

Data Path : Z:\HPCHEM1\BNA\_G\DATA\BG122215\  
 Data File : BG020448.D  
 Acq On : 23 Dec 2015 18:08  
 Operator : UM/SJ  
 Sample : G4848-03DL 30X  
 Misc :  
 ALS Vial : 38 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 D9N49DL

Quant Time: Dec 24 02:49:35 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  | 18698    | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 10.90 | 136  | 84287    | 20.00 | ng/ul | 0.00     |
| 36) Acenaphthene-d10      | 14.72 | 164  | 64418    | 20.00 | ng/ul | 0.00     |
| 62) Phenanthrene-d10      | 17.46 | 188  | 167502   | 20.00 | ng/ul | 0.00     |
| 78) Chrysene-d12          | 21.73 | 240  | 214839   | 20.00 | ng/ul | 0.00     |
| 86) Perylene-d12          | 25.00 | 264  | 206537   | 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  | 957  | 0.58 | ng/ul | 0.00 |
| 7) Bis-(2-Chloroethyl)ether-d  | 7.41  | 67  | 581  | 0.59 | ng/ul | 0.00 |
| 9) 2-Chlorophenol-d4           | 7.62  | 132 | 784  | 0.65 | ng/ul | 0.00 |
| 13) 4-Methylphenol-d8          | 8.80  | 113 | 709  | 0.50 | ng/ul | 0.00 |
| 19) Nitrobenzene-d5            | 9.26  | 128 | 259  | 0.39 | ng/ul | 0.00 |
| 22) 2-Nitrophenol-d4           | 9.98  | 143 | 376  | 0.51 | ng/ul | 0.00 |
| 26) 2,4-Dichlorophenol-d3      | 10.52 | 165 | 806  | 0.54 | ng/ul | 0.00 |
| 29) 4-Chloroaniline-d4         | 11.05 | 131 | 759  | 0.46 | ng/ul | 0.02 |
| 44) Dimethylphthalate-d6       | 14.11 | 166 | 4719 | 0.91 | ng/ul | 0.00 |
| 47) Acenaphthylene-d8          | 14.41 | 160 | 4784 | 0.79 | ng/ul | 0.00 |
| 52) 4-Nitrophenol-d4           | 0.00  | 143 | 0    | 0.00 | ng/ul |      |
| 58) Fluorene-d10               | 15.71 | 176 | 4666 | 0.99 | ng/ul | 0.00 |
| 63) 4,6-Dinitro-2-methylphenol | 0.00  | 200 | 0    | 0.00 | ng/ul |      |
| 71) Anthracene-d10             | 17.56 | 188 | 7756 | 1.00 | ng/ul | 0.00 |
| 79) Pyrene-d10                 | 19.84 | 212 | 9141 | 0.91 | ng/ul | 0.00 |
| 90) Benzo(a)pyrene-d12         | 24.78 | 264 | 9193 | 0.89 | ng/ul | 0.00 |

## Target Compounds

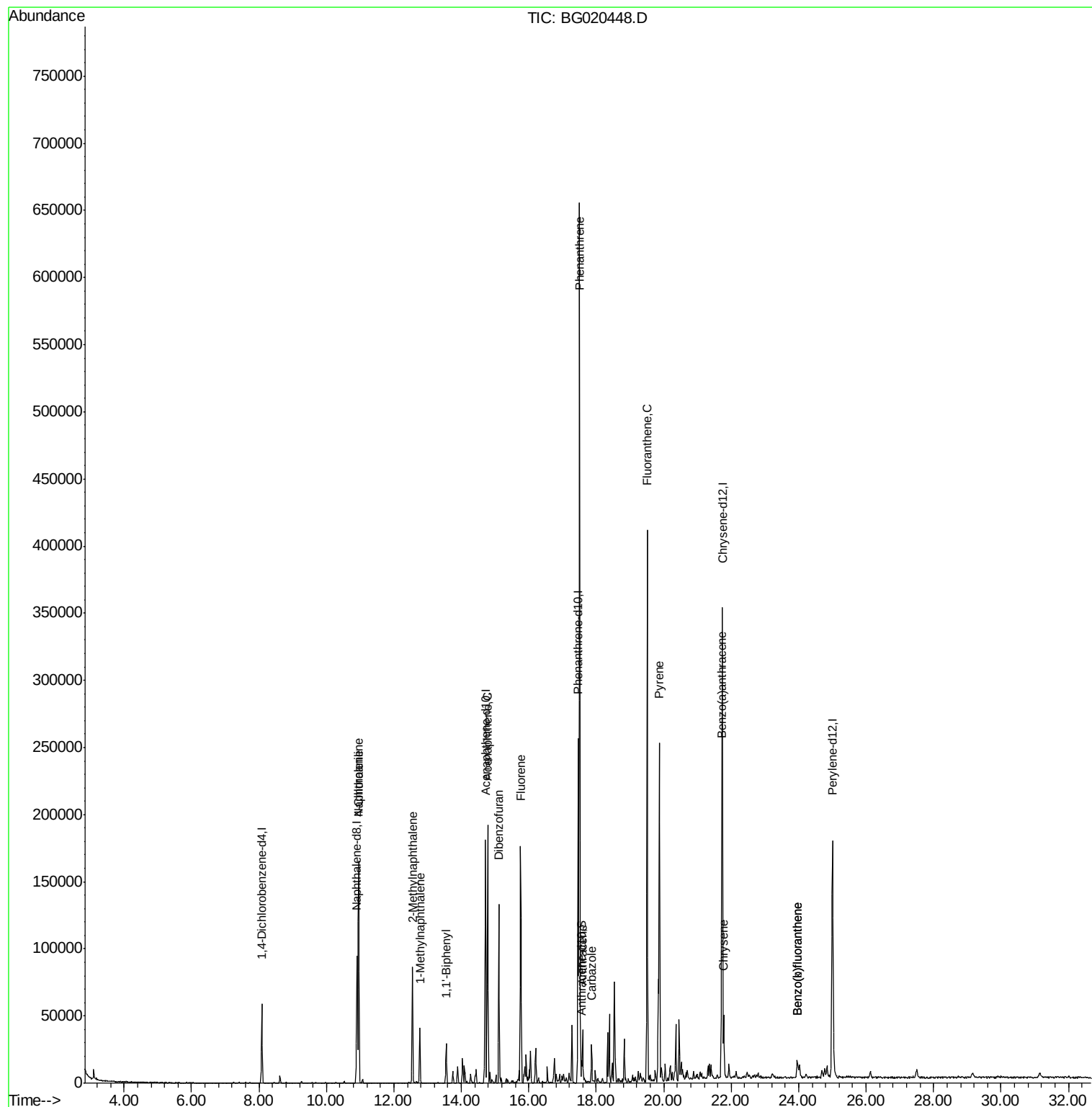
|                          |       |     |        |       |        | Qvalue |
|--------------------------|-------|-----|--------|-------|--------|--------|
| 28) Naphthalene          | 10.95 | 128 | 145770 | 33.12 | ng/ul  | 99     |
| 30) 4-Chloroaniline      | 10.95 | 127 | 19887  | 11.71 | ng/ul# | 16     |
| 34) 2-Methylnaphthalene  | 12.55 | 142 | 43549  | 12.95 | ng/ul  | 98     |
| 35) 1-Methylnaphthalene  | 12.77 | 142 | 20903  | 6.47  | ng/ul  | 98     |
| 41) 1,1'-Biphenyl        | 13.55 | 154 | 17636  | 3.63  | ng/ul# | 95     |
| 50) Acenaphthene         | 14.78 | 153 | 84684  | 19.54 | ng/ul  | 98     |
| 54) Dibenzofuran         | 15.11 | 168 | 89871  | 13.94 | ng/ul  | 98     |
| 59) Fluorene             | 15.76 | 166 | 86905  | 16.79 | ng/ul  | 98     |
| 70) Phenanthrene         | 17.50 | 178 | 442133 | 48.26 | ng/ul  | 100    |
| 72) Anthracene           | 17.59 | 178 | 30310  | 3.26  | ng/ul  | 99     |
| 75) Carbazole            | 17.86 | 167 | 20335  | 2.60  | ng/ul  | 97     |
| 77) Fluoranthene         | 19.51 | 202 | 274069 | 25.60 | ng/ul  | 98     |
| 80) Pyrene               | 19.87 | 202 | 180312 | 13.87 | ng/ul  | 97     |
| 83) Benzo(a)anthracene   | 21.72 | 228 | 44545  | 3.55  | ng/ul  | 99     |
| 85) Chrysene             | 21.78 | 228 | 34985  | 2.96  | ng/ul  | 96     |
| 88) Benzo(b)fluoranthene | 23.97 | 252 | 19714  | 1.59  | ng/ul  | 97     |
| 89) Benzo(k)fluoranthene | 23.97 | 252 | 19714  | 1.65  | ng/ul  | 99     |

