

Data Path : Z:\HPCHEM1\BNA F\DATA\BF101817\  
 Data File : BF099623.D  
 Acq On : 18 Oct 2017 17:59  
 Operator : SJ/JU  
 Sample : I5834-02  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :

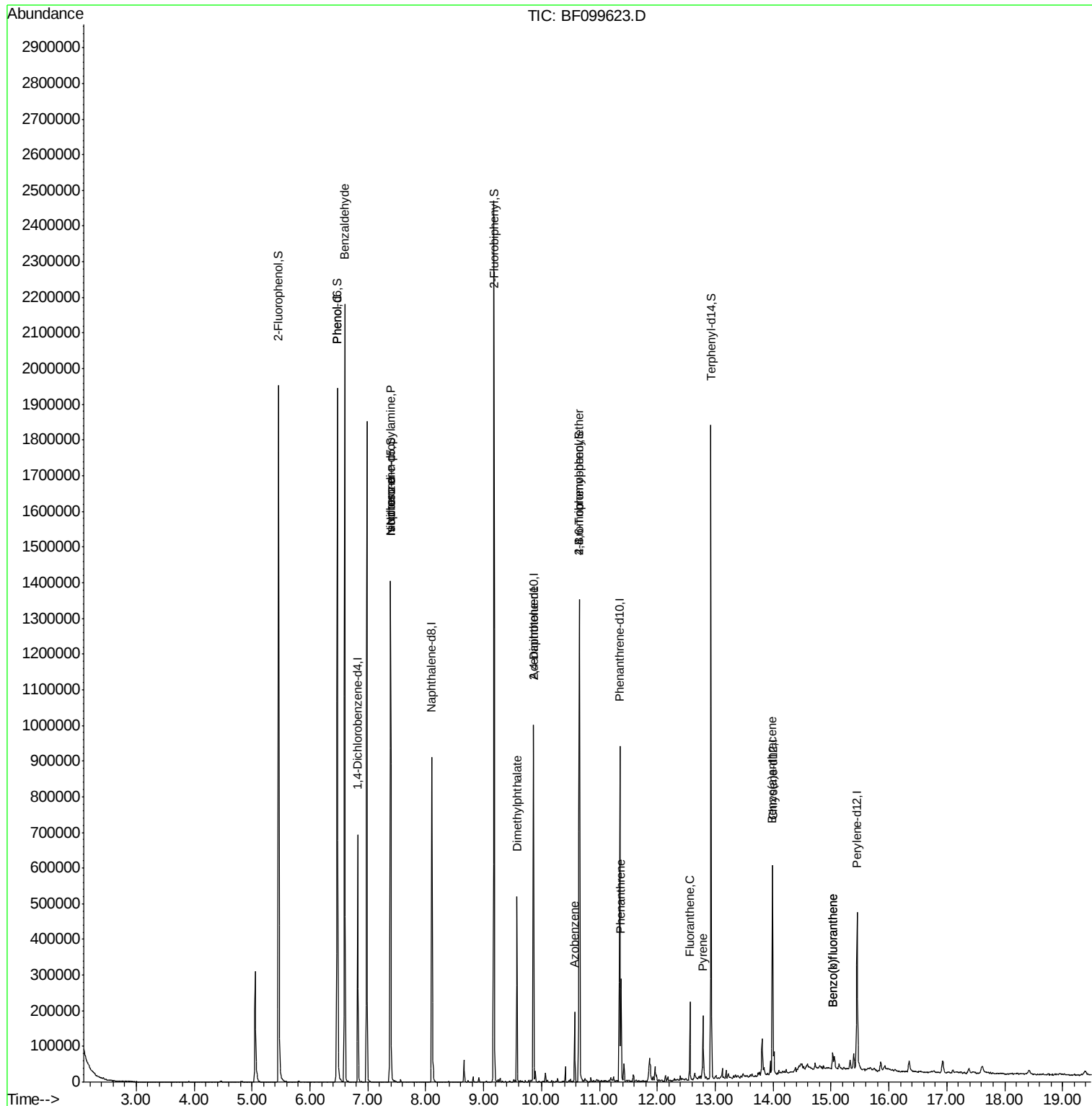
Quant Time: Oct 18 22:14:07 2017  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF092317.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Oct 18 15:18:49 2017  
 Response via : Initial Calibration

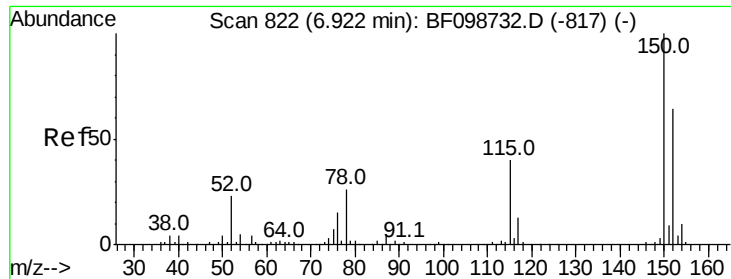
| Internal Standards             | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|--------------------------------|-------|------|----------|--------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4      | 6.83  | 152  | 108916   | 20.00  | ng    | 0.00     |
| 21) Naphthalene-d8             | 8.10  | 136  | 454984   | 20.00  | ng    | 0.00     |
| 38) Acenaphthene-d10           | 9.86  | 164  | 204748   | 20.00  | ng    | 0.00     |
| 63) Phenanthrene-d10           | 11.35 | 188  | 338151   | 20.00  | ng    | 0.00     |
| 75) Chrysene-d12               | 13.99 | 240  | 193554   | 20.00  | ng    | 0.00     |
| 86) Perylene-d12               | 15.45 | 264  | 191043   | 20.00  | ng    | 0.00     |
| System Monitoring Compounds    |       |      |          |        |       |          |
| 5) 2-Fluorophenol              | 5.46  | 112  | 664644   | 97.14  | ng    | 0.00     |
| 7) Phenol-d6                   | 6.47  | 99   | 800747   | 94.87  | ng    | 0.00     |
| 23) Nitrobenzene-d5            | 7.39  | 82   | 480027   | 67.66  | ng    | 0.00     |
| 41) 2,4,6-Tribromophenol       | 10.66 | 330  | 171137   | 102.15 | ng    | 0.00     |
| 44) 2-Fluorobiphenyl           | 9.18  | 172  | 802076   | 65.40  | ng    | 0.00     |
| 78) Terphenyl-d14              | 12.93 | 244  | 572179   | 67.23  | ng    | 0.00     |
| Target Compounds               |       |      |          |        |       |          |
| 9) Benzaldehyde                | 6.60  | 77   | 13033    | 2.662  | ng    | 85       |
