

Data Path : Z:\HPCHEM1\BNA F\DATA\BF101317\  
 Data File : BF099462.D  
 Acq On : 14 Oct 2017 1:49  
 Operator : SJ/JU  
 Sample : I5819-16  
 Misc :  
 ALS Vial : 25 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :

Quant Time: Oct 14 02:23:52 2017  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF092317.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Oct 11 16:25:21 2017  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.85  | 152  | 94783    | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 8.13  | 136  | 371373   | 20.00 | ng    | 0.00     |
| 38) Acenaphthene-d10      | 9.89  | 164  | 148644   | 20.00 | ng    | 0.00     |
| 63) Phenanthrene-d10      | 11.38 | 188  | 223205   | 20.00 | ng    | 0.00     |
| 75) Chrysene-d12          | 14.02 | 240  | 165770   | 20.00 | ng    | 0.00     |
| 86) Perylene-d12          | 15.50 | 264  | 183912   | 20.00 | ng    | 0.02     |

|                             |       |     |        |        |    |      |
|-----------------------------|-------|-----|--------|--------|----|------|
| System Monitoring Compounds |       |     |        |        |    |      |
| 5) 2-Fluorophenol           | 5.49  | 112 | 398490 | 66.93  | ng | 0.02 |
| 7) Phenol-d6                | 6.49  | 99  | 307980 | 41.93  | ng | 0.00 |
| 23) Nitrobenzene-d5         | 7.42  | 82  | 527385 | 91.07  | ng | 0.00 |
| 41) 2,4,6-Tribromophenol    | 10.68 | 330 | 135323 | 111.26 | ng | 0.00 |
| 44) 2-Fluorobiphenyl        | 9.21  | 172 | 946116 | 106.26 | ng | 0.00 |
| 78) Terphenyl-d14           | 12.96 | 244 | 639053 | 87.67  | ng | 0.00 |

|                                |       |     |        |       |    |        |
|--------------------------------|-------|-----|--------|-------|----|--------|
| Target Compounds               |       |     |        |       |    | Qvalue |
| 9) Benzaldehyde                | 6.63  | 77  | 11910  | 2.80  | ng | 91     |
| 19) n-Nitroso-di-n-propylamine | 7.42  | 70  | 66504  | 14.18 | ng | # 73   |
| 25) Isophorone                 | 7.42  | 82  | 527379 | 44.05 | ng | # 64   |
| 31) Naphthalene                | 8.16  | 128 | 303726 | 17.41 | ng | 100    |
| 33) 4-Chloroaniline            | 8.16  | 127 | 39555  | 5.43  | ng | # 36   |
| 48) Acenaphthylene             | 9.75  | 152 | 130226 | 8.87  | ng | 98     |
| 50) 2,6-Dinitrotoluene         | 9.89  | 165 | 18232  | 7.46  | ng | # 25   |
| 51) Acenaphthene               | 9.92  | 154 | 108076 | 11.62 | ng | 99     |
| 56) 2,4-Dinitrotoluene         | 9.89  | 165 | 18232  | 5.75  | ng | # 23   |
| 57) Fluorene                   | 10.44 | 166 | 165576 | 16.63 | ng | 98     |
| 66) 4-Bromophenyl-phenylether  | 10.68 | 248 | 9378   | 4.29  | ng | # 1    |
| 70) Phenanthrene               | 11.41 | 178 | 975997 | 81.69 | ng | 99     |
| 71) Anthracene                 | 11.46 | 178 | 153708 | 12.57 | ng | 96     |
| 74) Fluoranthene               | 12.60 | 202 | 620883 | 51.32 | ng | 98     |
| 77) Pyrene                     | 12.83 | 202 | 479011 | 37.89 | ng | 98     |
| 80) Benzo(a)anthracene         | 14.01 | 228 | 139548 | 13.90 | ng | 98     |
| 82) Chrysene                   | 14.04 | 228 | 122012 | 12.77 | ng | 97     |
| 85) Indeno(1,2,3-cd)pyrene     | 16.98 | 276 | 181615 | 23.76 | ng | 98     |
| 87) Benzo(b)fluoranthene       | 15.06 | 252 | 124516 | 11.01 | ng | 98     |
| 88) Benzo(k)fluoranthene       | 15.09 | 252 | 161341 | 14.45 | ng | 98     |
| 89) Benzo(a)pyrene             | 15.43 | 252 | 126789 | 12.22 | ng | 98     |
| 90) Dibenzo(a,h)anthracene     | 16.99 | 278 | 111553 | 13.43 | ng | 97     |
| 91) Benzo(g,h,i)perylene       | 17.43 | 276 | 77751  | 9.47  | ng | 95     |

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



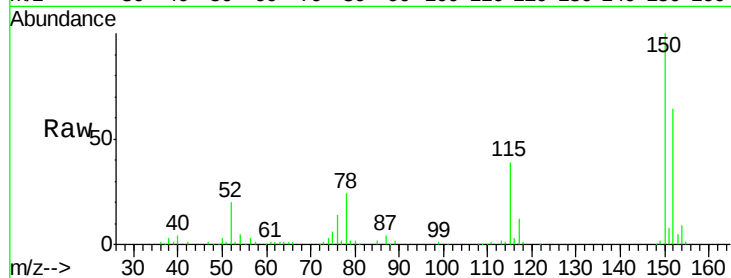


#1

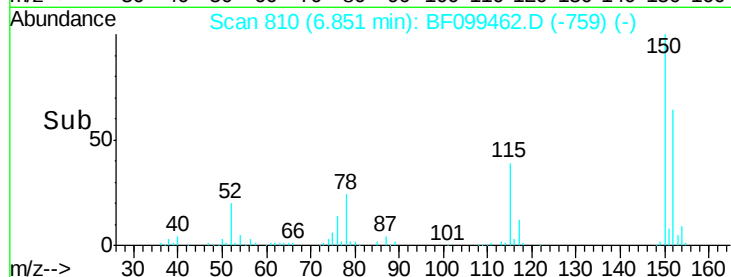
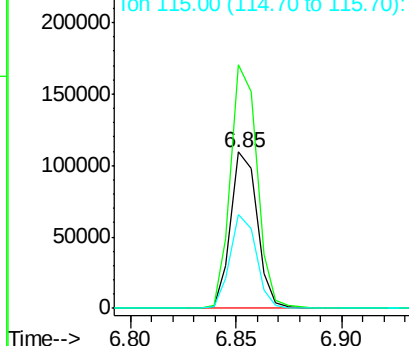
1,4-Dichlorobenzene-d4  
Concen: 20.00 ng  
RT: 6.85 min Scan# 810  
Delta R.T. -0.00 min  
Lab File: BF099462.D  
Acq: 14 Oct 2017 1:49

Instrument :  
BNA\_F  
ClientSampled :

Tot Ion:152 Resp: 94783  
Ion Ratio Lower Upper  
152 100  
150 155.7 124.6 186.8  
115 60.4 50.1 75.1



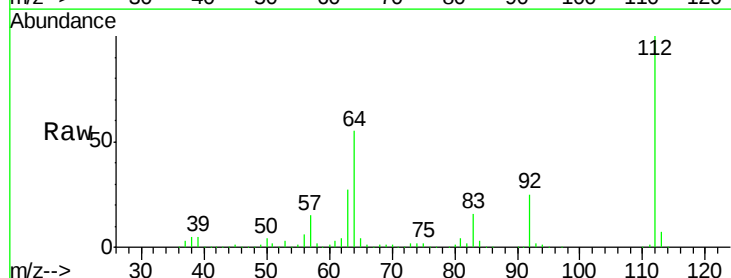
Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 115.00 (114.70 to 115.70): E



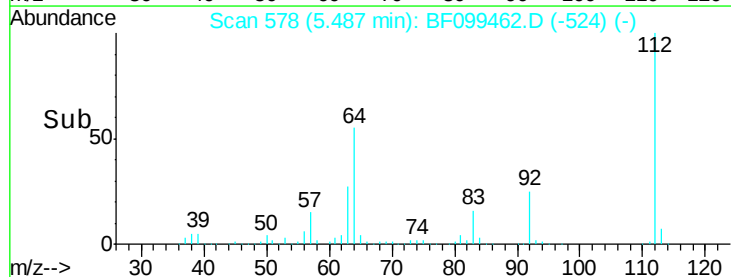
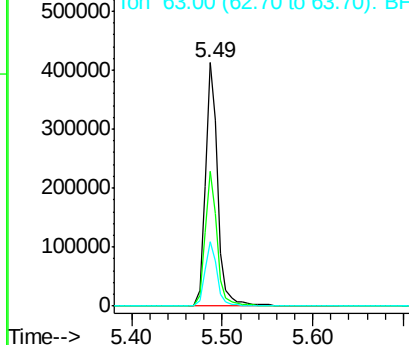
#5

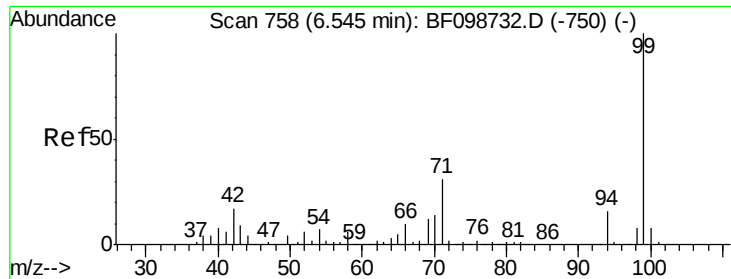
2-Fluorophenol  
Concen: 66.93 ng  
RT: 5.49 min Scan# 578  
Delta R.T. 0.02 min  
Lab File: BF099462.D  
Acq: 14 Oct 2017 1:49

Tgt Ion:112 Resp: 398490  
Ion Ratio Lower Upper  
112 100  
64 55.4 47.9 71.9  
63 26.6 23.7 35.5



Abundance Ion 112.00 (111.70 to 112.70): E  
Ion 64.00 (63.70 to 64.70): BF0  
Ion 63.00 (62.70 to 63.70): BF0





#7

Phenol-d6

Concen: 41.93 ng

RT: 6.49 min Scan# 749

Delta R.T. 0.01 min

Lab File: BF099462.D

Acq: 14 Oct 2017 1:49

Instrument :

BNA\_F

ClientSampleId :

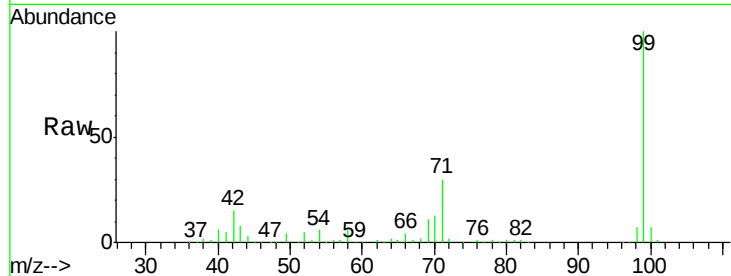
Tot Ion: 99 Resp: 307980

Ion Ratio Lower Upper

99 100

42 15.2 14.5 21.7

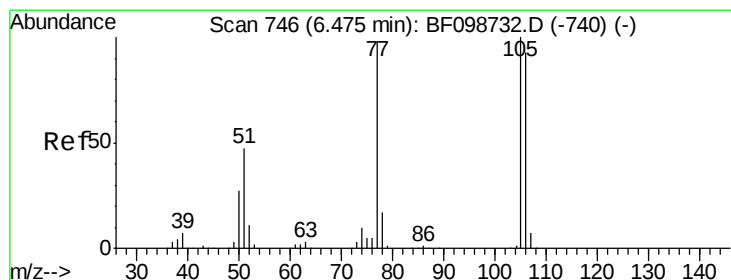
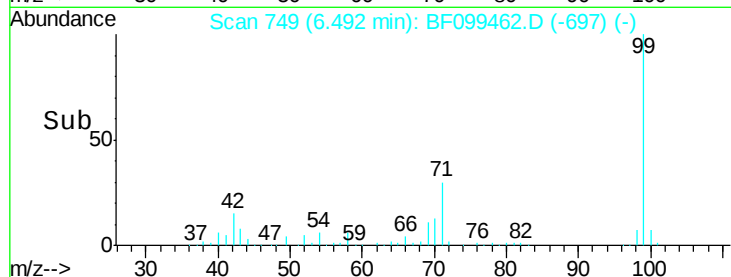
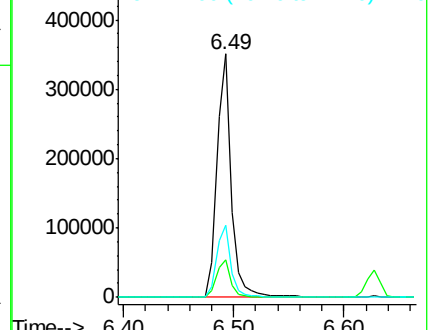
71 29.5 25.4 38.0



