

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF040319\  
 Data File : BF113552.D  
 Acq On : 3 Apr 2019 19:18  
 Operator : JU/SJ  
 Sample : K2196-01  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :

Quant Time: Apr 04 04:26:38 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF040319.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Apr 04 04:05:31 2019  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.69  | 152  | 137887   | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 7.97  | 136  | 512958   | 20.00 | ng    | 0.00     |
| 39) Acenaphthene-d10      | 9.72  | 164  | 240260   | 20.00 | ng    | 0.00     |
| 64) Phenanthrene-d10      | 11.20 | 188  | 449566   | 20.00 | ng    | 0.00     |
| 76) Chrysene-d12          | 13.84 | 240  | 361490   | 20.00 | ng    | 0.00     |
| 87) Perylene-d12          | 15.25 | 264  | 305897   | 20.00 | ng    | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 5) 2-Fluorophenol           | 5.30  | 112  | 840285   | 103.92 | ng    | 0.00     |
| 7) Phenol-d6                | 6.33  | 99   | 1094734  | 109.84 | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 7.25  | 82   | 646035   | 73.77  | ng    | 0.00     |
| 42) 2,4,6-Tribromophenol    | 10.51 | 330  | 297530   | 103.09 | ng    | 0.00     |
| 45) 2-Fluorobiphenyl        | 9.05  | 172  | 1212129  | 81.22  | ng    | 0.00     |
| 79) Terphenyl-d14           | 12.79 | 244  | 1200739  | 67.63  | ng    | 0.00     |

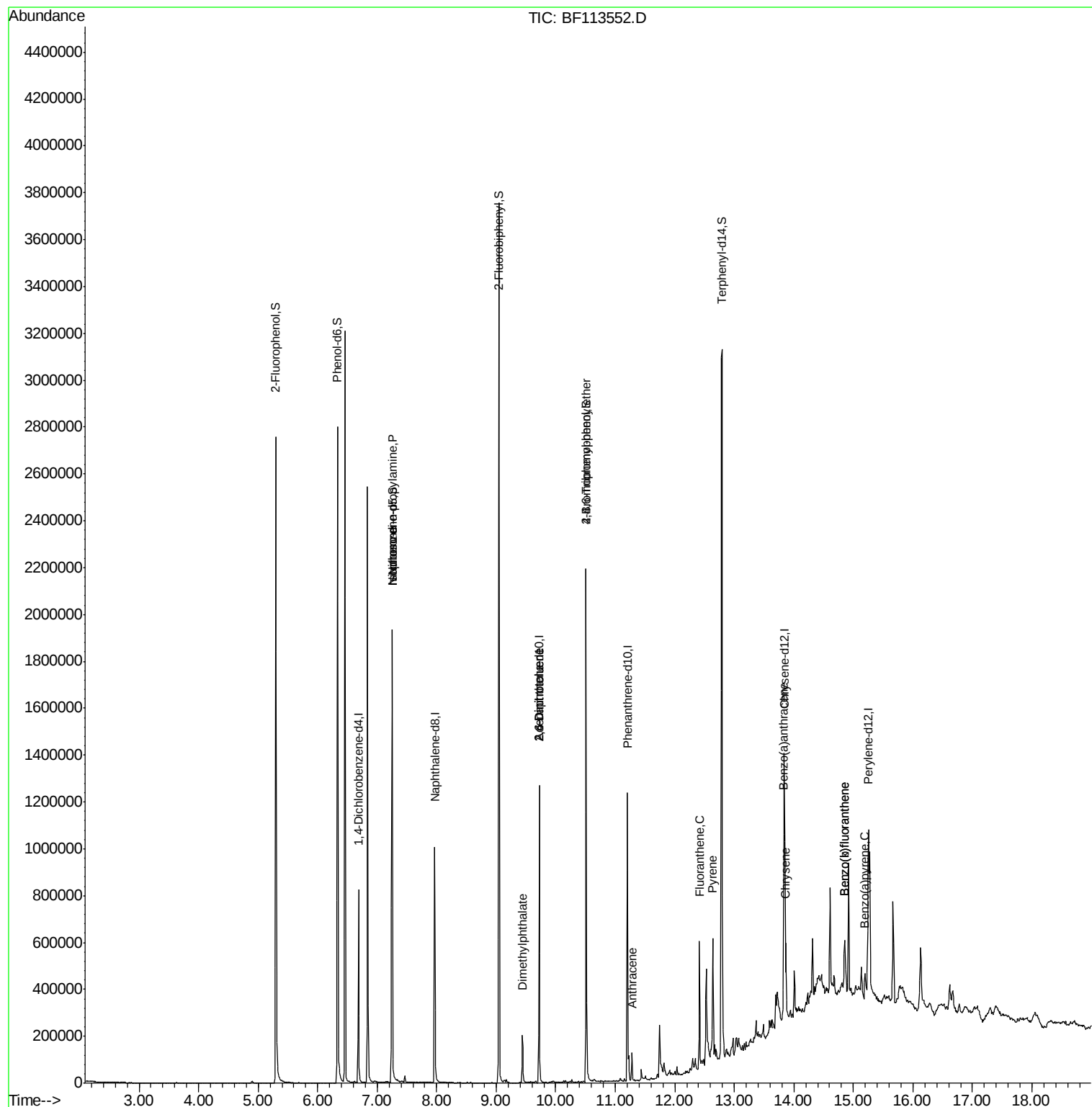
| Target Compounds               | R.T.  | QIon | Response | Conc   | Units | Qvalue |
|--------------------------------|-------|------|----------|--------|-------|--------|
| 19) n-Nitroso-di-n-propylamine | 7.25  | 70   | 82554    | 13.433 | ng    | # 75   |
| 25) Isophorone                 | 7.25  | 82   | 637756   | 37.805 | ng    | # 64   |
| 50) Dimethylphthalate          | 9.44  | 163  | 83528    | 4.716  | ng    | 100    |
| 51) 2,6-Dinitrotoluene         | 9.72  | 165  | 29867    | 7.651  | ng    | # 27   |
| 57) 2,4-Dinitrotoluene         | 9.72  | 165  | 29867    | 6.326  | ng    | # 23   |
| 67) 4-Bromophenyl-phenylether  | 10.51 | 248  | 17265    | 3.424  | ng    | # 1    |
| 72) Anthracene                 | 11.28 | 178  | 47904    | 2.108  | ng    | 97     |
| 75) Fluoranthene               | 12.42 | 202  | 229441   | 9.585  | ng    | 98     |
| 78) Pyrene                     | 12.64 | 202  | 215566   | 7.837  | ng    | 98     |
| 81) Benzo(a)anthracene         | 13.83 | 228  | 94804    | 4.546  | ng    | 100    |
| 83) Chrysene                   | 13.86 | 228  | 126139   | 5.967  | ng    | 99     |
| 88) Benzo(b)fluoranthene       | 14.85 | 252  | 146836   | 7.842  | ng    | # 95   |
| 89) Benzo(k)fluoranthene       | 14.85 | 252  | 146836   | 8.738  | ng    | # 96   |
| 90) Benzo(a)pyrene             | 15.19 | 252  | 35391    | 2.127  | ng    | # 87   |

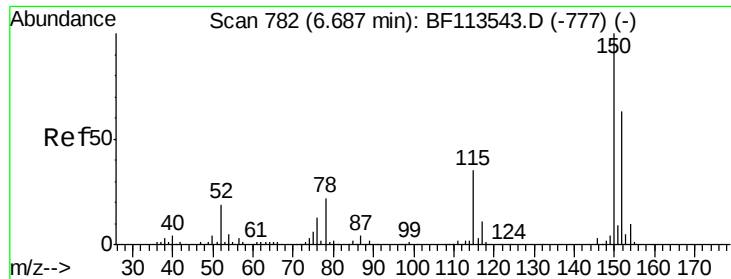
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF040319\  
Data File : BF113552.D  
Acq On : 3 Apr 2019 19:18  
Operator : JU/SJ  
Sample : K2196-01  
Misc :  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :

Quant Time: Apr 04 04:26:38 2019  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF040319.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Thu Apr 04 04:05:31 2019  
Response via : Initial Calibration



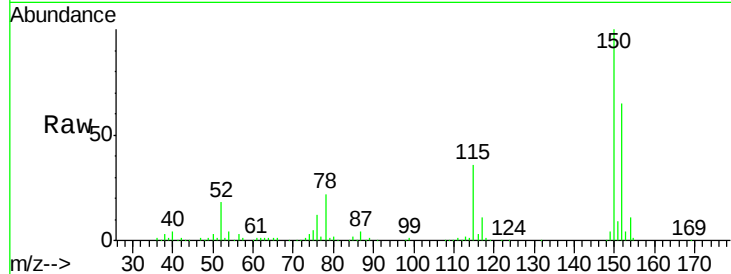


#1

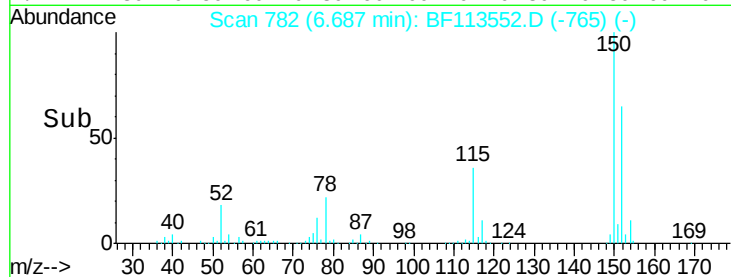
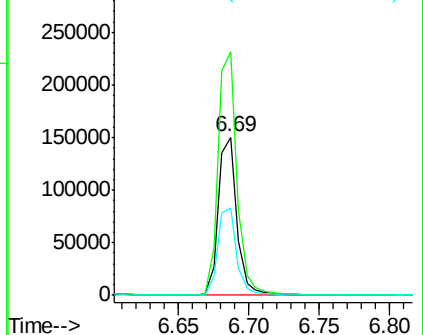
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.69 min Scan# 782  
Delta R.T. 0.00 min  
Lab File: BF113552.D  
Acq: 3 Apr 2019 19:18

Instrument :  
BNA\_F  
ClientSampleId :

Tot Ion:152 Resp: 137887  
Ion Ratio Lower Upper  
152 100  
150 154.2 124.7 187.1  
115 55.4 46.0 69.0



