

Data Path : Z:\HPCHEM1\BNA F\DATA\BF041618\  
 Data File : BF104549.D  
 Acq On : 16 Apr 2018 22:40  
 Operator : JU/SJ  
 Sample : J2370-01  
 Misc :  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :

Quant Time: Apr 17 00:58:33 2018  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF040618.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Apr 16 12:15:25 2018  
 Response via : Initial Calibration

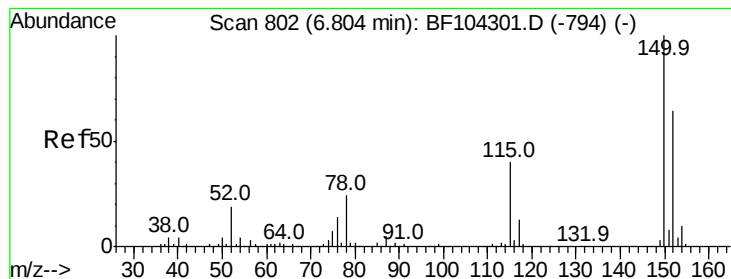
| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.81  | 152  | 153586   | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 8.09  | 136  | 605067   | 20.00 | ng    | 0.00     |
| 38) Acenaphthene-d10      | 9.85  | 164  | 244995   | 20.00 | ng    | 0.00     |
| 63) Phenanthrene-d10      | 11.34 | 188  | 363169   | 20.00 | ng    | 0.00     |
| 75) Chrysene-d12          | 13.99 | 240  | 288563   | 20.00 | ng    | 0.00     |
| 86) Perylene-d12          | 15.46 | 264  | 226970   | 20.00 | ng    | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|-------|------|----------|-------|-------|----------|
| 5) 2-Fluorophenol           | 5.43  | 112  | 710075   | 70.69 | ng    | 0.01     |
| 7) Phenol-d6                | 6.45  | 99   | 903340   | 73.20 | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 7.37  | 82   | 564140   | 60.88 | ng    | 0.00     |
| 41) 2,4,6-Tribromophenol    | 10.65 | 330  | 157984   | 62.16 | ng    | 0.00     |
| 44) 2-Fluorobiphenyl        | 9.17  | 172  | 1004126  | 64.75 | ng    | 0.00     |
| 78) Terphenyl-d14           | 12.93 | 244  | 705220   | 55.72 | ng    | 0.00     |

| Target Compounds               | R.T.  | QIon | Response | Conc      | Units | Qvalue |
|--------------------------------|-------|------|----------|-----------|-------|--------|
| 9) Benzaldehyde                | 6.45  | 77   | 1299     | Below Cal |       | # 1    |
| 19) n-Nitroso-di-n-propylamine | 7.37  | 70   | 71975    | 8.925     | ng    | # 73   |
| 25) Isophorone                 | 7.37  | 82   | 564132   | 28.790    | ng    | # 64   |
| 49) Dimethylphthalate          | 9.56  | 163  | 105879   | 5.480     | ng    | 100    |
| 50) 2,6-Dinitrotoluene         | 9.85  | 165  | 32383    | 9.058     | ng    | # 25   |
| 64) 4,6-Dinitro-2-methylphenol | 10.65 | 198  | 286      | 7.484     | ng    | # 1    |
| 66) 4-Bromophenyl-phenylether  | 10.65 | 248  | 9224     | 2.388     | ng    | # 1    |
| 70) Phenanthrene               | 11.36 | 178  | 204871   | 10.130    | ng    | 99     |
| 74) Fluoranthene               | 12.56 | 202  | 142616   | 6.749     | ng    | 99     |
| 76) Benzidine                  | 12.93 | 184  | 9580     | Below Cal |       | 97     |
| 77) Pyrene                     | 12.79 | 202  | 239514   | 11.198    | ng    | 99     |
| 80) Benzo(a)anthracene         | 14.02 | 228  | 79253    | 4.597     | ng    | 98     |
| 82) Chrysene                   | 14.02 | 228  | 79253    | 4.476     | ng    | 97     |
| 87) Benzo(b)fluoranthene       | 15.03 | 252  | 68827    | 4.801     | ng    | # 89   |
| 88) Benzo(k)fluoranthene       | 15.03 | 252  | 68827    | 5.086     | ng    | # 92   |
| 89) Benzo(a)pyrene             | 15.39 | 252  | 46120    | 3.596     | ng    | # 93   |
| 91) Benzo(a,h,i)perylene       | 17.35 | 276  | 20792    | 2.037     | ng    | 95     |

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



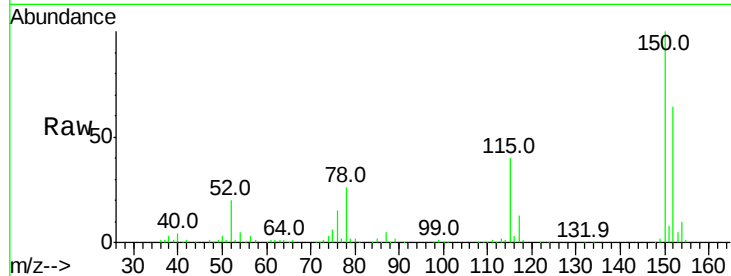


#1

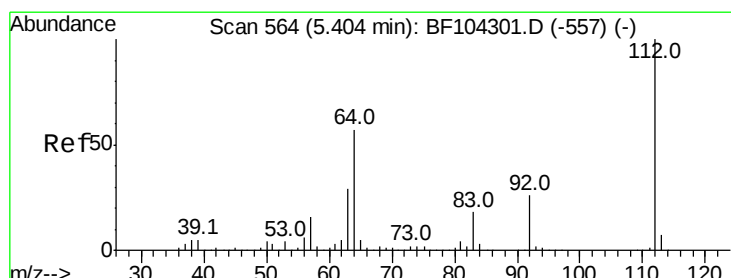
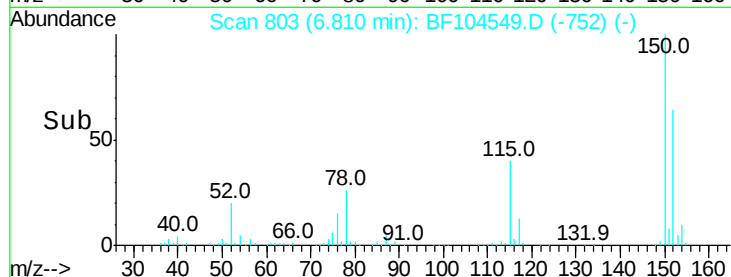
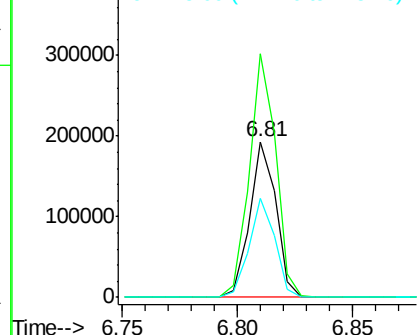
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.81 min Scan# 803  
Delta R.T. -0.00 min  
Lab File: BF104549.D  
Acq: 16 Apr 2018 22:40

Instrument :  
BNA\_F  
ClientSampleId :

Tot Ion:152 Resp: 153586  
Ion Ratio Lower Upper  
152 100  
150 156.7 124.6 186.8  
115 63.3 50.1 75.1



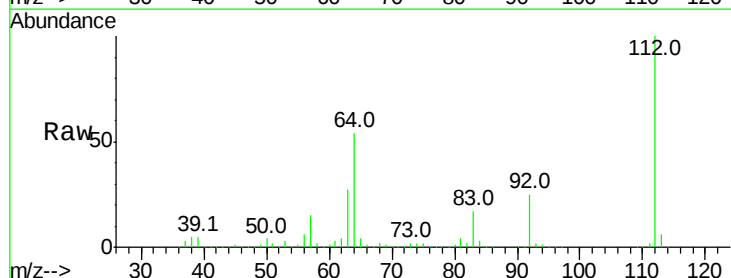
Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 115.00 (114.70 to 115.70): E



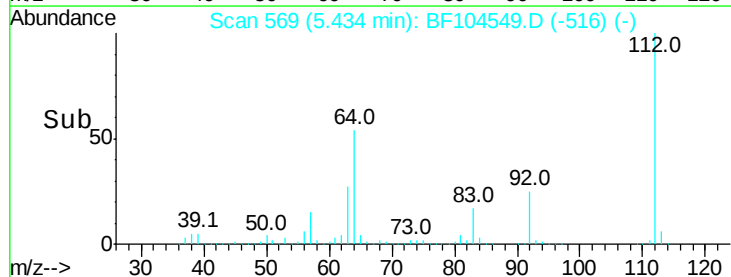
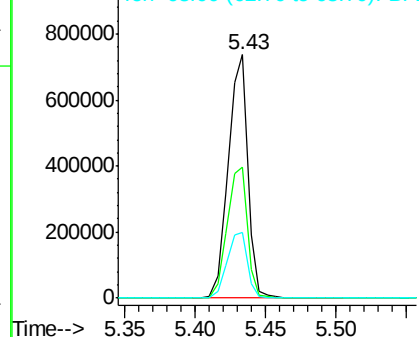
#5

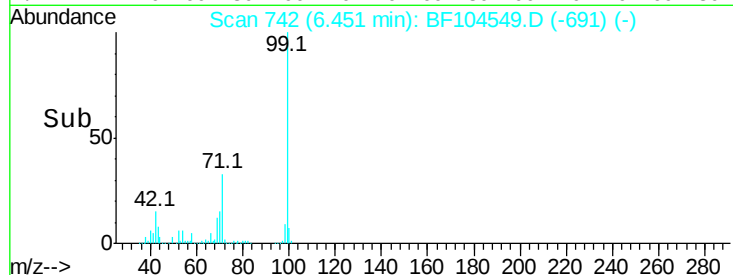
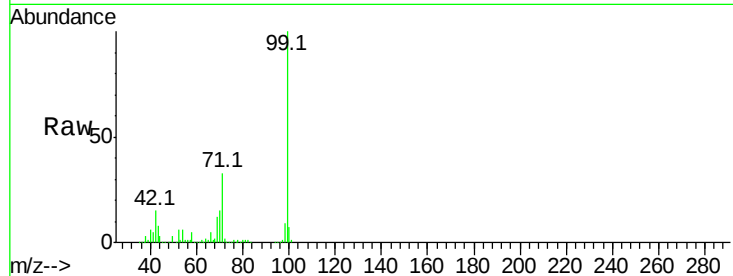
2-Fluorophenol  
Concen: 70.693 ng  
RT: 5.43 min Scan# 569  
Delta R.T. 0.01 min  
Lab File: BF104549.D  
Acq: 16 Apr 2018 22:40

