

Data Path : \\74.0.250.170\SV0ASRV\HPCHEM1\BNA F\DATA\BF031918\  
 Data File : BF103764.D  
 Acq On : 19 Mar 2018 19:10  
 Operator : JU/SJ  
 Sample : J1965-01 5X  
 Misc :  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :

Quant Time: Mar 20 00:56:37 2018  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF031518.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Mar 15 18:31:53 2018  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.97  | 152  | 152474   | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 8.25  | 136  | 611239   | 20.00 | ng    | 0.00     |
| 38) Acenaphthene-d10      | 10.01 | 164  | 264869   | 20.00 | ng    | 0.00     |
| 63) Phenanthrene-d10      | 11.51 | 188  | 419305   | 20.00 | ng    | 0.01     |
| 75) Chrysene-d12          | 14.16 | 240  | 305089   | 20.00 | ng    | 0.01     |
| 86) Perylene-d12          | 15.70 | 264  | 251638   | 20.00 | ng    | 0.02     |

## System Monitoring Compounds

|                          |       |     |        |       |    |      |
|--------------------------|-------|-----|--------|-------|----|------|
| 5) 2-Fluorophenol        | 5.58  | 112 | 212911 | 21.24 | ng | 0.00 |
| 7) Phenol-d6             | 6.58  | 99  | 265489 | 21.65 | ng | 0.00 |
| 23) Nitrobenzene-d5      | 7.53  | 82  | 149893 | 17.10 | ng | 0.00 |
| 41) 2,4,6-Tribromophenol | 10.80 | 330 | 51215  | 22.49 | ng | 0.00 |
| 44) 2-Fluorobiphenyl     | 9.32  | 172 | 258659 | 15.58 | ng | 0.00 |
| 78) Terphenyl-d14        | 13.09 | 244 | 214448 | 16.32 | ng | 0.00 |

## Target Compounds

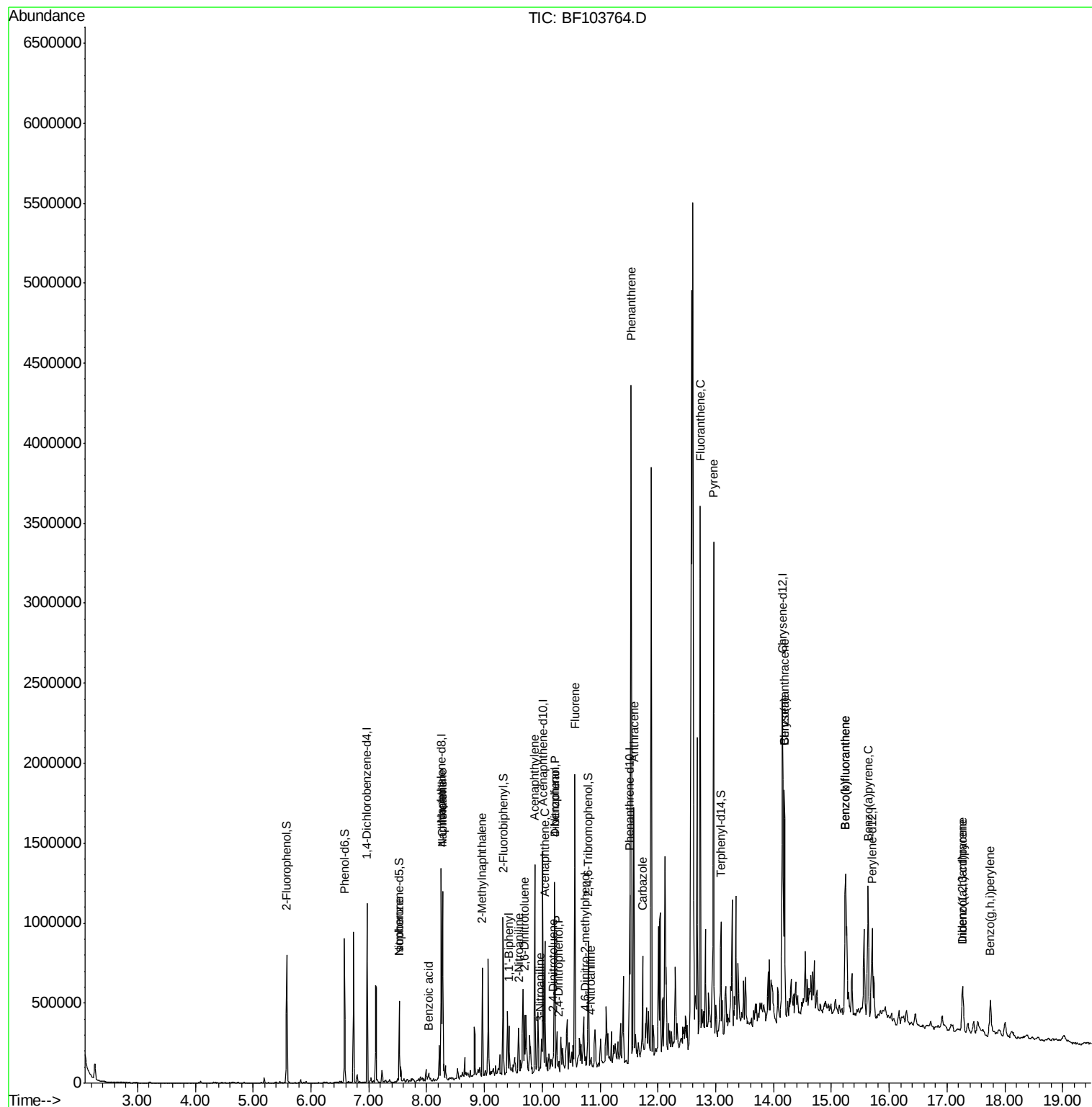
|                                |       |     |         |        |    | Qvalue |
|--------------------------------|-------|-----|---------|--------|----|--------|
| 25) Isophorone                 | 7.53  | 82  | 149921  | 7.389  | ng | # 64   |
| 31) Naphthalene                | 8.27  | 128 | 448969  | 14.541 | ng | 99     |
| 32) Benzoic acid               | 8.02  | 122 | 658     | 9.990  | ng | # 58   |
| 33) 4-Chloroaniline            | 8.27  | 127 | 59220   | 4.572  | ng | # 31   |
| 37) 2-Methylnaphthalene        | 8.96  | 142 | 168138  | 8.587  | ng | 98     |
| 45) 1,1'-Biphenyl              | 9.43  | 154 | 79516   | 3.600  | ng | 98     |
| 47) 2-Nitroaniline             | 9.59  | 65  | 1355    | 7.068  | ng | # 37   |
| 48) Acenaphthylene             | 9.87  | 152 | 478644  | 17.596 | ng | 100    |
| 50) 2,6-Dinitrotoluene         | 9.70  | 165 | 3052    | 4.700  | ng | # 1    |
| 51) Acenaphthene               | 10.05 | 154 | 129632  | 8.026  | ng | 98     |
| 52) 3-Nitroaniline             | 9.96  | 138 | 565     | 3.925  | ng | # 1    |
| 53) 2,4-Dinitrophenol          | 10.29 | 184 | 414     | 7.108  | ng | # 28   |
| 54) Dibenzofuran               | 10.22 | 168 | 387933  | 16.817 | ng | 99     |
| 55) 4-Nitrophenol              | 10.22 | 139 | 147813  | 42.440 | ng | # 10   |
| 56) 2,4-Dinitrotoluene         | 10.18 | 165 | 2867    | 6.718  | ng | # 70   |
| 57) Fluorene                   | 10.56 | 166 | 495776  | 27.696 | ng | 99     |
| 61) 4-Nitroaniline             | 10.83 | 138 | 338     | 3.818  | ng | 81     |
| 64) 4,6-Dinitro-2-methylphenol | 10.75 | 198 | 145     | 8.219  | ng | # 1    |
| 70) Phenanthrene               | 11.54 | 178 | 1790328 | 78.054 | ng | 99     |
| 71) Anthracene                 | 11.59 | 178 | 595245  | 25.551 | ng | 100    |
| 72) Carbazole                  | 11.73 | 167 | 206249  | 9.109  | ng | 99     |
| 74) Fluoranthene               | 12.73 | 202 | 1469672 | 62.194 | ng | 99     |
| 77) Pyrene                     | 12.96 | 202 | 1313849 | 58.640 | ng | 99     |
| 80) Benzo(a)anthracene         | 14.19 | 228 | 549119  | 28.434 | ng | 95     |
| 82) Chrysene                   | 14.19 | 228 | 549119  | 29.828 | ng | 97     |
| 85) Indeno(1,2,3-cd)pyrene     | 17.27 | 276 | 204236  | 12.704 | ng | 93     |
| 87) Benzo(b)fluoranthene       | 15.24 | 252 | 751648  | 47.280 | ng | # 95   |
| 88) Benzo(k)fluoranthene       | 15.24 | 252 | 751648  | 49.185 | ng | 98     |
| 89) Benzo(a)pyrene             | 15.63 | 252 | 426386  | 29.570 | ng | # 94   |
| 90) Dibenzo(a,h)anthracene     | 17.28 | 278 | 56602   | 4.533  | ng | # 85   |
| 91) Benzo(g,h,i)perylene       | 17.75 | 276 | 184596  | 15.197 | ng | 99     |

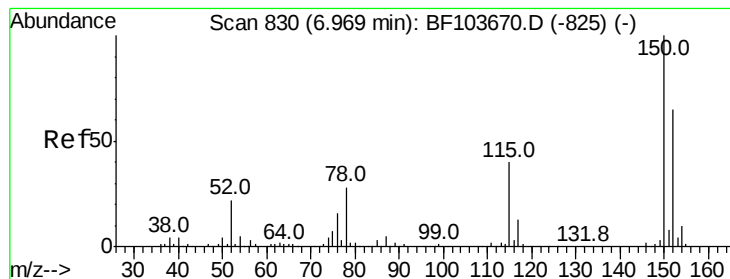
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : \\74.0.250.170\SV0ASRV\HPCHEM1\BNA F\DATA\BF031918\  
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ALS Vial : 7 Sample Multiplier: 1

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BNA\_F  
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Quant Time: Mar 20 00:56:37 2018  
Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF031518.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Thu Mar 15 18:31:53 2018  
Response via : Initial Calibration



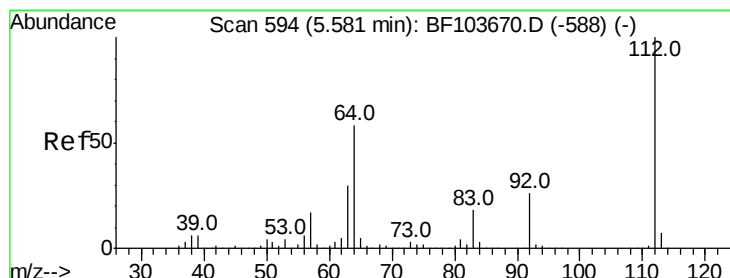
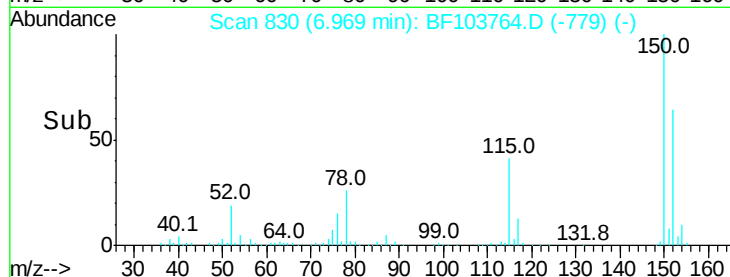
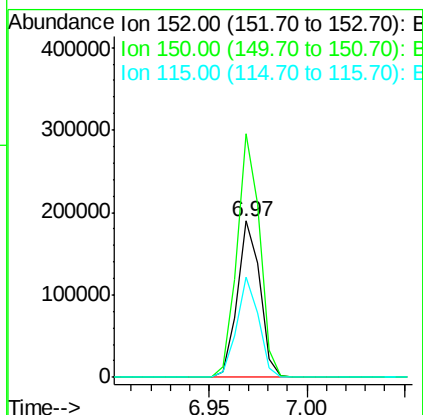
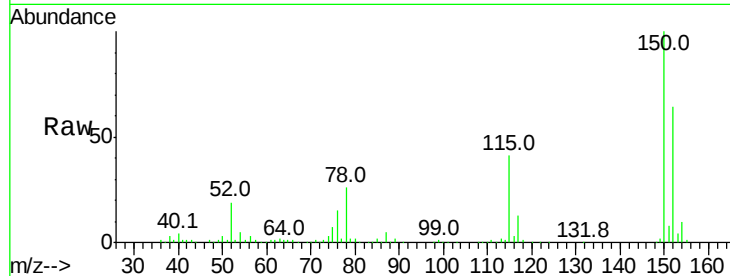


#1

1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.97 min Scan# 830  
Delta R.T. 0.00 min  
Lab File: BF103764.D  
Acq: 19 Mar 2018 19:10

Instrument :  
BNA\_F  
ClientSampleId :

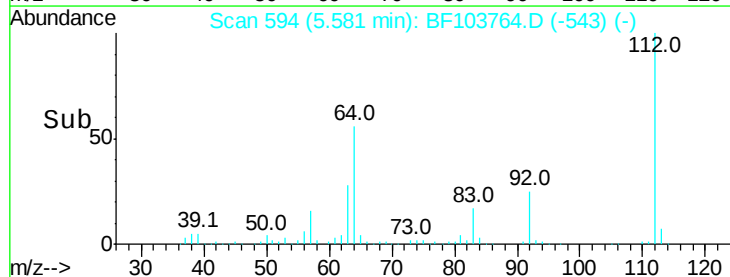
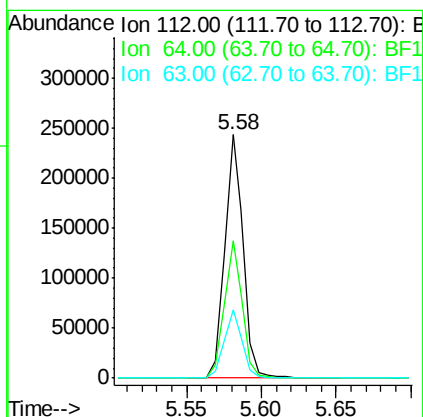
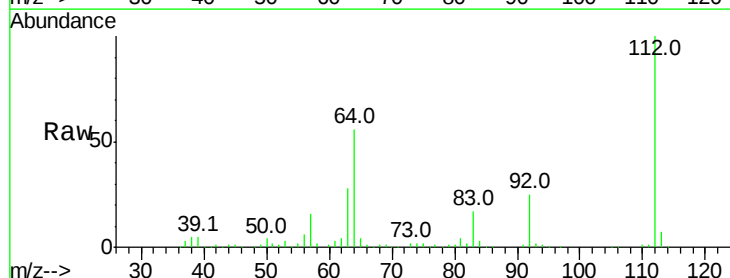
Tot Ion:152 Resp: 152474  
Ion Ratio Lower Upper  
152 100  
150 155.7 124.6 186.8  
115 64.0 50.1 75.1



#5

2-Fluorophenol  
Concen: 21.239 ng  
RT: 5.58 min Scan# 594  
Delta R.T. -0.00 min  
Lab File: BF103764.D  
Acq: 19 Mar 2018 19:10

Tgt Ion:112 Resp: 212911  
Ion Ratio Lower Upper  
112 100  
64 56.4 47.9 71.9  
63 27.9 23.7 35.5





#7

Phenol-d6

Concen: 21.647 ng

RT: 6.58 min Scan# 764

Delta R.T. -0.01 min

Lab File: BF103764.D

Acq: 19 Mar 2018 19:10

Instrument :

BNA\_F

ClientSampleId :

