

Data Path : Z:\HPCHEM1\BNA F\DATA\BF011017\  
 Data File : BF092178.D  
 Acq On : 10 Jan 2017 13:33  
 Operator : UM/SJ  
 Sample : I1045-03RE 2X  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :

Quant Time: Jan 10 14:02:23 2017  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF122116.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Jan 06 15:43:51 2017  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.63  | 152  | 162777   | 20.00 | ng    | -0.01    |
| 21) Naphthalene-d8        | 7.91  | 136  | 611005   | 20.00 | ng    | -0.02    |
| 38) Acenaphthene-d10      | 9.67  | 164  | 298522   | 20.00 | ng    | -0.01    |
| 63) Phenanthrene-d10      | 11.14 | 188  | 419999   | 20.00 | ng    | -0.01    |
| 75) Chrysene-d12          | 13.79 | 240  | 276938   | 20.00 | ng    | 0.00     |
| 86) Perylene-d12          | 15.17 | 264  | 194919   | 20.00 | ng    | 0.02     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|-------|------|----------|-------|-------|----------|
| 5) 2-Fluorophenol           | 5.22  | 112  | 644394   | 66.10 | ng    | -0.01    |
| 7) Phenol-d6                | 6.30  | 99   | 662598   | 55.67 | ng    | -0.01    |
| 23) Nitrobenzene-d5         | 7.19  | 82   | 353485   | 32.17 | ng    | -0.02    |
| 41) 2,4,6-Tribromophenol    | 10.46 | 330  | 89105    | 36.07 | ng    | -0.01    |
| 44) 2-Fluorobiphenyl        | 9.00  | 172  | 632735   | 35.99 | ng    | -0.01    |
| 78) Terphenyl-d14           | 12.73 | 244  | 478553   | 41.91 | ng    | -0.01    |

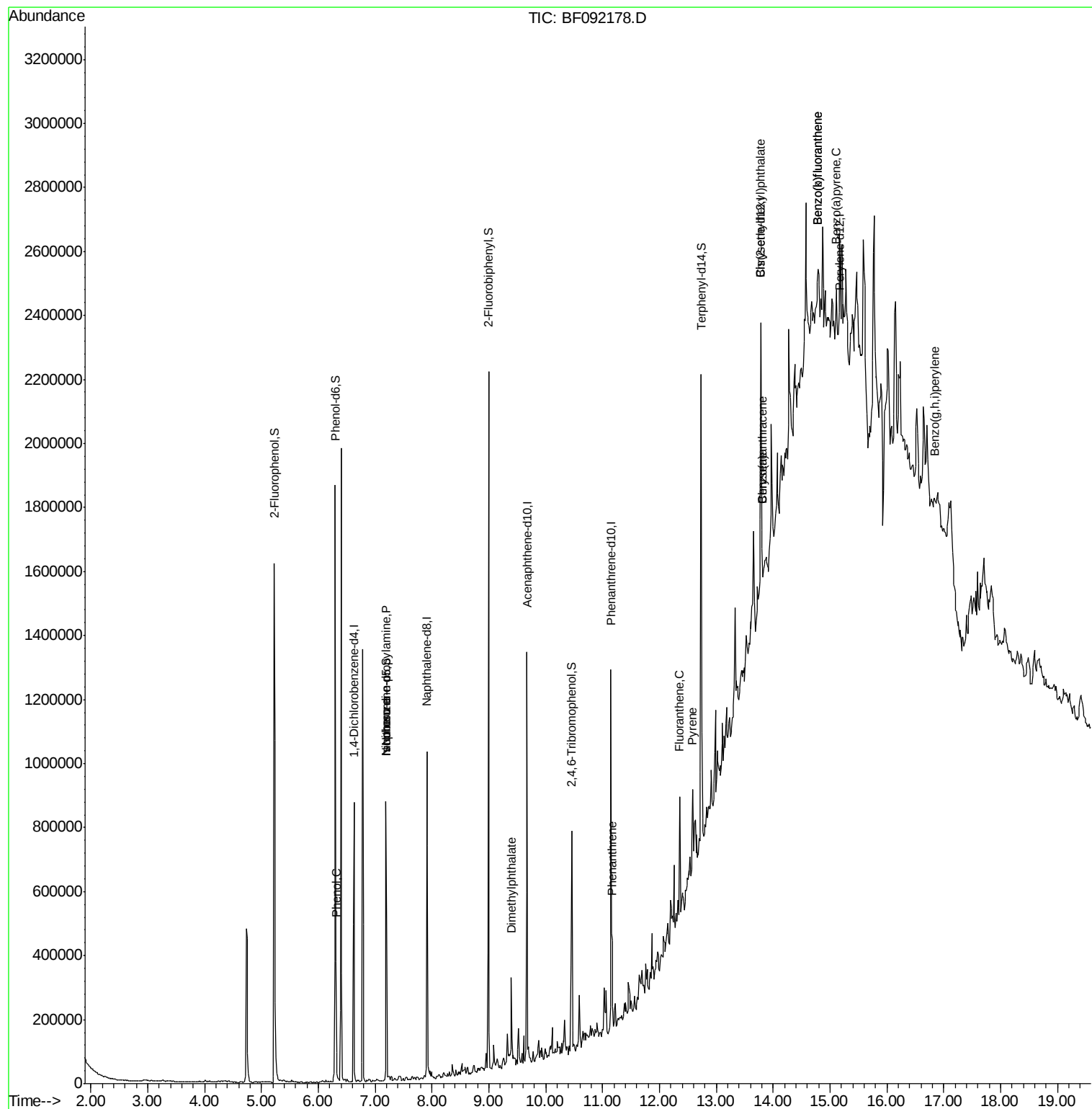
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units | Qvalue |
|--------------------------------|-------|------|----------|-----------|-------|--------|
| 9) Benzaldehyde                | 6.30  | 77   | 1384     | Below Cal | #     | 17     |
| 10) Phenol                     | 6.31  | 94   | 37552    | 2.77      | ng    | 77     |
| 19) n-Nitroso-di-n-propylamine | 7.19  | 70   | 47924    | 6.05      | ng    | 77     |
| 25) Isophorone                 | 7.19  | 82   | 343992   | 16.97     | ng    | 65     |
| 37) 2-Methylnaphthalene        | 8.63  | 142  | 6786     | Below Cal |       | 98     |
| 49) Dimethylphthalate          | 9.40  | 163  | 98371    | 5.15      | ng    | 98     |
| 70) Phenanthrene               | 11.17 | 178  | 104161   | 4.57      | ng    | 97     |
| 73) Di-n-butylphthalate        | 11.72 | 149  | 4226     | Below Cal | #     | 62     |
| 74) Fluoranthene               | 12.36 | 202  | 134717   | 3.19      | ng    | 97     |
| 76) Benzidine                  | 12.46 | 184  | 902      | Below Cal | #     | 1      |
| 77) Pyrene                     | 12.59 | 202  | 129793   | 6.39      | ng    | 98     |
| 80) Benzo(a)anthracene         | 13.81 | 228  | 107044   | 6.85      | ng    | 79     |
| 82) Chrysene                   | 13.81 | 228  | 107200   | 6.84      | ng    | 84     |
| 83) Bis(2-ethylhexyl)phthalate | 13.79 | 149  | 23968    | 2.20      | ng    | 75     |
| 87) Benzo(b)fluoranthene       | 14.79 | 252  | 48842    | 4.02      | ng    | 12     |
| 88) Benzo(k)fluoranthene       | 14.79 | 252  | 48842    | 4.72      | ng    | 13     |
| 89) Benzo(a)pyrene             | 15.11 | 252  | 24696    | 2.29      | ng    | 1      |
| 91) Benzo(g,h,i)perylene       | 16.85 | 276  | 18748    | 2.04      | ng    | 42     |

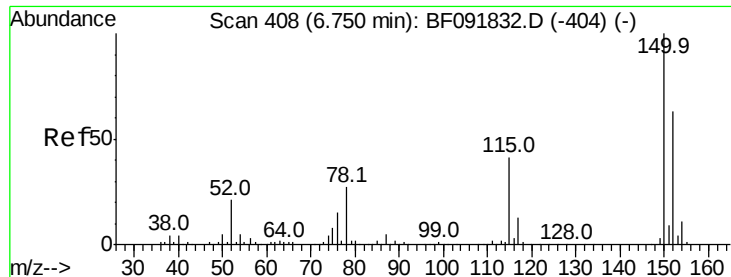
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\HPCHEM1\BNA F\DATA\BF011017\  
Data File : BF092178.D  
Acq On : 10 Jan 2017 13:33  
Operator : UM/SJ  
Sample : I1045-03RE 2X  
Misc :  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :

Quant Time: Jan 10 14:02:23 2017  
Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF122116.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Jan 06 15:43:51 2017  
Response via : Initial Calibration





#1

1,4-Dichlorobenzene-d4

Concen: 20.00 ng

RT: 6.63 min Scan# 415

Delta R.T. -0.01 min

Lab File: BF092178.D

Acq: 10 Jan 2017 13:33

Instrument :

BNA\_F

ClientSampleId :

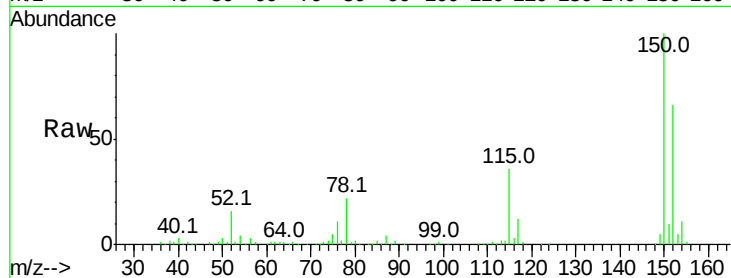
Tot Ion:152 Resp: 162777

Ion Ratio Lower Upper

152 100

150 152.2 124.9 187.3

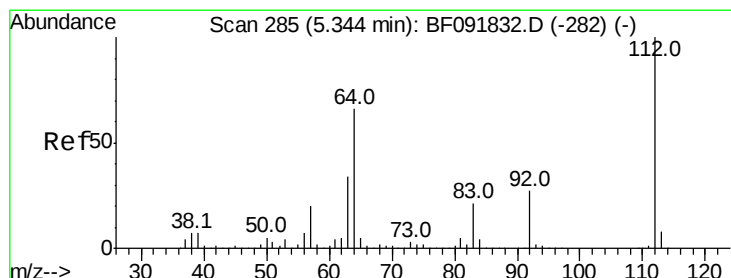
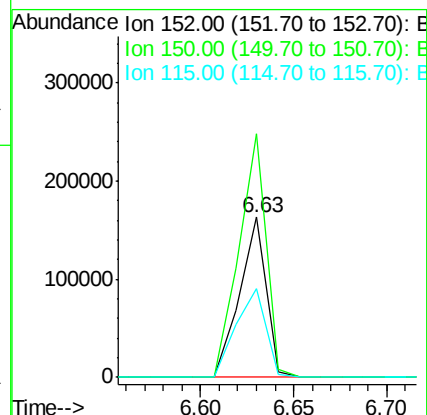
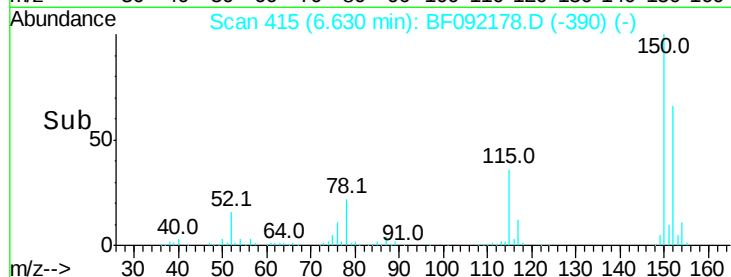
115 55.1 46.0 69.0



