

Data Path : Z:\HPCHEM1\BNA\_G\DATA\BG072115\  
 Data File : BG018040.D  
 Acq On : 22 Jul 2015 3:08  
 Operator : TP/UM  
 Sample : G2904-04  
 Misc :  
 ALS Vial : 19 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 PIPE1

Quant Time: Jul 22 05:20:06 2015  
 Quant Method : Z:\HPCHEM1\BNA\_G\METHODS\8270-BG071715.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Jul 22 04:14:54 2015  
 Response via : Initial Calibration

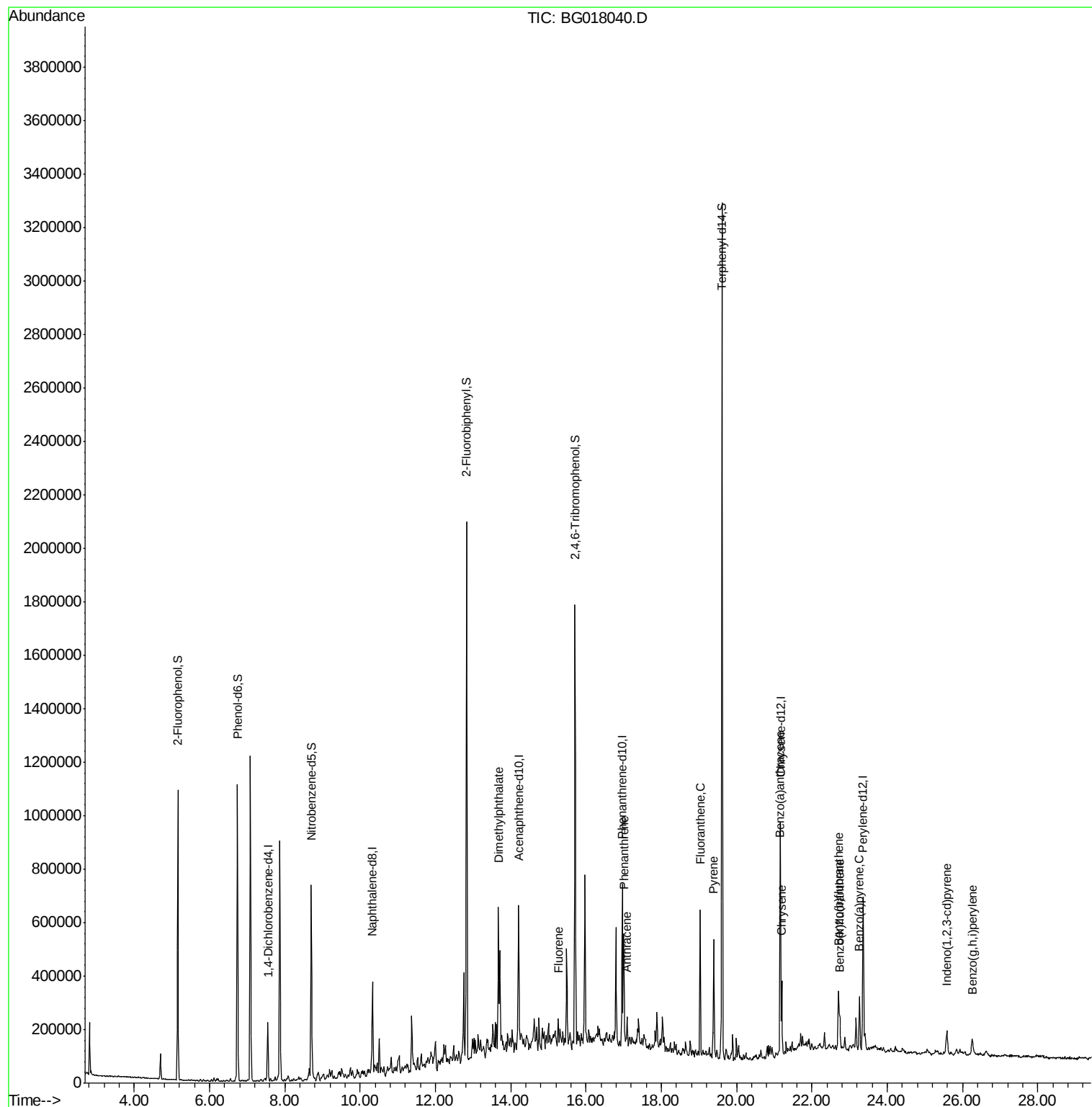
| Internal Standards          | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 7.55  | 152  | 60604    | 20.00  | ng    | 0.00     |
| 21) Naphthalene-d8          | 10.33 | 136  | 273571   | 20.00  | ng    | 0.00     |
| 38) Acenaphthene-d10        | 14.21 | 164  | 173429   | 20.00  | ng    | 0.00     |
| 63) Phenanthrene-d10        | 16.96 | 188  | 348857   | 20.00  | ng    | 0.00     |
| 75) Chrysene-d12            | 21.17 | 240  | 386478   | 20.00  | ng    | 0.00     |
| 86) Perylene-d12            | 23.36 | 264  | 393131   | 20.00  | ng    | 0.00     |
| System Monitoring Compounds |       |      |          |        |       |          |
| 5) 2-Fluorophenol           | 5.16  | 112  | 485655   | 139.79 | ng    | 0.00     |
| 7) Phenol-d6                | 6.74  | 99   | 686165   | 150.76 | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 8.70  | 82   | 407249   | 96.42  | ng    | 0.00     |
| 41) 2,4,6-Tribromophenol    | 15.71 | 330  | 326713   | 185.94 | ng    | 0.00     |
| 44) 2-Fluorobiphenyl        | 12.83 | 172  | 1061451  | 106.06 | ng    | 0.00     |
| 78) Terphenyl-d14           | 19.61 | 244  | 1381432  | 90.04  | ng    | 0.00     |
| Target Compounds            |       |      |          |        |       | Qvalue   |
| 49) Dimethylphthalate       | 13.67 | 163  | 344597   | 28.60  | ng    | 100      |
| 57) Fluorene                | 15.26 | 166  | 26606    | 2.16   | ng    | # 97     |
| 70) Phenanthrene            | 17.01 | 178  | 243763   | 13.55  | ng    | 97       |
| 71) Anthracene              | 17.09 | 178  | 62578    | 3.57   | ng    | 99       |
| 74) Fluoranthene            | 19.03 | 202  | 320465   | 16.27  | ng    | 95       |
| 77) Pyrene                  | 19.40 | 202  | 273730   | 12.70  | ng    | 96       |
| 80) Benzo(a)anthracene      | 21.15 | 228  | 161561   | 7.91   | ng    | 97       |
| 82) Chrysene                | 21.20 | 228  | 139515   | 7.18   | ng    | 96       |
| 85) Indeno(1,2,3-cd)pyrene  | 25.58 | 276  | 82389    | 3.50   | ng    | # 91     |
| 87) Benzo(b)fluoranthene    | 22.71 | 252  | 189013   | 8.79   | ng    | 99       |
| 88) Benzo(k)fluoranthene    | 22.74 | 252  | 57494m   | 2.68   | ng    |          |
| 89) Benzo(a)pyrene          | 23.26 | 252  | 133267   | 6.65   | ng    | 98       |
| 91) Benzo(g,h,i)perylene    | 26.27 | 276  | 74113    | 3.70   | ng    | # 93     |

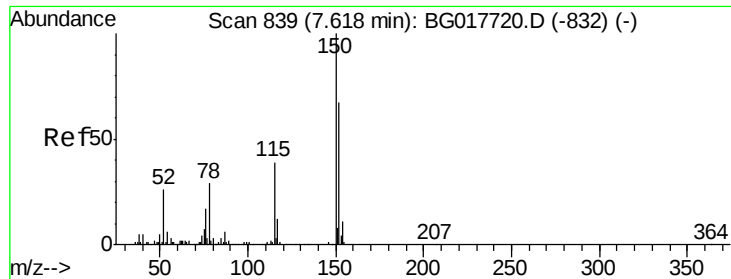
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\HPCHEM1\BNA\_G\DATA\BG072115\  
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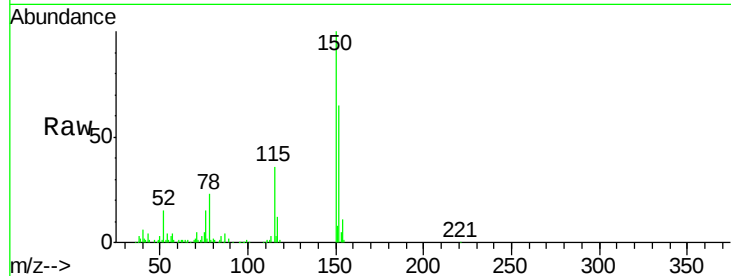


#1

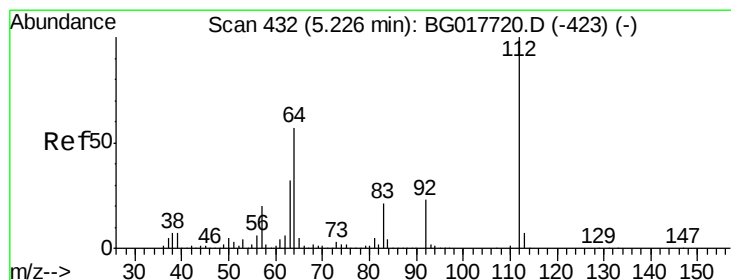
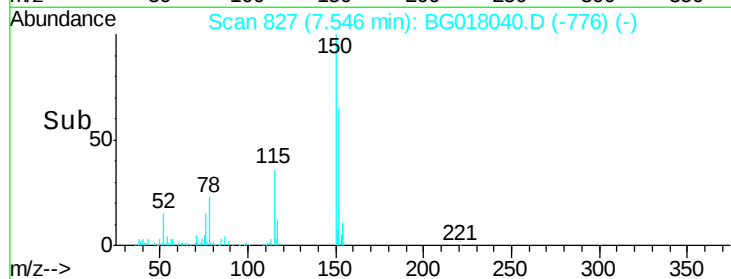
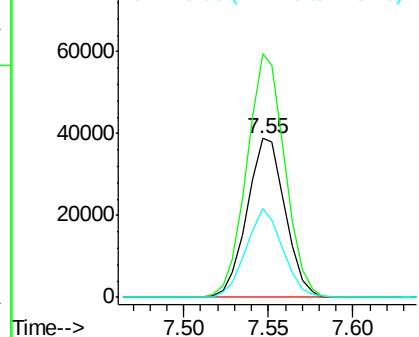
1,4-Dichlorobenzene-d4  
Concen: 20.00 ng  
RT: 7.55 min Scan# 827  
Delta R.T. 0.00 min  
Lab File: BG018040.D  
Acq: 22 Jul 2015 3:08