| 10) Phenol                     | 6.48  | 94   | 53180    | 5.634  | ng    | 90       |
| 19) n-Nitroso-di-n-propylamine | 7.39  | 70   | 59353    | 11.014 | ng    | # 73     |
| 25) Isophorone                 | 7.39  | 82   | 480022   | 32.725 | ng    | # 64     |
| 49) Dimethylphthalate          | 9.57  | 163  | 193829   | 12.543 | ng    | 99       |
| 56) 2,4-Dinitrotoluene         | 9.86  | 165  | 25717    | 5.890  | ng    | # 22     |
| 62) Azobenzene                 | 10.57 | 77   | 31704    | 2.283  | ng    | # 1      |
| 66) 4-Bromophenyl-phenylether  | 10.65 | 248  | 11103    | 3.354  | ng    | # 1      |
| 70) Phenanthrene               | 11.37 | 178  | 105731   | 5.841  | ng    | 99       |
| 74) Fluoranthene               | 12.56 | 202  | 79272    | 4.325  | ng    | 96       |
| 77) Pyrene                     | 12.79 | 202  | 66787    | 4.525  | ng    | 99       |
| 80) Benzo(a)anthracene         | 13.98 | 228  | 24233    | 2.068  | ng    | 95       |
| 87) Benzo(b)fluoranthene       | 15.03 | 252  | 31721    | 2.701  | ng    | # 91     |
| 88) Benzo(k)fluoranthene       | 15.03 | 252  | 31721    | 2.734  | ng    | # 93     |

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

```
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Operator  : SJ/JU  
Sample    : I5834-02  
Misc      :  
ALS Vial  : 6      Sample Multiplier: 1
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Quant Time: Oct 18 22:14:07 2017  
Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF092317.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Wed Oct 18 15:18:49 2017  
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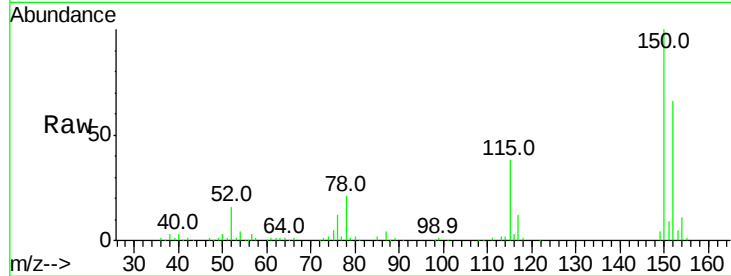


#1

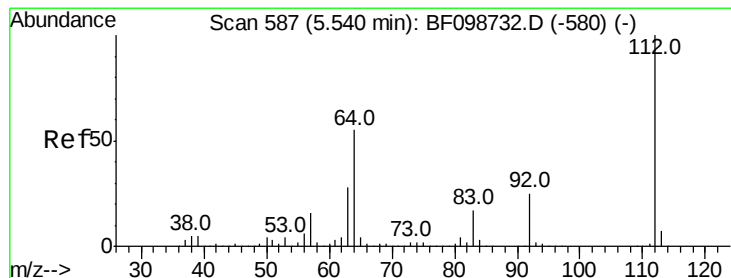
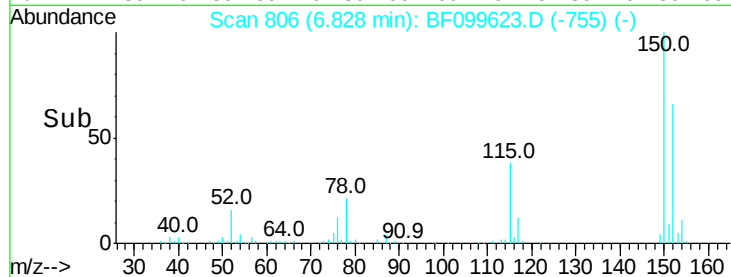
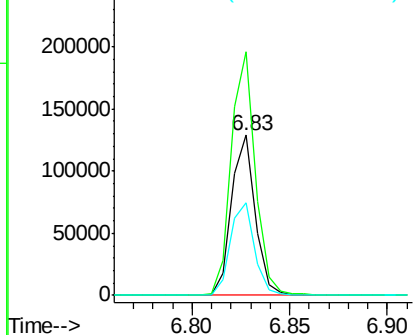
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.83 min Scan# 806  
Delta R.T. 0.00 min  
Lab File: BF099623.D  
Acq: 18 Oct 2017 17:59

Instrument :  
BNA\_F  
ClientSampleId :

Tot Ion:152 Resp: 108916  
