

Data Path : Z:\SVOASRV\HPCHEM1\BNA\_F\DATA\BF070618\  
 Data File : BF107182.D  
 Acq On : 6 Jul 2018 19:27  
 Operator : JU/SJ  
 Sample : J3854-01  
 Misc :  
 ALS Vial : 17 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 S4

Quant Time: Jul 06 22:55:27 2018  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_F\METHODS\8270-BF061918.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Jun 29 14:38:29 2018  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.94  | 152  | 62744    | 20.00 | ng    | -0.02    |
| 21) Naphthalene-d8        | 8.23  | 136  | 248861   | 20.00 | ng    | -0.02    |
| 38) Acenaphthene-d10      | 9.98  | 164  | 117458   | 20.00 | ng    | -0.02    |
| 63) Phenanthrene-d10      | 11.48 | 188  | 201248   | 20.00 | ng    | -0.02    |
| 75) Chrysene-d12          | 14.14 | 240  | 192804   | 20.00 | ng    | -0.03    |
| 86) Perylene-d12          | 15.67 | 264  | 154005   | 20.00 | ng    | -0.05    |

## System Monitoring Compounds

|                          |       |     |        |       |    |       |
|--------------------------|-------|-----|--------|-------|----|-------|
| 5) 2-Fluorophenol        | 5.58  | 112 | 251524 | 67.88 | ng | -0.02 |
| 7) Phenol-d6             | 6.59  | 99  | 316485 | 68.40 | ng | -0.02 |
| 23) Nitrobenzene-d5      | 7.51  | 82  | 196259 | 43.83 | ng | -0.03 |
| 41) 2,4,6-Tribromophenol | 10.78 | 330 | 82517  | 60.61 | ng | -0.02 |
| 44) 2-Fluorobiphenyl     | 9.30  | 172 | 375341 | 47.60 | ng | -0.02 |
| 78) Terphenyl-d14        | 13.07 | 244 | 380689 | 47.83 | ng | -0.02 |

## Target Compounds

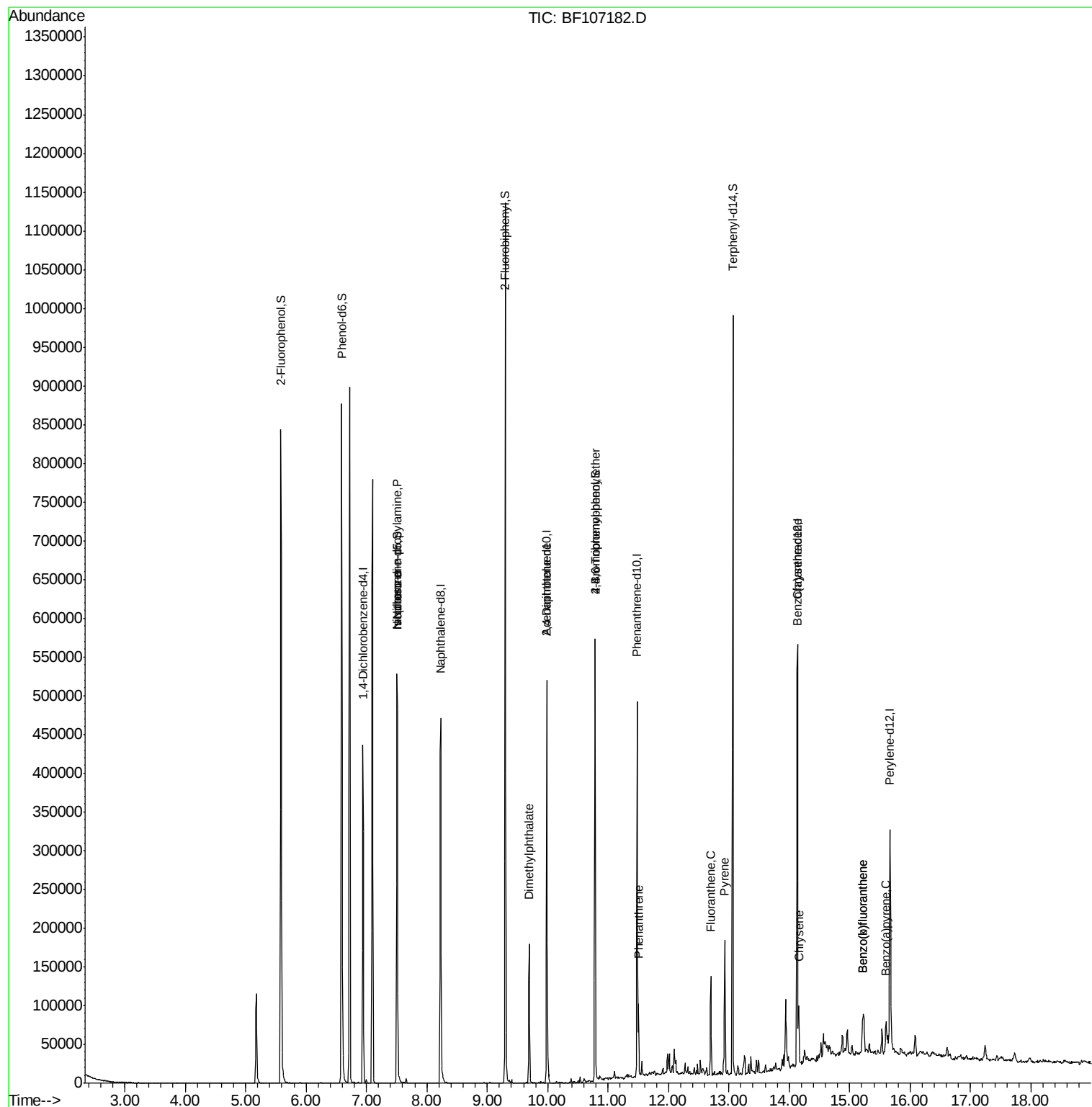
|                                |       |     |        |        |    | Qvalue |
|--------------------------------|-------|-----|--------|--------|----|--------|
| 19) n-Nitroso-di-n-propylamine | 7.51  | 70  | 24996  | 8.195  | ng | # 73   |
| 25) Isophorone                 | 7.51  | 82  | 196258 | 24.871 | ng | # 64   |
| 49) Dimethylphthalate          | 9.70  | 163 | 78899  | 8.956  | ng | 99     |
| 56) 2,4-Dinitrotoluene         | 9.98  | 165 | 14765  | 6.064  | ng | # 21   |
| 66) 4-Bromophenyl-phenylether  | 10.78 | 248 | 4974   | 2.071  | ng | # 1    |
| 70) Phenanthrene               | 11.51 | 178 | 36267  | 3.736  | ng | 98     |
| 74) Fluoranthene               | 12.70 | 202 | 48552  | 4.538  | ng | 95     |
| 77) Pyrene                     | 12.93 | 202 | 73751  | 5.801  | ng | 99     |
| 80) Benzo(a)anthracene         | 14.12 | 228 | 30655  | 2.609  | ng | 98     |
| 82) Chrysene                   | 14.16 | 228 | 27256  | 2.521  | ng | 98     |
| 87) Benzo(b)fluoranthene       | 15.21 | 252 | 32980  | 3.447  | ng | 95     |
| 88) Benzo(k)fluoranthene       | 15.21 | 252 | 32980  | 3.620  | ng | 98     |
| 89) Benzo(a)pyrene             | 15.60 | 252 | 20118  | 2.366  | ng | 94     |

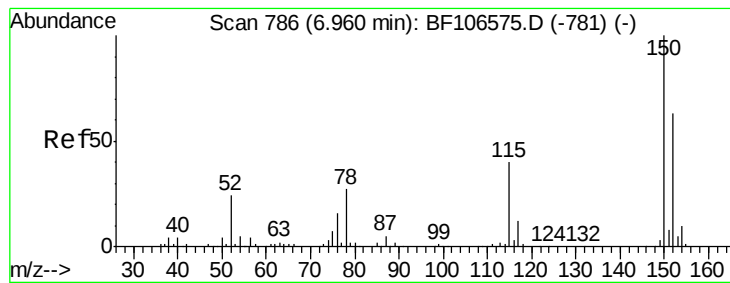
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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ALS Vial : 17 Sample Multiplier: 1

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Quant Time: Jul 06 22:55:27 2018  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_F\METHODS\8270-BF061918.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Jun 29 14:38:29 2018  
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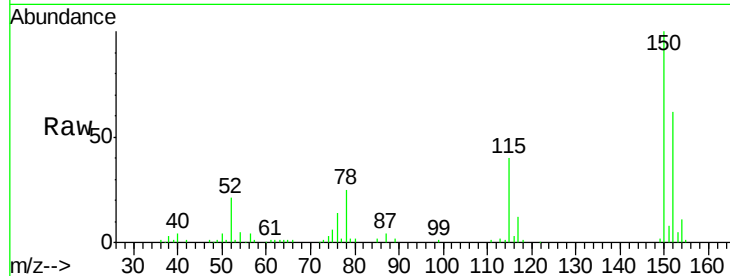


#1

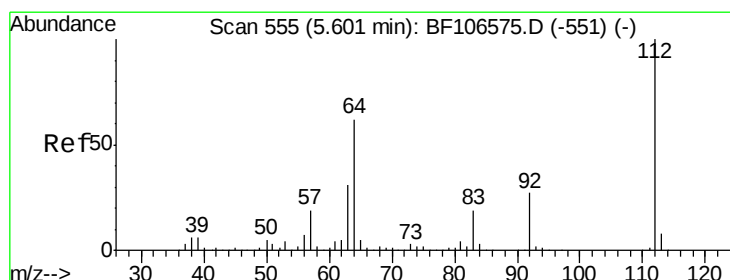
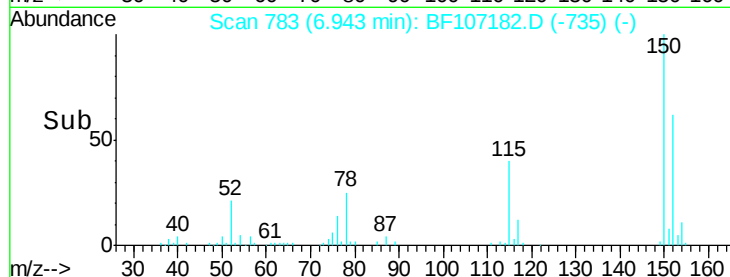
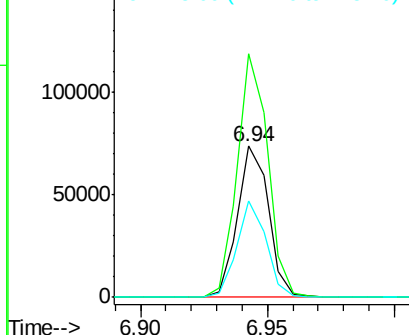
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.94 min Scan# 783  
Delta R.T. -0.02 min  
Lab File: BF107182.D  
Acq: 6 Jul 2018 19:27

