

Data Path : Z:\HPCHEM1\BNA F\DATA\BF010218\  
 Data File : BF101849.D  
 Acq On : 2 Jan 2018 14:23  
 Operator : SJ/JU  
 Sample : I7100-04  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :

Quant Time: Jan 02 15:05:14 2018  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF121417.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Dec 29 13:21:45 2017  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.78  | 152  | 135380   | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 8.06  | 136  | 531140   | 20.00 | ng    | 0.00     |
| 38) Acenaphthene-d10      | 9.82  | 164  | 214288   | 20.00 | ng    | 0.00     |
| 63) Phenanthrene-d10      | 11.31 | 188  | 337912   | 20.00 | ng    | 0.00     |
| 75) Chrysene-d12          | 13.96 | 240  | 259999   | 20.00 | ng    | -0.01    |
| 86) Perylene-d12          | 15.43 | 264  | 271024   | 20.00 | ng    | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 5) 2-Fluorophenol           | 5.40  | 112  | 973371   | 107.10 | ng    | 0.00     |
| 7) Phenol-d6                | 6.43  | 99   | 1178020  | 104.15 | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 7.35  | 82   | 747636   | 78.36  | ng    | -0.01    |
| 41) 2,4,6-Tribromophenol    | 10.62 | 330  | 194054   | 93.98  | ng    | 0.00     |
| 44) 2-Fluorobiphenyl        | 9.13  | 172  | 979770   | 70.93  | ng    | 0.00     |
| 78) Terphenyl-d14           | 12.89 | 244  | 715711   | 66.36  | ng    | -0.01    |

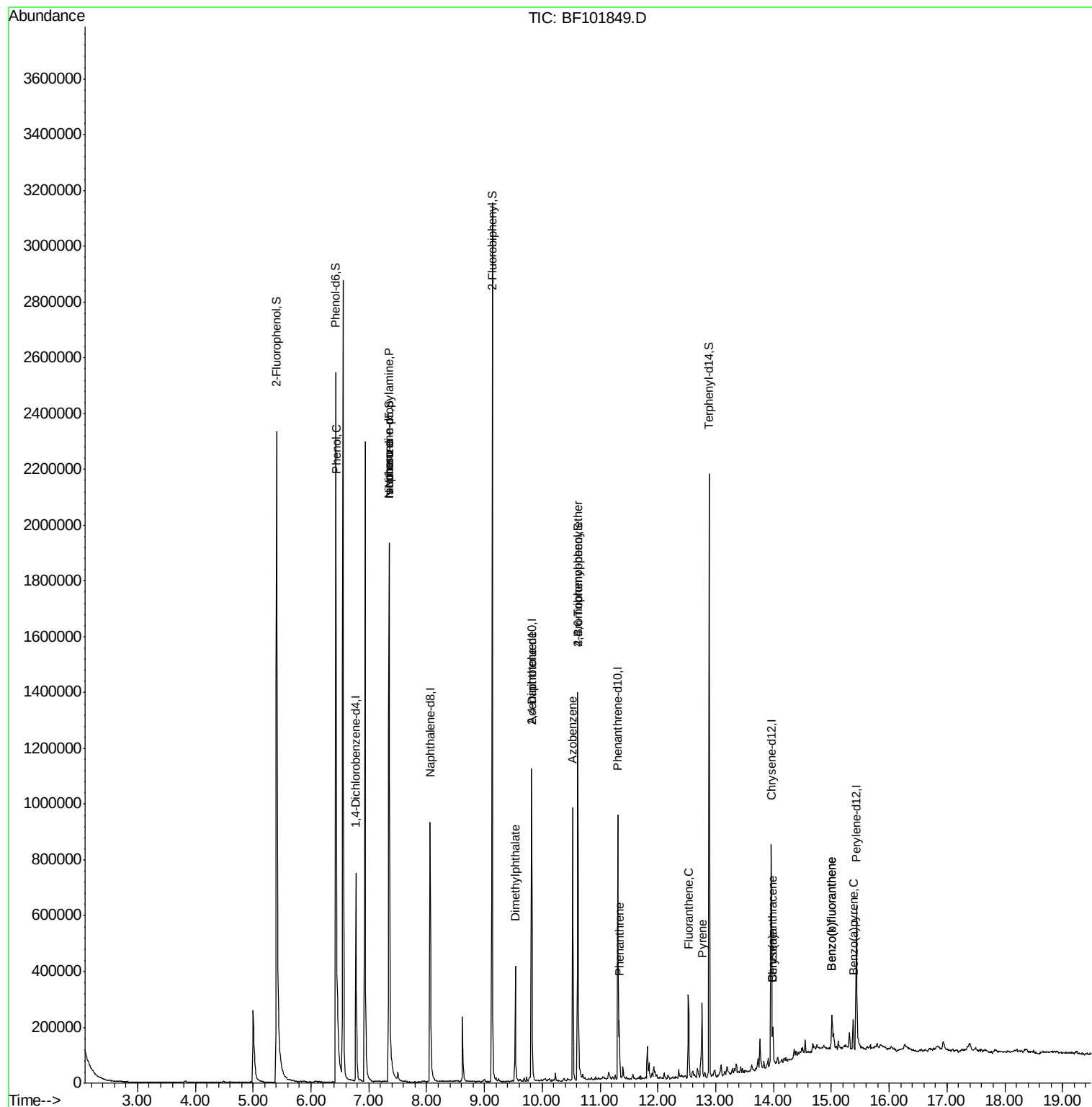
| Target Compounds               | R.T.  | QIon | Response | Conc   | Units | Qvalue |
|--------------------------------|-------|------|----------|--------|-------|--------|
| 10) Phenol                     | 6.44  | 94   | 44761    | 3.472  | ng    | # 47   |
| 19) n-Nitroso-di-n-propylamine | 7.35  | 70   | 98208    | 13.221 | ng    | # 83   |
| 25) Isophorone                 | 7.35  | 82   | 747636   | 39.059 | ng    | # 64   |
| 49) Dimethylphthalate          | 9.53  | 163  | 186422   | 10.816 | ng    | # 99   |
| 56) 2,4-Dinitrotoluene         | 9.82  | 165  | 28501    | 7.221  | ng    | # 23   |
| 62) Azobenzene                 | 10.53 | 77   | 157569   | 8.911  | ng    | # 1    |
| 66) 4-Bromophenyl-phenylether  | 10.62 | 248  | 11955    | 3.149  | ng    | # 1    |
| 70) Phenanthrene               | 11.33 | 178  | 82411    | 4.385  | ng    | 97     |
| 74) Fluoranthene               | 12.53 | 202  | 122086   | 6.190  | ng    | 99     |
| 77) Pyrene                     | 12.76 | 202  | 108243   | 5.547  | ng    | 96     |
| 80) Benzo(a)anthracene         | 13.99 | 228  | 53167    | 3.097  | ng    | 94     |
| 82) Chrysene                   | 13.99 | 228  | 53167    | 3.280  | ng    | 98     |
| 87) Benzo(b)fluoranthene       | 15.01 | 252  | 84825    | 5.135  | ng    | # 93   |
| 88) Benzo(k)fluoranthene       | 15.01 | 252  | 84825    | 5.281  | ng    | # 96   |
| 89) Benzo(a)pyrene             | 15.38 | 252  | 47156    | 3.097  | ng    | # 94   |

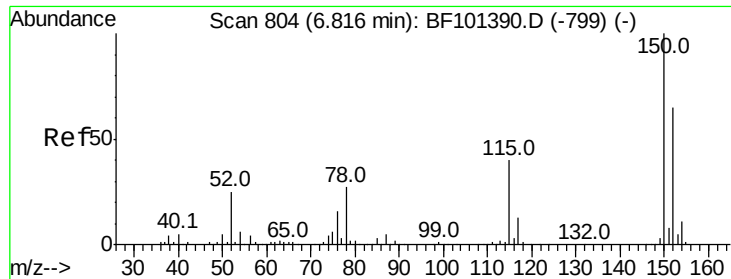
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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ALS Vial : 9 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :

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Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF121417.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Dec 29 13:21:45 2017  
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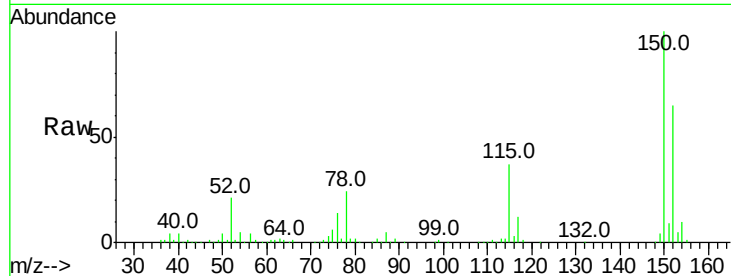


#1

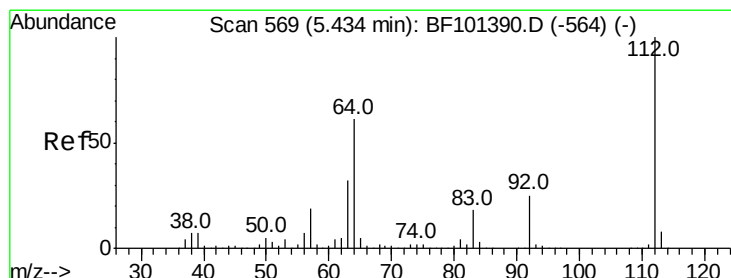
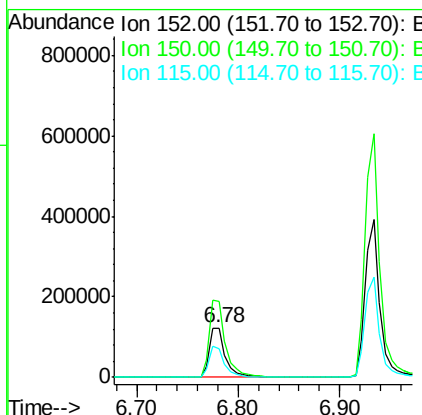
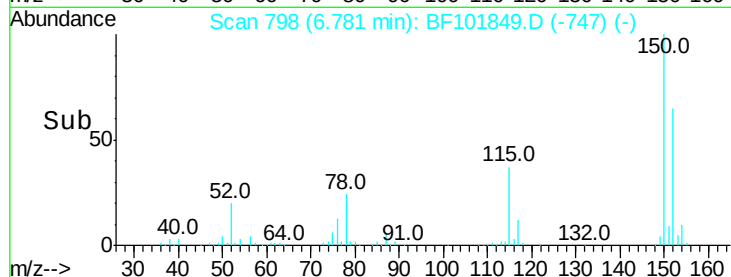
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.78 min Scan# 798  
Delta R.T. 0.00 min  
Lab File: BF101849.D  
Acq: 2 Jan 2018 14:23

Instrument :  
BNA\_F  
ClientSampleId :

Tot Ion:152 Resp: 135380  
Ion Ratio Lower Upper  
152 100  
150 154.4 124.6 186.8  
115 56.8 50.1 75.1



