

Data Path : Z:\HPCHEM1\BNA F\DATA\BF103017\  
 Data File : BF099962.D  
 Acq On : 30 Oct 2017 16:27  
 Operator : SJ/JU  
 Sample : I6171-03 5X  
 Misc :  
 ALS Vial : 13 Sample Multiplier: 1

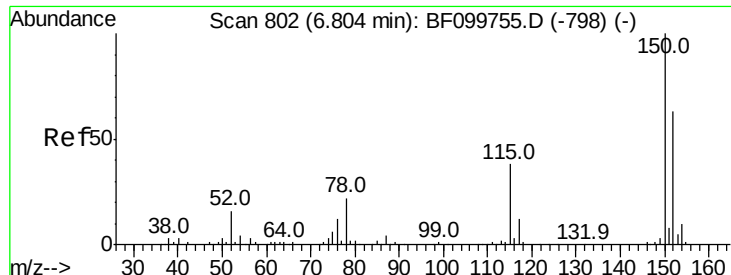
Instrument :  
 BNA\_F  
 ClientSampleId :

Quant Time: Oct 31 02:26:27 2017  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF102317.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Oct 27 15:58:57 2017  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|--------------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4      | 6.79  | 152  | 98508    | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8             | 8.07  | 136  | 422082   | 20.00 | ng    | -0.01    |
| 38) Acenaphthene-d10           | 9.82  | 164  | 189791   | 20.00 | ng    | -0.02    |
| 63) Phenanthrene-d10           | 11.32 | 188  | 329092   | 20.00 | ng    | -0.02    |
| 75) Chrysene-d12               | 13.97 | 240  | 200633   | 20.00 | ng    | -0.02    |
| 86) Perylene-d12               | 15.46 | 264  | 178692   | 20.00 | ng    | 0.00     |
| System Monitoring Compounds    |       |      |          |       |       |          |
| 5) 2-Fluorophenol              | 5.41  | 112  | 129628   | 20.66 | ng    | 0.00     |
| 7) Phenol-d6                   | 6.43  | 99   | 192001   | 25.81 | ng    | -0.01    |
| 23) Nitrobenzene-d5            | 7.36  | 82   | 103359   | 15.77 | ng    | -0.01    |
| 41) 2,4,6-Tribromophenol       | 10.62 | 330  | 34741    | 20.09 | ng    | -0.02    |
| 44) 2-Fluorobiphenyl           | 9.14  | 172  | 273849   | 22.26 | ng    | -0.02    |
| 78) Terphenyl-d14              | 12.90 | 244  | 223095   | 24.30 | ng    | -0.02    |
| Target Compounds               |       |      |          |       |       |          |
| 19) n-Nitroso-di-n-propylamine | 7.36  | 70   | 13054    | 2.994 | ng    | # 70     |
| 25) Isophorone                 | 7.36  | 82   | 103359   | 8.688 | ng    | # 64     |
| 49) Dimethylphthalate          | 9.55  | 163  | 41114    | 2.735 | ng    | 100      |
| 50) 2,6-Dinitrotoluene         | 9.82  | 165  | 23884    | 7.559 | ng    | # 24     |
| 56) 2,4-Dinitrotoluene         | 9.82  | 165  | 23884    | 6.277 | ng    | # 21     |
| 74) Fluoranthene               | 12.54 | 202  | 58400    | 3.026 | ng    | 98       |
| 77) Pyrene                     | 12.77 | 202  | 62981    | 4.128 | ng    | 98       |
| 80) Benzo(a)anthracene         | 13.96 | 228  | 28043    | 2.205 | ng    | 97       |
| 82) Chrysene                   | 14.00 | 228  | 27995    | 2.341 | ng    | 97       |
| 85) Indeno(1,2,3-cd)pyrene     | 16.96 | 276  | 22515    | 2.051 | ng    | 94       |
| 87) Benzo(b)fluoranthene       | 15.03 | 252  | 50006    | 4.432 | ng    | # 89     |
| 88) Benzo(k)fluoranthene       | 15.03 | 252  | 50006    | 4.700 | ng    | # 92     |
| 89) Benzo(a)pyrene             | 15.40 | 252  | 30598    | 3.019 | ng    | # 89     |
| 91) Benzo(a,h,i)perylene       | 17.41 | 276  | 22944    | 2.604 | ng    | # 95     |

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



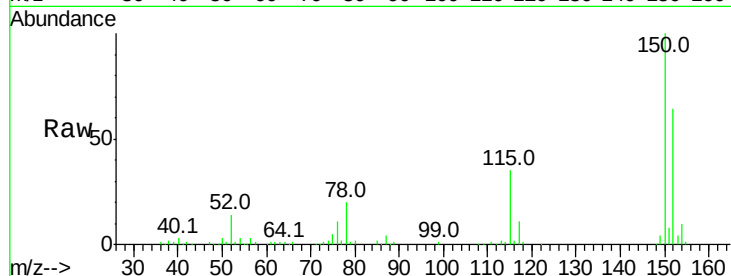


#1

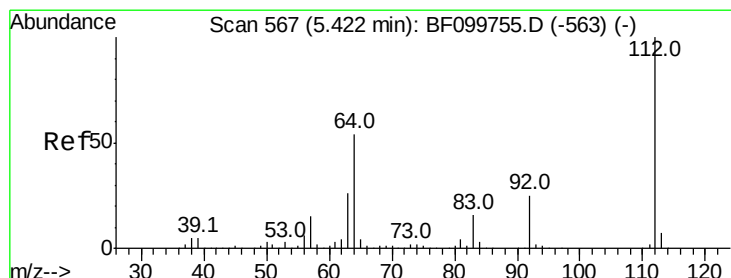
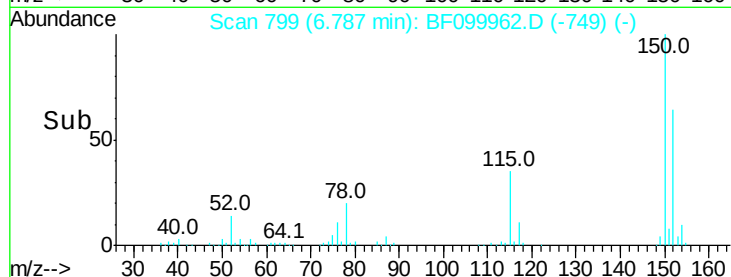
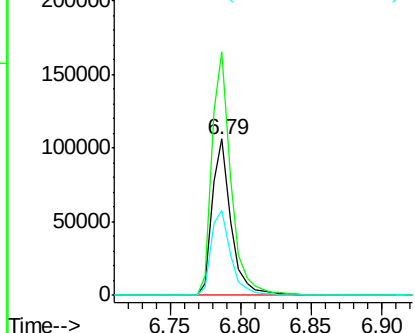
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.79 min Scan# 799  
Delta R.T. -0.01 min  
Lab File: BF099962.D  
Acq: 30 Oct 2017 16:27

Instrument :  
BNA\_F  
ClientSampleId :

Tot Ion:152 Resp: 98508  
Ion Ratio Lower Upper  
152 100  
150 155.6 124.6 186.8  
115 54.4 50.1 75.1



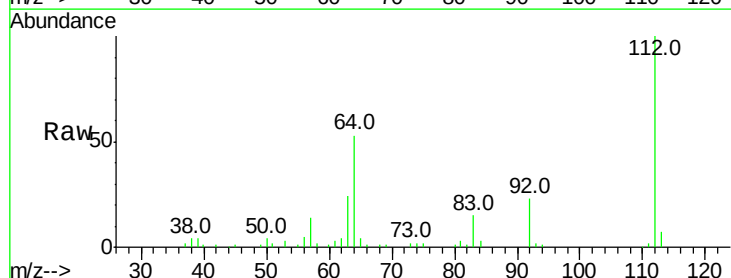
Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 115.00 (114.70 to 115.70): E



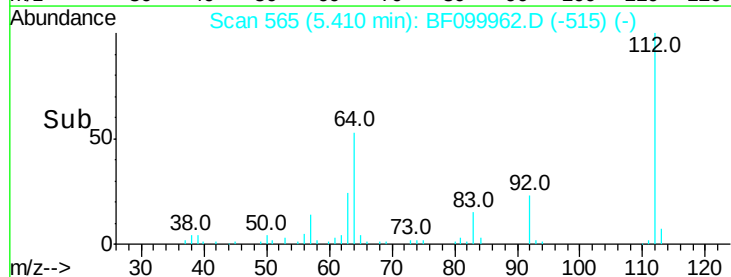
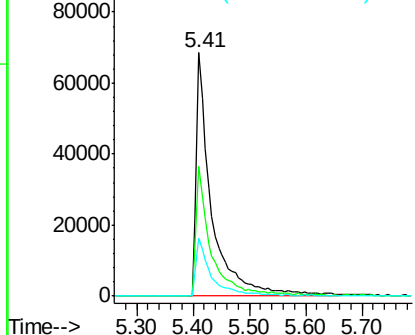
#5

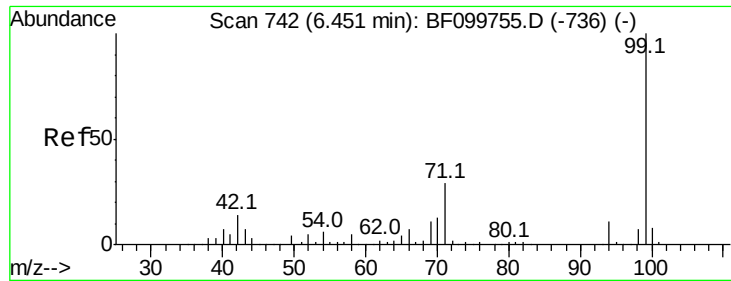
2-Fluorophenol  
Concen: 20.659 ng  
RT: 5.41 min Scan# 565  
Delta R.T. -0.01 min  
Lab File: BF099962.D  
Acq: 30 Oct 2017 16:27

