

Data Path : Z:\HPCHEM1\BNA F\DATA\BF111815\  
 Data File : BF083018.D  
 Acq On : 18 Nov 2015 20:00  
 Operator : UM/IZ  
 Sample : G4453-01  
 Misc :  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 CWC-8-20151116

Quant Time: Nov 19 01:50:19 2015  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF110715.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Nov 18 13:32:32 2015  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.73  | 152  | 139253   | 20.00 | ng    | -0.01    |
| 21) Naphthalene-d8        | 8.02  | 136  | 526895   | 20.00 | ng    | 0.00     |
| 38) Acenaphthene-d10      | 9.77  | 164  | 275397   | 20.00 | ng    | -0.01    |
| 63) Phenanthrene-d10      | 11.24 | 188  | 698515   | 20.00 | ng    | -0.01    |
| 75) Chrysene-d12          | 13.87 | 240  | 532357   | 20.00 | ng    | -0.02    |
| 86) Perylene-d12          | 15.27 | 264  | 417117   | 20.00 | ng    | -0.01    |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 5) 2-Fluorophenol           | 5.33  | 112  | 1157573  | 129.34 | ng    | 0.00     |
| 7) Phenol-d6                | 6.38  | 99   | 1606480  | 135.02 | ng    | -0.01    |
| 23) Nitrobenzene-d5         | 7.30  | 82   | 1191144  | 98.37  | ng    | -0.01    |
| 41) 2,4,6-Tribromophenol    | 10.56 | 330  | 375596   | 118.95 | ng    | -0.01    |
| 44) 2-Fluorobiphenyl        | 9.09  | 172  | 1338065  | 69.64  | ng    | -0.01    |
| 78) Terphenyl-d14           | 12.83 | 244  | 1597545  | 71.18  | ng    | -0.01    |

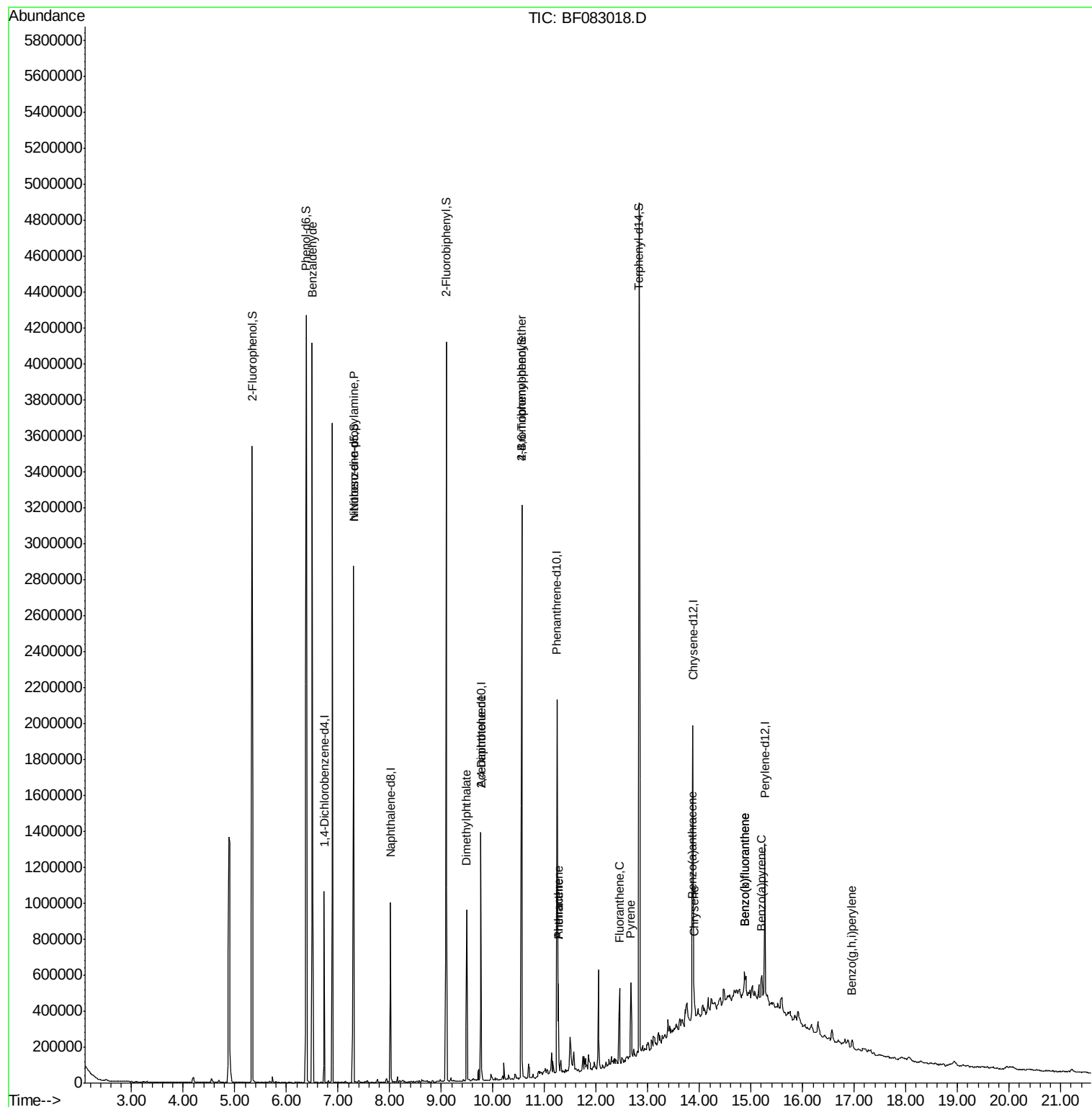
| Target Compounds               | R.T.  | QIon | Response | Conc  | Units | Qvalue |
|--------------------------------|-------|------|----------|-------|-------|--------|
| 9) Benzaldehyde                | 6.50  | 77   | 29200    | 4.44  | ng    | 88     |
| 19) n-Nitroso-di-n-propylamine | 7.30  | 70   | 161541   | 18.47 | ng    | # 68   |
| 49) Dimethylphthalate          | 9.49  | 163  | 396797   | 17.59 | ng    | 98     |
| 56) 2,4-Dinitrotoluene         | 9.77  | 165  | 35479    | 5.43  | ng    | # 15   |
| 66) 4-Bromophenyl-phenylether  | 10.56 | 248  | 27306    | 3.25  | ng    | # 1    |
| 70) Phenanthrene               | 11.26 | 178  | 170137   | 4.19  | ng    | 96     |
| 71) Anthracene                 | 11.26 | 178  | 170137   | 3.98  | ng    | 97     |
| 74) Fluoranthene               | 12.45 | 202  | 214234   | 4.92  | ng    | 95     |
| 77) Pyrene                     | 12.67 | 202  | 199285   | 5.45  | ng    | 95     |
| 80) Benzo(a)anthracene         | 13.86 | 228  | 93644    | 2.81  | ng    | 97     |
| 82) Chrysene                   | 13.89 | 228  | 67529    | 2.21  | ng    | 98     |
| 87) Benzo(b)fluoranthene       | 14.88 | 252  | 92873    | 3.47  | ng    | # 84   |
| 88) Benzo(k)fluoranthene       | 14.88 | 252  | 92873    | 3.91  | ng    | # 86   |
| 89) Benzo(a)pyrene             | 15.21 | 252  | 47290    | 2.04  | ng    | # 81   |
| 91) Benzo(a,h,i)perylene       | 16.96 | 276  | 37772    | 2.01  | ng    | # 95   |

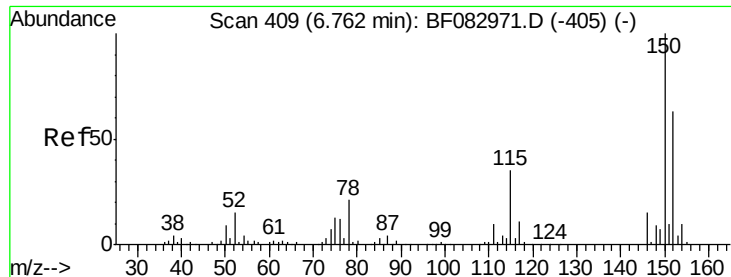
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Instrument :  
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Quant Time: Nov 19 01:50:19 2015  
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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Wed Nov 18 13:32:32 2015  
Response via : Initial Calibration





#1

1,4-Dichlorobenzene-d4

Concen: 20.00 ng

RT: 6.73 min Scan# 406

Delta R.T. -0.01 min

Lab File: BF083018.D

Acq: 18 Nov 2015 20:00

Instrument :

BNA\_F

ClientSampleId :

CWC-8-20151116

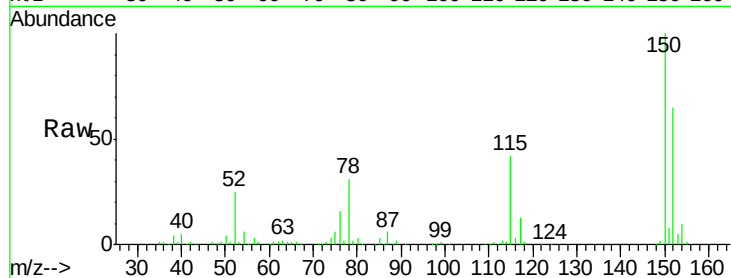
Tot Ion:152 Resp: 139253

Ion Ratio Lower Upper

152 100

150 155.0 127.0 190.4

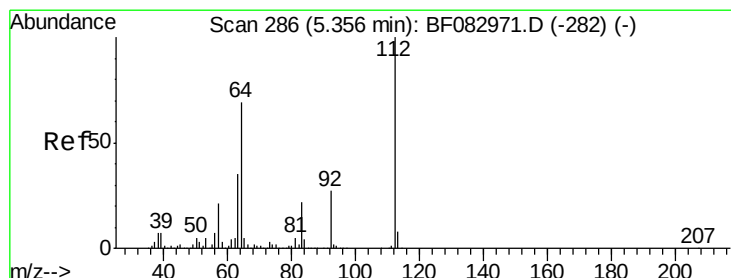
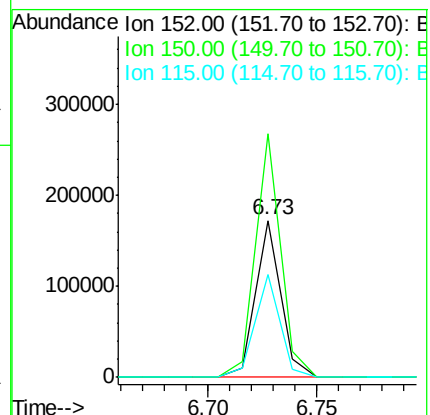
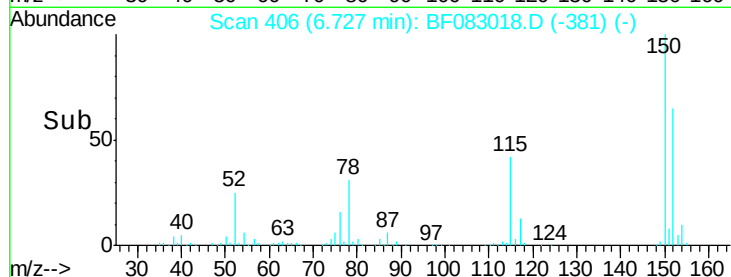
115 65.8 47.0 70.6



