

Data Path : Z:\HPCHEM1\BNA\_G\DATA\BG080615\  
 Data File : BG018300.D  
 Acq On : 6 Aug 2015 12:25  
 Operator : UM/TP  
 Sample : G3109-08DL 10X  
 Misc :  
 ALS Vial : 26 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 C01J2DL

Quant Time: Aug 07 01:33:26 2015  
 Quant Method : Z:\HPCHEM1\BNA\_G\METHODS\SOM02.2-EPA-BG080515.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Fri Aug 07 01:32:43 2015  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.43  | 152  | 20653    | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 10.21 | 136  | 96634    | 20.00 | ng/ul | 0.00     |
| 36) Acenaphthene-d10      | 14.12 | 164  | 66588    | 20.00 | ng/ul | 0.00     |
| 62) Phenanthrene-d10      | 16.88 | 188  | 167467   | 20.00 | ng/ul | 0.00     |
| 78) Chrysene-d12          | 21.10 | 240  | 115198   | 20.00 | ng/ul | 0.00     |
| 86) Perylene-d12          | 23.26 | 264  | 88515    | 20.00 | ng/ul | -0.02    |

## System Monitoring Compounds

|                                |       |     |       |      |       |       |
|--------------------------------|-------|-----|-------|------|-------|-------|
| 3) 1,4-Dioxane-d8              | 0.00  | 96  | 0     | 0.00 | ng/uL |       |
| 5) Phenol-d5                   | 6.65  | 99  | 2953  | 1.82 | ng/ul | 0.00  |
| 7) Bis-(2-Chloroethyl)ether-d  | 6.78  | 67  | 1165  | 1.48 | ng/ul | 0.00  |
| 9) 2-Chlorophenol-d4           | 6.97  | 132 | 2300  | 1.70 | ng/ul | 0.00  |
| 13) 4-Methylphenol-d8          | 8.18  | 113 | 1206  | 0.88 | ng/ul | 0.00  |
| 19) Nitrobenzene-d5            | 8.59  | 128 | 1507  | 2.01 | ng/ul | -0.01 |
| 22) 2-Nitrophenol-d4           | 9.32  | 143 | 1750  | 2.02 | ng/ul | 0.00  |
| 26) 2,4-Dichlorophenol-d3      | 9.87  | 165 | 2483  | 1.56 | ng/ul | 0.00  |
| 29) 4-Chloroaniline-d4         | 10.37 | 131 | 225   | 0.12 | ng/ul | 0.00  |
| 44) Dimethylphthalate-d6       | 13.53 | 166 | 12165 | 2.36 | ng/ul | 0.00  |
| 47) Acenaphthylene-d8          | 13.81 | 160 | 10901 | 1.87 | ng/ul | 0.00  |
| 52) 4-Nitrophenol-d4           | 14.40 | 143 | 771   | 0.91 | ng/ul | 0.00  |
| 58) Fluorene-d10               | 15.12 | 176 | 10683 | 2.31 | ng/ul | 0.00  |
| 63) 4,6-Dinitro-2-methylphenol | 15.28 | 200 | 445   | 0.38 | ng/ul | 0.00  |
| 71) Anthracene-d10             | 16.98 | 188 | 15444 | 2.10 | ng/ul | 0.00  |
| 79) Pyrene-d10                 | 19.29 | 212 | 15311 | 2.38 | ng/ul | 0.00  |
| 90) Benzo(a)pyrene-d12         | 23.12 | 264 | 7591  | 1.65 | ng/ul | -0.02 |

## Target Compounds

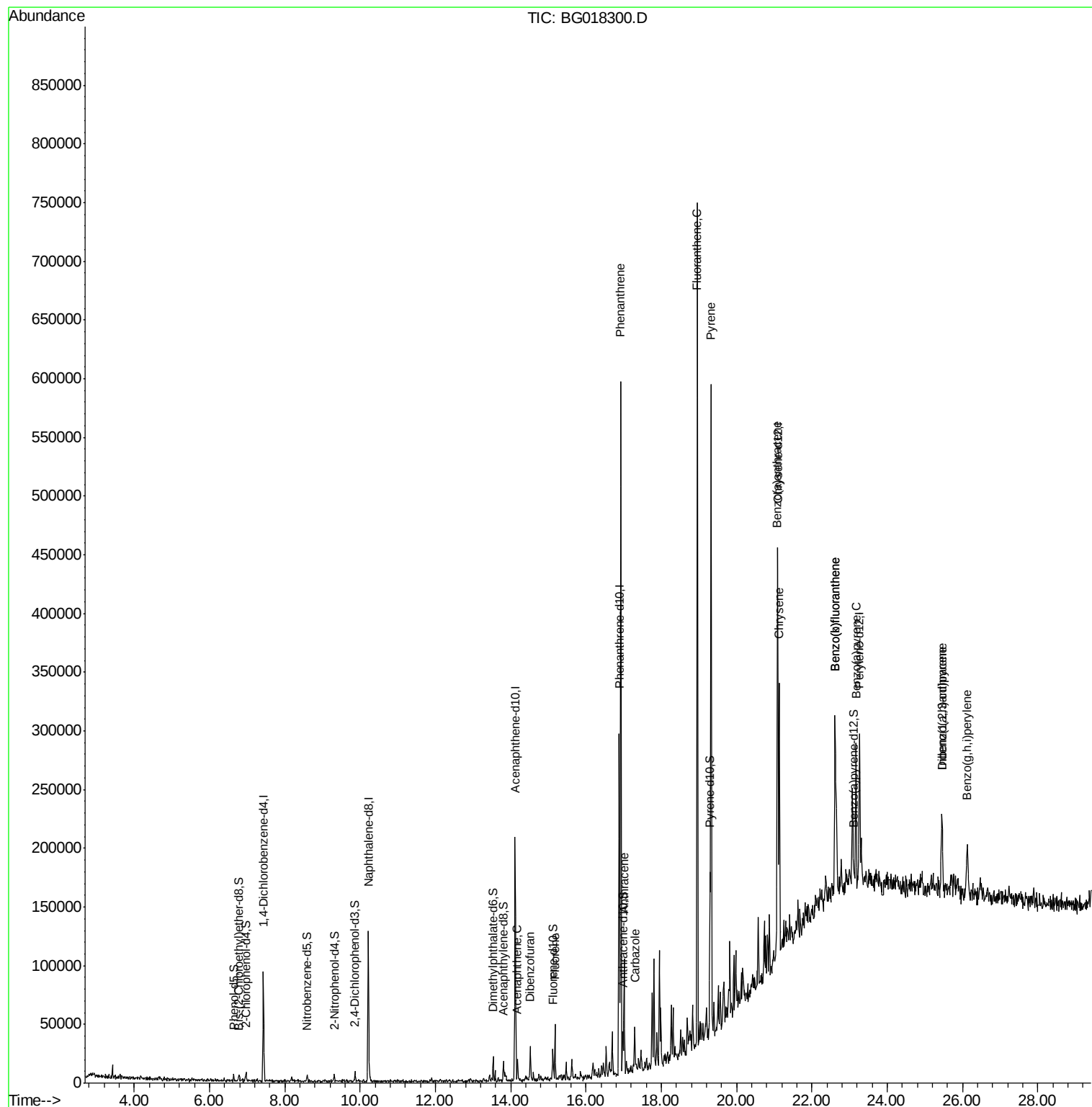
|                            |       |     |        |       |        | Qvalue |
|----------------------------|-------|-----|--------|-------|--------|--------|
| 50) Acenaphthene           | 14.19 | 153 | 7403   | 1.90  | ng/ul# | 82     |
| 54) Dibenzofuran           | 14.52 | 168 | 12066  | 2.11  | ng/ul  | 93     |
| 59) Fluorene               | 15.18 | 166 | 18810  | 3.74  | ng/ul  | 95     |
| 70) Phenanthrene           | 16.92 | 178 | 315715 | 37.36 | ng/ul  | 96     |
| 72) Anthracene             | 17.01 | 178 | 57730  | 6.84  | ng/ul  | 96     |
| 75) Carbazole              | 17.29 | 167 | 18793  | 2.64  | ng/ul  | 96     |
| 77) Fluoranthene           | 18.96 | 202 | 420245 | 44.83 | ng/ul# | 96     |
| 80) Pyrene                 | 19.32 | 202 | 322238 | 40.23 | ng/ul  | 99     |
| 83) Benzo(a)anthracene     | 21.08 | 228 | 128980 | 21.21 | ng/ul  | 98     |
| 85) Chrysene               | 21.13 | 228 | 115663 | 21.17 | ng/ul  | 94     |
| 88) Benzo(b)fluoranthene   | 22.62 | 252 | 106442 | 19.61 | ng/ul  | 98     |
| 89) Benzo(k)fluoranthene   | 22.62 | 252 | 106254 | 20.41 | ng/ul  | 94     |
| 91) Benzo(a)pyrene         | 23.18 | 252 | 78300  | 16.52 | ng/ul  | 100    |
| 92) Indeno(1,2,3-cd)pyrene | 25.45 | 276 | 62471  | 10.65 | ng/ul# | 93     |
| 93) Dibenzo(a,h)anthracene | 25.45 | 278 | 14843  | 2.88  | ng/ul  | 94     |
| 94) Benzo(g,h,i)perylene   | 26.13 | 276 | 54471  | 11.45 | ng/ul# | 91     |