Tgt Ion:112 Resp: 129628  
Ion Ratio Lower Upper  
112 100  
64 53.2 47.9 71.9  
63 23.8 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: 25.807 ng

RT: 6.43 min Scan# 738

Delta R.T. -0.01 min

Lab File: BF099962.D

Acq: 30 Oct 2017 16:27

Instrument :

BNA\_F

ClientSampleId :

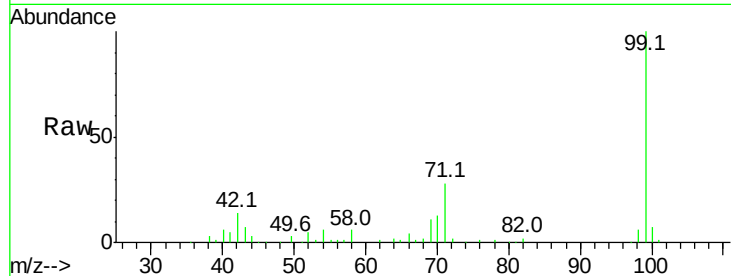
Tot Ion: 99 Resp: 192001

Ion Ratio Lower Upper

99 100

42 14.1 14.5 21.7#

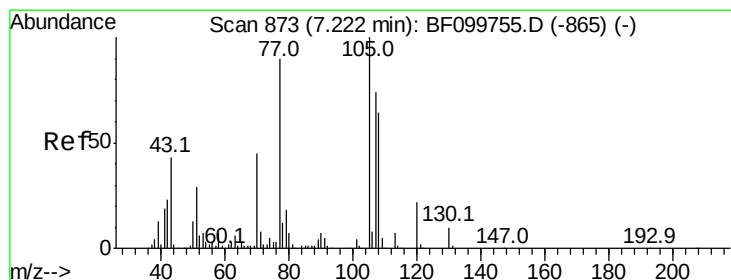
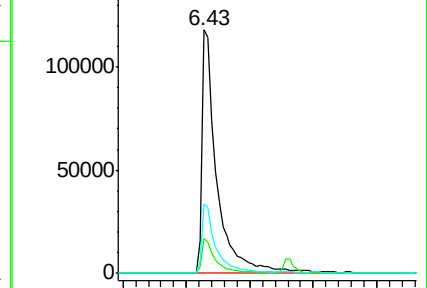
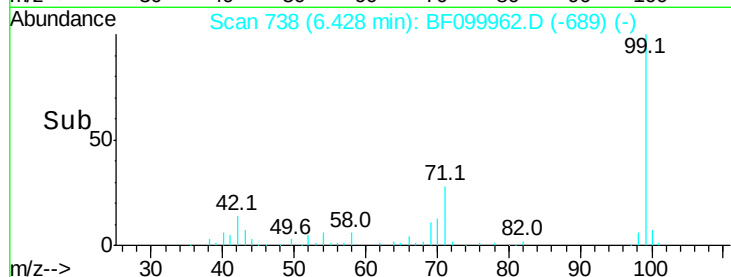
71 28.4 25.4 38.0



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



#19

n-Nitroso-di-n-propylamine

Concen: 2.994 ng

RT: 7.36 min Scan# 896

Delta R.T. 0.15 min

Lab File: BF099962.D

Acq: 30 Oct 2017 16:27

Tgt Ion: 70 Resp: 13054

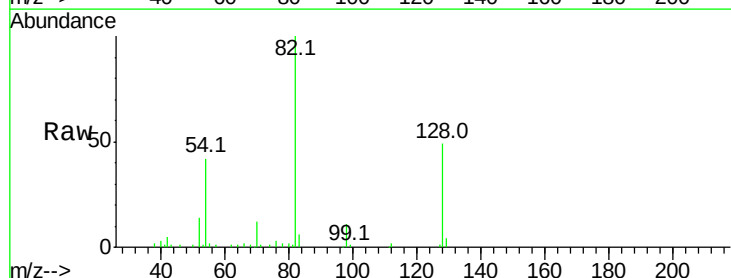
Ion Ratio Lower Upper

70 100

42 40.6 47.5 71.3#

101 0.0 7.4 11.2#

130 0.0 16.6 25.0#

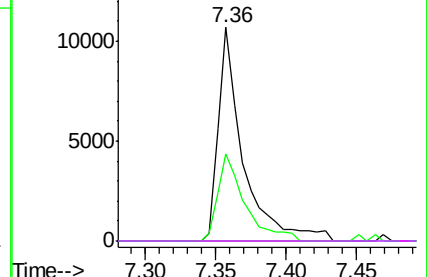
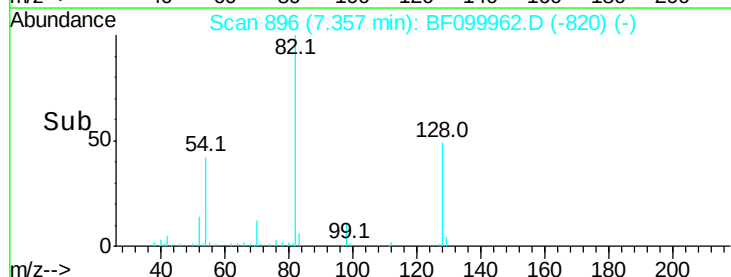


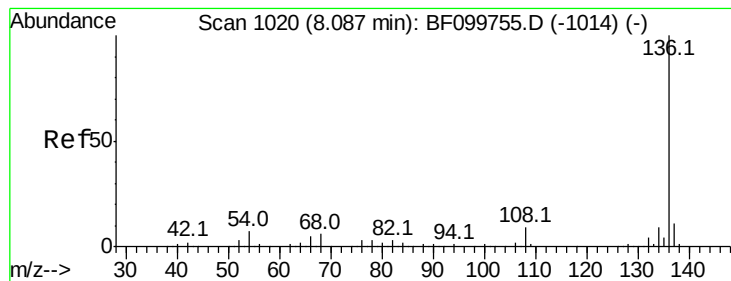
Abundance Ion 70.00 (69.70 to 70.70): BF0

Ion 42.00 (41.70 to 42.70): BF0

Ion 101.00 (100.70 to 101.70): BF0

Ion 130.00 (129.70 to 130.70): BF0





#21

Naphthalene-d8

Concen: 20.000 ng

RT: 8.07 min Scan# 1017

Delta R.T. -0.01 min

Lab File: BF099962.D

Acq: 30 Oct 2017 16:27

Instrument :

BNA\_F

ClientSampleId :

Tot Ion:136 Resp: 422082

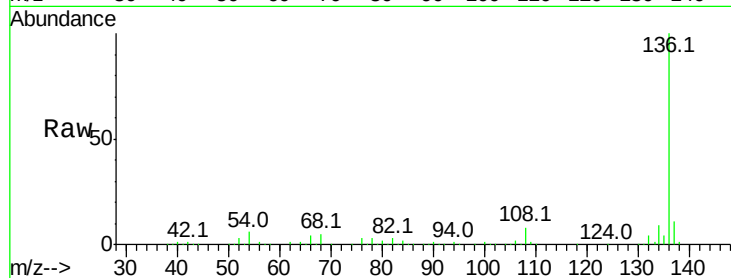
Ion Ratio Lower Upper

136 100

137 10.5 8.9 13.3

54 6.3 6.6 9.8#

68 5.3 5.0 7.4

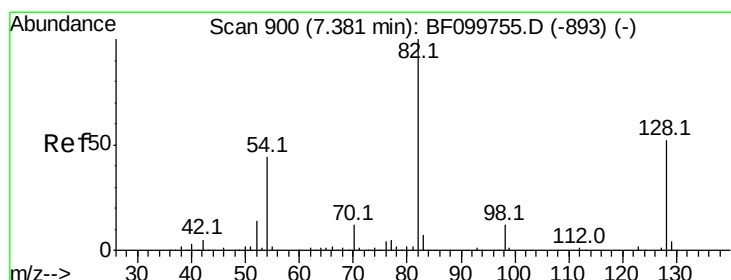
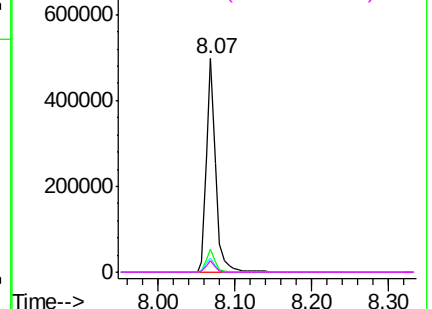
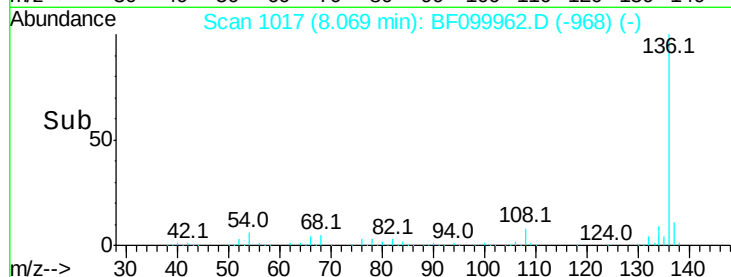