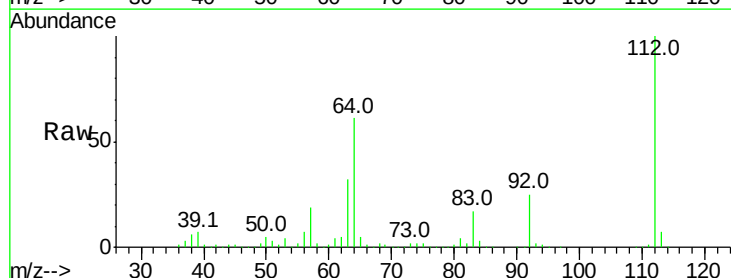
Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 115.00 (114.70 to 115.70): E



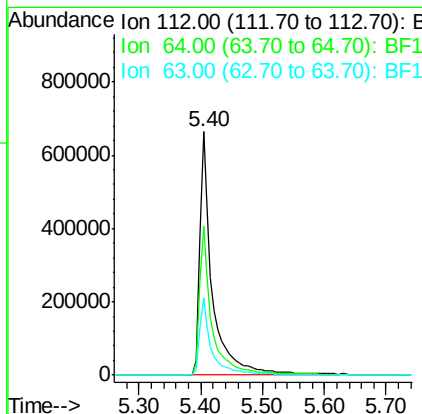
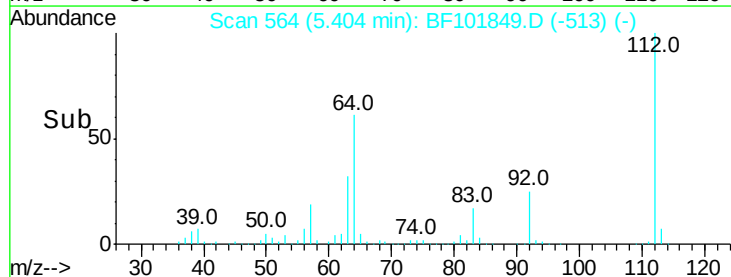
#5

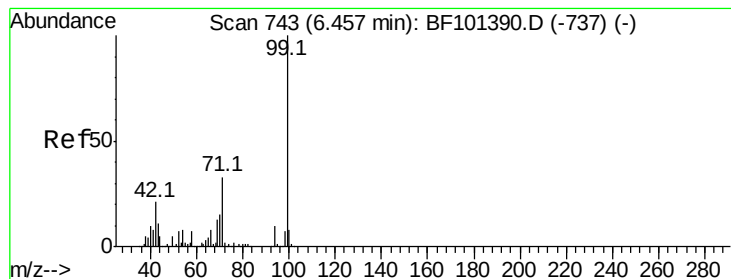
2-Fluorophenol  
Concen: 107.099 ng  
RT: 5.40 min Scan# 564  
Delta R.T. 0.00 min  
Lab File: BF101849.D  
Acq: 2 Jan 2018 14:23

Tgt Ion:112 Resp: 973371  
Ion Ratio Lower Upper  
112 100  
64 61.4 47.9 71.9  
63 31.8 23.7 35.5



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





#7

Phenol-d6

Concen: 104.149 ng

RT: 6.43 min Scan# 738

Delta R.T. -0.01 min

Lab File: BF101849.D

Acq: 2 Jan 2018 14:23

Instrument :

BNA\_F

ClientSampled :

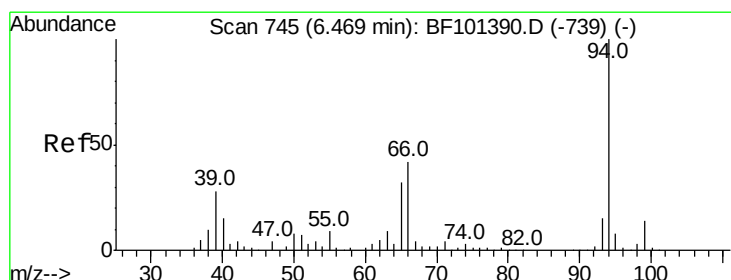
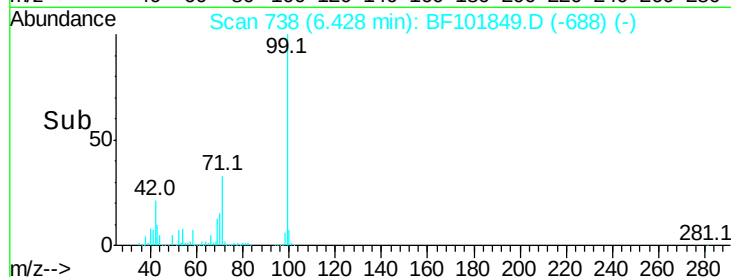
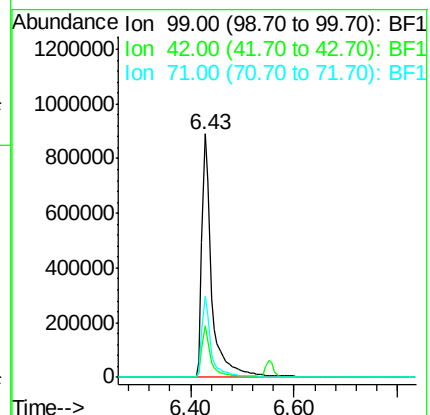
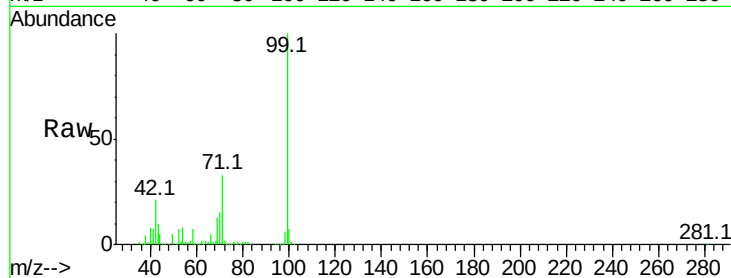
Tot Ion: 99 Resp: 1178020

Ion Ratio Lower Upper

99 100

42 21.1 14.5 21.7

71 33.4 25.4 38.0



#10

Phenol

Concen: 3.472 ng

RT: 6.44 min Scan# 740

Delta R.T. -0.01 min

Lab File: BF101849.D

Acq: 2 Jan 2018 14:23

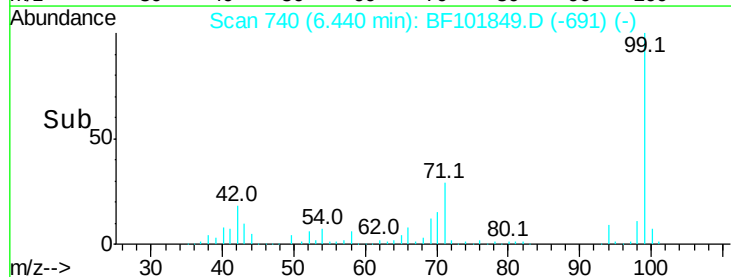
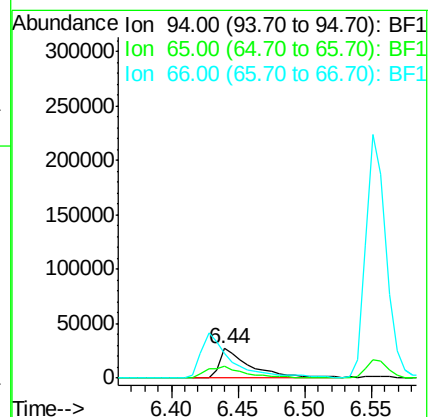
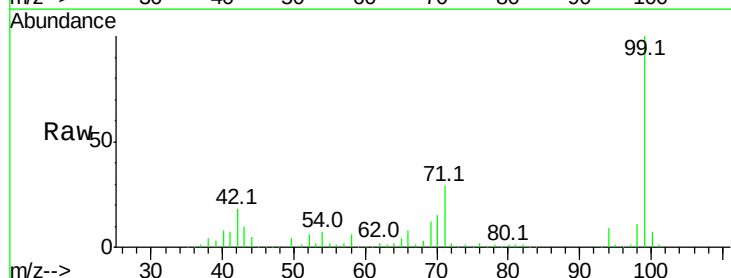
Tgt Ion: 94 Resp: 44761

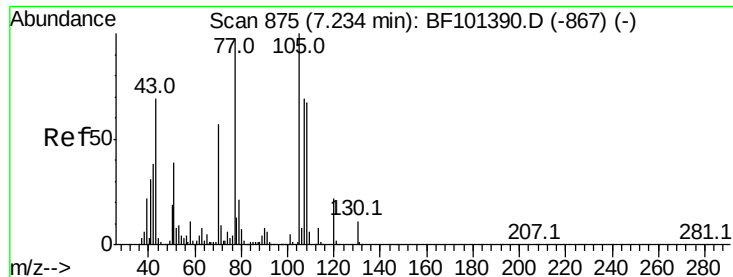
Ion Ratio Lower Upper

94 100

65 38.9 7.9 47.9

66 82.0 16.2 56.2#





#19

n-Nitroso-di-n-propylamine

Concen: 13.221 ng

RT: 7.35 min Scan# 895

Delta R.T. 0.15 min

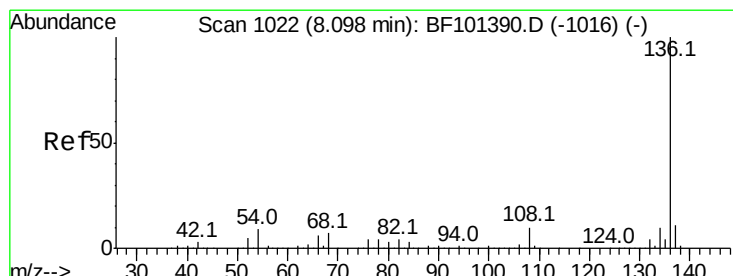
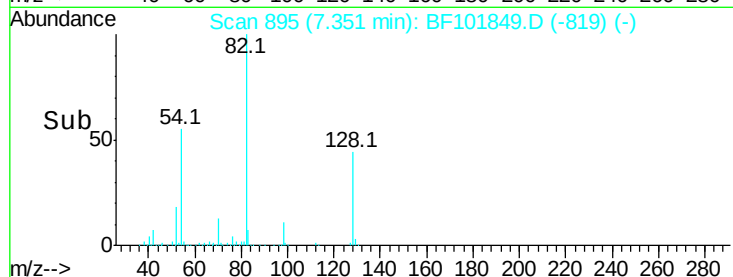
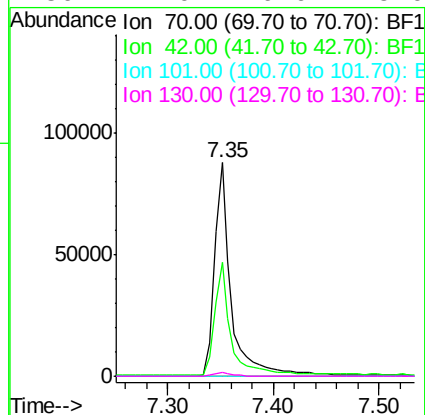
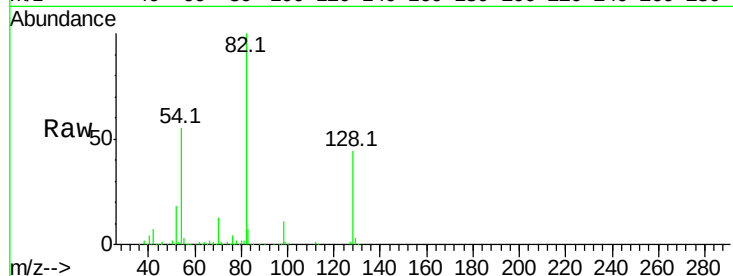
Lab File: BF101849.D

