

Data Path : Z:\HPCHEM1\BNA F\DATA\BF031015\  
 Data File : BF077675.D  
 Acq On : 10 Mar 2015 21:57  
 Operator : TP/IZ  
 Sample : G1466-01  
 Misc :  
 ALS Vial : 19 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 DCW-WW-082-3915

Quant Time: Mar 11 02:25:35 2015  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF021915.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Mar 11 00:54:19 2015  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.18  | 152  | 51116    | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 8.76  | 136  | 202759   | 20.00 | ng    | 0.00     |
| 38) Acenaphthene-d10      | 10.93 | 164  | 102296   | 20.00 | ng    | 0.00     |
| 63) Phenanthrene-d10      | 12.77 | 188  | 195712   | 20.00 | ng    | 0.00     |
| 75) Chrysene-d12          | 16.05 | 240  | 219815   | 20.00 | ng    | -0.03    |
| 86) Perylene-d12          | 17.78 | 264  | 210062   | 20.00 | ng    | -0.12    |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 5) 2-Fluorophenol           | 5.47  | 112  | 168197   | 54.93  | ng    | 0.00     |
| 7) Phenol-d6                | 6.75  | 99   | 123203   | 31.30  | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 7.88  | 82   | 323131   | 99.10  | ng    | 0.00     |
| 41) 2,4,6-Tribromophenol    | 11.91 | 330  | 142906   | 145.08 | ng    | 0.00     |
| 44) 2-Fluorobiphenyl        | 10.11 | 172  | 707681   | 107.87 | ng    | 0.00     |
| 78) Terphenyl-d14           | 14.76 | 244  | 806061   | 85.73  | ng    | 0.00     |

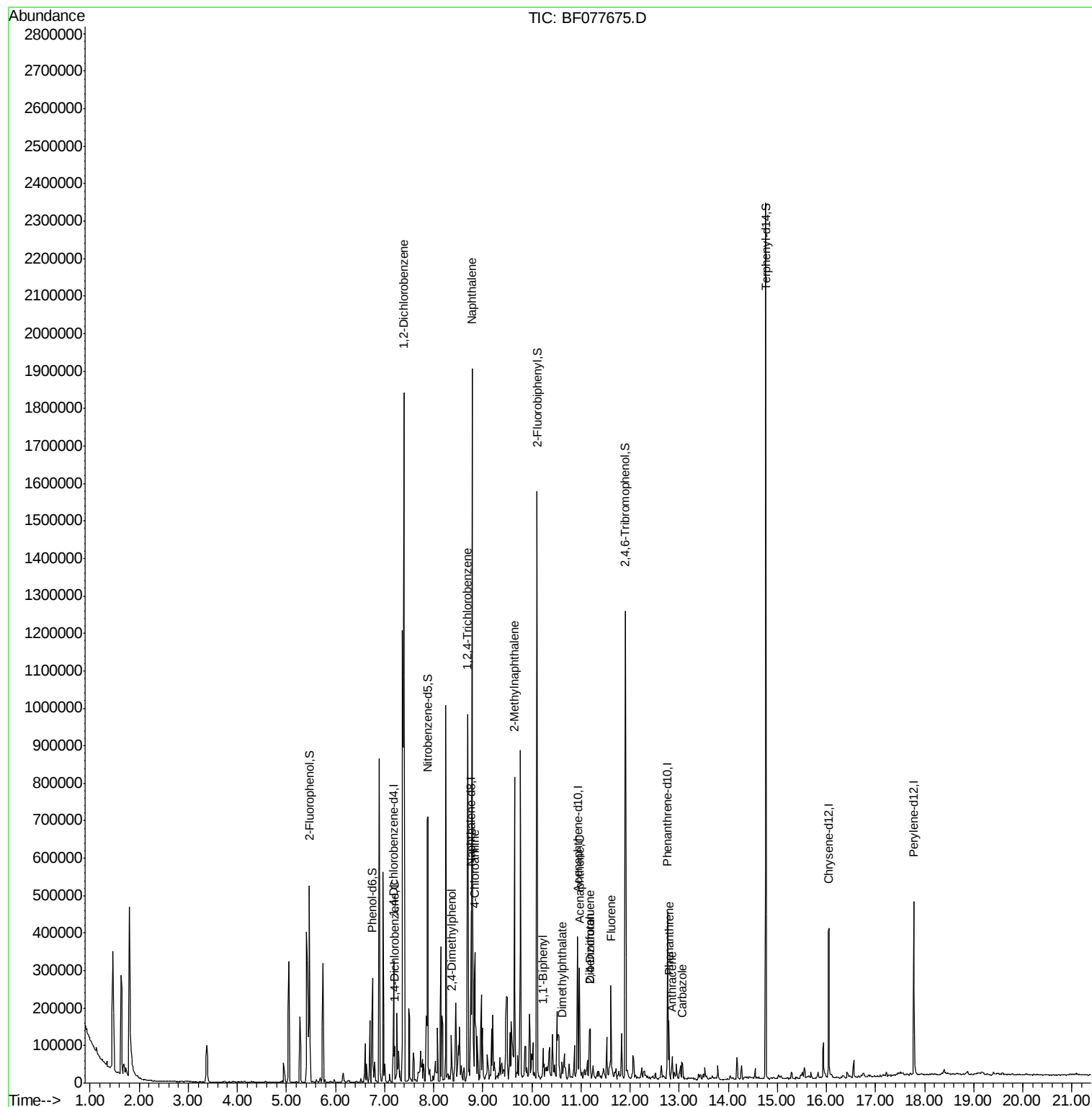
| Target Compounds           | R.T.  | QIon | Response | Conc   | Units | Qvalue |
|----------------------------|-------|------|----------|--------|-------|--------|
| 13) 1,4-Dichlorobenzene    | 7.21  | 146  | 25900    | 6.47   | ng    | 99     |
| 14) 1,2-Dichlorobenzene    | 7.39  | 146  | 410709   | 107.90 | ng    | 99     |
| 27) 2,4-Dimethylphenol     | 8.37  | 122  | 8682     | 2.76   | ng    | 99     |
| 30) 1,2,4-Trichlorobenzene | 8.69  | 180  | 177022   | 54.53  | ng    | 99     |
| 31) Naphthalene            | 8.79  | 128  | 872403   | 86.04  | ng    | 99     |
| 33) 4-Chloroaniline        | 8.84  | 127  | 149238   | 33.10  | ng    | 99     |
| 37) 2-Methylnaphthalene    | 9.64  | 142  | 225964   | 31.38  | ng    | 98     |
| 45) 1,1'-Biphenyl          | 10.23 | 154  | 21914    | 2.83   | ng    | 96     |
| 49) Dimethylphthalate      | 10.61 | 163  | 18228    | 2.53   | ng    | 99     |
| 51) Acenaphthene           | 10.97 | 154  | 60764    | 10.58  | ng    | 99     |
| 54) Dibenzofuran           | 11.18 | 168  | 34275    | 3.87   | ng    | 96     |
| 56) 2,4-Dinitrotoluene     | 11.18 | 165  | 17321    | 8.89   | ng    | # 63   |
| 57) Fluorene               | 11.61 | 166  | 70706    | 9.98   | ng    | 98     |
| 70) Phenanthrene           | 12.80 | 178  | 63261    | 5.58   | ng    | 99     |
| 71) Anthracene             | 12.86 | 178  | 25577    | 2.27   | ng    | 98     |
| 72) Carbazole              | 13.07 | 167  | 26818    | 2.51   | ng    | 99     |

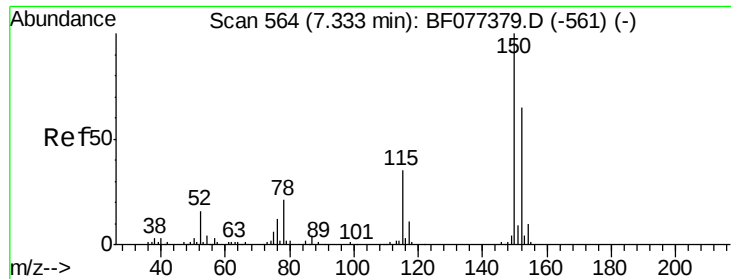
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\HPCHEM1\BNA F\DATA\BF031015\  
Data File : BF077675.D  
Acq On : 10 Mar 2015 21:57  
Operator : TP/IZ  
Sample : G1466-01  
Misc :  
ALS Vial : 19 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
DCW-WW-082-3915

Quant Time: Mar 11 02:25:35 2015  
Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF021915.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Wed Mar 11 00:54:19 2015  
Response via : Initial Calibration



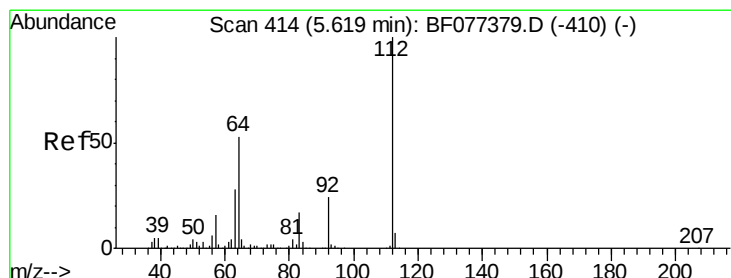
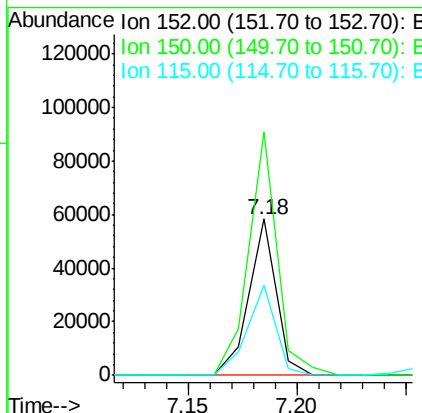
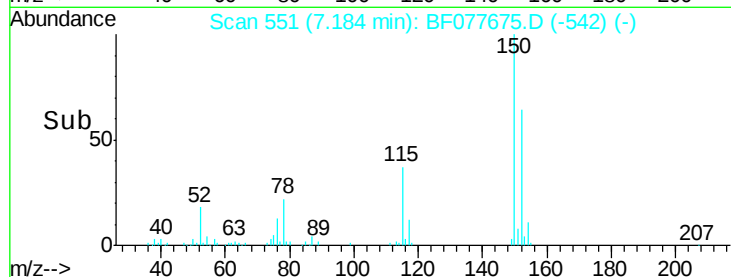
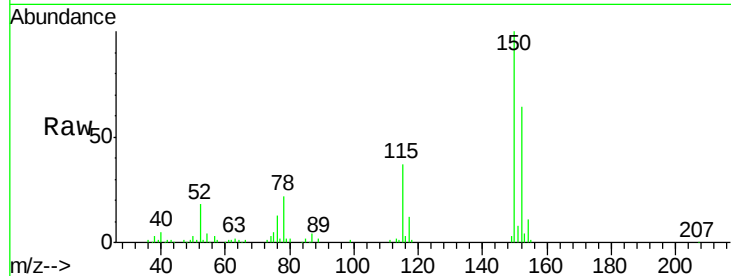


