

Data Path : Z:\HPCHEM1\BNA\_G\DATA\BG122215\  
 Data File : BG020460.D  
 Acq On : 24 Dec 2015 2:02  
 Operator : UM/SJ  
 Sample : G4849-08DL 5X  
 Misc :  
 ALS Vial : 50 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 D9N72MEDL

Quant Time: Dec 24 02:54:12 2015  
 Quant Method : Z:\HPCHEM1\BNA\_G\METHODS\SOM02.2-EPA-BG121415.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Thu Dec 24 02:43:25 2015  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 8.08  | 152  | 19499    | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 10.90 | 136  | 90348    | 20.00 | ng/ul | 0.00     |
| 36) Acenaphthene-d10      | 14.72 | 164  | 64224    | 20.00 | ng/ul | 0.00     |
| 62) Phenanthrene-d10      | 17.46 | 188  | 153327   | 20.00 | ng/ul | 0.00     |
| 78) Chrysene-d12          | 21.73 | 240  | 192325   | 20.00 | ng/ul | 0.00     |
| 86) Perylene-d12          | 25.00 | 264  | 176987   | 20.00 | ng/ul | 0.00     |

## System Monitoring Compounds

|                                |       |     |       |      |       |      |
|--------------------------------|-------|-----|-------|------|-------|------|
| 3) 1,4-Dioxane-d8              | 0.00  | 96  | 0     | 0.00 | ng/uL |      |
| 5) Phenol-d5                   | 7.24  | 99  | 7308  | 4.25 | ng/ul | 0.00 |
| 7) Bis-(2-Chloroethyl)ether-d  | 7.40  | 67  | 4460  | 4.35 | ng/ul | 0.00 |
| 9) 2-Chlorophenol-d4           | 7.61  | 132 | 5674  | 4.54 | ng/ul | 0.00 |
| 13) 4-Methylphenol-d8          | 8.79  | 113 | 6895  | 4.69 | ng/ul | 0.00 |
| 19) Nitrobenzene-d5            | 9.25  | 128 | 3502  | 4.97 | ng/ul | 0.00 |
| 22) 2-Nitrophenol-d4           | 9.98  | 143 | 4061  | 5.18 | ng/ul | 0.00 |
| 26) 2,4-Dichlorophenol-d3      | 10.52 | 165 | 8107  | 5.11 | ng/ul | 0.00 |
| 29) 4-Chloroaniline-d4         | 11.03 | 131 | 10184 | 5.71 | ng/ul | 0.00 |
| 44) Dimethylphthalate-d6       | 14.11 | 166 | 35397 | 6.81 | ng/ul | 0.00 |
| 47) Acenaphthylene-d8          | 14.41 | 160 | 39911 | 6.60 | ng/ul | 0.00 |
| 52) 4-Nitrophenol-d4           | 14.92 | 143 | 2403  | 2.58 | ng/ul | 0.00 |
| 58) Fluorene-d10               | 15.71 | 176 | 32060 | 6.80 | ng/ul | 0.00 |
| 63) 4,6-Dinitro-2-methylphenol | 15.82 | 200 | 2649  | 2.91 | ng/ul | 0.00 |
| 71) Anthracene-d10             | 17.56 | 188 | 49848 | 7.06 | ng/ul | 0.00 |
| 79) Pyrene-d10                 | 19.84 | 212 | 60163 | 6.71 | ng/ul | 0.00 |
| 90) Benzo(a)pyrene-d12         | 24.77 | 264 | 64715 | 7.33 | ng/ul | 0.00 |

## Target Compounds

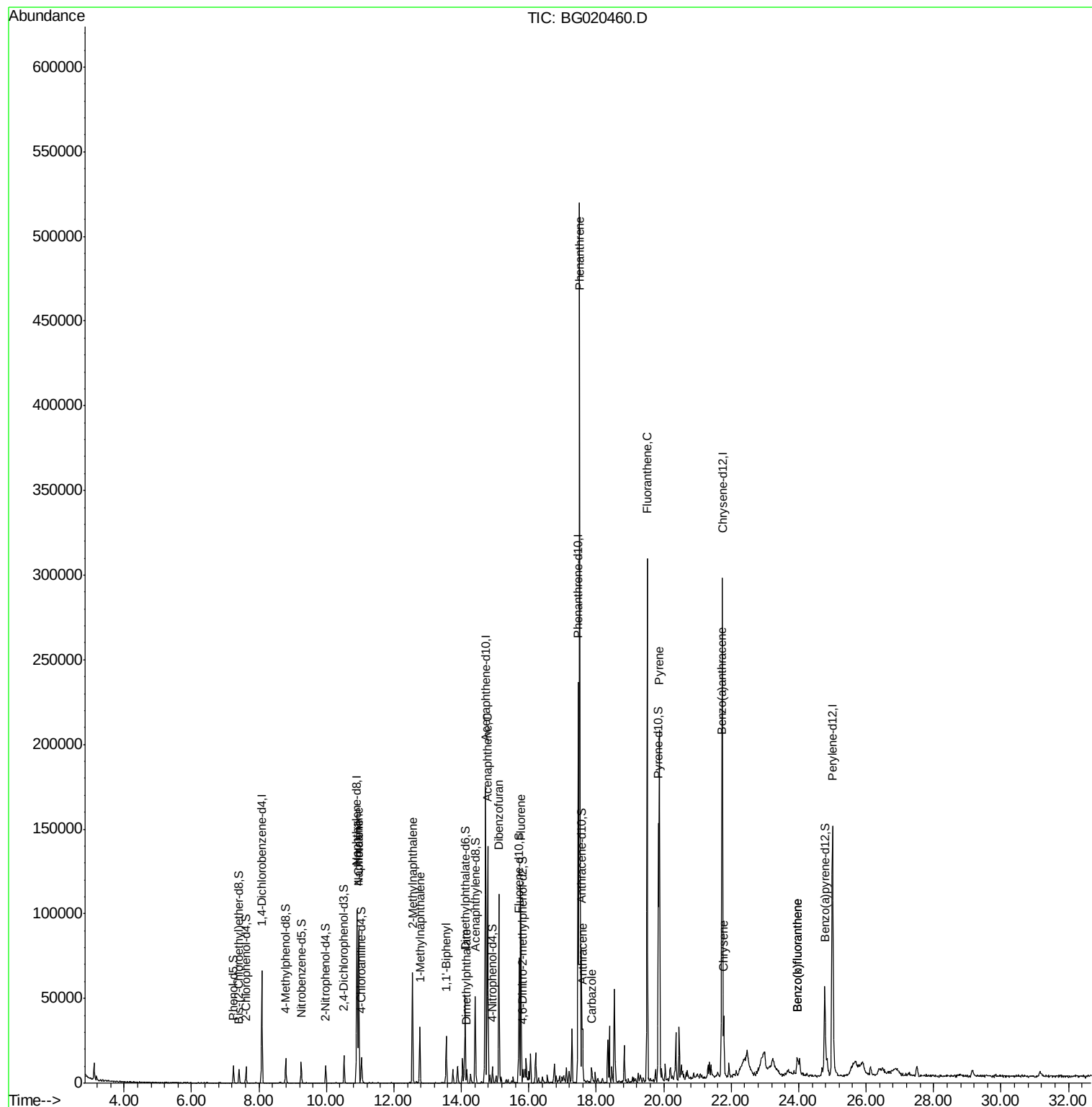
|                          |       |     |        |       |        | Qvalue |
|--------------------------|-------|-----|--------|-------|--------|--------|
| 28) Naphthalene          | 10.95 | 128 | 79333  | 16.81 | ng/ul  | 99     |
| 30) 4-Chloroaniline      | 10.95 | 127 | 10434  | 5.73  | ng/ul# | 1      |
| 34) 2-Methylnaphthalene  | 12.55 | 142 | 33344  | 9.25  | ng/ul  | 91     |
| 35) 1-Methylnaphthalene  | 12.77 | 142 | 16769  | 4.84  | ng/ul  | 96     |
| 41) 1,1'-Biphenyl        | 13.55 | 154 | 15935  | 3.29  | ng/ul  | 93     |
| 45) Dimethylphthalate    | 14.16 | 163 | 6216   | 1.17  | ng/ul  | 98     |
| 50) Acenaphthene         | 14.78 | 153 | 63372  | 14.67 | ng/ul  | 99     |
| 54) Dibenzofuran         | 15.11 | 168 | 73755  | 11.48 | ng/ul  | 98     |
| 59) Fluorene             | 15.76 | 166 | 57415  | 11.12 | ng/ul  | 99     |
| 70) Phenanthrene         | 17.50 | 178 | 344864 | 41.12 | ng/ul  | 100    |
| 72) Anthracene           | 17.60 | 178 | 23495  | 2.76  | ng/ul  | 98     |
| 75) Carbazole            | 17.86 | 167 | 7607   | 1.06  | ng/ul  | 95     |
| 77) Fluoranthene         | 19.51 | 202 | 216085 | 22.05 | ng/ul  | 97     |
| 80) Pyrene               | 19.87 | 202 | 145437 | 12.49 | ng/ul  | 98     |
| 83) Benzo(a)anthracene   | 21.72 | 228 | 34225  | 3.05  | ng/ul  | 99     |
| 85) Chrysene             | 21.78 | 228 | 28765  | 2.72  | ng/ul  | 98     |
| 88) Benzo(b)fluoranthene | 23.96 | 252 | 16633  | 1.56  | ng/ul  | 93     |
| 89) Benzo(k)fluoranthene | 23.96 | 252 | 16633  | 1.63  | ng/ul  | 96     |