Instrument :  
BNA\_G  
ClientSampleId :  
PIPE1

| Tgt Ion | Resp  | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 60604 |       |       |
| 150     | 153.3 | 119.1 | 178.7 |
| 115     | 55.5  | 47.0  | 70.4  |



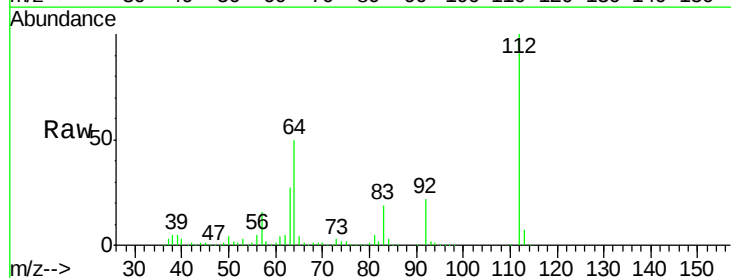
Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 115.00 (114.70 to 115.70): E



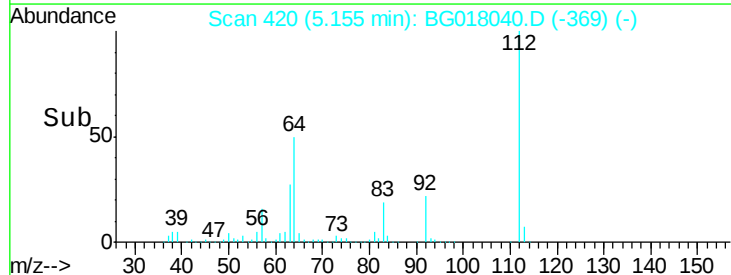
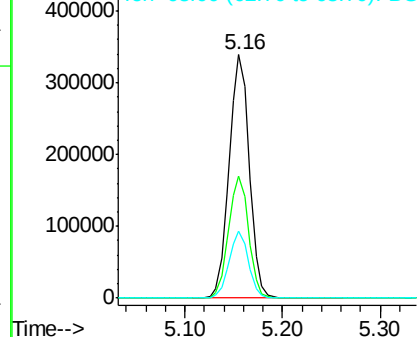
#5

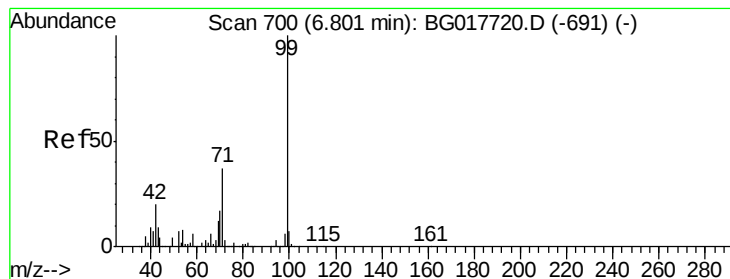
2-Fluorophenol  
Concen: 139.79 ng  
RT: 5.16 min Scan# 420  
Delta R.T. 0.00 min  
Lab File: BG018040.D  
Acq: 22 Jul 2015 3:08

| Tgt Ion | Resp   | Lower | Upper |
|---------|--------|-------|-------|
| 112     | 485655 |       |       |
| 64      | 50.0   | 45.4  | 68.0  |
| 63      | 27.3   | 25.3  | 37.9  |



Abundance Ion 112.00 (111.70 to 112.70): E  
Ion 64.00 (63.70 to 64.70): BGC  
Ion 63.00 (62.70 to 63.70): BGC





#7

Phenol-d6

Concen: 150.76 ng

RT: 6.74 min Scan# 690

Delta R.T. 0.01 min

Lab File: BG018040.D

Acq: 22 Jul 2015 3:08

Instrument :

BNA\_G

ClientSampled :

PIPE1

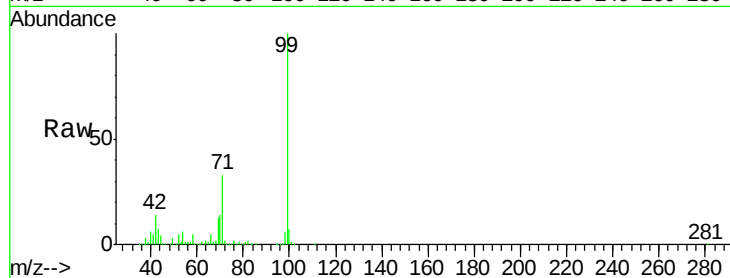
Tgt Ion: 99 Resp: 686165

Ion Ratio Lower Upper

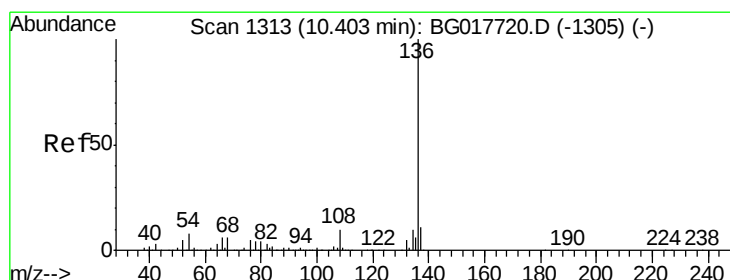
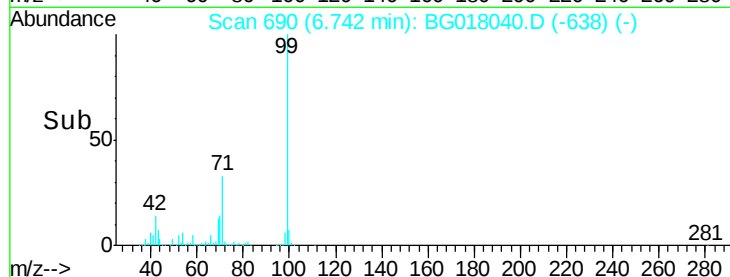
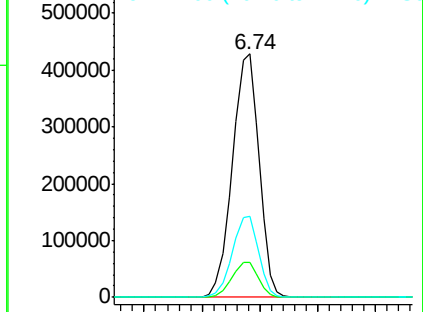
99 100

42 14.5 16.2 24.4#

71 33.1 29.5 44.3



Abundance Ion 99.00 (98.70 to 99.70): BGC  
Ion 42.00 (41.70 to 42.70): BGC  
Ion 71.00 (70.70 to 71.70): BGC



#21

Naphthalene-d8

Concen: 20.00 ng

RT: 10.33 min Scan# 1300

Delta R.T. -0.01 min

Lab File: BG018040.D

Acq: 22 Jul 2015 3:08

Tgt Ion: 136 Resp: 273571

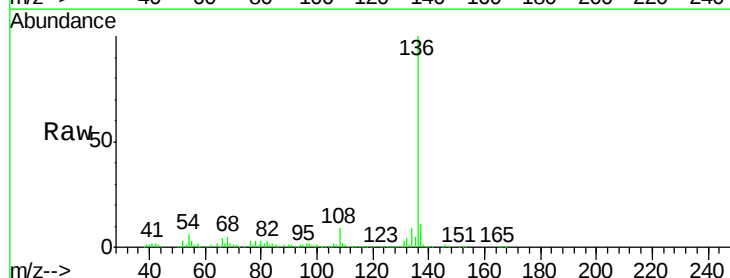
Ion Ratio Lower Upper

136 100

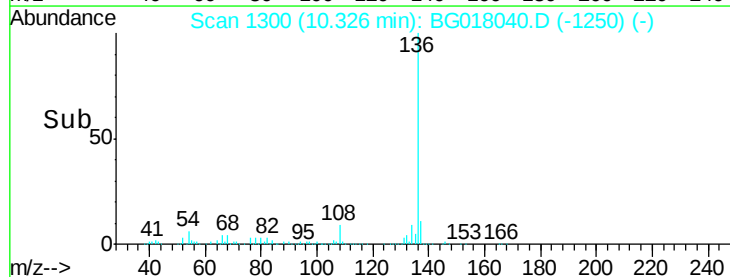
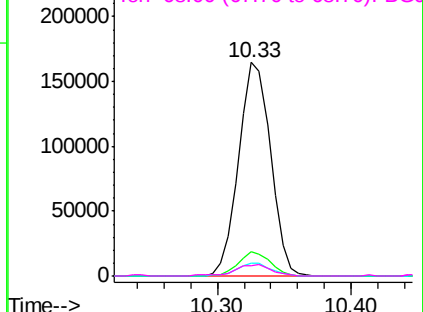
137 11.5 8.8 13.2

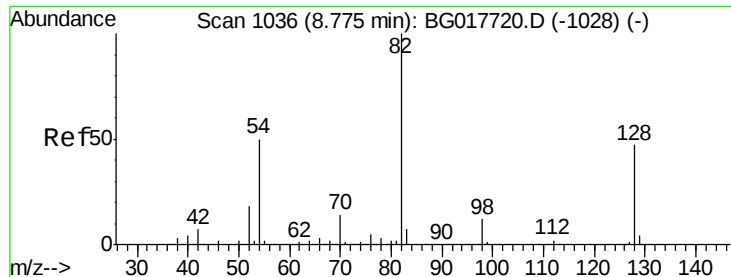
54 5.9 6.6 9.8#

68 4.5 5.1 7.7#



Abundance Ion 136.00 (135.70 to 136.70): BGC  
Ion 137.00 (136.70 to 137.70): BGC  
Ion 54.00 (53.70 to 54.70): BGC  
Ion 68.00 (67.70 to 68.70): BGC