#1

1,4-Dichlorobenzene-d4  
Concen: 20.00 ng  
RT: 7.18 min Scan# 551  
Delta R.T. -0.00 min  
Lab File: BF077675.D  
Acq: 10 Mar 2015 21:57

Instrument :  
BNA\_F  
ClientSampleId :  
DCW-WW-082-3915

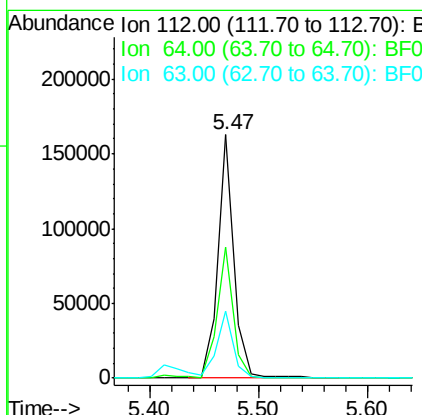
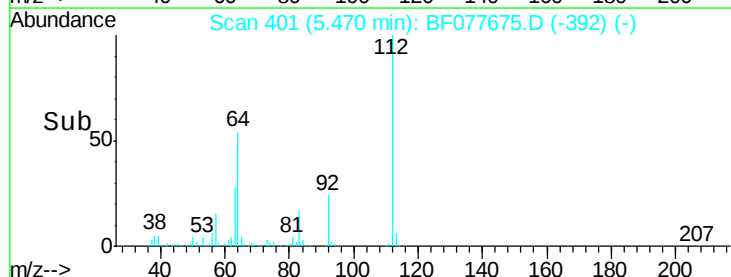
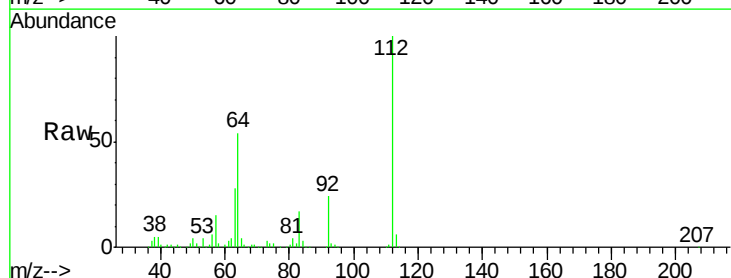
Tot Ion:152 Resp: 51116  
Ion Ratio Lower Upper  
152 100  
150 155.9 124.0 186.0  
115 57.5 49.4 74.2

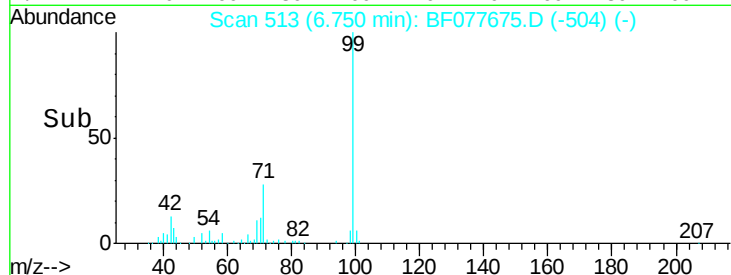
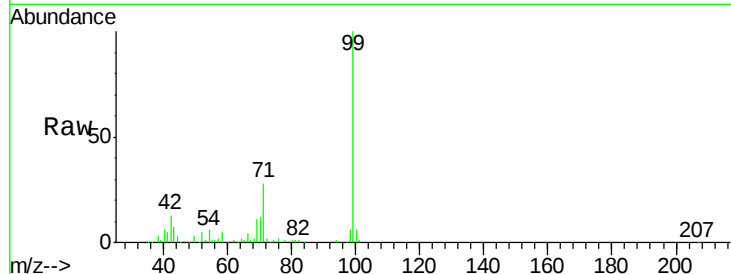


#5

2-Fluorophenol  
Concen: 54.93 ng  
RT: 5.47 min Scan# 401  
Delta R.T. 0.00 min  
Lab File: BF077675.D  
Acq: 10 Mar 2015 21:57

Tgt Ion:112 Resp: 168197  
Ion Ratio Lower Upper  
112 100  
64 54.0 48.5 72.7  
63 27.5 25.0 37.4





#7

Phenol-d6

Concen: 31.30 ng

RT: 6.75 min Scan# 513

Delta R.T. -0.00 min

Lab File: BF077675.D

Acq: 10 Mar 2015 21:57

Instrument :

BNA\_F

ClientSampleId :

DCW-WW-082-3915

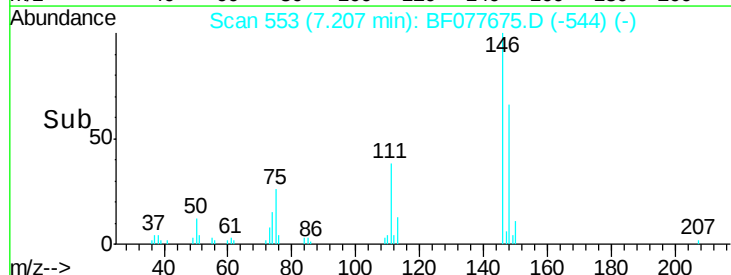
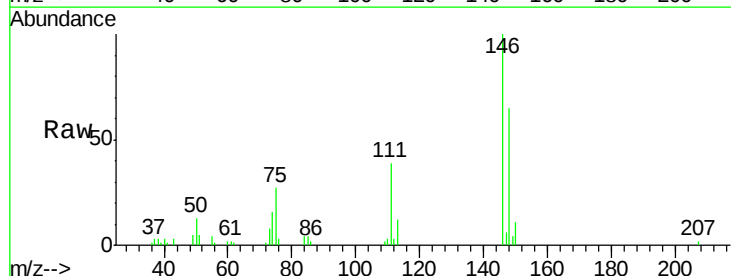
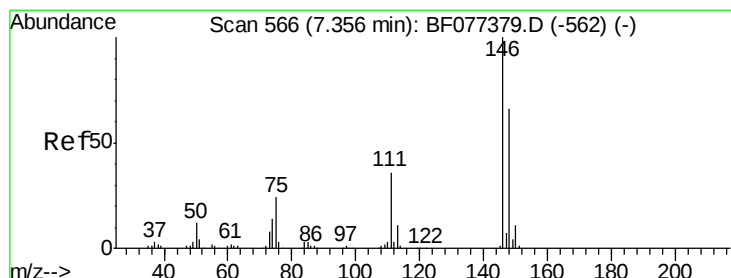
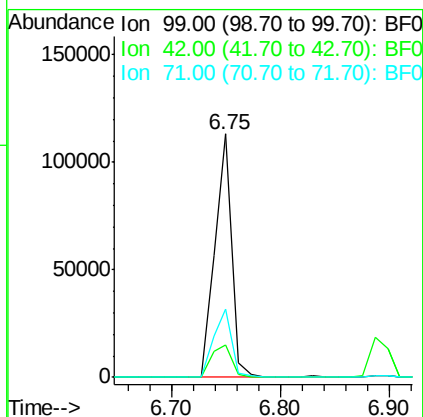
Tot Ion: 99 Resp: 123203

Ion Ratio Lower Upper

99 100

42 13.4 16.2 24.4#

71 28.2 26.7 40.1



#13

1,4-Dichlorobenzene

Concen: 6.47 ng

RT: 7.21 min Scan# 553

Delta R.T. -0.00 min

Lab File: BF077675.D

Acq: 10 Mar 2015 21:57

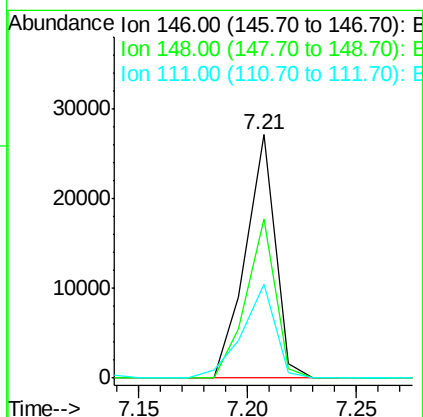
Tgt Ion: 146 Resp: 25900

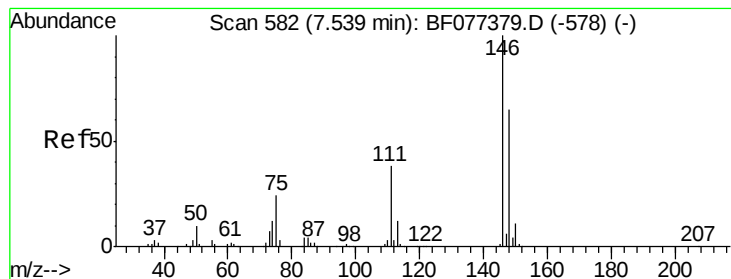
Ion Ratio Lower Upper

146 100

148 65.2 52.0 78.0

111 38.7 31.9 47.9

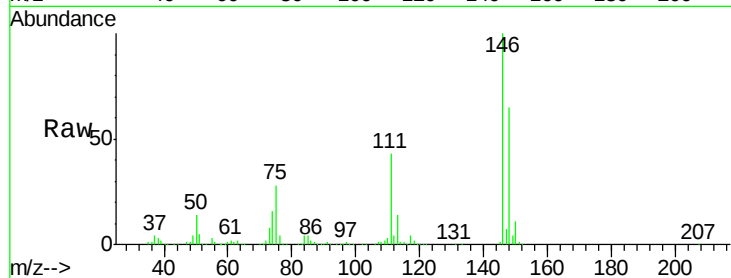




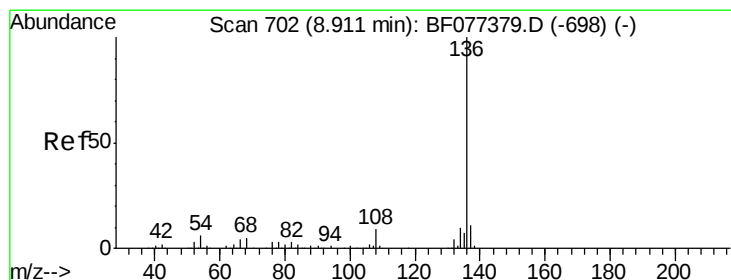
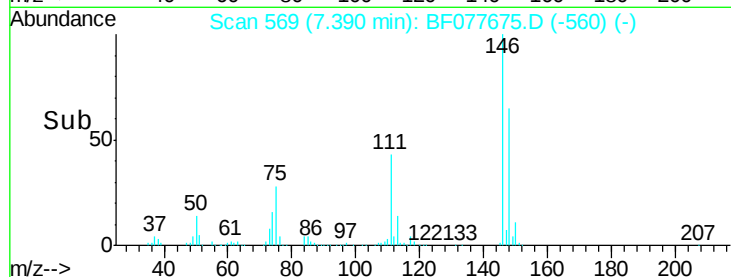
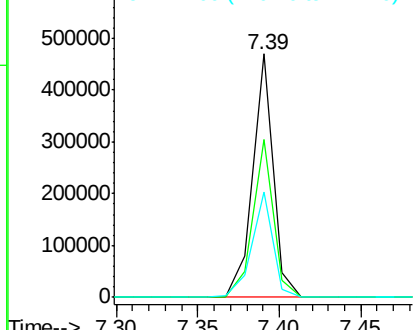
#14  
1,2-Dichlorobenzene  
Concen: 107.90 ng  
RT: 7.39 min Scan# 569  
Delta R.T. -0.00 min  
Lab File: BF077675.D  
Acq: 10 Mar 2015 21:57

