

Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF051315\  
 Data File : BF079207.D  
 Acq On : 13 May 2015 21:41  
 Operator : TP/IZ  
 Sample : G2215-06  
 Misc :  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SB-41D

Quant Time: May 14 01:19:17 2015  
 Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF043015.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu May 14 00:58:22 2015  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.23  | 152  | 60494    | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 8.81  | 136  | 250426   | 20.00 | ng    | 0.00     |
| 38) Acenaphthene-d10      | 10.98 | 164  | 117109   | 20.00 | ng    | 0.00     |
| 63) Phenanthrene-d10      | 12.83 | 188  | 222740   | 20.00 | ng    | 0.00     |
| 75) Chrysene-d12          | 16.13 | 240  | 231528   | 20.00 | ng    | -0.03    |
| 86) Perylene-d12          | 17.89 | 264  | 252817   | 20.00 | ng    | -0.14    |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 5) 2-Fluorophenol           | 5.53  | 112  | 396800   | 112.91 | ng    | 0.00     |
| 7) Phenol-d6                | 6.80  | 99   | 505758   | 108.88 | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 7.93  | 82   | 296227   | 67.98  | ng    | 0.00     |
| 41) 2,4,6-Tribromophenol    | 11.96 | 330  | 137537   | 108.56 | ng    | 0.00     |
| 44) 2-Fluorobiphenyl        | 10.16 | 172  | 527397   | 62.74  | ng    | 0.00     |
| 78) Terphenyl-d14           | 14.82 | 244  | 553012   | 57.18  | ng    | 0.00     |

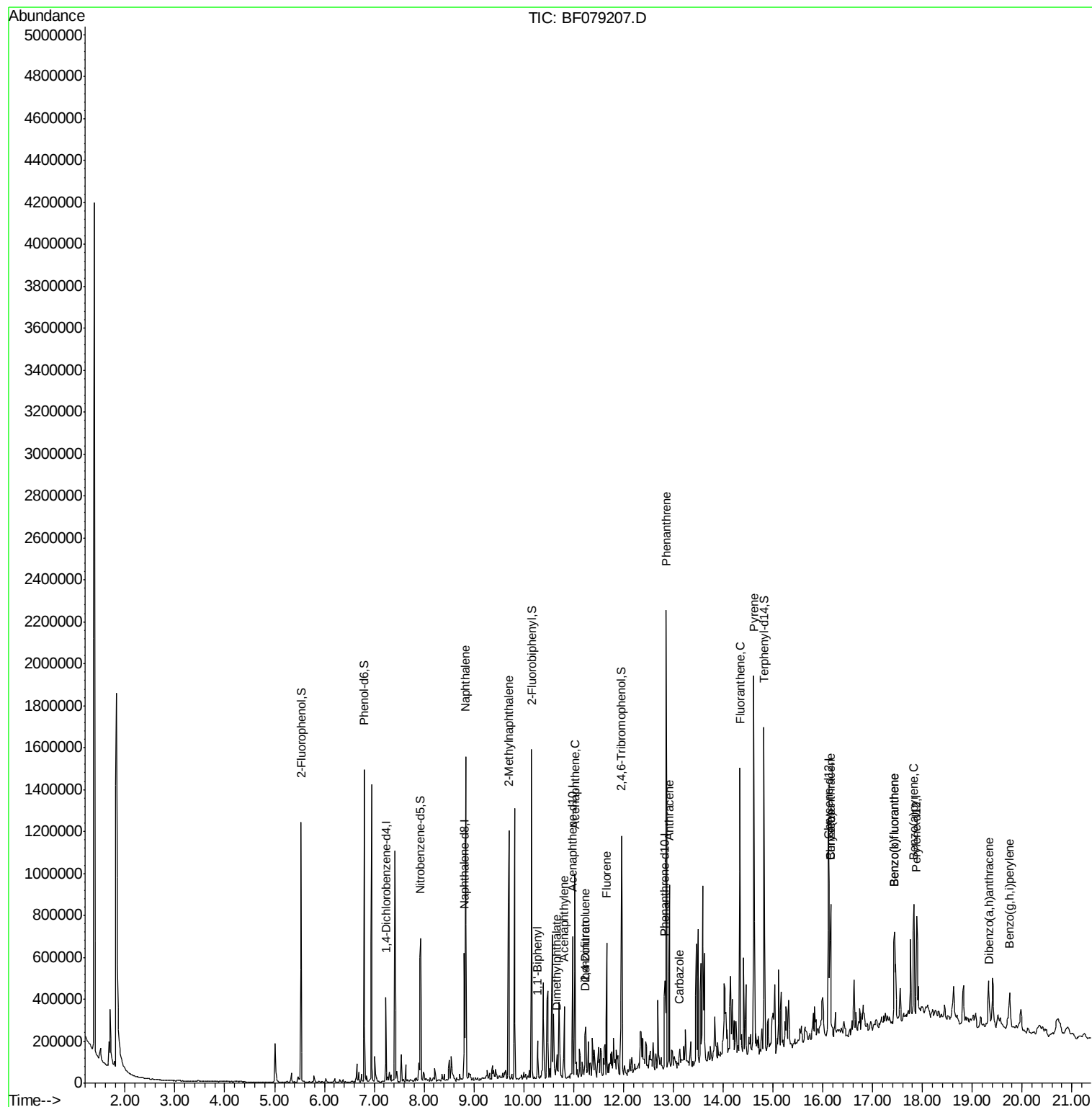
| Target Compounds           | R.T.  | QIon | Response | Conc  | Units | Qvalue |
|----------------------------|-------|------|----------|-------|-------|--------|
| 31) Naphthalene            | 8.83  | 128  | 810183   | 67.90 | ng    | 100    |
| 37) 2-Methylnaphthalene    | 9.70  | 142  | 442164   | 53.47 | ng    | # 96   |
| 45) 1,1'-Biphenyl          | 10.27 | 154  | 63241    | 6.79  | ng    | 98     |
| 48) Acenaphthylene         | 10.81 | 152  | 55596    | 4.66  | ng    | # 88   |
| 49) Dimethylphthalate      | 10.66 | 163  | 39222    | 4.56  | ng    | 98     |
| 51) Acenaphthene           | 11.03 | 154  | 255859   | 35.98 | ng    | 100    |
| 54) Dibenzofuran           | 11.23 | 168  | 45469    | 4.43  | ng    | # 91   |
| 56) 2,4-Dinitrotoluene     | 11.24 | 165  | 4526     | 2.02  | ng    | # 55   |
| 57) Fluorene               | 11.67 | 166  | 237661   | 28.19 | ng    | 100    |
| 70) Phenanthrene           | 12.86 | 178  | 1046571  | 83.99 | ng    | 99     |
| 71) Anthracene             | 12.93 | 178  | 410966   | 33.62 | ng    | 99     |
| 72) Carbazole              | 13.13 | 167  | 25860    | 2.22  | ng    | 93     |
| 74) Fluoranthene           | 14.34 | 202  | 712566   | 54.88 | ng    | 94     |
| 77) Pyrene                 | 14.62 | 202  | 830129   | 62.22 | ng    | 98     |
| 80) Benzo(a)anthracene     | 16.16 | 228  | 263101   | 20.75 | ng    | 94     |
| 82) Chrysene               | 16.16 | 228  | 304479   | 24.97 | ng    | 98     |
| 87) Benzo(b)fluoranthene   | 17.44 | 252  | 308688   | 22.31 | ng    | 99     |
| 88) Benzo(k)fluoranthene   | 17.44 | 252  | 423073   | 31.58 | ng    | 99     |
| 89) Benzo(a)pyrene         | 17.83 | 252  | 293859   | 23.06 | ng    | # 97   |
| 90) Dibenzo(a,h)anthracene | 19.35 | 278  | 37024    | 2.73  | ng    | # 85   |
| 91) Benzo(g,h,i)perylene   | 19.75 | 276  | 146577   | 10.80 | ng    | # 94   |

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

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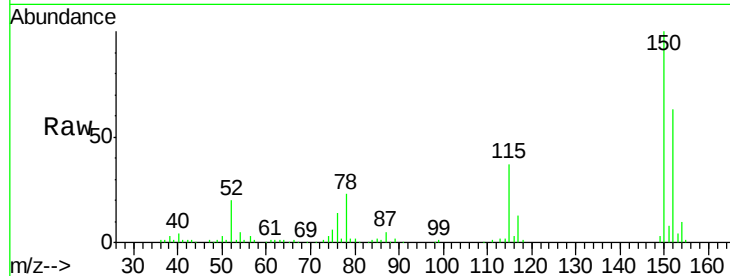


#1

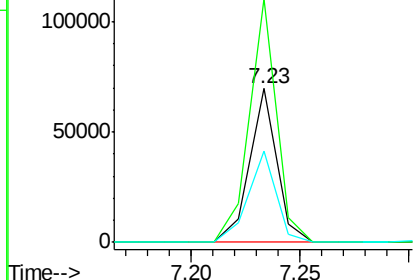
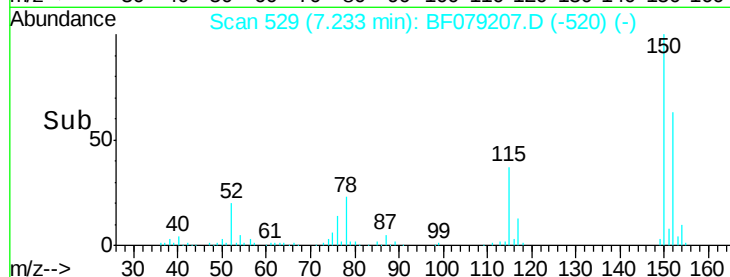
1,4-Dichlorobenzene-d4  
Concen: 20.00 ng  
RT: 7.23 min Scan# 529  
Delta R.T. -0.00 min  
Lab File: BF079207.D  
Acq: 13 May 2015 21:41