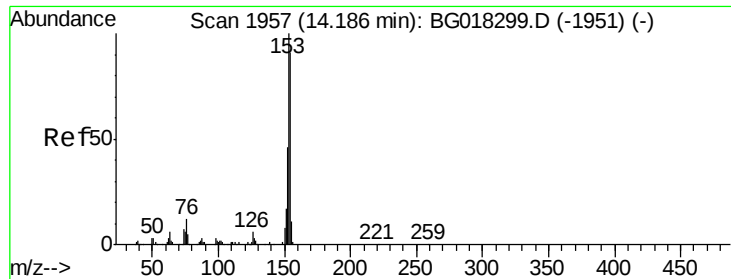
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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C01J2DL

Quant Time: Aug 07 01:33:26 2015  
Quant Method : Z:\HPCHEM1\BNA\_G\METHODS\SOM02.2-EPA-BG080515.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Fri Aug 07 01:32:43 2015  
Response via : Initial Calibration





#50

Acenaphthene

Concen: 1.90 ng/ul

RT: 14.19 min Scan# 1957

Delta R.T. 0.00 min

Lab File: BG018300.D

Acq: 6 Aug 2015 12:25

Instrument :

BNA\_G

ClientSampleId :

C01J2DL

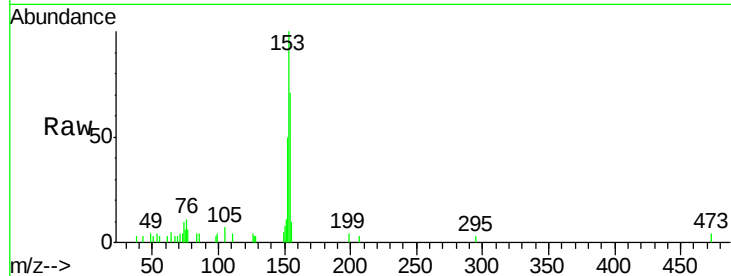
Tgt Ion:153 Resp: 7403

Ion Ratio Lower Upper

153 100

152 50.1 39.0 58.4

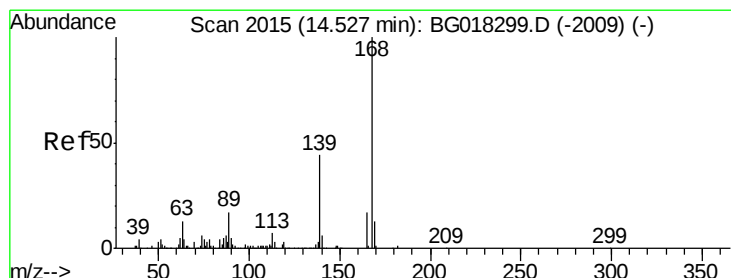
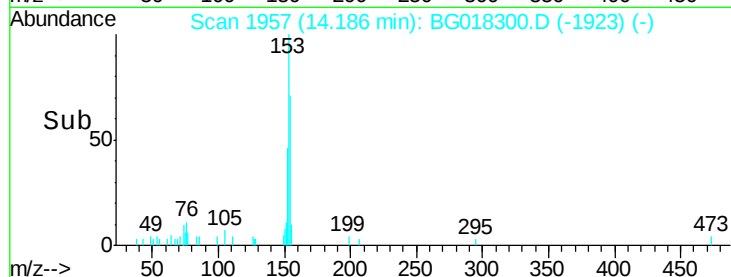
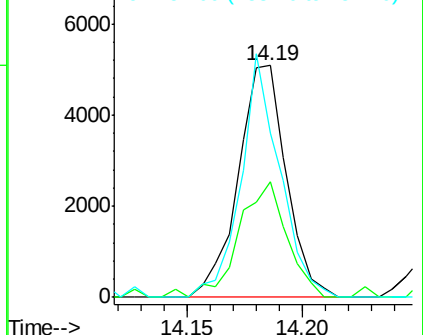
154 70.9 77.4 116.2#



