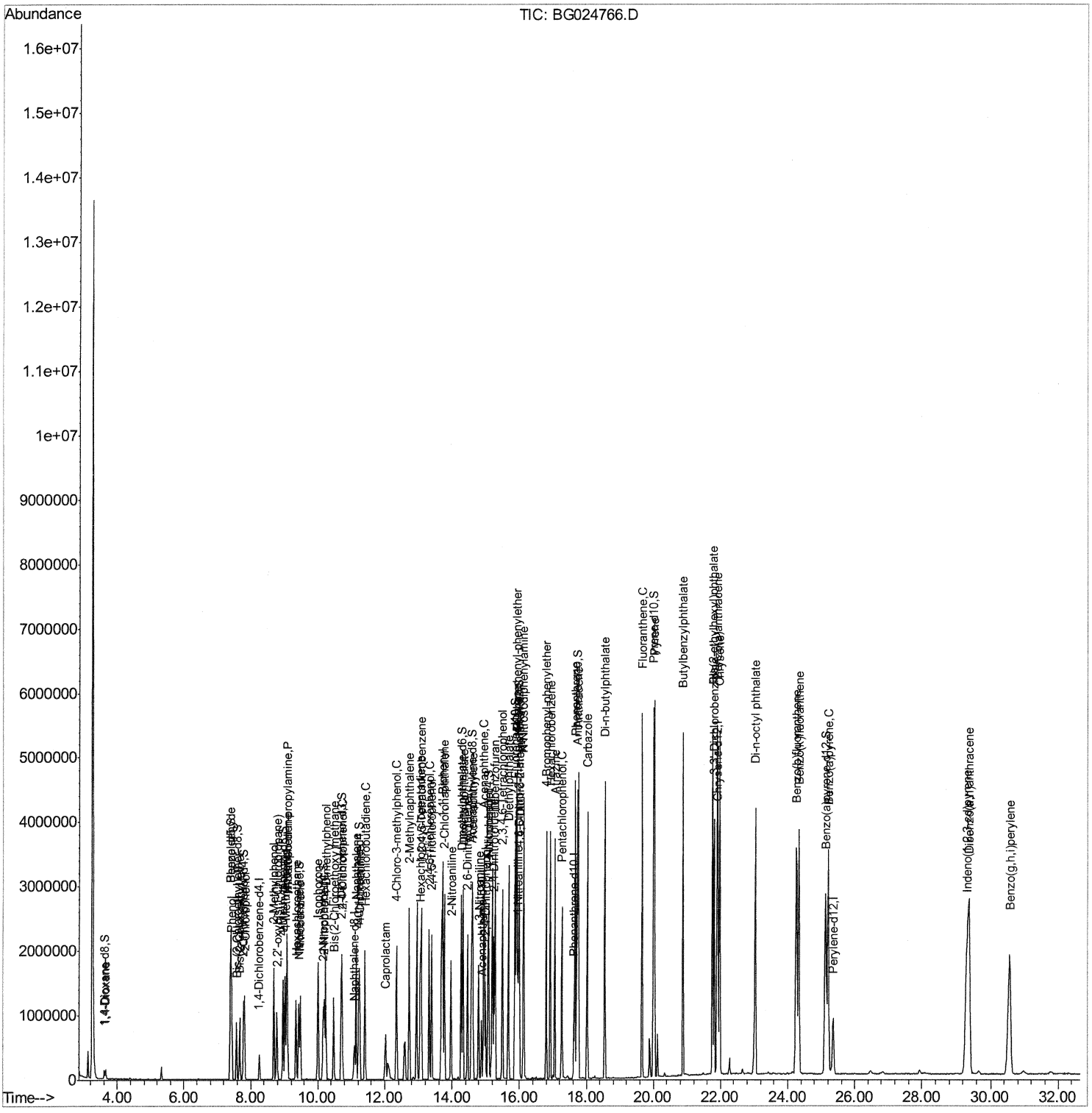
Data Path : Z:\HPCHEM1\BNA G\DATA\BG111416\
Data File : BG024766.D
Acq On : 14 Nov 2016 13:04
Operator : UM/SJ
Sample : SSTD08005
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Nov 14 13:48:34 2016
Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG111416.M
Quant Title : SVOA CALIBRATION
QLast Update : Mon Nov 14 12:59:58 2016
Response via : Initial Calibration

Instrument :
BNA_G
ClientSampleId :
SSTD08005

Manual Integrations APPROVED
sohil
11/15/2016 2:58:48 PM

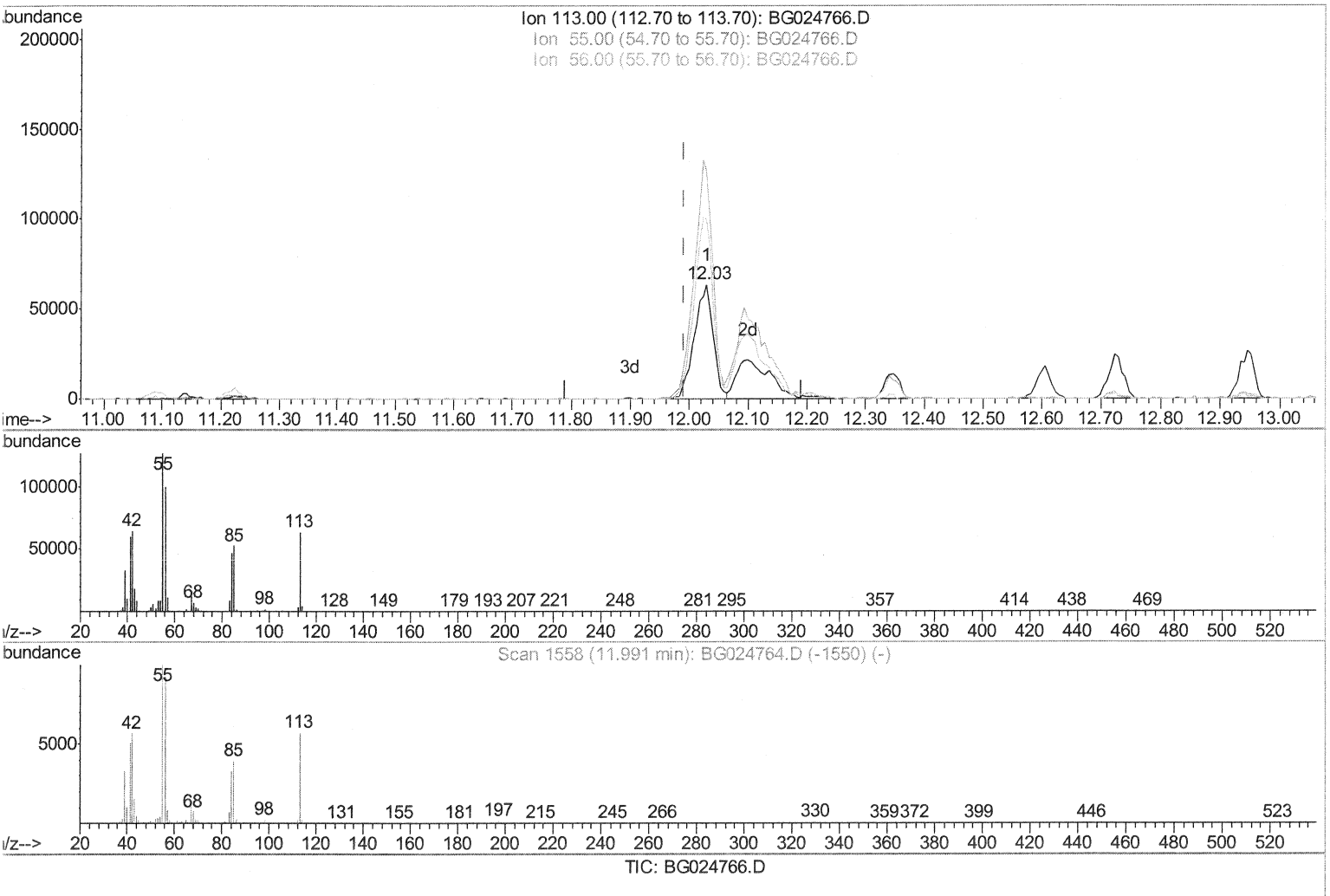


Data Path : Z:\HPCHEM1\BNA G\DATA\BG111416\
Data File : BG024766.D
Acq On : 14 Nov 2016 13:04
Operator : UM/SJ
Sample : SSTD08005
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Nov 14 13:43:46 2016
Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG111416.M
Quant Title : SVOA CALIBRATION
QLast Update : Mon Nov 14 12:59:58 2016
Response via : Initial Calibration

