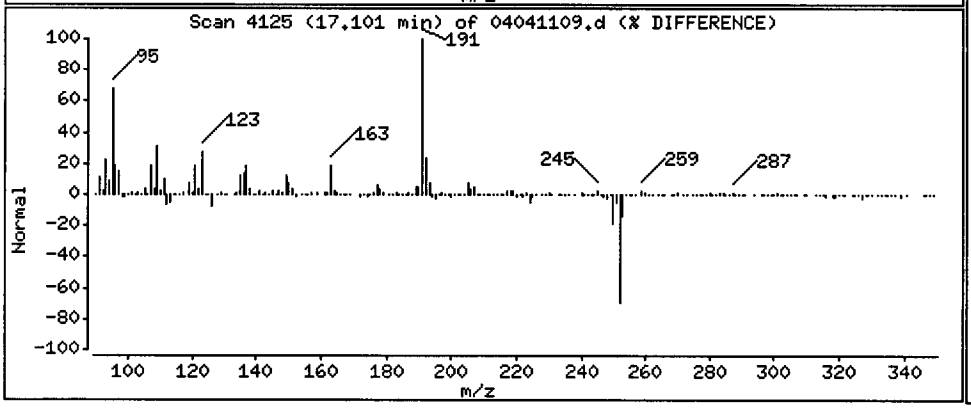












Data File: /chem1/nt12.i/20110404.b/04041109.d

Date : 04-APR-2011 15:36

Client ID: LL-SED2-0-56-031511

Instrument: nt12.i

Sample Info: SN54G

Volume Injected (uL): 1.0

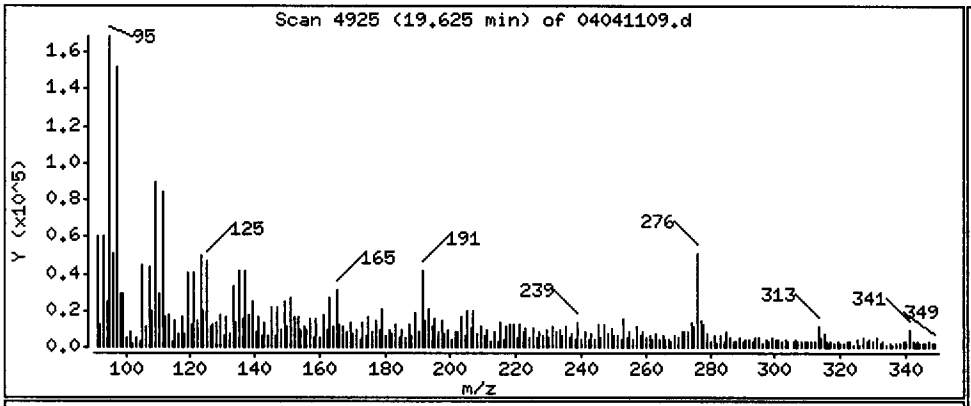
Operator: JZ

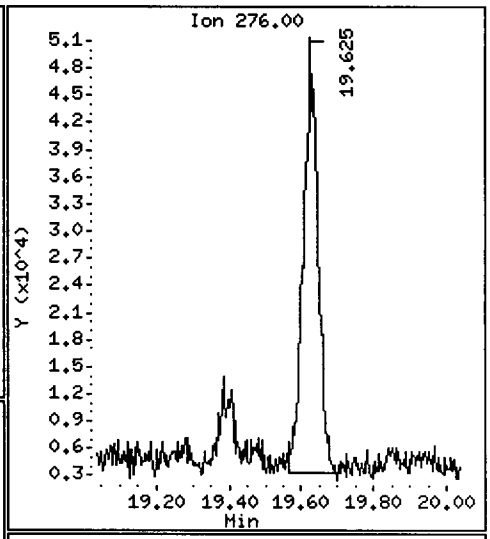
Column phase: ZB35

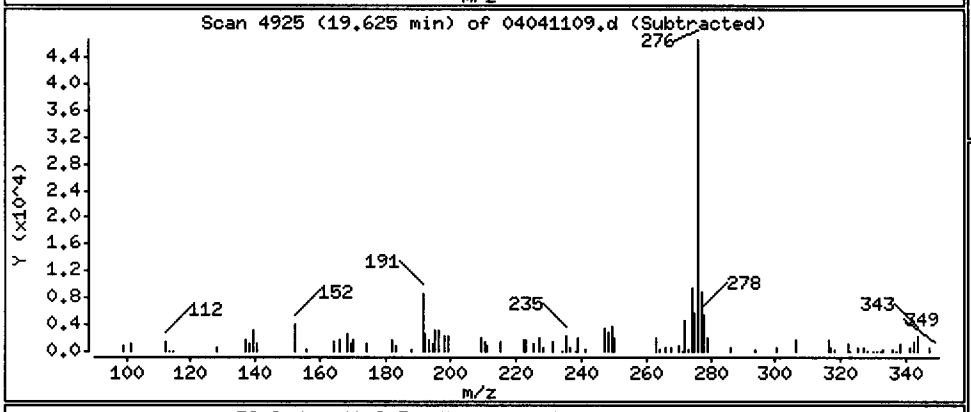
Column diameter: 0.32

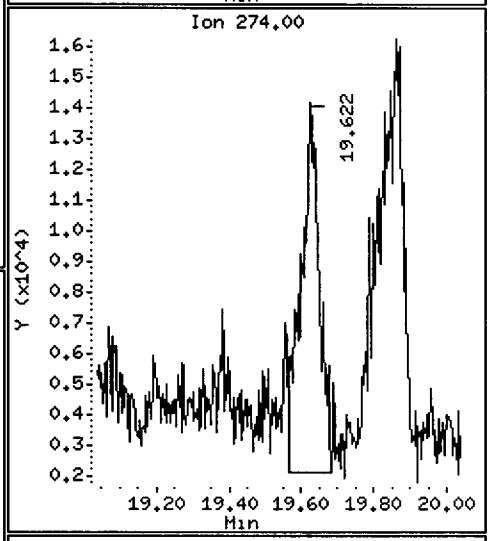
78 Indeno(1,2,3-cd)pyrene

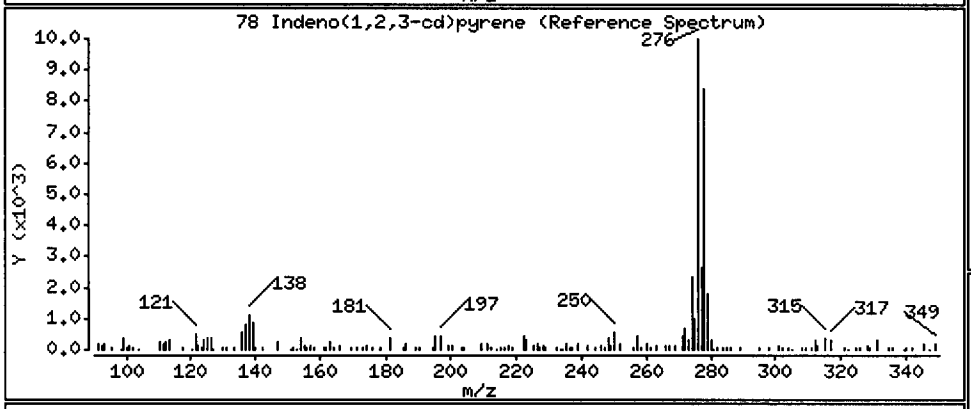
Concentration: 282.3 ug/kg

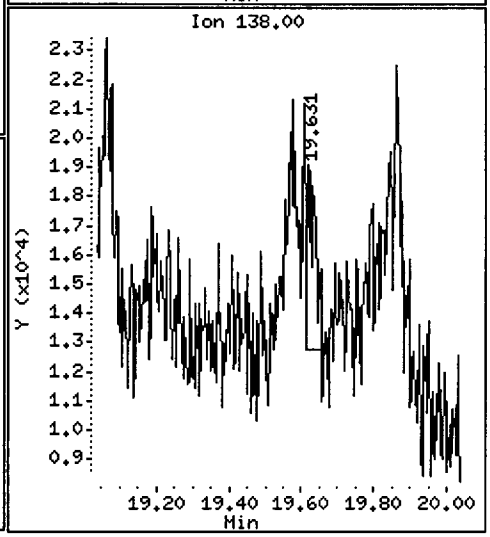


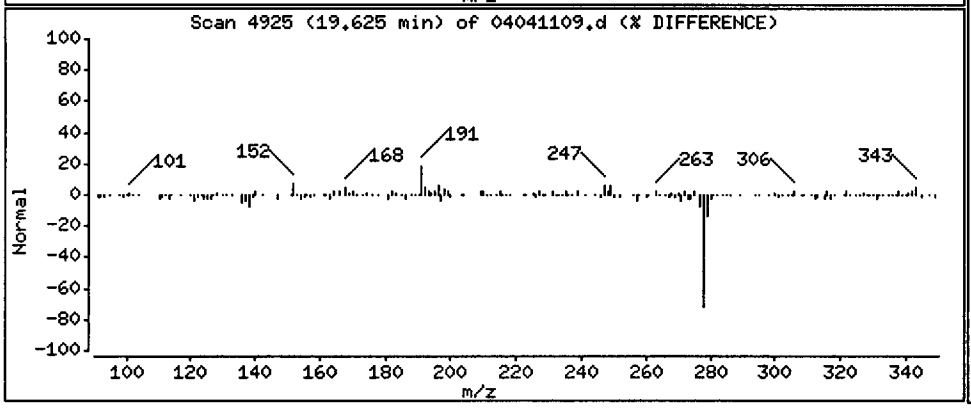






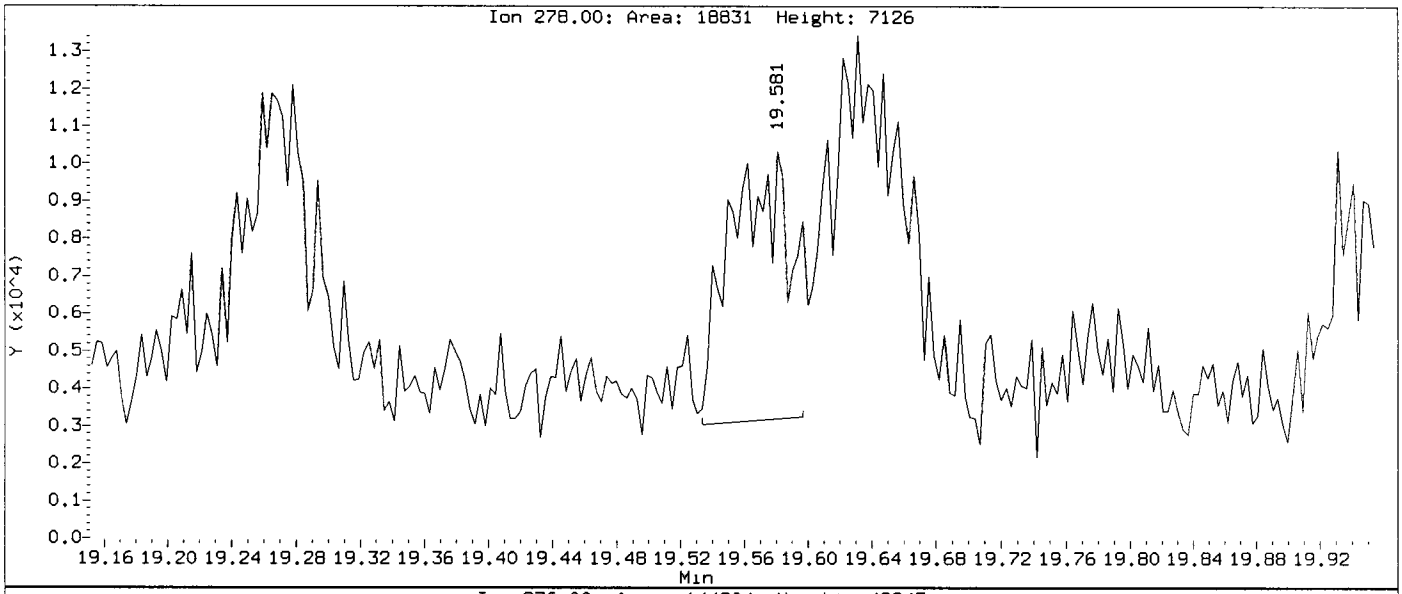


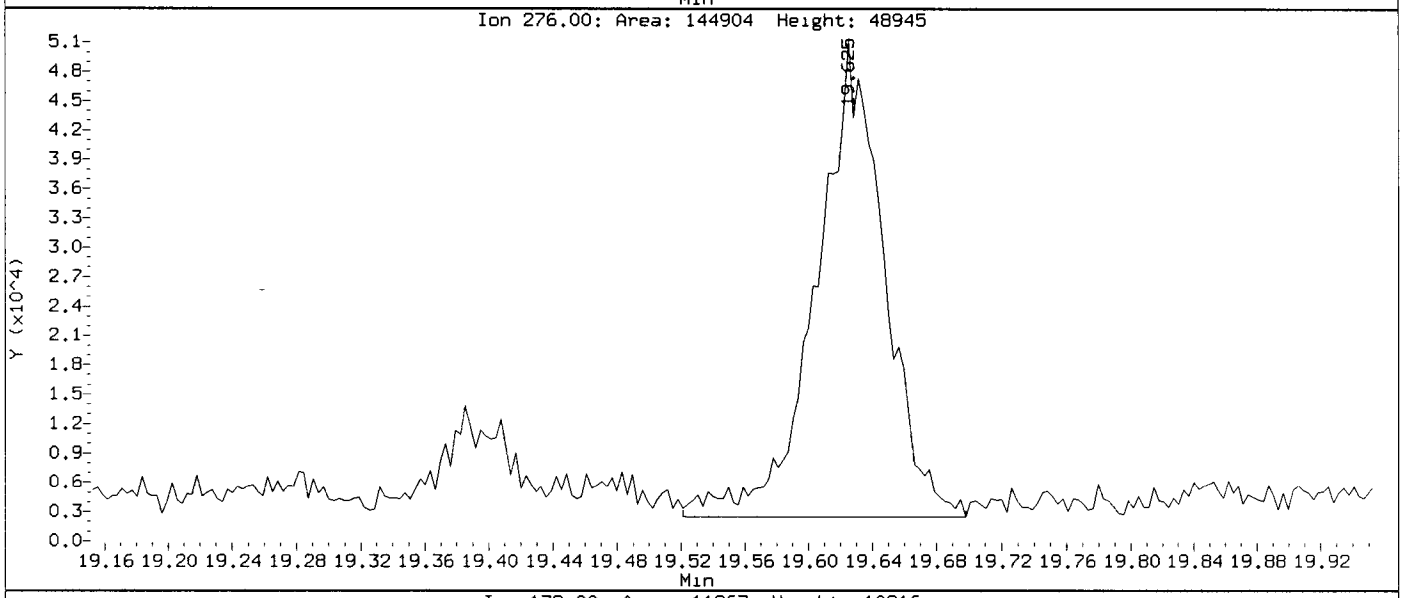


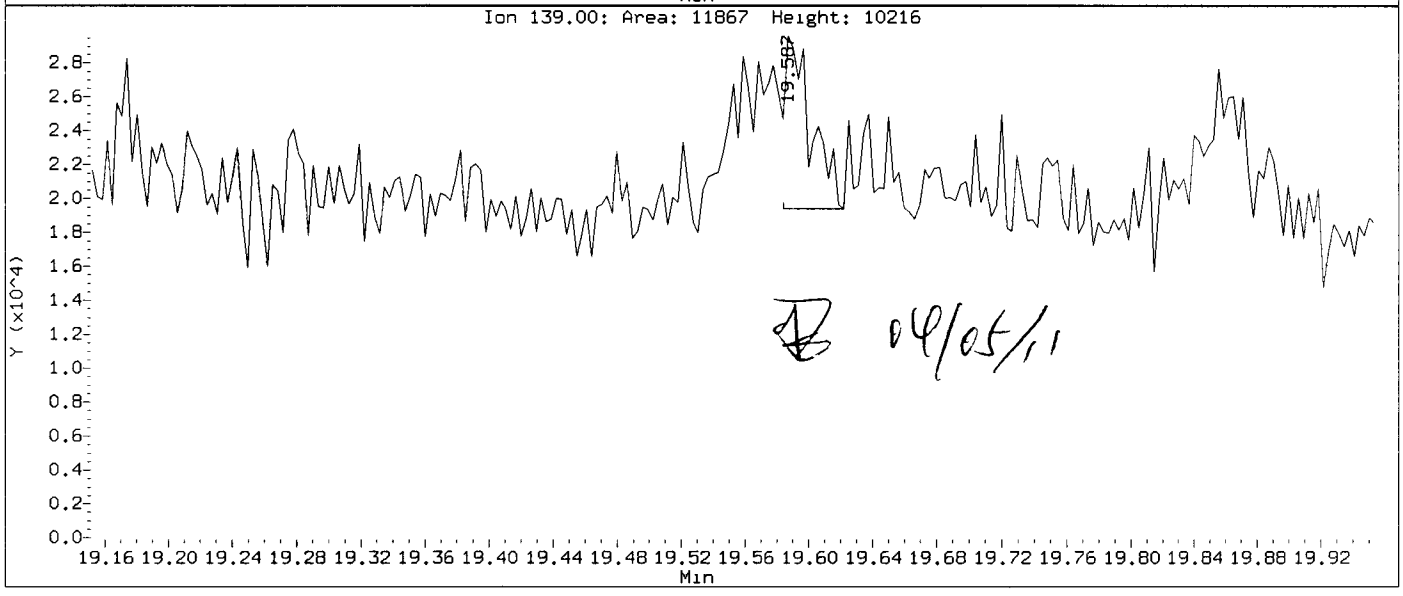


Data File: /chem1/nt12.i/20110404.b/04041109.d
Injection Date: 04-APR-2011 15:36
Instrument: nt12.i
Client Sample ID: LL-SED2-0-56-031511

Compound: Dibenzo(a,h)anthracene
CAS Number: 53-70-3





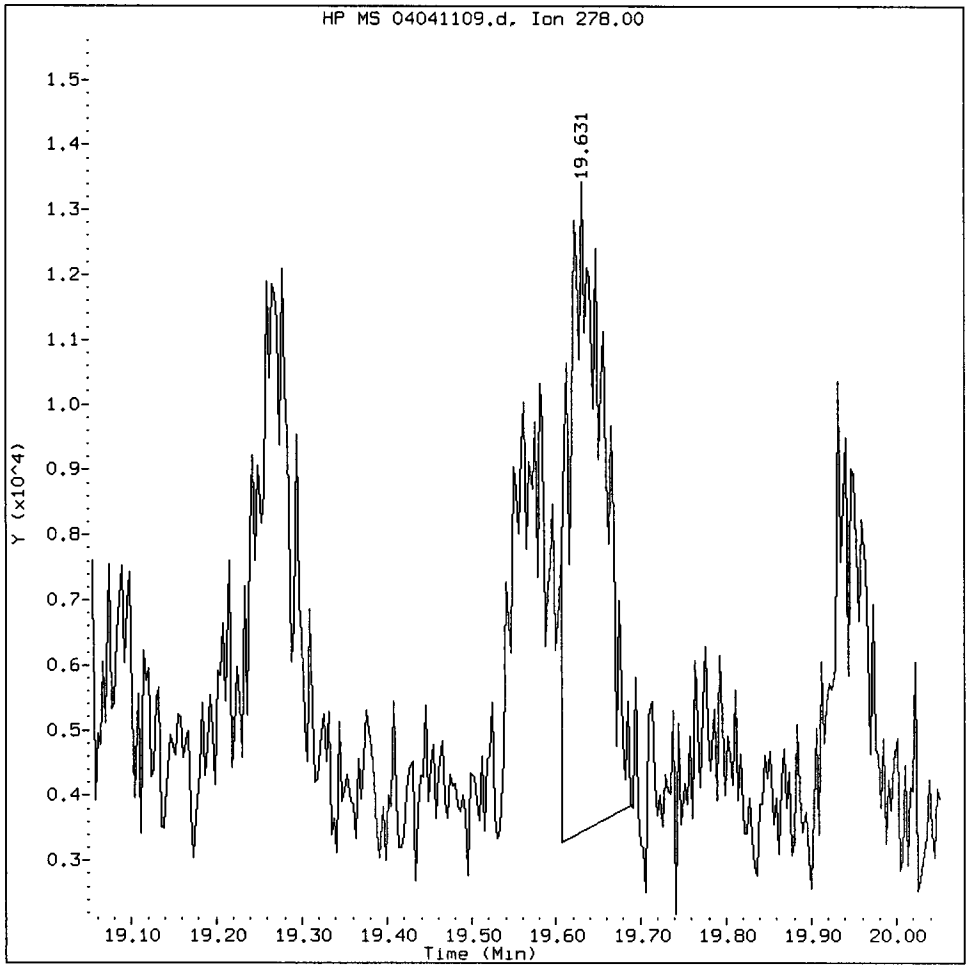


04/05/11

SN54 : 00370

SN54G, /chem1/nt12.i/20110404.b/04041109.d

Dibenzo(a,h)anthracene Amount: 0.32 Area: 28576



MANUAL INTEGRATION for Dibenzo(a,h)anthracene

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

Analyst: [signature] Date: 04/04/11

Data File: /chem1/nt12.i/20110404.b/04041109.d

Date : 04-APR-2011 15:36

Client ID: LL-SED2-0-56-031511

Instrument: nt12.i

Sample Info: SN54G

Volume Injected (uL): 1.0

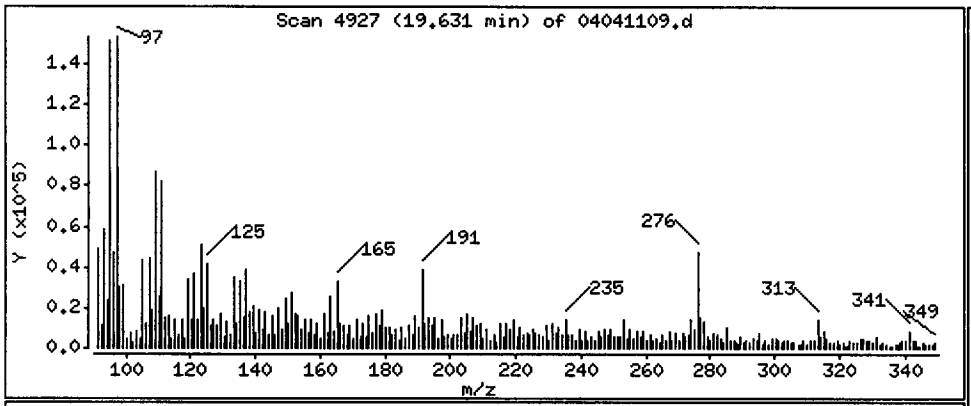
Operator: JZ

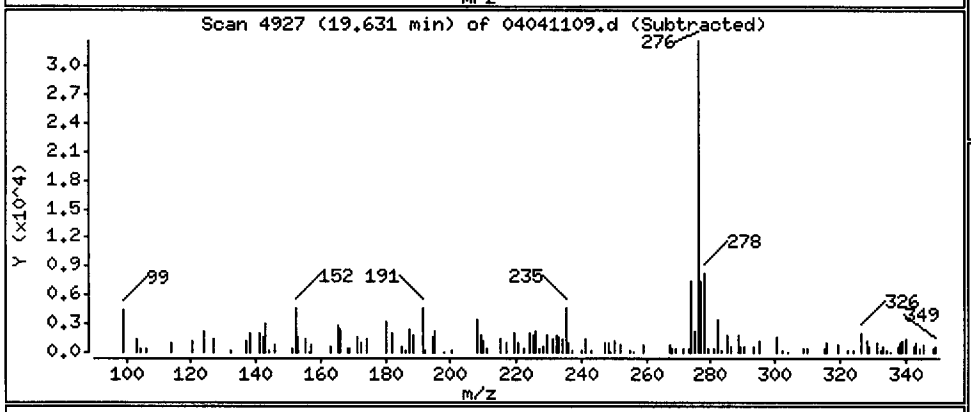
Column phase: ZB35

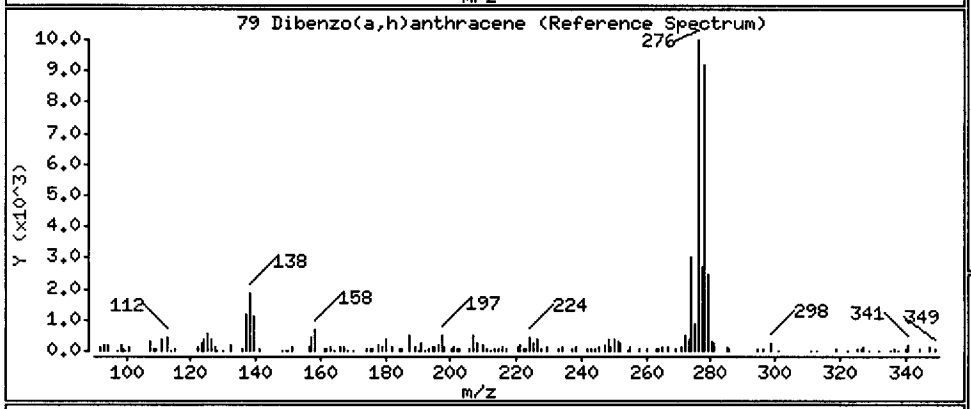
Column diameter: 0.32

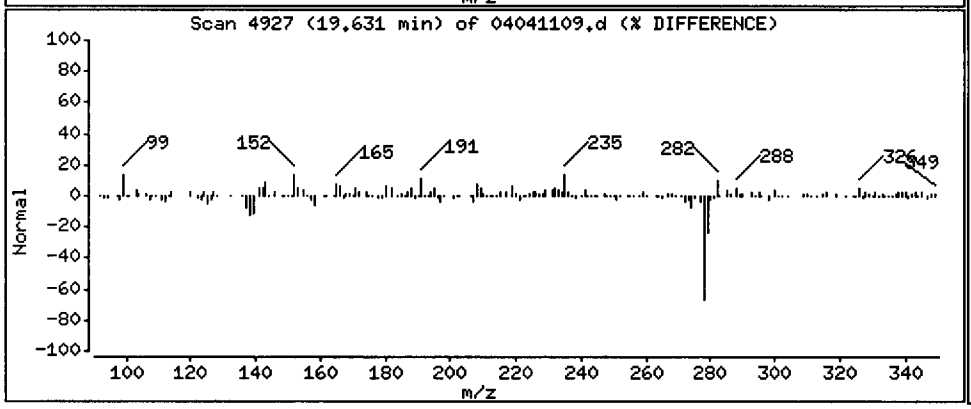
79 Dibenzo(a,h)anthracene

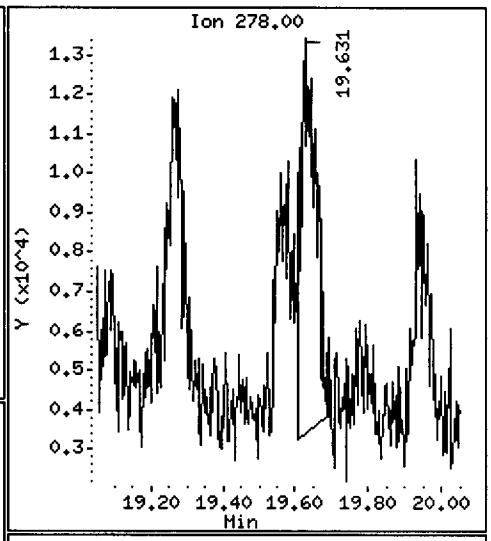
Concentration: 74.30 ug/kg

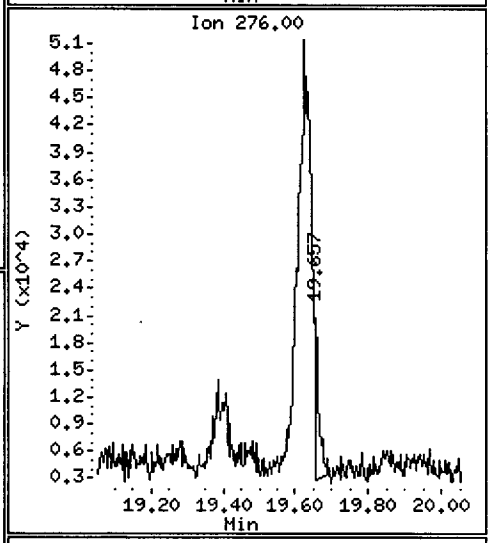


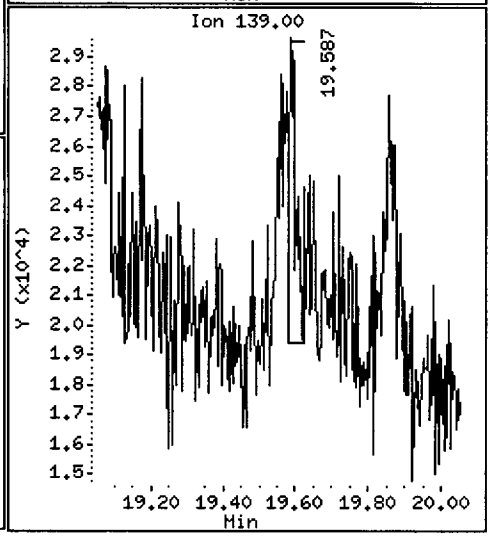






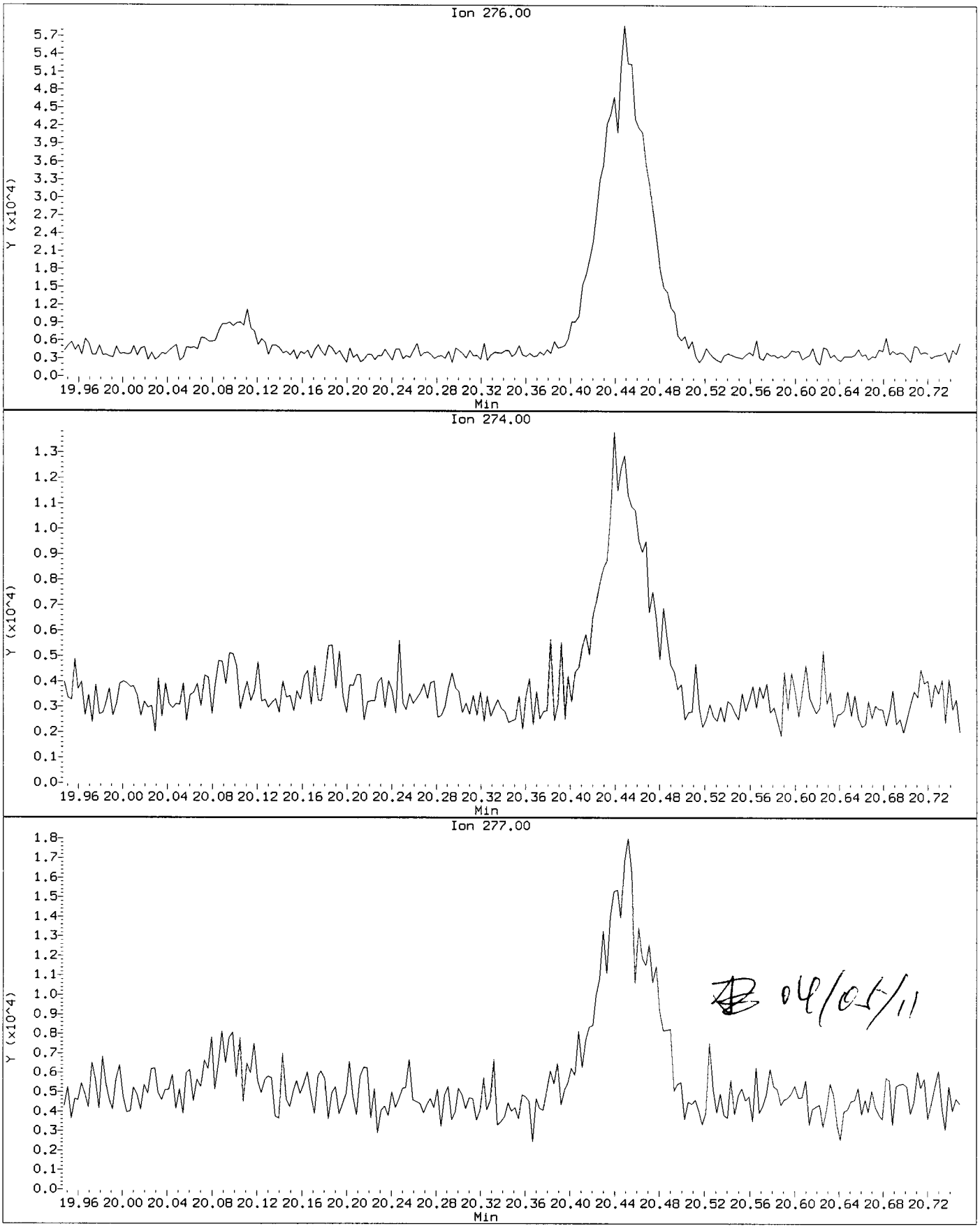






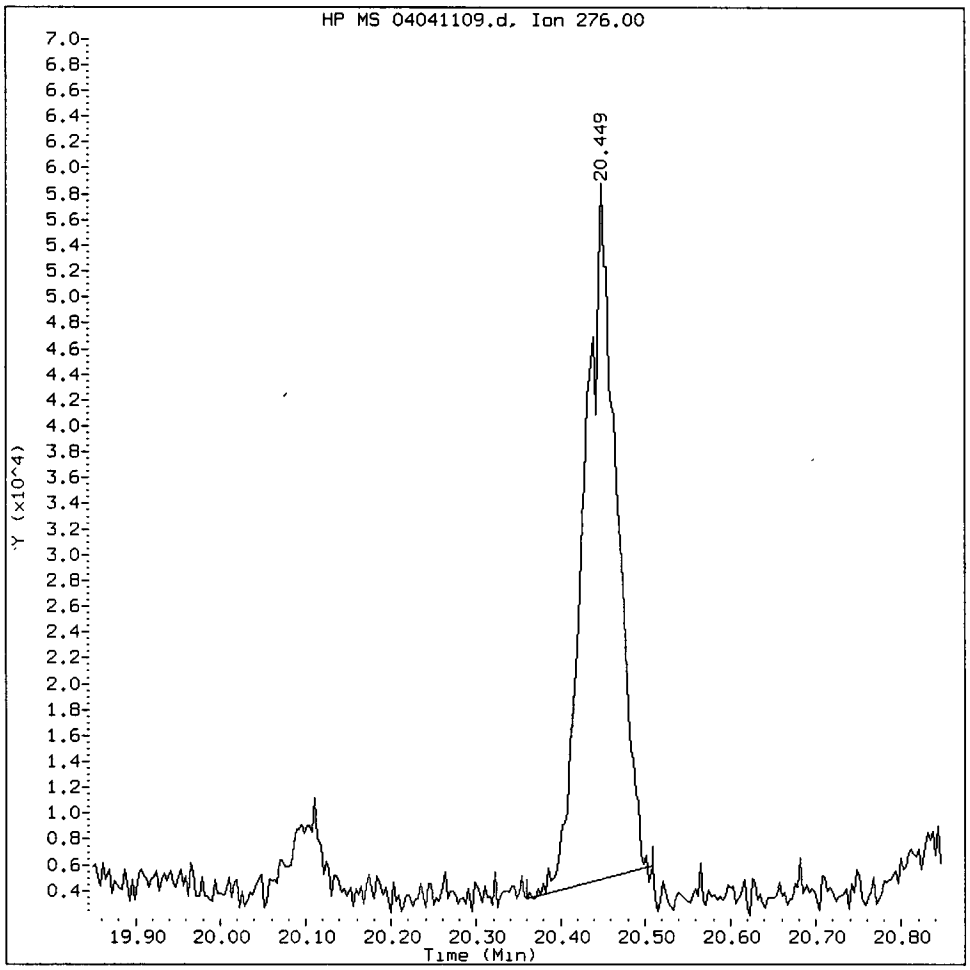
Data File: /chem1/nt12.i/20110404.b/04041109.d
Injection Date: 04-APR-2011 15:36
Instrument: nt12.i
Client Sample ID: LL-SED2-0-56-031511

Compound: Benzo(g,h,i)perylene
CAS Number: 191-24-2



SN54G, /chem1/nt12.i/20110404.b/04041109.d

Benzo(g,h,i)perylene Amount: 1.50 Area: 145273



MANUAL INTEGRATION for Benzo(g,h,i)perylene

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

5. Other _____

Analyst: _____ Date: 04/04/11

Data File: /chem1/nt12.i/20110404.b/04041109.d

Date : 04-APR-2011 15:36

Client ID: LL-SED2-0-56-031511

Instrument: nt12.i

Sample Info: SN54G

Volume Injected (uL): 1.0

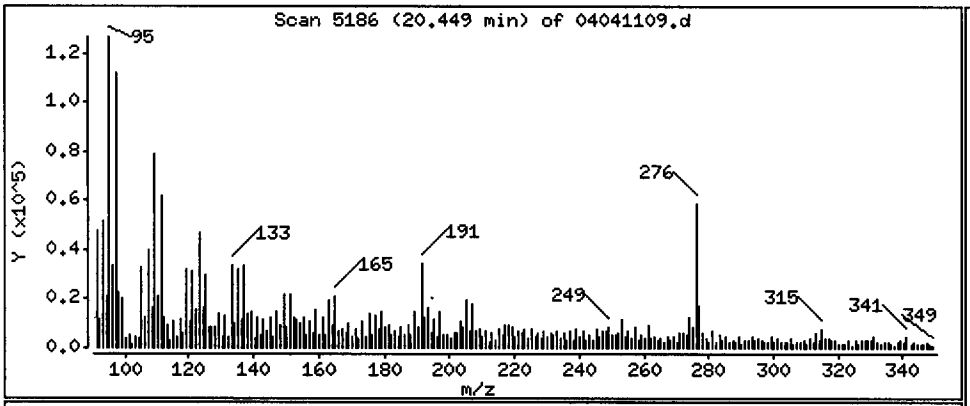
Operator: JZ

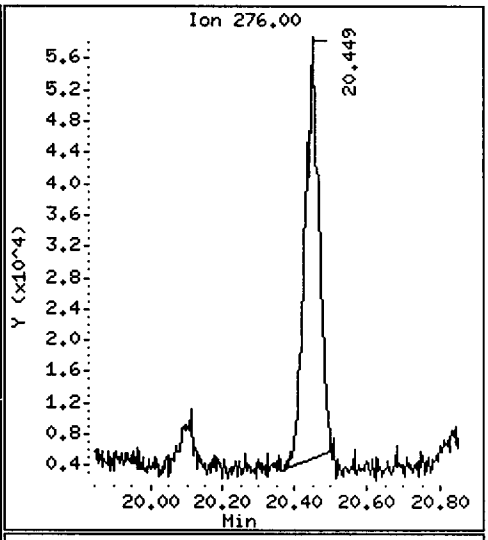
Column phase: ZB35

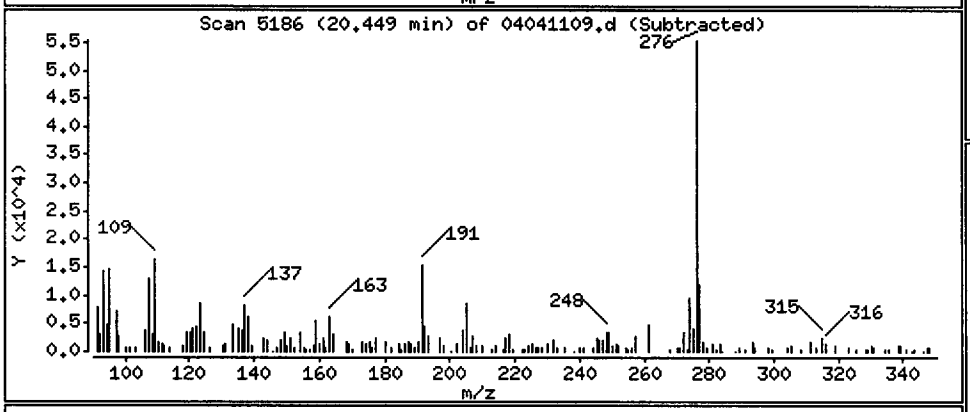
Column diameter: 0.32

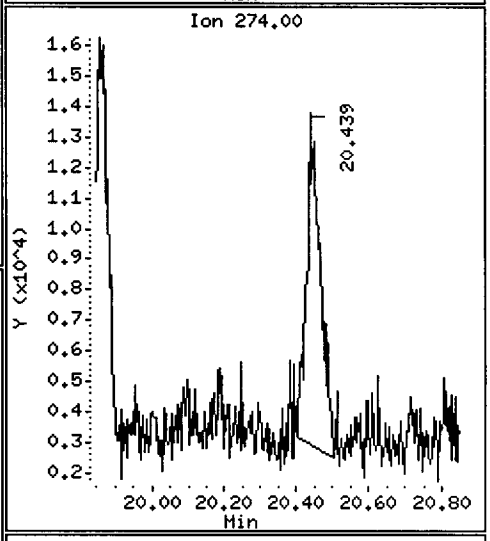
80 Benzo(g,h,i)perylene

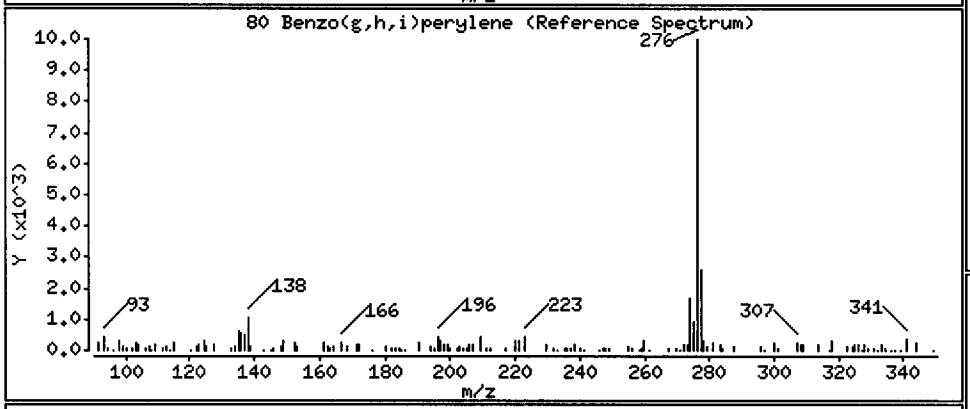
Concentration: 348.3 ug/kg

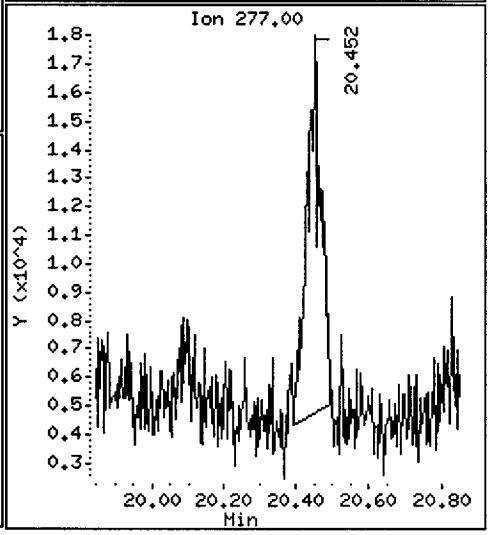


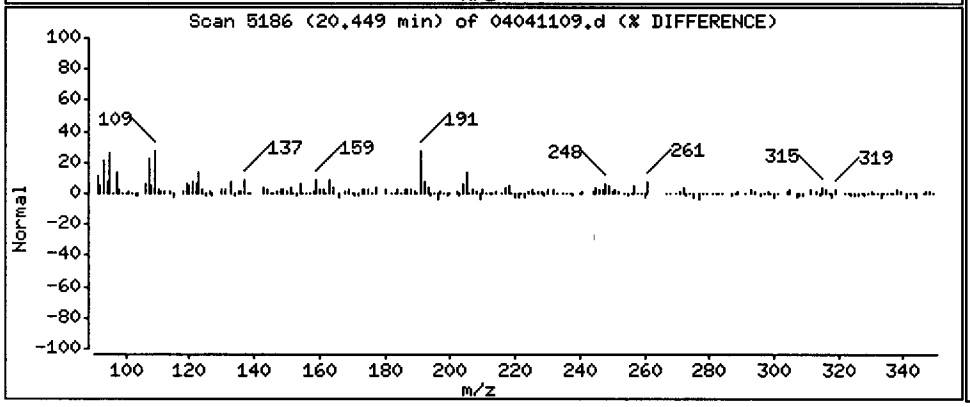












Data File: /chem1/nt12.i/20110404.b/04041109.d

Date : 04-APR-2011 15:36

Client ID: LL-SED2-0-56-031511

Instrument: nt12.i

Sample Info: SN54G

Volume Injected (uL): 1.0

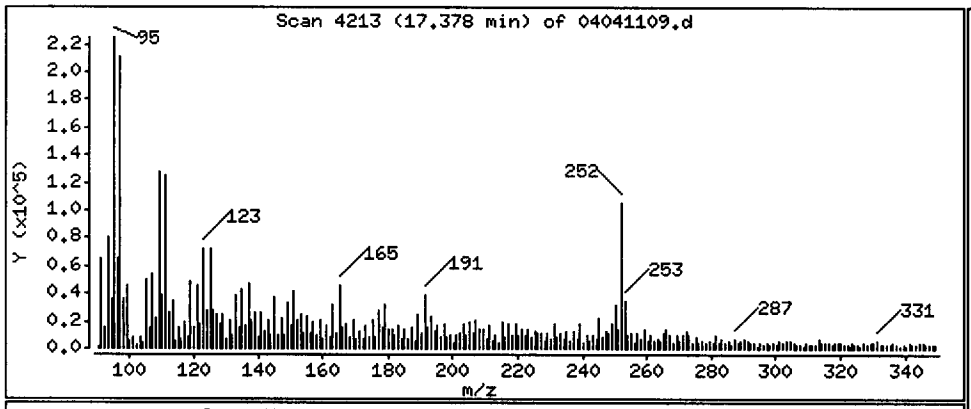
Operator: JZ

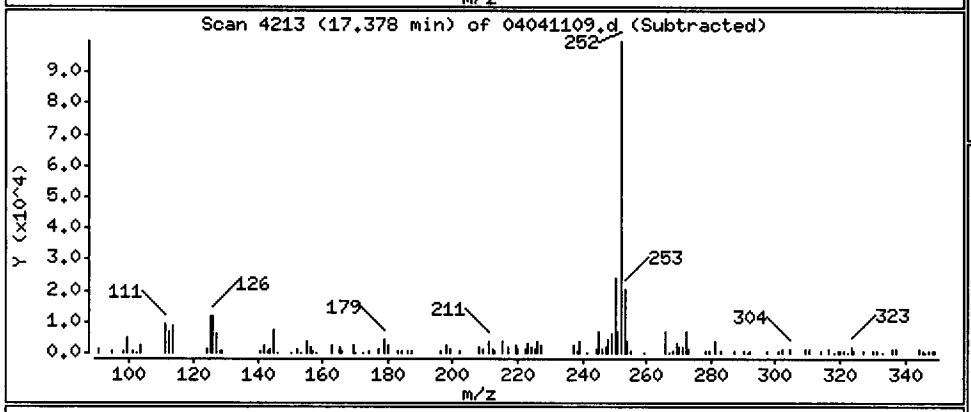
Column phase: ZB35

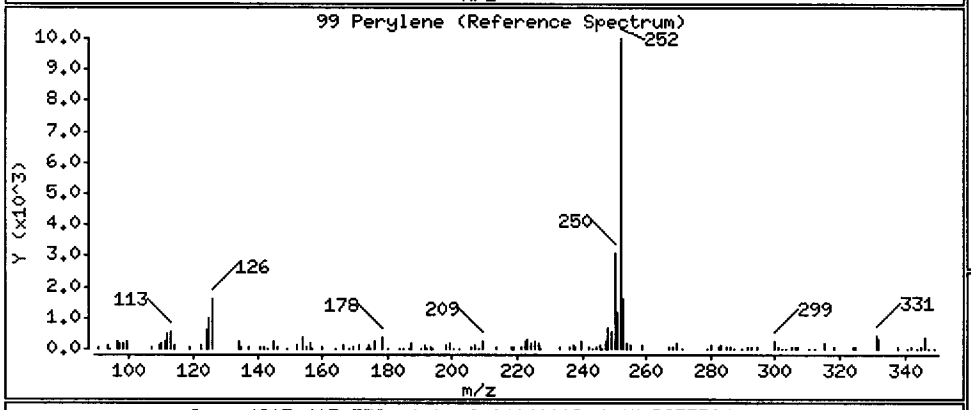
Column diameter: 0.32

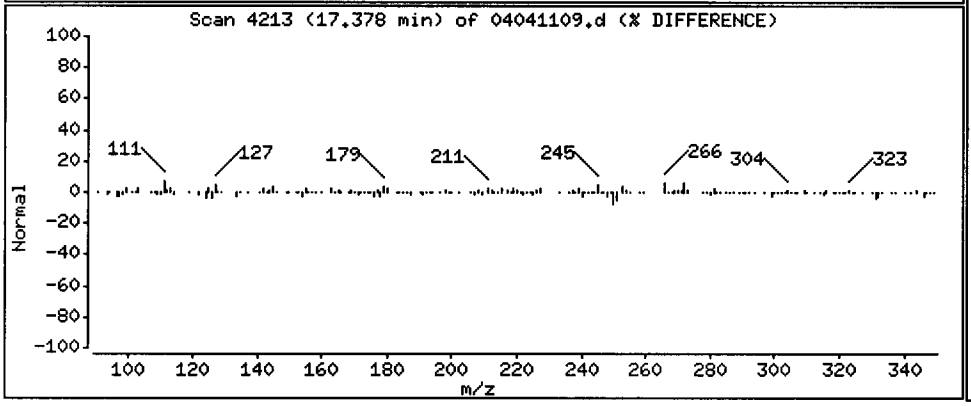
99 Perylene

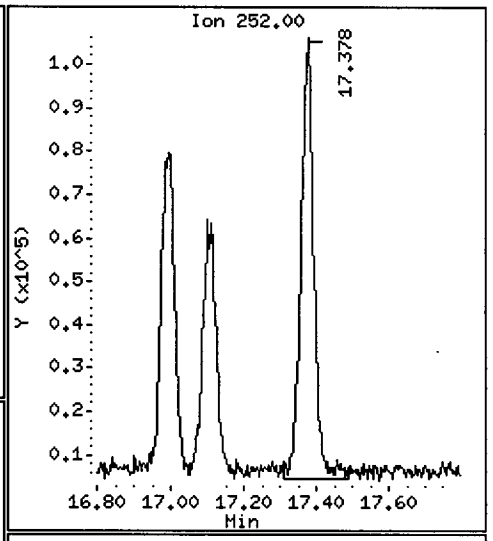
Concentration: 772.0 ug/kg

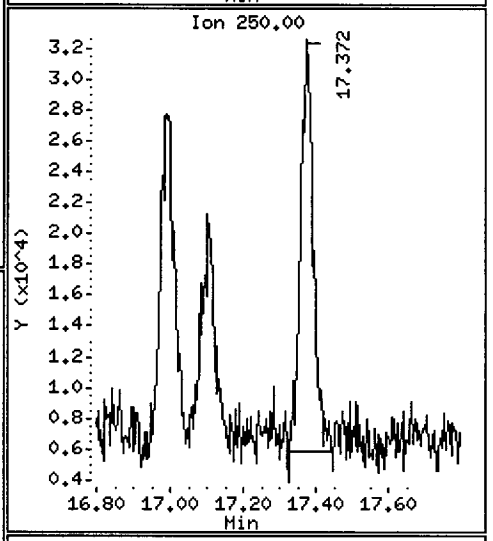


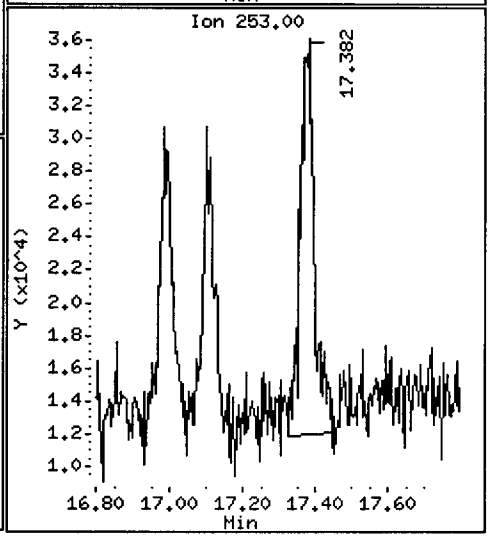












CO-ELUTION SUMMARY FOR FILE - 04041109.d

Lab ID: SN54G, Method: SIMPNA0331.m, Instrument: nt12.i, Date: 04-APR-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt12.i/20110404.b/04041110.d
Lab Smp Id: SN54H Client Smp ID: LL-SED1-0-56-031511
Inj Date : 04-APR-2011 16:03
Operator : JZ Inst ID: nt12.i
Smp Info : SN54H
Misc Info : 11-5932
Comment : 1ul Injection
Method : /chem1/nt12.i/20110404.b/SIMPNA0331.m
Meth Date : 05-Apr-2011 17:45 jianqing Quant Type: ISTD
Cal Date : 31-MAR-2011 22:47 Cal File: 03311107.d
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

04/05/11

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	19.41000	Weight of sample extracted (g)
M	45.60000	% 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	4.800	4.803	(1.000)	208943	2.00000	
28 Naphthalene	128	4.825	4.832	(1.005)	14429	0.14302	6.772
$ 190 2-Methylnaphthalene-d10	152	5.539	5.542	(1.154)	139212	2.17916	103.2
32 2-Methylnaphthalene	141	5.586	5.583	(1.164)	6896	0.12300	5.824
105 1-methylnaphthalene	141	5.775	5.775	(1.203)	17141	0.28729	13.60
40 Acenaphthylene	152	Compound Not Detected.					
* 42 Acenaphthene-d10	164	7.047	7.044	(1.000)	140371	2.00000	
44 Acenaphthene	153	7.091	7.091	(1.006)	7379	0.09644	4.567
46 Dibenzofuran	168	7.239	7.236	(1.027)	6745	0.06484	3.070
49 Fluorene	166	7.694	7.691	(1.092)	9296	0.10853	5.139
* 59 Phenanthrene-d10	188	8.985	8.981	(1.000)	227824	2.00000	
60 Phenanthrene	178	9.019	9.013	(1.004)	87219	0.72538	34.35
61 Anthracene	178	9.051	9.044	(1.007)	15279	0.12656	5.993
64 Fluoranthene	202	10.704	10.673	(1.191)	244806	1.87236	88.66
65 Pyrene	202	11.168	11.137	(0.818)	361370	2.39769	113.5

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
68 Benzo(a)anthracene	228	13.532	13.491	(0.992)	105570	0.78447	37.15
* 69 Chrysene-d12	240	13.645	13.604	(1.000)	279926	2.00000	
71 Chrysene	228	13.705	13.671	(1.004)	225418	1.71386	81.16
74 Benzo(b)fluoranthene	252	16.145	16.078	(0.933)	140805	1.53218	72.55
75 Benzo(k)fluoranthene	252	16.195	16.132	(0.936)	68458	0.71015	33 63(H)
188 Benzo(j)fluoranthene	252	16.274	16.208	(0.941)	67621	0.73411	34.76(H)
76 Benzo(a)pyrene	252	17.091	17.025	(0.988)	98681	1.16956	55.38(H)
* 77 Perylene-d12	264	17.299	17.230	(1.000)	163012	2.00000	
78 Indeno(1,2,3-cd)pyrene	276	19.603	19.537	(1.133)	82755	0.80660	38.19
$ 191 Dibenzo(a,h)anthracene-d14	292	19.537	19.470	(1.129)	142152	1.85835	88.00
79 Dibenzo(a,h)anthracene	278	19.631	19.553	(1.135)	10319	0.12299	5.824(M)
80 Benzo(g,h,i)perylene	276	20.423	20.348	(1.181)	105489	1.15925	54.89
99 Perylene	252	17.363	17.296	(1.004)	409157	5.73394	271 5

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt12.i
Lab File ID: 04041110.d
Lab Smp Id: SN54H
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem1/nt12.i/20110404.b/SIMPNA0331.m
Misc Info: 11-5932

Calibration Date: 04-APR-2011
Calibration Time: 11:18
Client Smp ID: LL-SED1-0-56-031
Level: LOW
Sample Type: Sediment

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF	
27 Naphthalene-d8	494112	247056	988224	208943	-57.71	NR <-
42 Acenaphthene-d10	280105	140052	560210	140371	-49.89	NR
59 Phenanthrene-d10	461353	230676	922706	227824	-50.62	NR <-
69 Chrysene-d12	503160	251580	1006320	279926	-44.37	
77 Perylene-d12	442215	221108	884430	163012	-63.14	<-

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	7.04	6.54	7.54	7.05	0.04
59 Phenanthrene-d10	8.98	8.48	9.48	8.98	0.04
69 Chrysene-d12	13.60	13.10	14.10	13.65	0.30
77 Perylene-d12	17.23	16.73	17.73	17.30	0.40

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.

04/05/11

Analytical Resources, Inc.

RECOVERY REPORT

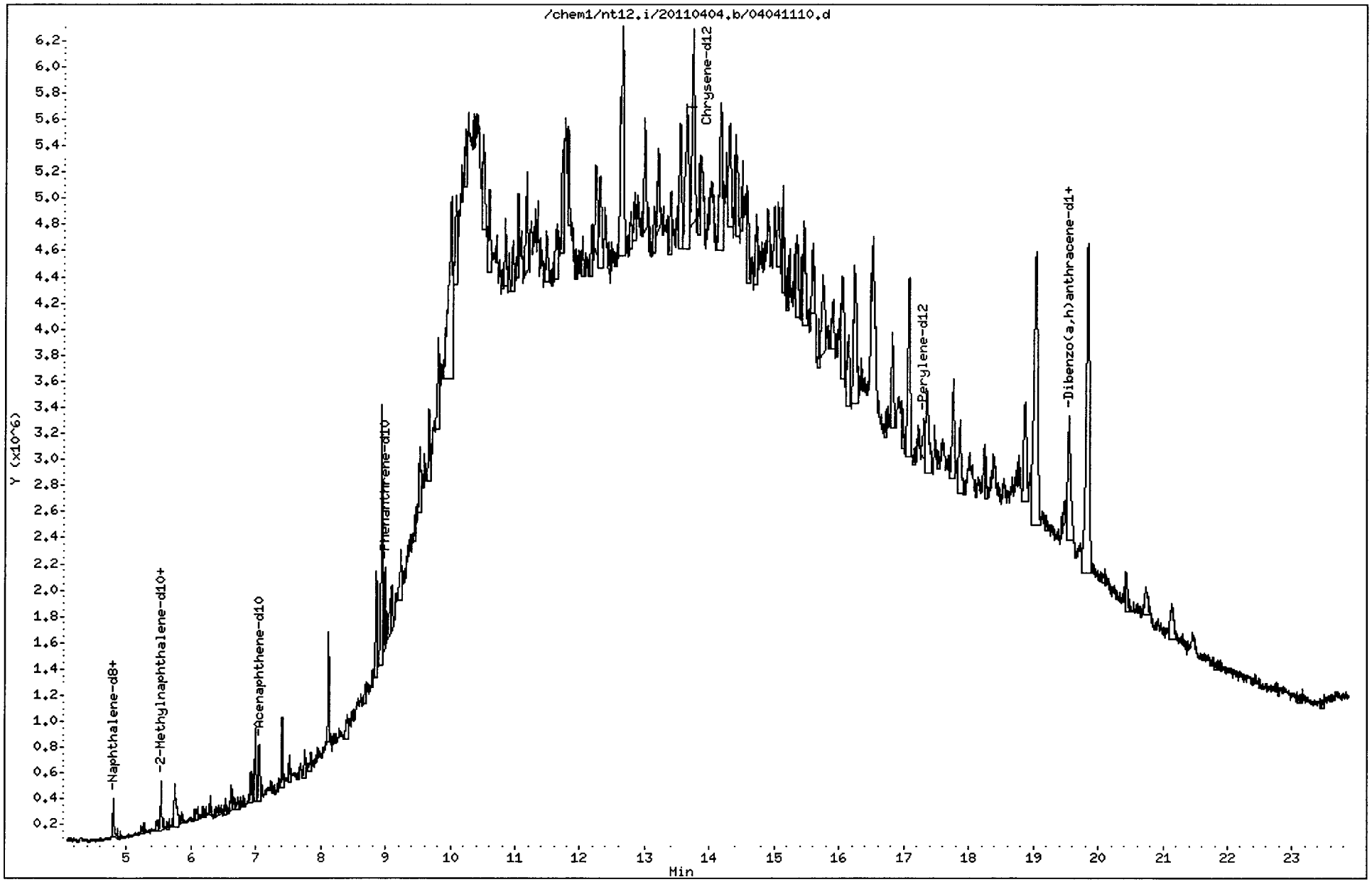
Client Name: Floyd Snider
Client SDG: SN54
Sample Matrix: SOLID
Fraction: SV
Lab Smp Id: SN54H
Client Smp ID: LL-SED1-0-56-031511
Level: LOW
Operator: JZ
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: pnalcss.spk
Quant Type: ISTD
Sublist File: pnax.sub
Method File: /chem1/nt12.i/20110404.b/SIMPNA0331.m
Misc Info: 11-5932

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	142.1	103.2	72.64	34-100
$ 191 Dibenzo(a,h)anthra	142.1	88.00	61.95	10-117

Data File: /chem1/nt12.i/20110404.b/04041110.d
Date : 04-APR-2011 16:03
Client ID: LL-SED1-0-56-031511
Sample Info: SN54H
Volume Injected (uL): 1.0
Column phase: ZB35

