

Data Path : Z:\HPCHEM1\BNA M\DATA\BM122015\  
 Data File : BM003654.D  
 Acq On : 20 Dec 2015 14:53  
 Operator : UM/SJ  
 Sample : G4801-16DL 5X  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 G9C64DL

Quant Time: Dec 21 02:23:10 2015  
 Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM02.2-EPA-BM121915.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Mon Dec 21 02:19:57 2015  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.70  | 152  | 22041    | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 10.49 | 136  | 106138   | 20.00 | ng/ul | 0.00     |
| 36) Acenaphthene-d10      | 14.35 | 164  | 66774    | 20.00 | ng/ul | 0.00     |
| 62) Phenanthrene-d10      | 17.10 | 188  | 163256   | 20.00 | ng/ul | 0.00     |
| 78) Chrysene-d12          | 21.30 | 240  | 197851   | 20.00 | ng/ul | 0.00     |
| 86) Perylene-d12          | 23.54 | 264  | 168952   | 20.00 | ng/ul | 0.00     |

## System Monitoring Compounds

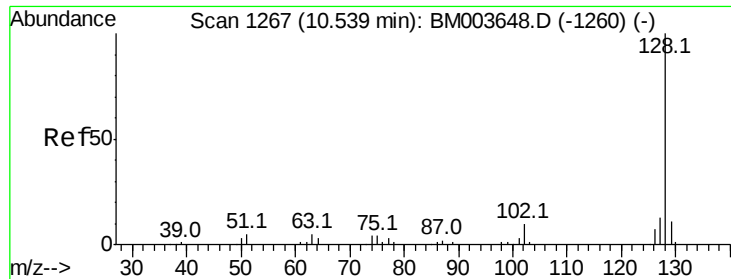
|                                |       |     |       |      |       |      |
|--------------------------------|-------|-----|-------|------|-------|------|
| 3) 1,4-Dioxane-d8              | 0.00  | 96  | 0     | 0.00 | ng/uL |      |
| 5) Phenol-d5                   | 6.87  | 99  | 7741  | 4.17 | ng/ul | 0.00 |
| 7) Bis-(2-Chloroethyl)ether-d  | 7.03  | 67  | 4571  | 4.62 | ng/ul | 0.00 |
| 9) 2-Chlorophenol-d4           | 7.23  | 132 | 6754  | 4.45 | ng/ul | 0.00 |
| 13) 4-Methylphenol-d8          | 8.40  | 113 | 7107  | 4.42 | ng/ul | 0.00 |
| 19) Nitrobenzene-d5            | 8.86  | 128 | 3310  | 4.30 | ng/ul | 0.00 |
| 22) 2-Nitrophenol-d4           | 9.58  | 143 | 3395  | 3.92 | ng/ul | 0.00 |
| 26) 2,4-Dichlorophenol-d3      | 10.11 | 165 | 7250  | 4.58 | ng/ul | 0.00 |
| 29) 4-Chloroaniline-d4         | 10.63 | 131 | 8100  | 3.85 | ng/ul | 0.00 |
| 44) Dimethylphthalate-d6       | 13.76 | 166 | 30124 | 5.46 | ng/ul | 0.00 |
| 47) Acenaphthylene-d8          | 14.04 | 160 | 34893 | 5.55 | ng/ul | 0.00 |
| 52) 4-Nitrophenol-d4           | 14.56 | 143 | 3231  | 3.01 | ng/ul | 0.00 |
| 58) Fluorene-d10               | 15.35 | 176 | 28424 | 6.23 | ng/ul | 0.00 |
| 63) 4,6-Dinitro-2-methylphenol | 15.47 | 200 | 2268  | 2.46 | ng/ul | 0.00 |
| 71) Anthracene-d10             | 17.19 | 188 | 47629 | 6.41 | ng/ul | 0.00 |
| 79) Pyrene-d10                 | 19.50 | 212 | 57901 | 6.70 | ng/ul | 0.00 |
| 90) Benzo(a)pyrene-d12         | 23.40 | 264 | 54216 | 6.46 | ng/ul | 0.00 |

## Target Compounds

|                          |       |     |        |       |        | Ovalue |
|--------------------------|-------|-----|--------|-------|--------|--------|
| 28) Naphthalene          | 10.53 | 128 | 277836 | 50.81 | ng/ul  | 100    |
| 34) 2-Methylnaphthalene  | 12.15 | 142 | 86001  | 21.06 | ng/ul  | 99     |
| 35) 1-Methylnaphthalene  | 12.37 | 142 | 52633  | 13.57 | ng/ul  | 98     |
| 41) 1,1'-Biphenyl        | 13.17 | 154 | 9293   | 1.71  | ng/ul  | 97     |
| 45) Dimethylphthalate    | 13.80 | 163 | 18442  | 3.27  | ng/ul  | 98     |
| 48) Acenaphthylene       | 14.07 | 152 | 7782   | 1.13  | ng/ul# | 93     |
| 50) Acenaphthene         | 14.41 | 153 | 8718   | 1.90  | ng/ul  | 99     |
| 59) Fluorene             | 15.40 | 166 | 14491  | 2.76  | ng/ul  | 98     |
| 70) Phenanthrene         | 17.14 | 178 | 102554 | 11.36 | ng/ul  | 99     |
| 72) Anthracene           | 17.23 | 178 | 20450  | 2.22  | ng/ul  | 99     |
| 77) Fluoranthene         | 19.16 | 202 | 35187  | 3.39  | ng/ul  | 99     |
| 80) Pyrene               | 19.53 | 202 | 59188  | 5.20  | ng/ul  | 97     |
| 83) Benzo(a)anthracene   | 21.28 | 228 | 23669  | 1.98  | ng/ul  | 92     |
| 85) Chrysene             | 21.33 | 228 | 21668  | 1.88  | ng/ul  | 97     |
| 88) Benzo(b)fluoranthene | 22.87 | 252 | 12637  | 1.24  | ng/ul  | 95     |
| 91) Benzo(a)pyrene       | 23.44 | 252 | 14838  | 1.52  | ng/ul  | 97     |

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





#28

Naphthalene

Concen: 50.81 ng/ul

RT: 10.53 min Scan# 1266

Delta R.T. -0.01 min

Lab File: BM003654.D

Acq: 20 Dec 2015 14:53

Instrument :

BNA\_M

ClientSampleId :

