

Data Path : U:\HPCHEM1\BNA F\DATA\BF013118\  
 Data File : BF102666.D  
 Acq On : 31 Jan 2018 20:30  
 Operator : SJ/JU  
 Sample : J1015-26 2X  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :

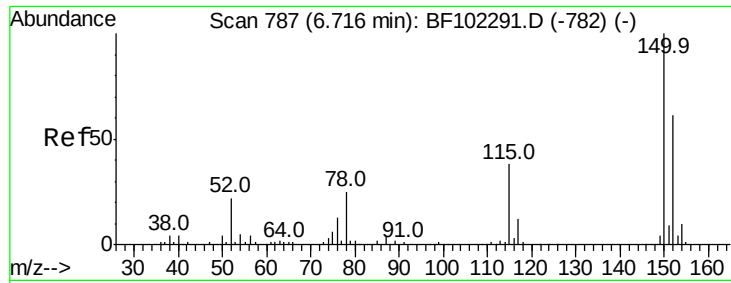
Quant Time: Feb 01 00:02:08 2018  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF012218.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Jan 31 18:38:00 2018  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.70  | 152  | 159650   | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 7.99  | 136  | 667581   | 20.00 | ng    | 0.00     |
| 38) Acenaphthene-d10      | 9.73  | 164  | 282476   | 20.00 | ng    | 0.00     |
| 63) Phenanthrene-d10      | 11.22 | 188  | 403717   | 20.00 | ng    | 0.00     |
| 75) Chrysene-d12          | 13.86 | 240  | 299207   | 20.00 | ng    | 0.00     |
| 86) Perylene-d12          | 15.29 | 264  | 237728   | 20.00 | ng    | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|-------|------|----------|-------|-------|----------|
| 5) 2-Fluorophenol           | 5.31  | 112  | 540598   | 51.34 | ng    | 0.00     |
| 7) Phenol-d6                | 6.35  | 99   | 643659   | 50.71 | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 7.27  | 82   | 384676   | 33.11 | ng    | -0.01    |
| 41) 2,4,6-Tribromophenol    | 10.53 | 330  | 107804   | 38.52 | ng    | 0.00     |
| 44) 2-Fluorobiphenyl        | 9.06  | 172  | 685492   | 35.68 | ng    | 0.00     |
| 78) Terphenyl-d14           | 12.80 | 244  | 442591   | 33.35 | ng    | 0.00     |

| Target Compounds               | R.T.  | QIon | Response | Conc   | Units | Qvalue |
|--------------------------------|-------|------|----------|--------|-------|--------|
| 19) n-Nitroso-di-n-propylamine | 7.27  | 70   | 52191    | 6.718  | ng    | # 77   |
| 25) Isophorone                 | 7.27  | 82   | 384533   | 18.568 | ng    | # 64   |
| 49) Dimethylphthalate          | 9.46  | 163  | 97773    | 4.188  | ng    | # 99   |
| 70) Phenanthrene               | 11.25 | 178  | 132441   | 5.630  | ng    | 97     |
| 71) Anthracene                 | 11.30 | 178  | 50951    | 2.122  | ng    | 97     |
| 74) Fluoranthene               | 12.43 | 202  | 327245   | 13.641 | ng    | 99     |
| 77) Pyrene                     | 12.66 | 202  | 319373   | 13.806 | ng    | 99     |
| 80) Benzo(a)anthracene         | 13.85 | 228  | 186144   | 10.105 | ng    | 97     |
| 82) Chrysene                   | 13.89 | 228  | 167026   | 8.929  | ng    | 97     |
| 85) Indeno(1,2,3-cd)pyrene     | 16.69 | 276  | 61556    | 3.984  | ng    | 98     |
| 87) Benzo(b)fluoranthene       | 14.89 | 252  | 245876   | 15.957 | ng    | # 84   |
| 88) Benzo(k)fluoranthene       | 14.89 | 252  | 245765   | 16.882 | ng    | # 87   |
| 89) Benzo(a)pyrene             | 15.23 | 252  | 126015   | 9.068  | ng    | # 87   |
| 91) Benzo(a,h,i)perylene       | 17.12 | 276  | 59897    | 5.389  | ng    | 92     |

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

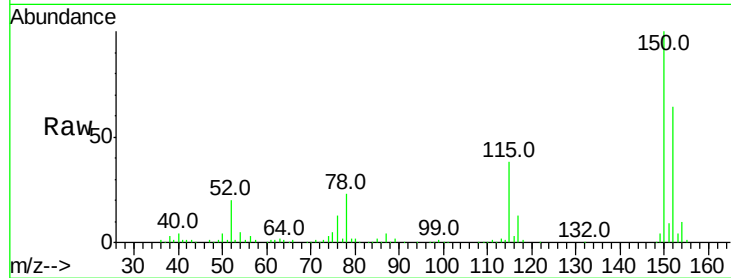


#1

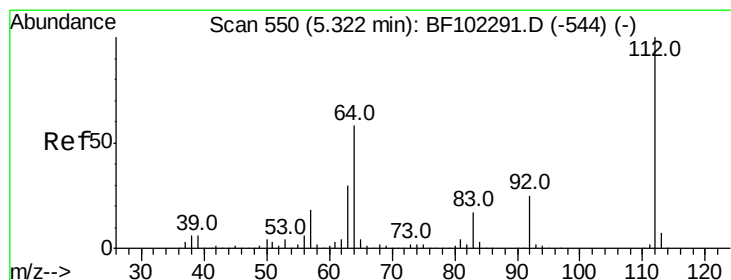
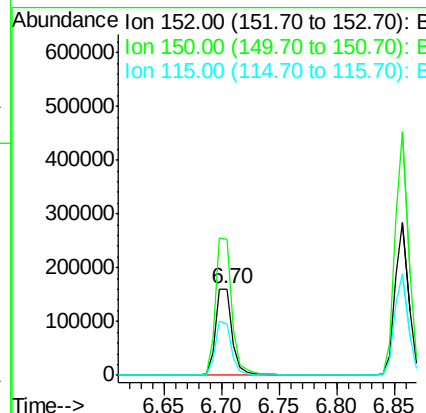
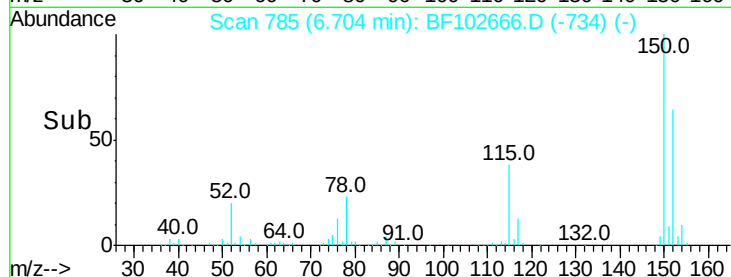
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.70 min Scan# 785  
Delta R.T. 0.00 min  
Lab File: BF102666.D  
Acq: 31 Jan 2018 20:30

Instrument :  
BNA\_F  
ClientSampled :

Tot Ion:152 Resp: 159650  
Ion Ratio Lower Upper  
152 100  
150 156.7 124.6 186.8  
115 59.5 50.1 75.1



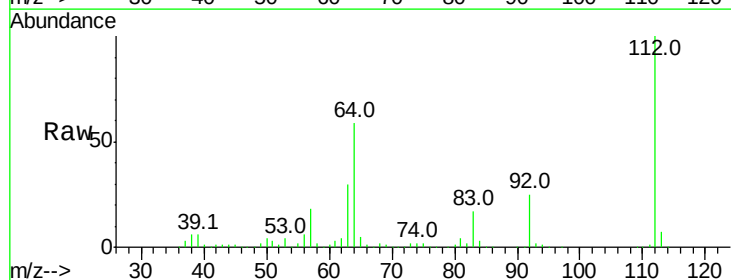
Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 115.00 (114.70 to 115.70): E



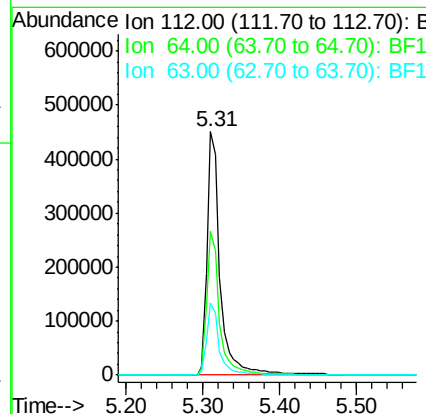
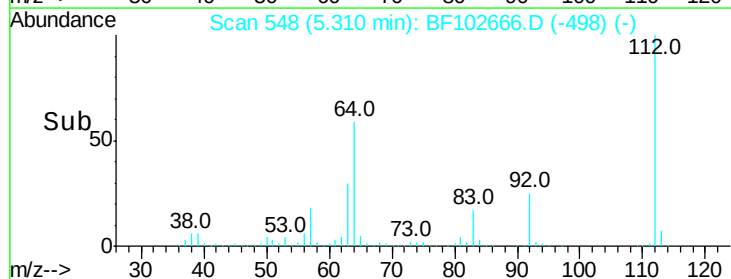
#5

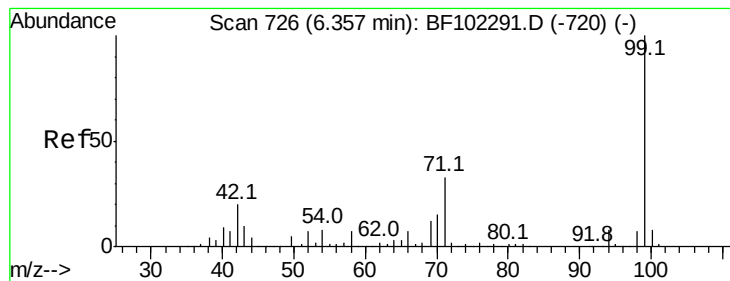
2-Fluorophenol  
Concen: 51.343 ng  
RT: 5.31 min Scan# 548  
Delta R.T. -0.01 min  
Lab File: BF102666.D  
Acq: 31 Jan 2018 20:30