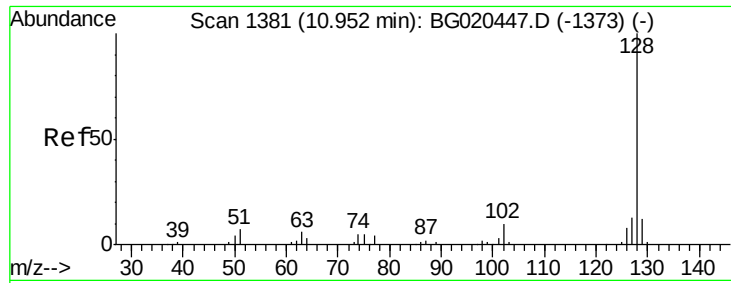
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Title : SVOA CALIBRATION  
QLast Update : Thu Dec 24 02:43:25 2015  
Response via : Initial Calibration

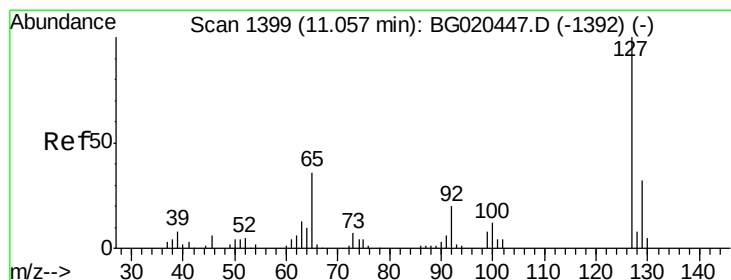
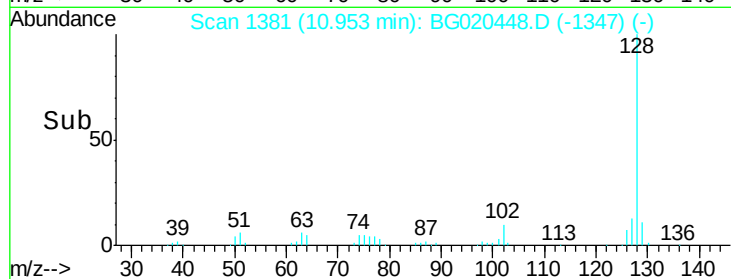
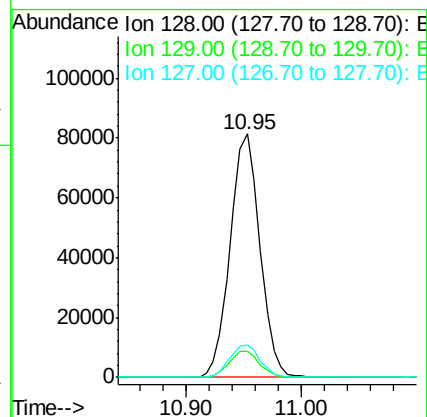
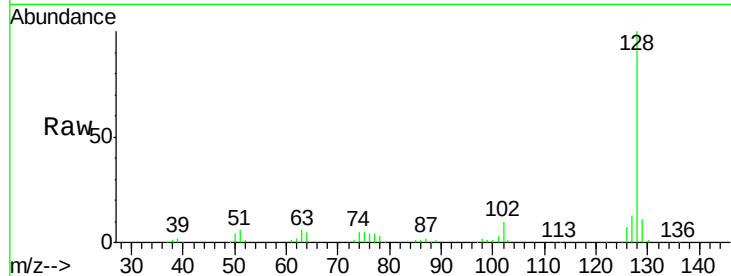




#28  
Naphthalene  
Concen: 33.12 ng/ul  
RT: 10.95 min Scan# 1381  
Delta R.T. 0.00 min  
Lab File: BG020448.D  
Acq: 23 Dec 2015 18:08

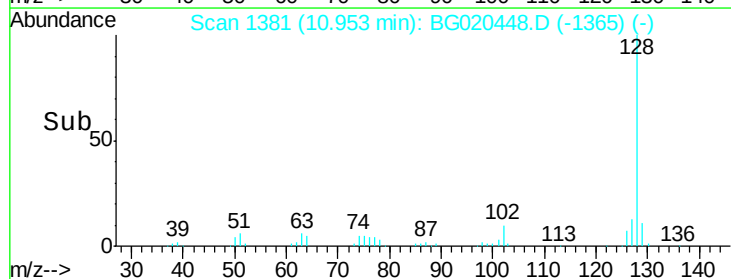
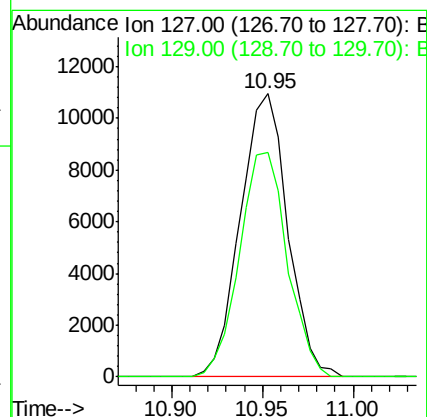
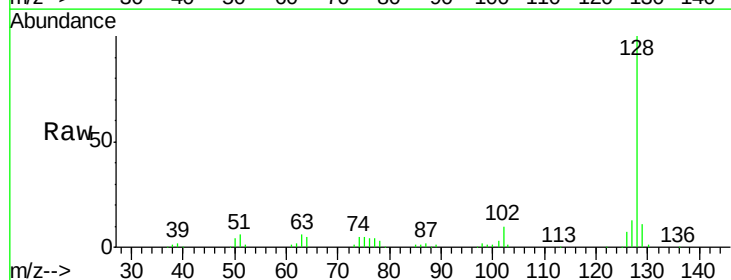
Instrument :  
BNA\_G  
ClientSampleId :  
D9N49DL