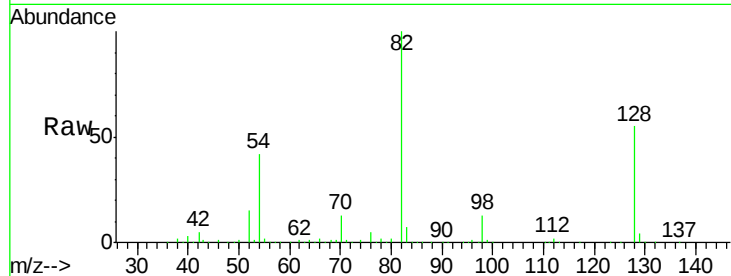




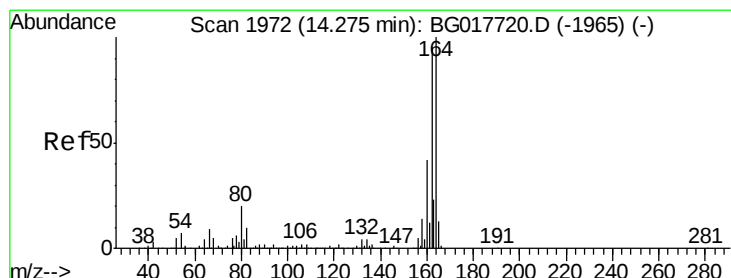
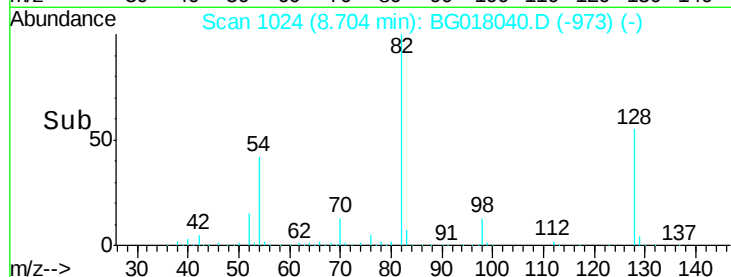
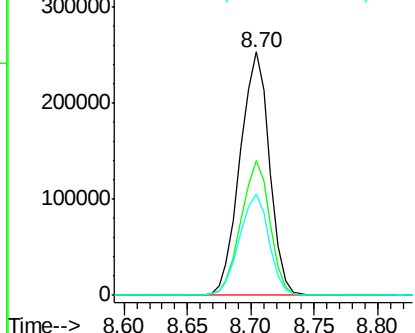
#23  
 Nitrobenzene-d5  
 Concen: 96.42 ng  
 RT: 8.70 min Scan# 1024  
 Delta R.T. 0.00 min  
 Lab File: BG018040.D  
 Acq: 22 Jul 2015 3:08

Instrument :  
 BNA\_G  
 ClientSampleId :  
 PIPE1

Tgt Ion: 82 Resp: 407249  
 Ion Ratio Lower Upper  
 82 100  
 128 55.3 37.8 56.6  
 54 41.9 39.9 59.9

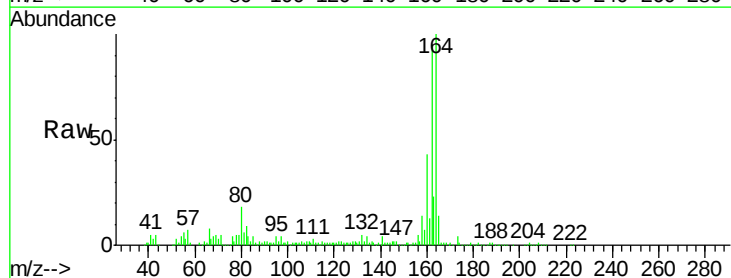


Abundance Ion 82.00 (81.70 to 82.70): BGC  
 Ion 128.00 (127.70 to 128.70): BGC  
 Ion 54.00 (53.70 to 54.70): BGC

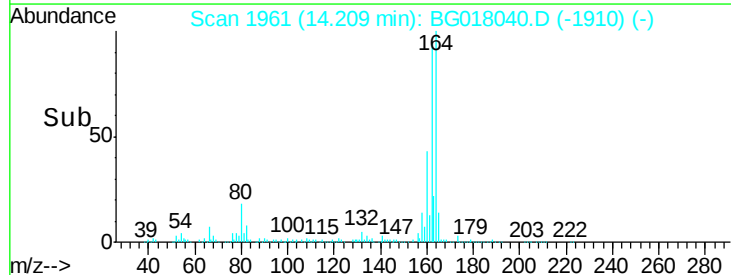
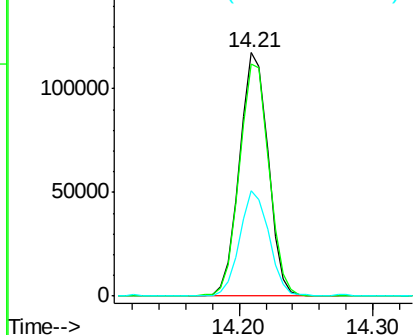


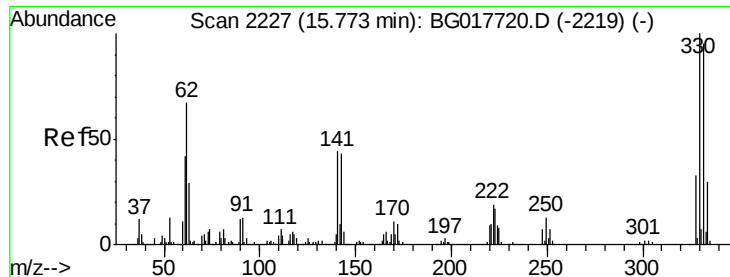
#38  
 Acenaphthene-d10  
 Concen: 20.00 ng  
 RT: 14.21 min Scan# 1961  
 Delta R.T. 0.00 min  
 Lab File: BG018040.D  
 Acq: 22 Jul 2015 3:08

Tgt Ion: 164 Resp: 173429  
 Ion Ratio Lower Upper  
 164 100  
 162 95.1 76.3 114.5  
 160 43.3 33.7 50.5



Abundance Ion 164.00 (163.70 to 164.70): BGC  
 Ion 162.00 (161.70 to 162.70): BGC  
 Ion 160.00 (159.70 to 160.70): BGC

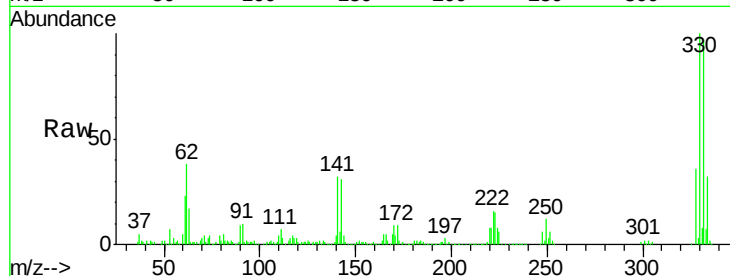




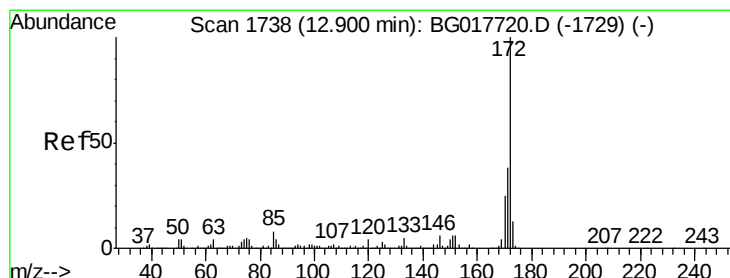
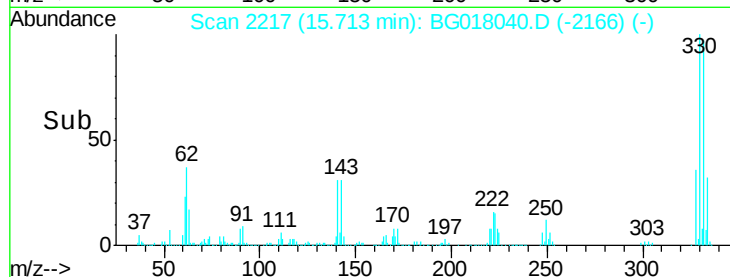
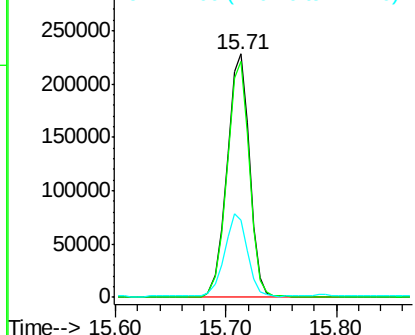
#41  
 2,4,6-Tribromophenol  
 Concen: 185.94 ng  
 RT: 15.71 min Scan# 2217  
 Delta R.T. 0.00 min  
 Lab File: BG018040.D  
 Acq: 22 Jul 2015 3:08

Instrument :  
 BNA\_G  
 ClientSampleId :  
 PIPE1

Tgt Ion:330 Resp: 326713  
 Ion Ratio Lower Upper  
 330 100  
 332 96.5 76.8 115.2  
 141 33.9 38.0 57.0#

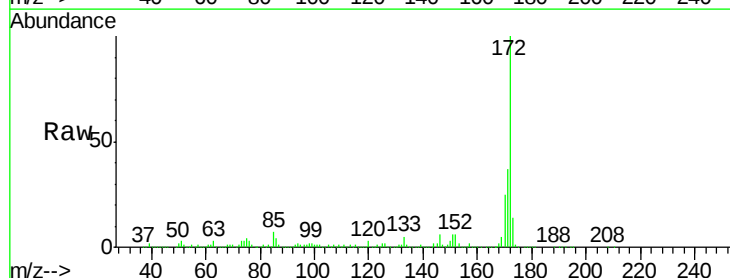


Abundance Ion 329.80 (329.50 to 330.50): E  
 Ion 331.80 (331.50 to 332.50): E  
 Ion 141.00 (140.70 to 141.70): E