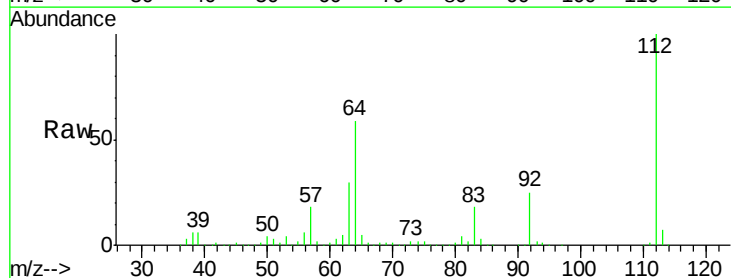
Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 115.00 (114.70 to 115.70): E



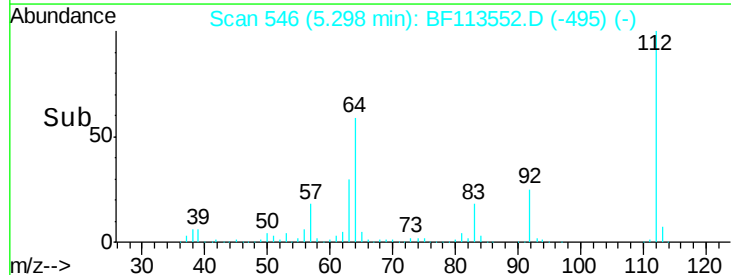
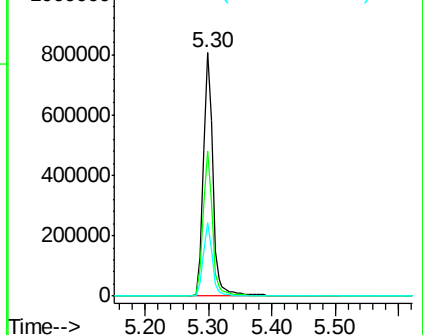
#5

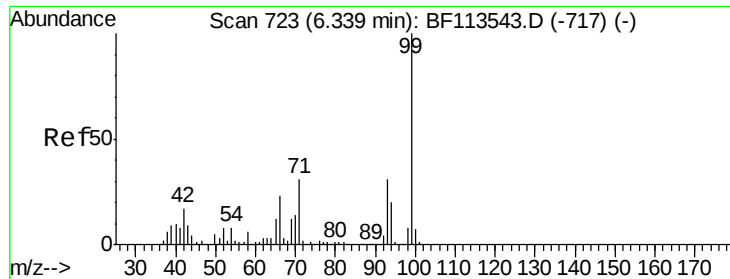
2-Fluorophenol  
Concen: 103.917 ng  
RT: 5.30 min Scan# 546  
Delta R.T. 0.00 min  
Lab File: BF113552.D  
Acq: 3 Apr 2019 19:18

Tgt Ion:112 Resp: 840285  
Ion Ratio Lower Upper  
112 100  
64 59.4 49.2 73.8  
63 30.0 24.9 37.3



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: 109.845 ng

RT: 6.33 min Scan# 722

Delta R.T. -0.01 min

Lab File: BF113552.D

Acq: 3 Apr 2019 19:18

Instrument :

BNA\_F

ClientSampled :

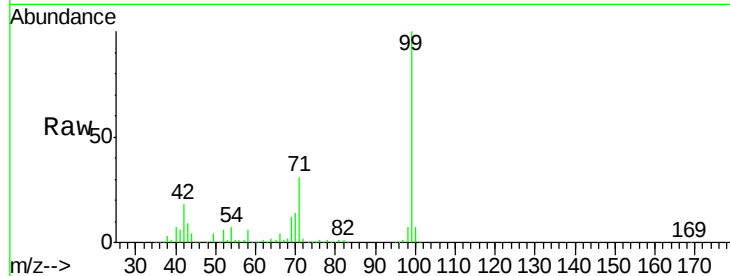
Tot Ion: 99 Resp: 1094734

Ion Ratio Lower Upper

99 100

42 18.3 14.8 22.2

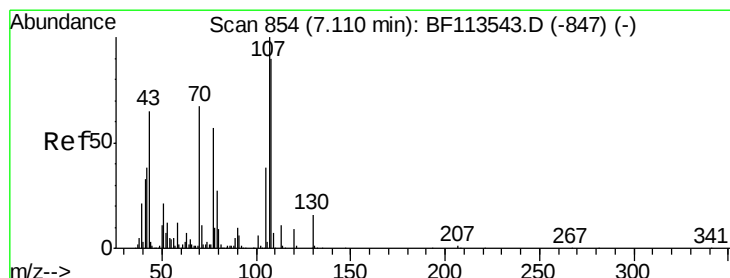
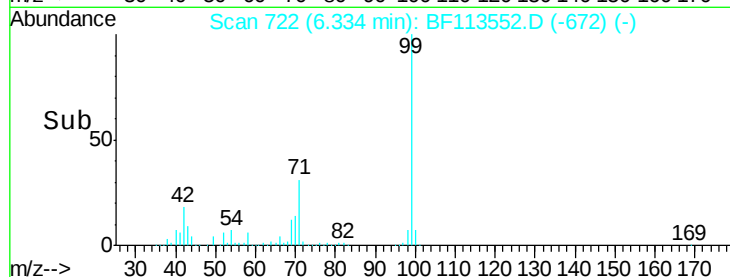
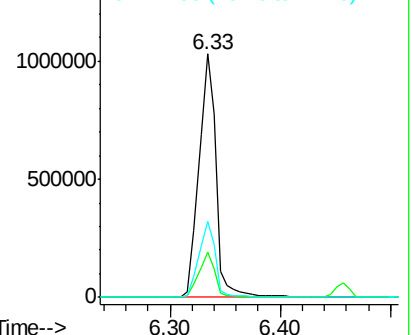
71 31.3 24.9 37.3



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: 13.433 ng

RT: 7.25 min Scan# 878

Delta R.T. 0.14 min

Lab File: BF113552.D

Acq: 3 Apr 2019 19:18

Tgt Ion: 70 Resp: 82554

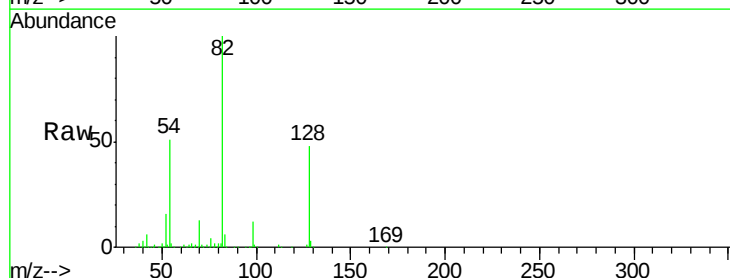
Ion Ratio Lower Upper

70 100

42 46.5 48.4 72.6#

101 0.0 7.8 11.8#

130 2.2 18.2 27.4#

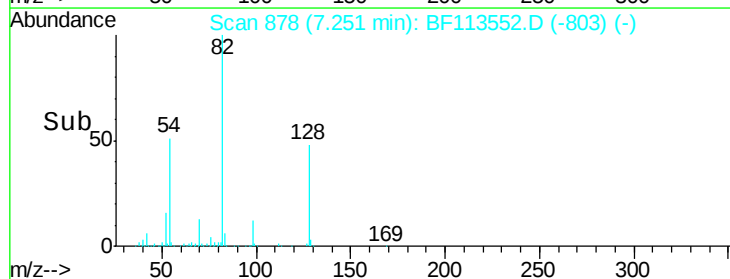
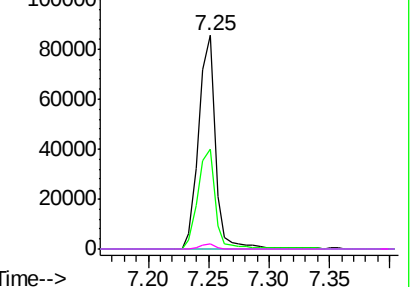


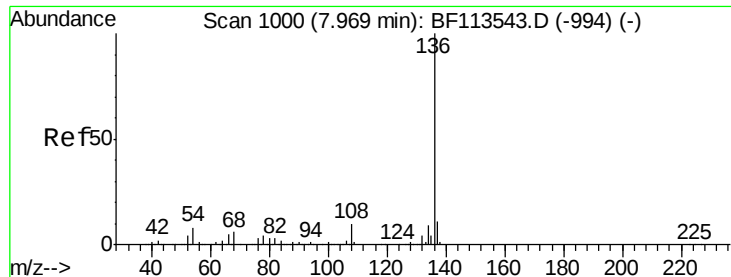
Abundance Ion 70.00 (69.70 to 70.70): BF1

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

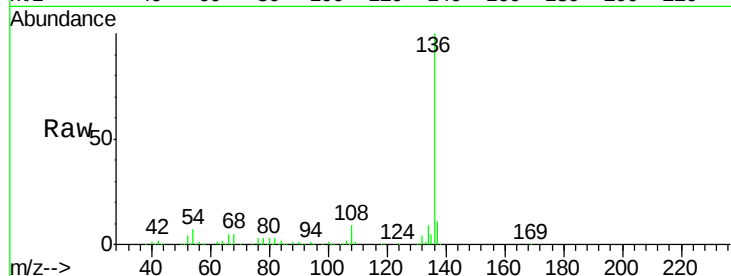




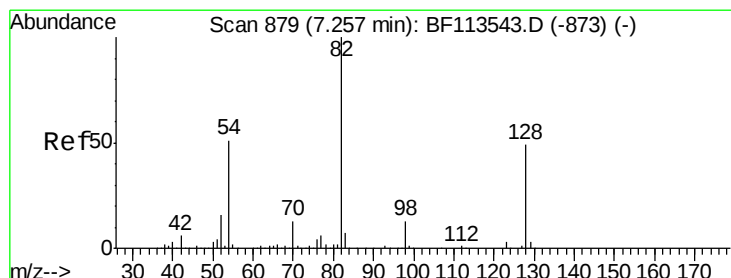
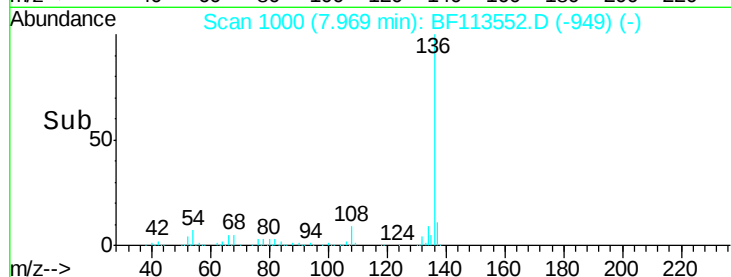
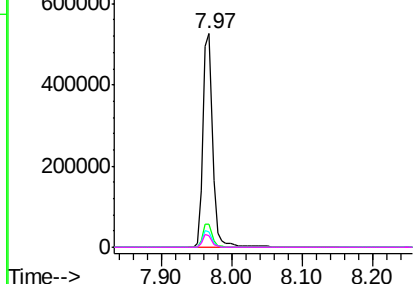
#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 7.97 min Scan# 1000  
Delta R.T. 0.00 min  
Lab File: BF113552.D  
Acq: 3 Apr 2019 19:18

