

Data Path : Z:\HPCHEM1\BNA F\DATA\BF042617\  
 Data File : BF094662.D  
 Acq On : 26 Apr 2017 22:11  
 Operator : SJ/MA  
 Sample : I2824-04 5X  
 Misc :  
 ALS Vial : 24 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 E2-W10-ESW

Quant Time: Apr 27 06:56:52 2017  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF041717.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Apr 17 14:59:23 2017  
 Response via : Initial Calibration

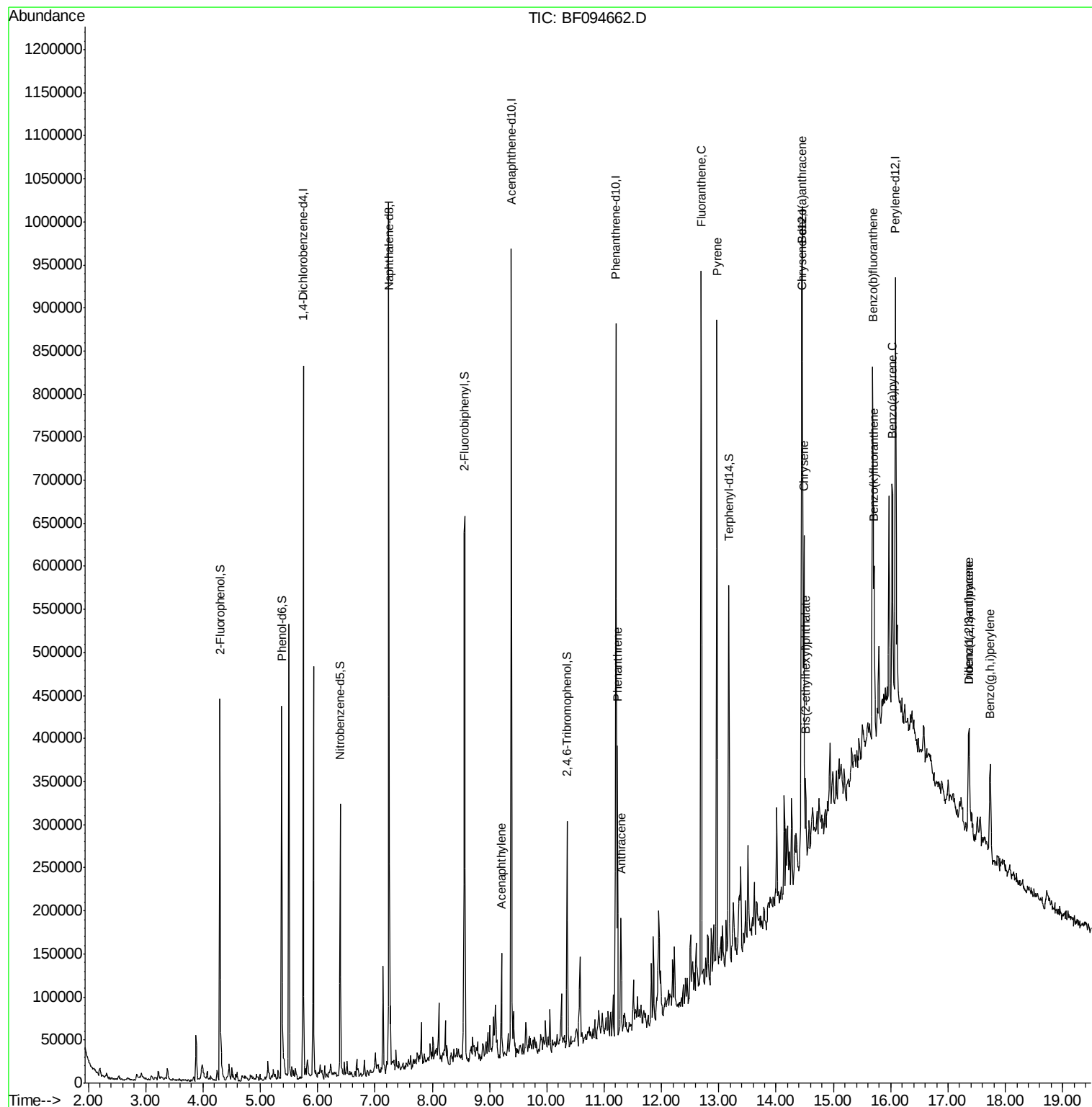
| Internal Standards             | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|--------------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4      | 5.75  | 152  | 122562   | 20.00 | ng    | -0.01    |
| 21) Naphthalene-d8             | 7.24  | 136  | 486820   | 20.00 | ng    | -0.02    |
| 38) Acenaphthene-d10           | 9.38  | 164  | 193083   | 20.00 | ng    | -0.02    |
| 63) Phenanthrene-d10           | 11.20 | 188  | 311655   | 20.00 | ng    | -0.02    |
| 75) Chrysene-d12               | 14.45 | 240  | 254945   | 20.00 | ng    | -0.01    |
| 86) Perylene-d12               | 16.08 | 264  | 203883   | 20.00 | ng    | 0.00     |
| System Monitoring Compounds    |       |      |          |       |       |          |
| 5) 2-Fluorophenol              | 4.30  | 112  | 150068   | 20.31 | ng    | 0.00     |
| 7) Phenol-d6                   | 5.37  | 99   | 184994   | 21.24 | ng    | -0.02    |
| 23) Nitrobenzene-d5            | 6.40  | 82   | 106928   | 13.56 | ng    | -0.02    |
| 41) 2,4,6-Tribromophenol       | 10.35 | 330  | 28403    | 18.81 | ng    | -0.02    |
| 44) 2-Fluorobiphenyl           | 8.57  | 172  | 220113   | 16.77 | ng    | -0.02    |
| 78) Terphenyl-d14              | 13.18 | 244  | 138916   | 14.56 | ng    | -0.02    |
| Target Compounds               |       |      |          |       |       | Qvalue   |
| 48) Acenaphthylene             | 9.21  | 152  | 54227    | 2.77  | ng    | 98       |
| 70) Phenanthrene               | 11.23 | 178  | 134450   | 7.66  | ng    | 97       |
| 71) Anthracene                 | 11.30 | 178  | 57896    | 3.19  | ng    | 97       |
| 74) Fluoranthene               | 12.69 | 202  | 380802   | 20.94 | ng    | 98       |
| 77) Pyrene                     | 12.97 | 202  | 335297   | 18.82 | ng    | 97       |
| 80) Benzo(a)anthracene         | 14.44 | 228  | 156684m  | 10.57 | ng    |          |
| 82) Chrysene                   | 14.48 | 228  | 171450   | 12.66 | ng    | 96       |
| 83) Bis(2-ethylhexyl)phthalate | 14.51 | 149  | 22007    | 2.10  | ng    | # 99     |
| 85) Indeno(1,2,3-cd)pyrene     | 17.36 | 276  | 72157    | 5.60  | ng    | 95       |
| 87) Benzo(b)fluoranthene       | 15.68 | 252  | 218344m  | 17.51 | ng    |          |
| 88) Benzo(k)fluoranthene       | 15.71 | 252  | 74739m   | 6.33  | ng    |          |
| 89) Benzo(a)pyrene             | 16.02 | 252  | 110125   | 9.49  | ng    | # 94     |
| 90) Dibenzo(a,h)anthracene     | 17.37 | 278  | 20782    | 2.16  | ng    | # 86     |
| 91) Benzo(g,h,i)perylene       | 17.74 | 276  | 73009    | 7.44  | ng    | 99       |

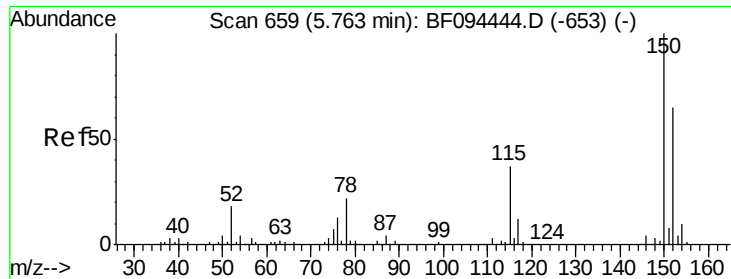
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\HPCHEM1\BNA F\DATA\BF042617\  
Data File : BF094662.D  
Acq On : 26 Apr 2017 22:11  
Operator : SJ/MA  
Sample : I2824-04 5X  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
E2-W10-ESW

Quant Time: Apr 27 06:56:52 2017  
Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF041717.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Apr 17 14:59:23 2017  
Response via : Initial Calibration



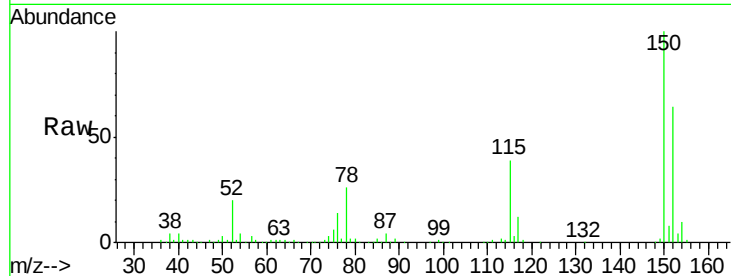


#1

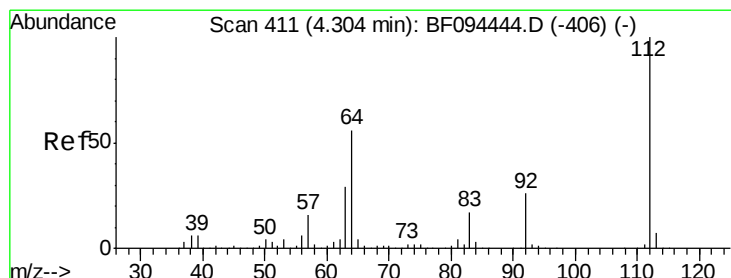
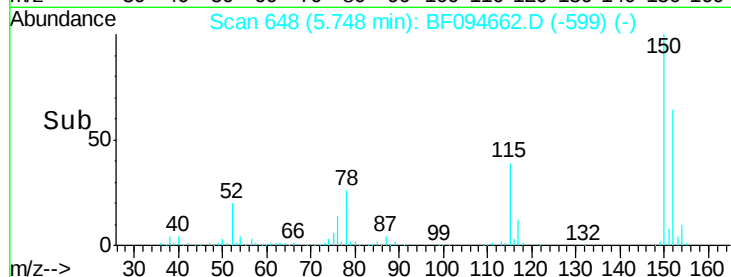
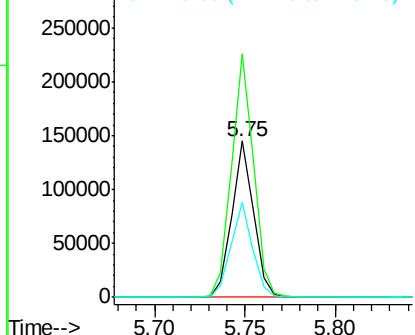
1,4-Dichlorobenzene-d4  
 Concen: 20.00 ng  
 RT: 5.75 min Scan# 648  
 Delta R.T. -0.01 min  
 Lab File: BF094662.D  
 Acq: 26 Apr 2017 22:11

