

Data Path : Z:\SVOASRV\HPCHEM1\BNA\_F\DATA\BF030419\  
 Data File : BF112819.D  
 Acq On : 4 Mar 2019 12:57  
 Operator : JU/SJ  
 Sample : K1672-01  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 FK-GF-02-033-A

Quant Time: Mar 05 00:35:25 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_F\METHODS\8270-BF022719.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Mar 01 15:40:43 2019  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.75  | 152  | 188725   | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 8.03  | 136  | 693275   | 20.00 | ng    | 0.00     |
| 39) Acenaphthene-d10      | 9.77  | 164  | 292808   | 20.00 | ng    | 0.00     |
| 64) Phenanthrene-d10      | 11.25 | 188  | 502555   | 20.00 | ng    | 0.00     |
| 76) Chrysene-d12          | 13.88 | 240  | 490028   | 20.00 | ng    | 0.00     |
| 87) Perylene-d12          | 15.29 | 264  | 496612   | 20.00 | ng    | 0.02     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|-------|------|----------|-------|-------|----------|
| 5) 2-Fluorophenol           | 5.36  | 112  | 966343   | 79.65 | ng    | 0.01     |
| 7) Phenol-d6                | 6.38  | 99   | 1233406  | 80.93 | ng    | 0.01     |
| 23) Nitrobenzene-d5         | 7.30  | 82   | 740817   | 63.94 | ng    | 0.00     |
| 42) 2,4,6-Tribromophenol    | 10.56 | 330  | 290441   | 93.43 | ng    | 0.00     |
| 45) 2-Fluorobiphenyl        | 9.10  | 172  | 1250122  | 66.87 | ng    | 0.00     |
| 79) Terphenyl-d14           | 12.83 | 244  | 1114404  | 44.08 | ng    | 0.00     |

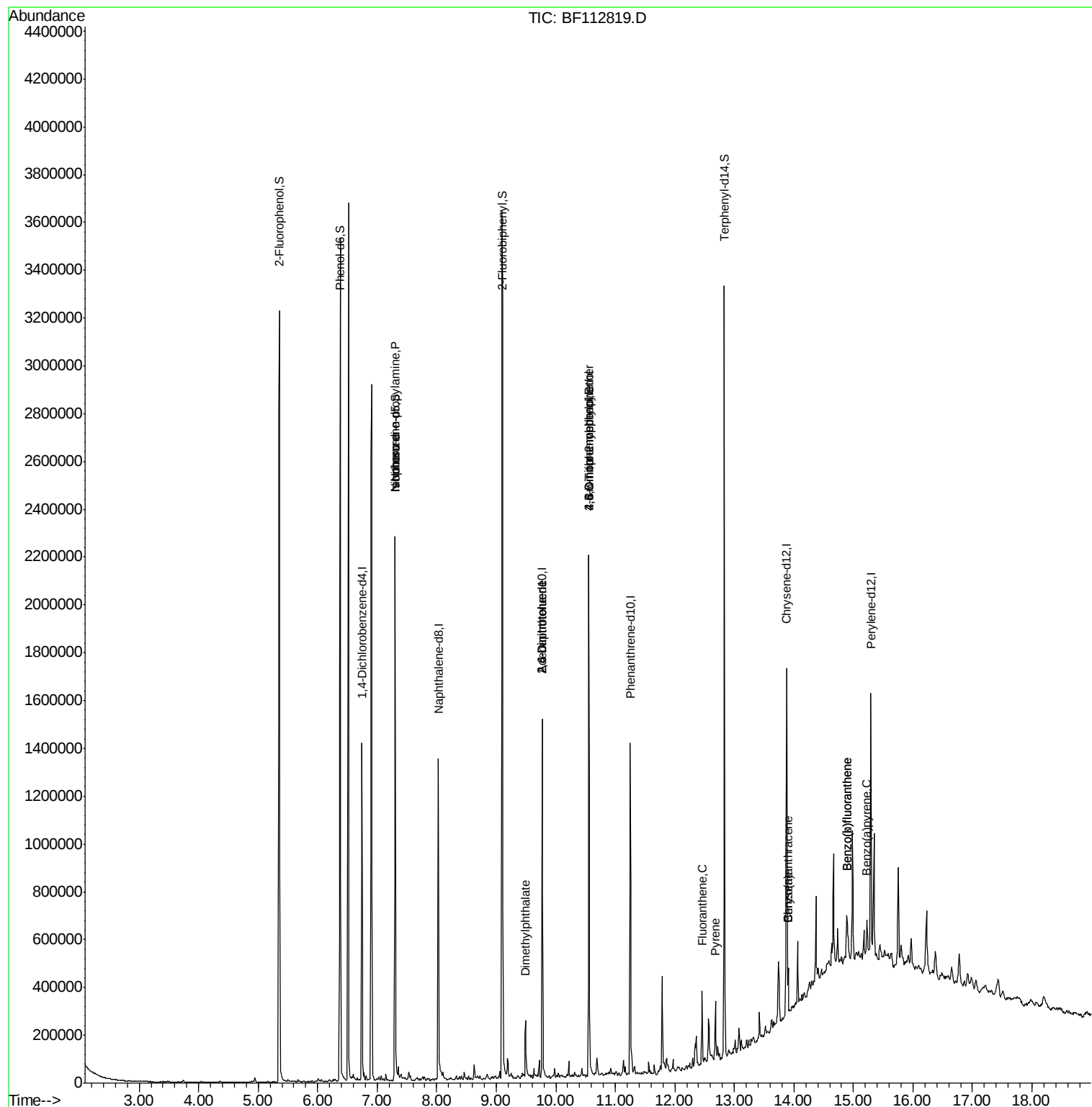
| Target Compounds               | R.T.  | QIon | Response | Conc   | Units | Qvalue |
|--------------------------------|-------|------|----------|--------|-------|--------|
| 19) n-Nitroso-di-n-propylamine | 7.30  | 70   | 97405    | 10.091 | ng    | # 76   |
| 25) Isophorone                 | 7.30  | 82   | 719472   | 28.825 | ng    | # 66   |
| 50) Dimethylphthalate          | 9.49  | 163  | 95694    | 4.432  | ng    | 100    |
| 51) 2,6-Dinitrotoluene         | 9.77  | 165  | 38236    | 8.505  | ng    | # 18   |
| 57) 2,4-Dinitrotoluene         | 9.77  | 165  | 38236    | 6.842  | ng    | # 18   |
| 65) 4,6-Dinitro-2-methylphenol | 10.56 | 198  | 345      | 4.764  | ng    | # 1    |
| 67) 4-Bromophenyl-phenylether  | 10.56 | 248  | 16093    | 3.040  | ng    | # 1    |
| 75) Fluoranthene               | 12.46 | 202  | 119327   | 4.454  | ng    | 95     |
| 78) Pyrene                     | 12.69 | 202  | 113441   | 2.746  | ng    | 97     |
| 81) Benzo(a)anthracene         | 13.90 | 228  | 78908    | 2.323  | ng    | 98     |
| 83) Chrysene                   | 13.90 | 228  | 78908    | 2.372  | ng    | 98     |
| 88) Benzo(b)fluoranthene       | 14.89 | 252  | 134382   | 4.183  | ng    | # 94   |
| 89) Benzo(k)fluoranthene       | 14.89 | 252  | 134382   | 4.619  | ng    | # 94   |
| 90) Benzo(a)pyrene             | 15.23 | 252  | 64325    | 2.264  | ng    | 95     |

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

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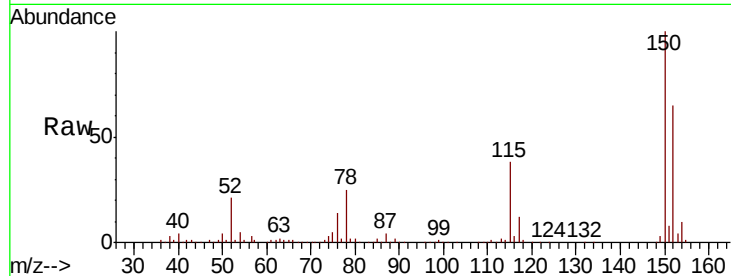




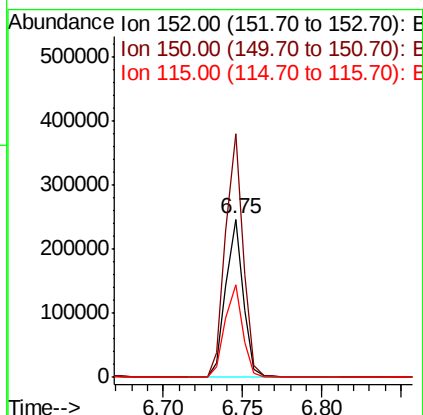
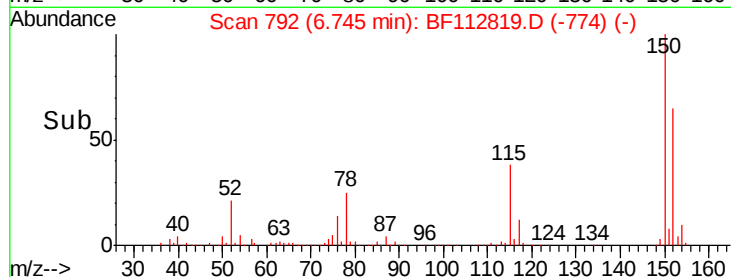
#1  
 1,4-Dichlorobenzene-d4  
 Concen: 20.000 ng  
 RT: 6.75 min Scan# 792  
 Delta R.T. 0.01 min  
 Lab File: BF112819.D  
 Acq: 4 Mar 2019 12:57

Instrument :  
 BNA\_F  
 ClientSampleId :  
 FK-GF-02-033-A

Tgt Ion:152 Resp: 188725  
 Ion Ratio Lower Upper  
 152 100  
 150 154.1 124.2 186.2  
 115 58.4 48.2 72.4

