

Data Path : \\74.0.250.170\SV0ASRV\HPCHEM1\BNA F\DATA\BF090917\  
 Data File : BF098401.D  
 Acq On : 9 Sep 2017 22:22  
 Operator : SJ/JU  
 Sample : I5136-03  
 Misc :  
 ALS Vial : 26 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :

Quant Time: Sep 11 04:16:43 2017  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF081517.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Sep 05 17:28:20 2017  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.67  | 152  | 106329   | 20.00 | ng    | -0.03    |
| 21) Naphthalene-d8        | 7.96  | 136  | 404349   | 20.00 | ng    | -0.03    |
| 38) Acenaphthene-d10      | 9.70  | 164  | 171001   | 20.00 | ng    | -0.04    |
| 63) Phenanthrene-d10      | 11.19 | 188  | 286017   | 20.00 | ng    | -0.04    |
| 75) Chrysene-d12          | 13.82 | 240  | 239788   | 20.00 | ng    | -0.04    |
| 86) Perylene-d12          | 15.22 | 264  | 215016   | 20.00 | ng    | -0.04    |

## System Monitoring Compounds

|                          |       |     |         |        |    |       |
|--------------------------|-------|-----|---------|--------|----|-------|
| 5) 2-Fluorophenol        | 5.29  | 112 | 743840  | 106.41 | ng | -0.01 |
| 7) Phenol-d6             | 6.33  | 99  | 1021871 | 107.59 | ng | -0.02 |
| 23) Nitrobenzene-d5      | 7.25  | 82  | 583478  | 78.39  | ng | -0.03 |
| 41) 2,4,6-Tribromophenol | 10.50 | 330 | 166098  | 111.95 | ng | -0.04 |
| 44) 2-Fluorobiphenyl     | 9.03  | 172 | 902993  | 77.58  | ng | -0.04 |
| 78) Terphenyl-d14        | 12.77 | 244 | 631477  | 54.92  | ng | -0.04 |

## Target Compounds

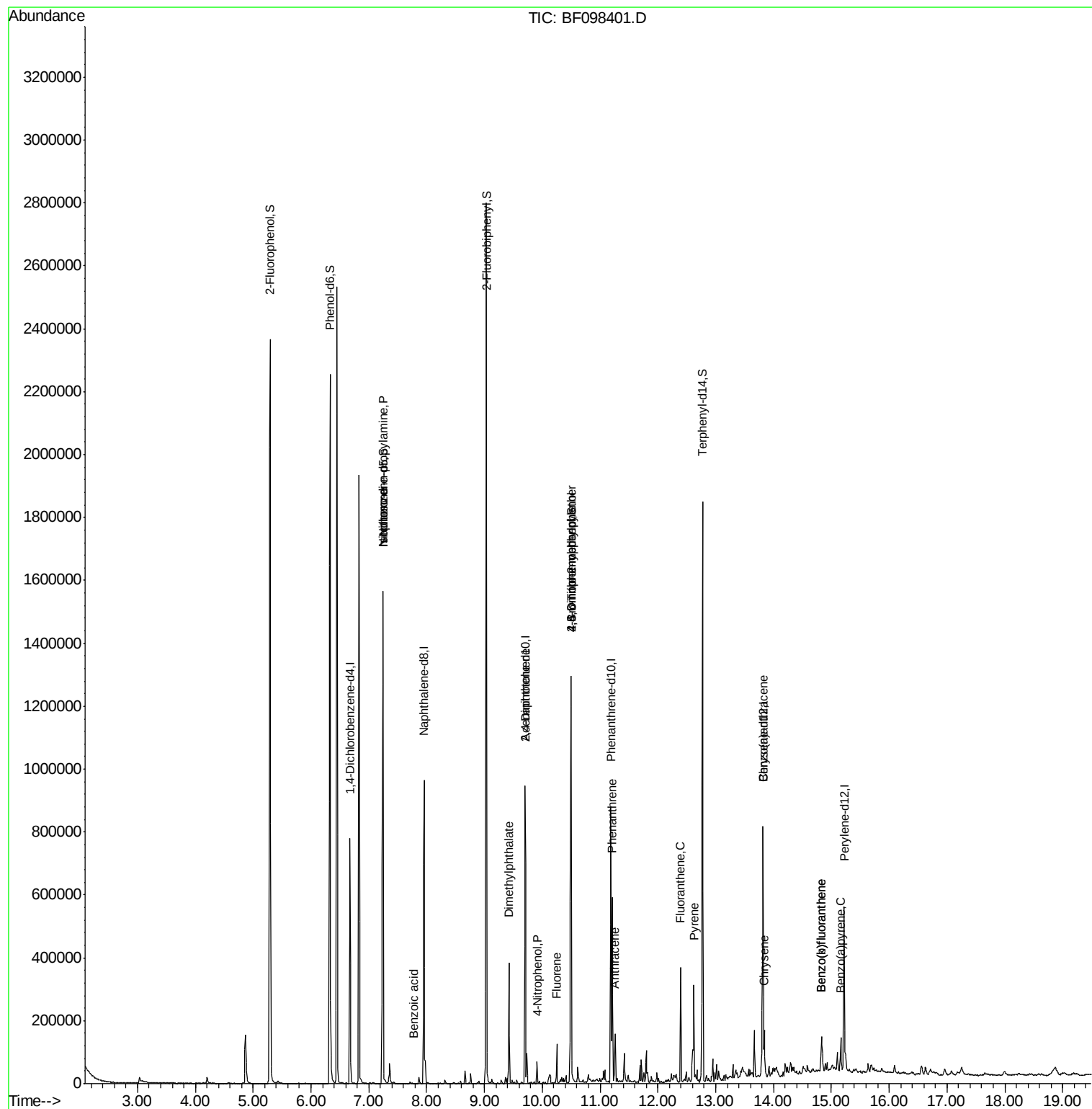
|                                |       |     |        |        |    | Qvalue |
|--------------------------------|-------|-----|--------|--------|----|--------|
| 19) n-Nitroso-di-n-propylamine | 7.25  | 70  | 75020  | 11.538 | ng | # 69   |
| 25) Isophorone                 | 7.25  | 82  | 579677 | 37.454 | ng | # 67   |
| 32) Benzoic acid               | 7.77  | 122 | 302    | 6.460  | ng | # 1    |
| 49) Dimethylphthalate          | 9.43  | 163 | 128994 | 10.320 | ng | 99     |
| 55) 4-Nitrophenol              | 9.91  | 139 | 8950   | 3.485  | ng | # 25   |
| 56) 2,4-Dinitrotoluene         | 9.70  | 165 | 22582  | 7.212  | ng | # 32   |
| 57) Fluorene                   | 10.25 | 166 | 30844  | 2.609  | ng | 99     |
| 64) 4,6-Dinitro-2-methylphenol | 10.50 | 198 | 122    | 8.396  | ng | # 1    |
| 66) 4-Bromophenyl-phenylether  | 10.50 | 248 | 10655  | 3.587  | ng | # 1    |
| 70) Phenanthrene               | 11.21 | 178 | 184486 | 12.105 | ng | 99     |
| 71) Anthracene                 | 11.26 | 178 | 57415  | 3.714  | ng | 97     |
| 74) Fluoranthene               | 12.39 | 202 | 141319 | 8.883  | ng | 98     |
| 77) Pyrene                     | 12.62 | 202 | 115456 | 5.887  | ng | 98     |
| 80) Benzo(a)anthracene         | 13.81 | 228 | 58629  | 4.080  | ng | 98     |
| 82) Chrysene                   | 13.84 | 228 | 50856  | 3.557  | ng | 97     |
| 87) Benzo(b)fluoranthene       | 14.83 | 252 | 74464  | 5.494  | ng | 99     |
| 88) Benzo(k)fluoranthene       | 14.83 | 252 | 74464  | 5.848  | ng | 96     |
| 89) Benzo(a)pyrene             | 15.16 | 252 | 40166  | 3.348  | ng | 98     |

