

Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF041415\  
 Data File : BF078522.D  
 Acq On : 15 Apr 2015 2:13  
 Operator : TP/IZ  
 Sample : G1823-01 5X  
 Misc :  
 ALS Vial : 20 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SP-1

Quant Time: Apr 15 02:39:18 2015  
 Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF040115.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Apr 15 01:10:59 2015  
 Response via : Initial Calibration

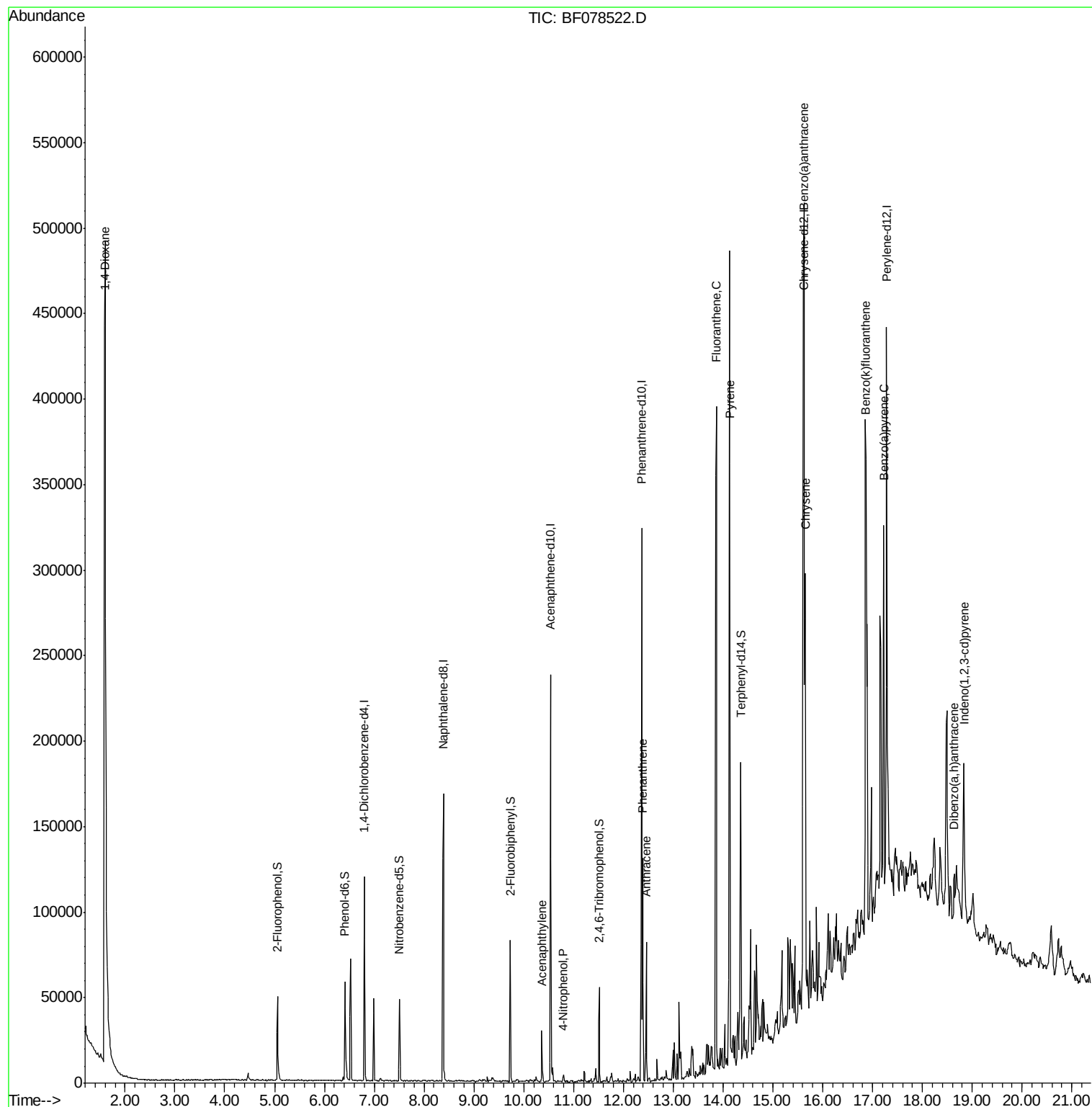
| Internal Standards          | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 6.80  | 152  | 24624    | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8          | 8.39  | 136  | 108945   | 20.00 | ng    | 0.00     |
| 38) Acenaphthene-d10        | 10.54 | 164  | 57264    | 20.00 | ng    | 0.00     |
| 63) Phenanthrene-d10        | 12.37 | 188  | 124374   | 20.00 | ng    | 0.00     |
| 75) Chrysene-d12            | 15.62 | 240  | 142681   | 20.00 | ng    | -0.03    |
| 86) Perylene-d12            | 17.28 | 264  | 144268   | 20.00 | ng    | -0.21    |
| System Monitoring Compounds |       |      |          |       |       |          |
| 5) 2-Fluorophenol           | 5.06  | 112  | 23239    | 15.56 | ng    | 0.01     |
| 7) Phenol-d6                | 6.41  | 99   | 31624    | 16.90 | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 7.51  | 82   | 17139    | 9.54  | ng    | 0.00     |
| 41) 2,4,6-Tribromophenol    | 11.52 | 330  | 8131     | 17.12 | ng    | 0.00     |
| 44) 2-Fluorobiphenyl        | 9.74  | 172  | 41919    | 10.46 | ng    | 0.00     |
| 78) Terphenyl-d14           | 14.35 | 244  | 58349    | 9.24  | ng    | 0.00     |
| Target Compounds            |       |      |          |       |       | Qvalue   |
| 2) 1,4-Dioxane              | 1.60  | 88   | 23944    | 35.45 | ng    | # 25     |
| 48) Acenaphthylene          | 10.36 | 152  | 14460    | 2.43  | ng    | 98       |
| 55) 4-Nitrophenol           | 10.80 | 139  | 877      | 3.91  | ng    | # 18     |
| 70) Phenanthrene            | 12.39 | 178  | 58513    | 8.13  | ng    | 100      |
| 71) Anthracene              | 12.46 | 178  | 35532    | 5.01  | ng    | 99       |
| 74) Fluoranthene            | 13.86 | 202  | 235120   | 30.99 | ng    | 91       |
| 77) Pyrene                  | 14.14 | 202  | 235277   | 26.27 | ng    | 99       |
| 80) Benzo(a)anthracene      | 15.61 | 228  | 170039   | 20.03 | ng    | 98       |
| 82) Chrysene                | 15.66 | 228  | 125836   | 15.78 | ng    | 96       |
| 85) Indeno(1,2,3-cd)pyrene  | 18.83 | 276  | 67941    | 7.51  | ng    | # 89     |
| 88) Benzo(k)fluoranthene    | 16.87 | 252  | 250256   | 31.58 | ng    | # 97     |
| 89) Benzo(a)pyrene          | 17.22 | 252  | 120837   | 15.53 | ng    | 97       |
| 90) Dibenzo(a,h)anthracene  | 18.64 | 278  | 15828    | 2.03  | ng    | # 89     |

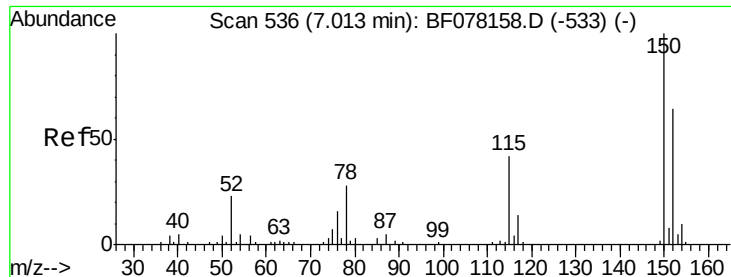
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Misc :  
ALS Vial : 20 Sample Multiplier: 1

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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Wed Apr 15 01:10:59 2015  
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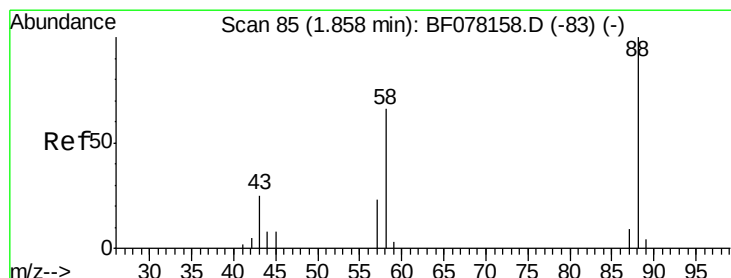
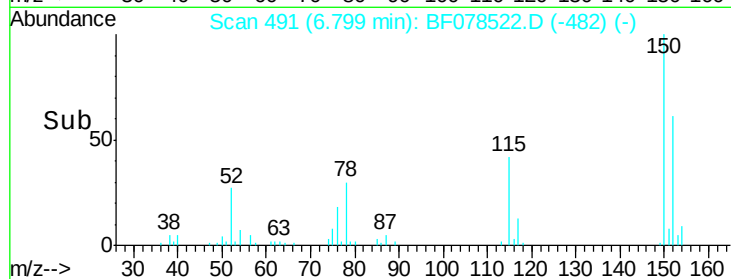
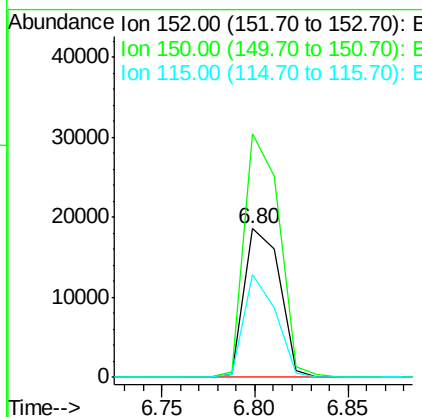
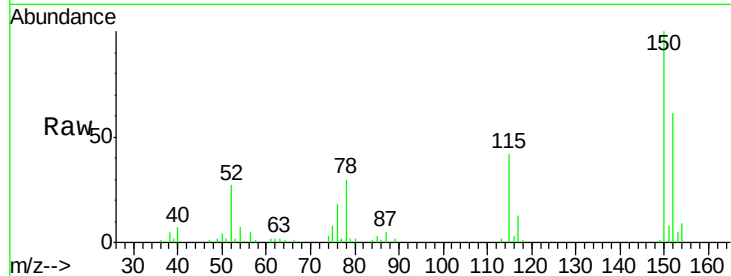