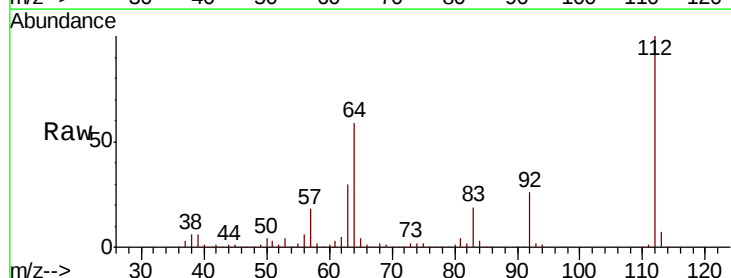


Abundance Ion 152.00 (151.70 to 152.70): E  
 Ion 150.00 (149.70 to 150.70): E  
 Ion 115.00 (114.70 to 115.70): E

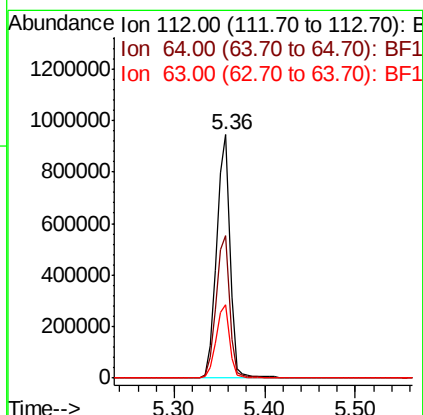
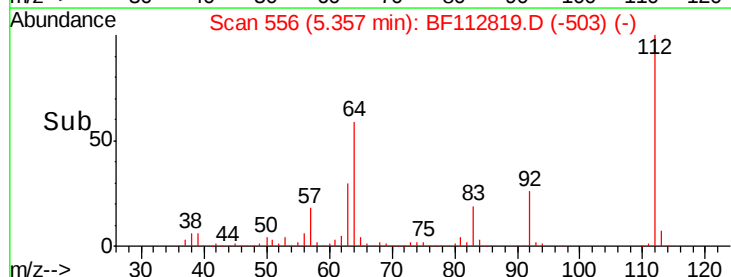


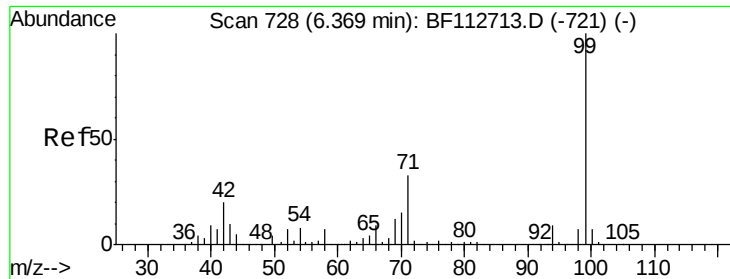
#5  
 2-Fluorophenol  
 Concen: 79.650 ng  
 RT: 5.36 min Scan# 556  
 Delta R.T. 0.01 min  
 Lab File: BF112819.D  
 Acq: 4 Mar 2019 12:57

Tgt Ion:112 Resp: 966343  
 Ion Ratio Lower Upper  
 112 100  
 64 58.5 47.6 71.4  
 63 30.0 24.4 36.6



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: 80.931 ng

RT: 6.38 min Scan# 730

Delta R.T. 0.01 min

Lab File: BF112819.D

Acq: 4 Mar 2019 12:57

Instrument :

BNA\_F

ClientSampleId :

FK-GF-02-033-A

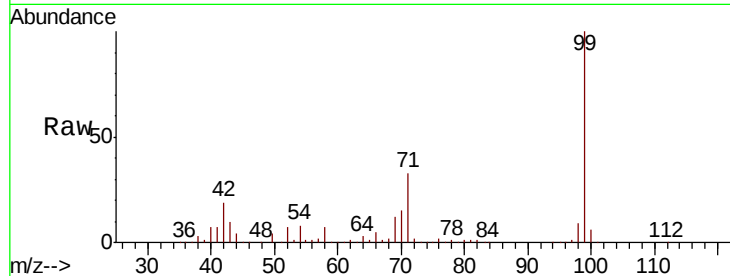
Tgt Ion: 99 Resp: 1233406

Ion Ratio Lower Upper

99 100

42 18.9 16.3 24.5

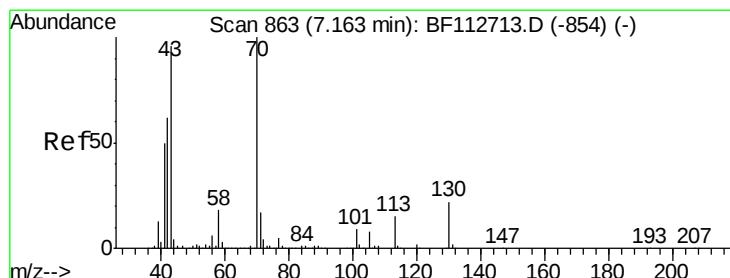
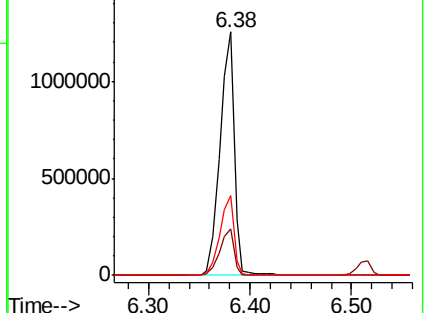
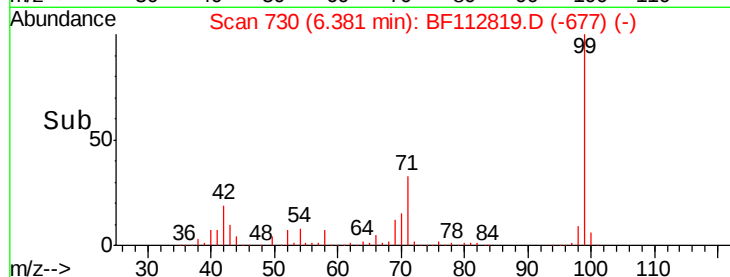
71 32.8 26.2 39.4



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: 10.091 ng

RT: 7.30 min Scan# 887

Delta R.T. 0.14 min

Lab File: BF112819.D

Acq: 4 Mar 2019 12:57

Tgt Ion: 70 Resp: 97405

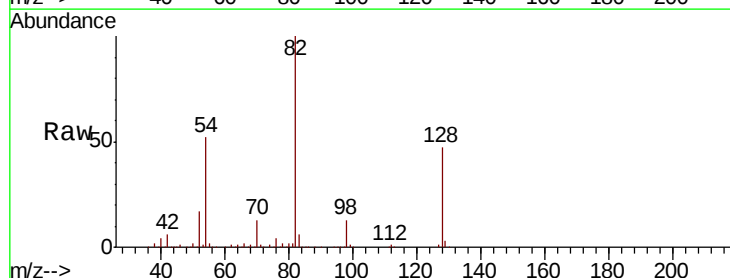
Ion Ratio Lower Upper

70 100

42 48.5 49.9 74.9#

101 0.0 7.4 11.2#

130 2.4 17.4 26.2#

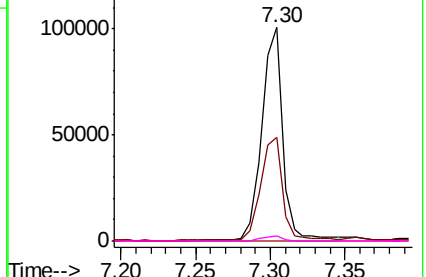
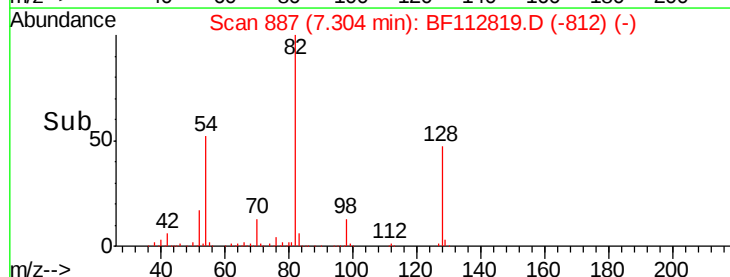


Abundance Ion 70.00 (69.70 to 70.70): BF1

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

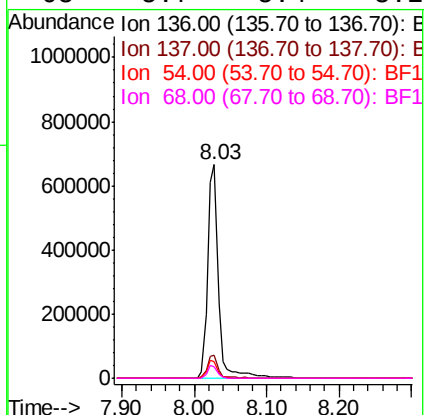
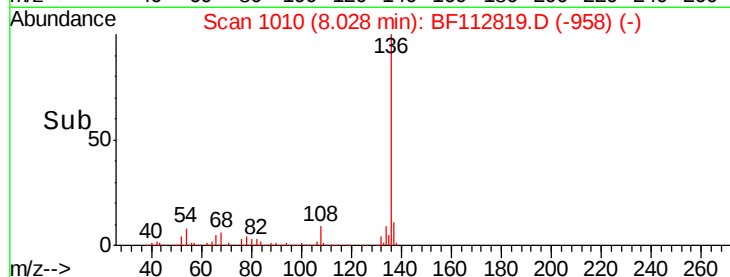
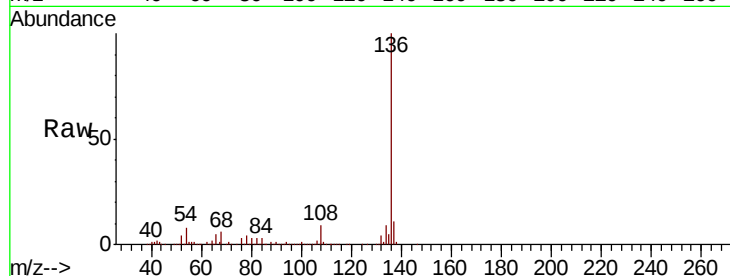