Tgt Ion:112 Resp: 710075  
Ion Ratio Lower Upper  
112 100  
64 53.8 47.9 71.9  
63 27.0 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: 73.196 ng

RT: 6.45 min Scan# 742

Delta R.T. -0.00 min

Lab File: BF104549.D

Acq: 16 Apr 2018 22:40

Instrument :

BNA\_F

ClientSampleId :

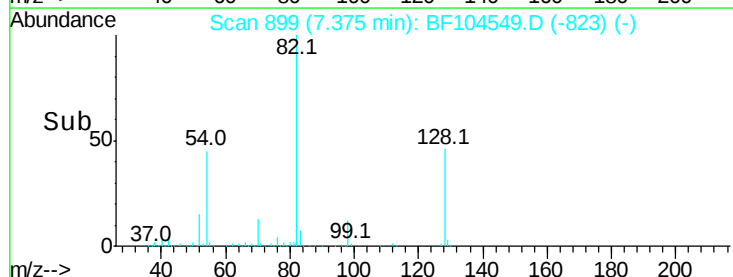
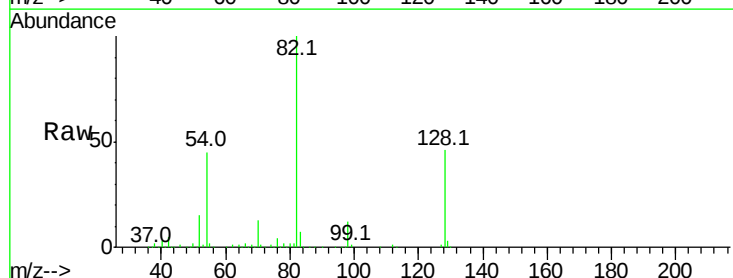
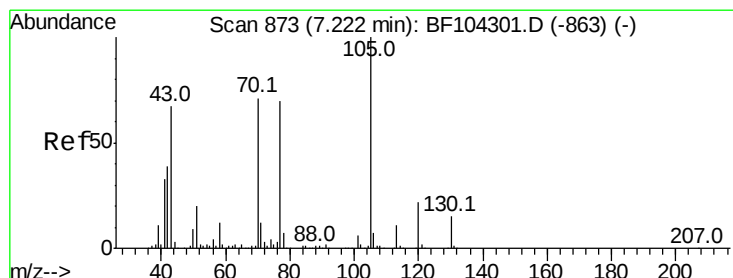
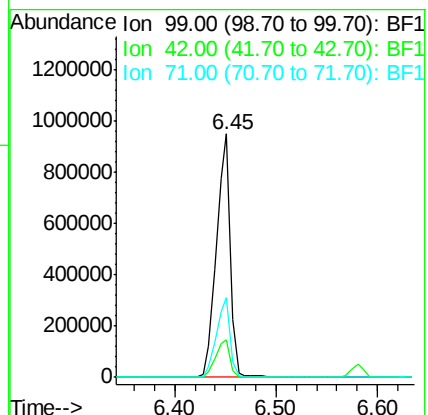
Tot Ion: 99 Resp: 903340

Ion Ratio Lower Upper

99 100

42 15.4 14.5 21.7

71 32.6 25.4 38.0



#19

n-Nitroso-di-n-propylamine

Concen: 8.925 ng

RT: 7.37 min Scan# 899

Delta R.T. 0.15 min

Lab File: BF104549.D

Acq: 16 Apr 2018 22:40

Tgt Ion: 70 Resp: 71975

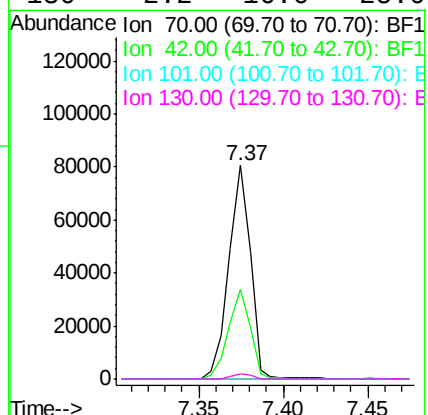
Ion Ratio Lower Upper

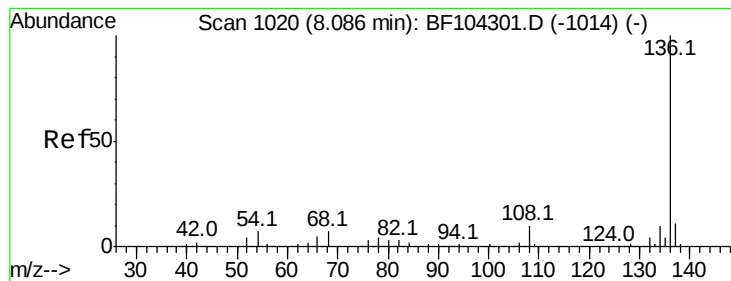
70 100

42 42.2 47.5 71.3#

101 0.0 7.4 11.2#

130 2.2 16.6 25.0#





#21

Naphthalene-d8

Concen: 20.000 ng

RT: 8.09 min Scan# 1021

Delta R.T. -0.00 min

Lab File: BF104549.D

Acq: 16 Apr 2018 22:40

Instrument :

BNA\_F

ClientSampleId :

Tot Ion:136 Resp: 605067

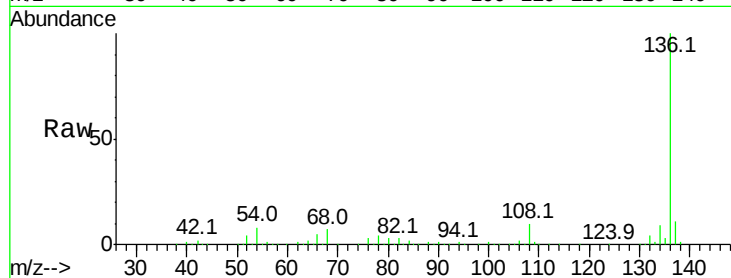
Ion Ratio Lower Upper

136 100

137 11.0 8.9 13.3

54 7.8 6.6 9.8

68 6.7 5.0 7.4

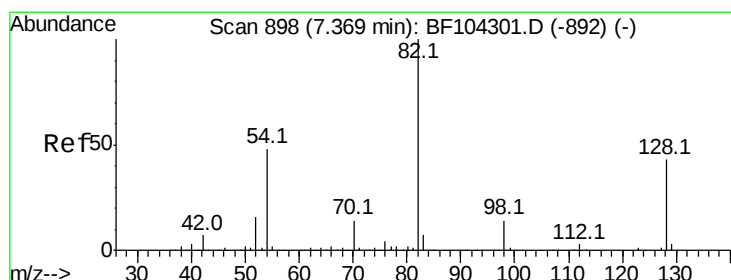
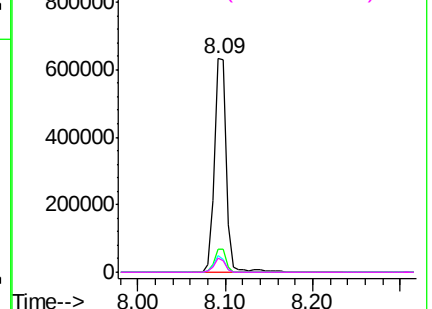
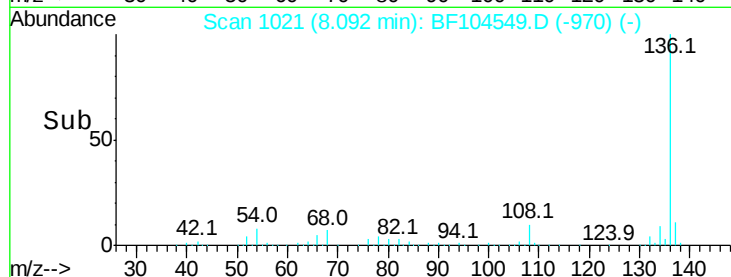


Abundance Ion 136.00 (135.70 to 136.70): E

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: 60.881 ng

RT: 7.37 min Scan# 899

Delta R.T. -0.01 min

Lab File: BF104549.D

Acq: 16 Apr 2018 22:40

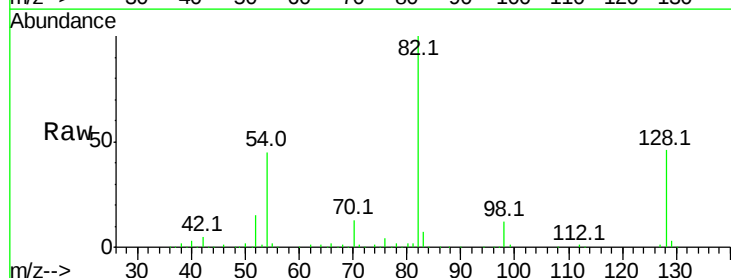
Tgt Ion: 82 Resp: 564140

Ion Ratio Lower Upper

82 100

128 46.0 36.1 54.1

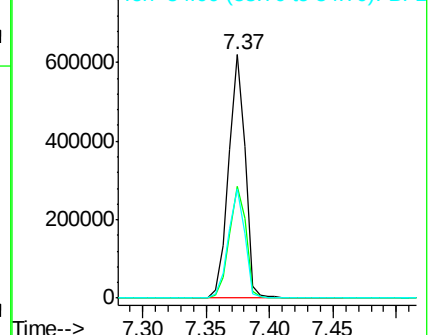
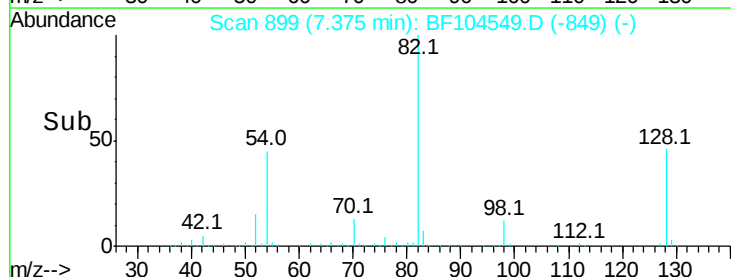
54 44.7 41.4 62.2