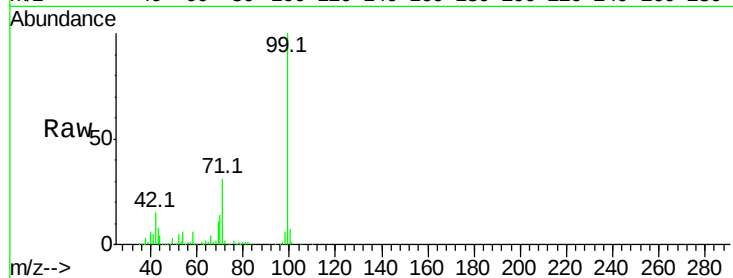
Tot Ion: 99 Resp: 265489

Ion Ratio Lower Upper

99 100

42 14.7 14.5 21.7

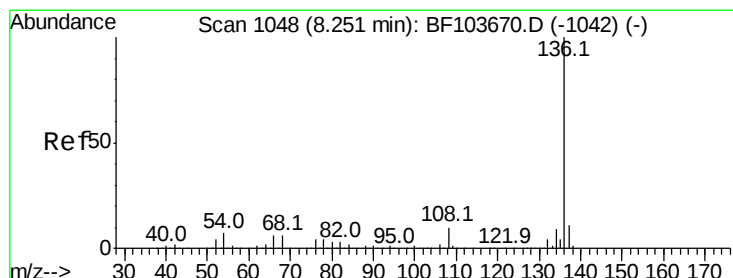
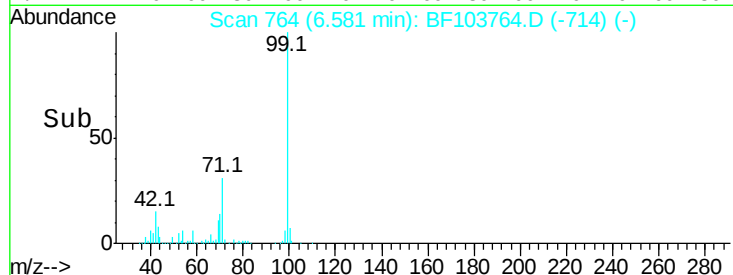
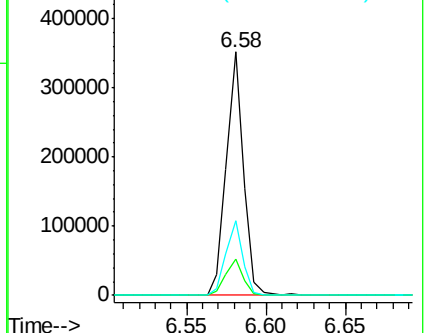
71 30.8 25.4 38.0



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



#21

Naphthalene-d8

Concen: 20.000 ng

RT: 8.25 min Scan# 1048

Delta R.T. -0.00 min

Lab File: BF103764.D

Acq: 19 Mar 2018 19:10

Tgt Ion: 136 Resp: 611239

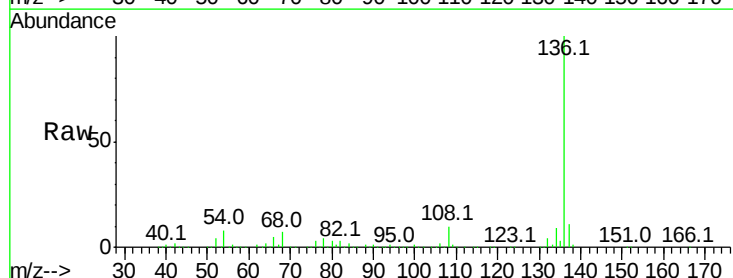
Ion Ratio Lower Upper

136 100

137 11.4 8.9 13.3

54 7.7 6.6 9.8

68 6.6 5.0 7.4

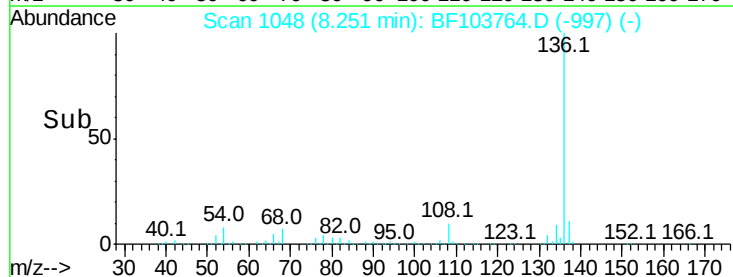
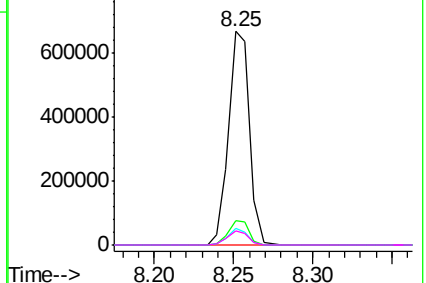


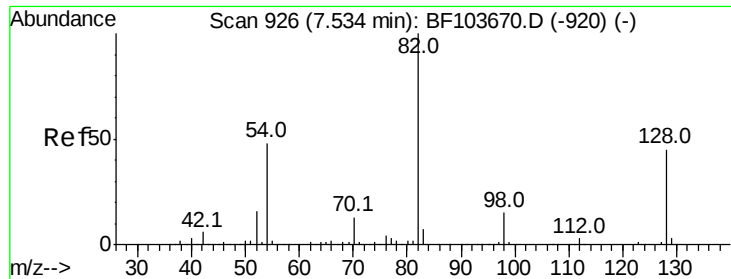
Abundance Ion 136.00 (135.70 to 136.70): E

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

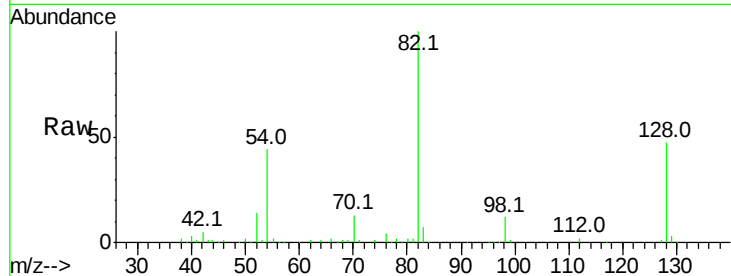




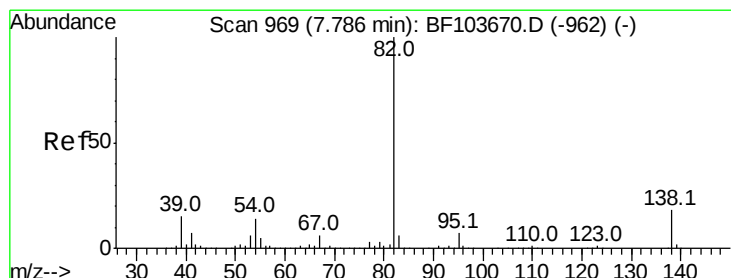
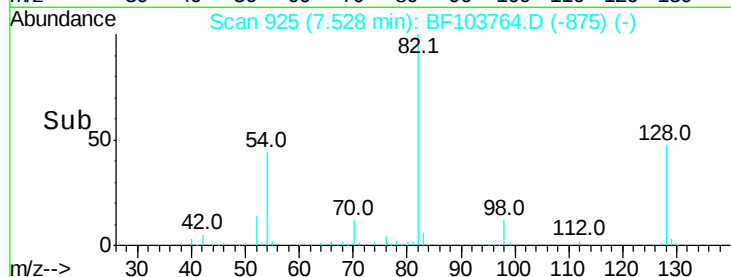
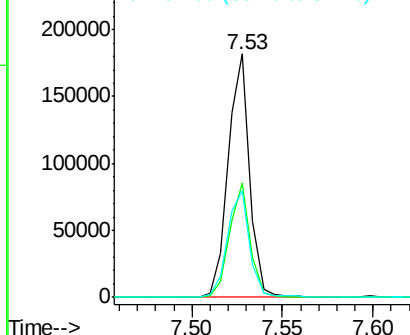
#23  
Nitrobenzene-d5  
Concen: 17.101 ng  
RT: 7.53 min Scan# 925  
Delta R.T. -0.01 min  
Lab File: BF103764.D  
Acq: 19 Mar 2018 19:10

Instrument :  
BNA\_F  
ClientSampled :

| Tot Ion   | 82    | Resp  | 149893 |
|-----------|-------|-------|--------|
| Ion Ratio | Lower | Upper |        |
| 82        | 100   |       |        |
| 128       | 46.9  | 36.1  | 54.1   |
| 54        | 43.7  | 41.4  | 62.2   |

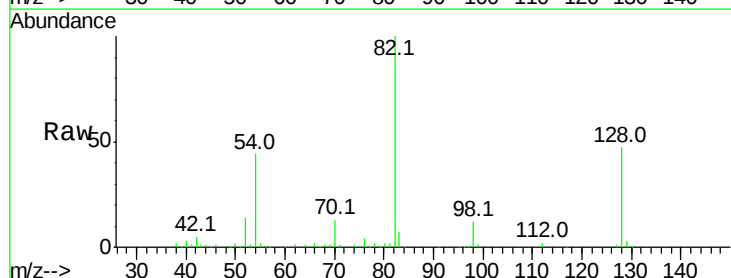


Abundance Ion 82.00 (81.70 to 82.70): BF1  
Ion 128.00 (127.70 to 128.70): BF1  
Ion 54.00 (53.70 to 54.70): BF1

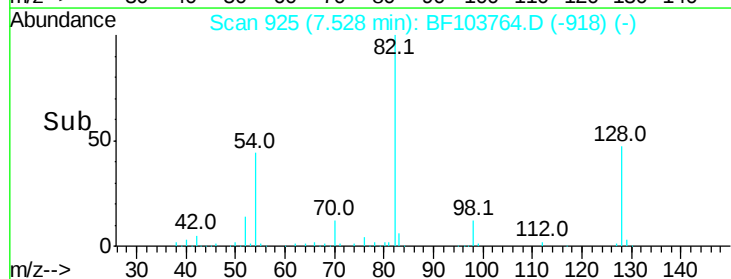
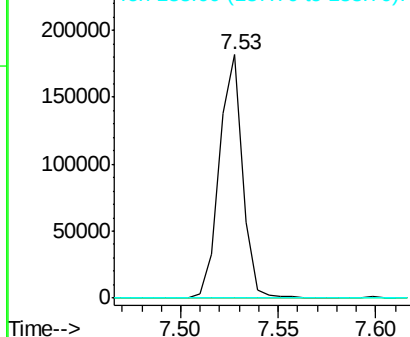


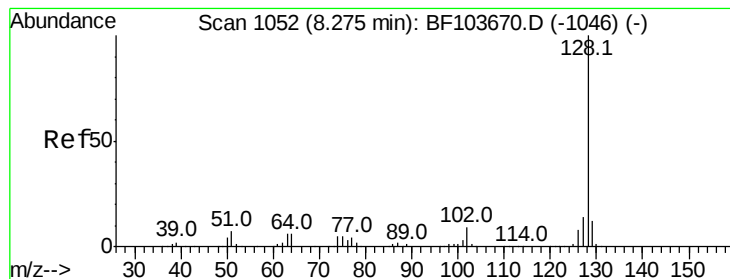
#25  
Isophorone  
Concen: 7.389 ng  
RT: 7.53 min Scan# 925  
Delta R.T. -0.26 min  
Lab File: BF103764.D  
Acq: 19 Mar 2018 19:10

| Tgt Ion   | 82    | Resp  | 149921 |
|-----------|-------|-------|--------|
| Ion Ratio | Lower | Upper |        |
| 82        | 100   |       |        |
| 95        | 0.3   | 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





#31

Naphthalene

Concen: 14.541 ng

RT: 8.27 min Scan# 1052

Delta R.T. 0.00 min

Lab File: BF103764.D

Acq: 19 Mar 2018 19:10

Instrument :

BNA\_F

ClientSampleId :

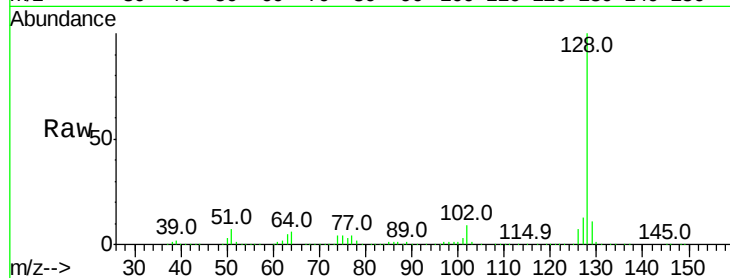
Tot Ion:128 Resp: 448969

Ion Ratio Lower Upper

128 100

129 11.3 8.8 13.2

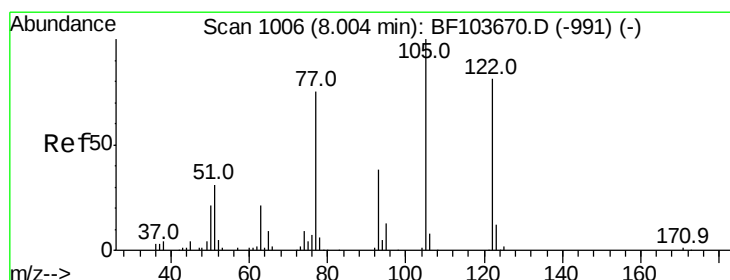
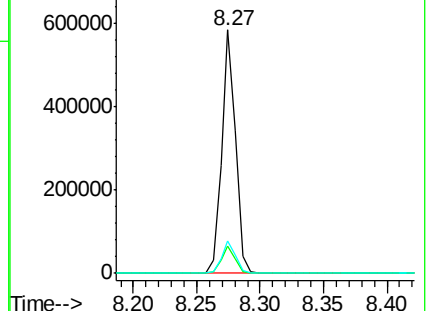
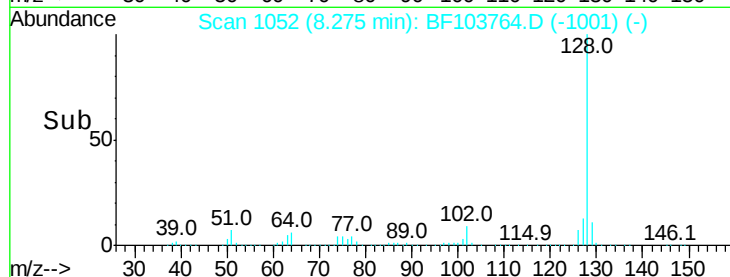
127 13.1 10.9 16.3



Abundance Ion 128.00 (127.70 to 128.70): E

Ion 129.00 (128.70 to 129.70): E

Ion 127.00 (126.70 to 127.70): E



#32

Benzoic acid

Concen: 9.990 ng

RT: 8.02 min Scan# 1009

Delta R.T. 0.02 min

Lab File: BF103764.D

Acq: 19 Mar 2018 19:10

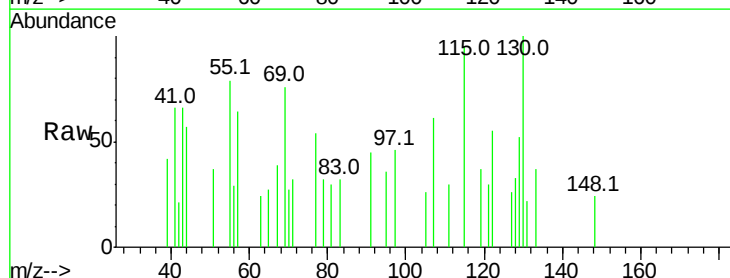
Tgt Ion:122 Resp: 658

Ion Ratio Lower Upper

122 100

105 47.5 101.1 141.1#

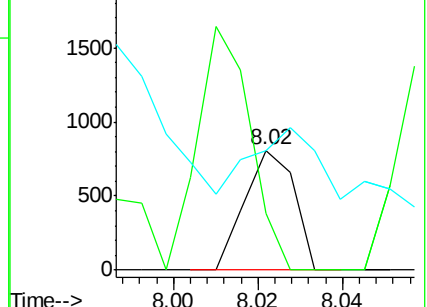
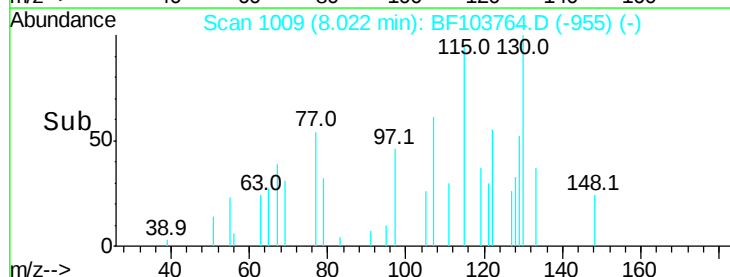
77 99.6 70.7 110.7

