

Data Path : Z:\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 01:09:22 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

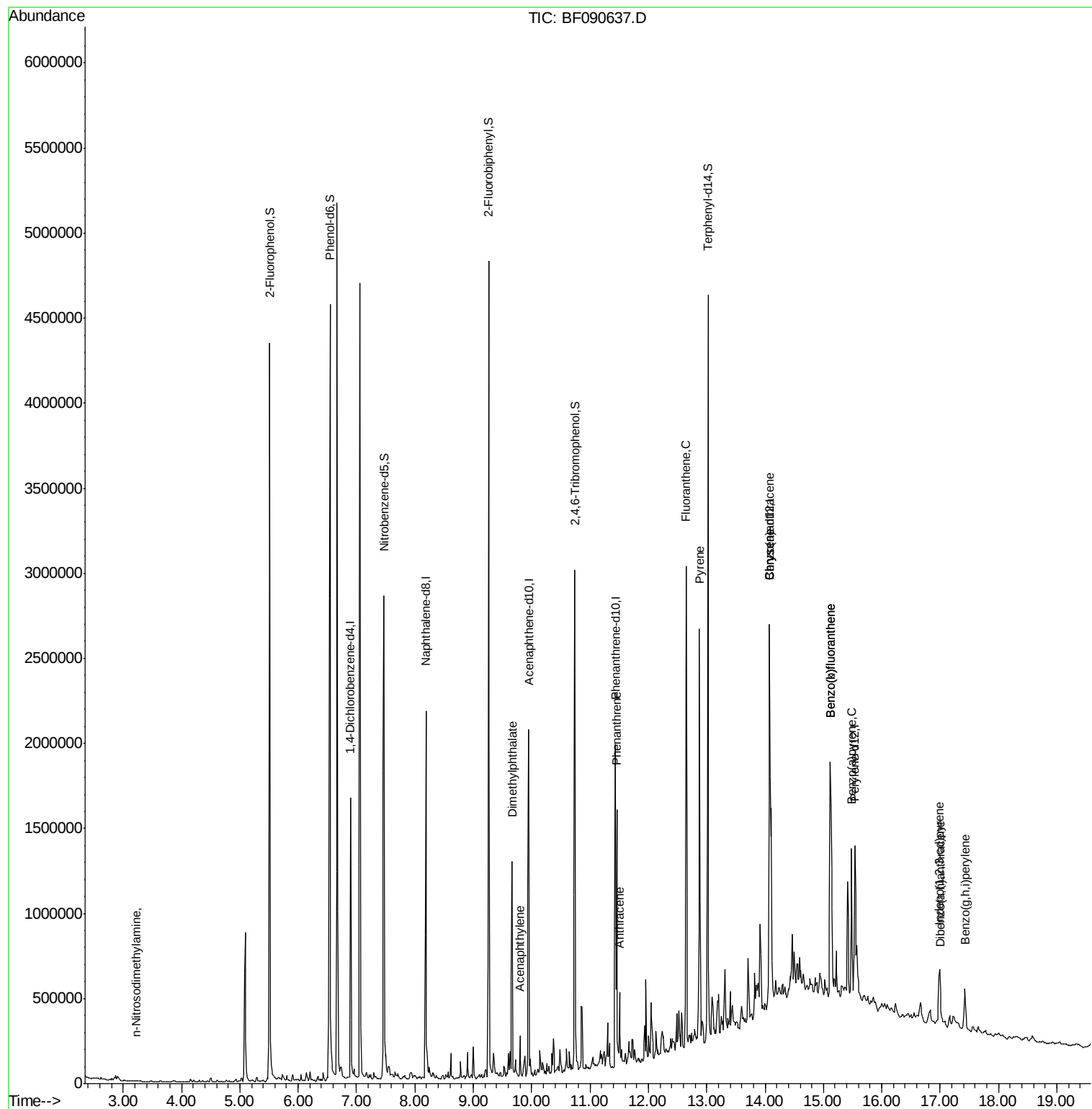
| Internal Standards          | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 6.90  | 152  | 238530   | 20.00  | ng    | -0.01    |
| 21) Naphthalene-d8          | 8.19  | 136  | 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   |
| 4) n-Nitrosodimethylamine   | 3.23  | 42   | 618      | 7.26   | ng    | # 1      |
| 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                | 14.08 | 228  | 723147   | 23.83  | ng    | 98       |
| 85) Indeno(1,2,3-cd)pyrene  | 16.99 | 276  | 242134   | 13.80  | ng    | # 91     |
| 87) Benzo(b)fluoranthene    | 15.12 | 252  | 1137568  | 37.60  | ng    | 98       |
| 88) Benzo(k)fluoranthene    | 15.12 | 252  | 1137568  | 34.95  | ng    | 97       |
| 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       |

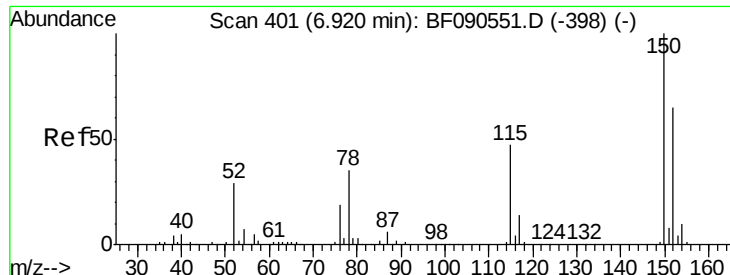
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF101816\  
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ALS Vial : 14 Sample Multiplier: 1

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

Quant Time: Oct 19 01:09:22 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

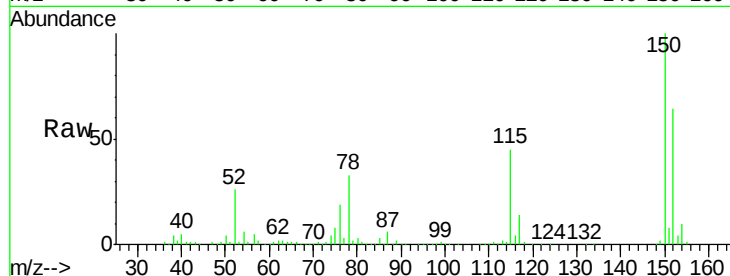
Tgt Ion:152 Resp: 238530

Ion Ratio Lower Upper

152 100

150 156.7 127.2 190.8

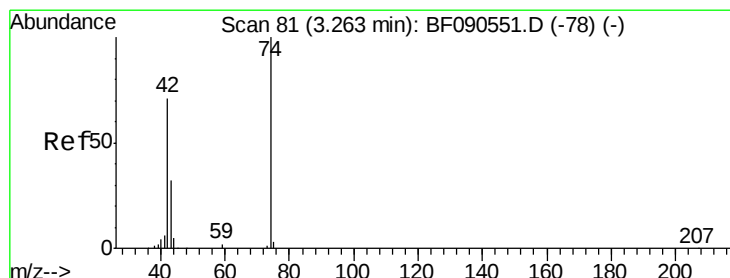
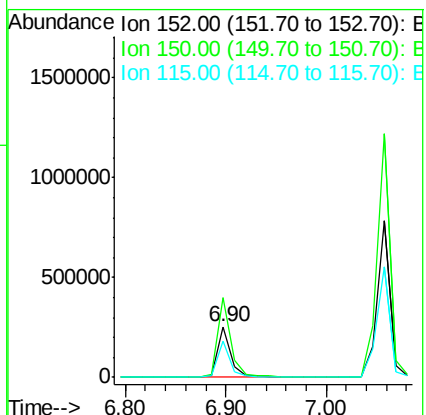
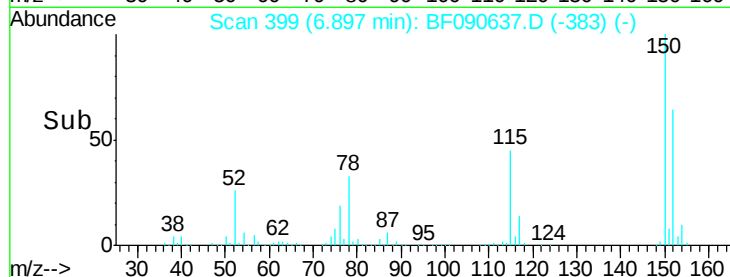
115 70.1 58.6 88.0



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



#4

n-Nitrosodimethylamine

Concen: 7.26 ng

RT: 3.23 min Scan# 78

Delta R.T. -0.00 min

Lab File: BF090637.D

Acq: 18 Oct 2016 19:30

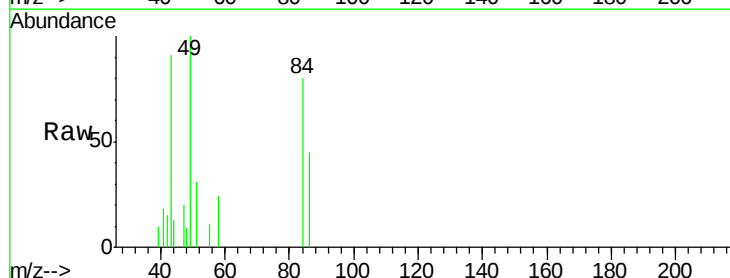
Tgt Ion: 42 Resp: 618

Ion Ratio Lower Upper

42 100

74 0.0 113.3 169.9#

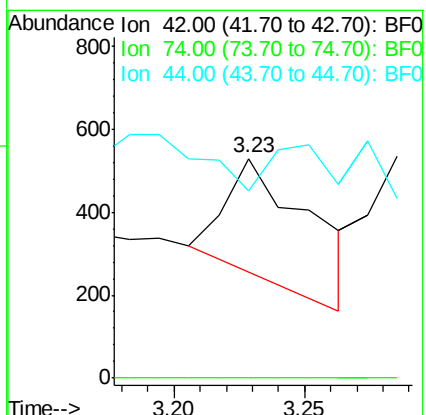
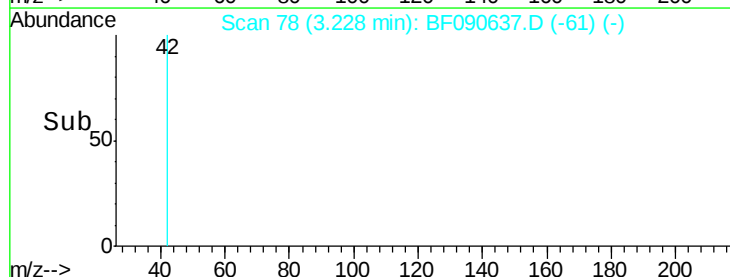
44 85.3 6.0 9.0#

