

Data Path : Z:\HPCHEM1\BNA M\DATA\BM122015\  
 Data File : BM003653.D  
 Acq On : 20 Dec 2015 14:18  
 Operator : UM/SJ  
 Sample : G4801-15DL 5X  
 Misc :  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 G9C63DL

Quant Time: Dec 21 02:22:58 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  | 19061    | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 10.49 | 136  | 92763    | 20.00 | ng/ul | 0.00     |
| 36) Acenaphthene-d10      | 14.35 | 164  | 58675    | 20.00 | ng/ul | 0.00     |
| 62) Phenanthrene-d10      | 17.10 | 188  | 143619   | 20.00 | ng/ul | 0.00     |
| 78) Chrysene-d12          | 21.30 | 240  | 189244   | 20.00 | ng/ul | 0.00     |
| 86) Perylene-d12          | 23.54 | 264  | 176541   | 20.00 | ng/ul | 0.00     |

## System Monitoring Compounds

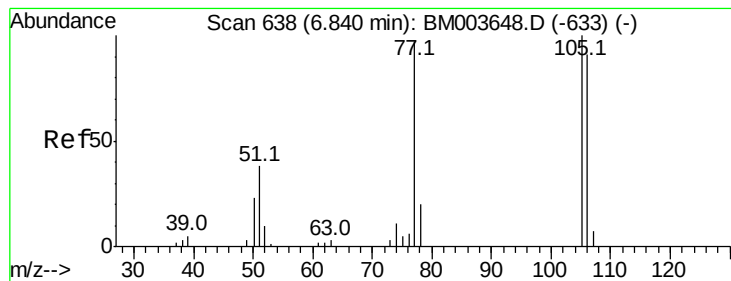
|                                |       |     |       |      |       |      |
|--------------------------------|-------|-----|-------|------|-------|------|
| 3) 1,4-Dioxane-d8              | 0.00  | 96  | 0     | 0.00 | ng/uL |      |
| 5) Phenol-d5                   | 6.87  | 99  | 4335  | 2.70 | ng/ul | 0.00 |
| 7) Bis-(2-Chloroethyl)ether-d  | 7.03  | 67  | 2785  | 3.25 | ng/ul | 0.00 |
| 9) 2-Chlorophenol-d4           | 7.23  | 132 | 3993  | 3.05 | ng/ul | 0.00 |
| 13) 4-Methylphenol-d8          | 8.40  | 113 | 2819  | 2.03 | ng/ul | 0.00 |
| 19) Nitrobenzene-d5            | 8.85  | 128 | 1845  | 2.74 | ng/ul | 0.00 |
| 22) 2-Nitrophenol-d4           | 9.57  | 143 | 1852  | 2.45 | ng/ul | 0.00 |
| 26) 2,4-Dichlorophenol-d3      | 10.12 | 165 | 3702  | 2.68 | ng/ul | 0.00 |
| 29) 4-Chloroaniline-d4         | 10.63 | 131 | 4120  | 2.24 | ng/ul | 0.00 |
| 44) Dimethylphthalate-d6       | 13.76 | 166 | 16295 | 3.36 | ng/ul | 0.00 |
| 47) Acenaphthylene-d8          | 14.04 | 160 | 19241 | 3.49 | ng/ul | 0.00 |
| 52) 4-Nitrophenol-d4           | 14.56 | 143 | 1168  | 1.24 | ng/ul | 0.00 |
| 58) Fluorene-d10               | 15.34 | 176 | 15811 | 3.94 | ng/ul | 0.00 |
| 63) 4,6-Dinitro-2-methylphenol | 15.47 | 200 | 783   | 0.97 | ng/ul | 0.00 |
| 71) Anthracene-d10             | 17.19 | 188 | 24897 | 3.81 | ng/ul | 0.00 |
| 79) Pyrene-d10                 | 19.50 | 212 | 29861 | 3.61 | ng/ul | 0.00 |
| 90) Benzo(a)pyrene-d12         | 23.40 | 264 | 31381 | 3.58 | ng/ul | 0.00 |

## Target Compounds

|                          |       |     |        |       |        | Ovalue |
|--------------------------|-------|-----|--------|-------|--------|--------|
| 4) Benzaldehyde          | 6.85  | 77  | 1004   | 1.08  | ng/ul# | 1      |
| 17) Hexachloroethane     | 8.79  | 117 | 1861   | 3.59  | ng/ul# | 7      |
| 28) Naphthalene          | 10.54 | 128 | 355852 | 74.46 | ng/ul  | 100    |
| 34) 2-Methylnaphthalene  | 12.16 | 142 | 138479 | 38.80 | ng/ul  | 100    |
| 35) 1-Methylnaphthalene  | 12.37 | 142 | 88537  | 26.11 | ng/ul  | 98     |
| 41) 1,1'-Biphenyl        | 13.17 | 154 | 12457  | 2.61  | ng/ul  | 99     |
| 45) Dimethylphthalate    | 13.80 | 163 | 11068  | 2.23  | ng/ul# | 95     |
| 48) Acenaphthylene       | 14.07 | 152 | 9372   | 1.55  | ng/ul# | 85     |
| 50) Acenaphthene         | 14.41 | 153 | 30166  | 7.48  | ng/ul  | 100    |
| 59) Fluorene             | 15.40 | 166 | 23107  | 5.00  | ng/ul  | 99     |
| 70) Phenanthrene         | 17.14 | 178 | 112240 | 14.13 | ng/ul  | 99     |
| 72) Anthracene           | 17.23 | 178 | 31417  | 3.88  | ng/ul  | 98     |
| 77) Fluoranthene         | 19.16 | 202 | 33201  | 3.64  | ng/ul  | 98     |
| 80) Pyrene               | 19.53 | 202 | 56642  | 5.20  | ng/ul  | 98     |
| 83) Benzo(a)anthracene   | 21.33 | 228 | 22923  | 2.01  | ng/ul  | 94     |
| 85) Chrysene             | 21.33 | 228 | 22923  | 2.08  | ng/ul  | 97     |
| 88) Benzo(b)fluoranthene | 22.87 | 252 | 12469  | 1.17  | ng/ul  | 97     |
| 91) Benzo(a)pyrene       | 23.44 | 252 | 12547  | 1.23  | ng/ul  | 96     |

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





#4

Benzaldehyde

Concen: 1.08 ng/ul

RT: 6.85 min Scan# 639

Delta R.T. 0.01 min

Lab File: BM003653.D

Acq: 20 Dec 2015 14:18

Instrument :

BNA\_M

ClientSampled :