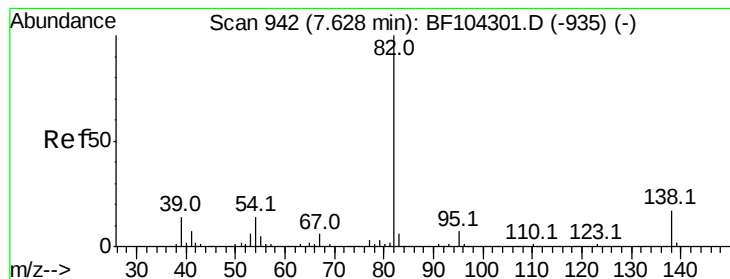


Abundance Ion 82.00 (81.70 to 82.70): BF1

Ion 128.00 (127.70 to 128.70): E

Ion 54.00 (53.70 to 54.70): BF1





#25

Isophorone

Concen: 28.790 ng

RT: 7.37 min Scan# 899

Delta R.T. -0.26 min

Lab File: BF104549.D

Acq: 16 Apr 2018 22:40

Instrument :

BNA\_F

ClientSampleId :

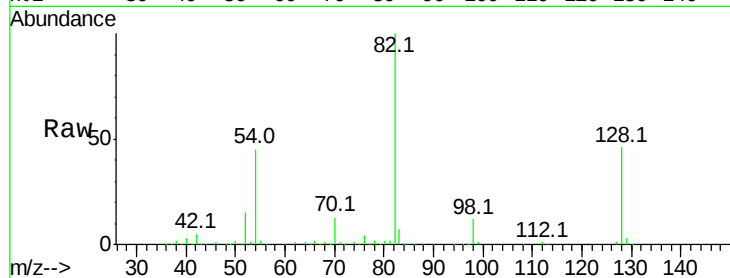
Tot Ion: 82 Resp: 564132

Ion Ratio Lower Upper

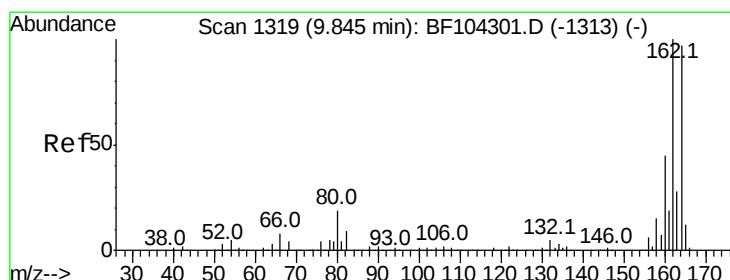
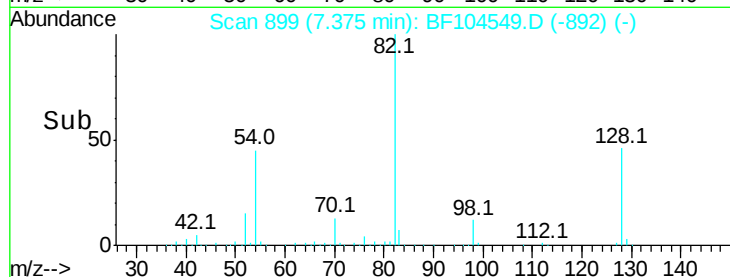
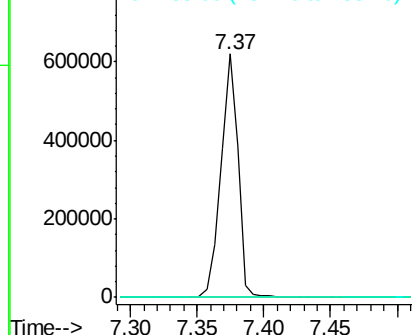
82 100

95 0.0 5.2 7.8#

138 0.0 14.9 22.3#



Abundance Ion 82.00 (81.70 to 82.70): BF1  
Ion 95.00 (94.70 to 95.70): BF1  
Ion 138.00 (137.70 to 138.70): BF1



#38

Acenaphthene-d10

Concen: 20.000 ng

RT: 9.85 min Scan# 1320

Delta R.T. -0.00 min

Lab File: BF104549.D

Acq: 16 Apr 2018 22:40

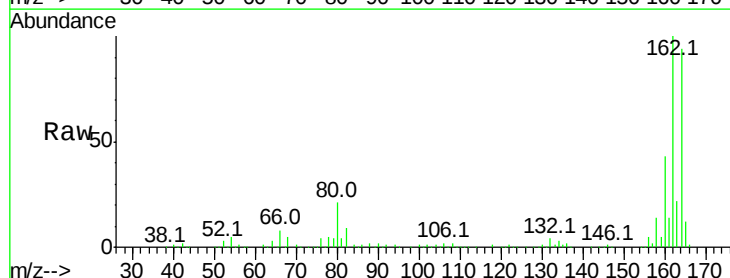
Tgt Ion:164 Resp: 244995

Ion Ratio Lower Upper

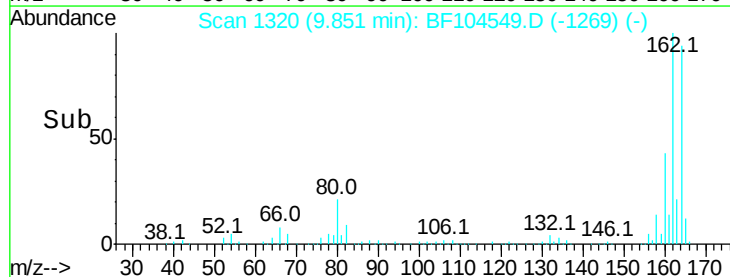
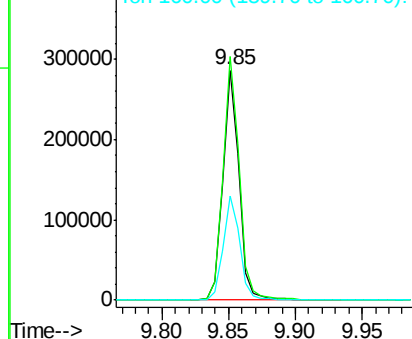
164 100

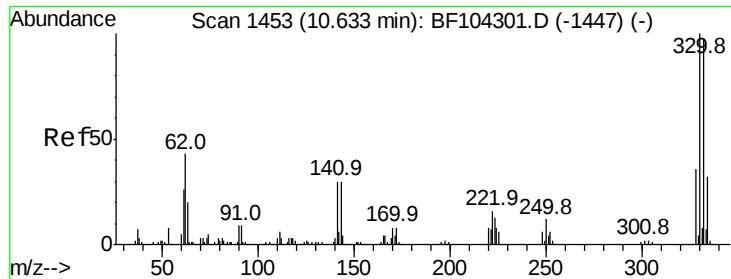
162 105.9 86.1 129.1

160 45.0 38.3 57.5



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

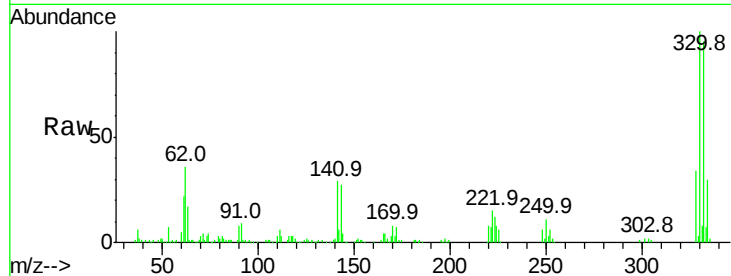




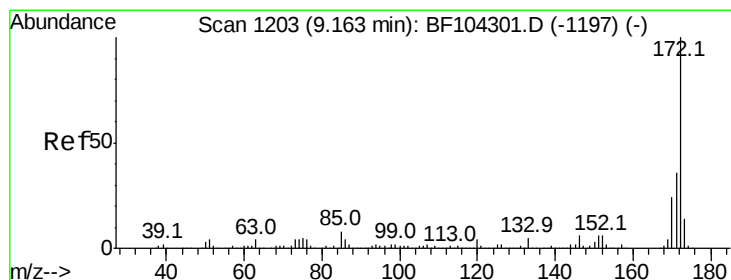
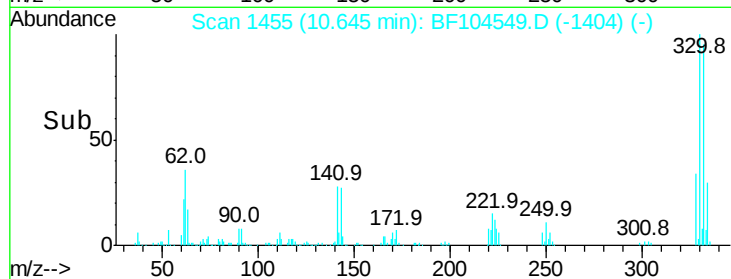
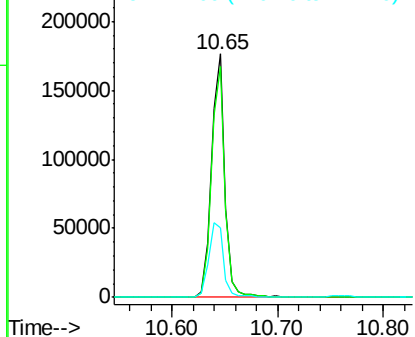
#41  
 2,4,6-Tribromophenol  
 Concen: 62.164 ng  
 RT: 10.65 min Scan# 1455  
 Delta R.T. -0.00 min  
 Lab File: BF104549.D  
 Acq: 16 Apr 2018 22:40

Instrument :  
 BNA\_F  
 ClientSampleId :

Tot Ion:330 Resp: 157984  
 Ion Ratio Lower Upper  
 330 100  
 332 95.3 77.0 115.6  
 141 33.2 29.9 44.9

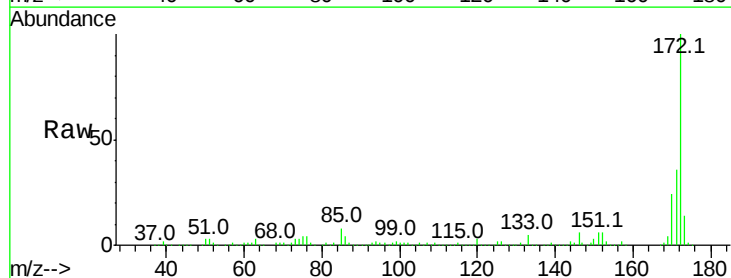


Abundance Ion 329.80 (329.50 to 330.50): E  
 Ion 331.80 (331.50 to 332.50): E  
 Ion 141.00 (140.70 to 141.70): E