Ion Ratio Lower Upper  
152 100  
150 152.1 124.6 186.8  
115 57.5 50.1 75.1



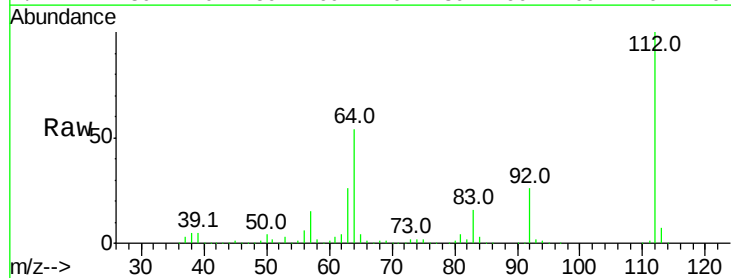
Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 115.00 (114.70 to 115.70): E



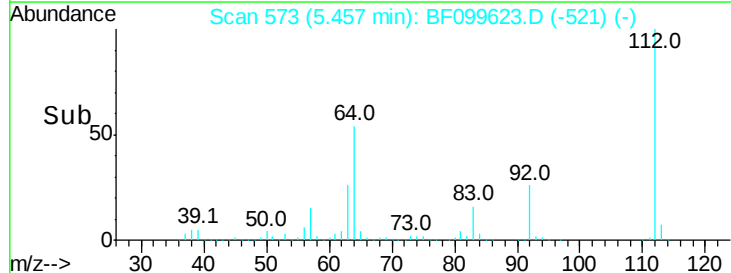
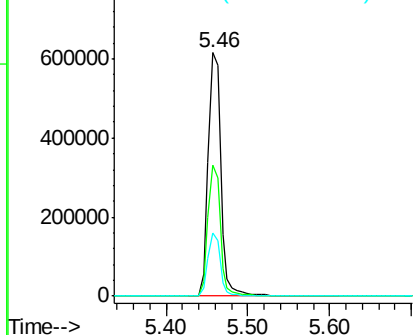
#5

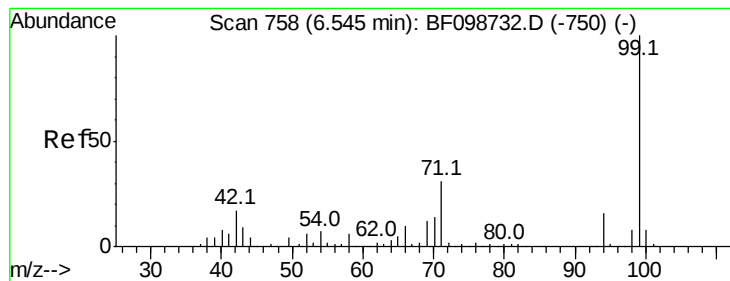
2-Fluorophenol  
Concen: 97.143 ng  
RT: 5.46 min Scan# 573  
Delta R.T. 0.01 min  
Lab File: BF099623.D  
Acq: 18 Oct 2017 17:59

Tgt Ion:112 Resp: 664644  
Ion Ratio Lower Upper  
112 100  
64 54.0 47.9 71.9  
63 26.0 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: 94.873 ng

RT: 6.47 min Scan# 746

Delta R.T. -0.01 min

Lab File: BF099623.D

Acq: 18 Oct 2017 17:59

Instrument :

BNA\_F

ClientSampled :

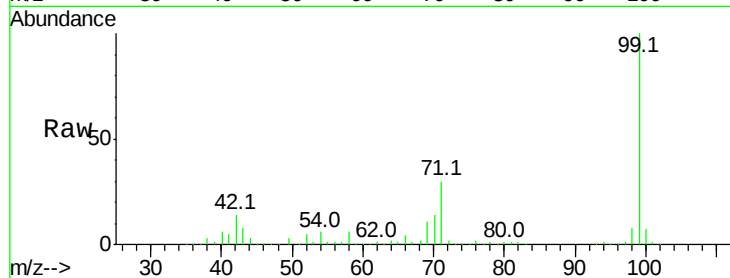
Tot Ion: 99 Resp: 800747

Ion Ratio Lower Upper

99 100

42 14.4 14.5 21.7#

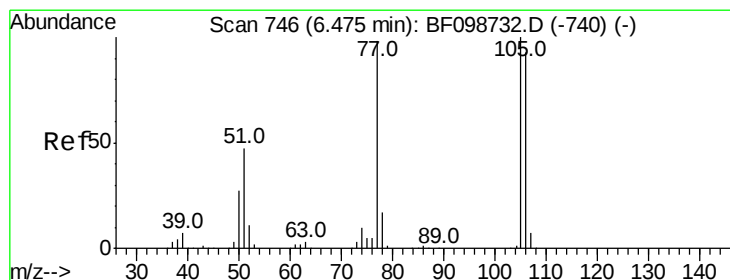
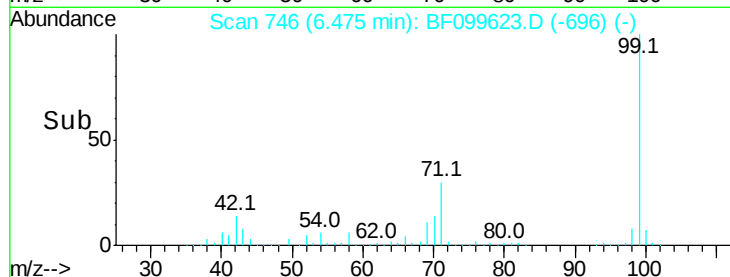
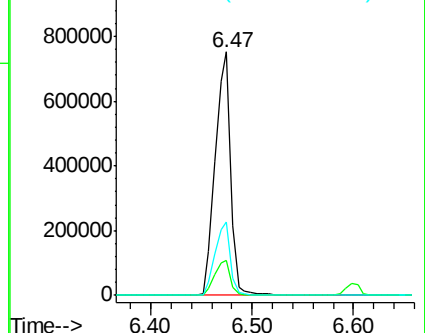
71 30.1 25.4 38.0



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: 2.662 ng

RT: 6.60 min Scan# 767

Delta R.T. 0.21 min

Lab File: BF099623.D

Acq: 18 Oct 2017 17:59

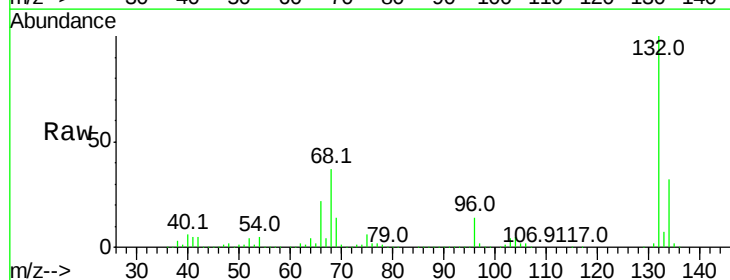
Tgt Ion: 77 Resp: 13033

Ion Ratio Lower Upper

77 100

105 84.1 81.1 121.1

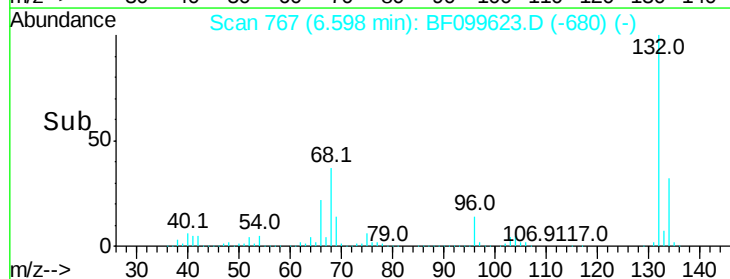
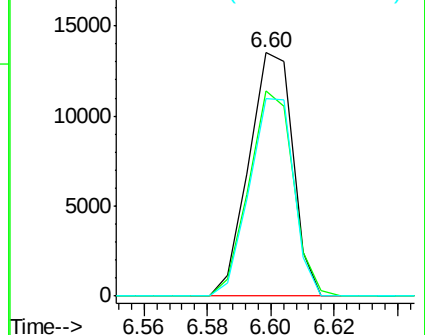
106 81.1 74.5 114.5

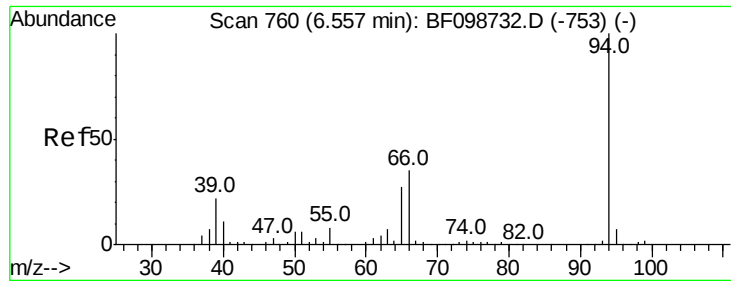


Abundance Ion 77.00 (76.70 to 77.70): BF0

Ion 105.00 (104.70 to 105.70): E

Ion 106.00 (105.70 to 106.70): E

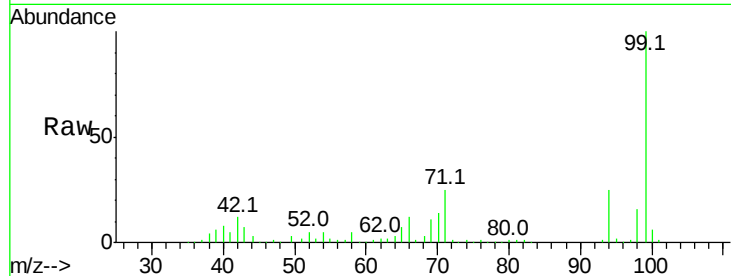




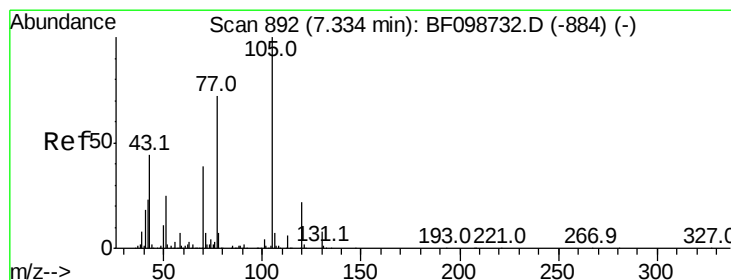
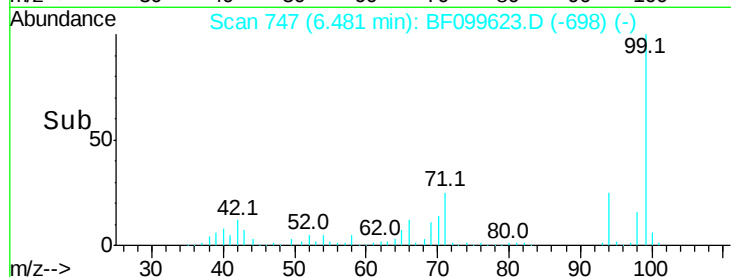
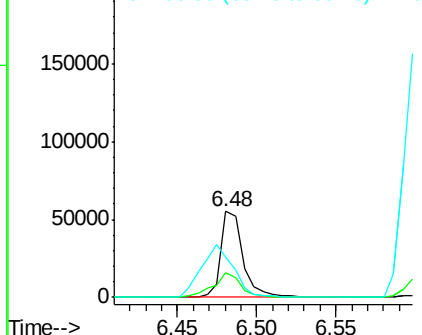
#10  
Phenol  
Concen: 5.634 ng  
RT: 6.48 min Scan# 747  
Delta R.T. -0.01 min  
Lab File: BF099623.D  
Acq: 18 Oct 2017 17:59

Instrument :  
BNA\_F  
ClientSampleId :

Tot Ion: 94 Resp: 53180  
Ion Ratio Lower Upper  
94 100  
65 28.8 7.9 47.9  
66 46.4 16.2 56.2



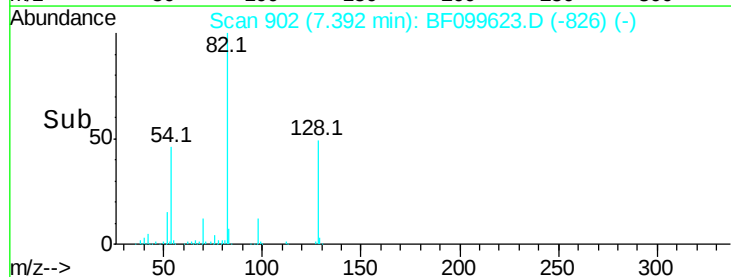
