

Data Path : U:\HPCHEM1\BNA F\DATA\BF101816\  
 Data File : BF090637.D  
 Acq On : 18 Oct 2016 19:30  
 Operator : UM/SJ  
 Sample : H5289-07  
 Misc :  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SP-2-2

Quant Time: Oct 19 01:59:52 2016  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF101316.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Oct 17 19:19:58 2016  
 Response via : Initial Calibration

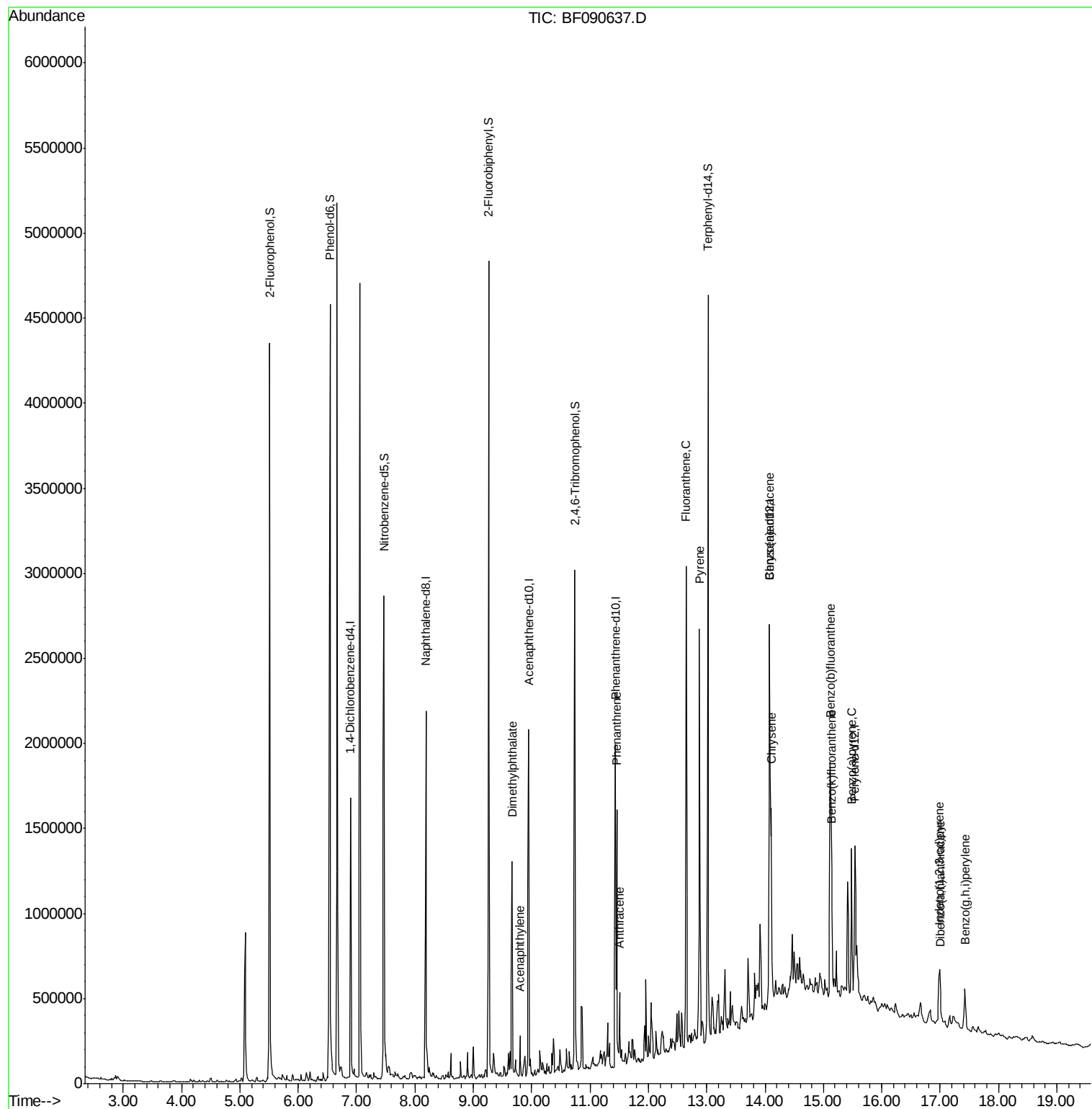
| Internal Standards          | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 6.90  | 152  | 238530   | 20.00  | ng    | -0.01    |
| 21) Naphthalene-d8          | 8.19  | 136  | 1057287  | 20.00  | ng    | -0.01    |
| 38) Acenaphthene-d10        | 9.95  | 164  | 521552   | 20.00  | ng    | -0.01    |
| 63) Phenanthrene-d10        | 11.44 | 188  | 762871   | 20.00  | ng    | -0.01    |
| 75) Chrysene-d12            | 14.08 | 240  | 553331   | 20.00  | ng    | -0.01    |
| 86) Perylene-d12            | 15.54 | 264  | 462349   | 20.00  | ng    | 0.00     |
| System Monitoring Compounds |       |      |          |        |       |          |
| 5) 2-Fluorophenol           | 5.51  | 112  | 1547472  | 118.93 | ng    | 0.00     |
| 7) Phenol-d6                | 6.54  | 99   | 2110127  | 109.14 | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 7.47  | 82   | 1364411  | 71.69  | ng    | -0.01    |
| 41) 2,4,6-Tribromophenol    | 10.74 | 330  | 380711   | 81.88  | ng    | -0.01    |
| 44) 2-Fluorobiphenyl        | 9.26  | 172  | 1822230  | 57.57  | ng    | -0.01    |
| 78) Terphenyl-d14           | 13.02 | 244  | 1452764  | 61.13  | ng    | -0.01    |
| Target Compounds            |       |      |          |        |       | Qvalue   |
| 48) Acenaphthylene          | 9.80  | 152  | 100893   | 2.14   | ng    | 98       |
| 49) Dimethylphthalate       | 9.66  | 163  | 556724   | 16.45  | ng    | # 98     |
| 70) Phenanthrene            | 11.46 | 178  | 562079   | 13.80  | ng    | 99       |
| 71) Anthracene              | 11.50 | 178  | 206046   | 4.70   | ng    | 99       |
| 74) Fluoranthene            | 12.65 | 202  | 1185584  | 28.94  | ng    | 93       |
| 77) Pyrene                  | 12.88 | 202  | 1058731  | 28.89  | ng    | 99       |
| 80) Benzo(a)anthracene      | 14.08 | 228  | 723147   | 22.96  | ng    | 97       |
| 82) Chrysene                | 14.11 | 228  | 605026m  | 19.93  | ng    |          |
| 85) Indeno(1,2,3-cd)pyrene  | 16.99 | 276  | 242134   | 13.80  | ng    | # 91     |
| 87) Benzo(b)fluoranthene    | 15.12 | 252  | 937436m  | 30.98  | ng    |          |
| 88) Benzo(k)fluoranthene    | 15.14 | 252  | 216564m  | 6.65   | ng    |          |
| 89) Benzo(a)pyrene          | 15.48 | 252  | 452966   | 16.35  | ng    | 96       |
| 90) Dibenzo(a,h)anthracene  | 17.00 | 278  | 60012    | 2.84   | ng    | 94       |
| 91) Benzo(g,h,i)perylene    | 17.42 | 276  | 199711   | 9.92   | ng    | 96       |

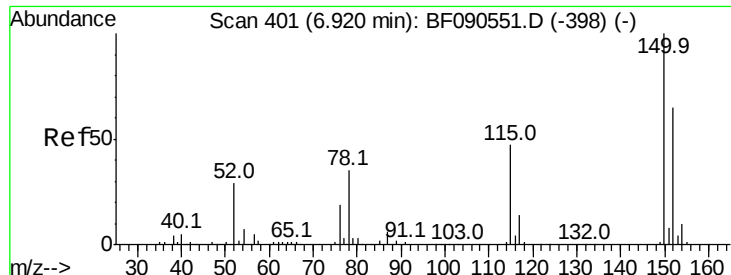
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Instrument :  
BNA\_F  
ClientSampleId :  
SP-2-2

Quant Time: Oct 19 01:59:52 2016  
Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF101316.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Oct 17 19:19:58 2016  
Response via : Initial Calibration





#1

1,4-Dichlorobenzene-d4

Concen: 20.00 ng

RT: 6.90 min Scan# 399

Delta R.T. -0.01 min

Lab File: BF090637.D

Acq: 18 Oct 2016 19:30

Instrument :

BNA\_F

ClientSampleId :

SP-2-2

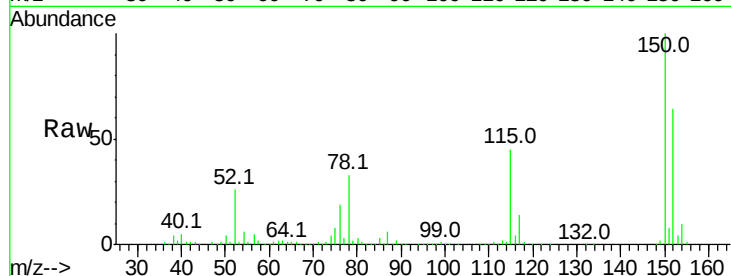
Tot Ion:152 Resp: 238530

Ion Ratio Lower Upper

152 100

150 156.7 127.2 190.8

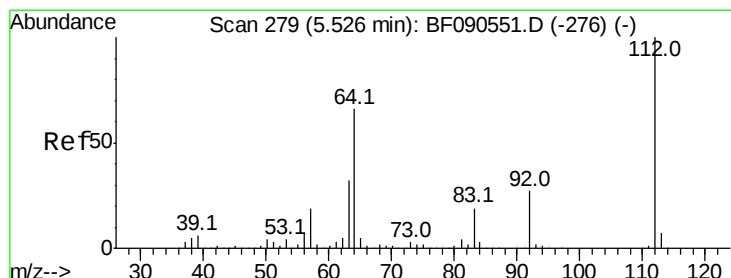
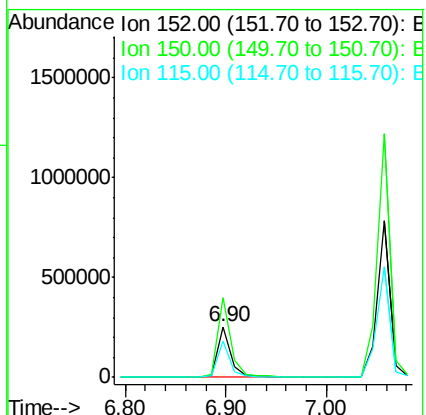
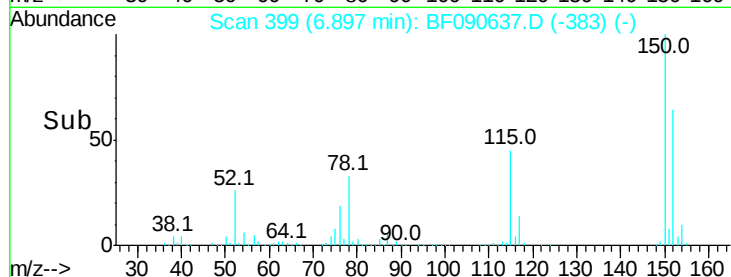
115 70.1 58.6 88.0



