

Data Path : Z:\HPCHEM1\BNA G\DATA\BG111715\  
 Data File : BG019679.D  
 Acq On : 18 Nov 2015 3:23  
 Operator : UM/NP  
 Sample : G4427-10  
 Misc :  
 ALS Vial : 21 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 BC7C9

Quant Time: Nov 18 04:10:03 2015  
 Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG111615.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Wed Nov 18 03:01:13 2015  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 8.15  | 152  | 24928    | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 10.97 | 136  | 114568   | 20.00 | ng/ul | 0.00     |
| 36) Acenaphthene-d10      | 14.78 | 164  | 100663   | 20.00 | ng/ul | 0.00     |
| 62) Phenanthrene-d10      | 17.52 | 188  | 270239   | 20.00 | ng/ul | 0.00     |
| 78) Chrysene-d12          | 21.80 | 240  | 335403   | 20.00 | ng/ul | 0.00     |
| 86) Perylene-d12          | 25.12 | 264  | 334304   | 20.00 | ng/ul | 0.01     |

## System Monitoring Compounds

|                                |       |     |        |       |       |      |
|--------------------------------|-------|-----|--------|-------|-------|------|
| 3) 1,4-Dioxane-d8              | 3.44  | 96  | 1989   | 3.41  | ng/uL | 0.00 |
| 5) Phenol-d5                   | 7.29  | 99  | 51011  | 19.98 | ng/ul | 0.00 |
| 7) Bis-(2-Chloroethyl)ether-d  | 7.46  | 67  | 33309  | 19.91 | ng/ul | 0.00 |
| 9) 2-Chlorophenol-d4           | 7.67  | 132 | 30976  | 18.91 | ng/ul | 0.00 |
| 13) 4-Methylphenol-d8          | 8.85  | 113 | 41518  | 19.64 | ng/ul | 0.00 |
| 19) Nitrobenzene-d5            | 9.32  | 128 | 17776  | 18.90 | ng/ul | 0.00 |
| 22) 2-Nitrophenol-d4           | 10.05 | 143 | 20714  | 19.57 | ng/ul | 0.00 |
| 26) 2,4-Dichlorophenol-d3      | 10.59 | 165 | 41572  | 18.16 | ng/ul | 0.00 |
| 29) 4-Chloroaniline-d4         | 11.10 | 131 | 42547  | 19.58 | ng/ul | 0.00 |
| 44) Dimethylphthalate-d6       | 14.18 | 166 | 162206 | 17.82 | ng/ul | 0.00 |
| 47) Acenaphthylene-d8          | 14.48 | 160 | 170769 | 17.31 | ng/ul | 0.00 |
| 52) 4-Nitrophenol-d4           | 14.97 | 143 | 22106  | 15.41 | ng/ul | 0.00 |
| 58) Fluorene-d10               | 15.77 | 176 | 143289 | 17.59 | ng/ul | 0.00 |
| 63) 4,6-Dinitro-2-methylphenol | 15.88 | 200 | 17120  | 9.81  | ng/ul | 0.00 |
| 71) Anthracene-d10             | 17.62 | 188 | 241742 | 18.42 | ng/ul | 0.00 |
| 79) Pyrene-d10                 | 19.90 | 212 | 275219 | 18.01 | ng/ul | 0.00 |
| 90) Benzo(a)pyrene-d12         | 24.89 | 264 | 321520 | 18.42 | ng/ul | 0.00 |

## Target Compounds

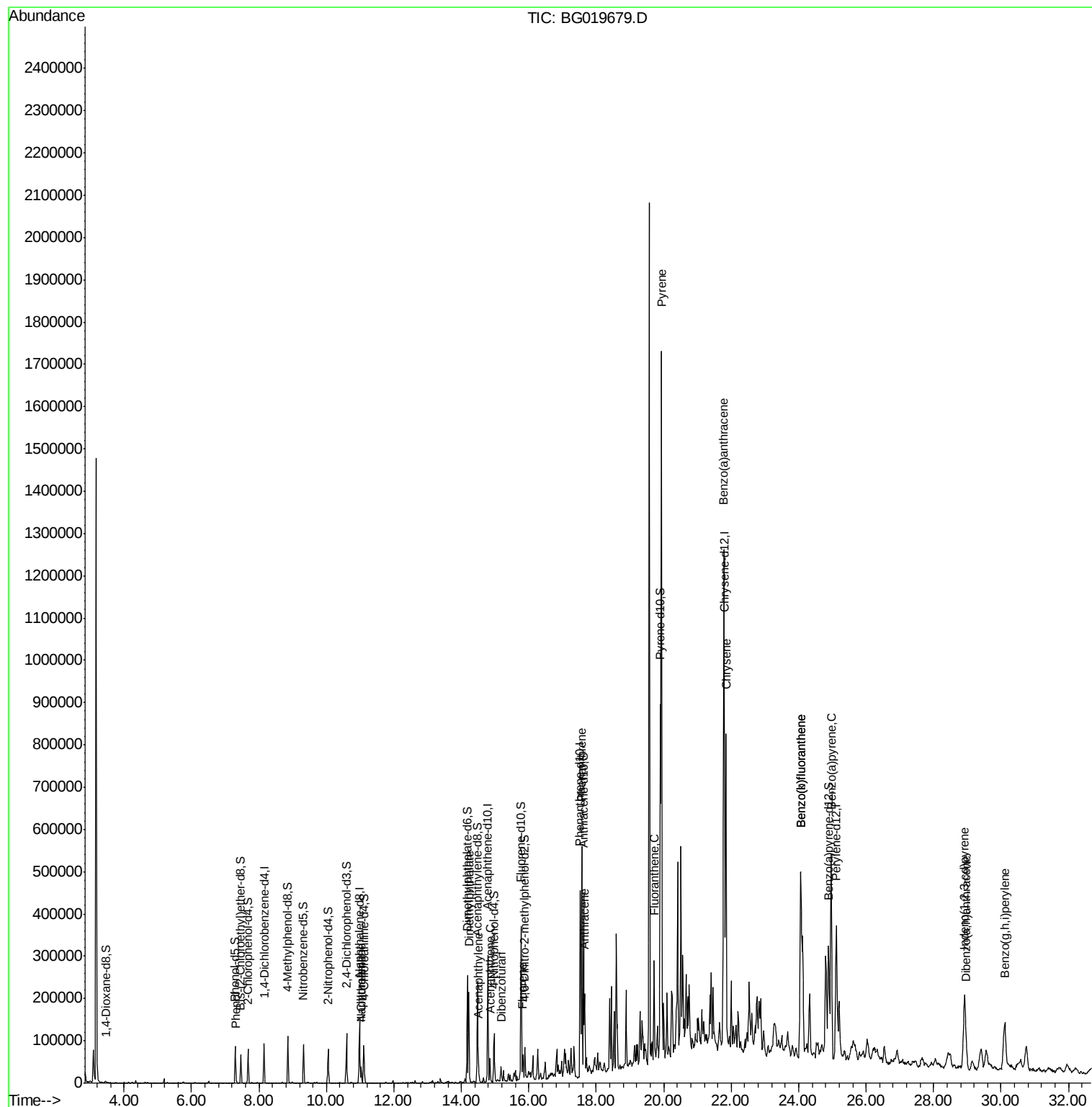
|                            |       |     |         |       |        | Ovalue |
|----------------------------|-------|-----|---------|-------|--------|--------|
| 6) Phenol                  | 7.32  | 94  | 4521    | 1.64  | ng/ul  | 97     |
| 28) Naphthalene            | 11.03 | 128 | 29937   | 4.84  | ng/ul  | 98     |
| 30) 4-Chloroaniline        | 11.03 | 127 | 3892    | 1.72  | ng/ul# | 1      |
| 45) Dimethylphthalate      | 14.22 | 163 | 123552  | 13.69 | ng/ul  | 99     |
| 48) Acenaphthylene         | 14.51 | 152 | 24459   | 2.48  | ng/ul  | 96     |
| 50) Acenaphthene           | 14.85 | 153 | 21925   | 3.25  | ng/ul  | 97     |
| 54) Dibenzofuran           | 15.18 | 168 | 10662   | 1.08  | ng/ul  | 97     |
| 59) Fluorene               | 15.83 | 166 | 25251   | 2.92  | ng/ul# | 97     |
| 70) Phenanthrene           | 17.57 | 178 | 316974  | 21.92 | ng/ul  | 99     |
| 72) Anthracene             | 17.66 | 178 | 115305  | 7.91  | ng/ul  | 98     |
| 77) Fluoranthene           | 19.71 | 202 | 147730  | 8.01  | ng/ul  | 100    |
| 80) Pyrene                 | 19.93 | 202 | 1088143 | 55.55 | ng/ul  | 99     |
| 83) Benzo(a)anthracene     | 21.77 | 228 | 703445  | 34.60 | ng/ul  | 96     |
| 85) Chrysene               | 21.84 | 228 | 543018  | 28.37 | ng/ul  | 99     |
| 88) Benzo(b)fluoranthene   | 24.06 | 252 | 679762  | 33.00 | ng/ul  | 99     |
| 89) Benzo(k)fluoranthene   | 24.06 | 252 | 679762  | 34.21 | ng/ul  | 99     |
| 91) Benzo(a)pyrene         | 24.96 | 252 | 541725  | 27.32 | ng/ul  | 96     |
| 92) Indeno(1,2,3-cd)pyrene | 28.92 | 276 | 306421  | 13.81 | ng/ul  | 97     |
| 93) Dibenzo(a,h)anthracene | 28.96 | 278 | 79402   | 4.35  | ng/ul# | 91     |
| 94) Benzo(g,h,i)perylene   | 30.11 | 276 | 233350  | 12.67 | ng/ul  | 98     |