Instrument: nt12.i
Operator: JZ
Column diameter: 0.32

SN54:003392



Data File: /chem1/nt12.i/20110404.b/04041110.d

Date : 04-APR-2011 16:03

Client ID: LL-SED1-0-56-031511

Instrument: nt12.i

Sample Info: SN54H

Volume Injected (uL): 1.0

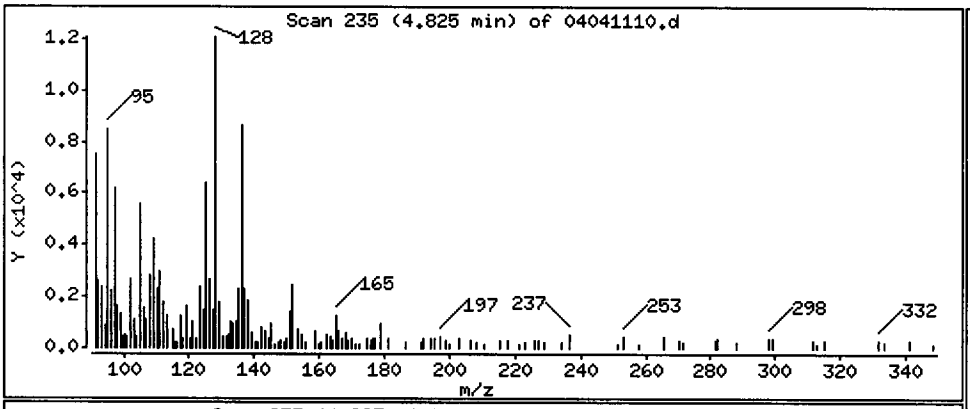
Operator: JZ

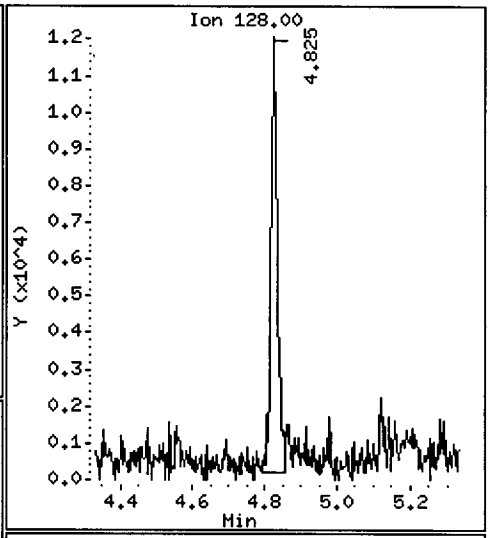
Column phase: ZB35

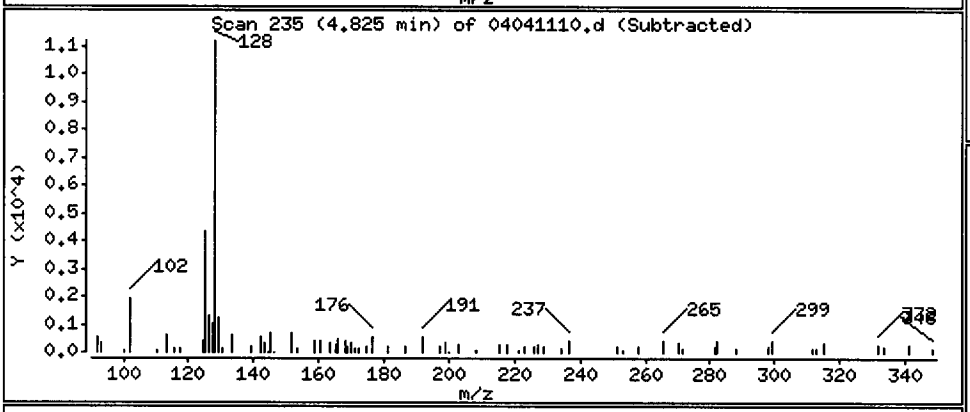
Column diameter: 0.32

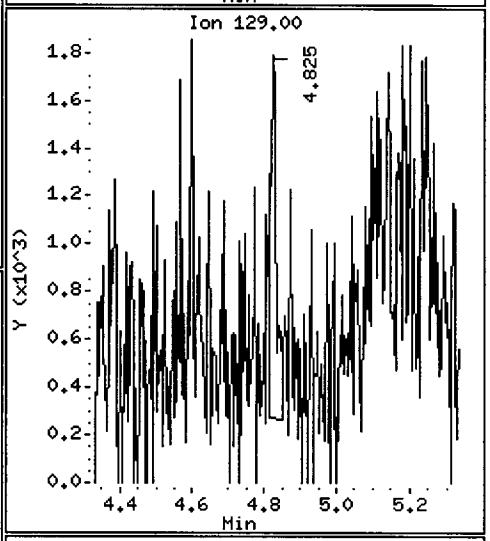
28 Naphthalene

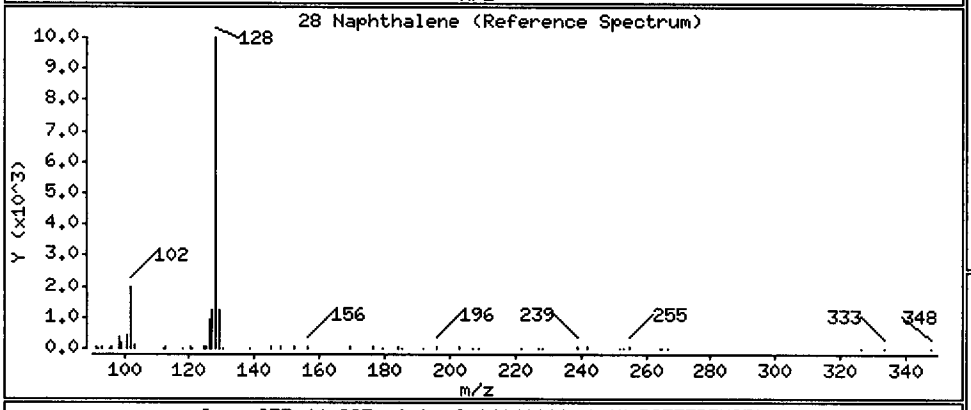
Concentration: 6.772 ug/kg

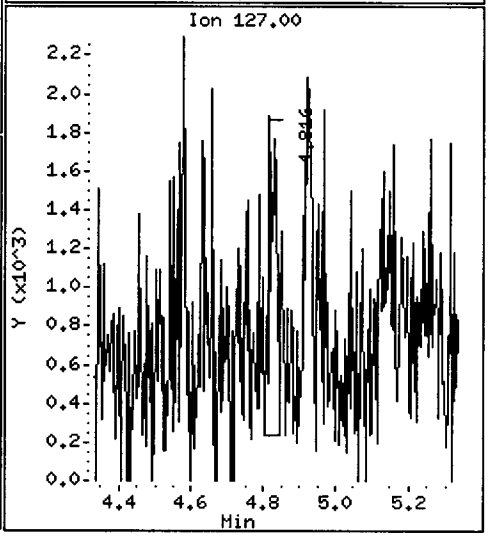


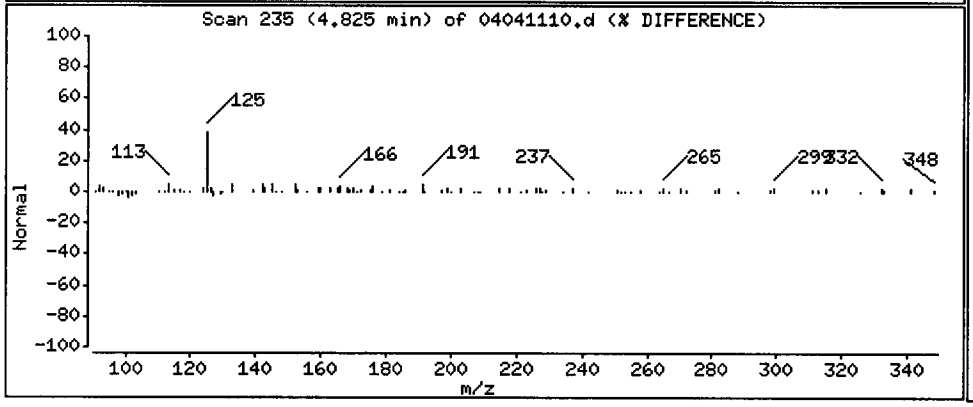












Data File: /chem1/nt12.i/20110404.b/04041110.d

Date : 04-APR-2011 16:03

Client ID: LL-SED1-0-56-031511

Instrument: nt12.i

Sample Info: SN54H

Volume Injected (uL): 1.0

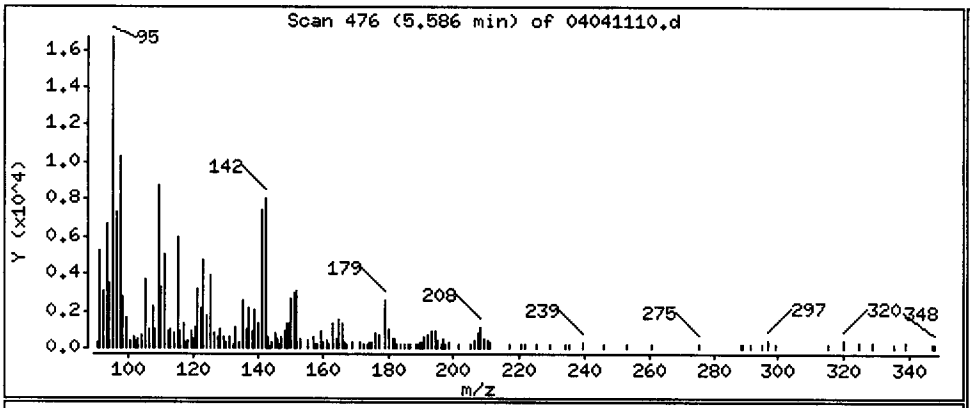
Operator: JZ

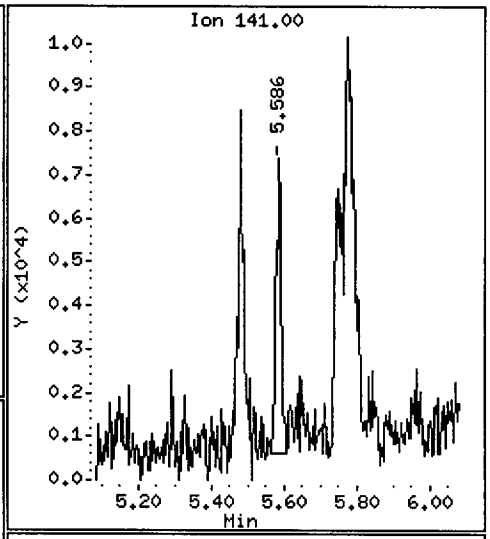
Column phase: ZB35

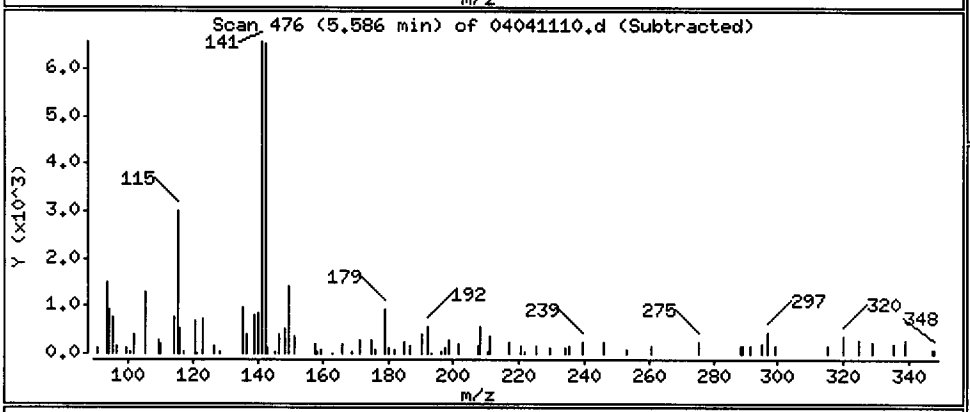
Column diameter: 0.32

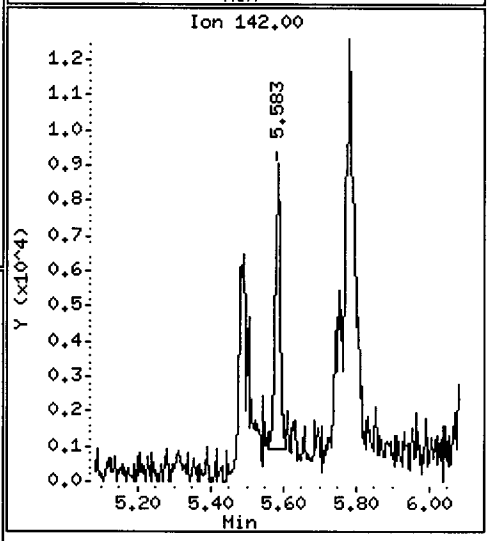
32 2-Methylnaphthalene

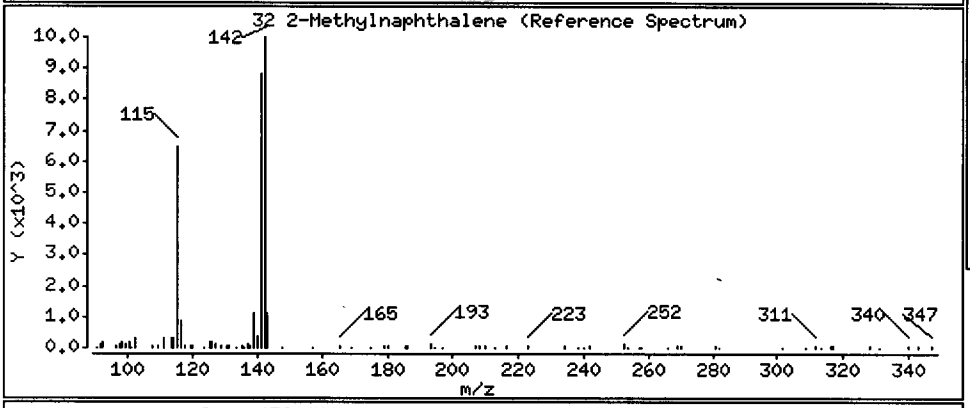
Concentration: 5.824 ug/kg

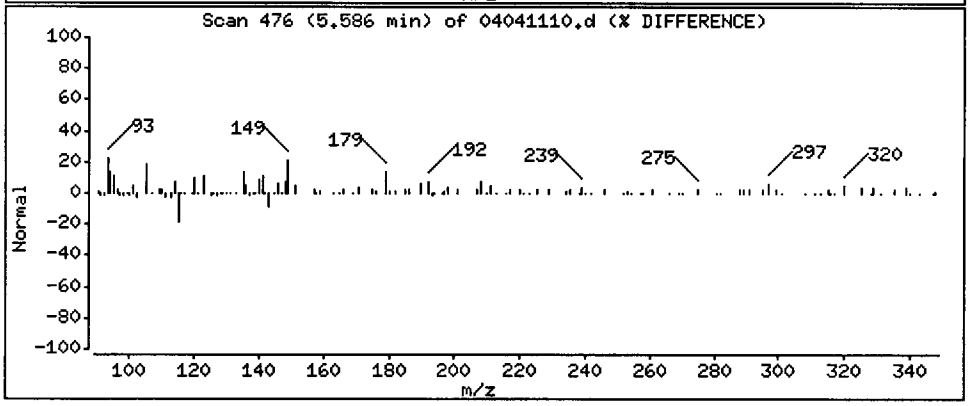












Data File: /chem1/nt12.i/20110404.b/04041110.d

Date : 04-APR-2011 16:03

Client ID: LL-SED1-0-56-031511

Instrument: nt12.i

Sample Info: SN54H

Volume Injected (uL): 1.0

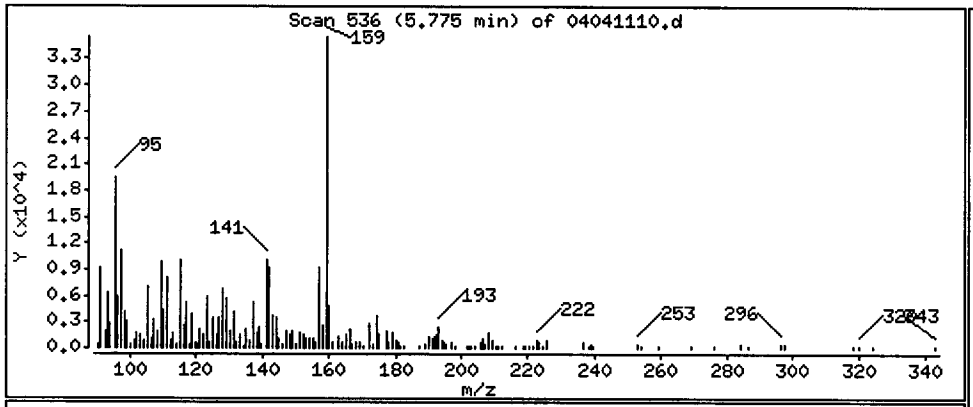
Operator: JZ

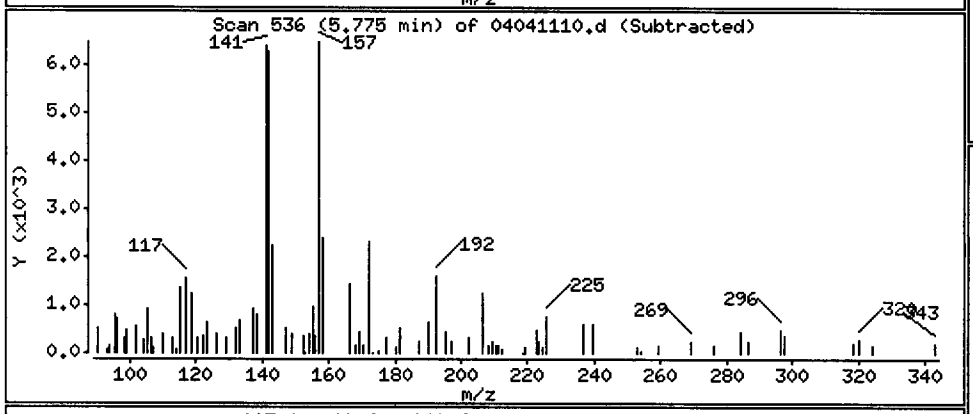
Column phase: ZB35

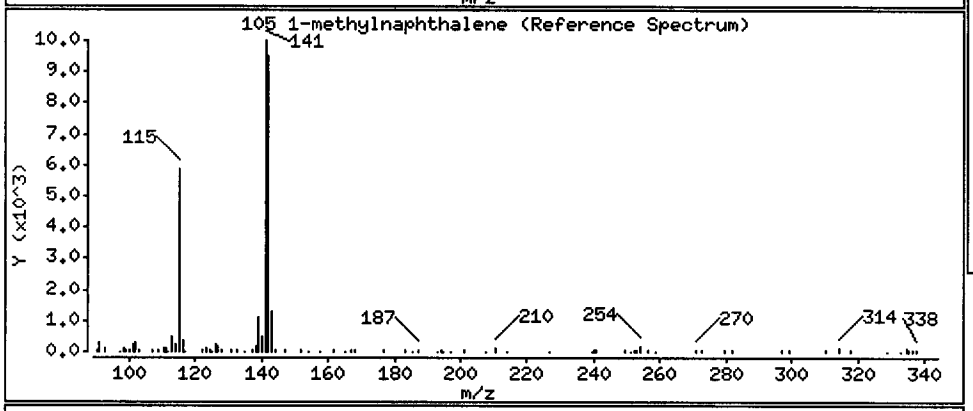
Column diameter: 0.32

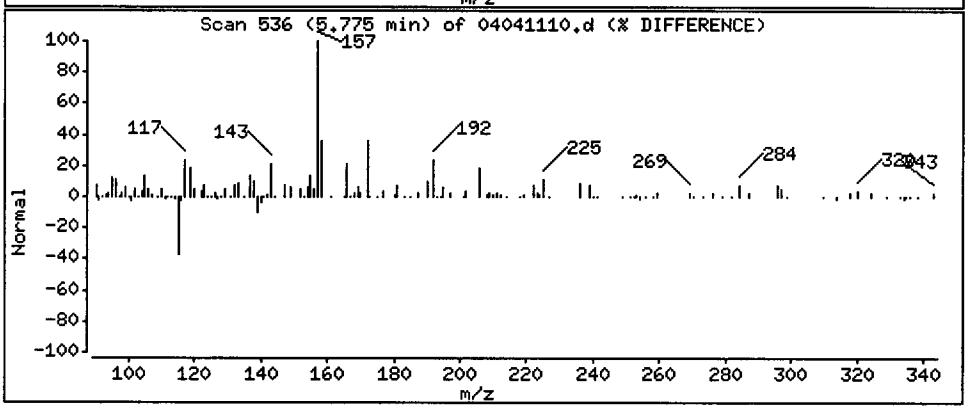
105 1-methylnaphthalene

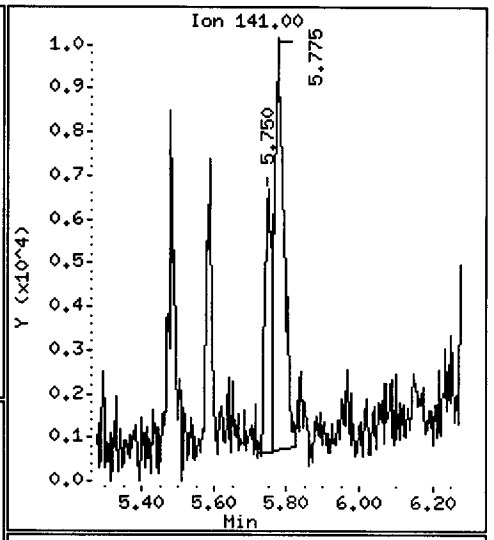
Concentration: 13.60 ug/kg

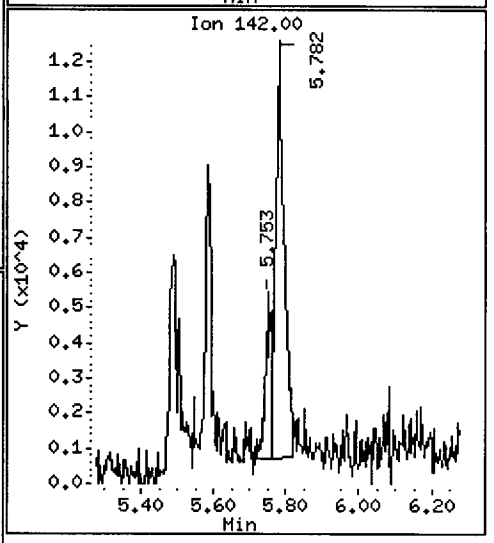












Data File: /chem1/nt12.i/20110404.b/04041110.d

Date : 04-APR-2011 16:03

Client ID: LL-SED1-0-56-031511

Instrument: nt12.i

Sample Info: SN54H

Volume Injected (uL): 1.0

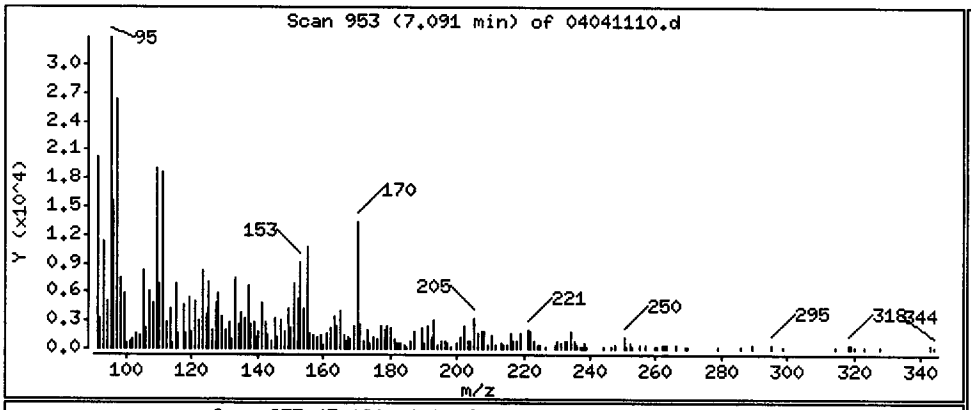
Operator: JZ

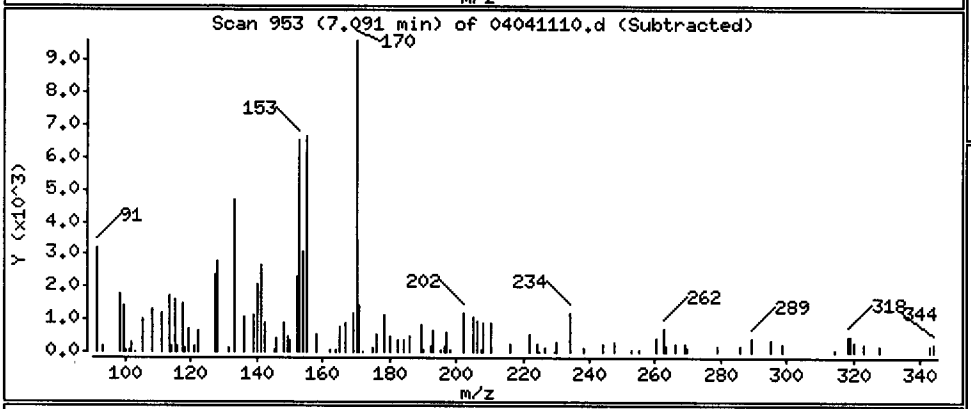
Column phase: ZB35

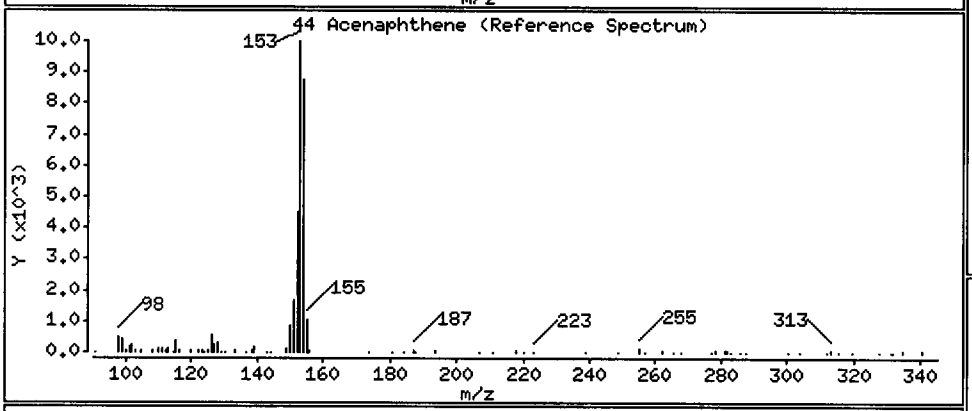
Column diameter: 0.32

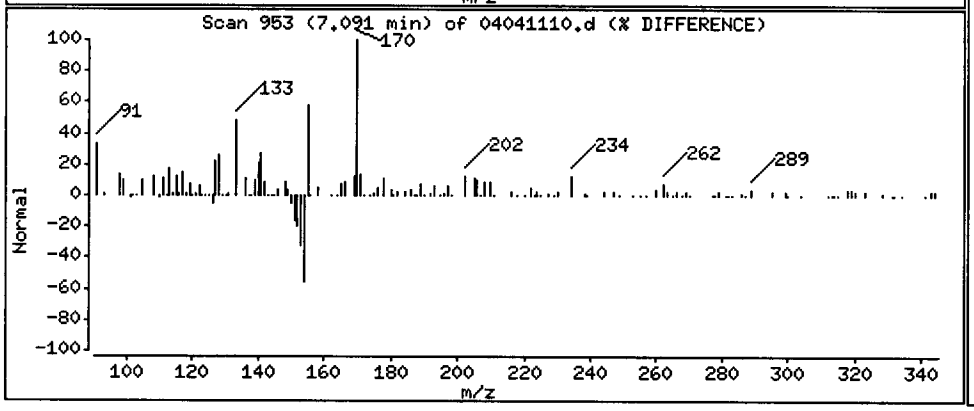
44 Acenaphthene

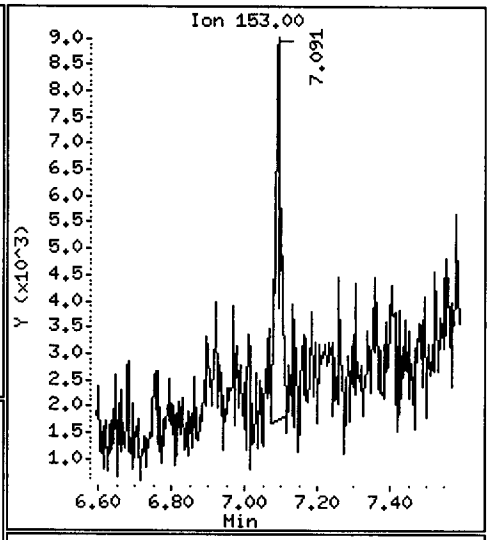
Concentration: 4.567 ug/kg

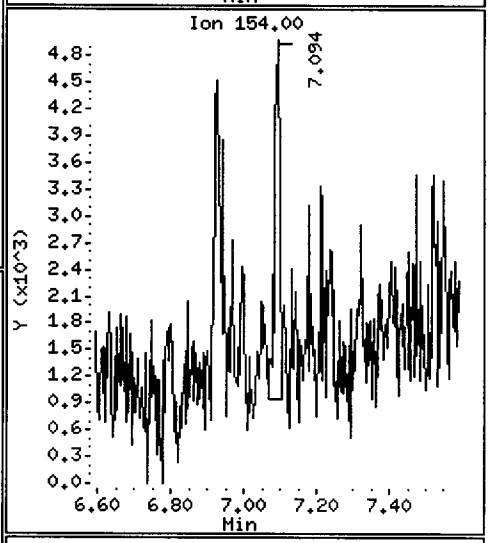


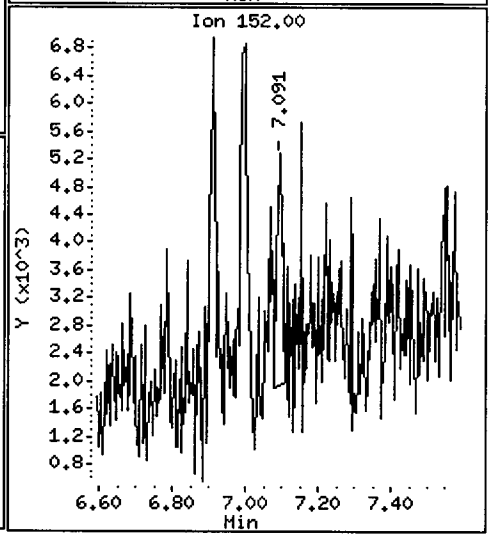












Data File: /chem1/nt12.i/20110404.b/04041110.d

Date : 04-APR-2011 16:03

Client ID: LL-SED1-0-56-031511

Instrument: nt12.i

Sample Info: SN54H

Volume Injected (uL): 1.0

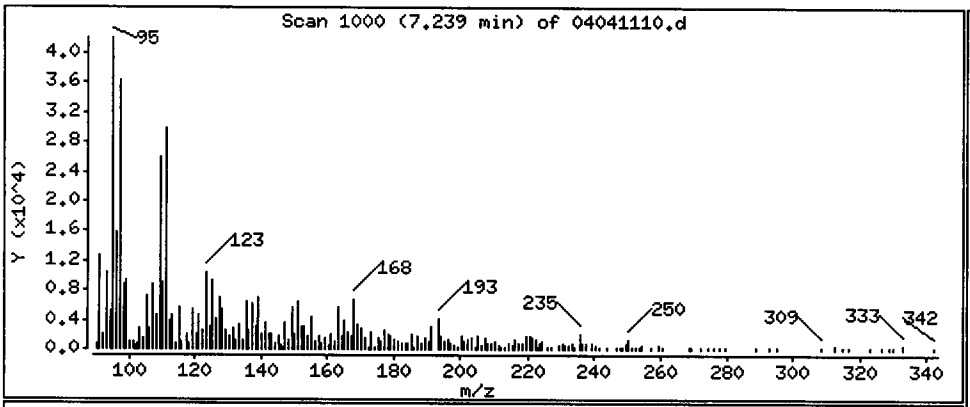
Operator: JZ

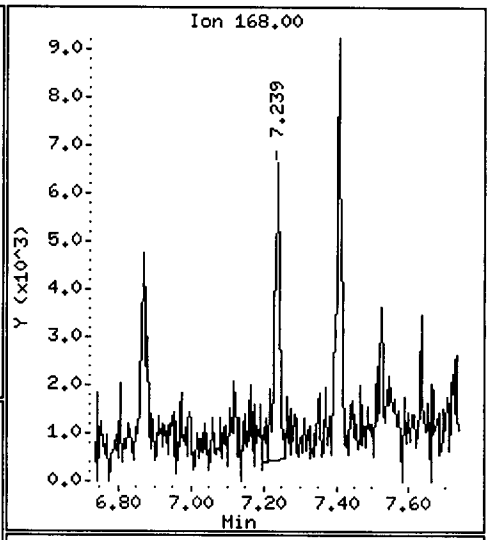
Column phase: ZB35

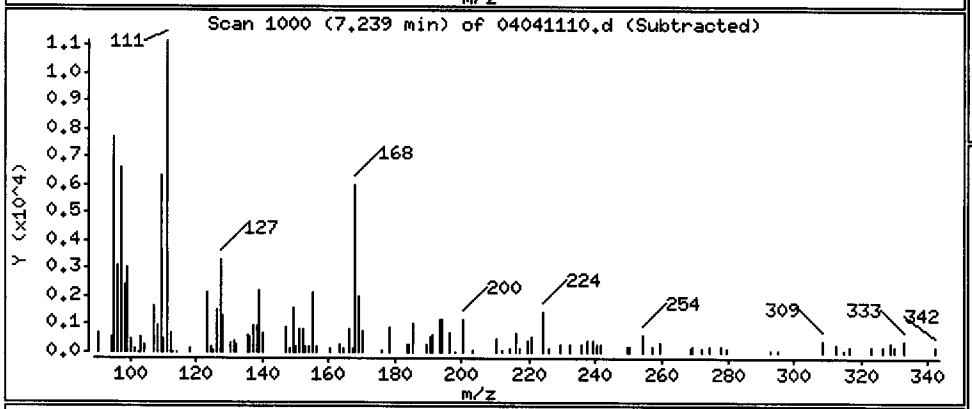
Column diameter: 0.32

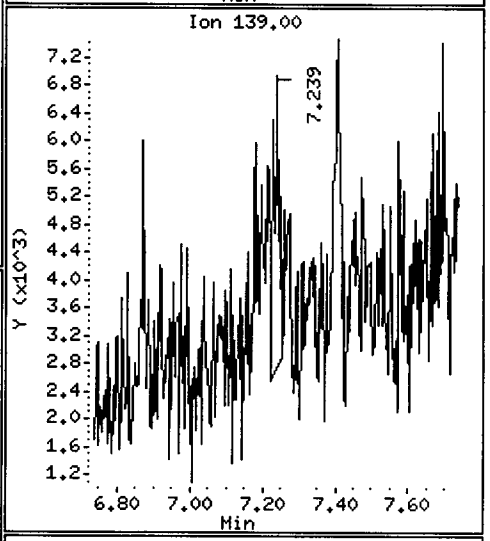
46 Dibenzofuran

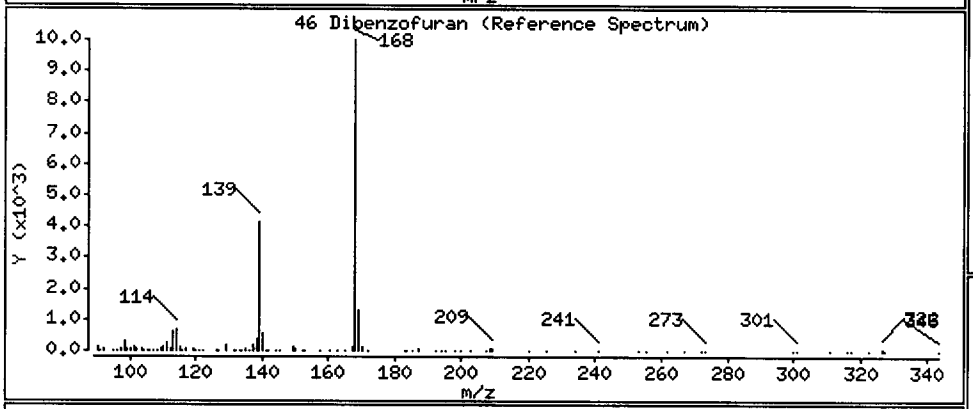
Concentration: 3.070 ug/kg

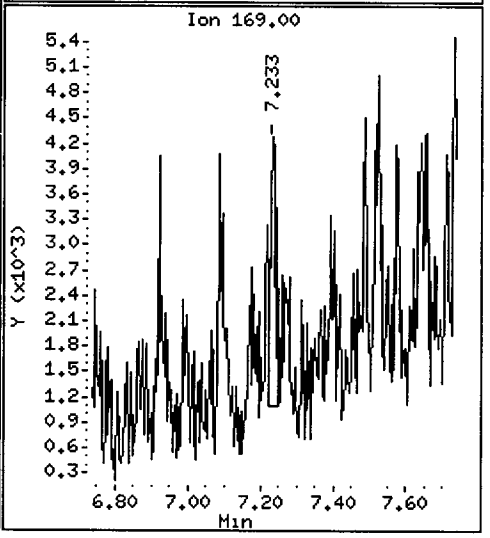


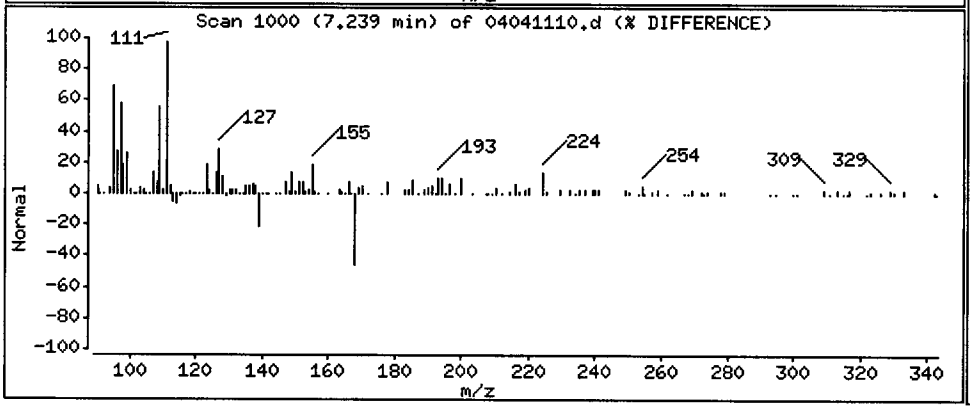












Data File: /chem1/nt12.i/20110404.b/04041110.d

Date : 04-APR-2011 16:03

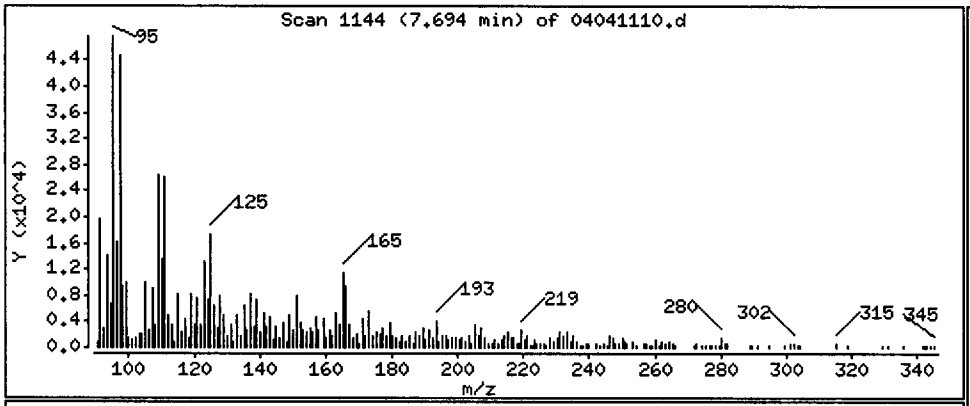
Client ID: LL-SED1-0-56-031511 Instrument: nt12.i

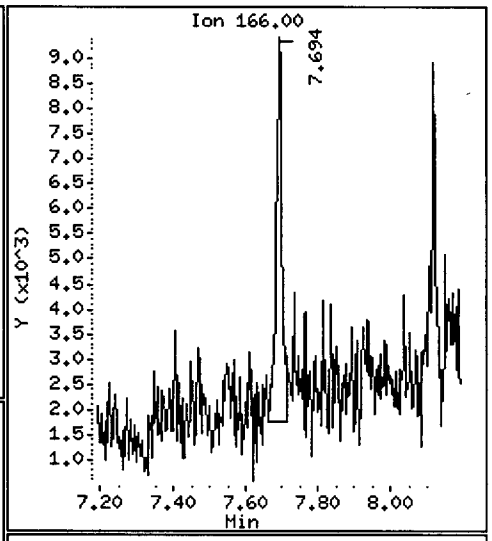
Sample Info: SN54H

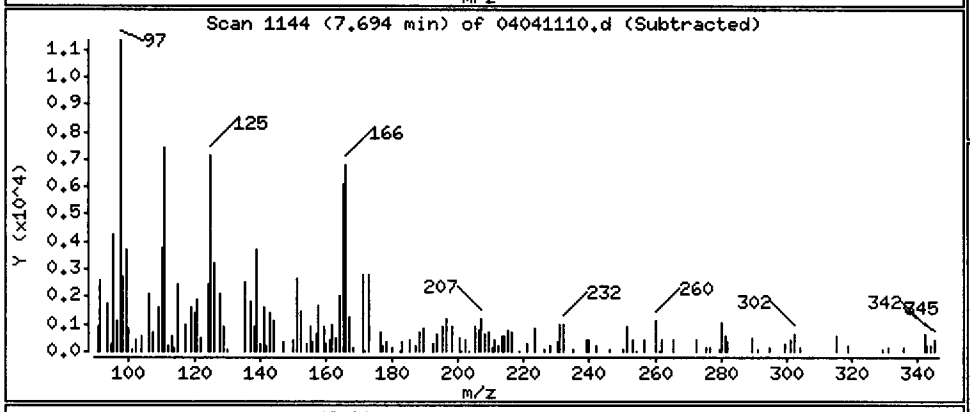
Volume Injected (uL): 1.0 Operator: JZ

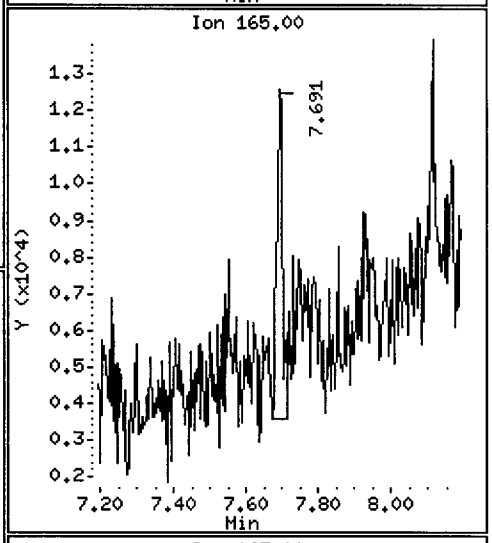
Column phase: ZB35 Column diameter: 0.32

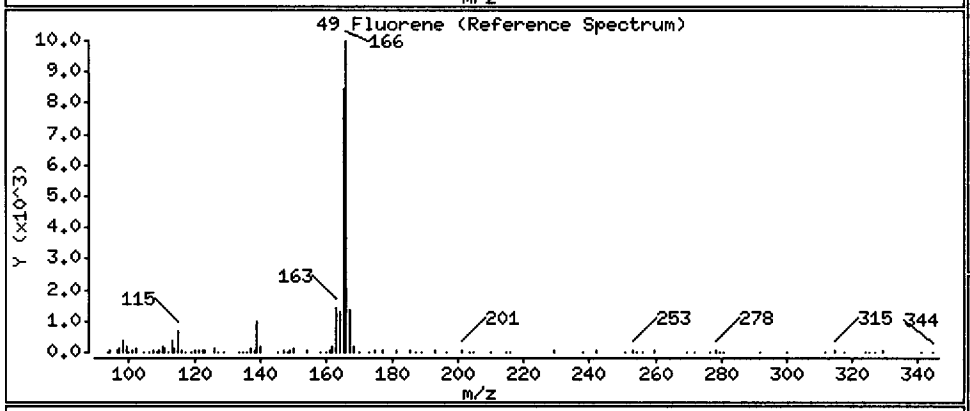
49 Fluorene Concentration: 5.139 ug/kg

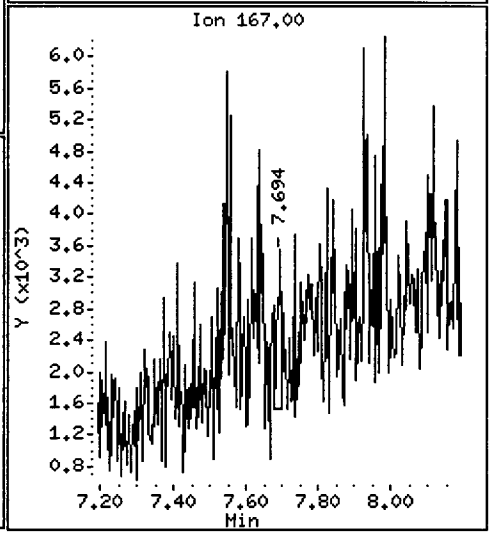


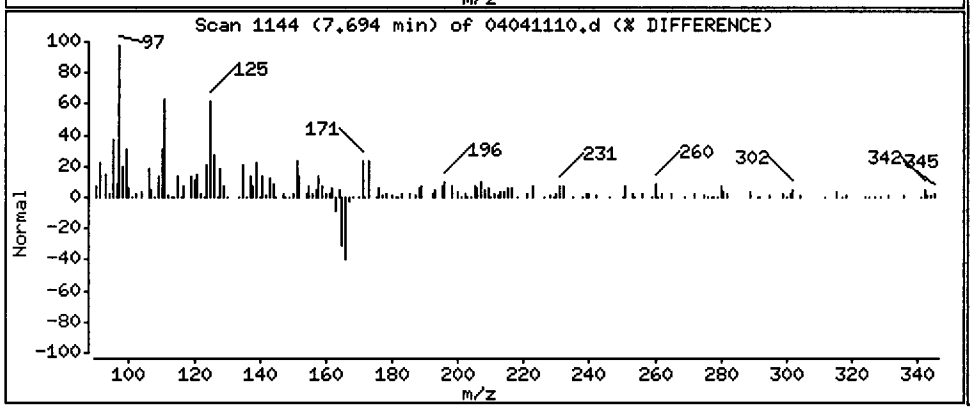












Data File: /chem1/nt12.i/20110404.b/04041110.d

Date : 04-APR-2011 16:03

Client ID: LL-SED1-0-56-031511

Instrument: nt12.i

Sample Info: SN54H

Volume Injected (uL): 1.0

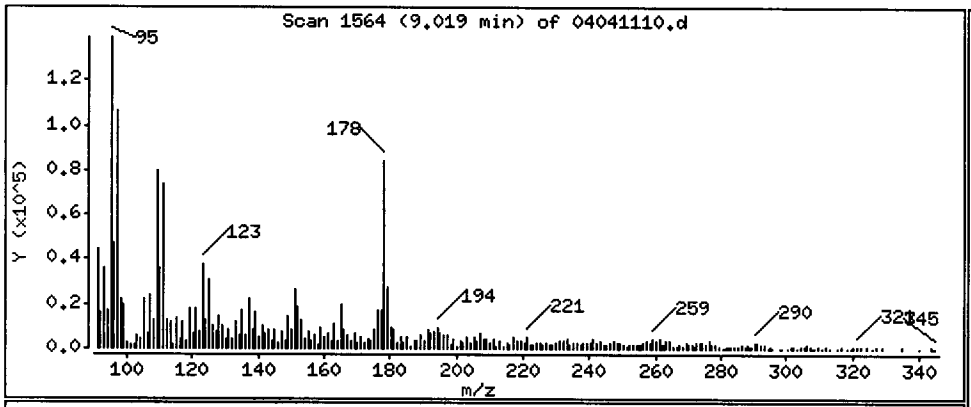
Operator: JZ

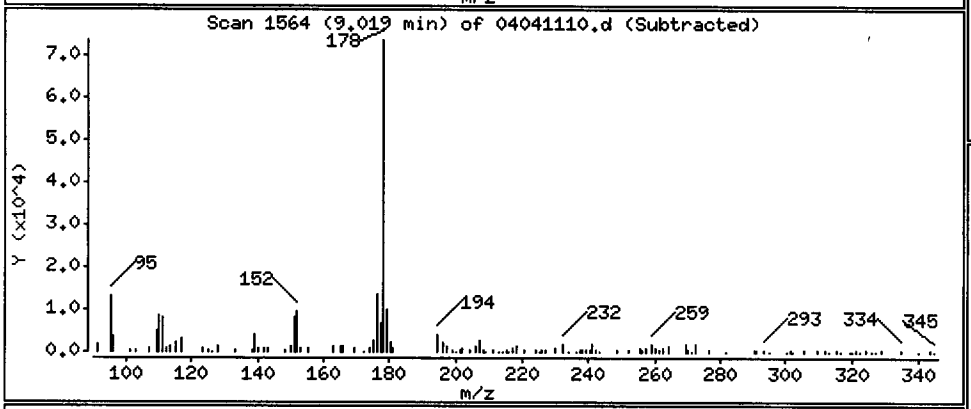
Column phase: ZB35

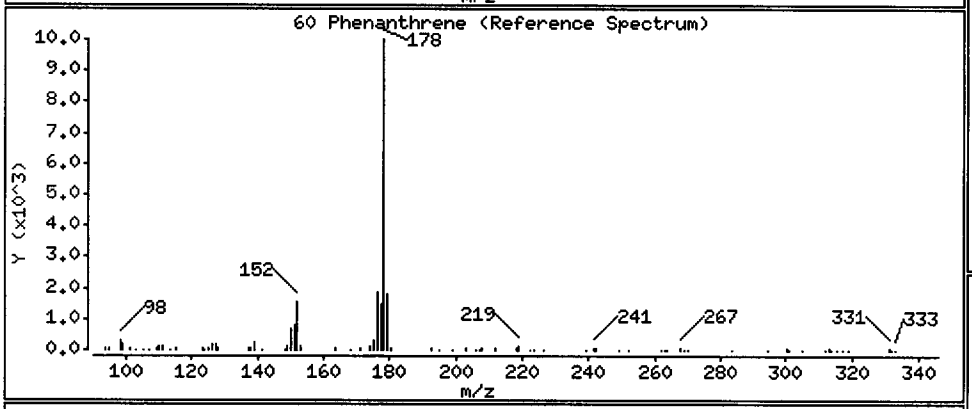
Column diameter: 0.32

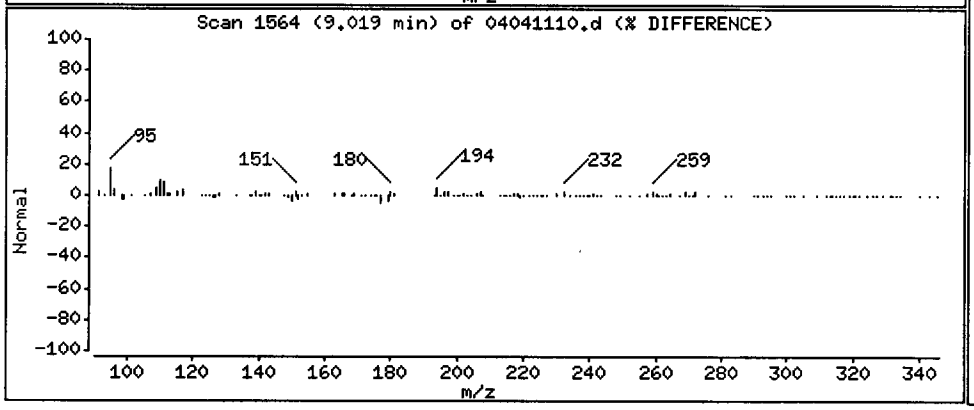
60 Phenanthrene

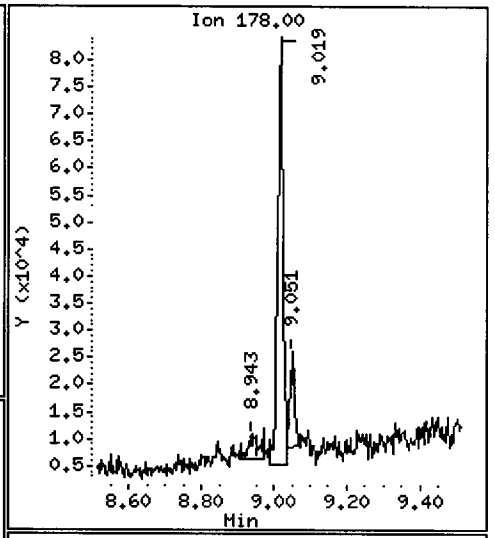
Concentration: 34.35 ug/kg

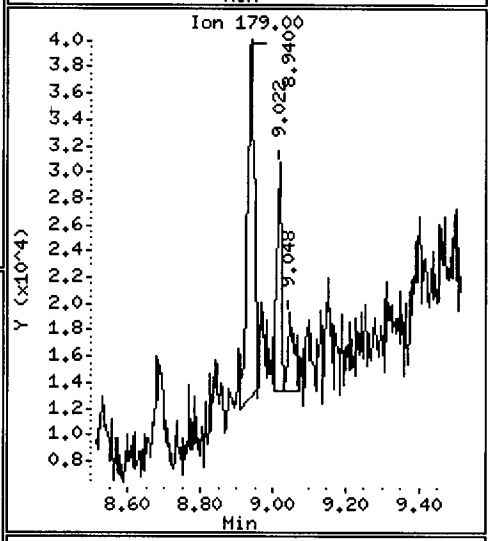


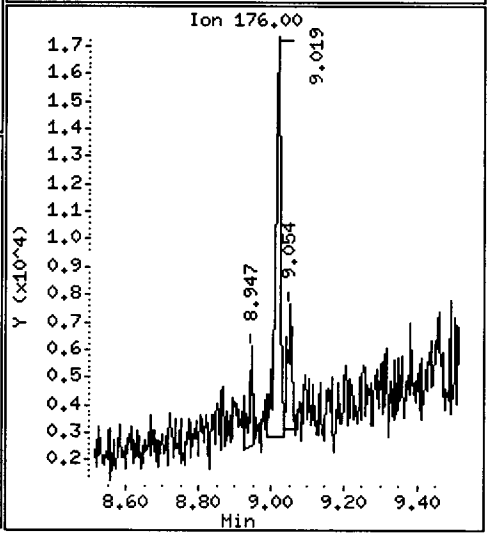












Data File: /chem1/nt12.i/20110404.b/04041110.d

Date : 04-APR-2011 16:03

Client ID: LL-SED1-0-56-031511

Instrument: nt12.i

Sample Info: SN54H

Volume Injected (uL): 1.0

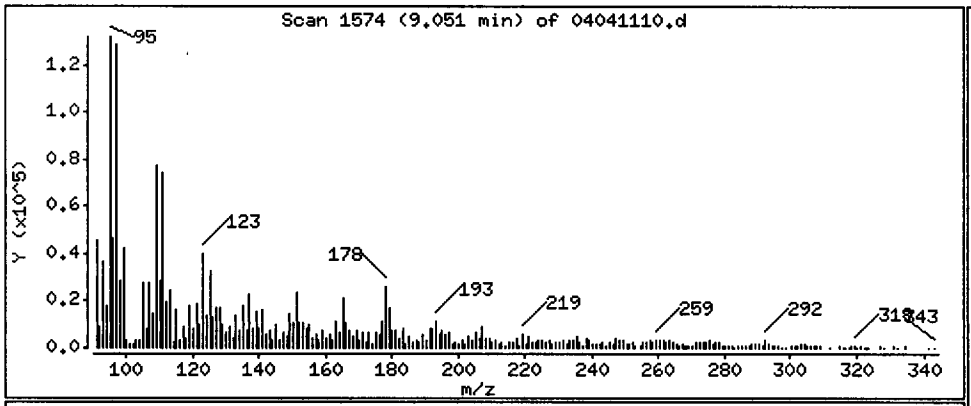
Operator: JZ

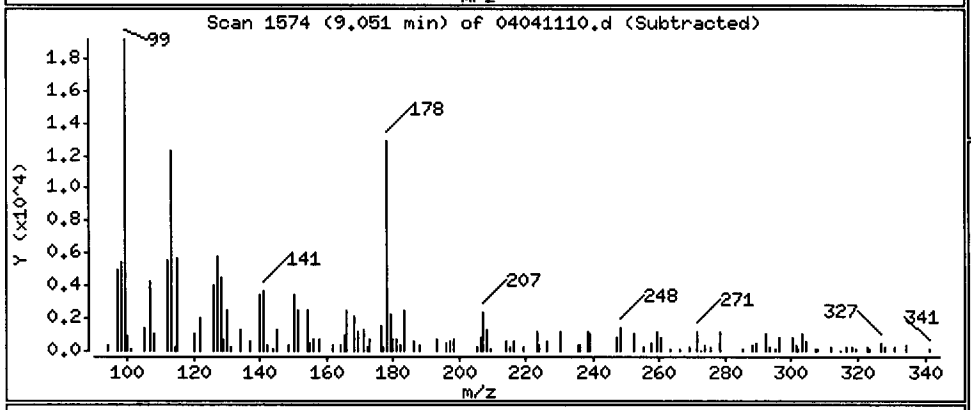
Column phase: ZB35

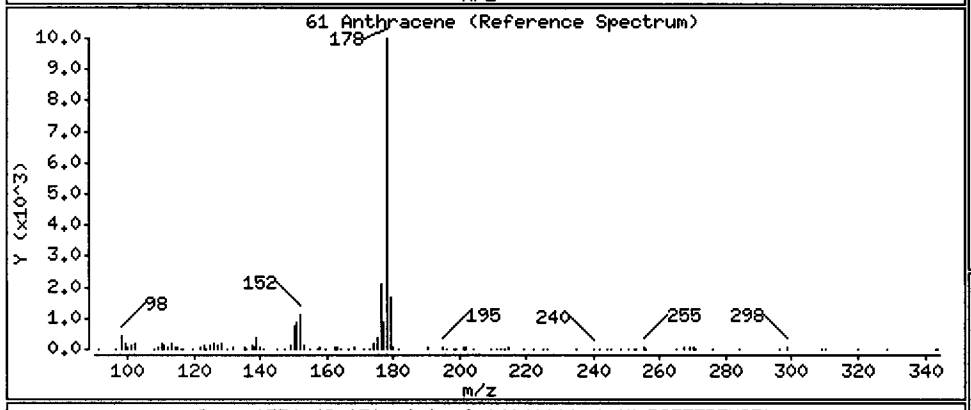
Column diameter: 0.32

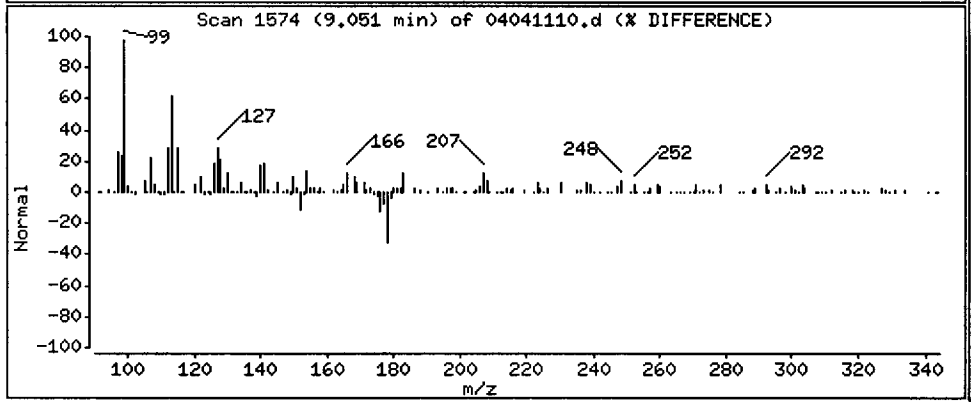
61 Anthracene

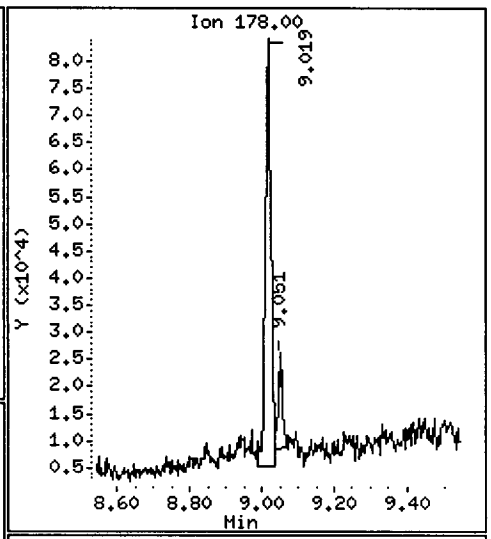
Concentration: 5.993 ug/kg

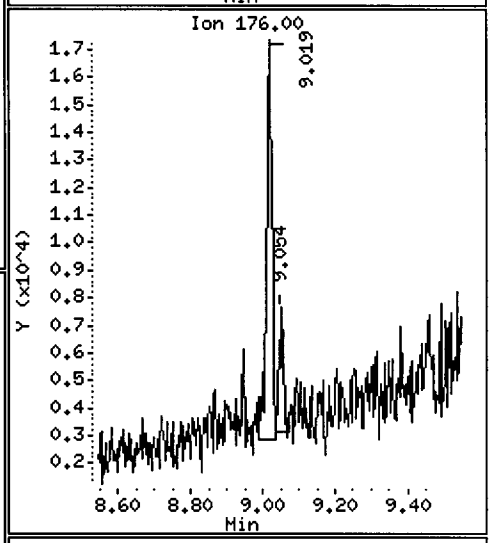


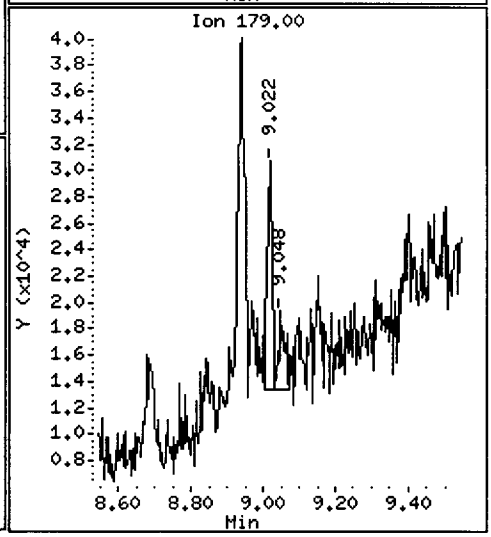












Data File: /chem1/nt12.i/20110404.b/04041110.d

Date : 04-APR-2011 16:03

Client ID: LL-SED1-0-56-031511

Instrument: nt12.i

Sample Info: SN54H

Volume Injected (uL): 1.0

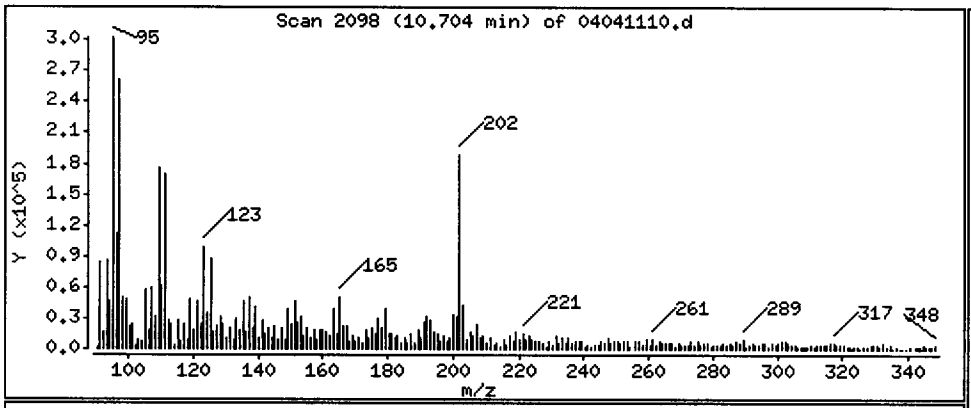
Operator: JZ

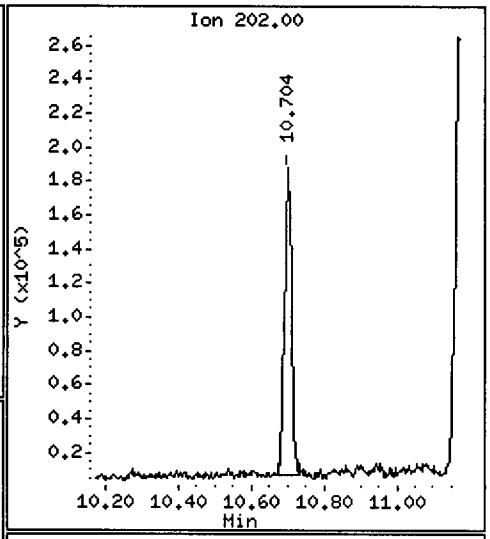
Column phase: ZB35

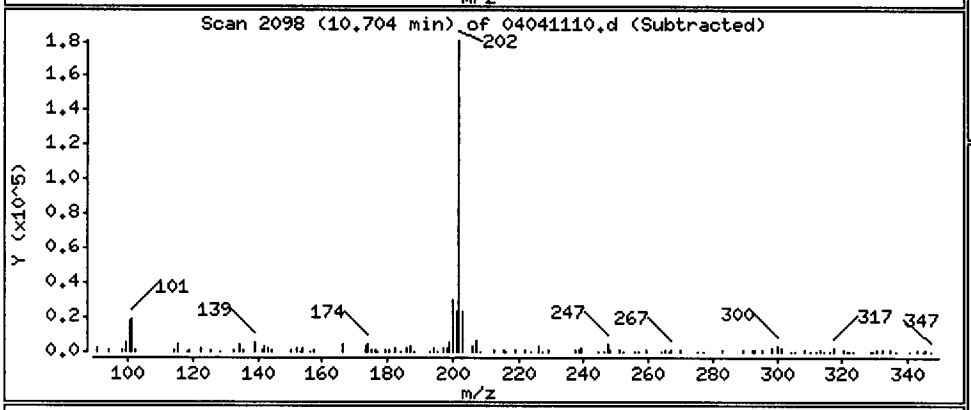
Column diameter: 0.32

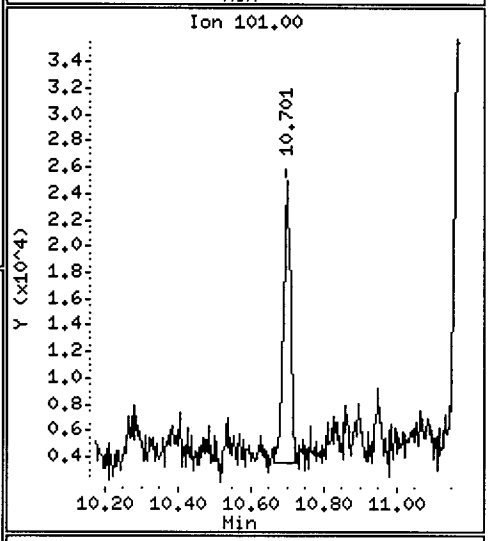
64 Fluoranthene

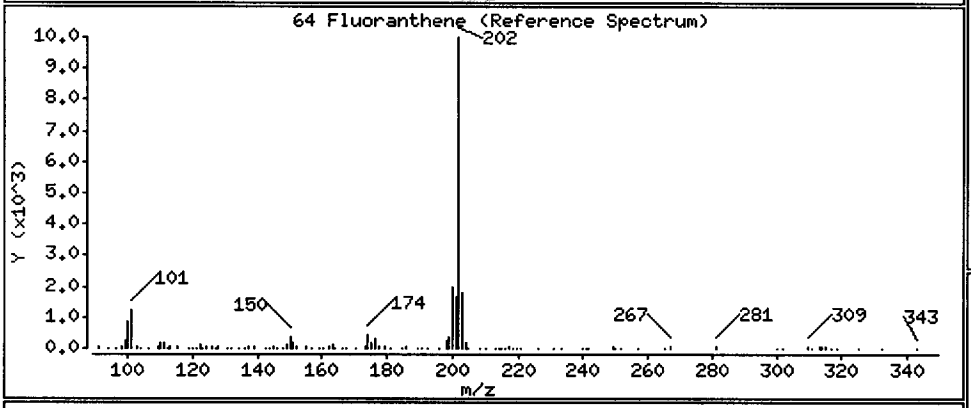
Concentration: 88.66 ug/kg

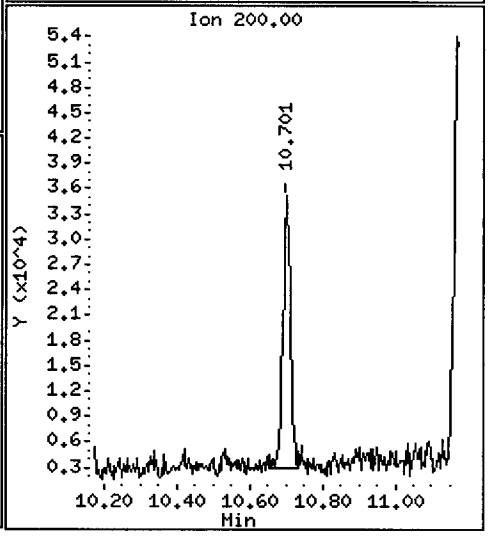


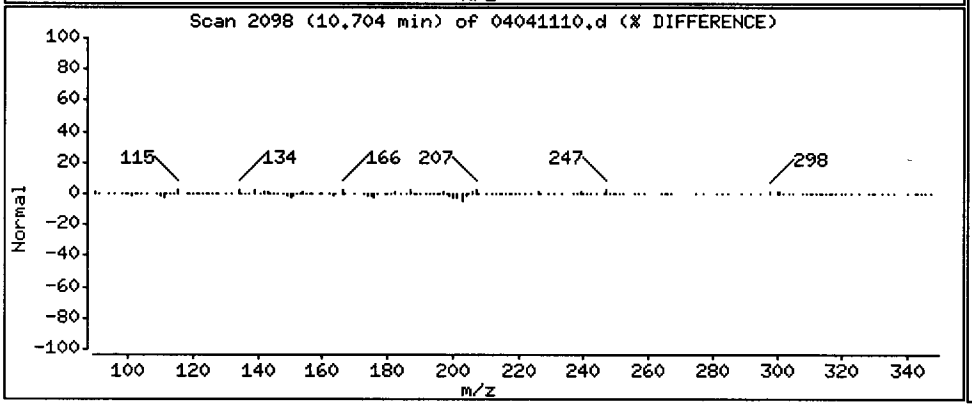












Data File: /chem1/nt12.i/20110404.b/04041110.d

Date : 04-APR-2011 16:03

Client ID: LL-SED1-0-56-031511

Instrument: nt12.i

Sample Info: SN54H

Volume Injected (uL): 1.0

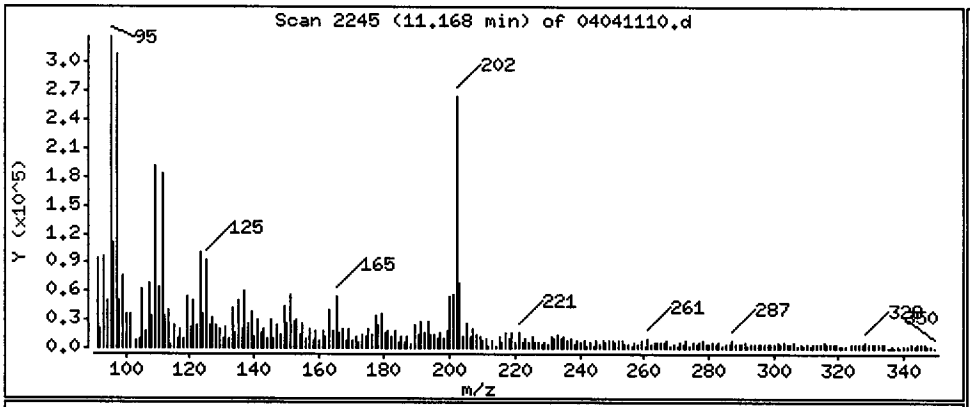
Operator: JZ

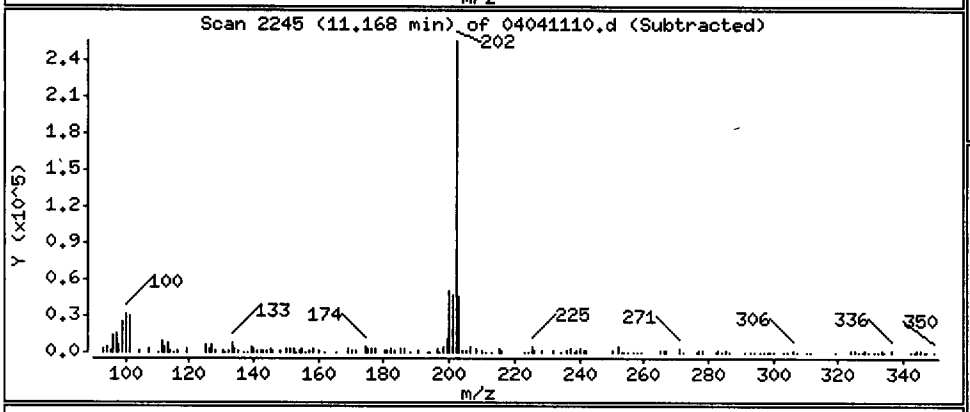
Column phase: ZB35

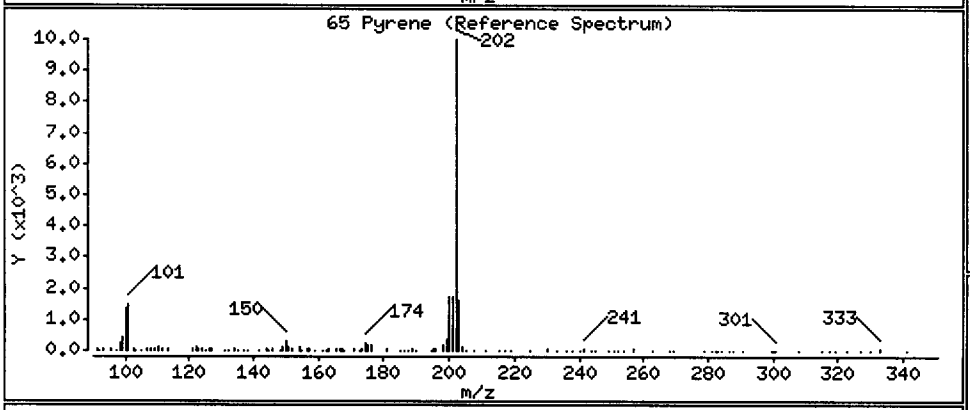
Column diameter: 0.32

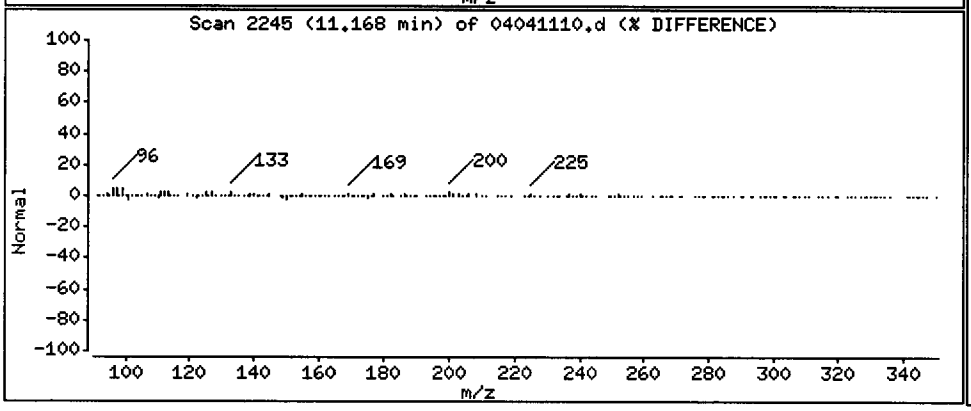
65 Pyrene

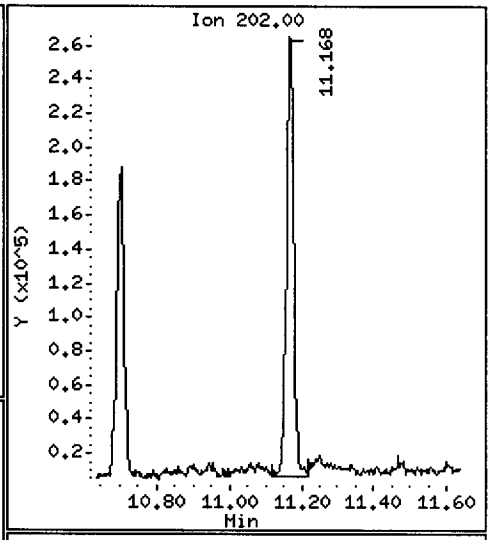
Concentration: 113.5 ug/kg

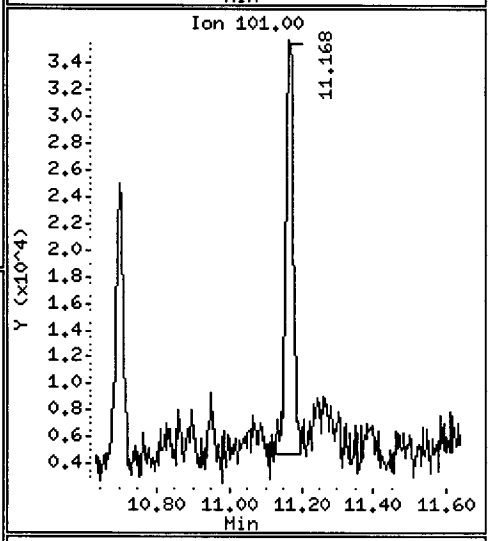


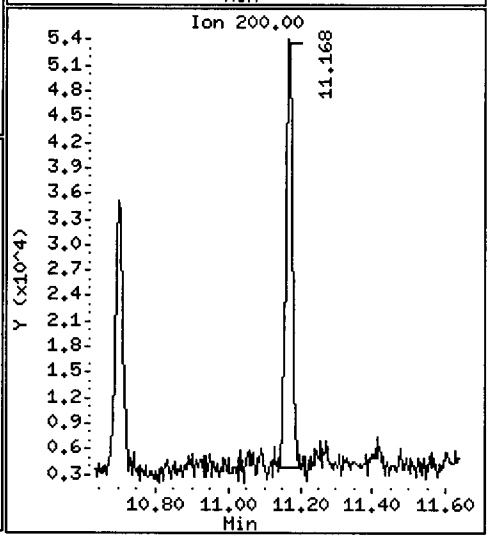












Data File: /chem1/nt12.i/20110404.b/04041110.d

Date : 04-APR-2011 16:03

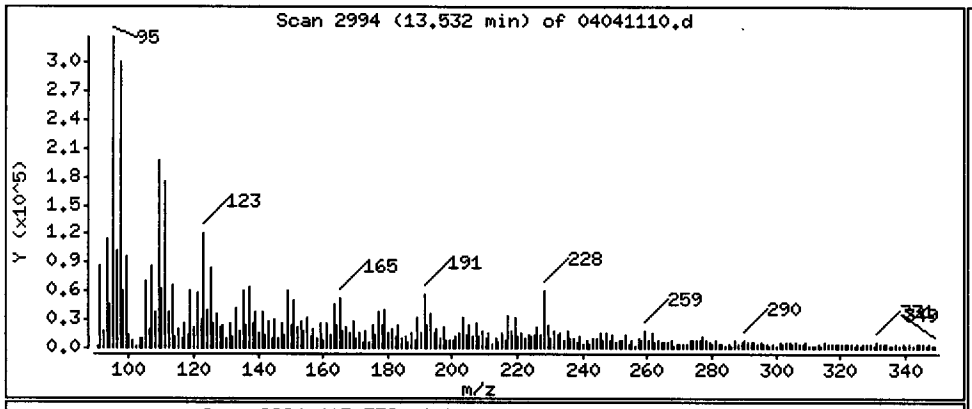
Client ID: LL-SED1-0-56-031511 Instrument: nt12.i