Instrument :  
BNA\_F  
ClientSampleId :

|             |       |           |
|-------------|-------|-----------|
| Tot Ion:136 | Resp: | 512958    |
| Ion Ratio   | Lower | Upper     |
| 136         | 100   |           |
| 137         | 10.6  | 8.9 13.3  |
| 54          | 7.0   | 7.0 10.6# |
| 68          | 5.3   | 4.8 7.2   |

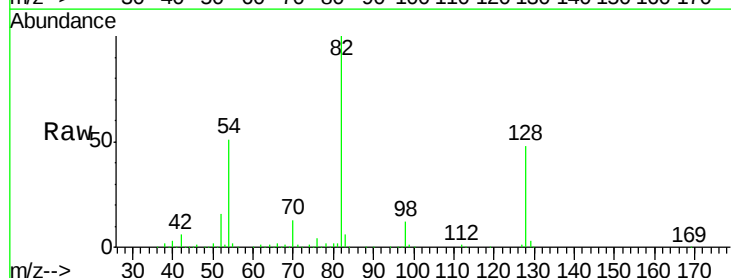


Abundance Ion 136.00 (135.70 to 136.70): E  
Ion 137.00 (136.70 to 137.70): E  
Ion 54.00 (53.70 to 54.70): BF1  
Ion 68.00 (67.70 to 68.70): BF1

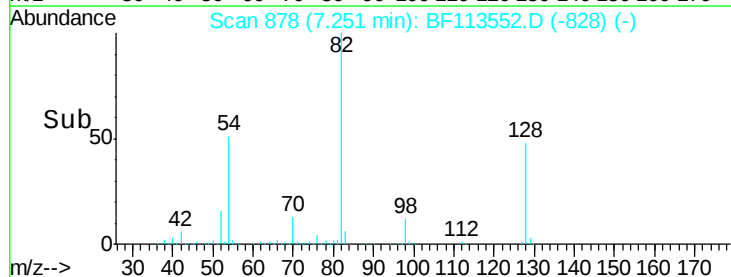
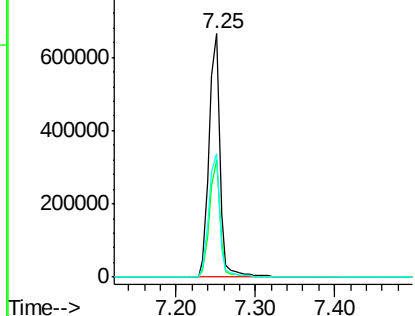


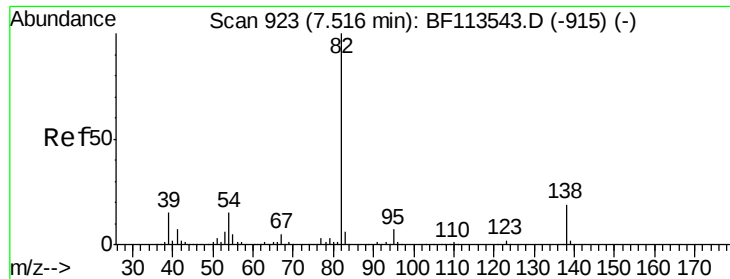
#23  
Nitrobenzene-d5  
Concen: 73.771 ng  
RT: 7.25 min Scan# 878  
Delta R.T. -0.01 min  
Lab File: BF113552.D  
Acq: 3 Apr 2019 19:18

|             |       |           |
|-------------|-------|-----------|
| Tgt Ion: 82 | Resp: | 646035    |
| Ion Ratio   | Lower | Upper     |
| 82          | 100   |           |
| 128         | 48.0  | 36.5 54.7 |
| 54          | 50.8  | 42.2 63.2 |



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: 37.805 ng

RT: 7.25 min Scan# 878

Delta R.T. -0.26 min

Lab File: BF113552.D

Acq: 3 Apr 2019 19:18

Instrument :

BNA\_F

ClientSampleId :

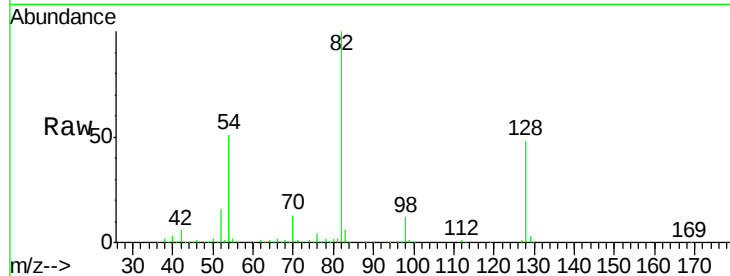
Tot Ion: 82 Resp: 637756

Ion Ratio Lower Upper

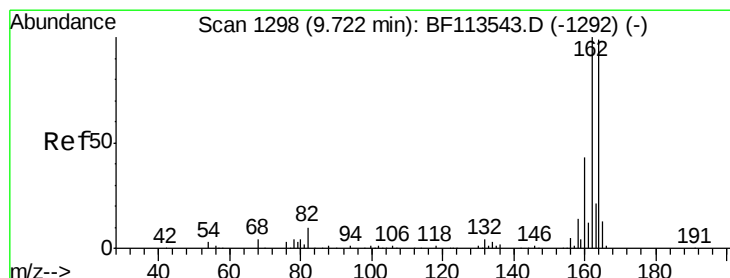
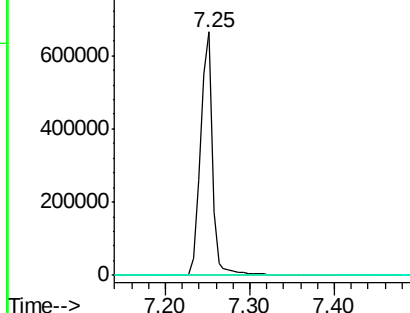
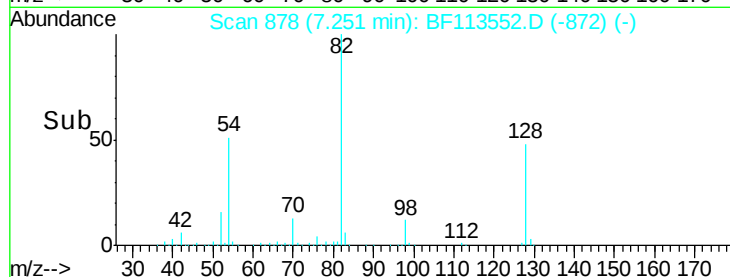
82 100

95 0.0 5.5 8.3#

138 0.0 15.2 22.8#



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



#39

Acenaphthene-d10

Concen: 20.000 ng

RT: 9.72 min Scan# 1298

Delta R.T. 0.00 min

Lab File: BF113552.D

Acq: 3 Apr 2019 19:18

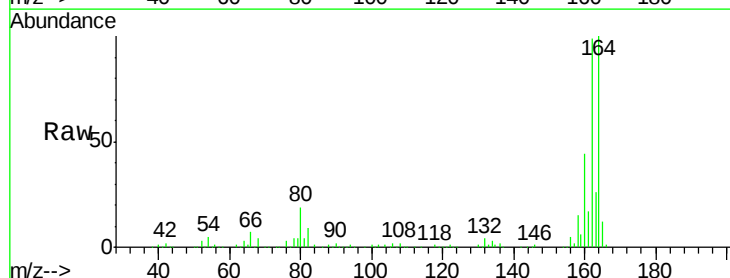
Tgt Ion:164 Resp: 240260

Ion Ratio Lower Upper

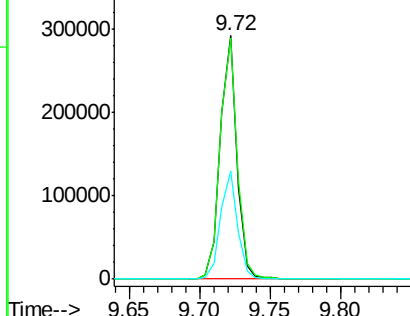
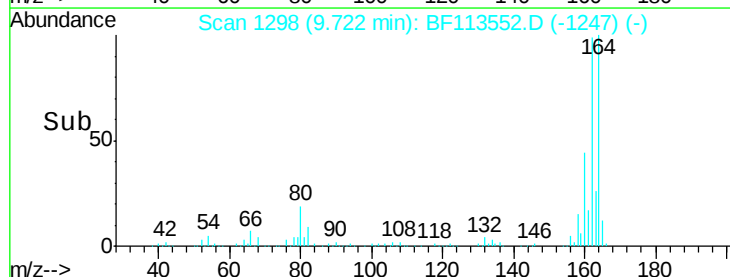
164 100

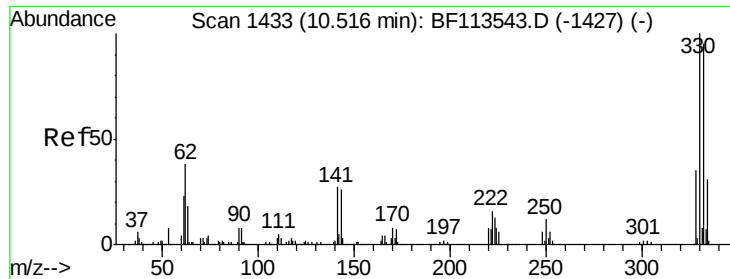
162 99.1 81.8 122.6

160 44.4 36.4 54.6



Abundance Ion 164.00 (163.70 to 164.70): BF1  
Ion 162.00 (161.70 to 162.70): BF1  
Ion 160.00 (159.70 to 160.70): BF1