Abundance Ion 153.00 (152.70 to 153.70): E

Ion 152.00 (151.70 to 152.70): E

Ion 154.00 (153.70 to 154.70): E



#54

Dibenzofuran

Concen: 2.11 ng/ul

RT: 14.52 min Scan# 2014

Delta R.T. -0.01 min

Lab File: BG018300.D

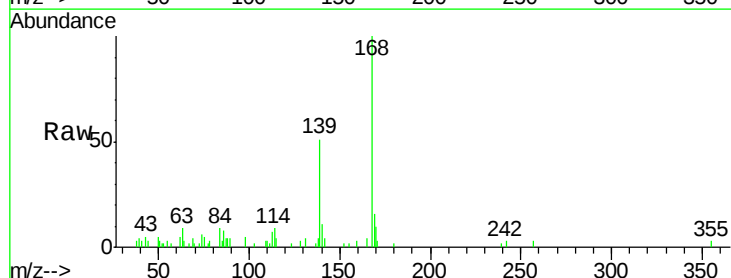
Acq: 6 Aug 2015 12:25

Tgt Ion:168 Resp: 12066

Ion Ratio Lower Upper

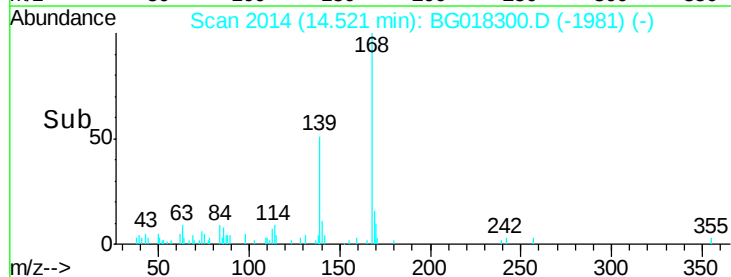
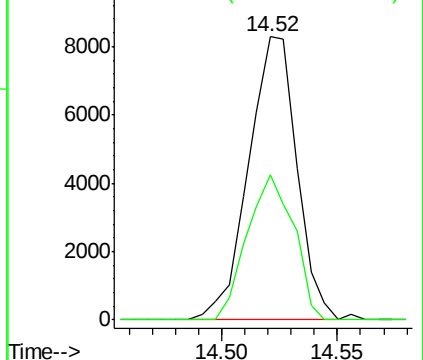
168 100

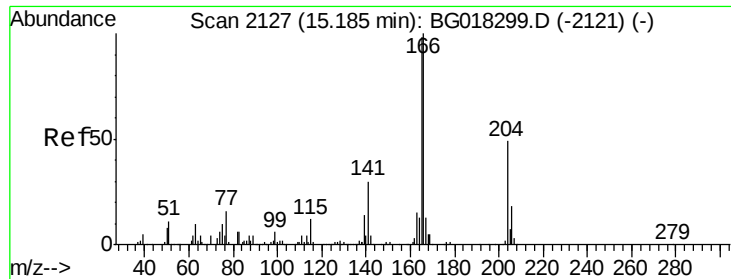
139 51.2 37.1 55.7



Abundance Ion 168.00 (167.70 to 168.70): E

Ion 139.00 (138.70 to 139.70): E

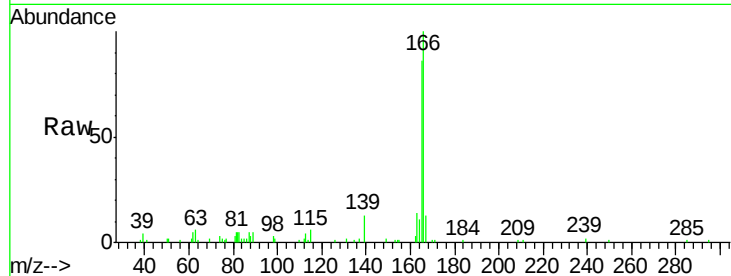




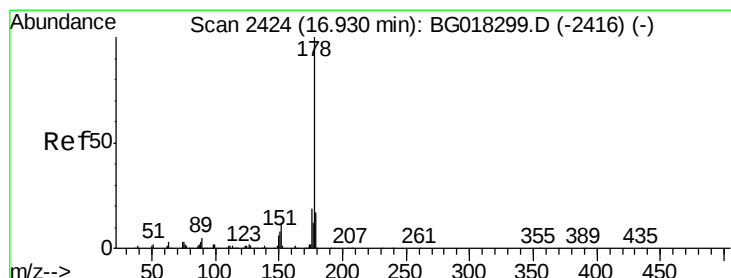
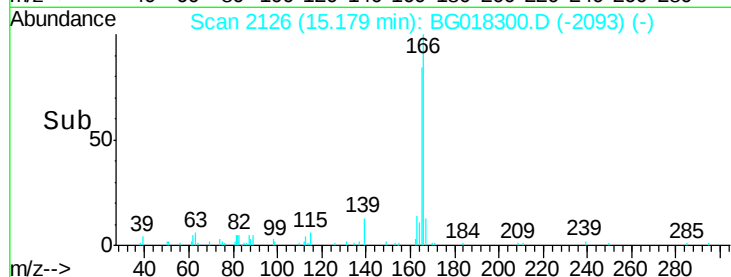
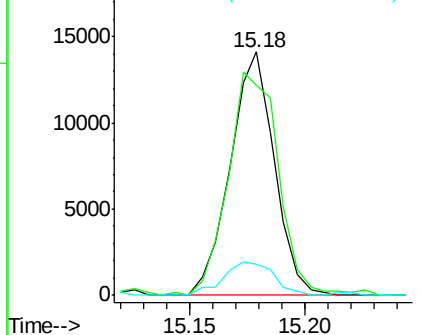
#59  
**Fluorene**  
 Concen: 3.74 ng/ul  
 RT: 15.18 min Scan# 2126  
 Delta R.T. -0.01 min  
 Lab File: BG018300.D  
 Acq: 6 Aug 2015 12:25

Instrument :  
 BNA\_G  
 ClientSampleId :  
 C01J2DL

Tgt Ion:166 Resp: 18810  
 Ion Ratio Lower Upper  
 166 100  
 165 86.2 72.4 108.6  
 167 12.6 11.4 17.0

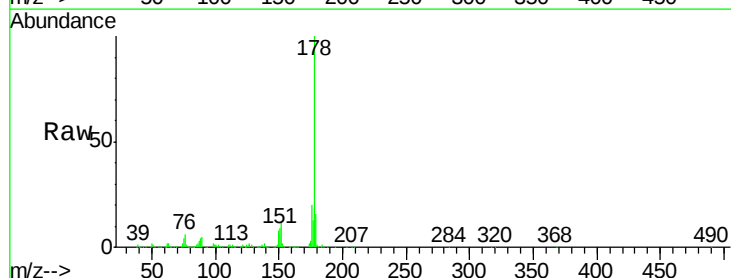


Abundance Ion 166.00 (165.70 to 166.70): E  
 Ion 165.00 (164.70 to 165.70): E  
 Ion 167.00 (166.70 to 167.70): E

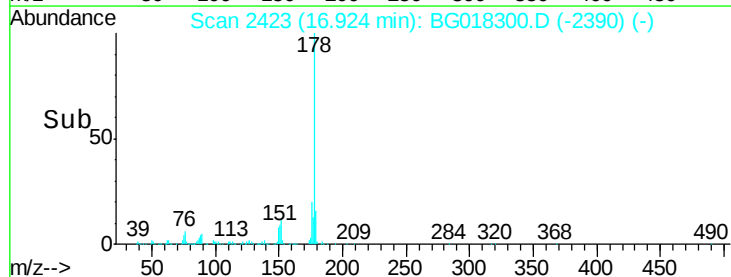
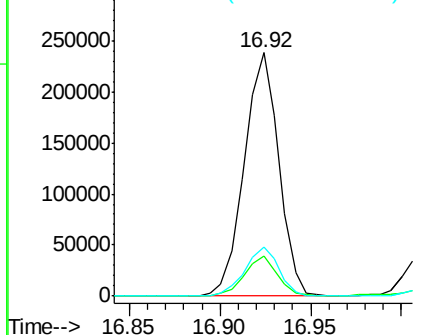