Instrument :  
 BNA\_F  
 ClientSampleId :  
 E2-W10-ESW

Tot Ion:152 Resp: 122562  
 Ion Ratio Lower Upper  
 152 100  
 150 155.8 126.2 189.2  
 115 61.2 52.2 78.2



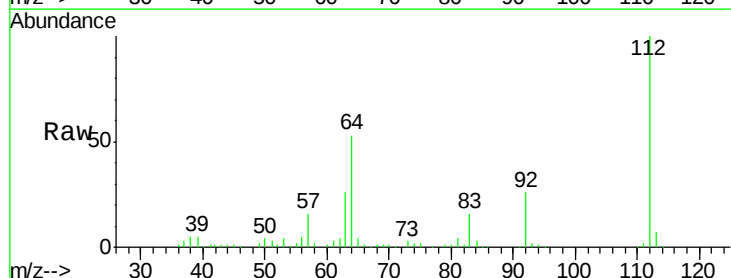
Abundance Ion 152.00 (151.70 to 152.70): E  
 Ion 150.00 (149.70 to 150.70): E  
 Ion 115.00 (114.70 to 115.70): E



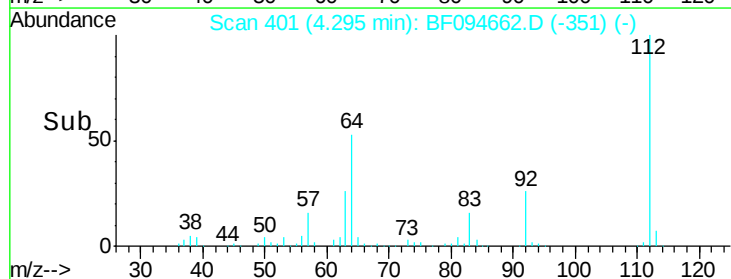
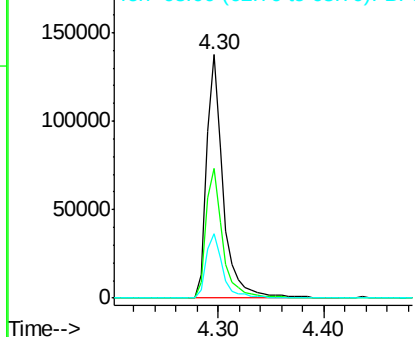
#5

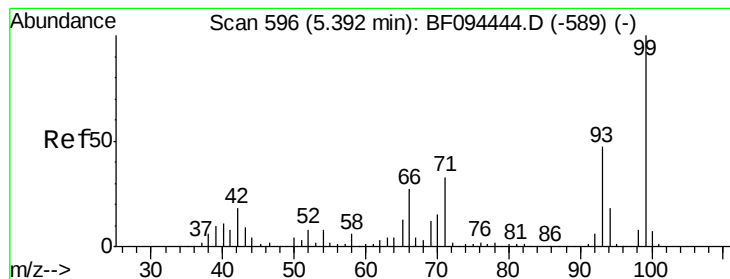
2-Fluorophenol  
 Concen: 20.31 ng  
 RT: 4.30 min Scan# 401  
 Delta R.T. -0.01 min  
 Lab File: BF094662.D  
 Acq: 26 Apr 2017 22:11

Tgt Ion:112 Resp: 150068  
 Ion Ratio Lower Upper  
 112 100  
 64 53.2 46.0 69.0  
 63 26.5 23.4 35.0



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: 21.24 ng

RT: 5.37 min Scan# 584

Delta R.T. -0.02 min

Lab File: BF094662.D

Acq: 26 Apr 2017 22:11

Instrument :

BNA\_F

ClientSampleId :

E2-W10-ESW

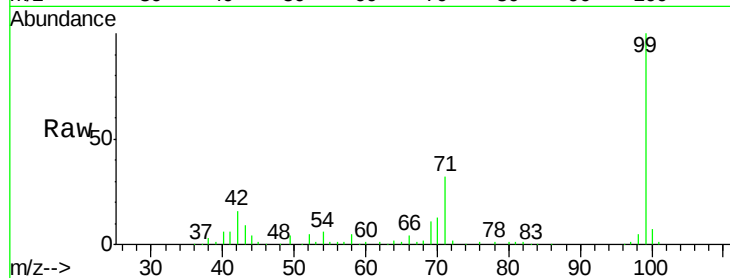
Tot Ion: 99 Resp: 184994

Ion Ratio Lower Upper

99 100

42 16.4 13.5 20.3

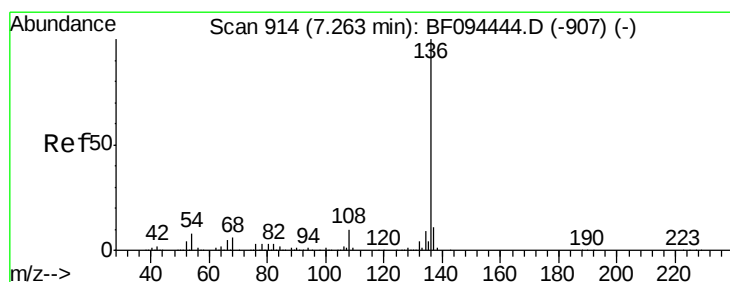
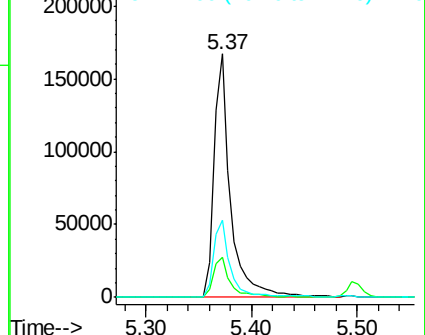
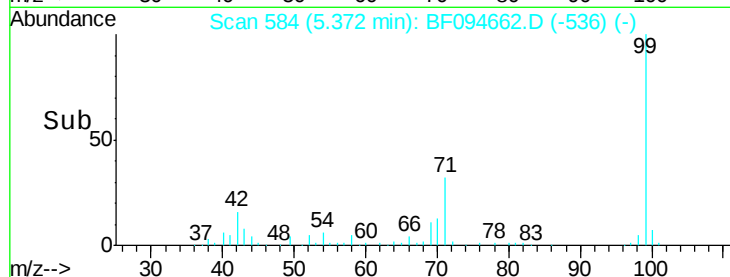
71 31.9 24.5 36.7



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: 7.24 min Scan# 902

Delta R.T. -0.02 min

Lab File: BF094662.D

Acq: 26 Apr 2017 22:11

Tgt Ion: 136 Resp: 486820

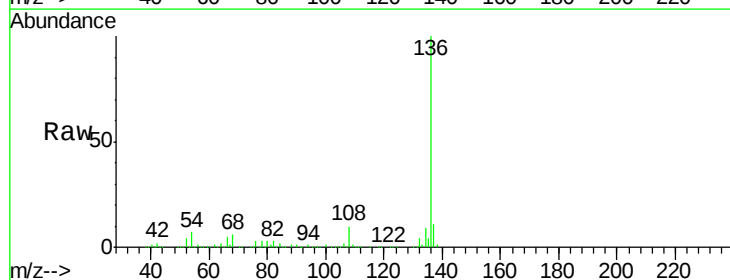
Ion Ratio Lower Upper

136 100

137 11.1 8.5 12.7

54 7.4 4.9 7.3#

68 5.8 4.1 6.1

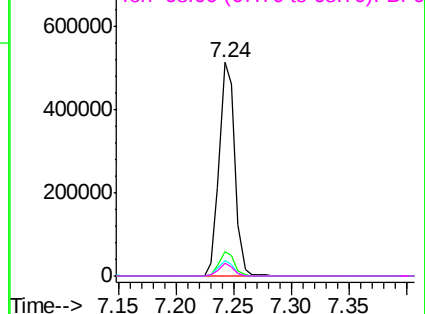
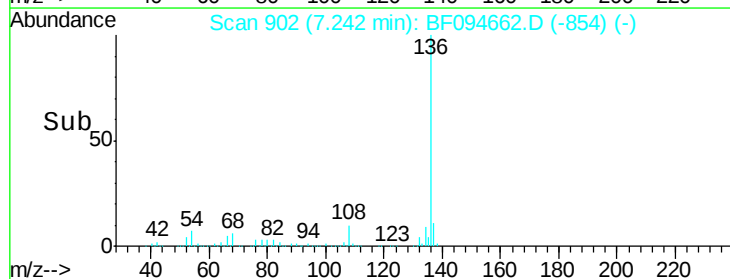


