

Data Path : Z:\HPCHEM1\BNA F\DATA\BF051916\  
 Data File : BF087191.D  
 Acq On : 19 May 2016 17:10  
 Operator : UM/SJ  
 Sample : H3119-02DL 50X  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :

Quant Time: May 19 18:12:13 2016  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF051716.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue May 17 16:55:01 2016  
 Response via : Initial Calibration

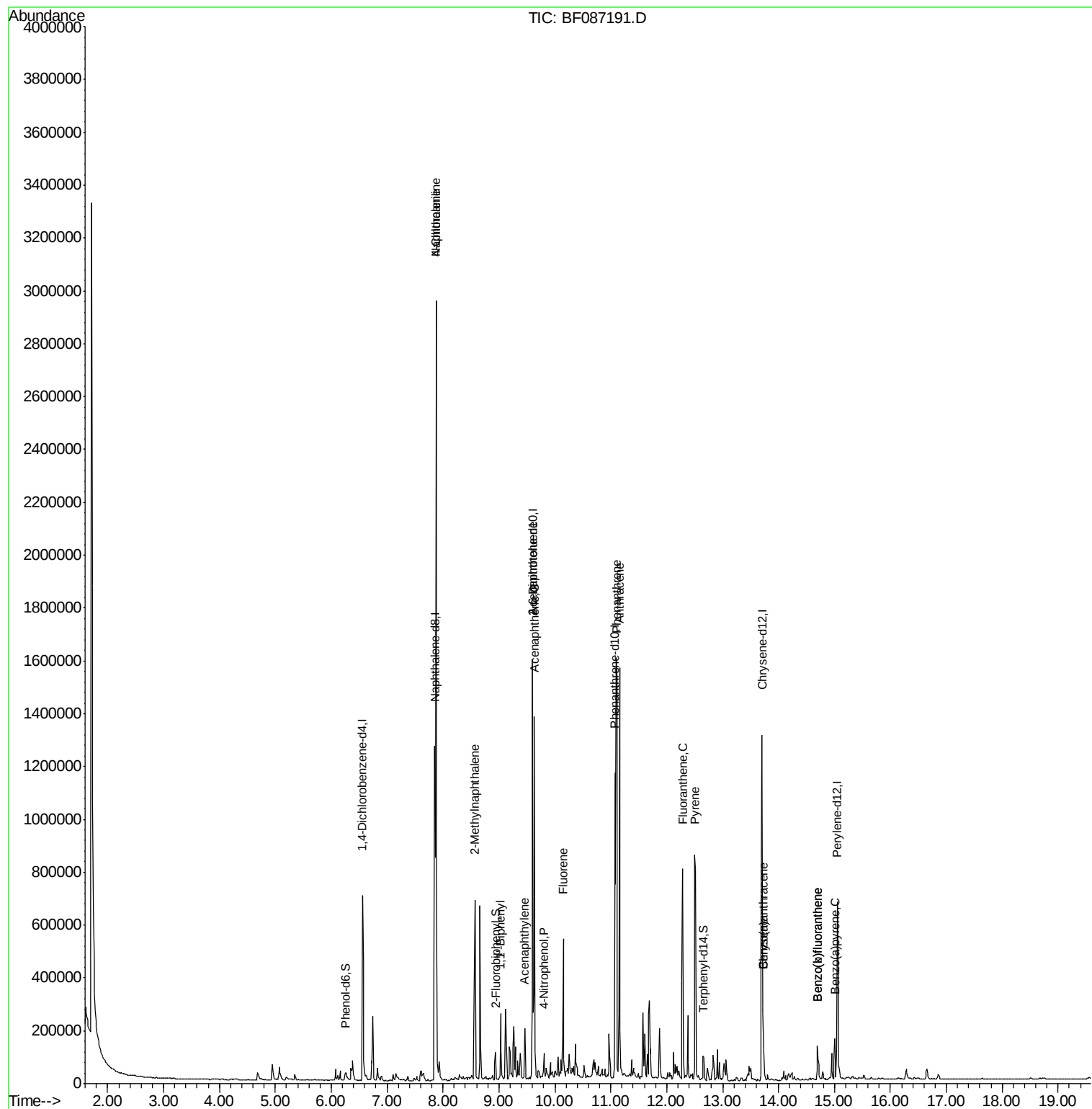
| Internal Standards          | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 6.56  | 152  | 129456   | 20.00 | ng    | -0.05    |
| 21) Naphthalene-d8          | 7.85  | 136  | 562970   | 20.00 | ng    | -0.05    |
| 38) Acenaphthene-d10        | 9.60  | 164  | 282715   | 20.00 | ng    | -0.05    |
| 63) Phenanthrene-d10        | 11.07 | 188  | 501066   | 20.00 | ng    | -0.05    |
| 75) Chrysene-d12            | 13.70 | 240  | 385795   | 20.00 | ng    | -0.06    |
| 86) Perylene-d12            | 15.05 | 264  | 294541   | 20.00 | ng    | -0.06    |
| System Monitoring Compounds |       |      |          |       |       |          |
| 5) 2-Fluorophenol           | 5.19  | 112  | 12789    | 1.66  | ng    | -0.01    |
| 7) Phenol-d6                | 6.26  | 99   | 29343    | 2.84  | ng    | -0.02    |
| 23) Nitrobenzene-d5         | 7.15  | 82   | 21180    | 1.88  | ng    | -0.03    |
| 41) 2,4,6-Tribromophenol    | 10.40 | 330  | 3904     | 1.25  | ng    | -0.05    |
| 44) 2-Fluorobiphenyl        | 8.94  | 172  | 41188    | 2.41  | ng    | -0.05    |
| 78) Terphenyl-d14           | 12.66 | 244  | 38589    | 2.26  | ng    | -0.05    |
| Target Compounds            |       |      |          |       |       | Qvalue   |
| 31) Naphthalene             | 7.87  | 128  | 1308632  | 47.57 | ng    | 99       |
| 33) 4-Chloroaniline         | 7.87  | 127  | 174797   | 15.29 | ng    | # 33     |
| 37) 2-Methylnaphthalene     | 8.57  | 142  | 224030   | 12.73 | ng    | 99       |
| 45) 1,1'-Biphenyl           | 9.03  | 154  | 85259    | 3.64  | ng    | 95       |
| 48) Acenaphthylene          | 9.46  | 152  | 60675    | 2.21  | ng    | 97       |
| 50) 2,6-Dinitrotoluene      | 9.60  | 165  | 40280    | 8.60  | ng    | # 22     |
| 51) Acenaphthene            | 9.63  | 154  | 292239   | 17.02 | ng    | 98       |
| 55) 4-Nitrophenol           | 9.80  | 139  | 10682    | 7.32  | ng    | # 22     |
| 57) Fluorene                | 10.15 | 166  | 169720   | 9.52  | ng    | 99       |
| 70) Phenanthrene            | 11.11 | 178  | 887516   | 32.66 | ng    | 99       |
| 71) Anthracene              | 11.15 | 178  | 585070   | 21.28 | ng    | 99       |
| 74) Fluoranthene            | 12.29 | 202  | 366453   | 13.46 | ng    | 91       |
| 77) Pyrene                  | 12.51 | 202  | 510145   | 18.30 | ng    | 97       |
| 80) Benzo(a)anthracene      | 13.73 | 228  | 88494    | 3.97  | ng    | 96       |
| 82) Chrysene                | 13.73 | 228  | 88536    | 4.10  | ng    | 99       |
| 87) Benzo(b)fluoranthene    | 14.70 | 252  | 85868    | 4.39  | ng    | 98       |
| 88) Benzo(k)fluoranthene    | 14.70 | 252  | 85868    | 5.90  | ng    | 98       |
| 89) Benzo(a)pyrene          | 15.01 | 252  | 72343    | 4.43  | ng    | 99       |

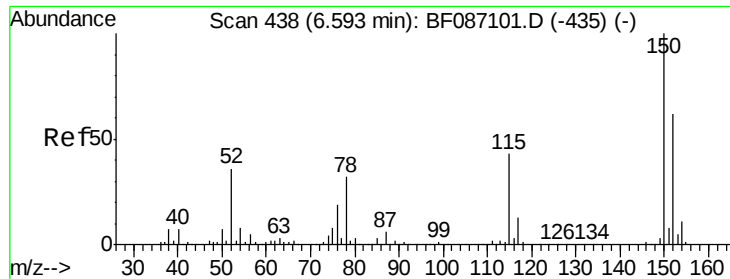
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#1

1,4-Dichlorobenzene-d4

Concen: 20.00 ng

RT: 6.56 min Scan# 435

Delta R.T. -0.05 min

Lab File: BF087191.D

Acq: 19 May 2016 17:10

Instrument :

BNA\_F

ClientSampleId :

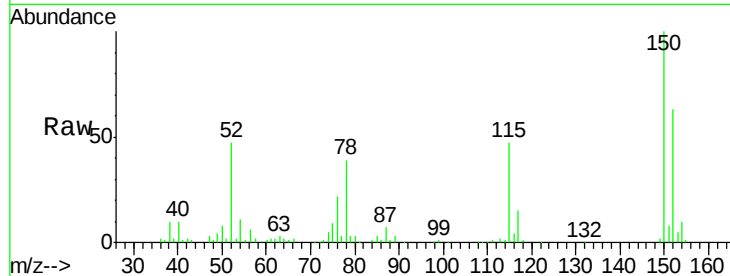
Tot Ion:152 Resp: 129456

Ion Ratio Lower Upper

152 100

150 159.8 125.8 188.6

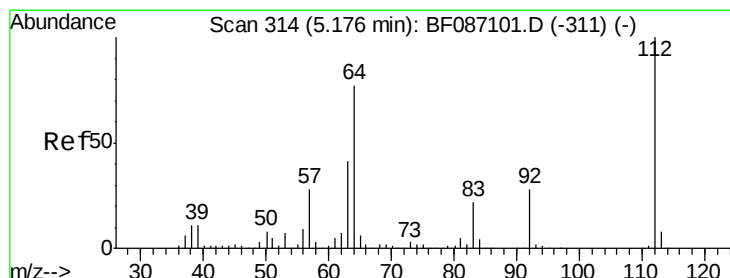
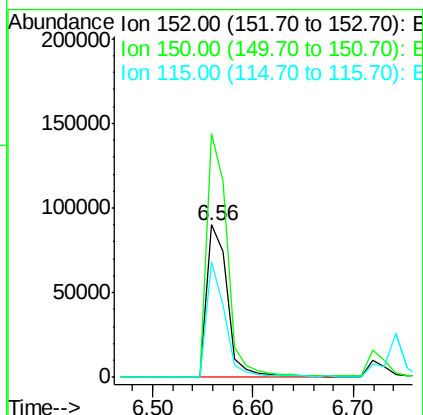
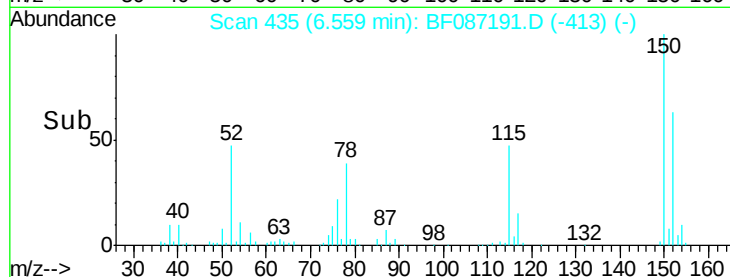
115 75.7 51.5 77.3



