

Data Path : Z:\HPCHEM1\BNA F\DATA\BF120417\  
 Data File : BF101099.D  
 Acq On : 4 Dec 2017 15:49  
 Operator : SJ/JU  
 Sample : I6308-01  
 Misc :  
 ALS Vial : 15 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :

Quant Time: Dec 04 16:19:01 2017  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF113017.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Dec 04 13:07:49 2017  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.85  | 152  | 54254    | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 8.13  | 136  | 204113   | 20.00 | ng    | 0.00     |
| 38) Acenaphthene-d10      | 9.89  | 164  | 92641    | 20.00 | ng    | 0.00     |
| 63) Phenanthrene-d10      | 11.37 | 188  | 145783   | 20.00 | ng    | 0.00     |
| 75) Chrysene-d12          | 14.02 | 240  | 127581   | 20.00 | ng    | 0.00     |
| 86) Perylene-d12          | 15.50 | 264  | 105169   | 20.00 | ng    | 0.01     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 5) 2-Fluorophenol           | 5.47  | 112  | 367326   | 111.88 | ng    | 0.01     |
| 7) Phenol-d6                | 6.49  | 99   | 430296   | 107.95 | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 7.42  | 82   | 267148   | 78.08  | ng    | 0.00     |
| 41) 2,4,6-Tribromophenol    | 10.68 | 330  | 101367   | 91.09  | ng    | 0.00     |
| 44) 2-Fluorobiphenyl        | 9.20  | 172  | 531370   | 78.48  | ng    | 0.00     |
| 78) Terphenyl-d14           | 12.96 | 244  | 382358   | 65.55  | ng    | 0.00     |

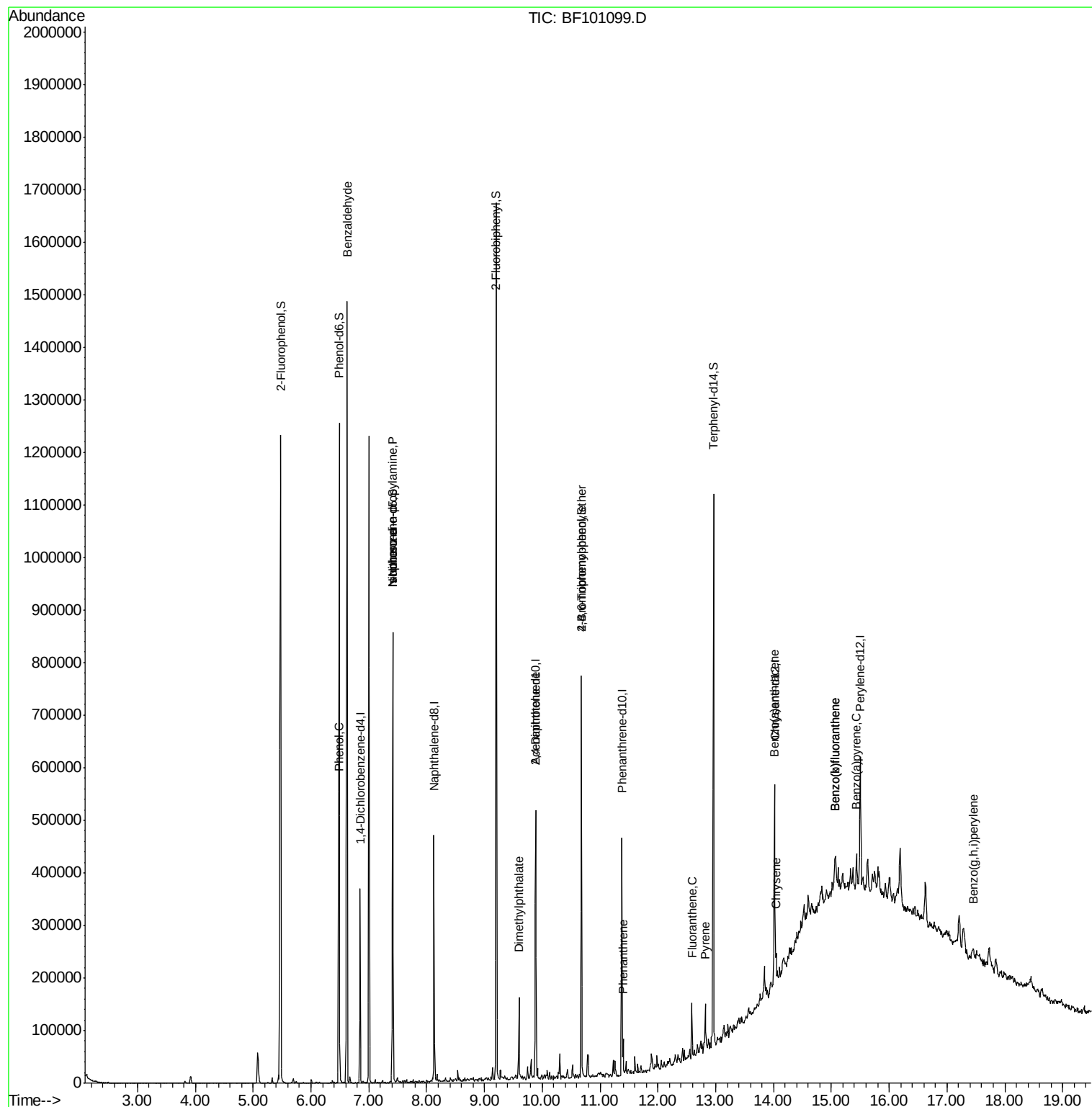
| Target Compounds               | R.T.  | QIon | Response | Conc  | Units | Qvalue |
|--------------------------------|-------|------|----------|-------|-------|--------|
| 9) Benzaldehyde                | 6.62  | 77   | 8227     | 3.37  | ng    | 90     |
| 10) Phenol                     | 6.50  | 94   | 11421    | 2.58  | ng    | 96     |
| 19) n-Nitroso-di-n-propylamine | 7.42  | 70   | 34915    | 13.01 | ng    | # 81   |
| 25) Isophorone                 | 7.42  | 82   | 267145   | 45.71 | ng    | # 64   |
| 49) Dimethylphthalate          | 9.60  | 163  | 51396    | 6.88  | ng    | # 98   |
| 56) 2,4-Dinitrotoluene         | 9.89  | 165  | 11723    | 5.56  | ng    | # 21   |
| 66) 4-Bromophenyl-phenylether  | 10.68 | 248  | 6515     | 3.99  | ng    | # 1    |
| 70) Phenanthrene               | 11.40 | 178  | 22689    | 2.83  | ng    | 98     |
| 74) Fluoranthene               | 12.59 | 202  | 38900    | 4.37  | ng    | 96     |
| 77) Pyrene                     | 12.82 | 202  | 33940    | 3.86  | ng    | 99     |
| 80) Benzo(a)anthracene         | 14.01 | 228  | 19682    | 2.44  | ng    | # 83   |
| 82) Chrysene                   | 14.04 | 228  | 23096    | 3.09  | ng    | # 90   |
| 87) Benzo(b)fluoranthene       | 15.07 | 252  | 39396    | 6.25  | ng    | # 63   |
| 88) Benzo(k)fluoranthene       | 15.07 | 252  | 39396    | 6.35  | ng    | # 67   |
| 89) Benzo(a)pyrene             | 15.44 | 252  | 19052    | 3.33  | ng    | # 77   |
| 91) Benzo(g,h,i)perylene       | 17.45 | 276  | 11137    | 2.34  | ng    | # 91   |

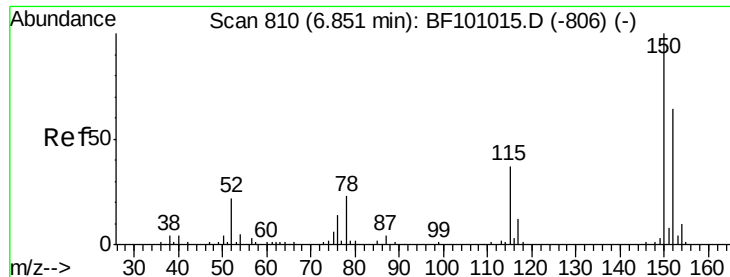
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\HPCHEM1\BNA F\DATA\BF120417\  
Data File : BF101099.D  
Acq On : 4 Dec 2017 15:49  
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Misc :  
ALS Vial : 15 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :

Quant Time: Dec 04 16:19:01 2017  
Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF113017.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Dec 04 13:07:49 2017  
Response via : Initial Calibration



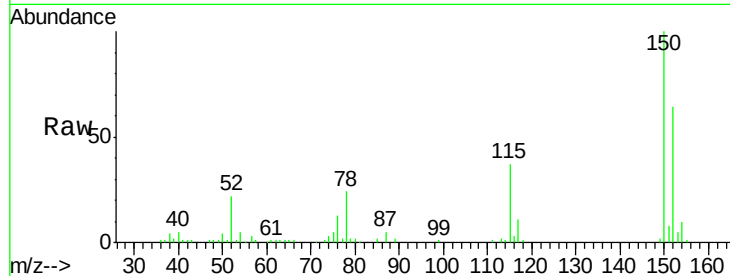


#1

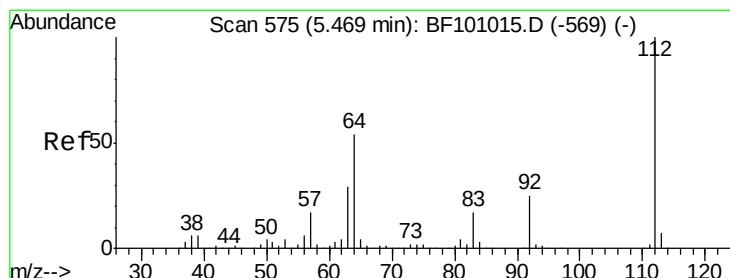
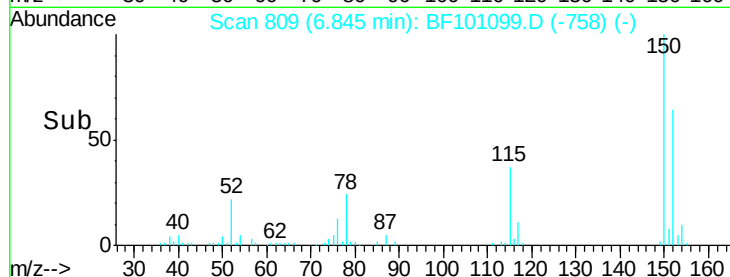
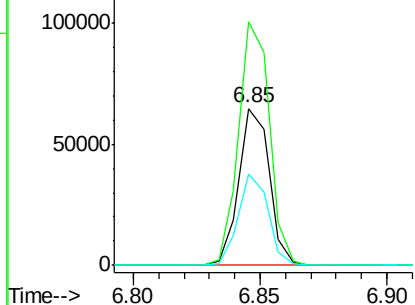
1,4-Dichlorobenzene-d4  
Concen: 20.00 ng  
RT: 6.85 min Scan# 809  
Delta R.T. 0.00 min  
Lab File: BF101099.D  
Acq: 4 Dec 2017 15:49

Instrument :  
BNA\_F  
ClientSampleId :

Tot Ion:152 Resp: 54254  
Ion Ratio Lower Upper  
152 100  
150 155.5 124.6 186.8  
115 58.2 50.1 75.1