G9C64DL

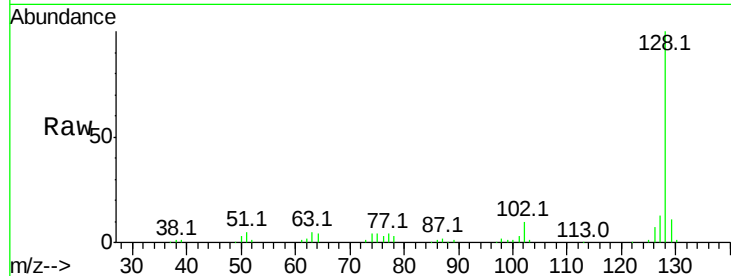
Tot Ion:128 Resp: 277836

Ion Ratio Lower Upper

128 100

129 11.0 8.8 13.2

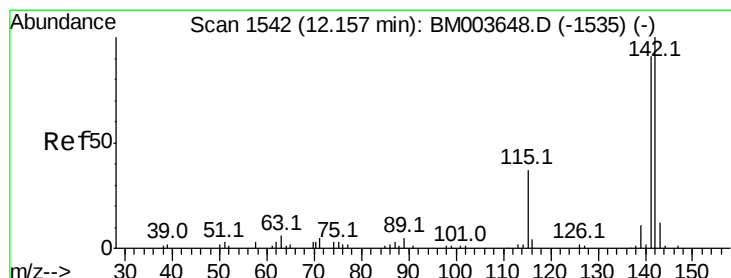
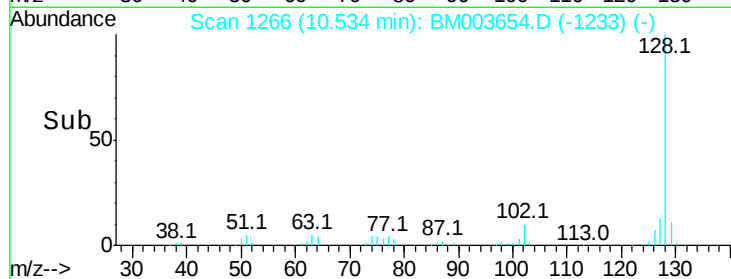
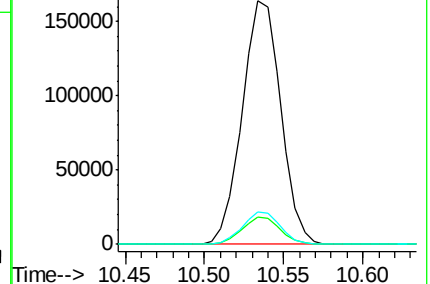
127 13.3 10.5 15.7



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



#34

2-Methylnaphthalene

Concen: 21.06 ng/ul

RT: 12.15 min Scan# 1541

Delta R.T. -0.01 min

Lab File: BM003654.D

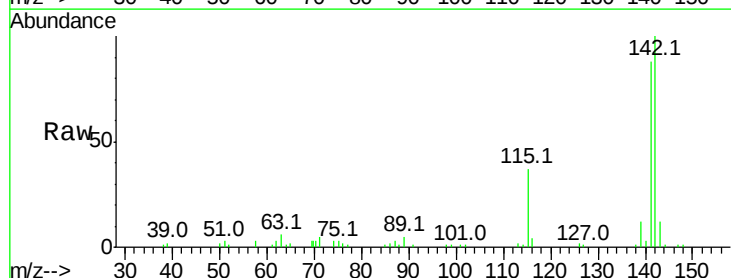
Acq: 20 Dec 2015 14:53

Tgt Ion:142 Resp: 86001

Ion Ratio Lower Upper

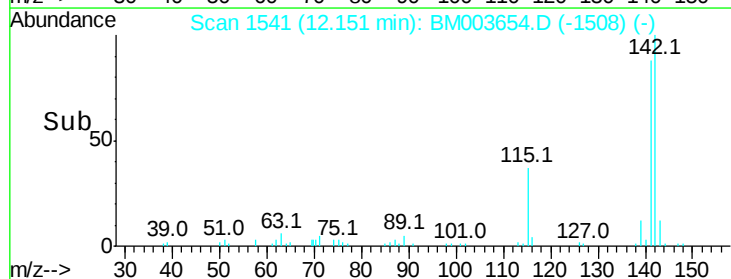
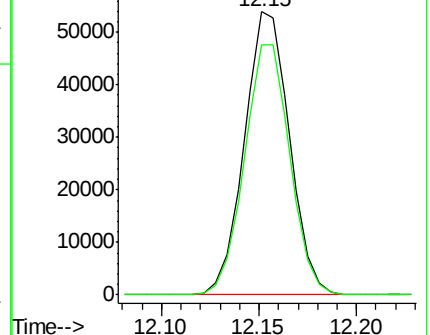
142 100