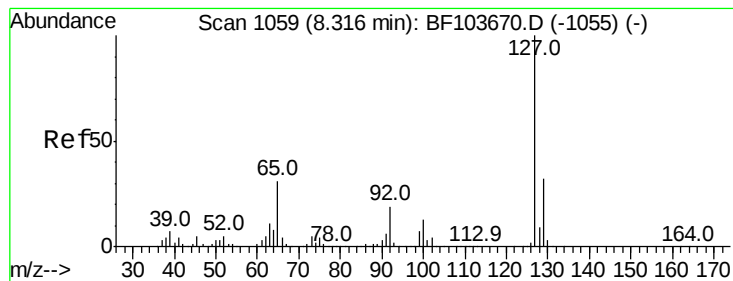


Abundance Ion 122.00 (121.70 to 122.70): E

Ion 105.00 (104.70 to 105.70): E

Ion 77.00 (76.70 to 77.70): BF1





#33

4-Chloroaniline

Concen: 4.572 ng

RT: 8.27 min Scan# 1052

Delta R.T. -0.04 min

Lab File: BF103764.D

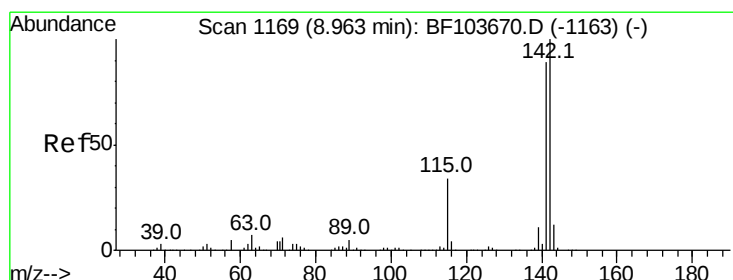
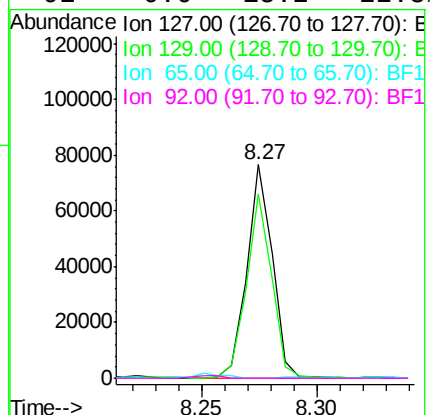
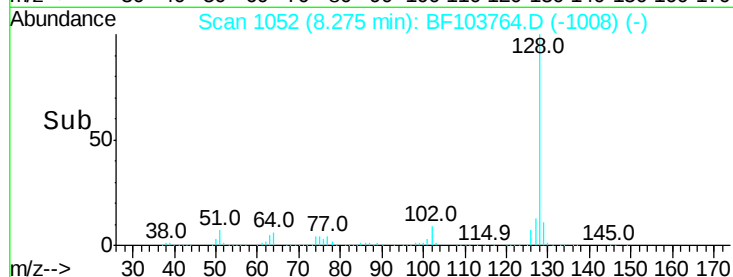
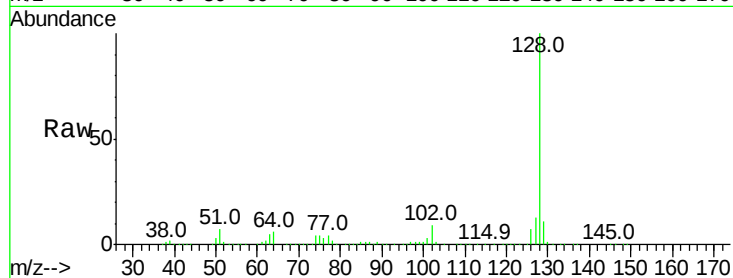
Acq: 19 Mar 2018 19:10

Instrument :

BNA\_F

ClientSampleId :

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 127   | Resp: | 59220 |
| Ion      | Ratio | Lower | Upper |
| 127      | 100   |       |       |
| 129      | 86.5  | 25.9  | 38.9# |
| 65       | 0.0   | 25.0  | 37.4# |
| 92       | 0.0   | 15.2  | 22.8# |



#37

2-Methylnaphthalene

Concen: 8.587 ng

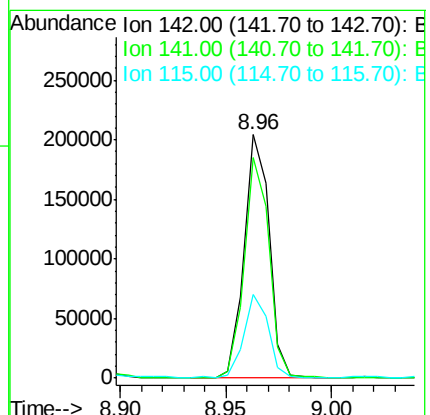
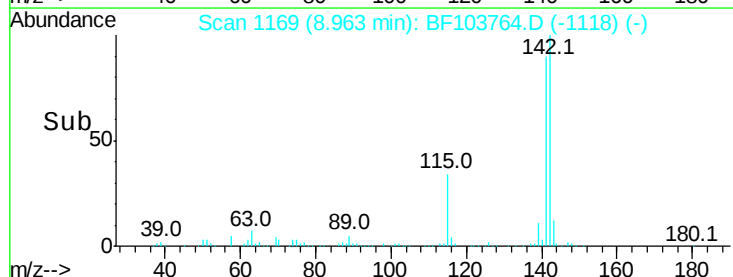
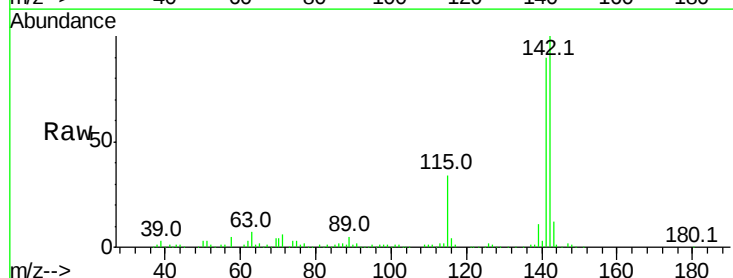
RT: 8.96 min Scan# 1169

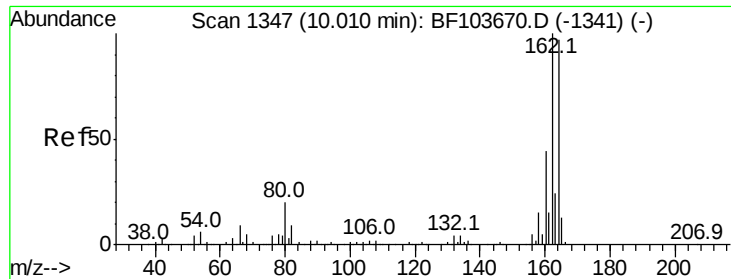
Delta R.T. -0.00 min

Lab File: BF103764.D

Acq: 19 Mar 2018 19:10

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 142   | Resp: | 168138 |
| Ion      | Ratio | Lower | Upper  |
| 142      | 100   |       |        |
| 141      | 90.4  | 70.8  | 106.2  |
| 115      | 34.3  | 26.1  | 39.1   |

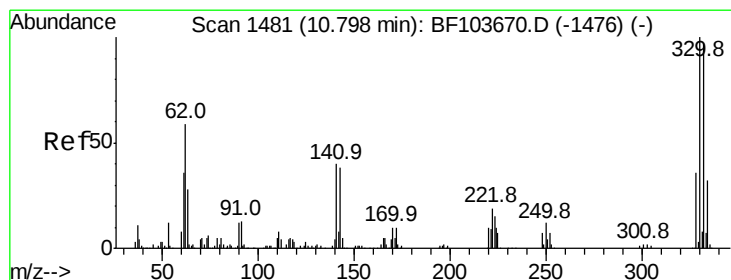
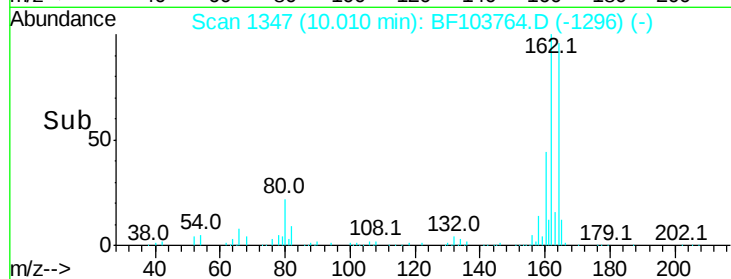
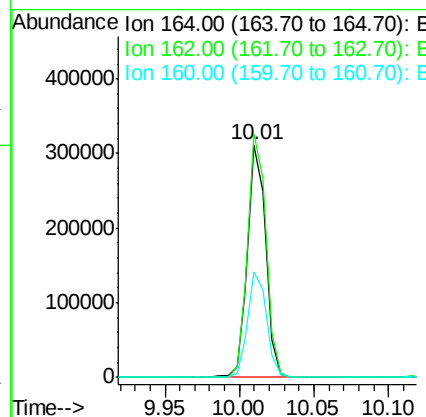
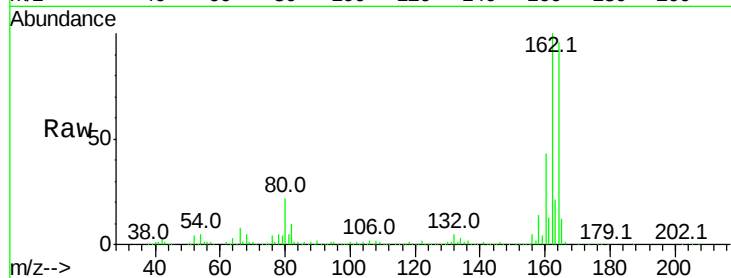




#38  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 10.01 min Scan# 1347  
Delta R.T. 0.00 min  
Lab File: BF103764.D  
Acq: 19 Mar 2018 19:10

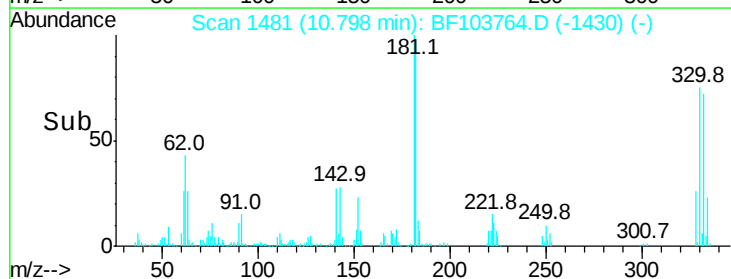
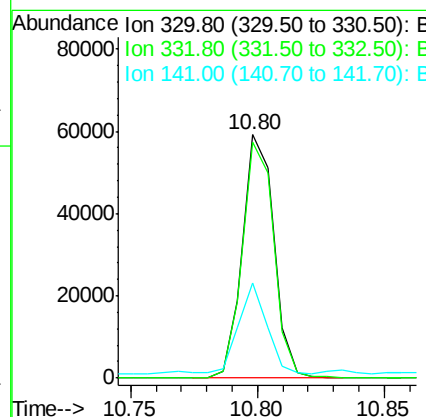
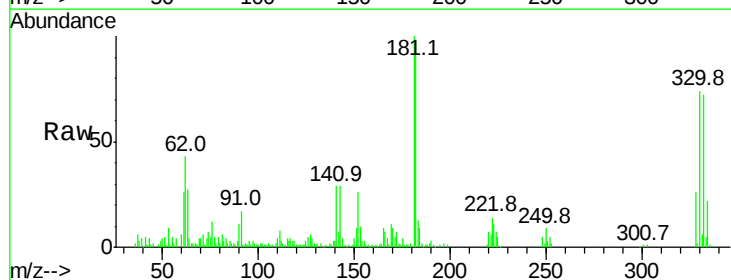
Instrument :  
BNA\_F  
ClientSampleId :

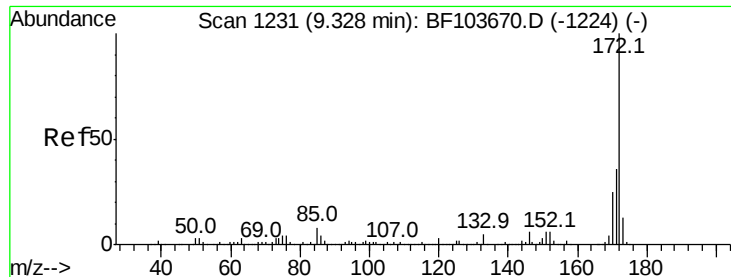
Tot Ion:164 Resp: 264869  
Ion Ratio Lower Upper  
164 100  
162 104.6 86.1 129.1  
160 45.0 38.3 57.5



#41  
2,4,6-Tribromophenol  
Concen: 22.489 ng  
RT: 10.80 min Scan# 1481  
Delta R.T. 0.00 min  
Lab File: BF103764.D  
Acq: 19 Mar 2018 19:10

Tgt Ion:330 Resp: 51215  
Ion Ratio Lower Upper  
330 100  
332 97.1 77.0 115.6  
141 34.7 29.9 44.9

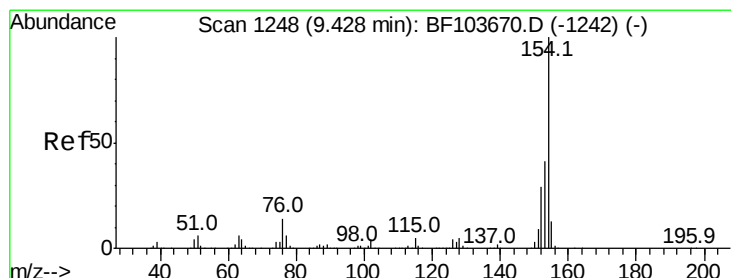
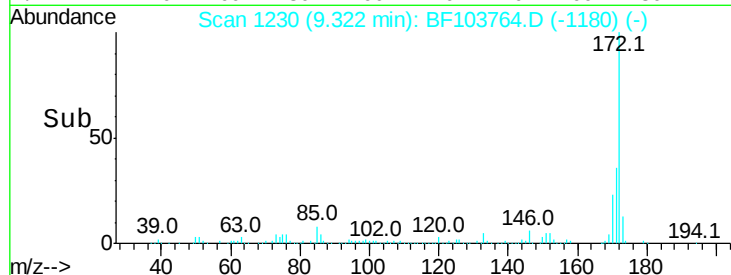
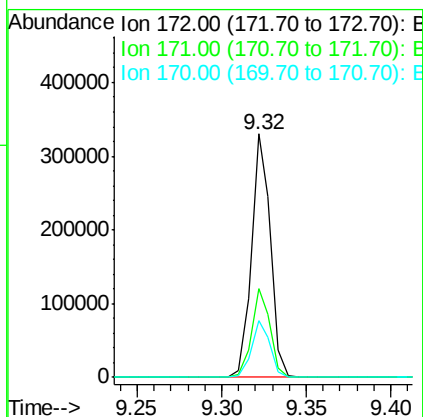
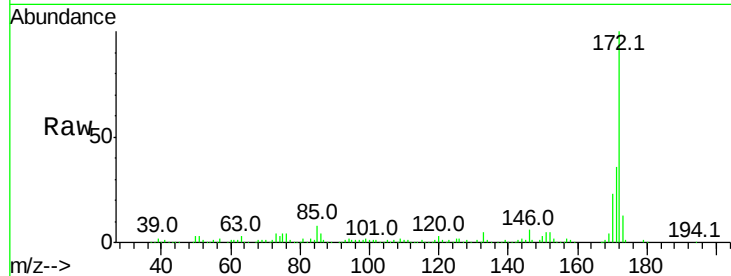




#44  
2-Fluorobiphenyl  
Concen: 15.578 ng  
RT: 9.32 min Scan# 1230  
Delta R.T. -0.01 min  
Lab File: BF103764.D  
Acq: 19 Mar 2018 19:10

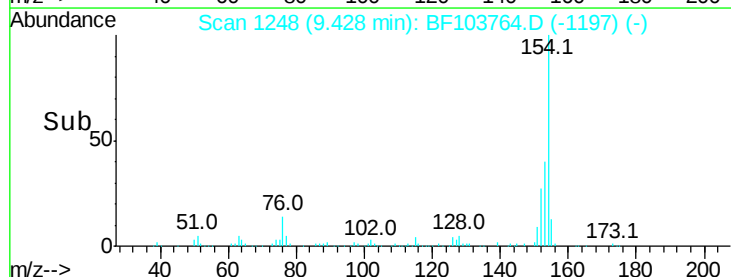
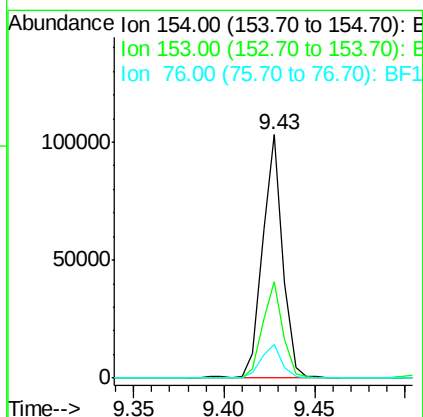
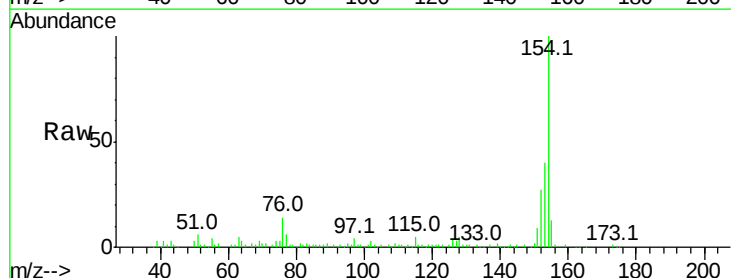
Instrument :  
BNA\_F  
ClientSampleId :

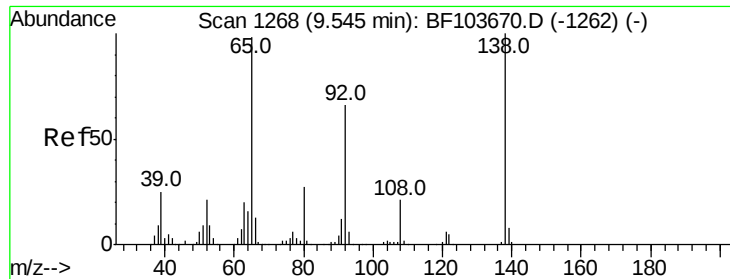
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 36.2  | 29.7  | 44.5  |
| 170     | 23.5  | 19.6  | 29.4  |