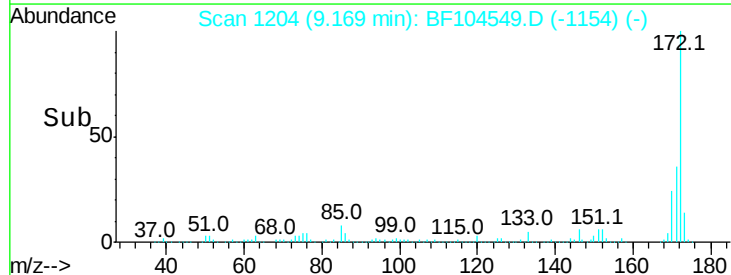
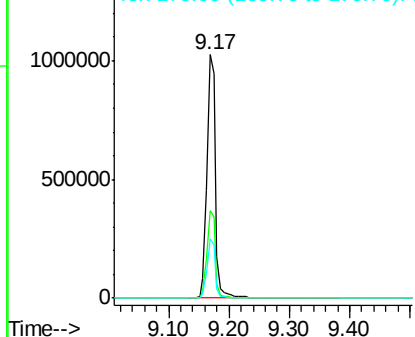


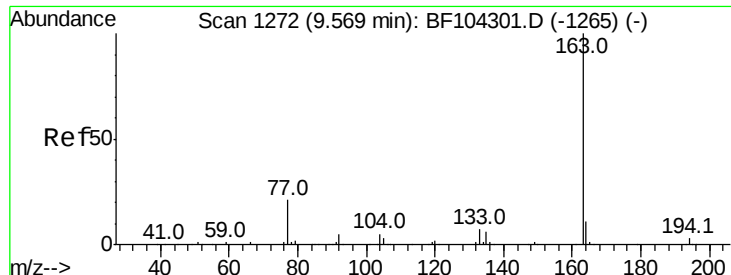
#44  
 2-Fluorobiphenyl  
 Concen: 64.747 ng  
 RT: 9.17 min Scan# 1204  
 Delta R.T. -0.01 min  
 Lab File: BF104549.D  
 Acq: 16 Apr 2018 22:40

Tgt Ion:172 Resp: 1004126  
 Ion Ratio Lower Upper  
 172 100  
 171 36.0 29.7 44.5  
 170 24.1 19.6 29.4



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

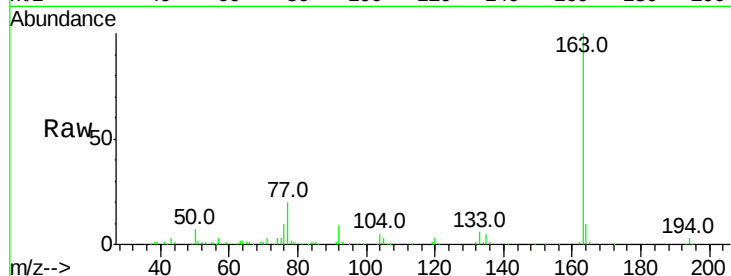




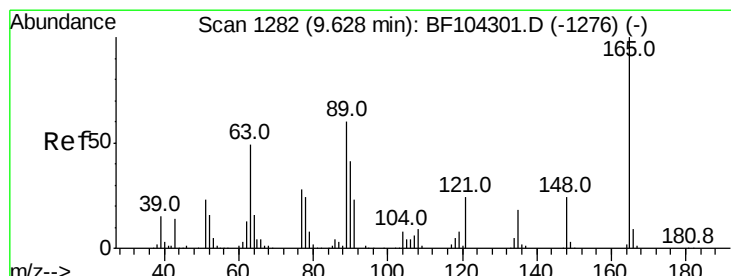
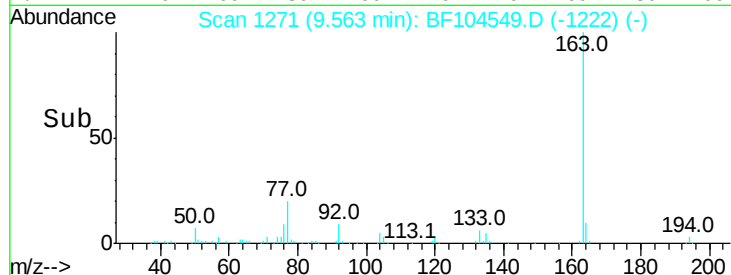
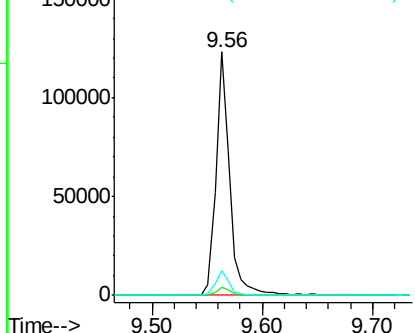
#49  
Dimethylphthalate  
Concen: 5.480 ng  
RT: 9.56 min Scan# 1271  
Delta R.T. -0.01 min  
Lab File: BF104549.D  
Acq: 16 Apr 2018 22:40

Instrument :  
BNA\_F  
ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 163     | 100   |       |       |
| 194     | 3.5   | 2.7   | 4.1   |
| 164     | 10.1  | 8.2   | 12.2  |

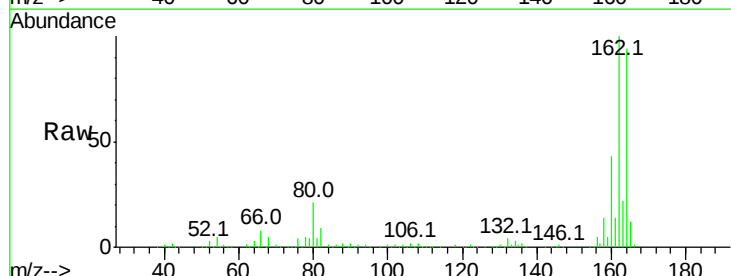


Abundance Ion 163.00 (162.70 to 163.70): E  
Ion 194.00 (193.70 to 194.70): E  
Ion 164.00 (163.70 to 164.70): E

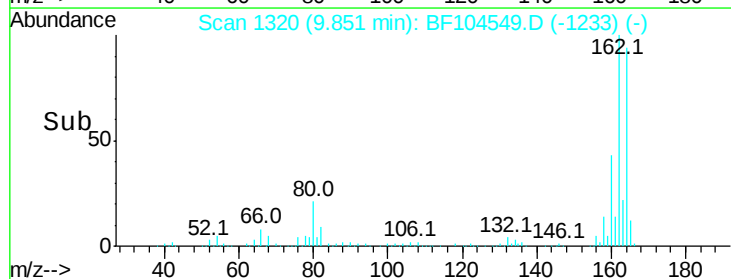
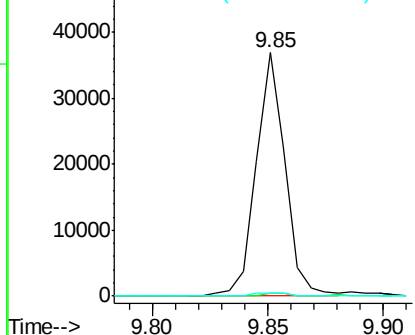


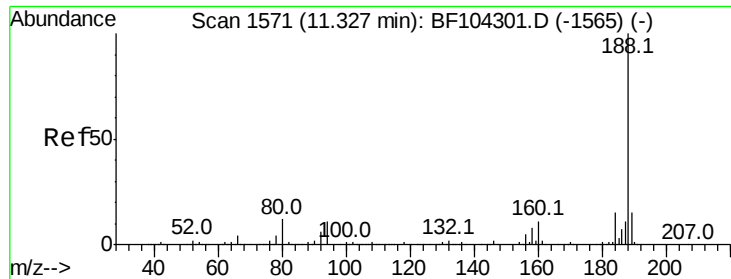
#50  
2,6-Dinitrotoluene  
Concen: 9.058 ng  
RT: 9.85 min Scan# 1320  
Delta R.T. 0.21 min  
Lab File: BF104549.D  
Acq: 16 Apr 2018 22:40

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 165     | 100   |       |       |
| 63      | 1.1   | 44.7  | 67.1# |
| 89      | 1.4   | 44.0  | 66.0# |



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

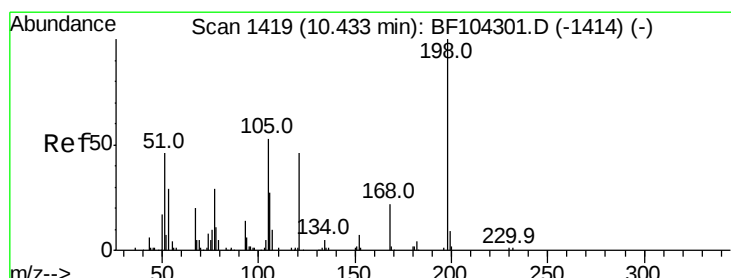
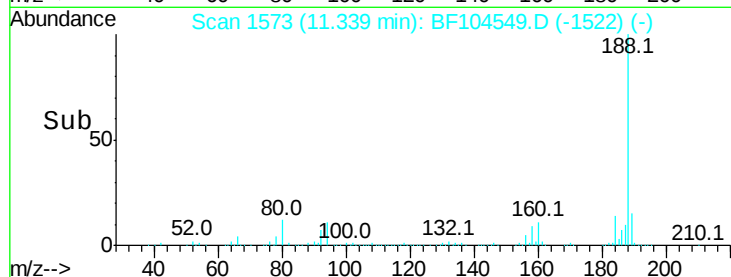
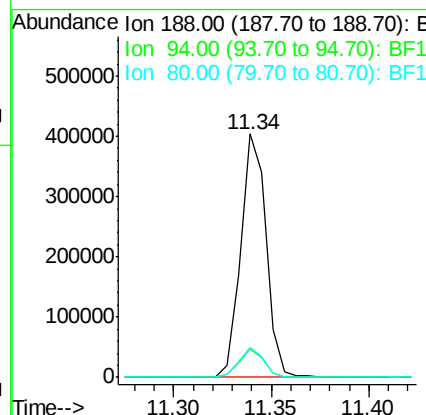
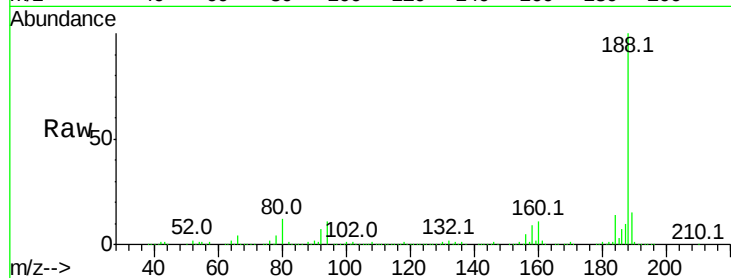