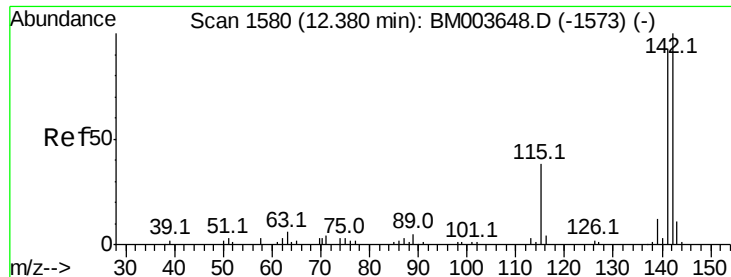
141 88.4 71.6 107.4



Abundance Ion 142.00 (141.70 to 142.70): E

Ion 141.00 (140.70 to 141.70): E

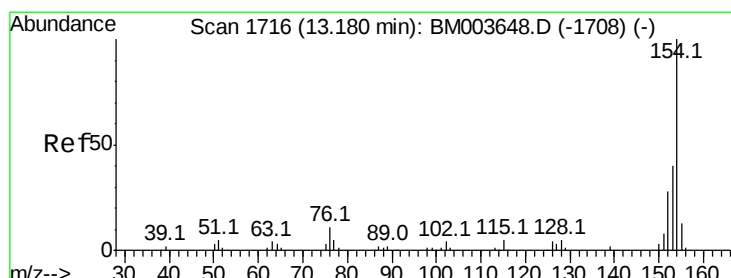
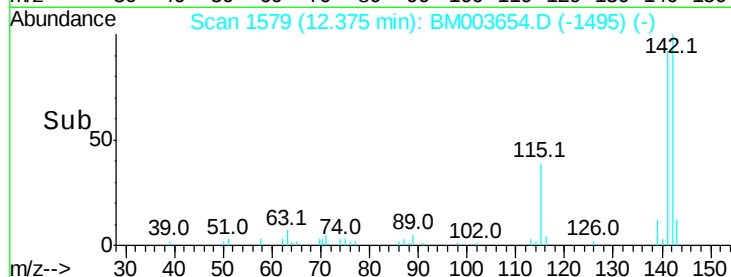
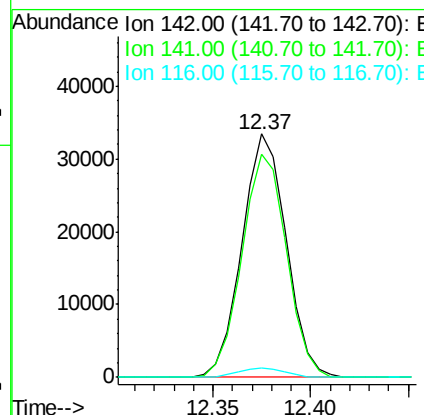
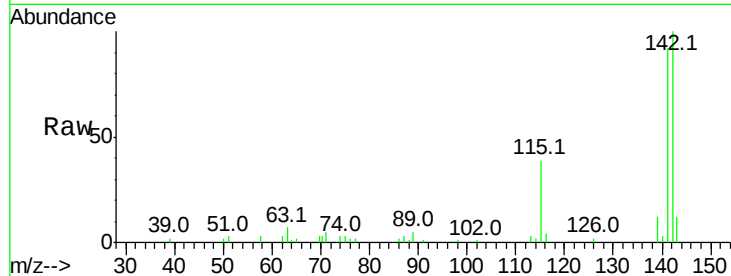




#35  
 1-Methylnaphthalene  
 Concen: 13.57 ng/ul  
 RT: 12.37 min Scan# 1579  
 Delta R.T. -0.01 min  
 Lab File: BM003654.D  
 Acq: 20 Dec 2015 14:53

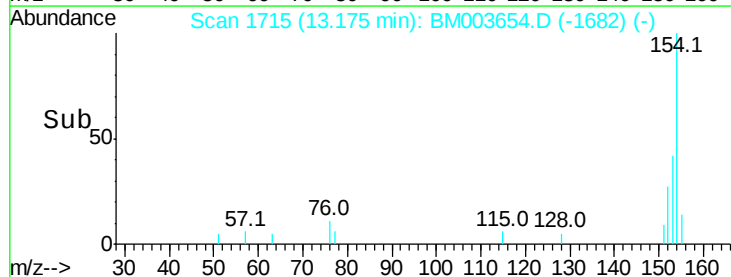
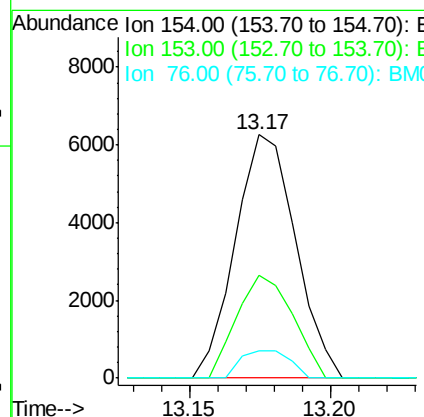
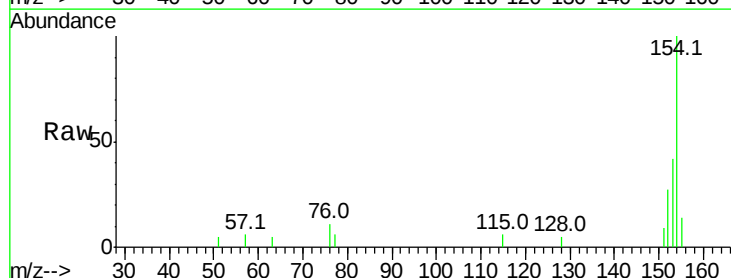
Instrument :  
 BNA\_M  
 ClientSampleId :  
 G9C64DL

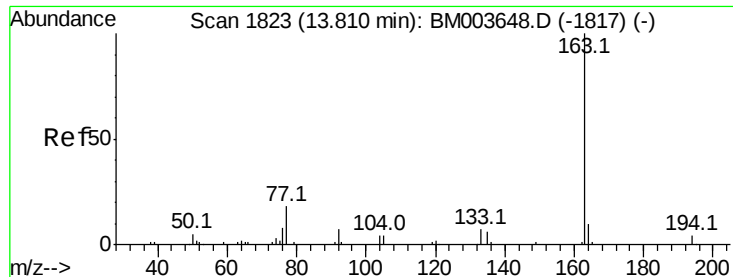
Tot Ion:142 Resp: 52633  
 Ion Ratio Lower Upper  
 142 100  
 141 91.8 74.9 112.3  
 116 3.8 3.1 4.7



#41  
 1,1'-Biphenyl  
 Concen: 1.71 ng/ul  
 RT: 13.17 min Scan# 1715  
 Delta R.T. -0.01 min  
 Lab File: BM003654.D  
 Acq: 20 Dec 2015 14:53

Tgt Ion:154 Resp: 9293  
 Ion Ratio Lower Upper  
 154 100  
 153 42.4 32.1 48.1  
 76 11.2 9.5 14.3