Instrument :
BNA_G
ClientSampleId :
SSTD08005

Manual Integrations APPROVED
sohil
11/15/2016 2:58:48 PM



(32) Caprolactam

12.029min (+0.038) 53.71ng/ul

response 142677

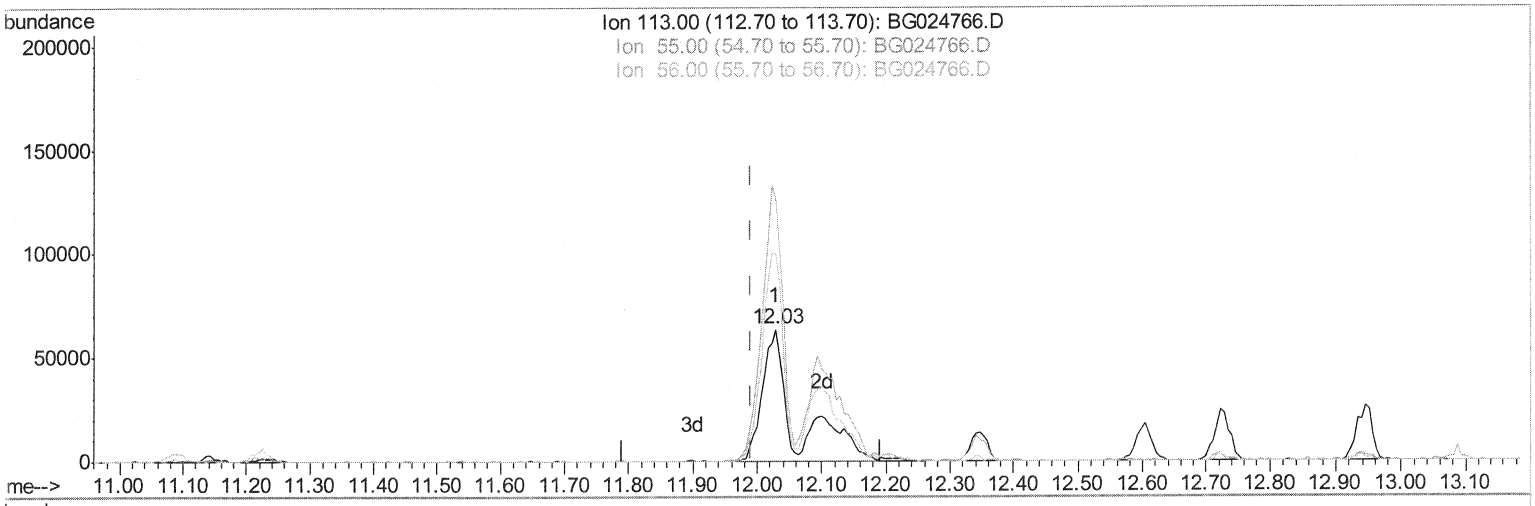
Ion	Exp%	Act%
113.00	100	100
55.00	210.70	198.84
56.00	160.60	156.26
0.00	0.00	0.00

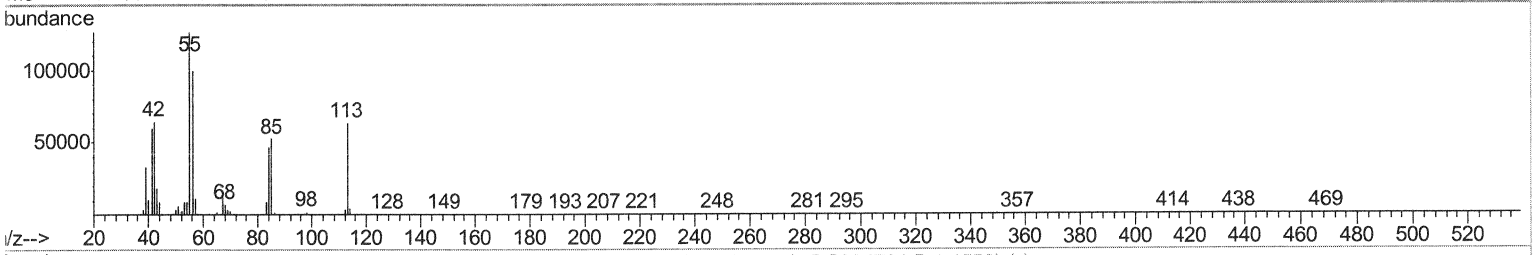
Data Path : Z:\HPCHEM1\BNA G\DATA\BG111416\
Data File : BG024766.D
Acq On : 14 Nov 2016 13:04
Operator : UM/SJ
Sample : SSTD08005
Misc :
ALS Vial : 6 Sample Multiplier: 1

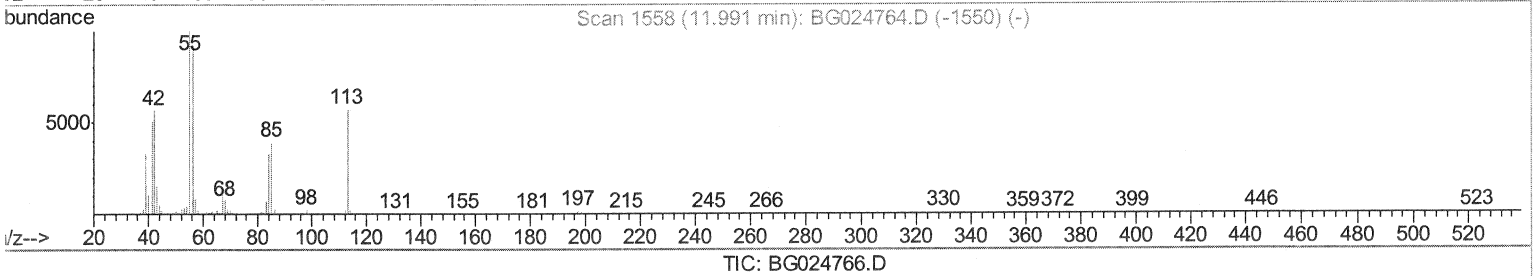
Quant Time: Nov 14 13:43:46 2016
Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG111416.M
Quant Title : SVOA CALIBRATION
QLast Update : Mon Nov 14 12:59:58 2016
Response via : Initial Calibration

Instrument :
BNA_G
ClientSampleId :
SSTD08005

Manual Integrations APPROVED
sohil
11/15/2016 2:58:48 PM







TIC: BG024766.D

(32) Caprolactam

12.029min (+0.038) 85.71ng/ul m SJ 11/15/16

response 227688

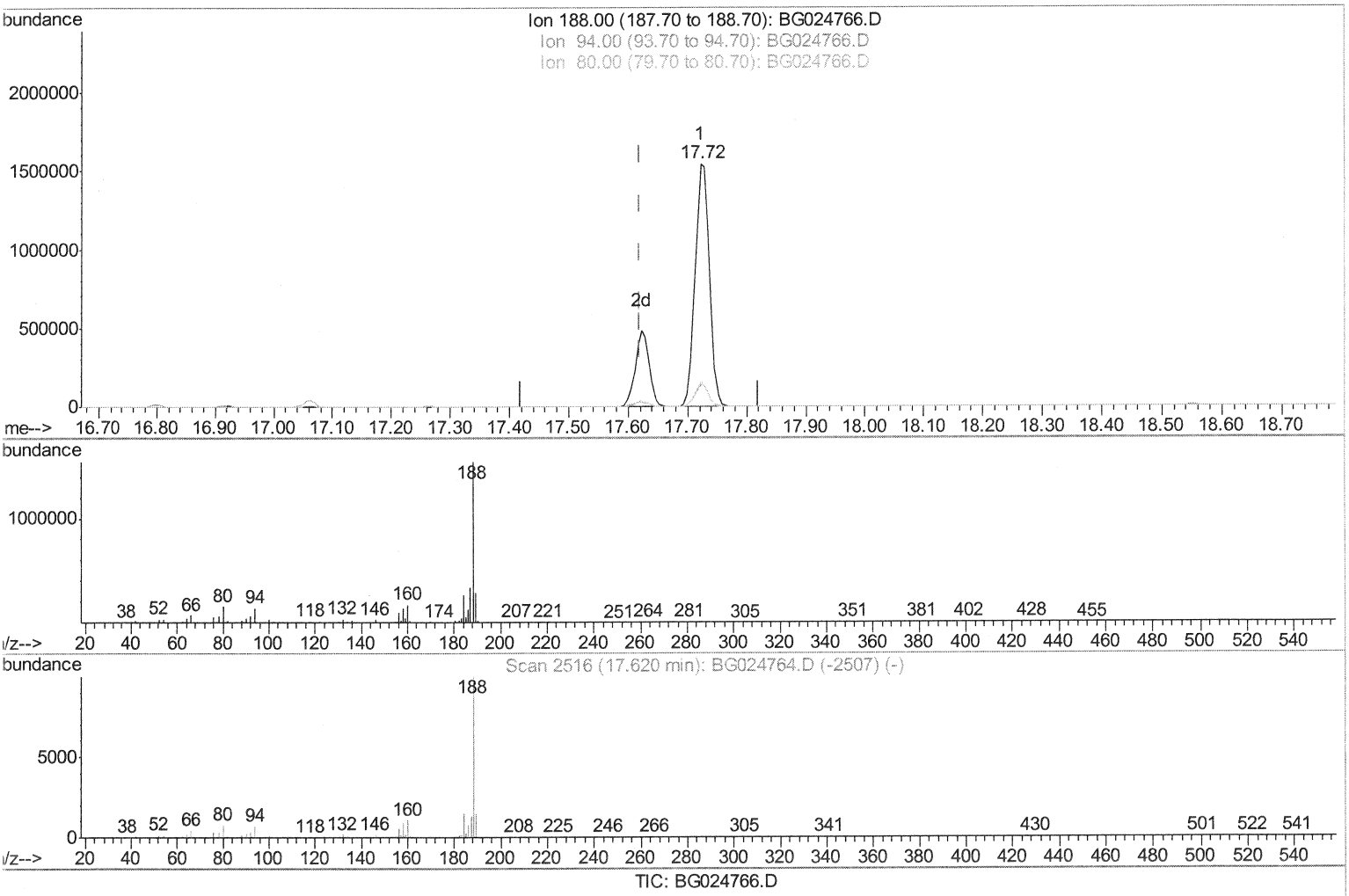
Ion	Exp%	Act%
113.00	100	100
55.00	210.70	198.84
56.00	160.60	156.26
0.00	0.00	0.00