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

Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA F\DATA\BF090917\  
Data File : BF098401.D  
Acq On : 9 Sep 2017 22:22  
Operator : SJ/JU  
Sample : I5136-03  
Misc :  
ALS Vial : 26 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :

Quant Time: Sep 11 04:16:43 2017  
Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF081517.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Tue Sep 05 17:28:20 2017  
Response via : Initial Calibration



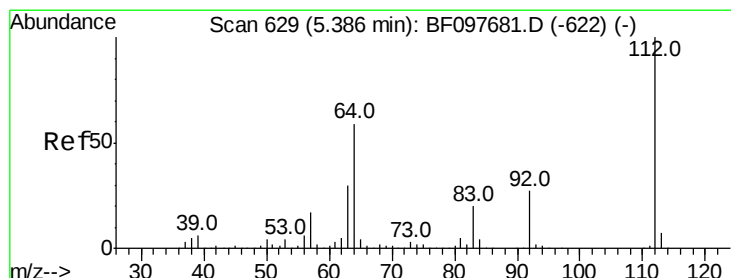
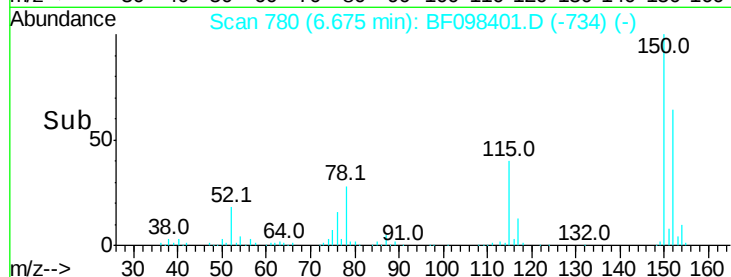
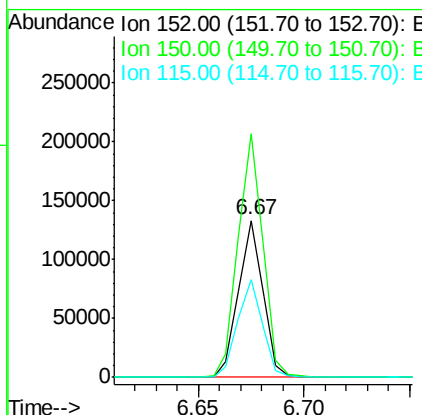
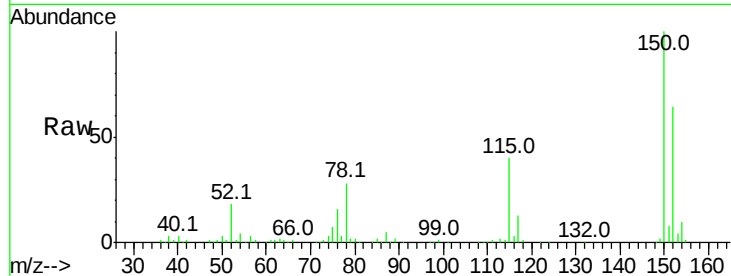


#1

1,4-Dichlorobenzene-d4  
 Concen: 20.000 ng  
 RT: 6.67 min Scan# 780  
 Delta R.T. -0.03 min  
 Lab File: BF098401.D  
 Acq: 9 Sep 2017 22:22

Instrument :  
 BNA\_F  
 ClientSampleId :

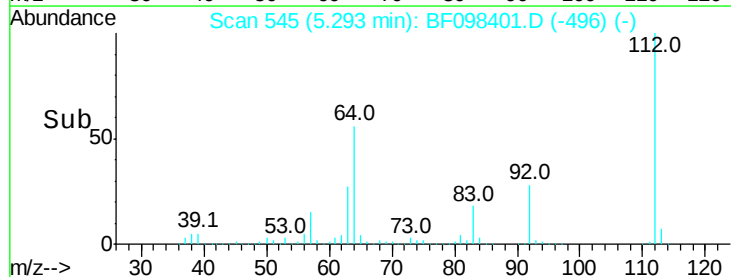
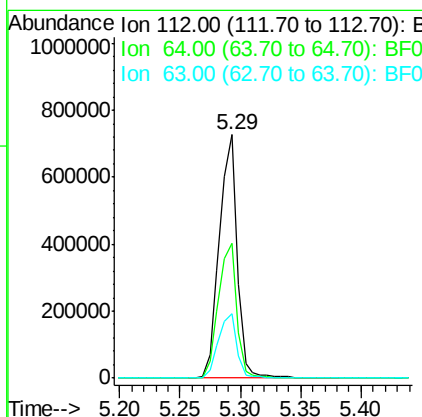
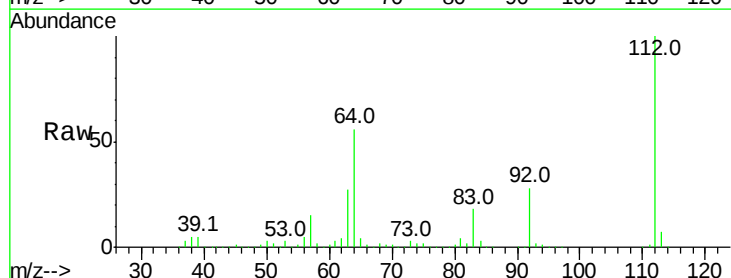
Tot Ion:152 Resp: 106329  
 Ion Ratio Lower Upper  
 152 100  
 150 155.3 126.2 189.2  
 115 62.6 52.2 78.2

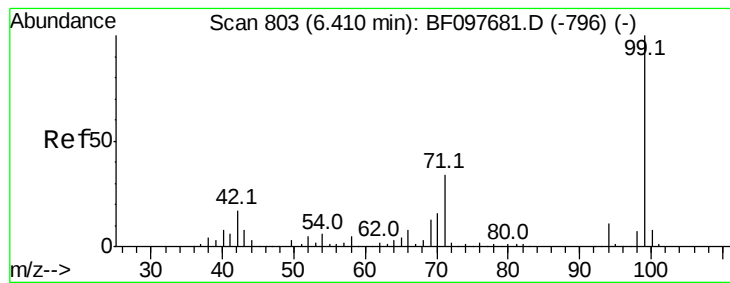


#5

2-Fluorophenol  
 Concen: 106.409 ng  
 RT: 5.29 min Scan# 545  
 Delta R.T. -0.01 min  
 Lab File: BF098401.D  
 Acq: 9 Sep 2017 22:22

Tgt Ion:112 Resp: 743840  
 Ion Ratio Lower Upper  
 112 100  
 64 55.6 46.0 69.0  
 63 26.7 23.4 35.0





#7

Phenol-d6

Concen: 107.589 ng

RT: 6.33 min Scan# 721

Delta R.T. -0.02 min

Lab File: BF098401.D

Acq: 9 Sep 2017 22:22

Instrument :

BNA\_F

ClientSampled :