Abundance Ion 136.00 (135.70 to 136.70): E

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

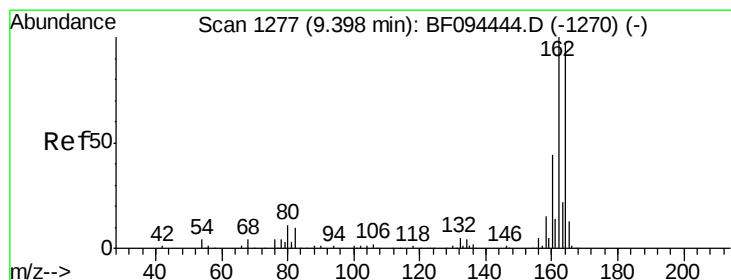
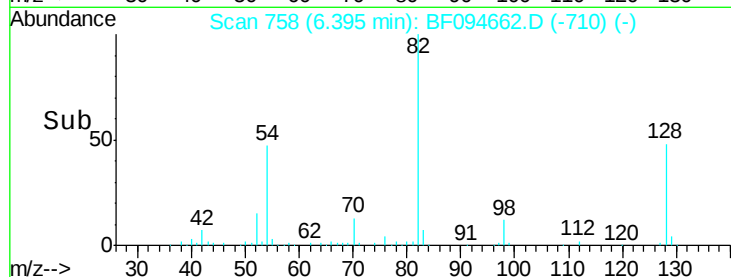
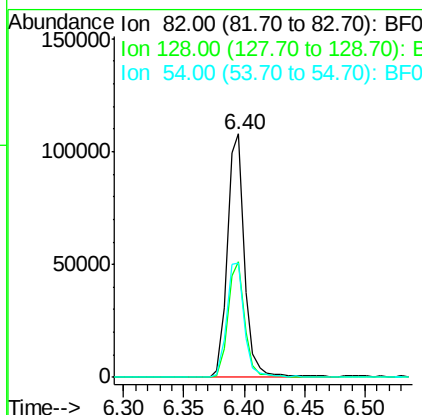
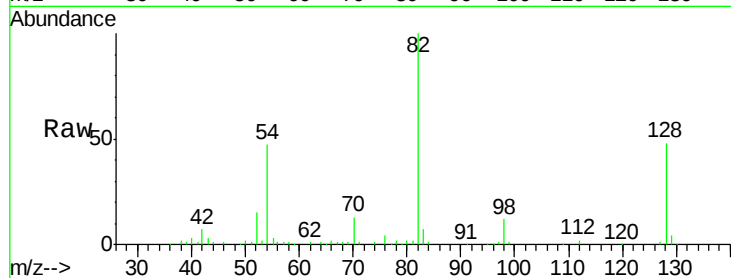




#23  
 Nitrobenzene-d5  
 Concen: 13.56 ng  
 RT: 6.40 min Scan# 758  
 Delta R.T. -0.02 min  
 Lab File: BF094662.D  
 Acq: 26 Apr 2017 22:11

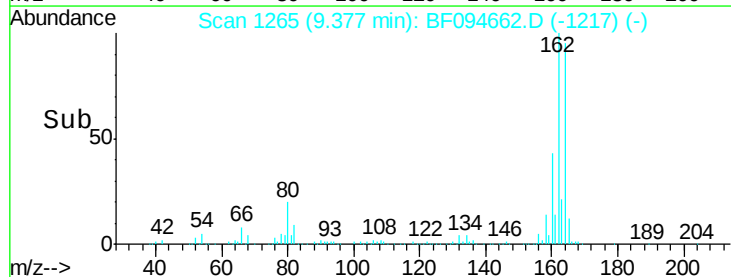
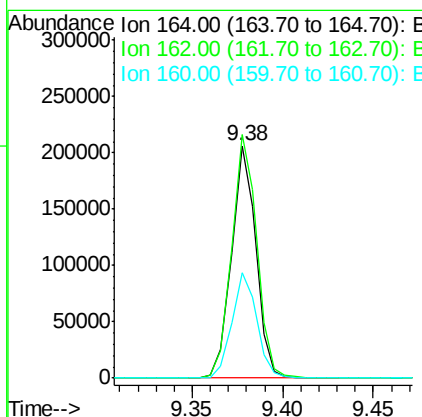
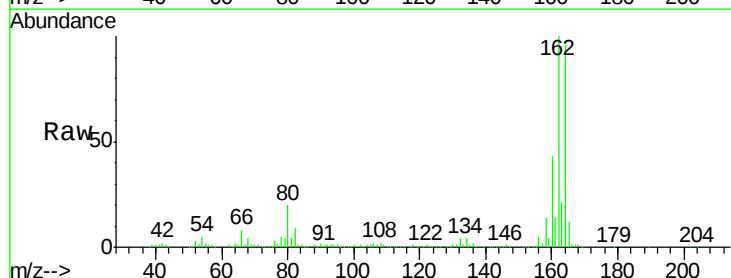
Instrument :  
 BNA\_F  
 ClientSampleId :  
 E2-W10-ESW

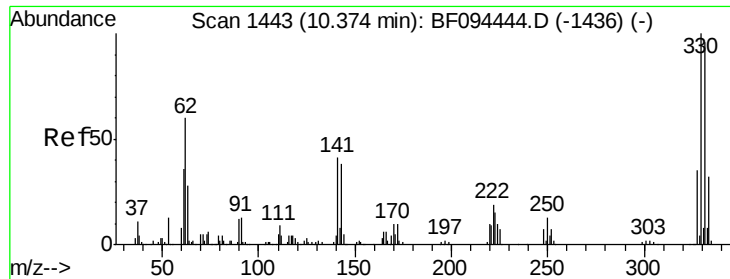
| Tot Ion   | 82    | Resp  | 106928 |
|-----------|-------|-------|--------|
| Ion Ratio | Lower | Upper |        |
| 82        | 100   |       |        |
| 128       | 47.6  | 34.0  | 51.0   |
| 54        | 47.0  | 42.2  | 63.2   |



#38  
 Acenaphthene-d10  
 Concen: 20.00 ng  
 RT: 9.38 min Scan# 1265  
 Delta R.T. -0.02 min  
 Lab File: BF094662.D  
 Acq: 26 Apr 2017 22:11

| Tgt Ion   | 164   | Resp  | 193083 |
|-----------|-------|-------|--------|
| Ion Ratio | Lower | Upper |        |
| 164       | 100   |       |        |
| 162       | 104.6 | 82.6  | 123.8  |
| 160       | 45.1  | 36.2  | 54.2   |

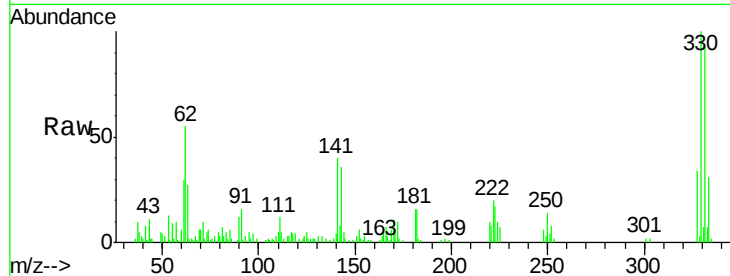




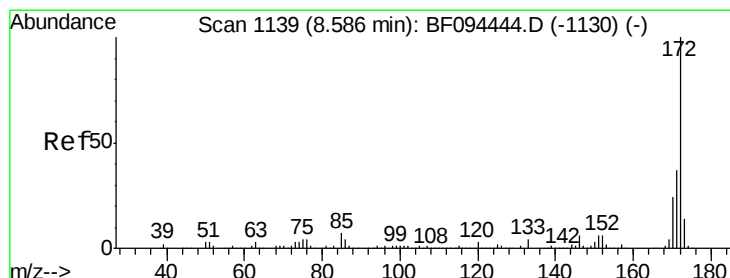
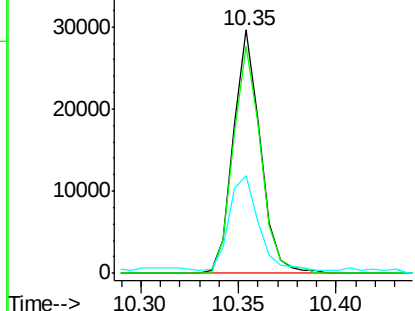
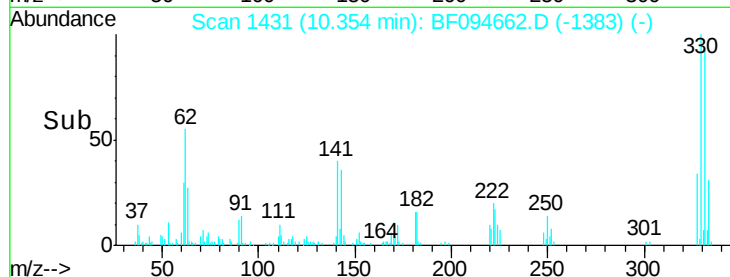
#41  
 2,4,6-Tribromophenol  
 Concen: 18.81 ng  
 RT: 10.35 min Scan# 1431  
 Delta R.T. -0.02 min  
 Lab File: BF094662.D  
 Acq: 26 Apr 2017 22:11

Instrument :  
 BNA\_F  
 ClientSampleId :  
 E2-W10-ESW

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 330     | 100   |       |       |
| 332     | 94.8  | 76.6  | 115.0 |
| 141     | 45.0  | 31.4  | 47.2  |

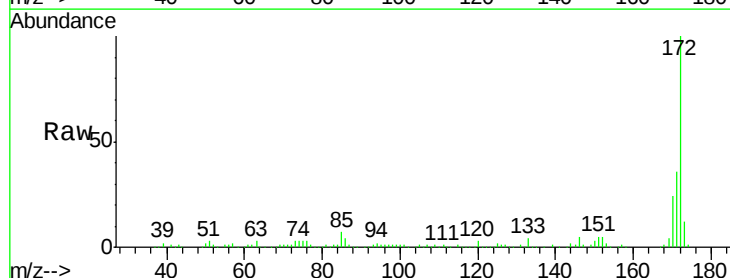


Abundance Ion 329.80 (329.50 to 330.50): E  
 Ion 331.80 (331.50 to 332.50): E  
 Ion 141.00 (140.70 to 141.70): E

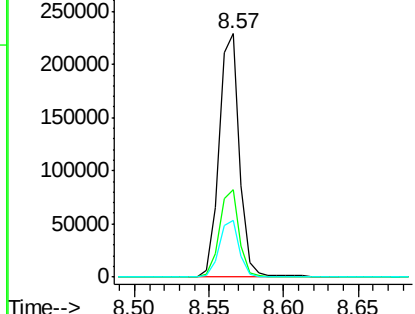
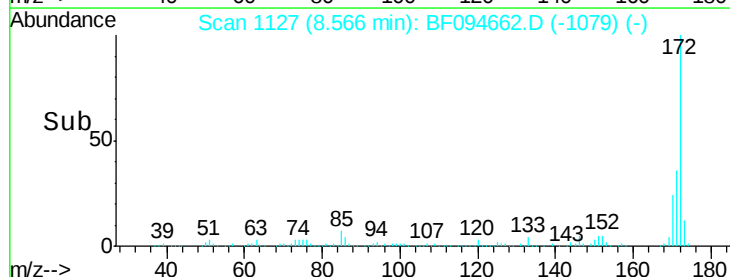


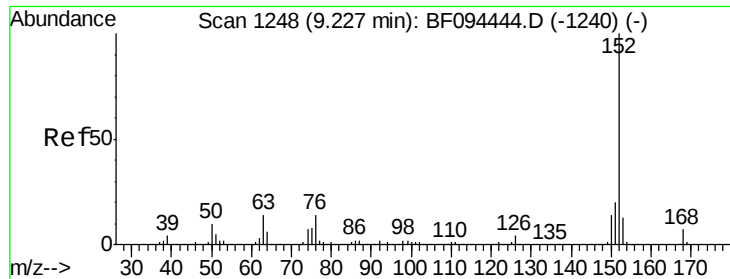
#44  
 2-Fluorobiphenyl  
 Concen: 16.77 ng  
 RT: 8.57 min Scan# 1127  
 Delta R.T. -0.02 min  
 Lab File: BF094662.D  
 Acq: 26 Apr 2017 22:11

