

Data Path : Z:\HPCHEM1\BNA F\DATA\BF050617\  
 Data File : BF094973.D  
 Acq On : 8 May 2017 7:18  
 Operator : SJ/MA  
 Sample : I2969-11  
 Misc :  
 ALS Vial : 20 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :

Quant Time: May 08 07:58:51 2017  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF050217.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed May 03 17:24:51 2017  
 Response via : Initial Calibration

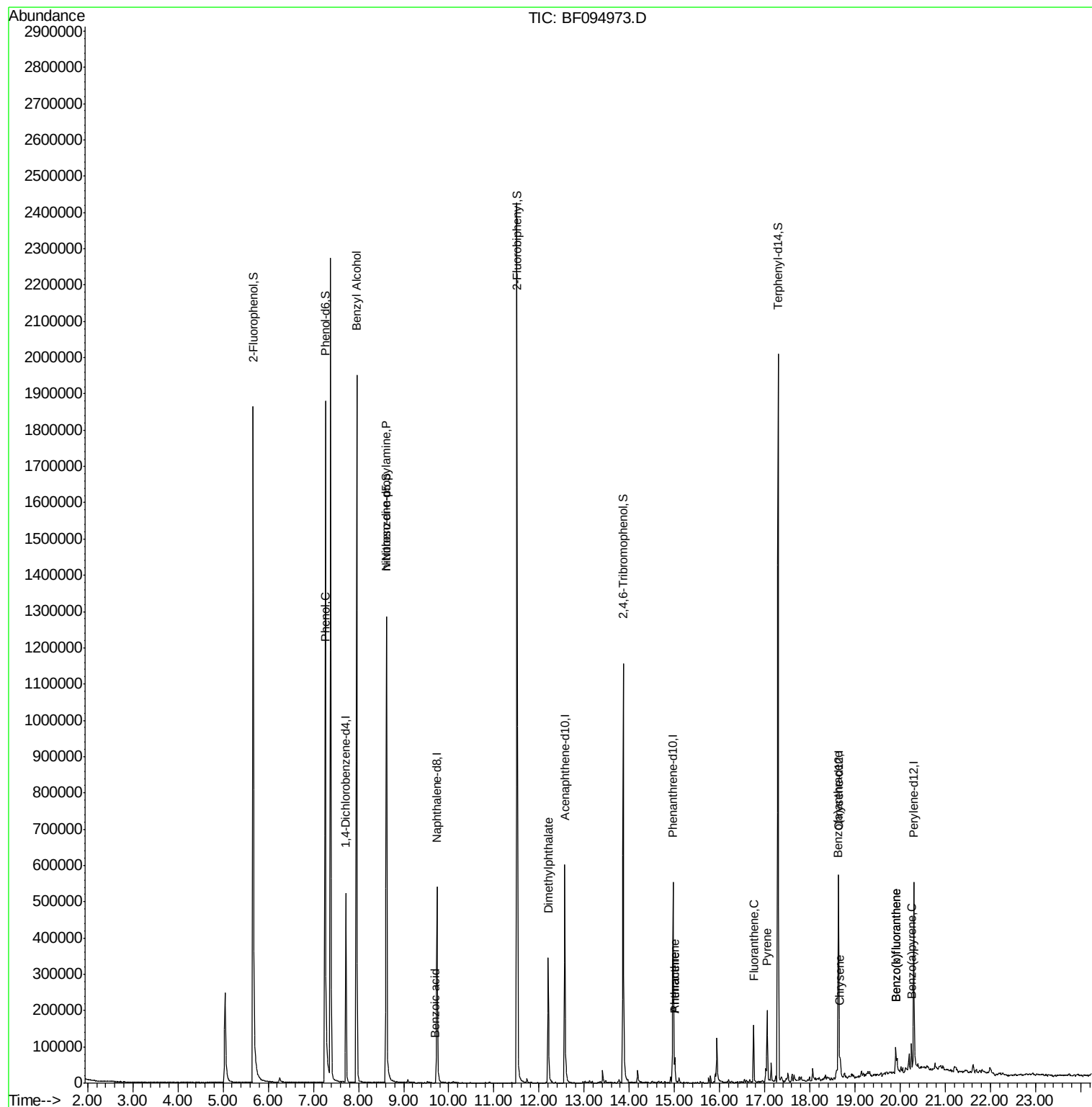
| Internal Standards             | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|--------------------------------|-------|------|----------|--------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4      | 7.72  | 152  | 106092   | 20.00  | ng    | -0.01    |
| 21) Naphthalene-d8             | 9.74  | 136  | 394037   | 20.00  | ng    | -0.02    |
| 38) Acenaphthene-d10           | 12.57 | 164  | 188416   | 20.00  | ng    | -0.01    |
| 63) Phenanthrene-d10           | 14.97 | 188  | 312037   | 20.00  | ng    | -0.01    |
| 75) Chrysene-d12               | 18.64 | 240  | 225142   | 20.00  | ng    | -0.02    |
| 86) Perylene-d12               | 20.30 | 264  | 217127   | 20.00  | ng    | -0.01    |
| System Monitoring Compounds    |       |      |          |        |       |          |
| 5) 2-Fluorophenol              | 5.67  | 112  | 899903   | 141.42 | ng    | -0.01    |
| 7) Phenol-d6                   | 7.27  | 99   | 1070149  | 140.16 | ng    | -0.01    |
| 23) Nitrobenzene-d5            | 8.62  | 82   | 652286   | 104.39 | ng    | -0.02    |
| 41) 2,4,6-Tribromophenol       | 13.87 | 330  | 200598   | 130.00 | ng    | -0.02    |
| 44) 2-Fluorobiphenyl           | 11.52 | 172  | 1156746  | 88.37  | ng    | -0.01    |
| 78) Terphenyl-d14              | 17.29 | 244  | 795620   | 77.84  | ng    | -0.02    |
| Target Compounds               |       |      |          |        |       | Qvalue   |
| 10) Phenol                     | 7.28  | 94   | 21546    | 2.68   | ng    | 88       |
| 15) Benzyl Alcohol             | 7.96  | 79   | 9825     | 2.00   | ng    | # 46     |
| 19) n-Nitroso-di-n-propylamine | 8.62  | 70   | 83608    | 16.19  | ng    | # 78     |
| 32) Benzoic acid               | 9.70  | 122  | 113      | 5.11   | ng    | # 1      |
| 49) Dimethylphthalate          | 12.20 | 163  | 227241   | 14.69  | ng    | 99       |
| 70) Phenanthrene               | 15.01 | 178  | 37306    | 2.08   | ng    | 97       |
| 71) Anthracene                 | 15.01 | 178  | 37306    | 2.04   | ng    | 98       |
| 74) Fluoranthene               | 16.75 | 202  | 90786    | 4.94   | ng    | 97       |
| 77) Pyrene                     | 17.05 | 202  | 87944    | 5.22   | ng    | 96       |
| 80) Benzo(a)anthracene         | 18.62 | 228  | 35019    | 2.67   | ng    | 95       |
| 82) Chrysene                   | 18.67 | 228  | 35424    | 2.80   | ng    | 100      |
| 87) Benzo(b)fluoranthene       | 19.90 | 252  | 41614    | 3.10   | ng    | # 96     |
| 88) Benzo(k)fluoranthene       | 19.90 | 252  | 41614    | 3.22   | ng    | 97       |
| 89) Benzo(a)pyrene             | 20.25 | 252  | 29938    | 2.42   | ng    | # 92     |

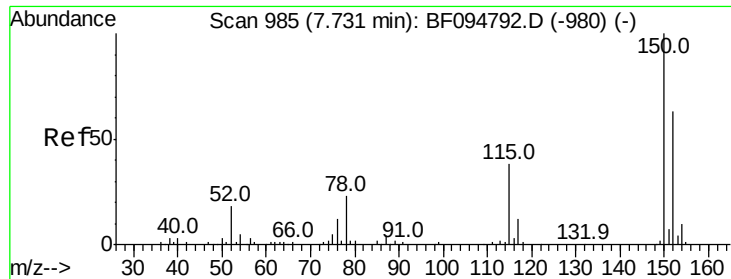
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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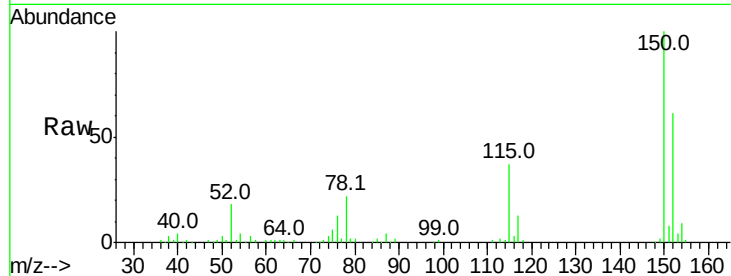


#1

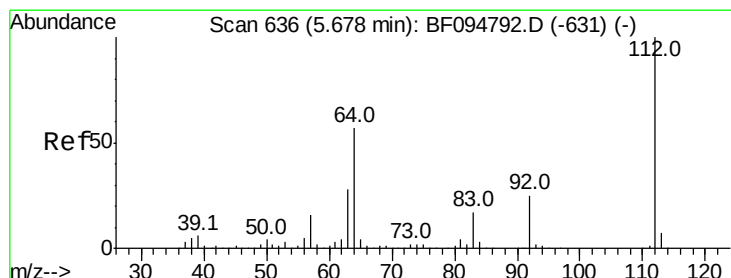
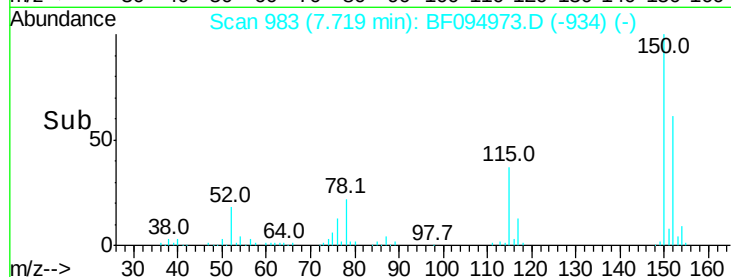
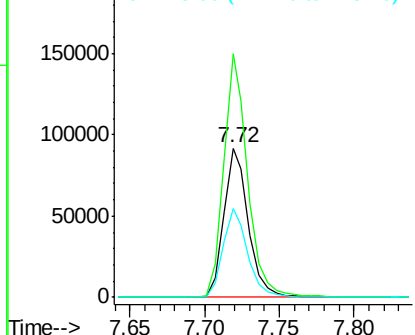
1,4-Dichlorobenzene-d4  
Concen: 20.00 ng  
RT: 7.72 min Scan# 983  
Delta R.T. -0.01 min  
Lab File: BF094973.D  
Acq: 8 May 2017 7:18

