

Data Path : Z:\HPCHEM1\BNA F\DATA\BF081217\  
 Data File : BF097650.D  
 Acq On : 12 Aug 2017 23:40  
 Operator : SJ/JU  
 Sample : I4649-02  
 Misc :  
 ALS Vial : 19 Sample Multiplier: 1

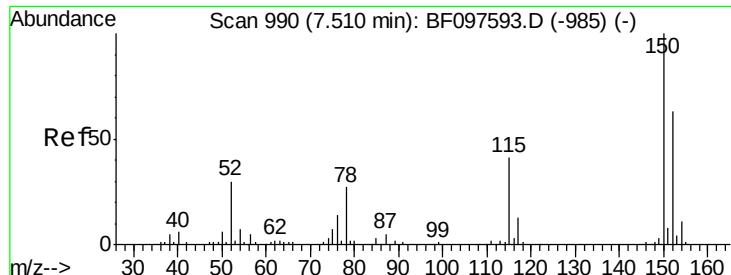
Instrument :  
 BNA\_F  
 ClientSampleId :  
 B-13(0-10)COMP

Quant Time: Aug 14 05:23:54 2017  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF081117.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Aug 11 15:55:57 2017  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|--------------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4      | 7.50  | 152  | 122067   | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8             | 9.53  | 136  | 500586   | 20.00 | ng    | 0.00     |
| 38) Acenaphthene-d10           | 12.36 | 164  | 204464   | 20.00 | ng    | -0.01    |
| 63) Phenanthrene-d10           | 14.76 | 188  | 304343   | 20.00 | ng    | 0.00     |
| 75) Chrysene-d12               | 18.46 | 240  | 187225   | 20.00 | ng    | 0.00     |
| 86) Perylene-d12               | 20.13 | 264  | 183624   | 20.00 | ng    | 0.00     |
| System Monitoring Compounds    |       |      |          |       |       |          |
| 5) 2-Fluorophenol              | 5.45  | 112  | 764993   | 99.61 | ng    | 0.05     |
| 7) Phenol-d6                   | 7.10  | 99   | 877470   | 92.11 | ng    | 0.04     |
| 23) Nitrobenzene-d5            | 8.42  | 82   | 480621   | 60.20 | ng    | 0.00     |
| 41) 2,4,6-Tribromophenol       | 13.66 | 330  | 108101   | 69.55 | ng    | 0.00     |
| 44) 2-Fluorobiphenyl           | 11.31 | 172  | 648264   | 47.85 | ng    | -0.01    |
| 78) Terphenyl-d14              | 17.11 | 244  | 343985   | 38.03 | ng    | -0.01    |
| Target Compounds               |       |      |          |       |       |          |
| 10) Phenol                     | 7.12  | 94   | 30468    | 2.92  | ng    | # 51     |
| 19) n-Nitroso-di-n-propylamine | 8.42  | 70   | 61969    | 9.35  | ng    | # 84     |
| 49) Dimethylphthalate          | 12.00 | 163  | 167566   | 10.63 | ng    | 98       |
| 70) Phenanthrene               | 14.80 | 178  | 42825    | 2.44  | ng    | 97       |
| 71) Anthracene                 | 14.80 | 178  | 42825    | 2.39  | ng    | 98       |
| 74) Fluoranthene               | 16.56 | 202  | 114449   | 7.23  | ng    | 99       |
| 77) Pyrene                     | 16.86 | 202  | 114349   | 7.39  | ng    | 96       |
| 80) Benzo(a)anthracene         | 18.44 | 228  | 50097    | 4.58  | ng    | 98       |
| 82) Chrysene                   | 18.49 | 228  | 50075    | 4.60  | ng    | 98       |
| 85) Indeno(1,2,3-cd)pyrene     | 21.36 | 276  | 22373    | 2.64  | ng    | 96       |
| 87) Benzo(b)fluoranthene       | 19.72 | 252  | 81732    | 7.41  | ng    | # 87     |
| 88) Benzo(k)fluoranthene       | 19.72 | 252  | 81732    | 7.36  | ng    | # 91     |
| 89) Benzo(a)pyrene             | 20.07 | 252  | 43230    | 4.27  | ng    | # 90     |
| 91) Benzo(a,h,i)perylene       | 21.71 | 276  | 24502    | 3.08  | ng    | # 90     |

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



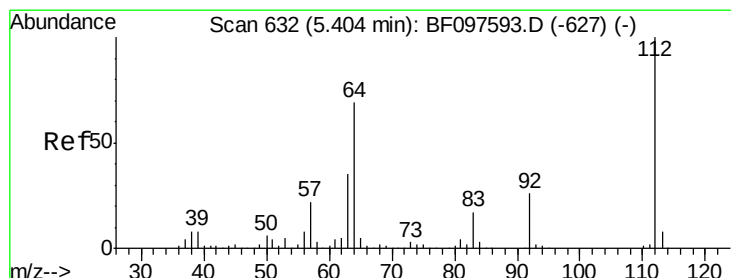
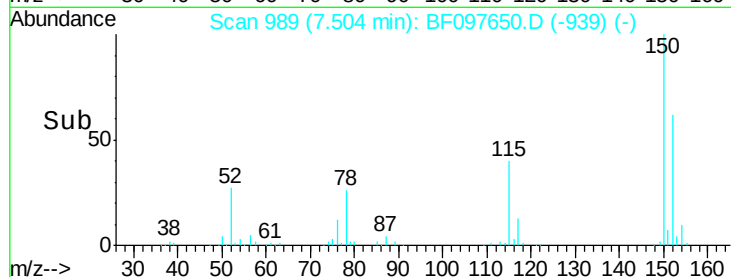
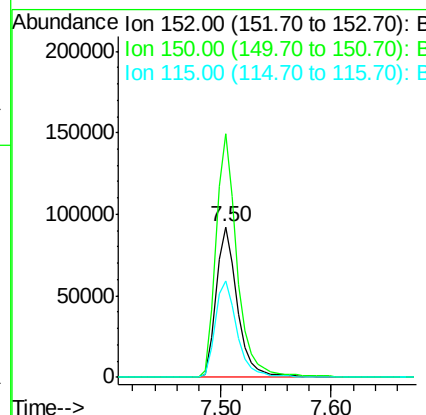
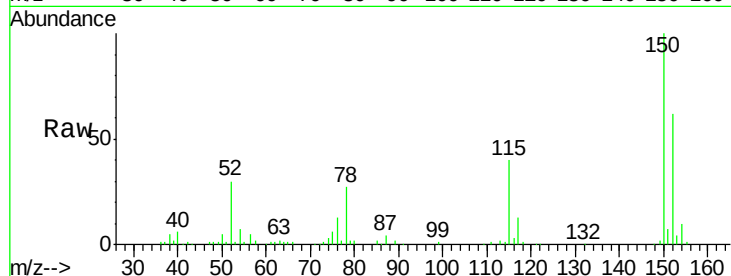


#1

1,4-Dichlorobenzene-d4  
Concen: 20.00 ng  
RT: 7.50 min Scan# 989  
Delta R.T. -0.01 min  
Lab File: BF097650.D  
Acq: 12 Aug 2017 23:40

Instrument :  
BNA\_F  
ClientSampleId :  
B-13(0-10)COMP

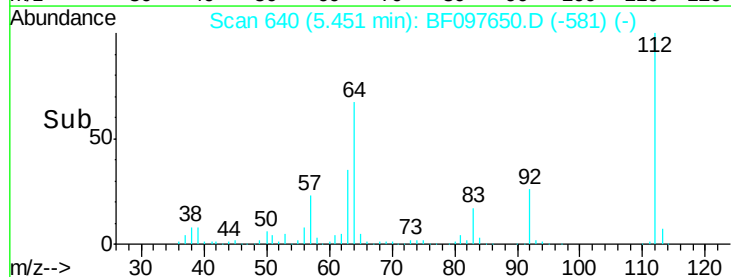
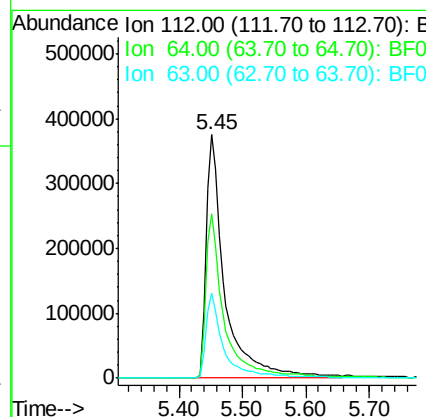
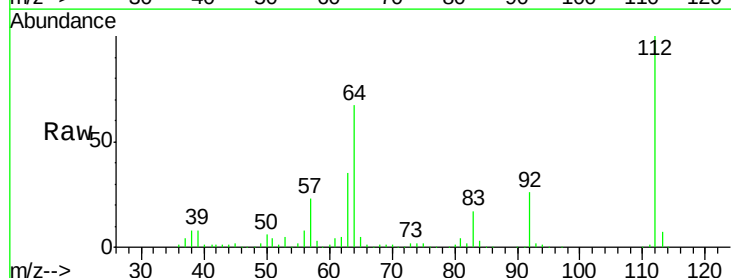
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 162.0 | 126.2 | 189.2 |
| 115     | 64.6  | 52.2  | 78.2  |

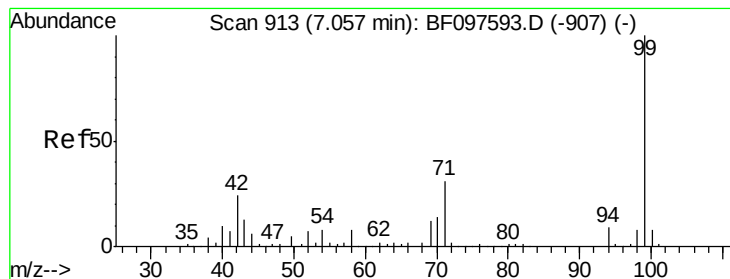


#5

2-Fluorophenol  
Concen: 99.61 ng  
RT: 5.45 min Scan# 640  
Delta R.T. 0.05 min  
Lab File: BF097650.D  
Acq: 12 Aug 2017 23:40

