

Data Path : Z:\HPCHEM1\BNA\_G\DATA\BG011516\  
 Data File : BG020753.D  
 Acq On : 15 Jan 2016 15:22  
 Operator : SJ/IZ  
 Sample : H1101-15 10X  
 Misc :  
 ALS Vial : 23 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 BC9F6

Quant Time: Jan 15 22:19:11 2016  
 Quant Method : Z:\HPCHEM1\BNA\_G\METHODS\SOM02.2-EPA-BG011216.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Fri Jan 15 22:12:27 2016  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 8.04  | 152  | 18670    | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 10.86 | 136  | 78566    | 20.00 | ng/ul | 0.00     |
| 36) Acenaphthene-d10      | 14.68 | 164  | 54544    | 20.00 | ng/ul | 0.00     |
| 62) Phenanthrene-d10      | 17.43 | 188  | 131447   | 20.00 | ng/ul | 0.00     |
| 78) Chrysene-d12          | 21.70 | 240  | 154163   | 20.00 | ng/ul | 0.00     |
| 86) Perylene-d12          | 24.96 | 264  | 148819   | 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                   | 7.21  | 99  | 1841  | 1.15 | ng/ul | 0.00 |
| 7) Bis-(2-Chloroethyl)ether-d  | 7.37  | 67  | 1167  | 1.21 | ng/ul | 0.00 |
| 9) 2-Chlorophenol-d4           | 7.59  | 132 | 1935  | 1.54 | ng/ul | 0.01 |
| 13) 4-Methylphenol-d8          | 8.76  | 113 | 1531  | 1.13 | ng/ul | 0.00 |
| 19) Nitrobenzene-d5            | 9.21  | 128 | 359   | 0.58 | ng/ul | 0.00 |
| 22) 2-Nitrophenol-d4           | 9.95  | 143 | 863   | 1.20 | ng/ul | 0.01 |
| 26) 2,4-Dichlorophenol-d3      | 10.49 | 165 | 1920  | 1.40 | ng/ul | 0.01 |
| 29) 4-Chloroaniline-d4         | 11.01 | 131 | 401   | 0.30 | ng/ul | 0.02 |
| 44) Dimethylphthalate-d6       | 14.08 | 166 | 8050  | 1.69 | ng/ul | 0.00 |
| 47) Acenaphthylene-d8          | 14.38 | 160 | 9332  | 1.75 | ng/ul | 0.00 |
| 52) 4-Nitrophenol-d4           | 0.00  | 143 | 0     | 0.00 | ng/ul |      |
| 58) Fluorene-d10               | 15.67 | 176 | 7616  | 1.79 | ng/ul | 0.00 |
| 63) 4,6-Dinitro-2-methylphenol | 15.81 | 200 | 424   | 0.59 | ng/ul | 0.00 |
| 71) Anthracene-d10             | 17.53 | 188 | 12176 | 1.89 | ng/ul | 0.00 |
| 79) Pyrene-d10                 | 19.81 | 212 | 14336 | 1.95 | ng/ul | 0.00 |
| 90) Benzo(a)pyrene-d12         | 24.72 | 264 | 14480 | 1.83 | ng/ul | 0.00 |

## Target Compounds

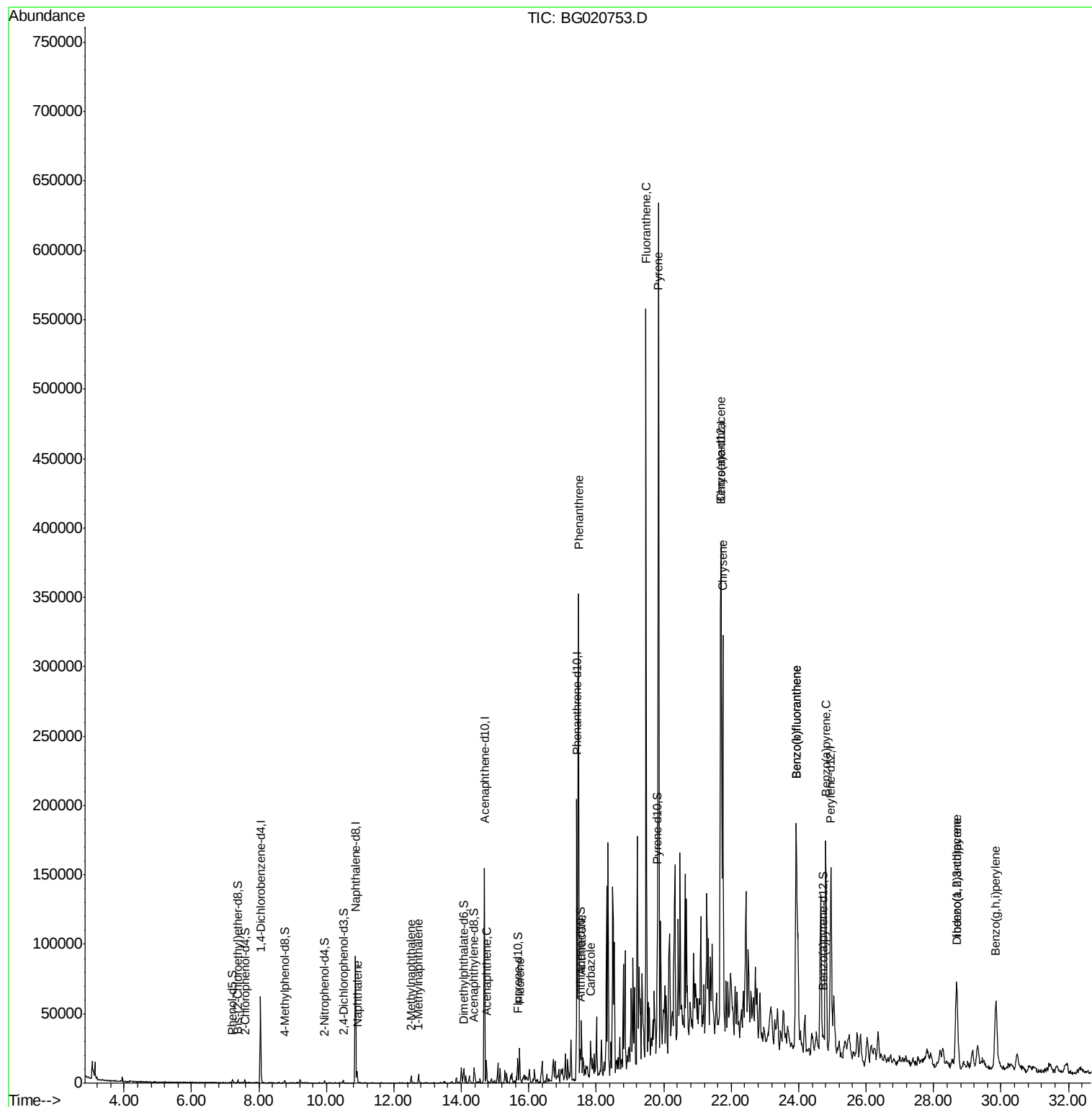
|                            |       |     |        |       |        | Qvalue |
|----------------------------|-------|-----|--------|-------|--------|--------|
| 28) Naphthalene            | 10.91 | 128 | 7181   | 1.62  | ng/ul  | 95     |
| 34) 2-Methylnaphthalene    | 12.52 | 142 | 3599   | 1.09  | ng/ul  | 86     |
| 35) 1-Methylnaphthalene    | 12.73 | 142 | 3563   | 1.14  | ng/ul# | 94     |
| 50) Acenaphthene           | 14.74 | 153 | 7734   | 1.99  | ng/ul  | 93     |
| 59) Fluorene               | 15.73 | 166 | 12045  | 2.52  | ng/ul  | 94     |
| 70) Phenanthrene           | 17.47 | 178 | 236891 | 30.29 | ng/ul  | 99     |
| 72) Anthracene             | 17.56 | 178 | 29985  | 3.80  | ng/ul  | 99     |
| 75) Carbazole              | 17.83 | 167 | 15653  | 2.42  | ng/ul# | 93     |
| 77) Fluoranthene           | 19.48 | 202 | 354548 | 37.29 | ng/ul  | 99     |
| 80) Pyrene                 | 19.84 | 202 | 399351 | 40.85 | ng/ul  | 98     |
| 83) Benzo(a)anthracene     | 21.68 | 228 | 195802 | 20.36 | ng/ul  | 97     |
| 85) Chrysene               | 21.75 | 228 | 210932 | 23.20 | ng/ul  | 97     |
| 88) Benzo(b)fluoranthene   | 23.93 | 252 | 206847 | 21.58 | ng/ul  | 97     |
| 89) Benzo(k)fluoranthene   | 23.93 | 252 | 206847 | 21.85 | ng/ul  | 97     |
| 91) Benzo(a)pyrene         | 24.80 | 252 | 169601 | 18.38 | ng/ul  | 96     |
| 92) Indeno(1,2,3-cd)pyrene | 28.68 | 276 | 103176 | 9.48  | ng/ul  | 99     |
| 93) Dibenzo(a,h)anthracene | 28.70 | 278 | 30787  | 3.43  | ng/ul# | 89     |
| 94) Benzo(g,h,i)perylene   | 29.85 | 276 | 59817  | 6.66  | ng/ul  | 98     |

