

Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF051215\  
 Data File : BF079158.D  
 Acq On : 12 May 2015 15:27  
 Operator : TP/IZ  
 Sample : G2155-07  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SB-44AS

Quant Time: May 13 01:12:25 2015  
 Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF043015.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed May 13 00:53:14 2015  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.28  | 152  | 65275    | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 8.86  | 136  | 283848   | 20.00 | ng    | 0.00     |
| 38) Acenaphthene-d10      | 11.03 | 164  | 137345   | 20.00 | ng    | -0.01    |
| 63) Phenanthrene-d10      | 12.88 | 188  | 267492   | 20.00 | ng    | 0.00     |
| 75) Chrysene-d12          | 16.22 | 240  | 273774   | 20.00 | ng    | 0.02     |
| 86) Perylene-d12          | 18.10 | 264  | 300498   | 20.00 | ng    | 0.08     |

|                             |       |     |        |        |    |      |
|-----------------------------|-------|-----|--------|--------|----|------|
| System Monitoring Compounds |       |     |        |        |    |      |
| 5) 2-Fluorophenol           | 5.59  | 112 | 386164 | 101.84 | ng | 0.01 |
| 7) Phenol-d6                | 6.84  | 99  | 486922 | 97.14  | ng | 0.00 |
| 23) Nitrobenzene-d5         | 7.98  | 82  | 294448 | 59.62  | ng | 0.00 |
| 41) 2,4,6-Tribromophenol    | 12.01 | 330 | 145772 | 98.11  | ng | 0.00 |
| 44) 2-Fluorobiphenyl        | 10.20 | 172 | 594324 | 60.29  | ng | 0.00 |
| 78) Terphenyl-d14           | 14.88 | 244 | 673881 | 58.93  | ng | 0.00 |

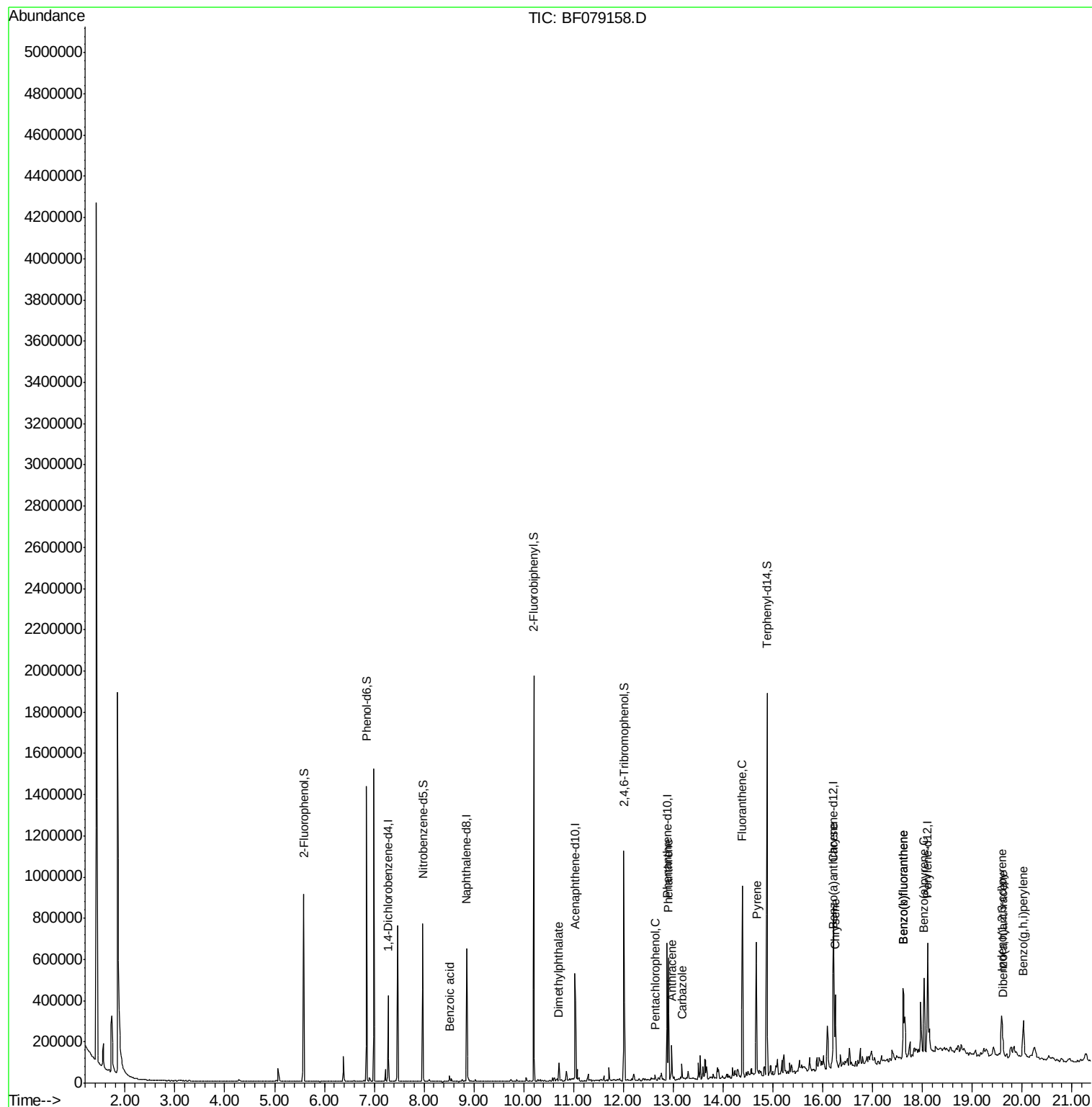
|                            |       |     |        |        |    |       |
|----------------------------|-------|-----|--------|--------|----|-------|
| Target Compounds           |       |     |        | Qvalue |    |       |
| 32) Benzoic acid           | 8.51  | 122 | 6273   | 8.46   | ng | 94    |
| 49) Dimethylphthalate      | 10.71 | 163 | 35663  | 3.54   | ng | 100   |
| 69) Pentachlorophenol      | 12.64 | 266 | 331    | 7.00   | ng | # 60  |
| 70) Phenanthrene           | 12.90 | 178 | 273471 | 18.27  | ng | 100   |
| 71) Anthracene             | 12.97 | 178 | 66835  | 4.55   | ng | 98    |
| 72) Carbazole              | 13.18 | 167 | 31437  | 2.25   | ng | 99    |
| 74) Fluoranthene           | 14.39 | 202 | 403556 | 25.88  | ng | 95    |
| 77) Pyrene                 | 14.67 | 202 | 362674 | 22.99  | ng | 98    |
| 80) Benzo(a)anthracene     | 16.21 | 228 | 196346 | 13.10  | ng | 97    |
| 82) Chrysene               | 16.25 | 228 | 172681 | 11.98  | ng | 98    |
| 85) Indeno(1,2,3-cd)pyrene | 19.59 | 276 | 150898 | 8.21   | ng | # 100 |
| 87) Benzo(b)fluoranthene   | 17.61 | 252 | 329243 | 20.02  | ng | 98    |
| 88) Benzo(k)fluoranthene   | 17.61 | 252 | 331742 | 20.83  | ng | 99    |
| 89) Benzo(a)pyrene         | 18.03 | 252 | 183126 | 12.09  | ng | # 95  |
| 90) Dibenzo(a,h)anthracene | 19.62 | 278 | 51791  | 3.22   | ng | 95    |
| 91) Benzo(g,h,i)perylene   | 20.02 | 276 | 142851 | 8.86   | ng | 95    |

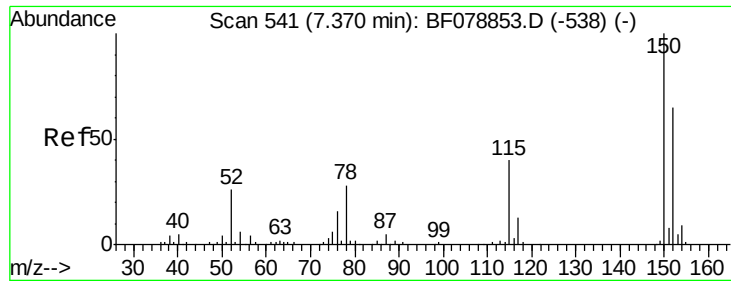
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
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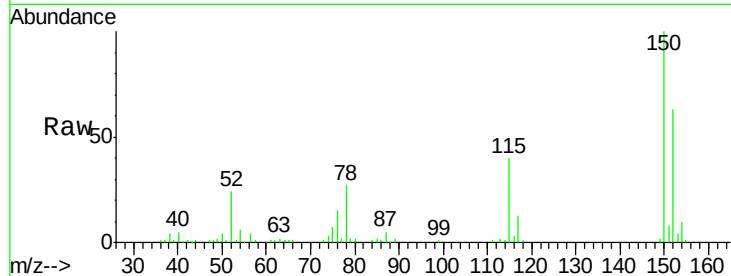




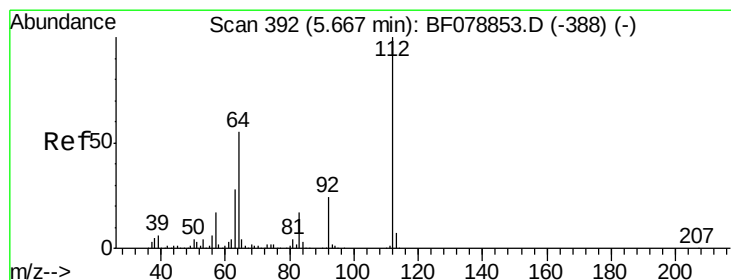
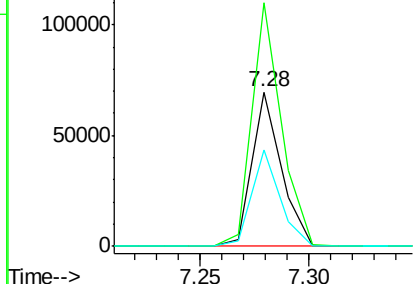
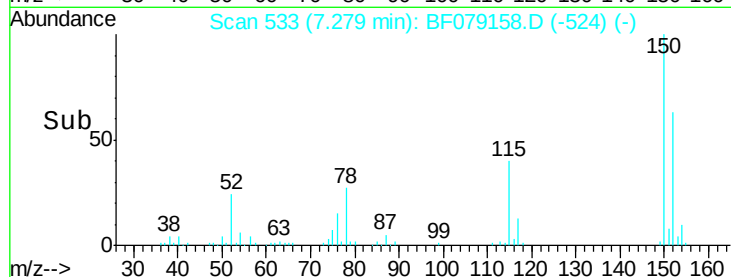
#1  
 1,4-Dichlorobenzene-d4  
 Concen: 20.00 ng  
 RT: 7.28 min Scan# 533  
 Delta R.T. 0.00 min  
 Lab File: BF079158.D  
 Acq: 12 May 2015 15:27

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SB-44AS

Tgt Ion:152 Resp: 65275  
 Ion Ratio Lower Upper  
 152 100  
 150 157.6 122.0 183.0  
 115 62.5 46.3 69.5

