

Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF051515\  
 Data File : BF079290.D  
 Acq On : 16 May 2015 3:24  
 Operator : TP/IZ  
 Sample : G2216-01DL 10X  
 Misc :  
 ALS Vial : 23 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 TW-4DL

Quant Time: May 16 04:16:09 2015  
 Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF043015.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat May 16 04:02:20 2015  
 Response via : Initial Calibration

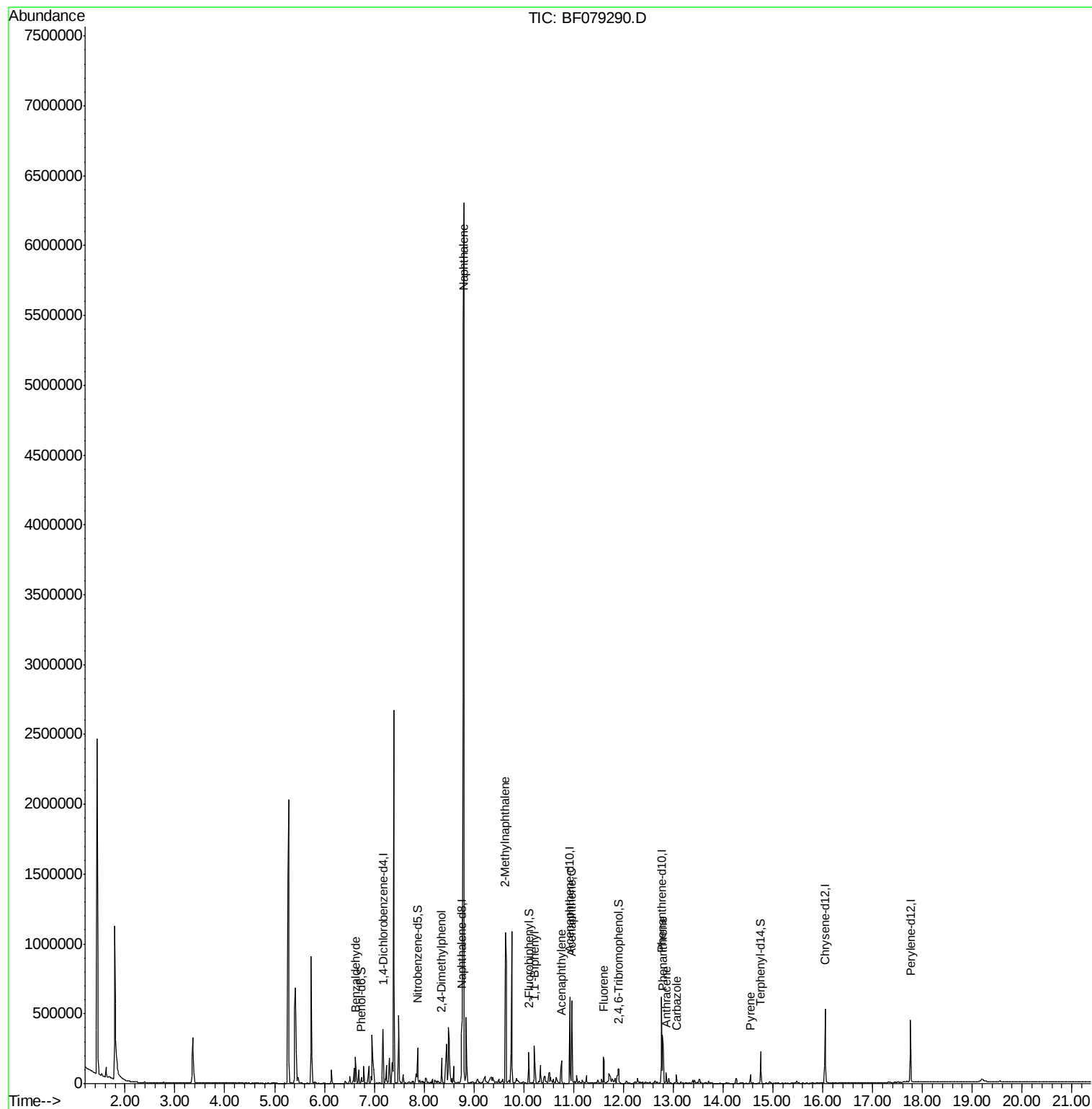
| Internal Standards          | R.T.  | QIon | Response | Conc   | Units | Dev(Min)      |
|-----------------------------|-------|------|----------|--------|-------|---------------|
| 1) 1,4-Dichlorobenzene-d4   | 7.18  | 152  | 59073    | 20.00  | ng    | 0.00          |
| 21) Naphthalene-d8          | 8.75  | 136  | 241431   | 20.00  | ng    | 0.00          |
| 38) Acenaphthene-d10        | 10.93 | 164  | 119606   | 20.00  | ng    | 0.00          |
| 63) Phenanthrene-d10        | 12.77 | 188  | 225841   | 20.00  | ng    | 0.00          |
| 75) Chrysene-d12            | 16.05 | 240  | 204236   | 20.00  | ng    | -0.01         |
| 86) Perylene-d12            | 17.76 | 264  | 203304   | 20.00  | ng    | 0.00          |
| System Monitoring Compounds |       |      |          |        |       |               |
| 5) 2-Fluorophenol           | 0.00  | 112  | 0        | 0.00   | ng    |               |
| 7) Phenol-d6                | 6.74  | 99   | 16389    | 3.61   | ng    | 0.00          |
| 23) Nitrobenzene-d5         | 7.87  | 82   | 32518    | 7.74   | ng    | 0.00          |
| 41) 2,4,6-Tribromophenol    | 11.91 | 330  | 16917    | 13.07  | ng    | 0.00          |
| 44) 2-Fluorobiphenyl        | 10.10 | 172  | 79958    | 9.31   | ng    | 0.00          |
| 78) Terphenyl-d14           | 14.75 | 244  | 85496    | 10.02  | ng    | -0.01         |
| Target Compounds            |       |      |          |        |       |               |
| 9) Benzaldehyde             | 6.63  | 77   | 9591     | 3.14   | ng    | Qvalue<br># 1 |
| 27) 2,4-Dimethylphenol      | 8.35  | 122  | 9508     | 2.76   | ng    | 89            |
| 31) Naphthalene             | 8.80  | 128  | 4589383  | 398.94 | ng    | # 94          |
| 37) 2-Methylnaphthalene     | 9.63  | 142  | 424991   | 53.31  | ng    | 96            |
| 45) 1,1'-Biphenyl           | 10.22 | 154  | 96577    | 10.16  | ng    | 94            |
| 48) Acenaphthylene          | 10.75 | 152  | 78074    | 6.41   | ng    | 99            |
| 51) Acenaphthene            | 10.96 | 154  | 177645   | 24.46  | ng    | 98            |
| 57) Fluorene                | 11.60 | 166  | 85556    | 9.94   | ng    | 99            |
| 70) Phenanthrene            | 12.79 | 178  | 187696   | 14.86  | ng    | 99            |
| 71) Anthracene              | 12.86 | 178  | 28534    | 2.30   | ng    | 98            |
| 72) Carbazole               | 13.06 | 167  | 25856    | 2.19   | ng    | 98            |
| 77) Pyrene                  | 14.55 | 202  | 27119    | 2.30   | ng    | 98            |

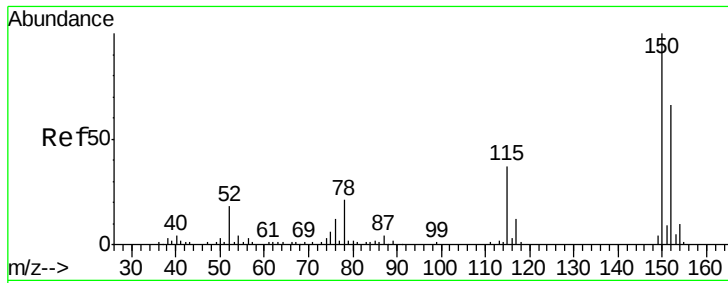
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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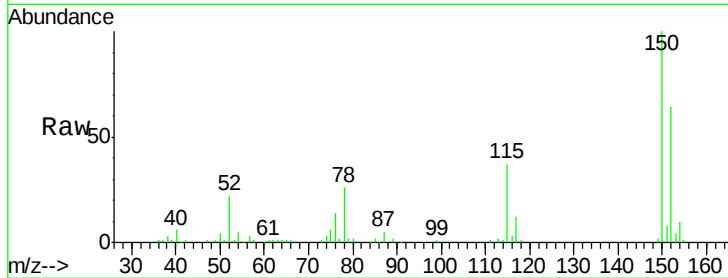