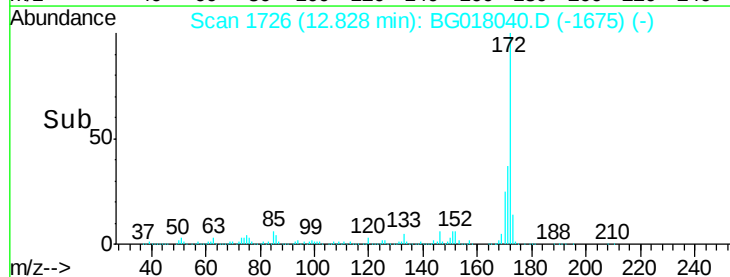
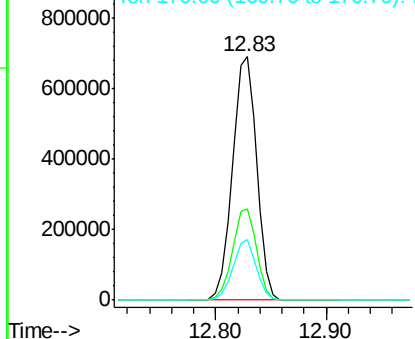


#44  
 2-Fluorobiphenyl  
 Concen: 106.06 ng  
 RT: 12.83 min Scan# 1726  
 Delta R.T. 0.00 min  
 Lab File: BG018040.D  
 Acq: 22 Jul 2015 3:08

Tgt Ion:172 Resp: 1061451  
 Ion Ratio Lower Upper  
 172 100  
 171 37.2 30.7 46.1  
 170 24.8 19.7 29.5



Abundance Ion 172.00 (171.70 to 172.70): E  
 Ion 171.00 (170.70 to 171.70): E  
 Ion 170.00 (169.70 to 170.70): E





#49

Dimethylphthalate

Concen: 28.60 ng

RT: 13.67 min Scan# 1870

Delta R.T. -0.01 min

Lab File: BG018040.D

Acq: 22 Jul 2015 3:08

Instrument :

BNA\_G

ClientSampleId :

PIPE1

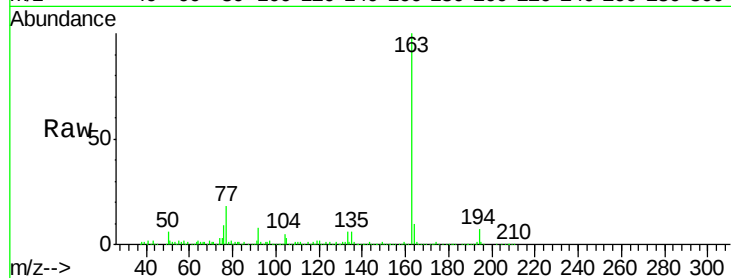
Tgt Ion:163 Resp: 344597

Ion Ratio Lower Upper

163 100

194 7.3 5.8 8.6

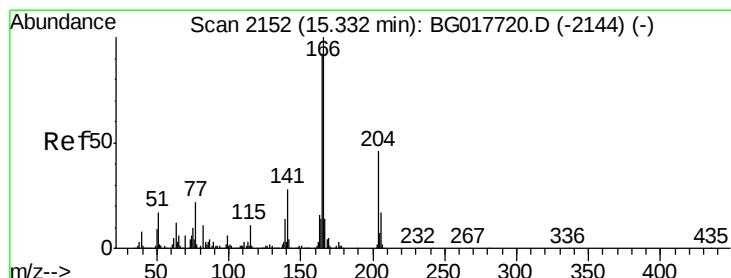
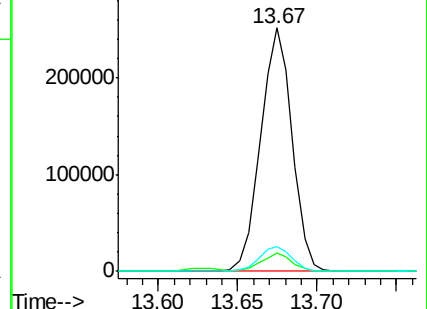
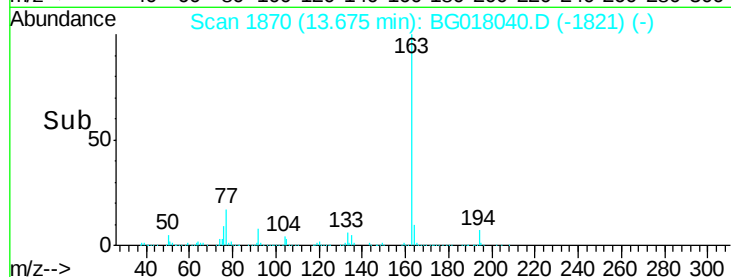
164 10.3 8.3 12.5



Abundance Ion 163.00 (162.70 to 163.70): E

Ion 194.00 (193.70 to 194.70): E

Ion 164.00 (163.70 to 164.70): E



#57

Fluorene

Concen: 2.16 ng

RT: 15.26 min Scan# 2140

Delta R.T. -0.01 min

Lab File: BG018040.D

Acq: 22 Jul 2015 3:08

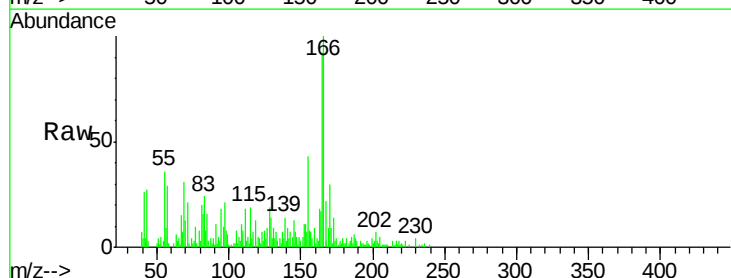
Tgt Ion:166 Resp: 26606

Ion Ratio Lower Upper

166 100

165 92.1 73.4 110.0

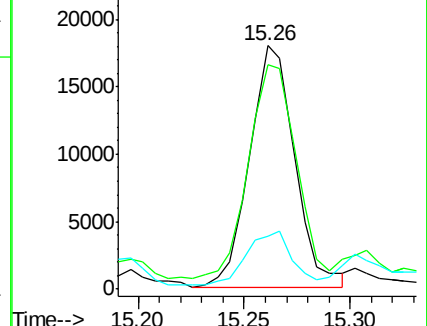
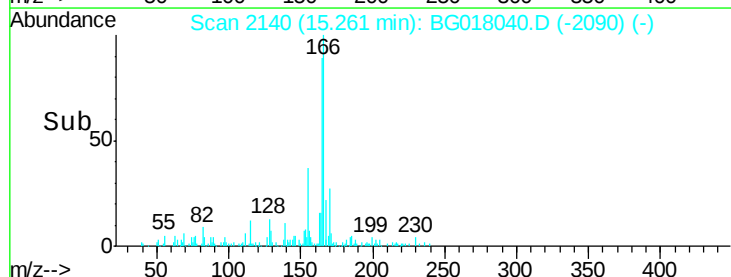
167 21.9 11.0 16.6#

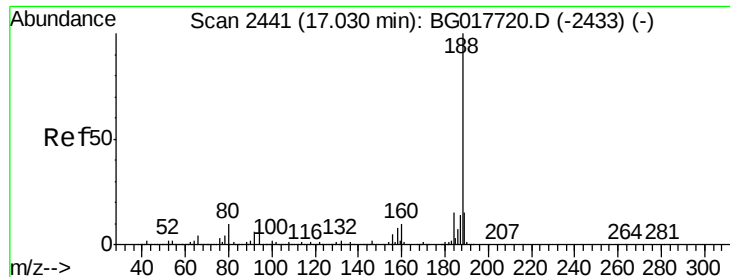


Abundance Ion 166.00 (165.70 to 166.70): E

Ion 165.00 (164.70 to 165.70): E

Ion 167.00 (166.70 to 167.70): E





#63

Phenanthrene-d10

Concen: 20.00 ng

RT: 16.96 min Scan# 2430

Delta R.T. 0.00 min

Lab File: BG018040.D

Acq: 22 Jul 2015 3:08

Instrument :

BNA\_G

ClientSampleId :

PIPE1

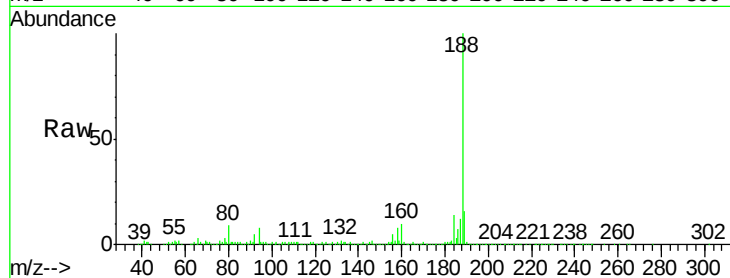
Tgt Ion:188 Resp: 348857

Ion Ratio Lower Upper

188 100

94 8.1 8.2 12.2#

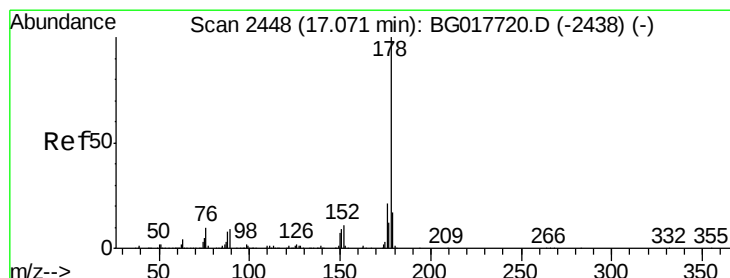
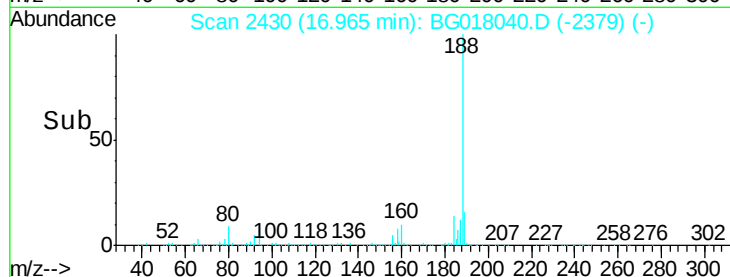
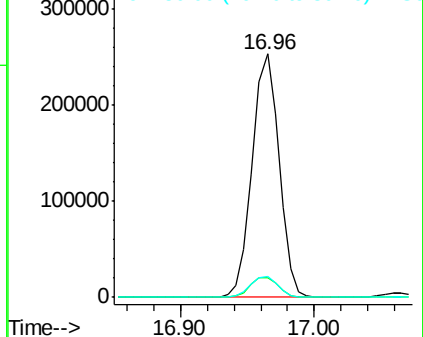
80 8.6 8.2 12.4