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: 66.10 ng

RT: 5.22 min Scan# 292

Delta R.T. -0.01 min

Lab File: BF092178.D

Acq: 10 Jan 2017 13:33

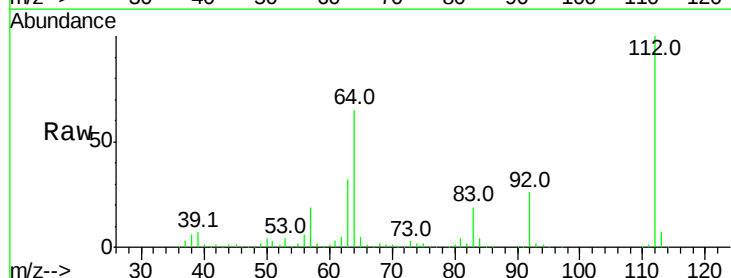
Tgt Ion:112 Resp: 644394

Ion Ratio Lower Upper

112 100

64 65.0 46.1 69.1

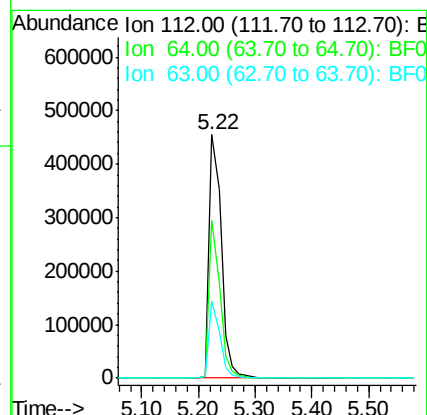
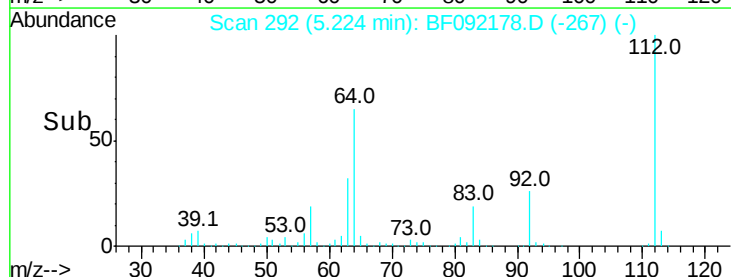
63 31.7 23.8 35.6

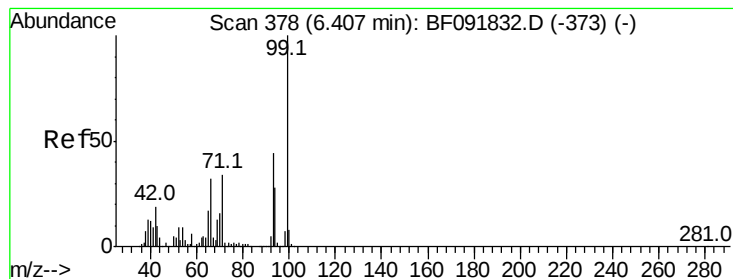


Abundance Ion 112.00 (111.70 to 112.70): E

Ion 64.00 (63.70 to 64.70): BF0

Ion 63.00 (62.70 to 63.70): BF0





#7

Phenol-d6

Concen: 55.67 ng

RT: 6.30 min Scan# 386

Delta R.T. -0.01 min

Lab File: BF092178.D

Acq: 10 Jan 2017 13:33

Instrument :

BNA\_F

ClientSampleId :

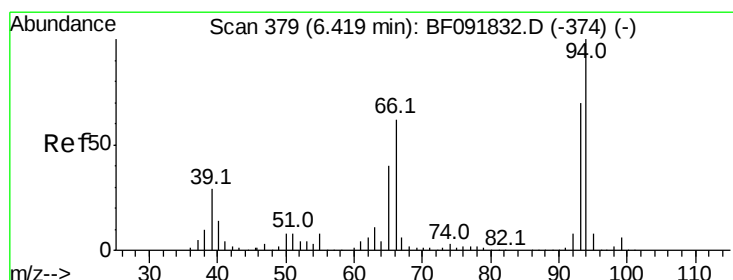
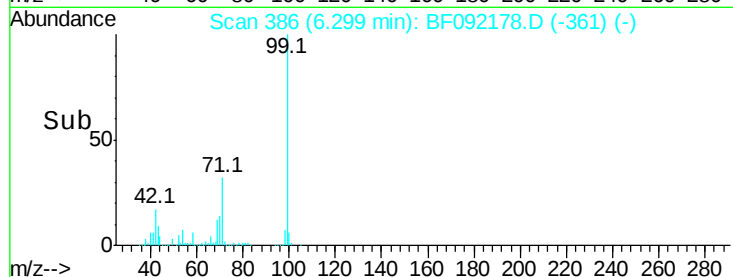
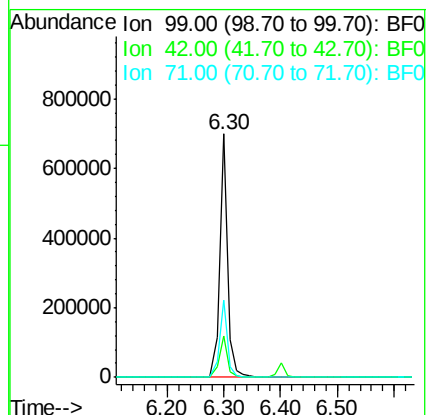
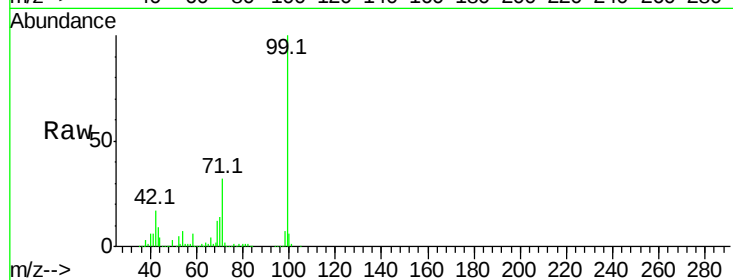
Tot Ion: 99 Resp: 662598

Ion Ratio Lower Upper

99 100

42 16.8 15.6 23.4

71 31.6 27.5 41.3



#10

Phenol

Concen: 2.77 ng

RT: 6.31 min Scan# 387

Delta R.T. -0.01 min

Lab File: BF092178.D

Acq: 10 Jan 2017 13:33

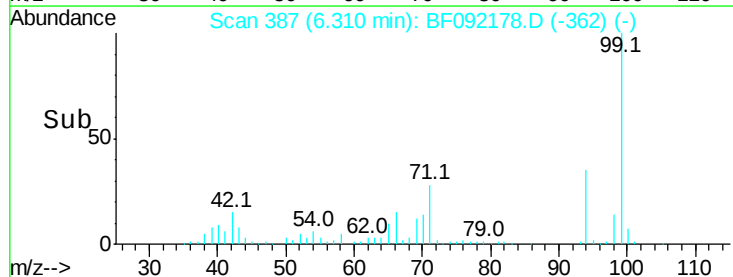
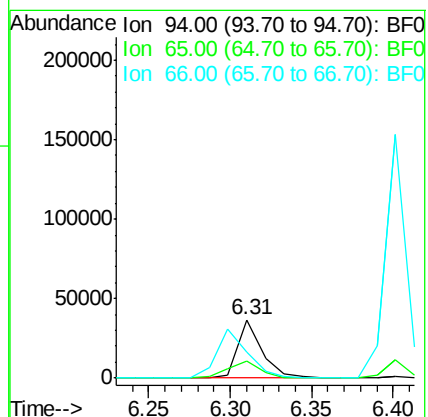
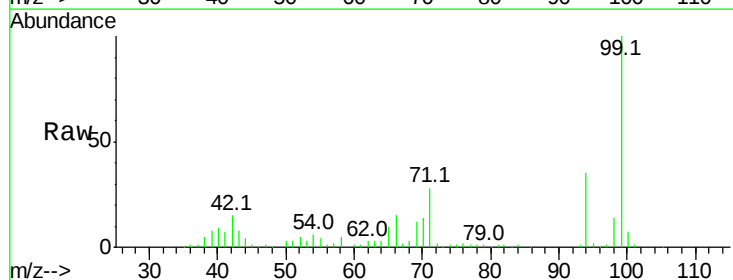
Tgt Ion: 94 Resp: 37552

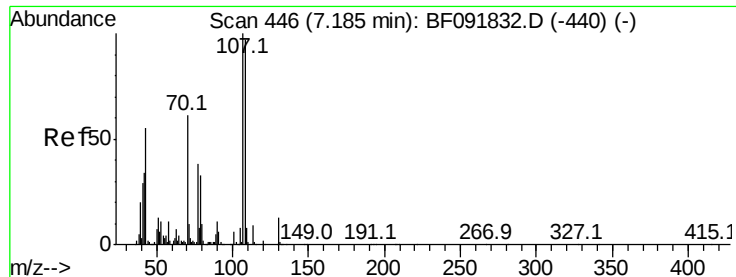
Ion Ratio Lower Upper

94 100

65 29.6 21.4 61.4

66 44.3 44.0 84.0





#19

n-Nitroso-di-n-propylamine

Concen: 6.05 ng

RT: 7.19 min Scan# 464

Delta R.T. 0.11 min

Lab File: BF092178.D

Acq: 10 Jan 2017 13:33

Instrument :

BNA\_F

ClientSampleId :