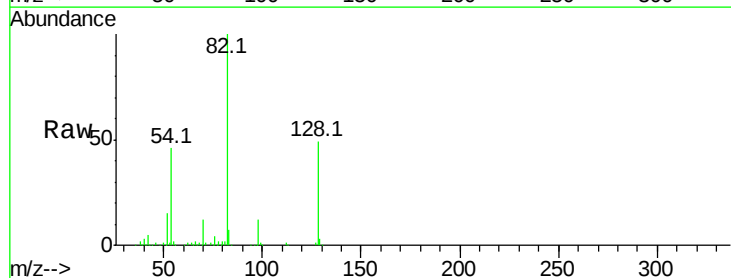
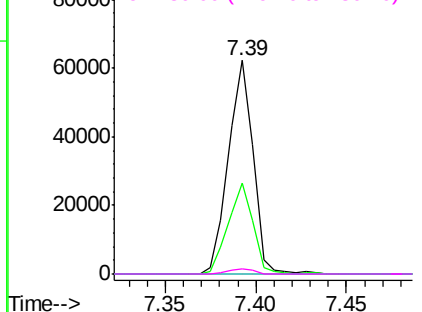
Abundance Ion 94.00 (93.70 to 94.70): BF0  
Ion 65.00 (64.70 to 65.70): BF0  
Ion 66.00 (65.70 to 66.70): BF0

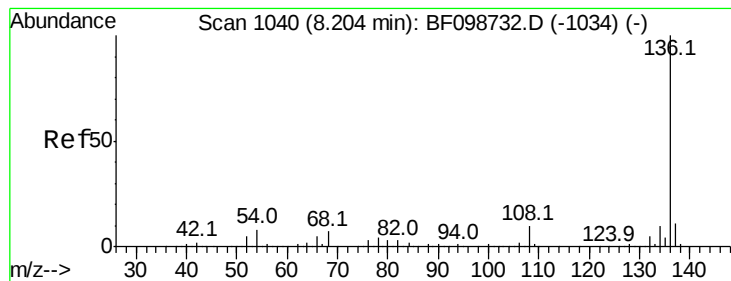


#19  
n-Nitroso-di-n-propylamine  
Concen: 11.014 ng  
RT: 7.39 min Scan# 902  
Delta R.T. 0.15 min  
Lab File: BF099623.D  
Acq: 18 Oct 2017 17:59

Tgt Ion: 70 Resp: 59353  
Ion Ratio Lower Upper  
70 100  
42 42.6 47.5 71.3#  
101 0.0 7.4 11.2#  
130 2.3 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: 8.10 min Scan# 1023

Delta R.T. -0.01 min

Lab File: BF099623.D

Acq: 18 Oct 2017 17:59

Instrument :

BNA\_F

ClientSampleId :

Tot Ion:136 Resp: 454984

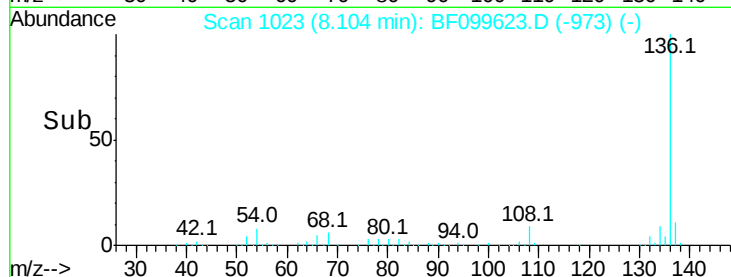
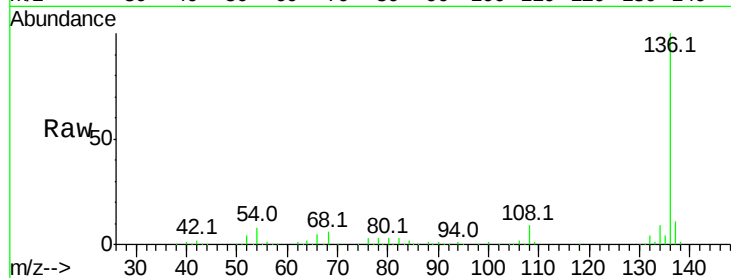
Ion Ratio Lower Upper

136 100

137 11.0 8.9 13.3

54 7.8 6.6 9.8

68 6.3 5.0 7.4

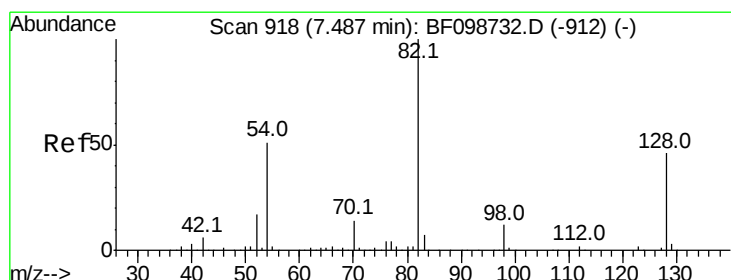
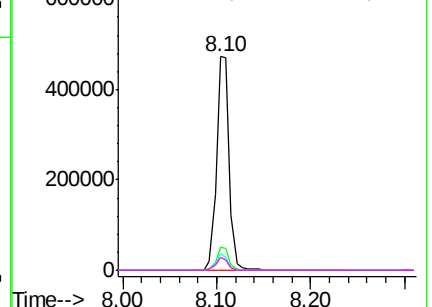


Abundance Ion 136.00 (135.70 to 136.70): E

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: 67.660 ng

RT: 7.39 min Scan# 902

Delta R.T. -0.01 min

Lab File: BF099623.D

Acq: 18 Oct 2017 17:59

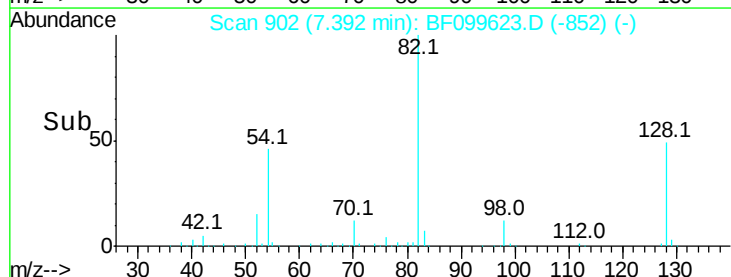
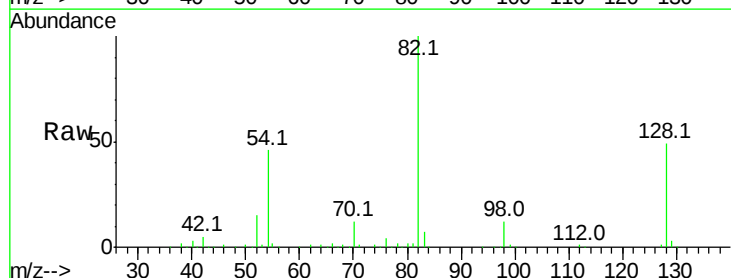
Tgt Ion: 82 Resp: 480027

Ion Ratio Lower Upper

82 100

128 48.6 36.1 54.1

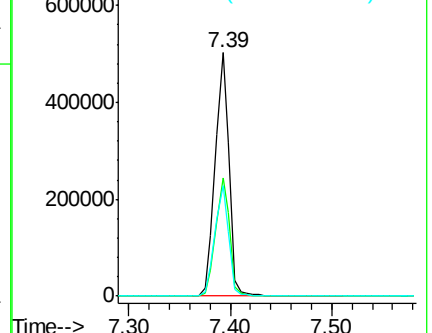
54 45.5 41.4 62.2

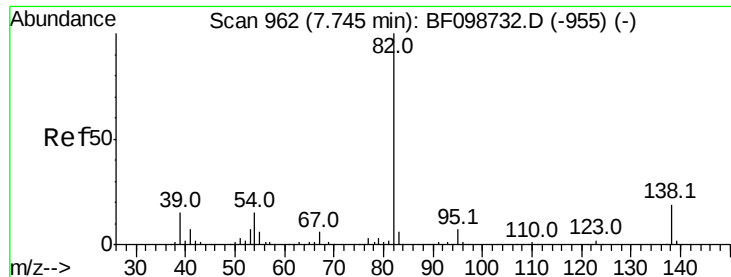


Abundance Ion 82.00 (81.70 to 82.70): BF0

Ion 128.00 (127.70 to 128.70): E

Ion 54.00 (53.70 to 54.70): BF0





#25

Isophorone

Concen: 32.725 ng

RT: 7.39 min Scan# 902

Delta R.T. -0.26 min

Lab File: BF099623.D

Acq: 18 Oct 2017 17:59

Instrument :

BNA\_F

ClientSampleId :

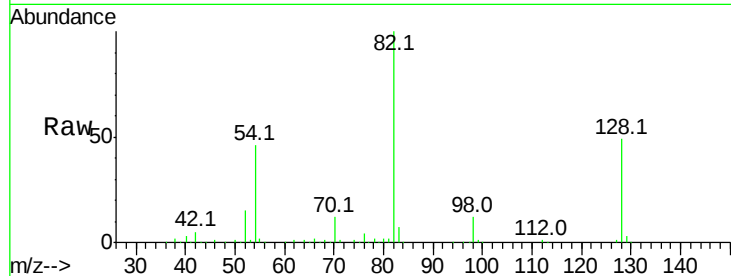
Tot Ion: 82 Resp: 480022

Ion Ratio Lower Upper

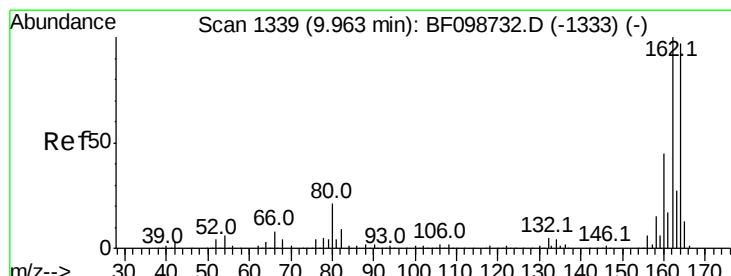
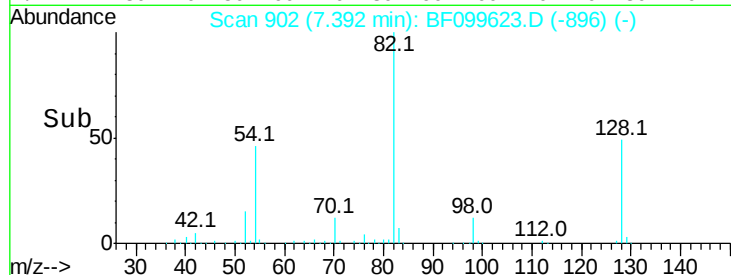
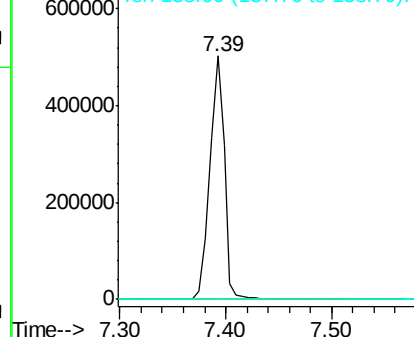
82 100

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): BF0



#38

Acenaphthene-d10