Abundance Ion 136.00 (135.70 to 136.70): E

Ion 137.00 (136.70 to 137.70): E

Ion 54.00 (53.70 to 54.70): BF0

Ion 68.00 (67.70 to 68.70): BF0



#23

Nitrobenzene-d5

Concen: 15.765 ng

RT: 7.36 min Scan# 896

Delta R.T. -0.01 min

Lab File: BF099962.D

Acq: 30 Oct 2017 16:27

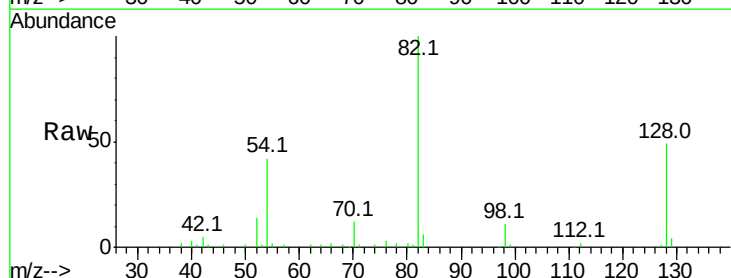
Tgt Ion: 82 Resp: 103359

Ion Ratio Lower Upper

82 100

128 49.1 36.1 54.1

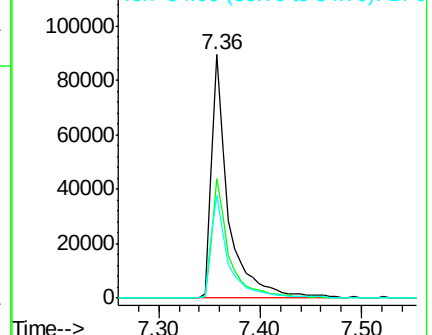
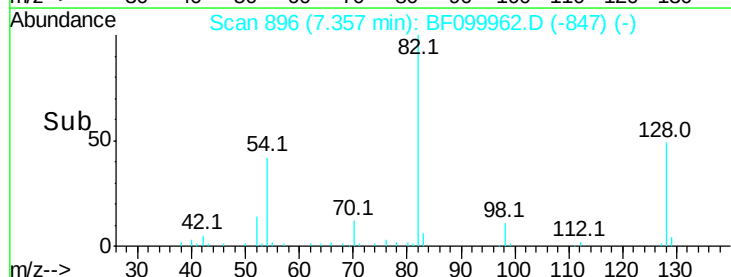
54 42.4 41.4 62.2

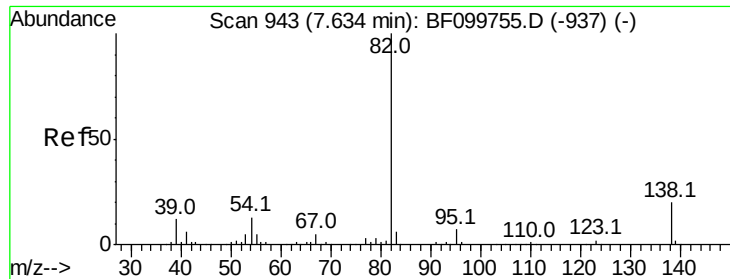


Abundance Ion 82.00 (81.70 to 82.70): BF0

Ion 128.00 (127.70 to 128.70): E

Ion 54.00 (53.70 to 54.70): BF0





#25

Isophorone

Concen: 8.688 ng

RT: 7.36 min Scan# 896

Delta R.T. -0.26 min

Lab File: BF099962.D

Acq: 30 Oct 2017 16:27

Instrument :

BNA\_F

ClientSampled :

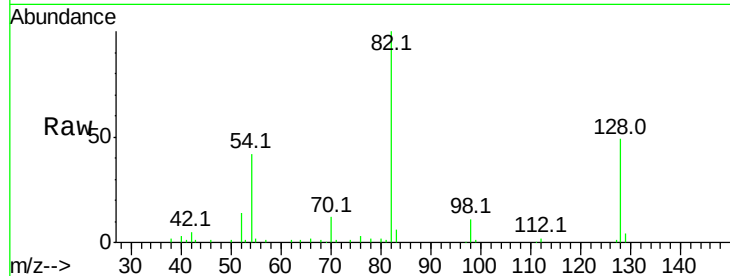
Tot Ion: 82 Resp: 103359

Ion Ratio Lower Upper

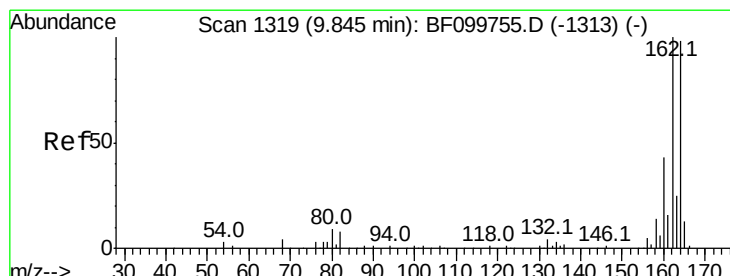
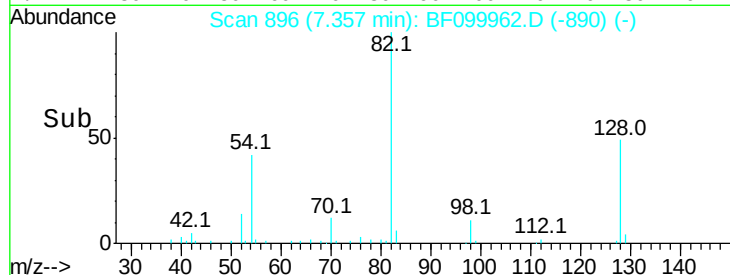
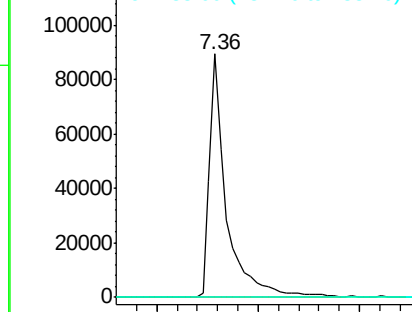
82 100

95 0.0 5.2 7.8#

138 0.0 14.9 22.3#



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



#38

Acenaphthene-d10

Concen: 20.000 ng

RT: 9.82 min Scan# 1315

Delta R.T. -0.02 min

Lab File: BF099962.D

Acq: 30 Oct 2017 16:27

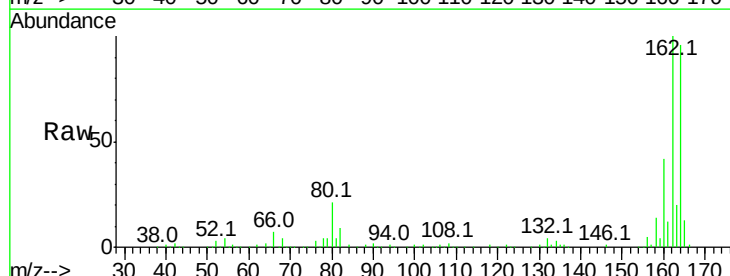
Tgt Ion:164 Resp: 189791

Ion Ratio Lower Upper

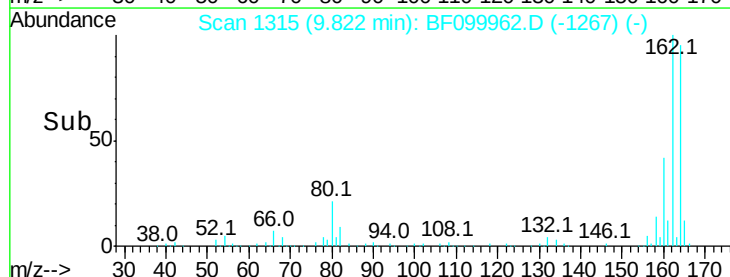
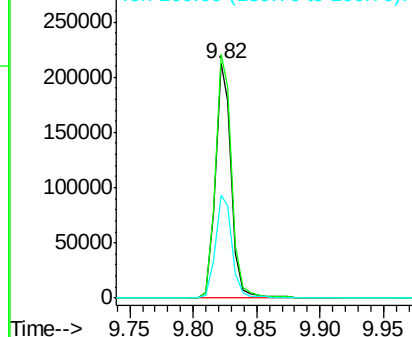
164 100

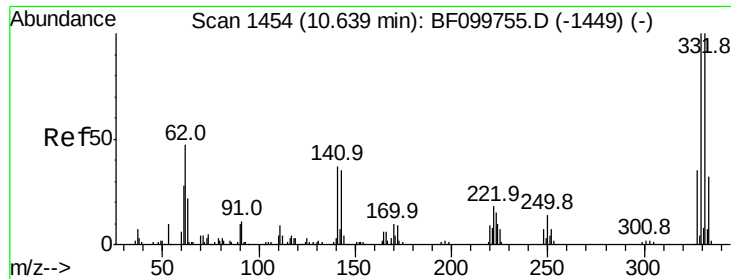
162 104.0 86.1 129.1

160 43.7 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

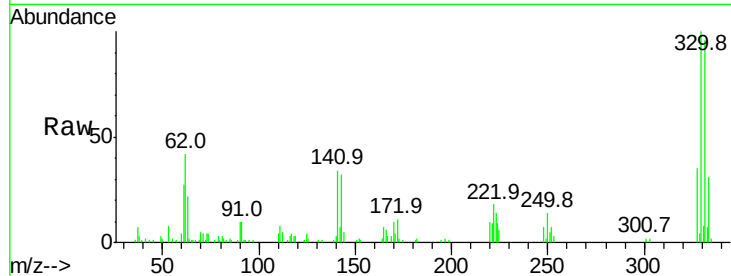




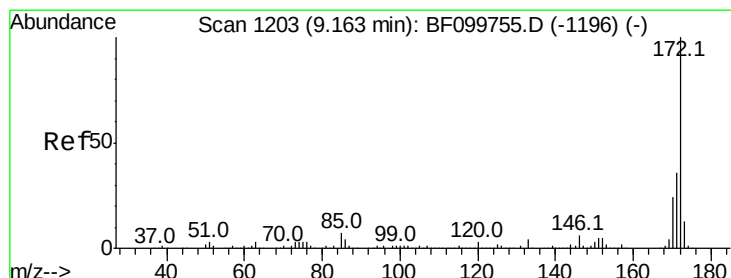
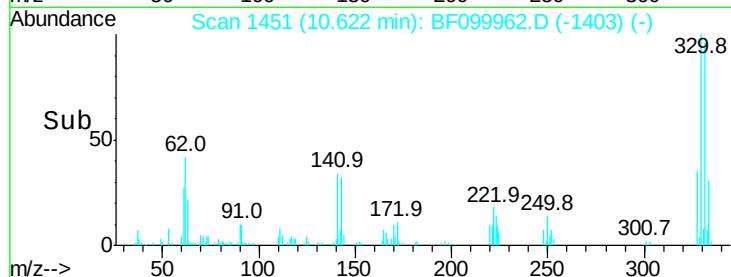
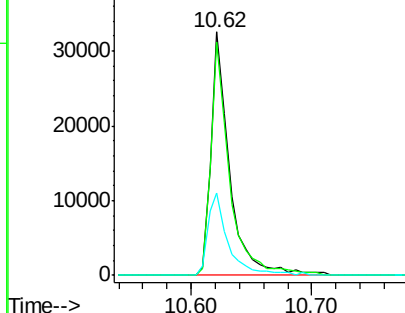
#41  
 2,4,6-Tribromophenol  
 Concen: 20.086 ng  
 RT: 10.62 min Scan# 1451  
 Delta R.T. -0.02 min  
 Lab File: BF099962.D  
 Acq: 30 Oct 2017 16:27