Instrument :  
BNA\_F  
ClientSampleId :  
SB-41D

Tgt Ion:152 Resp: 60494  
Ion Ratio Lower Upper  
152 100  
150 158.2 122.0 183.0  
115 59.2 46.3 69.5



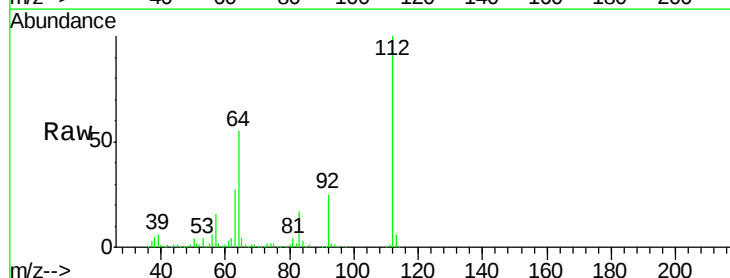
Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 115.00 (114.70 to 115.70): E



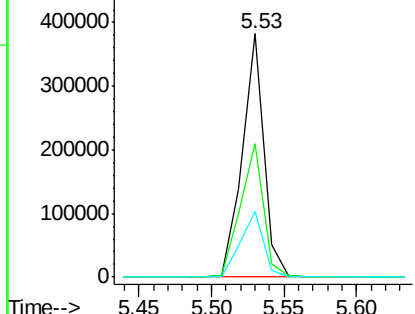
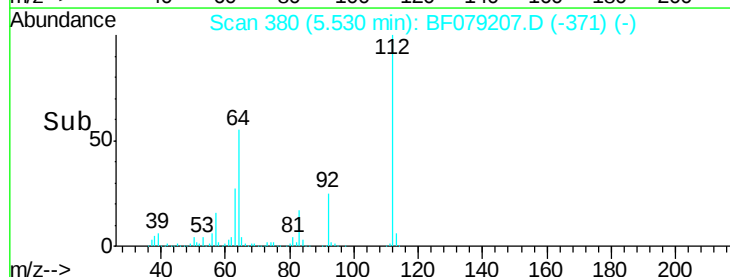
#5

2-Fluorophenol  
Concen: 112.91 ng  
RT: 5.53 min Scan# 380  
Delta R.T. -0.00 min  
Lab File: BF079207.D  
Acq: 13 May 2015 21:41

Tgt Ion:112 Resp: 396800  
Ion Ratio Lower Upper  
112 100  
64 54.8 53.5 80.3  
63 27.1 27.5 41.3#



Abundance Ion 112.00 (111.70 to 112.70): E  
Ion 64.00 (63.70 to 64.70): BF0  
Ion 63.00 (62.70 to 63.70): BF0





#7

Phenol-d6

Concen: 108.88 ng

RT: 6.80 min Scan# 491

Delta R.T. -0.00 min

Lab File: BF079207.D

Acq: 13 May 2015 21:41

Instrument :

BNA\_F

ClientSampleId :

SB-41D

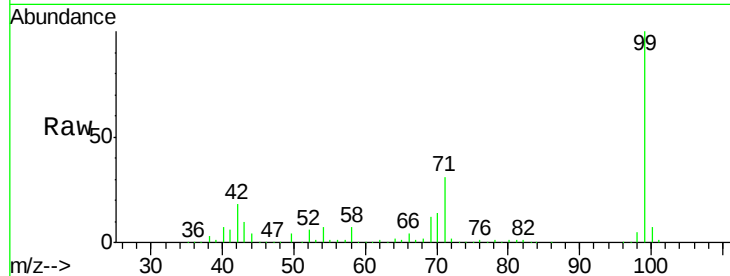
Tgt Ion: 99 Resp: 505758

Ion Ratio Lower Upper

99 100

42 18.1 12.8 19.2

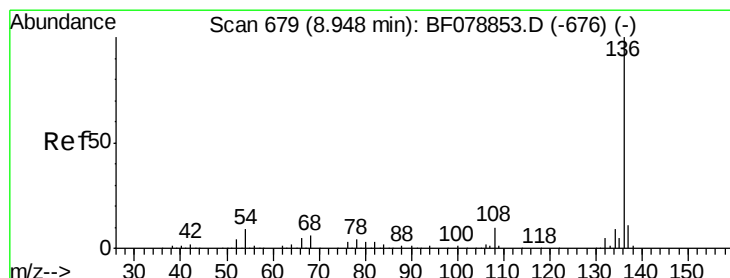
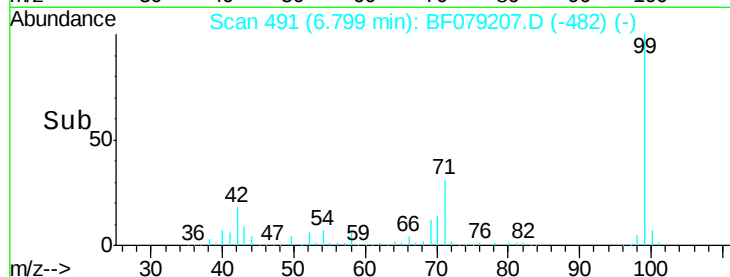
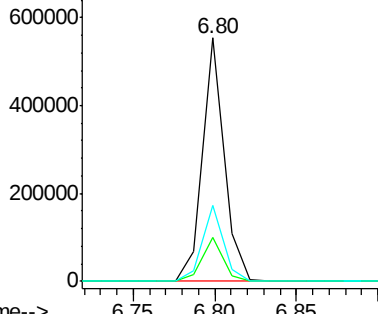
71 31.1 23.4 35.2



Abundance Ion 99.00 (98.70 to 99.70): BF0

Ion 42.00 (41.70 to 42.70): BF0

Ion 71.00 (70.70 to 71.70): BF0



#21

Naphthalene-d8

Concen: 20.00 ng

RT: 8.81 min Scan# 667

Delta R.T. -0.00 min

Lab File: BF079207.D

Acq: 13 May 2015 21:41

Tgt Ion: 136 Resp: 250426

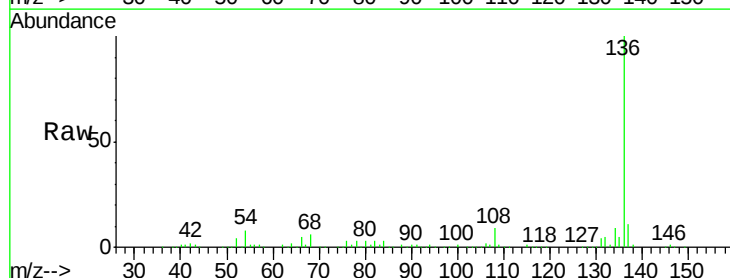
Ion Ratio Lower Upper

136 100

137 10.7 8.7 13.1

54 7.6 5.8 8.8

68 5.8 4.2 6.4

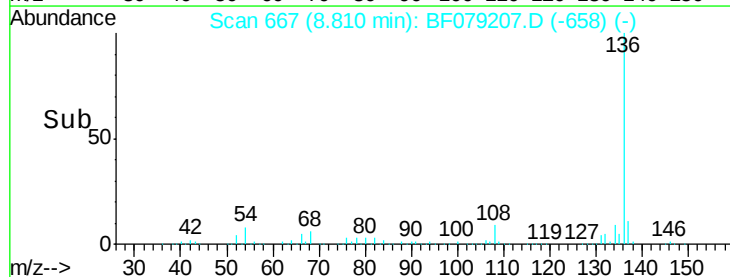
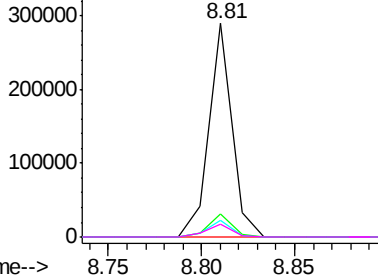


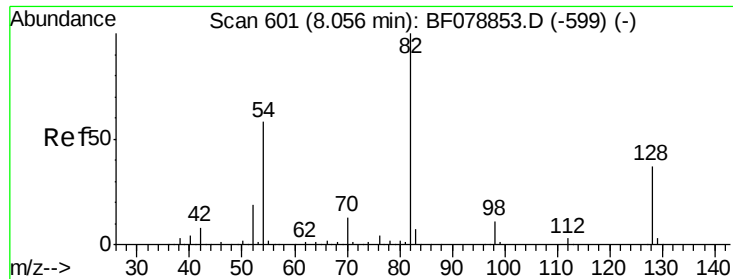
Abundance Ion 136.00 (135.70 to 136.70): E

