

Data Path : Z:\HPCHEM1\BNA F\DATA\BF042816\OLD\  
 Data File : BF086485.D  
 Acq On : 29 Apr 2016 2:24  
 Operator : UM/SJ  
 Sample : H2654-14  
 Misc :  
 ALS Vial : 22 Sample Multiplier: 1

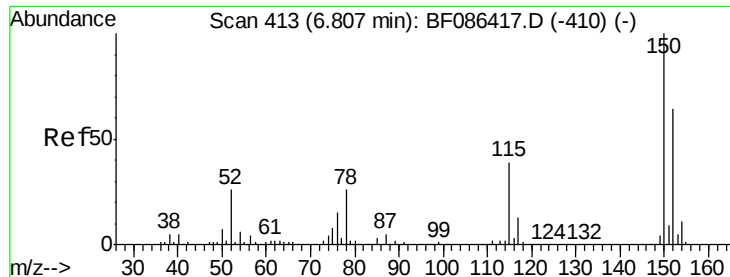
Instrument :  
 BNA\_F  
 ClientSampleId :  
 26WARD-2A-CS-15(6-12FTBGS)

Quant Time: Apr 29 08:56:57 2016  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF042716.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Apr 27 14:20:52 2016  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|--------------------------------|-------|------|----------|--------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4      | 6.78  | 152  | 146453   | 20.00  | ng    | -0.02    |
| 21) Naphthalene-d8             | 8.08  | 136  | 627963   | 20.00  | ng    | -0.02    |
| 38) Acenaphthene-d10           | 9.82  | 164  | 259545   | 20.00  | ng    | -0.02    |
| 63) Phenanthrene-d10           | 11.31 | 188  | 438132   | 20.00  | ng    | -0.01    |
| 75) Chrysene-d12               | 13.94 | 240  | 321610   | 20.00  | ng    | -0.02    |
| 86) Perylene-d12               | 15.35 | 264  | 301274   | 20.00  | ng    | -0.01    |
| System Monitoring Compounds    |       |      |          |        |       |          |
| 5) 2-Fluorophenol              | 5.39  | 112  | 985095   | 116.02 | ng    | 0.00     |
| 7) Phenol-d6                   | 6.43  | 99   | 1260851  | 106.40 | ng    | -0.01    |
| 23) Nitrobenzene-d5            | 7.36  | 82   | 829796   | 71.23  | ng    | -0.02    |
| 41) 2,4,6-Tribromophenol       | 10.61 | 330  | 227755   | 83.21  | ng    | -0.02    |
| 44) 2-Fluorobiphenyl           | 9.16  | 172  | 1307676  | 89.09  | ng    | -0.01    |
| 78) Terphenyl-d14              | 12.90 | 244  | 923493   | 63.26  | ng    | -0.01    |
| Target Compounds               |       |      |          |        |       |          |
| 19) n-Nitroso-di-n-propylamine | 7.36  | 70   | 110713   | 14.13  | ng    | # 75     |
| 25) Isophorone                 | 7.36  | 82   | 611671   | 27.28  | ng    | # 68     |
| 49) Dimethylphthalate          | 9.55  | 163  | 246063   | 12.59  | ng    | 99       |
| 56) 2,4-Dinitrotoluene         | 9.82  | 165  | 33535    | 6.52   | ng    | # 16     |
| 66) 4-Bromophenyl-phenylether  | 10.61 | 248  | 13407    | 2.97   | ng    | # 1      |
| 70) Phenanthrene               | 11.33 | 178  | 48278    | 2.10   | ng    | 98       |
| 74) Fluoranthene               | 12.52 | 202  | 70633    | 3.04   | ng    | 91       |
| 77) Pyrene                     | 12.74 | 202  | 64990    | 2.80   | ng    | 97       |
| 80) Benzo(a)anthracene         | 13.93 | 228  | 39902    | 2.33   | ng    | 94       |
| 82) Chrysene                   | 13.93 | 228  | 39902    | 2.14   | ng    | 96       |
| 87) Benzo(b)fluoranthene       | 14.95 | 252  | 59726    | 3.37   | ng    | # 94     |
| 88) Benzo(k)fluoranthene       | 14.95 | 252  | 59726    | 3.23   | ng    | # 92     |

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





#1

1,4-Dichlorobenzene-d4

Concen: 20.00 ng

RT: 6.78 min Scan# 411

Delta R.T. -0.02 min

Lab File: BF086485.D

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ClientSampleId :

26WARD-2A-CS-15(6-12FTBGS)

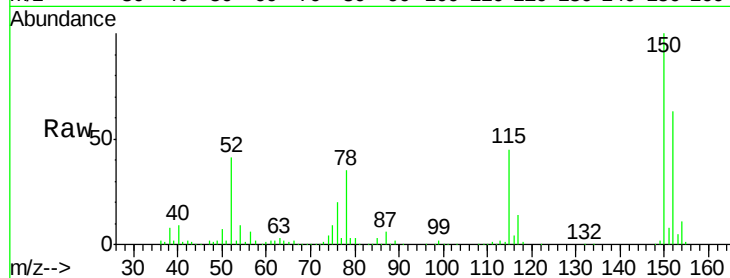
Tot Ion:152 Resp: 146453

Ion Ratio Lower Upper

152 100

150 159.0 125.8 188.6

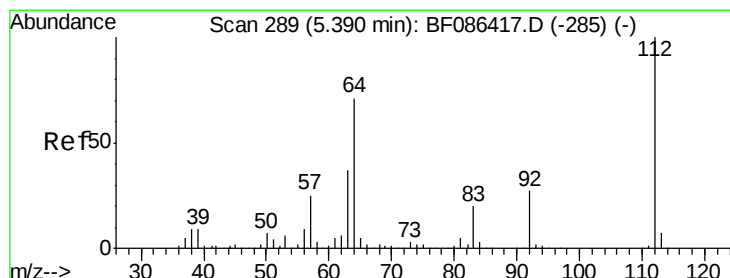
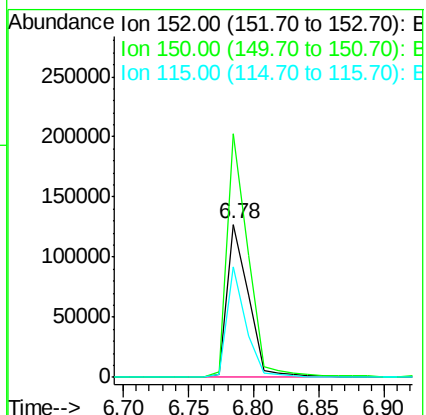
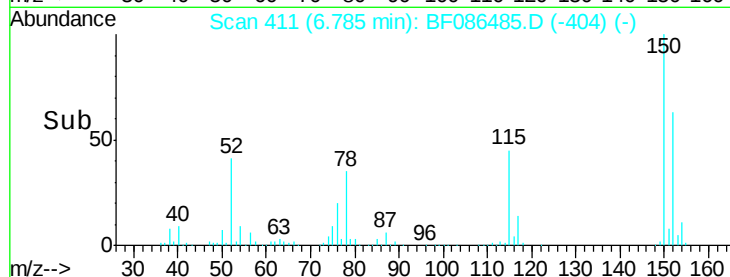
115 71.9 51.5 77.3



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: 116.02 ng

RT: 5.39 min Scan# 289

Delta R.T. 0.00 min

Lab File: BF086485.D

Acq: 29 Apr 2016 2:24

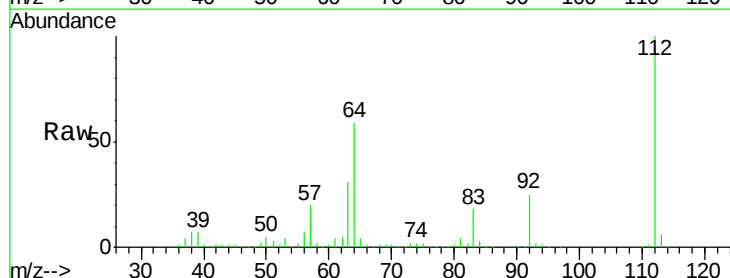
Tgt Ion:112 Resp: 985095

Ion Ratio Lower Upper

112 100

64 58.8 52.1 78.1

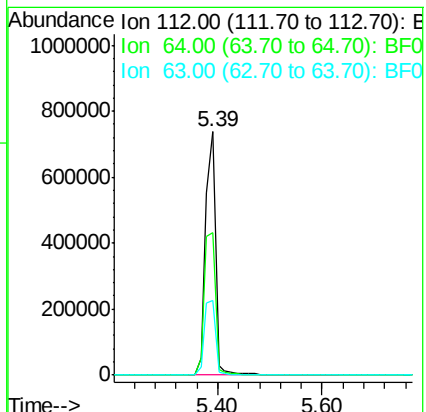
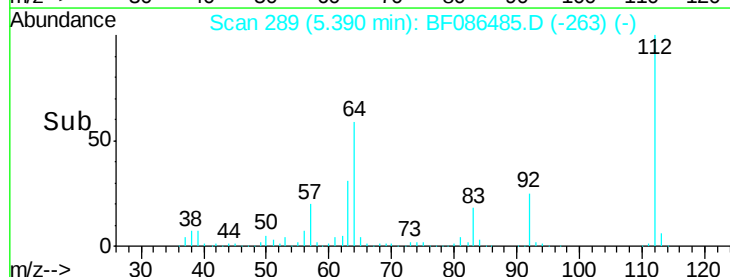
63 30.6 25.7 38.5