Acq: 2 Jan 2018 14:23

Instrument :  
BNA\_F  
ClientSampleId :

Tot Ion: 70 Resp: 98208

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 70  | 100   |       |       |
| 42  | 53.4  | 47.5  | 71.3  |
| 101 | 0.0   | 7.4   | 11.2# |
| 130 | 2.0   | 16.6  | 25.0# |



#21

Naphthalene-d8

Concen: 20.000 ng

RT: 8.06 min Scan# 1016

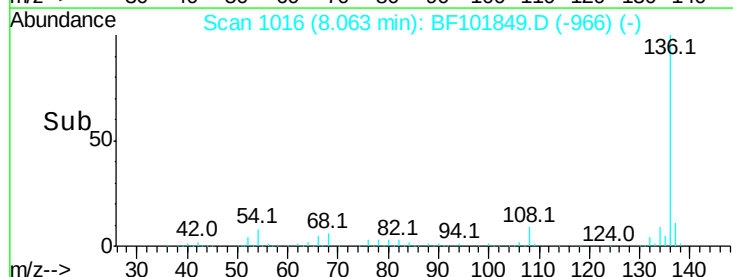
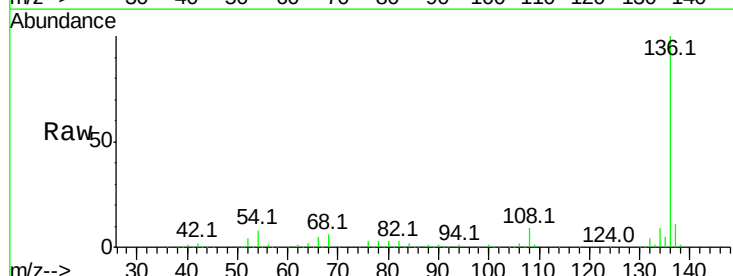
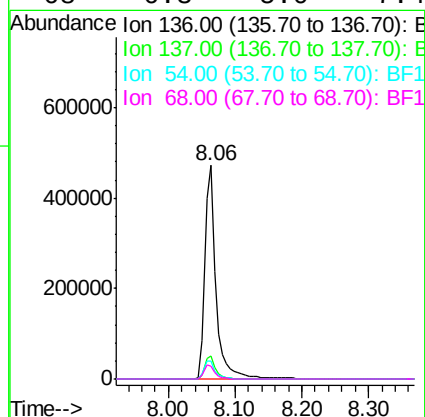
Delta R.T. -0.01 min

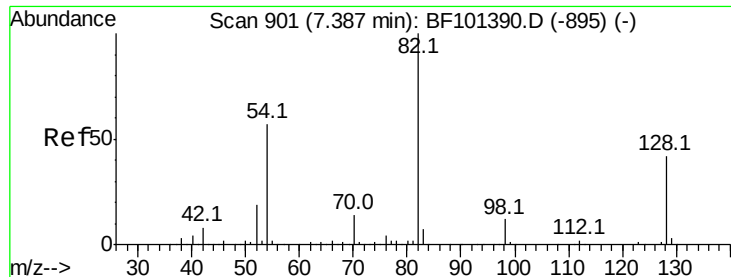
Lab File: BF101849.D

Acq: 2 Jan 2018 14:23

Tgt Ion: 136 Resp: 531140

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 136 | 100   |       |       |
| 137 | 10.6  | 8.9   | 13.3  |
| 54  | 8.2   | 6.6   | 9.8   |
| 68  | 6.3   | 5.0   | 7.4   |





#23

Nitrobenzene-d5

Concen: 78.356 ng

RT: 7.35 min Scan# 895

Delta R.T. -0.01 min

Lab File: BF101849.D

Acq: 2 Jan 2018 14:23

Instrument :

BNA\_F

ClientSampleId :

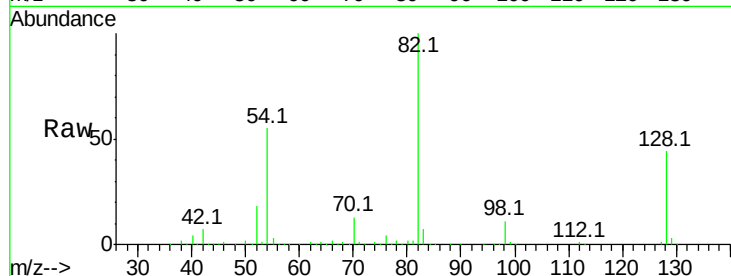
Tot Ion: 82 Resp: 747636

Ion Ratio Lower Upper

82 100

128 44.3 36.1 54.1

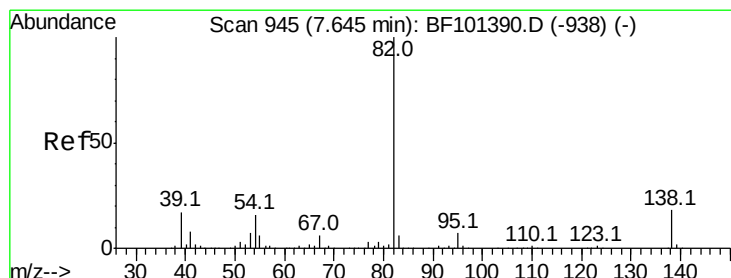
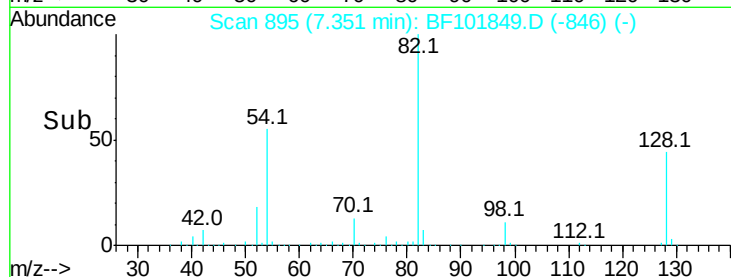
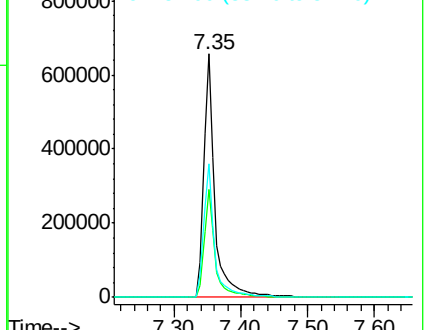
54 54.6 41.4 62.2



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: 39.059 ng

RT: 7.35 min Scan# 895

Delta R.T. -0.26 min

Lab File: BF101849.D

Acq: 2 Jan 2018 14:23

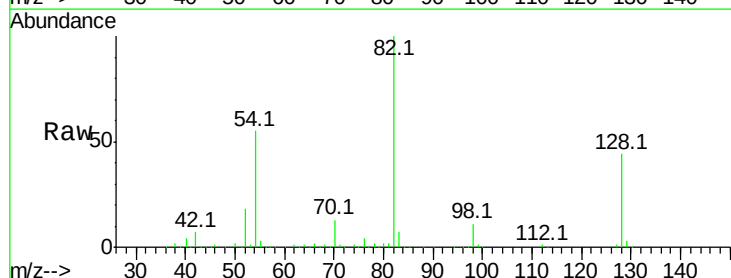
Tgt Ion: 82 Resp: 747636

Ion Ratio Lower Upper

82 100

95 0.0 5.2 7.8#

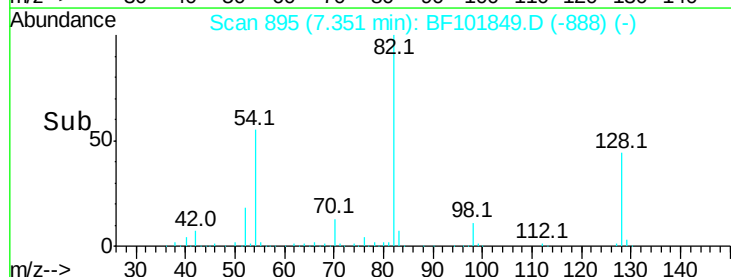
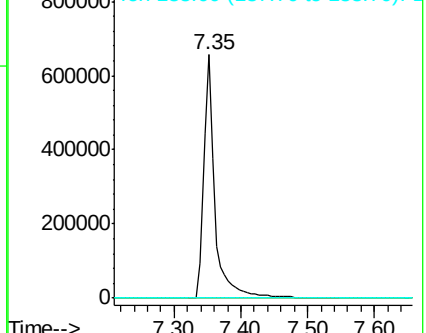
138 0.0 14.9 22.3#