#1  
 1,4-Dichlorobenzene-d4  
 Concen: 20.00 ng  
 RT: 6.80 min Scan# 491  
 Delta R.T. 0.00 min  
 Lab File: BF078522.D  
 Acq: 15 Apr 2015 2:13

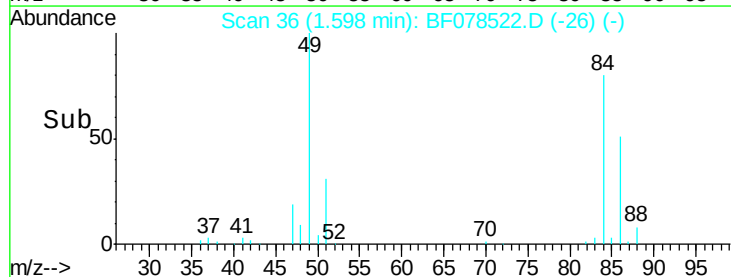
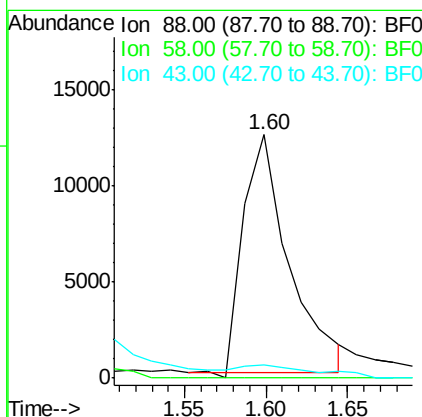
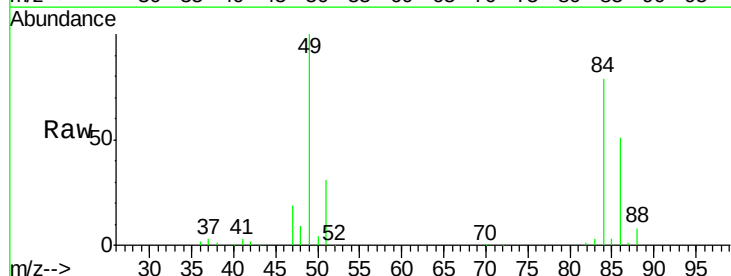
Instrument :  
 BNA\_F  
 ClientSampleId :  
 SP-1

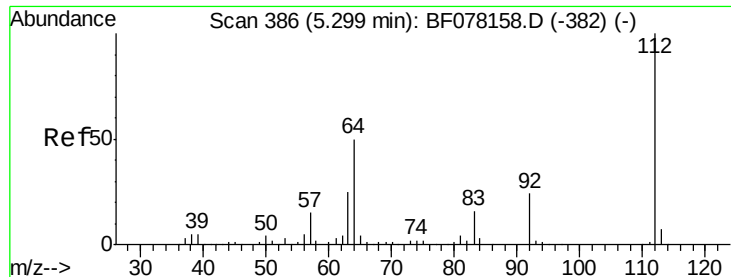
Tgt Ion:152 Resp: 24624  
 Ion Ratio Lower Upper  
 152 100  
 150 164.0 125.9 188.9  
 115 68.9 52.7 79.1



#2  
 1,4-Dioxane  
 Concen: 35.45 ng  
 RT: 1.60 min Scan# 36  
 Delta R.T. 0.01 min  
 Lab File: BF078522.D  
 Acq: 15 Apr 2015 2:13

Tgt Ion: 88 Resp: 23944  
 Ion Ratio Lower Upper  
 88 100  
 58 0.0 56.9 85.3#  
 43 3.0 21.4 32.2#





#5

2-Fluorophenol

Concen: 15.56 ng

RT: 5.06 min Scan# 339

Delta R.T. 0.01 min

Lab File: BF078522.D

Acq: 15 Apr 2015 2:13

Instrument :

BNA\_F

ClientSampleId :

SP-1

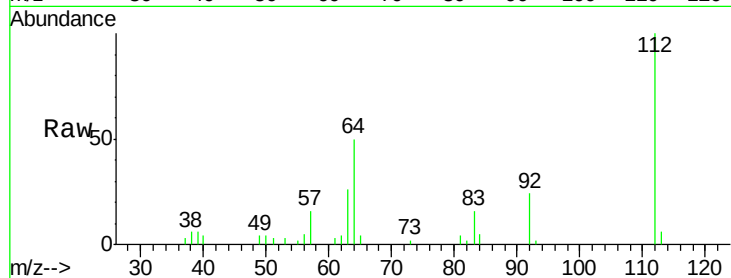
Tgt Ion: 112 Resp: 23239

Ion Ratio Lower Upper

112 100

64 49.9 39.9 59.9

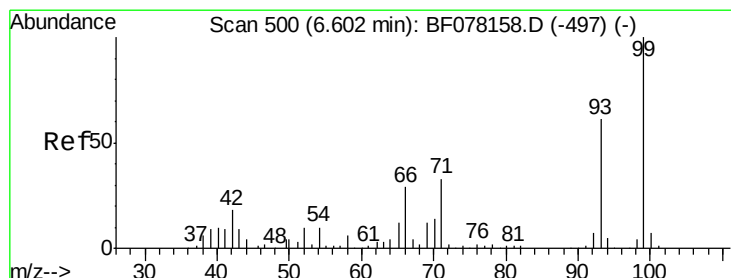
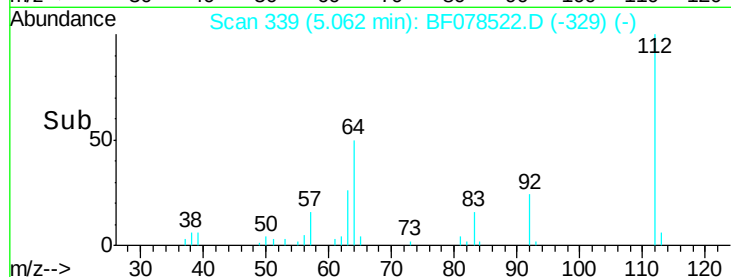
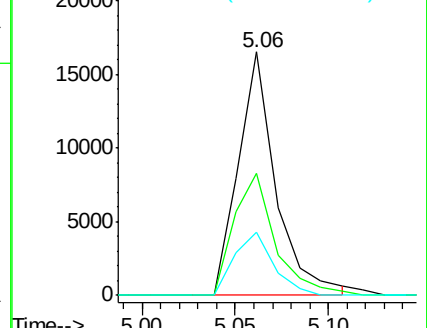
63 25.8 20.2 30.4



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: 16.90 ng

RT: 6.41 min Scan# 457

Delta R.T. 0.00 min

Lab File: BF078522.D

Acq: 15 Apr 2015 2:13

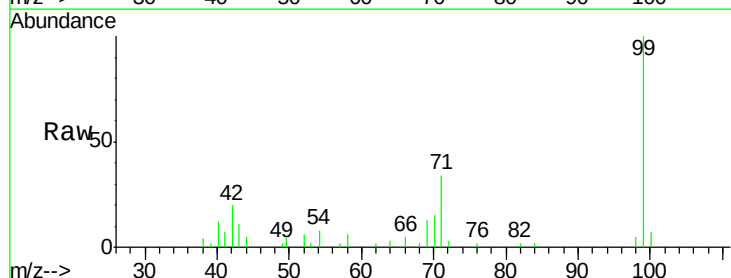
Tgt Ion: 99 Resp: 31624

Ion Ratio Lower Upper

99 100

42 20.2 14.8 22.2

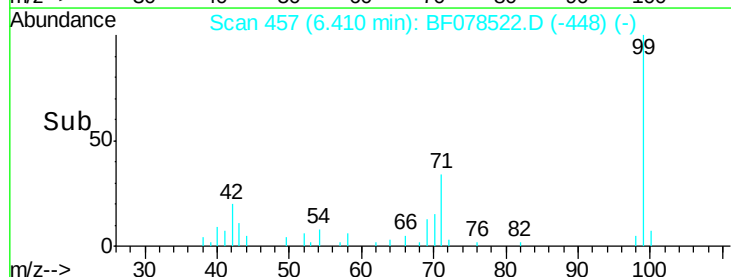
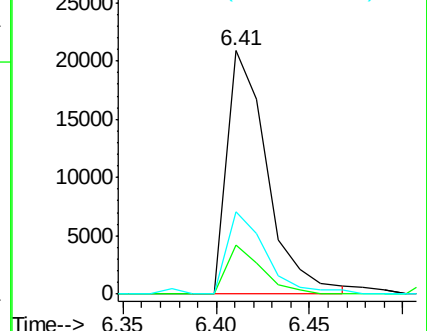
71 33.6 26.6 39.8