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: 1.66 ng

RT: 5.19 min Scan# 315

Delta R.T. -0.01 min

Lab File: BF087191.D

Acq: 19 May 2016 17:10

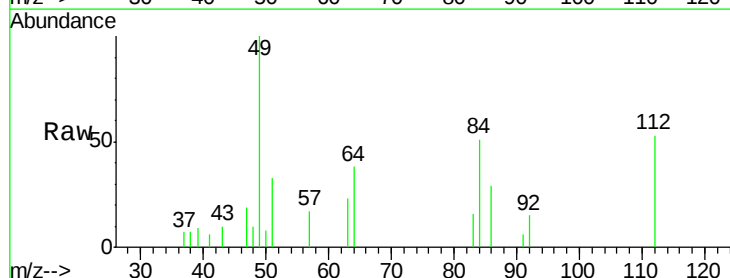
Tgt Ion:112 Resp: 12789

Ion Ratio Lower Upper

112 100

64 71.9 52.1 78.1

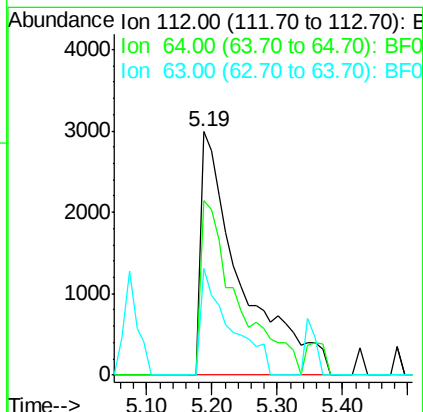
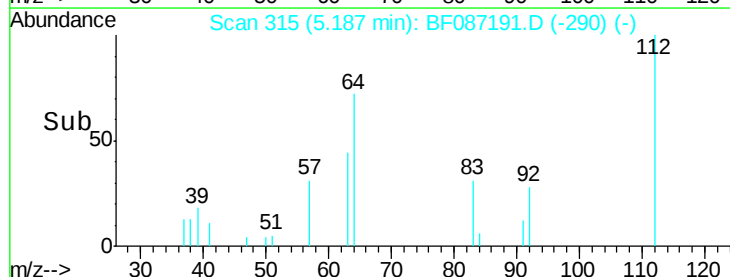
63 43.7 25.7 38.5#

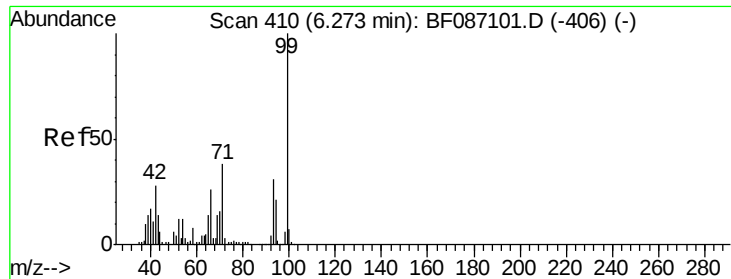


Abundance Ion 112.00 (111.70 to 112.70): E

Ion 64.00 (63.70 to 64.70): BF0

Ion 63.00 (62.70 to 63.70): BF0





#7

Phenol-d6

Concen: 2.84 ng

RT: 6.26 min Scan# 409

Delta R.T. -0.02 min

Lab File: BF087191.D

Acq: 19 May 2016 17:10

Instrument :

BNA\_F

ClientSampleId :

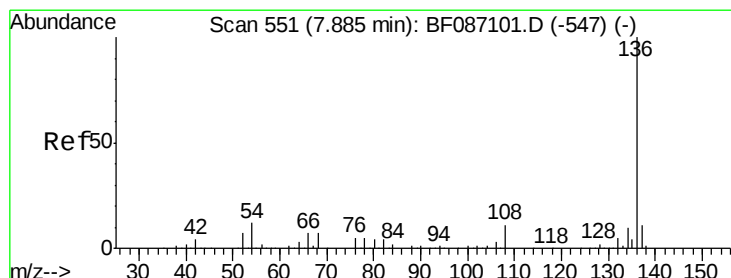
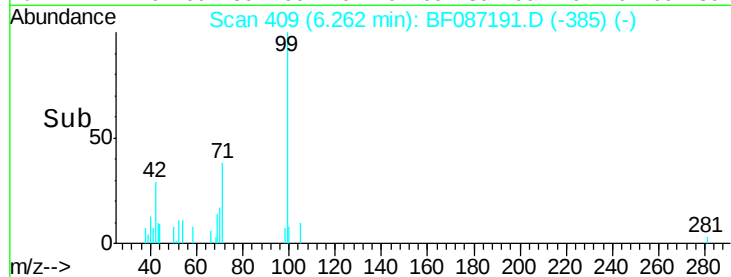
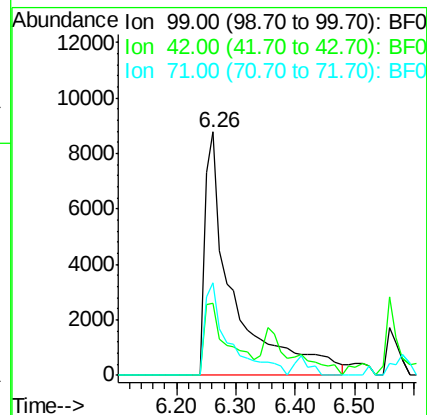
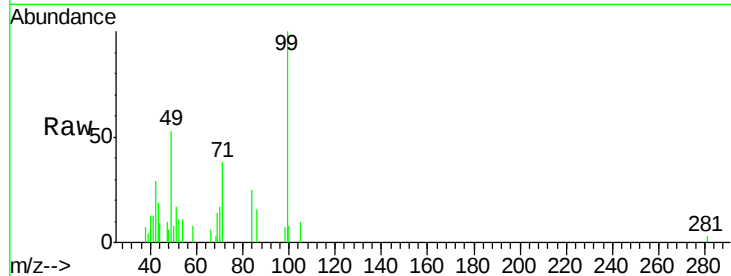
Tot Ion: 99 Resp: 29343

Ion Ratio Lower Upper

99 100

42 29.4 13.6 20.4#

71 38.0 24.6 36.8#



#21

Naphthalene-d8

Concen: 20.00 ng

RT: 7.85 min Scan# 548

Delta R.T. -0.05 min

Lab File: BF087191.D

Acq: 19 May 2016 17:10

Tgt Ion: 136 Resp: 562970

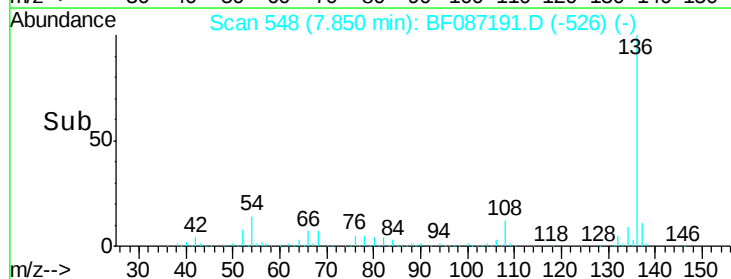
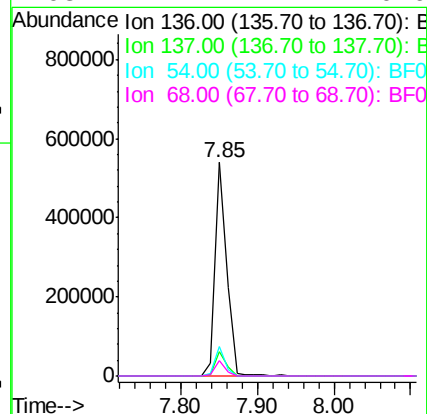
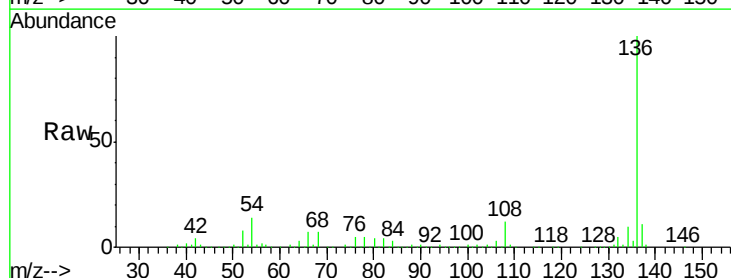
Ion Ratio Lower Upper

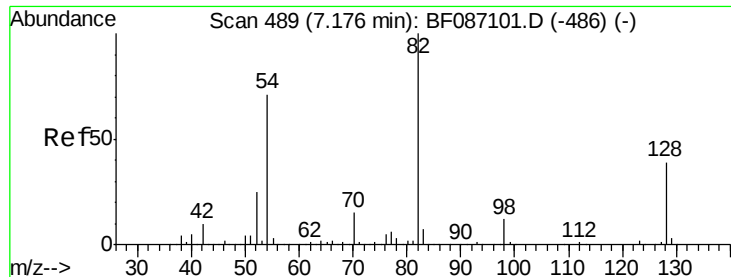
136 100

137 11.3 8.8 13.2

54 13.8 5.0 7.4#

68 7.1 4.4 6.6#

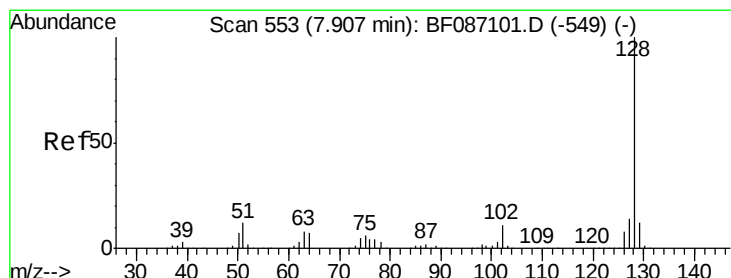
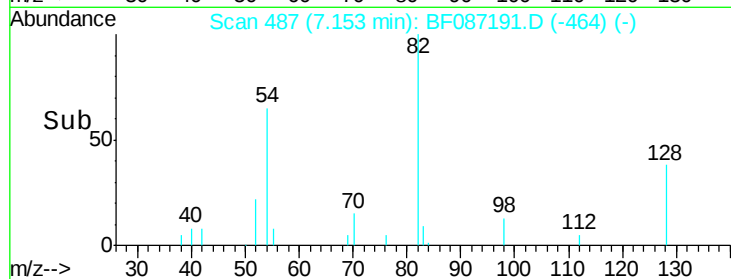
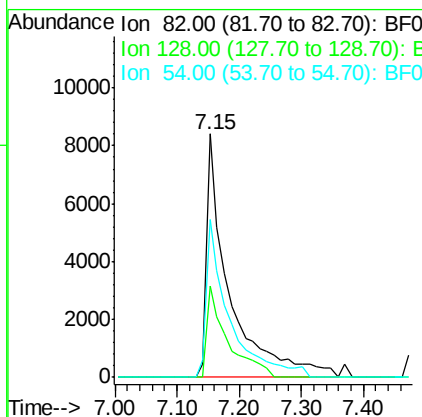
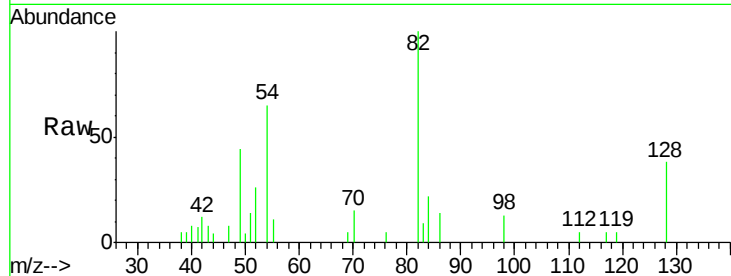




#23  
Nitrobenzene-d5  
Concen: 1.88 ng  
RT: 7.15 min Scan# 487  
Delta R.T. -0.03 min  
Lab File: BF087191.D  
Acq: 19 May 2016 17:10