Instrument :  
BNA\_F  
ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 163.5 | 126.2 | 189.2 |
| 115     | 59.8  | 52.2  | 78.2  |



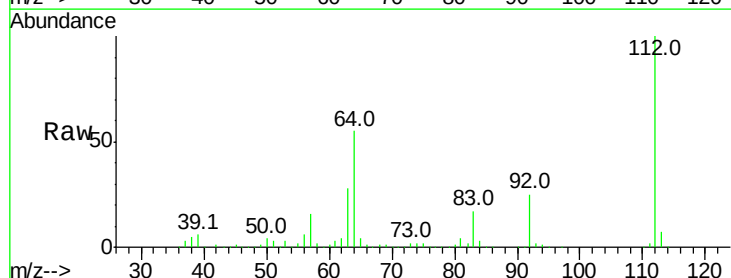
Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 115.00 (114.70 to 115.70): E



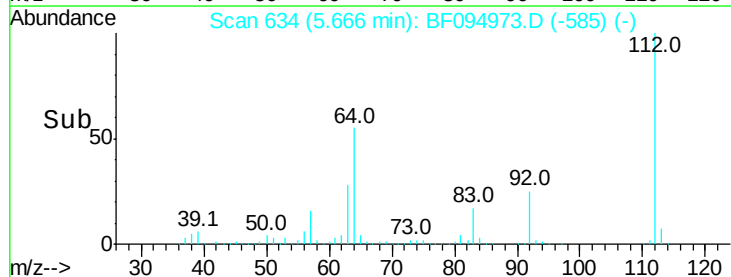
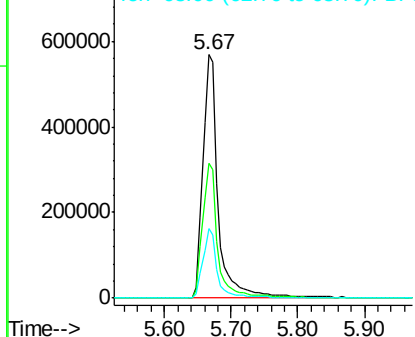
#5

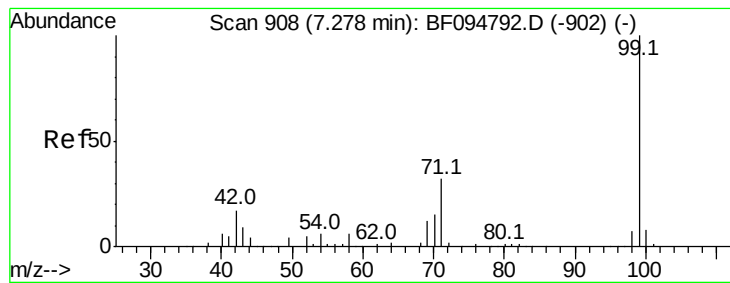
2-Fluorophenol  
Concen: 141.42 ng  
RT: 5.67 min Scan# 634  
Delta R.T. -0.01 min  
Lab File: BF094973.D  
Acq: 8 May 2017 7:18

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 55.4  | 46.0  | 69.0  |
| 63      | 28.3  | 23.4  | 35.0  |



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: 140.16 ng

RT: 7.27 min Scan# 906

Delta R.T. -0.01 min

Lab File: BF094973.D

Acq: 8 May 2017 7:18

Instrument :

BNA\_F

ClientSampled :

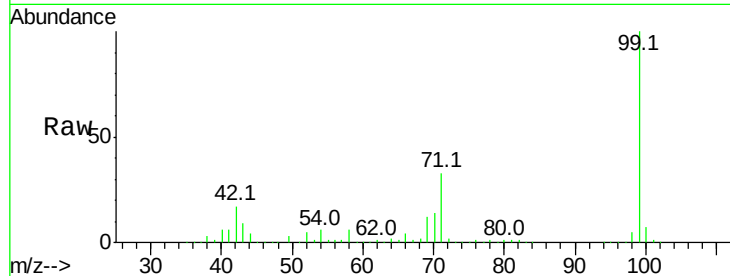
Tot Ion: 99 Resp: 1070149

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 99  | 100   |       |       |
| 42  | 16.8  | 13.5  | 20.3  |
| 71  | 32.8  | 24.5  | 36.7  |

99 100

42 16.8 13.5 20.3

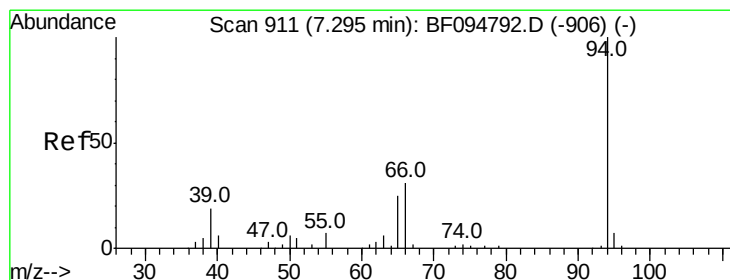
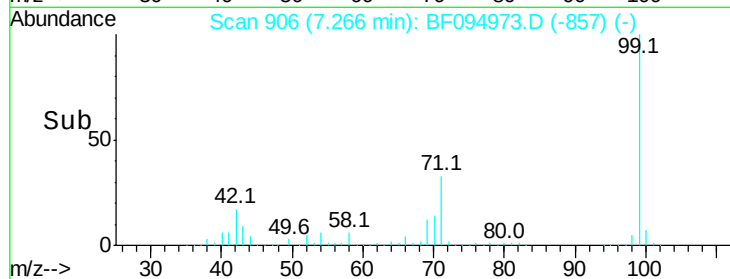
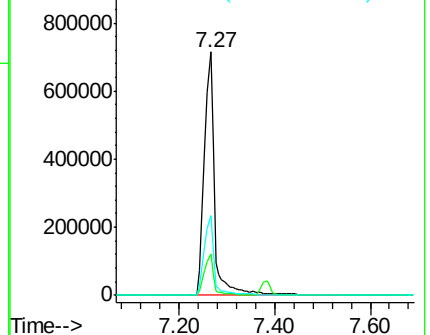
71 32.8 24.5 36.7



Abundance Ion 99.00 (98.70 to 99.70): BF0

Ion 42.00 (41.70 to 42.70): BF0

Ion 71.00 (70.70 to 71.70): BF0



#10

Phenol

Concen: 2.68 ng

RT: 7.28 min Scan# 908

Delta R.T. -0.02 min

Lab File: BF094973.D

Acq: 8 May 2017 7:18

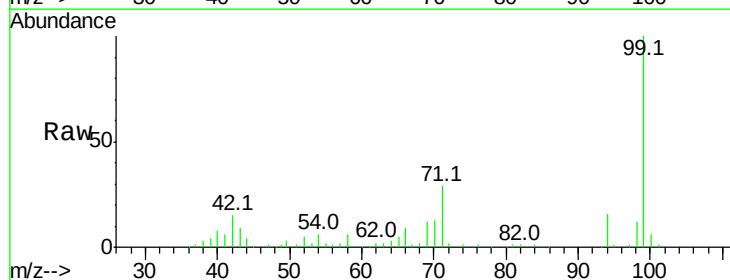
Tgt Ion: 94 Resp: 21546

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 94  | 100   |       |       |
| 65  | 33.5  | 9.9   | 49.9  |
| 66  | 53.5  | 23.1  | 63.1  |

94 100

65 33.5 9.9 49.9

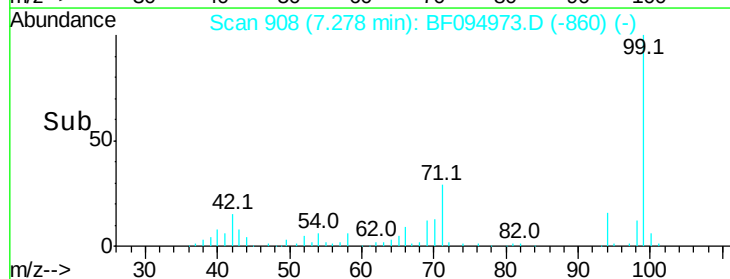
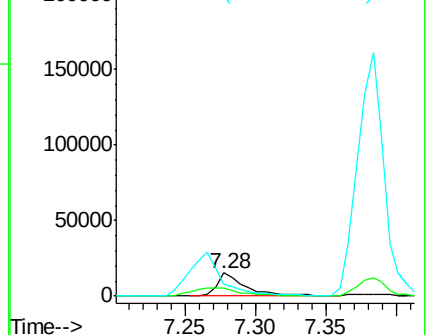
66 53.5 23.1 63.1

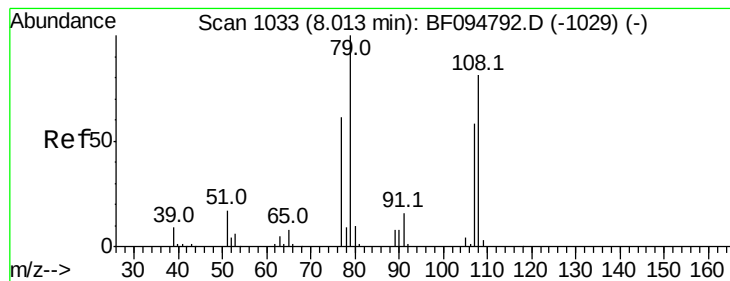


Abundance Ion 94.00 (93.70 to 94.70): BF0

Ion 65.00 (64.70 to 65.70): BF0

Ion 66.00 (65.70 to 66.70): BF0





#15

Benzyl Alcohol

Concen: 2.00 ng

RT: 7.96 min Scan# 1024

Delta R.T. -0.05 min

Lab File: BF094973.D

Acq: 8 May 2017 7:18

Instrument :

BNA\_F

ClientSampleId :