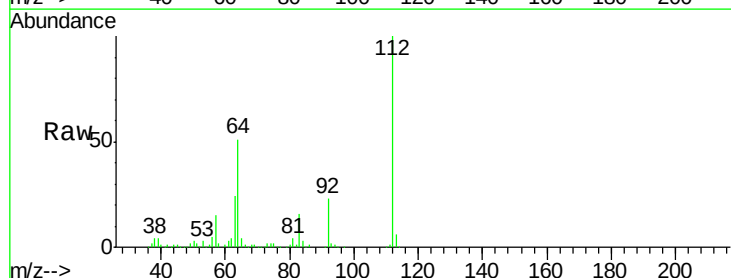


Abundance Ion 152.00 (151.70 to 152.70): E  
 Ion 150.00 (149.70 to 150.70): E  
 Ion 115.00 (114.70 to 115.70): E

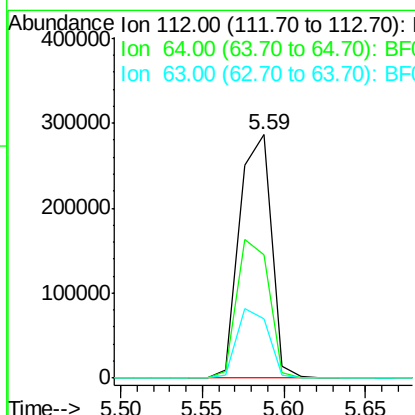
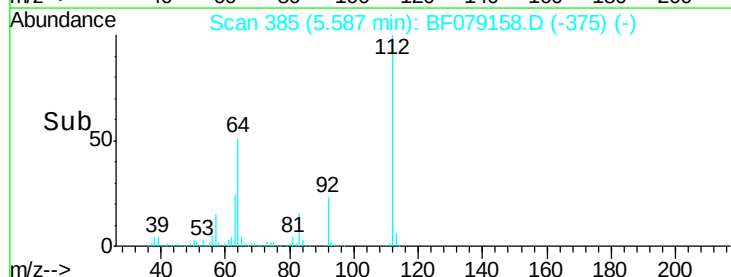


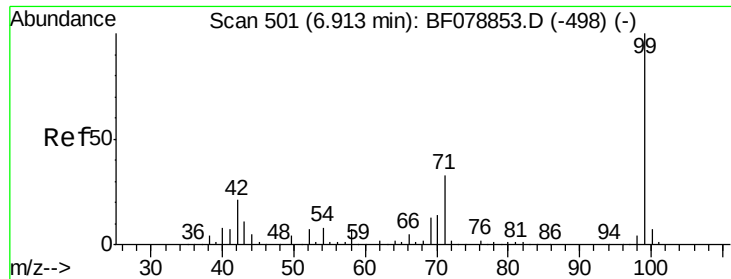
#5  
 2-Fluorophenol  
 Concen: 101.84 ng  
 RT: 5.59 min Scan# 385  
 Delta R.T. 0.01 min  
 Lab File: BF079158.D  
 Acq: 12 May 2015 15:27

Tgt Ion:112 Resp: 386164  
 Ion Ratio Lower Upper  
 112 100  
 64 50.8 53.5 80.3#  
 63 24.4 27.5 41.3#



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





#7

Phenol-d6

Concen: 97.14 ng

RT: 6.84 min Scan# 495

Delta R.T. 0.00 min

Lab File: BF079158.D

Acq: 12 May 2015 15:27

Instrument :

BNA\_F

ClientSampleId :

SB-44AS

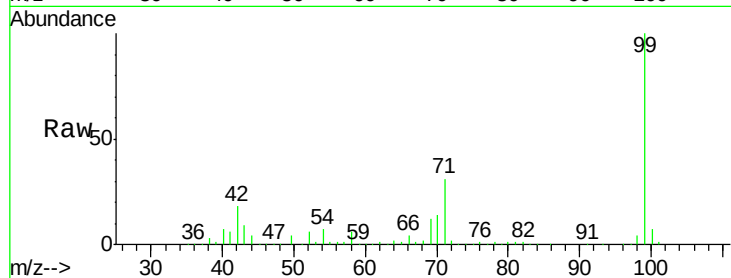
Tgt Ion: 99 Resp: 486922

Ion Ratio Lower Upper

99 100

42 18.1 12.8 19.2

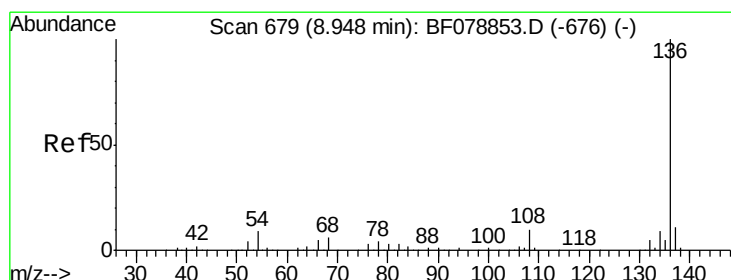
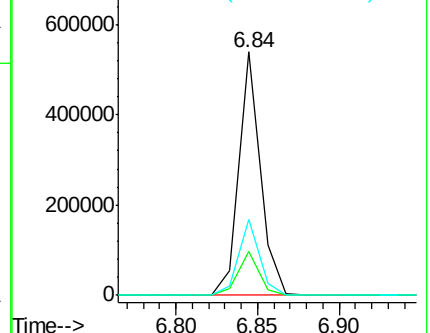
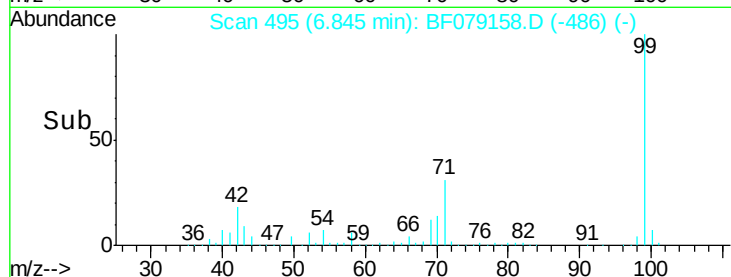
71 31.1 23.4 35.2



Abundance Ion 99.00 (98.70 to 99.70): BF0

Ion 42.00 (41.70 to 42.70): BF0

Ion 71.00 (70.70 to 71.70): BF0



#21

Naphthalene-d8

Concen: 20.00 ng

RT: 8.86 min Scan# 671

Delta R.T. 0.00 min

Lab File: BF079158.D

Acq: 12 May 2015 15:27

Tgt Ion: 136 Resp: 283848

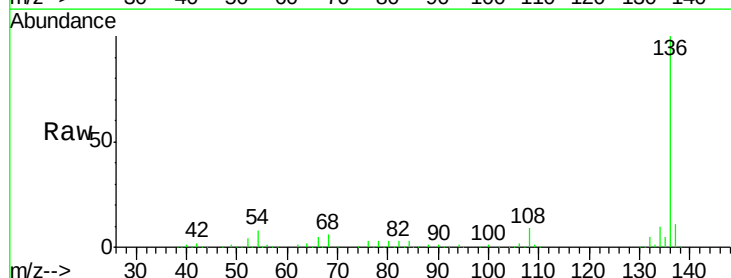
Ion Ratio Lower Upper

136 100

137 11.1 8.7 13.1

54 8.0 5.8 8.8

68 6.0 4.2 6.4

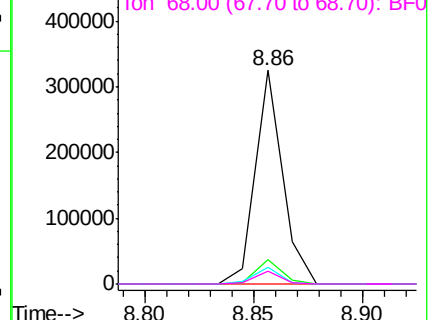
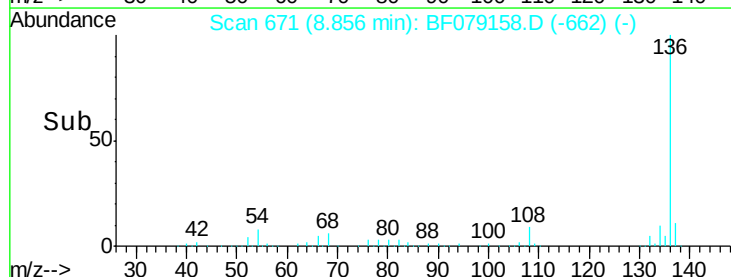


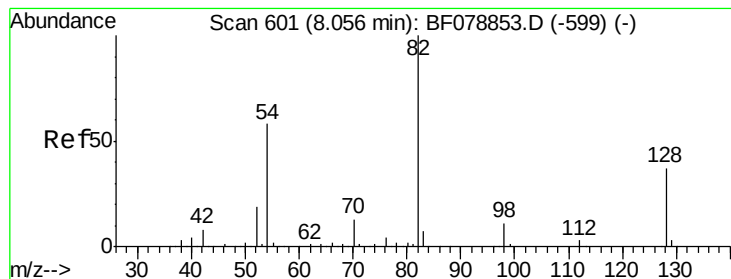
Abundance Ion 136.00 (135.70 to 136.70): E

Ion 137.00 (136.70 to 137.70): E

Ion 54.00 (53.70 to 54.70): BF0

Ion 68.00 (67.70 to 68.70): BF0





#23

Nitrobenzene-d5

Concen: 59.62 ng

RT: 7.98 min Scan# 594

Delta R.T. 0.00 min

Lab File: BF079158.D

Acq: 12 May 2015 15:27

Instrument :

BNA\_F

ClientSampleId :

SB-44AS

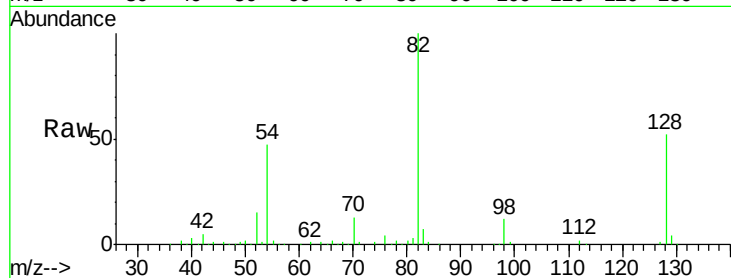
Tgt Ion: 82 Resp: 294448

Ion Ratio Lower Upper

82 100

128 52.3 30.0 45.0#

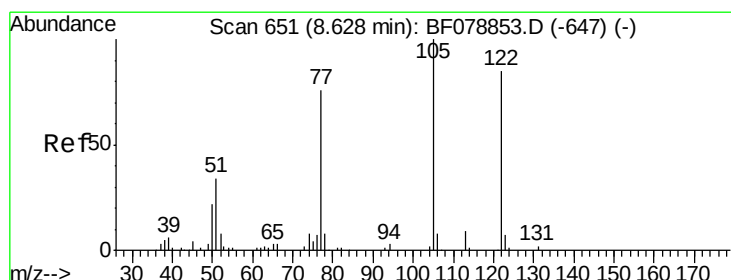
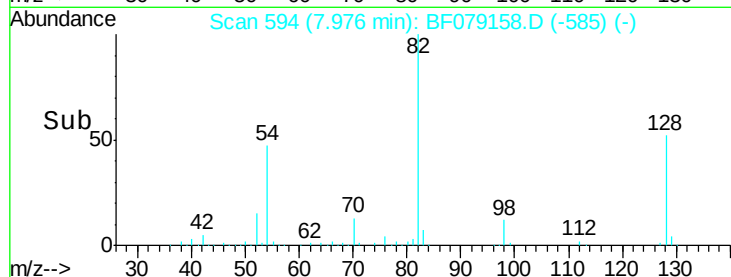
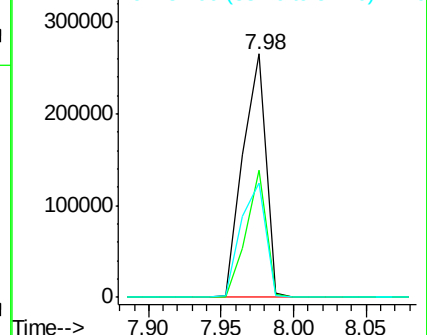
54 46.9 46.4 69.6