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: 129.34 ng

RT: 5.33 min Scan# 284

Delta R.T. -0.00 min

Lab File: BF083018.D

Acq: 18 Nov 2015 20:00

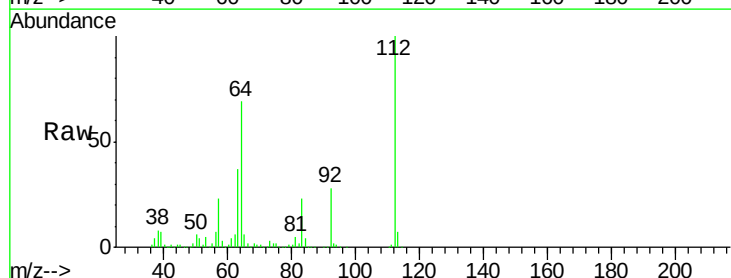
Tgt Ion:112 Resp: 1157573

Ion Ratio Lower Upper

112 100

64 69.4 48.9 73.3

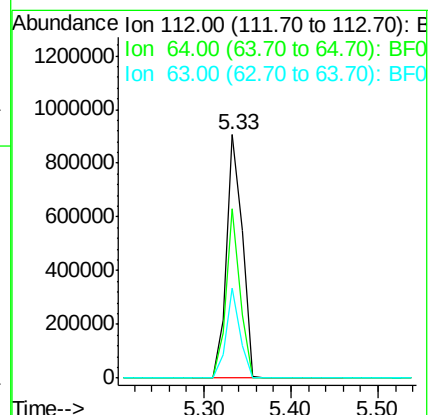
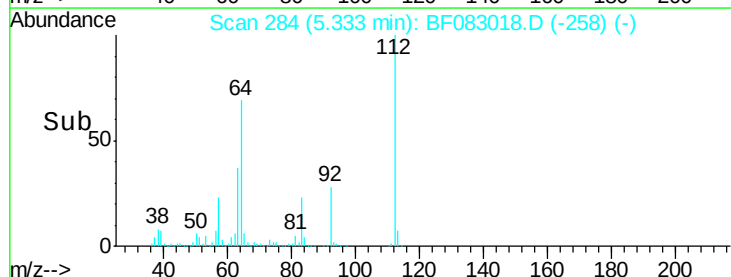
63 37.2 28.1 42.1

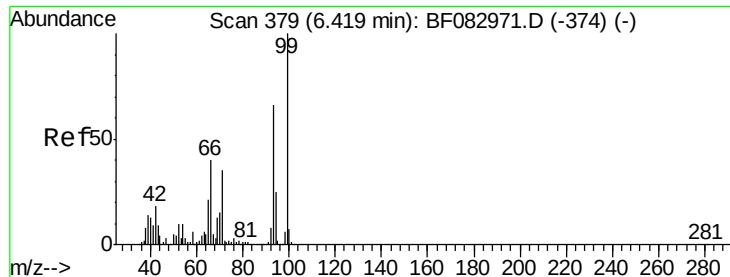


Abundance Ion 112.00 (111.70 to 112.70): E

Ion 64.00 (63.70 to 64.70): BF0

Ion 63.00 (62.70 to 63.70): BF0





#7

Phenol-d6

Concen: 135.02 ng

RT: 6.38 min Scan# 376

Delta R.T. -0.01 min

Lab File: BF083018.D

Acq: 18 Nov 2015 20:00

Instrument :

BNA\_F

ClientSampleId :

CWC-8-20151116

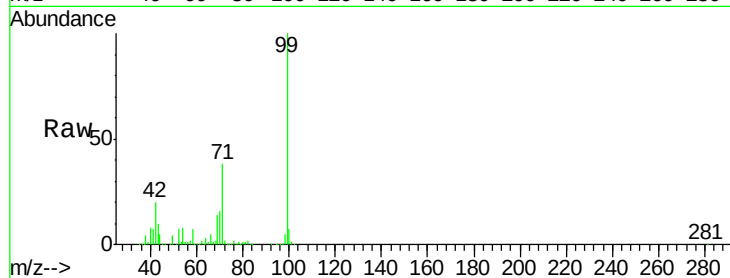
Tot Ion: 99 Resp: 1606480

Ion Ratio Lower Upper

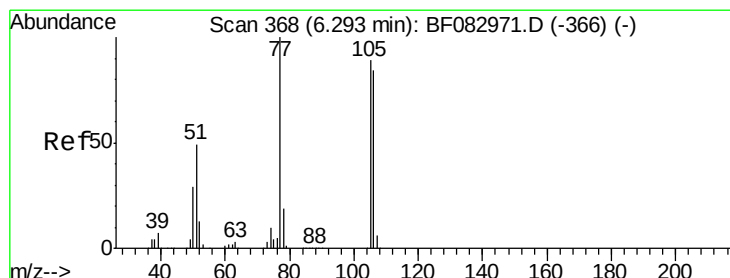
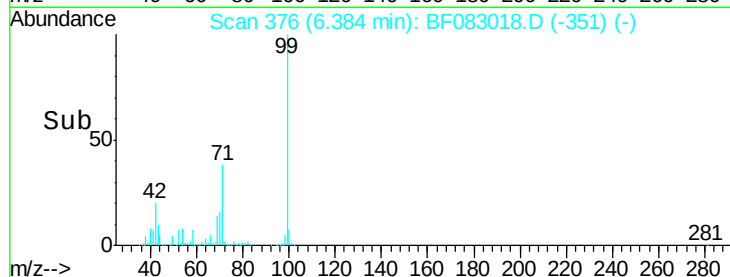
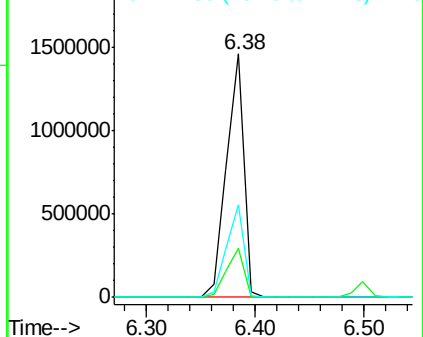
99 100

42 19.9 19.2 28.8

71 38.1 35.0 52.4



Abundance Ion 99.00 (98.70 to 99.70): BF0  
Ion 42.00 (41.70 to 42.70): BF0  
Ion 71.00 (70.70 to 71.70): BF0



#9

Benzaldehyde

Concen: 4.44 ng

RT: 6.50 min Scan# 386

Delta R.T. 0.23 min

Lab File: BF083018.D

Acq: 18 Nov 2015 20:00

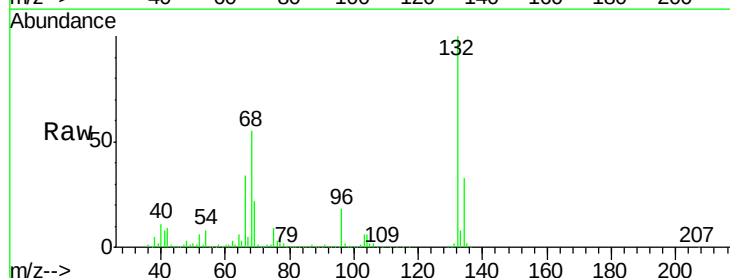
Tgt Ion: 77 Resp: 29200

Ion Ratio Lower Upper

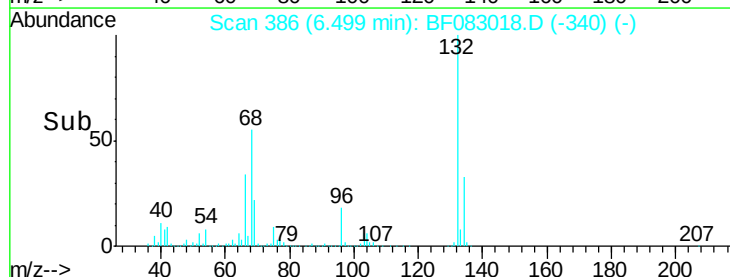
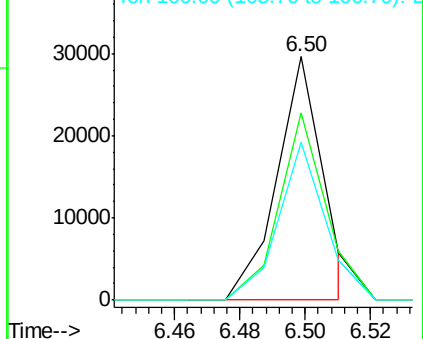
77 100

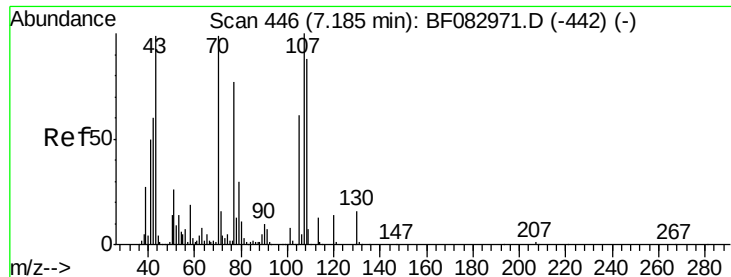
105 77.2 63.5 103.5

106 64.8 59.3 99.3



Abundance Ion 77.00 (76.70 to 77.70): BF0  
Ion 105.00 (104.70 to 105.70): BF0  
Ion 106.00 (105.70 to 106.70): BF0





#19

n-Nitroso-di-n-propylamine

Concen: 18.47 ng

RT: 7.30 min Scan# 456

Delta R.T. 0.13 min

Lab File: BF083018.D

Acq: 18 Nov 2015 20:00

Instrument :

BNA\_F

ClientSampleId :