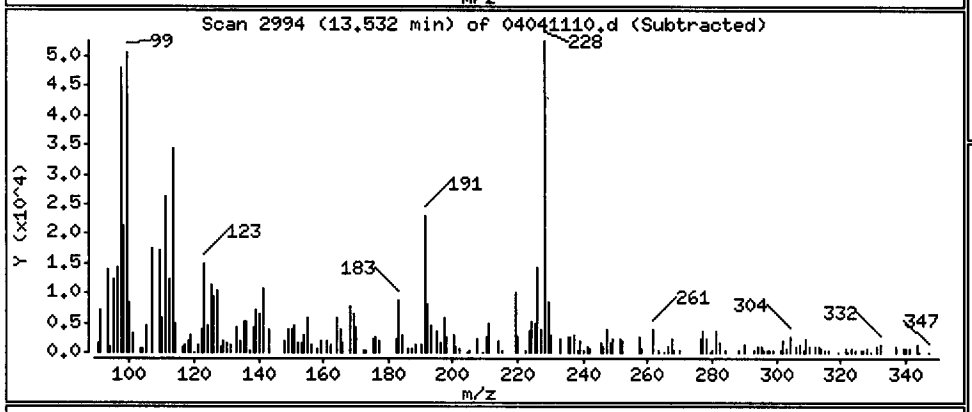
Sample Info: SN54H

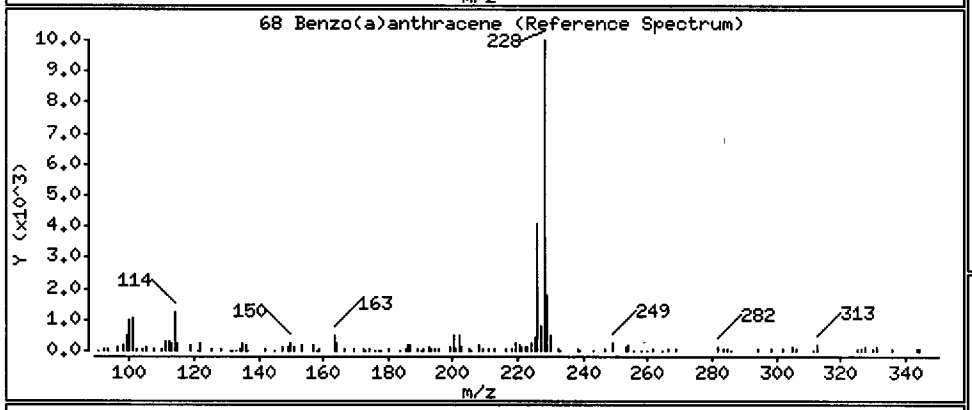
Volume Injected (uL): 1.0 Operator: JZ

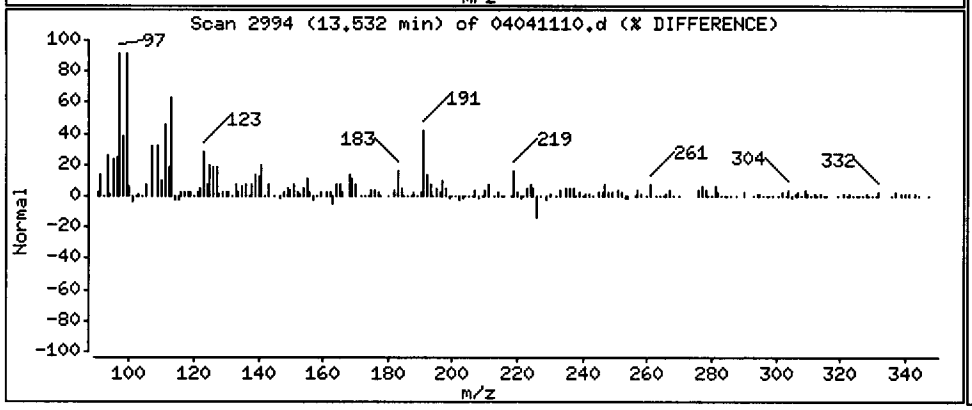
Column phase: ZB35 Column diameter: 0.32

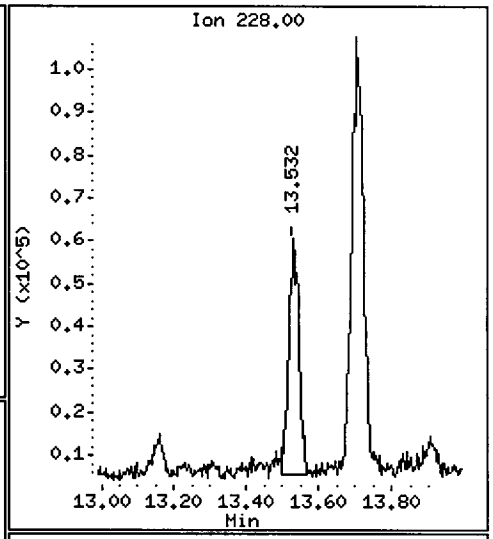
68 Benzo(a)anthracene Concentration: 37.15 ug/kg

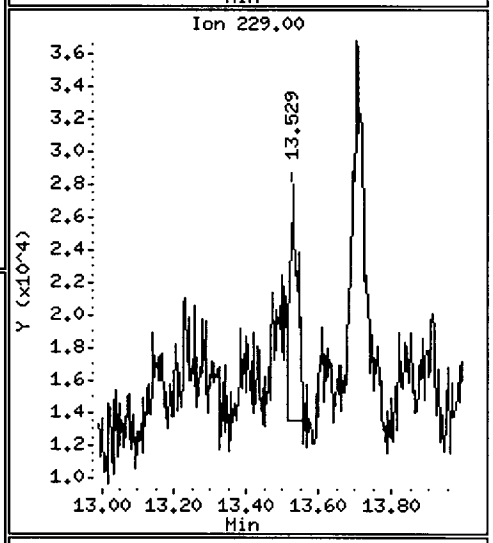


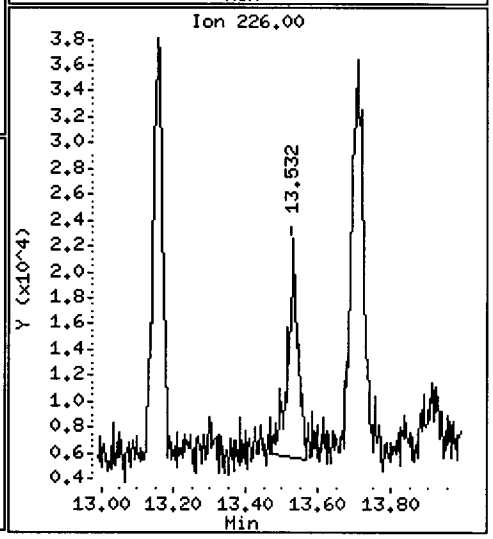












Data File: /chem1/nt12.i/20110404.b/04041110.d

Date : 04-APR-2011 16:03

Client ID: LL-SED1-0-56-031511

Instrument: nt12.i

Sample Info: SN54H

Volume Injected (uL): 1.0

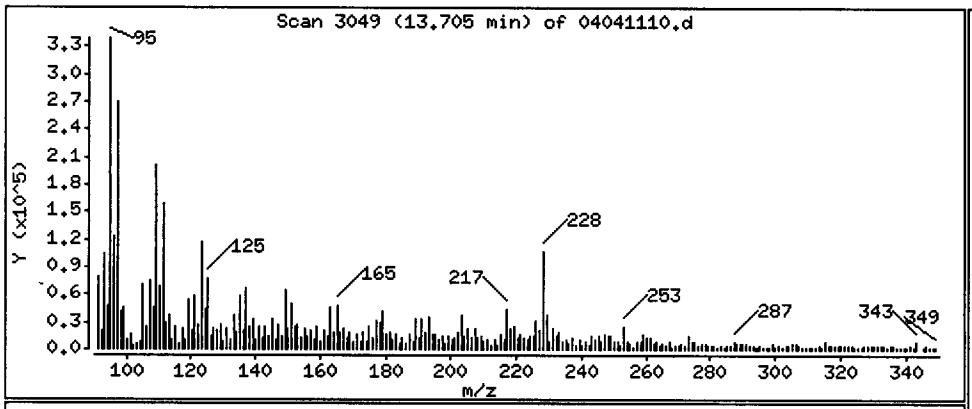
Operator: JZ

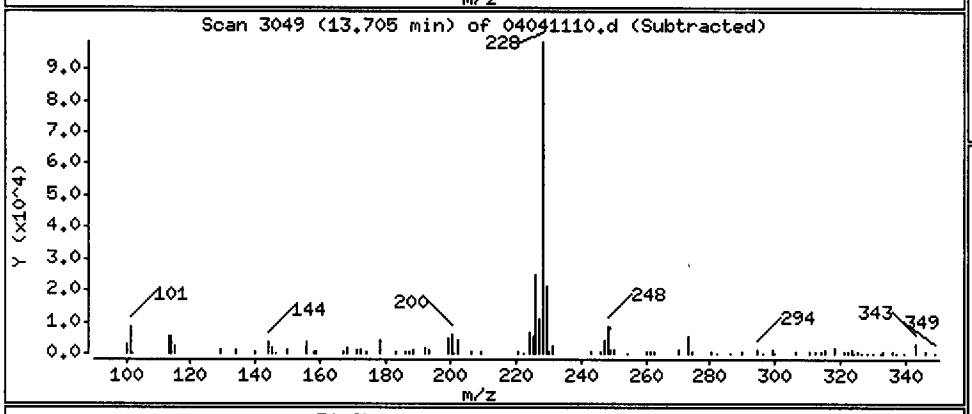
Column phase: ZB35

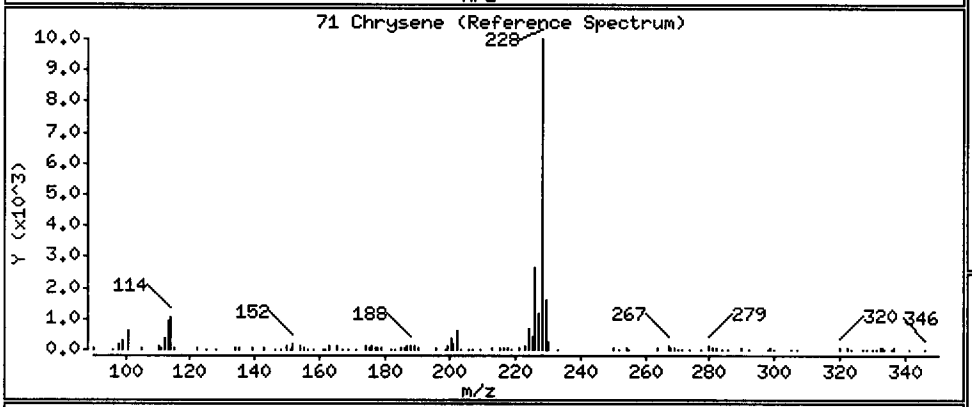
Column diameter: 0.32

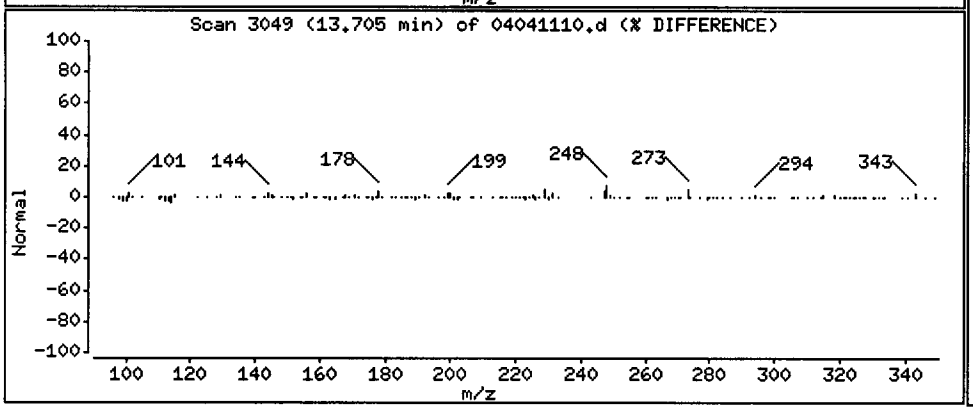
71 Chrysene

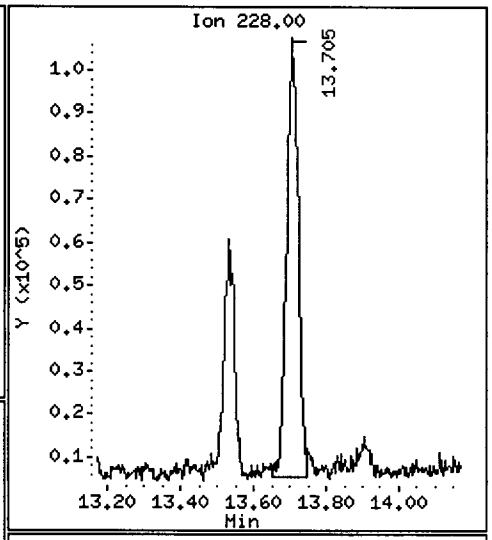
Concentration: 81.16 ug/kg

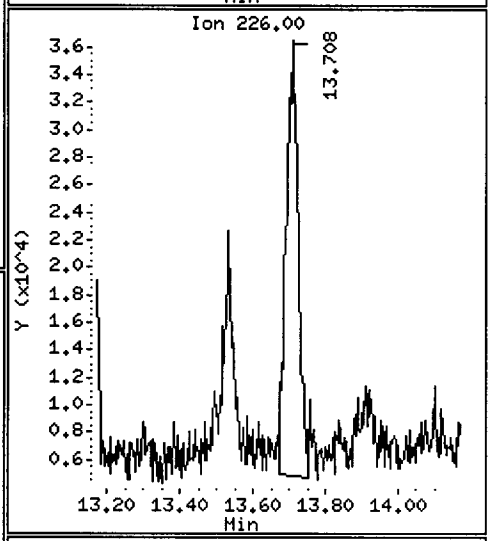


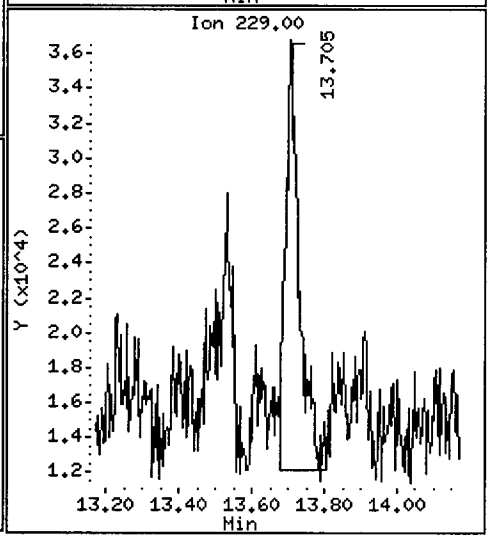












Data File: /chem1/nt12.i/20110404.b/04041110.d

Date : 04-APR-2011 16:03

Client ID: LL-SED1-0-56-031511

Instrument: nt12.i

Sample Info: SN54H

Volume Injected (uL): 1.0

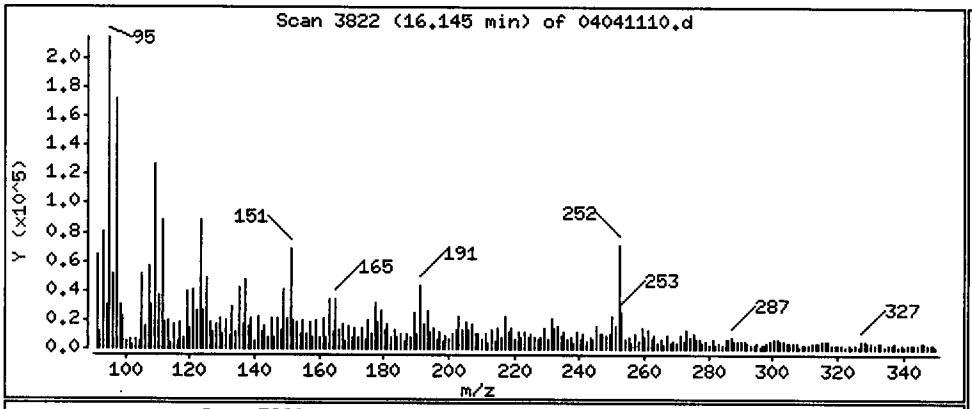
Operator: JZ

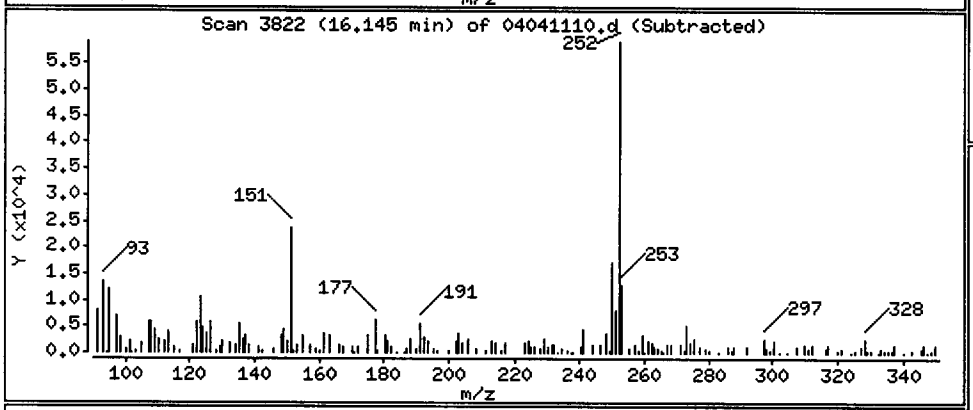
Column phase: ZB35

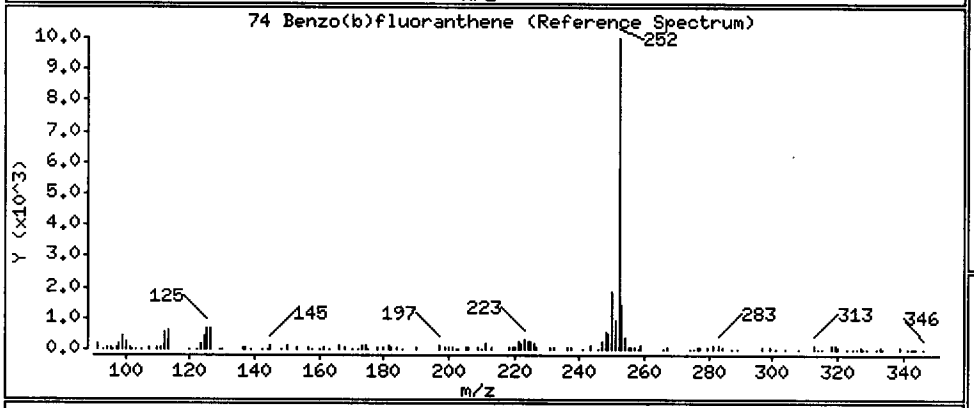
Column diameter: 0.32

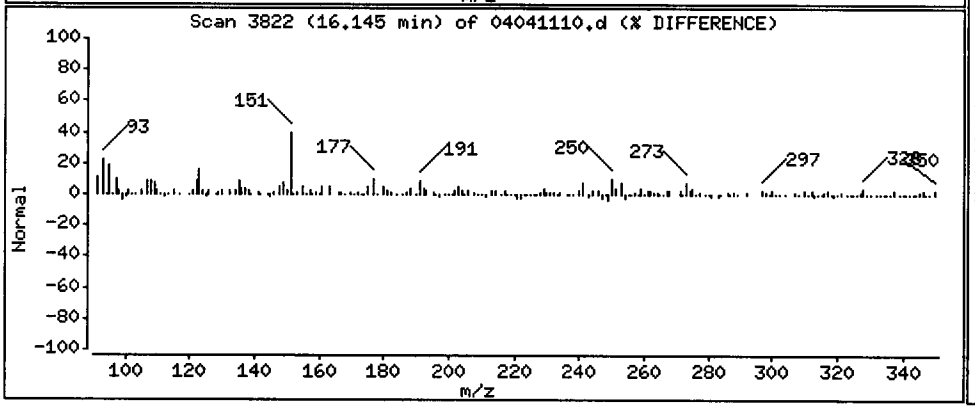
74 Benzo(b)fluoranthene

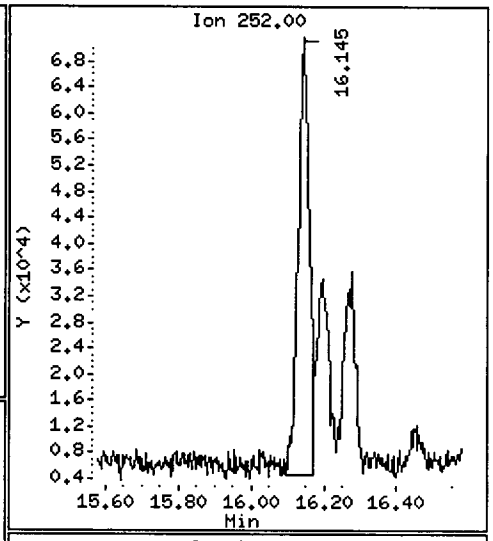
Concentration: 72.55 ug/kg

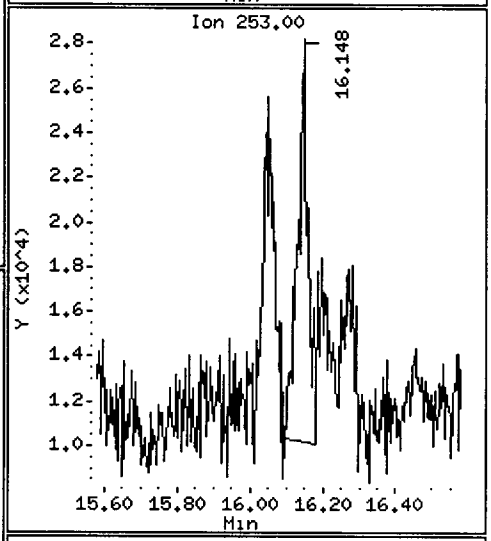


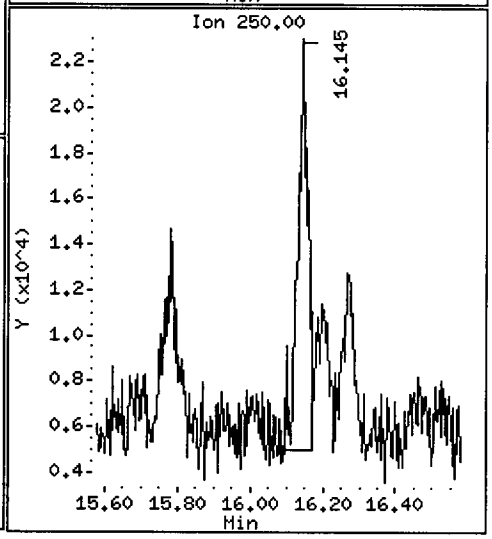












Data File: /chem1/nt12.i/20110404.b/04041110.d

Date : 04-APR-2011 16:03

Client ID: LL-SED1-0-56-031511

Instrument: nt12.i

Sample Info: SN54H

Volume Injected (uL): 1.0

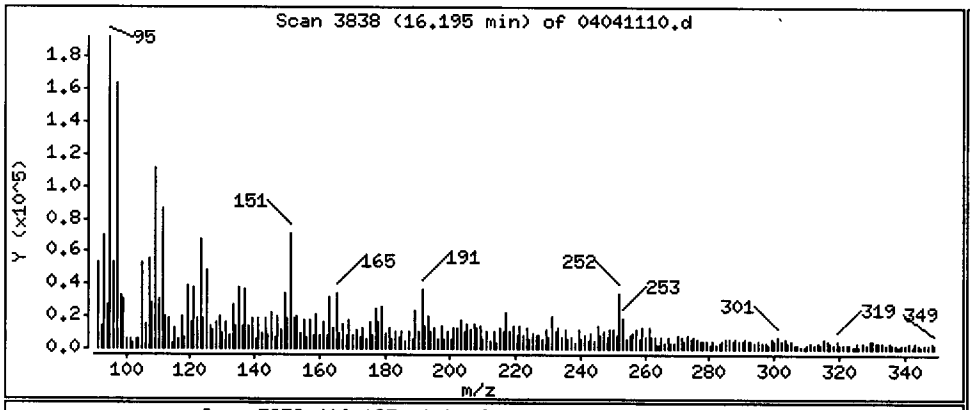
Operator: JZ

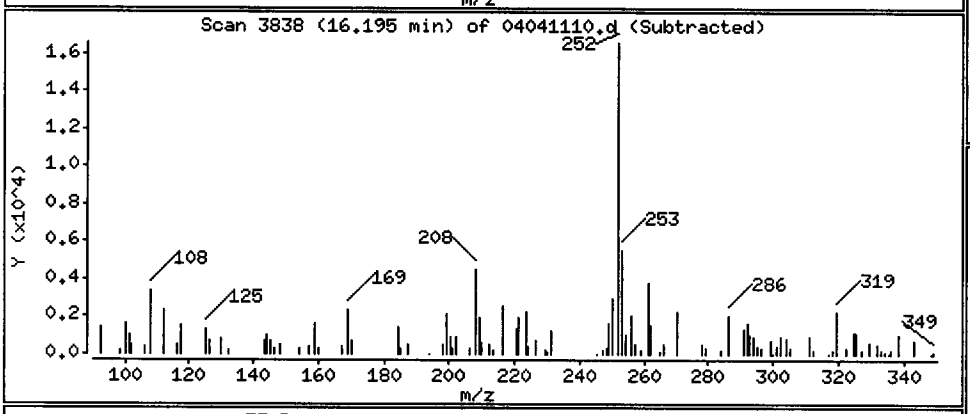
Column phase: ZB35

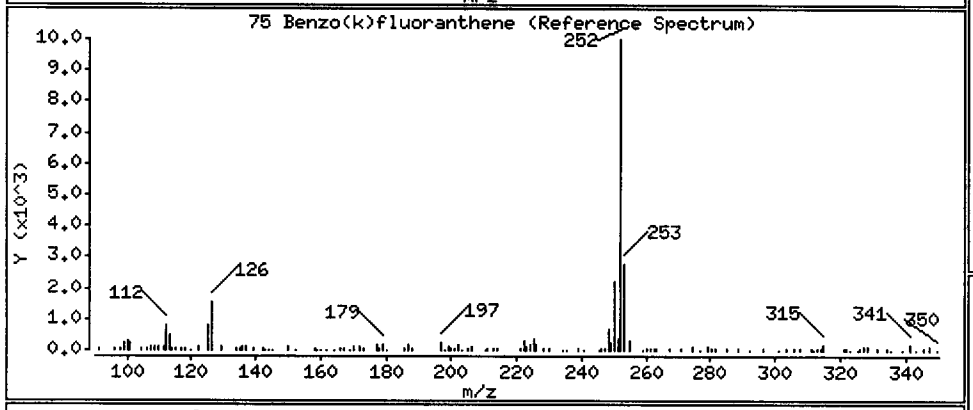
Column diameter: 0.32

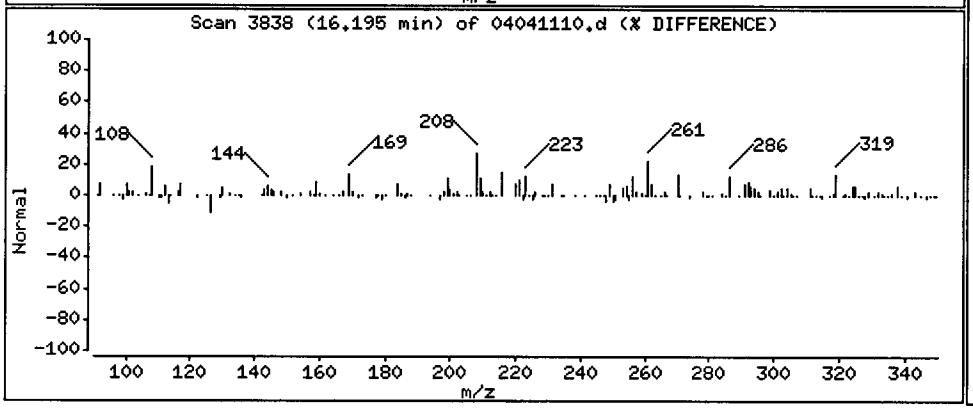
75 Benzo(k)fluoranthene

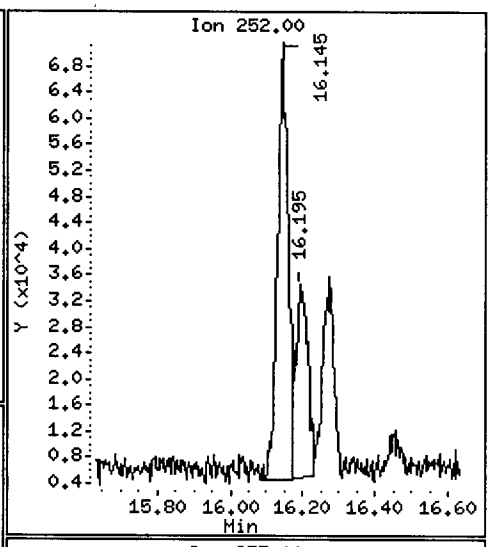
Concentration: 33.63 ug/kg

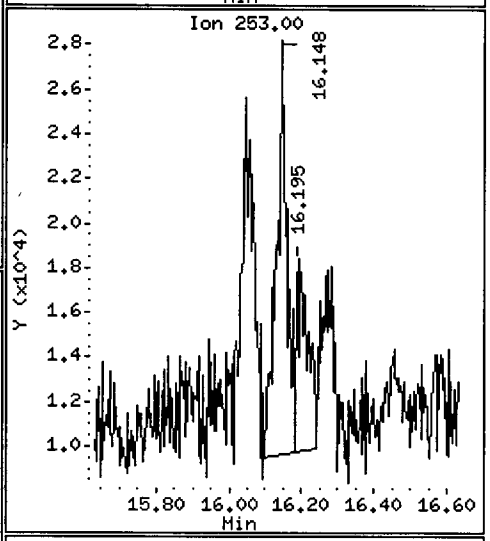


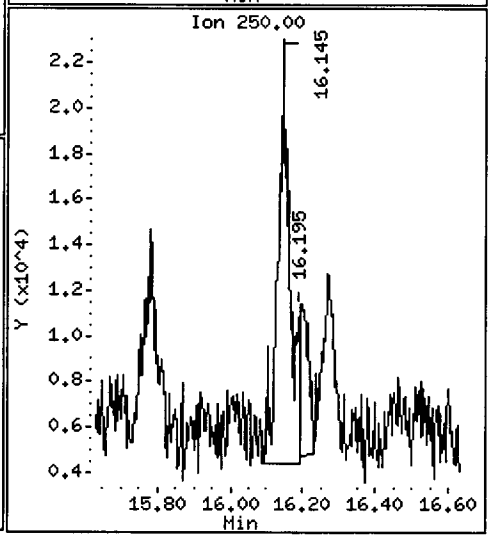












Data File: /chem1/nt12.i/20110404.b/04041110.d

Date : 04-APR-2011 16:03

Client ID: LL-SED1-0-56-031511

Instrument: nt12.i

Sample Info: SN54H

Volume Injected (uL): 1.0

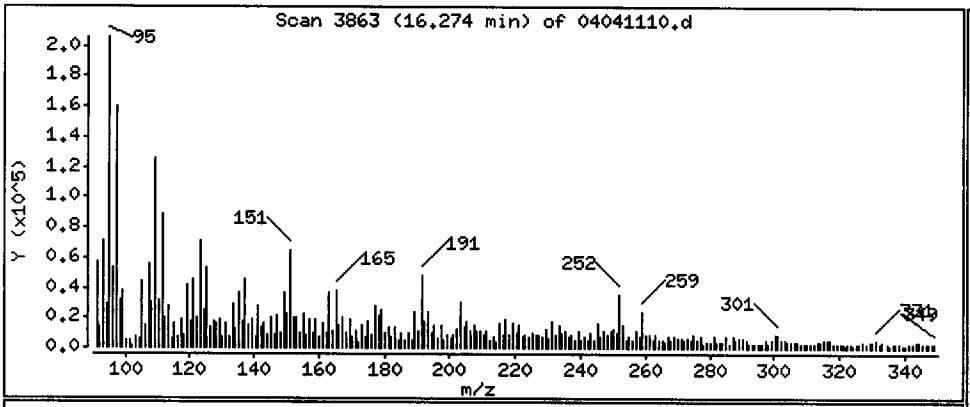
Operator: JZ

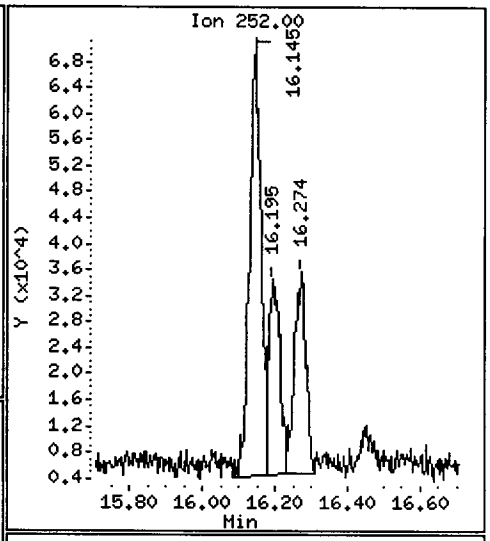
Column phase: ZB35

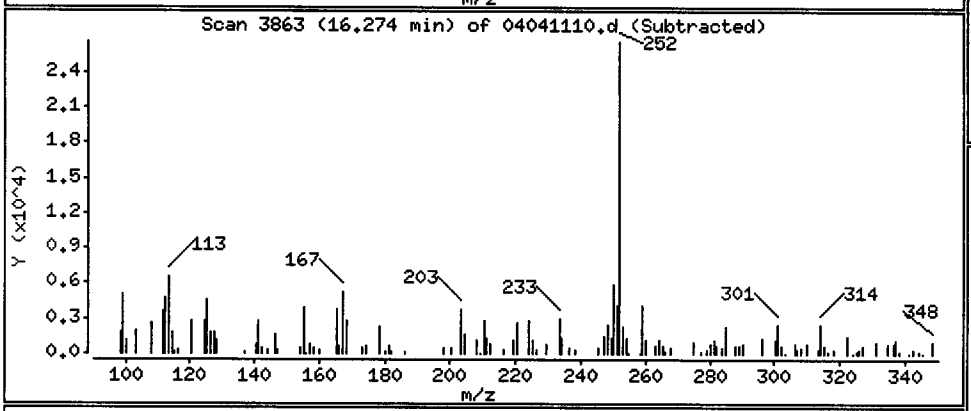
Column diameter: 0.32

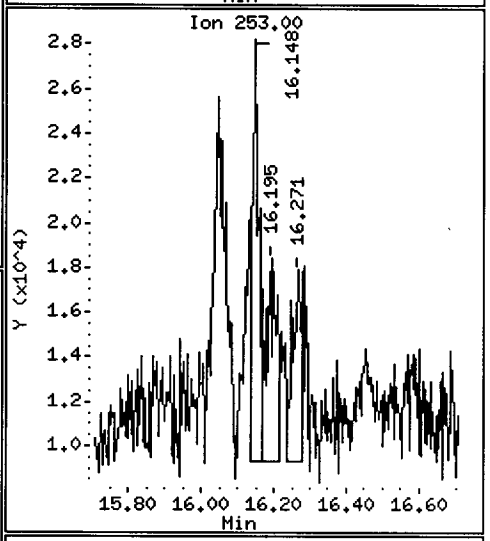
188 Benzo(j)fluoranthene

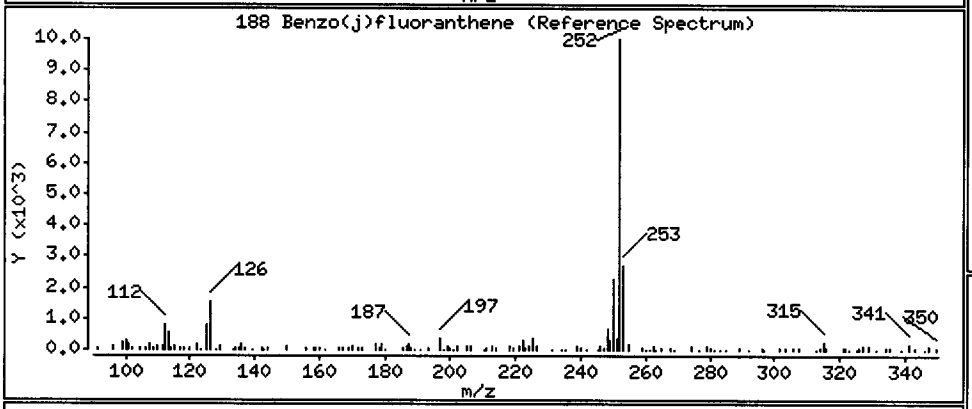
Concentration: 34.76 ug/kg

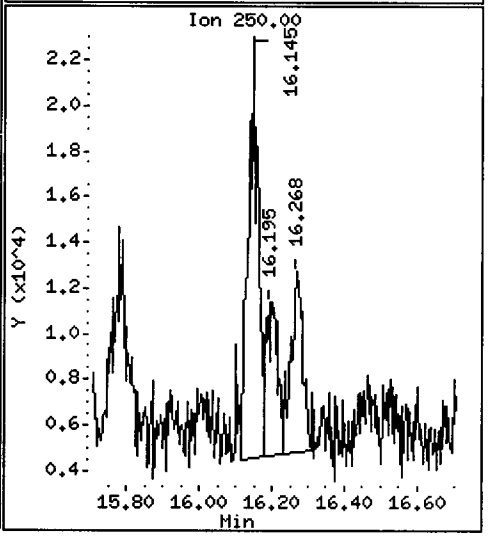


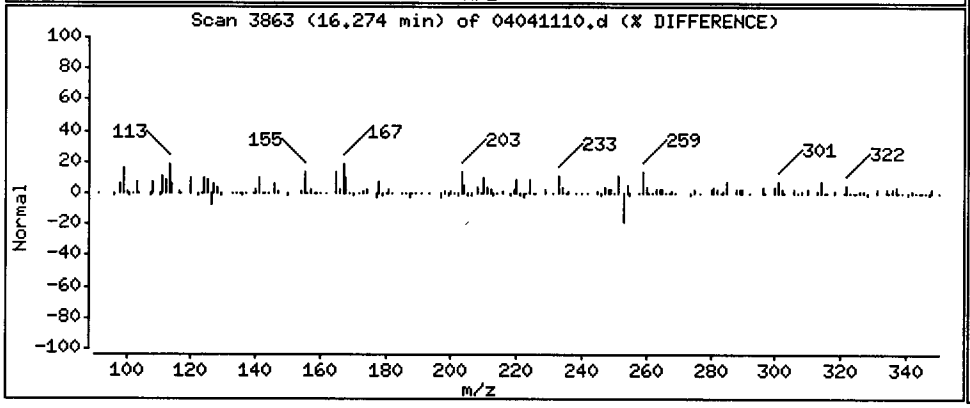












Data File: /chem1/nt12.i/20110404.b/04041110.d

Date : 04-APR-2011 16:03

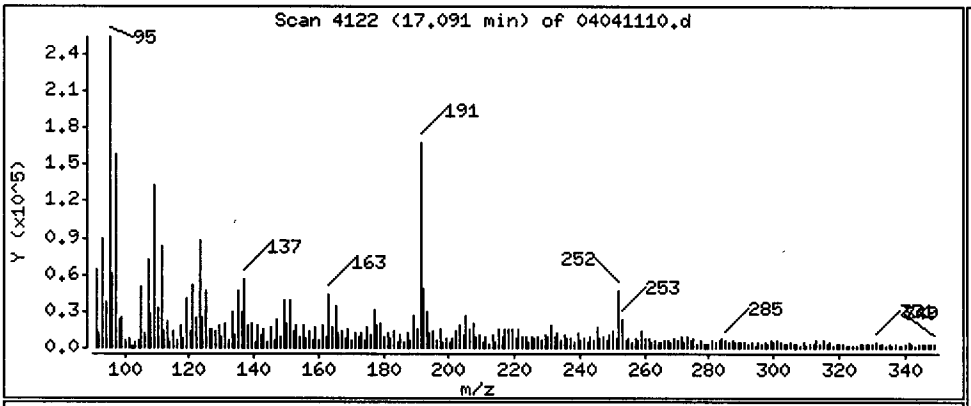
Client ID: LL-SED1-0-56-031511 Instrument: nt12.i

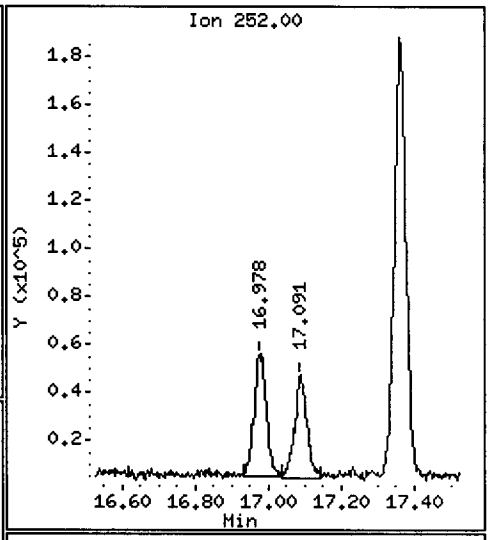
Sample Info: SN54H

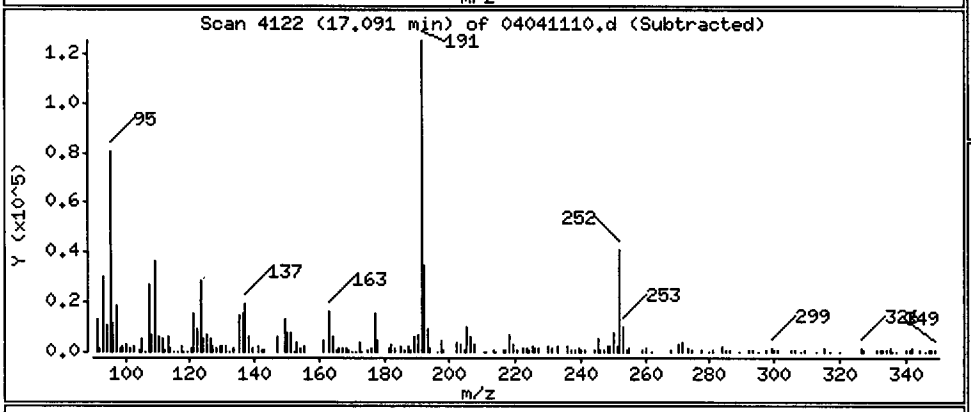
Volume Injected (uL): 1.0 Operator: JZ

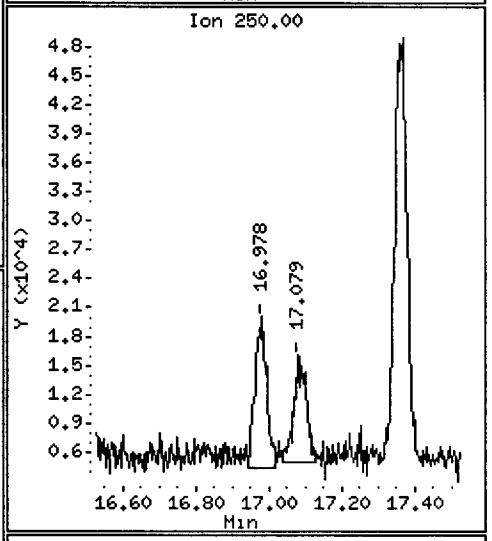
Column phase: ZB35 Column diameter: 0.32

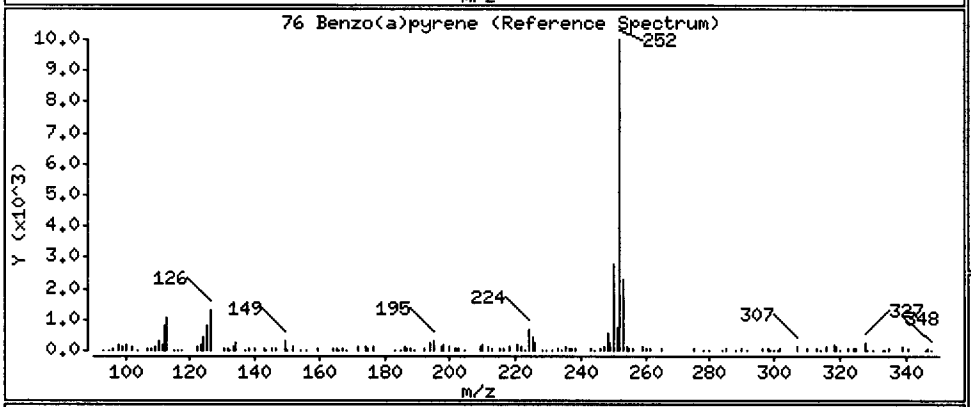
76 Benzo(a)pyrene Concentration: 55.38 ug/kg

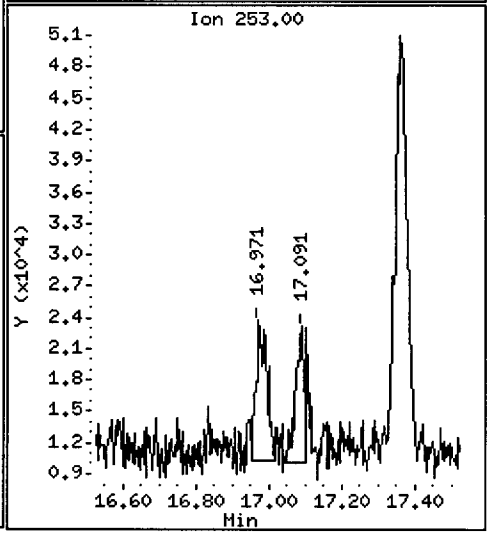


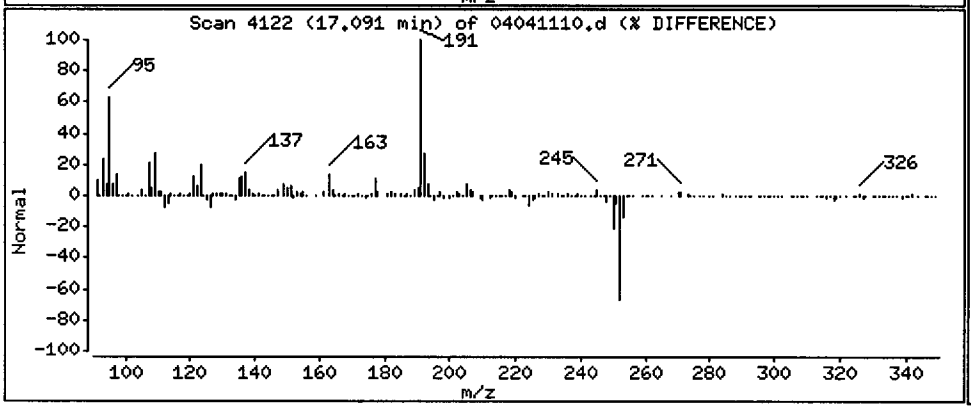












Data File: /chem1/nt12.i/20110404.b/04041110.d

Date : 04-APR-2011 16:03

Client ID: LL-SED1-0-56-031511

Instrument: nt12.i

Sample Info: SN54H

Volume Injected (uL): 1.0

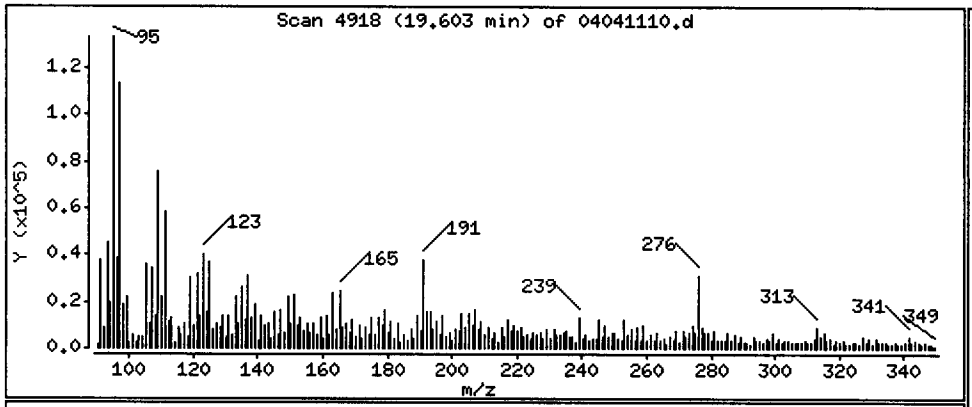
Operator: JZ

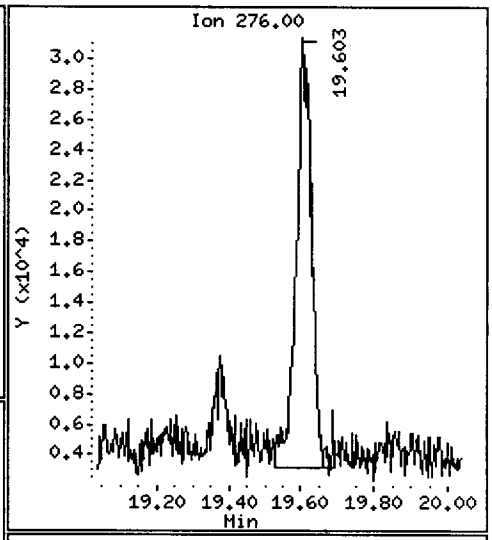
Column phase: ZB35

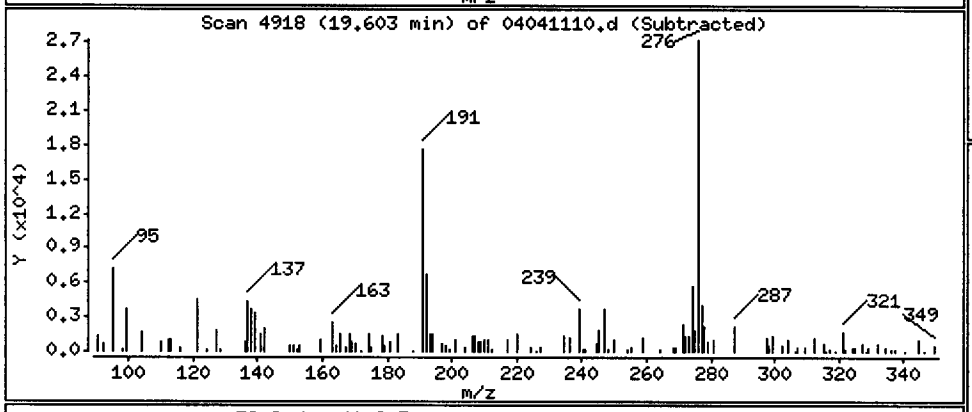
Column diameter: 0.32

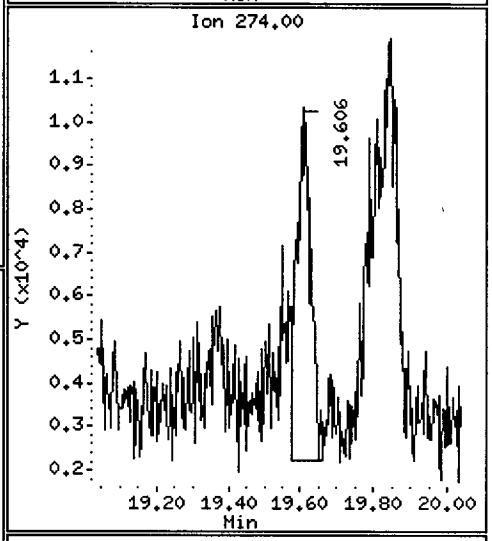
78 Indeno(1,2,3-cd)pyrene

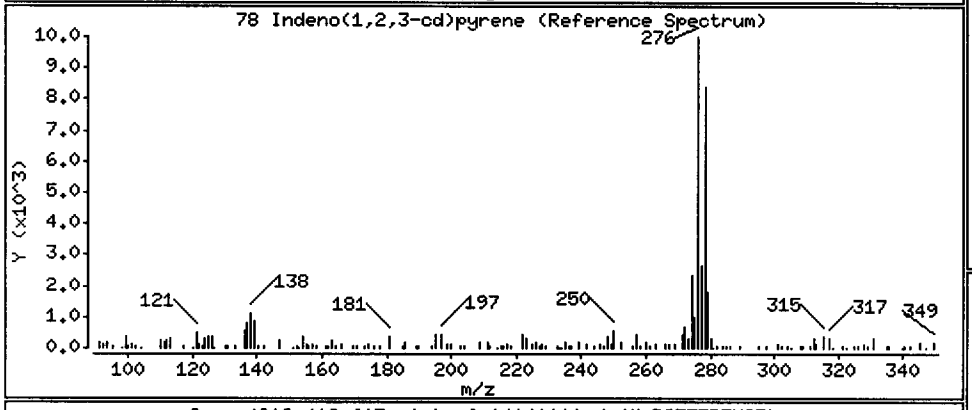
Concentration: 38.19 ug/kg

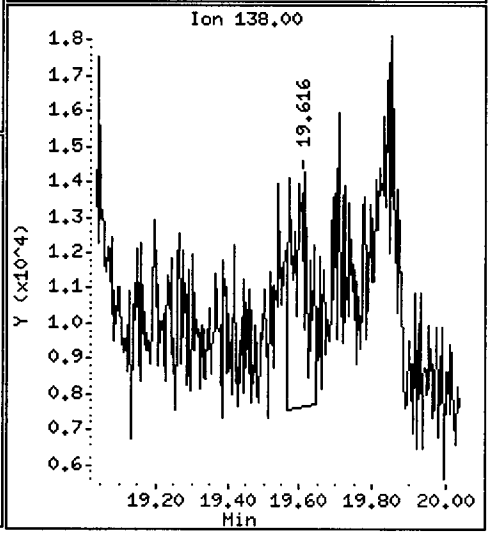


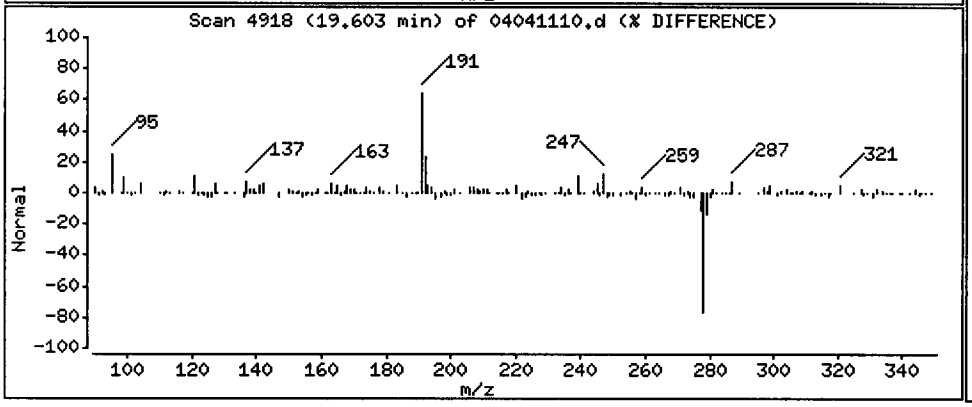






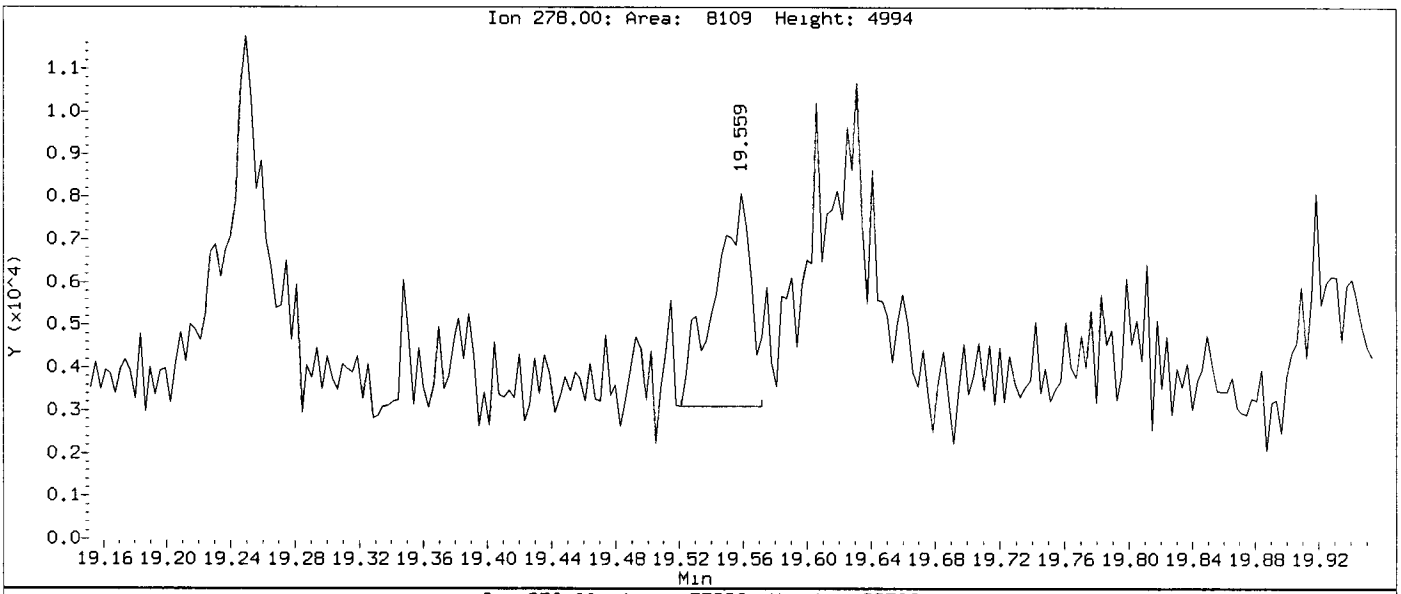


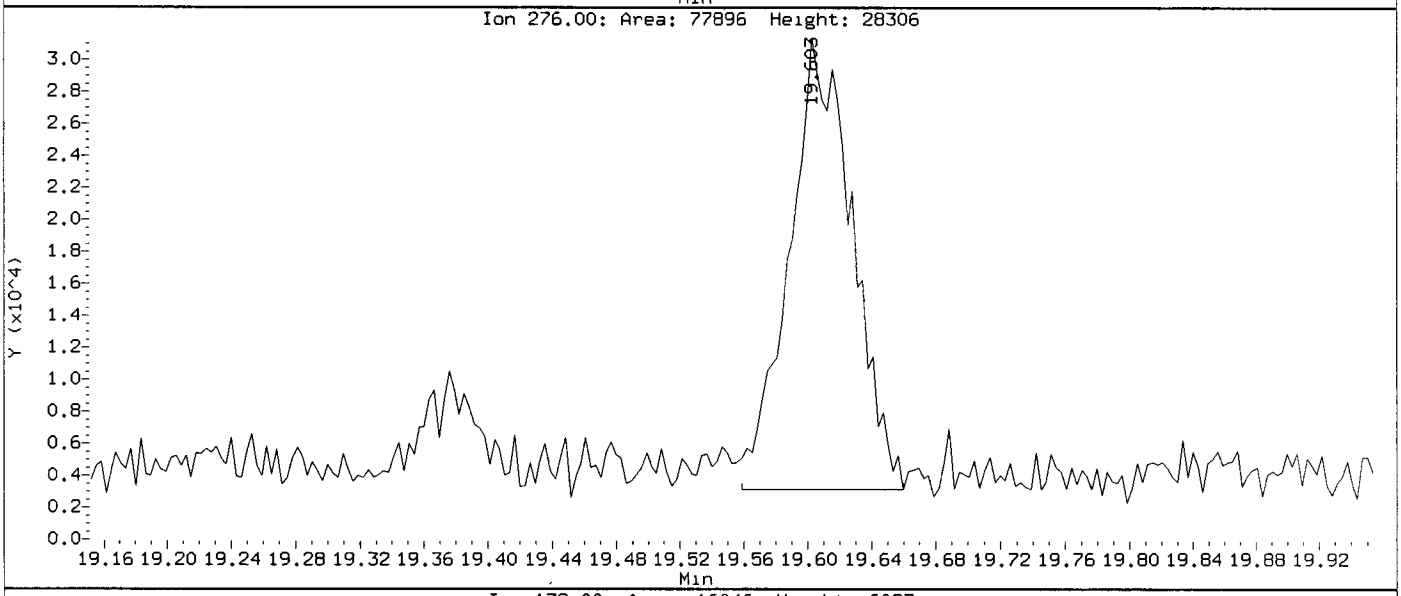


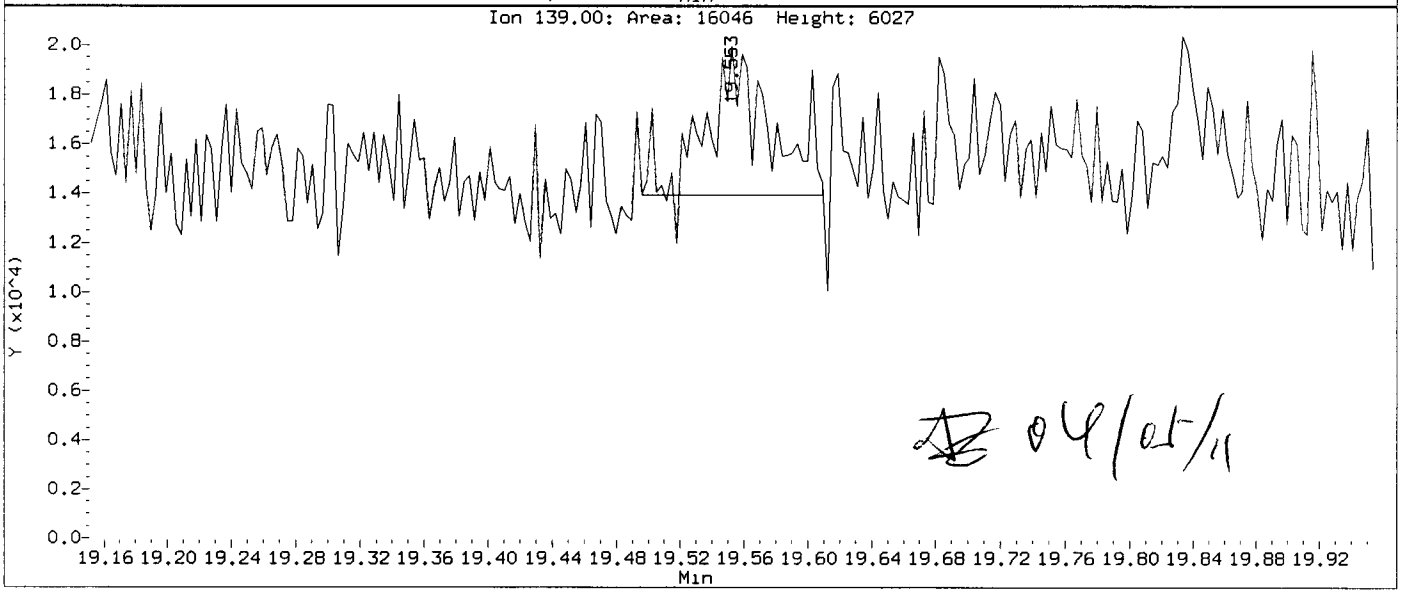


Data File: /chem1/nt12.i/20110404.b/04041110.d
Injection Date: 04-APR-2011 16:03
Instrument: nt12.i
Client Sample ID: LL-SED1-0-56-031511