G9C63DL

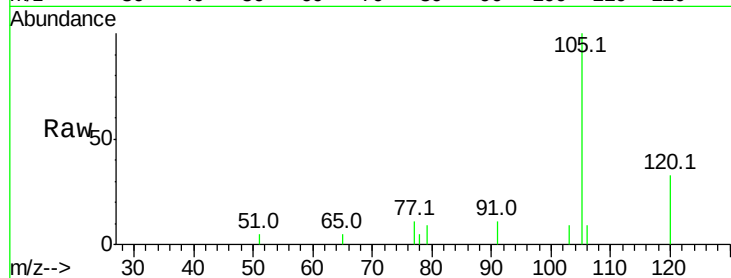
Tot Ion: 77 Resp: 1004

Ion Ratio Lower Upper

77 100

105 907.3 80.6 120.8#

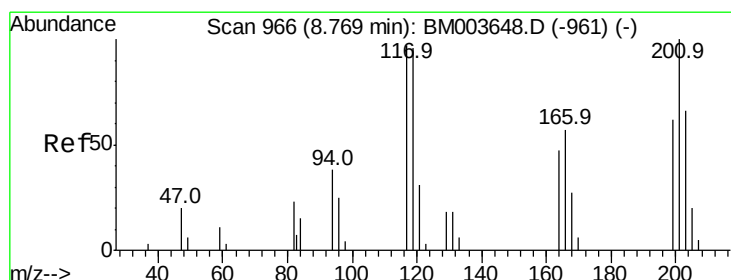
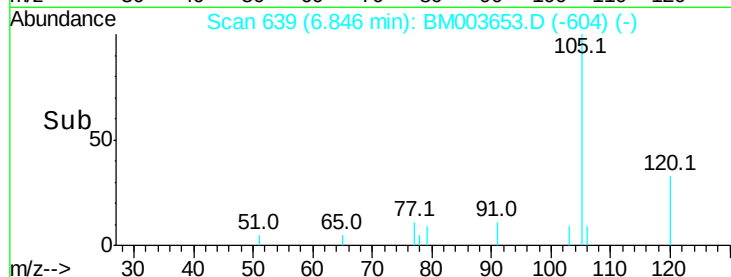
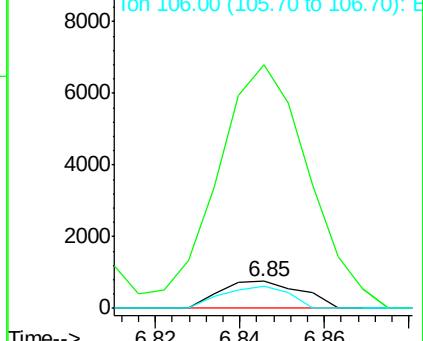
106 80.9 77.7 116.5



Abundance Ion 77.00 (76.70 to 77.70): BM003648.D (-633) (-)

Ion 105.00 (104.70 to 105.70): BM003648.D (-633) (-)

Ion 106.00 (105.70 to 106.70): BM003648.D (-633) (-)



#17

Hexachloroethane

Concen: 3.59 ng/ul

RT: 8.79 min Scan# 970

Delta R.T. 0.02 min

Lab File: BM003653.D

Acq: 20 Dec 2015 14:18

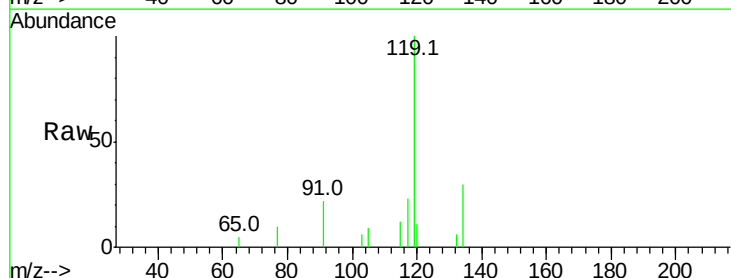
Tgt Ion: 117 Resp: 1861

Ion Ratio Lower Upper

117 100

201 0.0 81.5 122.3#

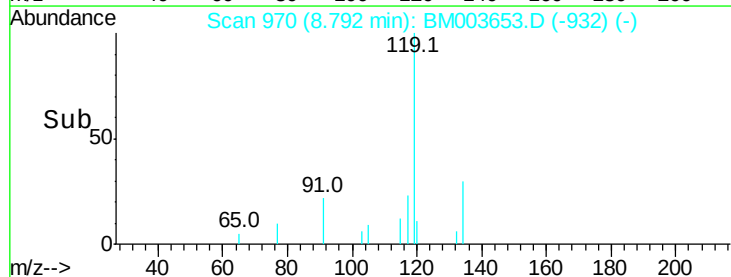
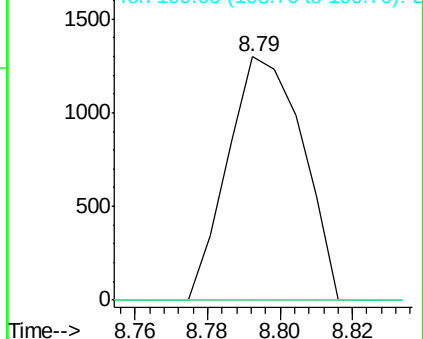
199 0.0 50.6 76.0#

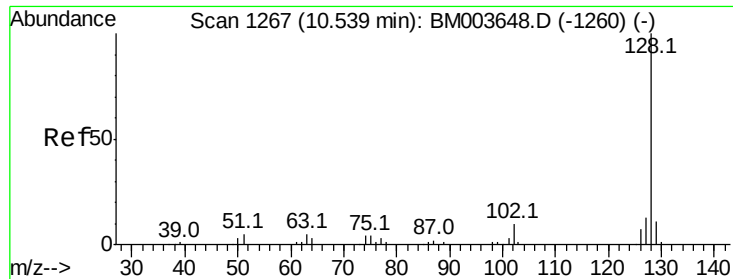


Abundance Ion 117.00 (116.70 to 117.70): BM003648.D (-961) (-)

Ion 201.00 (200.70 to 201.70): BM003648.D (-961) (-)

Ion 199.00 (198.70 to 199.70): BM003648.D (-961) (-)





#28

Naphthalene

Concen: 74.46 ng/ul

RT: 10.54 min Scan# 1267

Delta R.T. 0.00 min

Lab File: BM003653.D

Acq: 20 Dec 2015 14:18

Instrument :

BNA\_M

ClientSampled :

G9C63DL

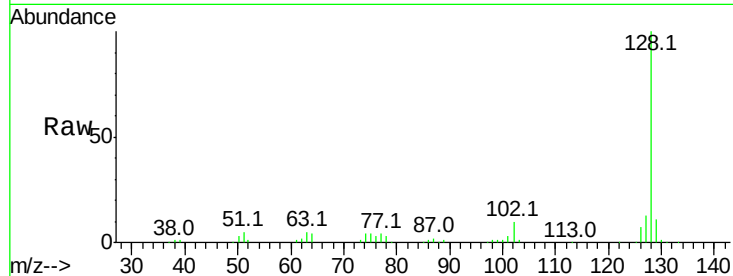
Tot Ion:128 Resp: 355852

Ion Ratio Lower Upper

128 100

129 10.8 8.8 13.2

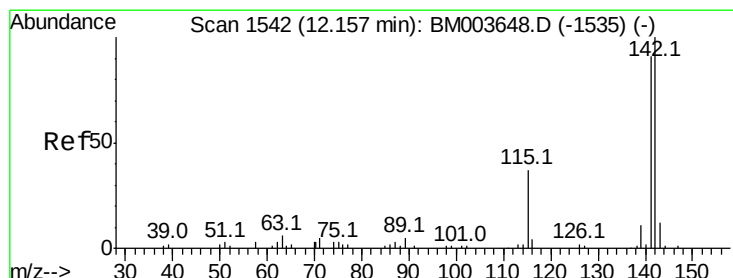
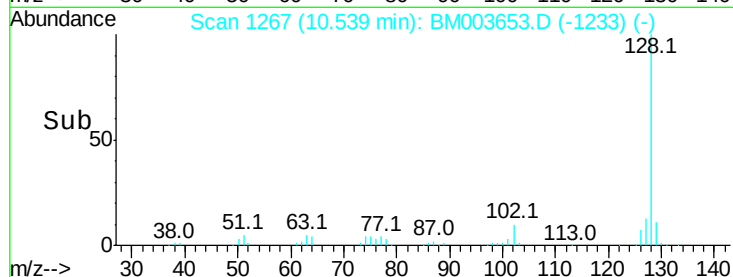
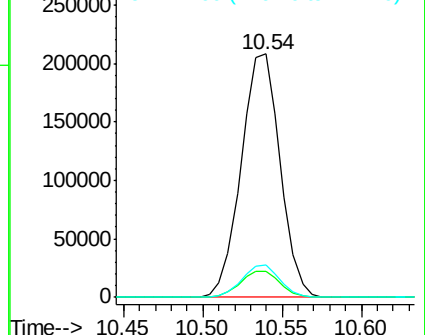
127 13.1 10.5 15.7