Instrument :  
BNA\_F  
ClientSampleId :  
S4

Tgt Ion:152 Resp: 62744  
Ion Ratio Lower Upper  
152 100  
150 161.3 124.6 186.8  
115 63.8 50.1 75.1



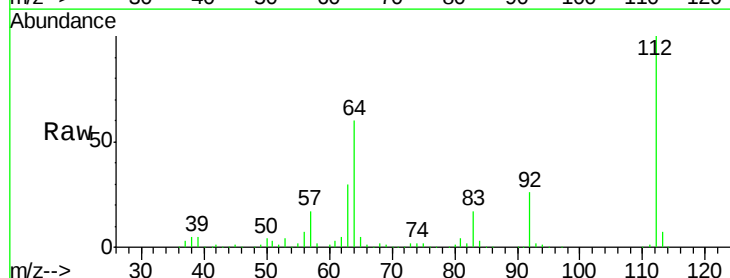
Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 115.00 (114.70 to 115.70): E



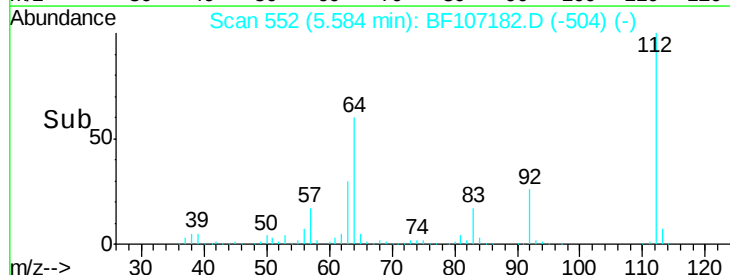
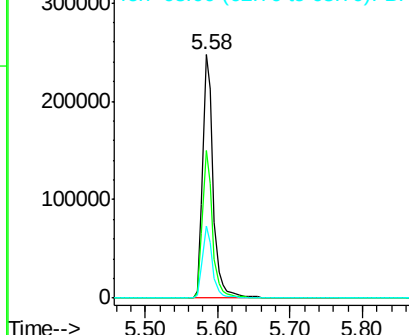
#5

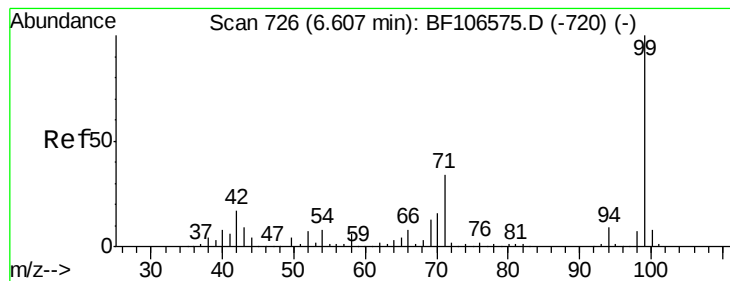
2-Fluorophenol  
Concen: 67.881 ng  
RT: 5.58 min Scan# 552  
Delta R.T. -0.02 min  
Lab File: BF107182.D  
Acq: 6 Jul 2018 19:27

Tgt Ion:112 Resp: 251524  
Ion Ratio Lower Upper  
112 100  
64 60.5 47.9 71.9  
63 29.8 23.7 35.5



Abundance Ion 112.00 (111.70 to 112.70): E  
Ion 64.00 (63.70 to 64.70): BF1  
Ion 63.00 (62.70 to 63.70): BF1





#7

Phenol-d6

Concen: 68.395 ng

RT: 6.59 min Scan# 723

Delta R.T. -0.02 min

Lab File: BF107182.D

Acq: 6 Jul 2018 19:27

Instrument :

BNA\_F

ClientSampleId :

S4

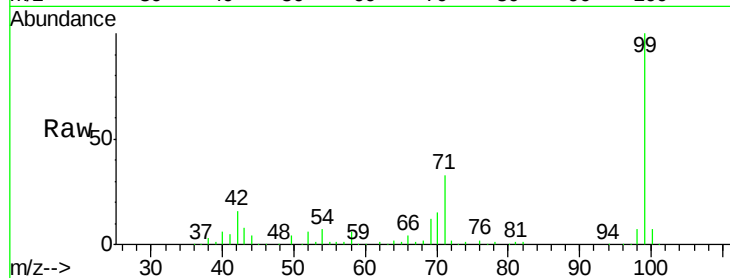
Tgt Ion: 99 Resp: 316485

Ion Ratio Lower Upper

99 100

42 16.3 14.5 21.7

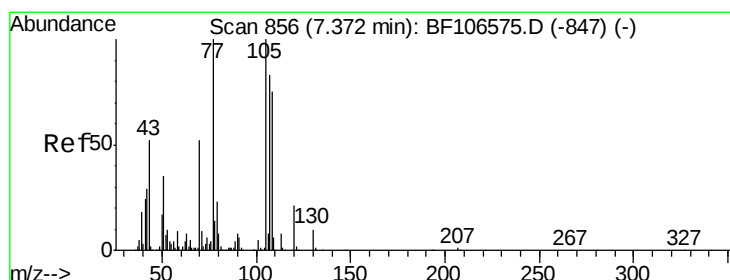
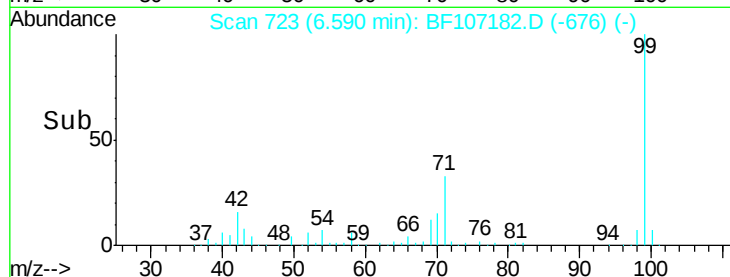
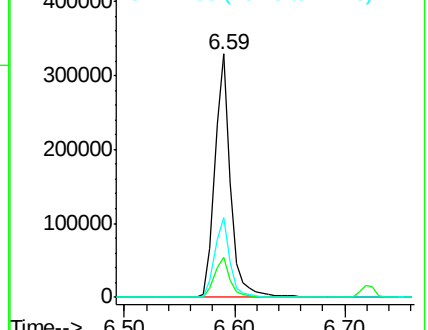
71 32.8 25.4 38.0



Abundance Ion 99.00 (98.70 to 99.70): BF1

Ion 42.00 (41.70 to 42.70): BF1

Ion 71.00 (70.70 to 71.70): BF1



#19

n-Nitroso-di-n-propylamine

Concen: 8.195 ng

RT: 7.51 min Scan# 879

Delta R.T. 0.12 min

Lab File: BF107182.D

Acq: 6 Jul 2018 19:27

Tgt Ion: 70 Resp: 24996

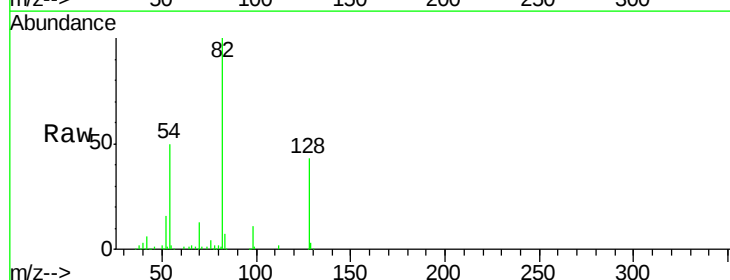
Ion Ratio Lower Upper

70 100

42 42.4 47.5 71.3#

101 0.0 7.4 11.2#

130 1.8 16.6 25.0#

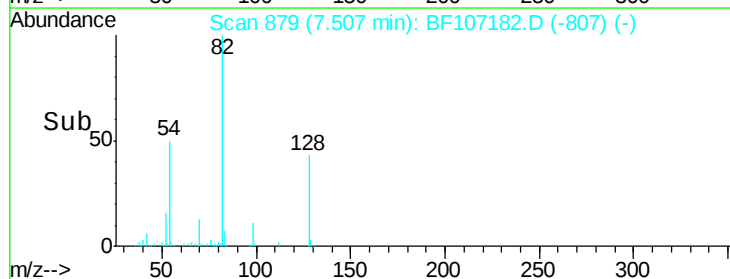
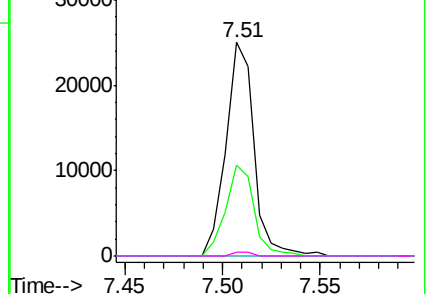


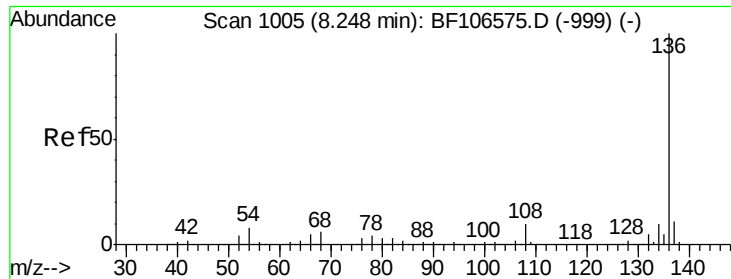
Abundance Ion 70.00 (69.70 to 70.70): BF1