Instrument :  
BNA\_F  
ClientSampleId :  
DCW-WW-082-3915

Tot Ion:146 Resp: 410709  
Ion Ratio Lower Upper  
146 100  
148 64.9 51.6 77.4  
111 43.1 34.2 51.2

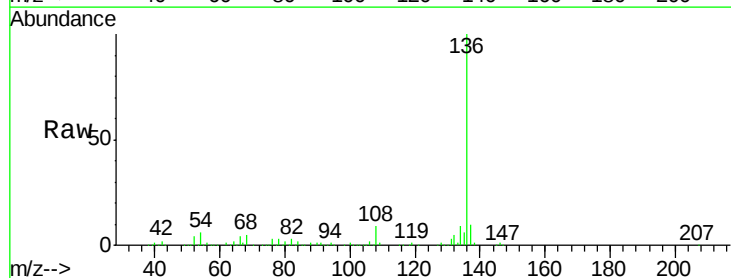


Abundance Ion 146.00 (145.70 to 146.70): E  
Ion 148.00 (147.70 to 148.70): E  
Ion 111.00 (110.70 to 111.70): E

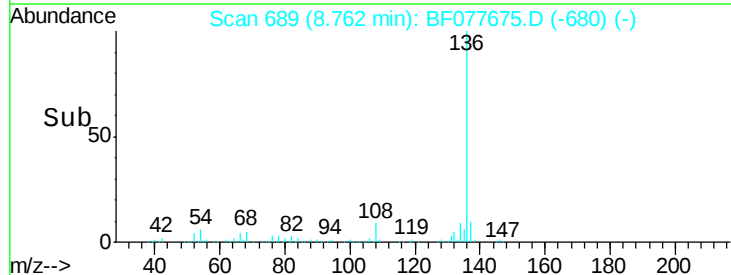
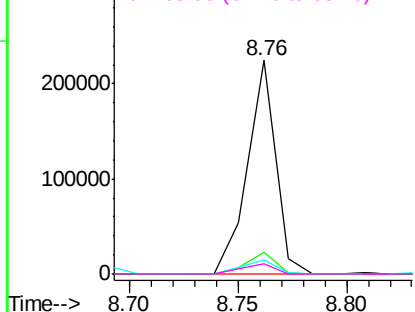


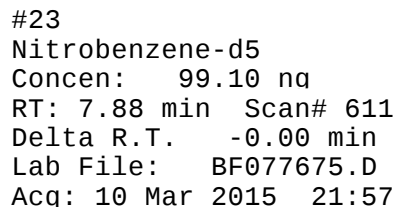
#21  
Naphthalene-d8  
Concen: 20.00 ng  
RT: 8.76 min Scan# 689  
Delta R.T. -0.00 min  
Lab File: BF077675.D  
Acq: 10 Mar 2015 21:57

Tgt Ion:136 Resp: 202759  
Ion Ratio Lower Upper  
136 100  
137 10.5 8.6 13.0  
54 6.4 6.2 9.4  
68 5.1 5.0 7.6



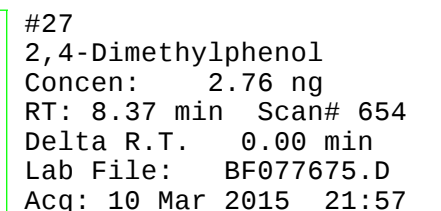
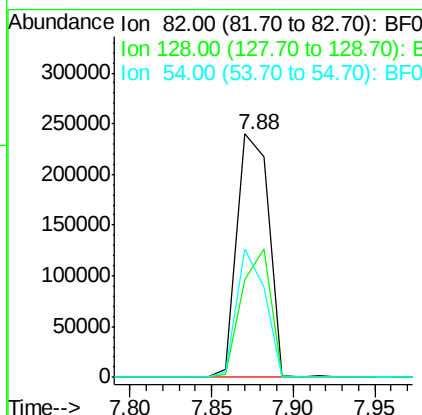
Abundance Ion 136.00 (135.70 to 136.70): E  
Ion 137.00 (136.70 to 137.70): E  
Ion 54.00 (53.70 to 54.70): BF0  
Ion 68.00 (67.70 to 68.70): BF0



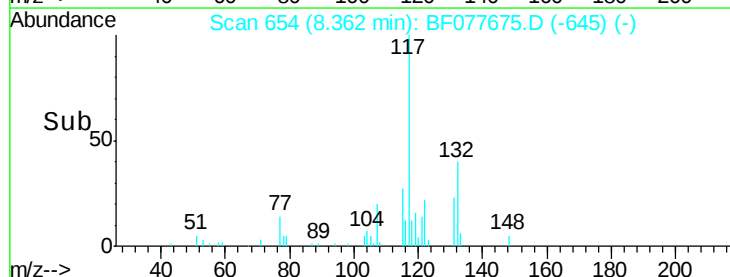
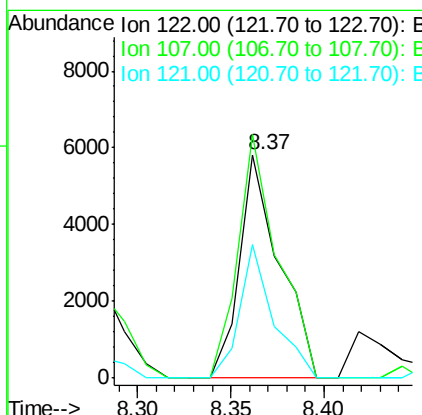


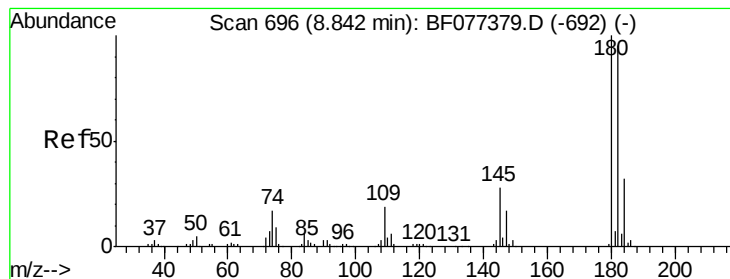
**Instrument :**  
BNA\_F  
**ClientSampleId :**  
DCW-WW-082-3915

|     |         |       |        |
|-----|---------|-------|--------|
| Tot | Ion: 82 | Resp: | 323131 |
| Ion | Ratio   | Lower | Upper  |
| 82  | 100     |       |        |
| 128 | 40.1    | 43.8  | 65.8#  |
| 54  | 52.6    | 36.7  | 55.1   |



|     |         |       |       |
|-----|---------|-------|-------|
| Tgt | Ion:122 | Resp: | 8682  |
| Ion | Ratio   | Lower | Upper |
| 122 | 100     |       |       |
| 107 | 109.0   | 86.6  | 130.0 |
| 121 | 59.6    | 47.4  | 71.0  |





#30

1,2,4-Trichlorobenzene

Concen: 54.53 ng

RT: 8.69 min Scan# 683

Delta R.T. -0.00 min

Lab File: BF077675.D

Acq: 10 Mar 2015 21:57

Instrument :

BNA\_F

ClientSampleId :

DCW-WW-082-3915

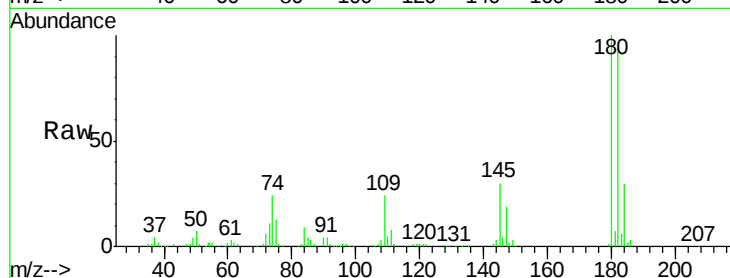
Tot Ion:180 Resp: 177022

Ion Ratio Lower Upper

180 100

182 94.2 76.2 114.4

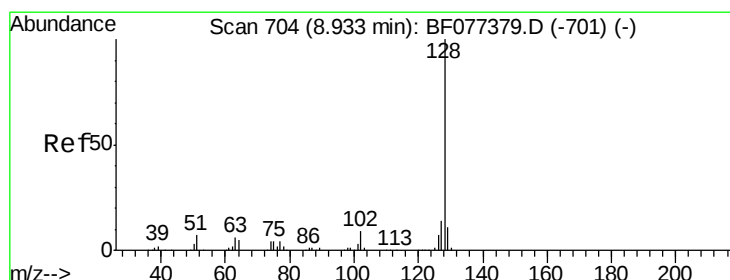
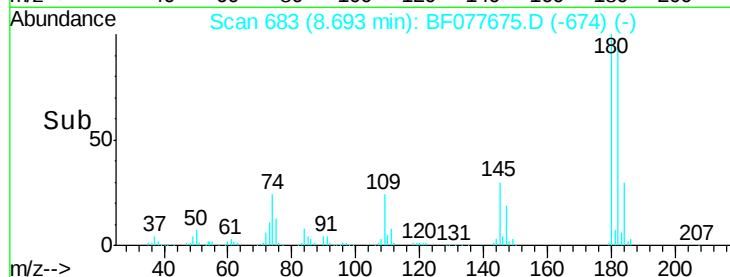
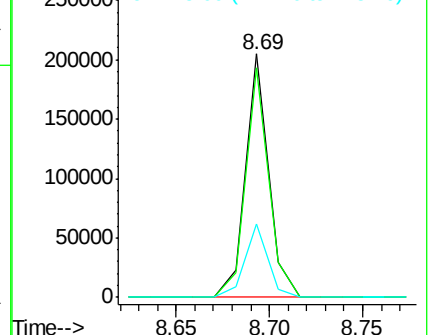
145 30.0 24.5 36.7