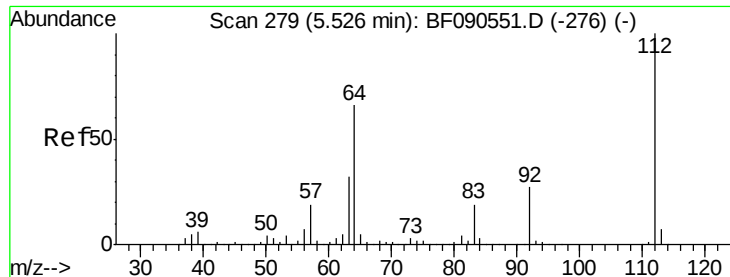


Abundance Ion 42.00 (41.70 to 42.70): BF0

Ion 74.00 (73.70 to 74.70): BF0

Ion 44.00 (43.70 to 44.70): BF0





#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

Instrument :

BNA\_F

ClientSampleId :

SP-2-2

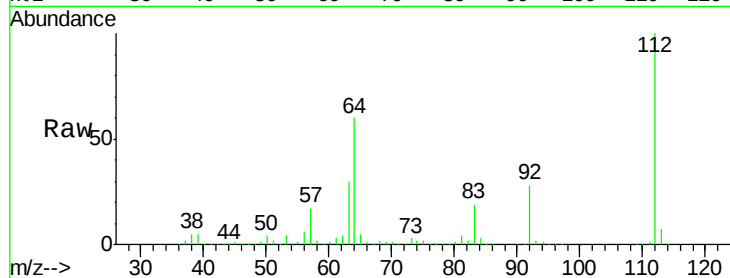
Tgt Ion: 112 Resp: 1547472

Ion Ratio Lower Upper

112 100

64 60.4 52.6 78.8

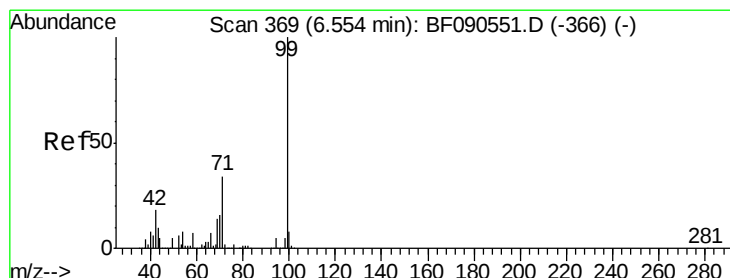
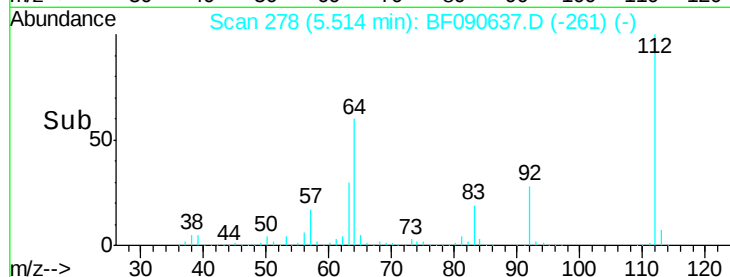
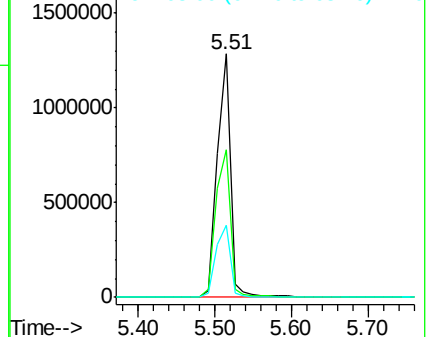
63 29.6 26.0 39.0



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

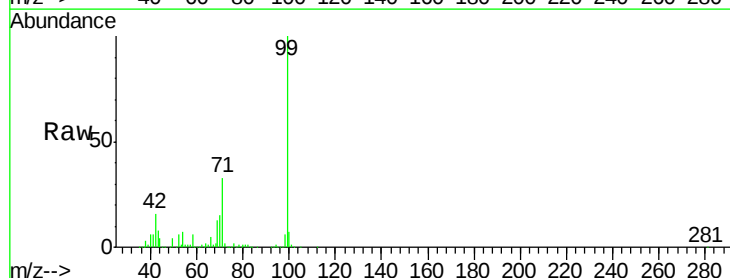
Tgt Ion: 99 Resp: 2110127

Ion Ratio Lower Upper

99 100

42 15.6 14.7 22.1

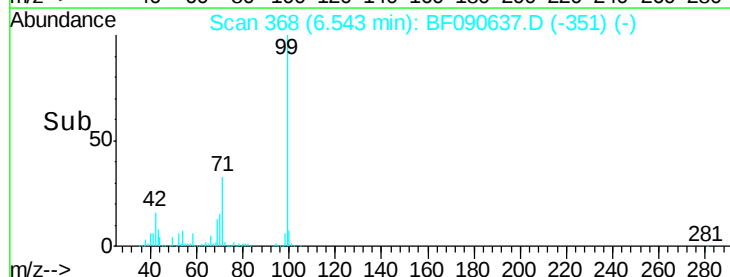
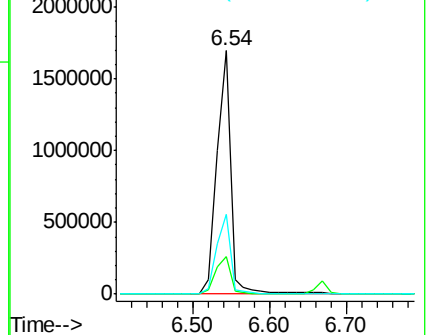
71 32.8 27.6 41.4

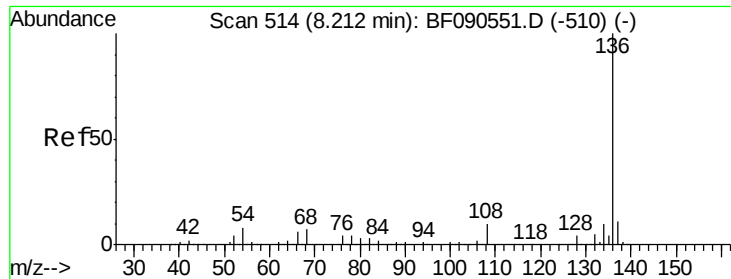


Abundance Ion 99.00 (98.70 to 99.70): BF0

Ion 42.00 (41.70 to 42.70): BF0

Ion 71.00 (70.70 to 71.70): BF0

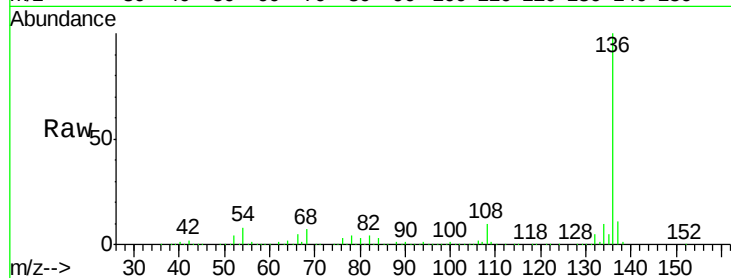




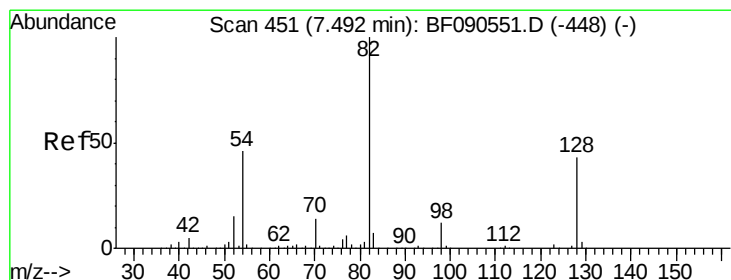
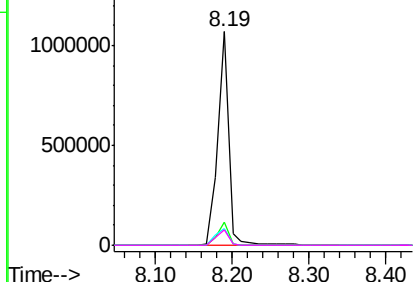
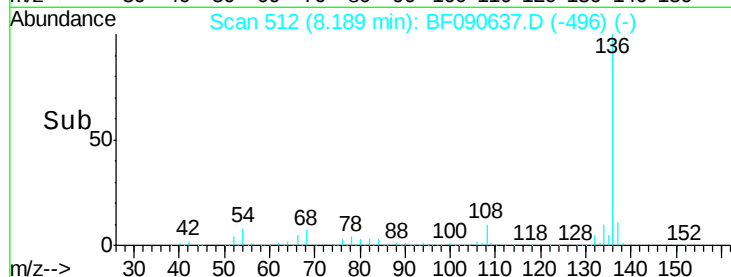
#21  
Naphthalene-d8  
Concen: 20.00 ng  
RT: 8.19 min Scan# 512  
Delta R.T. -0.01 min  
Lab File: BF090637.D  
Acq: 18 Oct 2016 19:30

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

| 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     |

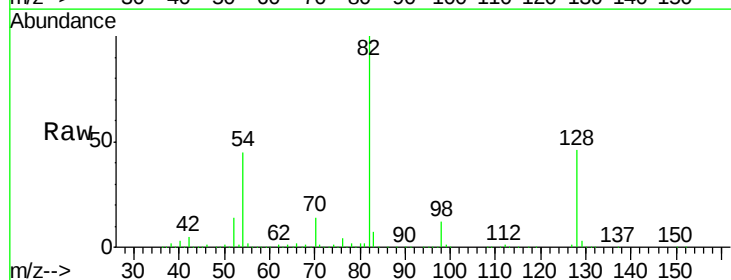


Abundance Ion 136.00 (135.70 to 136.70): E  
Ion 137.00 (136.70 to 137.70): E  
Ion 54.00 (53.70 to 54.70): BF0  
Ion 68.00 (67.70 to 68.70): BF0