Tot Ion: 70 Resp: 47924

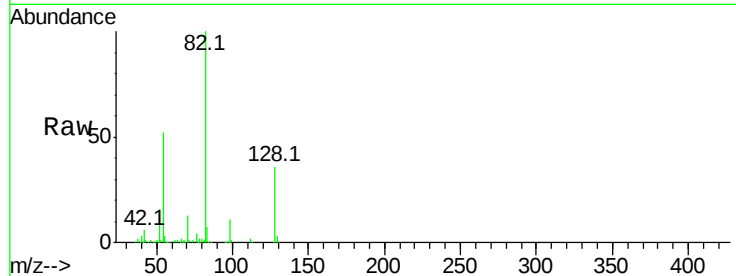
Ion Ratio Lower Upper

70 100

42 47.3 49.4 74.0#

101 0.0 7.4 11.2#

130 1.6 14.2 21.4#

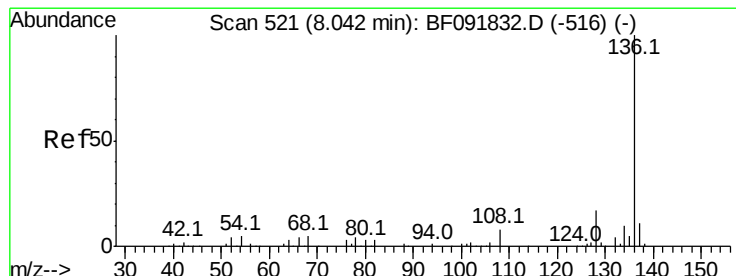
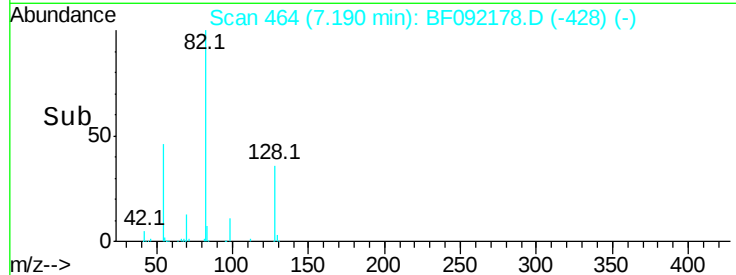
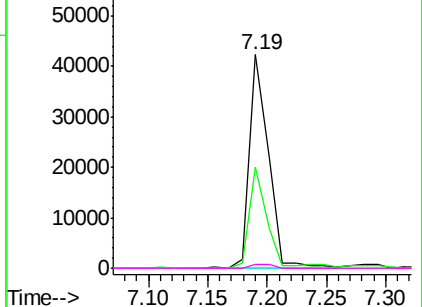


Abundance Ion 70.00 (69.70 to 70.70): BF0

Ion 42.00 (41.70 to 42.70): BF0

Ion 101.00 (100.70 to 101.70): BF0

Ion 130.00 (129.70 to 130.70): BF0



#21

Naphthalene-d8

Concen: 20.00 ng

RT: 7.91 min Scan# 527

Delta R.T. -0.02 min

Lab File: BF092178.D

Acq: 10 Jan 2017 13:33

Tgt Ion: 136 Resp: 611005

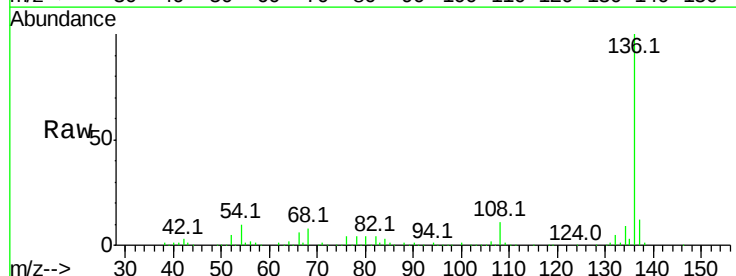
Ion Ratio Lower Upper

136 100

137 11.5 8.4 12.6

54 10.0 4.5 6.7#

68 7.6 3.6 5.4#

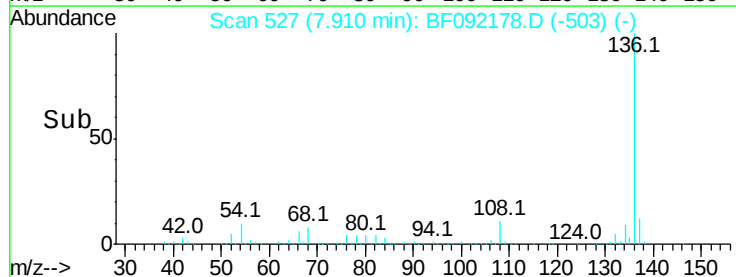
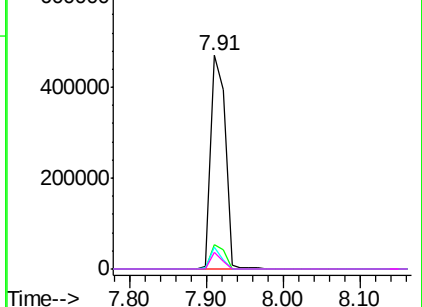


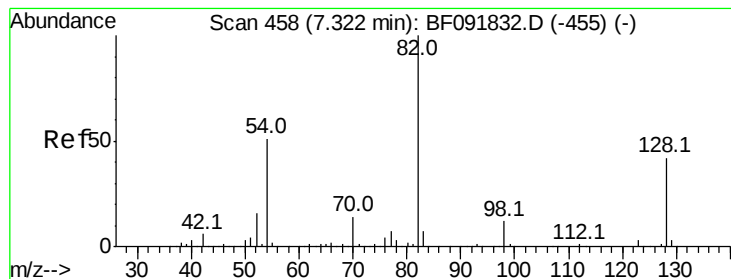
Abundance Ion 136.00 (135.70 to 136.70): BF0

Ion 137.00 (136.70 to 137.70): BF0

Ion 54.00 (53.70 to 54.70): BF0

Ion 68.00 (67.70 to 68.70): BF0





#23

Nitrobenzene-d5

Concen: 32.17 ng

RT: 7.19 min Scan# 464

Delta R.T. -0.02 min

Lab File: BF092178.D

Acq: 10 Jan 2017 13:33

Instrument :

BNA\_F

ClientSampled :

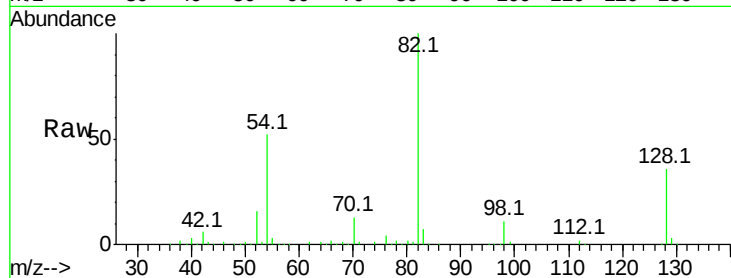
Tot Ion: 82 Resp: 353485

Ion Ratio Lower Upper

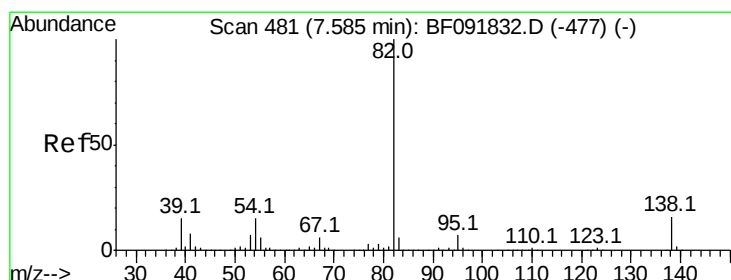
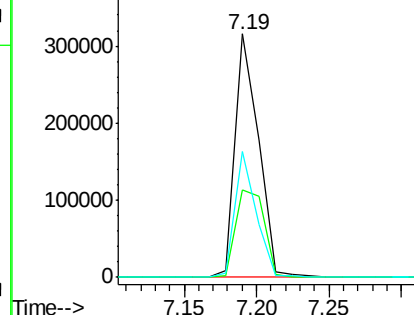
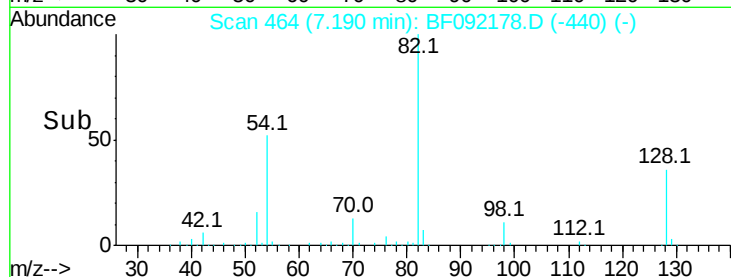
82 100

128 35.9 34.6 52.0

54 51.9 39.5 59.3



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



#25

Isophorone

Concen: 16.97 ng

RT: 7.19 min Scan# 464

Delta R.T. -0.29 min

Lab File: BF092178.D

Acq: 10 Jan 2017 13:33

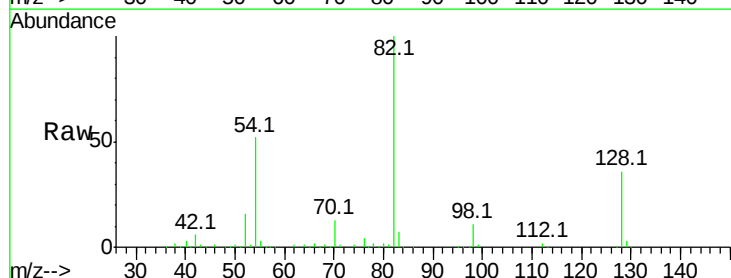
Tgt Ion: 82 Resp: 343992

Ion Ratio Lower Upper

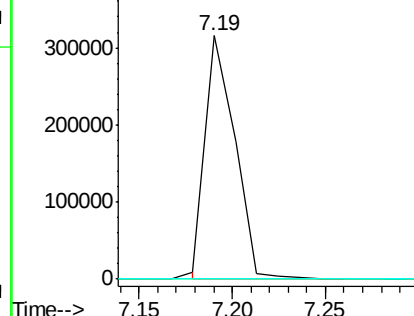
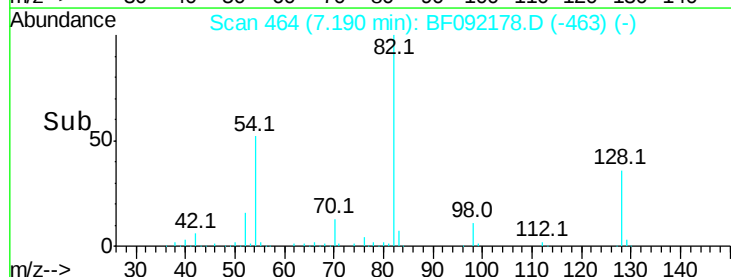
82 100

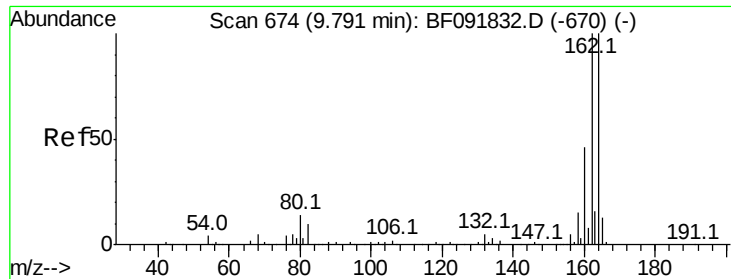
95 0.1 5.6 8.4#

138 0.0 14.6 22.0#



Abundance Ion 82.00 (81.70 to 82.70): BF0  
Ion 95.00 (94.70 to 95.70): BF0  
Ion 138.00 (137.70 to 138.70): BF0