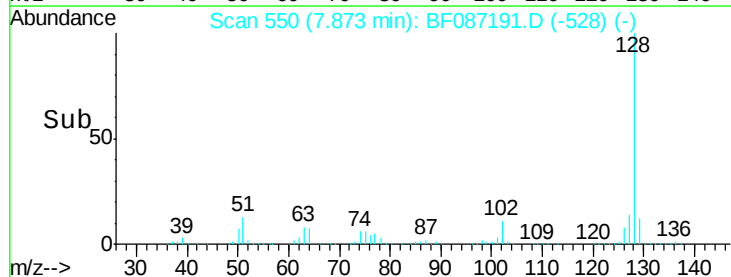
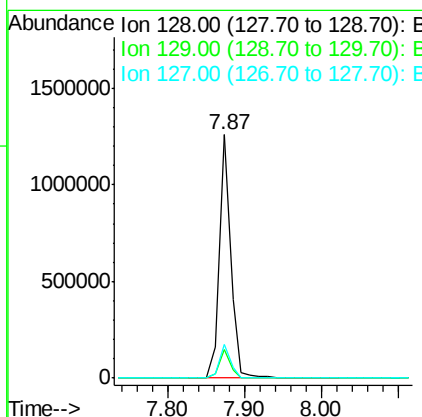
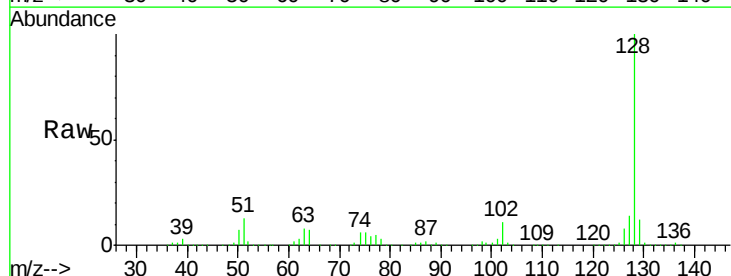
Instrument :  
BNA\_F  
ClientSampleId :

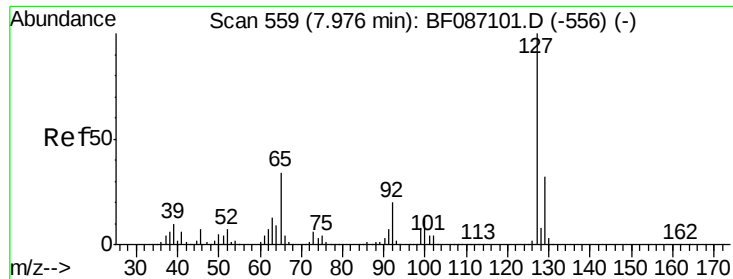
Tot Ion: 82 Resp: 21180  
Ion Ratio Lower Upper  
82 100  
128 37.6 40.6 61.0#  
54 64.9 38.1 57.1#



#31  
Naphthalene  
Concen: 47.57 ng  
RT: 7.87 min Scan# 550  
Delta R.T. -0.05 min  
Lab File: BF087191.D  
Acq: 19 May 2016 17:10

Tgt Ion: 128 Resp: 1308632  
Ion Ratio Lower Upper  
128 100  
129 11.7 8.6 13.0  
127 13.6 10.8 16.2

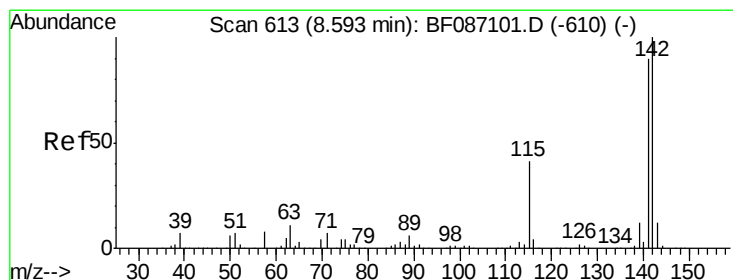
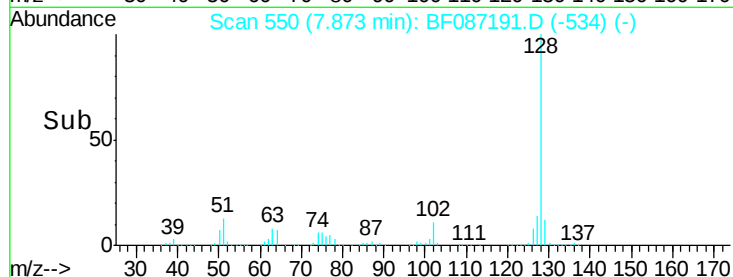
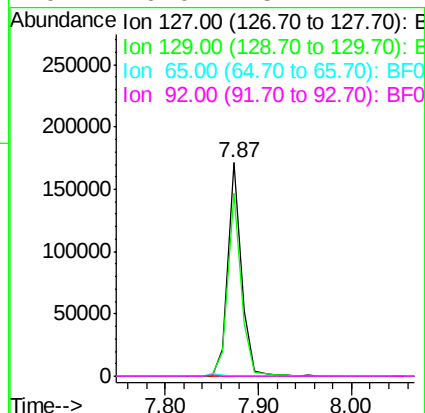
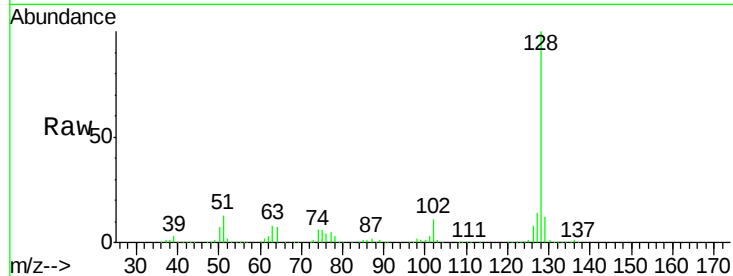




#33  
4-Chloroaniline  
Concen: 15.29 ng  
RT: 7.87 min Scan# 550  
Delta R.T. -0.11 min  
Lab File: BF087191.D  
Acq: 19 May 2016 17:10

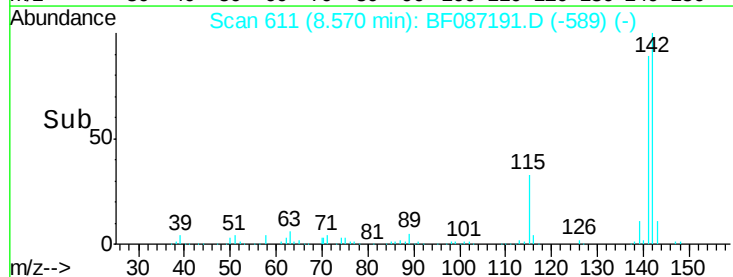
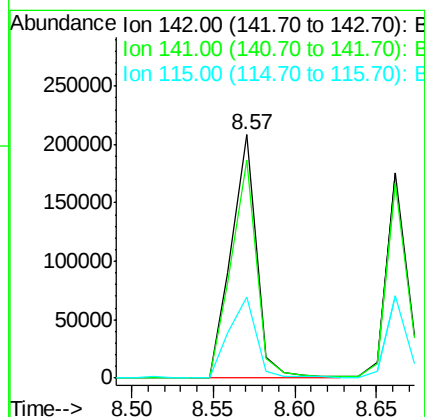
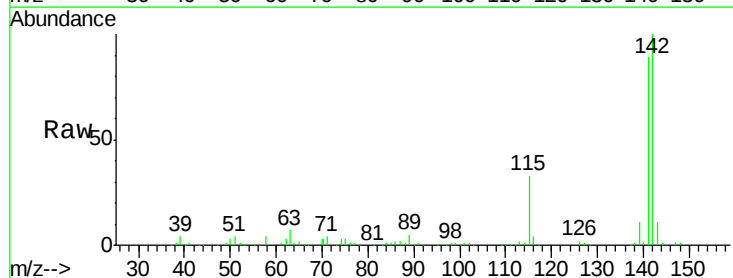
Instrument :  
BNA\_F  
ClientSampleId :

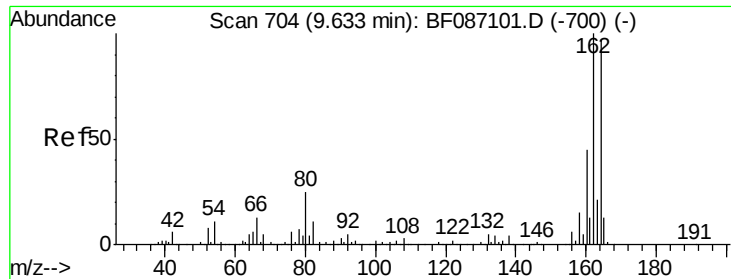
|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 127   | Resp: | 174797 |
| Ion      | Ratio | Lower | Upper  |
| 127      | 100   |       |        |
| 129      | 85.8  | 26.2  | 39.4#  |
| 65       | 0.0   | 23.0  | 34.4#  |
| 92       | 0.0   | 15.1  | 22.7#  |



#37  
2-Methylnaphthalene  
Concen: 12.73 ng  
RT: 8.57 min Scan# 611  
Delta R.T. -0.05 min  
Lab File: BF087191.D  
Acq: 19 May 2016 17:10

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 142   | Resp: | 224030 |
| Ion      | Ratio | Lower | Upper  |
| 142      | 100   |       |        |
| 141      | 89.5  | 71.0  | 106.6  |
| 115      | 33.4  | 26.6  | 39.8   |





#38

Acenaphthene-d10

Concen: 20.00 ng

RT: 9.60 min Scan# 701

Delta R.T. -0.05 min

Lab File: BF087191.D

Acq: 19 May 2016 17:10

Instrument :

BNA\_F

ClientSampleId :

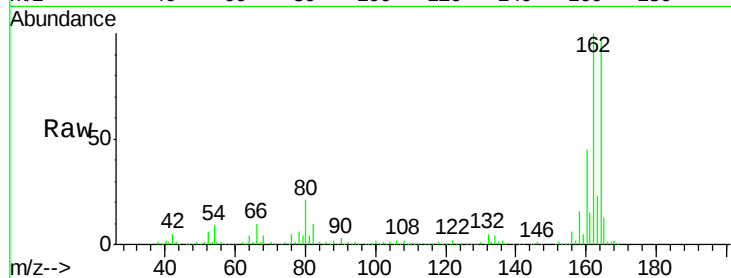
Tot Ion:164 Resp: 282715

Ion Ratio Lower Upper

164 100

162 103.1 82.8 124.2

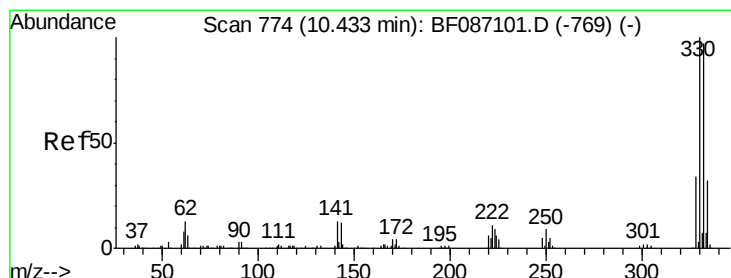
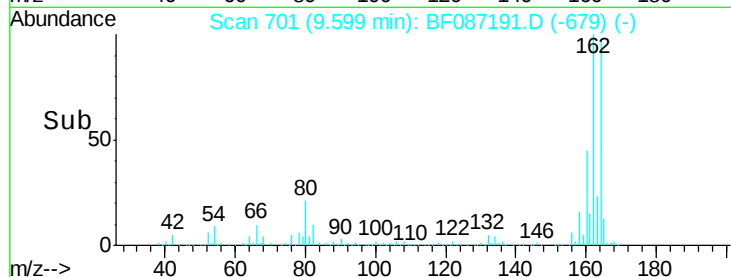
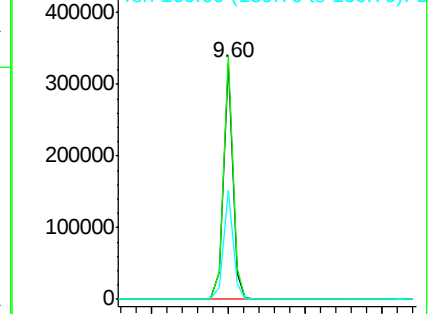
160 46.2 36.9 55.3