Data Path : Z:\HPCHEM1\BNA G\DATA\BG111416\
Data File : BG024766.D
Acq On : 14 Nov 2016 13:04
Operator : UM/SJ
Sample : SSTD08005
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Nov 14 13:43:46 2016
Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG111416.M
Quant Title : SVOA CALIBRATION
QLast Update : Mon Nov 14 12:59:58 2016
Response via : Initial Calibration

Instrument :
BNA_G
ClientSampleId :
SSTD08005

Manual Integrations APPROVED
sohil
11/15/2016 2:58:48 PM



TIC: BG024766.D

(61) Phenanthrene-d10 (I)

17.722min (+0.102) 20.00ng/ul

response 2615504

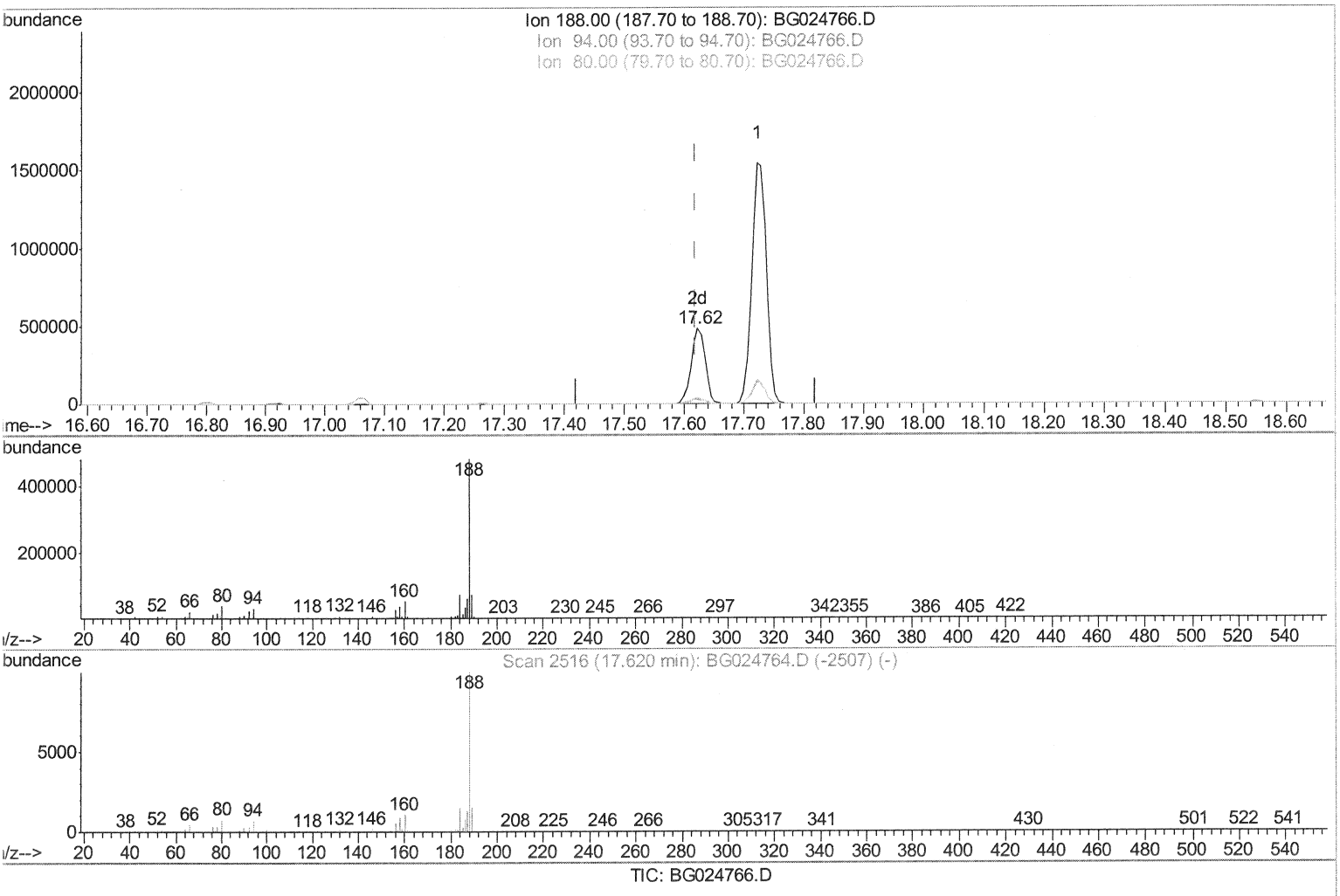
Ion	Exp%	Act%
188.00	100	100
94.00	8.80	9.11
80.00	9.50	10.01
0.00	0.00	0.00

Data Path : Z:\HPCHEM1\BNA G\DATA\BG111416\
Data File : BG024766.D
Acq On : 14 Nov 2016 13:04
Operator : UM/SJ
Sample : SSTD08005
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Nov 14 13:46:30 2016
Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG111416.M
Quant Title : SVOA CALIBRATION
QLast Update : Mon Nov 14 12:59:58 2016
Response via : Initial Calibration

Instrument :
BNA_G
ClientSampleId :
SSTD08005

Manual Integrations APPROVED
sohil
11/15/2016 2:58:48 PM



TIC: BG024766.D

(61) Phenanthrene-d10 (I)

17.622min (+0.002) 20.00ng/ul m SJ 11/15/16

response 791045

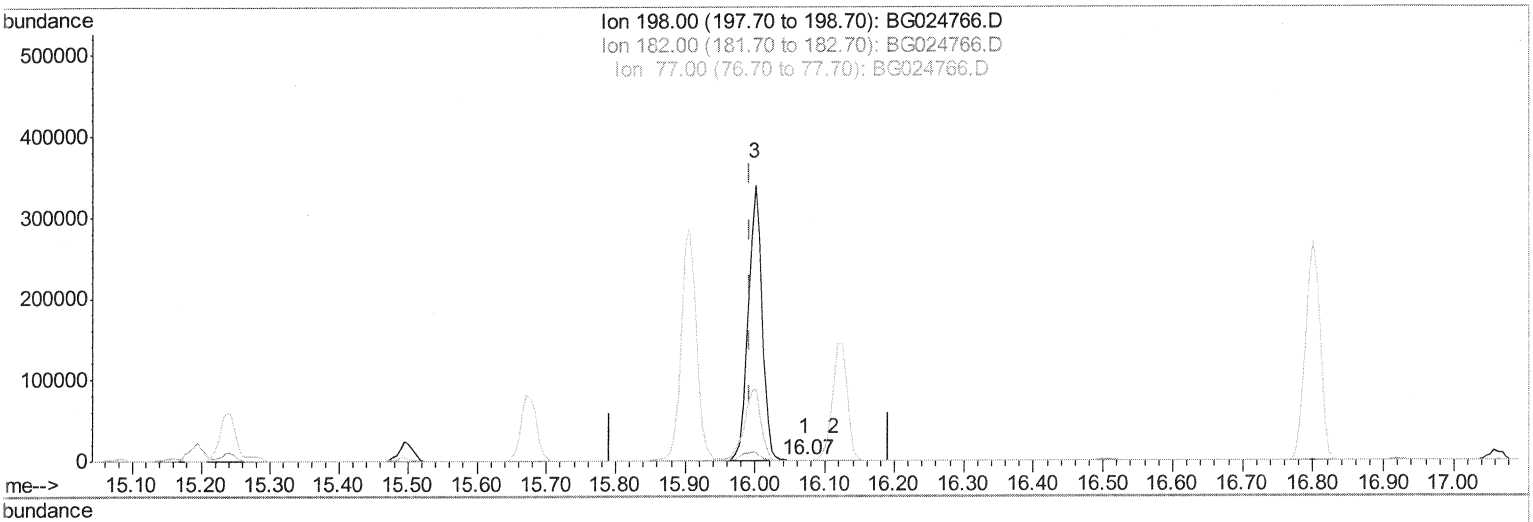
Ion	Exp%	Act%
188.00	100	100
94.00	8.80	6.49#
80.00	9.50	8.14
0.00	0.00	0.00