Abundance Ion 188.00 (187.70 to 188.70): E

Ion 94.00 (93.70 to 94.70): BGC

Ion 80.00 (79.70 to 80.70): BGC



#70

Phenanthrene

Concen: 13.55 ng

RT: 17.01 min Scan# 2437

Delta R.T. 0.00 min

Lab File: BG018040.D

Acq: 22 Jul 2015 3:08

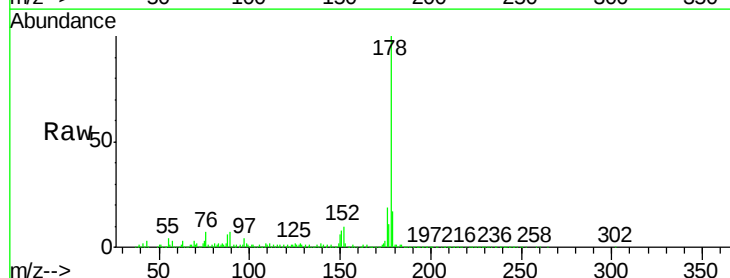
Tgt Ion:178 Resp: 243763

Ion Ratio Lower Upper

178 100

176 18.6 16.5 24.7

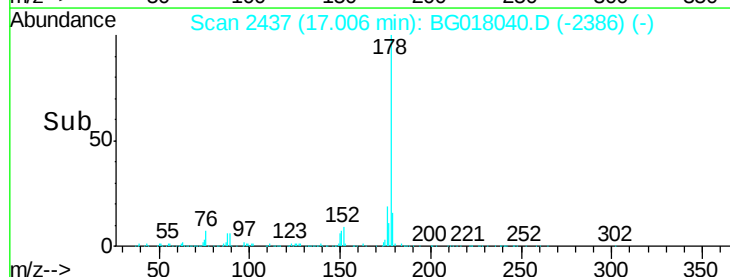
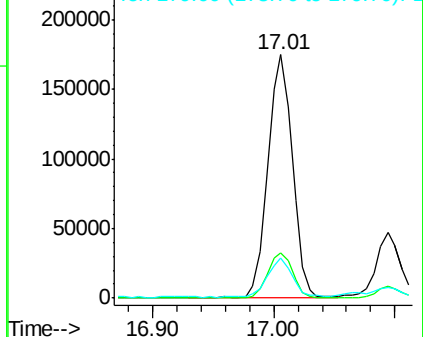
179 16.5 13.5 20.3

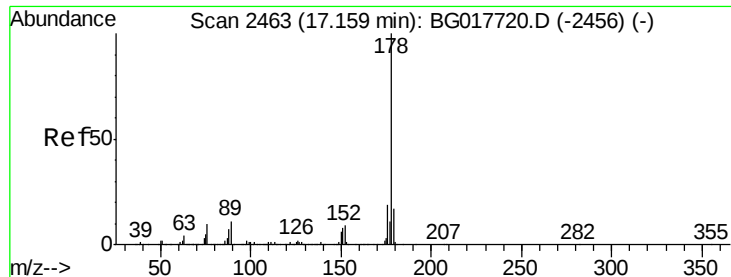


Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E

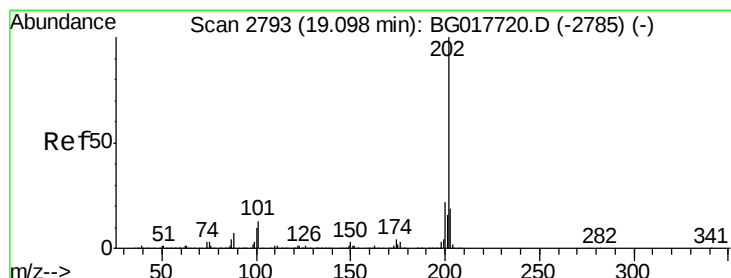
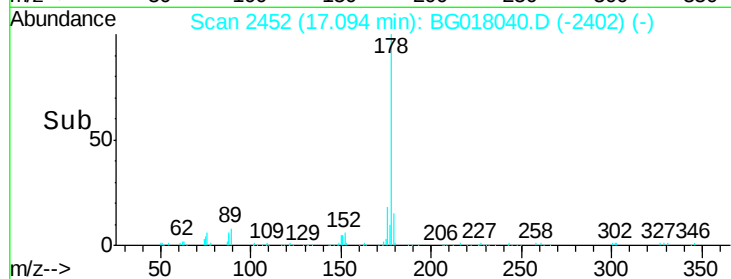
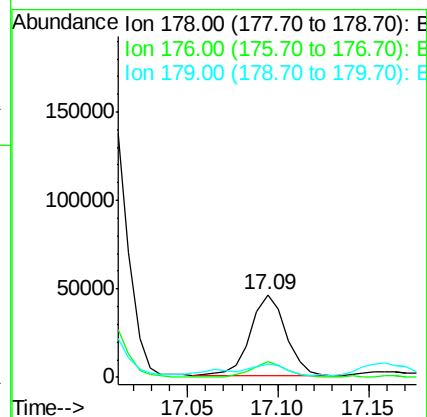
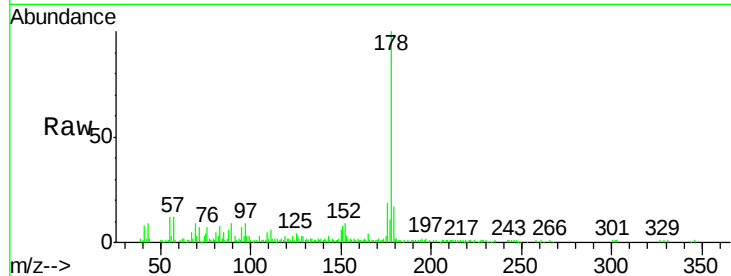




#71  
 Anthracene  
 Concen: 3.57 ng  
 RT: 17.09 min Scan# 2452  
 Delta R.T. -0.01 min  
 Lab File: BG018040.D  
 Acq: 22 Jul 2015 3:08

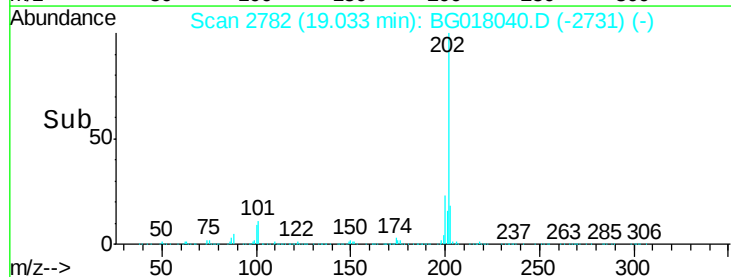
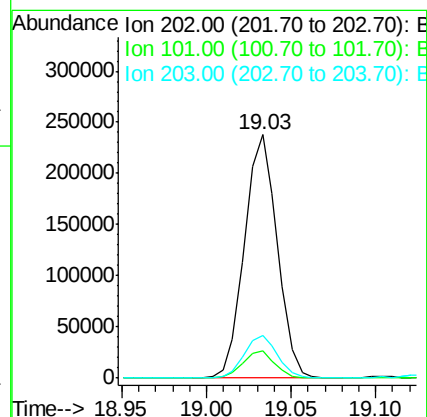
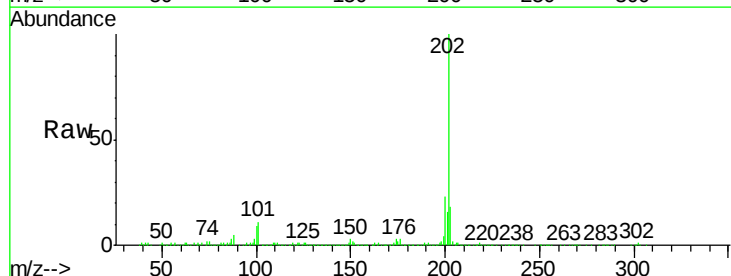
Instrument :  
 BNA\_G  
 ClientSampleId :  
 PIPE1

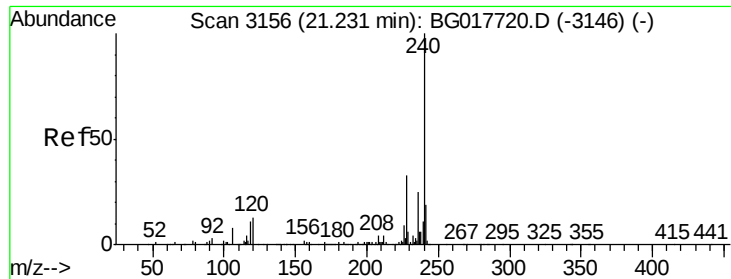
Tgt Ion:178 Resp: 62578  
 Ion Ratio Lower Upper  
 178 100  
 176 18.9 15.2 22.8  
 179 16.6 13.6 20.4



#74  
 Fluoranthene  
 Concen: 16.27 ng  
 RT: 19.03 min Scan# 2782  
 Delta R.T. 0.00 min  
 Lab File: BG018040.D  
 Acq: 22 Jul 2015 3:08

Tgt Ion:202 Resp: 320465  
 Ion Ratio Lower Upper  
 202 100  
 101 11.1 0.0 33.3  
 203 17.7 0.0 39.5





#75

Chrysene-d12

Concen: 20.00 ng

RT: 21.17 min Scan# 3145

Delta R.T. 0.00 min

Lab File: BG018040.D

Acq: 22 Jul 2015 3:08

Instrument :