Tgt Ion:112 Resp: 540598  
Ion Ratio Lower Upper  
112 100  
64 59.0 47.9 71.9  
63 29.7 23.7 35.5



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





#7

Phenol-d6

Concen: 50.706 ng

RT: 6.35 min Scan# 725

Delta R.T. -0.01 min

Lab File: BF102666.D

Acq: 31 Jan 2018 20:30

Instrument :

BNA\_F

ClientSampleId :

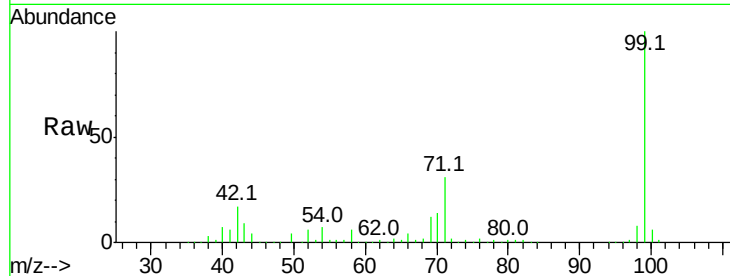
Tot Ion: 99 Resp: 643659

Ion Ratio Lower Upper

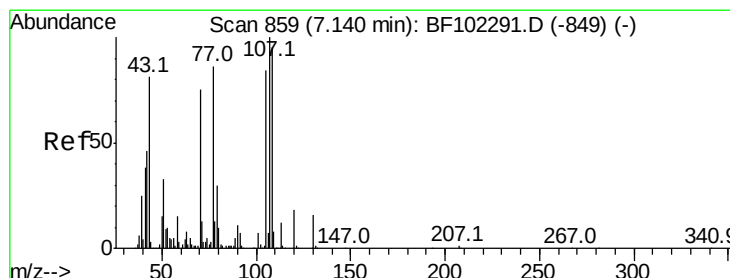
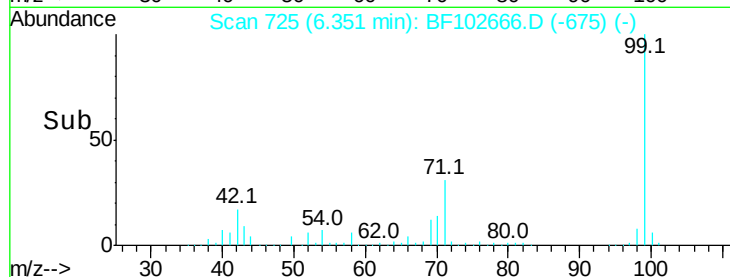
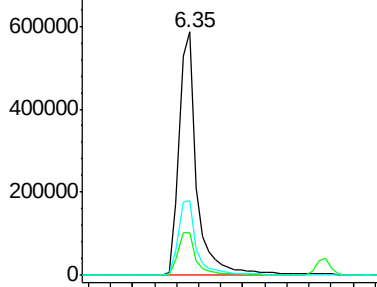
99 100

42 17.4 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



#19

n-Nitroso-di-n-propylamine

Concen: 6.718 ng

RT: 7.27 min Scan# 881

Delta R.T. 0.14 min

Lab File: BF102666.D

Acq: 31 Jan 2018 20:30

Tgt Ion: 70 Resp: 52191

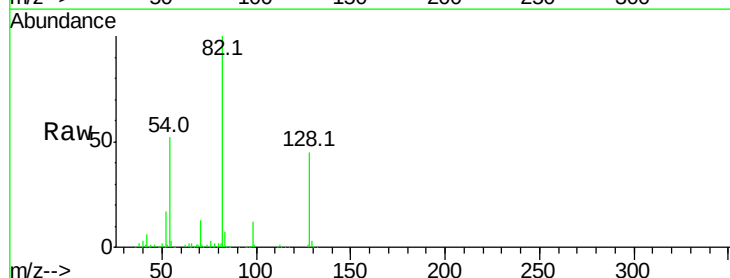
Ion Ratio Lower Upper

70 100

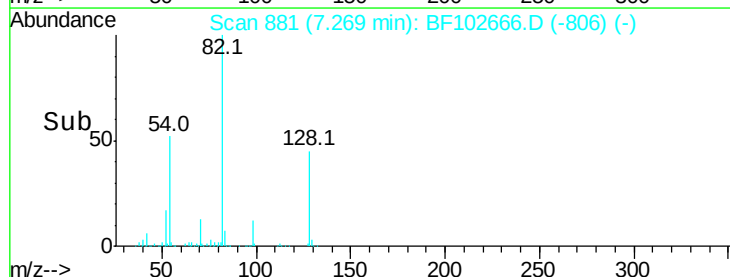
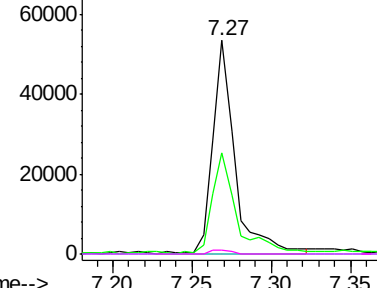
42 47.4 47.5 71.3#

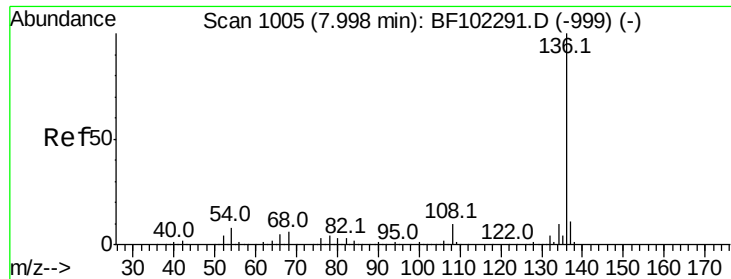
101 0.0 7.4 11.2#

130 1.9 16.6 25.0#



Abundance Ion 70.00 (69.70 to 70.70): BF1  
Ion 42.00 (41.70 to 42.70): BF1  
Ion 101.00 (100.70 to 101.70): BF1  
Ion 130.00 (129.70 to 130.70): BF1





#21

Naphthalene-d8

Concen: 20.000 ng

RT: 7.99 min Scan# 1003

Delta R.T. 0.00 min

Lab File: BF102666.D

Acq: 31 Jan 2018 20:30

Instrument :

BNA\_F

ClientSampleId :

Tot Ion:136 Resp: 667581

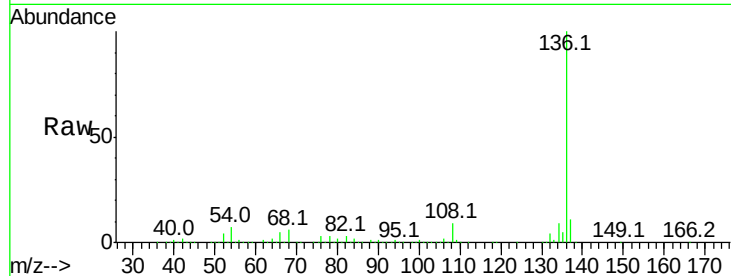
Ion Ratio Lower Upper

136 100

137 11.1 8.9 13.3

54 7.4 6.6 9.8

68 5.7 5.0 7.4

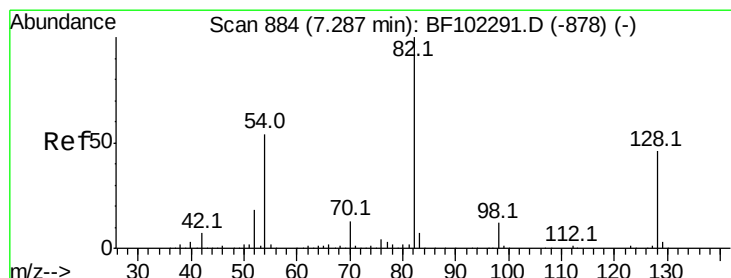
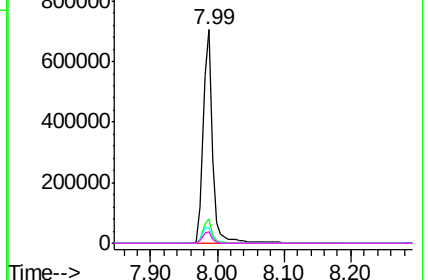
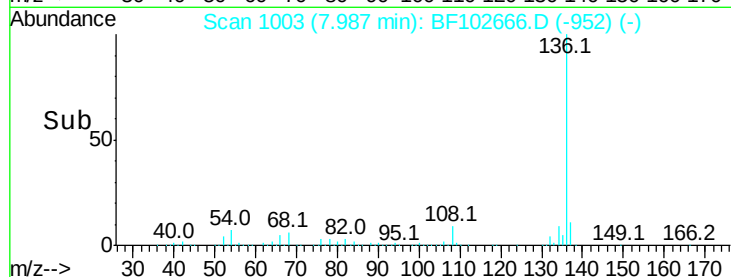


Abundance Ion 136.00 (135.70 to 136.70): E

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: 33.114 ng

RT: 7.27 min Scan# 881

Delta R.T. -0.01 min

Lab File: BF102666.D

Acq: 31 Jan 2018 20:30

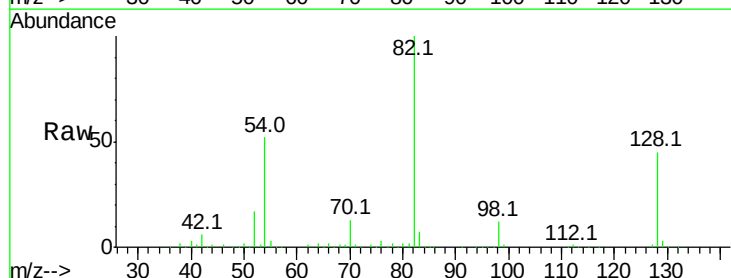
Tgt Ion: 82 Resp: 384676

Ion Ratio Lower Upper

82 100

128 45.2 36.1 54.1

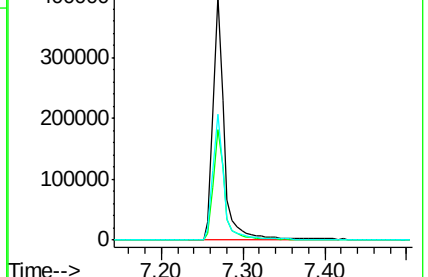
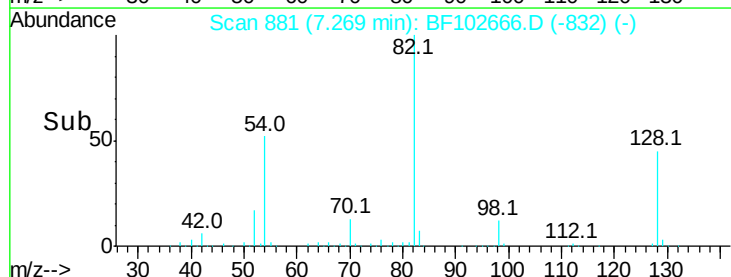
54 52.0 41.4 62.2