Abundance Ion 82.00 (81.70 to 82.70): BF079158.D (-585) (-)

Ion 128.00 (127.70 to 128.70): BF079158.D (-585) (-)

Ion 54.00 (53.70 to 54.70): BF079158.D (-585) (-)



#32

Benzoic acid

Concen: 8.46 ng

RT: 8.51 min Scan# 641

Delta R.T. -0.06 min

Lab File: BF079158.D

Acq: 12 May 2015 15:27

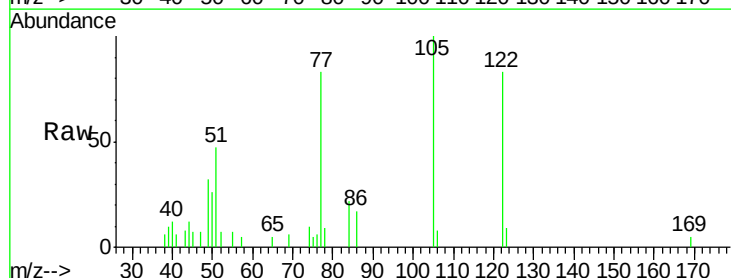
Tgt Ion: 122 Resp: 6273

Ion Ratio Lower Upper

122 100

105 120.7 107.1 147.1

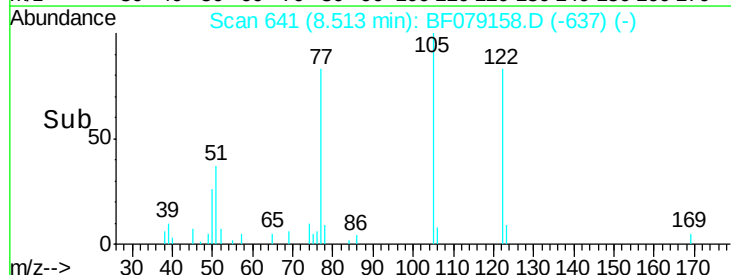
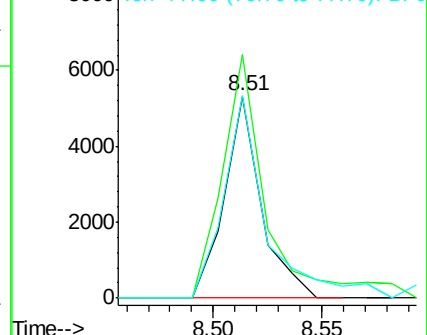
77 100.4 73.9 113.9

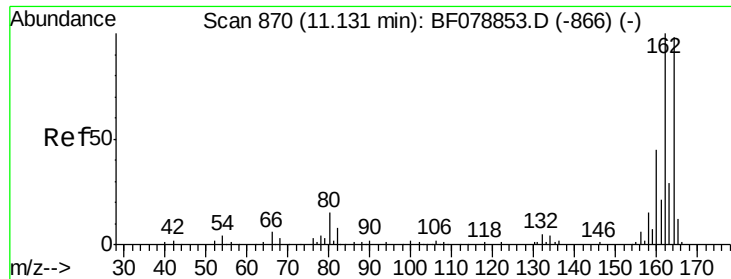


Abundance Ion 122.00 (121.70 to 122.70): BF079158.D (-637) (-)

Ion 105.00 (104.70 to 105.70): BF079158.D (-637) (-)

Ion 77.00 (76.70 to 77.70): BF079158.D (-637) (-)

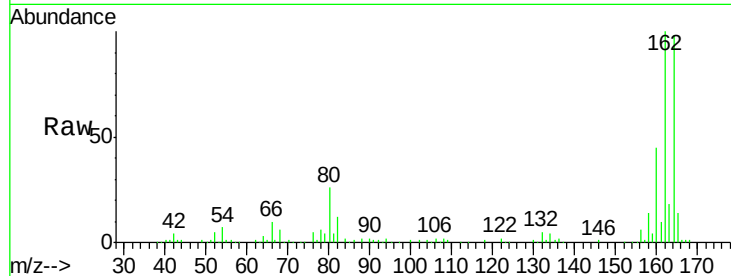




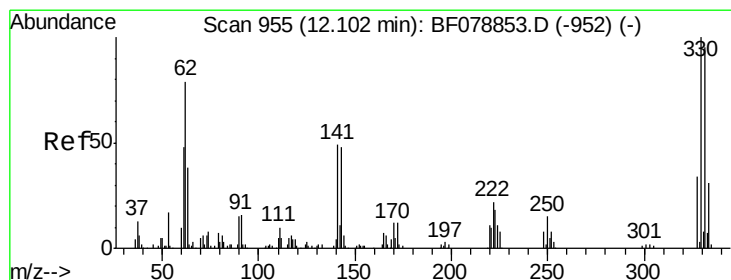
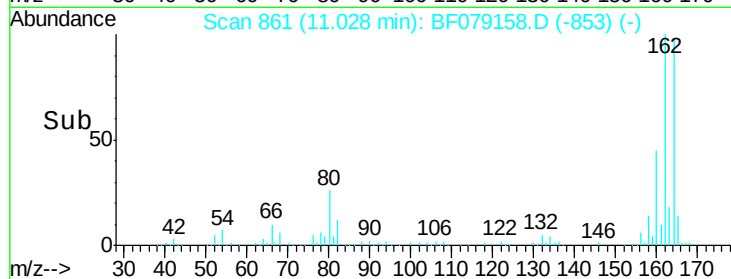
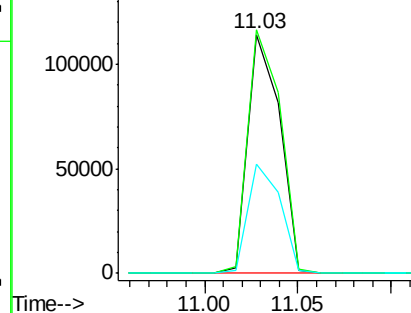
#38  
 Acenaphthene-d10  
 Concen: 20.00 ng  
 RT: 11.03 min Scan# 861  
 Delta R.T. -0.01 min  
 Lab File: BF079158.D  
 Acq: 12 May 2015 15:27

Instrument :  
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 ClientSampleId :  
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Tgt Ion:164 Resp: 137345  
 Ion Ratio Lower Upper  
 164 100  
 162 101.9 82.7 124.1  
 160 45.6 35.8 53.8

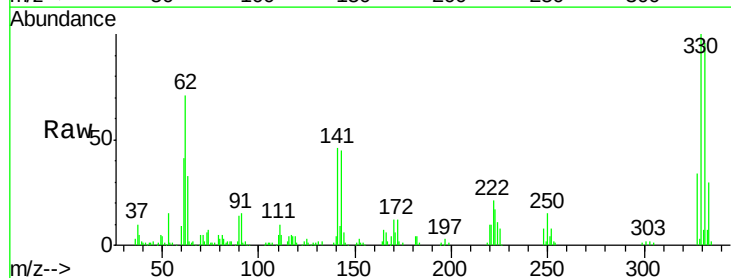


Abundance Ion 164.00 (163.70 to 164.70): E  
 Ion 162.00 (161.70 to 162.70): E  
 Ion 160.00 (159.70 to 160.70): E

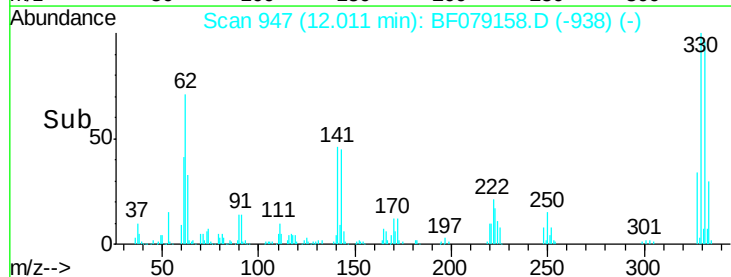
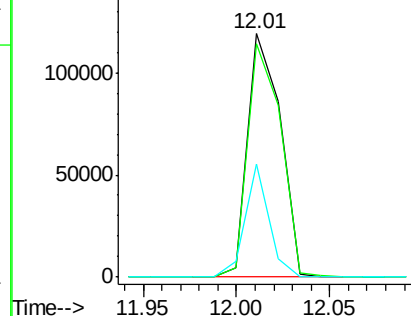


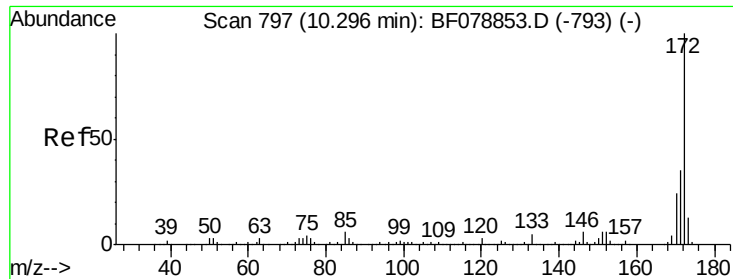
#41  
 2,4,6-Tribromophenol  
 Concen: 98.11 ng  
 RT: 12.01 min Scan# 947  
 Delta R.T. 0.00 min  
 Lab File: BF079158.D  
 Acq: 12 May 2015 15:27

Tgt Ion:330 Resp: 145772  
 Ion Ratio Lower Upper  
 330 100  
 332 96.5 0.0 0.0#  
 141 34.0 0.0 0.0#