Ion 42.00 (41.70 to 42.70): BF1

Ion 101.00 (100.70 to 101.70): BF1

Ion 130.00 (129.70 to 130.70): BF1

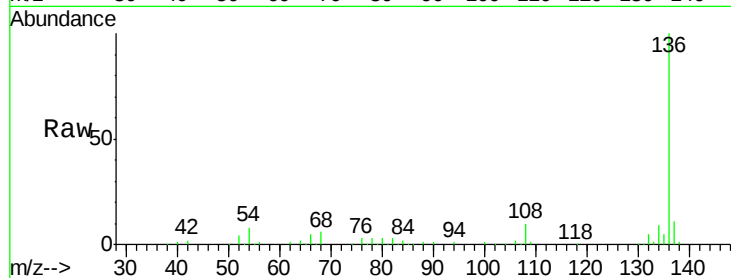




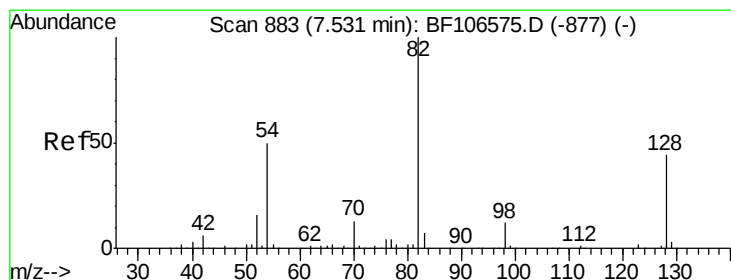
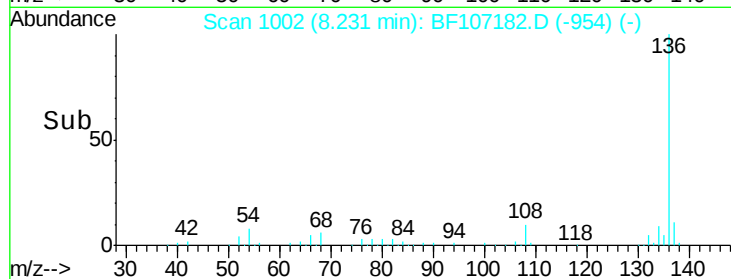
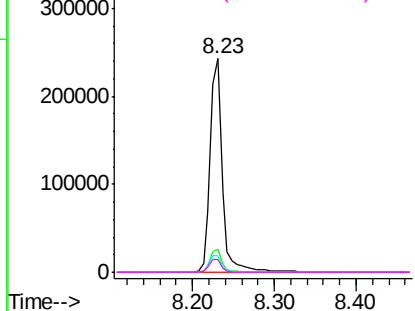
#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 8.23 min Scan# 1002  
Delta R.T. -0.02 min  
Lab File: BF107182.D  
Acq: 6 Jul 2018 19:27

Instrument :  
BNA\_F  
ClientSampleId :  
S4

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 136   | Resp: | 248861 |
| Ion      | Ratio | Lower | Upper  |
| 136      | 100   |       |        |
| 137      | 10.6  | 8.9   | 13.3   |
| 54       | 7.6   | 6.6   | 9.8    |
| 68       | 6.1   | 5.0   | 7.4    |

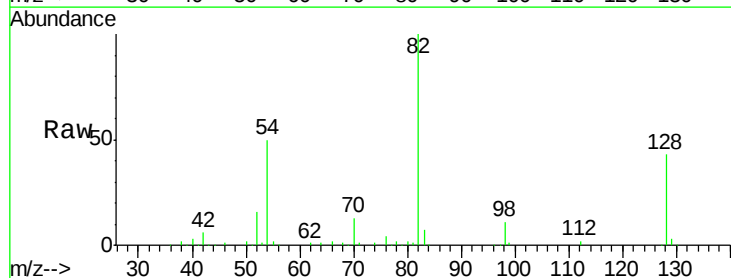


Abundance Ion 136.00 (135.70 to 136.70): E  
Ion 137.00 (136.70 to 137.70): E  
Ion 54.00 (53.70 to 54.70): BF1  
Ion 68.00 (67.70 to 68.70): BF1

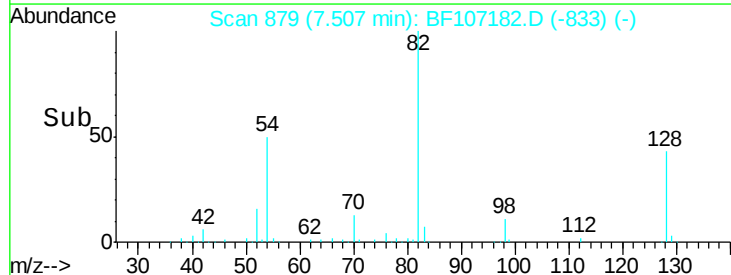
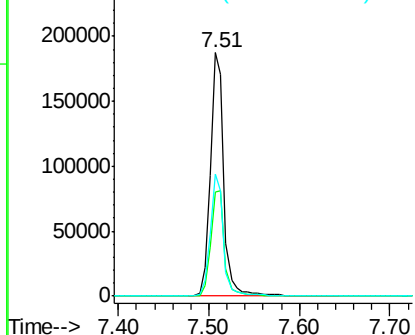


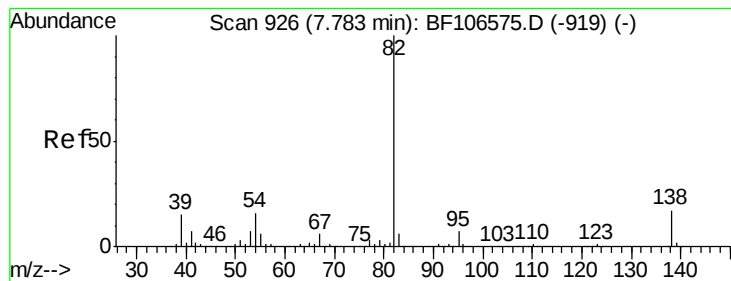
#23  
Nitrobenzene-d5  
Concen: 43.827 ng  
RT: 7.51 min Scan# 879  
Delta R.T. -0.03 min  
Lab File: BF107182.D  
Acq: 6 Jul 2018 19:27

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 82    | Resp: | 196259 |
| Ion      | Ratio | Lower | Upper  |
| 82       | 100   |       |        |
| 128      | 42.9  | 36.1  | 54.1   |
| 54       | 50.0  | 41.4  | 62.2   |



Abundance Ion 82.00 (81.70 to 82.70): BF1  
Ion 128.00 (127.70 to 128.70): E  
Ion 54.00 (53.70 to 54.70): BF1





#25

Isophorone

Concen: 24.871 ng

RT: 7.51 min Scan# 879

Delta R.T. -0.28 min

Lab File: BF107182.D

Acq: 6 Jul 2018 19:27

Instrument :

BNA\_F

ClientSampled :

S4

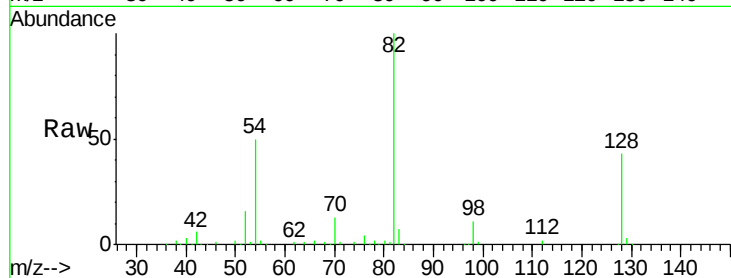
Tgt Ion: 82 Resp: 196258

Ion Ratio Lower Upper

82 100

95 0.0 5.2 7.8#

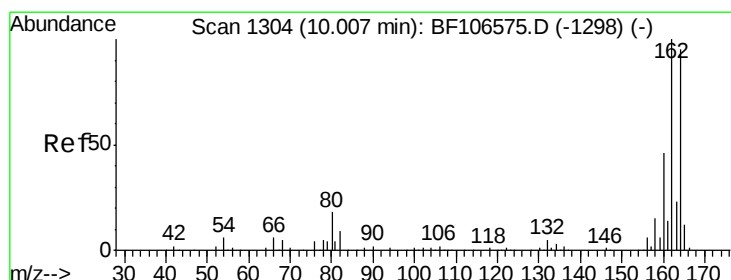
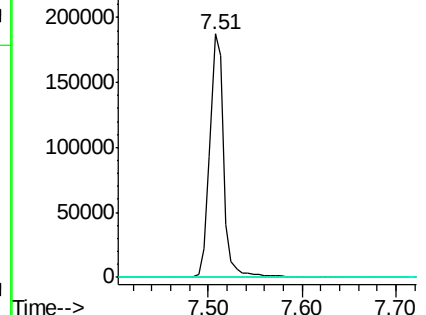
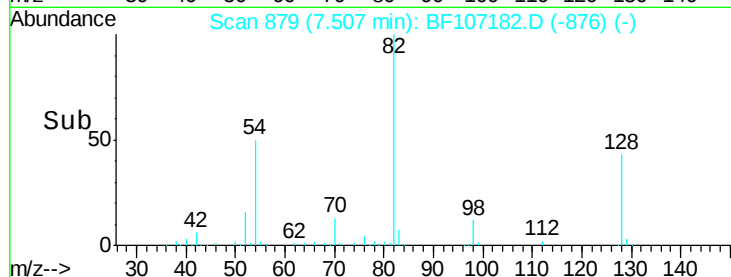
138 0.0 14.9 22.3#