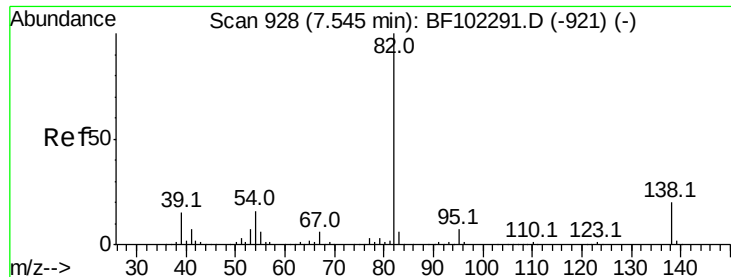


Abundance Ion 82.00 (81.70 to 82.70): BF1

Ion 128.00 (127.70 to 128.70): E

Ion 54.00 (53.70 to 54.70): BF1





#25

Isophorone

Concen: 18.568 ng

RT: 7.27 min Scan# 881

Delta R.T. -0.26 min

Lab File: BF102666.D

Acq: 31 Jan 2018 20:30

Instrument :

BNA\_F

ClientSampled :

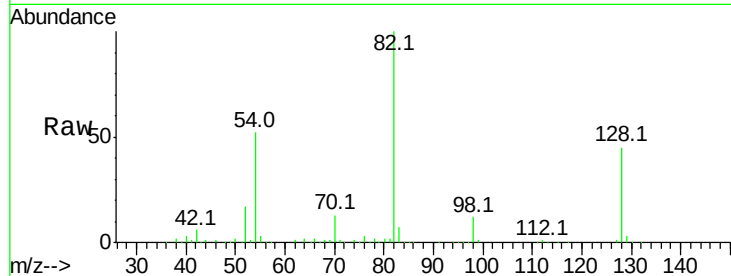
Tot Ion: 82 Resp: 384533

Ion Ratio Lower Upper

82 100

95 0.1 5.2 7.8#

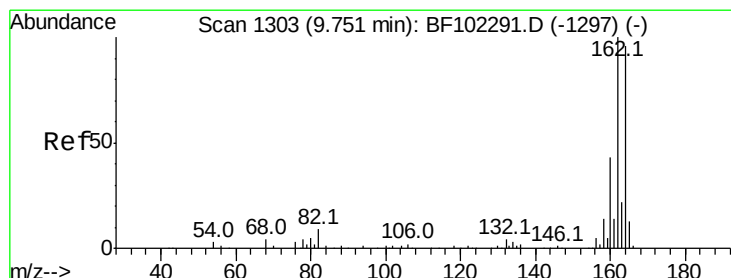
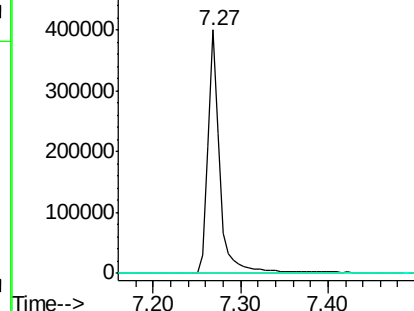
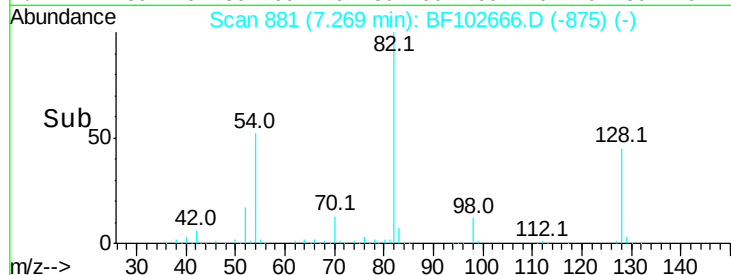
138 0.0 14.9 22.3#



Abundance Ion 82.00 (81.70 to 82.70): BF1

Ion 95.00 (94.70 to 95.70): BF1

Ion 138.00 (137.70 to 138.70): BF1



#38

Acenaphthene-d10

Concen: 20.000 ng

RT: 9.73 min Scan# 1300

Delta R.T. -0.01 min

Lab File: BF102666.D

Acq: 31 Jan 2018 20:30

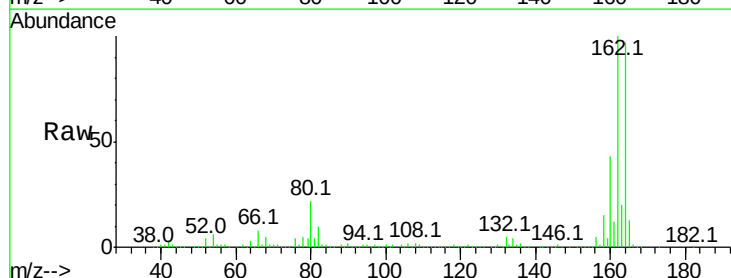
Tgt Ion:164 Resp: 282476

Ion Ratio Lower Upper

164 100

162 103.5 86.1 129.1

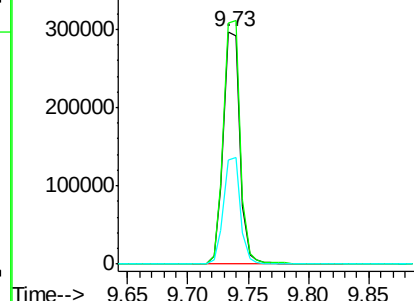
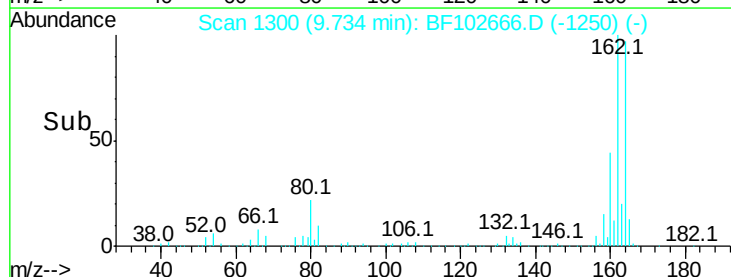
160 45.0 38.3 57.5

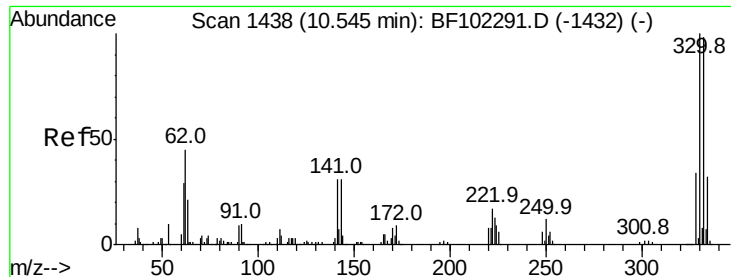


Abundance Ion 164.00 (163.70 to 164.70): E

Ion 162.00 (161.70 to 162.70): E

Ion 160.00 (159.70 to 160.70): E





#41

2,4,6-Tribromophenol

Concen: 38.516 ng

RT: 10.53 min Scan# 1435

Delta R.T. -0.01 min

Lab File: BF102666.D

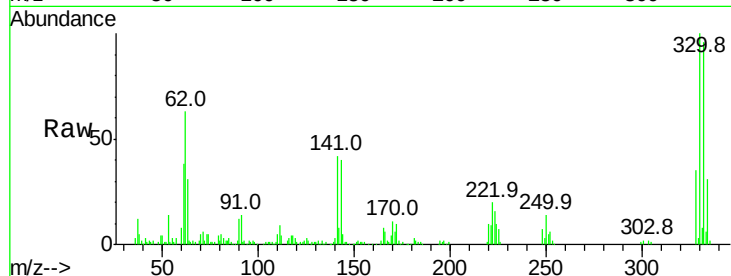
Acq: 31 Jan 2018 20:30

Instrument :

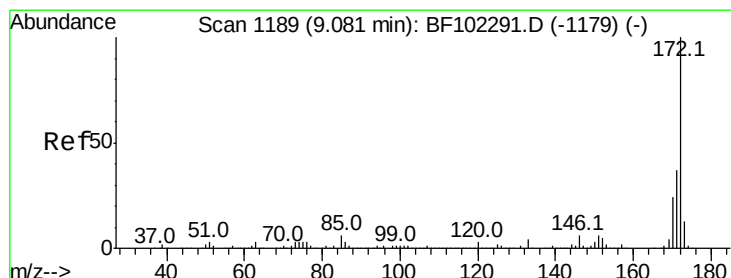
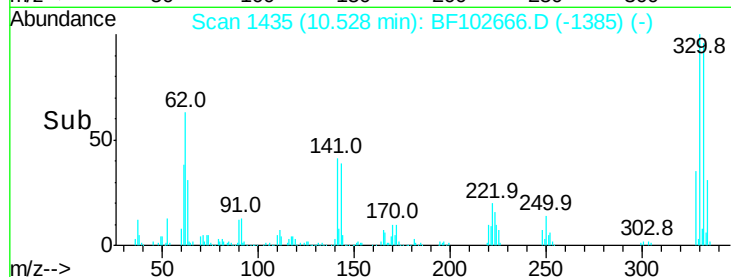
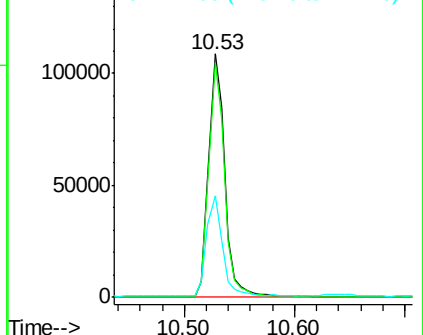
BNA\_F