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: 118.93 ng

RT: 5.51 min Scan# 278

Delta R.T. 0.00 min

Lab File: BF090637.D

Acq: 18 Oct 2016 19:30

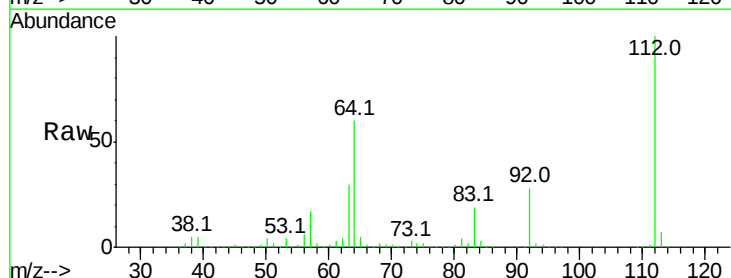
Tgt Ion:112 Resp: 1547472

Ion Ratio Lower Upper

112 100

64 60.4 52.6 78.8

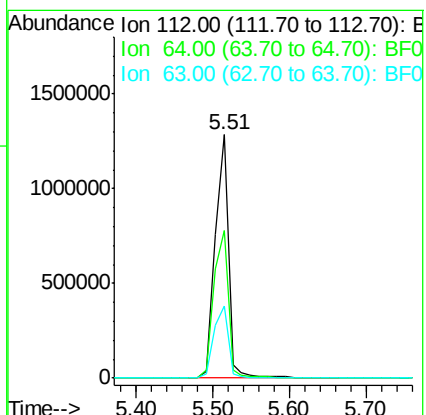
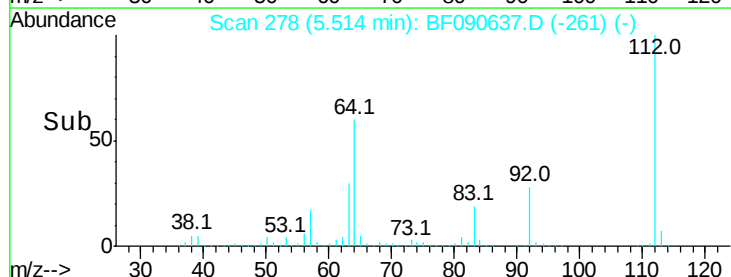
63 29.6 26.0 39.0

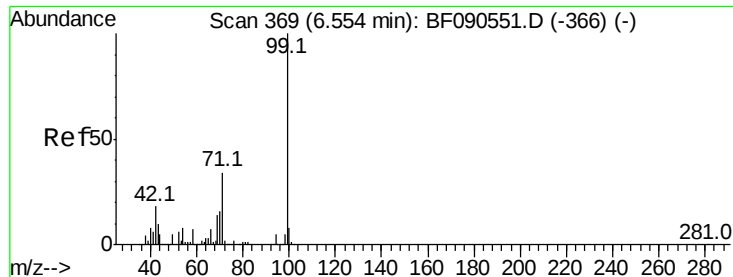


Abundance Ion 112.00 (111.70 to 112.70): E

Ion 64.00 (63.70 to 64.70): BF0

Ion 63.00 (62.70 to 63.70): BF0





#7

Phenol-d6

Concen: 109.14 ng

RT: 6.54 min Scan# 368

Delta R.T. -0.00 min

Lab File: BF090637.D

Acq: 18 Oct 2016 19:30

Instrument :

BNA\_F

ClientSampleId :

SP-2-2

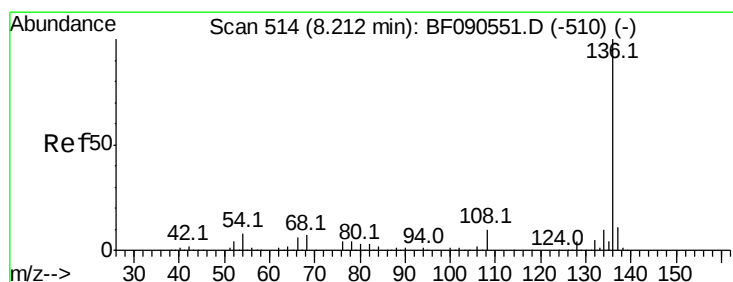
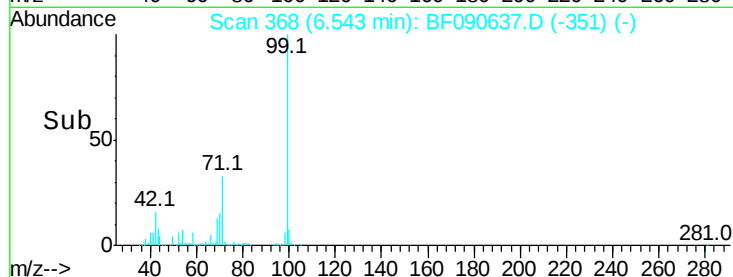
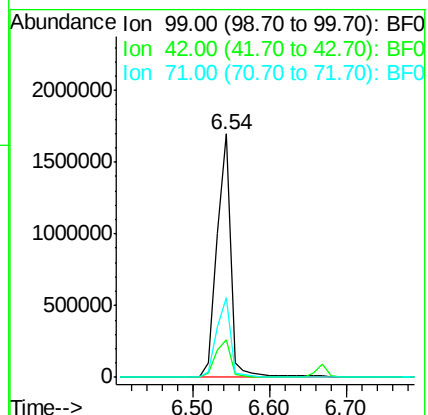
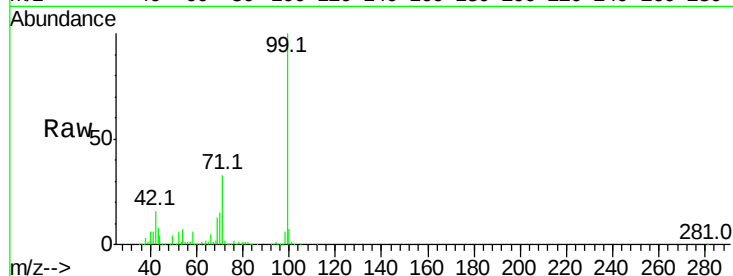
Tot Ion: 99 Resp: 2110127

Ion Ratio Lower Upper

99 100

42 15.6 14.7 22.1

71 32.8 27.6 41.4



#21

Naphthalene-d8

Concen: 20.00 ng

RT: 8.19 min Scan# 512

Delta R.T. -0.01 min

Lab File: BF090637.D

Acq: 18 Oct 2016 19:30

Tgt Ion: 136 Resp: 1057287

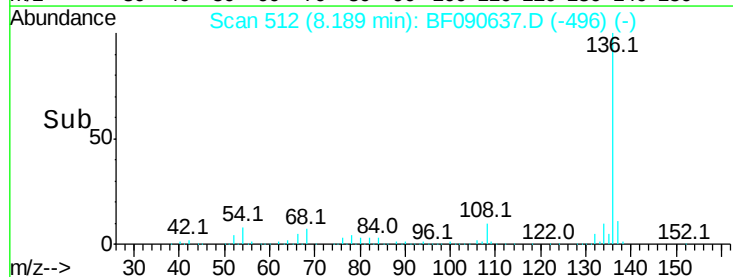
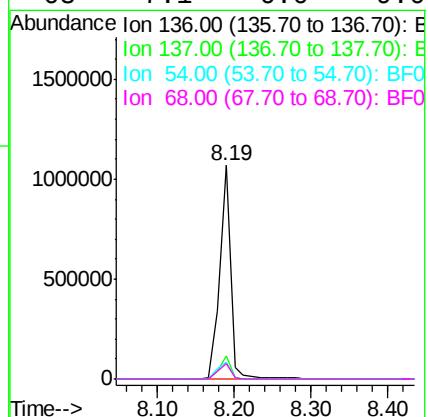
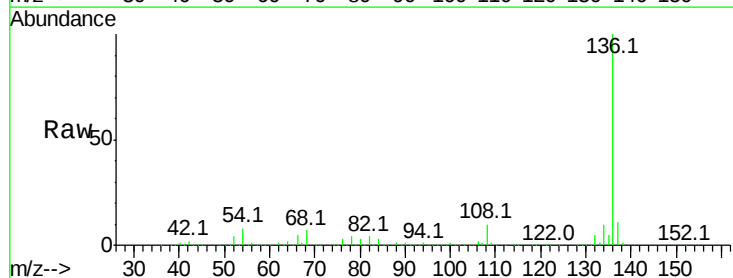
Ion Ratio Lower Upper