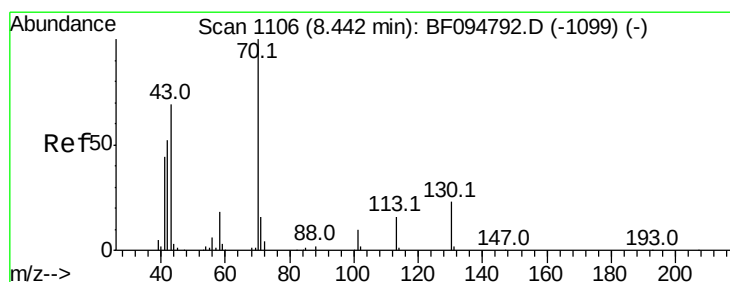
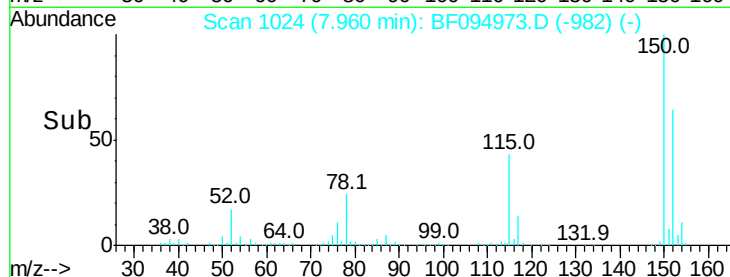
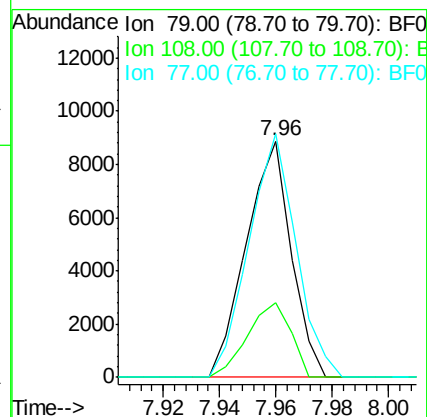
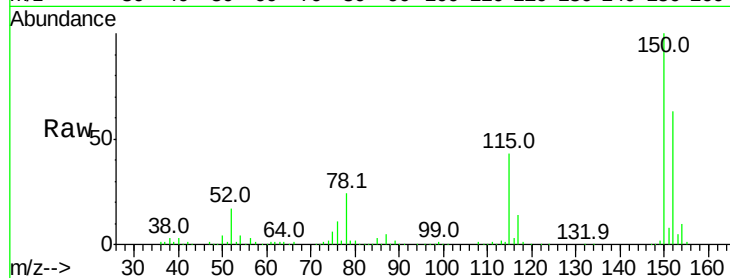
Tot Ion: 79 Resp: 9825

Ion Ratio Lower Upper

79 100

108 31.5 63.4 95.0#

77 103.0 49.2 73.8#



#19

n-Nitroso-di-n-propylamine

Concen: 16.19 ng

RT: 8.62 min Scan# 1136

Delta R.T. 0.18 min

Lab File: BF094973.D

Acq: 8 May 2017 7:18

Tgt Ion: 70 Resp: 83608

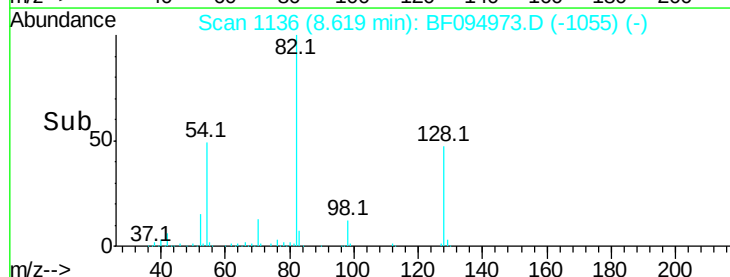
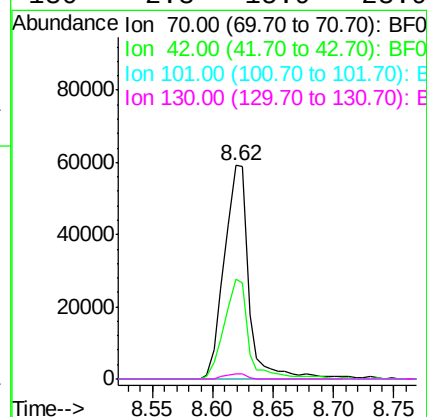
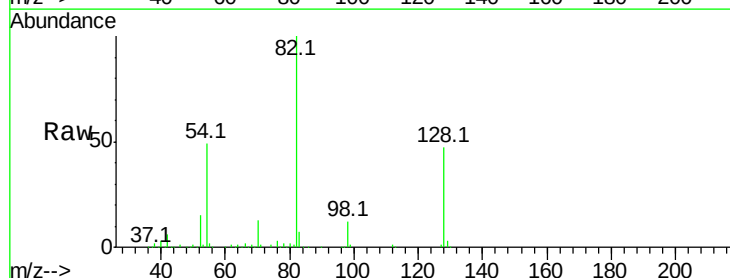
Ion Ratio Lower Upper

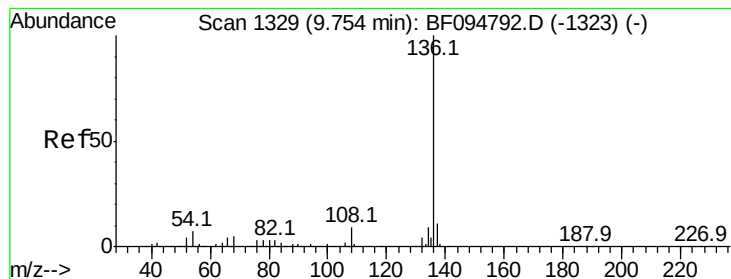
70 100

42 46.8 47.2 70.8#

101 0.0 7.2 10.8#

130 2.3 15.9 23.9#





#21

Naphthalene-d8

Concen: 20.00 ng

RT: 9.74 min Scan# 1326

Delta R.T. -0.02 min

Lab File: BF094973.D

Acq: 8 May 2017 7:18

Instrument :

BNA\_F

ClientSampleId :

Tot Ion:136 Resp: 394037

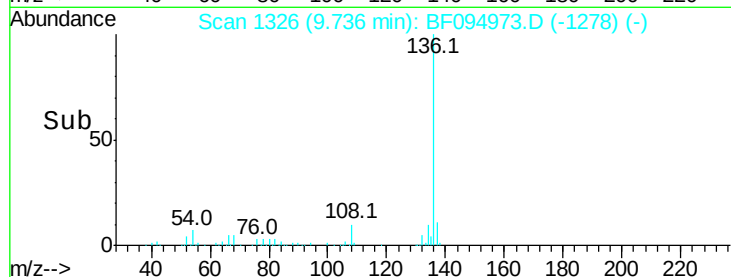
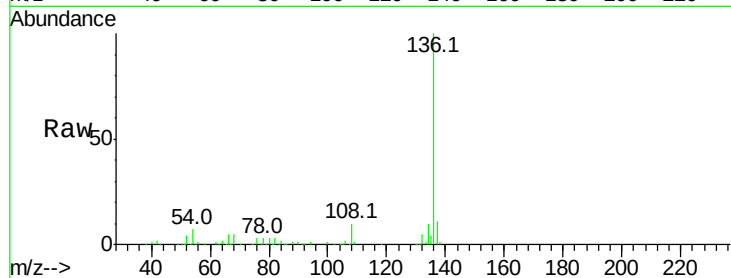
Ion Ratio Lower Upper

136 100

137 10.9 8.5 12.7

54 7.3 4.9 7.3

68 5.4 4.1 6.1

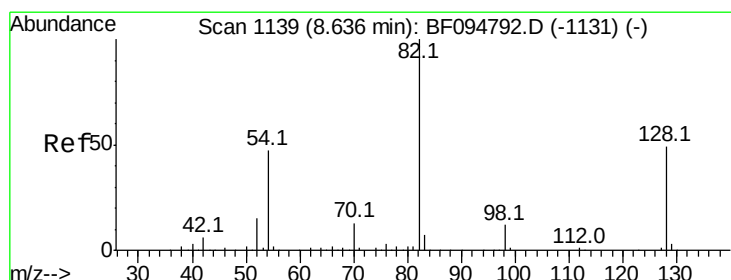
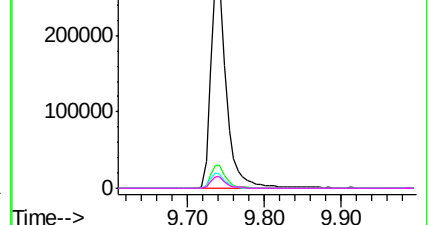


Abundance Ion 136.00 (135.70 to 136.70): E

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: 104.39 ng

RT: 8.62 min Scan# 1136

Delta R.T. -0.02 min

Lab File: BF094973.D

Acq: 8 May 2017 7:18

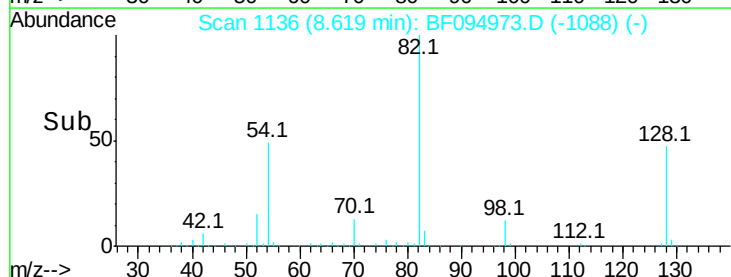
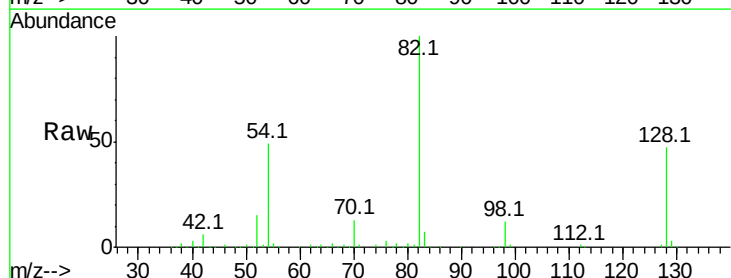
Tgt Ion: 82 Resp: 652286