Concen: 20.000 ng

RT: 9.86 min Scan# 1322

Delta R.T. -0.01 min

Lab File: BF099623.D

Acq: 18 Oct 2017 17:59

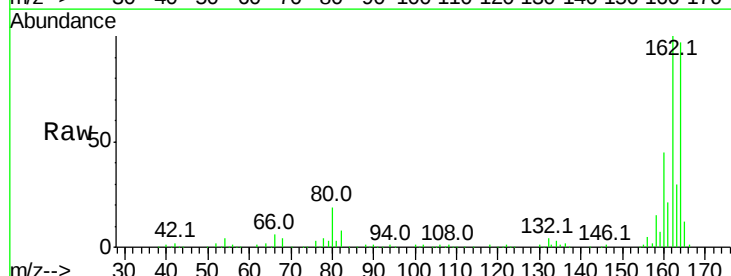
Tgt Ion:164 Resp: 204748

Ion Ratio Lower Upper

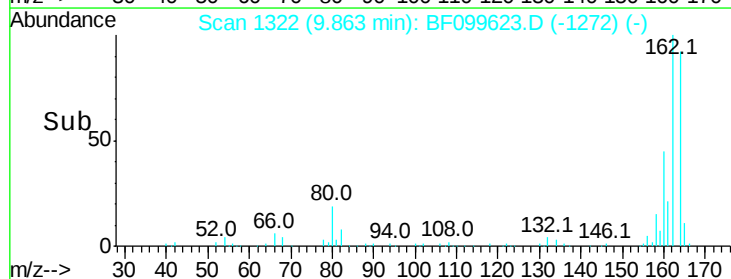
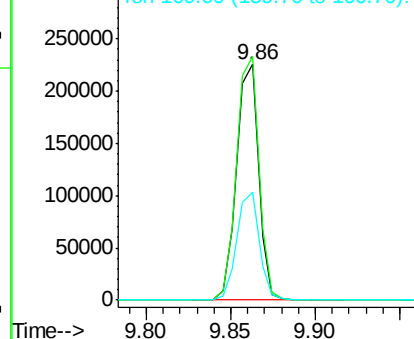
164 100

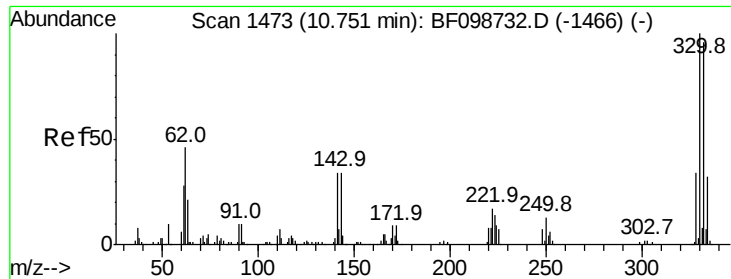
162 103.4 86.1 129.1

160 46.1 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

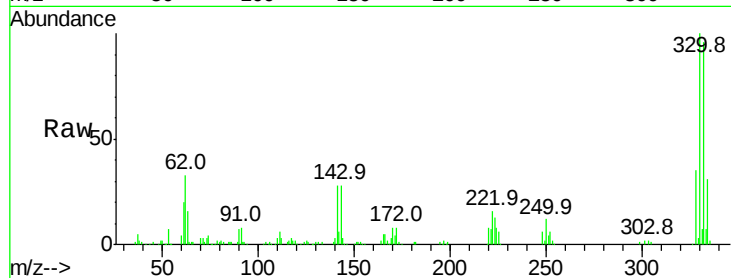




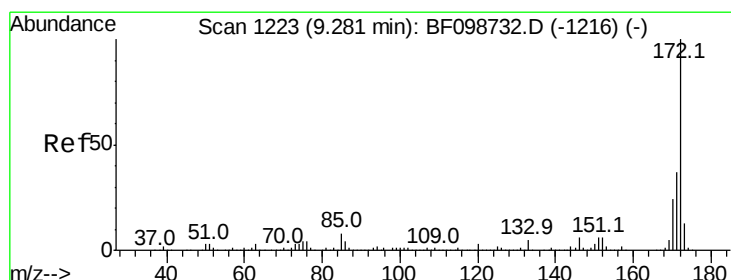
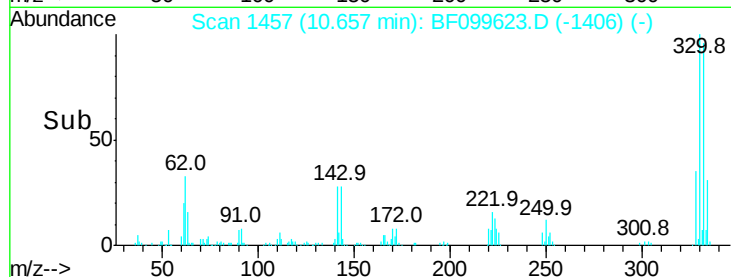
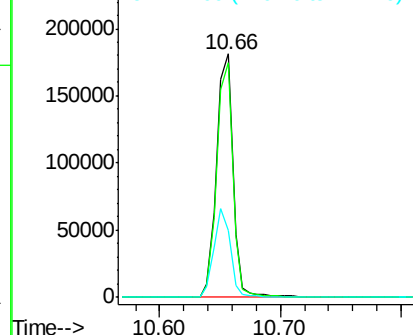
#41  
 2,4,6-Tribromophenol  
 Concen: 102.147 ng  
 RT: 10.66 min Scan# 1457  
 Delta R.T. 0.00 min  
 Lab File: BF099623.D  
 Acq: 18 Oct 2017 17:59

Instrument :  
 BNA\_F  
 ClientSampled :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 330     | 100   |       |       |
| 332     | 95.6  | 77.0  | 115.6 |
| 141     | 36.5  | 29.9  | 44.9  |

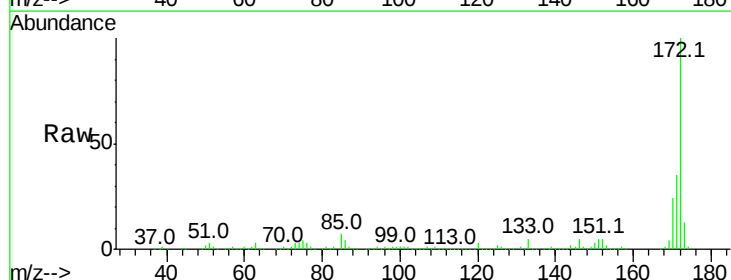


Abundance Ion 329.80 (329.50 to 330.50): E  
 Ion 331.80 (331.50 to 332.50): E  
 Ion 141.00 (140.70 to 141.70): E

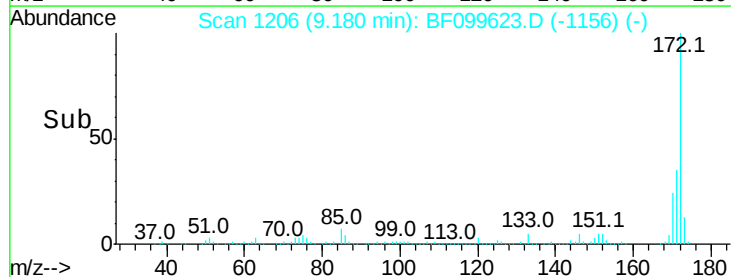
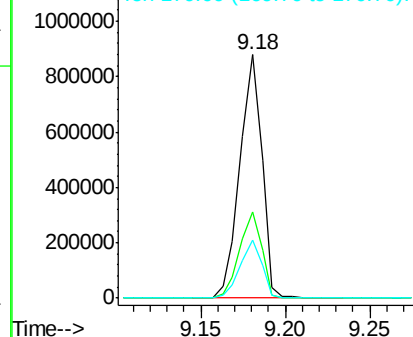


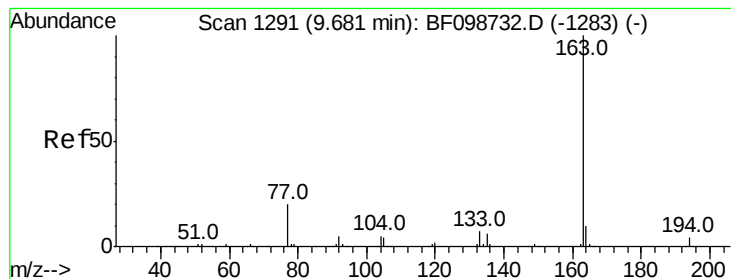
#44  
 2-Fluorobiphenyl  
 Concen: 65.397 ng  
 RT: 9.18 min Scan# 1206  
 Delta R.T. -0.01 min  
 Lab File: BF099623.D  
 Acq: 18 Oct 2017 17:59

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 35.3  | 29.7  | 44.5  |
| 170     | 24.0  | 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: 12.543 ng

RT: 9.57 min Scan# 1273

Delta R.T. -0.02 min

Lab File: BF099623.D

Acq: 18 Oct 2017 17:59

Instrument :

BNA\_F

ClientSampleId :

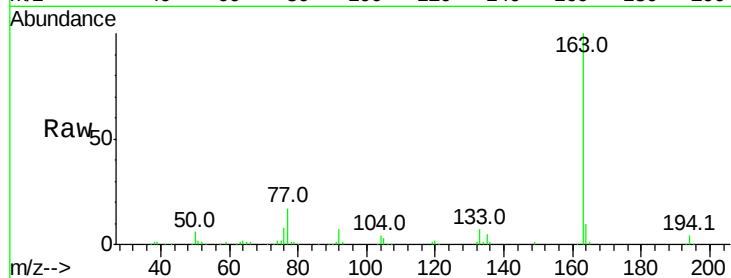
Tot Ion:163 Resp: 193829

Ion Ratio Lower Upper

163 100

194 3.5 2.7 4.1

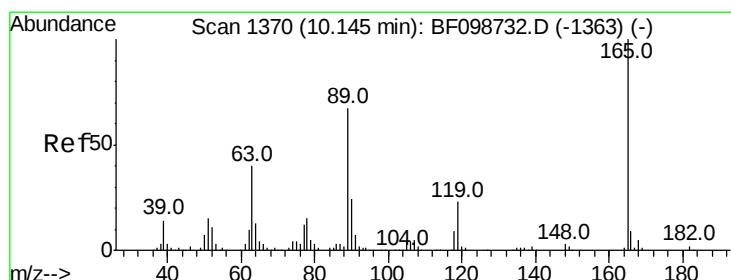
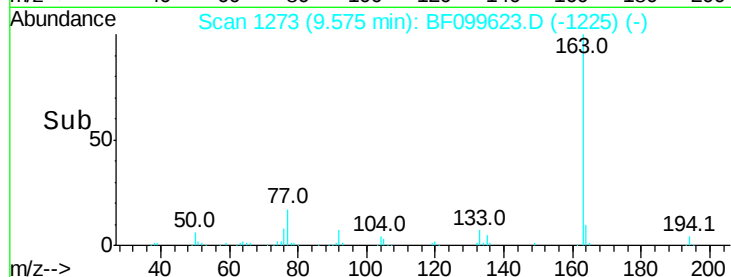
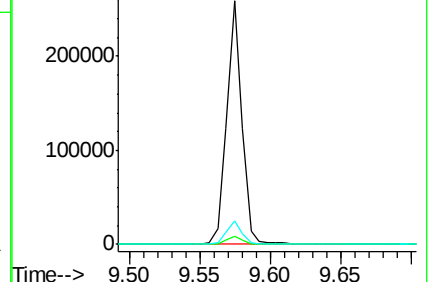
164 9.7 8.2 12.2



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



#56

2,4-Dinitrotoluene