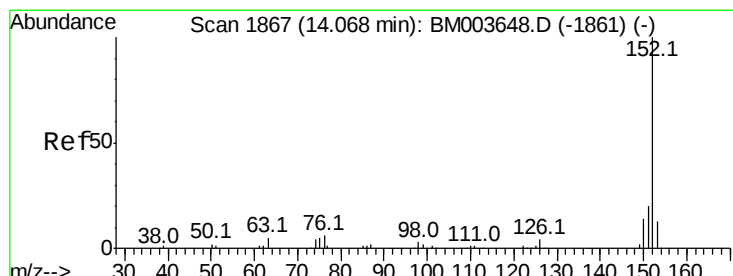
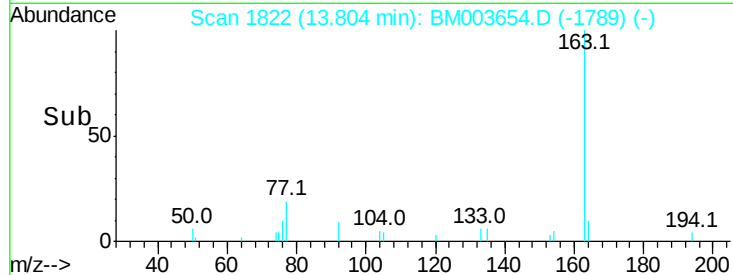
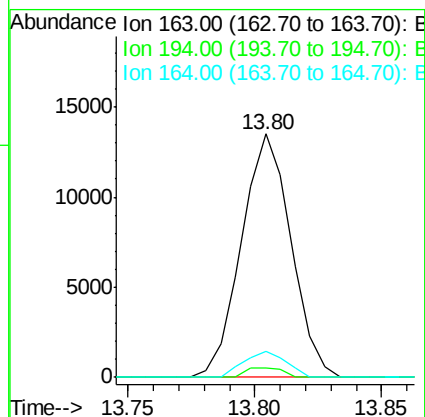
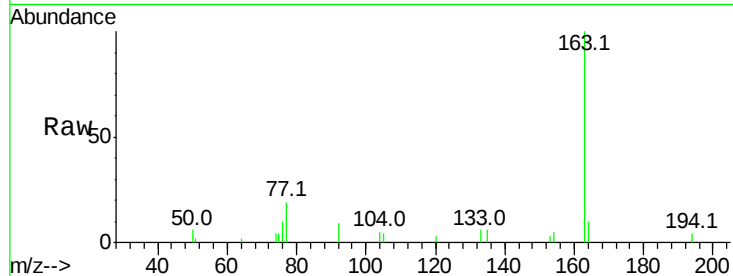




#45  
Dimethylphthalate  
Concen: 3.27 ng/ul  
RT: 13.80 min Scan# 1822  
Delta R.T. -0.01 min  
Lab File: BM003654.D  
Acq: 20 Dec 2015 14:53

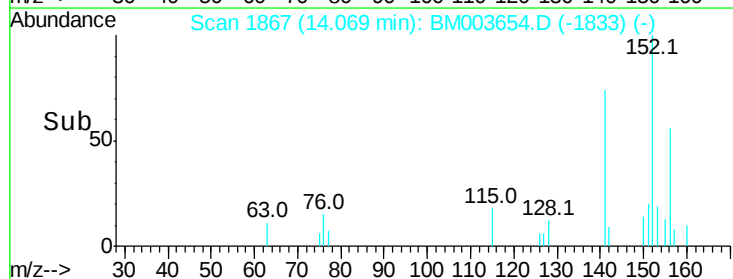
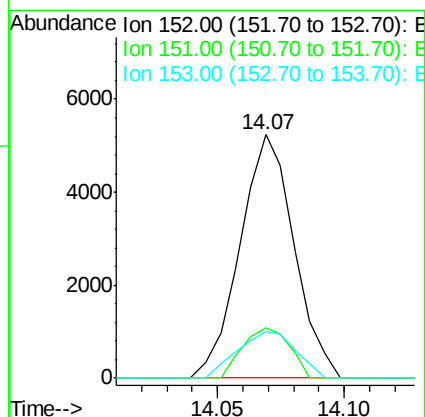
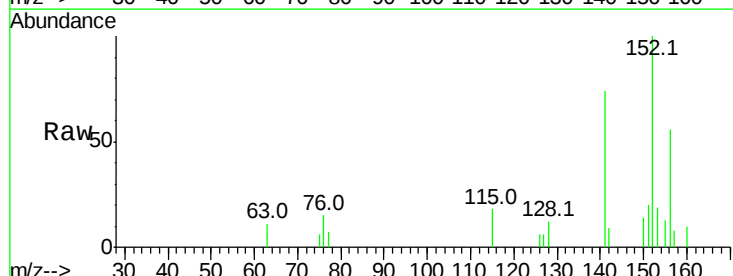
Instrument :  
BNA\_M  
ClientSampleId :  
G9C64DL

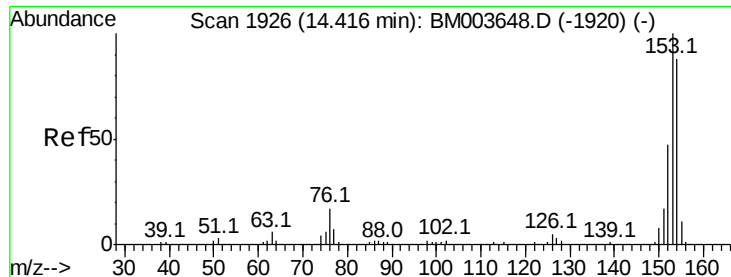
Tot Ion:163 Resp: 18442  
Ion Ratio Lower Upper  
163 100  
194 3.6 3.2 4.8  
164 10.5 7.8 11.8



#48  
Acenaphthylene  
Concen: 1.13 ng/ul  
RT: 14.07 min Scan# 1867  
Delta R.T. 0.00 min  
Lab File: BM003654.D  
Acq: 20 Dec 2015 14:53

Tgt Ion:152 Resp: 7782  
Ion Ratio Lower Upper  
152 100  
151 20.4 15.7 23.5  
153 19.3 10.5 15.7#





#50

Acenaphthene

Concen: 1.90 ng/ul

RT: 14.41 min Scan# 1925

Delta R.T. -0.01 min

Lab File: BM003654.D

Acq: 20 Dec 2015 14:53

Instrument :

BNA\_M

ClientSampleId :