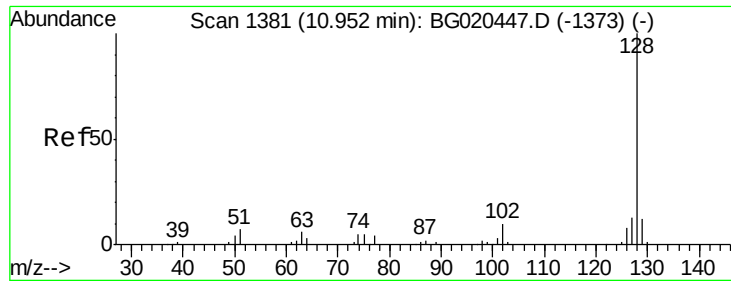
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\HPCHEM1\BNA\_G\DATA\BG122215\  
Data File : BG020460.D  
Acq On : 24 Dec 2015 2:02  
Operator : UM/SJ  
Sample : G4849-08DL 5X  
Misc :  
ALS Vial : 50 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
D9N72MEDL

Quant Time: Dec 24 02:54:12 2015  
Quant Method : Z:\HPCHEM1\BNA\_G\METHODS\SOM02.2-EPA-BG121415.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Thu Dec 24 02:43:25 2015  
Response via : Initial Calibration





#28

Naphthalene

Concen: 16.81 ng/ul

RT: 10.95 min Scan# 1381

Delta R.T. 0.00 min

Lab File: BG020460.D

Acq: 24 Dec 2015 2:02

Instrument :

BNA\_G

ClientSampleId :

D9N72MEDL

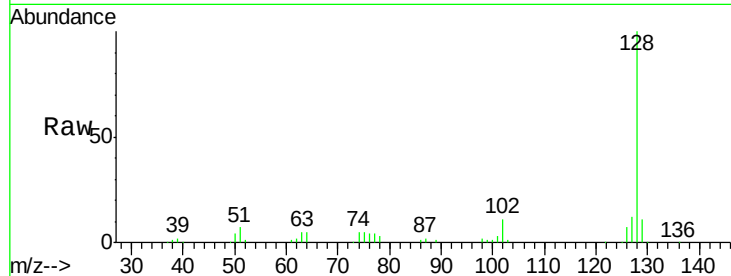
Tgt Ion:128 Resp: 79333

Ion Ratio Lower Upper

128 100

129 11.1 8.6 12.8

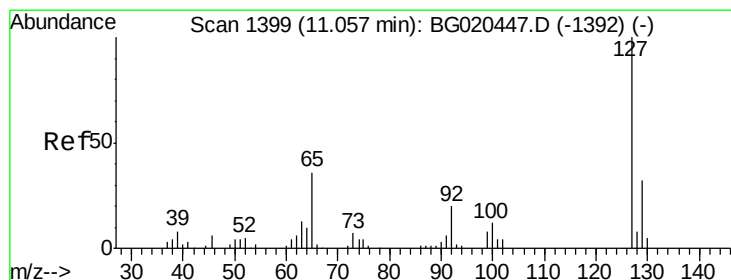
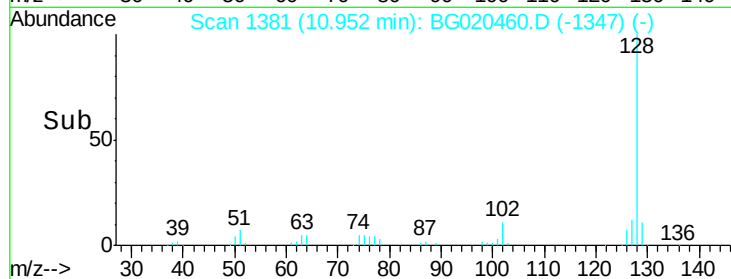
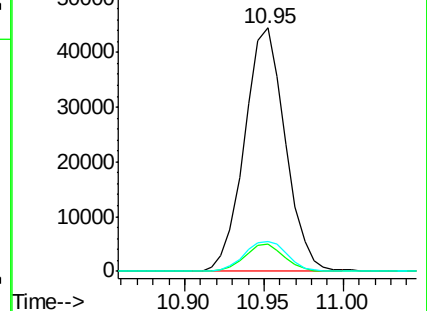
127 12.2 10.1 15.1



Abundance Ion 128.00 (127.70 to 128.70): E

Ion 129.00 (128.70 to 129.70): E

Ion 127.00 (126.70 to 127.70): E



#30

4-Chloroaniline

Concen: 5.73 ng/ul

RT: 10.95 min Scan# 1381

Delta R.T. -0.11 min

Lab File: BG020460.D

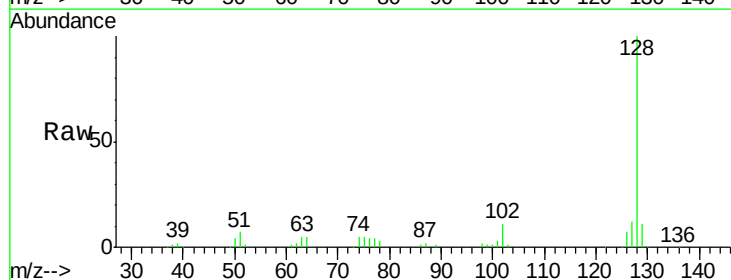
Acq: 24 Dec 2015 2:02

Tgt Ion:127 Resp: 10434

Ion Ratio Lower Upper

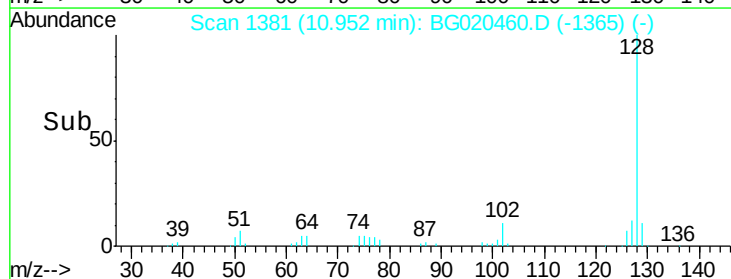
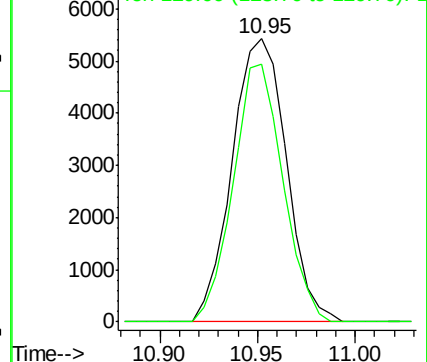
127 100