Ion Ratio Lower Upper

82 100

128 46.7 34.0 51.0

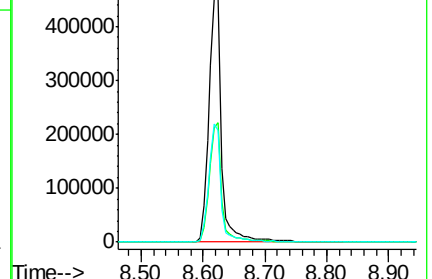
54 48.5 42.2 63.2

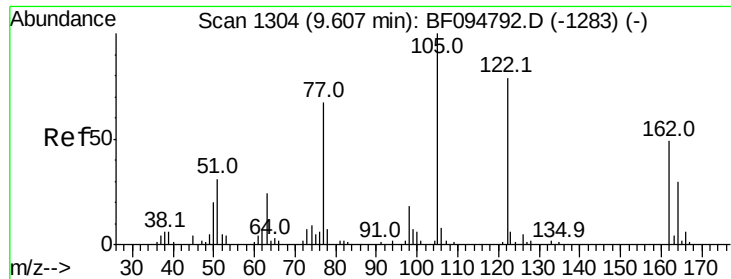


Abundance Ion 82.00 (81.70 to 82.70): BF0

Ion 128.00 (127.70 to 128.70): E

Ion 54.00 (53.70 to 54.70): BF0





#32

Benzoic acid

Concen: 5.11 ng

RT: 9.70 min Scan# 1320

Delta R.T. 0.09 min

Lab File: BF094973.D

Acq: 8 May 2017 7:18

Instrument :

BNA\_F

ClientSampleId :

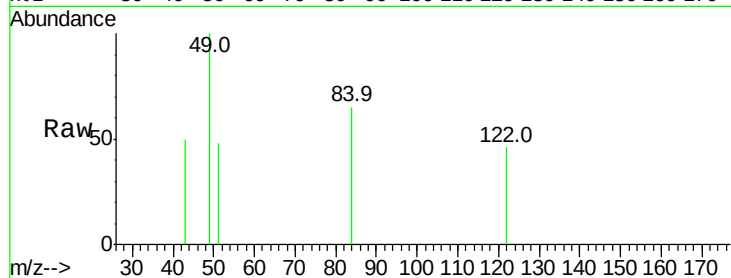
Tot Ion:122 Resp: 113

Ion Ratio Lower Upper

122 100

105 0.0 103.3 143.3#

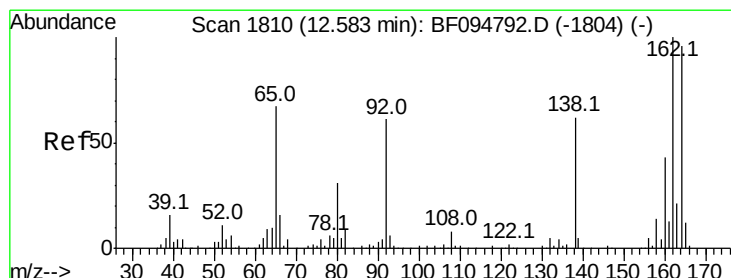
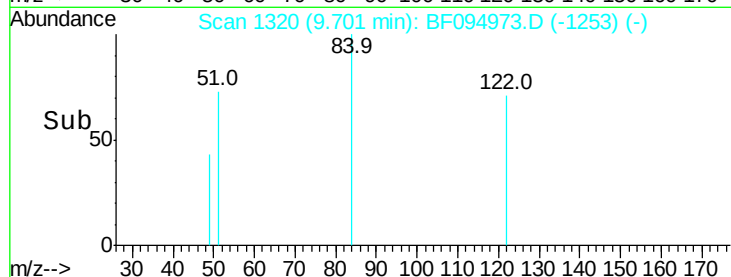
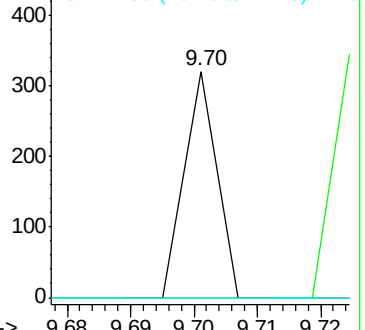
77 0.0 73.7 113.7#



Abundance Ion 122.00 (121.70 to 122.70): E

Ion 105.00 (104.70 to 105.70): E

Ion 77.00 (76.70 to 77.70): BF0



#38

Acenaphthene-d10

Concen: 20.00 ng

RT: 12.57 min Scan# 1808

Delta R.T. -0.01 min

Lab File: BF094973.D

Acq: 8 May 2017 7:18

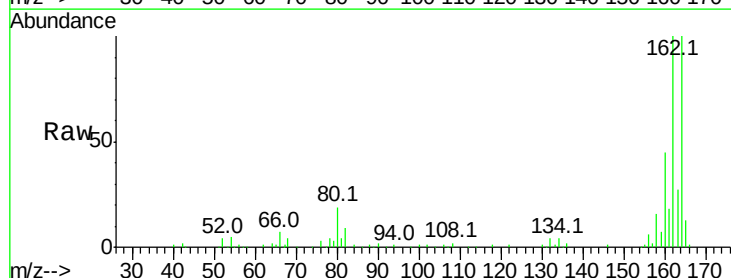
Tgt Ion:164 Resp: 188416

Ion Ratio Lower Upper

164 100

162 99.6 82.6 123.8

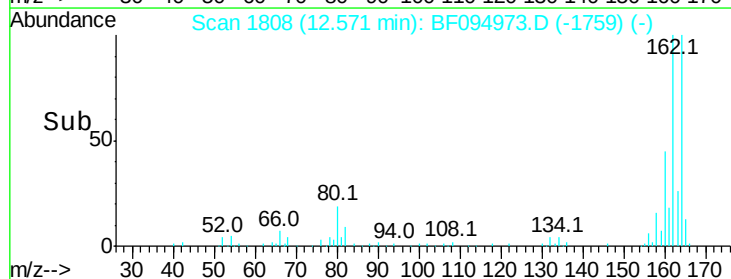
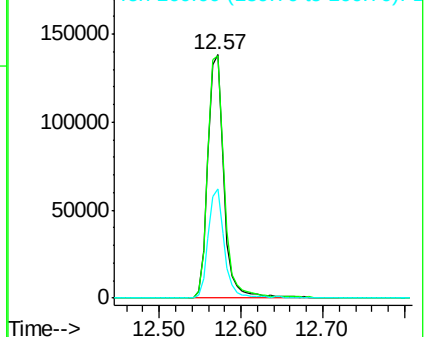
160 44.6 36.2 54.2

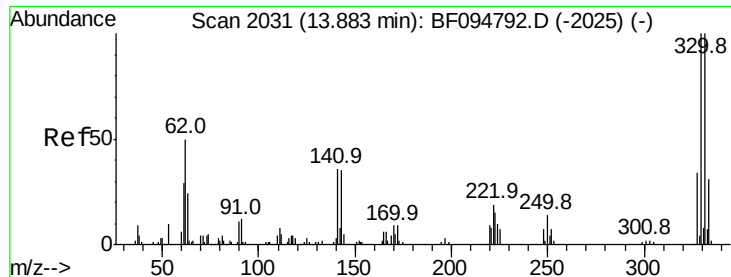


Abundance Ion 164.00 (163.70 to 164.70): E

Ion 162.00 (161.70 to 162.70): E

Ion 160.00 (159.70 to 160.70): E

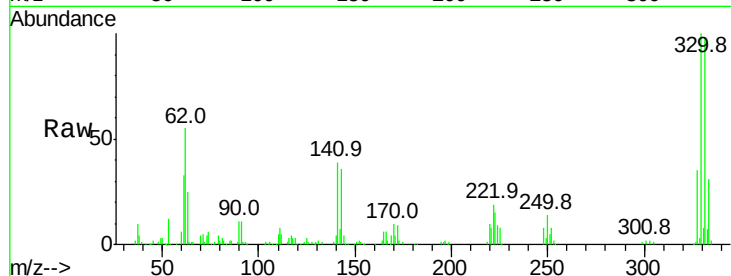




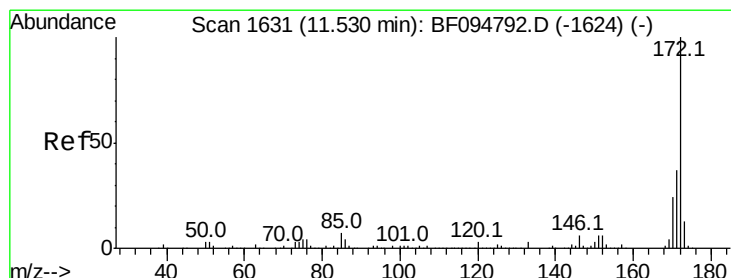
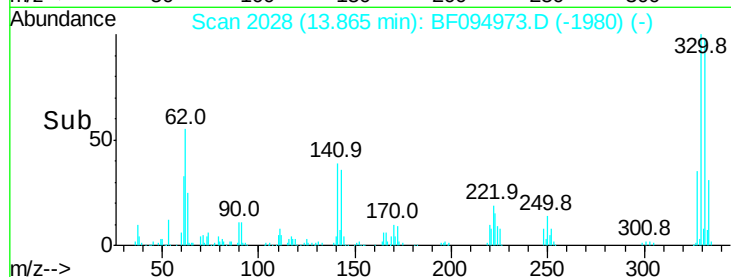
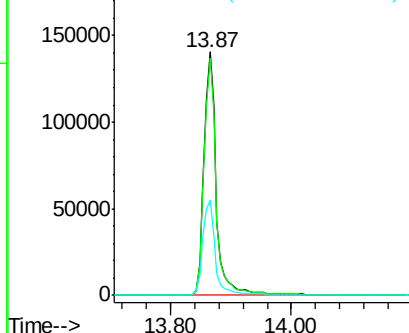
#41  
 2,4,6-Tribromophenol  
 Concen: 130.00 ng  
 RT: 13.87 min Scan# 2028  
 Delta R.T. -0.02 min  
 Lab File: BF094973.D  
 Acq: 8 May 2017 7:18

Instrument :  
 BNA\_F  
 ClientSampled :

Tot Ion:330 Resp: 200598  
 Ion Ratio Lower Upper  
 330 100  
 332 97.2 76.6 115.0  
 141 39.8 31.4 47.2

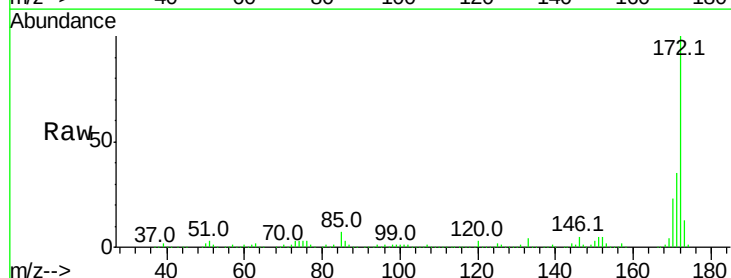


Abundance Ion 329.80 (329.50 to 330.50): E  
 Ion 331.80 (331.50 to 332.50): E  
 Ion 141.00 (140.70 to 141.70): E