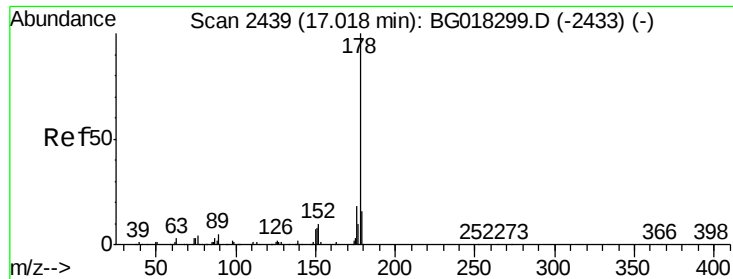
#70  
**Phenanthrene**  
 Concen: 37.36 ng/ul  
 RT: 16.92 min Scan# 2423  
 Delta R.T. -0.01 min  
 Lab File: BG018300.D  
 Acq: 6 Aug 2015 12:25

Tgt Ion:178 Resp: 315715  
 Ion Ratio Lower Upper  
 178 100  
 179 16.4 12.2 18.4  
 176 20.2 14.5 21.7



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: 6.84 ng/ul

RT: 17.01 min Scan# 2438

Delta R.T. -0.01 min

Lab File: BG018300.D

Acq: 6 Aug 2015 12:25

Instrument :

BNA\_G

ClientSampleId :

C01J2DL

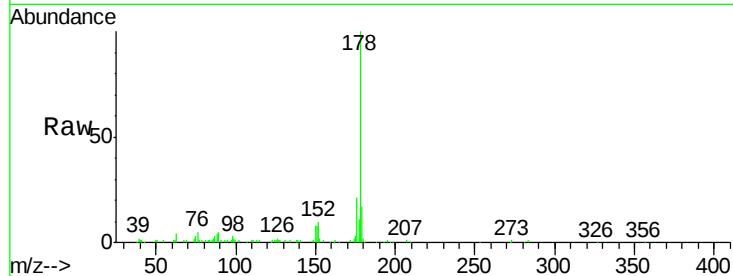
Tgt Ion:178 Resp: 57730

Ion Ratio Lower Upper

178 100

179 16.6 12.2 18.4

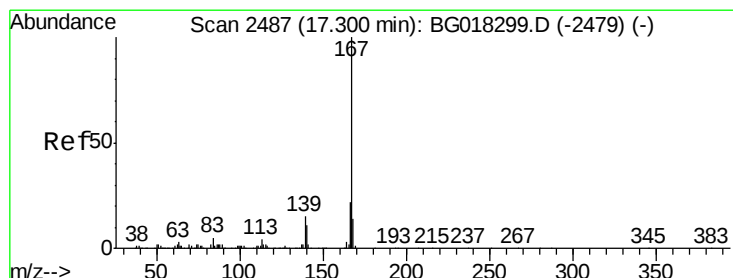
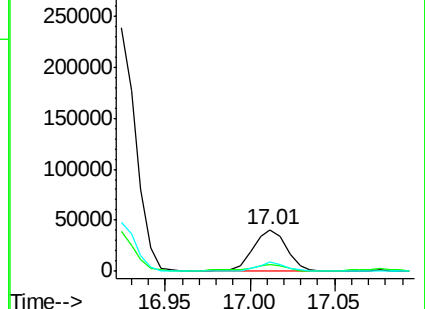
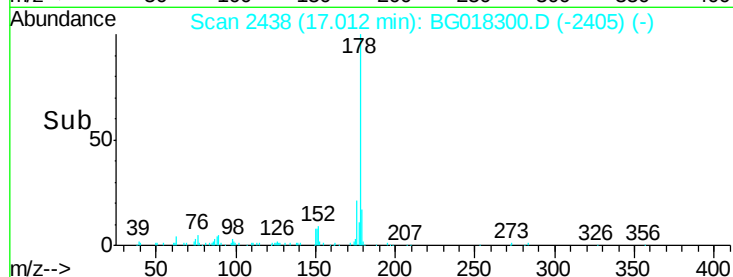
176 21.2 15.3 22.9



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



#75

Carbazole

Concen: 2.64 ng/ul

RT: 17.29 min Scan# 2486

Delta R.T. -0.01 min

Lab File: BG018300.D

Acq: 6 Aug 2015 12:25

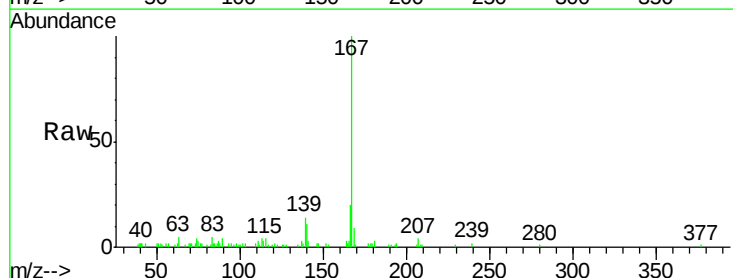
Tgt Ion:167 Resp: 18793

Ion Ratio Lower Upper

167 100

166 19.6 17.8 26.8

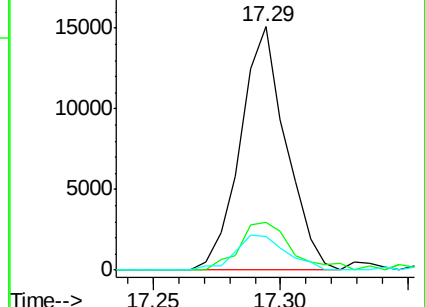
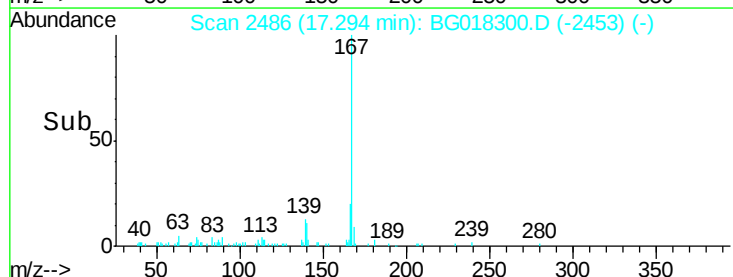
139 13.9 10.6 16.0