Abundance Ion 180.00 (179.70 to 180.70): E

Ion 182.00 (181.70 to 182.70): E

Ion 145.00 (144.70 to 145.70): E



#31

Naphthalene

Concen: 86.04 ng

RT: 8.79 min Scan# 691

Delta R.T. -0.00 min

Lab File: BF077675.D

Acq: 10 Mar 2015 21:57

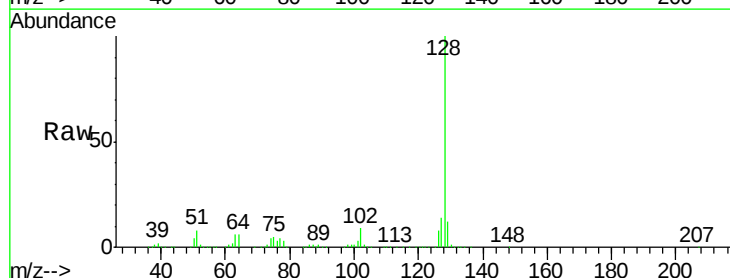
Tgt Ion:128 Resp: 872403

Ion Ratio Lower Upper

128 100

129 11.8 9.4 14.0

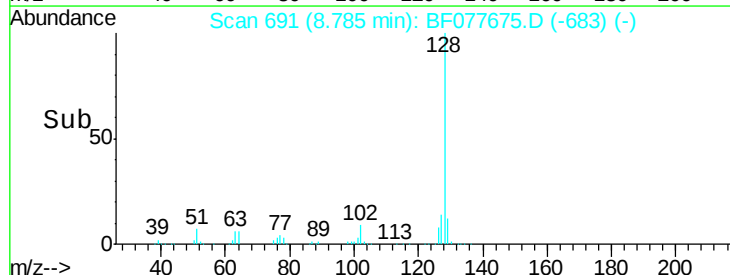
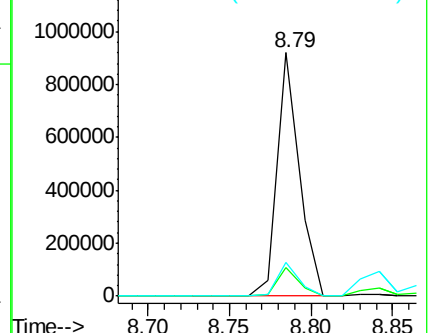
127 13.7 10.6 15.8

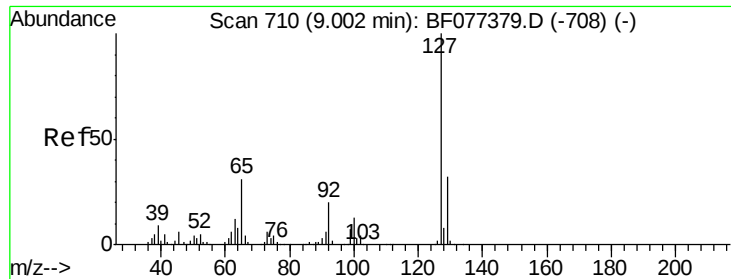


Abundance Ion 128.00 (127.70 to 128.70): E

Ion 129.00 (128.70 to 129.70): E

Ion 127.00 (126.70 to 127.70): E

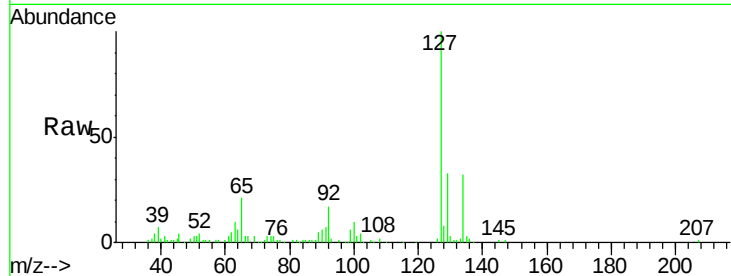




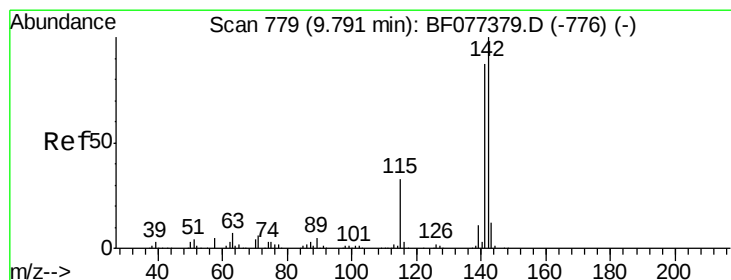
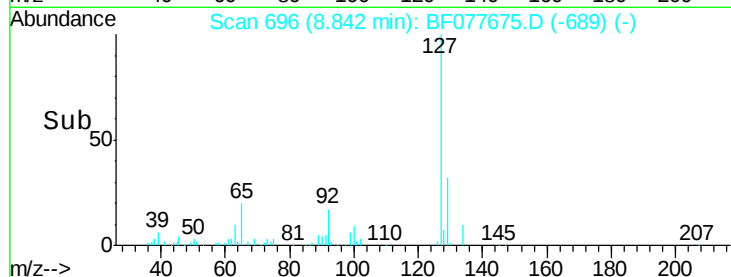
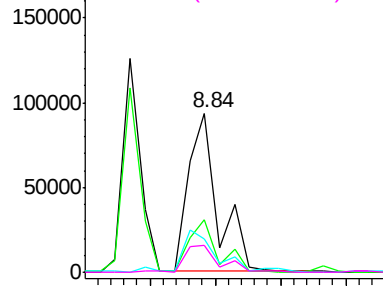
#33  
4-Chloroaniline  
Concen: 33.10 ng  
RT: 8.84 min Scan# 696  
Delta R.T. -0.02 min  
Lab File: BF077675.D  
Acq: 10 Mar 2015 21:57

Instrument :  
BNA\_F  
ClientSampleId :  
DCW-WW-082-3915

|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 127   | Resp: | 149238 |
| Ion      | Ratio | Lower | Upper  |
| 127      | 100   |       |        |
| 129      | 33.1  | 26.9  | 40.3   |
| 65       | 21.3  | 16.7  | 25.1   |
| 92       | 16.8  | 12.5  | 18.7   |

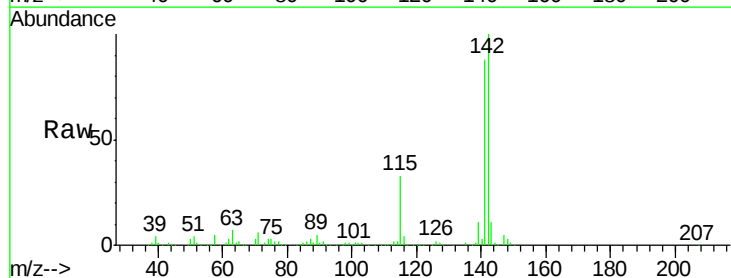


Abundance Ion 127.00 (126.70 to 127.70): E  
Ion 129.00 (128.70 to 129.70): E  
Ion 65.00 (64.70 to 65.70): BF0  
Ion 92.00 (91.70 to 92.70): BF0

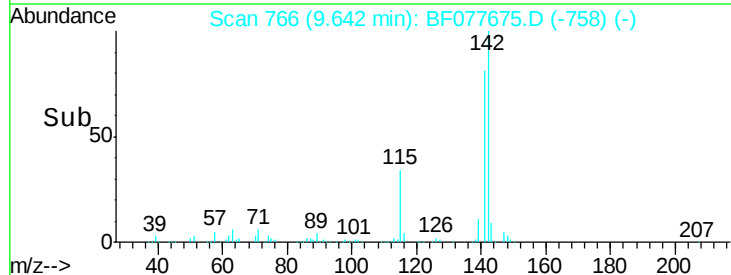
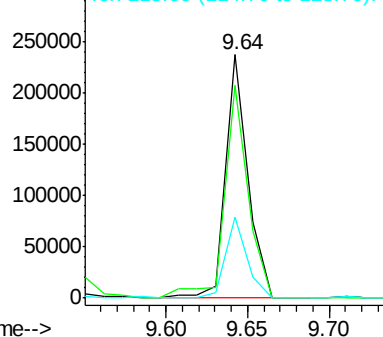


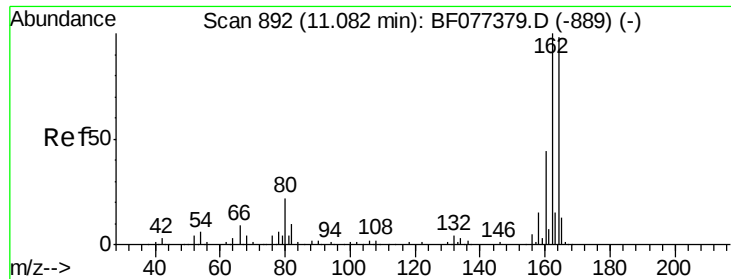
#37  
2-Methylnaphthalene  
Concen: 31.38 ng  
RT: 9.64 min Scan# 766  
Delta R.T. -0.00 min  
Lab File: BF077675.D  
Acq: 10 Mar 2015 21:57

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 142   | Resp: | 225964 |
| Ion      | Ratio | Lower | Upper  |
| 142      | 100   |       |        |
| 141      | 87.6  | 70.7  | 106.1  |
| 115      | 33.5  | 24.2  | 36.4   |



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

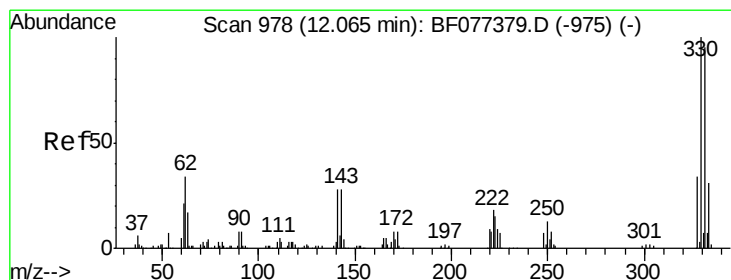
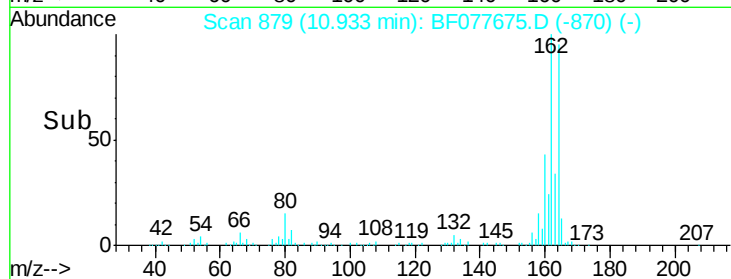
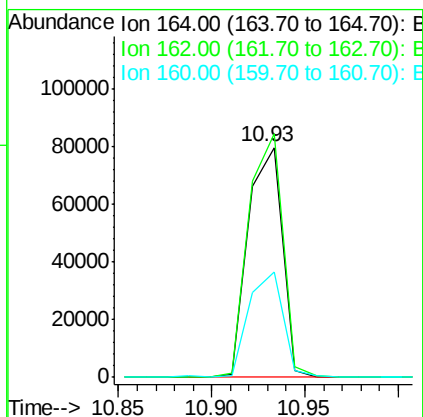
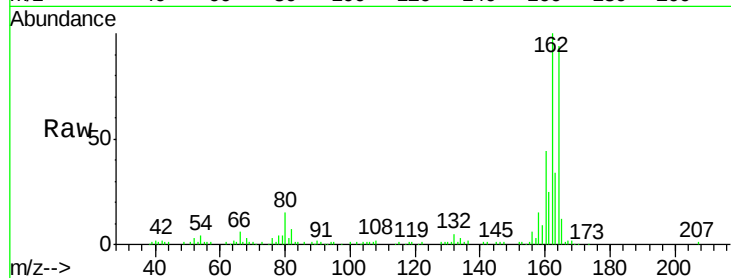




