

Data Path : Z:\HPCHEM1\BNA\_G\DATA\BG073015\  
 Data File : BG018178.D  
 Acq On : 30 Jul 2015 17:36  
 Operator : TP/UM  
 Sample : G3130-01  
 Misc :  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 SOIL-3

Quant Time: Jul 30 18:19:47 2015  
 Quant Method : Z:\HPCHEM1\BNA\_G\Methods\8270-BG071715.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Jul 18 01:50:30 2015  
 Response via : Initial Calibration

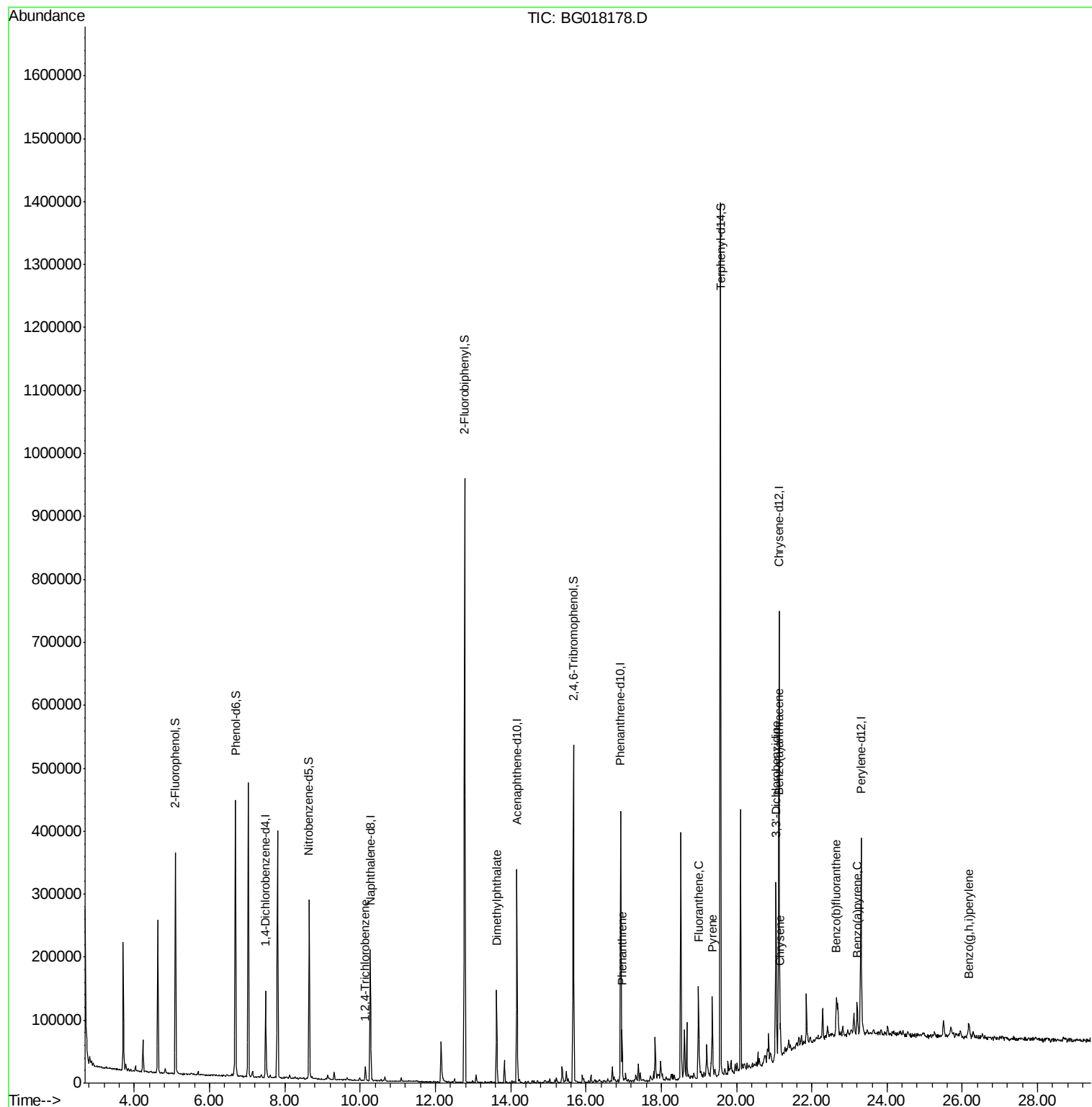
| Internal Standards          | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 7.49  | 152  | 40265    | 20.00 | ng    | -0.10    |
| 21) Naphthalene-d8          | 10.28 | 136  | 185066   | 20.00 | ng    | -0.09    |
| 38) Acenaphthene-d10        | 14.17 | 164  | 121704   | 20.00 | ng    | -0.08    |
| 63) Phenanthrene-d10        | 16.92 | 188  | 263424   | 20.00 | ng    | -0.08    |
| 75) Chrysene-d12            | 21.13 | 240  | 237298   | 20.00 | ng    | -0.07    |
| 86) Perylene-d12            | 23.31 | 264  | 231328   | 20.00 | ng    | -0.11    |
| System Monitoring Compounds |       |      |          |       |       |          |
| 5) 2-Fluorophenol           | 5.09  | 112  | 172991   | 74.95 | ng    | -0.10    |
| 7) Phenol-d6                | 6.69  | 99   | 278085   | 91.96 | ng    | -0.07    |
| 23) Nitrobenzene-d5         | 8.65  | 82   | 161024   | 56.35 | ng    | -0.09    |
| 41) 2,4,6-Tribromophenol    | 15.67 | 330  | 115833   | 93.94 | ng    | -0.07    |
| 44) 2-Fluorobiphenyl        | 12.78 | 172  | 519327   | 73.95 | ng    | -0.08    |
| 78) Terphenyl-d14           | 19.58 | 244  | 639668   | 67.90 | ng    | -0.07    |
| Target Compounds            |       |      |          |       |       | Qvalue   |
| 30) 1,2,4-Trichlorobenzene  | 10.14 | 180  | 8632     | 3.09  | ng    | 87       |
| 49) Dimethylphthalate       | 13.63 | 163  | 102386   | 12.11 | ng    | 100      |
| 70) Phenanthrene            | 16.96 | 178  | 48949    | 3.60  | ng    | 98       |
| 74) Fluoranthene            | 18.99 | 202  | 84545    | 5.68  | ng    | 94       |
| 77) Pyrene                  | 19.36 | 202  | 76393    | 5.77  | ng    | 96       |
| 80) Benzo(a)anthracene      | 21.11 | 228  | 37639    | 3.00  | ng    | 99       |
| 81) 3,3'-Dichlorobenzidine  | 21.05 | 252  | 81816    | 18.00 | ng    | # 96     |
| 82) Chrysene                | 21.16 | 228  | 35570    | 2.98  | ng    | 96       |
| 87) Benzo(b)fluoranthene    | 22.66 | 252  | 47328m   | 3.74  | ng    |          |
| 89) Benzo(a)pyrene          | 23.21 | 252  | 35750m   | 3.03  | ng    |          |
| 91) Benzo(g,h,i)perylene    | 26.17 | 276  | 23928    | 2.03  | ng    | # 90     |

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

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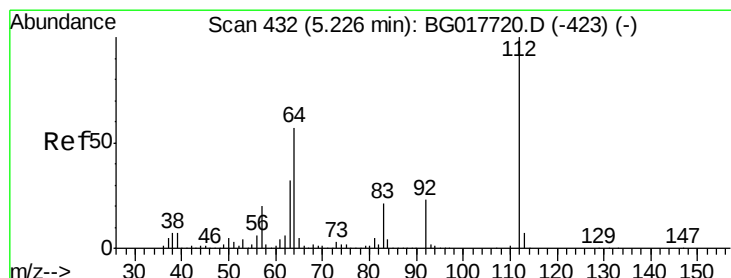
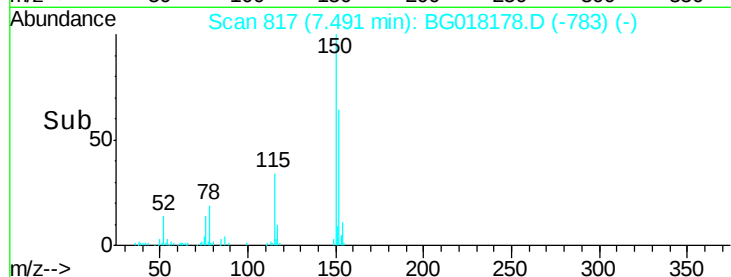
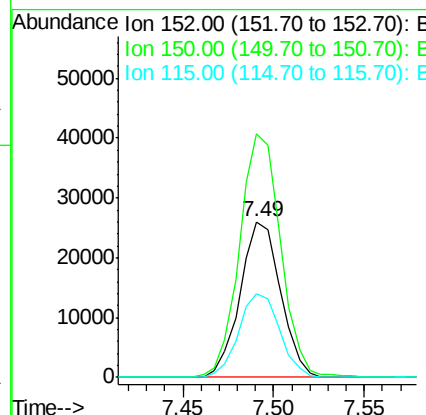
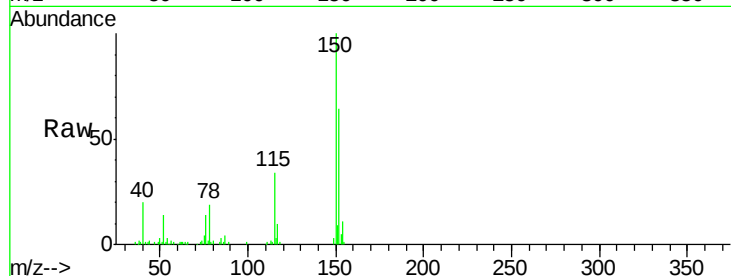