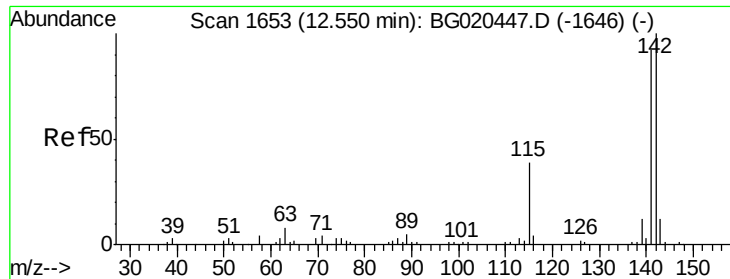
129 91.0 25.7 38.5#



Abundance Ion 127.00 (126.70 to 127.70): E

Ion 129.00 (128.70 to 129.70): E

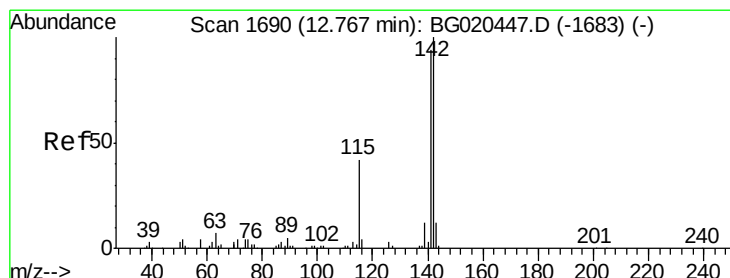
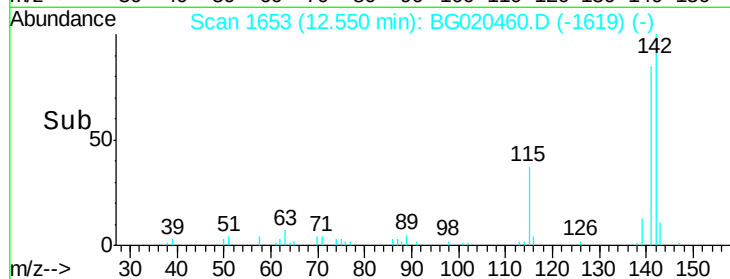
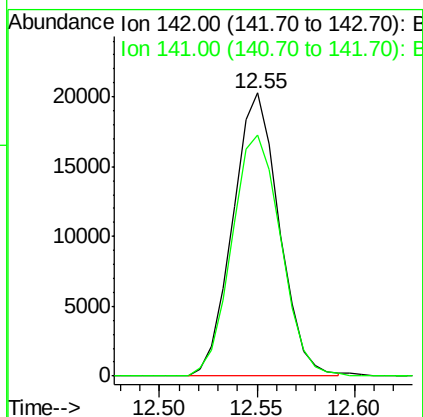
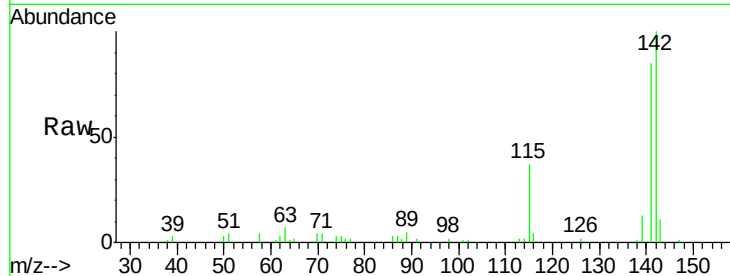




#34  
 2-Methylnaphthalene  
 Concen: 9.25 ng/ul  
 RT: 12.55 min Scan# 1653  
 Delta R.T. 0.00 min  
 Lab File: BG020460.D  
 Acq: 24 Dec 2015 2:02

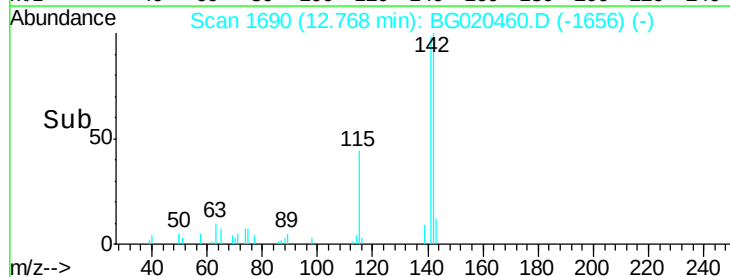
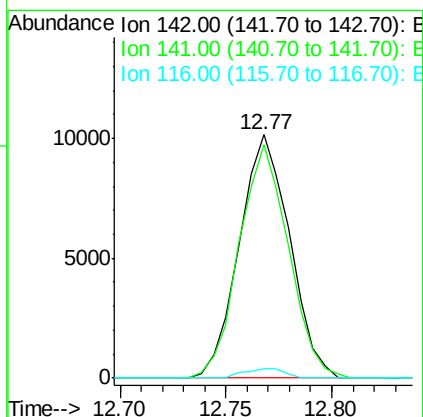
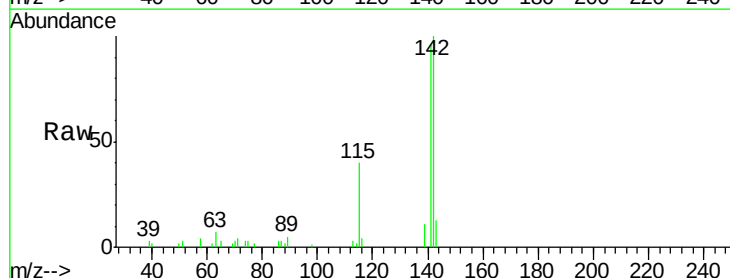
Instrument :  
 BNA\_G  
 ClientSampleId :  
 D9N72MEDL

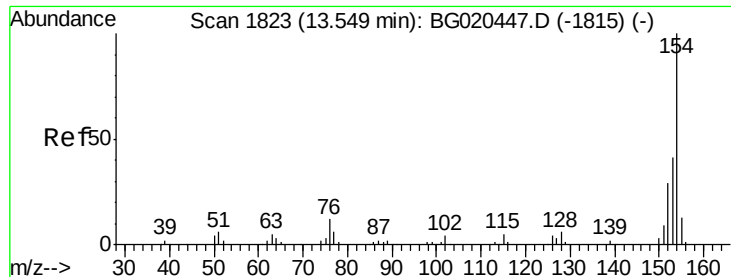
Tgt Ion:142 Resp: 33344  
 Ion Ratio Lower Upper  
 142 100  
 141 85.4 74.9 112.3



#35  
 1-Methylnaphthalene  
 Concen: 4.84 ng/ul  
 RT: 12.77 min Scan# 1690  
 Delta R.T. 0.00 min  
 Lab File: BG020460.D  
 Acq: 24 Dec 2015 2:02

Tgt Ion:142 Resp: 16769  
 Ion Ratio Lower Upper  
 142 100  
 141 95.7 73.0 109.6  
 116 3.7 3.0 4.6