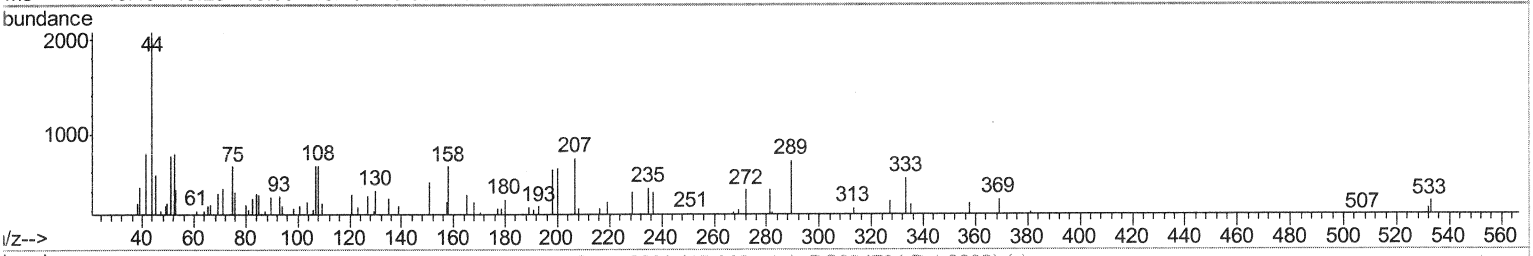
Data Path : Z:\HPCHEM1\BNA G\DATA\BG111416\
Data File : BG024766.D
Acq On : 14 Nov 2016 13:04
Operator : UM/SJ
Sample : SSTD08005
Misc :
ALS Vial : 6 Sample Multiplier: 1

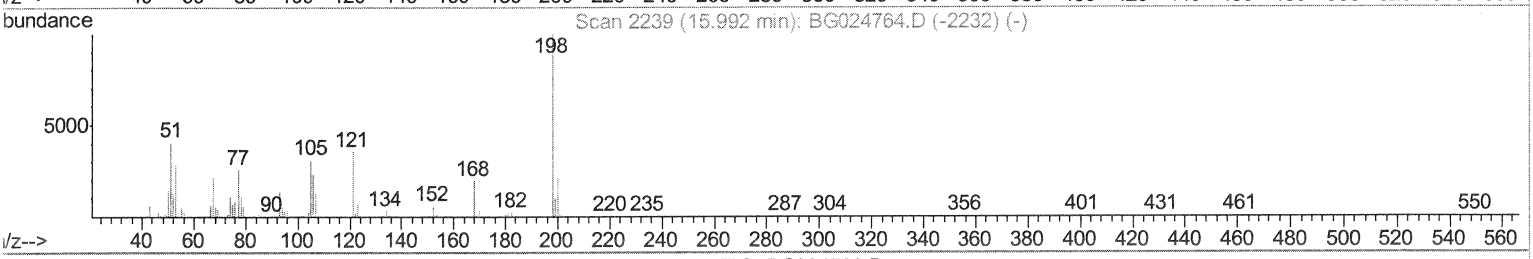
Quant Time: Nov 14 13:46:30 2016
Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG111416.M
Quant Title : SVOA CALIBRATION
QLast Update : Mon Nov 14 12:59:58 2016
Response via : Initial Calibration

Instrument :
BNA_G
ClientSampleId :
SSTD08005

Manual Integrations APPROVED
sohil
11/15/2016 2:58:48 PM







TIC: BG024766.D

(63) 4,6-Dinitro-2-methylphenol

16.071min (+0.079) 0.12ng/ul

response 600

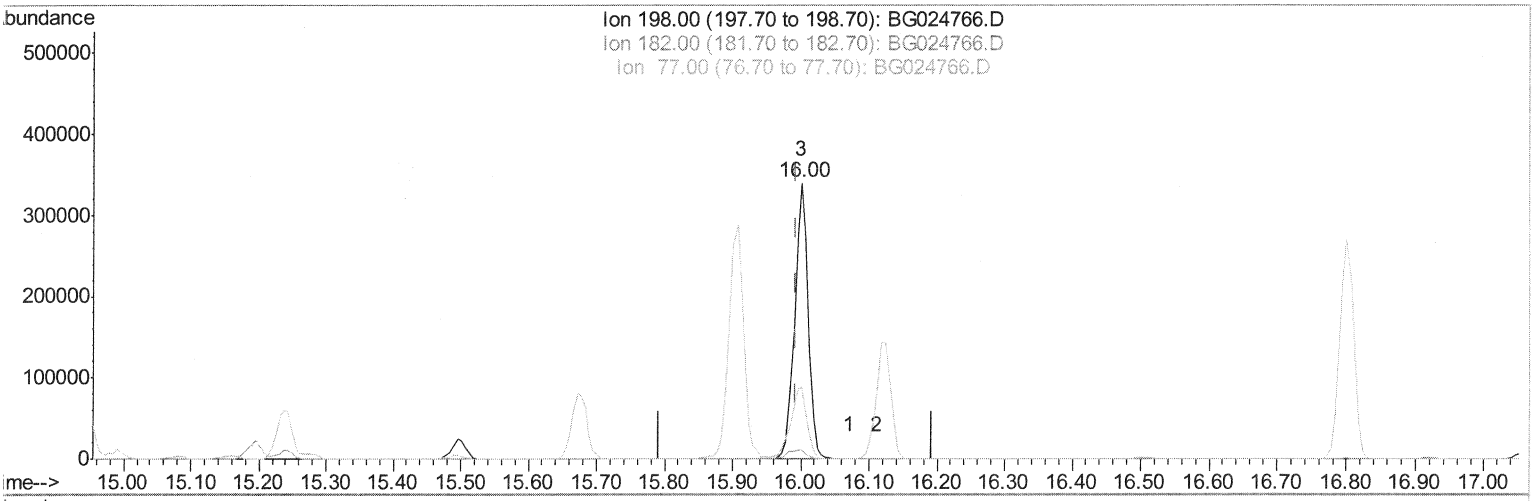
Ion	Exp%	Act%
198.00	100	100
182.00	6.10	0.00#
77.00	28.00	0.00#
0.00	0.00	0.00

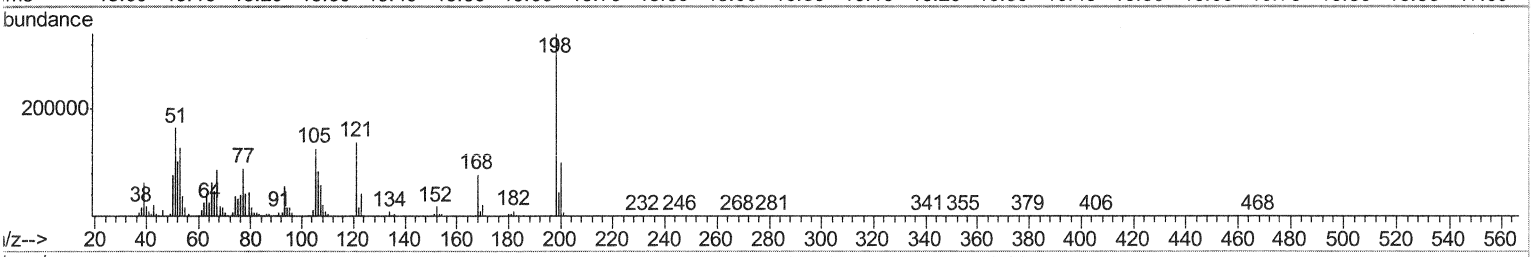
Data Path : Z:\HPCHEM1\BNA G\DATA\BG111416\
Data File : BG024766.D
Acq On : 14 Nov 2016 13:04
Operator : UM/SJ
Sample : SSTD08005
Misc :
ALS Vial : 6 Sample Multiplier: 1