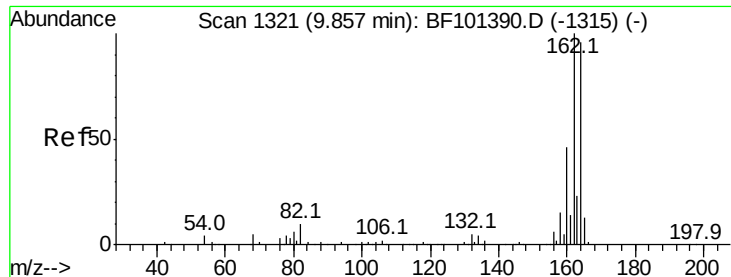


Abundance Ion 82.00 (81.70 to 82.70): BF1

Ion 95.00 (94.70 to 95.70): BF1

Ion 138.00 (137.70 to 138.70): BF1

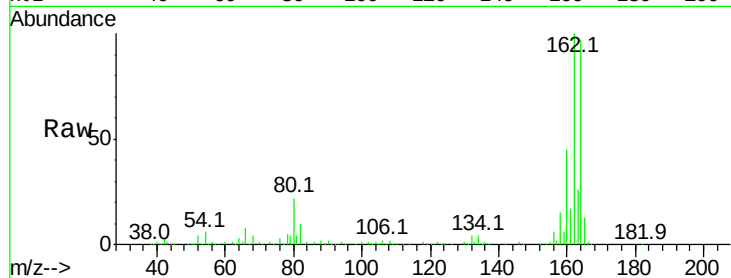




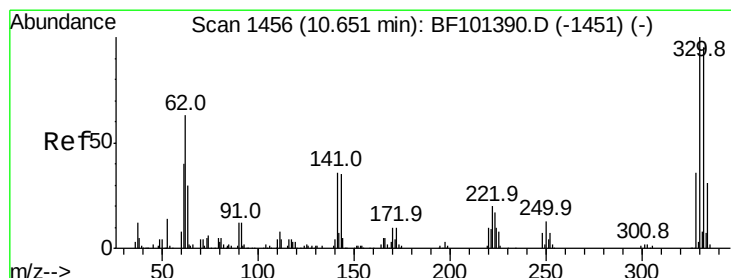
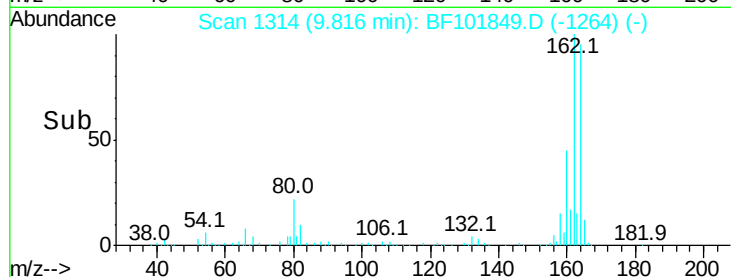
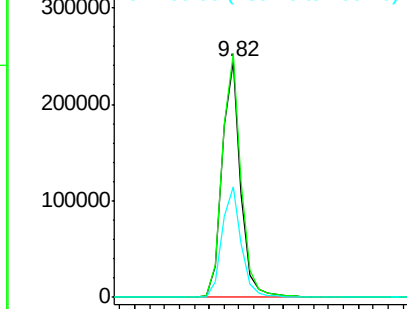
#38  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 9.82 min Scan# 1314  
Delta R.T. -0.01 min  
Lab File: BF101849.D  
Acq: 2 Jan 2018 14:23

Instrument :  
BNA\_F  
ClientSampleId :

Tot Ion:164 Resp: 214288  
Ion Ratio Lower Upper  
164 100  
162 103.4 86.1 129.1  
160 46.7 38.3 57.5

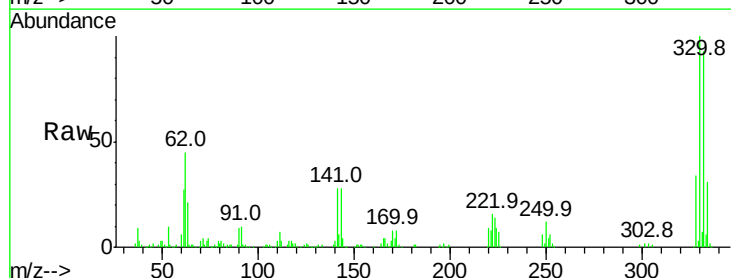


Abundance Ion 164.00 (163.70 to 164.70): E  
Ion 162.00 (161.70 to 162.70): E  
Ion 160.00 (159.70 to 160.70): E

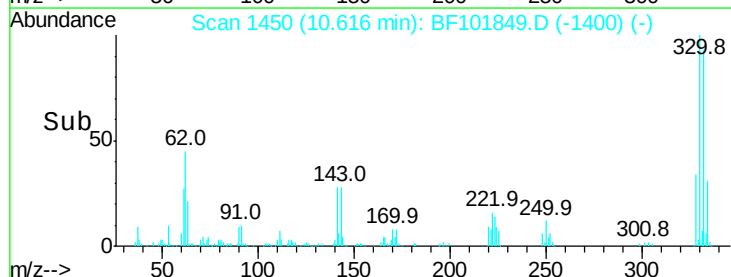
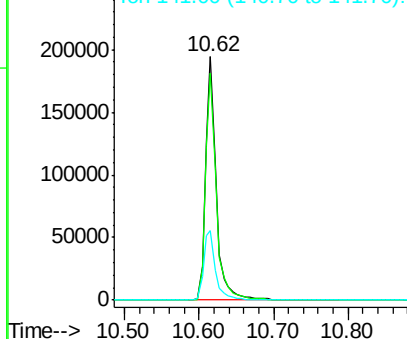


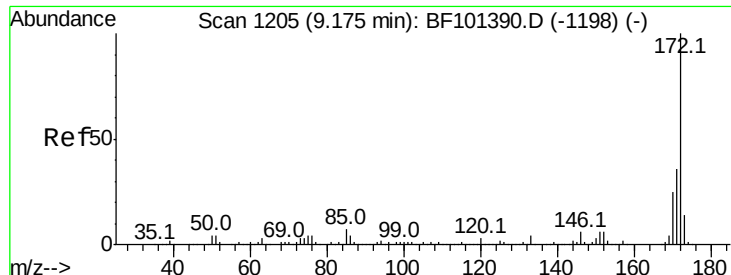
#41  
2,4,6-Tribromophenol  
Concen: 93.981 ng  
RT: 10.62 min Scan# 1450  
Delta R.T. -0.01 min  
Lab File: BF101849.D  
Acq: 2 Jan 2018 14:23

Tgt Ion:330 Resp: 194054  
Ion Ratio Lower Upper  
330 100  
332 95.5 77.0 115.6  
141 32.4 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



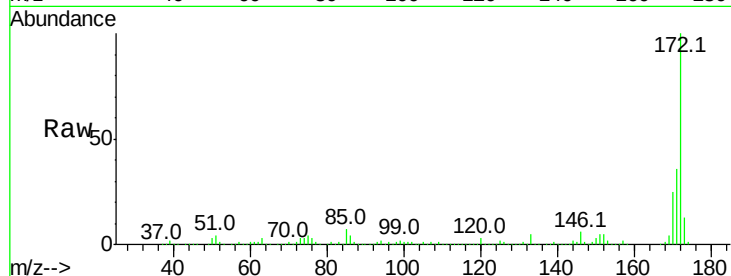


#44  
 2-Fluorobiphenyl  
 Concen: 70.926 ng  
 RT: 9.13 min Scan# 1198  
 Delta R.T. -0.01 min  
 Lab File: BF101849.D  
 Acq: 2 Jan 2018 14:23

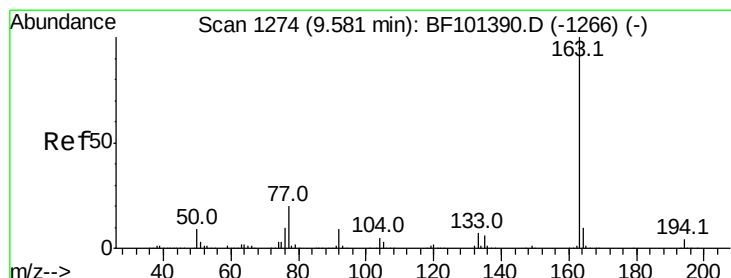
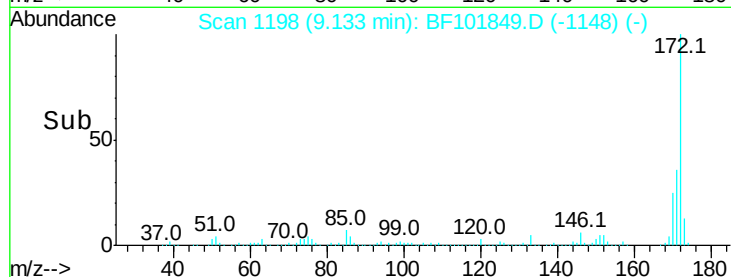
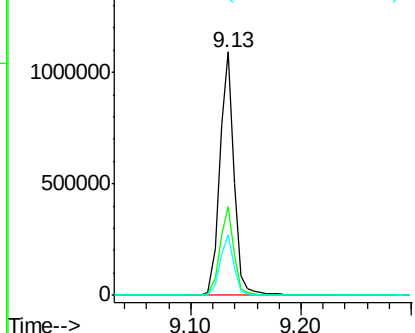
Instrument :  
 BNA\_F  
 ClientSampled :

Tot Ion:172 Resp: 979770  

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 172 | 100   |       |       |
| 171 | 36.3  | 29.7  | 44.5  |
| 170 | 24.7  | 19.6  | 29.4  |



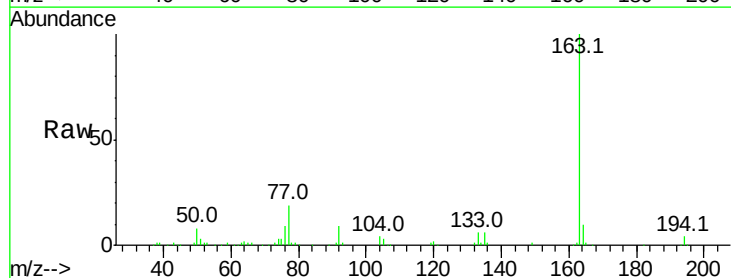
Abundance Ion 172.00 (171.70 to 172.70): E  
 Ion 171.00 (170.70 to 171.70): E  
 Ion 170.00 (169.70 to 170.70): E



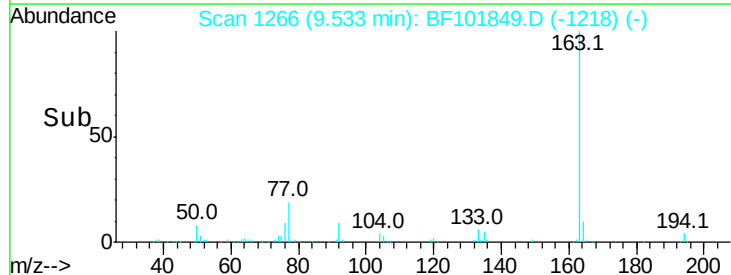
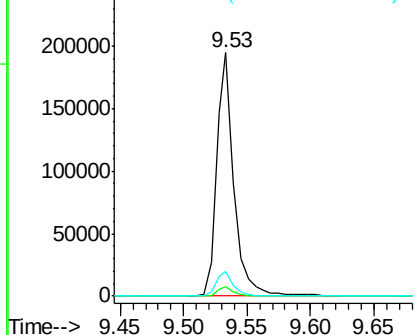
#49  
 Dimethylphthalate  
 Concen: 10.816 ng  
 RT: 9.53 min Scan# 1266  
 Delta R.T. -0.02 min  
 Lab File: BF101849.D  
 Acq: 2 Jan 2018 14:23

Tgt Ion:163 Resp: 186422  

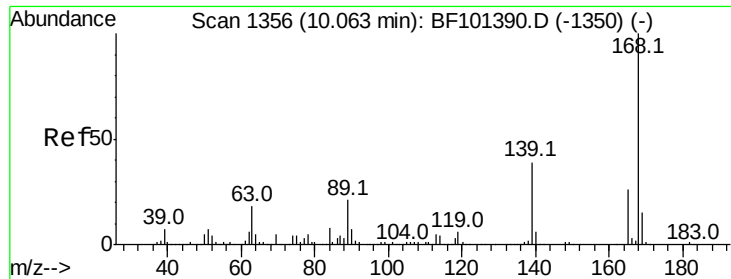
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 163 | 100   |       |       |
| 194 | 3.7   | 2.7   | 4.1   |
| 164 | 10.0  | 8.2   | 12.2  |