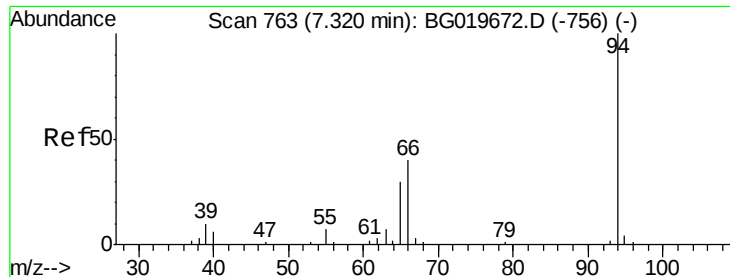
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Misc :  
ALS Vial : 21 Sample Multiplier: 1

Instrument :  
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ClientSampleId :  
BC7C9

Quant Time: Nov 18 04:10:03 2015  
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Quant Title : SVOA CALIBRATION  
QLast Update : Wed Nov 18 03:01:13 2015  
Response via : Initial Calibration





#6

Phenol

Concen: 1.64 ng/ul

RT: 7.32 min Scan# 763

Delta R.T. -0.00 min

Lab File: BG019679.D

Acq: 18 Nov 2015 3:23

Instrument :

BNA\_G

ClientSampleId :

BC7C9

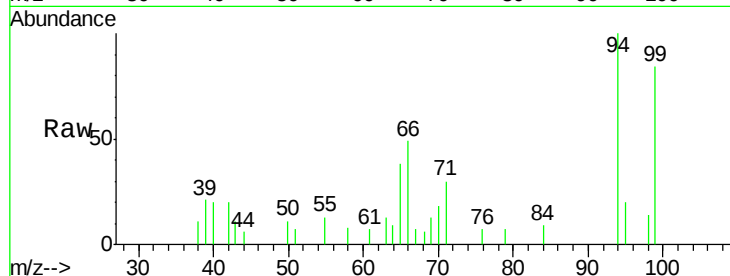
Tot Ion: 94 Resp: 4521

Ion Ratio Lower Upper

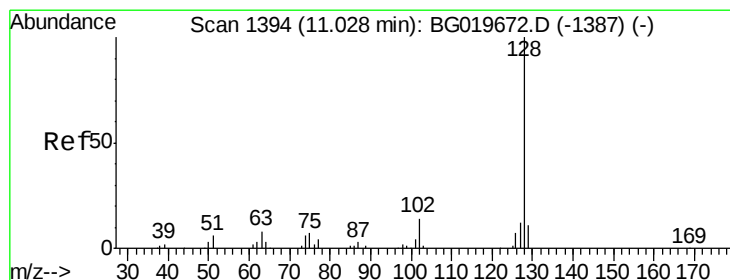
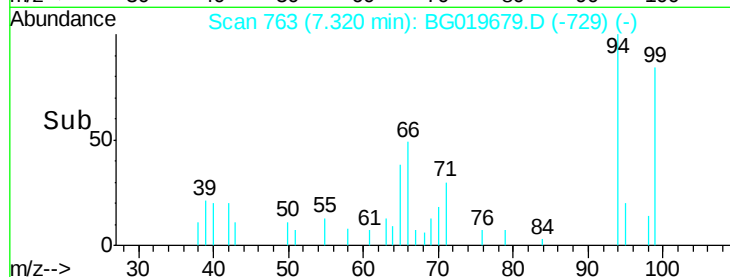
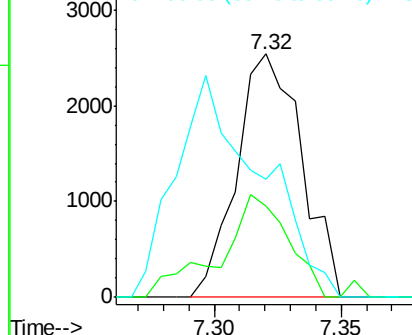
94 100

65 37.7 27.4 41.0

66 48.7 39.0 58.6



Abundance Ion 94.00 (93.70 to 94.70): BGC  
Ion 65.00 (64.70 to 65.70): BGC  
Ion 66.00 (65.70 to 66.70): BGC



#28

Naphthalene

Concen: 4.84 ng/ul

RT: 11.03 min Scan# 1394

Delta R.T. -0.00 min

Lab File: BG019679.D

Acq: 18 Nov 2015 3:23

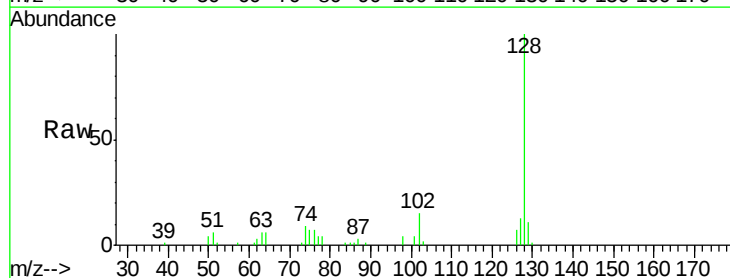
Tgt Ion:128 Resp: 29937

Ion Ratio Lower Upper

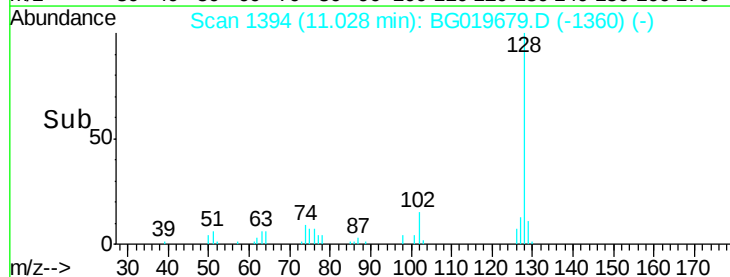
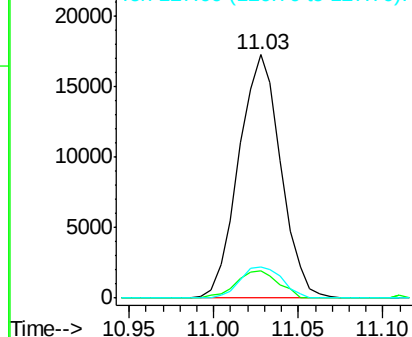
128 100