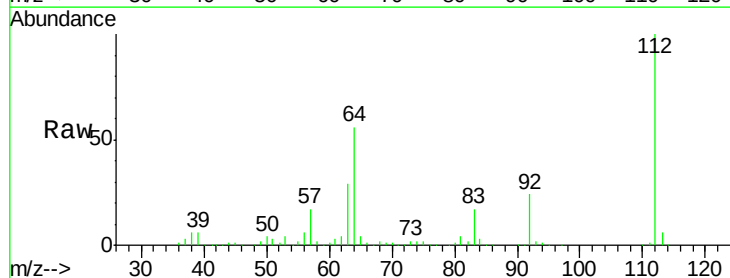
Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 115.00 (114.70 to 115.70): E



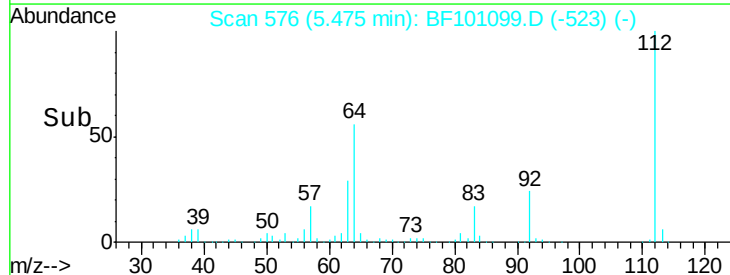
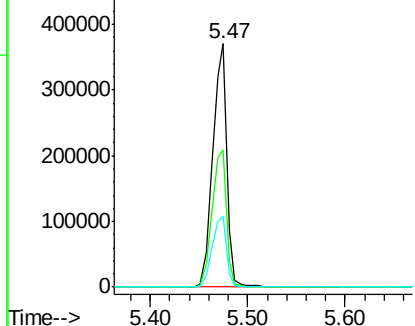
#5

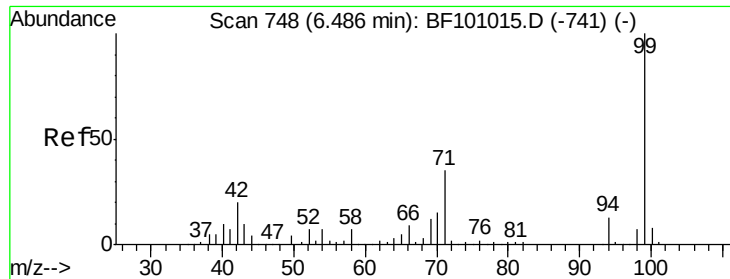
2-Fluorophenol  
Concen: 111.88 ng  
RT: 5.47 min Scan# 576  
Delta R.T. 0.01 min  
Lab File: BF101099.D  
Acq: 4 Dec 2017 15:49

Tgt Ion:112 Resp: 367326  
Ion Ratio Lower Upper  
112 100  
64 56.2 47.9 71.9  
63 29.1 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: 107.95 ng

RT: 6.49 min Scan# 748

Delta R.T. 0.01 min

Lab File: BF101099.D

Acq: 4 Dec 2017 15:49

Instrument :

BNA\_F

ClientSampled :

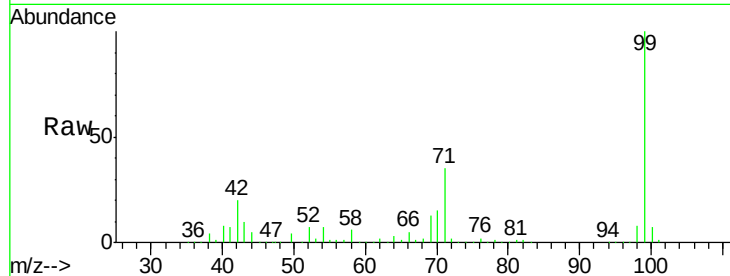
Tot Ion: 99 Resp: 430296

Ion Ratio Lower Upper

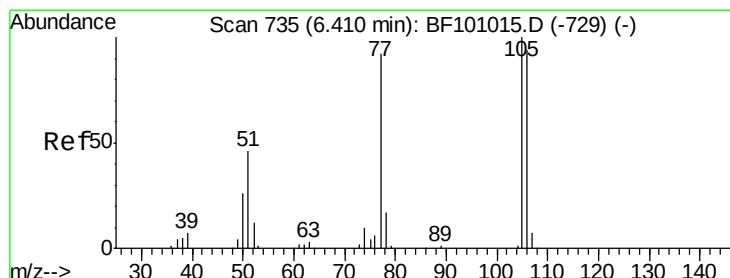
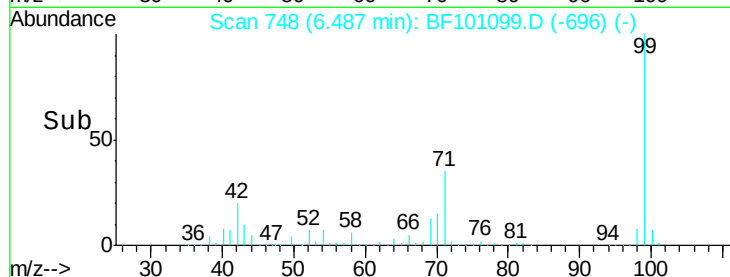
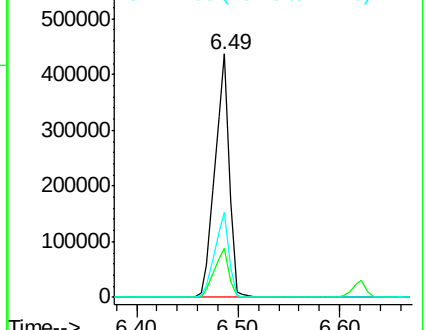
99 100

42 20.2 14.5 21.7

71 34.7 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



#9

Benzaldehyde

Concen: 3.37 ng

RT: 6.62 min Scan# 771

Delta R.T. 0.22 min

Lab File: BF101099.D

Acq: 4 Dec 2017 15:49

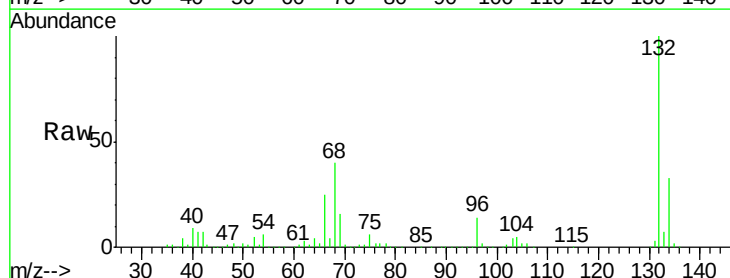
Tgt Ion: 77 Resp: 8227

Ion Ratio Lower Upper

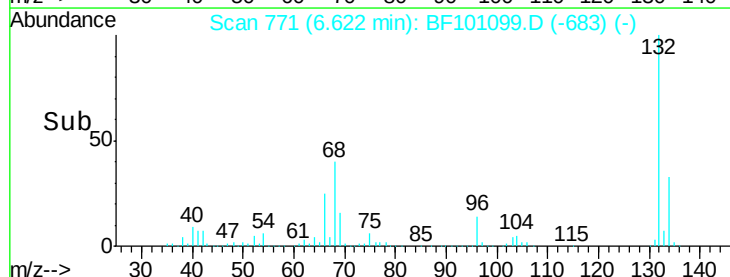
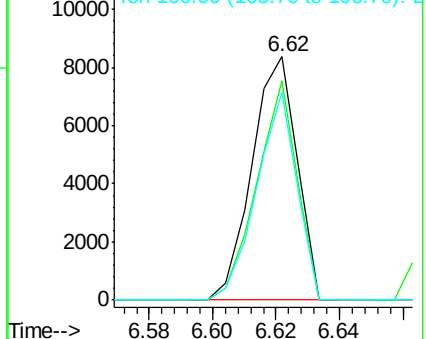
77 100

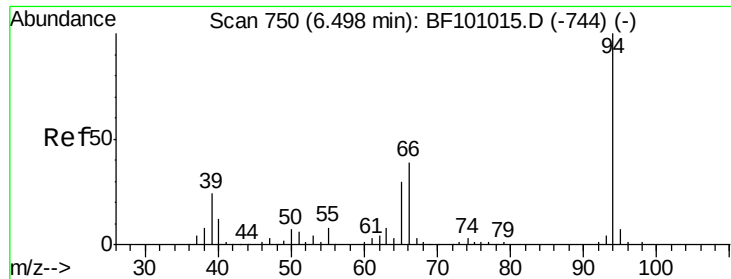
105 89.8 81.1 121.1

106 85.5 74.5 114.5



Abundance Ion 77.00 (76.70 to 77.70): BF1  
Ion 105.00 (104.70 to 105.70): BF1  
Ion 106.00 (105.70 to 106.70): BF1

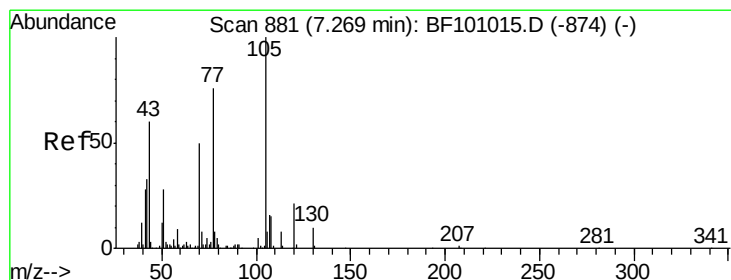
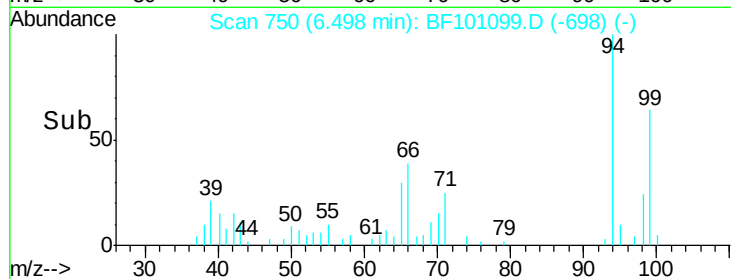
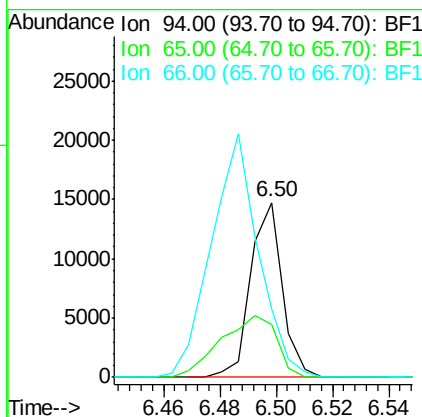
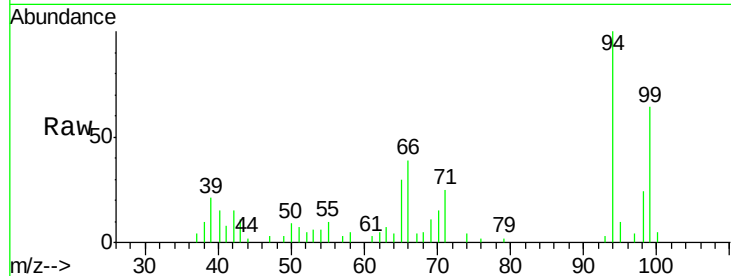