#63  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 11.34 min Scan# 1573  
Delta R.T. -0.00 min  
Lab File: BF104549.D  
Acq: 16 Apr 2018 22:40

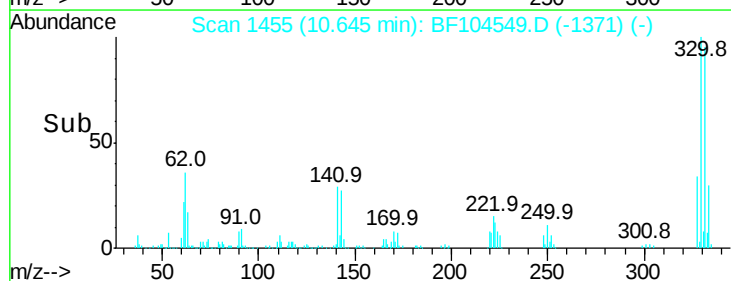
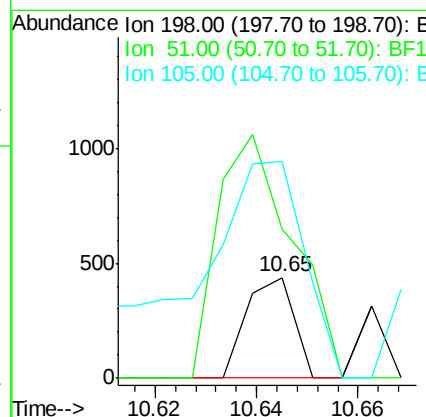
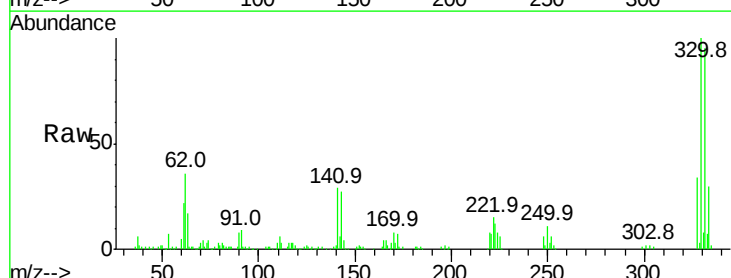
Instrument :  
BNA\_F  
ClientSampleId :

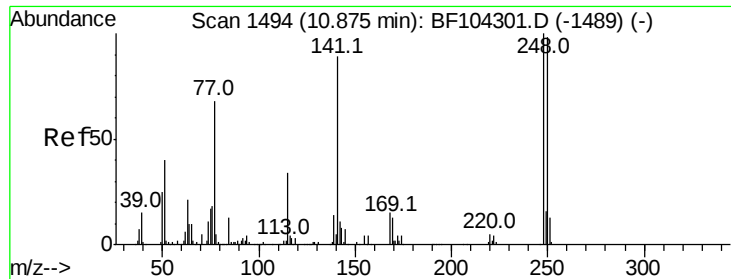
Tot Ion:188 Resp: 363169  
Ion Ratio Lower Upper  
188 100  
94 11.5 8.5 12.7  
80 12.2 9.2 13.8



#64  
4,6-Dinitro-2-methylphenol  
Concen: 7.484 ng  
RT: 10.65 min Scan# 1455  
Delta R.T. 0.19 min  
Lab File: BF104549.D  
Acq: 16 Apr 2018 22:40

Tgt Ion:198 Resp: 286  
Ion Ratio Lower Upper  
198 100  
51 147.8 37.7 77.7#  
105 215.3 36.3 76.3#

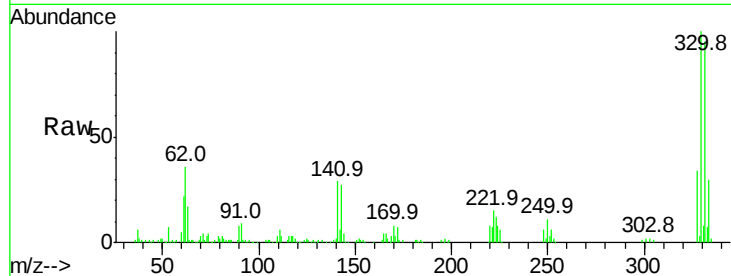




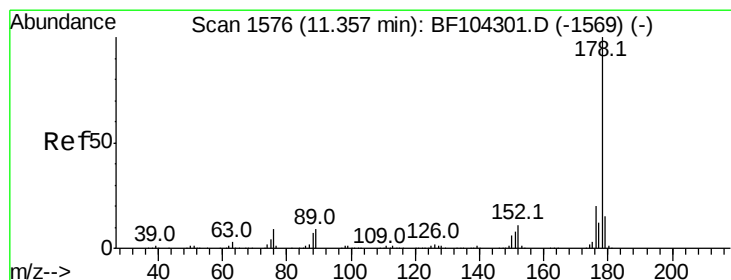
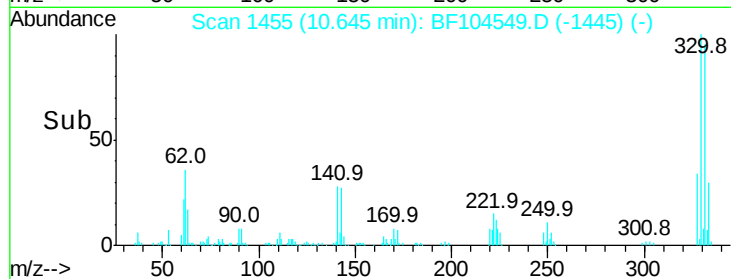
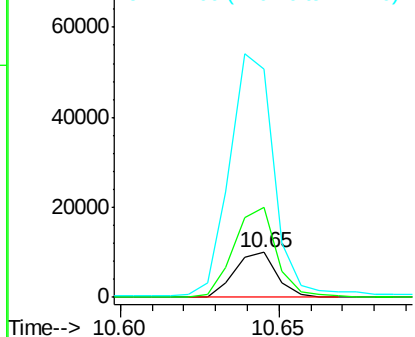
#66  
 4-Bromophenyl-phenylether  
 Concen: 2.388 ng  
 RT: 10.65 min Scan# 1455  
 Delta R.T. -0.24 min  
 Lab File: BF104549.D  
 Acq: 16 Apr 2018 22:40

Instrument :  
 BNA\_F  
 ClientSampleId :

Tot Ion:248 Resp: 9224  
 Ion Ratio Lower Upper  
 248 100  
 250 201.7 76.9 115.3#  
 141 509.3 74.4 111.6#

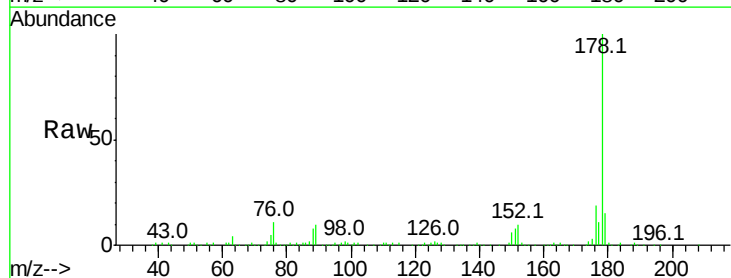


Abundance Ion 248.00 (247.70 to 248.70): E  
 Ion 250.00 (249.70 to 250.70): E  
 Ion 141.00 (140.70 to 141.70): E

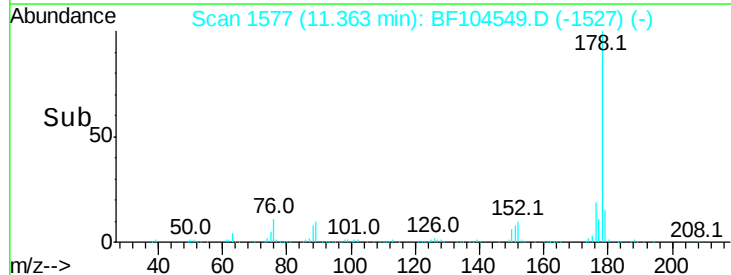
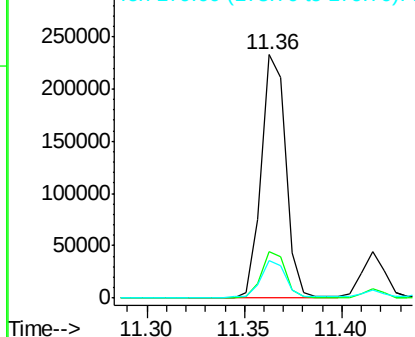


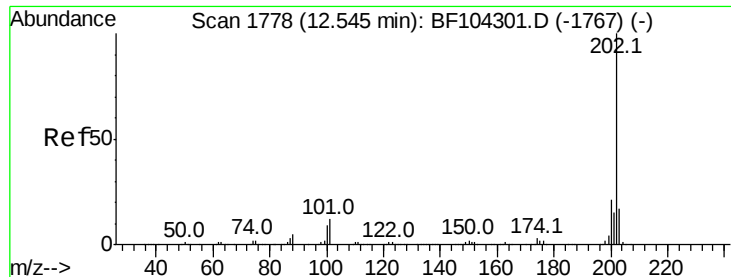
#70  
 Phenanthrene  
 Concen: 10.130 ng  
 RT: 11.36 min Scan# 1577  
 Delta R.T. -0.01 min  
 Lab File: BF104549.D  
 Acq: 16 Apr 2018 22:40

Tgt Ion:178 Resp: 204871  
 Ion Ratio Lower Upper  
 178 100  
 176 19.3 15.8 23.8  
 179 15.5 13.0 19.6