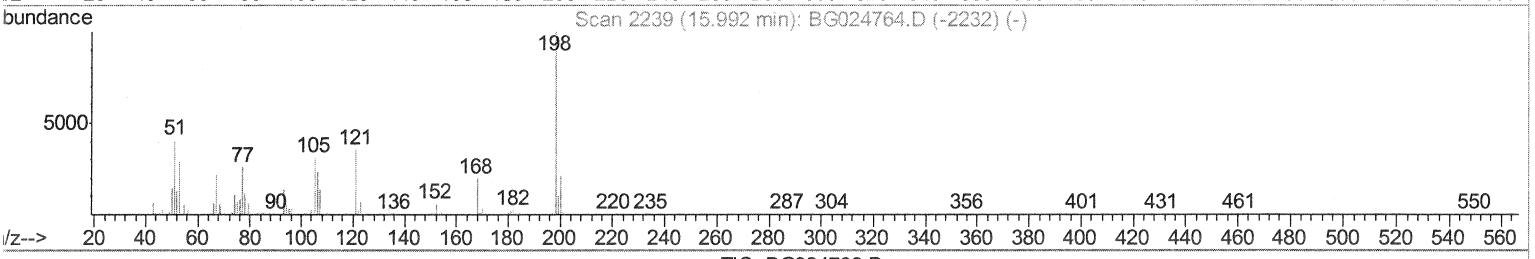
Quant Time: Nov 14 13:46:30 2016
Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG111416.M
Quant Title : SVOA CALIBRATION
QLast Update : Mon Nov 14 12:59:58 2016
Response via : Initial Calibration

Instrument :
BNA_G
ClientSampleId :
SSTD08005

Manual Integrations APPROVED
sohil
11/15/2016 2:58:48 PM







TIC: BG024766.D

(63) 4,6-Dinitro-2-methylphenol

16.001min (+0.008) 95.42ng/ul m SJ 11/15/16

response 475474

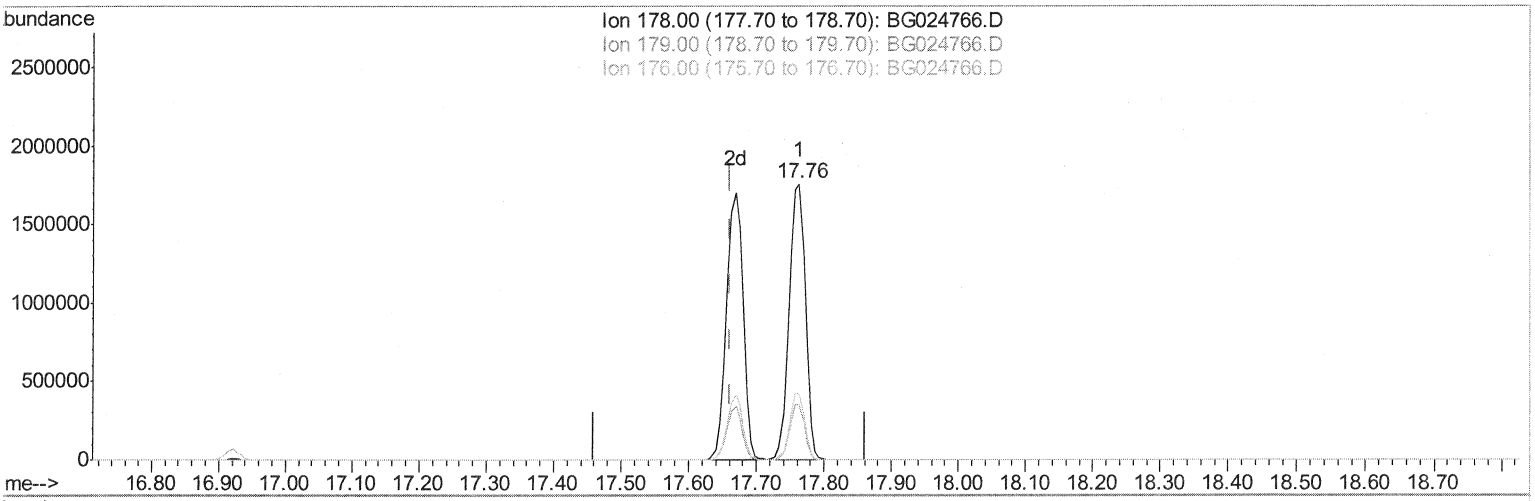
Ion	Exp%	Act%
198.00	100	100
182.00	6.10	3.10#
77.00	28.00	26.14
0.00	0.00	0.00

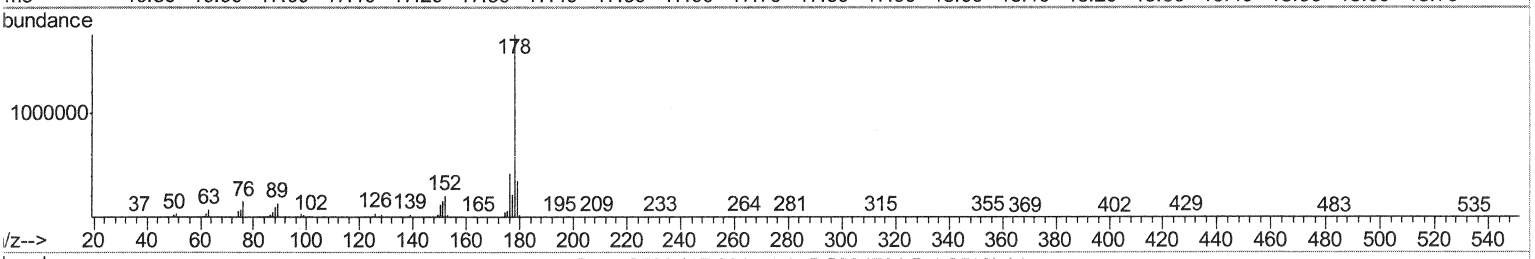
Data Path : Z:\HPCHEM1\BNA G\DATA\BG111416\
Data File : BG024766.D
Acq On : 14 Nov 2016 13:04
Operator : UM/SJ
Sample : SSTD08005
Misc :
ALS Vial : 6 Sample Multiplier: 1

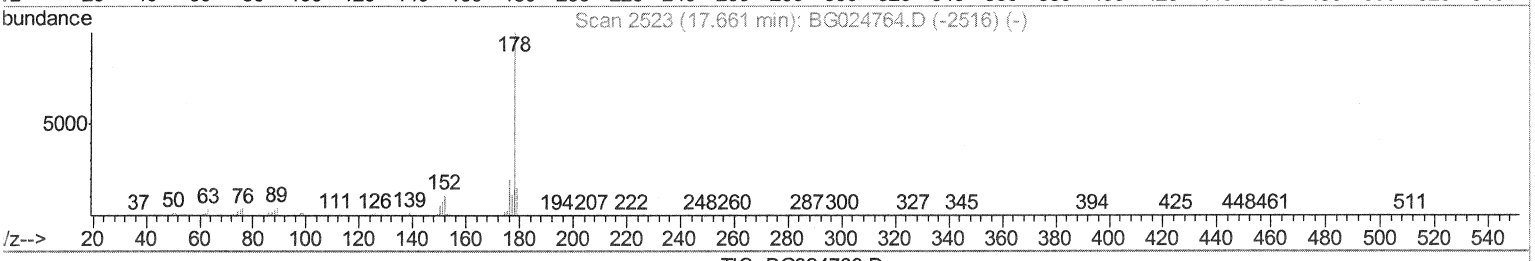
Quant Time: Nov 14 13:46:30 2016
Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG111416.M
Quant Title : SVOA CALIBRATION
QLast Update : Mon Nov 14 12:59:58 2016
Response via : Initial Calibration