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



#9

Benzaldehyde

Concen: 2.80 ng

RT: 6.63 min Scan# 772

Delta R.T. 0.22 min

Lab File: BF099462.D

Acq: 14 Oct 2017 1:49

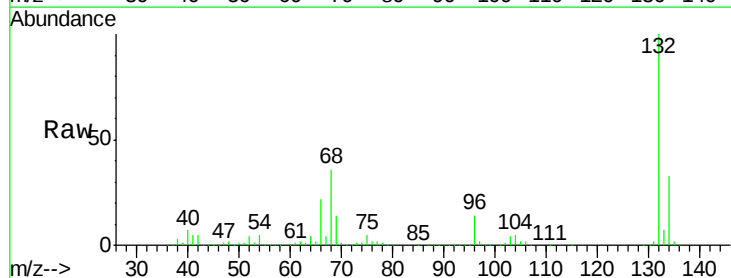
Tgt Ion: 77 Resp: 11910

Ion Ratio Lower Upper

77 100

105 89.5 81.1 121.1

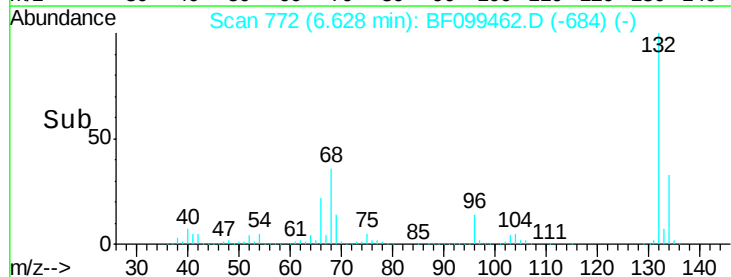
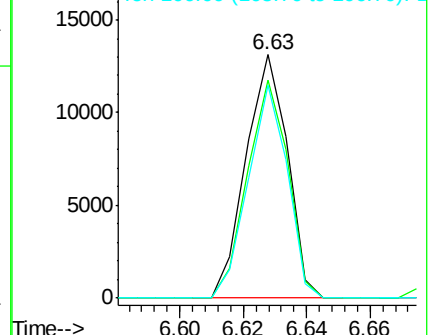
106 87.5 74.5 114.5

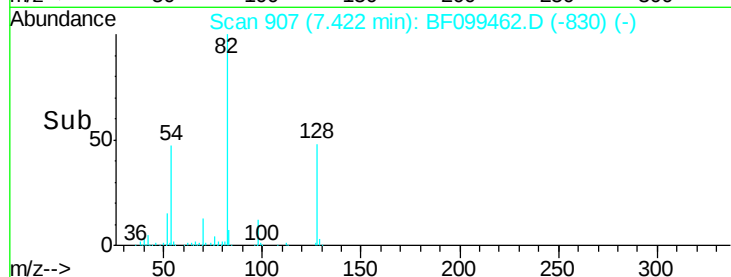
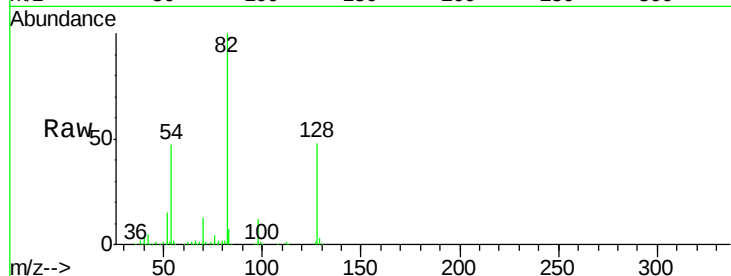


Abundance Ion 77.00 (76.70 to 77.70): BF0

Ion 105.00 (104.70 to 105.70): B

Ion 106.00 (105.70 to 106.70): B





#19

n-Nitroso-di-n-propylamine

Concen: 14.18 ng

RT: 7.42 min Scan# 907

Delta R.T. 0.15 min

Lab File: BF099462.D

Acq: 14 Oct 2017 1:49

Instrument :

BNA\_F

ClientSampled :

Tot Ion: 70 Resp: 66504

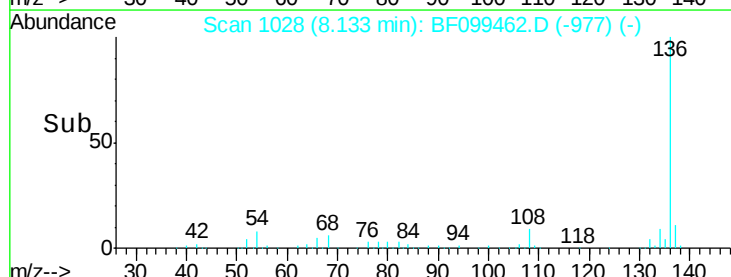
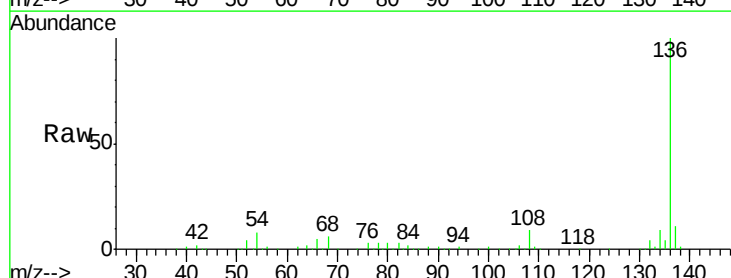
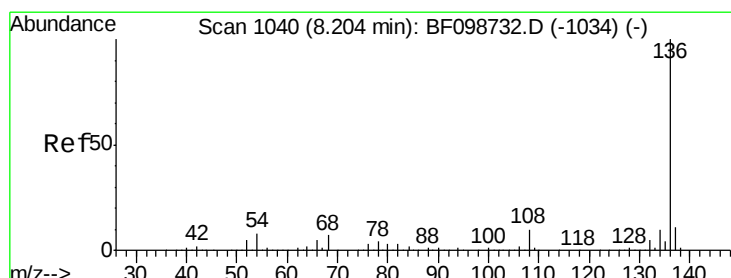
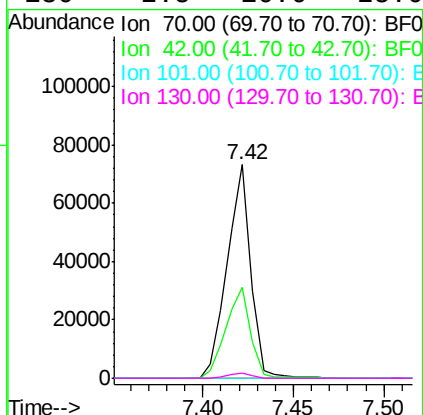
Ion Ratio Lower Upper

70 100

42 42.4 47.5 71.3#

101 0.0 7.4 11.2#

130 2.5 16.6 25.0#



#21

Naphthalene-d8

Concen: 20.00 ng

RT: 8.13 min Scan# 1028

Delta R.T. -0.00 min

Lab File: BF099462.D

Acq: 14 Oct 2017 1:49

Tgt Ion: 136 Resp: 371373

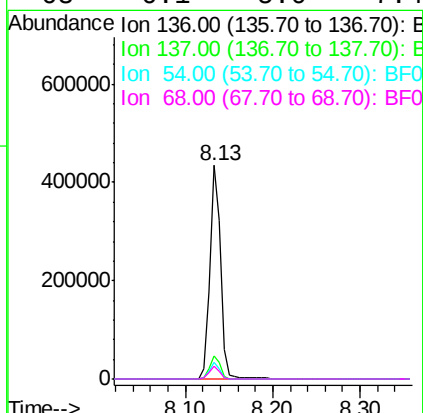
Ion Ratio Lower Upper

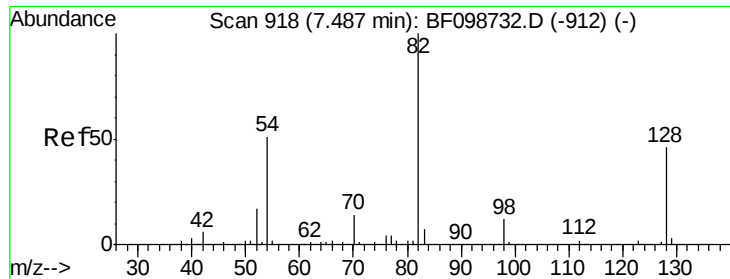
136 100

137 10.8 8.9 13.3

54 7.5 6.6 9.8

68 6.1 5.0 7.4

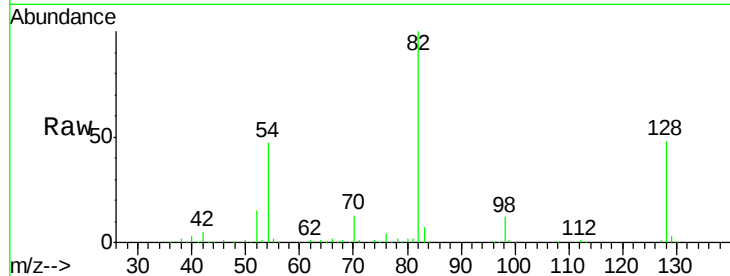




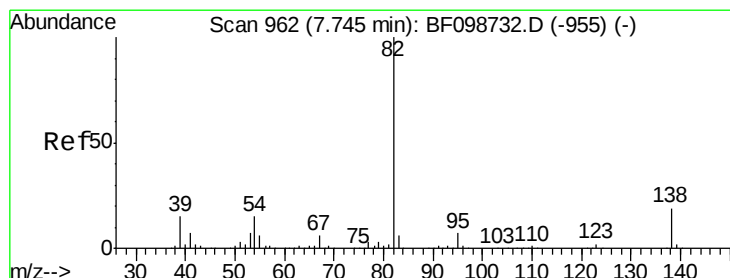
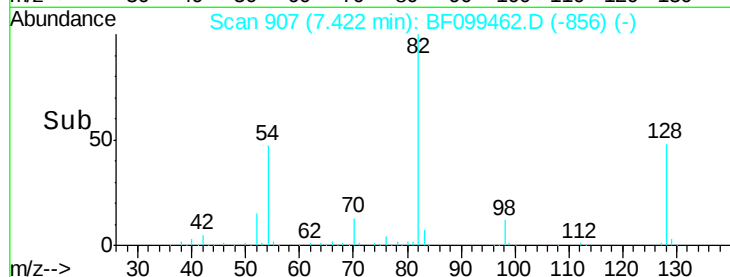
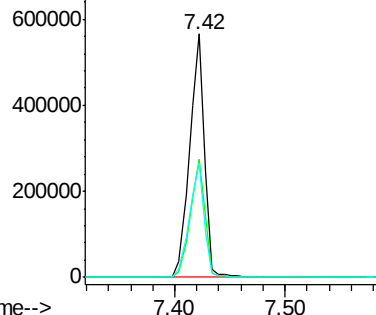
#23  
 Nitrobenzene-d5  
 Concen: 91.07 ng  
 RT: 7.42 min Scan# 907  
 Delta R.T. -0.00 min  
 Lab File: BF099462.D  
 Acq: 14 Oct 2017 1:49

Instrument :  
 BNA\_F  
 ClientSampled :

| Tot Ion   | 82   | Resp  | 527385 |
|-----------|------|-------|--------|
| Ion Ratio | 100  | Lower | Upper  |
| 128       | 48.3 | 36.1  | 54.1   |
| 54        | 46.9 | 41.4  | 62.2   |

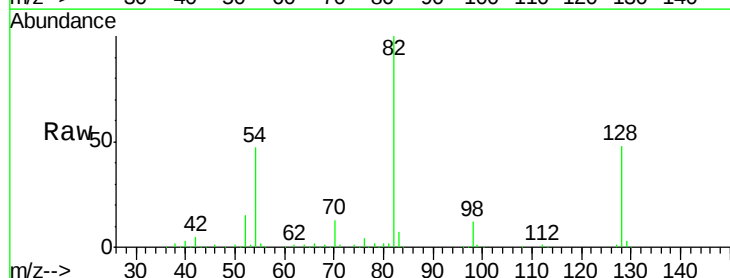


Abundance Ion 82.00 (81.70 to 82.70): BF0  
 Ion 128.00 (127.70 to 128.70): BF0  
 Ion 54.00 (53.70 to 54.70): BF0

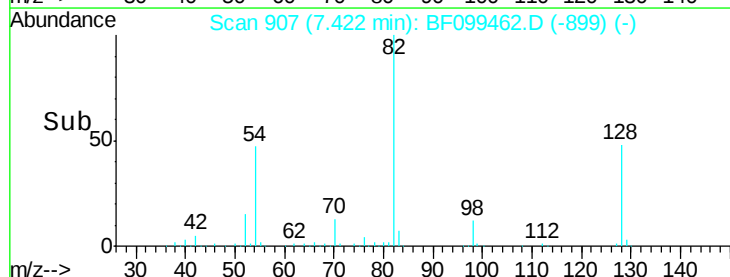
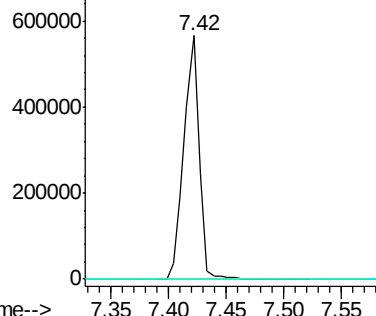


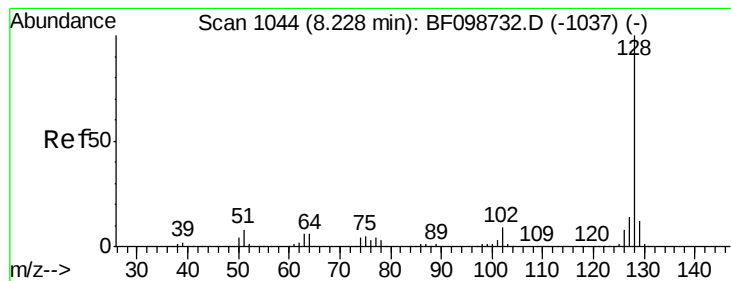
#25  
 Isophorone  
 Concen: 44.05 ng  
 RT: 7.42 min Scan# 907  
 Delta R.T. -0.25 min  
 Lab File: BF099462.D  
 Acq: 14 Oct 2017 1:49

| Tgt Ion   | 82  | Resp  | 527379 |
|-----------|-----|-------|--------|
| Ion Ratio | 100 | Lower | Upper  |
| 95        | 0.0 | 5.2   | 7.8#   |
| 138       | 0.0 | 14.9  | 22.3#  |