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

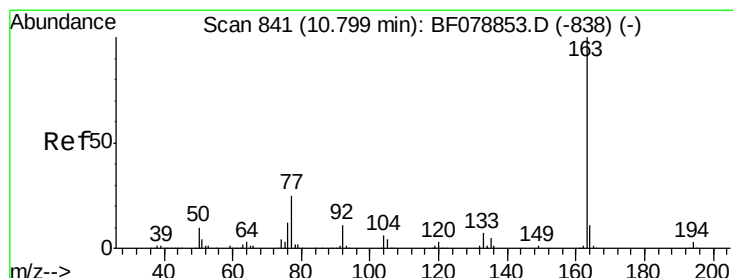
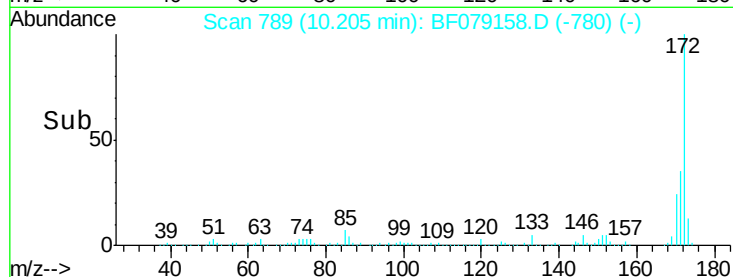
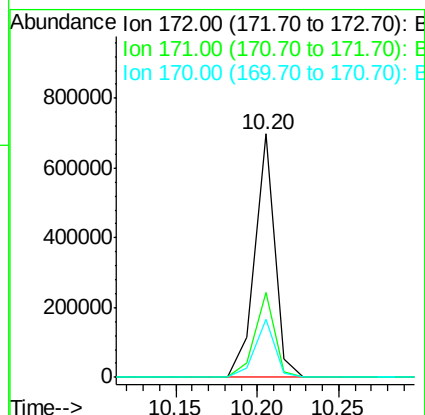
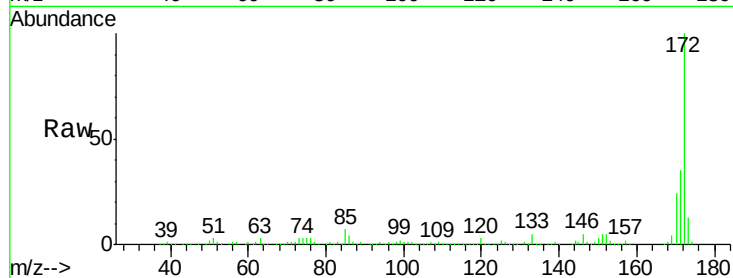




#44  
2-Fluorobiphenyl  
Concen: 60.29 ng  
RT: 10.20 min Scan# 789  
Delta R.T. 0.00 min  
Lab File: BF079158.D  
Acq: 12 May 2015 15:27

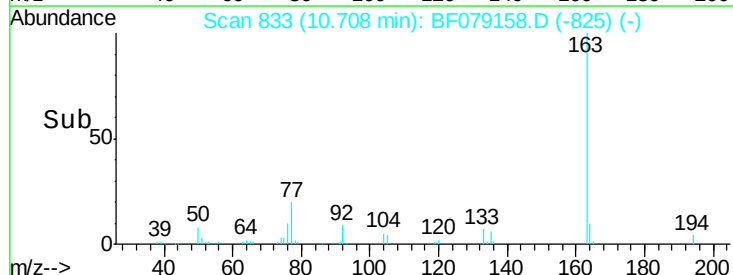
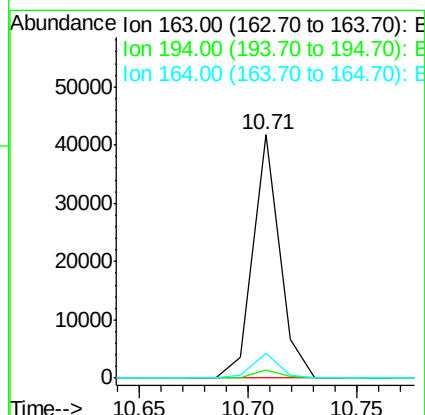
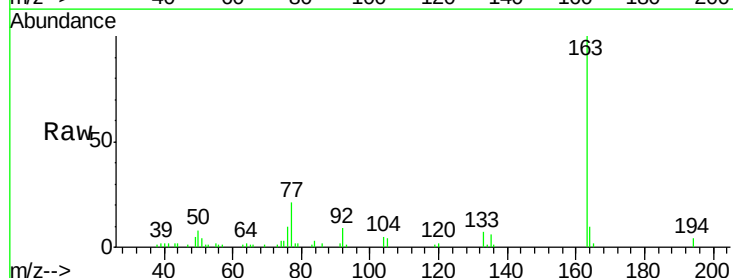
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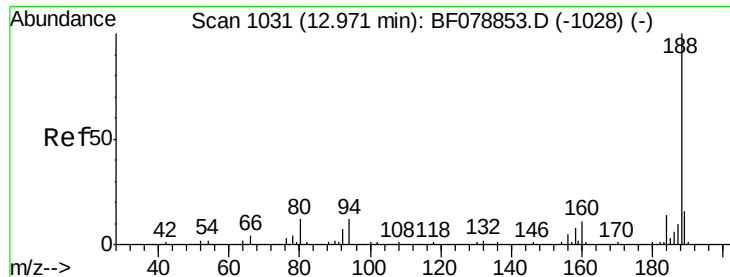
Tgt Ion:172 Resp: 594324  
Ion Ratio Lower Upper  
172 100  
171 35.0 27.9 41.9  
170 23.8 19.4 29.0



#49  
Dimethylphthalate  
Concen: 3.54 ng  
RT: 10.71 min Scan# 833  
Delta R.T. -0.01 min  
Lab File: BF079158.D  
Acq: 12 May 2015 15:27

Tgt Ion:163 Resp: 35663  
Ion Ratio Lower Upper  
163 100  
194 3.5 2.6 4.0  
164 10.0 8.1 12.1

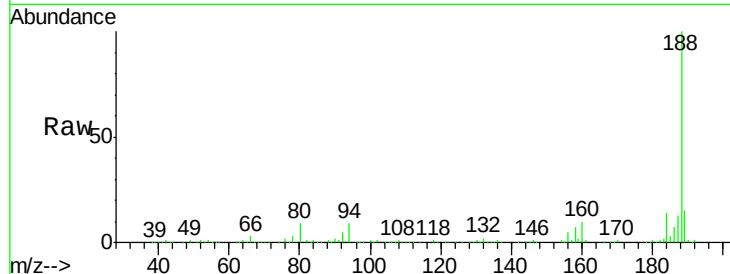




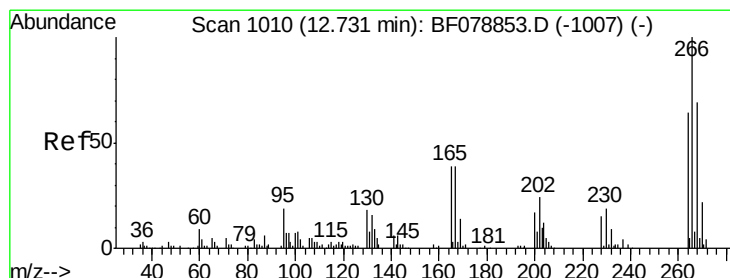
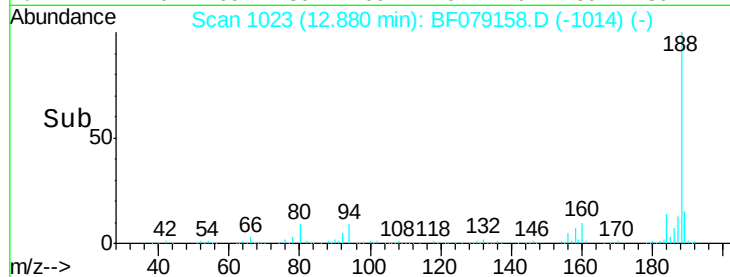
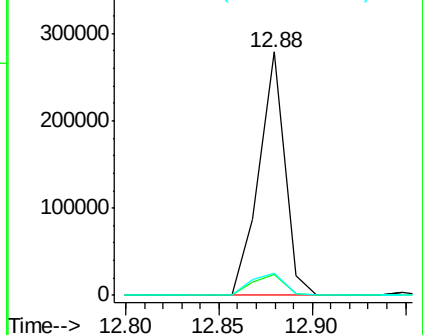
#63  
Phenanthrene-d10  
Concen: 20.00 ng  
RT: 12.88 min Scan# 1023  
Delta R.T. 0.00 min  
Lab File: BF079158.D  
Acq: 12 May 2015 15:27

Instrument :  
BNA\_F  
ClientSampleId :  
SB-44AS

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 188     | 100   | 267492 |       |       |
| 94      | 8.8   |        | 8.2   | 12.2  |
| 80      | 8.9   |        | 8.9   | 13.3  |

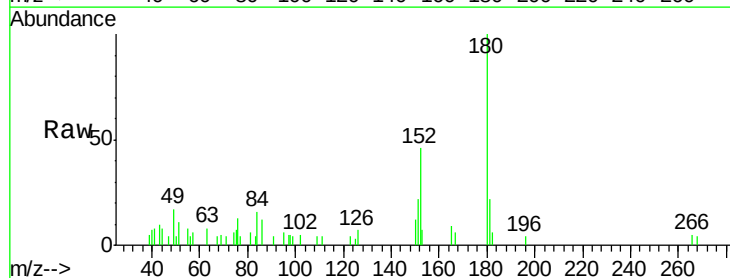


Abundance Ion 188.00 (187.70 to 188.70): E  
Ion 94.00 (93.70 to 94.70): BF0  
Ion 80.00 (79.70 to 80.70): BF0

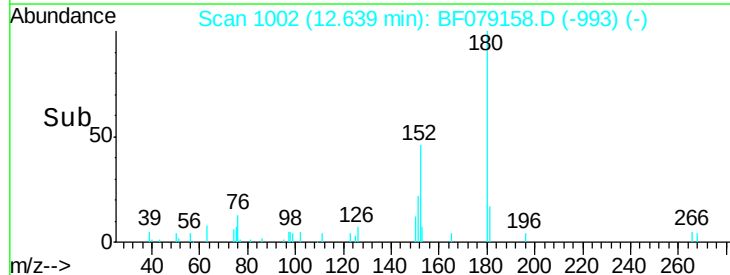
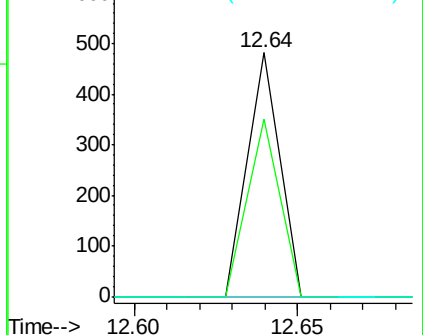


#69  
Pentachlorophenol  
Concen: 7.00 ng  
RT: 12.64 min Scan# 1002  
Delta R.T. 0.00 min  
Lab File: BF079158.D  
Acq: 12 May 2015 15:27

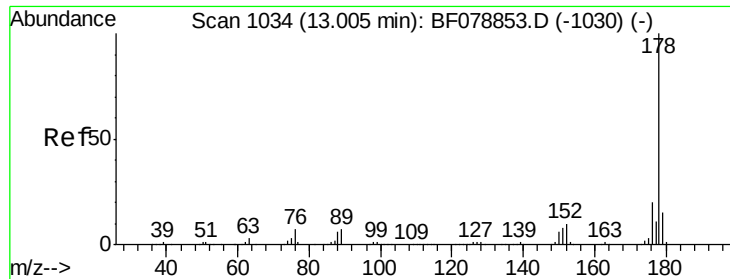
| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 266     | 100   | 331  |       |       |
| 268     | 72.8  |      | 55.0  | 82.6  |
| 264     | 0.0   |      | 48.2  | 72.2# |