#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 8.03 min Scan# 1010  
Delta R.T. 0.01 min  
Lab File: BF112819.D  
Acq: 4 Mar 2019 12:57

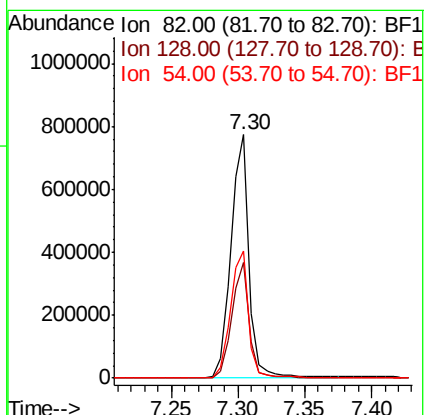
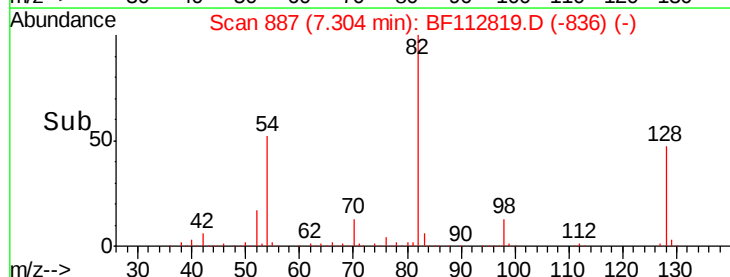
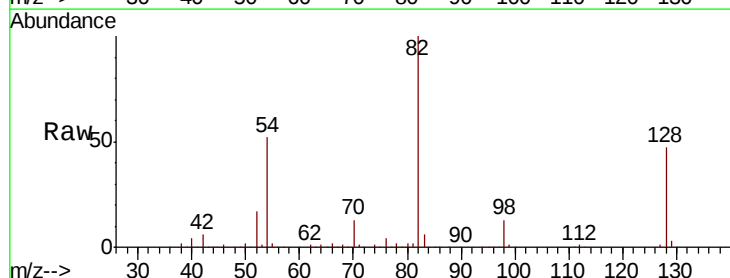
Instrument :  
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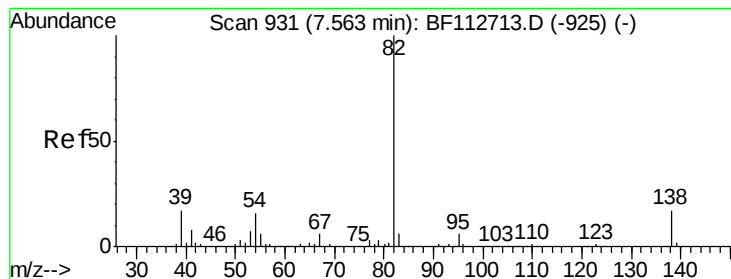
|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 136   | Resp: | 693275 |
| Ion      | Ratio | Lower | Upper  |
| 136      | 100   |       |        |
| 137      | 10.9  | 8.9   | 13.3   |
| 54       | 7.8   | 7.3   | 10.9   |
| 68       | 5.7   | 5.4   | 8.2    |



#23  
Nitrobenzene-d5  
Concen: 63.941 ng  
RT: 7.30 min Scan# 887  
Delta R.T. 0.00 min  
Lab File: BF112819.D  
Acq: 4 Mar 2019 12:57

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 82    | Resp: | 740817 |
| Ion      | Ratio | Lower | Upper  |
| 82       | 100   |       |        |
| 128      | 47.5  | 36.3  | 54.5   |
| 54       | 52.2  | 43.7  | 65.5   |





#25

Isophorone

Concen: 28.825 ng

RT: 7.30 min Scan# 887

Delta R.T. -0.26 min

Lab File: BF112819.D

Acq: 4 Mar 2019 12:57

Instrument :

BNA\_F

ClientSampleId :

FK-GF-02-033-A

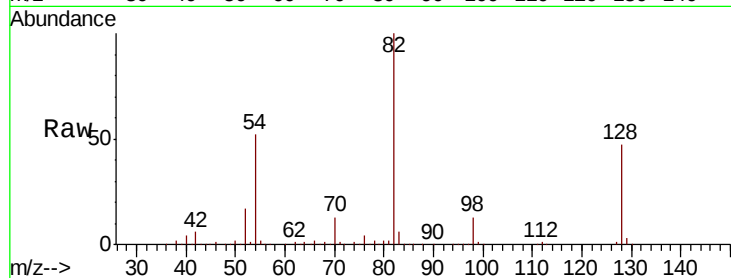
Tgt Ion: 82 Resp: 719472

Ion Ratio Lower Upper

82 100

95 0.1 5.2 7.8#

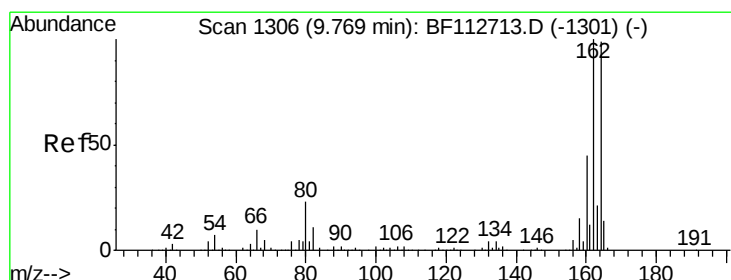
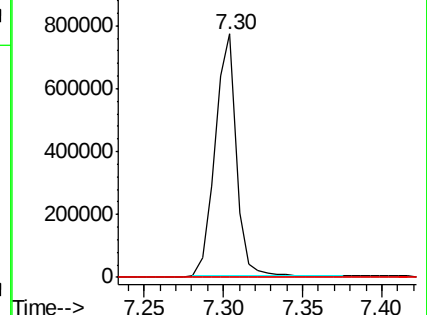
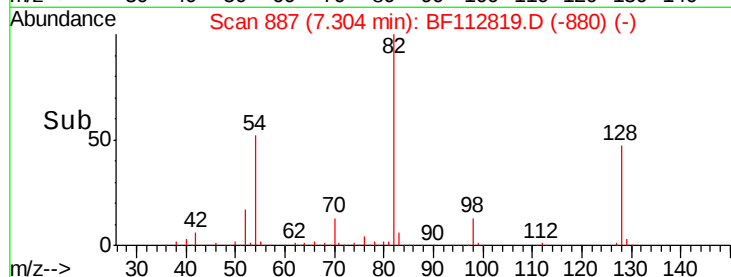
138 0.0 13.8 20.8#



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: 9.77 min Scan# 1307

Delta R.T. 0.01 min

Lab File: BF112819.D

Acq: 4 Mar 2019 12:57

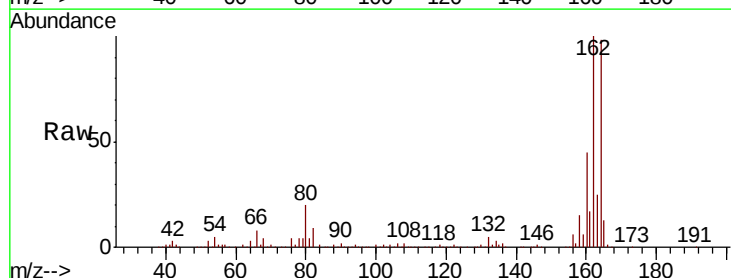
Tgt Ion: 164 Resp: 292808

Ion Ratio Lower Upper

164 100

162 101.9 80.6 120.8

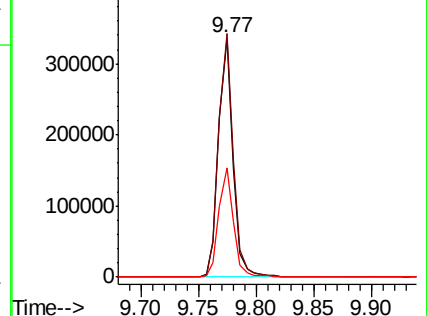
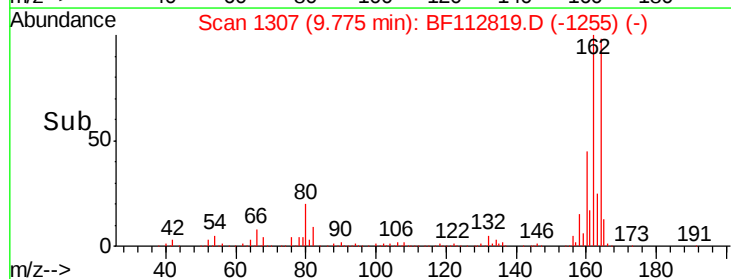
160 46.0 36.0 54.0