ClientSampleId :

|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 330   | Resp: | 107804 |
| Ion      | Ratio | Lower | Upper  |
| 330      | 100   |       |        |
| 332      | 94.8  | 77.0  | 115.6  |
| 141      | 40.3  | 29.9  | 44.9   |



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



#44

2-Fluorobiphenyl

Concen: 35.681 ng

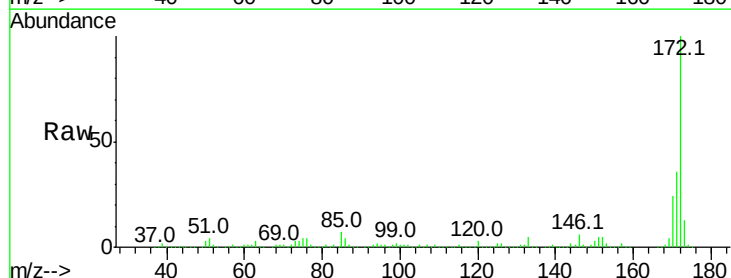
RT: 9.06 min Scan# 1185

Delta R.T. -0.01 min

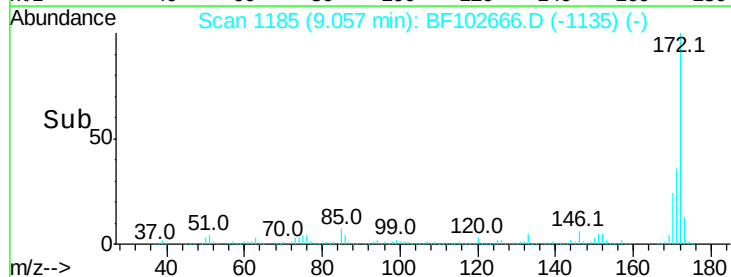
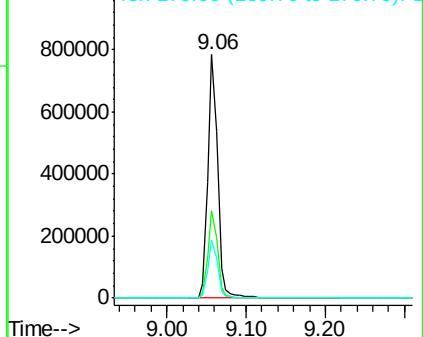
Lab File: BF102666.D

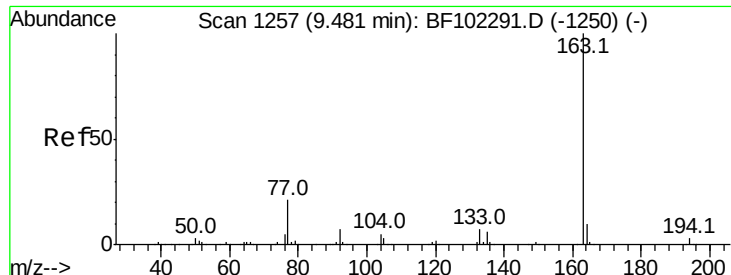
Acq: 31 Jan 2018 20:30

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 172   | Resp: | 685492 |
| Ion      | Ratio | Lower | Upper  |
| 172      | 100   |       |        |
| 171      | 35.9  | 29.7  | 44.5   |
| 170      | 23.9  | 19.6  | 29.4   |



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

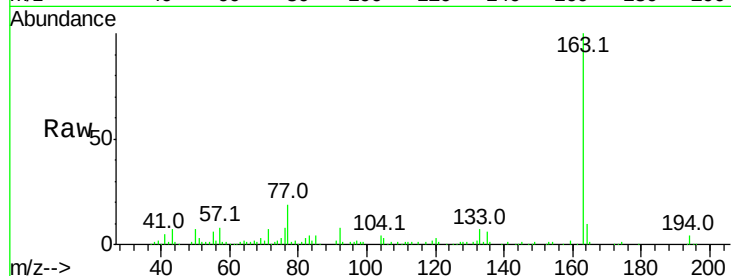




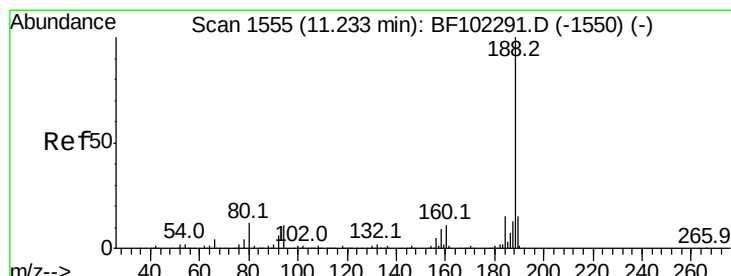
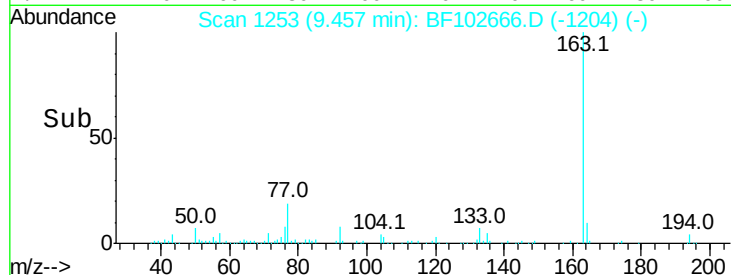
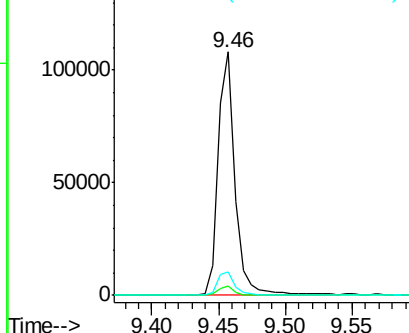
#49  
Dimethylphthalate  
Concen: 4.188 ng  
RT: 9.46 min Scan# 1253  
Delta R.T. -0.01 min  
Lab File: BF102666.D  
Acq: 31 Jan 2018 20:30

Instrument :  
BNA\_F  
ClientSampleId :

Tot Ion:163 Resp: 97773  
Ion Ratio Lower Upper  
163 100  
194 4.1 2.7 4.1#  
164 9.9 8.2 12.2

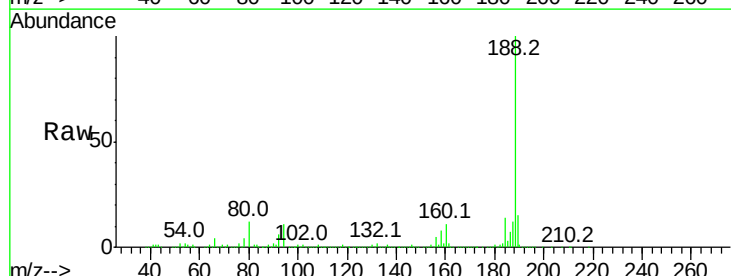


Abundance Ion 163.00 (162.70 to 163.70): E  
Ion 194.00 (193.70 to 194.70): E  
Ion 164.00 (163.70 to 164.70): E

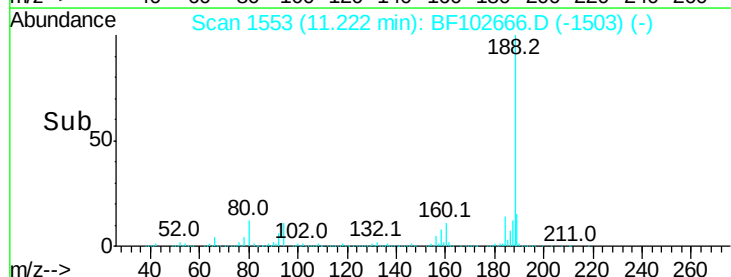
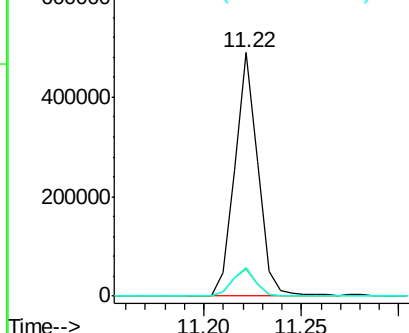


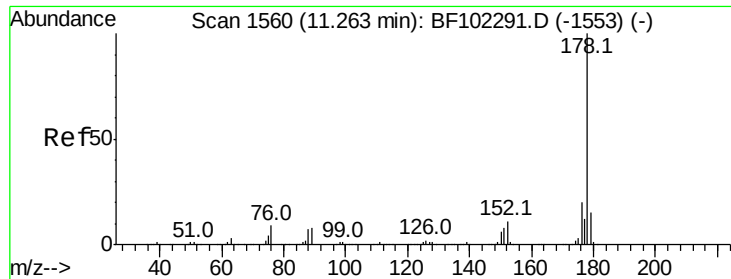
#63  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 11.22 min Scan# 1553  
Delta R.T. -0.01 min  
Lab File: BF102666.D  
Acq: 31 Jan 2018 20:30

Tgt Ion:188 Resp: 403717  
Ion Ratio Lower Upper  
188 100  
94 11.0 8.5 12.7  
80 11.6 9.2 13.8



Abundance Ion 188.00 (187.70 to 188.70): E  
Ion 94.00 (93.70 to 94.70): BF1  
Ion 80.00 (79.70 to 80.70): BF1





#70

Phenanthrene

Concen: 5.630 ng

RT: 11.25 min Scan# 1557

Delta R.T. -0.01 min

Lab File: BF102666.D

Acq: 31 Jan 2018 20:30

Instrument :