#1

1,4-Dichlorobenzene-d4  
Concen: 20.00 ng  
RT: 7.49 min Scan# 817  
Delta R.T. -0.10 min  
Lab File: BG018178.D  
Acq: 30 Jul 2015 17:36

Instrument :  
BNA\_G  
ClientSampled :  
SOIL-3

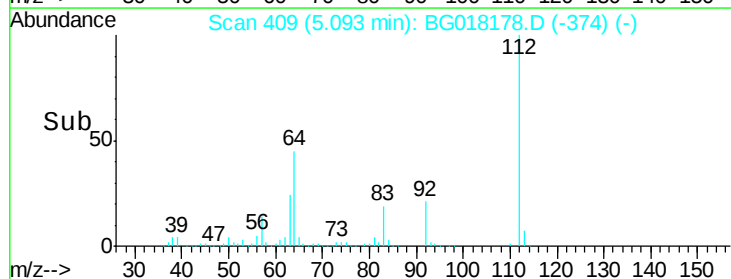
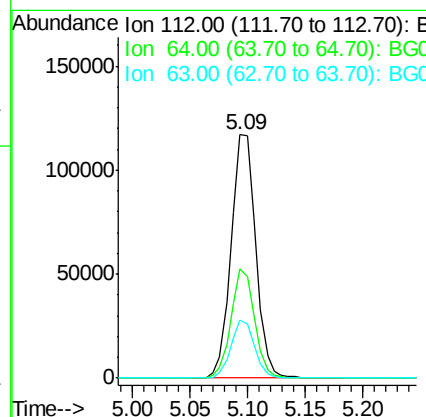
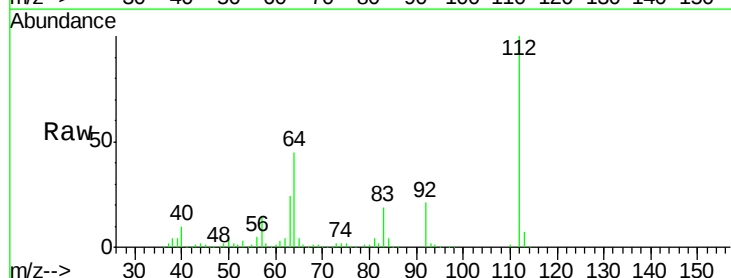
Tgt Ion:152 Resp: 40265  
Ion Ratio Lower Upper  
152 100  
150 156.4 119.1 178.7  
115 53.7 47.0 70.4



#5

2-Fluorophenol  
Concen: 74.95 ng  
RT: 5.09 min Scan# 409  
Delta R.T. -0.10 min  
Lab File: BG018178.D  
Acq: 30 Jul 2015 17:36

Tgt Ion:112 Resp: 172991  
Ion Ratio Lower Upper  
112 100  
64 44.8 45.4 68.0#  
63 23.8 25.3 37.9#





#7

Phenol-d6

Concen: 91.96 ng

RT: 6.69 min Scan# 681

Delta R.T. -0.07 min

Lab File: BG018178.D

Acq: 30 Jul 2015 17:36

Instrument :

BNA\_G

ClientSampleId :

SOIL-3

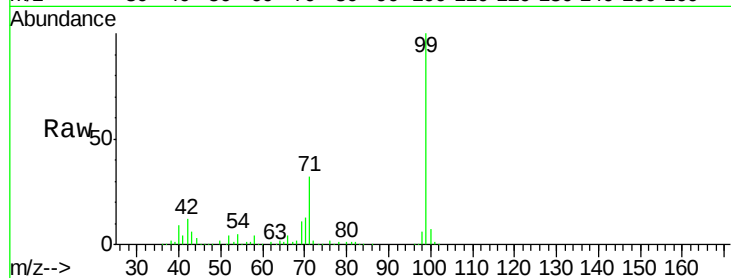
Tgt Ion: 99 Resp: 278085

Ion Ratio Lower Upper

99 100

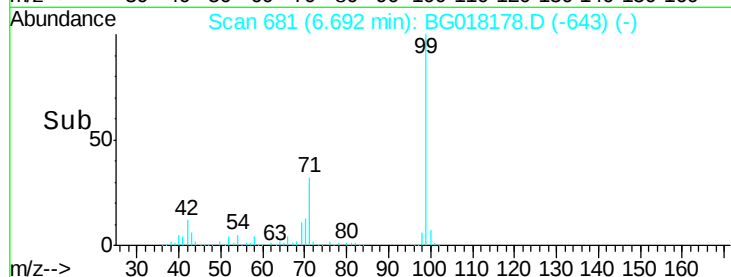
42 12.1 16.2 24.4#

71 32.0 29.5 44.3

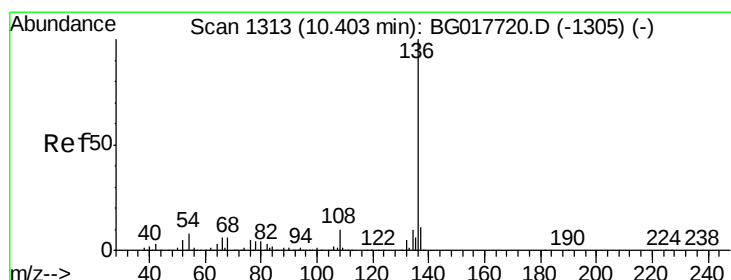


Abundance Ion 99.00 (98.70 to 99.70): BGC  
Ion 42.00 (41.70 to 42.70): BGC  
Ion 71.00 (70.70 to 71.70): BGC

6.69



Time-->



#21

Naphthalene-d8

Concen: 20.00 ng

RT: 10.28 min Scan# 1291

Delta R.T. -0.09 min

Lab File: BG018178.D

Acq: 30 Jul 2015 17:36

Tgt Ion: 136 Resp: 185066

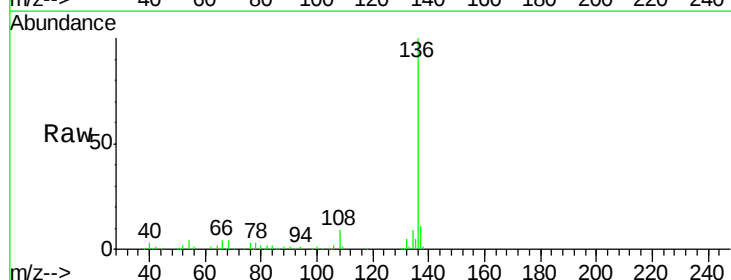
Ion Ratio Lower Upper

136 100

137 10.9 8.8 13.2

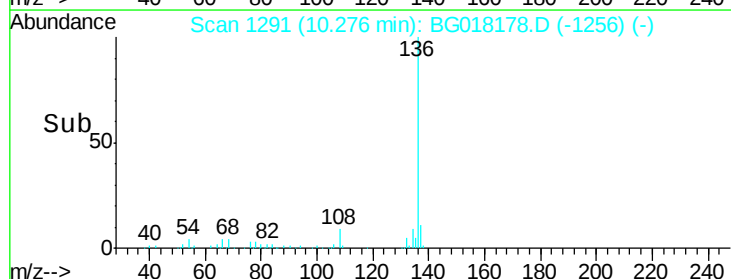
54 4.0 6.6 9.8#

68 3.9 5.1 7.7#

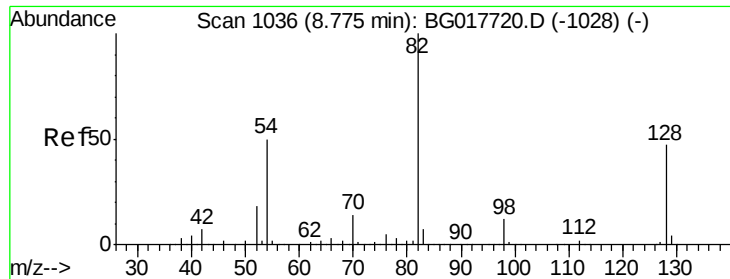


Abundance Ion 136.00 (135.70 to 136.70): BGC  
Ion 137.00 (136.70 to 137.70): BGC  
Ion 54.00 (53.70 to 54.70): BGC  
Ion 68.00 (67.70 to 68.70): BGC