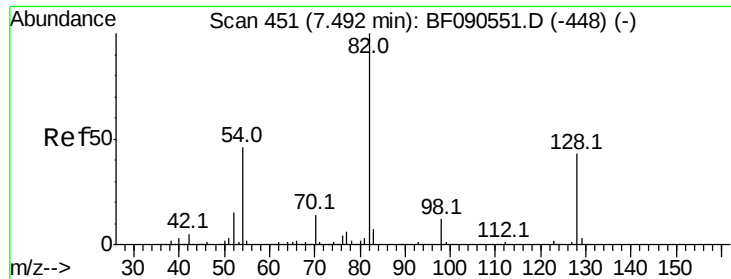
136 100

137 11.1 8.8 13.2

54 8.1 6.8 10.2

68 7.1 6.0 9.0



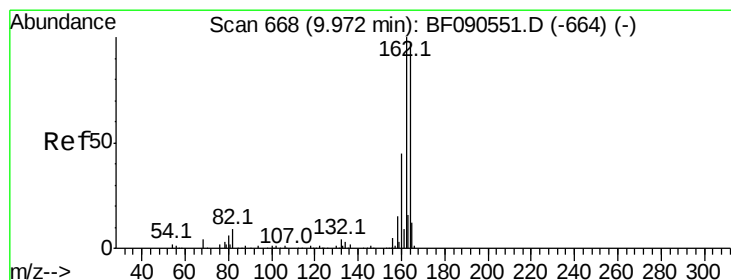
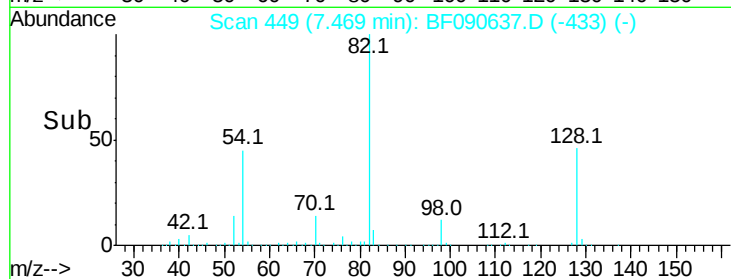
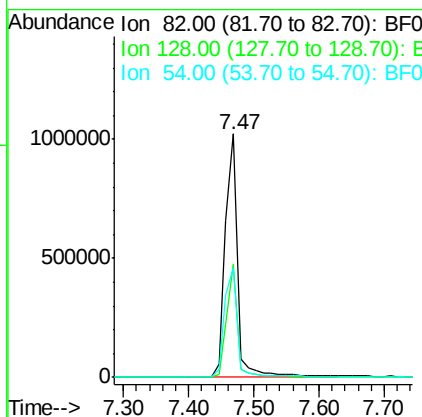
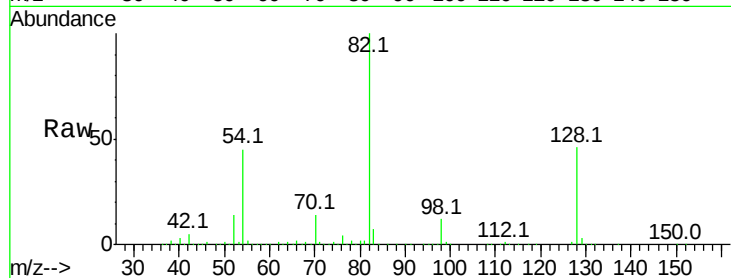


#23  
 Nitrobenzene-d5  
 Concen: 71.69 ng  
 RT: 7.47 min Scan# 449  
 Delta R.T. -0.01 min  
 Lab File: BF090637.D  
 Acq: 18 Oct 2016 19:30

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SP-2-2

Tot Ion: 82 Resp: 1364411  

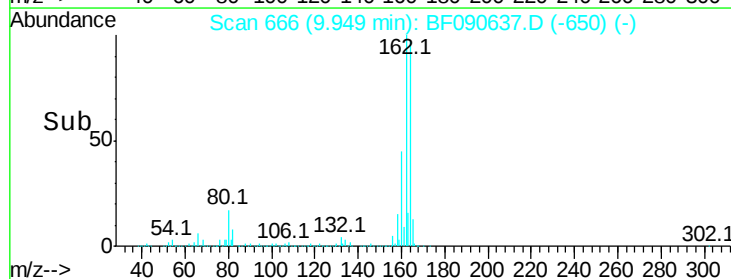
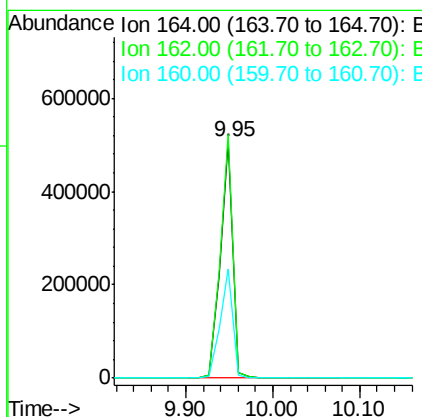
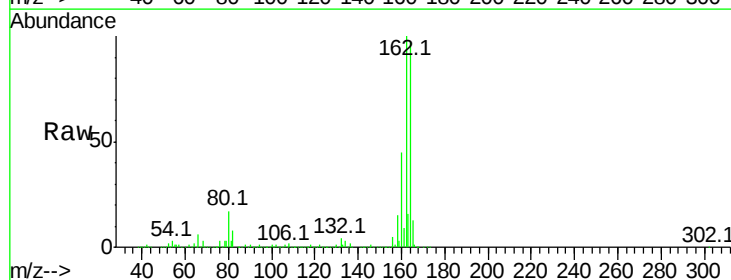
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 82  | 100   |       |       |
| 128 | 46.4  | 34.3  | 51.5  |
| 54  | 45.0  | 37.0  | 55.6  |

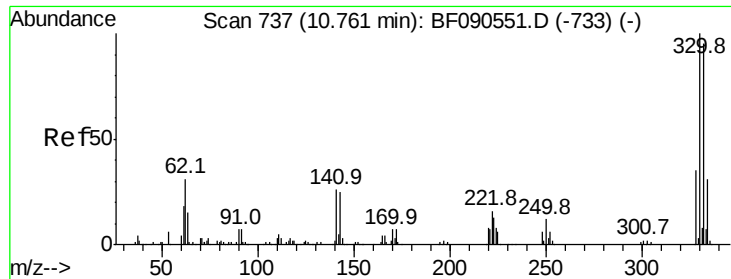


#38  
 Acenaphthene-d10  
 Concen: 20.00 ng  
 RT: 9.95 min Scan# 666  
 Delta R.T. -0.01 min  
 Lab File: BF090637.D  
 Acq: 18 Oct 2016 19:30

Tgt Ion:164 Resp: 521552  

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 164 | 100   |       |       |
| 162 | 102.8 | 82.2  | 123.4 |
| 160 | 46.1  | 36.6  | 55.0  |

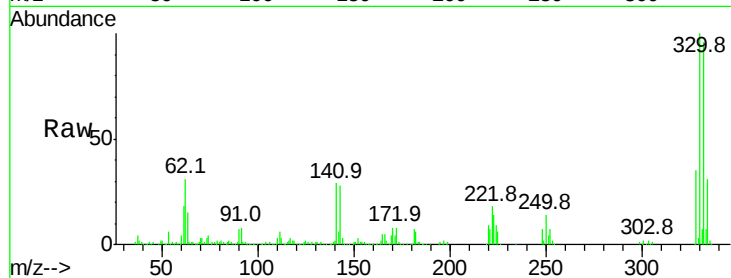




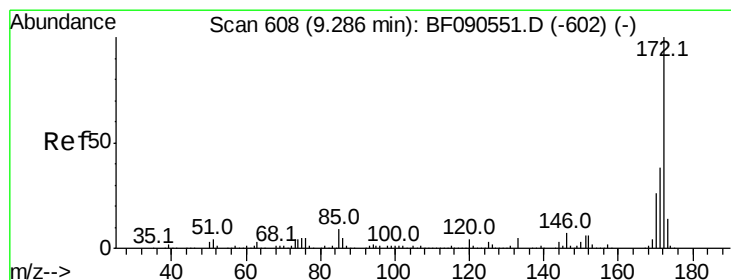
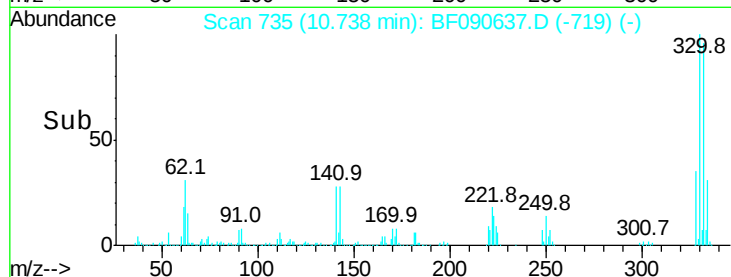
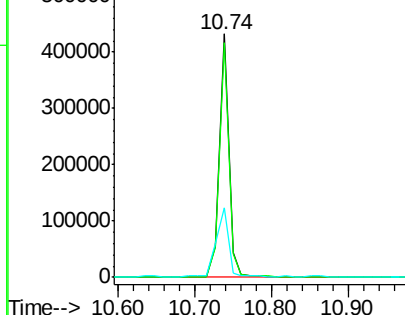
#41  
 2,4,6-Tribromophenol  
 Concen: 81.88 ng  
 RT: 10.74 min Scan# 735  
 Delta R.T. -0.01 min  
 Lab File: BF090637.D  
 Acq: 18 Oct 2016 19:30

Instrument :  
 BNA\_F  
 ClientSampled :  
 SP-2-2

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 330     | 100   |       |       |
| 332     | 96.4  | 76.2  | 114.2 |
| 141     | 36.0  | 31.4  | 47.2  |

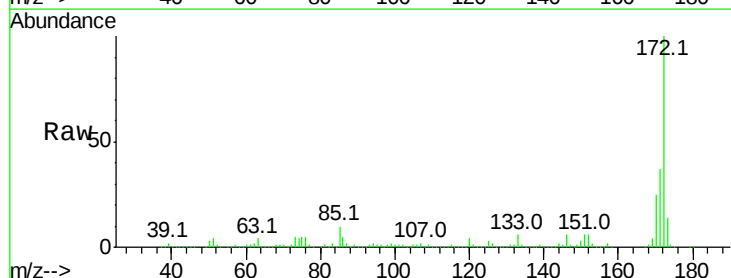


Abundance Ion 329.80 (329.50 to 330.50): E  
 Ion 331.80 (331.50 to 332.50): E  
 Ion 141.00 (140.70 to 141.70): E

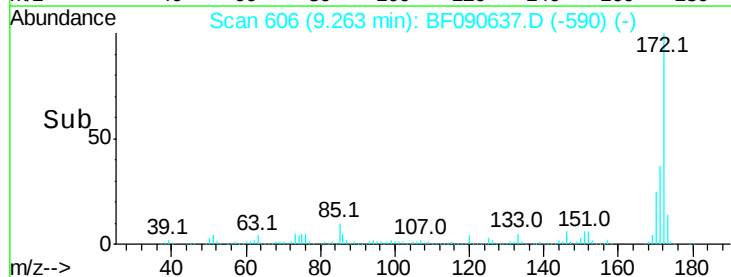
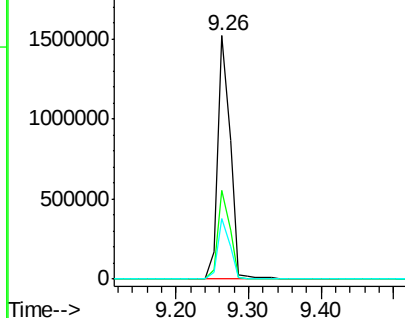