CWC-8-20151116

Tot Ion: 70 Resp: 161541

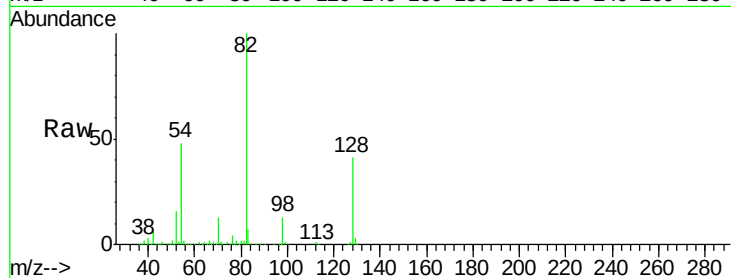
Ion Ratio Lower Upper

70 100

42 44.0 57.7 86.5#

101 0.0 7.0 10.6#

130 2.1 11.8 17.6#

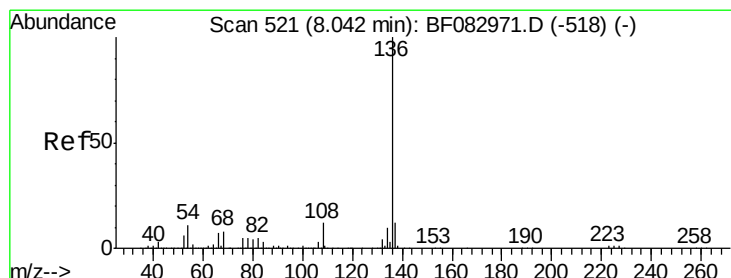
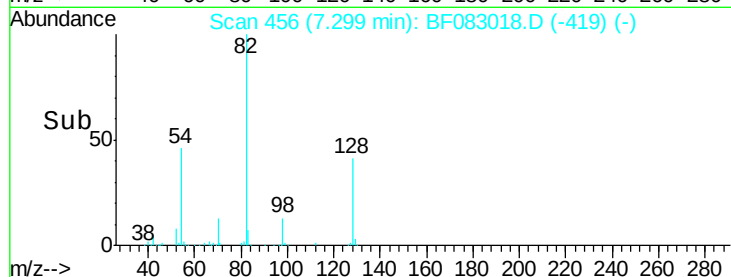
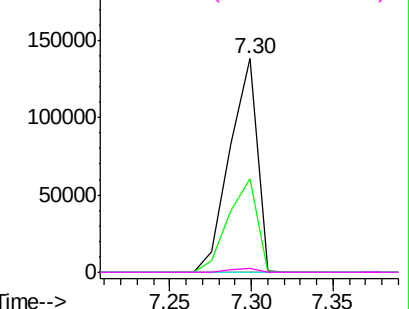


Abundance Ion 70.00 (69.70 to 70.70): BF0

Ion 42.00 (41.70 to 42.70): BF0

Ion 101.00 (100.70 to 101.70): E

Ion 130.00 (129.70 to 130.70): E



#21

Naphthalene-d8

Concen: 20.00 ng

RT: 8.02 min Scan# 519

Delta R.T. -0.00 min

Lab File: BF083018.D

Acq: 18 Nov 2015 20:00

Tgt Ion: 136 Resp: 526895

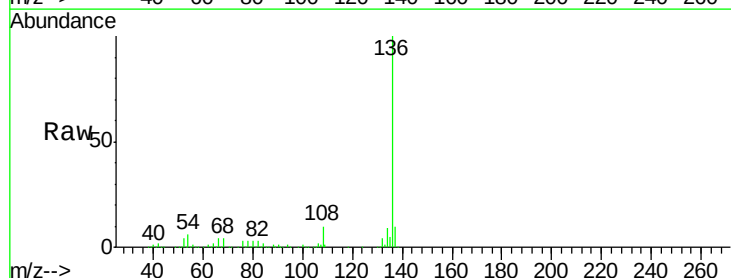
Ion Ratio Lower Upper

136 100

137 10.5 9.1 13.7

54 6.2 9.1 13.7#

68 4.4 4.8 7.2#

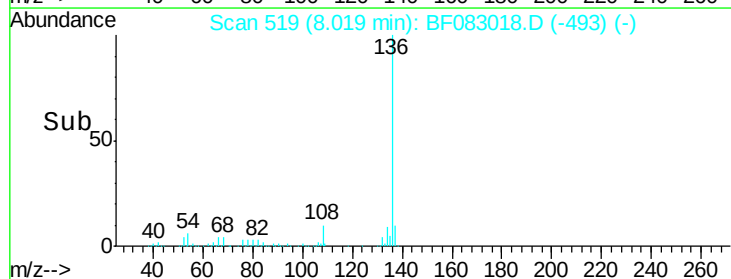
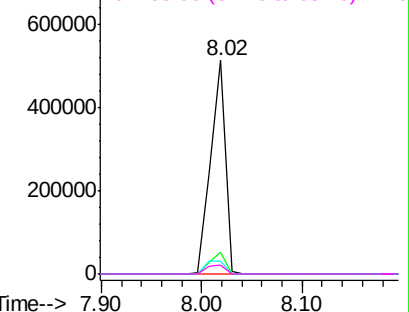


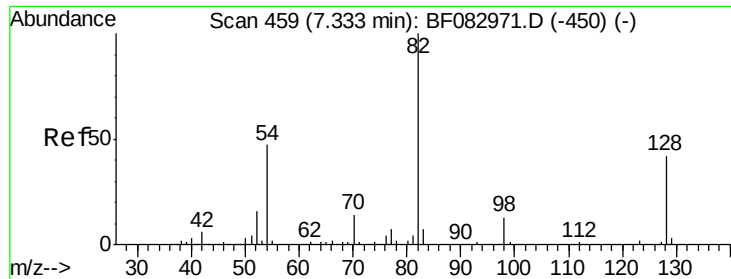
Abundance Ion 136.00 (135.70 to 136.70): E

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

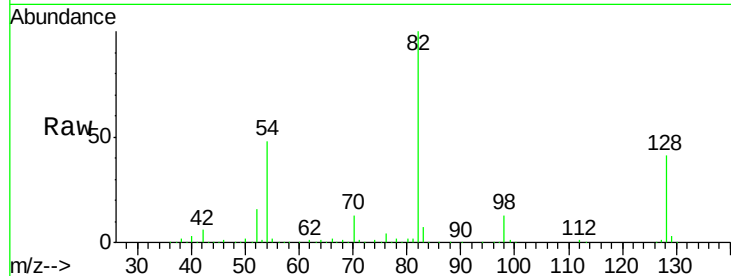




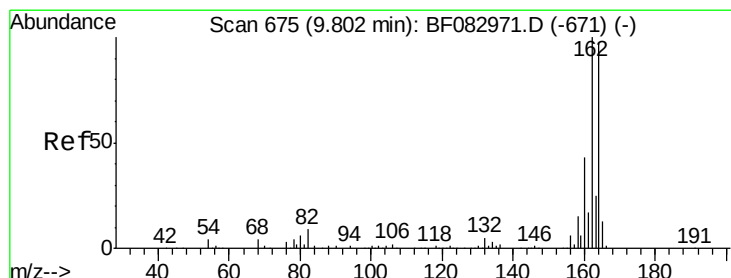
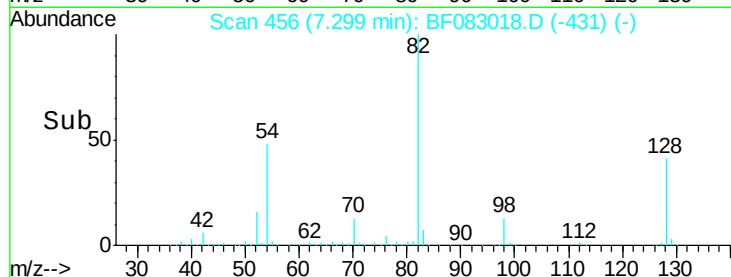
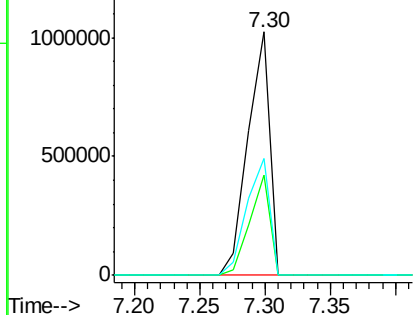
#23  
Nitrobenzene-d5  
Concen: 98.37 ng  
RT: 7.30 min Scan# 456  
Delta R.T. -0.01 min  
Lab File: BF083018.D  
Acq: 18 Nov 2015 20:00

Instrument :  
BNA\_F  
ClientSampleId :  
CWC-8-20151116

Tot Ion: 82 Resp: 1191144  
Ion Ratio Lower Upper  
82 100  
128 41.1 26.8 40.2#  
54 48.2 45.7 68.5

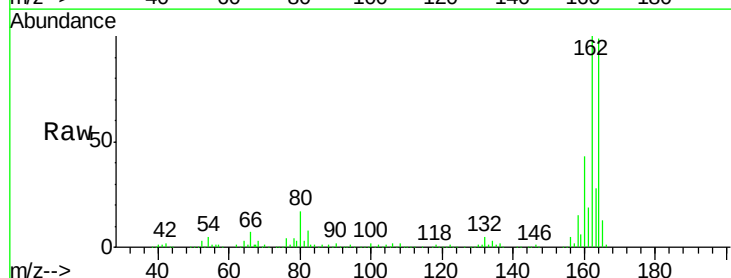


Abundance Ion 82.00 (81.70 to 82.70): BF0  
Ion 128.00 (127.70 to 128.70): E  
Ion 54.00 (53.70 to 54.70): BF0

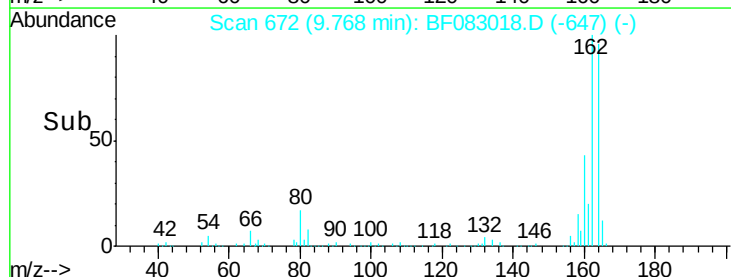
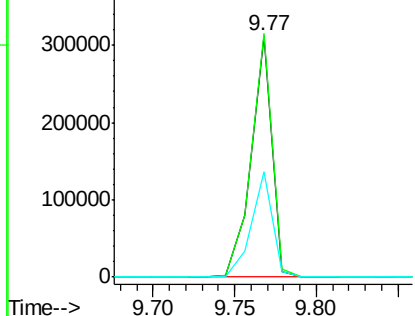


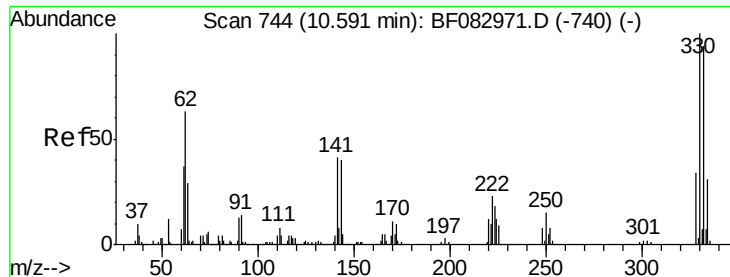
#38  
Acenaphthene-d10  
Concen: 20.00 ng  
RT: 9.77 min Scan# 672  
Delta R.T. -0.01 min  
Lab File: BF083018.D  
Acq: 18 Nov 2015 20:00

Tgt Ion:164 Resp: 275397  
Ion Ratio Lower Upper  
164 100  
162 101.0 84.9 127.3  
160 43.5 37.5 56.3