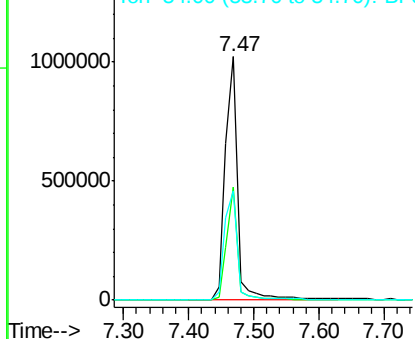
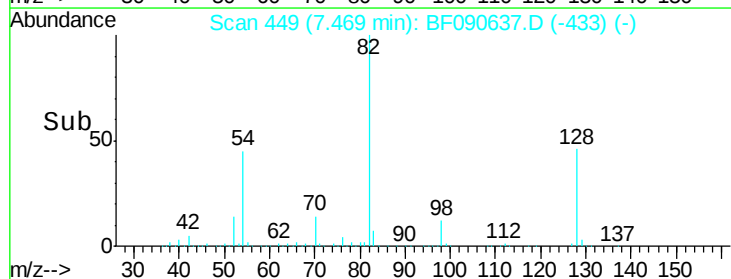


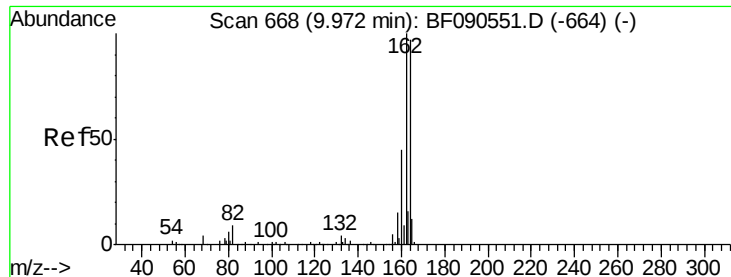
#23  
Nitrobenzene-d5  
Concen: 71.69 ng  
RT: 7.47 min Scan# 449  
Delta R.T. -0.01 min  
Lab File: BF090637.D  
Acq: 18 Oct 2016 19:30

| Tgt Ion: | 82    | Resp: | 1364411 |
|----------|-------|-------|---------|
| Ion      | Ratio | Lower | Upper   |
| 82       | 100   |       |         |
| 128      | 46.4  | 34.3  | 51.5    |
| 54       | 45.0  | 37.0  | 55.6    |



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





#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

Instrument :

BNA\_F

ClientSampleId :

SP-2-2

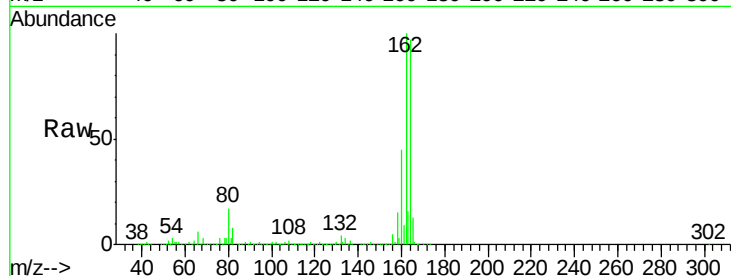
Tgt Ion:164 Resp: 521552

Ion Ratio Lower Upper

164 100

162 102.8 82.2 123.4

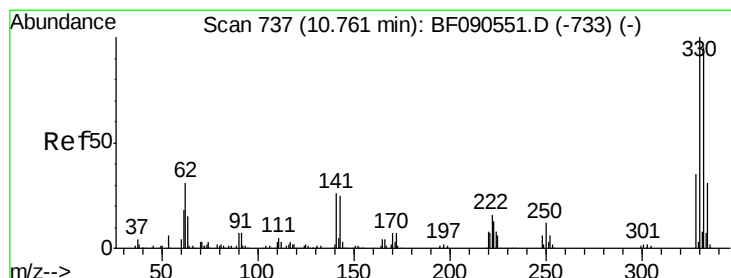
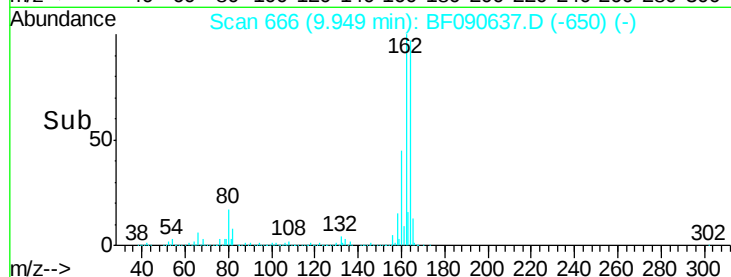
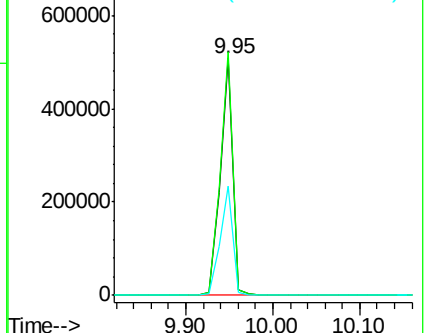
160 46.1 36.6 55.0



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: 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

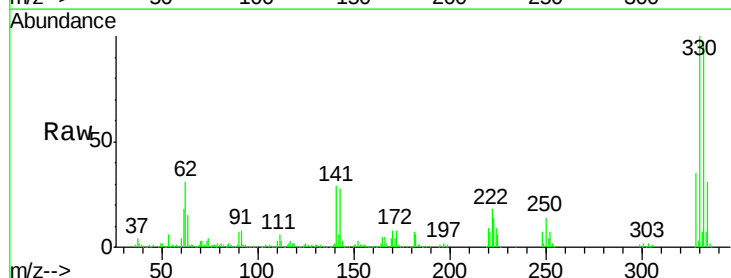
Tgt Ion:330 Resp: 380711

Ion Ratio Lower Upper

330 100

332 96.4 76.2 114.2

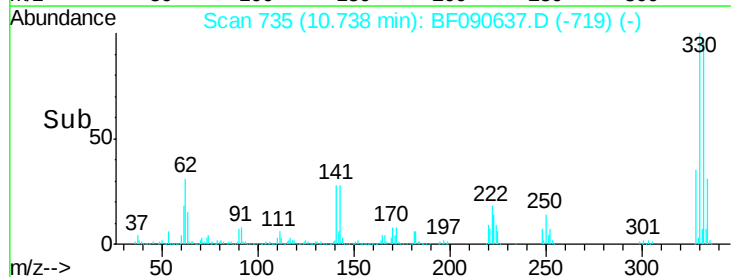
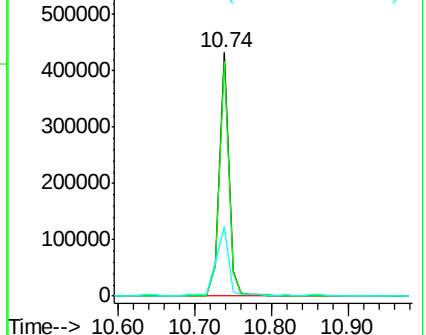
141 36.0 31.4 47.2

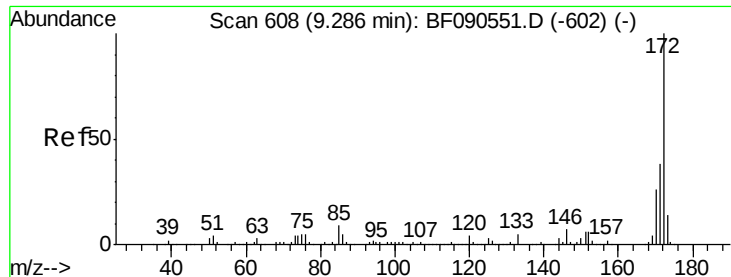


Abundance Ion 329.80 (329.50 to 330.50): E

Ion 331.80 (331.50 to 332.50): E

Ion 141.00 (140.70 to 141.70): E

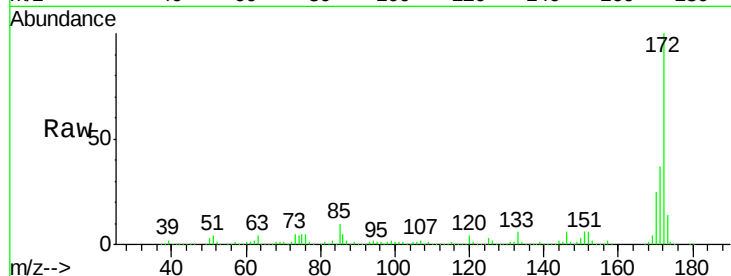




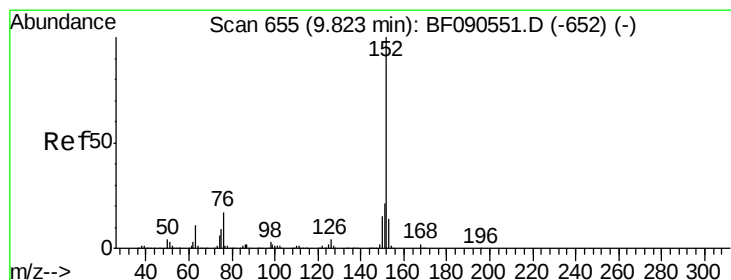
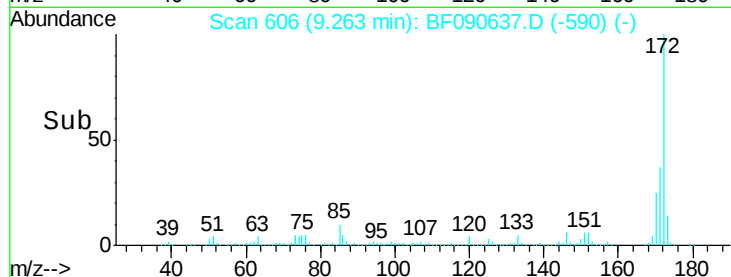
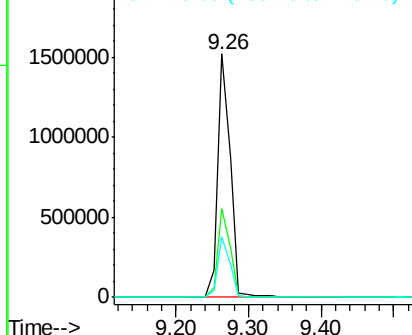
#44  
 2-Fluorobiphenyl  
 Concen: 57.57 ng  
 RT: 9.26 min Scan# 606  
 Delta R.T. -0.01 min  
 Lab File: BF090637.D  
 Acq: 18 Oct 2016 19:30