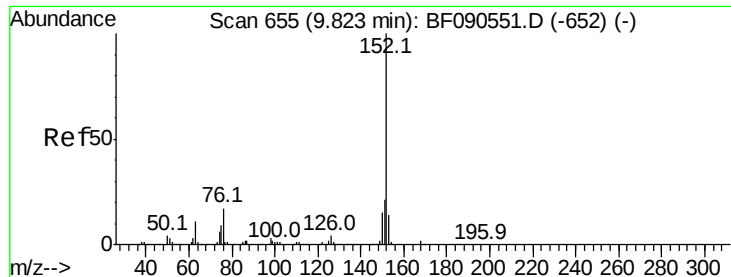
#44  
 2-Fluorobiphenyl  
 Concen: 57.57 ng  
 RT: 9.26 min Scan# 606  
 Delta R.T. -0.01 min  
 Lab File: BF090637.D  
 Acq: 18 Oct 2016 19:30

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 36.5  | 30.1  | 45.1  |
| 170     | 24.8  | 20.6  | 30.8  |



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: 2.14 ng

RT: 9.80 min Scan# 653

Delta R.T. -0.02 min

Lab File: BF090637.D

Acq: 18 Oct 2016 19:30

Instrument :

BNA\_F

ClientSampleId :

SP-2-2

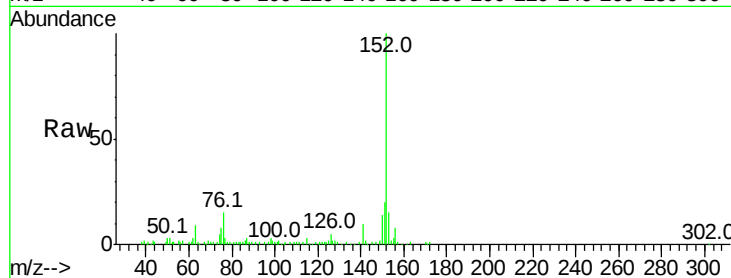
Tot Ion:152 Resp: 100893

Ion Ratio Lower Upper

152 100

151 20.1 16.6 25.0

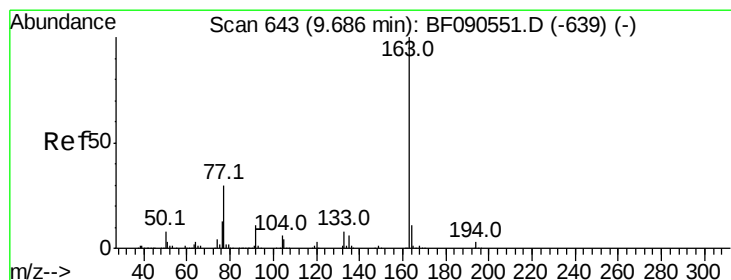
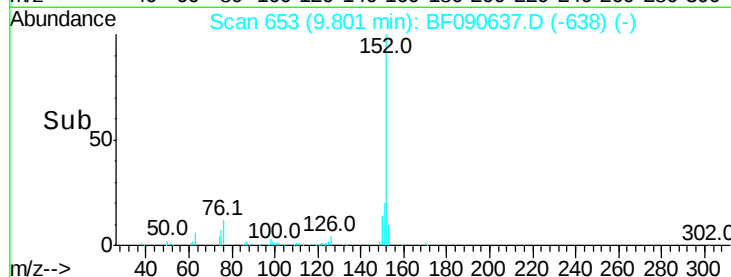
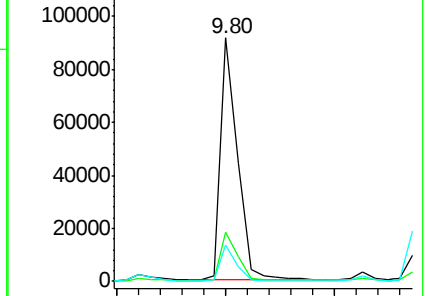
153 14.8 11.3 16.9



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



#49

Dimethylphthalate

Concen: 16.45 ng

RT: 9.66 min Scan# 641

Delta R.T. -0.01 min

Lab File: BF090637.D

Acq: 18 Oct 2016 19:30

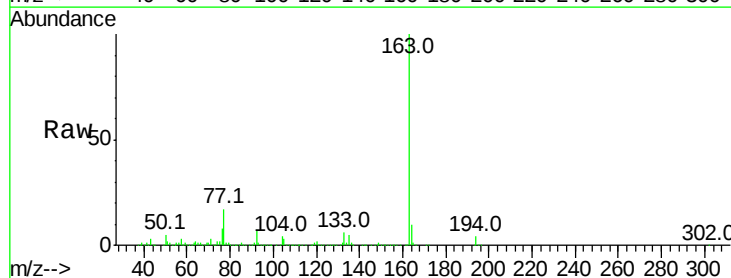
Tgt Ion:163 Resp: 556724

Ion Ratio Lower Upper

163 100

194 3.7 2.3 3.5#

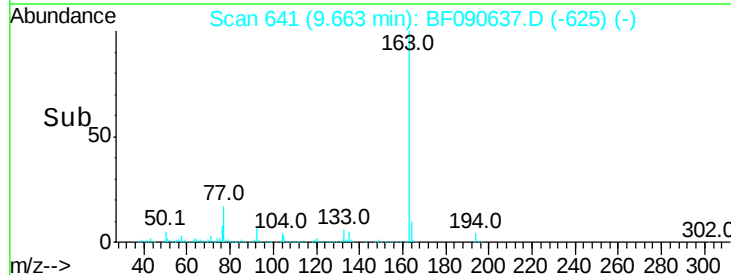
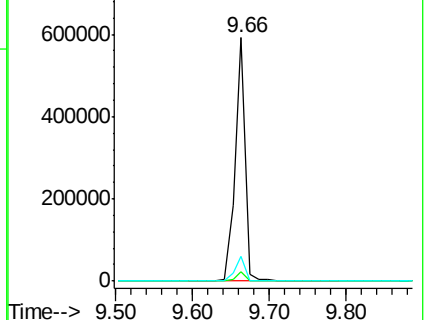
164 9.9 8.6 13.0

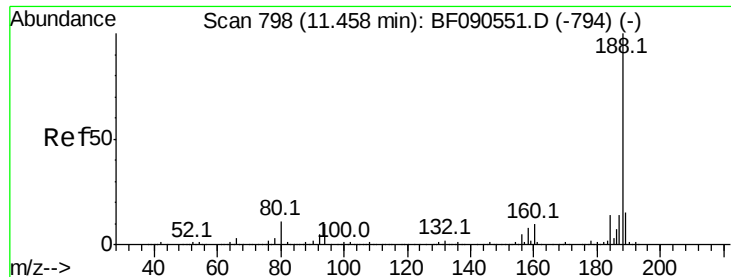


Abundance Ion 163.00 (162.70 to 163.70): E

Ion 194.00 (193.70 to 194.70): E

Ion 164.00 (163.70 to 164.70): E

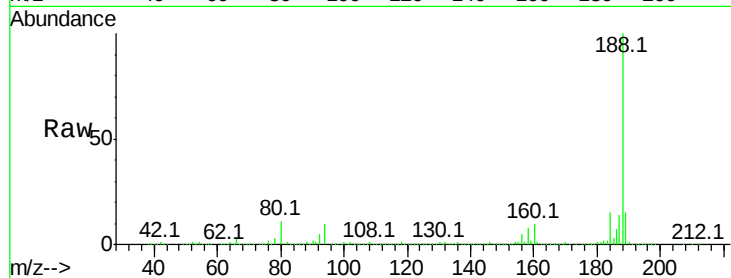




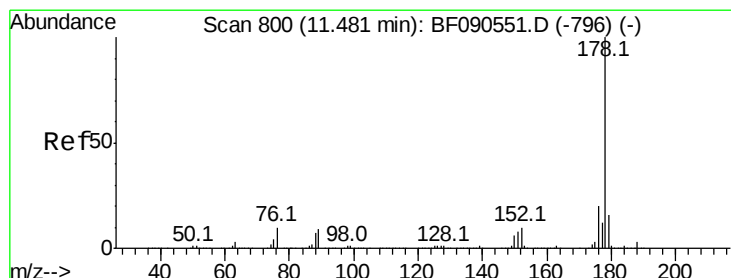
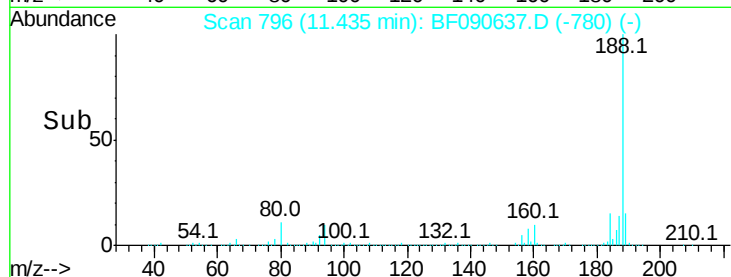
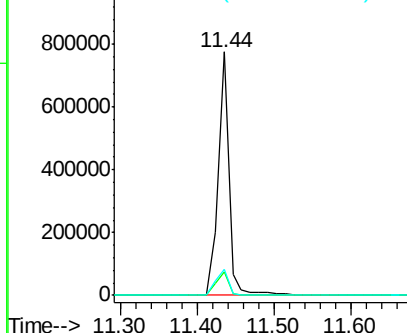
#63  
Phenanthrene-d10  
Concen: 20.00 ng  
RT: 11.44 min Scan# 796  
Delta R.T. -0.01 min  
Lab File: BF090637.D  
Acq: 18 Oct 2016 19:30

Instrument :  
BNA\_F  
ClientSampled :  
SP-2-2

Tot Ion:188 Resp: 762871  
Ion Ratio Lower Upper  
188 100  
94 9.6 7.7 11.5  
80 10.6 8.6 12.8

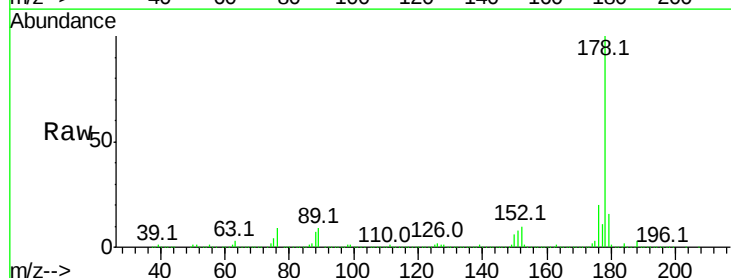


Abundance Ion 188.00 (187.70 to 188.70): E  
Ion 94.00 (93.70 to 94.70): BF0  
Ion 80.00 (79.70 to 80.70): BF0