Instrument :  
 BNA\_F  
 ClientSampleId :

Tot Ion:330 Resp: 34741  
 Ion Ratio Lower Upper  
 330 100  
 332 95.7 77.0 115.6  
 141 36.8 29.9 44.9

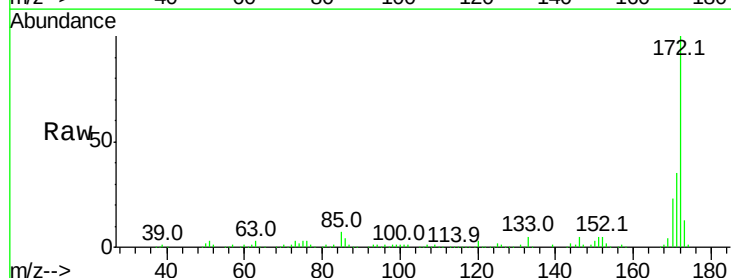


Abundance Ion 329.80 (329.50 to 330.50): E  
 Ion 331.80 (331.50 to 332.50): E  
 Ion 141.00 (140.70 to 141.70): E

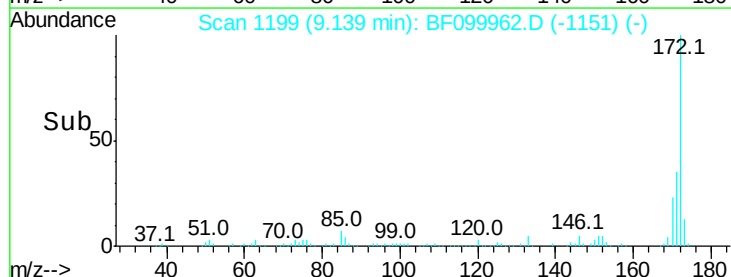
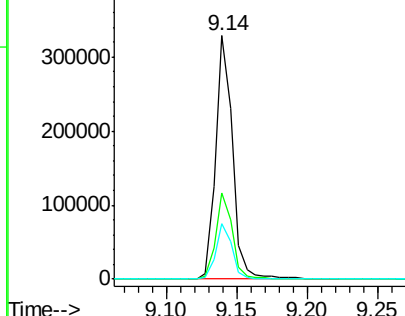


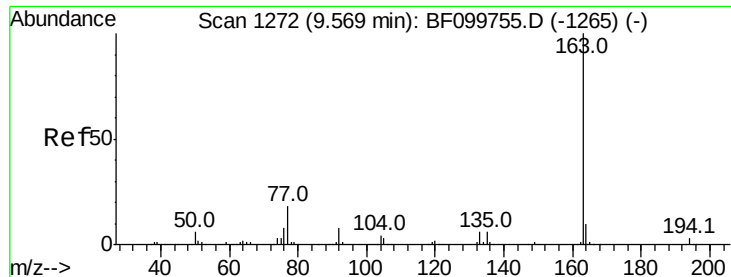
#44  
 2-Fluorobiphenyl  
 Concen: 22.262 ng  
 RT: 9.14 min Scan# 1199  
 Delta R.T. -0.02 min  
 Lab File: BF099962.D  
 Acq: 30 Oct 2017 16:27

Tgt Ion:172 Resp: 273849  
 Ion Ratio Lower Upper  
 172 100  
 171 35.2 29.7 44.5  
 170 23.0 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

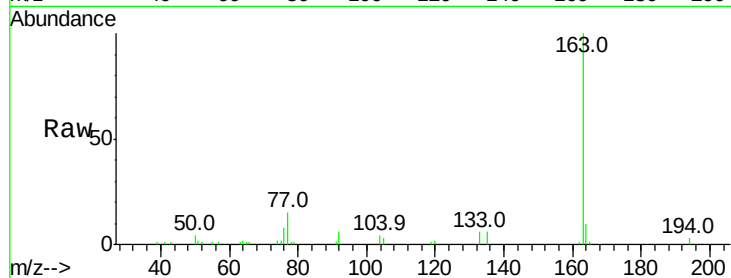




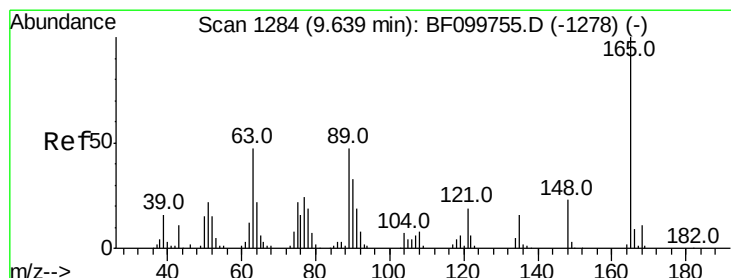
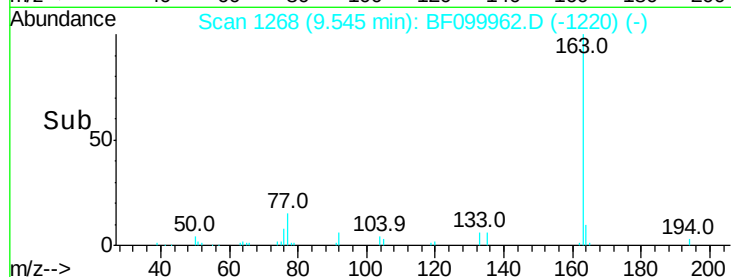
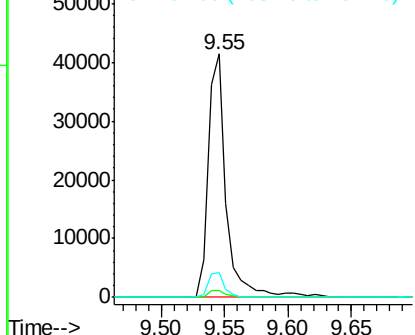
#49  
 Dimethylphthalate  
 Concen: 2.735 ng  
 RT: 9.55 min Scan# 1268  
 Delta R.T. -0.02 min  
 Lab File: BF099962.D  
 Acq: 30 Oct 2017 16:27

Instrument :  
 BNA\_F  
 ClientSampleId :

Tot Ion:163 Resp: 41114  
 Ion Ratio Lower Upper  
 163 100  
 194 3.0 2.7 4.1  
 164 10.1 8.2 12.2

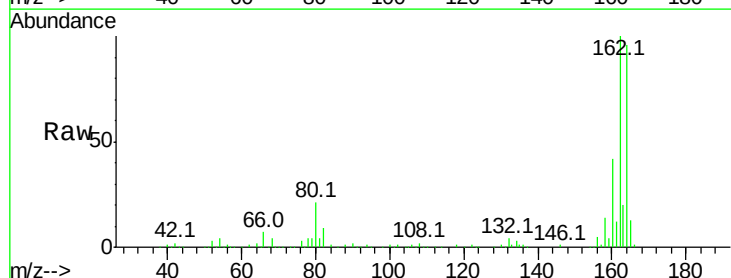


Abundance Ion 163.00 (162.70 to 163.70): E  
 Ion 194.00 (193.70 to 194.70): E  
 Ion 164.00 (163.70 to 164.70): E

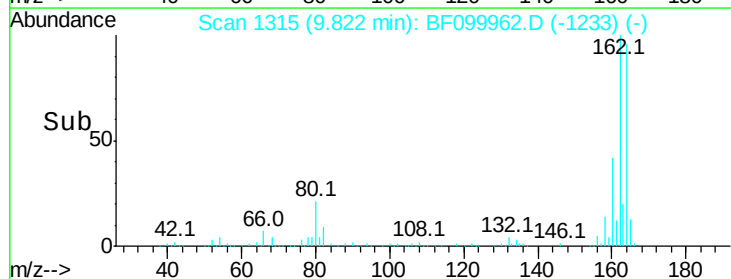
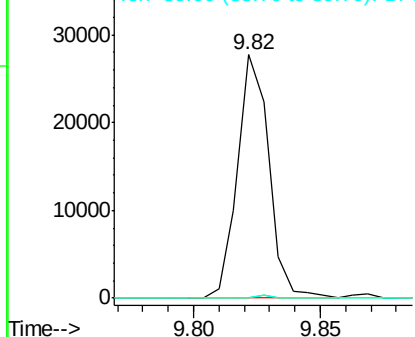


#50  
 2,6-Dinitrotoluene  
 Concen: 7.559 ng  
 RT: 9.82 min Scan# 1315  
 Delta R.T. 0.18 min  
 Lab File: BF099962.D  
 Acq: 30 Oct 2017 16:27

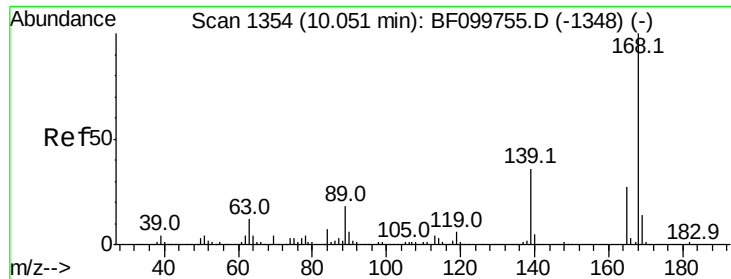
Tgt Ion:165 Resp: 23884  
 Ion Ratio Lower Upper  
 165 100  
 63 0.0 44.7 67.1#  
 89 0.0 44.0 66.0#