Ion 137.00 (136.70 to 137.70): E

Ion 54.00 (53.70 to 54.70): BF0

Ion 68.00 (67.70 to 68.70): BF0

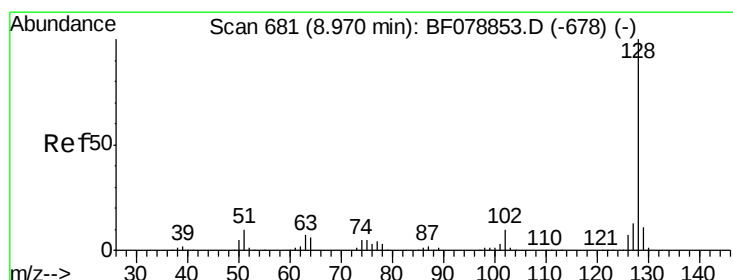
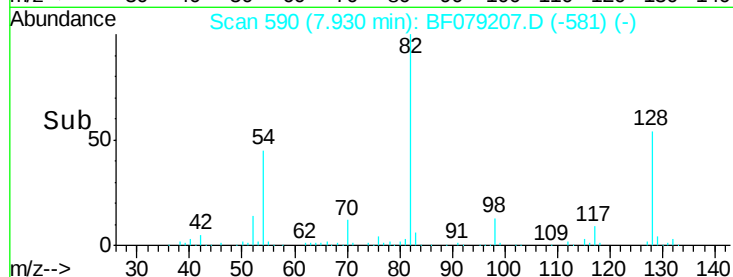
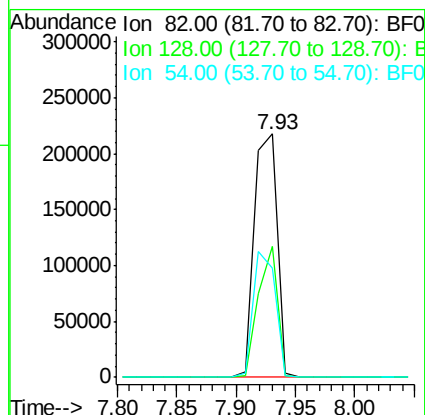
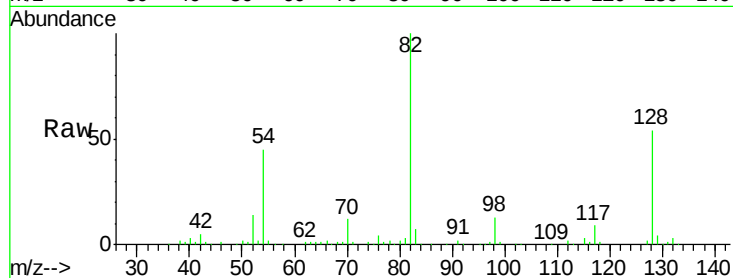




#23  
 Nitrobenzene-d5  
 Concen: 67.98 ng  
 RT: 7.93 min Scan# 590  
 Delta R.T. -0.00 min  
 Lab File: BF079207.D  
 Acq: 13 May 2015 21:41

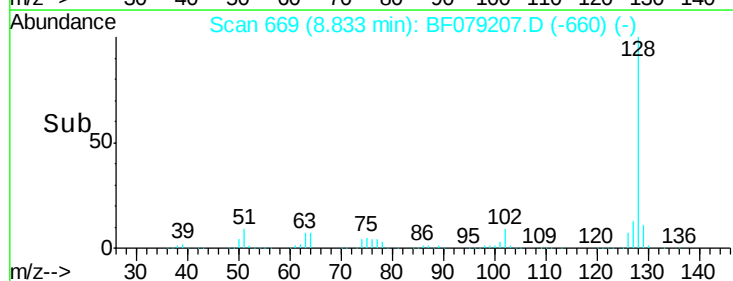
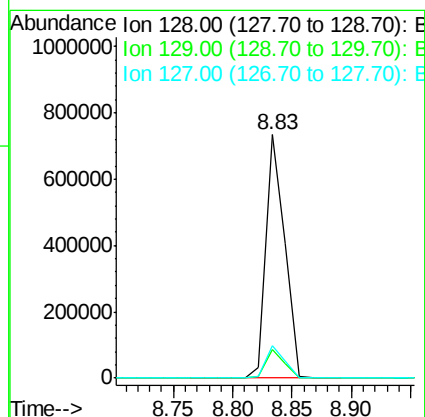
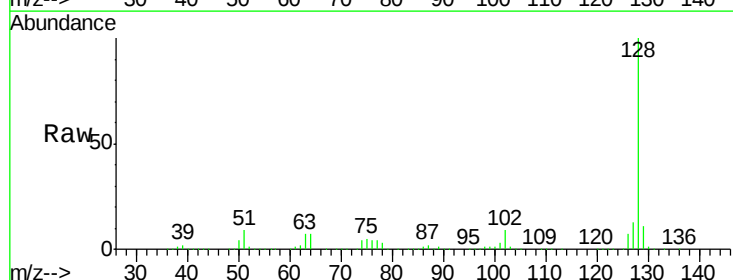
Instrument :  
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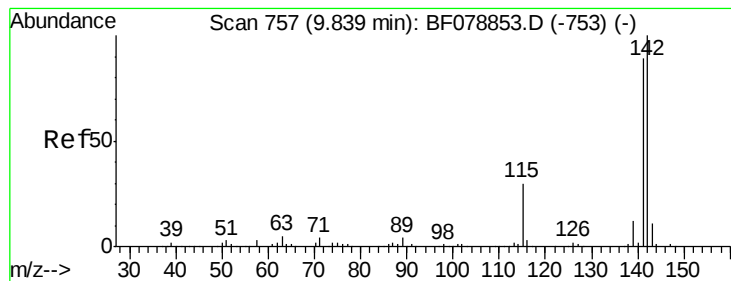
Tgt Ion: 82 Resp: 296227  
 Ion Ratio Lower Upper  
 82 100  
 128 53.7 30.0 45.0#  
 54 45.1 46.4 69.6#



#31  
 Naphthalene  
 Concen: 67.90 ng  
 RT: 8.83 min Scan# 669  
 Delta R.T. -0.00 min  
 Lab File: BF079207.D  
 Acq: 13 May 2015 21:41

Tgt Ion: 128 Resp: 810183  
 Ion Ratio Lower Upper  
 128 100  
 129 11.5 9.3 13.9  
 127 13.3 10.7 16.1





#37

2-Methylnaphthalene

Concen: 53.47 ng

RT: 9.70 min Scan# 745

Delta R.T. -0.00 min

Lab File: BF079207.D

Acq: 13 May 2015 21:41

Instrument :

BNA\_F

ClientSampleId :

SB-41D

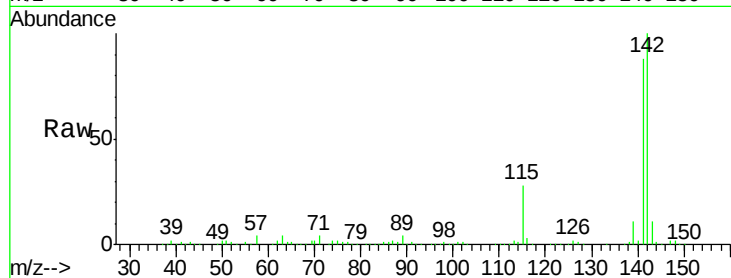
Tgt Ion:142 Resp: 442164

Ion Ratio Lower Upper

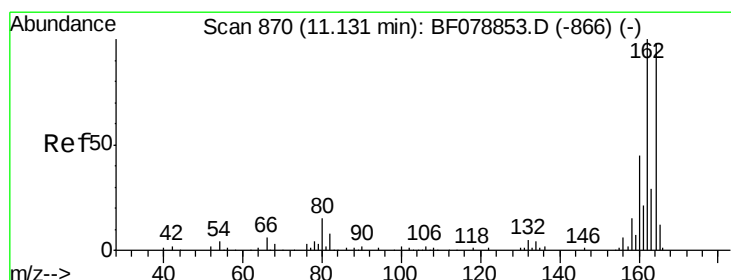
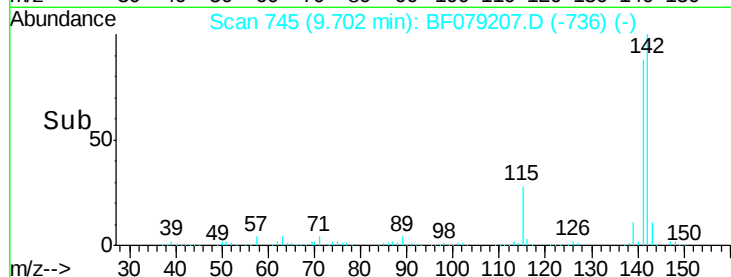
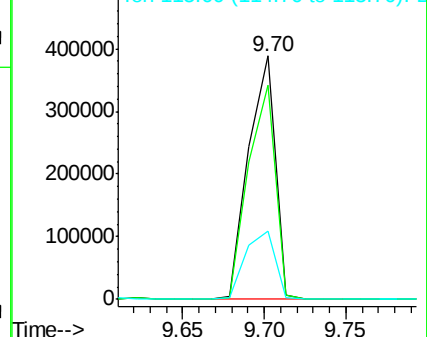
142 100

141 88.2 70.9 106.3

115 28.1 28.5 42.7#



Abundance Ion 142.00 (141.70 to 142.70): E  
Ion 141.00 (140.70 to 141.70): E  
Ion 115.00 (114.70 to 115.70): E