Compound: Dibenzo(a,h)anthracene
CAS Number: 53-70-3





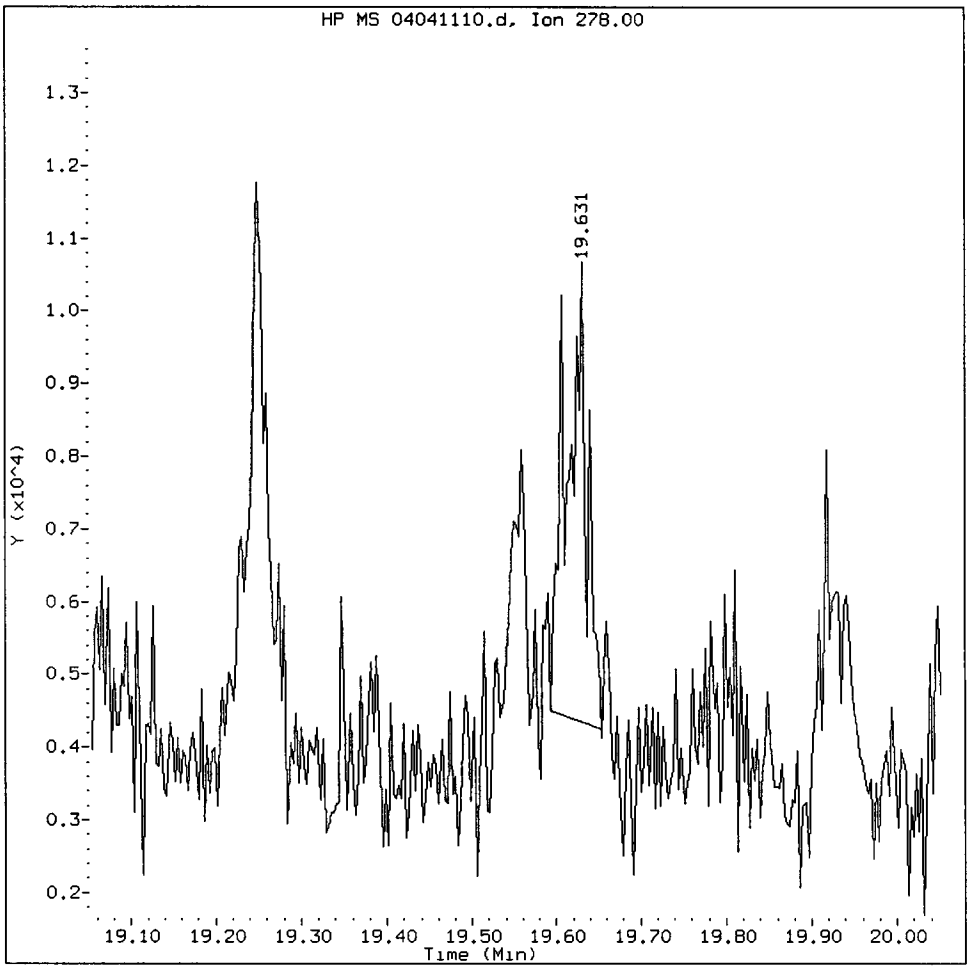


04/04/11

SN54 : 00400

SN54H, /chem1/nt12.i/20110404.b/04041110.d

Dibenzo(a,h)anthracene Amount: 0.12 Area: 10319



MANUAL INTEGRATION for Dibenzo(a,h)anthracene

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

Analyst: [signature] Date: 04/05/11

Data File: /chem1/nt12.i/20110404.b/04041110.d

Date : 04-APR-2011 16:03

Client ID: LL-SED1-0-56-031511

Instrument: nt12.i

Sample Info: SN54H

Volume Injected (uL): 1.0

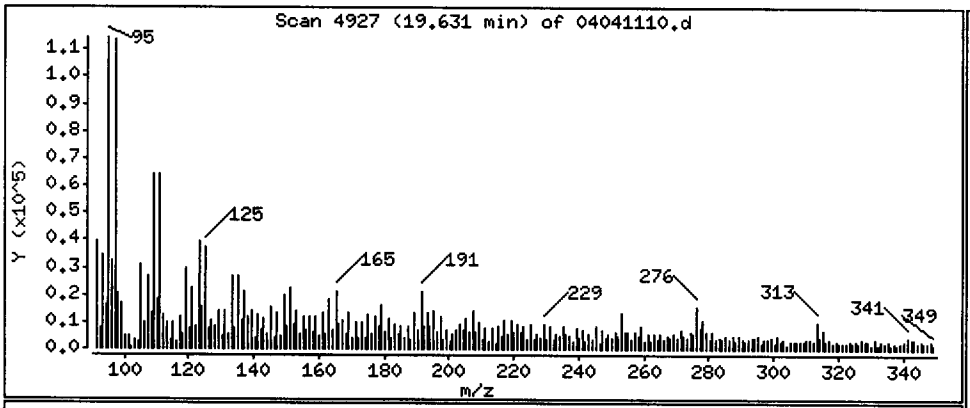
Operator: JZ

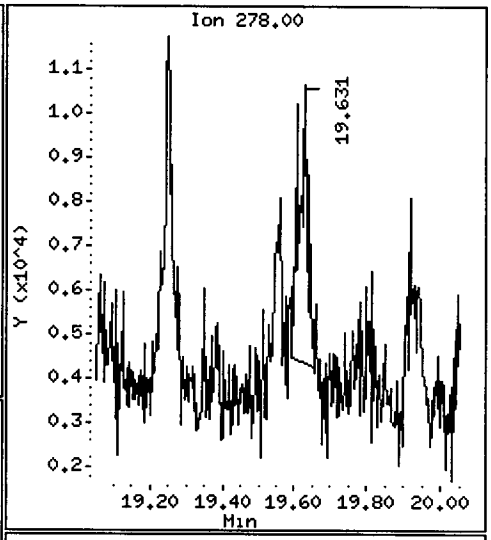
Column phase: ZB35

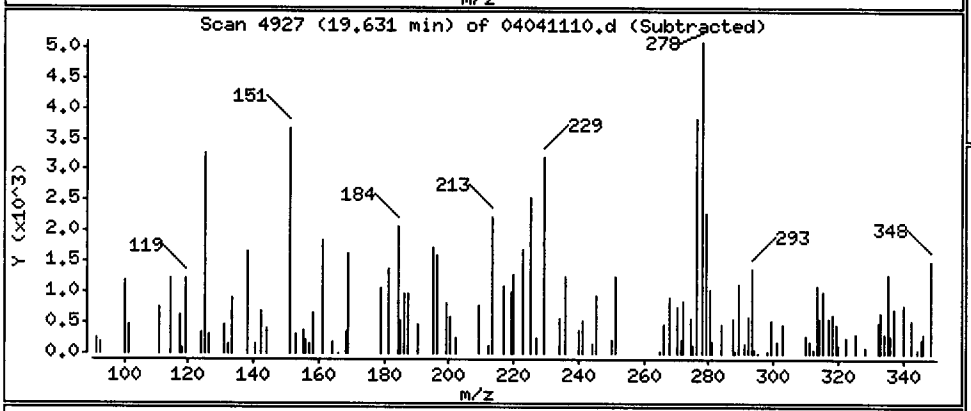
Column diameter: 0.32

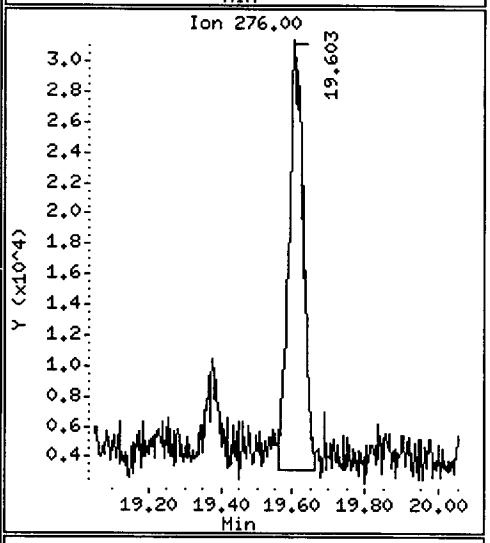
79 Dibenzo(a,h)anthracene

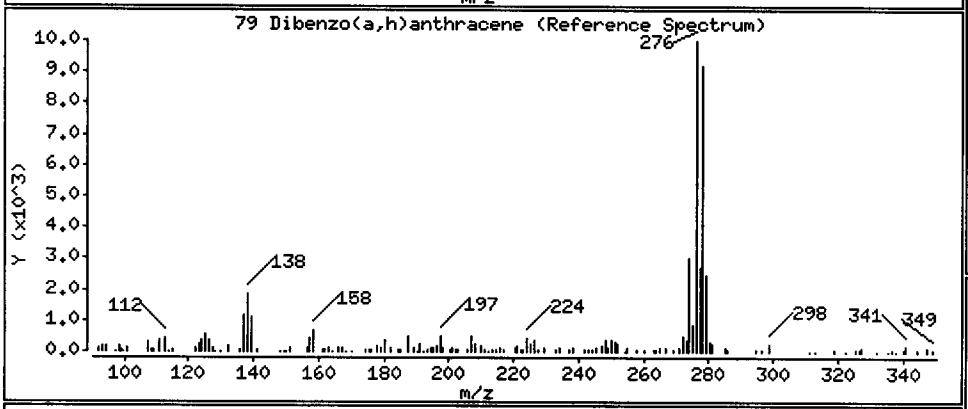
Concentration: 5.824 ug/kg

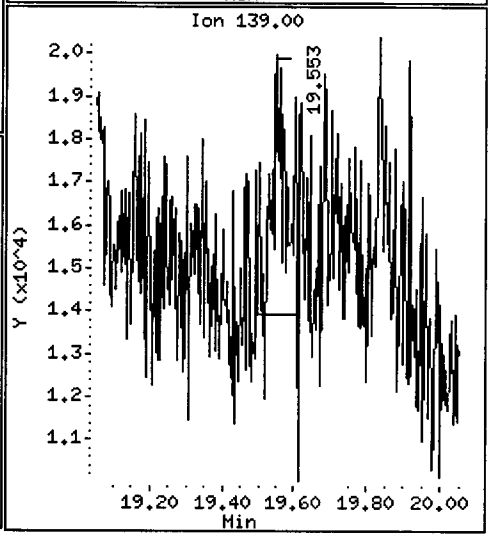


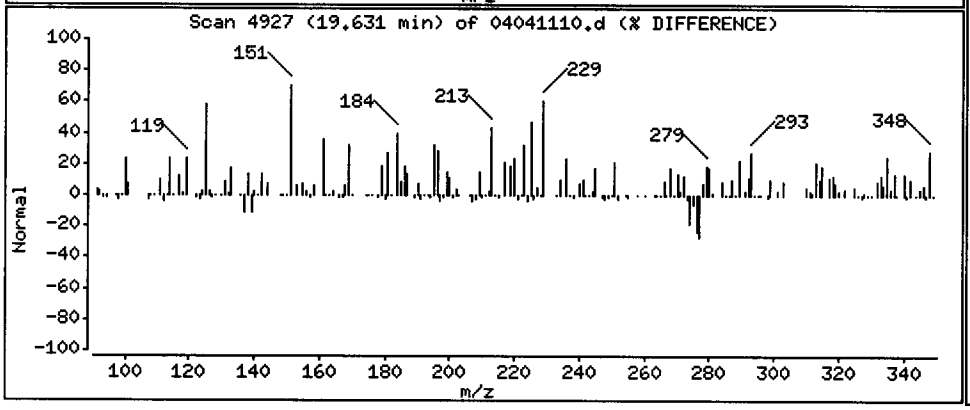












Data File: /chem1/nt12.i/20110404.b/04041110.d

Date : 04-APR-2011 16:03

Client ID: LL-SED1-0-56-031511

Instrument: nt12.i

Sample Info: SN54H

Volume Injected (uL): 1.0

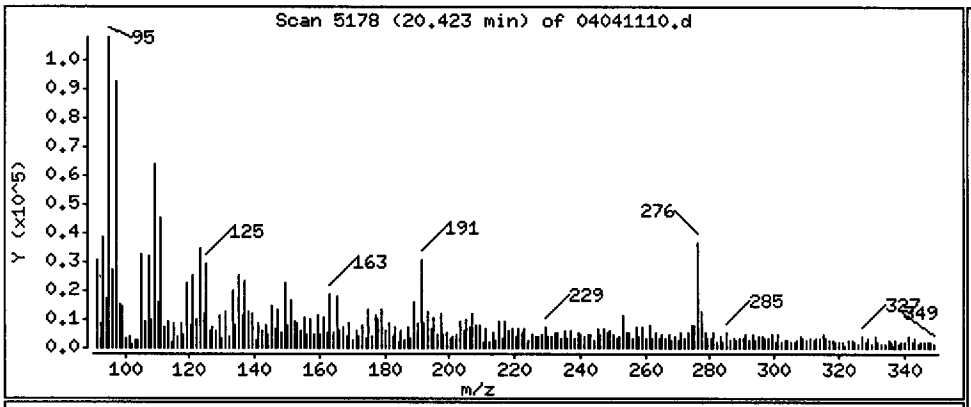
Operator: JZ

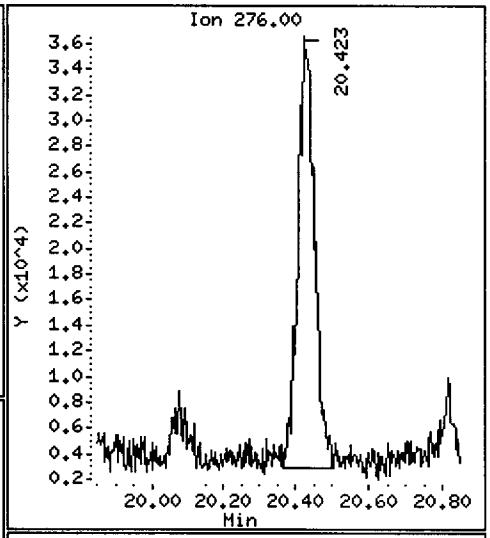
Column phase: ZB35

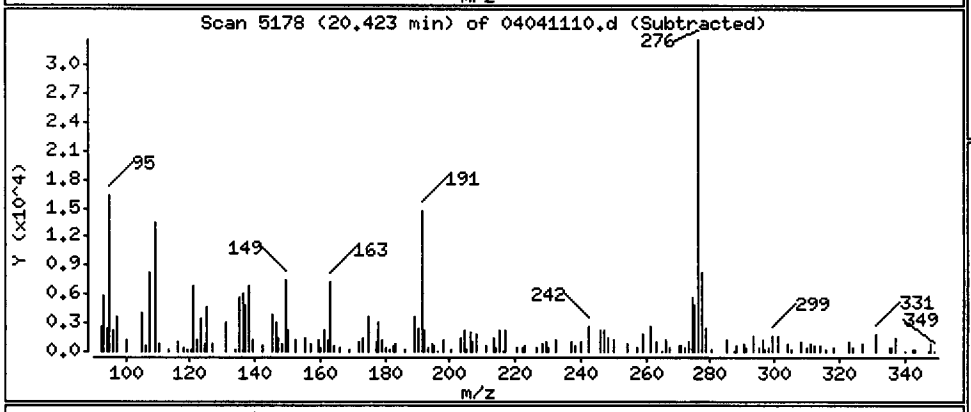
Column diameter: 0.32

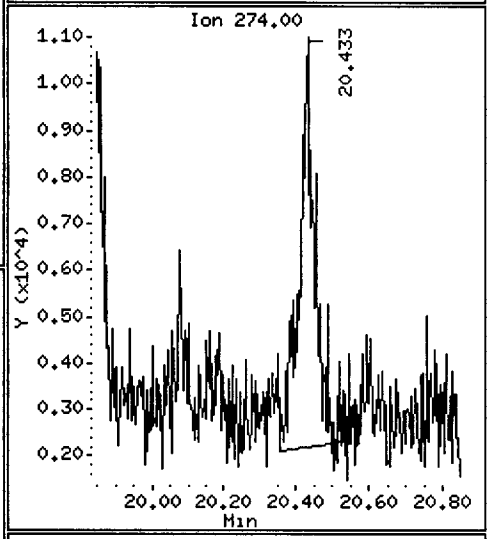
80 Benzo(g,h,i)perylene

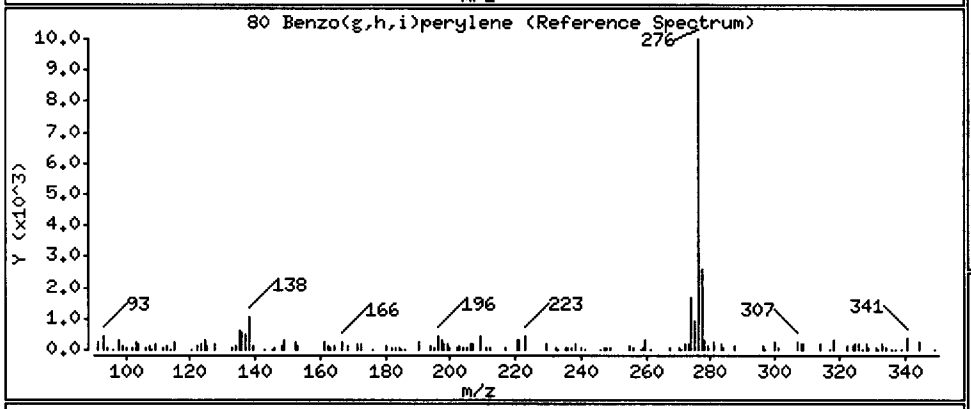
Concentration: 54.89 ug/kg

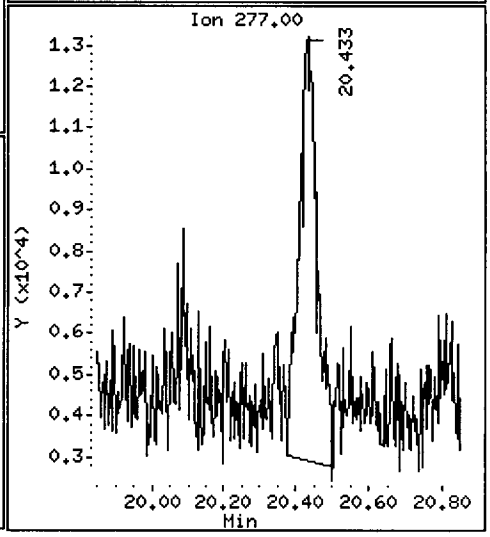


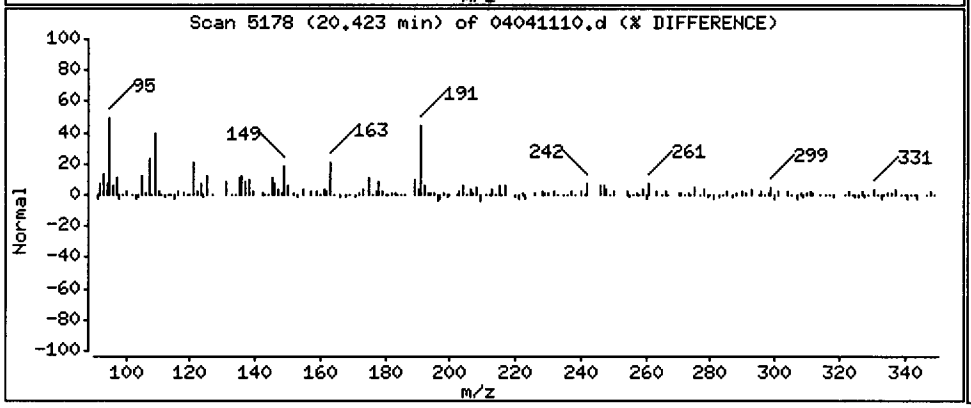












Data File: /chem1/nt12.i/20110404.b/04041110.d

Date : 04-APR-2011 16:03

Client ID: LL-SED1-0-56-031511

Instrument: nt12.i

Sample Info: SN54H

Volume Injected (uL): 1.0

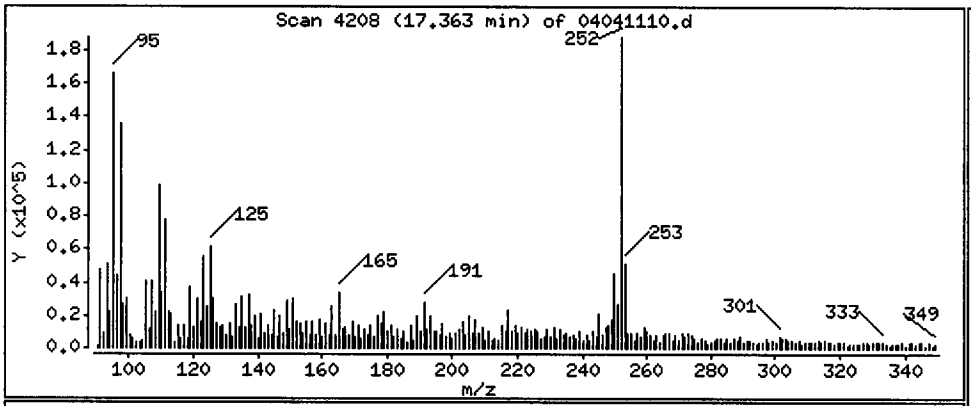
Operator: JZ

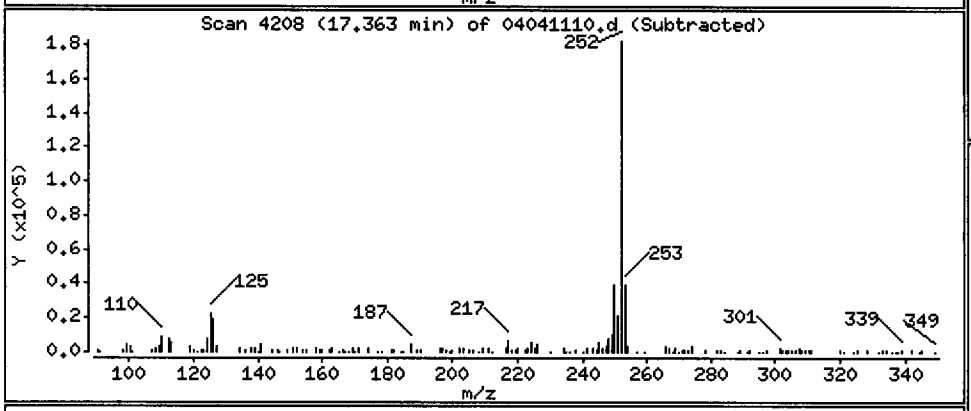
Column phase: ZB35

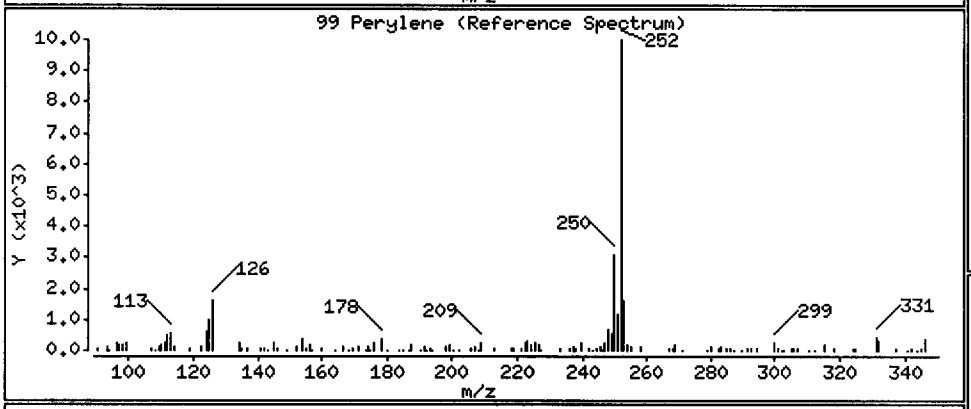
Column diameter: 0.32

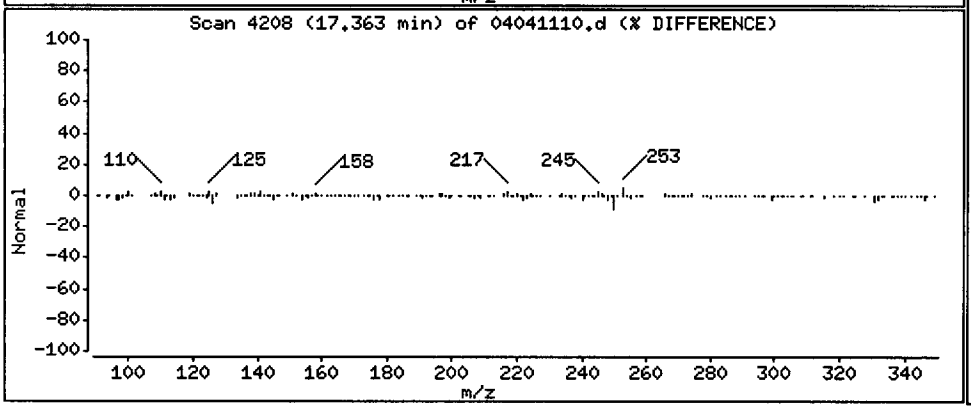
99 Perylene

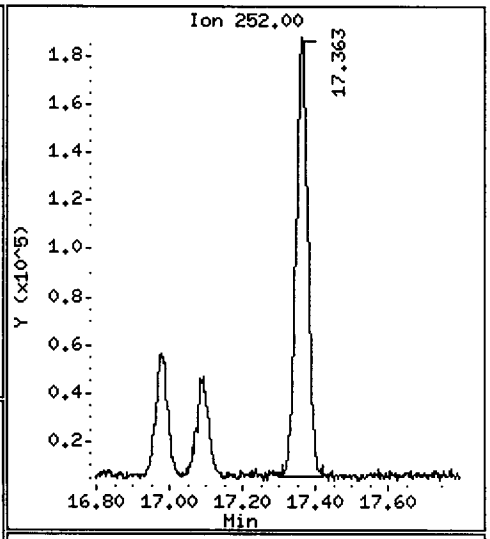
Concentration: 271.5 ug/kg

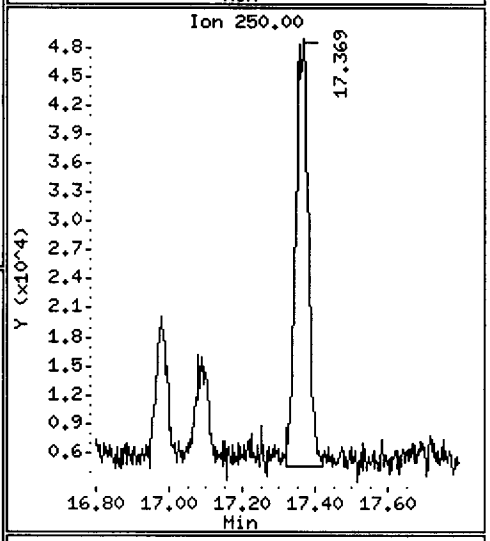


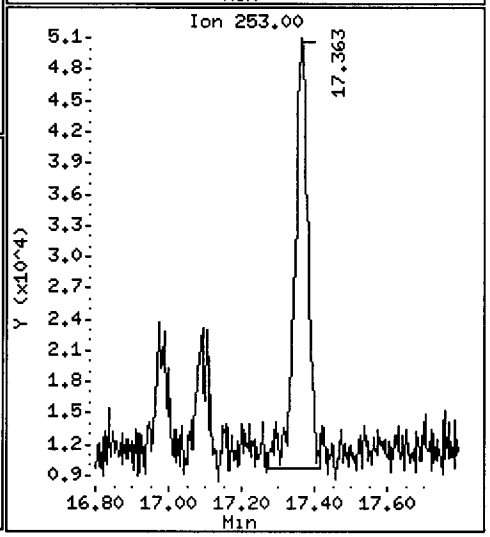












CO-ELUTION SUMMARY FOR FILE - 04041110.d

Lab ID: SN54H, Method: SIMPNA0331.m, Instrument: nt12.i, Date: 04-APR-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt12.i/20110404.b/04041112.d
Lab Smp Id: SN54G Client Smp ID: LL-SED2-0-56-031511
Inj Date : 04-APR-2011 17:22
Operator : JZ Inst ID: nt12.i
Smp Info : SN54G,3,
Misc Info : 11-5931
Comment : 1ul Injection
Method : /chem1/nt12.i/20110404.b/SIMPNA0331.m
Meth Date : 05-Apr-2011 17:45 jianqing Quant Type: ISTD
Cal Date : 31-MAR-2011 22:47 Cal File: 03311107.d
Als bottle: 12
Dil Factor: 3.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

04/05/11

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

Name	Value	Description
DF	3.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Ws	19.03000	Weight of sample extracted (g)
M	88.70000	% 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	4.807	4.803	(1.000)	261511	2.00000	
28 Naphthalene	128	Compound Not Detected.					
$ 190 2-Methylnaphthalene-d10	152	5.545	5.542	(1.154)	55232	0.69078	481.9
32 2-Methylnaphthalene	141	5.586	5.583	(1.162)	3661	0.05217	36.39
105 1-methylnaphthalene	141	5.785	5.775	(1.204)	24100	0.32273	225.1
40 Acenaphthylene	152	Compound Not Detected.					
* 42 Acenaphthene-d10	164	7.047	7.044	(1.000)	166500	2.00000	
44 Acenaphthene	153	7.097	7.091	(1.007)	7116	0.07841	54.70
46 Dibenzofuran	168	Compound Not Detected.					
49 Fluorene	166	7.697	7.691	(1.092)	5235	0.05153	35.94
* 59 Phenanthrene-d10	188	8.988	8.981	(1.000)	238192	2.00000	
60 Phenanthrene	178	9.019	9.013	(1.004)	40312	0.32067	223.7
61 Anthracene	178	9.054	9.044	(1.007)	10109	0.08009	55.87
64 Fluoranthene	202	10.701	10.673	(1.191)	128319	0.93871	654.8
65 Pyrene	202	11.171	11.137	(0.819)	149471	1.05481	735.8

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
68	Benzo(a)anthracene	228	13.522	13.491	(0.991)	43011	0.33993	237.1
* 69	Chrysene-d12	240	13.639	13.604	(1.000)	263188	2.00000	
71	Chrysene	228	13.699	13.671	(1.004)	100590	0.81343	567.4
74	Benzo(b)fluoranthene	252	16.122	16.078	(0.933)	70194	0.75263	525.0
75	Benzo(k)fluoranthene	252	16.173	16.132	(0.936)	36905	0.37722	263.1(H)
188	Benzo(j)fluoranthene	252	16.249	16.208	(0.940)	34386	0.36783	256.6(H)
76	Benzo(a)pyrene	252	17.072	17.025	(0.988)	40550	0.47355	330.3
* 77	Perylene-d12	264	17.277	17.230	(1.000)	165436	2.00000	
78	Indeno(1,2,3-cd)pyrene	276	19.587	19.537	(1.134)	40784	0.39169	273.2
$ 191	Dibenzo(a,h)anthracene-d14	292	19.521	19.470	(1.130)	45672	0.58832	410.4
79	Dibenzo(a,h)anthracene	278	19.600	19.553	(1.134)	11632	0.13660	95.28(H)
80	Benzo(g,h,i)perylene	276	20.408	20.348	(1.181)	50433	0.54610	380.9
99	Perylene	252	17.344	17.296	(1.004)	67795	0.93616	653.0

QC Flag Legend

H - Operator selected an alternate compound hit.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt12.i
Lab File ID: 04041112.d
Lab Smp Id: SN54G
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem1/nt12.i/20110404.b/SIMPNA0331.m
Misc Info: 11-5931

Calibration Date: 04-APR-2011
Calibration Time: 11:18
Client Smp ID: LL-SED2-0-56-031
Level: LOW
Sample Type: Sediment

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF	
27 Naphthalene-d8	494112	247056	988224	261511	-47.07	
42 Acenaphthene-d10	280105	140052	560210	166500	-40.56	
59 Phenanthrene-d10	461353	230676	922706	238192	-48.37	
69 Chrysene-d12	503160	251580	1006320	263188	-47.69	
77 Perylene-d12	442215	221108	884430	165436	-62.59	<-

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	4.80	4.30	5.30	4.81	0.07
42 Acenaphthene-d10	7.04	6.54	7.54	7.05	0.04
59 Phenanthrene-d10	8.98	8.48	9.48	8.99	0.07
69 Chrysene-d12	13.60	13.10	14.10	13.64	0.26
77 Perylene-d12	17.23	16.73	17.73	17.28	0.27

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

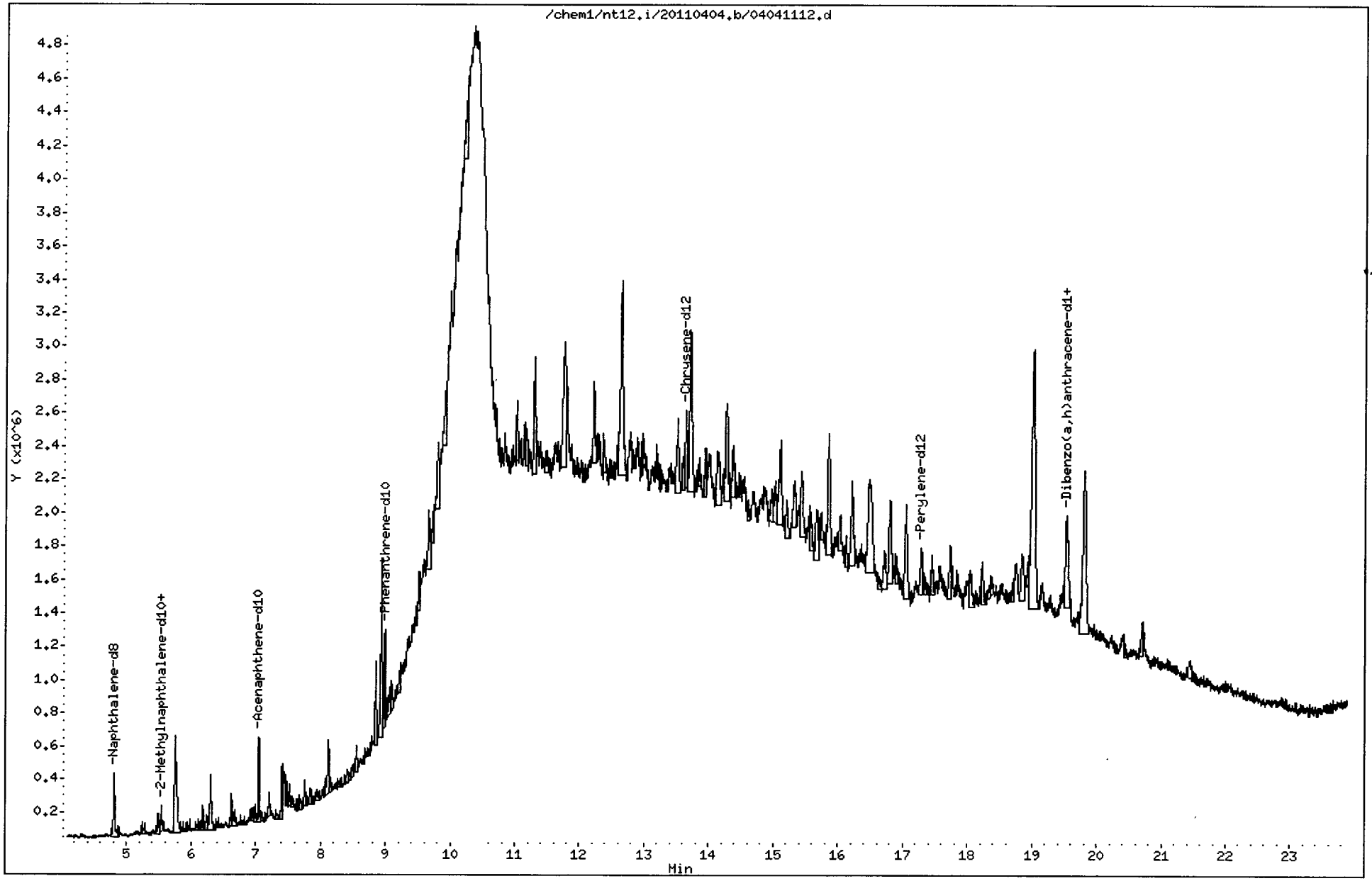
Client Name: Floyd Snider
Client SDG: SN54
Sample Matrix: SOLID
Fraction: SV
Lab Smp Id: SN54G
Client Smp ID: LL-SED2-0-56-031511
Level: LOW
Operator: JZ
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: pnalcss.spk
Quant Type: ISTD
Sublist File: pnax.sub
Method File: /chem1/nt12.i/20110404.b/SIMPNA0331.m
Misc Info: 11-5931

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	697.5	481.9	69.08	34-100
$ 191 Dibenzo(a,h)anthra	697.5	410.4	58.83	10-117

Data File: /chem1/nt12.i/20110404.b/04041112.d
Date : 04-APR-2011 17:22
Client ID: LL-SED2-0-56-031511
Sample Info: SN54G,3,
Volume Injected (uL): 1.0
Column phase: ZB35