Abundance Ion 82.00 (81.70 to 82.70): BF0  
 Ion 95.00 (94.70 to 95.70): BF0  
 Ion 138.00 (137.70 to 138.70): BF0





#31

Naphthalene

Concen: 17.41 ng

RT: 8.16 min Scan# 1032

Delta R.T. -0.00 min

Lab File: BF099462.D

Acq: 14 Oct 2017 1:49

Instrument :

BNA\_F

ClientSampleId :

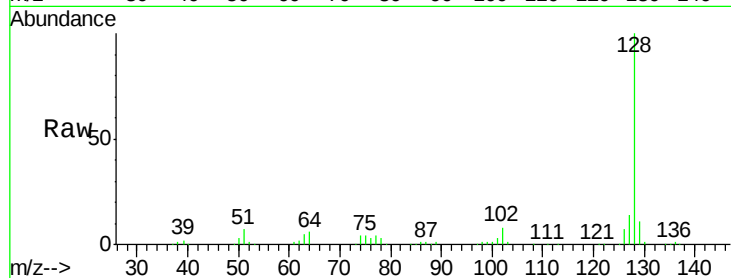
Tot Ion:128 Resp: 303726

Ion Ratio Lower Upper

128 100

129 10.9 8.8 13.2

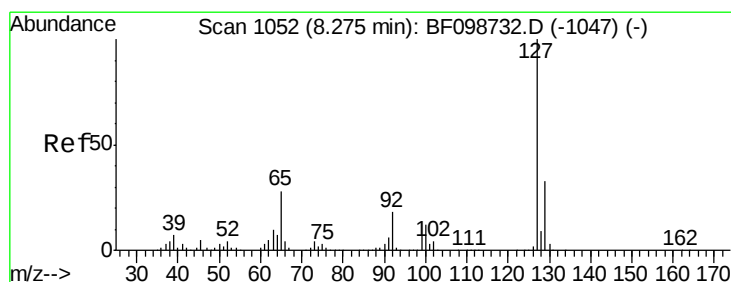
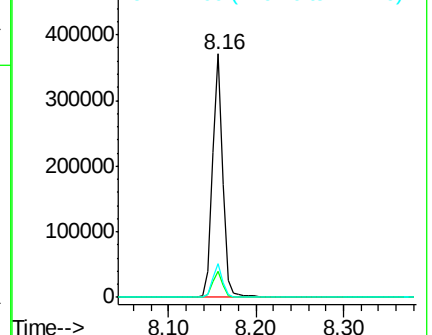
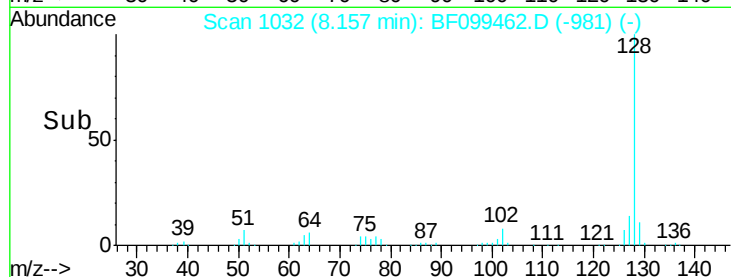
127 13.6 10.9 16.3



Abundance Ion 128.00 (127.70 to 128.70): E

Ion 129.00 (128.70 to 129.70): E

Ion 127.00 (126.70 to 127.70): E



#33

4-Chloroaniline

Concen: 5.43 ng

RT: 8.16 min Scan# 1032

Delta R.T. -0.05 min

Lab File: BF099462.D

Acq: 14 Oct 2017 1:49

Tgt Ion:127 Resp: 39555

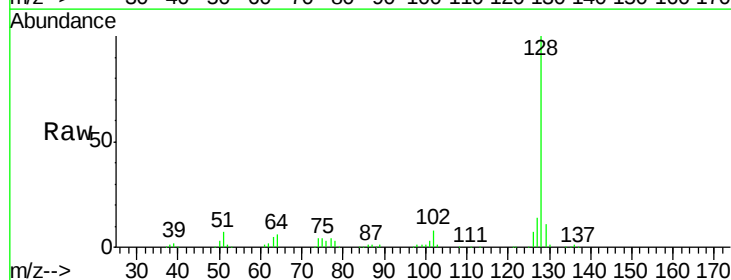
Ion Ratio Lower Upper

127 100

129 79.9 25.9 38.9#

65 0.0 25.0 37.4#

92 0.0 15.2 22.8#

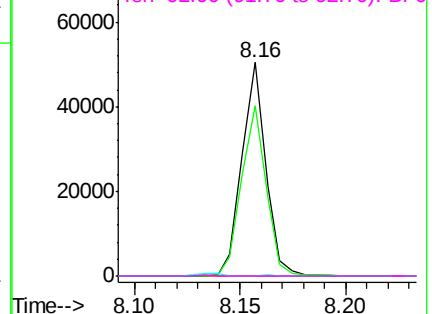
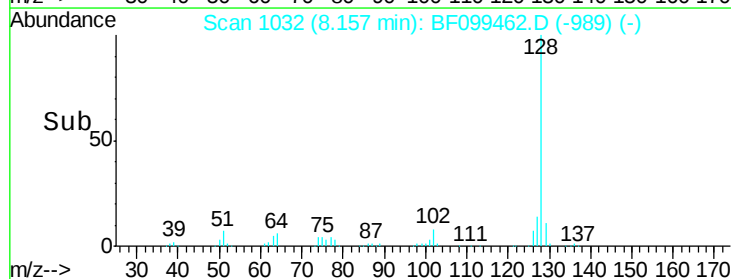


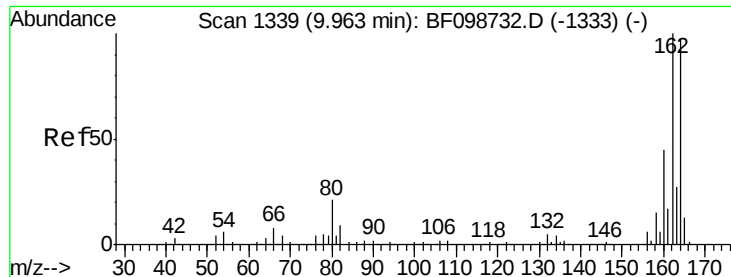
Abundance Ion 127.00 (126.70 to 127.70): E

Ion 129.00 (128.70 to 129.70): E

Ion 65.00 (64.70 to 65.70): BF0

Ion 92.00 (91.70 to 92.70): BF0





#38

Acenaphthene-d10

Concen: 20.00 ng

RT: 9.89 min Scan# 1327

Delta R.T. -0.00 min

Lab File: BF099462.D

Acq: 14 Oct 2017 1:49

Instrument :

BNA\_F

ClientSampleId :

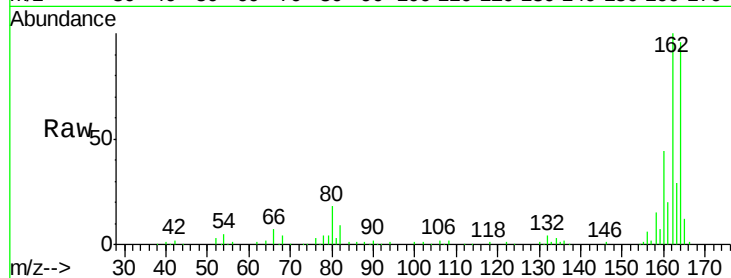
Tot Ion:164 Resp: 148644

Ion Ratio Lower Upper

164 100

162 104.5 86.1 129.1

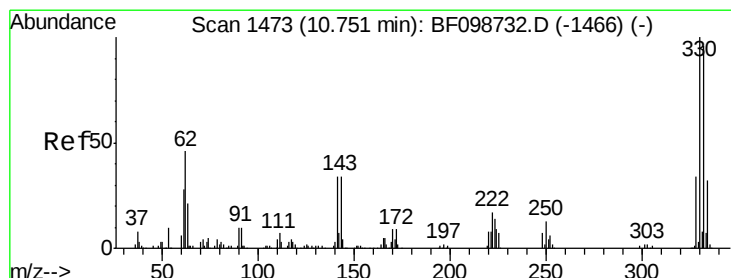
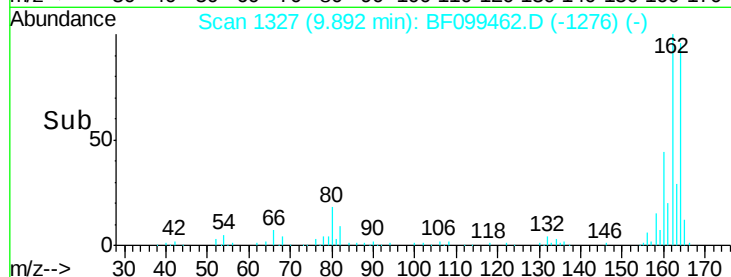
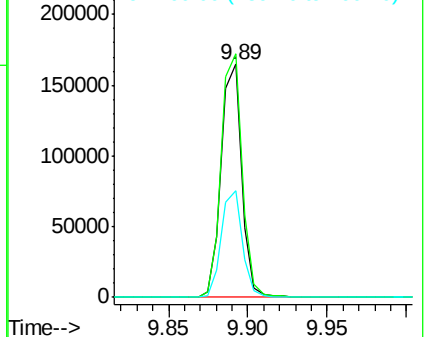
160 45.8 38.3 57.5



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: 111.26 ng

RT: 10.68 min Scan# 1461

Delta R.T. -0.00 min

Lab File: BF099462.D

Acq: 14 Oct 2017 1:49

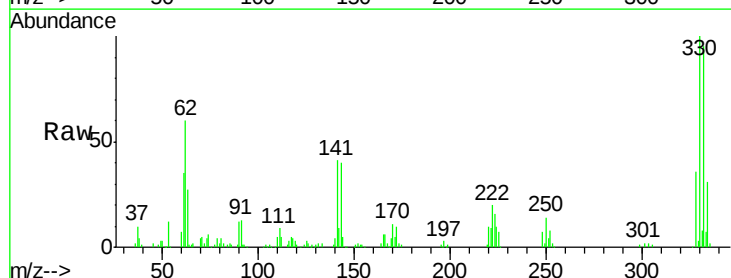
Tgt Ion:330 Resp: 135323

Ion Ratio Lower Upper

330 100

332 96.7 77.0 115.6

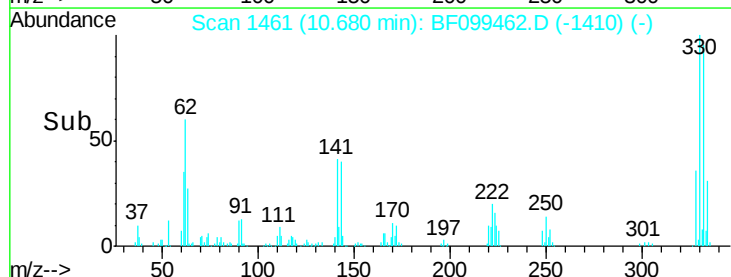
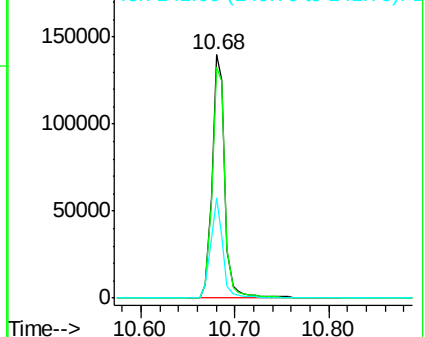
141 39.4 29.9 44.9

