

Data Path : Z:\HPCHEM1\BNA F\DATA\BF040915\  
 Data File : BF078398.D  
 Acq On : 10 Apr 2015 12:06  
 Operator : TP/IZ  
 Sample : G1793-01RE  
 Misc :  
 ALS Vial : 39 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :

Quant Time: Apr 10 12:49:14 2015  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF040115.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Apr 09 11:29:31 2015  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.89  | 152  | 46436    | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 8.46  | 136  | 194748   | 20.00 | ng    | 0.00     |
| 38) Acenaphthene-d10      | 10.63 | 164  | 94507    | 20.00 | ng    | -0.01    |
| 63) Phenanthrene-d10      | 12.45 | 188  | 185151   | 20.00 | ng    | -0.01    |
| 75) Chrysene-d12          | 15.71 | 240  | 191589   | 20.00 | ng    | -0.03    |
| 86) Perylene-d12          | 17.41 | 264  | 177884   | 20.00 | ng    | -0.05    |

|                             |       |     |        |       |    |       |
|-----------------------------|-------|-----|--------|-------|----|-------|
| System Monitoring Compounds |       |     |        |       |    |       |
| 5) 2-Fluorophenol           | 5.15  | 112 | 103806 | 36.86 | ng | -0.02 |
| 7) Phenol-d6                | 6.49  | 99  | 320948 | 90.93 | ng | 0.01  |
| 23) Nitrobenzene-d5         | 7.58  | 82  | 212279 | 66.07 | ng | 0.00  |
| 41) 2,4,6-Tribromophenol    | 11.60 | 330 | 15745  | 20.09 | ng | -0.02 |
| 44) 2-Fluorobiphenyl        | 9.81  | 172 | 415410 | 62.83 | ng | 0.00  |
| 78) Terphenyl-d14           | 14.44 | 244 | 407702 | 48.09 | ng | -0.02 |

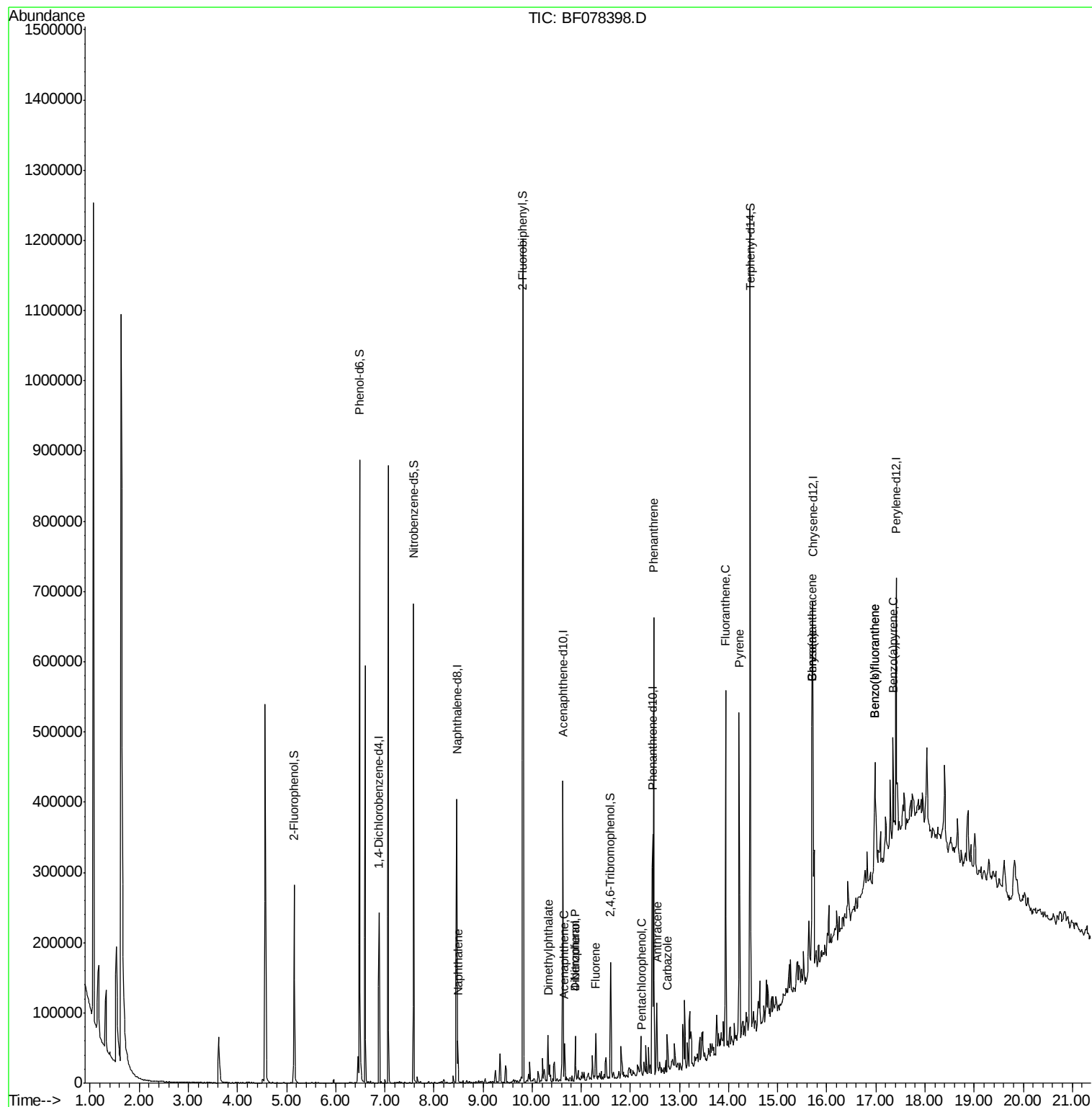
|                          |       |     |        |       |    |        |
|--------------------------|-------|-----|--------|-------|----|--------|
| Target Compounds         |       |     |        |       |    | Qvalue |
| 31) Naphthalene          | 8.49  | 128 | 25237  | 2.49  | ng | 98     |
| 49) Dimethylphthalate    | 10.33 | 163 | 38571  | 5.43  | ng | # 97   |
| 51) Acenaphthene         | 10.66 | 154 | 11776  | 2.13  | ng | 97     |
| 54) Dibenzofuran         | 10.88 | 168 | 24342  | 2.88  | ng | 99     |
| 55) 4-Nitrophenol        | 10.88 | 139 | 9206   | 10.03 | ng | # 18   |
| 57) Fluorene             | 11.30 | 166 | 17312  | 2.53  | ng | 99     |
| 69) Pentachlorophenol    | 12.24 | 266 | 234    | 7.98  | ng | # 19   |
| 70) Phenanthrene         | 12.48 | 178 | 250982 | 23.43 | ng | 100    |
| 71) Anthracene           | 12.55 | 178 | 58876  | 5.58  | ng | 99     |
| 72) Carbazole            | 12.75 | 167 | 26829  | 2.71  | ng | # 94   |
| 74) Fluoranthene         | 13.94 | 202 | 229902 | 20.35 | ng | 97     |
| 77) Pvrene               | 14.21 | 202 | 198789 | 16.53 | ng | # 93   |
| 80) Benzo(a)anthracene   | 15.70 | 228 | 104058 | 9.13  | ng | 97     |
| 82) Chrysene             | 15.70 | 228 | 101946 | 9.52  | ng | 96     |
| 87) Benzo(b)fluoranthene | 16.98 | 252 | 124630 | 11.34 | ng | # 89   |
| 88) Benzo(k)fluoranthene | 16.98 | 252 | 124875 | 12.78 | ng | 95     |
| 89) Benzo(a)pyrene       | 17.35 | 252 | 70011  | 7.30  | ng | # 87   |

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

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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
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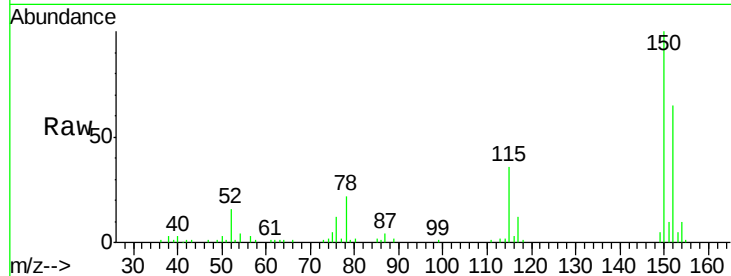


#1

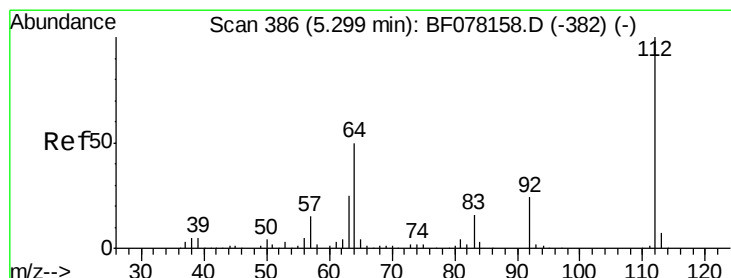
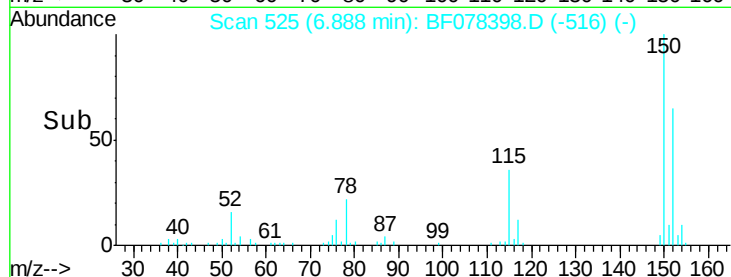
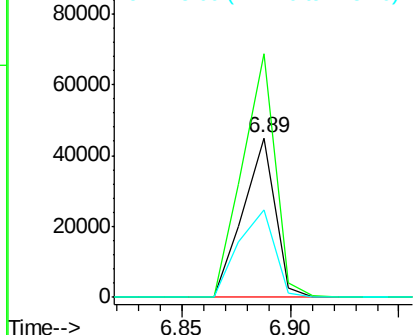
1,4-Dichlorobenzene-d4  
Concen: 20.00 ng  
RT: 6.89 min Scan# 525  
Delta R.T. 0.00 min  
Lab File: BF078398.D  
Acq: 10 Apr 2015 12:06

Instrument :  
BNA\_F  
ClientSampleId :

Tot Ion:152 Resp: 46436  
Ion Ratio Lower Upper  
152 100  
150 152.9 125.9 188.9  
115 55.1 52.7 79.1



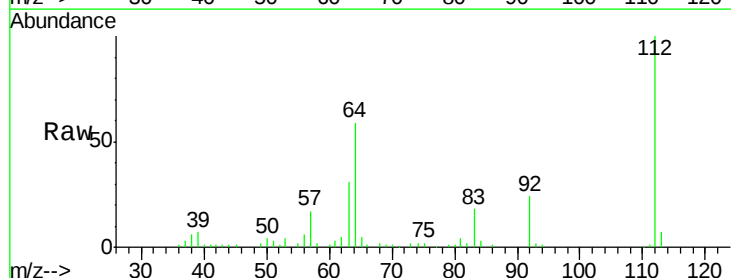
Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 115.00 (114.70 to 115.70): E