10.28



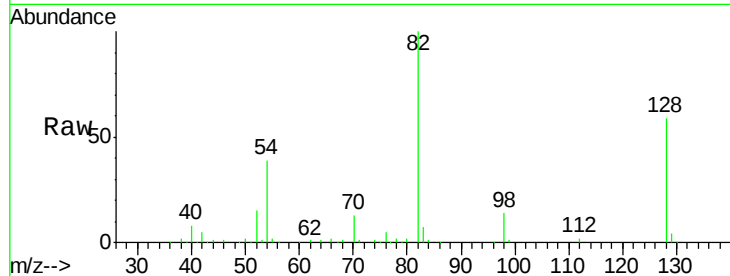
Time-->



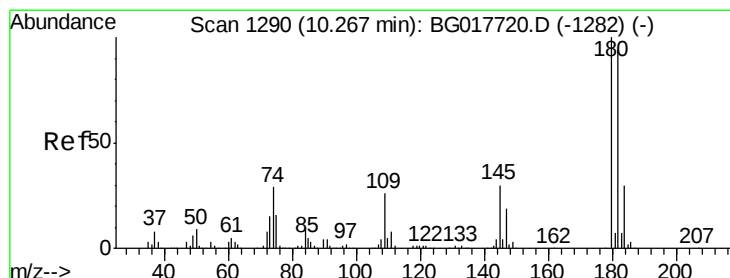
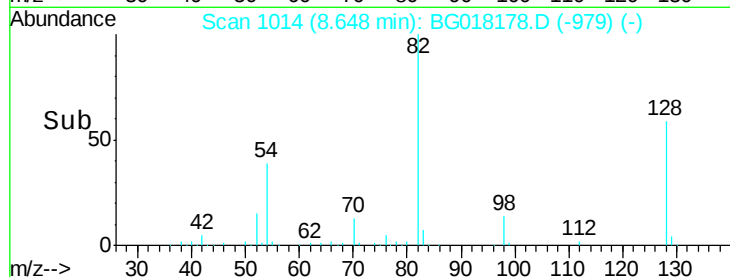
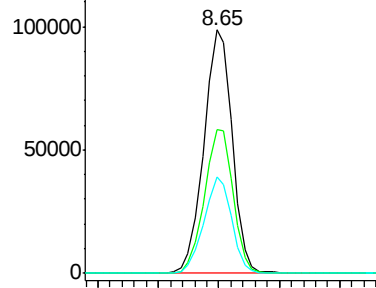
#23  
 Nitrobenzene-d5  
 Concen: 56.35 ng  
 RT: 8.65 min Scan# 1014  
 Delta R.T. -0.09 min  
 Lab File: BG018178.D  
 Acq: 30 Jul 2015 17:36

Instrument :  
 BNA\_G  
 ClientSampleId :  
 SOIL-3

Tgt Ion: 82 Resp: 161024  
 Ion Ratio Lower Upper  
 82 100  
 128 59.1 37.8 56.6#  
 54 39.4 39.9 59.9#

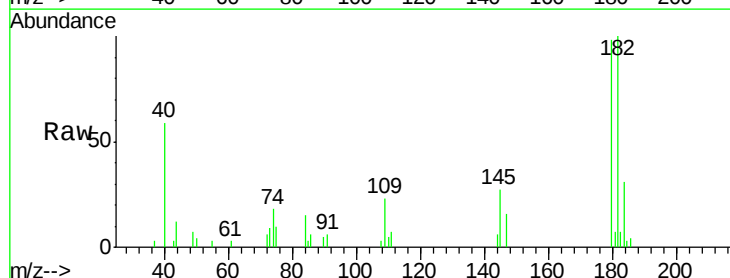


Abundance Ion 82.00 (81.70 to 82.70): BGC  
 Ion 128.00 (127.70 to 128.70): BGC  
 Ion 54.00 (53.70 to 54.70): BGC

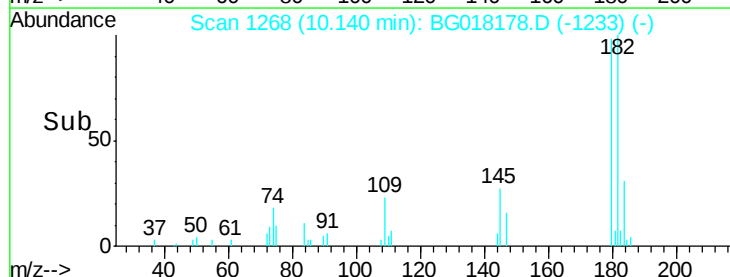
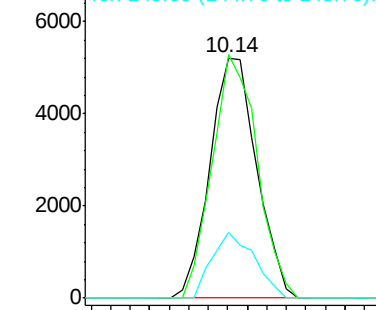


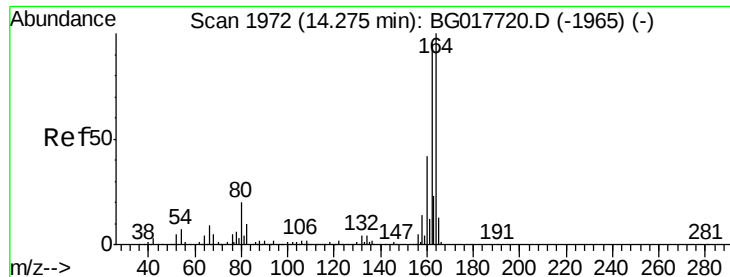
#30  
 1,2,4-Trichlorobenzene  
 Concen: 3.09 ng  
 RT: 10.14 min Scan# 1268  
 Delta R.T. -0.09 min  
 Lab File: BG018178.D  
 Acq: 30 Jul 2015 17:36

Tgt Ion: 180 Resp: 8632  
 Ion Ratio Lower Upper  
 180 100  
 182 109.1 75.2 112.8  
 145 27.5 24.1 36.1



Abundance Ion 180.00 (179.70 to 180.70): BGC  
 Ion 182.00 (181.70 to 182.70): BGC  
 Ion 145.00 (144.70 to 145.70): BGC





#38

Acenaphthene-d10

Concen: 20.00 ng

RT: 14.17 min Scan# 1953

Delta R.T. -0.08 min

Lab File: BG018178.D

Acq: 30 Jul 2015 17:36

Instrument :

BNA\_G

ClientSampleId :

SOIL-3

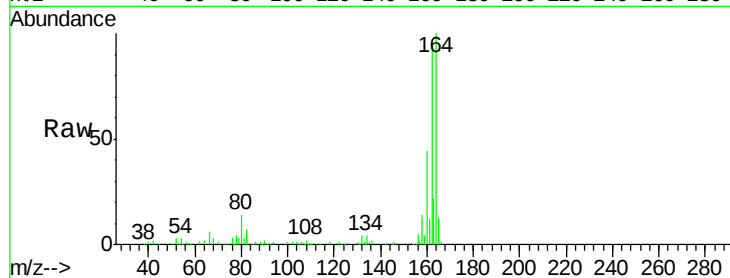
Tgt Ion:164 Resp: 121704

Ion Ratio Lower Upper

164 100

162 97.0 76.3 114.5

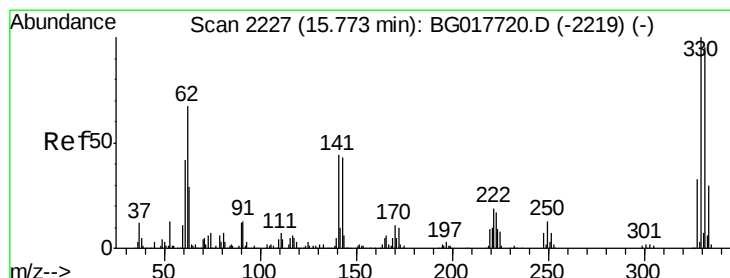
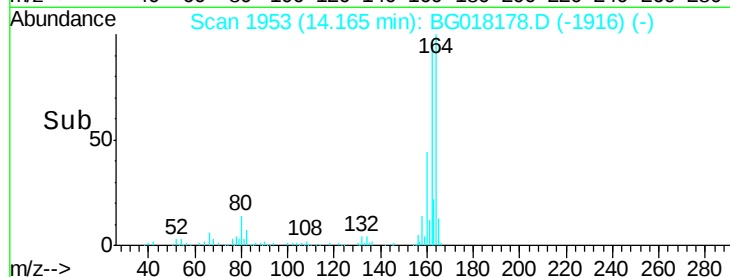
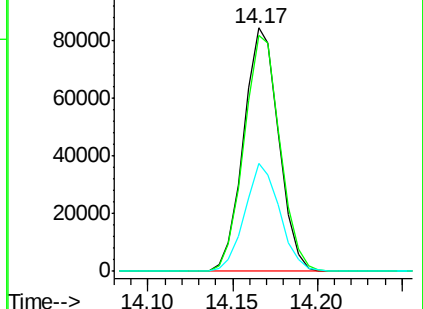
160 44.4 33.7 50.5