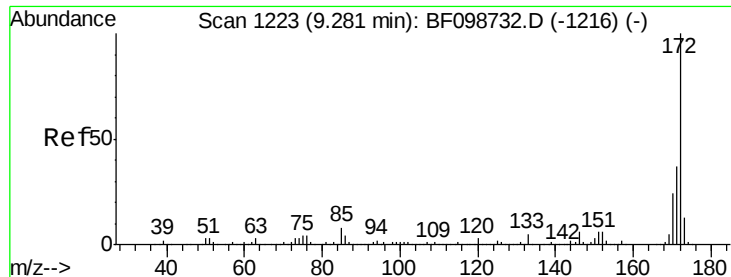


Abundance Ion 329.80 (329.50 to 330.50): E

Ion 331.80 (331.50 to 332.50): E

Ion 141.00 (140.70 to 141.70): E

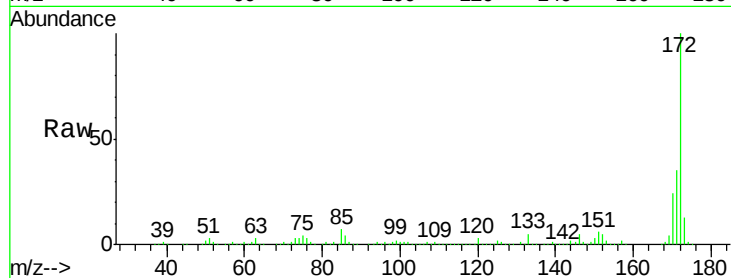




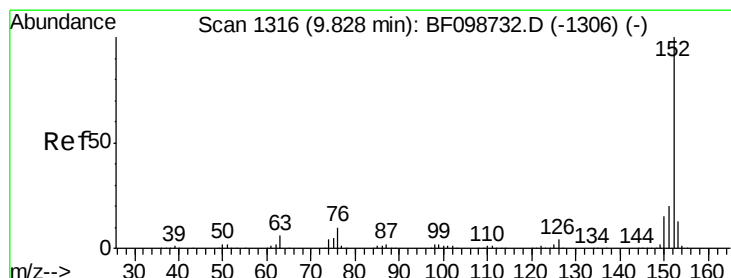
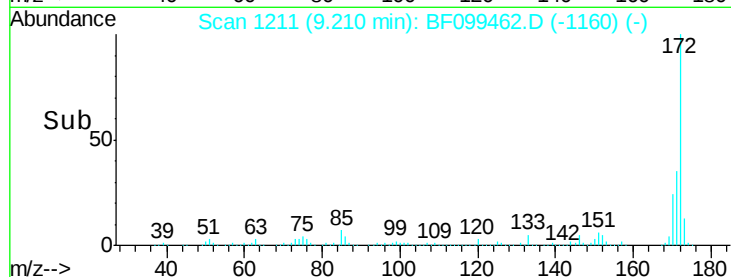
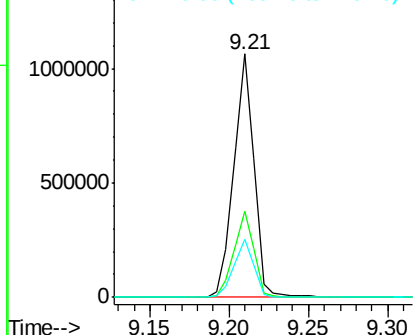
#44  
 2-Fluorobiphenyl  
 Concen: 106.26 ng  
 RT: 9.21 min Scan# 1211  
 Delta R.T. -0.00 min  
 Lab File: BF099462.D  
 Acq: 14 Oct 2017 1:49

Instrument :  
 BNA\_F  
 ClientSampled :

Tot Ion:172 Resp: 946116  
 Ion Ratio Lower Upper  
 172 100  
 171 35.4 29.7 44.5  
 170 23.9 19.6 29.4

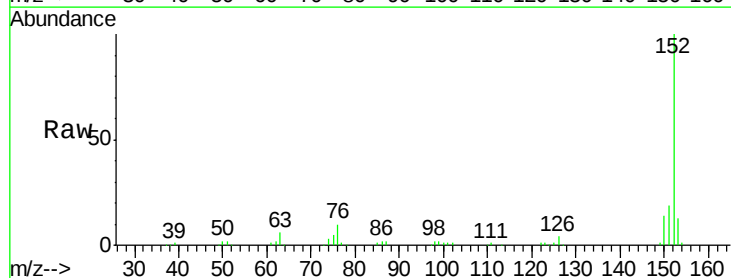


Abundance Ion 172.00 (171.70 to 172.70): E  
 Ion 171.00 (170.70 to 171.70): E  
 Ion 170.00 (169.70 to 170.70): E

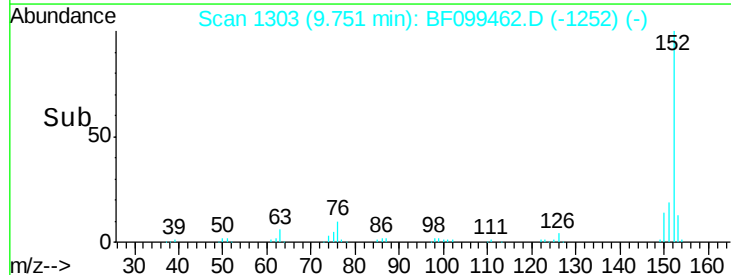
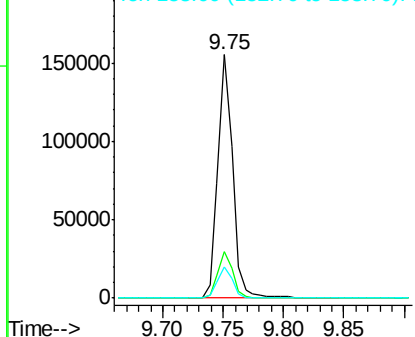


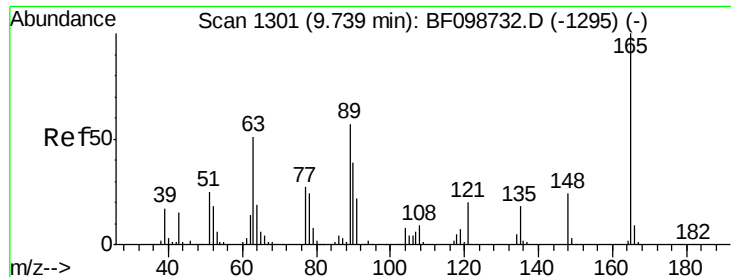
#48  
 Acenaphthylene  
 Concen: 8.87 ng  
 RT: 9.75 min Scan# 1303  
 Delta R.T. -0.00 min  
 Lab File: BF099462.D  
 Acq: 14 Oct 2017 1:49

Tgt Ion:152 Resp: 130226  
 Ion Ratio Lower Upper  
 152 100  
 151 19.4 16.3 24.5  
 153 12.9 10.7 16.1



Abundance Ion 152.00 (151.70 to 152.70): E  
 Ion 151.00 (150.70 to 151.70): E  
 Ion 153.00 (152.70 to 153.70): E

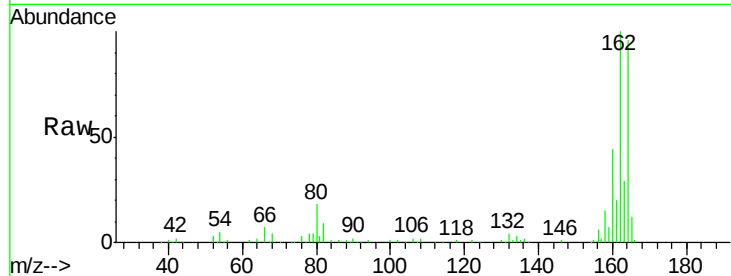




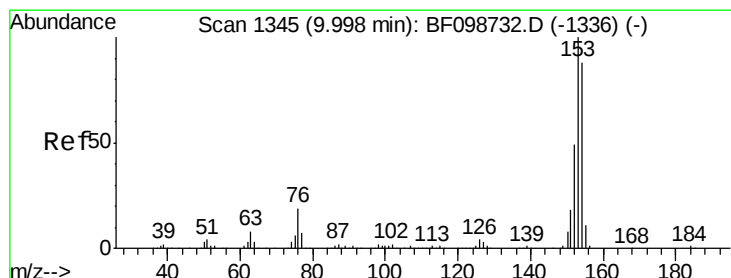
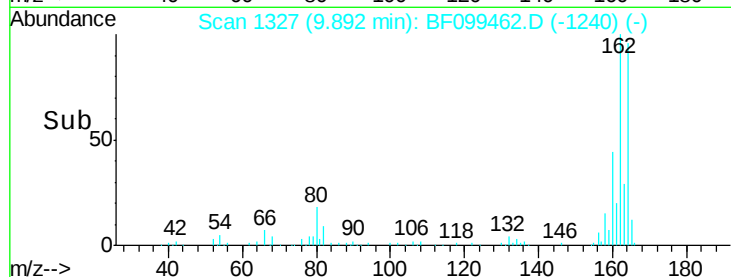
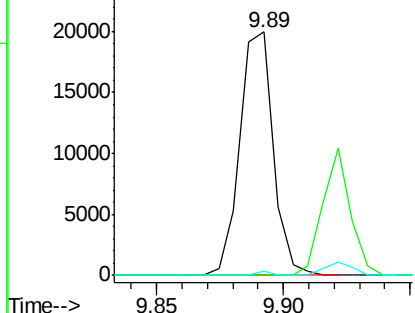
#50  
 2,6-Dinitrotoluene  
 Concen: 7.46 ng  
 RT: 9.89 min Scan# 1327  
 Delta R.T. 0.21 min  
 Lab File: BF099462.D  
 Acq: 14 Oct 2017 1:49

Instrument :  
 BNA\_F  
 ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 165     | 100   |       |       |
| 63      | 0.0   | 44.7  | 67.1# |
| 89      | 1.8   | 44.0  | 66.0# |

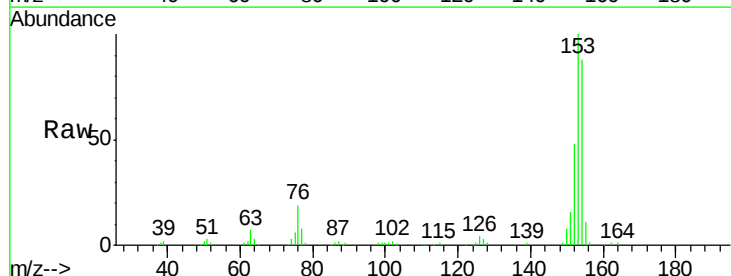


Abundance Ion 165.00 (164.70 to 165.70): E  
 Ion 63.00 (62.70 to 63.70): BF0  
 Ion 89.00 (88.70 to 89.70): BF0

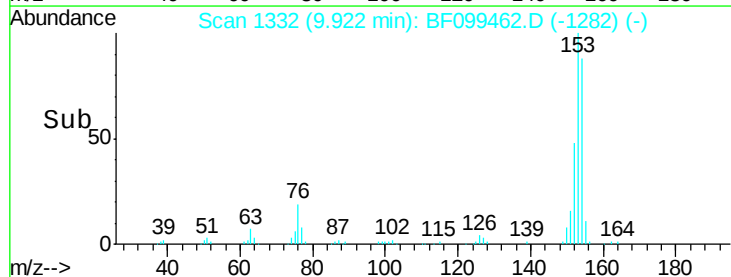
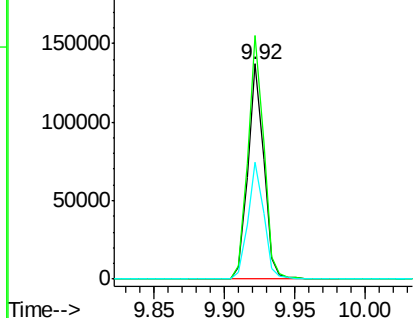


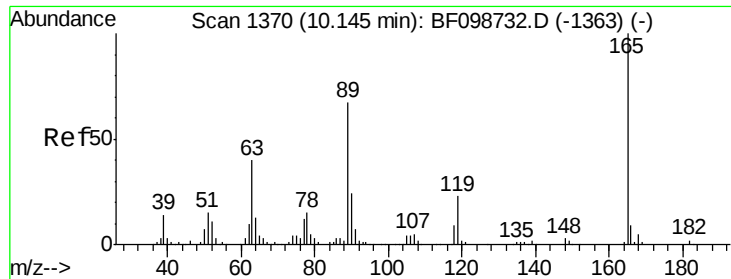
#51  
 Acenaphthene  
 Concen: 11.62 ng  
 RT: 9.92 min Scan# 1332  
 Delta R.T. -0.01 min  
 Lab File: BF099462.D  
 Acq: 14 Oct 2017 1:49

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 154     | 100   |       |       |
| 153     | 113.2 | 91.2  | 136.8 |
| 152     | 54.1  | 43.8  | 65.8  |



Abundance Ion 154.00 (153.70 to 154.70): E  
 Ion 153.00 (152.70 to 153.70): E  
 Ion 152.00 (151.70 to 152.70): E

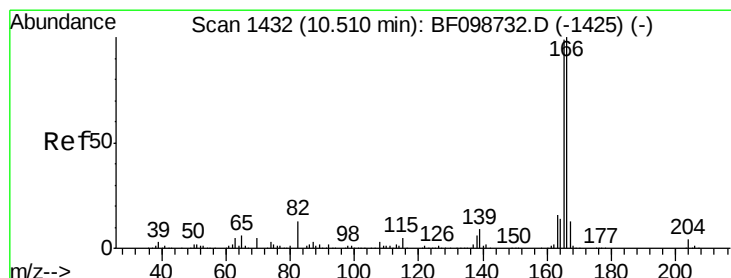
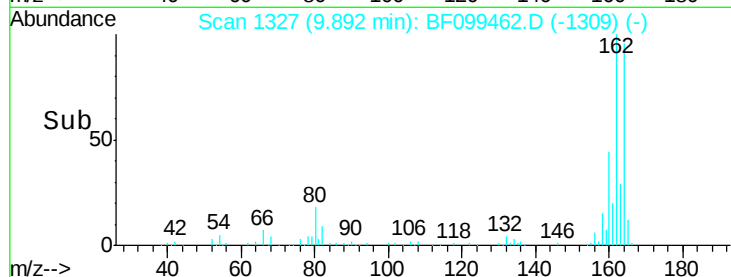
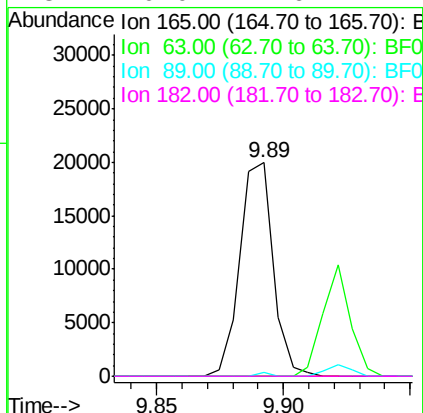
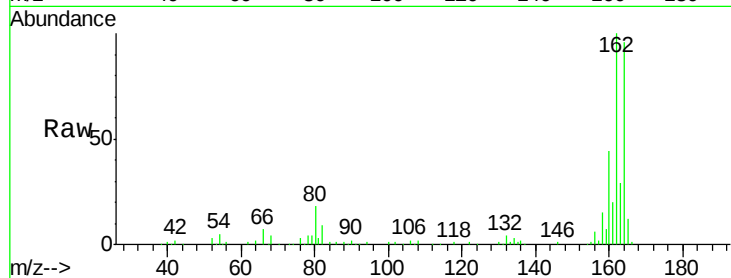




