

Data Path : Z:\HPCHEM1\BNA\_G\DATA\BG123015\  
 Data File : BG020614.D  
 Acq On : 30 Dec 2015 18:32  
 Operator : UM/SJ  
 Sample : G4802-20DL 5X  
 Misc :  
 ALS Vial : 22 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 G9D95DL

Quant Time: Dec 31 01:09:13 2015  
 Quant Method : Z:\HPCHEM1\BNA\_G\METHODS\SOM02.2-EPA-BG123015.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Thu Dec 31 01:03:28 2015  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 8.06  | 152  | 16748    | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 10.88 | 136  | 76865    | 20.00 | ng/ul | 0.00     |
| 36) Acenaphthene-d10      | 14.69 | 164  | 58048    | 20.00 | ng/ul | 0.00     |
| 62) Phenanthrene-d10      | 17.44 | 188  | 148144   | 20.00 | ng/ul | 0.00     |
| 78) Chrysene-d12          | 21.72 | 240  | 175957   | 20.00 | ng/ul | 0.00     |
| 86) Perylene-d12          | 24.97 | 264  | 172385   | 20.00 | ng/ul | 0.00     |

## System Monitoring Compounds

|                                |       |     |       |      |       |      |
|--------------------------------|-------|-----|-------|------|-------|------|
| 3) 1,4-Dioxane-d8              | 3.43  | 96  | 172   | 0.62 | ng/uL | 0.00 |
| 5) Phenol-d5                   | 7.22  | 99  | 6380  | 4.51 | ng/ul | 0.00 |
| 7) Bis-(2-Chloroethyl)ether-d  | 7.39  | 67  | 5098  | 5.96 | ng/ul | 0.00 |
| 9) 2-Chlorophenol-d4           | 7.59  | 132 | 5541  | 5.12 | ng/ul | 0.00 |
| 13) 4-Methylphenol-d8          | 8.77  | 113 | 1544  | 1.27 | ng/ul | 0.00 |
| 19) Nitrobenzene-d5            | 9.22  | 128 | 3460  | 5.83 | ng/ul | 0.00 |
| 22) 2-Nitrophenol-d4           | 9.95  | 143 | 3979  | 5.77 | ng/ul | 0.00 |
| 26) 2,4-Dichlorophenol-d3      | 10.50 | 165 | 6278  | 4.79 | ng/ul | 0.00 |
| 29) 4-Chloroaniline-d4         | 11.02 | 131 | 4826  | 3.10 | ng/ul | 0.00 |
| 44) Dimethylphthalate-d6       | 14.09 | 166 | 28927 | 6.09 | ng/ul | 0.00 |
| 47) Acenaphthylene-d8          | 14.39 | 160 | 36303 | 6.73 | ng/ul | 0.00 |
| 52) 4-Nitrophenol-d4           | 14.91 | 143 | 1957  | 2.63 | ng/ul | 0.01 |
| 58) Fluorene-d10               | 15.68 | 176 | 29171 | 6.77 | ng/ul | 0.00 |
| 63) 4,6-Dinitro-2-methylphenol | 15.81 | 200 | 3477  | 3.87 | ng/ul | 0.00 |
| 71) Anthracene-d10             | 17.54 | 188 | 45907 | 6.65 | ng/ul | 0.00 |
| 79) Pyrene-d10                 | 19.82 | 212 | 55344 | 7.01 | ng/ul | 0.00 |
| 90) Benzo(a)pyrene-d12         | 24.74 | 264 | 60332 | 7.01 | ng/ul | 0.00 |

## Target Compounds

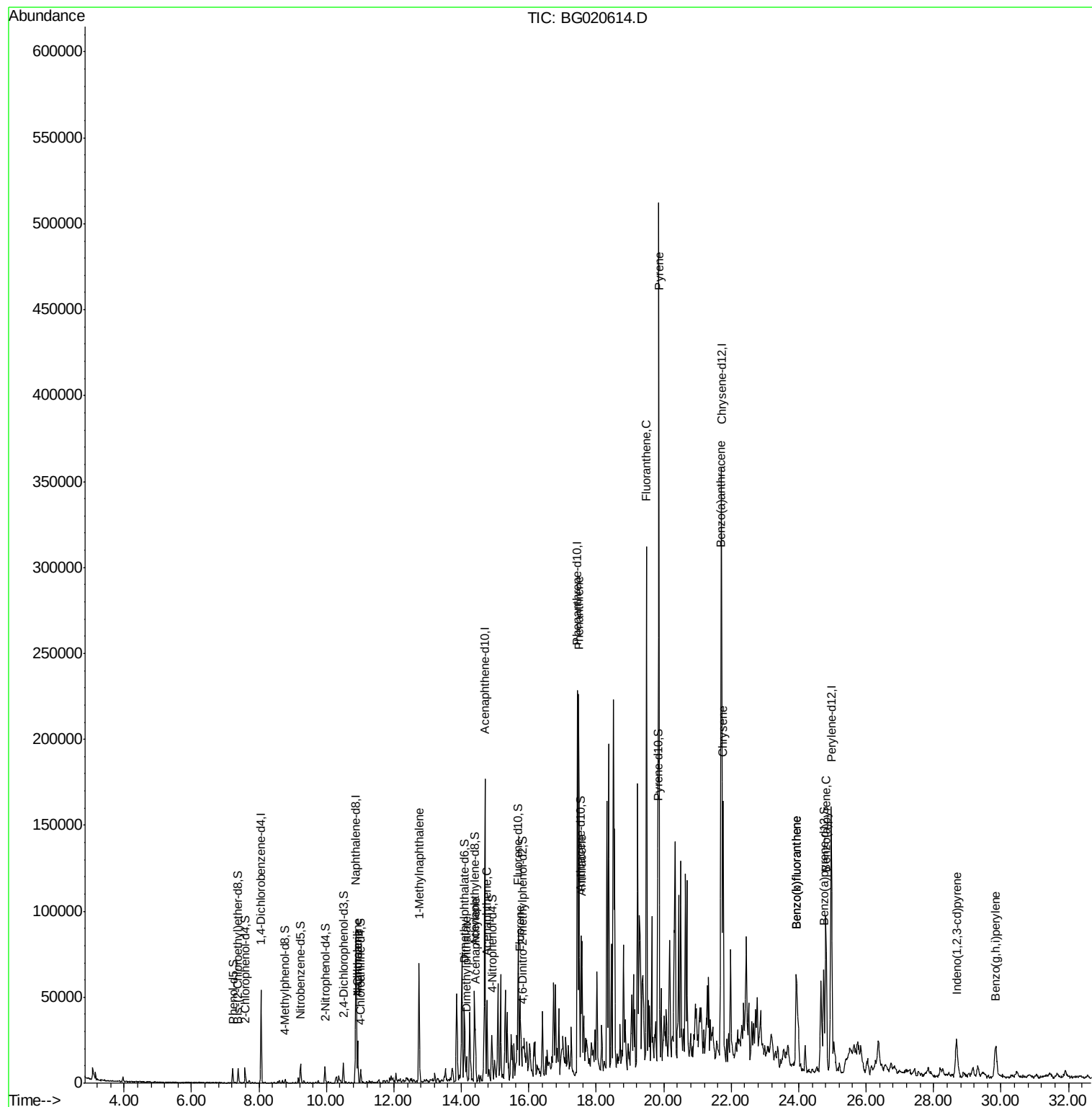
|                            |       |     |        |             | Qvalue |
|----------------------------|-------|-----|--------|-------------|--------|
| 28) Naphthalene            | 10.93 | 128 | 21294  | 5.23 ng/ul  | 96     |
| 30) 4-Chloroaniline        | 10.92 | 127 | 2612   | 1.64 ng/ul# | 1      |
| 35) 1-Methylnaphthalene    | 12.74 | 142 | 32854  | 11.18 ng/ul | 94     |
| 45) Dimethylphthalate      | 14.14 | 163 | 6174   | 1.27 ng/ul  | 98     |
| 48) Acenaphthylene         | 14.42 | 152 | 12685  | 2.21 ng/ul# | 87     |
| 50) Acenaphthene           | 14.76 | 153 | 19571  | 5.03 ng/ul  | 98     |
| 59) Fluorene               | 15.74 | 166 | 25651  | 5.43 ng/ul  | 98     |
| 70) Phenanthrene           | 17.48 | 178 | 144200 | 17.90 ng/ul | 99     |
| 72) Anthracene             | 17.57 | 178 | 51724  | 6.28 ng/ul  | 95     |
| 77) Fluoranthene           | 19.49 | 202 | 174863 | 17.77 ng/ul | 100    |
| 80) Pyrene                 | 19.85 | 202 | 316267 | 31.03 ng/ul | 99     |
| 83) Benzo(a)anthracene     | 21.69 | 228 | 126291 | 12.27 ng/ul | 96     |
| 85) Chrysene               | 21.76 | 228 | 112566 | 11.62 ng/ul | 96     |
| 88) Benzo(b)fluoranthene   | 23.93 | 252 | 76793  | 7.50 ng/ul# | 95     |
| 89) Benzo(k)fluoranthene   | 23.93 | 252 | 76793  | 7.83 ng/ul# | 95     |
| 91) Benzo(a)pyrene         | 24.81 | 252 | 87525  | 8.90 ng/ul  | 99     |
| 92) Indeno(1,2,3-cd)pyrene | 28.68 | 276 | 37086  | 3.16 ng/ul  | 99     |
| 94) Benzo(g,h,i)perylene   | 29.84 | 276 | 41346  | 4.29 ng/ul  | 98     |