BNA\_G

ClientSampleId :

PIPE1

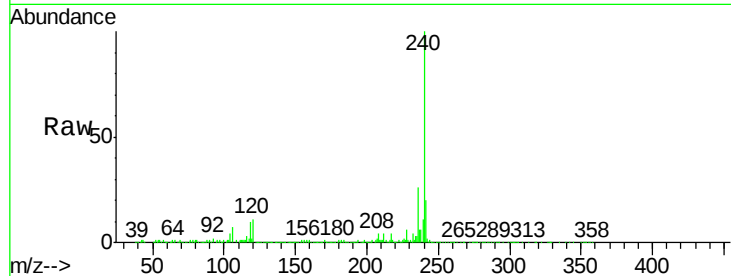
Tgt Ion:240 Resp: 386478

Ion Ratio Lower Upper

240 100

120 10.8 10.8 16.2#

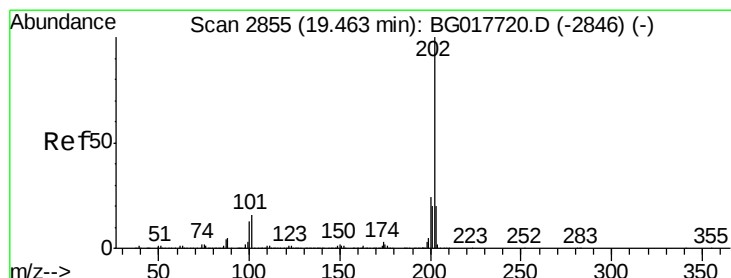
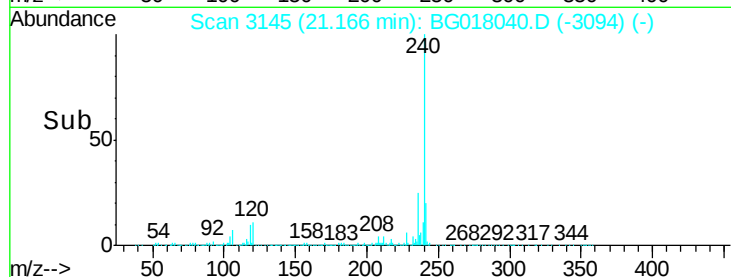
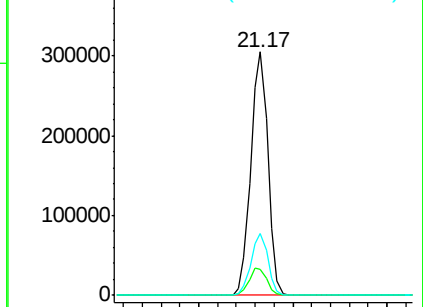
236 25.5 20.0 30.0



Abundance Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E



#77

Pyrene

Concen: 12.70 ng

RT: 19.40 min Scan# 2844

Delta R.T. 0.00 min

Lab File: BG018040.D

Acq: 22 Jul 2015 3:08

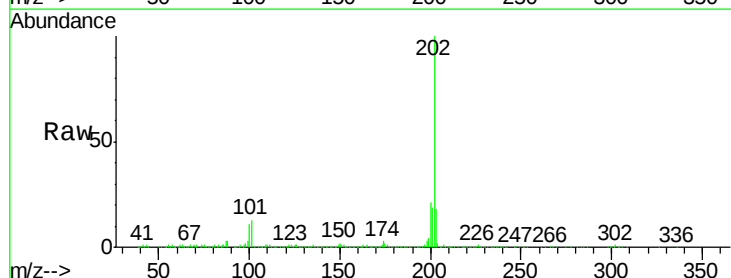
Tgt Ion:202 Resp: 273730

Ion Ratio Lower Upper

202 100

200 21.2 18.8 28.2

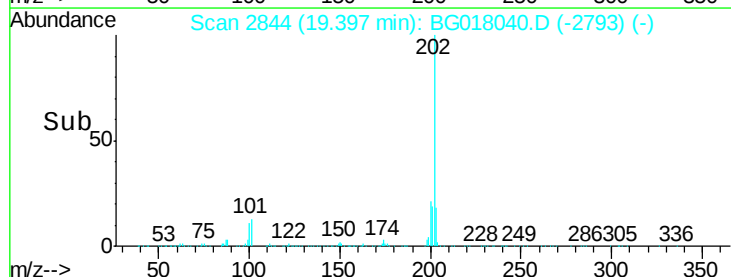
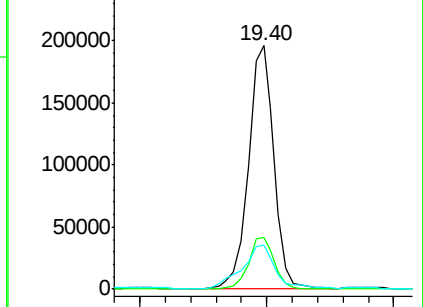
203 18.2 15.9 23.9

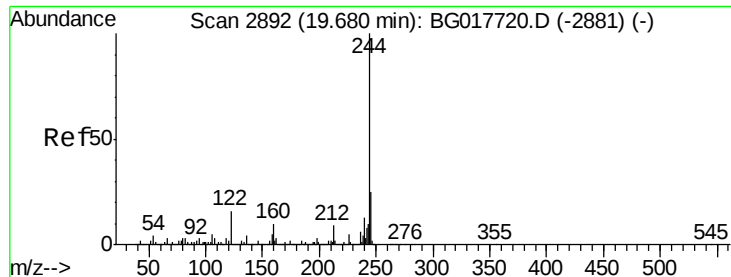


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 200.00 (199.70 to 200.70): E

Ion 203.00 (202.70 to 203.70): E





#78

Terphenyl-d14

Concen: 90.04 ng

RT: 19.61 min Scan# 2881

Delta R.T. 0.00 min

Lab File: BG018040.D

Acq: 22 Jul 2015 3:08

Instrument :

BNA\_G

ClientSampleId :

PIPE1

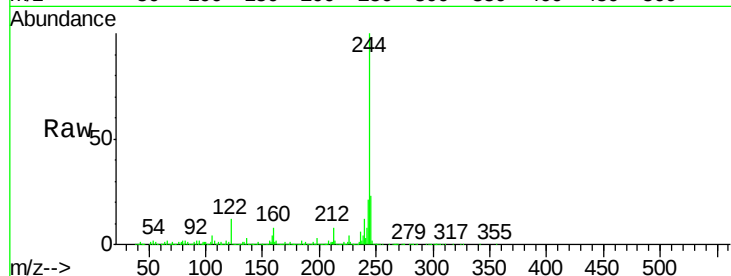
Tgt Ion:244 Resp: 1381432

Ion Ratio Lower Upper

244 100

212 8.1 7.2 10.8

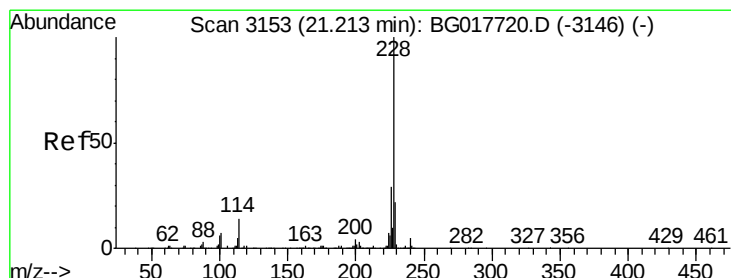
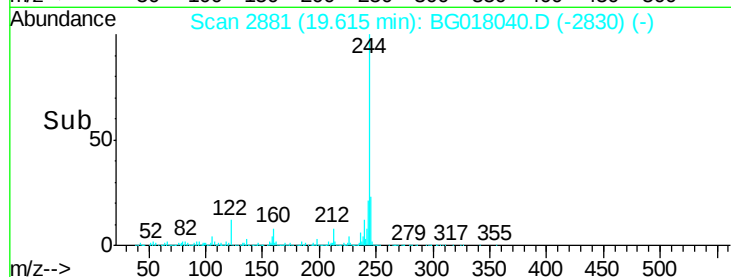
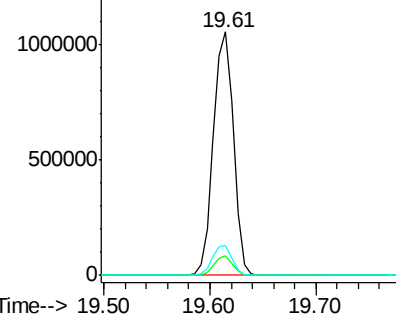
122 12.1 12.8 19.2#



Abundance Ion 244.00 (243.70 to 244.70): E

Ion 212.00 (211.70 to 212.70): E

Ion 122.00 (121.70 to 122.70): E



#80

Benzo(a)anthracene

Concen: 7.91 ng

RT: 21.15 min Scan# 3142

Delta R.T. -0.01 min

Lab File: BG018040.D

Acq: 22 Jul 2015 3:08

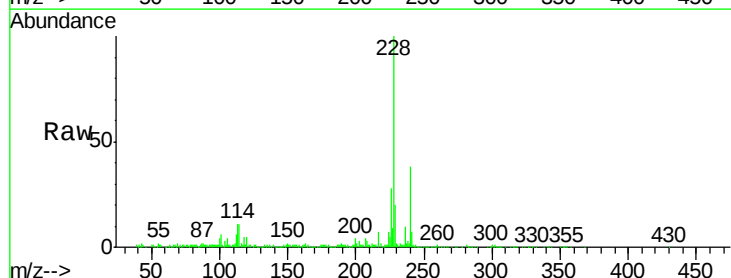
Tgt Ion:228 Resp: 161561

Ion Ratio Lower Upper

228 100

226 27.6 23.1 34.7

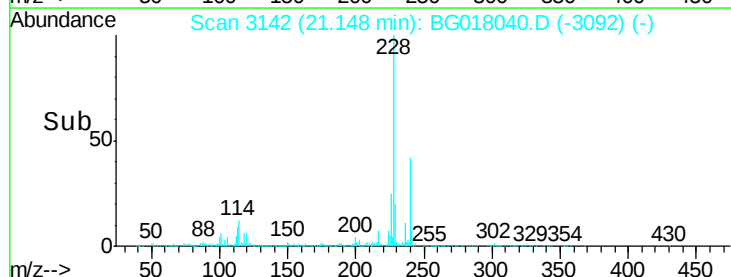
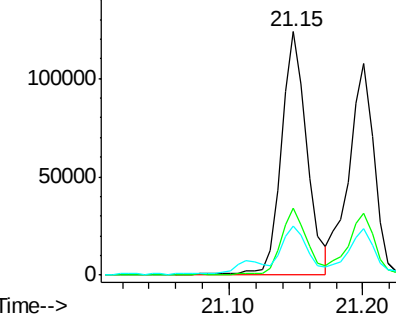
229 20.2 17.4 26.0