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

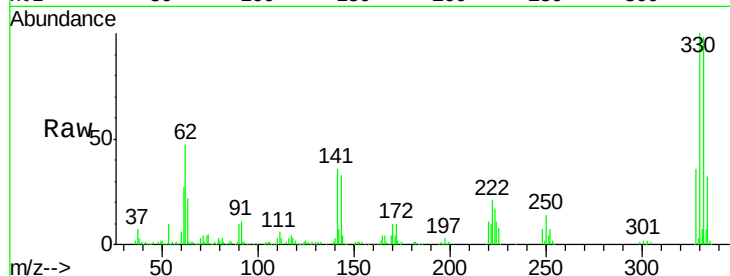




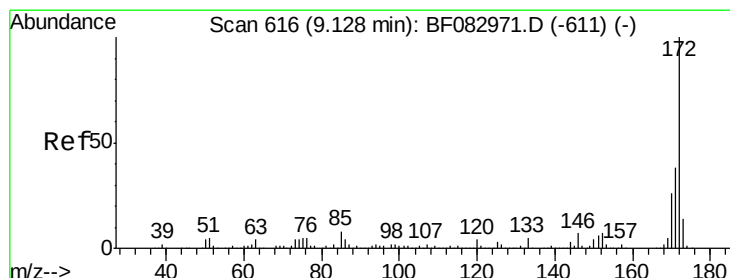
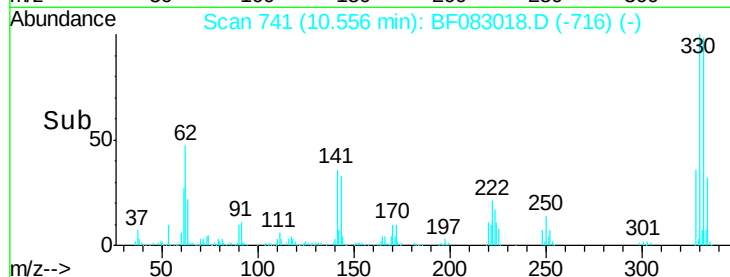
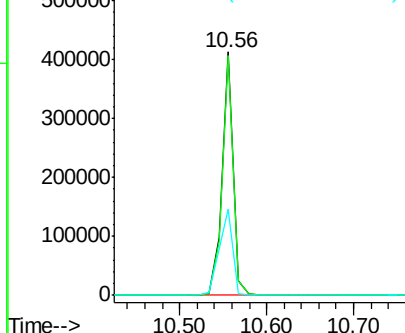
#41  
 2,4,6-Tribromophenol  
 Concen: 118.95 ng  
 RT: 10.56 min Scan# 741  
 Delta R.T. -0.01 min  
 Lab File: BF083018.D  
 Acq: 18 Nov 2015 20:00

Instrument :  
 BNA\_F  
 ClientSampleId :  
 CWC-8-20151116

Tot Ion:330 Resp: 375596  
 Ion Ratio Lower Upper  
 330 100  
 332 97.3 76.6 114.8  
 141 43.1 41.2 61.8

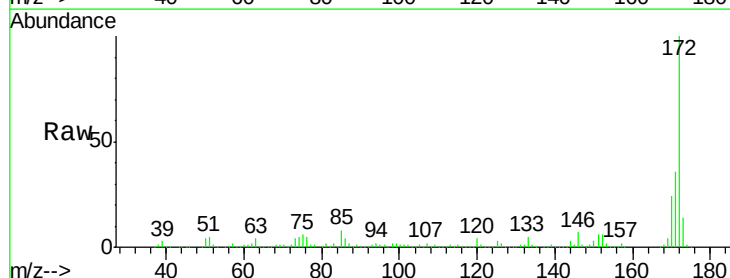


Abundance Ion 329.80 (329.50 to 330.50): E  
 Ion 331.80 (331.50 to 332.50): E  
 Ion 141.00 (140.70 to 141.70): E

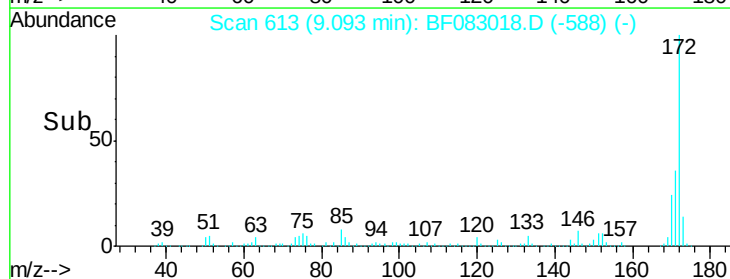
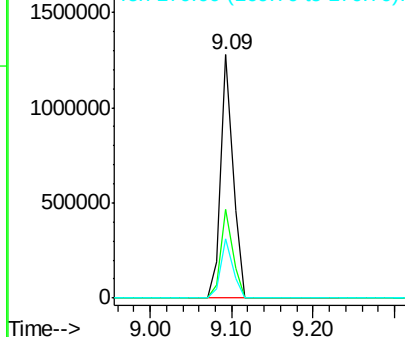


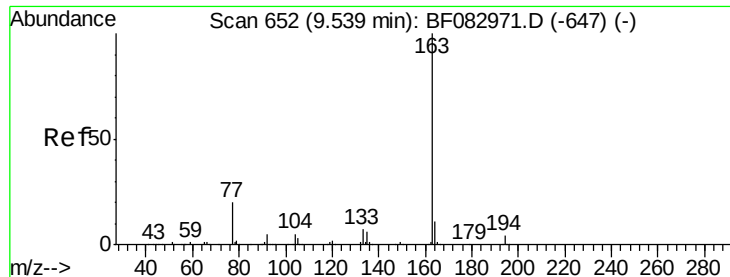
#44  
 2-Fluorobiphenyl  
 Concen: 69.64 ng  
 RT: 9.09 min Scan# 613  
 Delta R.T. -0.01 min  
 Lab File: BF083018.D  
 Acq: 18 Nov 2015 20:00

Tgt Ion:172 Resp: 1338065  
 Ion Ratio Lower Upper  
 172 100  
 171 36.4 30.8 46.2  
 170 24.4 21.2 31.8



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: 17.59 ng

RT: 9.49 min Scan# 648

Delta R.T. -0.02 min

Lab File: BF083018.D

Acq: 18 Nov 2015 20:00

Instrument :

BNA\_F

ClientSampleId :

CWC-8-20151116

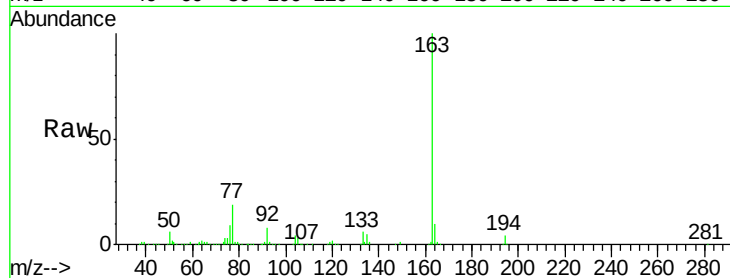
Tot Ion:163 Resp: 396797

Ion Ratio Lower Upper

163 100

194 3.6 2.6 4.0

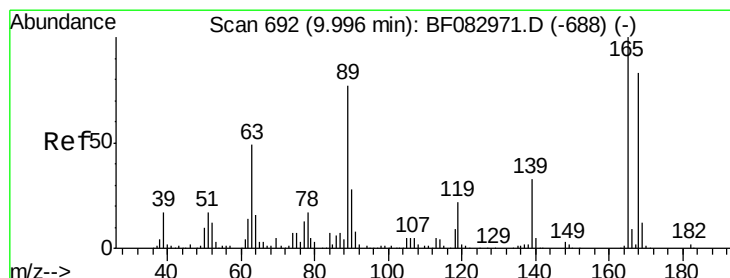
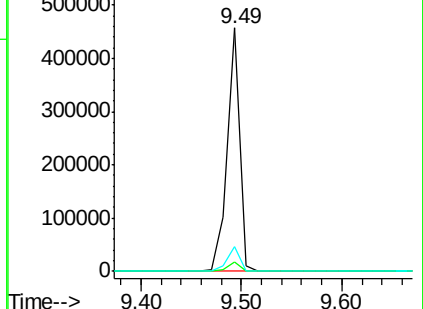
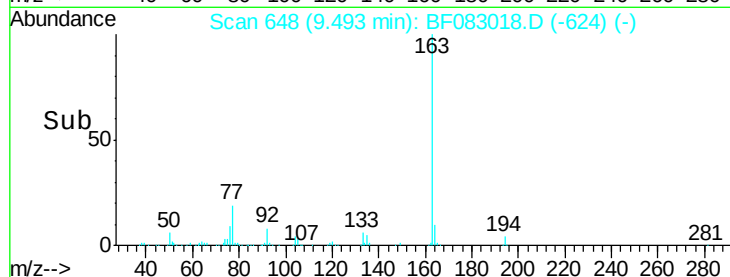
164 10.1 8.7 13.1



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: 5.43 ng

RT: 9.77 min Scan# 672

Delta R.T. -0.21 min

Lab File: BF083018.D

Acq: 18 Nov 2015 20:00

Tgt Ion:165 Resp: 35479

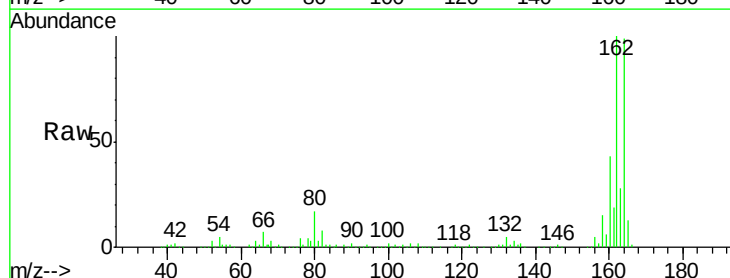
Ion Ratio Lower Upper

165 100

63 1.7 43.4 65.0#

89 1.2 70.6 106.0#

182 0.0 1.5 2.3#

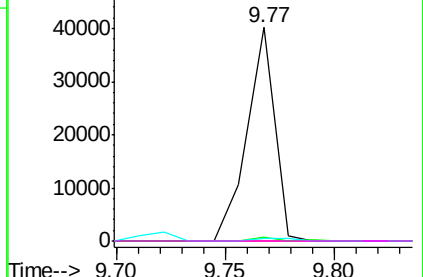
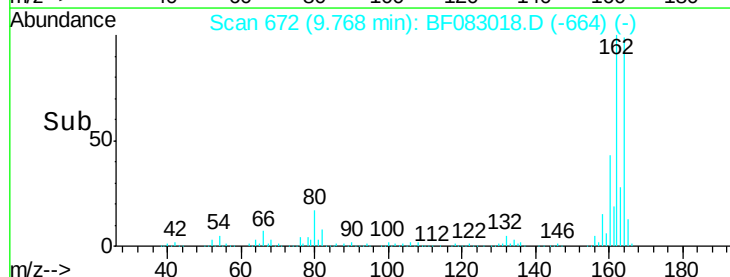