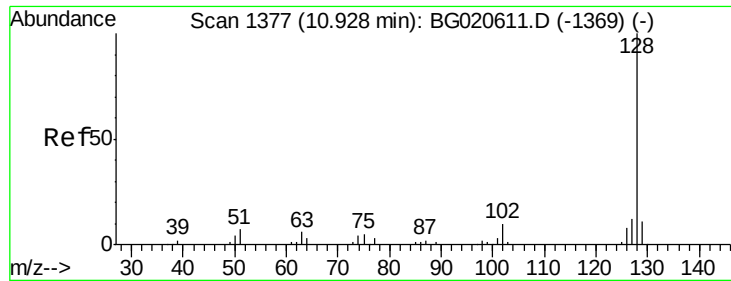
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\HPCHEM1\BNA\_G\DATA\BG123015\  
Data File : BG020614.D  
Acq On : 30 Dec 2015 18:32  
Operator : UM/SJ  
Sample : G4802-20DL 5X  
Misc :  
ALS Vial : 22 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
G9D95DL

Quant Time: Dec 31 01:09:13 2015  
Quant Method : Z:\HPCHEM1\BNA\_G\METHODS\SOM02.2-EPA-BG123015.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Thu Dec 31 01:03:28 2015  
Response via : Initial Calibration

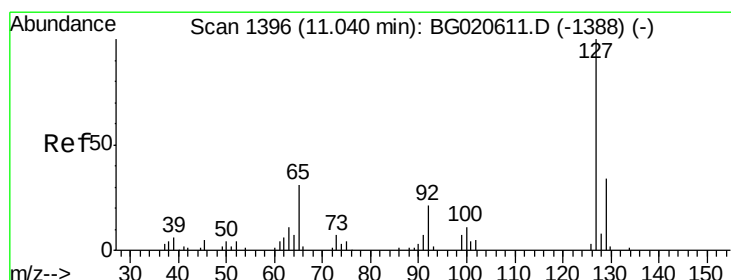
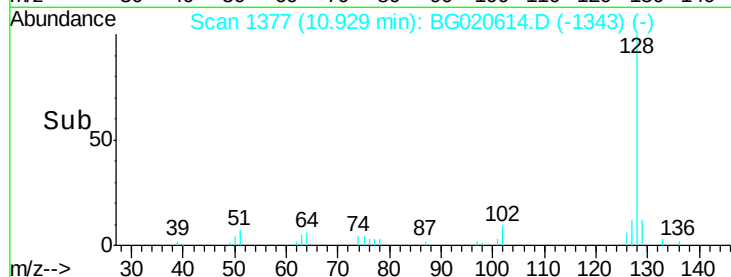
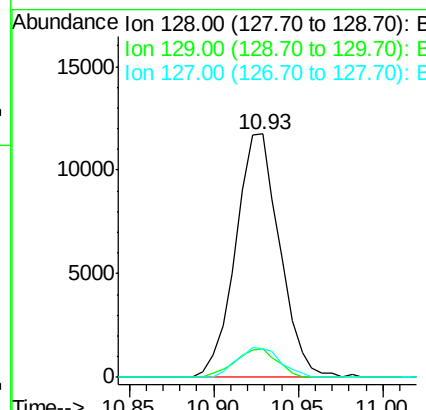
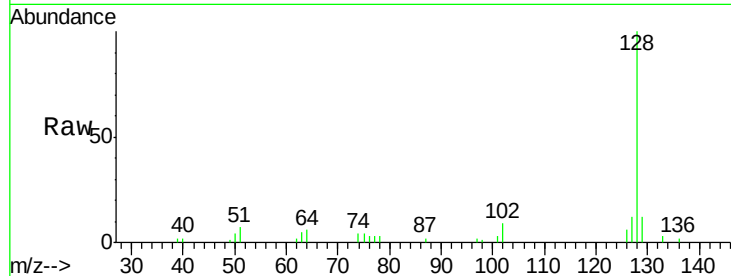




#28  
Naphthalene  
Concen: 5.23 ng/ul  
RT: 10.93 min Scan# 1377  
Delta R.T. 0.00 min  
Lab File: BG020614.D  
Acq: 30 Dec 2015 18:32

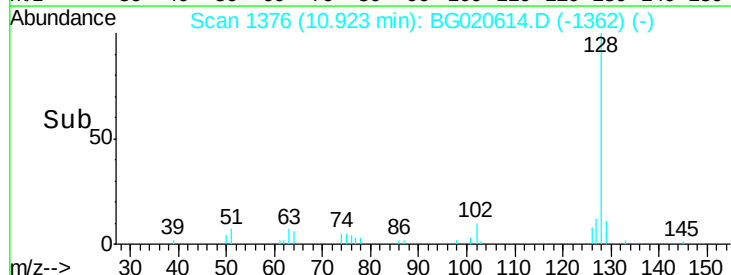
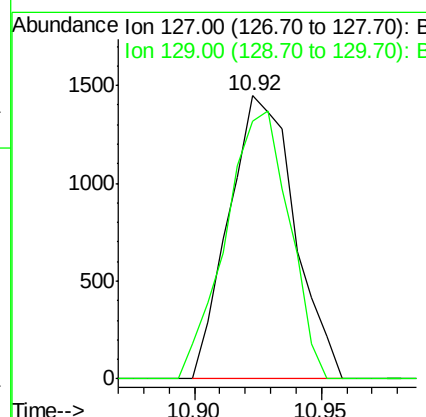
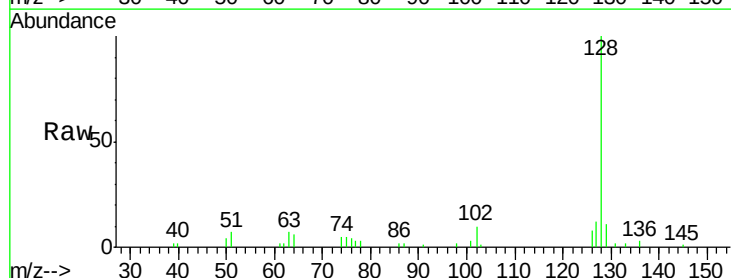
Instrument :  
BNA\_G  
ClientSampleId :  
G9D95DL