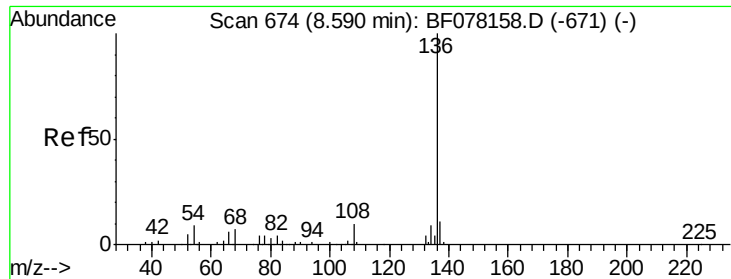


Abundance Ion 99.00 (98.70 to 99.70): BF0

Ion 42.00 (41.70 to 42.70): BF0

Ion 71.00 (70.70 to 71.70): BF0

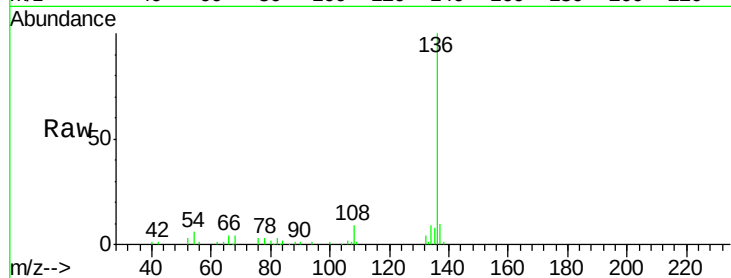




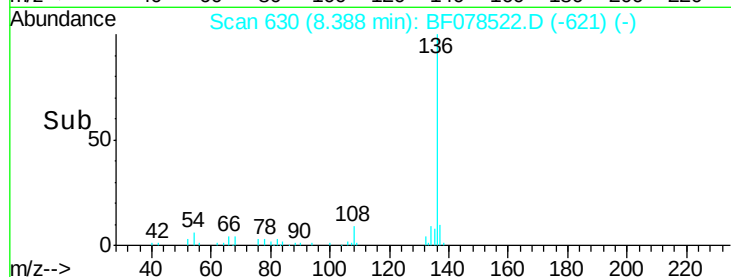
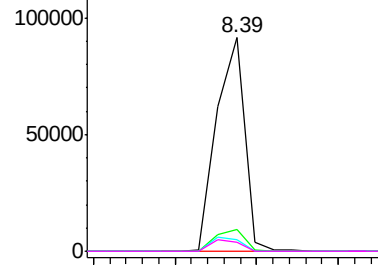
#21  
Naphthalene-d8  
Concen: 20.00 ng  
RT: 8.39 min Scan# 630  
Delta R.T. -0.00 min  
Lab File: BF078522.D  
Acq: 15 Apr 2015 2:13

Instrument :  
BNA\_F  
ClientSampled :  
SP-1

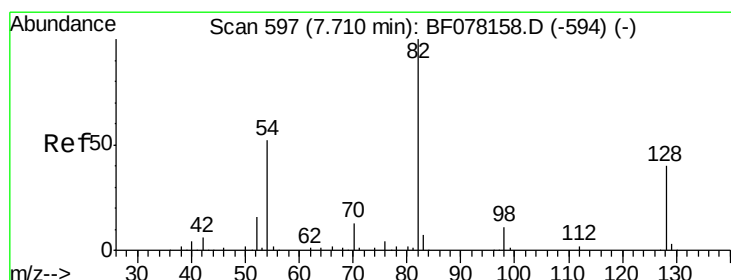
|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 136   | Resp: | 108945 |
| Ion Ratio | Lower | Upper |        |
| 136       | 100   |       |        |
| 137       | 10.4  | 9.0   | 13.4   |
| 54        | 5.6   | 7.0   | 10.6#  |
| 68        | 4.3   | 5.4   | 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

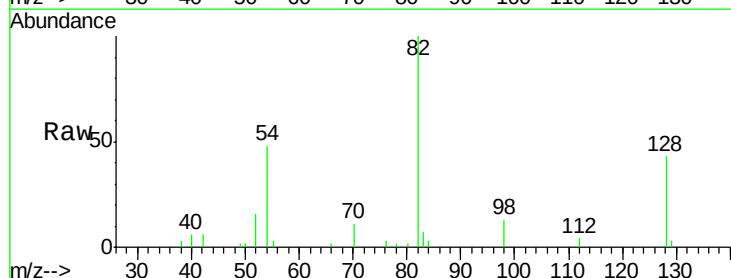


Time-->

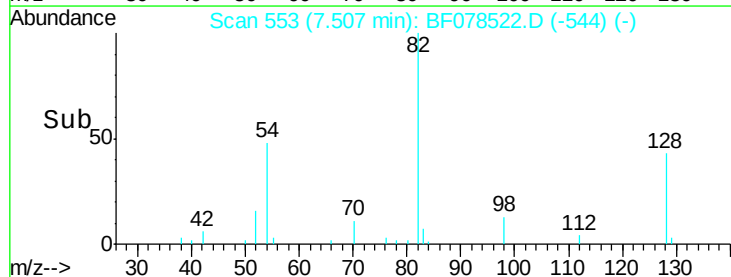
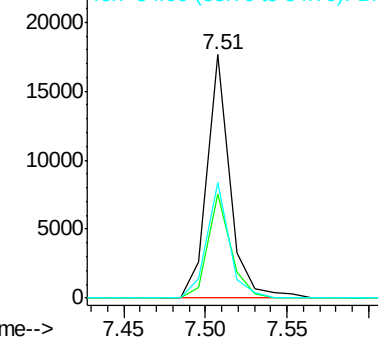


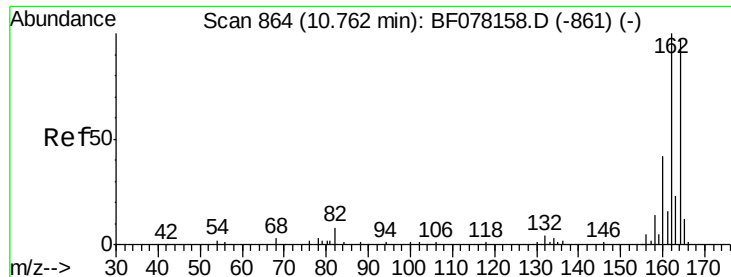
#23  
Nitrobenzene-d5  
Concen: 9.54 ng  
RT: 7.51 min Scan# 553  
Delta R.T. 0.00 min  
Lab File: BF078522.D  
Acq: 15 Apr 2015 2:13

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 82    | Resp: | 17139 |
| Ion Ratio | Lower | Upper |       |
| 82        | 100   |       |       |
| 128       | 43.0  | 31.8  | 47.8  |
| 54        | 47.7  | 41.5  | 62.3  |



Abundance Ion 82.00 (81.70 to 82.70): BF0  
Ion 128.00 (127.70 to 128.70): E  
Ion 54.00 (53.70 to 54.70): BF0

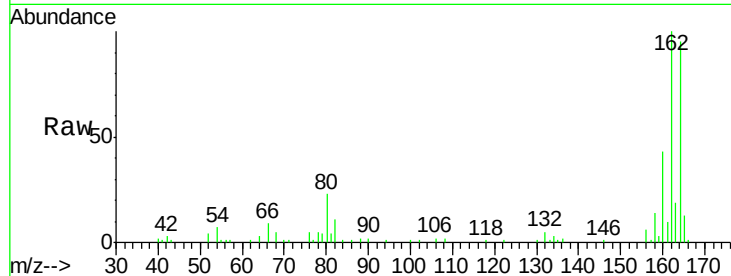




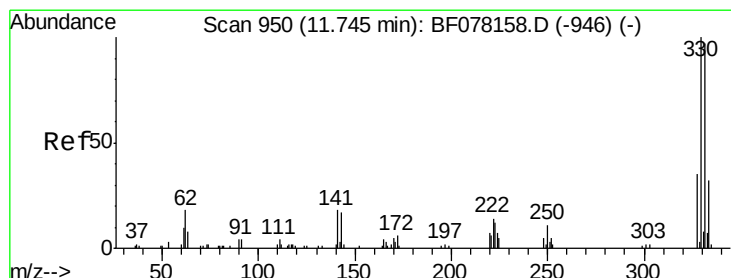
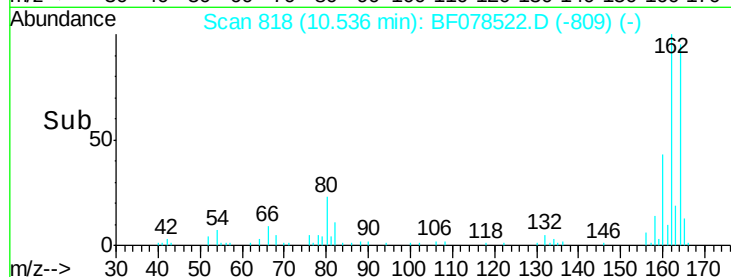
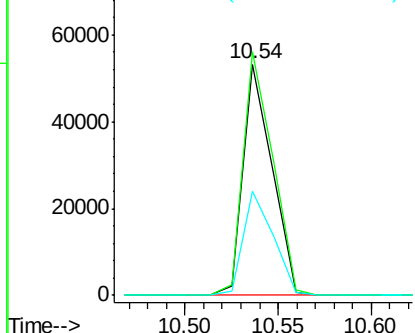
#38  
 Acenaphthene-d10  
 Concen: 20.00 ng  
 RT: 10.54 min Scan# 818  
 Delta R.T. -0.00 min  
 Lab File: BF078522.D  
 Acq: 15 Apr 2015 2:13

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SP-1

Tgt Ion:164 Resp: 57264  
 Ion Ratio Lower Upper  
 164 100  
 162 105.4 82.2 123.2  
 160 45.1 34.7 52.1

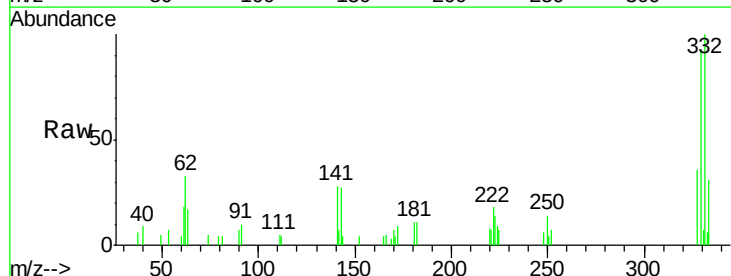


Abundance Ion 164.00 (163.70 to 164.70): E  
 Ion 162.00 (161.70 to 162.70): E  
 Ion 160.00 (159.70 to 160.70): E