Abundance Ion 164.00 (163.70 to 164.70): E

Ion 162.00 (161.70 to 162.70): E

Ion 160.00 (159.70 to 160.70): E



#41

2,4,6-Tribromophenol

Concen: 93.94 ng

RT: 15.67 min Scan# 2209

Delta R.T. -0.07 min

Lab File: BG018178.D

Acq: 30 Jul 2015 17:36

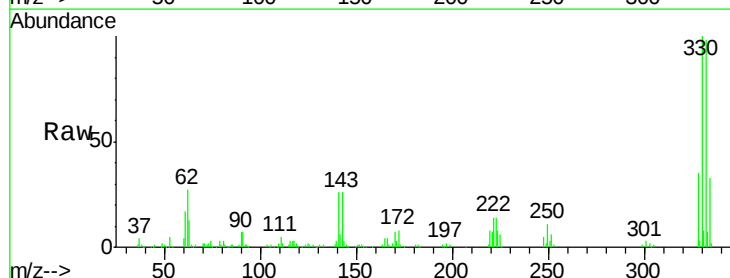
Tgt Ion:330 Resp: 115833

Ion Ratio Lower Upper

330 100

332 97.8 76.8 115.2

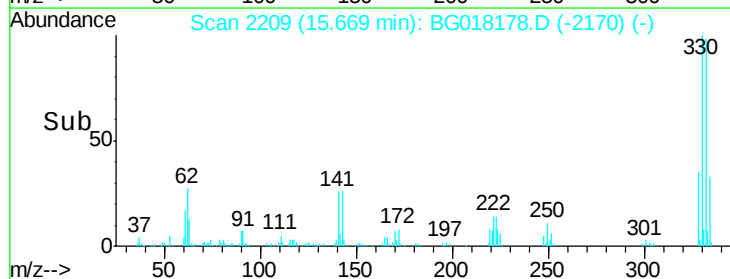
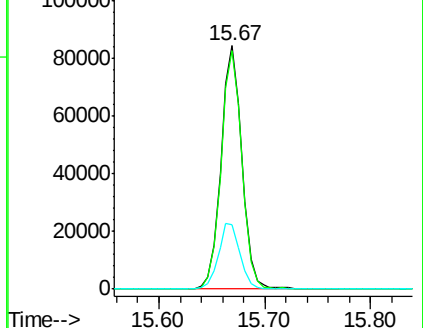
141 28.2 38.0 57.0#

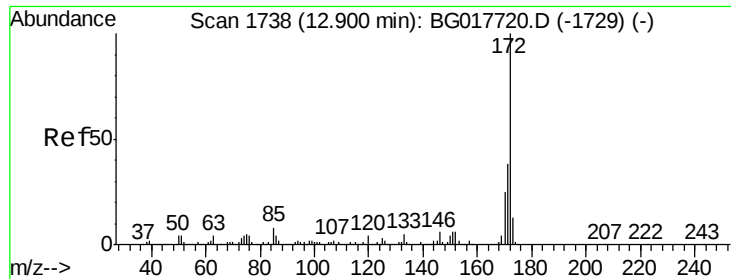


Abundance Ion 329.80 (329.50 to 330.50): E

Ion 331.80 (331.50 to 332.50): E

Ion 141.00 (140.70 to 141.70): E

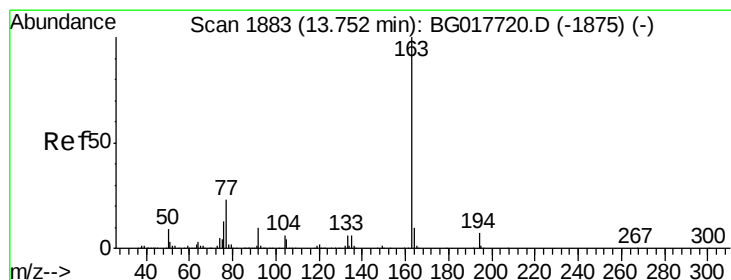
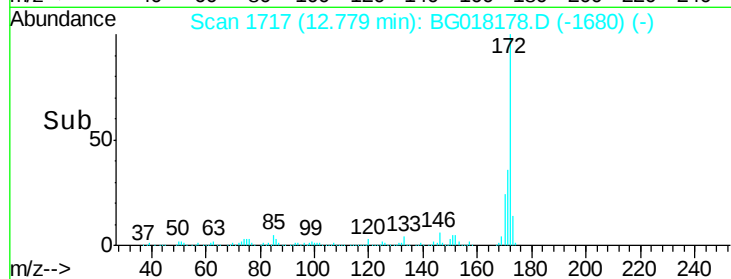
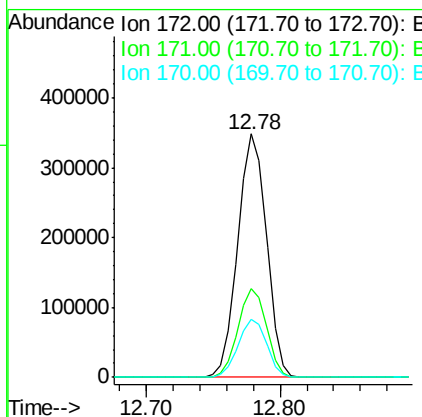
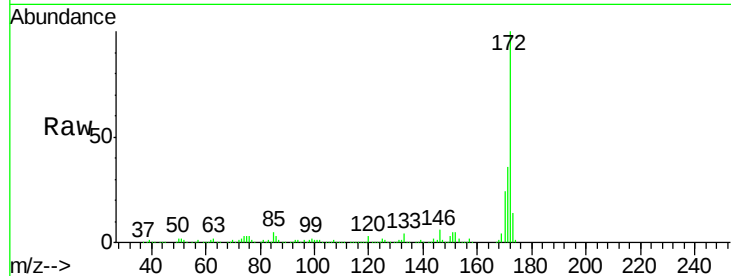




#44  
2-Fluorobiphenyl  
Concen: 73.95 ng  
RT: 12.78 min Scan# 1717  
Delta R.T. -0.08 min  
Lab File: BG018178.D  
Acq: 30 Jul 2015 17:36

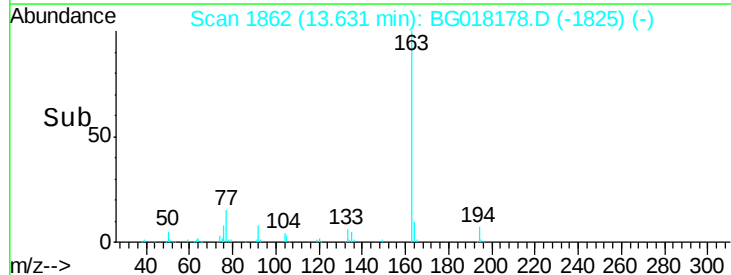
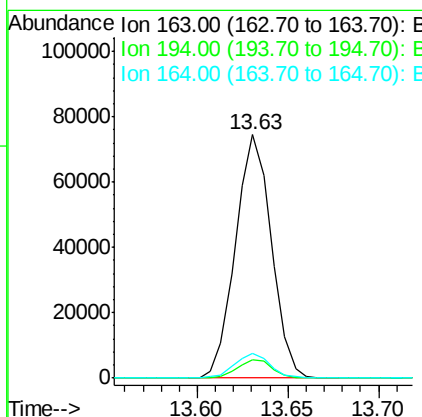
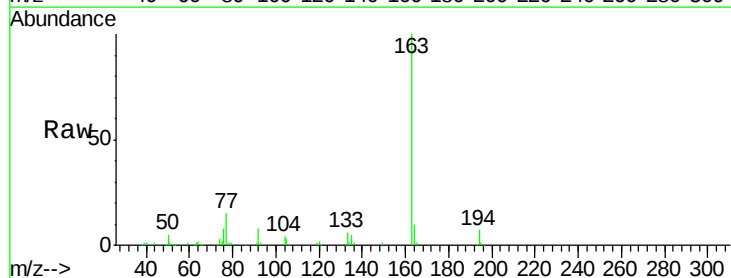
Instrument :  
BNA\_G  
ClientSampleId :  
SOIL-3

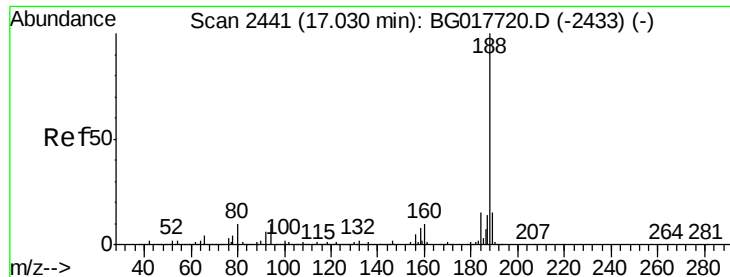
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 36.4  | 30.7  | 46.1  |
| 170     | 23.9  | 19.7  | 29.5  |



#49  
Dimethylphthalate  
Concen: 12.11 ng  
RT: 13.63 min Scan# 1862  
Delta R.T. -0.08 min  
Lab File: BG018178.D  
Acq: 30 Jul 2015 17:36

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 163     | 100   |       |       |
| 194     | 7.3   | 5.8   | 8.6   |
| 164     | 10.4  | 8.3   | 12.5  |