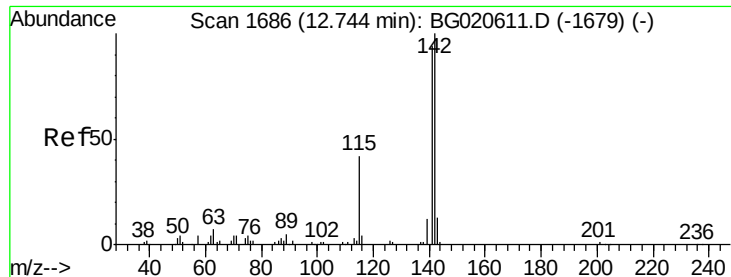
Tgt Ion:128 Resp: 21294  
Ion Ratio Lower Upper  
128 100  
129 11.7 8.3 12.5  
127 11.6 10.8 16.2



#30  
4-Chloroaniline  
Concen: 1.64 ng/ul  
RT: 10.92 min Scan# 1376  
Delta R.T. -0.12 min  
Lab File: BG020614.D  
Acq: 30 Dec 2015 18:32

Tgt Ion:127 Resp: 2612  
Ion Ratio Lower Upper  
127 100  
129 90.9 24.6 37.0#

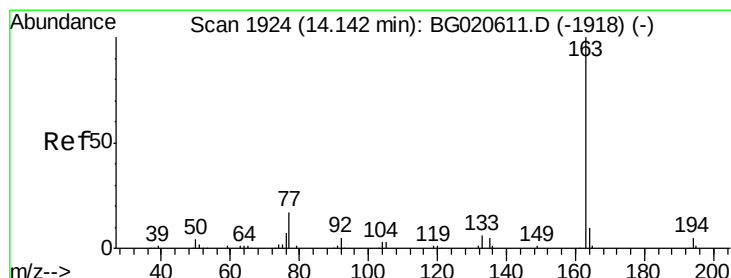
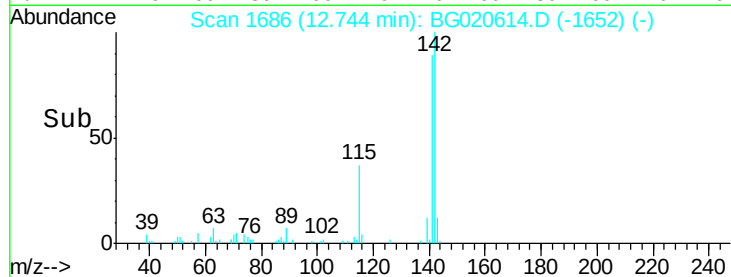
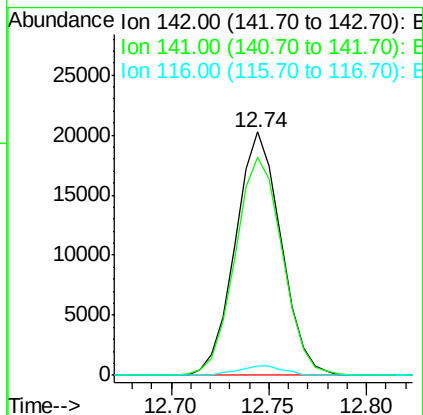
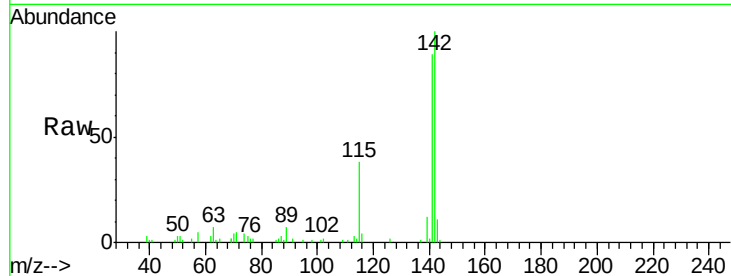




#35  
 1-Methylnaphthalene  
 Concen: 11.18 ng/ul  
 RT: 12.74 min Scan# 1686  
 Delta R.T. 0.00 min  
 Lab File: BG020614.D  
 Acq: 30 Dec 2015 18:32

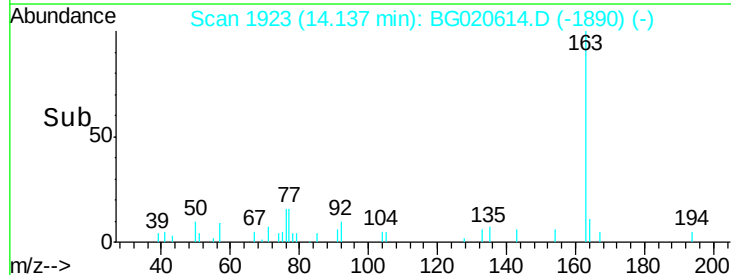
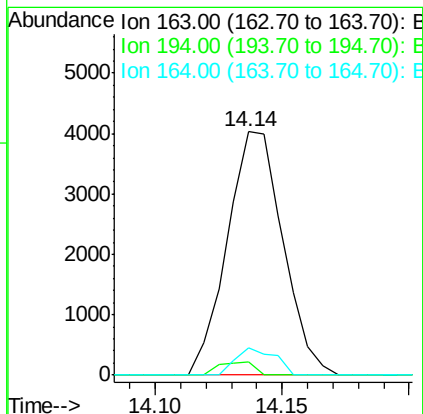
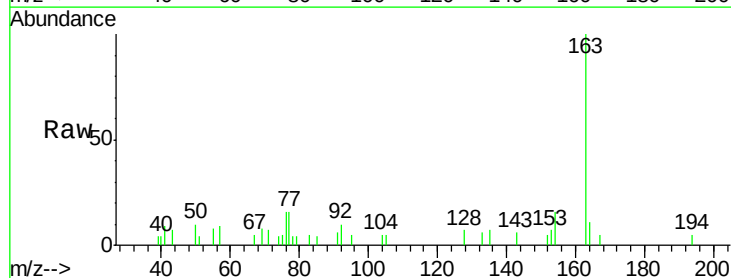
Instrument :  
 BNA\_G  
 ClientSampleId :  
 G9D95DL

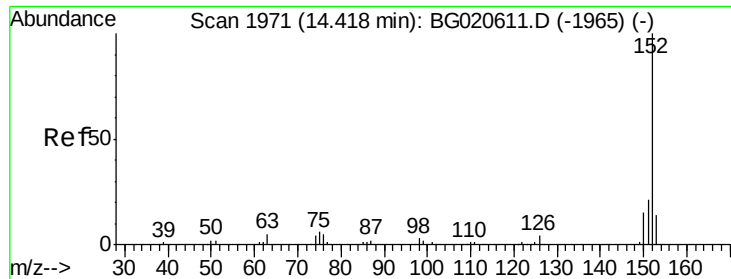
Tgt Ion:142 Resp: 32854  
 Ion Ratio Lower Upper  
 142 100  
 141 89.3 76.6 115.0  
 116 3.9 3.6 5.4



#45  
 Dimethylphthalate  
 Concen: 1.27 ng/ul  
 RT: 14.14 min Scan# 1923  
 Delta R.T. -0.01 min  
 Lab File: BG020614.D  
 Acq: 30 Dec 2015 18:32

Tgt Ion:163 Resp: 6174  
 Ion Ratio Lower Upper  
 163 100  
 194 5.2 4.0 6.0  
 164 11.3 8.4 12.6





#48

Acenaphthylene

Concen: 2.21 ng/ul

RT: 14.42 min Scan# 1971

Delta R.T. 0.00 min

Lab File: BG020614.D

Acq: 30 Dec 2015 18:32

Instrument :

BNA\_G

ClientSampleId :