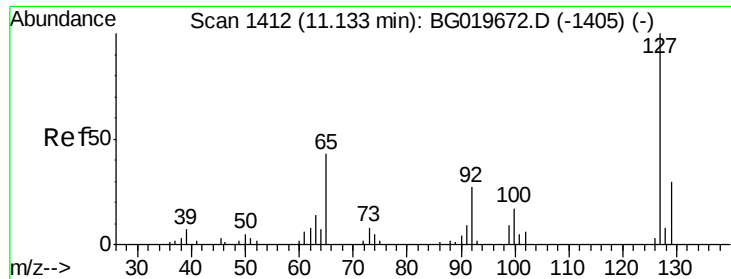
129 11.4 8.1 12.1

127 12.8 10.0 15.0



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

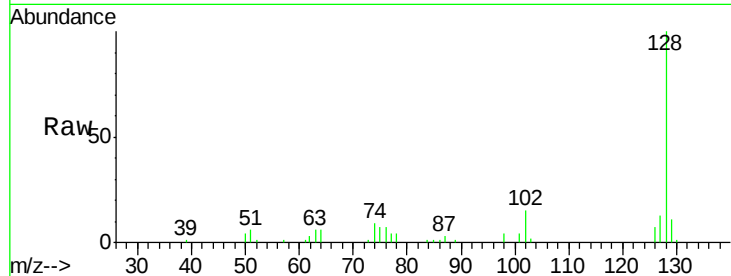




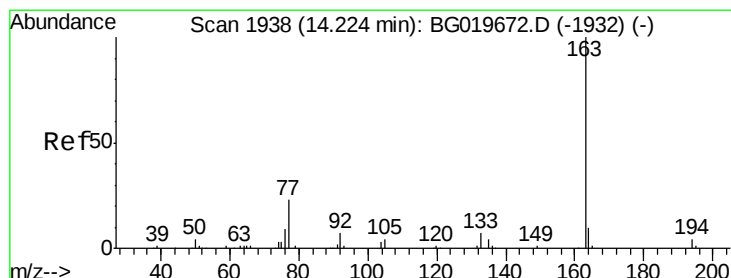
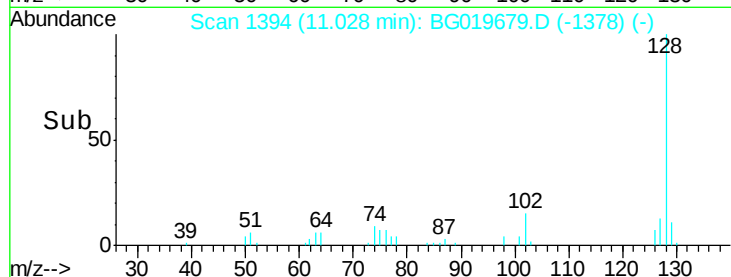
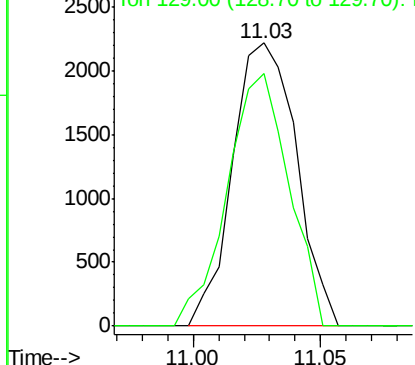
#30  
4-Chloroaniline  
Concen: 1.72 ng/ul  
RT: 11.03 min Scan# 1394  
Delta R.T. -0.11 min  
Lab File: BG019679.D  
Acq: 18 Nov 2015 3:23

Instrument :  
BNA\_G  
ClientSampleId :  
BC7C9

Tot Ion:127 Resp: 3892  
Ion Ratio Lower Upper  
127 100  
129 89.1 24.2 36.4#

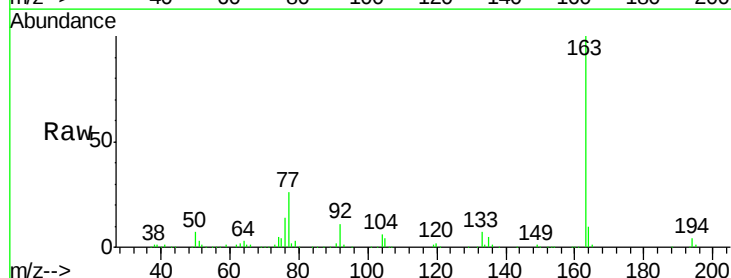


Abundance Ion 127.00 (126.70 to 127.70): E  
Ion 129.00 (128.70 to 129.70): E

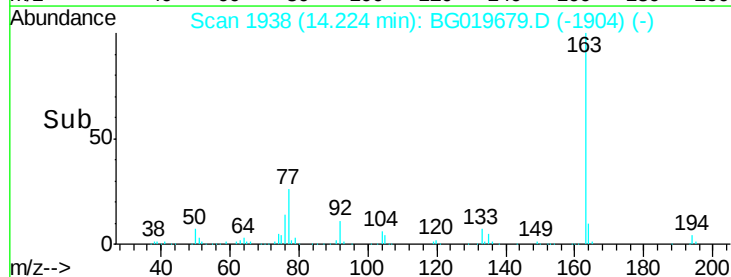
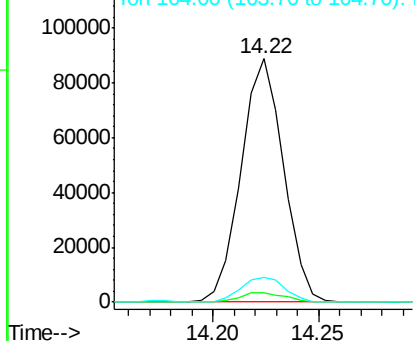


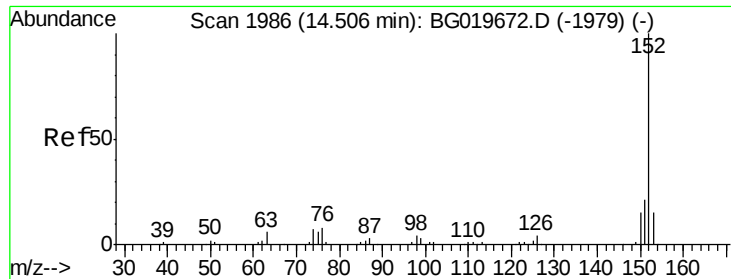
#45  
Dimethylphthalate  
Concen: 13.69 ng/ul  
RT: 14.22 min Scan# 1938  
Delta R.T. -0.00 min  
Lab File: BG019679.D  
Acq: 18 Nov 2015 3:23

Tgt Ion:163 Resp: 123552  
Ion Ratio Lower Upper  
163 100  
194 4.0 3.5 5.3  
164 9.9 8.3 12.5



Abundance Ion 163.00 (162.70 to 163.70): E  
Ion 194.00 (193.70 to 194.70): E  
Ion 164.00 (163.70 to 164.70): E





#48

Acenaphthylene

Concen: 2.48 ng/ul

RT: 14.51 min Scan# 1986

Delta R.T. -0.00 min

Lab File: BG019679.D

Acq: 18 Nov 2015 3:23

Instrument :

BNA\_G

ClientSampleId :

BC7C9

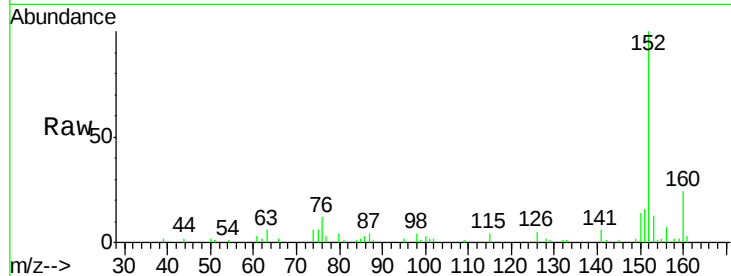
Tot Ion:152 Resp: 24459

Ion Ratio Lower Upper

152 100

151 16.3 15.1 22.7

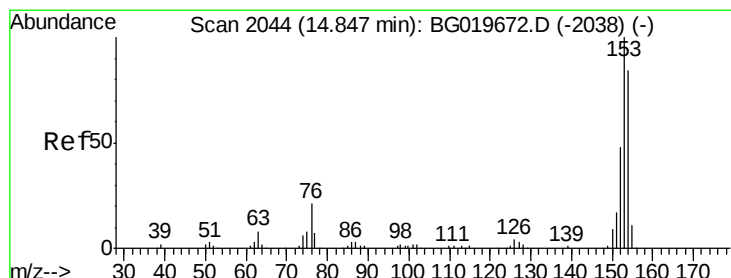
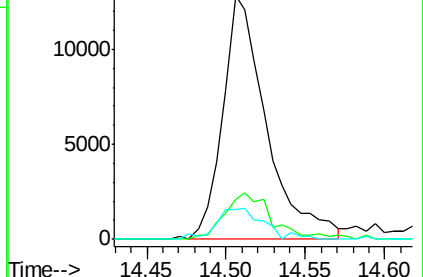
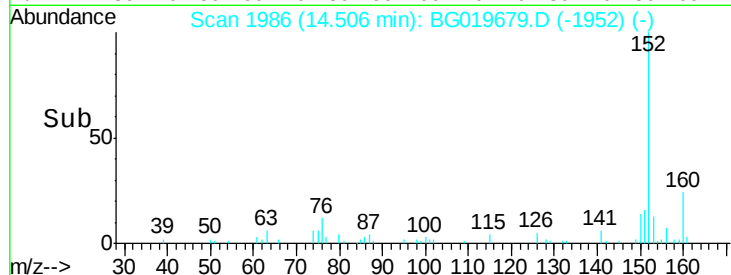
153 12.5 9.8 14.8