Abundance Ion 82.00 (81.70 to 82.70): BF1

Ion 95.00 (94.70 to 95.70): BF1

Ion 138.00 (137.70 to 138.70): BF1



#38

Acenaphthene-d10

Concen: 20.000 ng

RT: 9.98 min Scan# 1300

Delta R.T. -0.02 min

Lab File: BF107182.D

Acq: 6 Jul 2018 19:27

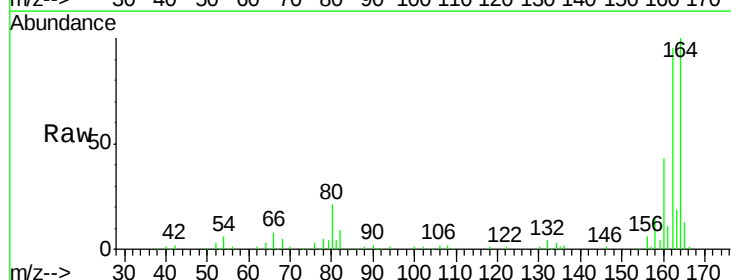
Tgt Ion: 164 Resp: 117458

Ion Ratio Lower Upper

164 100

162 95.3 86.1 129.1

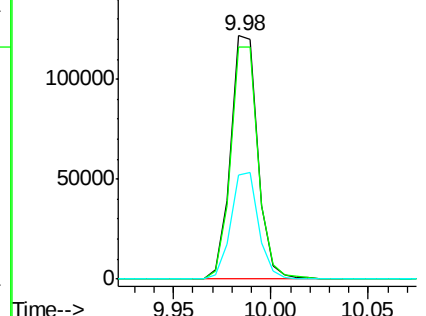
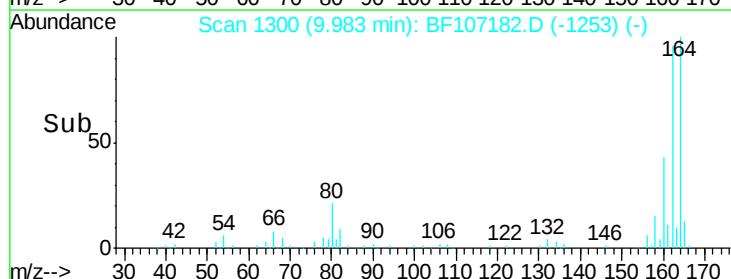
160 42.6 38.3 57.5

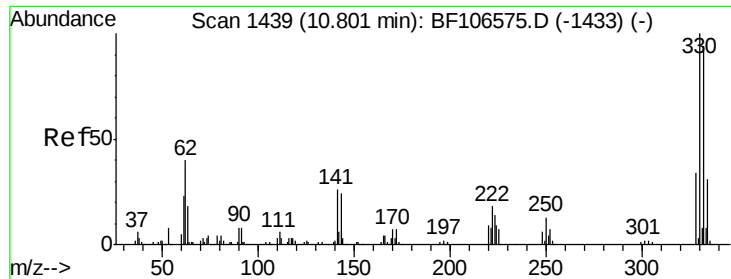


Abundance Ion 164.00 (163.70 to 164.70): BF1

Ion 162.00 (161.70 to 162.70): BF1

Ion 160.00 (159.70 to 160.70): BF1

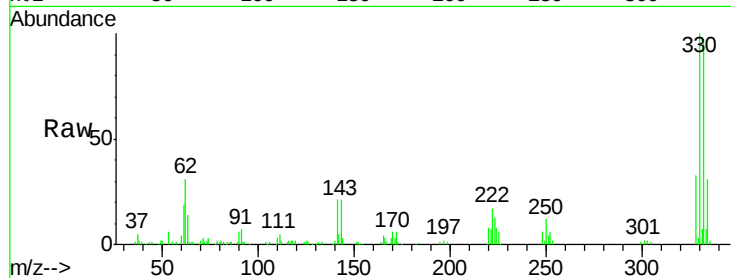




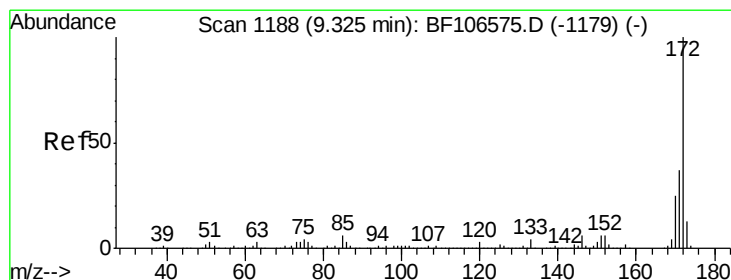
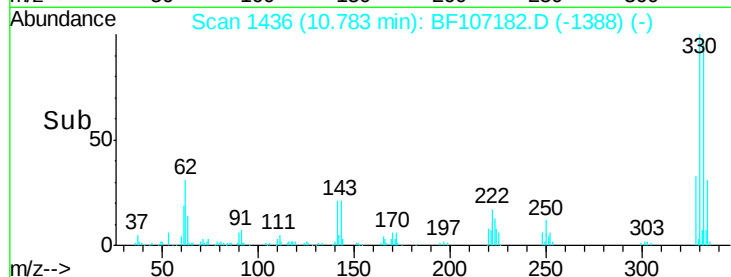
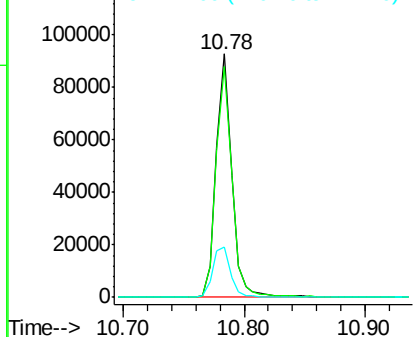
#41  
 2,4,6-Tribromophenol  
 Concen: 60.613 ng  
 RT: 10.78 min Scan# 1436  
 Delta R.T. -0.02 min  
 Lab File: BF107182.D  
 Acq: 6 Jul 2018 19:27

Instrument :  
 BNA\_F  
 ClientSampleId :  
 S4

Tgt Ion:330 Resp: 82517  
 Ion Ratio Lower Upper  
 330 100  
 332 97.5 77.0 115.6  
 141 23.6 29.9 44.9#

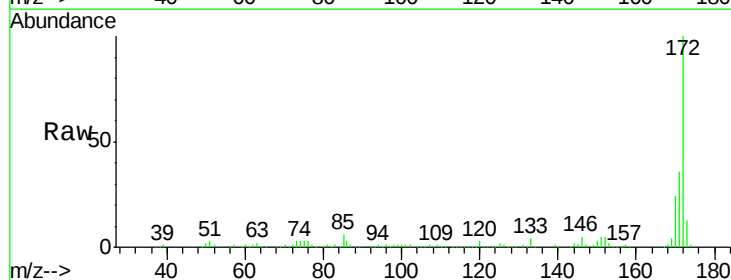


Abundance Ion 329.80 (329.50 to 330.50): E  
 Ion 331.80 (331.50 to 332.50): E  
 Ion 141.00 (140.70 to 141.70): E

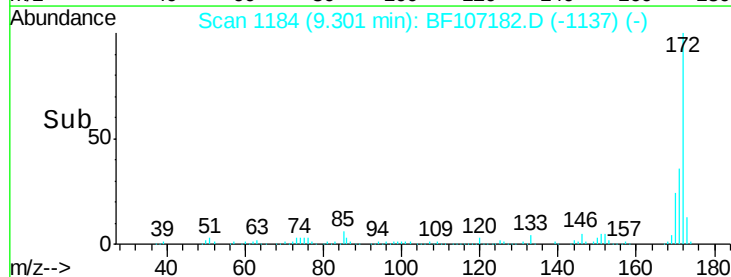
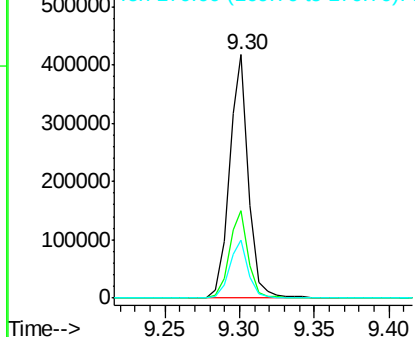


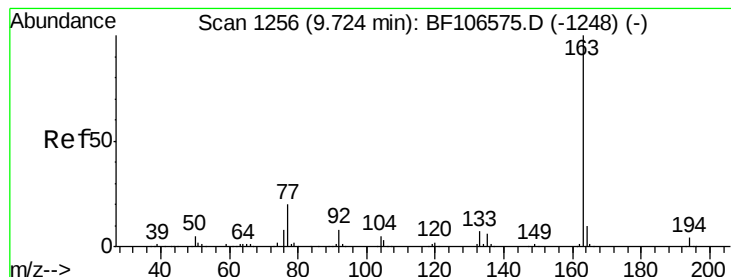
#44  
 2-Fluorobiphenyl  
 Concen: 47.597 ng  
 RT: 9.30 min Scan# 1184  
 Delta R.T. -0.02 min  
 Lab File: BF107182.D  
 Acq: 6 Jul 2018 19:27

Tgt Ion:172 Resp: 375341  
 Ion Ratio Lower Upper  
 172 100  
 171 35.9 29.7 44.5  
 170 23.7 19.6 29.4



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





#49

Dimethylphthalate

Concen: 8.956 ng

RT: 9.70 min Scan# 1251

Delta R.T. -0.03 min

Lab File: BF107182.D

Acq: 6 Jul 2018 19:27

Instrument :

BNA\_F

ClientSampleId :

S4

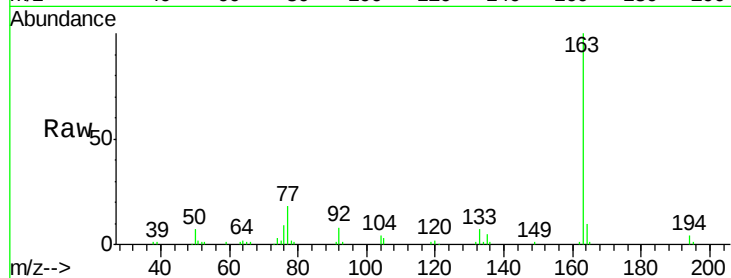
Tgt Ion:163 Resp: 78899

Ion Ratio Lower Upper

163 100

194 4.0 2.7 4.1

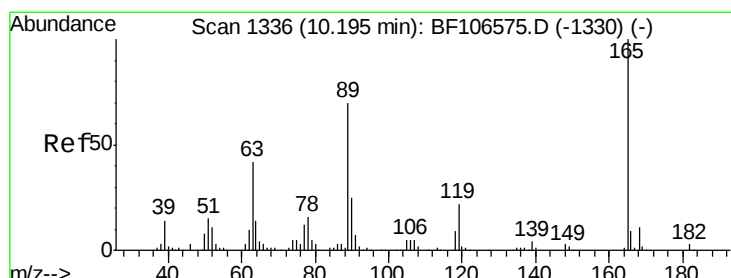
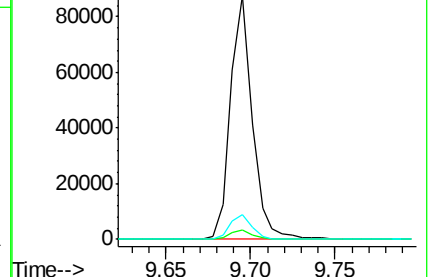
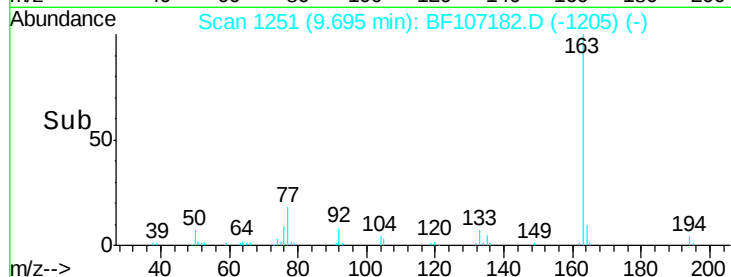
164 10.4 8.2 12.2