#10  
Phenol  
Concen: 2.58 ng  
RT: 6.50 min Scan# 750  
Delta R.T. 0.01 min  
Lab File: BF101099.D  
Acq: 4 Dec 2017 15:49

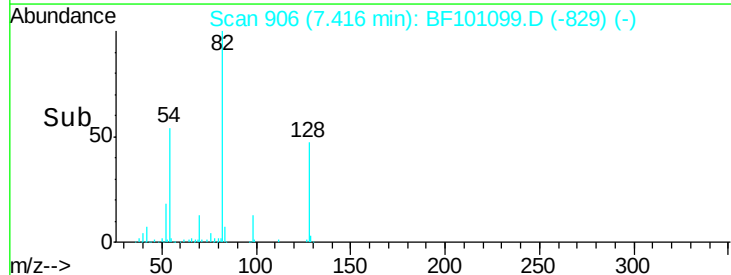
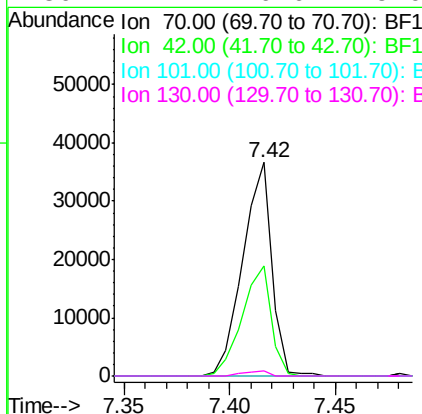
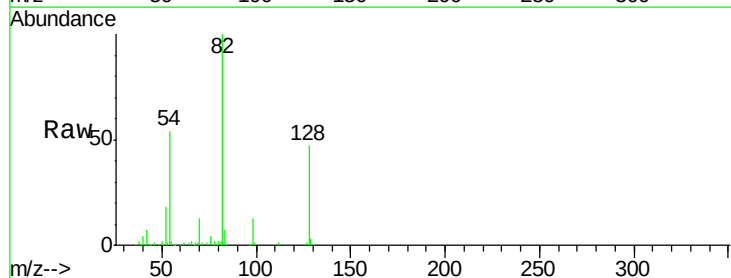
Instrument :  
BNA\_F  
ClientSampled :

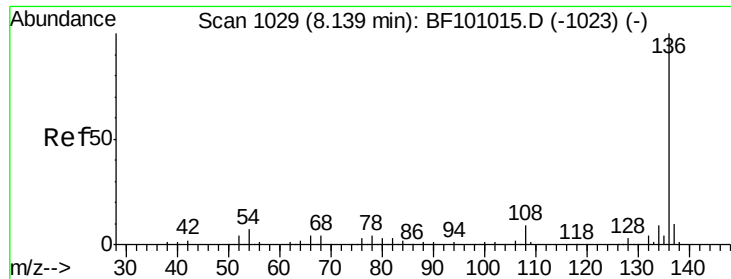
Tot Ion: 94 Resp: 11421  
Ion Ratio Lower Upper  
94 100  
65 29.9 7.9 47.9  
66 38.8 16.2 56.2



#19  
n-Nitroso-di-n-propylamine  
Concen: 13.01 ng  
RT: 7.42 min Scan# 906  
Delta R.T. 0.15 min  
Lab File: BF101099.D  
Acq: 4 Dec 2017 15:49

Tgt Ion: 70 Resp: 34915  
Ion Ratio Lower Upper  
70 100  
42 51.4 47.5 71.3  
101 0.0 7.4 11.2#  
130 2.2 16.6 25.0#

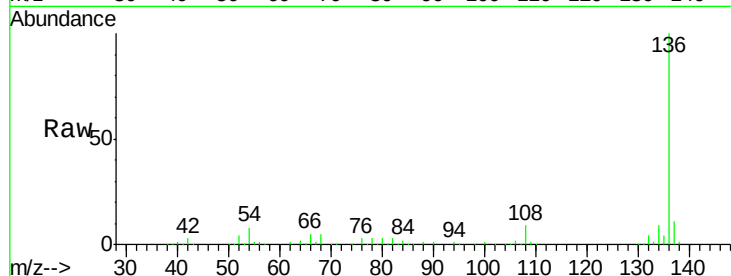




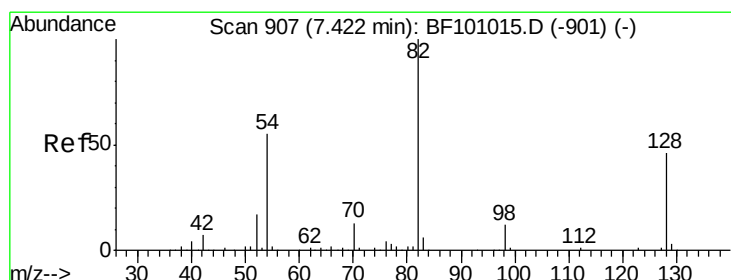
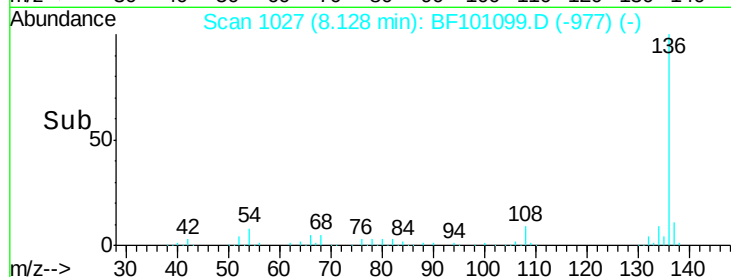
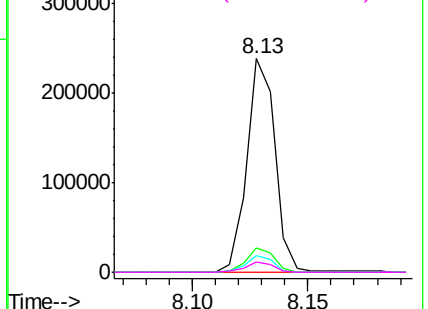
#21  
Naphthalene-d8  
Concen: 20.00 ng  
RT: 8.13 min Scan# 1027  
Delta R.T. -0.01 min  
Lab File: BF101099.D  
Acq: 4 Dec 2017 15:49

Instrument :  
BNA\_F  
ClientSampleId :

|             |       |          |
|-------------|-------|----------|
| Tot Ion:136 | Resp: | 204113   |
| Ion Ratio   | Lower | Upper    |
| 136         | 100   |          |
| 137         | 11.3  | 8.9 13.3 |
| 54          | 8.0   | 6.6 9.8  |
| 68          | 5.0   | 5.0 7.4  |

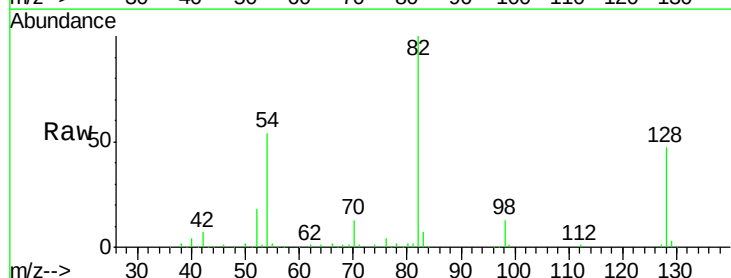


Abundance Ion 136.00 (135.70 to 136.70): E  
Ion 137.00 (136.70 to 137.70): E  
Ion 54.00 (53.70 to 54.70): BF1  
Ion 68.00 (67.70 to 68.70): BF1

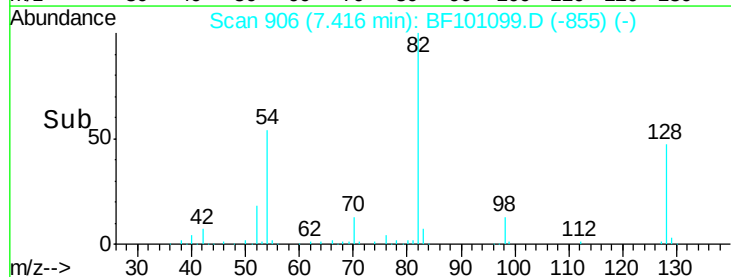
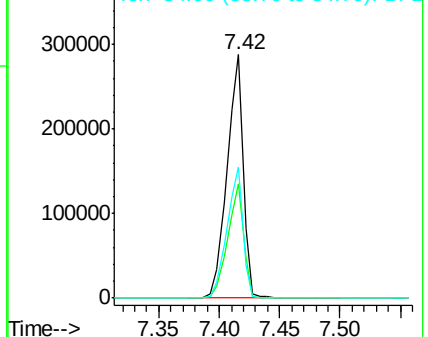


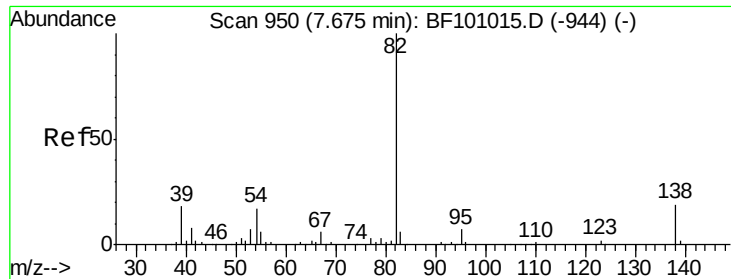
#23  
Nitrobenzene-d5  
Concen: 78.08 ng  
RT: 7.42 min Scan# 906  
Delta R.T. 0.00 min  
Lab File: BF101099.D  
Acq: 4 Dec 2017 15:49

|             |       |           |
|-------------|-------|-----------|
| Tgt Ion: 82 | Resp: | 267148    |
| Ion Ratio   | Lower | Upper     |
| 82          | 100   |           |
| 128         | 47.1  | 36.1 54.1 |
| 54          | 53.9  | 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