G9D95DL

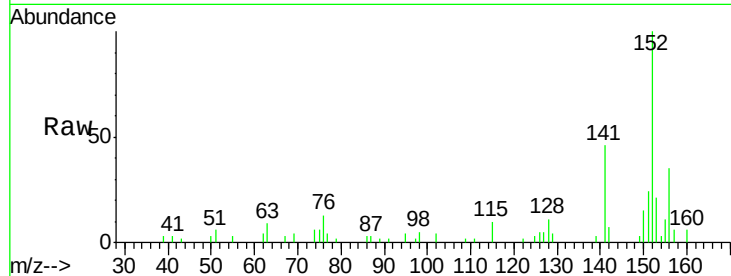
Tgt Ion:152 Resp: 12685

Ion Ratio Lower Upper

152 100

151 24.1 16.1 24.1

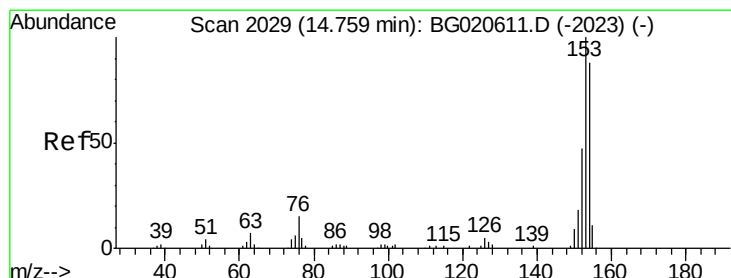
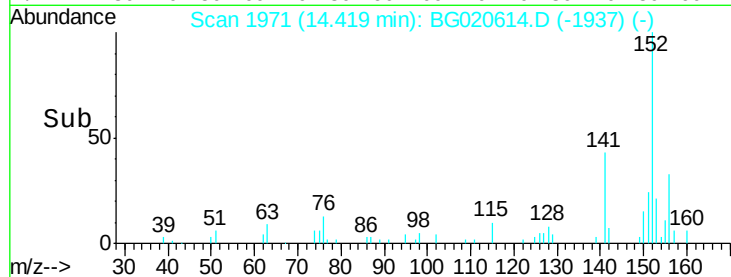
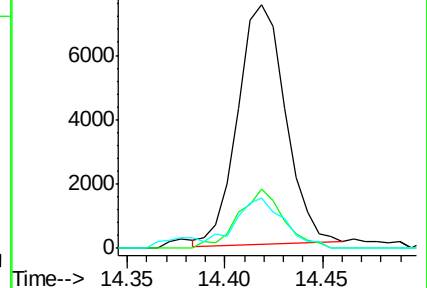
153 20.8 10.8 16.2#



Abundance Ion 152.00 (151.70 to 152.70): E

Ion 151.00 (150.70 to 151.70): E

Ion 153.00 (152.70 to 153.70): E



#50

Acenaphthene

Concen: 5.03 ng/ul

RT: 14.76 min Scan# 2029

Delta R.T. 0.00 min

Lab File: BG020614.D

Acq: 30 Dec 2015 18:32

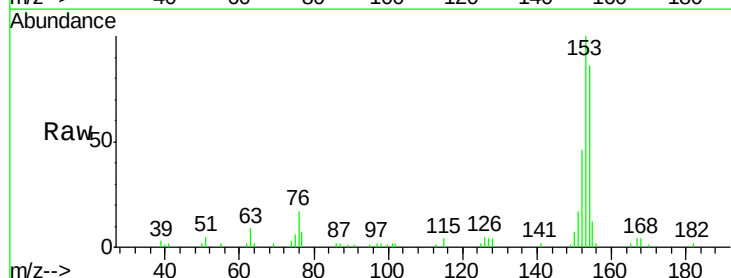
Tgt Ion:153 Resp: 19571

Ion Ratio Lower Upper

153 100

152 46.4 37.9 56.9

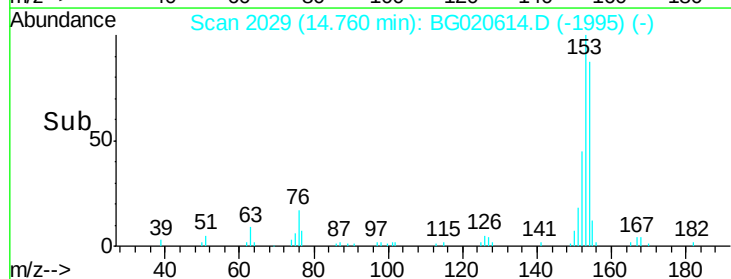
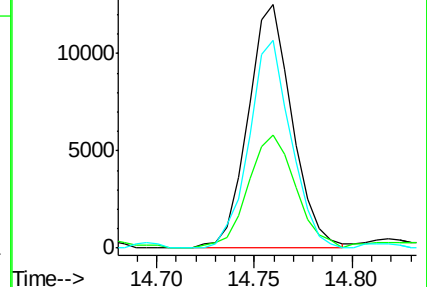
154 85.6 69.8 104.6

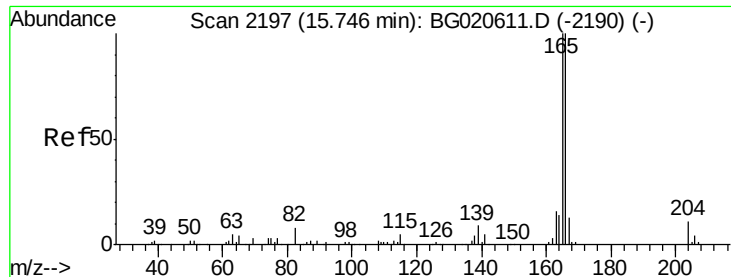


Abundance Ion 153.00 (152.70 to 153.70): E

Ion 152.00 (151.70 to 152.70): E

Ion 154.00 (153.70 to 154.70): E

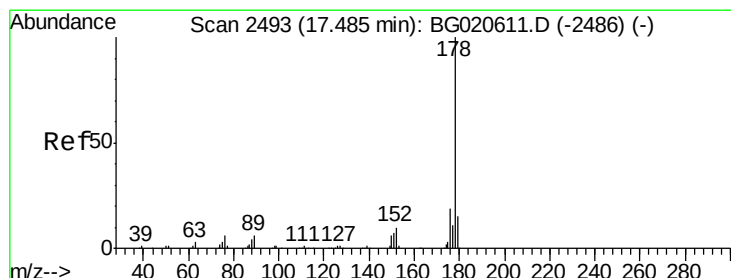
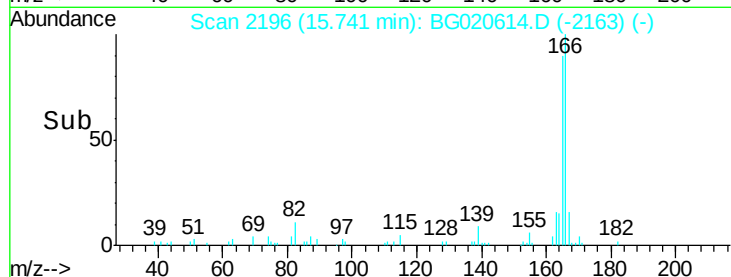
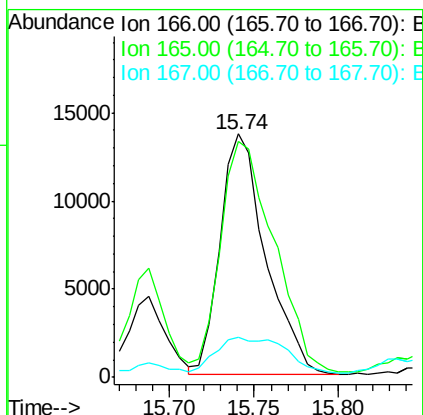
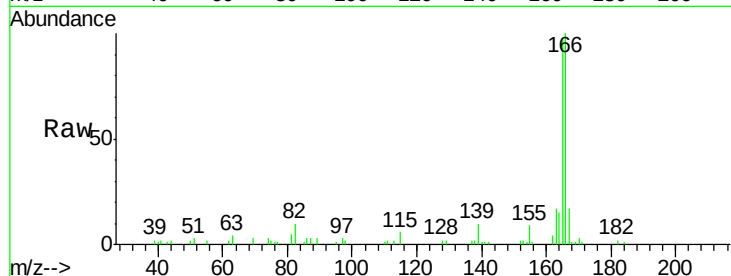