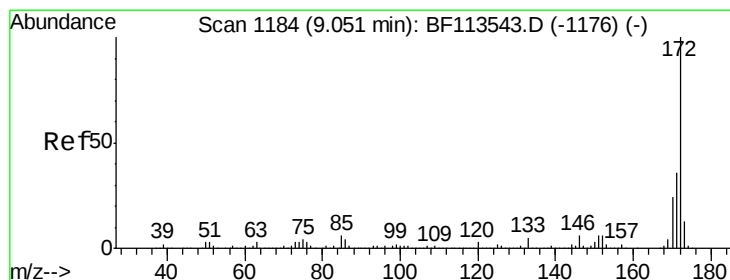
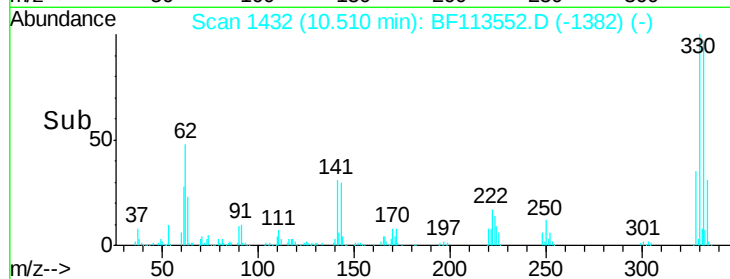
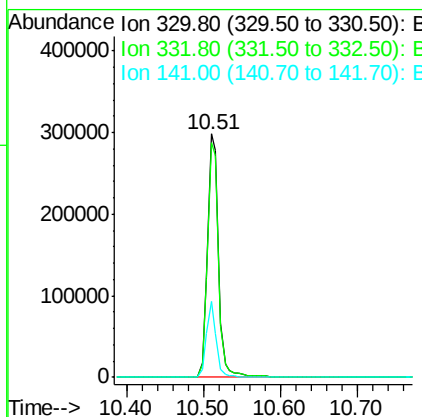
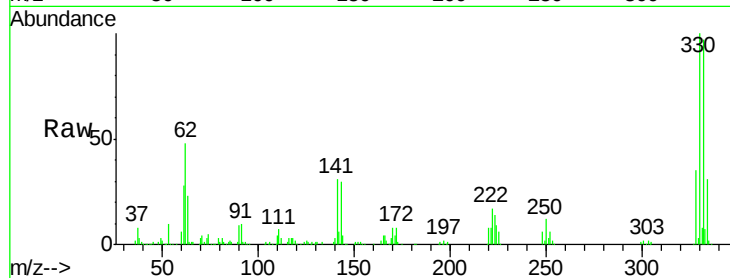




#42  
 2,4,6-Tribromophenol  
 Concen: 103.090 ng  
 RT: 10.51 min Scan# 1432  
 Delta R.T. -0.01 min  
 Lab File: BF113552.D  
 Acq: 3 Apr 2019 19:18

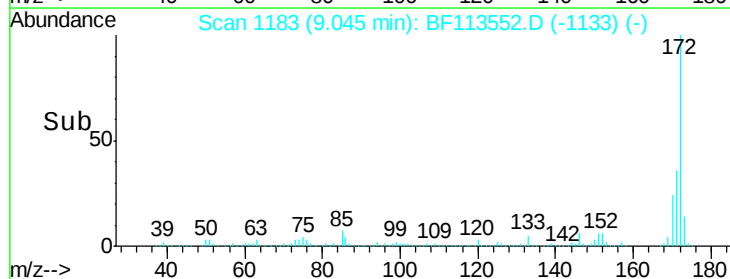
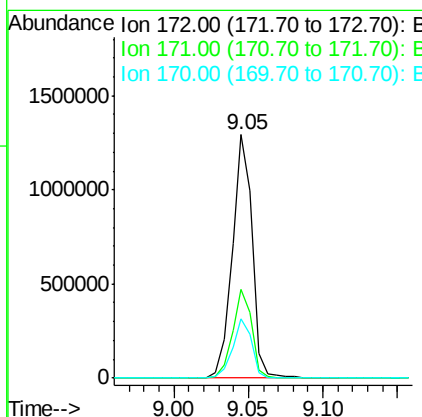
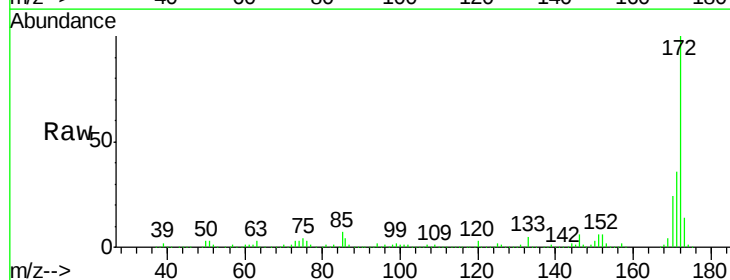
Instrument :  
 BNA\_F  
 ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 330     | 100   |       |       |
| 332     | 96.5  | 77.8  | 116.6 |
| 141     | 27.9  | 22.7  | 34.1  |



#45  
 2-Fluorobiphenyl  
 Concen: 81.220 ng  
 RT: 9.05 min Scan# 1183  
 Delta R.T. -0.01 min  
 Lab File: BF113552.D  
 Acq: 3 Apr 2019 19:18

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 36.2  | 29.0  | 43.6  |
| 170     | 24.2  | 19.5  | 29.3  |

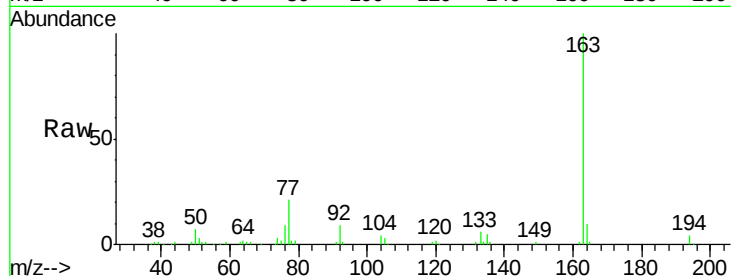




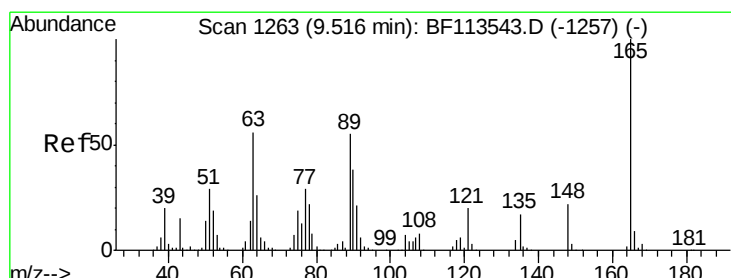
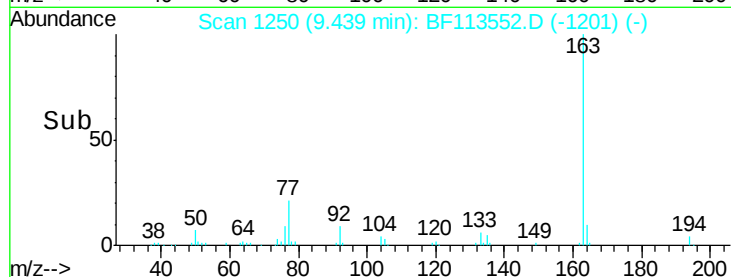
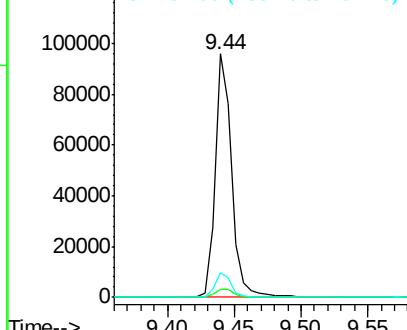
#50  
Dimethylphthalate  
Concen: 4.716 ng  
RT: 9.44 min Scan# 1250  
Delta R.T. -0.01 min  
Lab File: BF113552.D  
Acq: 3 Apr 2019 19:18

Instrument :  
BNA\_F  
ClientSampleId :

Tot Ion:163 Resp: 83528  
Ion Ratio Lower Upper  
163 100  
194 3.5 3.0 4.6  
164 10.2 8.1 12.1

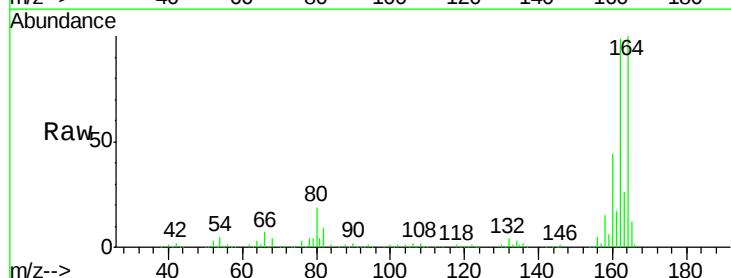


Abundance Ion 163.00 (162.70 to 163.70): E  
Ion 194.00 (193.70 to 194.70): E  
Ion 164.00 (163.70 to 164.70): E

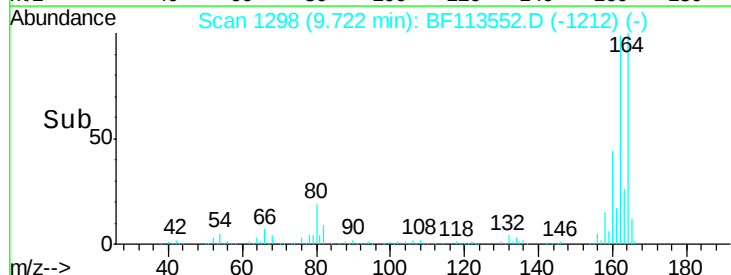
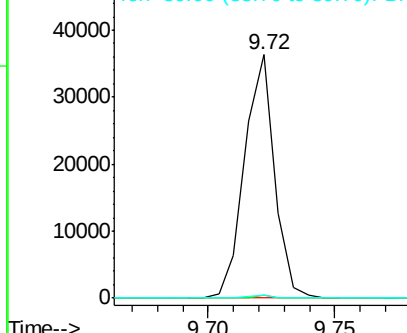