Abundance Ion 164.00 (163.70 to 164.70): E

Ion 162.00 (161.70 to 162.70): E

Ion 160.00 (159.70 to 160.70): E



#41

2,4,6-Tribromophenol

Concen: 1.25 ng

RT: 10.40 min Scan# 771

Delta R.T. -0.05 min

Lab File: BF087191.D

Acq: 19 May 2016 17:10

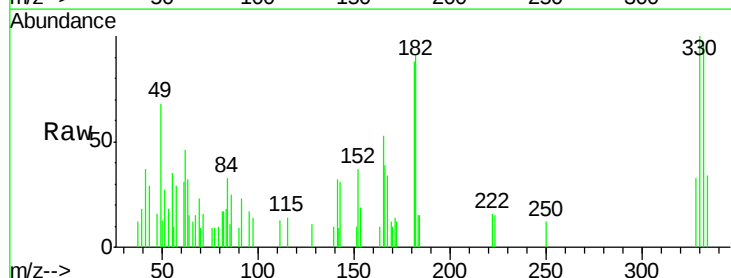
Tgt Ion:330 Resp: 3904

Ion Ratio Lower Upper

330 100

332 99.6 79.0 118.4

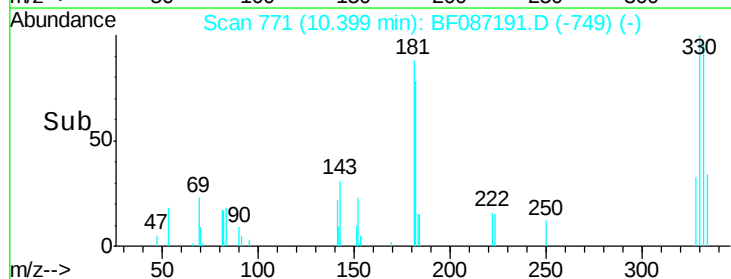
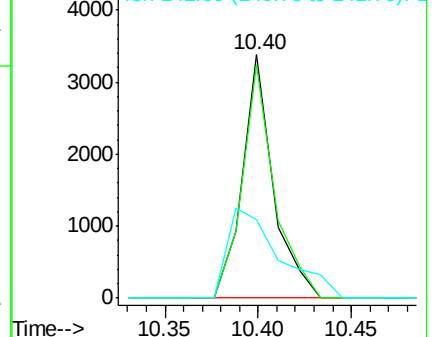
141 63.2 31.2 46.8#

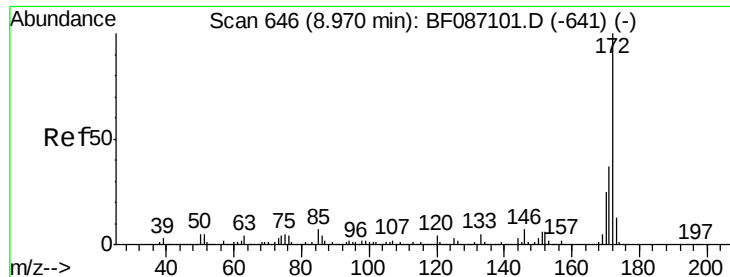


Abundance Ion 329.80 (329.50 to 330.50): E

Ion 331.80 (331.50 to 332.50): E

Ion 141.00 (140.70 to 141.70): E





#44

2-Fluorobiphenyl

Concen: 2.41 ng

RT: 8.94 min Scan# 643

Delta R.T. -0.05 min

Lab File: BF087191.D

Acq: 19 May 2016 17:10

Instrument :

BNA\_F

ClientSampleId :

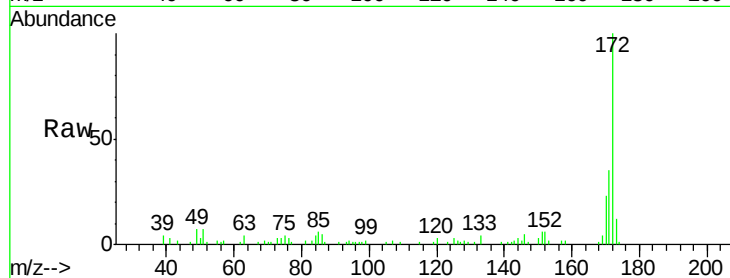
Tot Ion:172 Resp: 41188

Ion Ratio Lower Upper

172 100

171 34.7 29.0 43.6

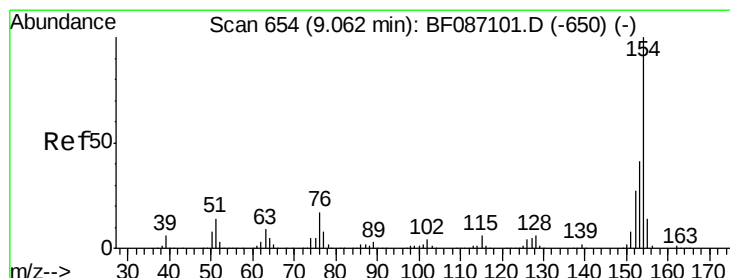
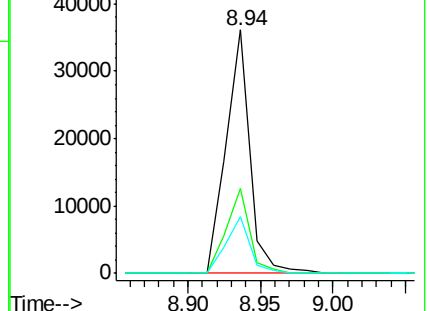
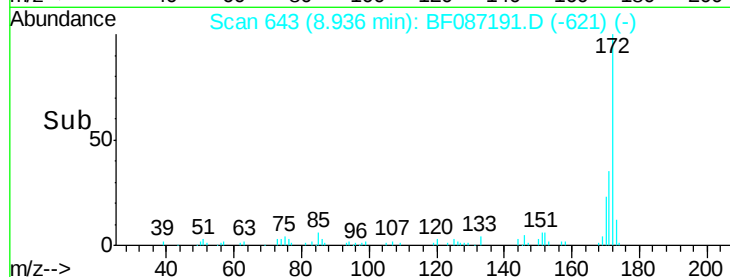
170 23.3 19.8 29.8



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



#45

1,1'-Biphenyl

Concen: 3.64 ng

RT: 9.03 min Scan# 651

Delta R.T. -0.05 min

Lab File: BF087191.D

Acq: 19 May 2016 17:10

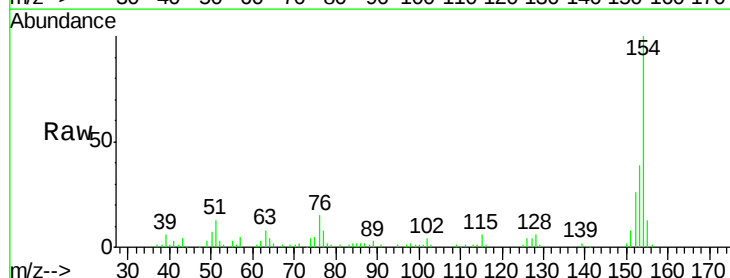
Tgt Ion:154 Resp: 85259

Ion Ratio Lower Upper

154 100

153 38.5 20.3 60.3

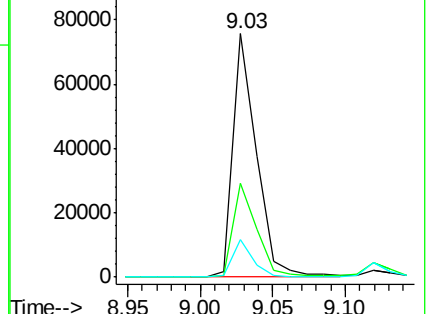
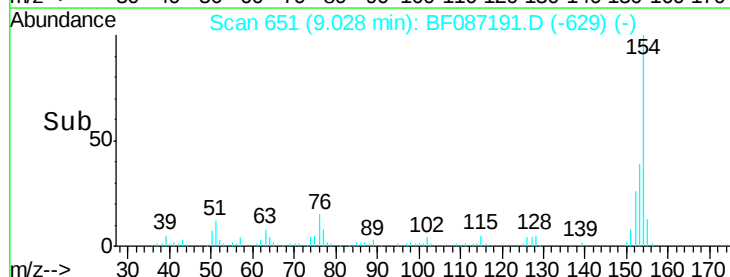
76 15.4 0.0 30.2

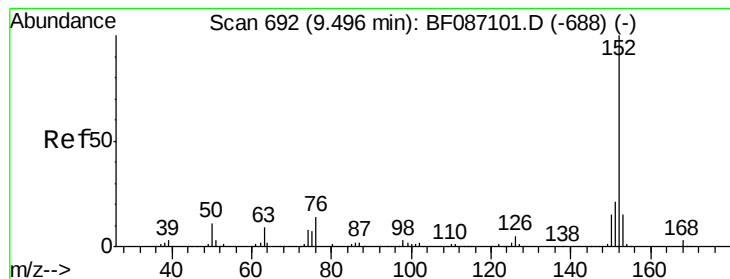


Abundance Ion 154.00 (153.70 to 154.70): E

Ion 153.00 (152.70 to 153.70): E

Ion 76.00 (75.70 to 76.70): BF0





#48

Acenaphthylene

Concen: 2.21 ng

RT: 9.46 min Scan# 689

Delta R.T. -0.05 min

Lab File: BF087191.D

Acq: 19 May 2016 17:10

Instrument :

BNA\_F

ClientSampled :

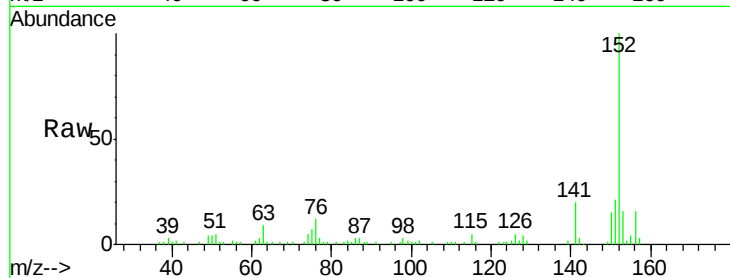
Tot Ion:152 Resp: 60675

Ion Ratio Lower Upper

152 100

151 20.6 16.8 25.2

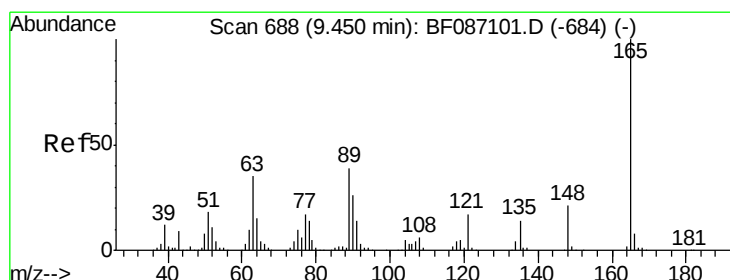
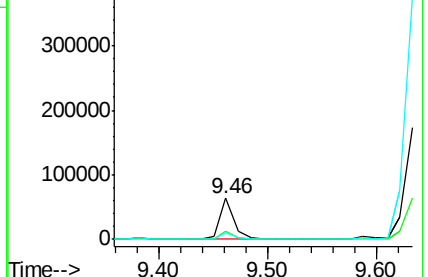
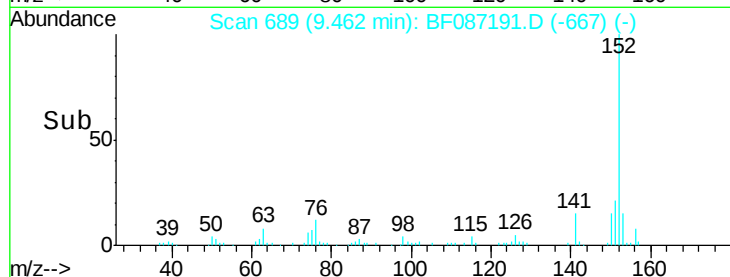
153 16.1 10.9 16.3