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

Tgt Ion:172 Resp: 1822230  
 Ion Ratio Lower Upper  
 172 100  
 171 36.5 30.1 45.1  
 170 24.8 20.6 30.8

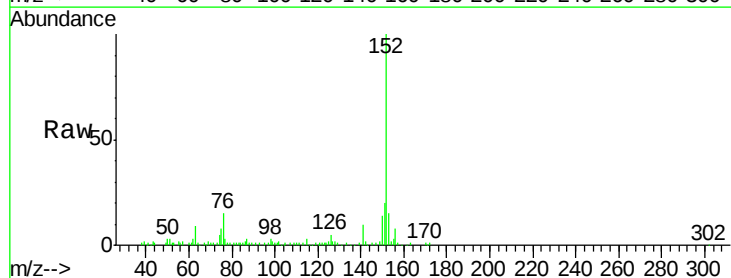


Abundance Ion 172.00 (171.70 to 172.70): E  
 Ion 171.00 (170.70 to 171.70): E  
 Ion 170.00 (169.70 to 170.70): E

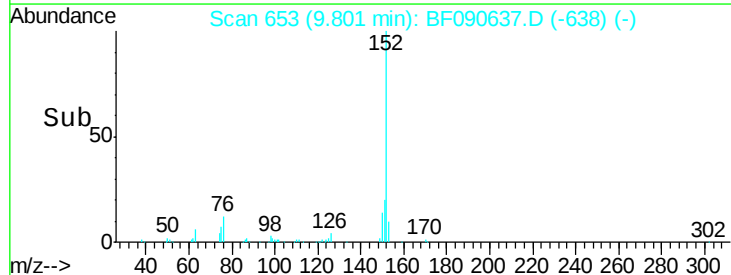
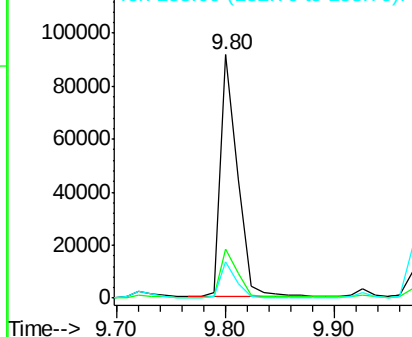


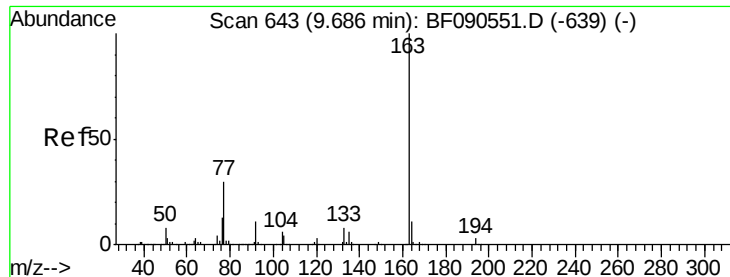
#48  
 Acenaphthylene  
 Concen: 2.14 ng  
 RT: 9.80 min Scan# 653  
 Delta R.T. -0.02 min  
 Lab File: BF090637.D  
 Acq: 18 Oct 2016 19:30

Tgt 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

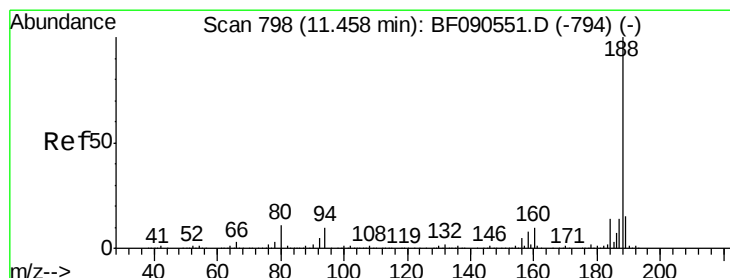
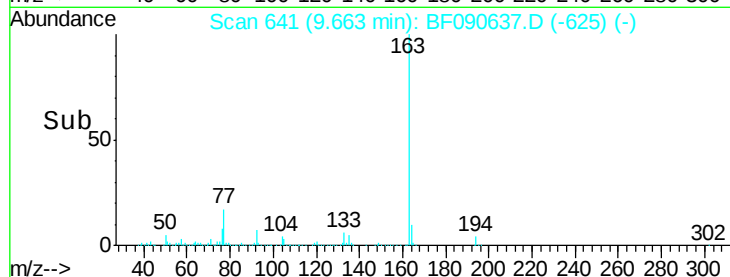
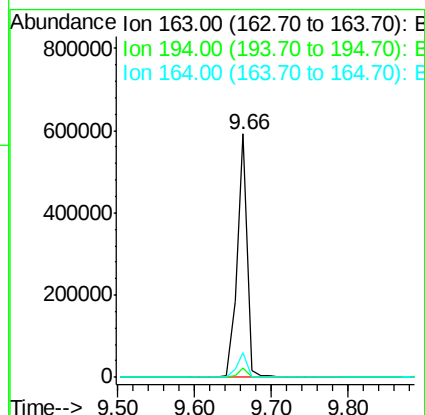
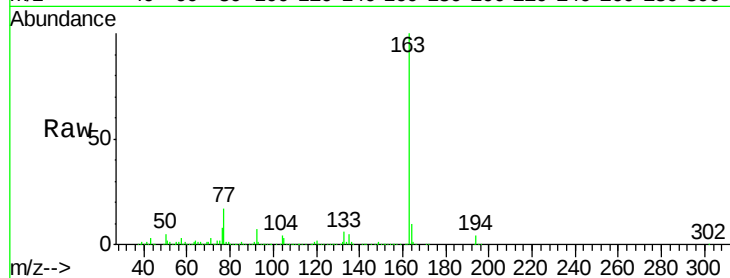
Instrument :

BNA\_F

ClientSampleId :

SP-2-2

|          |       |       |        |
|----------|-------|-------|--------|
| 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   |



#63

Phenanthrene-d10

Concen: 20.00 ng

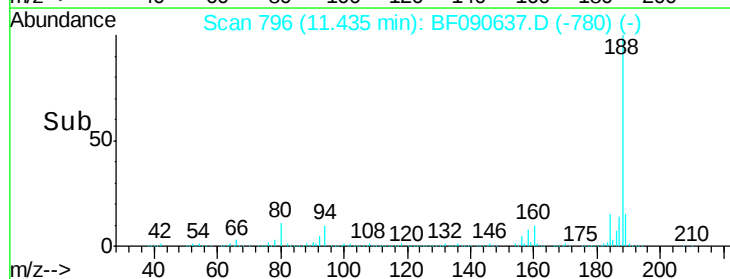
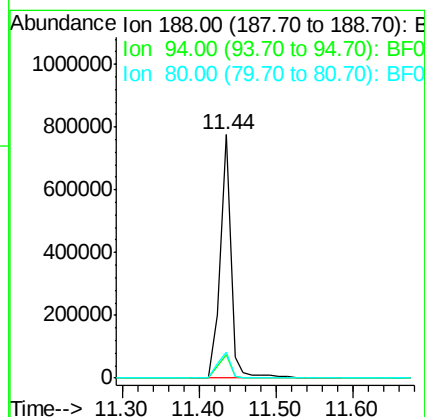
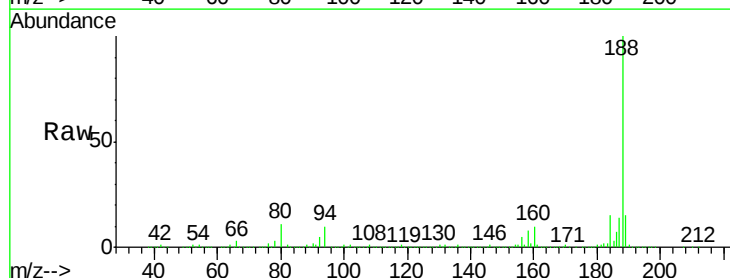
RT: 11.44 min Scan# 796

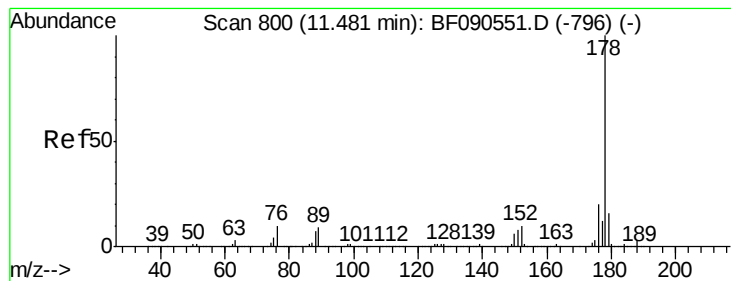
Delta R.T. -0.01 min

Lab File: BF090637.D

Acq: 18 Oct 2016 19:30

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





#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

Instrument :

BNA\_F

ClientSampleId :