#56  
2,4-Dinitrotoluene  
Concen: 5.75 ng  
RT: 9.89 min Scan# 1327  
Delta R.T. -0.19 min  
Lab File: BF099462.D  
Acq: 14 Oct 2017 1:49

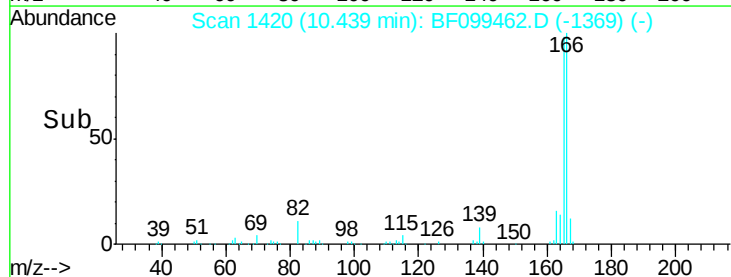
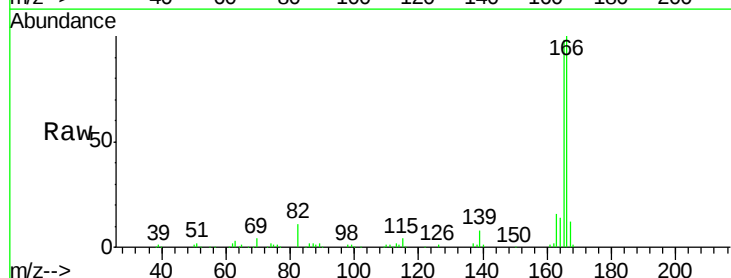
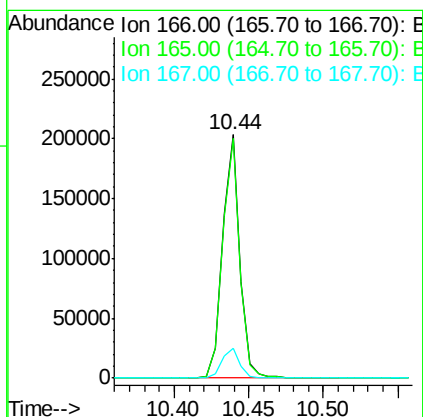
Instrument :  
BNA\_F  
ClientSampleId :

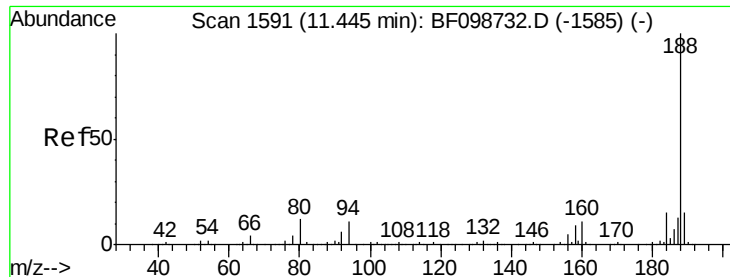
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 165     | 100   |       |       |
| 63      | 0.0   | 36.4  | 54.6# |
| 89      | 1.8   | 57.8  | 86.6# |
| 182     | 0.0   | 1.6   | 2.4#  |



#57  
Fluorene  
Concen: 16.63 ng  
RT: 10.44 min Scan# 1420  
Delta R.T. -0.00 min  
Lab File: BF099462.D  
Acq: 14 Oct 2017 1:49

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 166     | 100   |       |       |
| 165     | 98.2  | 79.8  | 119.8 |
| 167     | 12.5  | 10.6  | 16.0  |

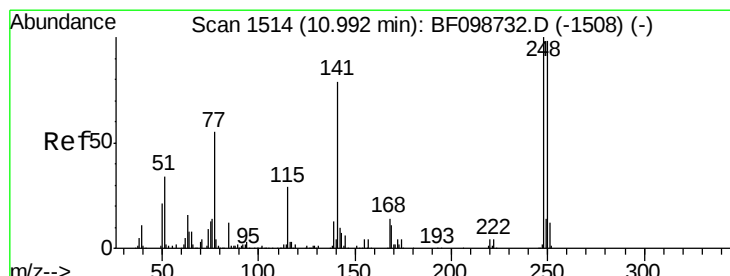
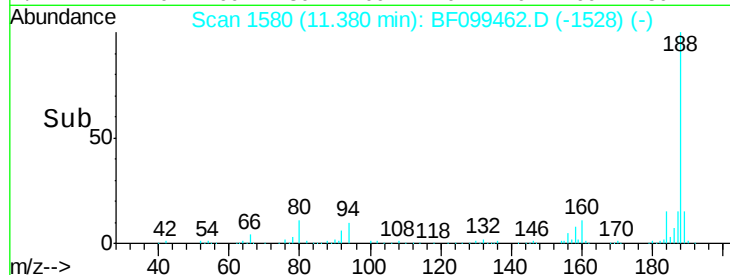
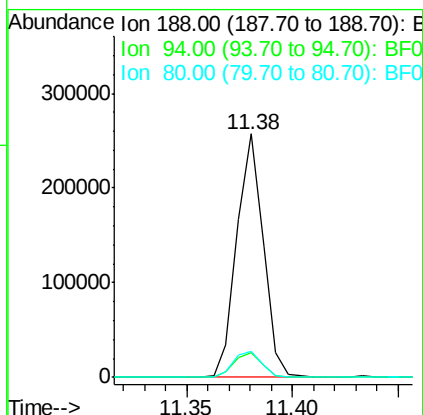
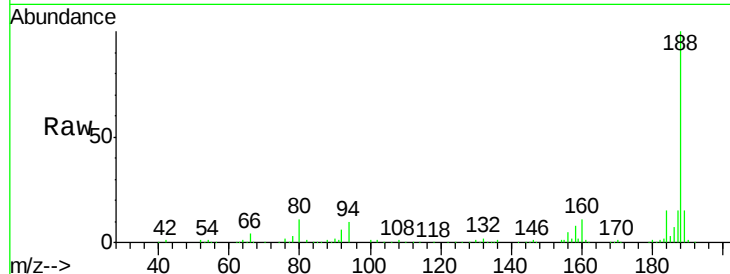




#63  
Phenanthrene-d10  
Concen: 20.00 ng  
RT: 11.38 min Scan# 1580  
Delta R.T. 0.01 min  
Lab File: BF099462.D  
Acq: 14 Oct 2017 1:49

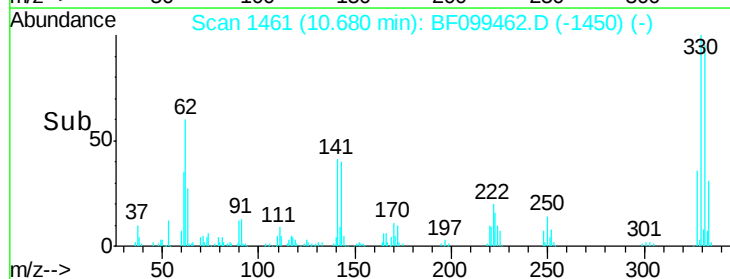
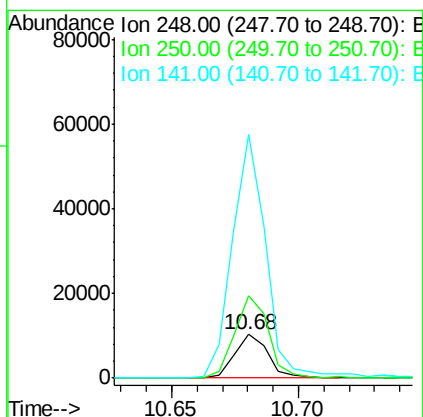
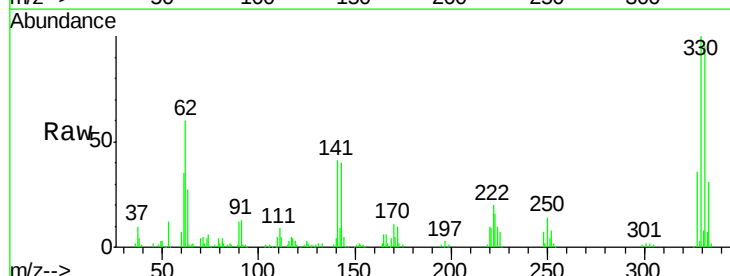
Instrument :  
BNA\_F  
ClientSampleId :

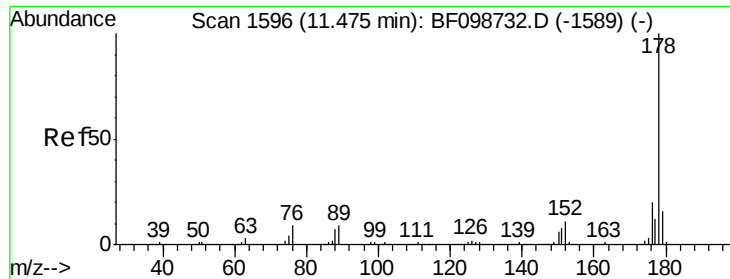
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 188     | 100   |       |       |
| 94      | 10.3  | 8.5   | 12.7  |
| 80      | 10.9  | 9.2   | 13.8  |



#66  
4-Bromophenyl-phenylether  
Concen: 4.29 ng  
RT: 10.68 min Scan# 1461  
Delta R.T. -0.24 min  
Lab File: BF099462.D  
Acq: 14 Oct 2017 1:49

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 248     | 100   |       |        |
| 250     | 190.0 | 76.9  | 115.3# |
| 141     | 562.1 | 74.4  | 111.6# |





#70

Phenanthrene

Concen: 81.69 ng

RT: 11.41 min Scan# 1585

Delta R.T. 0.01 min

Lab File: BF099462.D

Acq: 14 Oct 2017 1:49

Instrument :

BNA\_F

ClientSampleId :

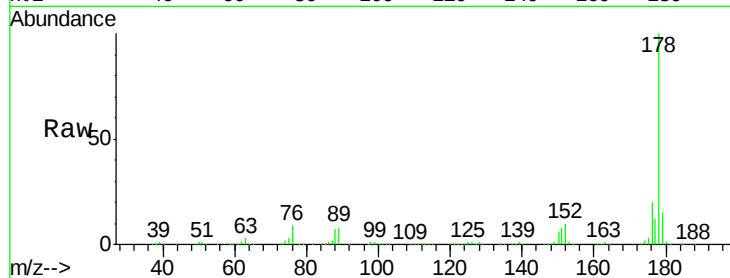
Tot Ion:178 Resp: 975997

Ion Ratio Lower Upper

178 100

176 19.6 15.8 23.8

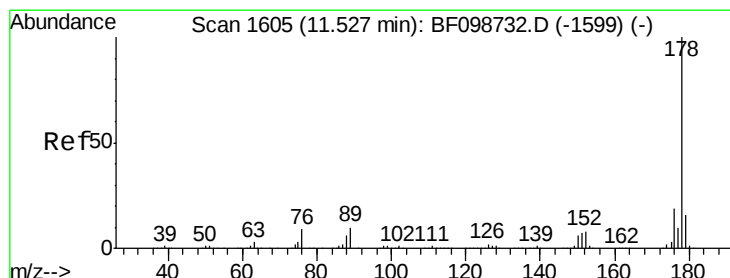
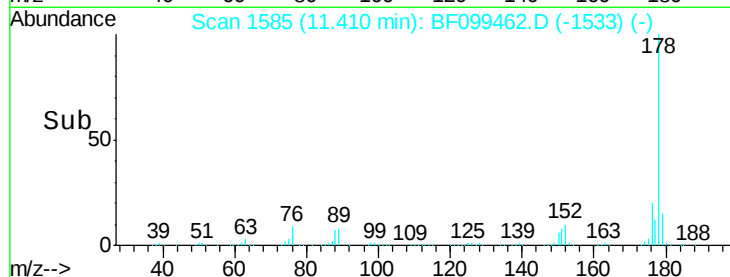
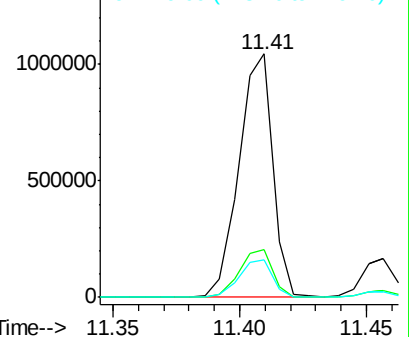
179 15.2 13.0 19.6