#38  
Acenaphthene-d10  
Concen: 20.00 ng  
RT: 10.93 min Scan# 879  
Delta R.T. -0.01 min  
Lab File: BF077675.D  
Acq: 10 Mar 2015 21:57

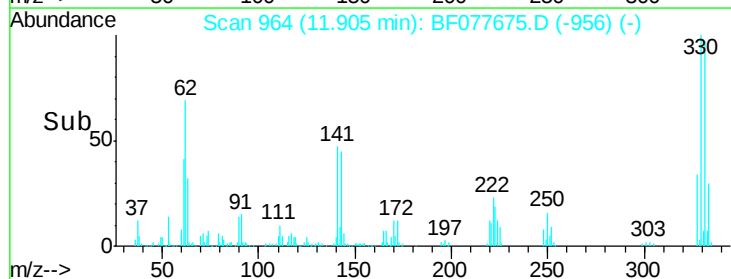
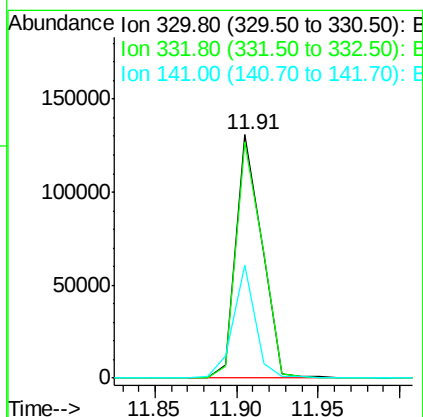
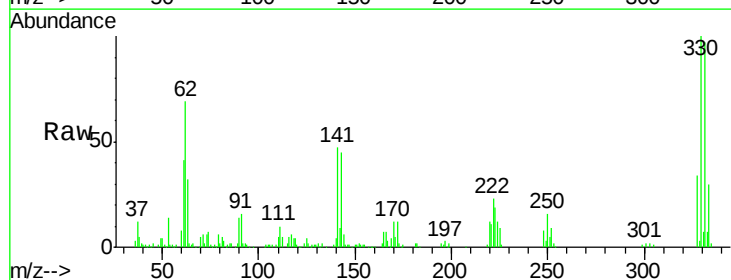
Instrument :  
BNA\_F  
ClientSampleId :  
DCW-WW-082-3915

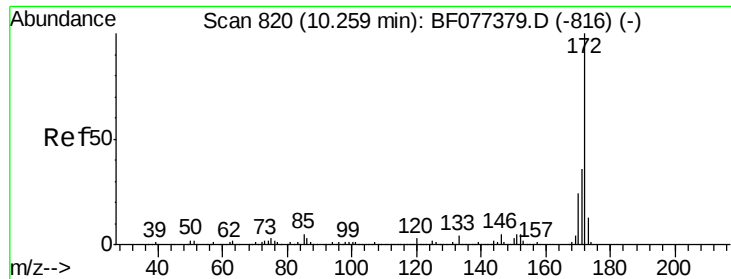
Tot Ion:164 Resp: 102296  
Ion Ratio Lower Upper  
164 100  
162 105.8 83.2 124.8  
160 46.1 34.6 52.0



#41  
2,4,6-Tribromophenol  
Concen: 145.08 ng  
RT: 11.91 min Scan# 964  
Delta R.T. -0.00 min  
Lab File: BF077675.D  
Acq: 10 Mar 2015 21:57

Tgt Ion:330 Resp: 142906  
Ion Ratio Lower Upper  
330 100  
332 97.9 77.4 116.2  
141 40.0 28.8 43.2





#44

2-Fluorobiphenyl

Concen: 107.87 ng

RT: 10.11 min Scan# 807

Delta R.T. -0.00 min

Lab File: BF077675.D

Acq: 10 Mar 2015 21:57

Instrument :

BNA\_F

ClientSampleId :

DCW-WW-082-3915

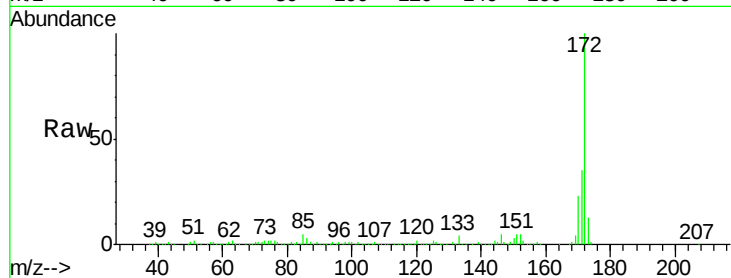
Tot Ion:172 Resp: 707681

Ion Ratio Lower Upper

172 100

171 35.3 28.9 43.3

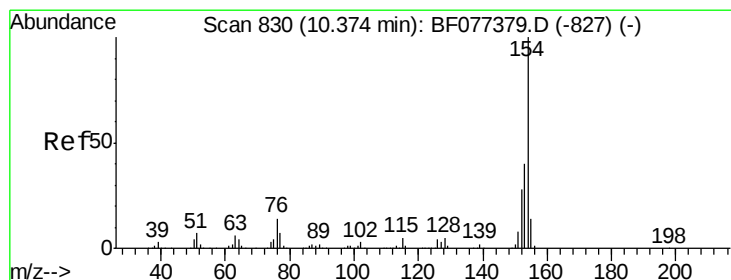
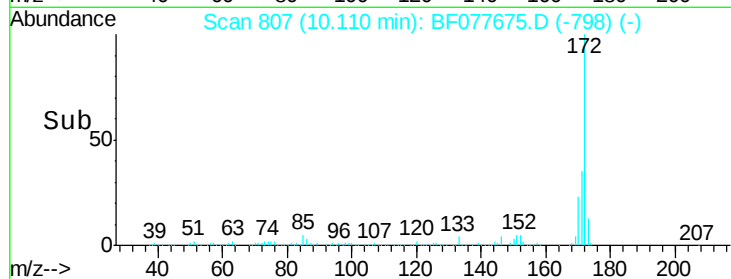
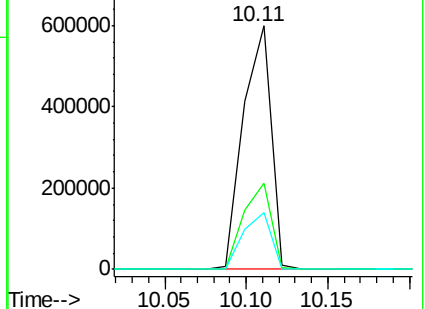
170 23.1 19.4 29.2



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: 2.83 ng

RT: 10.23 min Scan# 817

Delta R.T. -0.00 min

Lab File: BF077675.D

Acq: 10 Mar 2015 21:57

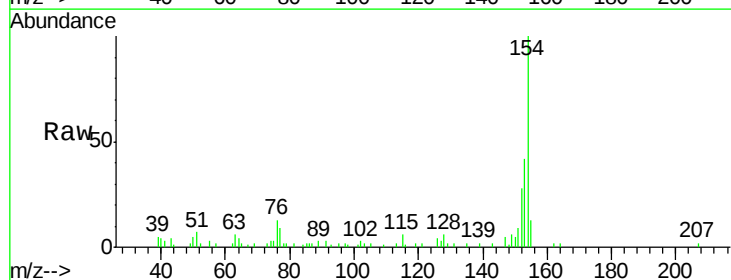
Tgt Ion:154 Resp: 21914

Ion Ratio Lower Upper

154 100

153 41.8 20.2 60.2

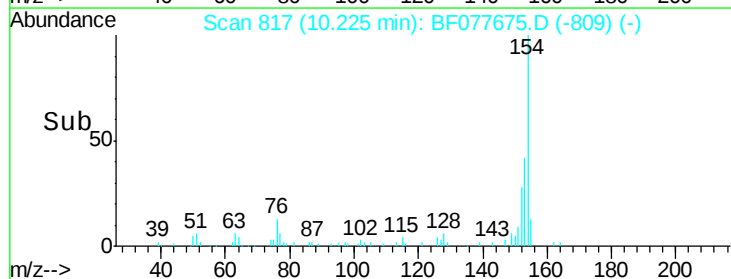
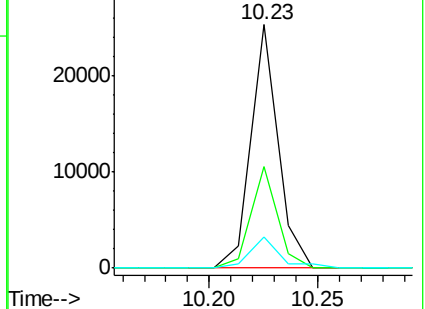
76 12.5 0.0 29.4