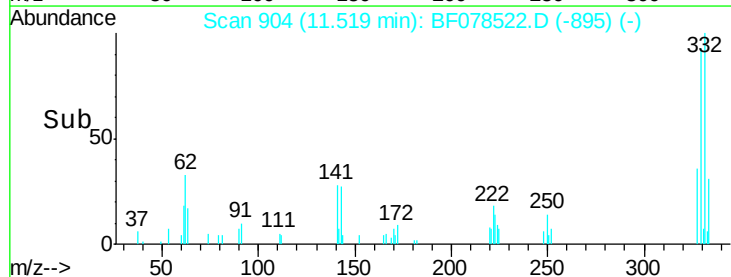
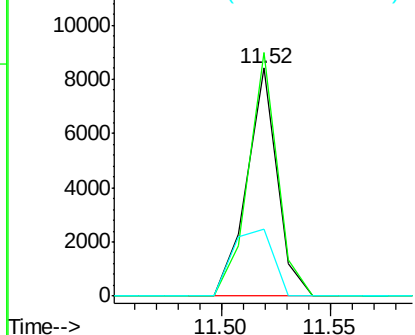


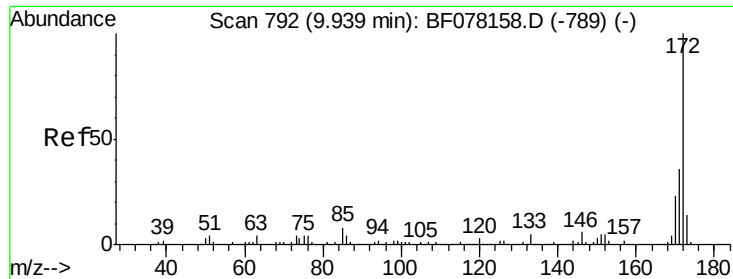
#41  
 2,4,6-Tribromophenol  
 Concen: 17.12 ng  
 RT: 11.52 min Scan# 904  
 Delta R.T. 0.00 min  
 Lab File: BF078522.D  
 Acq: 15 Apr 2015 2:13

Tgt Ion:330 Resp: 8131  
 Ion Ratio Lower Upper  
 330 100  
 332 102.7 78.6 117.8  
 141 39.3 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

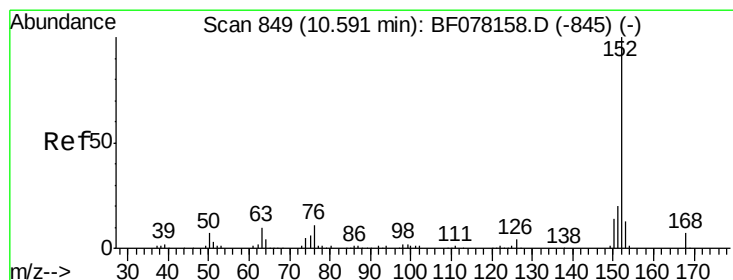
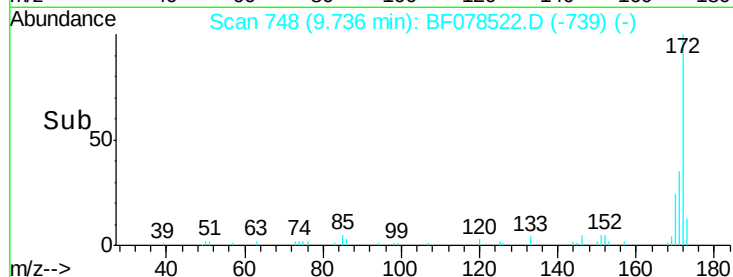
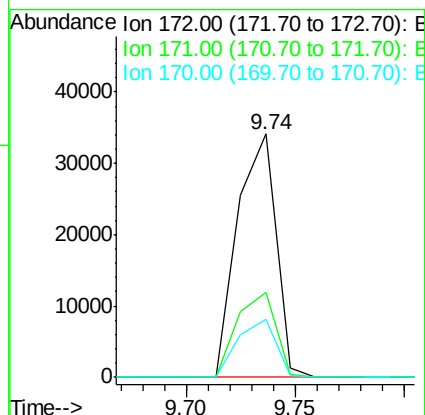
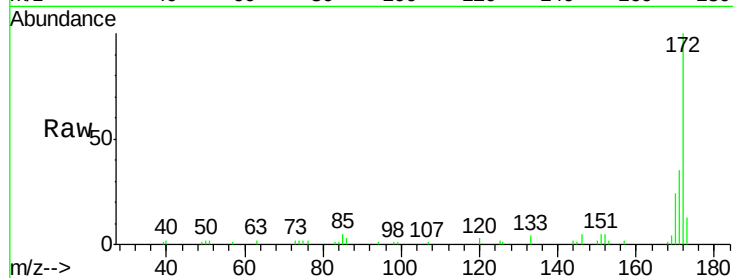




#44  
2-Fluorobiphenyl  
Concen: 10.46 ng  
RT: 9.74 min Scan# 748  
Delta R.T. 0.00 min  
Lab File: BF078522.D  
Acq: 15 Apr 2015 2:13

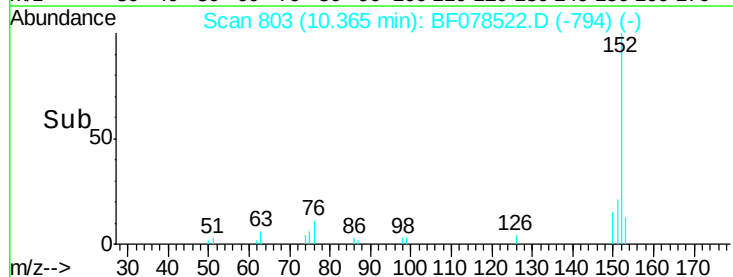
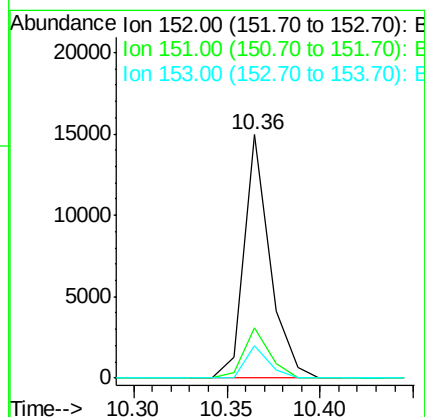
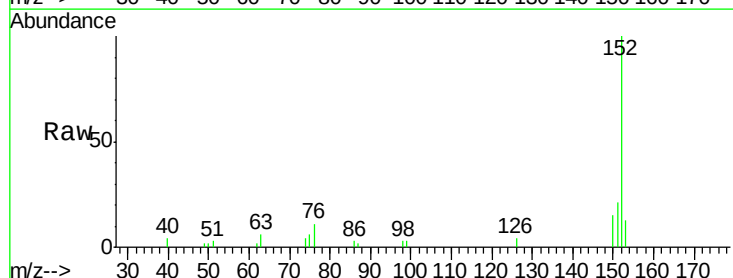
Instrument :  
BNA\_F  
ClientSampleId :  
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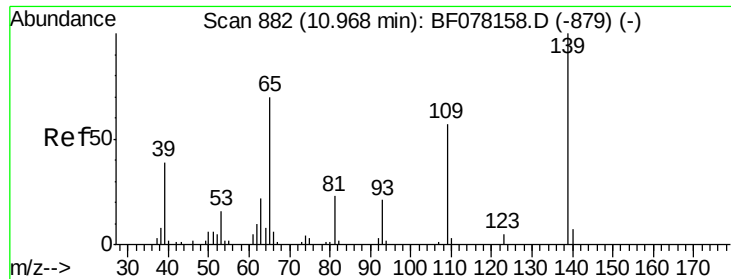
Tgt Ion:172 Resp: 41919  
Ion Ratio Lower Upper  
172 100  
171 34.9 28.6 42.8  
170 24.1 18.5 27.7



#48  
Acenaphthylene  
Concen: 2.43 ng  
RT: 10.36 min Scan# 803  
Delta R.T. 0.00 min  
Lab File: BF078522.D  
Acq: 15 Apr 2015 2:13

Tgt Ion:152 Resp: 14460  
Ion Ratio Lower Upper  
152 100  
151 20.9 15.7 23.5  
153 13.1 10.2 15.2

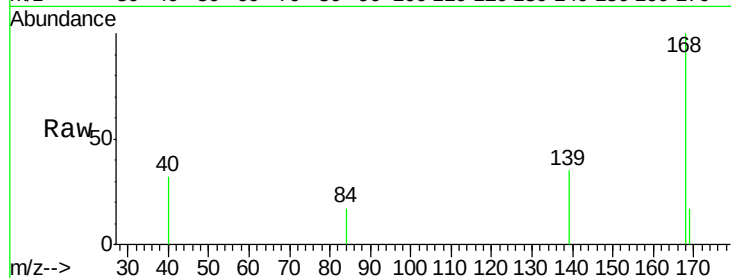




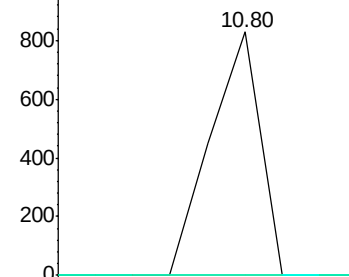
#55  
4-Nitrophenol  
Concen: 3.91 ng  
RT: 10.80 min Scan# 841  
Delta R.T. 0.03 min  
Lab File: BF078522.D  
Acq: 15 Apr 2015 2:13

Instrument :  
BNA\_F  
ClientSampled :  
SP-1

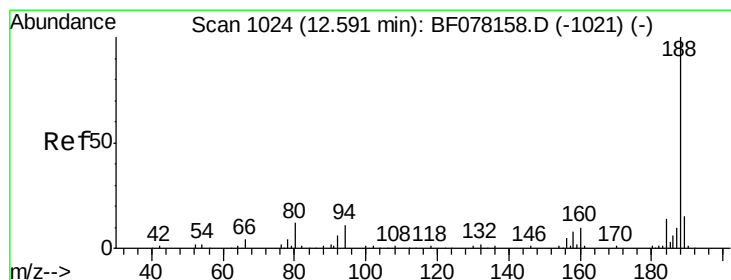
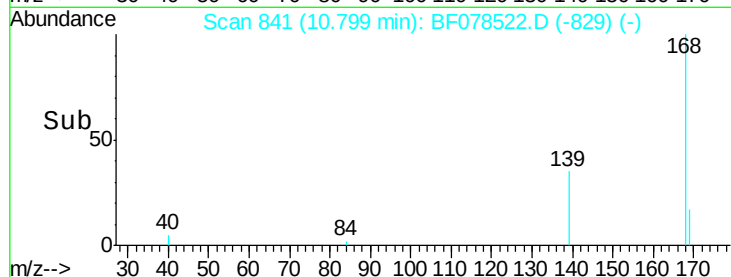
Tgt Ion:139 Resp: 877  
Ion Ratio Lower Upper  
139 100  
109 0.0 36.7 76.7#  
65 0.0 49.9 89.9#