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



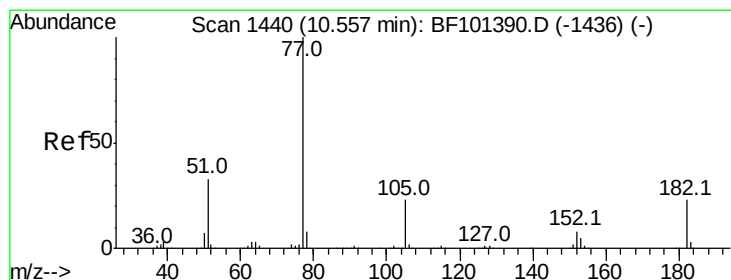
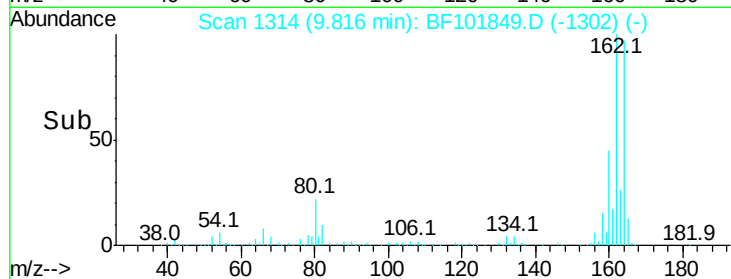
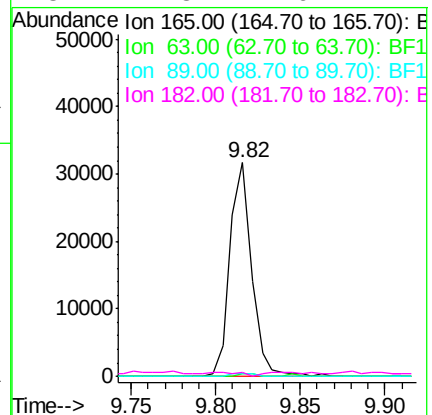
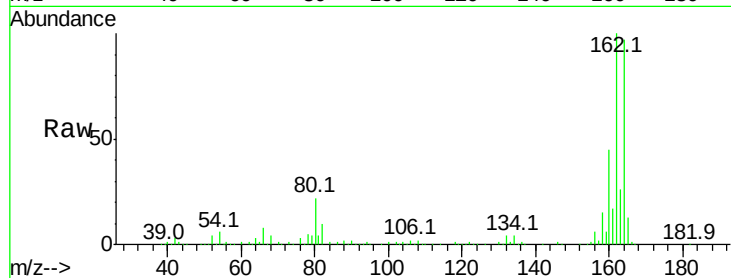




#56  
2,4-Dinitrotoluene  
Concen: 7.221 ng  
RT: 9.82 min Scan# 1314  
Delta R.T. -0.23 min  
Lab File: BF101849.D  
Acq: 2 Jan 2018 14:23

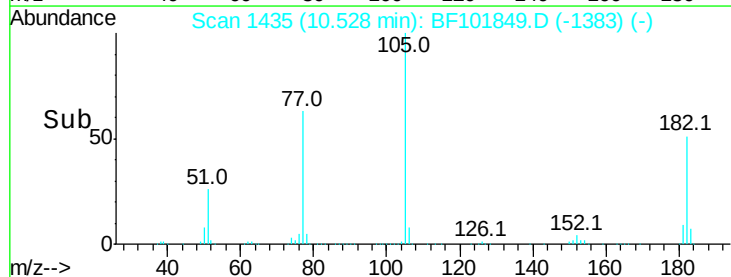
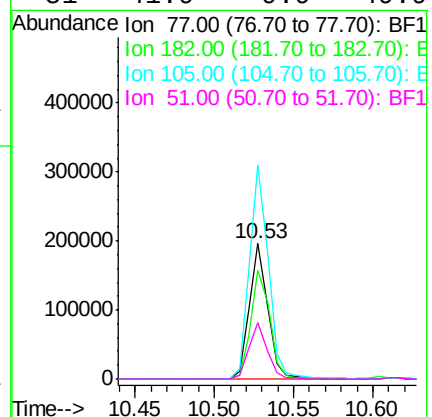
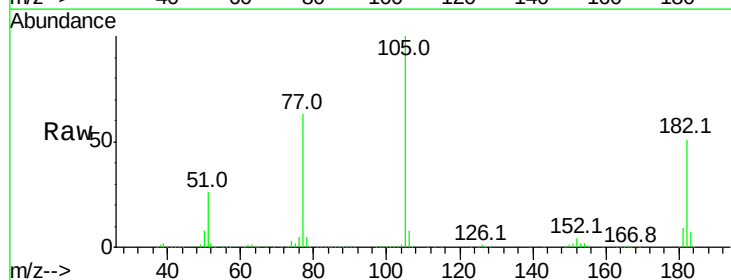
Instrument :  
BNA\_F  
ClientSampleId :

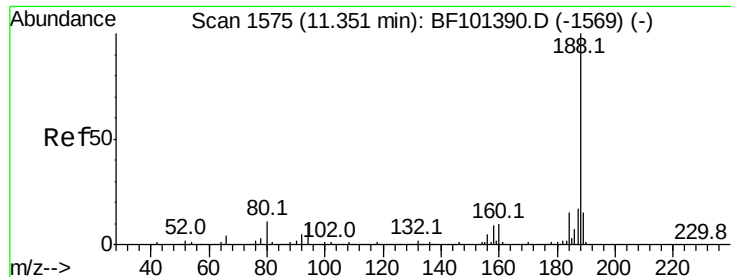
Tot Ion:165 Resp: 28501  
Ion Ratio Lower Upper  
165 100  
63 1.4 36.4 54.6#  
89 1.4 57.8 86.6#  
182 1.8 1.6 2.4



#62  
Azobenzene  
Concen: 8.911 ng  
RT: 10.53 min Scan# 1435  
Delta R.T. 0.01 min  
Lab File: BF101849.D  
Acq: 2 Jan 2018 14:23

Tgt Ion: 77 Resp: 157569  
Ion Ratio Lower Upper  
77 100  
182 80.6 1.7 41.7#  
105 157.9 3.0 43.0#  
51 41.9 9.9 49.9

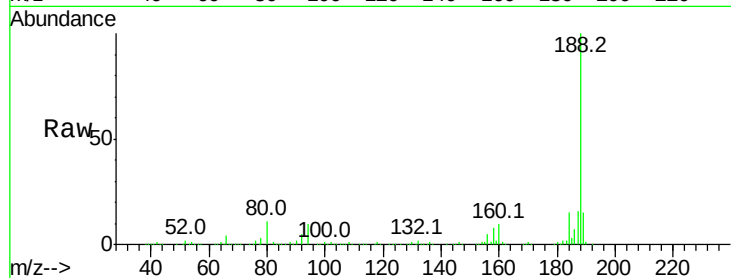




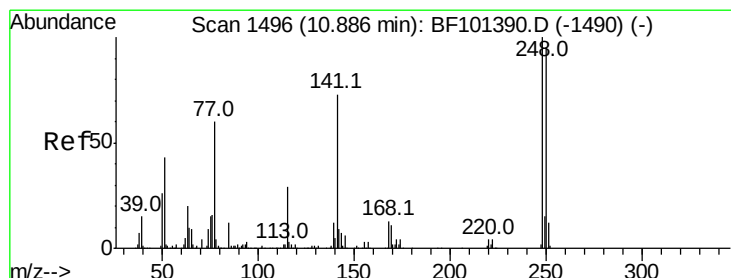
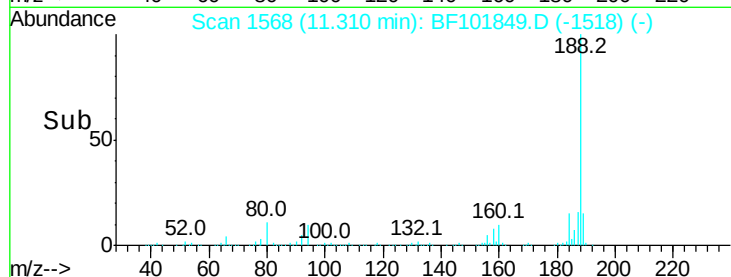
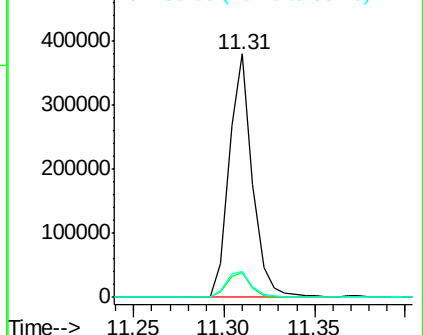
#63  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 11.31 min Scan# 1568  
Delta R.T. -0.01 min  
Lab File: BF101849.D  
Acq: 2 Jan 2018 14:23

Instrument :  
BNA\_F  
ClientSampleId :

Tot Ion:188 Resp: 337912  
Ion Ratio Lower Upper  
188 100  
94 10.2 8.5 12.7  
80 10.6 9.2 13.8

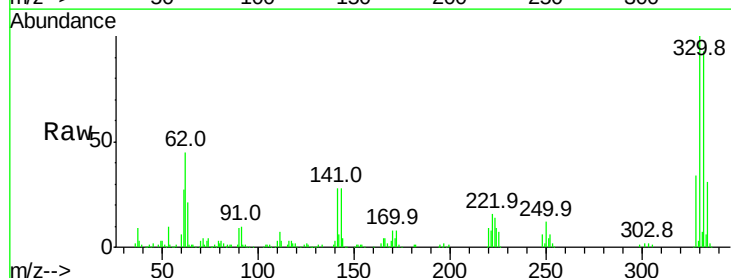


Abundance Ion 188.00 (187.70 to 188.70): E  
Ion 94.00 (93.70 to 94.70): BF1  
Ion 80.00 (79.70 to 80.70): BF1

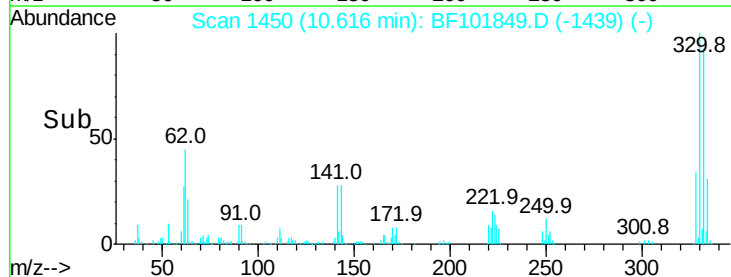
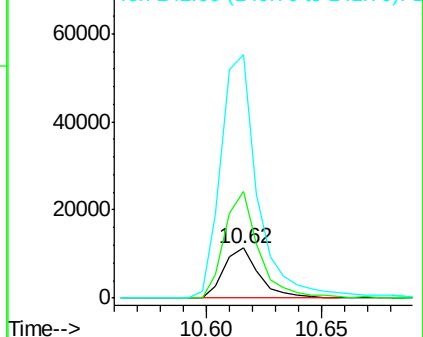