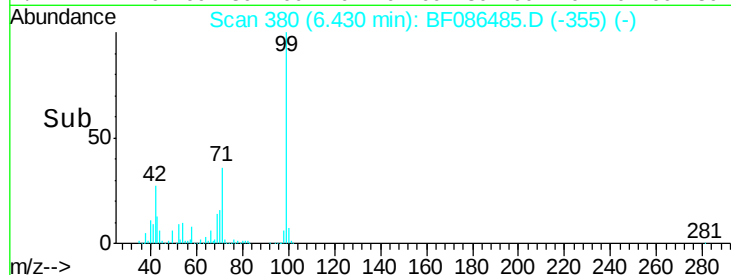
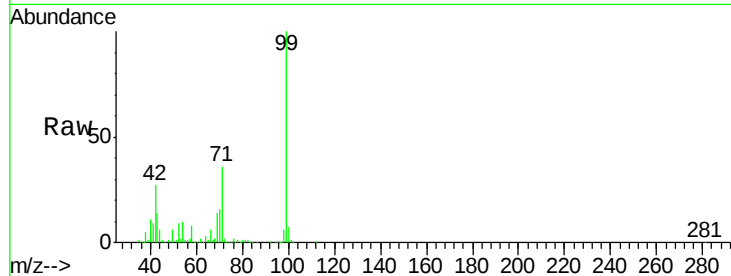
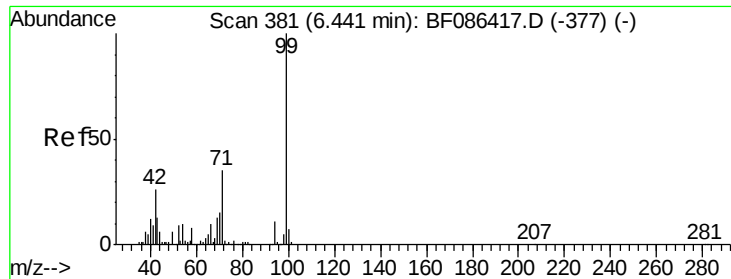


Abundance Ion 112.00 (111.70 to 112.70): E

Ion 64.00 (63.70 to 64.70): BF0

Ion 63.00 (62.70 to 63.70): BF0





#7

Phenol-d6

Concen: 106.40 ng

RT: 6.43 min Scan# 380

Delta R.T. -0.01 min

Lab File: BF086485.D

Acq: 29 Apr 2016 2:24

Instrument :

BNA\_F

ClientSampleId :

26WARD-2A-CS-15(6-12FTBGS)

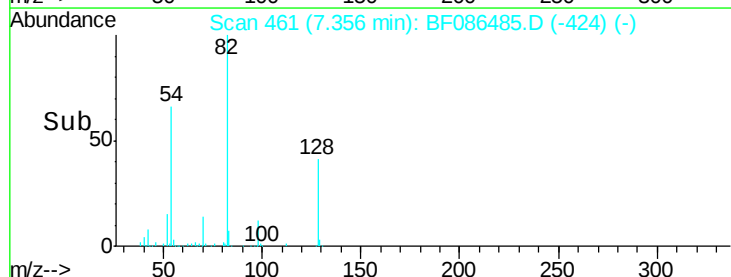
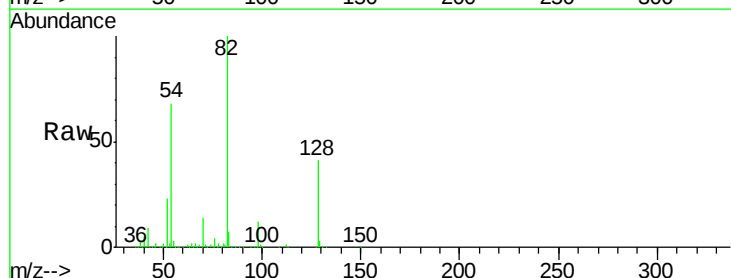
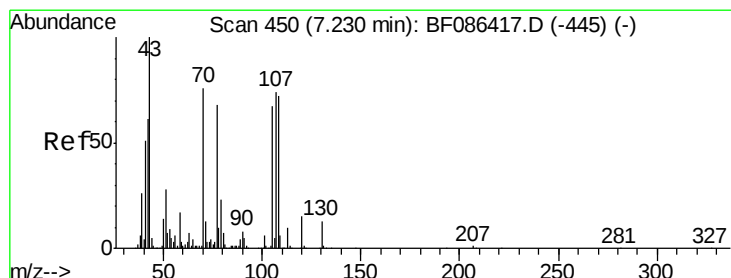
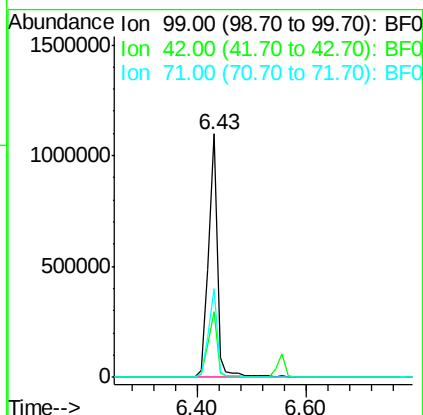
Tot Ion: 99 Resp: 1260851

Ion Ratio Lower Upper

99 100

42 27.1 13.6 20.4#

71 36.4 24.6 36.8



#19

n-Nitroso-di-n-propylamine

Concen: 14.13 ng

RT: 7.36 min Scan# 461

Delta R.T. 0.13 min

Lab File: BF086485.D

Acq: 29 Apr 2016 2:24

Tgt Ion: 70 Resp: 110713

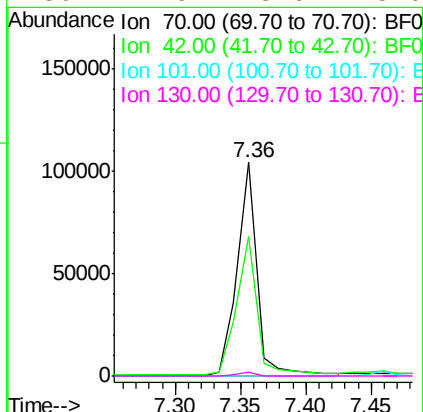
Ion Ratio Lower Upper

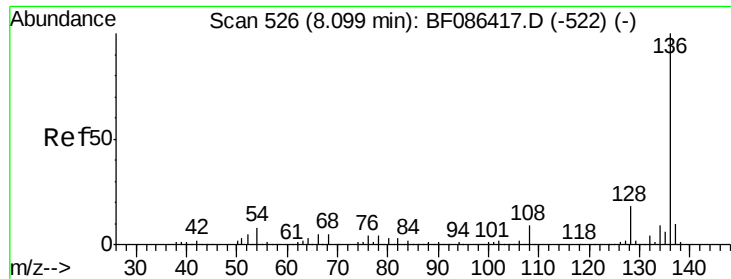
70 100

42 65.4 43.1 64.7#

101 0.0 8.1 12.1#

130 1.9 18.6 28.0#

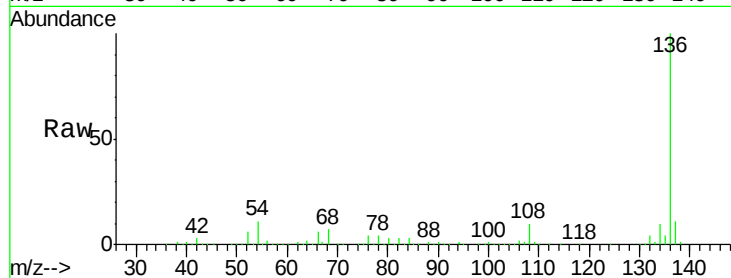




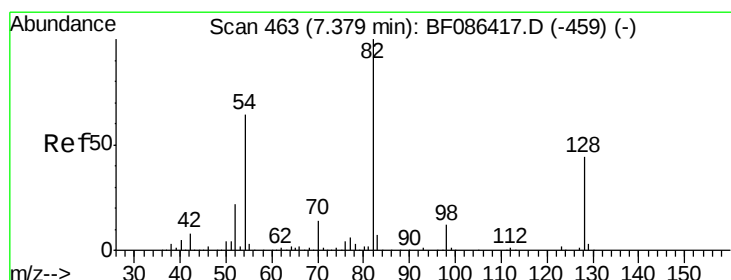
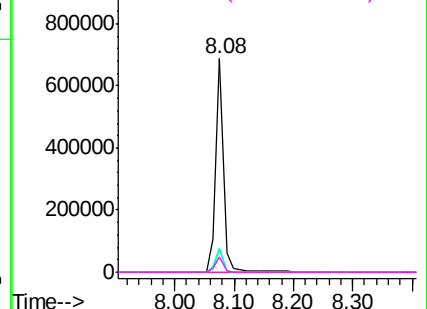
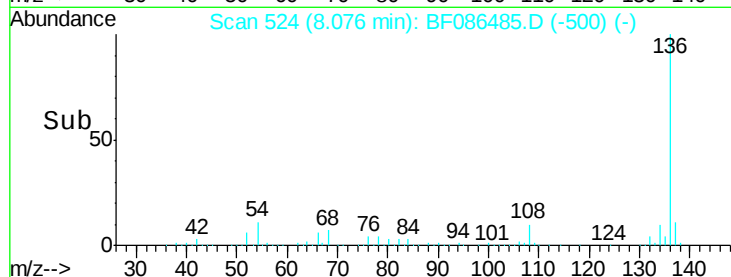
#21  
Naphthalene-d8  
Concen: 20.00 ng  
RT: 8.08 min Scan# 524  
Delta R.T. -0.02 min  
Lab File: BF086485.D  
Acq: 29 Apr 2016 2:24