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: 3.25 ng/ul

RT: 14.85 min Scan# 2044

Delta R.T. -0.00 min

Lab File: BG019679.D

Acq: 18 Nov 2015 3:23

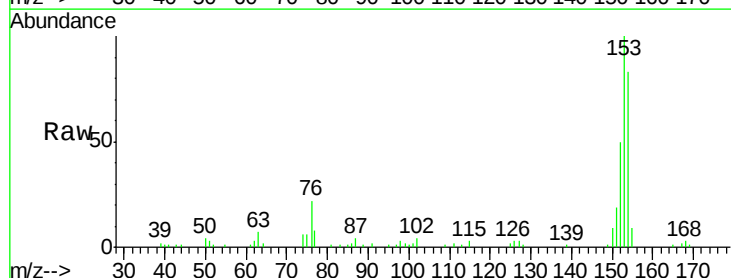
Tgt Ion:153 Resp: 21925

Ion Ratio Lower Upper

153 100

152 50.2 40.9 61.3

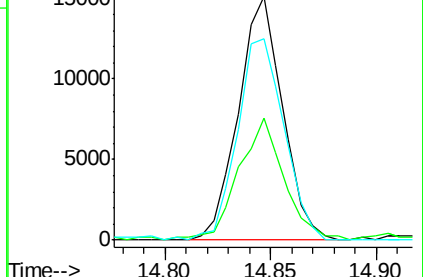
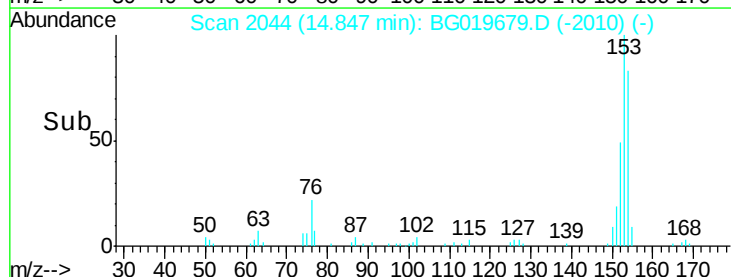
154 82.9 69.1 103.7

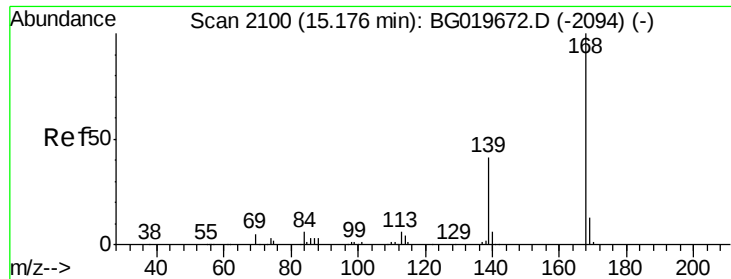


Abundance Ion 153.00 (152.70 to 153.70): E

Ion 152.00 (151.70 to 152.70): E

Ion 154.00 (153.70 to 154.70): E

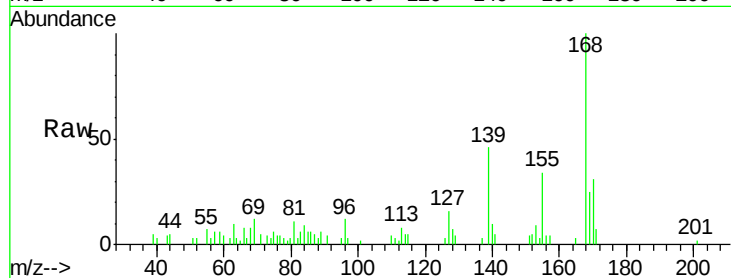




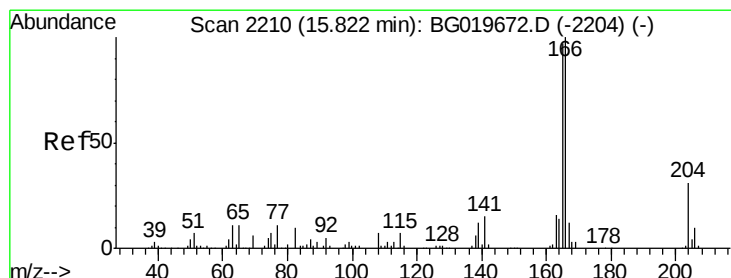
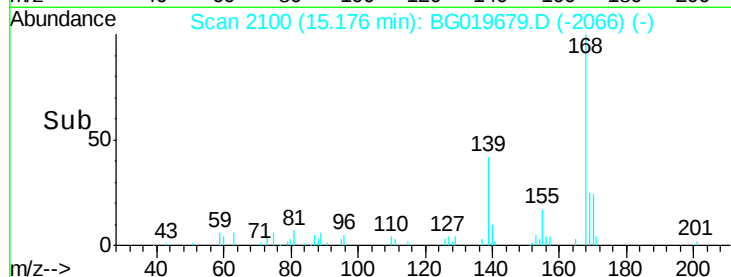
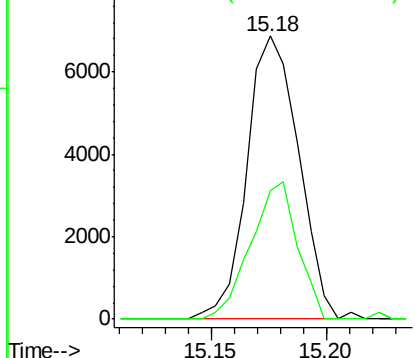
#54  
Dibenzenofuran  
Concen: 1.08 ng/ul  
RT: 15.18 min Scan# 2100  
Delta R.T. -0.00 min  
Lab File: BG019679.D  
Acq: 18 Nov 2015 3:23

Instrument :  
BNA\_G  
ClientSampleId :  
BC7C9

Tot Ion:168 Resp: 10662  
Ion Ratio Lower Upper  
168 100  
139 45.5 34.7 52.1

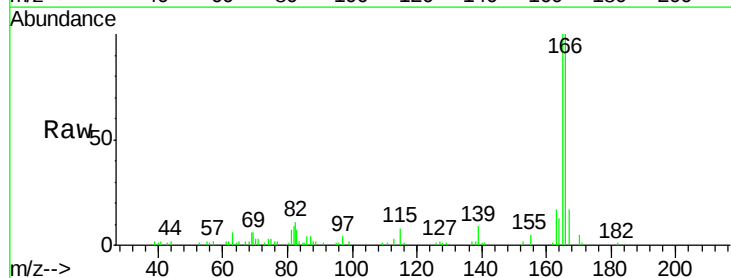


Abundance Ion 168.00 (167.70 to 168.70): E  
Ion 139.00 (138.70 to 139.70): E

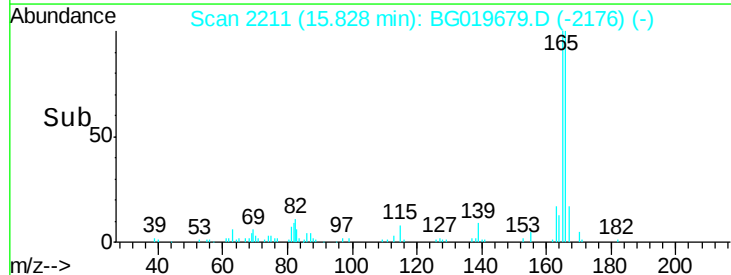
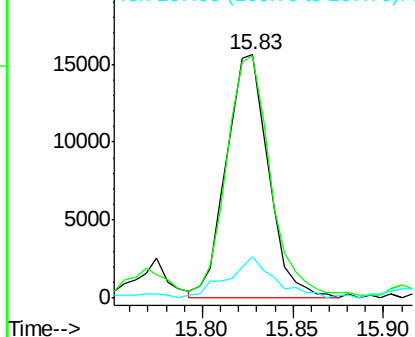


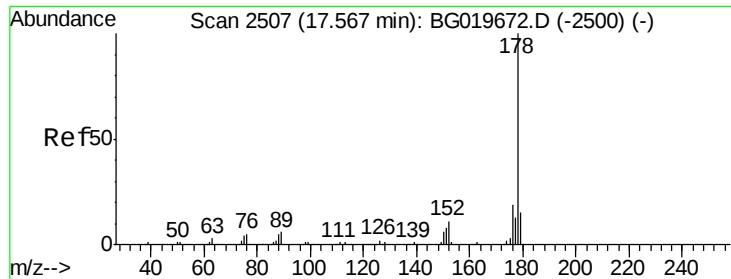
#59  
Fluorene  
Concen: 2.92 ng/ul  
RT: 15.83 min Scan# 2211  
Delta R.T. 0.01 min  
Lab File: BG019679.D  
Acq: 18 Nov 2015 3:23