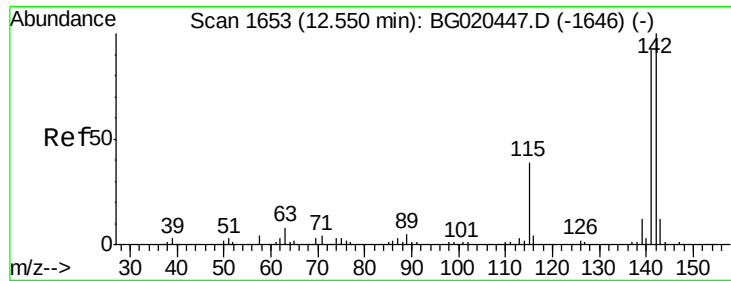
Tgt Ion:128 Resp: 145770  
Ion Ratio Lower Upper  
128 100  
129 10.6 8.6 12.8  
127 13.4 10.1 15.1



#30  
4-Chloroaniline  
Concen: 11.71 ng/ul  
RT: 10.95 min Scan# 1381  
Delta R.T. -0.10 min  
Lab File: BG020448.D  
Acq: 23 Dec 2015 18:08

Tgt Ion:127 Resp: 19887  
Ion Ratio Lower Upper  
127 100  
129 79.2 25.7 38.5#





#34

2-Methylnaphthalene

Concen: 12.95 ng/ul

RT: 12.55 min Scan# 1653

Delta R.T. 0.00 min

Lab File: BG020448.D

Acq: 23 Dec 2015 18:08

Instrument :

BNA\_G

ClientSampleId :

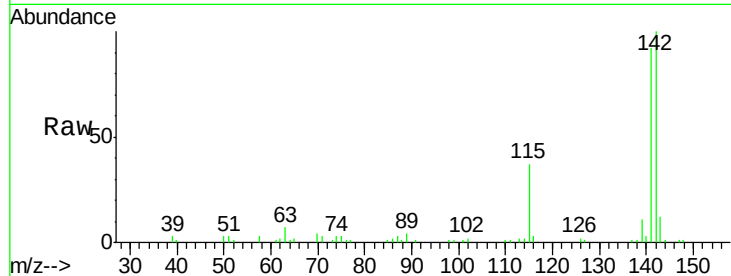
D9N49DL

Tgt Ion:142 Resp: 43549

Ion Ratio Lower Upper

142 100

141 91.7 74.9 112.3

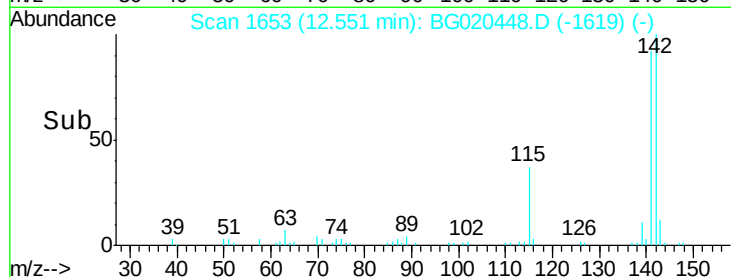


Abundance Ion 142.00 (141.70 to 142.70): E

Ion 141.00 (140.70 to 141.70): E

12.55

Time-->



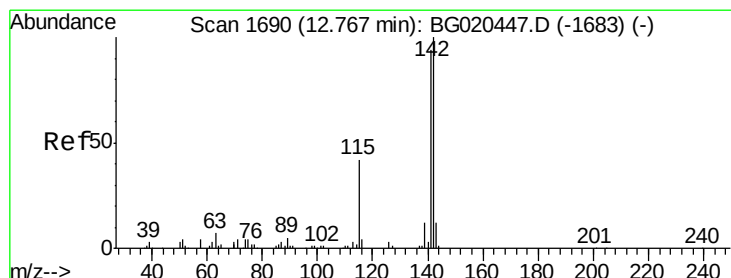
Abundance

Ion 142.00 (141.70 to 142.70): E

Ion 141.00 (140.70 to 141.70): E

12.55

Time-->



#35

1-Methylnaphthalene

Concen: 6.47 ng/ul

RT: 12.77 min Scan# 1690

Delta R.T. 0.00 min

Lab File: BG020448.D

Acq: 23 Dec 2015 18:08

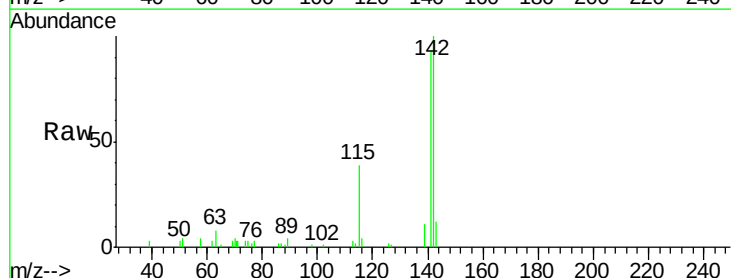
Tgt Ion:142 Resp: 20903

Ion Ratio Lower Upper

142 100

141 93.2 73.0 109.6

116 4.3 3.0 4.6



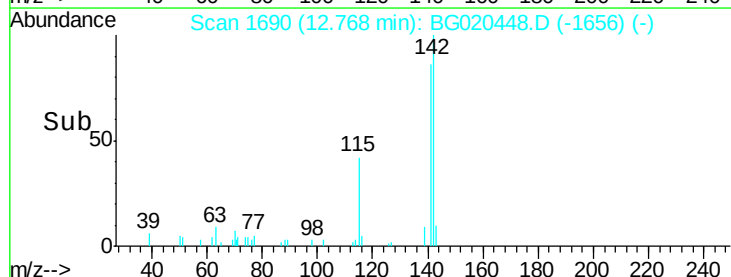
Abundance Ion 142.00 (141.70 to 142.70): E