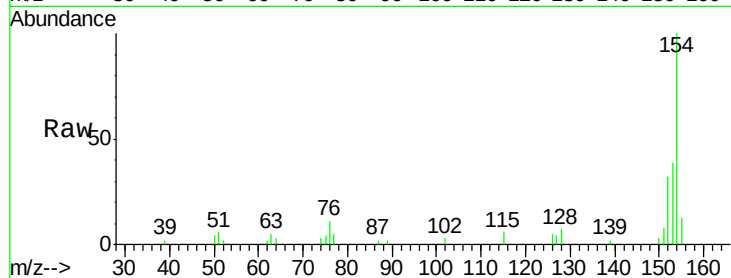




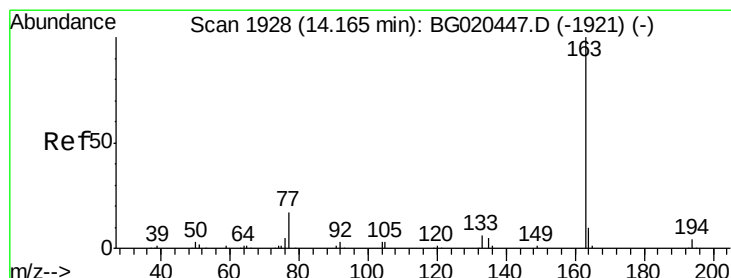
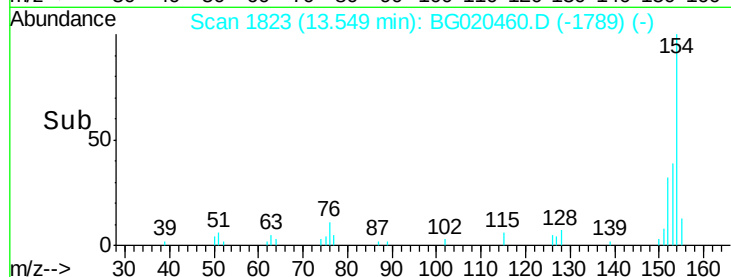
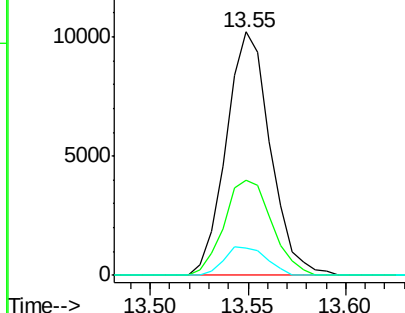
#41  
 1,1'-Biphenyl  
 Concen: 3.29 ng/ul  
 RT: 13.55 min Scan# 1823  
 Delta R.T. 0.00 min  
 Lab File: BG020460.D  
 Acq: 24 Dec 2015 2:02

Instrument :  
 BNA\_G  
 ClientSampleId :  
 D9N72MEDL

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 154     | 100   |       |       |
| 153     | 39.3  | 35.5  | 53.3  |
| 76      | 11.0  | 10.4  | 15.6  |

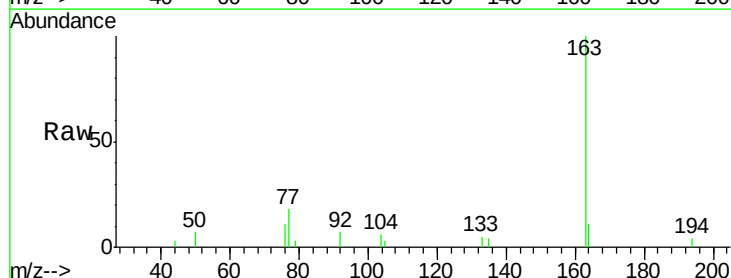


Abundance Ion 154.00 (153.70 to 154.70): E  
 Ion 153.00 (152.70 to 153.70): E  
 Ion 76.00 (75.70 to 76.70): BGC

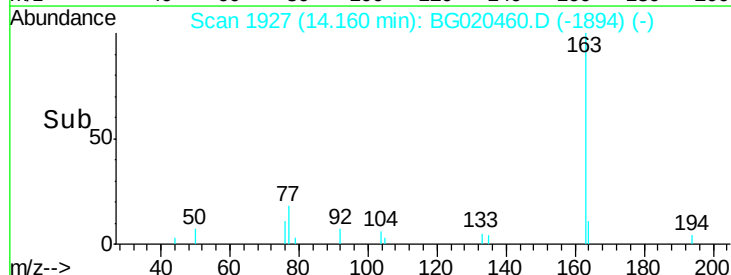
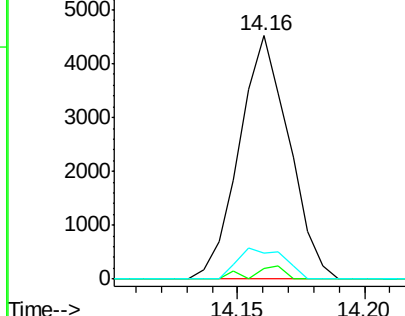


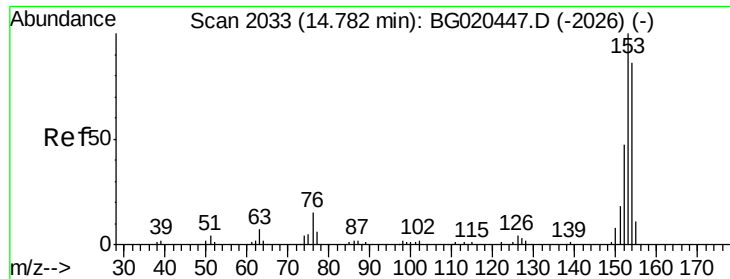
#45  
 Dimethylphthalate  
 Concen: 1.17 ng/ul  
 RT: 14.16 min Scan# 1927  
 Delta R.T. -0.01 min  
 Lab File: BG020460.D  
 Acq: 24 Dec 2015 2:02

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 163     | 100   |       |       |
| 194     | 4.2   | 3.5   | 5.3   |
| 164     | 10.6  | 7.7   | 11.5  |



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





#50

Acenaphthene

Concen: 14.67 ng/ul

RT: 14.78 min Scan# 2033

Delta R.T. 0.00 min

Lab File: BG020460.D

Acq: 24 Dec 2015 2:02

Instrument :

BNA\_G

ClientSampleId :

D9N72MEDL

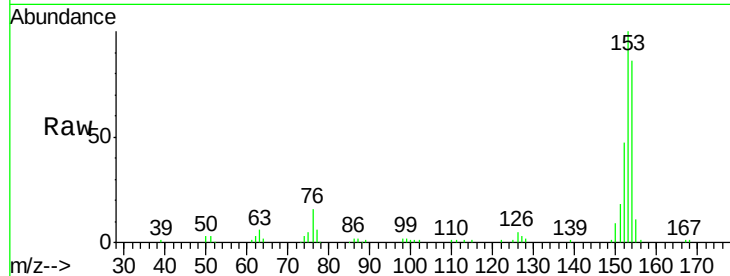
Tgt Ion:153 Resp: 63372

Ion Ratio Lower Upper

153 100

152 46.8 37.6 56.4

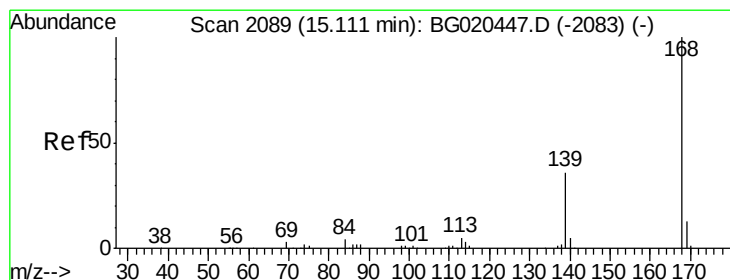
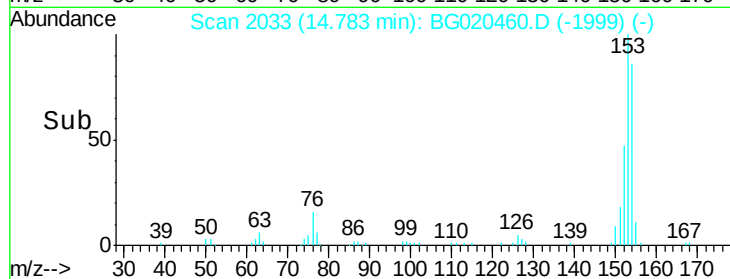
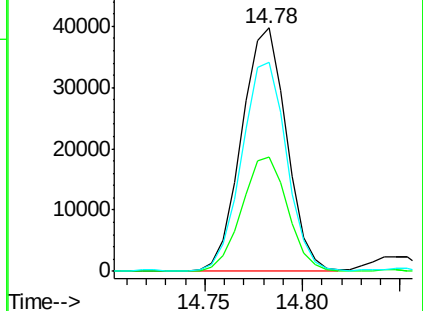
154 85.9 67.9 101.9