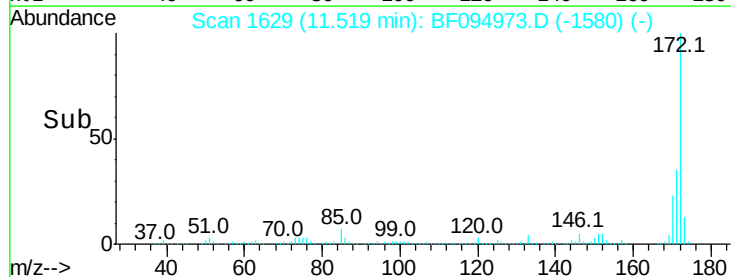
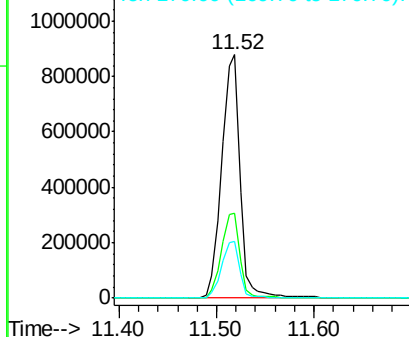


#44  
 2-Fluorobiphenyl  
 Concen: 88.37 ng  
 RT: 11.52 min Scan# 1629  
 Delta R.T. -0.01 min  
 Lab File: BF094973.D  
 Acq: 8 May 2017 7:18

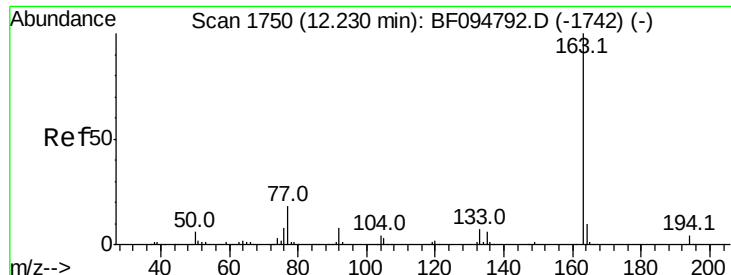
Tgt Ion:172 Resp: 1156746  
 Ion Ratio Lower Upper  
 172 100  
 171 34.7 29.6 44.4  
 170 23.3 19.8 29.8



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







#49

Dimethylphthalate

Concen: 14.69 ng

RT: 12.20 min Scan# 1745

Delta R.T. -0.03 min

Lab File: BF094973.D

Acq: 8 May 2017 7:18

Instrument :

BNA\_F

ClientSampleId :

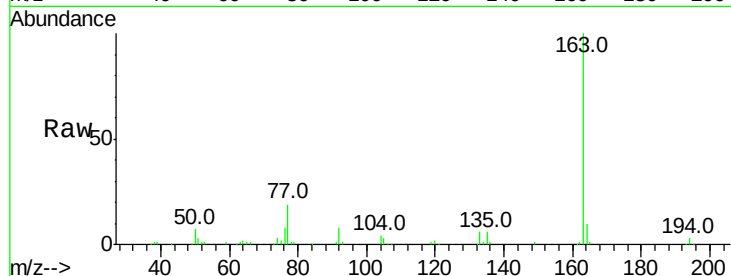
Tot Ion:163 Resp: 227241

Ion Ratio Lower Upper

163 100

194 3.0 2.6 4.0

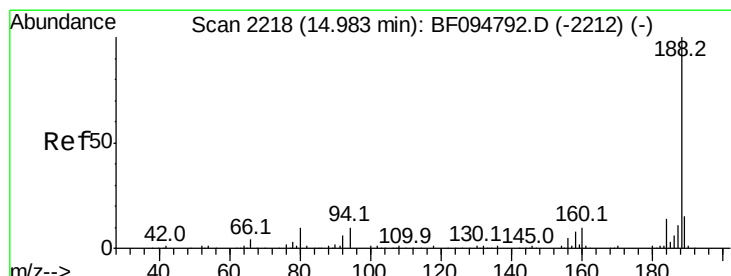
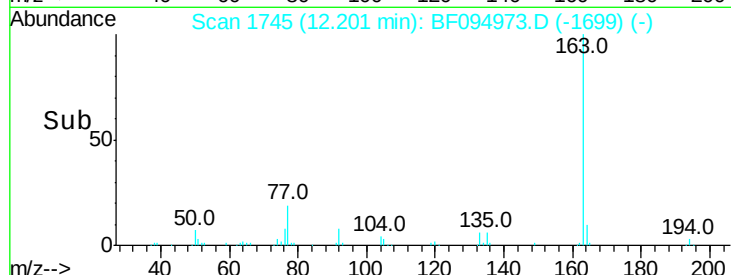
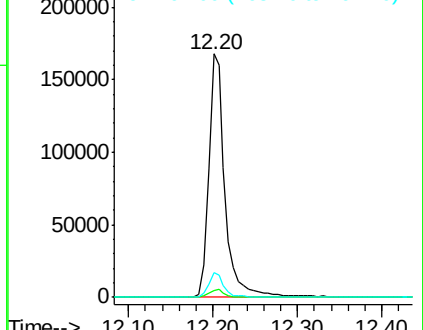
164 10.3 8.4 12.6



Abundance Ion 163.00 (162.70 to 163.70): E

Ion 194.00 (193.70 to 194.70): E

Ion 164.00 (163.70 to 164.70): E



#63

Phenanthrene-d10

Concen: 20.00 ng

RT: 14.97 min Scan# 2216

Delta R.T. -0.01 min

Lab File: BF094973.D

Acq: 8 May 2017 7:18

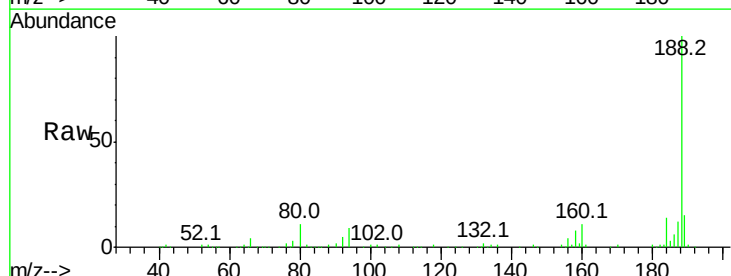
Tgt Ion:188 Resp: 312037

Ion Ratio Lower Upper

188 100

94 9.5 9.4 14.2

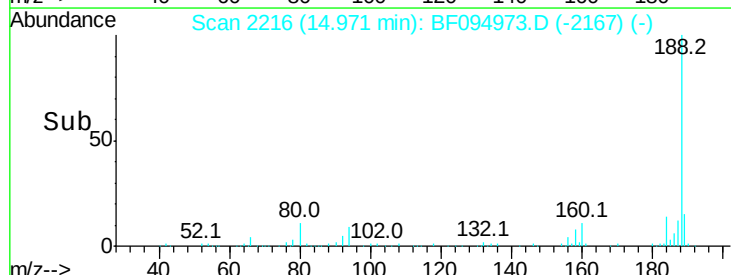
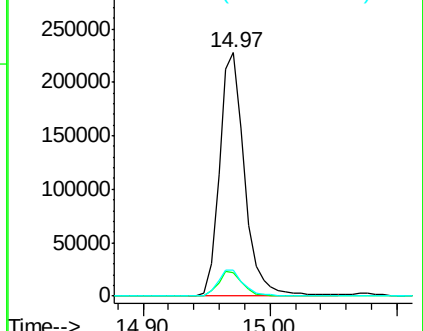
80 10.8 10.2 15.2

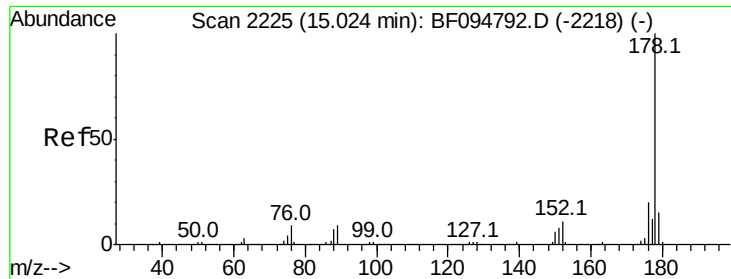


Abundance Ion 188.00 (187.70 to 188.70): E

Ion 94.00 (93.70 to 94.70): BF0

Ion 80.00 (79.70 to 80.70): BF0

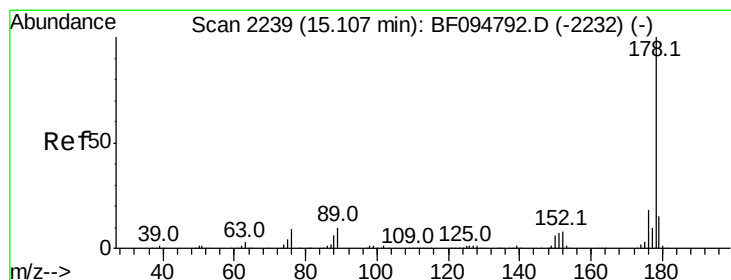
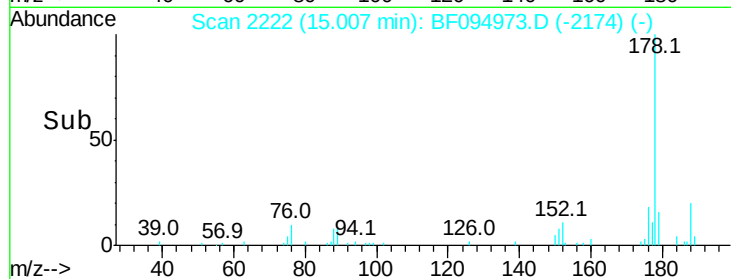
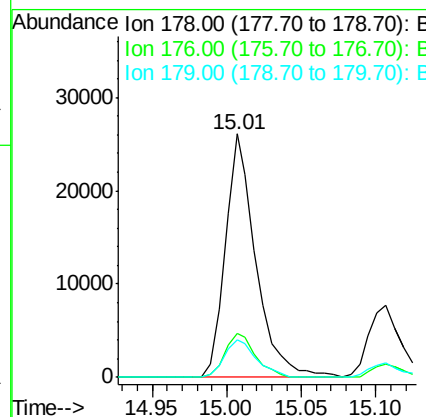
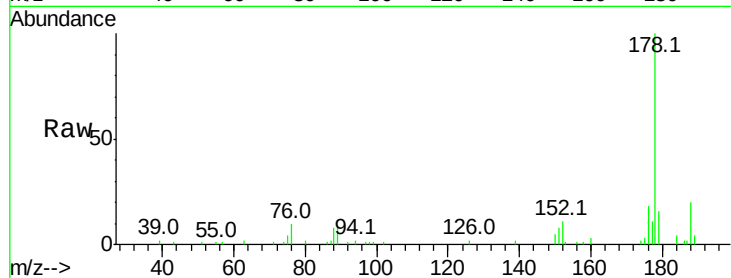