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



#50

2,6-Dinitrotoluene

Concen: 8.60 ng

RT: 9.60 min Scan# 701

Delta R.T. 0.14 min

Lab File: BF087191.D

Acq: 19 May 2016 17:10

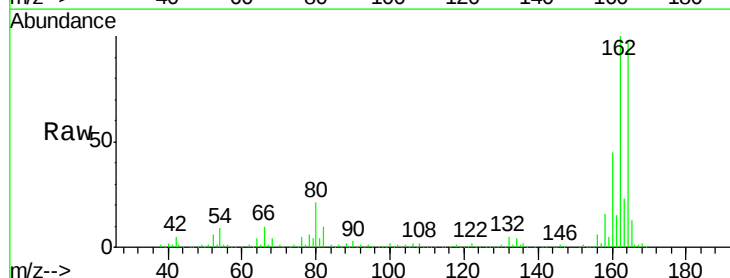
Tgt Ion:165 Resp: 40280

Ion Ratio Lower Upper

165 100

63 3.0 51.8 77.8#

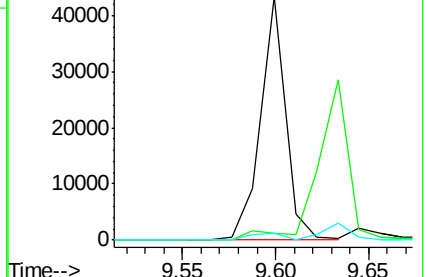
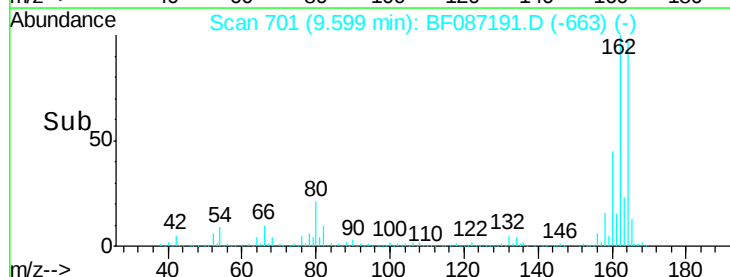
89 2.6 50.7 76.1#

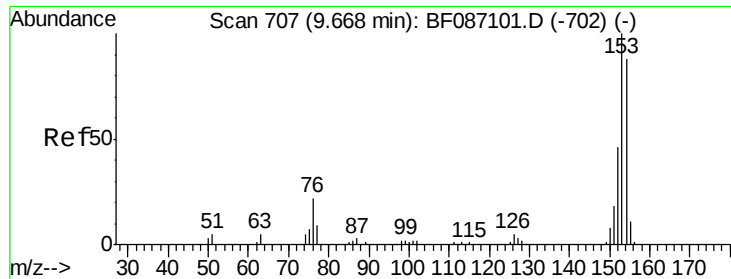


Abundance Ion 165.00 (164.70 to 165.70): E

Ion 63.00 (62.70 to 63.70): BF0

Ion 89.00 (88.70 to 89.70): BF0





#51

Acenaphthene

Concen: 17.02 ng

RT: 9.63 min Scan# 704

Delta R.T. -0.05 min

Lab File: BF087191.D

Acq: 19 May 2016 17:10

Instrument :

BNA\_F

ClientSampleId :

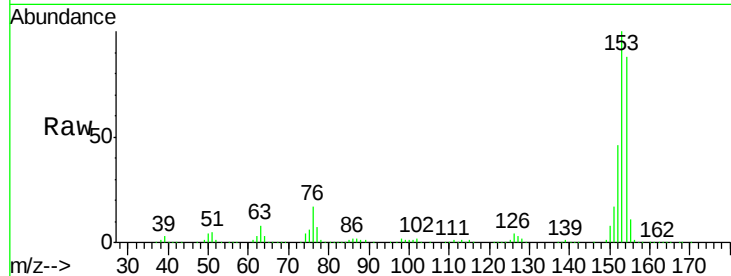
Tot Ion:154 Resp: 292239

Ion Ratio Lower Upper

154 100

153 113.9 89.8 134.6

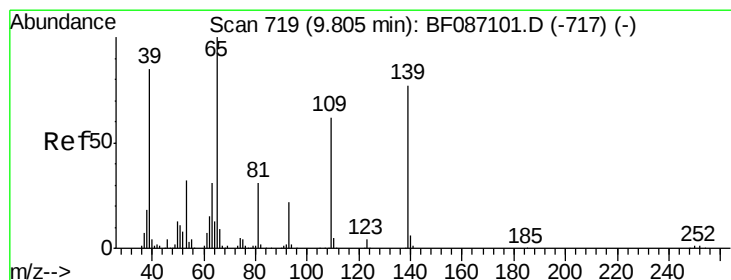
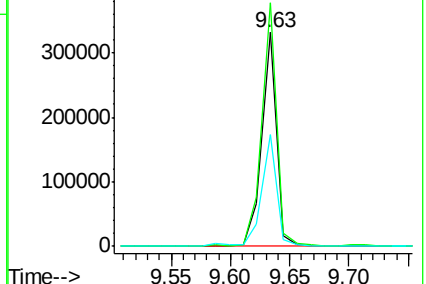
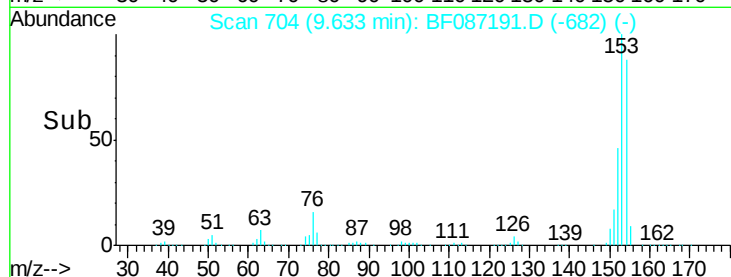
152 52.5 43.4 65.0



Abundance Ion 154.00 (153.70 to 154.70): E

Ion 153.00 (152.70 to 153.70): E

Ion 152.00 (151.70 to 152.70): E



#55

4-Nitrophenol

Concen: 7.32 ng

RT: 9.80 min Scan# 719

Delta R.T. -0.01 min

Lab File: BF087191.D

Acq: 19 May 2016 17:10

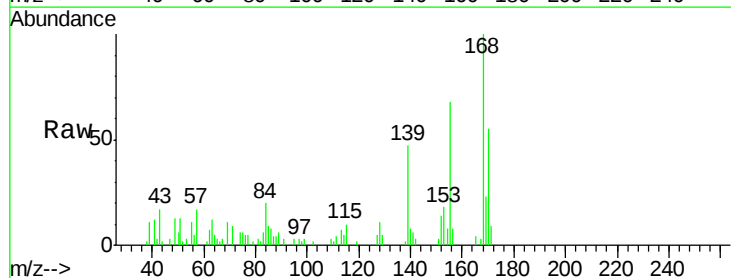
Tgt Ion:139 Resp: 10682

Ion Ratio Lower Upper

139 100

109 5.8 36.9 76.9#

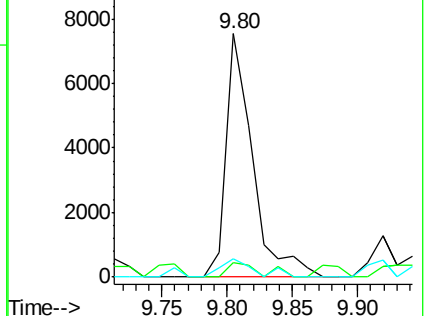
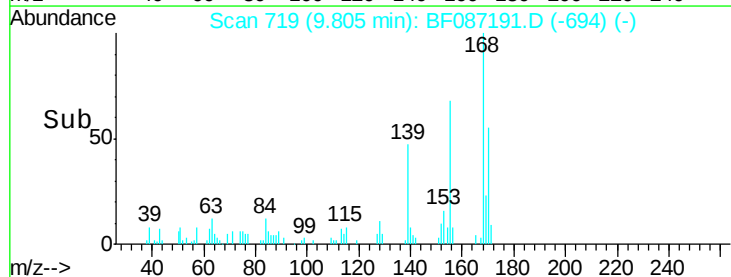
65 7.3 64.0 104.0#

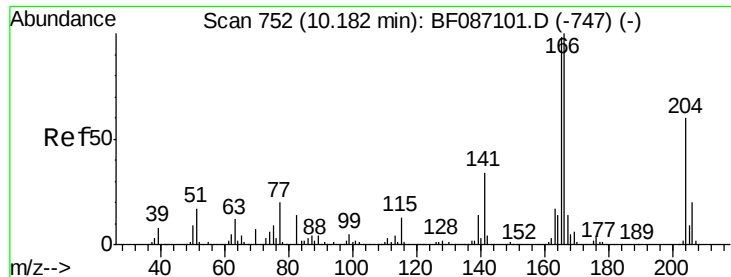


Abundance Ion 139.00 (138.70 to 139.70): E

Ion 109.00 (108.70 to 109.70): E

Ion 65.00 (64.70 to 65.70): BF0

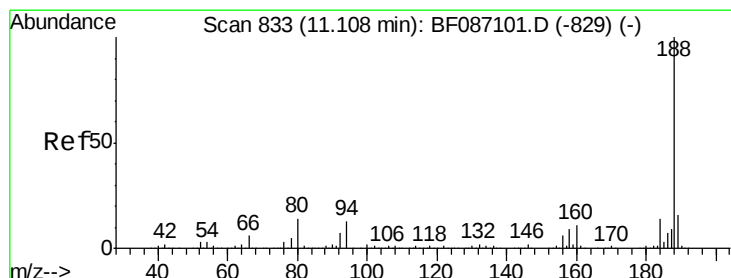
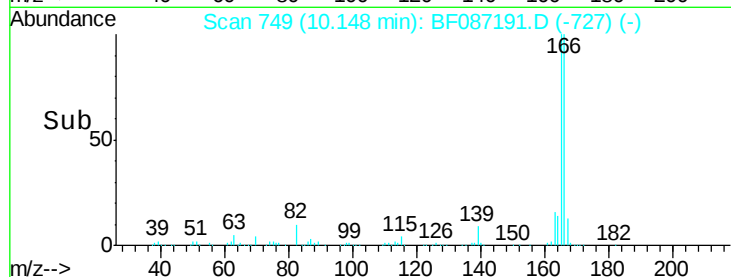
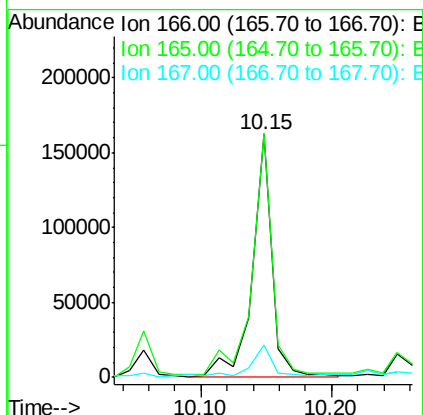
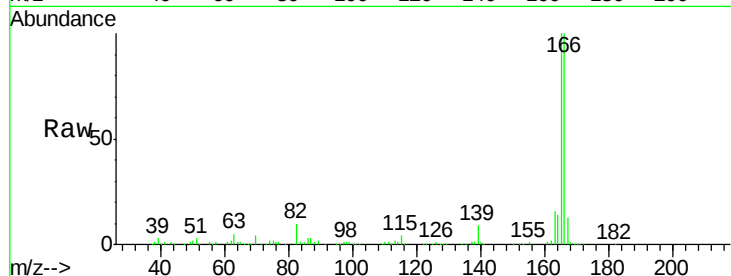




#57  
**Fluorene**  
 Concen: 9.52 ng  
 RT: 10.15 min Scan# 749  
 Delta R.T. -0.05 min  
 Lab File: BF087191.D  
 Acq: 19 May 2016 17:10