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



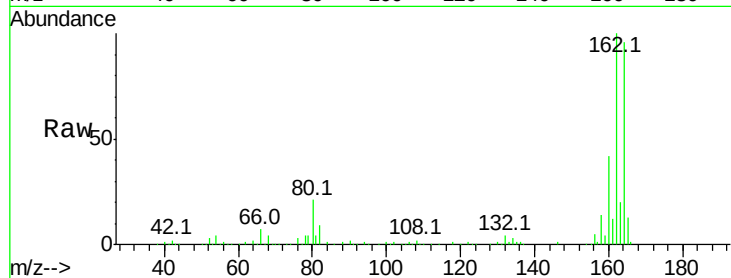




#56  
 2,4-Dinitrotoluene  
 Concen: 6.277 ng  
 RT: 9.82 min Scan# 1315  
 Delta R.T. -0.23 min  
 Lab File: BF099962.D  
 Acq: 30 Oct 2017 16:27

Instrument :  
 BNA\_F  
 ClientSampleId :

|             |       |            |
|-------------|-------|------------|
| Tot Ion:165 | Resp: | 23884      |
| Ion Ratio   | Lower | Upper      |
| 165         | 100   |            |
| 63          | 0.0   | 36.4 54.6# |
| 89          | 0.0   | 57.8 86.6# |
| 182         | 0.0   | 1.6 2.4#   |

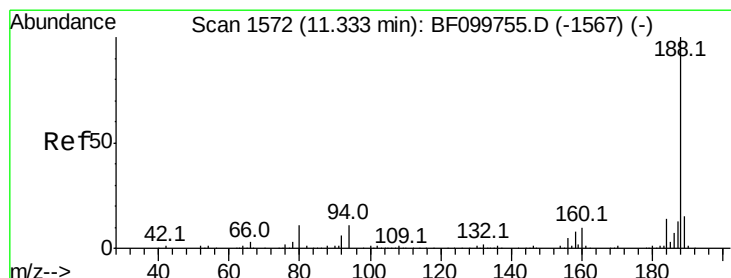
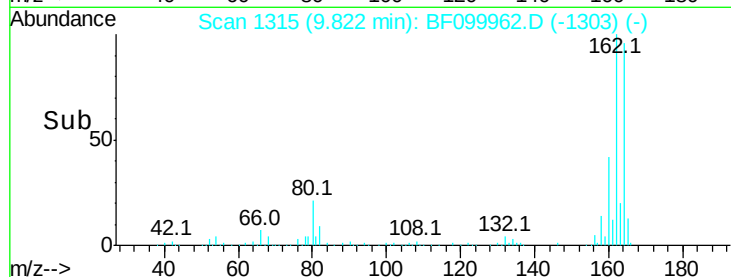
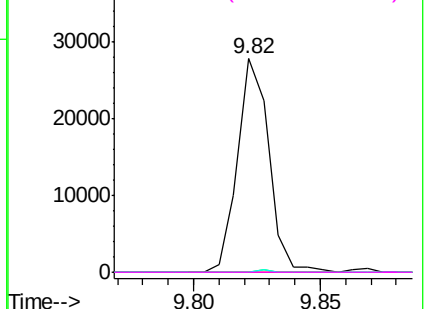


Abundance Ion 165.00 (164.70 to 165.70): E

Ion 63.00 (62.70 to 63.70): BF0

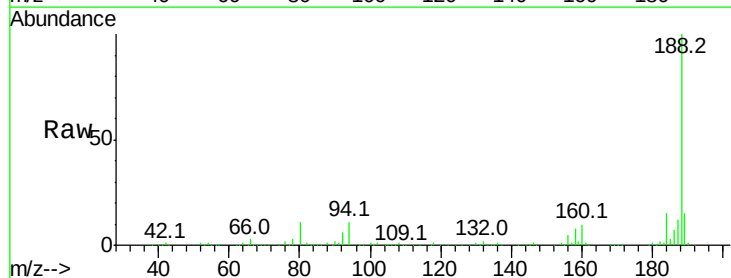
Ion 89.00 (88.70 to 89.70): BF0

Ion 182.00 (181.70 to 182.70): E



#63  
 Phenanthrene-d10  
 Concen: 20.000 ng  
 RT: 11.32 min Scan# 1569  
 Delta R.T. -0.02 min  
 Lab File: BF099962.D  
 Acq: 30 Oct 2017 16:27

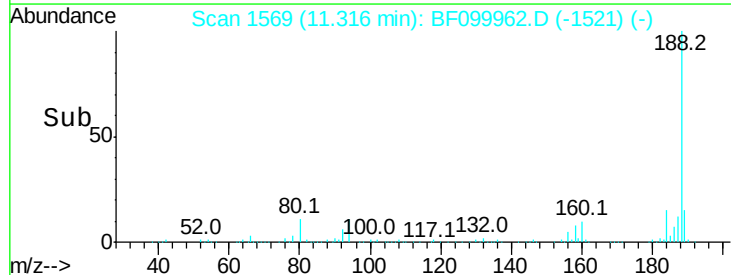
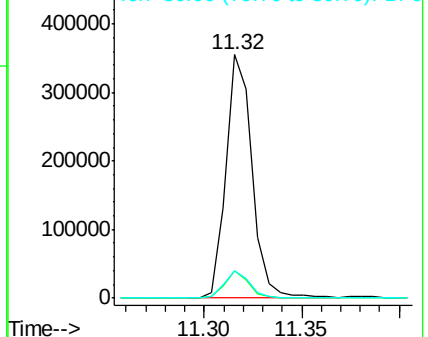
|             |       |          |
|-------------|-------|----------|
| Tgt Ion:188 | Resp: | 329092   |
| Ion Ratio   | Lower | Upper    |
| 188         | 100   |          |
| 94          | 11.0  | 8.5 12.7 |
| 80          | 11.3  | 9.2 13.8 |

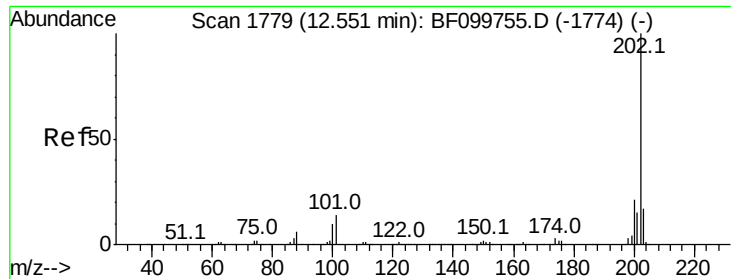


Abundance Ion 188.00 (187.70 to 188.70): E

Ion 94.00 (93.70 to 94.70): BF0

Ion 80.00 (79.70 to 80.70): BF0

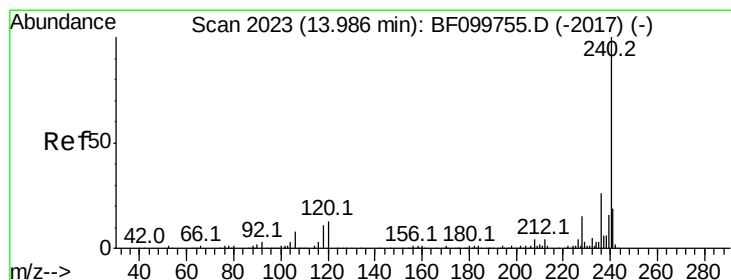
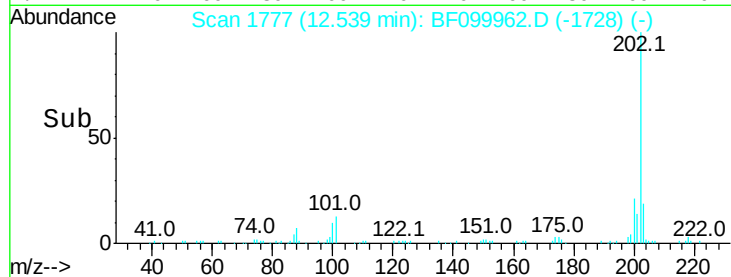
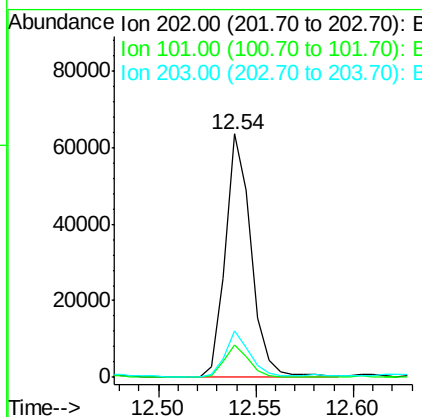
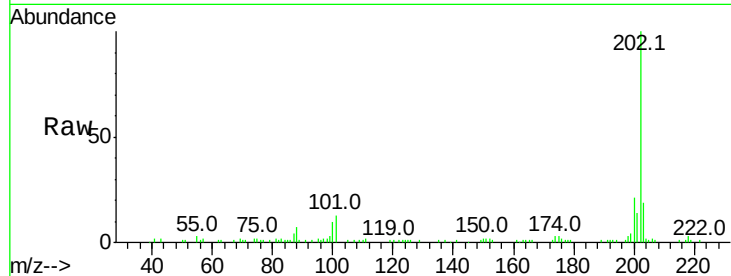




#74  
 Fluoranthene  
 Concen: 3.026 ng  
 RT: 12.54 min Scan# 1777  
 Delta R.T. -0.01 min  
 Lab File: BF099962.D  
 Acq: 30 Oct 2017 16:27