SP-2-2

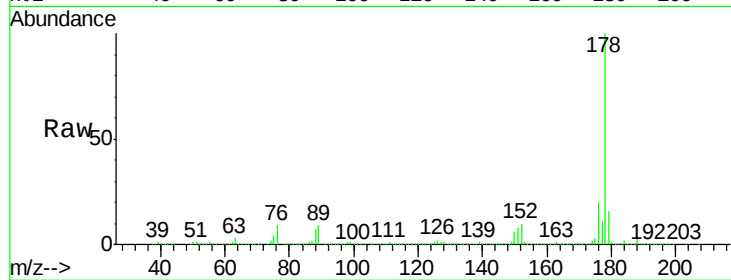
Tgt Ion:178 Resp: 562079

Ion Ratio Lower Upper

178 100

176 19.7 16.1 24.1

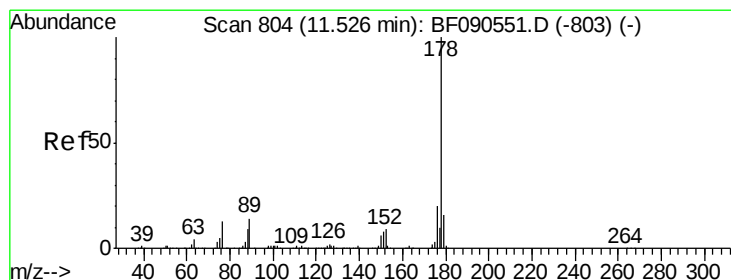
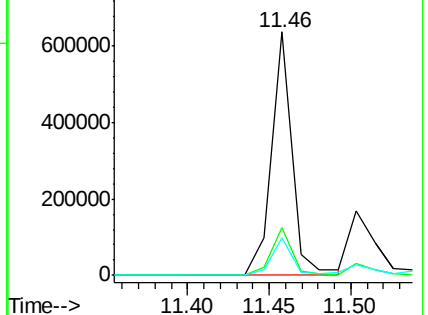
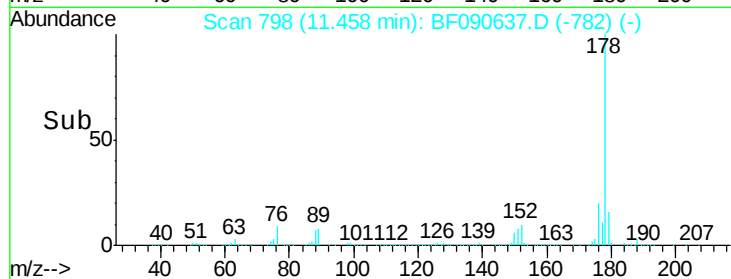
179 15.6 12.6 19.0



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

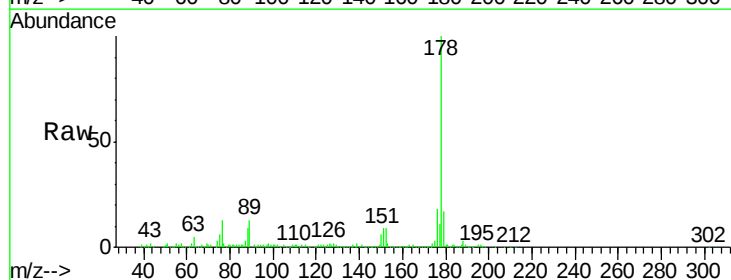
Tgt Ion:178 Resp: 206046

Ion Ratio Lower Upper

178 100

176 18.5 15.5 23.3

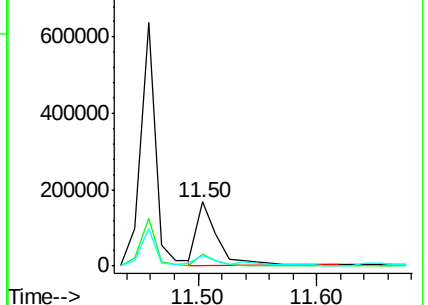
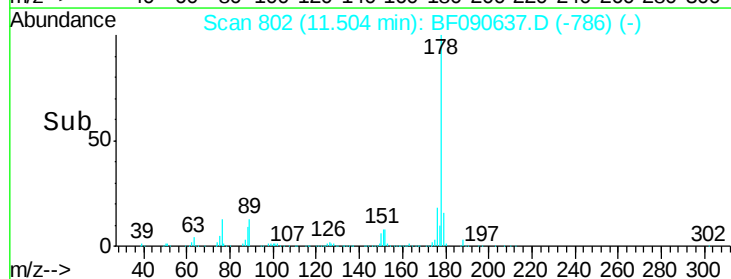
179 16.5 13.0 19.4

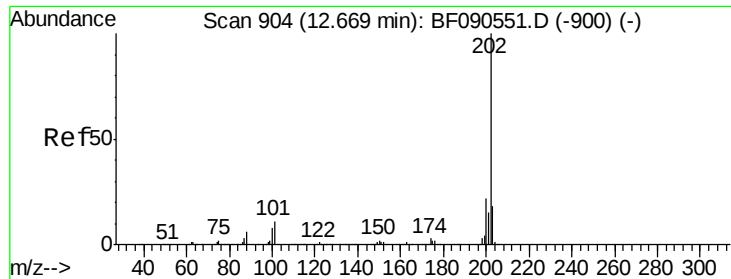


Abundance Ion 178.00 (177.70 to 178.70): E

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

Instrument :

BNA\_F

ClientSampleId :

SP-2-2

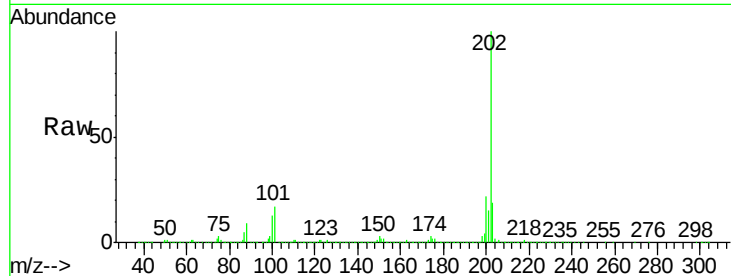
Tgt Ion:202 Resp: 1185584

Ion Ratio Lower Upper

202 100

101 16.7 0.0 31.1

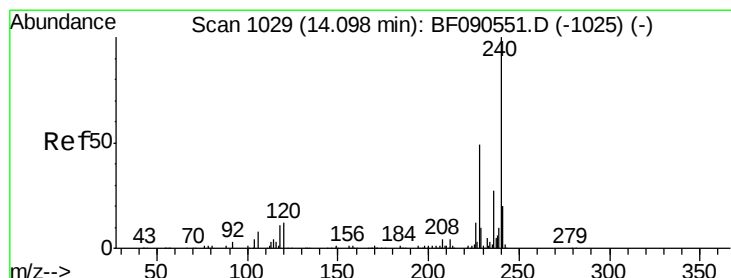
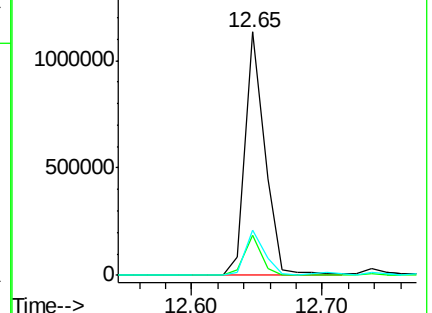
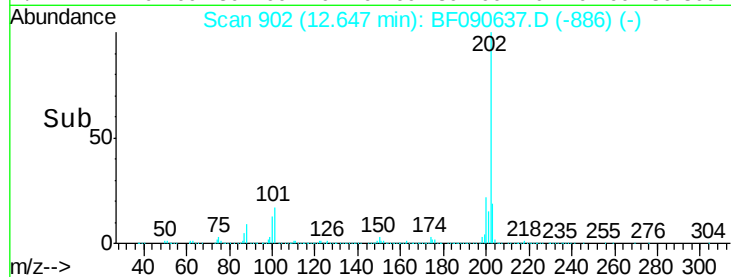
203 18.7 0.0 38.0



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

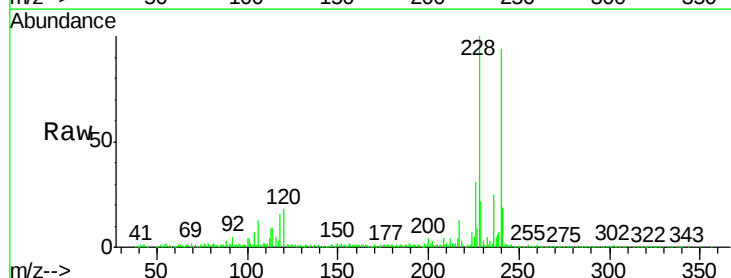
Tgt Ion:240 Resp: 553331

Ion Ratio Lower Upper

240 100

120 18.7 9.8 14.8#

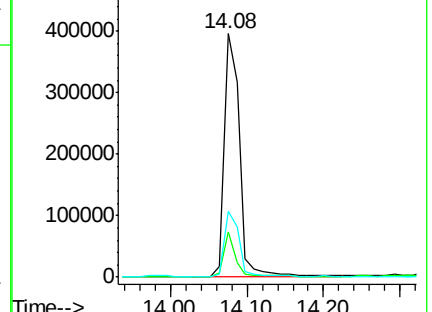
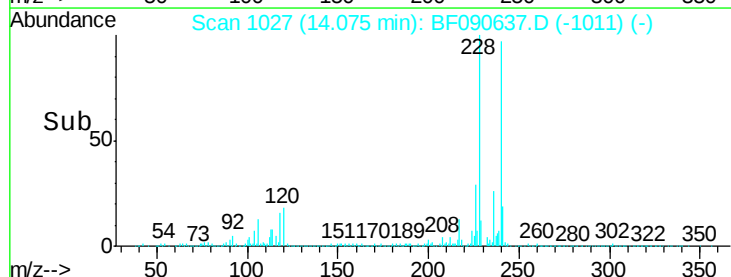
236 27.0 21.7 32.5

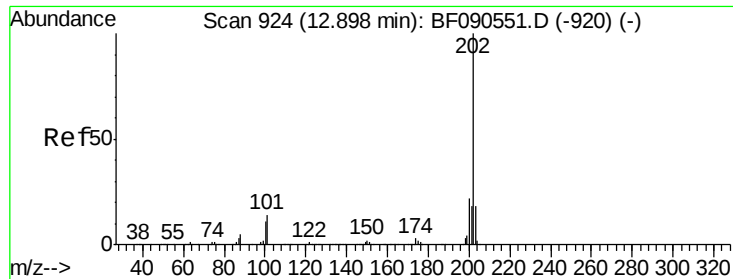


Abundance Ion 240.00 (239.70 to 240.70): E

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

Instrument :