G9C64DL

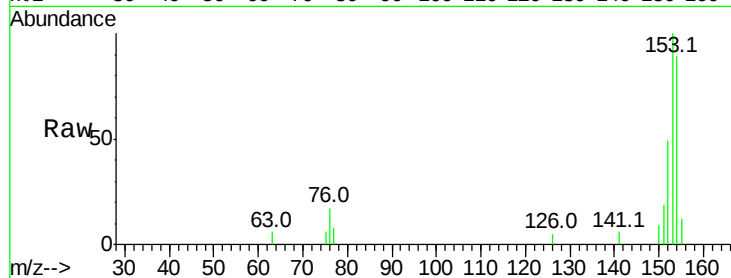
Tot Ion:153 Resp: 8718

Ion Ratio Lower Upper

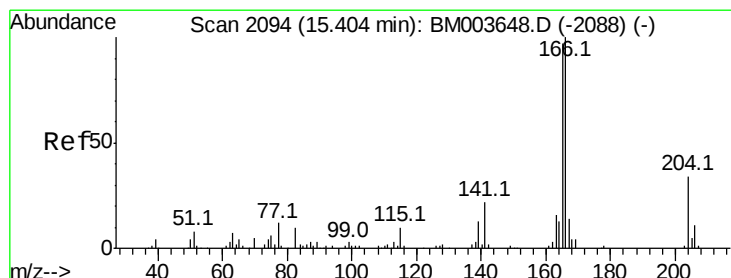
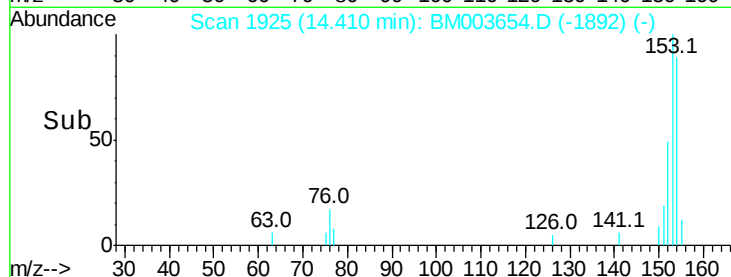
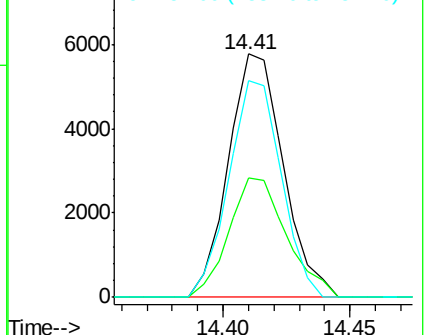
153 100

152 49.0 38.3 57.5

154 88.9 71.8 107.8



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: 2.76 ng/ul

RT: 15.40 min Scan# 2093

Delta R.T. -0.01 min

Lab File: BM003654.D

Acq: 20 Dec 2015 14:53

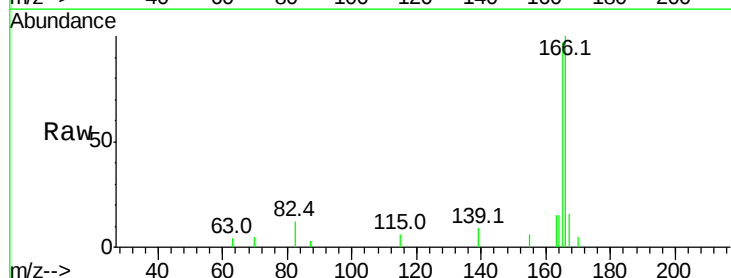
Tgt Ion:166 Resp: 14491

Ion Ratio Lower Upper

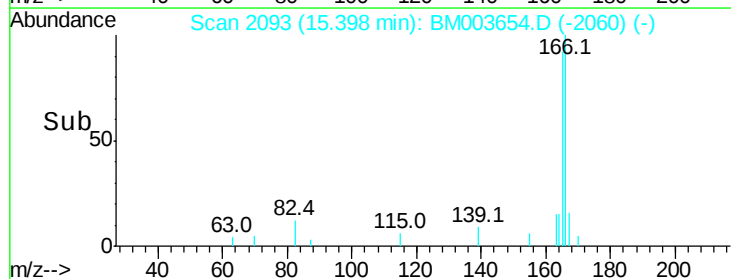
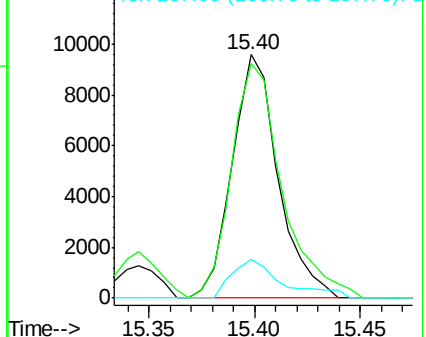
166 100

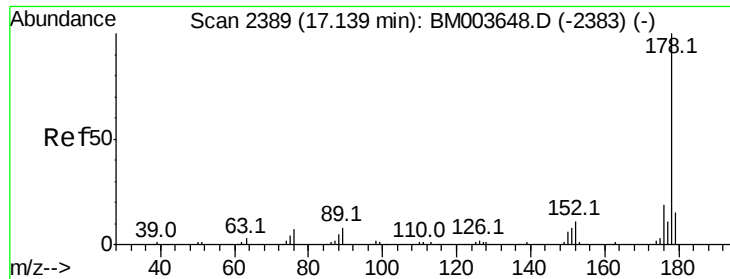
165 96.6 78.5 117.7

167 15.8 10.7 16.1



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: 11.36 ng/ul

RT: 17.14 min Scan# 2389

Delta R.T. 0.00 min

Lab File: BM003654.D

Acq: 20 Dec 2015 14:53

Instrument :

BNA\_M

ClientSampleId :

G9C64DL

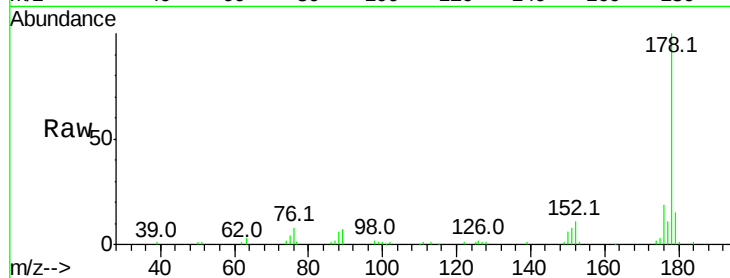
Tot Ion:178 Resp: 102554

Ion Ratio Lower Upper

178 100

179 15.4 12.2 18.4

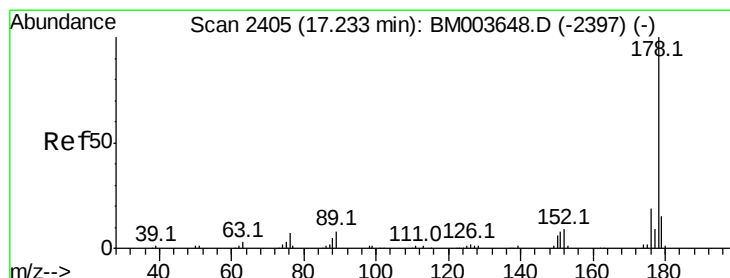
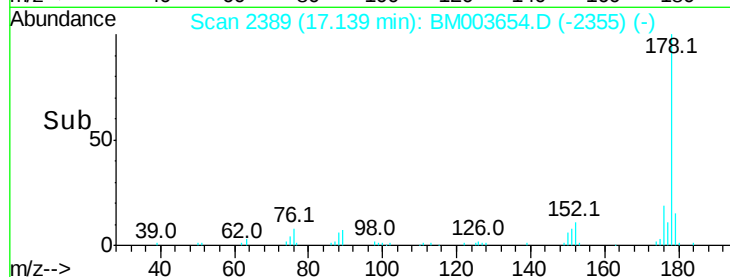
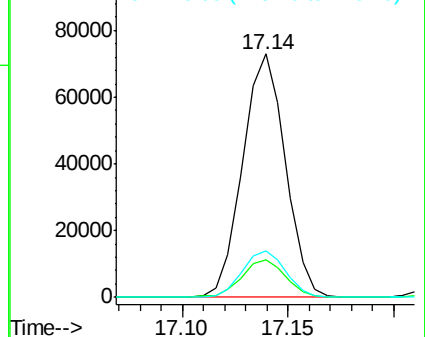
176 19.1 15.6 23.4