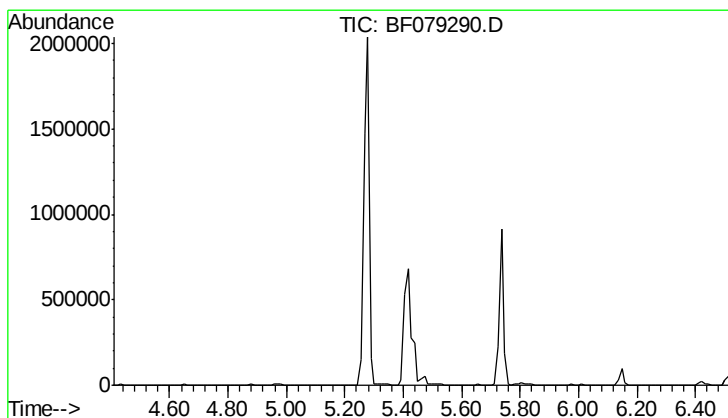
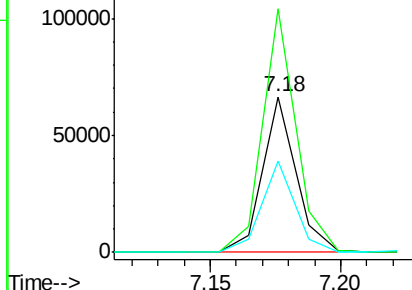
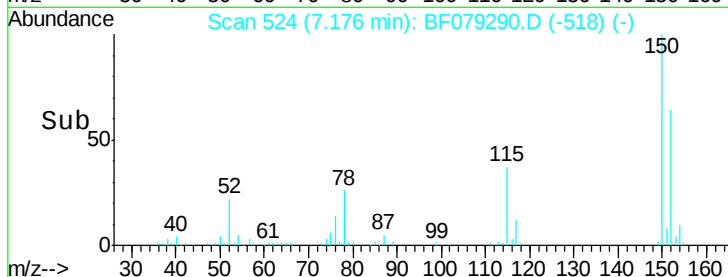
#1  
 1,4-Dichlorobenzene-d4  
 Concen: 20.00 ng  
 RT: 7.18 min Scan# 524  
 Delta R.T. 0.00 min  
 Lab File: BF079290.D  
 Acq: 16 May 2015 3:24

Instrument :  
 BNA\_F  
 ClientSampleId :  
 TW-4DL

Tgt Ion: 152 Resp: 59073  
 Ion Ratio Lower Upper  
 152 100  
 150 156.6 123.8 185.8  
 115 58.5 49.4 74.0

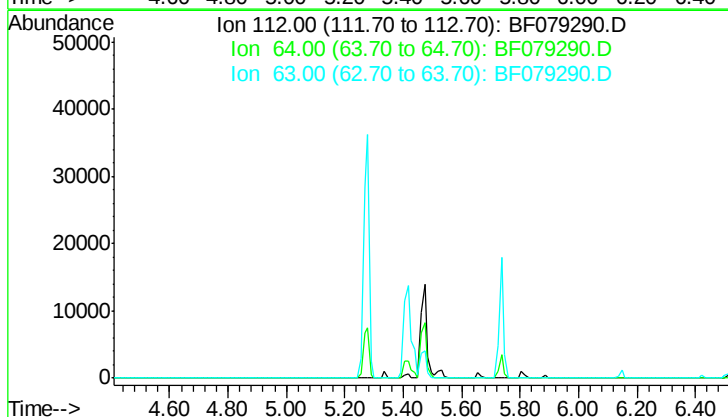


Abundance Ion 152.00 (151.70 to 152.70): E  
 Ion 150.00 (149.70 to 150.70): E  
 Ion 115.00 (114.70 to 115.70): E



#5  
 2-Fluorophenol  
 Concen: 0.00 ng  
 Expected RT: 5.46 min  
 Lab File: BF079290.D  
 Acq: 16 May 2015 3:24

Tgt Ion: 112  
 Sig Exp Ratio  
 112 100  
 64 55.2  
 63 28.4





#7

Phenol-d6

Concen: 3.61 ng

RT: 6.74 min Scan# 486

Delta R.T. 0.00 min

Lab File: BF079290.D

Acq: 16 May 2015 3:24

Instrument :

BNA\_F

ClientSampleId :

TW-4DL

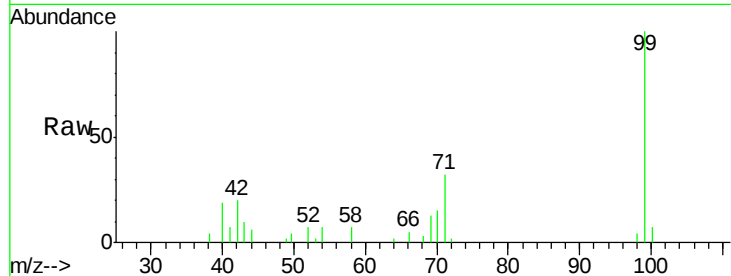
Tgt Ion: 99 Resp: 16389

Ion Ratio Lower Upper

99 100

42 20.5 17.1 25.7

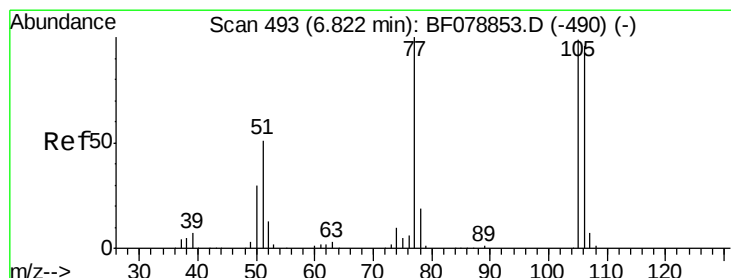
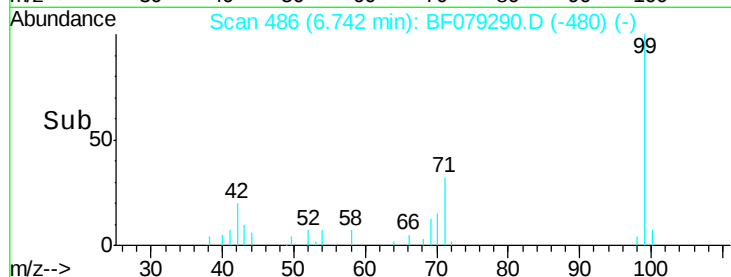
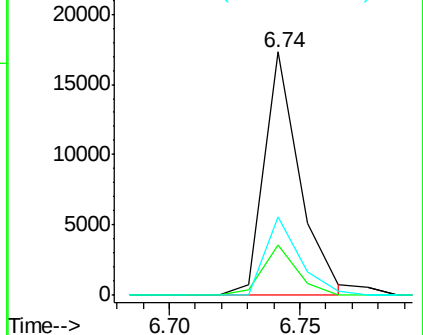
71 32.2 26.3 39.5



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



#9

Benzaldehyde

Concen: 3.14 ng

RT: 6.63 min Scan# 476

Delta R.T. 0.00 min

Lab File: BF079290.D

Acq: 16 May 2015 3:24

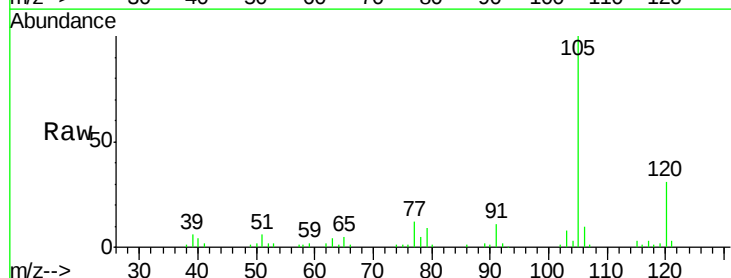
Tgt Ion: 77 Resp: 9591

Ion Ratio Lower Upper

77 100

105 805.2 78.9 118.9#

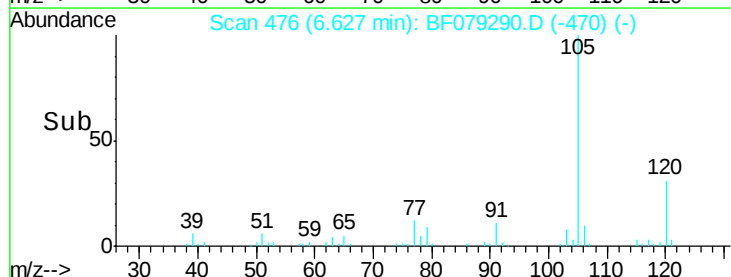
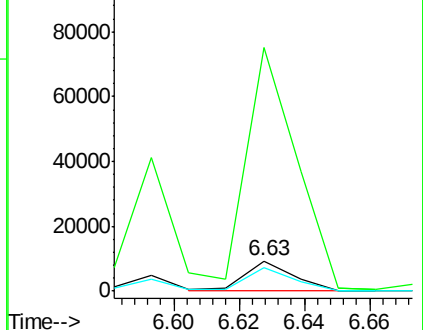
106 77.3 75.8 115.8

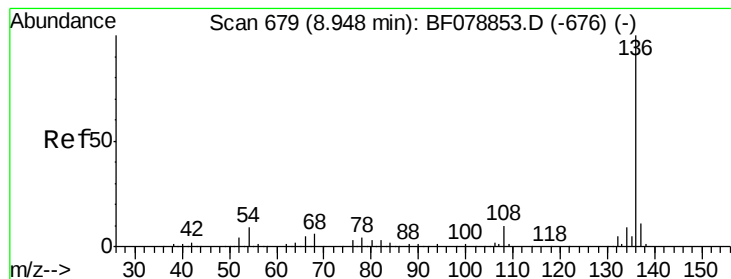


Abundance Ion 77.00 (76.70 to 77.70): BF0

Ion 105.00 (104.70 to 105.70): E

Ion 106.00 (105.70 to 106.70): E





#21

Naphthalene-d8

Concen: 20.00 ng

RT: 8.75 min Scan# 662

Delta R.T. 0.00 min

Lab File: BF079290.D

Acq: 16 May 2015 3:24

Instrument :

BNA\_F

ClientSampleId :