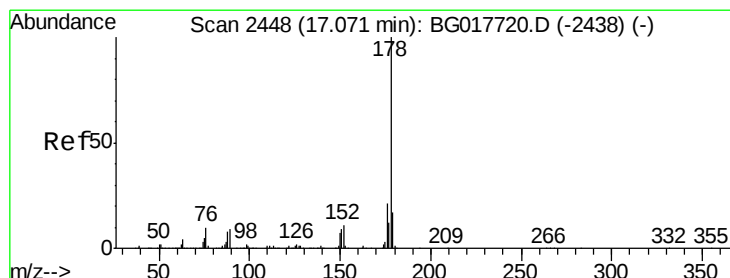
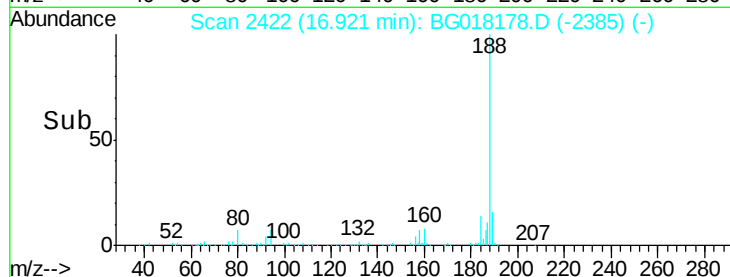
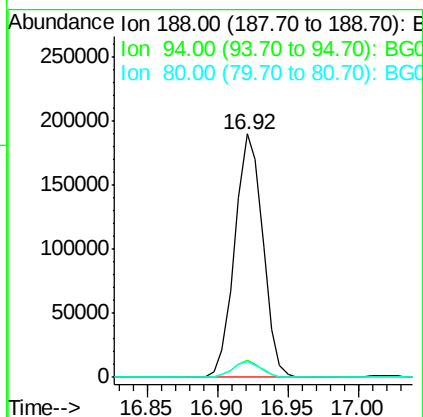
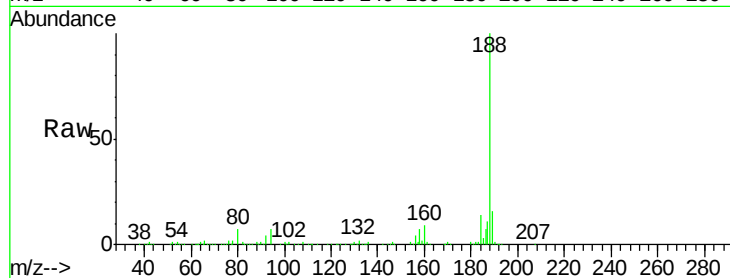




#63  
Phenanthrene-d10  
Concen: 20.00 ng  
RT: 16.92 min Scan# 2422  
Delta R.T. -0.08 min  
Lab File: BG018178.D  
Acq: 30 Jul 2015 17:36

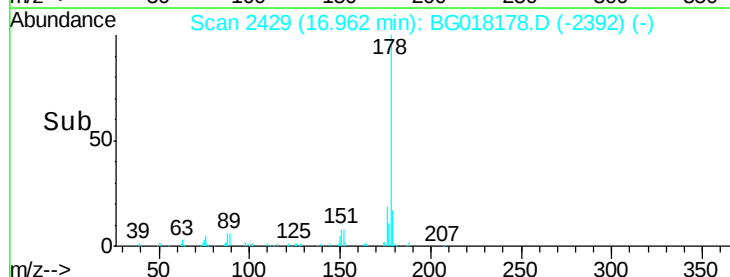
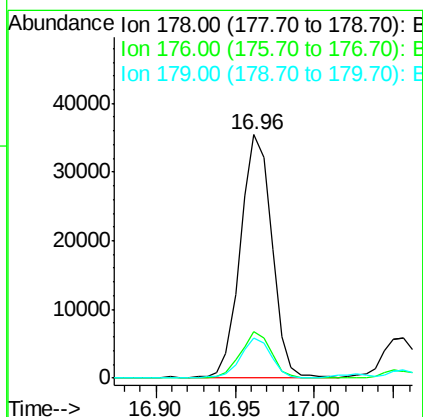
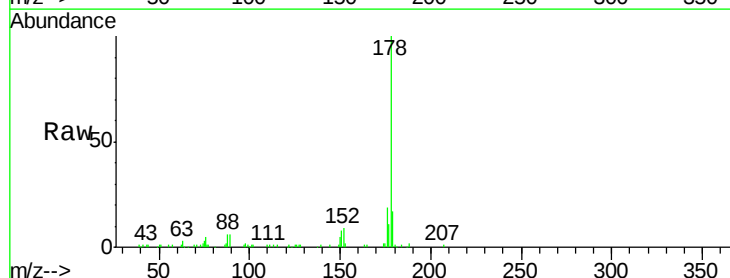
Instrument :  
BNA\_G  
ClientSampleId :  
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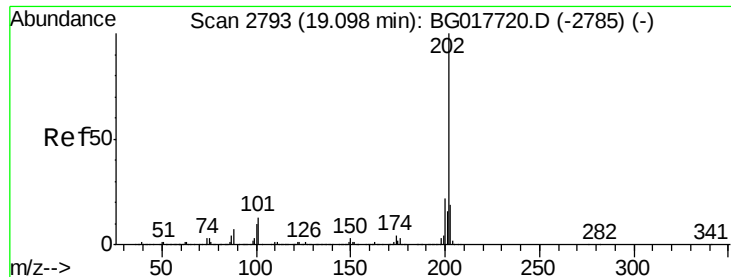
Tgt Ion:188 Resp: 263424  
Ion Ratio Lower Upper  
188 100  
94 6.8 8.2 12.2#  
80 6.6 8.2 12.4#



#70  
Phenanthrene  
Concen: 3.60 ng  
RT: 16.96 min Scan# 2429  
Delta R.T. -0.08 min  
Lab File: BG018178.D  
Acq: 30 Jul 2015 17:36

Tgt Ion:178 Resp: 48949  
Ion Ratio Lower Upper  
178 100  
176 19.2 16.5 24.7  
179 16.5 13.5 20.3





#74

Fluoranthene

Concen: 5.68 ng

RT: 18.99 min Scan# 2775

Delta R.T. -0.07 min

Lab File: BG018178.D

Acq: 30 Jul 2015 17:36

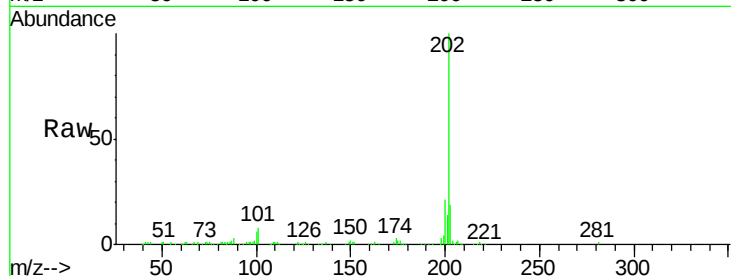
Instrument :

BNA\_G

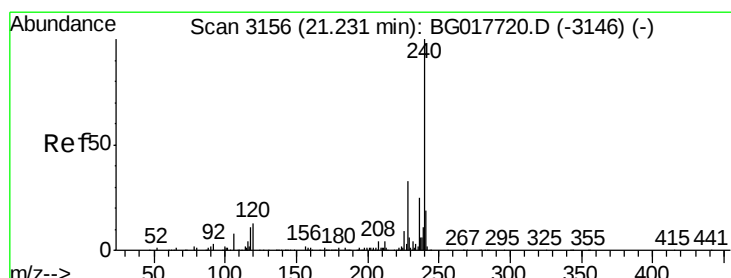
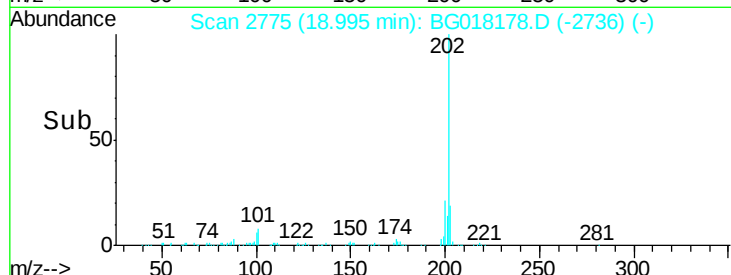
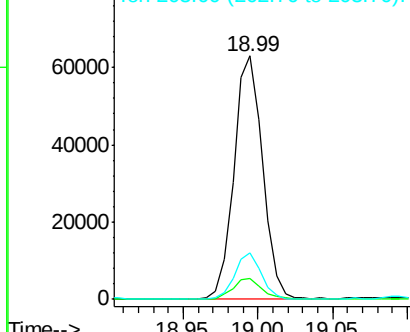
ClientSampleId :

SOIL-3

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 202   | Resp: | 84545 |
| Ion Ratio | Lower | Upper |       |
| 202       | 100   |       |       |
| 101       | 8.4   | 0.0   | 33.3  |
| 203       | 18.9  | 0.0   | 39.5  |



Abundance Ion 202.00 (201.70 to 202.70): E  
Ion 101.00 (100.70 to 101.70): E  
Ion 203.00 (202.70 to 203.70): E



#75

Chrysene-d12

Concen: 20.00 ng

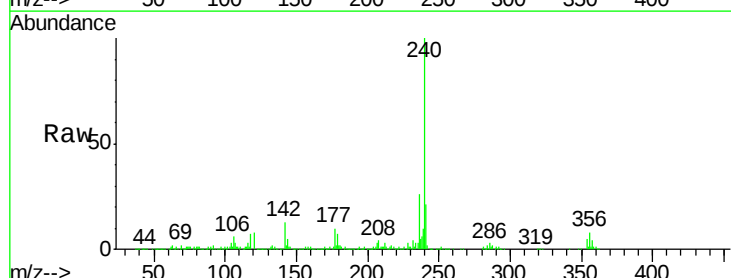
RT: 21.13 min Scan# 3138

Delta R.T. -0.07 min

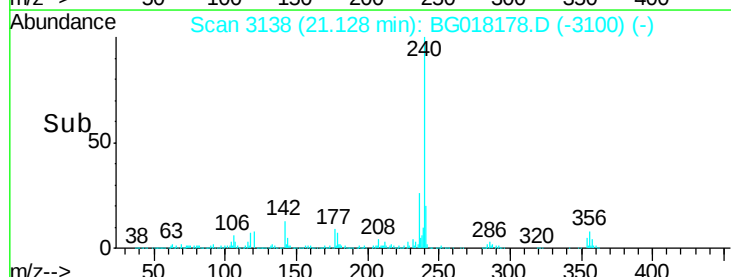
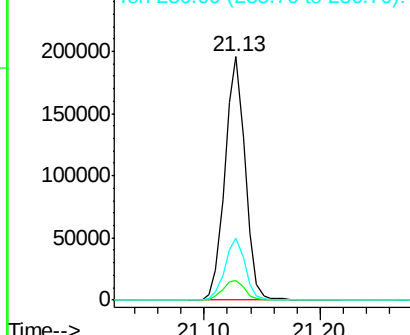
Lab File: BG018178.D