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: 38.80 ng/ul

RT: 12.16 min Scan# 1542

Delta R.T. 0.00 min

Lab File: BM003653.D

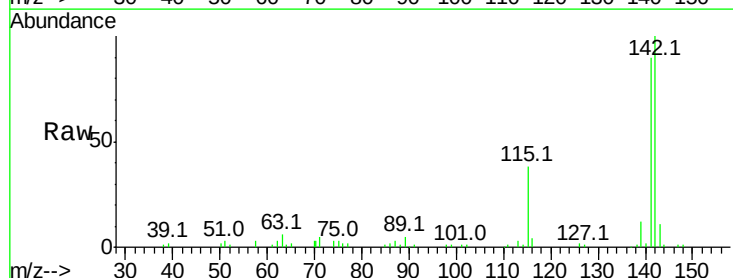
Acq: 20 Dec 2015 14:18

Tgt Ion:142 Resp: 138479

Ion Ratio Lower Upper

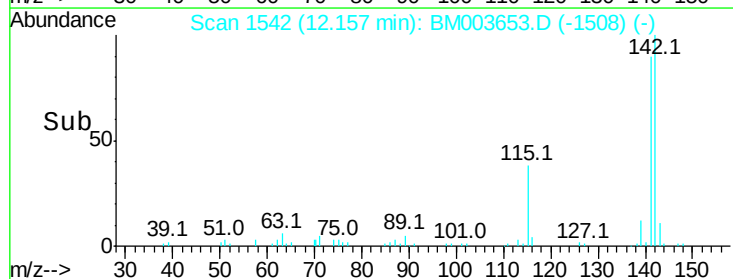
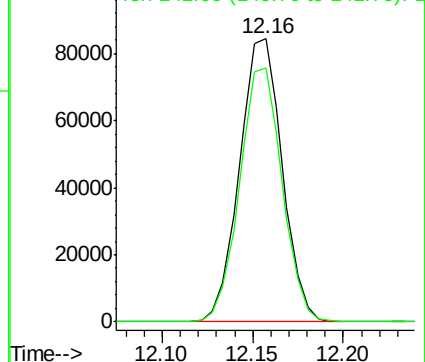
142 100

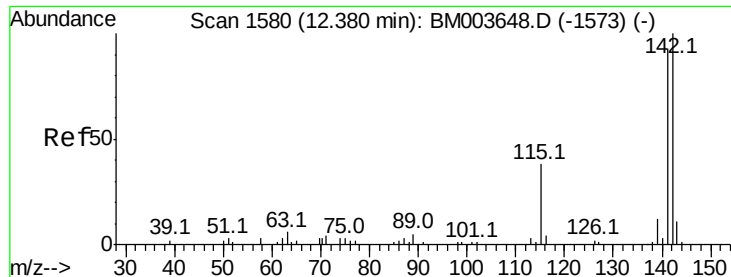
141 89.9 71.6 107.4



Abundance Ion 142.00 (141.70 to 142.70): E

Ion 141.00 (140.70 to 141.70): E

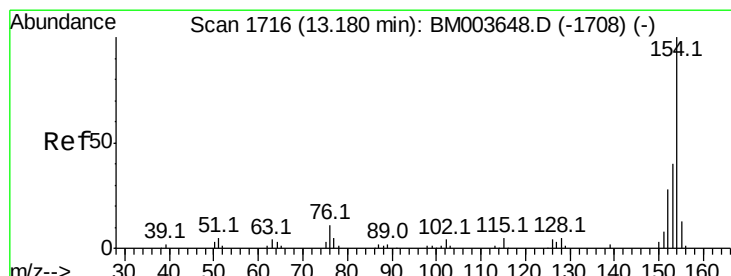
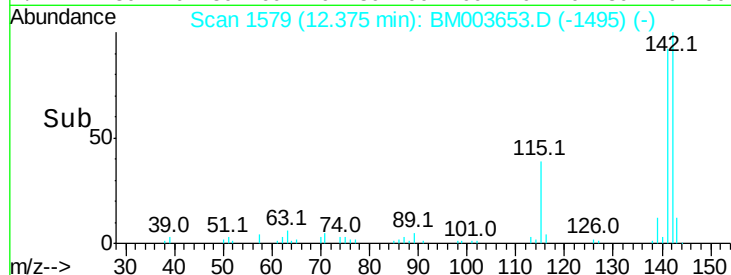
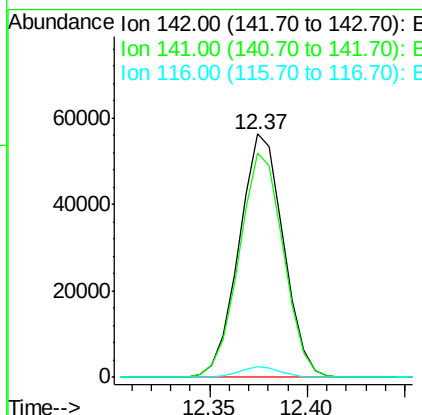
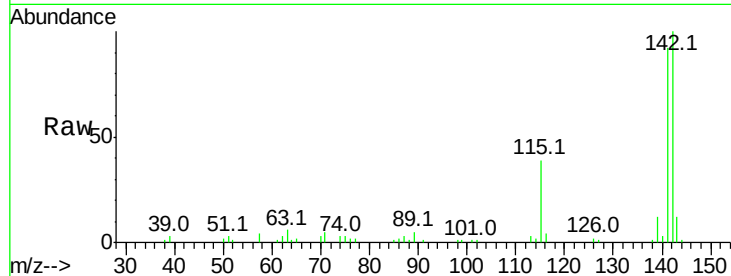




#35  
 1-Methylnaphthalene  
 Concen: 26.11 ng/ul  
 RT: 12.37 min Scan# 1579  
 Delta R.T. -0.01 min  
 Lab File: BM003653.D  
 Acq: 20 Dec 2015 14:18