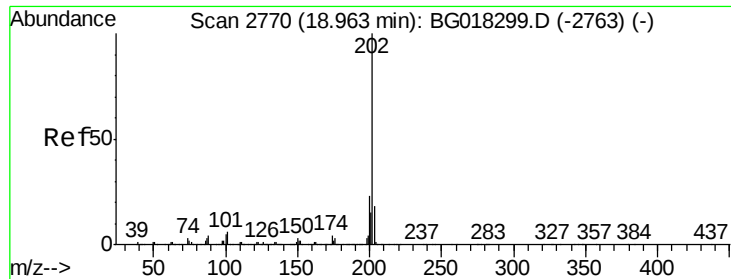


Abundance Ion 167.00 (166.70 to 167.70): E

Ion 166.00 (165.70 to 166.70): E

Ion 139.00 (138.70 to 139.70): E

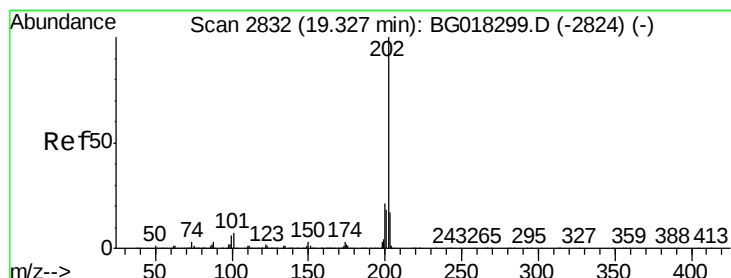
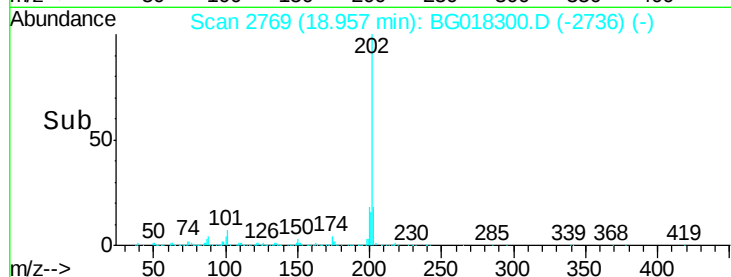
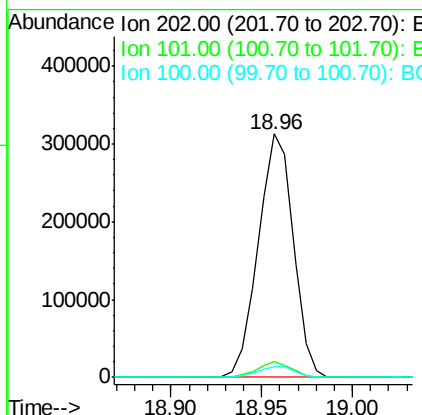
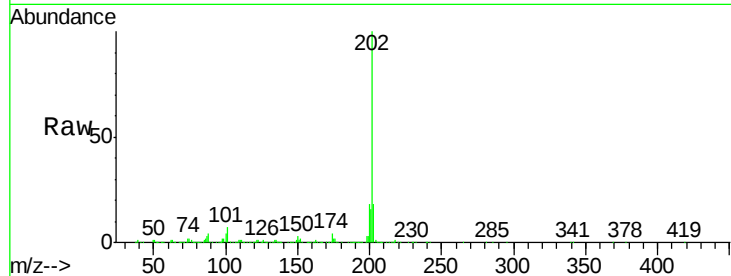




#77  
 Fluoranthene  
 Concen: 44.83 ng/ul  
 RT: 18.96 min Scan# 2769  
 Delta R.T. -0.01 min  
 Lab File: BG018300.D  
 Acq: 6 Aug 2015 12:25

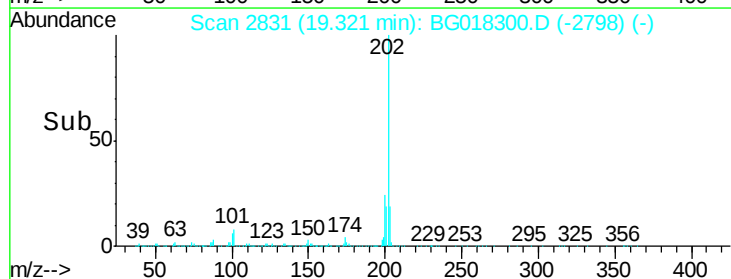
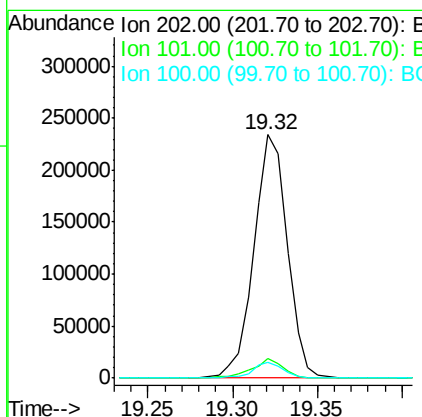
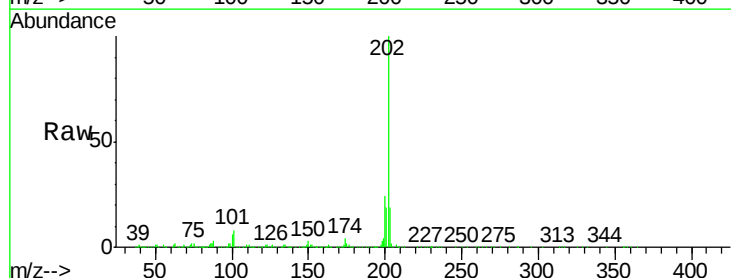
Instrument :  
 BNA\_G  
 ClientSampleId :  
 C01J2DL

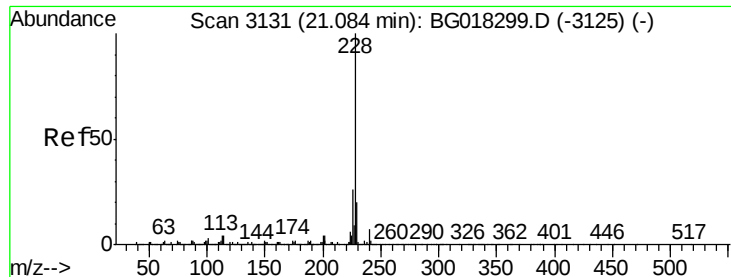
|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 202   | Resp: | 420245 |
| Ion Ratio | Lower | Upper |        |
| 202       | 100   |       |        |
| 101       | 6.6   | 6.2   | 9.2    |
| 100       | 4.3   | 4.6   | 6.8#   |



#80  
 Pyrene  
 Concen: 40.23 ng/ul  
 RT: 19.32 min Scan# 2831  
 Delta R.T. -0.01 min  
 Lab File: BG018300.D  
 Acq: 6 Aug 2015 12:25

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 202   | Resp: | 322238 |
| Ion Ratio | Lower | Upper |        |
| 202       | 100   |       |        |
| 101       | 8.0   | 6.2   | 9.2    |
| 100       | 6.3   | 4.6   | 7.0    |





#83

Benzo(a)anthracene

Concen: 21.21 ng/ul

RT: 21.08 min Scan# 3130

Delta R.T. -0.01 min

Lab File: BG018300.D

Acq: 6 Aug 2015 12:25

Instrument :

BNA\_G

ClientSampled :