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): BF0

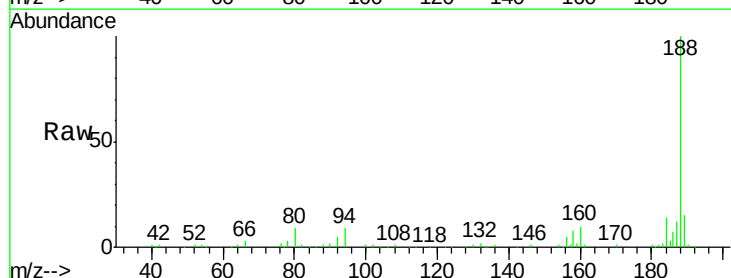


Time-->

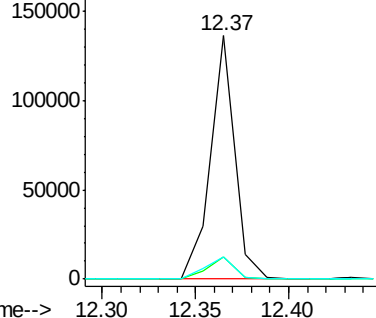


#63  
Phenanthrene-d10  
Concen: 20.00 ng  
RT: 12.37 min Scan# 978  
Delta R.T. 0.00 min  
Lab File: BF078522.D  
Acq: 15 Apr 2015 2:13

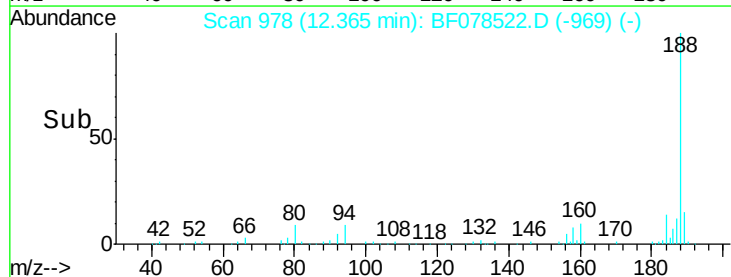
Tgt Ion:188 Resp: 124374  
Ion Ratio Lower Upper  
188 100  
94 9.0 9.0 13.4  
80 9.2 9.5 14.3#



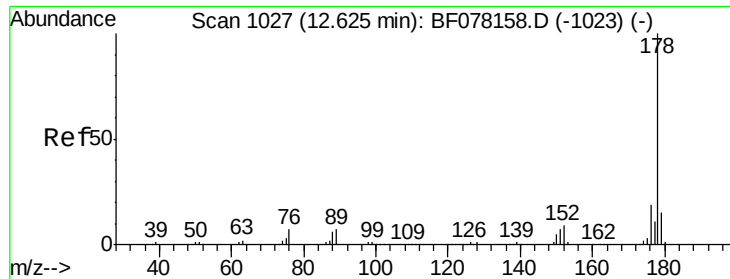
Abundance Ion 188.00 (187.70 to 188.70): E  
Ion 94.00 (93.70 to 94.70): BF0  
Ion 80.00 (79.70 to 80.70): BF0



Time-->



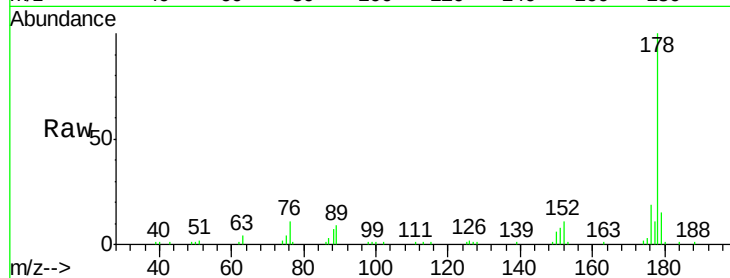




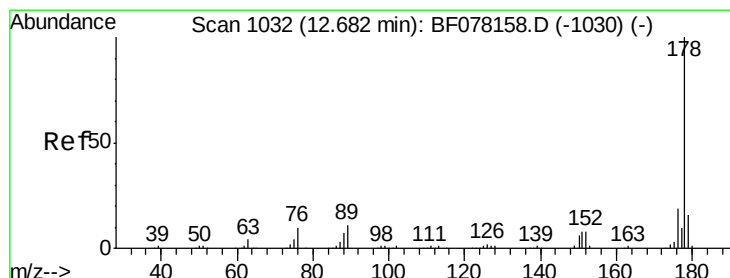
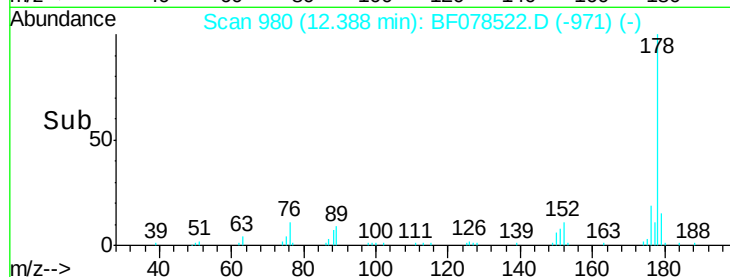
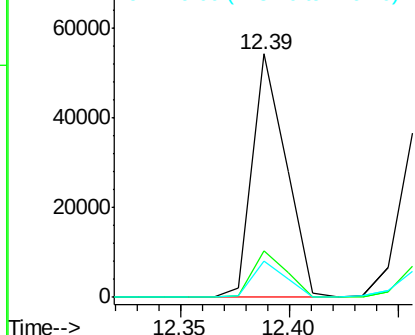
#70  
 Phenanthrene  
 Concen: 8.13 ng  
 RT: 12.39 min Scan# 980  
 Delta R.T. 0.00 min  
 Lab File: BF078522.D  
 Acq: 15 Apr 2015 2:13

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SP-1

Tgt Ion:178 Resp: 58513  
 Ion Ratio Lower Upper  
 178 100  
 176 19.0 15.4 23.0  
 179 15.0 12.2 18.2

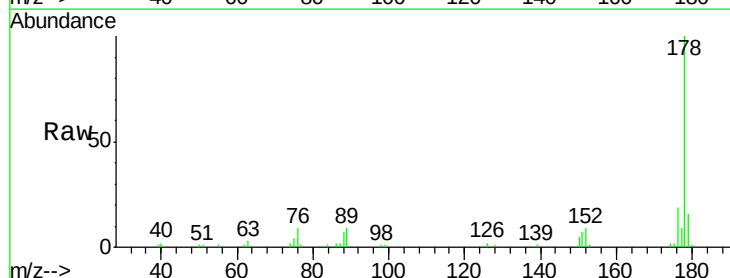


Abundance Ion 178.00 (177.70 to 178.70): E  
 Ion 176.00 (175.70 to 176.70): E  
 Ion 179.00 (178.70 to 179.70): E

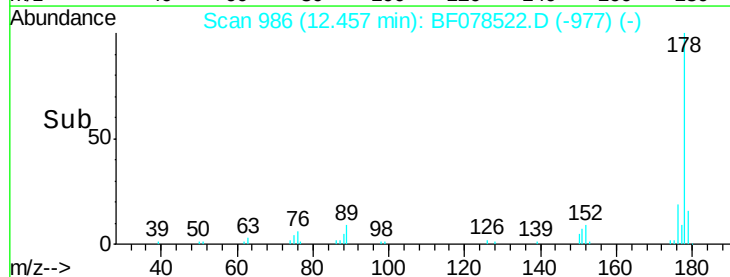
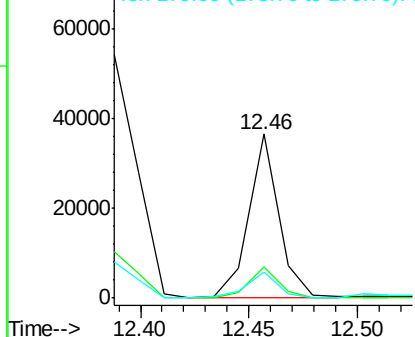


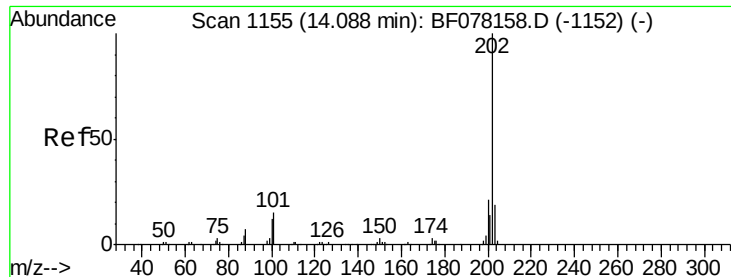
#71  
 Anthracene  
 Concen: 5.01 ng  
 RT: 12.46 min Scan# 986  
 Delta R.T. 0.00 min  
 Lab File: BF078522.D  
 Acq: 15 Apr 2015 2:13

Tgt Ion:178 Resp: 35532  
 Ion Ratio Lower Upper  
 178 100  
 176 19.0 14.8 22.2  
 179 16.2 12.4 18.6



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





#74

Fluoranthene

Concen: 30.99 ng

RT: 13.86 min Scan# 1109

Delta R.T. 0.01 min

Lab File: BF078522.D

Acq: 15 Apr 2015 2:13

Instrument :

BNA\_F

ClientSampled :