Tgt Ion:166 Resp: 25251  
Ion Ratio Lower Upper  
166 100  
165 99.7 81.4 122.2  
167 16.8 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: 21.92 ng/ul

RT: 17.57 min Scan# 2507

Delta R.T. -0.00 min

Lab File: BG019679.D

Acq: 18 Nov 2015 3:23

Instrument :

BNA\_G

ClientSampleId :

BC7C9

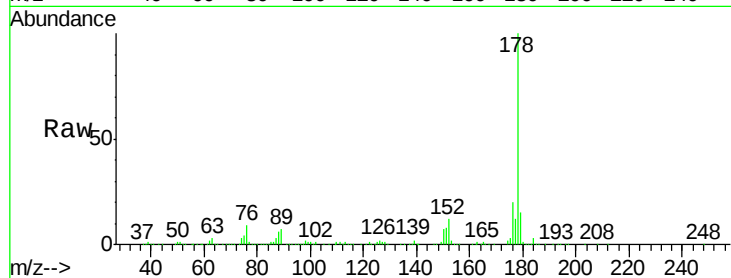
Tot Ion:178 Resp: 316974

Ion Ratio Lower Upper

178 100

179 15.5 12.2 18.2

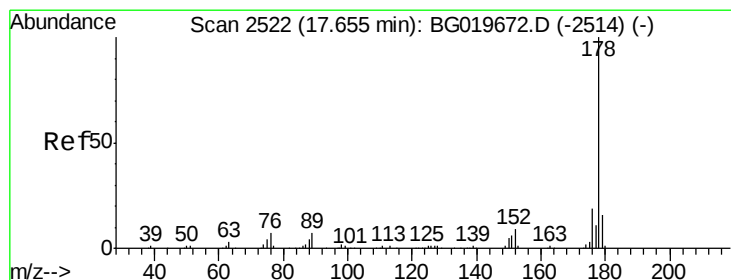
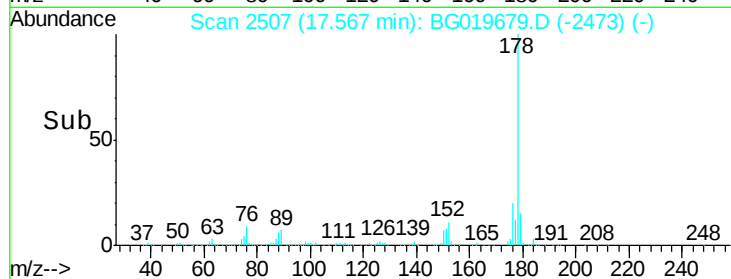
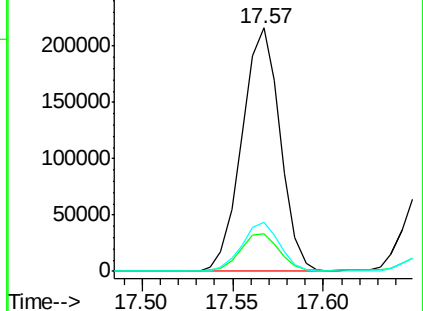
176 20.3 16.6 24.8



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: 7.91 ng/ul

RT: 17.66 min Scan# 2522

Delta R.T. -0.00 min

Lab File: BG019679.D

Acq: 18 Nov 2015 3:23

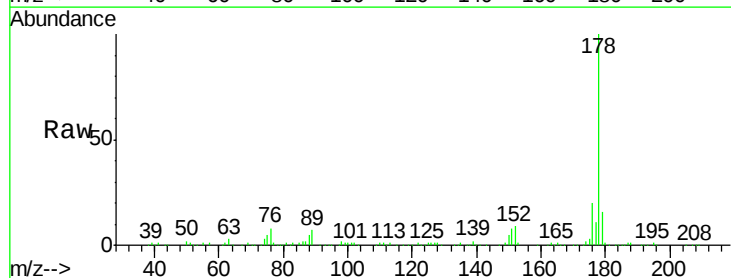
Tgt Ion:178 Resp: 115305

Ion Ratio Lower Upper

178 100

179 15.5 12.6 19.0

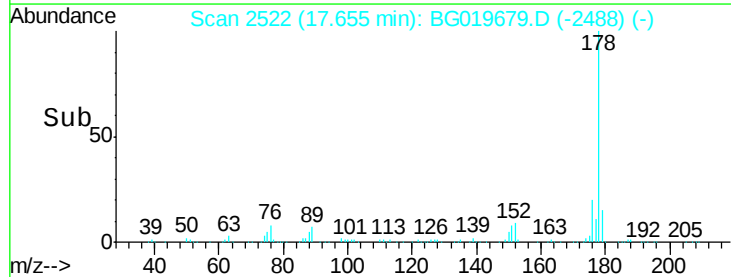
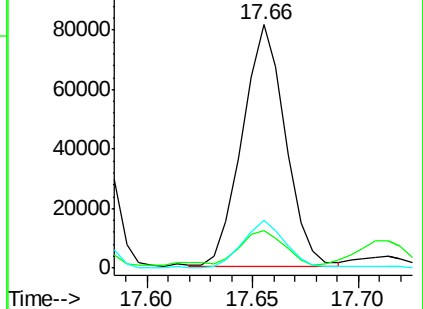
176 19.7 15.0 22.4

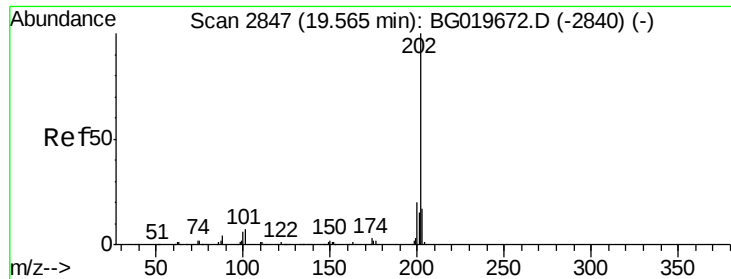


Abundance Ion 178.00 (177.70 to 178.70): E

Ion 179.00 (178.70 to 179.70): E

Ion 176.00 (175.70 to 176.70): E





#77

Fluoranthene

Concen: 8.01 ng/ul

RT: 19.71 min Scan# 2872

Delta R.T. 0.15 min

Lab File: BG019679.D

Acq: 18 Nov 2015 3:23

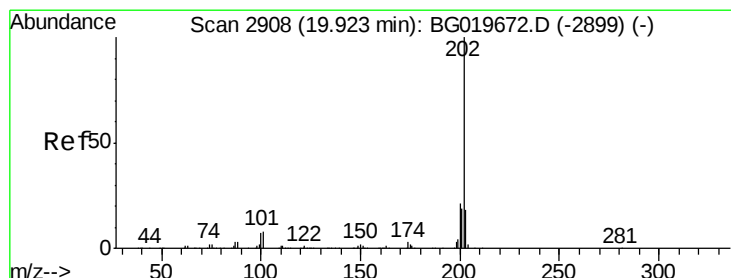
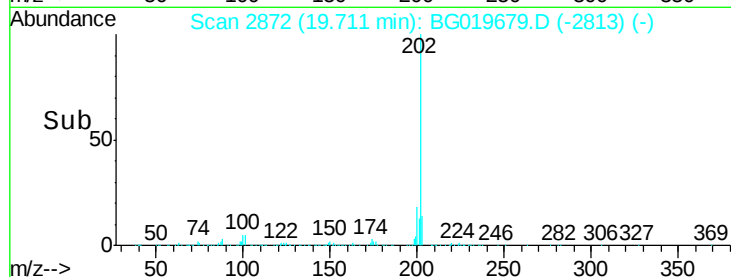
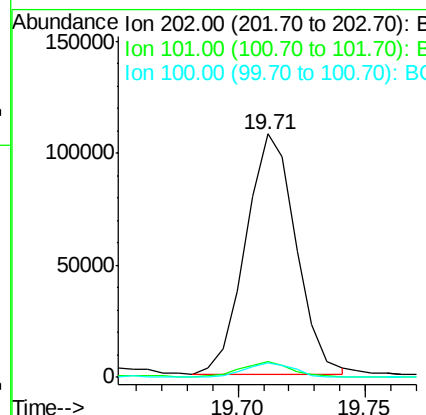
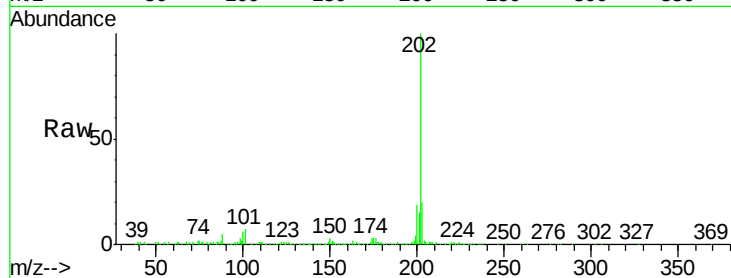
Instrument :