BNA\_F

ClientSampleId :

SP-2-2

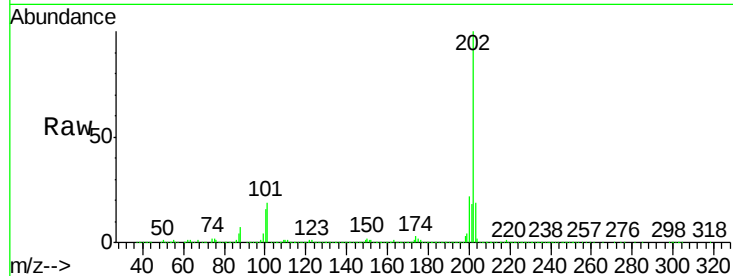
Tgt Ion:202 Resp: 1058731

Ion Ratio Lower Upper

202 100

200 21.7 17.8 26.6

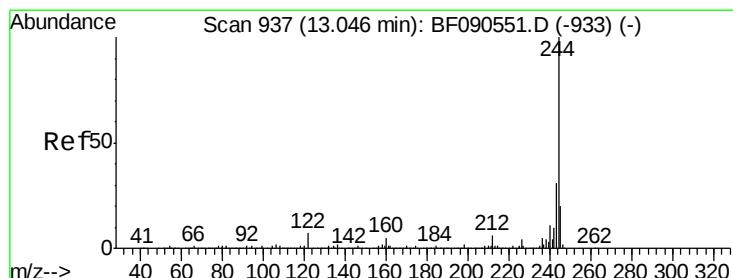
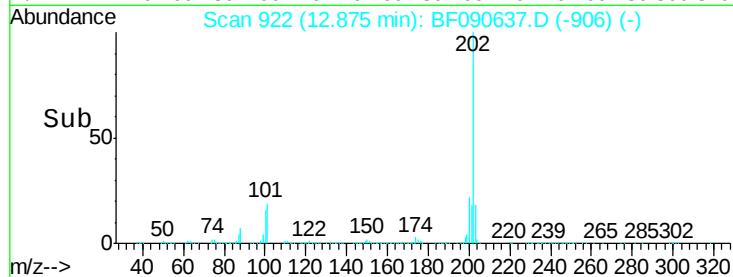
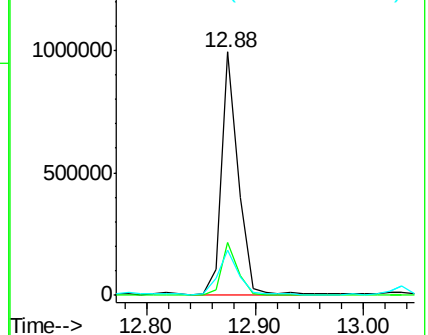
203 18.6 14.6 21.8



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

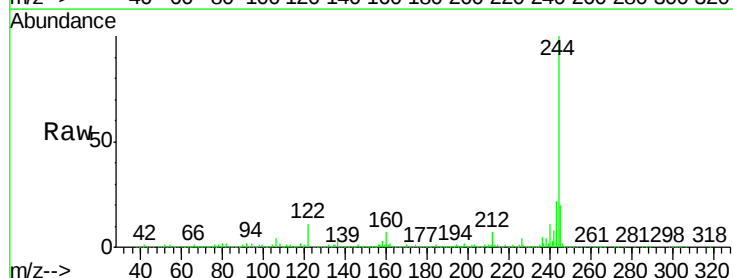
Tgt Ion:244 Resp: 1452764

Ion Ratio Lower Upper

244 100

212 7.0 5.0 7.4

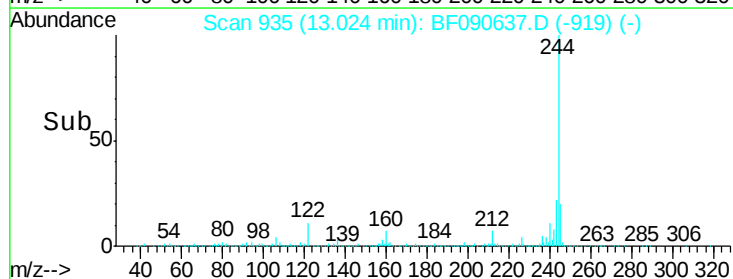
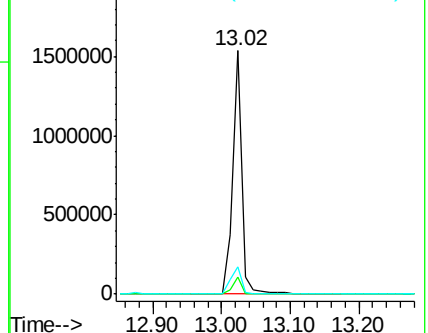
122 11.2 5.6 8.4#

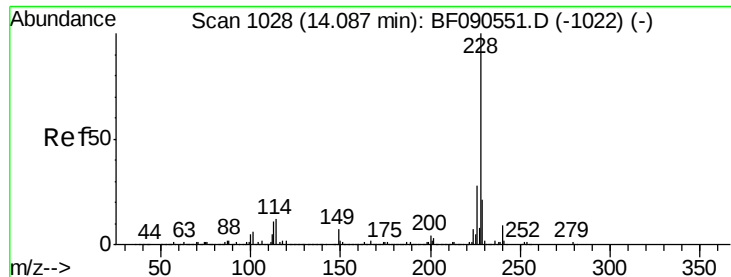


Abundance Ion 244.00 (243.70 to 244.70): E

Ion 212.00 (211.70 to 212.70): E

Ion 122.00 (121.70 to 122.70): E





#80

Benzo(a)anthracene

Concen: 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

Instrument :

BNA\_F

ClientSampleId :

SP-2-2

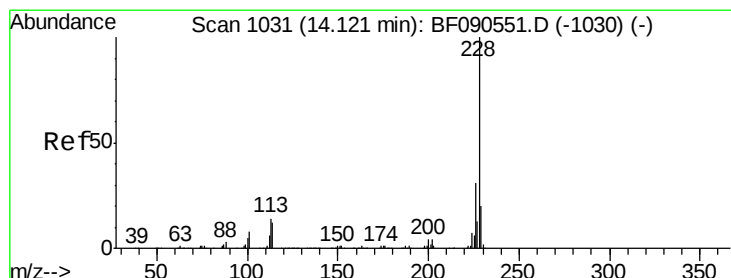
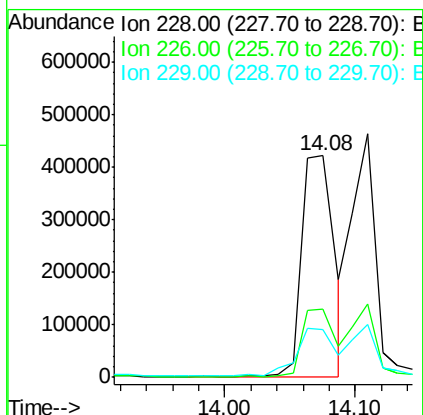
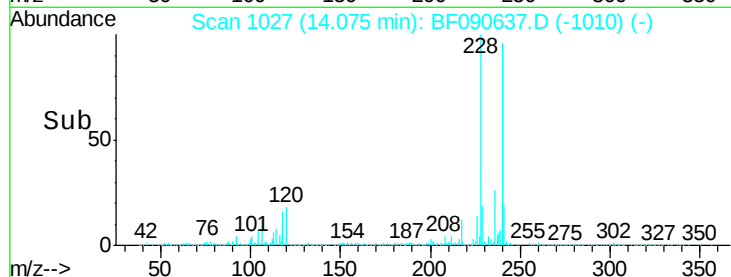
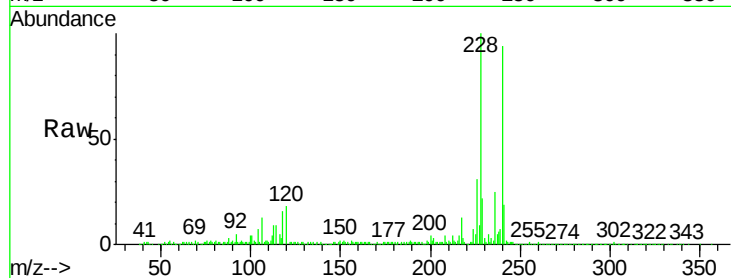
Tgt Ion:228 Resp: 723147

Ion Ratio Lower Upper

228 100

226 30.5 22.8 34.2

229 21.8 16.6 25.0



#82

Chrysene

Concen: 23.83 ng

RT: 14.08 min Scan# 1027

Delta R.T. -0.03 min

Lab File: BF090637.D

Acq: 18 Oct 2016 19:30

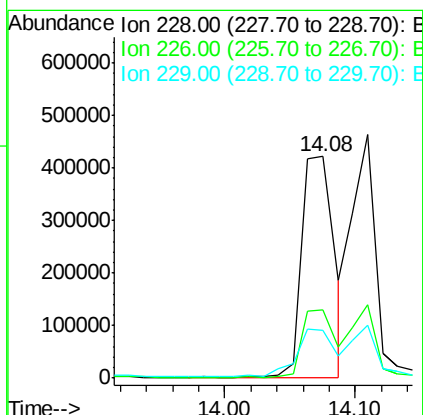
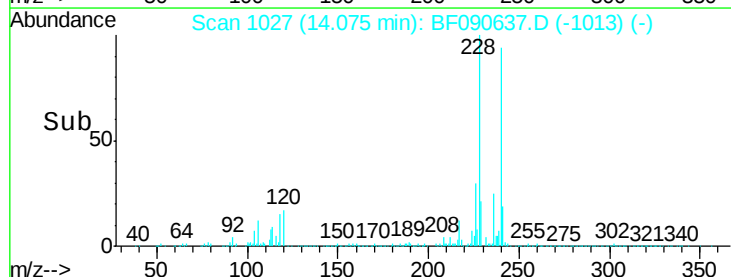
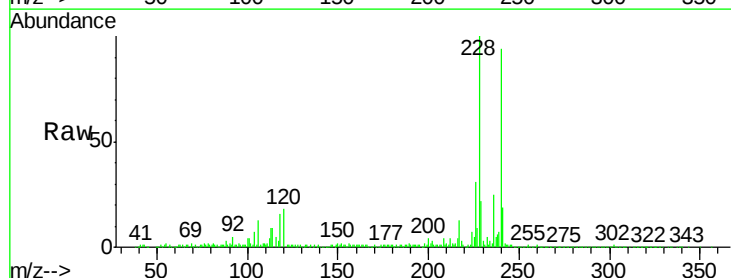
Tgt Ion:228 Resp: 723147