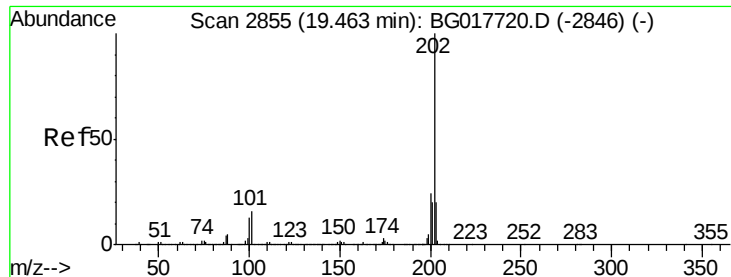
Acq: 30 Jul 2015 17:36

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 240   | Resp: | 237298 |
| Ion Ratio | Lower | Upper |        |
| 240       | 100   |       |        |
| 120       | 8.3   | 10.8  | 16.2#  |
| 236       | 25.6  | 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: 5.77 ng

RT: 19.36 min Scan# 2837

Delta R.T. -0.07 min

Lab File: BG018178.D

Acq: 30 Jul 2015 17:36

Instrument :

BNA\_G

ClientSampleId :

SOIL-3

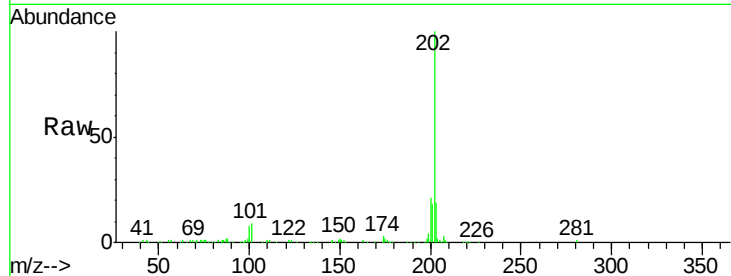
Tgt Ion:202 Resp: 76393

Ion Ratio Lower Upper

202 100

200 20.9 18.8 28.2

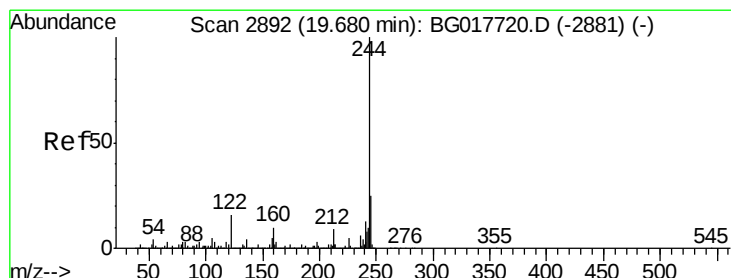
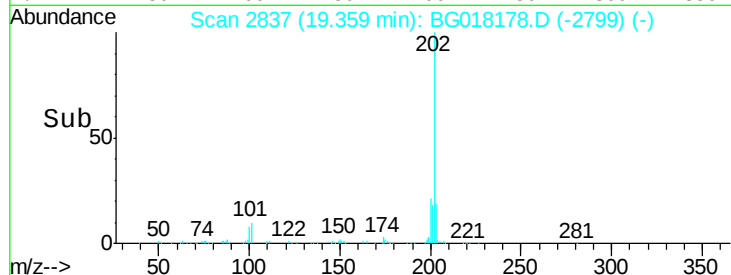
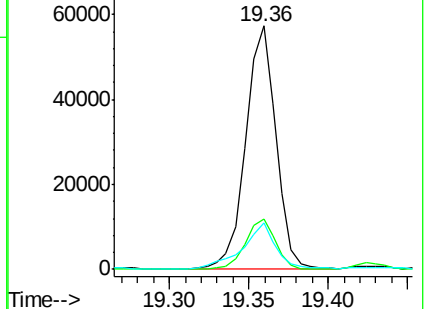
203 19.2 15.9 23.9



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: 67.90 ng

RT: 19.58 min Scan# 2874

Delta R.T. -0.07 min

Lab File: BG018178.D

Acq: 30 Jul 2015 17:36

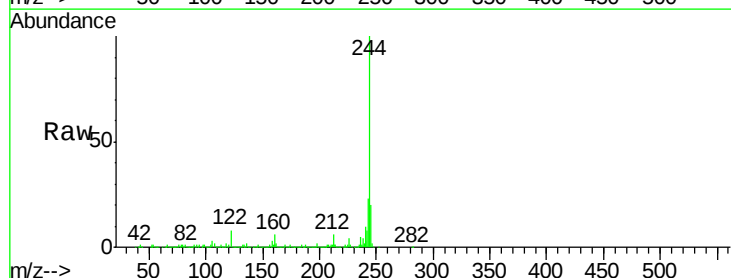
Tgt Ion:244 Resp: 639668

Ion Ratio Lower Upper

244 100

212 6.5 7.2 10.8#

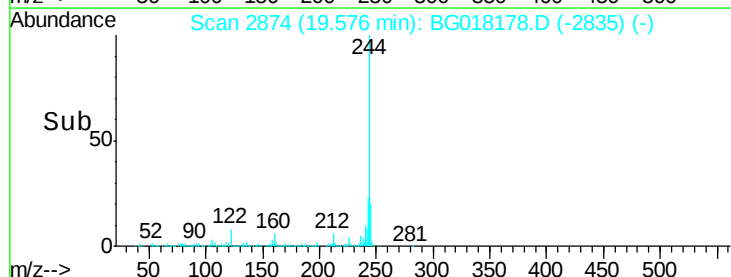
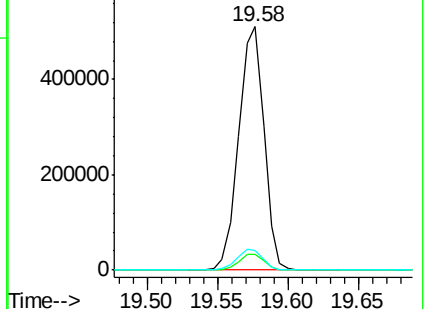
122 8.0 12.8 19.2#

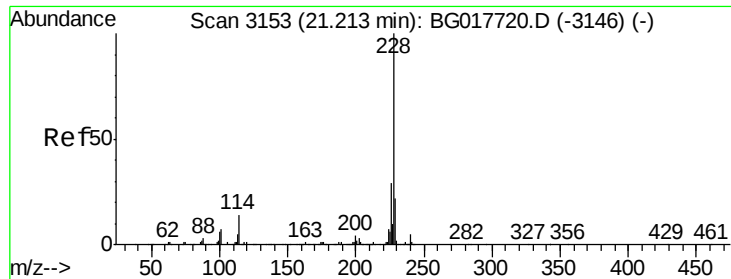


Abundance Ion 244.00 (243.70 to 244.70): E

Ion 212.00 (211.70 to 212.70): E

Ion 122.00 (121.70 to 122.70): E





#80

Benzo(a)anthracene

Concen: 3.00 ng

RT: 21.11 min Scan# 3135

Delta R.T. -0.07 min

Lab File: BG018178.D

Acq: 30 Jul 2015 17:36

Instrument :

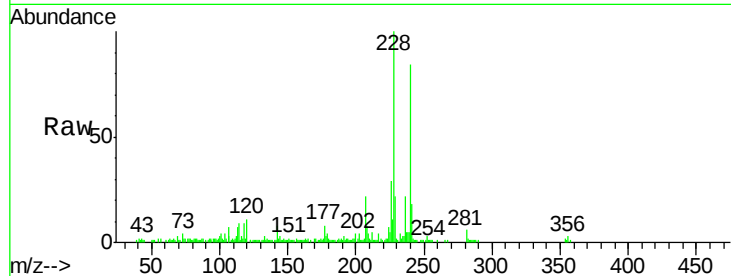
BNA\_G

ClientSampleId :

SOIL-3

Tgt Ion:228 Resp: 37639

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 228 | 100   |       |       |
| 226 | 28.8  | 23.1  | 34.7  |
| 229 | 22.1  | 17.4  | 26.0  |