BNA\_G

ClientSampleId :

BC7C9

|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 202   | Resp: | 147730 |
| Ion      | Ratio | Lower | Upper  |
| 202      | 100   |       |        |
| 101      | 6.5   | 5.2   | 7.8    |
| 100      | 6.0   | 5.0   | 7.4    |



#80

Pyrene

Concen: 55.55 ng/ul

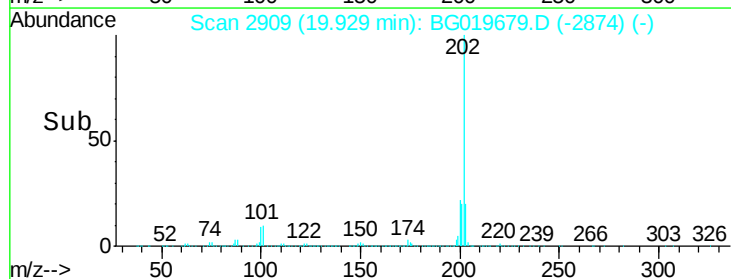
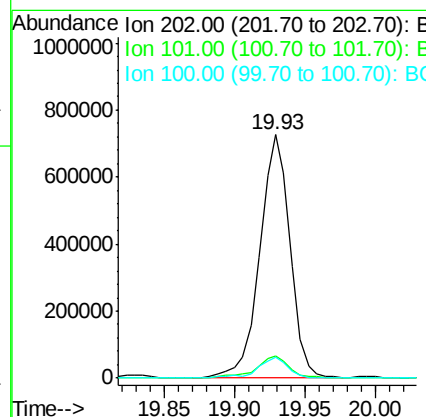
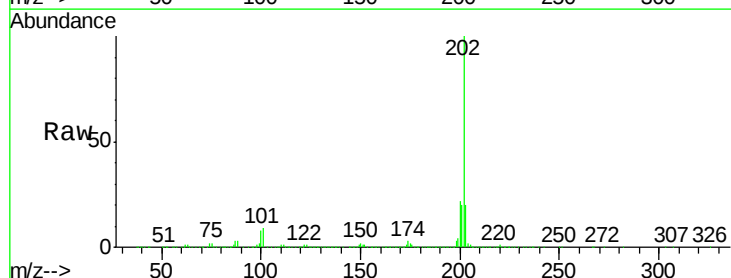
RT: 19.93 min Scan# 2909

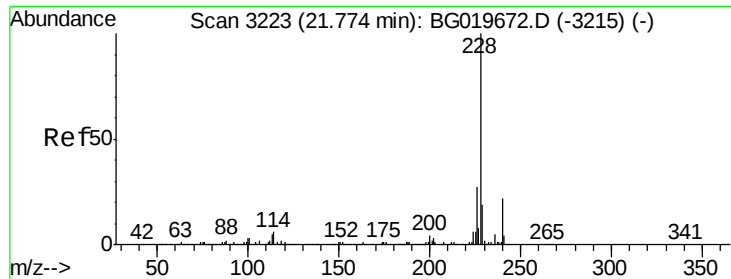
Delta R.T. 0.01 min

Lab File: BG019679.D

Acq: 18 Nov 2015 3:23

|          |       |       |         |
|----------|-------|-------|---------|
| Tgt Ion: | 202   | Resp: | 1088143 |
| Ion      | Ratio | Lower | Upper   |
| 202      | 100   |       |         |
| 101      | 9.3   | 7.0   | 10.6    |
| 100      | 8.5   | 6.6   | 10.0    |

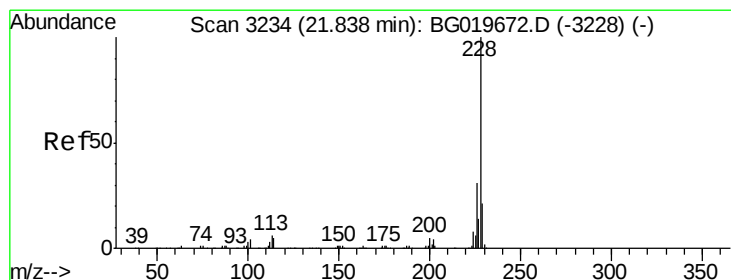
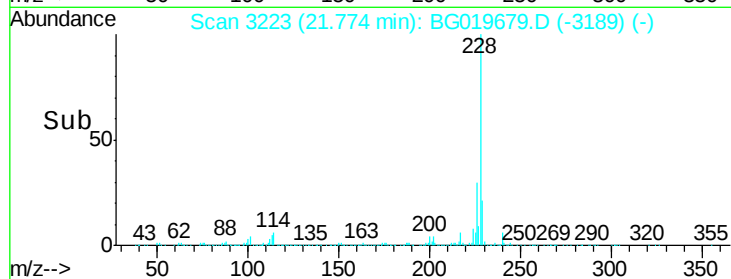
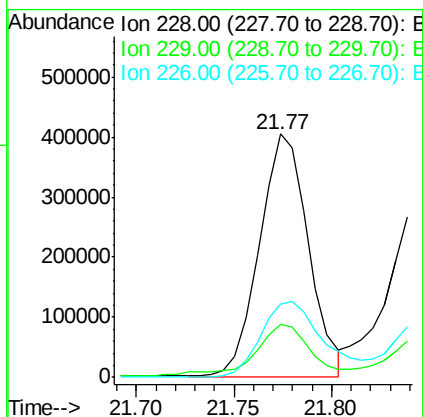
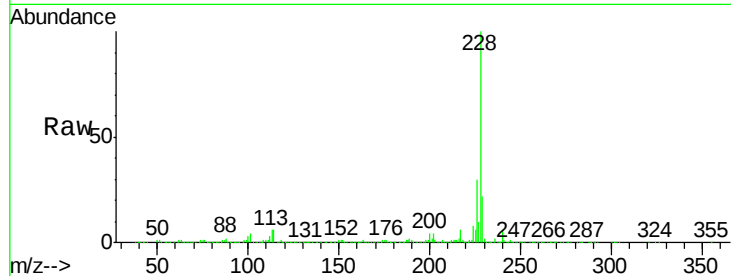




#83  
Benzo(a)anthracene  
Concen: 34.60 ng/ul  
RT: 21.77 min Scan# 3223  
Delta R.T. -0.00 min  
Lab File: BG019679.D  
Acq: 18 Nov 2015 3:23

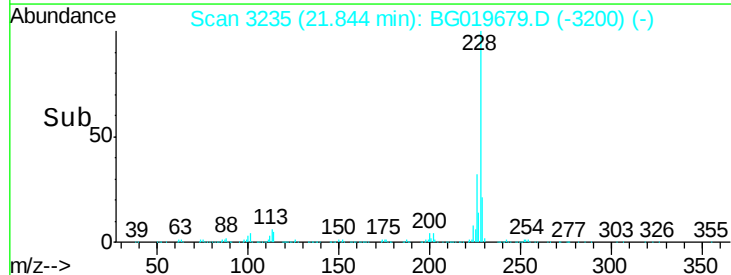
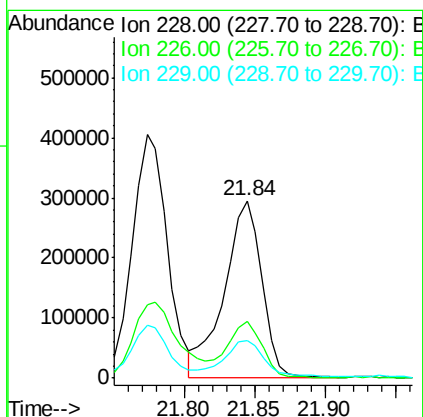
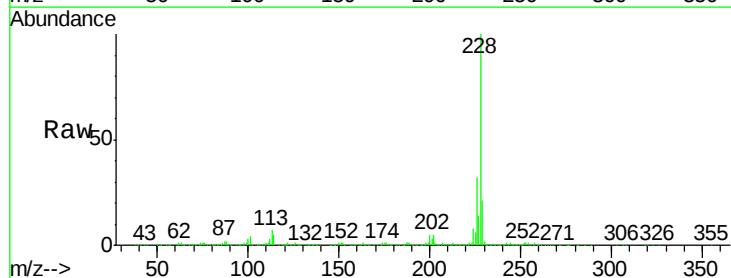
Instrument :  
BNA\_G  
ClientSampled :  
BC7C9