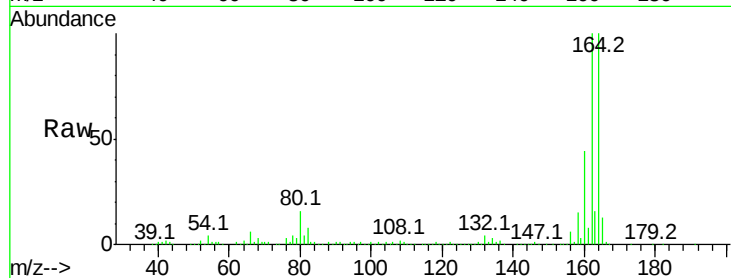




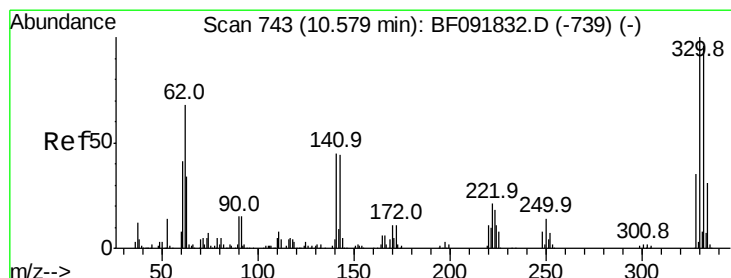
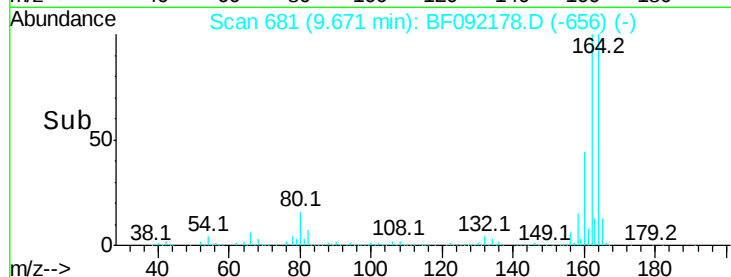
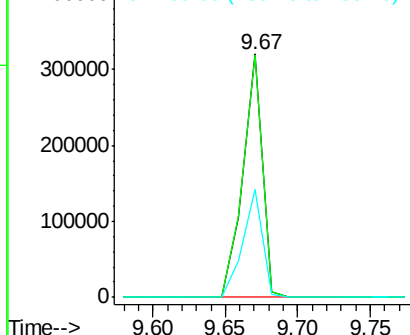
#38  
 Acenaphthene-d10  
 Concen: 20.00 ng  
 RT: 9.67 min Scan# 681  
 Delta R.T. -0.01 min  
 Lab File: BF092178.D  
 Acq: 10 Jan 2017 13:33

Instrument :  
 BNA\_F  
 ClientSampleId :

Tot Ion:164 Resp: 298522  
 Ion Ratio Lower Upper  
 164 100  
 162 99.6 80.2 120.2  
 160 44.3 36.9 55.3

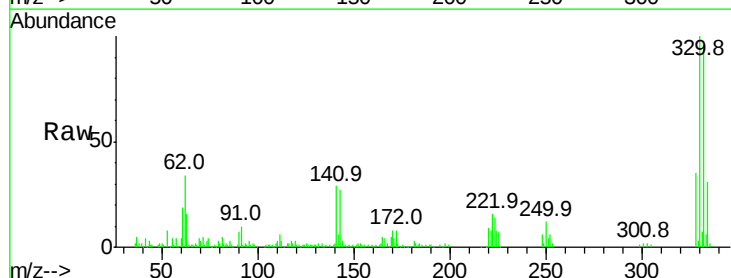


Abundance Ion 164.00 (163.70 to 164.70): E  
 Ion 162.00 (161.70 to 162.70): E  
 Ion 160.00 (159.70 to 160.70): E

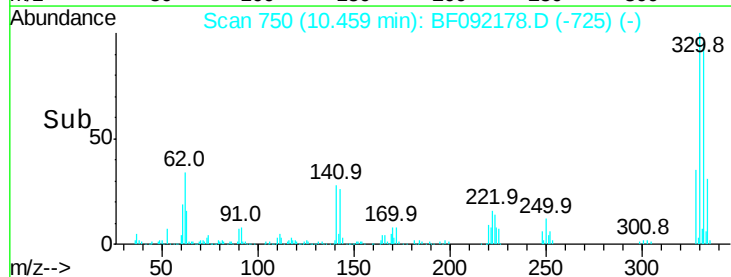
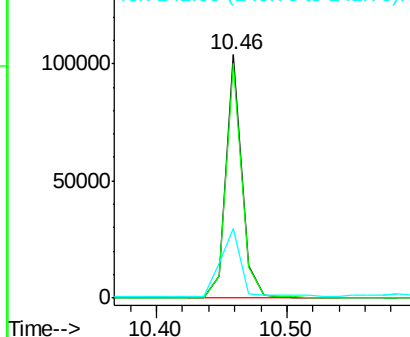


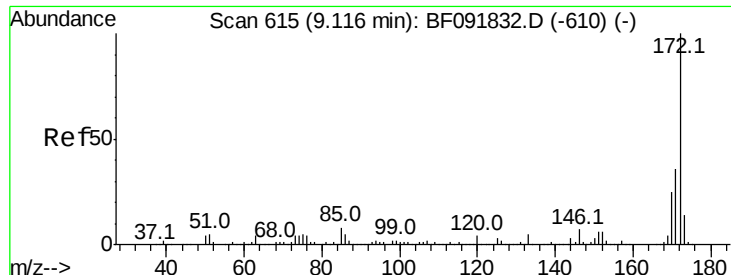
#41  
 2,4,6-Tribromophenol  
 Concen: 36.07 ng  
 RT: 10.46 min Scan# 750  
 Delta R.T. -0.01 min  
 Lab File: BF092178.D  
 Acq: 10 Jan 2017 13:33

Tgt Ion:330 Resp: 89105  
 Ion Ratio Lower Upper  
 330 100  
 332 96.8 77.4 116.2  
 141 36.7 34.1 51.1



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

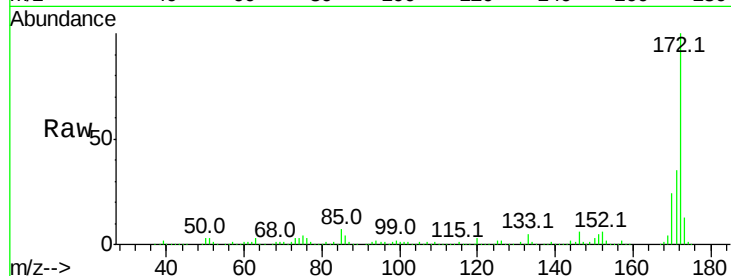




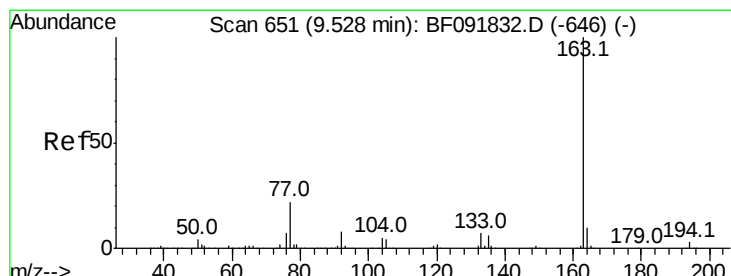
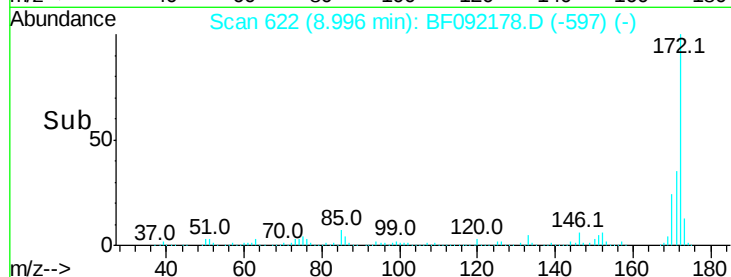
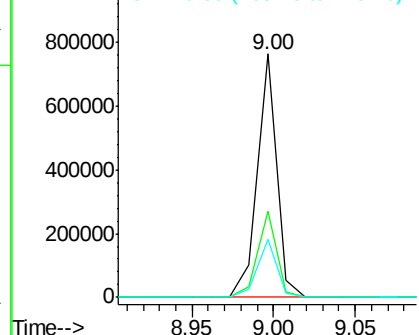
#44  
2-Fluorobiphenyl  
Concen: 35.99 ng  
RT: 9.00 min Scan# 622  
Delta R.T. -0.01 min  
Lab File: BF092178.D  
Acq: 10 Jan 2017 13:33

Instrument :  
BNA\_F  
ClientSampled :

Tot Ion:172 Resp: 632735  
Ion Ratio Lower Upper  
172 100  
171 35.3 29.4 44.0  
170 23.8 20.2 30.4

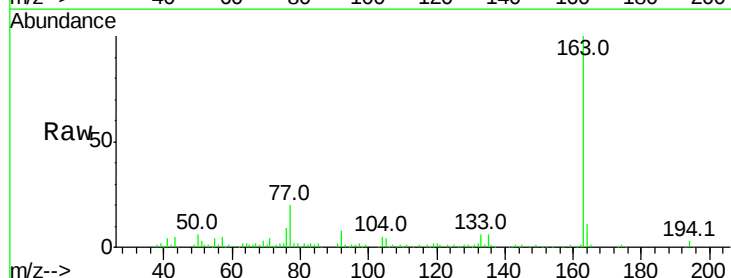


Abundance Ion 172.00 (171.70 to 172.70): E  
Ion 171.00 (170.70 to 171.70): E  
Ion 170.00 (169.70 to 170.70): E

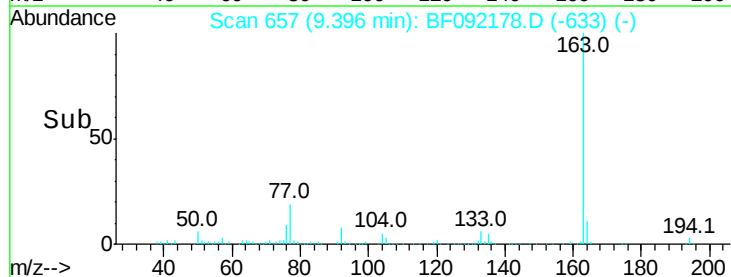
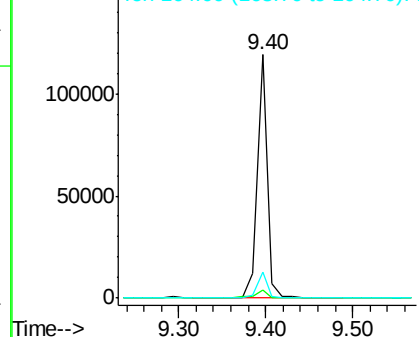