SP-1

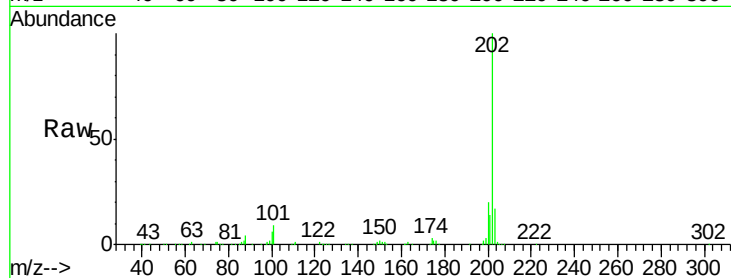
Tgt Ion: 202 Resp: 235120

Ion Ratio Lower Upper

202 100

101 8.6 0.0 35.2

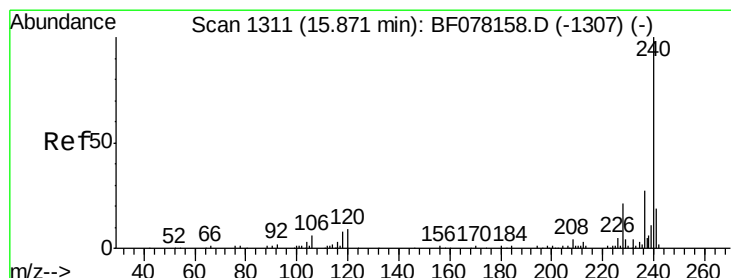
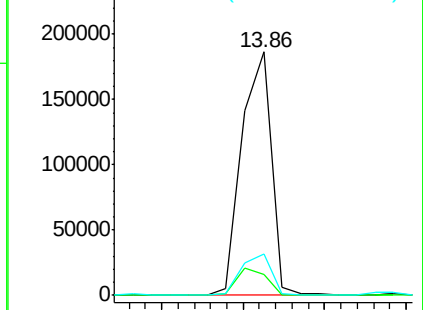
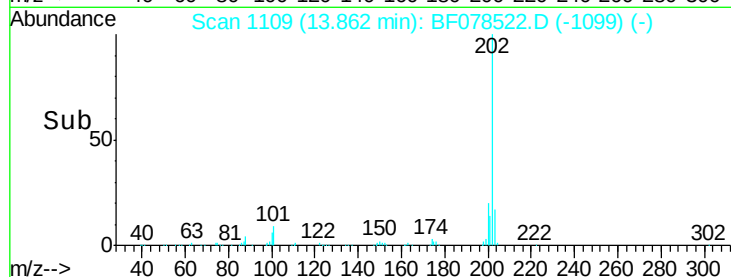
203 17.2 0.0 38.5



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: 15.62 min Scan# 1263

Delta R.T. -0.03 min

Lab File: BF078522.D

Acq: 15 Apr 2015 2:13

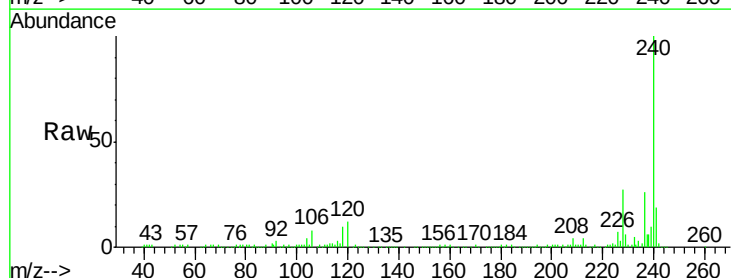
Tgt Ion: 240 Resp: 142681

Ion Ratio Lower Upper

240 100

120 11.6 7.1 10.7#

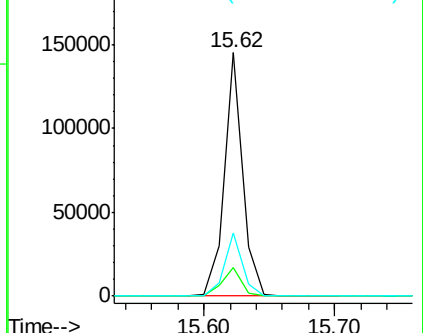
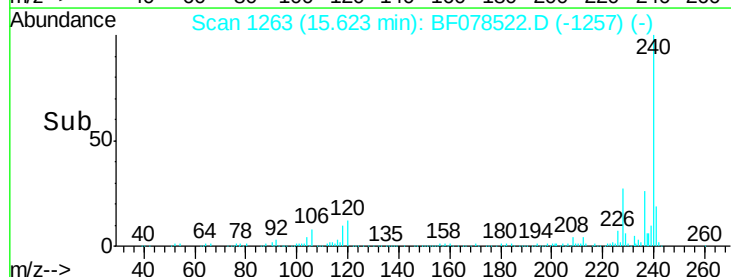
236 26.0 21.4 32.2

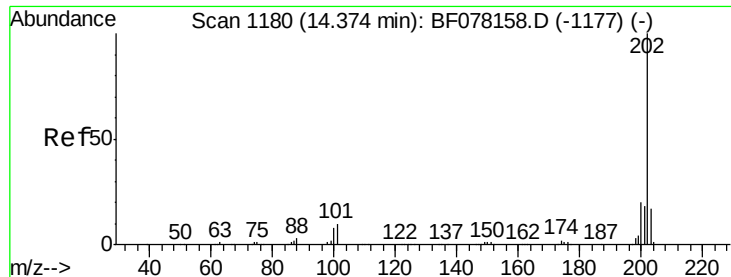


Abundance Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E





#77

Pyrene

Concen: 26.27 ng

RT: 14.14 min Scan# 1133

Delta R.T. 0.01 min

Lab File: BF078522.D

Acq: 15 Apr 2015 2:13

Instrument :

BNA\_F

ClientSampleId :

SP-1

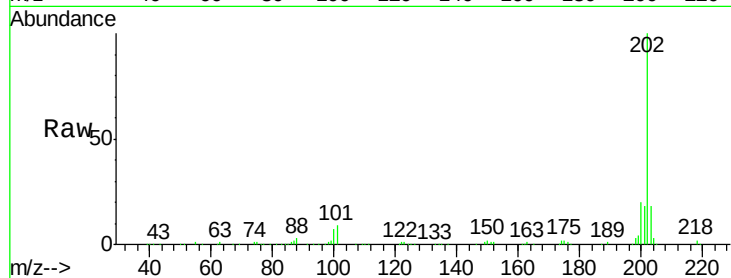
Tgt Ion:202 Resp: 235277

Ion Ratio Lower Upper

202 100

200 20.4 16.3 24.5

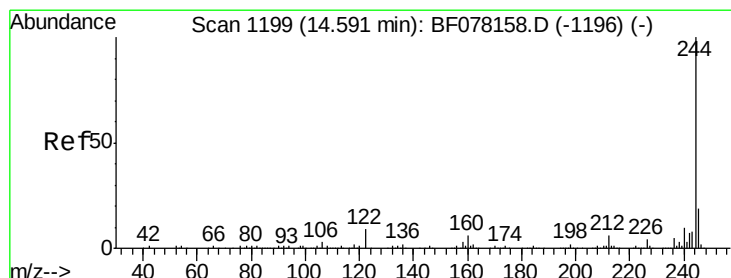
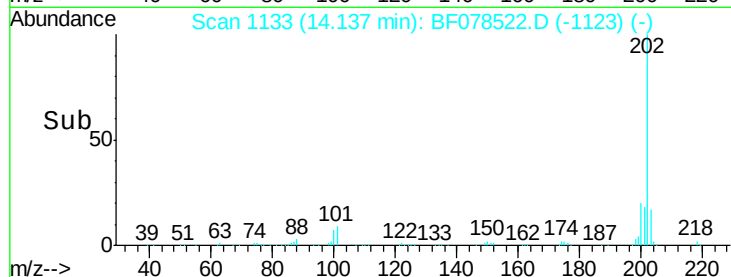
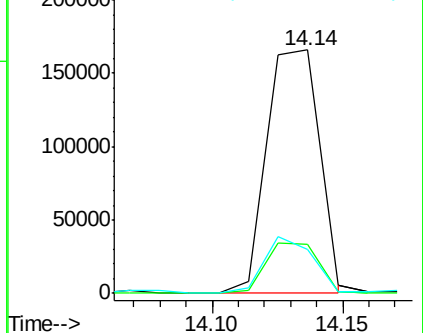
203 18.0 13.8 20.6



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: 9.24 ng

RT: 14.35 min Scan# 1152

Delta R.T. 0.00 min

Lab File: BF078522.D

Acq: 15 Apr 2015 2:13

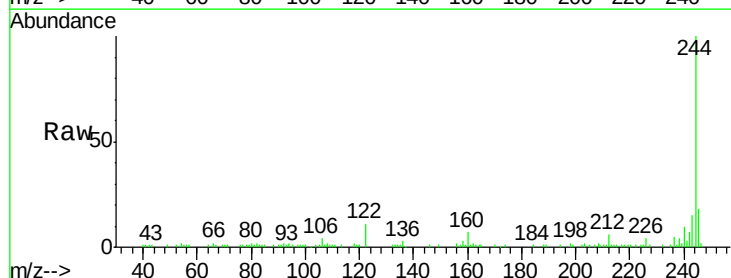
Tgt Ion:244 Resp: 58349

Ion Ratio Lower Upper

244 100

212 6.2 5.0 7.4

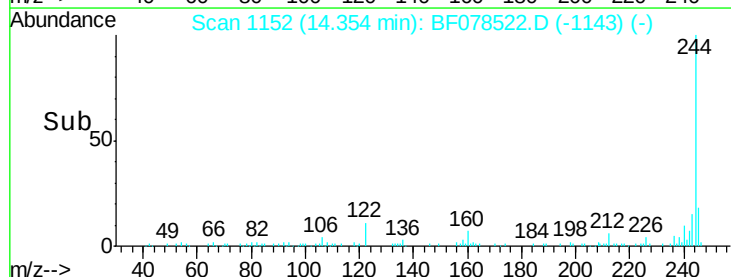
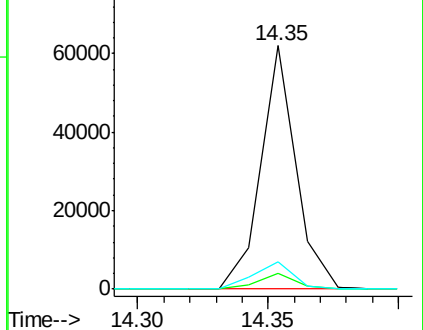
122 11.4 7.1 10.7#