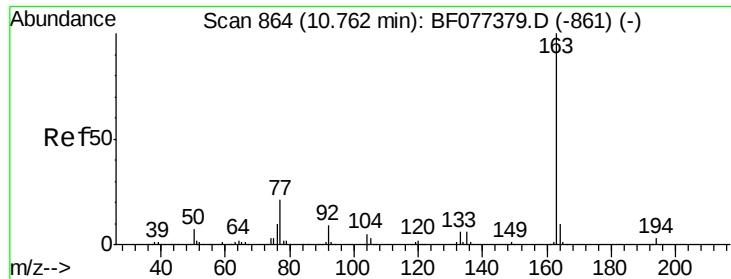


Abundance Ion 154.00 (153.70 to 154.70): E

Ion 153.00 (152.70 to 153.70): E

Ion 76.00 (75.70 to 76.70): BF0

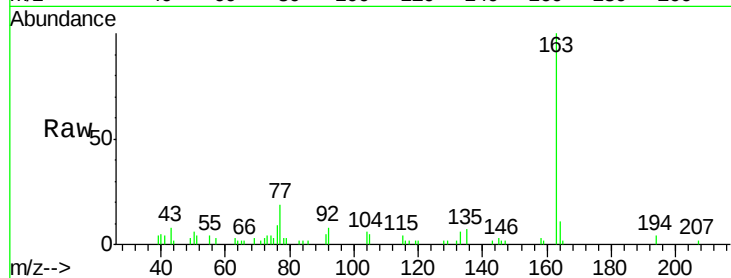




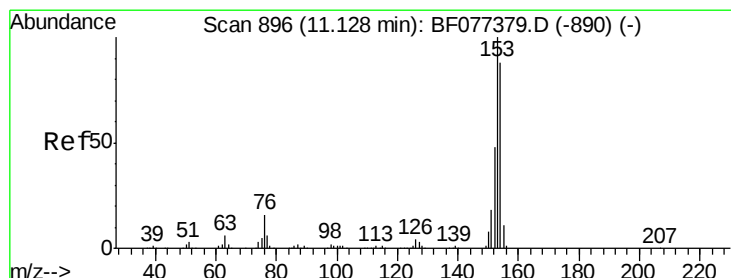
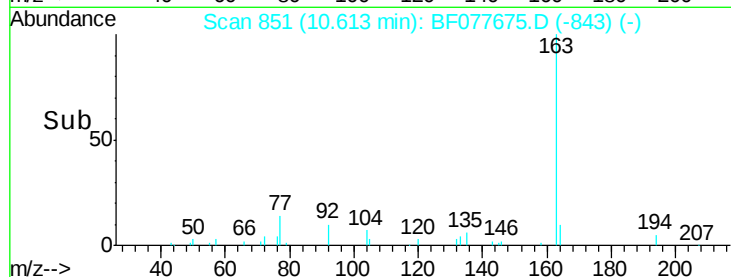
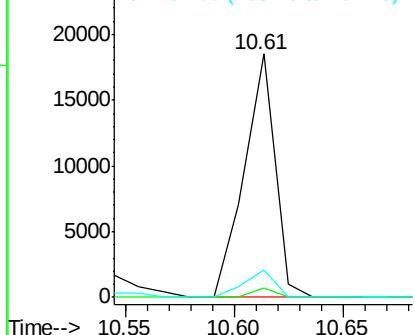
#49  
Dimethylphthalate  
Concen: 2.53 ng  
RT: 10.61 min Scan# 851  
Delta R.T. -0.01 min  
Lab File: BF077675.D  
Acq: 10 Mar 2015 21:57

Instrument :  
BNA\_F  
ClientSampleId :  
DCW-WW-082-3915

Tot Ion:163 Resp: 18228  
Ion Ratio Lower Upper  
163 100  
194 3.9 2.6 4.0  
164 11.1 8.6 13.0

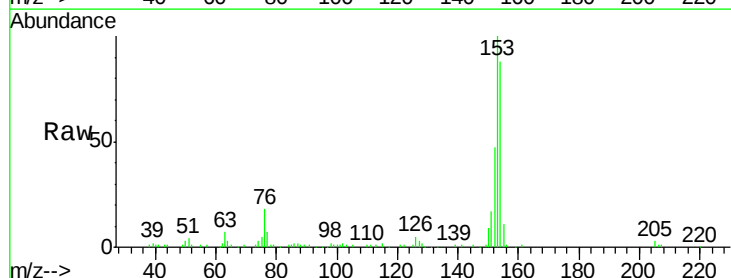


Abundance Ion 163.00 (162.70 to 163.70): E  
Ion 194.00 (193.70 to 194.70): E  
Ion 164.00 (163.70 to 164.70): E

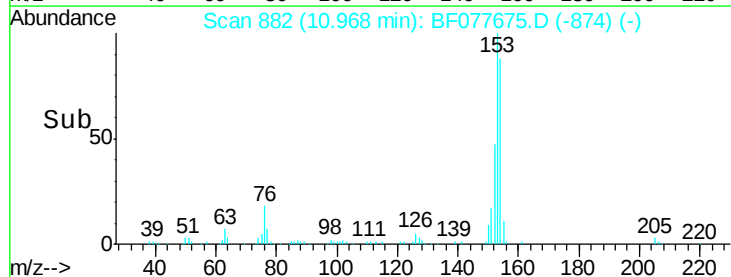
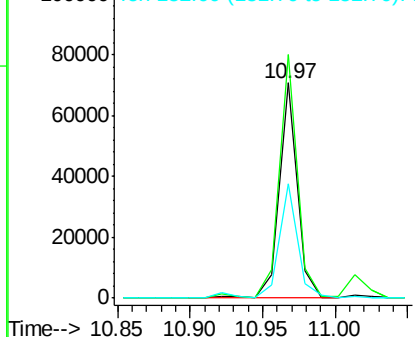


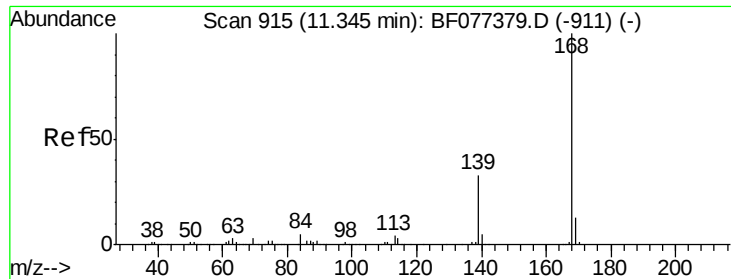
#51  
Acenaphthene  
Concen: 10.58 ng  
RT: 10.97 min Scan# 882  
Delta R.T. -0.01 min  
Lab File: BF077675.D  
Acq: 10 Mar 2015 21:57

Tgt Ion:154 Resp: 60764  
Ion Ratio Lower Upper  
154 100  
153 113.3 90.5 135.7  
152 53.5 43.5 65.3



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

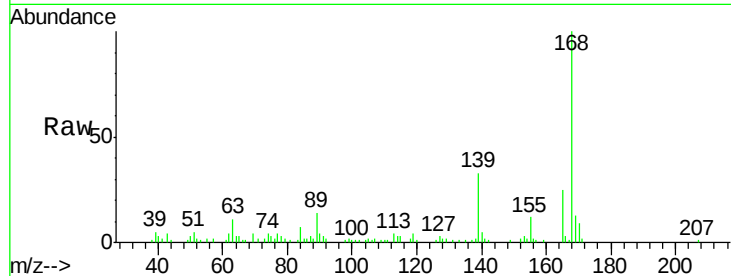




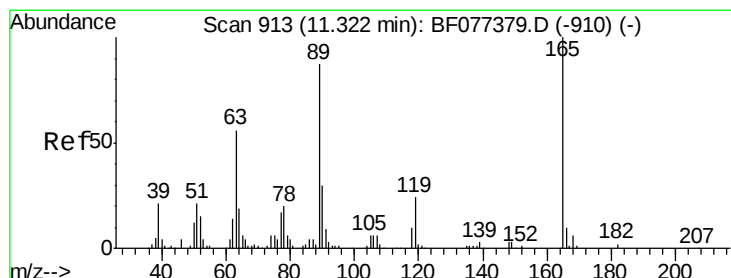
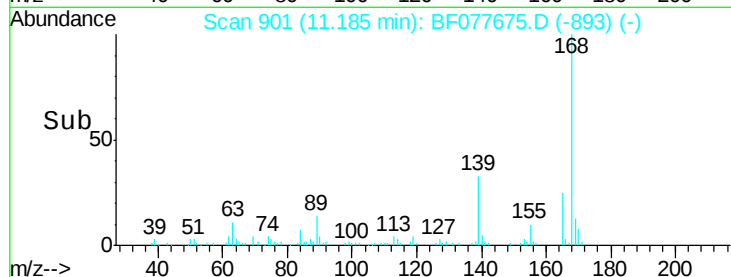
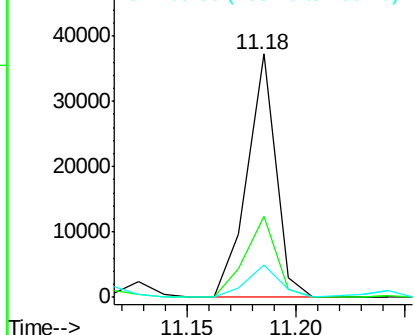
#54  
Dibenzofuran  
Concen: 3.87 ng  
RT: 11.18 min Scan# 901  
Delta R.T. -0.01 min  
Lab File: BF077675.D  
Acq: 10 Mar 2015 21:57

Instrument :  
BNA\_F  
ClientSampleId :  
DCW-WW-082-3915

Tot Ion:168 Resp: 34275  
Ion Ratio Lower Upper  
168 100  
139 33.5 29.3 43.9  
169 13.3 10.9 16.3

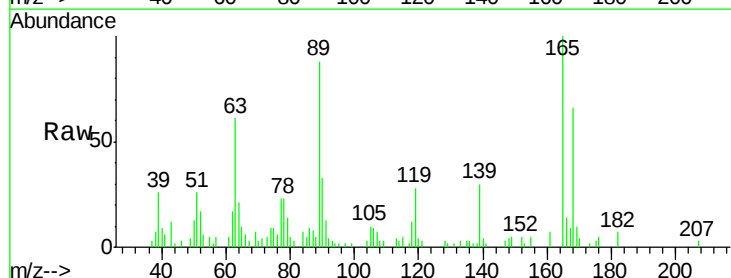


Abundance Ion 168.00 (167.70 to 168.70): E  
Ion 139.00 (138.70 to 139.70): E  
Ion 169.00 (168.70 to 169.70): E

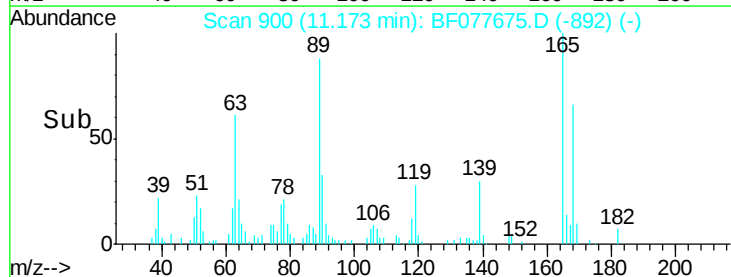
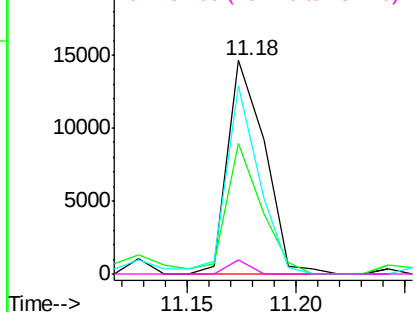