Instrument :  
BNA\_F  
ClientSampleId :  
26WARD-2A-CS-15(6-12FTBGS)

|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 136   | Resp: | 627963 |
| Ion      | Ratio | Lower | Upper  |
| 136      | 100   |       |        |
| 137      | 10.8  | 8.8   | 13.2   |
| 54       | 11.5  | 5.0   | 7.4#   |
| 68       | 7.0   | 4.4   | 6.6#   |

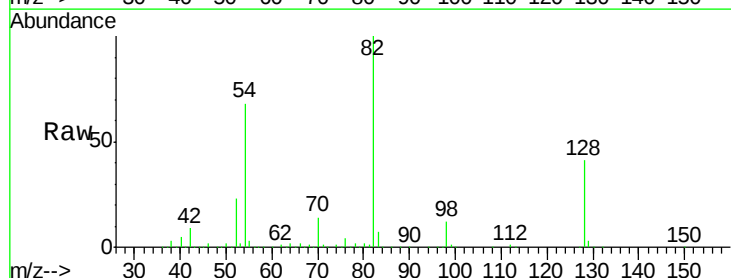


Abundance Ion 136.00 (135.70 to 136.70): E  
Ion 137.00 (136.70 to 137.70): E  
Ion 54.00 (53.70 to 54.70): BF0  
Ion 68.00 (67.70 to 68.70): BF0

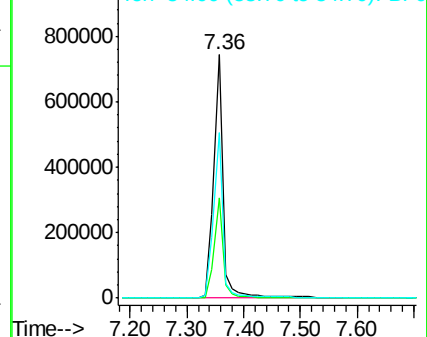
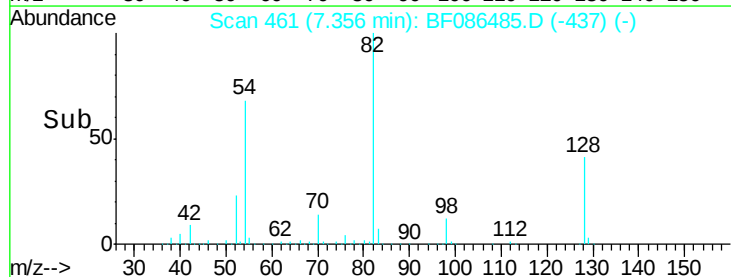


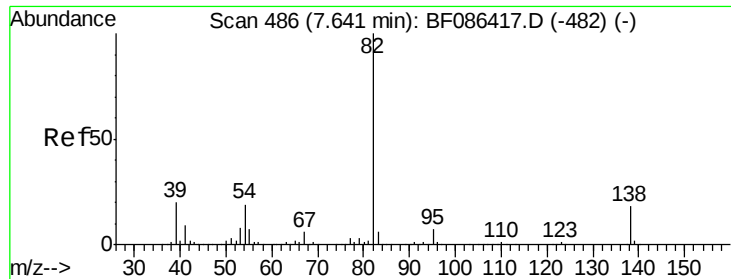
#23  
Nitrobenzene-d5  
Concen: 71.23 ng  
RT: 7.36 min Scan# 461  
Delta R.T. -0.02 min  
Lab File: BF086485.D  
Acq: 29 Apr 2016 2:24

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 82    | Resp: | 829796 |
| Ion      | Ratio | Lower | Upper  |
| 82       | 100   |       |        |
| 128      | 41.2  | 40.6  | 61.0   |
| 54       | 68.1  | 38.1  | 57.1#  |



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





#25

Isophorone

Concen: 27.28 ng

RT: 7.36 min Scan# 461

Delta R.T. -0.29 min

Lab File: BF086485.D

Acq: 29 Apr 2016 2:24

Instrument :

BNA\_F

ClientSampleId :

26WARD-2A-CS-15(6-12FTBGS)

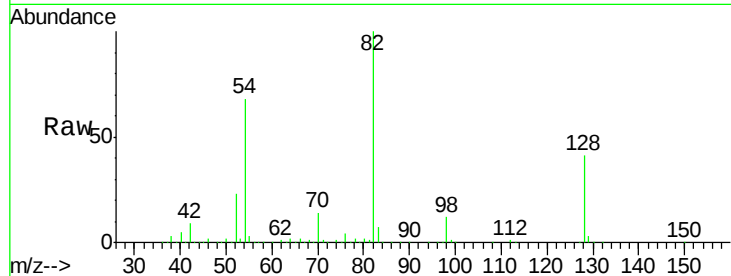
Tot Ion: 82 Resp: 611671

Ion Ratio Lower Upper

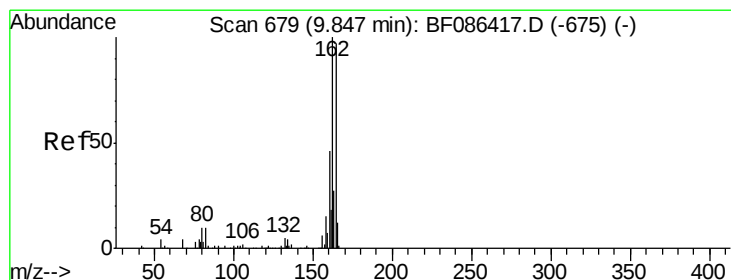
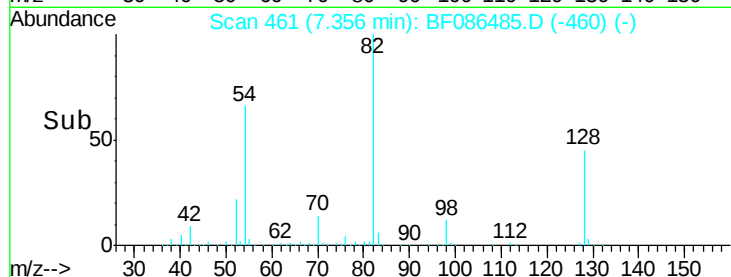
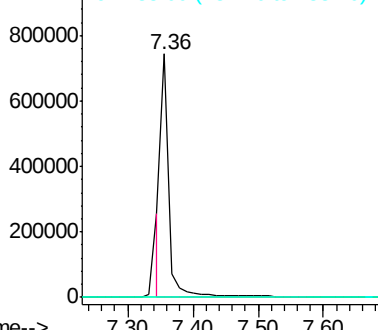
82 100

95 0.0 5.1 7.7#

138 0.0 12.4 18.6#



Abundance Ion 82.00 (81.70 to 82.70): BF0  
Ion 95.00 (94.70 to 95.70): BF0  
Ion 138.00 (137.70 to 138.70): E



#38

Acenaphthene-d10

Concen: 20.00 ng

RT: 9.82 min Scan# 677

Delta R.T. -0.02 min

Lab File: BF086485.D

Acq: 29 Apr 2016 2:24

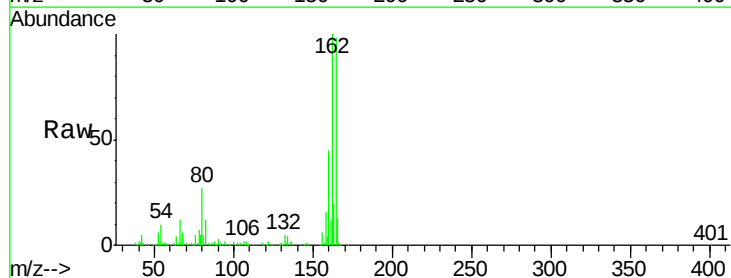
Tgt Ion:164 Resp: 259545

Ion Ratio Lower Upper

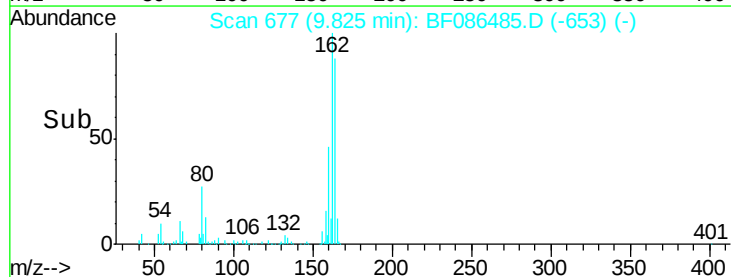
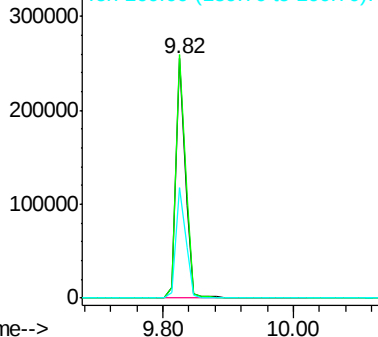
164 100