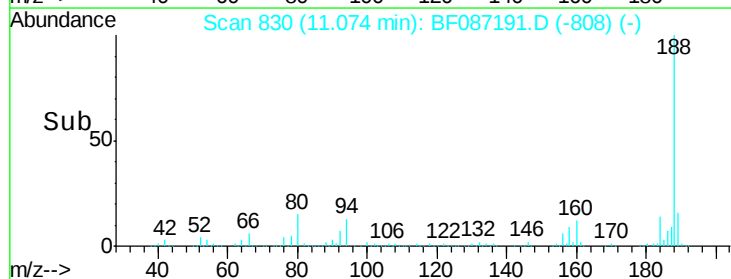
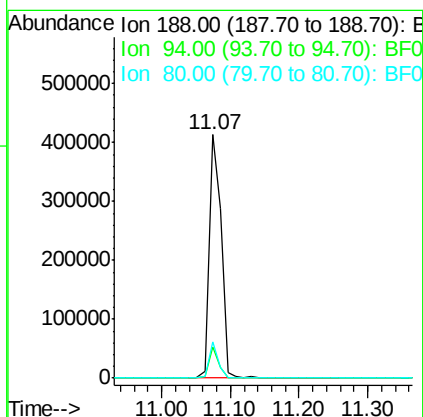
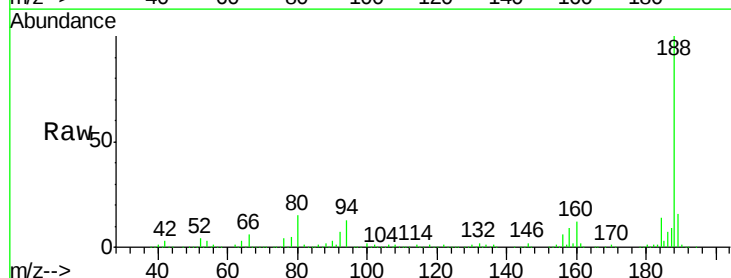
Instrument :  
 BNA\_F  
 ClientSampleId :

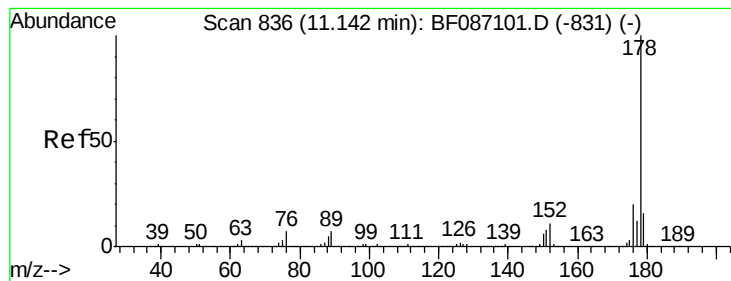
Tot Ion:166 Resp: 169720  
 Ion Ratio Lower Upper  
 166 100  
 165 99.8 79.0 118.6  
 167 13.4 10.6 15.8



#63  
**Phenanthrene-d10**  
 Concen: 20.00 ng  
 RT: 11.07 min Scan# 830  
 Delta R.T. -0.05 min  
 Lab File: BF087191.D  
 Acq: 19 May 2016 17:10

Tgt Ion:188 Resp: 501066  
 Ion Ratio Lower Upper  
 188 100  
 94 12.9 6.8 10.2#  
 80 14.9 7.1 10.7#





#70

Phenanthrene

Concen: 32.66 ng

RT: 11.11 min Scan# 833

Delta R.T. -0.05 min

Lab File: BF087191.D

Acq: 19 May 2016 17:10

Instrument :

BNA\_F

ClientSampleId :

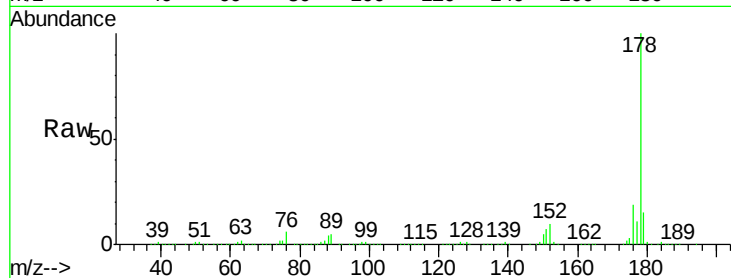
Tot Ion:178 Resp: 887516

Ion Ratio Lower Upper

178 100

176 19.4 16.0 24.0

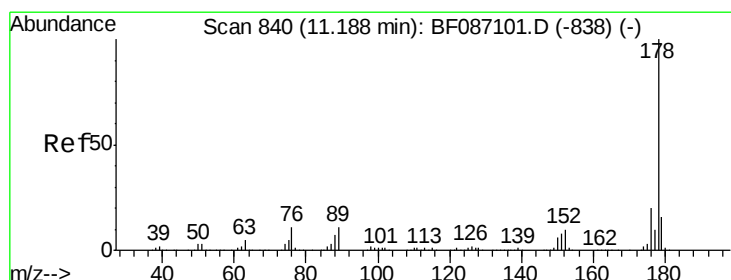
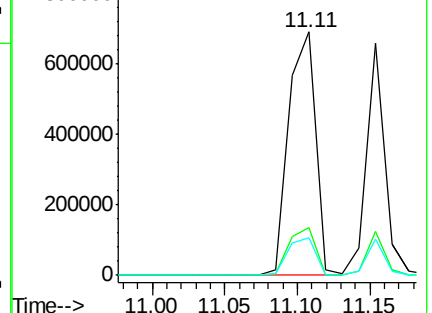
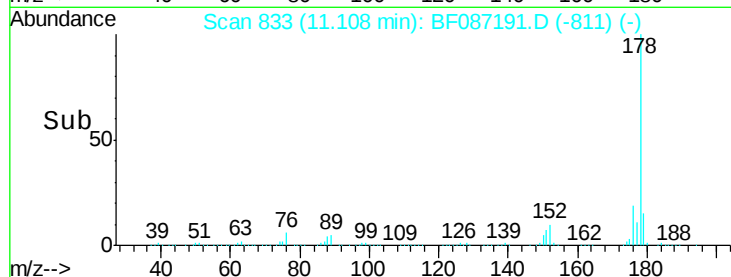
179 15.4 12.6 18.8



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: 21.28 ng

RT: 11.15 min Scan# 837

Delta R.T. -0.05 min

Lab File: BF087191.D

Acq: 19 May 2016 17:10

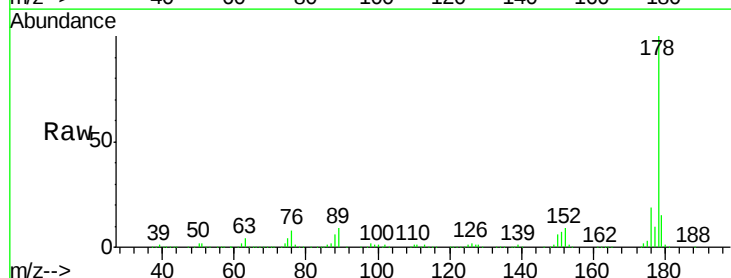
Tgt Ion:178 Resp: 585070

Ion Ratio Lower Upper

178 100

176 19.0 15.6 23.4

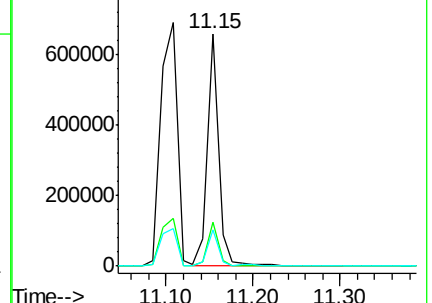
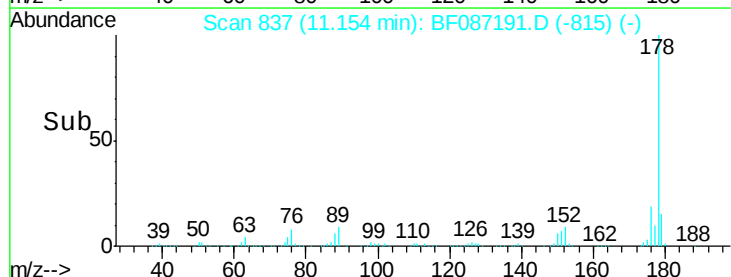
179 15.5 12.7 19.1

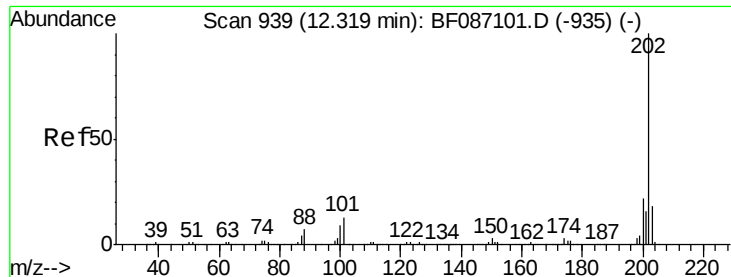


Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E





#74

Fluoranthene

Concen: 13.46 ng

RT: 12.29 min Scan# 936

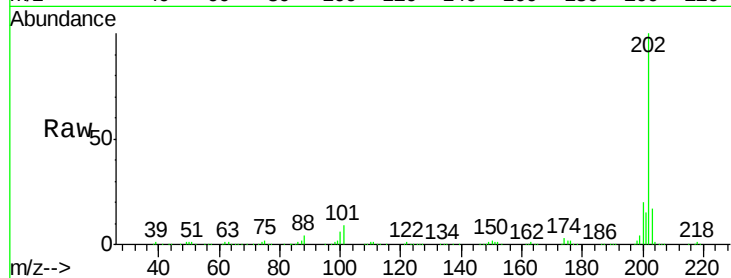
Delta R.T. -0.05 min

Lab File: BF087191.D

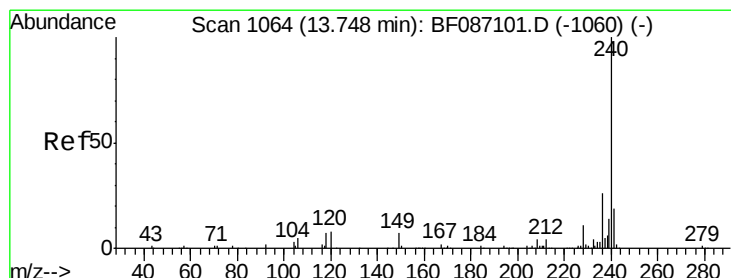
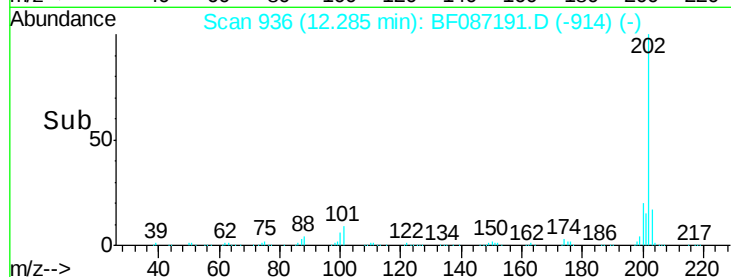
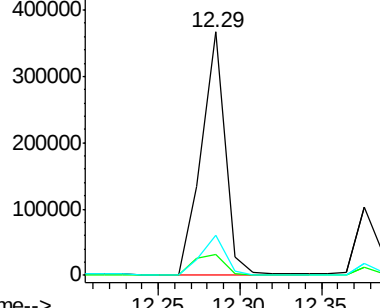
Acq: 19 May 2016 17:10

Instrument :  
BNA\_F  
ClientSampleId :

|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 202   | Resp: | 366453 |
| Ion      | Ratio | Lower | Upper  |
| 202      | 100   |       |        |
| 101      | 8.8   | 0.0   | 35.4   |
| 203      | 16.7  | 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