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



#71

Anthracene

Concen: 12.57 ng

RT: 11.46 min Scan# 1593

Delta R.T. 0.01 min

Lab File: BF099462.D

Acq: 14 Oct 2017 1:49

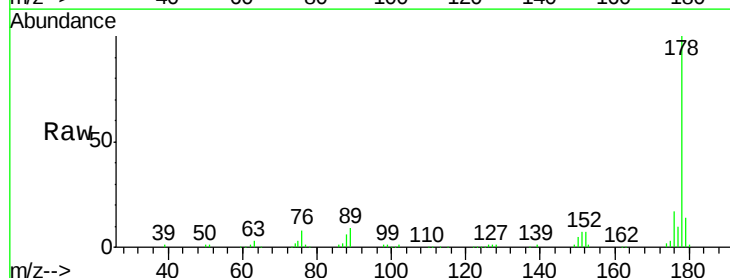
Tgt Ion:178 Resp: 153708

Ion Ratio Lower Upper

178 100

176 17.2 15.4 23.2

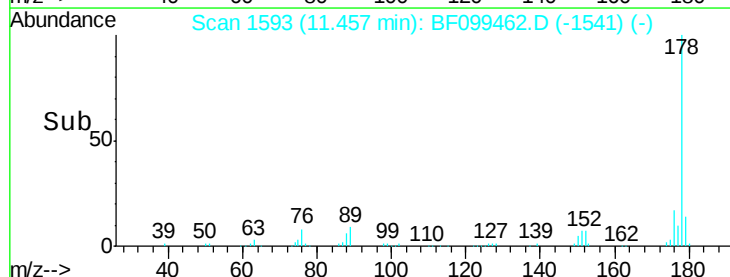
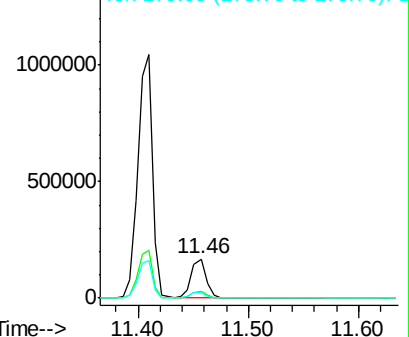
179 14.5 12.6 19.0

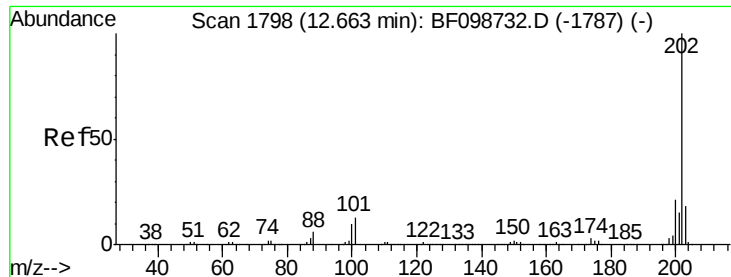


Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E

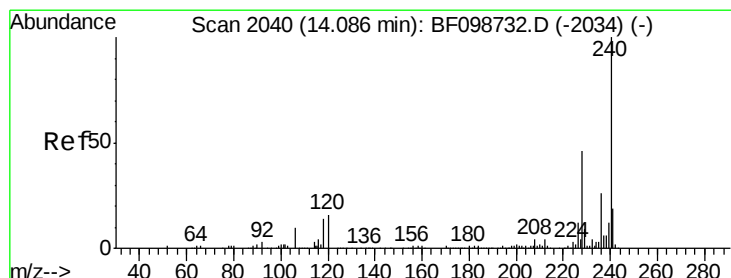
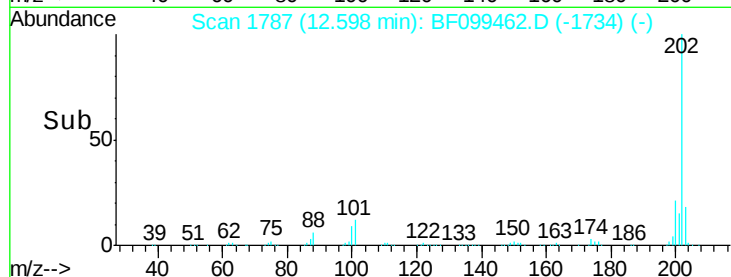
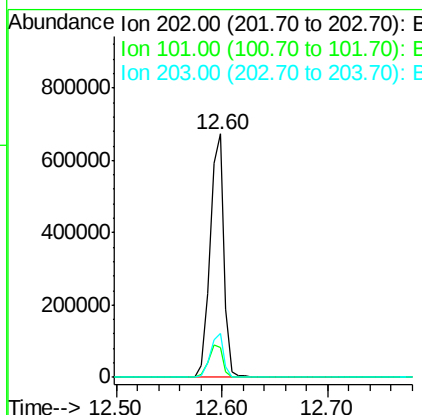
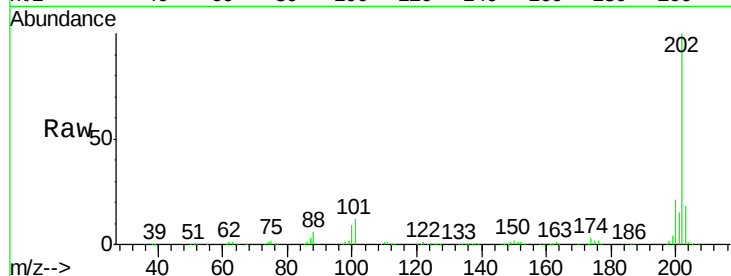




#74  
Fluoranthene  
Concen: 51.32 ng  
RT: 12.60 min Scan# 1787  
Delta R.T. 0.01 min  
Lab File: BF099462.D  
Acq: 14 Oct 2017 1:49

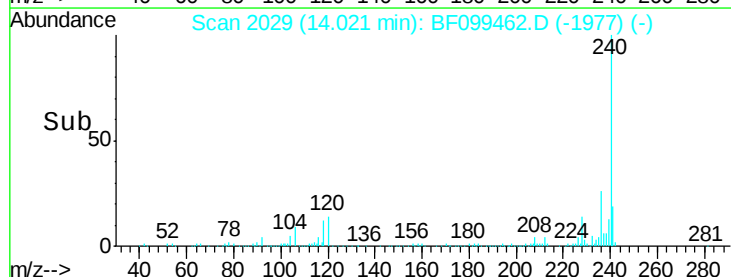
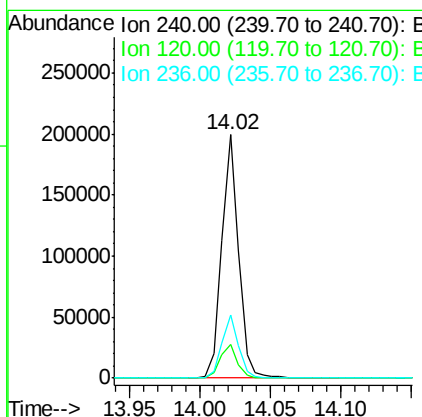
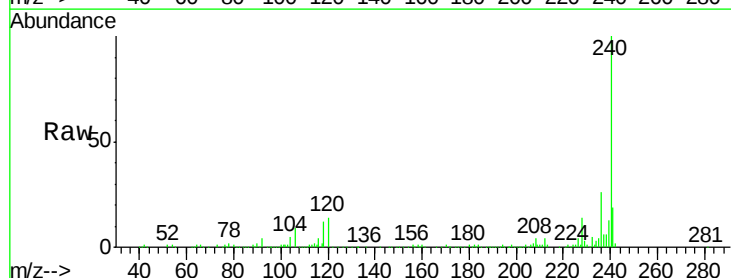
Instrument :  
BNA\_F  
ClientSampleId :

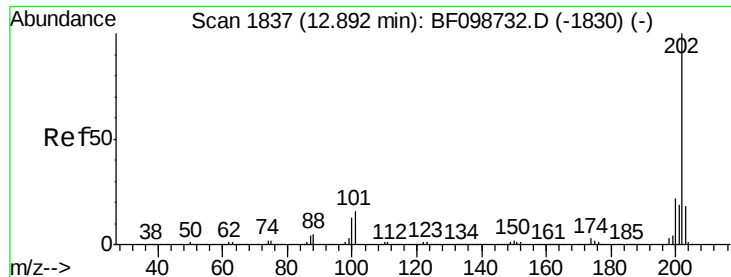
Tot Ion:202 Resp: 620883  
Ion Ratio Lower Upper  
202 100  
101 12.4 0.0 34.1  
203 17.9 0.0 38.1



#75  
Chrysene-d12  
Concen: 20.00 ng  
RT: 14.02 min Scan# 2029  
Delta R.T. 0.01 min  
Lab File: BF099462.D  
Acq: 14 Oct 2017 1:49

Tgt Ion:240 Resp: 165770  
Ion Ratio Lower Upper  
240 100  
120 13.7 9.5 14.3  
236 25.9 20.7 31.1

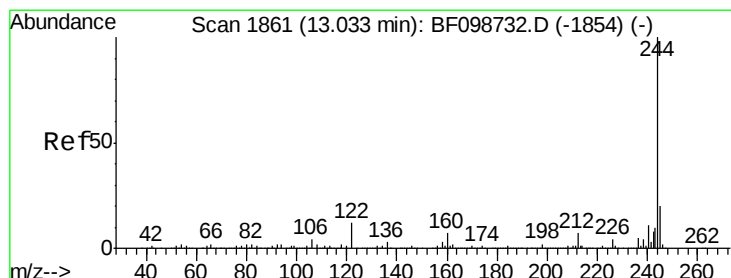
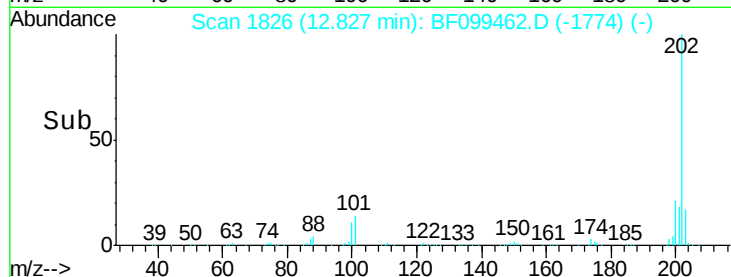
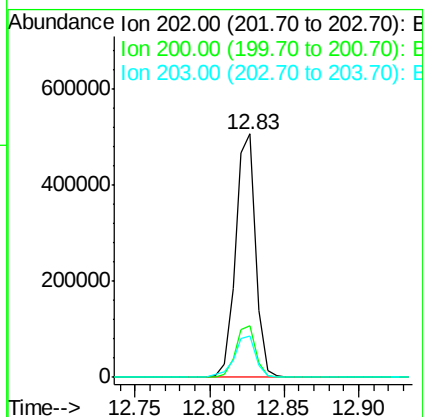
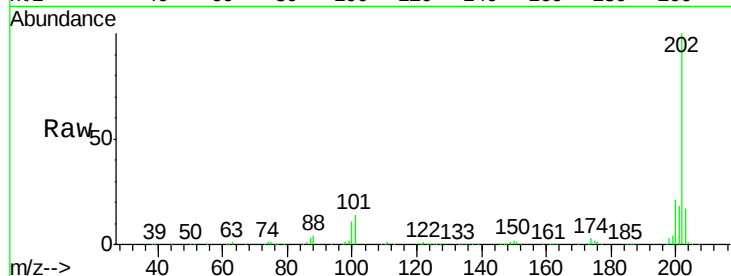




#77  
Pvrene  
Concen: 37.89 ng  
RT: 12.83 min Scan# 1826  
Delta R.T. 0.01 min  
Lab File: BF099462.D  
Acq: 14 Oct 2017 1:49

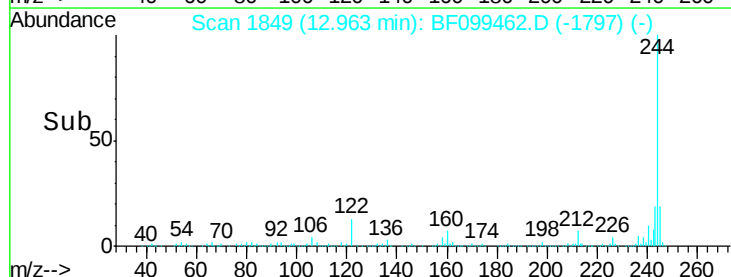
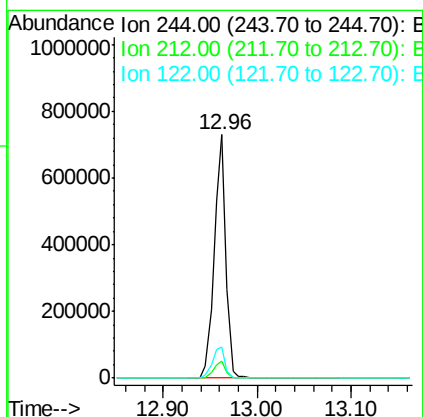
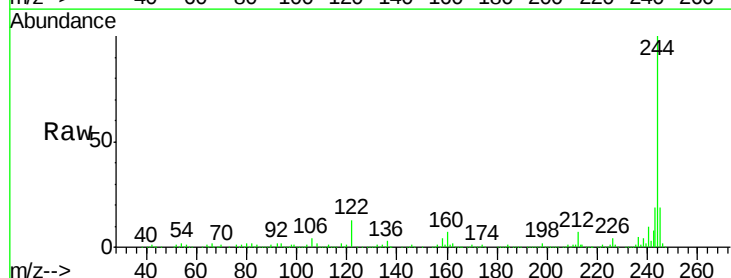
Instrument :  
BNA\_F  
ClientSampleId :