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



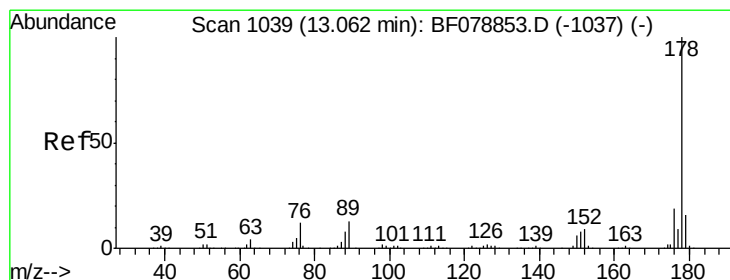
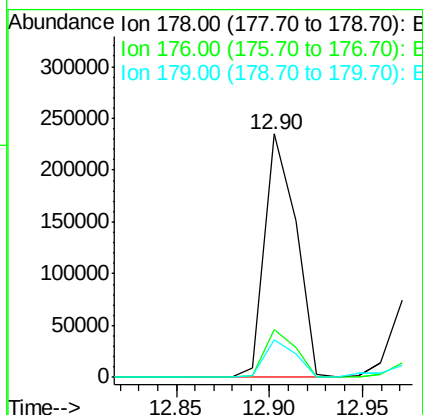
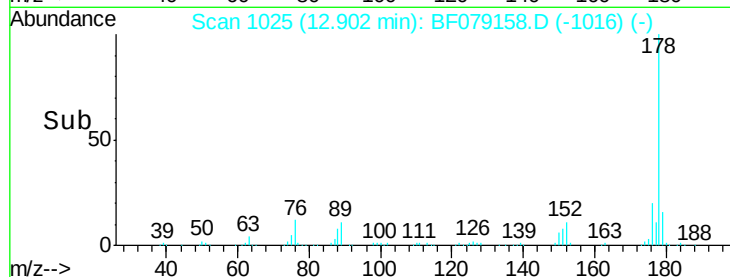
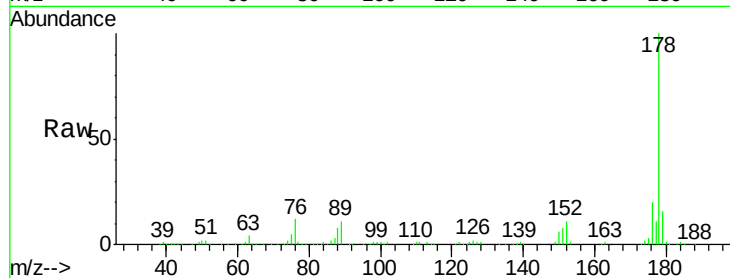




#70  
Phenanthrene  
Concen: 18.27 ng  
RT: 12.90 min Scan# 1025  
Delta R.T. 0.00 min  
Lab File: BF079158.D  
Acq: 12 May 2015 15:27

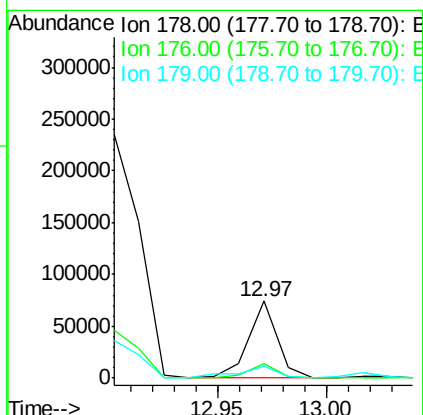
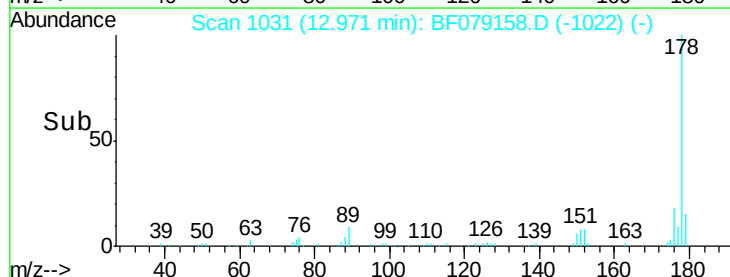
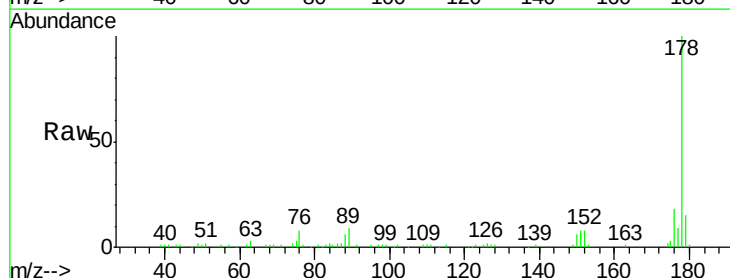
Instrument :  
BNA\_F  
ClientSampleId :  
SB-44AS

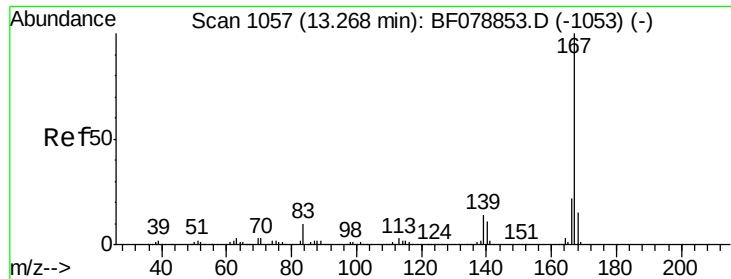
Tgt Ion:178 Resp: 273471  
Ion Ratio Lower Upper  
178 100  
176 19.6 15.8 23.8  
179 15.6 12.5 18.7



#71  
Anthracene  
Concen: 4.55 ng  
RT: 12.97 min Scan# 1031  
Delta R.T. 0.00 min  
Lab File: BF079158.D  
Acq: 12 May 2015 15:27

Tgt Ion:178 Resp: 66835  
Ion Ratio Lower Upper  
178 100  
176 18.4 15.5 23.3  
179 14.9 12.7 19.1

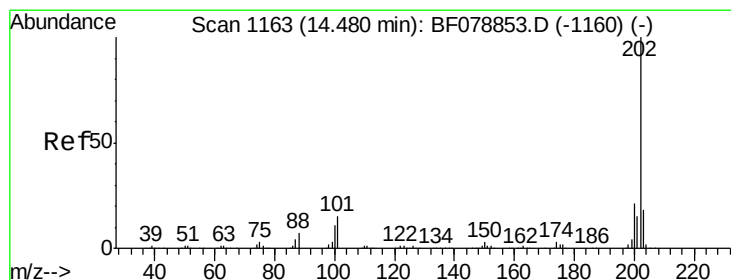
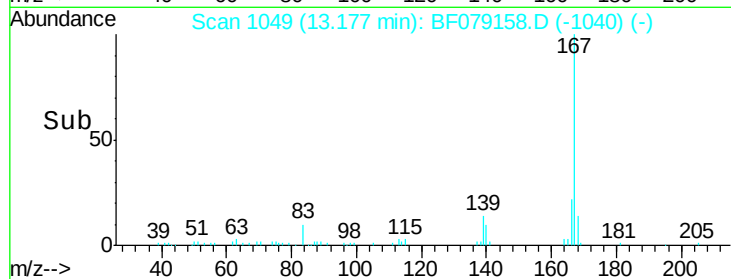
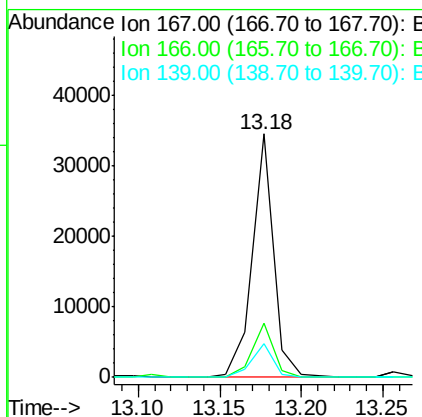
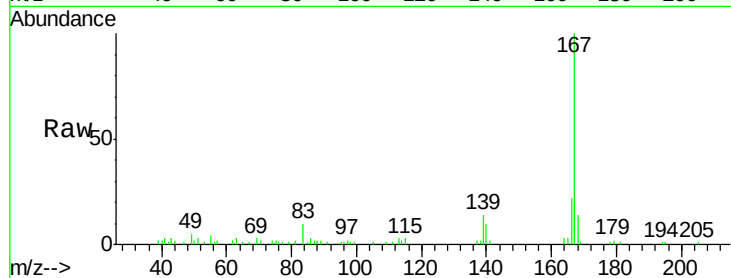




#72  
 Carbazole  
 Concen: 2.25 ng  
 RT: 13.18 min Scan# 1049  
 Delta R.T. 0.00 min  
 Lab File: BF079158.D  
 Acq: 12 May 2015 15:27

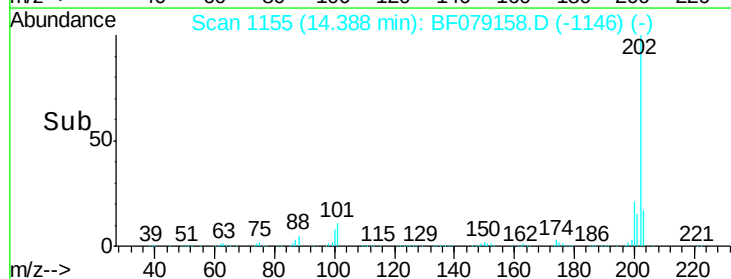
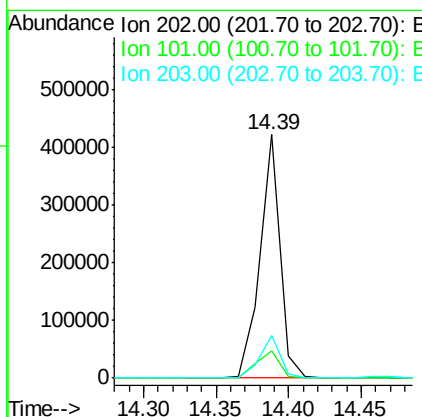
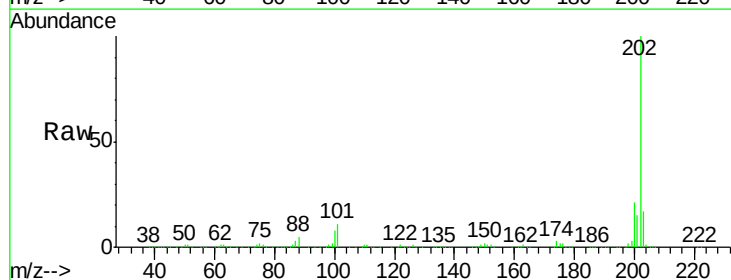
Instrument :  
 BNA\_F  
 ClientSampleId :  
 SB-44AS

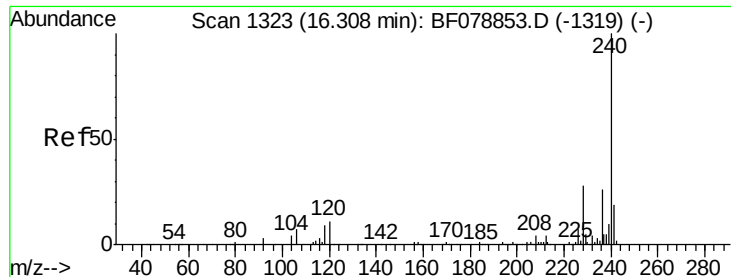
Tgt Ion:167 Resp: 31437  
 Ion Ratio Lower Upper  
 167 100  
 166 22.0 17.8 26.8  
 139 13.9 10.6 16.0