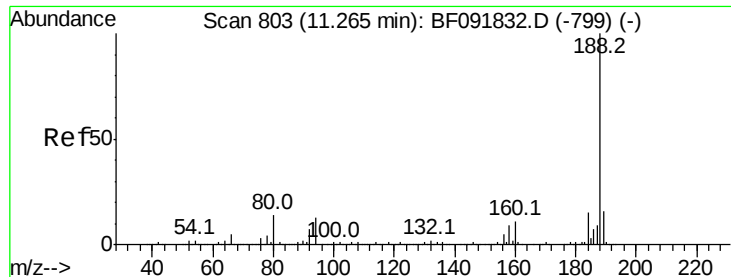
#49  
Dimethylphthalate  
Concen: 5.15 ng  
RT: 9.40 min Scan# 657  
Delta R.T. -0.02 min  
Lab File: BF092178.D  
Acq: 10 Jan 2017 13:33

Tgt Ion:163 Resp: 98371  
Ion Ratio Lower Upper  
163 100  
194 3.3 3.0 4.4  
164 10.6 8.0 12.0



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





#63

Phenanthrene-d10

Concen: 20.00 ng

RT: 11.14 min Scan# 810

Delta R.T. -0.01 min

Lab File: BF092178.D

Acq: 10 Jan 2017 13:33

Instrument :

BNA\_F

ClientSampleId :

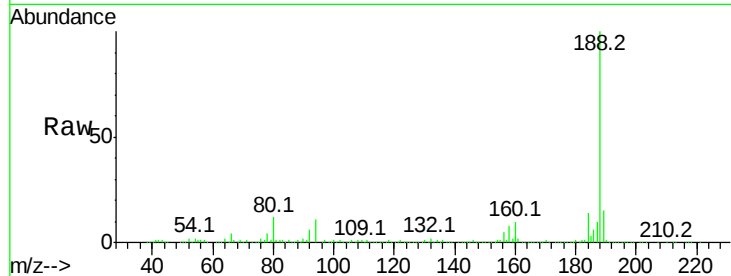
Tot Ion:188 Resp: 419999

Ion Ratio Lower Upper

188 100

94 11.1 10.0 15.0

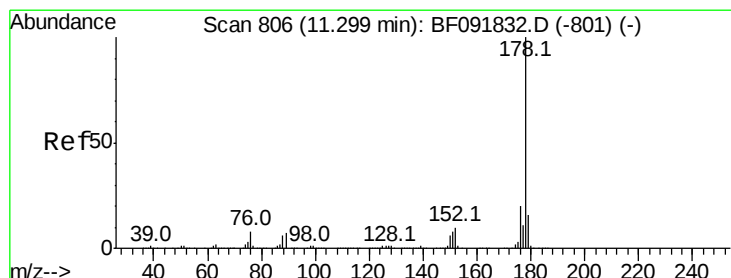
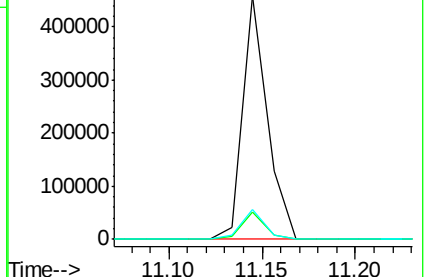
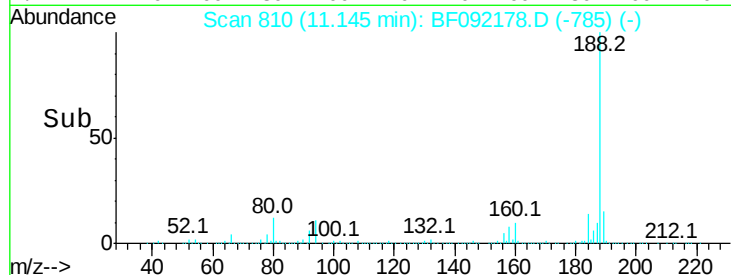
80 12.4 11.2 16.8



Abundance Ion 188.00 (187.70 to 188.70): E

Ion 94.00 (93.70 to 94.70): BF0

Ion 80.00 (79.70 to 80.70): BF0



#70

Phenanthrene

Concen: 4.57 ng

RT: 11.17 min Scan# 812

Delta R.T. -0.01 min

Lab File: BF092178.D

Acq: 10 Jan 2017 13:33

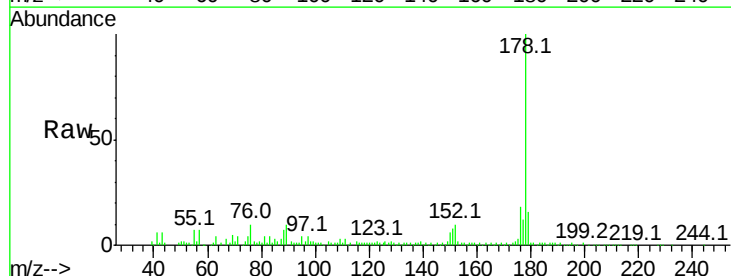
Tgt Ion:178 Resp: 104161

Ion Ratio Lower Upper

178 100

176 18.4 16.6 25.0

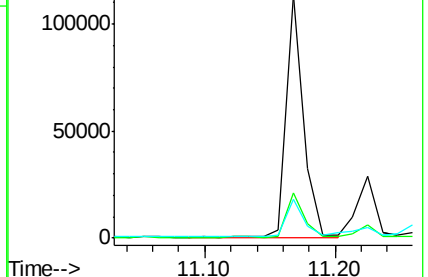
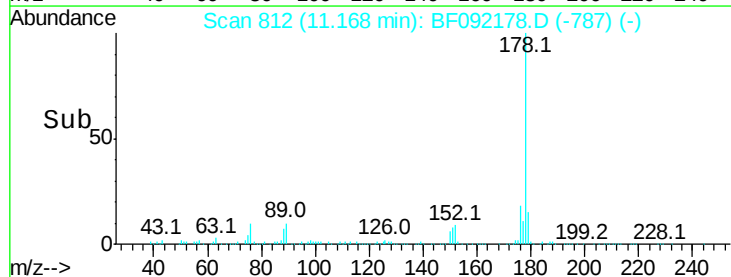
179 15.8 12.8 19.2

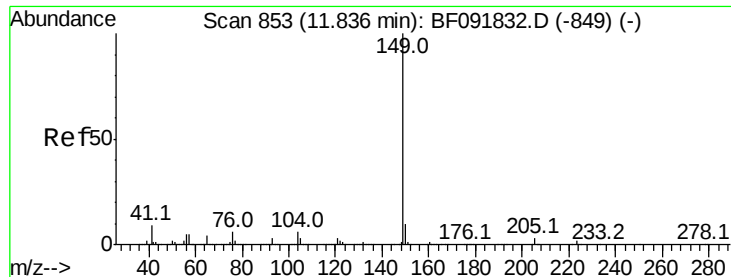


Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E





#73

Di-n-butylphthalate

Concen: Below Cal

RT: 11.72 min Scan# 860

Delta R.T. -0.01 min

Lab File: BF092178.D

Acq: 10 Jan 2017 13:33

Instrument :

BNA\_F

ClientSampleId :

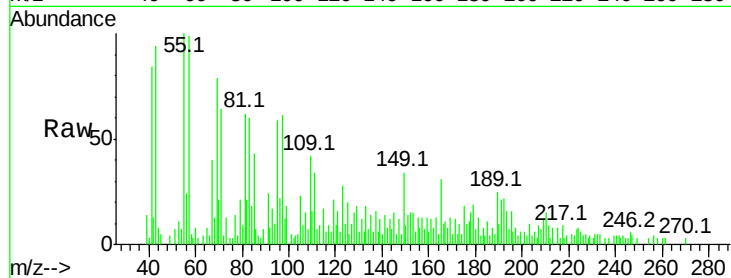
Tot Ion:149 Resp: 4226

Ion Ratio Lower Upper

149 100

150 26.5 8.1 12.1#

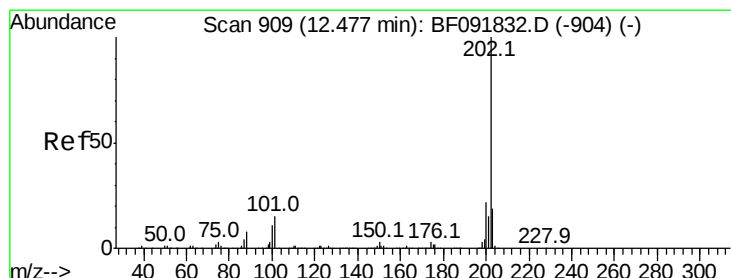
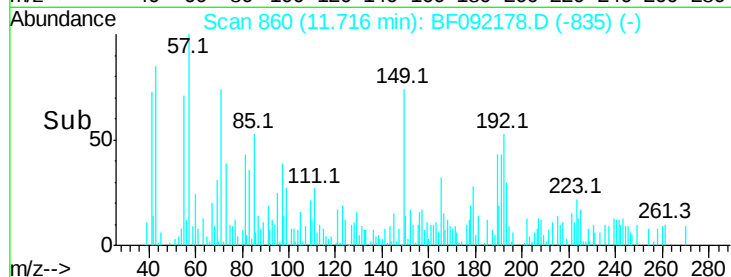
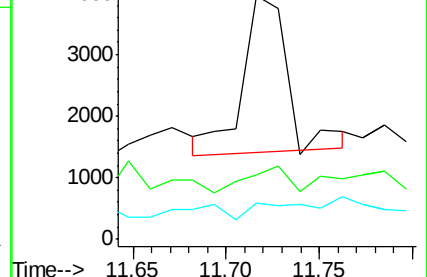
104 15.0 4.6 7.0#