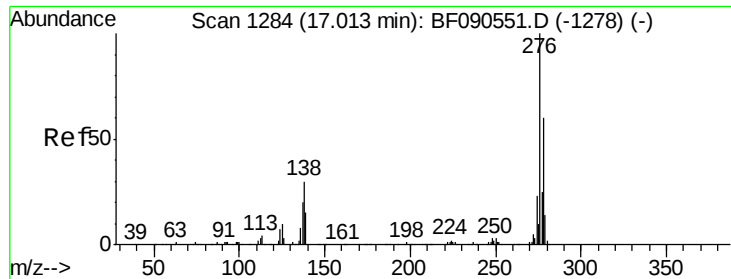
Ion Ratio Lower Upper

228 100

226 30.5 24.8 37.2

229 21.8 16.2 24.4

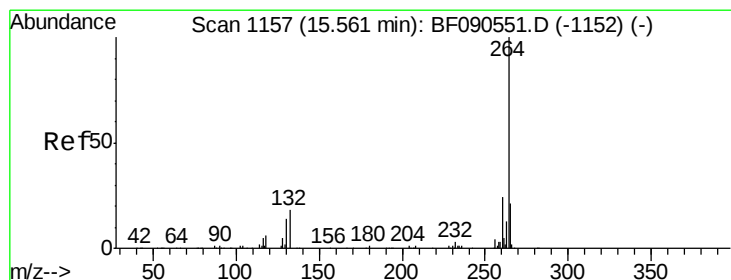
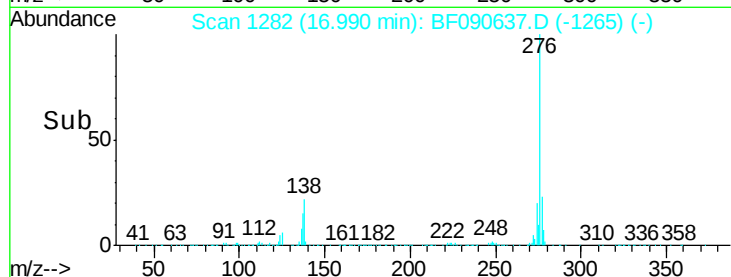
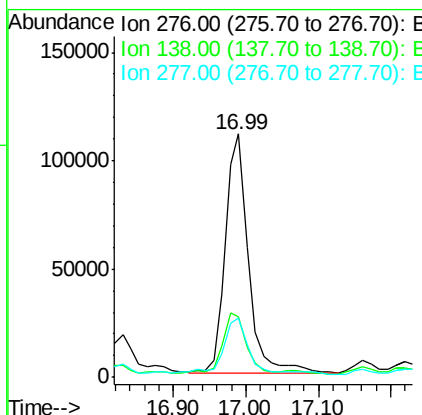
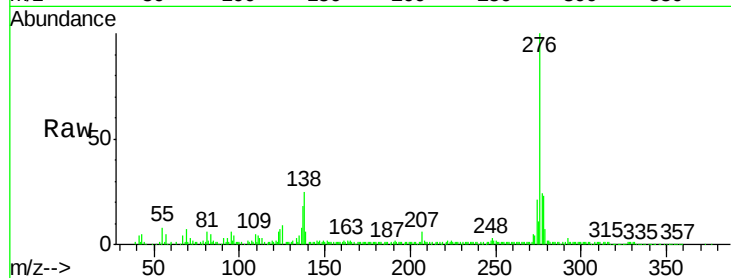




#85  
 Indeno(1,2,3-cd)pyrene  
 Concen: 13.80 ng  
 RT: 16.99 min Scan# 1282  
 Delta R.T. -0.00 min  
 Lab File: BF090637.D  
 Acq: 18 Oct 2016 19:30

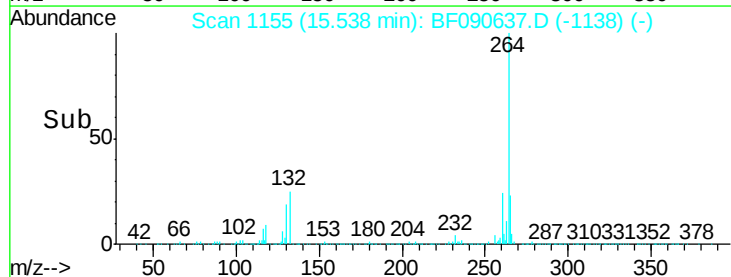
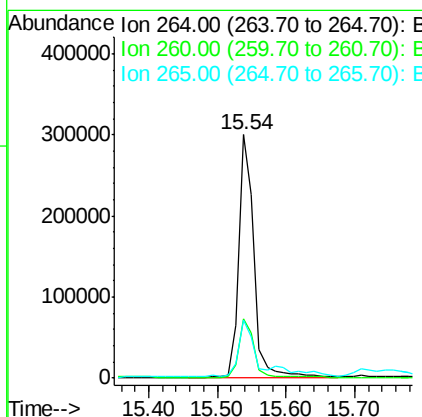
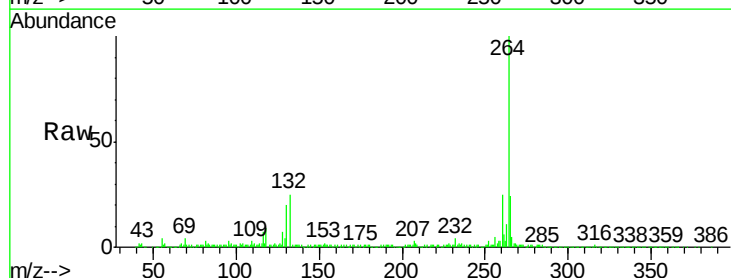
Instrument :  
 BNA\_F  
 ClientSampleID :  
 SP-2-2

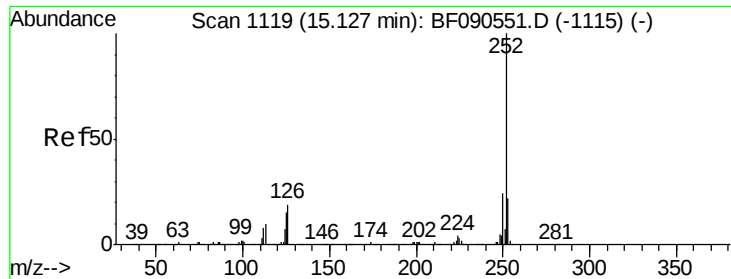
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 25.3  | 25.8  | 38.6# |
| 277     | 22.5  | 20.1  | 30.1  |



#86  
 Perylene-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

| Tgt 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: 37.60 ng

RT: 15.12 min Scan# 1118

Delta R.T. 0.00 min

Lab File: BF090637.D

Acq: 18 Oct 2016 19:30

Instrument :

BNA\_F

ClientSampleId :

SP-2-2

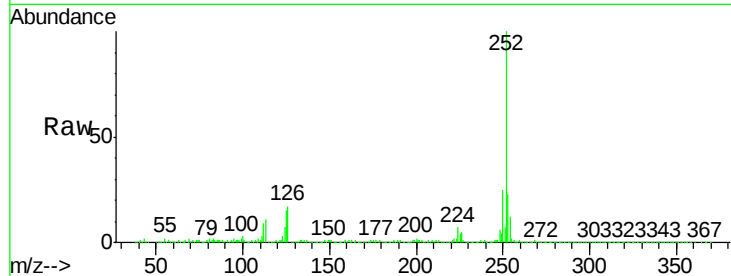
Tgt Ion:252 Resp: 1137568

Ion Ratio Lower Upper

252 100

253 23.4 17.8 26.8

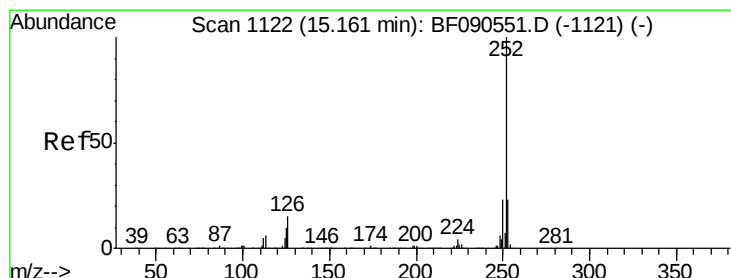
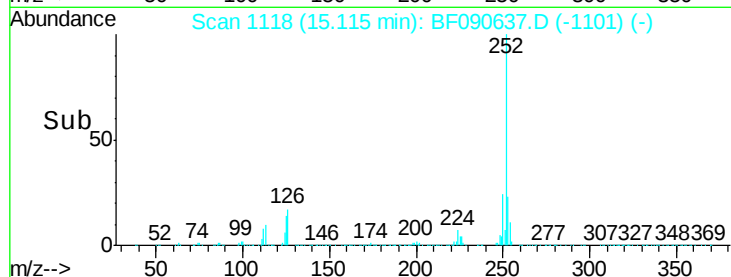
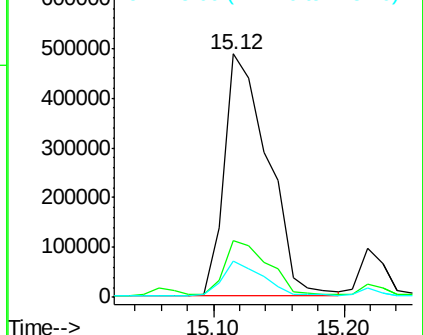
125 14.6 12.0 18.0