BNA\_F

ClientSampleId :

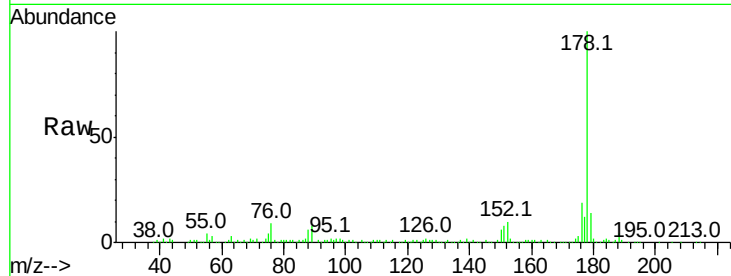
Tot Ion:178 Resp: 132441

Ion Ratio Lower Upper

178 100

176 19.2 15.8 23.8

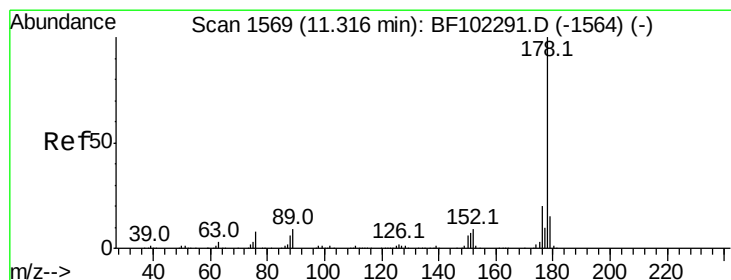
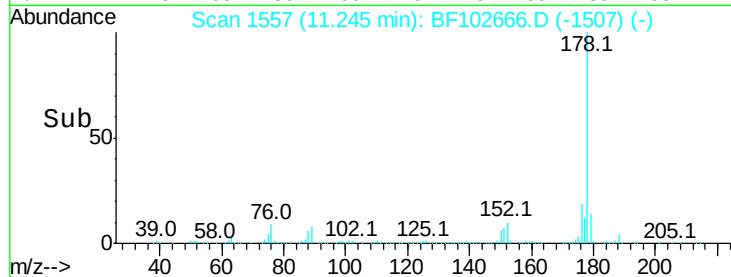
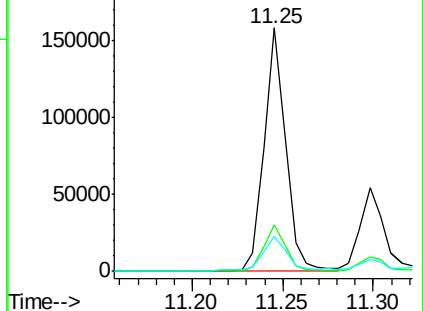
179 14.2 13.0 19.6



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: 2.122 ng

RT: 11.30 min Scan# 1566

Delta R.T. -0.01 min

Lab File: BF102666.D

Acq: 31 Jan 2018 20:30

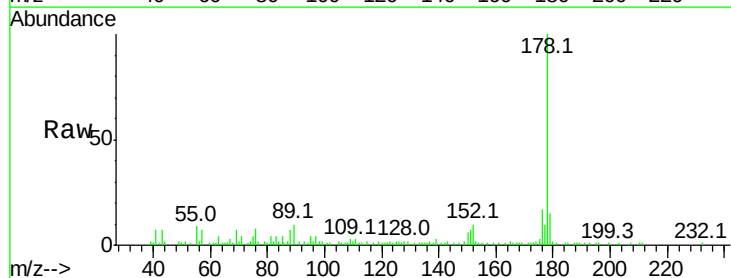
Tgt Ion:178 Resp: 50951

Ion Ratio Lower Upper

178 100

176 17.5 15.4 23.2

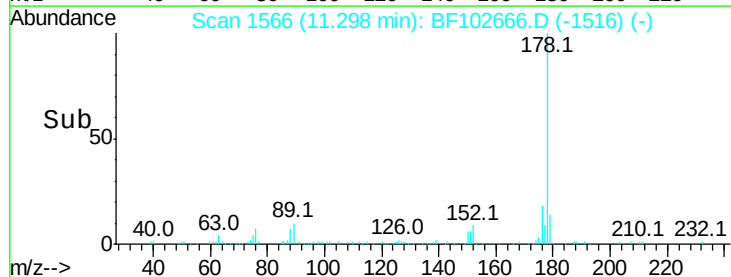
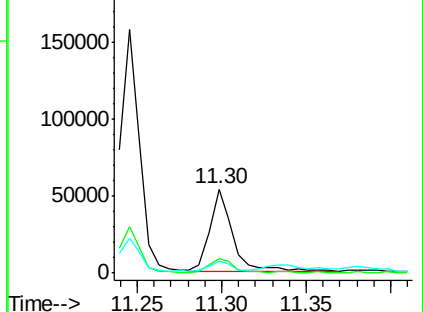
179 14.7 12.6 19.0



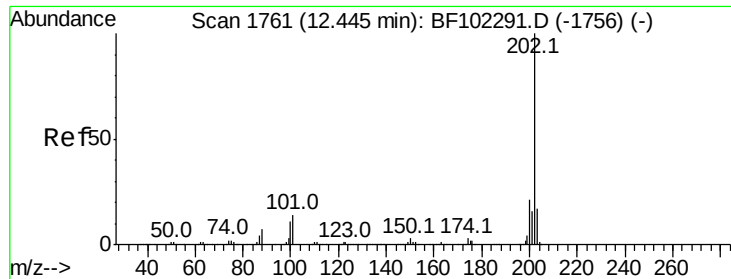
Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E







#74

Fluoranthene

Concen: 13.641 ng

RT: 12.43 min Scan# 1759

Delta R.T. -0.01 min

Lab File: BF102666.D

Acq: 31 Jan 2018 20:30

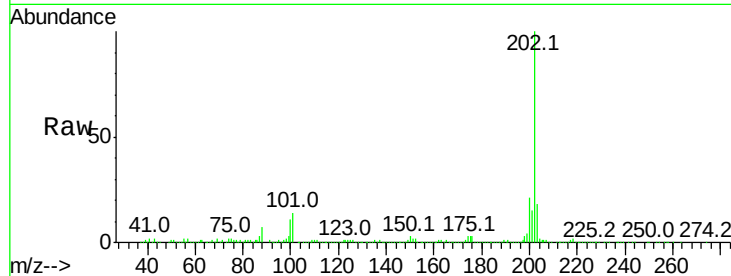
Instrument :

BNA\_F

ClientSampleId :

Tot Ion:202 Resp: 327245

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 202 | 100   |       |       |
| 101 | 14.4  | 0.0   | 34.1  |
| 203 | 18.4  | 0.0   | 38.1  |

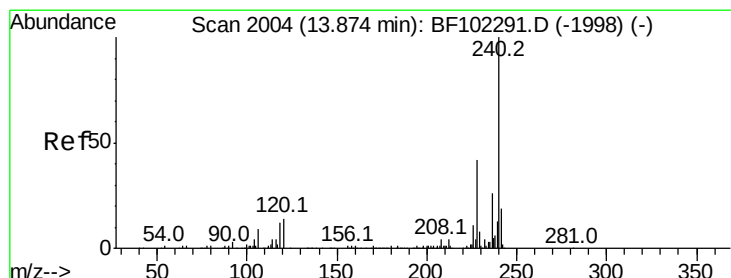
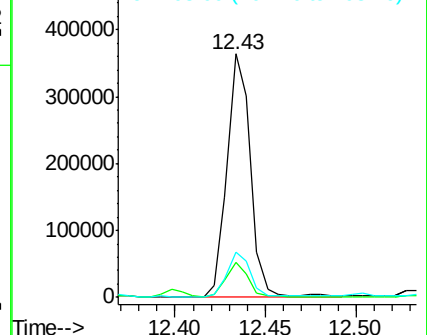
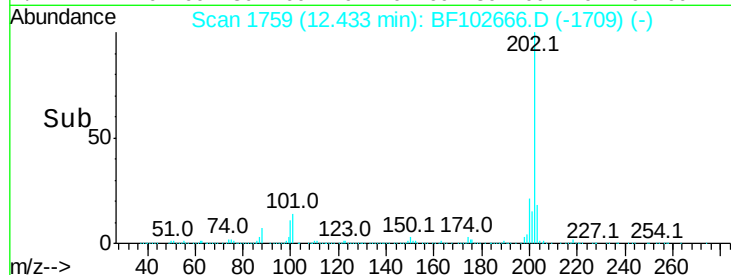


Abundance

Ion 202.00 (201.70 to 202.70): E

Ion 101.00 (100.70 to 101.70): E

Ion 203.00 (202.70 to 203.70): E



#75

Chrysene-d12

Concen: 20.000 ng

RT: 13.86 min Scan# 2002

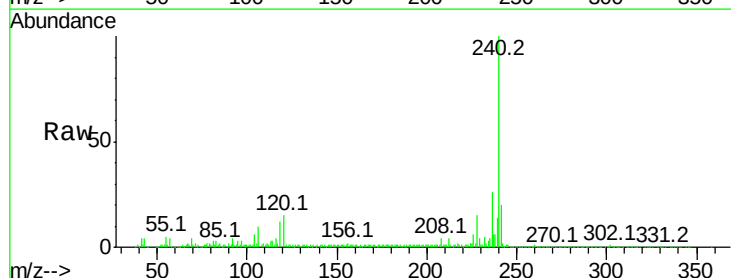
Delta R.T. -0.01 min

Lab File: BF102666.D

Acq: 31 Jan 2018 20:30

Tgt Ion:240 Resp: 299207

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 240 | 100   |       |       |
| 120 | 14.7  | 9.5   | 14.3# |
| 236 | 25.9  | 20.7  | 31.1  |