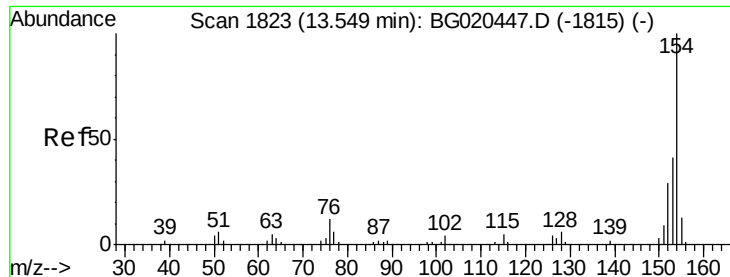
Ion 141.00 (140.70 to 141.70): E

Ion 116.00 (115.70 to 116.70): E

12.77

Time-->

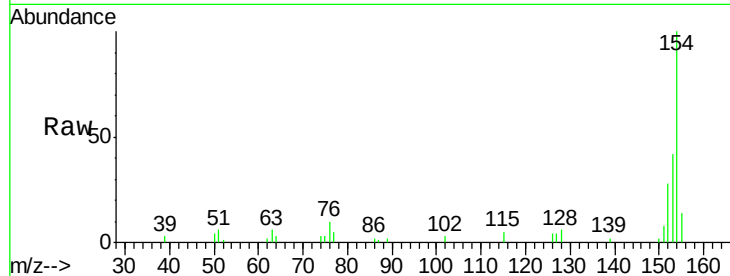




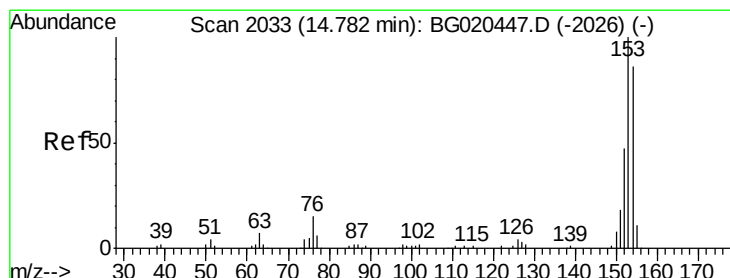
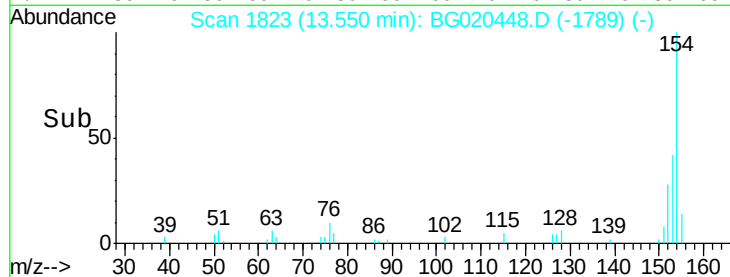
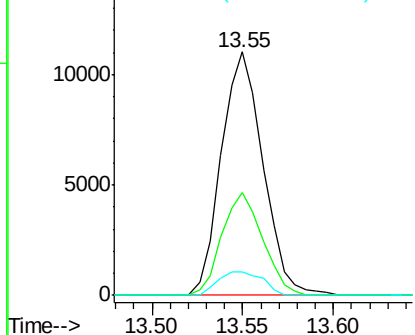
#41  
 1,1'-Biphenyl  
 Concen: 3.63 ng/ul  
 RT: 13.55 min Scan# 1823  
 Delta R.T. 0.00 min  
 Lab File: BG020448.D  
 Acq: 23 Dec 2015 18:08

Instrument :  
 BNA\_G  
 ClientSampleId :  
 D9N49DL

Tgt Ion:154 Resp: 17636  
 Ion Ratio Lower Upper  
 154 100  
 153 42.1 35.5 53.3  
 76 9.7 10.4 15.6#

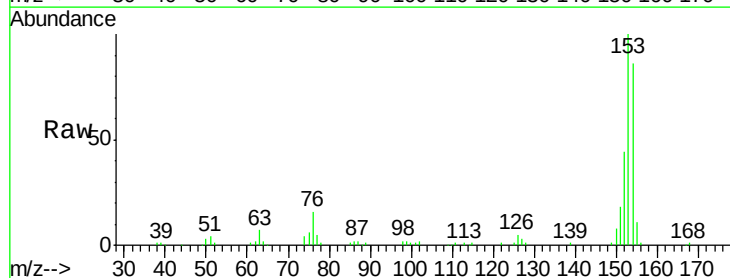


Abundance Ion 154.00 (153.70 to 154.70): E  
 Ion 153.00 (152.70 to 153.70): E  
 Ion 76.00 (75.70 to 76.70): BGC

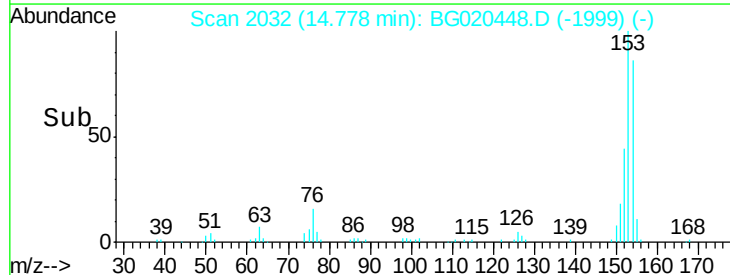
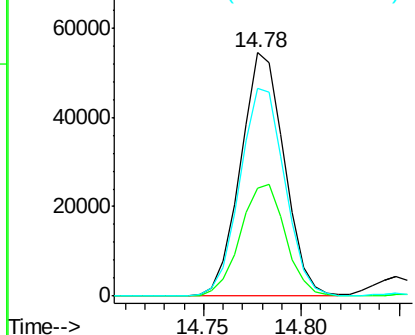


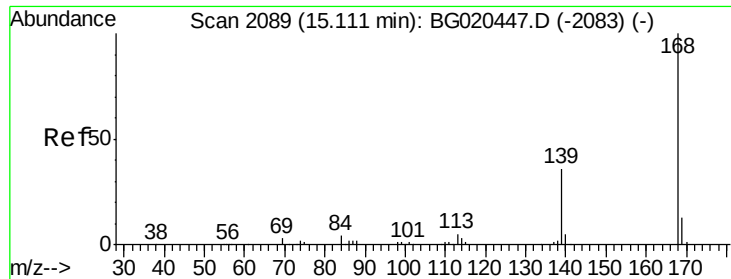
#50  
 Acenaphthene  
 Concen: 19.54 ng/ul  
 RT: 14.78 min Scan# 2032  
 Delta R.T. -0.00 min  
 Lab File: BG020448.D  
 Acq: 23 Dec 2015 18:08

Tgt Ion:153 Resp: 84684  
 Ion Ratio Lower Upper  
 153 100  
 152 44.4 37.6 56.4  
 154 85.5 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

Dibenzenofuran

Concen: 13.94 ng/ul

RT: 15.11 min Scan# 2089

Delta R.T. 0.00 min

Lab File: BG020448.D

Acq: 23 Dec 2015 18:08

Instrument :

BNA\_G

ClientSampleId :