#75

Chrysene-d12

Concen: 20.00 ng

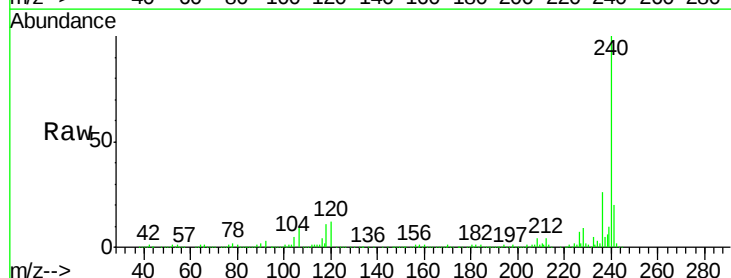
RT: 13.70 min Scan# 1060

Delta R.T. -0.06 min

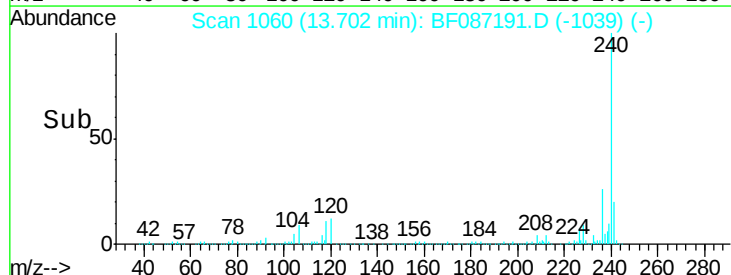
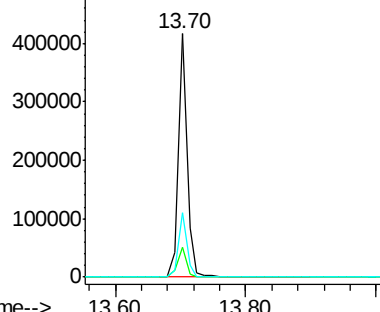
Lab File: BF087191.D

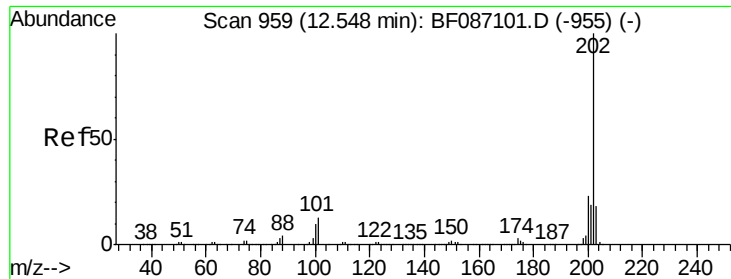
Acq: 19 May 2016 17:10

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 240   | Resp: | 385795 |
| Ion      | Ratio | Lower | Upper  |
| 240      | 100   |       |        |
| 120      | 12.3  | 11.2  | 16.8   |
| 236      | 26.2  | 21.2  | 31.8   |



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

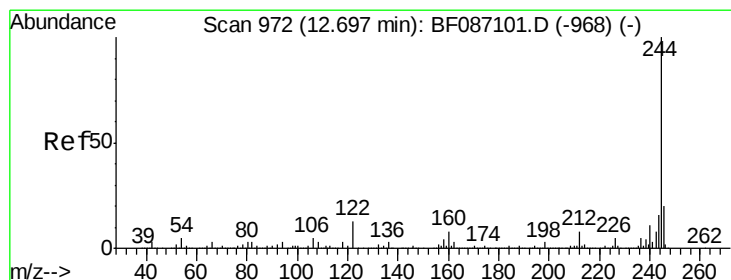
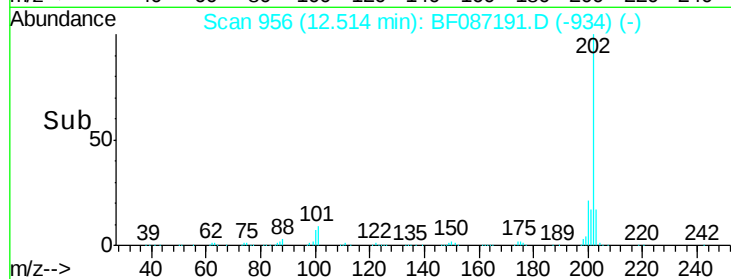
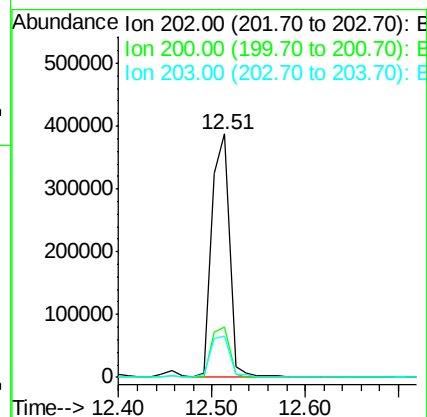
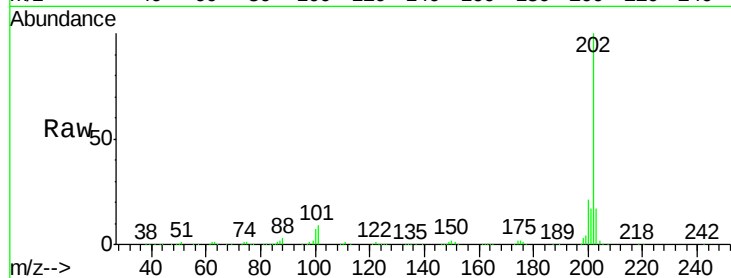




#77  
Pvrene  
Concen: 18.30 ng  
RT: 12.51 min Scan# 956  
Delta R.T. -0.05 min  
Lab File: BF087191.D  
Acq: 19 May 2016 17:10

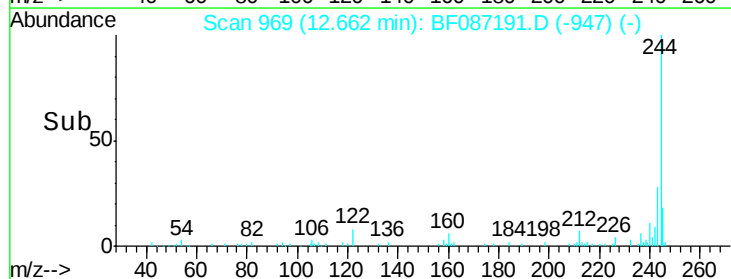
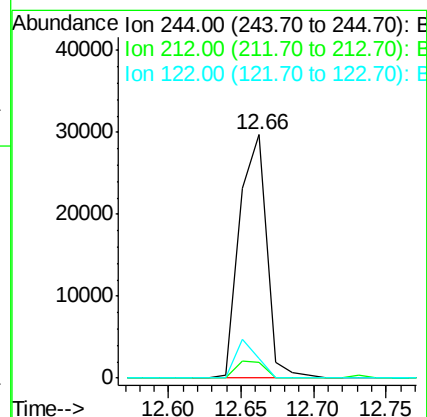
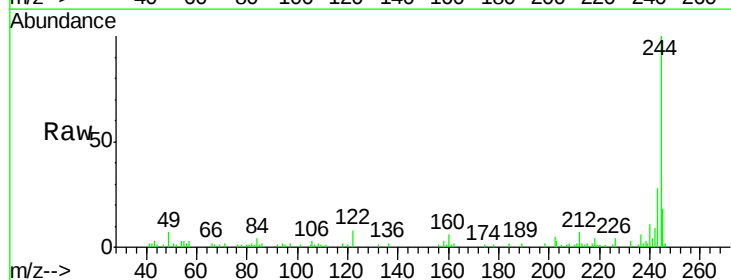
Instrument :  
BNA\_F  
ClientSampled :

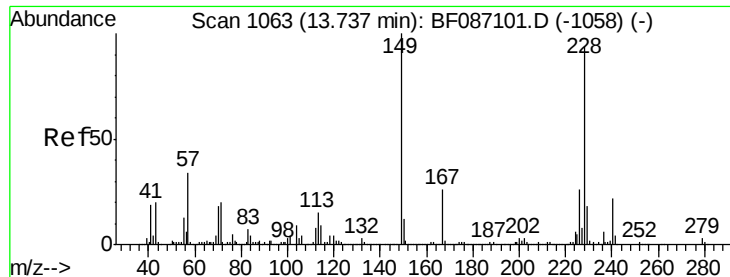
Tot Ion:202 Resp: 510145  
Ion Ratio Lower Upper  
202 100  
200 20.7 17.7 26.5  
203 16.7 14.2 21.4



#78  
Terphenyl-d14  
Concen: 2.26 ng  
RT: 12.66 min Scan# 969  
Delta R.T. -0.05 min  
Lab File: BF087191.D  
Acq: 19 May 2016 17:10

Tgt Ion:244 Resp: 38589  
Ion Ratio Lower Upper  
244 100  
212 6.6 6.2 9.2  
122 8.2 12.0 18.0#





#80

Benzo(a)anthracene

Concen: 3.97 ng

RT: 13.73 min Scan# 1062

Delta R.T. -0.02 min

Lab File: BF087191.D

Acq: 19 May 2016 17:10

Instrument :

BNA\_F

ClientSampleId :

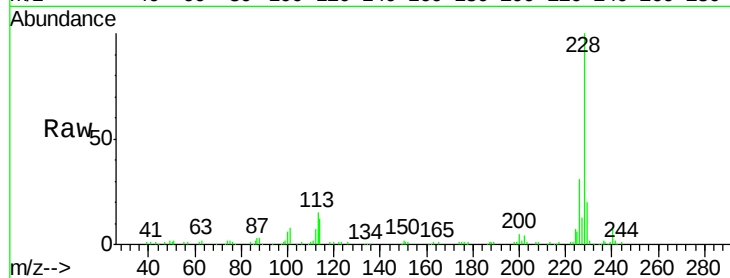
Tot Ion:228 Resp: 88494

Ion Ratio Lower Upper

228 100

226 31.2 22.5 33.7

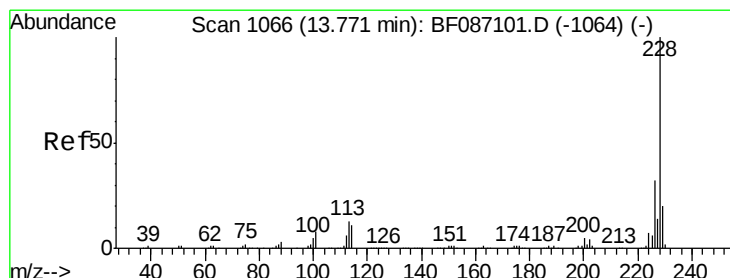
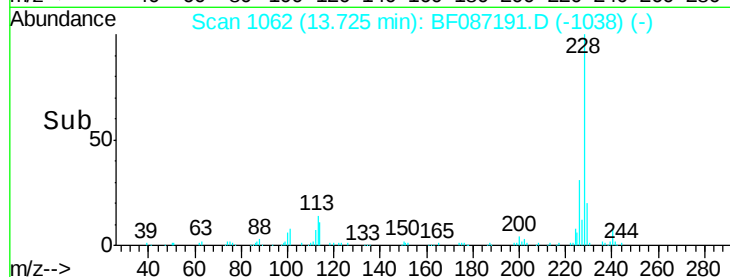
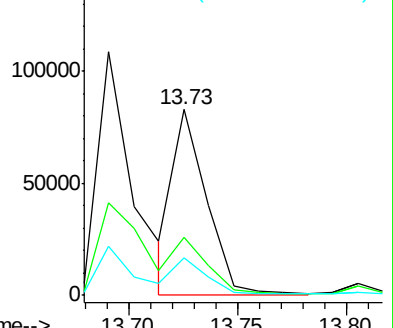
229 20.4 16.6 25.0