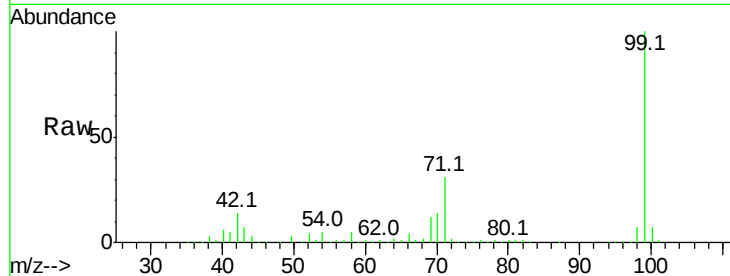
Tot Ion: 99 Resp: 1021871

Ion Ratio Lower Upper

99 100

42 14.3 13.5 20.3

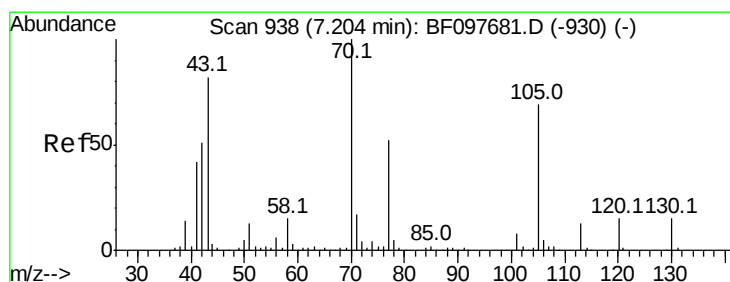
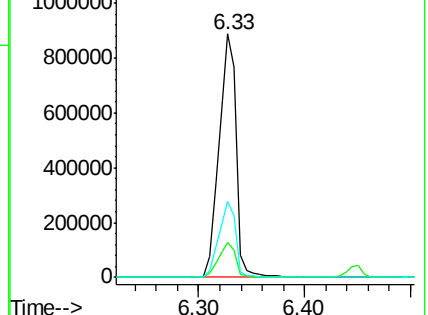
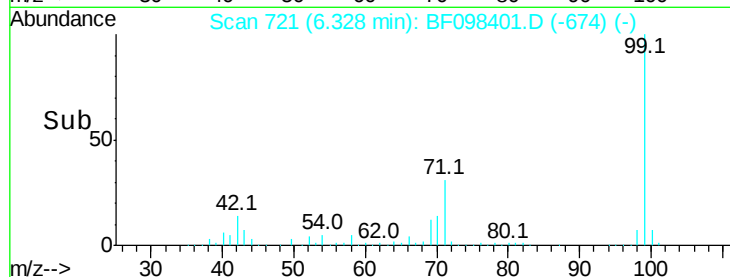
71 31.3 24.5 36.7



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



#19

n-Nitroso-di-n-propylamine

Concen: 11.538 ng

RT: 7.25 min Scan# 877

Delta R.T. 0.12 min

Lab File: BF098401.D

Acq: 9 Sep 2017 22:22

Tgt Ion: 70 Resp: 75020

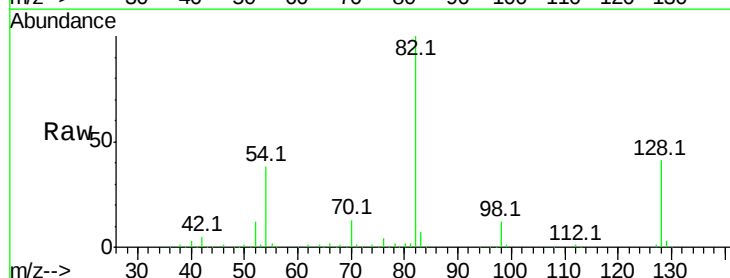
Ion Ratio Lower Upper

70 100

42 37.4 47.2 70.8#

101 0.0 7.2 10.8#

130 2.0 15.9 23.9#

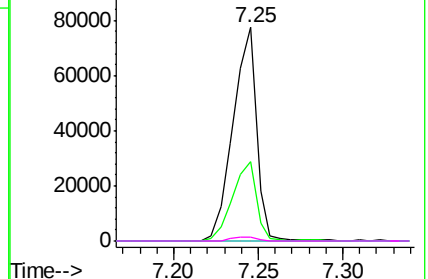
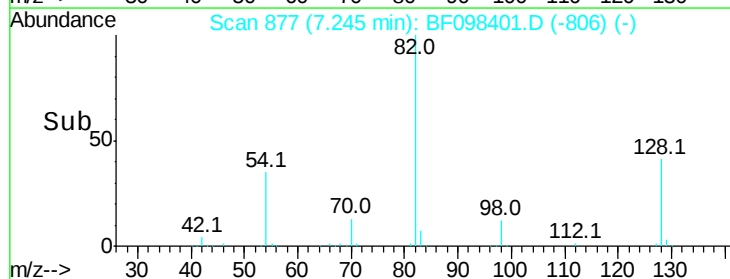


Abundance Ion 70.00 (69.70 to 70.70): BF0

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

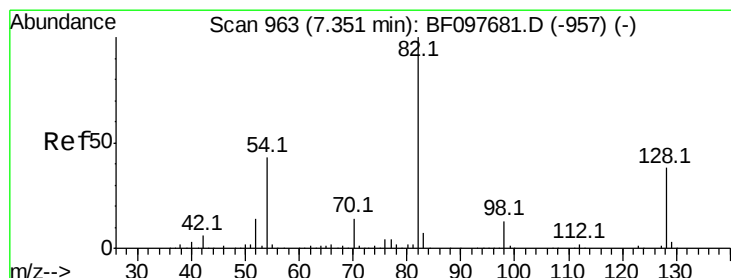
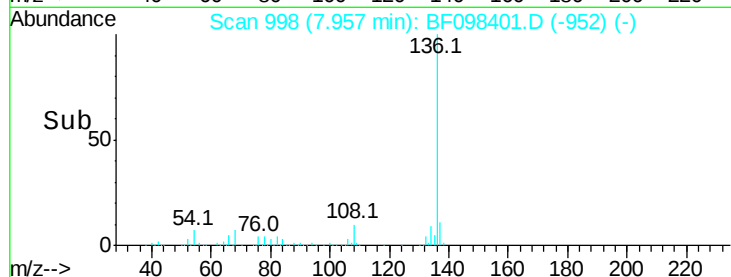
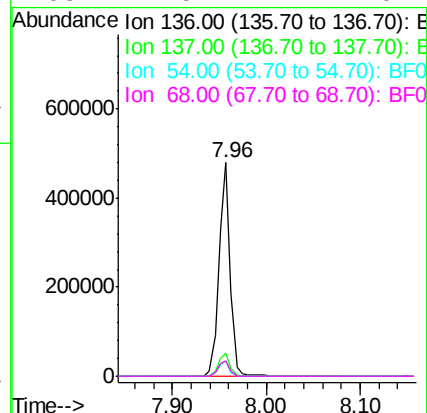
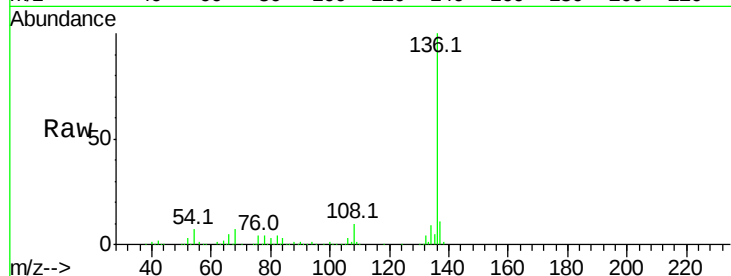




#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 7.96 min Scan# 998  
Delta R.T. -0.03 min  
Lab File: BF098401.D  
Acq: 9 Sep 2017 22:22

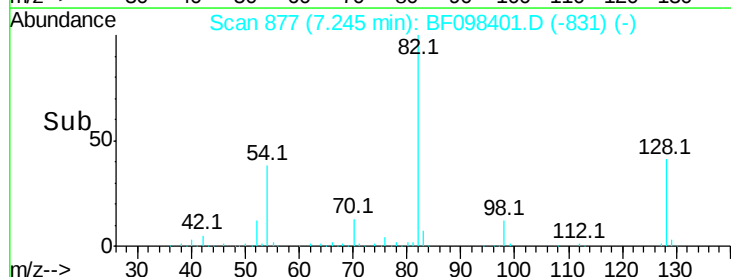
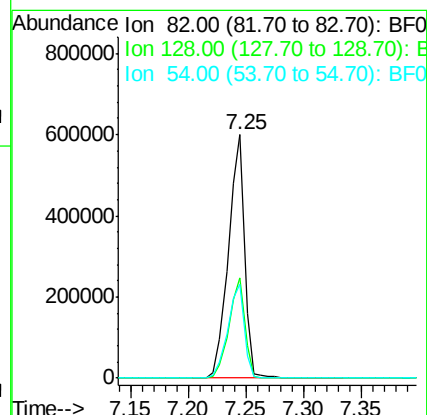
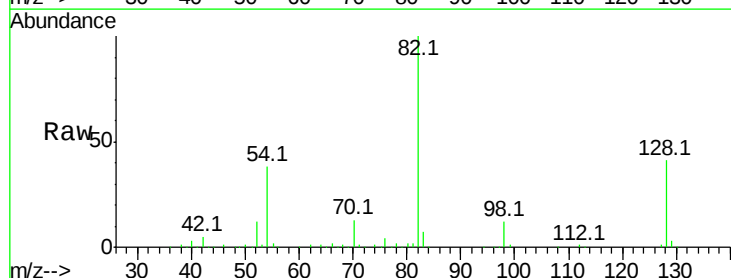
Instrument :  
BNA\_F  
ClientSampleId :