#45  
1,1'-Biphenyl  
Concen: 3.600 ng  
RT: 9.43 min Scan# 1248  
Delta R.T. 0.00 min  
Lab File: BF103764.D  
Acq: 19 Mar 2018 19:10

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 154     | 100   |       |       |
| 153     | 39.6  | 21.3  | 61.3  |
| 76      | 13.7  | 0.0   | 34.0  |





#47

2-Nitroaniline

Concen: 7.068 ng

RT: 9.59 min Scan# 1276

Delta R.T. 0.05 min

Lab File: BF103764.D

Acq: 19 Mar 2018 19:10

Instrument :

BNA\_F

ClientSampleId :

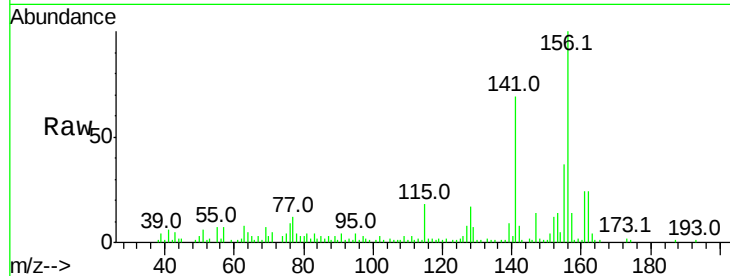
Tot Ion: 65 Resp: 1355

Ion Ratio Lower Upper

65 100

92 24.7 55.8 83.6#

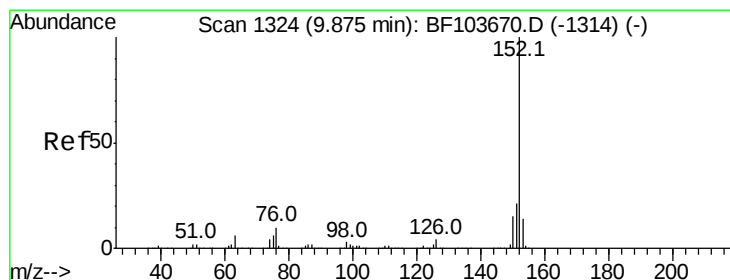
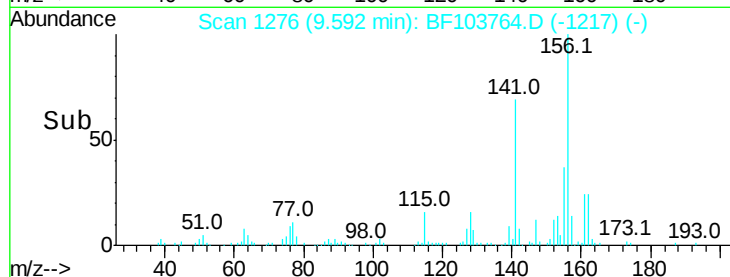
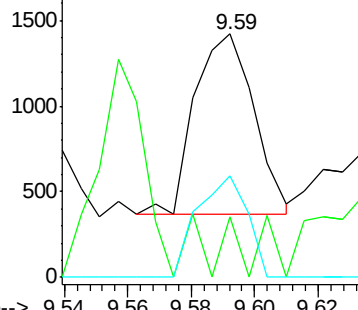
138 41.5 91.2 136.8#



Abundance Ion 65.00 (64.70 to 65.70): BF1

Ion 92.00 (91.70 to 92.70): BF1

Ion 138.00 (137.70 to 138.70): BF1



#48

Acenaphthylene

Concen: 17.596 ng

RT: 9.87 min Scan# 1324

Delta R.T. -0.00 min

Lab File: BF103764.D

Acq: 19 Mar 2018 19:10

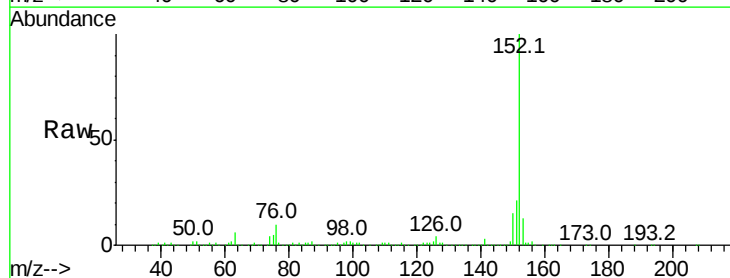
Tgt Ion: 152 Resp: 478644

Ion Ratio Lower Upper

152 100

151 20.7 16.3 24.5

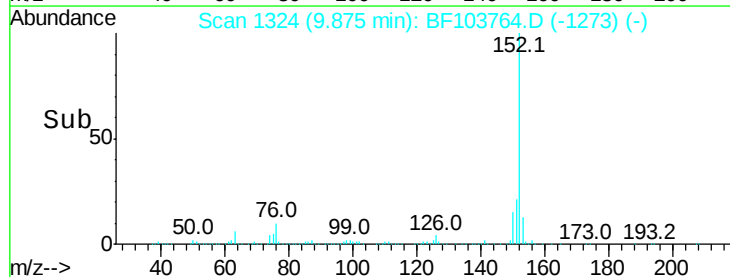
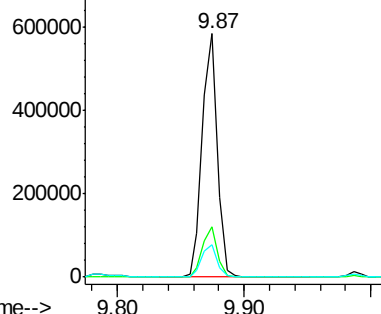
153 13.3 10.7 16.1

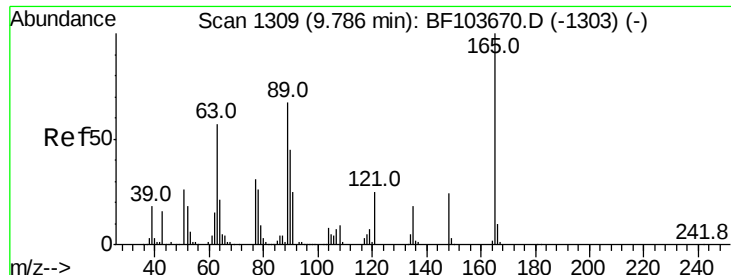


Abundance Ion 152.00 (151.70 to 152.70): E

Ion 151.00 (150.70 to 151.70): E

Ion 153.00 (152.70 to 153.70): E

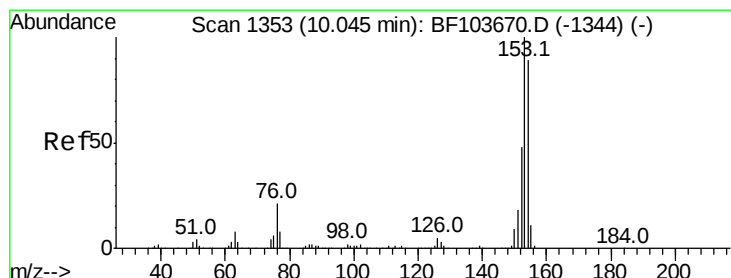
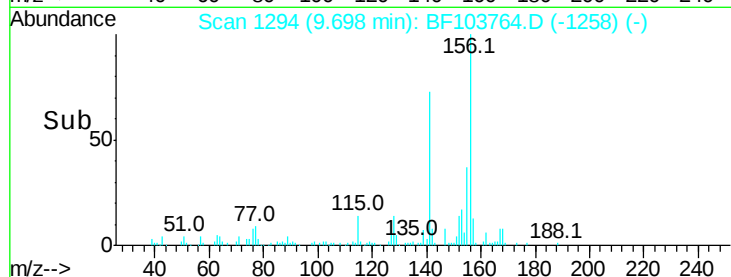
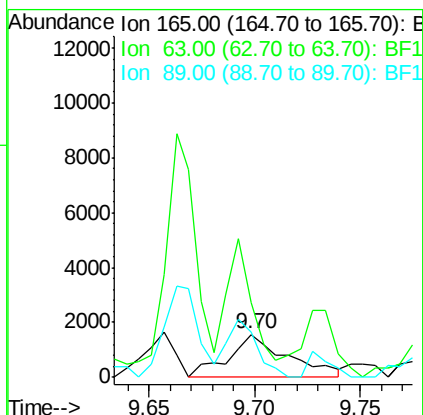
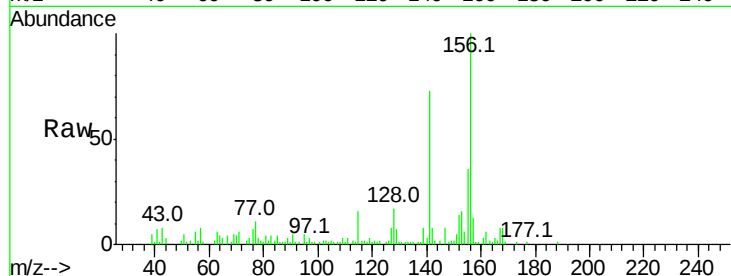




#50  
2,6-Dinitrotoluene  
Concen: 4.700 ng  
RT: 9.70 min Scan# 1294  
Delta R.T. -0.09 min  
Lab File: BF103764.D  
Acq: 19 Mar 2018 19:10

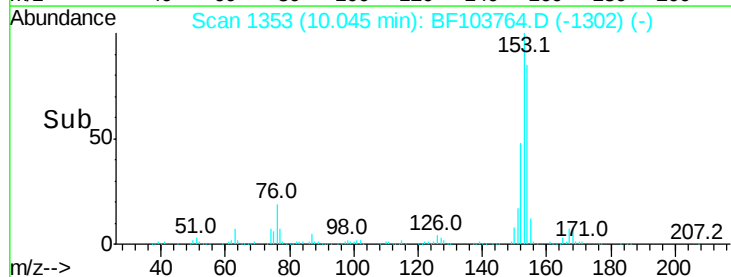
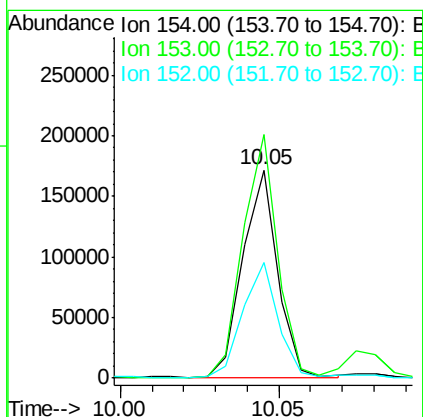
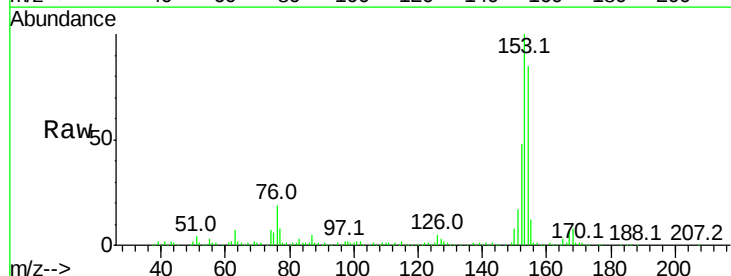
Instrument :  
BNA\_F  
ClientSampleId :

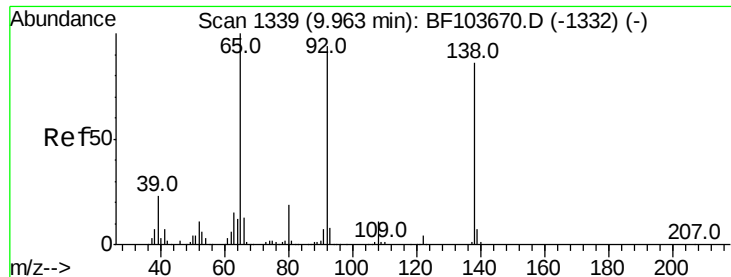
Tot Ion:165 Resp: 3052  
Ion Ratio Lower Upper  
165 100  
63 172.8 44.7 67.1#  
89 105.0 44.0 66.0#



#51  
Acenaphthene  
Concen: 8.026 ng  
RT: 10.05 min Scan# 1353  
Delta R.T. -0.00 min  
Lab File: BF103764.D  
Acq: 19 Mar 2018 19:10

Tgt Ion:154 Resp: 129632  
Ion Ratio Lower Upper  
154 100  
153 117.0 91.2 136.8  
152 55.8 43.8 65.8





#52

3-Nitroaniline

Concen: 3.925 ng

RT: 9.96 min Scan# 1339

Delta R.T. 0.00 min

Lab File: BF103764.D

Acq: 19 Mar 2018 19:10

Instrument :

BNA\_F

ClientSampled :

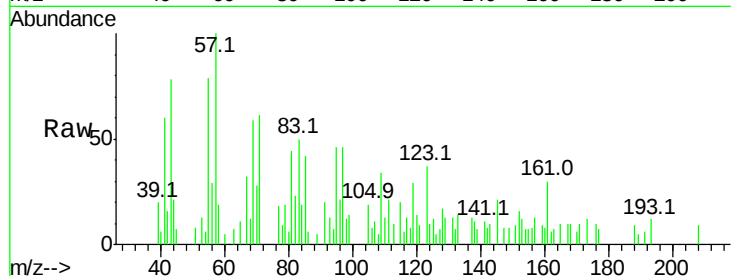
Tot Ion:138 Resp: 565

Ion Ratio Lower Upper

138 100

108 49.9 9.4 14.0#

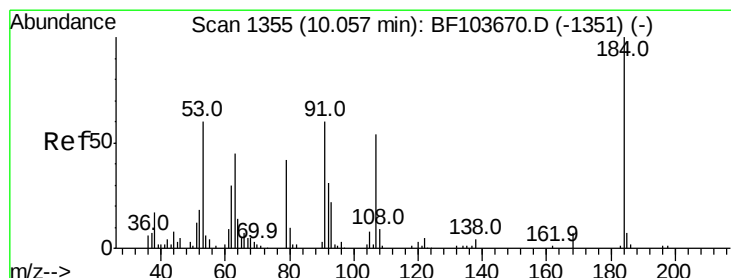
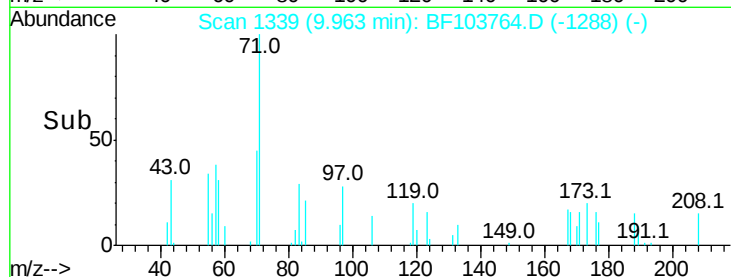
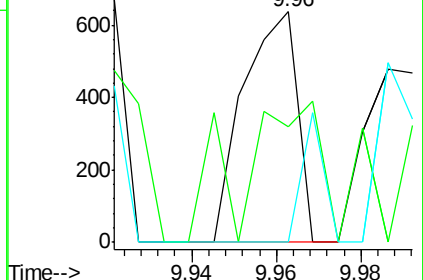
92 0.0 89.4 134.2#



Abundance Ion 138.00 (137.70 to 138.70): E

Ion 108.00 (107.70 to 108.70): E

Ion 92.00 (91.70 to 92.70): BF1



#53

2,4-Dinitrophenol

Concen: 7.108 ng

RT: 10.29 min Scan# 1395

Delta R.T. 0.24 min

Lab File: BF103764.D

Acq: 19 Mar 2018 19:10

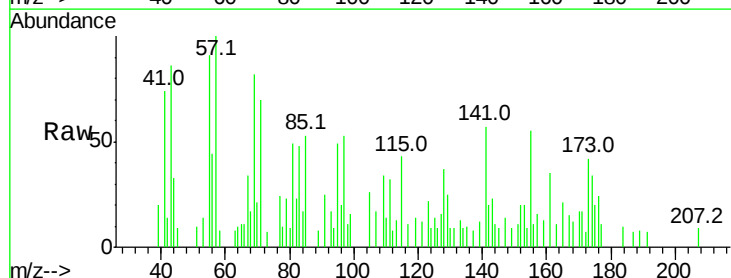
Tgt Ion:184 Resp: 414

Ion Ratio Lower Upper

184 100

63 81.9 54.2 81.2#

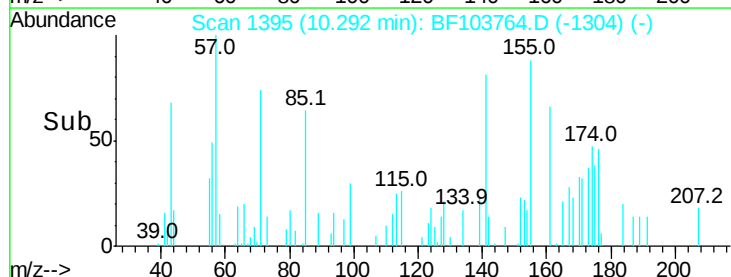
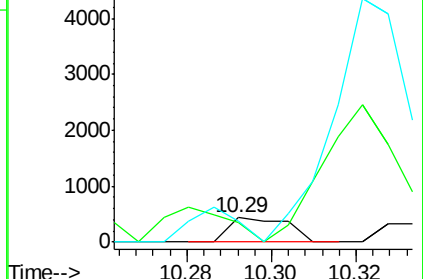
154 84.4 184.0 276.0#