#38

Acenaphthene-d10

Concen: 20.00 ng

RT: 10.98 min Scan# 857

Delta R.T. -0.00 min

Lab File: BF079207.D

Acq: 13 May 2015 21:41

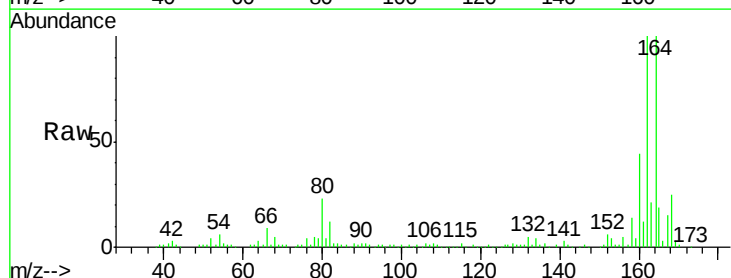
Tgt Ion:164 Resp: 117109

Ion Ratio Lower Upper

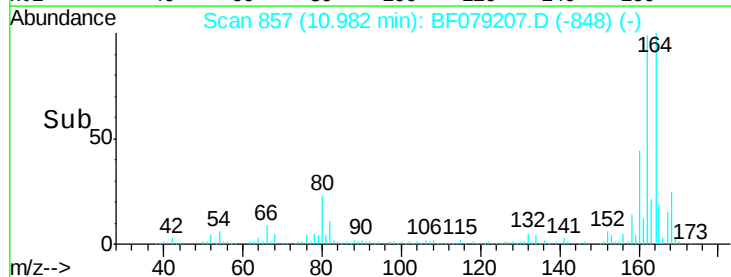
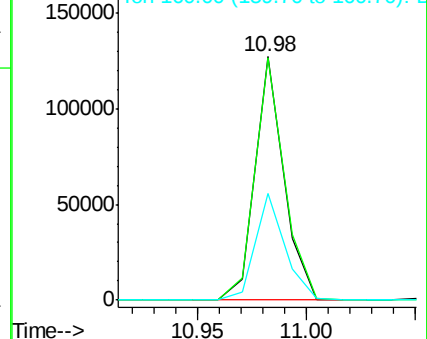
164 100

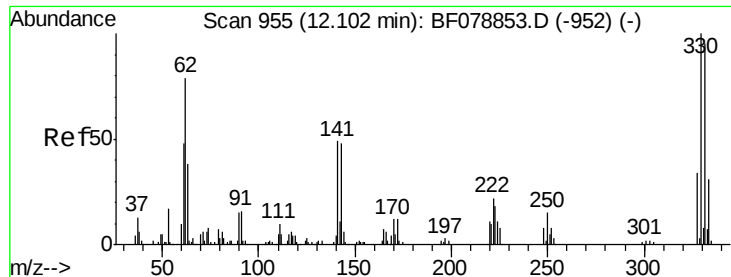
162 99.5 82.7 124.1

160 43.9 35.8 53.8



Abundance Ion 164.00 (163.70 to 164.70): E  
Ion 162.00 (161.70 to 162.70): E  
Ion 160.00 (159.70 to 160.70): E

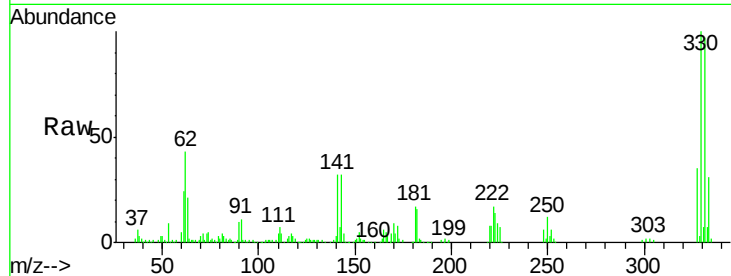




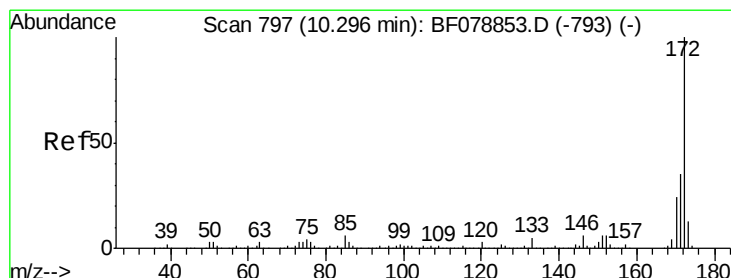
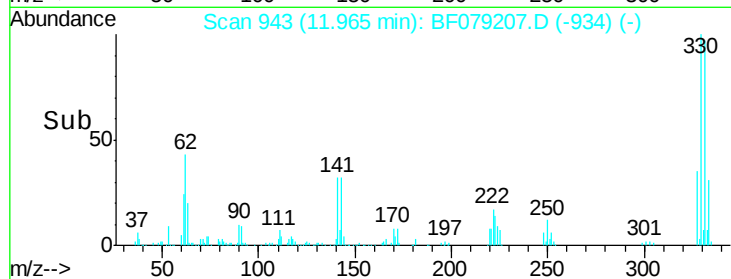
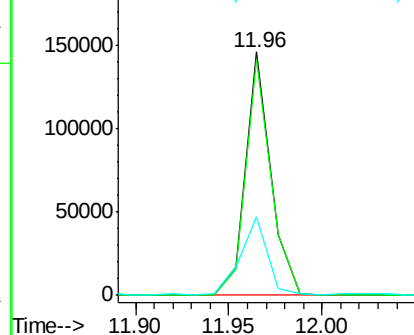
#41  
 2,4,6-Tribromophenol  
 Concen: 108.56 ng  
 RT: 11.96 min Scan# 943  
 Delta R.T. -0.00 min  
 Lab File: BF079207.D  
 Acq: 13 May 2015 21:41

Instrument :  
 BNA\_F  
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Tgt Ion:330 Resp: 137537  
 Ion Ratio Lower Upper  
 330 100  
 332 97.0 0.0 0.0#  
 141 33.7 0.0 0.0#

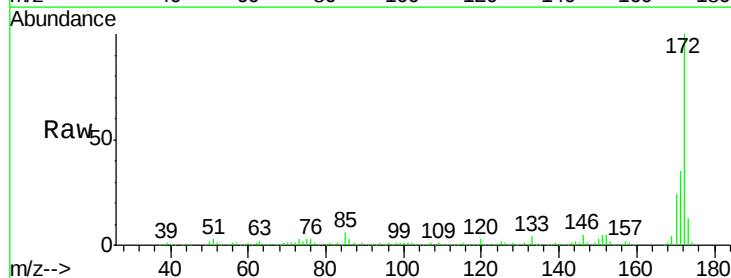


Abundance Ion 329.80 (329.50 to 330.50): E  
 Ion 331.80 (331.50 to 332.50): E  
 Ion 141.00 (140.70 to 141.70): E

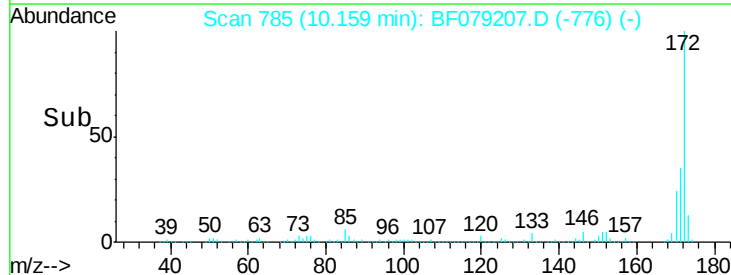
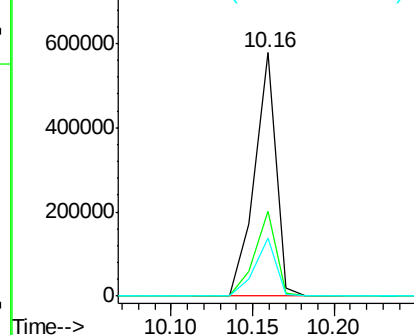


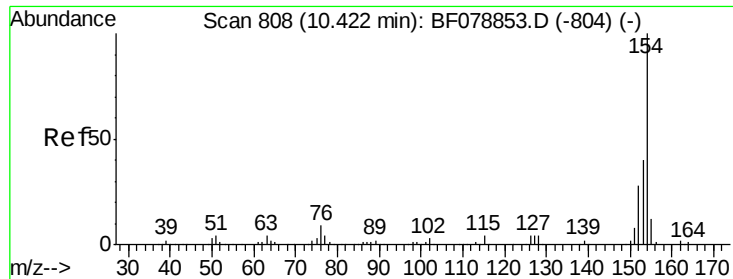
#44  
 2-Fluorobiphenyl  
 Concen: 62.74 ng  
 RT: 10.16 min Scan# 785  
 Delta R.T. -0.00 min  
 Lab File: BF079207.D  
 Acq: 13 May 2015 21:41

Tgt Ion:172 Resp: 527397  
 Ion Ratio Lower Upper  
 172 100  
 171 34.8 27.9 41.9  
 170 23.6 19.4 29.0



Abundance Ion 172.00 (171.70 to 172.70): E  
 Ion 171.00 (170.70 to 171.70): E  
 Ion 170.00 (169.70 to 170.70): E

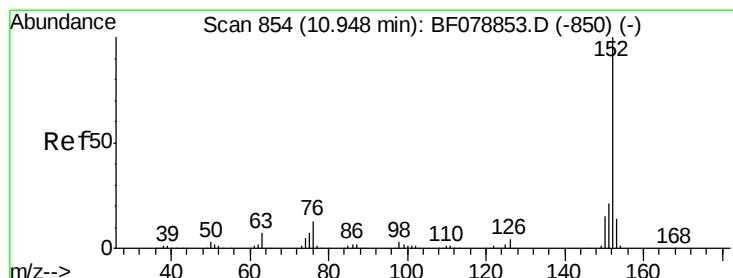
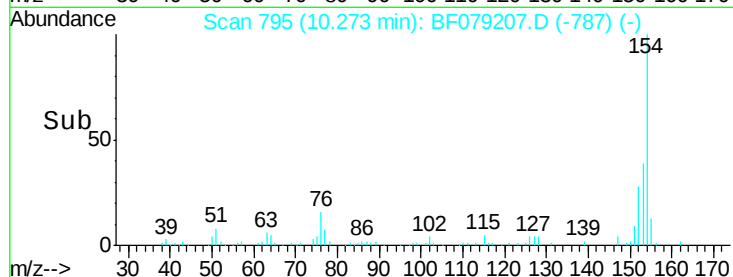
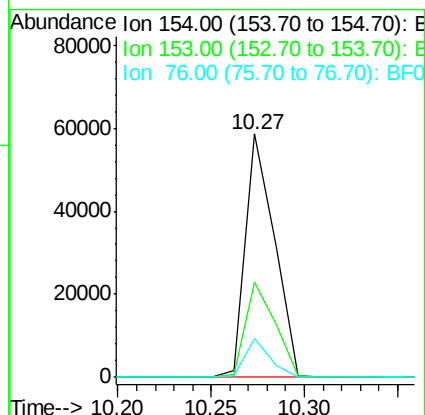
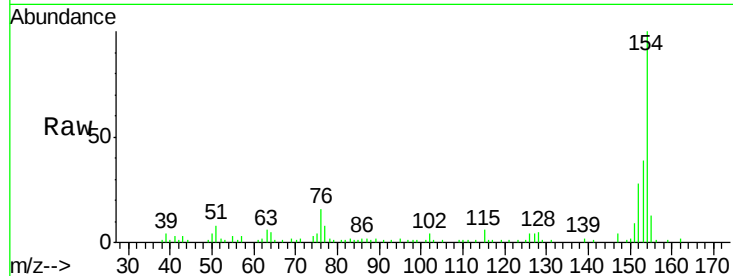