Abundance Ion 153.00 (152.70 to 153.70): E

Ion 152.00 (151.70 to 152.70): E

Ion 154.00 (153.70 to 154.70): E



#54

Dibenzofuran

Concen: 11.48 ng/ul

RT: 15.11 min Scan# 2089

Delta R.T. 0.00 min

Lab File: BG020460.D

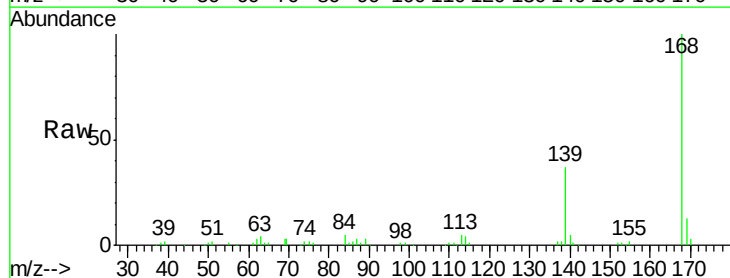
Acq: 24 Dec 2015 2:02

Tgt Ion:168 Resp: 73755

Ion Ratio Lower Upper

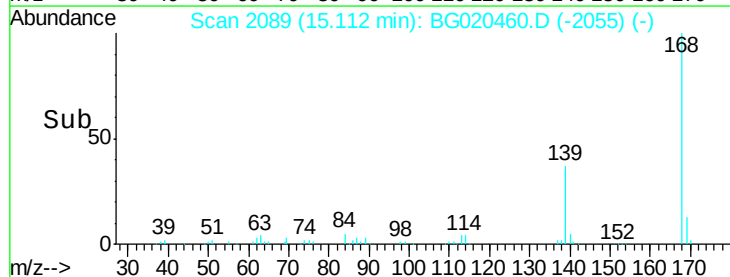
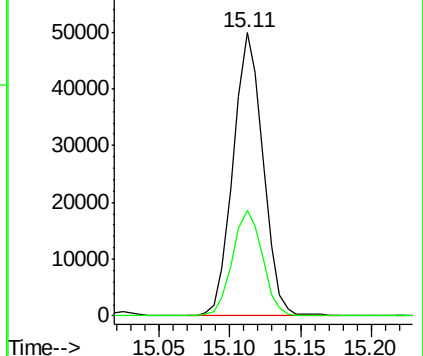
168 100

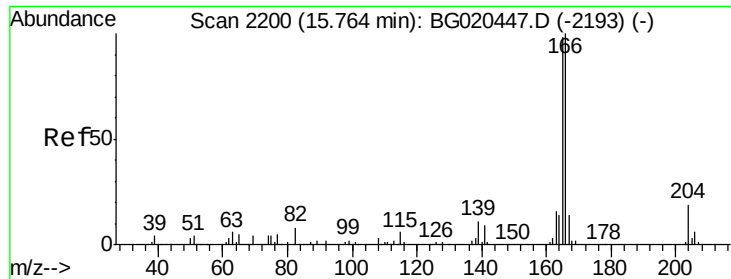
139 37.2 30.5 45.7



Abundance Ion 168.00 (167.70 to 168.70): E

Ion 139.00 (138.70 to 139.70): E





#59

Fluorene

Concen: 11.12 ng/ul

RT: 15.76 min Scan# 2199

Delta R.T. -0.01 min

Lab File: BG020460.D

Acq: 24 Dec 2015 2:02

Instrument :

BNA\_G

ClientSampleId :

D9N72MEDL

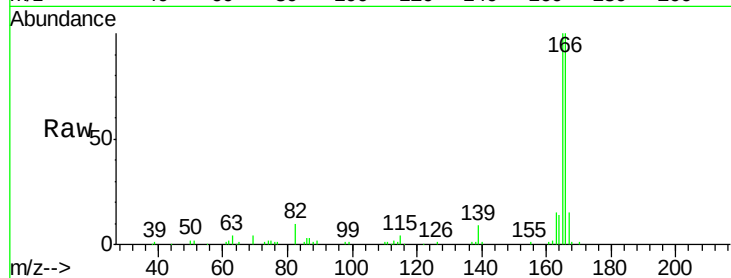
Tgt Ion:166 Resp: 57415

Ion Ratio Lower Upper

166 100

165 100.3 81.4 122.0

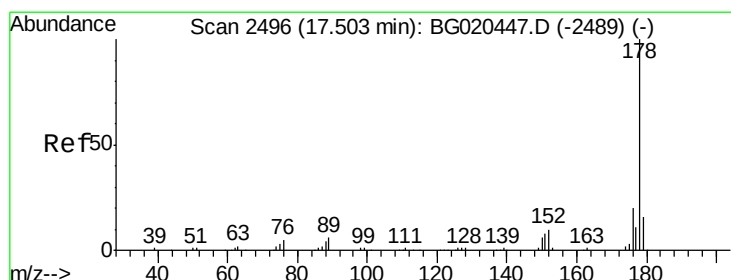
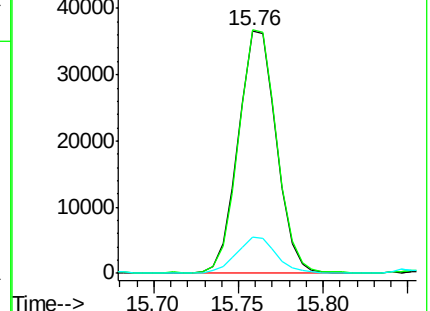
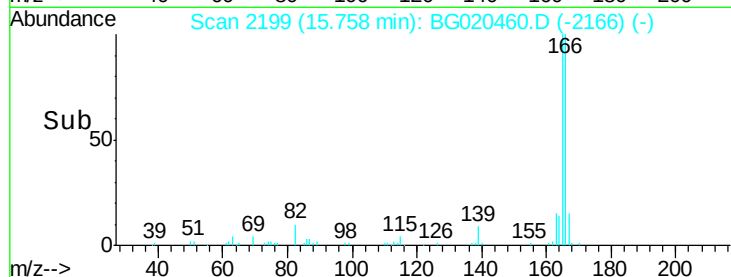
167 14.7 11.2 16.8



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



#70

Phenanthrene

Concen: 41.12 ng/ul

RT: 17.50 min Scan# 2496

Delta R.T. 0.00 min

Lab File: BG020460.D

Acq: 24 Dec 2015 2:02

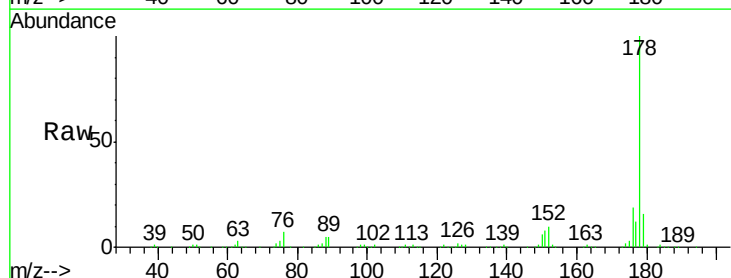
Tgt Ion:178 Resp: 344864

Ion Ratio Lower Upper

178 100

179 16.4 12.9 19.3

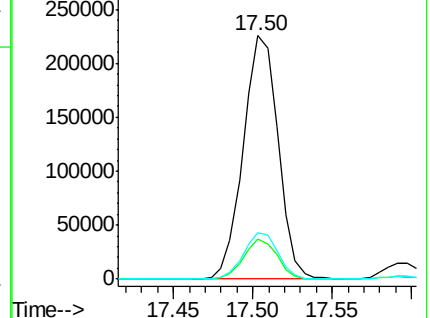
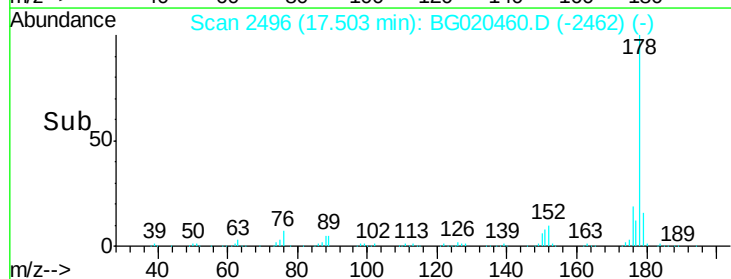
176 19.3 15.3 22.9