#59  
Fluorene  
Concen: 5.43 ng/ul  
RT: 15.74 min Scan# 2196  
Delta R.T. -0.01 min  
Lab File: BG020614.D  
Acq: 30 Dec 2015 18:32

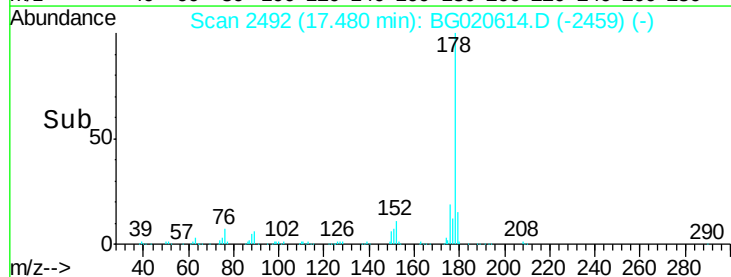
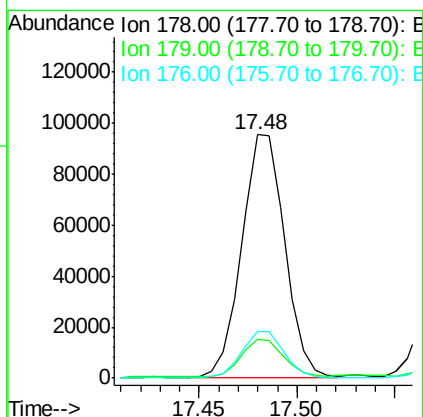
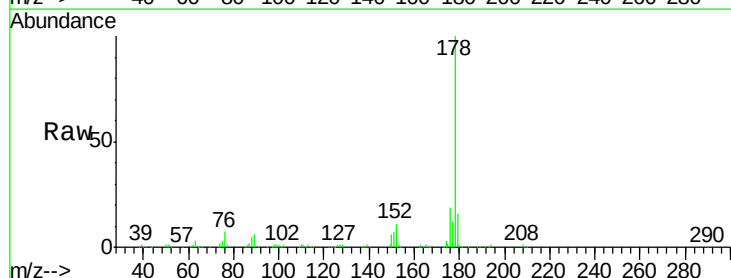
Instrument :  
BNA\_G  
ClientSampleId :  
G9D95DL

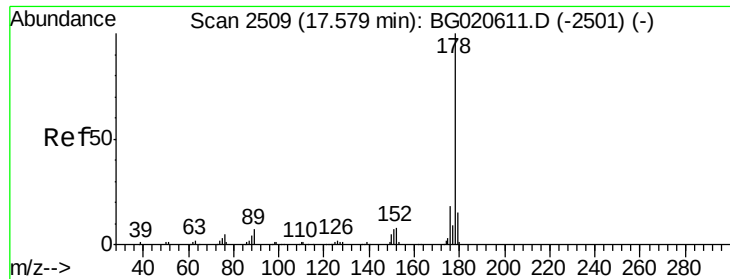
Tgt Ion:166 Resp: 25651  
Ion Ratio Lower Upper  
166 100  
165 96.8 78.4 117.6  
167 16.5 11.1 16.7



#70  
Phenanthrene  
Concen: 17.90 ng/ul  
RT: 17.48 min Scan# 2492  
Delta R.T. -0.01 min  
Lab File: BG020614.D  
Acq: 30 Dec 2015 18:32

Tgt Ion:178 Resp: 144200  
Ion Ratio Lower Upper  
178 100  
179 15.9 12.3 18.5  
176 19.2 15.4 23.0





#72

Anthracene

Concen: 6.28 ng/ul

RT: 17.57 min Scan# 2508

Delta R.T. -0.01 min

Lab File: BG020614.D

Acq: 30 Dec 2015 18:32

Instrument :

BNA\_G

ClientSampleId :

G9D95DL

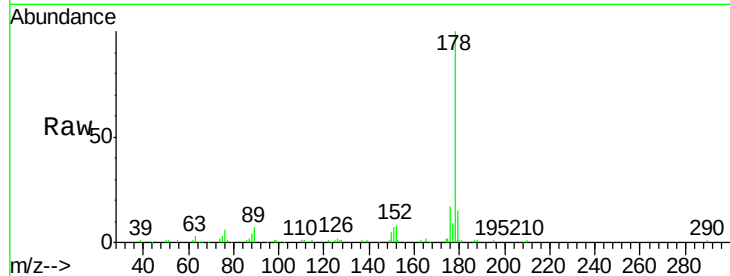
Tgt Ion:178 Resp: 51724

Ion Ratio Lower Upper

178 100

179 14.9 13.4 20.2

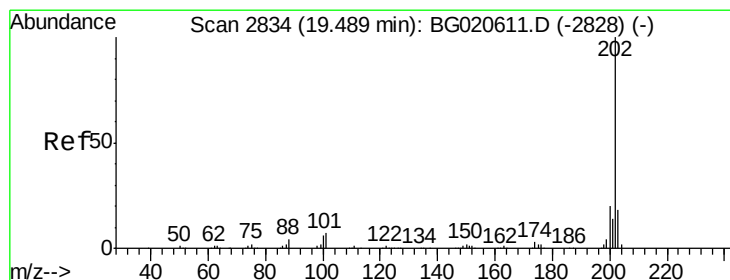
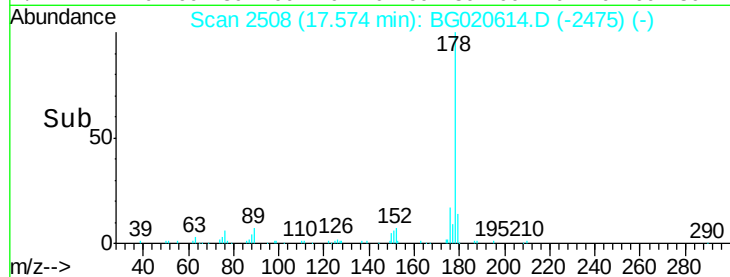
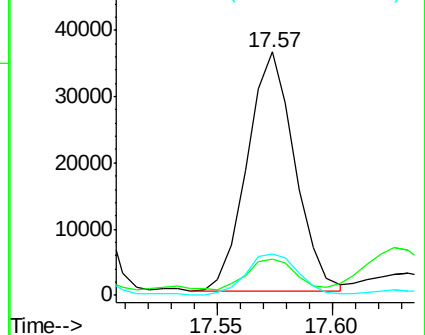
176 17.0 15.4 23.0



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



#77

Fluoranthene

Concen: 17.77 ng/ul

RT: 19.49 min Scan# 2834

Delta R.T. 0.00 min

Lab File: BG020614.D

Acq: 30 Dec 2015 18:32

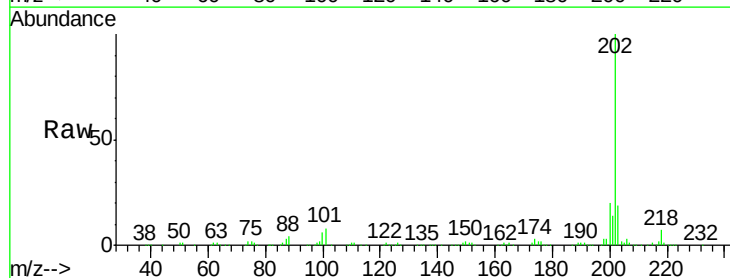
Tgt Ion:202 Resp: 174863

Ion Ratio Lower Upper

202 100

101 7.6 6.1 9.1

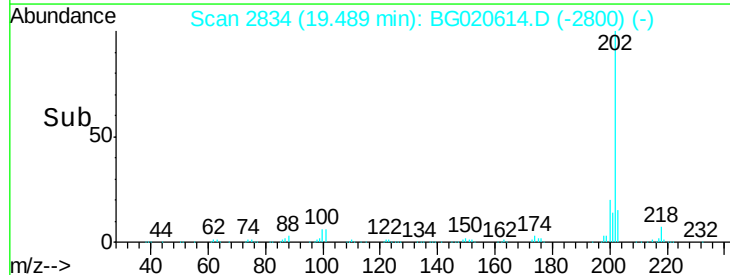
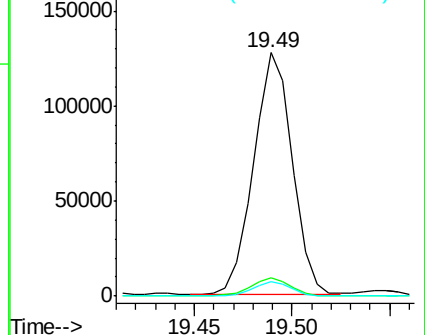
100 6.0 4.6 7.0