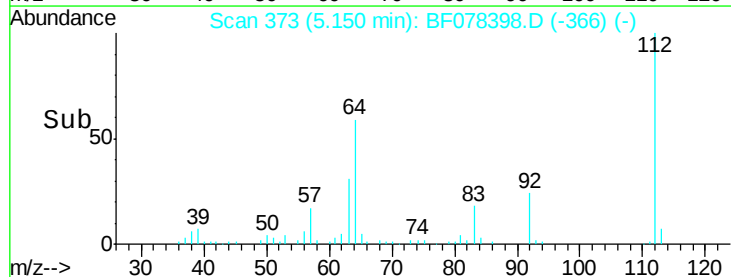
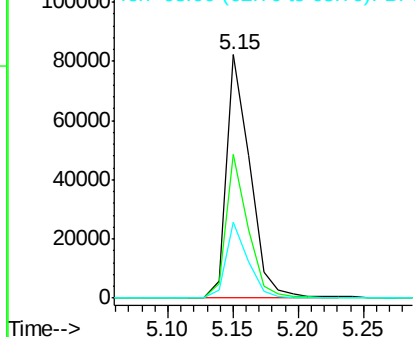
#5

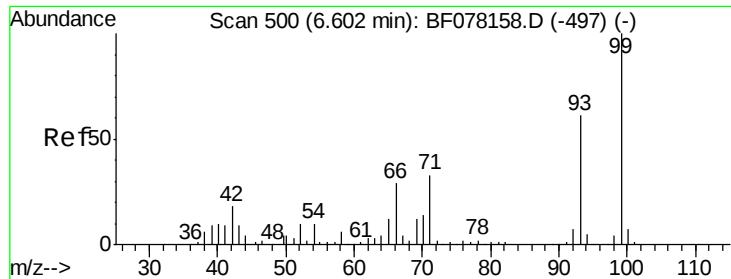
2-Fluorophenol  
Concen: 36.86 ng  
RT: 5.15 min Scan# 373  
Delta R.T. -0.02 min  
Lab File: BF078398.D  
Acq: 10 Apr 2015 12:06

Tgt Ion:112 Resp: 103806  
Ion Ratio Lower Upper  
112 100  
64 58.9 39.9 59.9  
63 31.0 20.2 30.4#



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: 90.93 ng

RT: 6.49 min Scan# 490

Delta R.T. 0.01 min

Lab File: BF078398.D

Acq: 10 Apr 2015 12:06

Instrument :

BNA\_F

ClientSampleId :

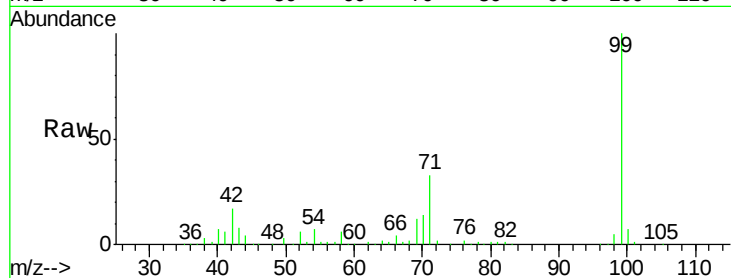
Tot Ion: 99 Resp: 320948

Ion Ratio Lower Upper

99 100

42 16.9 14.8 22.2

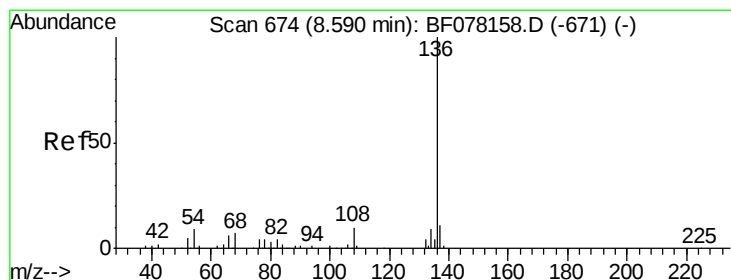
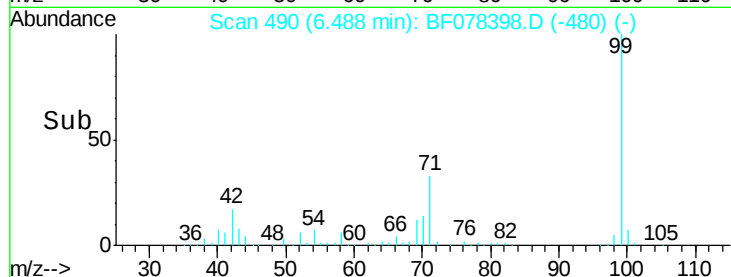
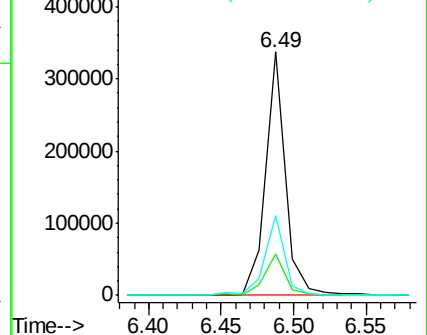
71 32.6 26.6 39.8



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: 8.46 min Scan# 663

Delta R.T. 0.00 min

Lab File: BF078398.D

Acq: 10 Apr 2015 12:06

Tgt Ion: 136 Resp: 194748

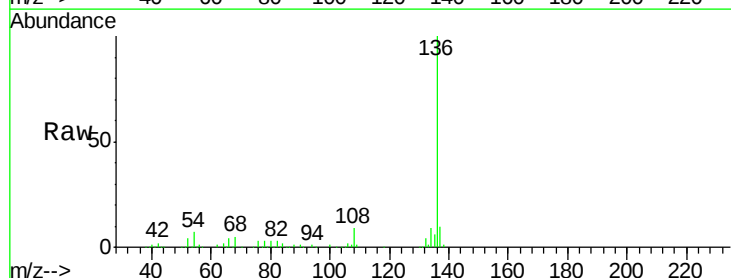
Ion Ratio Lower Upper

136 100

137 10.2 9.0 13.4

54 6.5 7.0 10.6#

68 5.0 5.4 8.2#

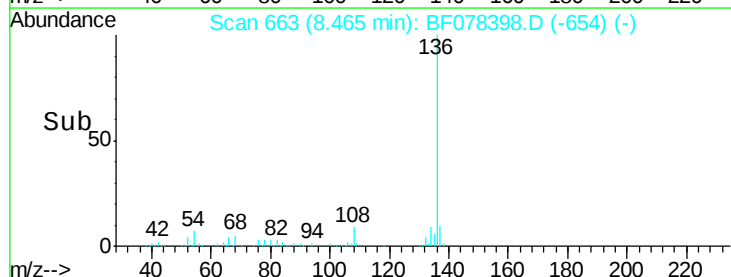
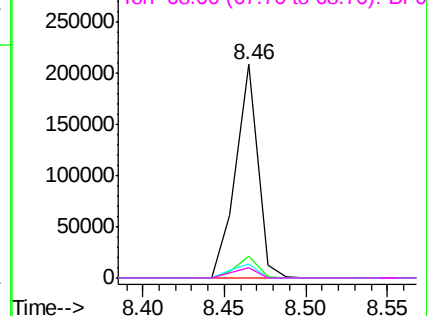


Abundance Ion 136.00 (135.70 to 136.70): E

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

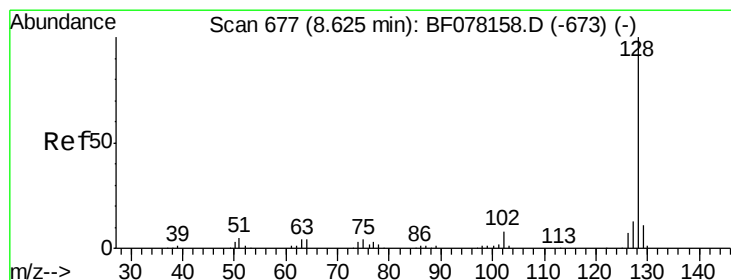
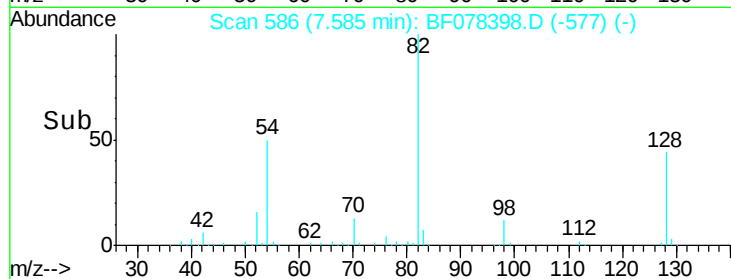
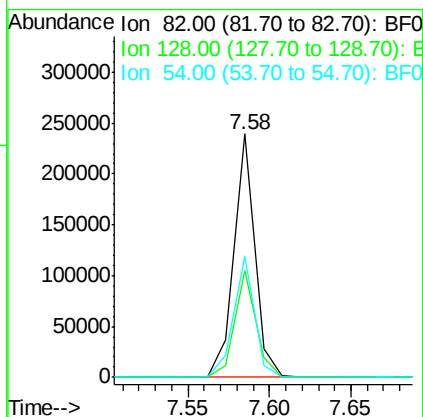
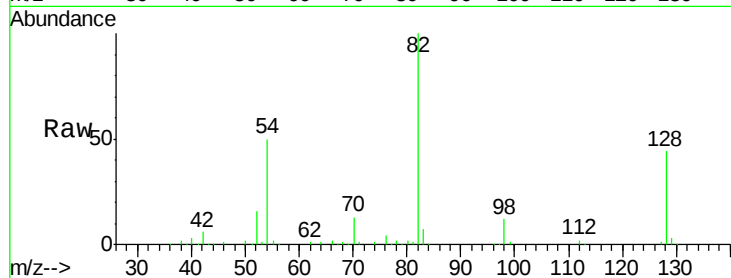




#23  
 Nitrobenzene-d5  
 Concen: 66.07 ng  
 RT: 7.58 min Scan# 586  
 Delta R.T. 0.00 min  
 Lab File: BF078398.D  
 Acq: 10 Apr 2015 12:06