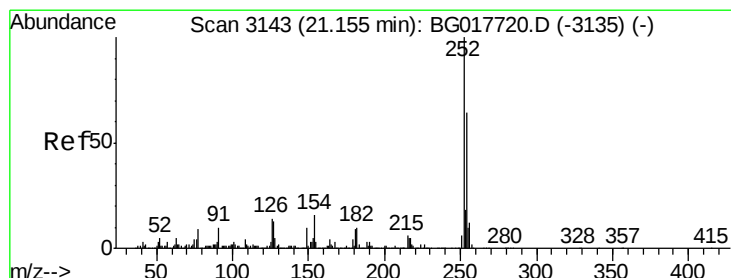
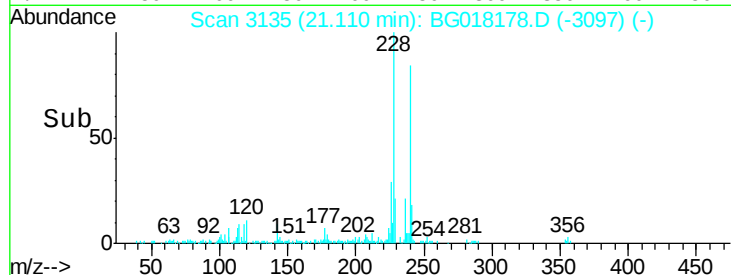
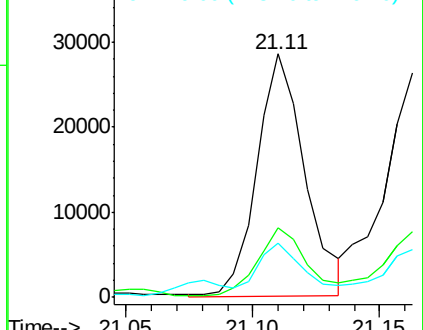


Abundance

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



#81

3,3'-Dichlorobenzidine

Concen: 18.00 ng

RT: 21.05 min Scan# 3125

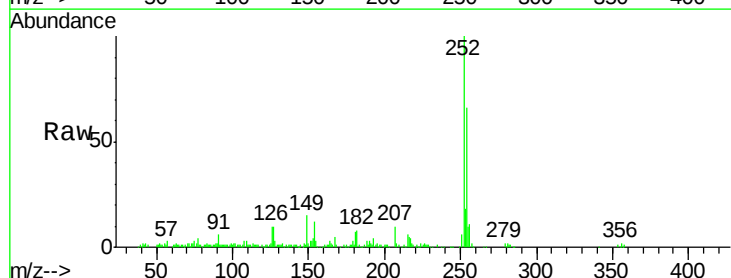
Delta R.T. -0.07 min

Lab File: BG018178.D

Acq: 30 Jul 2015 17:36

Tgt Ion:252 Resp: 81816

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 252 | 100   |       |       |
| 254 | 65.8  | 51.2  | 76.8  |
| 126 | 10.4  | 11.4  | 17.0  |

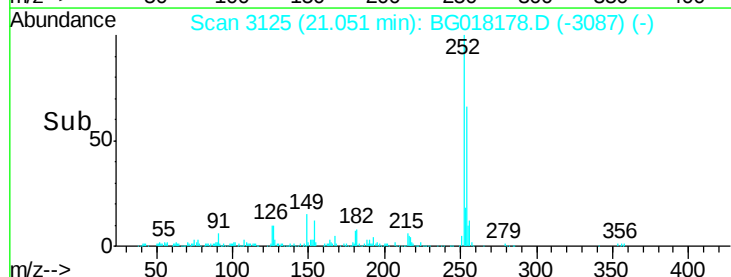
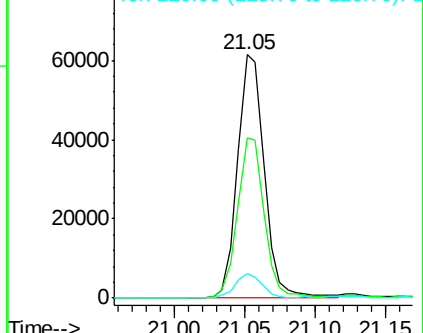


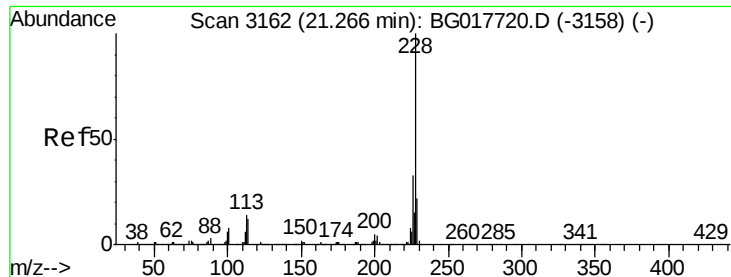
Abundance

Ion 252.00 (251.70 to 252.70): E

Ion 254.00 (253.70 to 254.70): E

Ion 126.00 (125.70 to 126.70): E





#82

Chrysene

Concen: 2.98 ng

RT: 21.16 min Scan# 3144

Delta R.T. -0.07 min

Lab File: BG018178.D

Acq: 30 Jul 2015 17:36

Instrument :

BNA\_G

ClientSampleId :

SOIL-3

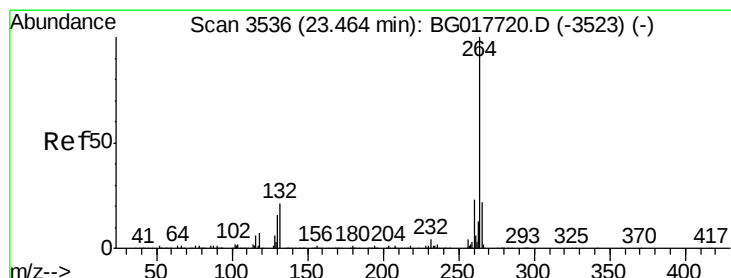
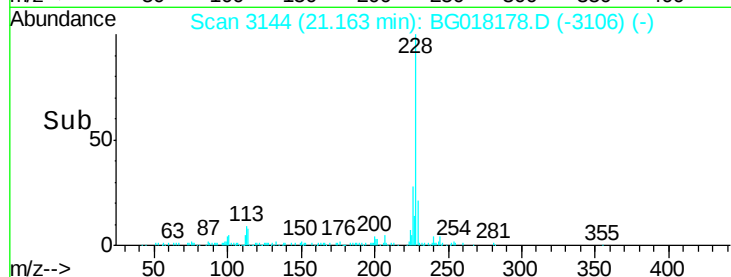
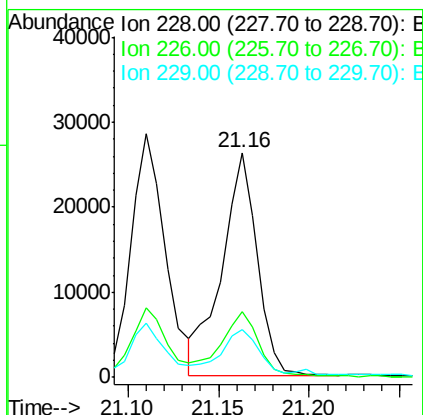
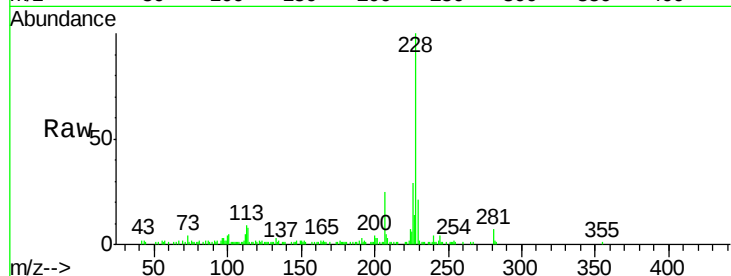
Tgt Ion:228 Resp: 35570

Ion Ratio Lower Upper

228 100

226 29.0 26.1 39.1

229 21.3 17.7 26.5



#86

Perylene-d12

Concen: 20.00 ng

RT: 23.31 min Scan# 3509

Delta R.T. -0.11 min

Lab File: BG018178.D

Acq: 30 Jul 2015 17:36

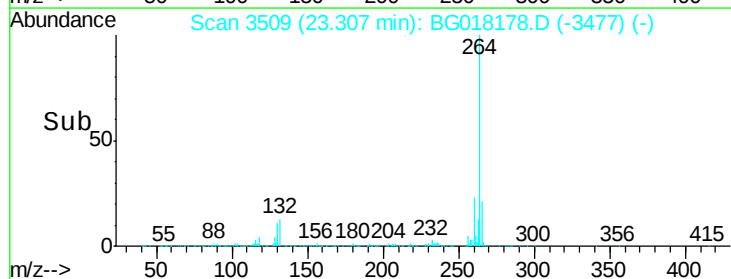
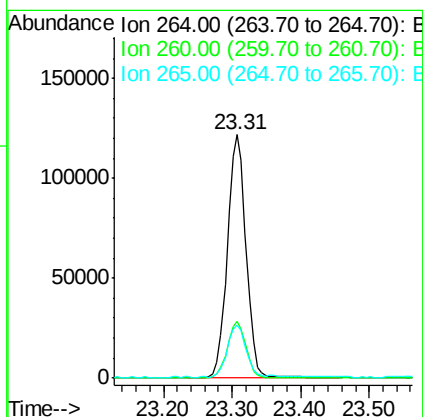
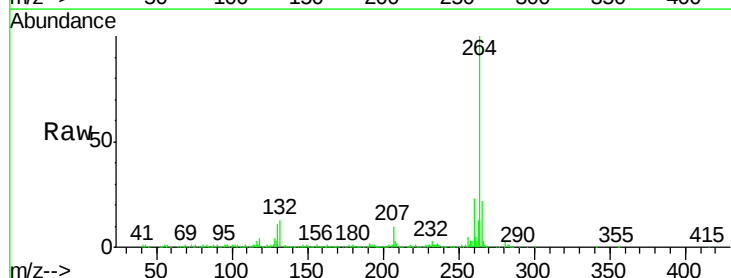
Tgt Ion:264 Resp: 231328