#45  
1,1'-Biphenyl  
Concen: 6.79 ng  
RT: 10.27 min Scan# 795  
Delta R.T. -0.01 min  
Lab File: BF079207.D  
Acq: 13 May 2015 21:41

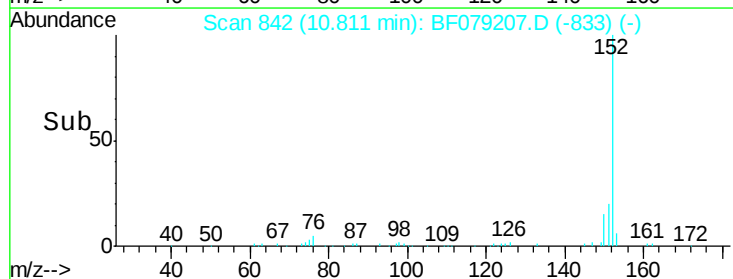
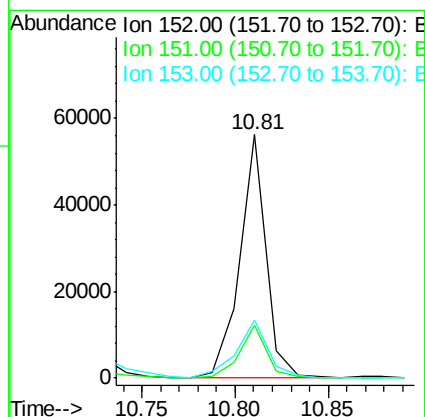
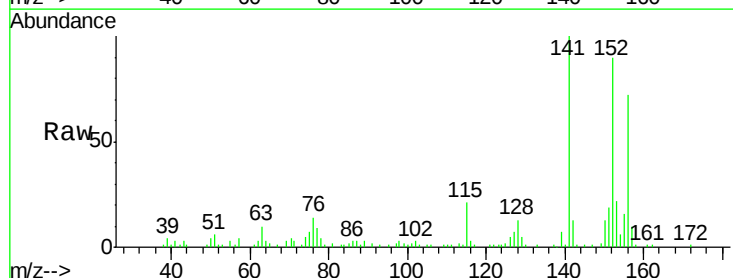
Instrument :  
BNA\_F  
ClientSampleId :  
SB-41D

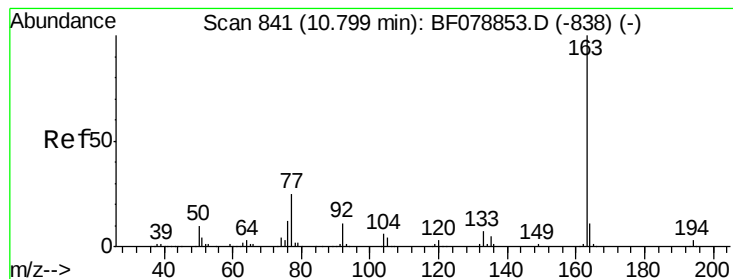
Tgt Ion:154 Resp: 63241  
Ion Ratio Lower Upper  
154 100  
153 38.9 19.9 59.9  
76 15.8 0.0 35.0



#48  
Acenaphthylene  
Concen: 4.66 ng  
RT: 10.81 min Scan# 842  
Delta R.T. -0.00 min  
Lab File: BF079207.D  
Acq: 13 May 2015 21:41

Tgt Ion:152 Resp: 55596  
Ion Ratio Lower Upper  
152 100  
151 21.7 16.2 24.4  
153 24.0 10.9 16.3#





#49

Dimethylphthalate

Concen: 4.56 ng

RT: 10.66 min Scan# 829

Delta R.T. -0.01 min

Lab File: BF079207.D

Acq: 13 May 2015 21:41

Instrument :

BNA\_F

ClientSampleId :

SB-41D

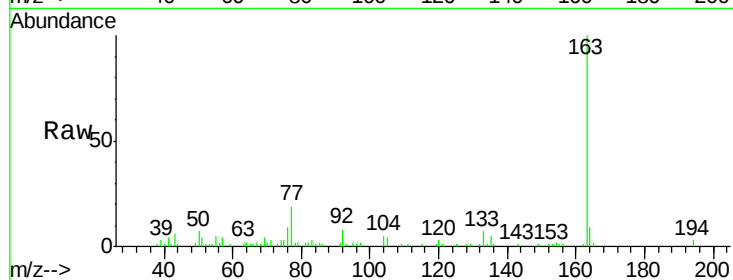
Tgt Ion:163 Resp: 39222

Ion Ratio Lower Upper

163 100

194 3.4 2.6 4.0

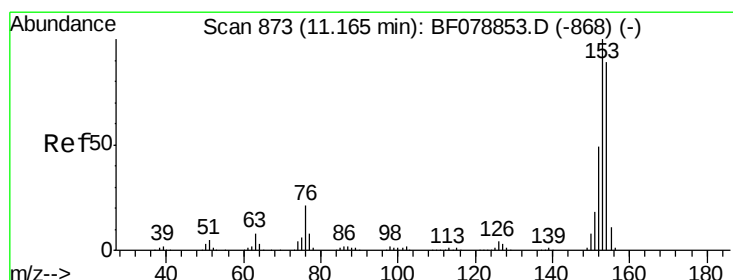
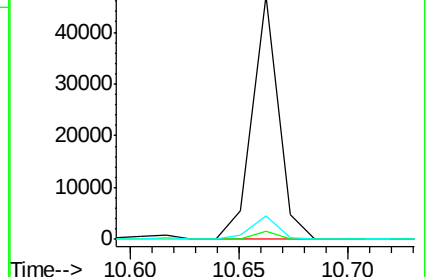
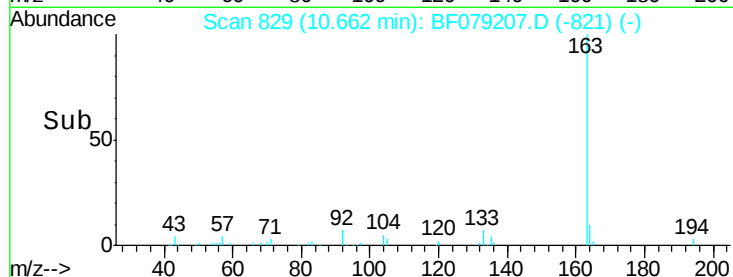
164 9.4 8.1 12.1



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



#51

Acenaphthene

Concen: 35.98 ng

RT: 11.03 min Scan# 861

Delta R.T. -0.00 min

Lab File: BF079207.D

Acq: 13 May 2015 21:41

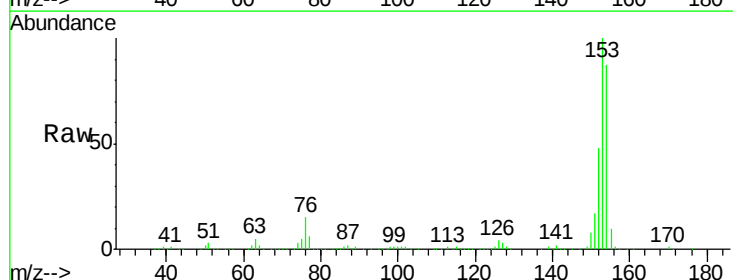
Tgt Ion:154 Resp: 255859

Ion Ratio Lower Upper

154 100

153 114.8 91.5 137.3

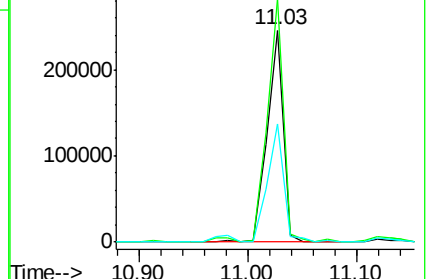
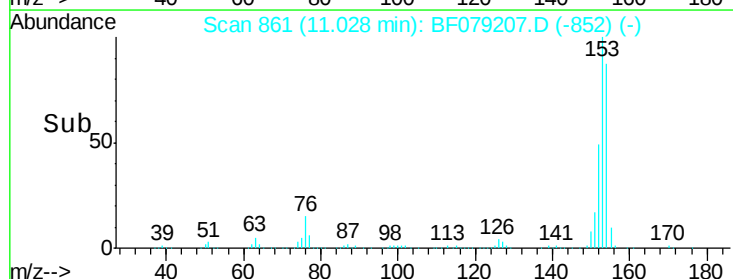
152 55.7 44.2 66.4