Abundance Ion 149.00 (148.70 to 149.70): E

Ion 150.00 (149.70 to 150.70): E

Ion 104.00 (103.70 to 104.70): E



#74

Fluoranthene

Concen: 3.19 ng

RT: 12.36 min Scan# 916

Delta R.T. -0.01 min

Lab File: BF092178.D

Acq: 10 Jan 2017 13:33

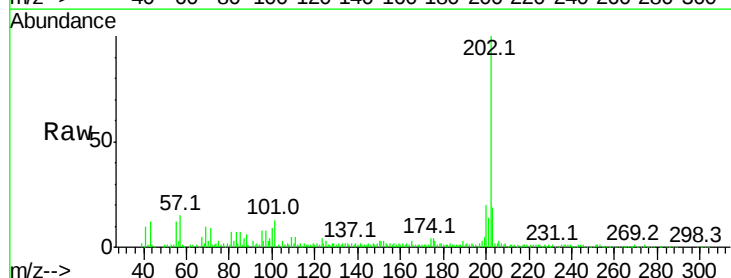
Tgt Ion:202 Resp: 134717

Ion Ratio Lower Upper

202 100

101 12.6 0.0 34.6

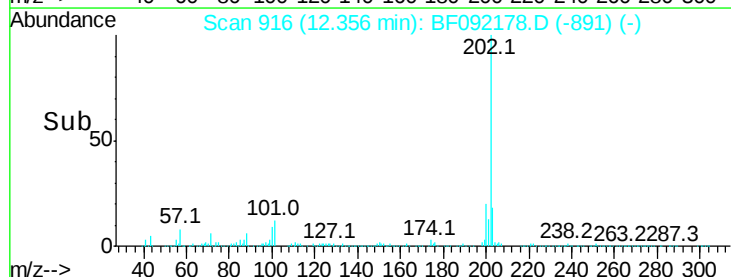
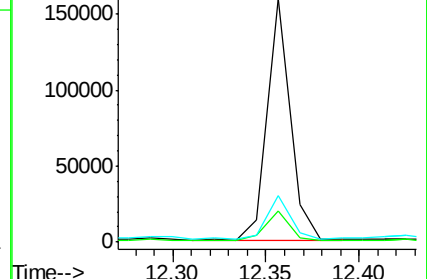
203 19.3 0.0 38.7

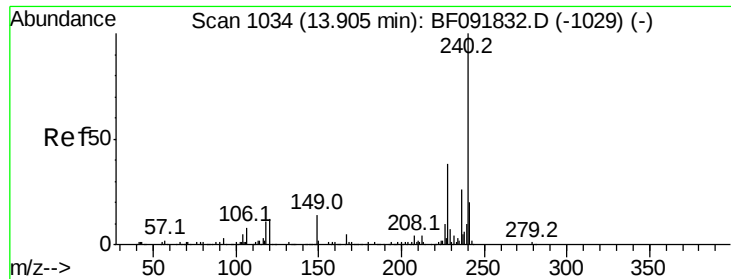


Abundance Ion 202.00 (201.70 to 202.70): E

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: 13.79 min Scan# 1041

Delta R.T. 0.00 min

Lab File: BF092178.D

Acq: 10 Jan 2017 13:33

Instrument :

BNA\_F

ClientSampleId :

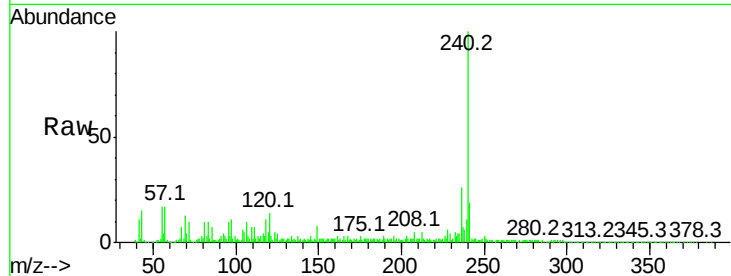
Tot Ion:240 Resp: 276938

Ion Ratio Lower Upper

240 100

120 13.6 12.9 19.3

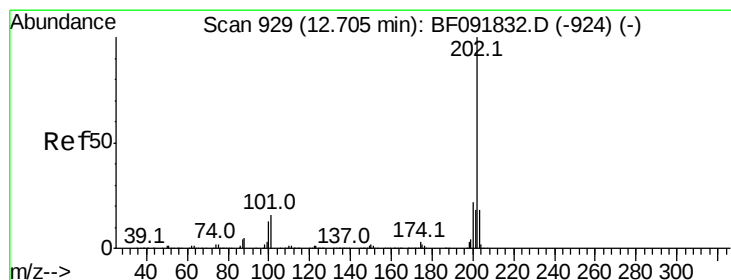
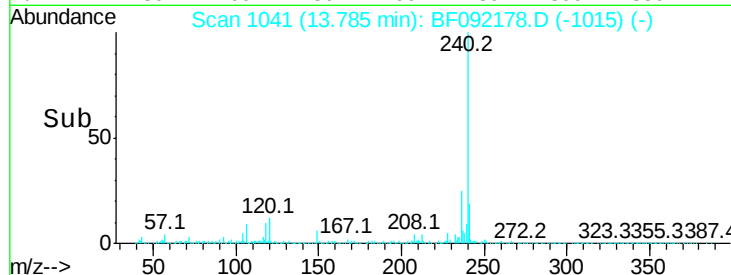
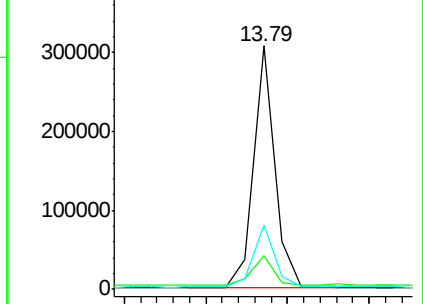
236 26.2 20.9 31.3



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: 6.39 ng

RT: 12.59 min Scan# 936

Delta R.T. 0.00 min

Lab File: BF092178.D

Acq: 10 Jan 2017 13:33

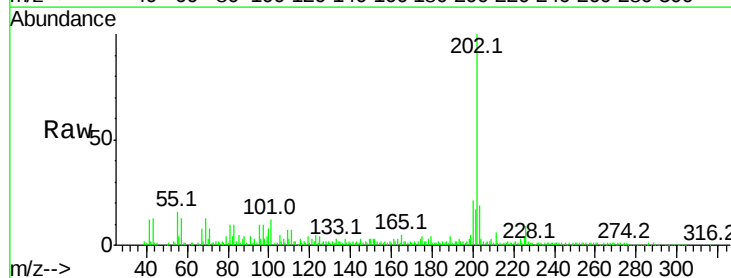
Tgt Ion:202 Resp: 129793

Ion Ratio Lower Upper

202 100

200 21.1 17.7 26.5

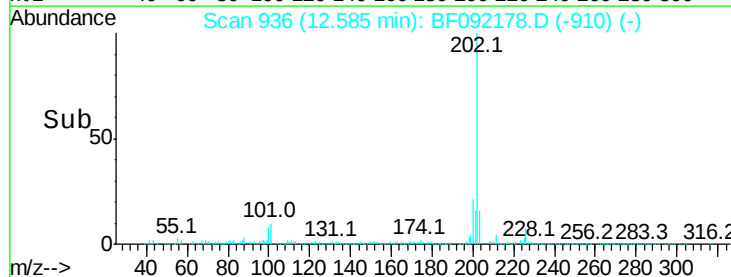
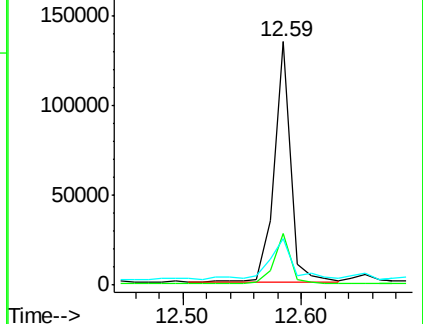
203 18.9 14.7 22.1

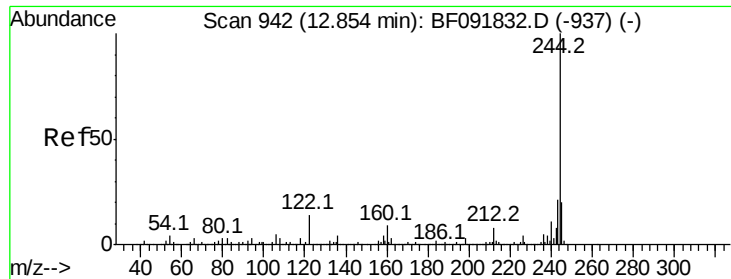


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 200.00 (199.70 to 200.70): E

Ion 203.00 (202.70 to 203.70): E

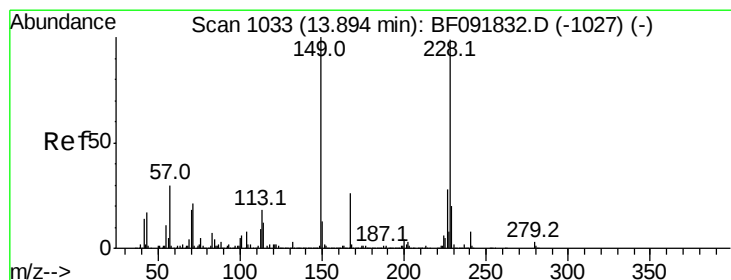
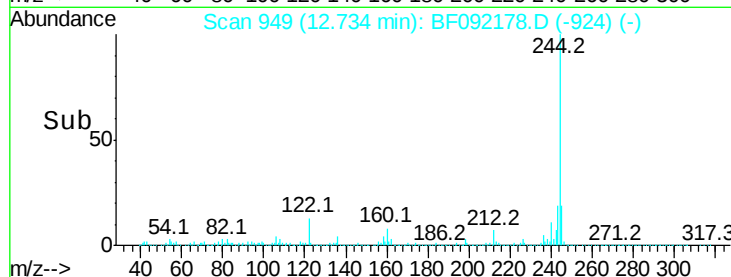
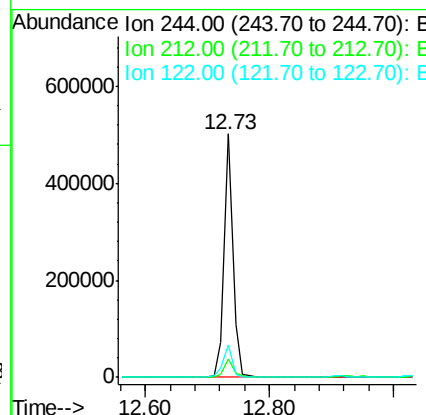
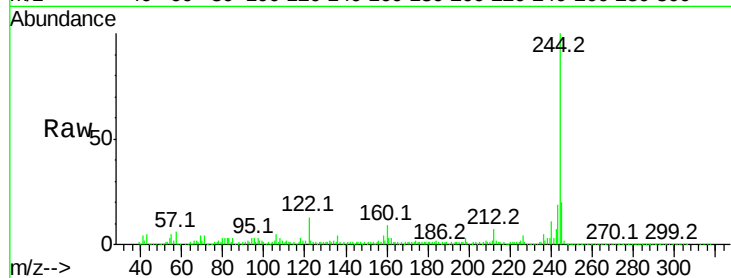




#78  
 Terphenyl-d14  
 Concen: 41.91 ng  
 RT: 12.73 min Scan# 949  
 Delta R.T. -0.01 min  
 Lab File: BF092178.D  
 Acq: 10 Jan 2017 13:33