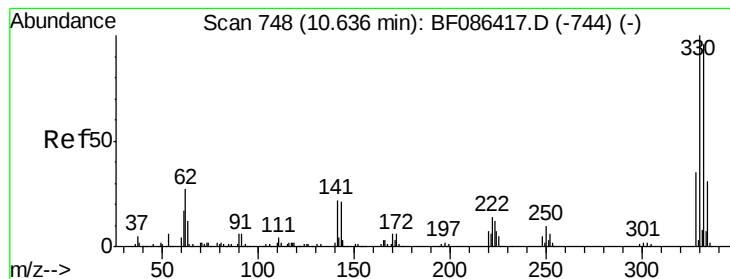
162 101.8 82.8 124.2

160 46.0 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: 83.21 ng

RT: 10.61 min Scan# 746

Delta R.T. -0.02 min

Lab File: BF086485.D

Acq: 29 Apr 2016 2:24

Instrument :

BNA\_F

ClientSampleId :

26WARD-2A-CS-15(6-12FTBGS)

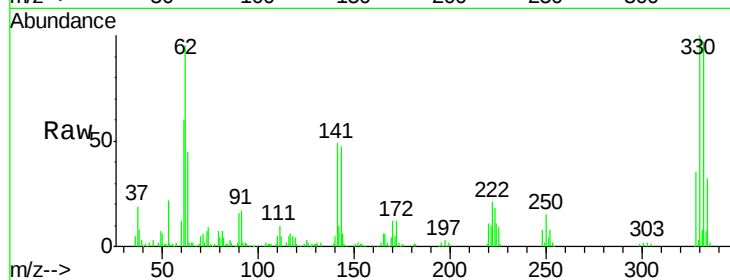
Tot Ion:330 Resp: 227755

Ion Ratio Lower Upper

330 100

332 97.8 79.0 118.4

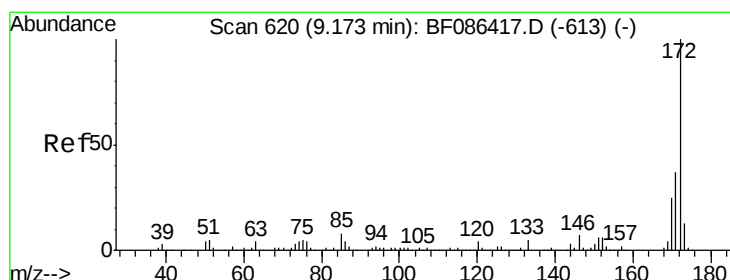
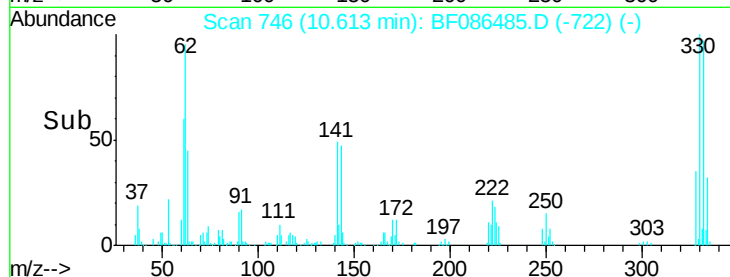
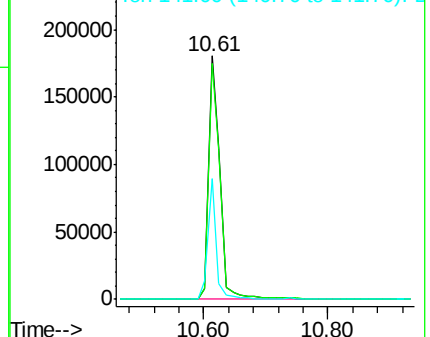
141 37.2 31.2 46.8



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: 89.09 ng

RT: 9.16 min Scan# 619

Delta R.T. -0.01 min

Lab File: BF086485.D

Acq: 29 Apr 2016 2:24

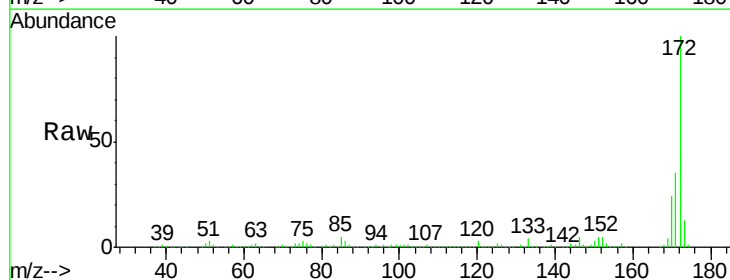
Tgt Ion:172 Resp: 1307676

Ion Ratio Lower Upper

172 100

171 35.5 29.0 43.6

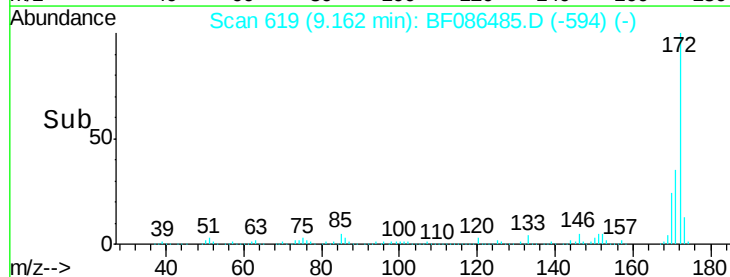
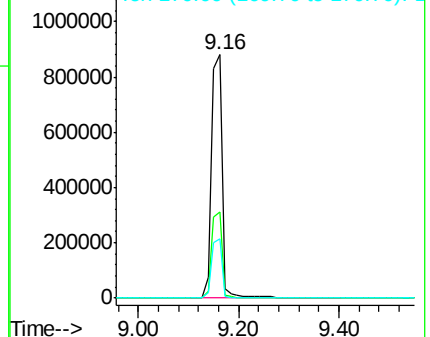
170 24.3 19.8 29.8

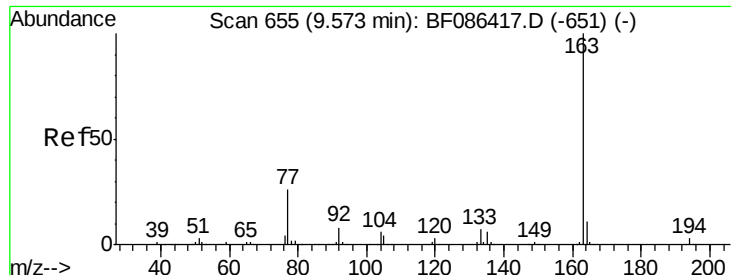


Abundance Ion 172.00 (171.70 to 172.70): E

Ion 171.00 (170.70 to 171.70): E

Ion 170.00 (169.70 to 170.70): E

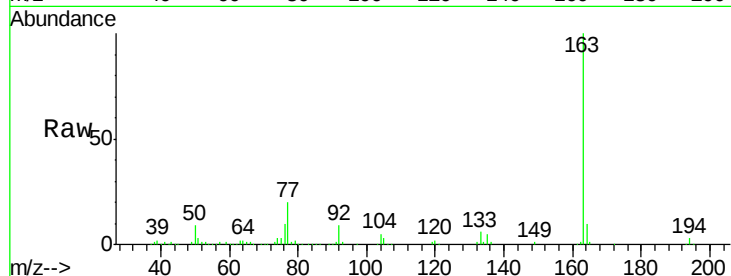




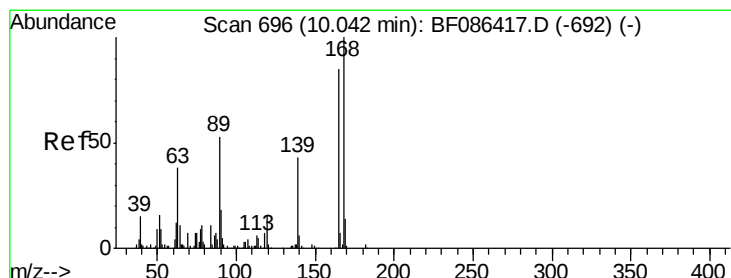
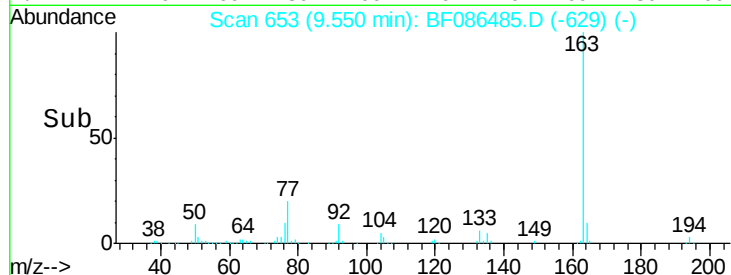
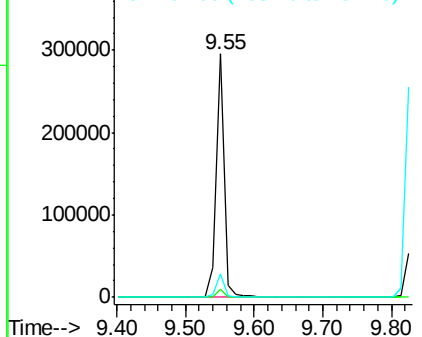
#49  
Dimethylphthalate  
Concen: 12.59 ng  
RT: 9.55 min Scan# 653  
Delta R.T. -0.02 min  
Lab File: BF086485.D  
Acq: 29 Apr 2016 2:24