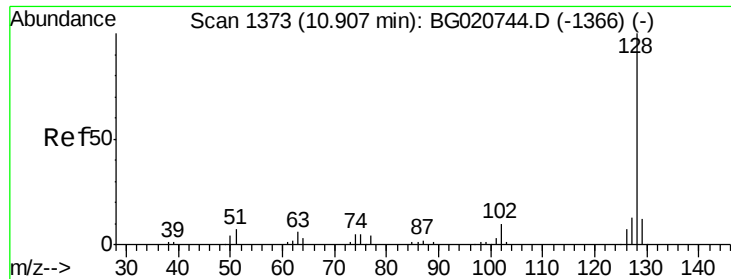
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\HPCHEM1\BNA\_G\DATA\BG011516\  
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ALS Vial : 23 Sample Multiplier: 1

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ClientSampleId :  
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Quant Time: Jan 15 22:19:11 2016  
Quant Method : Z:\HPCHEM1\BNA\_G\METHODS\SOM02.2-EPA-BG011216.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Fri Jan 15 22:12:27 2016  
Response via : Initial Calibration

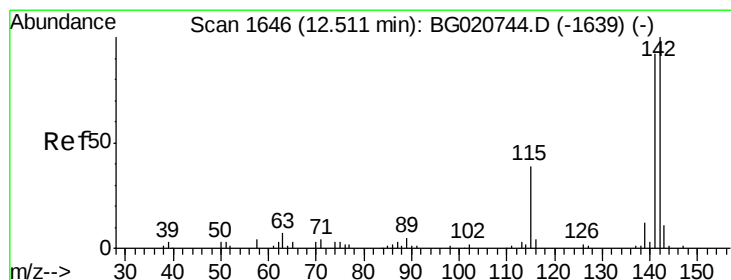
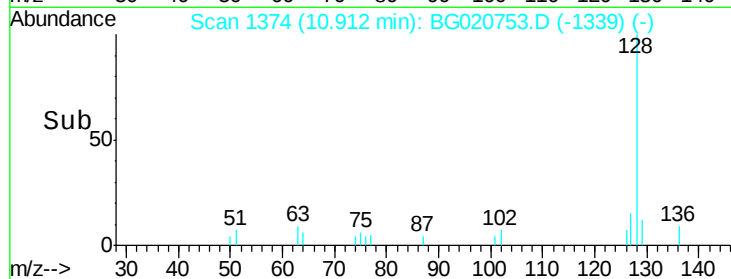
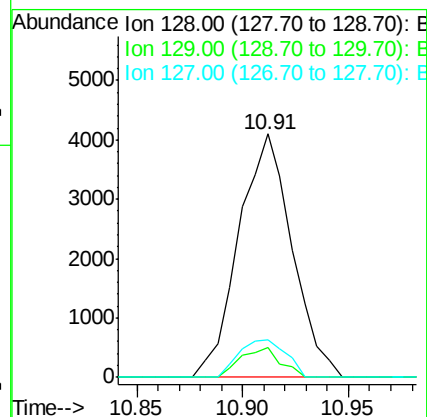
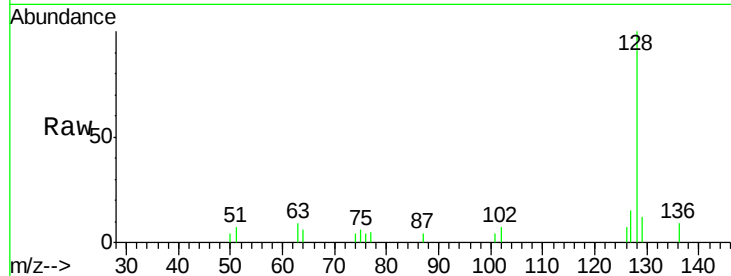




#28  
Naphthalene  
Concen: 1.62 ng/ul  
RT: 10.91 min Scan# 1374  
Delta R.T. 0.00 min  
Lab File: BG020753.D  
Acq: 15 Jan 2016 15:22

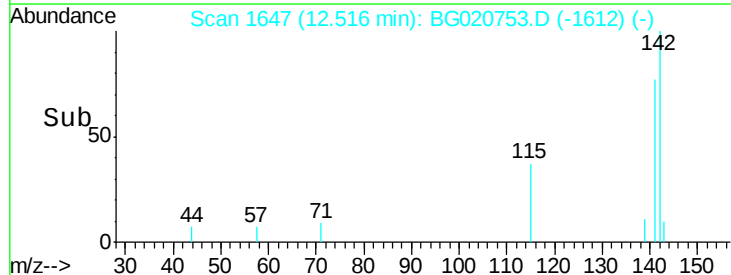
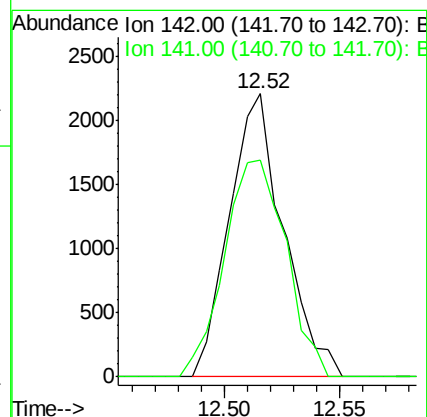
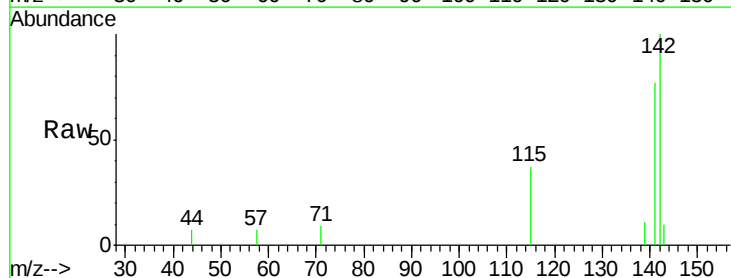
Instrument :  
BNA\_G  
ClientSampleId :  
BC9F6