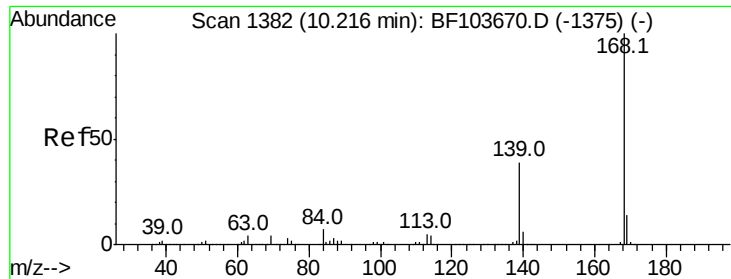


Abundance Ion 184.00 (183.70 to 184.70): E

Ion 63.00 (62.70 to 63.70): BF1

Ion 154.00 (153.70 to 154.70): E





#54

Dibenzenofuran

Concen: 16.817 ng

RT: 10.22 min Scan# 1382

Delta R.T. 0.00 min

Lab File: BF103764.D

Acq: 19 Mar 2018 19:10

Instrument :

BNA\_F

ClientSampleId :

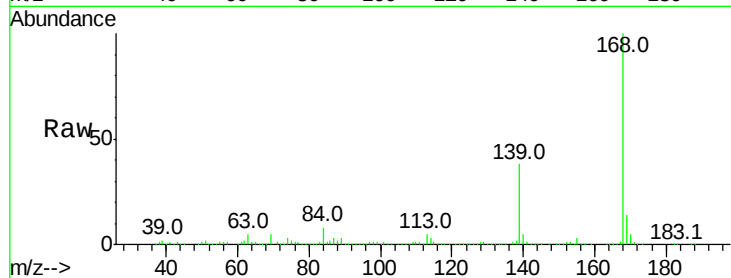
Tot Ion:168 Resp: 387933

Ion Ratio Lower Upper

168 100

139 38.1 30.1 45.1

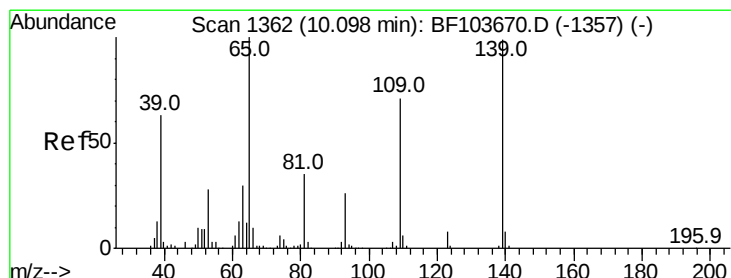
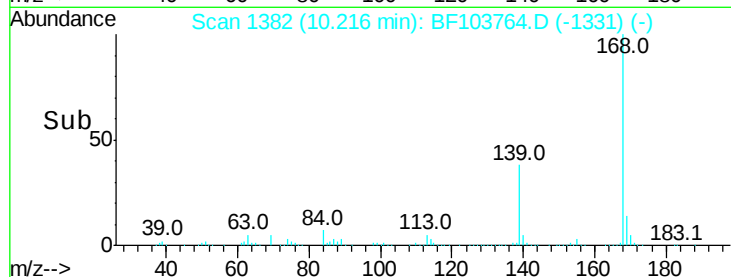
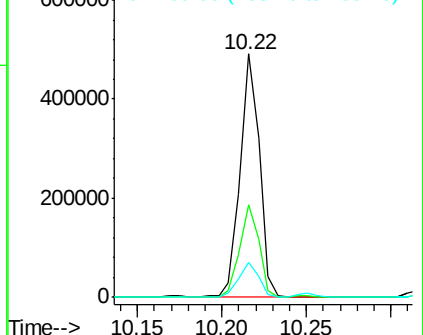
169 14.2 10.9 16.3



Abundance Ion 168.00 (167.70 to 168.70): E

Ion 139.00 (138.70 to 139.70): E

Ion 169.00 (168.70 to 169.70): E



#55

4-Nitrophenol

Concen: 42.440 ng

RT: 10.22 min Scan# 1382

Delta R.T. 0.12 min

Lab File: BF103764.D

Acq: 19 Mar 2018 19:10

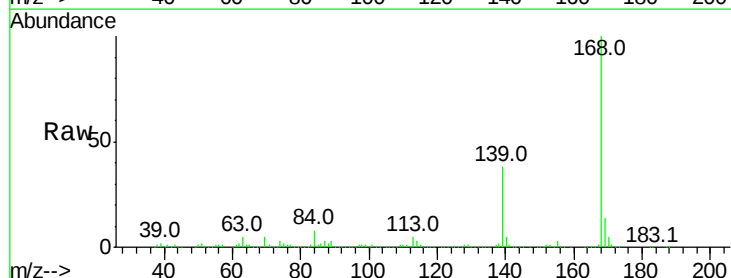
Tgt Ion:139 Resp: 147813

Ion Ratio Lower Upper

139 100

109 1.6 48.4 88.4#

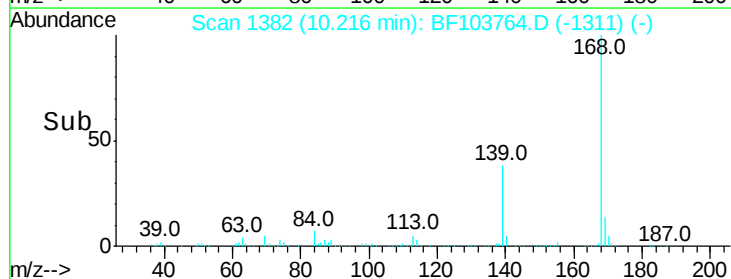
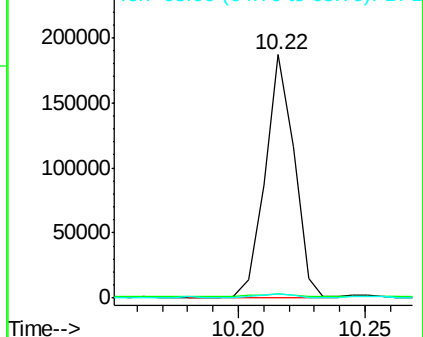
65 1.7 72.6 112.6#

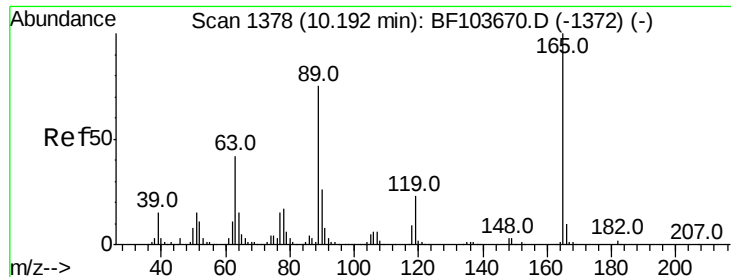


Abundance Ion 139.00 (138.70 to 139.70): E

Ion 109.00 (108.70 to 109.70): E

Ion 65.00 (64.70 to 65.70): BF1

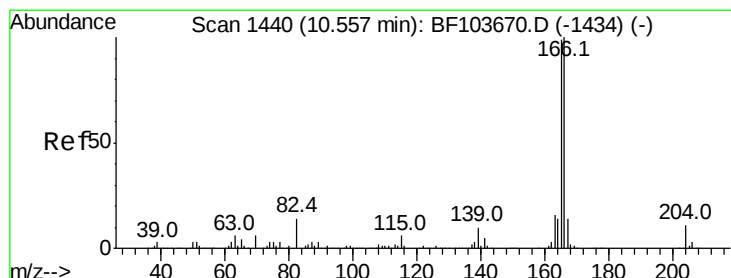
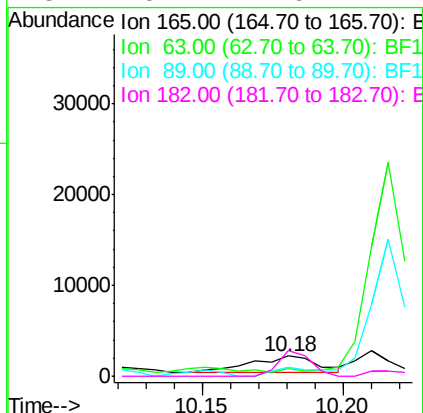
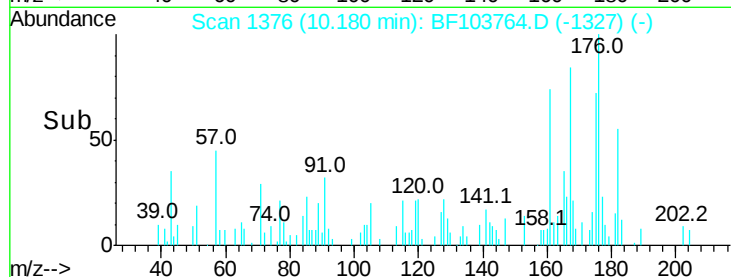
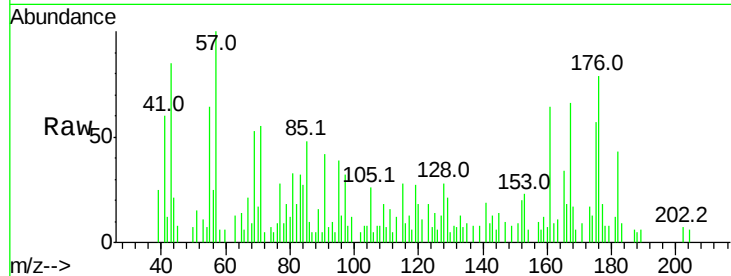




#56  
2,4-Dinitrotoluene  
Concen: 6.718 ng  
RT: 10.18 min Scan# 1376  
Delta R.T. -0.01 min  
Lab File: BF103764.D  
Acq: 19 Mar 2018 19:10

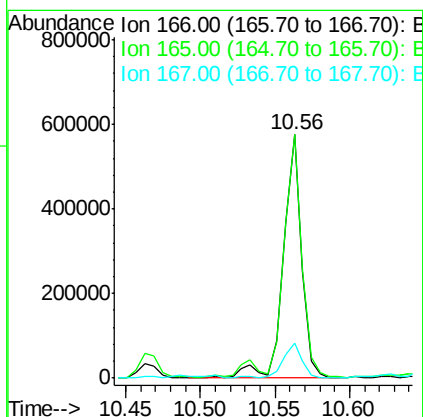
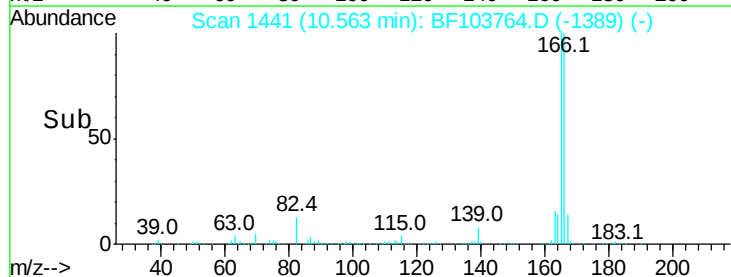
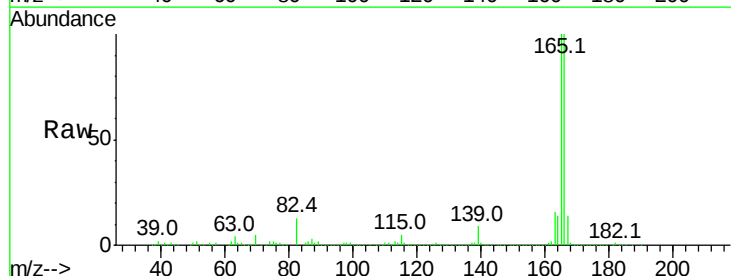
Instrument :  
BNA\_F  
ClientSampleId :

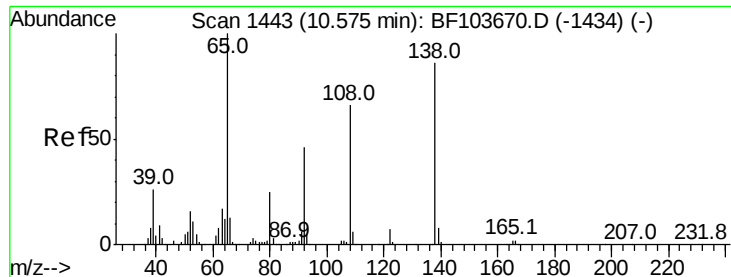
Tot Ion:165 Resp: 2867  
Ion Ratio Lower Upper  
165 100  
63 36.9 36.4 54.6  
89 46.2 57.8 86.6#  
182 126.2 1.6 2.4#



#57  
Fluorene  
Concen: 27.696 ng  
RT: 10.56 min Scan# 1441  
Delta R.T. 0.01 min  
Lab File: BF103764.D  
Acq: 19 Mar 2018 19:10

Tgt Ion:166 Resp: 495776  
Ion Ratio Lower Upper  
166 100  
165 100.2 79.8 119.8  
167 14.4 10.6 16.0

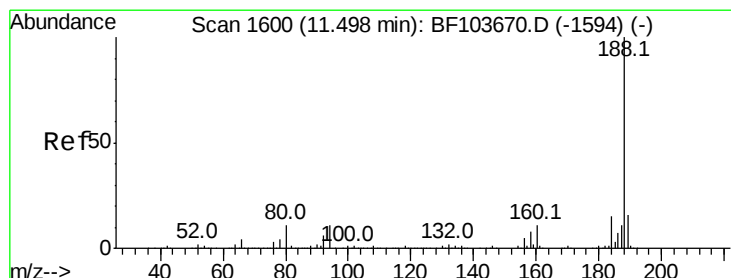
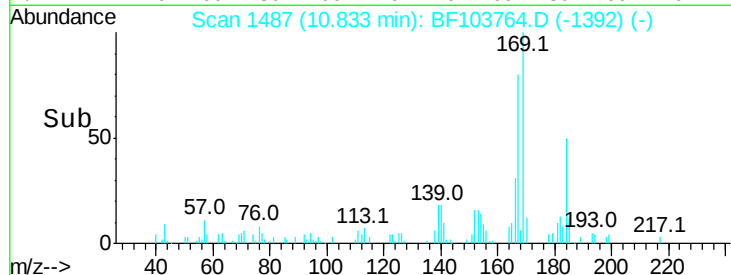
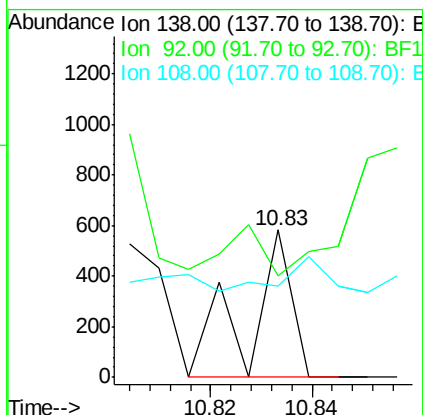
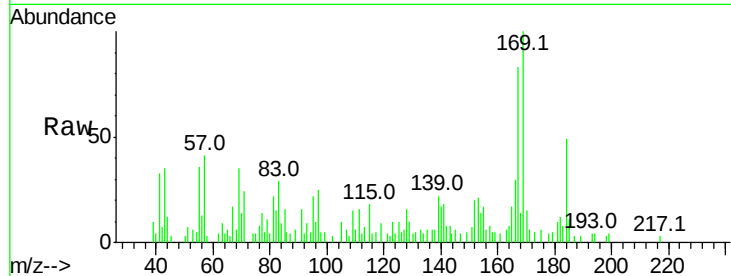




#61  
4-Nitroaniline  
Concen: 3.818 ng  
RT: 10.83 min Scan# 1487  
Delta R.T. 0.26 min  
Lab File: BF103764.D  
Acq: 19 Mar 2018 19:10