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 35.9  | 29.6  | 44.4  |
| 170     | 23.5  | 19.8  | 29.8  |



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





#48

Acenaphthylene

Concen: 2.77 ng

RT: 9.21 min Scan# 1236

Delta R.T. -0.02 min

Lab File: BF094662.D

Acq: 26 Apr 2017 22:11

Instrument :

BNA\_F

ClientSampleId :

E2-W10-ESW

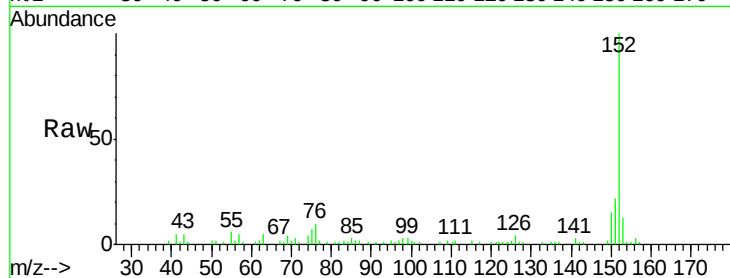
Tot Ion:152 Resp: 54227

Ion Ratio Lower Upper

152 100

151 21.7 16.8 25.2

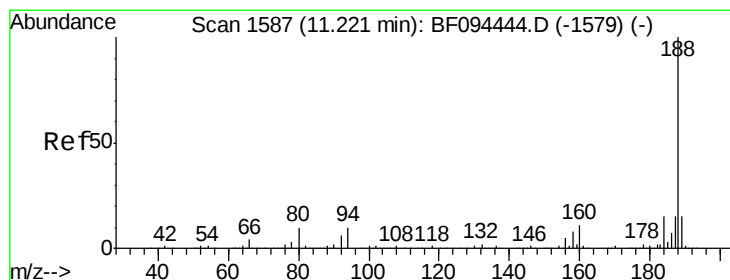
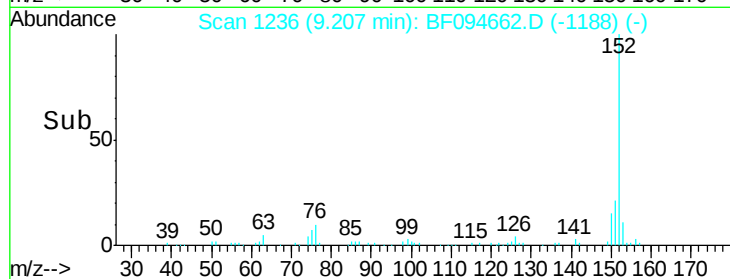
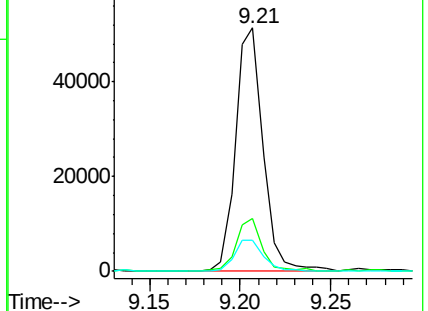
153 12.7 10.8 16.2



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



#63

Phenanthrene-d10

Concen: 20.00 ng

RT: 11.20 min Scan# 1575

Delta R.T. -0.02 min

Lab File: BF094662.D

Acq: 26 Apr 2017 22:11

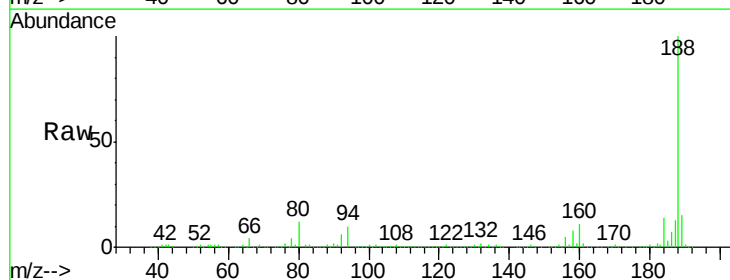
Tgt Ion:188 Resp: 311655

Ion Ratio Lower Upper

188 100

94 10.5 9.4 14.2

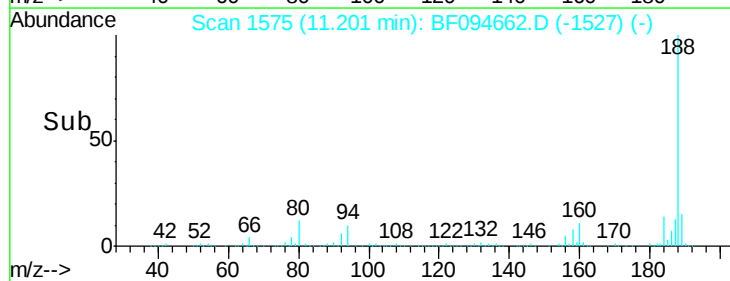
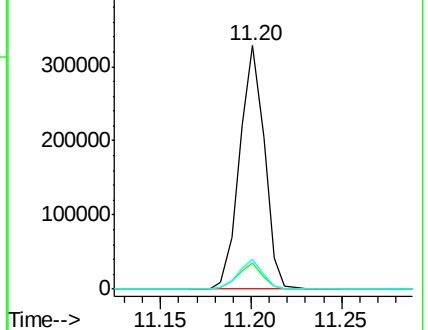
80 12.0 10.2 15.2

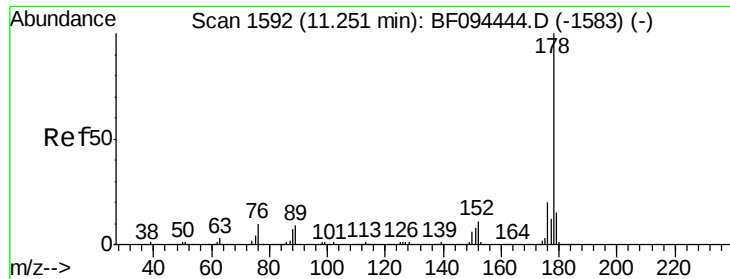


Abundance Ion 188.00 (187.70 to 188.70): E

Ion 94.00 (93.70 to 94.70): BF0

Ion 80.00 (79.70 to 80.70): BF0





#70

Phenanthrene

Concen: 7.66 ng

RT: 11.23 min Scan# 1580

Delta R.T. -0.02 min

Lab File: BF094662.D

Acq: 26 Apr 2017 22:11

Instrument :

BNA\_F

ClientSampleId :

E2-W10-ESW

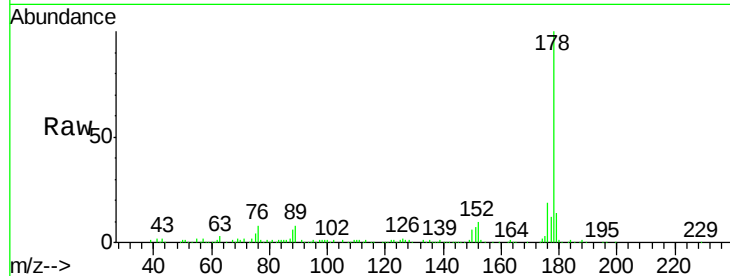
Tot Ion:178 Resp: 134450

Ion Ratio Lower Upper

178 100

176 18.7 16.2 24.4

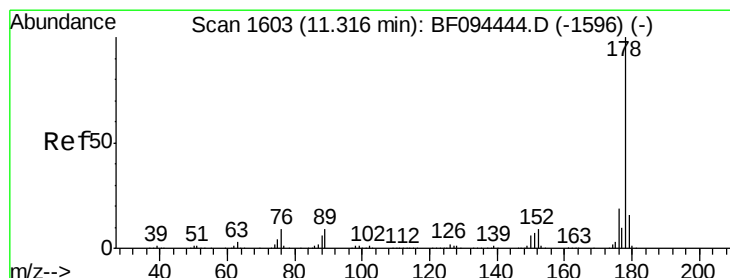
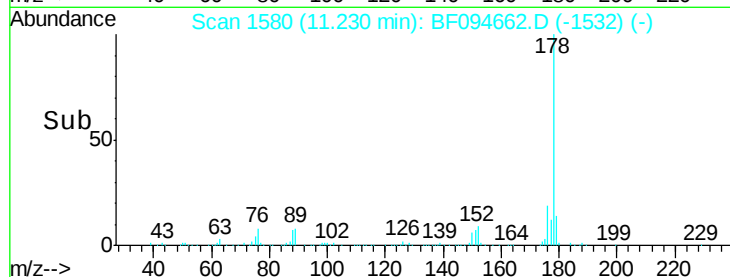
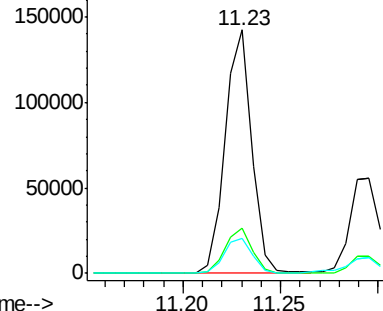
179 14.5 12.6 19.0



Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E



#71

Anthracene

Concen: 3.19 ng

RT: 11.30 min Scan# 1591

Delta R.T. -0.02 min

Lab File: BF094662.D

Acq: 26 Apr 2017 22:11

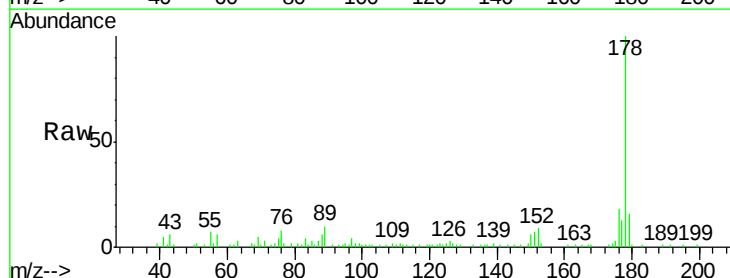
Tgt Ion:178 Resp: 57896

Ion Ratio Lower Upper

178 100

176 17.7 15.8 23.8

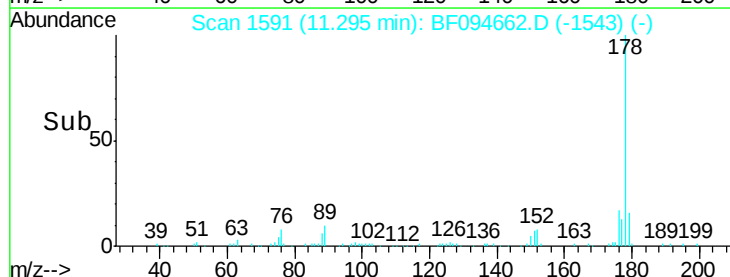
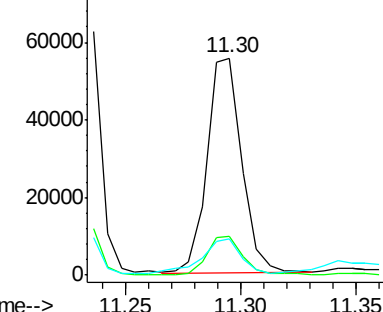
179 16.5 12.7 19.1

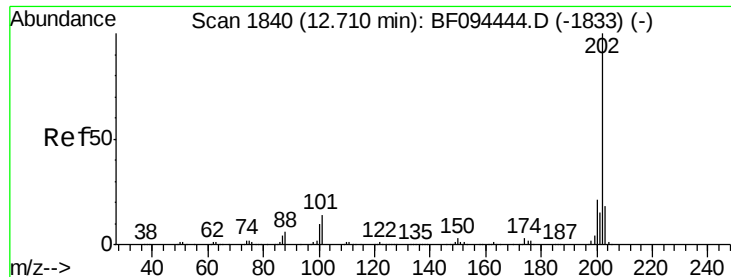


Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E





#74

Fluoranthene

Concen: 20.94 ng

RT: 12.69 min Scan# 1829

Delta R.T. -0.01 min

Lab File: BF094662.D

Acq: 26 Apr 2017 22:11

Instrument :

BNA\_F

ClientSampleId :

E2-W10-ESW

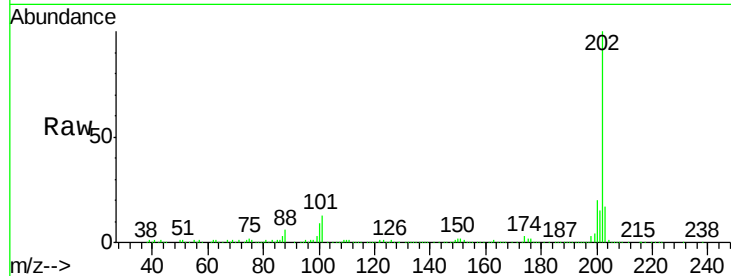
Tot Ion:202 Resp: 380802

Ion Ratio Lower Upper

202 100

101 12.5 0.0 33.2

203 17.2 0.0 38.1

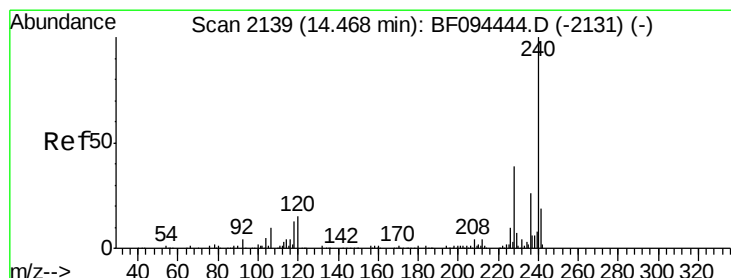
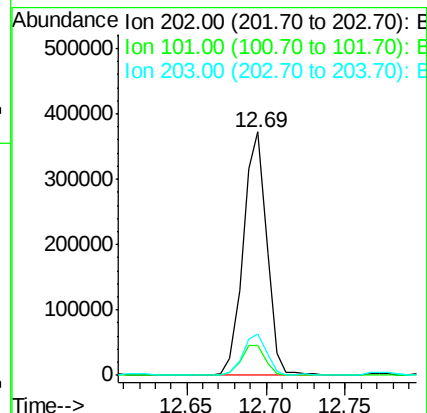
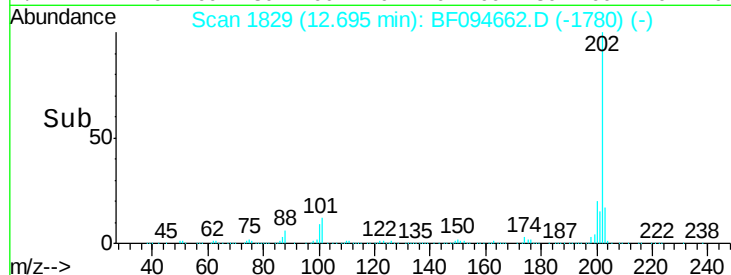


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 101.00 (100.70 to 101.70): E

Ion 203.00 (202.70 to 203.70): E

12.69



#75

Chrysene-d12

Concen: 20.00 ng

RT: 14.45 min Scan# 2128

Delta R.T. -0.01 min

Lab File: BF094662.D

Acq: 26 Apr 2017 22:11

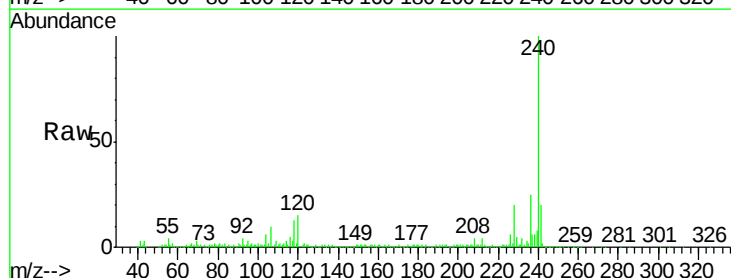
Tgt Ion:240 Resp: 254945

Ion Ratio Lower Upper

240 100

120 15.2 5.8 8.8#

236 24.8 20.5 30.7

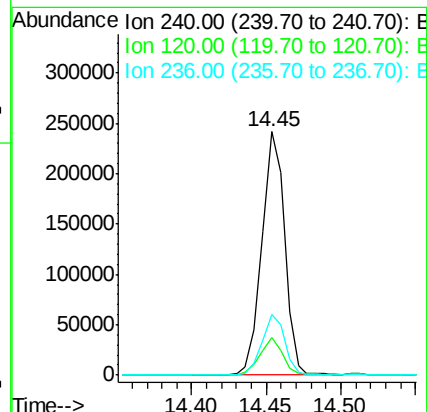
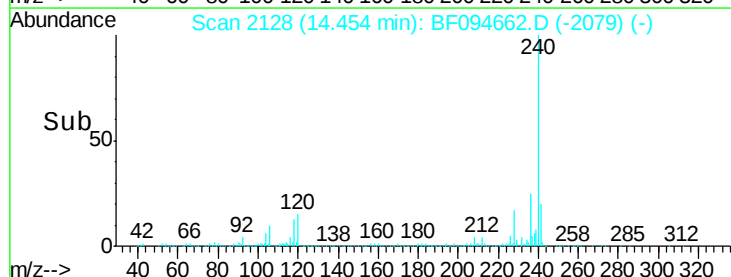


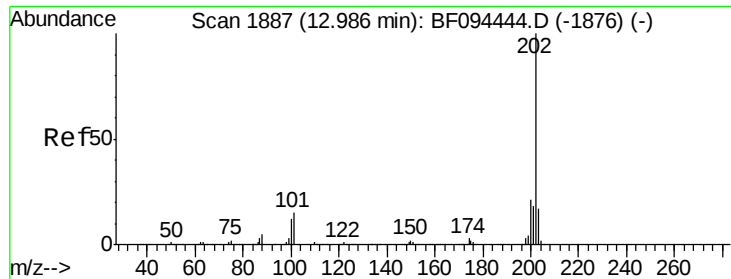
Abundance Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E

14.45





#77

Pvrene

Concen: 18.82 ng

RT: 12.97 min Scan# 1875

Delta R.T. -0.02 min

Lab File: BF094662.D

Acq: 26 Apr 2017 22:11

Instrument :

BNA\_F

ClientSampleId :

E2-W10-ESW

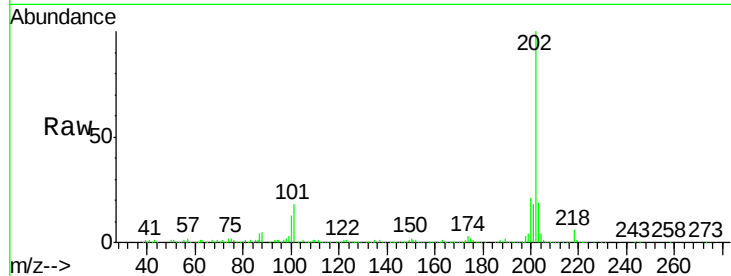
Tot Ion:202 Resp: 335297

Ion Ratio Lower Upper

202 100

200 20.6 17.6 26.4

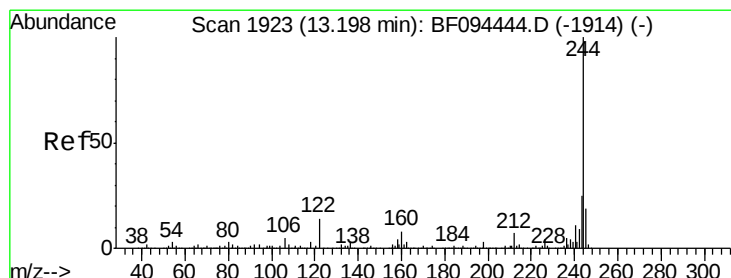
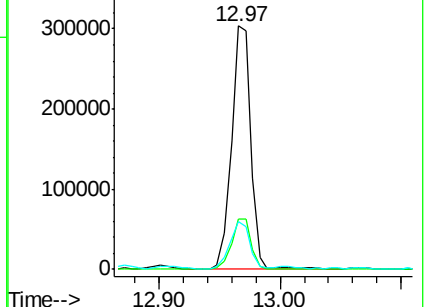
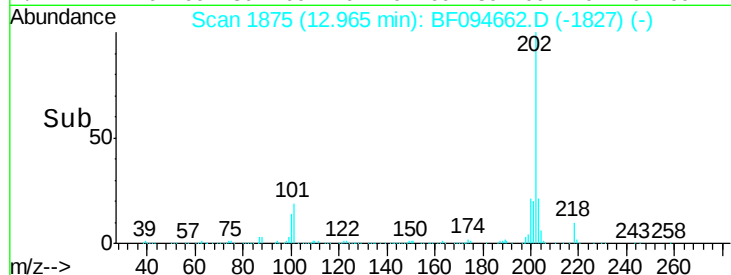
203 19.4 14.4 21.6