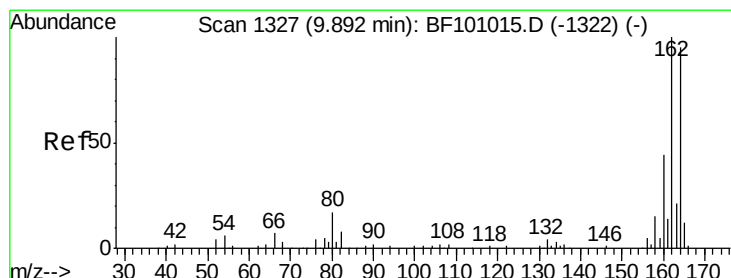
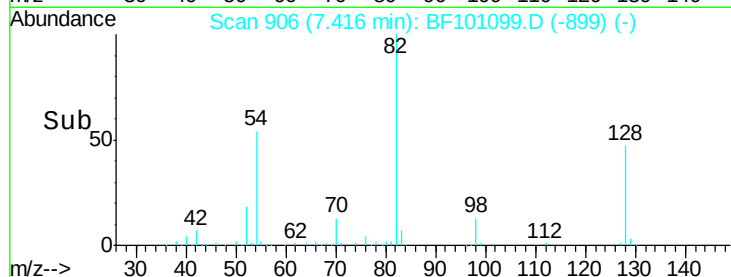
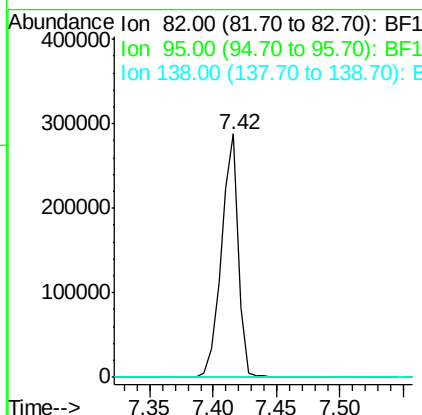
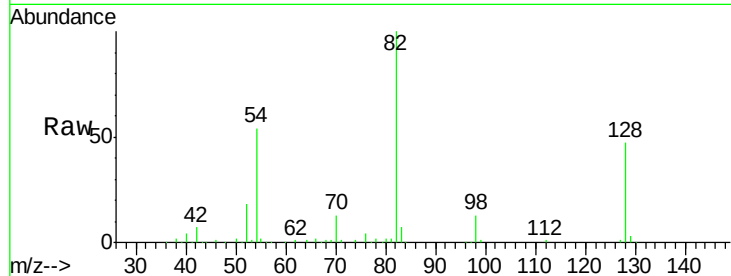




#25  
Isophorone  
Concen: 45.71 ng  
RT: 7.42 min Scan# 906  
Delta R.T. -0.26 min  
Lab File: BF101099.D  
Acq: 4 Dec 2017 15:49

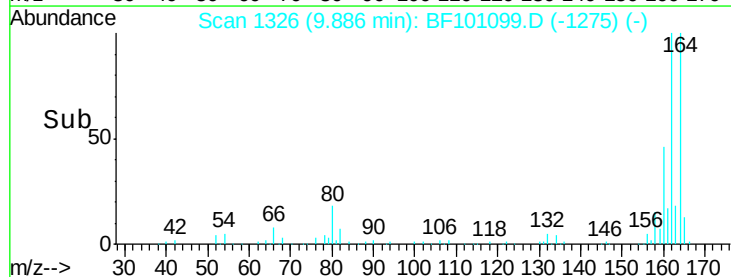
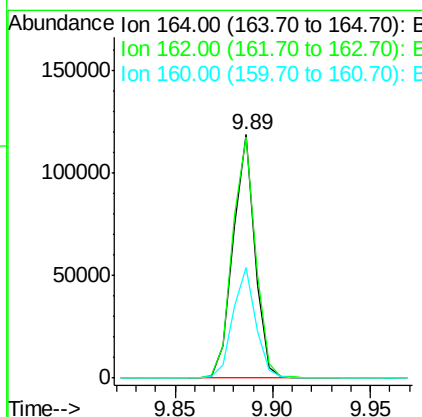
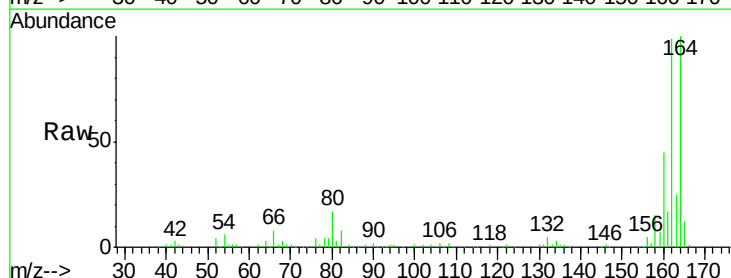
Instrument :  
BNA\_F  
ClientSampleId :

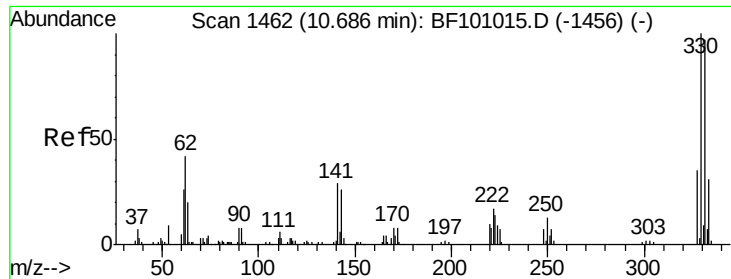
Tot Ion: 82 Resp: 267145  
Ion Ratio Lower Upper  
82 100  
95 0.0 5.2 7.8#  
138 0.0 14.9 22.3#



#38  
Acenaphthene-d10  
Concen: 20.00 ng  
RT: 9.89 min Scan# 1326  
Delta R.T. 0.00 min  
Lab File: BF101099.D  
Acq: 4 Dec 2017 15:49

Tgt Ion:164 Resp: 92641  
Ion Ratio Lower Upper  
164 100  
162 98.8 86.1 129.1  
160 45.3 38.3 57.5

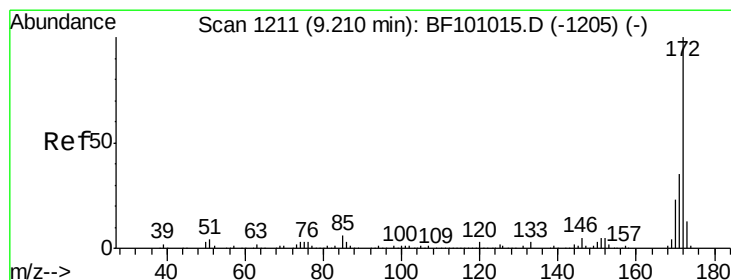
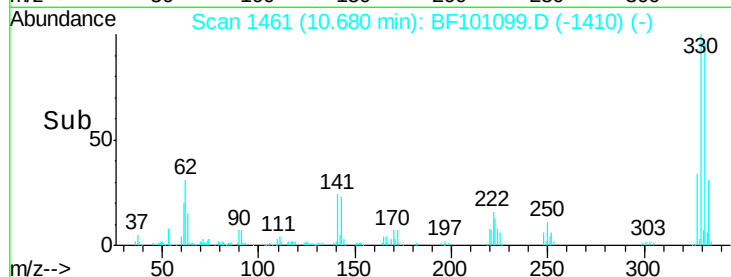
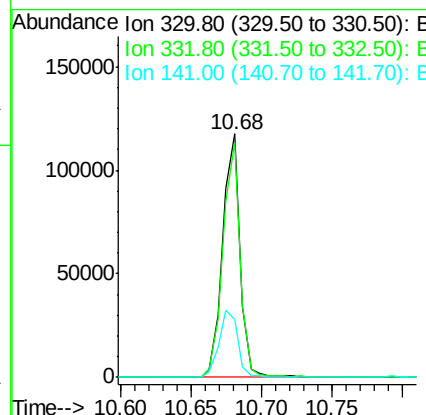
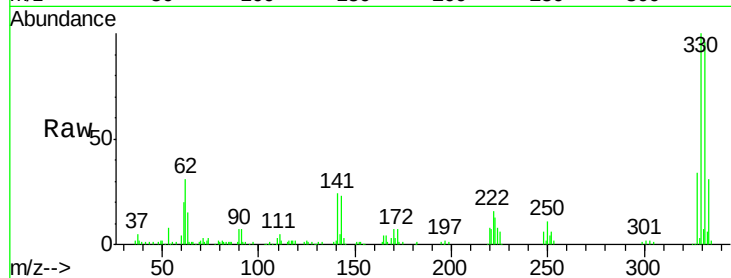




#41  
 2,4,6-Tribromophenol  
 Concen: 91.09 ng  
 RT: 10.68 min Scan# 1461  
 Delta R.T. 0.00 min  
 Lab File: BF101099.D  
 Acq: 4 Dec 2017 15:49

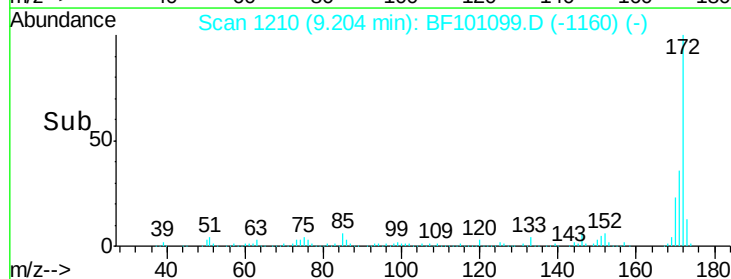
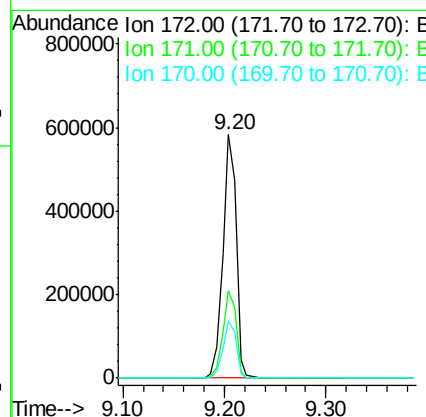
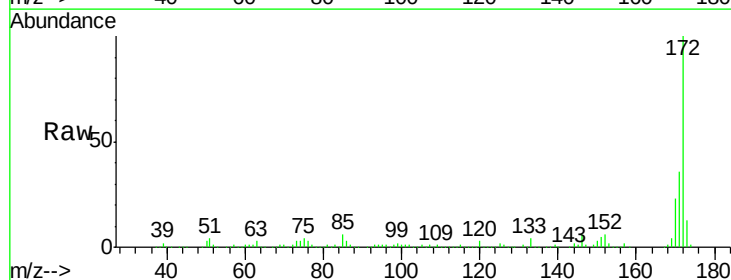
Instrument :  
 BNA\_F  
 ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 330     | 100   |       |       |
| 332     | 95.3  | 77.0  | 115.6 |
| 141     | 30.0  | 29.9  | 44.9  |

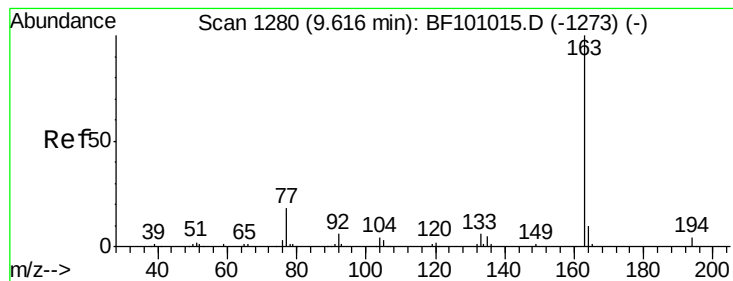


#44  
 2-Fluorobiphenyl  
 Concen: 78.48 ng  
 RT: 9.20 min Scan# 1210  
 Delta R.T. -0.01 min  
 Lab File: BF101099.D  
 Acq: 4 Dec 2017 15:49

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 36.1  | 29.7  | 44.5  |
| 170     | 23.4  | 19.6  | 29.4  |