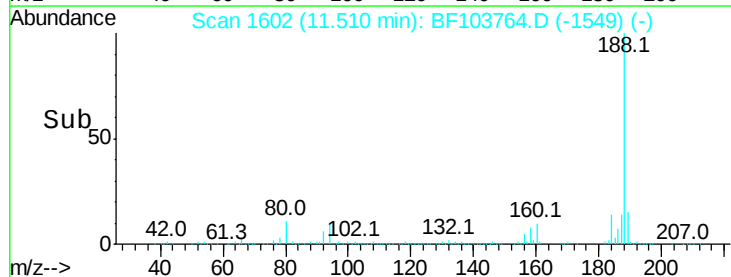
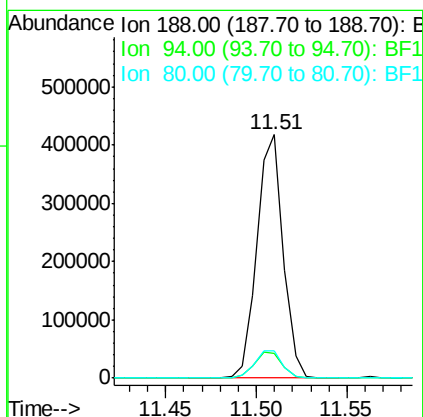
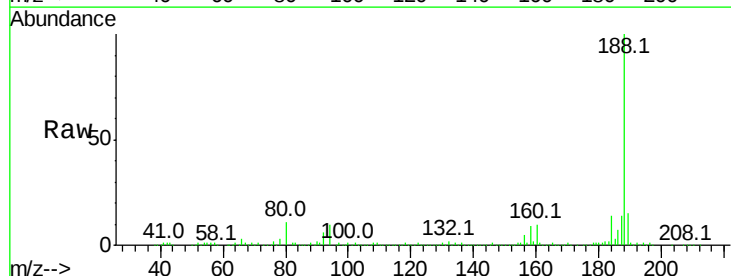
Instrument :  
BNA\_F  
ClientSampled :

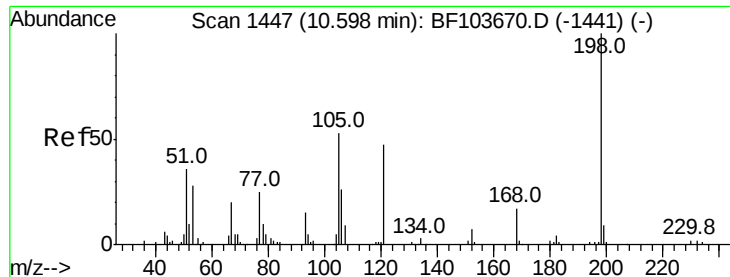
Tot Ion:138 Resp: 338  
Ion Ratio Lower Upper  
138 100  
92 68.7 30.2 70.2  
108 61.9 52.5 92.5



#63  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 11.51 min Scan# 1602  
Delta R.T. 0.01 min  
Lab File: BF103764.D  
Acq: 19 Mar 2018 19:10

Tgt Ion:188 Resp: 419305  
Ion Ratio Lower Upper  
188 100  
94 10.3 8.5 12.7  
80 11.0 9.2 13.8

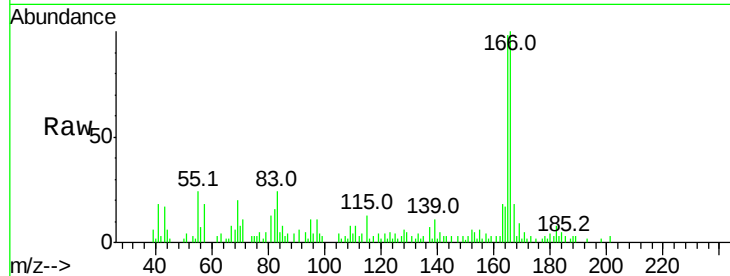




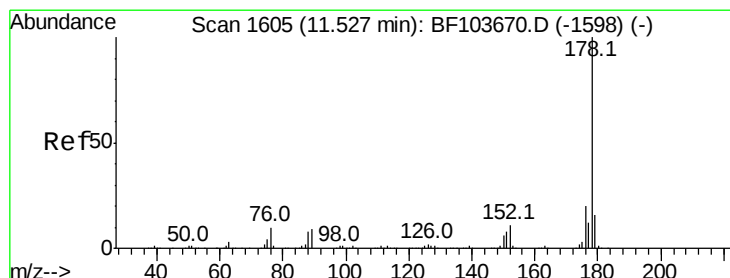
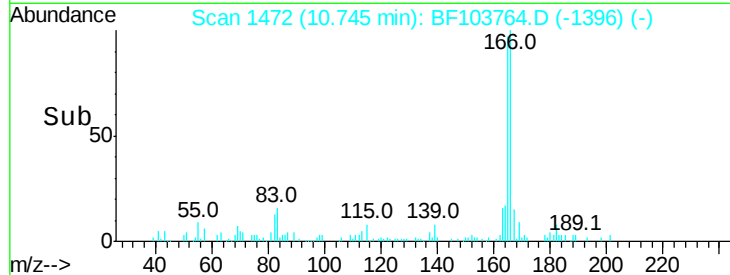
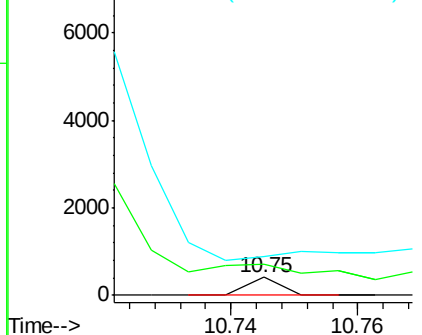
#64  
 4,6-Dinitro-2-methylphenol  
 Concen: 8.219 ng  
 RT: 10.75 min Scan# 1472  
 Delta R.T. 0.15 min  
 Lab File: BF103764.D  
 Acq: 19 Mar 2018 19:10

Instrument :  
 BNA\_F  
 ClientSampleId :

Tot Ion:198 Resp: 145  
 Ion Ratio Lower Upper  
 198 100  
 51 175.9 37.7 77.7#  
 105 215.1 36.3 76.3#

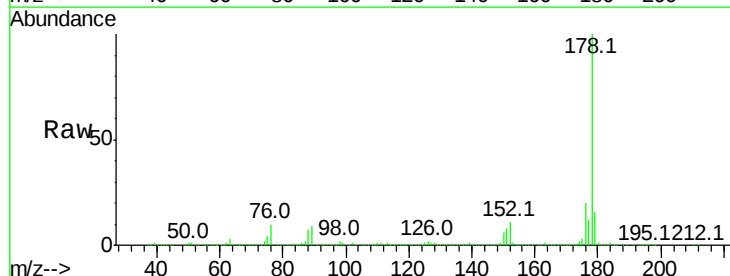


Abundance Ion 198.00 (197.70 to 198.70): E  
 Ion 51.00 (50.70 to 51.70): BF1  
 Ion 105.00 (104.70 to 105.70): E

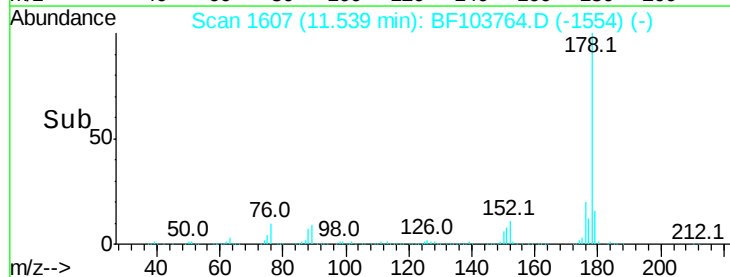
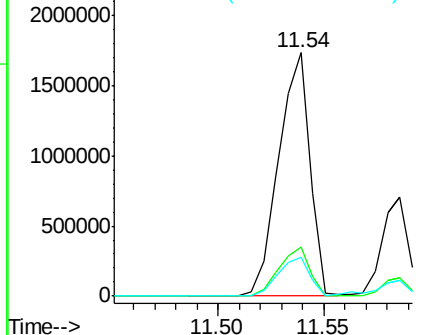


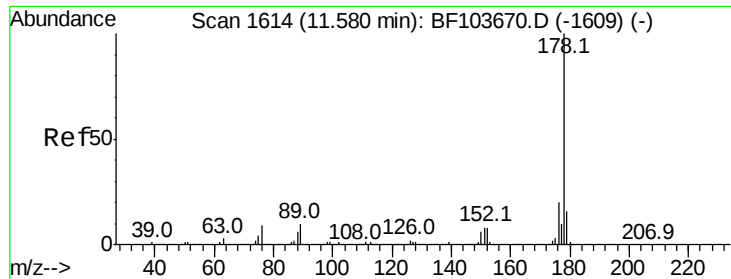
#70  
 Phenanthrene  
 Concen: 78.054 ng  
 RT: 11.54 min Scan# 1607  
 Delta R.T. 0.01 min  
 Lab File: BF103764.D  
 Acq: 19 Mar 2018 19:10

Tgt Ion:178 Resp: 1790328  
 Ion Ratio Lower Upper  
 178 100  
 176 20.2 15.8 23.8  
 179 15.7 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

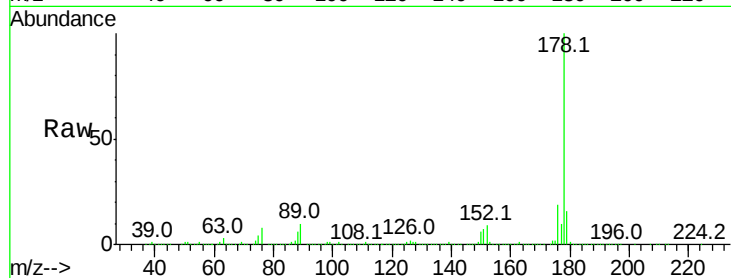




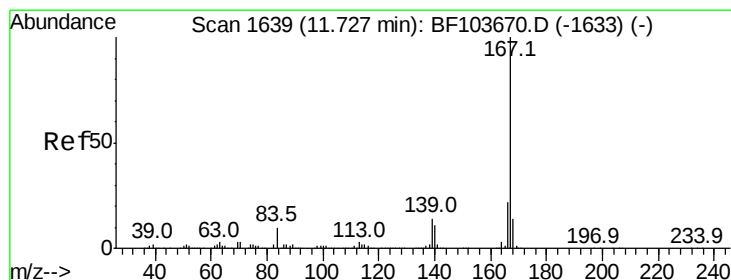
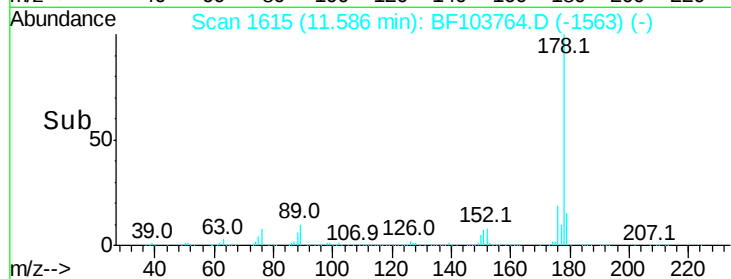
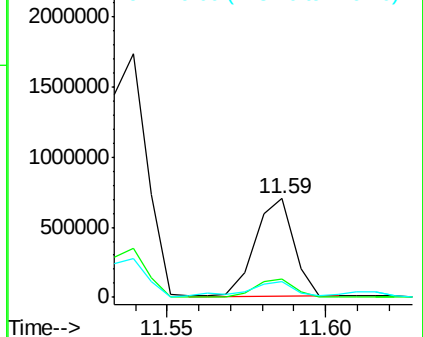
#71  
 Anthracene  
 Concen: 25.551 ng  
 RT: 11.59 min Scan# 1615  
 Delta R.T. 0.01 min  
 Lab File: BF103764.D  
 Acq: 19 Mar 2018 19:10

Instrument :  
 BNA\_F  
 ClientSampleId :

Tot Ion:178 Resp: 595245  
 Ion Ratio Lower Upper  
 178 100  
 176 19.2 15.4 23.2  
 179 15.7 12.6 19.0

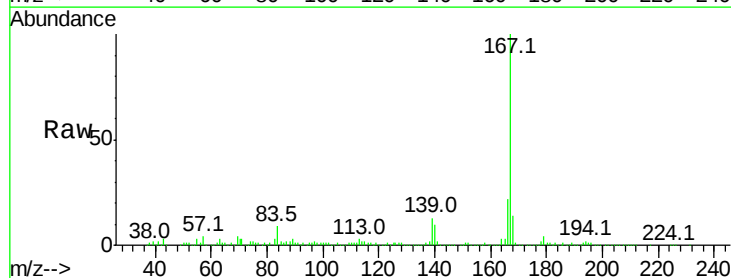


Abundance Ion 178.00 (177.70 to 178.70): E  
 Ion 176.00 (175.70 to 176.70): E  
 Ion 179.00 (178.70 to 179.70): E

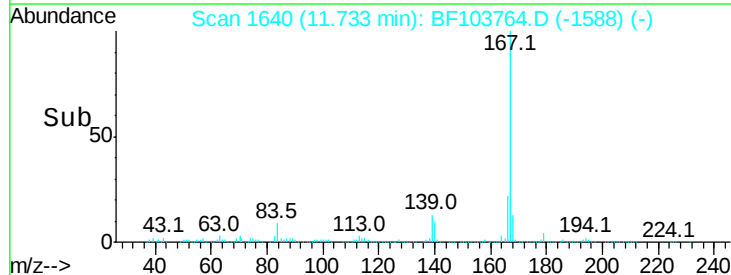
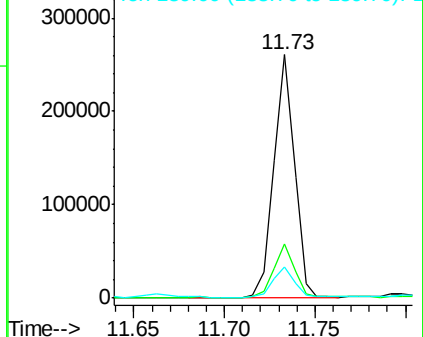


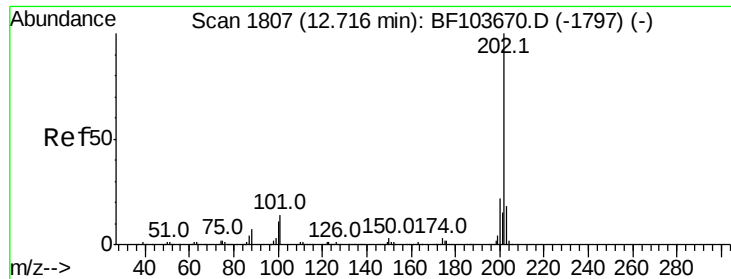
#72  
 Carbazole  
 Concen: 9.109 ng  
 RT: 11.73 min Scan# 1640  
 Delta R.T. 0.01 min  
 Lab File: BF103764.D  
 Acq: 19 Mar 2018 19:10

Tgt Ion:167 Resp: 206249  
 Ion Ratio Lower Upper  
 167 100  
 166 22.1 17.6 26.4  
 139 13.0 10.9 16.3



Abundance Ion 167.00 (166.70 to 167.70): E  
 Ion 166.00 (165.70 to 166.70): E  
 Ion 139.00 (138.70 to 139.70): E

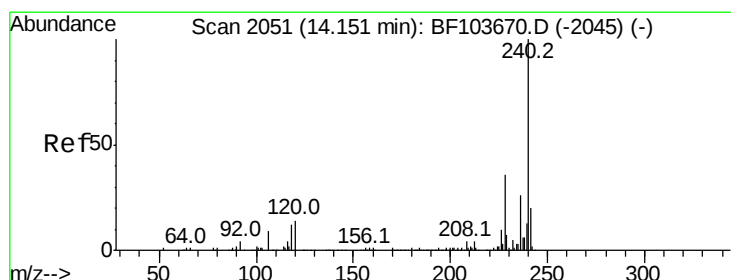
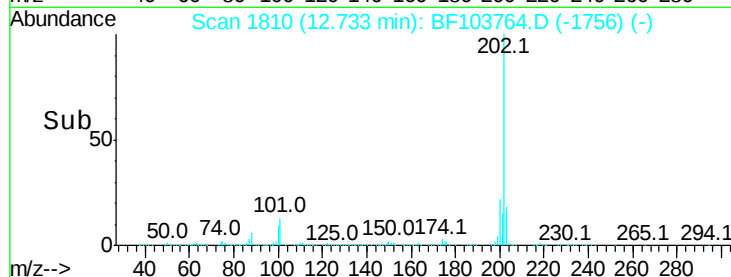
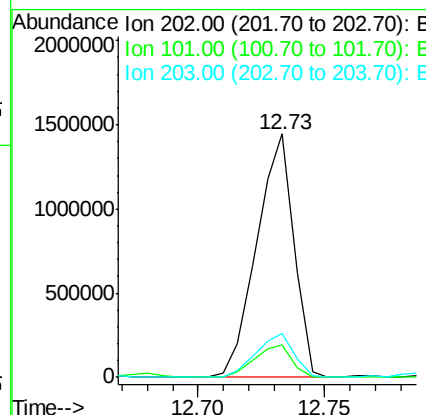
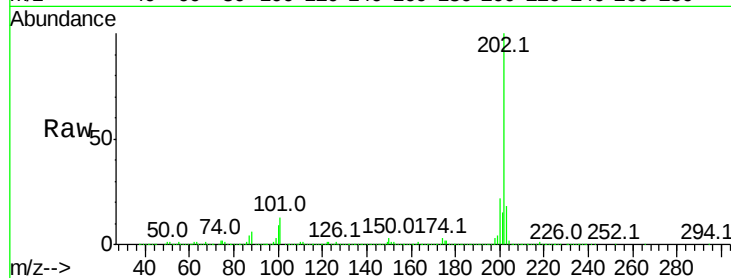