Concen: 5.890 ng

RT: 9.86 min Scan# 1322

Delta R.T. -0.21 min

Lab File: BF099623.D

Acq: 18 Oct 2017 17:59

Tgt Ion:165 Resp: 25717

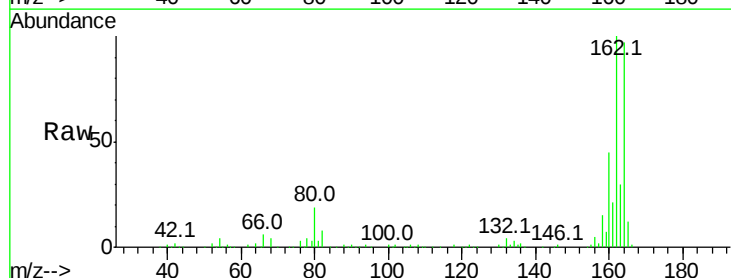
Ion Ratio Lower Upper

165 100

63 0.0 36.4 54.6#

89 1.3 57.8 86.6#

182 0.0 1.6 2.4#

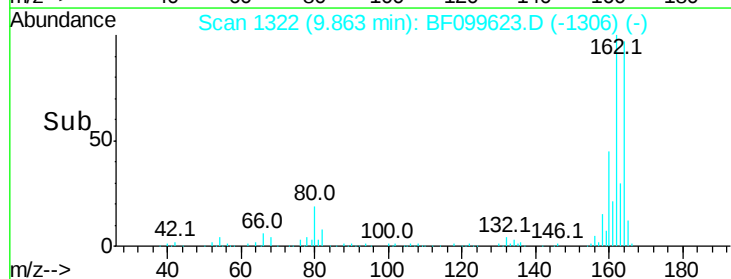
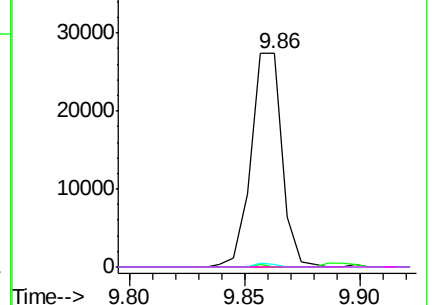


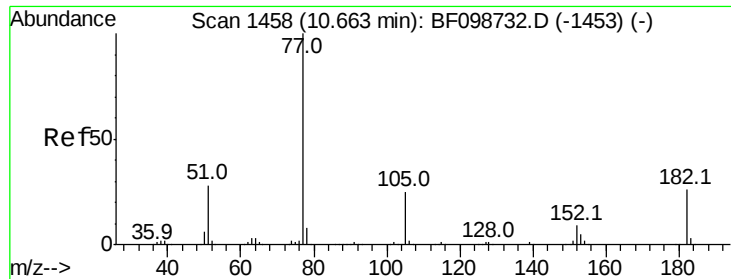
Abundance Ion 165.00 (164.70 to 165.70): E

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

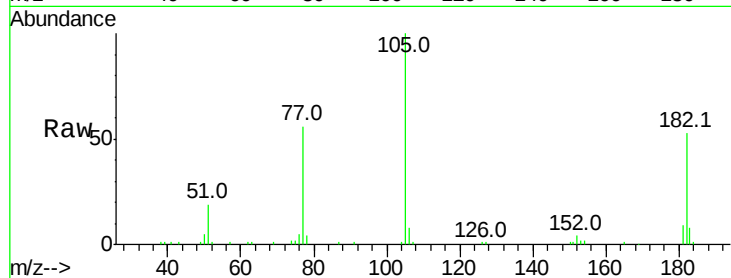




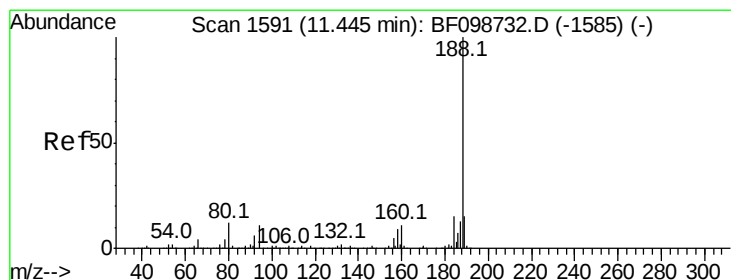
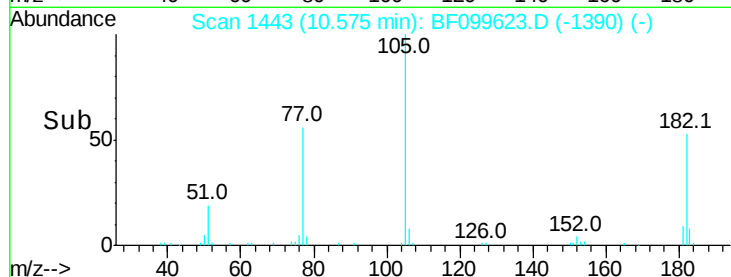
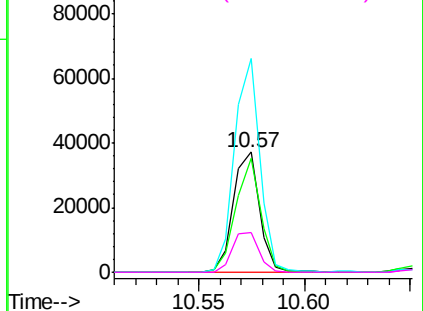
#62  
Azobenzene  
Concen: 2.283 ng  
RT: 10.57 min Scan# 1443  
Delta R.T. 0.01 min  
Lab File: BF099623.D  
Acq: 18 Oct 2017 17:59

Instrument :  
BNA\_F  
ClientSampleId :

Tot Ion: 77 Resp: 31704  
Ion Ratio Lower Upper  
77 100  
182 94.8 1.7 41.7#  
105 178.2 3.0 43.0#  
51 33.2 9.9 49.9

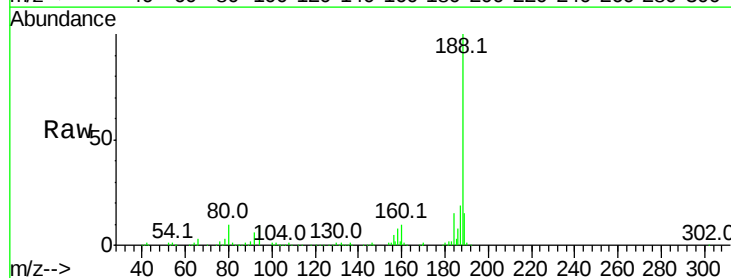


Abundance Ion 77.00 (76.70 to 77.70): BF0  
Ion 182.00 (181.70 to 182.70): E  
Ion 105.00 (104.70 to 105.70): E  
Ion 51.00 (50.70 to 51.70): BF0

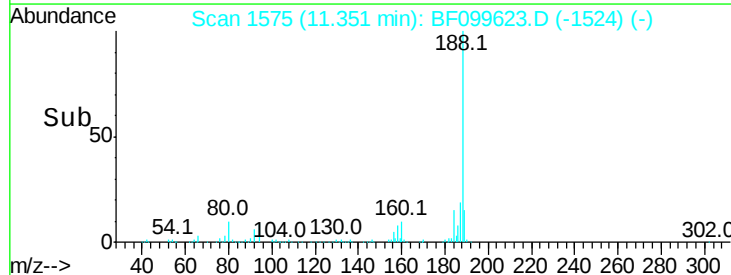
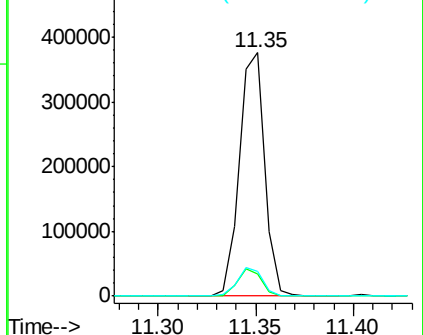


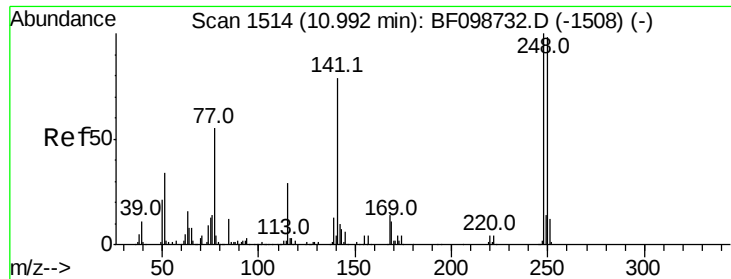
#63  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 11.35 min Scan# 1575  
Delta R.T. 0.00 min  
Lab File: BF099623.D  
Acq: 18 Oct 2017 17:59

Tgt Ion: 188 Resp: 338151  
Ion Ratio Lower Upper  
188 100  
94 9.3 8.5 12.7  
80 10.1 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

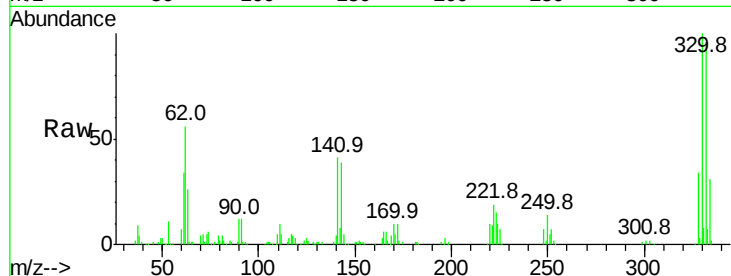




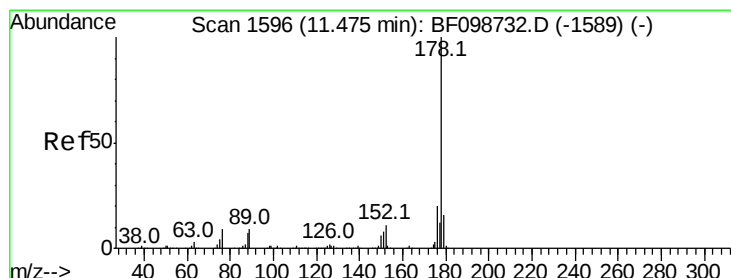
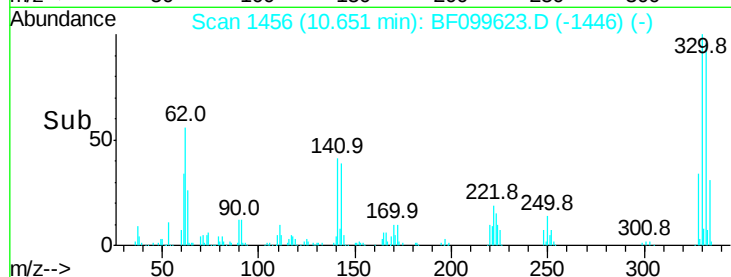
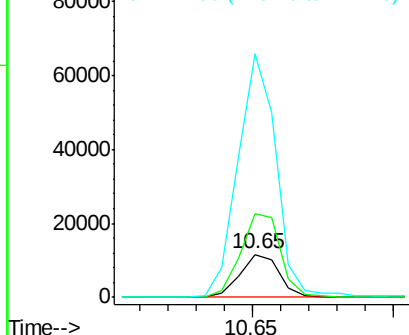
#66  
 4-Bromophenyl-phenylether  
 Concen: 3.354 ng  
 RT: 10.65 min Scan# 1456  
 Delta R.T. -0.24 min  
 Lab File: BF099623.D  
 Acq: 18 Oct 2017 17:59

Instrument :  
 BNA\_F  
 ClientSampled :

Tot Ion:248 Resp: 11103  
 Ion Ratio Lower Upper  
 248 100  
 250 194.7 76.9 115.3#  