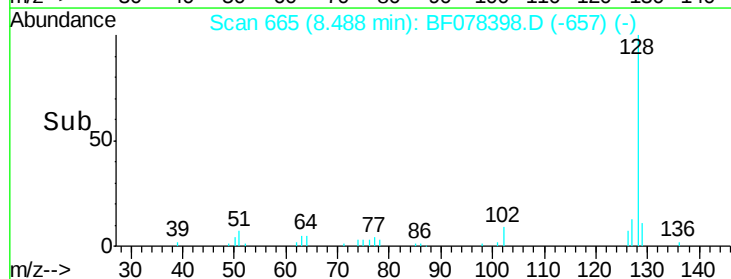
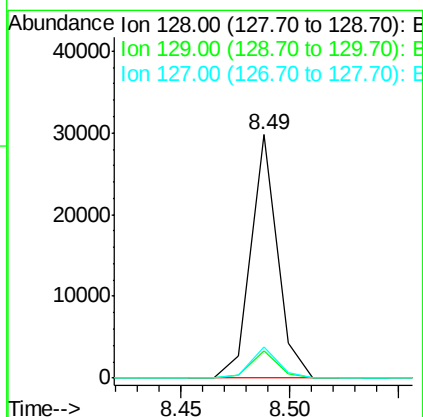
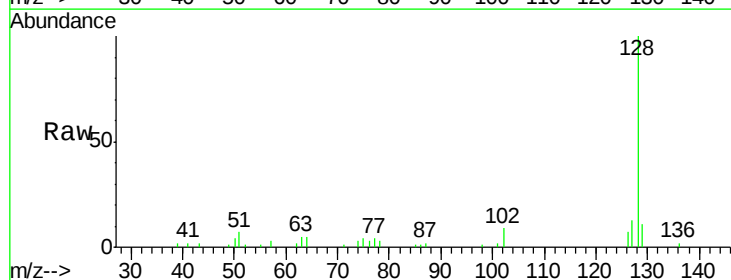
Instrument :  
 BNA\_F  
 ClientSampleId :

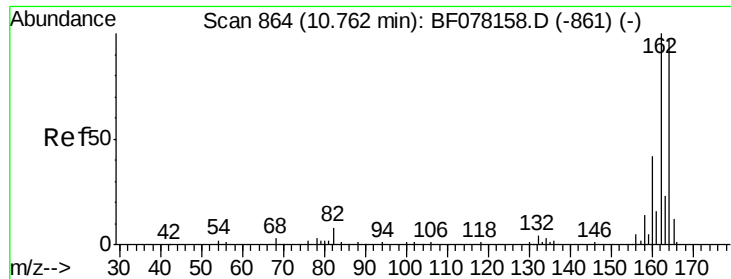
Tot Ion: 82 Resp: 212279  
 Ion Ratio Lower Upper  
 82 100  
 128 44.1 31.8 47.8  
 54 49.6 41.5 62.3



#31  
 Naphthalene  
 Concen: 2.49 ng  
 RT: 8.49 min Scan# 665  
 Delta R.T. -0.01 min  
 Lab File: BF078398.D  
 Acq: 10 Apr 2015 12:06

Tgt Ion: 128 Resp: 25237  
 Ion Ratio Lower Upper  
 128 100  
 129 11.1 8.6 12.8  
 127 12.5 10.7 16.1





#38

Acenaphthene-d10

Concen: 20.00 ng

RT: 10.63 min Scan# 852

Delta R.T. -0.01 min

Lab File: BF078398.D

Acq: 10 Apr 2015 12:06

Instrument :

BNA\_F

ClientSampled :

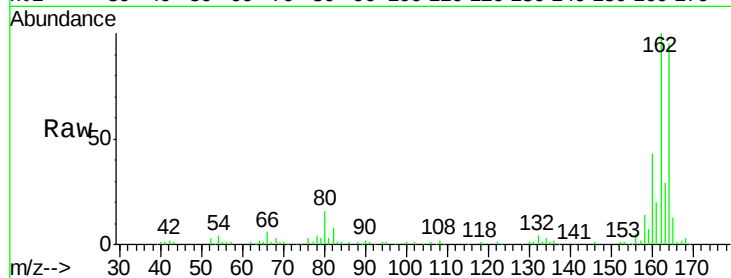
Tot Ion:164 Resp: 94507

Ion Ratio Lower Upper

164 100

162 104.9 82.2 123.2

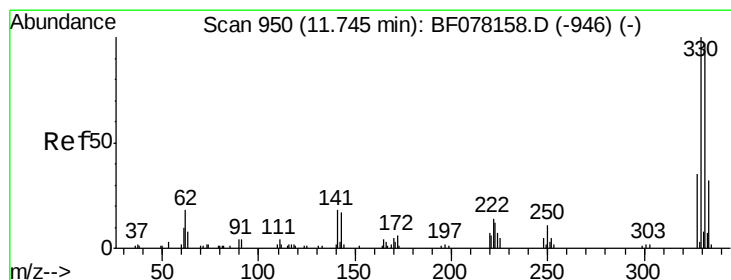
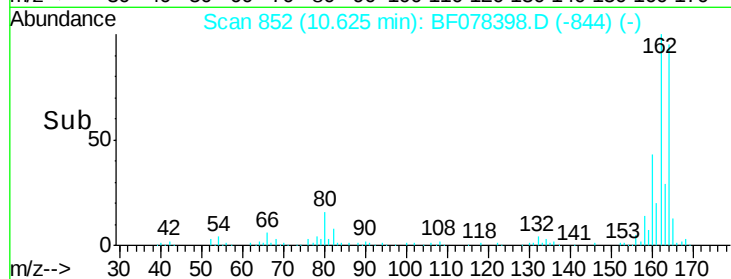
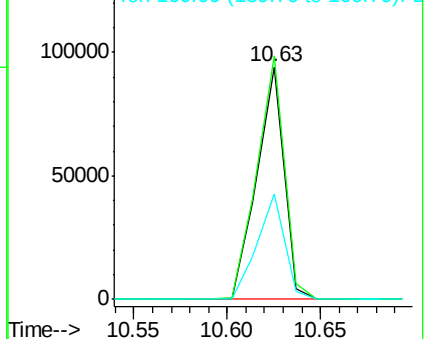
160 45.4 34.7 52.1



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: 20.09 ng

RT: 11.60 min Scan# 937

Delta R.T. -0.02 min

Lab File: BF078398.D

Acq: 10 Apr 2015 12:06

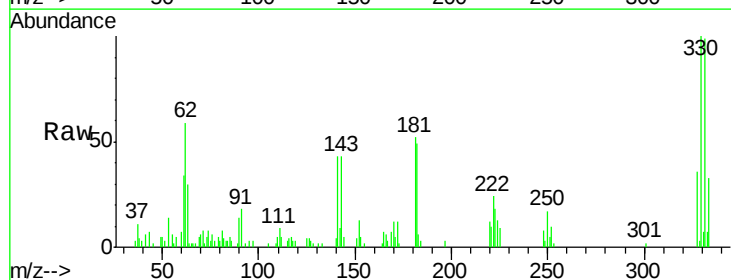
Tgt Ion:330 Resp: 15745

Ion Ratio Lower Upper

330 100

332 98.0 78.6 117.8

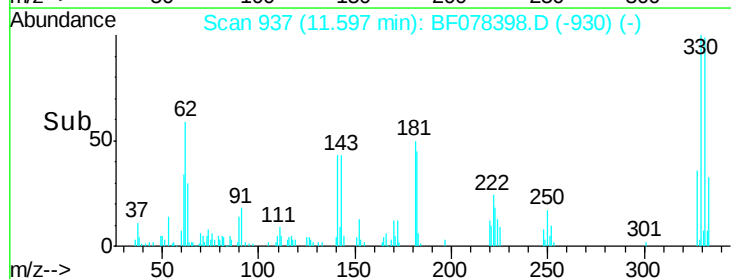
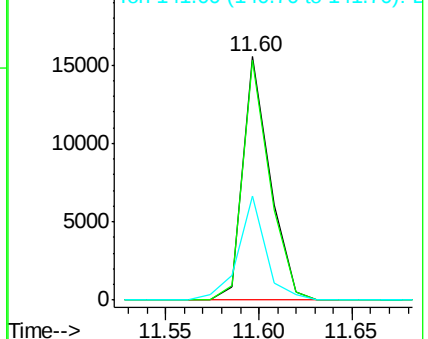
141 43.5 31.2 46.8

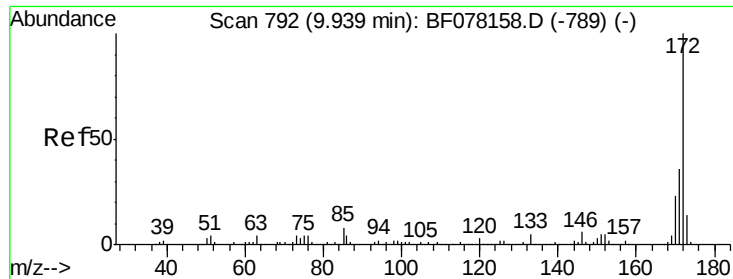


Abundance Ion 329.80 (329.50 to 330.50): E

Ion 331.80 (331.50 to 332.50): E

Ion 141.00 (140.70 to 141.70): E

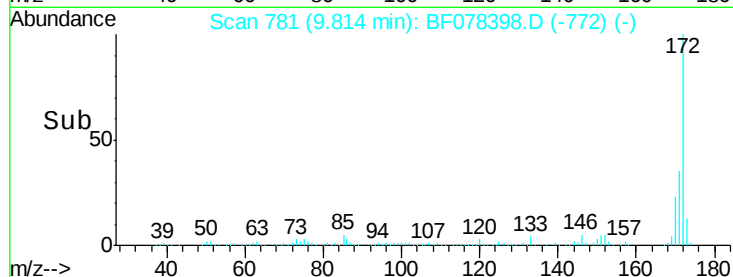
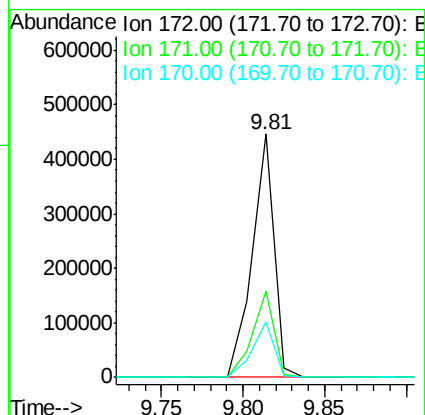
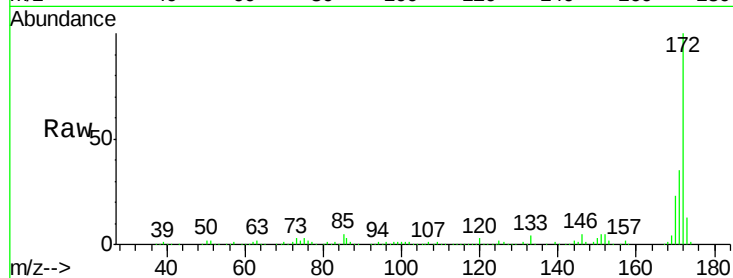




#44  
2-Fluorobiphenyl  
Concen: 62.83 ng  
RT: 9.81 min Scan# 781  
Delta R.T. 0.00 min  
Lab File: BF078398.D  
Acq: 10 Apr 2015 12:06