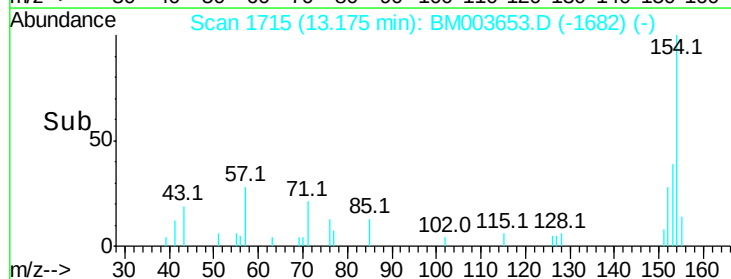
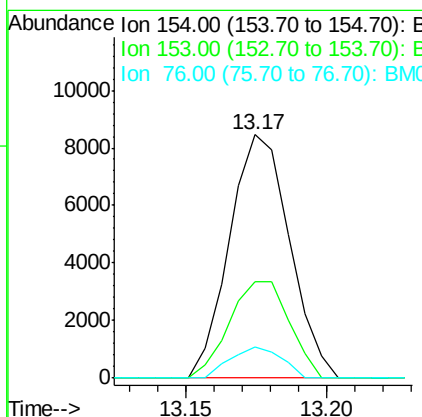
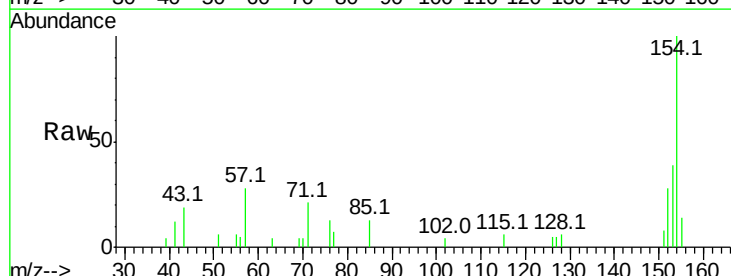
Instrument :  
 BNA\_M  
 ClientSampleId :  
 G9C63DL

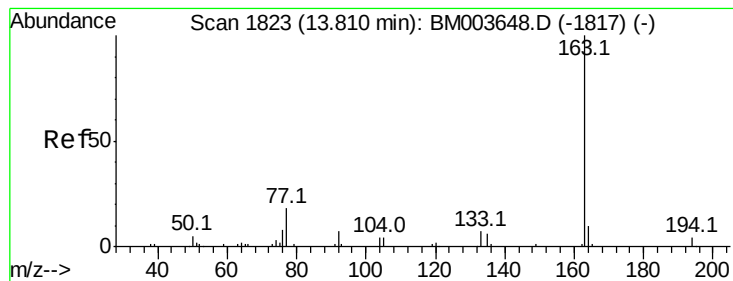
Tot Ion:142 Resp: 88537  
 Ion Ratio Lower Upper  
 142 100  
 141 92.1 74.9 112.3  
 116 4.4 3.1 4.7



#41  
 1,1'-Biphenyl  
 Concen: 2.61 ng/ul  
 RT: 13.17 min Scan# 1715  
 Delta R.T. -0.01 min  
 Lab File: BM003653.D  
 Acq: 20 Dec 2015 14:18

Tgt Ion:154 Resp: 12457  
 Ion Ratio Lower Upper  
 154 100  
 153 39.4 32.1 48.1  
 76 12.9 9.5 14.3





#45

Dimethylphthalate

Concen: 2.23 ng/ul

RT: 13.80 min Scan# 1822

Delta R.T. -0.01 min

Lab File: BM003653.D

Acq: 20 Dec 2015 14:18

Instrument :

BNA\_M

ClientSampleId :

G9C63DL

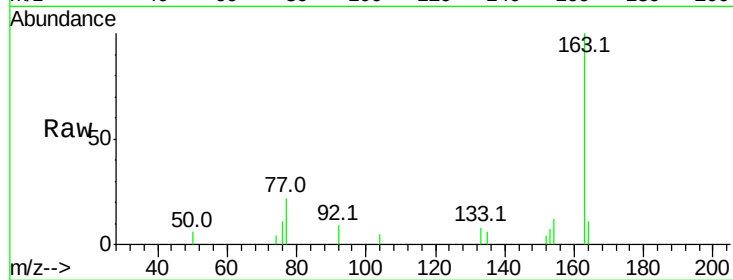
Tot Ion:163 Resp: 11068

Ion Ratio Lower Upper

163 100

194 0.0 3.2 4.8#

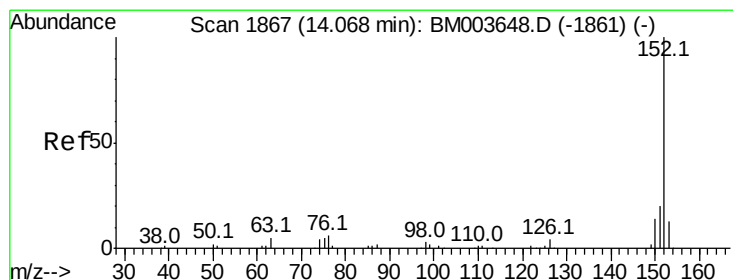
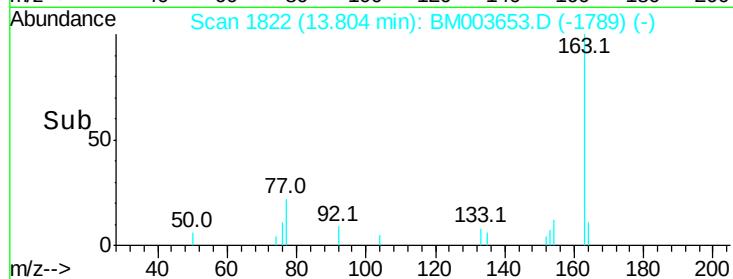
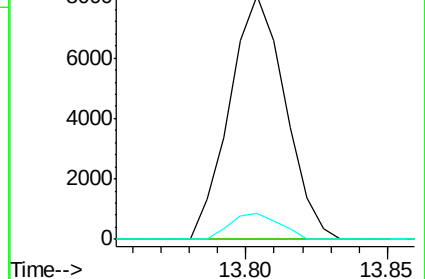
164 10.7 7.8 11.8



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: 1.55 ng/ul

RT: 14.07 min Scan# 1867

Delta R.T. 0.00 min

Lab File: BM003653.D

Acq: 20 Dec 2015 14:18

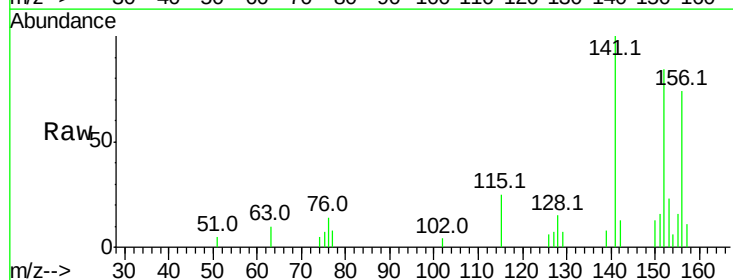
Tgt Ion:152 Resp: 9372

Ion Ratio Lower Upper

152 100

151 19.2 15.7 23.5

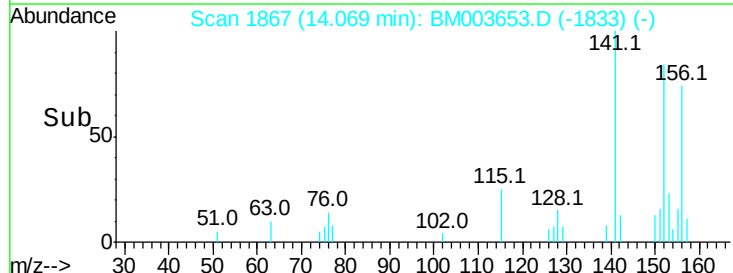
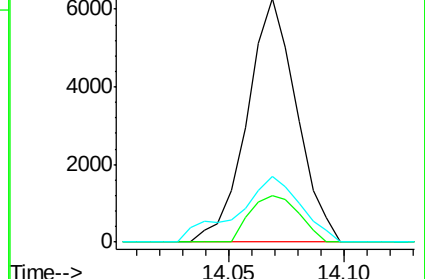
153 27.1 10.5 15.7#