Abundance Ion 165.00 (164.70 to 165.70): E

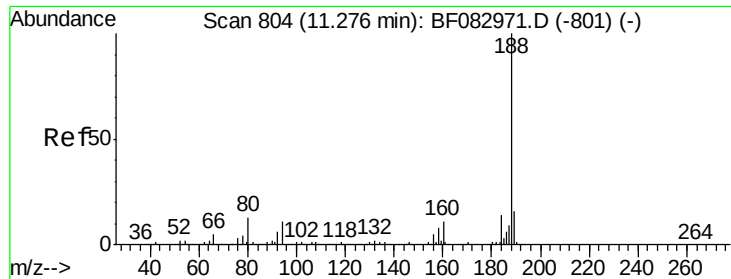
Ion 63.00 (62.70 to 63.70): BF0

Ion 89.00 (88.70 to 89.70): BF0

Ion 182.00 (181.70 to 182.70): E



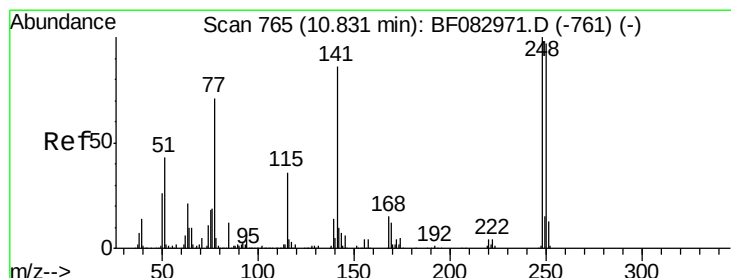
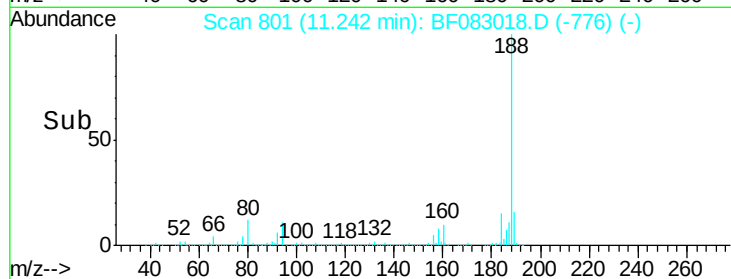
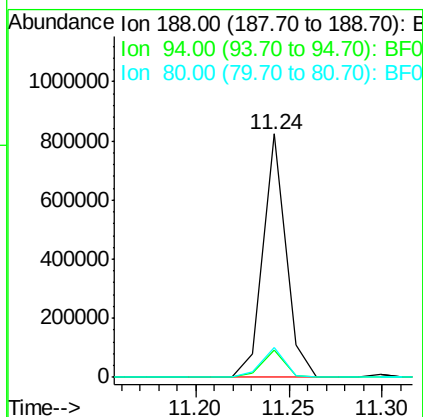
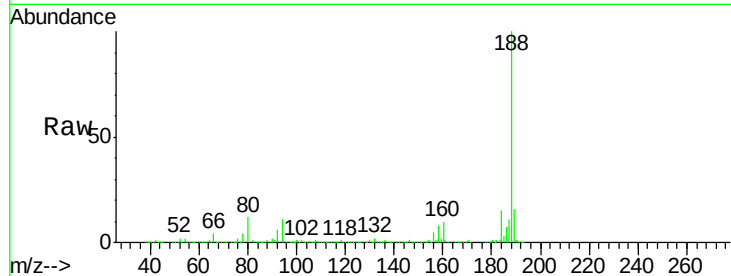




#63  
Phenanthrene-d10  
Concen: 20.00 ng  
RT: 11.24 min Scan# 801  
Delta R.T. -0.01 min  
Lab File: BF083018.D  
Acq: 18 Nov 2015 20:00

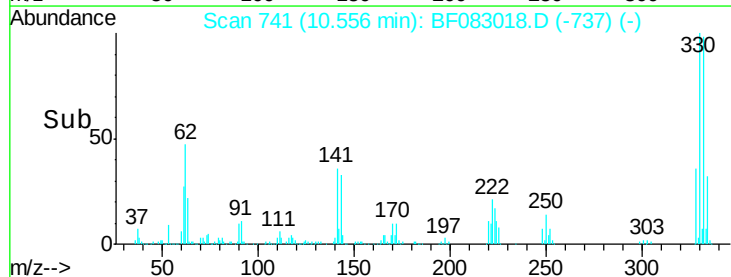
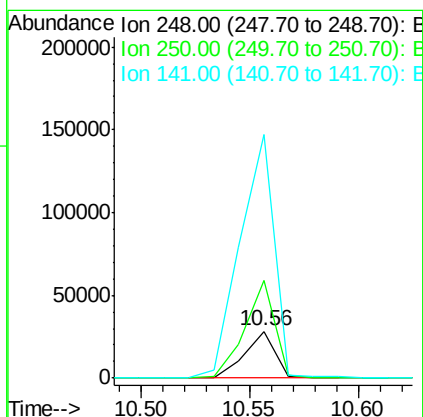
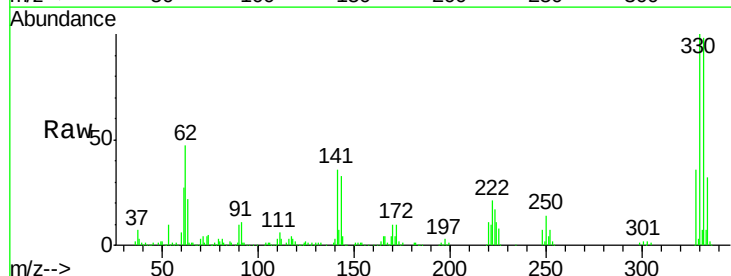
Instrument :  
BNA\_F  
ClientSampleId :  
CWC-8-20151116

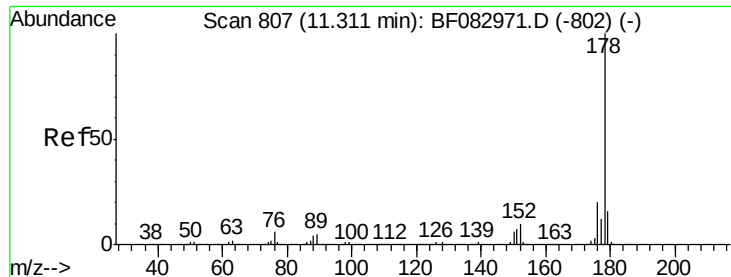
Tot Ion:188 Resp: 698515  
Ion Ratio Lower Upper  
188 100  
94 11.2 6.1 9.1#  
80 12.2 7.0 10.6#



#66  
4-Bromophenyl-phenylether  
Concen: 3.25 ng  
RT: 10.56 min Scan# 741  
Delta R.T. -0.25 min  
Lab File: BF083018.D  
Acq: 18 Nov 2015 20:00

Tgt Ion:248 Resp: 27306  
Ion Ratio Lower Upper  
248 100  
250 208.3 79.4 119.2#  
141 522.4 36.3 54.5#

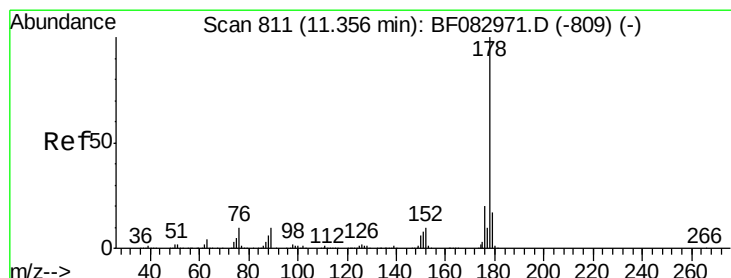
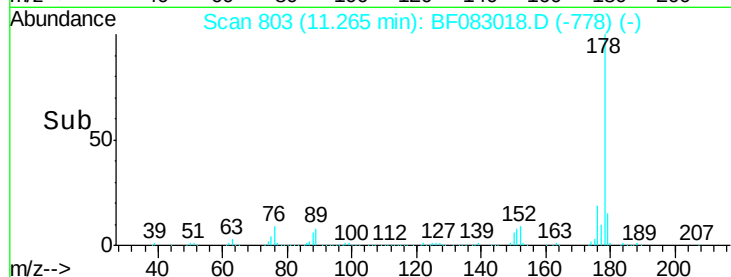
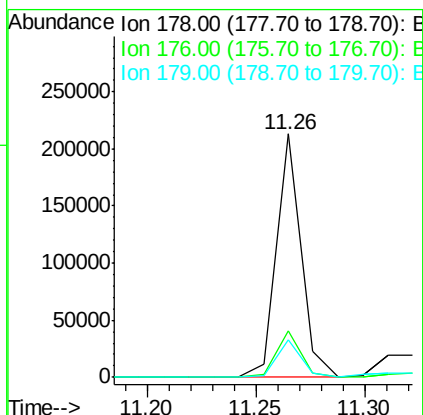
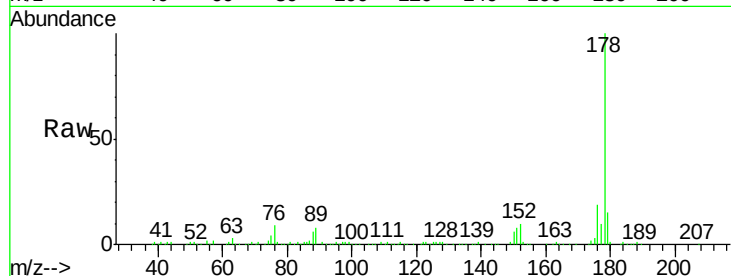




#70  
Phenanthrene  
Concen: 4.19 ng  
RT: 11.26 min Scan# 803  
Delta R.T. -0.01 min  
Lab File: BF083018.D  
Acq: 18 Nov 2015 20:00