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

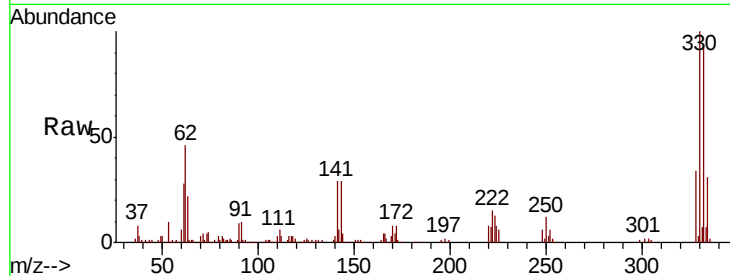




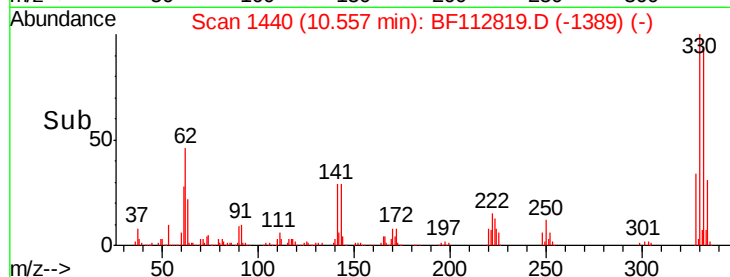
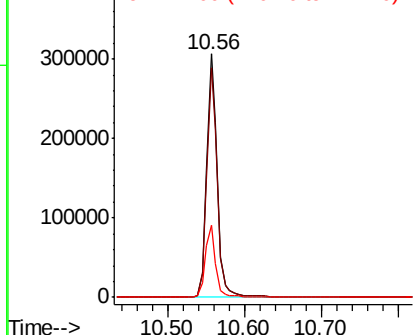
#42  
 2,4,6-Tribromophenol  
 Concen: 93.434 ng  
 RT: 10.56 min Scan# 1440  
 Delta R.T. 0.00 min  
 Lab File: BF112819.D  
 Acq: 4 Mar 2019 12:57

Instrument :  
 BNA\_F  
 ClientSampleId :  
 FK-GF-02-033-A

Tgt Ion:330 Resp: 290441  
 Ion Ratio Lower Upper  
 330 100  
 332 94.9 76.2 114.4  
 141 29.7 27.0 40.6

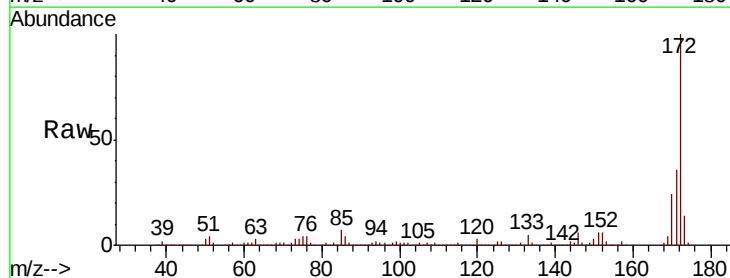


Abundance Ion 329.80 (329.50 to 330.50): E  
 Ion 331.80 (331.50 to 332.50): E  
 Ion 141.00 (140.70 to 141.70): E

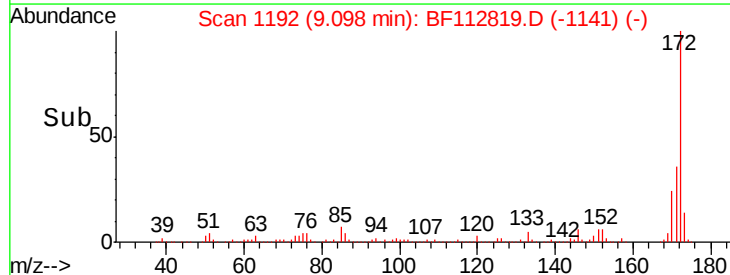
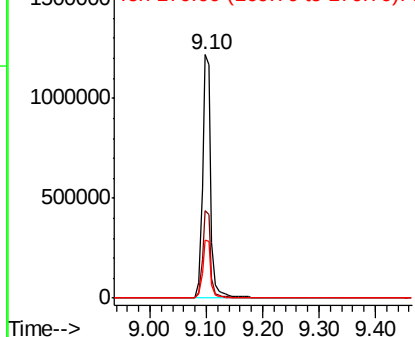


#45  
 2-Fluorobiphenyl  
 Concen: 66.869 ng  
 RT: 9.10 min Scan# 1192  
 Delta R.T. 0.00 min  
 Lab File: BF112819.D  
 Acq: 4 Mar 2019 12:57

Tgt Ion:172 Resp: 1250122  
 Ion Ratio Lower Upper  
 172 100  
 171 35.8 29.0 43.4  
 170 24.1 20.0 30.0



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

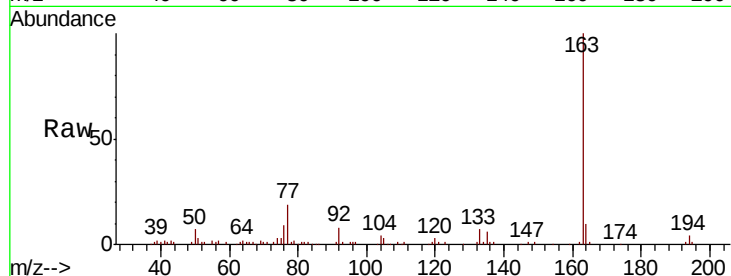




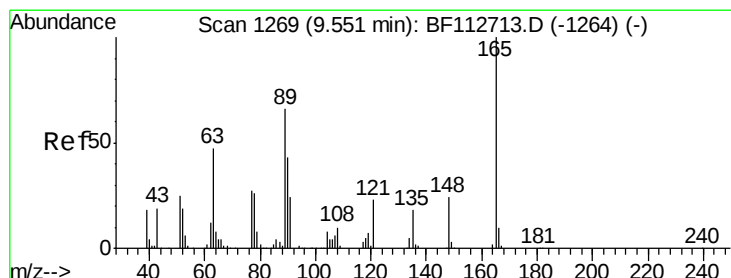
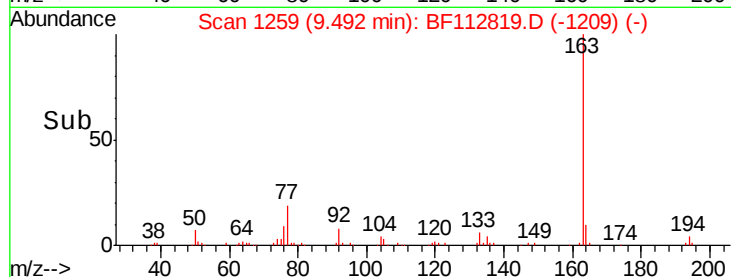
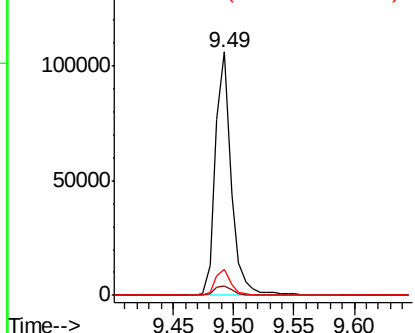
#50  
Dimethylphthalate  
Concen: 4.432 ng  
RT: 9.49 min Scan# 1259  
Delta R.T. -0.01 min  
Lab File: BF112819.D  
Acq: 4 Mar 2019 12:57

Instrument :  
BNA\_F  
ClientSampleId :  
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| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 163     | 100   |       |       |
| 194     | 4.0   | 3.0   | 4.4   |
| 164     | 10.5  | 8.4   | 12.6  |

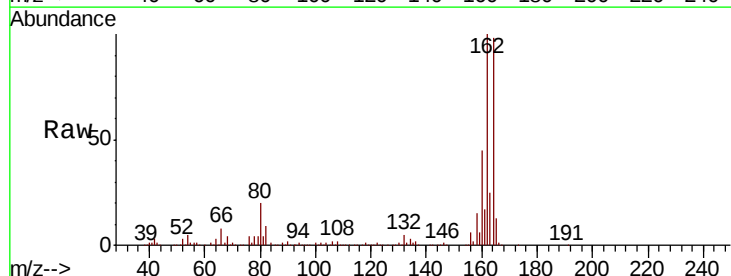


Abundance Ion 163.00 (162.70 to 163.70): E  
Ion 194.00 (193.70 to 194.70): E  
Ion 164.00 (163.70 to 164.70): E

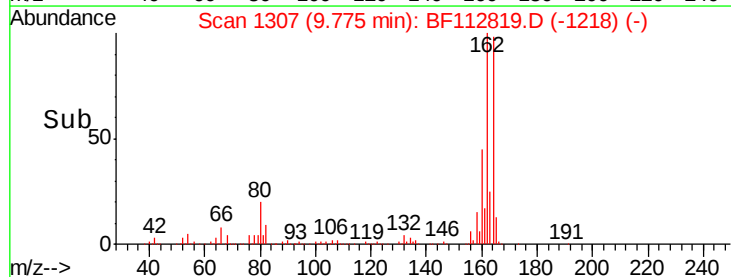
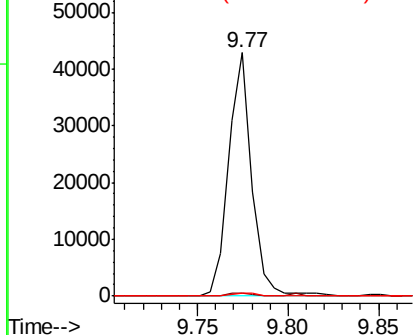


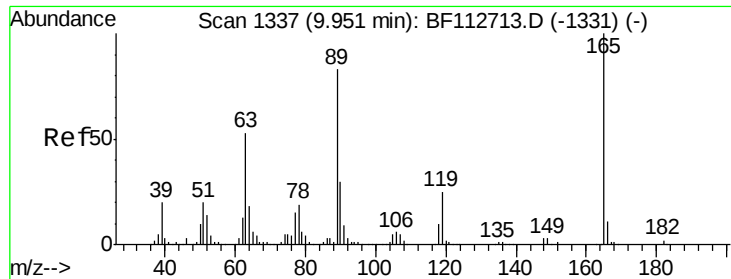
#51  
2,6-Dinitrotoluene  
Concen: 8.505 ng  
RT: 9.77 min Scan# 1307  
Delta R.T. 0.22 min  
Lab File: BF112819.D  
Acq: 4 Mar 2019 12:57