Instrument: nt12.i
Operator: JZ
Column diameter: 0.32

SN54 : 00110



Data File: /chem1/nt12.i/20110404.b/04041112.d

Date : 04-APR-2011 17:22

Client ID: LL-SED2-0-56-031511

Instrument: nt12.i

Sample Info: SN54G,3,

Volume Injected (uL): 1.0

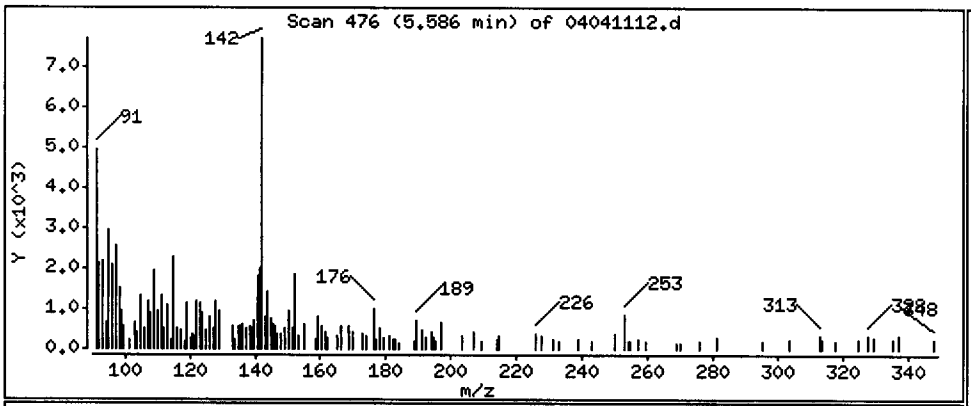
Operator: JZ

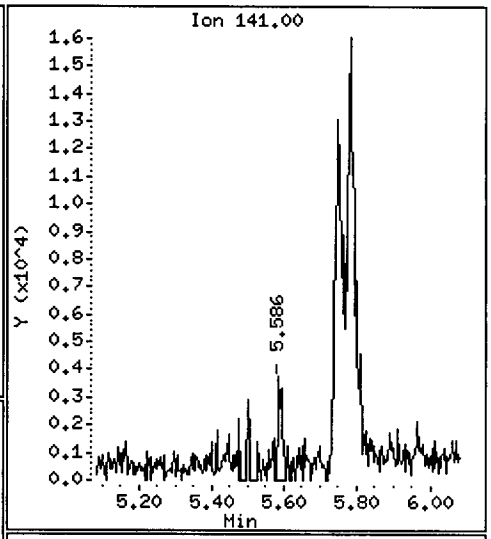
Column phase: ZB35

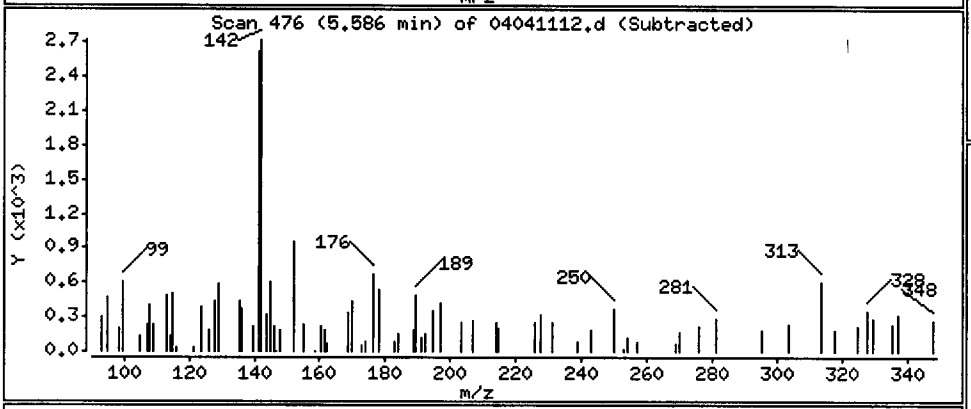
Column diameter: 0.32

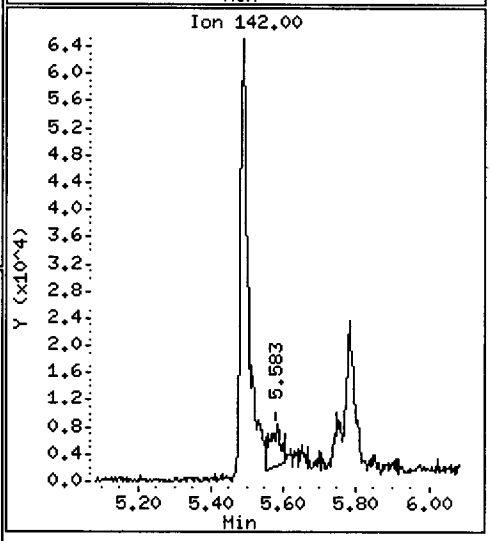
32 2-Methylnaphthalene

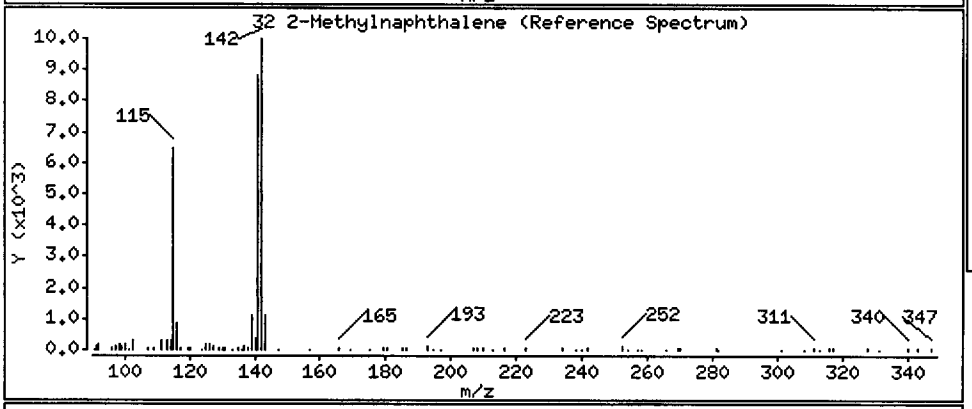
Concentration: 36.39 ug/kg

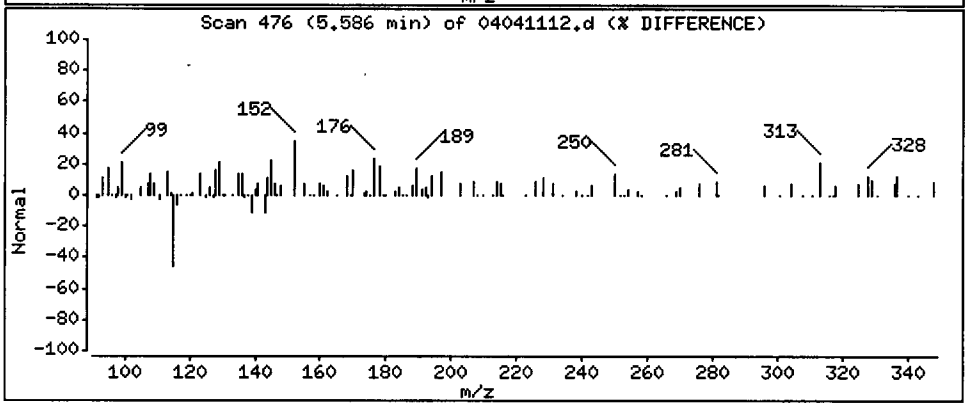












Data File: /chem1/nt12.i/20110404.b/04041112.d

Date : 04-APR-2011 17:22

Client ID: LL-SED2-0-56-031511

Instrument: nt12.i

Sample Info: SN54G,3,

Volume Injected (uL): 1.0

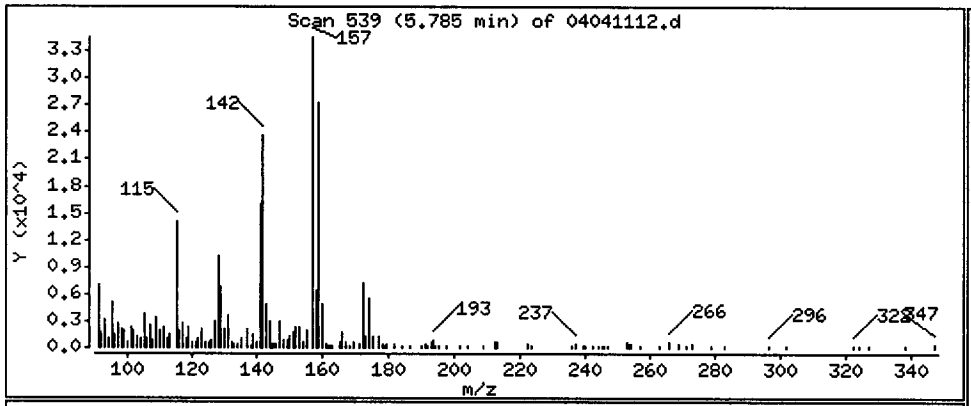
Operator: JZ

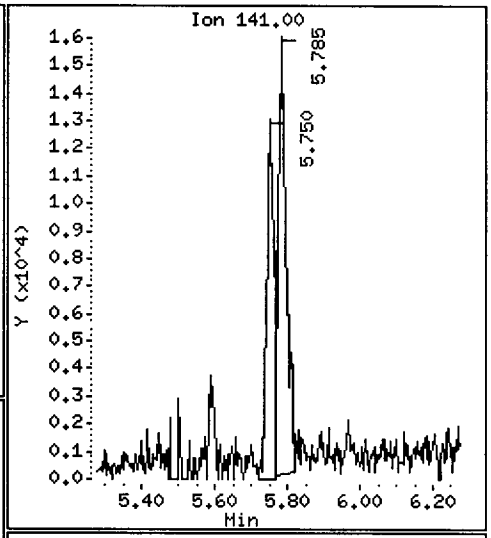
Column phase: ZB35

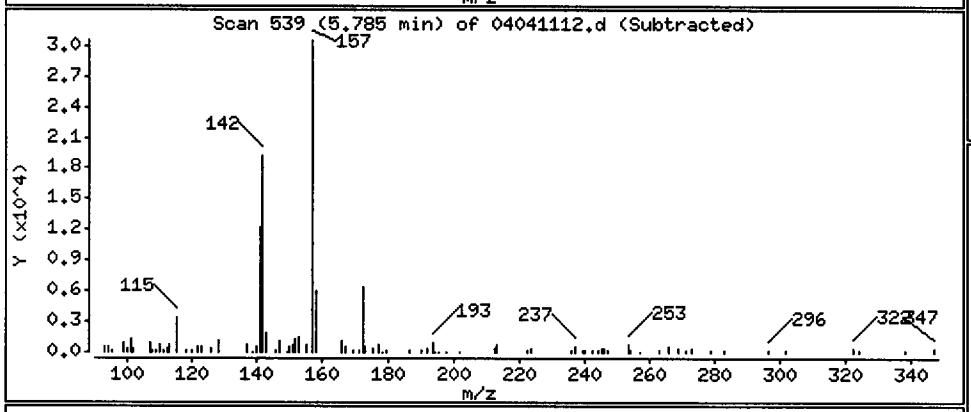
Column diameter: 0.32

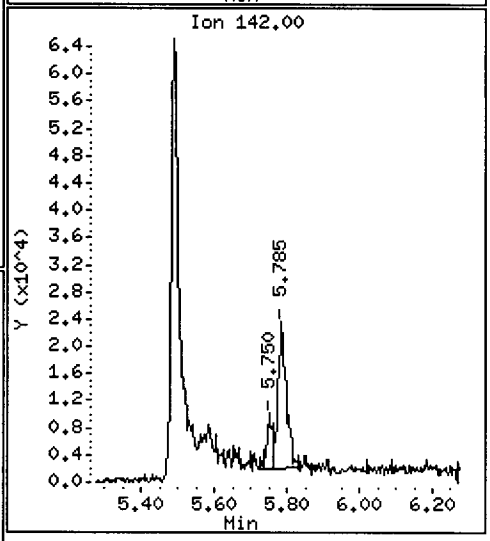
105 1-methylnaphthalene

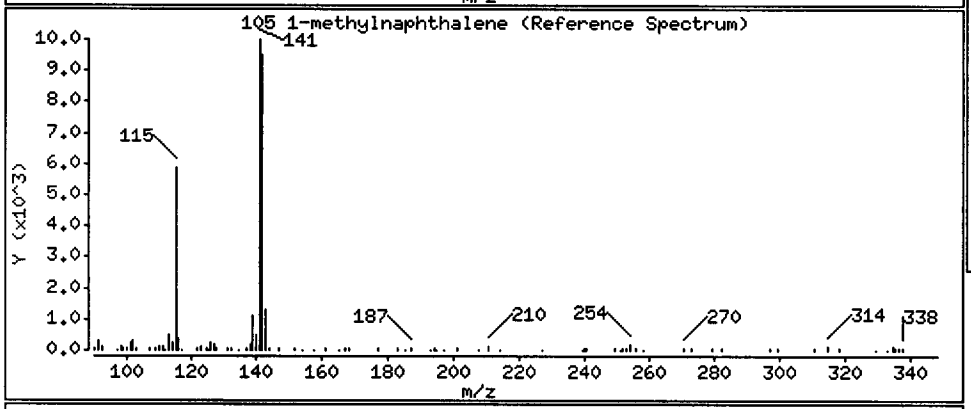
Concentration: 225.1 ug/kg

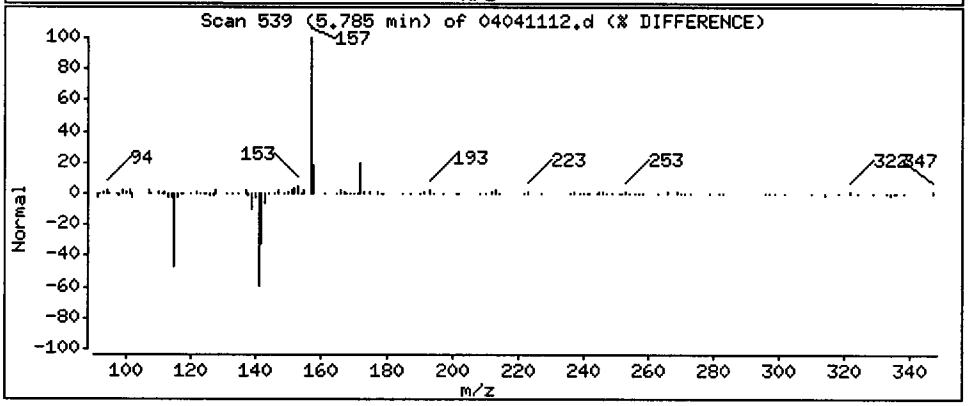












Data File: /chem1/nt12.i/20110404.b/04041112.d

Date : 04-APR-2011 17:22

Client ID: LL-SED2-0-56-031511

Instrument: nt12.i

Sample Info: SN54G,3,

Volume Injected (uL): 1.0

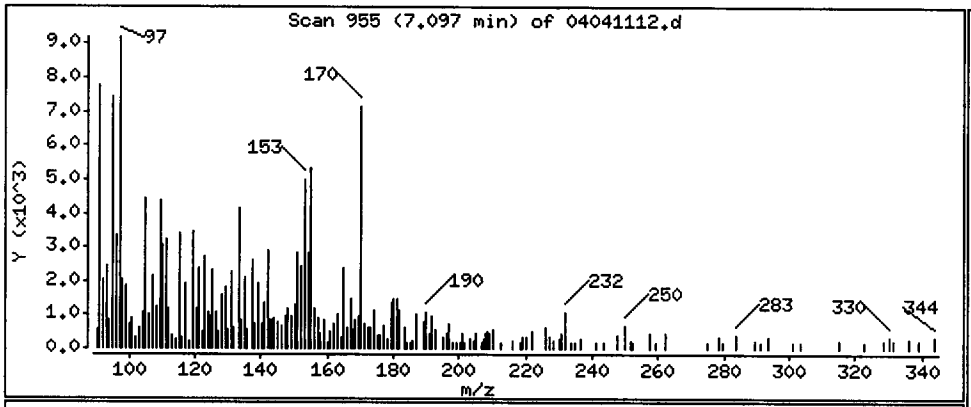
Operator: JZ

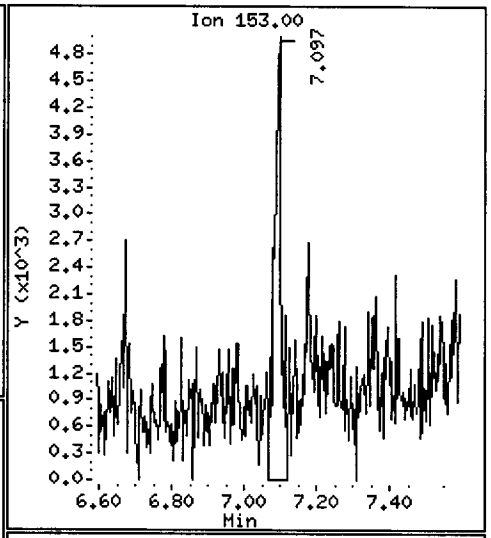
Column phase: ZB35

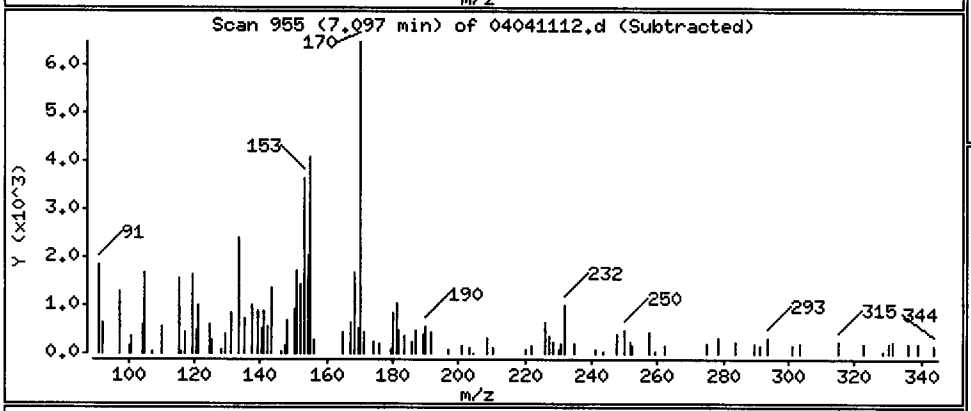
Column diameter: 0.32

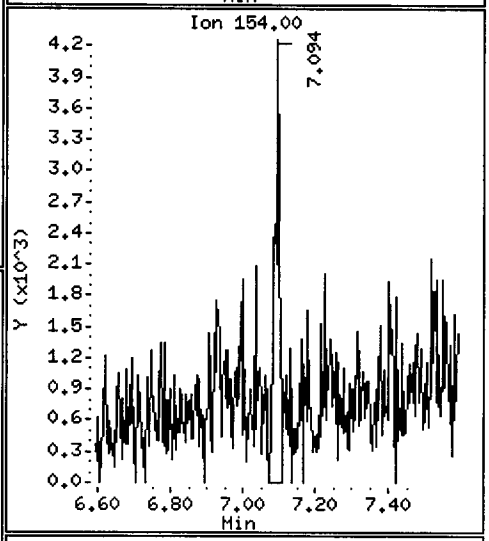
44 Acenaphthene

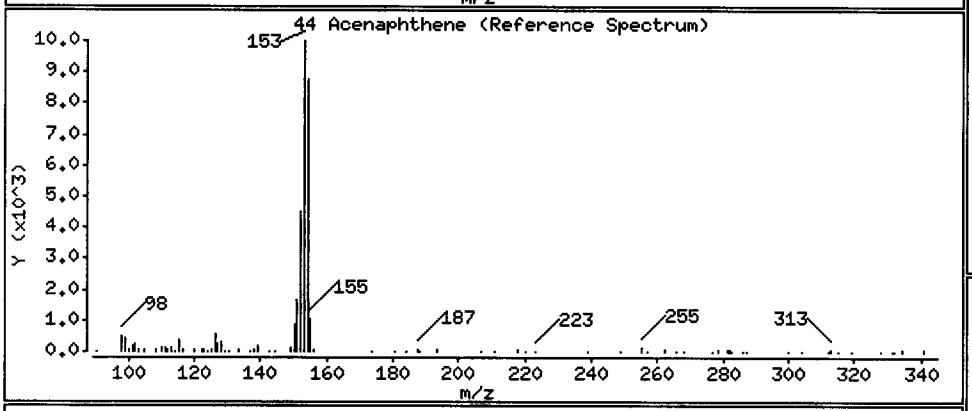
Concentration: 54.70 ug/kg

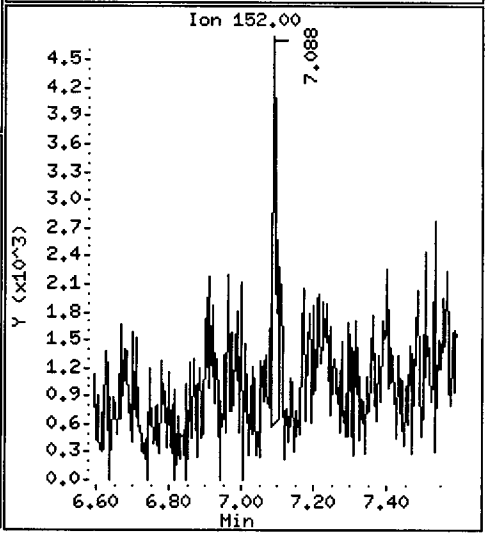


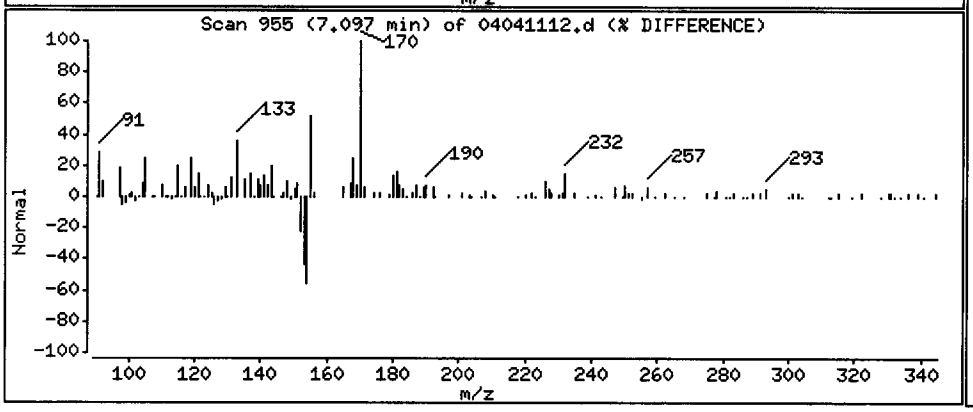












Data File: /chem1/nt12.i/20110404.b/04041112.d

Date : 04-APR-2011 17:22

Client ID: LL-SED2-0-56-031511

Instrument: nt12.i

Sample Info: SN54G,3,

Volume Injected (uL): 1.0

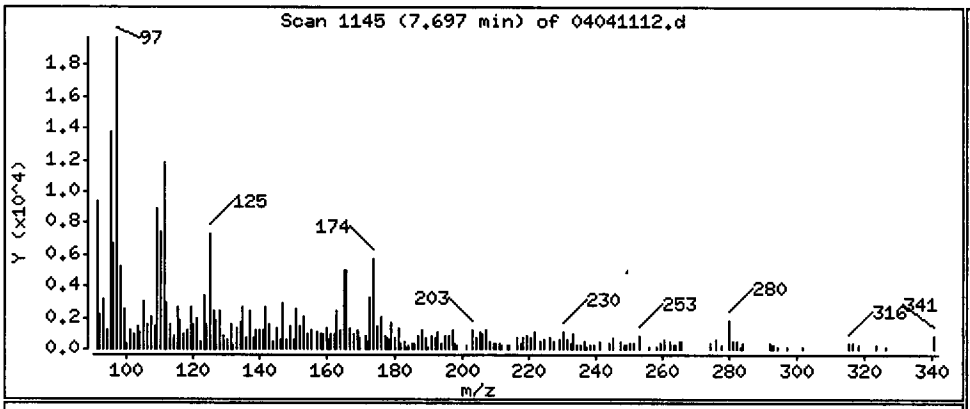
Operator: JZ

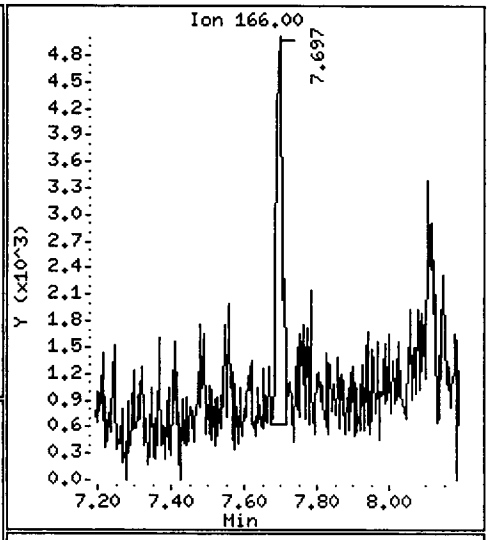
Column phase: ZB35

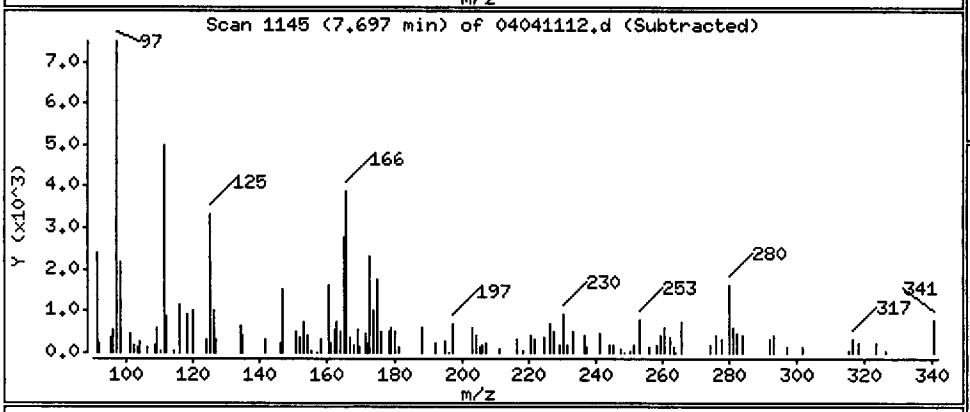
Column diameter: 0.32

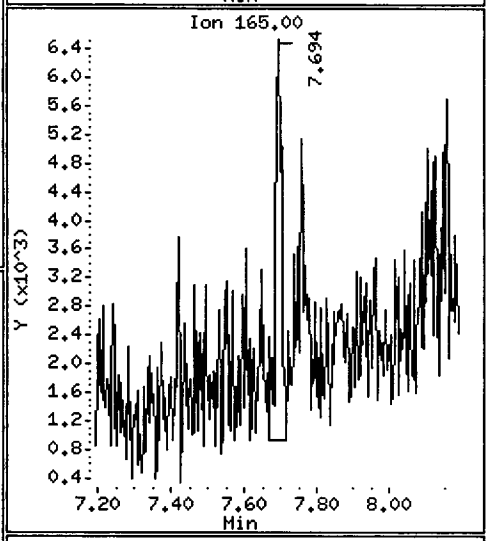
49 Fluorene

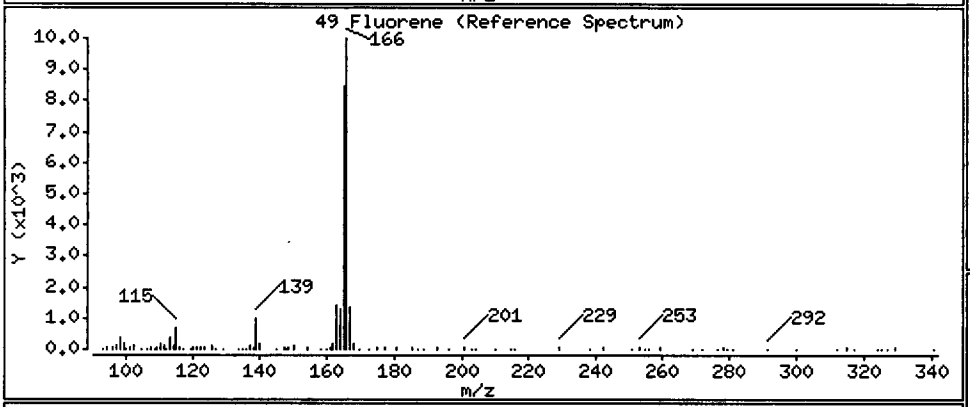
Concentration: 35.94 ug/kg

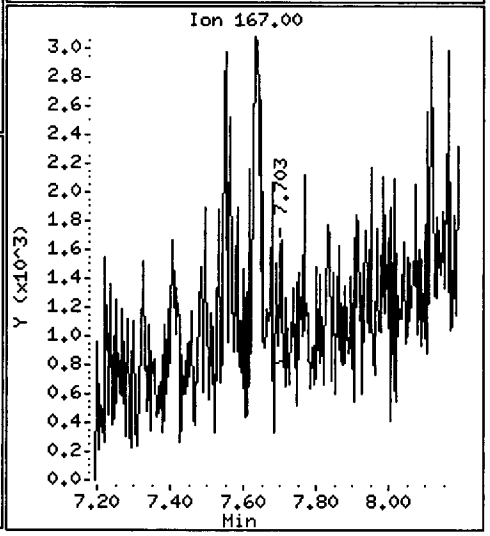


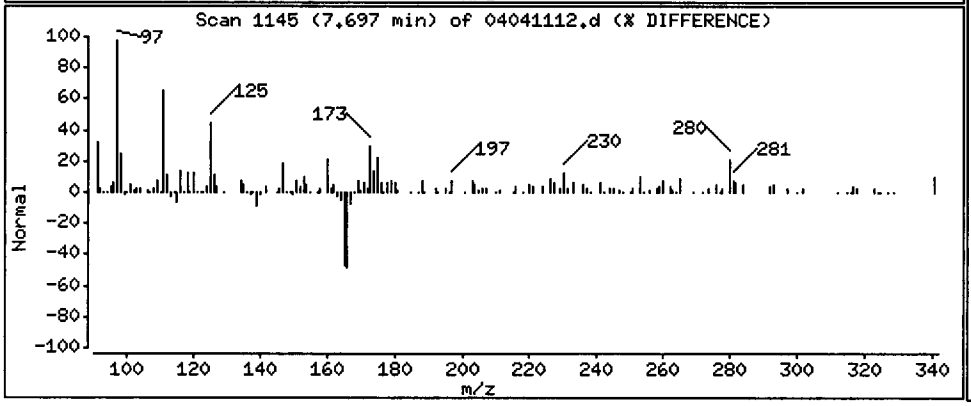












Data File: /chem1/nt12.i/20110404.b/04041112.d

Date : 04-APR-2011 17:22

Client ID: LL-SED2-0-56-031511

Instrument: nt12.i

Sample Info: SN54G,3,

Volume Injected (uL): 1.0

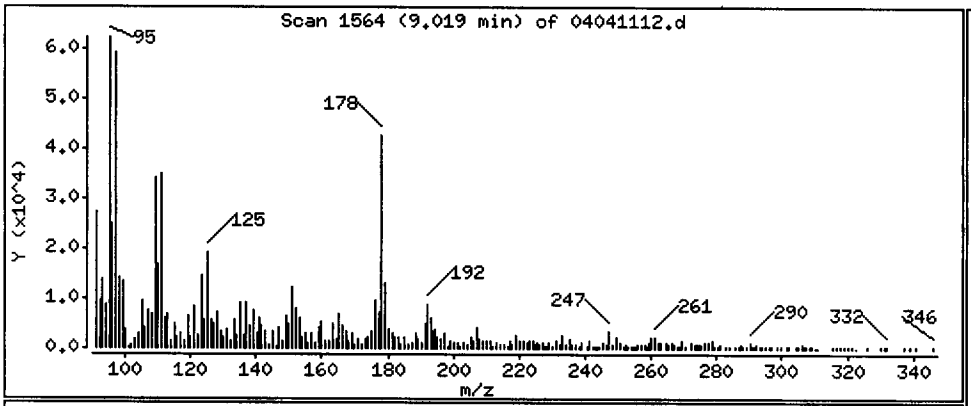
Operator: JZ

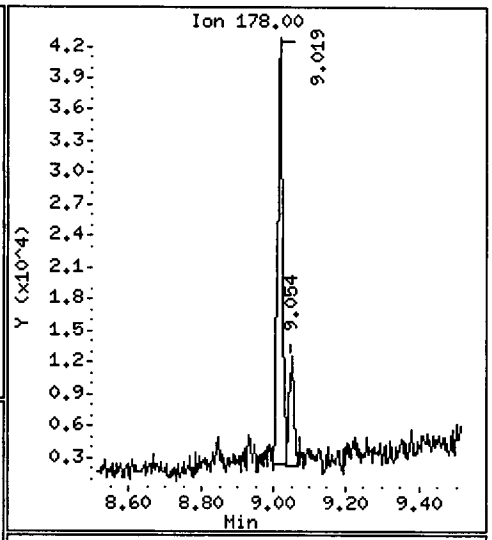
Column phase: ZB35

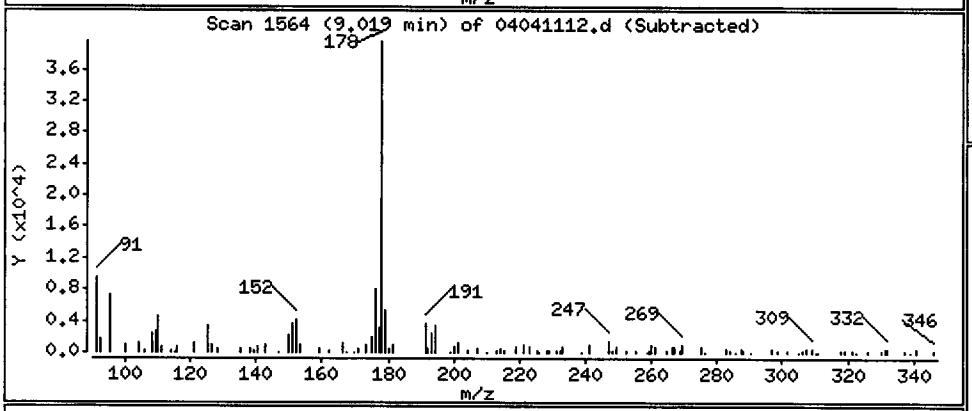
Column diameter: 0.32

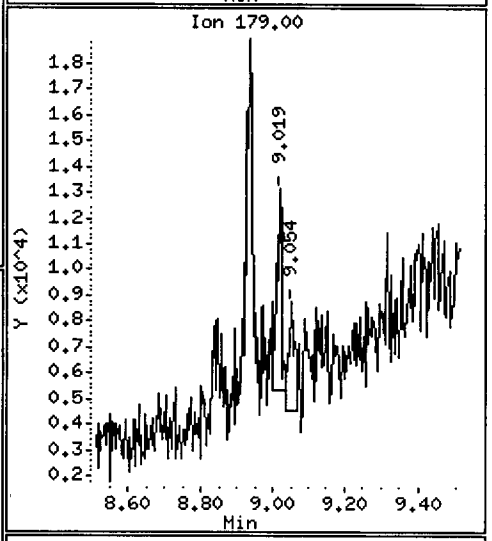
60 Phenanthrene

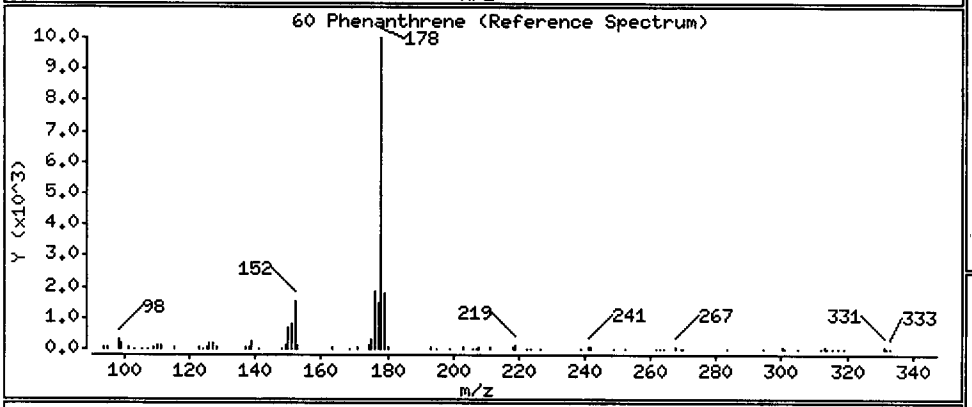
Concentration: 223.7 ug/kg

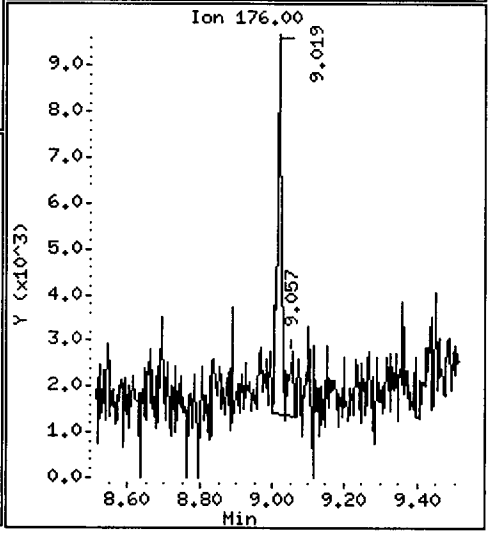


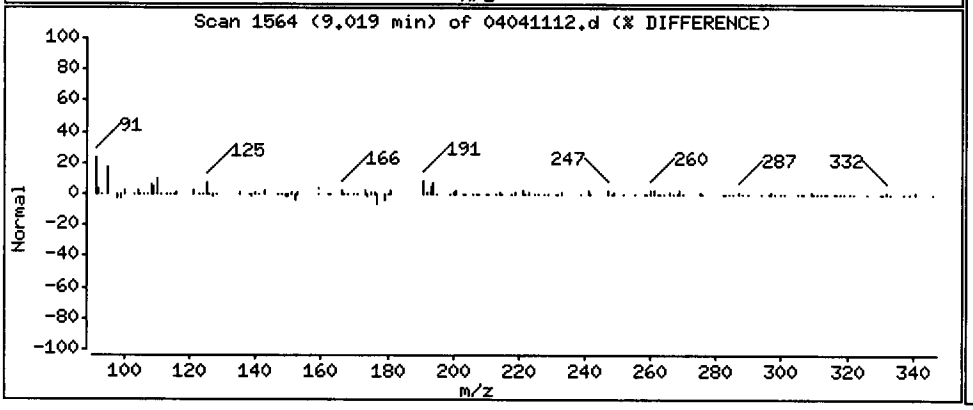












Data File: /chem1/nt12.i/20110404.b/04041112.d

Date : 04-APR-2011 17:22

Client ID: LL-SED2-0-56-031511

Instrument: nt12.i

Sample Info: SN54G,3,

Volume Injected (uL): 1.0

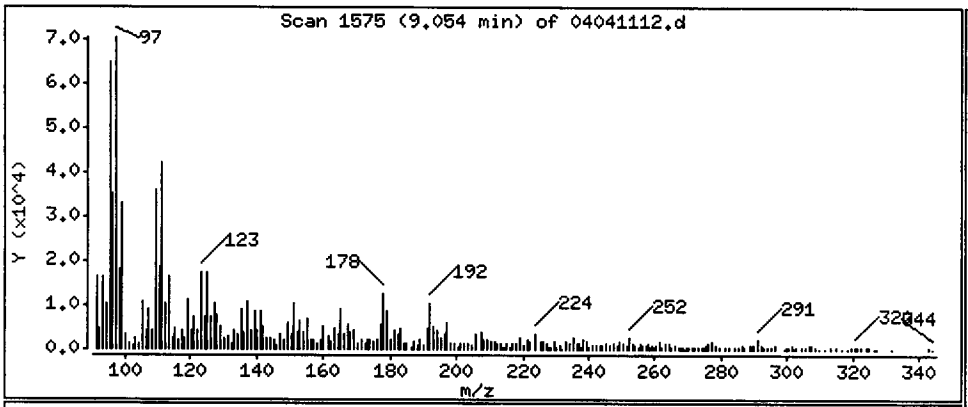
Operator: JZ

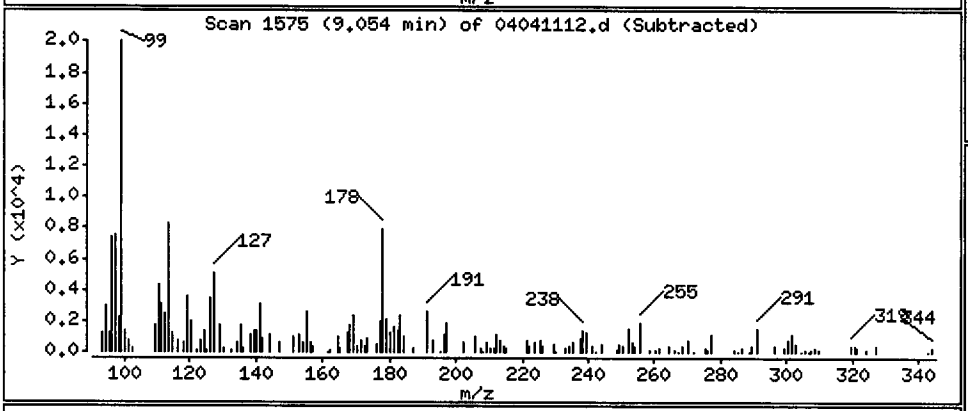
Column phase: ZB35

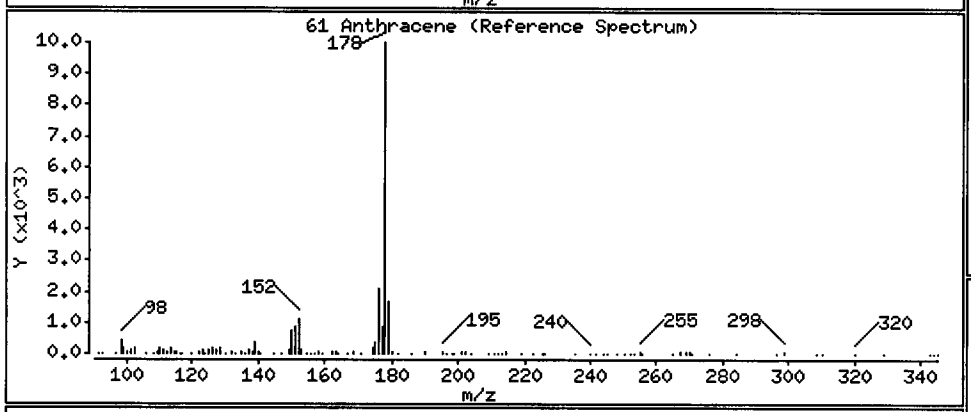
Column diameter: 0.32

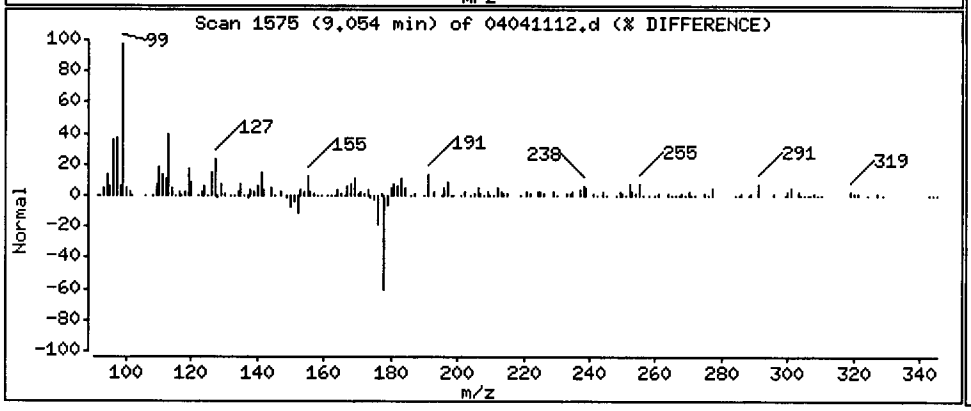
61 Anthracene

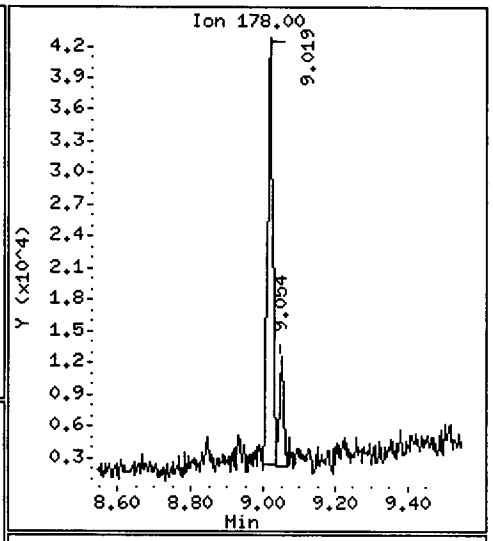
Concentration: 55.87 ug/kg

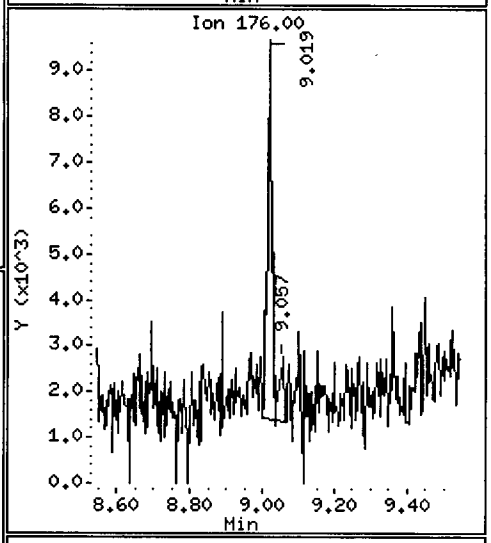


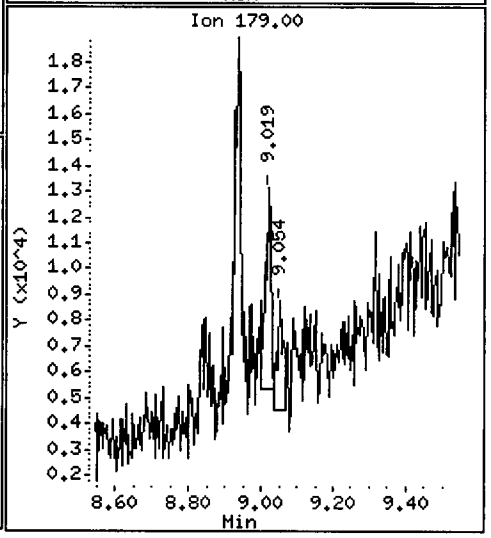












Data File: /chem1/nt12.i/20110404.b/04041112.d

Date : 04-APR-2011 17:22

Client ID: LL-SED2-0-56-031511

Instrument: nt12.i

Sample Info: SN54G,3,

Volume Injected (uL): 1.0

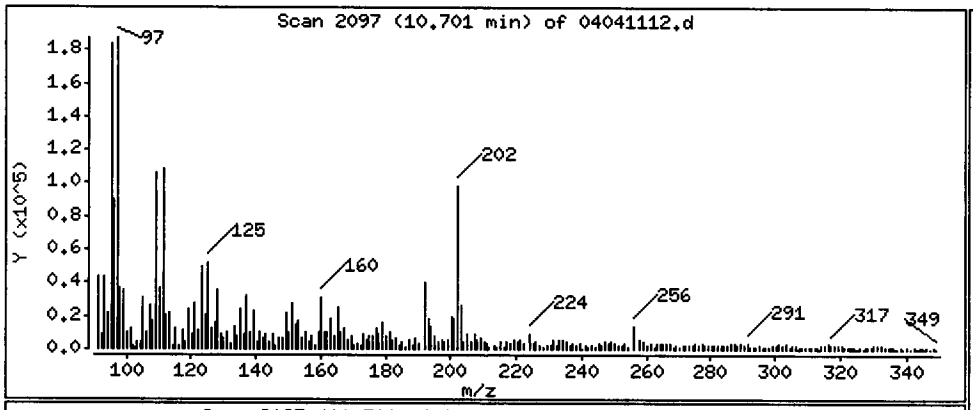
Operator: JZ

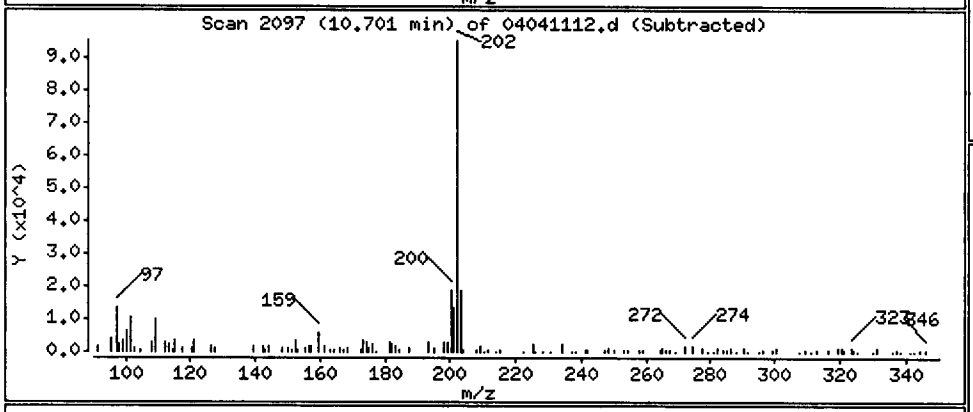
Column phase: ZB35

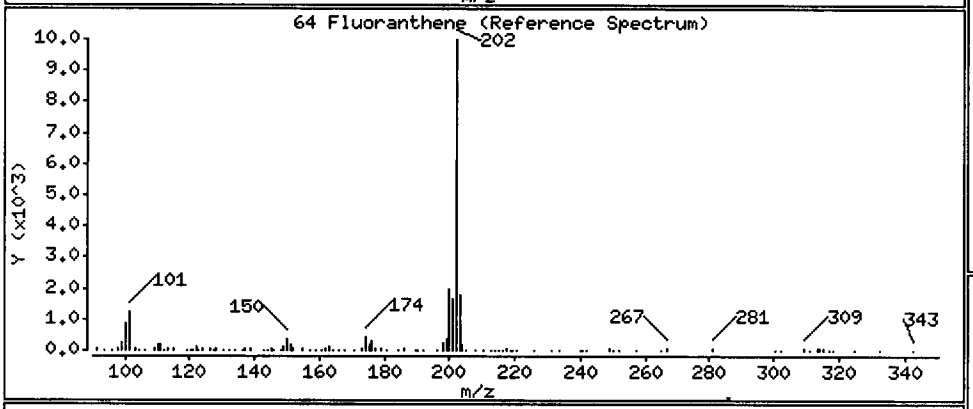
Column diameter: 0.32

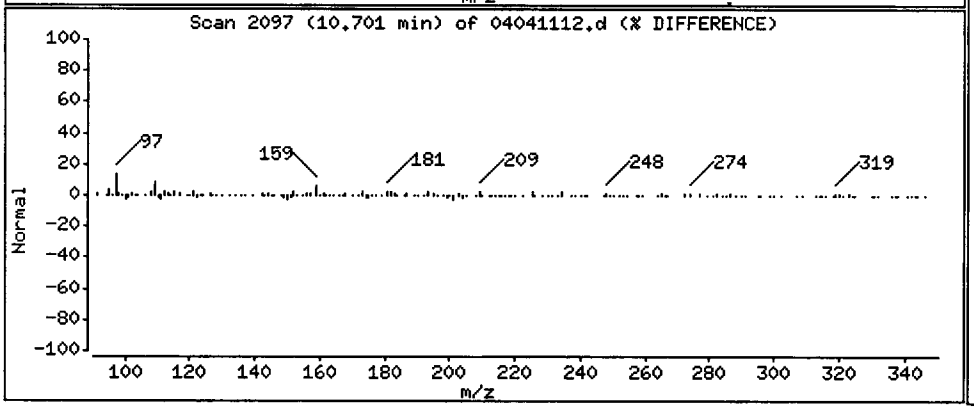
64 Fluoranthene

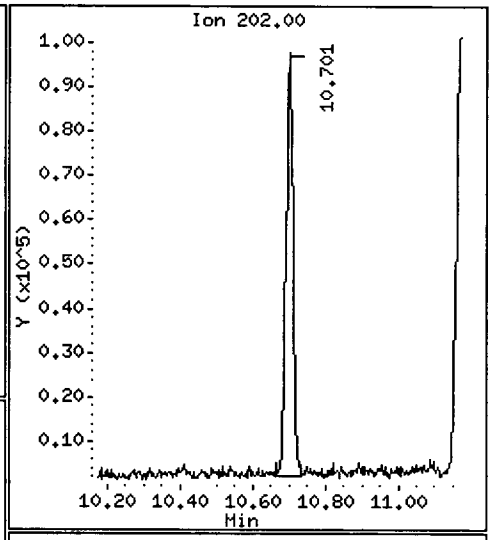
Concentration: 654.8 ug/kg

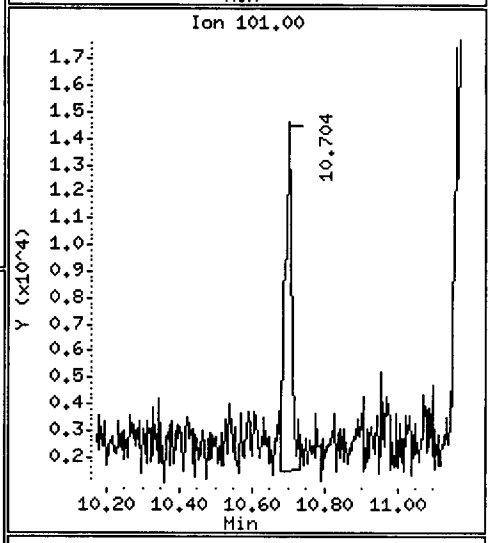


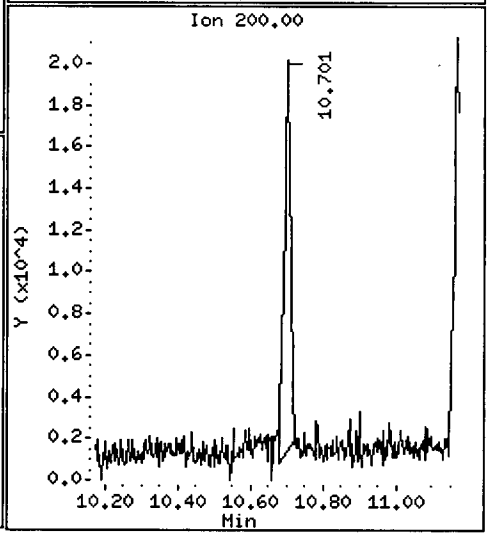












Data File: /chem1/nt12.i/20110404.b/04041112.d

Date : 04-APR-2011 17:22

Client ID: LL-SED2-0-56-031511

Instrument: nt12.i

Sample Info: SN54C,3,

Volume Injected (uL): 1.0

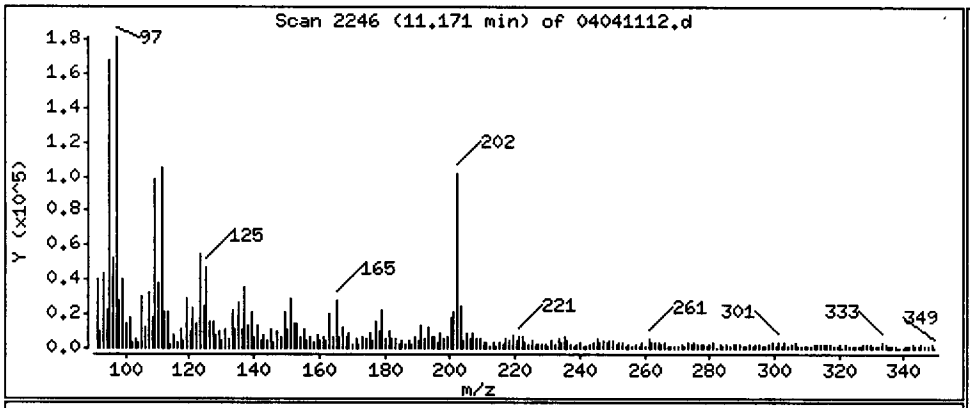
Operator: JZ

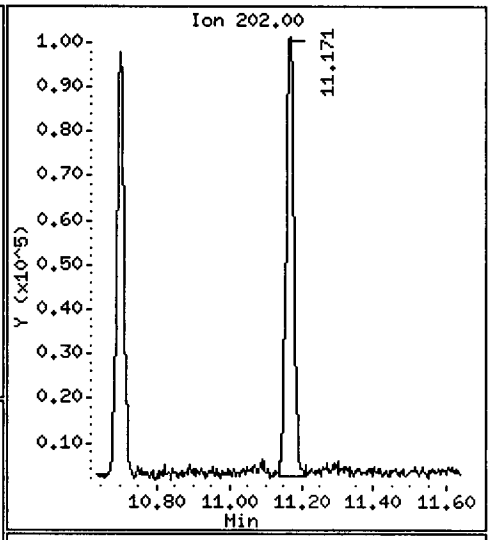
Column phase: ZB35

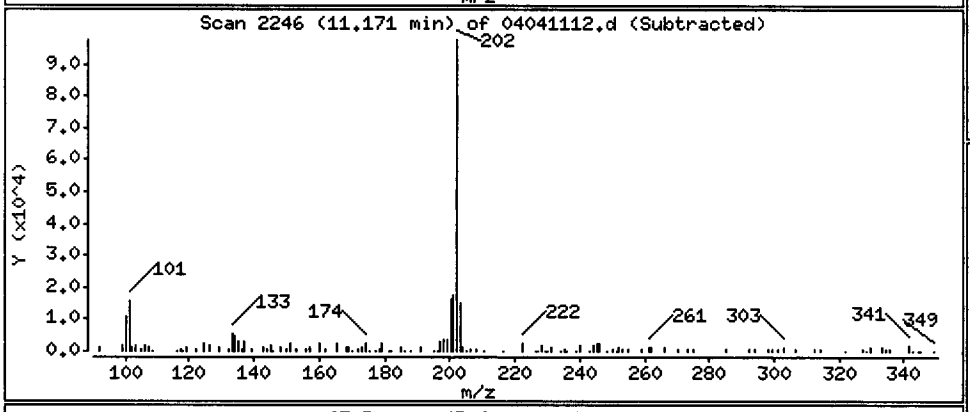
Column diameter: 0.32

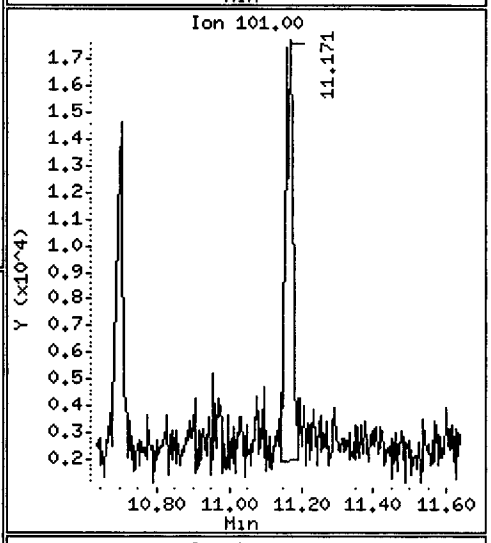
65 Pyrene

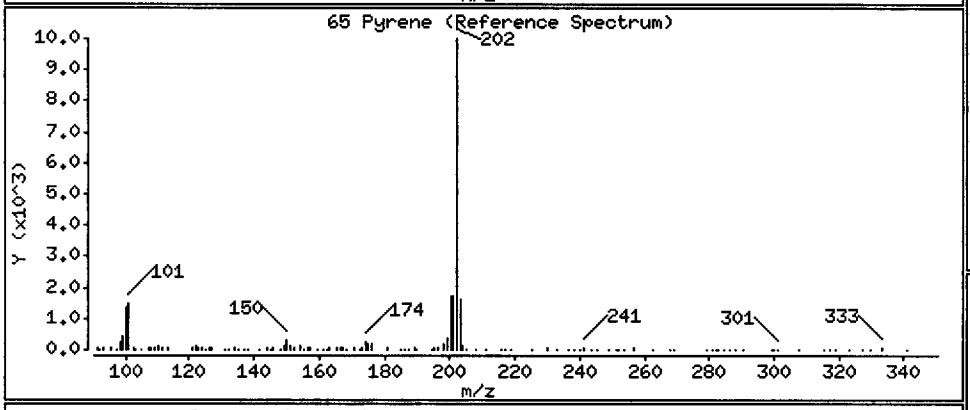
Concentration: 735.8 ug/kg

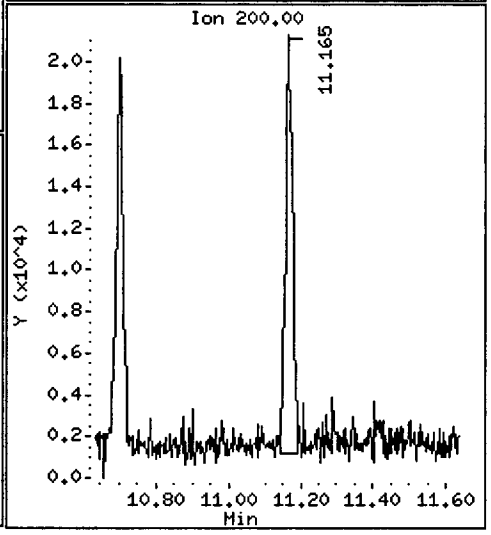


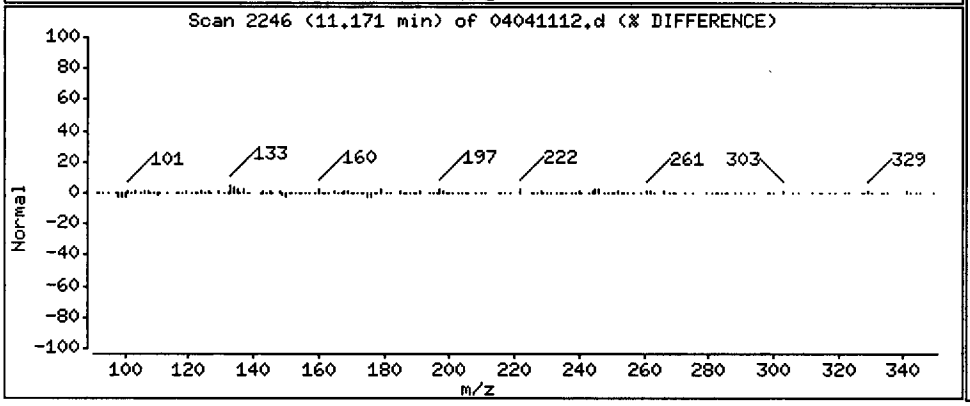












Data File: /chem1/nt12.i/20110404.b/04041112.d

Date : 04-APR-2011 17:22

Client ID: LL-SED2-0-56-031511

Instrument: nt12.i

Sample Info: SN54G,3,

Volume Injected (uL): 1.0

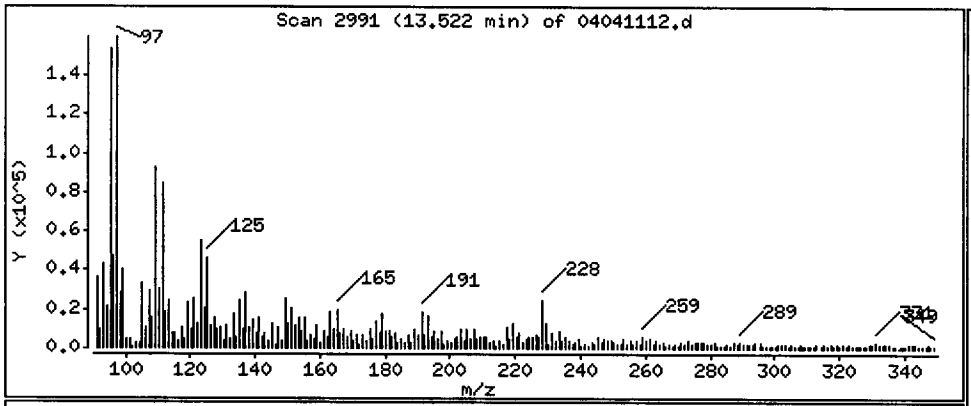
Operator: JZ

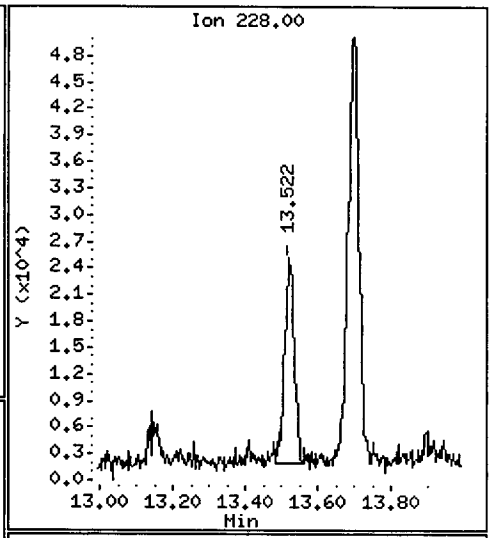
Column phase: ZB35

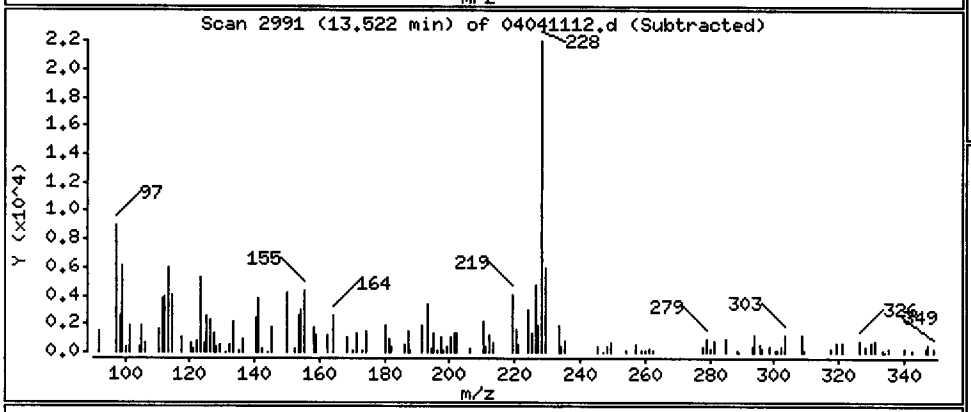
Column diameter: 0.32

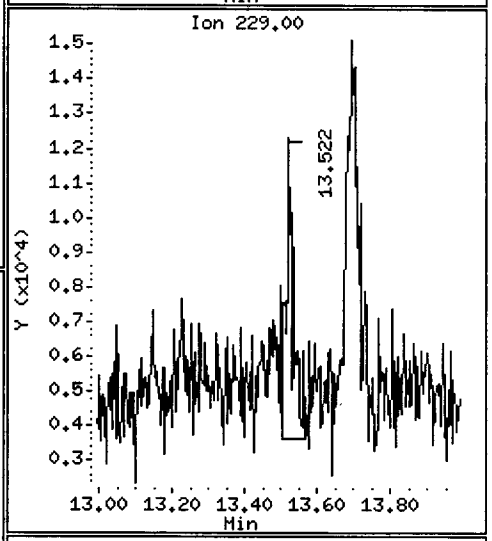
68 Benzo(a)anthracene

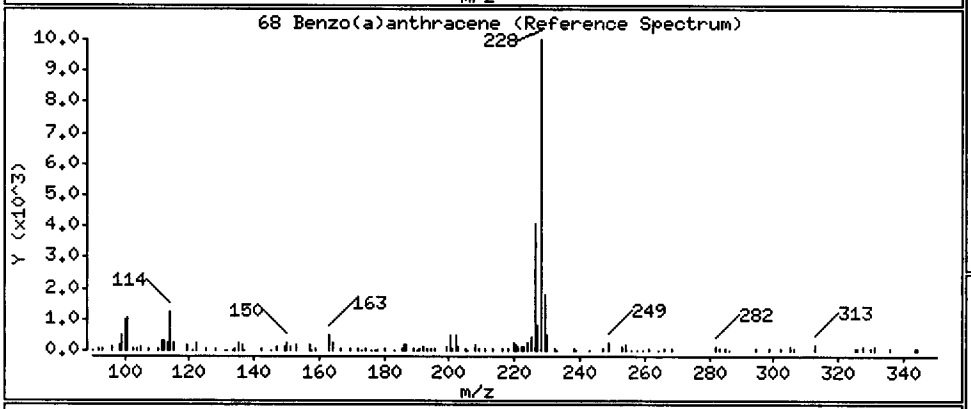
Concentration: 237.1 ug/kg

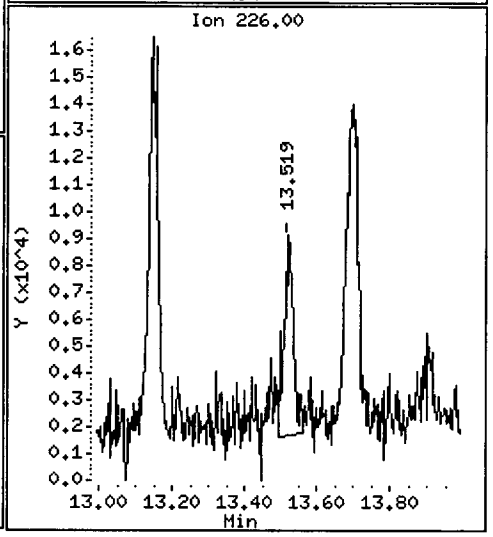


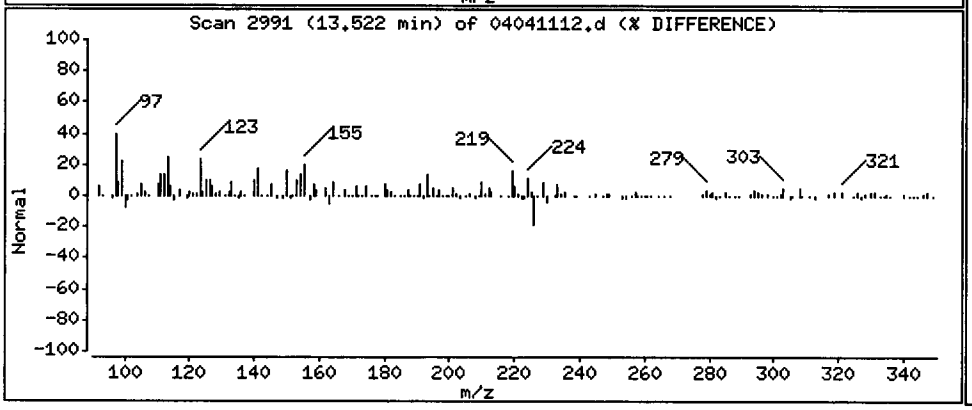












Data File: /chem1/nt12.i/20110404.b/04041112.d

Date : 04-APR-2011 17:22

Client ID: LL-SED2-0-56-031511

Instrument: nt12.i

Sample Info: SN54G,3,

Volume Injected (uL): 1.0

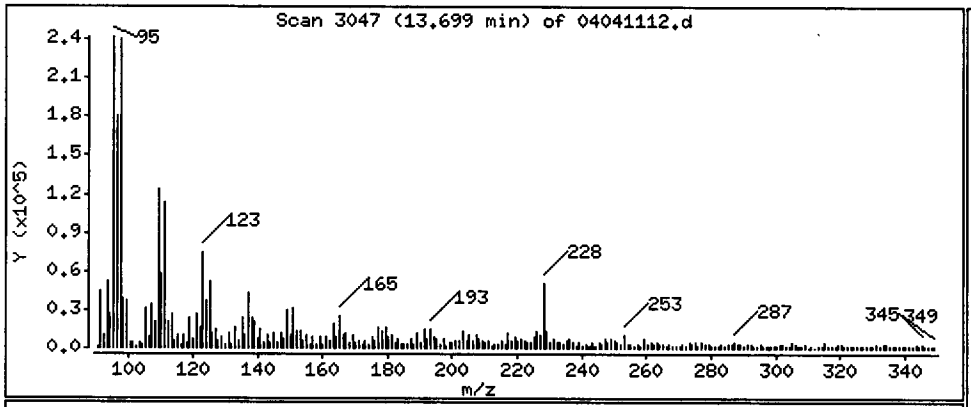
Operator: JZ

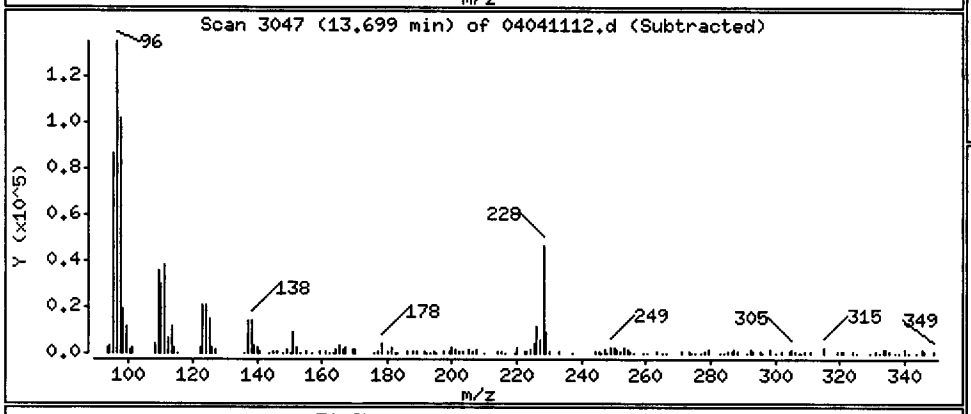
Column phase: ZB35

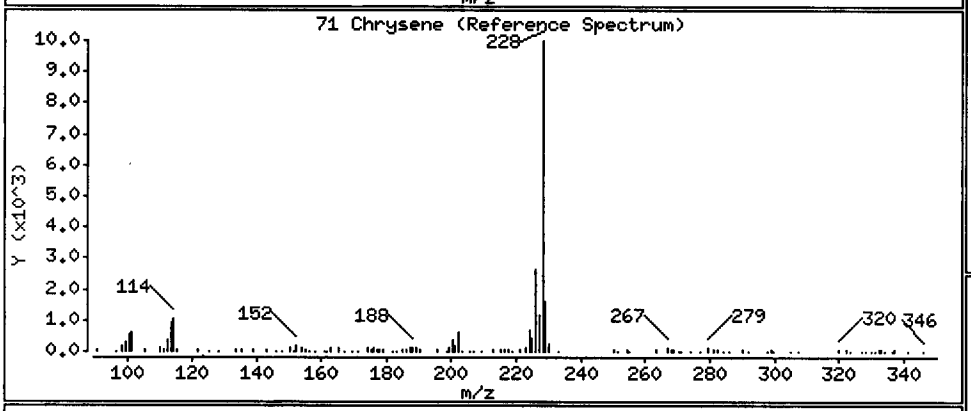
Column diameter: 0.32

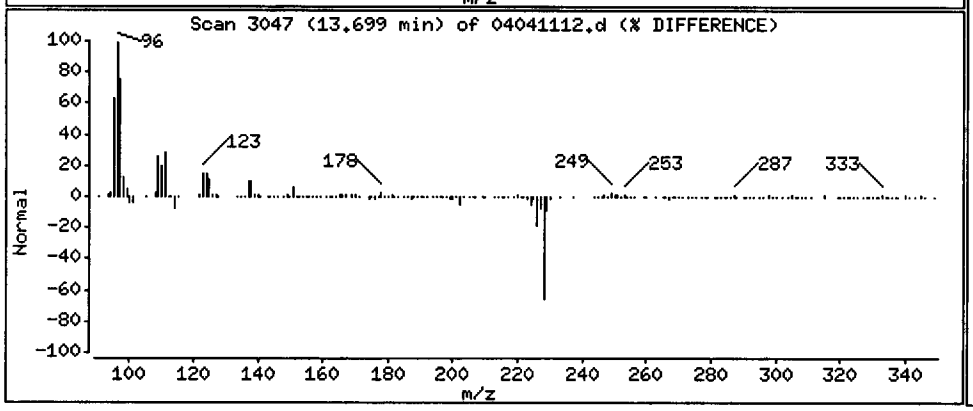
71 Chrysene

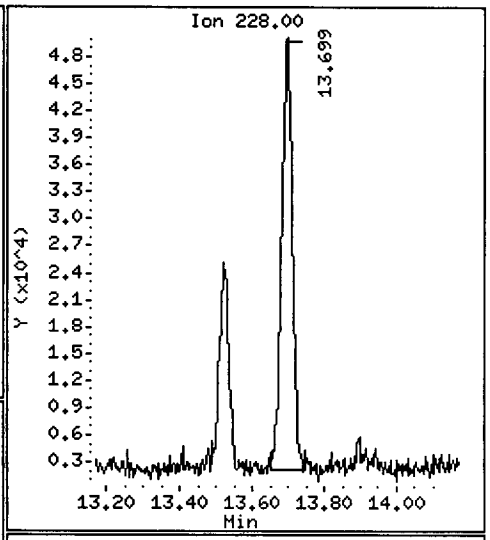
Concentration: 567.4 ug/kg

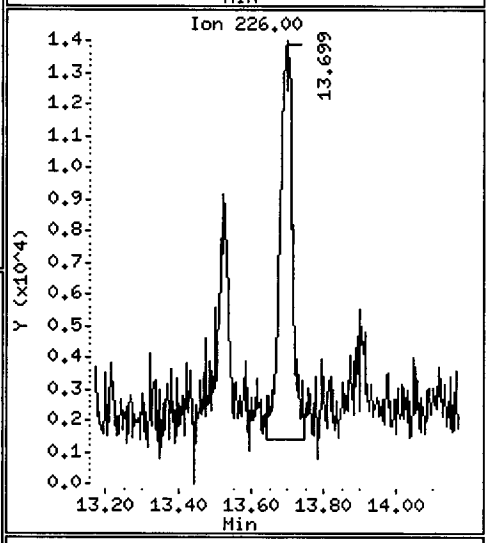


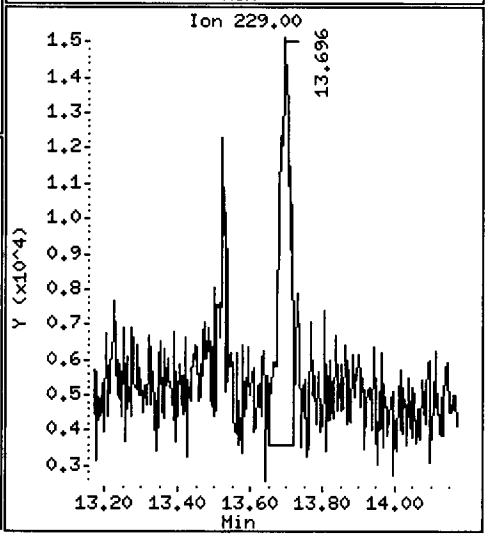












Data File: /chem1/nt12.i/20110404.b/04041112.d

Date : 04-APR-2011 17:22

Client ID: LL-SED2-0-56-031511

Instrument: nt12.i

Sample Info: SN54G,3,

Volume Injected (uL): 1.0

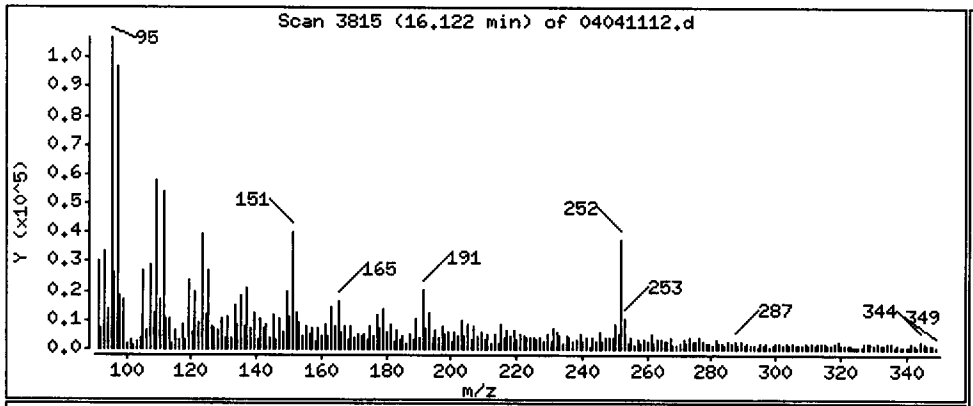
Operator: JZ

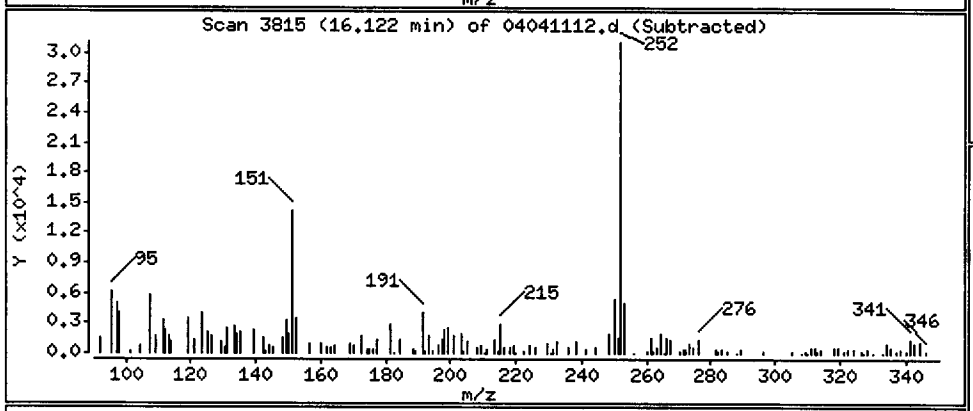
Column phase: ZB35

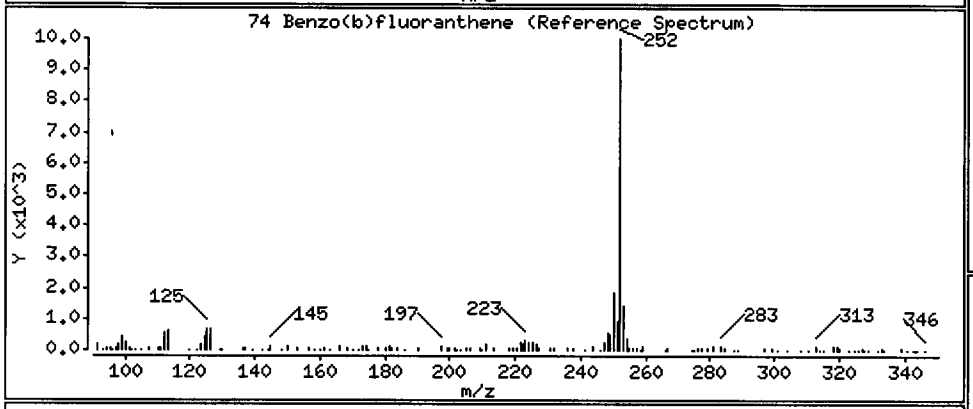
Column diameter: 0.32

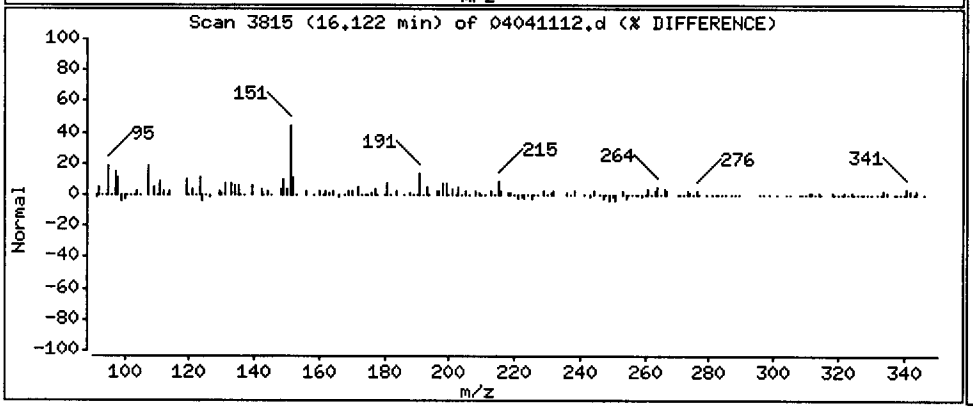
74 Benzo(b)fluoranthene

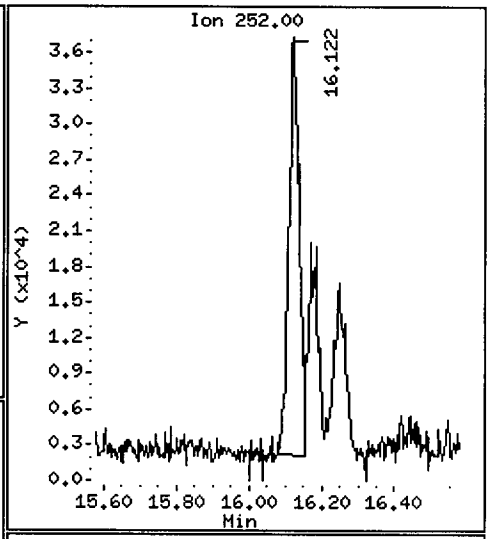
Concentration: 525.0 ug/kg

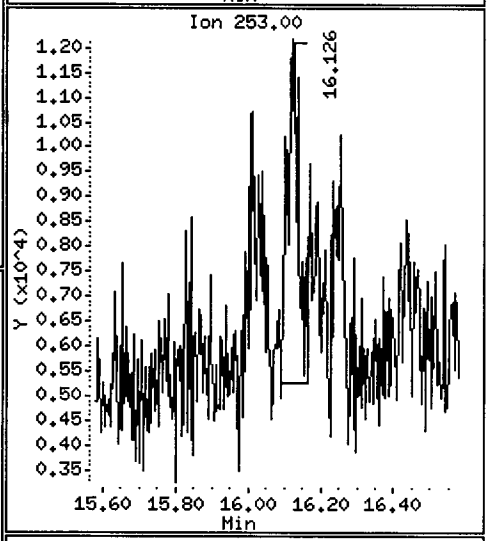


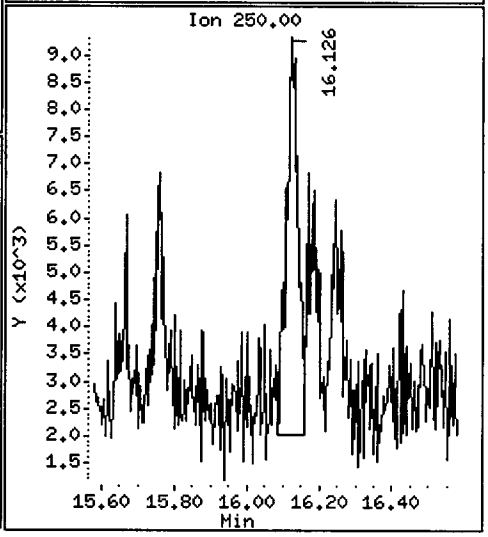












Data File: /chem1/nt12.i/20110404.b/04041112.d

Date : 04-APR-2011 17:22

Client ID: LL-SED2-0-56-031511

Instrument: nt12.i

Sample Info: SN54G,3,

Volume Injected (uL): 1.0

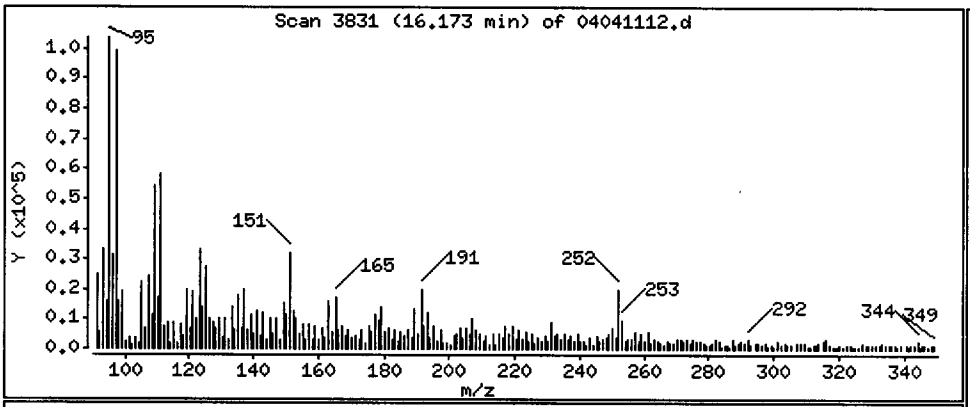
Operator: JZ

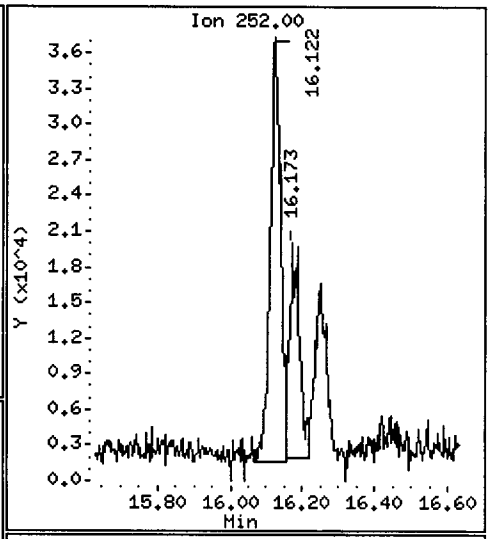
Column phase: ZB35

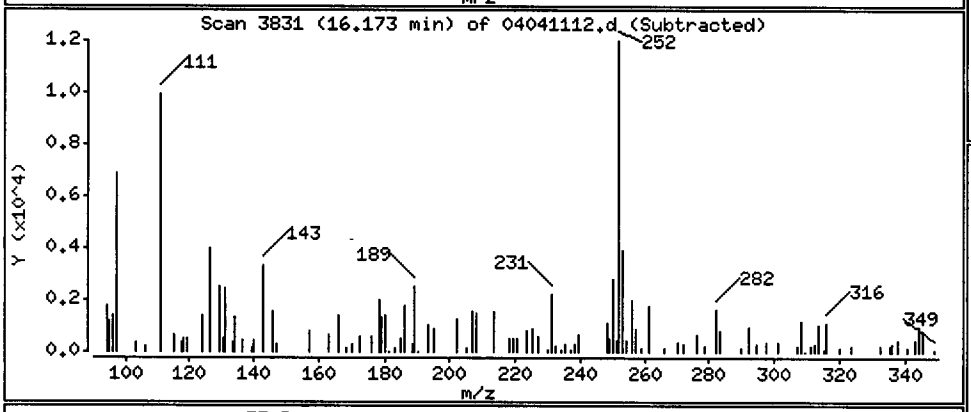
Column diameter: 0.32

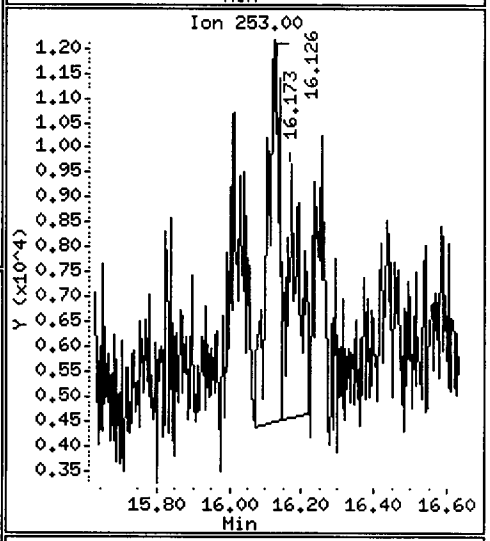
75 Benzo(k)fluoranthene

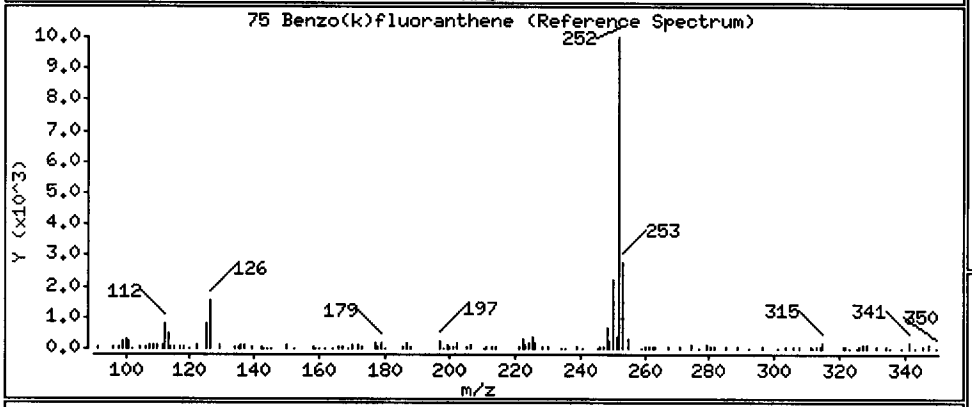
Concentration: 263.1 ug/kg

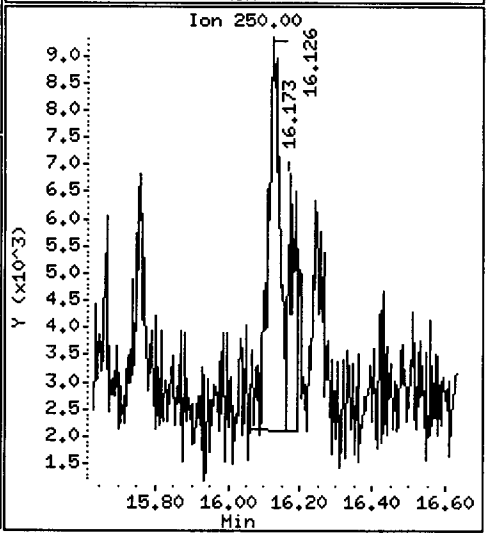


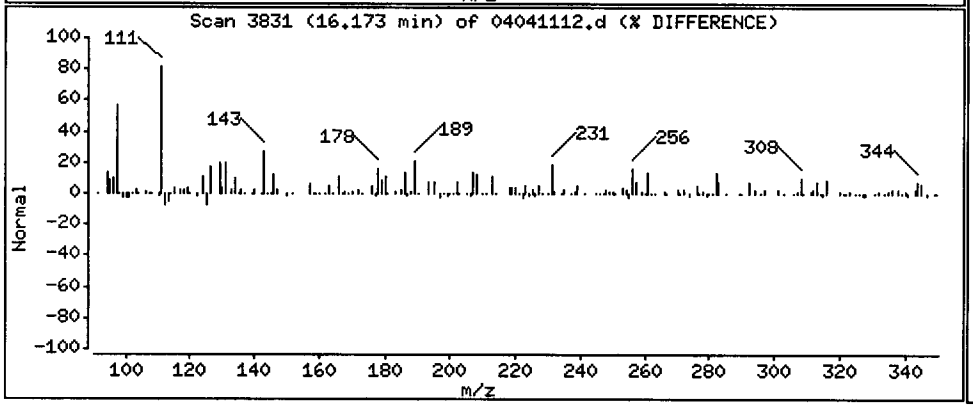












Data File: /chem1/nt12.i/20110404.b/04041112.d

Date : 04-APR-2011 17:22

Client ID: LL-SED2-0-56-031511

Instrument: nt12.i

Sample Info: SN54G,3,

Volume Injected (uL): 1.0

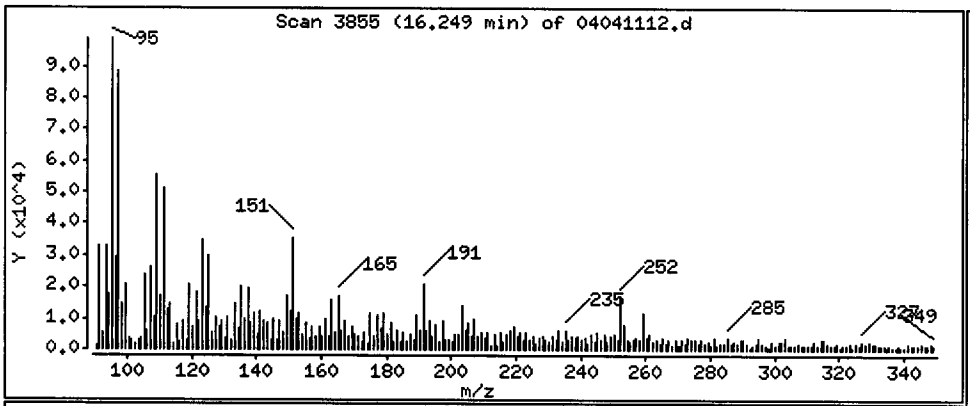
Operator: JZ

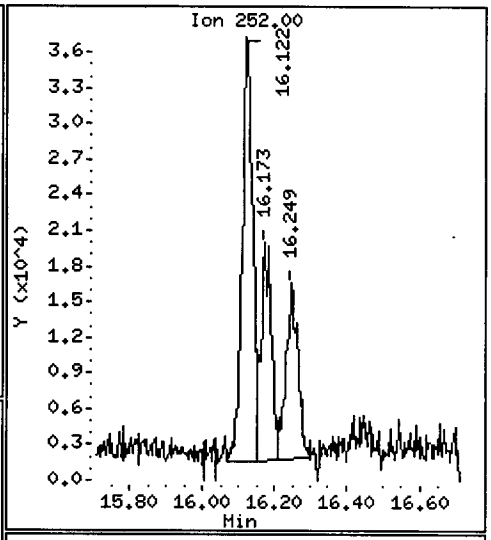
Column phase: ZB35

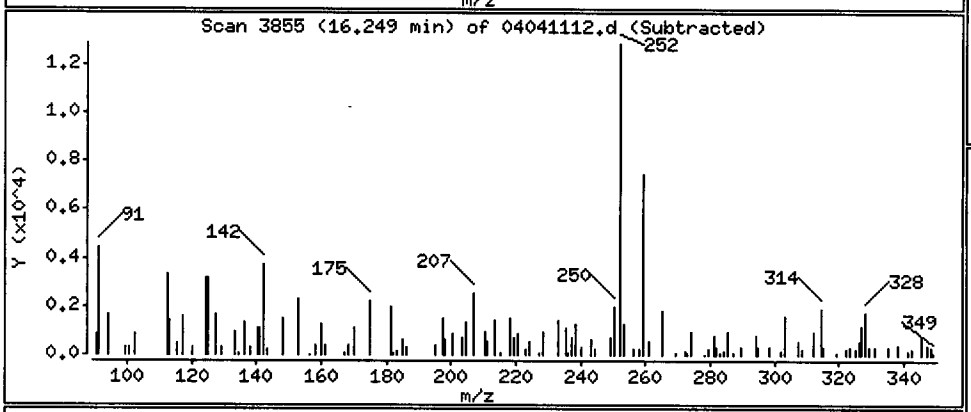
Column diameter: 0.32

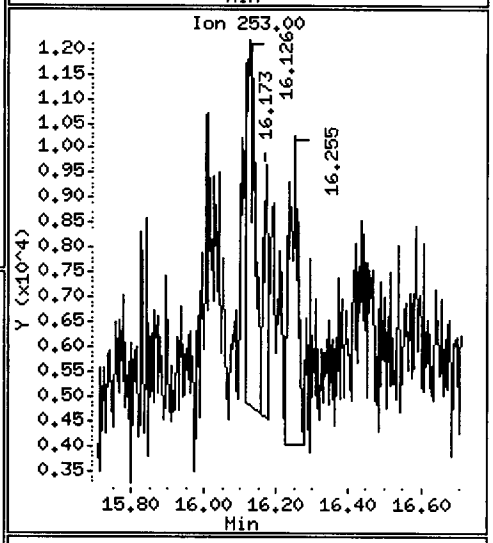