Instrument :
BNA_G
ClientSampleId :
SSTD08005

Manual Integrations APPROVED
sohil
11/15/2016 2:58:48 PM







TIC: BG024766.D

(69) Phenanthrene

17.763min (+0.102) 72.99ng/ul

response 2915086

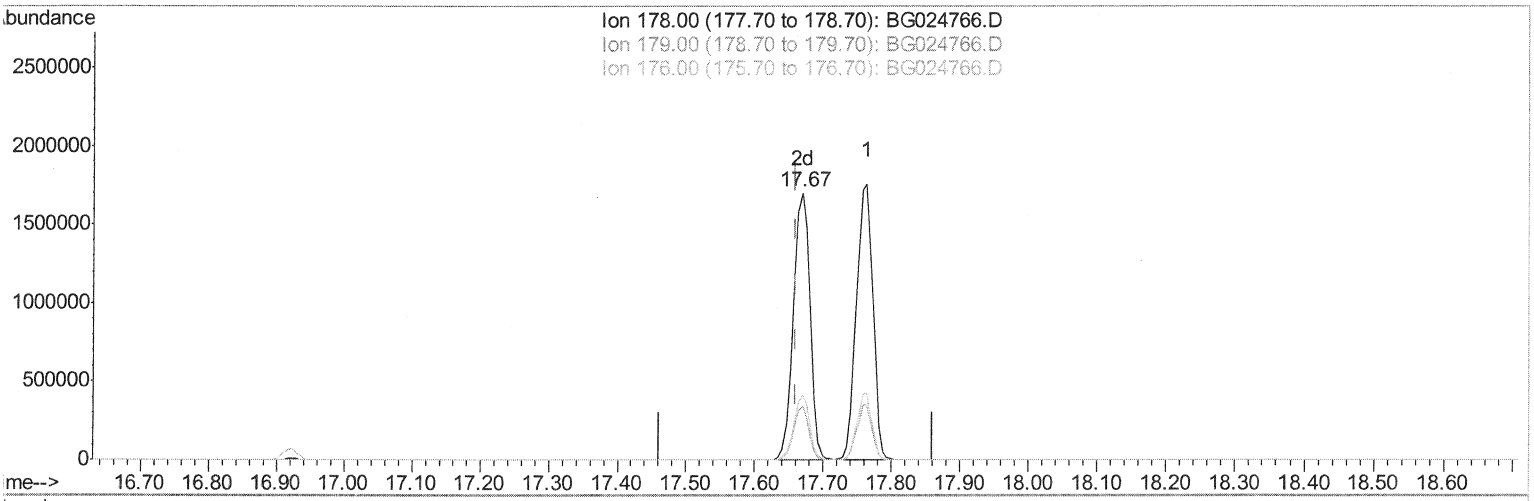
Ion	Exp%	Act%
178.00	100	100
179.00	15.50	20.06#
176.00	20.60	24.13
0.00	0.00	0.00

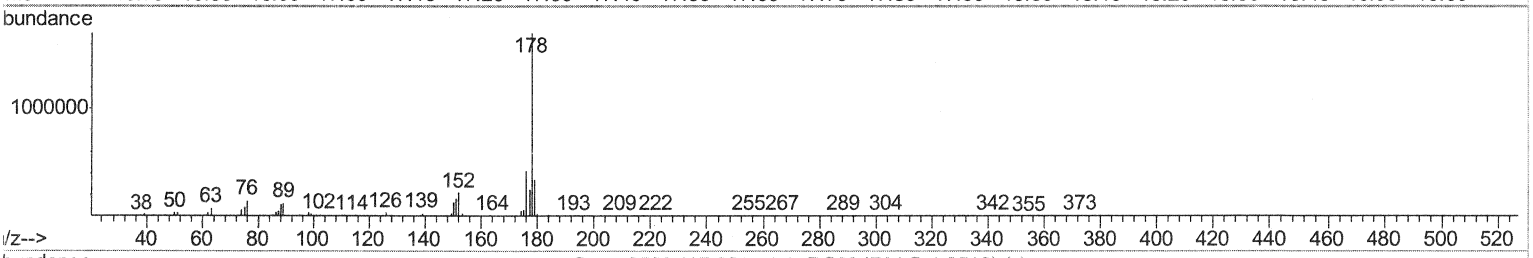
Data Path : Z:\HPCHEM1\BNA G\DATA\BG111416\
Data File : BG024766.D
Acq On : 14 Nov 2016 13:04
Operator : UM/SJ
Sample : SSTD08005
Misc :
ALS Vial : 6 Sample Multiplier: 1

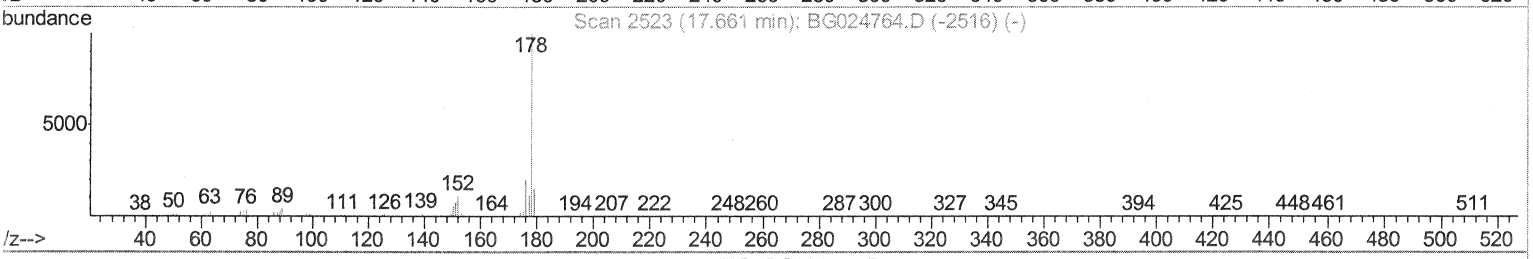
Quant Time: Nov 14 13:46:30 2016
Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG111416.M
Quant Title : SVOA CALIBRATION
QLast Update : Mon Nov 14 12:59:58 2016
Response via : Initial Calibration

Instrument :
BNA_G
ClientSampleId :
SSTD08005

Manual Integrations APPROVED
sohil
11/15/2016 2:58:48 PM







TIC: BG024766.D

(69) Phenanthrene

17.669min (+0.008) 72.61ng/ul m SJ 11/15/16

response 2900199

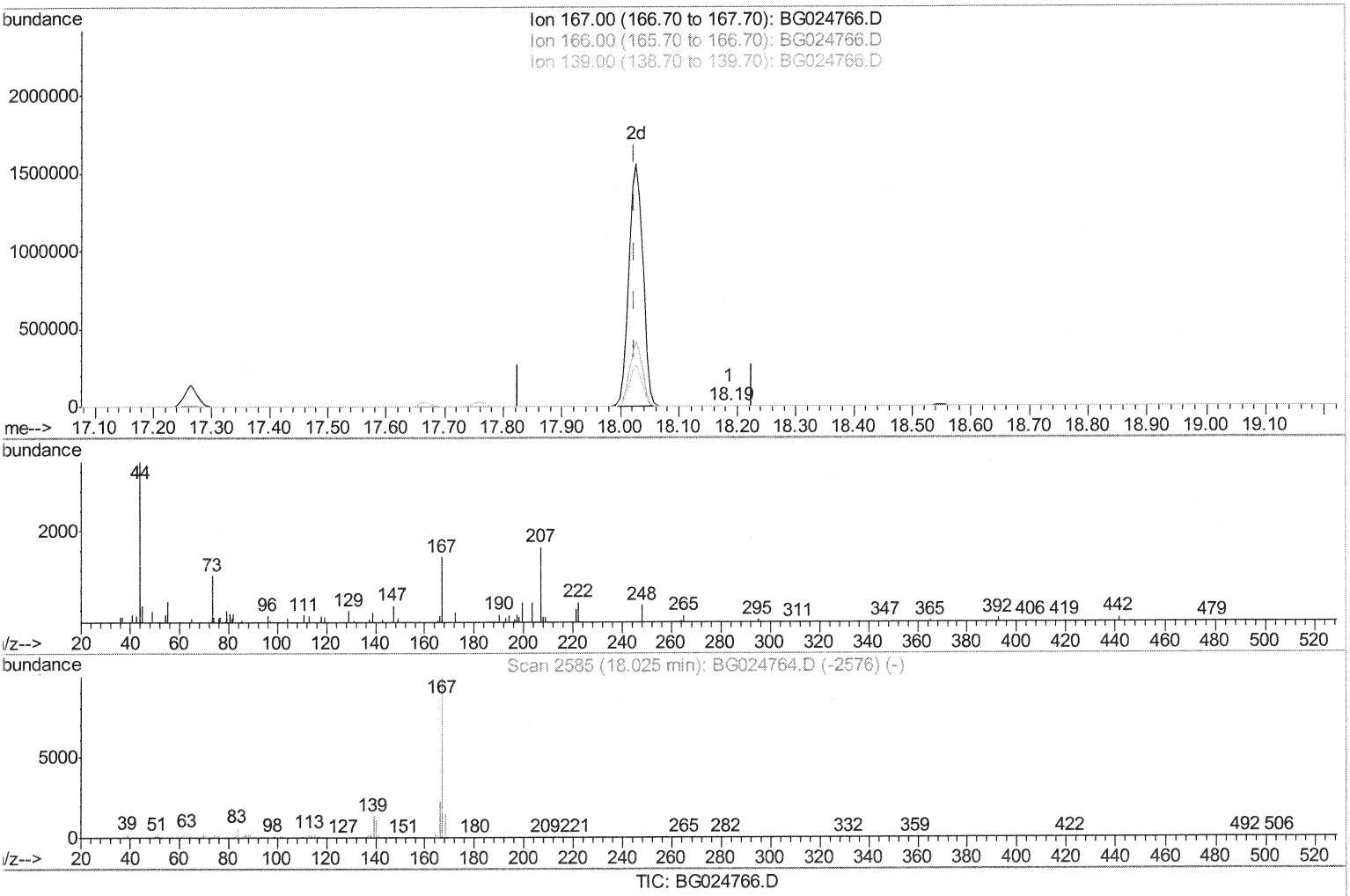
Ion	Exp%	Act%
178.00	100	100
179.00	15.50	20.11#
176.00	20.60	24.57
0.00	0.00	0.00