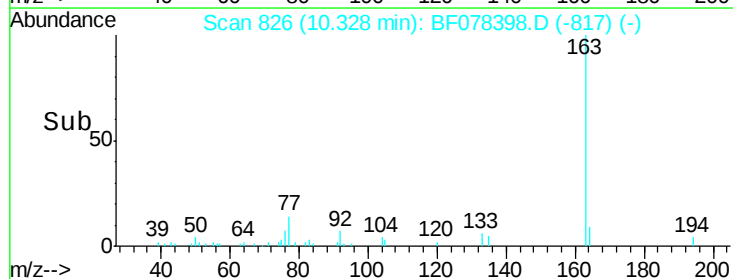
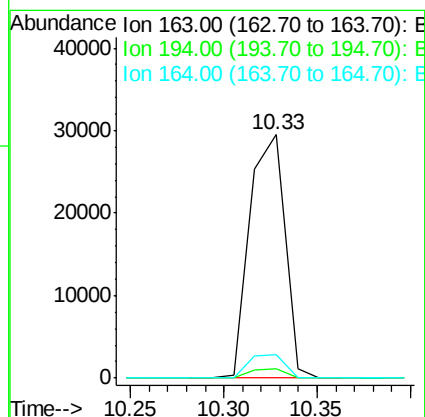
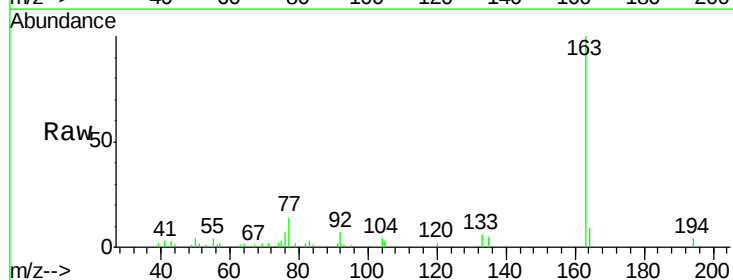
Instrument :  
BNA\_F  
ClientSampleId :

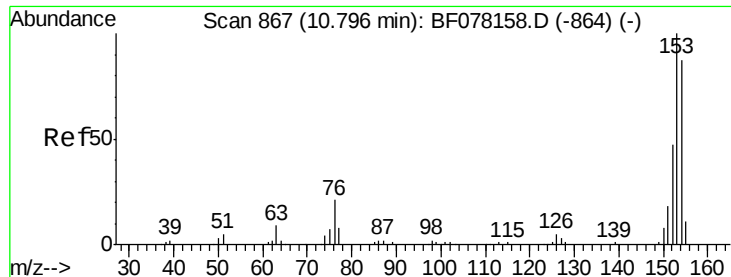
Tot Ion:172 Resp: 415410  
Ion Ratio Lower Upper  
172 100  
171 35.3 28.6 42.8  
170 22.9 18.5 27.7



#49  
Dimethylphthalate  
Concen: 5.43 ng  
RT: 10.33 min Scan# 826  
Delta R.T. 0.00 min  
Lab File: BF078398.D  
Acq: 10 Apr 2015 12:06

Tgt Ion:163 Resp: 38571  
Ion Ratio Lower Upper  
163 100  
194 3.7 2.3 3.5#  
164 9.4 8.6 13.0





#51

Acenaphthene

Concen: 2.13 ng

RT: 10.66 min Scan# 855

Delta R.T. -0.01 min

Lab File: BF078398.D

Acq: 10 Apr 2015 12:06

Instrument :

BNA\_F

ClientSampleId :

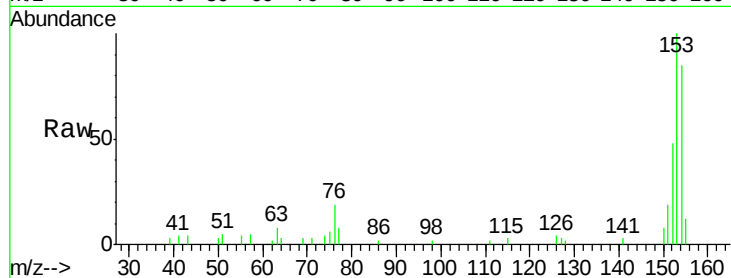
Tot Ion:154 Resp: 11776

Ion Ratio Lower Upper

154 100

153 117.9 91.4 137.2

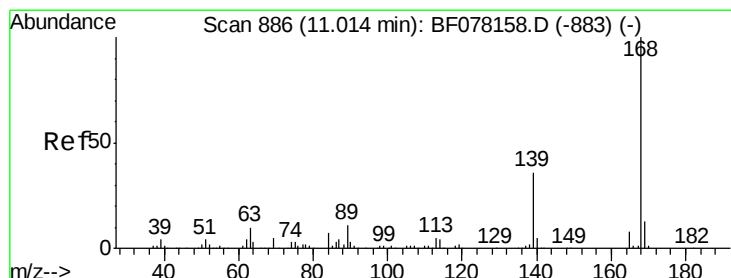
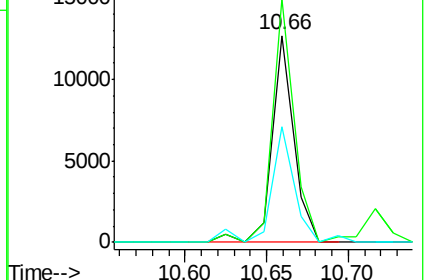
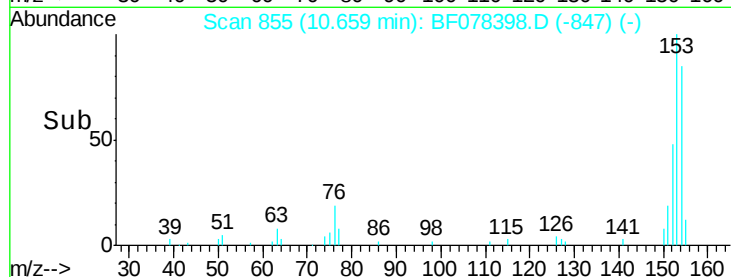
152 56.3 43.0 64.6



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: 2.88 ng

RT: 10.88 min Scan# 874

Delta R.T. -0.01 min

Lab File: BF078398.D

Acq: 10 Apr 2015 12:06

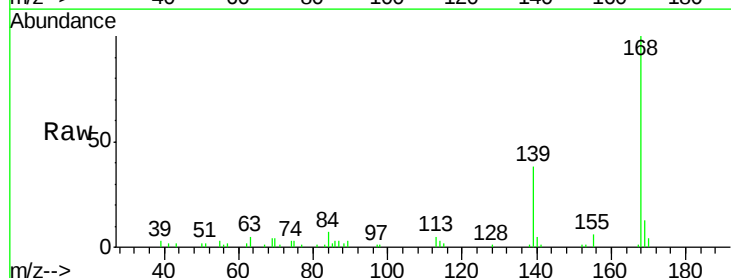
Tgt Ion:168 Resp: 24342

Ion Ratio Lower Upper

168 100

139 37.7 31.0 46.4

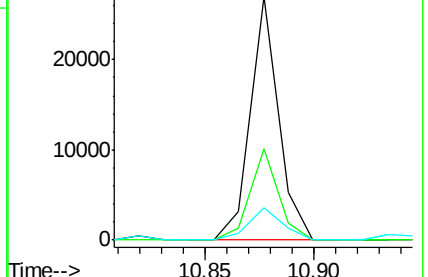
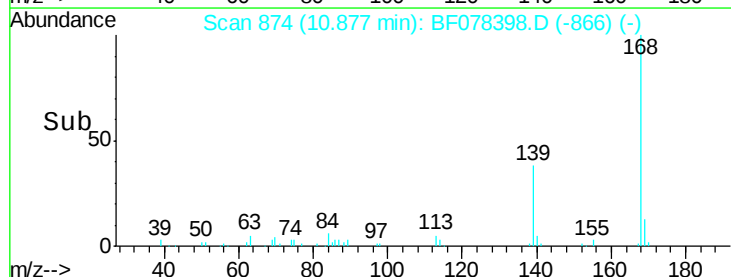
169 13.3 10.7 16.1

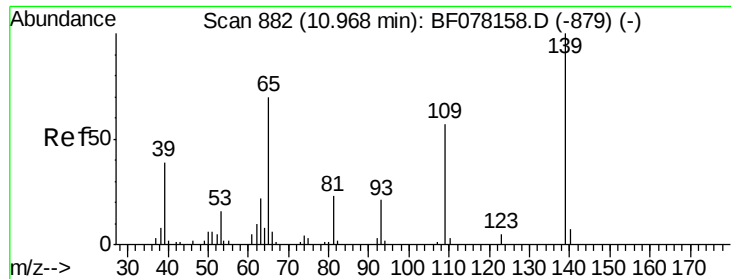


Abundance Ion 168.00 (167.70 to 168.70): E

Ion 139.00 (138.70 to 139.70): E

Ion 169.00 (168.70 to 169.70): E

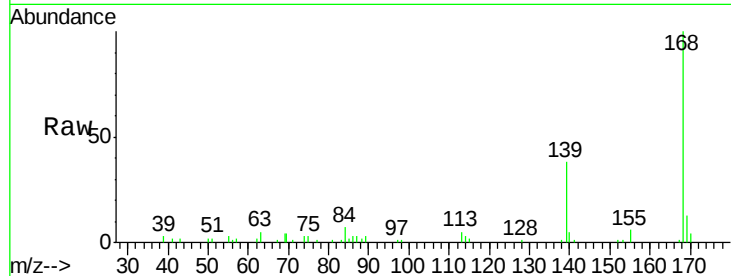




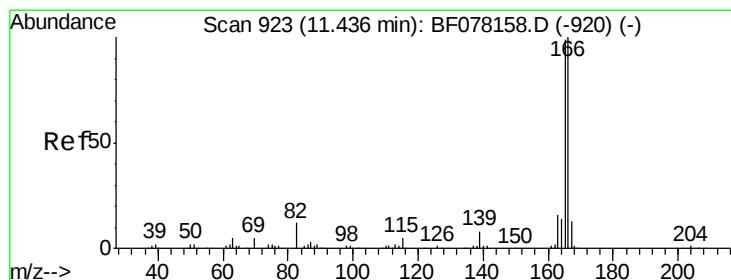
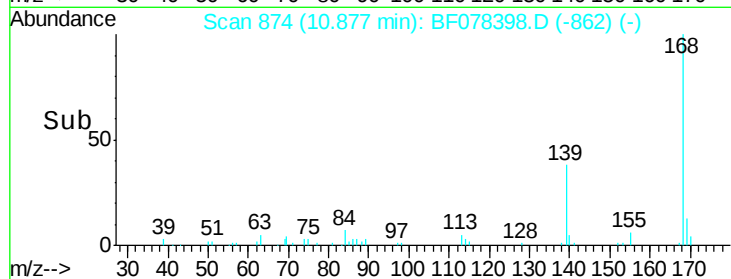
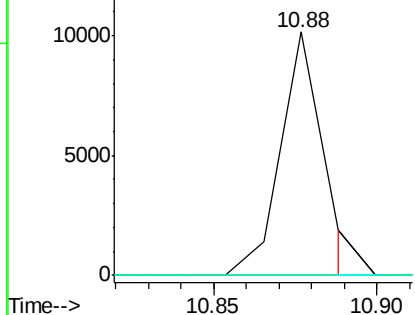
#55  
4-Nitrophenol  
Concen: 10.03 ng  
RT: 10.88 min Scan# 874  
Delta R.T. 0.04 min  
Lab File: BF078398.D  
Acq: 10 Apr 2015 12:06

Instrument :  
BNA\_F  
ClientSampleId :

Tot Ion:139 Resp: 9206  
Ion Ratio Lower Upper  
139 100  
109 0.0 36.7 76.7#  
65 0.0 49.9 89.9#