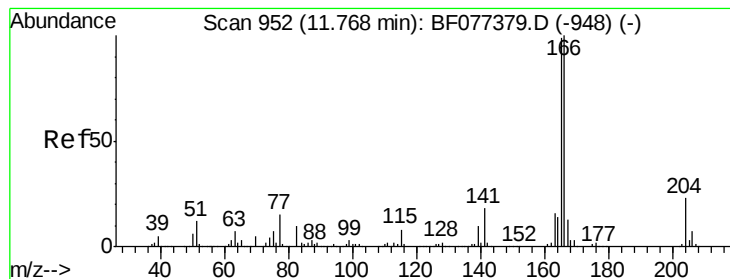
#56  
2,4-Dinitrotoluene  
Concen: 8.89 ng  
RT: 11.18 min Scan# 900  
Delta R.T. -0.01 min  
Lab File: BF077675.D  
Acq: 10 Mar 2015 21:57

Tgt Ion:165 Resp: 17321  
Ion Ratio Lower Upper  
165 100  
63 61.1 29.8 44.8#  
89 88.4 48.5 72.7#  
182 6.6 1.9 2.9#



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: 9.98 ng

RT: 11.61 min Scan# 938

Delta R.T. -0.01 min

Lab File: BF077675.D

Acq: 10 Mar 2015 21:57

Instrument :

BNA\_F

ClientSampleId :

DCW-WW-082-3915

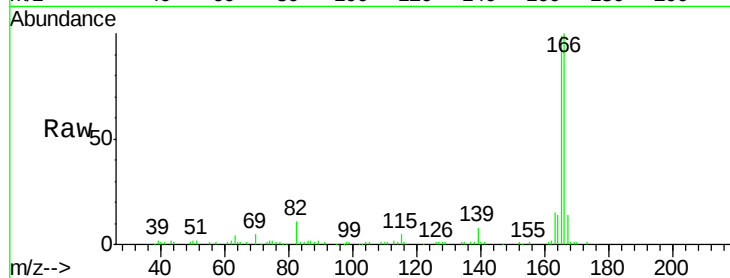
Tot Ion:166 Resp: 70706

Ion Ratio Lower Upper

166 100

165 99.1 77.6 116.4

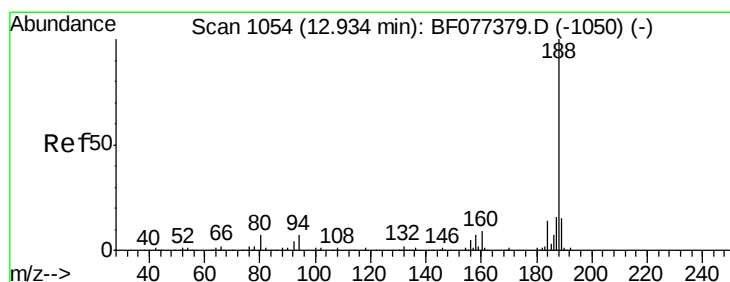
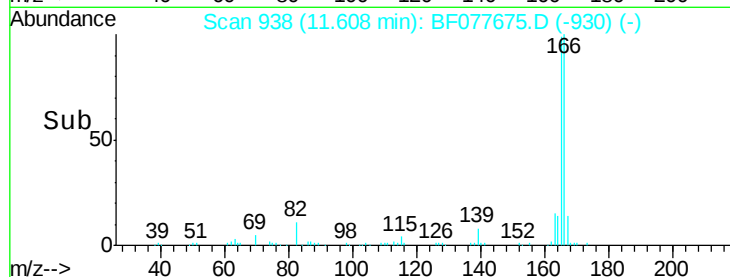
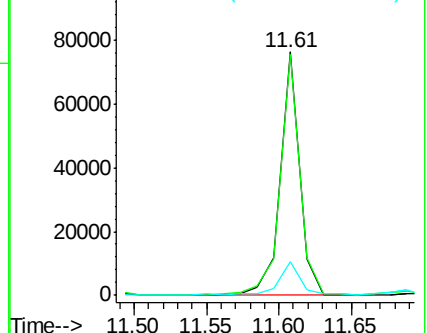
167 13.8 10.6 16.0



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



#63

Phenanthrene-d10

Concen: 20.00 ng

RT: 12.77 min Scan# 1039

Delta R.T. -0.01 min

Lab File: BF077675.D

Acq: 10 Mar 2015 21:57

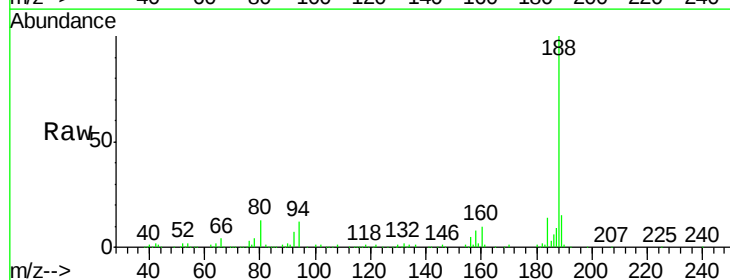
Tgt Ion:188 Resp: 195712

Ion Ratio Lower Upper

188 100

94 12.3 7.4 11.2#

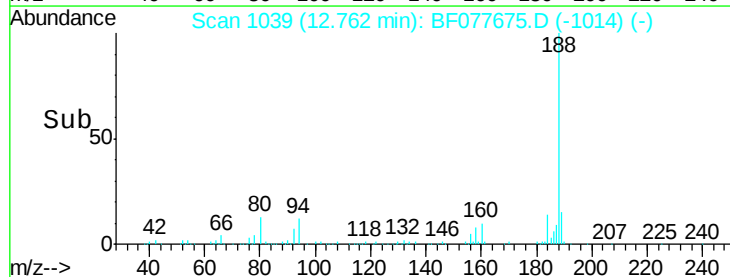
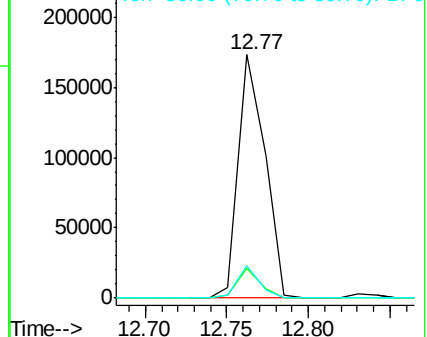
80 13.5 8.0 12.0#

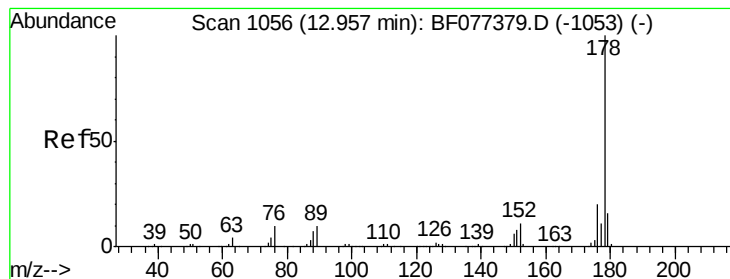


Abundance Ion 188.00 (187.70 to 188.70): E

Ion 94.00 (93.70 to 94.70): BF0

Ion 80.00 (79.70 to 80.70): BF0





#70

Phenanthrene

Concen: 5.58 ng

RT: 12.80 min Scan# 1042

Delta R.T. -0.01 min

Lab File: BF077675.D

Acq: 10 Mar 2015 21:57

Instrument :

BNA\_F

ClientSampleId :

DCW-WW-082-3915

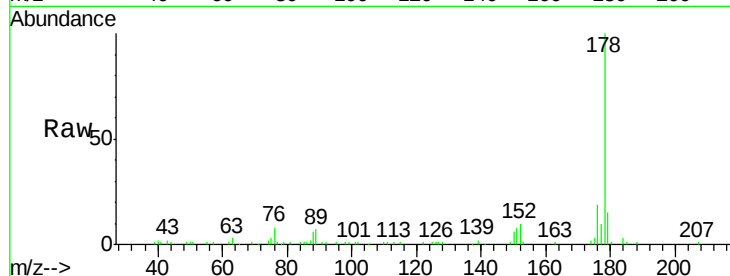
Tot Ion:178 Resp: 63261

Ion Ratio Lower Upper

178 100

176 18.8 15.5 23.3

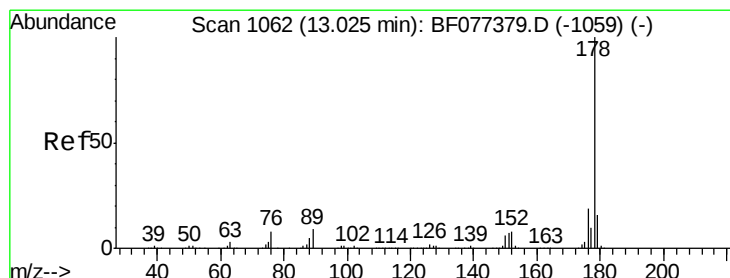
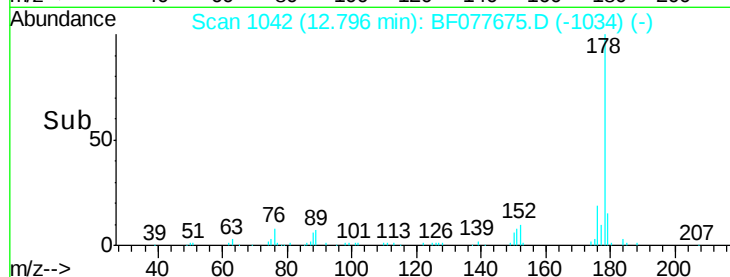
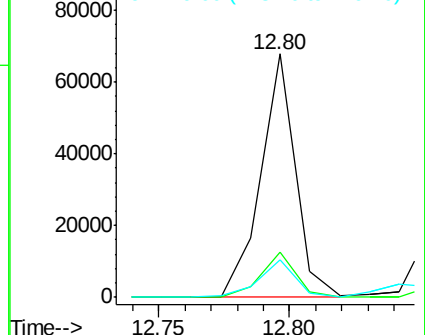
179 15.4 12.2 18.2



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: 2.27 ng

RT: 12.86 min Scan# 1047

Delta R.T. -0.01 min

Lab File: BF077675.D

Acq: 10 Mar 2015 21:57

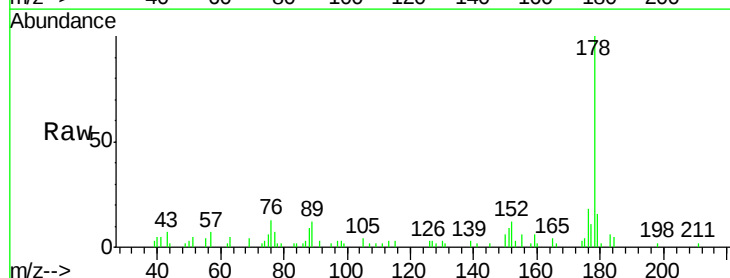
Tgt Ion:178 Resp: 25577

Ion Ratio Lower Upper

178 100

176 17.8 15.4 23.0

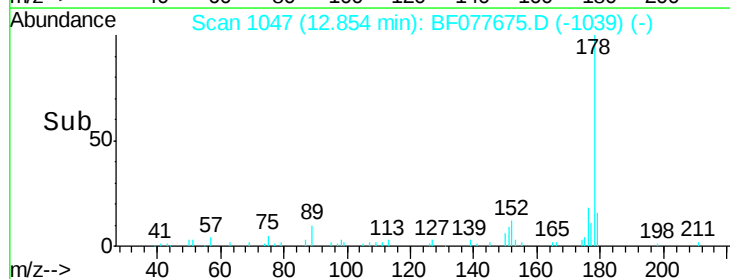
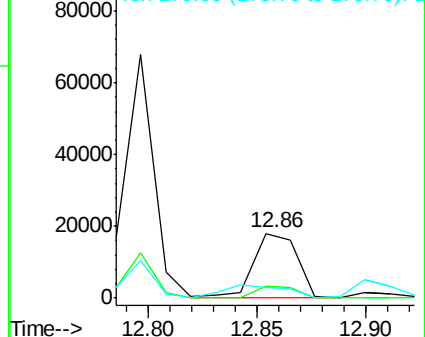
179 16.4 12.9 19.3