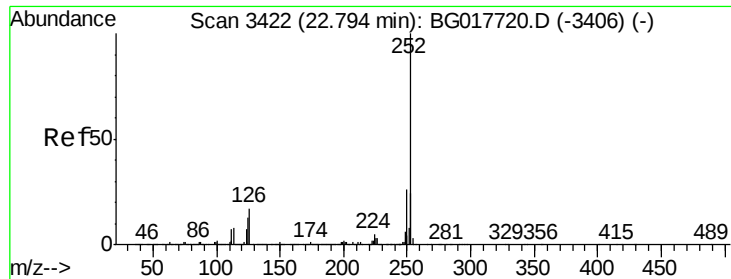
Ion Ratio Lower Upper

264 100

260 23.4 18.6 27.8

265 21.6 18.2 27.2





#87

Benzo(b)fluoranthene

Concen: 3.74 ng m

RT: 22.66 min Scan# 3398

Delta R.T. -0.09 min

Lab File: BG018178.D

Acq: 30 Jul 2015 17:36

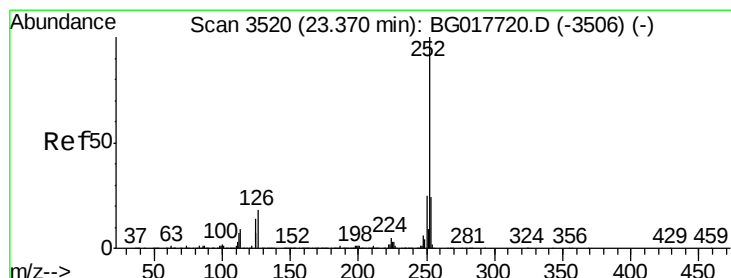
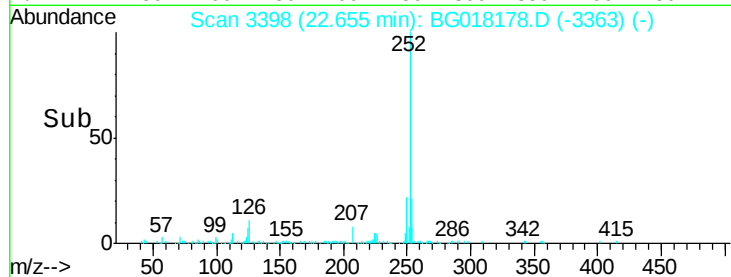
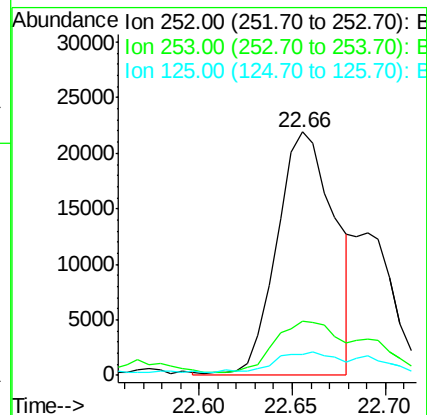
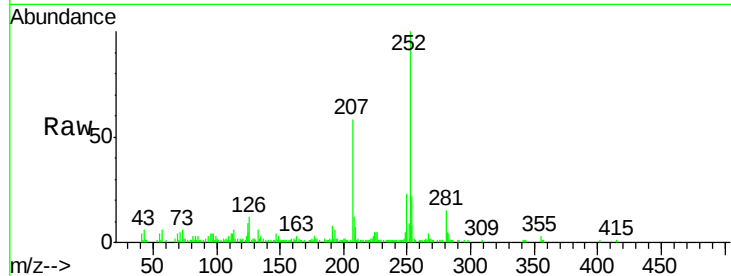
Instrument :

BNA\_G

ClientSampleId :

SOIL-3

|           |      |       |       |
|-----------|------|-------|-------|
| Tgt Ion:  | 252  | Resp: | 47328 |
| Ion Ratio |      | Lower | Upper |
| 252       | 100  |       |       |
| 253       | 22.5 | 19.7  | 29.5  |
| 125       | 8.8  | 10.6  | 15.8# |



#89

Benzo(a)pyrene

Concen: 3.03 ng m

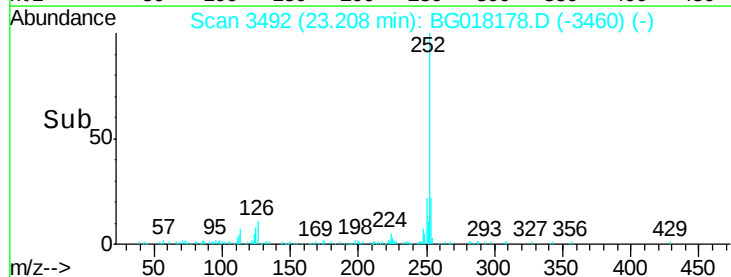
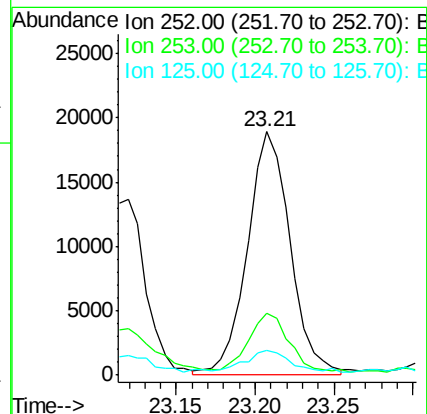
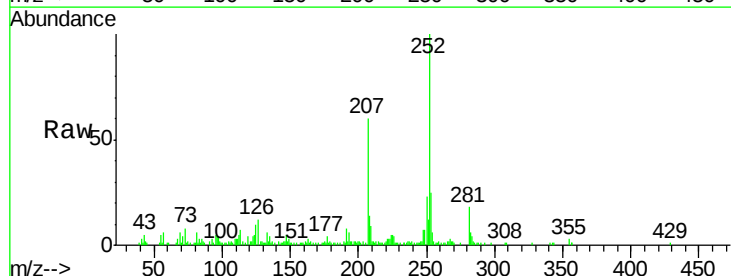
RT: 23.21 min Scan# 3492

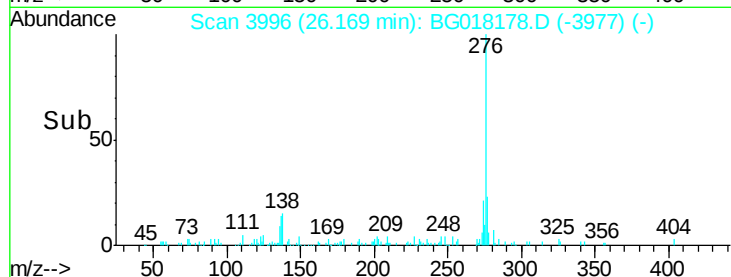
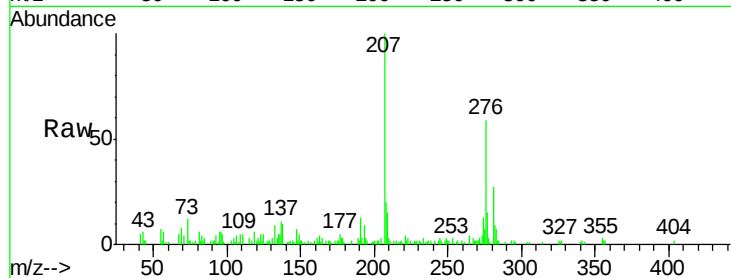
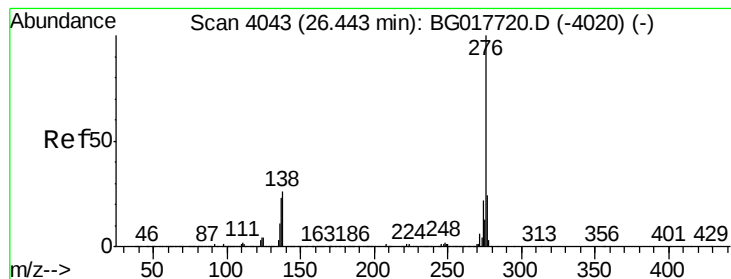
Delta R.T. -0.11 min

Lab File: BG018178.D

Acq: 30 Jul 2015 17:36

|           |      |       |       |
|-----------|------|-------|-------|
| Tgt Ion:  | 252  | Resp: | 35750 |
| Ion Ratio |      | Lower | Upper |
| 252       | 100  |       |       |
| 253       | 25.2 | 19.0  | 28.6  |
| 125       | 10.1 | 11.1  | 16.7# |





#91

Benzo(g,h,i)perylene

Concen: 2.03 ng

RT: 26.17 min Scan# 3996

Delta R.T. -0.19 min

Lab File: BG018178.D

Acq: 30 Jul 2015 17:36

Instrument :

BNA\_G

ClientSampleId :

SOIL-3

Tgt Ion: 276 Resp: 23928

Ion Ratio Lower Upper

276 100

277 25.1 18.9 28.3

138 17.5 20.8 31.2#