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



#56

2,4-Dinitrotoluene

Concen: 6.064 ng

RT: 9.98 min Scan# 1300

Delta R.T. -0.22 min

Lab File: BF107182.D

Acq: 6 Jul 2018 19:27

Tgt Ion:165 Resp: 14765

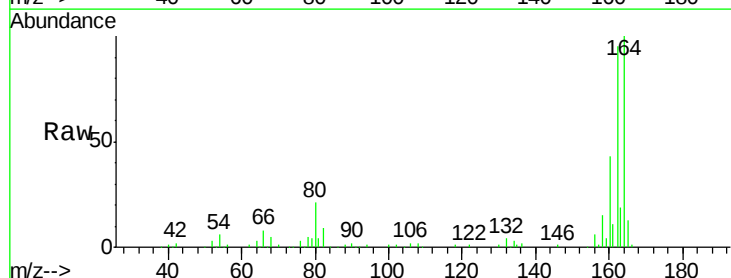
Ion Ratio Lower Upper

165 100

63 0.0 36.4 54.6#

89 0.0 57.8 86.6#

182 0.0 1.6 2.4#

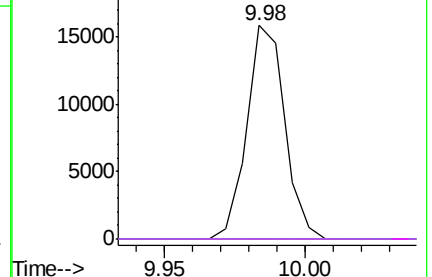
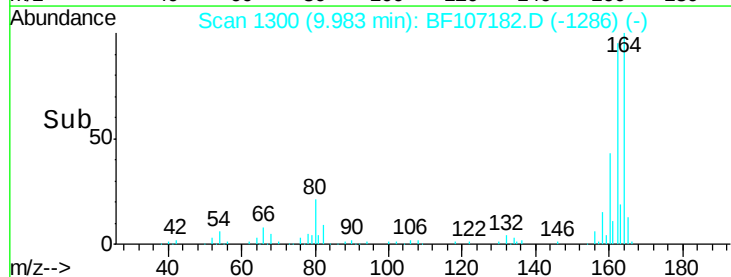


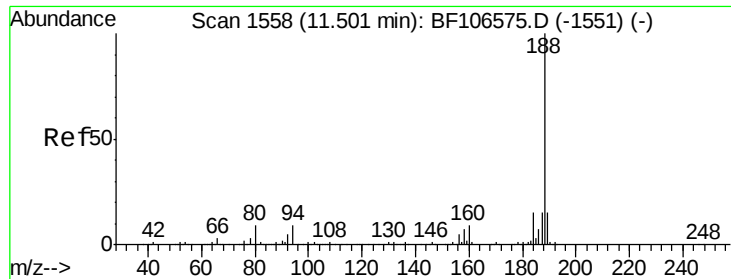
Abundance Ion 165.00 (164.70 to 165.70): E

Ion 63.00 (62.70 to 63.70): BF1

Ion 89.00 (88.70 to 89.70): BF1

Ion 182.00 (181.70 to 182.70): E

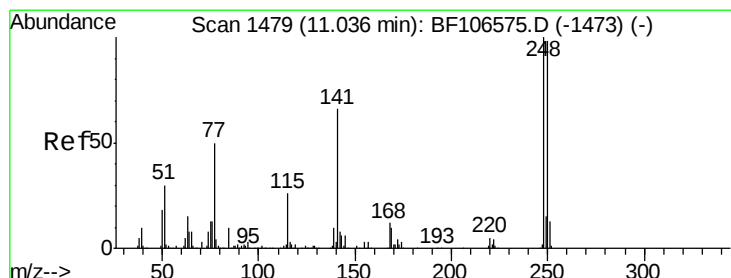
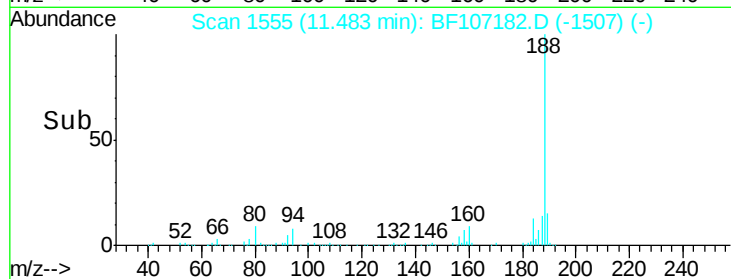
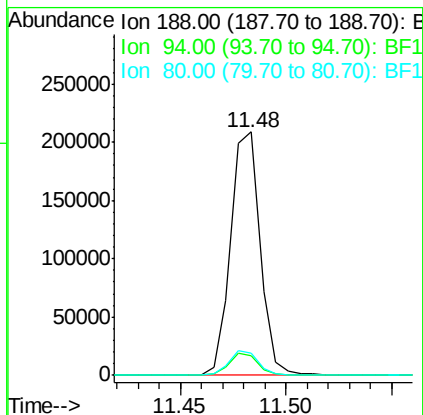
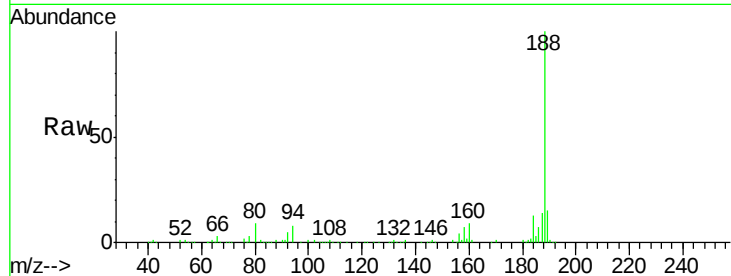




#63  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 11.48 min Scan# 1555  
Delta R.T. -0.02 min  
Lab File: BF107182.D  
Acq: 6 Jul 2018 19:27

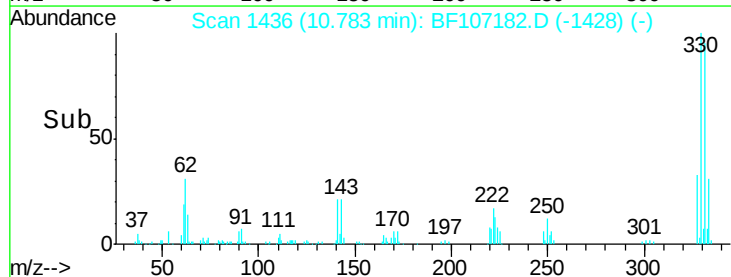
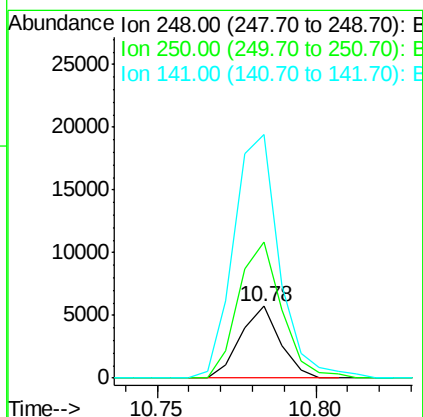
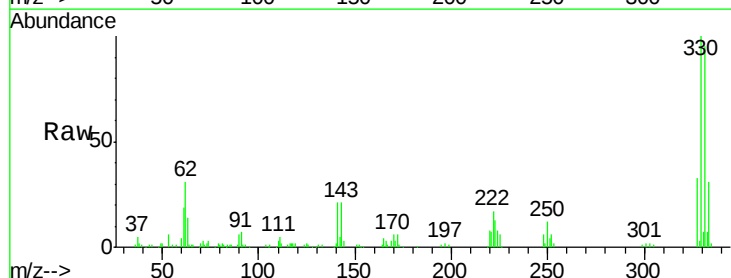
Instrument :  
BNA\_F  
ClientSampled :  
S4

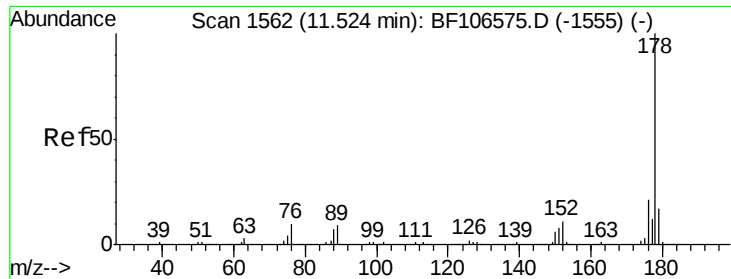
Tgt Ion:188 Resp: 201248  
Ion Ratio Lower Upper  
188 100  
94 8.0 8.5 12.7#  
80 9.0 9.2 13.8#



#66  
4-Bromophenyl-phenylether  
Concen: 2.071 ng  
RT: 10.78 min Scan# 1436  
Delta R.T. -0.25 min  
Lab File: BF107182.D  
Acq: 6 Jul 2018 19:27

Tgt Ion:248 Resp: 4974  
Ion Ratio Lower Upper  
248 100  
250 190.0 76.9 115.3#  
141 338.5 74.4 111.6#





#70

Phenanthrene

Concen: 3.736 ng

RT: 11.51 min Scan# 1559

Delta R.T. -0.02 min

Lab File: BF107182.D

Acq: 6 Jul 2018 19:27

Instrument :

BNA\_F

Client Sampled :