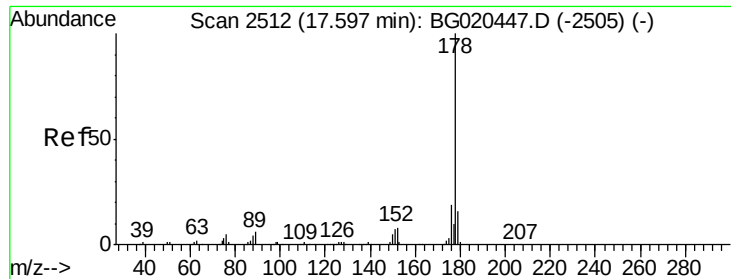


Abundance Ion 178.00 (177.70 to 178.70): E

Ion 179.00 (178.70 to 179.70): E

Ion 176.00 (175.70 to 176.70): E





#72

Anthracene

Concen: 2.76 ng/ul

RT: 17.60 min Scan# 2512

Delta R.T. 0.00 min

Lab File: BG020460.D

Acq: 24 Dec 2015 2:02

Instrument :

BNA\_G

ClientSampleId :

D9N72MEDL

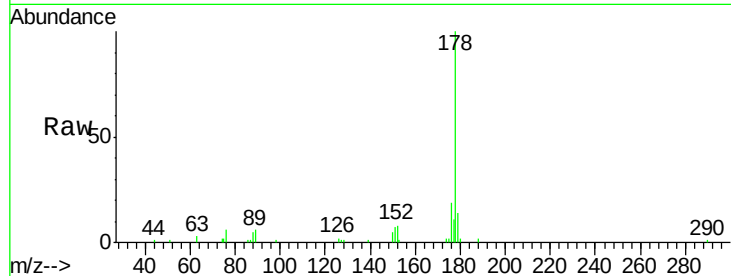
Tgt Ion:178 Resp: 23495

Ion Ratio Lower Upper

178 100

179 14.2 12.3 18.5

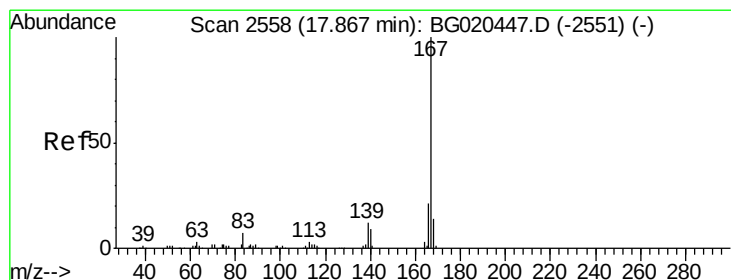
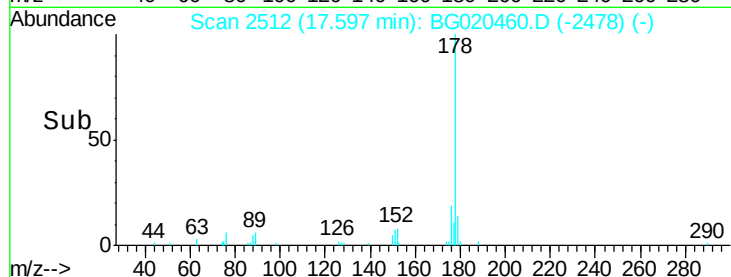
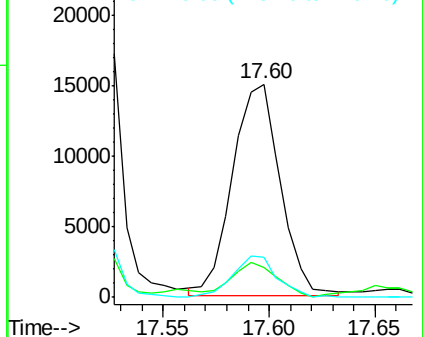
176 18.6 14.3 21.5



Abundance Ion 178.00 (177.70 to 178.70): E

Ion 179.00 (178.70 to 179.70): E

Ion 176.00 (175.70 to 176.70): E



#75

Carbazole

Concen: 1.06 ng/ul

RT: 17.86 min Scan# 2557

Delta R.T. -0.01 min

Lab File: BG020460.D

Acq: 24 Dec 2015 2:02

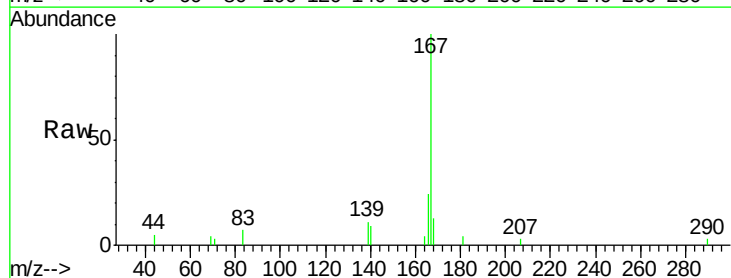
Tgt Ion:167 Resp: 7607

Ion Ratio Lower Upper

167 100

166 23.5 17.0 25.6

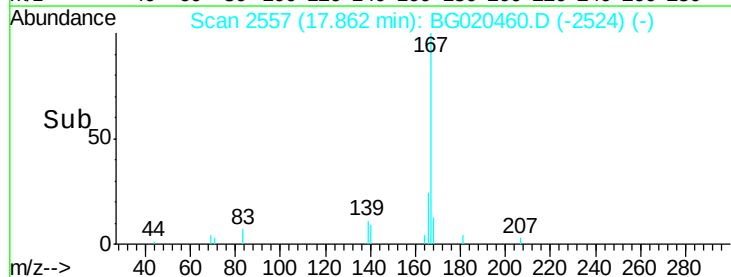
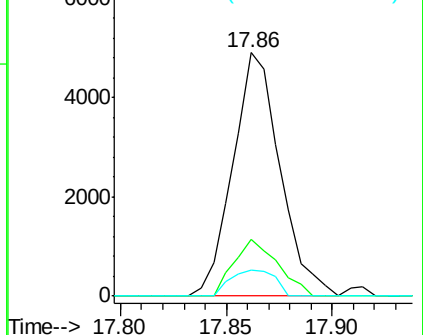
139 10.6 10.1 15.1



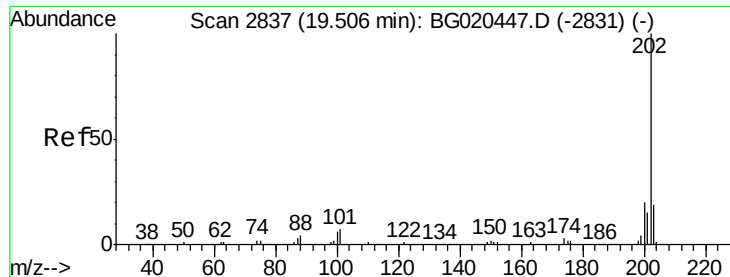
Abundance Ion 167.00 (166.70 to 167.70): E

Ion 166.00 (165.70 to 166.70): E

Ion 139.00 (138.70 to 139.70): E







#77

Fluoranthene

Concen: 22.05 ng/ul

RT: 19.51 min Scan# 2838

Delta R.T. 0.01 min

Lab File: BG020460.D

Acq: 24 Dec 2015 2:02

Instrument :

BNA\_G

ClientSampleId :