#70  
 Phenanthrene  
 Concen: 2.08 ng  
 RT: 15.01 min Scan# 2222  
 Delta R.T. -0.02 min  
 Lab File: BF094973.D  
 Acq: 8 May 2017 7:18

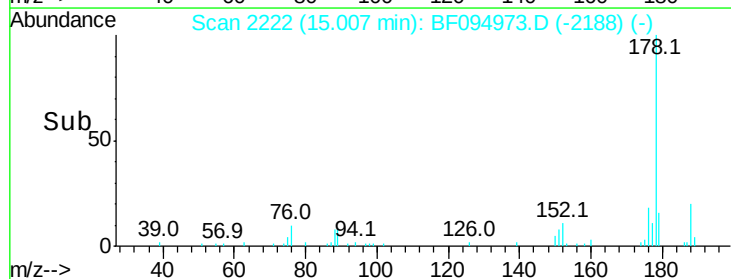
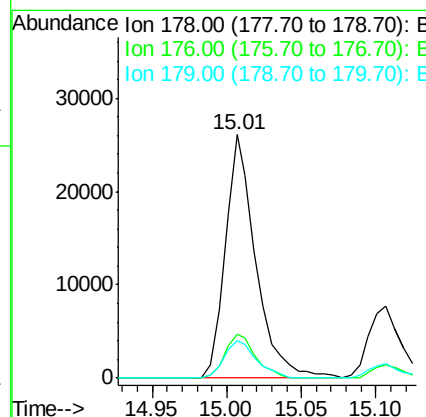
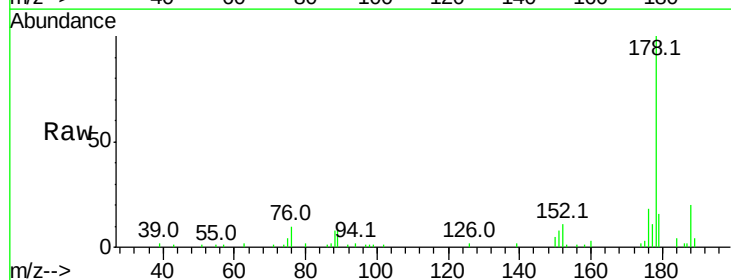
Instrument :  
 BNA\_F  
 ClientSampleId :

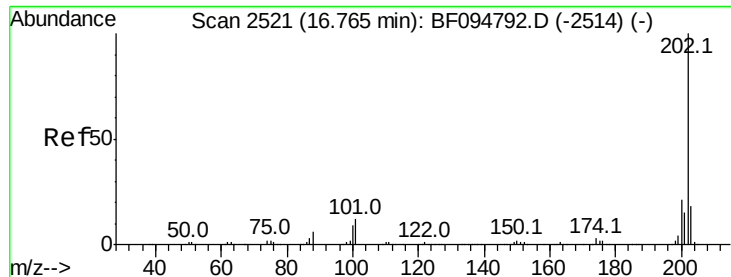
Tot Ion:178 Resp: 37306  
 Ion Ratio Lower Upper  
 178 100  
 176 18.2 16.2 24.4  
 179 15.7 12.6 19.0



#71  
 Anthracene  
 Concen: 2.04 ng  
 RT: 15.01 min Scan# 2222  
 Delta R.T. -0.10 min  
 Lab File: BF094973.D  
 Acq: 8 May 2017 7:18

Tgt Ion:178 Resp: 37306  
 Ion Ratio Lower Upper  
 178 100  
 176 18.2 15.8 23.8  
 179 15.7 12.7 19.1

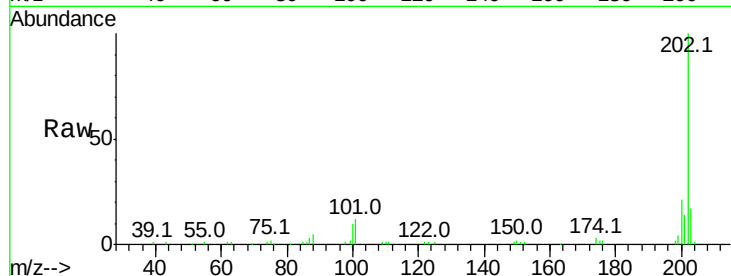




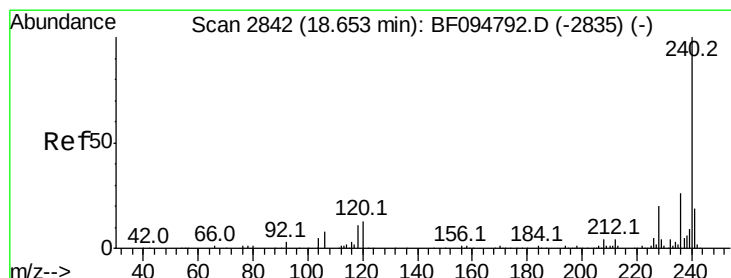
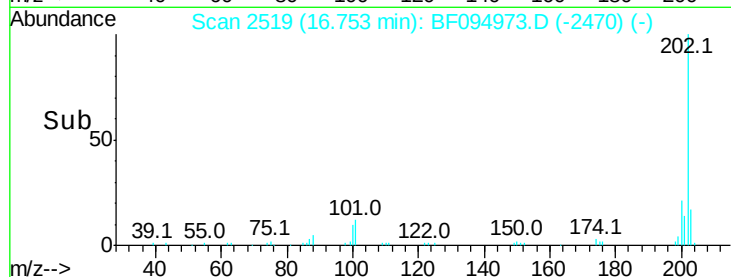
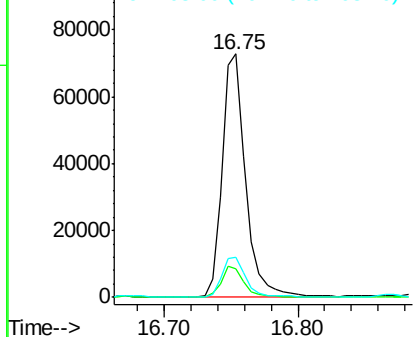
#74  
 Fluoranthene  
 Concen: 4.94 ng  
 RT: 16.75 min Scan# 2519  
 Delta R.T. -0.01 min  
 Lab File: BF094973.D  
 Acq: 8 May 2017 7:18

Instrument :  
 BNA\_F  
 ClientSampled :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 11.8  | 0.0   | 33.2  |
| 203     | 16.6  | 0.0   | 38.1  |

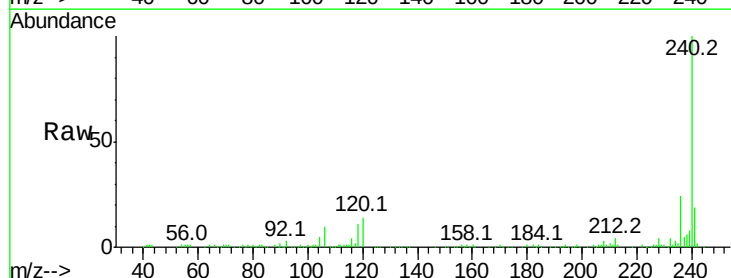


Abundance Ion 202.00 (201.70 to 202.70): E  
 Ion 101.00 (100.70 to 101.70): E  
 Ion 203.00 (202.70 to 203.70): E

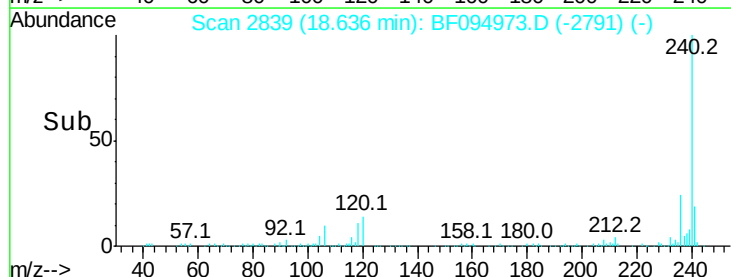
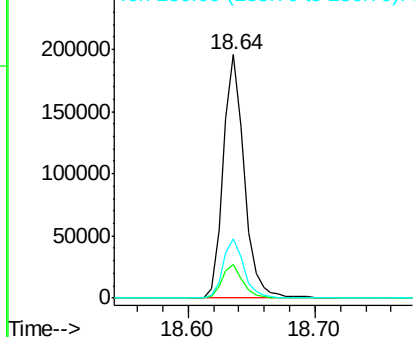


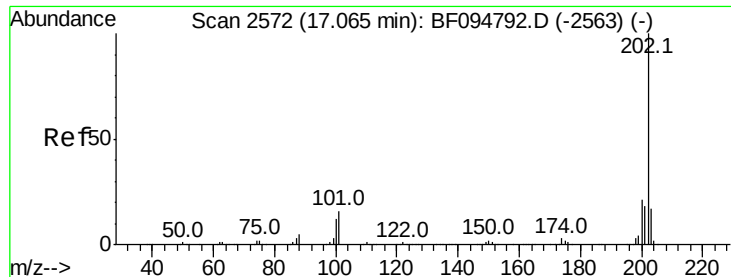
#75  
 Chrysene-d12  
 Concen: 20.00 ng  
 RT: 18.64 min Scan# 2839  
 Delta R.T. -0.02 min  
 Lab File: BF094973.D  
 Acq: 8 May 2017 7:18

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 240     | 100   |       |       |
| 120     | 13.9  | 5.8   | 8.8#  |
| 236     | 24.3  | 20.5  | 30.7  |



Abundance Ion 240.00 (239.70 to 240.70): E  
 Ion 120.00 (119.70 to 120.70): E  
 Ion 236.00 (235.70 to 236.70): E





#77

Pvrene

Concen: 5.22 ng

RT: 17.05 min Scan# 2570

Delta R.T. -0.01 min

Lab File: BF094973.D

Acq: 8 May 2017 7:18

Instrument :

BNA\_F

ClientSampleId :