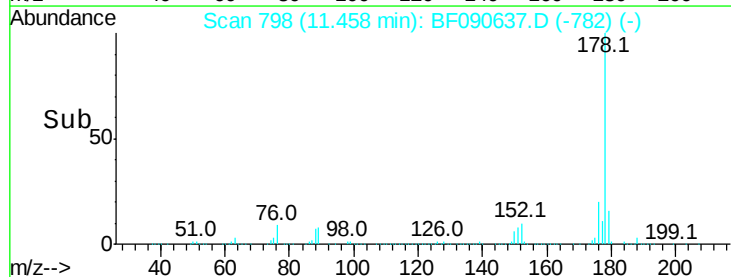
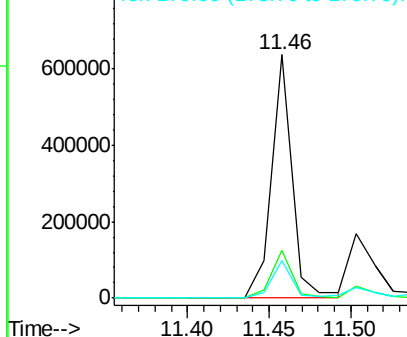


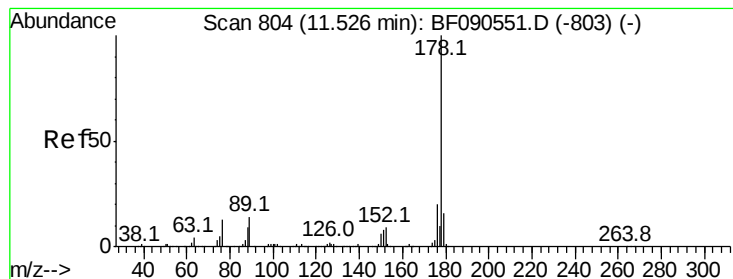
#70  
Phenanthrene  
Concen: 13.80 ng  
RT: 11.46 min Scan# 798  
Delta R.T. -0.01 min  
Lab File: BF090637.D  
Acq: 18 Oct 2016 19:30

Tgt Ion:178 Resp: 562079  
Ion Ratio Lower Upper  
178 100  
176 19.7 16.1 24.1  
179 15.6 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: 4.70 ng

RT: 11.50 min Scan# 802

Delta R.T. -0.01 min

Lab File: BF090637.D

Acq: 18 Oct 2016 19:30

Instrument :

BNA\_F

ClientSampleId :

SP-2-2

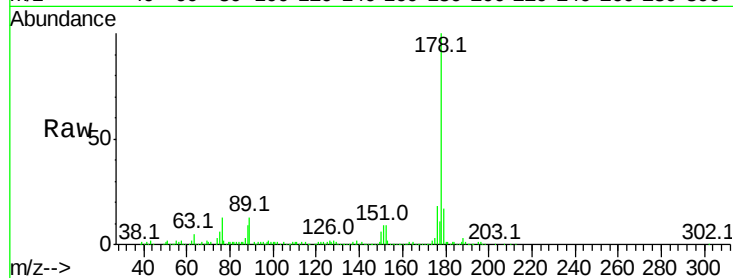
Tot Ion:178 Resp: 206046

Ion Ratio Lower Upper

178 100

176 18.5 15.5 23.3

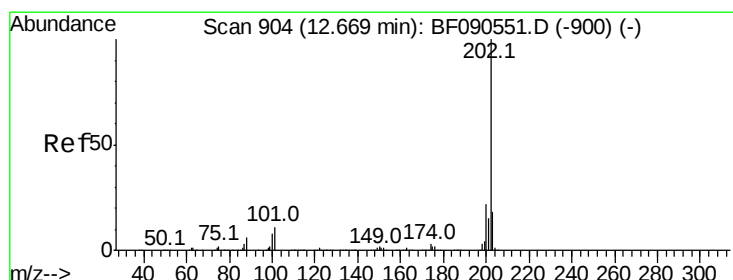
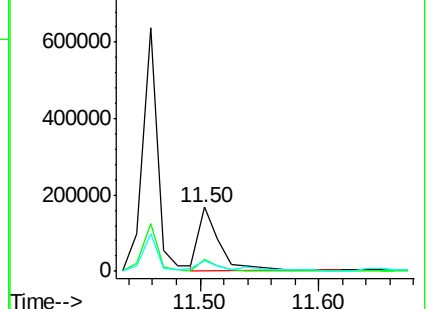
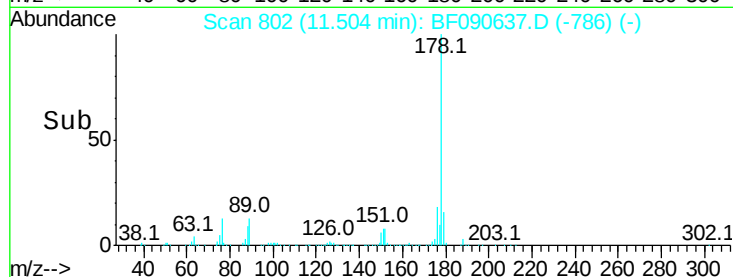
179 16.5 13.0 19.4



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: 28.94 ng

RT: 12.65 min Scan# 902

Delta R.T. -0.01 min

Lab File: BF090637.D

Acq: 18 Oct 2016 19:30

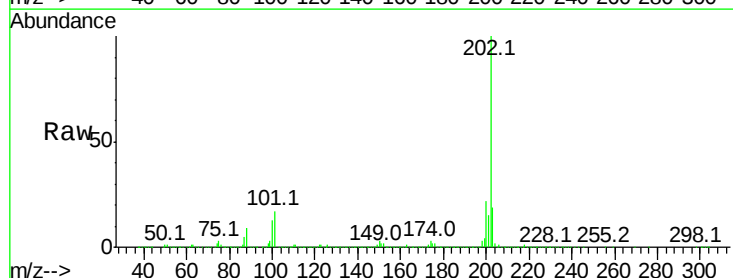
Tgt Ion:202 Resp: 1185584

Ion Ratio Lower Upper

202 100

101 16.7 0.0 31.1

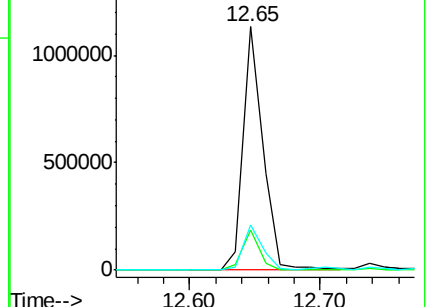
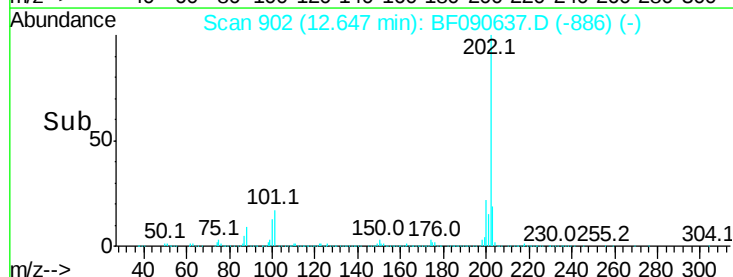
203 18.7 0.0 38.0

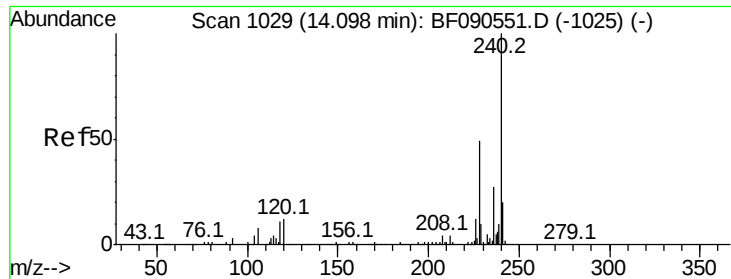


Abundance Ion 202.00 (201.70 to 202.70): E

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: 14.08 min Scan# 1027

Delta R.T. -0.01 min

Lab File: BF090637.D

Acq: 18 Oct 2016 19:30

Instrument :

BNA\_F

ClientSampled :

SP-2-2

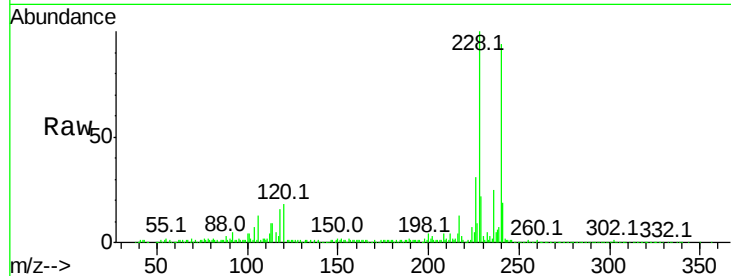
Tot Ion:240 Resp: 553331

Ion Ratio Lower Upper

240 100

120 18.7 9.8 14.8#

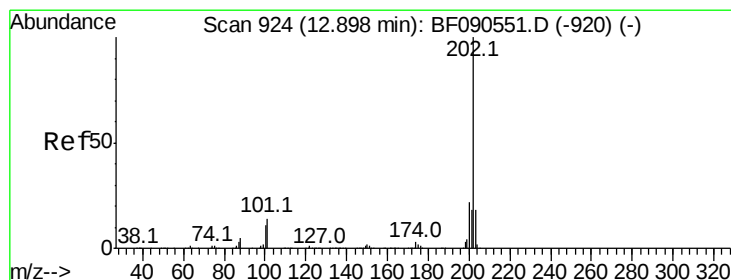
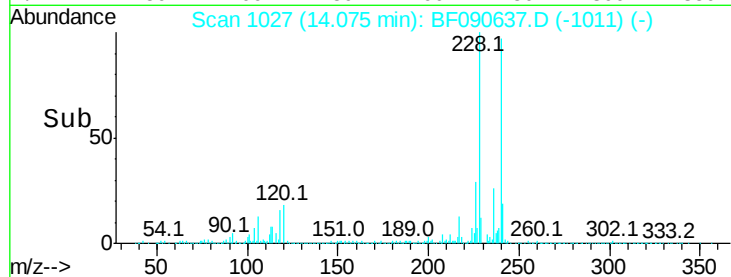
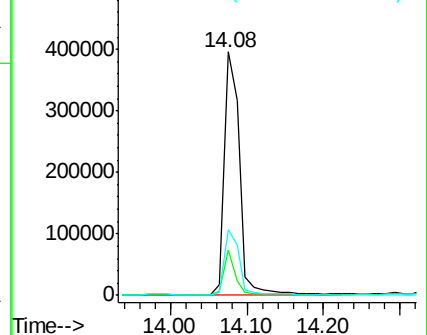
236 27.0 21.7 32.5