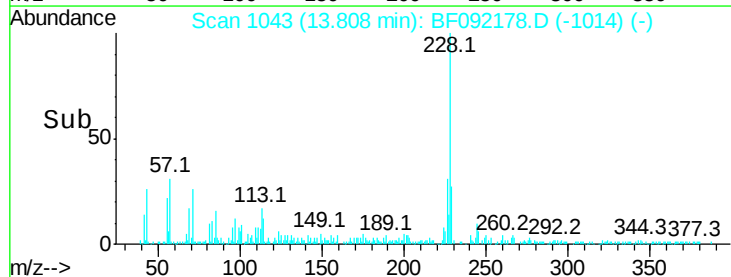
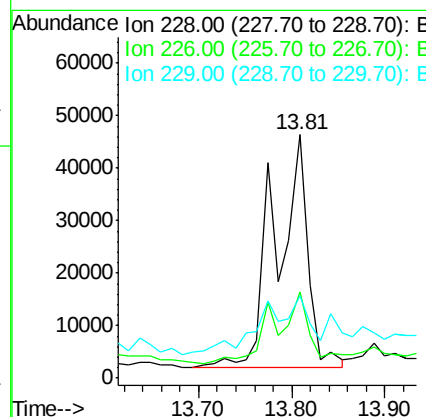
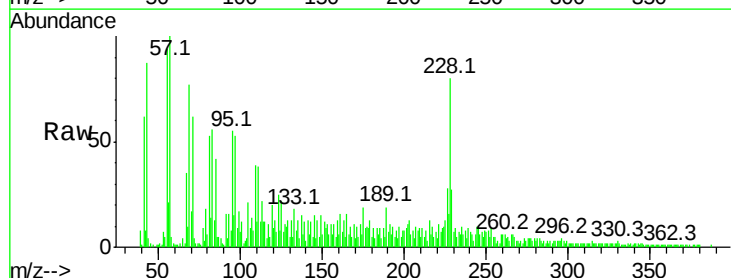
Instrument :  
 BNA\_F  
 ClientSampleId :

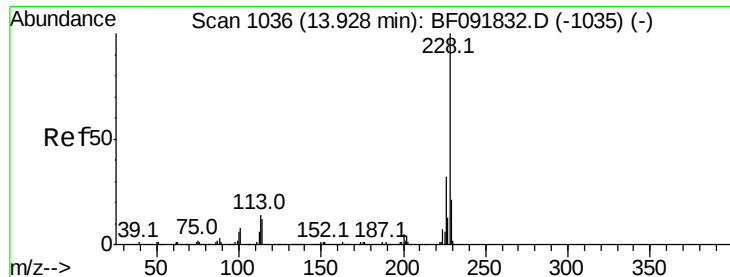
Tot Ion:244 Resp: 478553  
 Ion Ratio Lower Upper  
 244 100  
 212 7.3 6.2 9.2  
 122 13.2 11.4 17.2



#80  
 Benzo(a)anthracene  
 Concen: 6.85 ng  
 RT: 13.81 min Scan# 1043  
 Delta R.T. 0.03 min  
 Lab File: BF092178.D  
 Acq: 10 Jan 2017 13:33

Tgt Ion:228 Resp: 107044  
 Ion Ratio Lower Upper  
 228 100  
 226 35.5 22.4 33.6#  
 229 33.8 16.2 24.4#





#82

Chrysene

Concen: 6.84 ng

RT: 13.81 min Scan# 1043

Delta R.T. 0.00 min

Lab File: BF092178.D

Acq: 10 Jan 2017 13:33

Instrument :

BNA\_F

ClientSampleId :

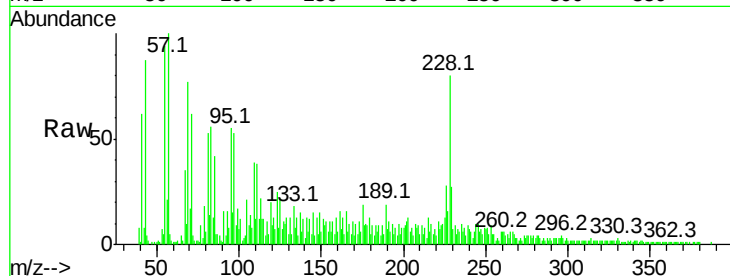
Tot Ion:228 Resp: 107200

Ion Ratio Lower Upper

228 100

226 35.5 25.4 38.0

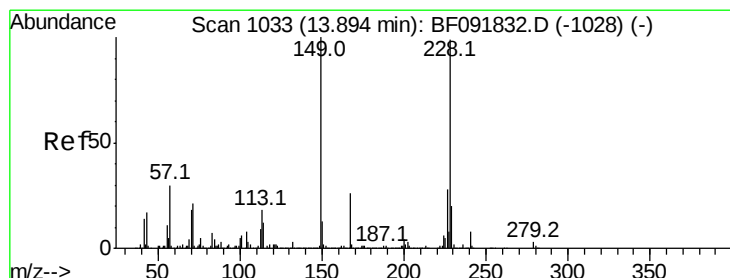
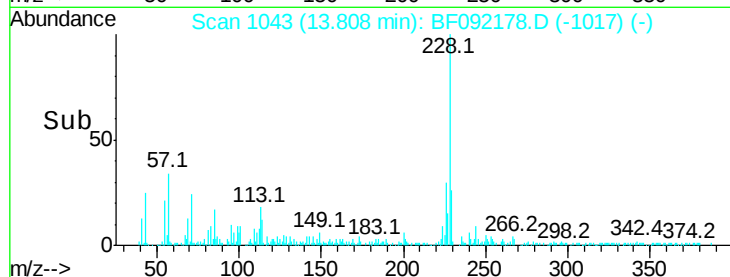
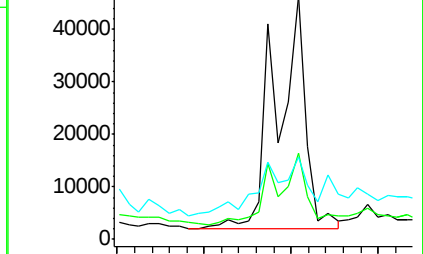
229 33.8 16.2 24.2#



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



#83

Bis(2-ethylhexyl)phthalate

Concen: 2.20 ng

RT: 13.79 min Scan# 1041

Delta R.T. 0.00 min

Lab File: BF092178.D

Acq: 10 Jan 2017 13:33

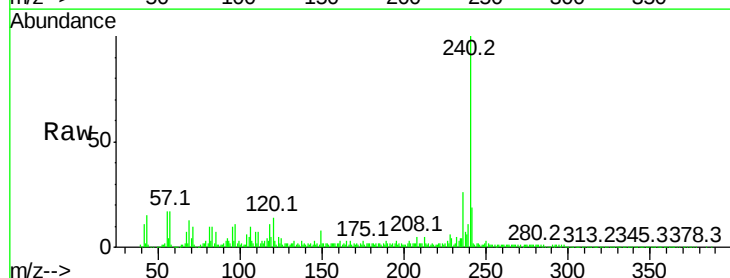
Tgt Ion:149 Resp: 23968

Ion Ratio Lower Upper

149 100

167 37.8 20.2 30.4#

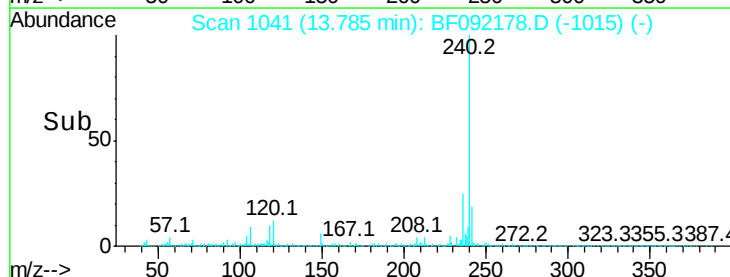
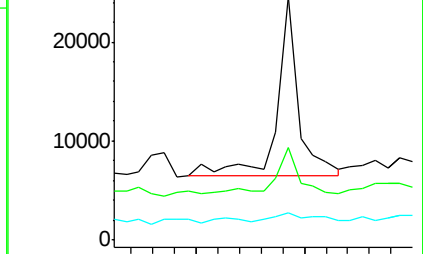
279 11.1 1.8 2.8#

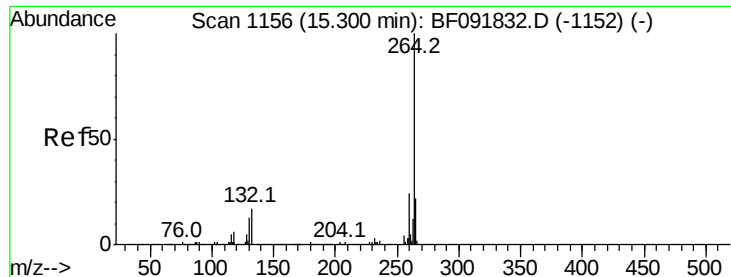


Abundance Ion 149.00 (148.70 to 149.70): E

Ion 167.00 (166.70 to 167.70): E

Ion 279.00 (278.70 to 279.70): E





#86

Pervlene-d12

Concen: 20.00 ng

RT: 15.17 min Scan# 1162

Delta R.T. 0.02 min

Lab File: BF092178.D

Acq: 10 Jan 2017 13:33

Instrument :

BNA\_F

ClientSampleId :

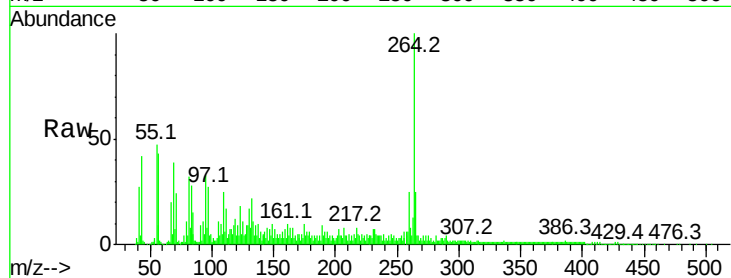
Tot Ion:264 Resp: 194919

Ion Ratio Lower Upper

264 100

260 25.3 19.2 28.8

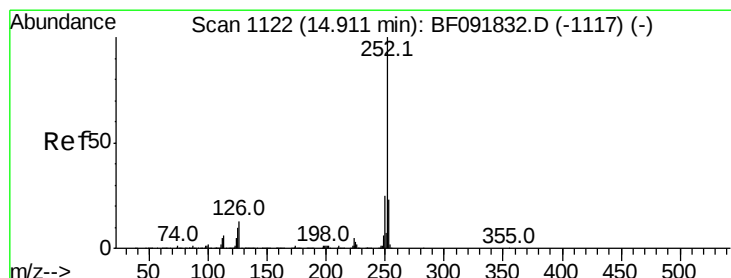
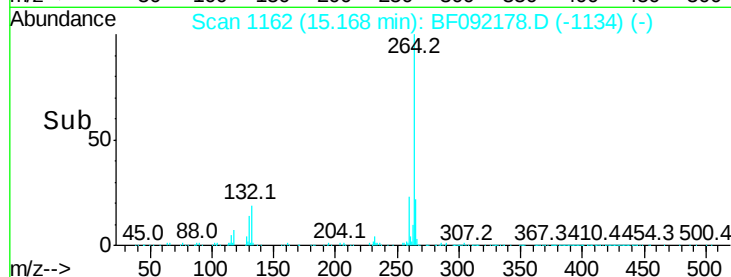
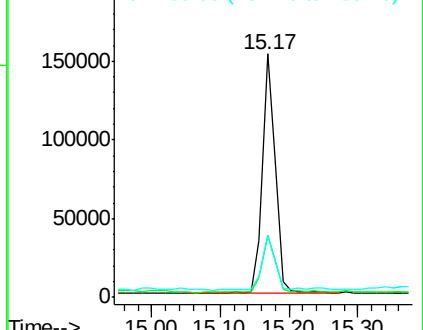
265 25.2 17.4 26.0