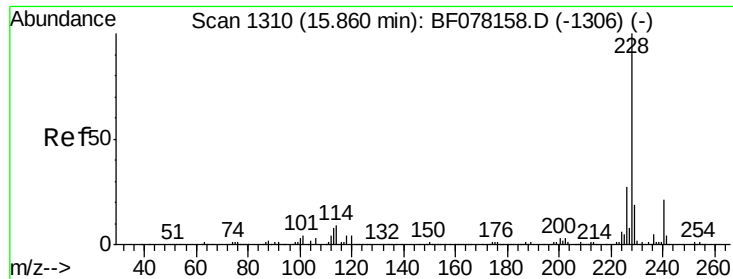


Abundance Ion 244.00 (243.70 to 244.70): E

Ion 212.00 (211.70 to 212.70): E

Ion 122.00 (121.70 to 122.70): E





#80

Benzo(a)anthracene

Concen: 20.03 ng

RT: 15.61 min Scan# 1262

Delta R.T. -0.03 min

Lab File: BF078522.D

Acq: 15 Apr 2015 2:13

Instrument :

BNA\_F

ClientSampleId :

SP-1

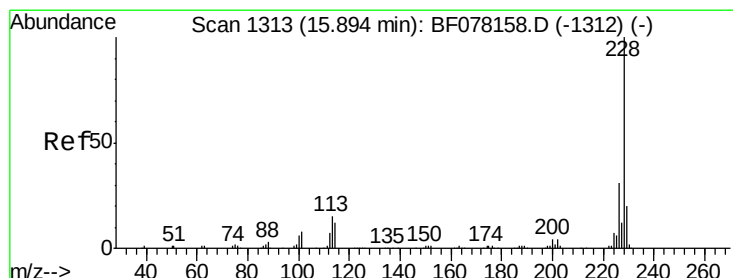
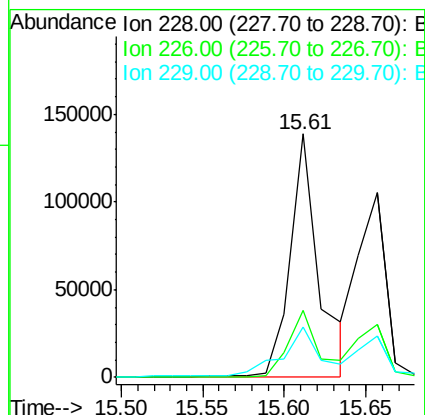
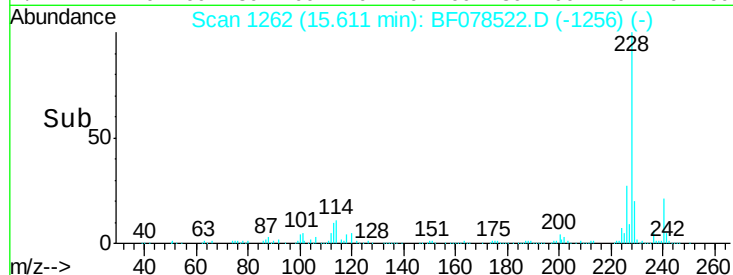
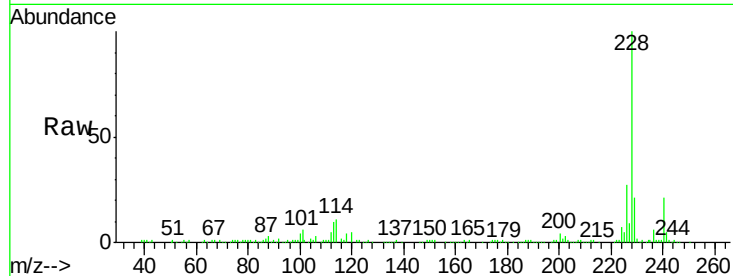
Tgt Ion:228 Resp: 170039

Ion Ratio Lower Upper

228 100

226 27.3 21.3 31.9

229 20.6 15.4 23.2



#82

Chrysene

Concen: 15.78 ng

RT: 15.66 min Scan# 1266

Delta R.T. -0.03 min

Lab File: BF078522.D

Acq: 15 Apr 2015 2:13

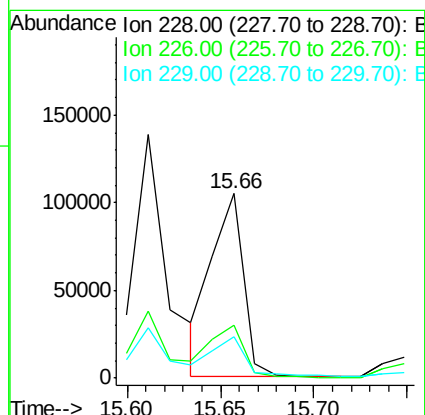
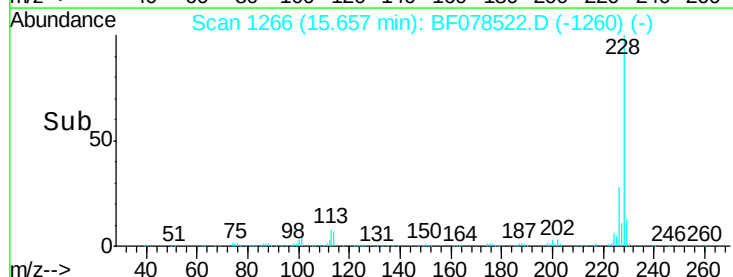
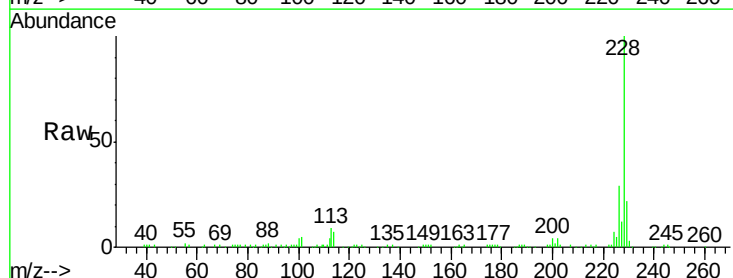
Tgt Ion:228 Resp: 125836

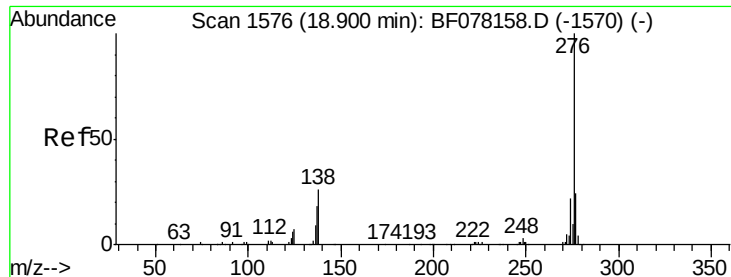
Ion Ratio Lower Upper

228 100

226 29.0 24.2 36.4

229 22.2 15.8 23.8





#85

Indeno(1,2,3-cd)pyrene

Concen: 7.51 ng

RT: 18.83 min Scan# 1544

Delta R.T. 0.02 min

Lab File: BF078522.D

Acq: 15 Apr 2015 2:13

Instrument :

BNA\_F

ClientSampleId :

SP-1

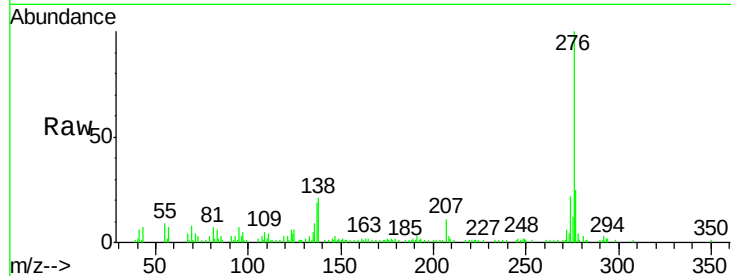
Tgt Ion:276 Resp: 67941

Ion Ratio Lower Upper

276 100

138 25.0 16.9 25.3

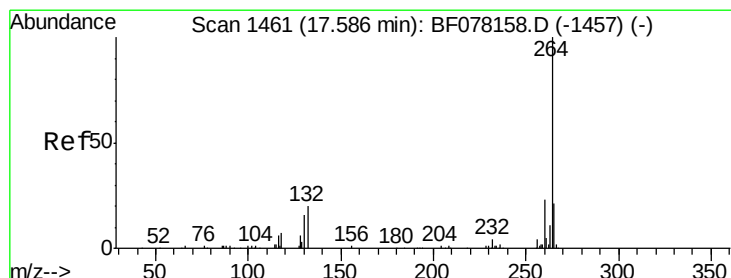
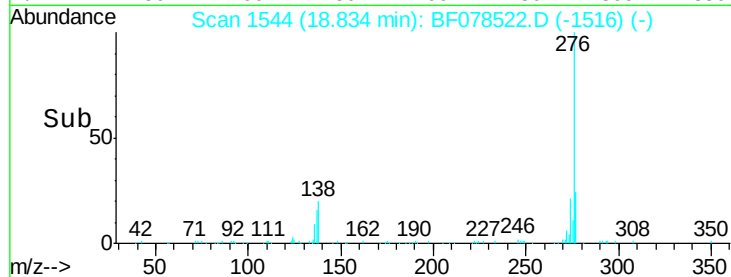
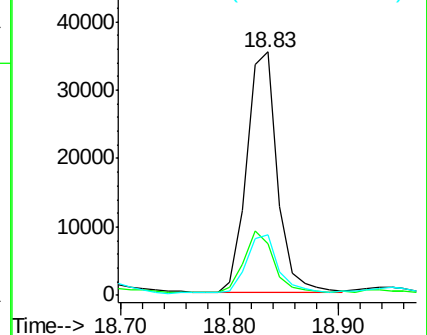
277 25.9 15.8 23.6#