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: 28.89 ng

RT: 12.88 min Scan# 922

Delta R.T. -0.01 min

Lab File: BF090637.D

Acq: 18 Oct 2016 19:30

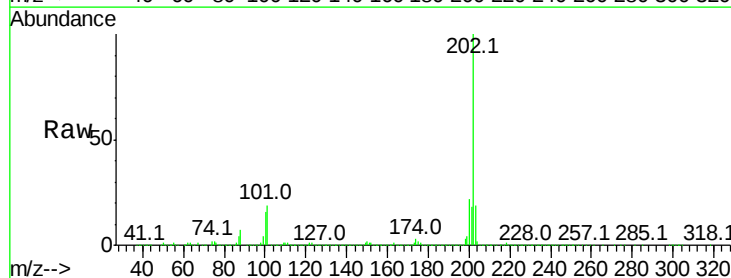
Tgt Ion:202 Resp: 1058731

Ion Ratio Lower Upper

202 100

200 21.7 17.8 26.6

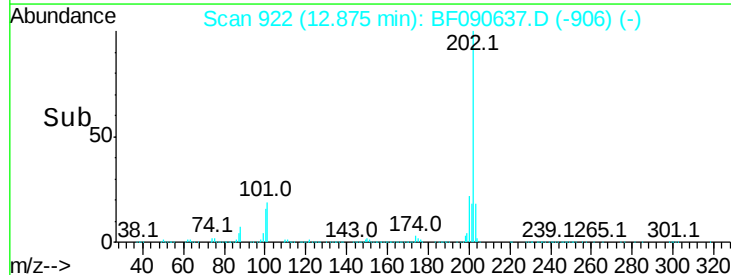
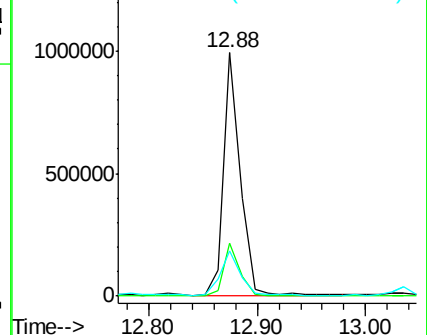
203 18.6 14.6 21.8

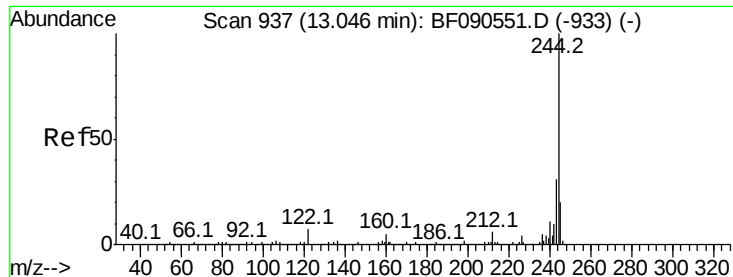


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 200.00 (199.70 to 200.70): E

Ion 203.00 (202.70 to 203.70): E





#78

Terphenyl-d14

Concen: 61.13 ng

RT: 13.02 min Scan# 935

Delta R.T. -0.01 min

Lab File: BF090637.D

Acq: 18 Oct 2016 19:30

Instrument :

BNA\_F

ClientSampleId :

SP-2-2

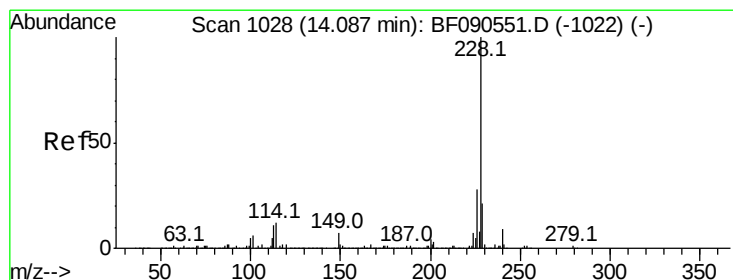
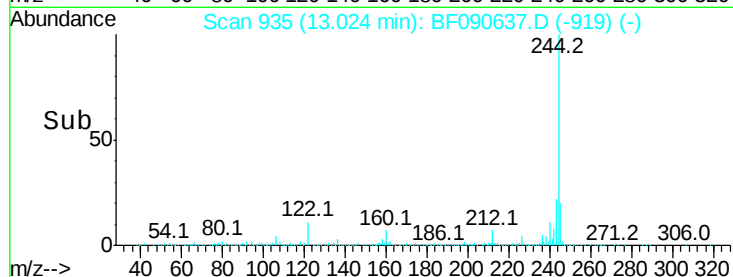
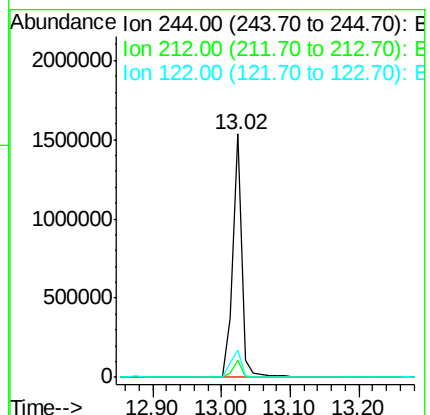
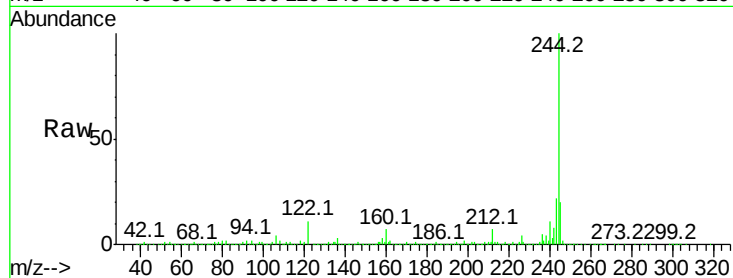
Tot Ion:244 Resp: 1452764

Ion Ratio Lower Upper

244 100

212 7.0 5.0 7.4

122 11.2 5.6 8.4#



#80

Benzo(a)anthracene

Concen: 22.96 ng

RT: 14.08 min Scan# 1027

Delta R.T. -0.00 min

Lab File: BF090637.D

Acq: 18 Oct 2016 19:30

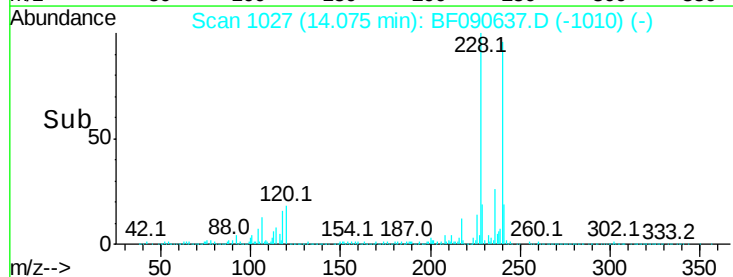
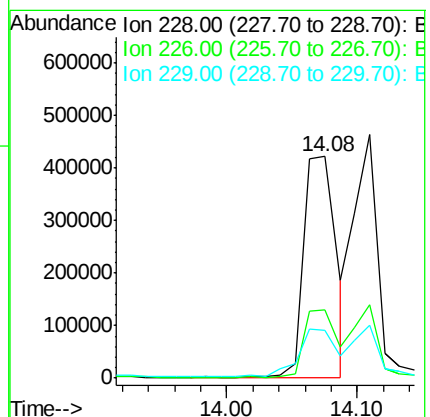
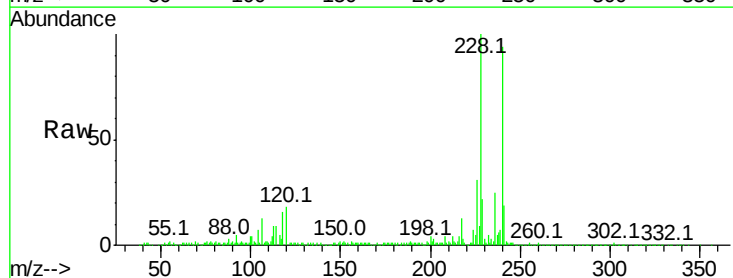
Tgt Ion:228 Resp: 723147