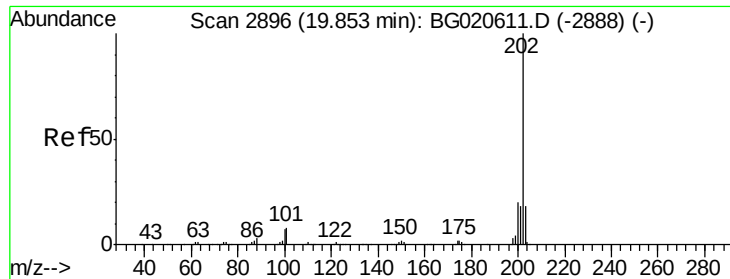


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 101.00 (100.70 to 101.70): E

Ion 100.00 (99.70 to 100.70): B

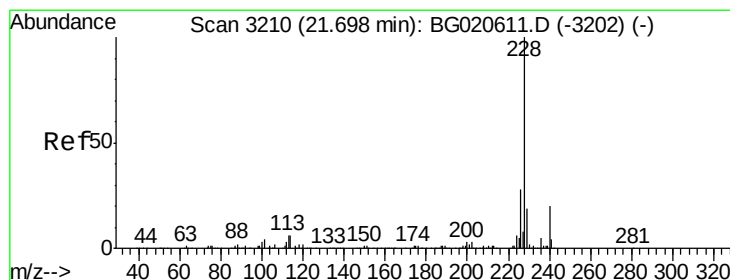
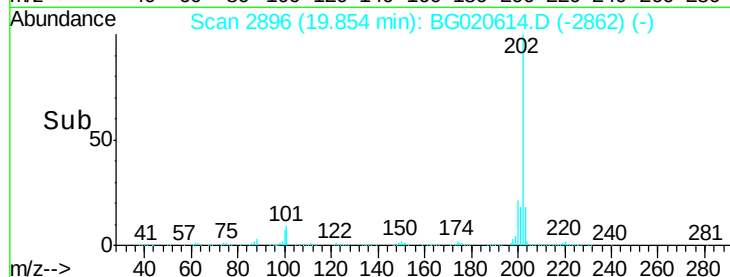
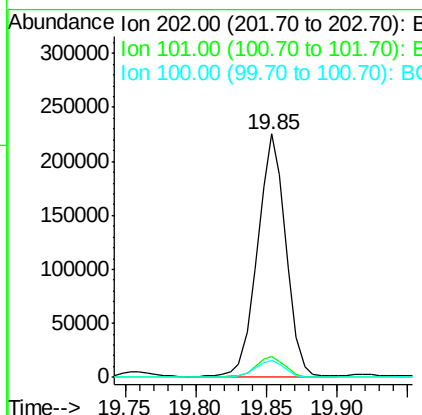
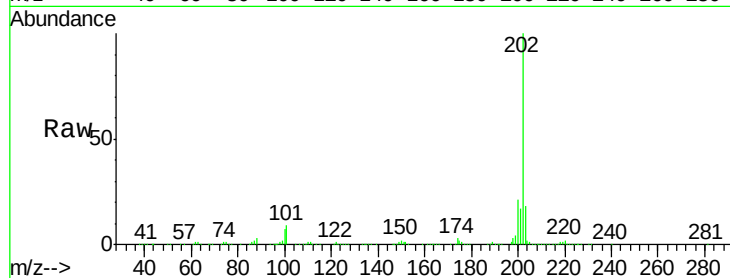




#80  
 Pyrene  
 Concen: 31.03 ng/ul  
 RT: 19.85 min Scan# 2896  
 Delta R.T. 0.00 min  
 Lab File: BG020614.D  
 Acq: 30 Dec 2015 18:32

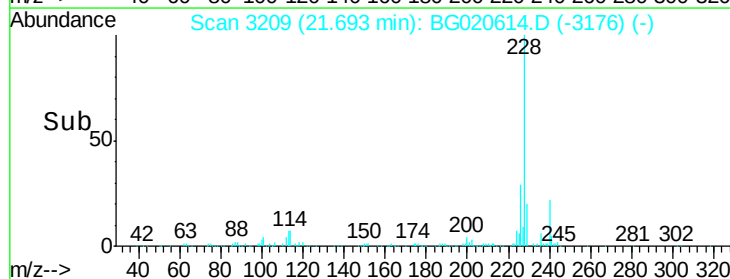
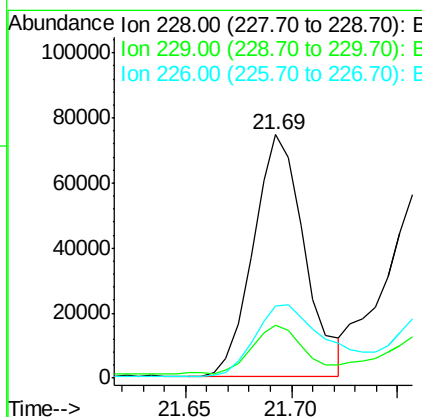
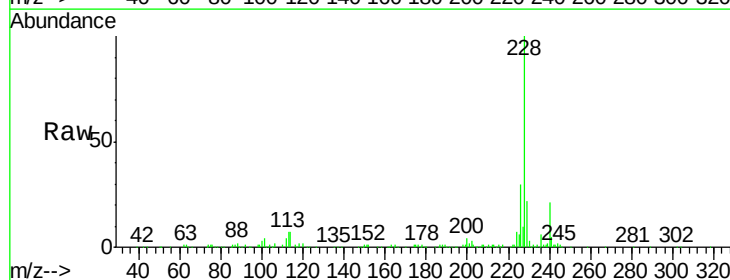
Instrument :  
 BNA\_G  
 ClientSampleId :  
 G9D95DL

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 202   | Resp: | 316267 |
| Ion      | Ratio | Lower | Upper  |
| 202      | 100   |       |        |
| 101      | 8.8   | 6.9   | 10.3   |
| 100      | 7.2   | 5.6   | 8.4    |

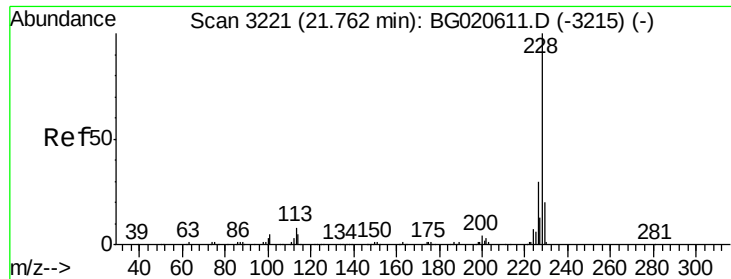


#83  
 Benzo(a)anthracene  
 Concen: 12.27 ng/ul  
 RT: 21.69 min Scan# 3209  
 Delta R.T. -0.01 min  
 Lab File: BG020614.D  
 Acq: 30 Dec 2015 18:32

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 228   | Resp: | 126291 |
| Ion      | Ratio | Lower | Upper  |
| 228      | 100   |       |        |
| 229      | 21.6  | 16.0  | 24.0   |
| 226      | 29.7  | 21.8  | 32.8   |







#85

Chrysene

Concen: 11.62 ng/ul

RT: 21.76 min Scan# 3220

Delta R.T. -0.01 min

Lab File: BG020614.D

Acq: 30 Dec 2015 18:32

Instrument :