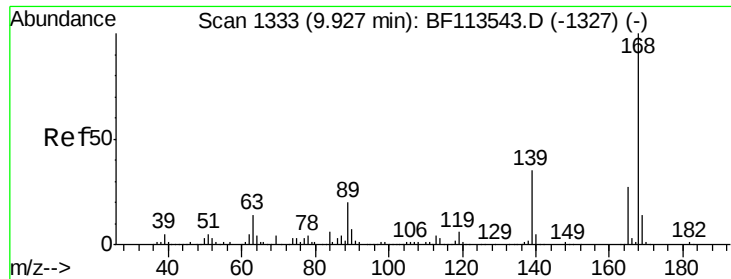
#51  
2,6-Dinitrotoluene  
Concen: 7.651 ng  
RT: 9.72 min Scan# 1298  
Delta R.T. 0.21 min  
Lab File: BF113552.D  
Acq: 3 Apr 2019 19:18

Tgt Ion:165 Resp: 29867  
Ion Ratio Lower Upper  
165 100  
63 1.4 43.4 65.0#  
89 1.4 43.1 64.7#



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

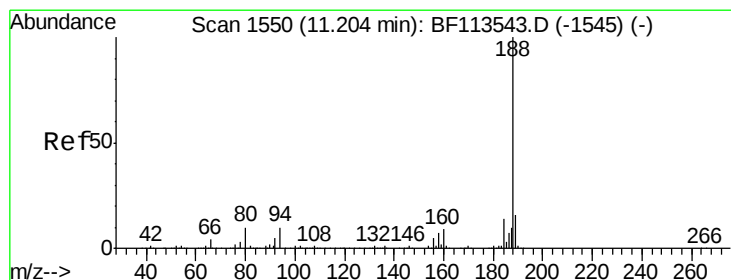
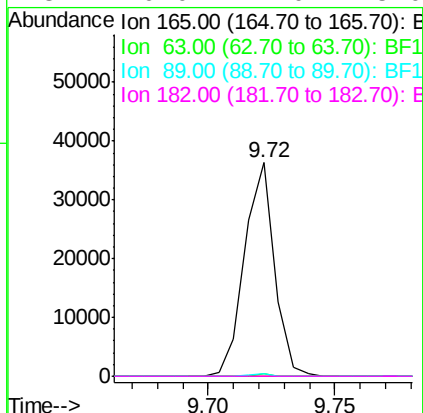
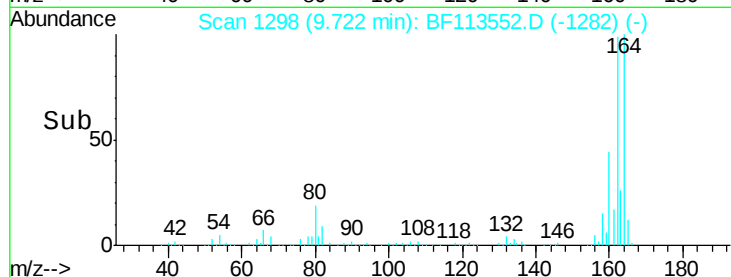
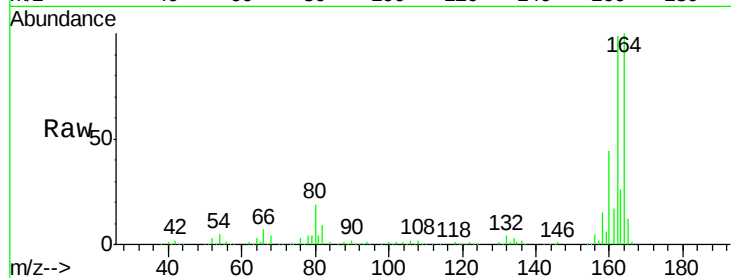




#57  
 2,4-Dinitrotoluene  
 Concen: 6.326 ng  
 RT: 9.72 min Scan# 1298  
 Delta R.T. -0.21 min  
 Lab File: BF113552.D  
 Acq: 3 Apr 2019 19:18

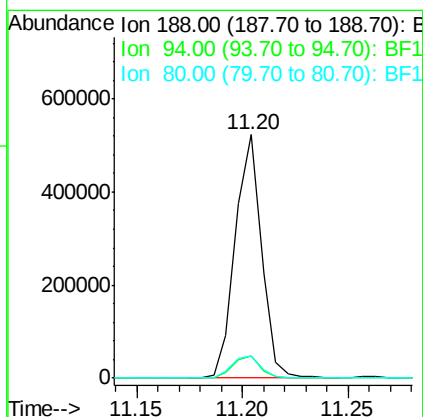
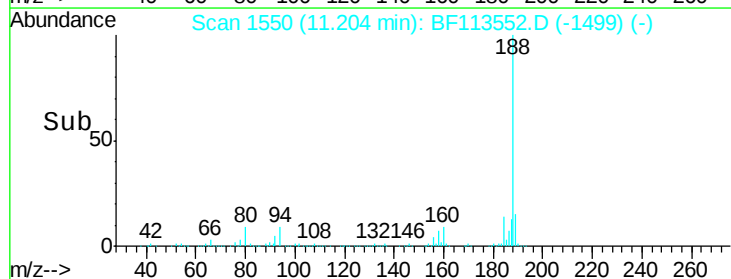
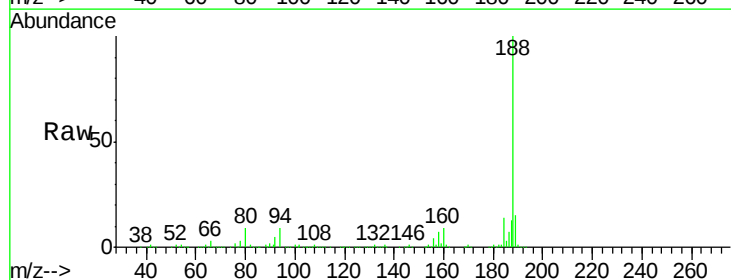
Instrument :  
 BNA\_F  
 ClientSampleId :

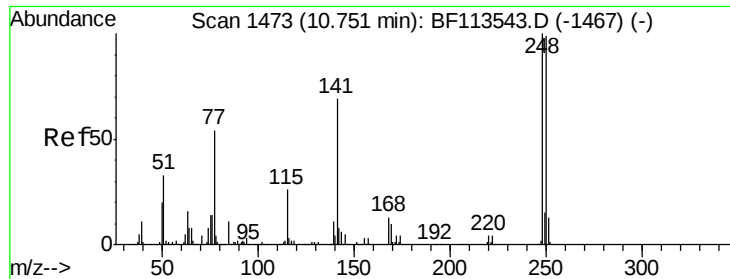
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 165     | 100   |       |       |
| 63      | 1.4   | 37.5  | 56.3# |
| 89      | 1.4   | 57.4  | 86.2# |
| 182     | 0.0   | 2.0   | 3.0#  |



#64  
 Phenanthrene-d10  
 Concen: 20.000 ng  
 RT: 11.20 min Scan# 1550  
 Delta R.T. 0.00 min  
 Lab File: BF113552.D  
 Acq: 3 Apr 2019 19:18

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 188     | 100   |       |       |
| 94      | 9.1   | 7.0   | 10.6  |
| 80      | 9.2   | 7.7   | 11.5  |

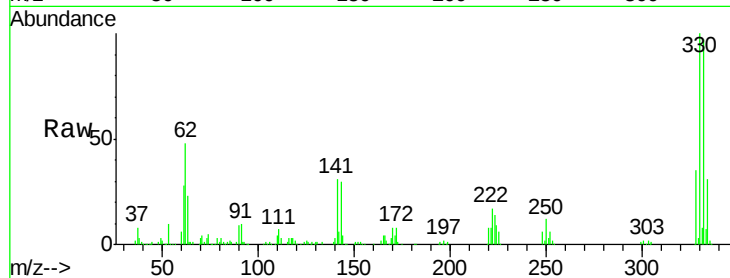




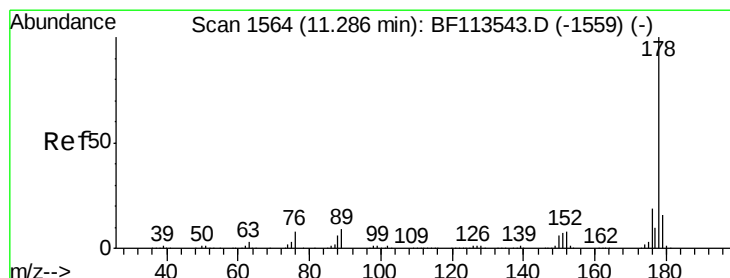
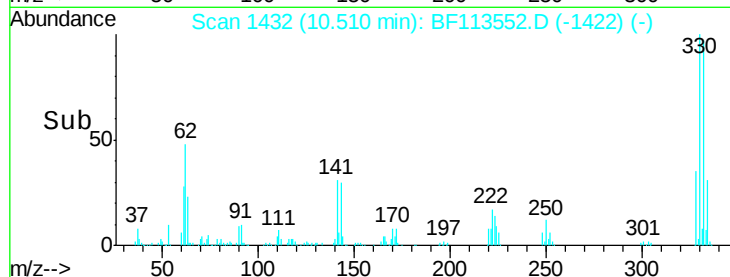
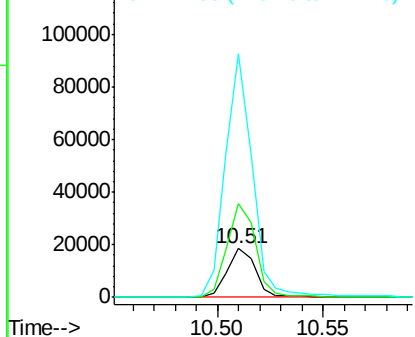
#67  
 4-Bromophenyl-phenylether  
 Concen: 3.424 ng  
 RT: 10.51 min Scan# 1432  
 Delta R.T. -0.24 min  
 Lab File: BF113552.D  
 Acq: 3 Apr 2019 19:18

Instrument :  
 BNA\_F  
 ClientSampleId :

Tot Ion:248 Resp: 17265  
 Ion Ratio Lower Upper  
 248 100  
 250 194.5 78.3 117.5#  
 141 501.1 56.2 84.4#