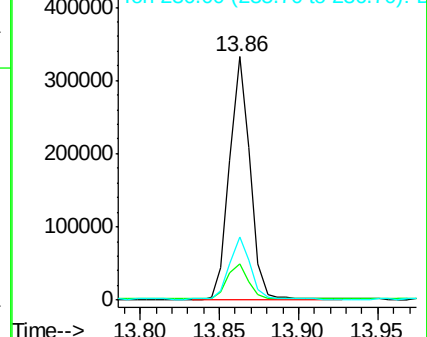
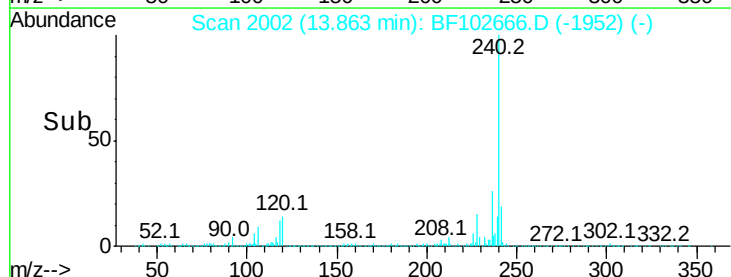


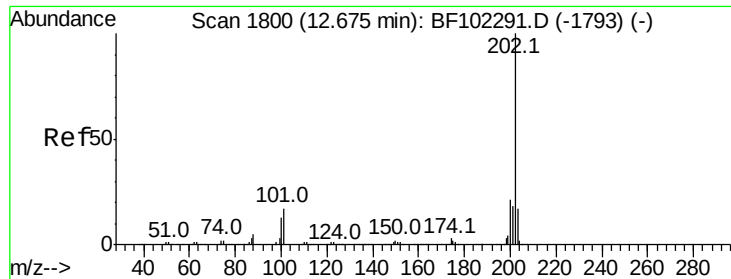
Abundance

Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E

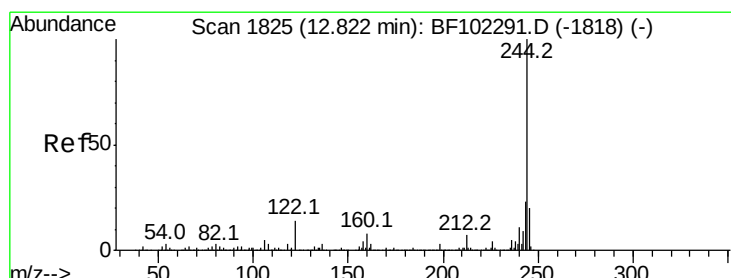
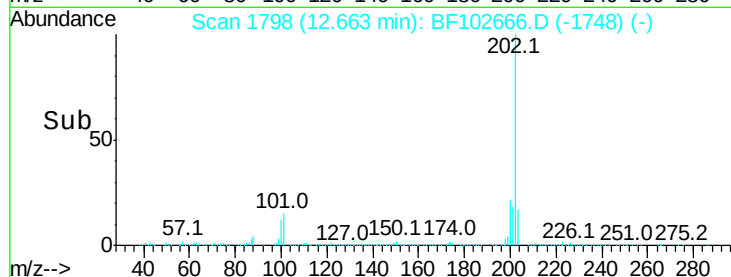
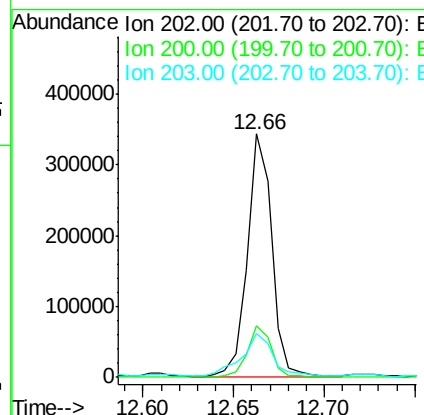
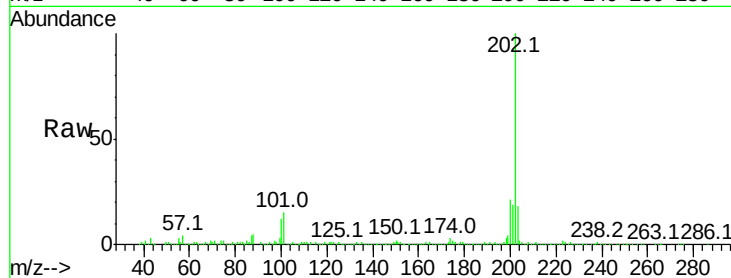




#77  
Pvrene  
Concen: 13.806 ng  
RT: 12.66 min Scan# 1798  
Delta R.T. -0.01 min  
Lab File: BF102666.D  
Acq: 31 Jan 2018 20:30

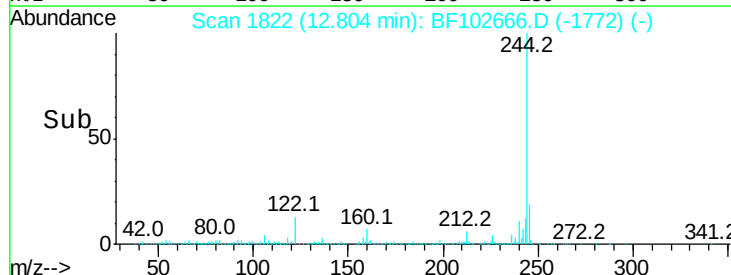
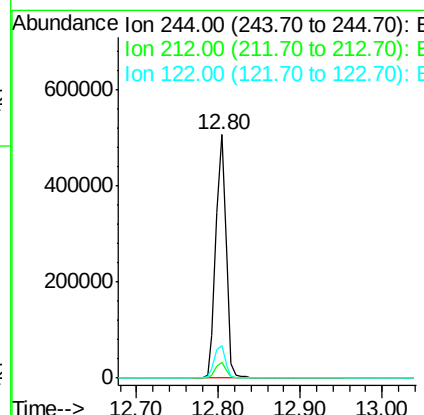
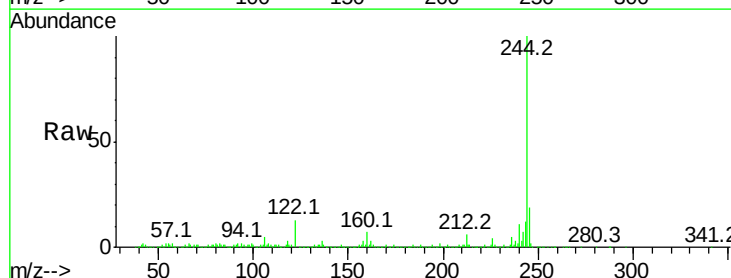
Instrument :  
BNA\_F  
ClientSampleId :

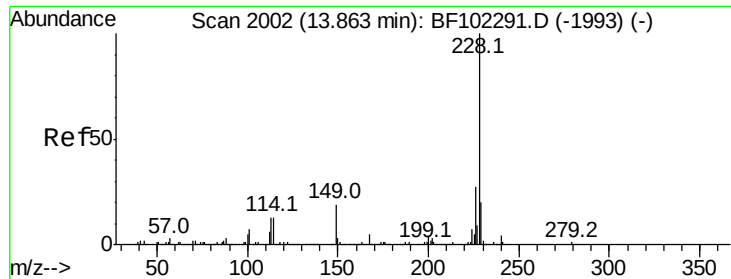
Tot Ion:202 Resp: 319373  
Ion Ratio Lower Upper  
202 100  
200 21.0 17.4 26.2  
203 18.1 14.3 21.5



#78  
Terphenyl-d14  
Concen: 33.347 ng  
RT: 12.80 min Scan# 1822  
Delta R.T. -0.01 min  
Lab File: BF102666.D  
Acq: 31 Jan 2018 20:30

Tgt Ion:244 Resp: 442591  
Ion Ratio Lower Upper  
244 100  
212 6.3 5.4 8.0  
122 13.3 11.0 16.4

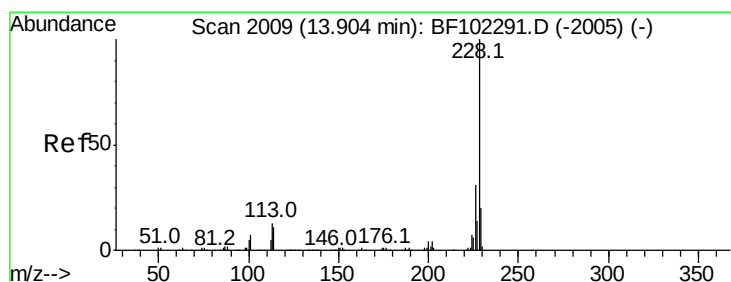
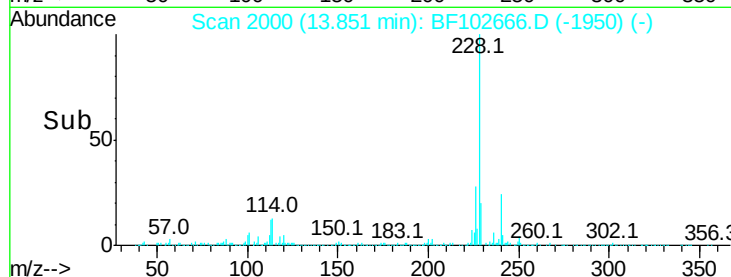
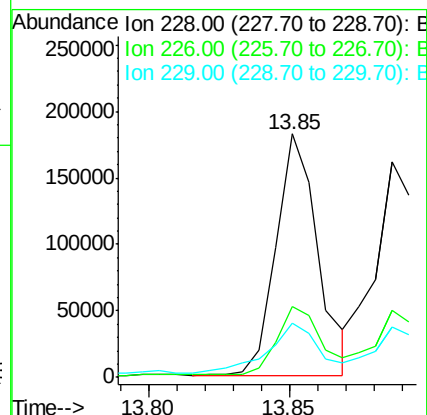
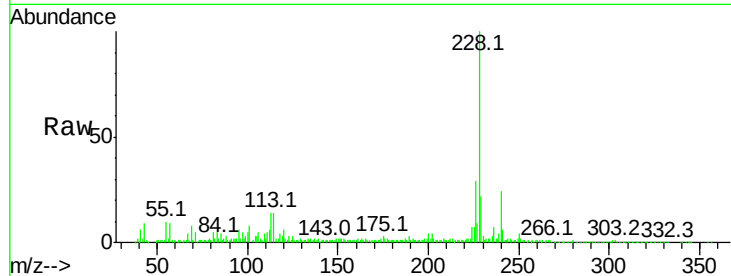