S4

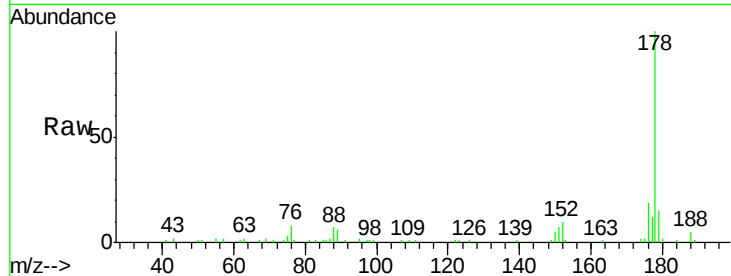
Tgt Ion:178 Resp: 36267

Ion Ratio Lower Upper

178 100

176 19.2 15.8 23.8

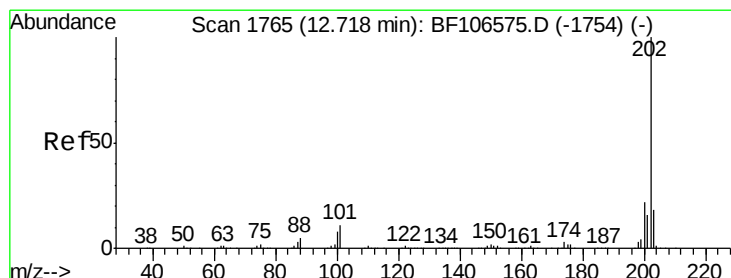
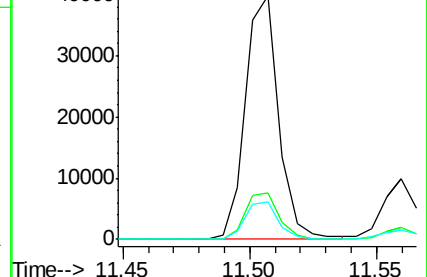
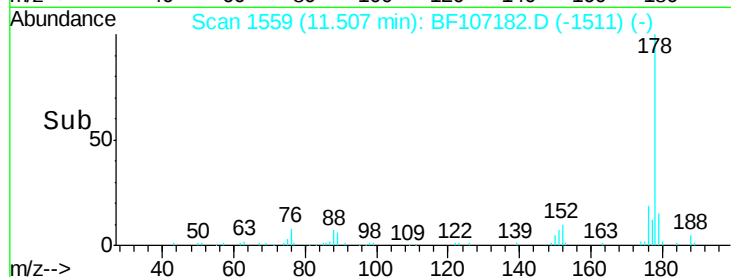
179 15.5 13.0 19.6



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: 4.538 ng

RT: 12.70 min Scan# 1762

Delta R.T. -0.02 min

Lab File: BF107182.D

Acq: 6 Jul 2018 19:27

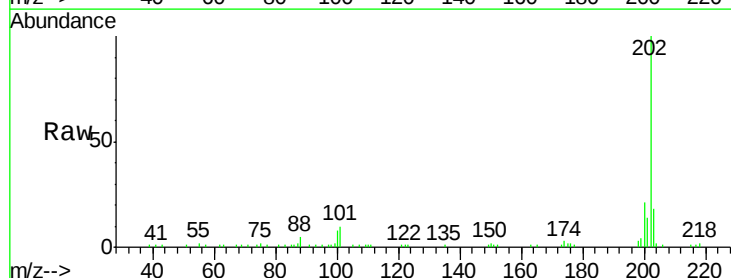
Tgt Ion:202 Resp: 48552

Ion Ratio Lower Upper

202 100

101 10.3 0.0 34.1

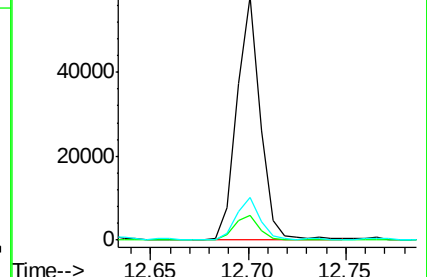
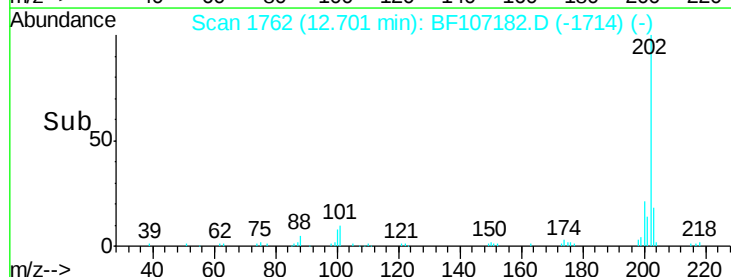
203 17.7 0.0 38.1

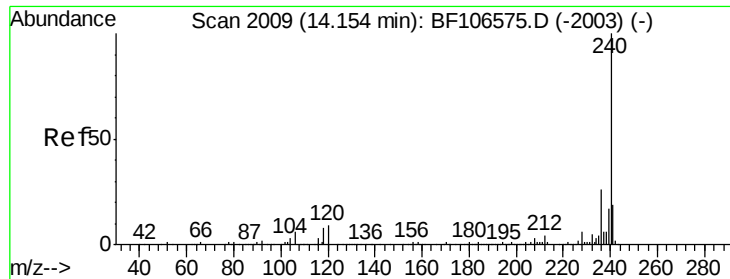


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 101.00 (100.70 to 101.70): E

Ion 203.00 (202.70 to 203.70): E





#75

Chrysene-d12

Concen: 20.000 ng

RT: 14.14 min Scan# 2006

Delta R.T. -0.03 min

Lab File: BF107182.D

Acq: 6 Jul 2018 19:27

Instrument :

BNA\_F

ClientSampled :

S4

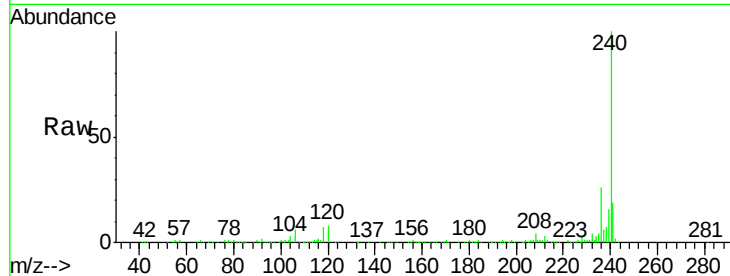
Tgt Ion:240 Resp: 192804

Ion Ratio Lower Upper

240 100

120 8.3 9.5 14.3#

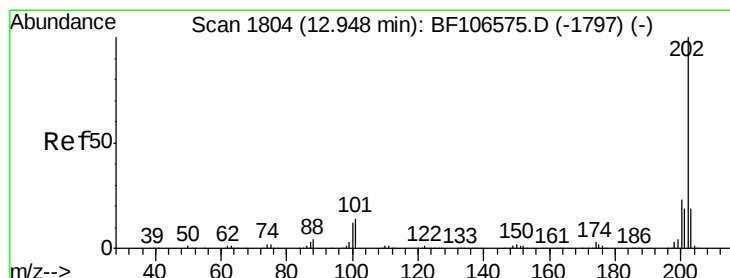
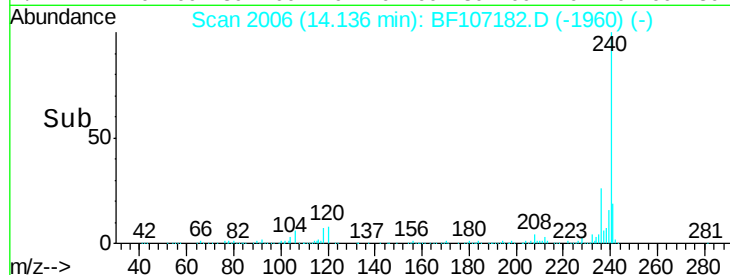
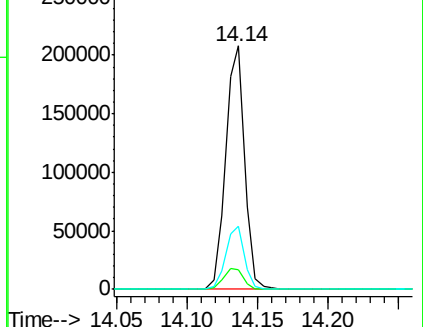
236 25.7 20.7 31.1



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: 5.801 ng

RT: 12.93 min Scan# 1801

Delta R.T. -0.02 min

Lab File: BF107182.D

Acq: 6 Jul 2018 19:27

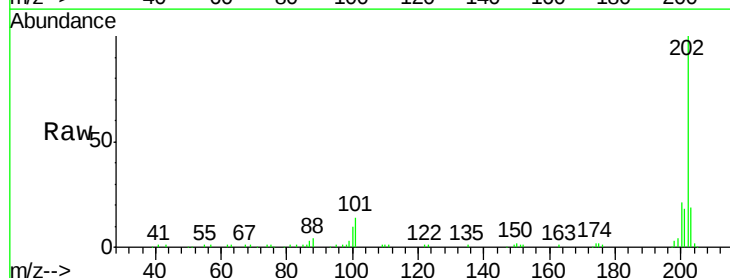
Tgt Ion:202 Resp: 73751

Ion Ratio Lower Upper

202 100

200 21.4 17.4 26.2

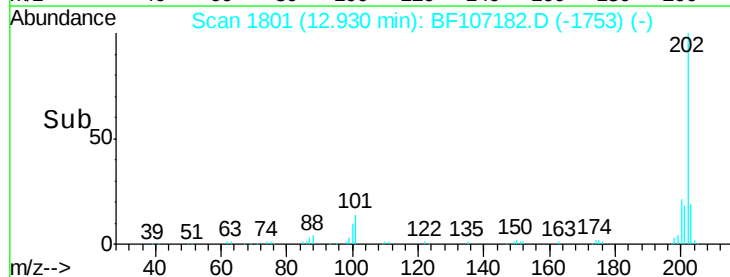
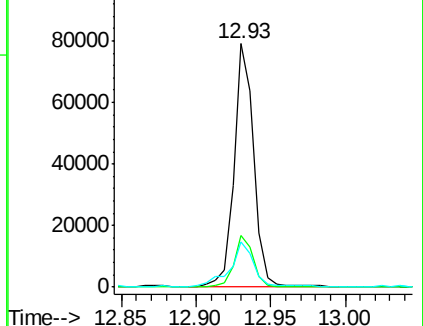
203 18.6 14.3 21.5