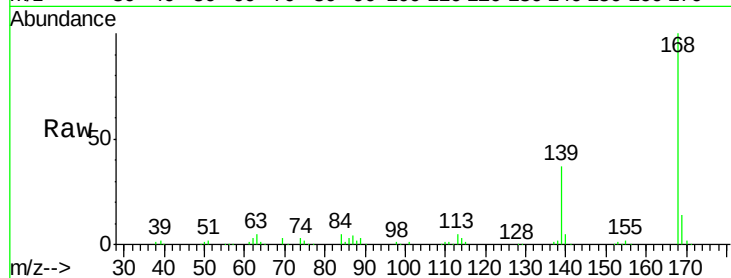
D9N49DL

Tgt Ion:168 Resp: 89871

Ion Ratio Lower Upper

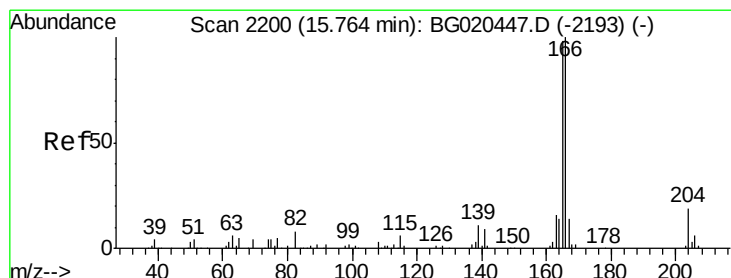
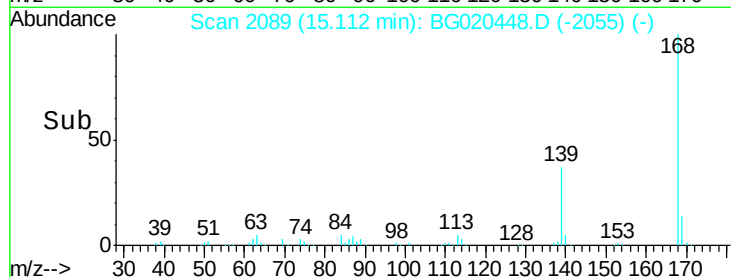
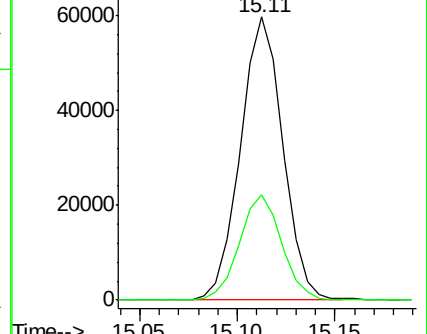
168 100

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: 16.79 ng/ul

RT: 15.76 min Scan# 2199

Delta R.T. -0.00 min

Lab File: BG020448.D

Acq: 23 Dec 2015 18:08

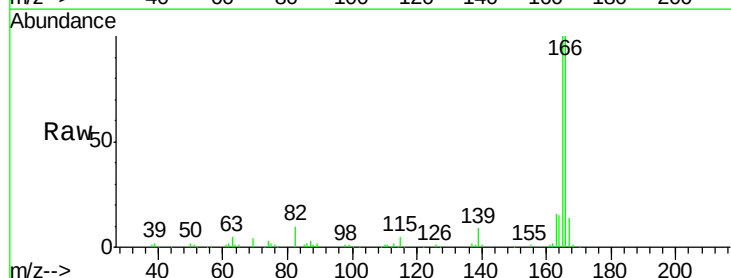
Tgt Ion:166 Resp: 86905

Ion Ratio Lower Upper

166 100

165 100.1 81.4 122.0

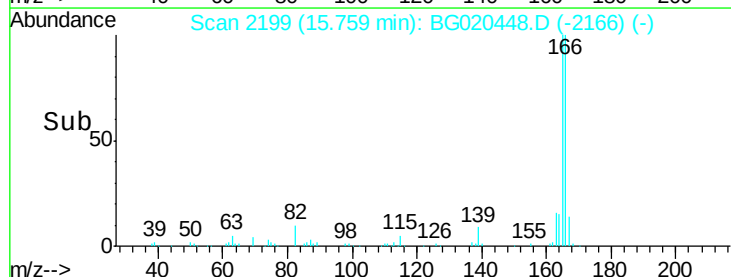
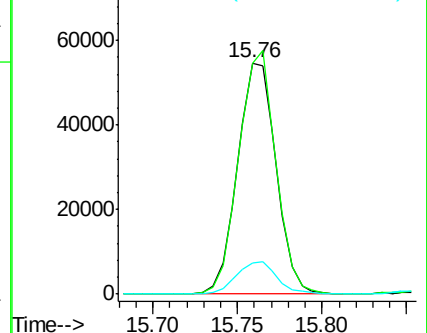
167 13.6 11.2 16.8

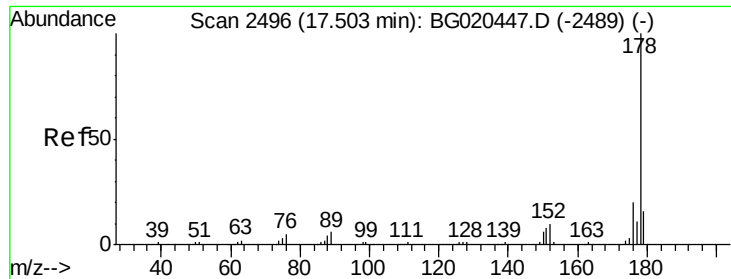


Abundance Ion 166.00 (165.70 to 166.70): E

Ion 165.00 (164.70 to 165.70): E

Ion 167.00 (166.70 to 167.70): E

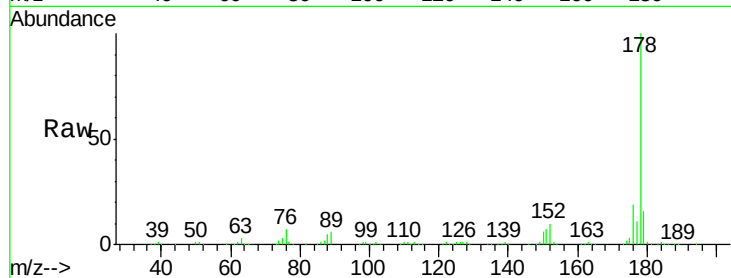




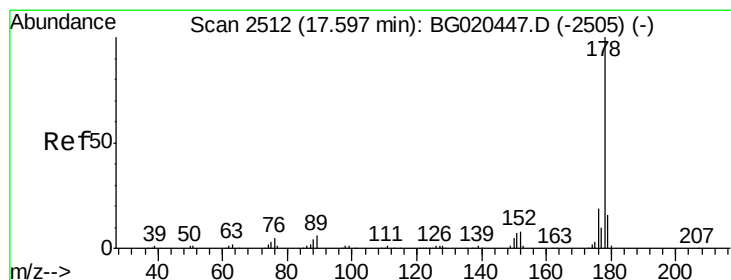
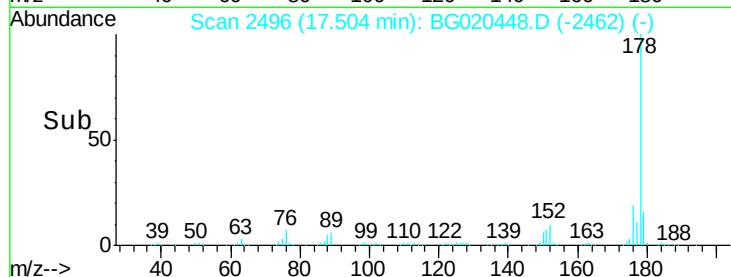
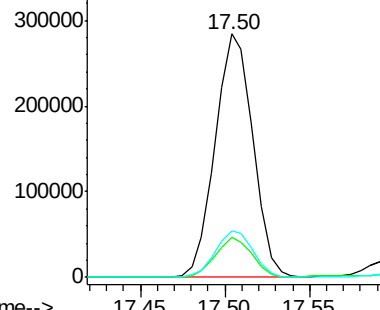
#70  
Phenanthrene  
Concen: 48.26 ng/ul  
RT: 17.50 min Scan# 2496  
Delta R.T. 0.00 min  
Lab File: BG020448.D  
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Tgt Ion:178 Resp: 442133  
Ion Ratio Lower Upper  
178 100  
179 16.4 12.9 19.3  
176 19.2 15.3 22.9