#74  
 Fluoranthene  
 Concen: 25.88 ng  
 RT: 14.39 min Scan# 1155  
 Delta R.T. 0.00 min  
 Lab File: BF079158.D  
 Acq: 12 May 2015 15:27

Tgt Ion:202 Resp: 403556  
 Ion Ratio Lower Upper  
 202 100  
 101 11.0 0.0 34.6  
 203 17.4 0.0 38.4





#75

Chrysene-d12

Concen: 20.00 ng

RT: 16.22 min Scan# 1315

Delta R.T. 0.02 min

Lab File: BF079158.D

Acq: 12 May 2015 15:27

Instrument :

BNA\_F

ClientSampled :

SB-44AS

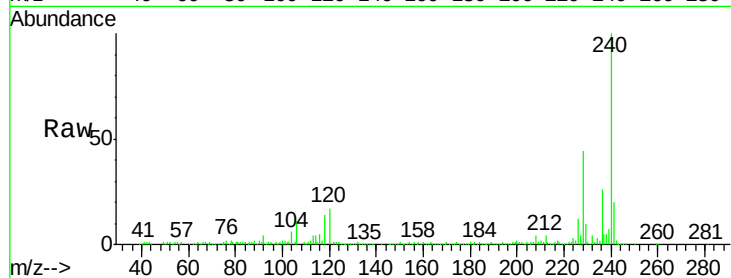
Tgt Ion:240 Resp: 273774

Ion Ratio Lower Upper

240 100

120 16.8 9.7 14.5#

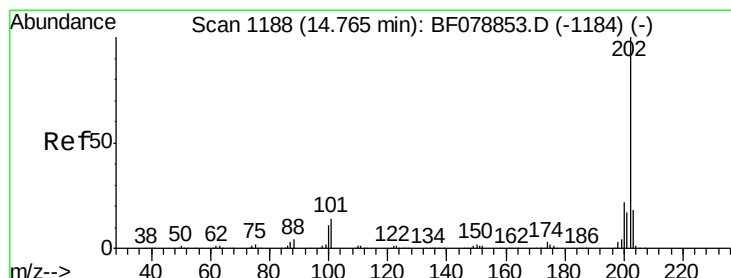
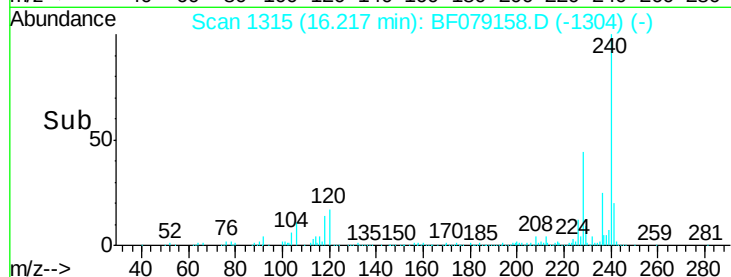
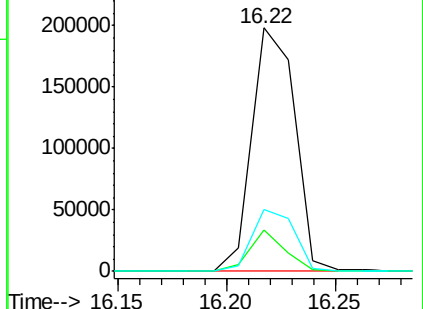
236 25.6 20.2 30.4



Abundance Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E



#77

Pyrene

Concen: 22.99 ng

RT: 14.67 min Scan# 1180

Delta R.T. 0.01 min

Lab File: BF079158.D

Acq: 12 May 2015 15:27

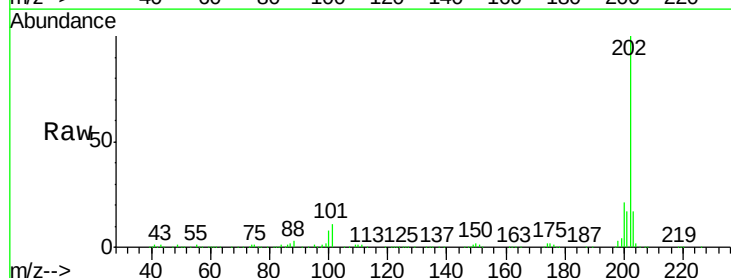
Tgt Ion:202 Resp: 362674

Ion Ratio Lower Upper

202 100

200 20.7 17.5 26.3

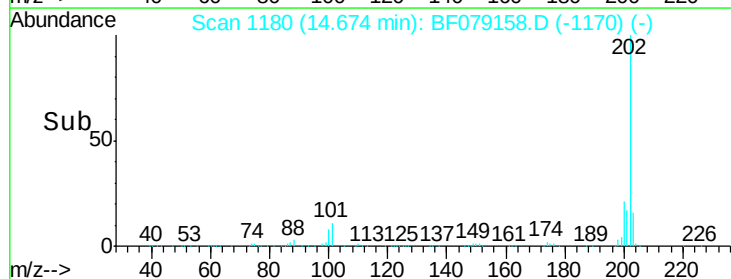
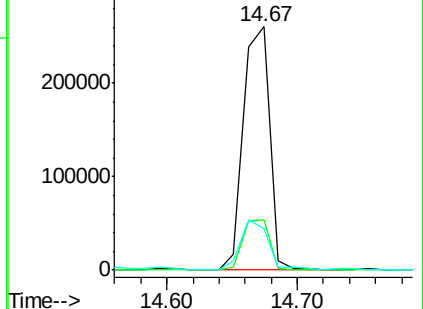
203 17.1 13.9 20.9

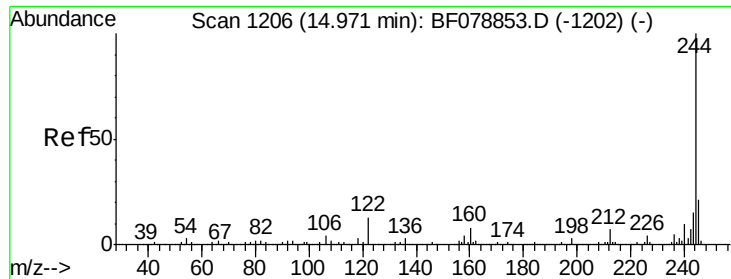


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 200.00 (199.70 to 200.70): E

Ion 203.00 (202.70 to 203.70): E





#78

Terphenyl-d14

Concen: 58.93 ng

RT: 14.88 min Scan# 1198

Delta R.T. 0.00 min

Lab File: BF079158.D

Acq: 12 May 2015 15:27

Instrument :

BNA\_F

ClientSampleId :

SB-44AS

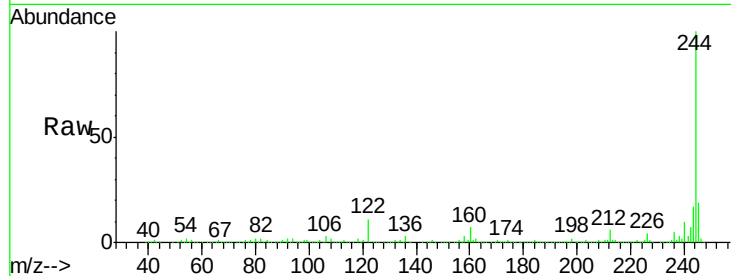
Tgt Ion:244 Resp: 673881

Ion Ratio Lower Upper

244 100

212 6.4 5.6 8.4

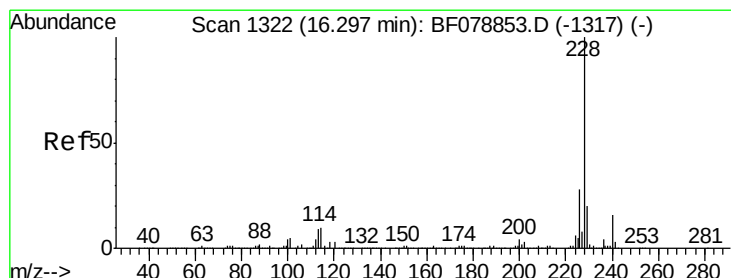
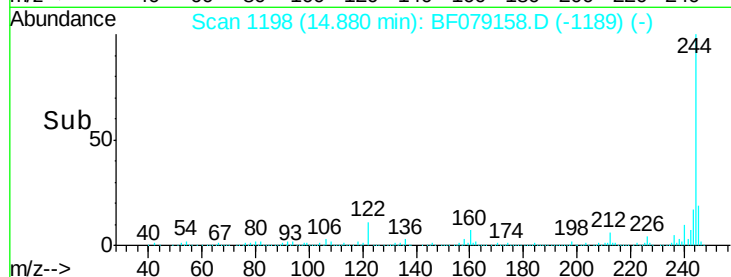
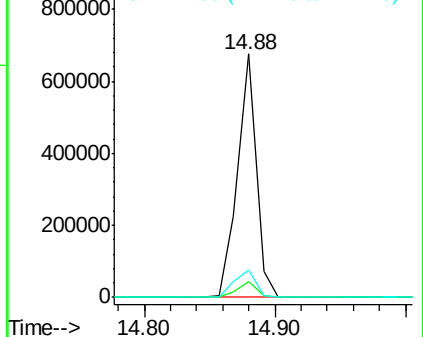
122 11.0 10.3 15.5



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: 13.10 ng

RT: 16.21 min Scan# 1314

Delta R.T. 0.02 min

Lab File: BF079158.D

Acq: 12 May 2015 15:27

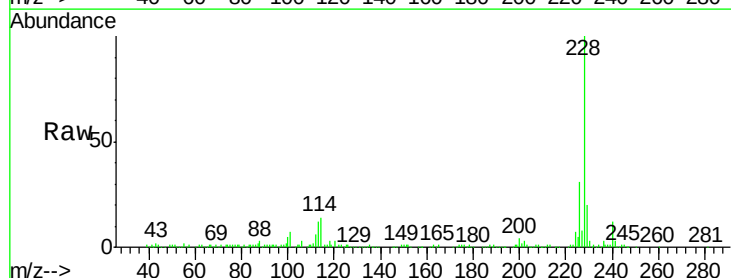
Tgt Ion:228 Resp: 196346

Ion Ratio Lower Upper

228 100

226 30.7 22.6 33.8

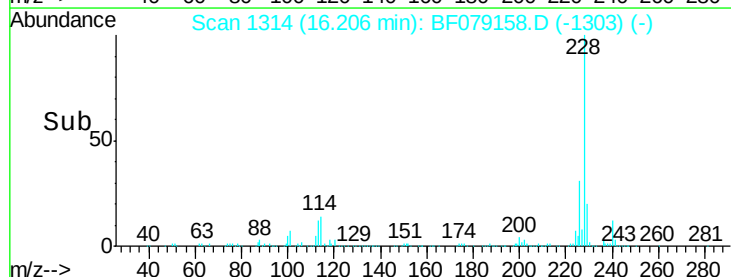
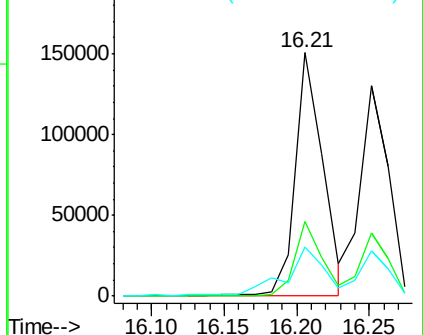
229 20.3 15.9 23.9