188 Benzo(j)fluoranthene

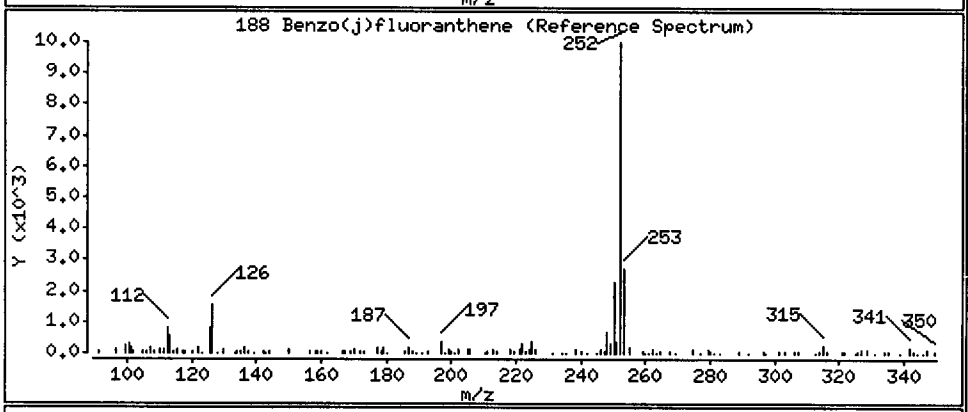
Concentration: 256.6 ug/kg

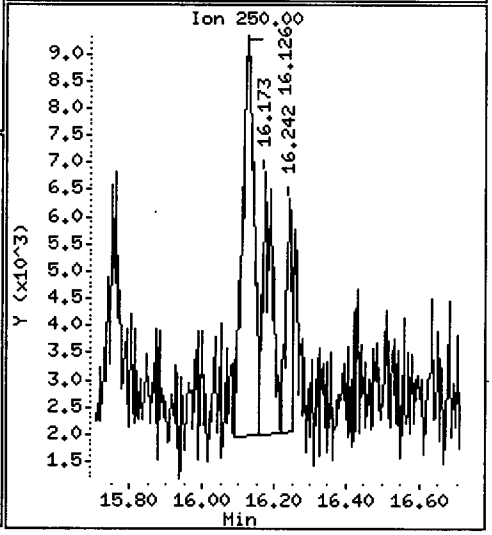


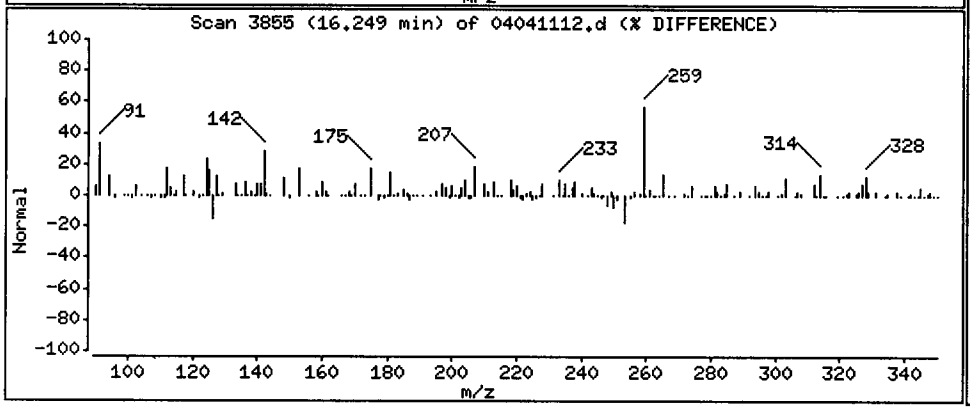












Data File: /chem1/nt12.i/20110404.b/04041112.d

Date : 04-APR-2011 17:22

Client ID: LL-SED2-0-56-031511

Instrument: nt12.i

Sample Info: SN54G,3,

Volume Injected (uL): 1.0

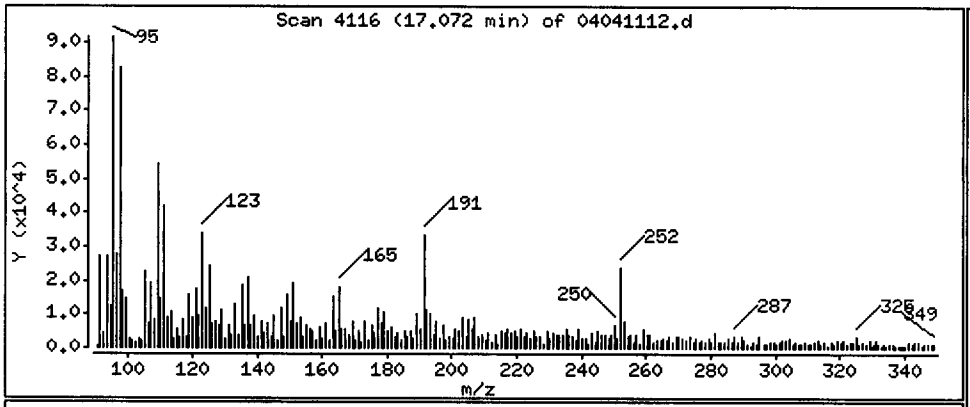
Operator: JZ

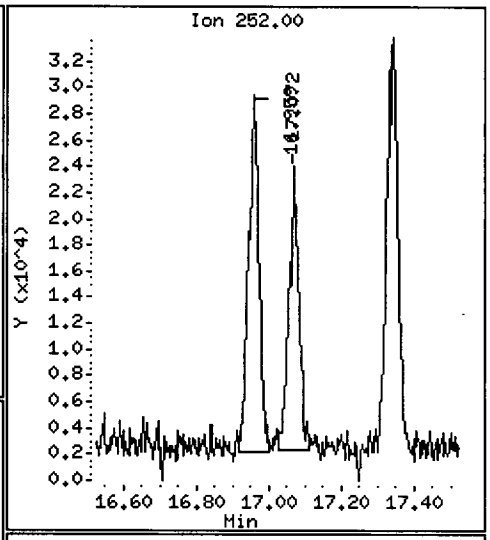
Column phase: ZB35

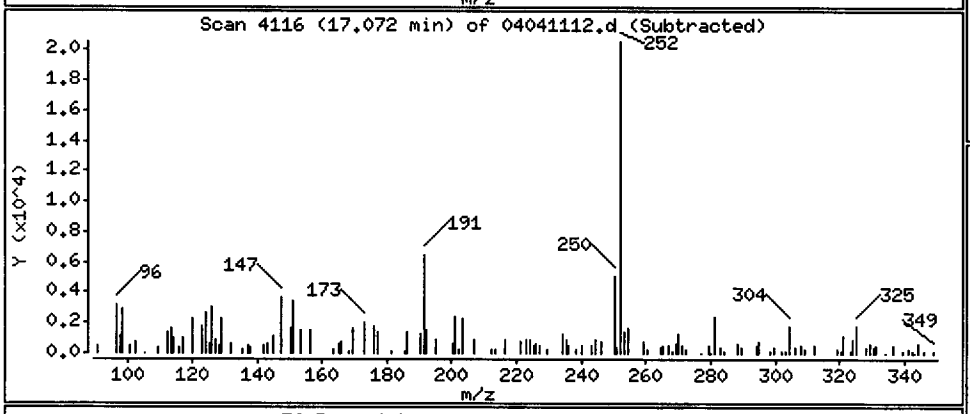
Column diameter: 0.32

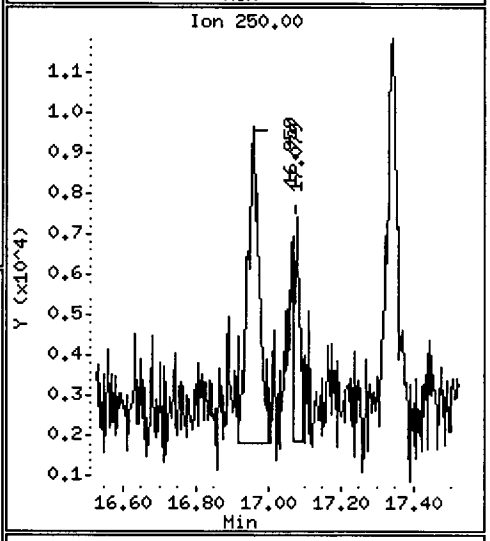
76 Benzo(a)pyrene

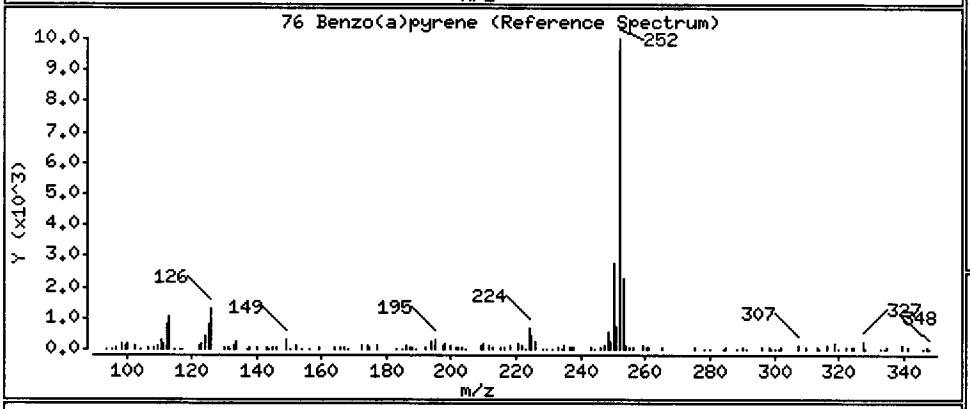
Concentration: 330.3 ug/kg

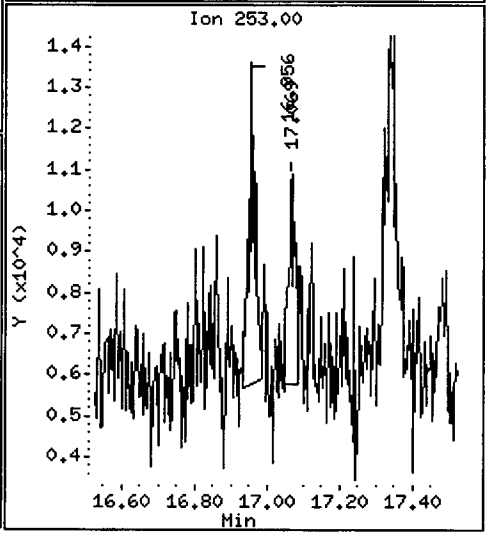


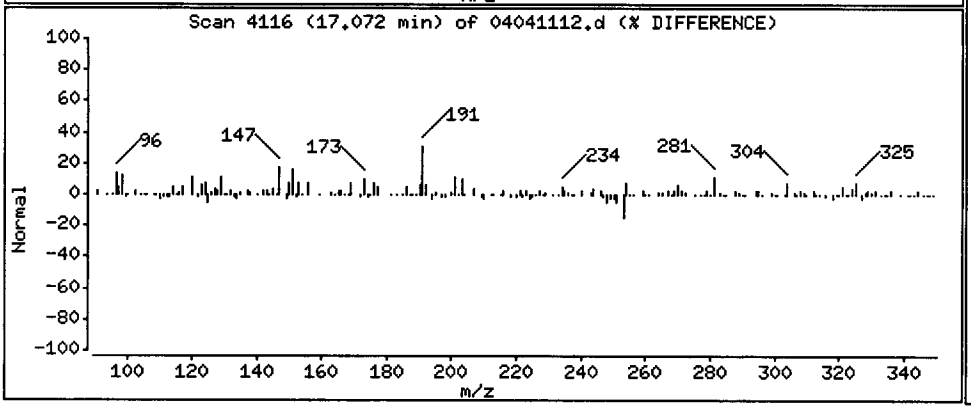












Data File: /chem1/nt12.i/20110404.b/04041112.d

Date : 04-APR-2011 17:22

Client ID: LL-SED2-0-56-031511

Instrument: nt12.i

Sample Info: SN54G,3,

Volume Injected (uL): 1.0

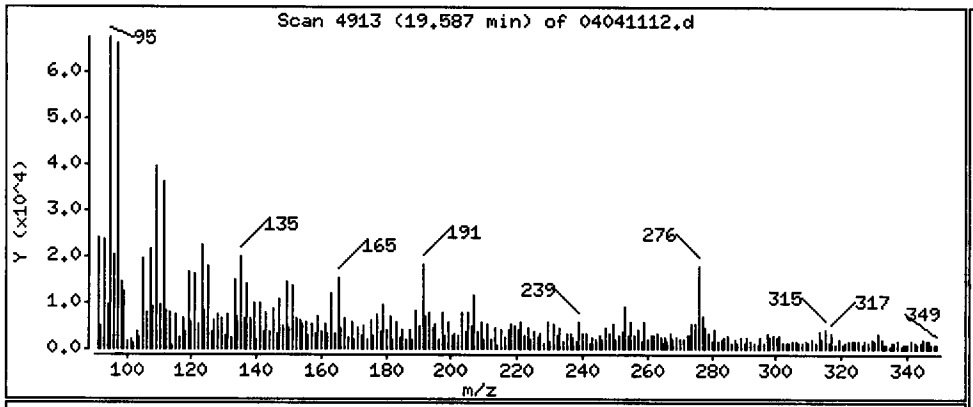
Operator: JZ

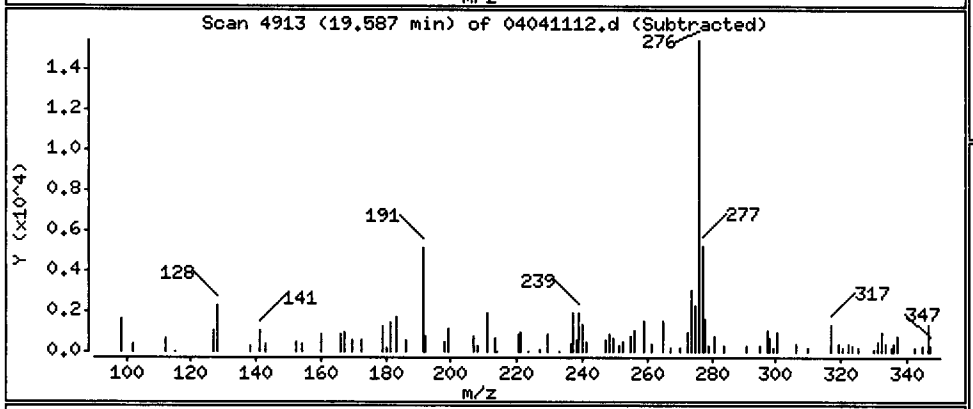
Column phase: ZB35

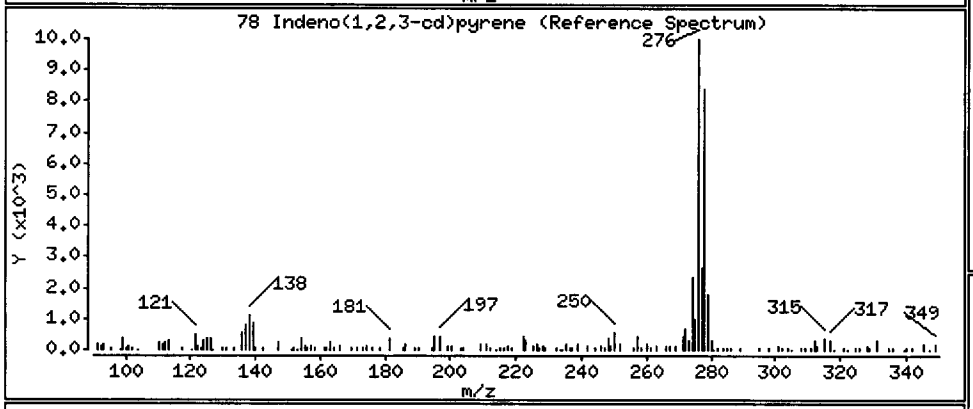
Column diameter: 0.32

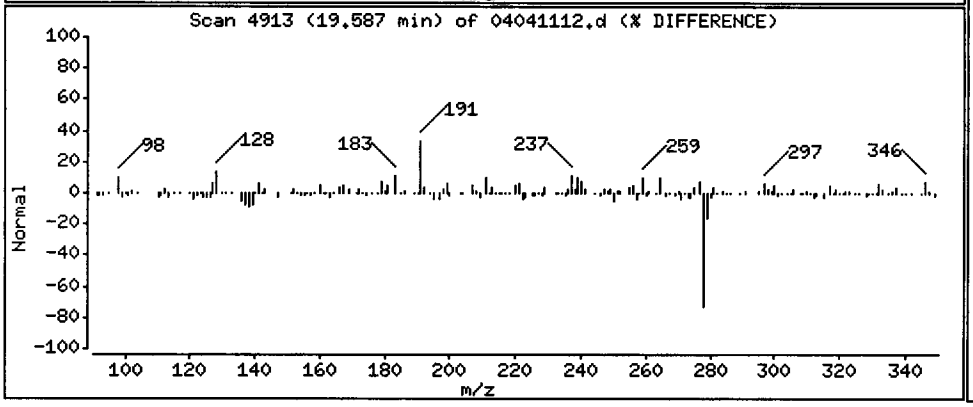
78 Indeno(1,2,3-cd)pyrene

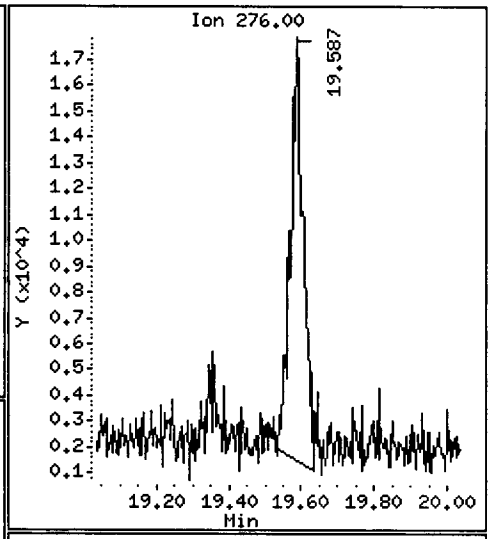
Concentration: 273.2 ug/kg

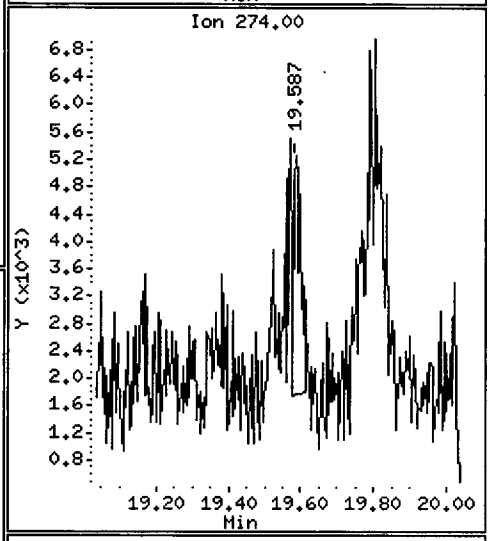


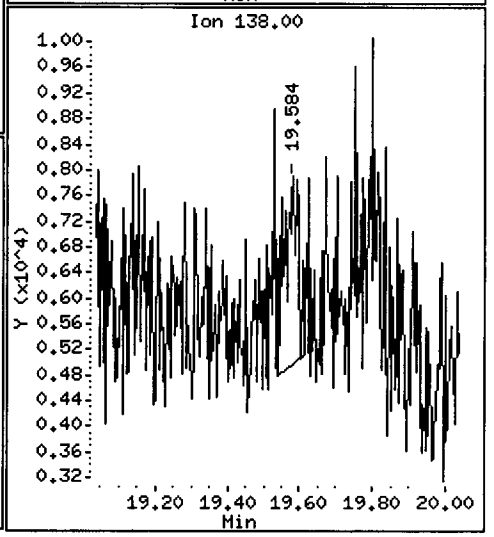












Data File: /chem1/nt12.i/20110404.b/04041112.d

Date : 04-APR-2011 17:22

Client ID: LL-SED2-0-56-031511

Instrument: nt12.i

Sample Info: SN54G,3,

Volume Injected (uL): 1.0

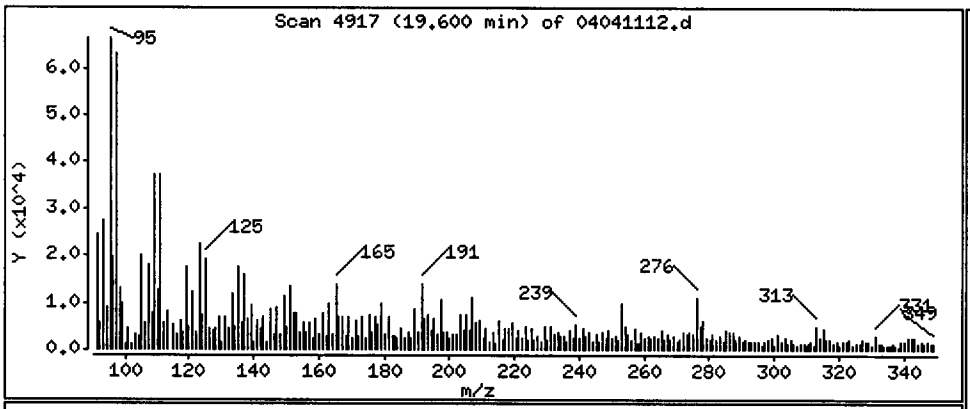
Operator: JZ

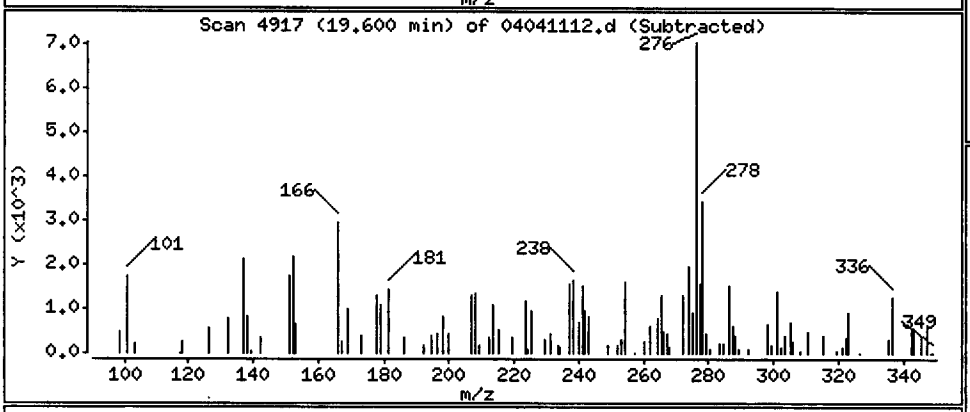
Column phase: ZB35

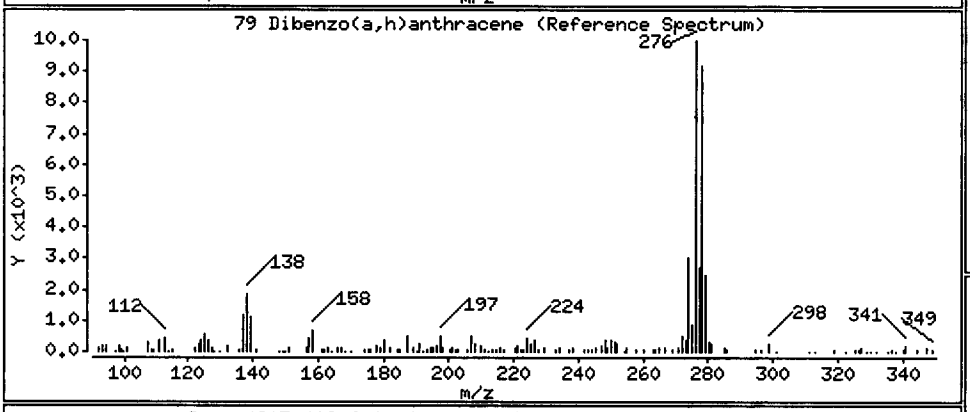
Column diameter: 0.32

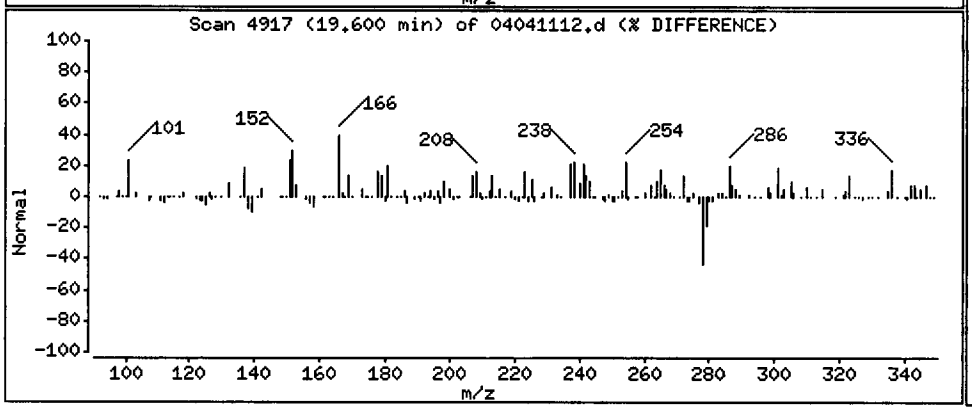
79 Dibenzo(a,h)anthracene

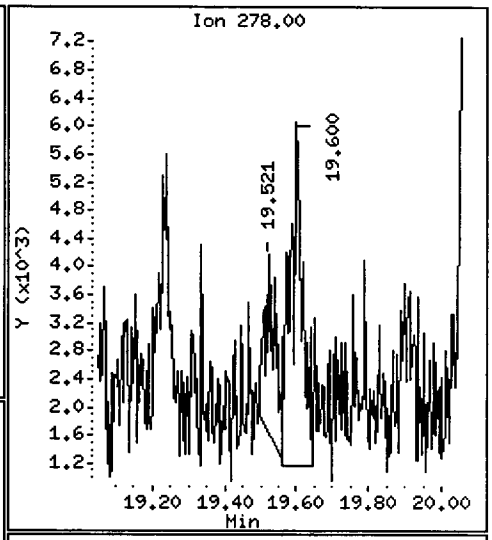
Concentration: 95.28 ug/kg

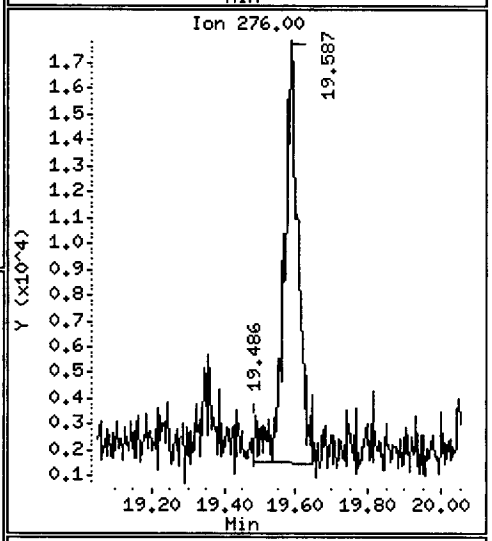


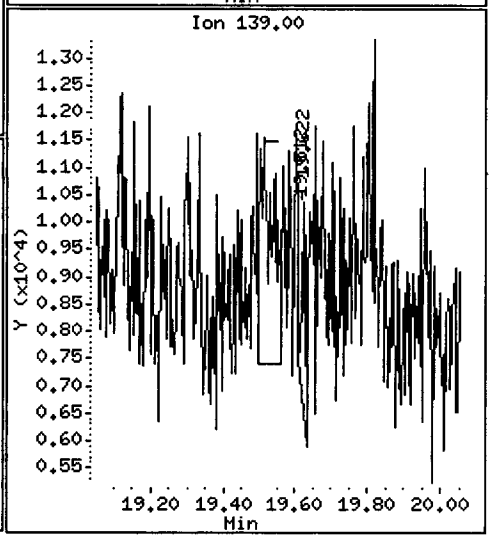












Data File: /chem1/nt12.i/20110404.b/04041112.d

Date : 04-APR-2011 17:22

Client ID: LL-SED2-0-56-031511

Instrument: nt12.i

Sample Info: SN54G,3,

Volume Injected (uL): 1.0

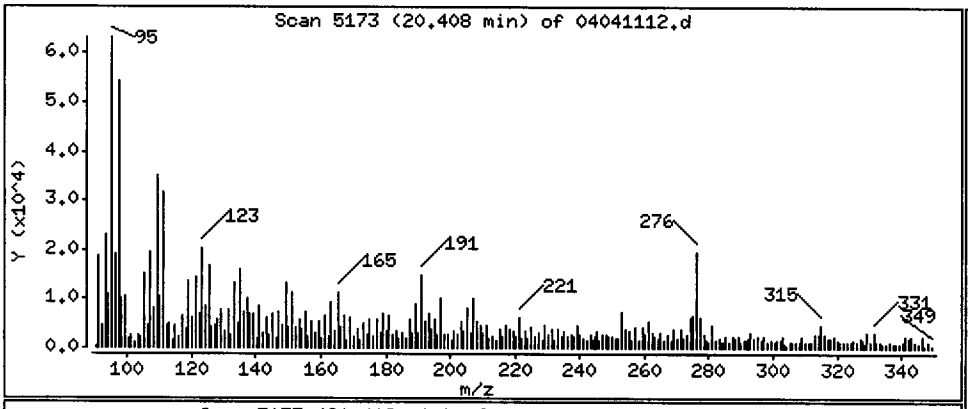
Operator: JZ

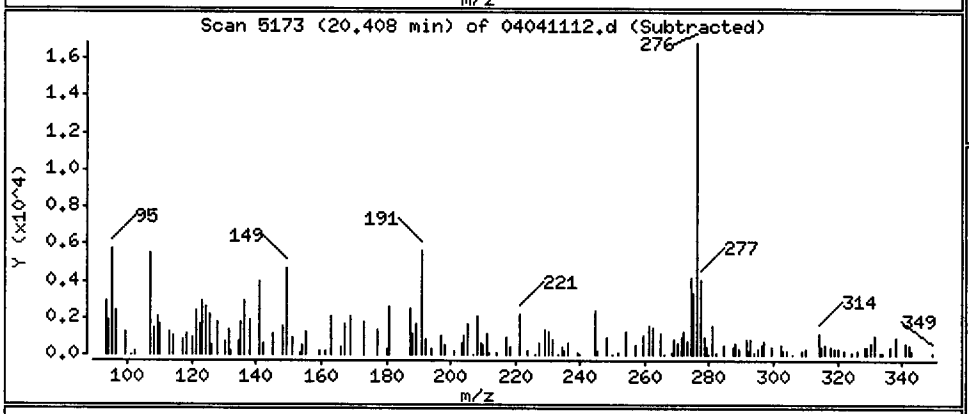
Column phase: ZB35

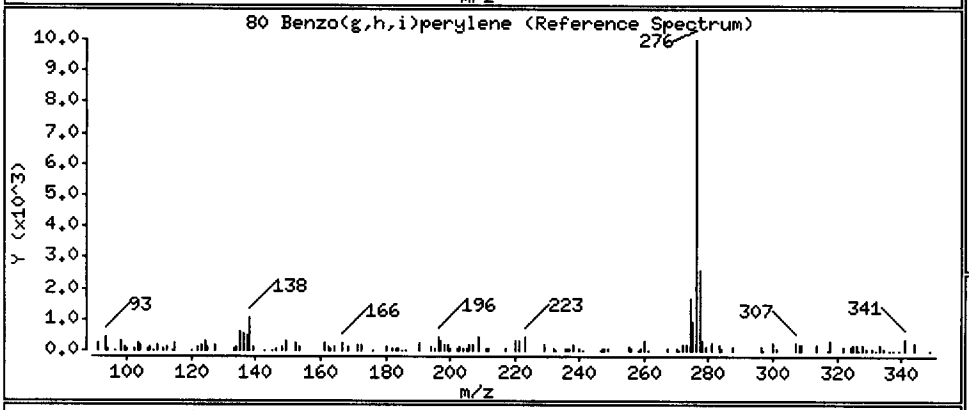
Column diameter: 0.32

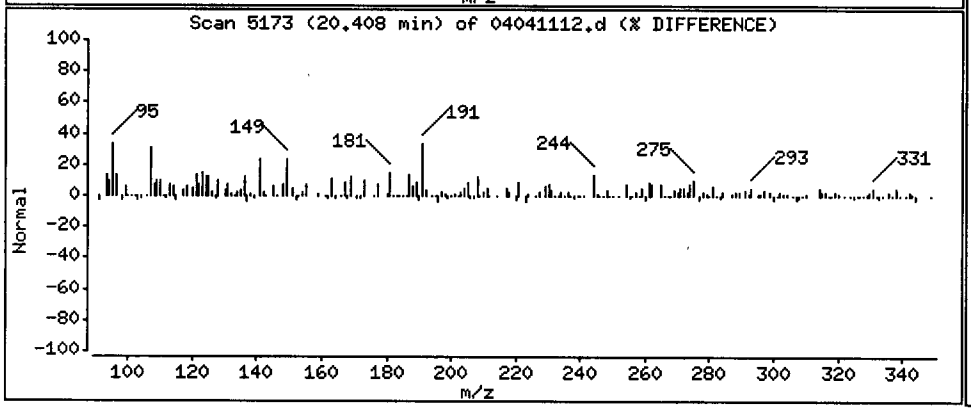
80 Benzo(g,h,i)perylene

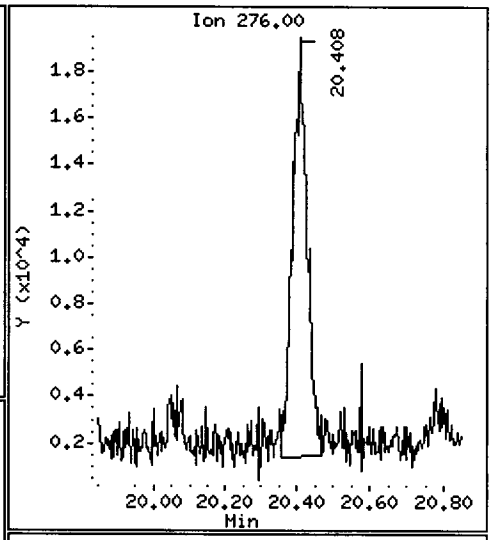
Concentration: 380.9 ug/kg

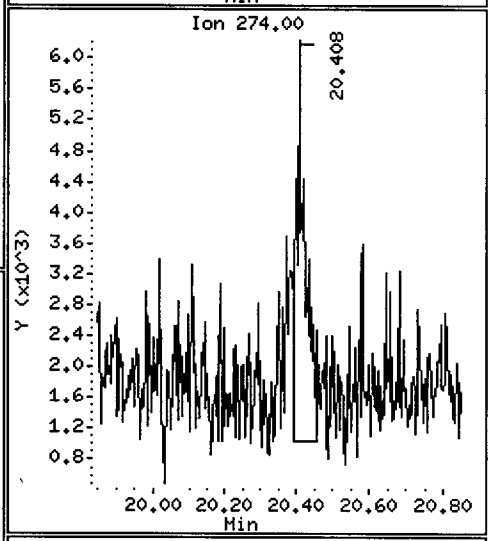


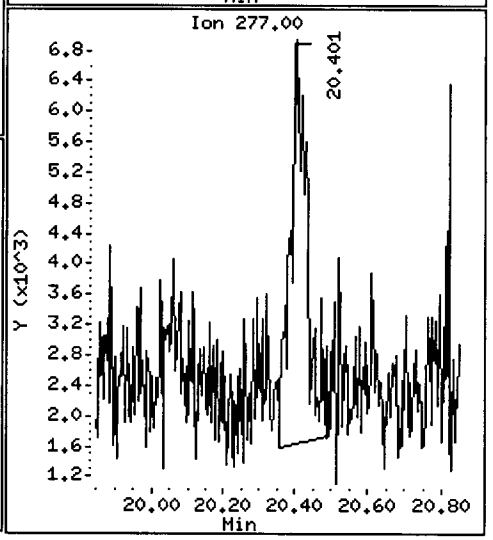












Data File: /chem1/nt12.i/20110404.b/04041112.d

Date : 04-APR-2011 17:22

Client ID: LL-SED2-0-56-031511

Instrument: nt12.i

Sample Info: SN54C,3,

Volume Injected (uL): 1.0

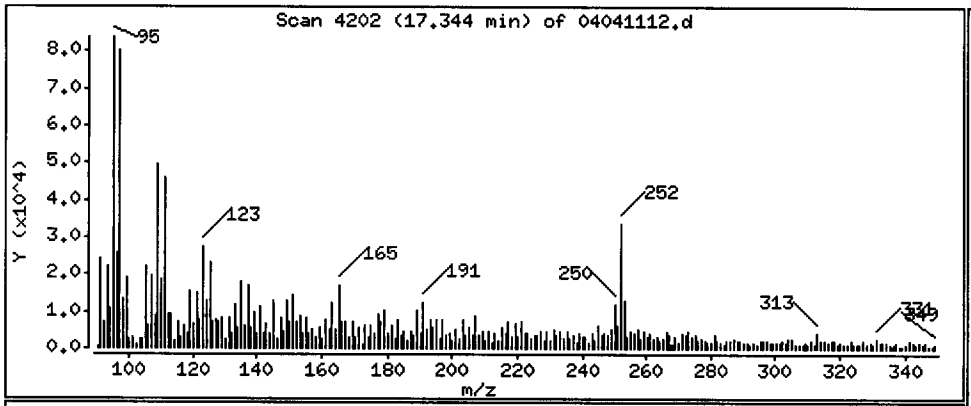
Operator: JZ

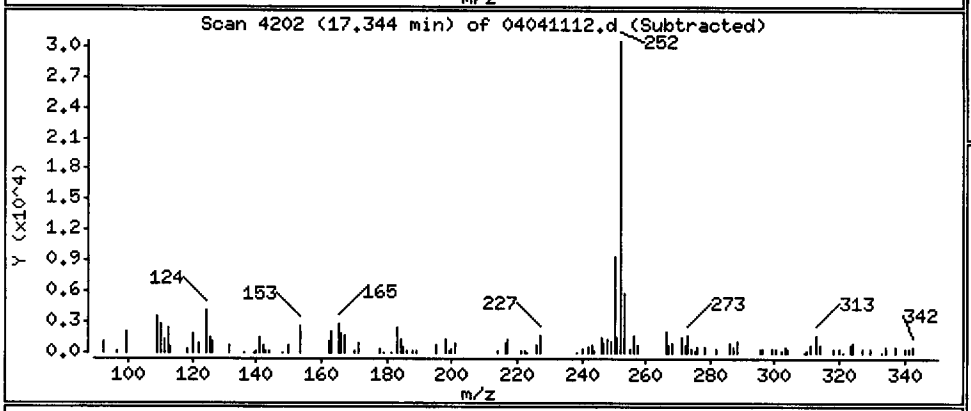
Column phase: ZB35

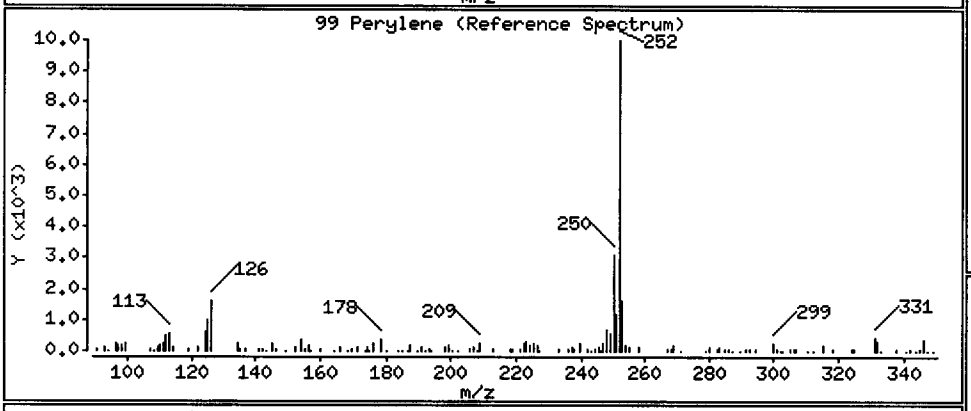
Column diameter: 0.32

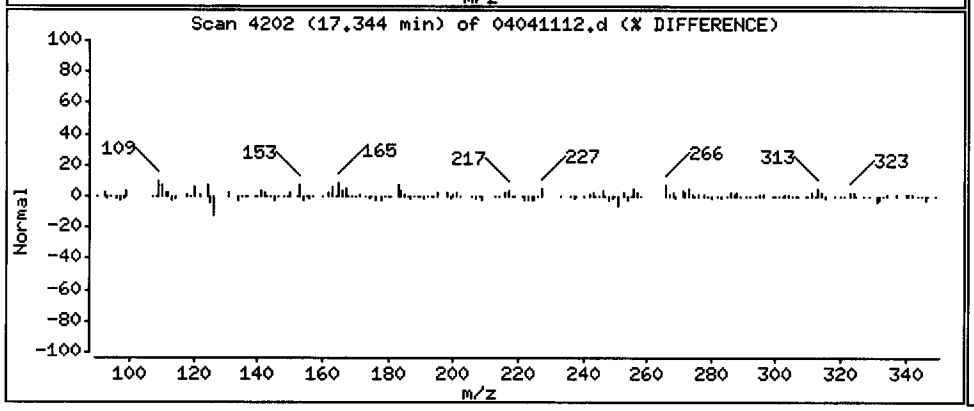
99 Perylene

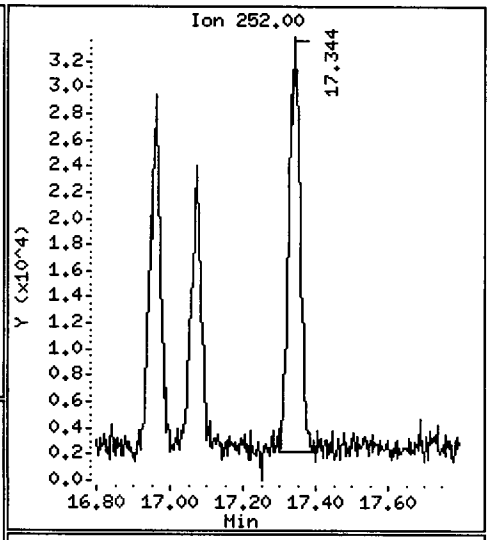
Concentration: 653.0 ug/kg

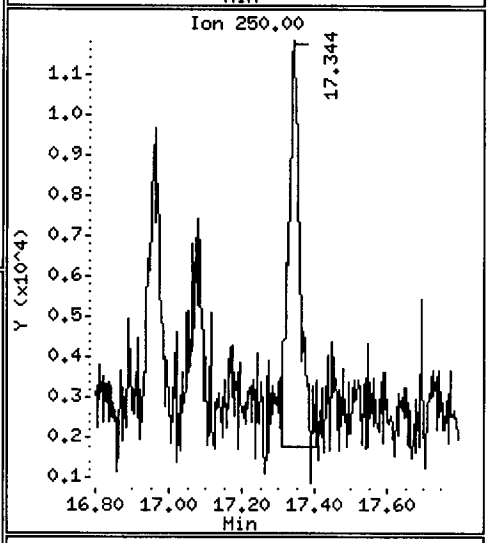


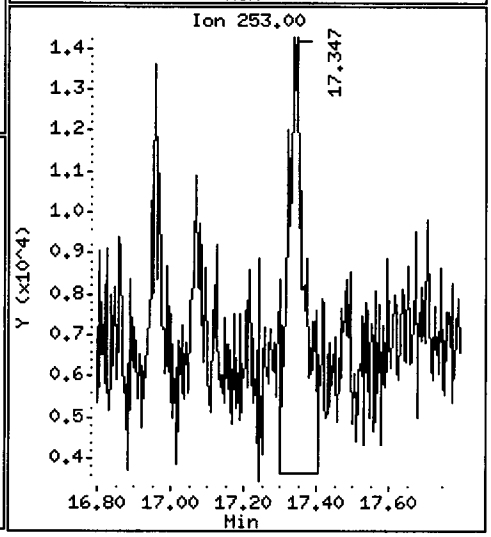












CO-ELUTION SUMMARY FOR FILE - 04041112.d

Lab ID: SN54G, Method: SIMPNA0331.m, Instrument: nt12.i, Date: 04-APR-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt12.i/20110404.b/04041113.d
Lab Smp Id: SN54H Client Smp ID: LL-SED1-0-56-031511
Inj Date : 04-APR-2011 17:50
Operator : JZ Inst ID: nt12.i
Smp Info : SN54H,3,
Misc Info : 11-5932
Comment : 1ul Injection
Method : /chem1/nt12.i/20110404.b/SIMPNA0331.m
Meth Date : 05-Apr-2011 17:45 jianqing Quant Type: ISTD
Cal Date : 31-MAR-2011 22:47 Cal File: 03311107.d
Als bottle: 13
Dil Factor: 3.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

04/04/11

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

Name	Value	Description
DF	3.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Ws	19.41000	Weight of sample extracted (g)
M	45.60000	% 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	4.807	4.803	(1.000)	269407	2.00000	
28 Naphthalene	128	4.829	4.832	(1.005)	6517	0.05010	7.117
$ 190 2-Methylnaphthalene-d10	152	5.545	5.542	(1.154)	51468	0.62484	88.76
32 2-Methylnaphthalene	141	Compound Not Detected.					
105 1-methylnaphthalene	141	5.785	5.775	(1.204)	4117	0.05352	7.602
40 Acenaphthylene	152	Compound Not Detected.					
* 42 Acenaphthene-d10	164	7.050	7.044	(1.000)	163401	2.00000	
44 Acenaphthene	153	Compound Not Detected.					
46 Dibenzofuran	168	Compound Not Detected.					
49 Fluorene	166	Compound Not Detected.					
* 59 Phenanthrene-d10	188	8.985	8.981	(1.000)	239810	2.00000	
60 Phenanthrene	178	9.019	9.013	(1.004)	24256	0.19165	27.23
61 Anthracene	178	Compound Not Detected.					
64 Fluoranthene	202	10.685	10.673	(1.189)	70742	0.51402	73.02
65 Pyrene	202	11.152	11.137	(0.818)	102766	0.69977	99.41

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
68	Benzo(a)anthracene	228	13.516	13.491	(0.992)	28761	0.21933	31.16
* 69	Chrysene-d12	240	13.626	13.604	(1.000)	272758	2.00000	
71	Chrysene	228	13.683	13.671	(1.004)	62966	0.49131	69.80
74	Benzo(b)fluoranthene	252	16.116	16.078	(0.933)	47415	0.48967	69.56
75	Benzo(k)fluoranthene	252	16.167	16.132	(0.936)	21389	0.21057	29.91(H)
188	Benzo(j)fluoranthene	252	16.242	16.208	(0.941)	18050	0.18597	26.42
76	Benzo(a)pyrene	252	17.069	17.025	(0.989)	28467	0.32020	45.49
* 77	Perylene-d12	264	17.265	17.230	(1.000)	171762	2.00000	
78	Indeno(1,2,3-cd)pyrene	276	19.578	19.537	(1.134)	25494	0.23583	33.50
$ 191	Dibenzo(a,h)anthracene-d14	292	19.505	19.470	(1.130)	46488	0.57678	81.94
79	Dibenzo(a,h)anthracene	278	19.571	19.553	(1.134)	8532	0.09650	13.71
80	Benzo(g,h,i)perylene	276	20.401	20.348	(1.182)	41350	0.43126	61.26
99	Perylene	252	17.331	17.296	(1.004)	133777	1.77925	252.8

QC Flag Legend

H - Operator selected an alternate compound hit.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt12.i
Lab File ID: 04041113.d
Lab Smp Id: SN54H
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem1/nt12.i/20110404.b/SIMPNA0331.m
Misc Info: 11-5932

Calibration Date: 04-APR-2011
Calibration Time: 11:18
Client Smp ID: LL-SED1-0-56-031
Level: LOW
Sample Type: Sediment

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF	
27 Naphthalene-d8	494112	247056	988224	269407	-45.48	
42 Acenaphthene-d10	280105	140052	560210	163401	-41.66	
59 Phenanthrene-d10	461353	230676	922706	239810	-48.02	
69 Chrysene-d12	503160	251580	1006320	272758	-45.79	
77 Perylene-d12	442215	221108	884430	171762	-61.16	<-

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	4.80	4.30	5.30	4.81	0.07
42 Acenaphthene-d10	7.04	6.54	7.54	7.05	0.09
59 Phenanthrene-d10	8.98	8.48	9.48	8.98	0.04
69 Chrysene-d12	13.60	13.10	14.10	13.63	0.16
77 Perylene-d12	17.23	16.73	17.73	17.26	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: SN54H
Level: LOW
Data Type: MS DATA
SpikeList File: pnalcss.spk
Sublist File: pnax.sub
Method File: /chem1/nt12.i/20110404.b/SIMPNA0331.m
Misc Info: 11-5932

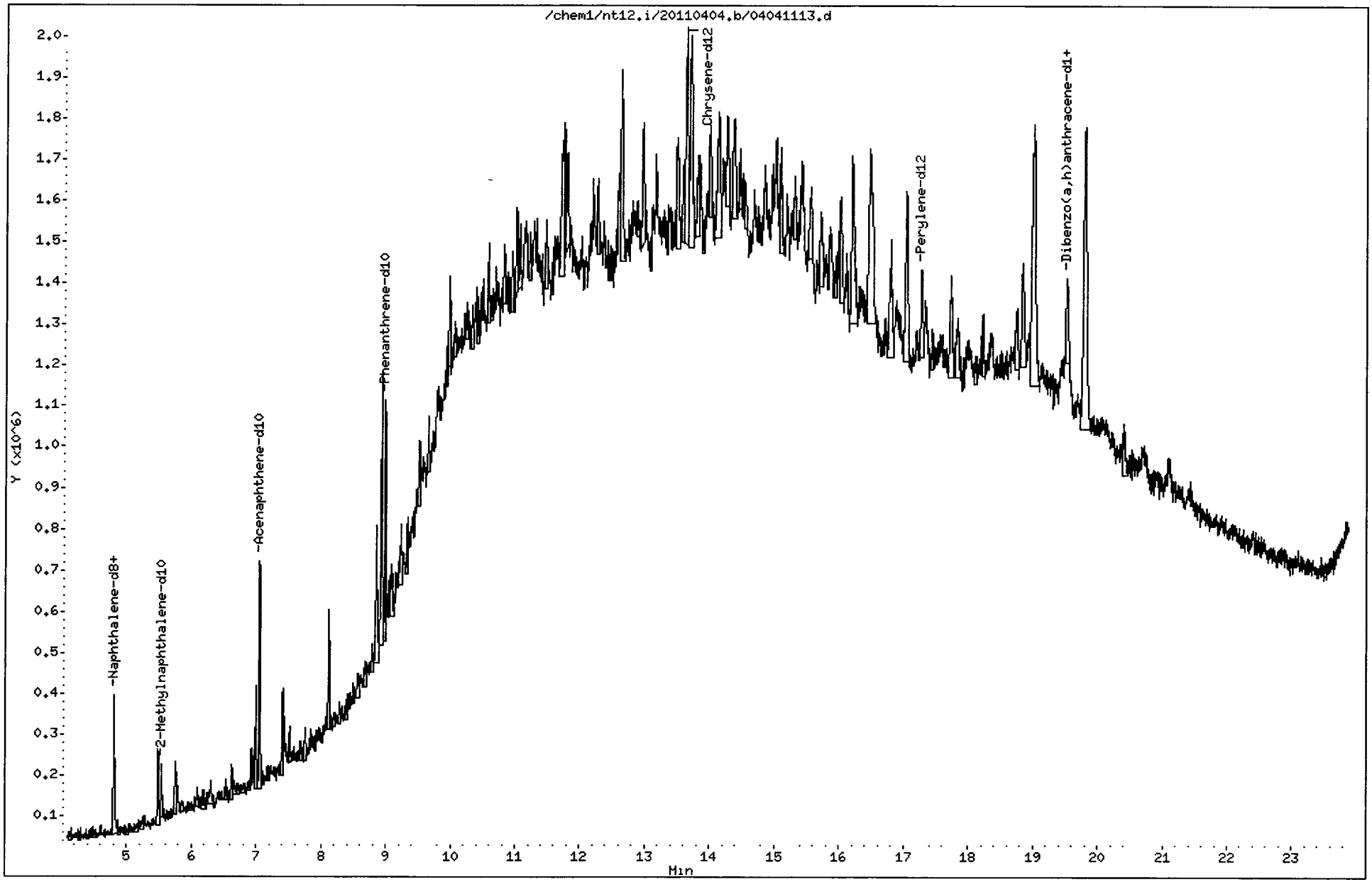
Client SDG: SN54
Fraction: SV
Client Smp ID: LL-SED1-0-56-031511
Operator: JZ
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	142.1	88.76	62.48	34-100
$ 191 Dibenzo(a,h)anthra	142.1	81.94	57.68	10-117

Data File: /chem1/nt12.i/20110404.b/04041113.d
Date : 04-APR-2011 17:50
Client ID: LL-SED1-0-56-031511
Sample Info: SN54H,3,
Volume Injected (uL): 1.0
Column phase: ZB35