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 67.4  | 46.0  | 69.0  |
| 63      | 35.1  | 23.4  | 35.0  |





#7

Phenol-d6

Concen: 92.11 ng

RT: 7.10 min Scan# 920

Delta R.T. 0.04 min

Lab File: BF097650.D

Acq: 12 Aug 2017 23:40

Instrument :

BNA\_F

ClientSampleId :

B-13(0-10)COMP

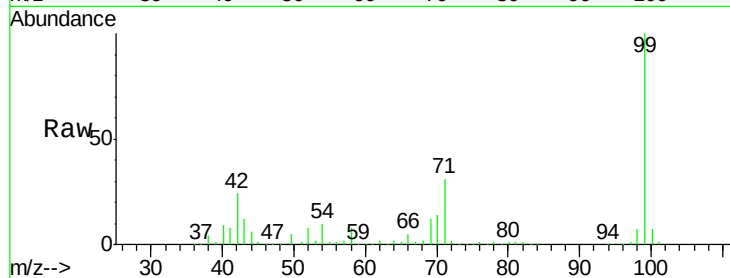
Tot Ion: 99 Resp: 877470

Ion Ratio Lower Upper

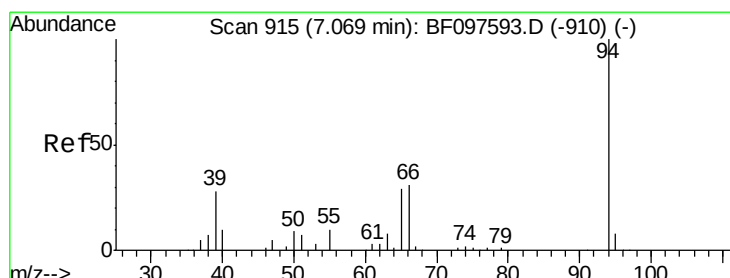
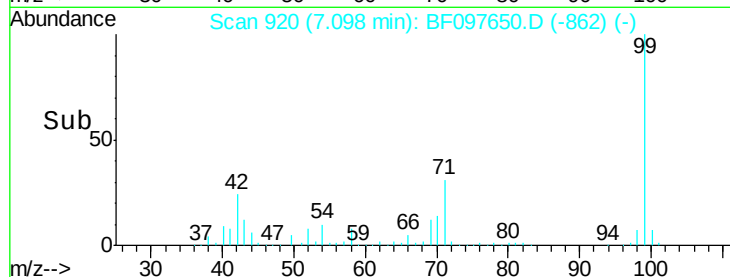
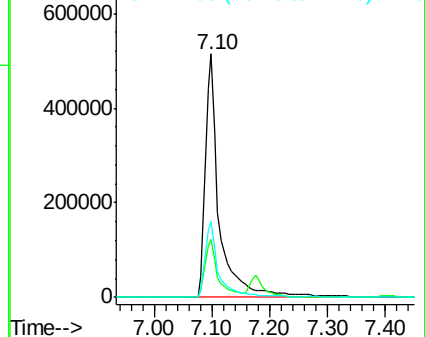
99 100

42 24.0 13.5 20.3#

71 31.3 24.5 36.7



Abundance Ion 99.00 (98.70 to 99.70): BF0  
Ion 42.00 (41.70 to 42.70): BF0  
Ion 71.00 (70.70 to 71.70): BF0



#10

Phenol

Concen: 2.92 ng

RT: 7.12 min Scan# 923

Delta R.T. 0.05 min

Lab File: BF097650.D

Acq: 12 Aug 2017 23:40

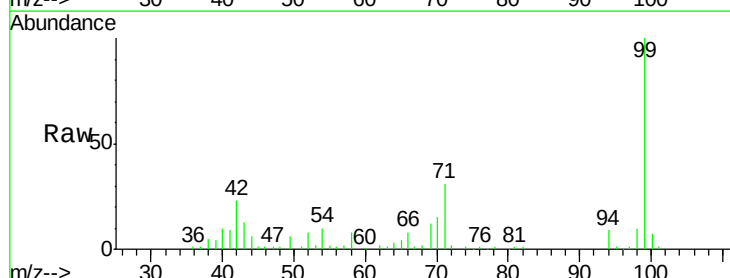
Tgt Ion: 94 Resp: 30468

Ion Ratio Lower Upper

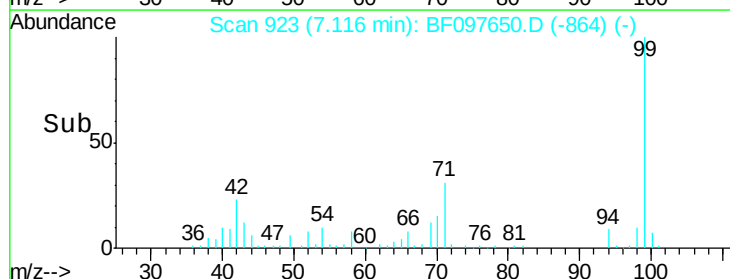
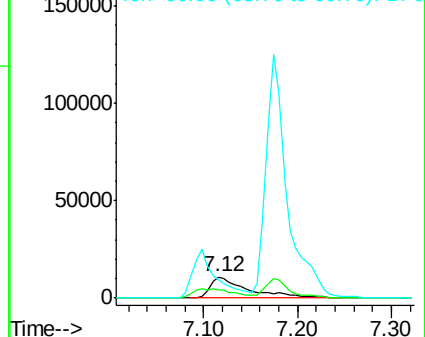
94 100

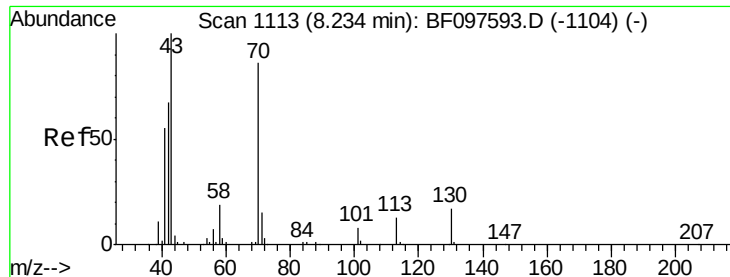
65 39.4 9.9 49.9

66 88.4 23.1 63.1#



Abundance Ion 94.00 (93.70 to 94.70): BF0  
Ion 65.00 (64.70 to 65.70): BF0  
Ion 66.00 (65.70 to 66.70): BF0

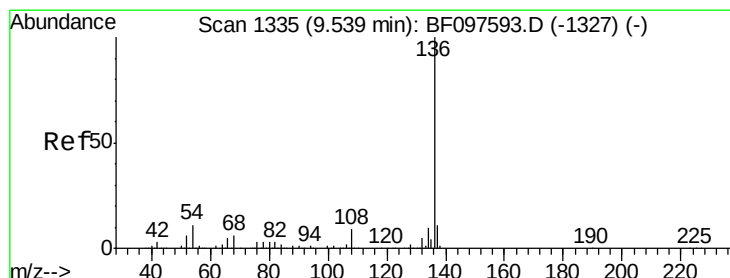
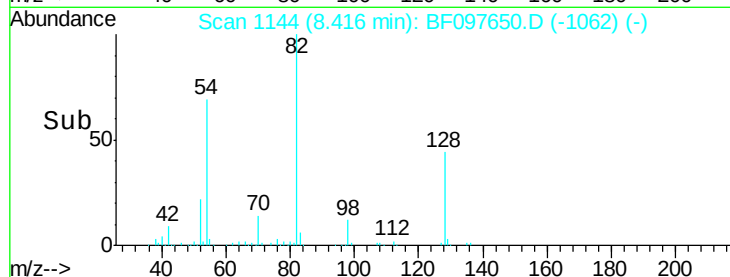
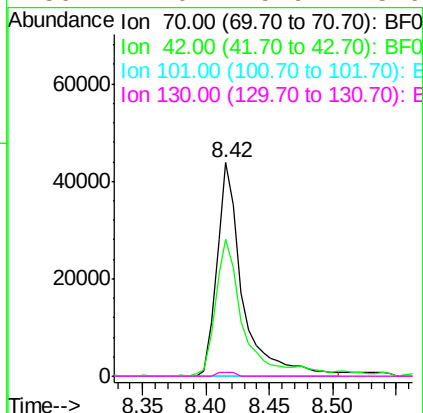
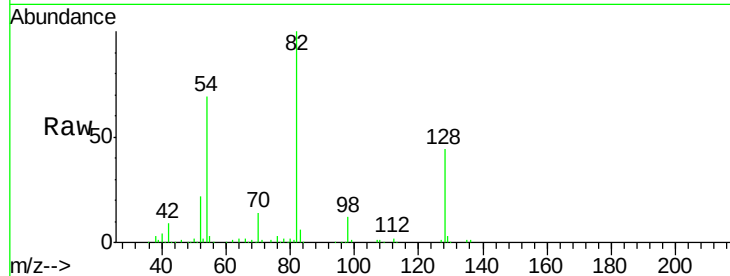




#19  
n-Nitroso-di-n-propylamine  
Concen: 9.35 ng  
RT: 8.42 min Scan# 1144  
Delta R.T. 0.18 min  
Lab File: BF097650.D  
Acq: 12 Aug 2017 23:40