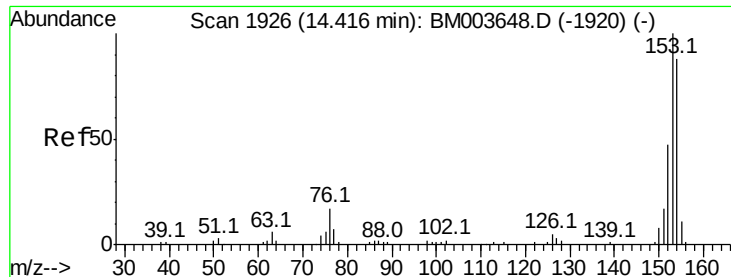


Abundance Ion 152.00 (151.70 to 152.70): E

Ion 151.00 (150.70 to 151.70): E

Ion 153.00 (152.70 to 153.70): E





#50

Acenaphthene

Concen: 7.48 ng/ul

RT: 14.41 min Scan# 1925

Delta R.T. -0.01 min

Lab File: BM003653.D

Acq: 20 Dec 2015 14:18

Instrument :

BNA\_M

ClientSampleId :

G9C63DL

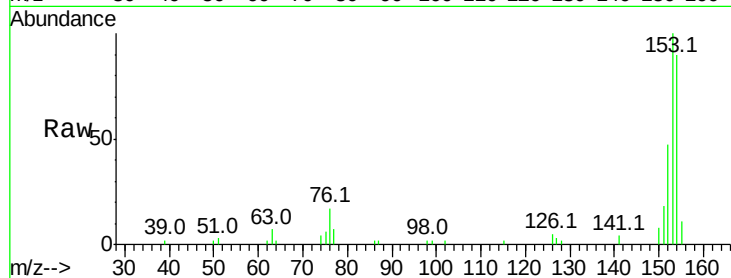
Tot Ion:153 Resp: 30166

Ion Ratio Lower Upper

153 100

152 47.2 38.3 57.5

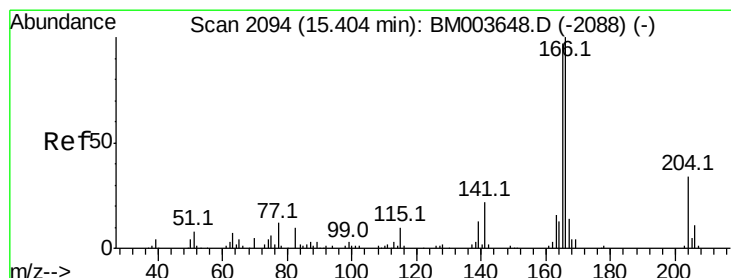
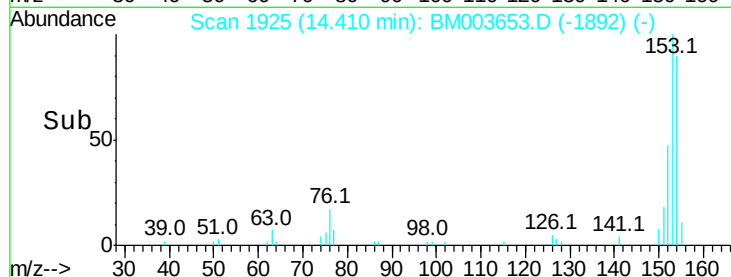
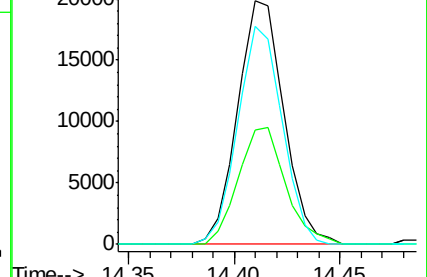
154 89.6 71.8 107.8



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: 5.00 ng/ul

RT: 15.40 min Scan# 2093

Delta R.T. -0.01 min

Lab File: BM003653.D

Acq: 20 Dec 2015 14:18

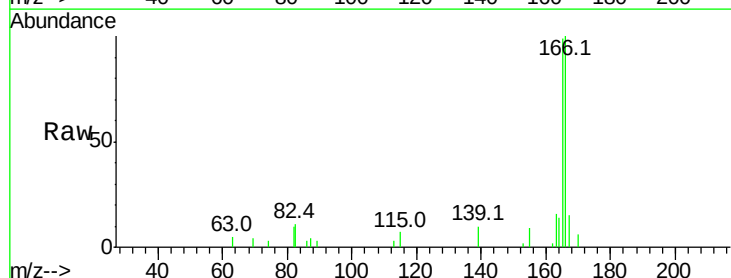
Tgt Ion:166 Resp: 23107

Ion Ratio Lower Upper

166 100

165 98.7 78.5 117.7

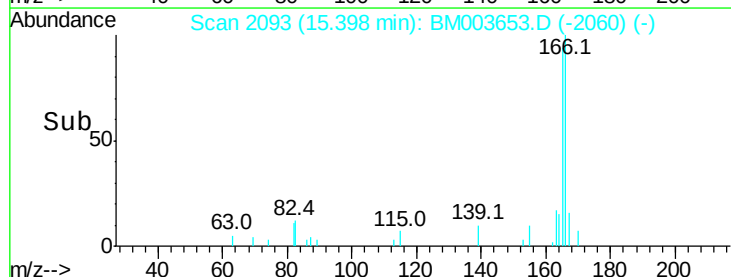
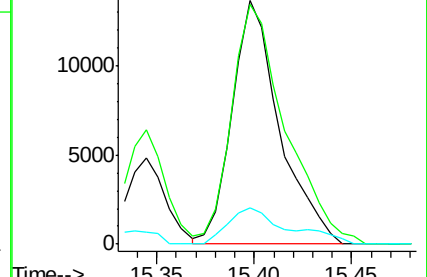
167 14.8 10.7 16.1