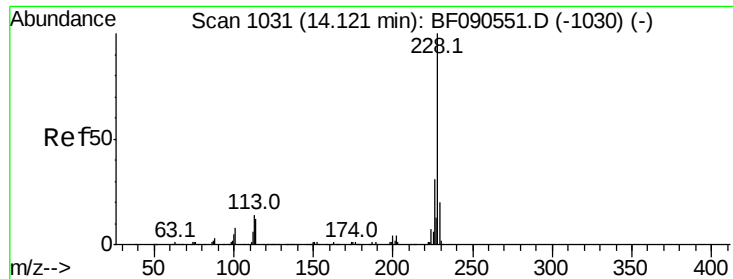
Ion Ratio Lower Upper

228 100

226 30.5 22.8 34.2

229 21.8 16.6 25.0

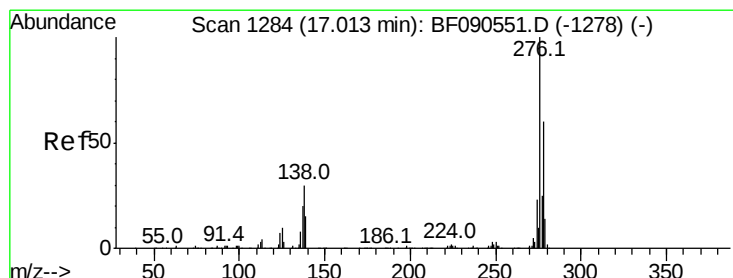
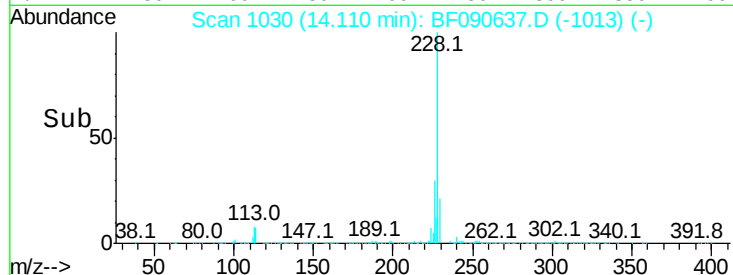
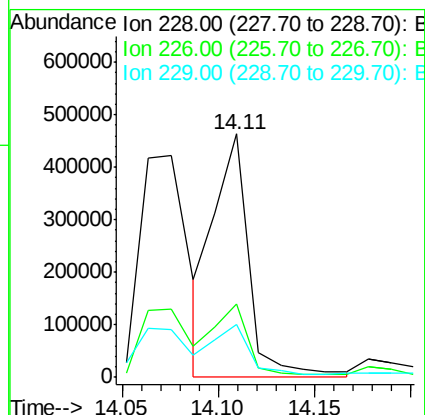
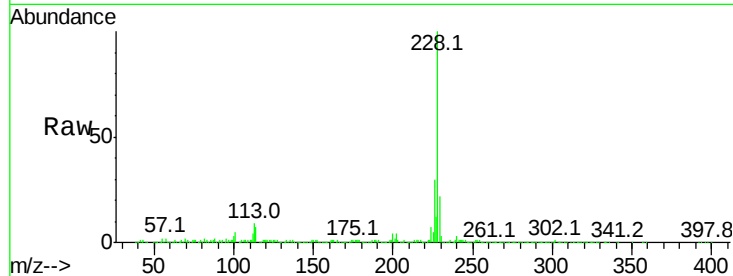




#82  
Chrysene  
Concen: 19.93 ng m  
RT: 14.11 min Scan# 1030  
Delta R.T. -0.00 min  
Lab File: BF090637.D  
Acq: 18 Oct 2016 19:30

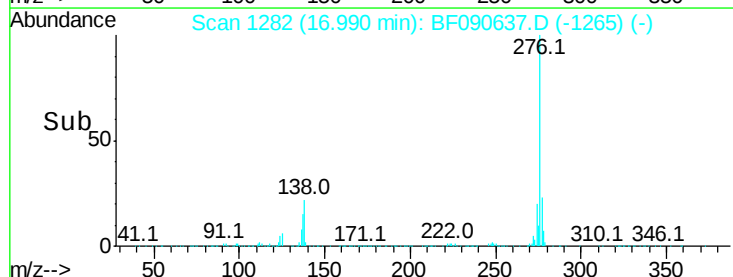
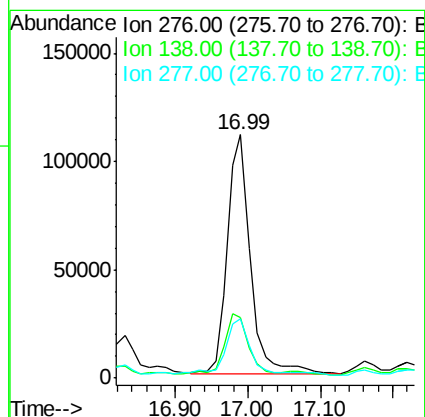
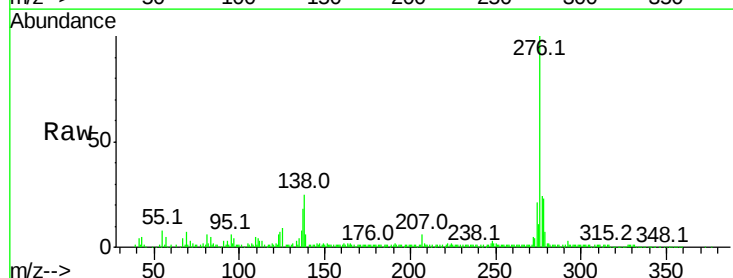
Instrument :  
BNA\_F  
ClientSampled :  
SP-2-2

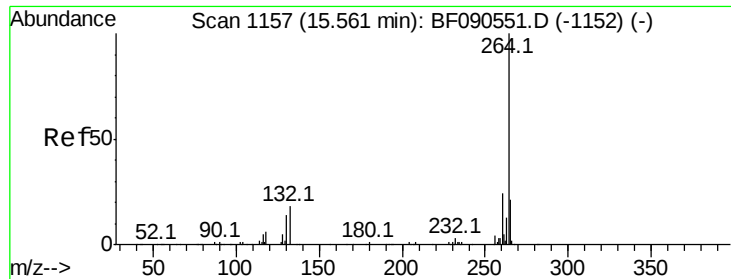
Tot Ion:228 Resp: 605026  
Ion Ratio Lower Upper  
228 100  
226 30.4 24.8 37.2  
229 22.0 16.2 24.4



#85  
Indeno(1,2,3-cd)pyrene  
Concen: 13.80 ng  
RT: 16.99 min Scan# 1282  
Delta R.T. -0.00 min  
Lab File: BF090637.D  
Acq: 18 Oct 2016 19:30

Tgt Ion:276 Resp: 242134  
Ion Ratio Lower Upper  
276 100  
138 25.3 25.8 38.6#  
277 22.5 20.1 30.1

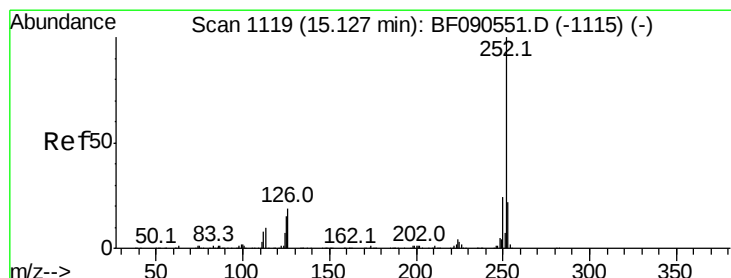
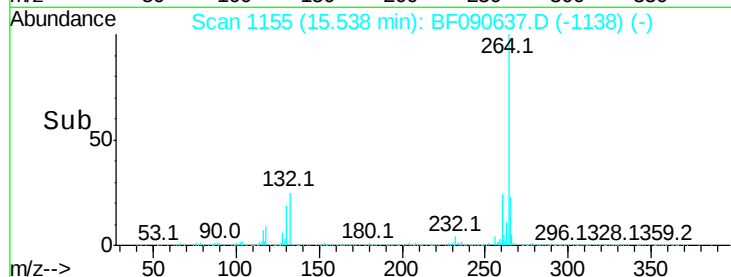
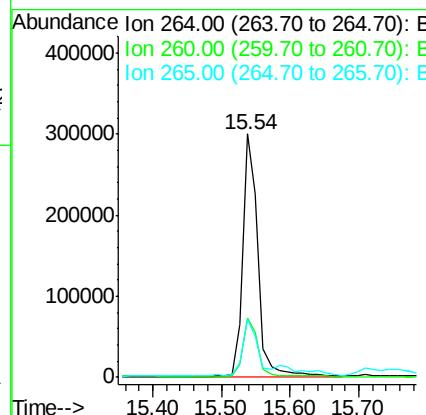
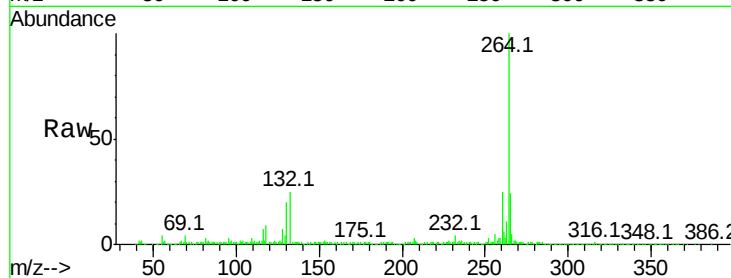




#86  
Pervlene-d12  
Concen: 20.00 ng  
RT: 15.54 min Scan# 1155  
Delta R.T. 0.00 min  
Lab File: BF090637.D  
Acq: 18 Oct 2016 19:30

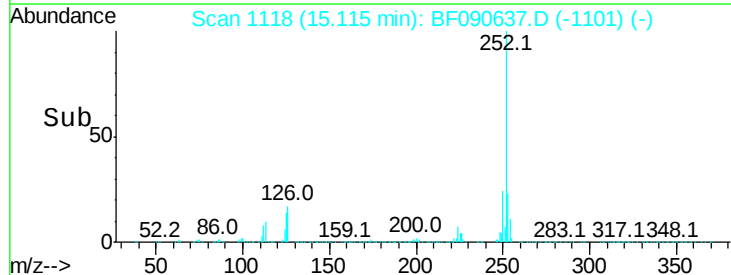
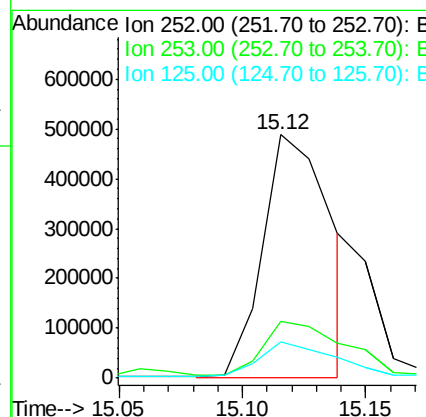
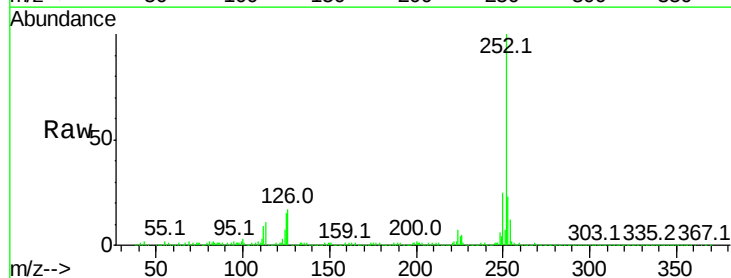
Instrument :  
BNA\_F  
ClientSampleId :  
SP-2-2

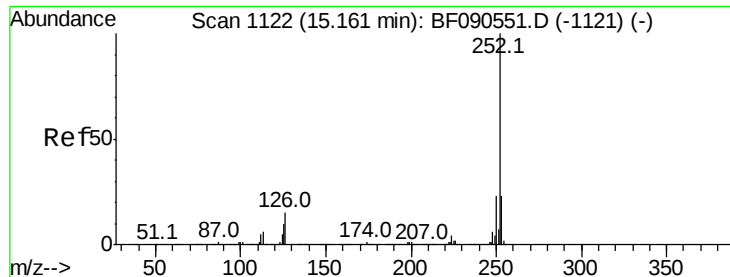
Tot Ion:264 Resp: 462349  
Ion Ratio Lower Upper  
264 100  
260 24.5 19.3 28.9  
265 23.8 16.7 25.1