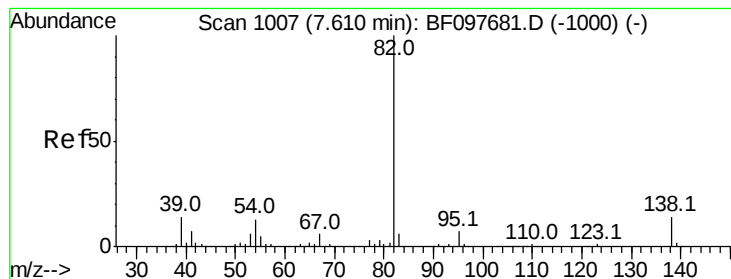
Tot Ion:136 Resp: 404349  
Ion Ratio Lower Upper  
136 100  
137 10.6 8.5 12.7  
54 7.0 4.9 7.3  
68 7.5 4.1 6.1#



#23  
Nitrobenzene-d5  
Concen: 78.391 ng  
RT: 7.25 min Scan# 877  
Delta R.T. -0.03 min  
Lab File: BF098401.D  
Acq: 9 Sep 2017 22:22

Tgt Ion: 82 Resp: 583478  
Ion Ratio Lower Upper  
82 100  
128 41.3 34.0 51.0  
54 38.5 42.2 63.2#





#25

Isophorone

Concen: 37.454 ng

RT: 7.25 min Scan# 877

Delta R.T. -0.29 min

Lab File: BF098401.D

Acq: 9 Sep 2017 22:22

Instrument :

BNA\_F

ClientSampleId :

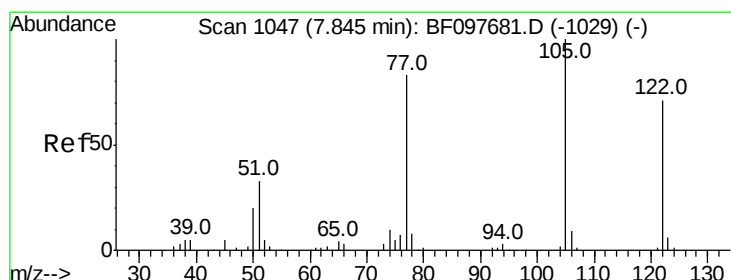
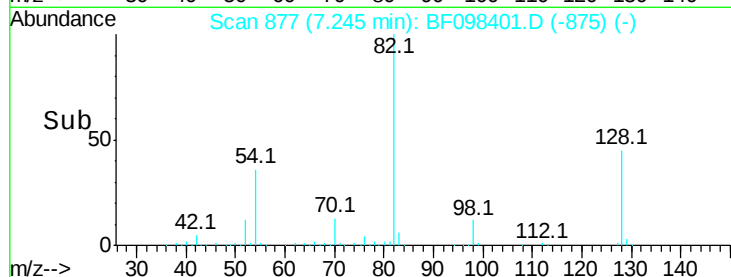
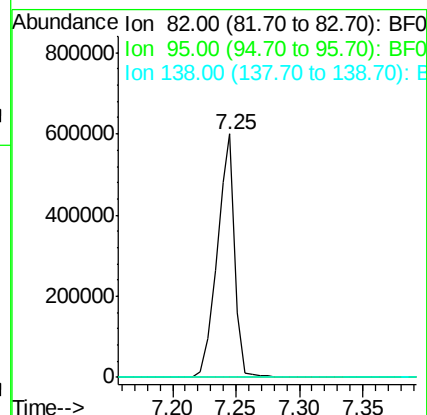
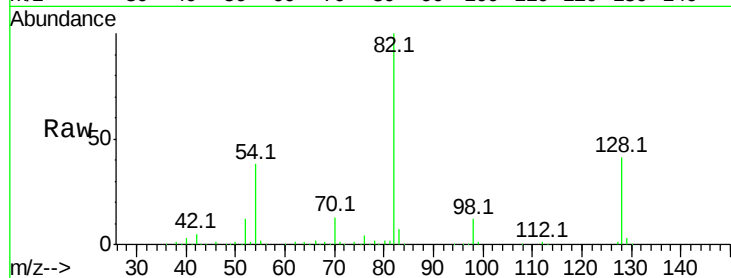
Tot Ion: 82 Resp: 579677

Ion Ratio Lower Upper

82 100

95 0.0 5.3 7.9#

138 0.0 13.1 19.7#



#32

Benzoic acid

Concen: 6.460 ng

RT: 7.77 min Scan# 966

Delta R.T. -0.03 min

Lab File: BF098401.D

Acq: 9 Sep 2017 22:22

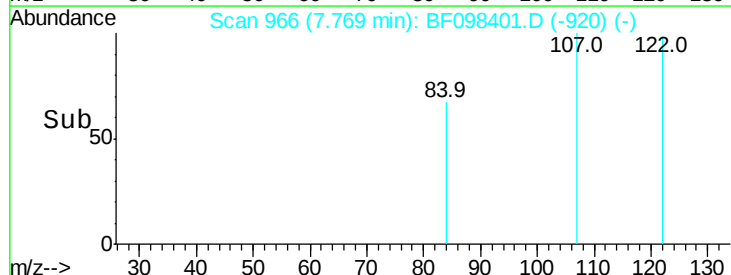
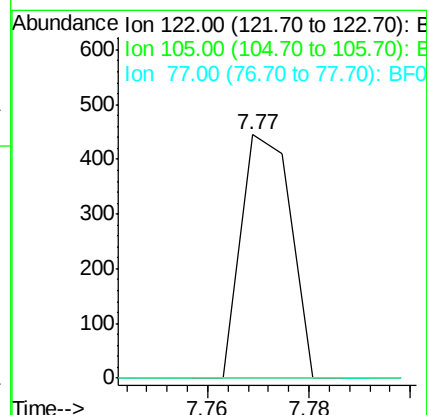
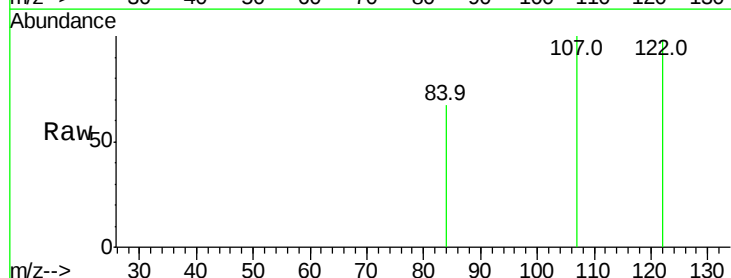
Tgt Ion: 122 Resp: 302