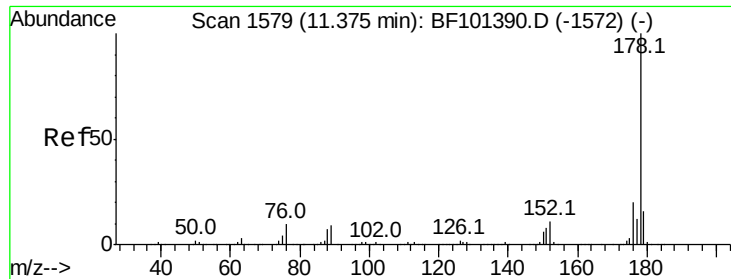
#66  
4-Bromophenyl-phenylether  
Concen: 3.149 ng  
RT: 10.62 min Scan# 1450  
Delta R.T. -0.24 min  
Lab File: BF101849.D  
Acq: 2 Jan 2018 14:23

Tgt Ion:248 Resp: 11955  
Ion Ratio Lower Upper  
248 100  
250 212.7 76.9 115.3#  
141 488.4 74.4 111.6#



Abundance Ion 248.00 (247.70 to 248.70): E  
Ion 250.00 (249.70 to 250.70): E  
Ion 141.00 (140.70 to 141.70): E

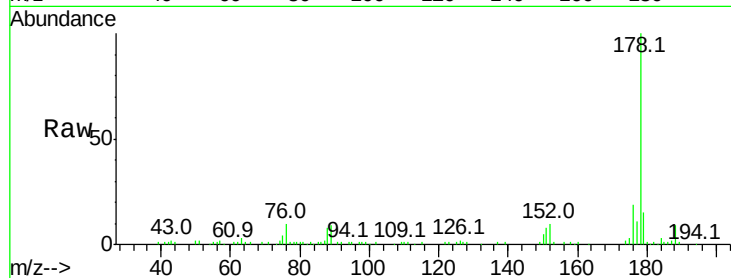




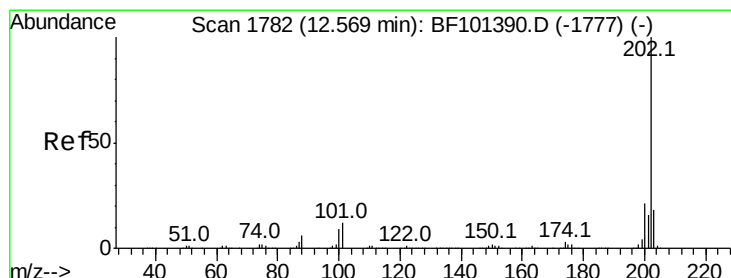
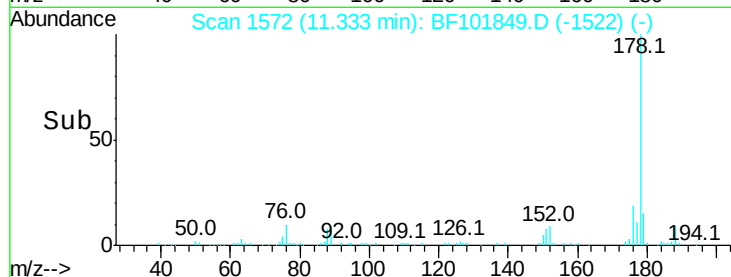
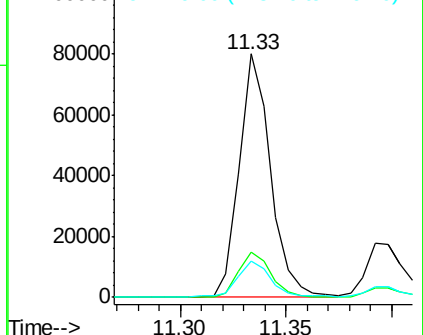
#70  
Phenanthrene  
Concen: 4.385 ng  
RT: 11.33 min Scan# 1572  
Delta R.T. -0.01 min  
Lab File: BF101849.D  
Acq: 2 Jan 2018 14:23

Instrument :  
BNA\_F  
ClientSampleId :

Tot Ion:178 Resp: 82411  
Ion Ratio Lower Upper  
178 100  
176 18.7 15.8 23.8  
179 15.1 13.0 19.6

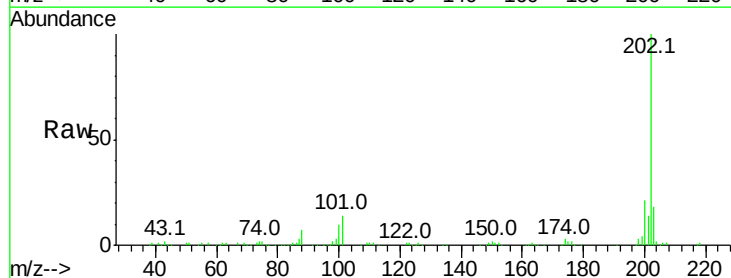


Abundance Ion 178.00 (177.70 to 178.70): E  
Ion 176.00 (175.70 to 176.70): E  
Ion 179.00 (178.70 to 179.70): E

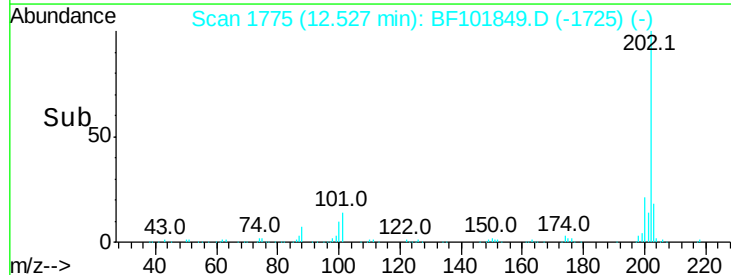
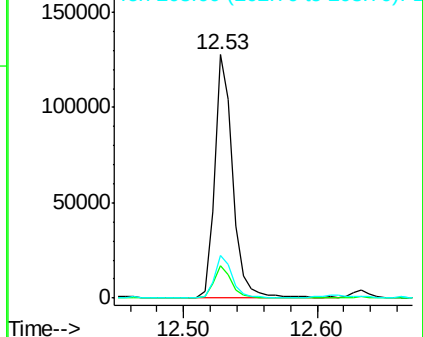


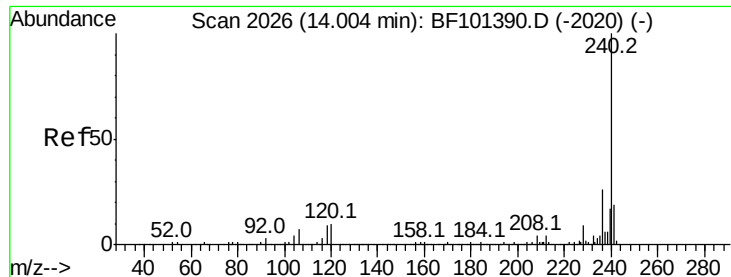
#74  
Fluoranthene  
Concen: 6.190 ng  
RT: 12.53 min Scan# 1775  
Delta R.T. -0.01 min  
Lab File: BF101849.D  
Acq: 2 Jan 2018 14:23

Tgt Ion:202 Resp: 122086  
Ion Ratio Lower Upper  
202 100  
101 13.6 0.0 34.1  
203 17.7 0.0 38.1



Abundance Ion 202.00 (201.70 to 202.70): E  
Ion 101.00 (100.70 to 101.70): E  
Ion 203.00 (202.70 to 203.70): E





#75

Chrysene-d12

Concen: 20.000 ng

RT: 13.96 min Scan# 2019

Delta R.T. -0.01 min

Lab File: BF101849.D

Acq: 2 Jan 2018 14:23

Instrument :

BNA\_F

ClientSampleId :

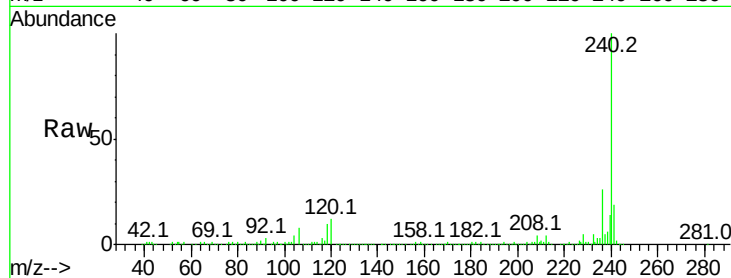
Tot Ion:240 Resp: 259999

Ion Ratio Lower Upper

240 100

120 11.5 9.5 14.3

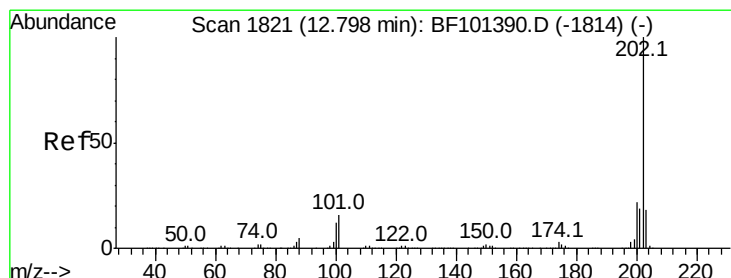
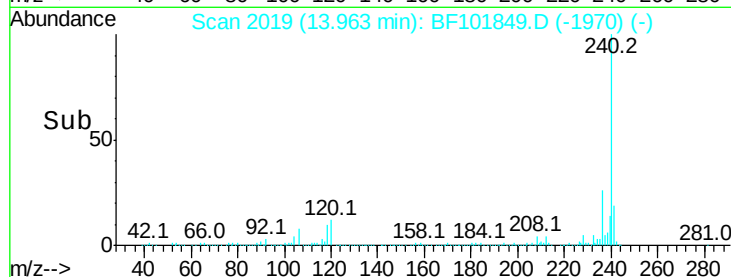
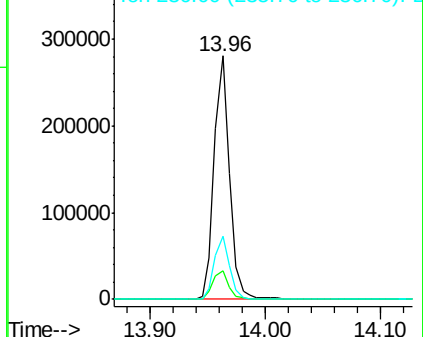
236 26.0 20.7 31.1