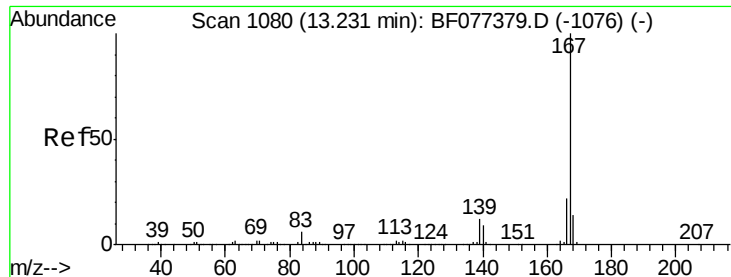


Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E





#72

Carbazole

Concen: 2.51 ng

RT: 13.07 min Scan# 1066

Delta R.T. -0.01 min

Lab File: BF077675.D

Acq: 10 Mar 2015 21:57

Instrument :

BNA\_F

ClientSampleId :

DCW-WW-082-3915

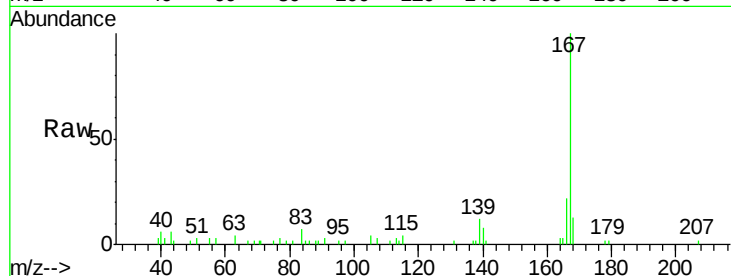
Tot Ion:167 Resp: 26818

Ion Ratio Lower Upper

167 100

166 22.4 17.6 26.4

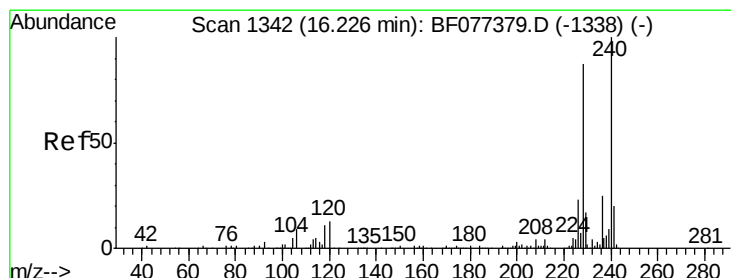
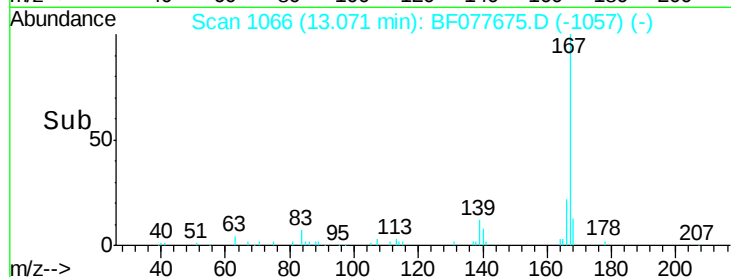
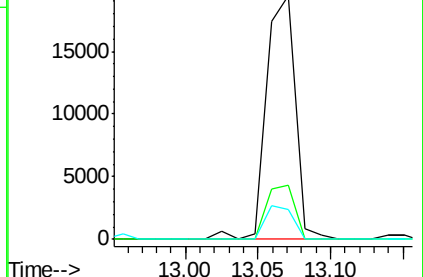
139 12.1 9.9 14.9



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



#75

Chrysene-d12

Concen: 20.00 ng

RT: 16.05 min Scan# 1327

Delta R.T. -0.03 min

Lab File: BF077675.D

Acq: 10 Mar 2015 21:57

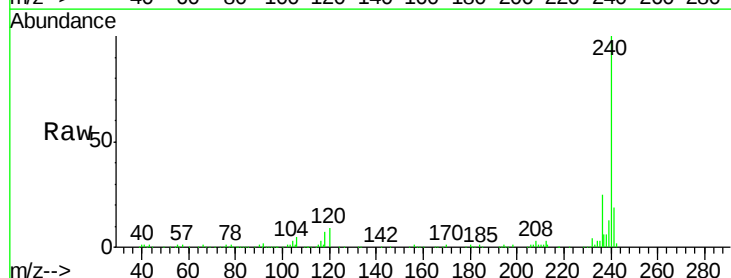
Tgt Ion:240 Resp: 219815

Ion Ratio Lower Upper

240 100

120 8.6 8.8 13.2#

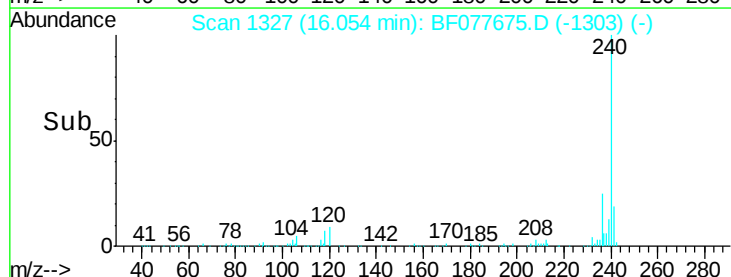
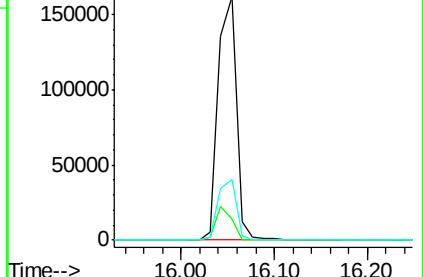
236 24.7 20.7 31.1

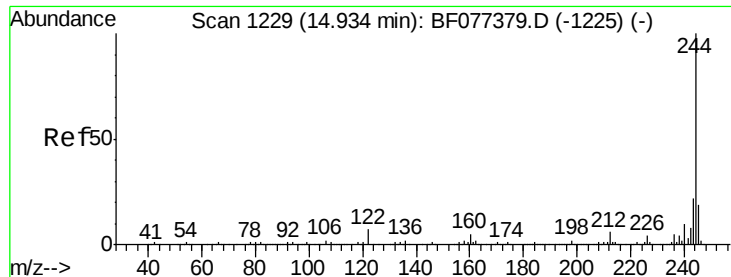


Abundance Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E

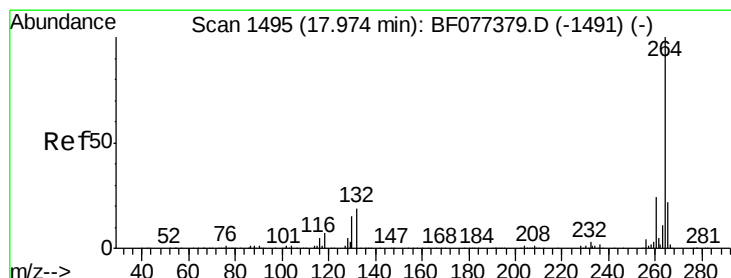
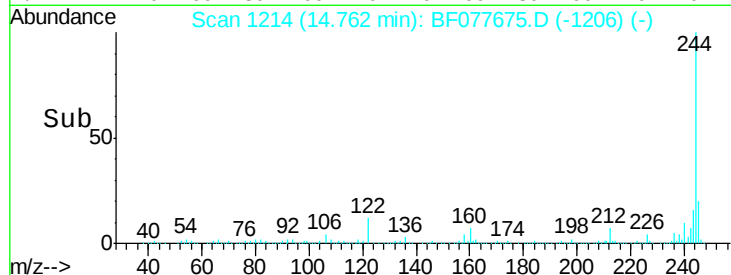
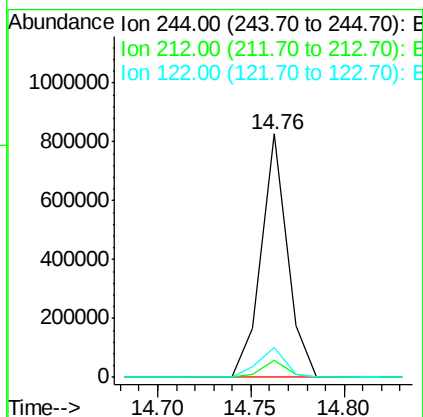
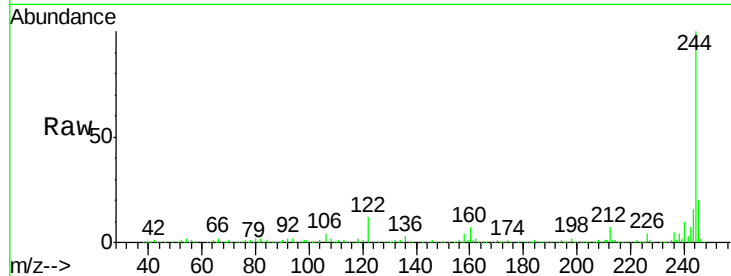




#78  
 Terphenyl-d14  
 Concen: 85.73 ng  
 RT: 14.76 min Scan# 1214  
 Delta R.T. -0.01 min  
 Lab File: BF077675.D  
 Acq: 10 Mar 2015 21:57

Instrument :  
 BNA\_F  
 ClientSampleId :  
 DCW-WW-082-3915

Tot Ion:244 Resp: 806061  
 Ion Ratio Lower Upper  
 244 100  
 212 6.8 5.2 7.8  
 122 12.3 7.8 11.8#



#86  
 Perylene-d12  
 Concen: 20.00 ng  
 RT: 17.78 min Scan# 1478  
 Delta R.T. -0.12 min  
 Lab File: BF077675.D  
 Acq: 10 Mar 2015 21:57

Tgt Ion:264 Resp: 210062  
 Ion Ratio Lower Upper  
 264 100  
 260 23.2 19.3 28.9  
 265 21.8 16.8 25.2