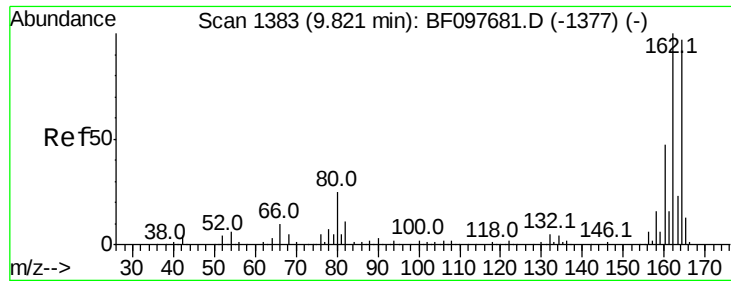
Ion Ratio Lower Upper

122 100

105 0.0 103.3 143.3#

77 0.0 73.7 113.7#

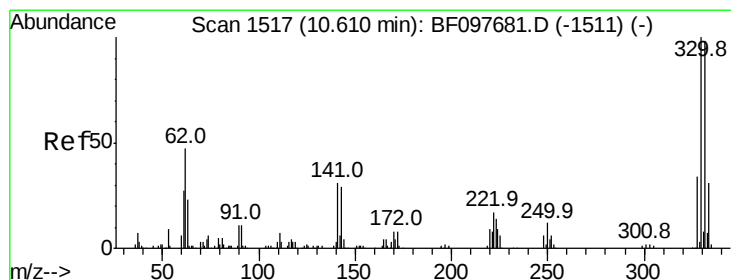
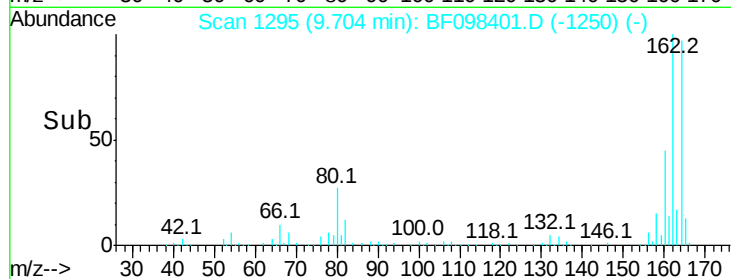
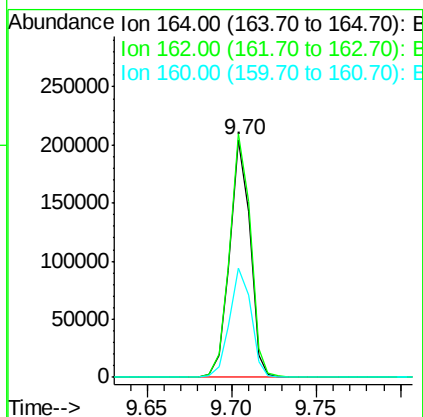
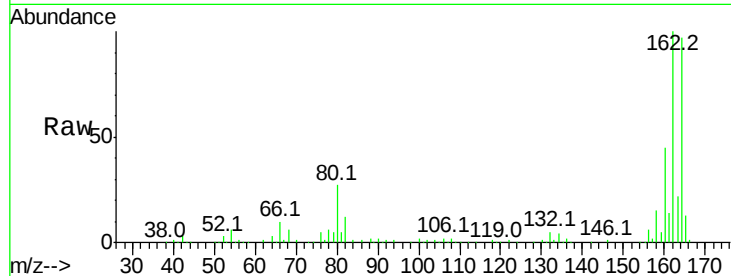




#38  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 9.70 min Scan# 1295  
Delta R.T. -0.04 min  
Lab File: BF098401.D  
Acq: 9 Sep 2017 22:22

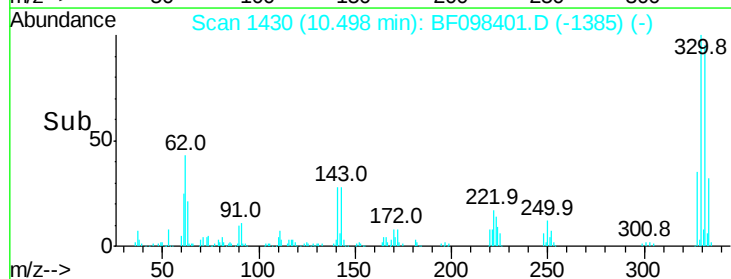
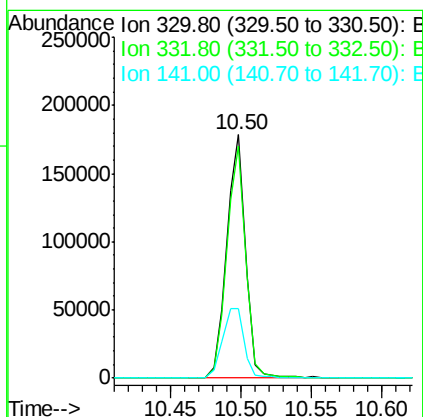
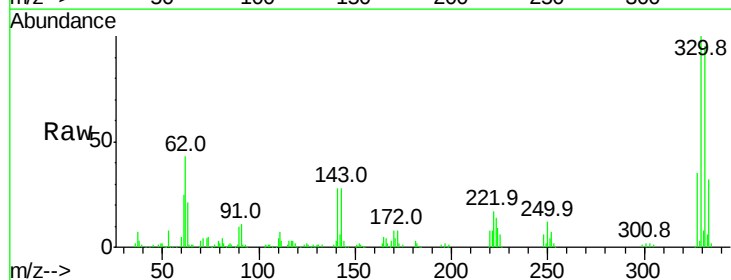
Instrument :  
BNA\_F  
ClientSampled :

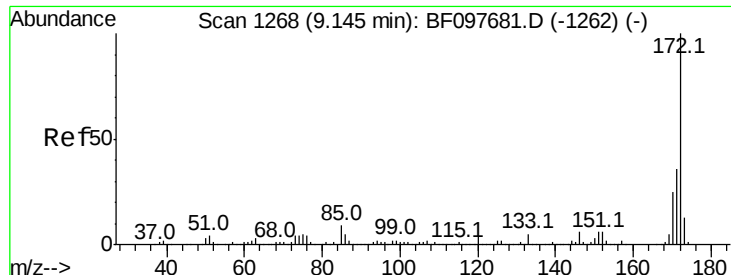
Tot Ion:164 Resp: 171001  
Ion Ratio Lower Upper  
164 100  
162 102.6 82.6 123.8  
160 46.2 36.2 54.2



#41  
2,4,6-Tribromophenol  
Concen: 111.948 ng  
RT: 10.50 min Scan# 1430  
Delta R.T. -0.04 min  
Lab File: BF098401.D  
Acq: 9 Sep 2017 22:22

Tgt Ion:330 Resp: 166098  
Ion Ratio Lower Upper  
330 100  
332 96.1 76.6 115.0  
141 33.6 31.4 47.2

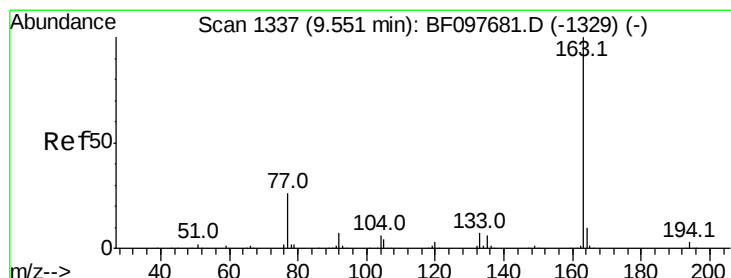
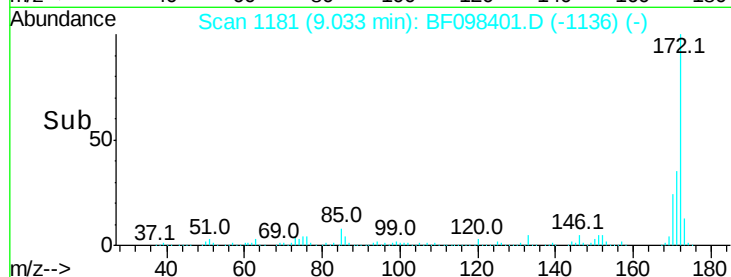
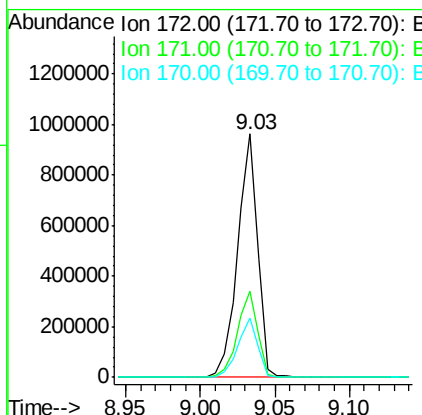
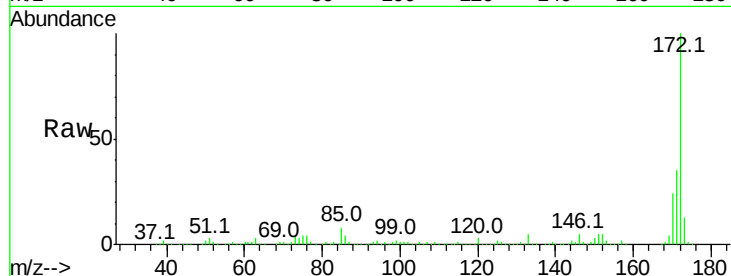