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

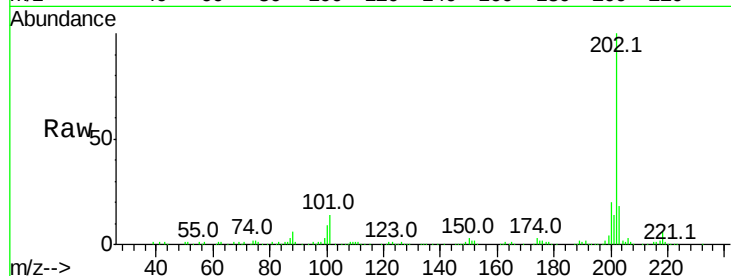




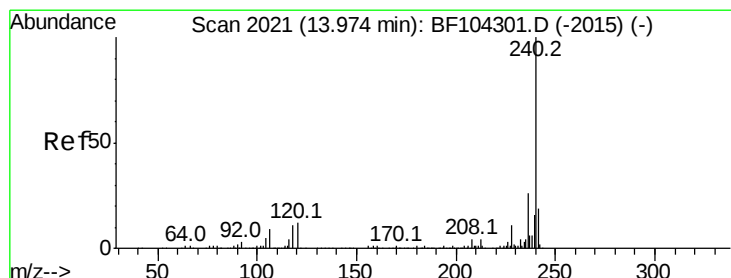
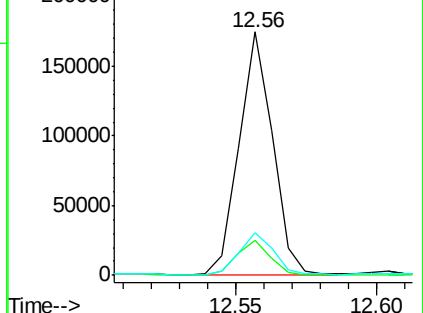
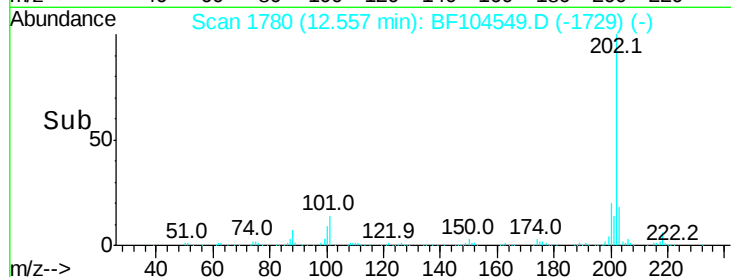
#74  
 Fluoranthene  
 Concen: 6.749 ng  
 RT: 12.56 min Scan# 1780  
 Delta R.T. -0.00 min  
 Lab File: BF104549.D  
 Acq: 16 Apr 2018 22:40

Instrument :  
 BNA\_F  
 ClientSampleId :

Tot Ion:202 Resp: 142616  
 Ion Ratio Lower Upper  
 202 100  
 101 14.2 0.0 34.1  
 203 17.7 0.0 38.1

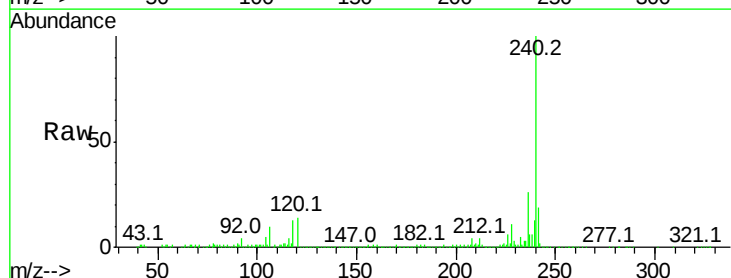


Abundance Ion 202.00 (201.70 to 202.70): E  
 Ion 101.00 (100.70 to 101.70): E  
 Ion 203.00 (202.70 to 203.70): E

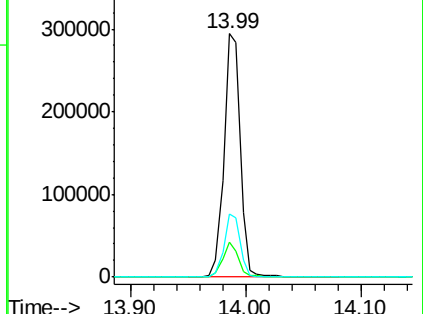
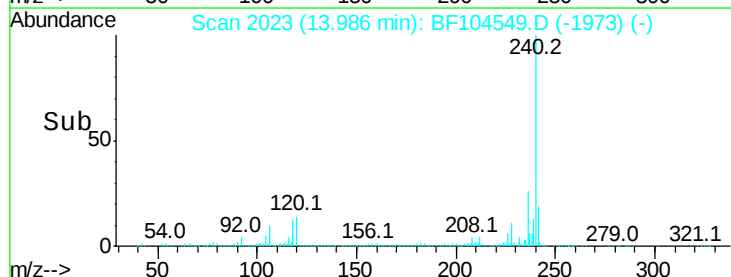


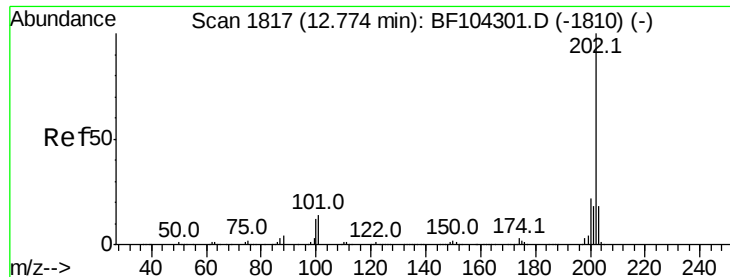
#75  
 Chrysene-d12  
 Concen: 20.000 ng  
 RT: 13.99 min Scan# 2023  
 Delta R.T. -0.01 min  
 Lab File: BF104549.D  
 Acq: 16 Apr 2018 22:40

Tgt Ion:240 Resp: 288563  
 Ion Ratio Lower Upper  
 240 100  
 120 14.5 9.5 14.3#  
 236 25.9 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

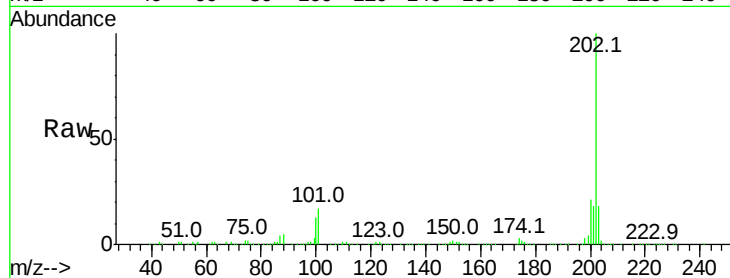




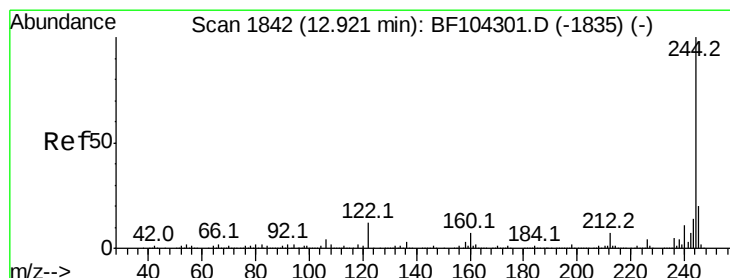
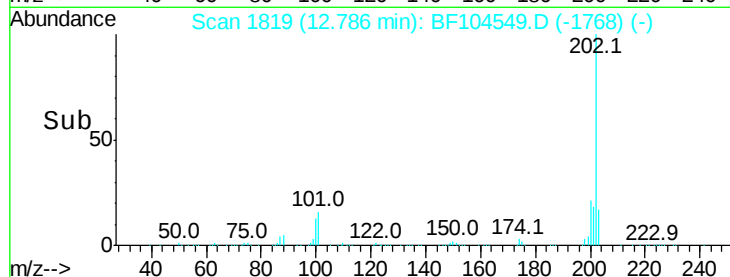
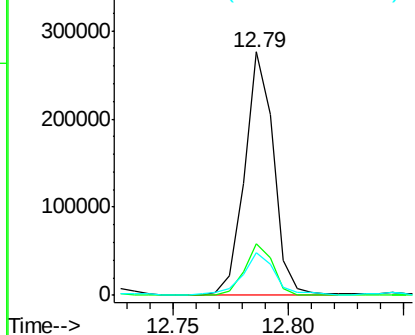
#77  
Pvrene  
Concen: 11.198 ng  
RT: 12.79 min Scan# 1819  
Delta R.T. -0.00 min  
Lab File: BF104549.D  
Acq: 16 Apr 2018 22:40

Instrument :  
BNA\_F  
ClientSampleId :

Tot Ion:202 Resp: 239514  
Ion Ratio Lower Upper  
202 100  
200 21.3 17.4 26.2  
203 17.8 14.3 21.5

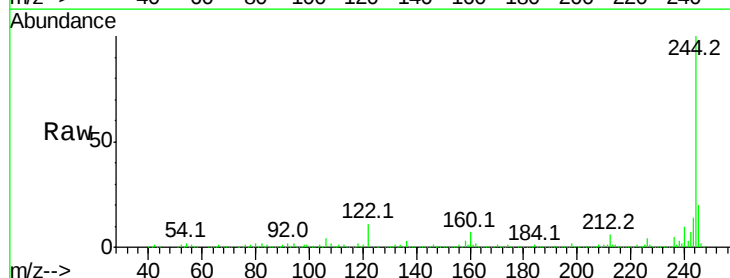


Abundance Ion 202.00 (201.70 to 202.70): E  
Ion 200.00 (199.70 to 200.70): E  
Ion 203.00 (202.70 to 203.70): E