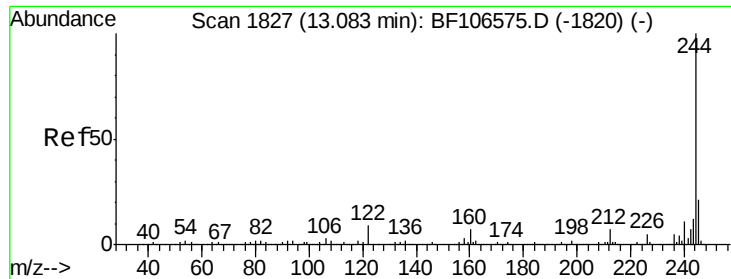


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 200.00 (199.70 to 200.70): E

Ion 203.00 (202.70 to 203.70): E

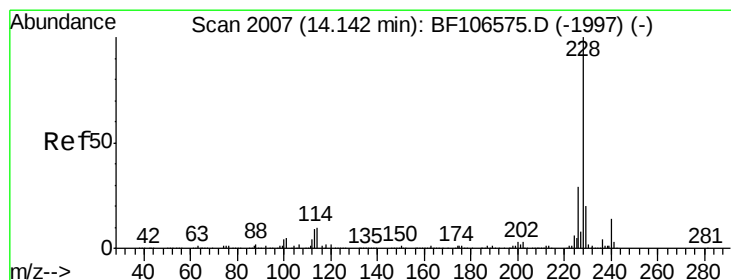
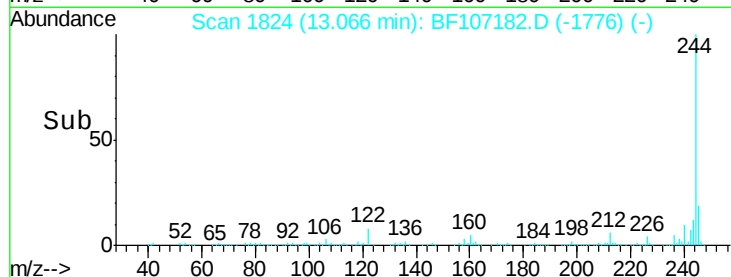
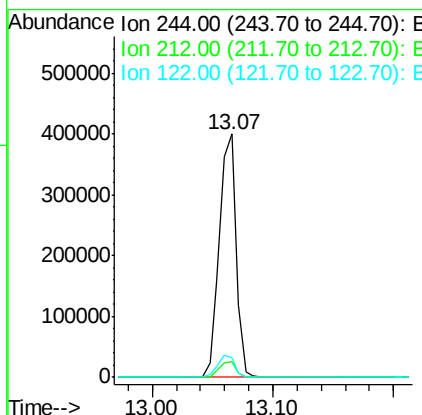
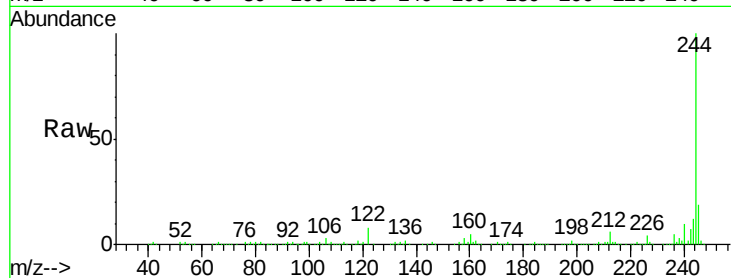




#78  
 Terphenyl-d14  
 Concen: 47.828 ng  
 RT: 13.07 min Scan# 1824  
 Delta R.T. -0.02 min  
 Lab File: BF107182.D  
 Acq: 6 Jul 2018 19:27

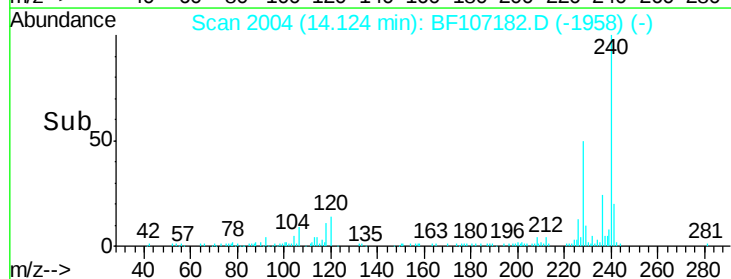
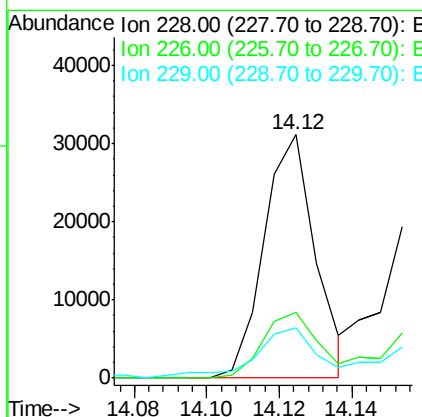
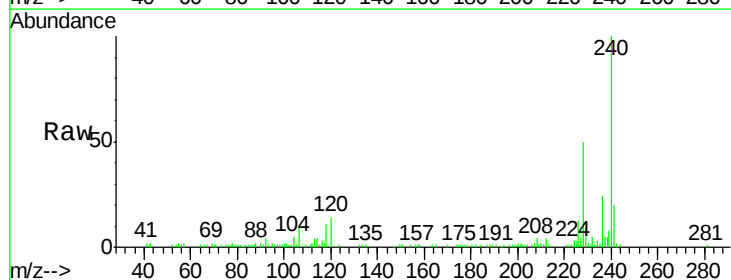
Instrument :  
 BNA\_F  
 ClientSampleId :  
 S4

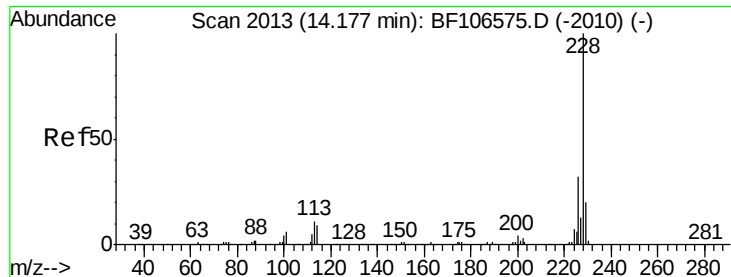
Tgt Ion:244 Resp: 380689  
 Ion Ratio Lower Upper  
 244 100  
 212 6.2 5.4 8.0  
 122 8.0 11.0 16.4#



#80  
 Benzo(a)anthracene  
 Concen: 2.609 ng  
 RT: 14.12 min Scan# 2004  
 Delta R.T. -0.03 min  
 Lab File: BF107182.D  
 Acq: 6 Jul 2018 19:27

Tgt Ion:228 Resp: 30655  
 Ion Ratio Lower Upper  
 228 100  
 226 27.1 22.6 33.8  
 229 20.4 15.8 23.6

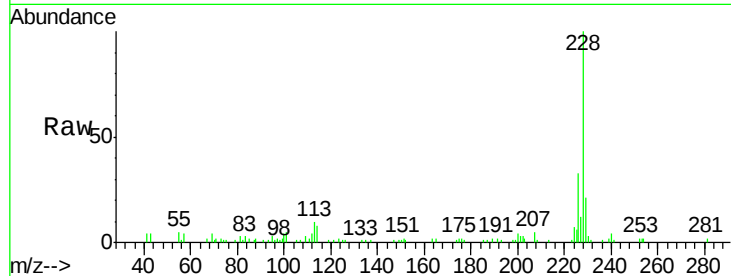




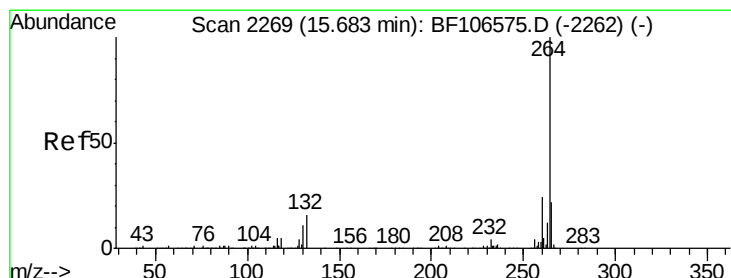
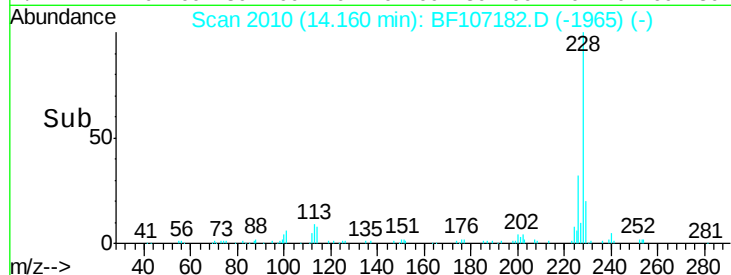
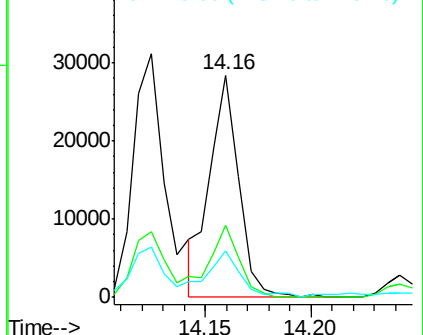
#82  
Chrysene  
Concen: 2.521 ng  
RT: 14.16 min Scan# 2010  
Delta R.T. -0.04 min  
Lab File: BF107182.D  
Acq: 6 Jul 2018 19:27

Instrument :  
BNA\_F  
ClientSampleId :  
S4

Tgt Ion:228 Resp: 27256  
Ion Ratio Lower Upper  
228 100  
226 32.6 25.0 37.6  
229 20.8 16.2 24.4