Instrument :  
BNA\_F  
ClientSampleId :  
26WARD-2A-CS-15(6-12FTBGS)

Tot Ion:163 Resp: 246063  
Ion Ratio Lower Upper  
163 100  
194 3.2 2.6 4.0  
164 9.9 8.2 12.4

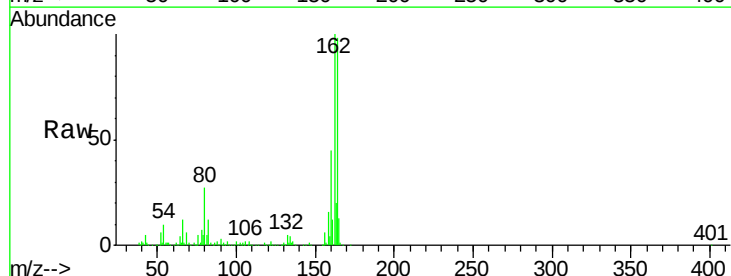


Abundance Ion 163.00 (162.70 to 163.70): E  
Ion 194.00 (193.70 to 194.70): E  
Ion 164.00 (163.70 to 164.70): E

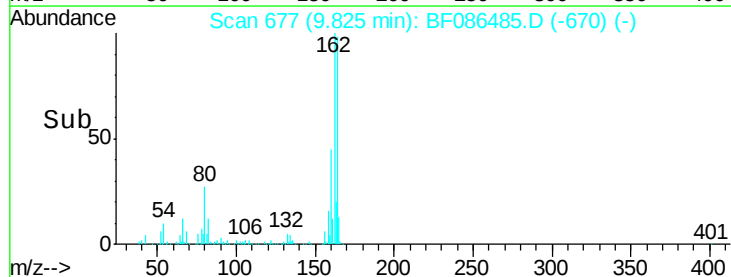
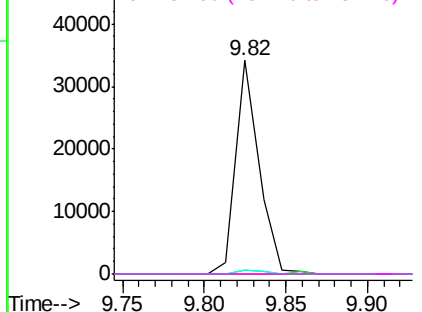


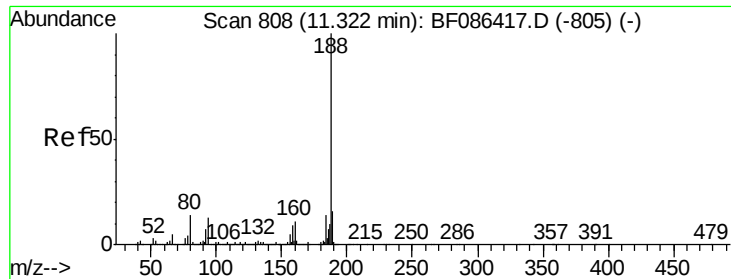
#56  
2,4-Dinitrotoluene  
Concen: 6.52 ng  
RT: 9.82 min Scan# 677  
Delta R.T. -0.22 min  
Lab File: BF086485.D  
Acq: 29 Apr 2016 2:24

Tgt Ion:165 Resp: 33535  
Ion Ratio Lower Upper  
165 100  
63 1.7 44.3 66.5#  
89 1.7 70.0 105.0#  
182 0.0 1.8 2.6#



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  
Ion 182.00 (181.70 to 182.70): E





#63

Phenanthrene-d10

Concen: 20.00 ng

RT: 11.31 min Scan# 807

Delta R.T. -0.01 min

Lab File: BF086485.D

Acq: 29 Apr 2016 2:24

Instrument :

BNA\_F

ClientSampleId :

26WARD-2A-CS-15(6-12FTBGS)

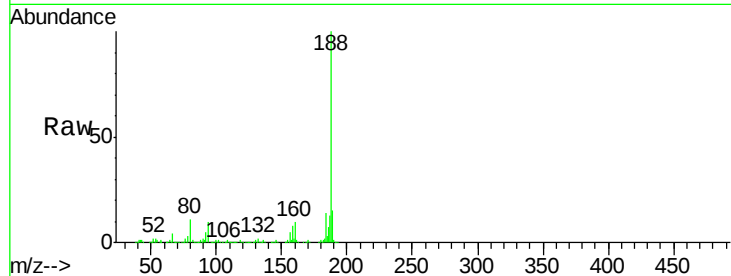
Tot Ion:188 Resp: 438132

Ion Ratio Lower Upper

188 100

94 10.1 6.8 10.2

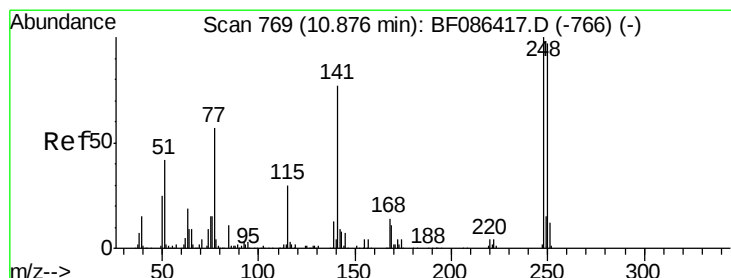
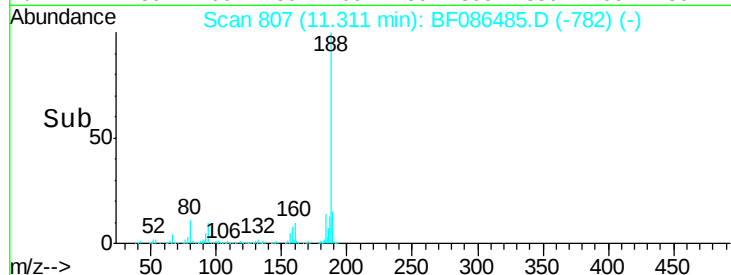
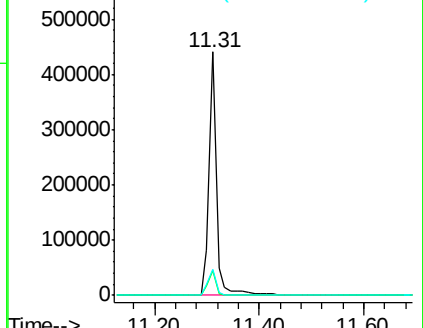
80 10.7 7.1 10.7#



Abundance Ion 188.00 (187.70 to 188.70): E

Ion 94.00 (93.70 to 94.70): BF0

Ion 80.00 (79.70 to 80.70): BF0



#66

4-Bromophenyl-phenylether

Concen: 2.97 ng

RT: 10.61 min Scan# 746

Delta R.T. -0.26 min

Lab File: BF086485.D

Acq: 29 Apr 2016 2:24

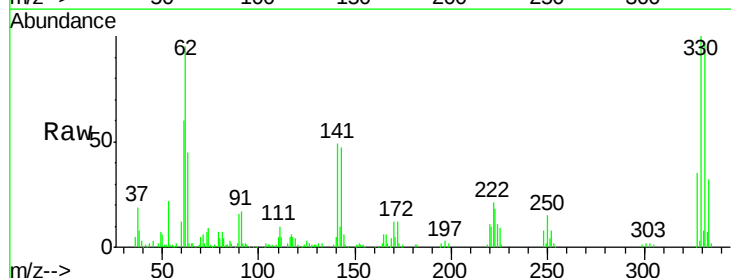
Tgt Ion:248 Resp: 13407

Ion Ratio Lower Upper

248 100

250 195.1 78.6 117.8#

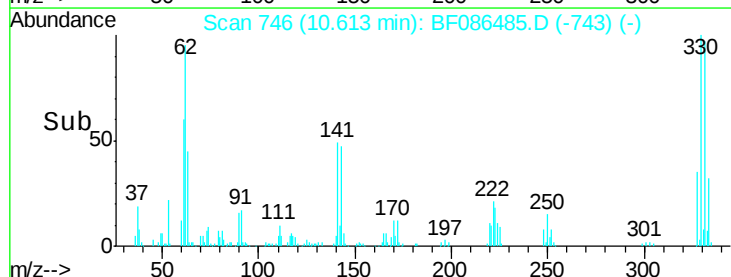
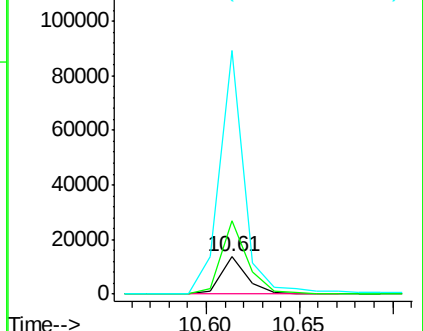
141 651.6 76.0 114.0#

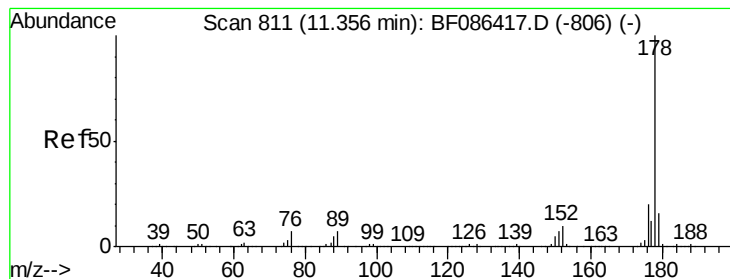


Abundance Ion 248.00 (247.70 to 248.70): E

Ion 250.00 (249.70 to 250.70): E

Ion 141.00 (140.70 to 141.70): E





#70

Phenanthrene

Concen: 2.10 ng

RT: 11.33 min Scan# 809

Delta R.T. -0.02 min

Lab File: BF086485.D

Acq: 29 Apr 2016 2:24

Instrument :