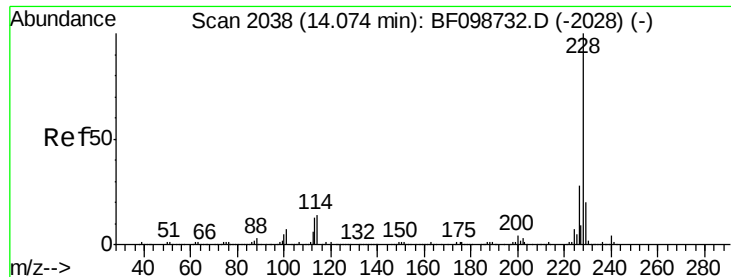
Tot Ion:202 Resp: 479011  
Ion Ratio Lower Upper  
202 100  
200 21.0 17.4 26.2  
203 17.2 14.3 21.5



#78  
Terphenyl-d14  
Concen: 87.67 ng  
RT: 12.96 min Scan# 1849  
Delta R.T. 0.01 min  
Lab File: BF099462.D  
Acq: 14 Oct 2017 1:49

Tgt Ion:244 Resp: 639053  
Ion Ratio Lower Upper  
244 100  
212 6.8 5.4 8.0  
122 13.0 11.0 16.4

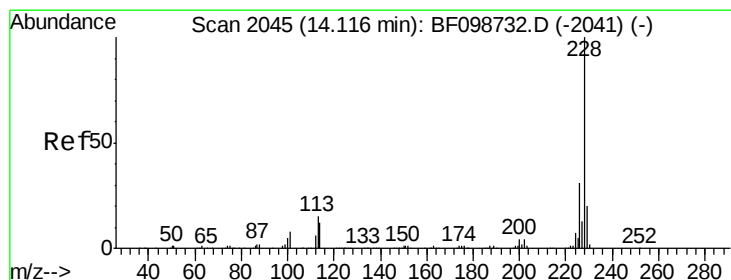
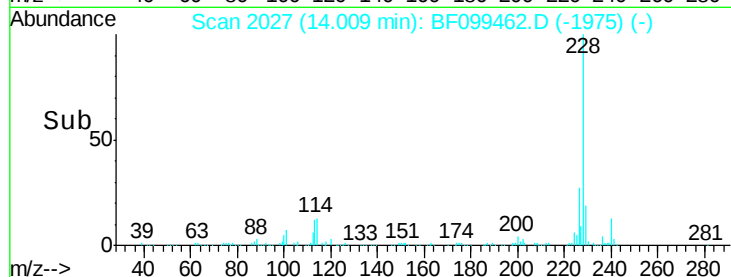
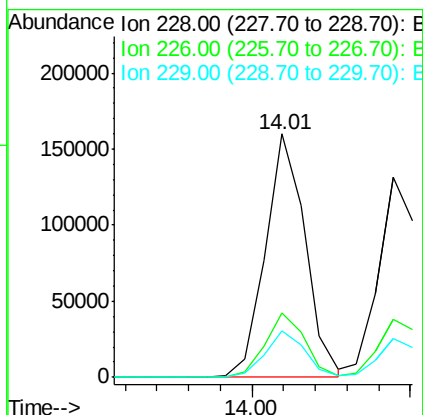
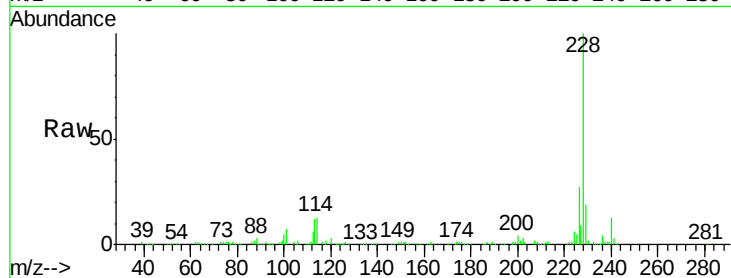




#80  
Benzo(a)anthracene  
Concen: 13.90 ng  
RT: 14.01 min Scan# 2027  
Delta R.T. 0.01 min  
Lab File: BF099462.D  
Acq: 14 Oct 2017 1:49

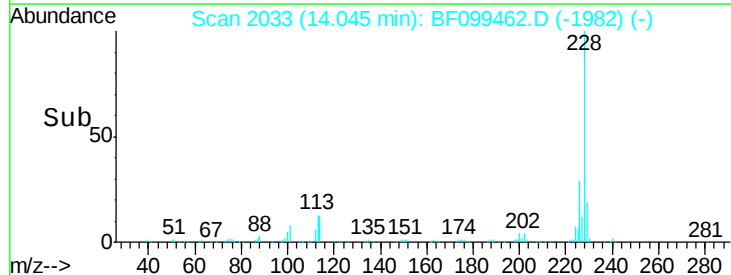
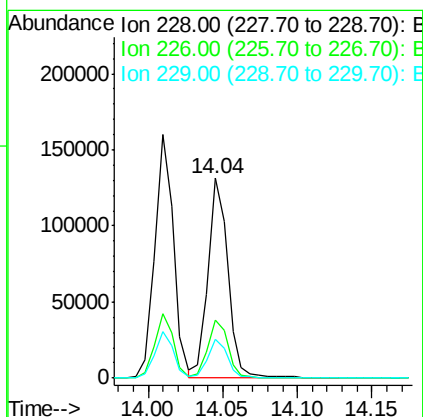
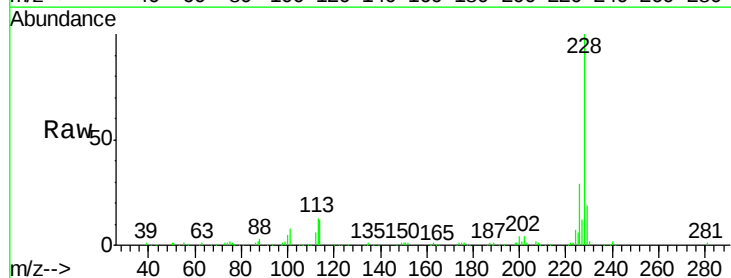
Instrument :  
BNA\_F  
ClientSampleId :

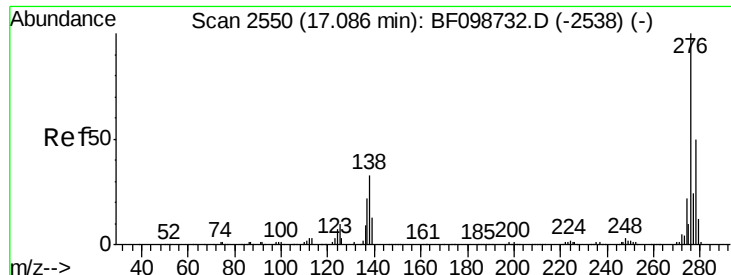
Tot Ion:228 Resp: 139548  
Ion Ratio Lower Upper  
228 100  
226 26.6 22.6 33.8  
229 18.9 15.8 23.6



#82  
Chrysene  
Concen: 12.77 ng  
RT: 14.04 min Scan# 2033  
Delta R.T. -0.00 min  
Lab File: BF099462.D  
Acq: 14 Oct 2017 1:49

Tgt Ion:228 Resp: 122012  
Ion Ratio Lower Upper  
228 100  
226 29.2 25.0 37.6  
229 19.1 16.2 24.4

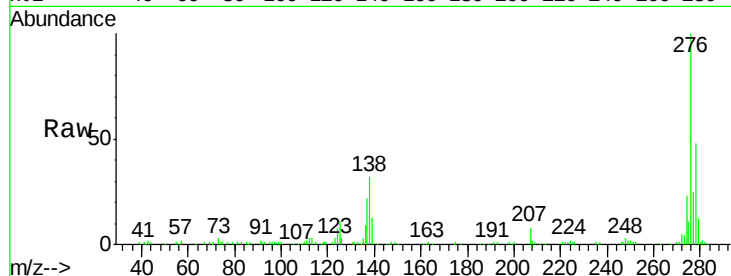




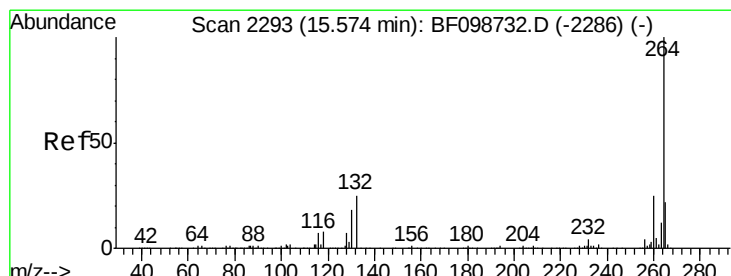
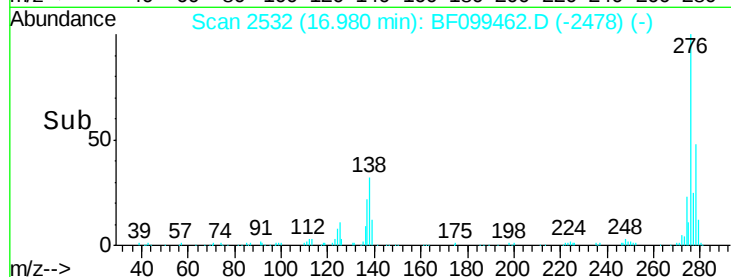
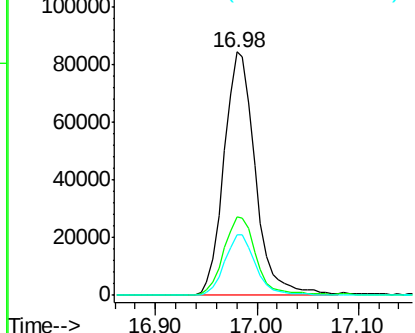
#85  
 Indeno(1,2,3-cd)pyrene  
 Concen: 23.76 ng  
 RT: 16.98 min Scan# 2532  
 Delta R.T. 0.02 min  
 Lab File: BF099462.D  
 Acq: 14 Oct 2017 1:49

Instrument :  
 BNA\_F  
 ClientSampleId :

Tot Ion:276 Resp: 181615  
 Ion Ratio Lower Upper  
 276 100  
 138 33.4 25.0 37.6  
 277 24.6 20.1 30.1

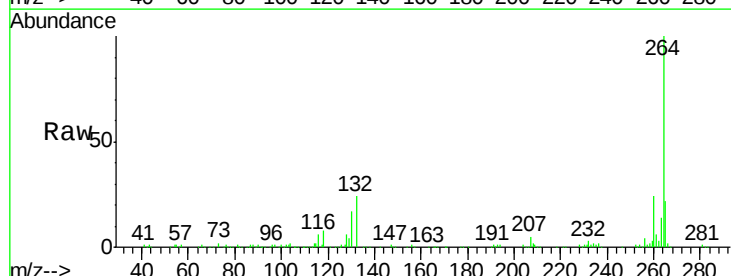


Abundance Ion 276.00 (275.70 to 276.70): E  
 Ion 138.00 (137.70 to 138.70): E  
 Ion 277.00 (276.70 to 277.70): E

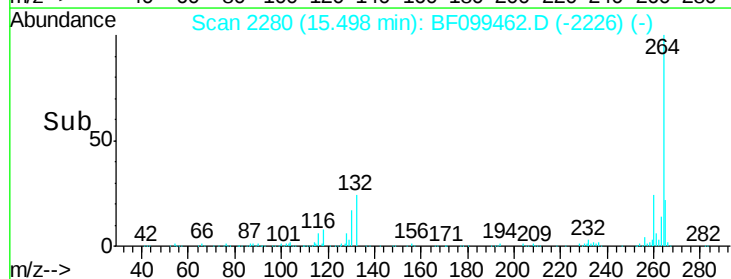
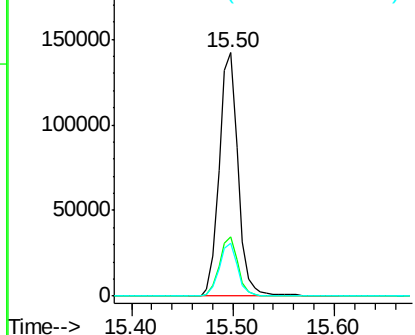


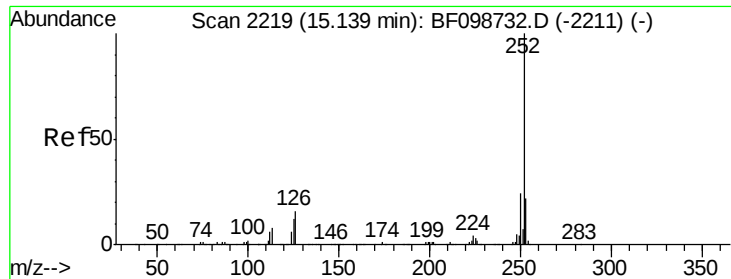
#86  
 Perylene-d12  
 Concen: 20.00 ng  
 RT: 15.50 min Scan# 2280  
 Delta R.T. 0.02 min  
 Lab File: BF099462.D  
 Acq: 14 Oct 2017 1:49

Tgt Ion:264 Resp: 183912  
 Ion Ratio Lower Upper  
 264 100  
 260 24.2 19.2 28.8  
 265 21.8 17.5 26.3



Abundance Ion 264.00 (263.70 to 264.70): E  
 Ion 260.00 (259.70 to 260.70): E  
 Ion 265.00 (264.70 to 265.70): E