D9N72MEDL

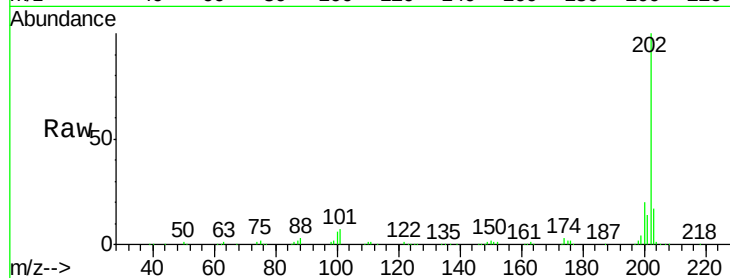
Tgt Ion:202 Resp: 216085

Ion Ratio Lower Upper

202 100

101 6.8 6.2 9.4

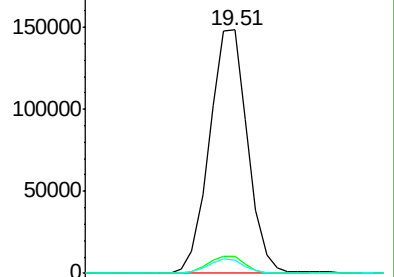
100 5.6 5.1 7.7



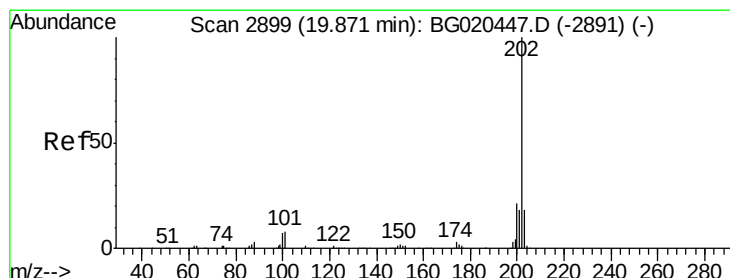
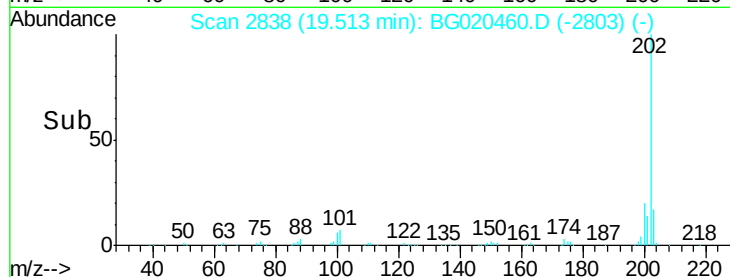
Abundance Ion 202.00 (201.70 to 202.70): E

Ion 101.00 (100.70 to 101.70): E

Ion 100.00 (99.70 to 100.70): B



Time-->



#80

Pyrene

Concen: 12.49 ng/ul

RT: 19.87 min Scan# 2899

Delta R.T. 0.00 min

Lab File: BG020460.D

Acq: 24 Dec 2015 2:02

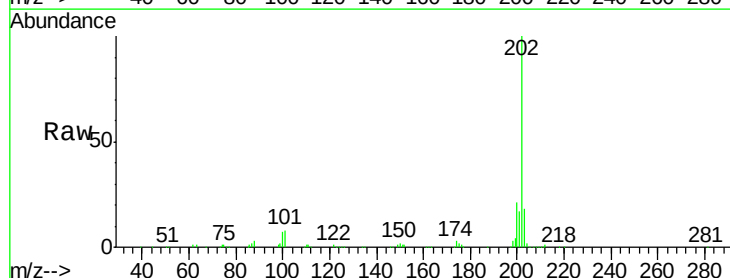
Tgt Ion:202 Resp: 145437

Ion Ratio Lower Upper

202 100

101 8.2 7.0 10.4

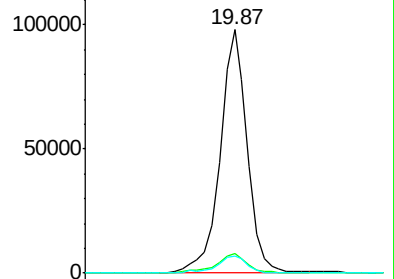
100 7.0 6.4 9.6



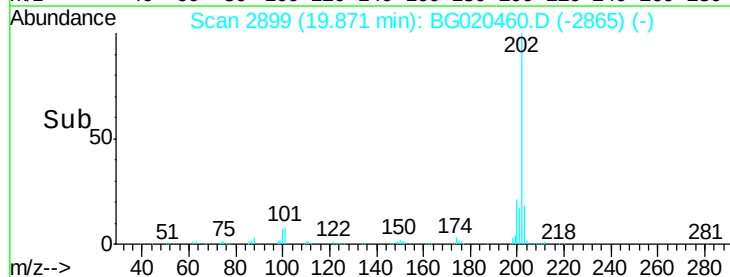
Abundance Ion 202.00 (201.70 to 202.70): E

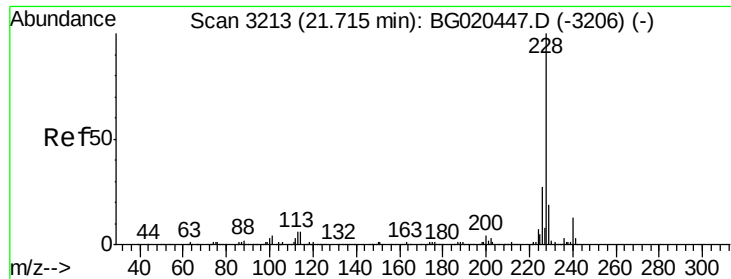
Ion 101.00 (100.70 to 101.70): E

Ion 100.00 (99.70 to 100.70): B



Time-->





#83

Benzo(a)anthracene

Concen: 3.05 ng/ul

RT: 21.72 min Scan# 3213

Delta R.T. 0.00 min

Lab File: BG020460.D

Acq: 24 Dec 2015 2:02

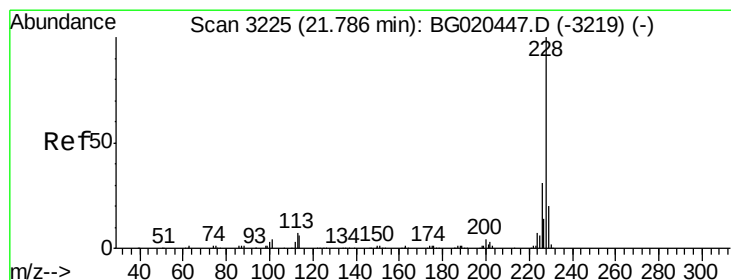
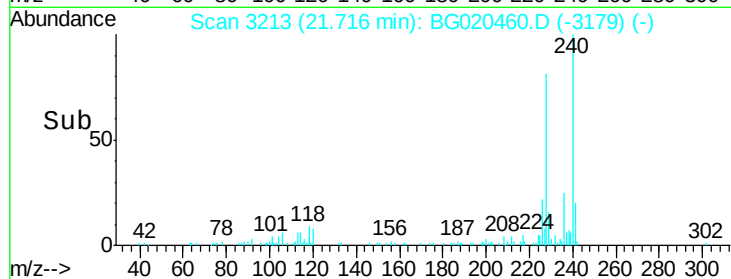
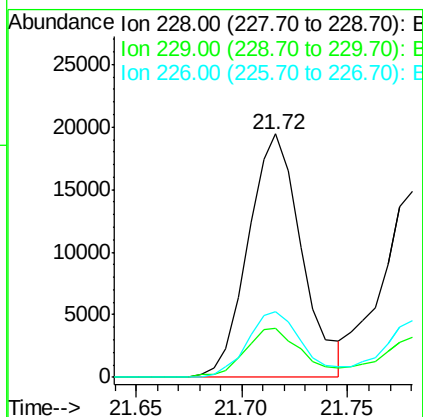
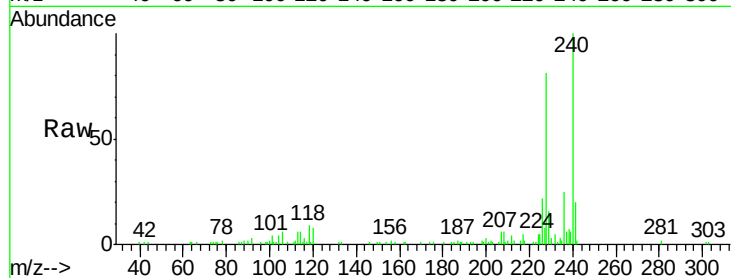
Instrument :