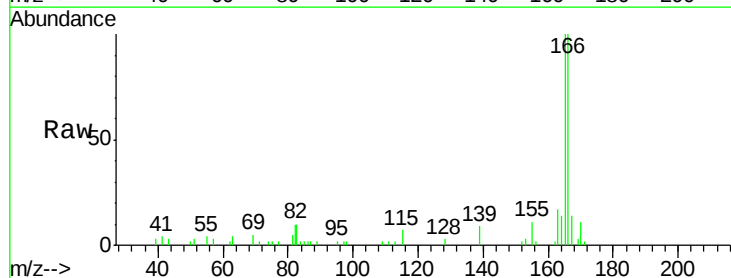


Abundance Ion 139.00 (138.70 to 139.70): E  
Ion 109.00 (108.70 to 109.70): E  
Ion 65.00 (64.70 to 65.70): E

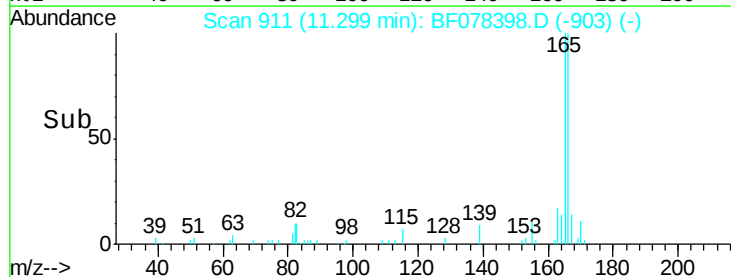
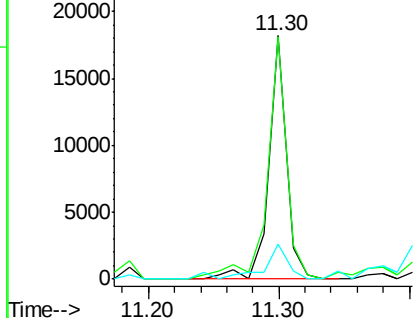


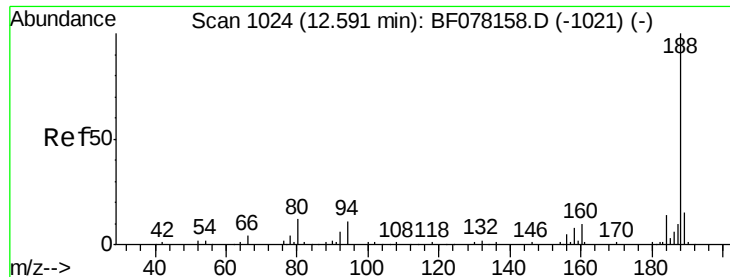
#57  
Fluorene  
Concen: 2.53 ng  
RT: 11.30 min Scan# 911  
Delta R.T. -0.01 min  
Lab File: BF078398.D  
Acq: 10 Apr 2015 12:06

Tgt Ion:166 Resp: 17312  
Ion Ratio Lower Upper  
166 100  
165 99.5 78.9 118.3  
167 14.4 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

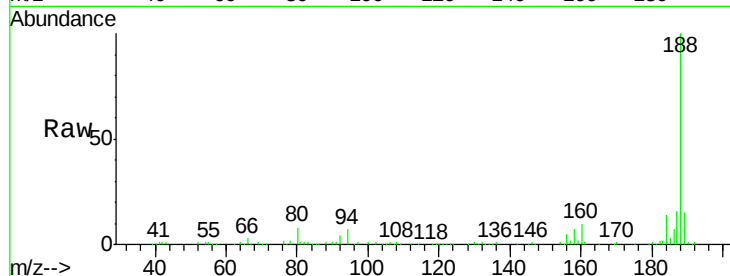




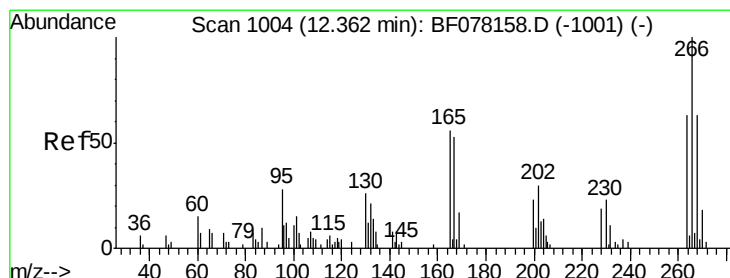
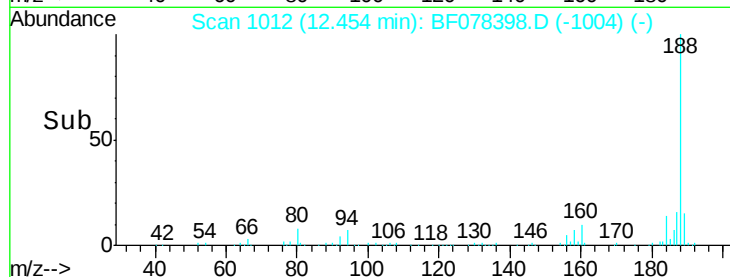
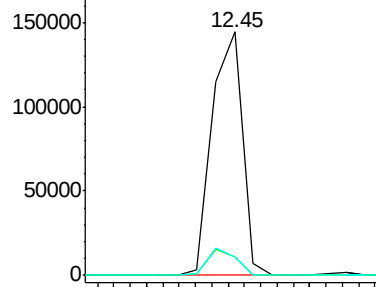
#63  
Phenanthrene-d10  
Concen: 20.00 ng  
RT: 12.45 min Scan# 1012  
Delta R.T. -0.01 min  
Lab File: BF078398.D  
Acq: 10 Apr 2015 12:06

Instrument :  
BNA\_F  
ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 188     | 100   |       |       |
| 94      | 7.4   | 9.0   | 13.4# |
| 80      | 7.7   | 9.5   | 14.3# |

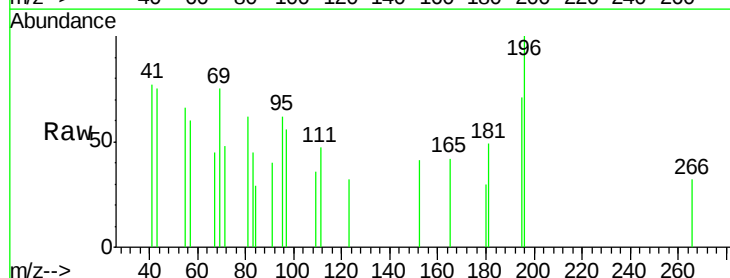


Abundance Ion 188.00 (187.70 to 188.70): E  
Ion 94.00 (93.70 to 94.70): BF0  
Ion 80.00 (79.70 to 80.70): BF0

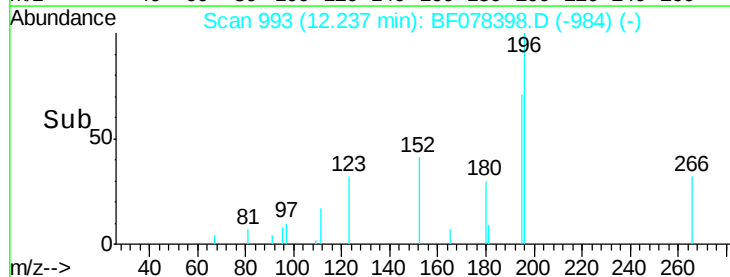
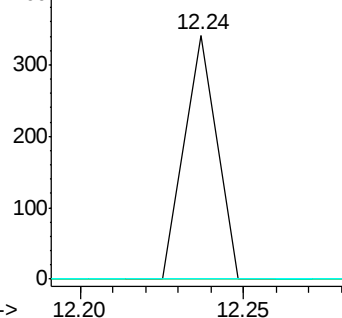


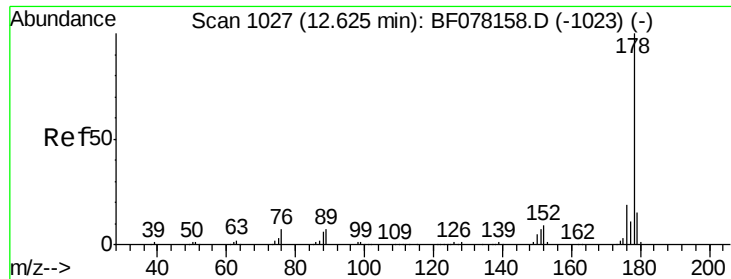
#69  
Pentachlorophenol  
Concen: 7.98 ng  
RT: 12.24 min Scan# 993  
Delta R.T. 0.00 min  
Lab File: BF078398.D  
Acq: 10 Apr 2015 12:06

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 266     | 100   |       |       |
| 268     | 0.0   | 50.1  | 75.1# |
| 264     | 0.0   | 50.0  | 75.0# |



Abundance Ion 265.70 (265.40 to 266.40): E  
Ion 268.00 (267.70 to 268.70): E  
Ion 264.00 (263.70 to 264.70): E

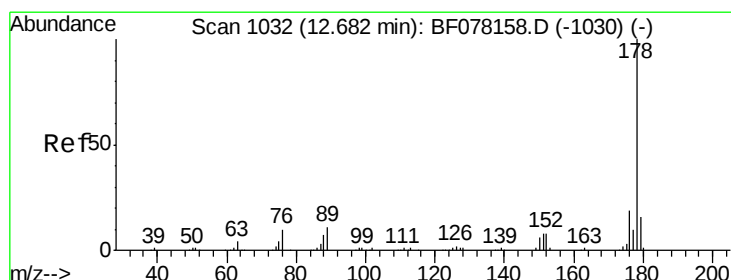
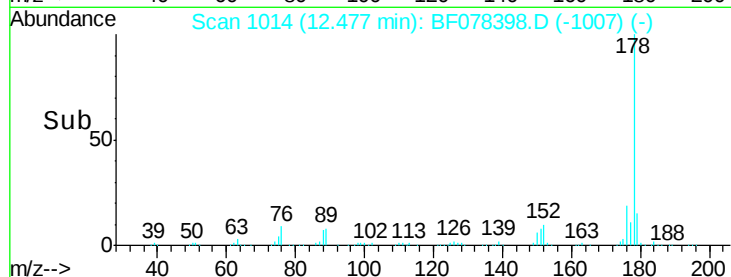
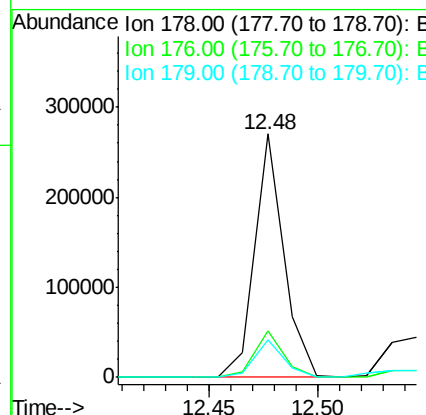
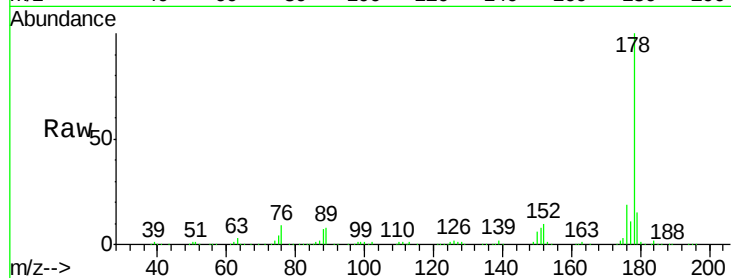