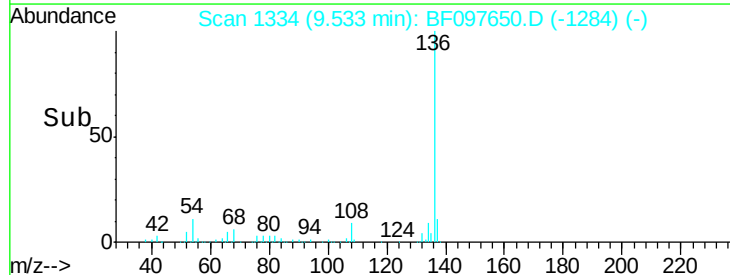
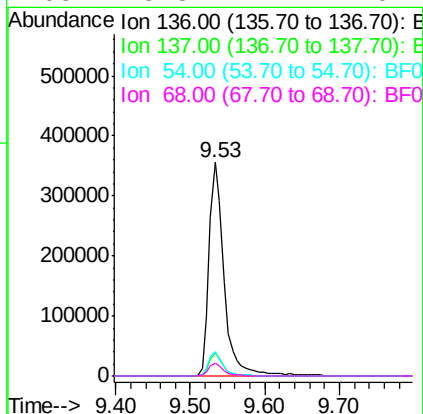
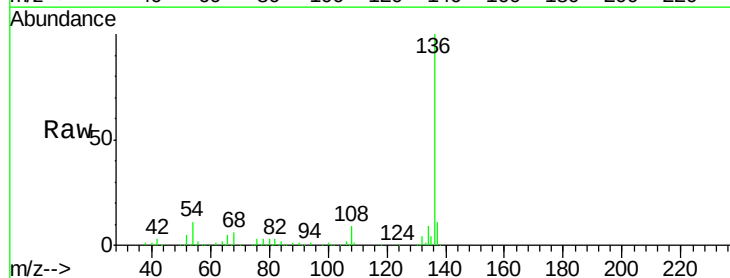
Instrument :  
BNA\_F  
ClientSampleId :  
B-13(0-10)COMP

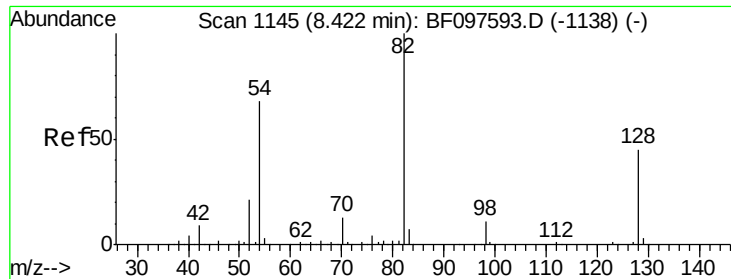
Tot Ion: 70 Resp: 61969  
Ion Ratio Lower Upper  
70 100  
42 63.9 47.2 70.8  
101 0.0 7.2 10.8#  
130 2.0 15.9 23.9#



#21  
Naphthalene-d8  
Concen: 20.00 ng  
RT: 9.53 min Scan# 1334  
Delta R.T. -0.01 min  
Lab File: BF097650.D  
Acq: 12 Aug 2017 23:40

Tgt Ion: 136 Resp: 500586  
Ion Ratio Lower Upper  
136 100  
137 10.6 8.5 12.7  
54 11.4 4.9 7.3#  
68 5.8 4.1 6.1

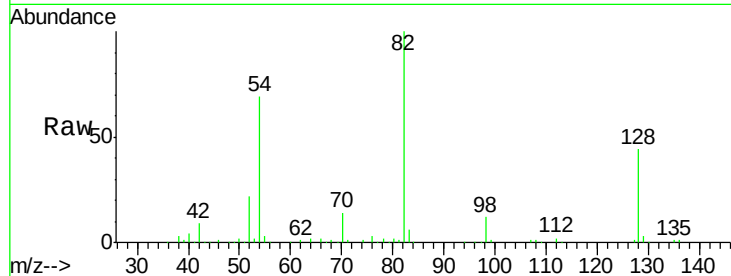




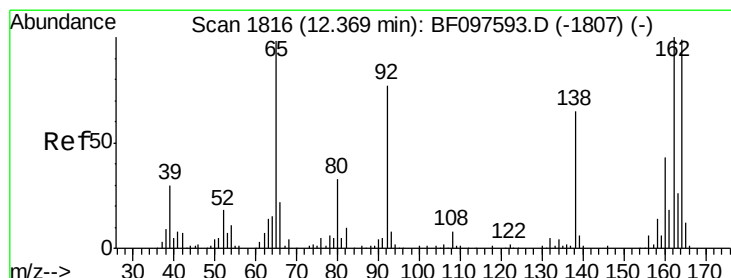
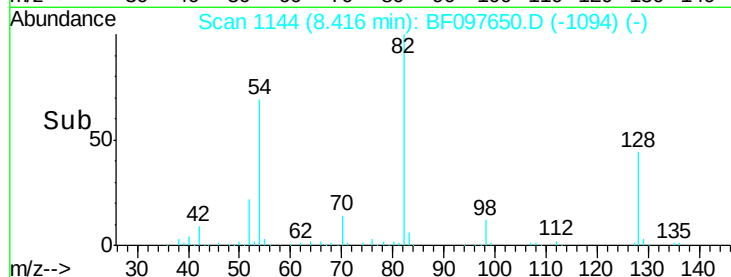
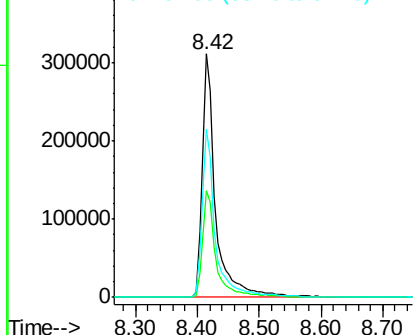
#23  
Nitrobenzene-d5  
Concen: 60.20 ng  
RT: 8.42 min Scan# 1144  
Delta R.T. -0.01 min  
Lab File: BF097650.D  
Acq: 12 Aug 2017 23:40

Instrument :  
BNA\_F  
ClientSampleId :  
B-13(0-10)COMP

Tot Ion: 82 Resp: 480621  
Ion Ratio Lower Upper  
82 100  
128 44.0 34.0 51.0  
54 69.1 42.2 63.2#

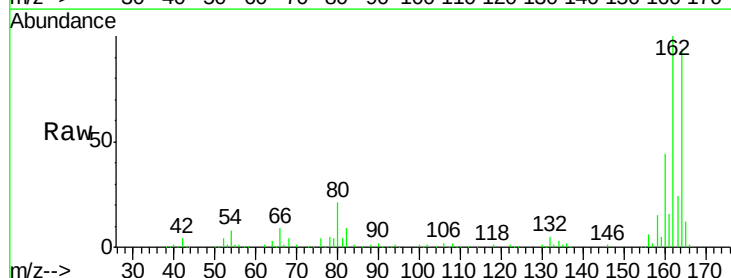


Abundance Ion 82.00 (81.70 to 82.70): BF0  
Ion 128.00 (127.70 to 128.70): E  
Ion 54.00 (53.70 to 54.70): BF0

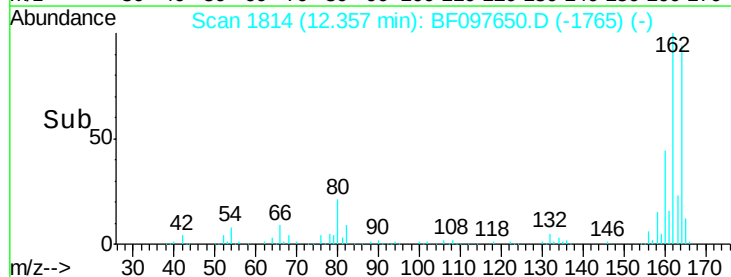
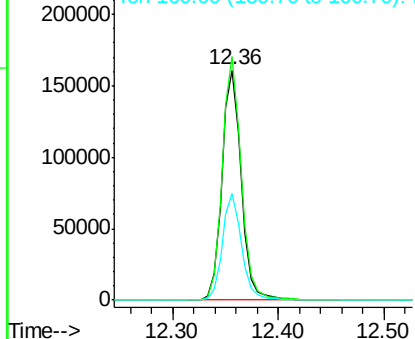


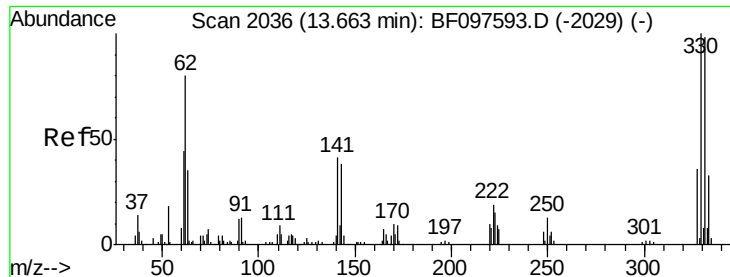
#38  
Acenaphthene-d10  
Concen: 20.00 ng  
RT: 12.36 min Scan# 1814  
Delta R.T. -0.01 min  
Lab File: BF097650.D  
Acq: 12 Aug 2017 23:40

Tgt Ion: 164 Resp: 204464  
Ion Ratio Lower Upper  
164 100  
162 105.8 82.6 123.8  
160 46.1 36.2 54.2