Abundance Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E



#77

Pyrene

Concen: 5.547 ng

RT: 12.76 min Scan# 1815

Delta R.T. -0.01 min

Lab File: BF101849.D

Acq: 2 Jan 2018 14:23

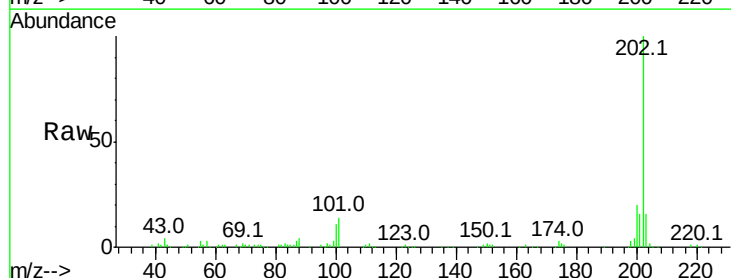
Tgt Ion:202 Resp: 108243

Ion Ratio Lower Upper

202 100

200 19.6 17.4 26.2

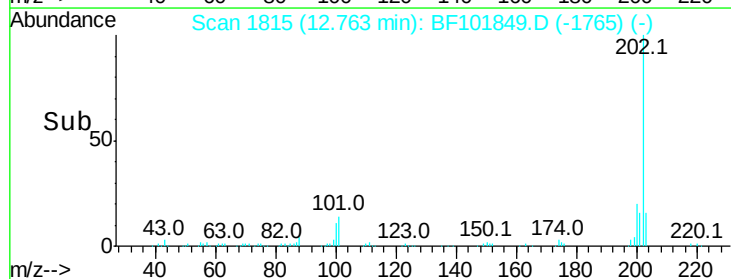
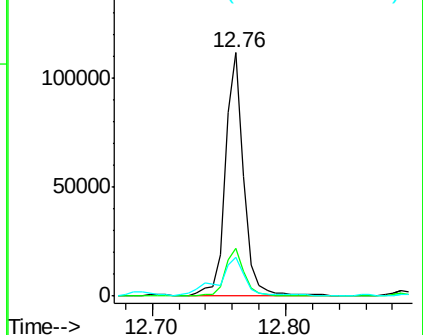
203 16.1 14.3 21.5

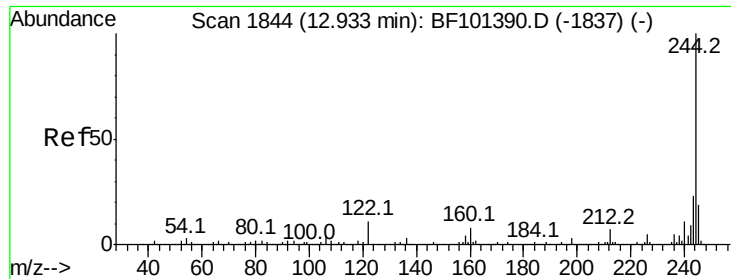


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 200.00 (199.70 to 200.70): E

Ion 203.00 (202.70 to 203.70): E





#78

Terphenyl-d14

Concen: 66.362 ng

RT: 12.89 min Scan# 1836

Delta R.T. -0.01 min

Lab File: BF101849.D

Acq: 2 Jan 2018 14:23

Instrument :

BNA\_F

ClientSampleId :

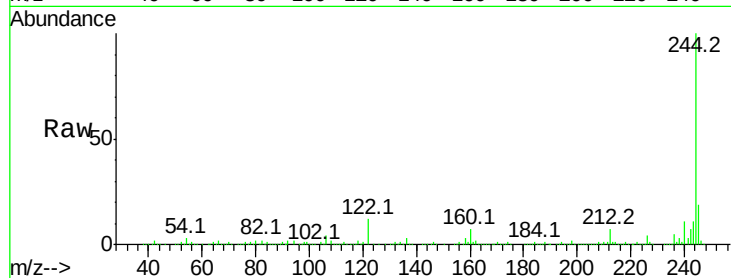
Tot Ion:244 Resp: 715711

Ion Ratio Lower Upper

244 100

212 7.1 5.4 8.0

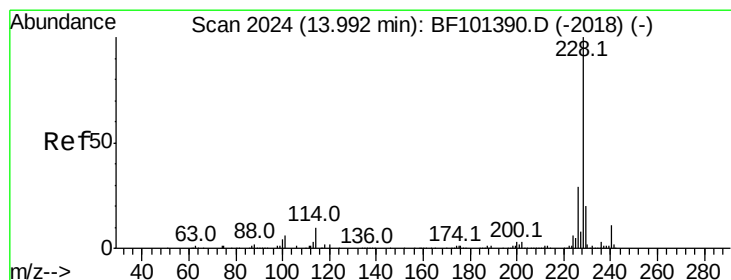
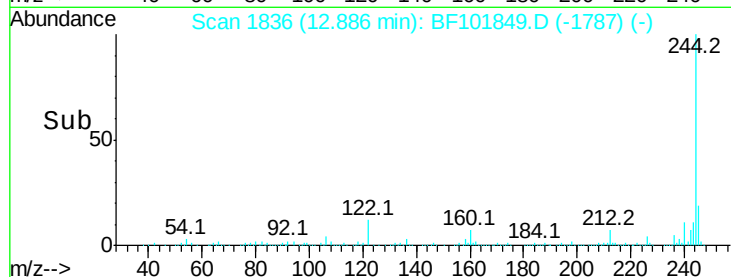
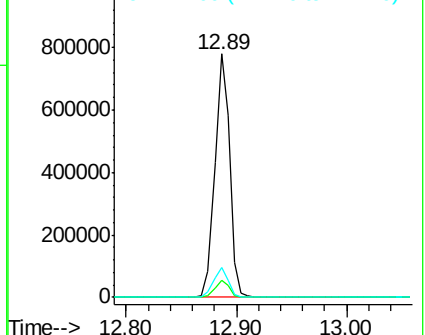
122 12.2 11.0 16.4



Abundance Ion 244.00 (243.70 to 244.70): E

Ion 212.00 (211.70 to 212.70): E

Ion 122.00 (121.70 to 122.70): E



#80

Benzo(a)anthracene

Concen: 3.097 ng

RT: 13.99 min Scan# 2024

Delta R.T. 0.03 min

Lab File: BF101849.D

Acq: 2 Jan 2018 14:23

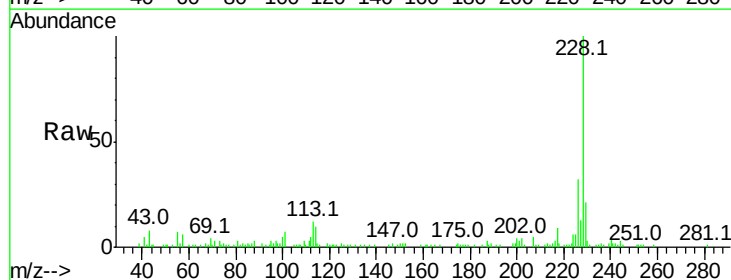
Tgt Ion:228 Resp: 53167

Ion Ratio Lower Upper

228 100

226 32.2 22.6 33.8

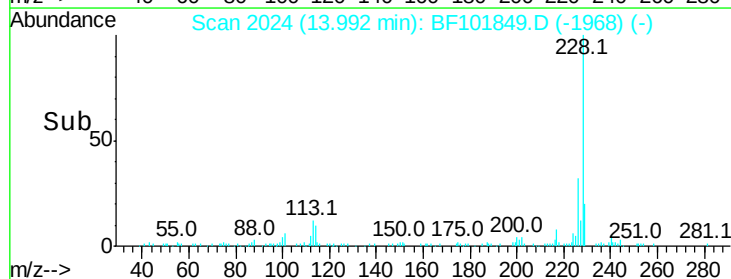
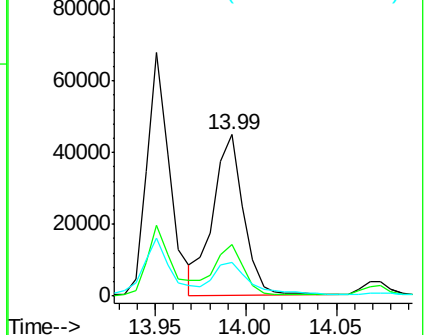
229 21.3 15.8 23.6

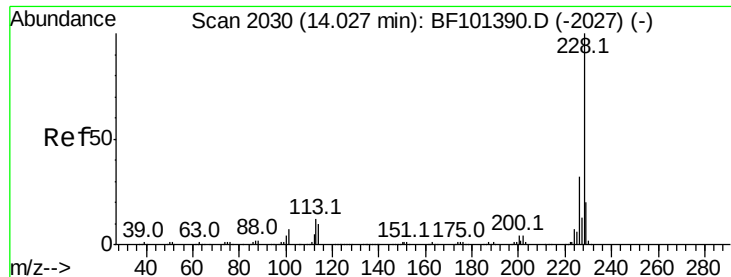


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E





#82

Chrysene

Concen: 3.280 ng

RT: 13.99 min Scan# 2024

Delta R.T. -0.01 min

Lab File: BF101849.D

Acq: 2 Jan 2018 14:23

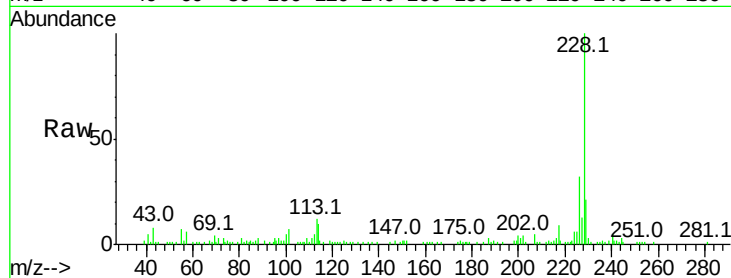
Instrument :

BNA\_F

ClientSampleId :

Tot Ion:228 Resp: 53167

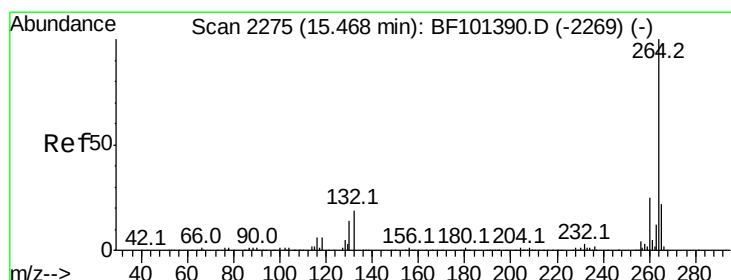
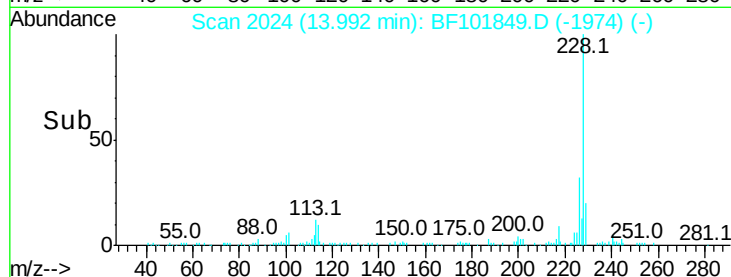
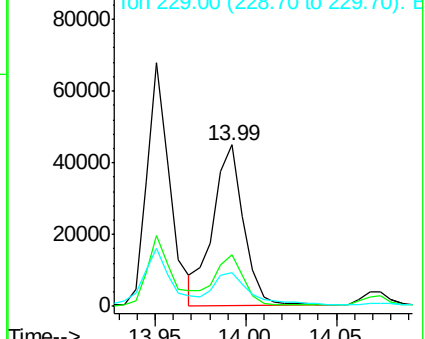
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 228 | 100   |       |       |
| 226 | 32.2  | 25.0  | 37.6  |
| 229 | 21.3  | 16.2  | 24.4  |



Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E



#86

Perylene-d12

Concen: 20.000 ng

RT: 15.43 min Scan# 2269

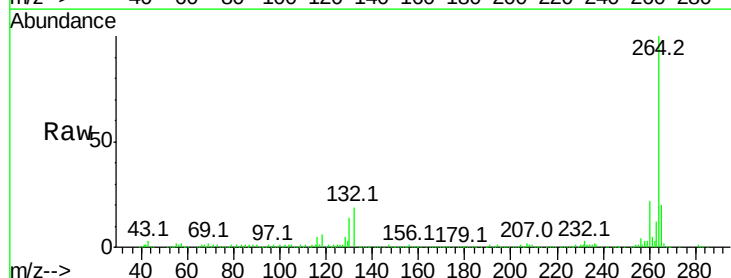
Delta R.T. -0.01 min

Lab File: BF101849.D

Acq: 2 Jan 2018 14:23

Tgt Ion:264 Resp: 271024

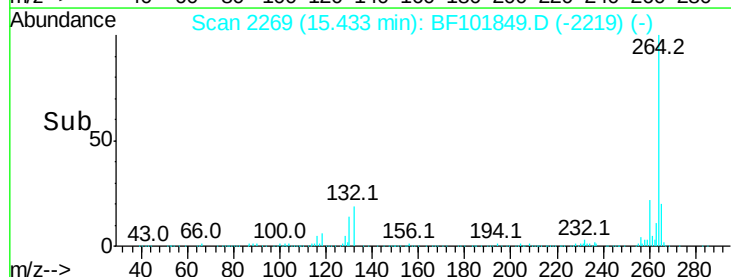
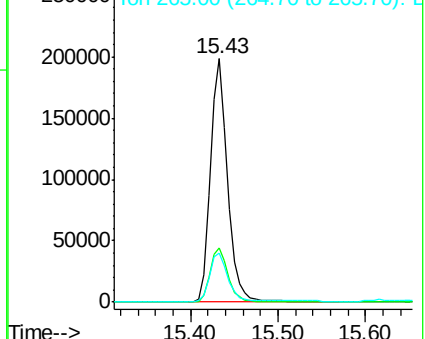
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 264 | 100   |       |       |
| 260 | 22.4  | 19.2  | 28.8  |
| 265 | 20.1  | 17.5  | 26.3  |

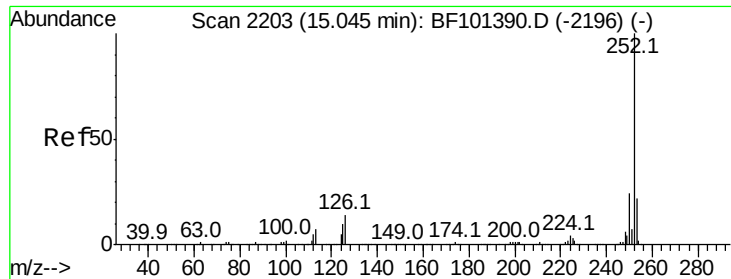


Abundance Ion 264.00 (263.70 to 264.70): E

Ion 260.00 (259.70 to 260.70): E

Ion 265.00 (264.70 to 265.70): E

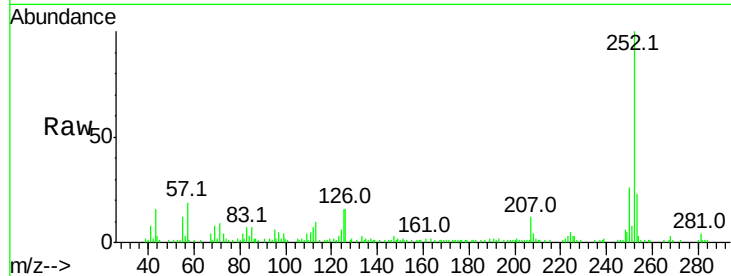




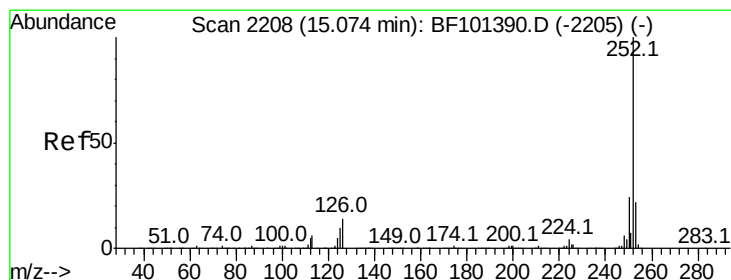
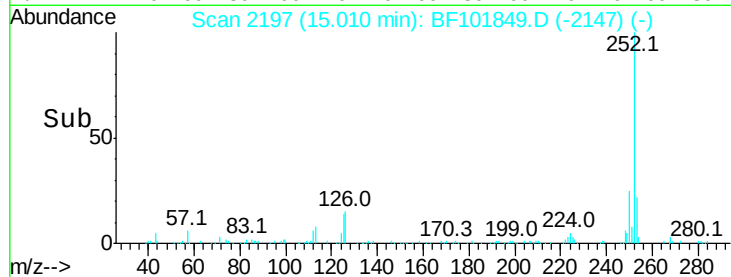
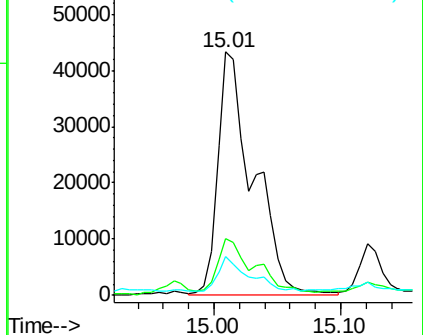
#87  
Benzo(b)fluoranthene  
Concen: 5.135 ng  
RT: 15.01 min Scan# 2197  
Delta R.T. -0.01 min  
Lab File: BF101849.D  
Acq: 2 Jan 2018 14:23

Instrument :  
BNA\_F  
ClientSampled :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.4  | 17.0  | 25.6  |
| 125     | 15.9  | 9.0   | 13.6  |

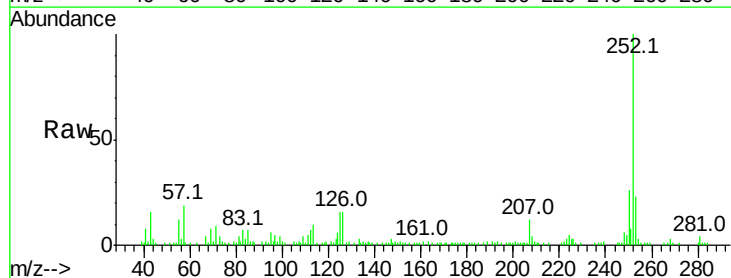


Abundance Ion 252.00 (251.70 to 252.70): E  
Ion 253.00 (252.70 to 253.70): E  
Ion 125.00 (124.70 to 125.70): E

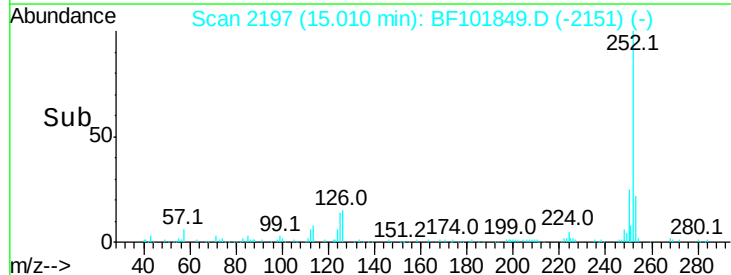
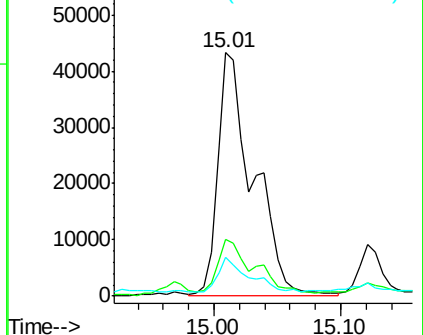


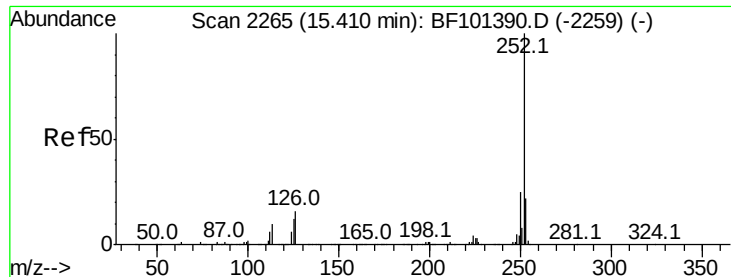
#88  
Benzo(k)fluoranthene  
Concen: 5.281 ng  
RT: 15.01 min Scan# 2197  
Delta R.T. -0.03 min  
Lab File: BF101849.D  
Acq: 2 Jan 2018 14:23

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.4  | 17.9  | 26.9  |
| 125     | 15.9  | 10.2  | 15.2  |



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





#89

Benzo(a)pyrene

Concen: 3.097 ng

RT: 15.38 min Scan# 2260

Delta R.T. 0.00 min

Lab File: BF101849.D

Acq: 2 Jan 2018 14:23

Instrument :

BNA\_F

ClientSampleId :

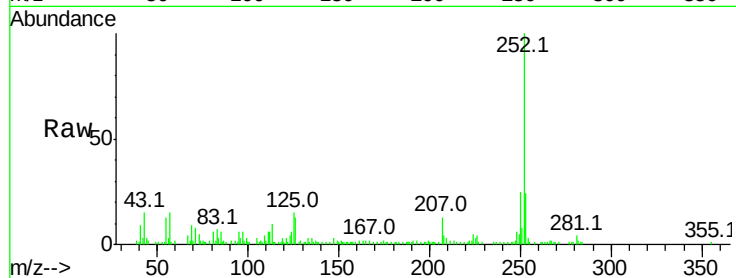
Tot Ion:252 Resp: 47156

Ion Ratio Lower Upper

252 100

253 24.2 17.1 25.7

125 15.2 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