#70  
Phenanthrene  
Concen: 23.43 ng  
RT: 12.48 min Scan# 1014  
Delta R.T. -0.02 min  
Lab File: BF078398.D  
Acq: 10 Apr 2015 12:06

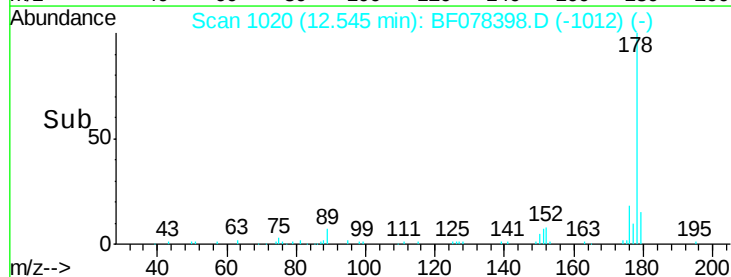
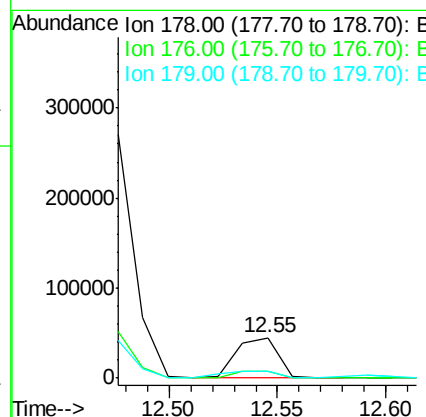
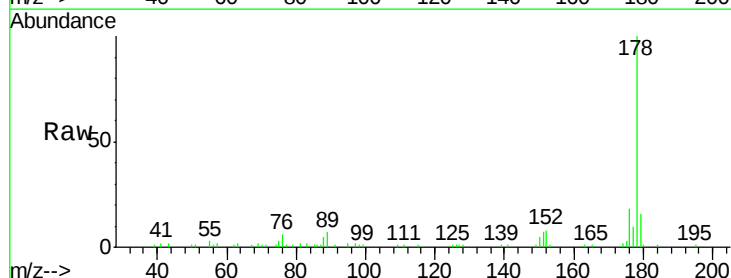
Instrument :  
BNA\_F  
ClientSampleId :

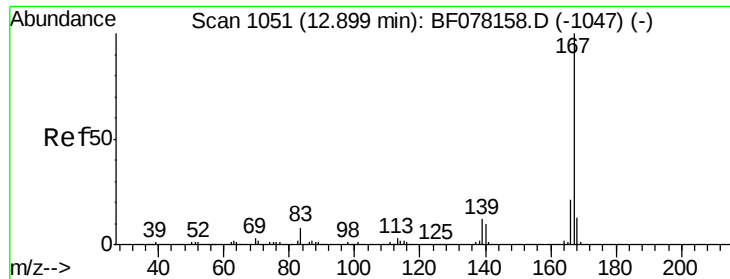
Tot Ion:178 Resp: 250982  
Ion Ratio Lower Upper  
178 100  
176 19.0 15.4 23.0  
179 15.4 12.2 18.2



#71  
Anthracene  
Concen: 5.58 ng  
RT: 12.55 min Scan# 1020  
Delta R.T. -0.01 min  
Lab File: BF078398.D  
Acq: 10 Apr 2015 12:06

Tgt Ion:178 Resp: 58876  
Ion Ratio Lower Upper  
178 100  
176 18.3 14.8 22.2  
179 15.9 12.4 18.6

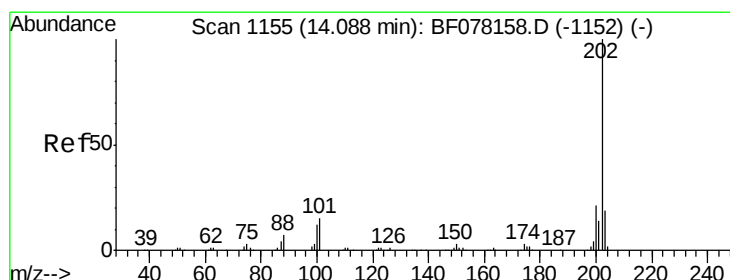
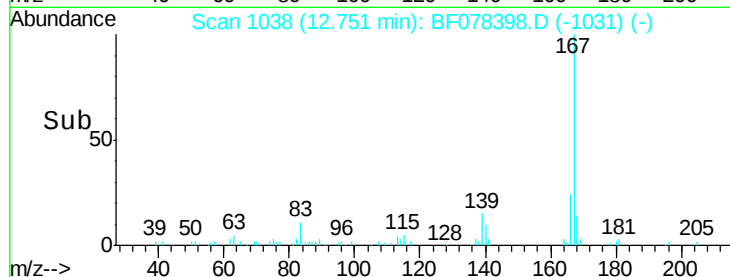
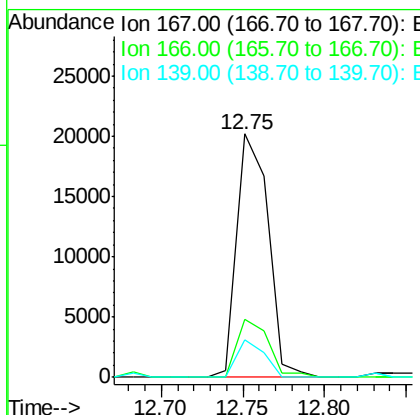
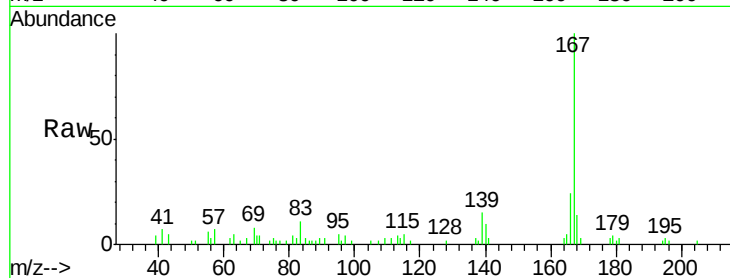




#72  
 Carbazole  
 Concen: 2.71 ng  
 RT: 12.75 min Scan# 1038  
 Delta R.T. -0.02 min  
 Lab File: BF078398.D  
 Acq: 10 Apr 2015 12:06

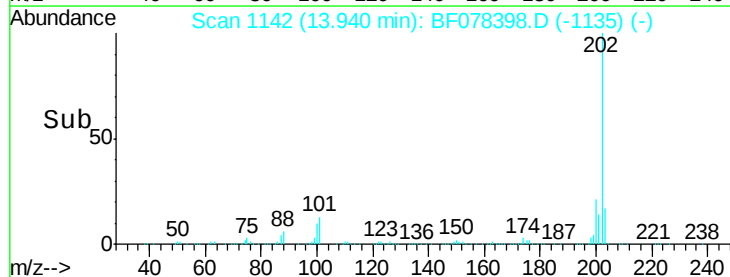
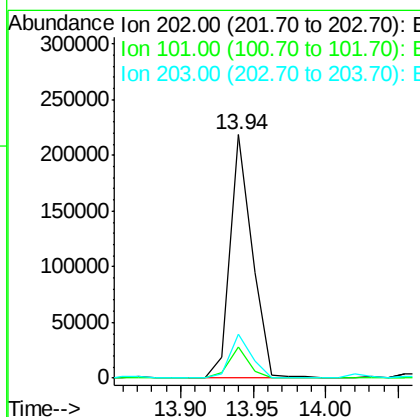
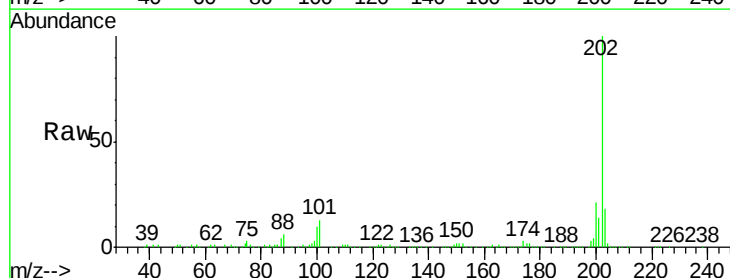
Instrument :  
 BNA\_F  
 ClientSampled :

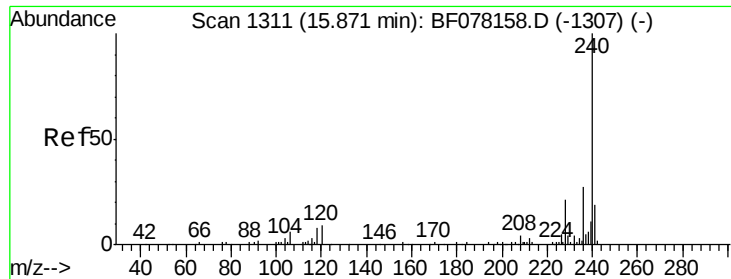
Tot Ion:167 Resp: 26829  
 Ion Ratio Lower Upper  
 167 100  
 166 23.8 16.8 25.2  
 139 15.2 10.0 15.0#



#74  
 Fluoranthene  
 Concen: 20.35 ng  
 RT: 13.94 min Scan# 1142  
 Delta R.T. -0.02 min  
 Lab File: BF078398.D  
 Acq: 10 Apr 2015 12:06

Tgt Ion:202 Resp: 229902  
 Ion Ratio Lower Upper  
 202 100  
 101 12.8 0.0 35.2  
 203 17.9 0.0 38.5





#75

Chrysene-d12

Concen: 20.00 ng

RT: 15.71 min Scan# 1297

Delta R.T. -0.03 min

Lab File: BF078398.D

Acq: 10 Apr 2015 12:06

Instrument :

BNA\_F

ClientSampleId :

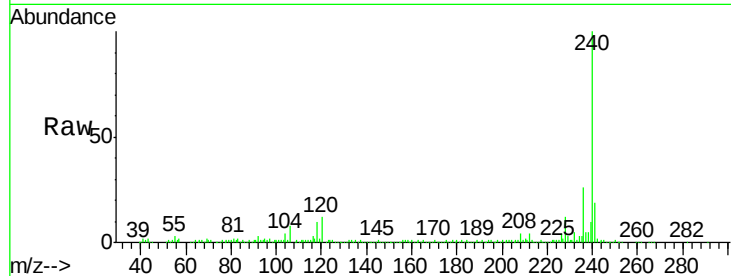
Tot Ion:240 Resp: 191589

Ion Ratio Lower Upper

240 100

120 11.7 7.1 10.7#

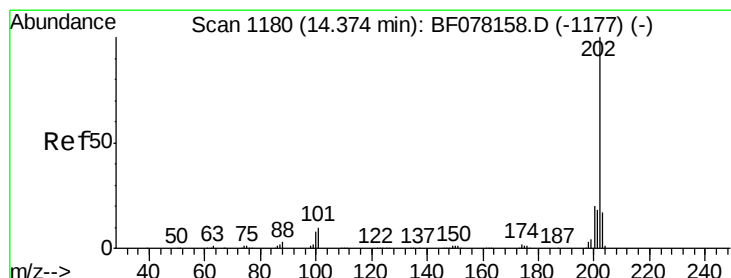
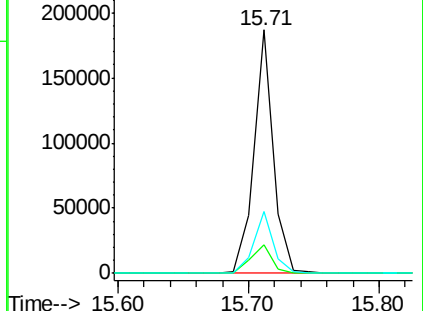
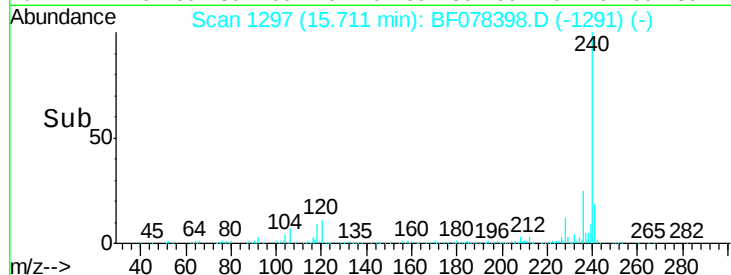
236 25.6 21.4 32.2