TW-4DL

Tgt Ion:136 Resp: 241431

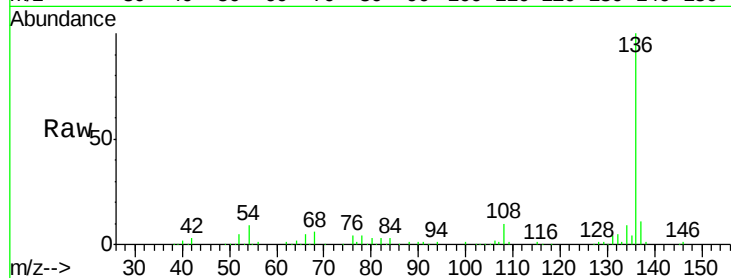
Ion Ratio Lower Upper

136 100

137 10.7 8.8 13.2

54 8.7 6.9 10.3

68 5.9 4.9 7.3

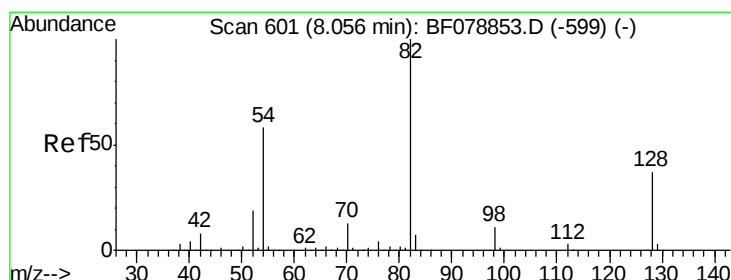
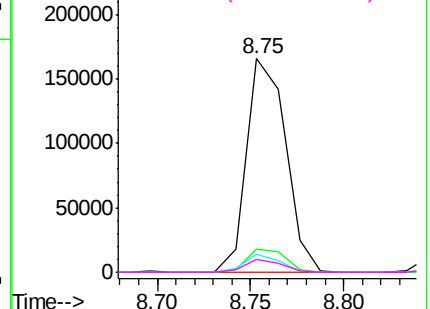
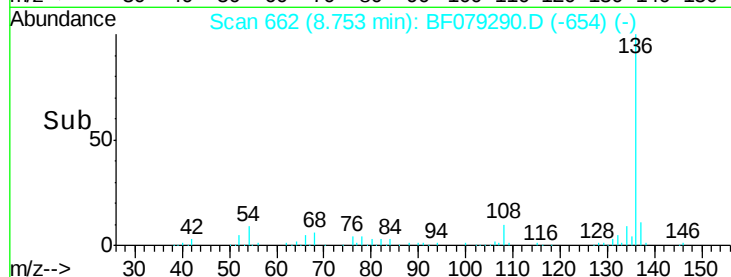


Abundance Ion 136.00 (135.70 to 136.70): E

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: 7.74 ng

RT: 7.87 min Scan# 585

Delta R.T. 0.00 min

Lab File: BF079290.D

Acq: 16 May 2015 3:24

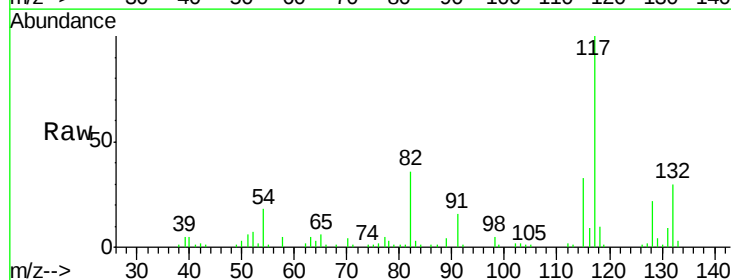
Tgt Ion: 82 Resp: 32518

Ion Ratio Lower Upper

82 100

128 60.5 29.7 44.5#

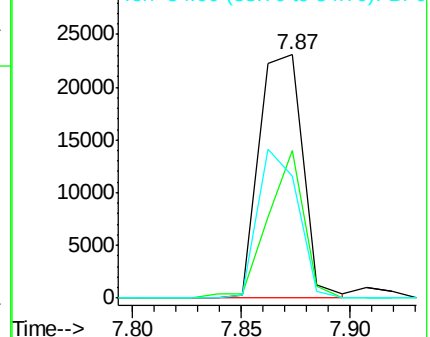
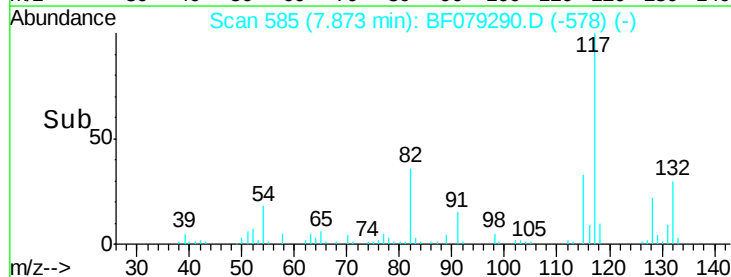
54 50.3 46.2 69.4

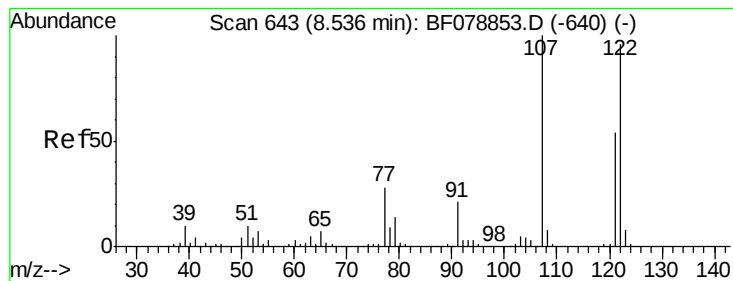


Abundance Ion 82.00 (81.70 to 82.70): BF0

Ion 128.00 (127.70 to 128.70): E

Ion 54.00 (53.70 to 54.70): BF0

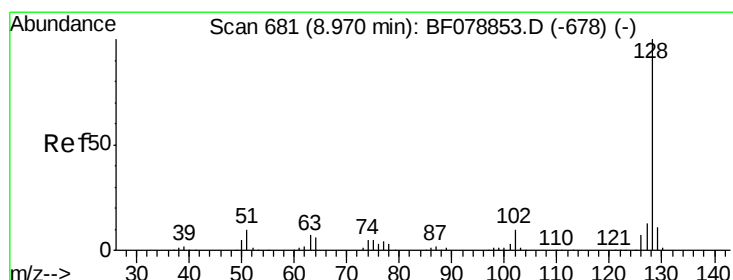
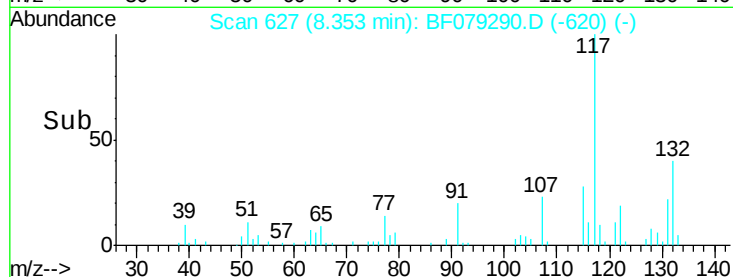
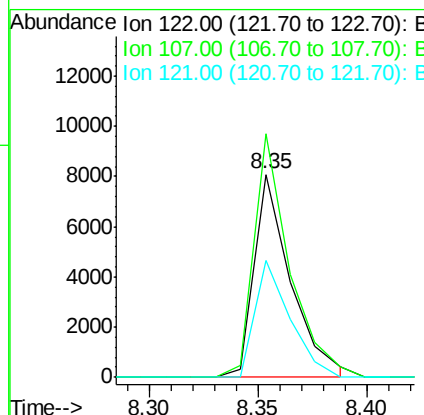
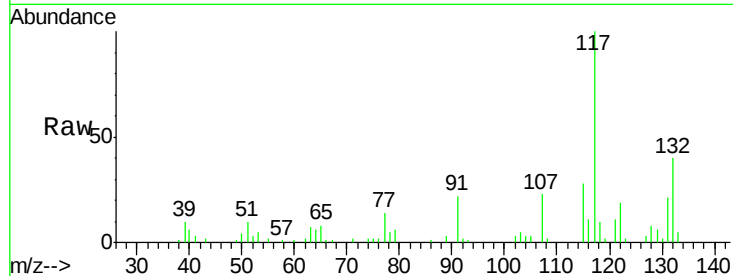




#27  
 2,4-Dimethylphenol  
 Concen: 2.76 ng  
 RT: 8.35 min Scan# 627  
 Delta R.T. 0.00 min  
 Lab File: BF079290.D  
 Acq: 16 May 2015 3:24

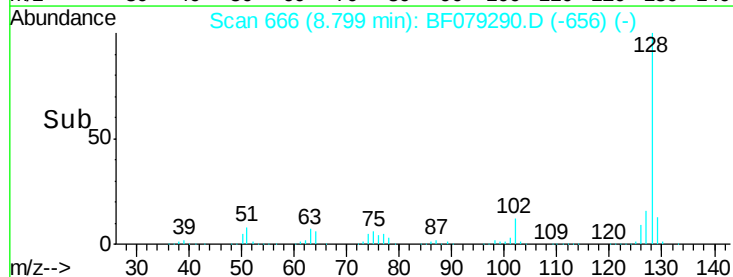
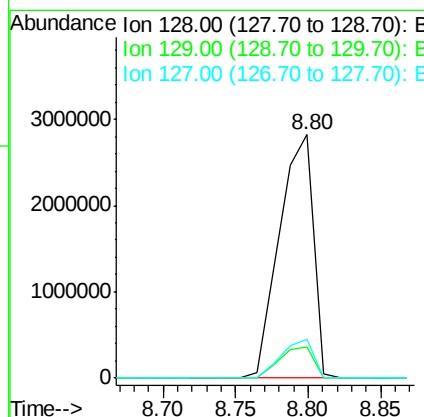
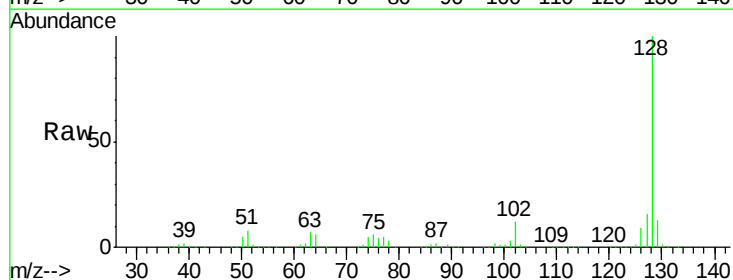
Instrument :  
 BNA\_F  
 ClientSampleId :  
 TW-4DL