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



#72

Anthracene

Concen: 2.22 ng/ul

RT: 17.23 min Scan# 2404

Delta R.T. -0.01 min

Lab File: BM003654.D

Acq: 20 Dec 2015 14:53

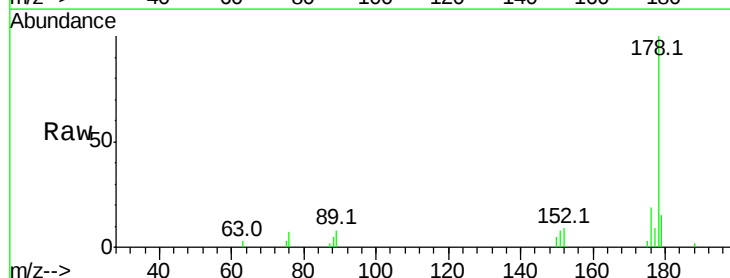
Tgt Ion:178 Resp: 20450

Ion Ratio Lower Upper

178 100

179 15.5 12.1 18.1

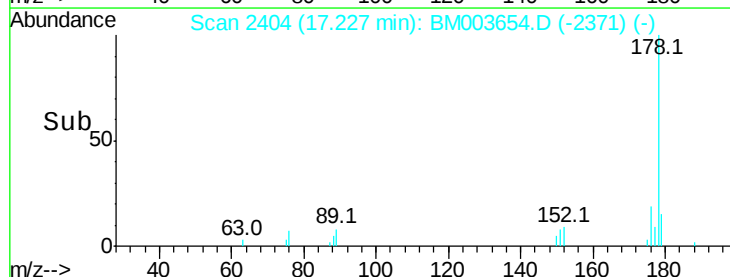
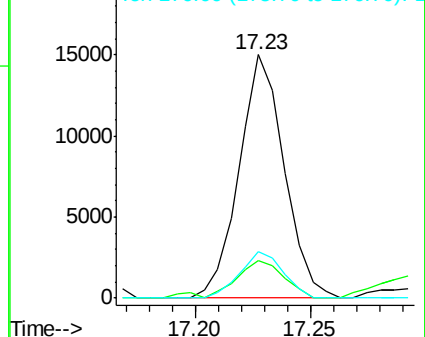
176 18.9 14.8 22.2

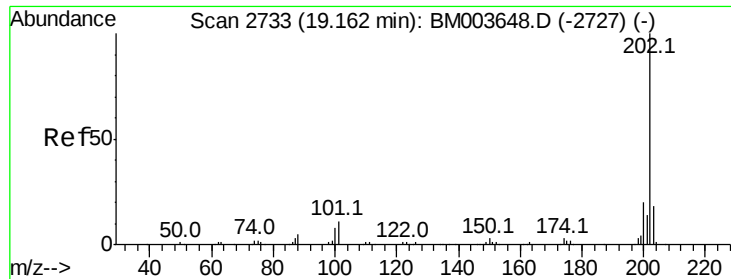


Abundance Ion 178.00 (177.70 to 178.70): E

Ion 179.00 (178.70 to 179.70): E

Ion 176.00 (175.70 to 176.70): E

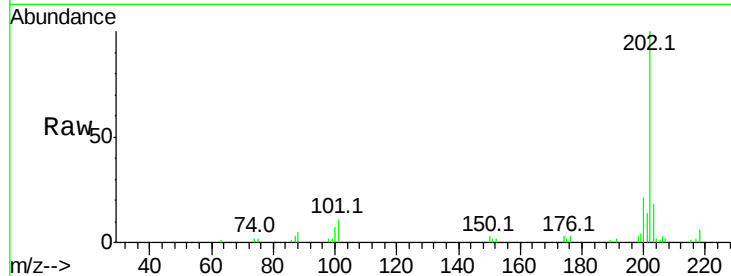




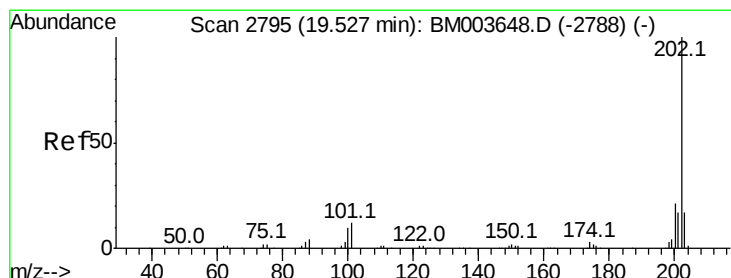
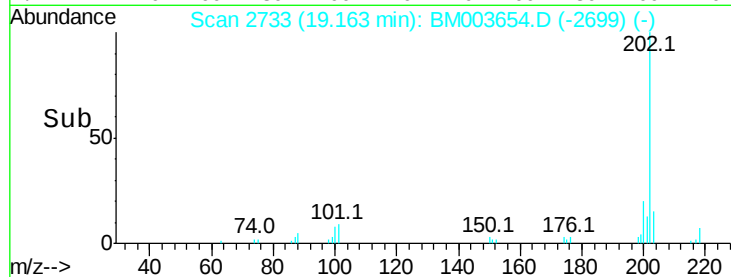
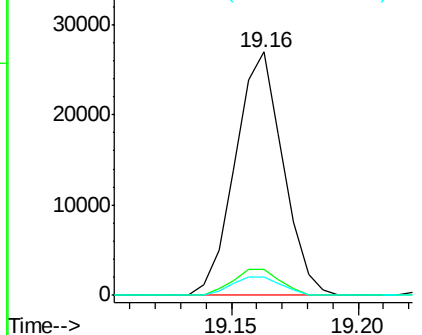
#77  
**Fluoranthene**  
 Concen: 3.39 ng/ul  
 RT: 19.16 min Scan# 2733  
 Delta R.T. 0.00 min  
 Lab File: BM003654.D  
 Acq: 20 Dec 2015 14:53