Abundance Ion 202.00 (201.70 to 202.70): E

Ion 200.00 (199.70 to 200.70): E

Ion 203.00 (202.70 to 203.70): E



#78

Terphenyl-d14

Concen: 14.56 ng

RT: 13.18 min Scan# 1911

Delta R.T. -0.02 min

Lab File: BF094662.D

Acq: 26 Apr 2017 22:11

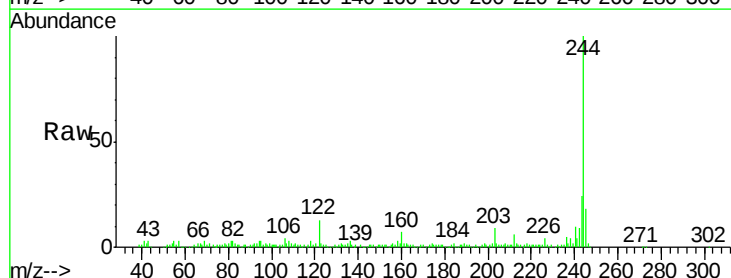
Tgt Ion:244 Resp: 138916

Ion Ratio Lower Upper

244 100

212 6.3 6.0 9.0

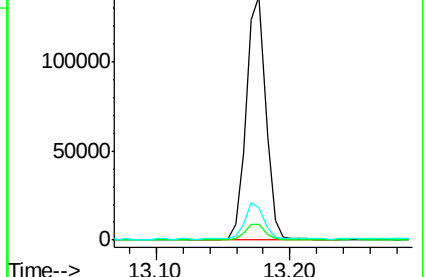
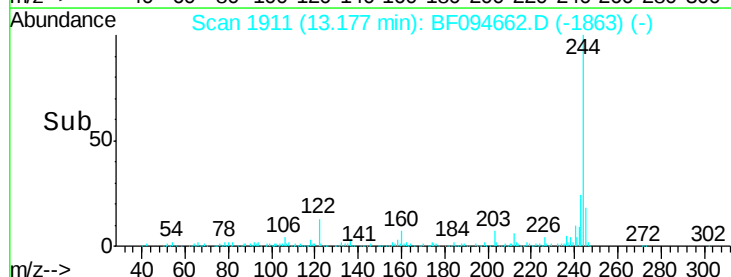
122 13.2 10.3 15.5

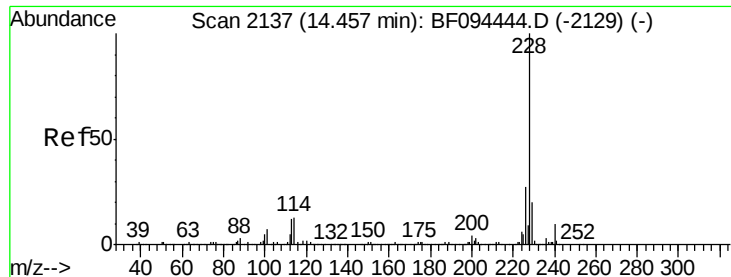


Abundance Ion 244.00 (243.70 to 244.70): E

Ion 212.00 (211.70 to 212.70): E

Ion 122.00 (121.70 to 122.70): E





#80

Benzo(a)anthracene

Concen: 10.57 ng/mL

RT: 14.44 min Scan# 2126

Delta R.T. -0.01 min

Lab File: BF094662.D

Acq: 26 Apr 2017 22:11

Instrument :

BNA\_F

ClientSampleId :

E2-W10-ESW

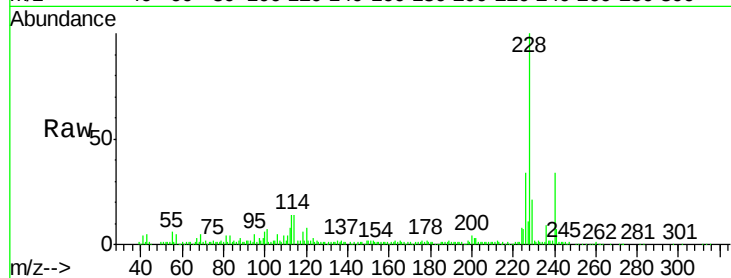
Tot Ion:228 Resp: 156684

Ion Ratio Lower Upper

228 100

226 33.9 22.6 33.8#

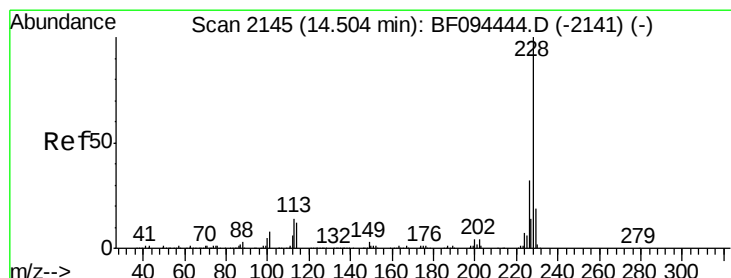
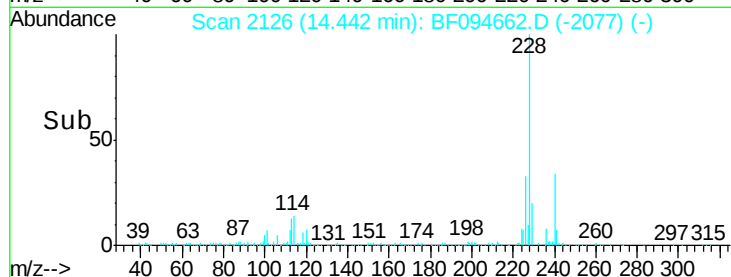
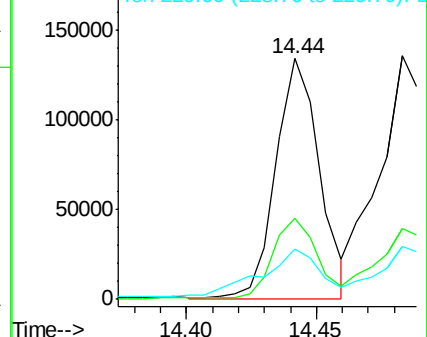
229 20.9 16.3 24.5



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: 12.66 ng/mL

RT: 14.48 min Scan# 2133

Delta R.T. -0.02 min

Lab File: BF094662.D

Acq: 26 Apr 2017 22:11

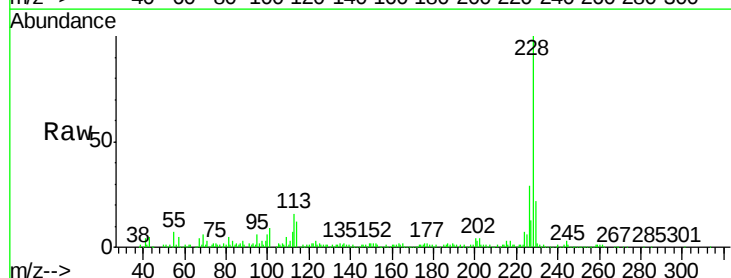
Tgt Ion:228 Resp: 171450

Ion Ratio Lower Upper

228 100

226 29.3 24.9 37.3

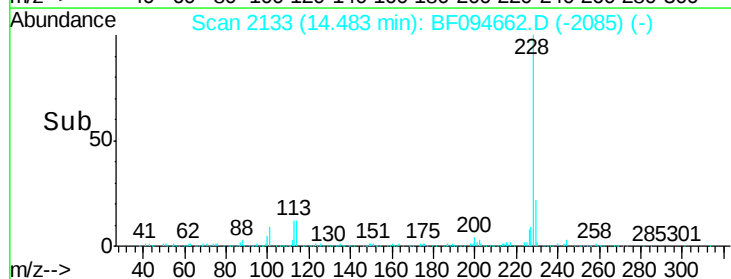
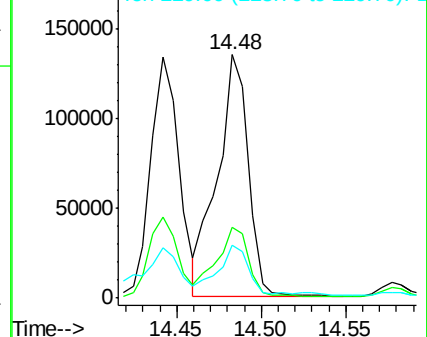
229 21.9 15.8 23.6

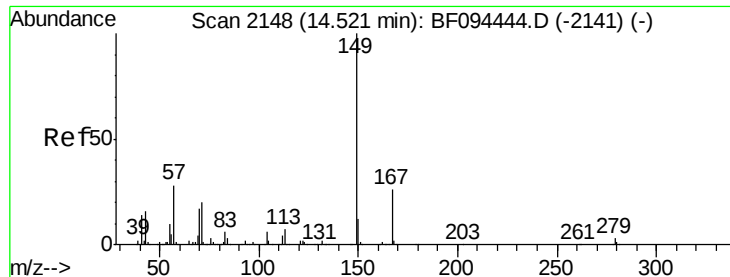


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E

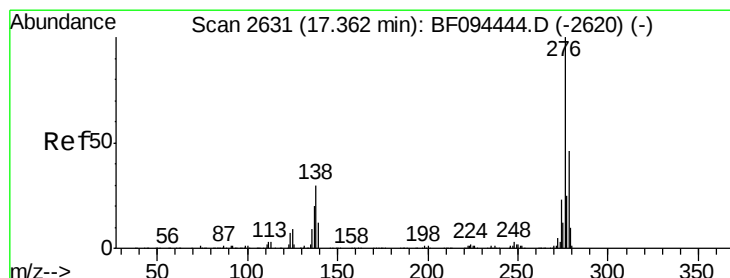
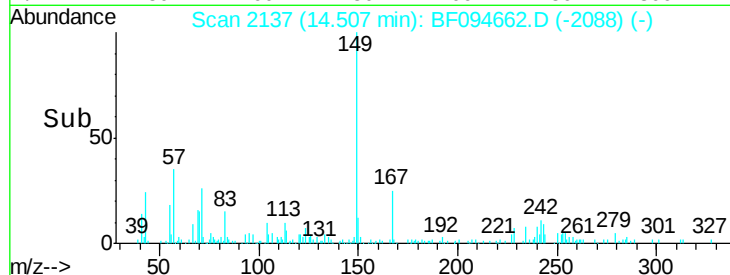
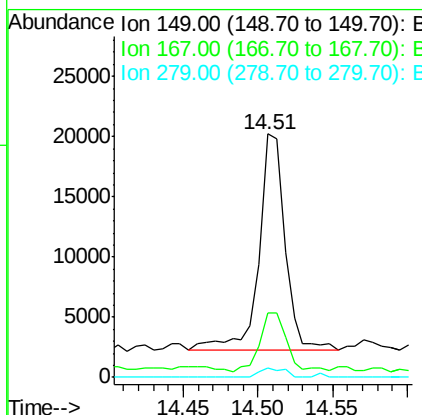
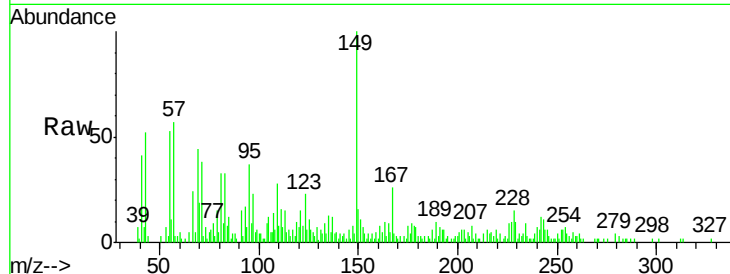