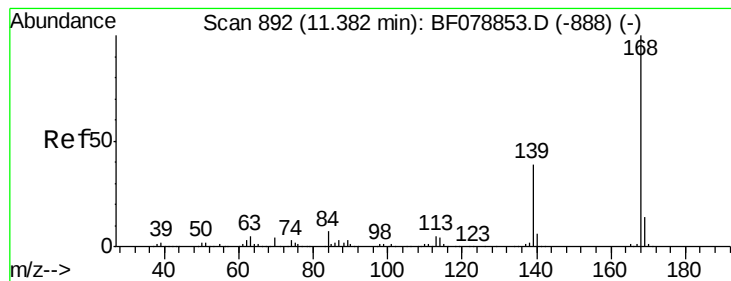


Abundance Ion 154.00 (153.70 to 154.70): E

Ion 153.00 (152.70 to 153.70): E

Ion 152.00 (151.70 to 152.70): E





#54

Dibenzofuran

Concen: 4.43 ng

RT: 11.23 min Scan# 879

Delta R.T. -0.01 min

Lab File: BF079207.D

Acq: 13 May 2015 21:41

Instrument :

BNA\_F

ClientSampleId :

SB-41D

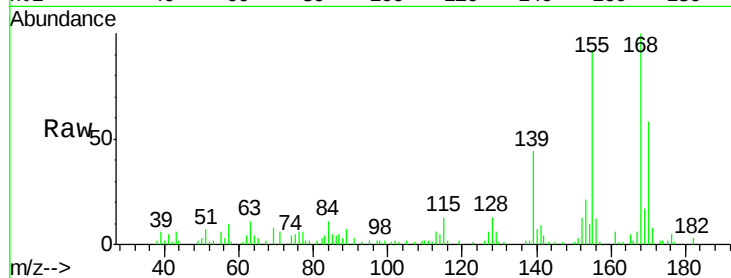
Tgt Ion:168 Resp: 45469

Ion Ratio Lower Upper

168 100

139 43.7 31.0 46.4

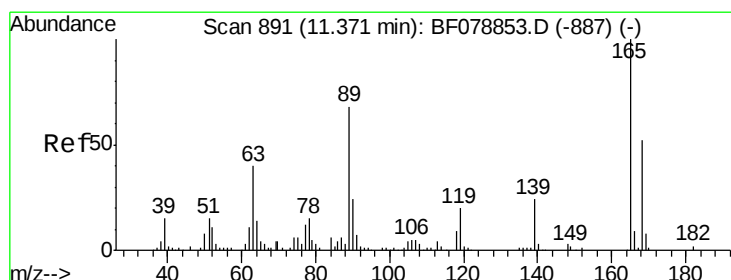
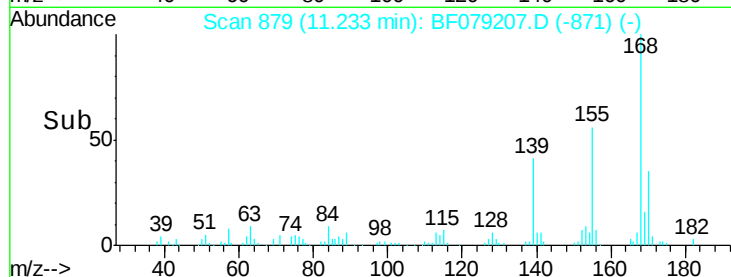
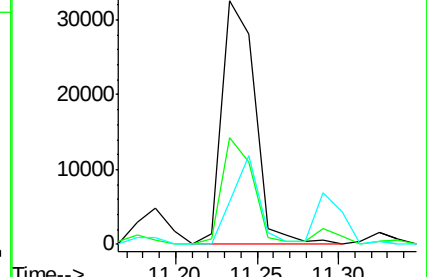
169 17.4 10.6 16.0#



Abundance Ion 168.00 (167.70 to 168.70): E

Ion 139.00 (138.70 to 139.70): E

Ion 169.00 (168.70 to 169.70): E



#56

2,4-Dinitrotoluene

Concen: 2.02 ng

RT: 11.24 min Scan# 880

Delta R.T. 0.01 min

Lab File: BF079207.D

Acq: 13 May 2015 21:41

Tgt Ion:165 Resp: 4526

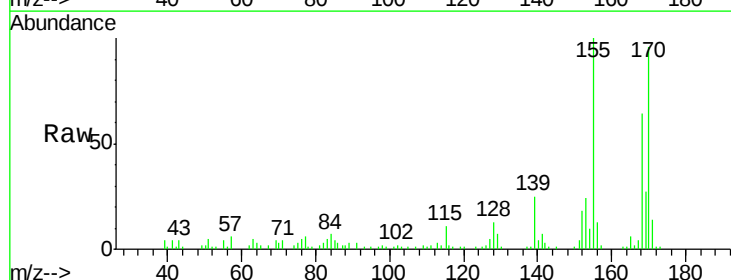
Ion Ratio Lower Upper

165 100

63 90.4 51.2 76.8#

89 50.3 82.7 124.1#

182 0.0 1.4 2.2#

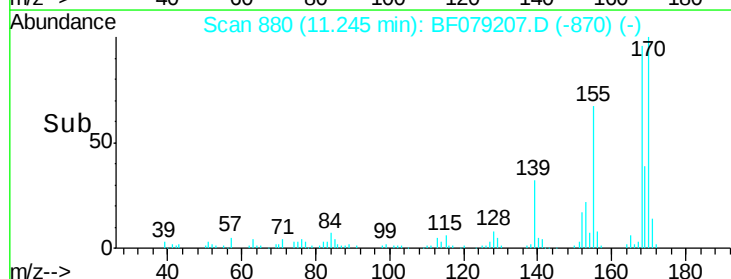
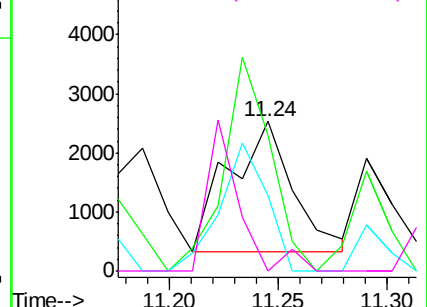


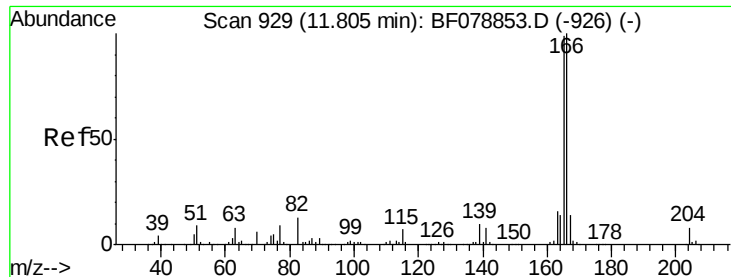
Abundance Ion 165.00 (164.70 to 165.70): E

Ion 63.00 (62.70 to 63.70): BF0

Ion 89.00 (88.70 to 89.70): BF0

Ion 182.00 (181.70 to 182.70): E

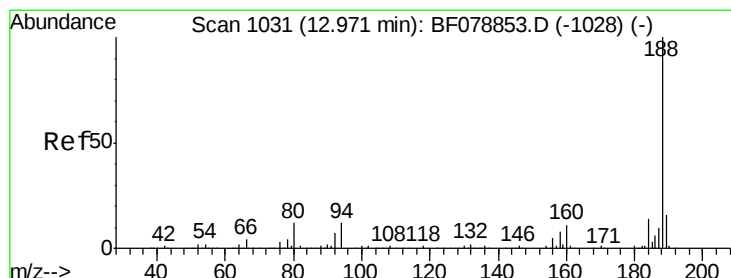
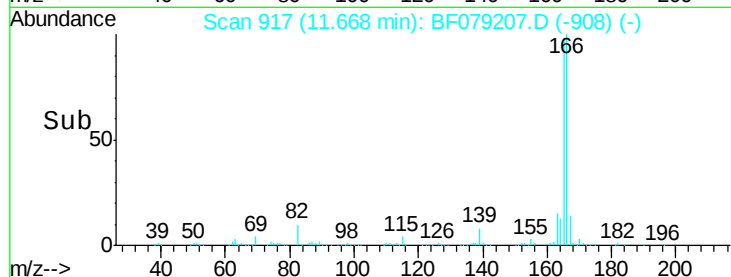
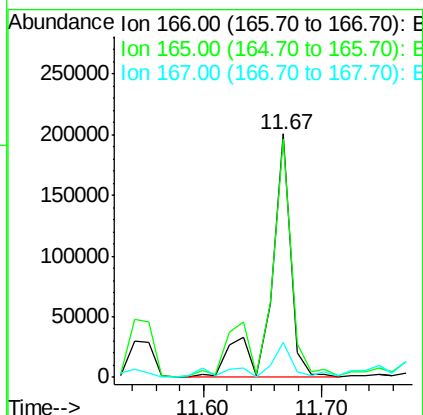
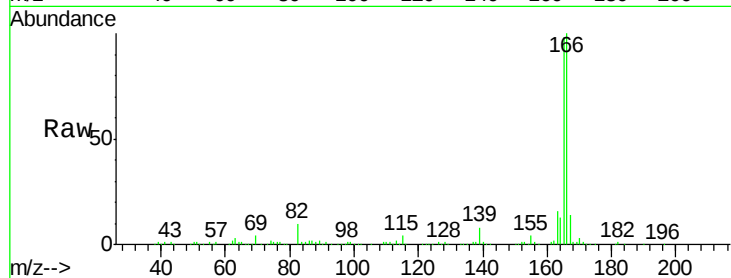