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

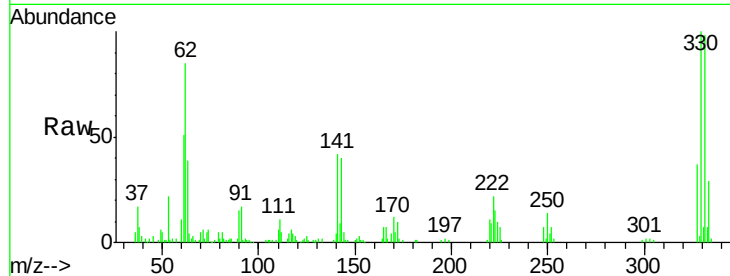




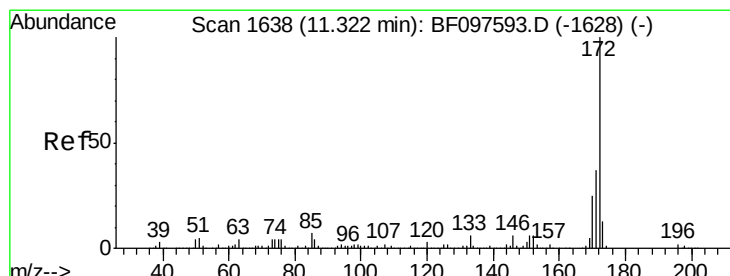
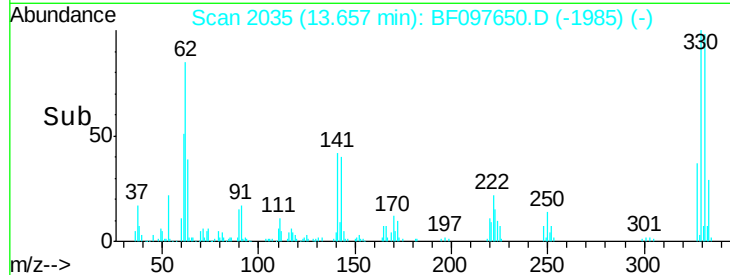
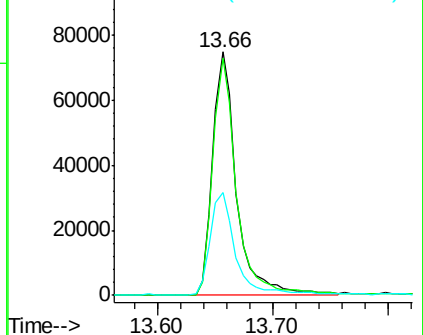
#41  
 2,4,6-Tribromophenol  
 Concen: 69.55 ng  
 RT: 13.66 min Scan# 2035  
 Delta R.T. -0.01 min  
 Lab File: BF097650.D  
 Acq: 12 Aug 2017 23:40

Instrument :  
 BNA\_F  
 ClientSampleId :  
 B-13(0-10)COMP

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 330     | 100   |       |       |
| 332     | 97.0  | 76.6  | 115.0 |
| 141     | 45.9  | 31.4  | 47.2  |

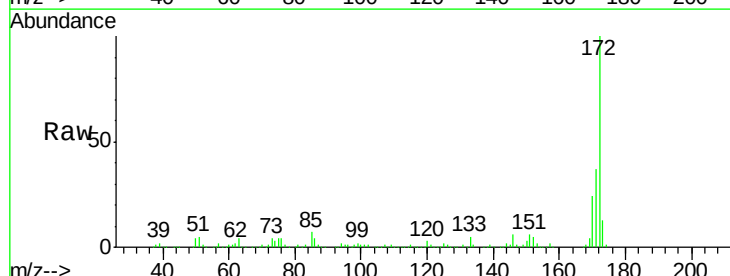


Abundance Ion 329.80 (329.50 to 330.50): E  
 Ion 331.80 (331.50 to 332.50): E  
 Ion 141.00 (140.70 to 141.70): E

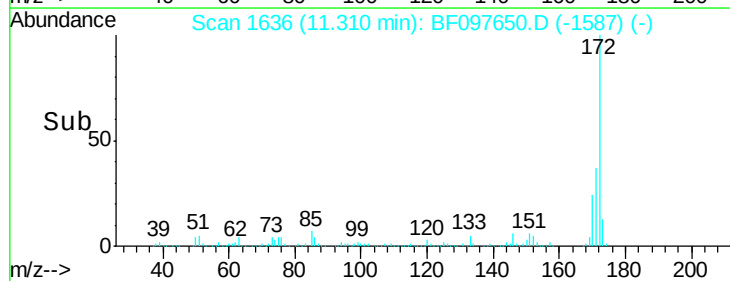
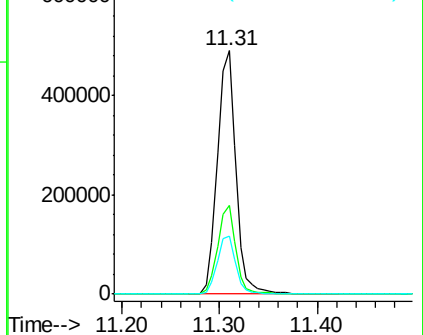


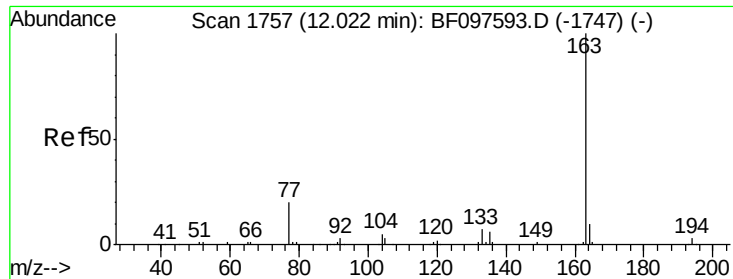
#44  
 2-Fluorobiphenyl  
 Concen: 47.85 ng  
 RT: 11.31 min Scan# 1636  
 Delta R.T. -0.01 min  
 Lab File: BF097650.D  
 Acq: 12 Aug 2017 23:40

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 36.7  | 29.6  | 44.4  |
| 170     | 24.1  | 19.8  | 29.8  |



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

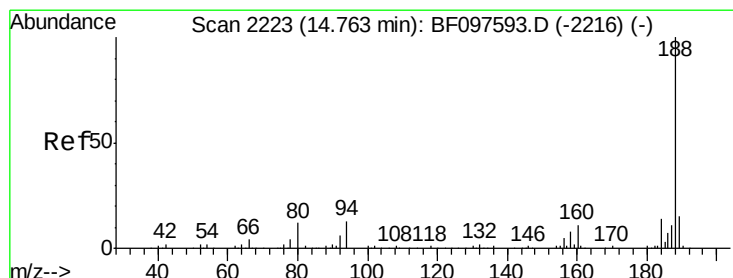
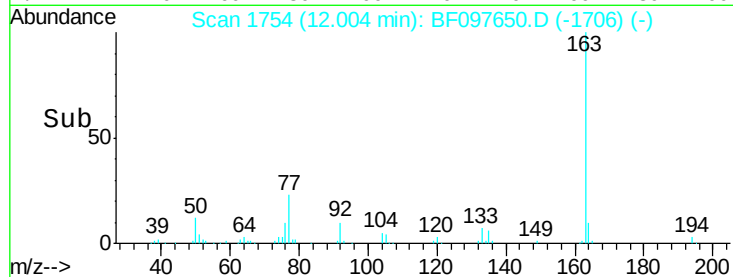
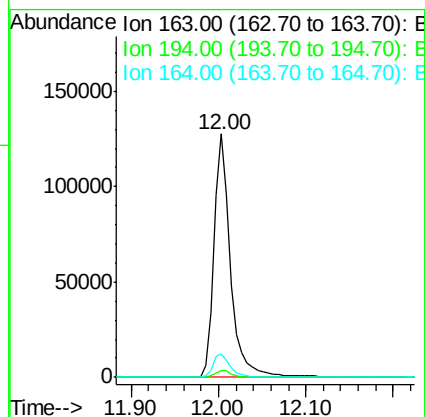
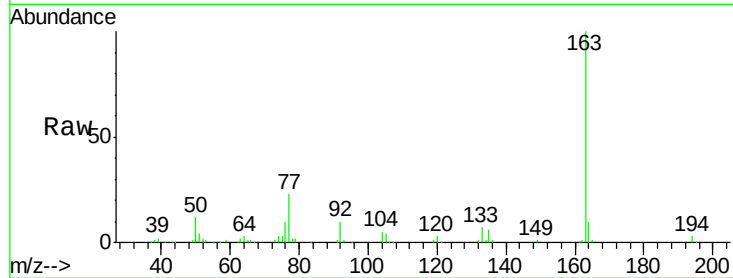




#49  
Dimethylphthalate  
Concen: 10.63 ng  
RT: 12.00 min Scan# 1754  
Delta R.T. -0.02 min  
Lab File: BF097650.D  
Acq: 12 Aug 2017 23:40

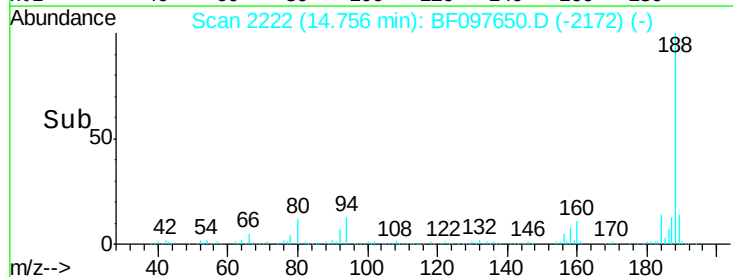
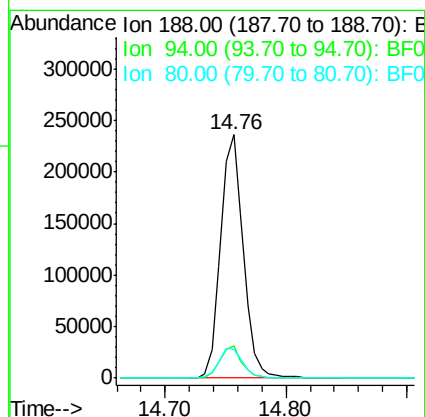
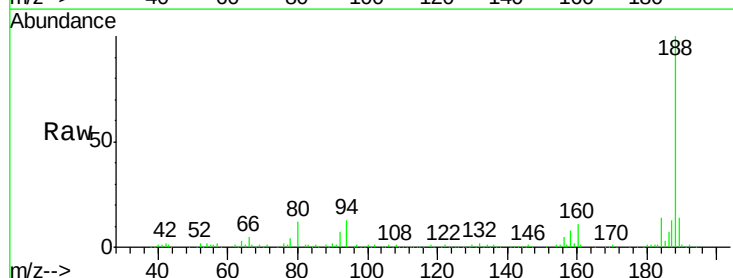
Instrument :  
BNA\_F  
ClientSampleId :  
B-13(0-10)COMP

Tot Ion:163 Resp: 167566  
Ion Ratio Lower Upper  
163 100  
194 2.9 2.6 4.0  
164 9.6 8.4 12.6