#80  
Benzo(a)anthracene  
Concen: 10.105 ng  
RT: 13.85 min Scan# 2000  
Delta R.T. -0.01 min  
Lab File: BF102666.D  
Acq: 31 Jan 2018 20:30

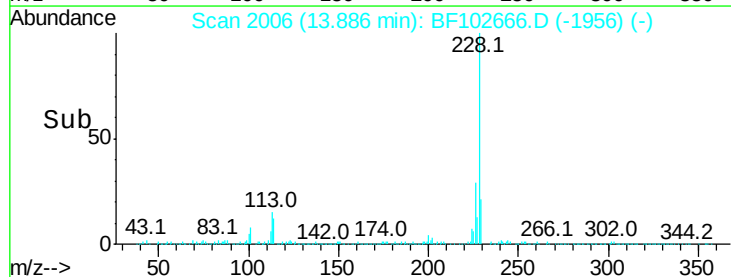
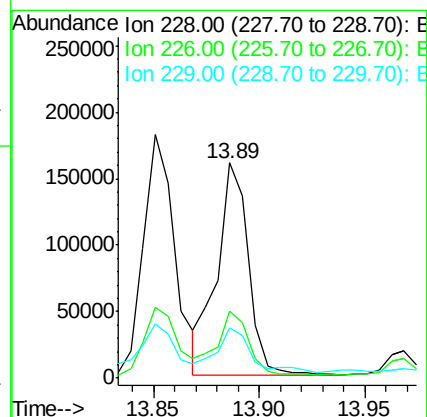
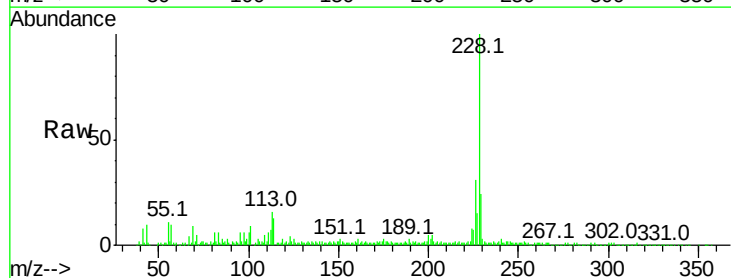
Instrument :  
BNA\_F  
ClientSampled :

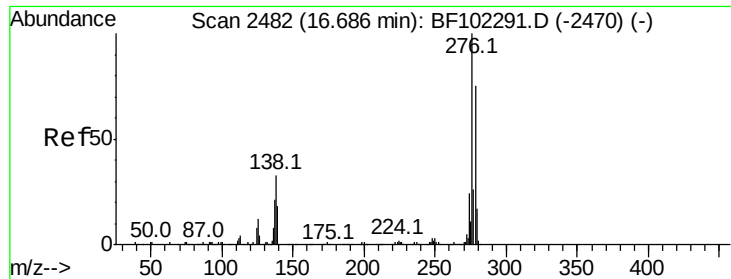
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 29.1  | 22.6  | 33.8  |
| 229     | 22.1  | 15.8  | 23.6  |



#82  
Chrysene  
Concen: 8.929 ng  
RT: 13.89 min Scan# 2006  
Delta R.T. -0.01 min  
Lab File: BF102666.D  
Acq: 31 Jan 2018 20:30

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 31.0  | 25.0  | 37.6  |
| 229     | 23.6  | 16.2  | 24.4  |

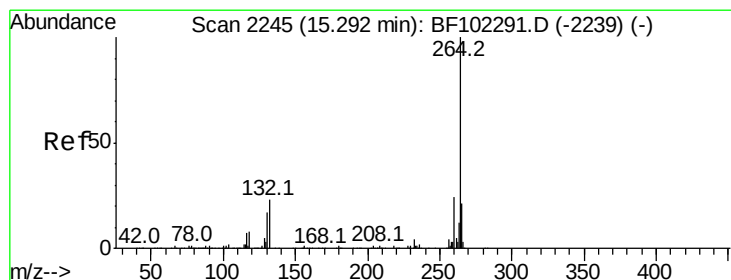
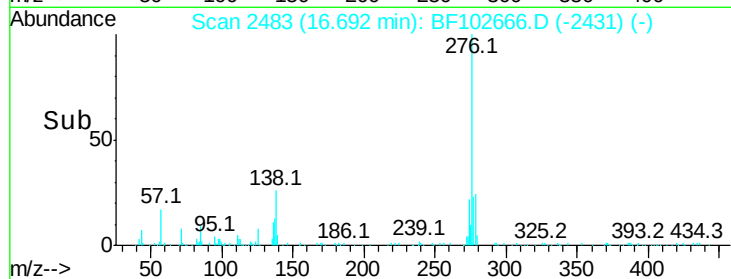
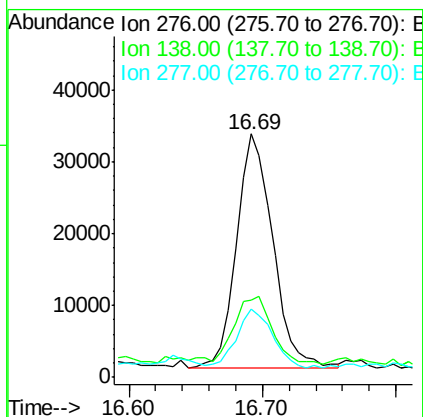
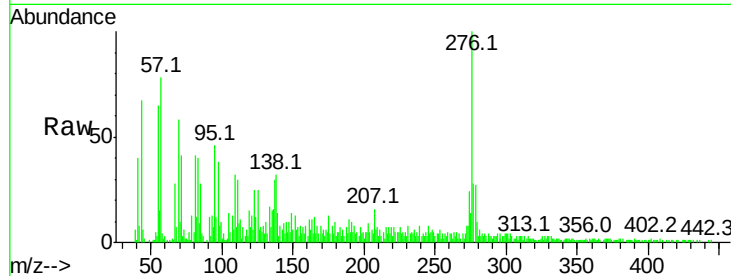




#85  
Indeno(1,2,3-cd)pyrene  
Concen: 3.984 ng  
RT: 16.69 min Scan# 2483  
Delta R.T. 0.01 min  
Lab File: BF102666.D  
Acq: 31 Jan 2018 20:30

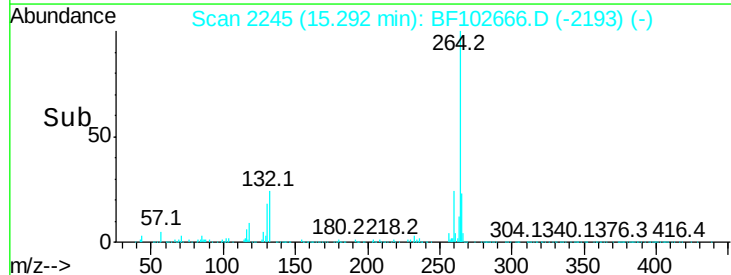
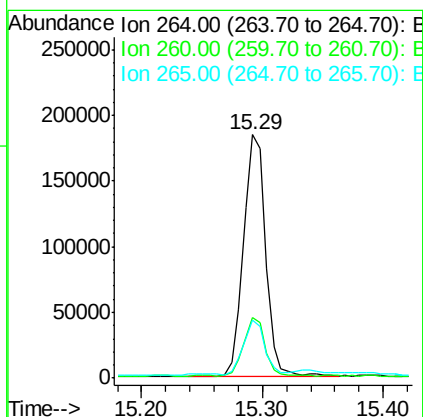
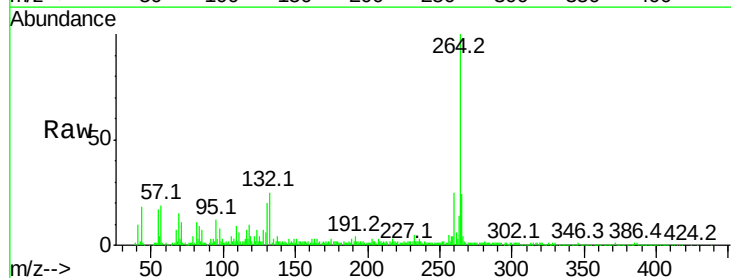
Instrument :  
BNA\_F  
ClientSampleId :

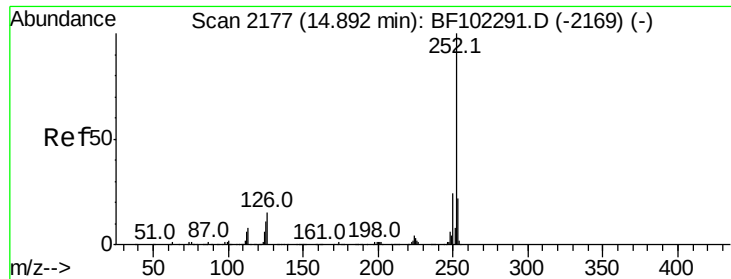
Tot Ion:276 Resp: 61556  
Ion Ratio Lower Upper  
276 100  
138 29.3 25.0 37.6  
277 24.8 20.1 30.1



#86  
Perylene-d12  
Concen: 20.000 ng  
RT: 15.29 min Scan# 2245  
Delta R.T. 0.01 min  
Lab File: BF102666.D  
Acq: 31 Jan 2018 20:30

Tgt Ion:264 Resp: 237728  
Ion Ratio Lower Upper  
264 100  
260 24.9 19.2 28.8  
265 23.8 17.5 26.3