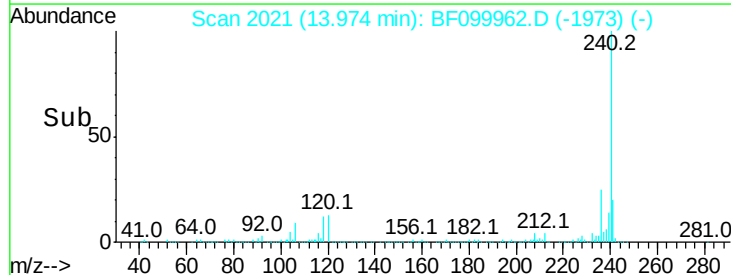
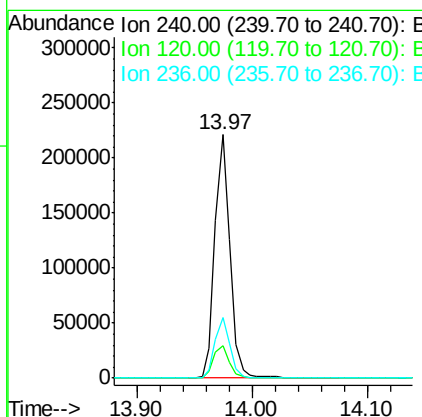
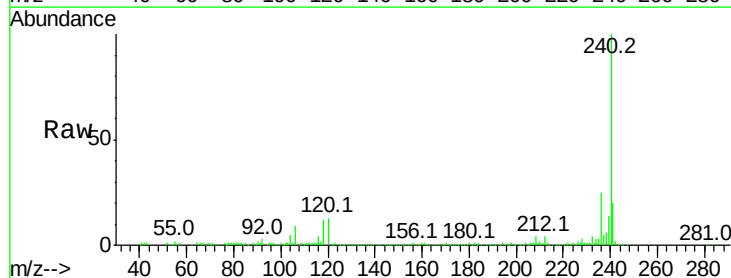
Instrument :  
 BNA\_F  
 ClientSampleId :

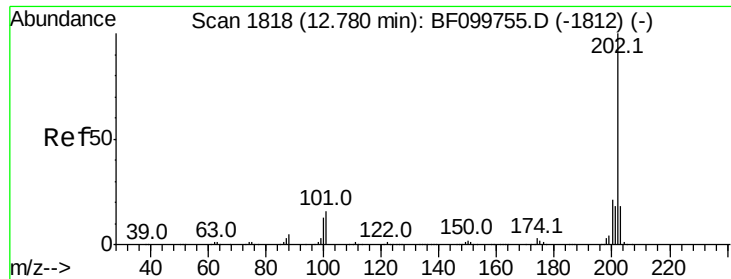
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 13.5  | 0.0   | 34.1  |
| 203     | 19.3  | 0.0   | 38.1  |



#75  
 Chrysene-d12  
 Concen: 20.000 ng  
 RT: 13.97 min Scan# 2021  
 Delta R.T. -0.02 min  
 Lab File: BF099962.D  
 Acq: 30 Oct 2017 16:27

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 240     | 100   |       |       |
| 120     | 13.4  | 9.5   | 14.3  |
| 236     | 24.8  | 20.7  | 31.1  |





#77

Pvrene

Concen: 4.128 ng

RT: 12.77 min Scan# 1816

Delta R.T. -0.02 min

Lab File: BF099962.D

Acq: 30 Oct 2017 16:27

Instrument :

BNA\_F

ClientSampleId :

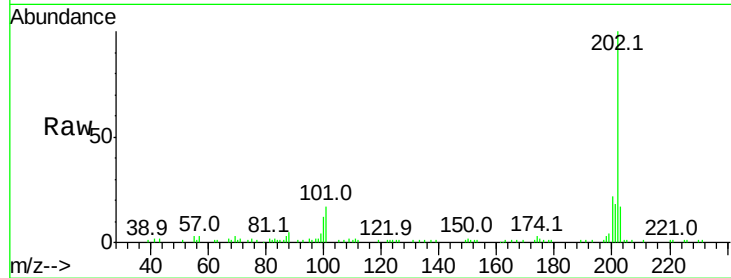
Tot Ion:202 Resp: 62981

Ion Ratio Lower Upper

202 100

200 22.5 17.4 26.2

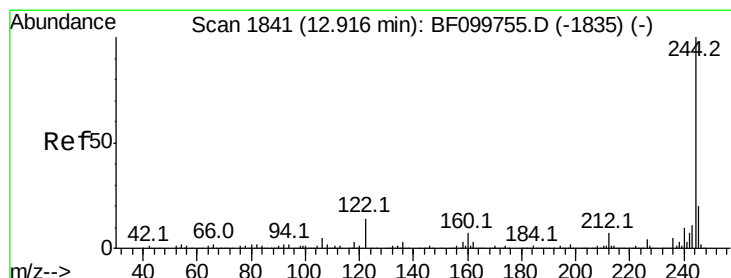
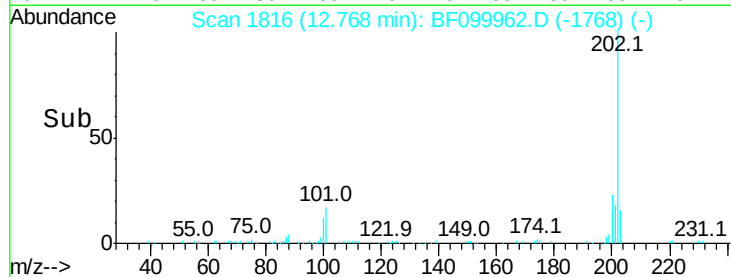
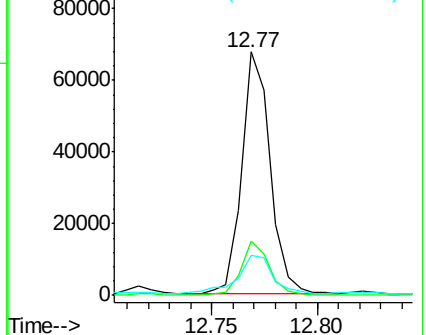
203 16.5 14.3 21.5



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: 24.300 ng

RT: 12.90 min Scan# 1838

Delta R.T. -0.02 min

Lab File: BF099962.D

Acq: 30 Oct 2017 16:27

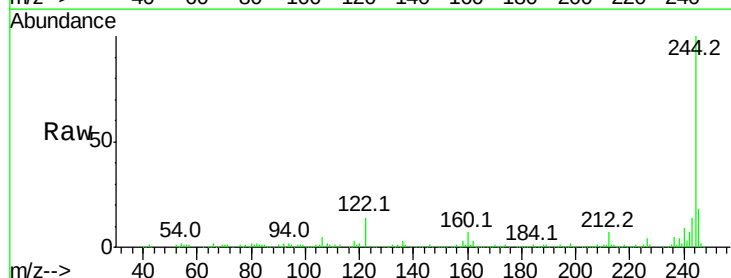
Tgt Ion:244 Resp: 223095

Ion Ratio Lower Upper

244 100

212 6.5 5.4 8.0

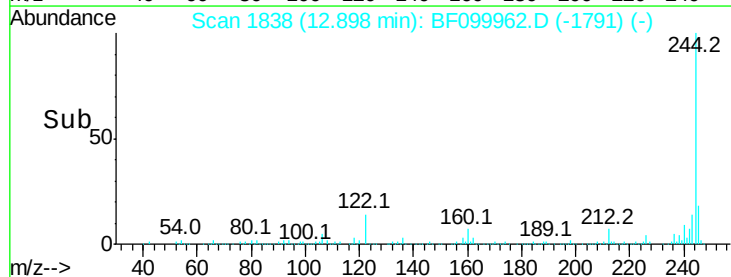
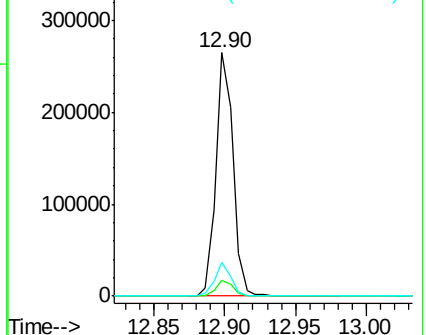
122 14.1 11.0 16.4

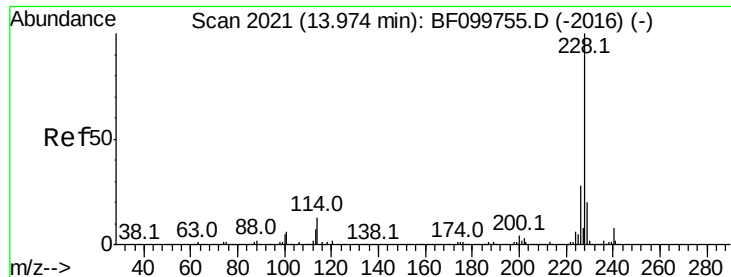


Abundance Ion 244.00 (243.70 to 244.70): E

Ion 212.00 (211.70 to 212.70): E

Ion 122.00 (121.70 to 122.70): E





#80

Benzo(a)anthracene

Concen: 2.205 ng

RT: 13.96 min Scan# 2019

Delta R.T. -0.02 min

Lab File: BF099962.D

Acq: 30 Oct 2017 16:27

Instrument :

BNA\_F

ClientSampleId :