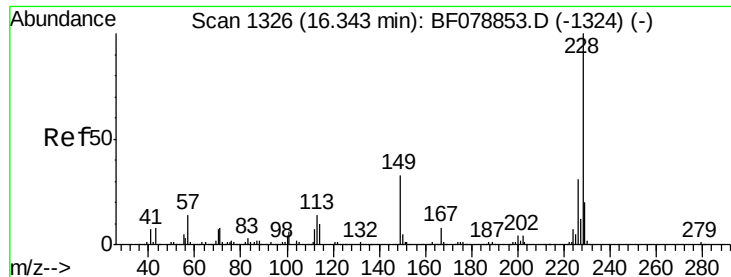


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E





#82

Chrysene

Concen: 11.98 ng

RT: 16.25 min Scan# 1318

Delta R.T. 0.02 min

Lab File: BF079158.D

Acq: 12 May 2015 15:27

Instrument :

BNA\_F

ClientSampleId :

SB-44AS

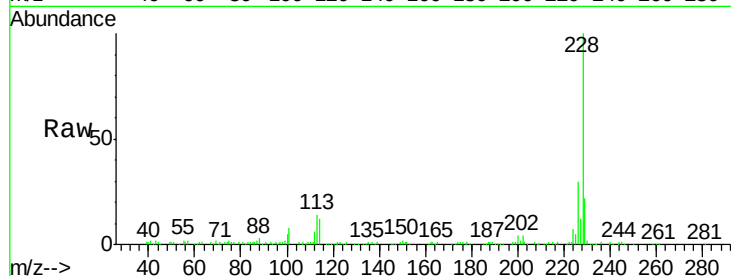
Tgt Ion:228 Resp: 172681

Ion Ratio Lower Upper

228 100

226 30.4 24.9 37.3

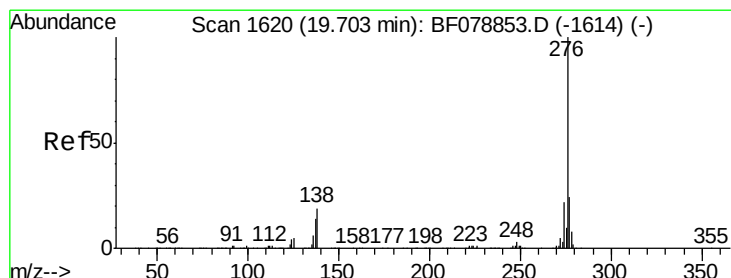
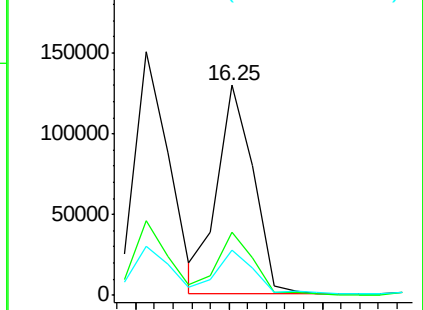
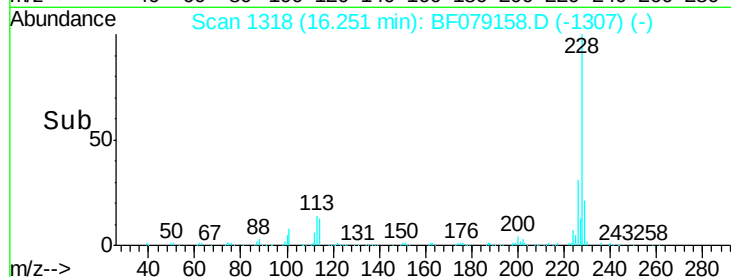
229 21.7 16.0 24.0



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



#85

Indeno(1,2,3-cd)pyrene

Concen: 8.21 ng

RT: 19.59 min Scan# 1610

Delta R.T. 0.09 min

Lab File: BF079158.D

Acq: 12 May 2015 15:27

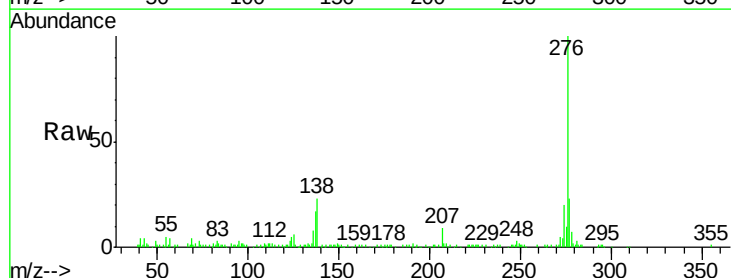
Tgt Ion:276 Resp: 150898

Ion Ratio Lower Upper

276 100

138 25.2 0.0 0.0#

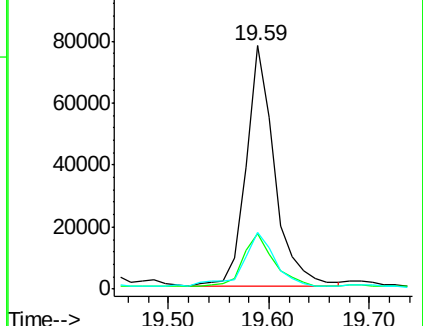
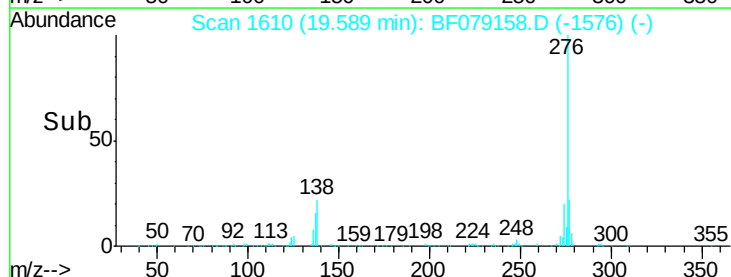
277 26.5 0.0 0.0#

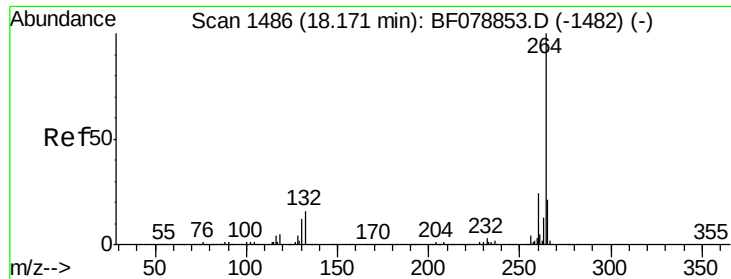


Abundance Ion 276.00 (275.70 to 276.70): E

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: 18.10 min Scan# 1480

Delta R.T. 0.08 min

Lab File: BF079158.D

Acq: 12 May 2015 15:27

Instrument :

BNA\_F

ClientSampleId :

SB-44AS

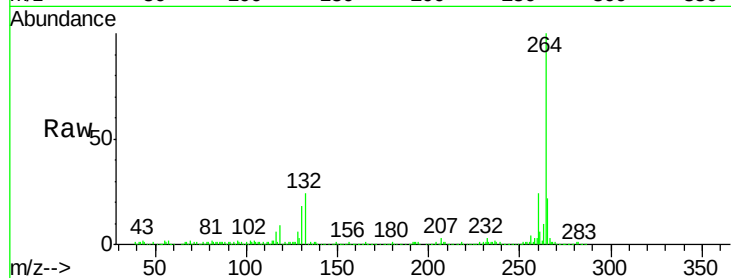
Tgt Ion:264 Resp: 300498

Ion Ratio Lower Upper

264 100

260 24.0 19.4 29.2

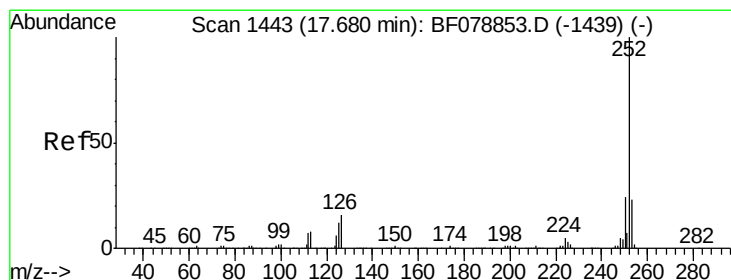
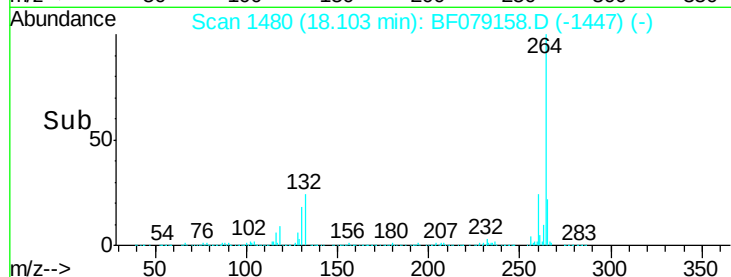
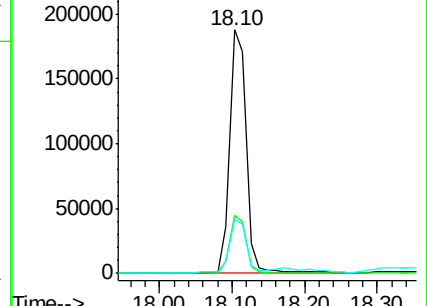
265 22.5 18.3 27.5



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



#87

Benzo(b)fluoranthene

Concen: 20.02 ng

RT: 17.61 min Scan# 1437

Delta R.T. 0.07 min

Lab File: BF079158.D

Acq: 12 May 2015 15:27

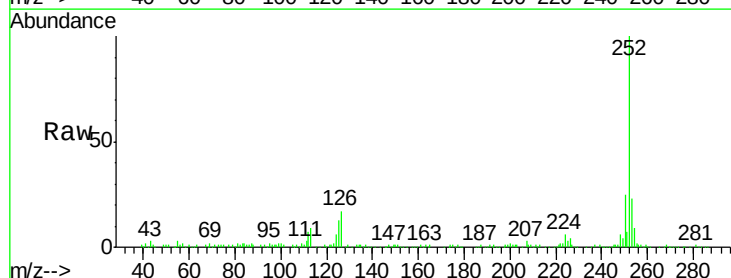
Tgt Ion:252 Resp: 329243

Ion Ratio Lower Upper

252 100

253 22.8 17.7 26.5

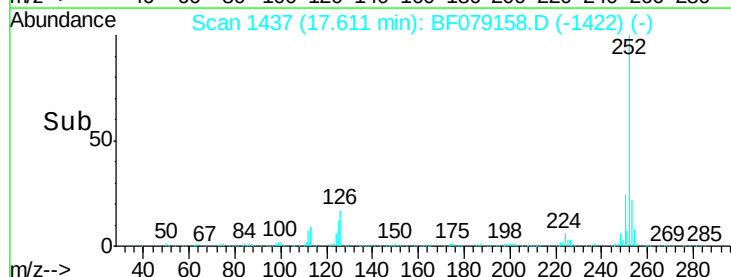
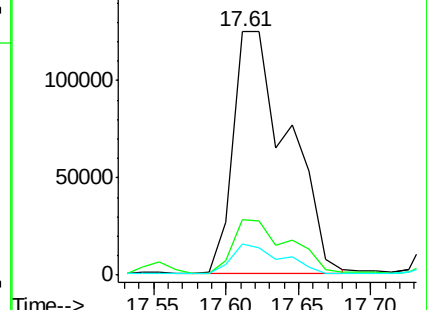
125 12.9 9.5 14.3