#83  
 Bis(2-ethylhexyl)phthalate  
 Concen: 2.10 ng  
 RT: 14.51 min Scan# 2137  
 Delta R.T. -0.01 min  
 Lab File: BF094662.D  
 Acq: 26 Apr 2017 22:11

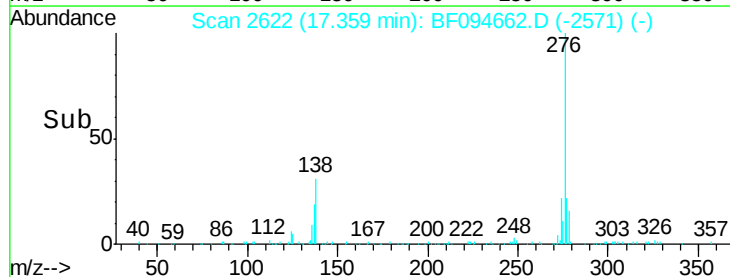
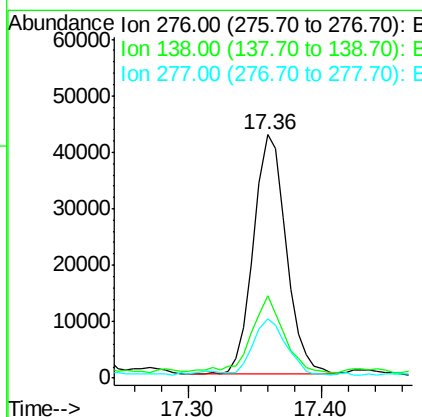
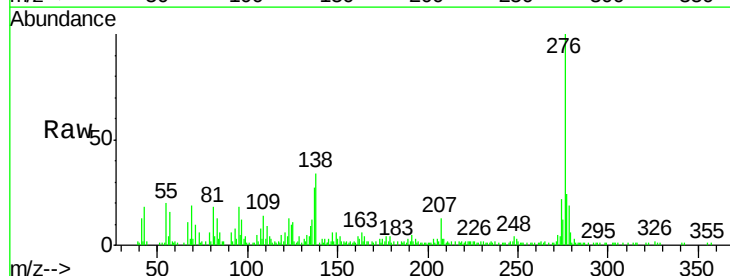
Instrument :  
 BNA\_F  
 ClientSampleId :  
 E2-W10-ESW

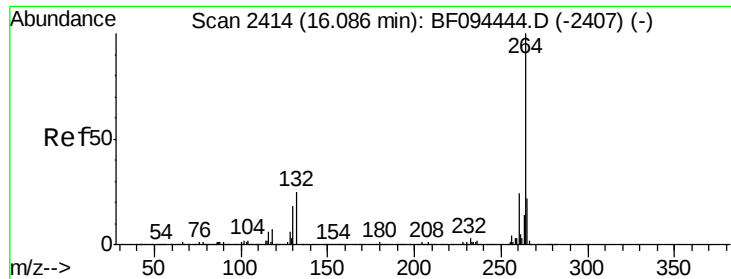
Tot Ion:149 Resp: 22007  
 Ion Ratio Lower Upper  
 149 100  
 167 26.3 21.0 31.4  
 279 4.0 1.9 2.9#



#85  
 Indeno(1,2,3-cd)pyrene  
 Concen: 5.60 ng  
 RT: 17.36 min Scan# 2622  
 Delta R.T. -0.00 min  
 Lab File: BF094662.D  
 Acq: 26 Apr 2017 22:11

Tgt Ion:276 Resp: 72157  
 Ion Ratio Lower Upper  
 276 100  
 138 31.2 27.8 41.6  
 277 23.5 20.2 30.4

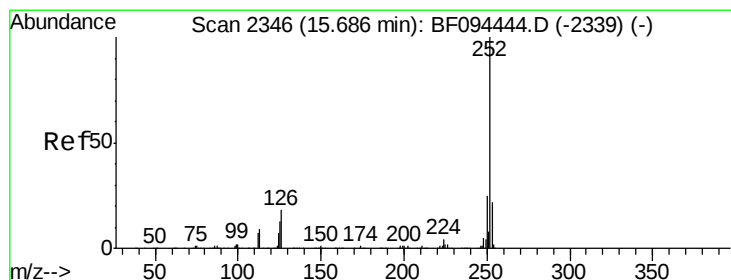
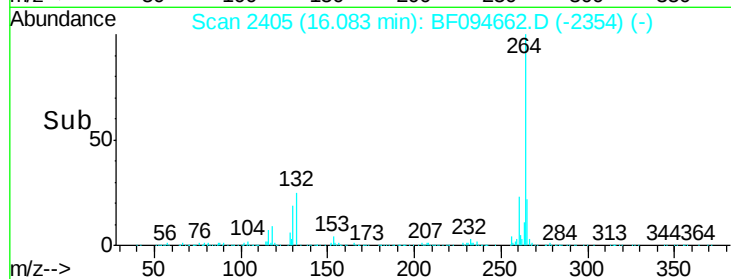
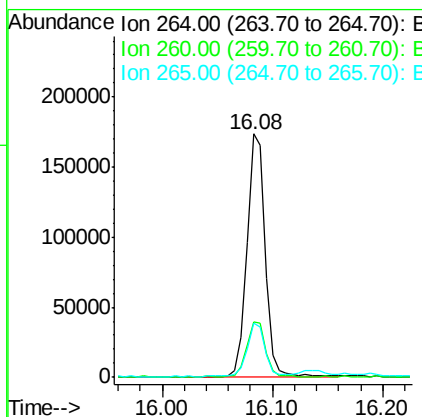
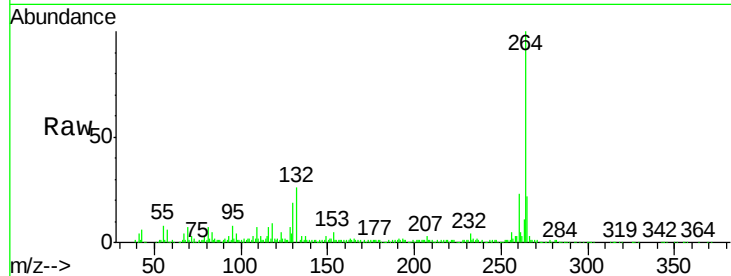




#86  
Pervlene-d12  
Concen: 20.00 ng  
RT: 16.08 min Scan# 2405  
Delta R.T. -0.00 min  
Lab File: BF094662.D  
Acq: 26 Apr 2017 22:11

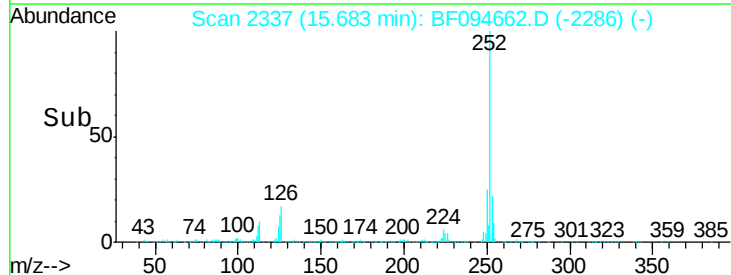
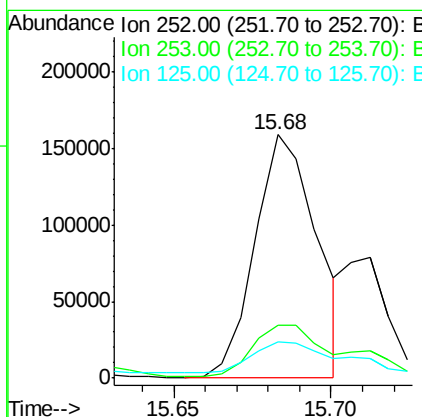
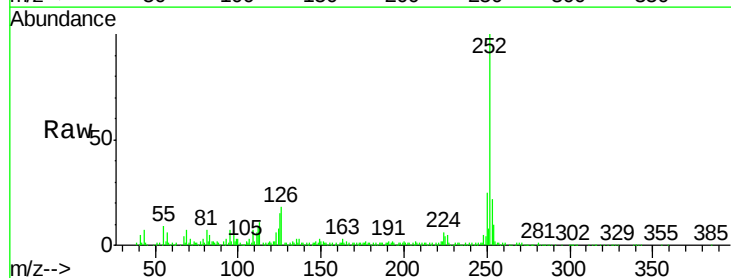
Instrument :  
BNA\_F  
ClientSampleId :  
E2-W10-ESW

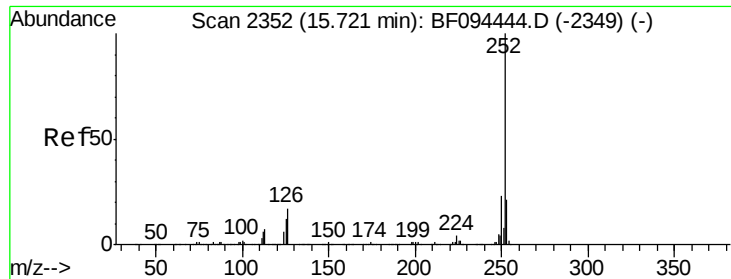
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 23.0  | 19.5  | 29.3  |
| 265     | 22.0  | 17.2  | 25.8  |