#74  
 Fluoranthene  
 Concen: 62.194 ng  
 RT: 12.73 min Scan# 1810  
 Delta R.T. 0.02 min  
 Lab File: BF103764.D  
 Acq: 19 Mar 2018 19:10

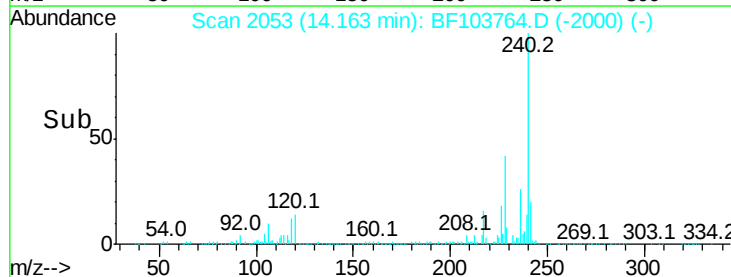
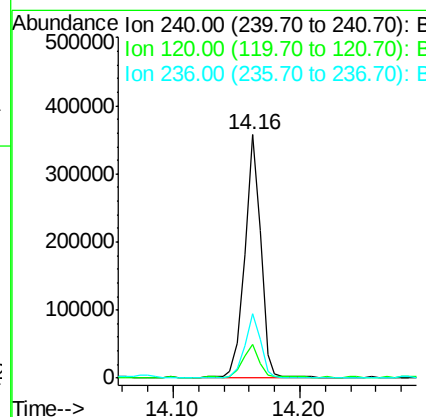
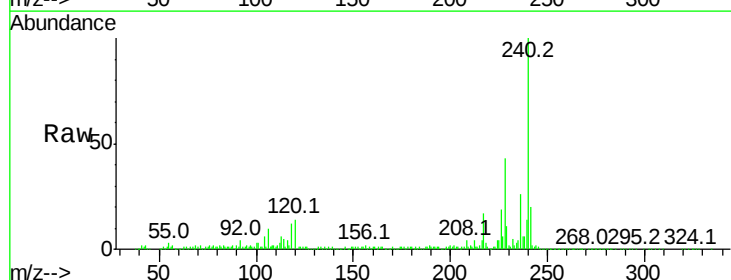
Instrument :  
 BNA\_F  
 ClientSampleId :

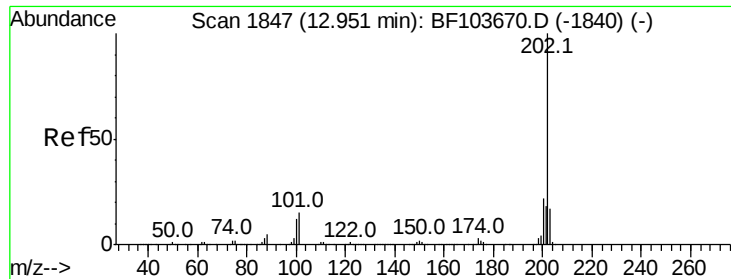
Tot Ion:202 Resp: 1469672  
 Ion Ratio Lower Upper  
 202 100  
 101 13.1 0.0 34.1  
 203 18.2 0.0 38.1



#75  
 Chrysene-d12  
 Concen: 20.000 ng  
 RT: 14.16 min Scan# 2053  
 Delta R.T. 0.01 min  
 Lab File: BF103764.D  
 Acq: 19 Mar 2018 19:10

Tgt Ion:240 Resp: 305089  
 Ion Ratio Lower Upper  
 240 100  
 120 14.0 9.5 14.3  
 236 26.3 20.7 31.1

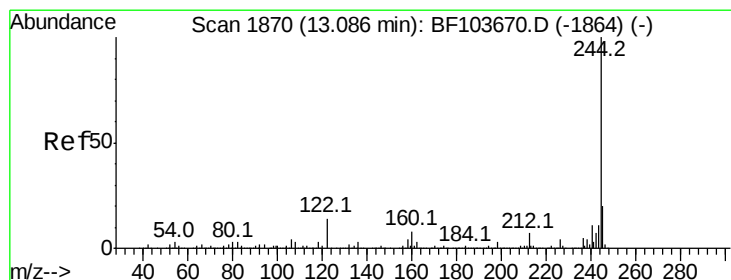
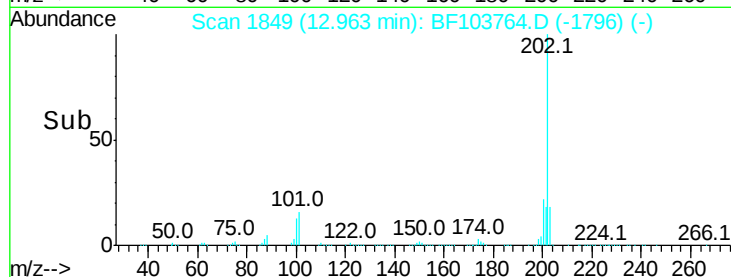
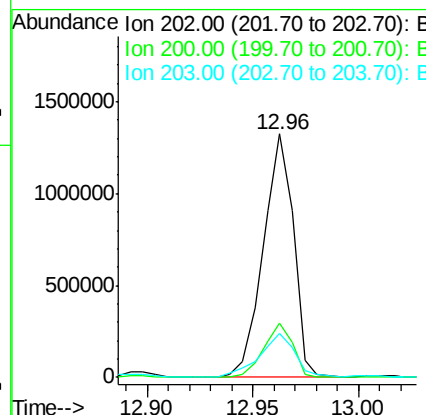
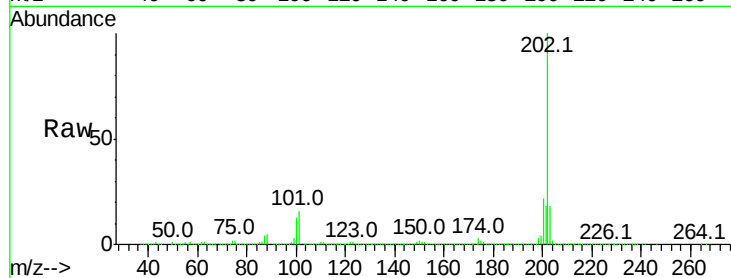




#77  
Pvrene  
Concen: 58.640 ng  
RT: 12.96 min Scan# 1849  
Delta R.T. 0.01 min  
Lab File: BF103764.D  
Acq: 19 Mar 2018 19:10

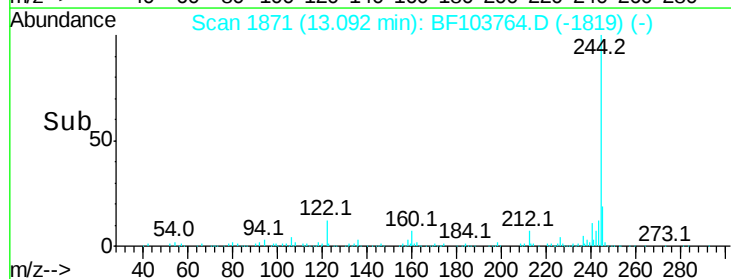
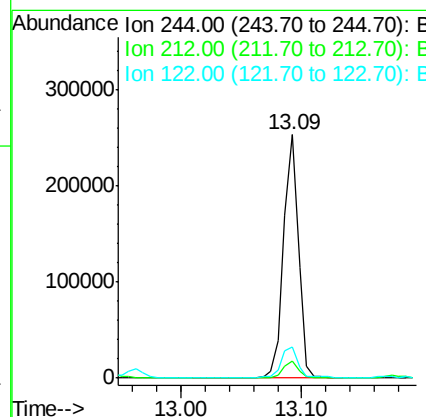
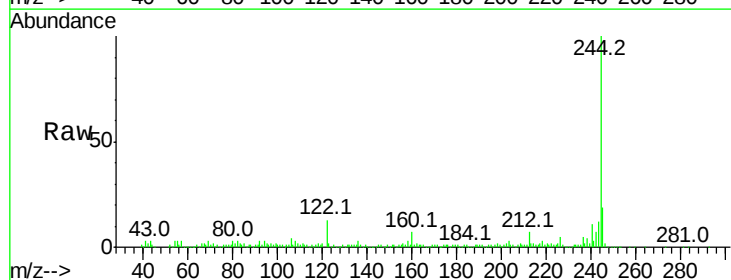
Instrument :  
BNA\_F  
ClientSampleId :

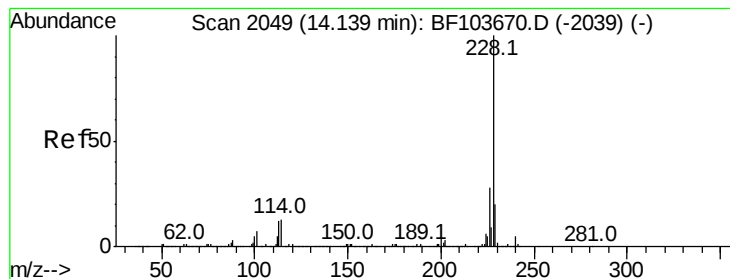
Tot Ion:202 Resp: 1313849  
Ion Ratio Lower Upper  
202 100  
200 22.1 17.4 26.2  
203 18.1 14.3 21.5



#78  
Terphenyl-d14  
Concen: 16.315 ng  
RT: 13.09 min Scan# 1871  
Delta R.T. 0.01 min  
Lab File: BF103764.D  
Acq: 19 Mar 2018 19:10

Tgt Ion:244 Resp: 214448  
Ion Ratio Lower Upper  
244 100  
212 7.1 5.4 8.0  
122 13.0 11.0 16.4





#80

Benzo(a)anthracene

Concen: 28.434 ng

RT: 14.19 min Scan# 2057

Delta R.T. 0.05 min

Lab File: BF103764.D

Acq: 19 Mar 2018 19:10

Instrument :

BNA\_F

ClientSampleId :

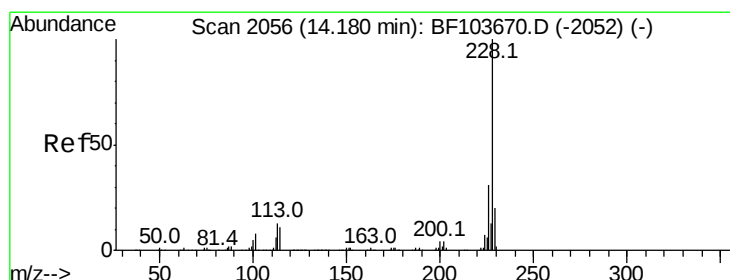
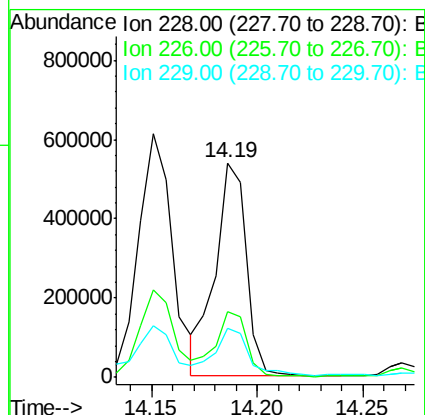
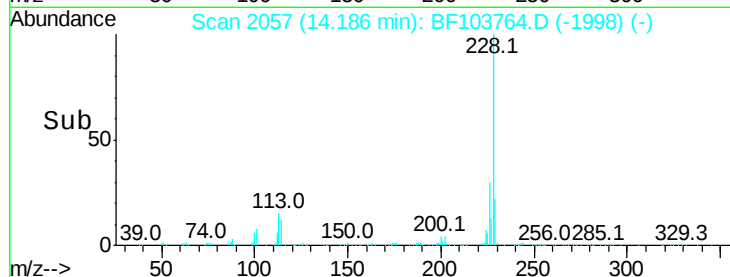
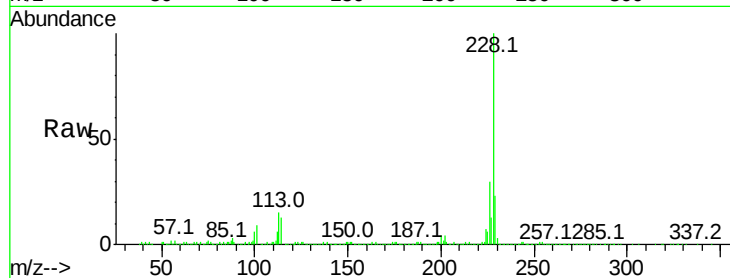
Tot Ion:228 Resp: 549119

Ion Ratio Lower Upper

228 100

226 30.4 22.6 33.8

229 22.8 15.8 23.6



#82

Chrysene

Concen: 29.828 ng

RT: 14.19 min Scan# 2057

Delta R.T. 0.01 min

Lab File: BF103764.D

Acq: 19 Mar 2018 19:10

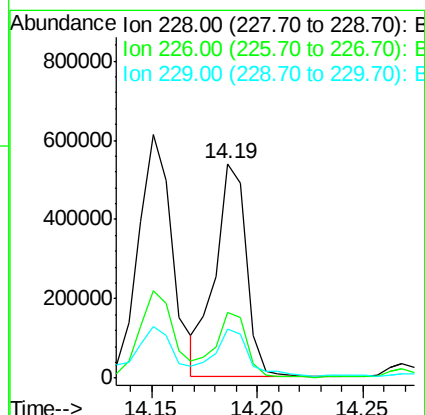
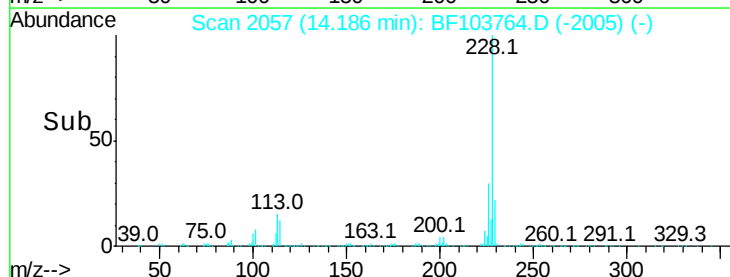
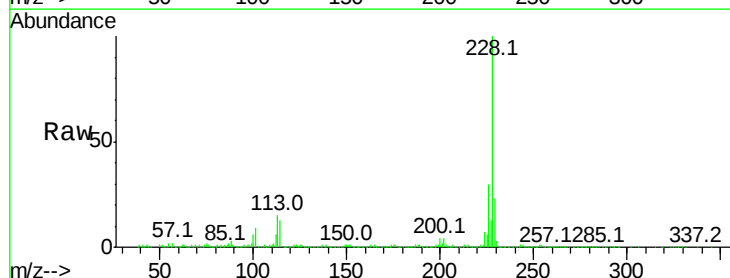
Tgt Ion:228 Resp: 549119

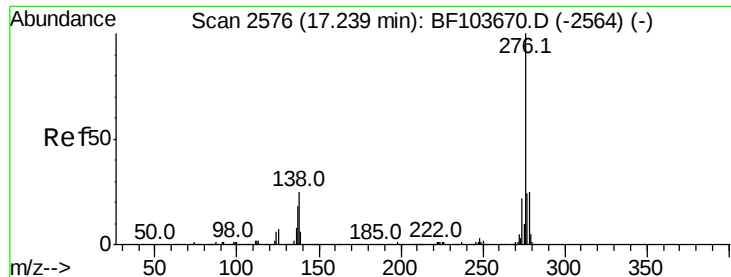
Ion Ratio Lower Upper

228 100

226 30.4 25.0 37.6

229 22.8 16.2 24.4

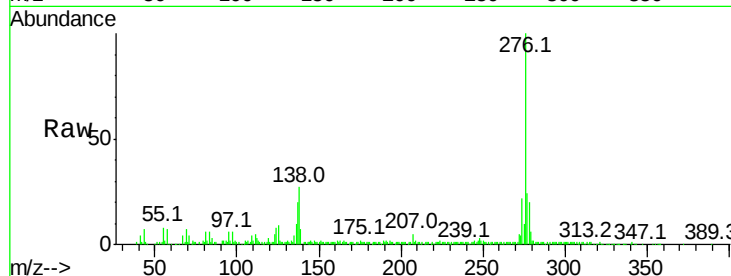




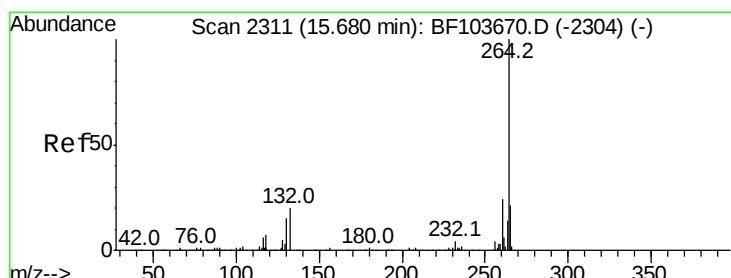
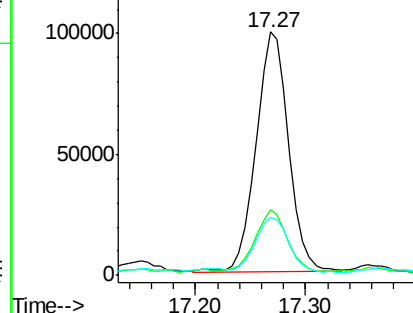
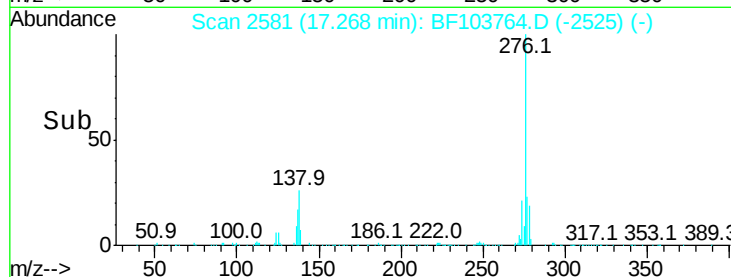
#85  
 Indeno(1,2,3-cd)pyrene  
 Concen: 12.704 ng  
 RT: 17.27 min Scan# 2581  
 Delta R.T. 0.03 min  
 Lab File: BF103764.D  
 Acq: 19 Mar 2018 19:10