Instrument :  
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Tot Ion:202 Resp: 35187  
 Ion Ratio Lower Upper  
 202 100  
 101 10.7 8.8 13.2  
 100 7.4 6.6 9.8

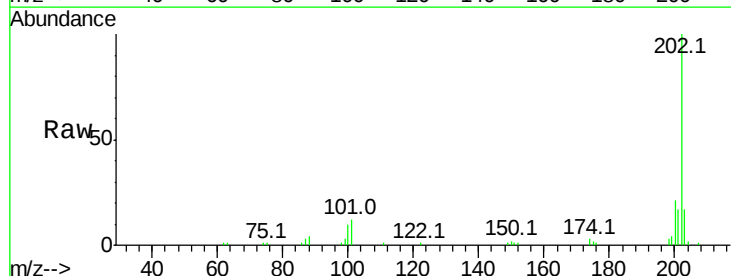


Abundance Ion 202.00 (201.70 to 202.70): E  
 Ion 101.00 (100.70 to 101.70): E  
 Ion 100.00 (99.70 to 100.70): B

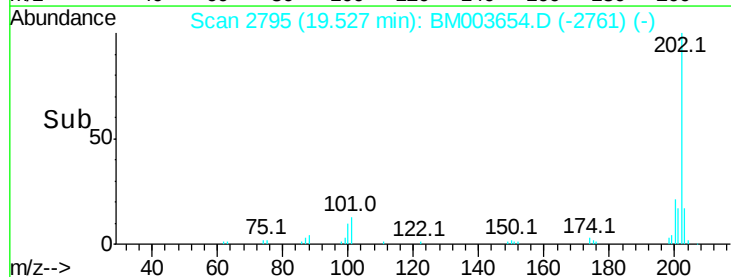
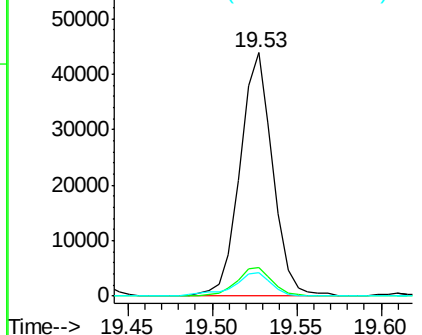


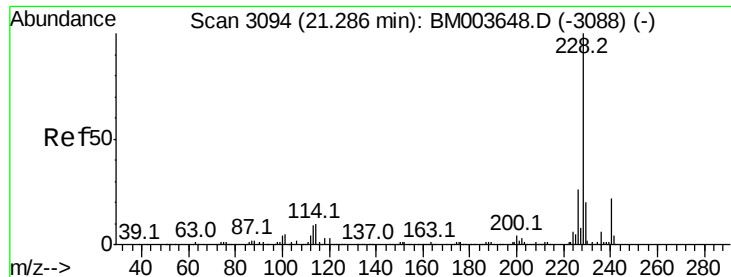
#80  
**Pyrene**  
 Concen: 5.20 ng/ul  
 RT: 19.53 min Scan# 2795  
 Delta R.T. 0.00 min  
 Lab File: BM003654.D  
 Acq: 20 Dec 2015 14:53

Tgt Ion:202 Resp: 59188  
 Ion Ratio Lower Upper  
 202 100  
 101 11.7 10.2 15.2  
 100 9.6 8.5 12.7



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





#83

Benzo(a)anthracene

Concen: 1.98 ng/ul

RT: 21.28 min Scan# 3093

Delta R.T. -0.01 min

Lab File: BM003654.D

Acq: 20 Dec 2015 14:53

Instrument :

BNA\_M

ClientSampleId :

G9C64DL

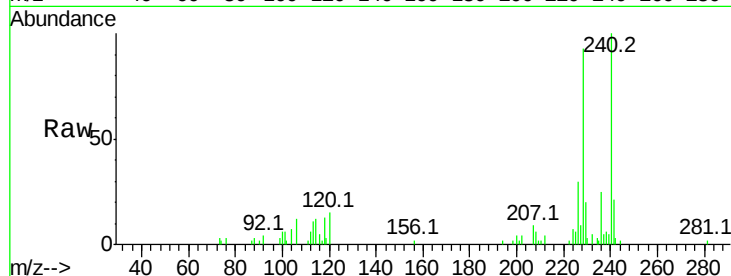
Tot Ion:228 Resp: 23669

Ion Ratio Lower Upper

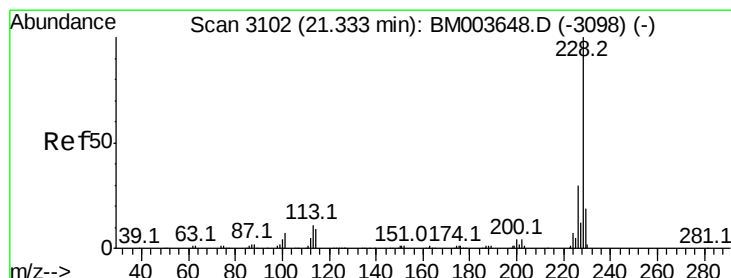
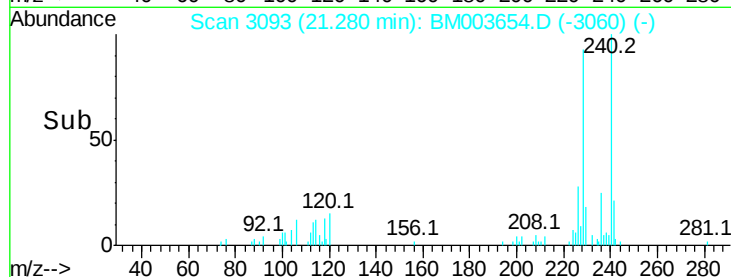
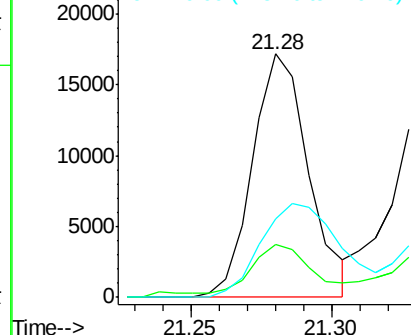
228 100