C01J2DL

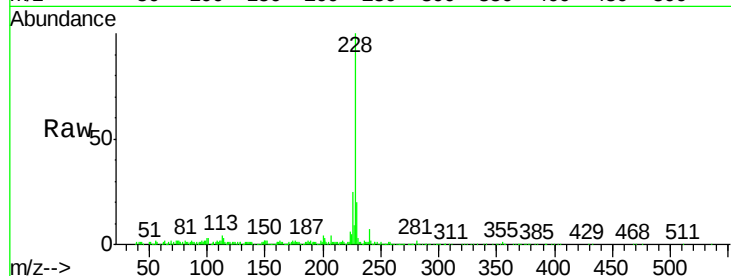
Tgt Ion:228 Resp: 128980

Ion Ratio Lower Upper

228 100

229 20.0 16.3 24.5

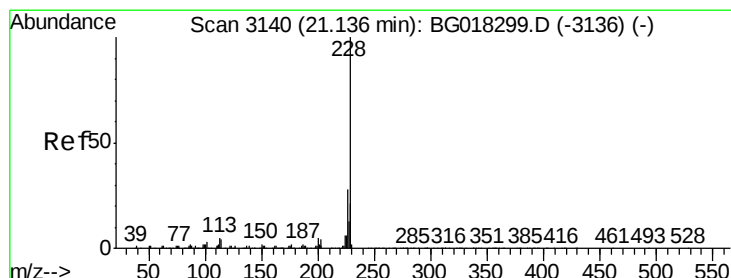
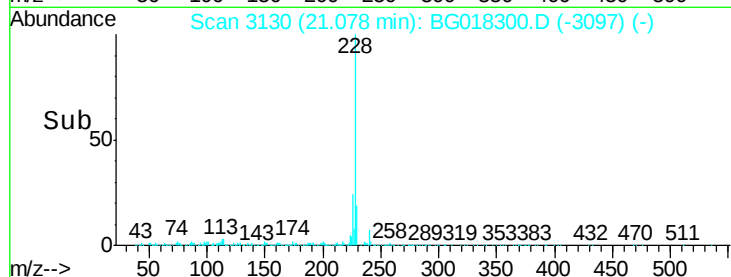
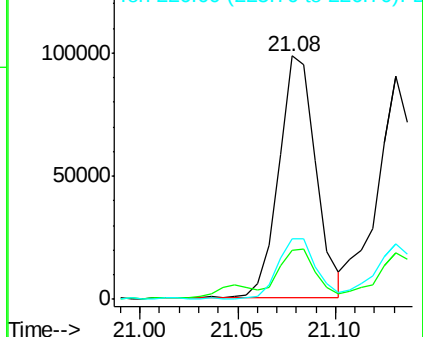
226 24.9 21.2 31.8



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: 21.17 ng/ul

RT: 21.13 min Scan# 3139

Delta R.T. -0.01 min

Lab File: BG018300.D

Acq: 6 Aug 2015 12:25

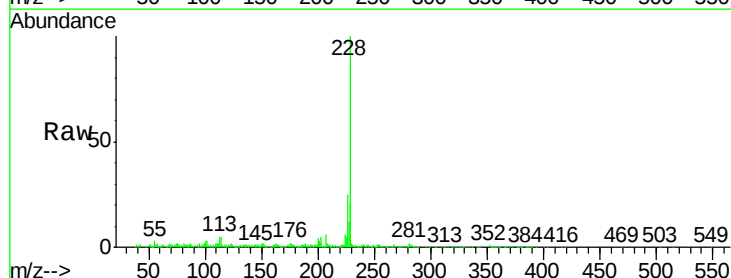
Tgt Ion:228 Resp: 115663

Ion Ratio Lower Upper

228 100

226 24.7 23.0 34.6

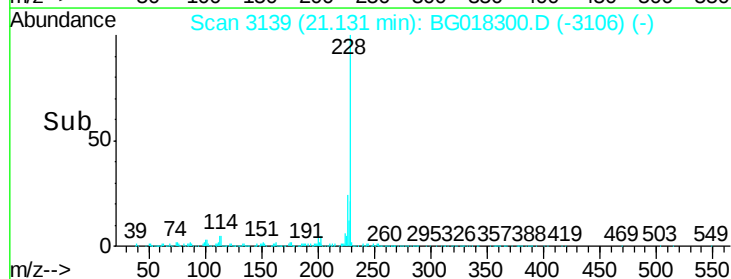
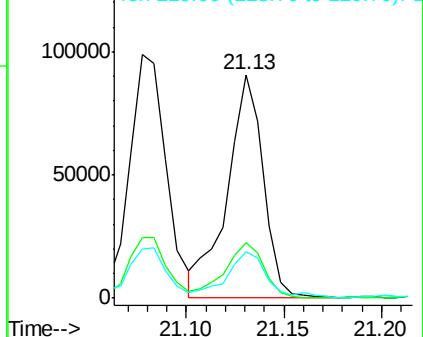
229 21.1 15.9 23.9

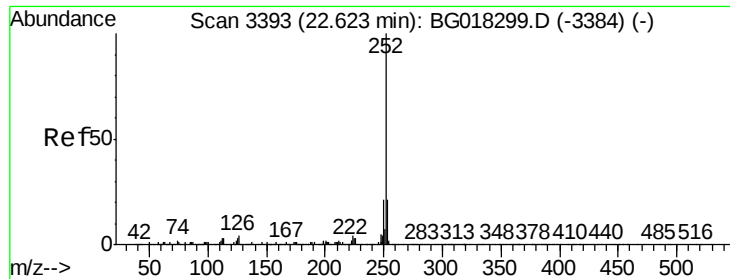


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E





#88

Benzo(b)fluoranthene

Concen: 19.61 ng/ul

RT: 22.62 min Scan# 3392

Delta R.T. -0.01 min

Lab File: BG018300.D

Acq: 6 Aug 2015 12:25

Instrument :

BNA\_G

ClientSampleId :