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: 4.02 ng

RT: 14.79 min Scan# 1129

Delta R.T. 0.01 min

Lab File: BF092178.D

Acq: 10 Jan 2017 13:33

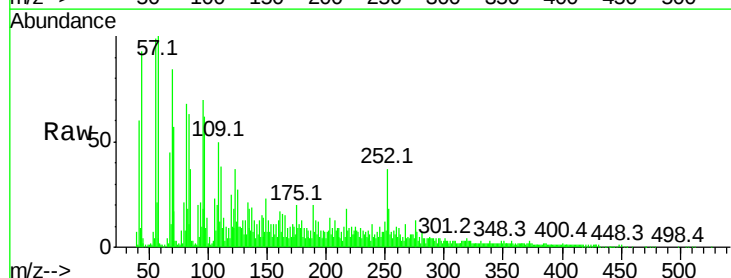
Tgt Ion:252 Resp: 48842

Ion Ratio Lower Upper

252 100

253 49.0 18.2 27.4#

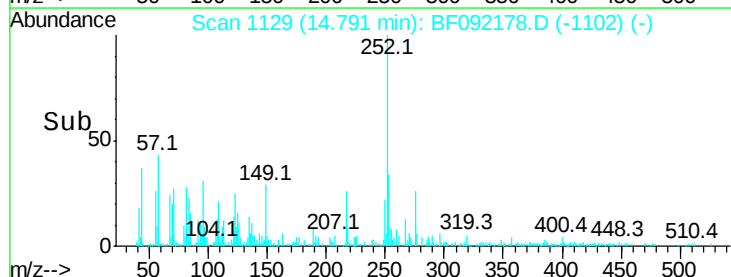
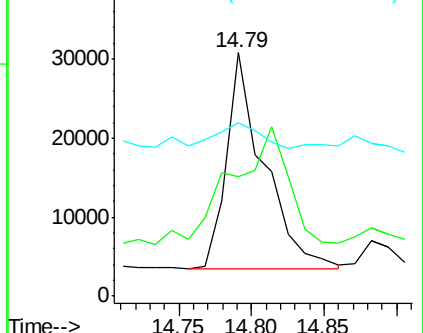
125 71.2 9.8 14.6#

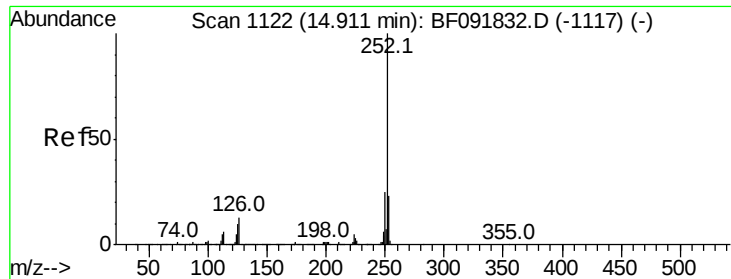


Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E

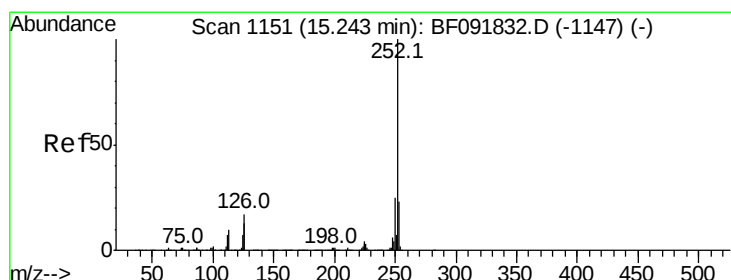
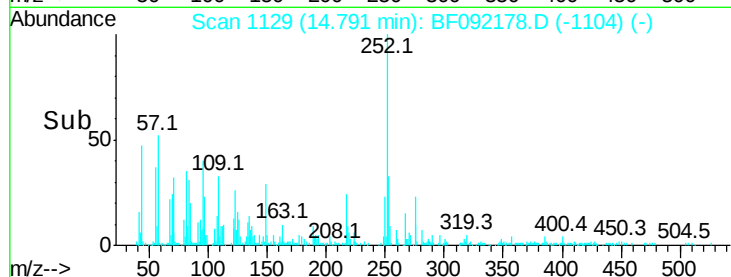
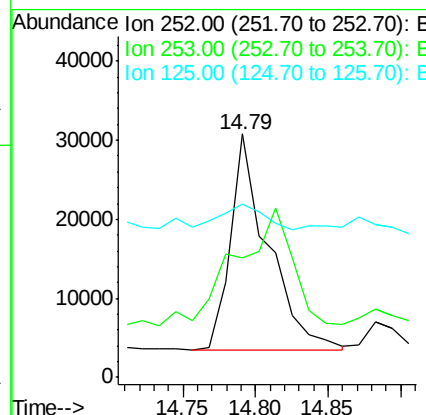
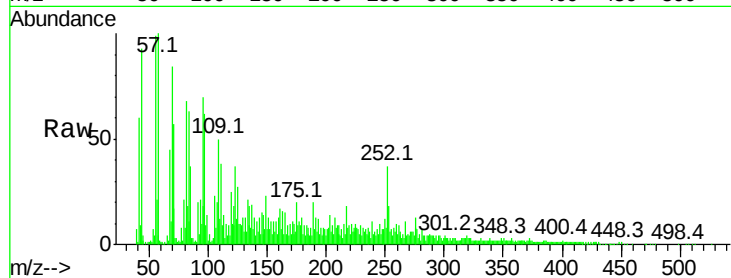




#88  
Benzo(k)fluoranthene  
Concen: 4.72 ng  
RT: 14.79 min Scan# 1129  
Delta R.T. -0.01 min  
Lab File: BF092178.D  
Acq: 10 Jan 2017 13:33

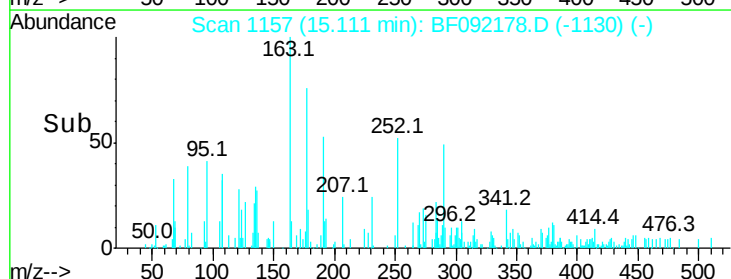
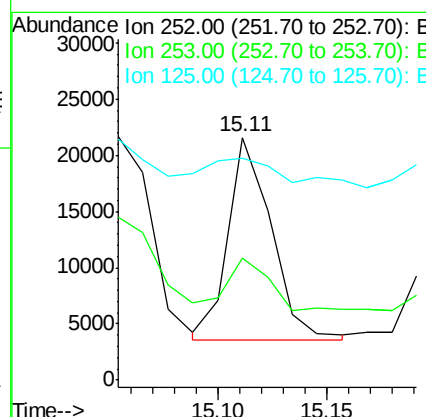
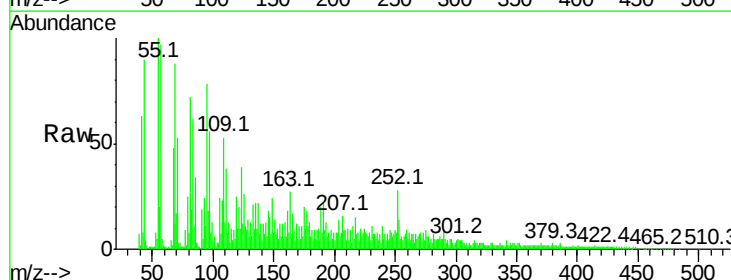
Instrument :  
BNA\_F  
ClientSampled :

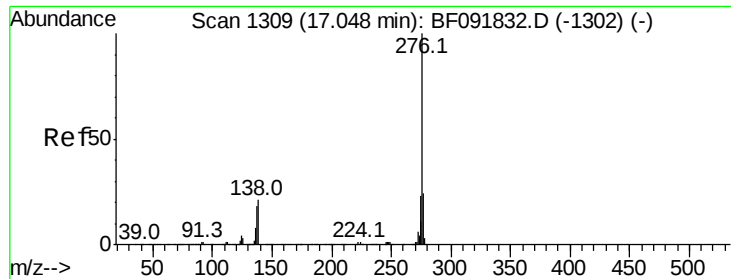
Tot Ion:252 Resp: 48842  
Ion Ratio Lower Upper  
252 100  
253 49.0 18.5 27.7#  
125 71.2 8.9 13.3#



#89  
Benzo(a)pyrene  
Concen: 2.29 ng  
RT: 15.11 min Scan# 1157  
Delta R.T. 0.01 min  
Lab File: BF092178.D  
Acq: 10 Jan 2017 13:33

Tgt Ion:252 Resp: 24696  
Ion Ratio Lower Upper  
252 100  
253 50.2 18.2 27.2#  
125 91.6 10.0 15.0#





#91

Benzo(a,h,i)perylene

Concen: 2.04 ng

RT: 16.85 min Scan# 1309

Delta R.T. 0.05 min

Lab File: BF092178.D

Acq: 10 Jan 2017 13:33

Instrument :

BNA\_F

ClientSampleId :

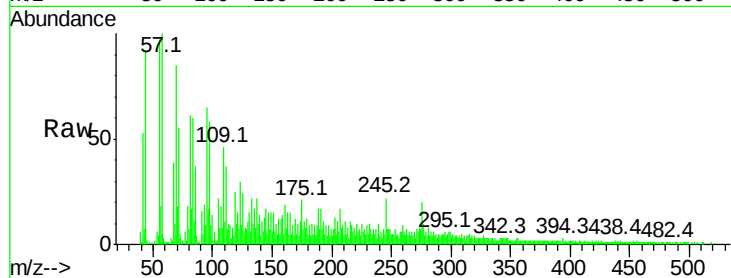
Tot Ion:276 Resp: 18748

Ion Ratio Lower Upper

276 100

277 50.3 19.2 28.8#

138 49.2 16.0 24.0#



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