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 165     | 100   |       |       |
| 63      | 1.2   | 54.1  | 81.1# |
| 89      | 1.4   | 52.8  | 79.2# |



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

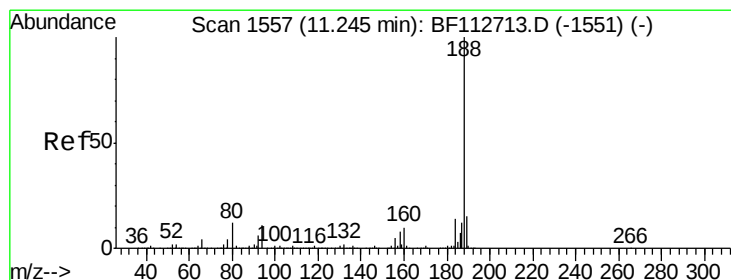
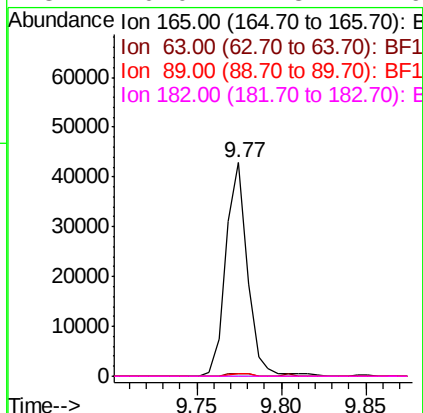
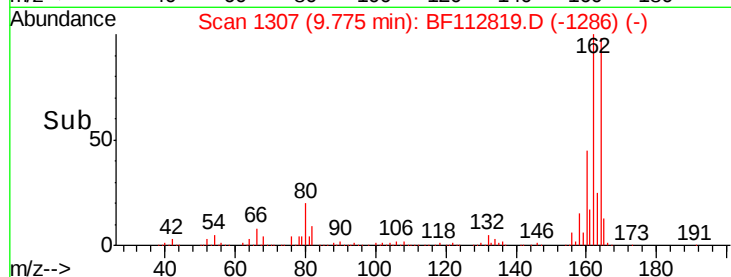
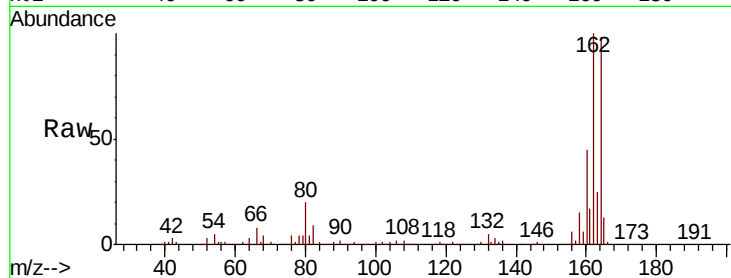




#57  
 2,4-Dinitrotoluene  
 Concen: 6.842 ng  
 RT: 9.77 min Scan# 1307  
 Delta R.T. -0.18 min  
 Lab File: BF112819.D  
 Acq: 4 Mar 2019 12:57

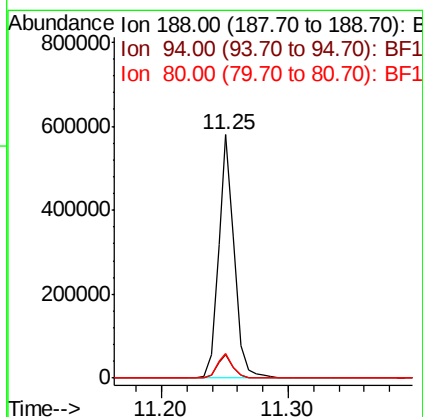
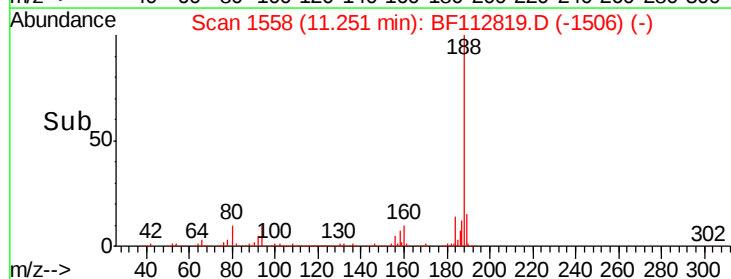
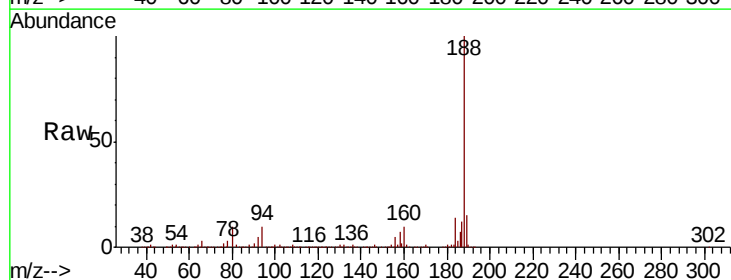
Instrument :  
 BNA\_F  
 ClientSampleId :  
 FK-GF-02-033-A

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 165     | 100   |       |       |
| 63      | 1.2   | 42.2  | 63.2# |
| 89      | 1.4   | 66.2  | 99.4# |
| 182     | 0.0   | 1.8   | 2.6#  |



#64  
 Phenanthrene-d10  
 Concen: 20.000 ng  
 RT: 11.25 min Scan# 1558  
 Delta R.T. 0.01 min  
 Lab File: BF112819.D  
 Acq: 4 Mar 2019 12:57

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 188     | 100   |       |       |
| 94      | 9.7   | 9.0   | 13.4  |
| 80      | 9.9   | 9.2   | 13.8  |

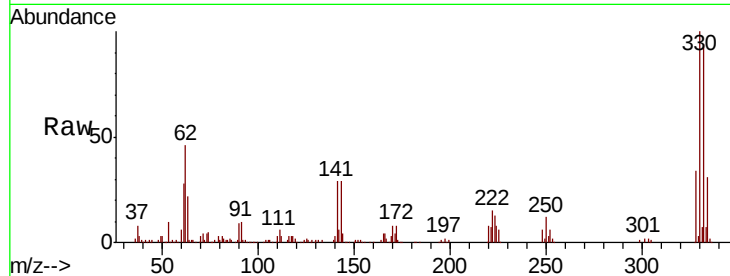




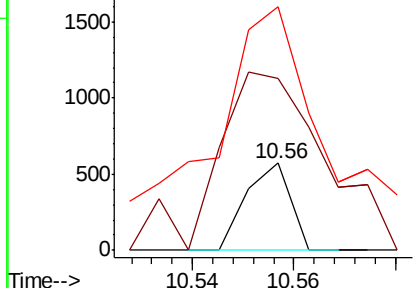
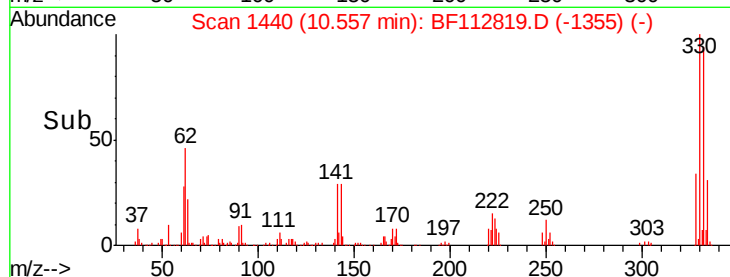
#65  
 4,6-Dinitro-2-methylphenol  
 Concen: 4.764 ng  
 RT: 10.56 min Scan# 1440  
 Delta R.T. 0.20 min  
 Lab File: BF112819.D  
 Acq: 4 Mar 2019 12:57

Instrument :  
 BNA\_F  
 ClientSampleId :  
 FK-GF-02-033-A

Tgt Ion:198 Resp: 345  
 Ion Ratio Lower Upper  
 198 100  
 51 198.2 43.8 83.8#  
 105 280.0 36.5 76.5#

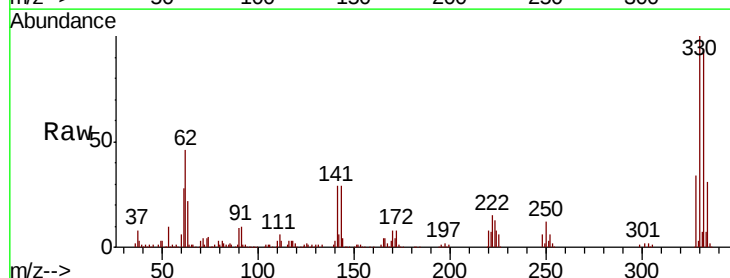


Abundance Ion 198.00 (197.70 to 198.70): E  
 Ion 51.00 (50.70 to 51.70): BF1  
 Ion 105.00 (104.70 to 105.70): E

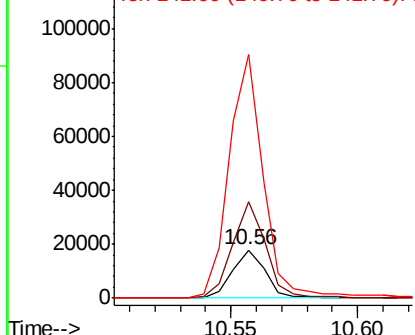
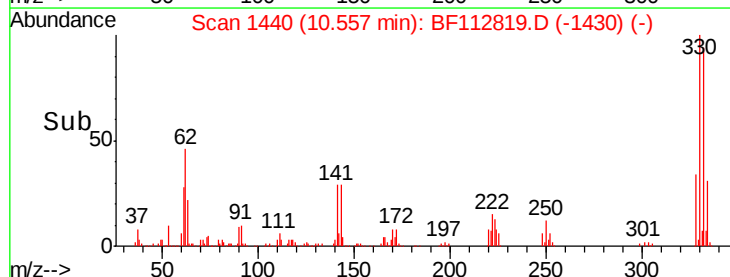