BNA\_F

ClientSampleId :

26WARD-2A-CS-15(6-12FTBGS)

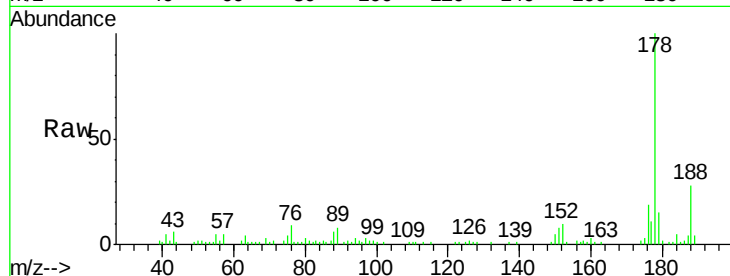
Tot Ion:178 Resp: 48278

Ion Ratio Lower Upper

178 100

176 19.5 16.0 24.0

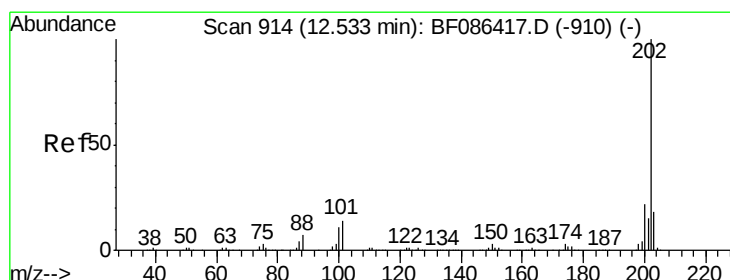
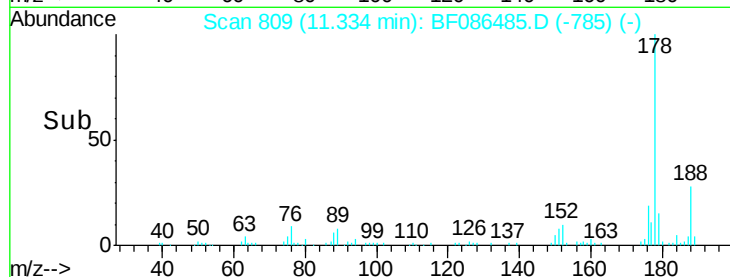
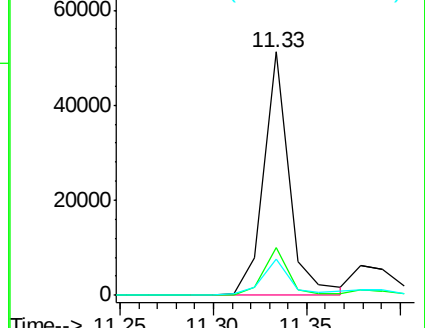
179 14.7 12.6 18.8



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



#74

Fluoranthene

Concen: 3.04 ng

RT: 12.52 min Scan# 913

Delta R.T. -0.01 min

Lab File: BF086485.D

Acq: 29 Apr 2016 2:24

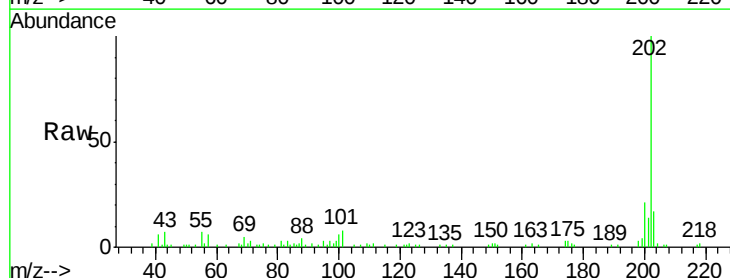
Tgt Ion:202 Resp: 70633

Ion Ratio Lower Upper

202 100

101 8.4 0.0 35.4

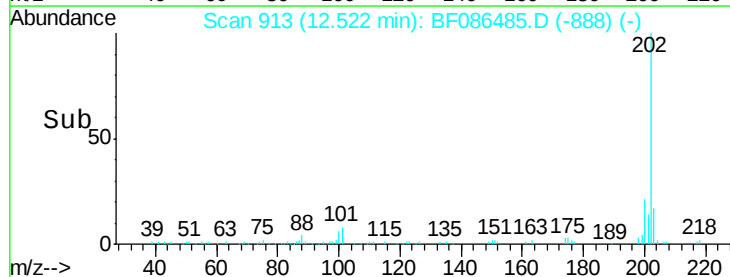
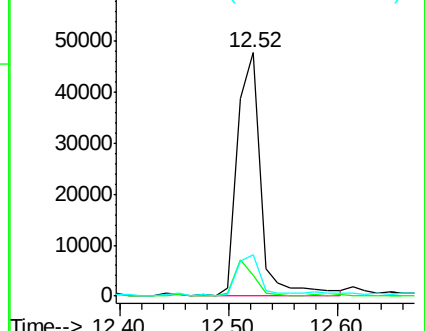
203 16.9 0.0 38.1

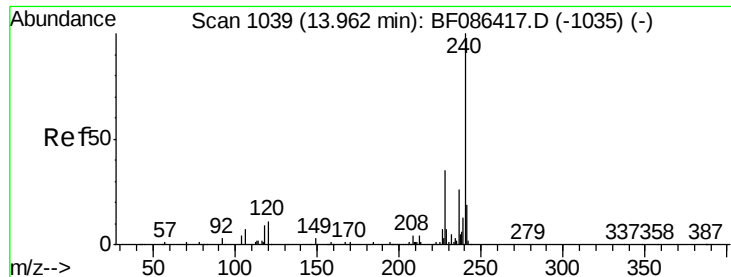


Abundance Ion 202.00 (201.70 to 202.70): E

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: 13.94 min Scan# 1037

Delta R.T. -0.02 min

Lab File: BF086485.D

Acq: 29 Apr 2016 2:24

Instrument :

BNA\_F

ClientSampleId :

26WARD-2A-CS-15(6-12FTBGS)

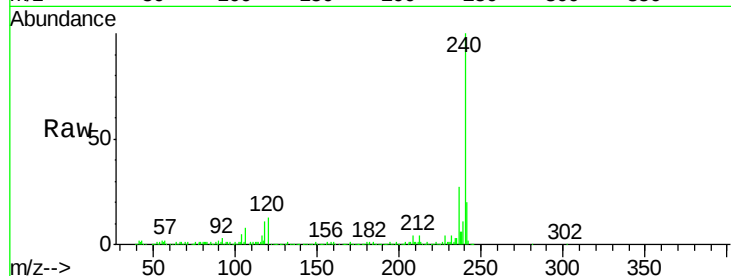
Tot Ion:240 Resp: 321610

Ion Ratio Lower Upper

240 100

120 12.7 11.2 16.8

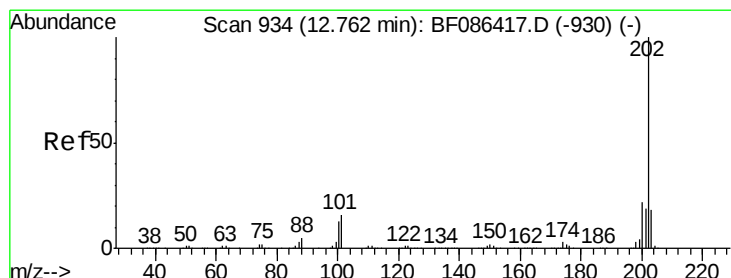
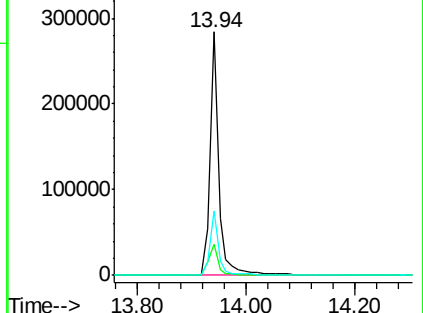
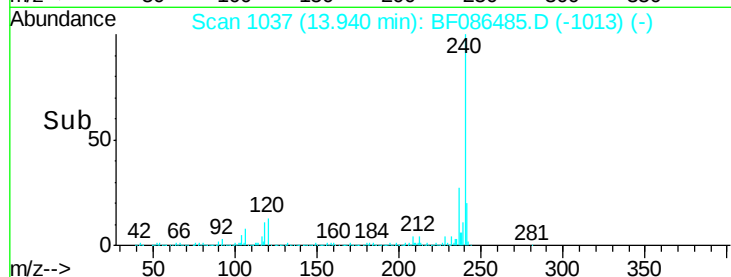
236 26.5 21.2 31.8