229 22.0 15.7 23.5

226 32.5 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: 1.88 ng/ul

RT: 21.33 min Scan# 3102

Delta R.T. 0.00 min

Lab File: BM003654.D

Acq: 20 Dec 2015 14:53

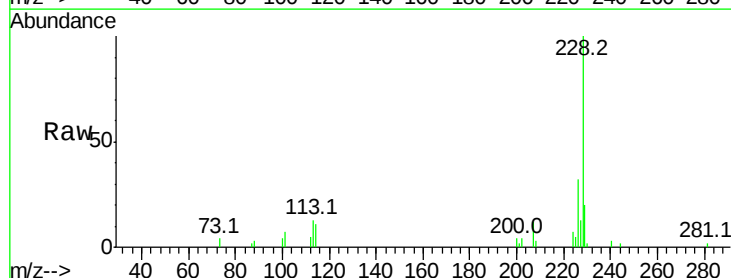
Tgt Ion:228 Resp: 21668

Ion Ratio Lower Upper

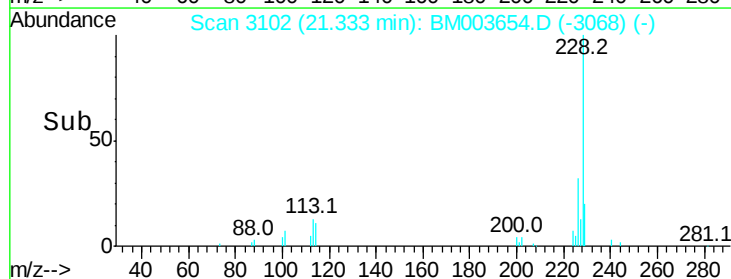
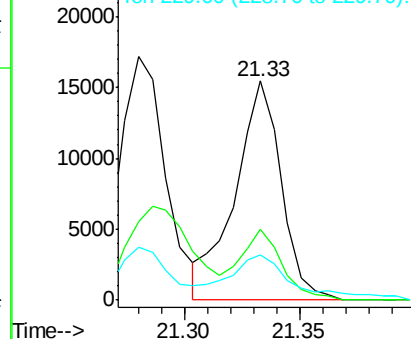
228 100

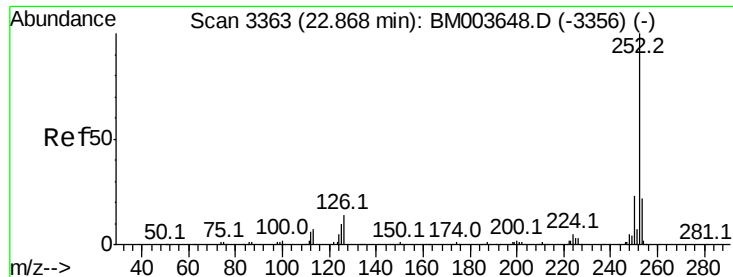
226 32.3 24.0 36.0

229 20.5 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

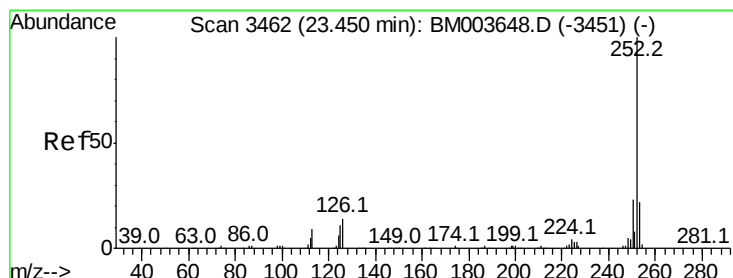
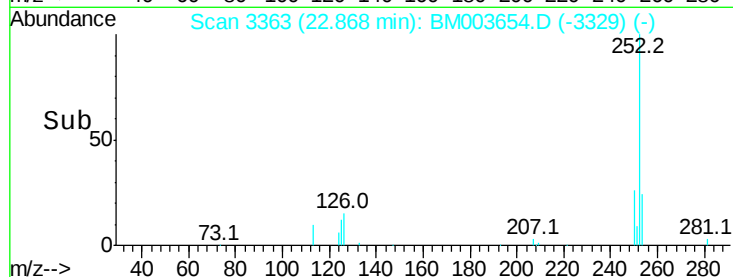
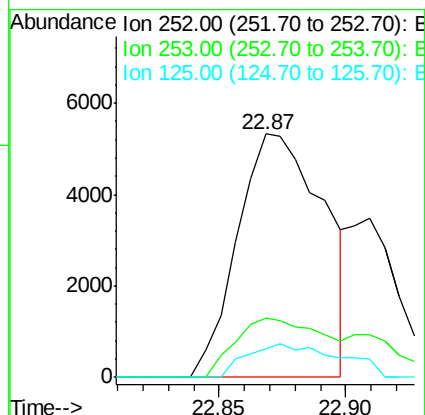
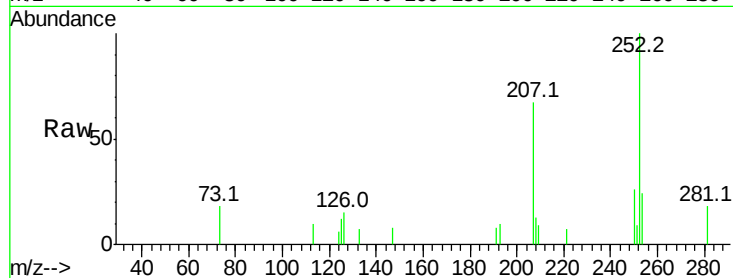




#88  
Benzo(b)fluoranthene  
Concen: 1.24 ng/ul  
RT: 22.87 min Scan# 3363  
Delta R.T. 0.00 min  
Lab File: BM003654.D  
Acq: 20 Dec 2015 14:53

Instrument :  
BNA\_M  
ClientSampleId :  
G9C64DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 24.4  | 17.5  | 26.3  |
| 125     | 11.9  | 8.5   | 12.7  |



#91  
Benzo(a)pyrene  
Concen: 1.52 ng/ul  
RT: 23.44 min Scan# 3461  
Delta R.T. -0.01 min  
Lab File: BM003654.D  
Acq: 20 Dec 2015 14:53

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.4  | 17.2  | 25.8  |
| 125     | 13.0  | 9.0   | 13.6  |