 141 567.4 74.4 111.6#

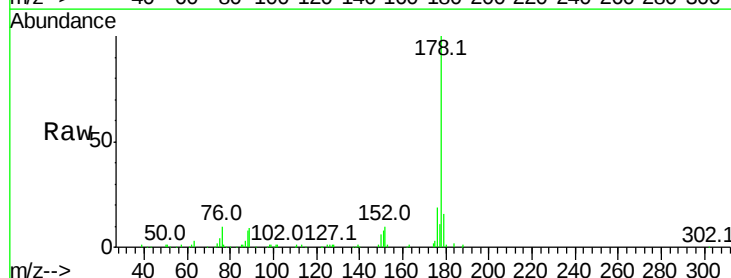


Abundance Ion 248.00 (247.70 to 248.70): E  
 Ion 250.00 (249.70 to 250.70): E  
 Ion 141.00 (140.70 to 141.70): E

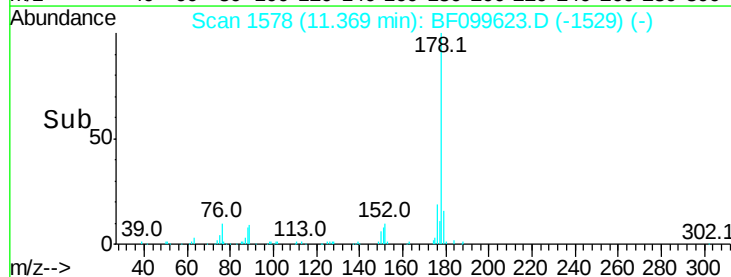
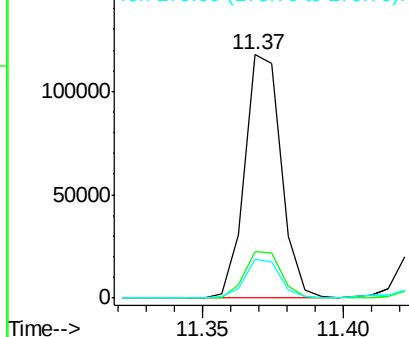


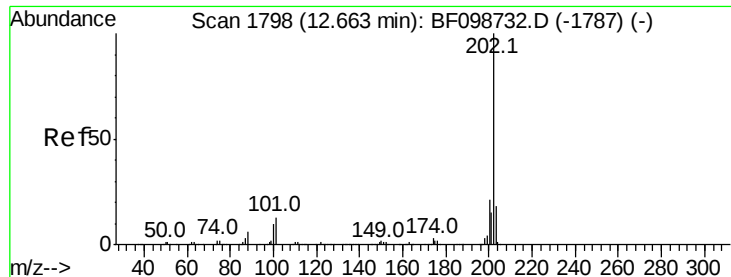
#70  
 Phenanthrene  
 Concen: 5.841 ng  
 RT: 11.37 min Scan# 1578  
 Delta R.T. -0.01 min  
 Lab File: BF099623.D  
 Acq: 18 Oct 2017 17:59

Tgt Ion:178 Resp: 105731  
 Ion Ratio Lower Upper  
 178 100  
 176 19.2 15.8 23.8  
 179 15.7 13.0 19.6



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





#74

Fluoranthene

Concen: 4.325 ng

RT: 12.56 min Scan# 1781

Delta R.T. -0.01 min

Lab File: BF099623.D

Acq: 18 Oct 2017 17:59

Instrument :

BNA\_F

ClientSampleId :

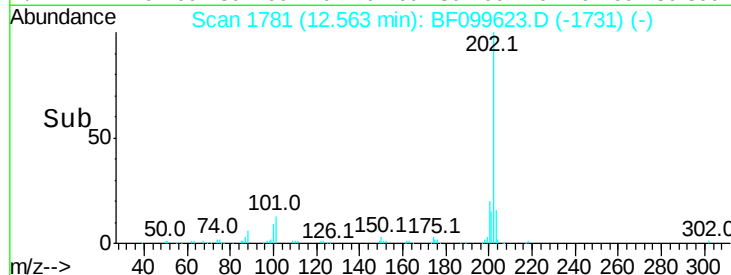
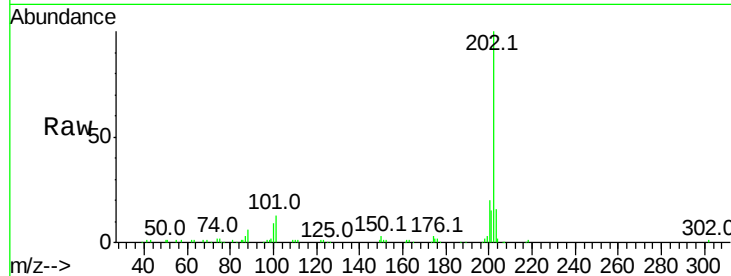
Tot Ion:202 Resp: 79272

Ion Ratio Lower Upper

202 100

101 12.7 0.0 34.1

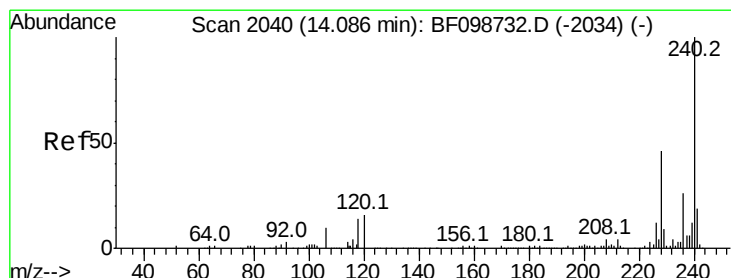
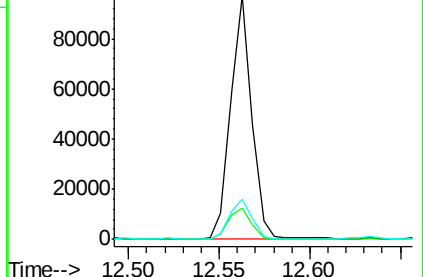
203 16.2 0.0 38.1



Abundance Ion 202.00 (201.70 to 202.70): E

Ion 101.00 (100.70 to 101.70): E

Ion 203.00 (202.70 to 203.70): E



#75

Chrysene-d12

Concen: 20.000 ng

RT: 13.99 min Scan# 2024

Delta R.T. -0.01 min

Lab File: BF099623.D

Acq: 18 Oct 2017 17:59

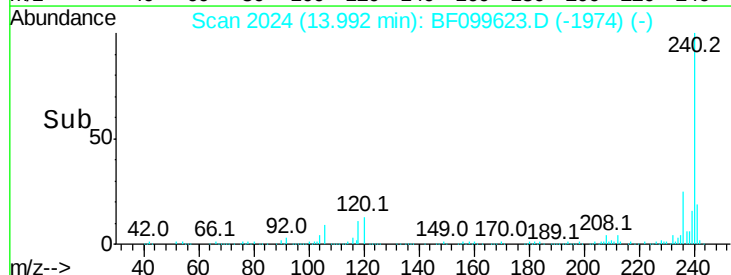
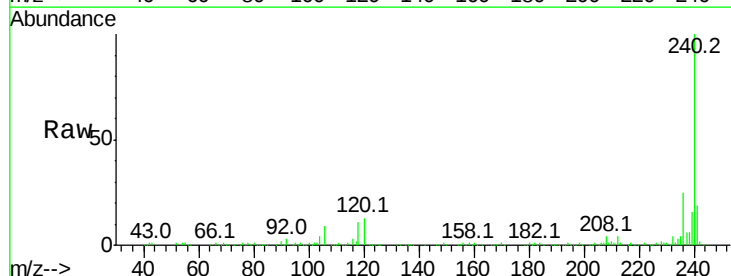
Tgt Ion:240 Resp: 193554

Ion Ratio Lower Upper

240 100

120 13.1 9.5 14.3

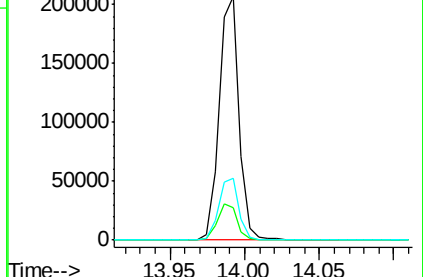
236 25.5 20.7 31.1

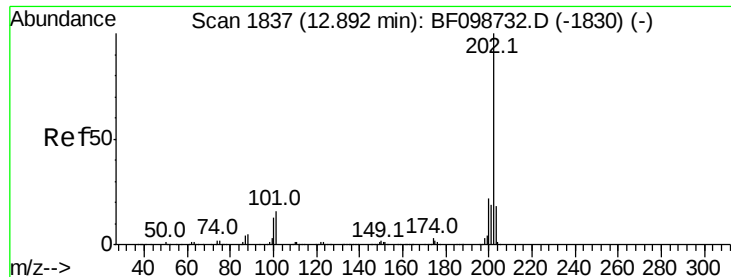


Abundance Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E

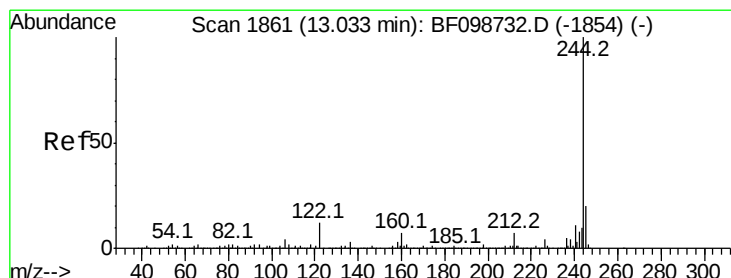
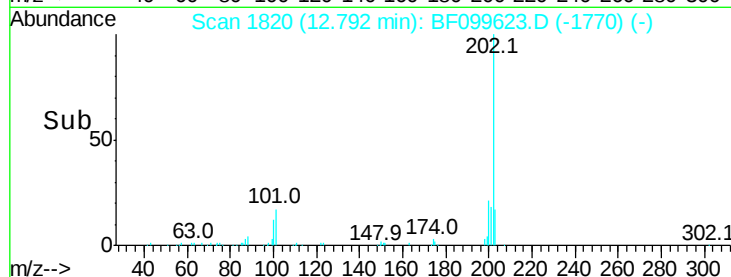
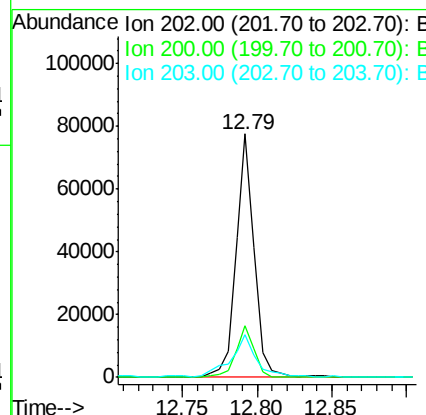
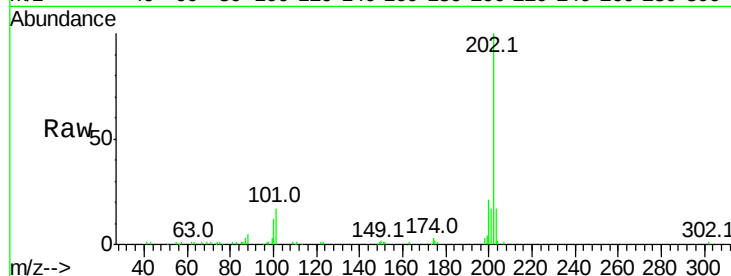




#77  
Pvrene  
Concen: 4.525 ng  
RT: 12.79 min Scan# 1820  
Delta R.T. -0.01 min  
Lab File: BF099623.D  
Acq: 18 Oct 2017 17:59

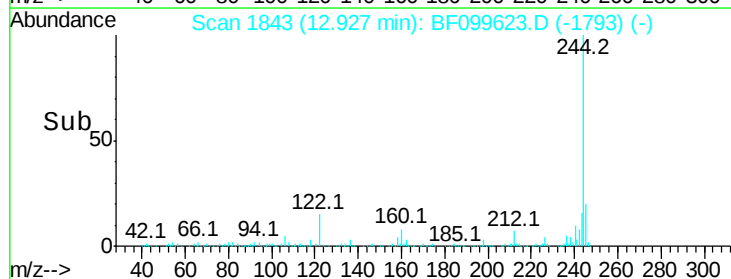
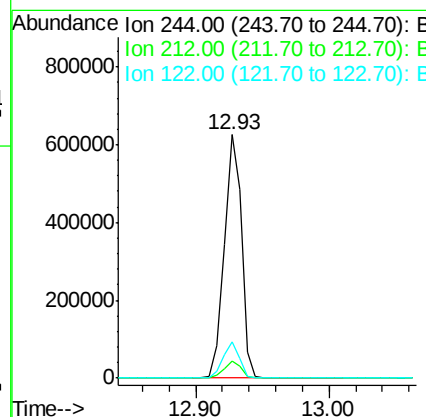