#44  
2-Fluorobiphenyl  
Concen: 77.583 ng  
RT: 9.03 min Scan# 1181  
Delta R.T. -0.04 min  
Lab File: BF098401.D  
Acq: 9 Sep 2017 22:22

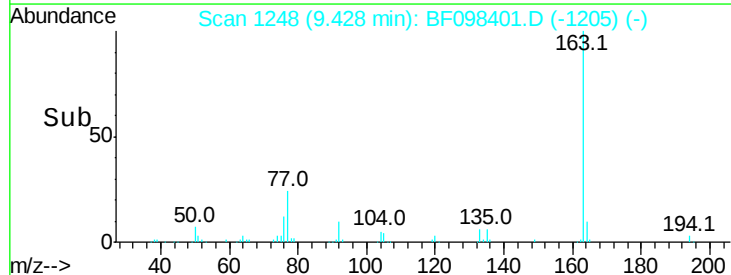
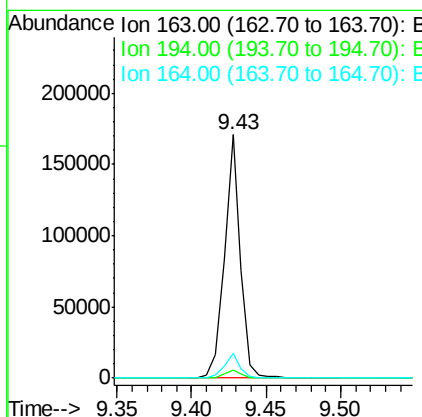
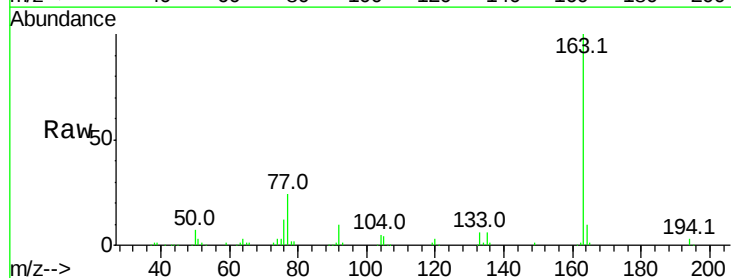
Instrument :  
BNA\_F  
ClientSampleId :

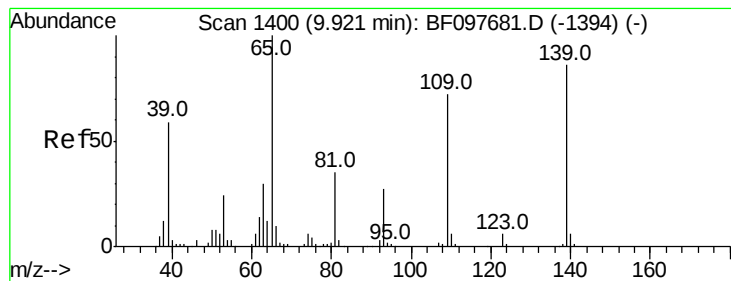
Tot Ion:172 Resp: 902993  
Ion Ratio Lower Upper  
172 100  
171 35.5 29.6 44.4  
170 24.3 19.8 29.8



#49  
Dimethylphthalate  
Concen: 10.320 ng  
RT: 9.43 min Scan# 1248  
Delta R.T. -0.05 min  
Lab File: BF098401.D  
Acq: 9 Sep 2017 22:22

Tgt Ion:163 Resp: 128994  
Ion Ratio Lower Upper  
163 100  
194 3.3 2.6 4.0  
164 10.2 8.4 12.6





#55

4-Nitrophenol

Concen: 3.485 ng

RT: 9.91 min Scan# 1330

Delta R.T. 0.04 min

Lab File: BF098401.D

Acq: 9 Sep 2017 22:22

Instrument :

BNA\_F

ClientSampleId :

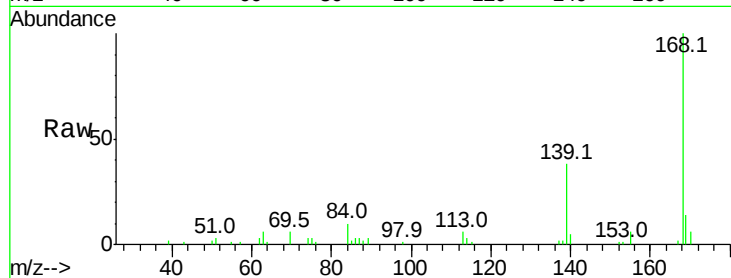
Tot Ion:139 Resp: 8950

Ion Ratio Lower Upper

139 100

109 0.0 34.1 74.1#

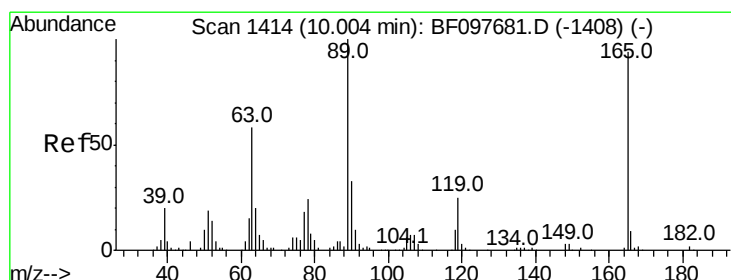
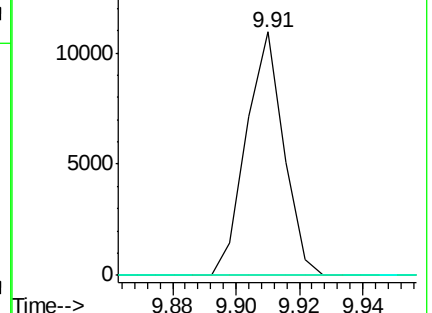
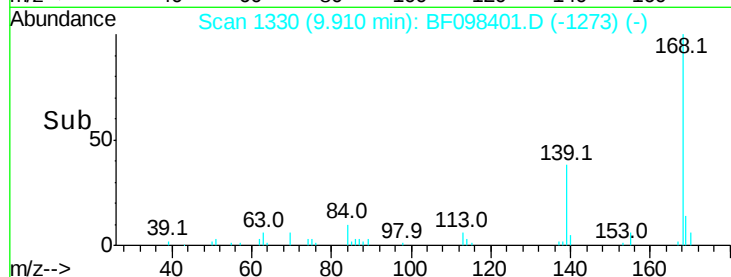
65 0.0 31.4 71.4#