BNA\_G

ClientSampleId :

D9N72MEDL

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 228   | Resp: | 34225 |
| Ion      | Ratio | Lower | Upper |
| 228      | 100   |       |       |
| 229      | 20.2  | 15.8  | 23.8  |
| 226      | 26.8  | 21.8  | 32.6  |



#85

Chrysene

Concen: 2.72 ng/ul

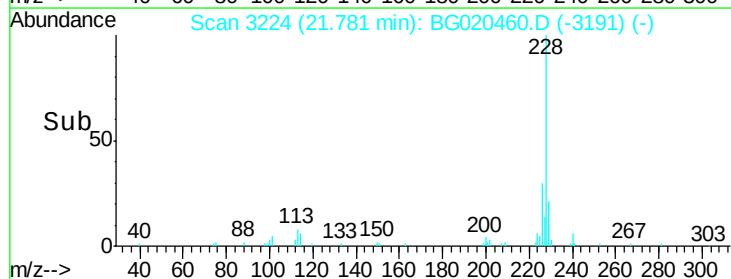
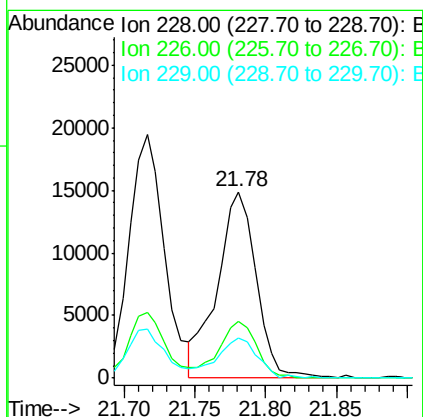
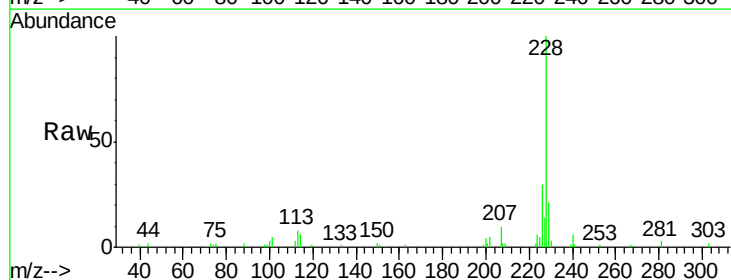
RT: 21.78 min Scan# 3224

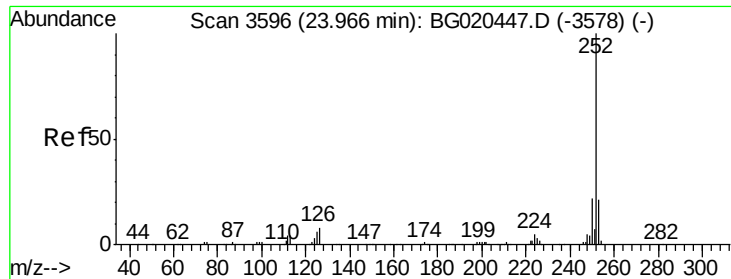
Delta R.T. -0.01 min

Lab File: BG020460.D

Acq: 24 Dec 2015 2:02

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 228   | Resp: | 28765 |
| Ion      | Ratio | Lower | Upper |
| 228      | 100   |       |       |
| 226      | 30.3  | 23.9  | 35.9  |
| 229      | 21.3  | 15.6  | 23.4  |





#88

Benzo(b)fluoranthene

Concen: 1.56 ng/ul

RT: 23.96 min Scan# 3595

Delta R.T. -0.01 min

Lab File: BG020460.D

Acq: 24 Dec 2015 2:02

Instrument :

BNA\_G

ClientSampleId :

D9N72MEDL

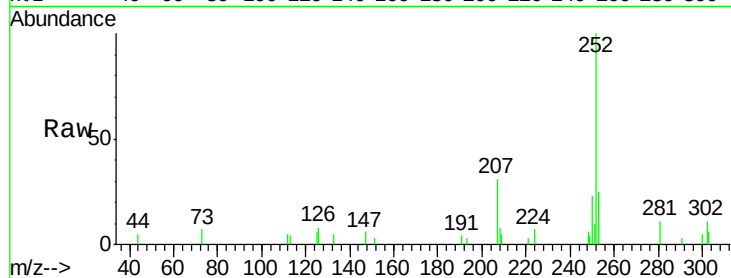
Tgt Ion:252 Resp: 16633

Ion Ratio Lower Upper

252 100

253 24.5 16.7 25.1

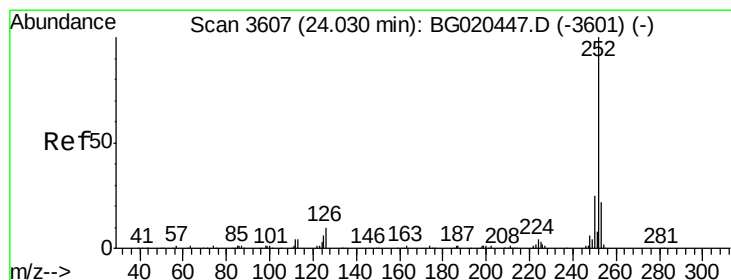
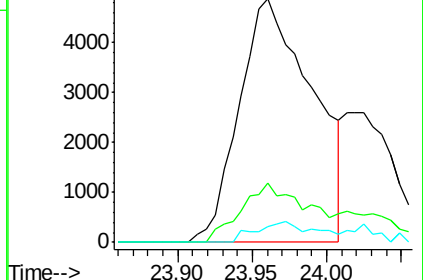
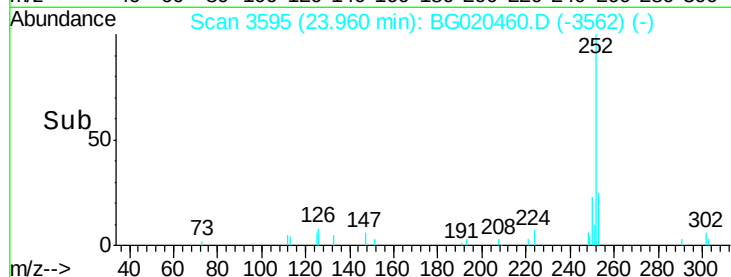
125 6.3 6.2 9.2



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(k)fluoranthene

Concen: 1.63 ng/ul

RT: 23.96 min Scan# 3595

Delta R.T. -0.07 min

Lab File: BG020460.D

Acq: 24 Dec 2015 2:02

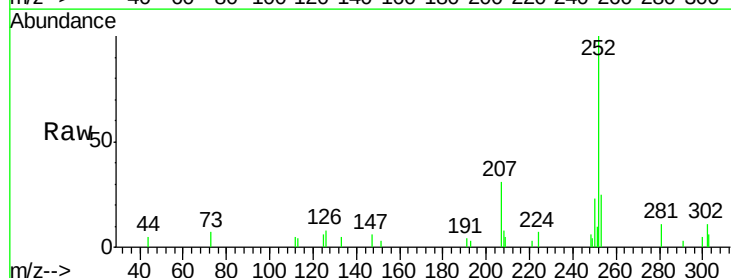
Tgt Ion:252 Resp: 16633

Ion Ratio Lower Upper

252 100

253 24.5 17.9 26.9

125 6.3 5.8 8.6



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