#87  
Benzo(b)fluoranthene  
Concen: 17.51 ng m  
RT: 15.68 min Scan# 2337  
Delta R.T. -0.00 min  
Lab File: BF094662.D  
Acq: 26 Apr 2017 22:11

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 21.9  | 18.1  | 27.1  |
| 125     | 15.0  | 9.8   | 14.8  |

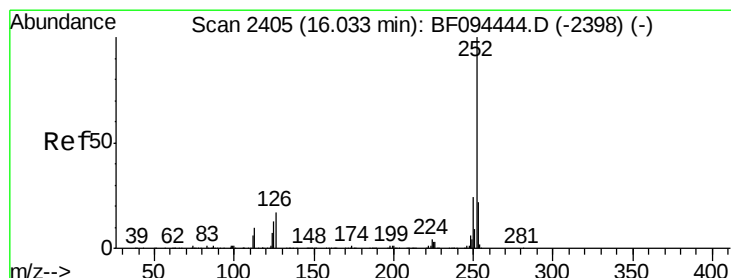
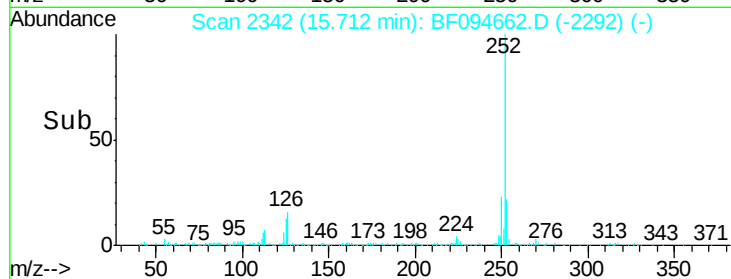
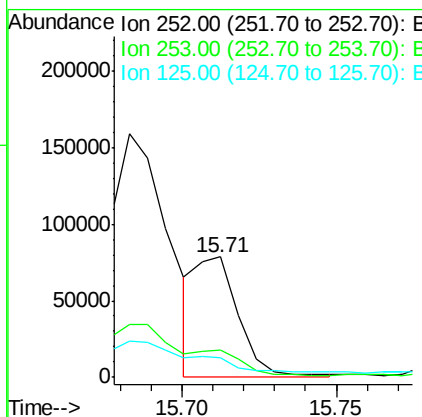
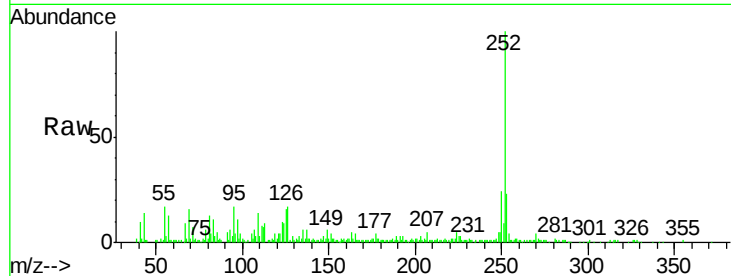




#88  
Benzo(k)fluoranthene  
Concen: 6.33 ng/mL  
RT: 15.71 min Scan# 2342  
Delta R.T. -0.01 min  
Lab File: BF094662.D  
Acq: 26 Apr 2017 22:11

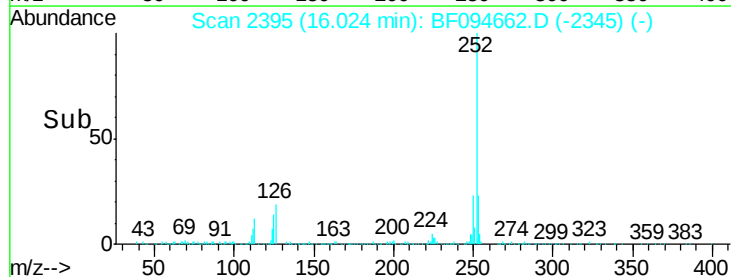
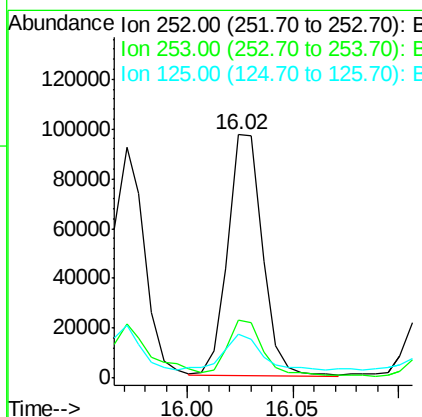
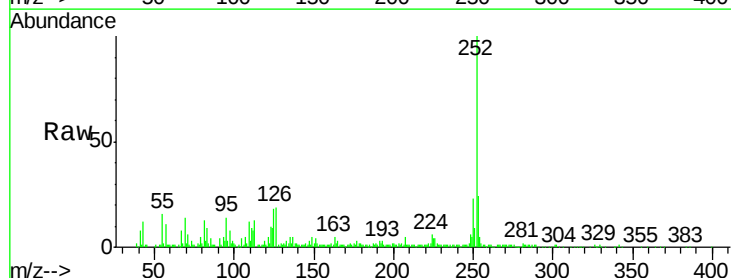
Instrument :  
BNA\_F  
ClientSampleId :  
E2-W10-ESW

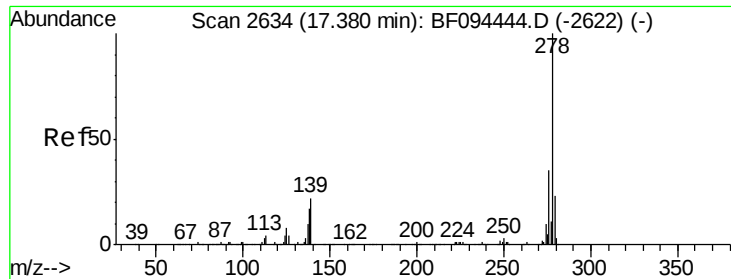
Tot Ion:252 Resp: 74739  
Ion Ratio Lower Upper  
252 100  
253 22.9 18.4 27.6  
125 16.5 13.1 19.7



#89  
Benzo(a)pyrene  
Concen: 9.49 ng/mL  
RT: 16.02 min Scan# 2395  
Delta R.T. -0.01 min  
Lab File: BF094662.D  
Acq: 26 Apr 2017 22:11

Tgt Ion:252 Resp: 110125  
Ion Ratio Lower Upper  
252 100  
253 23.7 17.5 26.3  
125 17.9 11.0 16.4#





#90

Dibenzo(a,h)anthracene

Concen: 2.16 ng

RT: 17.37 min Scan# 2624

Delta R.T. -0.01 min

Lab File: BF094662.D

Acq: 26 Apr 2017 22:11

Instrument :

BNA\_F

ClientSampleId :

E2-W10-ESW

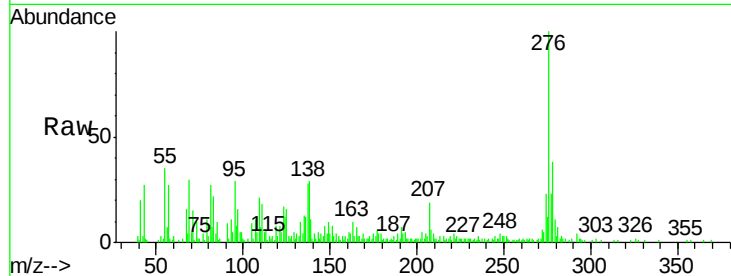
Tot Ion:278 Resp: 20782

Ion Ratio Lower Upper

278 100

139 28.3 16.6 24.8#

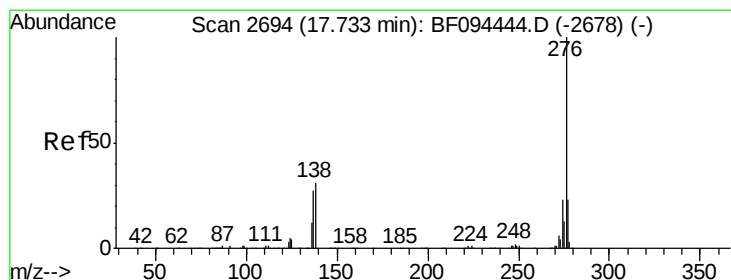
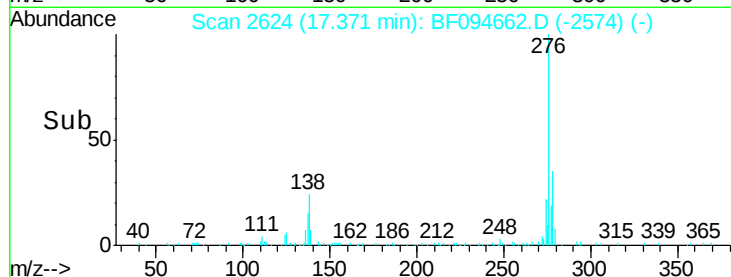
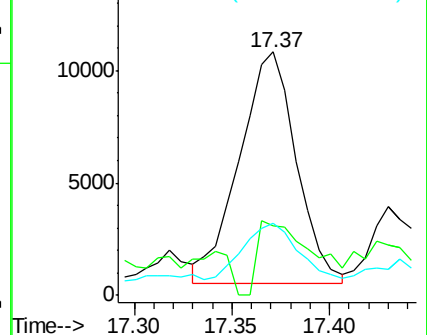
279 29.6 19.3 28.9#



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: 7.44 ng

RT: 17.74 min Scan# 2686

Delta R.T. 0.00 min

Lab File: BF094662.D

Acq: 26 Apr 2017 22:11

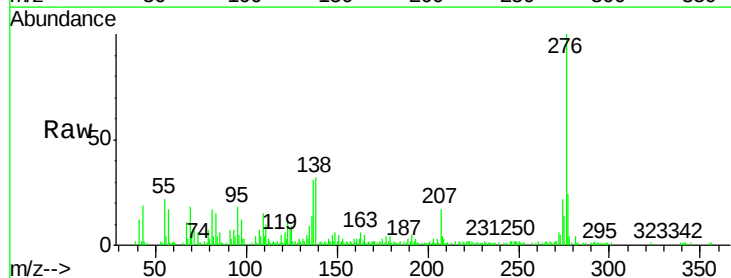
Tgt Ion:276 Resp: 73009

Ion Ratio Lower Upper

276 100

277 24.4 18.6 28.0

138 32.1 25.4 38.0



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