Abundance Ion 139.00 (138.70 to 139.70): E

Ion 109.00 (108.70 to 109.70): E

Ion 65.00 (64.70 to 65.70): BF0



#56

2,4-Dinitrotoluene

Concen: 7.212 ng

RT: 9.70 min Scan# 1295

Delta R.T. -0.24 min

Lab File: BF098401.D

Acq: 9 Sep 2017 22:22

Tgt Ion:165 Resp: 22582

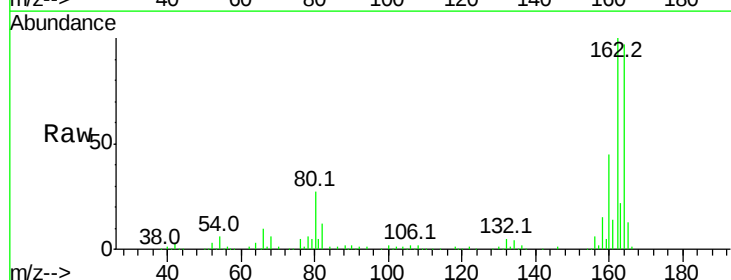
Ion Ratio Lower Upper

165 100

63 0.0 25.4 38.0#

89 1.2 46.4 69.6#

182 0.0 1.8 2.6#

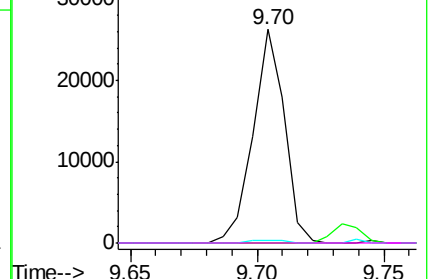
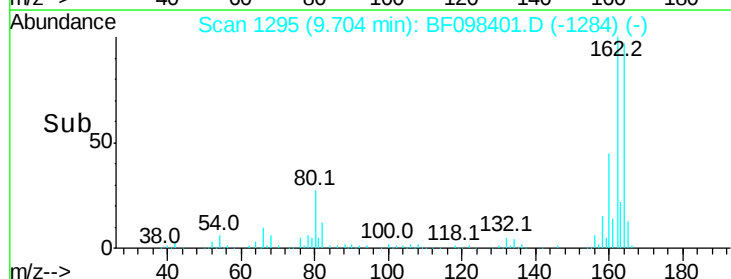


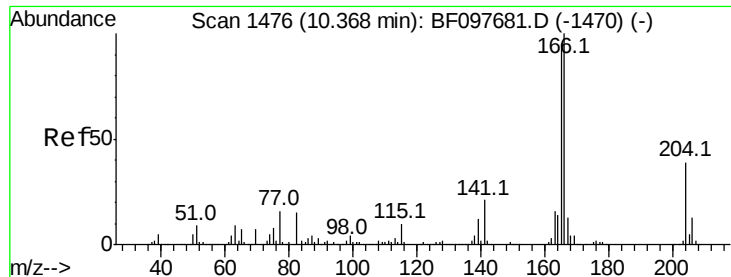
Abundance Ion 165.00 (164.70 to 165.70): E

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

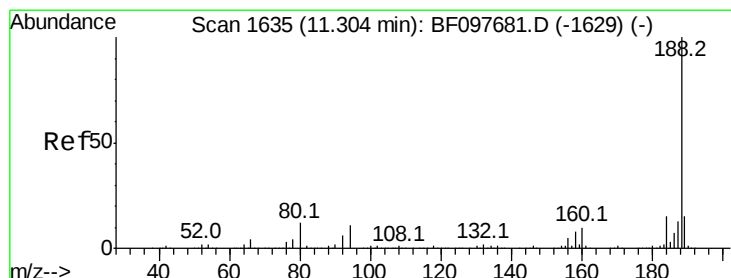
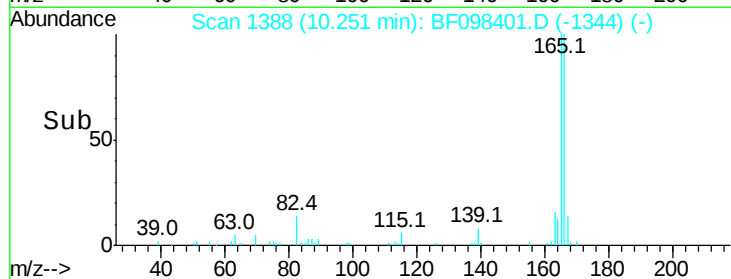
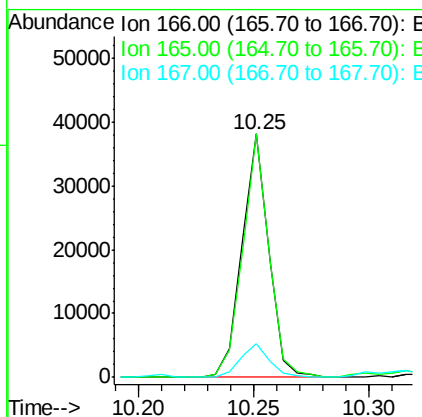
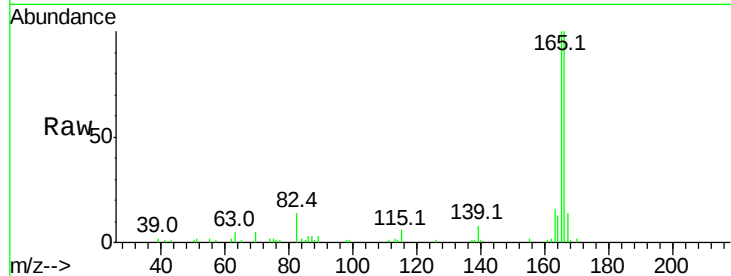




#57  
**Fluorene**  
 Concen: 2.609 ng  
 RT: 10.25 min Scan# 1388  
 Delta R.T. -0.04 min  
 Lab File: BF098401.D  
 Acq: 9 Sep 2017 22:22

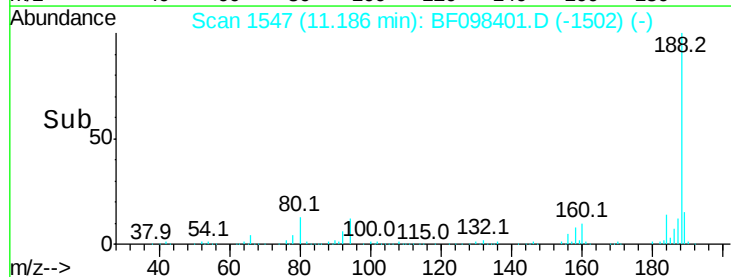
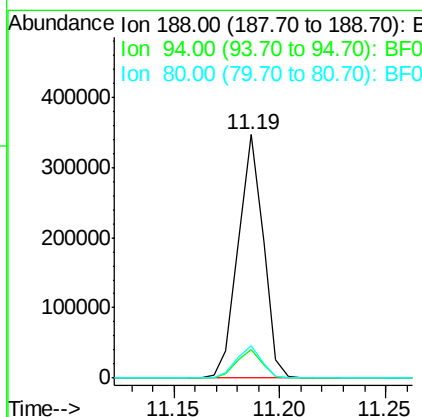
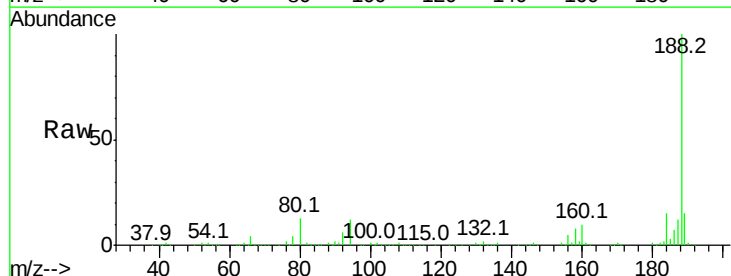
Instrument :  
 BNA\_F  
 ClientSampled :

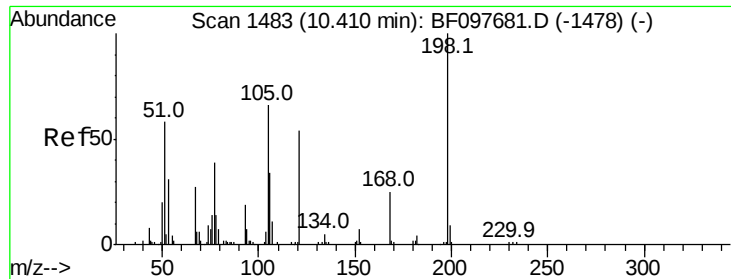
Tot Ion:166 Resp: 30844  
 Ion Ratio Lower Upper  
 166 100  
 165 99.9 78.8 118.2  
 167 13.8 10.6 16.0



#63  
**Phenanthrene-d10**  
 Concen: 20.000 ng  
 RT: 11.19 min Scan# 1547  
 Delta R.T. -0.04 min  
 Lab File: BF098401.D  
 Acq: 9 Sep 2017 22:22

Tgt Ion:188 Resp: 286017  
 Ion Ratio Lower Upper  
 188 100  
 94 11.9 9.4 14.2  
 80 13.3 10.2 15.2