#49

Dimethylphthalate

Concen: 6.88 ng

RT: 9.60 min Scan# 1277

Delta R.T. -0.01 min

Lab File: BF101099.D

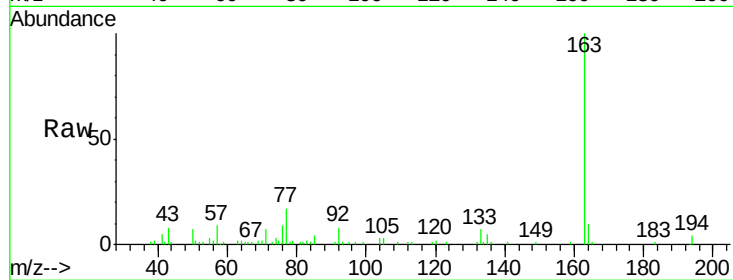
Acq: 4 Dec 2017 15:49

Instrument :

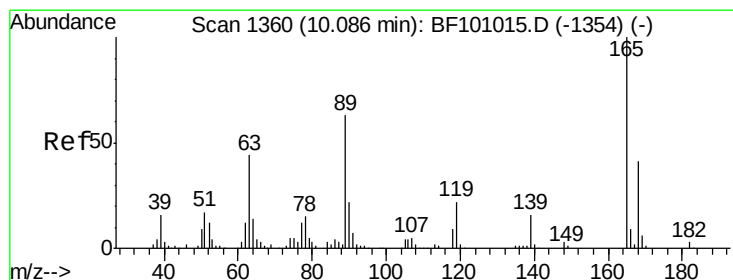
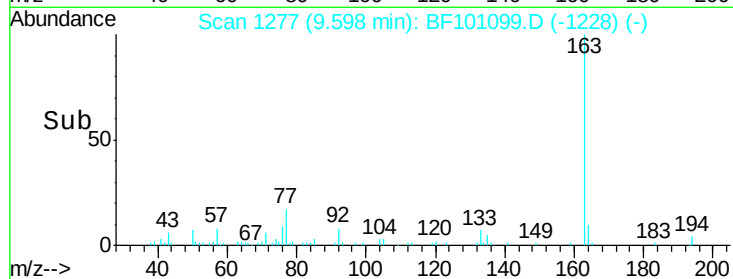
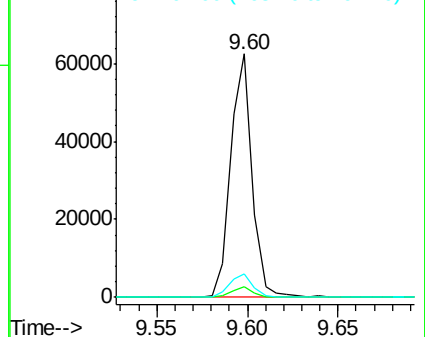
BNA\_F

ClientSampleId :

|             |       |          |
|-------------|-------|----------|
| Tot Ion:163 | Resp: | 51396    |
| Ion Ratio   | Lower | Upper    |
| 163         | 100   |          |
| 194         | 4.3   | 2.7 4.1# |
| 164         | 9.6   | 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: 5.56 ng

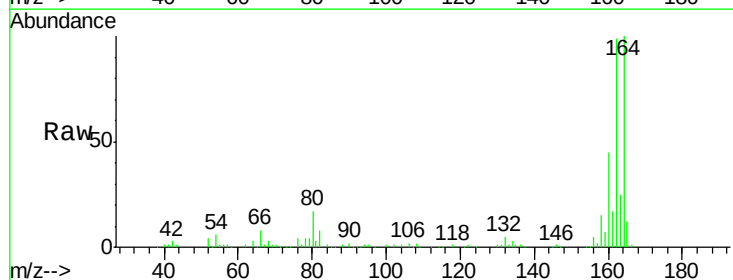
RT: 9.89 min Scan# 1326

Delta R.T. -0.19 min

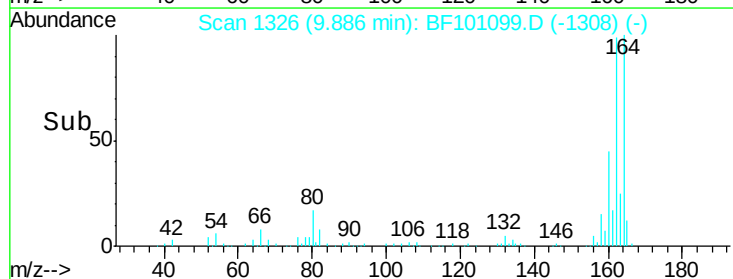
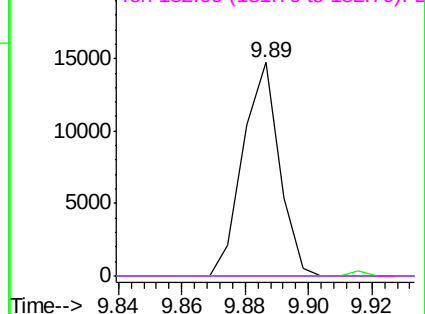
Lab File: BF101099.D

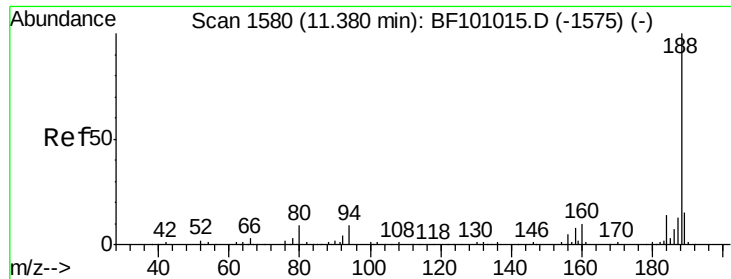
Acq: 4 Dec 2017 15:49

|             |       |            |
|-------------|-------|------------|
| Tgt Ion:165 | Resp: | 11723      |
| Ion Ratio   | Lower | Upper      |
| 165         | 100   |            |
| 63          | 0.0   | 36.4 54.6# |
| 89          | 0.0   | 57.8 86.6# |
| 182         | 0.0   | 1.6 2.4#   |



Abundance Ion 165.00 (164.70 to 165.70): E  
Ion 63.00 (62.70 to 63.70): BF1  
Ion 89.00 (88.70 to 89.70): BF1  
Ion 182.00 (181.70 to 182.70): E

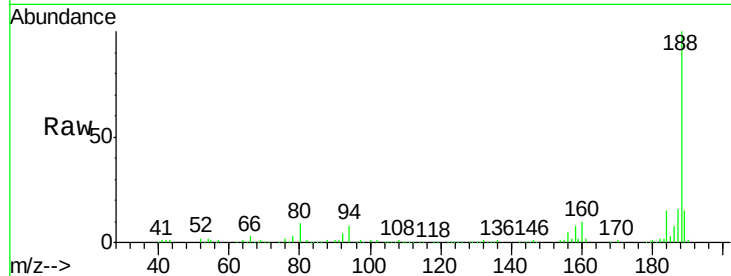




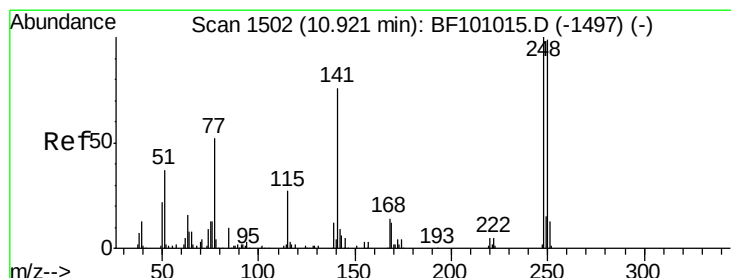
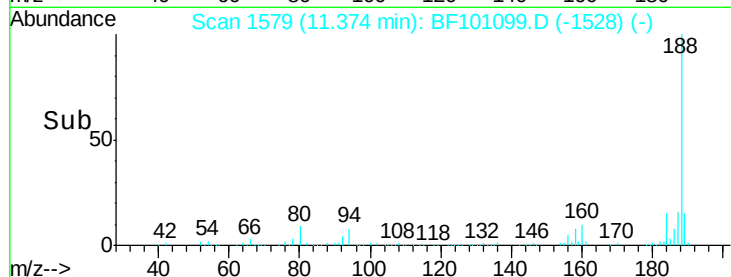
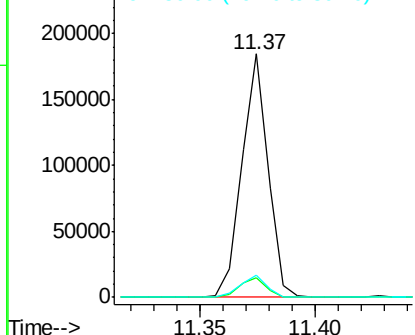
#63  
Phenanthrene-d10  
Concen: 20.00 ng  
RT: 11.37 min Scan# 1579  
Delta R.T. 0.00 min  
Lab File: BF101099.D  
Acq: 4 Dec 2017 15:49

Instrument :  
BNA\_F  
ClientSampleId :

Tot Ion:188 Resp: 145783  
Ion Ratio Lower Upper  
188 100  
94 7.8 8.5 12.7#  
80 9.3 9.2 13.8

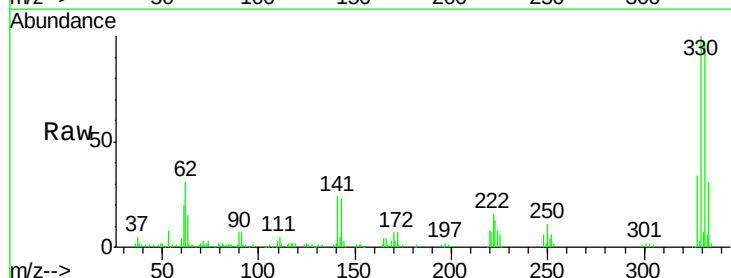


Abundance Ion 188.00 (187.70 to 188.70): E  
Ion 94.00 (93.70 to 94.70): BF1  
Ion 80.00 (79.70 to 80.70): BF1

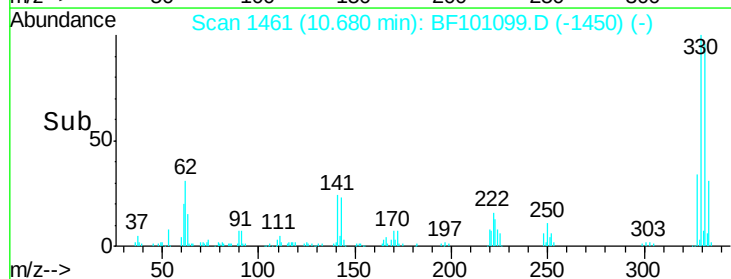
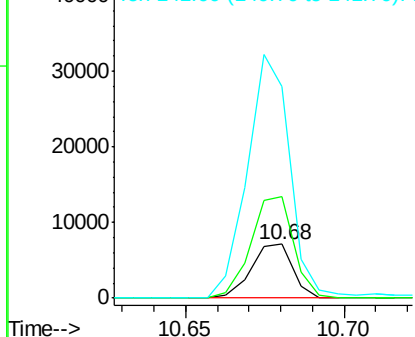