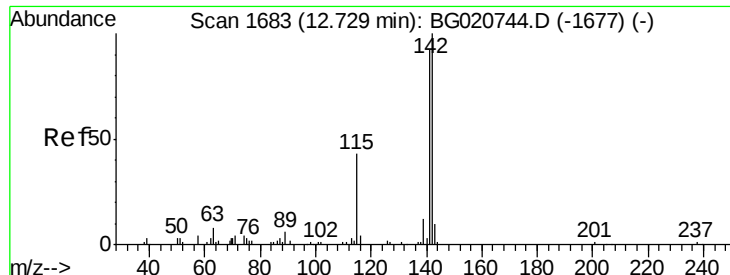
Tgt Ion:128 Resp: 7181  
Ion Ratio Lower Upper  
128 100  
129 12.2 8.3 12.5  
127 15.5 10.8 16.2



#34  
2-Methylnaphthalene  
Concen: 1.09 ng/ul  
RT: 12.52 min Scan# 1647  
Delta R.T. 0.00 min  
Lab File: BG020753.D  
Acq: 15 Jan 2016 15:22

Tgt Ion:142 Resp: 3599  
Ion Ratio Lower Upper  
142 100  
141 76.6 71.4 107.2

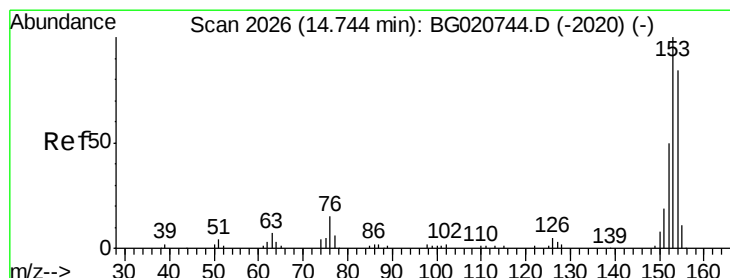
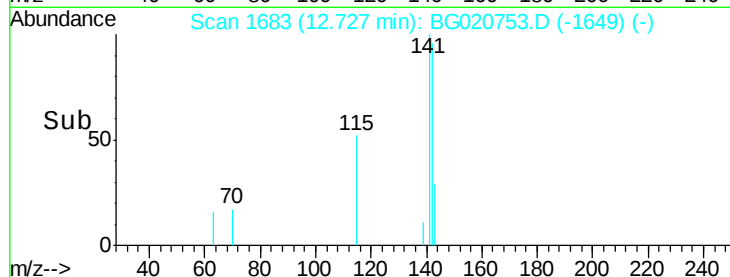
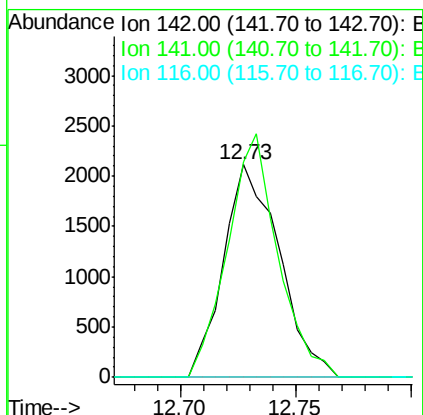
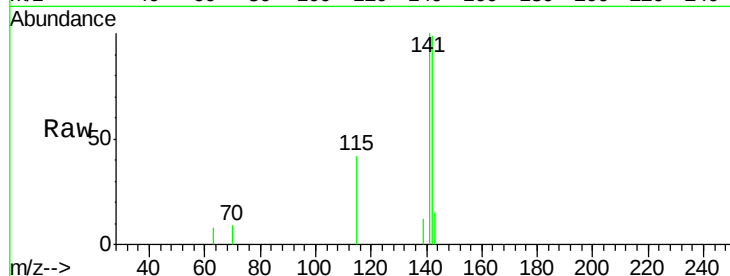




#35  
 1-Methylnaphthalene  
 Concen: 1.14 ng/ul  
 RT: 12.73 min Scan# 1683  
 Delta R.T. -0.00 min  
 Lab File: BG020753.D  
 Acq: 15 Jan 2016 15:22

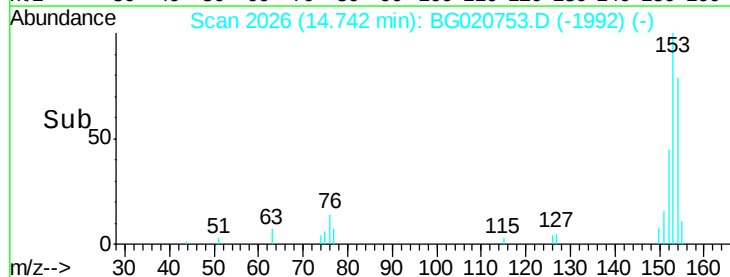
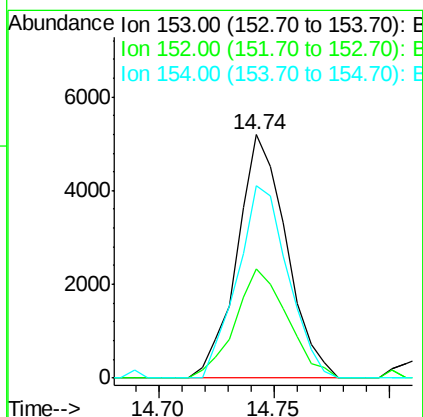
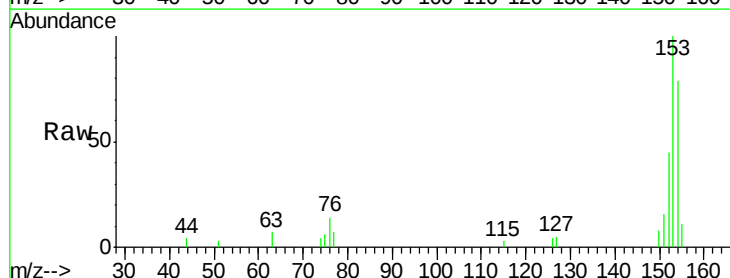
Instrument :  
 BNA\_G  
 ClientSampleId :  
 BC9F6

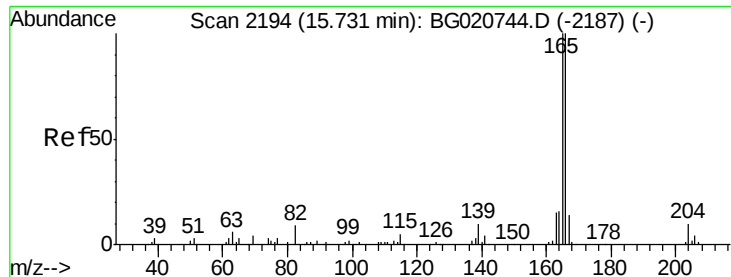
Tgt Ion:142 Resp: 3563  
 Ion Ratio Lower Upper  
 142 100  
 141 101.3 76.6 115.0  
 116 0.0 3.6 5.4#



#50  
 Acenaphthene  
 Concen: 1.99 ng/ul  
 RT: 14.74 min Scan# 2026  
 Delta R.T. -0.00 min  
 Lab File: BG020753.D  
 Acq: 15 Jan 2016 15:22

Tgt Ion:153 Resp: 7734  
 Ion Ratio Lower Upper  
 153 100  
 152 44.8 37.9 56.9  
 154 79.2 69.8 104.6





#59

Fluorene

Concen: 2.52 ng/ul

RT: 15.73 min Scan# 2194

Delta R.T. -0.00 min

Lab File: BG020753.D

Acq: 15 Jan 2016 15:22

Instrument :

BNA\_G

ClientSampleId :