Instrument :  
 BNA\_F  
 ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 25.3  | 25.0  | 37.6  |
| 277     | 24.0  | 20.1  | 30.1  |

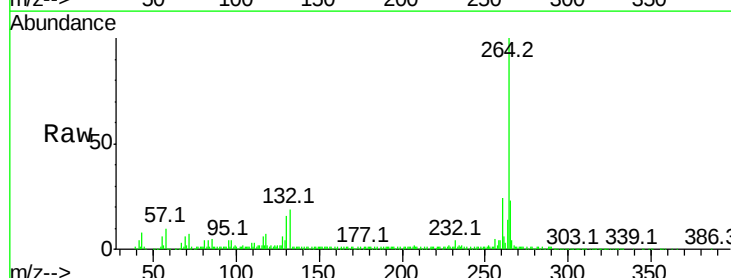


Abundance Ion 276.00 (275.70 to 276.70): E  
 Ion 138.00 (137.70 to 138.70): E  
 Ion 277.00 (276.70 to 277.70): E

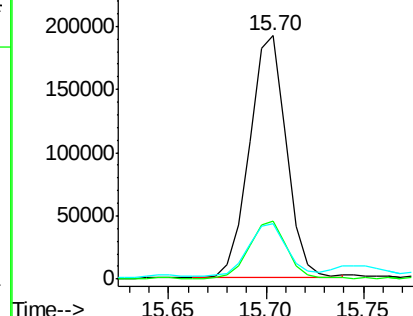
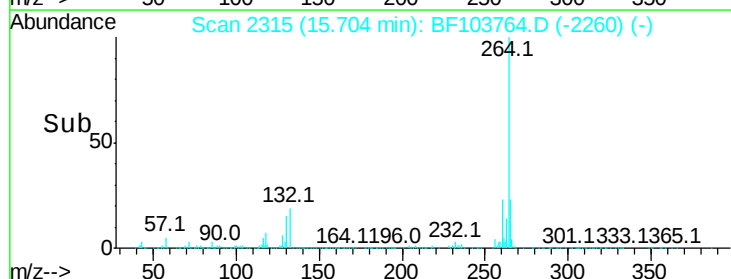


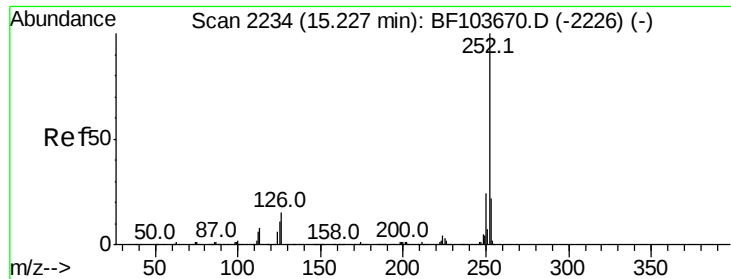
#86  
 Perylene-d12  
 Concen: 20.000 ng  
 RT: 15.70 min Scan# 2315  
 Delta R.T. 0.02 min  
 Lab File: BF103764.D  
 Acq: 19 Mar 2018 19:10

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 23.6  | 19.2  | 28.8  |
| 265     | 23.0  | 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: 47.280 ng

RT: 15.24 min Scan# 2237

Delta R.T. 0.02 min

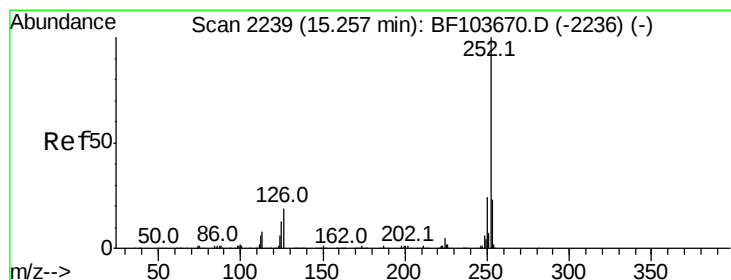
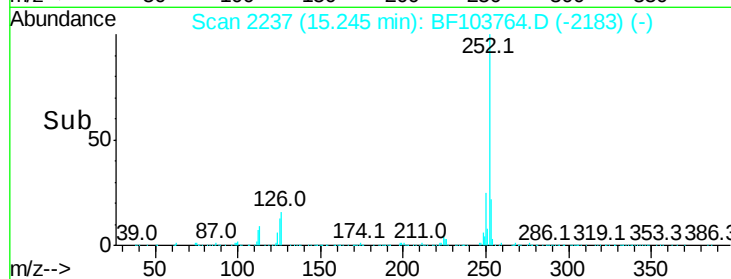
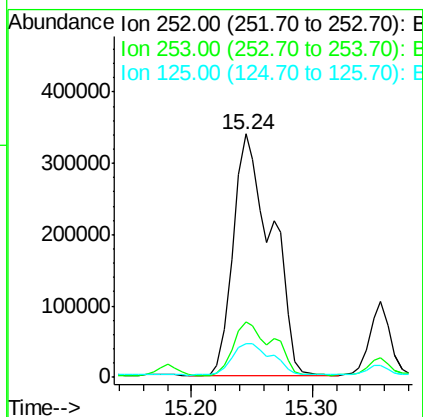
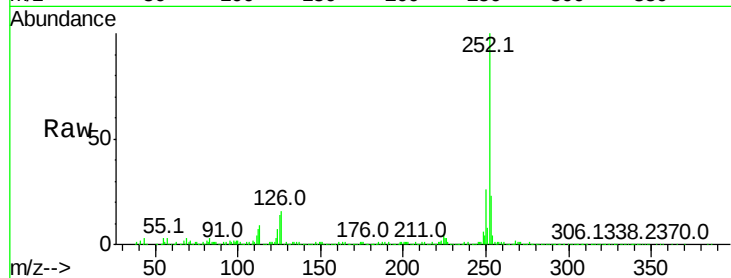
Lab File: BF103764.D

Acq: 19 Mar 2018 19:10

Instrument :  
BNA\_F  
ClientSampleId :

Tot Ion:252 Resp: 751648

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 252 | 100   |       |       |
| 253 | 22.8  | 17.0  | 25.6  |
| 125 | 14.1  | 9.0   | 13.6# |



#88

Benzo(k)fluoranthene

Concen: 49.185 ng

RT: 15.24 min Scan# 2237

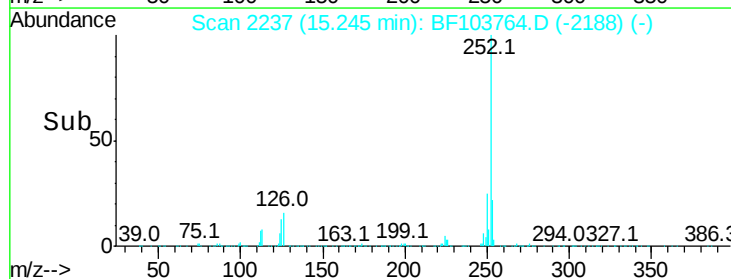
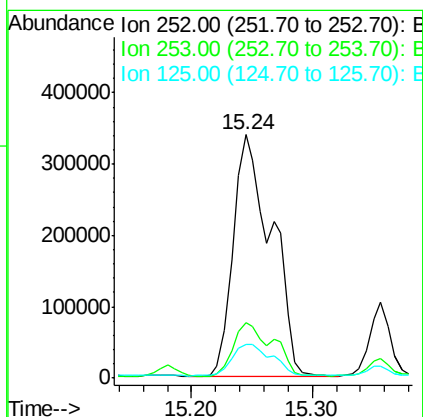
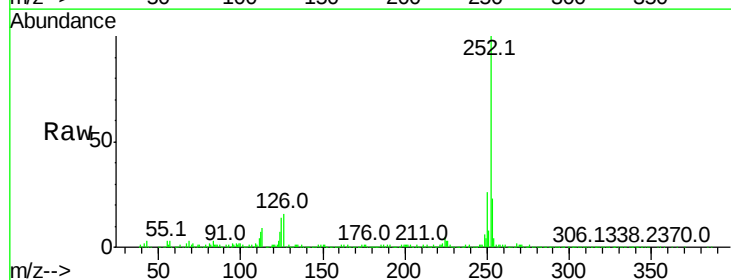
Delta R.T. -0.01 min

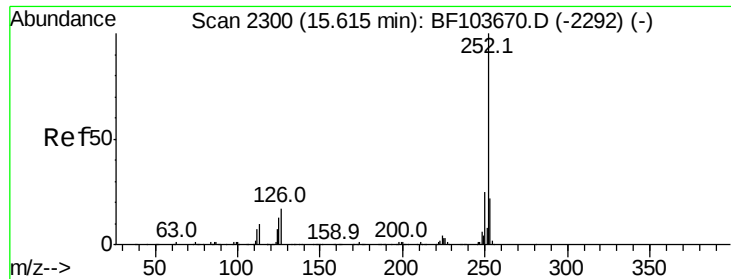
Lab File: BF103764.D

Acq: 19 Mar 2018 19:10

Tgt Ion:252 Resp: 751648

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 252 | 100   |       |       |
| 253 | 22.8  | 17.9  | 26.9  |
| 125 | 14.1  | 10.2  | 15.2  |





#89

Benzo(a)pyrene

Concen: 29.570 ng

RT: 15.63 min Scan# 2303

Delta R.T. 0.02 min

Lab File: BF103764.D

Acq: 19 Mar 2018 19:10

Instrument :

BNA\_F

ClientSampleId :

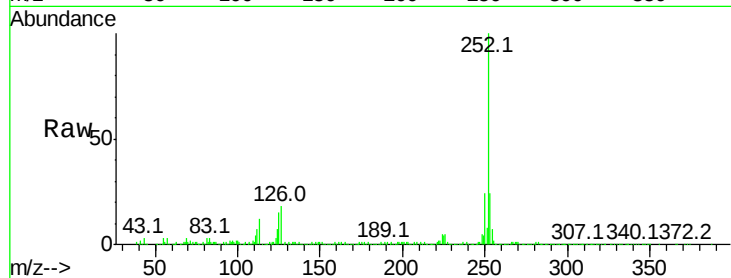
Tot Ion:252 Resp: 426386

Ion Ratio Lower Upper

252 100

253 23.9 17.1 25.7

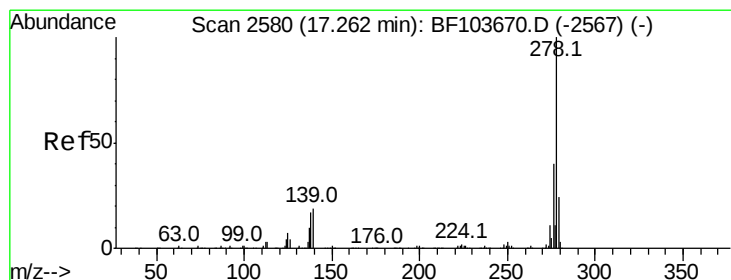
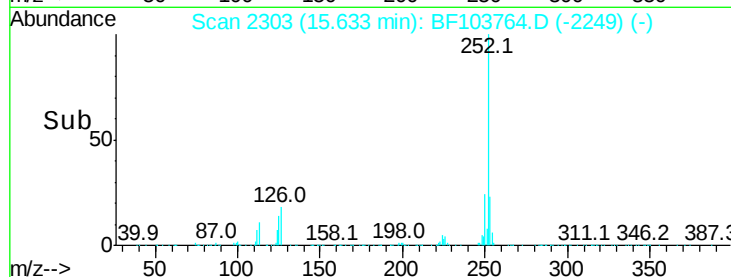
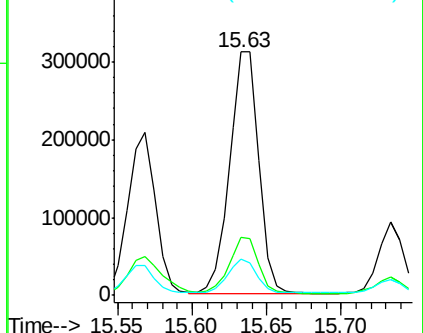
125 14.9 9.8 14.6#



Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E



#90

Dibenzo(a,h)anthracene

Concen: 4.533 ng

RT: 17.28 min Scan# 2583

Delta R.T. 0.02 min

Lab File: BF103764.D

Acq: 19 Mar 2018 19:10

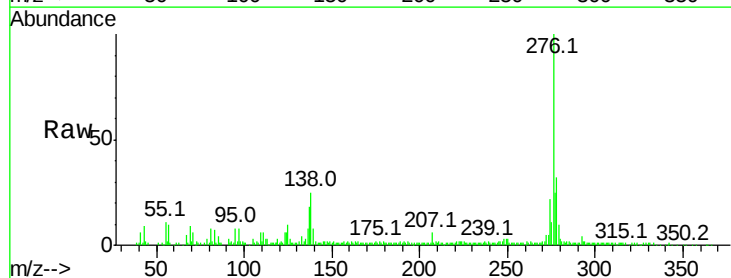
Tgt Ion:278 Resp: 56602

Ion Ratio Lower Upper

278 100

139 26.0 15.9 23.9#

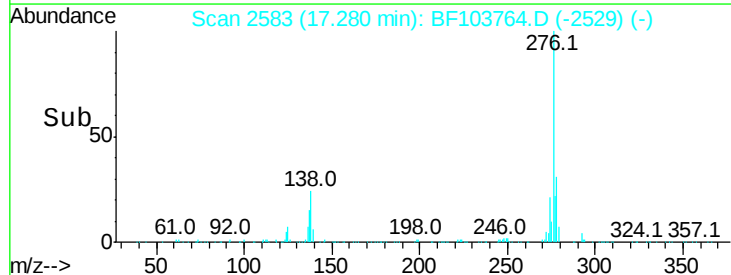
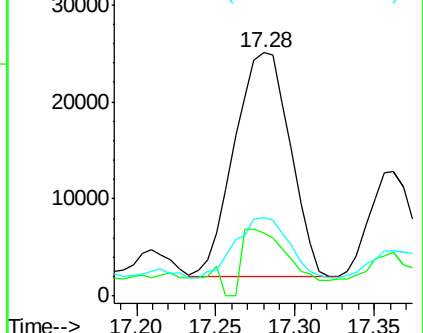
279 32.0 19.0 28.4#

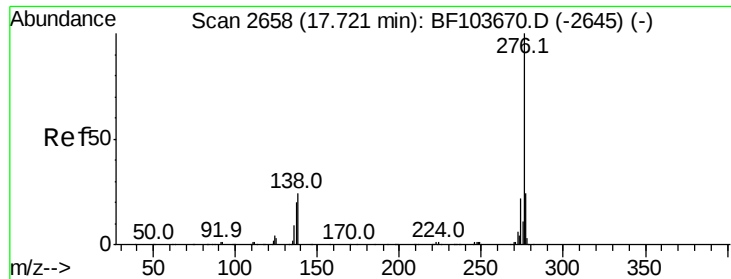


Abundance Ion 278.00 (277.70 to 278.70): E

Ion 139.00 (138.70 to 139.70): E

Ion 279.00 (278.70 to 279.70): E





#91

Benzo(a,h,i)perylene

Concen: 15.197 ng

RT: 17.75 min Scan# 2663

Delta R.T. 0.03 min

Lab File: BF103764.D

Acq: 19 Mar 2018 19:10

Instrument :

BNA\_F

ClientSampleId :

Tot Ion:276 Resp: 184596

Ion Ratio Lower Upper

276 100

277 23.5 17.9 26.9

138 27.7 21.8 32.8