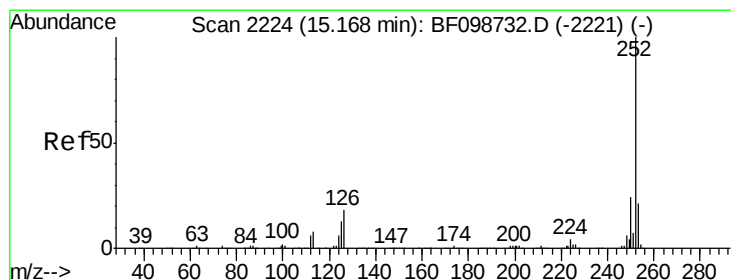
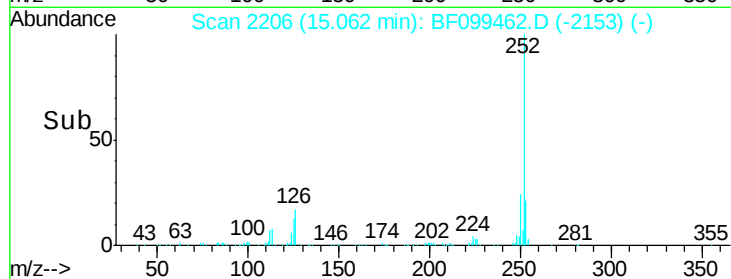
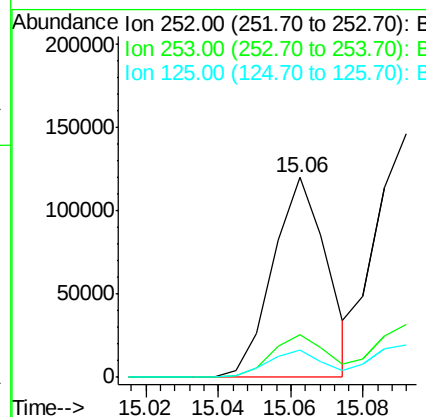
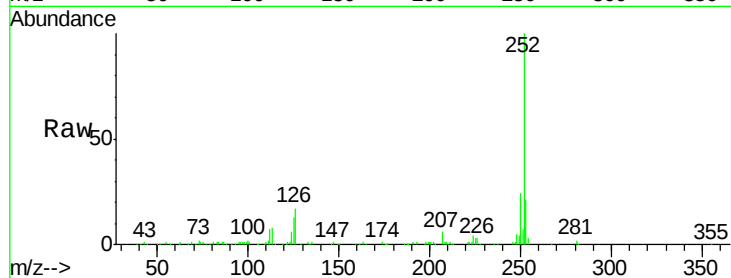




#87  
Benzo(b)fluoranthene  
Concen: 11.01 ng  
RT: 15.06 min Scan# 2206  
Delta R.T. 0.01 min  
Lab File: BF099462.D  
Acq: 14 Oct 2017 1:49

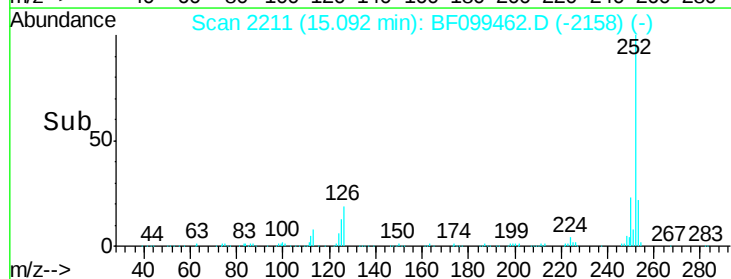
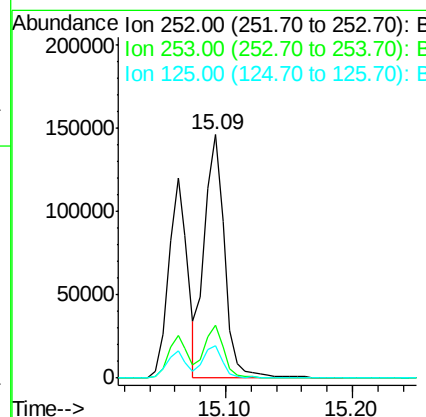
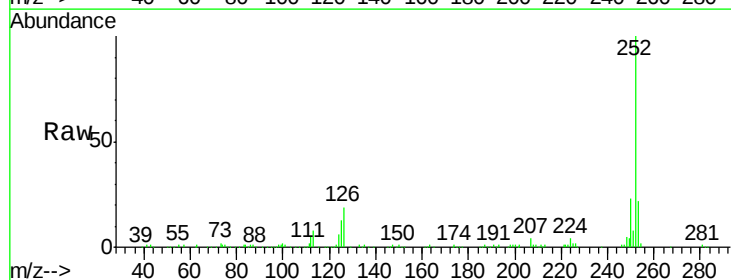
Instrument :  
BNA\_F  
ClientSampleId :

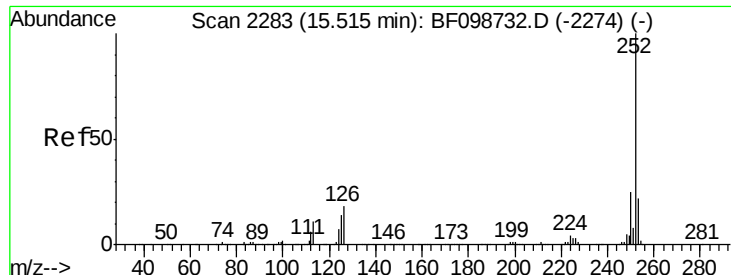
Tot Ion:252 Resp: 124516  
Ion Ratio Lower Upper  
252 100  
253 21.1 17.0 25.6  
125 13.5 9.0 13.6



#88  
Benzo(k)fluoranthene  
Concen: 14.45 ng  
RT: 15.09 min Scan# 2211  
Delta R.T. 0.01 min  
Lab File: BF099462.D  
Acq: 14 Oct 2017 1:49

Tgt Ion:252 Resp: 161341  
Ion Ratio Lower Upper  
252 100  
253 21.6 17.9 26.9  
125 13.5 10.2 15.2

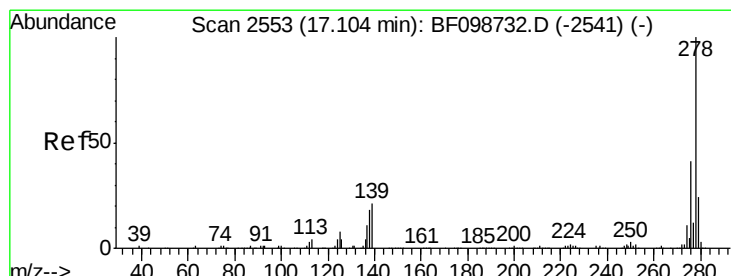
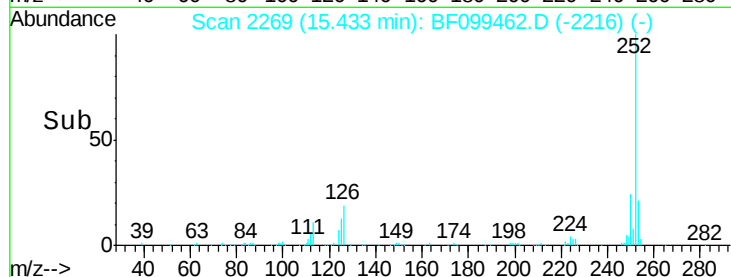
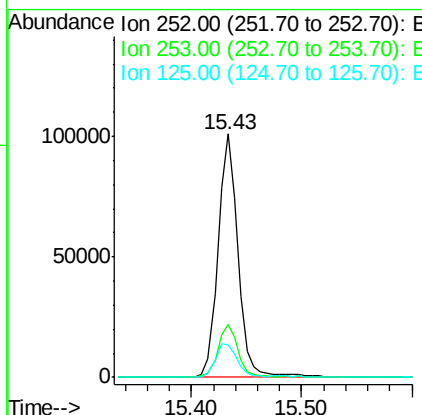
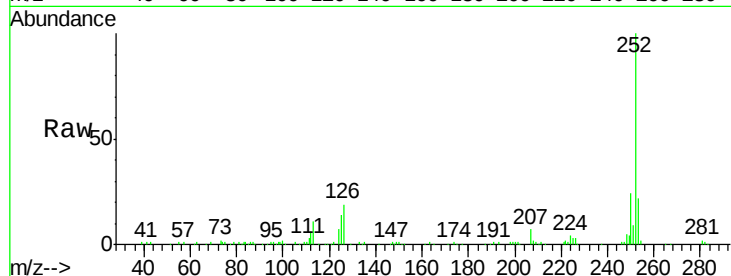




#89  
Benzo(a)pyrene  
Concen: 12.22 ng  
RT: 15.43 min Scan# 2269  
Delta R.T. 0.01 min  
Lab File: BF099462.D  
Acq: 14 Oct 2017 1:49

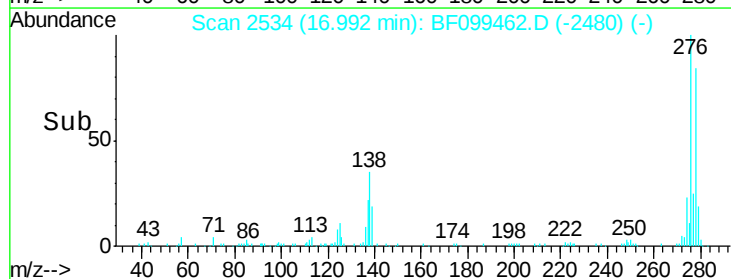
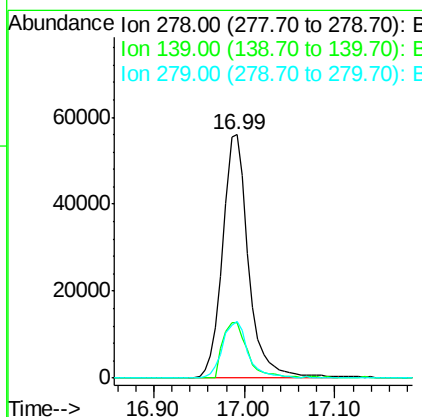
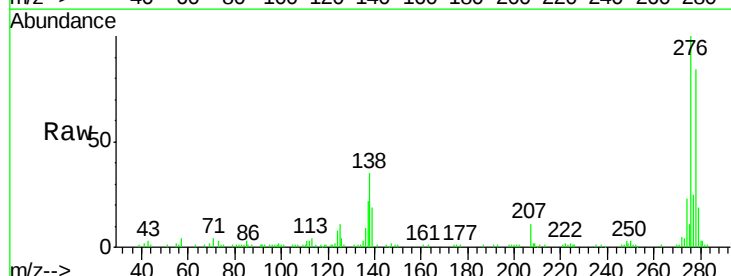
Instrument :  
BNA\_F  
ClientSampleId :

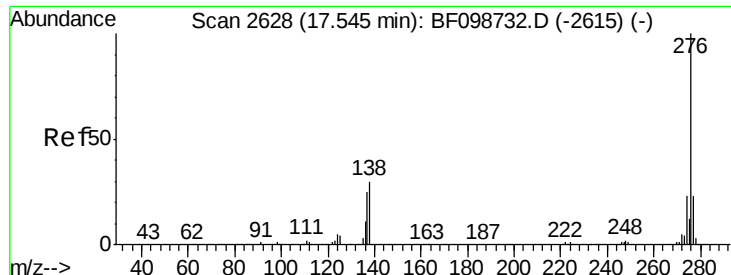
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 21.6  | 17.1  | 25.7  |
| 125     | 13.5  | 9.8   | 14.6  |



#90  
Dibenzo(a,h)anthracene  
Concen: 13.43 ng  
RT: 16.99 min Scan# 2534  
Delta R.T. 0.02 min  
Lab File: BF099462.D  
Acq: 14 Oct 2017 1:49

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 278     | 100   |       |       |
| 139     | 22.5  | 15.9  | 23.9  |
| 279     | 23.1  | 19.0  | 28.4  |





#91

Benzo(a,h,i)perylene

Concen: 9.47 ng

RT: 17.43 min Scan# 2609

Delta R.T. 0.02 min

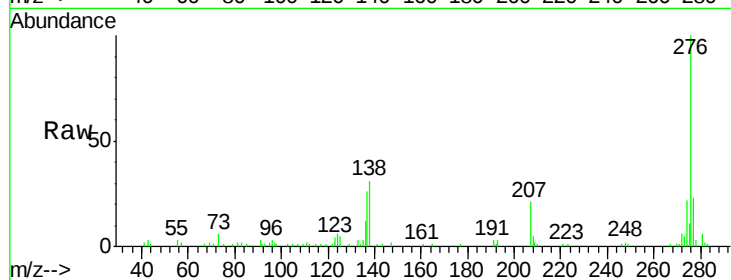
Lab File: BF099462.D

Acq: 14 Oct 2017 1:49

Instrument :

BNA\_F

ClientSampleId :



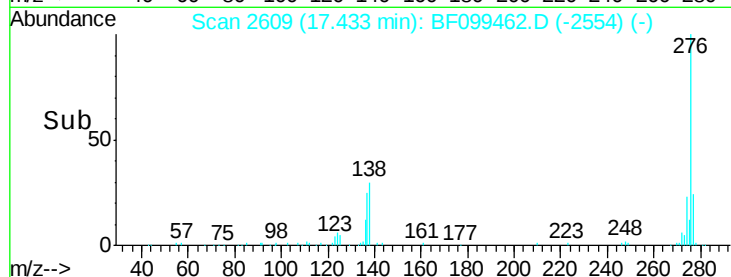
Tot Ion: 276 Resp: 77751

Ion Ratio Lower Upper

276 100

277 23.5 17.9 26.9

138 30.7 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