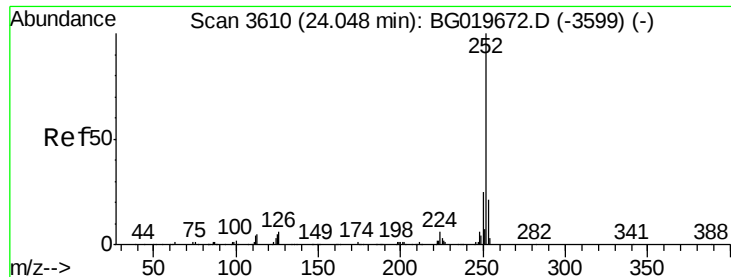
Tot Ion:228 Resp: 703445  
Ion Ratio Lower Upper  
228 100  
229 21.7 15.7 23.5  
226 30.3 22.6 33.8



#85  
Chrysene  
Concen: 28.37 ng/ul  
RT: 21.84 min Scan# 3235  
Delta R.T. 0.01 min  
Lab File: BG019679.D  
Acq: 18 Nov 2015 3:23

Tgt Ion:228 Resp: 543018  
Ion Ratio Lower Upper  
228 100  
226 32.1 24.9 37.3  
229 21.4 17.0 25.6

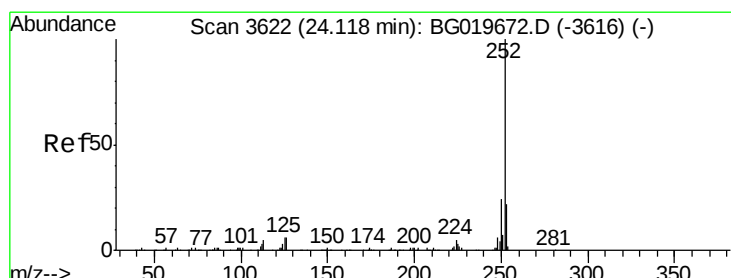
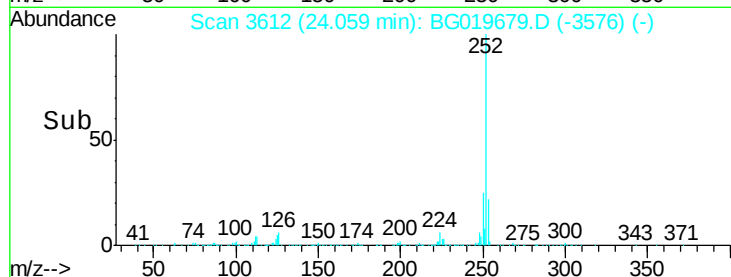
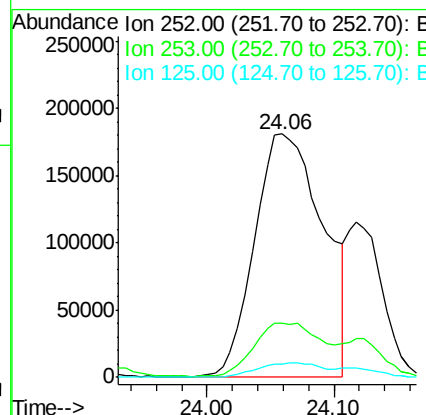
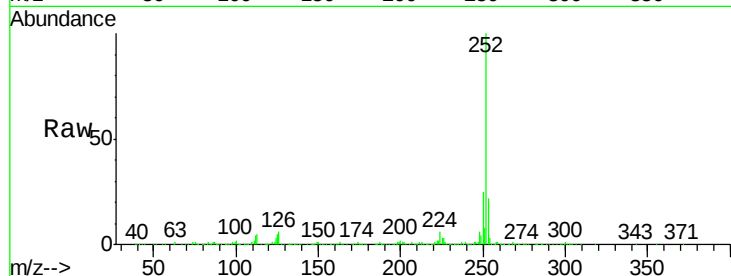




#88  
Benzo(b)fluoranthene  
Concen: 33.00 ng/u1  
RT: 24.06 min Scan# 3612  
Delta R.T. 0.01 min  
Lab File: BG019679.D  
Acq: 18 Nov 2015 3:23

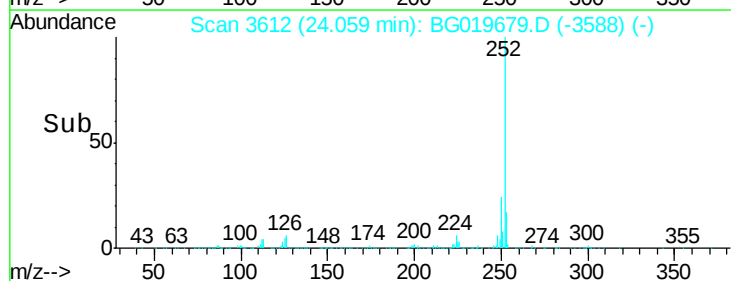
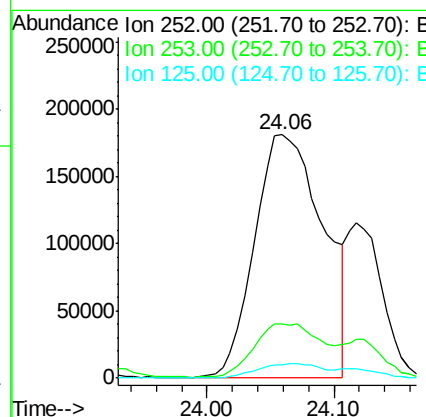
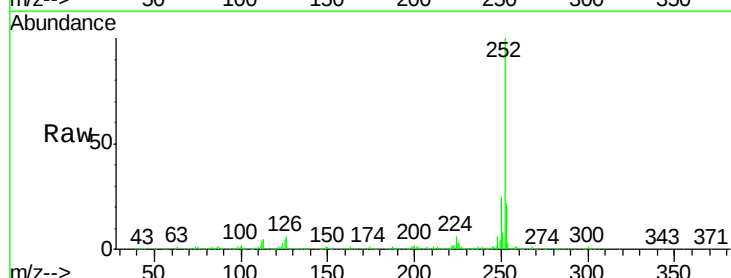
Instrument :  
BNA\_G  
ClientSampleId :  
BC7C9

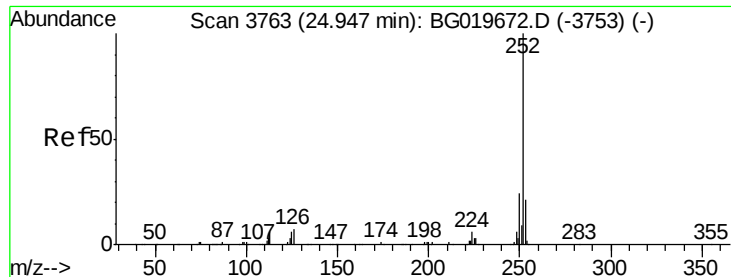
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.2  | 17.1  | 25.7  |
| 125     | 5.5   | 4.2   | 6.4   |



#89  
Benzo(k)fluoranthene  
Concen: 34.21 ng/u1  
RT: 24.06 min Scan# 3612  
Delta R.T. -0.06 min  
Lab File: BG019679.D  
Acq: 18 Nov 2015 3:23

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.2  | 17.1  | 25.7  |
| 125     | 5.5   | 4.4   | 6.6   |