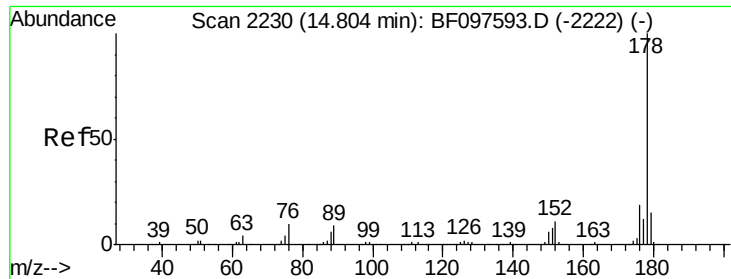


#63  
Phenanthrene-d10  
Concen: 20.00 ng  
RT: 14.76 min Scan# 2222  
Delta R.T. -0.01 min  
Lab File: BF097650.D  
Acq: 12 Aug 2017 23:40

Tgt Ion:188 Resp: 304343  
Ion Ratio Lower Upper  
188 100  
94 13.2 9.4 14.2  
80 11.6 10.2 15.2



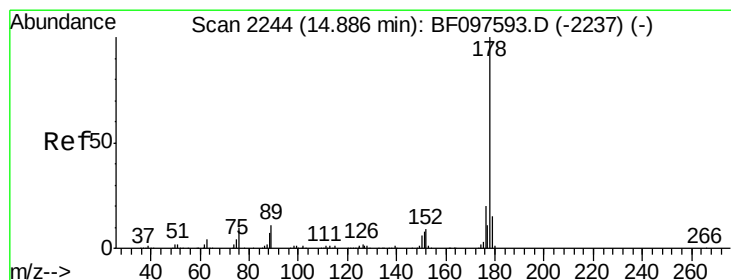
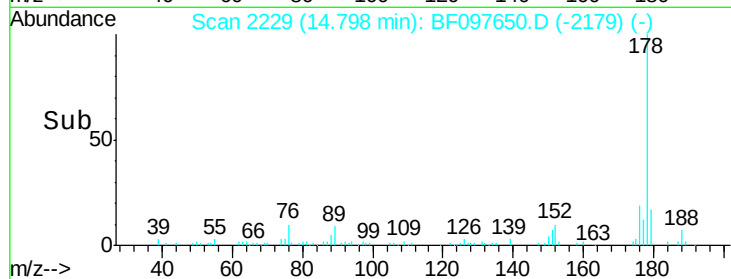
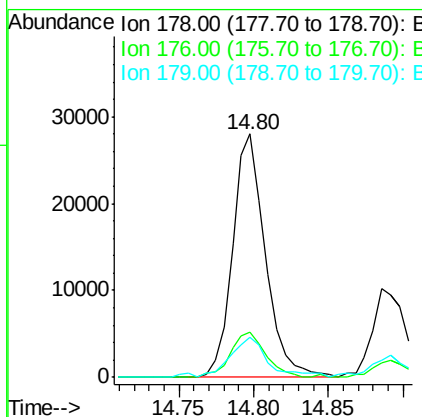
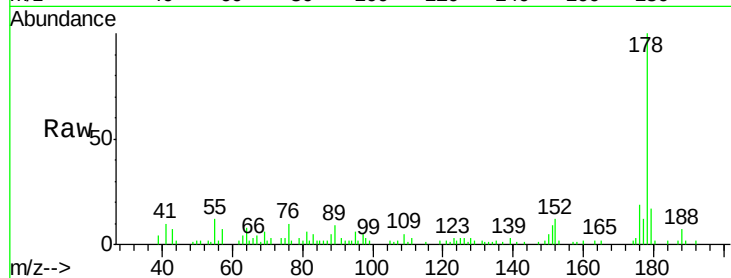




#70  
 Phenanthrene  
 Concen: 2.44 ng  
 RT: 14.80 min Scan# 2229  
 Delta R.T. -0.01 min  
 Lab File: BF097650.D  
 Acq: 12 Aug 2017 23:40

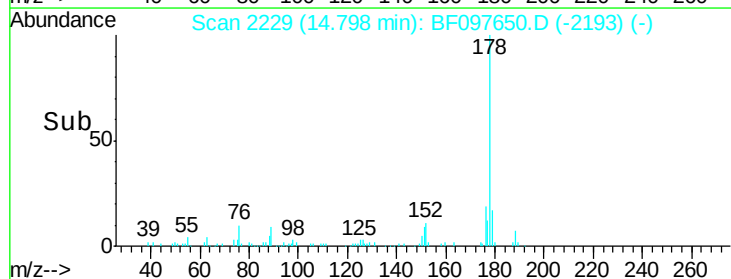
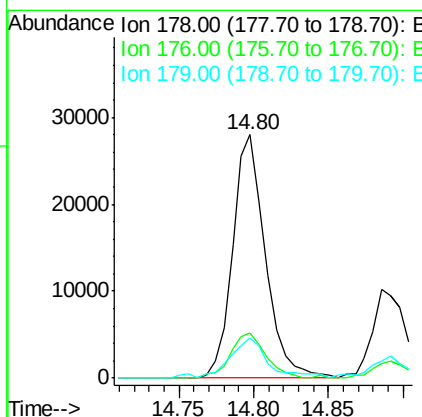
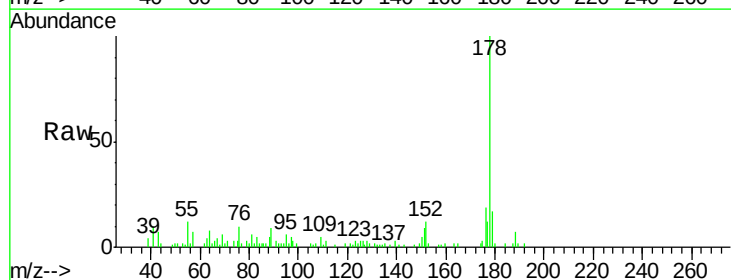
Instrument :  
 BNA\_F  
 ClientSampleId :  
 B-13(0-10)COMP

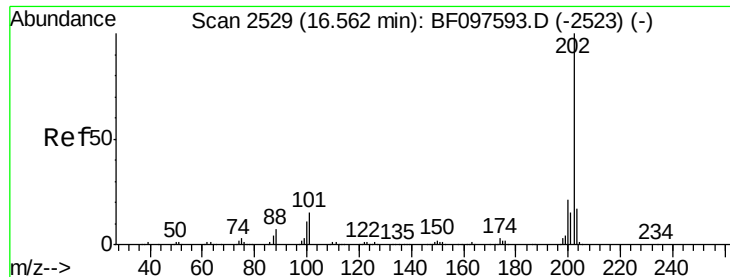
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 176     | 18.6  | 16.2  | 24.4  |
| 179     | 16.6  | 12.6  | 19.0  |



#71  
 Anthracene  
 Concen: 2.39 ng  
 RT: 14.80 min Scan# 2229  
 Delta R.T. -0.09 min  
 Lab File: BF097650.D  
 Acq: 12 Aug 2017 23:40

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 176     | 18.6  | 15.8  | 23.8  |
| 179     | 16.6  | 12.7  | 19.1  |





#74

Fluoranthene

Concen: 7.23 ng

RT: 16.56 min Scan# 2529

Delta R.T. -0.00 min

Lab File: BF097650.D

Acq: 12 Aug 2017 23:40

Instrument :

BNA\_F

ClientSampleId :

B-13(0-10)COMP

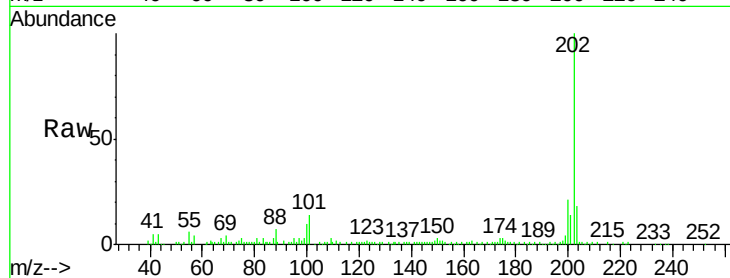
Tot Ion:202 Resp: 114449

Ion Ratio Lower Upper

202 100

101 13.7 0.0 33.2

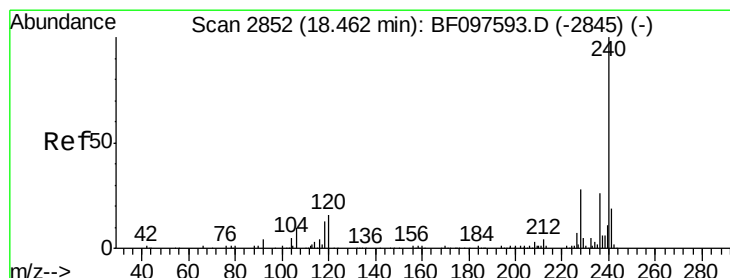
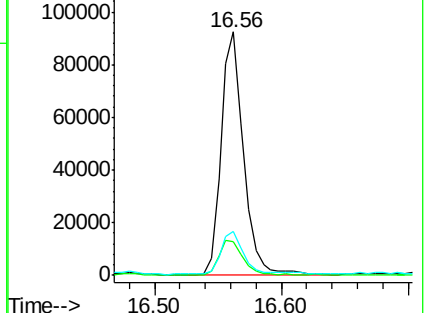
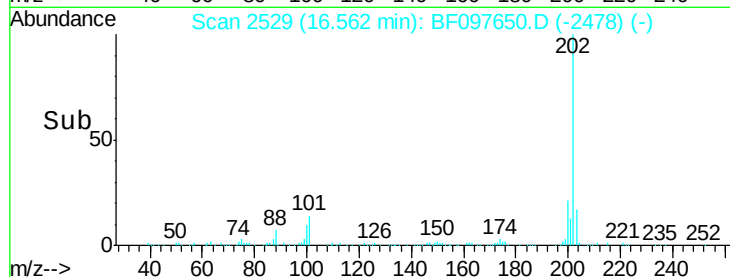
203 17.8 0.0 38.1