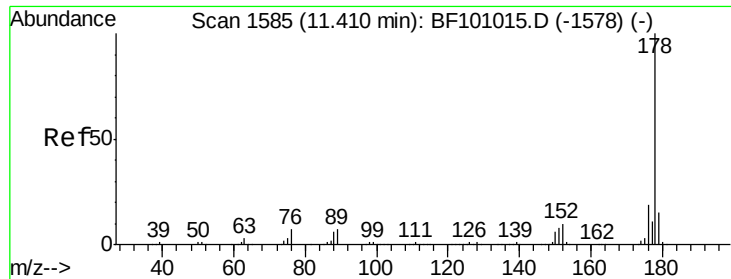
#66  
4-Bromophenyl-phenylether  
Concen: 3.99 ng  
RT: 10.68 min Scan# 1461  
Delta R.T. -0.24 min  
Lab File: BF101099.D  
Acq: 4 Dec 2017 15:49

Tgt Ion:248 Resp: 6515  
Ion Ratio Lower Upper  
248 100  
250 188.8 76.9 115.3#  
141 393.6 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

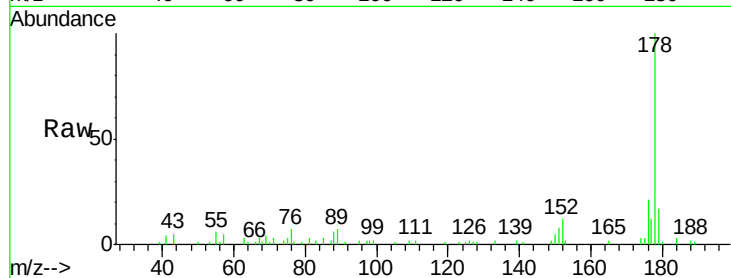




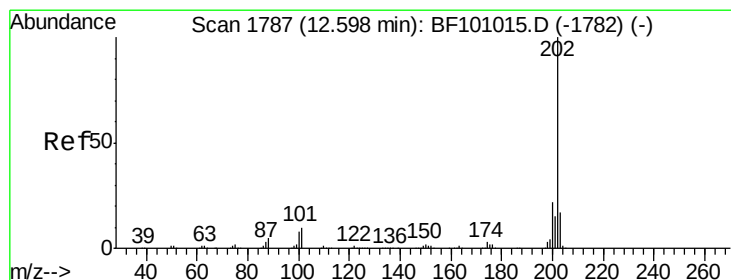
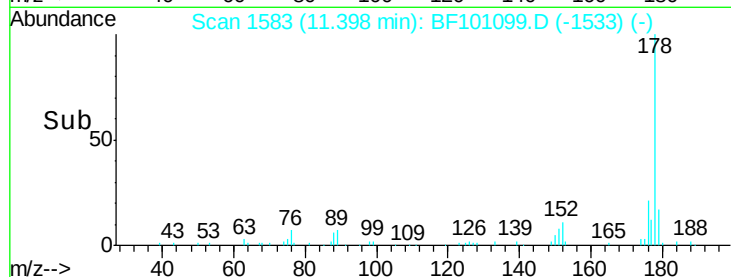
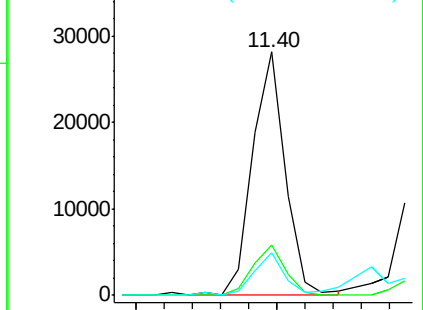
#70  
Phenanthrene  
Concen: 2.83 ng  
RT: 11.40 min Scan# 1583  
Delta R.T. -0.01 min  
Lab File: BF101099.D  
Acq: 4 Dec 2017 15:49

Instrument :  
BNA\_F  
ClientSampleId :

Tot Ion:178 Resp: 22689  
Ion Ratio Lower Upper  
178 100  
176 20.7 15.8 23.8  
179 17.4 13.0 19.6

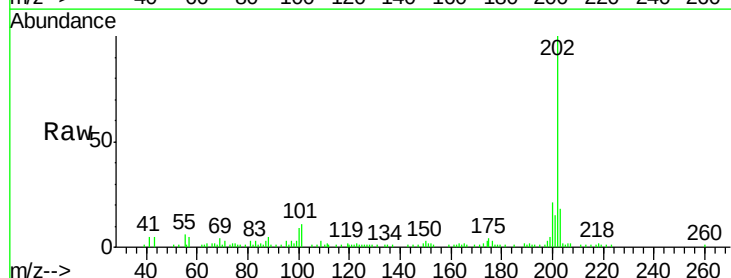


Abundance Ion 178.00 (177.70 to 178.70): E  
Ion 176.00 (175.70 to 176.70): E  
Ion 179.00 (178.70 to 179.70): E

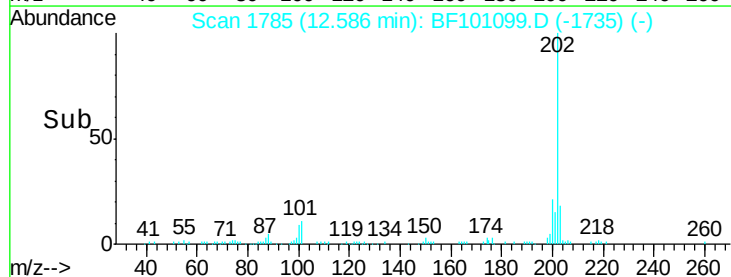
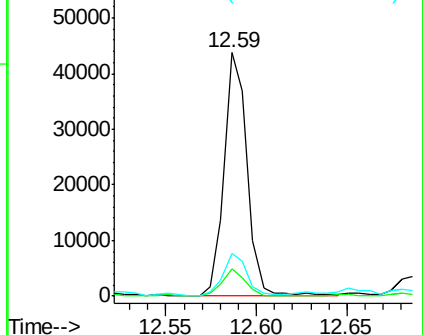


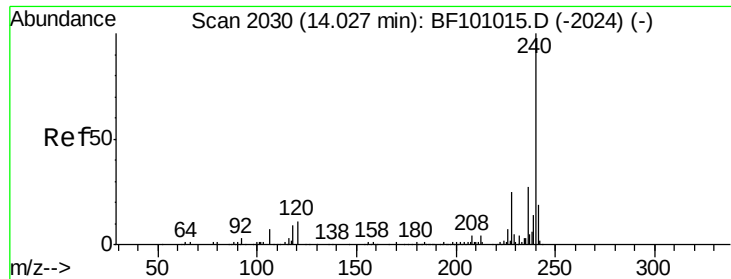
#74  
Fluoranthene  
Concen: 4.37 ng  
RT: 12.59 min Scan# 1785  
Delta R.T. -0.01 min  
Lab File: BF101099.D  
Acq: 4 Dec 2017 15:49

Tgt Ion:202 Resp: 38900  
Ion Ratio Lower Upper  
202 100  
101 11.2 0.0 34.1  
203 17.6 0.0 38.1



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





#75

Chrysene-d12

Concen: 20.00 ng

RT: 14.02 min Scan# 2029

Delta R.T. 0.00 min

Lab File: BF101099.D

Acq: 4 Dec 2017 15:49

Instrument :

BNA\_F

ClientSampleId :

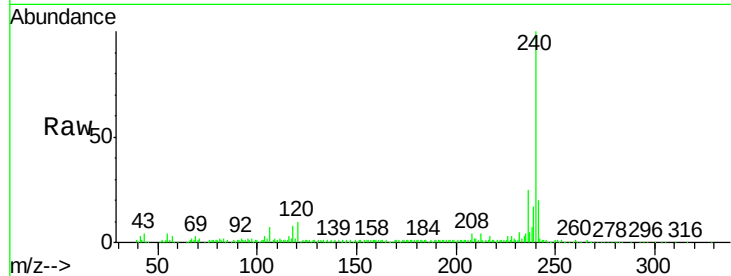
Tot Ion:240 Resp: 127581

Ion Ratio Lower Upper

240 100

120 9.5 9.5 14.3

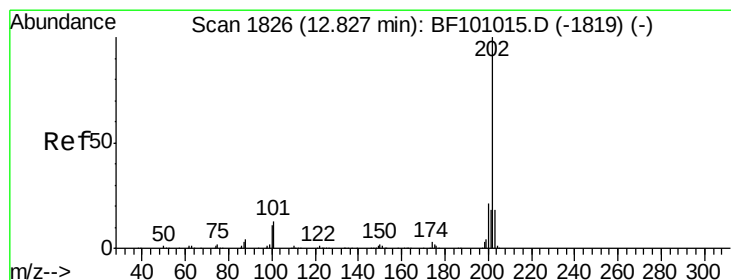
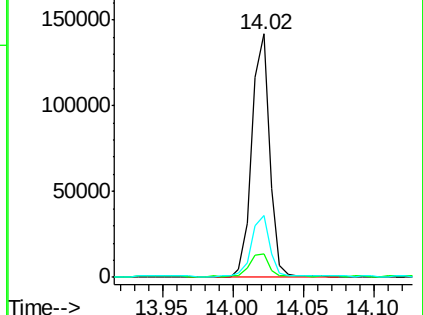
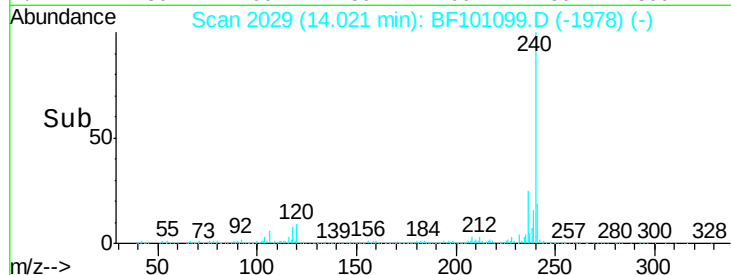
236 25.3 20.7 31.1



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: 3.86 ng

RT: 12.82 min Scan# 1825

Delta R.T. 0.00 min

Lab File: BF101099.D

Acq: 4 Dec 2017 15:49

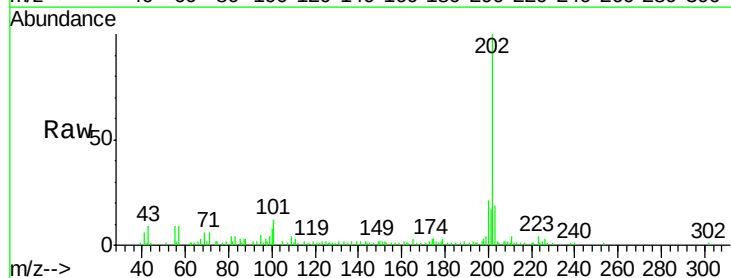
Tgt Ion:202 Resp: 33940

Ion Ratio Lower Upper

202 100

200 21.1 17.4 26.2

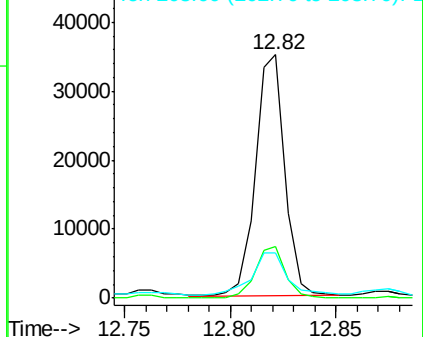
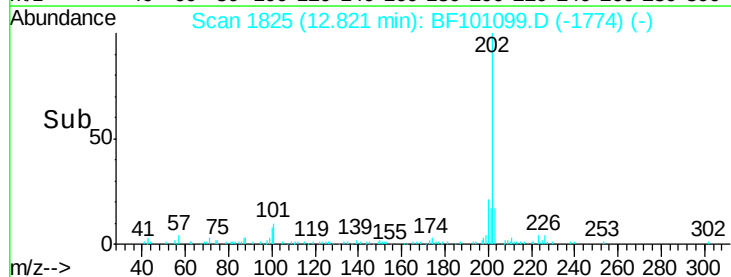
203 18.6 14.3 21.5