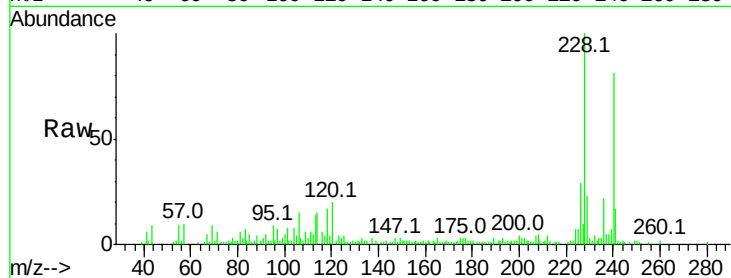
Tot Ion:228 Resp: 28043

Ion Ratio Lower Upper

228 100

226 28.7 22.6 33.8

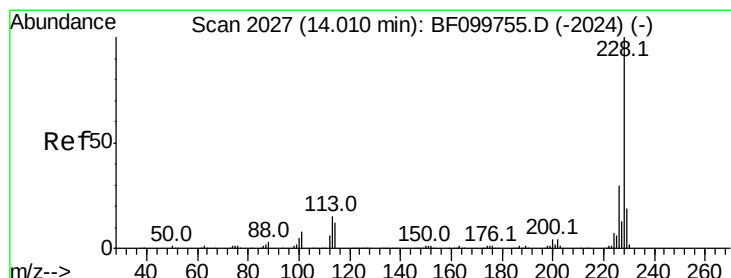
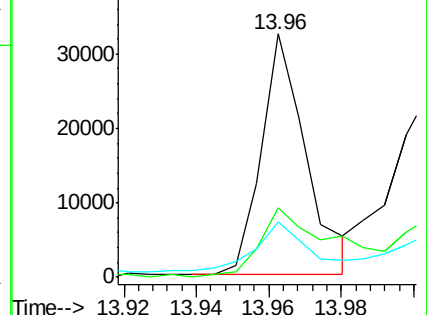
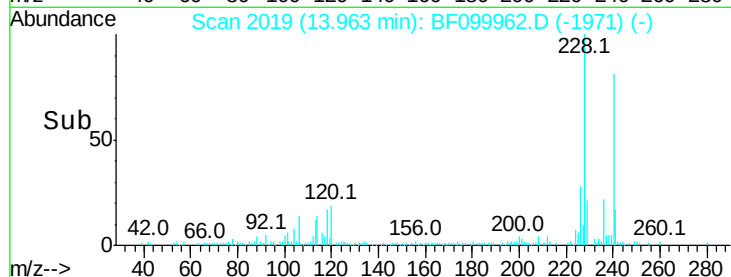
229 22.8 15.8 23.6



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: 2.341 ng

RT: 14.00 min Scan# 2026

Delta R.T. -0.01 min

Lab File: BF099962.D

Acq: 30 Oct 2017 16:27

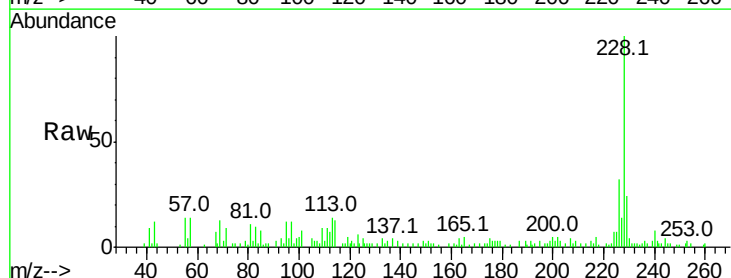
Tgt Ion:228 Resp: 27995

Ion Ratio Lower Upper

228 100

226 31.7 25.0 37.6

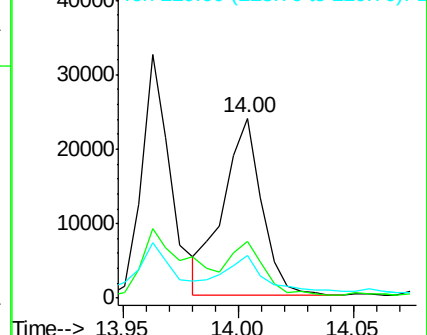
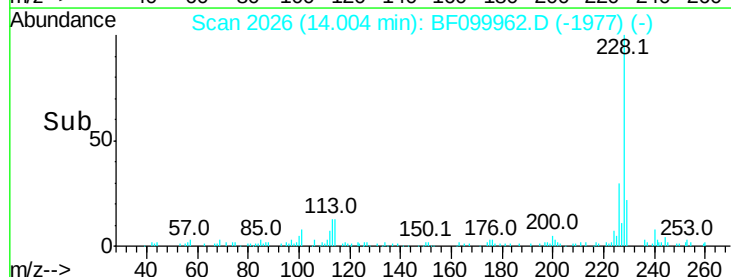
229 23.9 16.2 24.4

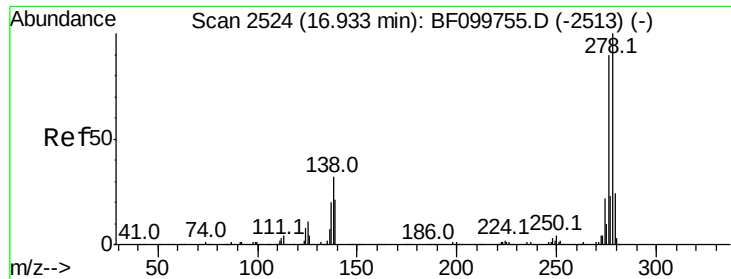


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E





#85

Indeno(1,2,3-cd)pyrene

Concen: 2.051 ng

RT: 16.96 min Scan# 2528

Delta R.T. 0.01 min

Lab File: BF099962.D

Acq: 30 Oct 2017 16:27

Instrument :

BNA\_F

ClientSampled :

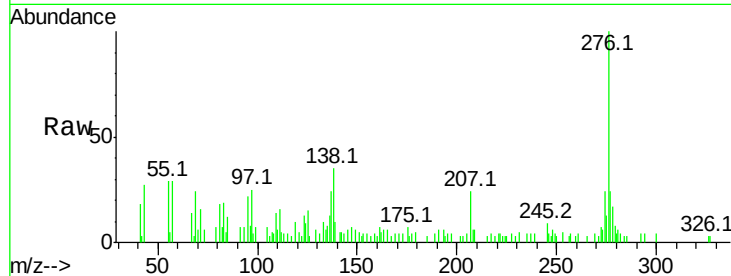
Tot Ion:276 Resp: 22515

Ion Ratio Lower Upper

276 100

138 27.5 25.0 37.6

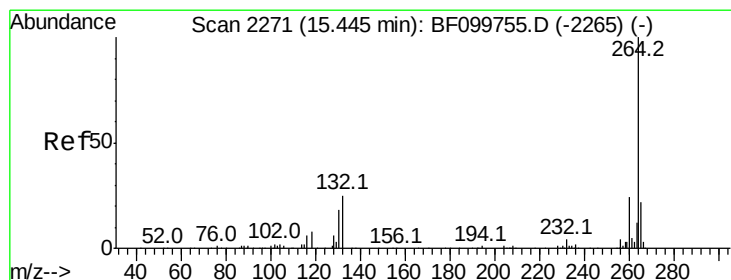
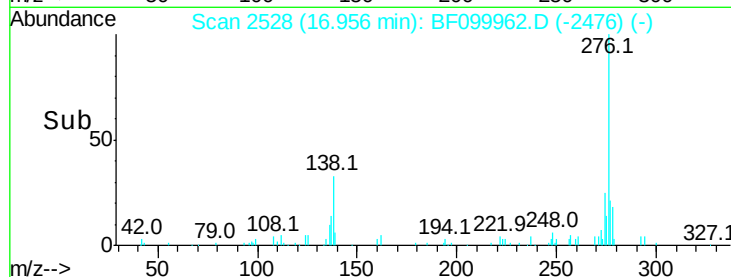
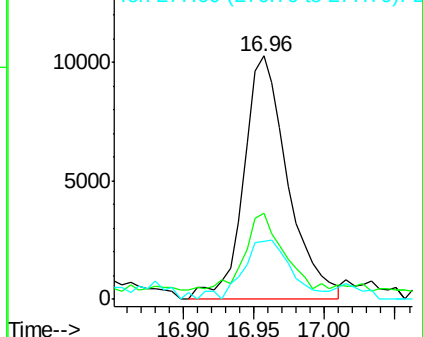
277 27.2 20.1 30.1



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: 20.000 ng

RT: 15.46 min Scan# 2273

Delta R.T. -0.00 min

Lab File: BF099962.D

Acq: 30 Oct 2017 16:27

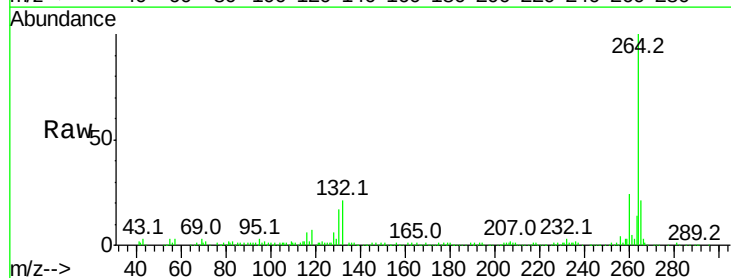
Tgt Ion:264 Resp: 178692

Ion Ratio Lower Upper

264 100

260 23.6 19.2 28.8

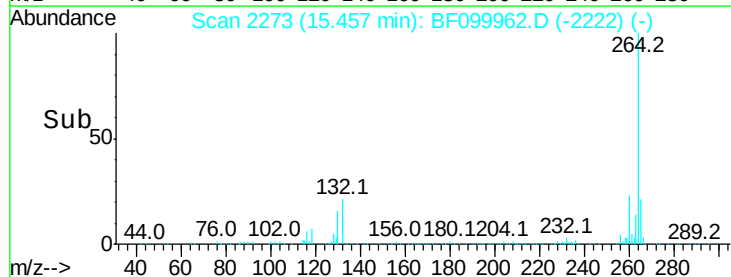
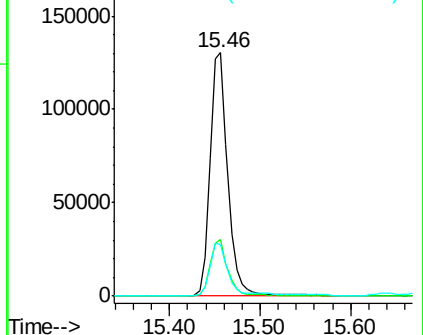
265 21.3 17.5 26.3