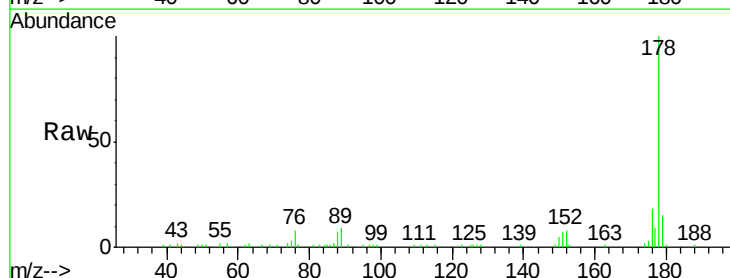


Abundance Ion 248.00 (247.70 to 248.70): E  
 Ion 250.00 (249.70 to 250.70): E  
 Ion 141.00 (140.70 to 141.70): E

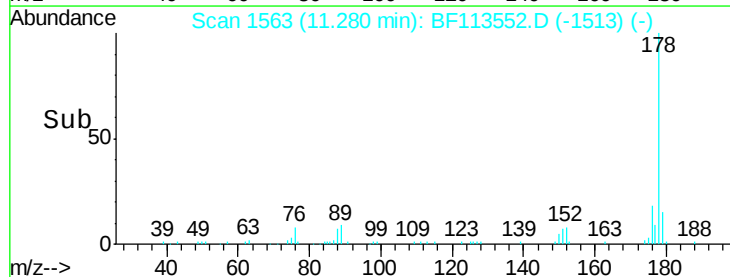
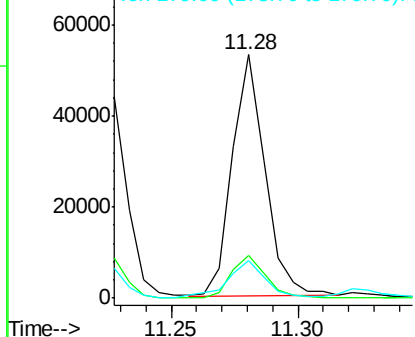


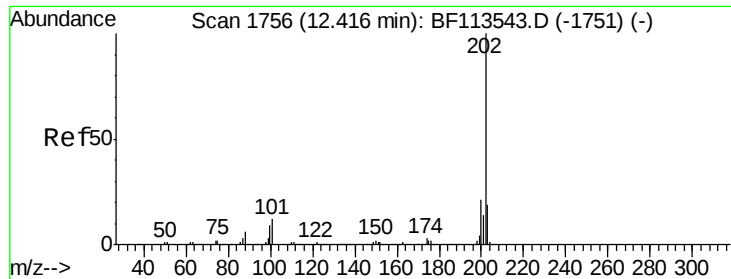
#72  
 Anthracene  
 Concen: 2.108 ng  
 RT: 11.28 min Scan# 1563  
 Delta R.T. -0.01 min  
 Lab File: BF113552.D  
 Acq: 3 Apr 2019 19:18

Tgt Ion:178 Resp: 47904  
 Ion Ratio Lower Upper  
 178 100  
 176 17.7 15.4 23.2  
 179 15.2 12.8 19.2



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





#75

Fluoranthene

Concen: 9.585 ng

RT: 12.42 min Scan# 1756

Delta R.T. 0.00 min

Lab File: BF113552.D

Acq: 3 Apr 2019 19:18

Instrument :

BNA\_F

ClientSampleId :

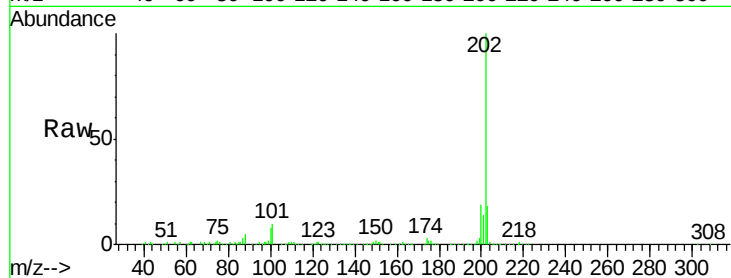
Tot Ion:202 Resp: 229441

Ion Ratio Lower Upper

202 100

101 10.0 0.0 31.4

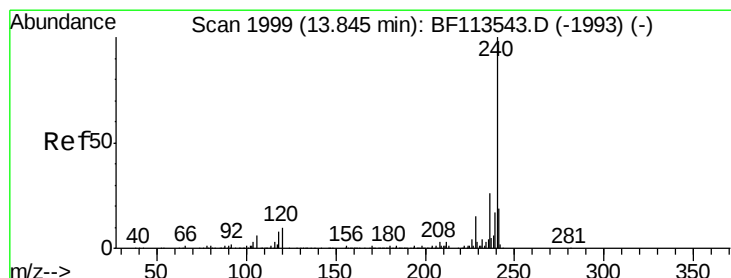
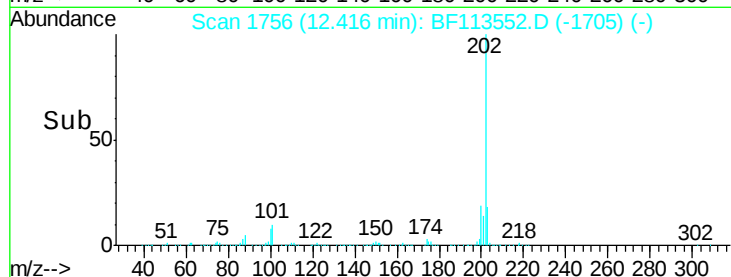
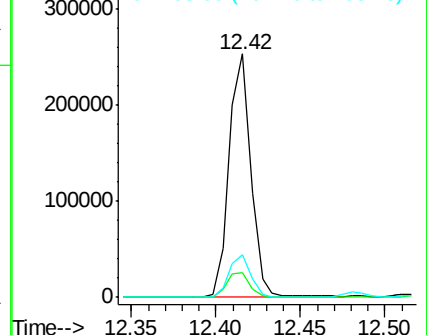
203 17.6 0.0 38.0



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



#76

Chrysene-d12

Concen: 20.000 ng

RT: 13.84 min Scan# 1998

Delta R.T. -0.01 min

Lab File: BF113552.D

Acq: 3 Apr 2019 19:18

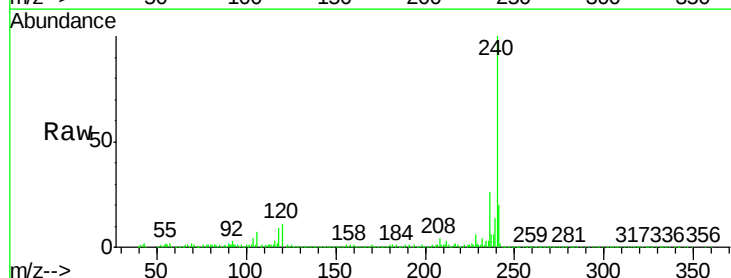
Tgt Ion:240 Resp: 361490

Ion Ratio Lower Upper

240 100

120 11.0 8.8 13.2

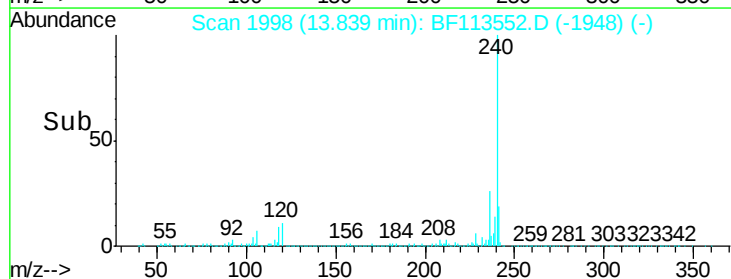
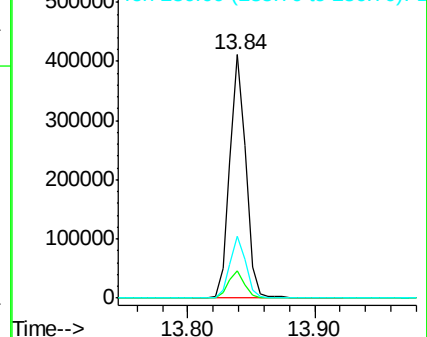
236 25.6 20.9 31.3

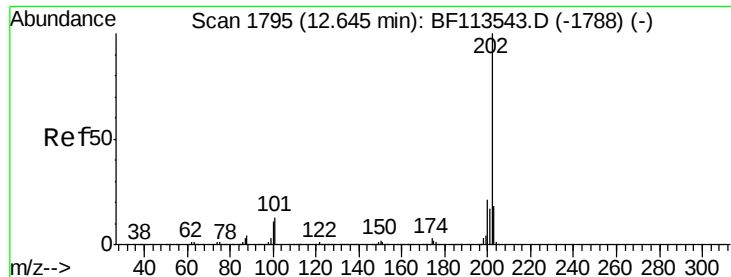


Abundance Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E

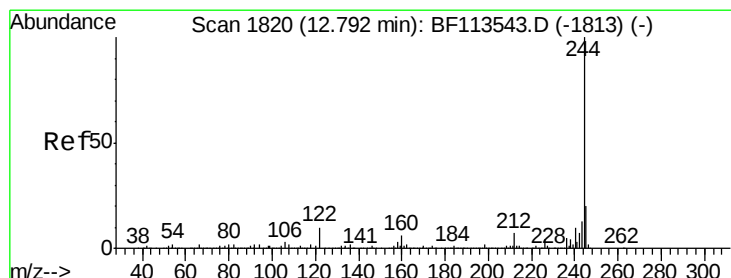
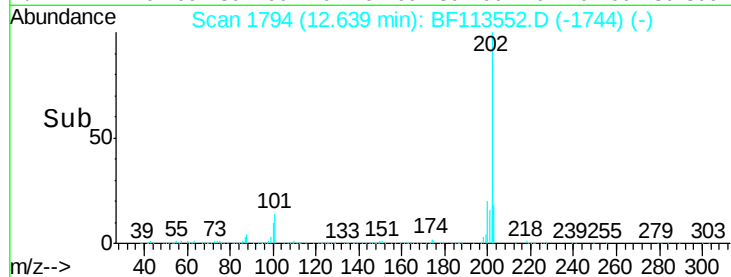
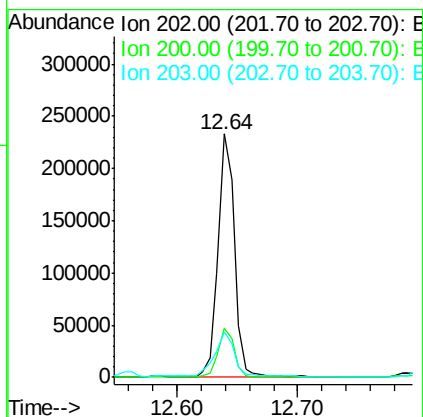
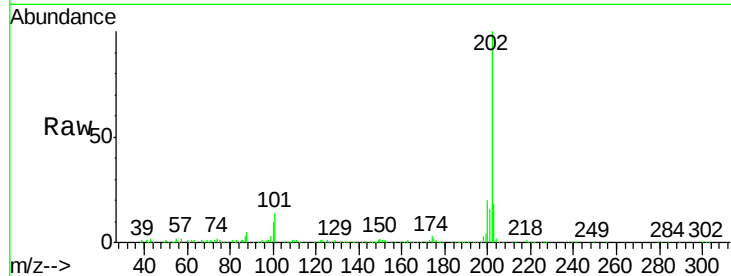