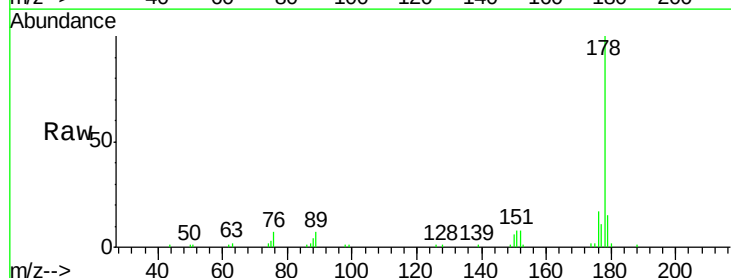


Abundance Ion 178.00 (177.70 to 178.70): E  
Ion 179.00 (178.70 to 179.70): E  
Ion 176.00 (175.70 to 176.70): E

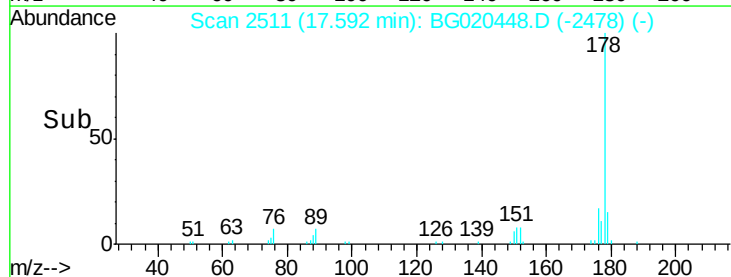
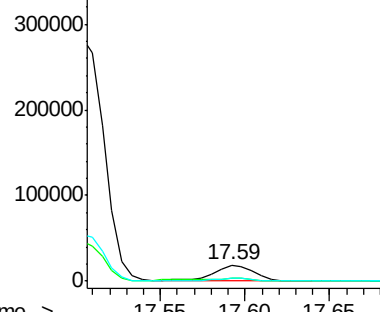


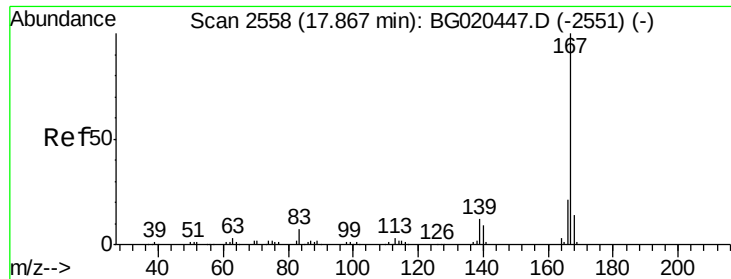
#72  
Anthracene  
Concen: 3.26 ng/ul  
RT: 17.59 min Scan# 2511  
Delta R.T. -0.00 min  
Lab File: BG020448.D  
Acq: 23 Dec 2015 18:08

Tgt Ion:178 Resp: 30310  
Ion Ratio Lower Upper  
178 100  
179 14.8 12.3 18.5  
176 17.3 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: 2.60 ng/ul

RT: 17.86 min Scan# 2557

Delta R.T. -0.00 min

Lab File: BG020448.D

Acq: 23 Dec 2015 18:08

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BNA\_G

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D9N49DL

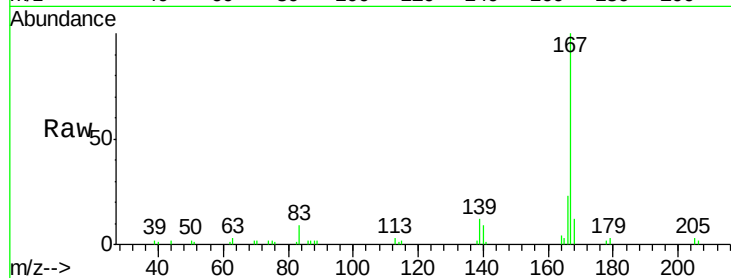
Tgt Ion:167 Resp: 20335

Ion Ratio Lower Upper

167 100

166 23.0 17.0 25.6

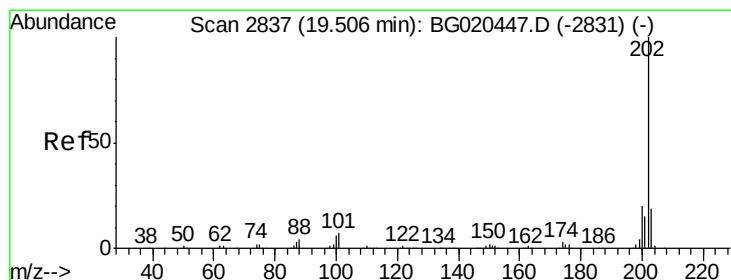
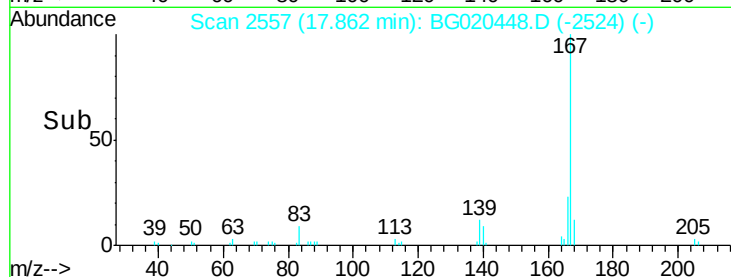
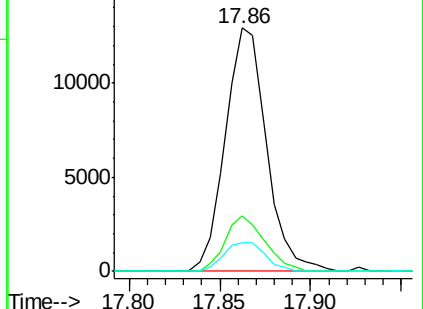
139 12.0 10.1 15.1