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



#88

Benzo(k)fluoranthene

Concen: 34.95 ng

RT: 15.12 min Scan# 1118

Delta R.T. -0.03 min

Lab File: BF090637.D

Acq: 18 Oct 2016 19:30

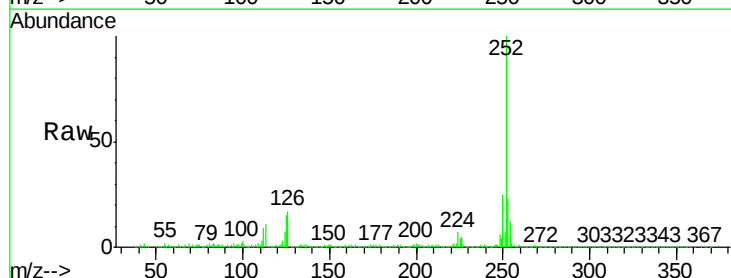
Tgt Ion:252 Resp: 1137568

Ion Ratio Lower Upper

252 100

253 23.4 18.0 27.0

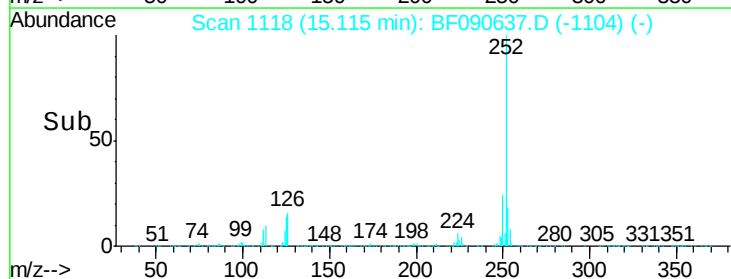
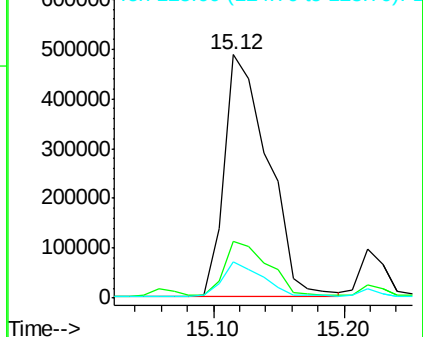
125 14.6 10.0 15.0

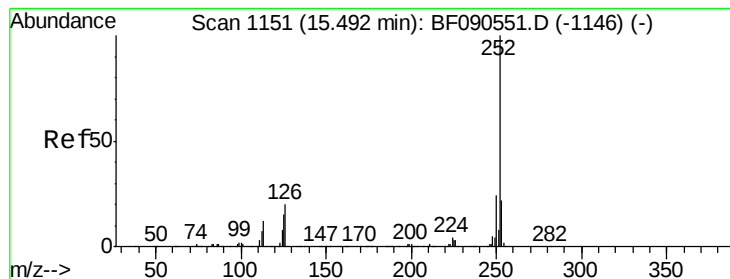


Abundance Ion 252.00 (251.70 to 252.70): E

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

RT: 15.48 min Scan# 1150

Delta R.T. 0.00 min

Lab File: BF090637.D

Acq: 18 Oct 2016 19:30

Instrument :

BNA\_F

ClientSampleId :

SP-2-2

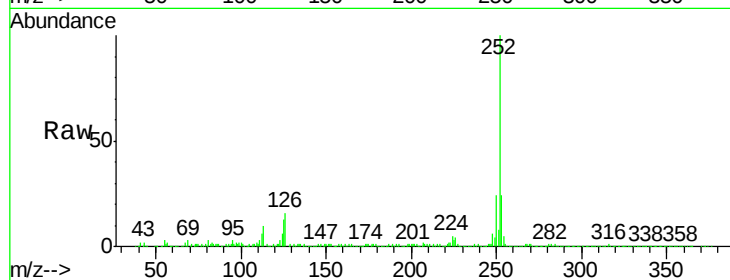
Tgt Ion:252 Resp: 452966

Ion Ratio Lower Upper

252 100

253 23.8 17.9 26.9

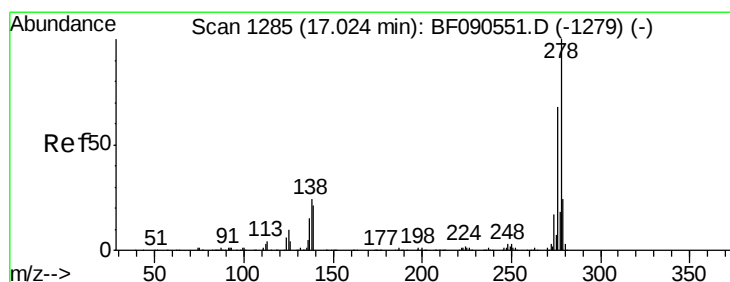
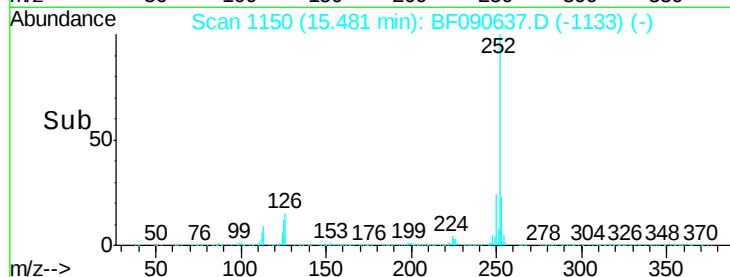
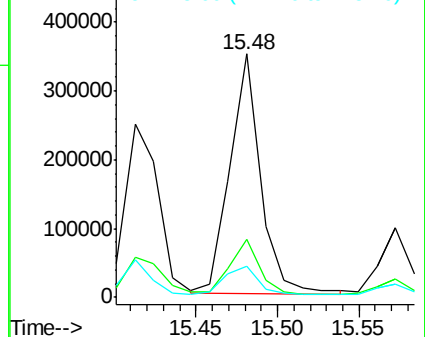
125 12.5 12.3 18.5



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

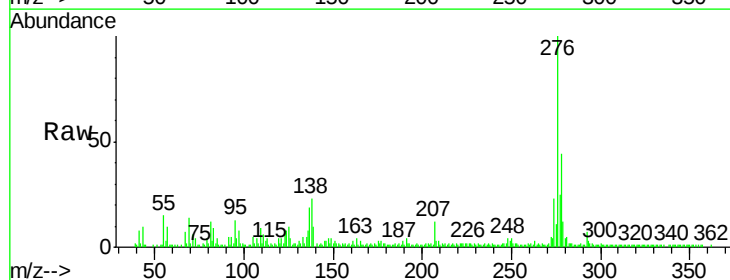
Tgt Ion:278 Resp: 60012

Ion Ratio Lower Upper

278 100

139 22.7 16.6 25.0

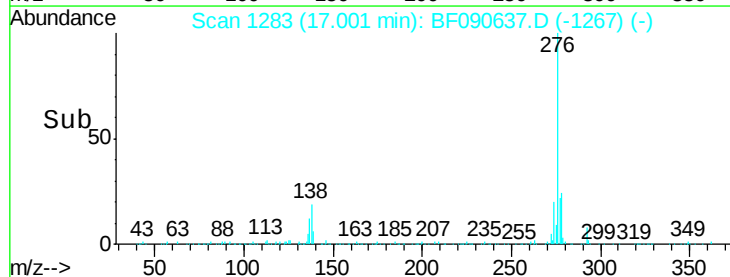
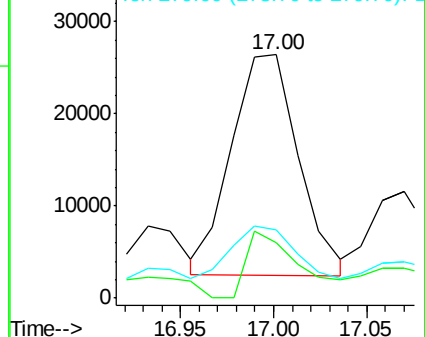
279 28.1 19.1 28.7

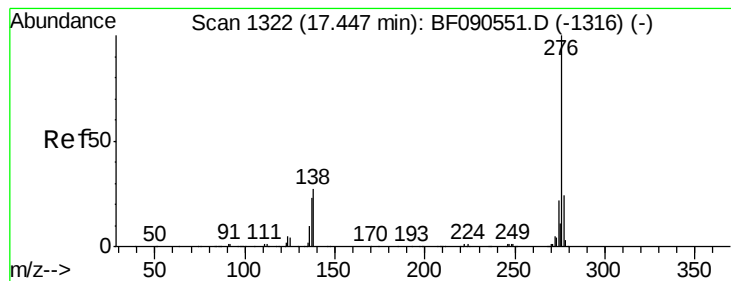


Abundance Ion 278.00 (277.70 to 278.70): E

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

Instrument :

BNA\_F

ClientSampleId :

SP-2-2

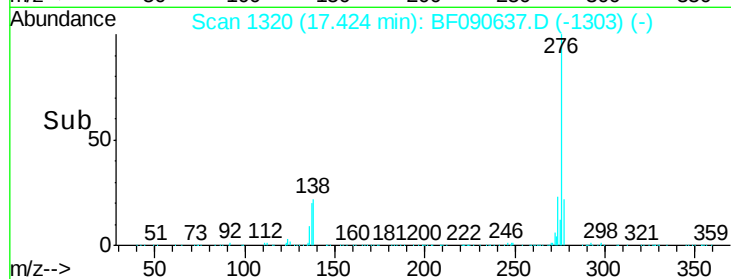
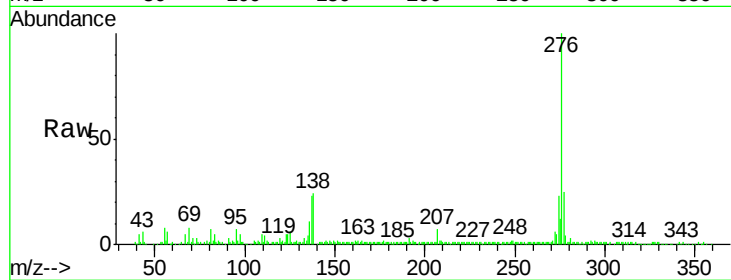
Tgt Ion: 276 Resp: 199711

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