BNA\_G

ClientSampleId :

G9D95DL

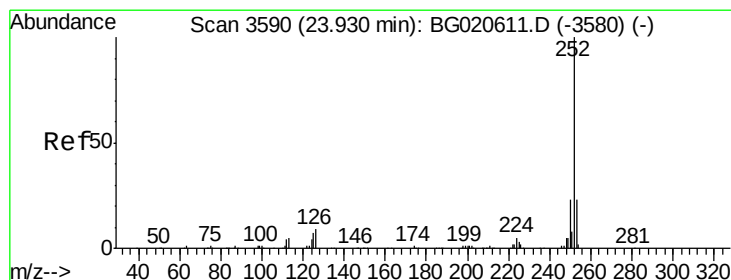
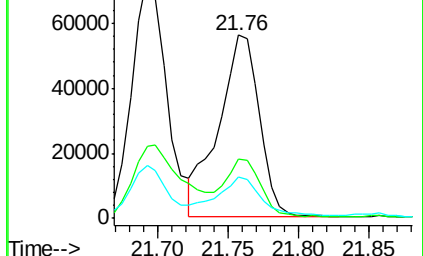
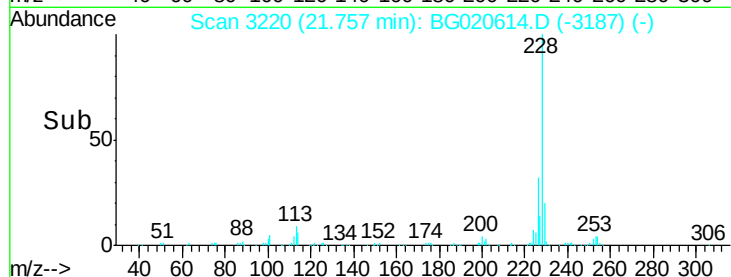
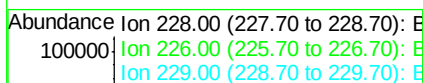
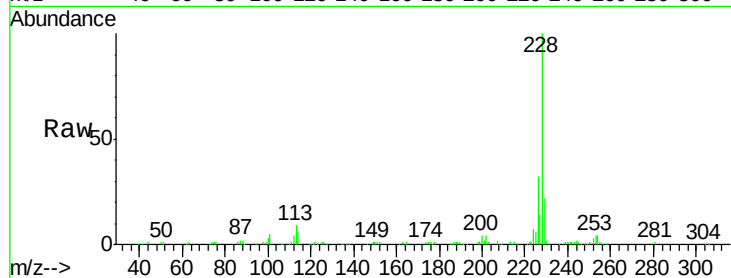
Tgt Ion:228 Resp: 112566

Ion Ratio Lower Upper

228 100

226 32.3 24.1 36.1

229 22.3 16.0 24.0



#88

Benzo(b)fluoranthene

Concen: 7.50 ng/ul

RT: 23.93 min Scan# 3590

Delta R.T. 0.00 min

Lab File: BG020614.D

Acq: 30 Dec 2015 18:32

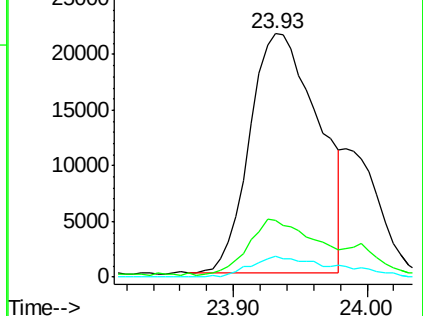
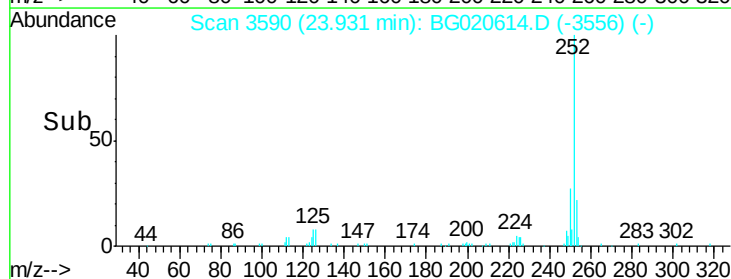
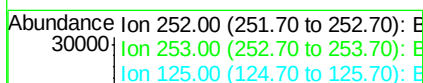
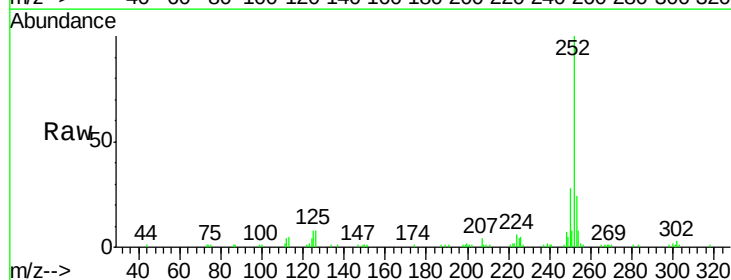
Tgt Ion:252 Resp: 76793

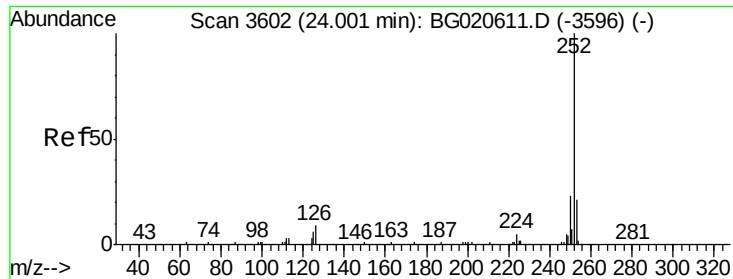
Ion Ratio Lower Upper

252 100

253 23.5 17.4 26.0

125 8.4 4.9 7.3#





#89

Benzo(k)fluoranthene

Concen: 7.83 ng/ul

RT: 23.93 min Scan# 3590

Delta R.T. -0.07 min

Lab File: BG020614.D

Acq: 30 Dec 2015 18:32

Instrument :

BNA\_G

ClientSampleId :

G9D95DL

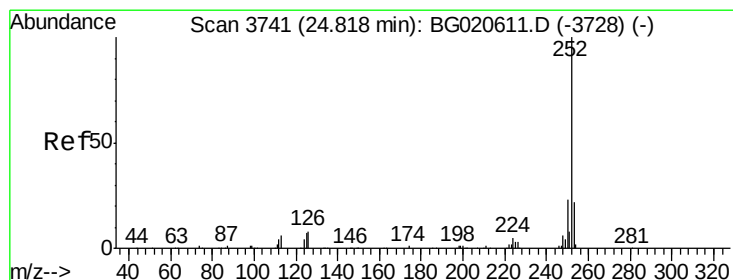
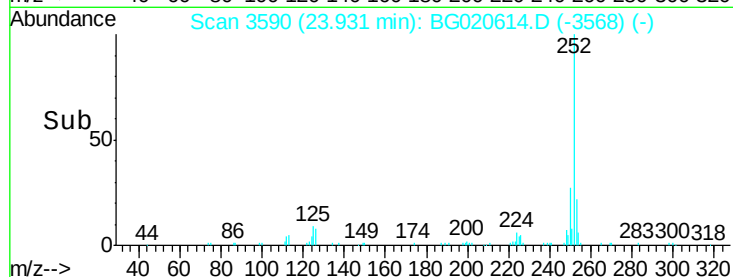
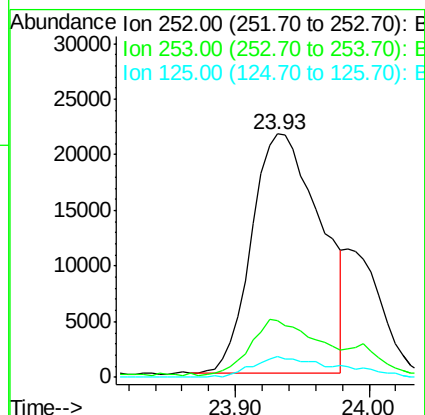
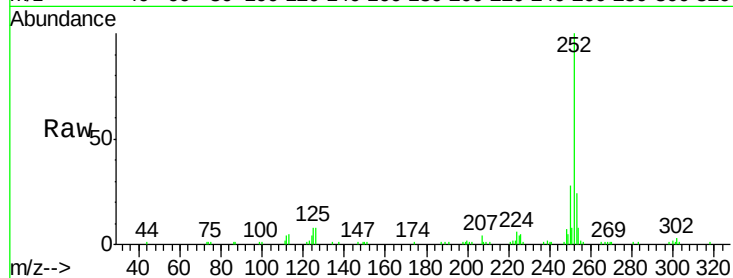
Tgt Ion:252 Resp: 76793