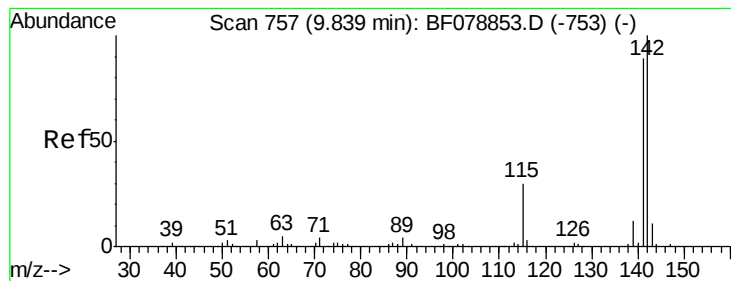
Tgt Ion:122 Resp: 9508  
 Ion Ratio Lower Upper  
 122 100  
 107 120.1 83.6 125.4  
 121 57.4 44.9 67.3



#31  
 Naphthalene  
 Concen: 398.94 ng  
 RT: 8.80 min Scan# 666  
 Delta R.T. 0.02 min  
 Lab File: BF079290.D  
 Acq: 16 May 2015 3:24

Tgt Ion:128 Resp: 4589383  
 Ion Ratio Lower Upper  
 128 100  
 129 13.0 9.2 13.8  
 127 15.9 10.3 15.5#





#37

2-Methylnaphthalene

Concen: 53.31 ng

RT: 9.63 min Scan# 739

Delta R.T. -0.01 min

Lab File: BF079290.D

Acq: 16 May 2015 3:24

Instrument :

BNA\_F

ClientSampleId :

TW-4DL

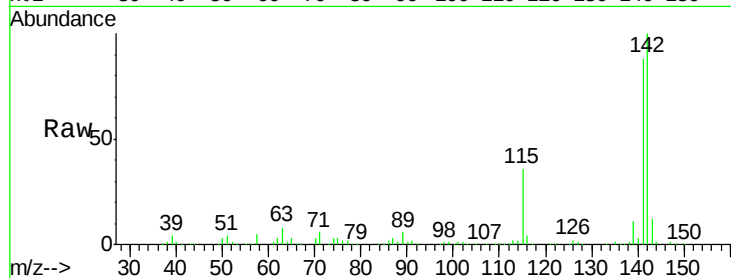
Tgt Ion:142 Resp: 424991

Ion Ratio Lower Upper

142 100

141 87.6 71.6 107.4

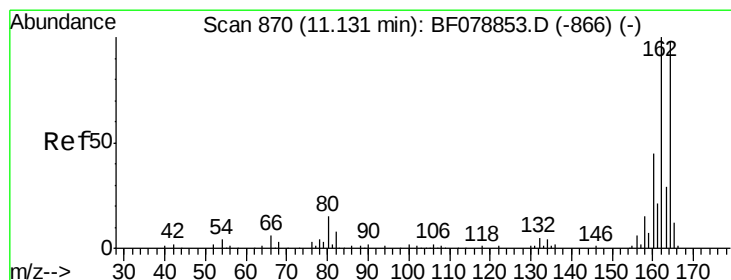
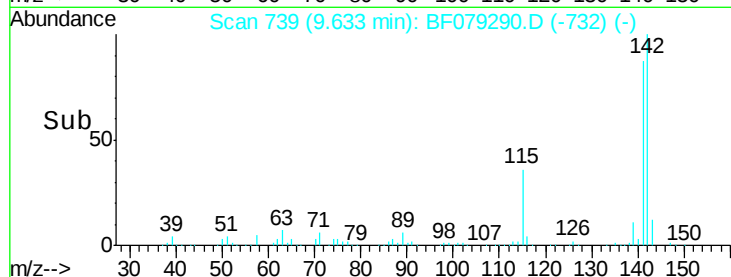
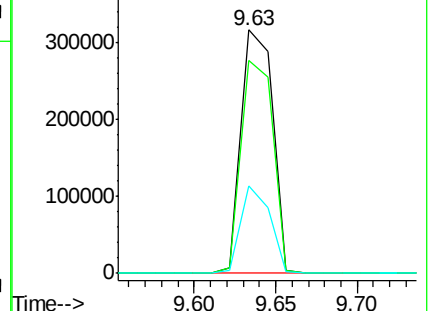
115 36.2 24.2 36.4



Abundance Ion 142.00 (141.70 to 142.70): E

Ion 141.00 (140.70 to 141.70): E

Ion 115.00 (114.70 to 115.70): E



#38

Acenaphthene-d10

Concen: 20.00 ng

RT: 10.93 min Scan# 852

Delta R.T. 0.00 min

Lab File: BF079290.D

Acq: 16 May 2015 3:24

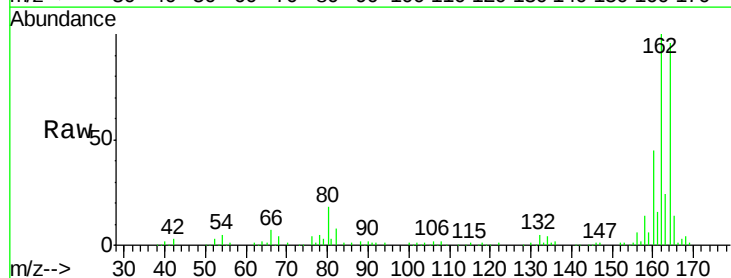
Tgt Ion:164 Resp: 119606

Ion Ratio Lower Upper

164 100

162 104.3 81.4 122.0

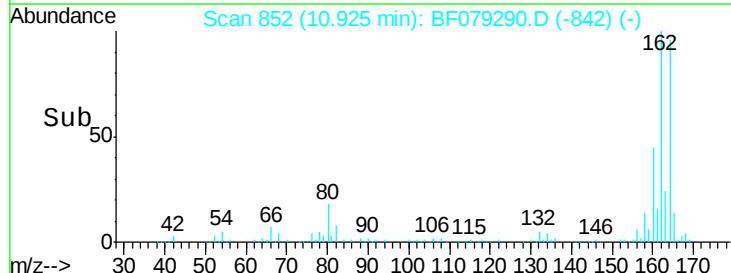
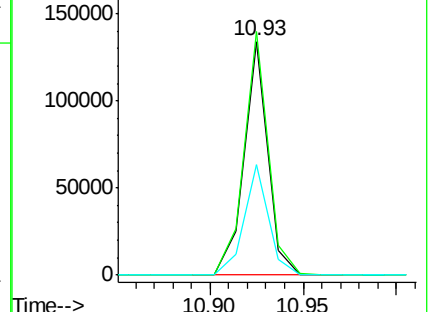
160 47.1 36.6 54.8

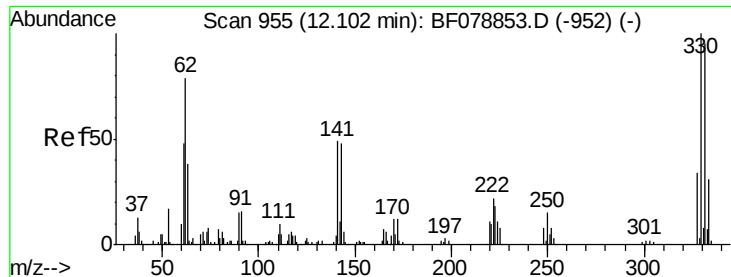


Abundance Ion 164.00 (163.70 to 164.70): E

Ion 162.00 (161.70 to 162.70): E

Ion 160.00 (159.70 to 160.70): E

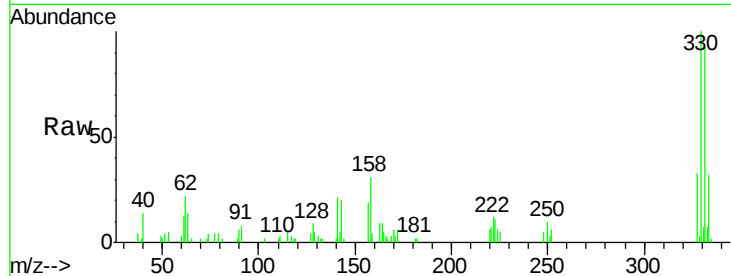




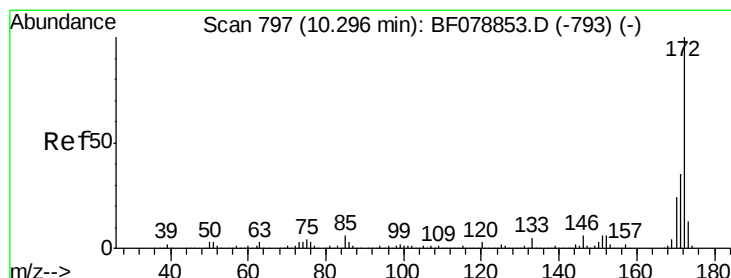
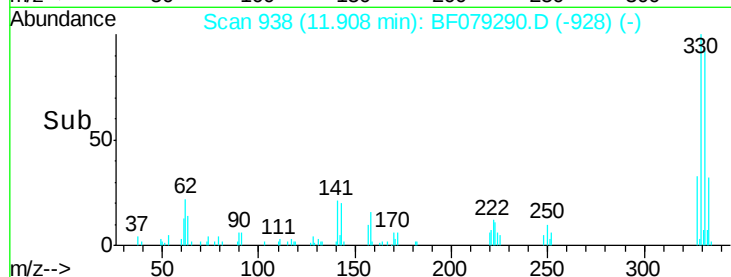
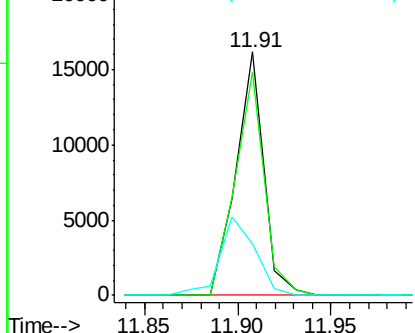
#41  
 2,4,6-Tribromophenol  
 Concen: 13.07 ng  
 RT: 11.91 min Scan# 938  
 Delta R.T. 0.00 min  
 Lab File: BF079290.D  
 Acq: 16 May 2015 3:24