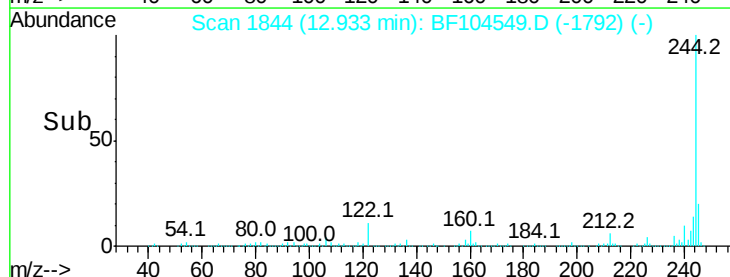
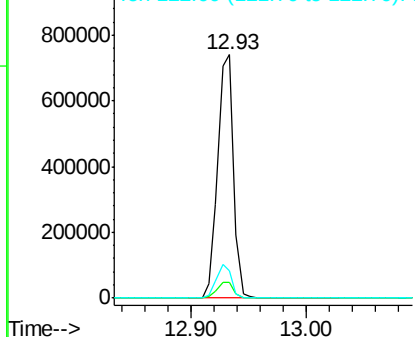


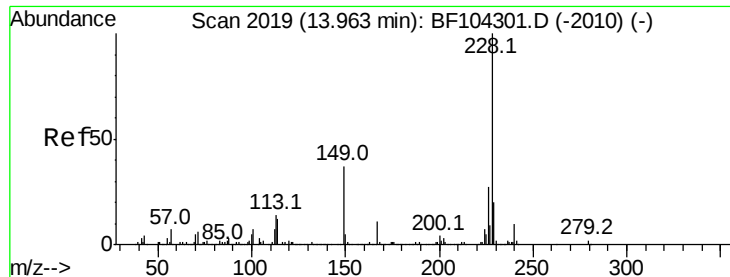
#78  
Terphenyl-d14  
Concen: 55.717 ng  
RT: 12.93 min Scan# 1844  
Delta R.T. 0.01 min  
Lab File: BF104549.D  
Acq: 16 Apr 2018 22:40

Tgt Ion:244 Resp: 705220  
Ion Ratio Lower Upper  
244 100  
212 6.5 5.4 8.0  
122 11.2 11.0 16.4



Abundance Ion 244.00 (243.70 to 244.70): E  
Ion 212.00 (211.70 to 212.70): E  
Ion 122.00 (121.70 to 122.70): E





#80

Benzo(a)anthracene

Concen: 4.597 ng

RT: 14.02 min Scan# 2028

Delta R.T. 0.04 min

Lab File: BF104549.D

Acq: 16 Apr 2018 22:40

Instrument :

BNA\_F

ClientSampled :

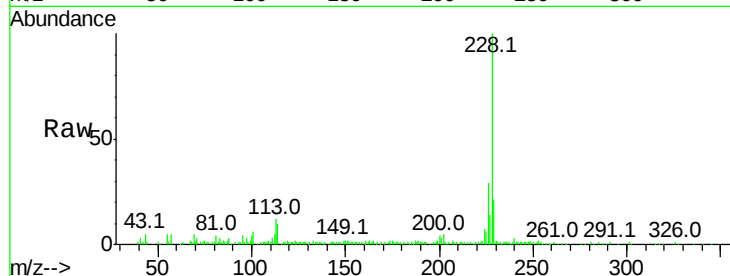
Tot Ion:228 Resp: 79253

Ion Ratio Lower Upper

228 100

226 29.4 22.6 33.8

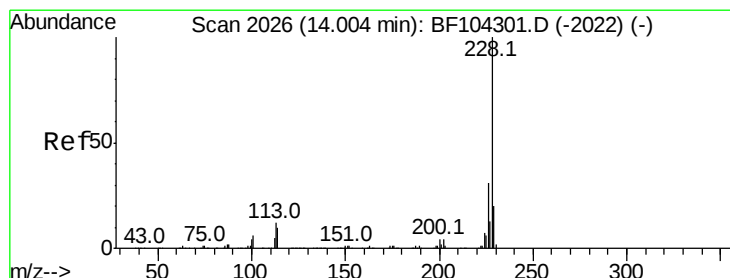
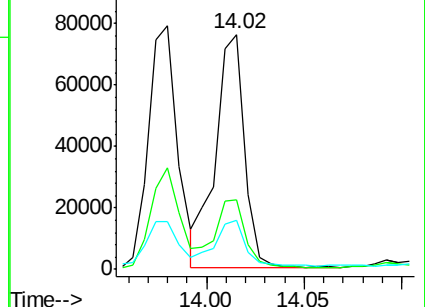
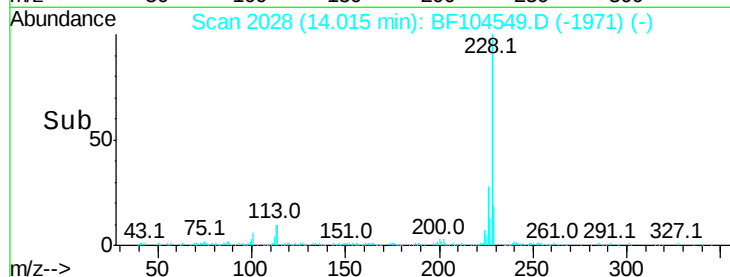
229 20.9 15.8 23.6



Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E



#82

Chrysene

Concen: 4.476 ng

RT: 14.02 min Scan# 2028

Delta R.T. -0.00 min

Lab File: BF104549.D

Acq: 16 Apr 2018 22:40

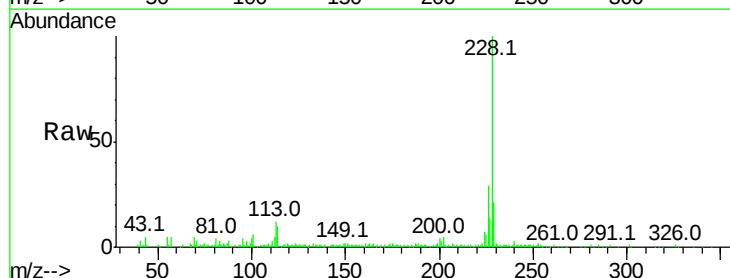
Tgt Ion:228 Resp: 79253

Ion Ratio Lower Upper

228 100

226 29.4 25.0 37.6

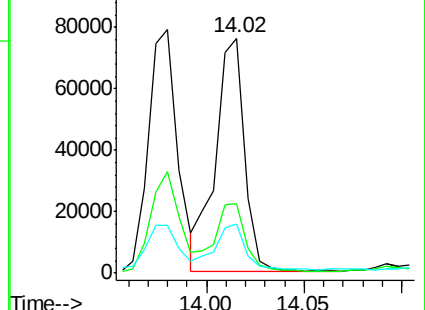
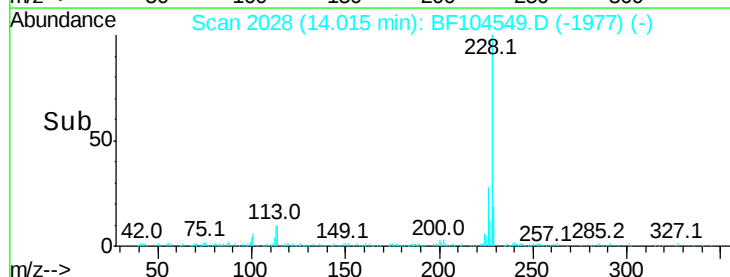
229 20.9 16.2 24.4

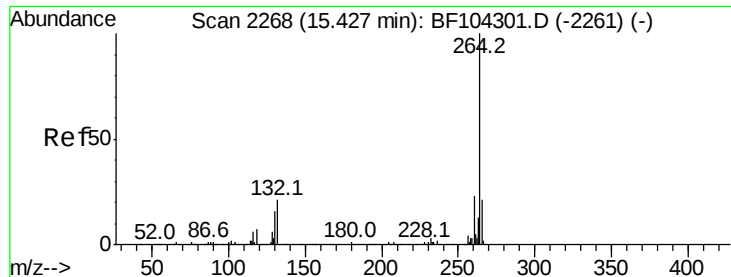


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E

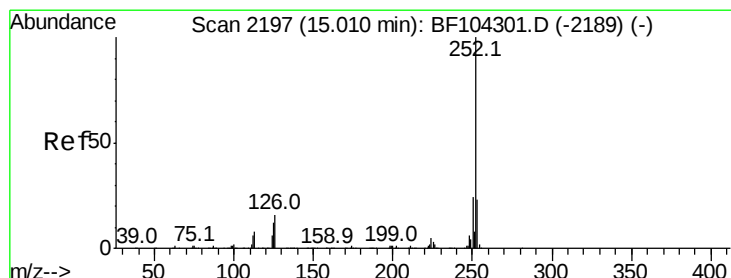
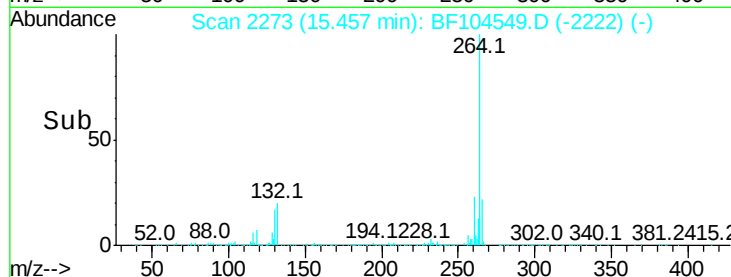
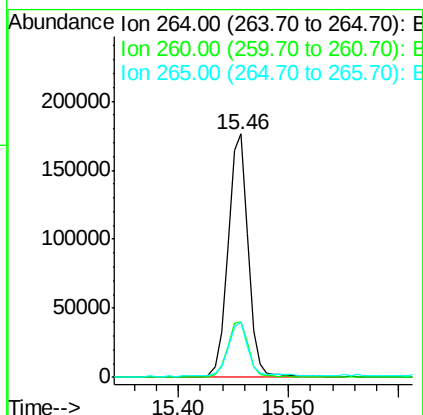
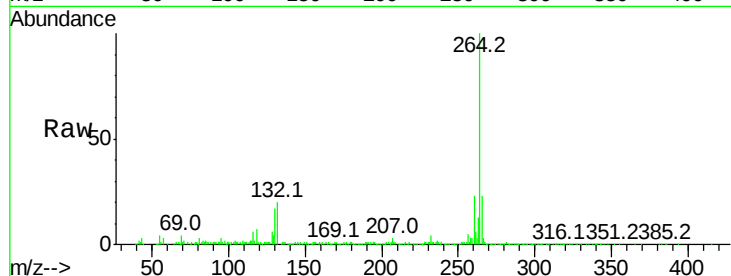




#86  
Pervlene-d12  
Concen: 20.000 ng  
RT: 15.46 min Scan# 2273  
Delta R.T. -0.00 min  
Lab File: BF104549.D  
Acq: 16 Apr 2018 22:40