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: 25.60 ng/ul

RT: 19.51 min Scan# 2837

Delta R.T. 0.00 min

Lab File: BG020448.D

Acq: 23 Dec 2015 18:08

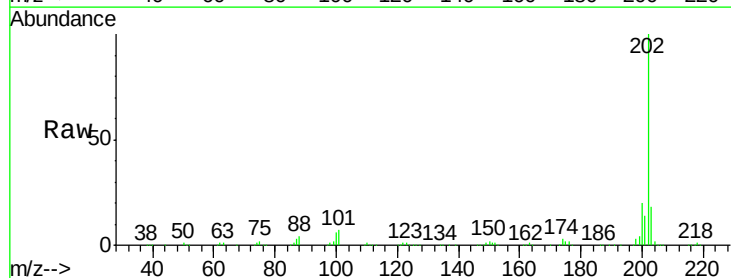
Tgt Ion:202 Resp: 274069

Ion Ratio Lower Upper

202 100

101 7.4 6.2 9.4

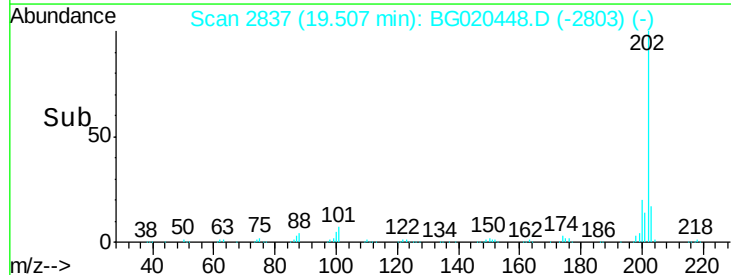
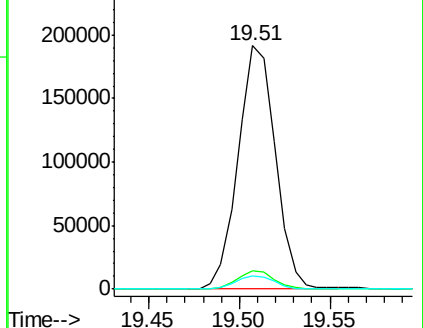
100 5.5 5.1 7.7



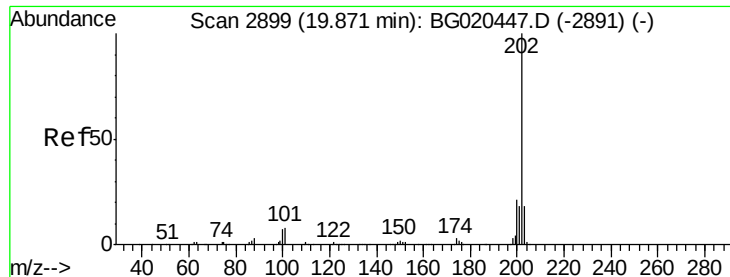
Abundance Ion 202.00 (201.70 to 202.70): E

Ion 101.00 (100.70 to 101.70): E

Ion 100.00 (99.70 to 100.70): B







#80

Pyrene

Concen: 13.87 ng/ul

RT: 19.87 min Scan# 2899

Delta R.T. 0.00 min

Lab File: BG020448.D

Acq: 23 Dec 2015 18:08

Instrument :

BNA\_G

ClientSampleId :

D9N49DL

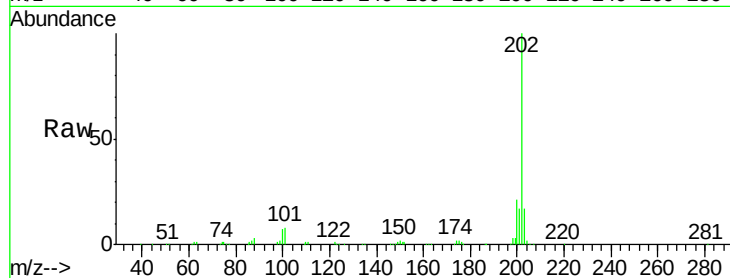
Tgt Ion:202 Resp: 180312

Ion Ratio Lower Upper

202 100

101 7.8 7.0 10.4

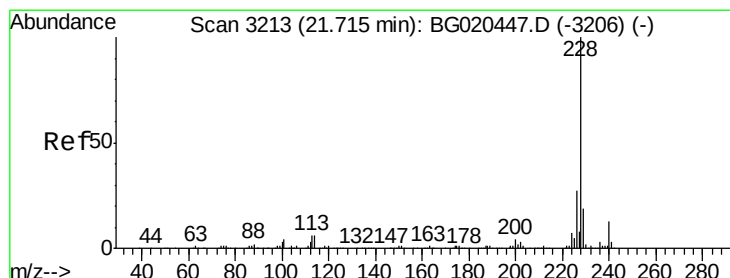
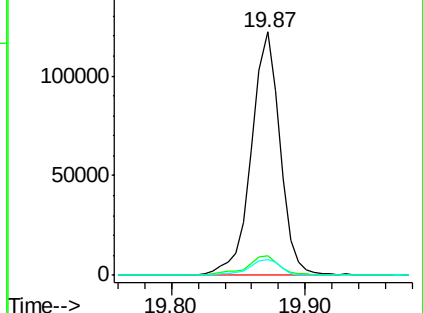
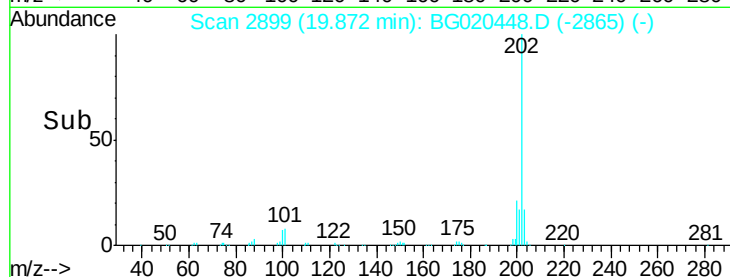
100 6.5 6.4 9.6



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): E



#83

Benzo(a)anthracene

Concen: 3.55 ng/ul

RT: 21.72 min Scan# 3213

Delta R.T. 0.00 min

Lab File: BG020448.D

Acq: 23 Dec 2015 18:08

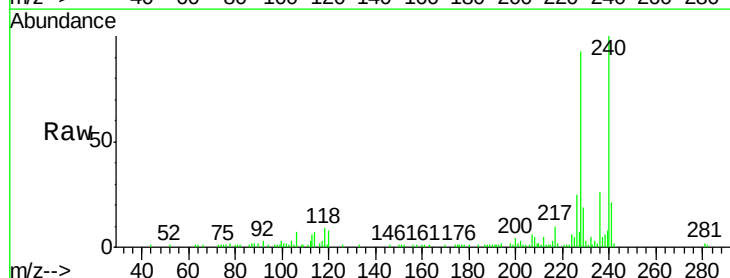
Tgt Ion:228 Resp: 44545

Ion Ratio Lower Upper

228 100

229 19.9 15.8 23.8

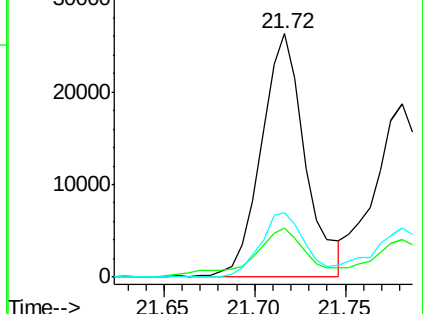
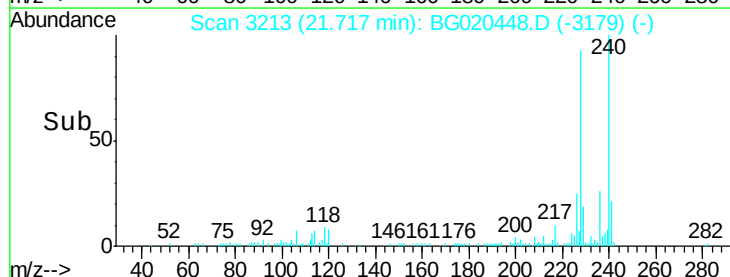
226 26.4 21.8 32.6