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: 16.53 ng

RT: 14.21 min Scan# 1166

Delta R.T. -0.03 min

Lab File: BF078398.D

Acq: 10 Apr 2015 12:06

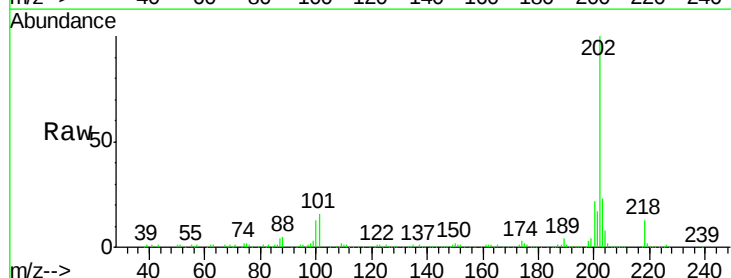
Tgt Ion:202 Resp: 198789

Ion Ratio Lower Upper

202 100

200 21.5 16.3 24.5

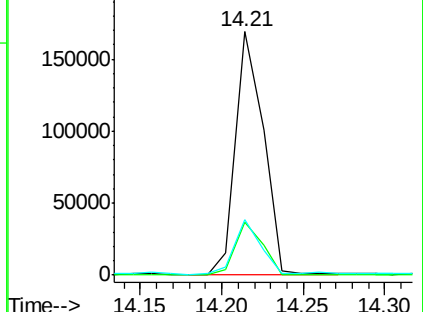
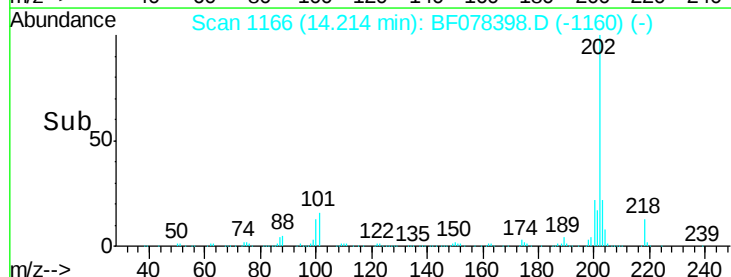
203 22.5 13.8 20.6#

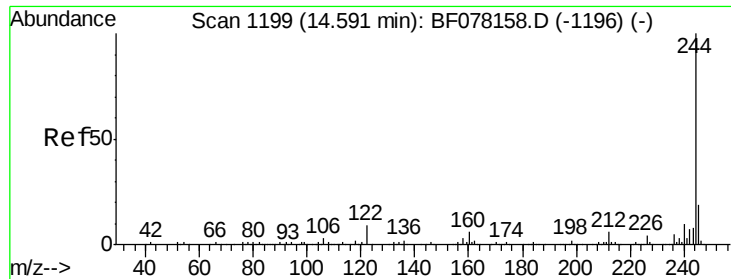


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 200.00 (199.70 to 200.70): E

Ion 203.00 (202.70 to 203.70): E





#78

Terphenyl-d14

Concen: 48.09 ng

RT: 14.44 min Scan# 1186

Delta R.T. -0.02 min

Lab File: BF078398.D

Acq: 10 Apr 2015 12:06

Instrument :

BNA\_F

ClientSampled :

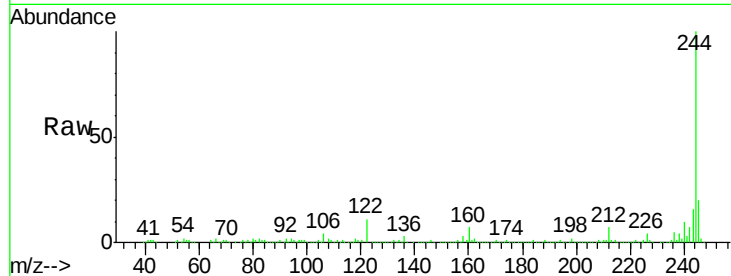
Tot Ion:244 Resp: 407702

Ion Ratio Lower Upper

244 100

212 6.8 5.0 7.4

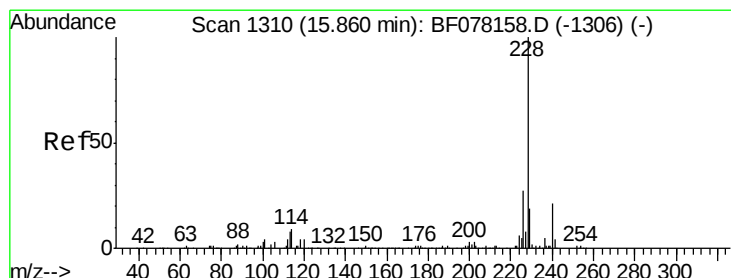
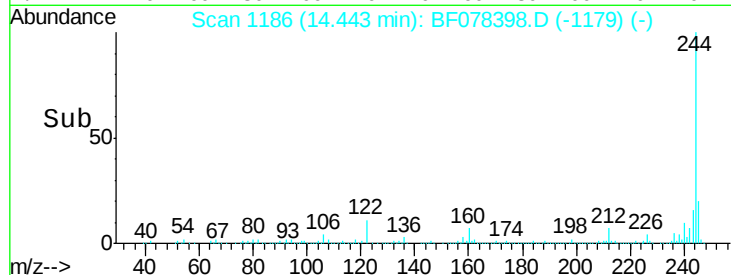
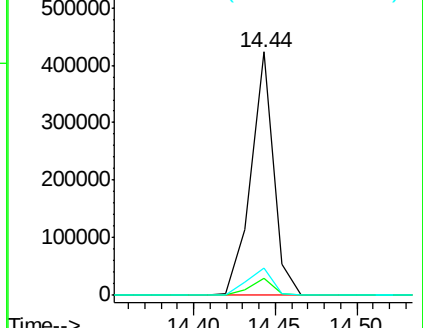
122 11.3 7.1 10.7#



Abundance Ion 244.00 (243.70 to 244.70): E

Ion 212.00 (211.70 to 212.70): E

Ion 122.00 (121.70 to 122.70): E



#80

Benzo(a)anthracene

Concen: 9.13 ng

RT: 15.70 min Scan# 1296

Delta R.T. -0.03 min

Lab File: BF078398.D

Acq: 10 Apr 2015 12:06

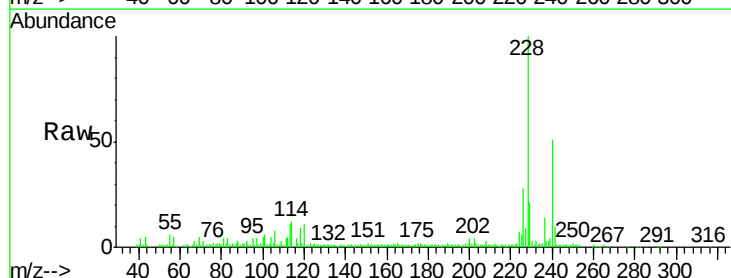
Tgt Ion:228 Resp: 104058

Ion Ratio Lower Upper

228 100

226 28.0 21.3 31.9

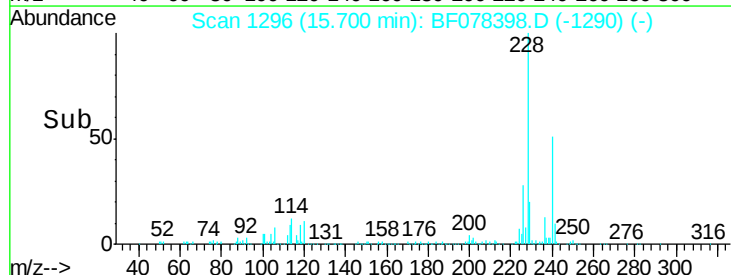
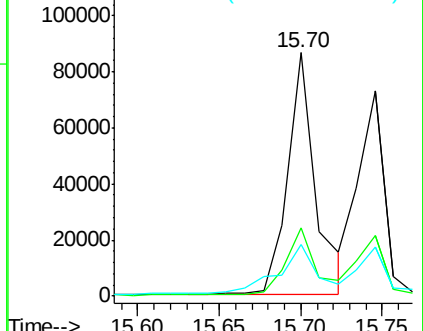
229 21.3 15.4 23.2

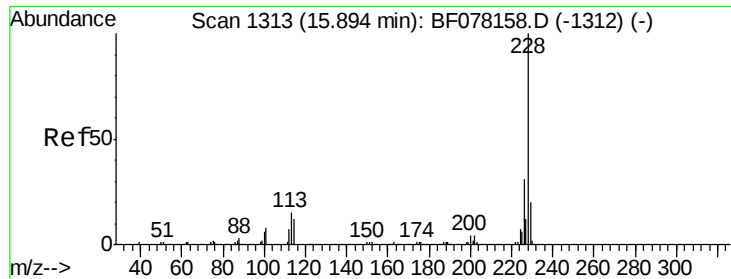


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E

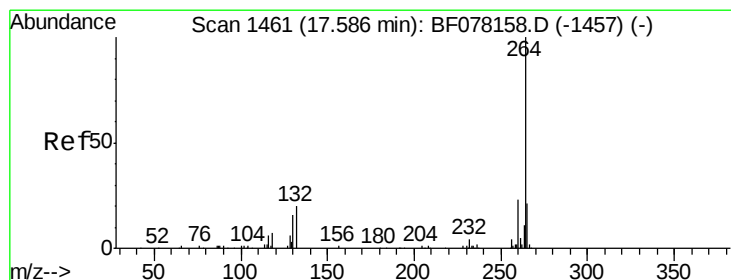
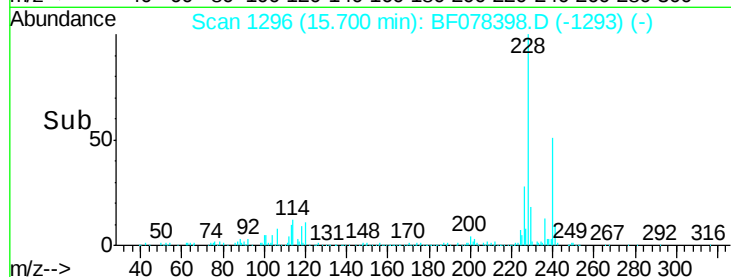
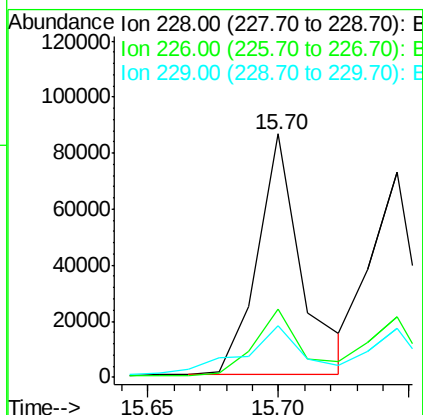
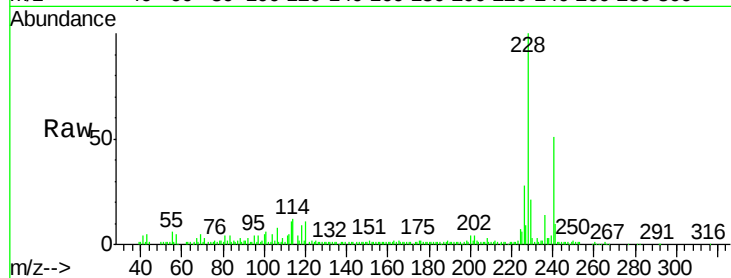