#87

Benzo(b)fluoranthene

Concen: 15.957 ng

RT: 14.89 min Scan# 2176

Delta R.T. 0.01 min

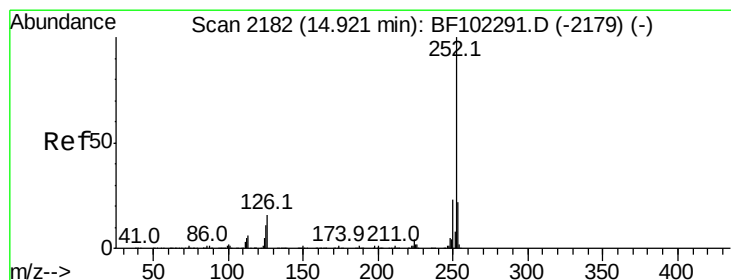
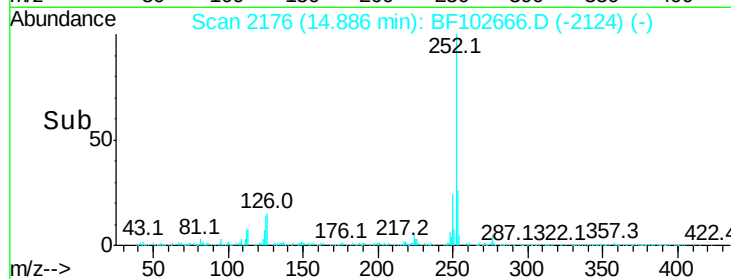
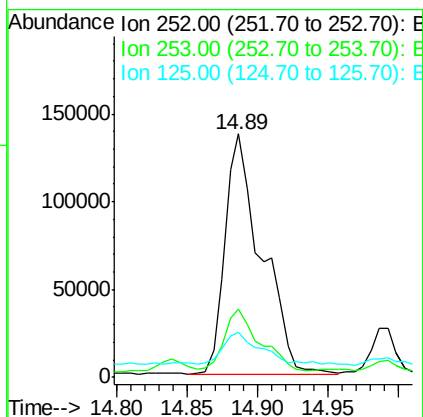
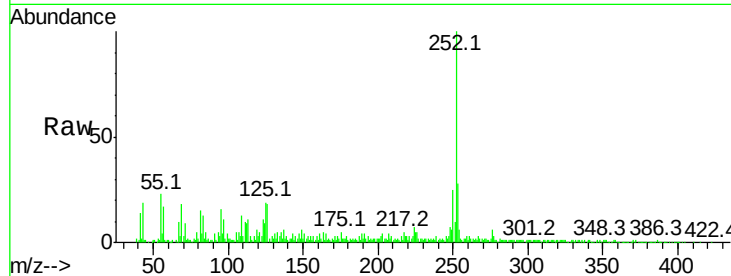
Lab File: BF102666.D

Acq: 31 Jan 2018 20:30

Instrument :  
BNA\_F  
ClientSampleId :

Tot Ion:252 Resp: 245876

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 252 | 100   |       |       |
| 253 | 27.8  | 17.0  | 25.6# |
| 125 | 18.8  | 9.0   | 13.6# |



#88

Benzo(k)fluoranthene

Concen: 16.882 ng

RT: 14.89 min Scan# 2176

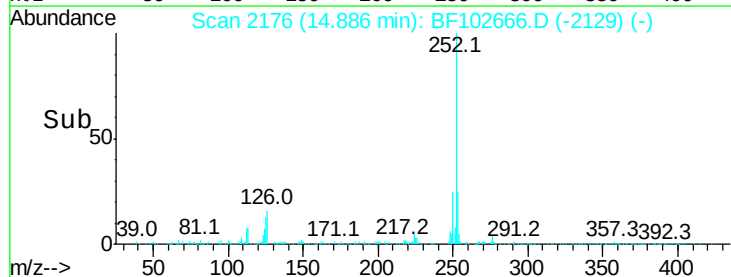
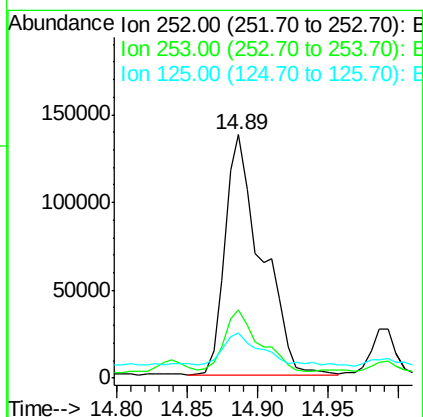
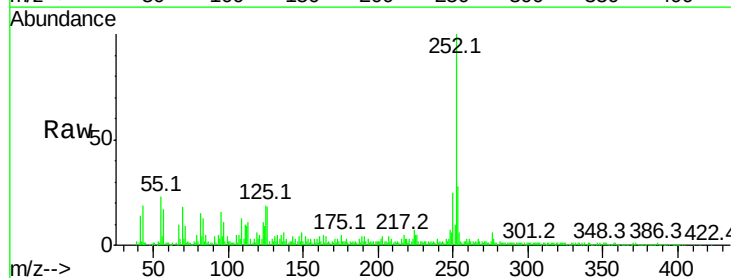
Delta R.T. -0.02 min

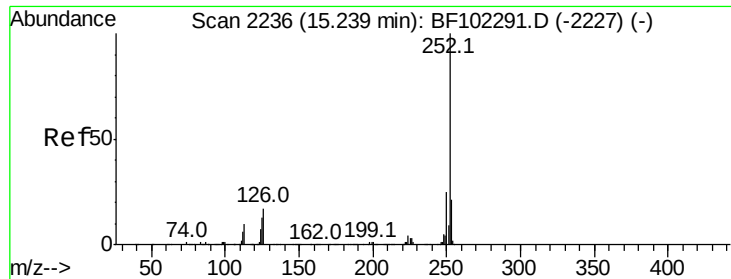
Lab File: BF102666.D

Acq: 31 Jan 2018 20:30

Tgt Ion:252 Resp: 245765

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 252 | 100   |       |       |
| 253 | 27.8  | 17.9  | 26.9# |
| 125 | 18.8  | 10.2  | 15.2# |





#89

Benzo(a)pyrene

Concen: 9.068 ng

RT: 15.23 min Scan# 2235

Delta R.T. 0.01 min

Lab File: BF102666.D

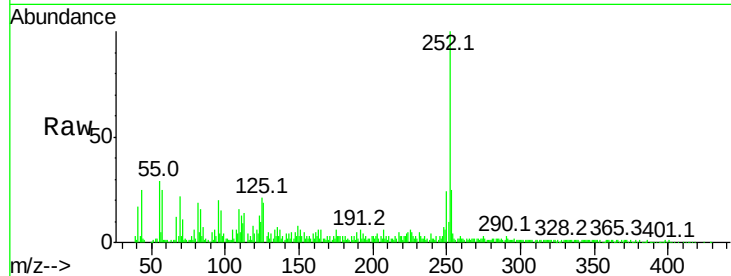
Acq: 31 Jan 2018 20:30

Instrument :

BNA\_F

ClientSampleId :

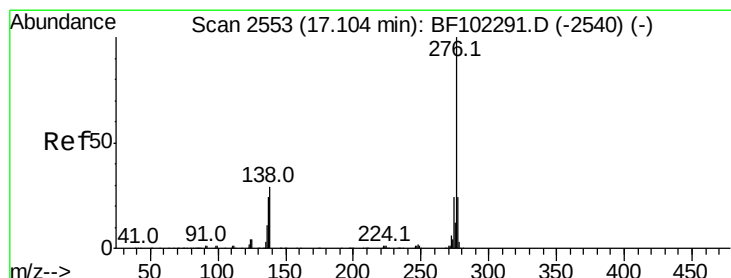
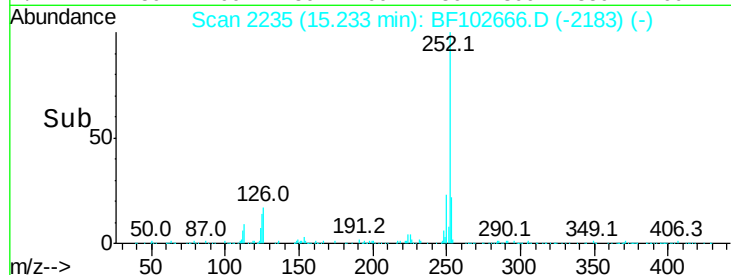
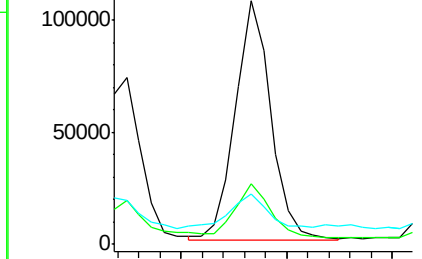
|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 252   | Resp: | 126015 |
| Ion      | Ratio | Lower | Upper  |
| 252      | 100   |       |        |
| 253      | 24.9  | 17.1  | 25.7   |
| 125      | 20.8  | 9.8   | 14.6#  |



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



#91

Benzo(g,h,i)perylene

Concen: 5.389 ng

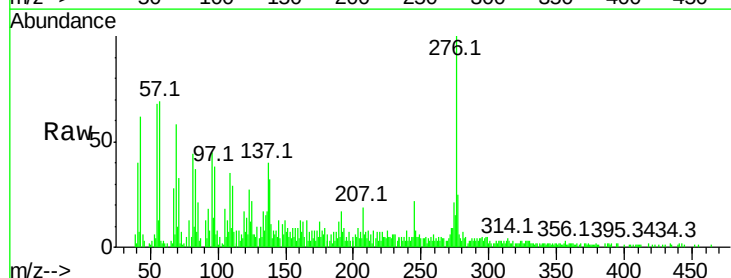
RT: 17.12 min Scan# 2555

Delta R.T. 0.01 min

Lab File: BF102666.D

Acq: 31 Jan 2018 20:30

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 276   | Resp: | 59897 |
| Ion      | Ratio | Lower | Upper |
| 276      | 100   |       |       |
| 277      | 24.9  | 17.9  | 26.9  |
| 138      | 32.3  | 21.8  | 32.8  |



Abundance Ion 276.00 (275.70 to 276.70): E

Ion 277.00 (276.70 to 277.70): E

Ion 138.00 (137.70 to 138.70): E