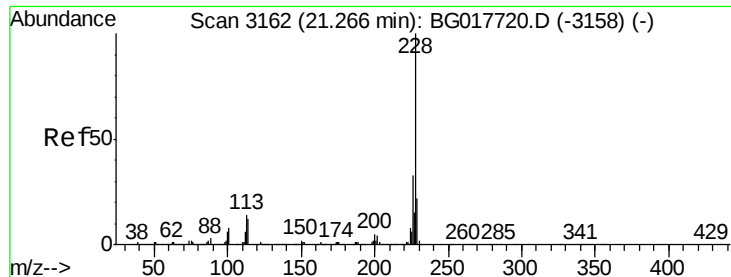


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E





#82

Chrysene

Concen: 7.18 ng

RT: 21.20 min Scan# 3151

Delta R.T. -0.01 min

Lab File: BG018040.D

Acq: 22 Jul 2015 3:08

Instrument :

BNA\_G

ClientSampleId :

PIPE1

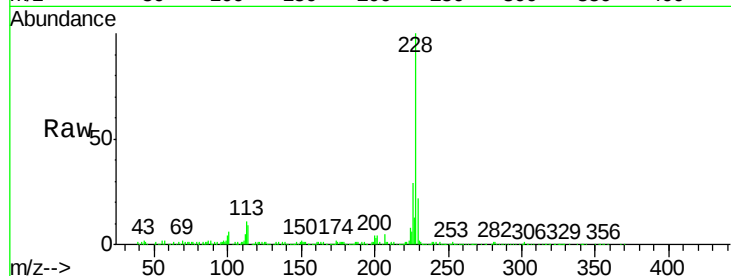
Tgt Ion: 228 Resp: 139515

Ion Ratio Lower Upper

228 100

226 29.2 26.1 39.1

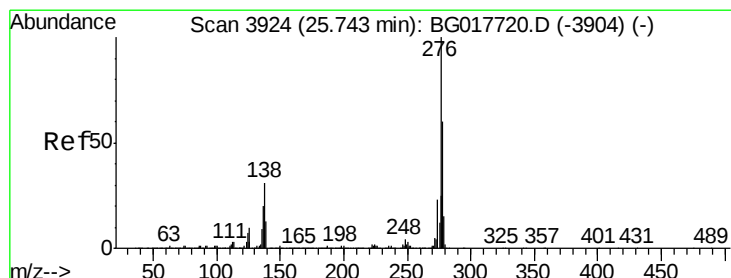
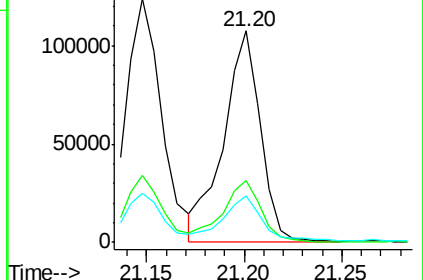
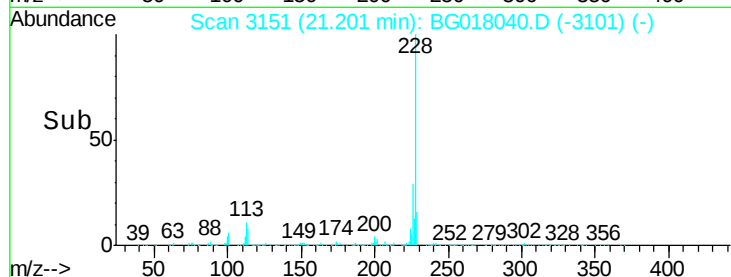
229 21.9 17.7 26.5



Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E



#85

Indeno(1,2,3-cd)pyrene

Concen: 3.50 ng

RT: 25.58 min Scan# 3897

Delta R.T. -0.02 min

Lab File: BG018040.D

Acq: 22 Jul 2015 3:08

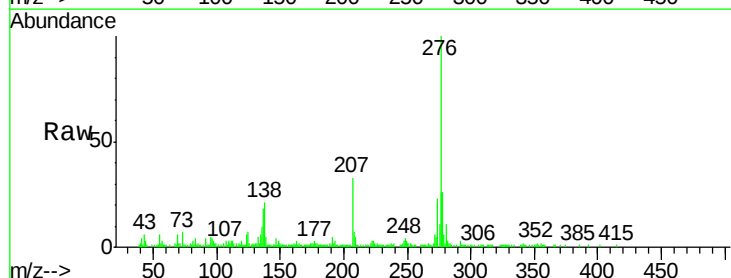
Tgt Ion: 276 Resp: 82389

Ion Ratio Lower Upper

276 100

138 23.3 25.4 38.0#

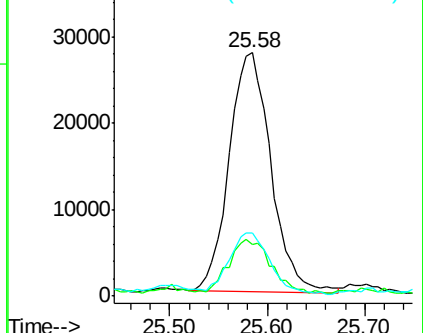
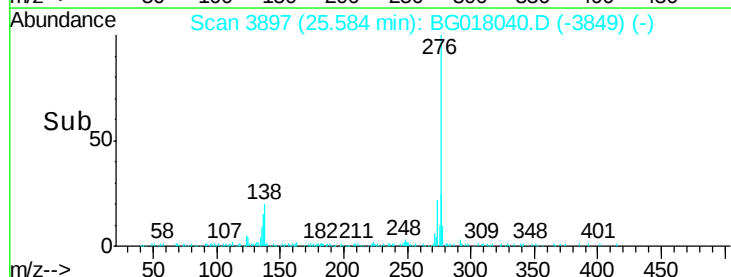
277 25.1 21.0 31.4

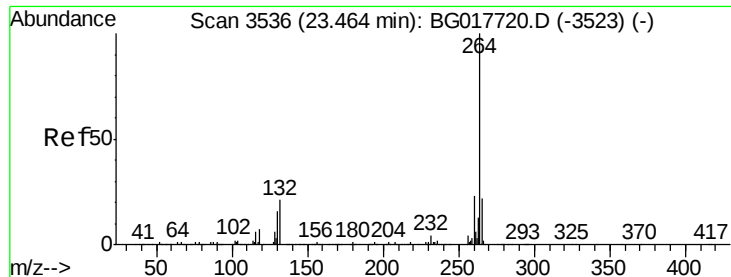


Abundance Ion 276.00 (275.70 to 276.70): E

Ion 138.00 (137.70 to 138.70): E

Ion 277.00 (276.70 to 277.70): E





#86

Perylene-d12

Concen: 20.00 ng

RT: 23.36 min Scan# 3519

Delta R.T. -0.01 min

Lab File: BG018040.D

Acq: 22 Jul 2015 3:08

Instrument :

BNA\_G

ClientSampleId :

PIPE1

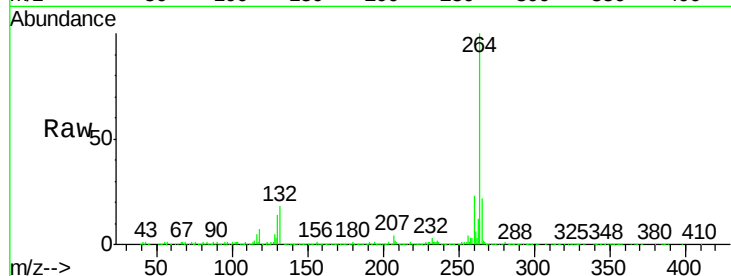
Tgt Ion:264 Resp: 393131

Ion Ratio Lower Upper

264 100

260 22.7 18.6 27.8

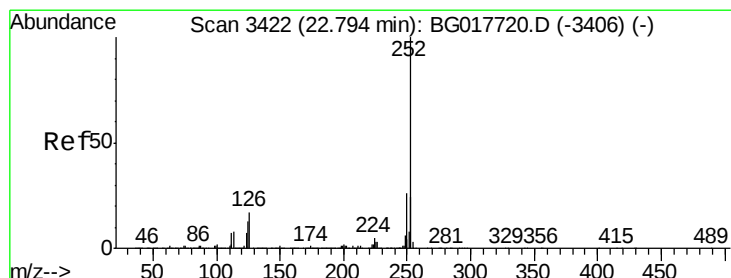
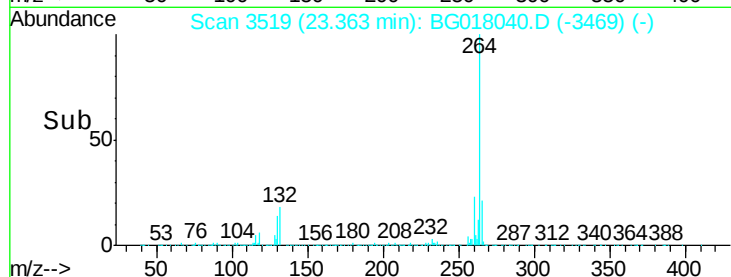
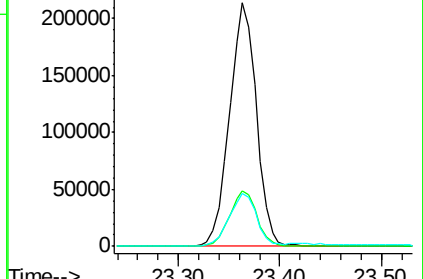
265 21.7 18.2 27.2