#57  
 Fluorene  
 Concen: 28.19 ng  
 RT: 11.67 min Scan# 917  
 Delta R.T. -0.00 min  
 Lab File: BF079207.D  
 Acq: 13 May 2015 21:41

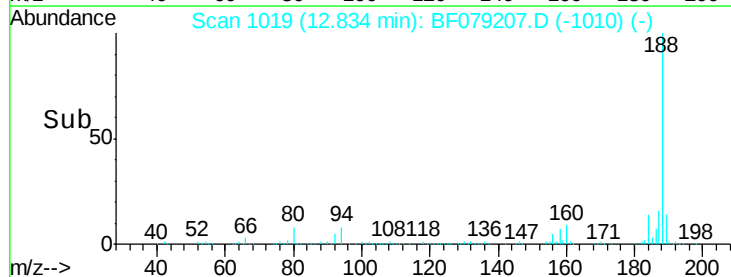
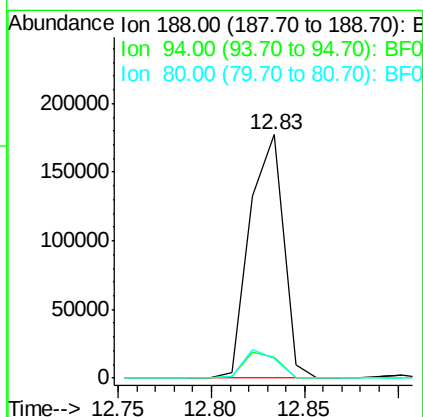
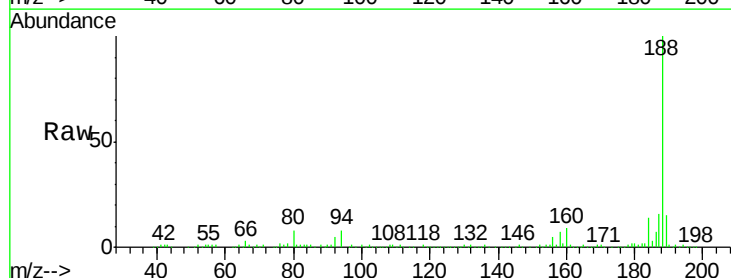
Instrument :  
 BNA\_F  
 ClientSampleId :  
 SB-41D

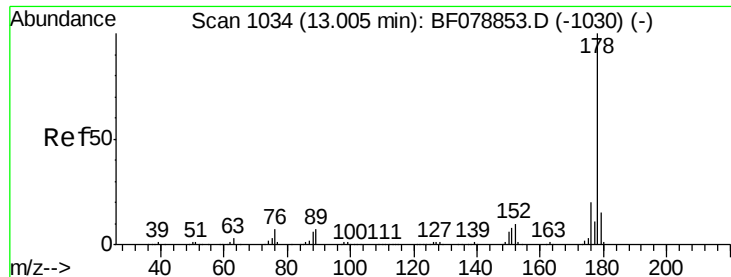
Tgt Ion:166 Resp: 237661  
 Ion Ratio Lower Upper  
 166 100  
 165 98.1 78.5 117.7  
 167 14.3 11.0 16.6



#63  
 Phenanthrene-d10  
 Concen: 20.00 ng  
 RT: 12.83 min Scan# 1019  
 Delta R.T. -0.00 min  
 Lab File: BF079207.D  
 Acq: 13 May 2015 21:41

Tgt Ion:188 Resp: 222740  
 Ion Ratio Lower Upper  
 188 100  
 94 8.4 8.2 12.2  
 80 8.0 8.9 13.3#





#70

Phenanthrene

Concen: 83.99 ng

RT: 12.86 min Scan# 1021

Delta R.T. -0.00 min

Lab File: BF079207.D

Acq: 13 May 2015 21:41

Instrument :

BNA\_F

ClientSampleId :

SB-41D

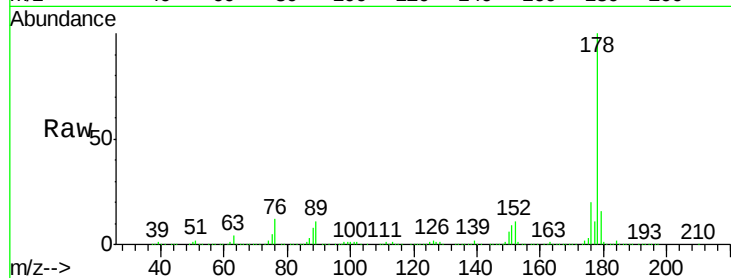
Tgt Ion:178 Resp: 1046571

Ion Ratio Lower Upper

178 100

176 19.9 15.8 23.8

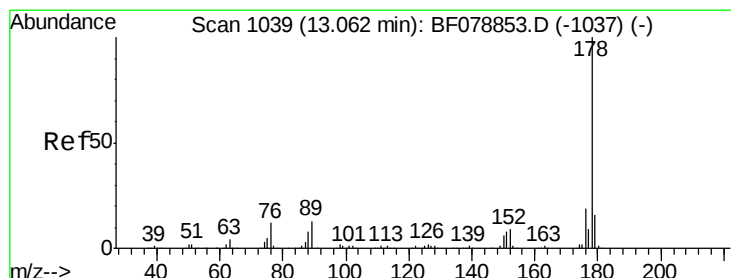
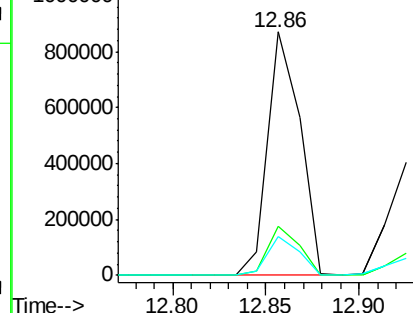
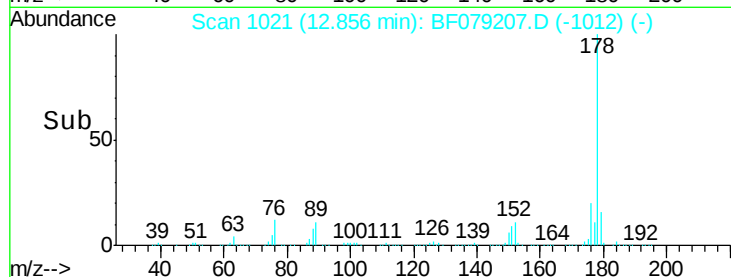
179 16.1 12.5 18.7



Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E



#71

Anthracene

Concen: 33.62 ng

RT: 12.93 min Scan# 1027

Delta R.T. -0.00 min

Lab File: BF079207.D

Acq: 13 May 2015 21:41

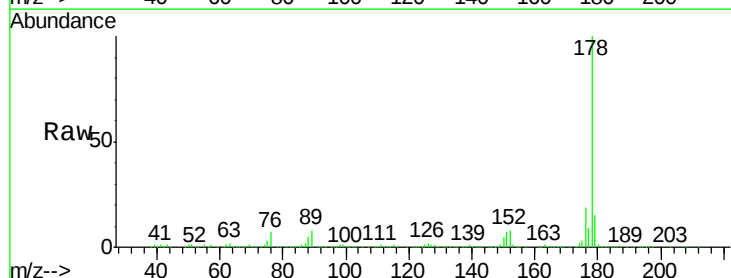
Tgt Ion:178 Resp: 410966

Ion Ratio Lower Upper

178 100

176 19.1 15.5 23.3

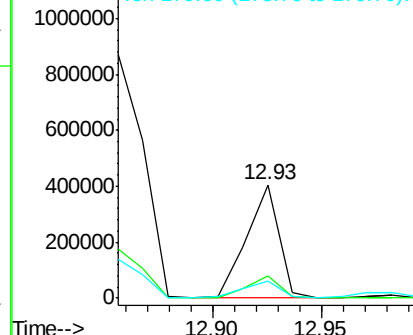
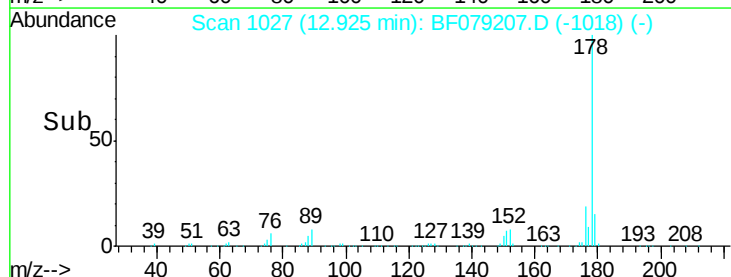
179 15.4 12.7 19.1

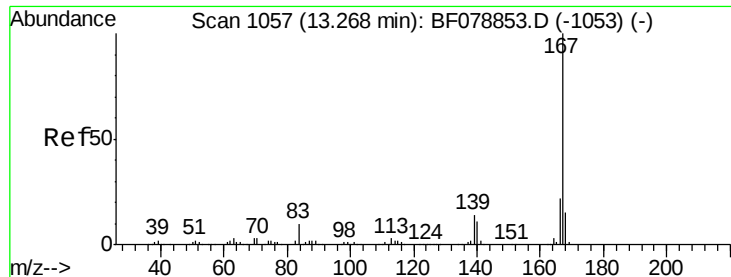


Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E





#72

Carbazole

Concen: 2.22 ng

RT: 13.13 min Scan# 1045

Delta R.T. -0.00 min

Lab File: BF079207.D

Acq: 13 May 2015 21:41

Instrument :

BNA\_F

ClientSampleId :