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: 18.46 min Scan# 2851

Delta R.T. -0.01 min

Lab File: BF097650.D

Acq: 12 Aug 2017 23:40

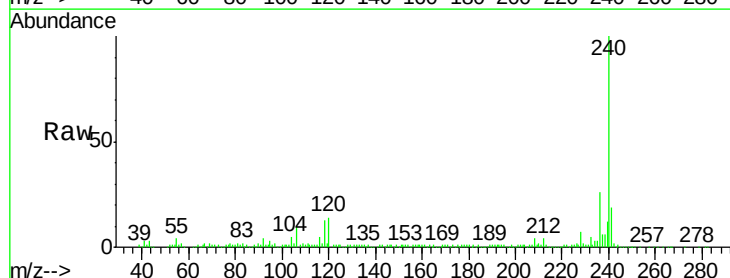
Tgt Ion:240 Resp: 187225

Ion Ratio Lower Upper

240 100

120 14.4 5.8 8.8#

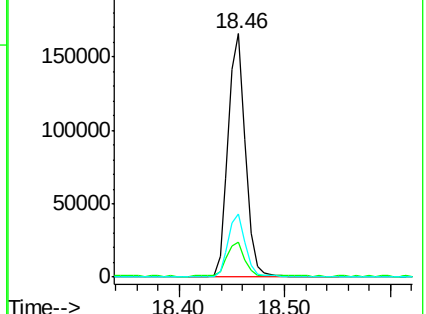
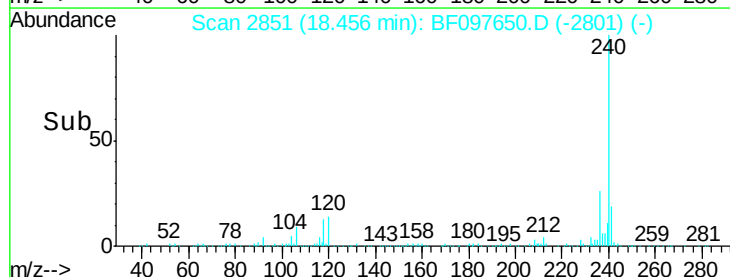
236 26.1 20.5 30.7

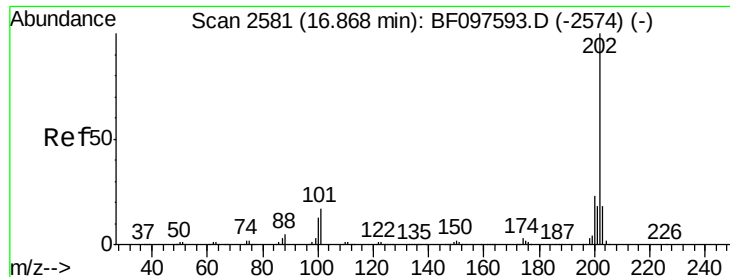


Abundance Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E





#77

Pvrene

Concen: 7.39 ng

RT: 16.86 min Scan# 2580

Delta R.T. -0.01 min

Lab File: BF097650.D

Acq: 12 Aug 2017 23:40

Instrument :

BNA\_F

ClientSampleId :

B-13(0-10)COMP

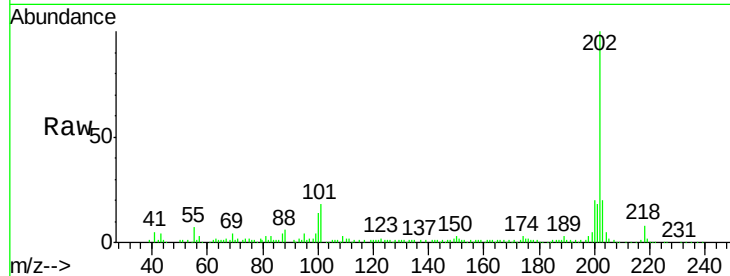
Tot Ion:202 Resp: 114349

Ion Ratio Lower Upper

202 100

200 19.7 17.6 26.4

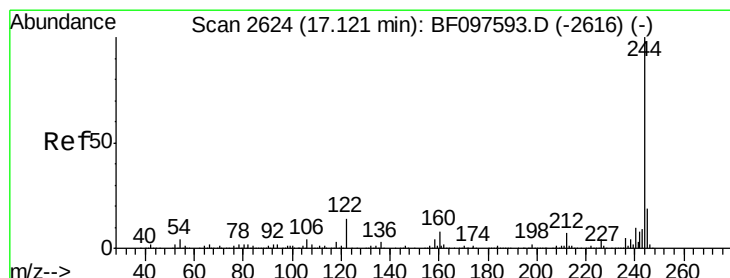
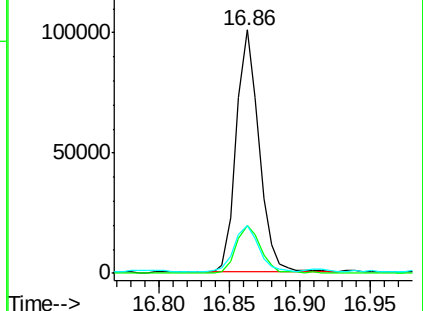
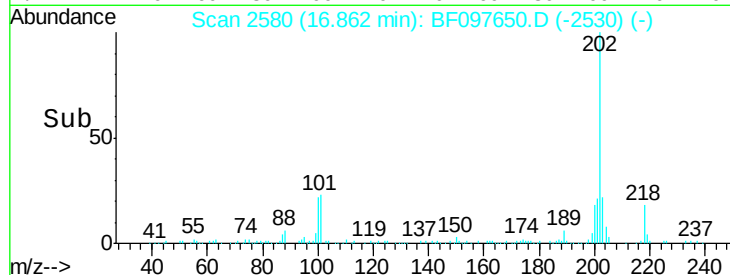
203 19.7 14.4 21.6



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: 38.03 ng

RT: 17.11 min Scan# 2622

Delta R.T. -0.01 min

Lab File: BF097650.D

Acq: 12 Aug 2017 23:40

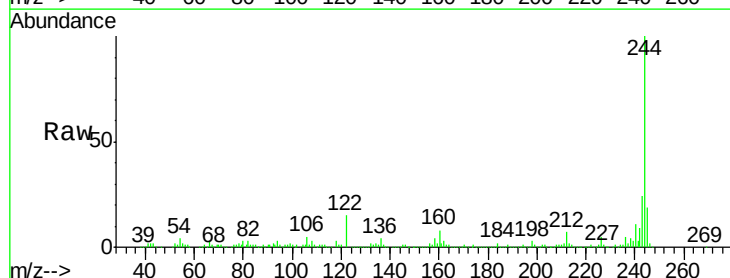
Tgt Ion:244 Resp: 343985

Ion Ratio Lower Upper

244 100

212 7.0 6.0 9.0

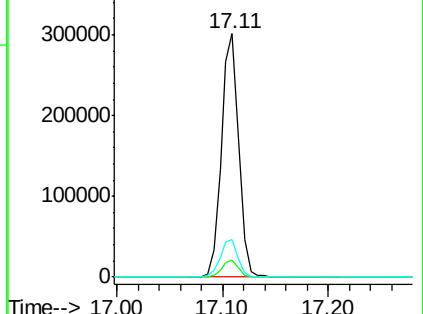
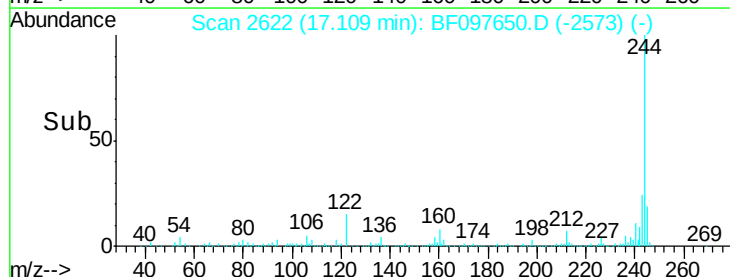
122 15.2 10.3 15.5

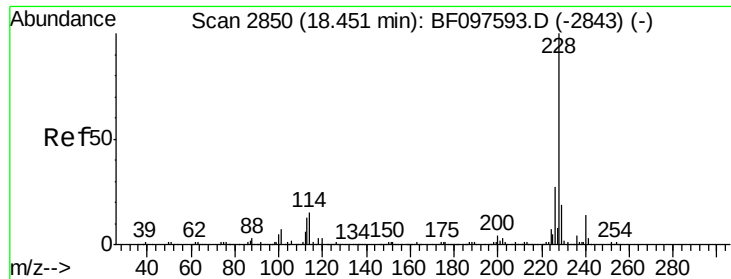


Abundance Ion 244.00 (243.70 to 244.70): E

Ion 212.00 (211.70 to 212.70): E

Ion 122.00 (121.70 to 122.70): E





#80

Benzo(a)anthracene

Concen: 4.58 ng

RT: 18.44 min Scan# 2849

Delta R.T. -0.01 min

Lab File: BF097650.D

Acq: 12 Aug 2017 23:40

Instrument :

BNA\_F

ClientSampleId :