BC9F6

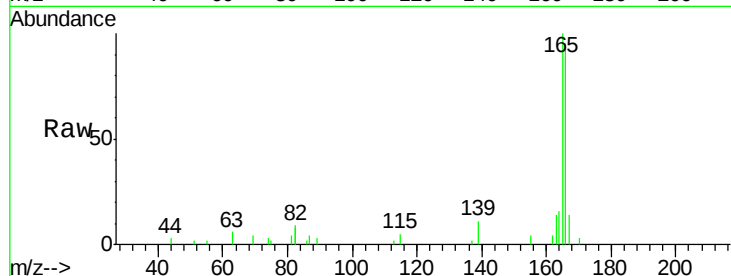
Tgt Ion:166 Resp: 12045

Ion Ratio Lower Upper

166 100

165 104.9 78.4 117.6

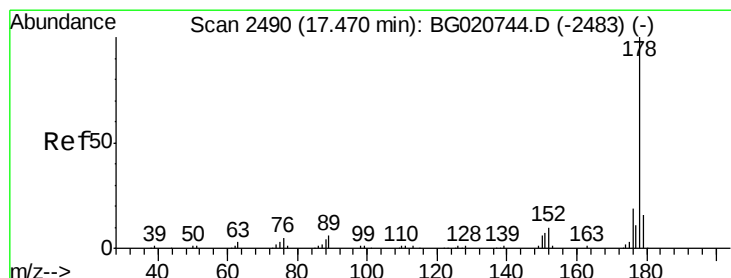
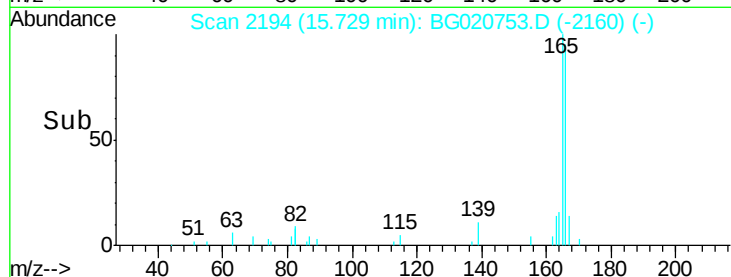
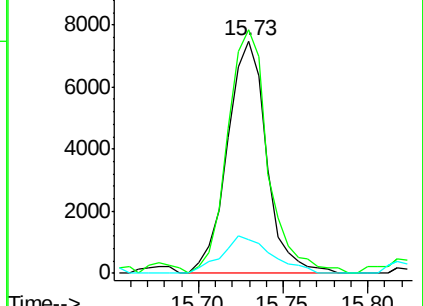
167 14.7 11.1 16.7



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: 30.29 ng/ul

RT: 17.47 min Scan# 2491

Delta R.T. 0.00 min

Lab File: BG020753.D

Acq: 15 Jan 2016 15:22

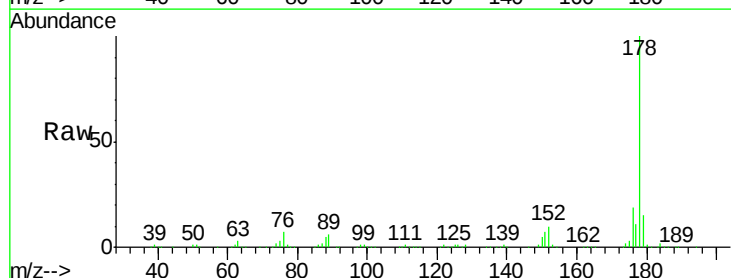
Tgt Ion:178 Resp: 236891

Ion Ratio Lower Upper

178 100

179 15.2 12.3 18.5

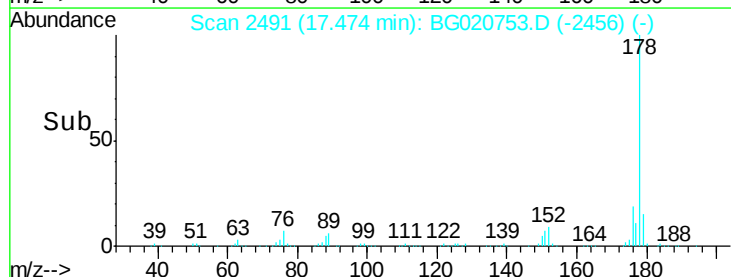
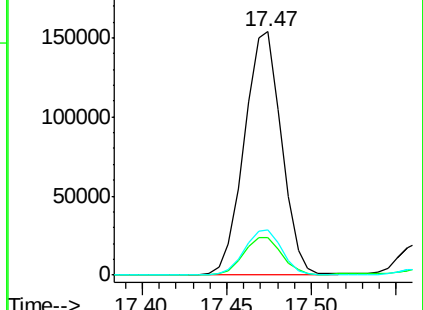
176 18.8 15.4 23.0

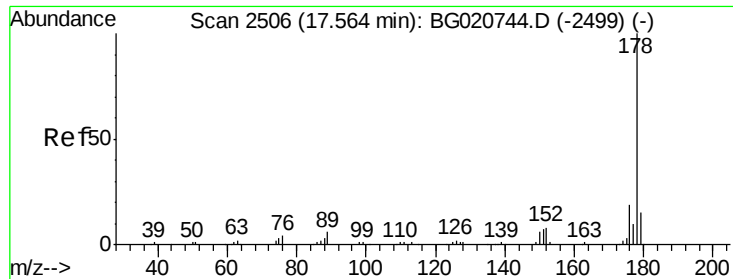


Abundance Ion 178.00 (177.70 to 178.70): E

Ion 179.00 (178.70 to 179.70): E

Ion 176.00 (175.70 to 176.70): E





#72

Anthracene

Concen: 3.80 ng/ul

RT: 17.56 min Scan# 2506

Delta R.T. -0.00 min

Lab File: BG020753.D

Acq: 15 Jan 2016 15:22

Instrument :

BNA\_G

ClientSampleId :

BC9F6

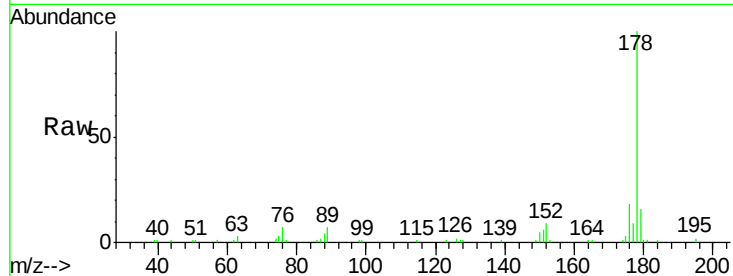
Tgt Ion:178 Resp: 29985

Ion Ratio Lower Upper

178 100

179 16.5 13.4 20.2

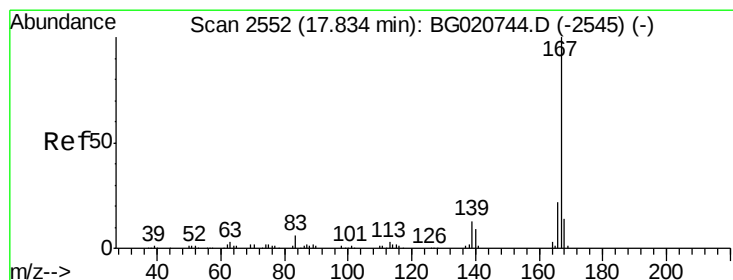
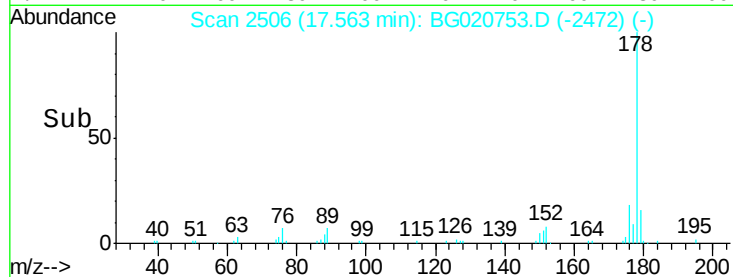
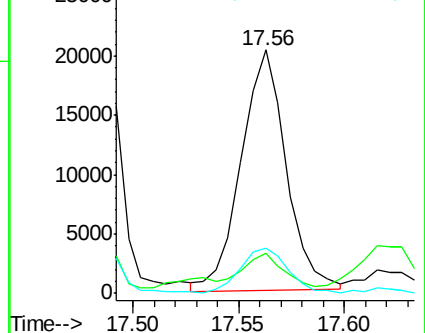
176 18.3 15.4 23.0