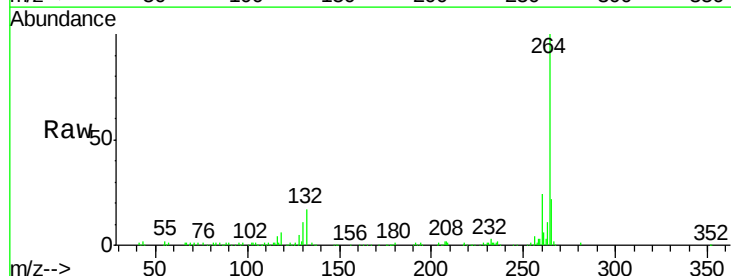


Abundance Ion 228.00 (227.70 to 228.70): E  
Ion 226.00 (225.70 to 226.70): E  
Ion 229.00 (228.70 to 229.70): E

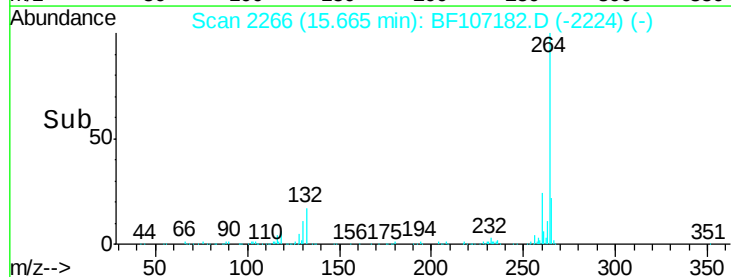
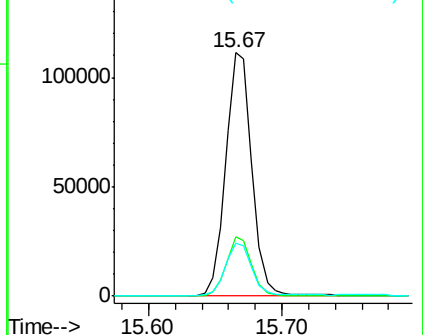


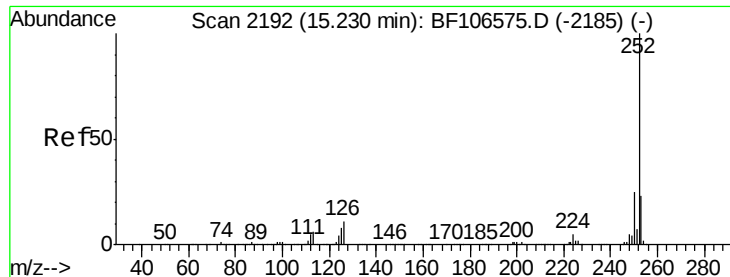
#86  
Perylene-d12  
Concen: 20.000 ng  
RT: 15.67 min Scan# 2266  
Delta R.T. -0.05 min  
Lab File: BF107182.D  
Acq: 6 Jul 2018 19:27

Tgt Ion:264 Resp: 154005  
Ion Ratio Lower Upper  
264 100  
260 24.2 19.2 28.8  
265 21.6 17.5 26.3



Abundance Ion 264.00 (263.70 to 264.70): E  
Ion 260.00 (259.70 to 260.70): E  
Ion 265.00 (264.70 to 265.70): E

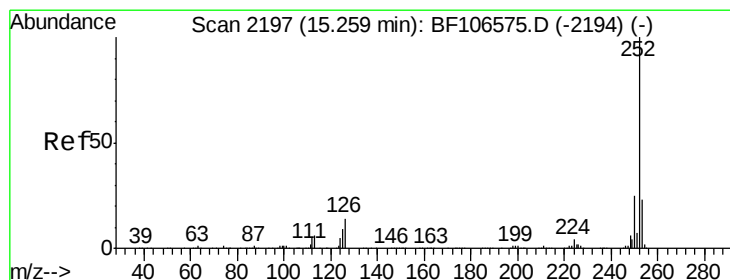
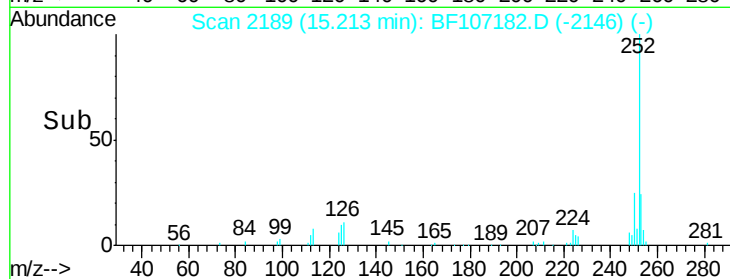
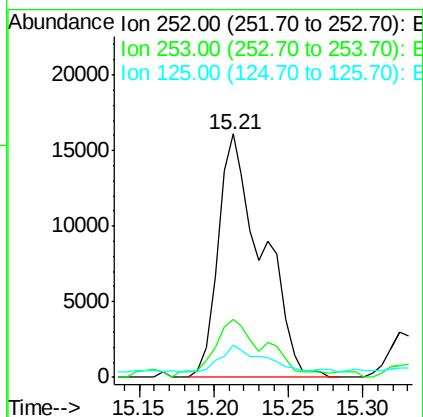
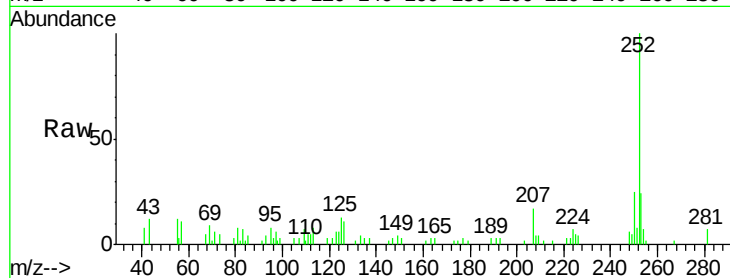




#87  
Benzo(b)fluoranthene  
Concen: 3.447 ng  
RT: 15.21 min Scan# 2189  
Delta R.T. -0.05 min  
Lab File: BF107182.D  
Acq: 6 Jul 2018 19:27

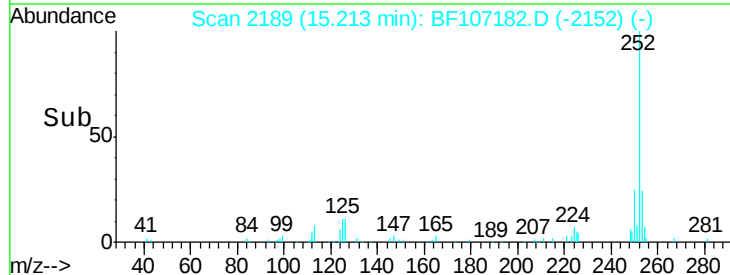
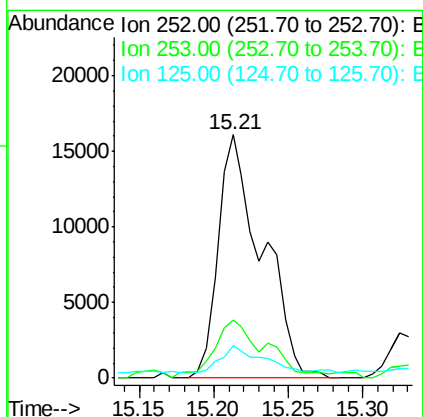
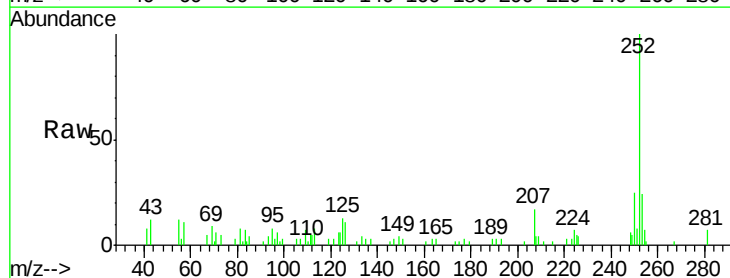
Instrument :  
BNA\_F  
ClientSampleId :  
S4

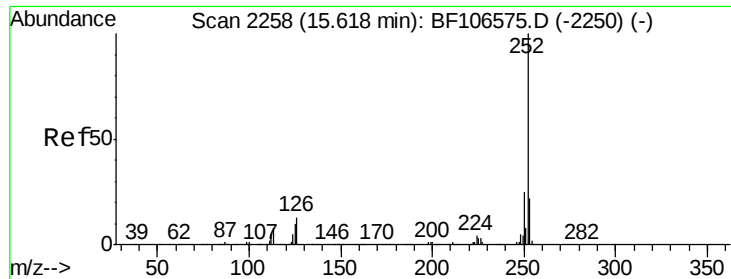
Tgt Ion:252 Resp: 32980  
Ion Ratio Lower Upper  
252 100  
253 23.8 17.0 25.6  
125 13.3 9.0 13.6



#88  
Benzo(k)fluoranthene  
Concen: 3.620 ng  
RT: 15.21 min Scan# 2189  
Delta R.T. -0.08 min  
Lab File: BF107182.D  
Acq: 6 Jul 2018 19:27

Tgt Ion:252 Resp: 32980  
Ion Ratio Lower Upper  
252 100  
253 23.8 17.9 26.9  
125 13.3 10.2 15.2





#89

Benzo(a)pyrene

Concen: 2.366 ng

RT: 15.60 min Scan# 2255

Delta R.T. -0.05 min

Lab File: BF107182.D

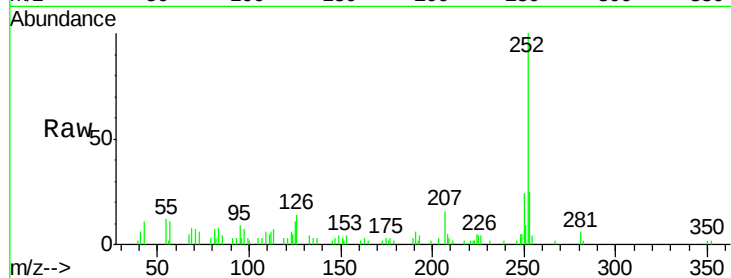
Acq: 6 Jul 2018 19:27

Instrument :

BNA\_F

ClientSampleId :

S4



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 252   | Resp: | 20118 |
| Ion      | Ratio | Lower | Upper |
| 252      | 100   |       |       |
| 253      | 25.1  | 17.1  | 25.7  |
| 125      | 11.4  | 9.8   | 14.6  |