B-13(0-10)COMP

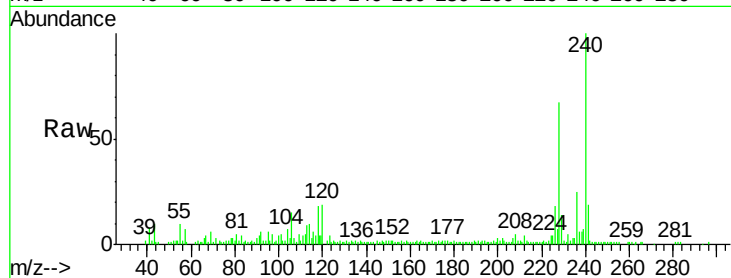
Tot Ion:228 Resp: 50097

Ion Ratio Lower Upper

228 100

226 26.7 22.6 33.8

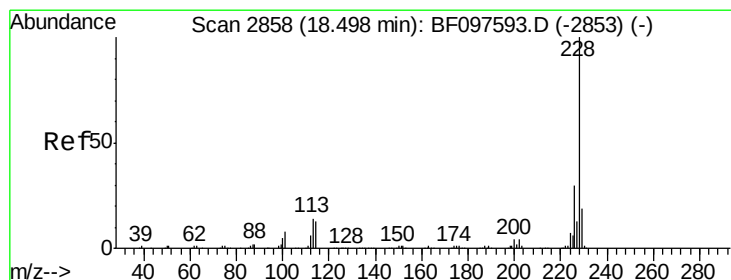
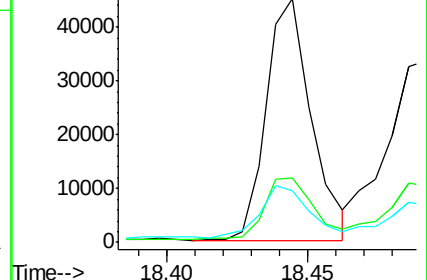
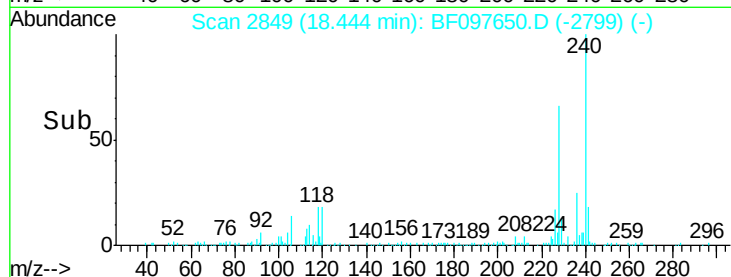
229 21.2 16.3 24.5



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



#82

Chrysene

Concen: 4.60 ng

RT: 18.49 min Scan# 2857

Delta R.T. -0.01 min

Lab File: BF097650.D

Acq: 12 Aug 2017 23:40

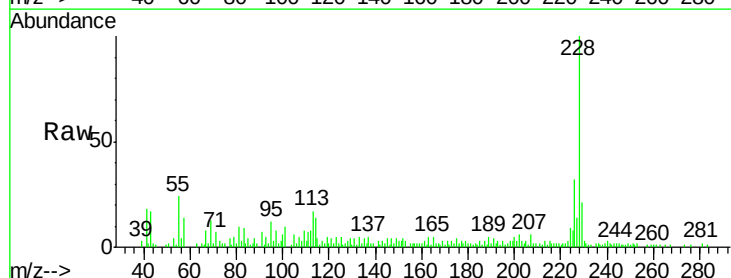
Tgt Ion:228 Resp: 50075

Ion Ratio Lower Upper

228 100

226 32.2 24.9 37.3

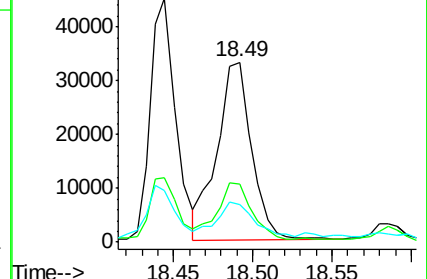
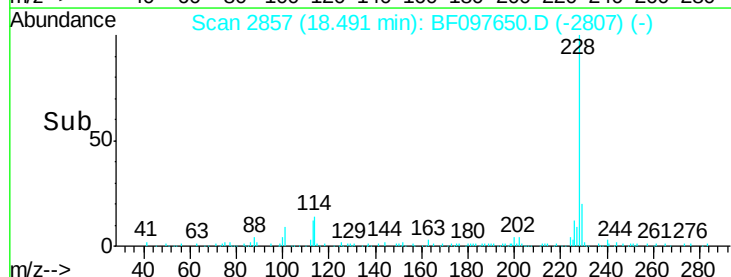
229 21.2 15.8 23.6

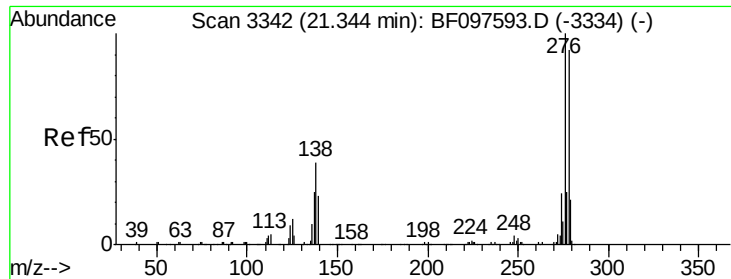


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E





#85

Indeno(1,2,3-cd)pyrene

Concen: 2.64 ng

RT: 21.36 min Scan# 3344

Delta R.T. 0.01 min

Lab File: BF097650.D

Acq: 12 Aug 2017 23:40

Instrument :

BNA\_F

ClientSampleId :

B-13(0-10)COMP

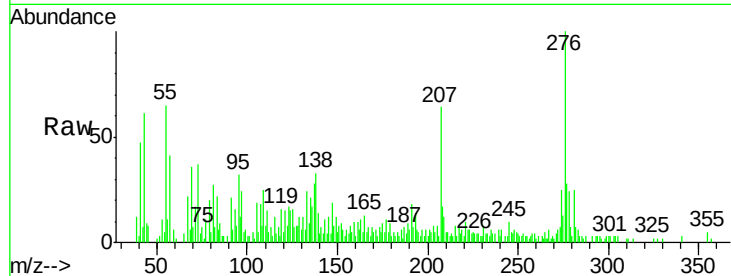
Tot Ion:276 Resp: 22373

Ion Ratio Lower Upper

276 100

138 33.0 27.8 41.6

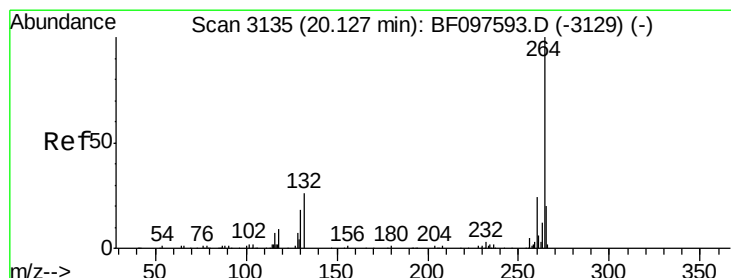
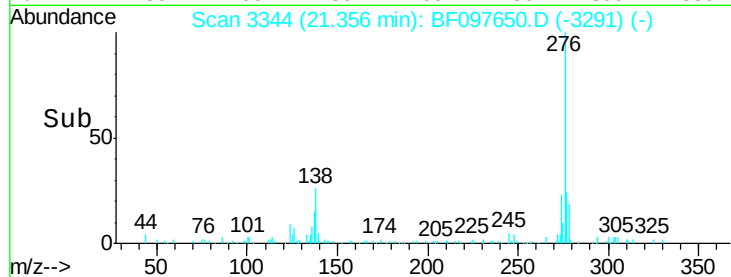
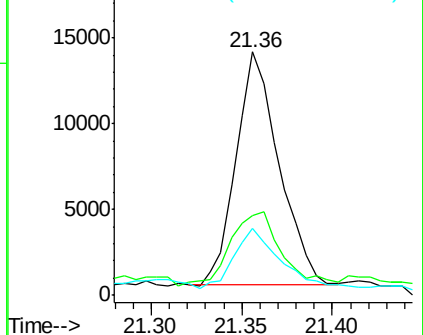
277 27.5 20.2 30.4



Abundance Ion 276.00 (275.70 to 276.70): E

Ion 138.00 (137.70 to 138.70): E

Ion 277.00 (276.70 to 277.70): E



#86

Perylene-d12

Concen: 20.00 ng

RT: 20.13 min Scan# 3135

Delta R.T. -0.00 min

Lab File: BF097650.D

Acq: 12 Aug 2017 23:40

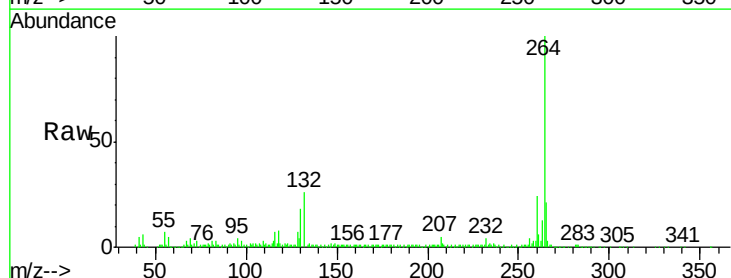
Tgt Ion:264 Resp: 183624

Ion Ratio Lower Upper

264 100

260 23.5 19.5 29.3

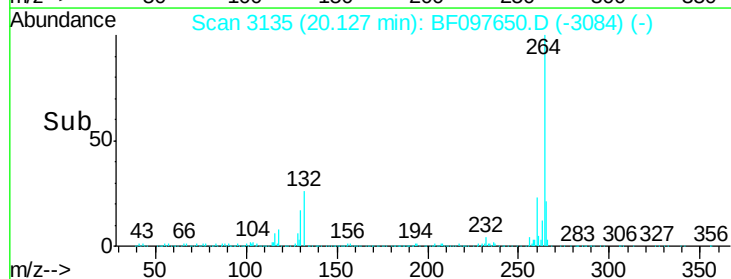
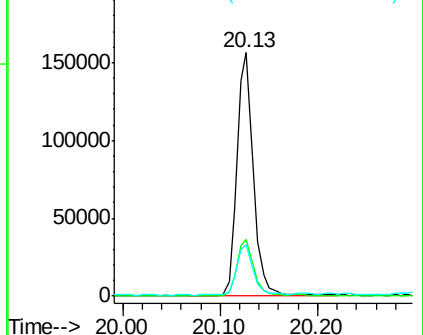
265 21.1 17.2 25.8