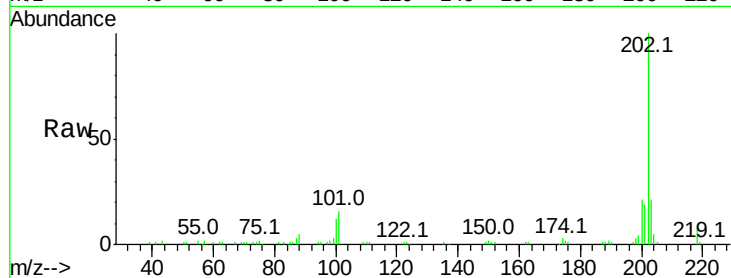
Tot Ion:202 Resp: 87944

Ion Ratio Lower Upper

202 100

200 21.1 17.6 26.4

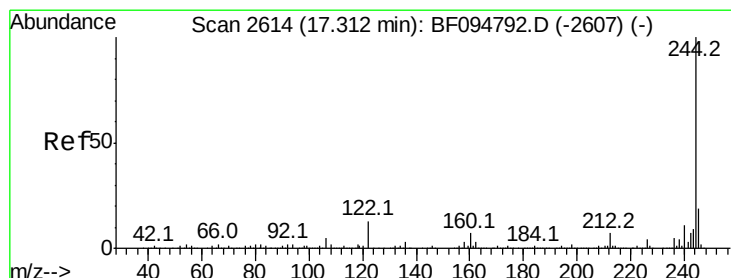
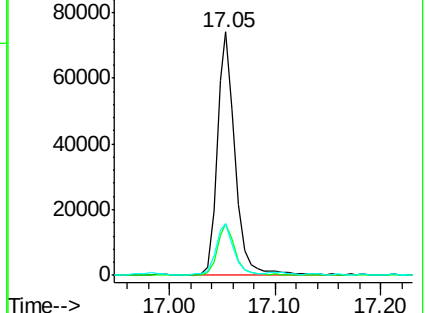
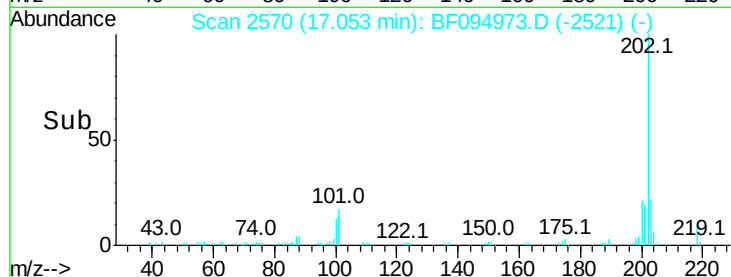
203 21.0 14.4 21.6



Abundance Ion 202.00 (201.70 to 202.70): E

Ion 200.00 (199.70 to 200.70): E

Ion 203.00 (202.70 to 203.70): E



#78

Terphenyl-d14

Concen: 77.84 ng

RT: 17.29 min Scan# 2611

Delta R.T. -0.02 min

Lab File: BF094973.D

Acq: 8 May 2017 7:18

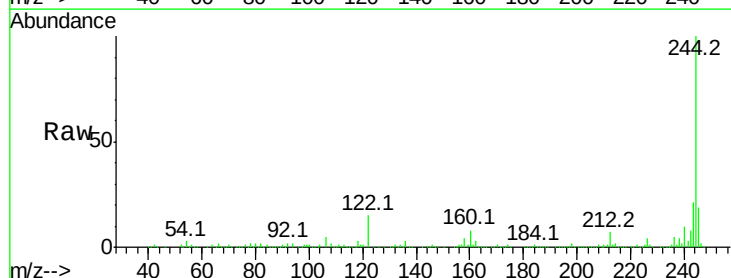
Tgt Ion:244 Resp: 795620

Ion Ratio Lower Upper

244 100

212 6.8 6.0 9.0

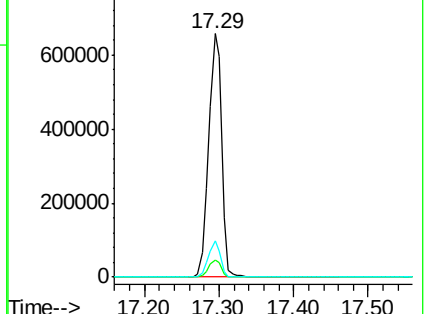
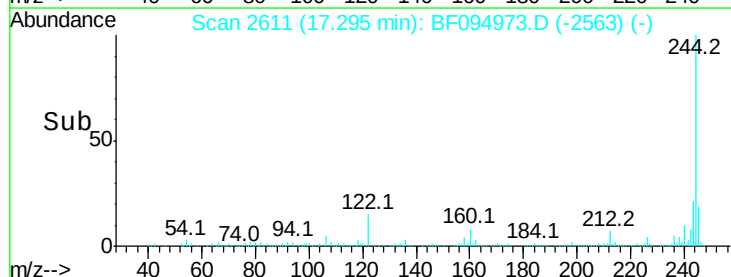
122 14.7 10.3 15.5

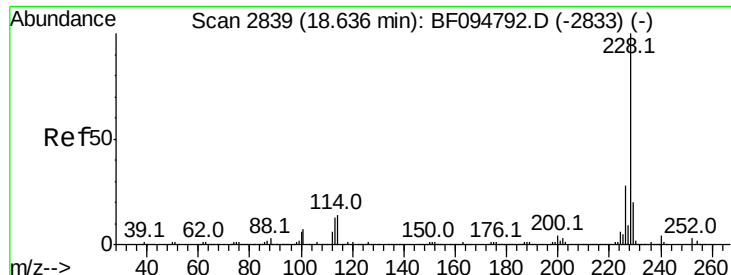


Abundance Ion 244.00 (243.70 to 244.70): E

Ion 212.00 (211.70 to 212.70): E

Ion 122.00 (121.70 to 122.70): E





#80

Benzo(a)anthracene

Concen: 2.67 ng

RT: 18.62 min Scan# 2837

Delta R.T. -0.01 min

Lab File: BF094973.D

Acq: 8 May 2017 7:18

Instrument :

BNA\_F

ClientSampleId :

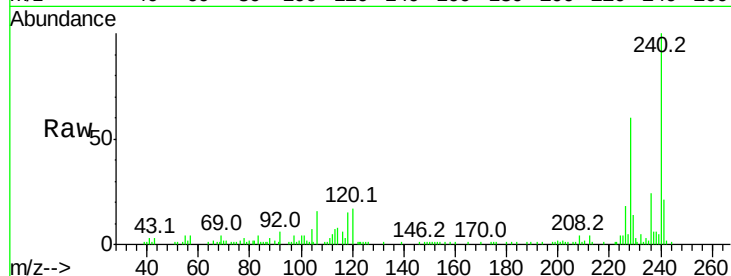
Tot Ion:228 Resp: 35019

Ion Ratio Lower Upper

228 100

226 30.1 22.6 33.8

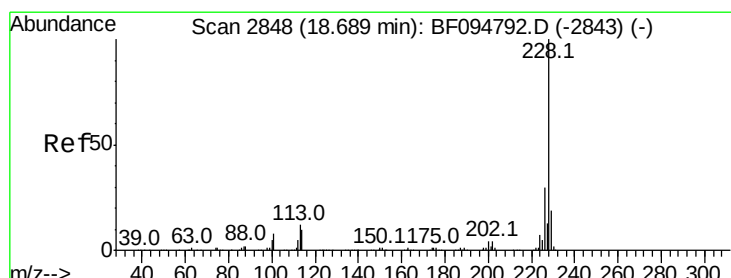
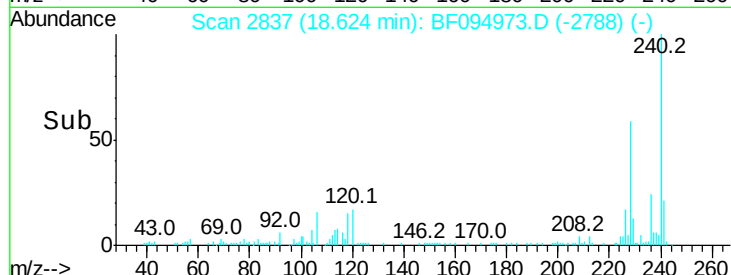
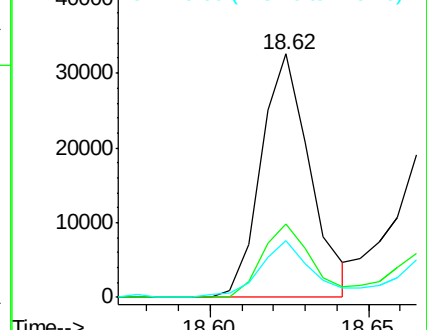
229 23.5 16.3 24.5



Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E



#82

Chrysene

Concen: 2.80 ng

RT: 18.67 min Scan# 2845

Delta R.T. -0.02 min

Lab File: BF094973.D

Acq: 8 May 2017 7:18

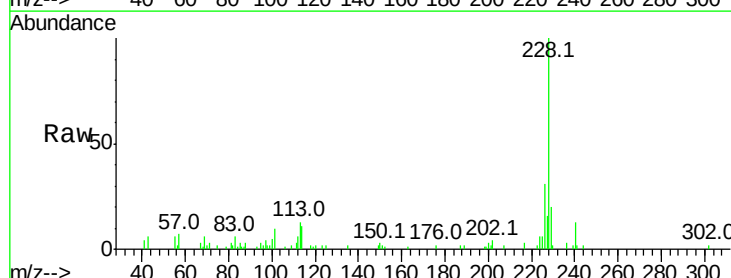
Tgt Ion:228 Resp: 35424

Ion Ratio Lower Upper

228 100

226 31.2 24.9 37.3

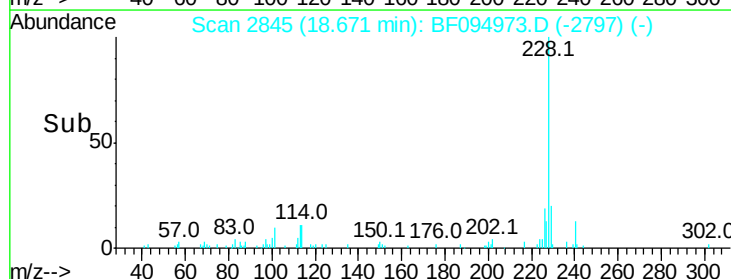
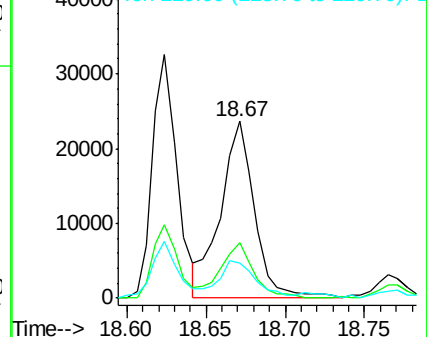
229 19.6 15.8 23.6