Instrument :  
 BNA\_F  
 ClientSampleId :  
 TW-4DL

Tgt Ion:330 Resp: 16917  
 Ion Ratio Lower Upper  
 330 100  
 332 95.9 76.9 115.3  
 141 40.8 27.8 41.8

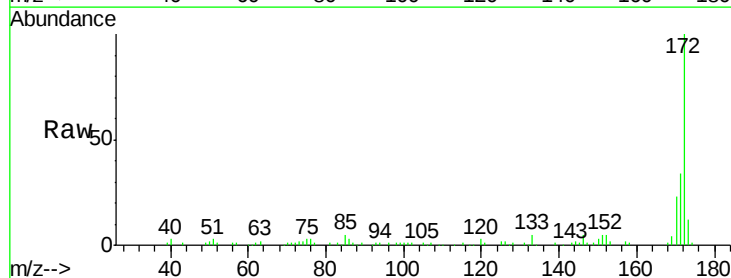


Abundance Ion 329.80 (329.50 to 330.50): E  
 Ion 331.80 (331.50 to 332.50): E  
 Ion 141.00 (140.70 to 141.70): E

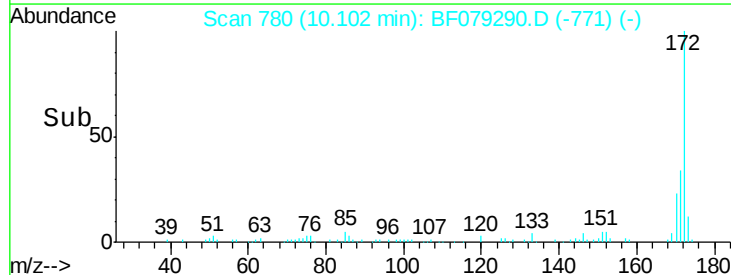
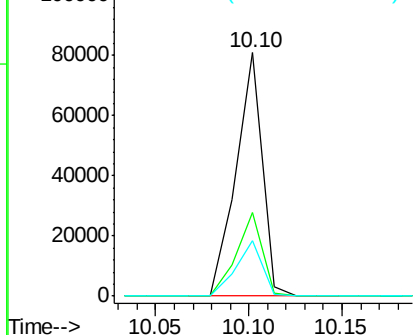


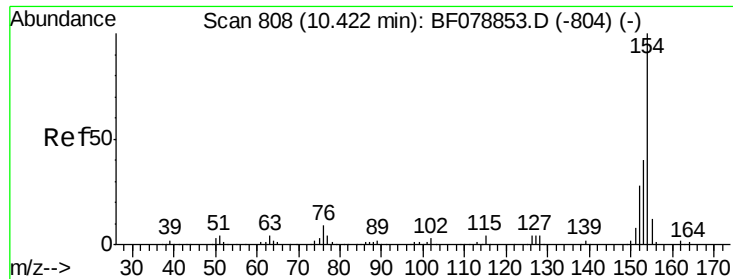
#44  
 2-Fluorobiphenyl  
 Concen: 9.31 ng  
 RT: 10.10 min Scan# 780  
 Delta R.T. 0.00 min  
 Lab File: BF079290.D  
 Acq: 16 May 2015 3:24

Tgt Ion:172 Resp: 79958  
 Ion Ratio Lower Upper  
 172 100  
 171 34.3 28.3 42.5  
 170 22.8 19.4 29.2



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





#45

1,1'-Biphenyl

Concen: 10.16 ng

RT: 10.22 min Scan# 790

Delta R.T. -0.01 min

Lab File: BF079290.D

Acq: 16 May 2015 3:24

Instrument :

BNA\_F

ClientSampleId :

TW-4DL

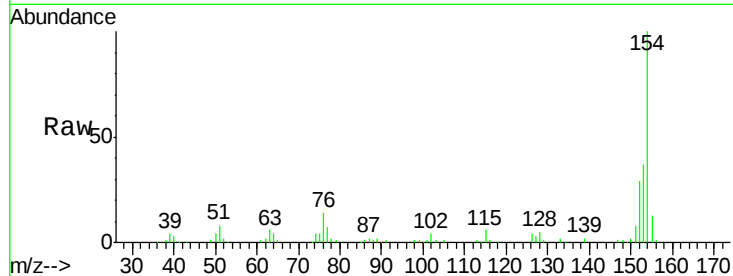
Tgt Ion:154 Resp: 96577

Ion Ratio Lower Upper

154 100

153 37.5 19.7 59.7

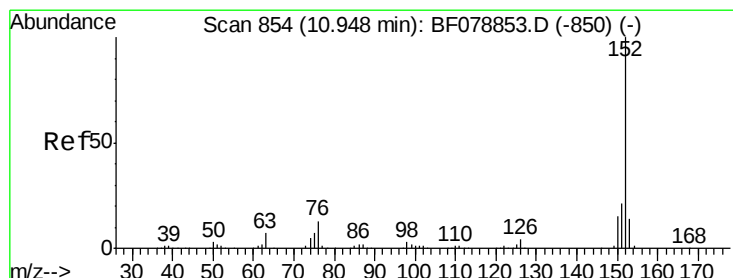
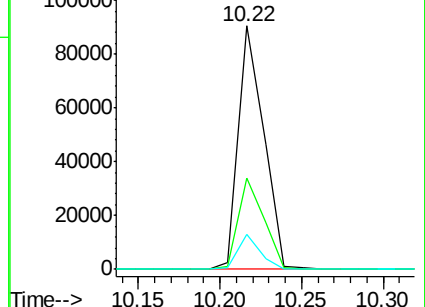
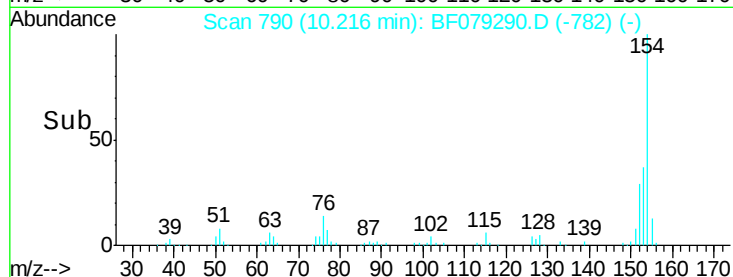
76 14.3 0.0 29.1



Abundance Ion 154.00 (153.70 to 154.70): E

Ion 153.00 (152.70 to 153.70): E

Ion 76.00 (75.70 to 76.70): BF0



#48

Acenaphthylene

Concen: 6.41 ng

RT: 10.75 min Scan# 837

Delta R.T. 0.00 min

Lab File: BF079290.D

Acq: 16 May 2015 3:24

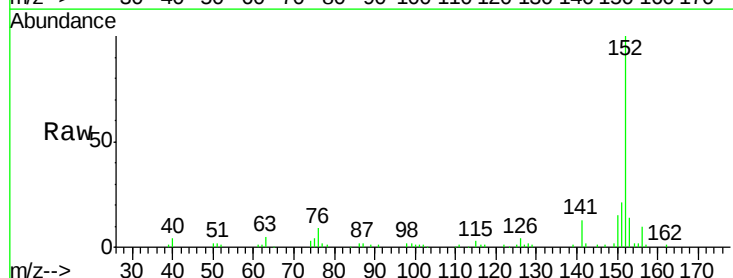
Tgt Ion:152 Resp: 78074

Ion Ratio Lower Upper

152 100

151 20.7 16.6 24.8

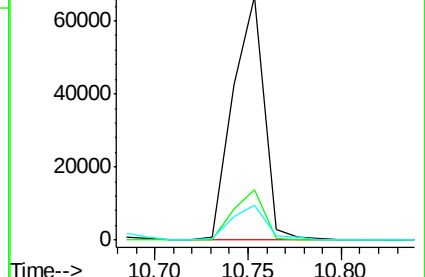
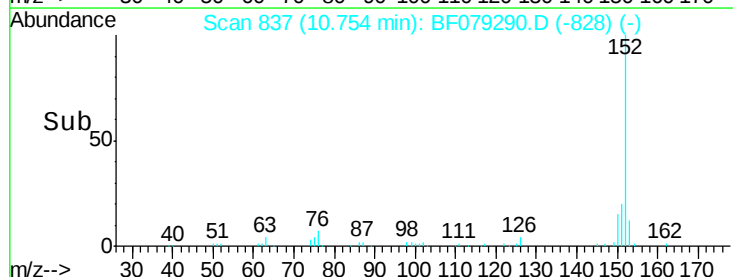
153 14.5 11.0 16.6