#87  
Benzo(b)fluoranthene  
Concen: 30.98 ng m  
RT: 15.12 min Scan# 1118  
Delta R.T. 0.00 min  
Lab File: BF090637.D  
Acq: 18 Oct 2016 19:30

Tgt Ion:252 Resp: 937436  
Ion Ratio Lower Upper  
252 100  
253 23.4 17.8 26.8  
125 14.6 12.0 18.0





#88

Benzo(k)fluoranthene

Concen: 6.65 ng/mL

RT: 15.14 min Scan# 1120

Delta R.T. -0.01 min

Lab File: BF090637.D

Acq: 18 Oct 2016 19:30

Instrument :

BNA\_F

ClientSampleId :

SP-2-2

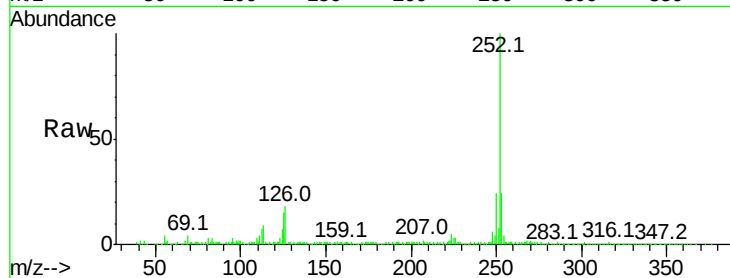
Tot Ion:252 Resp: 216564

Ion Ratio Lower Upper

252 100

253 24.0 18.0 27.0

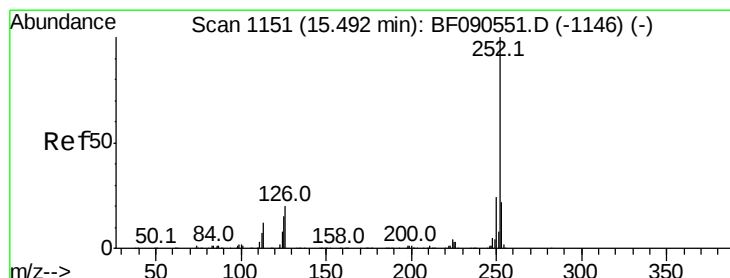
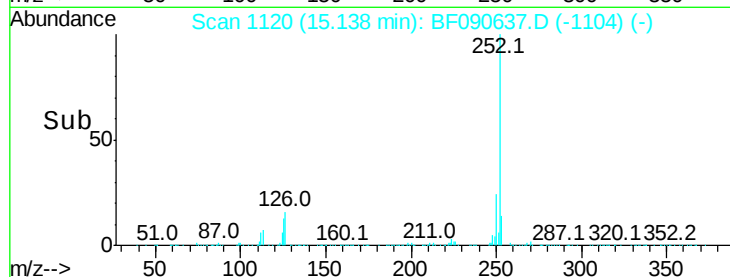
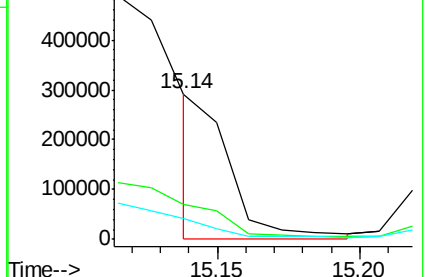
125 14.6 10.0 15.0



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



#89

Benzo(a)pyrene

Concen: 16.35 ng/mL

RT: 15.48 min Scan# 1150

Delta R.T. 0.00 min

Lab File: BF090637.D

Acq: 18 Oct 2016 19:30

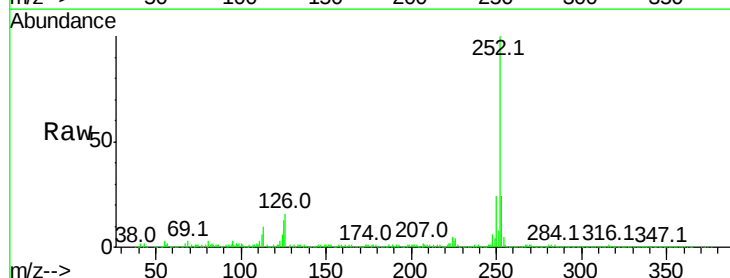
Tgt Ion:252 Resp: 452966

Ion Ratio Lower Upper

252 100

253 23.8 17.9 26.9

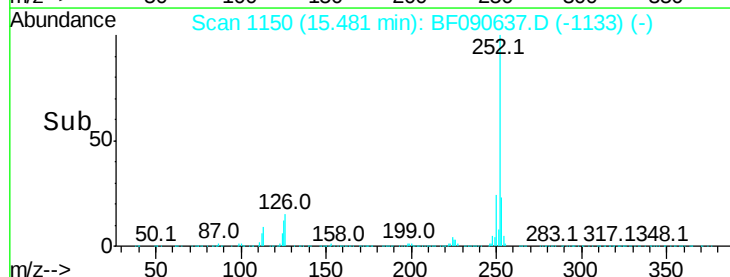
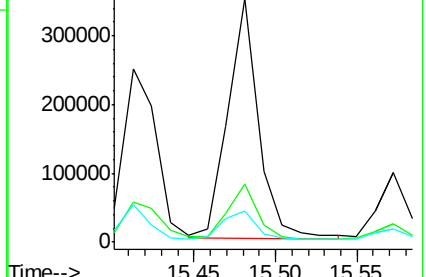
125 12.5 12.3 18.5

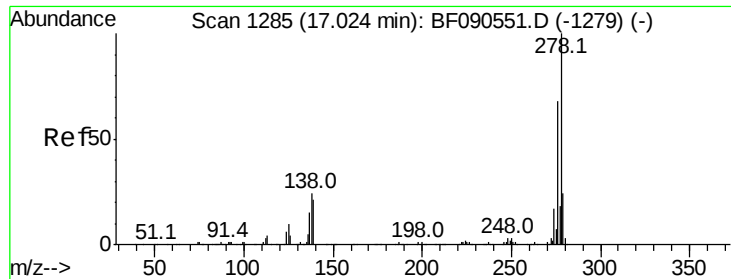


Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E





#90

Dibenzo(a,h)anthracene

Concen: 2.84 ng

RT: 17.00 min Scan# 1283

Delta R.T. -0.01 min

Lab File: BF090637.D

Acq: 18 Oct 2016 19:30

Instrument :

BNA\_F

ClientSampleId :

SP-2-2

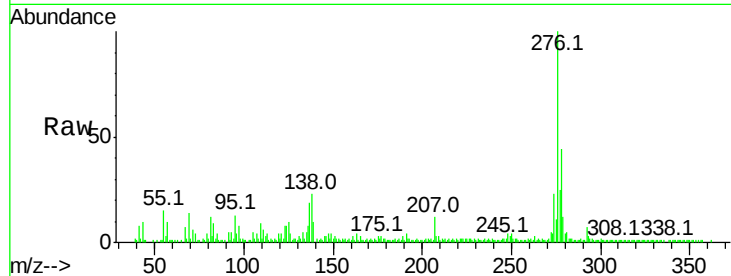
Tot Ion:278 Resp: 60012

Ion Ratio Lower Upper

278 100

139 22.7 16.6 25.0

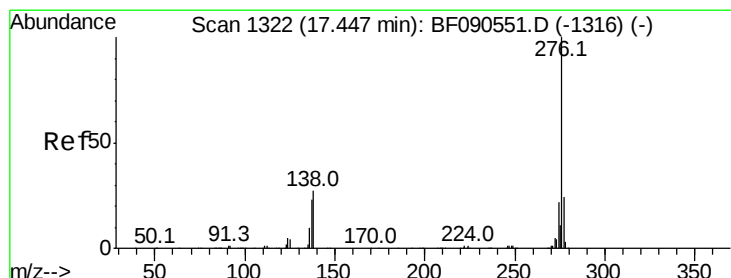
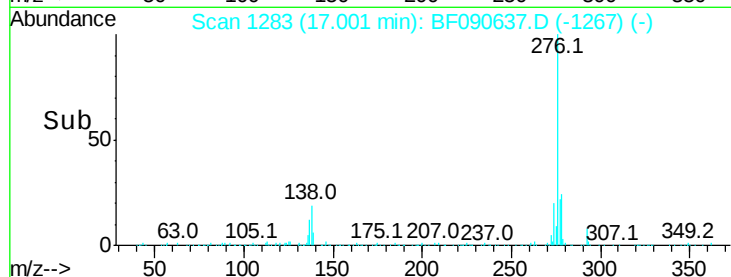
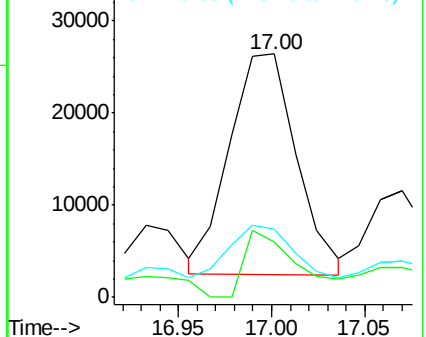
279 28.1 19.1 28.7



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: 9.92 ng

RT: 17.42 min Scan# 1320

Delta R.T. 0.00 min

Lab File: BF090637.D

Acq: 18 Oct 2016 19:30

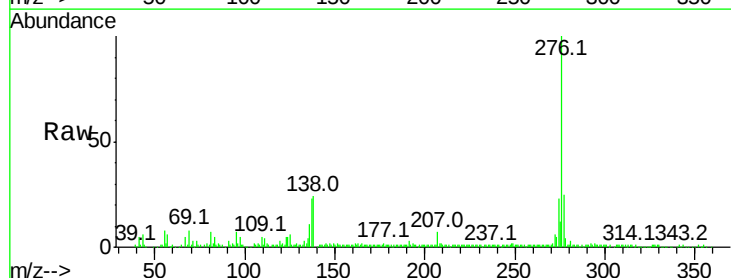
Tgt Ion:276 Resp: 199711

Ion Ratio Lower Upper

276 100

277 24.5 18.8 28.2

138 24.3 21.8 32.8



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