Abundance Ion 264.00 (263.70 to 264.70): E

Ion 260.00 (259.70 to 260.70): E

Ion 265.00 (264.70 to 265.70): E



#87

Benzo(b)fluoranthene

Concen: 8.79 ng

RT: 22.71 min Scan# 3407

Delta R.T. -0.01 min

Lab File: BG018040.D

Acq: 22 Jul 2015 3:08

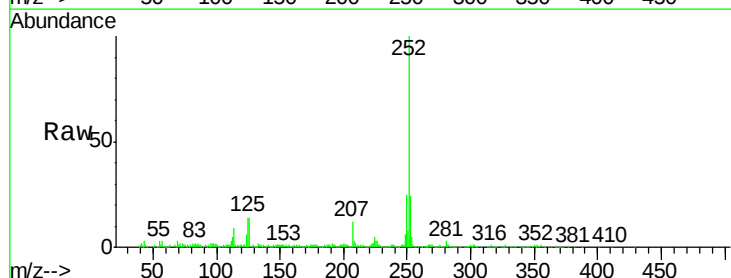
Tgt Ion:252 Resp: 189013

Ion Ratio Lower Upper

252 100

253 24.0 19.7 29.5

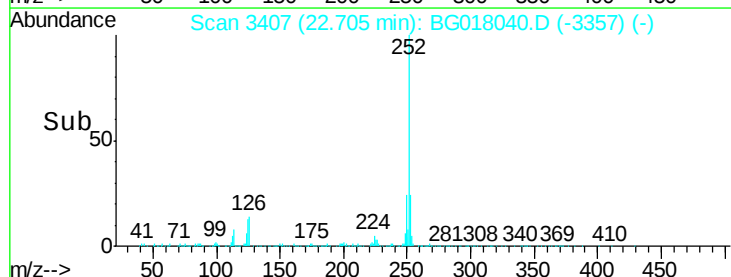
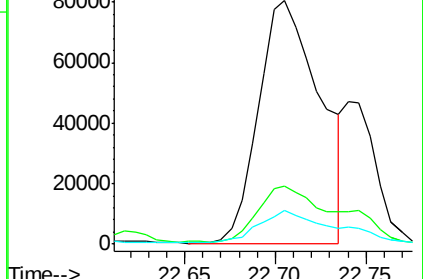
125 13.9 10.6 15.8

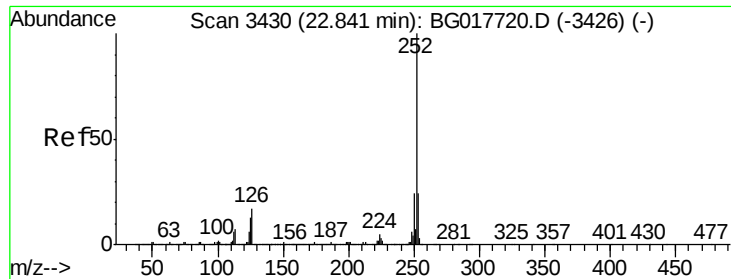


Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E





#88

Benzo(k)fluoranthene

Concen: 2.68 ng m

RT: 22.74 min Scan# 3413

Delta R.T. -0.01 min

Lab File: BG018040.D

Acq: 22 Jul 2015 3:08

Instrument :

BNA\_G

ClientSampleId :

PIPE1

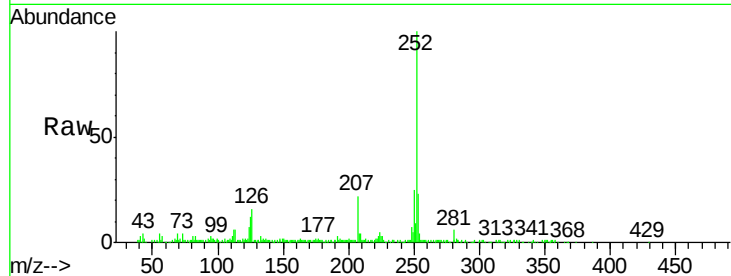
Tgt Ion:252 Resp: 57494

Ion Ratio Lower Upper

252 100

253 23.0 19.0 28.6

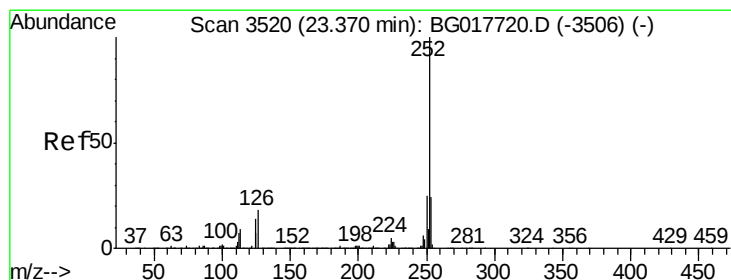
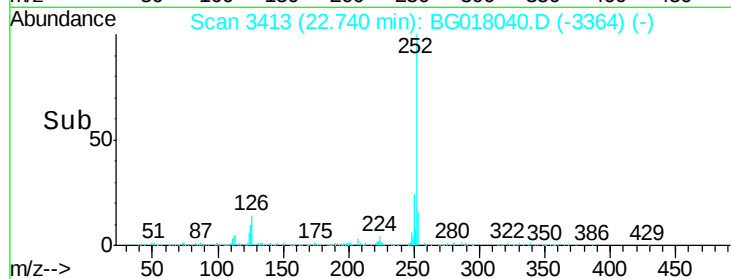
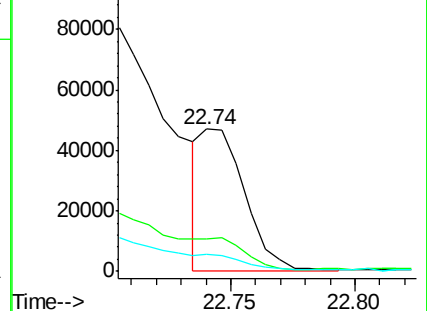
125 12.0 10.3 15.5



Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E



#89

Benzo(a)pyrene

Concen: 6.65 ng

RT: 23.26 min Scan# 3502

Delta R.T. -0.01 min

Lab File: BG018040.D

Acq: 22 Jul 2015 3:08

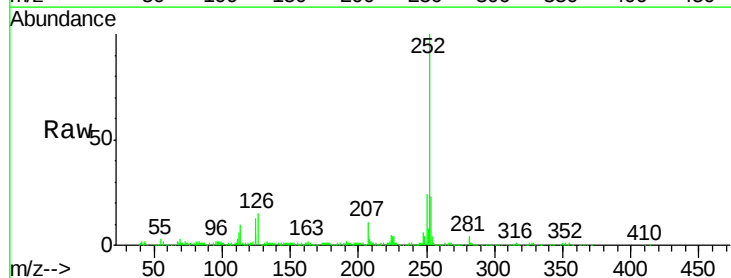
Tgt Ion:252 Resp: 133267

Ion Ratio Lower Upper

252 100

253 23.1 19.0 28.6

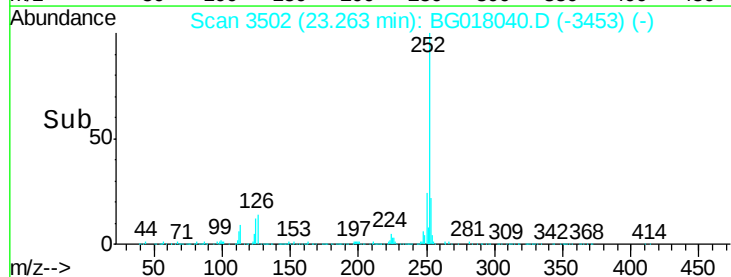
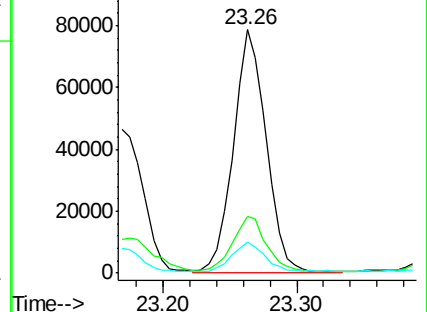
125 12.7 11.1 16.7

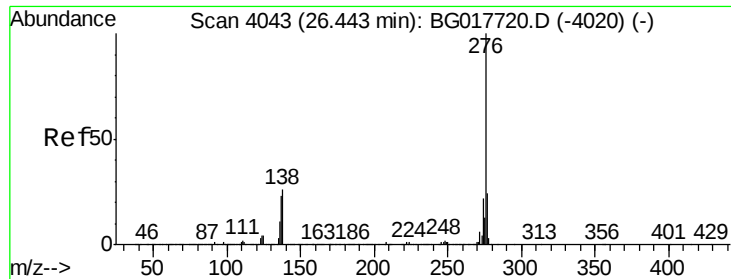


Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E





#91

Benzo(g,h,i)perylene

Concen: 3.70 ng

RT: 26.27 min Scan# 4013

Delta R.T. -0.02 min

Lab File: BG018040.D

Acq: 22 Jul 2015 3:08

Instrument :

BNA\_G

ClientSampleId :

PIPE1

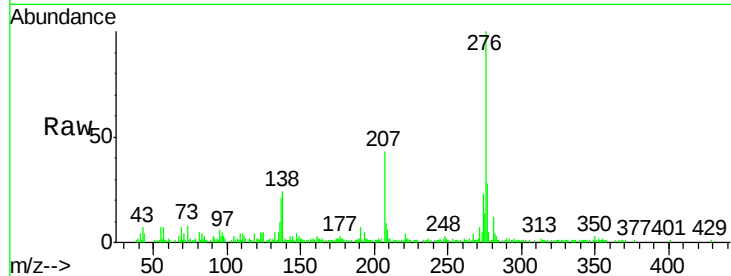
Tgt Ion: 276 Resp: 74113

Ion Ratio Lower Upper

276 100

277 28.5 18.9 28.3#

138 24.1 20.8 31.2



Abundance Ion 276.00 (275.70 to 276.70): E

Ion 277.00 (276.70 to 277.70): E

Ion 138.00 (137.70 to 138.70): E