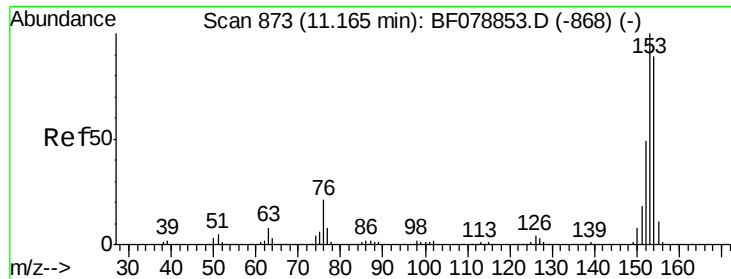


Abundance Ion 152.00 (151.70 to 152.70): E

Ion 151.00 (150.70 to 151.70): E

Ion 153.00 (152.70 to 153.70): E





#51

Acenaphthene

Concen: 24.46 ng

RT: 10.96 min Scan# 855

Delta R.T. -0.01 min

Lab File: BF079290.D

Acq: 16 May 2015 3:24

Instrument :

BNA\_F

ClientSampleId :

TW-4DL

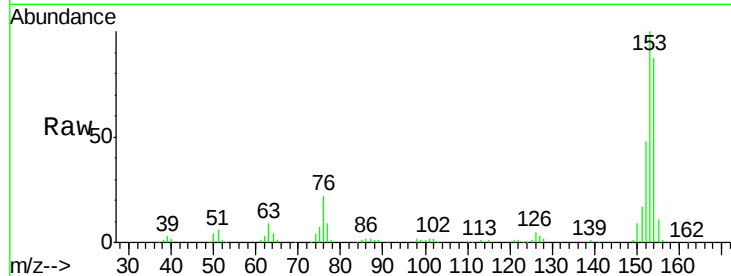
Tgt Ion:154 Resp: 177645

Ion Ratio Lower Upper

154 100

153 115.1 90.2 135.2

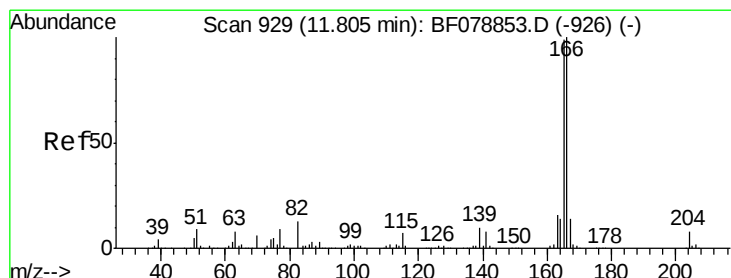
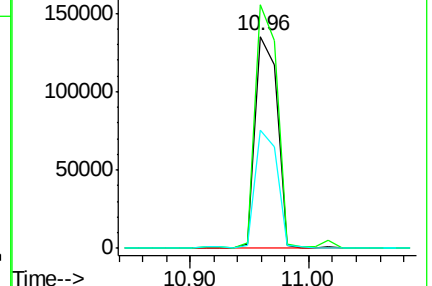
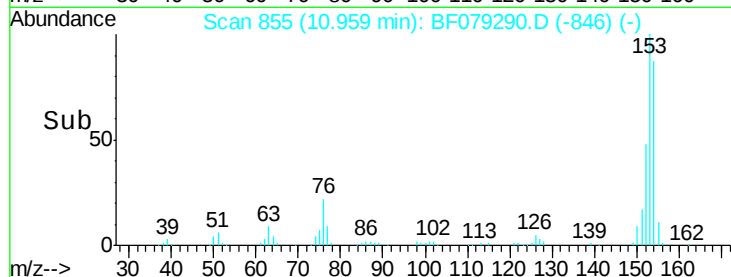
152 55.6 43.8 65.8



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



#57

Fluorene

Concen: 9.94 ng

RT: 11.60 min Scan# 911

Delta R.T. -0.01 min

Lab File: BF079290.D

Acq: 16 May 2015 3:24

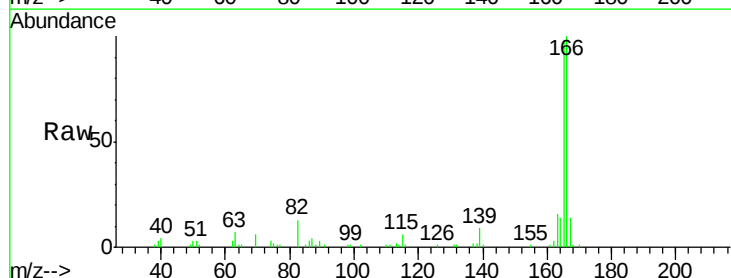
Tgt Ion:166 Resp: 85556

Ion Ratio Lower Upper

166 100

165 97.8 79.5 119.3

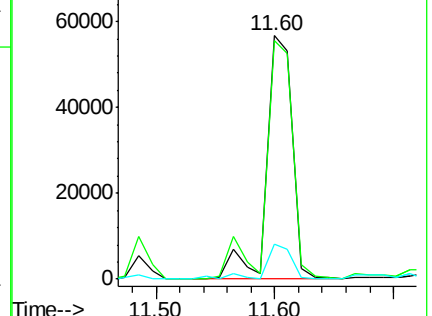
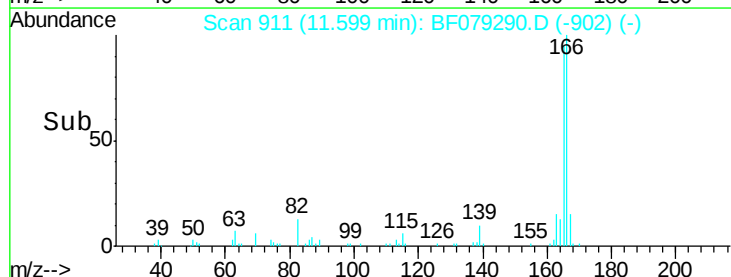
167 14.1 11.0 16.6

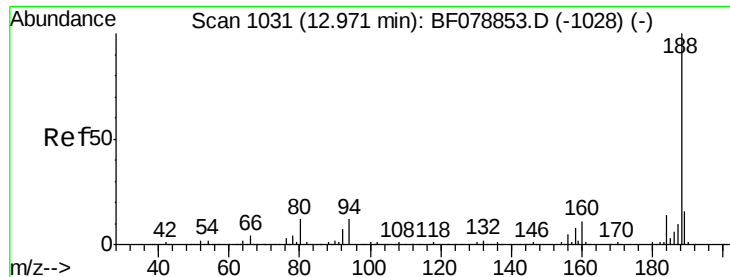


Abundance Ion 166.00 (165.70 to 166.70): E

Ion 165.00 (164.70 to 165.70): E

Ion 167.00 (166.70 to 167.70): E

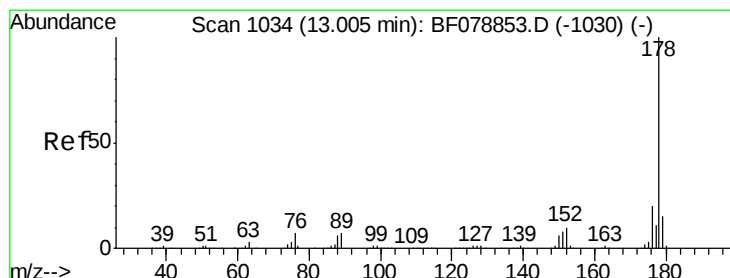
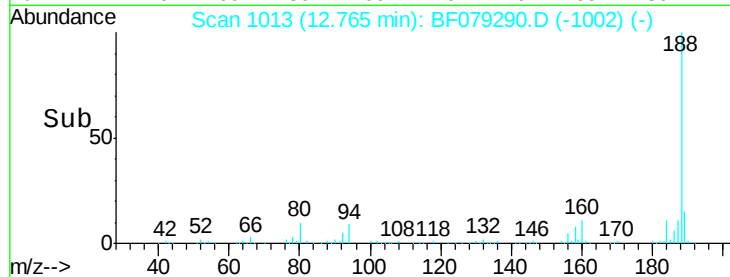
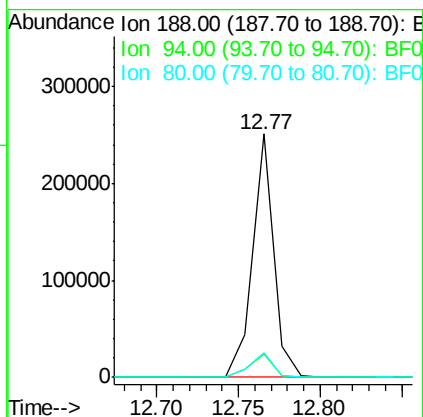
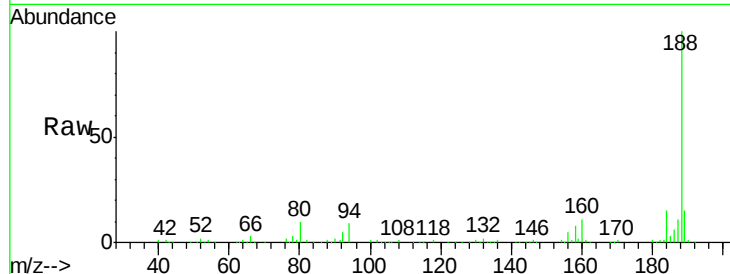




#63  
Phenanthrene-d10  
Concen: 20.00 ng  
RT: 12.77 min Scan# 1013  
Delta R.T. 0.00 min  
Lab File: BF079290.D  
Acq: 16 May 2015 3:24