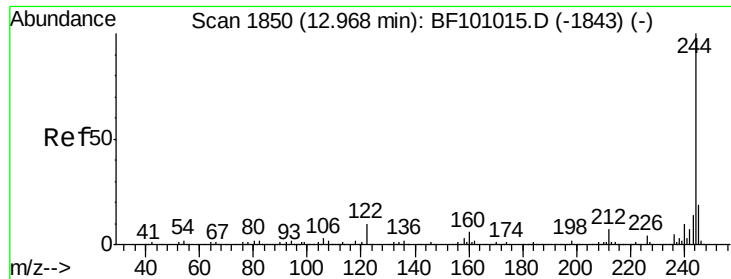


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 200.00 (199.70 to 200.70): E

Ion 203.00 (202.70 to 203.70): E

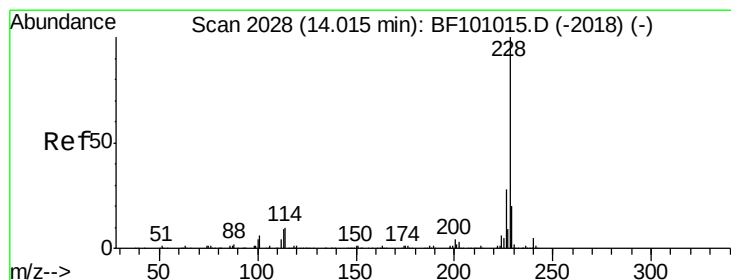
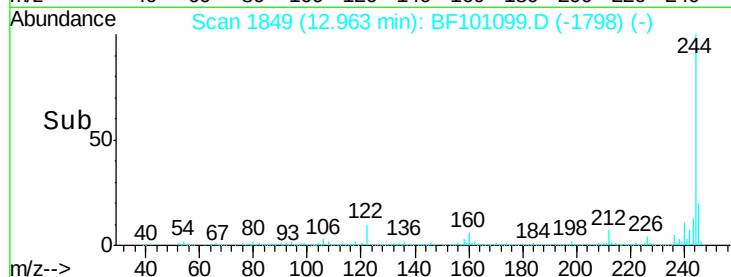
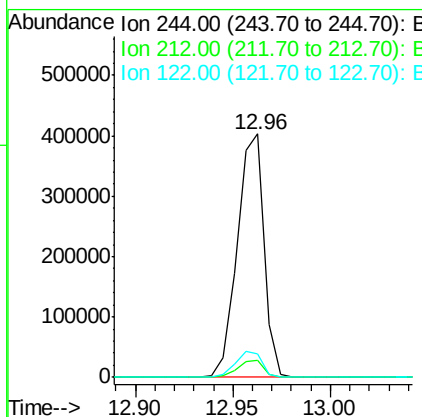
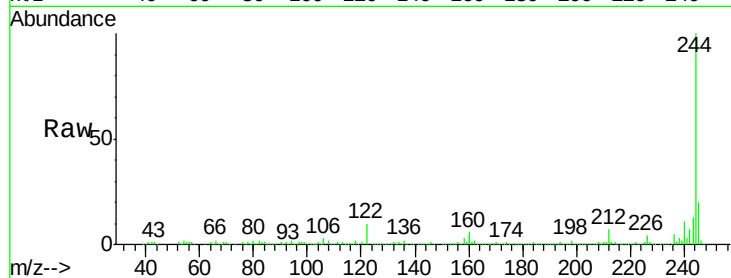




#78  
 Terphenyl-d14  
 Concen: 65.55 ng  
 RT: 12.96 min Scan# 1849  
 Delta R.T. 0.00 min  
 Lab File: BF101099.D  
 Acq: 4 Dec 2017 15:49

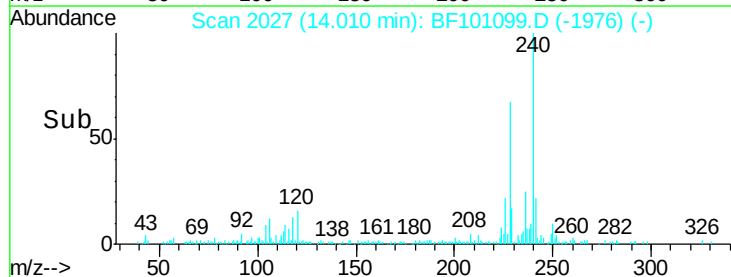
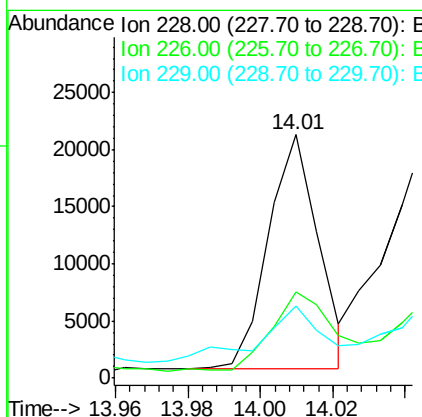
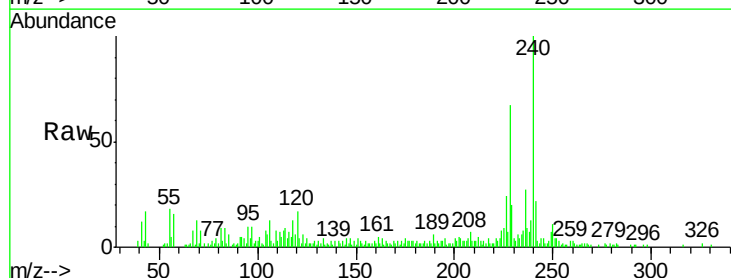
Instrument :  
 BNA\_F  
 ClientSampleId :

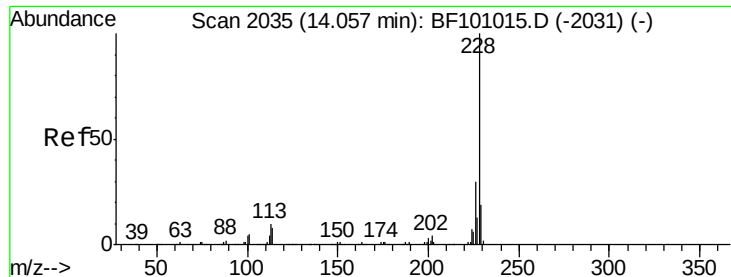
Tot Ion:244 Resp: 382358  
 Ion Ratio Lower Upper  
 244 100  
 212 6.8 5.4 8.0  
 122 9.5 11.0 16.4#



#80  
 Benzo(a)anthracene  
 Concen: 2.44 ng  
 RT: 14.01 min Scan# 2027  
 Delta R.T. 0.00 min  
 Lab File: BF101099.D  
 Acq: 4 Dec 2017 15:49

Tgt Ion:228 Resp: 19682  
 Ion Ratio Lower Upper  
 228 100  
 226 35.3 22.6 33.8#  
 229 29.9 15.8 23.6#





#82

Chrysene

Concen: 3.09 ng

RT: 14.04 min Scan# 2033

Delta R.T. -0.01 min

Lab File: BF101099.D

Acq: 4 Dec 2017 15:49

Instrument :

BNA\_F

ClientSampleId :

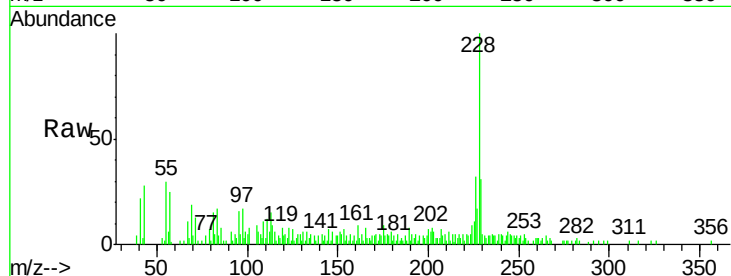
Tot Ion:228 Resp: 23096

Ion Ratio Lower Upper

228 100

226 32.0 25.0 37.6

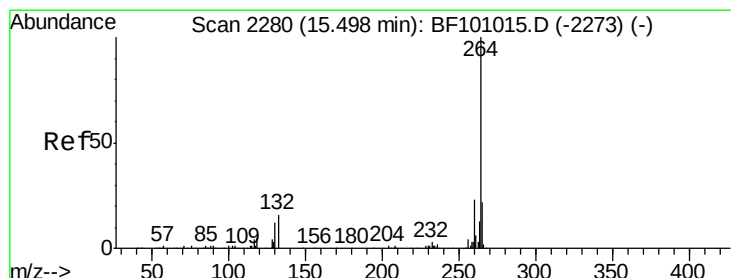
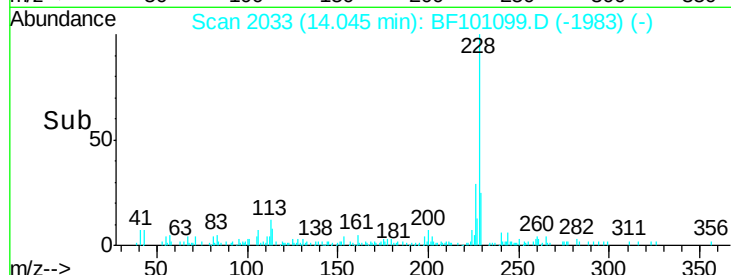
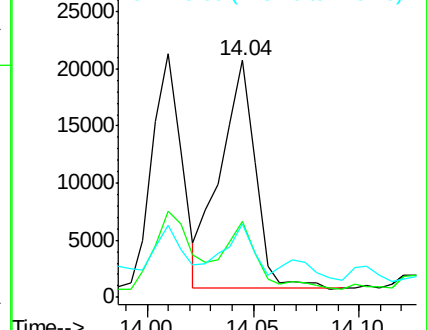
229 30.7 16.2 24.4#