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

Pyrene

Concen: 2.80 ng

RT: 12.74 min Scan# 932

Delta R.T. -0.02 min

Lab File: BF086485.D

Acq: 29 Apr 2016 2:24

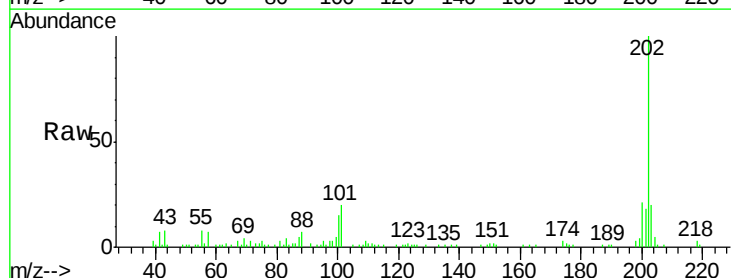
Tgt Ion:202 Resp: 64990

Ion Ratio Lower Upper

202 100

200 21.4 17.7 26.5

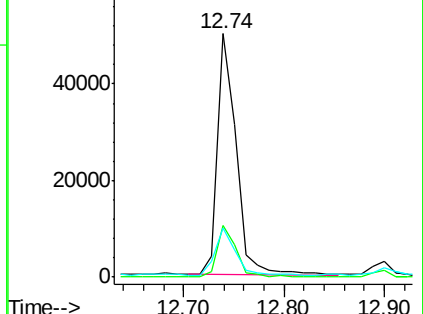
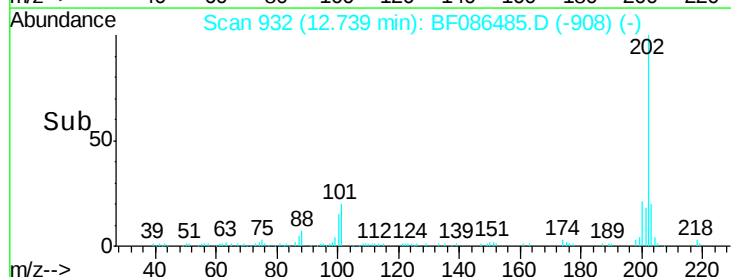
203 20.3 14.2 21.4

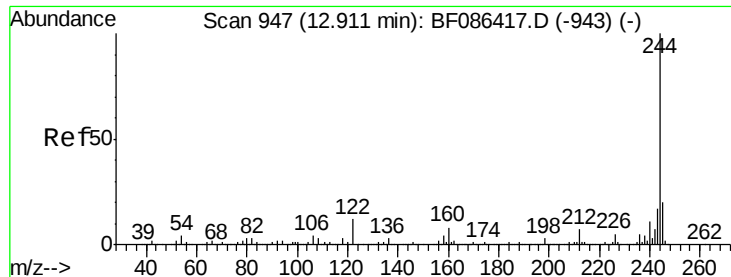


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 200.00 (199.70 to 200.70): E

Ion 203.00 (202.70 to 203.70): E

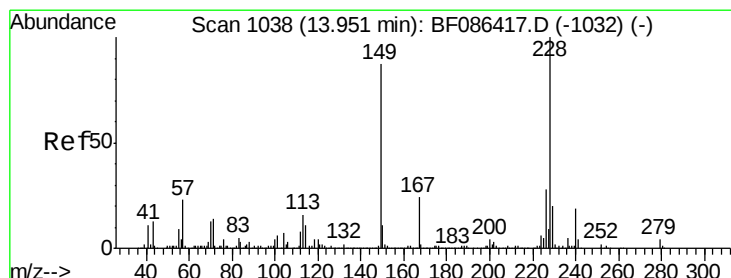
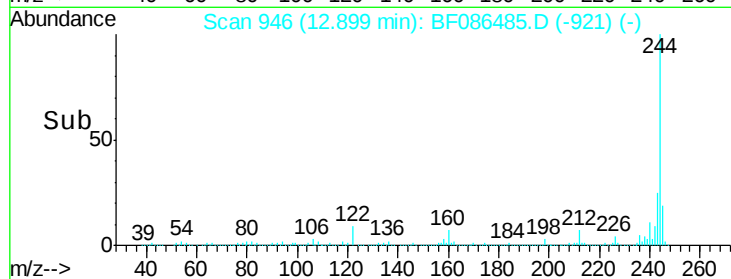
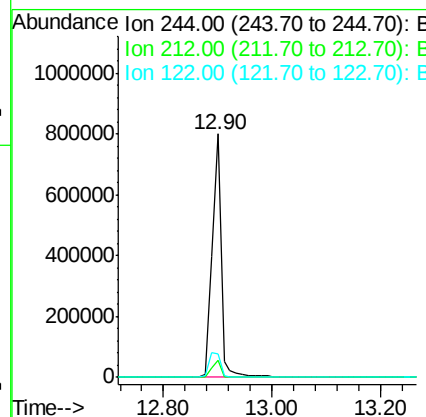
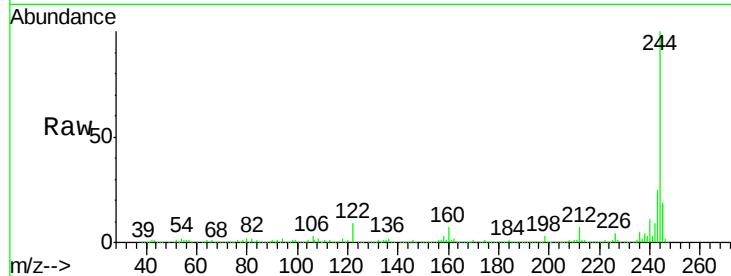




#78  
 Terphenyl-d14  
 Concen: 63.26 ng  
 RT: 12.90 min Scan# 946  
 Delta R.T. -0.01 min  
 Lab File: BF086485.D  
 Acq: 29 Apr 2016 2:24

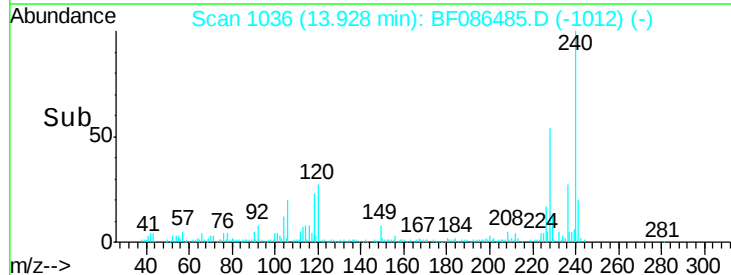
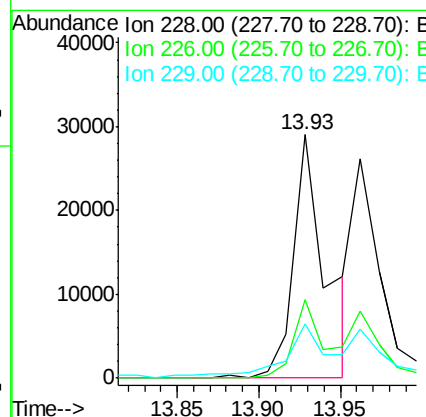
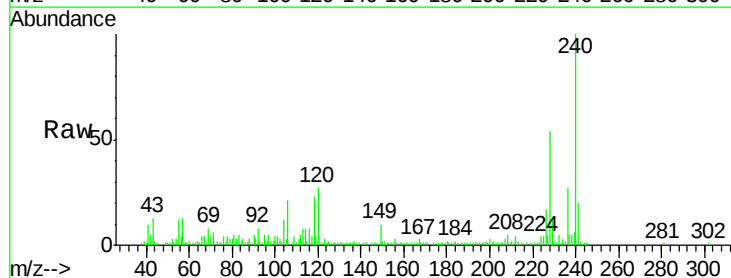
Instrument :  
 BNA\_F  
 ClientSampleId :  
 26WARD-2A-CS-15(6-12FTBGS)

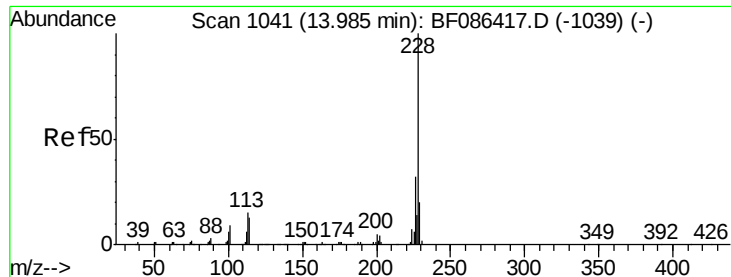
Tot Ion:244 Resp: 923493  
 Ion Ratio Lower Upper  
 244 100  
 212 7.1 6.2 9.2  
 122 9.5 12.0 18.0#



#80  
 Benzo(a)anthracene  
 Concen: 2.33 ng  
 RT: 13.93 min Scan# 1036  
 Delta R.T. -0.02 min  
 Lab File: BF086485.D  
 Acq: 29 Apr 2016 2:24

Tgt Ion:228 Resp: 39902  
 Ion Ratio Lower Upper  
 228 100  
 226 32.2 22.5 33.7  
 229 22.4 16.6 25.0





#82

Chrysene

Concen: 2.14 ng

RT: 13.93 min Scan# 1036

Delta R.T. -0.06 min

Lab File: BF086485.D

Acq: 29 Apr 2016 2:24

Instrument :

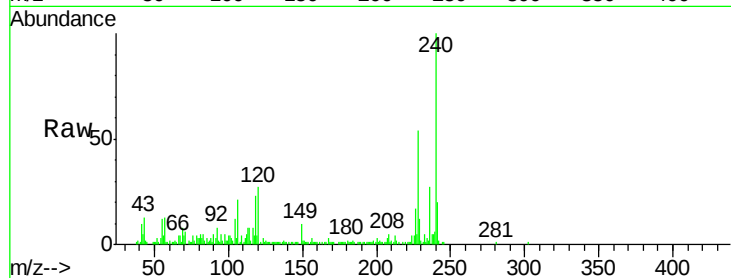
BNA\_F

ClientSampleId :