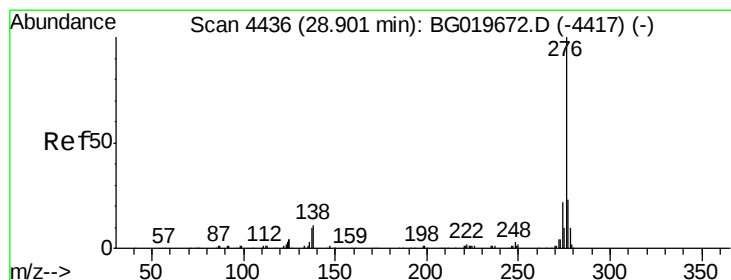
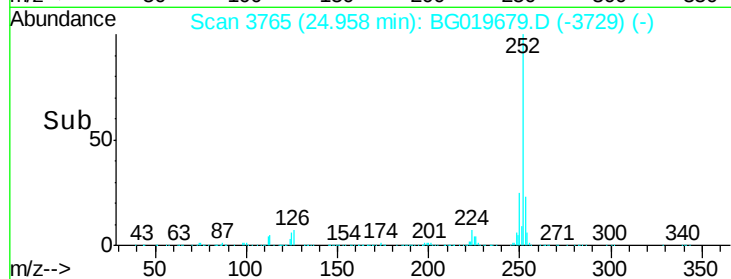
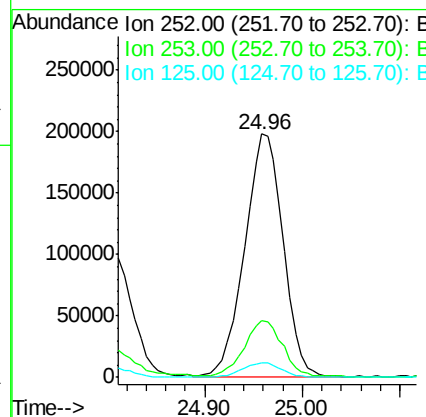
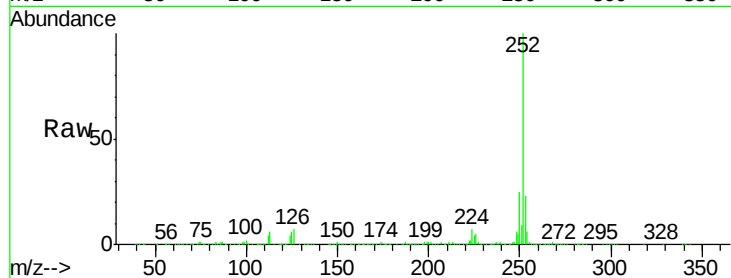




#91  
Benzo(a)pyrene  
Concen: 27.32 ng/ul  
RT: 24.96 min Scan# 3765  
Delta R.T. 0.01 min  
Lab File: BG019679.D  
Acq: 18 Nov 2015 3:23

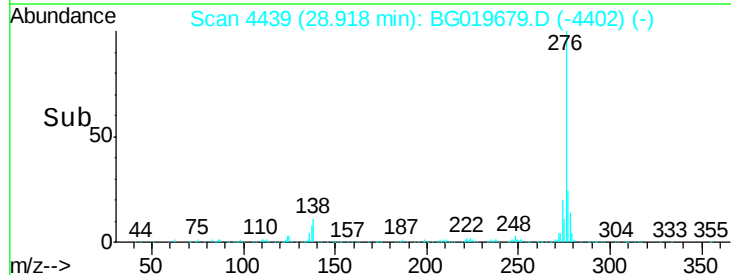
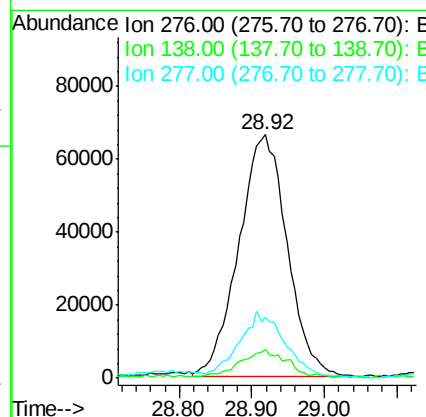
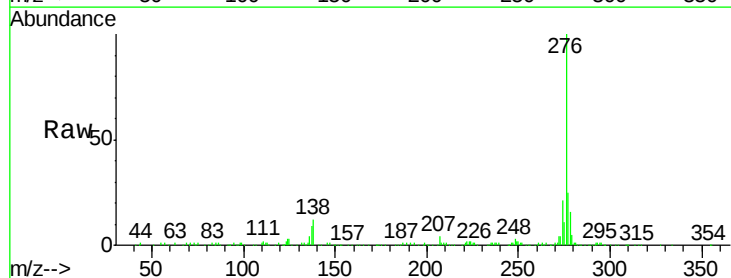
Instrument :  
BNA\_G  
ClientSampleId :  
BC7C9

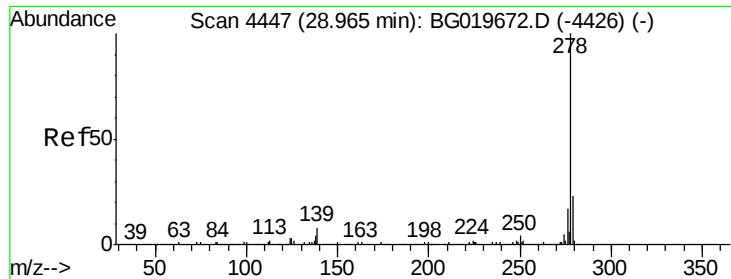
Tot Ion:252 Resp: 541725  
Ion Ratio Lower Upper  
252 100  
253 23.2 16.9 25.3  
125 5.8 5.4 8.0



#92  
Indeno(1,2,3-cd)pyrene  
Concen: 13.81 ng/ul  
RT: 28.92 min Scan# 4439  
Delta R.T. 0.02 min  
Lab File: BG019679.D  
Acq: 18 Nov 2015 3:23

Tgt Ion:276 Resp: 306421  
Ion Ratio Lower Upper  
276 100  
138 11.7 9.9 14.9  
277 24.9 21.3 31.9

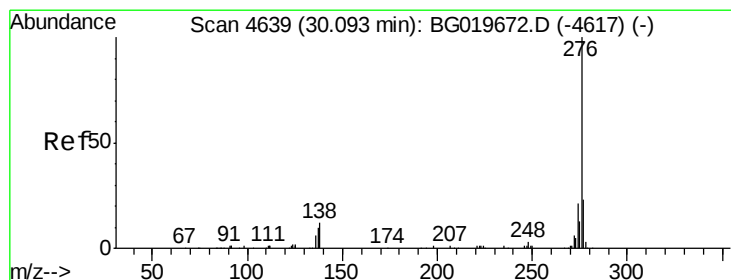
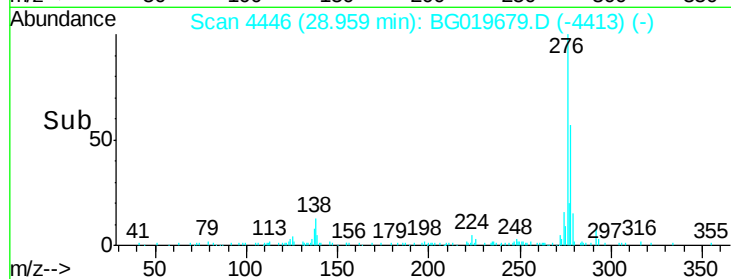
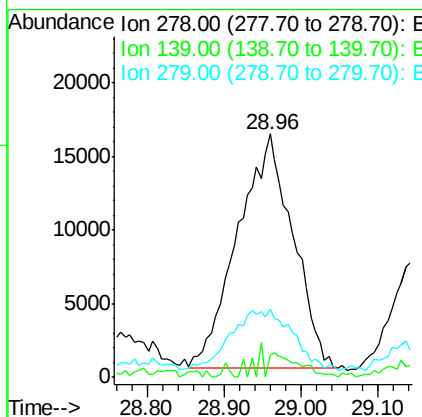
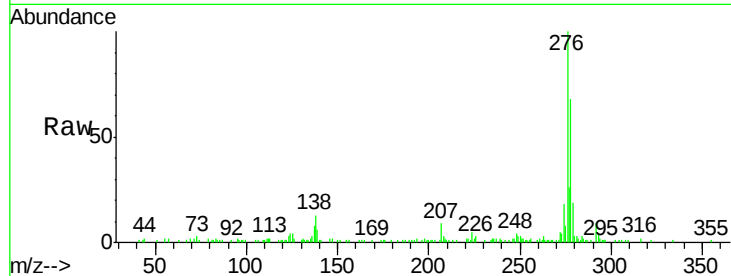




#93  
Dibenzo(a,h)anthracene  
Concen: 4.35 ng/ul  
RT: 28.96 min Scan# 4446  
Delta R.T. -0.01 min  
Lab File: BG019679.D  
Acq: 18 Nov 2015 3:23

Instrument :  
BNA\_G  
ClientSampleId :  
BC7C9

Tot Ion:278 Resp: 79402  
Ion Ratio Lower Upper  
278 100  
139 8.9 5.9 8.9  
279 28.0 18.2 27.2#



#94  
Benzo(g,h,i)perylene  
Concen: 12.67 ng/ul  
RT: 30.11 min Scan# 4642  
Delta R.T. 0.02 min  
Lab File: BG019679.D  
Acq: 18 Nov 2015 3:23

Tgt Ion:276 Resp: 233350  
Ion Ratio Lower Upper  
276 100  
138 13.2 9.2 13.8  
277 22.9 18.6 28.0