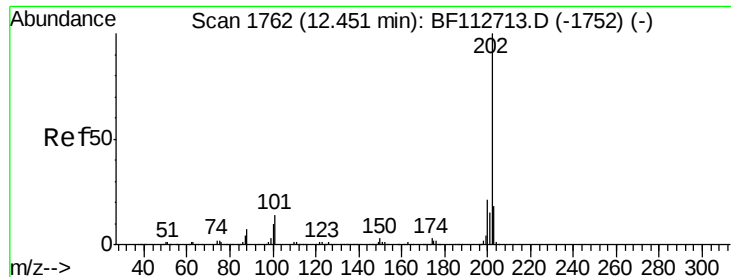
#67  
 4-Bromophenyl-phenylether  
 Concen: 3.040 ng  
 RT: 10.56 min Scan# 1440  
 Delta R.T. -0.24 min  
 Lab File: BF112819.D  
 Acq: 4 Mar 2019 12:57

Tgt Ion:248 Resp: 16093  
 Ion Ratio Lower Upper  
 248 100  
 250 201.0 77.5 116.3#  
 141 508.8 62.4 93.6#



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





#75

Fluoranthene

Concen: 4.454 ng

RT: 12.46 min Scan# 1763

Delta R.T. 0.01 min

Lab File: BF112819.D

Acq: 4 Mar 2019 12:57

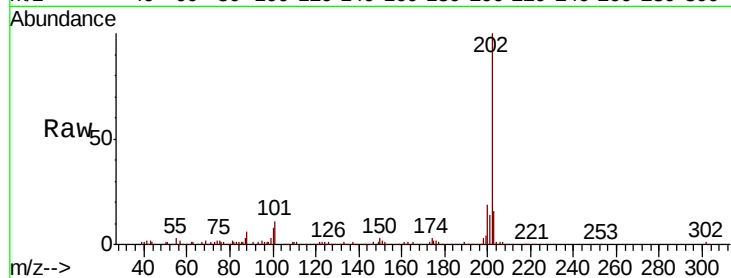
Instrument :

BNA\_F

ClientSampleId :

FK-GF-02-033-A

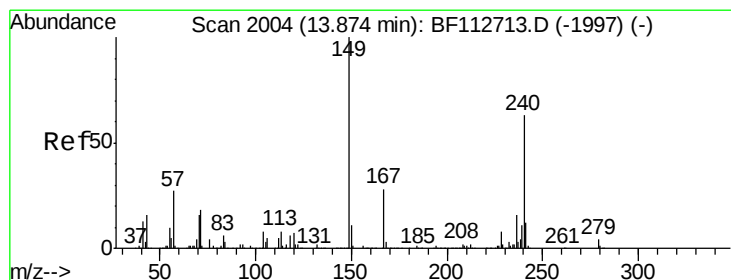
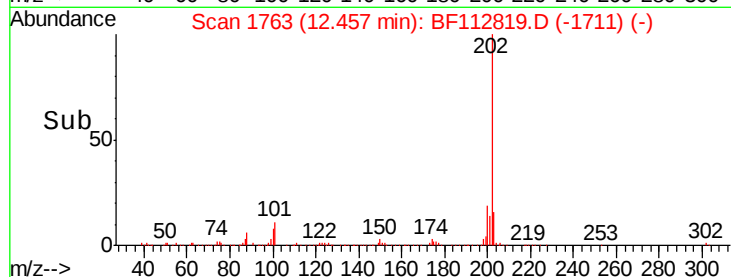
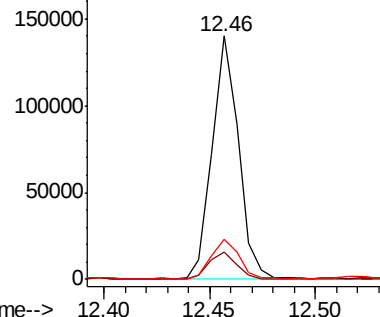
|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 202   | Resp: | 119327 |
| Ion      | Ratio | Lower | Upper  |
| 202      | 100   |       |        |
| 101      | 11.4  | 0.0   | 33.8   |
| 203      | 16.4  | 0.0   | 38.4   |



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

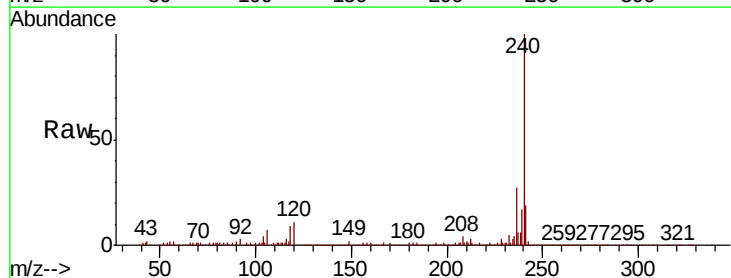
RT: 13.88 min Scan# 2005

Delta R.T. 0.01 min

Lab File: BF112819.D

Acq: 4 Mar 2019 12:57

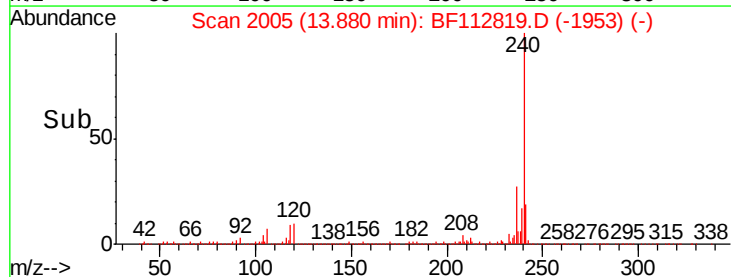
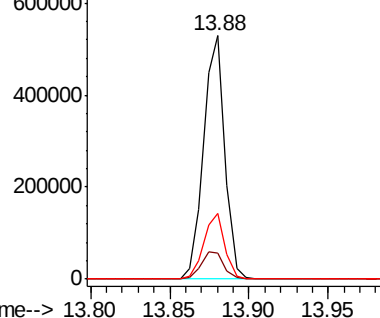
|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 240   | Resp: | 490028 |
| Ion      | Ratio | Lower | Upper  |
| 240      | 100   |       |        |
| 120      | 10.6  | 8.9   | 13.3   |
| 236      | 27.2  | 20.7  | 31.1   |

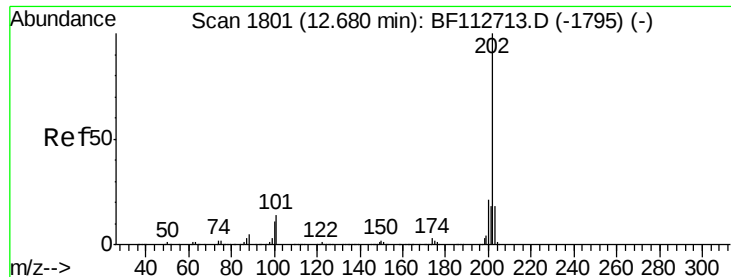


Abundance Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E

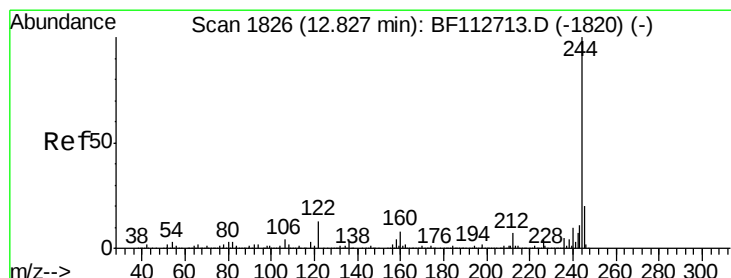
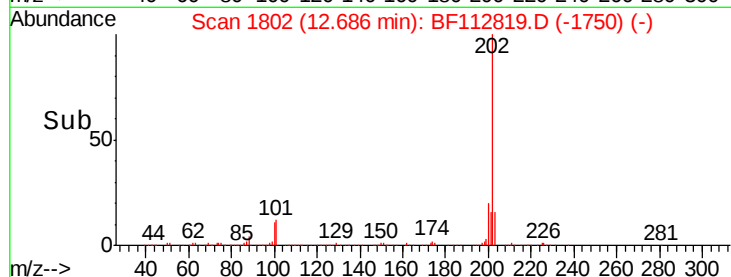
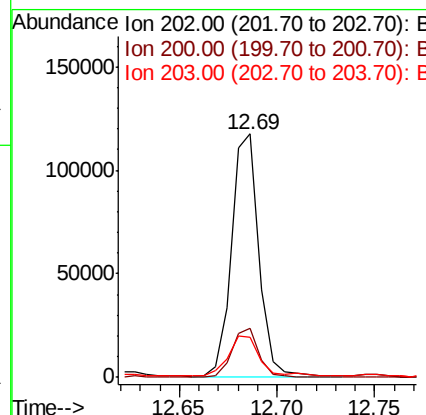
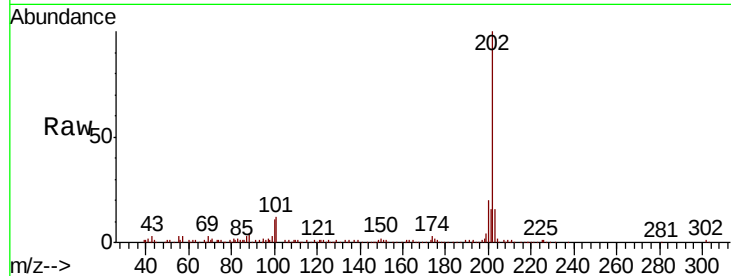