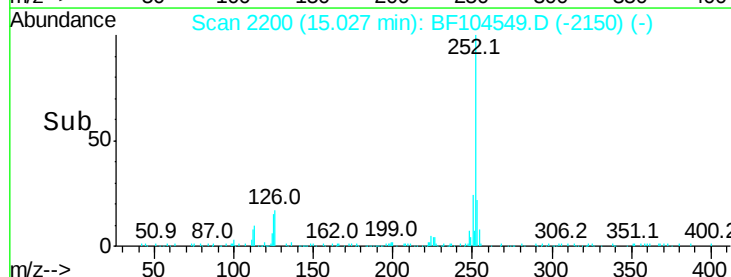
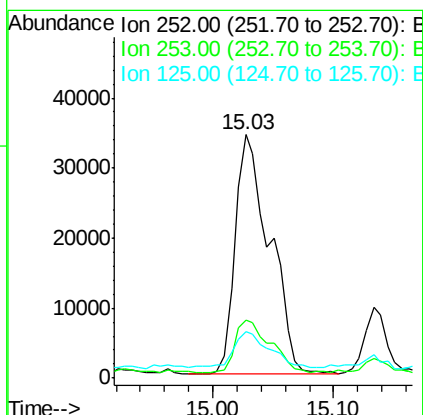
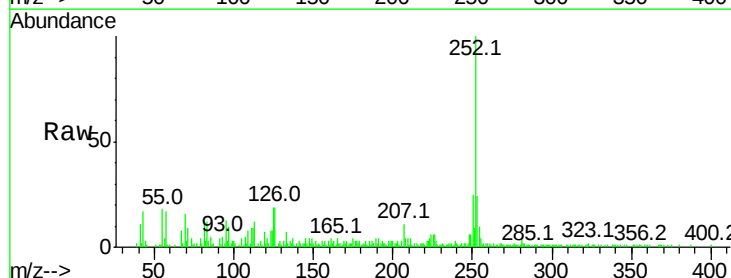
Instrument :  
BNA\_F  
ClientSampleId :

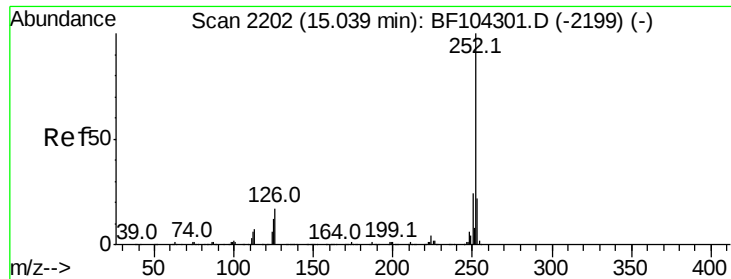
Tot Ion:264 Resp: 226970  
Ion Ratio Lower Upper  
264 100  
260 23.0 19.2 28.8  
265 22.5 17.5 26.3



#87  
Benzo(b)fluoranthene  
Concen: 4.801 ng  
RT: 15.03 min Scan# 2200  
Delta R.T. -0.01 min  
Lab File: BF104549.D  
Acq: 16 Apr 2018 22:40

Tgt Ion:252 Resp: 68827  
Ion Ratio Lower Upper  
252 100  
253 24.0 17.0 25.6  
125 19.3 9.0 13.6#





#88

Benzo(k)fluoranthene

Concen: 5.086 ng

RT: 15.03 min Scan# 2200

Delta R.T. -0.04 min

Lab File: BF104549.D

Acq: 16 Apr 2018 22:40

Instrument :

BNA\_F

ClientSampleId :

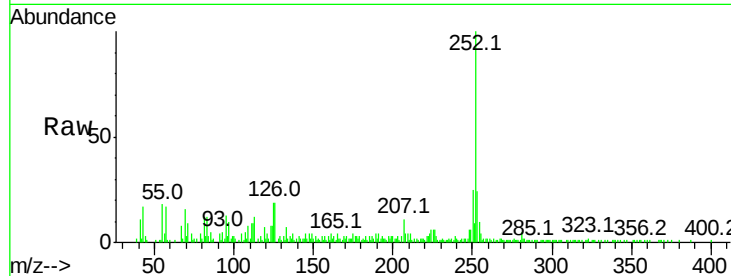
Tot Ion:252 Resp: 68827

Ion Ratio Lower Upper

252 100

253 24.0 17.9 26.9

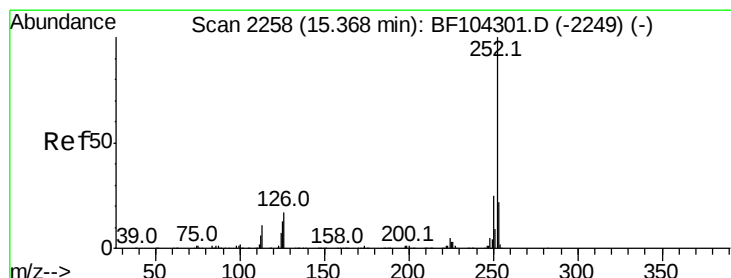
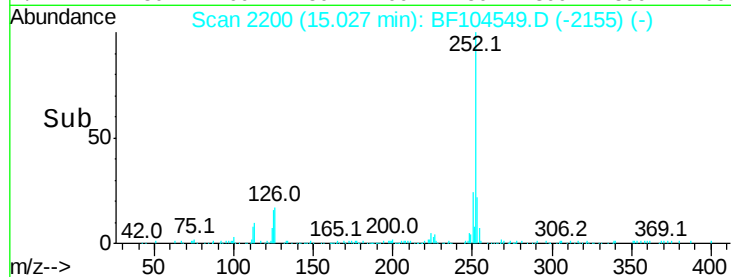
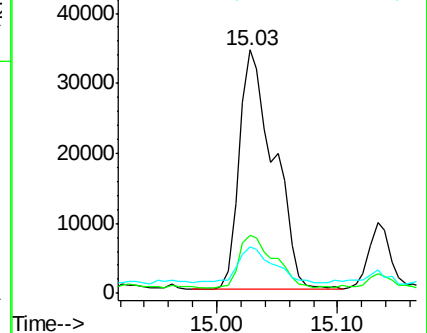
125 19.3 10.2 15.2#



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: 3.596 ng

RT: 15.39 min Scan# 2262

Delta R.T. -0.01 min

Lab File: BF104549.D

Acq: 16 Apr 2018 22:40

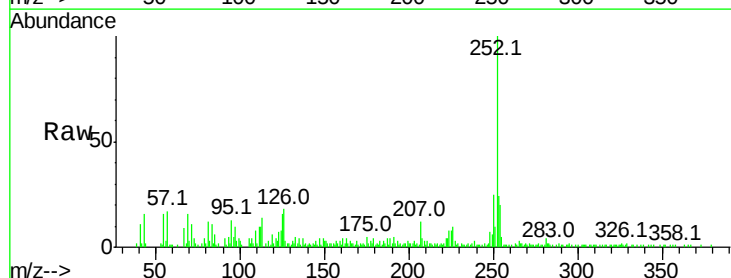
Tgt Ion:252 Resp: 46120

Ion Ratio Lower Upper

252 100

253 24.1 17.1 25.7

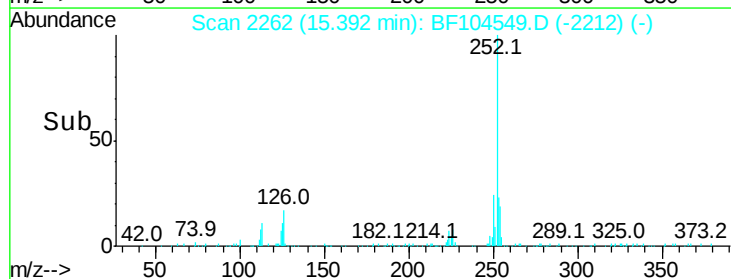
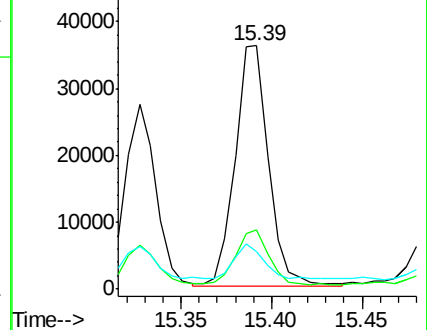
125 15.6 9.8 14.6#

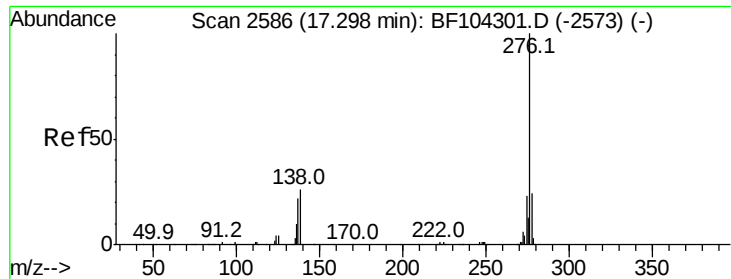


Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E

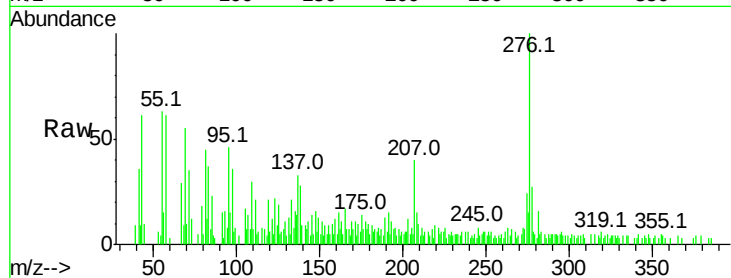




#91  
 Benzo(a,h,i)perylene  
 Concen: 2.037 ng  
 RT: 17.35 min Scan# 2595  
 Delta R.T. -0.01 min  
 Lab File: BF104549.D  
 Acq: 16 Apr 2018 22:40

Instrument :  
 BNA\_F  
 ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 26.7  | 17.9  | 26.9  |
| 138     | 28.2  | 21.8  | 32.8  |



Abundance

Ion 276.00 (275.70 to 276.70): E

Ion 277.00 (276.70 to 277.70): E

Ion 138.00 (137.70 to 138.70): E