26WARD-2A-CS-15(6-12FTBGS)

Tot Ion:228 Resp: 39902

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 228 | 100   |       |       |
| 226 | 32.2  | 24.4  | 36.6  |
| 229 | 22.4  | 15.8  | 23.8  |

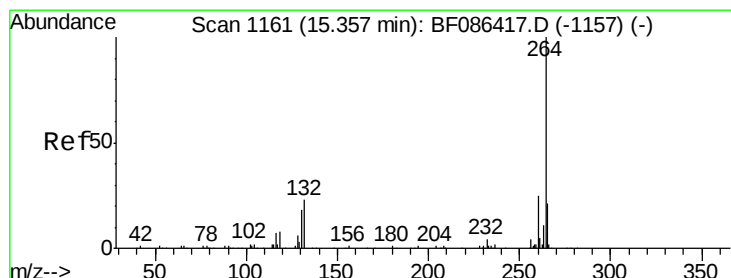
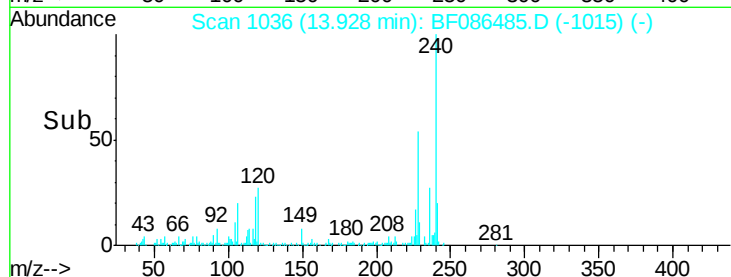
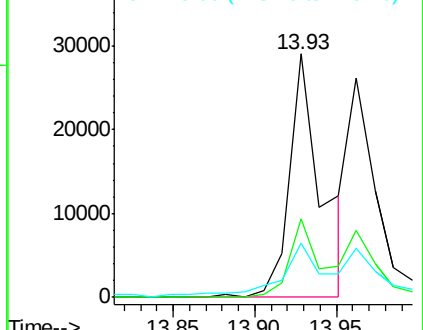


Abundance

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

Perylene-d12

Concen: 20.00 ng

RT: 15.35 min Scan# 1160

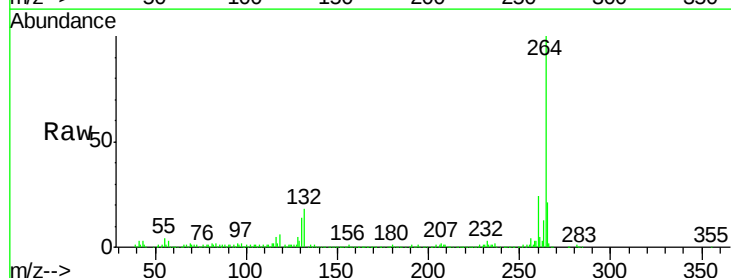
Delta R.T. -0.01 min

Lab File: BF086485.D

Acq: 29 Apr 2016 2:24

Tgt Ion:264 Resp: 301274

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 264 | 100   |       |       |
| 260 | 24.1  | 19.5  | 29.3  |
| 265 | 21.0  | 17.3  | 25.9  |

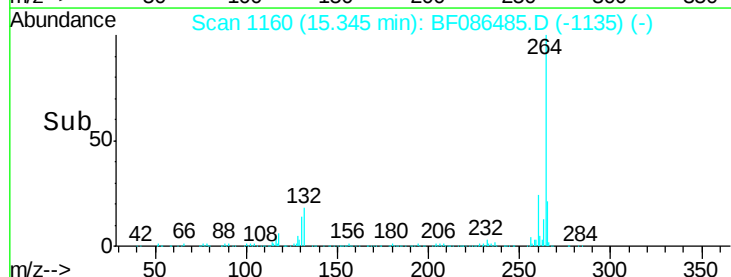
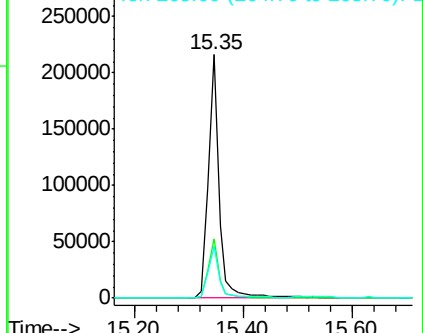


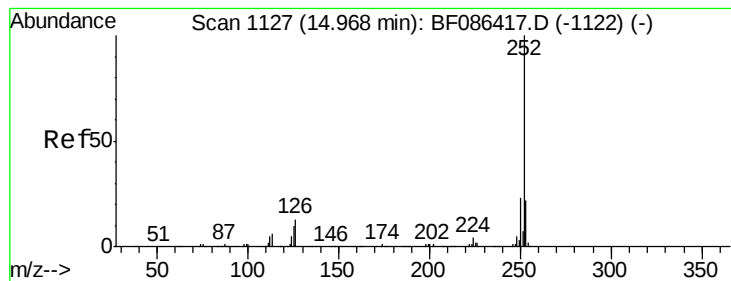
Abundance

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: 3.37 ng

RT: 14.95 min Scan# 1125

Delta R.T. -0.02 min

Lab File: BF086485.D

Acq: 29 Apr 2016 2:24

Instrument :

BNA\_F

ClientSampleId :

26WARD-2A-CS-15(6-12FTBGS)

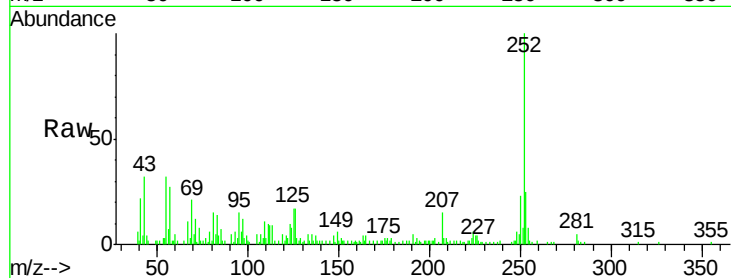
Tot Ion:252 Resp: 59726

Ion Ratio Lower Upper

252 100

253 24.6 17.8 26.6

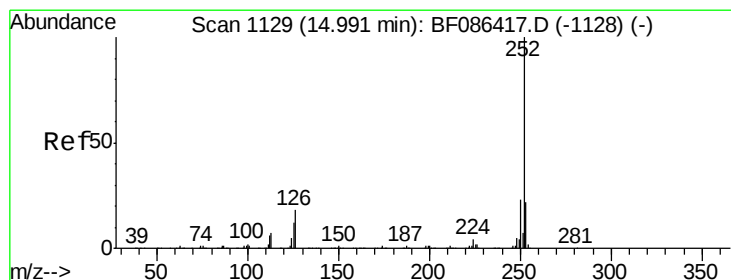
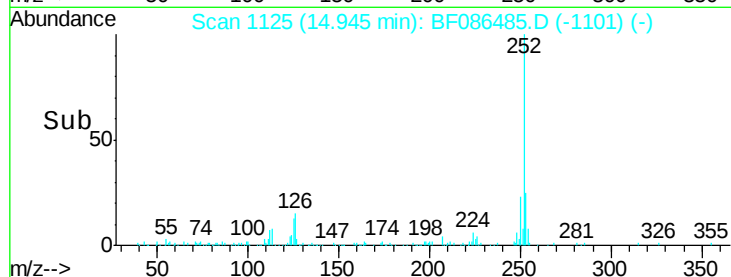
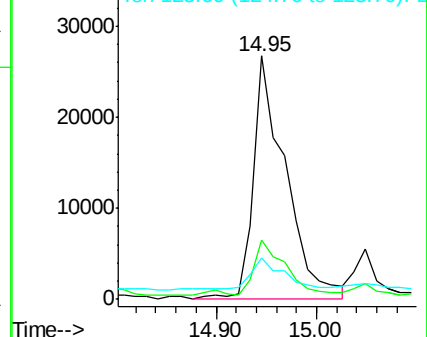
125 17.1 11.4 17.0#



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: 3.23 ng

RT: 14.95 min Scan# 1125

Delta R.T. -0.05 min

Lab File: BF086485.D

Acq: 29 Apr 2016 2:24

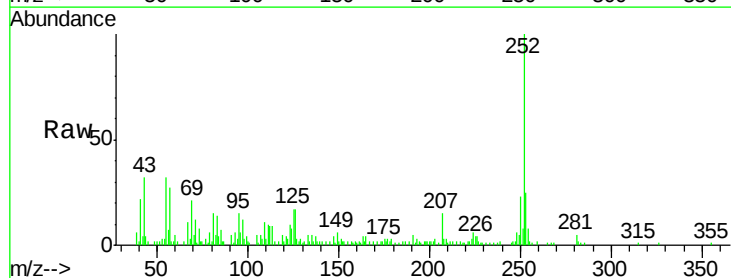
Tgt Ion:252 Resp: 59726

Ion Ratio Lower Upper

252 100

253 24.6 17.8 26.6

125 17.1 9.1 13.7#



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