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



#75

Carbazole

Concen: 2.42 ng/ul

RT: 17.83 min Scan# 2552

Delta R.T. -0.00 min

Lab File: BG020753.D

Acq: 15 Jan 2016 15:22

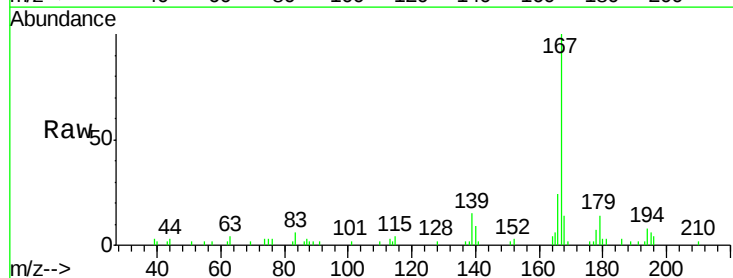
Tgt Ion:167 Resp: 15653

Ion Ratio Lower Upper

167 100

166 23.9 17.0 25.4

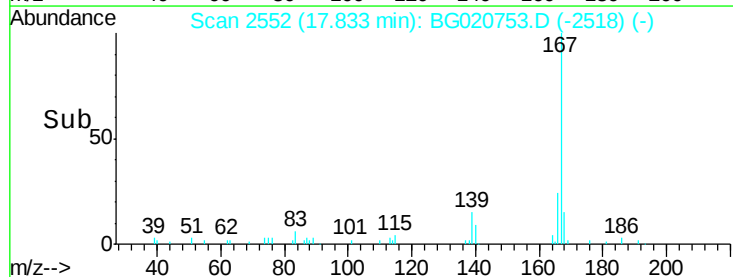
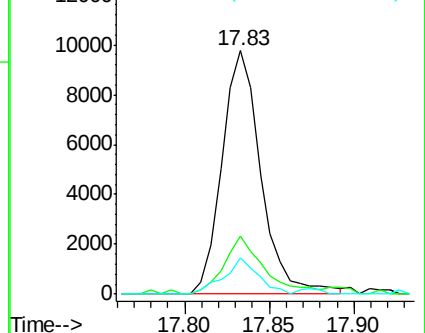
139 14.8 9.1 13.7#

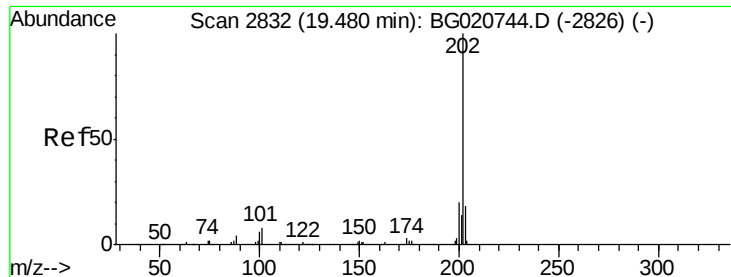


Abundance Ion 167.00 (166.70 to 167.70): E

Ion 166.00 (165.70 to 166.70): E

Ion 139.00 (138.70 to 139.70): E





#77

Fluoranthene

Concen: 37.29 ng/ul

RT: 19.48 min Scan# 2833

Delta R.T. 0.00 min

Lab File: BG020753.D

Acq: 15 Jan 2016 15:22

Instrument :

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ClientSampleId :

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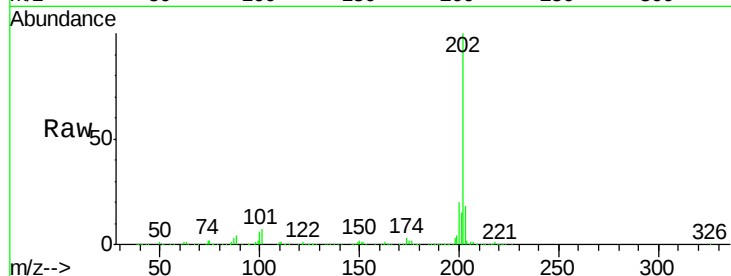
Tgt Ion:202 Resp: 354548

Ion Ratio Lower Upper

202 100

101 7.1 6.1 9.1

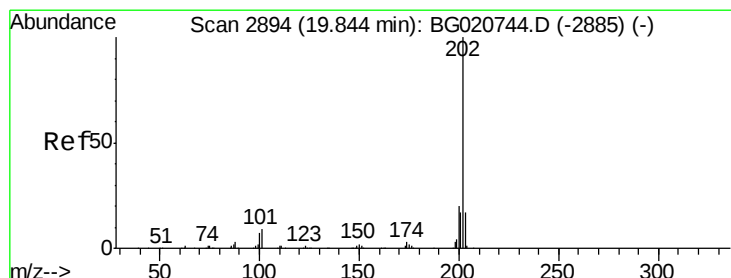
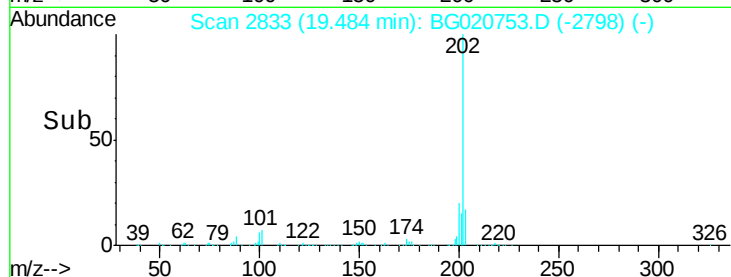
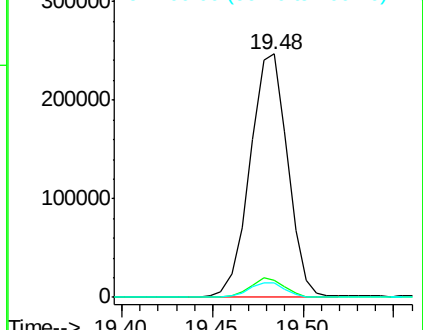
100 5.9 4.6 7.0



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: 40.85 ng/ul

RT: 19.84 min Scan# 2894

Delta R.T. -0.00 min

Lab File: BG020753.D

Acq: 15 Jan 2016 15:22

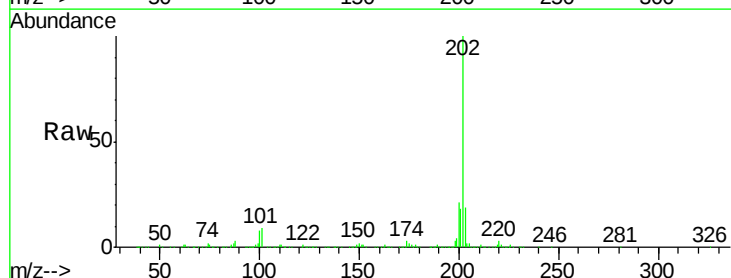
Tgt Ion:202 Resp: 399351

Ion Ratio Lower Upper

202 100

101 9.4 6.9 10.3

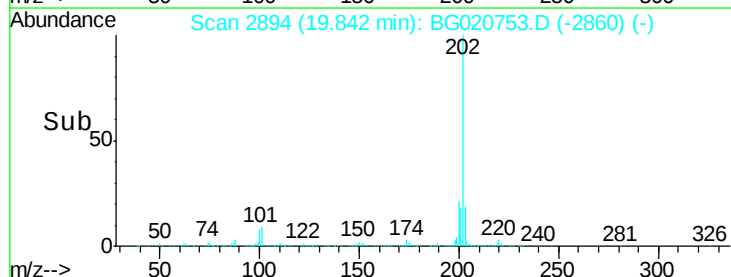
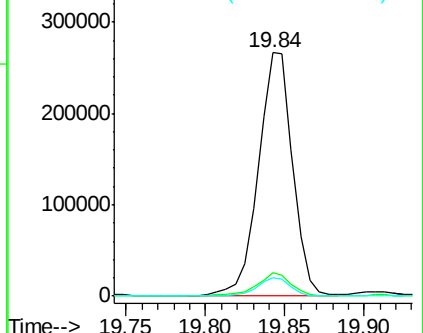
100 7.6 5.6 8.4