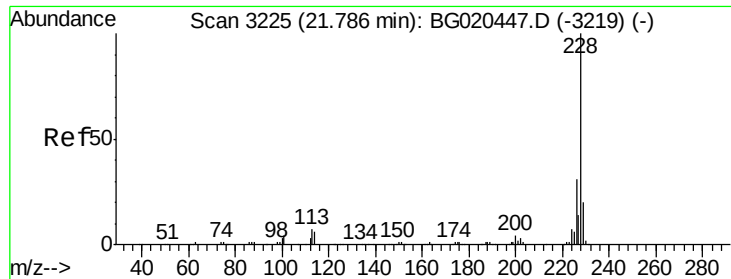


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 229.00 (228.70 to 229.70): E

Ion 226.00 (225.70 to 226.70): E





#85

Chrysene

Concen: 2.96 ng/ul

RT: 21.78 min Scan# 3224

Delta R.T. -0.00 min

Lab File: BG020448.D

Acq: 23 Dec 2015 18:08

Instrument :

BNA\_G

ClientSampleId :

D9N49DL

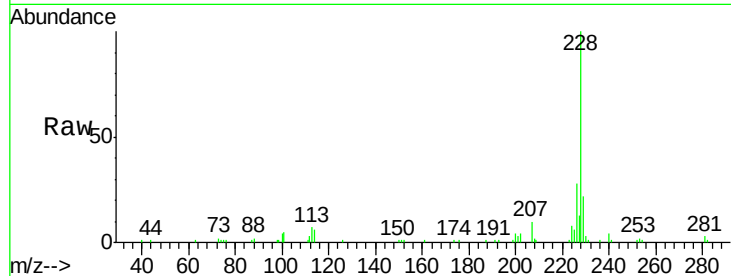
Tgt Ion:228 Resp: 34985

Ion Ratio Lower Upper

228 100

226 28.4 23.9 35.9

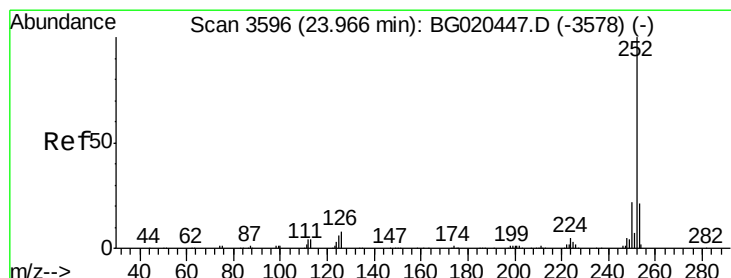
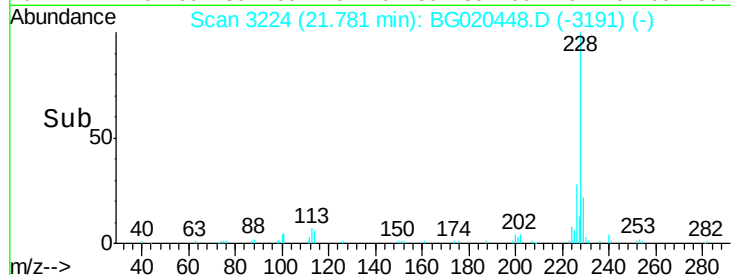
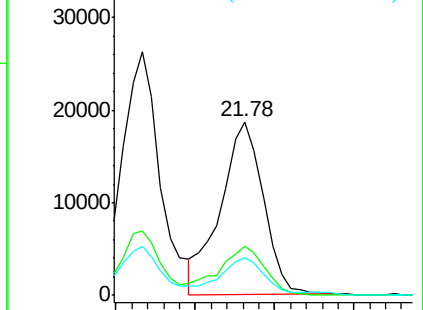
229 21.7 15.6 23.4



Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E



#88

Benzo(b)fluoranthene

Concen: 1.59 ng/ul

RT: 23.97 min Scan# 3596

Delta R.T. 0.00 min

Lab File: BG020448.D

Acq: 23 Dec 2015 18:08

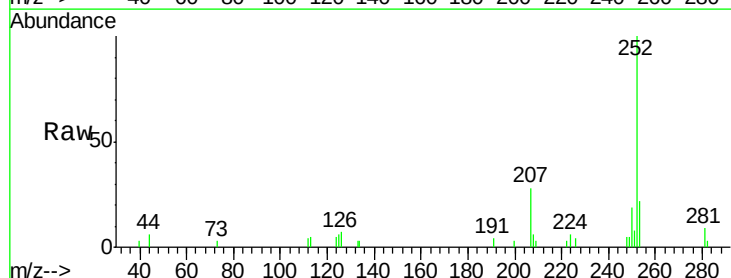
Tgt Ion:252 Resp: 19714

Ion Ratio Lower Upper

252 100

253 22.4 16.7 25.1

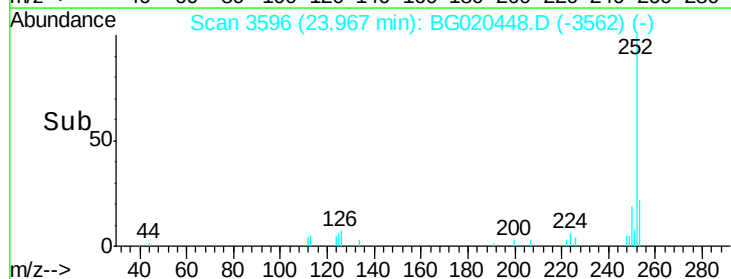
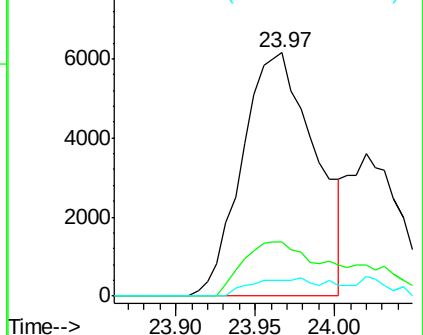
125 6.3 6.2 9.2

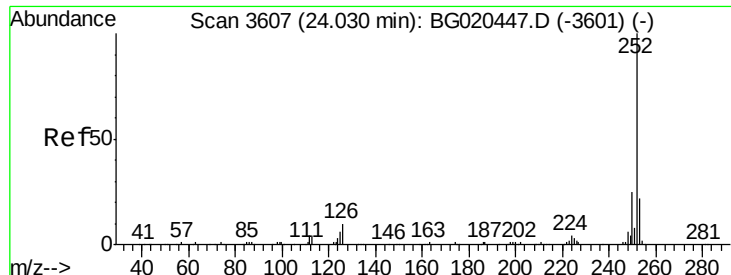


Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E





#89

Benzo(k)fluoranthene

Concen: 1.65 ng/ul

RT: 23.97 min Scan# 3596

Delta R.T. -0.06 min

Lab File: BG020448.D

Acq: 23 Dec 2015 18:08

Instrument :

BNA\_G

ClientSampleId :

D9N49DL

Tgt Ion: 252 Resp: 19714

Ion Ratio Lower Upper

252 100

253 22.4 17.9 26.9

125 6.3 5.8 8.6