#78  
Pvrene  
Concen: 7.837 ng  
RT: 12.64 min Scan# 1794  
Delta R.T. -0.01 min  
Lab File: BF113552.D  
Acq: 3 Apr 2019 19:18

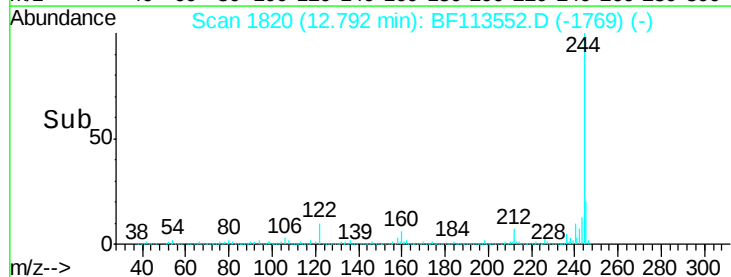
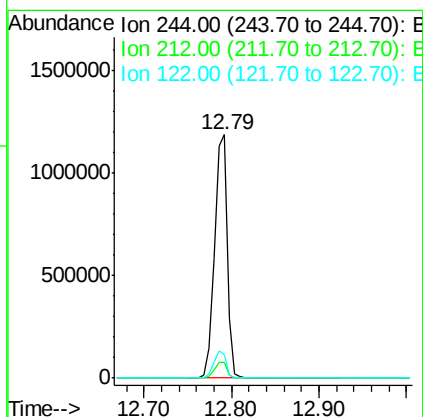
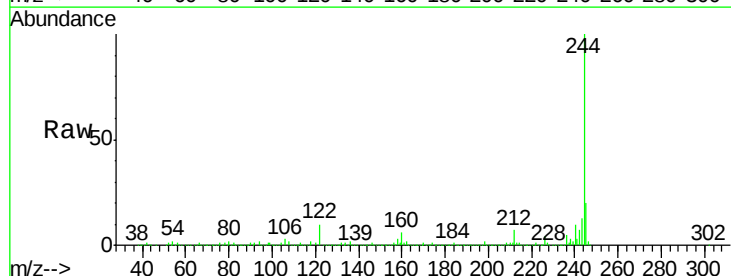
Instrument :  
BNA\_F  
ClientSampleId :

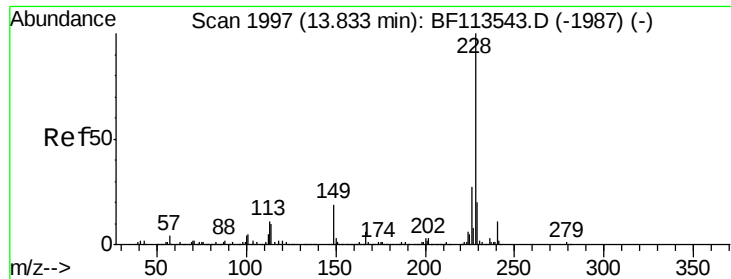
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 200     | 19.9  | 16.8  | 25.2  |
| 203     | 18.4  | 14.4  | 21.6  |



#79  
Terphenyl-d14  
Concen: 67.629 ng  
RT: 12.79 min Scan# 1820  
Delta R.T. 0.00 min  
Lab File: BF113552.D  
Acq: 3 Apr 2019 19:18

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 244     | 100   |       |       |
| 212     | 6.5   | 5.5   | 8.3   |
| 122     | 9.7   | 8.6   | 13.0  |

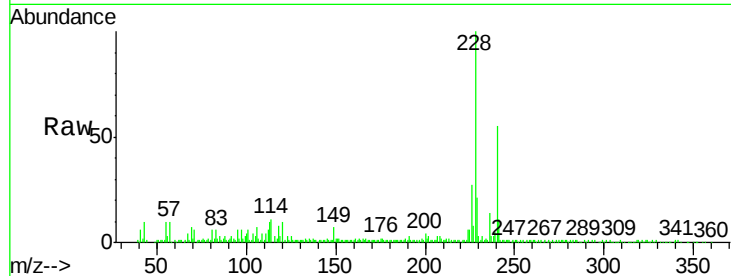




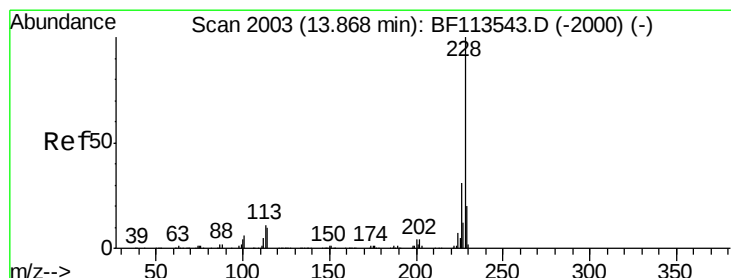
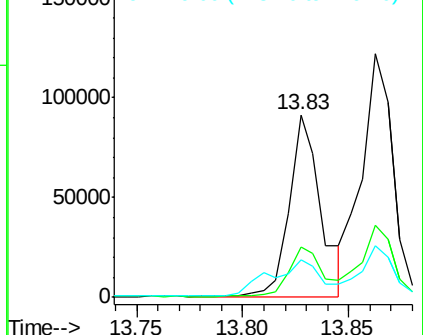
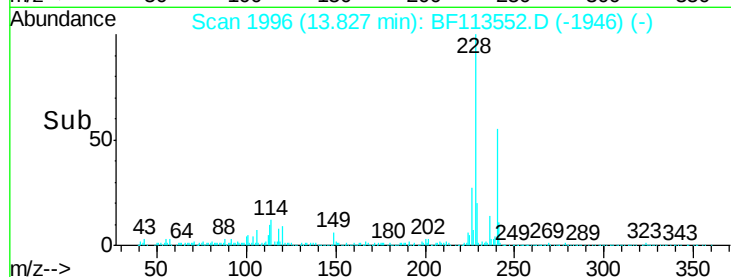
#81  
Benzo(a)anthracene  
Concen: 4.546 ng  
RT: 13.83 min Scan# 1996  
Delta R.T. -0.01 min  
Lab File: BF113552.D  
Acq: 3 Apr 2019 19:18

Instrument :  
BNA\_F  
ClientSampleId :

Tot Ion:228 Resp: 94804  
Ion Ratio Lower Upper  
228 100  
226 27.4 21.8 32.8  
229 20.6 16.2 24.4

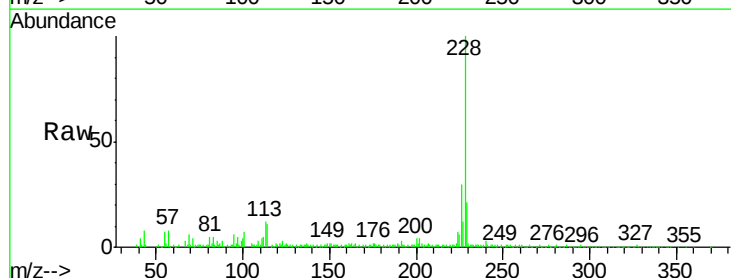


Abundance Ion 228.00 (227.70 to 228.70): E  
Ion 226.00 (225.70 to 226.70): E  
Ion 229.00 (228.70 to 229.70): E

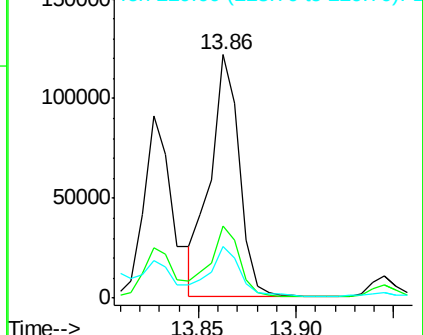
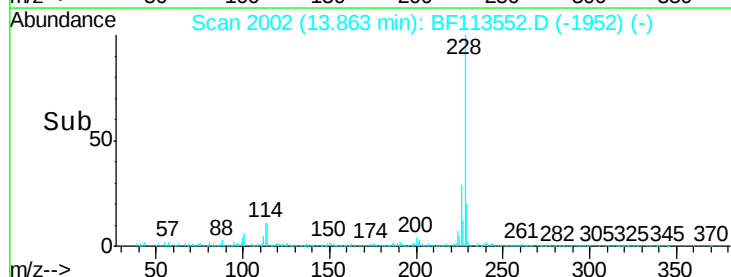


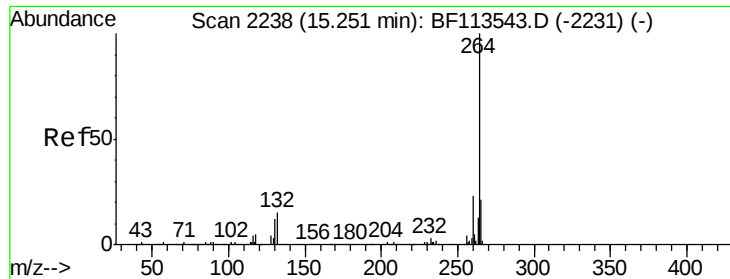
#83  
Chrysene  
Concen: 5.967 ng  
RT: 13.86 min Scan# 2002  
Delta R.T. -0.01 min  
Lab File: BF113552.D  
Acq: 3 Apr 2019 19:18