Instrument: nt12.i
Operator: JZ
Column diameter: 0.32

SN54H : 1CH00



Data File: /chem1/nt12.i/20110404.b/04041113.d

Date : 04-APR-2011 17:50

Client ID: LL-SED1-0-56-031511

Instrument: nt12.i

Sample Info: SN54H,3,

Volume Injected (uL): 1.0

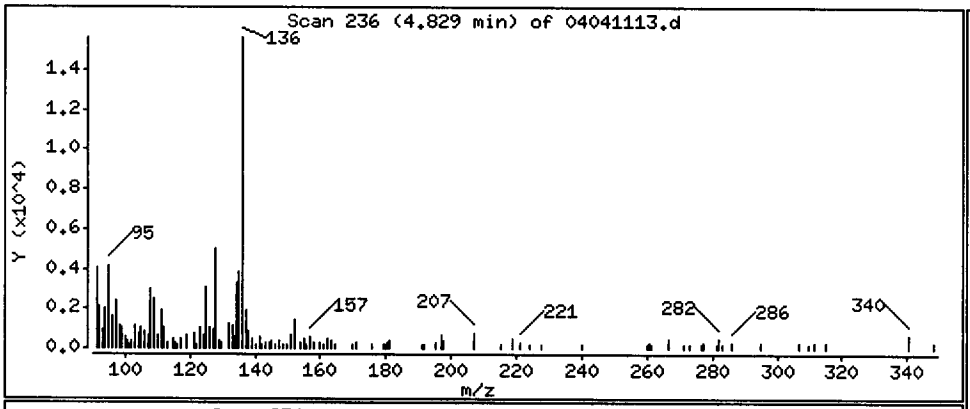
Operator: JZ

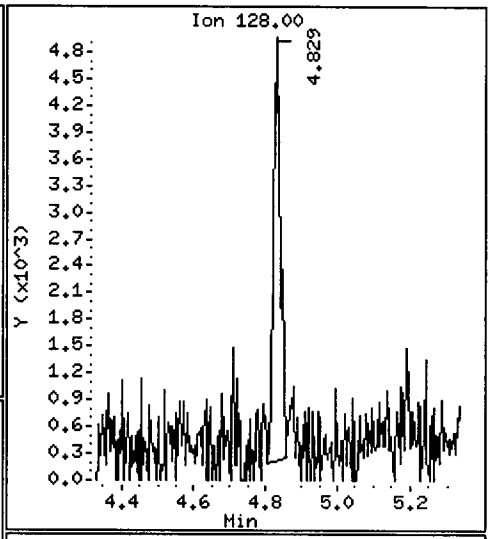
Column phase: ZB35

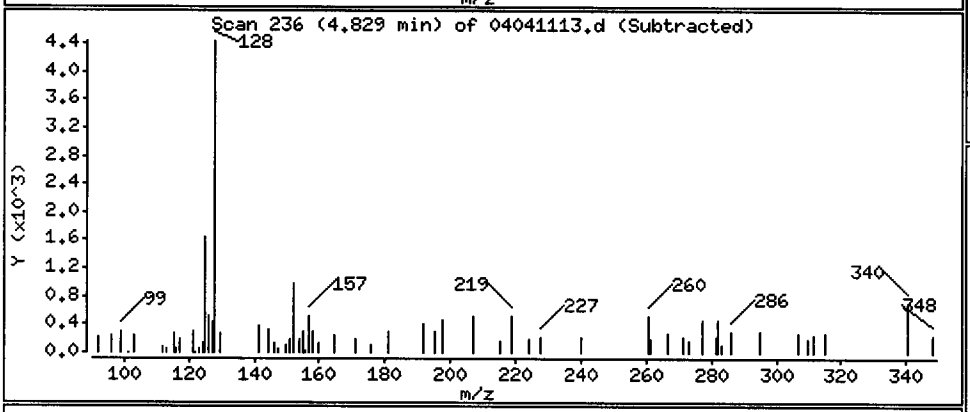
Column diameter: 0.32

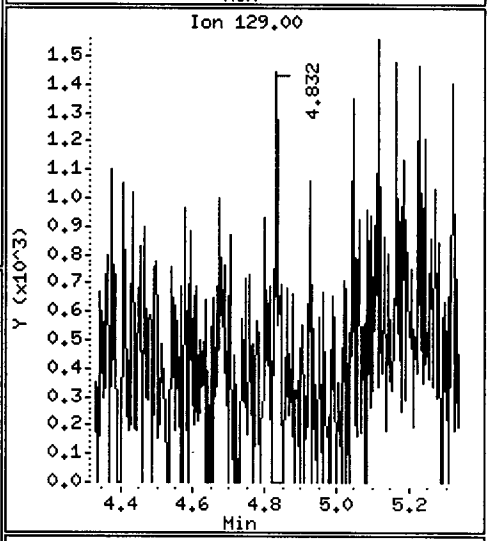
28 Naphthalene

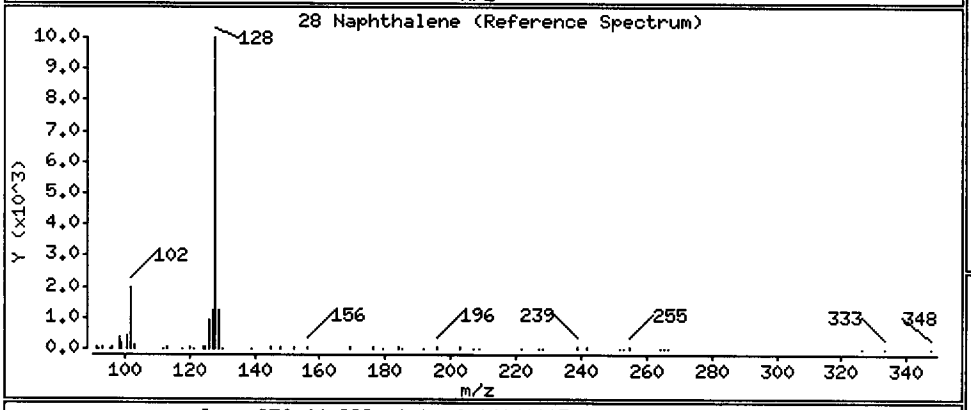
Concentration: 7.117 ug/kg

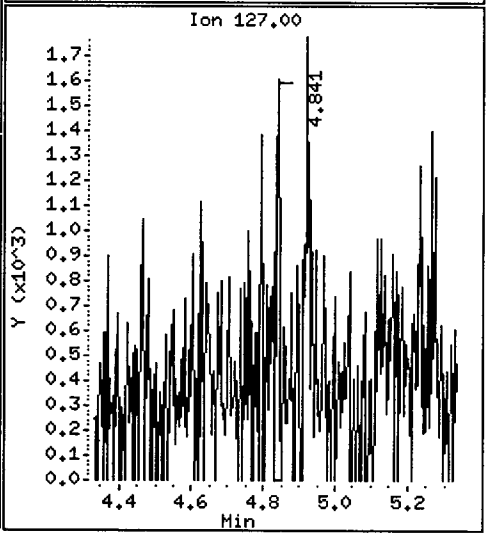


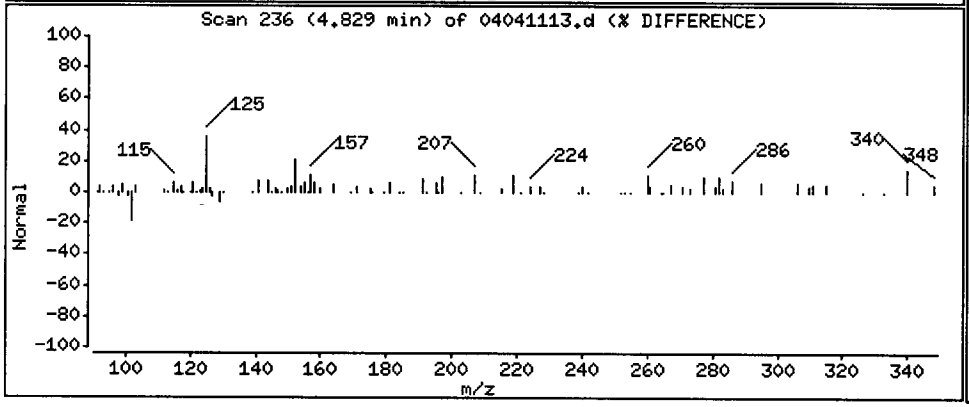












Data File: /chem1/nt12.i/20110404.b/04041113.d

Date : 04-APR-2011 17:50

Client ID: LL-SED1-0-56-031511

Instrument: nt12.i

Sample Info: SN54H,3,

Volume Injected (uL): 1.0

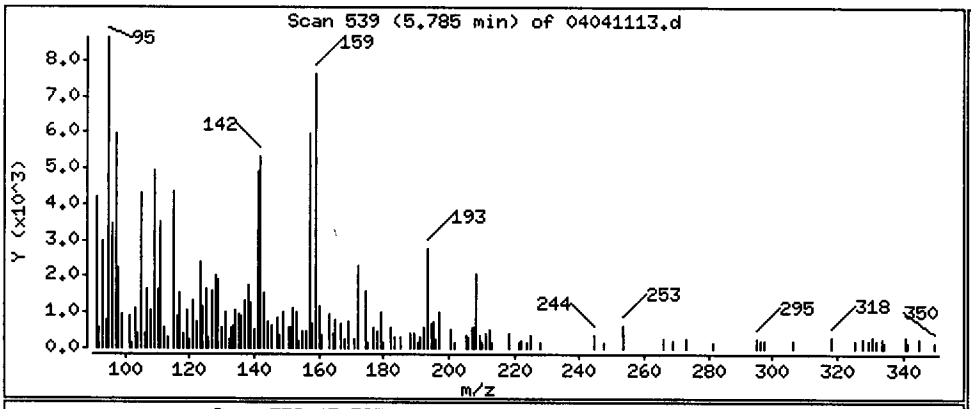
Operator: JZ

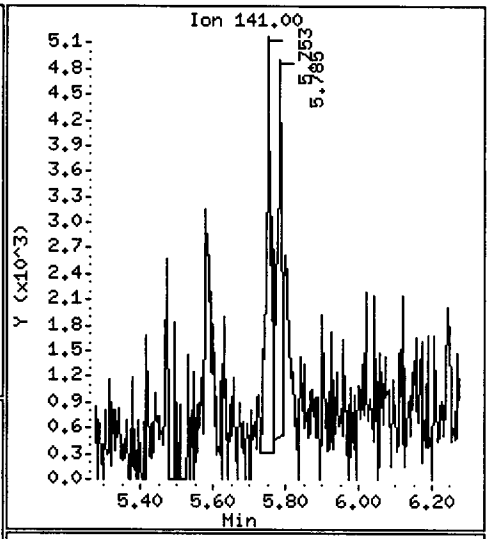
Column phase: ZB35

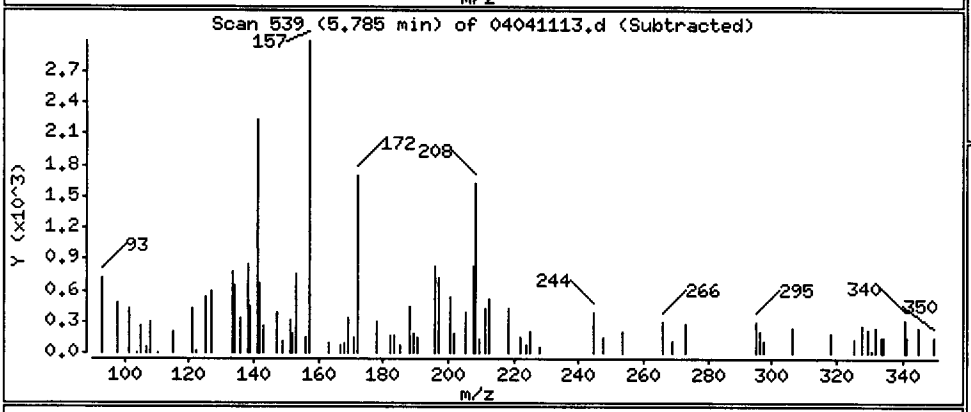
Column diameter: 0.32

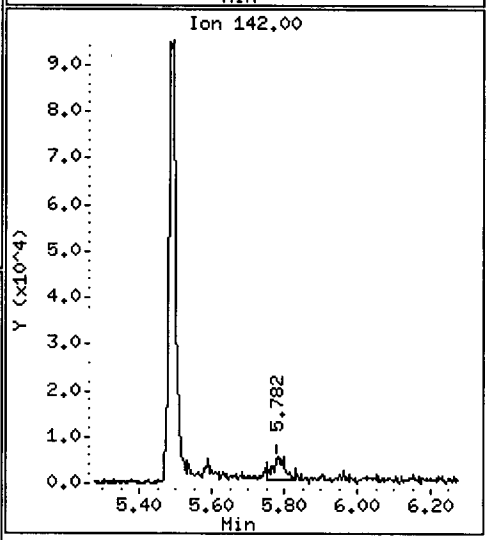
105 1-methylnaphthalene

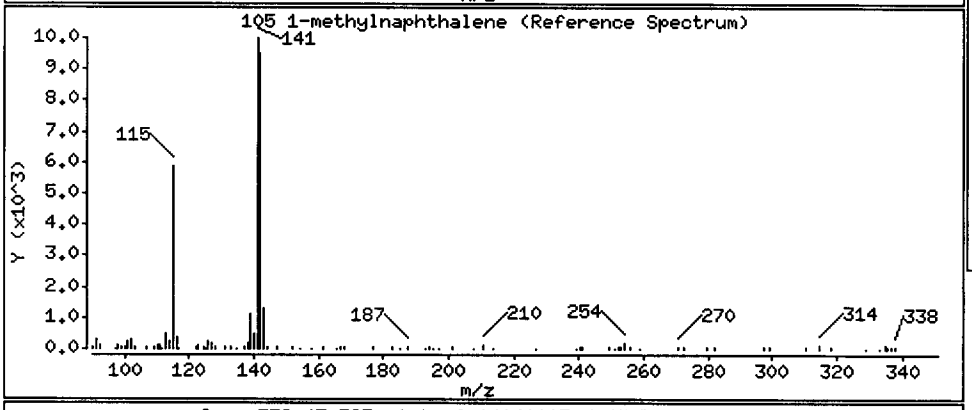
Concentration: 7.602 ug/kg

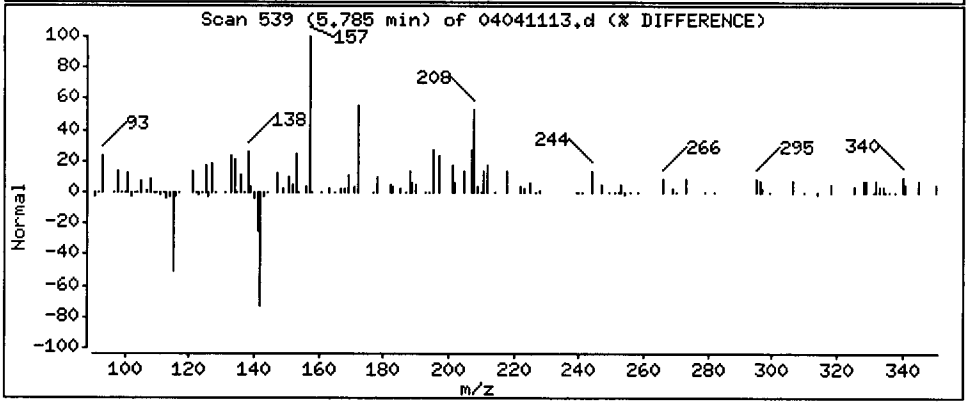












Data File: /chem1/nt12.i/20110404.b/04041113.d

Date : 04-APR-2011 17:50

Client ID: LL-SED1-0-56-031511

Instrument: nt12.i

Sample Info: SN54H,3,

Volume Injected (uL): 1.0

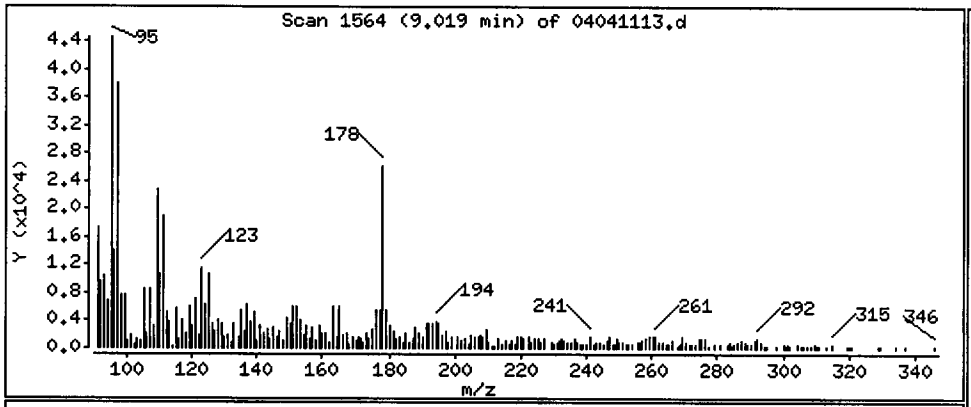
Operator: JZ

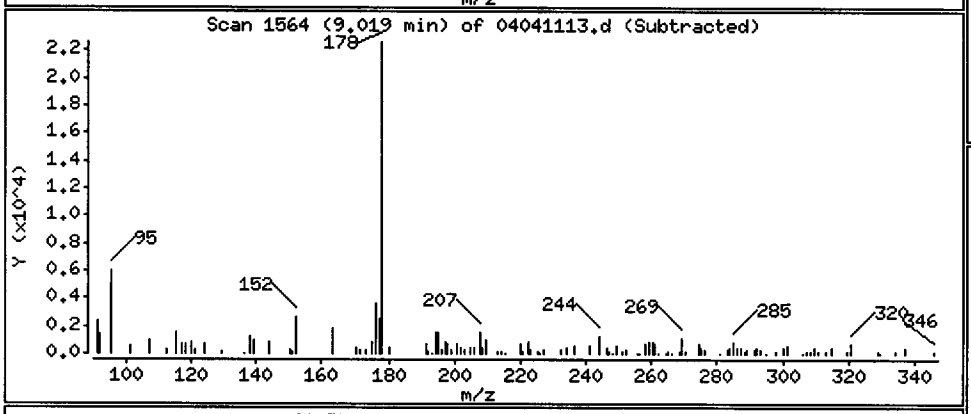
Column phase: ZB35

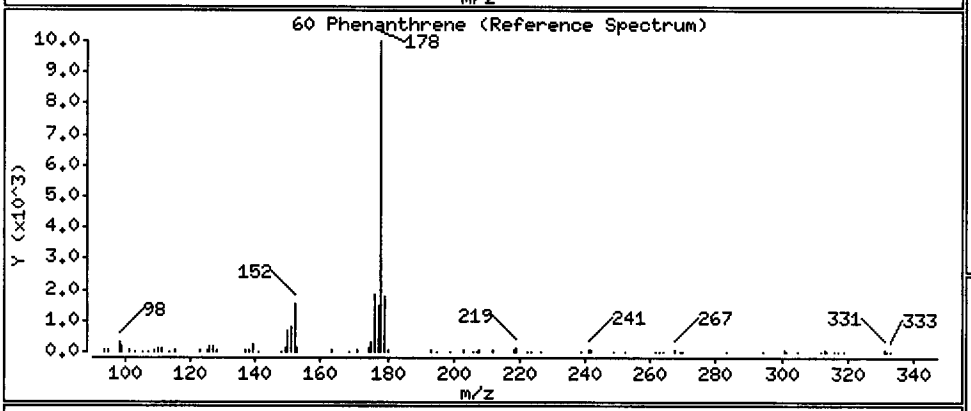
Column diameter: 0.32

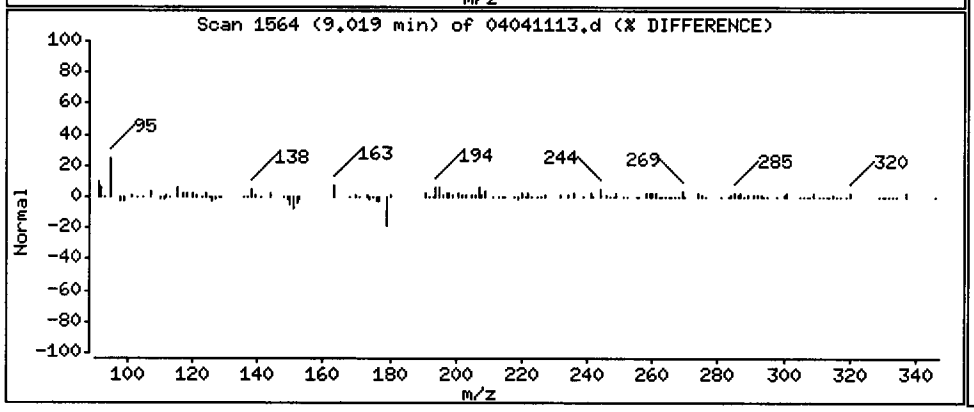
60 Phenanthrene

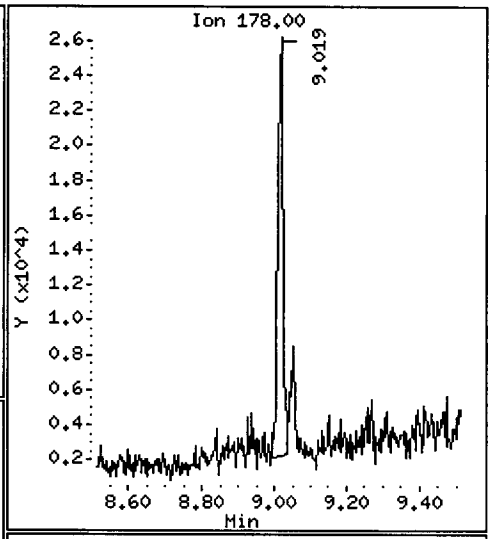
Concentration: 27.23 ug/kg

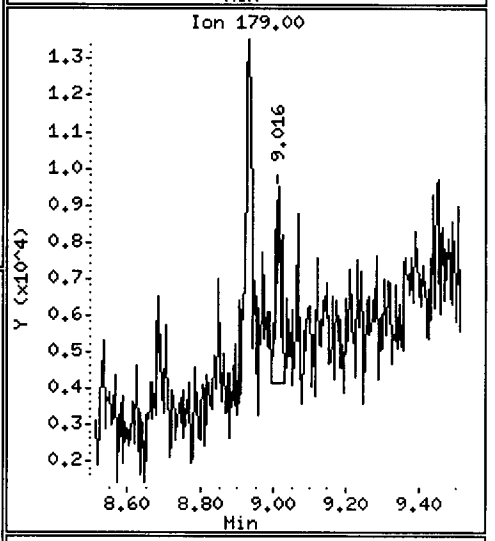


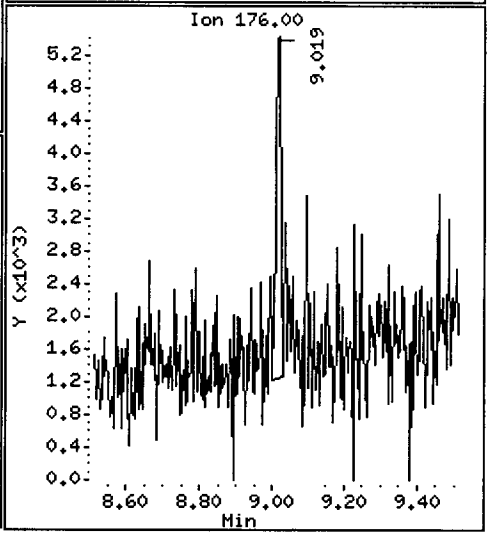












Data File: /chem1/nt12.i/20110404.b/04041113.d

Date : 04-APR-2011 17:50

Client ID: LL-SED1-0-56-031511

Instrument: nt12.i

Sample Info: SN54H,3,

Volume Injected (uL): 1.0

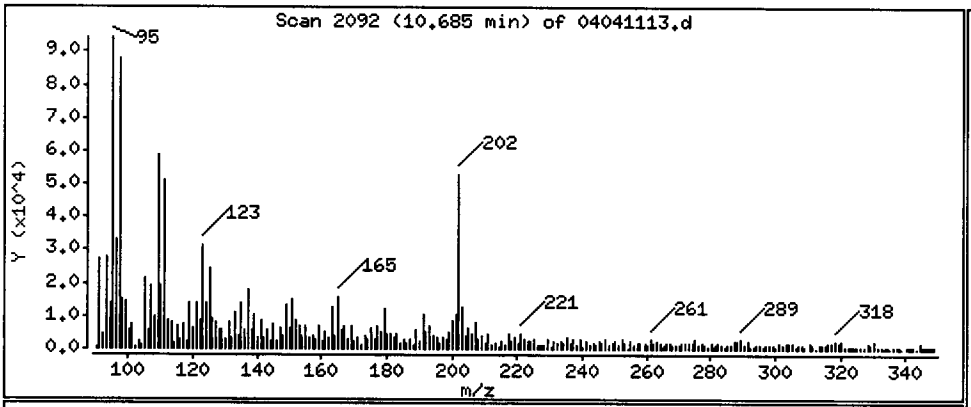
Operator: JZ

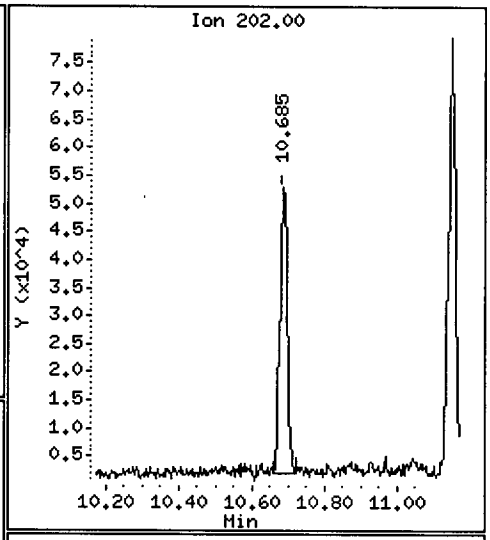
Column phase: ZB35

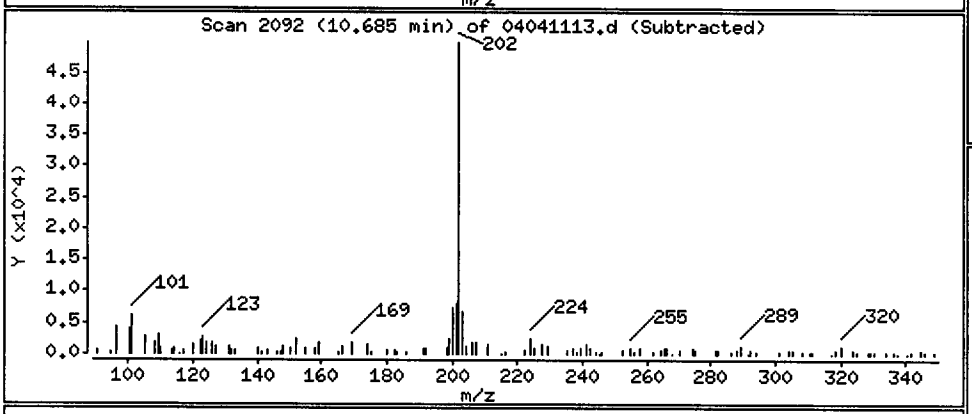
Column diameter: 0.32

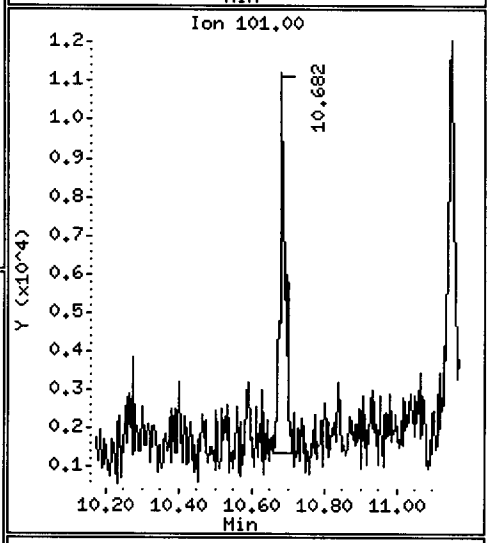
64 Fluoranthene

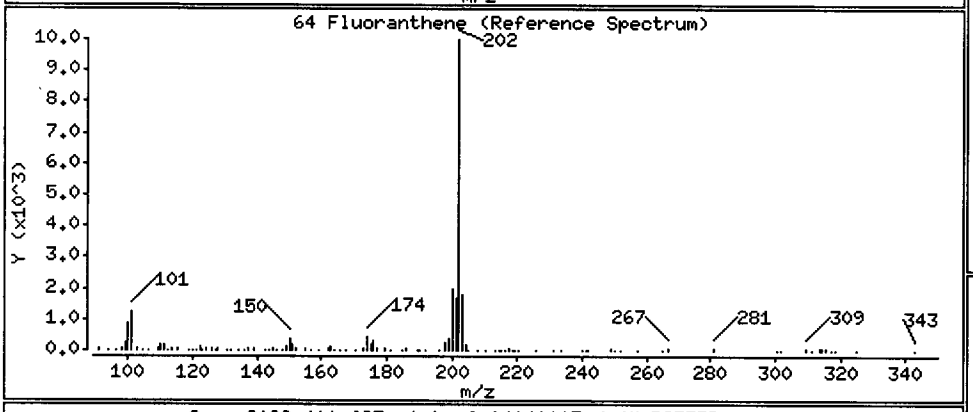
Concentration: 73.02 ug/kg

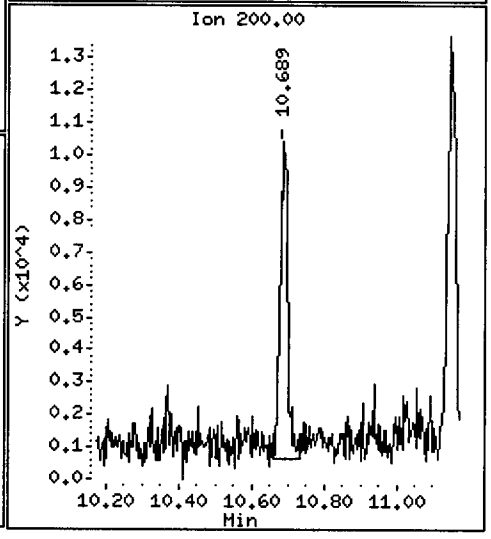


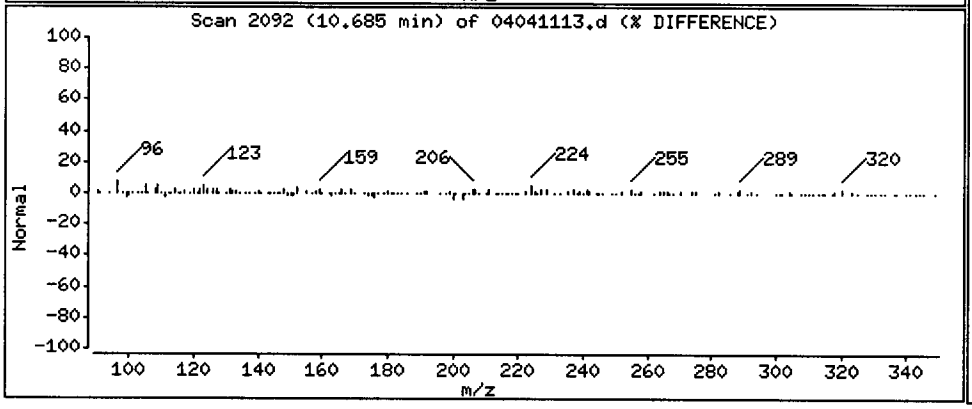












Data File: /chem1/nt12.i/20110404.b/04041113.d

Date : 04-APR-2011 17:50

Client ID: LL-SED1-0-56-031511

Instrument: nt12.i

Sample Info: SN54H,3,

Volume Injected (uL): 1.0

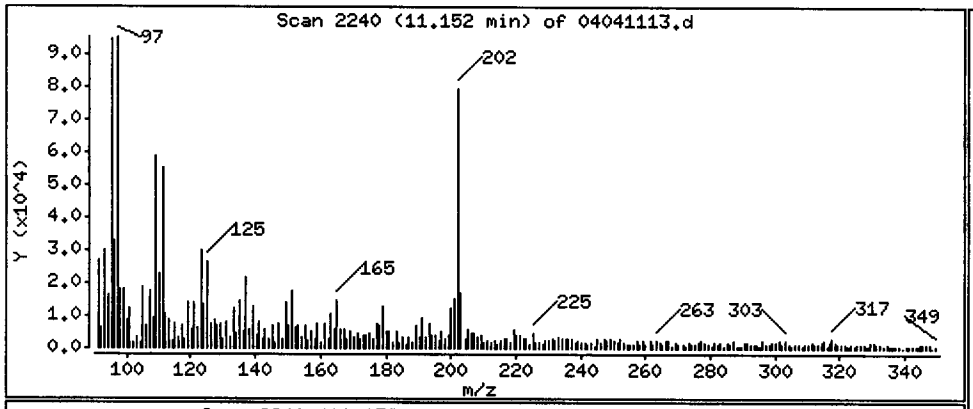
Operator: JZ

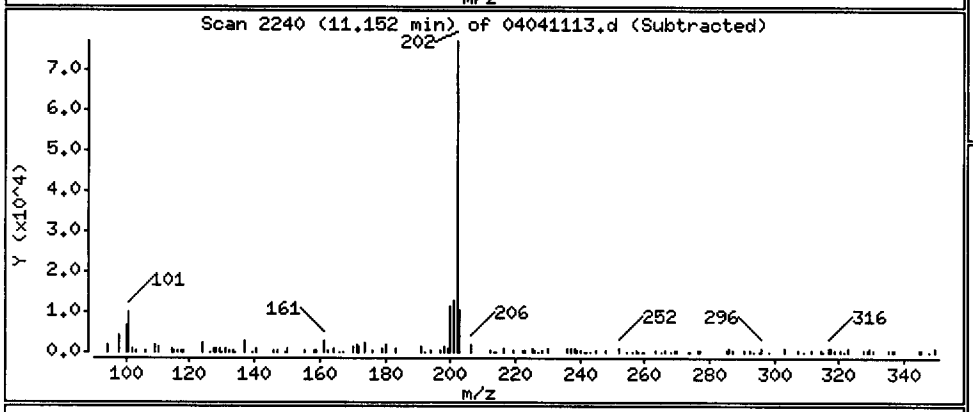
Column phase: ZB35

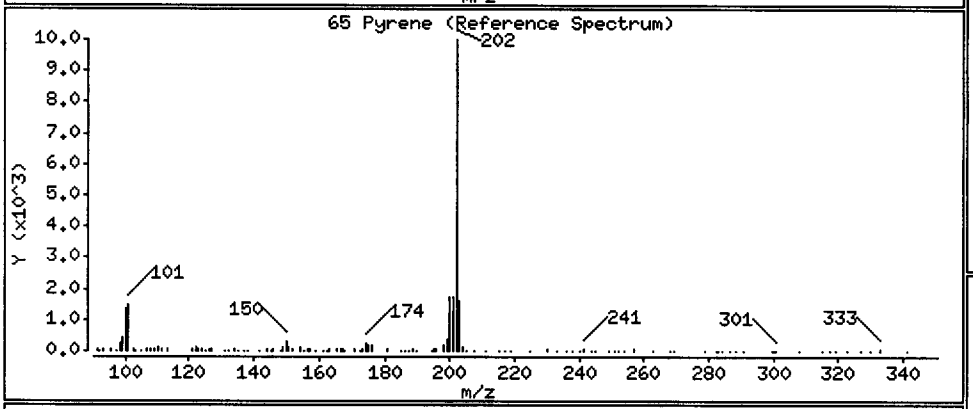
Column diameter: 0.32

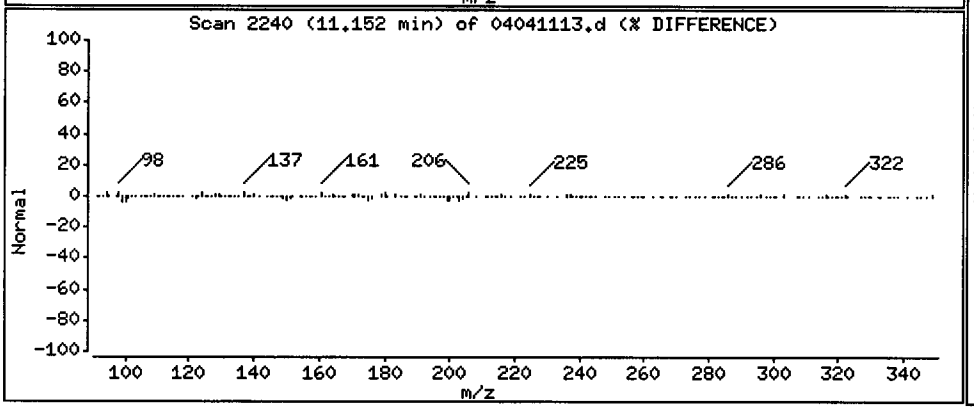
65 Pyrene

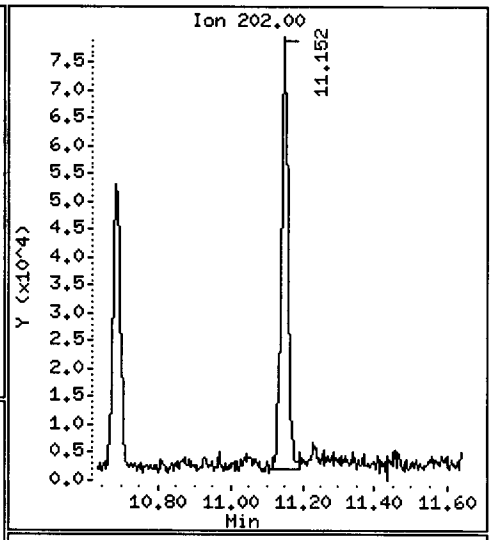
Concentration: 99.41 ug/kg

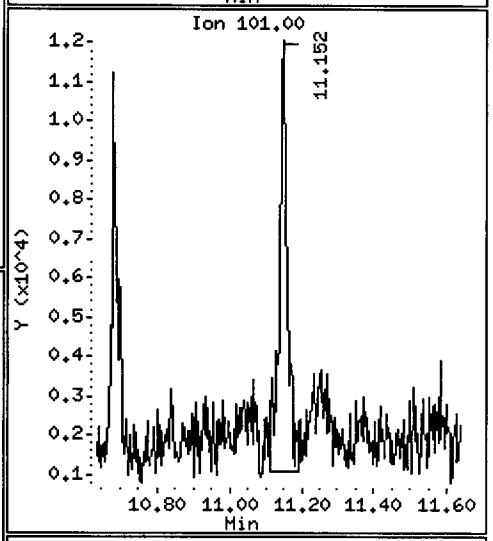


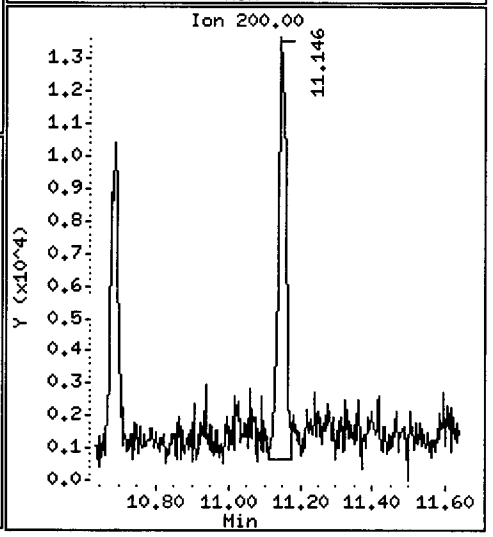












Data File: /chem1/nt12.i/20110404.b/04041113.d

Date : 04-APR-2011 17:50

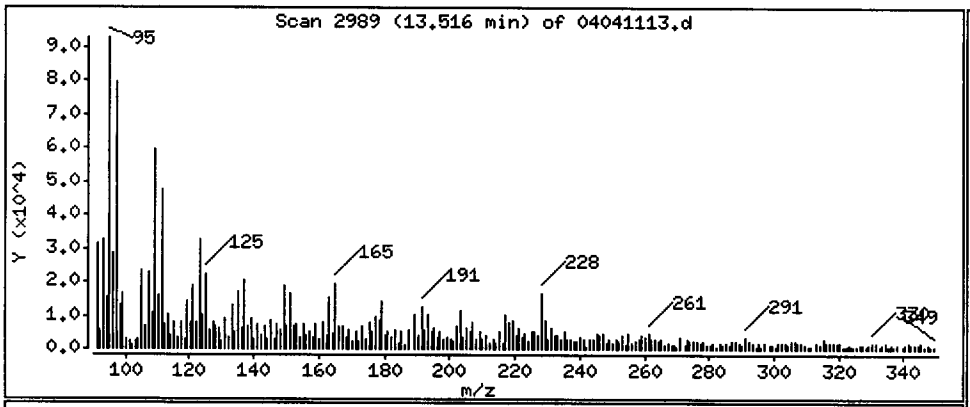
Client ID: LL-SED1-0-56-031511 Instrument: nt12.i

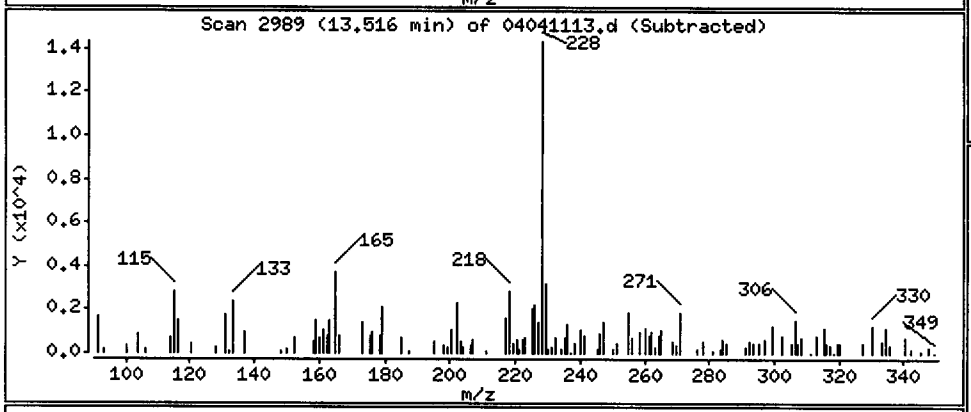
Sample Info: SN54H,3,

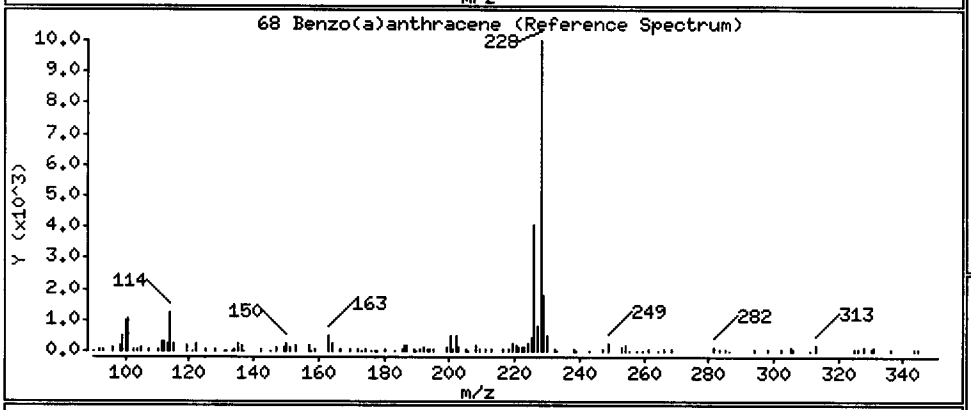
Volume Injected (uL): 1.0 Operator: JZ

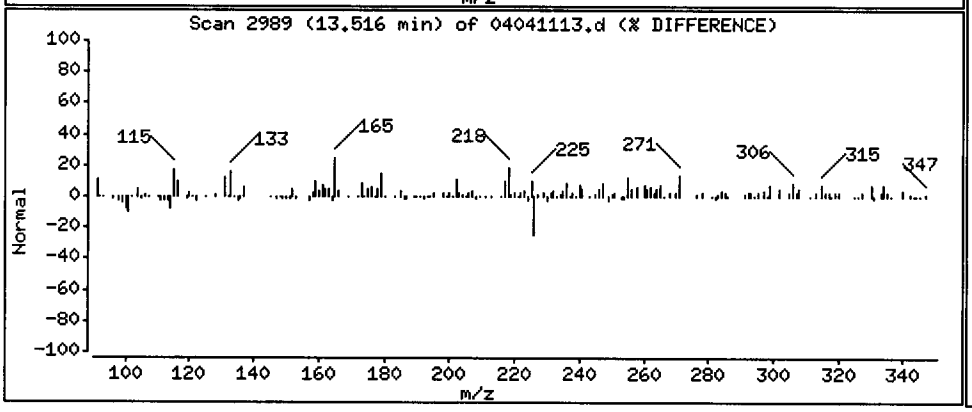
Column phase: ZB35 Column diameter: 0.32

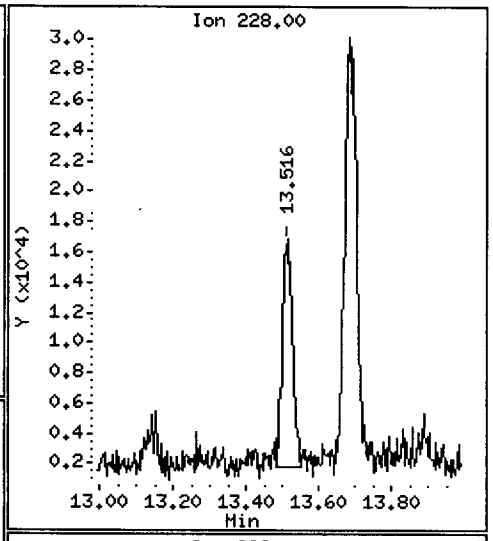
68 Benzo(a)anthracene Concentration: 31.16 ug/kg

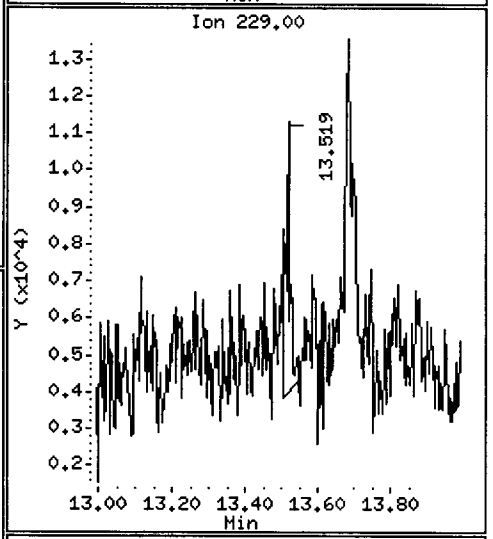


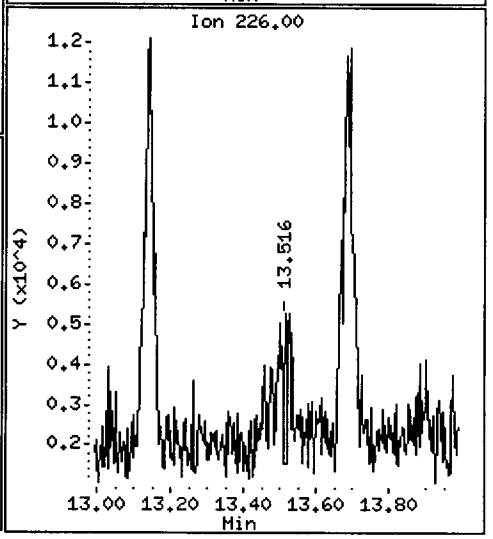












Data File: /chem1/nt12.i/20110404.b/04041113.d

Date : 04-APR-2011 17:50

Client ID: LL-SED1-0-56-031511

Instrument: nt12.i

Sample Info: SN54H,3,

Volume Injected (uL): 1.0

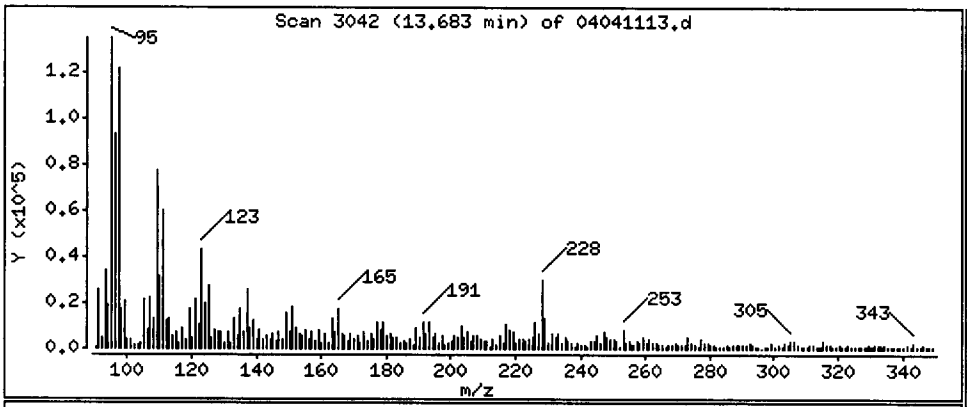
Operator: JZ

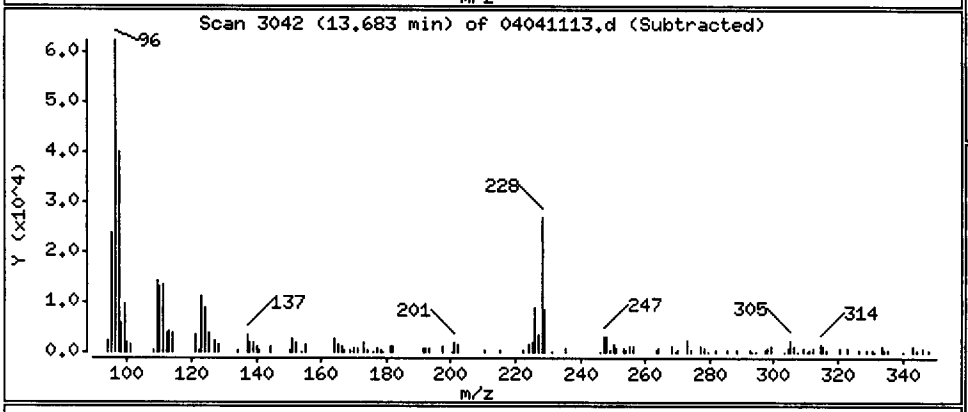
Column phase: ZB35

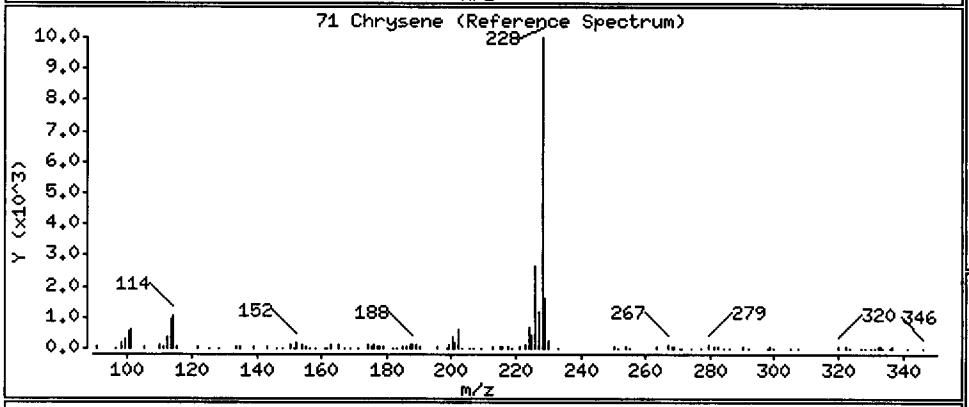
Column diameter: 0.32

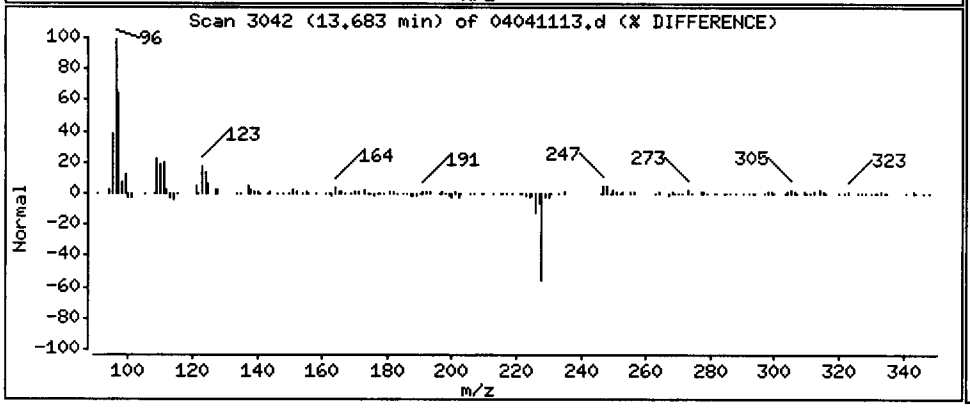
71 Chrysene

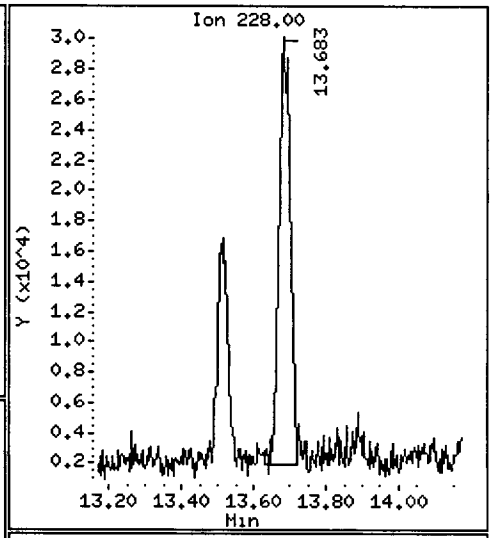
Concentration: 69.80 ug/kg

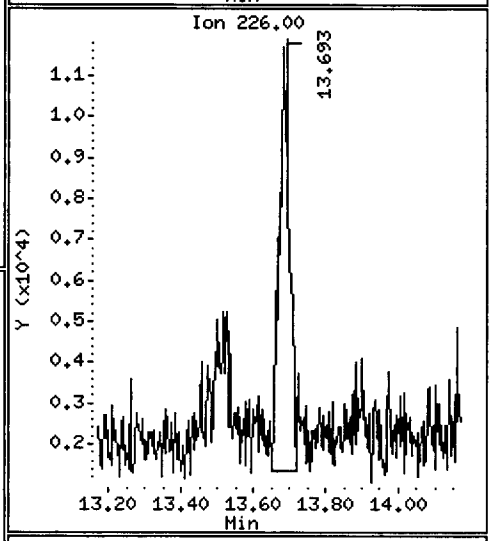


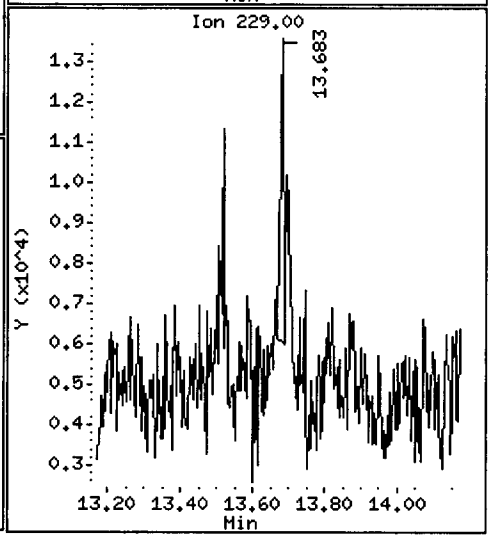












Data File: /chem1/nt12.i/20110404.b/04041113.d

Date : 04-APR-2011 17:50

Client ID: LL-SED1-0-56-031511

Instrument: nt12.i

Sample Info: SN54H,3,

Volume Injected (uL): 1.0

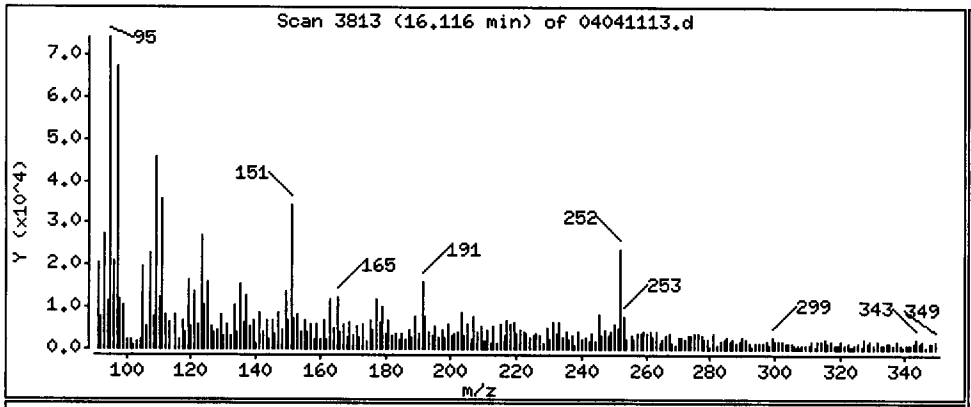
Operator: JZ

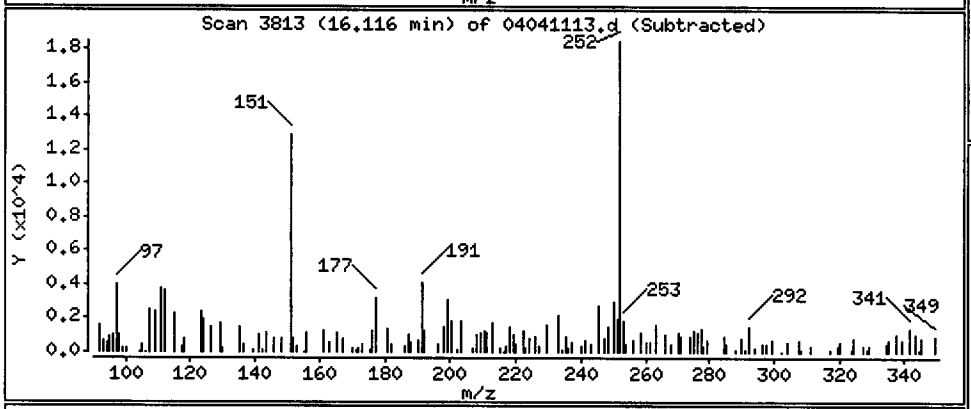
Column phase: ZB35

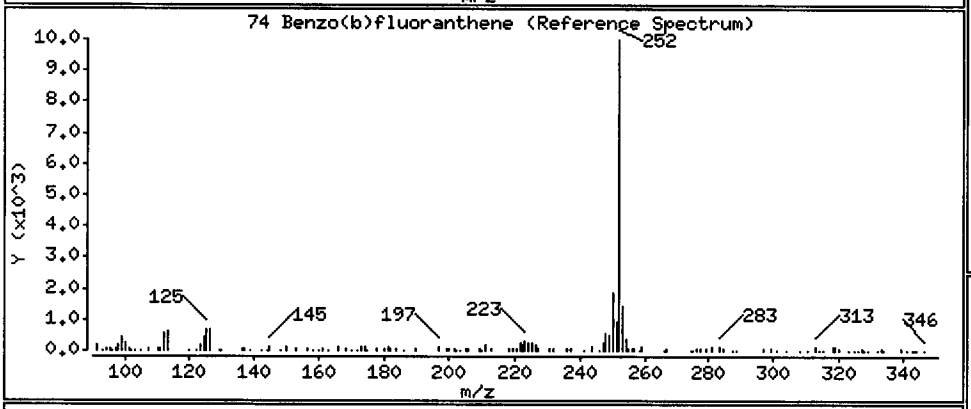
Column diameter: 0.32

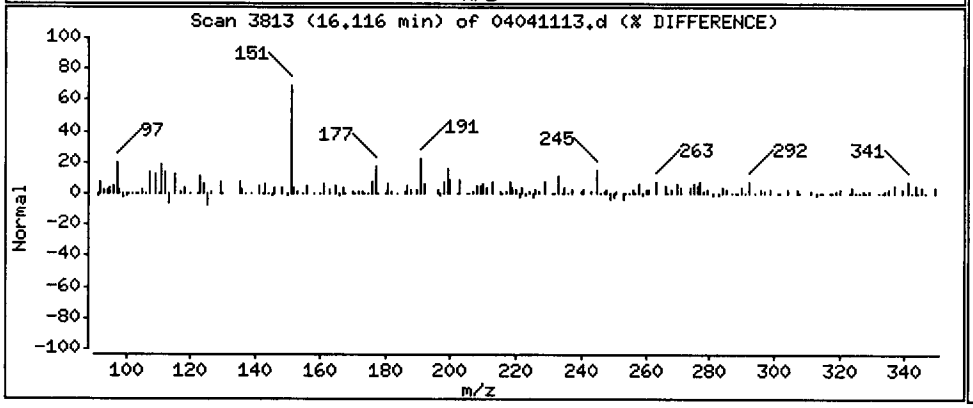
74 Benzo(b)fluoranthene

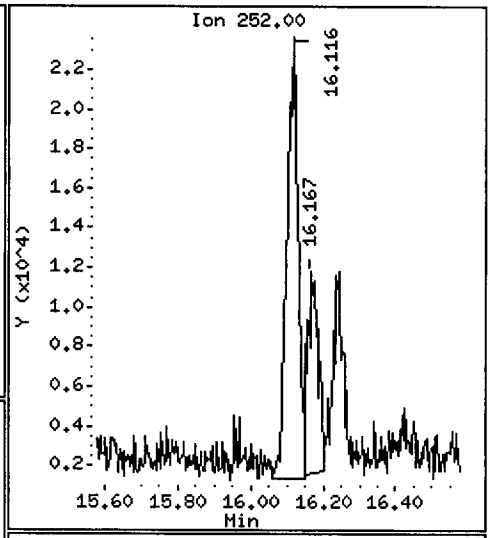
Concentration: 69.56 ug/kg

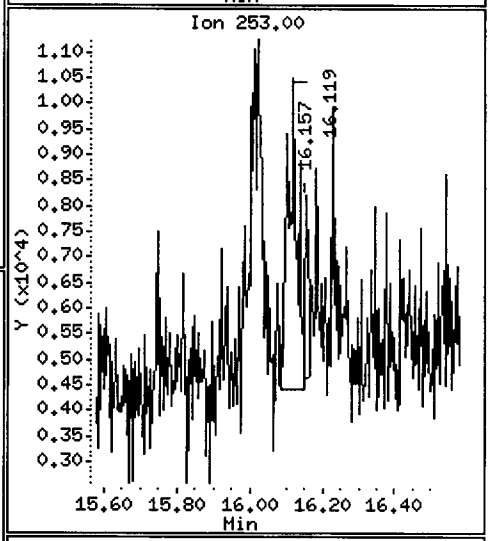


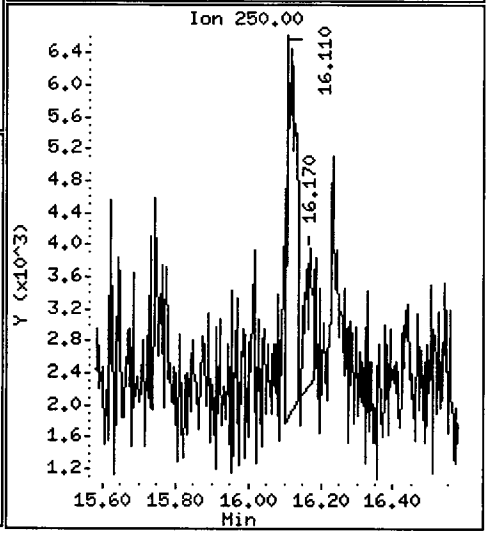












Data File: /chem1/nt12.i/20110404.b/04041113.d

Date : 04-APR-2011 17:50

Client ID: LL-SED1-0-56-031511

Instrument: nt12.i

Sample Info: SN54H,3,

Volume Injected (uL): 1.0

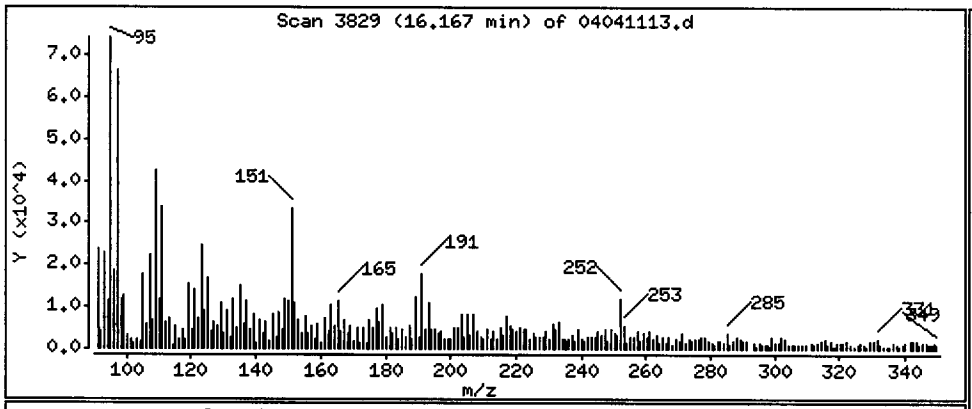
Operator: JZ

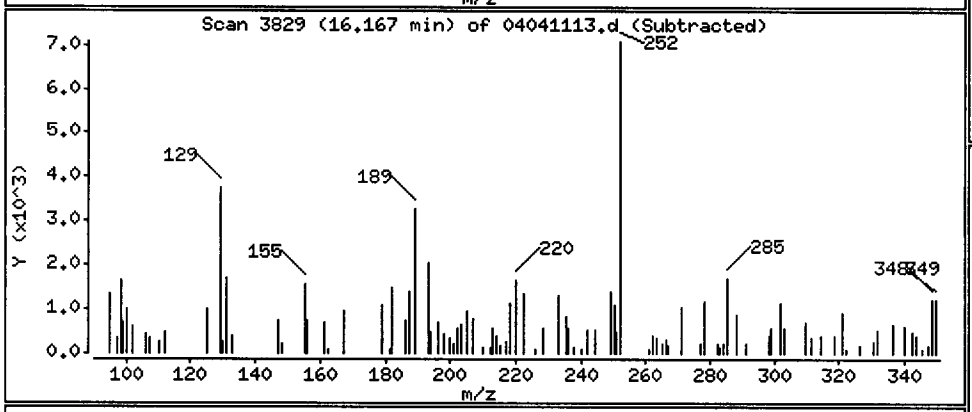
Column phase: ZB35

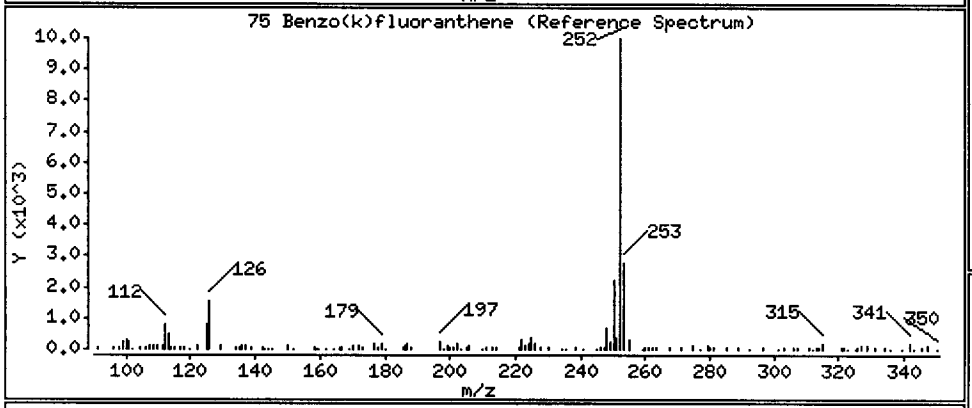
Column diameter: 0.32

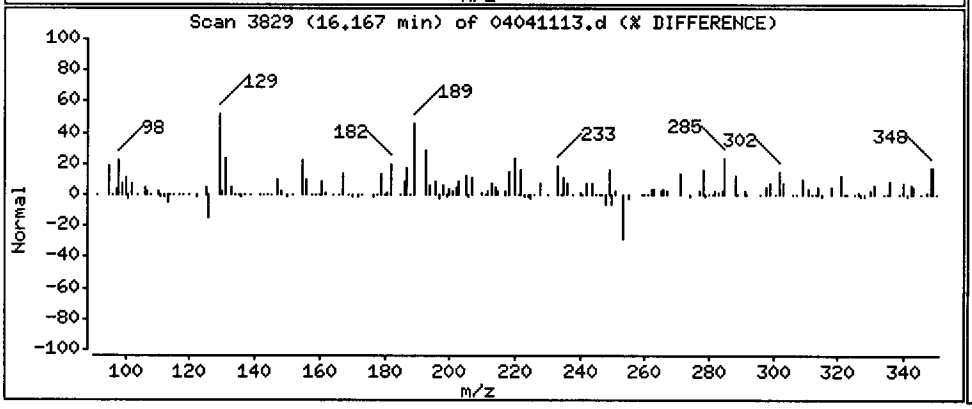
75 Benzo(k)fluoranthene

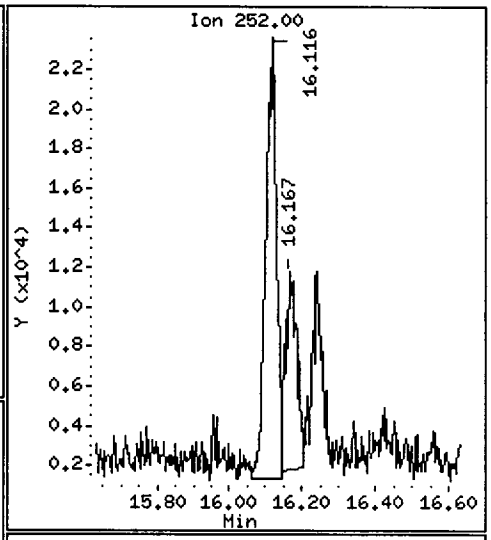
Concentration: 29.91 ug/kg

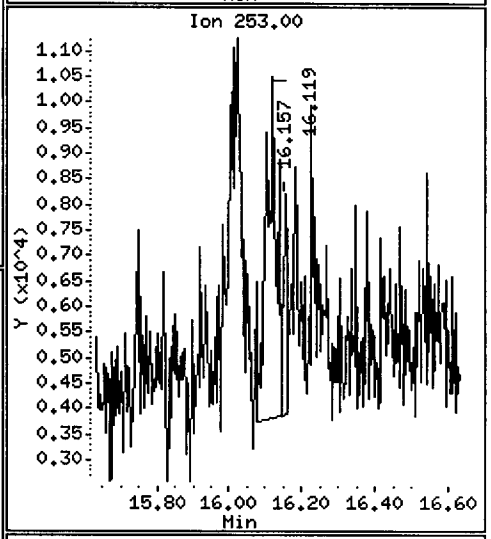


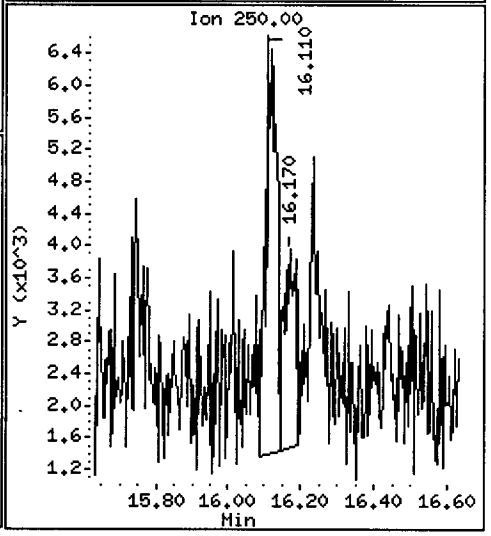












Data File: /chem1/nt12.i/20110404.b/04041113.d

Date : 04-APR-2011 17:50

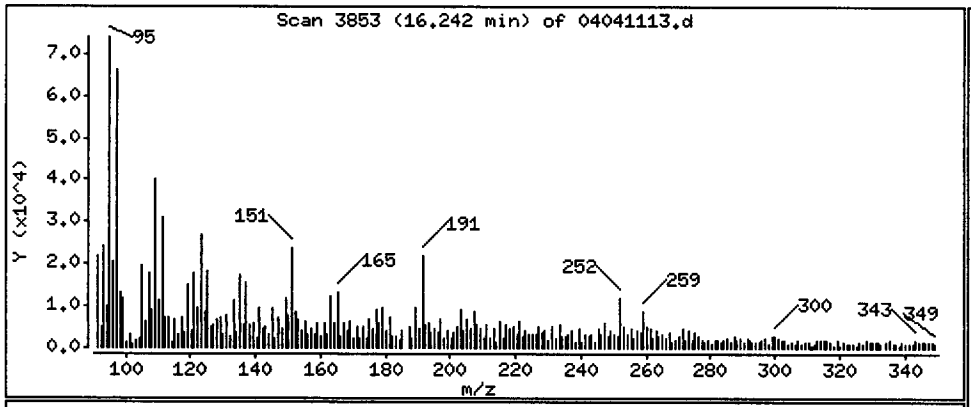
Client ID: LL-SED1-0-56-031511 Instrument: nt12.i