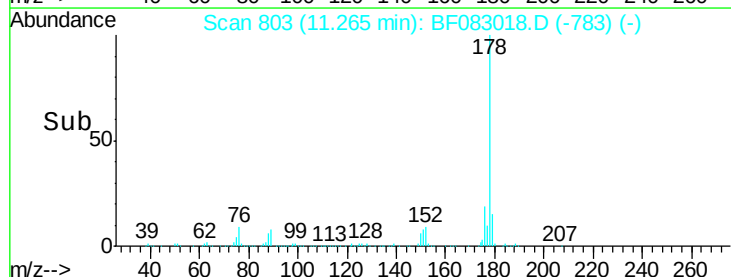
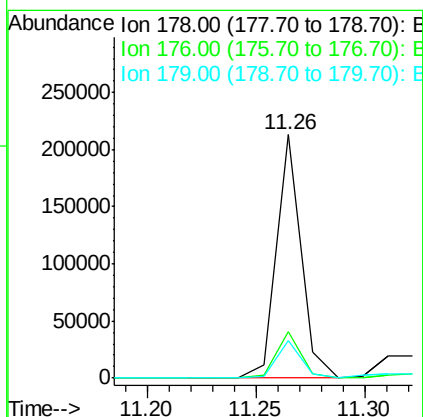
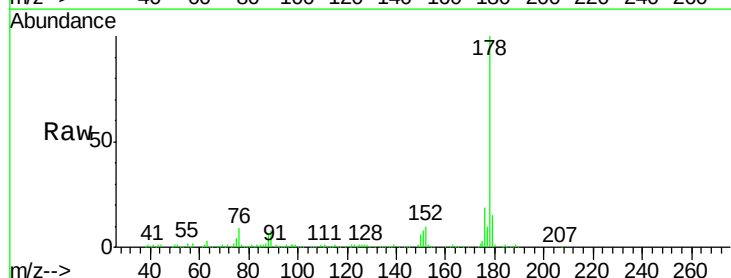
Instrument :  
BNA\_F  
ClientSampleId :  
CWC-8-20151116

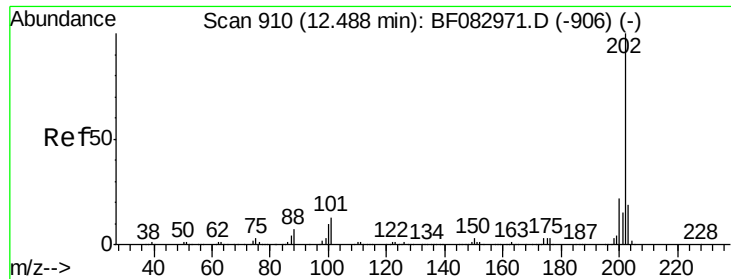
Tot Ion:178 Resp: 170137  
Ion Ratio Lower Upper  
178 100  
176 19.0 17.0 25.4  
179 15.3 13.4 20.0



#71  
Anthracene  
Concen: 3.98 ng  
RT: 11.26 min Scan# 803  
Delta R.T. -0.07 min  
Lab File: BF083018.D  
Acq: 18 Nov 2015 20:00

Tgt Ion:178 Resp: 170137  
Ion Ratio Lower Upper  
178 100  
176 19.0 16.5 24.7  
179 15.3 13.2 19.8





#74

Fluoranthene

Concen: 4.92 ng

RT: 12.45 min Scan# 907

Delta R.T. -0.01 min

Lab File: BF083018.D

Acq: 18 Nov 2015 20:00

Instrument :

BNA\_F

ClientSampleId :

CWC-8-20151116

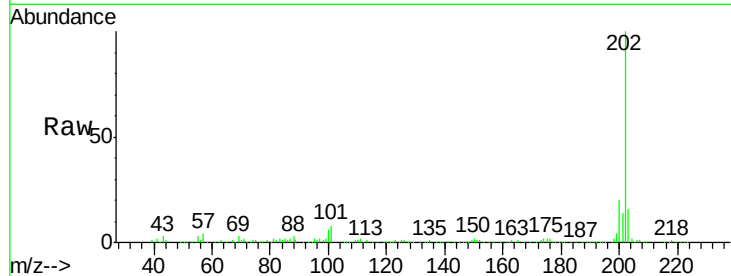
Tot Ion:202 Resp: 214234

Ion Ratio Lower Upper

202 100

101 8.1 0.0 30.5

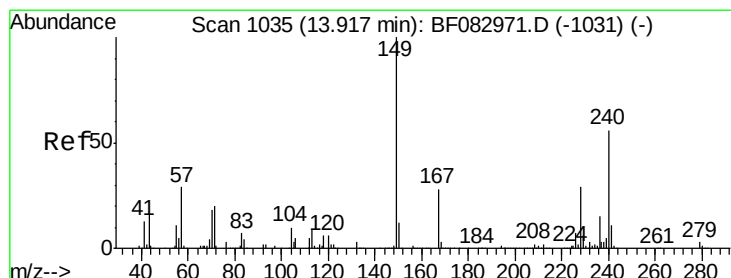
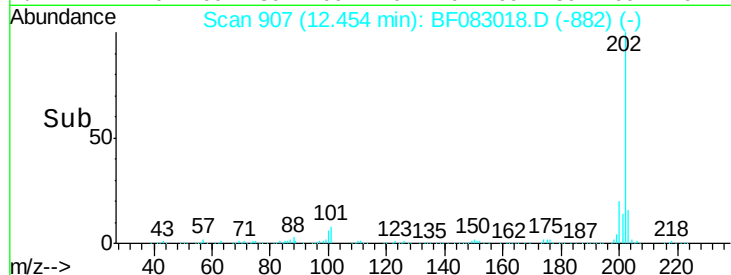
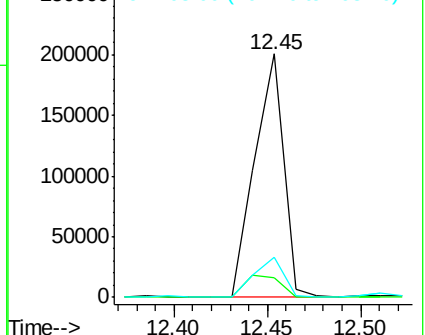
203 16.3 0.0 38.5



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: 13.87 min Scan# 1031

Delta R.T. -0.02 min

Lab File: BF083018.D

Acq: 18 Nov 2015 20:00

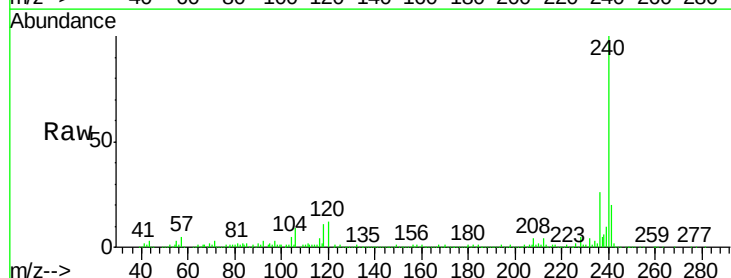
Tgt Ion:240 Resp: 532357

Ion Ratio Lower Upper

240 100

120 11.9 10.9 16.3

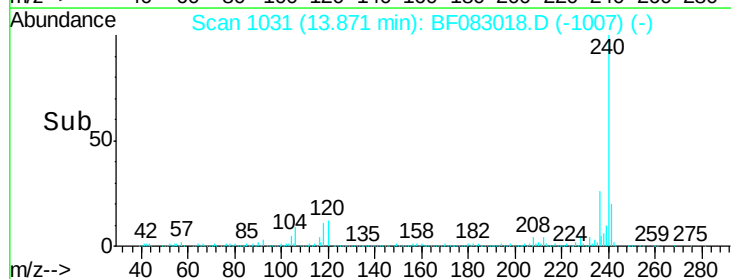
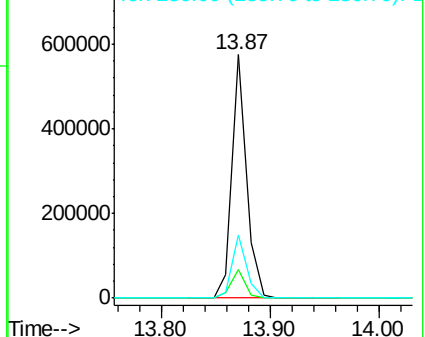
236 25.8 21.6 32.4

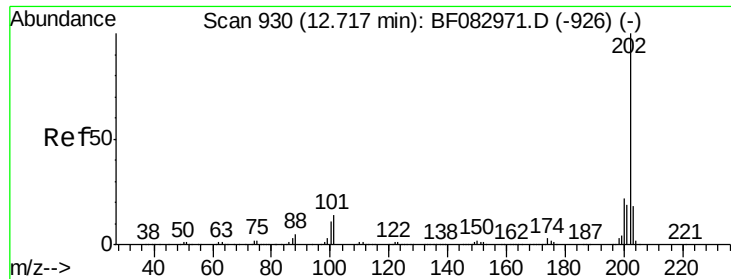


Abundance Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E

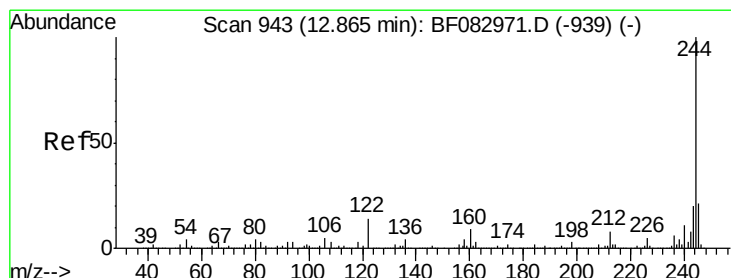
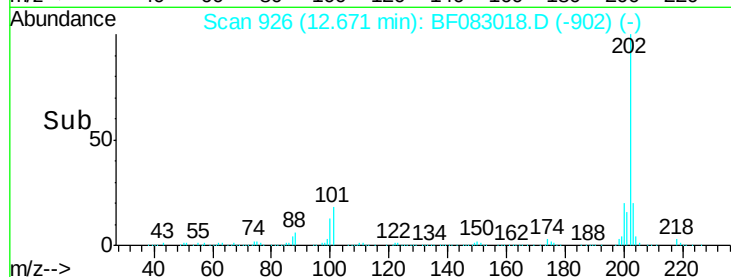
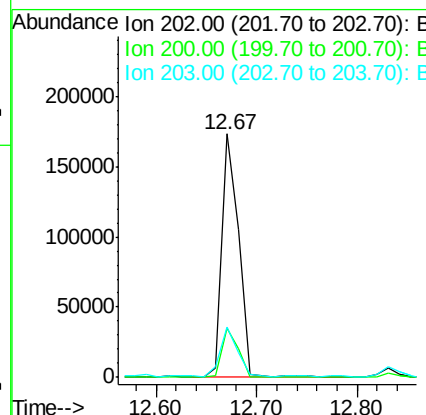
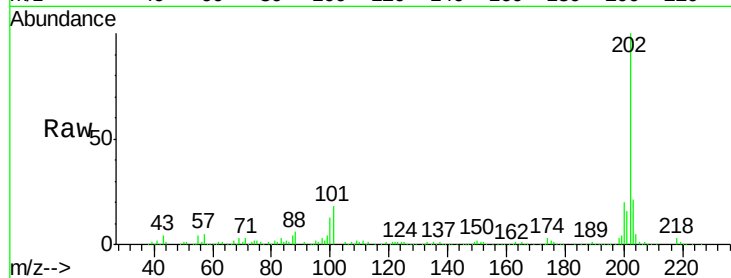




#77  
Pvrene  
Concen: 5.45 ng  
RT: 12.67 min Scan# 926  
Delta R.T. -0.02 min  
Lab File: BF083018.D  
Acq: 18 Nov 2015 20:00