#78  
 Pyrene  
 Concen: 2.746 ng  
 RT: 12.69 min Scan# 1802  
 Delta R.T. 0.01 min  
 Lab File: BF112819.D  
 Acq: 4 Mar 2019 12:57

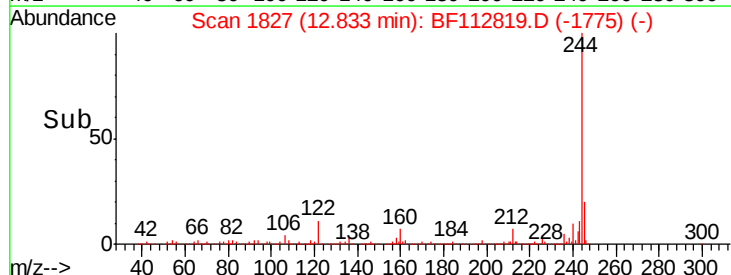
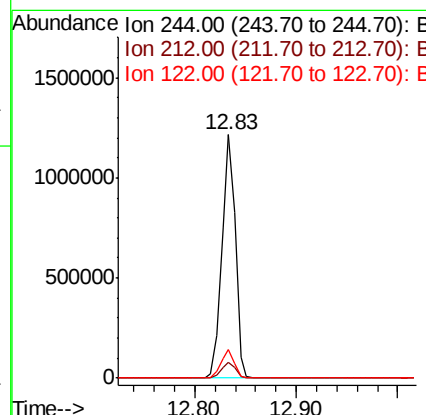
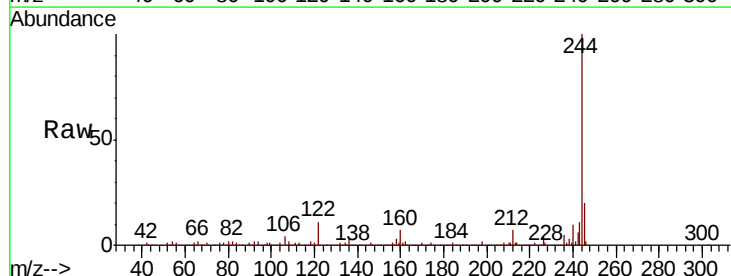
Instrument :  
 BNA\_F  
 ClientSampleId :  
 FK-GF-02-033-A

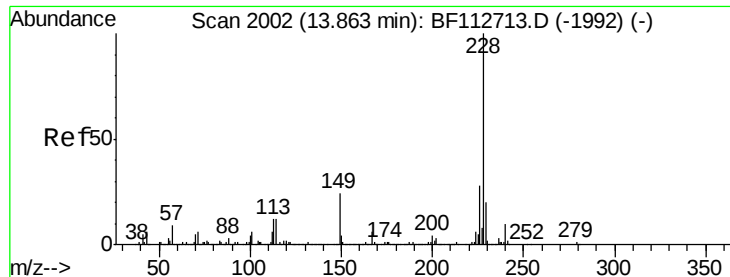
Tgt Ion: 202 Resp: 113441  
 Ion Ratio Lower Upper  
 202 100  
 200 20.2 17.0 25.4  
 203 16.5 14.4 21.6



#79  
 Terphenyl-d14  
 Concen: 44.085 ng  
 RT: 12.83 min Scan# 1827  
 Delta R.T. 0.01 min  
 Lab File: BF112819.D  
 Acq: 4 Mar 2019 12:57

Tgt Ion: 244 Resp: 1114404  
 Ion Ratio Lower Upper  
 244 100  
 212 6.7 5.6 8.4  
 122 11.5 10.5 15.7





#81

Benzo(a)anthracene

Concen: 2.323 ng

RT: 13.90 min Scan# 2009

Delta R.T. 0.04 min

Lab File: BF112819.D

Acq: 4 Mar 2019 12:57

Instrument :

BNA\_F

ClientSampleId :

FK-GF-02-033-A

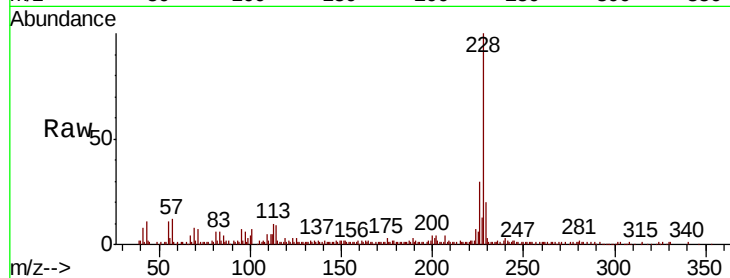
Tgt Ion:228 Resp: 78908

Ion Ratio Lower Upper

228 100

226 29.8 22.2 33.4

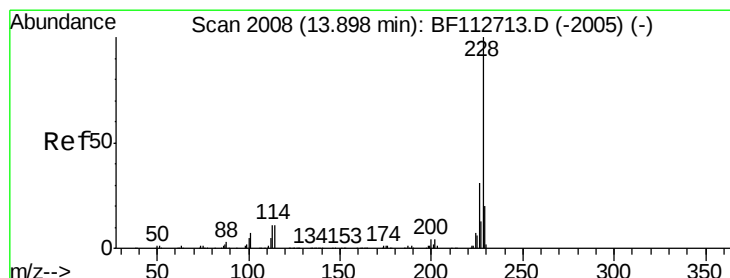
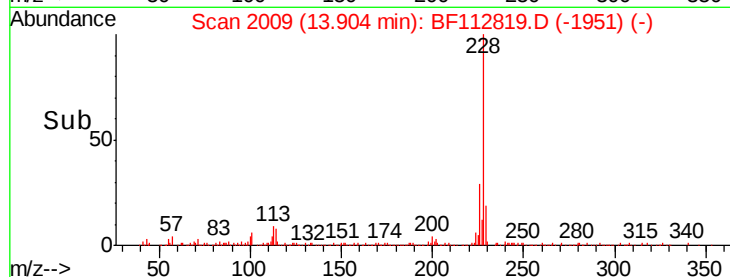
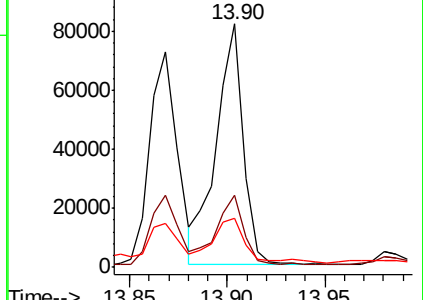
229 20.1 16.0 24.0



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: 2.372 ng

RT: 13.90 min Scan# 2009

Delta R.T. 0.01 min

Lab File: BF112819.D

Acq: 4 Mar 2019 12:57

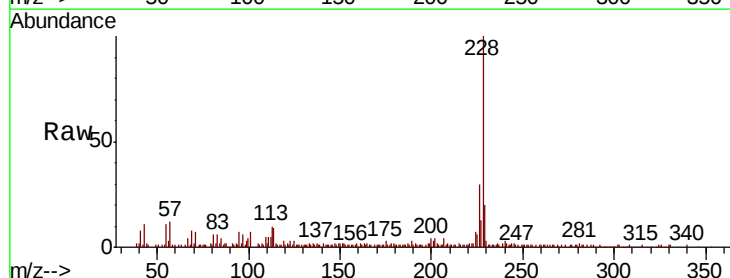
Tgt Ion:228 Resp: 78908

Ion Ratio Lower Upper

228 100

226 29.8 24.9 37.3

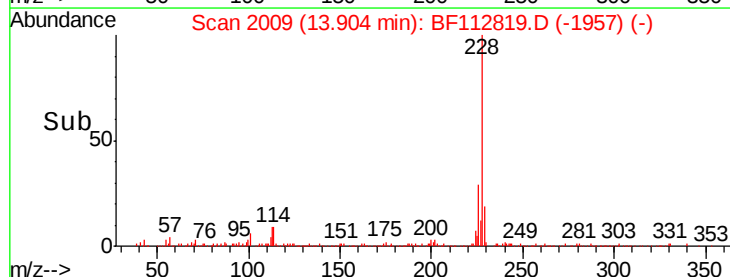
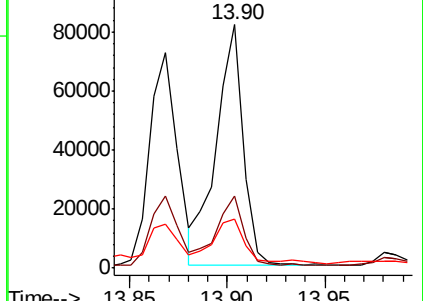
229 20.1 16.3 24.5