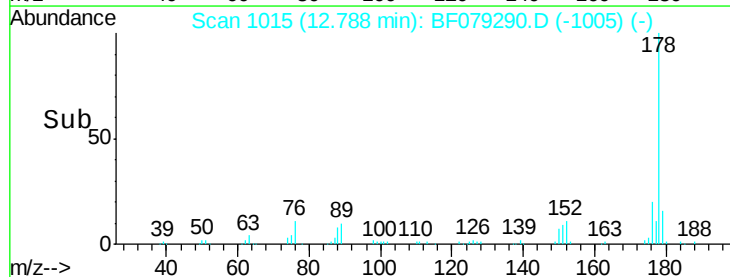
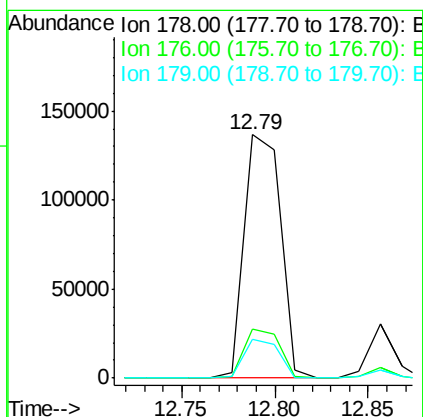
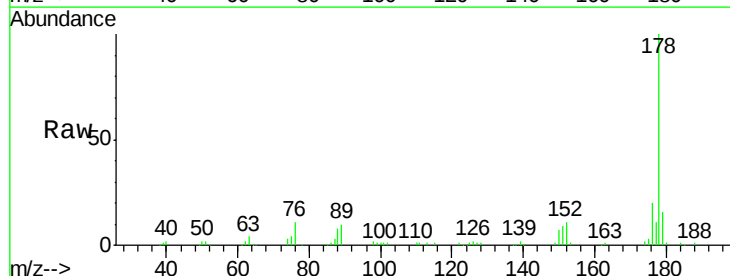
Instrument :  
BNA\_F  
ClientSampleId :  
TW-4DL

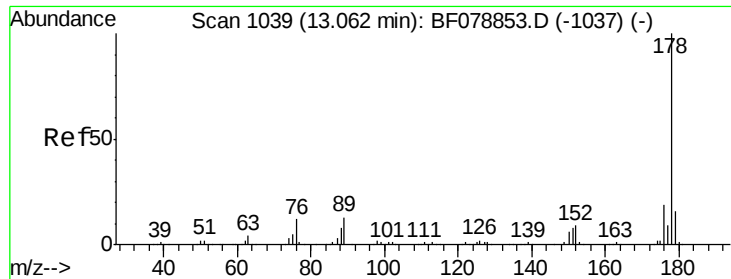
Tgt Ion:188 Resp: 225841  
Ion Ratio Lower Upper  
188 100  
94 9.5 9.4 14.0  
80 10.1 9.8 14.6



#70  
Phenanthrene  
Concen: 14.86 ng  
RT: 12.79 min Scan# 1015  
Delta R.T. -0.01 min  
Lab File: BF079290.D  
Acq: 16 May 2015 3:24

Tgt Ion:178 Resp: 187696  
Ion Ratio Lower Upper  
178 100  
176 20.2 15.9 23.9  
179 15.9 12.2 18.4

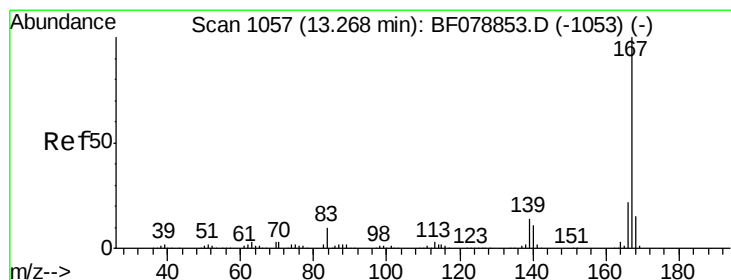
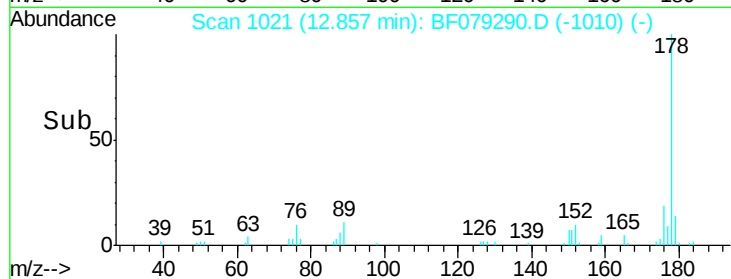
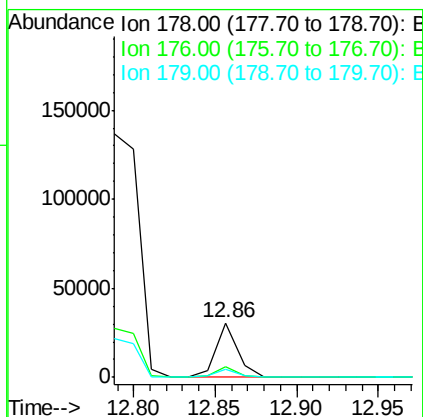
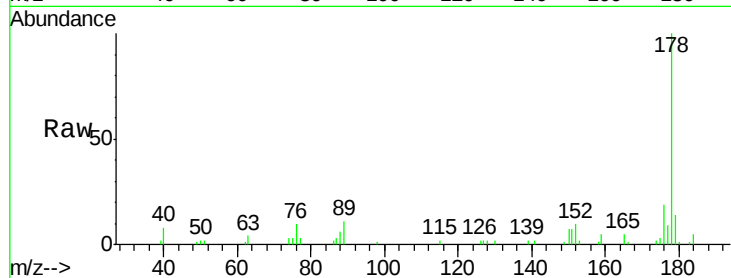




#71  
 Anthracene  
 Concen: 2.30 ng  
 RT: 12.86 min Scan# 1021  
 Delta R.T. 0.00 min  
 Lab File: BF079290.D  
 Acq: 16 May 2015 3:24

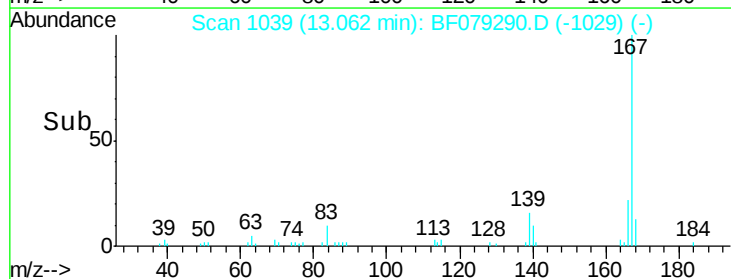
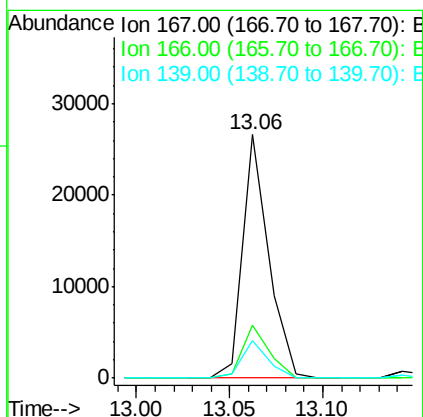
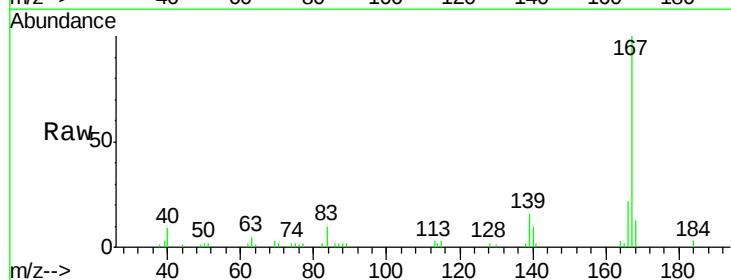
Instrument :  
 BNA\_F  
 ClientSampleId :  
 TW-4DL

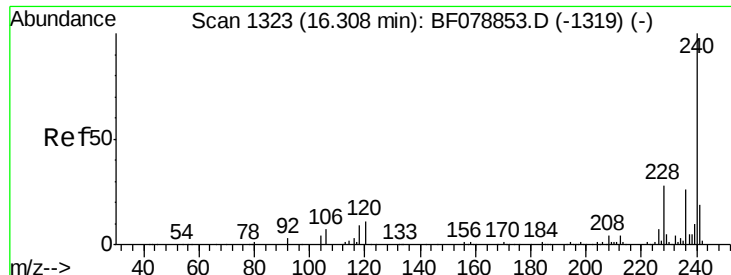
Tgt Ion:178 Resp: 28534  
 Ion Ratio Lower Upper  
 178 100  
 176 18.8 15.3 22.9  
 179 14.4 12.6 19.0



#72  
 Carbazole  
 Concen: 2.19 ng  
 RT: 13.06 min Scan# 1039  
 Delta R.T. -0.01 min  
 Lab File: BF079290.D  
 Acq: 16 May 2015 3:24

Tgt Ion:167 Resp: 25856  
 Ion Ratio Lower Upper  
 167 100  
 166 21.7 17.5 26.3  
 139 15.5 11.0 16.4