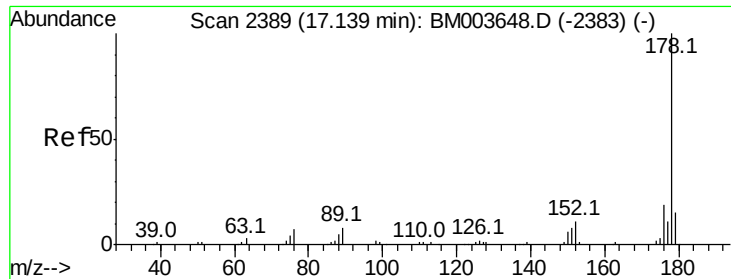


Abundance Ion 166.00 (165.70 to 166.70): E

Ion 165.00 (164.70 to 165.70): E

Ion 167.00 (166.70 to 167.70): E

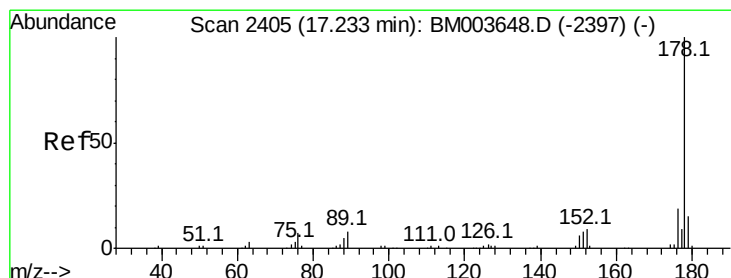
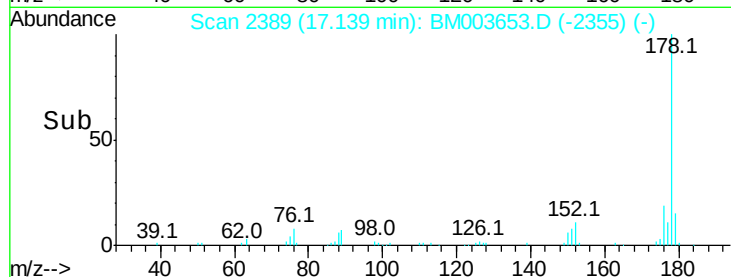
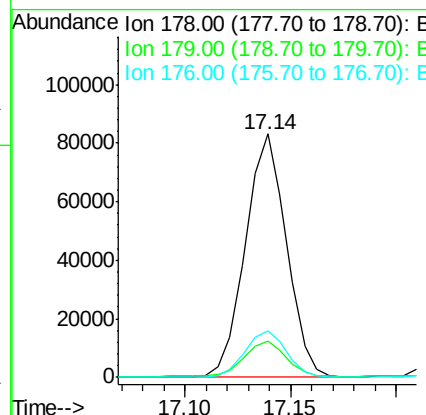
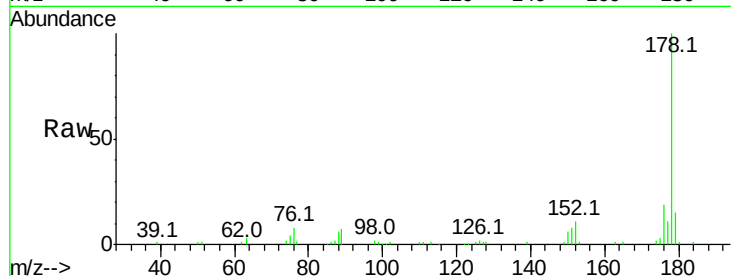




#70  
 Phenanthrene  
 Concen: 14.13 ng/ul  
 RT: 17.14 min Scan# 2389  
 Delta R.T. 0.00 min  
 Lab File: BM003653.D  
 Acq: 20 Dec 2015 14:18

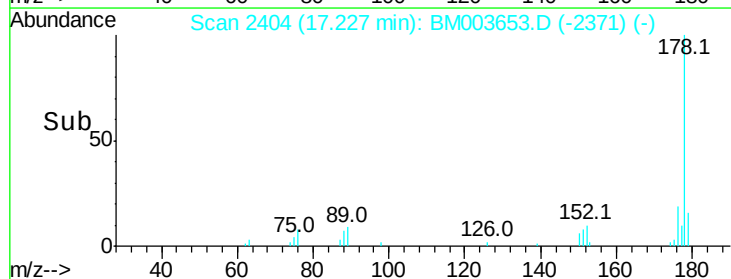
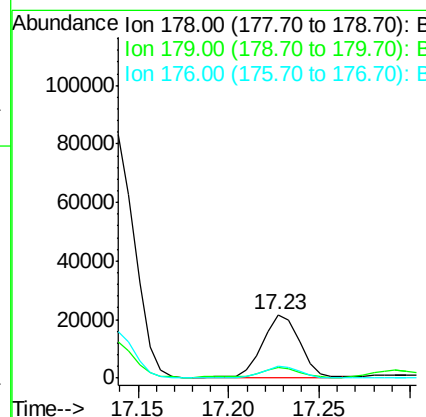
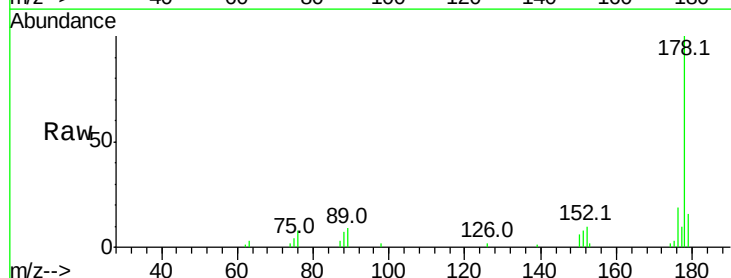
Instrument :  
 BNA\_M  
 ClientSampleId :  
 G9C63DL

Tot Ion:178 Resp: 112240  
 Ion Ratio Lower Upper  
 178 100  
 179 15.0 12.2 18.4  
 176 19.2 15.6 23.4

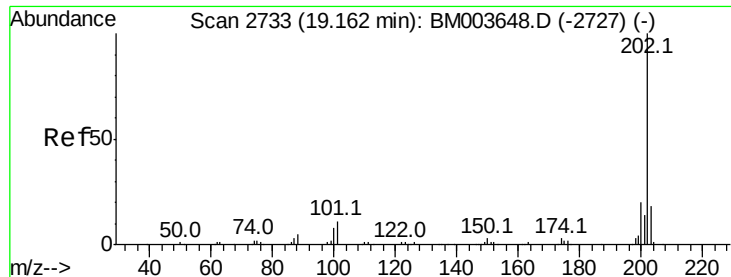


#72  
 Anthracene  
 Concen: 3.88 ng/ul  
 RT: 17.23 min Scan# 2404  
 Delta R.T. -0.01 min  
 Lab File: BM003653.D  
 Acq: 20 Dec 2015 14:18

Tgt Ion:178 Resp: 31417  
 Ion Ratio Lower Upper  
 178 100  
 179 16.0 12.1 18.1  
 176 19.1 14.8 22.2