SB-41D

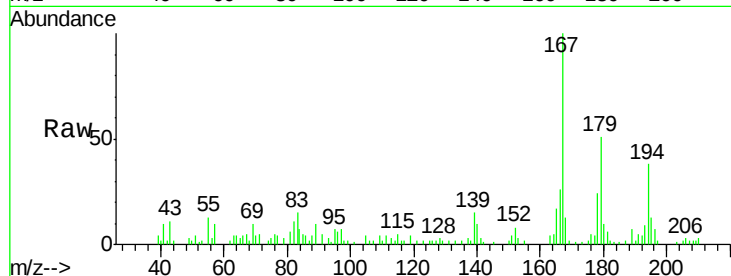
Tgt Ion:167 Resp: 25860

Ion Ratio Lower Upper

167 100

166 26.3 17.8 26.8

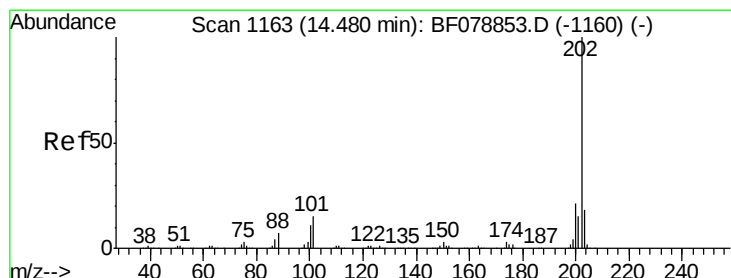
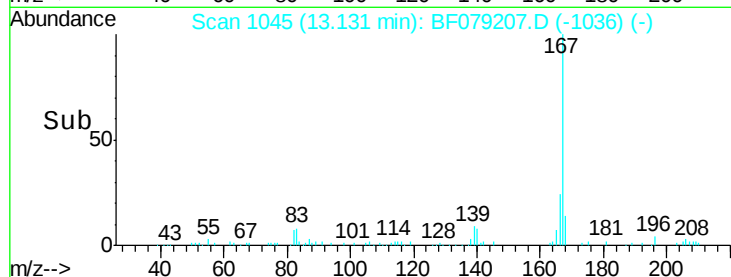
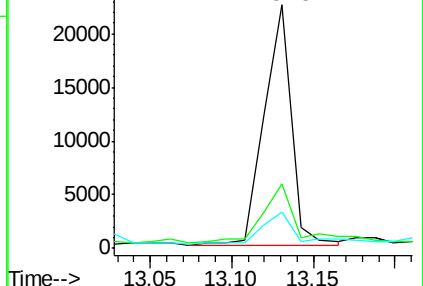
139 15.0 10.6 16.0



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



#74

Fluoranthene

Concen: 54.88 ng

RT: 14.34 min Scan# 1151

Delta R.T. -0.00 min

Lab File: BF079207.D

Acq: 13 May 2015 21:41

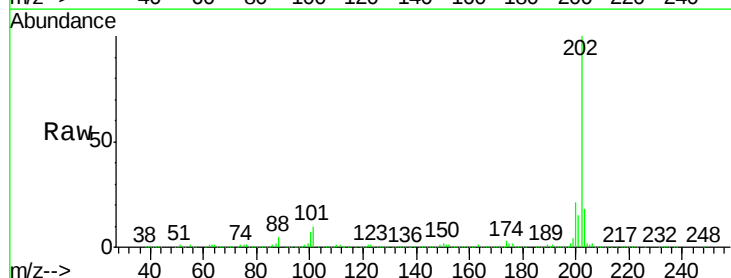
Tgt Ion:202 Resp: 712566

Ion Ratio Lower Upper

202 100

101 10.2 0.0 34.6

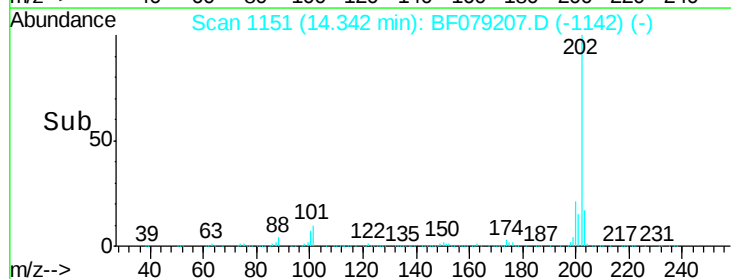
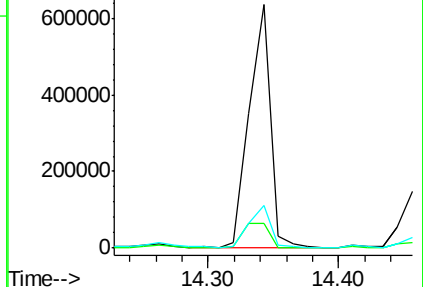
203 17.6 0.0 38.4

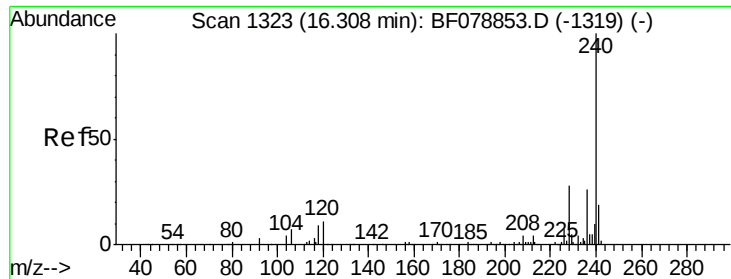


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 101.00 (100.70 to 101.70): E

Ion 203.00 (202.70 to 203.70): E





#75

Chrysene-d12

Concen: 20.00 ng

RT: 16.13 min Scan# 1307

Delta R.T. -0.03 min

Lab File: BF079207.D

Acq: 13 May 2015 21:41

Instrument :

BNA\_F

ClientSampleId :

SB-41D

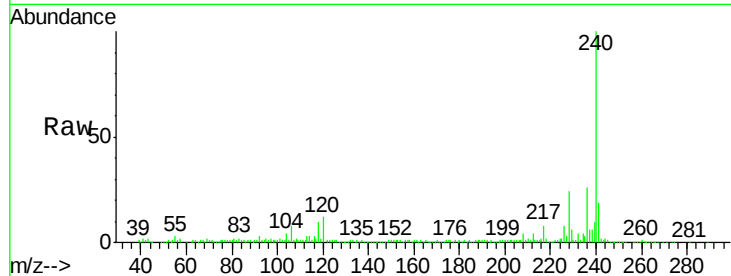
Tgt Ion:240 Resp: 231528

Ion Ratio Lower Upper

240 100

120 11.6 9.7 14.5

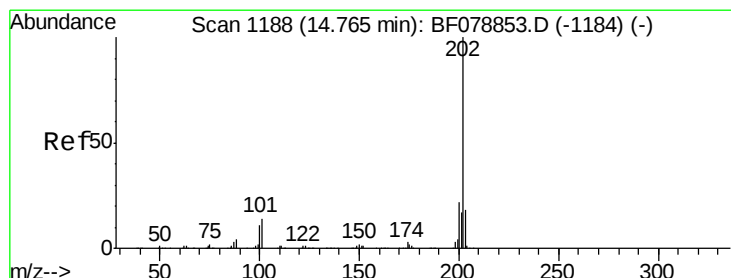
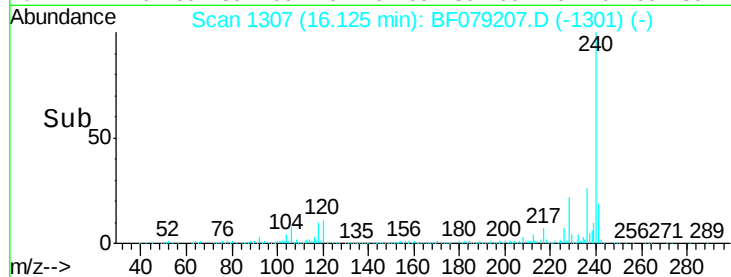
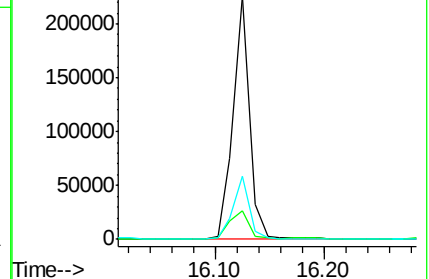
236 25.9 20.2 30.4



Abundance Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E



#77

Pyrene

Concen: 62.22 ng

RT: 14.62 min Scan# 1175

Delta R.T. -0.00 min

Lab File: BF079207.D

Acq: 13 May 2015 21:41

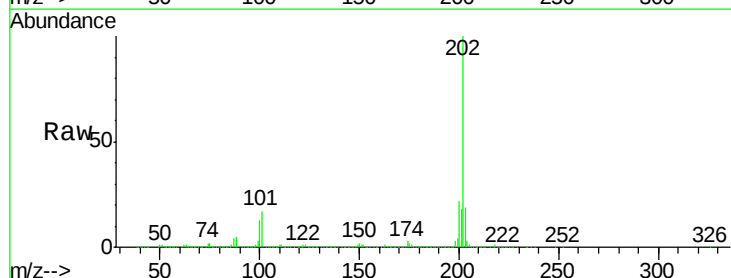
Tgt Ion:202 Resp: 830129

Ion Ratio Lower Upper

202 100

200 21.7 17.5 26.3

203 19.3 13.9 20.9



Abundance Ion 202.00 (201.70 to 202.70): E

Ion 200.00 (199.70 to 200.70): E

Ion 203.00 (202.70 to 203.70): E