C01J2DL

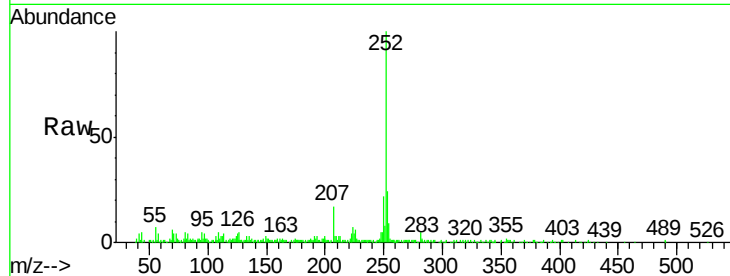
Tgt Ion:252 Resp: 106442

Ion Ratio Lower Upper

252 100

253 23.6 18.1 27.1

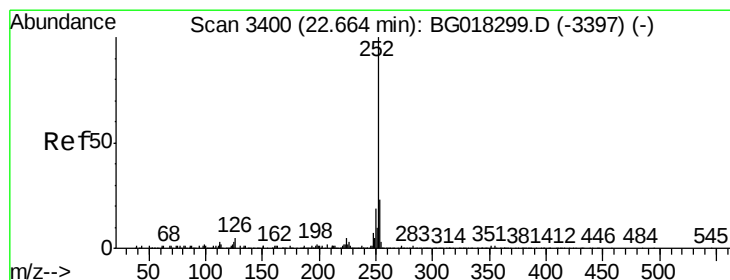
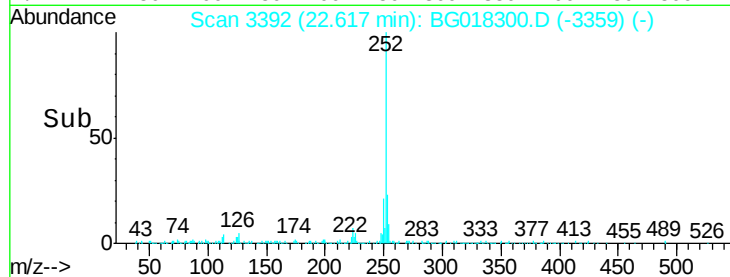
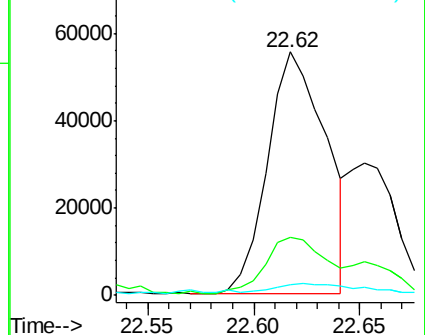
125 4.3 3.1 4.7



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: 20.41 ng/ul

RT: 22.62 min Scan# 3392

Delta R.T. -0.05 min

Lab File: BG018300.D

Acq: 6 Aug 2015 12:25

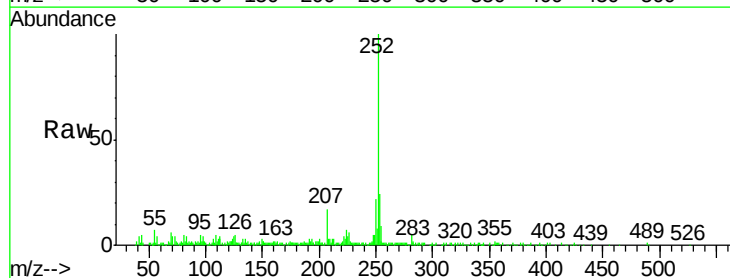
Tgt Ion:252 Resp: 106254

Ion Ratio Lower Upper

252 100

253 23.6 16.4 24.6

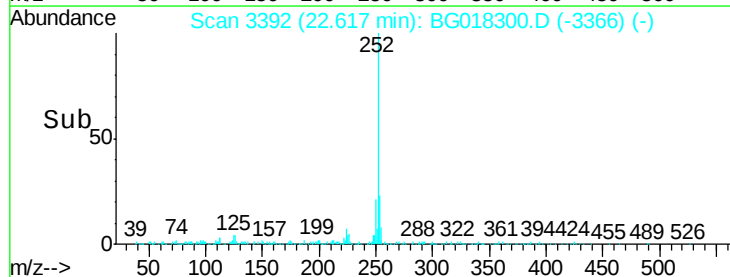
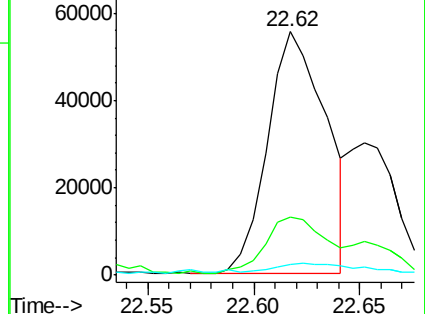
125 4.3 3.4 5.2

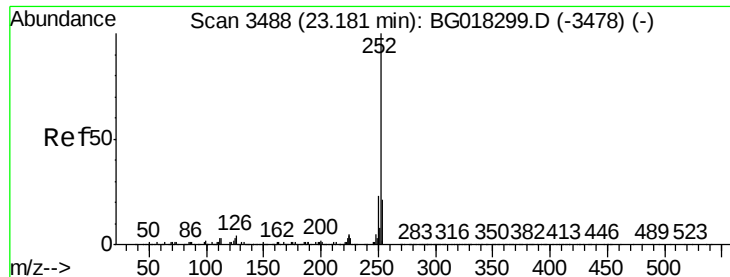


Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E





#91

Benzo(a)pyrene

Concen: 16.52 ng/ul

RT: 23.18 min Scan# 3487

Delta R.T. -0.01 min

Lab File: BG018300.D

Acq: 6 Aug 2015 12:25

Instrument :

BNA\_G

ClientSampleId :

C01J2DL

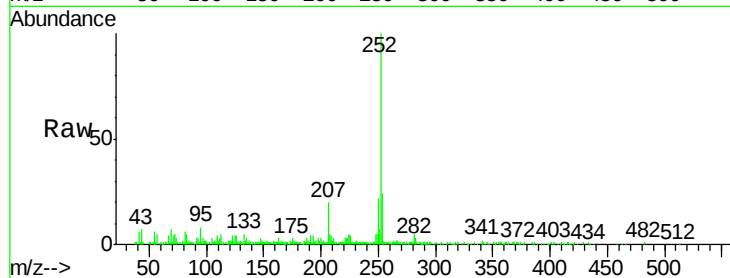
Tgt Ion:252 Resp: 78300

Ion Ratio Lower Upper

252 100

253 23.8 18.9 28.3

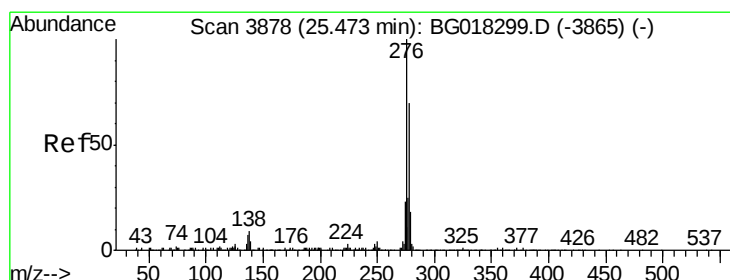
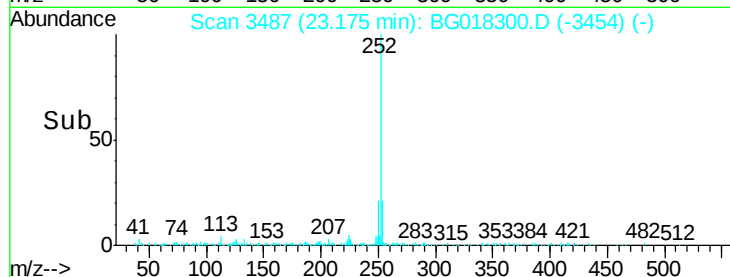
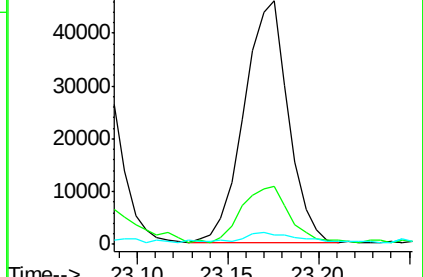
125 3.8 3.2 4.8