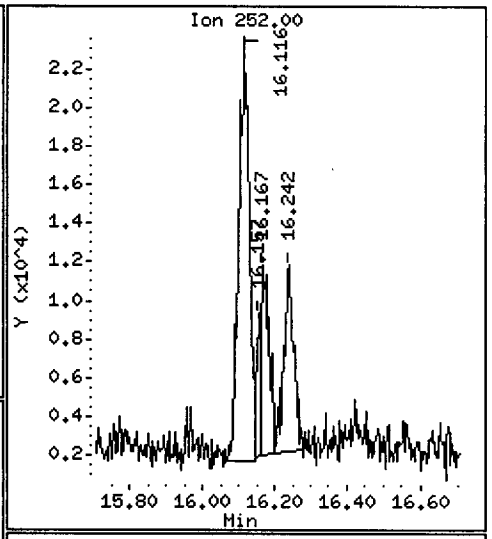
Sample Info: SN54H,3,

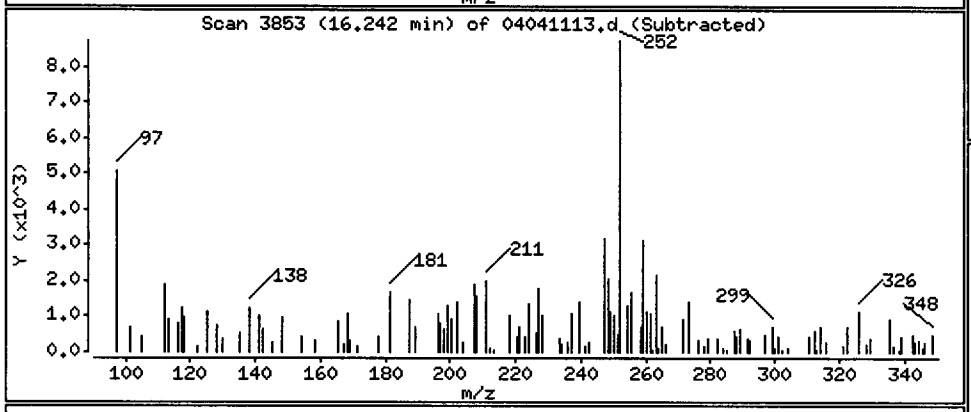
Volume Injected (uL): 1.0 Operator: JZ

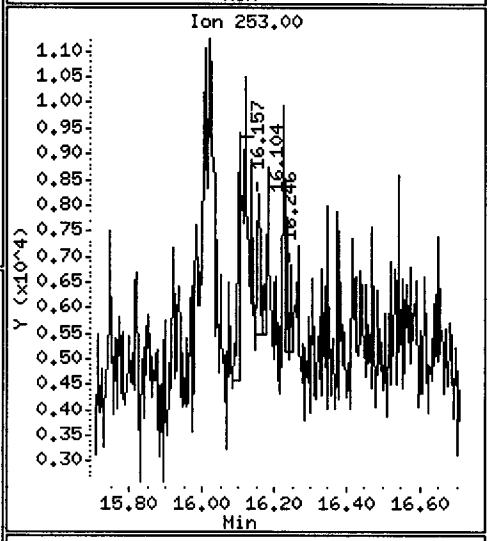
Column phase: ZB35 Column diameter: 0.32

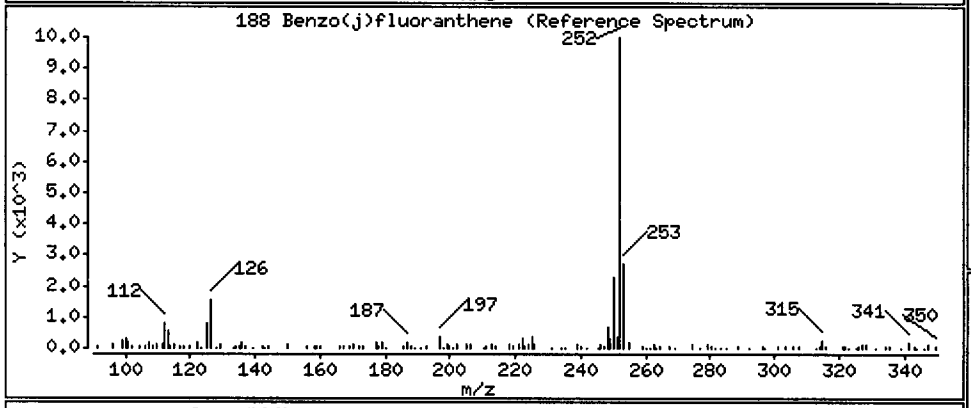
188 Benzo(j)fluoranthene Concentration: 26.42 ug/kg

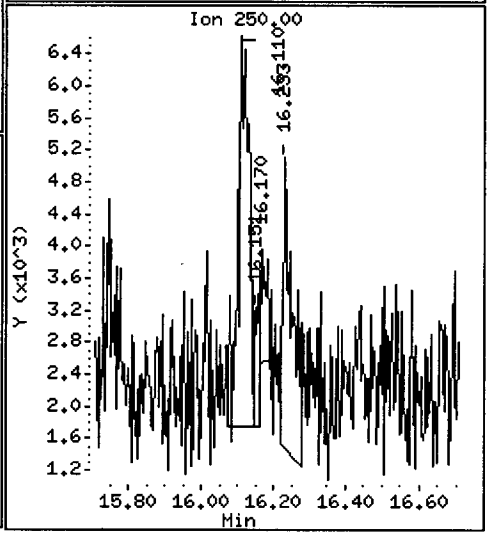


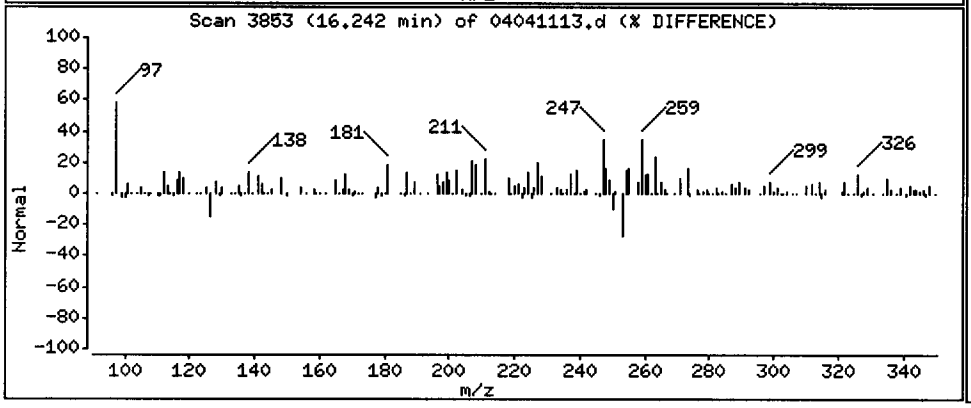












Data File: /chem1/nt12.i/20110404.b/04041113.d

Date : 04-APR-2011 17:50

Client ID: LL-SED1-0-56-031511

Instrument: nt12.i

Sample Info: SN54H,3,

Volume Injected (uL): 1.0

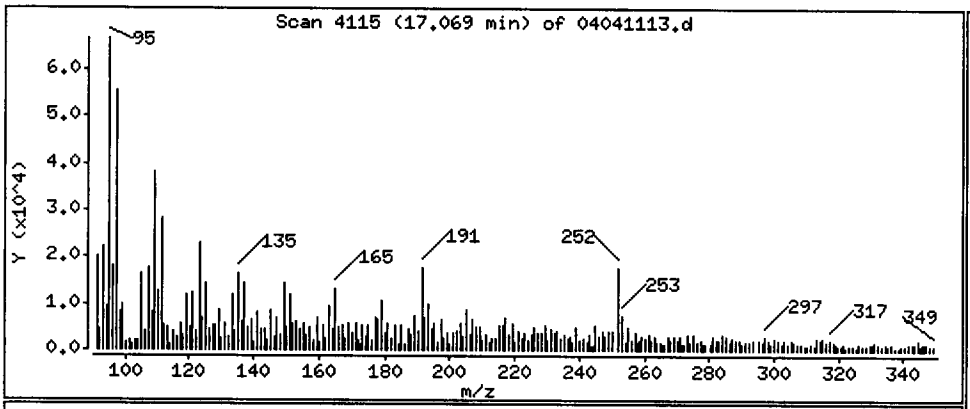
Operator: JZ

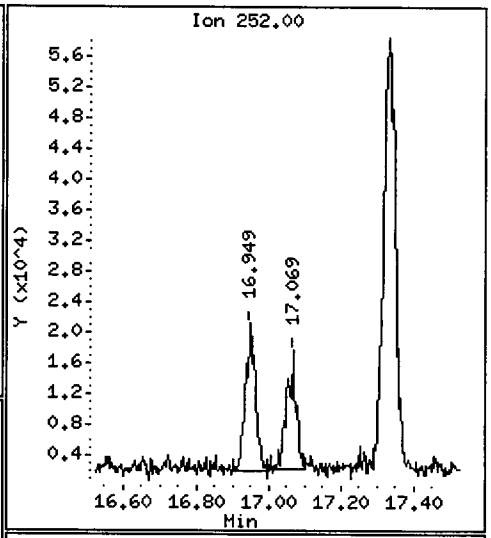
Column phase: ZB35

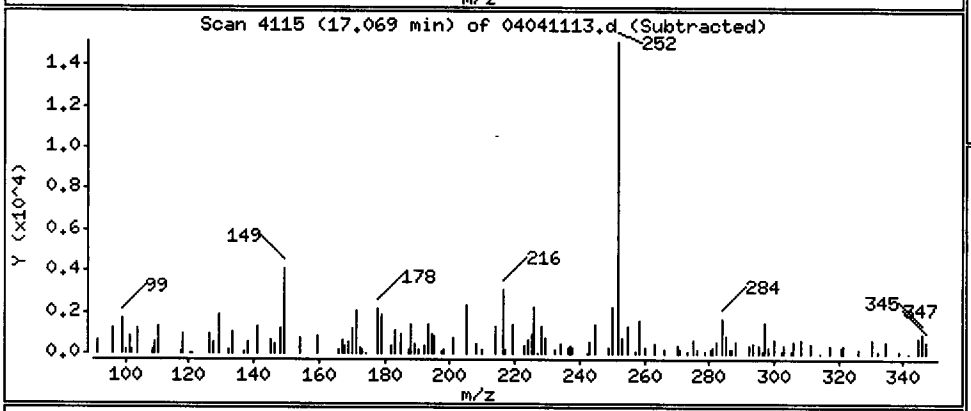
Column diameter: 0.32

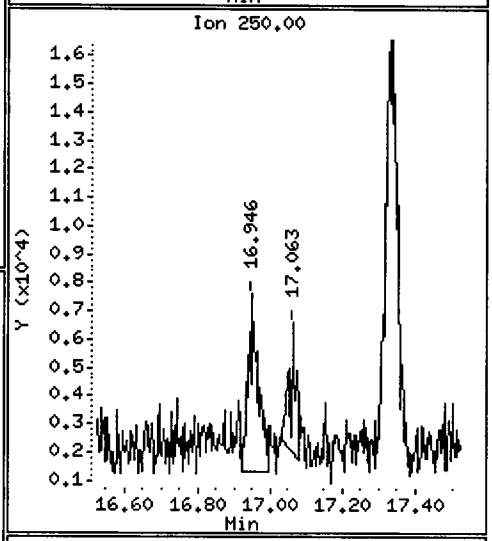
76 Benzo(a)pyrene

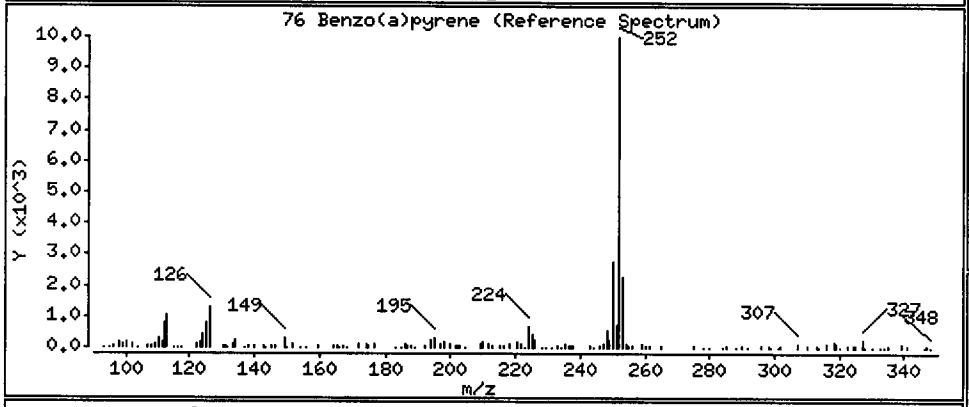
Concentration: 45.49 ug/kg

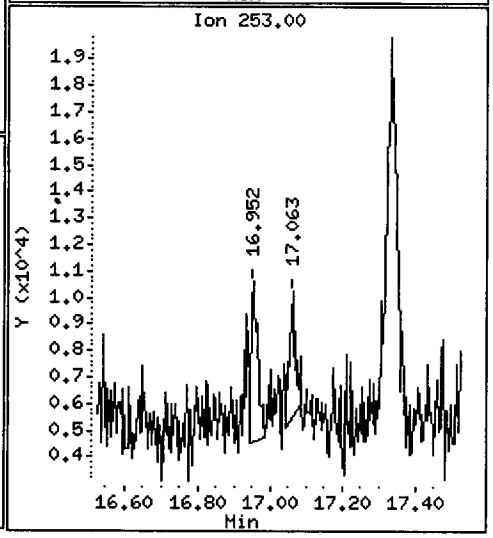


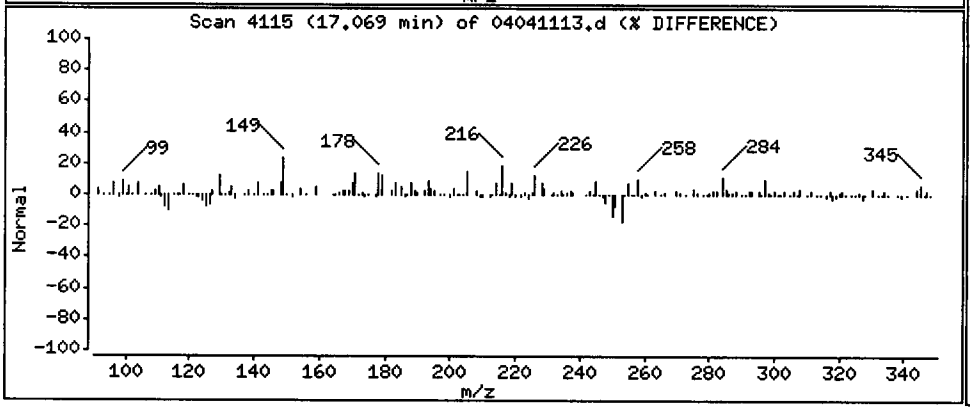












Data File: /chem1/nt12.i/20110404.b/04041113.d

Date : 04-APR-2011 17:50

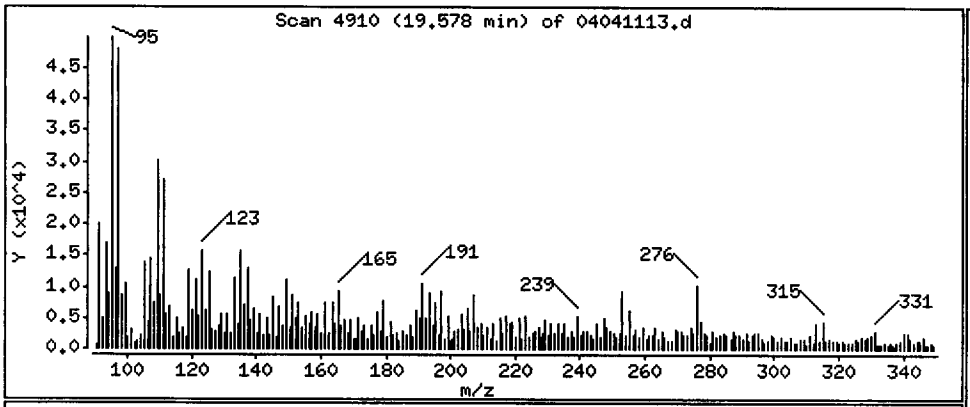
Client ID: LL-SED1-0-56-031511 Instrument: nt12.i

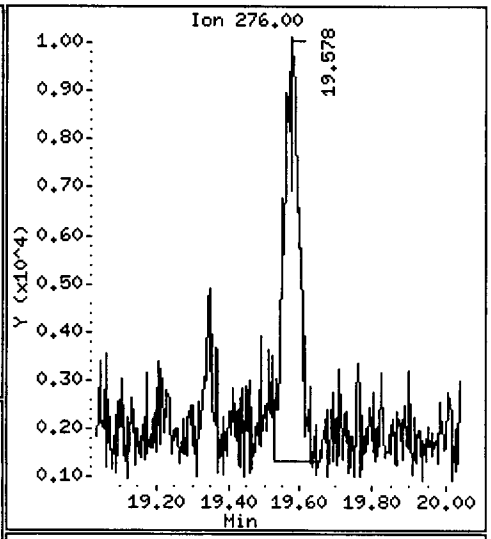
Sample Info: SN54H,3,

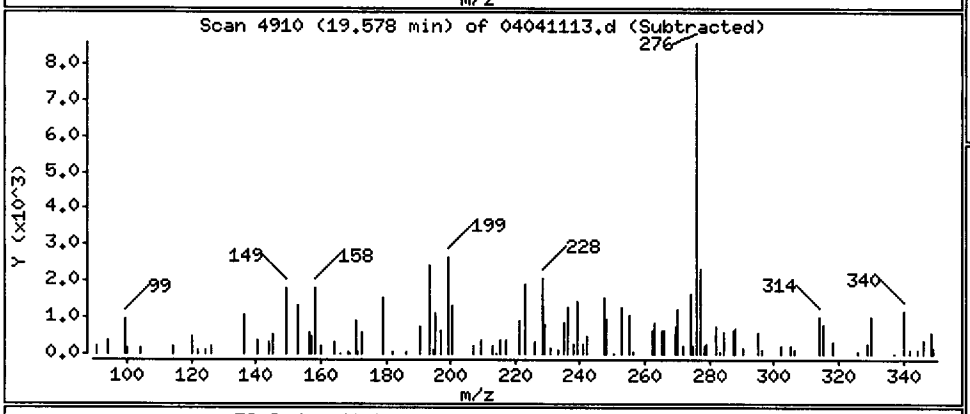
Volume Injected (uL): 1.0 Operator: JZ

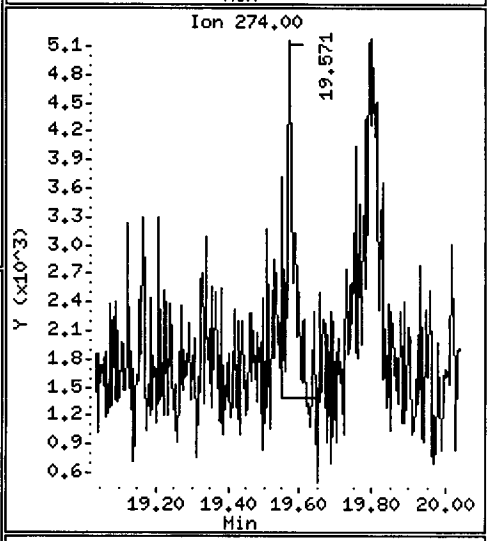
Column phase: ZB35 Column diameter: 0.32

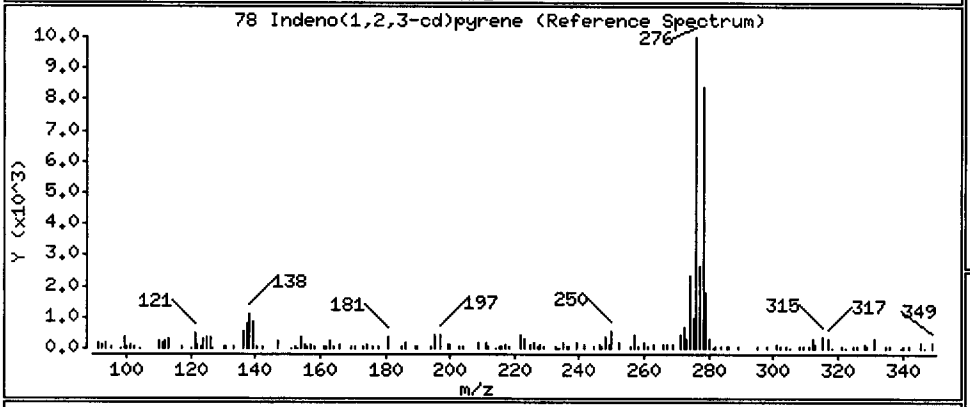
78 Indeno(1,2,3-cd)pyrene Concentration: 33.50 ug/kg

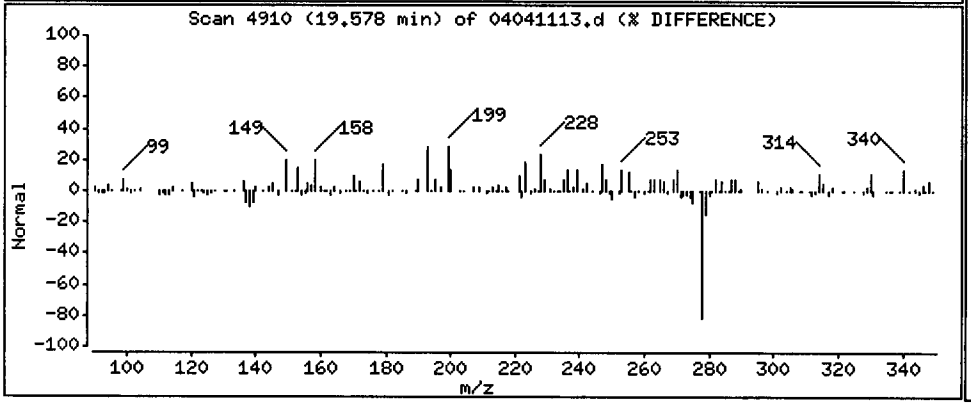


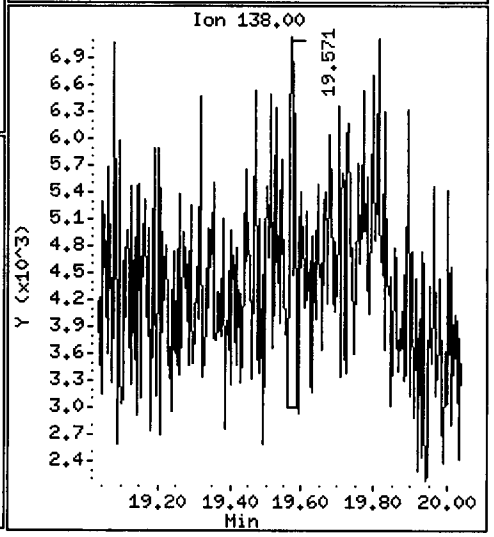












Data File: /chem1/nt12.i/20110404.b/04041113.d

Date : 04-APR-2011 17:50

Client ID: LL-SED1-0-56-031511

Instrument: nt12.i

Sample Info: SN54H,3,

Volume Injected (uL): 1.0

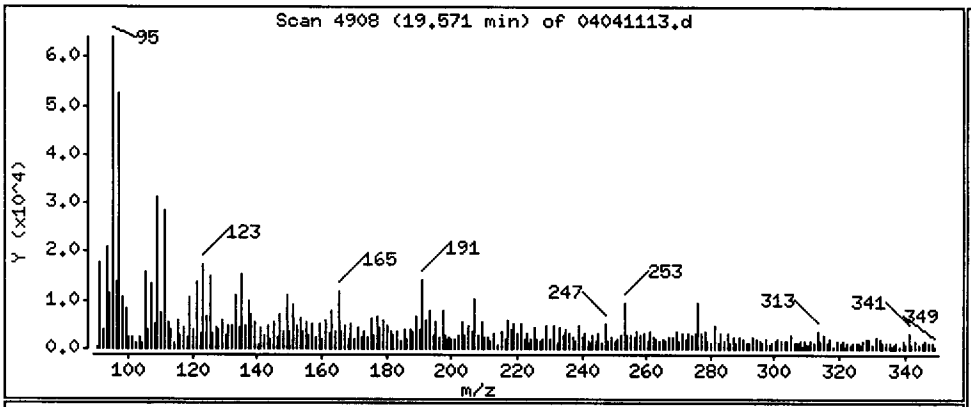
Operator: JZ

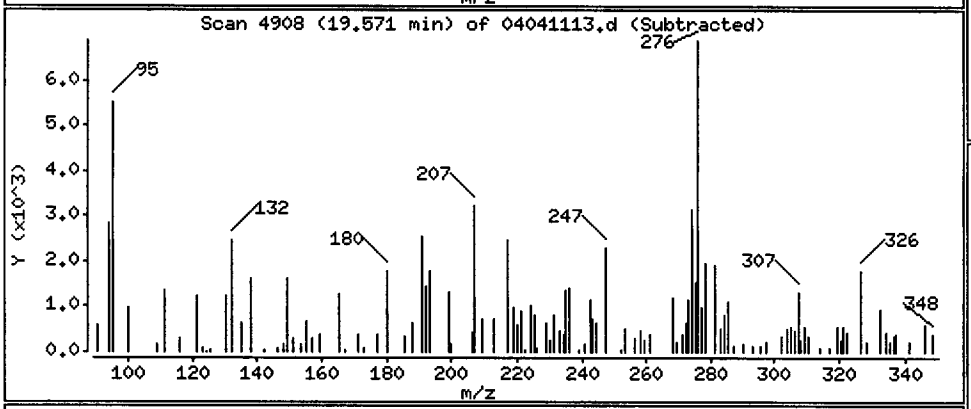
Column phase: ZB35

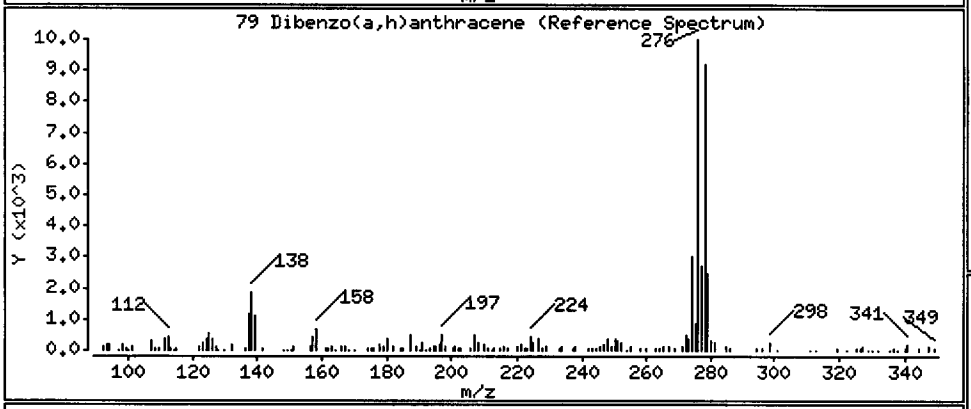
Column diameter: 0.32

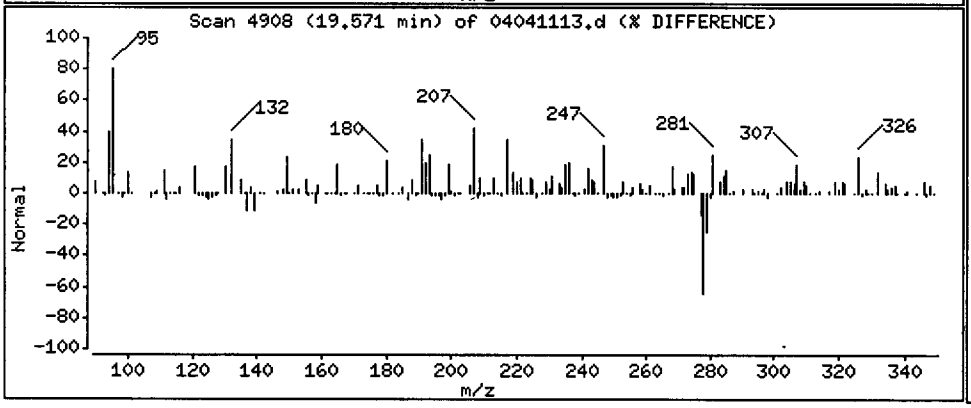
79 Dibenzo(a,h)anthracene

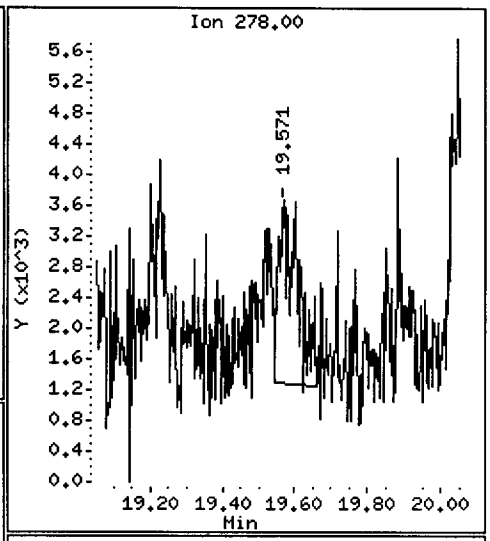
Concentration: 13.71 ug/kg

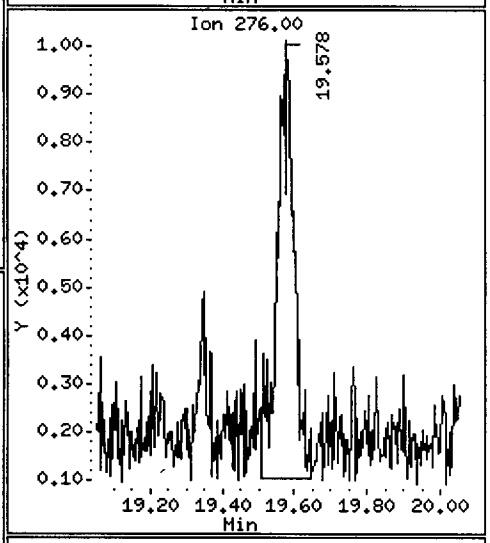


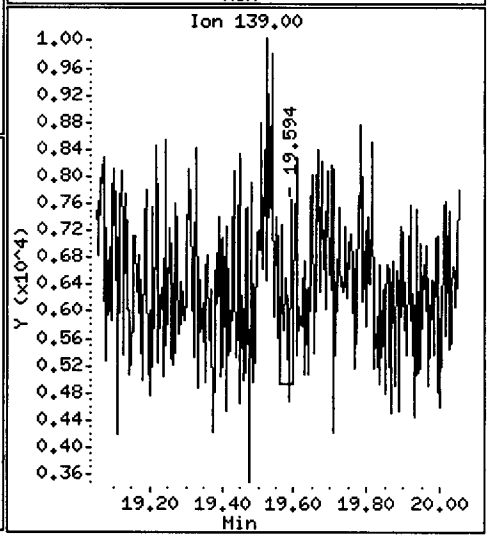












Data File: /chem1/nt12.i/20110404.b/04041113.d

Date : 04-APR-2011 17:50

Client ID: LL-SED1-0-56-031511

Instrument: nt12.i

Sample Info: SN54H,3,

Volume Injected (uL): 1.0

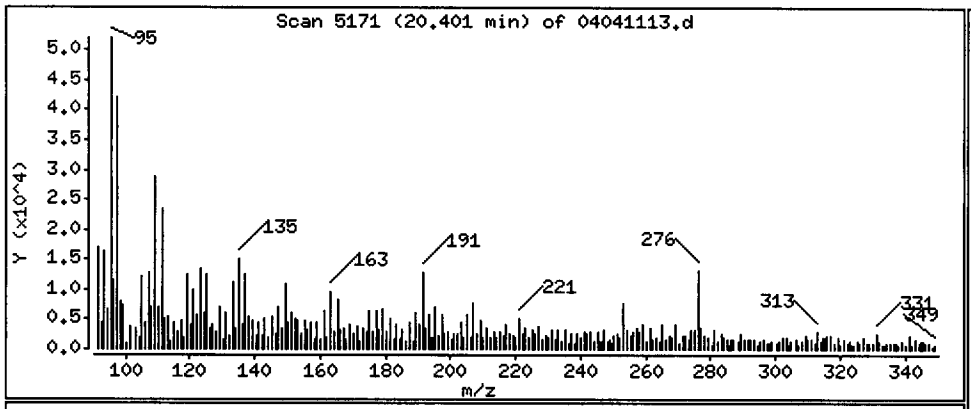
Operator: JZ

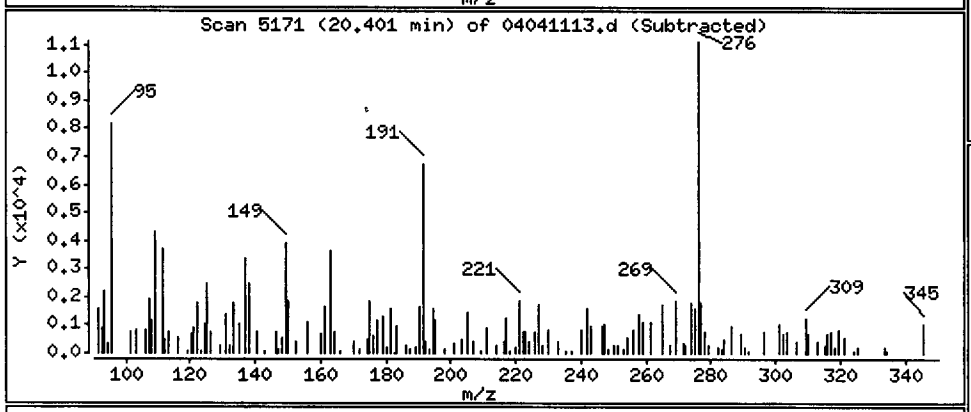
Column phase: ZB35

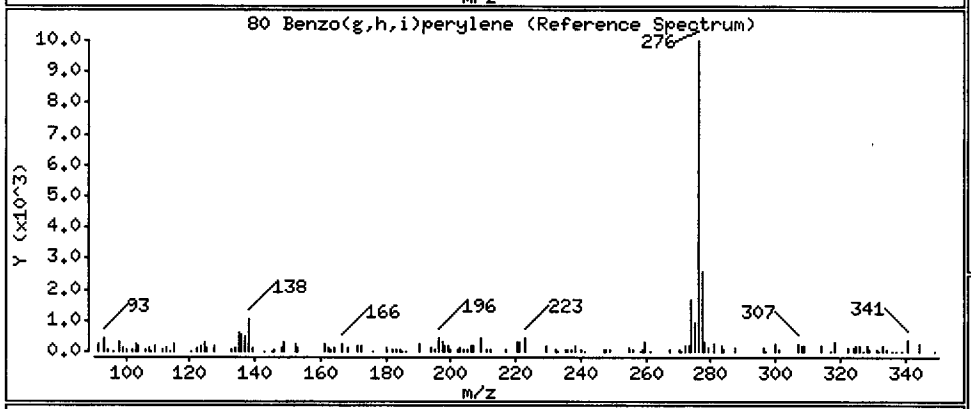
Column diameter: 0.32

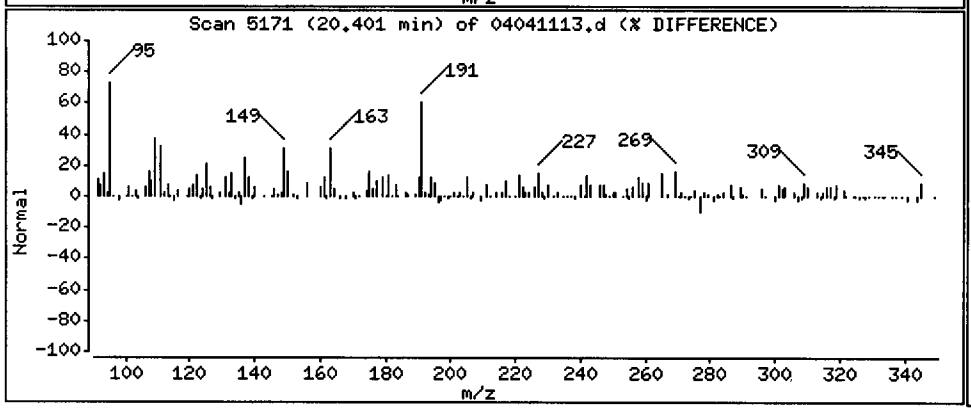
80 Benzo(g,h,i)perylene

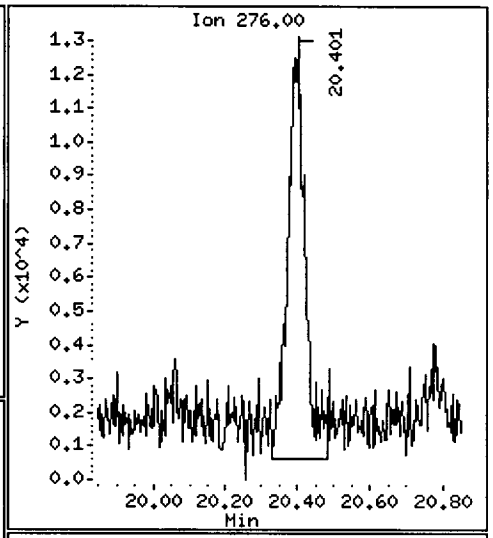
Concentration: 61.26 ug/kg

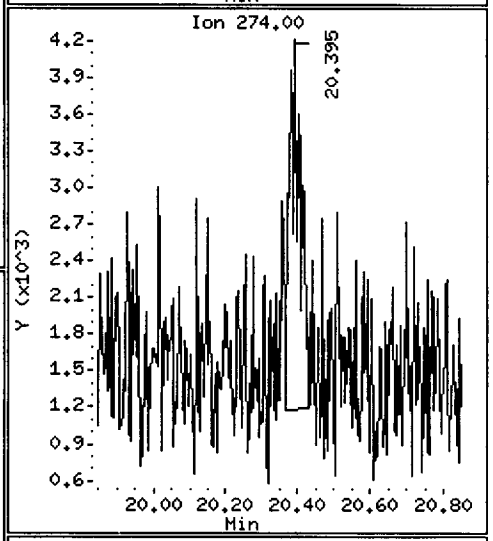


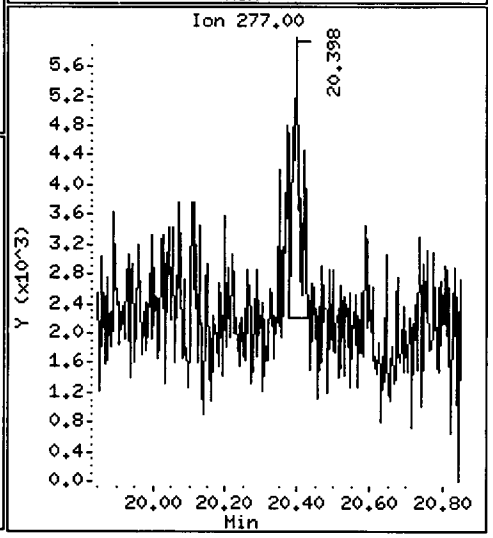












Data File: /chem1/nt12.i/20110404.b/04041113.d

Date : 04-APR-2011 17:50

Client ID: LL-SED1-0-56-031511

Instrument: nt12.i

Sample Info: SN54H,3,

Volume Injected (uL): 1.0

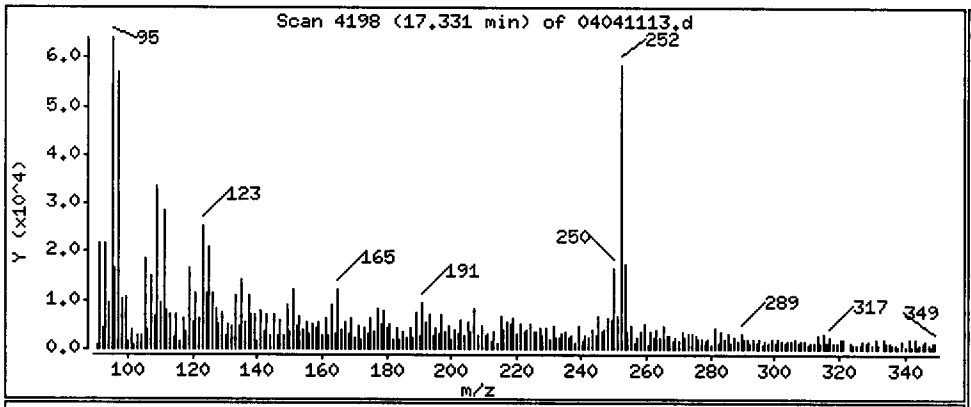
Operator: JZ

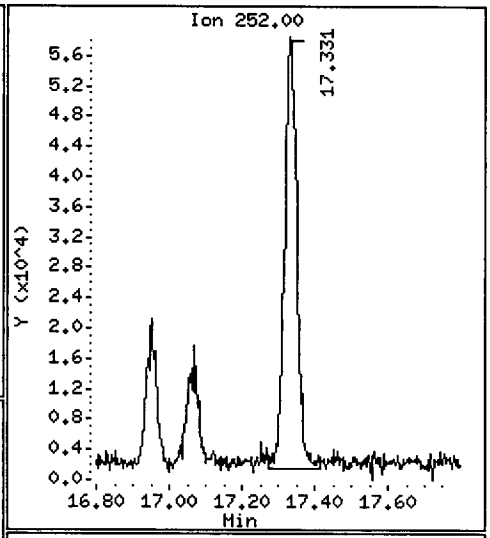
Column phase: ZB35

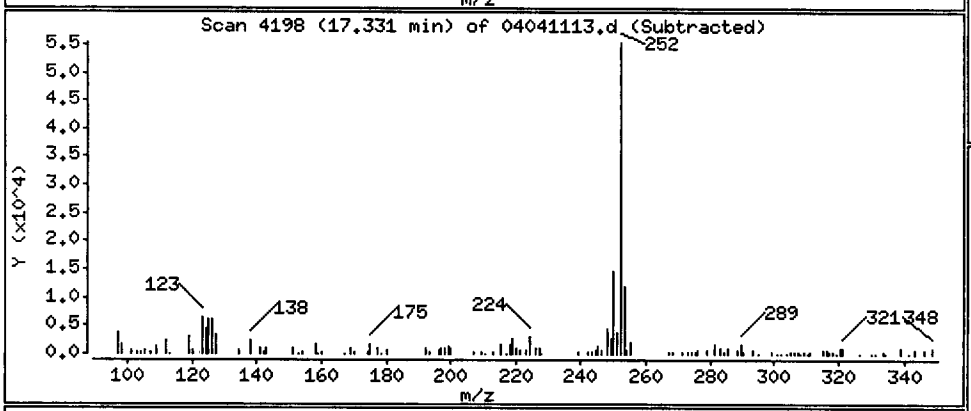
Column diameter: 0.32

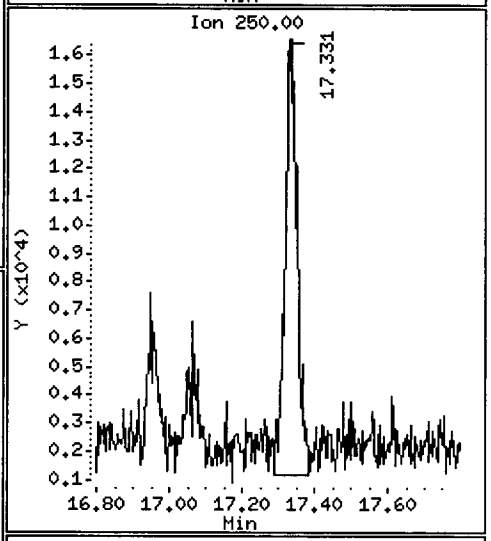
99 Perylene

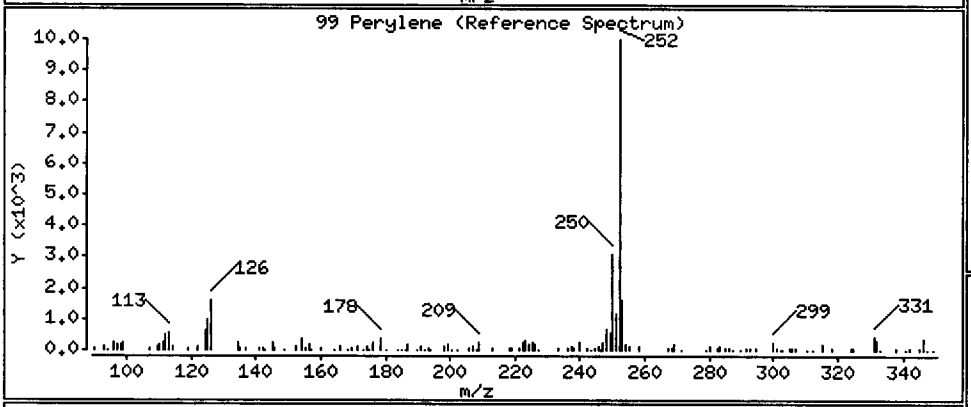
Concentration: 252.8 ug/kg

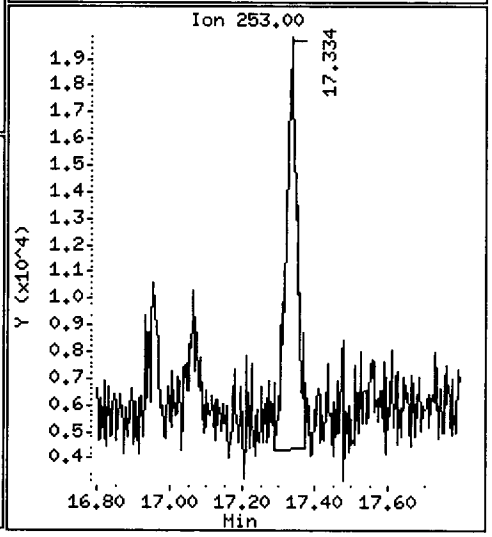


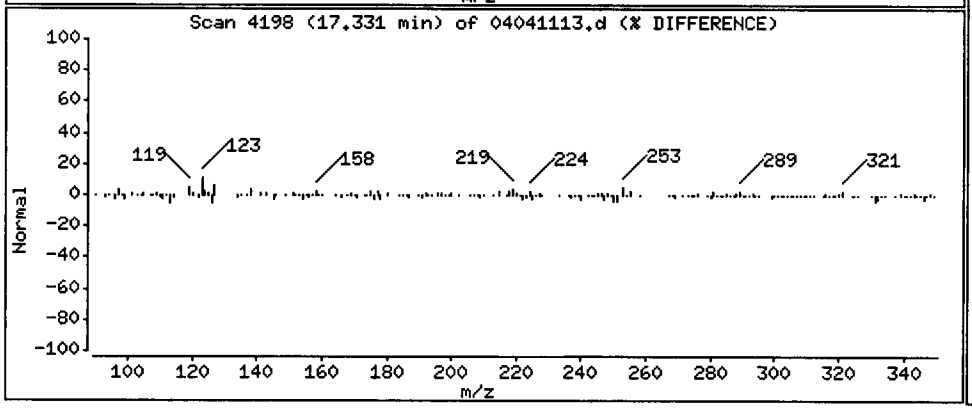












CO-ELUTION SUMMARY FOR FILE - 04041113.d

Lab ID: SN54H, Method: SIMPNA0331.m, Instrument: nt12.i, Date: 04-APR-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem1/nt12.i/20110404.b/04041114.d
Lab Smp Id: SN54F Client Smp ID: LL-SED2-112-168-031
Inj Date : 04-APR-2011 19:24
Operator : JZ Inst ID: nt12.i
Smp Info : SN54F,30
Misc Info : 11-5930
Comment : 1ul Injection
Method : /chem1/nt12.i/20110404.b/SIMPNA0331.m
Meth Date : 05-Apr-2011 17:45 jianqing Quant Type: ISTD
Cal Date : 31-MAR-2011 22:47 Cal File: 03311107.d
Als bottle: 14
Dil Factor: 30.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

JZ 04/05/11

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

Name	Value	Description
DF	30.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Ws	82.03000	Weight of sample extracted (g)
M	87.70000	% Moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
* 27 Naphthalene-d8	136	4.813	4.803	(1.000)	305119	2.00000	
28 Naphthalene	128	Compound Not Detected.					
$ 190 2-Methylnaphthalene-d10	152	5.551	5.542	(1.153)	8509	0.09122	135.6
32 2-Methylnaphthalene	141	Compound Not Detected.					
105 1-methylnaphthalene	141	Compound Not Detected.					
40 Acenaphthylene	152	Compound Not Detected.					
* 42 Acenaphthene-d10	164	7.053	7.044	(1.000)	194866	2.00000	
44 Acenaphthene	153	Compound Not Detected.					
46 Dibenzofuran	168	Compound Not Detected.					
49 Fluorene	166	Compound Not Detected.					
* 59 Phenanthrene-d10	188	8.991	8.981	(1.000)	291590	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	13.623	13.604	(1.000)	253711	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	17.271	17.230	(1.000)	174659	2.00000		
78	Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.						
$ 191	Dibenzo(a,h)anthracene-d14	292	19.511	19.470	(1.130)	5310	0.06479	96	32
79	Dibenzo(a,h)anthracene	278	Compound Not Detected.						
80	Benzo(g,h,i)perylene	276	Compound Not Detected.						
99	Perylene	252	17.331	17.296	(1.003)	29472	0.38548	573.1	

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt12.i
Lab File ID: 04041114.d
Lab Smp Id: SN54F
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem1/nt12.i/20110404.b/SIMPNA0331.m
Misc Info: 11-5930

Calibration Date: 04-APR-2011
Calibration Time: 11:18
Client Smp ID: LL-SED2-112-168-
Level: LOW
Sample Type: Sediment

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF	
27 Naphthalene-d8	494112	247056	988224	305119	-38.25	
42 Acenaphthene-d10	280105	140052	560210	194866	-30.43	
59 Phenanthrene-d10	461353	230676	922706	291590	-36.80	
69 Chrysene-d12	503160	251580	1006320	253711	-49.58	
77 Perylene-d12	442215	221108	884430	174659	-60.50	<-

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	4.80	4.30	5.30	4.81	0.19
42 Acenaphthene-d10	7.04	6.54	7.54	7.05	0.13
59 Phenanthrene-d10	8.98	8.48	9.48	8.99	0.10
69 Chrysene-d12	13.60	13.10	14.10	13.62	0.14
77 Perylene-d12	17.23	16.73	17.73	17.27	0.24

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

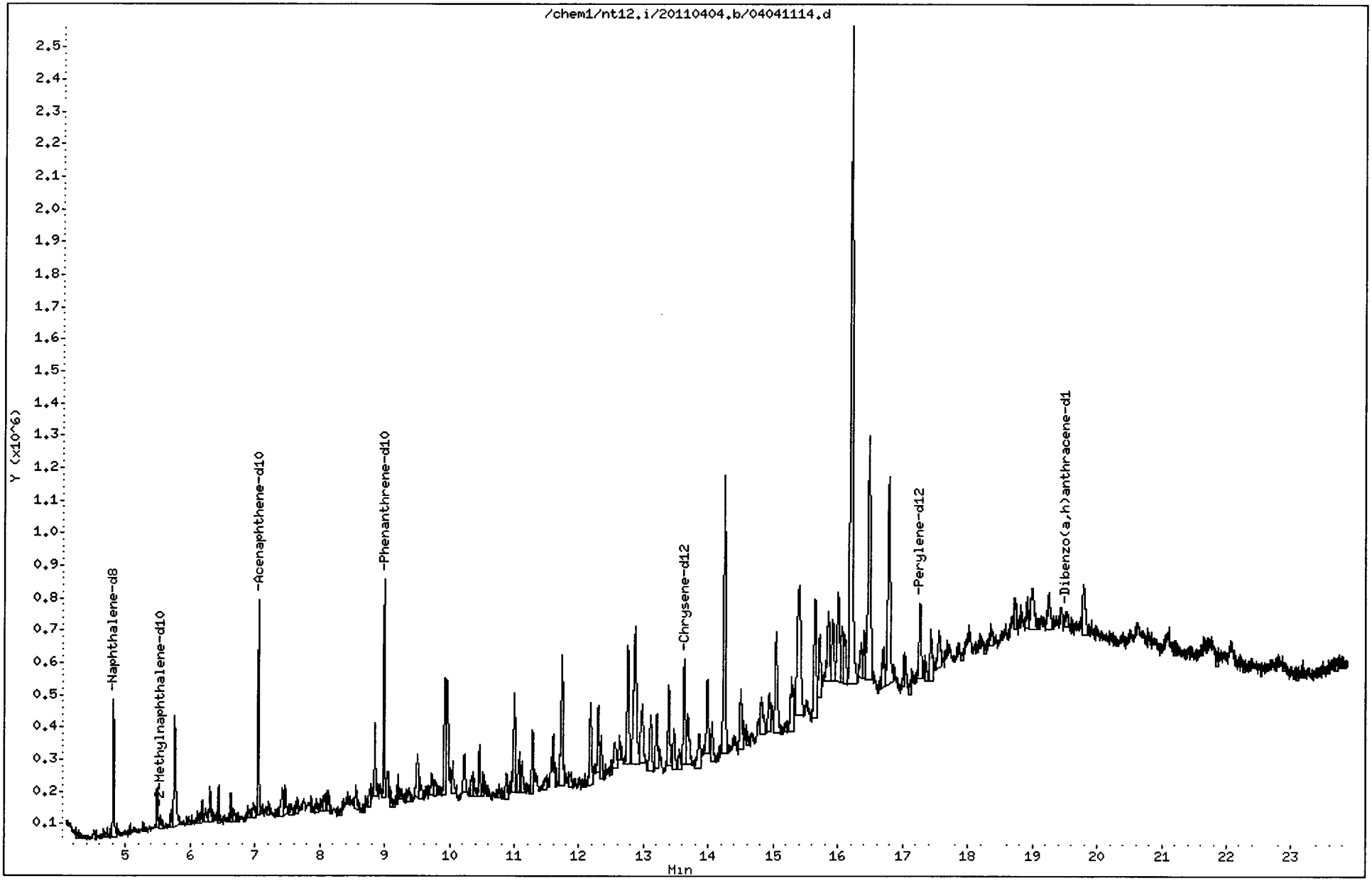
Client Name: Floyd Snider
Client SDG: SN54
Sample Matrix: SOLID
Fraction: SV
Lab Smp Id: SN54F
Client Smp ID: LL-SED2-112-168-031
Level: LOW
Operator: JZ
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: pnalcss.spk
Quant Type: ISTD
Sublist File: pnax.sub
Method File: /chem1/nt12.i/20110404.b/SIMPNA0331.m
Misc Info: 11-5930

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 190 2-Methylnaphthalen	148.7	135.6	91.22	34-100
$ 191 Dibenzo(a,h)anthra	148.7	96.32	64.79	10-117

Data File: /chem1/nt12.i/20110404.b/04041114.d
Date : 04-APR-2011 19:24
Client ID: LL-SED2-112-168-031
Sample Info: SN54F,30
Volume Injected (uL): 1.0
Column phase: ZB35

Instrument: nt12.i
Operator: JZ
Column diameter: 0.32

SN54 : 004455



Data File: /chem1/nt12.i/20110404.b/04041114.d

Date : 04-APR-2011 19:24

Client ID: LL-SED2-112-168-031

Instrument: nt12.i

Sample Info: SN54F,30

Volume Injected (uL): 1.0

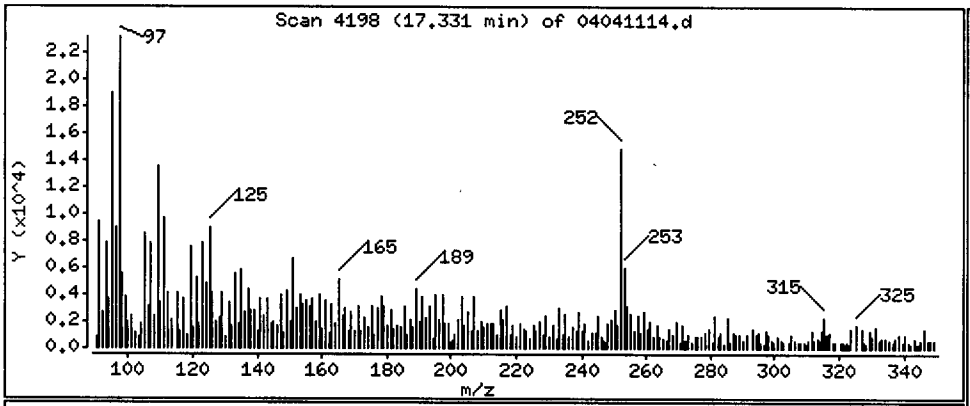
Operator: JZ

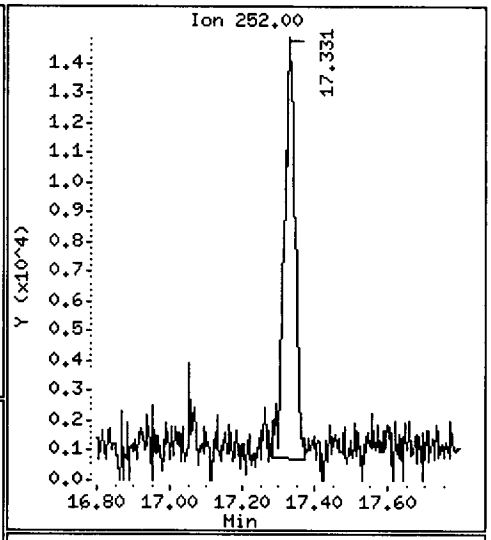
Column phase: ZB35

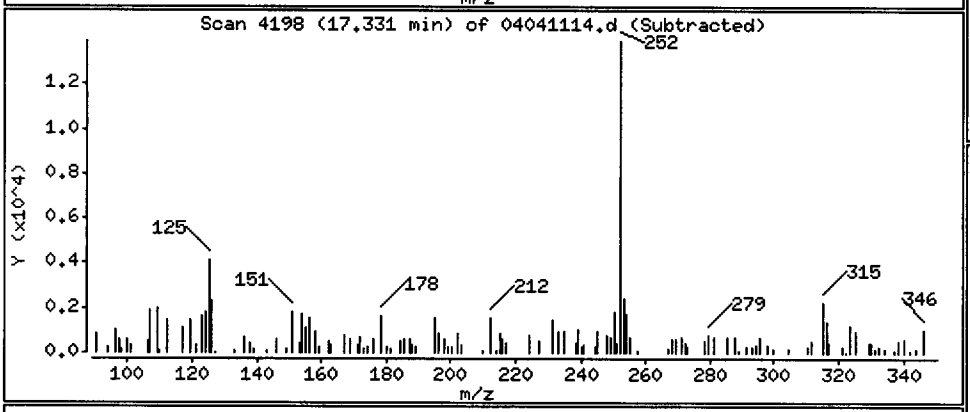
Column diameter: 0.32

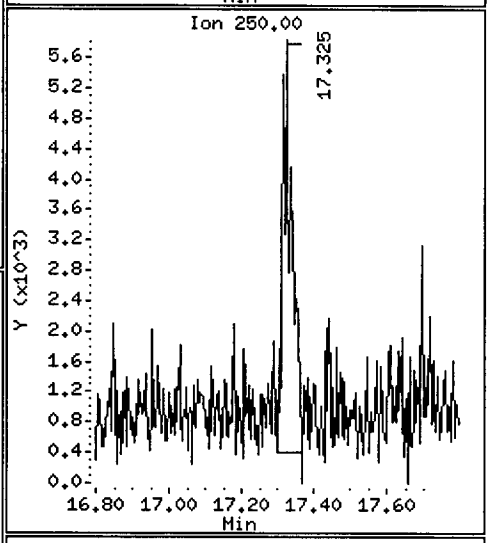
99 Perylene

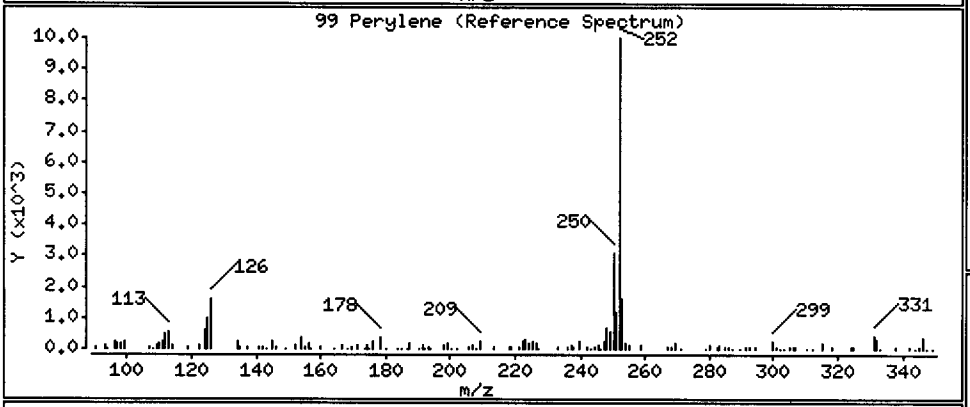
Concentration: 573.1 ug/kg

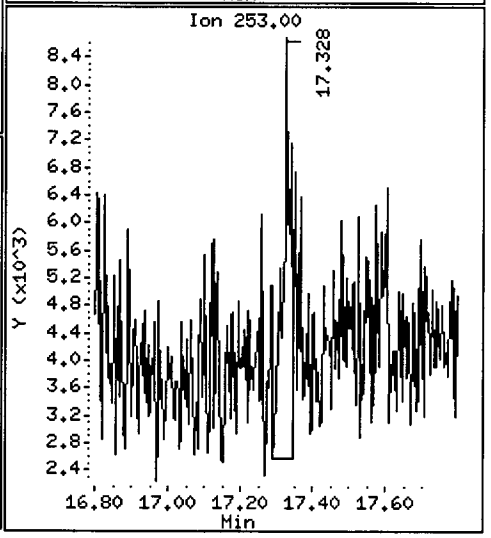


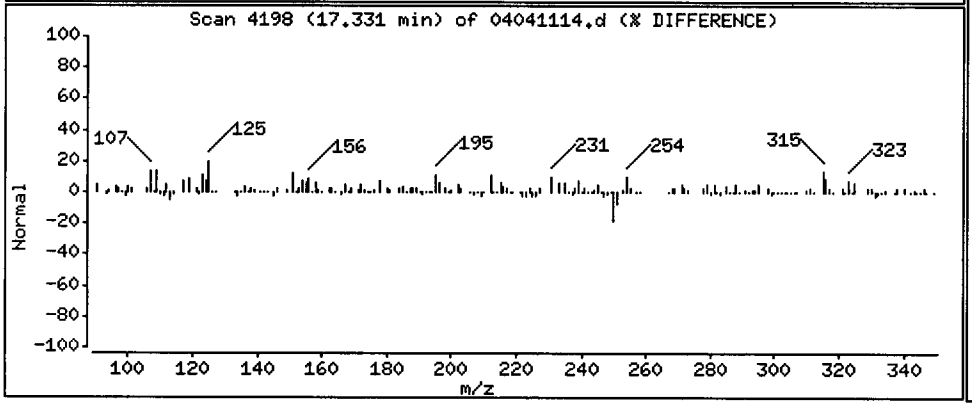












CO-ELUTION SUMMARY FOR FILE - 04041114.d

Lab ID: SN54F, Method: SIMPNA0331.m, Instrument: nt12.i, Date: 04-APR-2011

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

PCP/Chlorophenols Raw Data
Extraction Bench Sheets and Notes

ARI Job ID: SN54

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Benchsheet

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

Preparation Test PCP # 3

In-House (6.25ppb)

ARI Job No(s) SN54

Batch set up by: ~~SK~~

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
	SN54 MBS	Date 03/28/11	10.00g	1			10mL	100µL surr/spike + 600µL Deriv. Hex.	25mL	
	SBS	1	↓	2						
	~~SBSdup~~		↓							
	SN54 QLS	↓	↓	3						
2	A	checked	10.02	4						
4	B		10.00	5						
4	C		10.06	1						
2	D		10.07	7						
6	E		10.03	2						
6	EMS		10.05	3						
6	EMSD		10.03	4						
3	F		10.01	5						
2	G		10.09	7						
2	H		10.02	8						
								AR 4/1/2011	AR 4/1/2011	
						IS			IS	
Analyst/Date	AR 03/28/11 →		AC 3/28/11		RP 3/30/11	4-1-11 →			4-1-11	

Standard	Standard ID	Volume	Expiration Date	Analyst	Witness
Surrogate	**F** 1791-3	**50**µL 12.5	12/09/11	AR	PD
Spike	**6** 1791-5	**50**µL 12.5/12.5	12/10/11	AR	PD
QLS Spike	**16**	**25**µL	12/10/11	AR	PD
Extraction Time: 14:12	**Balance ID:** 24/50347		**Derivitized by:** AR 4/1/2011		**Diazald ID:** I6119

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

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

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

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

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

ARI Job No.: SN54 Client ID: Floyd Snider

Parameter: ~~GEMS~~ ~~PNA~~ JH PCP Client Project: Lois lake - Subsurface Sediment

Note problems, concerns, corrective actions	Analyst/Date
Screens: Soil/Sediment/Solid/Other:	
☐ No Anomalies (standard soil/sediment)	
☒ Wet sediment/sludge= Wet (A-H)	
☐ 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)= Samples A, B and C are provided in amber Jar.	WC 3/23/11
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates=	
☐ Emulsions=	
☐ Other (Details)=	
☒ Other Notes/Comments= Samples A, D, G and H were received as mostly water (~~78~~ %). As per project manager, Volume for these Samples was taken from the metals lab. Two jars each were centrifuged and combined by the Geotech lab.	JH 3/26/11
~~GCMS analysts reduced extraction weights for Samples A, D and G, based on sample pre-screens.~~	~~JH 3/26/11~~

3056F

Revision 007
02/25/10

SN54 : 00460

PCP/Chlorophenols Raw Data
Initial Calibration

ARI Job ID: SN54

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC Analyst Notes / Corrective Action Log

ARI Project ID: PCP Curve Client ID: ~~ARI~~

ARI SOP: **403S**(PCB) **405S**(Herb) **407S**(TPH-D) **409S**(HCID) **412S**(PCP) **423S**(Pest)
427S(Dir Inj) **428S**(EPH) **432S**(EDB) **Other**

Parameter(s): _____

Instrument: FID-3A FID-3B FID-4A FID-4B FID-5 FID-7 FID-8
FID-9 ECD-1 ECD-3 ECD-4 ECD-5 ECD-6 ECD-7

Dates: Curve: 4/1/2011 Analysis Start: 4/1/2011

Endrin/DDT Breakdown <15%?	YES / NO / ~~NA~~	Method Blank In Control?	YES / NO
ICal Meets RF & %RSD Criteria?	YES / NO	LCS/LCSD Recovery In Control?	YES / NO
CCal Meets RF & %RSD Criteria?	YES / NO	Surrogate Recovery In Control?	YES / NO
Manual Integrations for ICal?	YES / NO	Manual Integrations for Samples?	YES / NO
Internal Standard Meets Criteria?	YES / NO / NA	Special Analysis Criteria Met?	YES / ~~NO~~ / NA

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

Col 1: Quadratic - forced : 2,4-DCP & 2,3,4-TCP

Linear - forced : 2,4,6-TCP

Additional Details on Reverse: Yes / No

Analyst: _____ **Date:** 4/2/2011

Reviewer: VB **Date:** 4/2/11

MANUAL INTEGRATION SUMMARY FOR DATABATCH - /chem2/ecd1.i/PCP20110401.b/ical-1.b

ARI Job No.: PCP Method: PCP.m Instrument: ecd1.i Date: 01-APR-2011

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1629	0401A008.d	PCP	D	1	NO MANUAL INTEGRATION
1706	0401A009.d	PCP	A	1	Pentachlorophenol, 2,3,4,5-Tetrachlorophenol,
1742	0401A010.d	PCP	B	1	NO MANUAL INTEGRATION
1818	0401A011.d	PCP	C	1	NO MANUAL INTEGRATION
1854	0401A012.d	PCP	E	1	NO MANUAL INTEGRATION
1931	0401A013.d	PCP	F	1	NO MANUAL INTEGRATION
0921	0401A036.d	PCP	ICV	1	2,4,6-Trichlorophenol, 2,3,4-Trichlorophenol,