Data Path : Z:\HPCHEM1\BNA G\DATA\BG111416\
Data File : BG024766.D
Acq On : 14 Nov 2016 13:04
Operator : UM/SJ
Sample : SSTD08005
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Nov 14 13:46:30 2016
Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG111416.M
Quant Title : SVOA CALIBRATION
QLast Update : Mon Nov 14 12:59:58 2016
Response via : Initial Calibration

Instrument :
BNA_G
ClientSampleId :
SSTD08005

Manual Integrations APPROVED
sohil
11/15/2016 2:58:48 PM



TIC: BG024766.D

(72) Carbazole

18.186min (+0.161) 0.09ng/ul

response 2784

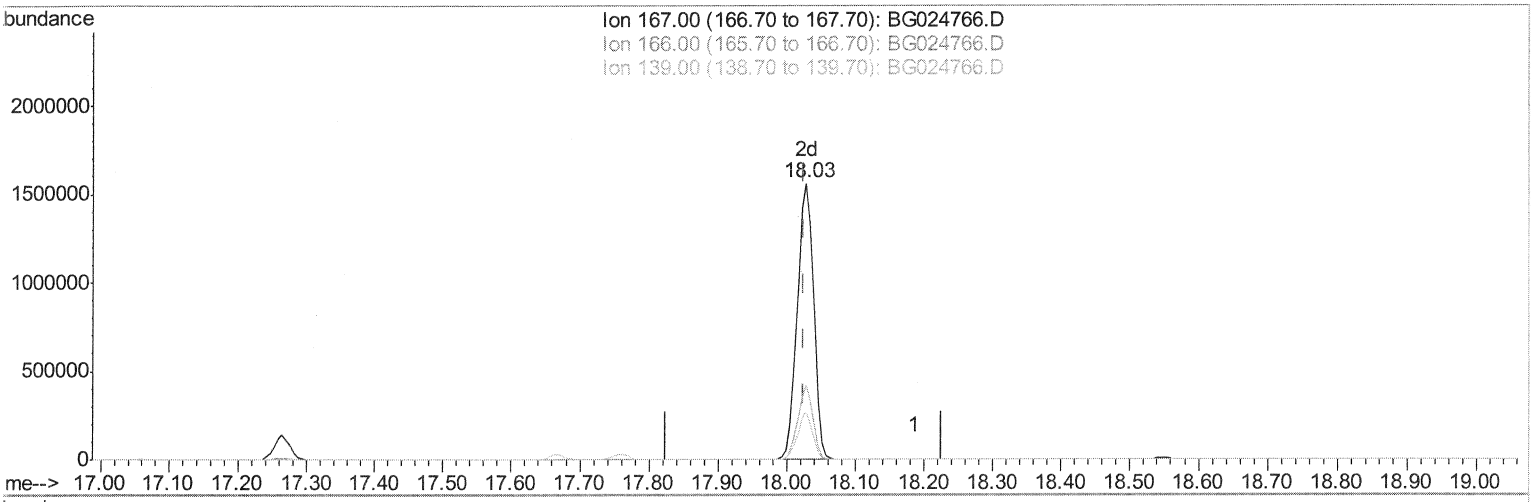
Ion	Exp%	Act%
167.00	100	100
166.00	22.40	19.84
139.00	13.10	24.12#
0.00	0.00	0.00

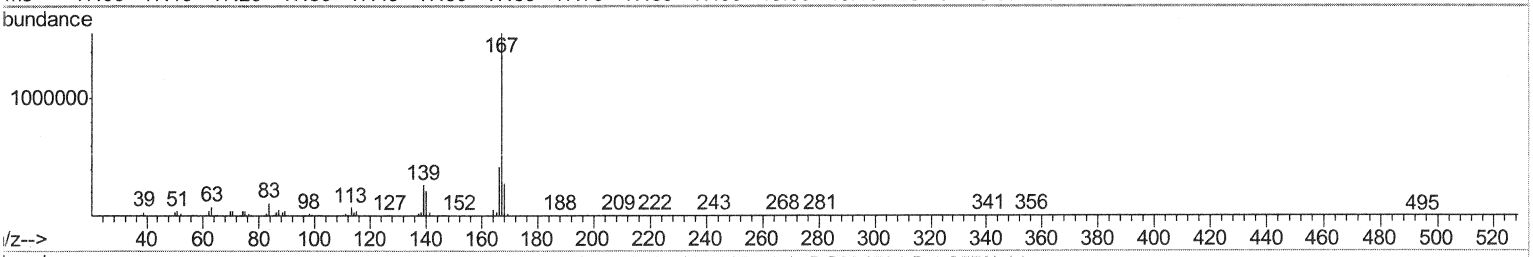
Data Path : Z:\HPCHEM1\BNA G\DATA\BG111416\
Data File : BG024766.D
Acq On : 14 Nov 2016 13:04
Operator : UM/SJ
Sample : SSTD08005
Misc :
ALS Vial : 6 Sample Multiplier: 1

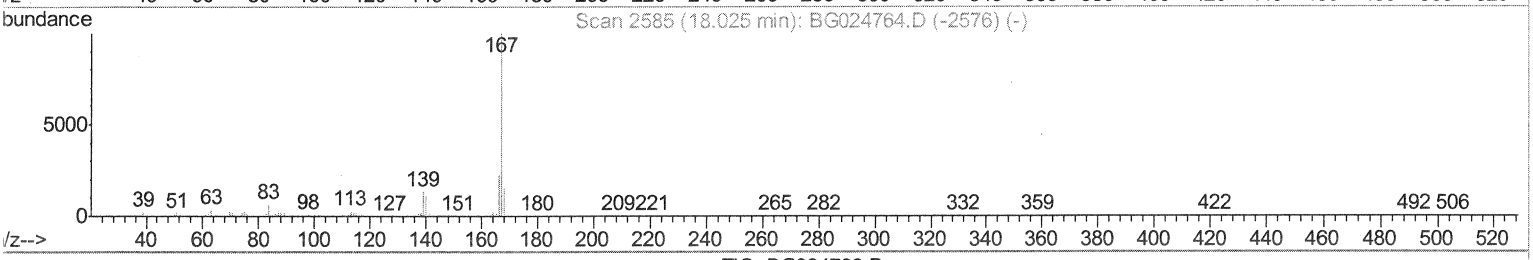
Quant Time: Nov 14 13:46:30 2016
Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG111416.M
Quant Title : SVOA CALIBRATION
QLast Update : Mon Nov 14 12:59:58 2016
Response via : Initial Calibration

Instrument :
BNA_G
ClientSampleId :
SSTD08005

Manual Integrations APPROVED
sohil
11/15/2016 2:58:48 PM







TIC: BG024766.D

(72) Carbazole

18.028min (+0.002) 81.01ng/ul m

SJ 11/15/16

response 2584357

Ion	Exp%	Act%
167.00	100	100
166.00	22.40	27.01#
139.00	13.10	16.98#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : Z:\HPCHEM1\BNA G\DATA\BG111416\
Data File : BG024766.D
Acq On : 14 Nov 2016 13:04
Operator : UM/SJ
Sample : SSTD08005
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Nov 14 13:48:34 2016
Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG111416.M
Quant Title : SVOA CALIBRATION
QLast Update : Mon Nov 14 12:59:58 2016
Response via : Initial Calibration