#82  
Chrysene  
Concen: 9.52 ng  
RT: 15.70 min Scan# 1296  
Delta R.T. -0.07 min  
Lab File: BF078398.D  
Acq: 10 Apr 2015 12:06

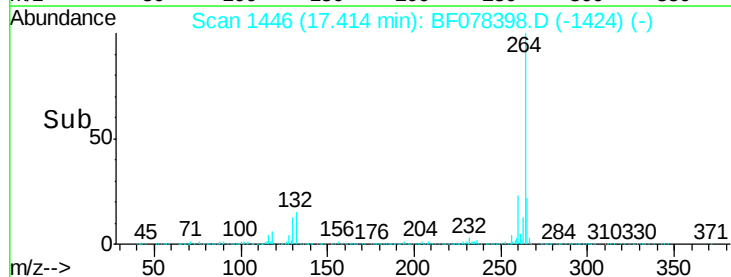
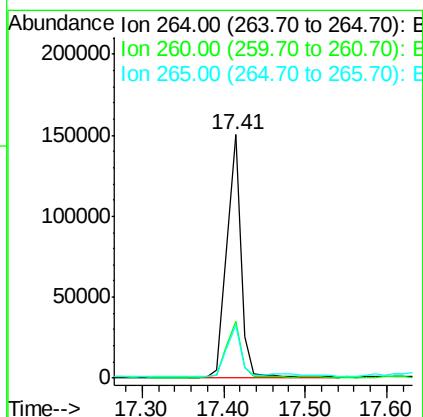
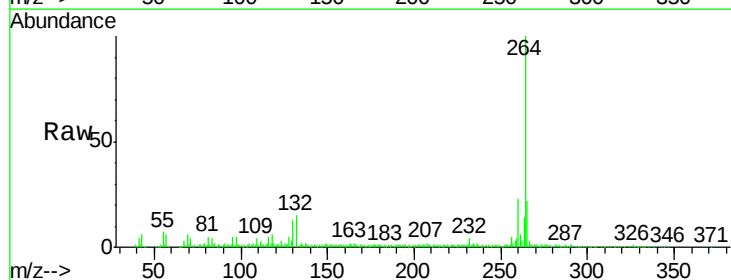
Instrument :  
BNA\_F  
ClientSampleId :

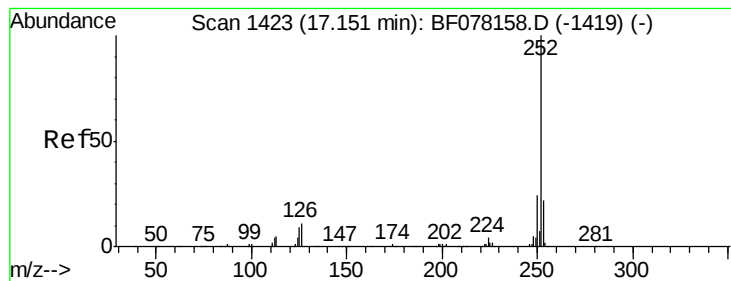
Tot Ion:228 Resp: 101946  
Ion Ratio Lower Upper  
228 100  
226 28.0 24.2 36.4  
229 21.3 15.8 23.8



#86  
Perylene-d12  
Concen: 20.00 ng  
RT: 17.41 min Scan# 1446  
Delta R.T. -0.05 min  
Lab File: BF078398.D  
Acq: 10 Apr 2015 12:06

Tgt Ion:264 Resp: 177884  
Ion Ratio Lower Upper  
264 100  
260 23.5 18.6 27.8  
265 22.0 17.0 25.6





#87

Benzo(b)fluoranthene

Concen: 11.34 ng

RT: 16.98 min Scan# 1408

Delta R.T. -0.05 min

Lab File: BF078398.D

Acq: 10 Apr 2015 12:06

Instrument :

BNA\_F

ClientSampleId :

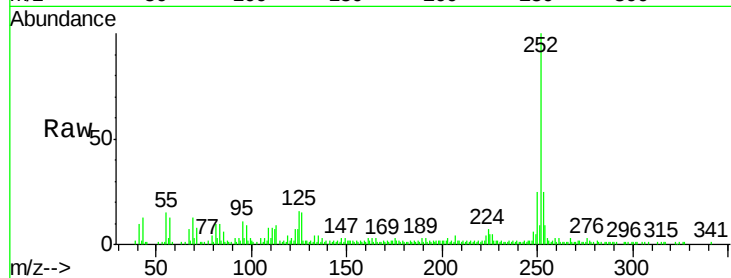
Tot Ion:252 Resp: 124630

Ion Ratio Lower Upper

252 100

253 25.3 17.2 25.8

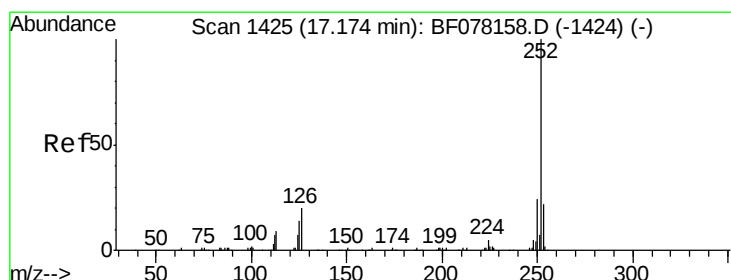
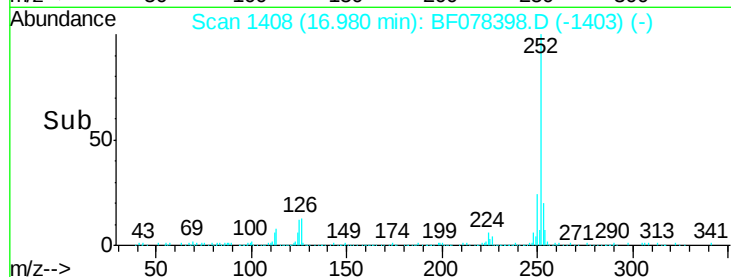
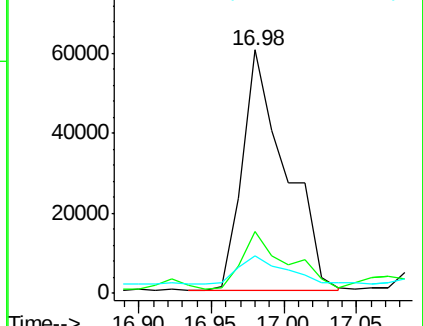
125 15.6 7.0 10.4#



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



#88

Benzo(k)fluoranthene

Concen: 12.78 ng

RT: 16.98 min Scan# 1408

Delta R.T. -0.07 min

Lab File: BF078398.D

Acq: 10 Apr 2015 12:06

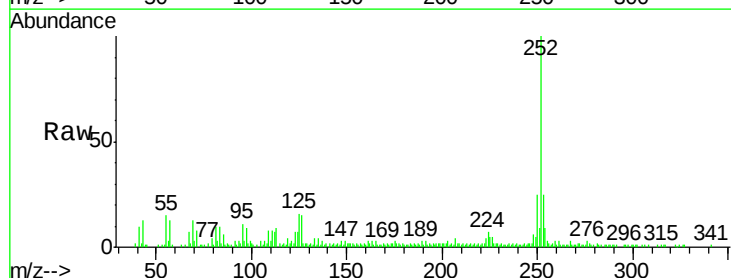
Tgt Ion:252 Resp: 124875

Ion Ratio Lower Upper

252 100

253 25.3 17.5 26.3

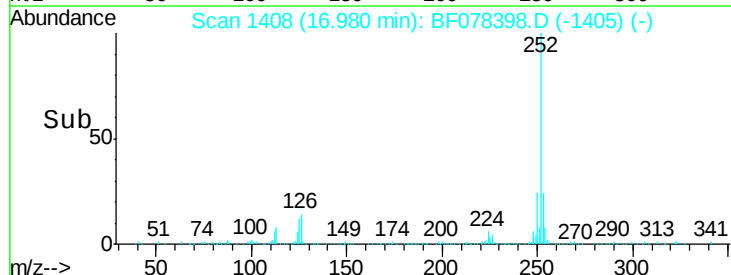
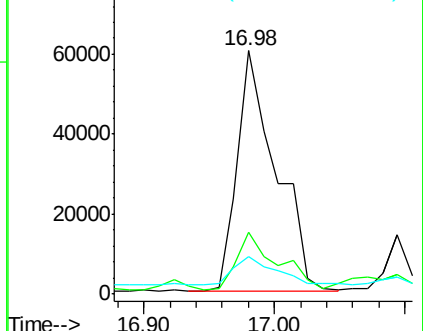
125 15.6 11.6 17.4

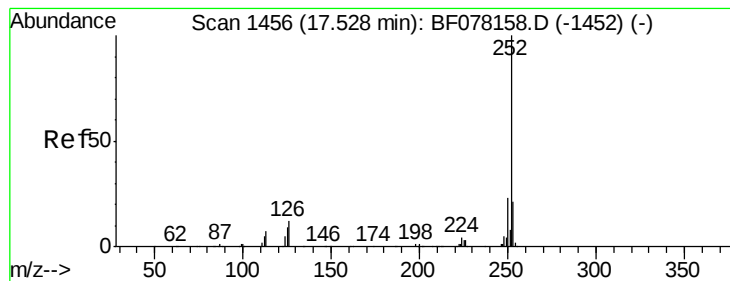


Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E





#89  
 Benzo(a)pyrene  
 Concen: 7.30 ng  
 RT: 17.35 min Scan# 1440  
 Delta R.T. -0.06 min  
 Lab File: BF078398.D  
 Acq: 10 Apr 2015 12:06

Instrument :  
 BNA\_F  
 ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 25.9  | 16.8  | 25.2# |
| 125     | 16.4  | 7.4   | 11.0# |