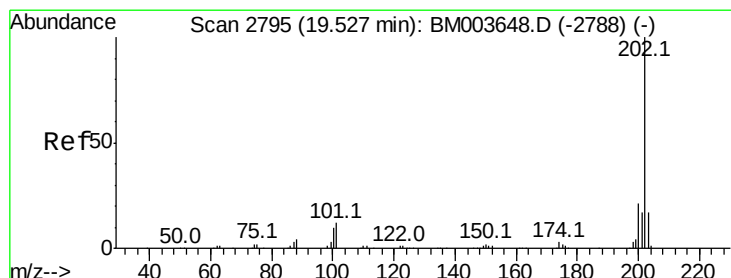
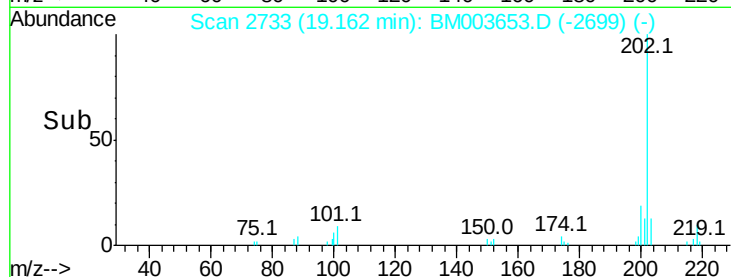
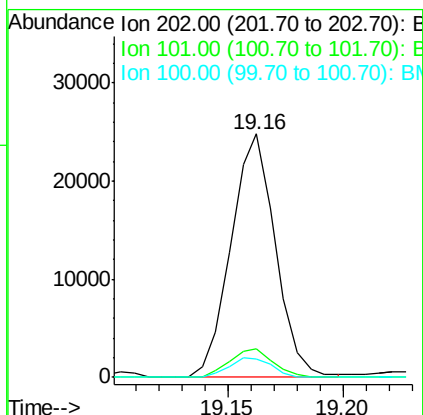
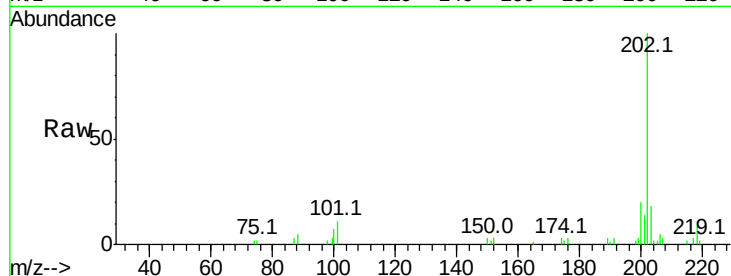




#77  
Fluoranthene  
Concen: 3.64 ng/ul  
RT: 19.16 min Scan# 2733  
Delta R.T. 0.00 min  
Lab File: BM003653.D  
Acq: 20 Dec 2015 14:18

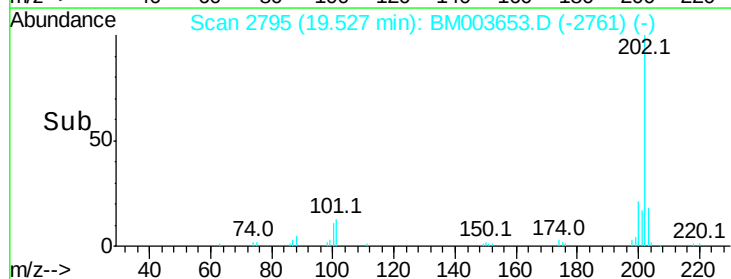
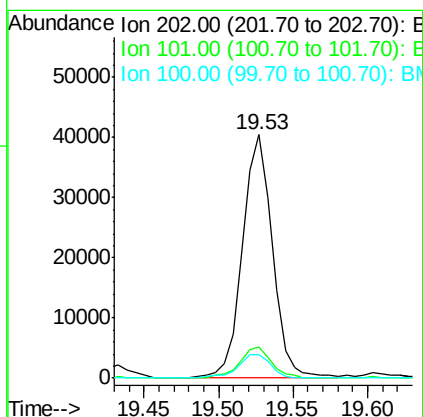
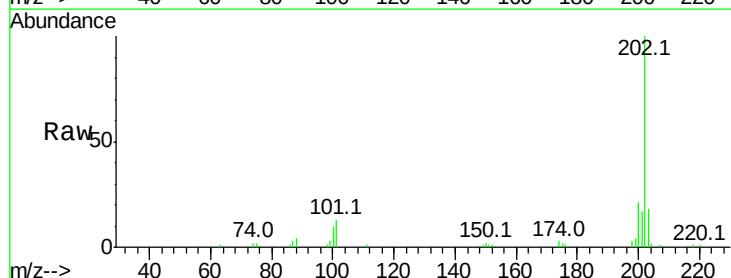
Instrument :  
BNA\_M  
ClientSampleId :  
G9C63DL

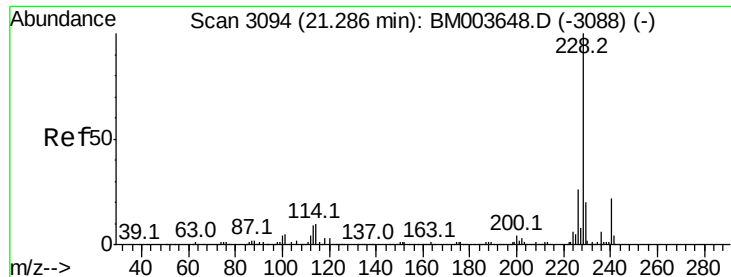
Tot Ion:202 Resp: 33201  
Ion Ratio Lower Upper  
202 100  
101 11.5 8.8 13.2  
100 7.4 6.6 9.8



#80  
Pyrene  
Concen: 5.20 ng/ul  
RT: 19.53 min Scan# 2795  
Delta R.T. 0.00 min  
Lab File: BM003653.D  
Acq: 20 Dec 2015 14:18

Tgt Ion:202 Resp: 56642  
Ion Ratio Lower Upper  
202 100  
101 13.0 10.2 15.2  
100 9.6 8.5 12.7





#83

Benzo(a)anthracene

Concen: 2.01 ng/ul

RT: 21.33 min Scan# 3102

Delta R.T. 0.05 min

Lab File: BM003653.D

Acq: 20 Dec 2015 14:18

Instrument :

BNA\_M

ClientSampleId :

G9C63DL

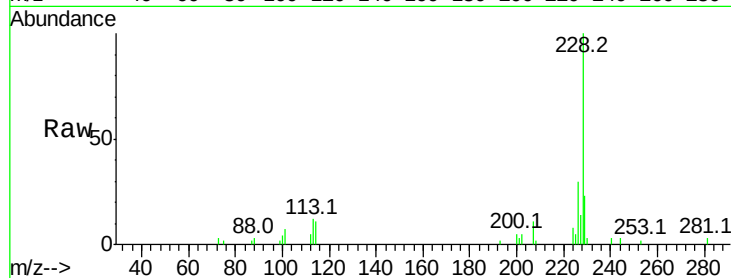
Tot Ion:228 Resp: 22923

Ion Ratio Lower Upper

228 100

229 23.0 15.7 23.5

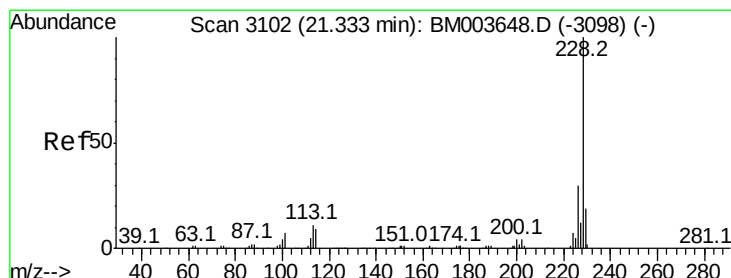
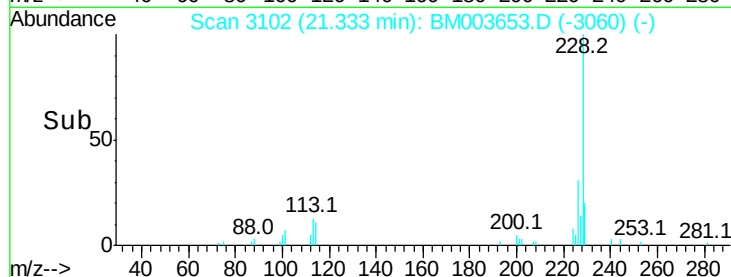
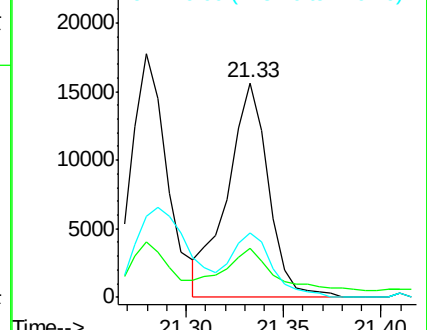
226 30.0 21.8 32.6