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: 10.65 ng/ul

RT: 25.45 min Scan# 3874

Delta R.T. -0.02 min

Lab File: BG018300.D

Acq: 6 Aug 2015 12:25

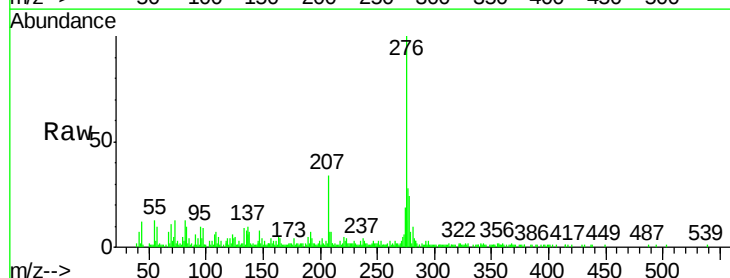
Tgt Ion:276 Resp: 62471

Ion Ratio Lower Upper

276 100

138 6.9 8.2 12.4#

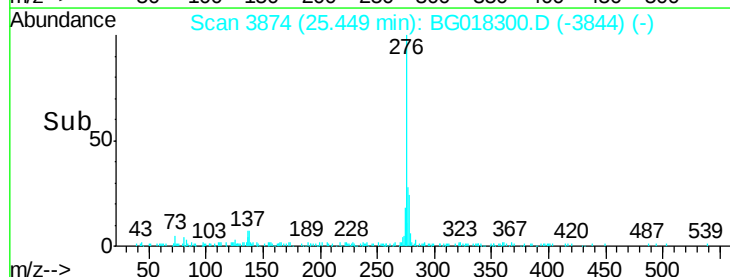
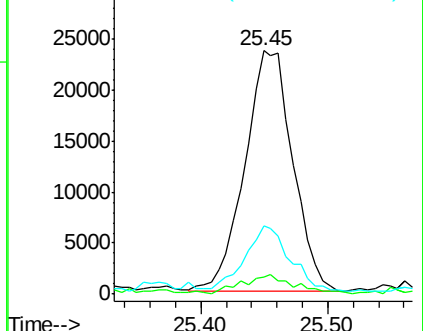
277 28.1 20.1 30.1

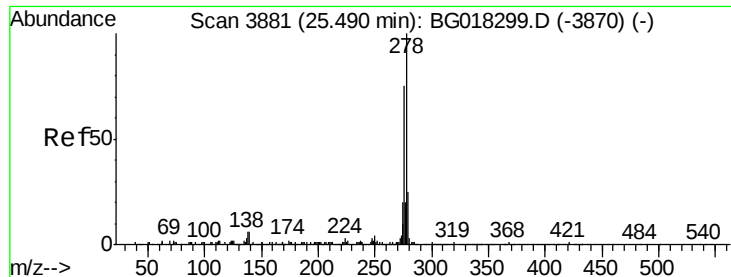


Abundance Ion 276.00 (275.70 to 276.70): E

Ion 138.00 (137.70 to 138.70): E

Ion 277.00 (276.70 to 277.70): E





#93

Dibenzo(a,h)anthracene

Concen: 2.88 ng/ul

RT: 25.45 min Scan# 3874

Delta R.T. -0.04 min

Lab File: BG018300.D

Acq: 6 Aug 2015 12:25

Instrument :

BNA\_G

ClientSampleId :

C01J2DL

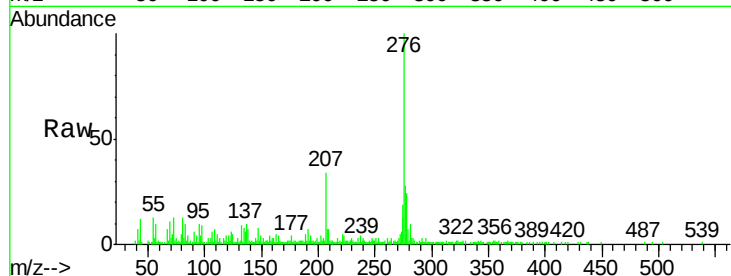
Tgt Ion:278 Resp: 14843

Ion Ratio Lower Upper

278 100

139 7.7 5.8 8.8

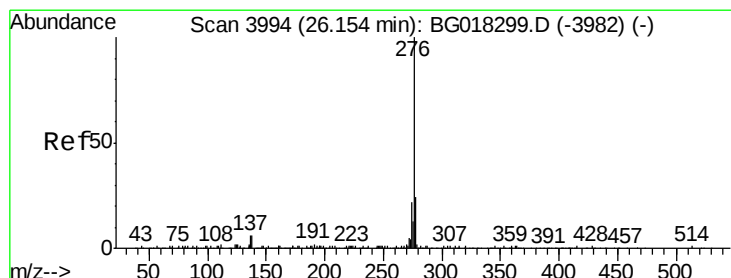
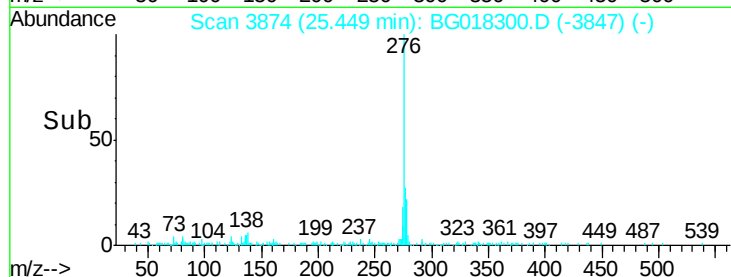
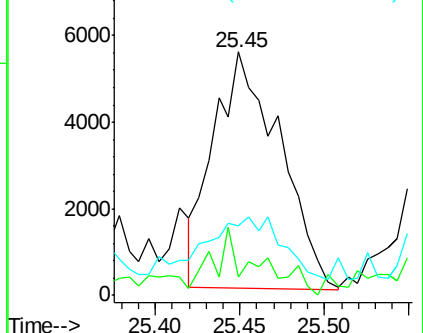
279 28.4 19.8 29.6



Abundance Ion 278.00 (277.70 to 278.70): E

Ion 139.00 (138.70 to 139.70): E

Ion 279.00 (278.70 to 279.70): E



#94

Benzo(g,h,i)perylene

Concen: 11.45 ng/ul

RT: 26.13 min Scan# 3990

Delta R.T. -0.02 min

Lab File: BG018300.D

Acq: 6 Aug 2015 12:25

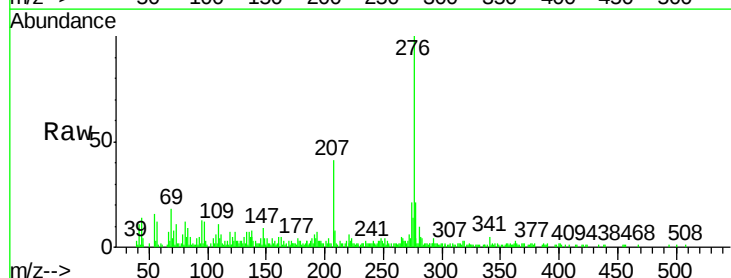
Tgt Ion:276 Resp: 54471

Ion Ratio Lower Upper

276 100

138 5.4 6.0 9.0#

277 21.5 21.1 31.7



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