Ion Ratio Lower Upper

252 100

253 23.5 17.1 25.7

125 8.4 5.4 8.0#



#91

Benzo(a)pyrene

Concen: 8.90 ng/ul

RT: 24.81 min Scan# 3740

Delta R.T. -0.01 min

Lab File: BG020614.D

Acq: 30 Dec 2015 18:32

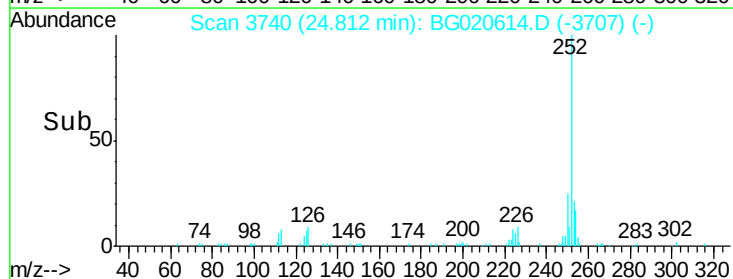
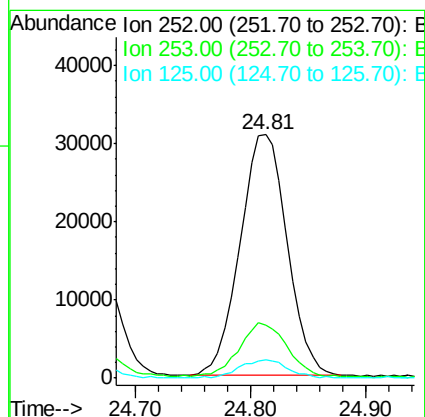
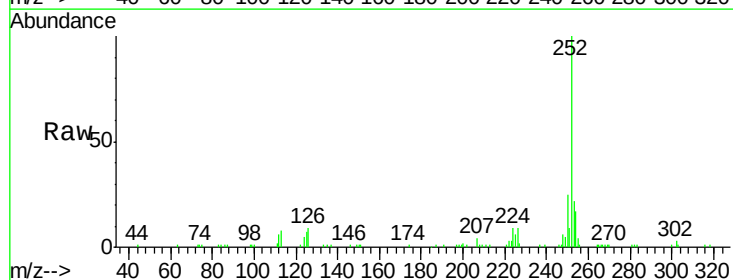
Tgt Ion:252 Resp: 87525

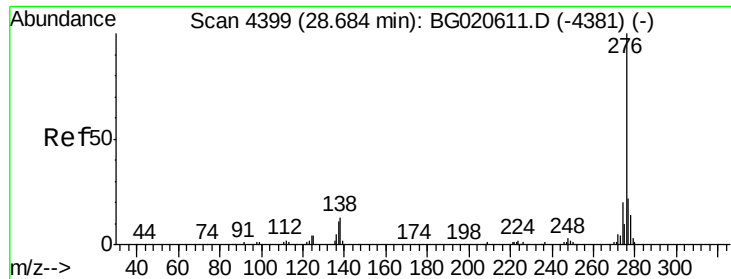
Ion Ratio Lower Upper

252 100

253 21.8 17.2 25.8

125 7.4 5.8 8.6





#92

Indeno(1,2,3-cd)pyrene

Concen: 3.16 ng/ul

RT: 28.68 min Scan# 4398

Delta R.T. -0.01 min

Lab File: BG020614.D

Acq: 30 Dec 2015 18:32

Instrument :

BNA\_G

ClientSampleId :

G9D95DL

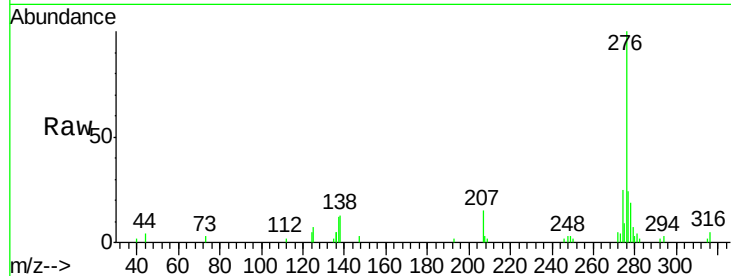
Tgt Ion:276 Resp: 37086

Ion Ratio Lower Upper

276 100

138 13.4 10.9 16.3

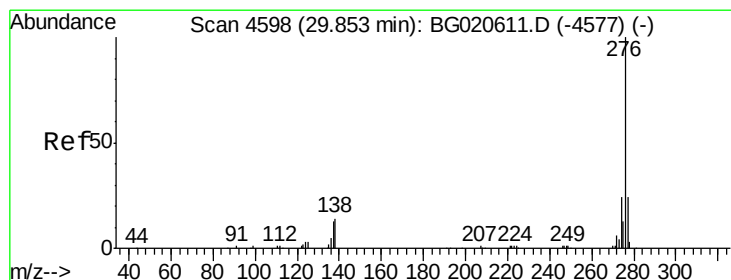
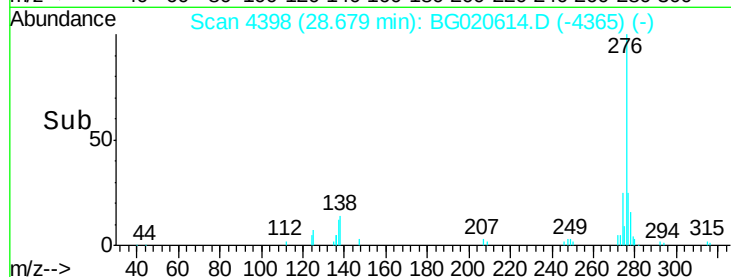
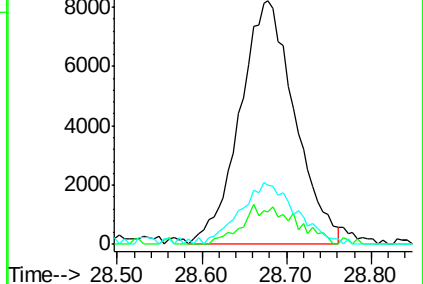
277 24.2 18.9 28.3



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



#94

Benzo(g,h,i)perylene

Concen: 4.29 ng/ul

RT: 29.84 min Scan# 4596

Delta R.T. -0.01 min

Lab File: BG020614.D

Acq: 30 Dec 2015 18:32

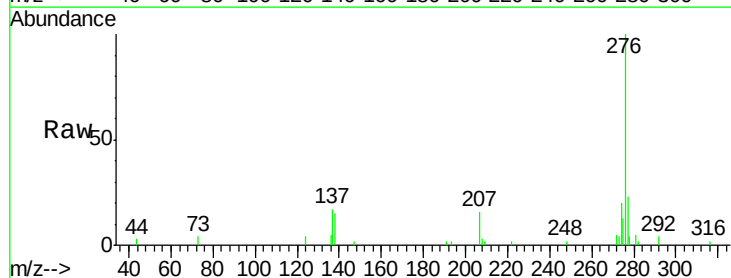
Tgt Ion:276 Resp: 41346

Ion Ratio Lower Upper

276 100

138 15.2 11.2 16.8

277 23.4 19.0 28.6



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