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: 4.10 ng

RT: 13.73 min Scan# 1062

Delta R.T. -0.06 min

Lab File: BF087191.D

Acq: 19 May 2016 17:10

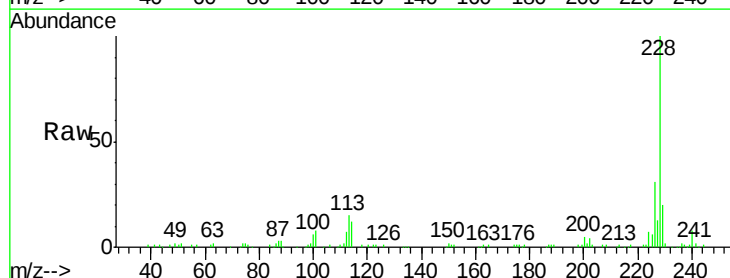
Tgt Ion:228 Resp: 88536

Ion Ratio Lower Upper

228 100

226 31.2 24.4 36.6

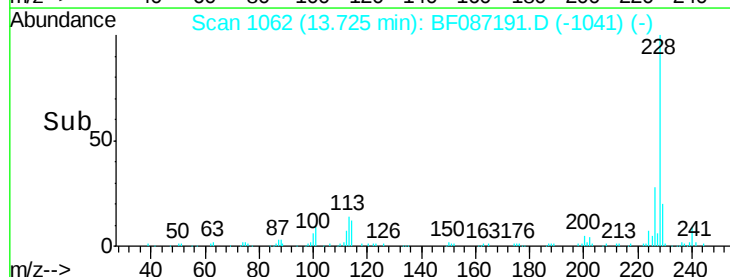
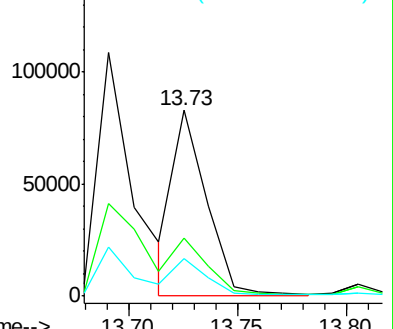
229 20.4 15.8 23.8

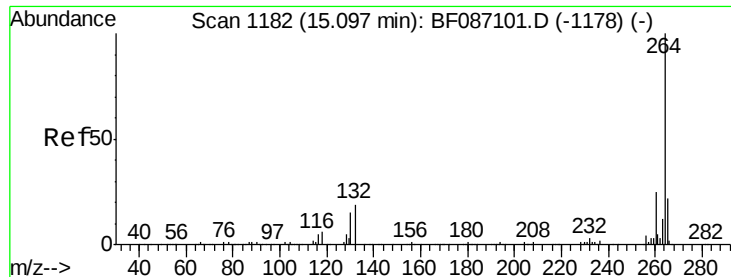


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E

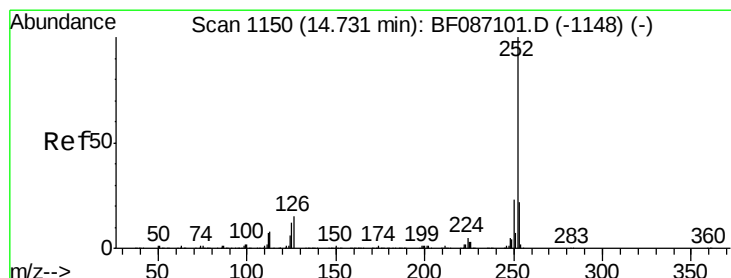
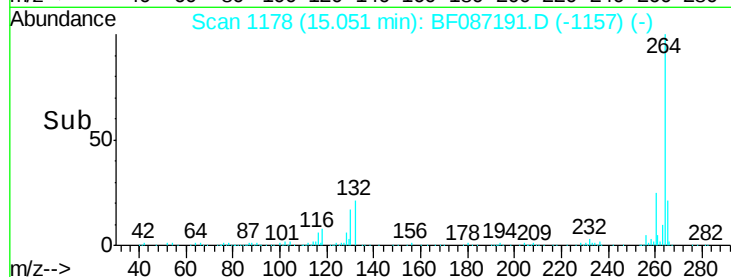
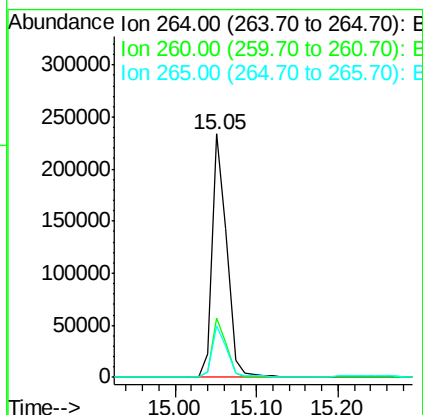
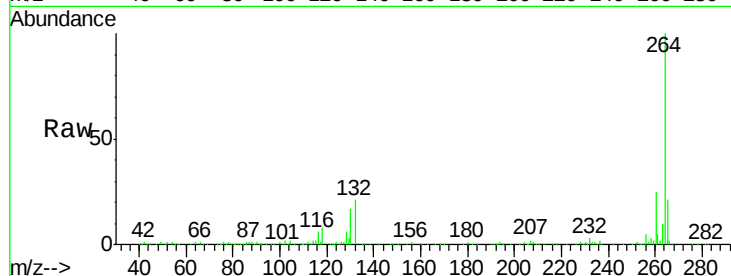




#86  
Pervlene-d12  
Concen: 20.00 ng  
RT: 15.05 min Scan# 1178  
Delta R.T. -0.06 min  
Lab File: BF087191.D  
Acq: 19 May 2016 17:10

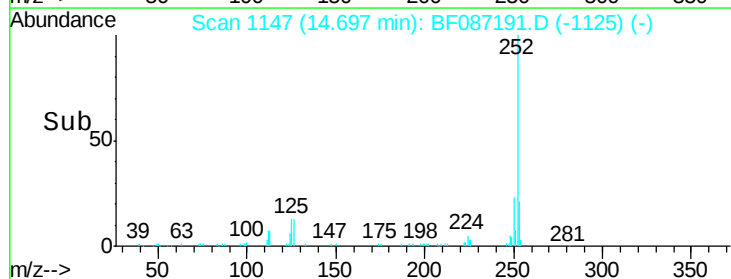
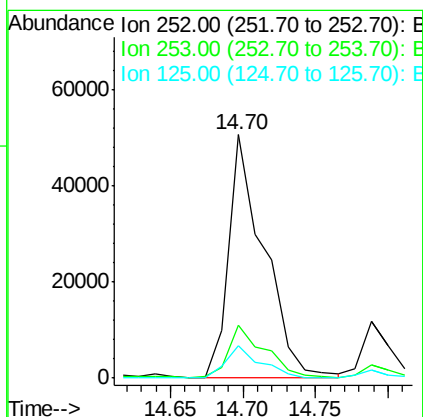
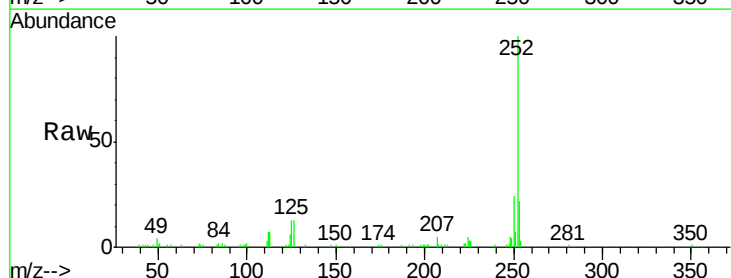
Instrument :  
BNA\_F  
ClientSampleId :

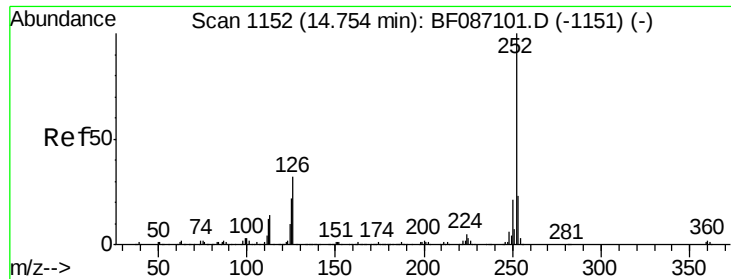
Tot Ion:264 Resp: 294541  
Ion Ratio Lower Upper  
264 100  
260 24.5 19.5 29.3  
265 21.4 17.3 25.9



#87  
Benzo(b)fluoranthene  
Concen: 4.39 ng  
RT: 14.70 min Scan# 1147  
Delta R.T. -0.05 min  
Lab File: BF087191.D  
Acq: 19 May 2016 17:10

Tgt Ion:252 Resp: 85868  
Ion Ratio Lower Upper  
252 100  
253 21.7 17.8 26.6  
125 13.2 11.4 17.0

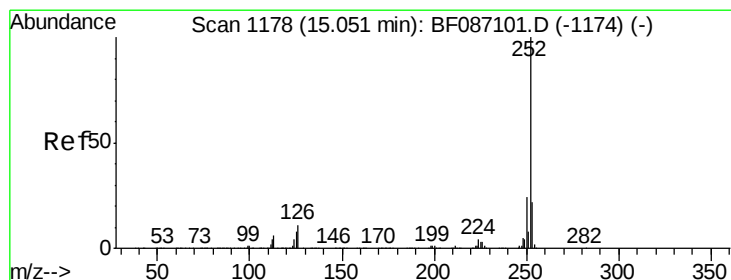
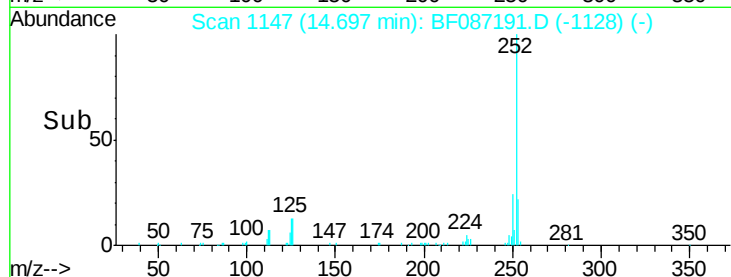
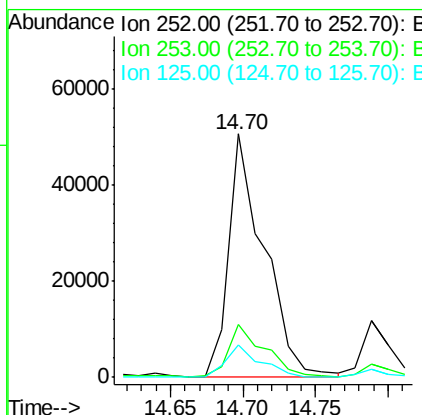
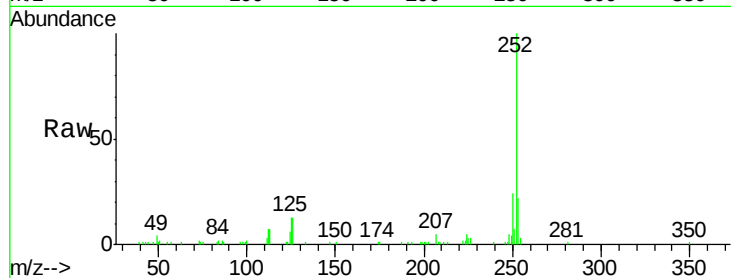




#88  
 Benzo(k)fluoranthene  
 Concen: 5.90 ng  
 RT: 14.70 min Scan# 1147  
 Delta R.T. -0.08 min  
 Lab File: BF087191.D  
 Acq: 19 May 2016 17:10

Instrument :  
 BNA\_F  
 ClientSampleId :

Tot Ion:252 Resp: 85868  
 Ion Ratio Lower Upper  
 252 100  
 253 21.7 17.8 26.6  
 125 13.2 9.1 13.7



#89  
 Benzo(a)pyrene  
 Concen: 4.43 ng  
 RT: 15.01 min Scan# 1174  
 Delta R.T. -0.06 min  
 Lab File: BF087191.D  
 Acq: 19 May 2016 17:10

Tgt Ion:252 Resp: 72343  
 Ion Ratio Lower Upper  
 252 100  
 253 21.7 17.2 25.8  
 125 10.6 9.0 13.6