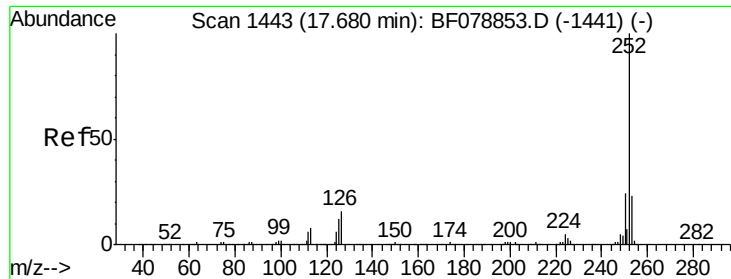


Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E

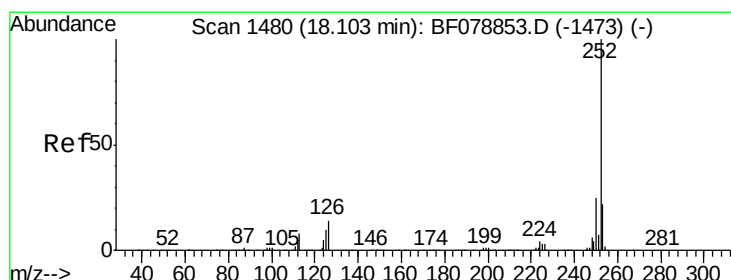
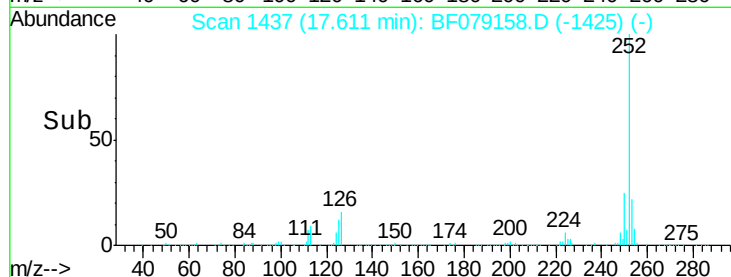
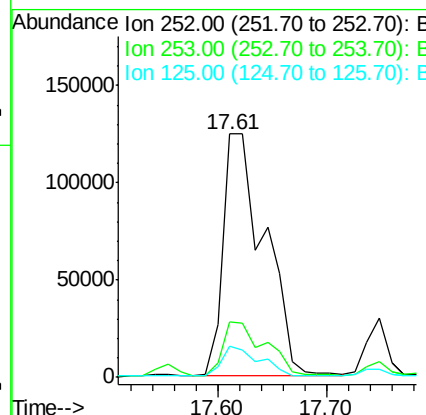
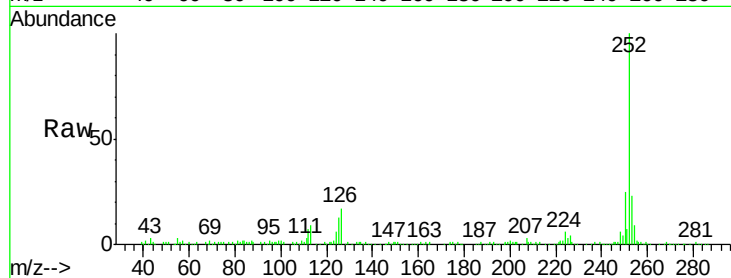




#88  
Benzo(k)fluoranthene  
Concen: 20.83 ng  
RT: 17.61 min Scan# 1437  
Delta R.T. 0.03 min  
Lab File: BF079158.D  
Acq: 12 May 2015 15:27

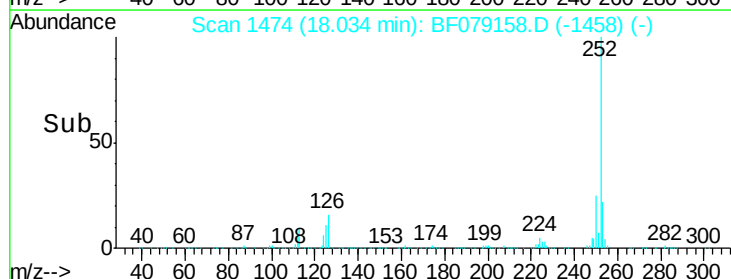
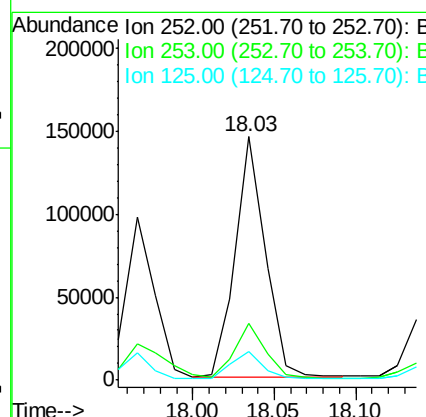
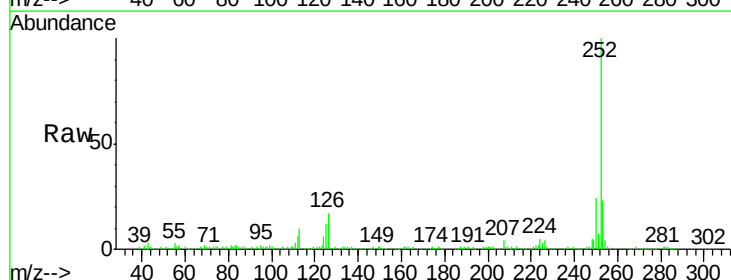
Instrument :  
BNA\_F  
ClientSampleId :  
SB-44AS

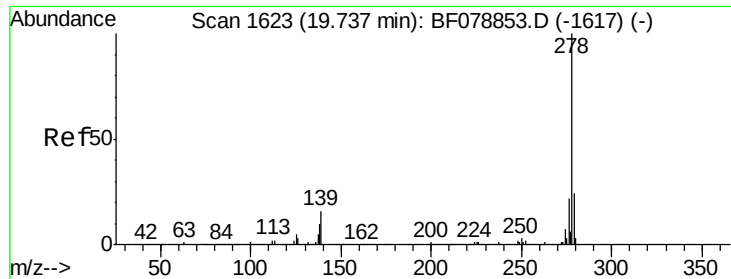
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.8  | 18.1  | 27.1  |
| 125     | 12.9  | 10.0  | 15.0  |



#89  
Benzo(a)pyrene  
Concen: 12.09 ng  
RT: 18.03 min Scan# 1474  
Delta R.T. 0.08 min  
Lab File: BF079158.D  
Acq: 12 May 2015 15:27

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.3  | 17.3  | 25.9  |
| 125     | 11.7  | 7.0   | 10.6# |





#90

Dibenzo(a,h)anthracene

Concen: 3.22 ng

RT: 19.62 min Scan# 1613

Delta R.T. 0.10 min

Lab File: BF079158.D

Acq: 12 May 2015 15:27

Instrument :

BNA\_F

ClientSampleId :

SB-44AS

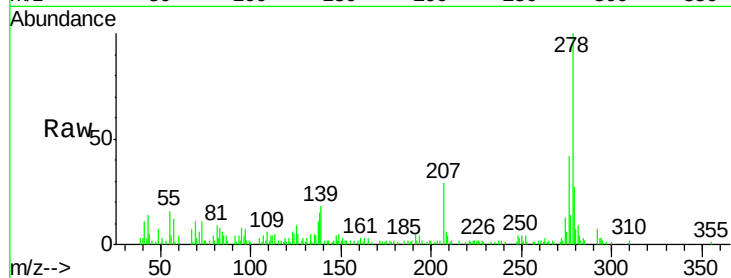
Tgt Ion:278 Resp: 51791

Ion Ratio Lower Upper

278 100

139 18.0 12.8 19.2

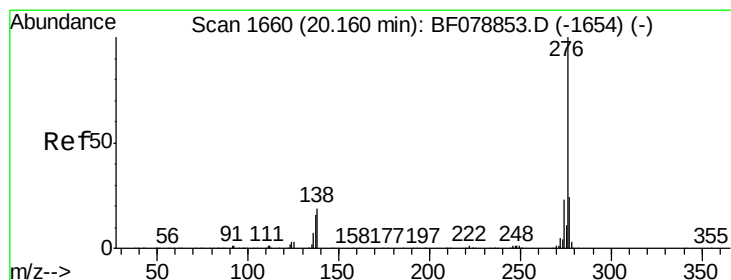
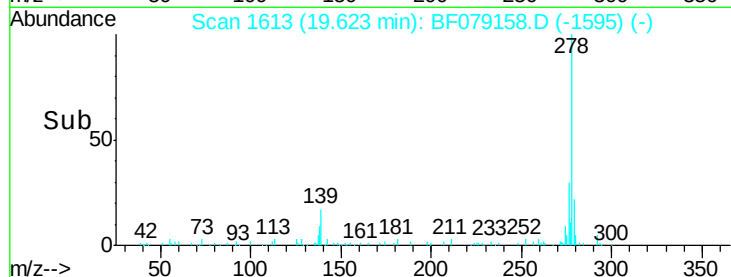
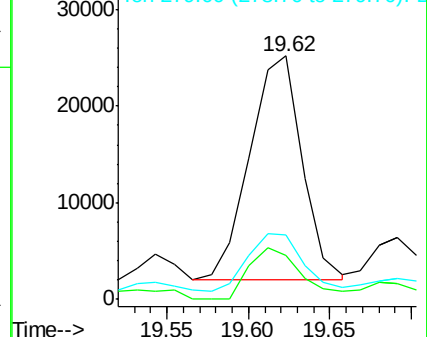
279 26.7 19.6 29.4



Abundance Ion 278.00 (277.70 to 278.70): E

Ion 139.00 (138.70 to 139.70): E

Ion 279.00 (278.70 to 279.70): E



#91

Benzo(g,h,i)perylene

Concen: 8.86 ng

RT: 20.02 min Scan# 1648

Delta R.T. 0.09 min

Lab File: BF079158.D

Acq: 12 May 2015 15:27

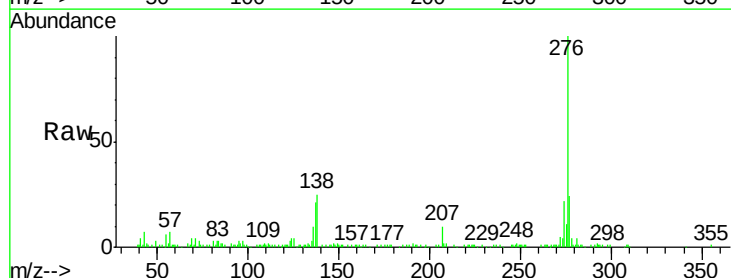
Tgt Ion:276 Resp: 142851

Ion Ratio Lower Upper

276 100

277 24.5 18.6 28.0

138 25.2 17.4 26.0



Abundance Ion 276.00 (275.70 to 276.70): E

Ion 277.00 (276.70 to 277.70): E

Ion 138.00 (137.70 to 138.70): E