Tgt Ion:228 Resp: 126139  
Ion Ratio Lower Upper  
228 100  
226 29.8 24.3 36.5  
229 21.0 16.3 24.5



Abundance Ion 228.00 (227.70 to 228.70): E  
Ion 226.00 (225.70 to 226.70): E  
Ion 229.00 (228.70 to 229.70): E

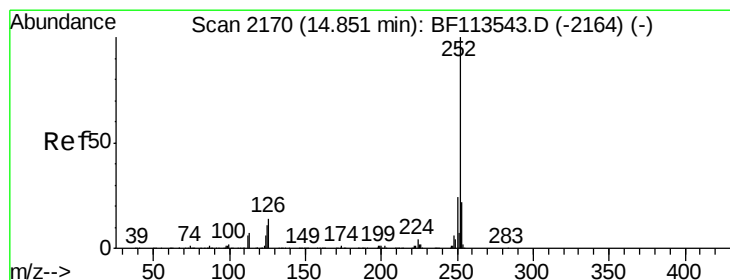
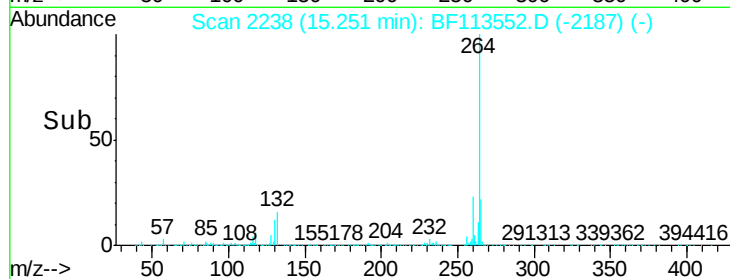
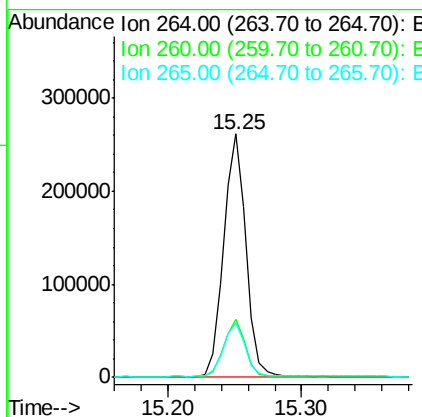
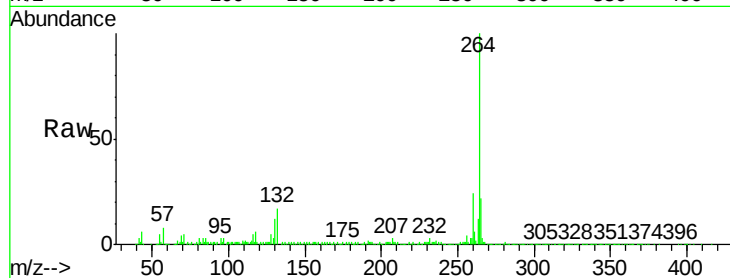




#87  
Pervlene-d12  
Concen: 20.000 ng  
RT: 15.25 min Scan# 2238  
Delta R.T. 0.00 min  
Lab File: BF113552.D  
Acq: 3 Apr 2019 19:18

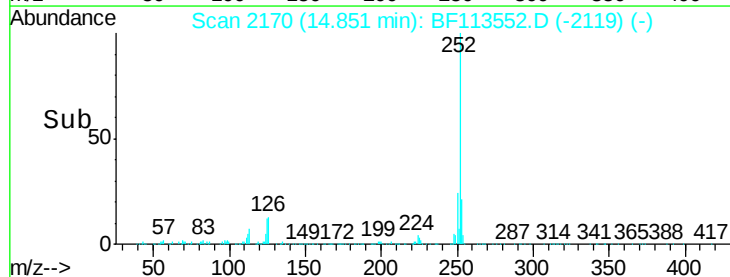
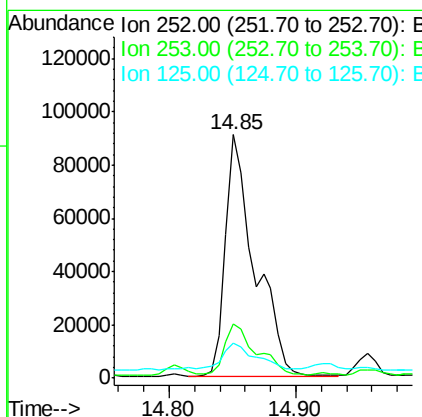
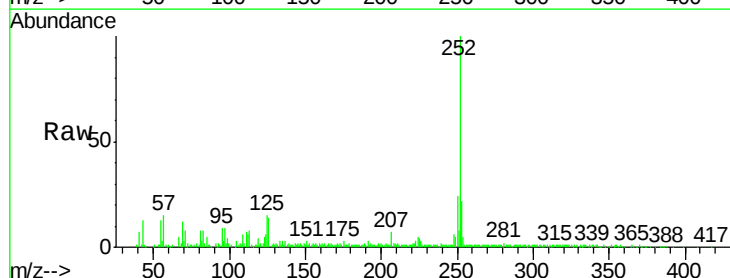
Instrument :  
BNA\_F  
ClientSampleId :

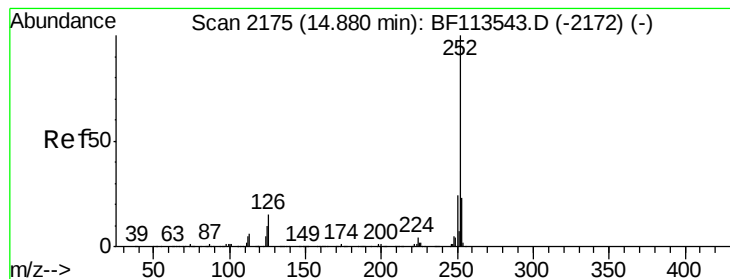
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 23.7  | 19.1  | 28.7  |
| 265     | 22.2  | 17.1  | 25.7  |



#88  
Benzo(b)fluoranthene  
Concen: 7.842 ng  
RT: 14.85 min Scan# 2170  
Delta R.T. 0.00 min  
Lab File: BF113552.D  
Acq: 3 Apr 2019 19:18

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.1  | 18.0  | 27.0  |
| 125     | 14.5  | 7.6   | 11.4  |





#89

Benzo(k)fluoranthene

Concen: 8.738 ng

RT: 14.85 min Scan# 2170

Delta R.T. -0.03 min

Lab File: BF113552.D

Acq: 3 Apr 2019 19:18

Instrument :

BNA\_F

ClientSampleId :

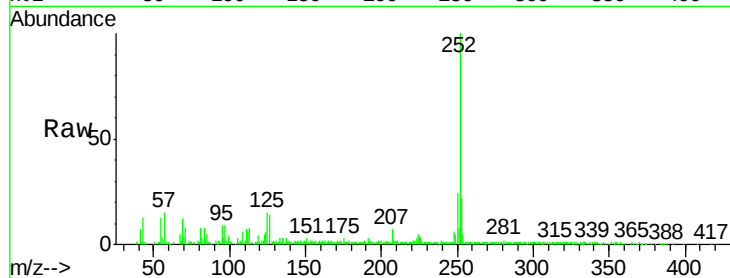
Tot Ion:252 Resp: 146836

Ion Ratio Lower Upper

252 100

253 22.1 17.7 26.5

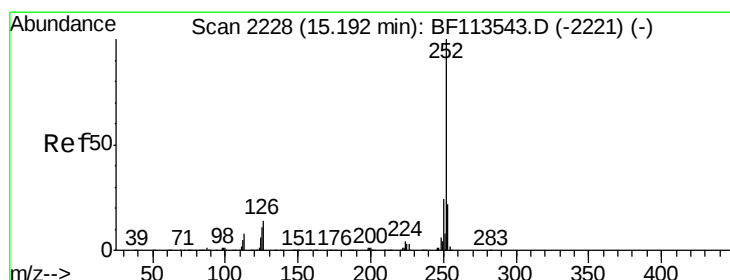
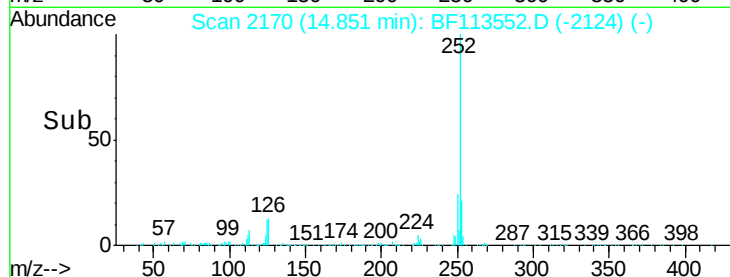
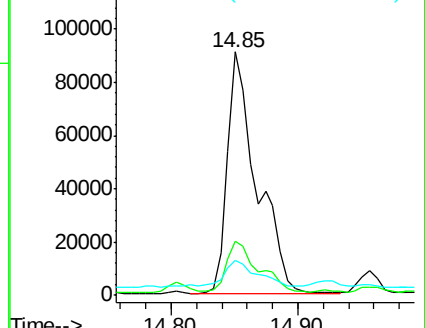
125 14.5 7.3 10.9#



Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E



#90

Benzo(a)pyrene

Concen: 2.127 ng

RT: 15.19 min Scan# 2228

Delta R.T. 0.00 min

Lab File: BF113552.D

Acq: 3 Apr 2019 19:18

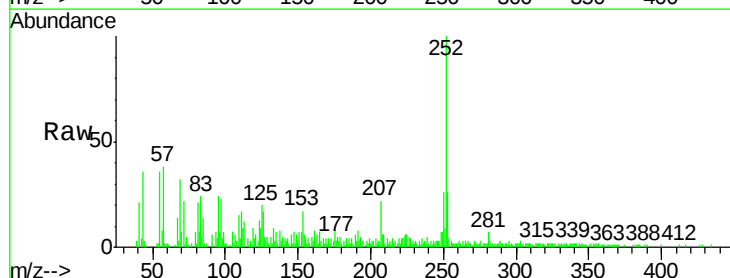
Tgt Ion:252 Resp: 35391

Ion Ratio Lower Upper

252 100

253 26.0 17.9 26.9

125 20.4 8.8 13.2#



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