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: 20.00 ng

RT: 15.50 min Scan# 2281

Delta R.T. 0.01 min

Lab File: BF101099.D

Acq: 4 Dec 2017 15:49

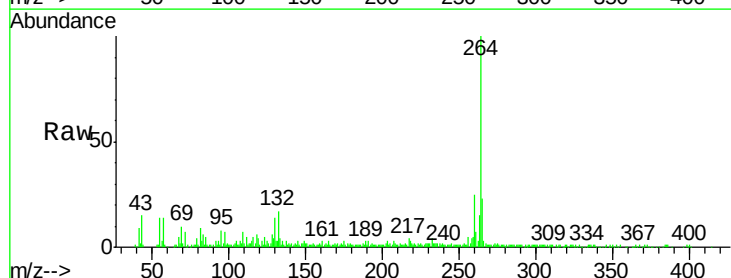
Tgt Ion:264 Resp: 105169

Ion Ratio Lower Upper

264 100

260 24.6 19.2 28.8

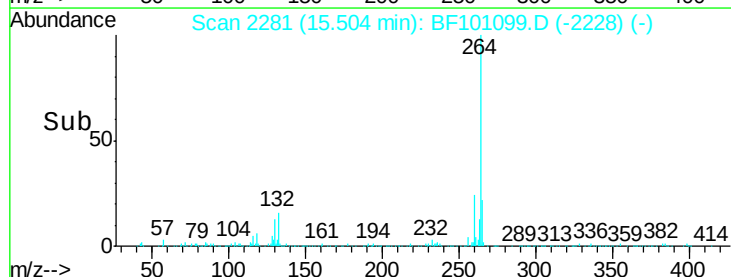
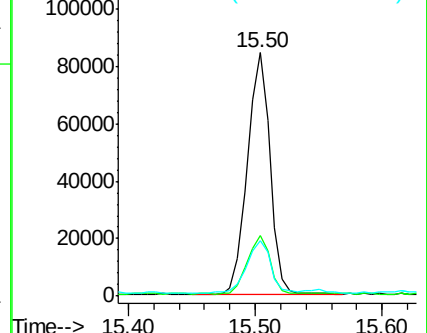
265 22.7 17.5 26.3

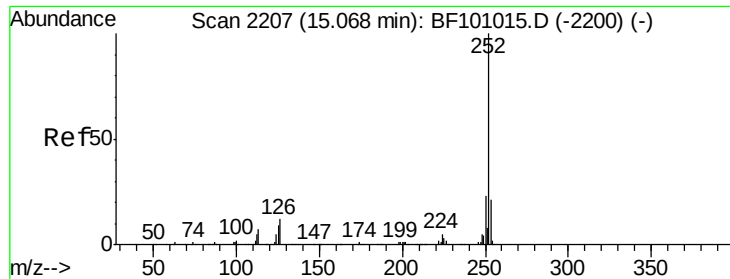


Abundance Ion 264.00 (263.70 to 264.70): E

Ion 260.00 (259.70 to 260.70): E

Ion 265.00 (264.70 to 265.70): E





#87

Benzo(b)fluoranthene

Concen: 6.25 ng

RT: 15.07 min Scan# 2207

Delta R.T. 0.01 min

Lab File: BF101099.D

Acq: 4 Dec 2017 15:49

Instrument :

BNA\_F

ClientSampleId :

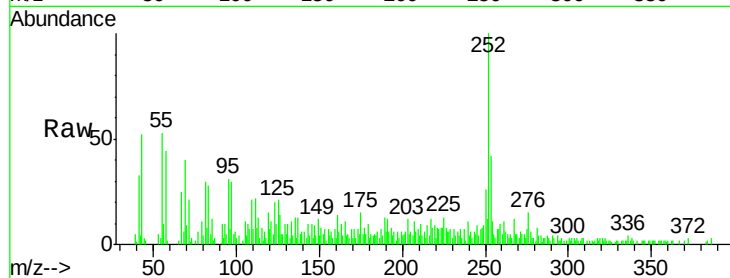
Tot Ion:252 Resp: 39396

Ion Ratio Lower Upper

252 100

253 41.5 17.0 25.6#

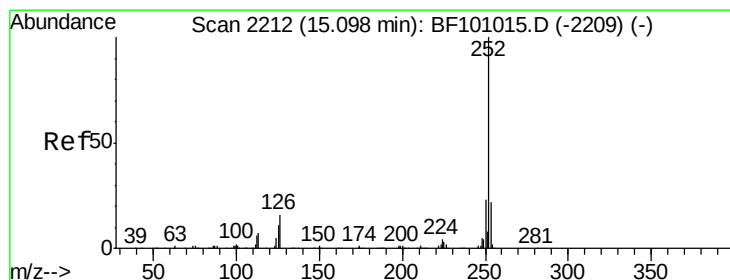
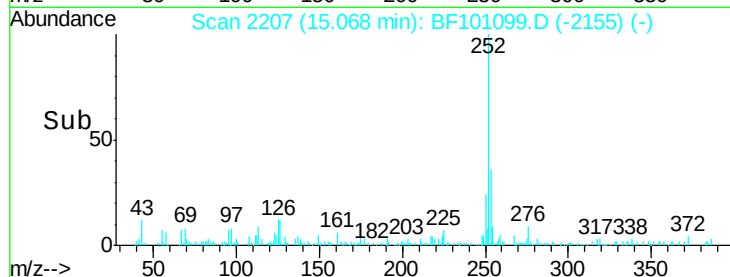
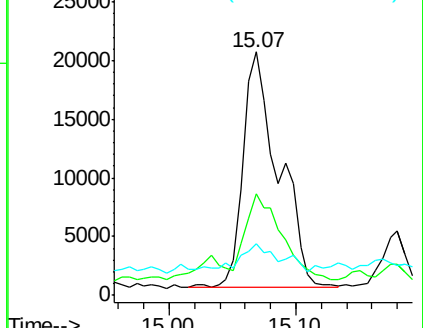
125 21.4 9.0 13.6#



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: 6.35 ng

RT: 15.07 min Scan# 2207

Delta R.T. -0.02 min

Lab File: BF101099.D

Acq: 4 Dec 2017 15:49

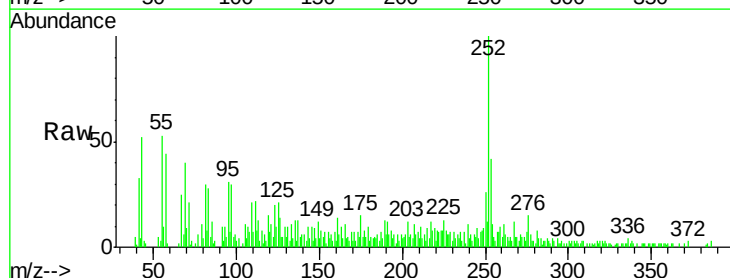
Tgt Ion:252 Resp: 39396

Ion Ratio Lower Upper

252 100

253 41.5 17.9 26.9#

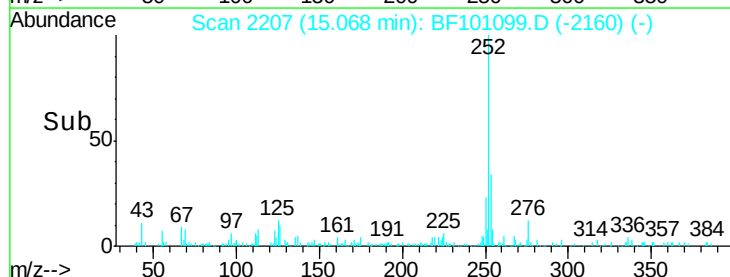
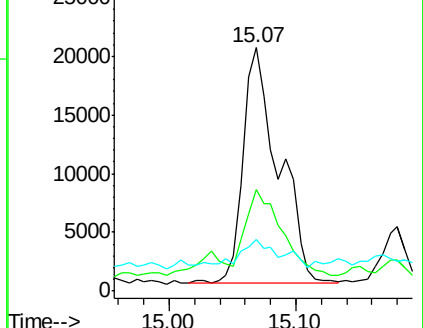
125 21.4 10.2 15.2#

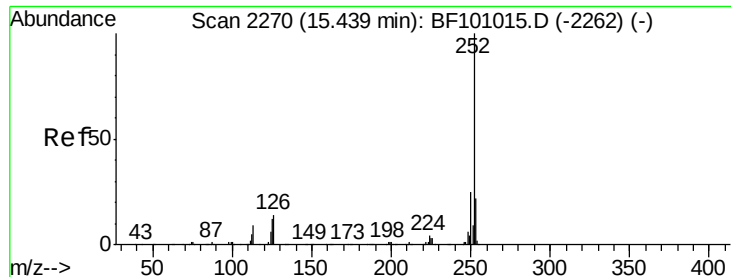


Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E

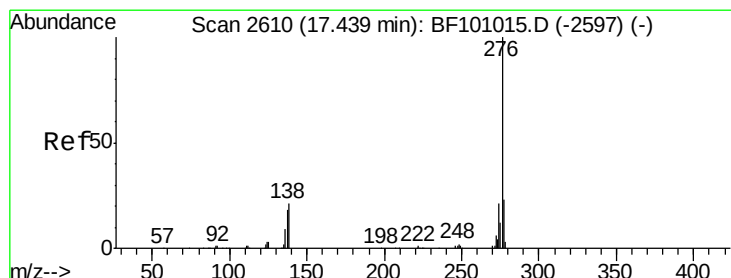
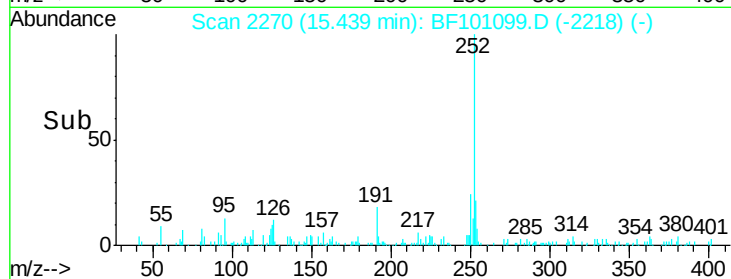
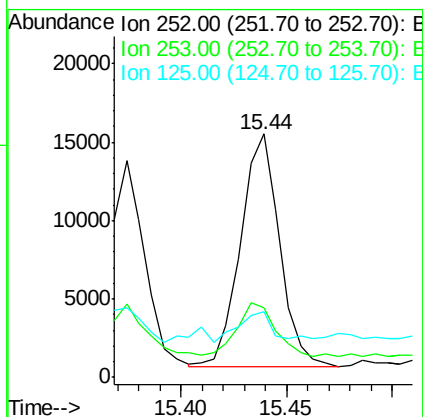
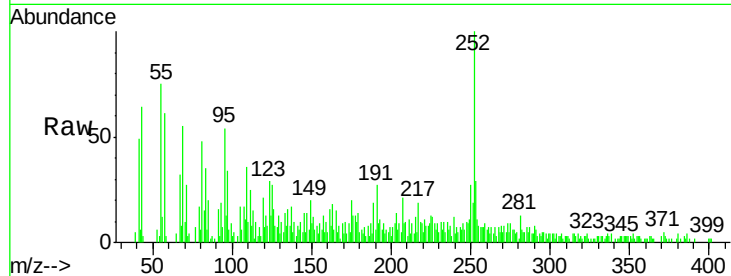




#89  
Benzo(a)pyrene  
Concen: 3.33 ng  
RT: 15.44 min Scan# 2270  
Delta R.T. 0.01 min  
Lab File: BF101099.D  
Acq: 4 Dec 2017 15:49

Instrument :  
BNA\_F  
ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 28.5  | 17.1  | 25.7# |
| 125     | 27.1  | 9.8   | 14.6# |



#91  
Benzo(g,h,i)perylene  
Concen: 2.34 ng  
RT: 17.45 min Scan# 2612  
Delta R.T. 0.02 min  
Lab File: BF101099.D  
Acq: 4 Dec 2017 15:49

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 30.7  | 17.9  | 26.9# |
| 138     | 28.2  | 21.8  | 32.8  |