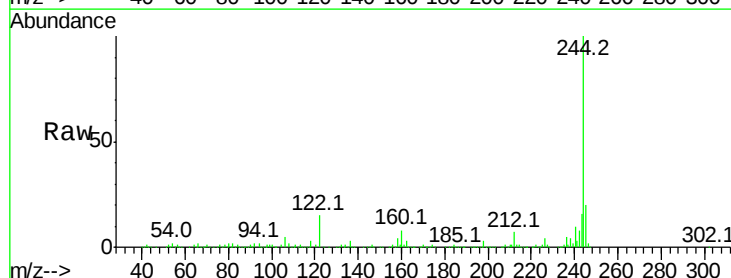
Instrument :  
BNA\_F  
ClientSampleId :

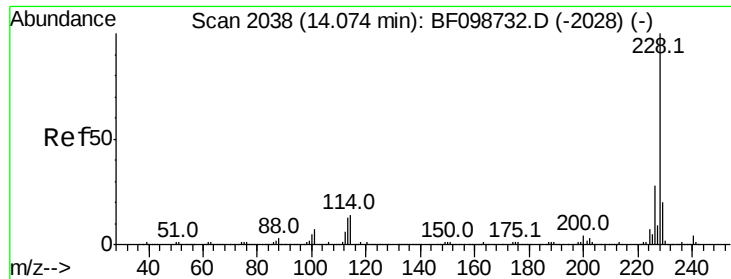
Tot Ion:202 Resp: 66787  
Ion Ratio Lower Upper  
202 100  
200 21.3 17.4 26.2  
203 17.5 14.3 21.5



#78  
Terphenyl-d14  
Concen: 67.229 ng  
RT: 12.93 min Scan# 1843  
Delta R.T. -0.01 min  
Lab File: BF099623.D  
Acq: 18 Oct 2017 17:59

Tgt Ion:244 Resp: 572179  
Ion Ratio Lower Upper  
244 100  
212 7.0 5.4 8.0  
122 14.8 11.0 16.4

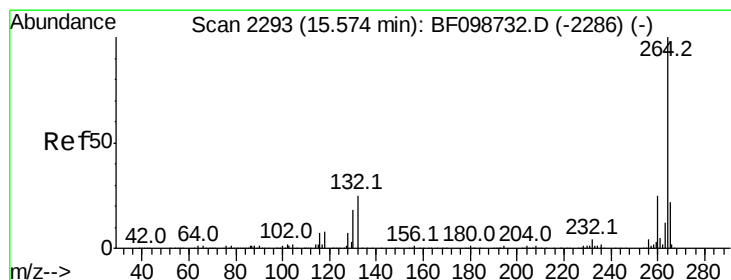
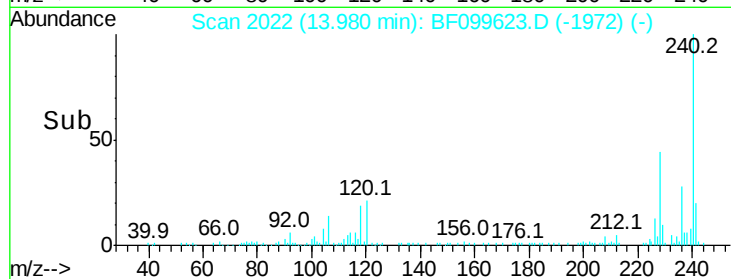
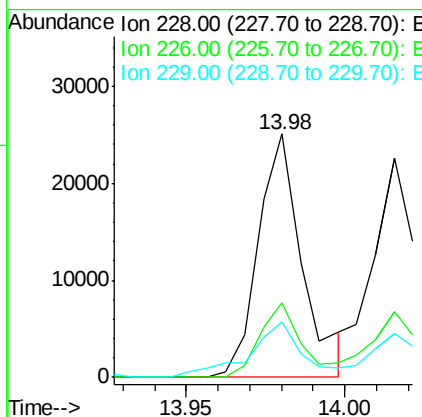
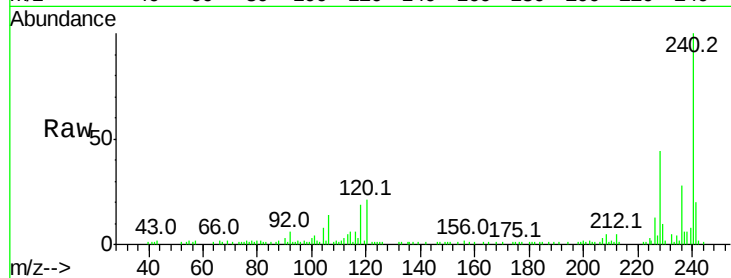




#80  
Benzo(a)anthracene  
Concen: 2.068 ng  
RT: 13.98 min Scan# 2022  
Delta R.T. -0.01 min  
Lab File: BF099623.D  
Acq: 18 Oct 2017 17:59

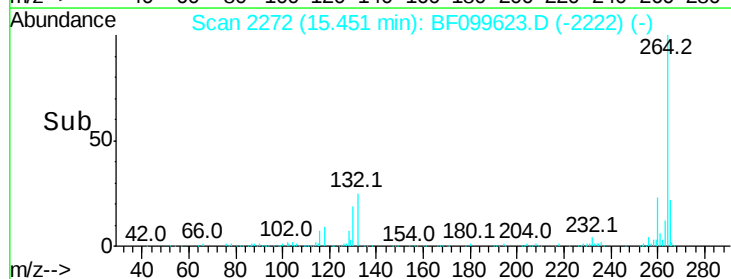
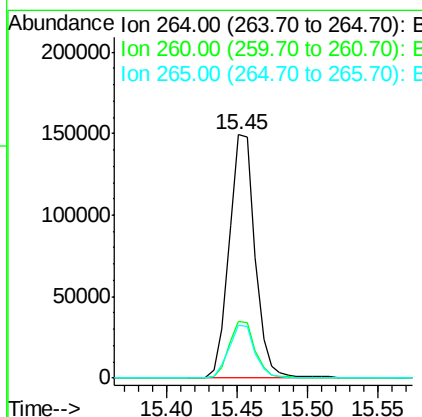
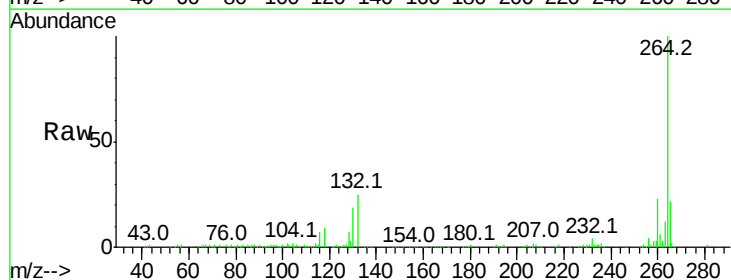
Instrument :  
BNA\_F  
ClientSampleId :

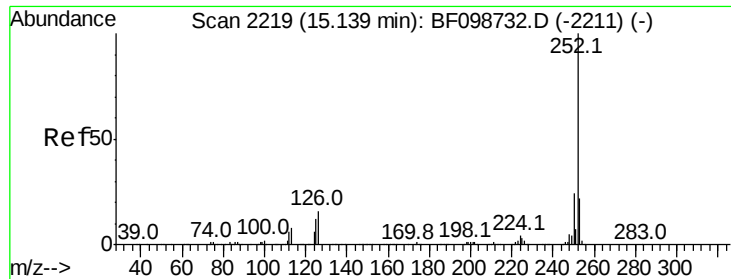
Tot Ion:228 Resp: 24233  
Ion Ratio Lower Upper  
228 100  
226 30.5 22.6 33.8  
229 22.8 15.8 23.6



#86  
Perylene-d12  
Concen: 20.000 ng  
RT: 15.45 min Scan# 2272  
Delta R.T. -0.01 min  
Lab File: BF099623.D  
Acq: 18 Oct 2017 17:59

Tgt Ion:264 Resp: 191043  
Ion Ratio Lower Upper  
264 100  
260 23.4 19.2 28.8  
265 22.0 17.5 26.3

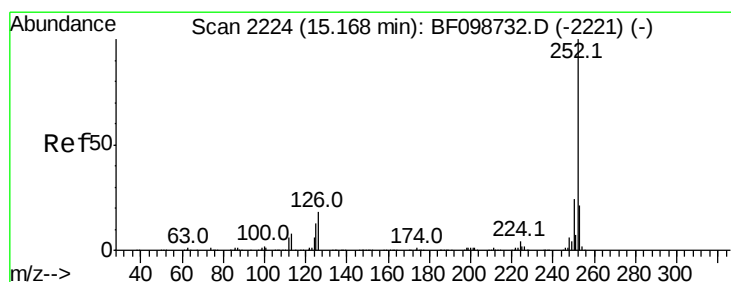
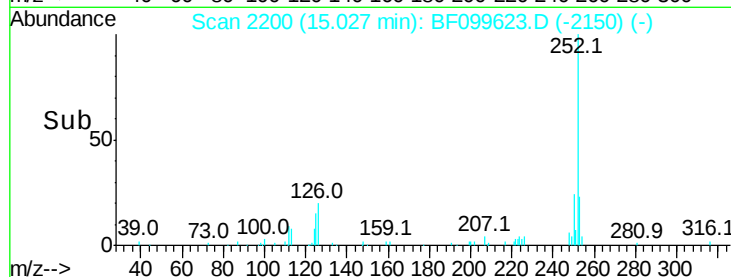
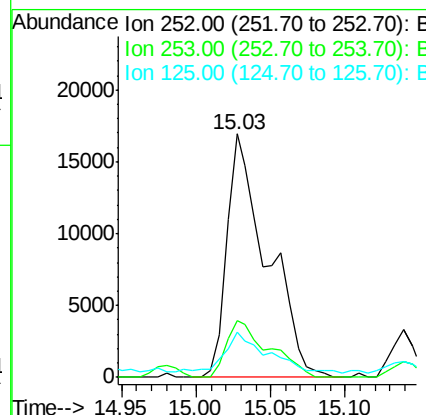
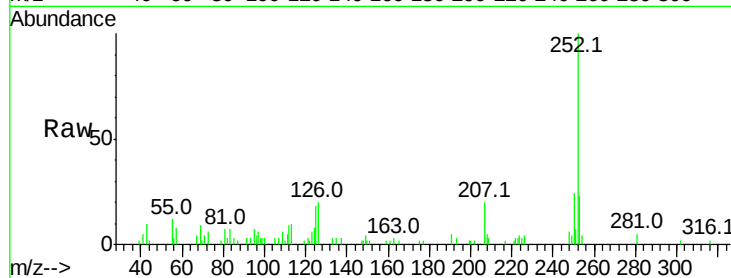




#87  
Benzo(b)fluoranthene  
Concen: 2.701 ng  
RT: 15.03 min Scan# 2200  
Delta R.T. -0.01 min  
Lab File: BF099623.D  
Acq: 18 Oct 2017 17:59

Instrument :  
BNA\_F  
ClientSampleId :

Tot Ion:252 Resp: 31721  
Ion Ratio Lower Upper  
252 100  
253 23.4 17.0 25.6  
125 18.4 9.0 13.6#



#88  
Benzo(k)fluoranthene  
Concen: 2.734 ng  
RT: 15.03 min Scan# 2200  
Delta R.T. -0.03 min  
Lab File: BF099623.D  
Acq: 18 Oct 2017 17:59

Tgt Ion:252 Resp: 31721  
Ion Ratio Lower Upper  
252 100  
253 23.4 17.9 26.9  
125 18.4 10.2 15.2#