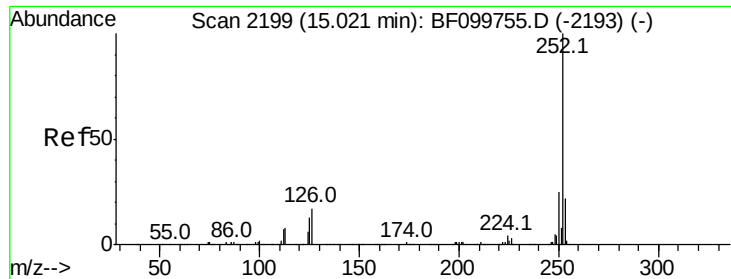


Abundance Ion 264.00 (263.70 to 264.70): E

Ion 260.00 (259.70 to 260.70): E

Ion 265.00 (264.70 to 265.70): E

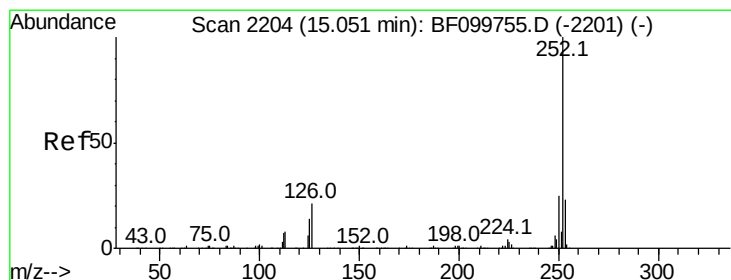
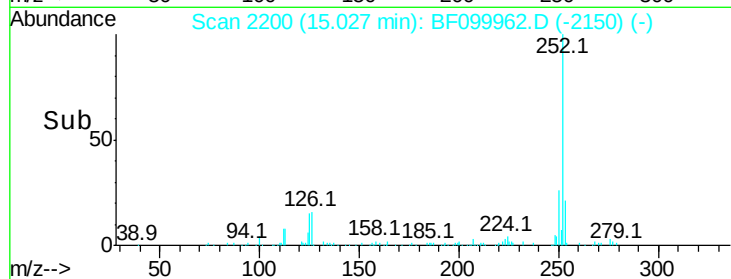
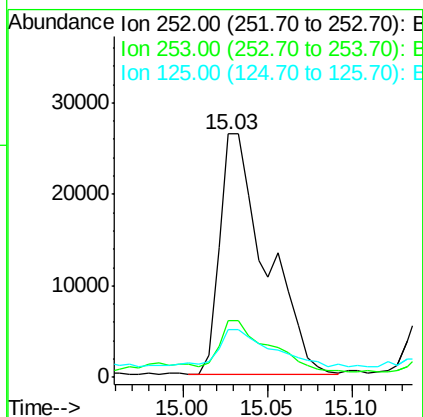
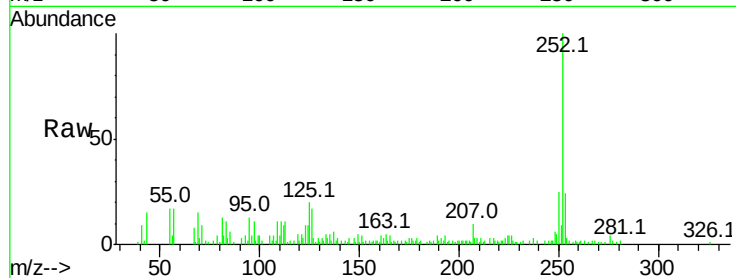




#87  
Benzo(b)fluoranthene  
Concen: 4.432 ng  
RT: 15.03 min Scan# 2200  
Delta R.T. -0.01 min  
Lab File: BF099962.D  
Acq: 30 Oct 2017 16:27

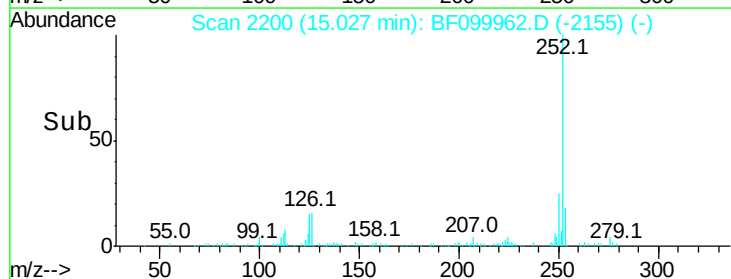
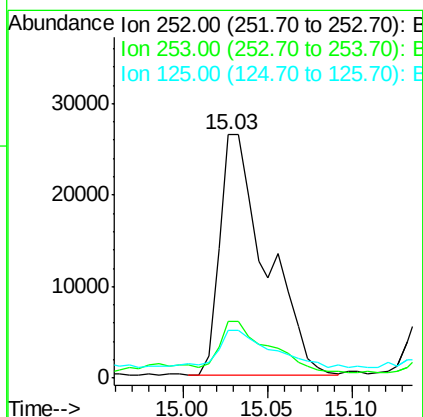
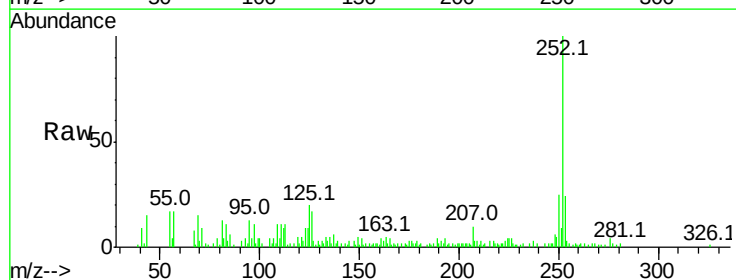
Instrument :  
BNA\_F  
ClientSampleId :

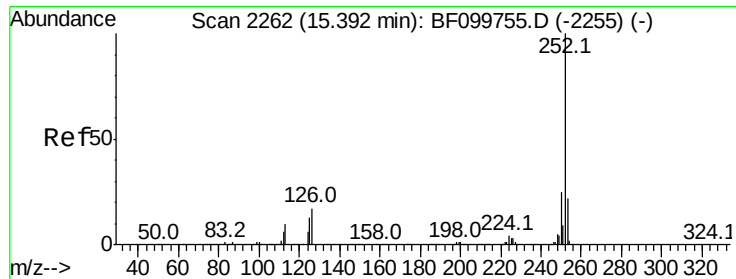
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.5  | 17.0  | 25.6  |
| 125     | 19.8  | 9.0   | 13.6  |



#88  
Benzo(k)fluoranthene  
Concen: 4.700 ng  
RT: 15.03 min Scan# 2200  
Delta R.T. -0.04 min  
Lab File: BF099962.D  
Acq: 30 Oct 2017 16:27

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.5  | 17.9  | 26.9  |
| 125     | 19.8  | 10.2  | 15.2  |

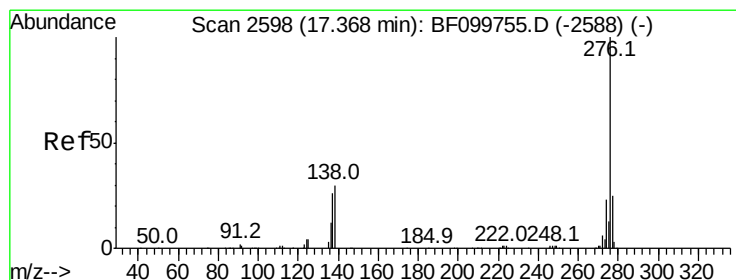
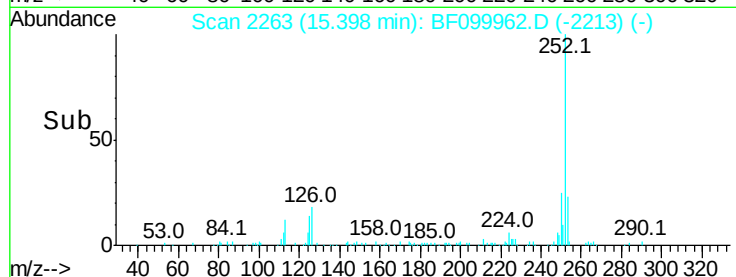
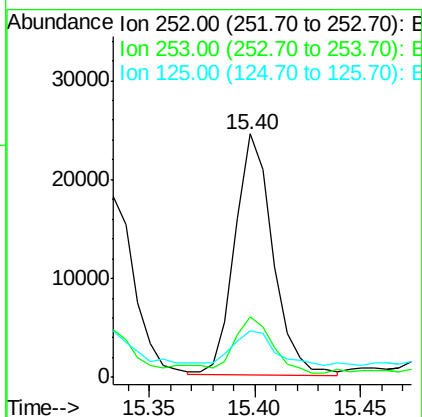
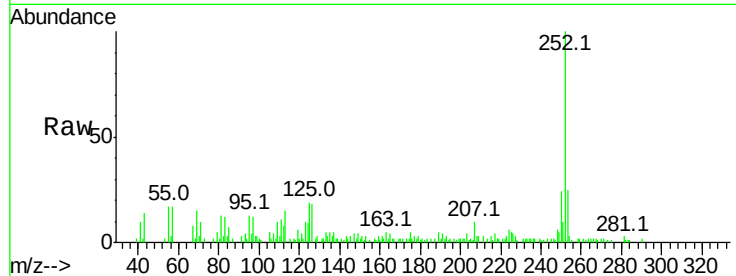




#89  
Benzo(a)pyrene  
Concen: 3.019 ng  
RT: 15.40 min Scan# 2263  
Delta R.T. -0.01 min  
Lab File: BF099962.D  
Acq: 30 Oct 2017 16:27

Instrument :  
BNA\_F  
ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 24.7  | 17.1  | 25.7  |
| 125     | 19.3  | 9.8   | 14.6  |



#91  
Benzo(g,h,i)perylene  
Concen: 2.604 ng  
RT: 17.41 min Scan# 2605  
Delta R.T. 0.01 min  
Lab File: BF099962.D  
Acq: 30 Oct 2017 16:27

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 27.2  | 17.9  | 26.9  |
| 138     | 27.7  | 21.8  | 32.8  |