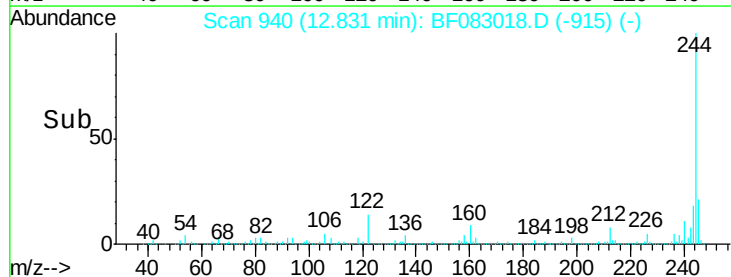
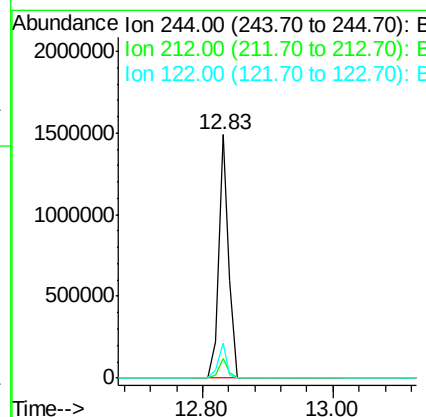
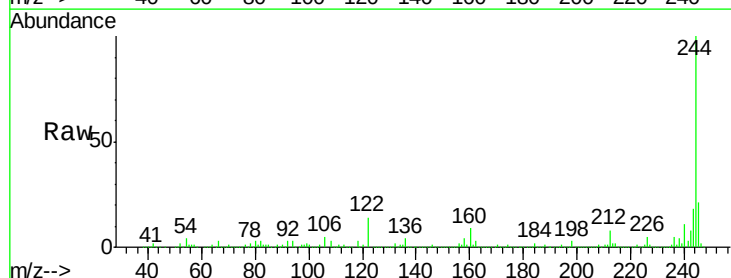
Instrument :  
BNA\_F  
ClientSampleId :  
CWC-8-20151116

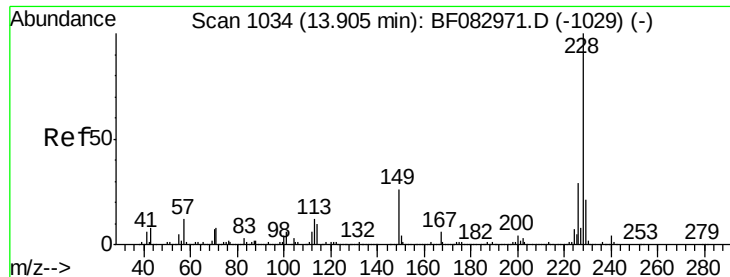
Tot Ion:202 Resp: 199285  
Ion Ratio Lower Upper  
202 100  
200 20.4 18.7 28.1  
203 20.5 14.8 22.2



#78  
Terphenyl-d14  
Concen: 71.18 ng  
RT: 12.83 min Scan# 940  
Delta R.T. -0.01 min  
Lab File: BF083018.D  
Acq: 18 Nov 2015 20:00

Tgt Ion:244 Resp: 1597545  
Ion Ratio Lower Upper  
244 100  
212 8.1 7.6 11.4  
122 14.4 11.3 16.9





#80

Benzo(a)anthracene

Concen: 2.81 ng

RT: 13.86 min Scan# 1030

Delta R.T. -0.01 min

Lab File: BF083018.D

Acq: 18 Nov 2015 20:00

Instrument :

BNA\_F

ClientSampleId :

CWC-8-20151116

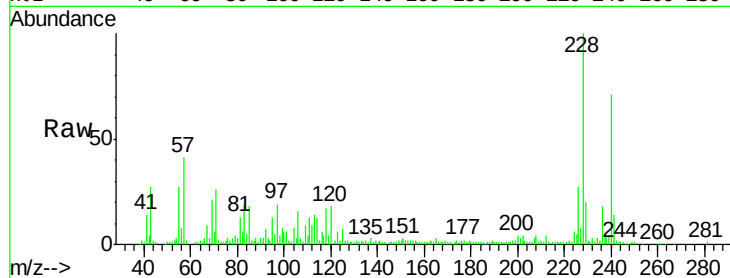
Tot Ion:228 Resp: 93644

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 228 | 100   |       |       |
| 226 | 27.0  | 23.4  | 35.2  |
| 229 | 20.2  | 16.3  | 24.5  |

228 100

226 27.0 23.4 35.2

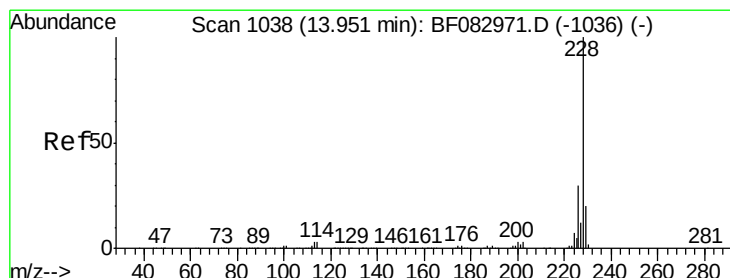
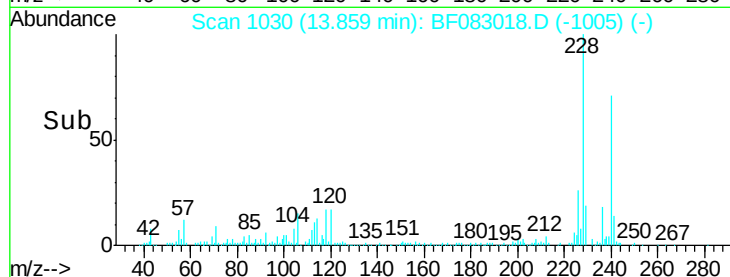
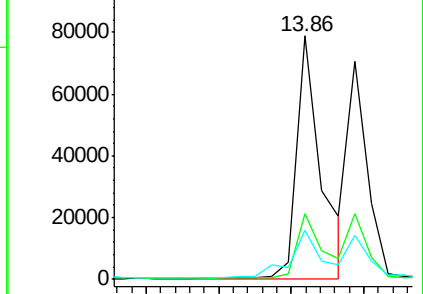
229 20.2 16.3 24.5



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: 2.21 ng

RT: 13.89 min Scan# 1033

Delta R.T. -0.02 min

Lab File: BF083018.D

Acq: 18 Nov 2015 20:00

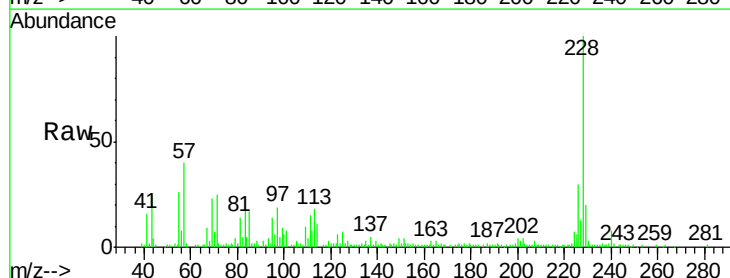
Tgt Ion:228 Resp: 67529

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 228 | 100   |       |       |
| 226 | 29.9  | 25.5  | 38.3  |
| 229 | 20.2  | 16.3  | 24.5  |

228 100

226 29.9 25.5 38.3

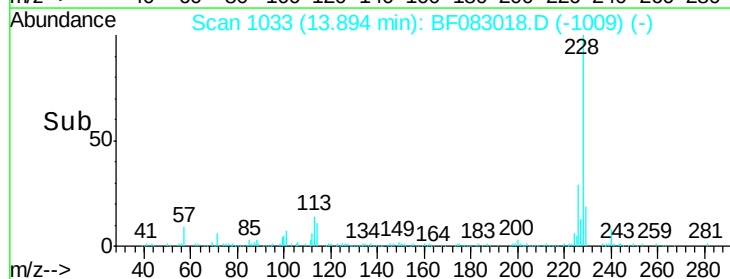
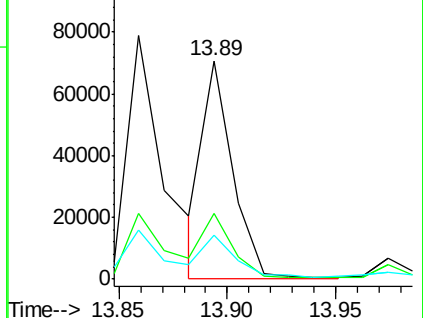
229 20.2 16.3 24.5

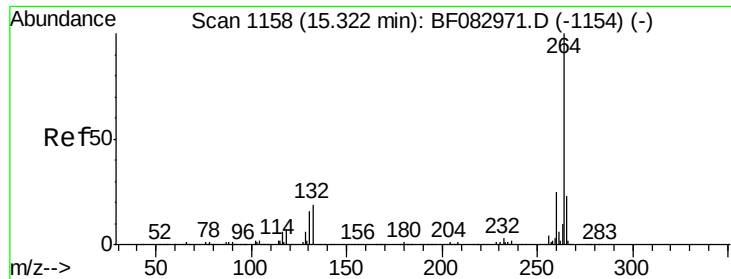


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E

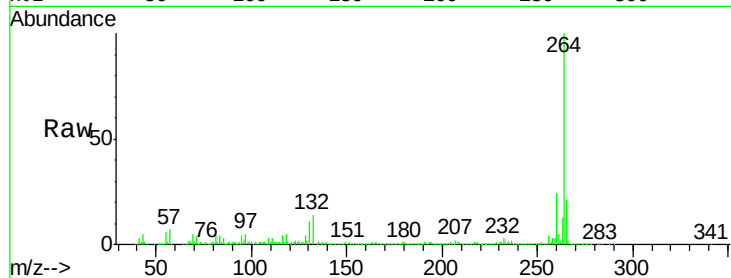




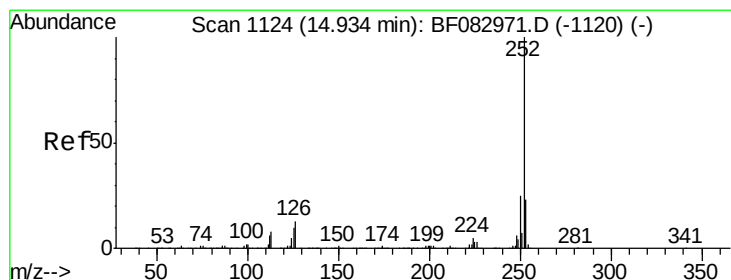
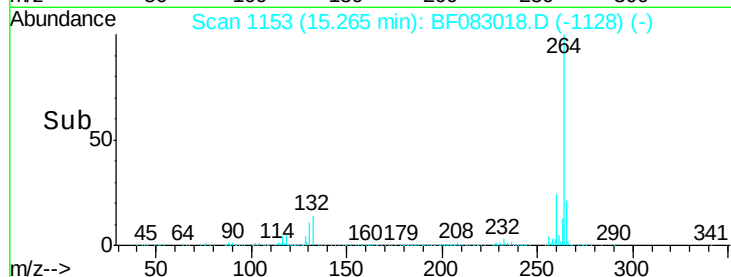
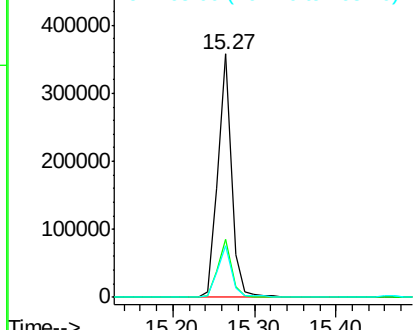
#86  
Pervlene-d12  
Concen: 20.00 ng  
RT: 15.27 min Scan# 1153  
Delta R.T. -0.01 min  
Lab File: BF083018.D  
Acq: 18 Nov 2015 20:00