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: 2.08 ng/ul

RT: 21.33 min Scan# 3102

Delta R.T. 0.00 min

Lab File: BM003653.D

Acq: 20 Dec 2015 14:18

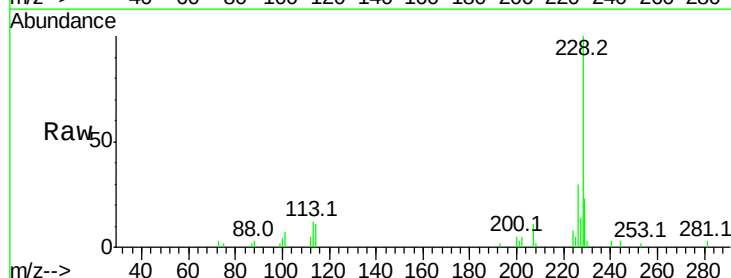
Tgt Ion:228 Resp: 22923

Ion Ratio Lower Upper

228 100

226 30.0 24.0 36.0

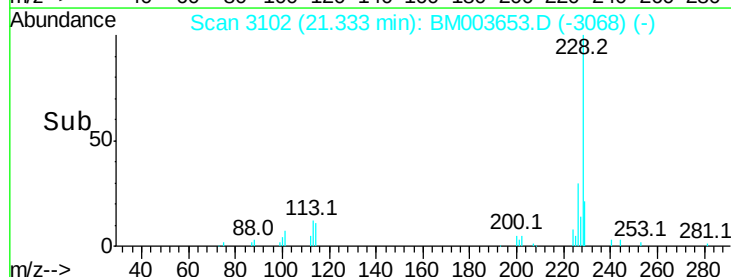
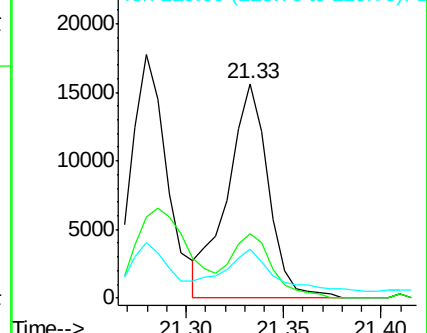
229 23.0 15.6 23.4

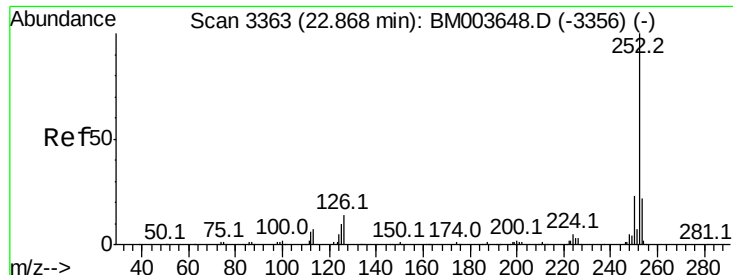


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E





#88

Benzo(b)fluoranthene

Concen: 1.17 ng/ul

RT: 22.87 min Scan# 3363

Delta R.T. 0.00 min

Lab File: BM003653.D

Acq: 20 Dec 2015 14:18

Instrument :

BNA\_M

ClientSampleId :

G9C63DL

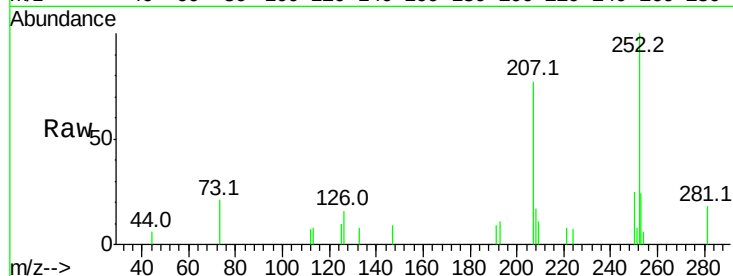
Tot Ion:252 Resp: 12469

Ion Ratio Lower Upper

252 100

253 23.9 17.5 26.3

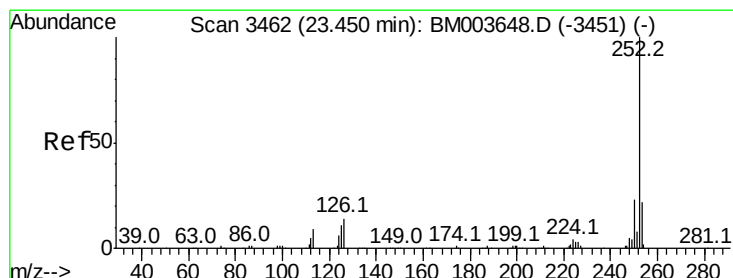
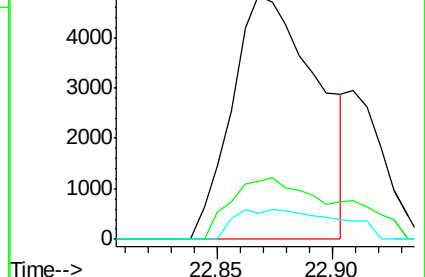
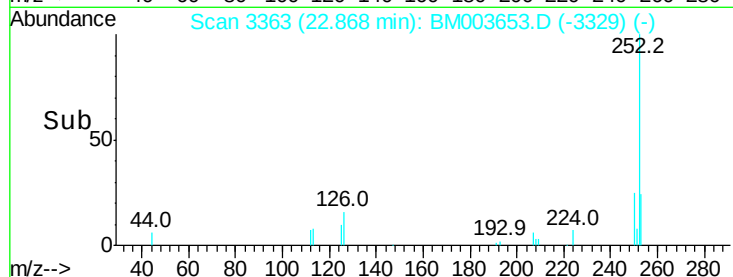
125 10.5 8.5 12.7



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



#91

Benzo(a)pyrene

Concen: 1.23 ng/ul

RT: 23.44 min Scan# 3461

Delta R.T. -0.01 min

Lab File: BM003653.D

Acq: 20 Dec 2015 14:18

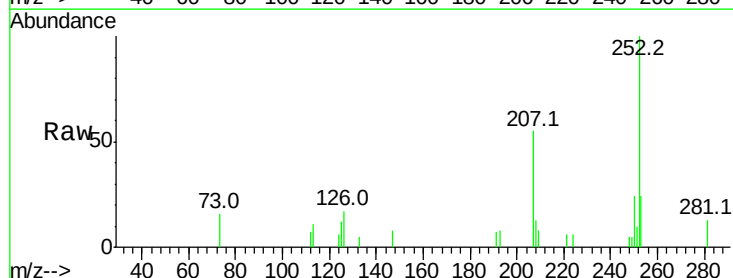
Tgt Ion:252 Resp: 12547

Ion Ratio Lower Upper

252 100

253 24.4 17.2 25.8

125 11.7 9.0 13.6



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