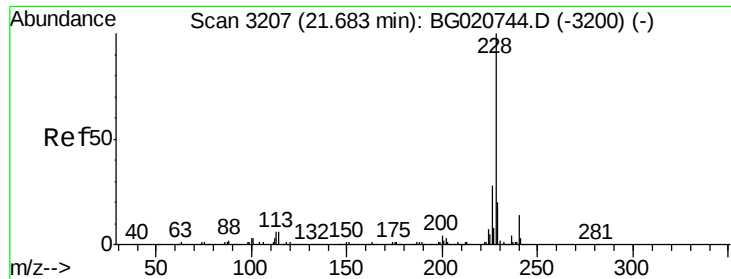


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 101.00 (100.70 to 101.70): E

Ion 100.00 (99.70 to 100.70): B

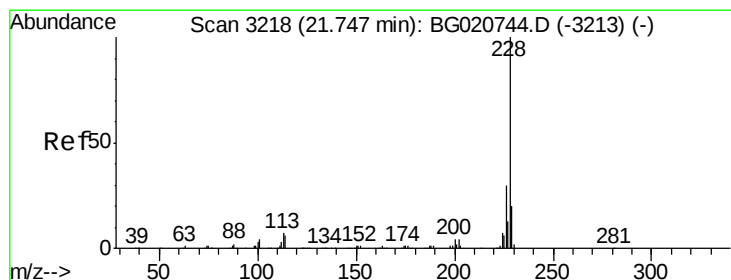
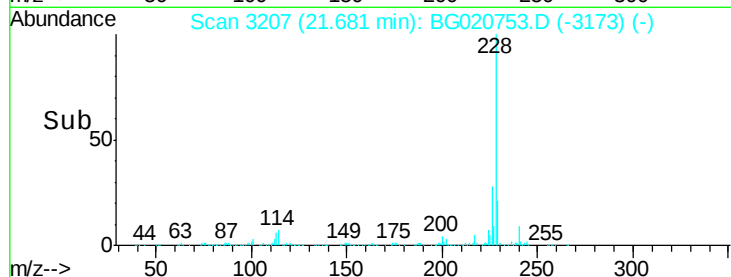
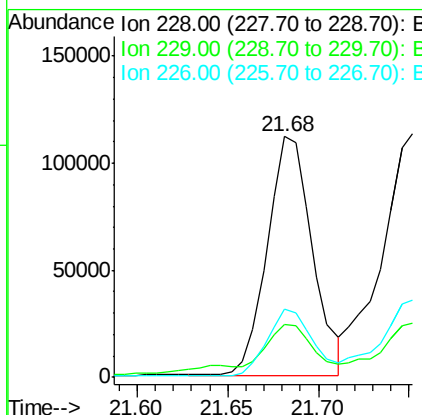
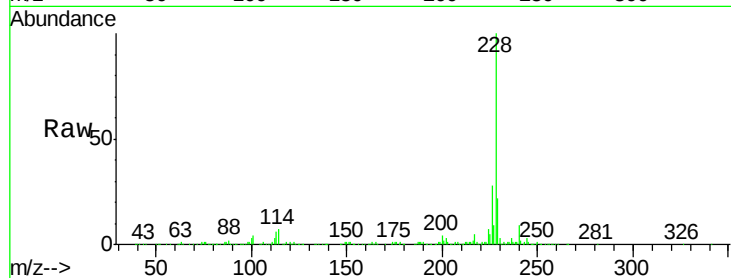




#83  
Benzo(a)anthracene  
Concen: 20.36 ng/u1  
RT: 21.68 min Scan# 3207  
Delta R.T. -0.00 min  
Lab File: BG020753.D  
Acq: 15 Jan 2016 15:22

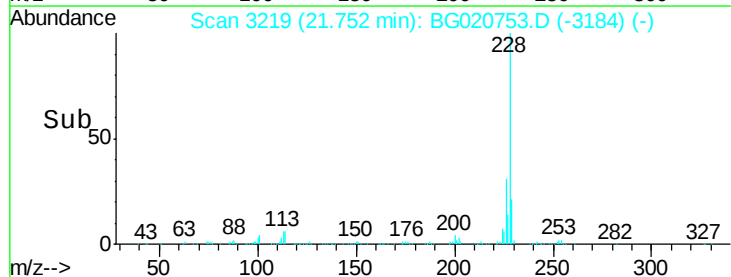
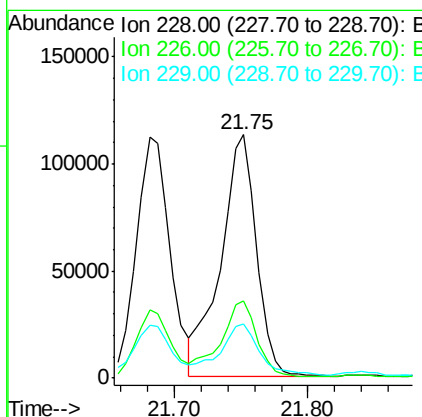
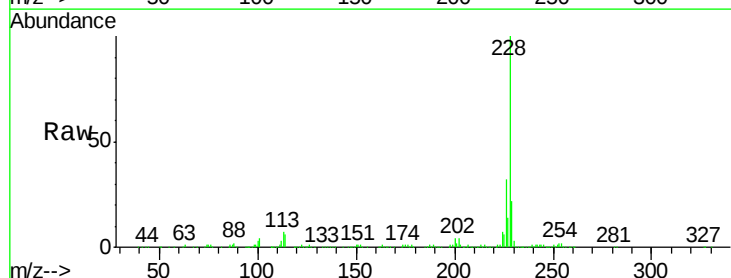
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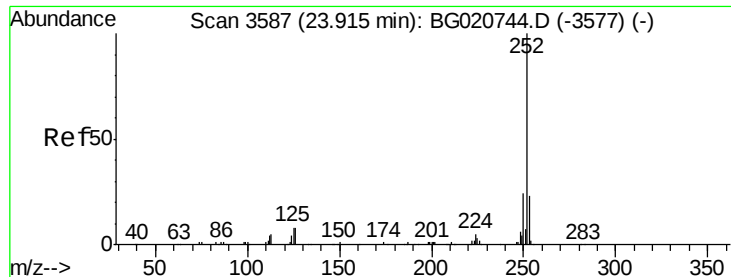
Tgt Ion:228 Resp: 195802  
Ion Ratio Lower Upper  
228 100  
229 22.0 16.0 24.0  
226 28.3 21.8 32.8



#85  
Chrysene  
Concen: 23.20 ng/u1  
RT: 21.75 min Scan# 3219  
Delta R.T. 0.00 min  
Lab File: BG020753.D  
Acq: 15 Jan 2016 15:22

Tgt Ion:228 Resp: 210932  
Ion Ratio Lower Upper  
228 100  
226 31.5 24.1 36.1  
229 22.2 16.0 24.0