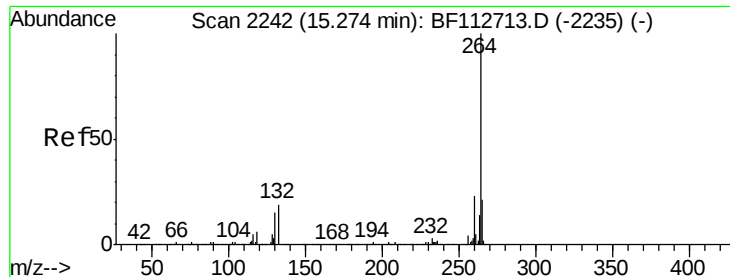


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E



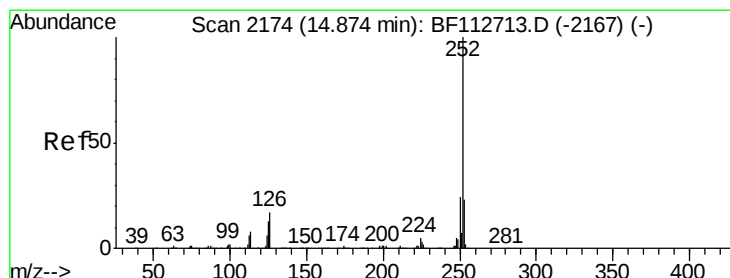
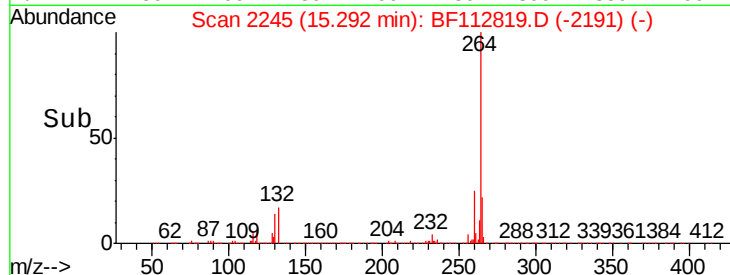
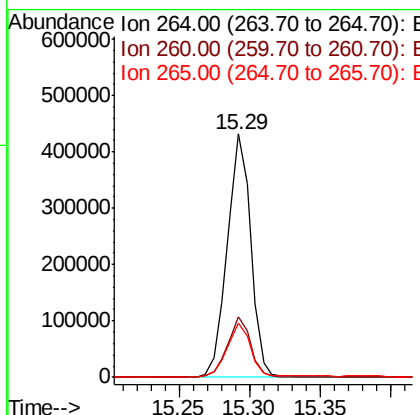
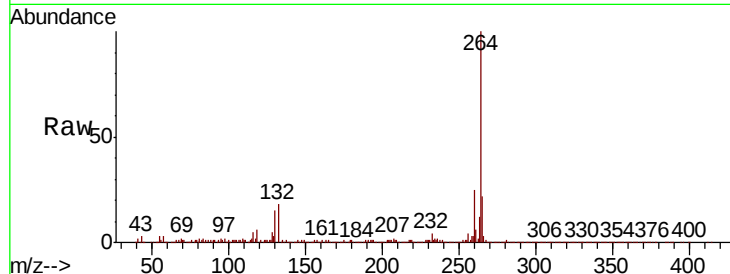


#87  
Perylene-d12  
Concen: 20.000 ng  
RT: 15.29 min Scan# 2245  
Delta R.T. 0.02 min  
Lab File: BF112819.D  
Acq: 4 Mar 2019 12:57

Instrument :  
BNA\_F  
ClientSampleId :  
FK-GF-02-033-A

Tgt Ion:264 Resp: 496612  

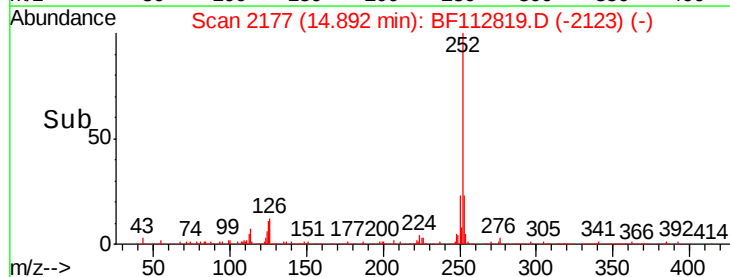
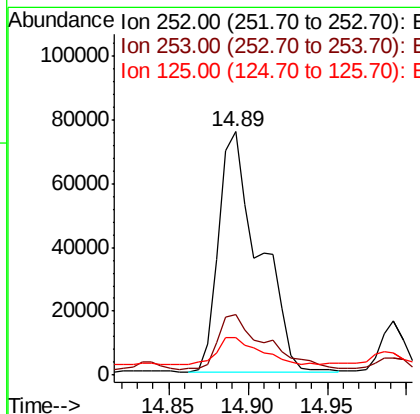
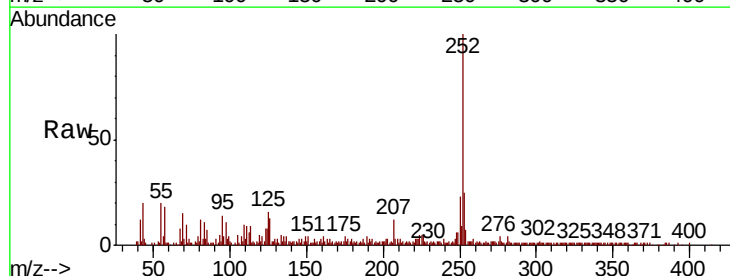
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 264 | 100   |       |       |
| 260 | 24.7  | 18.7  | 28.1  |
| 265 | 22.4  | 17.2  | 25.8  |

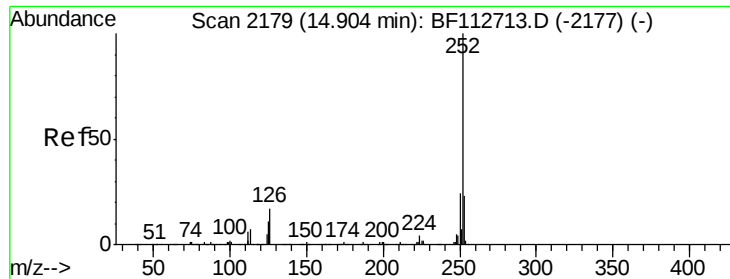


#88  
Benzo(b)fluoranthene  
Concen: 4.183 ng  
RT: 14.89 min Scan# 2177  
Delta R.T. 0.02 min  
Lab File: BF112819.D  
Acq: 4 Mar 2019 12:57

Tgt Ion:252 Resp: 134382  

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 252 | 100   |       |       |
| 253 | 24.7  | 18.0  | 27.0  |
| 125 | 15.6  | 10.2  | 15.2  |

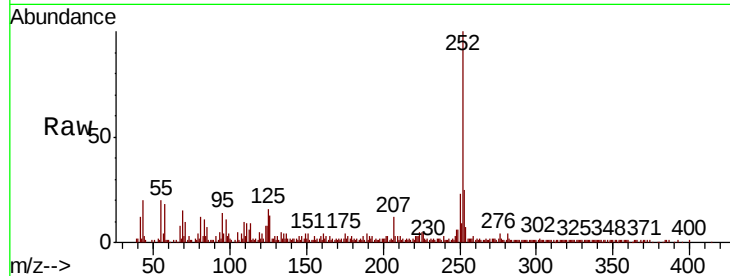




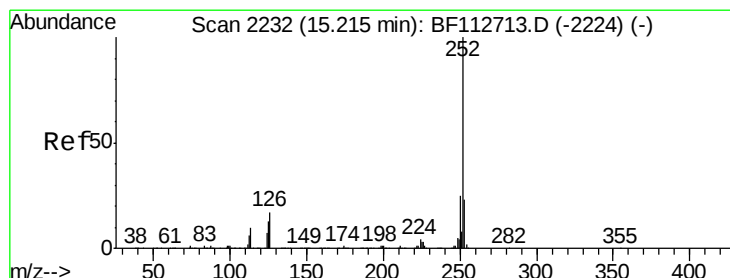
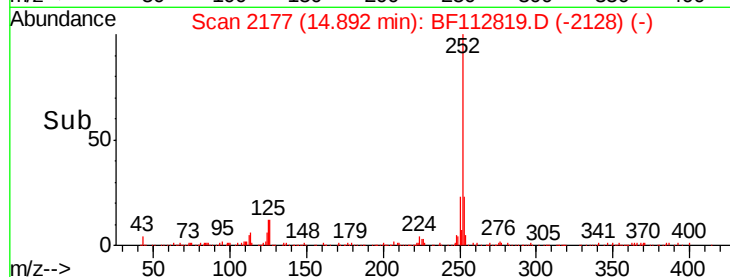
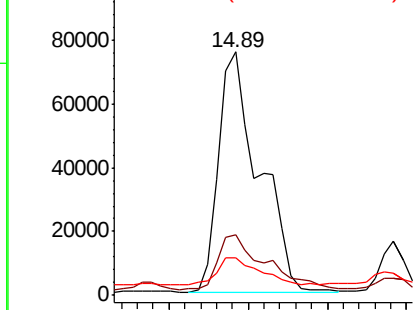
#89  
Benzo(k)fluoranthene  
Concen: 4.619 ng  
RT: 14.89 min Scan# 2177  
Delta R.T. -0.01 min  
Lab File: BF112819.D  
Acq: 4 Mar 2019 12:57

Instrument :  
BNA\_F  
ClientSampleId :  
FK-GF-02-033-A

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 24.7  | 18.2  | 27.2  |
| 125     | 15.6  | 9.8   | 14.6  |

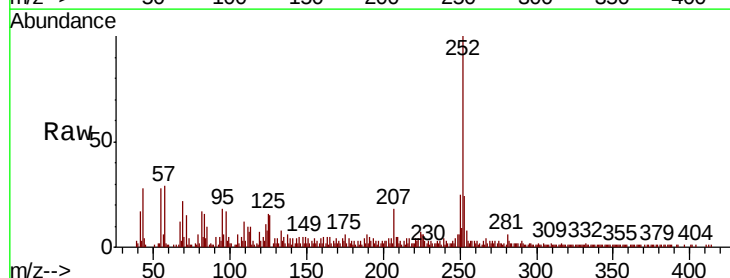


Abundance Ion 252.00 (251.70 to 252.70): E  
Ion 253.00 (252.70 to 253.70): E  
Ion 125.00 (124.70 to 125.70): E



#90  
Benzo(a)pyrene  
Concen: 2.264 ng  
RT: 15.23 min Scan# 2235  
Delta R.T. 0.02 min  
Lab File: BF112819.D  
Acq: 4 Mar 2019 12:57

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 24.5  | 18.0  | 27.0  |
| 125     | 15.7  | 10.7  | 16.1  |



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