Abundance Ion 276.00 (275.70 to 276.70): E

Ion 138.00 (137.70 to 138.70): E

Ion 277.00 (276.70 to 277.70): E



#86

Perylene-d12

Concen: 20.00 ng

RT: 17.28 min Scan# 1408

Delta R.T. -0.21 min

Lab File: BF078522.D

Acq: 15 Apr 2015 2:13

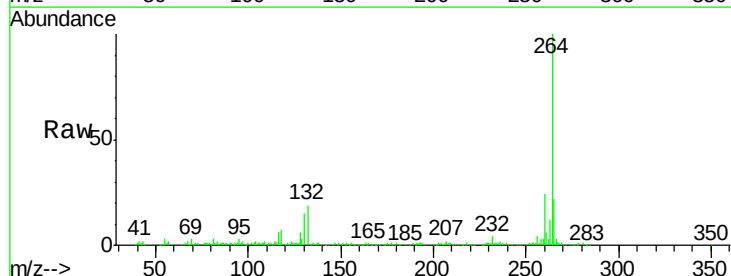
Tgt Ion:264 Resp: 144268

Ion Ratio Lower Upper

264 100

260 24.1 18.6 27.8

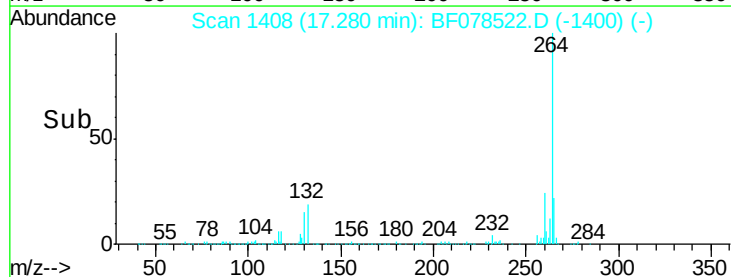
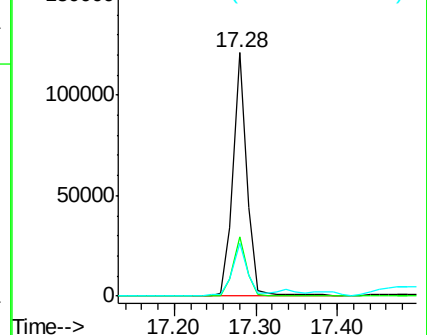
265 21.8 17.0 25.6

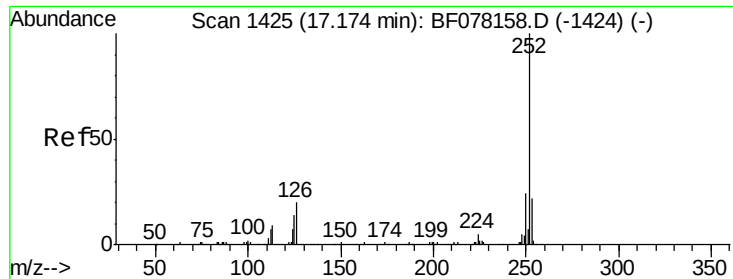


Abundance Ion 264.00 (263.70 to 264.70): E

Ion 260.00 (259.70 to 260.70): E

Ion 265.00 (264.70 to 265.70): E

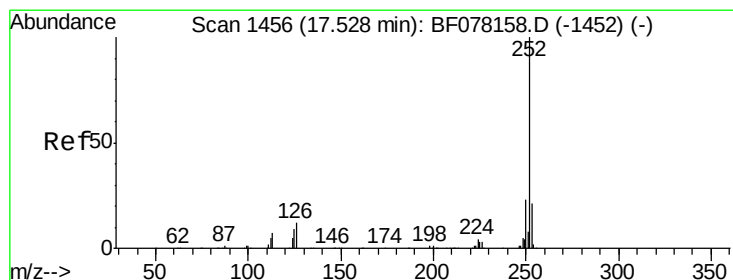
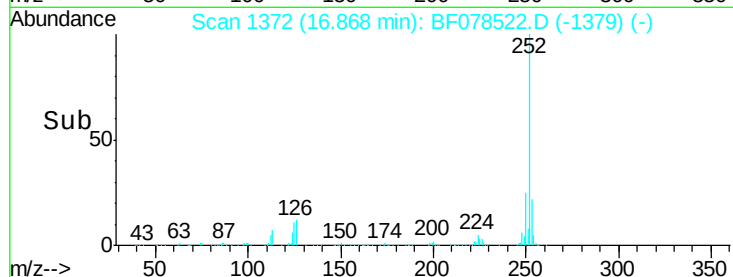
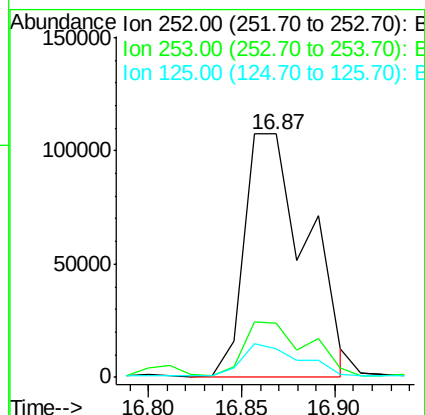
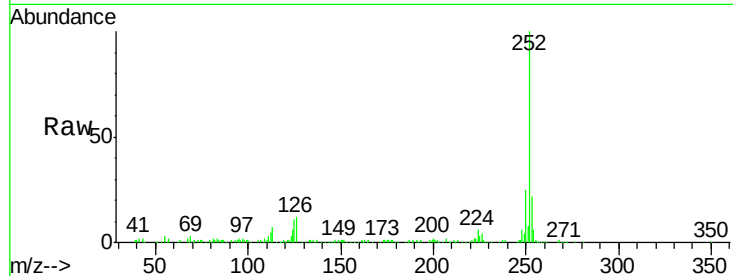




#88  
Benzo(k)fluoranthene  
Concen: 31.58 ng  
RT: 16.87 min Scan# 1372  
Delta R.T. -0.18 min  
Lab File: BF078522.D  
Acq: 15 Apr 2015 2:13

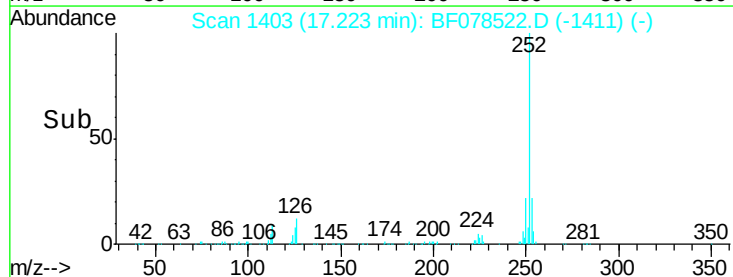
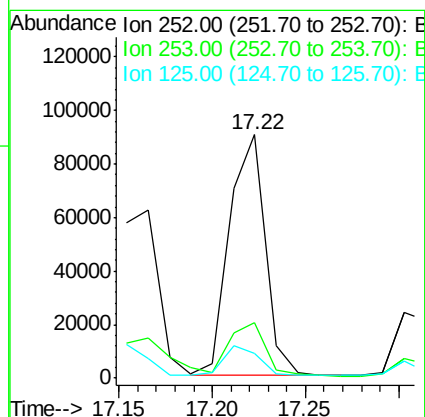
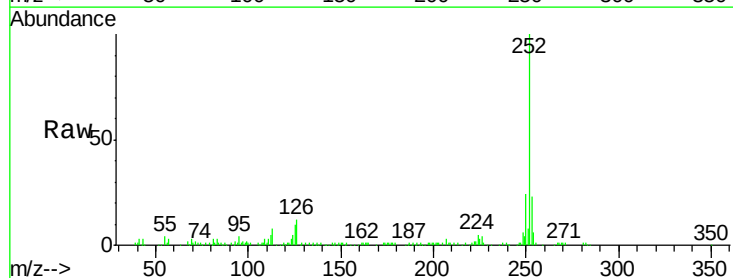
Instrument :  
BNA\_F  
ClientSampleId :  
SP-1

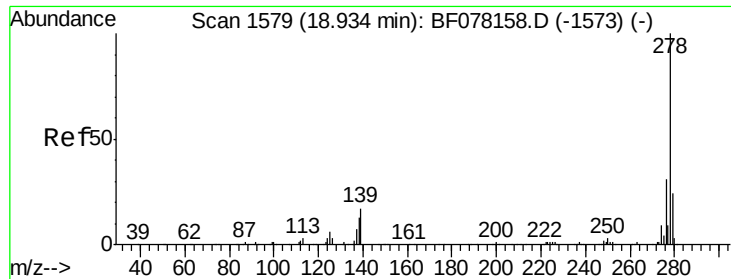
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.3  | 17.5  | 26.3  |
| 125     | 11.5  | 11.6  | 17.4# |



#89  
Benzo(a)pyrene  
Concen: 15.53 ng  
RT: 17.22 min Scan# 1403  
Delta R.T. -0.19 min  
Lab File: BF078522.D  
Acq: 15 Apr 2015 2:13

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.6  | 16.8  | 25.2  |
| 125     | 10.0  | 7.4   | 11.0  |





#90

Dibenzo(a,h)anthracene

Concen: 2.03 ng

RT: 18.64 min Scan# 1527

Delta R.T. -0.19 min

Lab File: BF078522.D

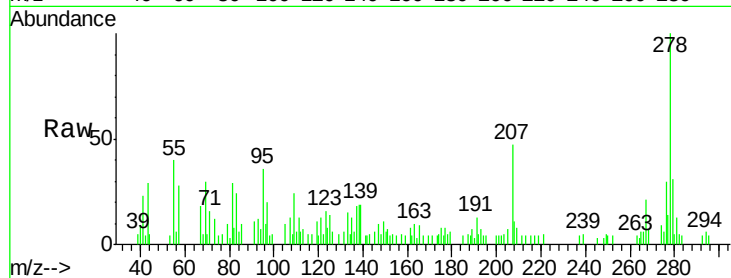
Acq: 15 Apr 2015 2:13

Instrument :

BNA\_F

ClientSampleId :

SP-1



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 278   | Resp: | 15828 |
| Ion      | Ratio | Lower | Upper |
| 278      | 100   |       |       |
| 139      | 19.3  | 13.6  | 20.4  |
| 279      | 31.2  | 19.0  | 28.6  |