#88

Benzo(b)fluoranthene

Concen: 21.58 ng/u1

RT: 23.93 min Scan# 3589

Delta R.T. 0.01 min

Lab File: BG020753.D

Acq: 15 Jan 2016 15:22

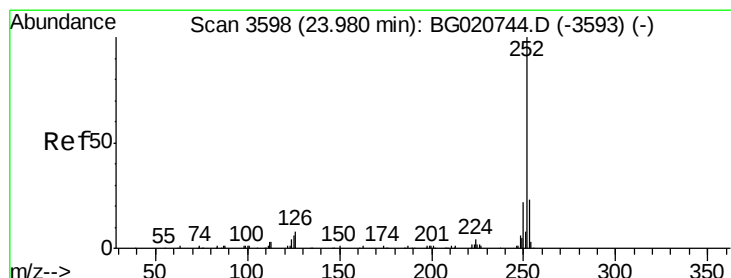
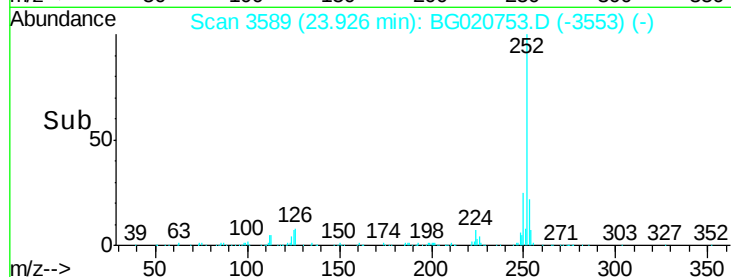
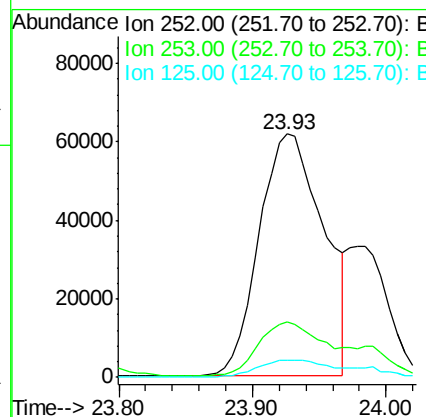
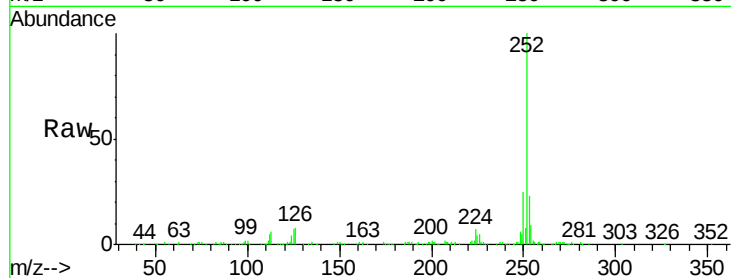
Instrument :

BNA\_G

ClientSampleId :

BC9F6

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 252   | Resp: | 206847 |
| Ion      | Ratio | Lower | Upper  |
| 252      | 100   |       |        |
| 253      | 23.0  | 17.4  | 26.0   |
| 125      | 6.8   | 4.9   | 7.3    |



#89

Benzo(k)fluoranthene

Concen: 21.85 ng/u1

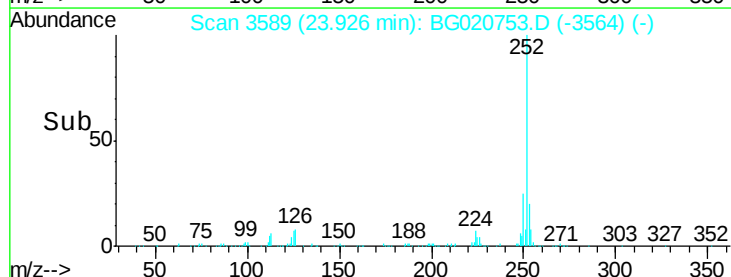
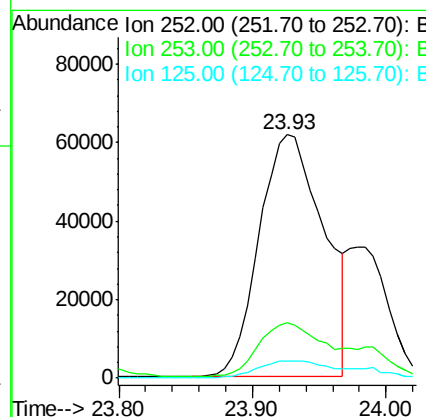
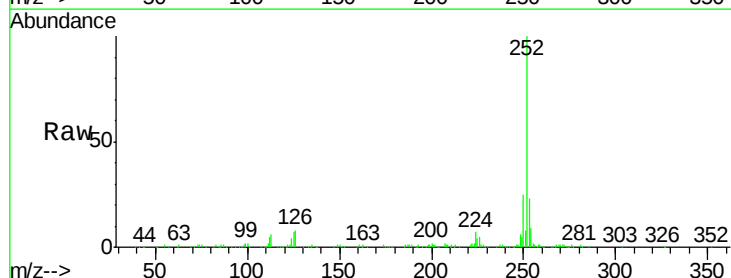
RT: 23.93 min Scan# 3589

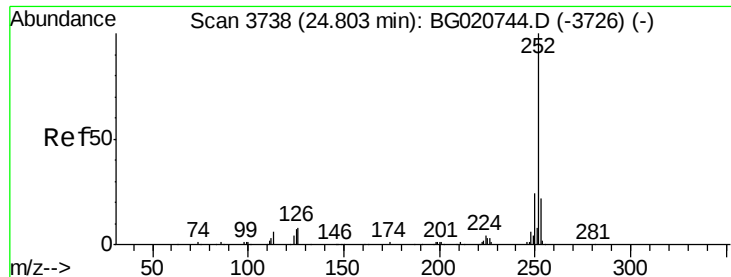
Delta R.T. -0.05 min

Lab File: BG020753.D

Acq: 15 Jan 2016 15:22

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 252   | Resp: | 206847 |
| Ion      | Ratio | Lower | Upper  |
| 252      | 100   |       |        |
| 253      | 23.0  | 17.1  | 25.7   |
| 125      | 6.8   | 5.4   | 8.0    |





#91

Benzo(a)pyrene

Concen: 18.38 ng/u1

RT: 24.80 min Scan# 3738

Delta R.T. -0.00 min

Lab File: BG020753.D

Acq: 15 Jan 2016 15:22

Instrument :

BNA\_G

ClientSampleId :