Instrument :  
BNA\_F  
ClientSampleId :  
CWC-8-20151116

Tot Ion:264 Resp: 417117  
Ion Ratio Lower Upper  
264 100  
260 23.6 19.8 29.6  
265 21.4 17.4 26.0

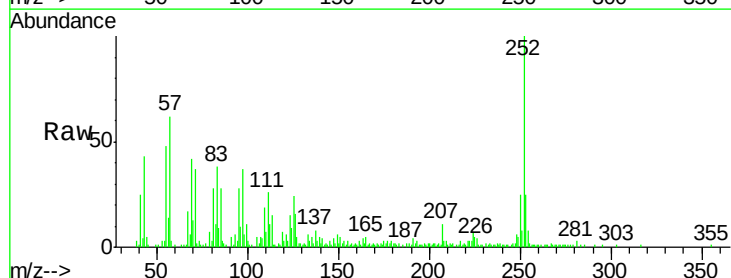


Abundance Ion 264.00 (263.70 to 264.70): E  
Ion 260.00 (259.70 to 260.70): E  
Ion 265.00 (264.70 to 265.70): E

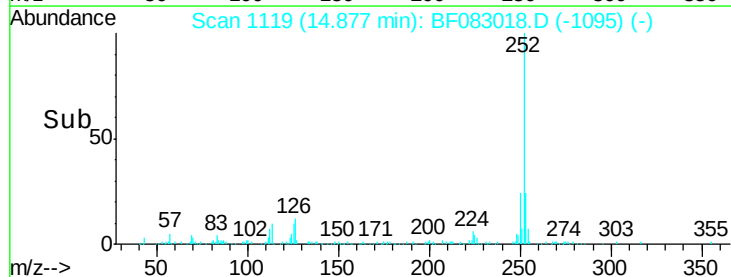
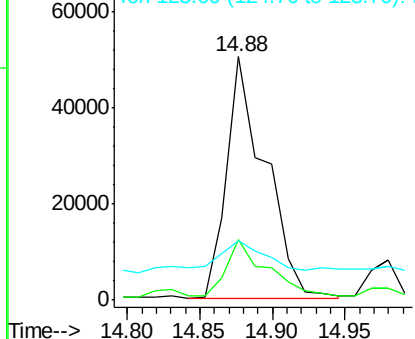


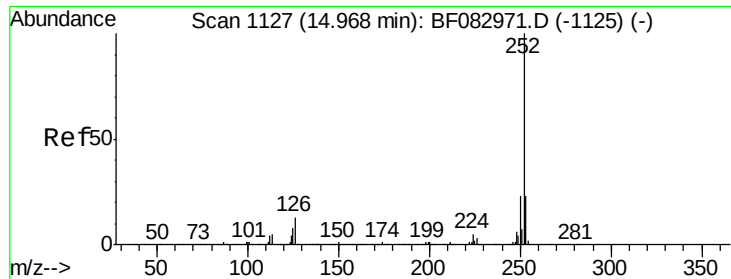
#87  
Benzo(b)fluoranthene  
Concen: 3.47 ng  
RT: 14.88 min Scan# 1119  
Delta R.T. -0.02 min  
Lab File: BF083018.D  
Acq: 18 Nov 2015 20:00

Tgt Ion:252 Resp: 92873  
Ion Ratio Lower Upper  
252 100  
253 24.7 17.8 26.8  
125 24.4 5.4 8.2#



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

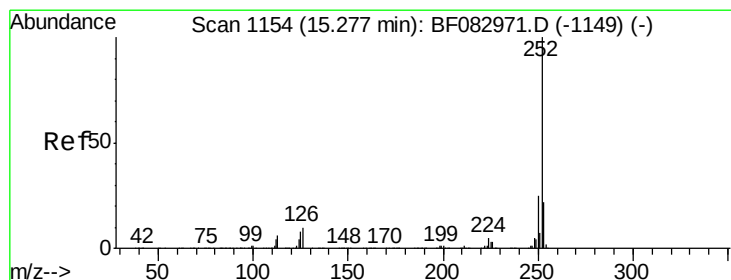
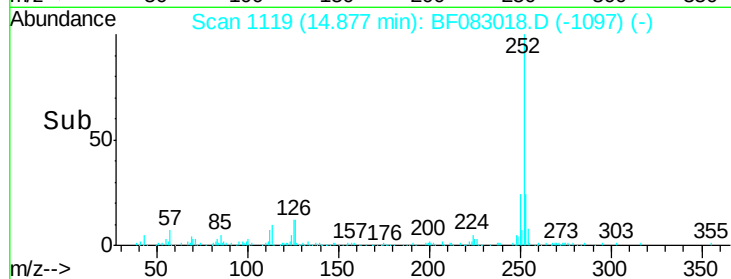
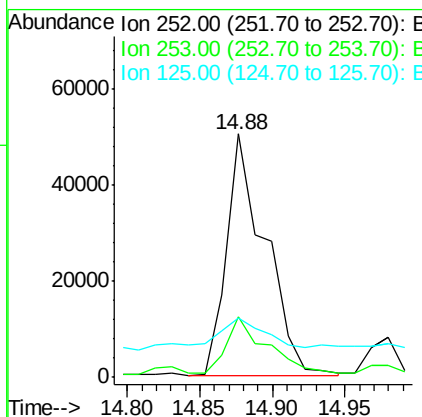
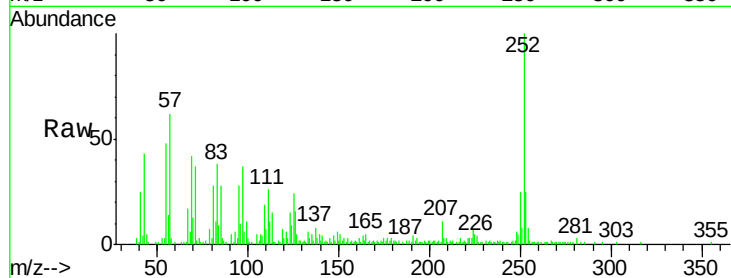




#88  
Benzo(k)fluoranthene  
Concen: 3.91 ng  
RT: 14.88 min Scan# 1119  
Delta R.T. -0.05 min  
Lab File: BF083018.D  
Acq: 18 Nov 2015 20:00

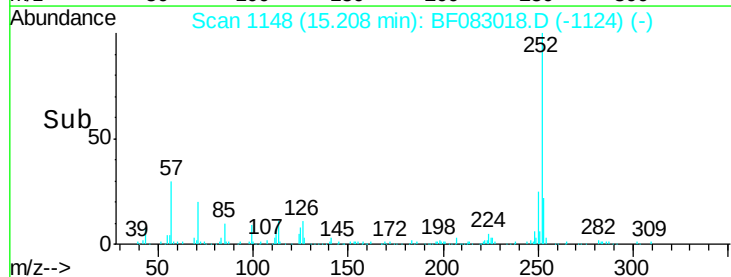
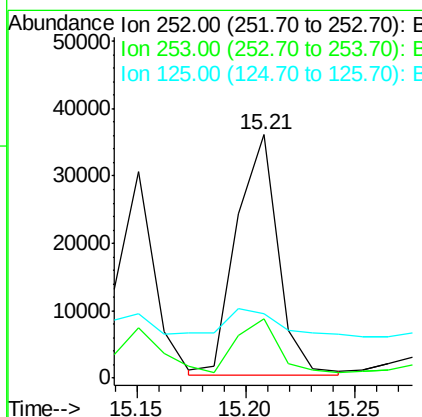
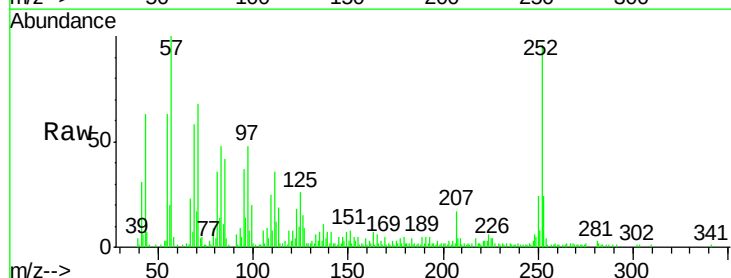
Instrument :  
BNA\_F  
ClientSampleId :  
CWC-8-20151116

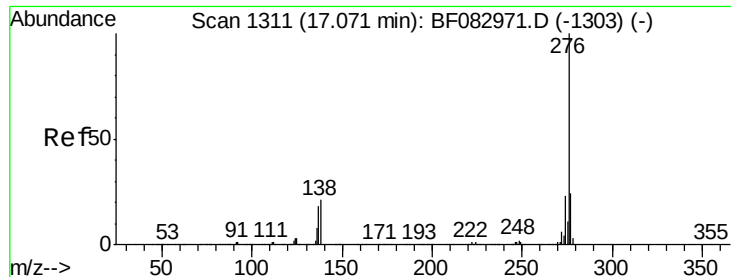
Tot Ion:252 Resp: 92873  
Ion Ratio Lower Upper  
252 100  
253 24.7 17.9 26.9  
125 24.4 3.5 5.3#



#89  
Benzo(a)pyrene  
Concen: 2.04 ng  
RT: 15.21 min Scan# 1148  
Delta R.T. -0.02 min  
Lab File: BF083018.D  
Acq: 18 Nov 2015 20:00

Tgt Ion:252 Resp: 47290  
Ion Ratio Lower Upper  
252 100  
253 24.6 17.3 25.9  
125 26.7 7.1 10.7#





#91  
 Benzo(a,h,i)perylene  
 Concen: 2.01 ng  
 RT: 16.96 min Scan# 1301  
 Delta R.T. -0.05 min  
 Lab File: BF083018.D  
 Acq: 18 Nov 2015 20:00

Instrument :  
 BNA\_F  
 ClientSampleId :  
 CWC-8-20151116

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 24.8  | 19.2  | 28.8  |
| 138     | 21.2  | 13.1  | 19.7  |