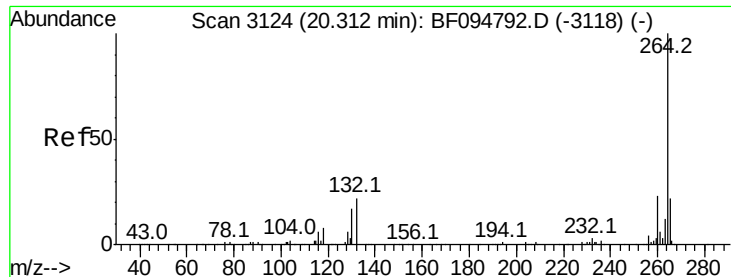


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E

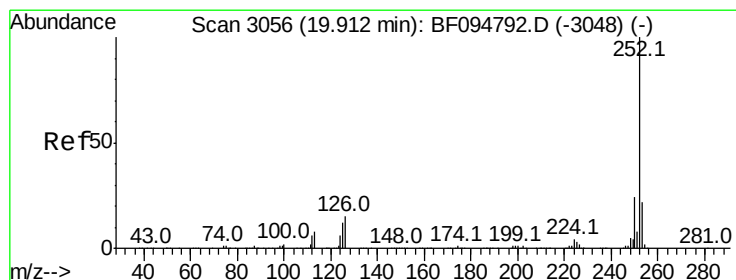
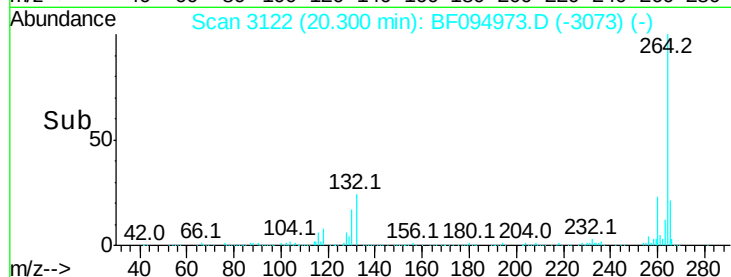
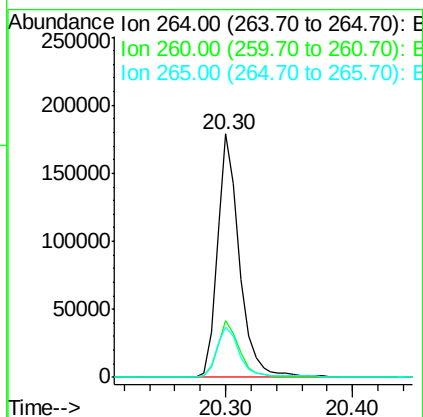
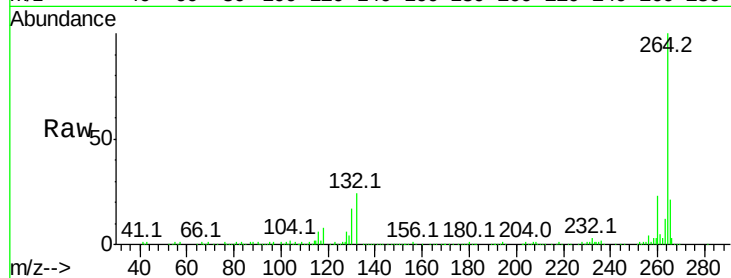




#86  
Pervlene-d12  
Concen: 20.00 ng  
RT: 20.30 min Scan# 3122  
Delta R.T. -0.01 min  
Lab File: BF094973.D  
Acq: 8 May 2017 7:18

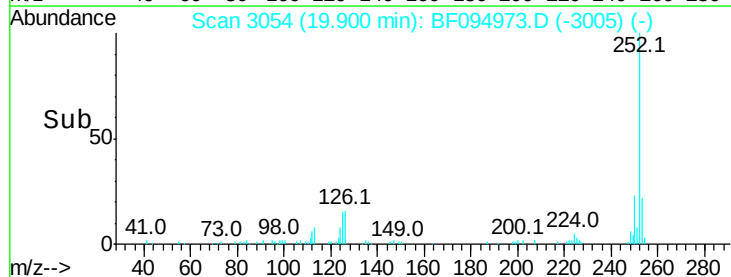
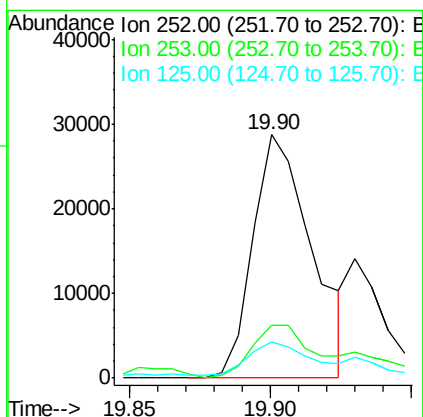
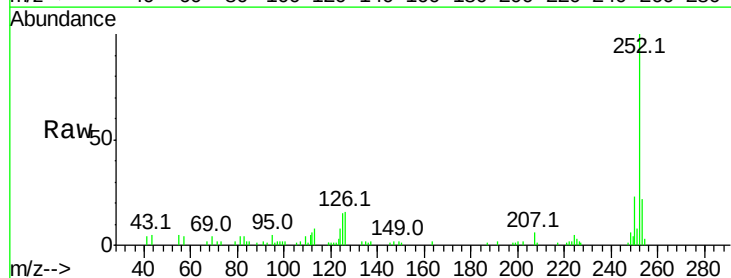
Instrument :  
BNA\_F  
ClientSampled :

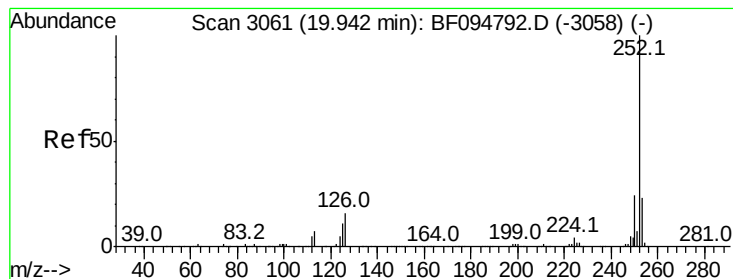
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 23.3  | 19.5  | 29.3  |
| 265     | 20.7  | 17.2  | 25.8  |



#87  
Benzo(b)fluoranthene  
Concen: 3.10 ng  
RT: 19.90 min Scan# 3054  
Delta R.T. -0.01 min  
Lab File: BF094973.D  
Acq: 8 May 2017 7:18

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 21.5  | 18.1  | 27.1  |
| 125     | 14.8  | 9.8   | 14.8# |





#88

Benzo(k)fluoranthene

Concen: 3.22 ng

RT: 19.90 min Scan# 3054

Delta R.T. -0.04 min

Lab File: BF094973.D

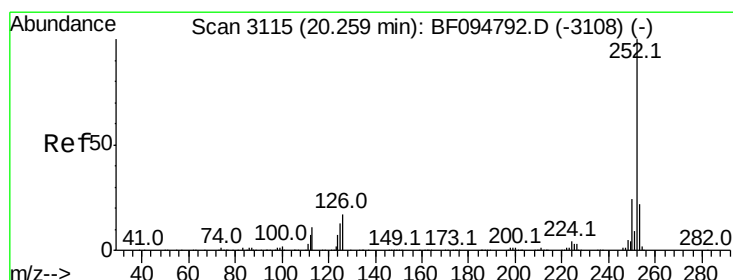
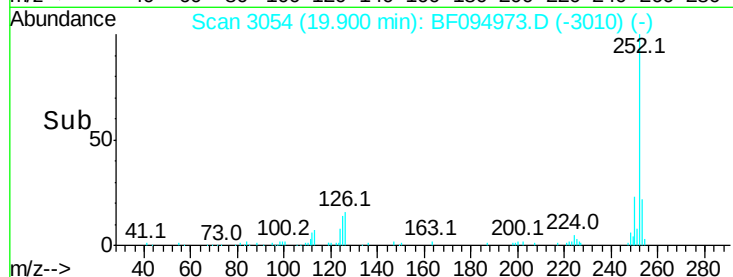
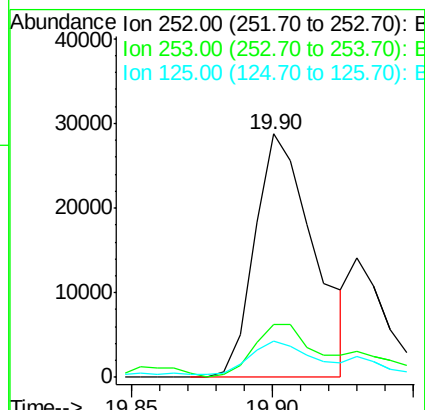
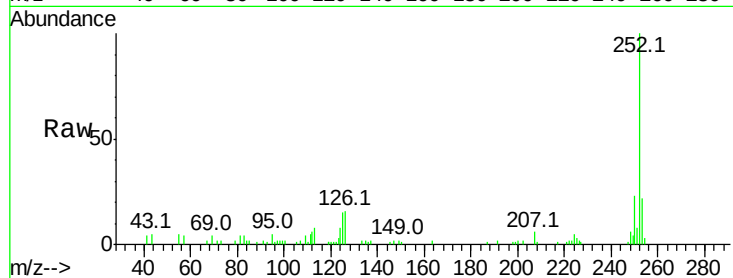
Acq: 8 May 2017 7:18

Instrument :

BNA\_F

ClientSampleId :

|             |       |           |
|-------------|-------|-----------|
| Tot Ion:252 | Resp: | 41614     |
| Ion Ratio   | Lower | Upper     |
| 252         | 100   |           |
| 253         | 21.5  | 18.4 27.6 |
| 125         | 14.8  | 13.1 19.7 |



#89

Benzo(a)pyrene

Concen: 2.42 ng

RT: 20.25 min Scan# 3113

Delta R.T. -0.01 min

Lab File: BF094973.D

Acq: 8 May 2017 7:18

|             |       |            |
|-------------|-------|------------|
| Tgt Ion:252 | Resp: | 29938      |
| Ion Ratio   | Lower | Upper      |
| 252         | 100   |            |
| 253         | 24.2  | 17.5 26.3  |
| 125         | 19.3  | 11.0 16.4# |