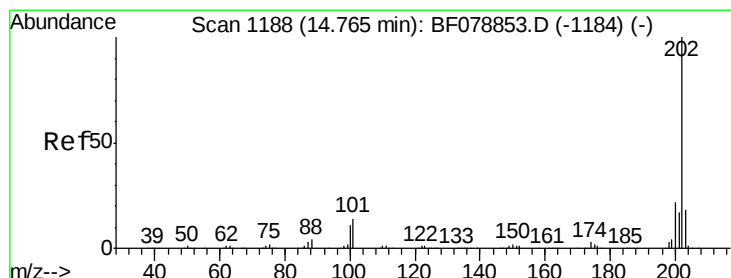
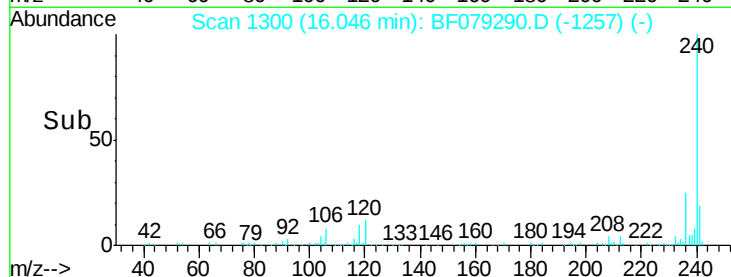
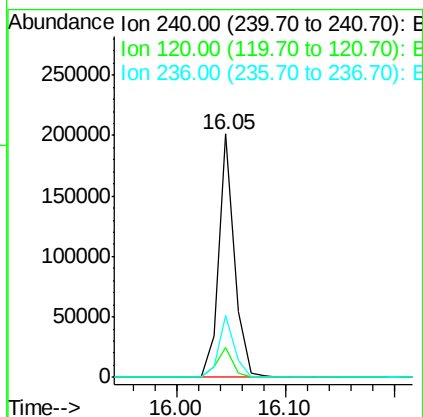
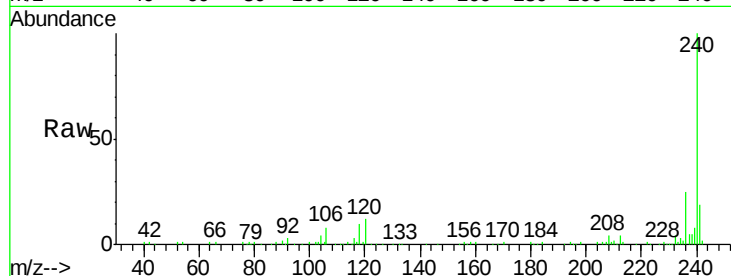




#75  
 Chrysene-d12  
 Concen: 20.00 ng  
 RT: 16.05 min Scan# 1300  
 Delta R.T. -0.01 min  
 Lab File: BF079290.D  
 Acq: 16 May 2015 3:24

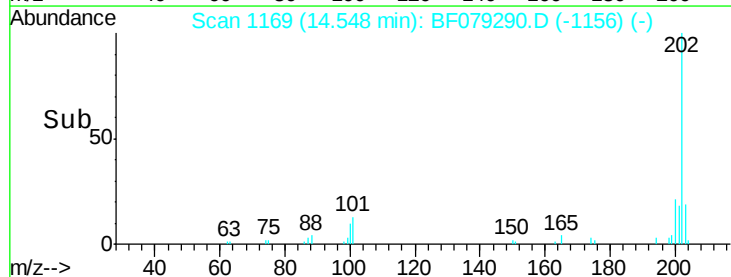
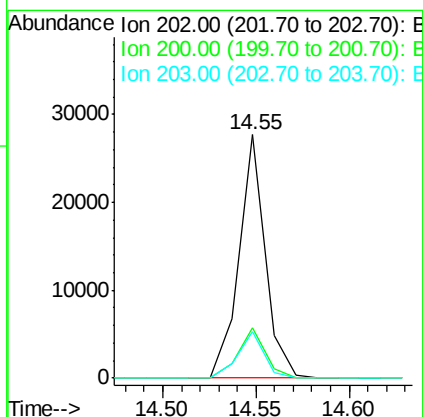
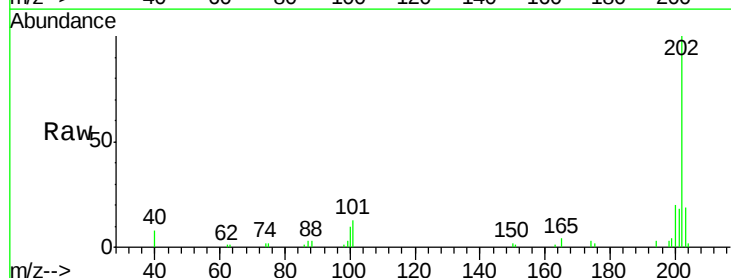
Instrument :  
 BNA\_F  
 ClientSampleId :  
 TW-4DL

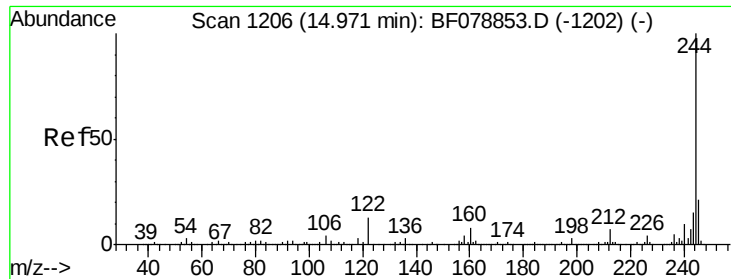
Tgt Ion: 240 Resp: 204236  
 Ion Ratio Lower Upper  
 240 100  
 120 12.5 8.6 12.8  
 236 25.5 21.0 31.6



#77  
 Pyrene  
 Concen: 2.30 ng  
 RT: 14.55 min Scan# 1169  
 Delta R.T. 0.00 min  
 Lab File: BF079290.D  
 Acq: 16 May 2015 3:24

Tgt Ion: 202 Resp: 27119  
 Ion Ratio Lower Upper  
 202 100  
 200 20.5 17.5 26.3  
 203 19.0 14.7 22.1





#78

Terphenyl-d14

Concen: 10.02 ng

RT: 14.75 min Scan# 1187

Delta R.T. -0.01 min

Lab File: BF079290.D

Acq: 16 May 2015 3:24

Instrument :

BNA\_F

ClientSampled :

TW-4DL

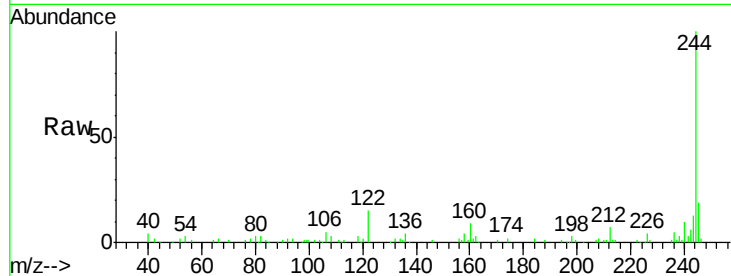
Tgt Ion:244 Resp: 85496

Ion Ratio Lower Upper

244 100

212 7.1 5.6 8.4

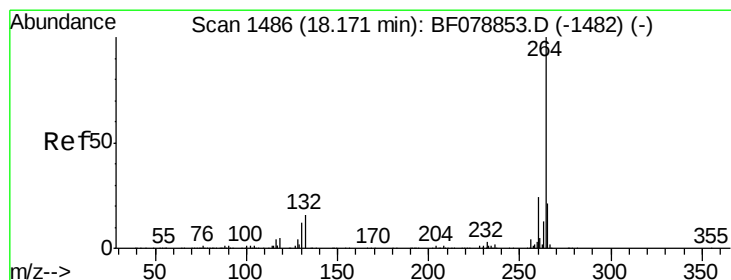
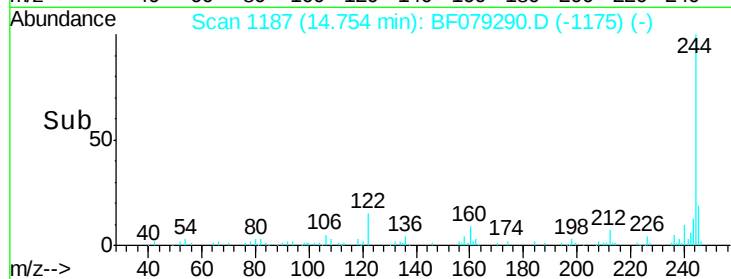
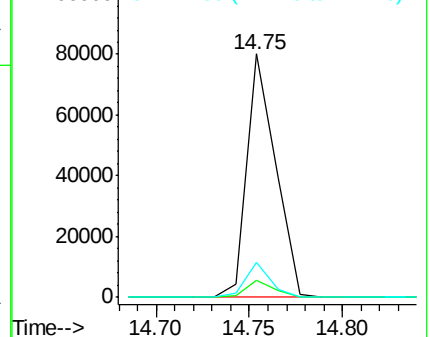
122 14.6 10.5 15.7



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



#86

Perylene-d12

Concen: 20.00 ng

RT: 17.76 min Scan# 1450

Delta R.T. 0.00 min

Lab File: BF079290.D

Acq: 16 May 2015 3:24

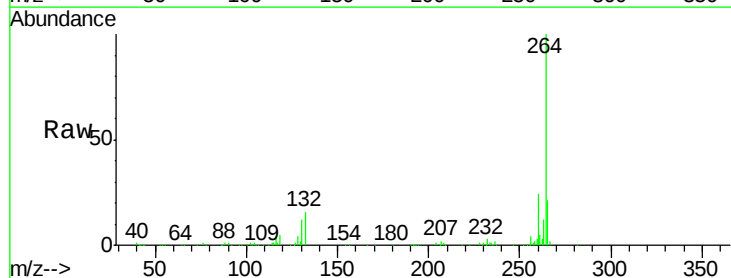
Tgt Ion:264 Resp: 203304

Ion Ratio Lower Upper

264 100

260 24.1 19.2 28.8

265 21.3 17.2 25.8



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