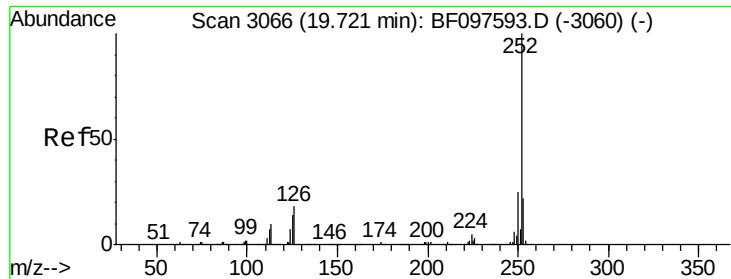


Abundance Ion 264.00 (263.70 to 264.70): E

Ion 260.00 (259.70 to 260.70): E

Ion 265.00 (264.70 to 265.70): E

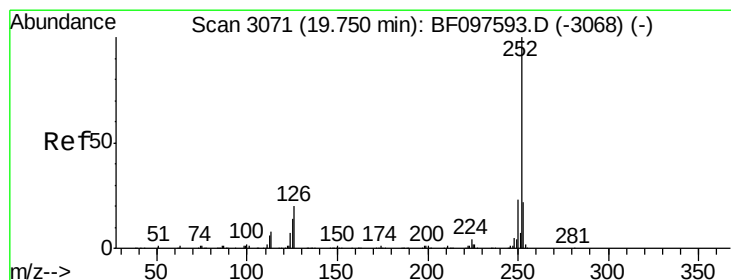
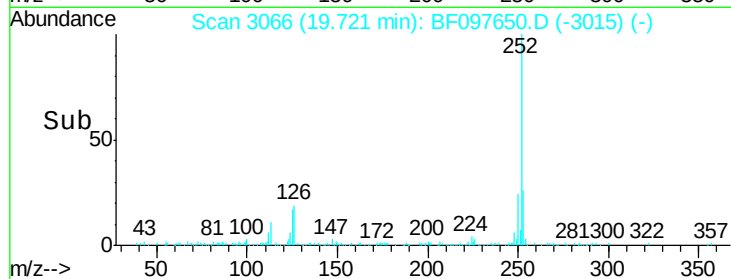
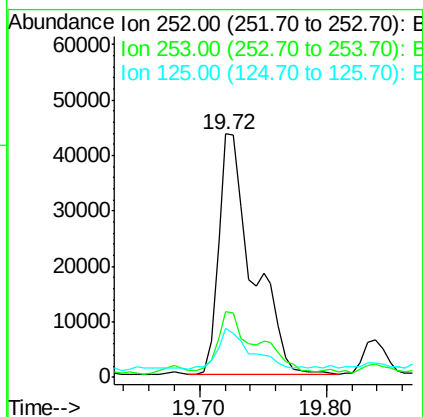
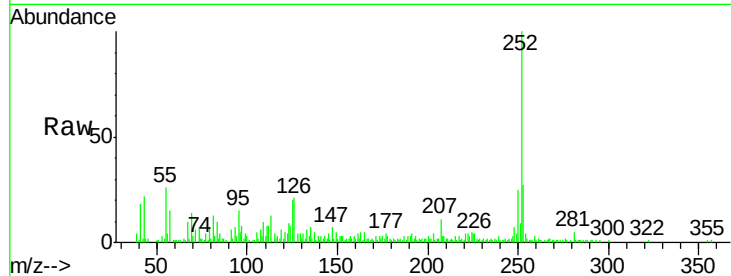




#87  
Benzo(b)fluoranthene  
Concen: 7.41 ng  
RT: 19.72 min Scan# 3066  
Delta R.T. -0.00 min  
Lab File: BF097650.D  
Acq: 12 Aug 2017 23:40

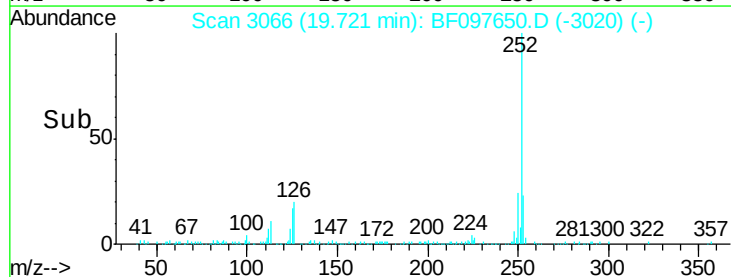
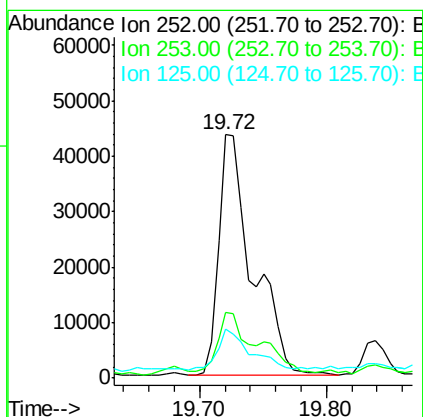
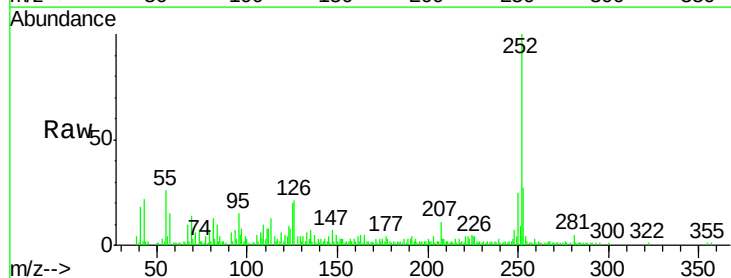
Instrument :  
BNA\_F  
ClientSampleId :  
B-13(0-10)COMP

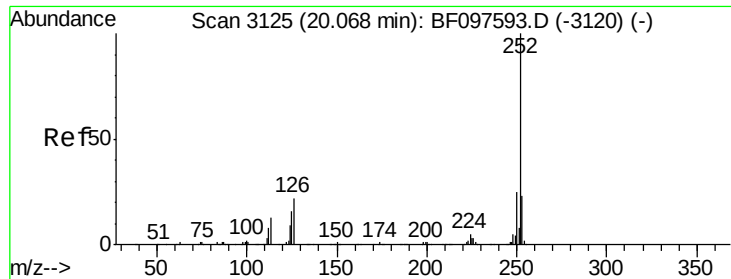
Tot Ion:252 Resp: 81732  
Ion Ratio Lower Upper  
252 100  
253 27.0 18.1 27.1  
125 20.3 9.8 14.8#



#88  
Benzo(k)fluoranthene  
Concen: 7.36 ng  
RT: 19.72 min Scan# 3066  
Delta R.T. -0.03 min  
Lab File: BF097650.D  
Acq: 12 Aug 2017 23:40

Tgt Ion:252 Resp: 81732  
Ion Ratio Lower Upper  
252 100  
253 27.0 18.4 27.6  
125 20.3 13.1 19.7#

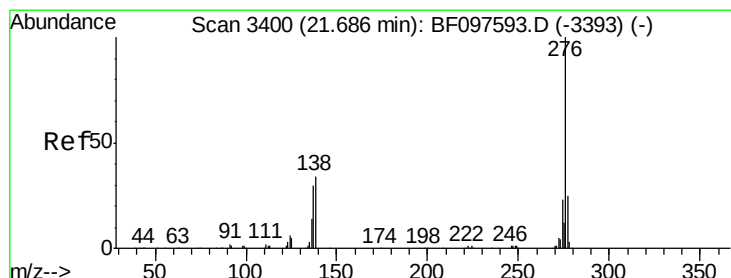
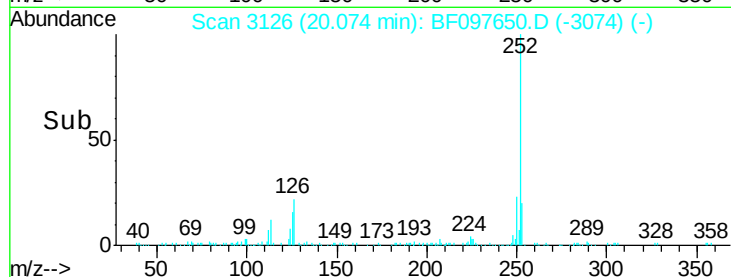
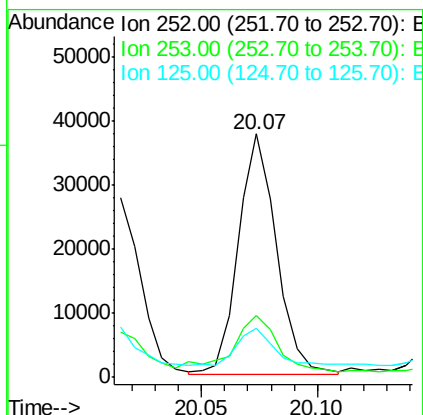
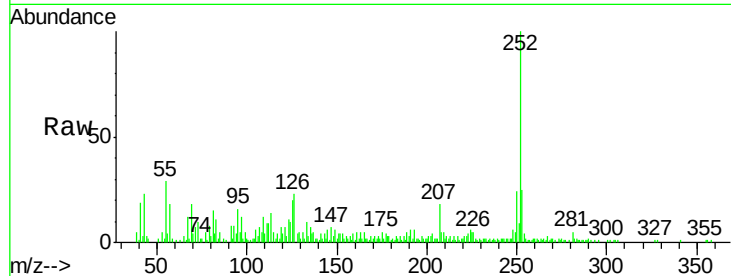




#89  
Benzo(a)pyrene  
Concen: 4.27 ng  
RT: 20.07 min Scan# 3126  
Delta R.T. 0.01 min  
Lab File: BF097650.D  
Acq: 12 Aug 2017 23:40

Instrument :  
BNA\_F  
ClientSampleId :  
B-13(0-10)COMP

Tot Ion:252 Resp: 43230  
Ion Ratio Lower Upper  
252 100  
253 25.2 17.5 26.3  
125 20.2 11.0 16.4#



#91  
Benzo(g,h,i)perylene  
Concen: 3.08 ng  
RT: 21.71 min Scan# 3404  
Delta R.T. 0.02 min  
Lab File: BF097650.D  
Acq: 12 Aug 2017 23:40

Tgt Ion:276 Resp: 24502  
Ion Ratio Lower Upper  
276 100  
277 26.6 18.6 28.0  
138 38.4 25.4 38.0#