BC9F6

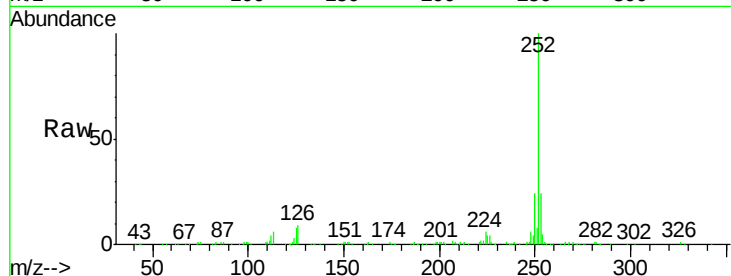
Tgt Ion:252 Resp: 169601

Ion Ratio Lower Upper

252 100

253 23.7 17.2 25.8

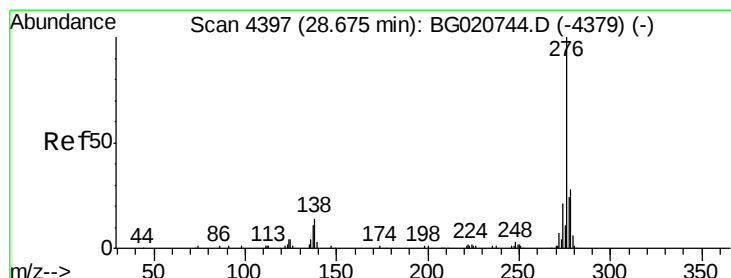
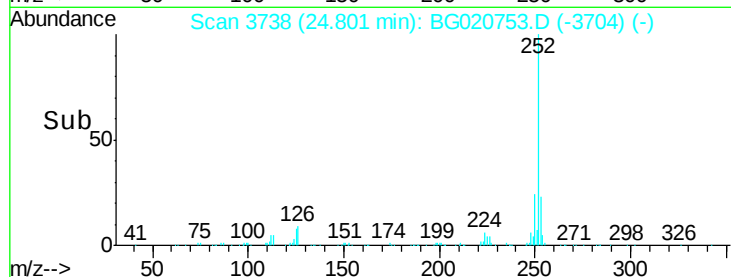
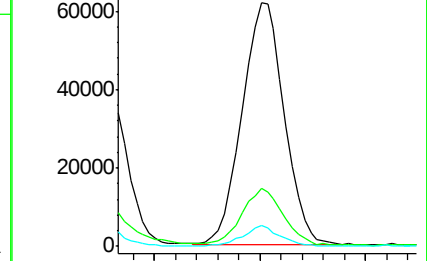
125 8.4 5.8 8.6



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



#92

Indeno(1,2,3-cd)pyrene

Concen: 9.48 ng/u1

RT: 28.68 min Scan# 4398

Delta R.T. 0.00 min

Lab File: BG020753.D

Acq: 15 Jan 2016 15:22

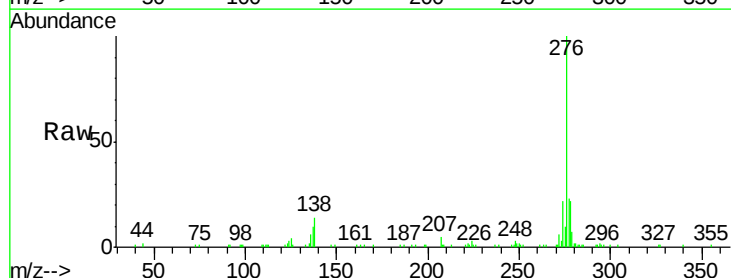
Tgt Ion:276 Resp: 103176

Ion Ratio Lower Upper

276 100

138 13.9 10.9 16.3

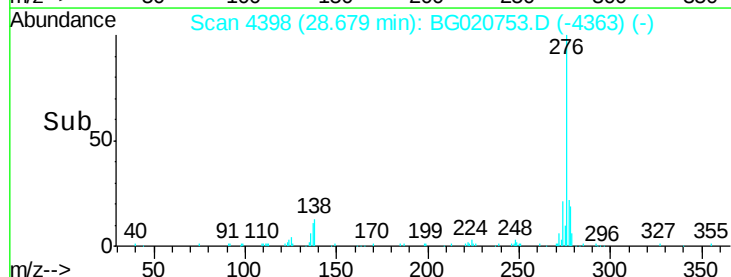
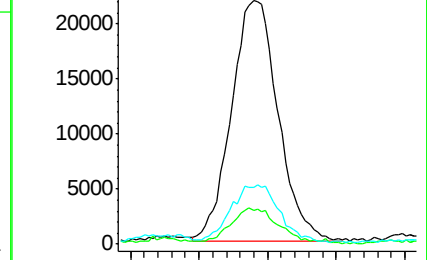
277 23.3 18.9 28.3

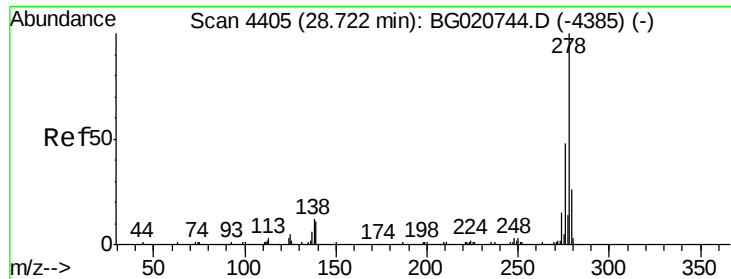


Abundance Ion 276.00 (275.70 to 276.70): E

Ion 138.00 (137.70 to 138.70): E

Ion 277.00 (276.70 to 277.70): E

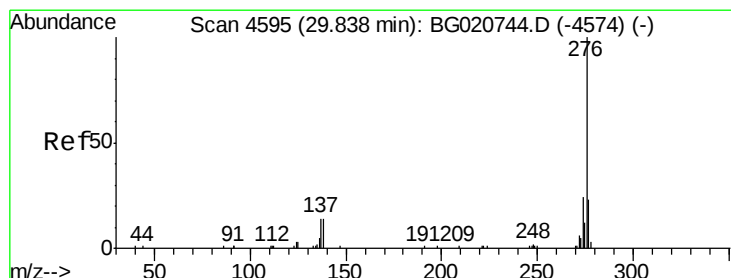
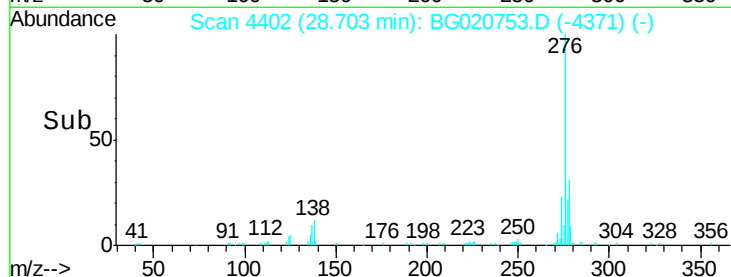
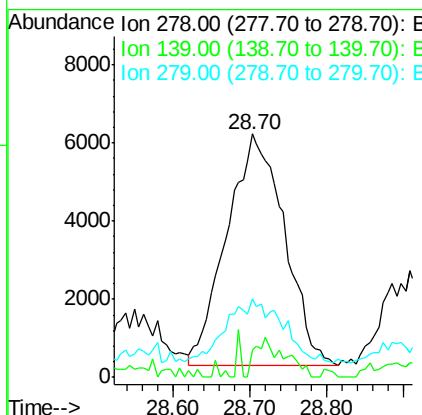
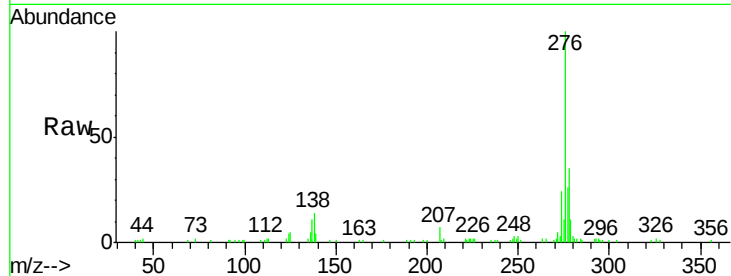




#93  
Dibenzo(a,h)anthracene  
Concen: 3.43 ng/ul  
RT: 28.70 min Scan# 4402  
Delta R.T. -0.02 min  
Lab File: BG020753.D  
Acq: 15 Jan 2016 15:22

Instrument :  
BNA\_G  
ClientSampleId :  
BC9F6

Tgt Ion:278 Resp: 30787  
Ion Ratio Lower Upper  
278 100  
139 11.0 9.0 13.4  
279 32.0 19.1 28.7#



#94  
Benzo(g,h,i)perylene  
Concen: 6.66 ng/ul  
RT: 29.85 min Scan# 4597  
Delta R.T. 0.01 min  
Lab File: BG020753.D  
Acq: 15 Jan 2016 15:22

Tgt Ion:276 Resp: 59817  
Ion Ratio Lower Upper  
276 100  
138 12.8 11.2 16.8  
277 24.5 19.0 28.6