Instrument :
BNA_G
ClientSampleId :
SSTD08005

Manual Integrations APPROVED
sohil
11/15/2016 2:58:48 PM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.26	152	102195	20.00	ng/ul	0.00
18) Naphthalene-d8	11.09	136	421504	20.00	ng/ul	0.00
35) Acenaphthene-d10	14.88	164	353976	20.00	ng/ul	0.00
61) Phenanthrene-d10	17.62	188	791045m	20.00	ng/ul	0.00
75) Chrysene-d12	21.92	240	1017264	20.00	ng/ul	0.00
83) Perylene-d12	25.36	264	1054484	20.00	ng/ul	0.01
System Monitoring Compounds						
3) 1,4-Dioxane-d8	3.62	96	61795	28.72	ng/uL	0.00
5) Phenol-d5	7.40	99	707116	74.16	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	7.58	67	446629	69.29	ng/ul	0.00
9) 2-Chlorophenol-d4	7.79	132	508180	77.40	ng/ul	0.00
13) 4-Methylphenol-d8	8.96	113	594991	77.19	ng/ul	0.00
19) Nitrobenzene-d5	9.44	128	261751	87.50	ng/ul	0.00
22) 2-Nitrophenol-d4	10.17	143	320758	95.85	ng/ul	0.00
26) 2,4-Dichlorophenol-d3	10.70	165	624869	85.73	ng/ul	0.00
29) 4-Chloroaniline-d4	11.22	131	665244	86.87	ng/ul	0.00
43) Dimethylphthalate-d6	14.28	166	1960493	79.32	ng/ul	0.00
46) Acenaphthylene-d8	14.58	160	2144416	75.74	ng/ul	0.00
51) 4-Nitrophenol-d4	15.07	143	370605	84.57	ng/ul	0.01
57) Fluorene-d10	15.87	176	1830030	78.31	ng/ul	0.00
62) 4,6-Dinitro-2-methylphenol	15.98	200	462944	97.38	ng/ul	0.00
70) Anthracene-d10	17.72	188	2617352	73.25	ng/ul	0.00
76) Pyrene-d10	20.00	212	3048798	64.21	ng/ul	0.00
87) Benzo(a)pyrene-d12	25.13	264	3647423	76.88	ng/ul	0.01
Target Compounds						Qvalue
2) 1,4-Dioxane	3.66	88	76208	32.68	ng/uL	94
4) Benzaldehyde	7.39	77	455608	67.90	ng/ul	97
6) Phenol	7.43	94	729400	75.37	ng/ul	94
8) Bis(2-Chloroethyl)ether	7.67	93	515144	72.31	ng/ul	94
10) 2-Chlorophenol	7.82	128	493870	74.22	ng/ul	94
11) 2-Methylphenol	8.69	108	549319	76.64	ng/ul	90
12) 2,2'-oxybis(1-Chloropropan	8.79	45	872542	61.34	ng/ul	96
14) Acetophenone	9.09	105	874664	76.41	ng/ul	90
15) N-Nitroso-di-n-propylamine	9.07	70	511516	74.10	ng/ul#	89
16) 4-Methylphenol	9.03	108	587983	77.34	ng/ul	100
17) Hexachloroethane	9.35	117	224216	72.85	ng/ul	94
20) Nitrobenzene	9.48	77	778940	82.28	ng/ul	99
21) Isophorone	10.00	82	1404429	81.62	ng/ul	100
23) 2-Nitrophenol	10.20	139	319130	87.50	ng/ul	93
24) 2,4-Dimethylphenol	10.24	107	749383	83.39	ng/ul	96
25) Bis(2-Chloroethoxy)methane	10.48	93	720686	76.41	ng/ul#	91
27) 2,4-Dichlorophenol	10.73	162	598297	85.62	ng/ul	95
28) Naphthalene	11.14	128	1569630	77.33	ng/ul	97
30) 4-Chloroaniline	11.25	127	647640	83.34	ng/ul	95
31) Hexachlorobutadiene	11.41	225	499933	89.32	ng/ul	89
32) Caprolactam	12.03	113	227688m	85.71	ng/ul	
33) 4-Chloro-3-methylphenol	12.35	107	713847	83.47	ng/ul	97
34) 2-Methylnaphthalene	12.72	142	1238152	76.74	ng/ul	97

SJ 11/15/16

SJ 11/15/16

Data Path : Z:\HPCHEM1\BNA G\DATA\BG111416\
Data File : BG024766.D
Acq On : 14 Nov 2016 13:04
Operator : UM/SJ
Sample : SSTD08005
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_G
ClientSampleId :
SSTD08005

Manual Integrations APPROVED
sohil
11/15/2016 2:58:48 PM

Quant Time: Nov 14 13:48:34 2016
Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG111416.M
Quant Title : SVOA CALIBRATION
QLast Update : Mon Nov 14 12:59:58 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
36) 1,2,4,5-Tetrachlorobenzene	13.09	216	904883	86.69	ng/ul#	93
37) Hexachlorocyclopentadiene	13.06	237	619768	80.97	ng/ul	95
38) 2,4,6-Trichlorophenol	13.32	196	565662	83.57	ng/ul	86
39) 2,4,5-Trichlorophenol	13.40	196	626415	84.22	ng/ul	97
40) 1,1'-Biphenyl	13.72	154	1727945	75.38	ng/ul	99
41) 2-Chloronaphthalene	13.77	162	1368413	76.15	ng/ul	92
42) 2-Nitroaniline	13.97	65	578410	84.57	ng/ul	96
44) Dimethylphthalate	14.33	163	1868719	77.11	ng/ul#	98
45) 2,6-Dinitrotoluene	14.46	165	433293	92.15	ng/ul#	95
47) Acenaphthylene	14.61	152	2047965	75.17	ng/ul	96
48) 3-Nitroaniline	14.79	138	356184	80.18	ng/ul#	85
49) Acenaphthene	14.95	153	1486512	76.33	ng/ul	97
50) 2,4-Dinitrophenol	14.99	184	327195	103.73	ng/ul	87
52) 4-Nitrophenol	15.09	109	444265	83.67	ng/ul	95
53) Dibenzofuran	15.28	168	2163669	75.49	ng/ul	93
54) 2,4-Dinitrotoluene	15.24	165	633622	90.94	ng/ul	93
55) 2,3,4,6-Tetrachlorophenol	15.50	232	657483	90.05	ng/ul	93
56) Diethylphthalate	15.68	149	1930185	75.55	ng/ul#	93
58) Fluorene	15.92	166	1802943	76.08	ng/ul	97
59) 4-Chlorophenyl-phenylether	15.91	204	1048100	79.69	ng/ul	92
60) 4-Nitroaniline	15.95	138	413509	80.83	ng/ul	96
63) 4,6-Dinitro-2-methylphenol	16.00	198	475474m	95.42	ng/ul	
64) N-Nitrosodiphenylamine	16.12	169	1676668	74.94	ng/ul	98
65) 4-Bromophenyl-phenylether	16.80	248	799786	87.30	ng/ul	94
66) Hexachlorobenzene	16.92	284	882042	86.28	ng/ul	96
67) Atrazine	17.06	200	794249	86.79	ng/ul	96
68) Pentachlorophenol	17.26	266	547614	88.13	ng/ul	93
69) Phenanthrene	17.67	178	2900199m	72.61	ng/ul	
71) Anthracene	17.76	178	2913974	71.68	ng/ul#	90
72) Carbazole	18.03	167	2584357m	81.01	ng/ul	
73) Di-n-butylphthalate	18.55	149	2918659	74.80	ng/ul#	92
74) Fluoranthene	19.66	202	3367630	83.48	ng/ul#	95
77) Pyrene	20.03	202	3311588	60.95	ng/ul#	93
78) Butylbenzylphthalate	20.88	149	1517145	69.50	ng/ul#	96
79) 3,3'-Dichlorobenzidine	21.81	252	1481974	78.23	ng/ul	90
80) Benzo(a)anthracene	21.90	228	3817594	67.63	ng/ul#	86
81) Bis(2-ethylhexyl)phthalate	21.76	149	2095928	67.88	ng/ul#	90
82) Chrysene	21.98	228	3621006	67.38	ng/ul#	85
84) Di-n-octyl phthalate	23.03	149	3475106	70.24	ng/ul	100
85) Benzo(b)fluoranthene	24.26	252	4304913	73.53	ng/ul	94
86) Benzo(k)fluoranthene	24.33	252	3855091	68.36	ng/ul	95
88) Benzo(a)pyrene	25.21	252	4097728	73.49	ng/ul	94
89) Indeno(1,2,3-cd)pyrene	29.31	276	5375965	81.40	ng/ul	94
90) Dibenzo(a,h)anthracene	29.38	278	4406491	78.89	ng/ul	99
91) Benzo(g,h,i)perylene	30.57	276	4415802	79.51	ng/ul	94

SJ 11/15/16

SJ 11/15/16

(#) = qualifier out of range (m) = manual integration (+) = signals summed