#64

4,6-Dinitro-2-methylphenol

Concen: 8.396 ng

RT: 10.50 min Scan# 1430

Delta R.T. 0.15 min

Lab File: BF098401.D

Acq: 9 Sep 2017 22:22

Instrument :

BNA\_F

ClientSampleId :

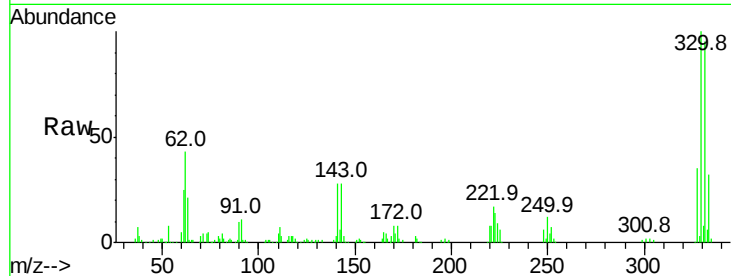
Tot Ion:198 Resp: 122

Ion Ratio Lower Upper

198 100

51 237.8 53.2 93.2#

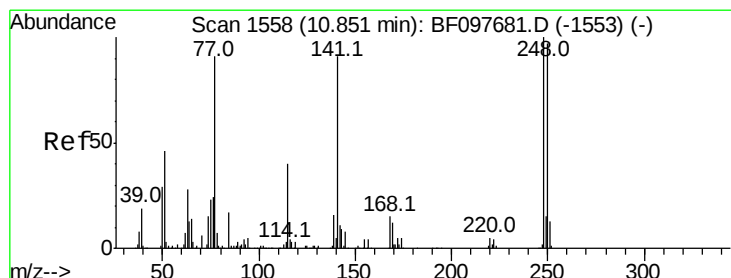
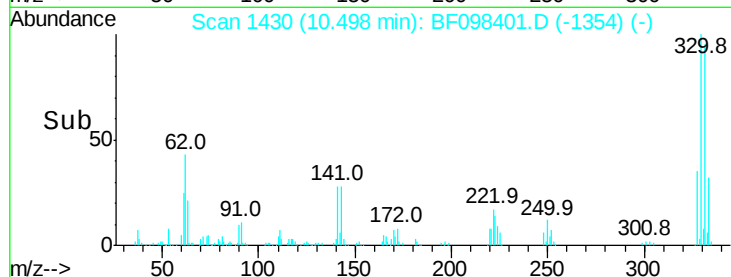
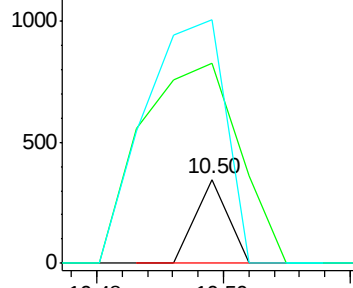
105 289.3 45.8 85.8#



Abundance Ion 198.00 (197.70 to 198.70): E

Ion 51.00 (50.70 to 51.70): BF0

Ion 105.00 (104.70 to 105.70): E



#66

4-Bromophenyl-phenylether

Concen: 3.587 ng

RT: 10.50 min Scan# 1430

Delta R.T. -0.27 min

Lab File: BF098401.D

Acq: 9 Sep 2017 22:22

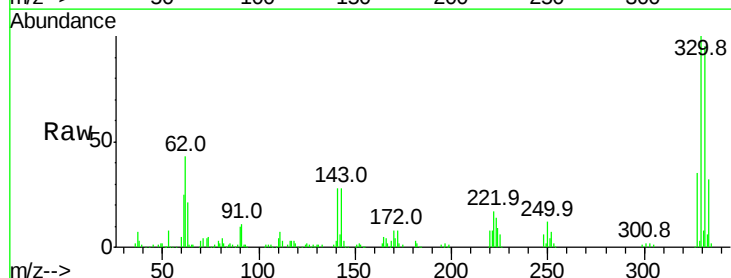
Tgt Ion:248 Resp: 10655

Ion Ratio Lower Upper

248 100

250 194.1 76.8 115.2#

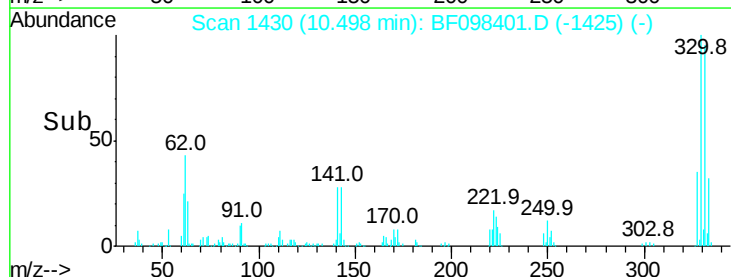
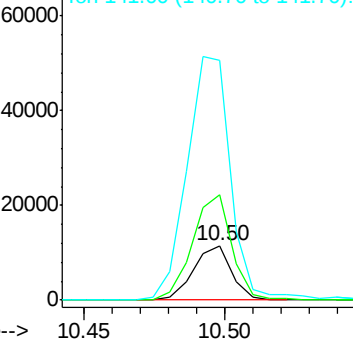
141 441.2 68.6 103.0#

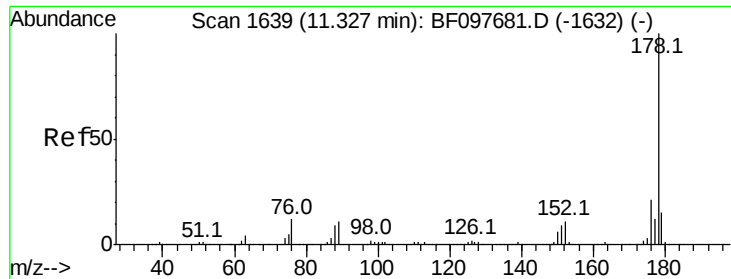


Abundance Ion 248.00 (247.70 to 248.70): E

Ion 250.00 (249.70 to 250.70): E

Ion 141.00 (140.70 to 141.70): E

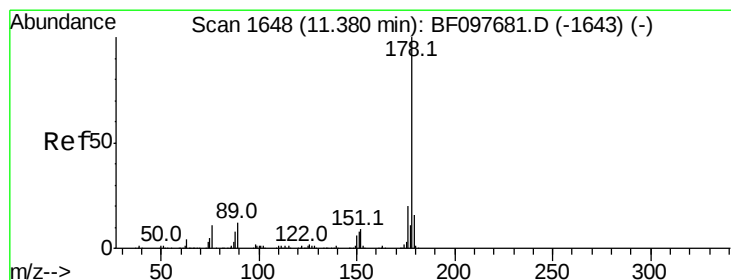
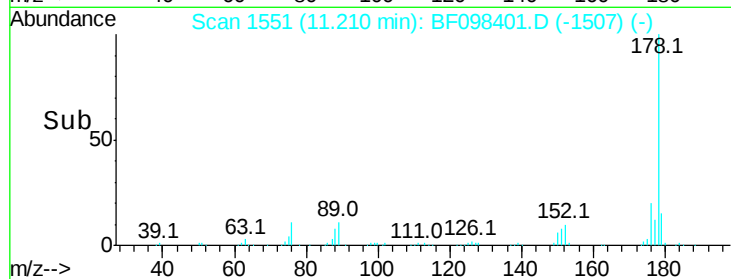
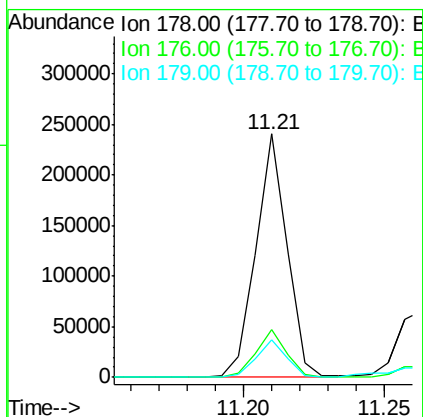
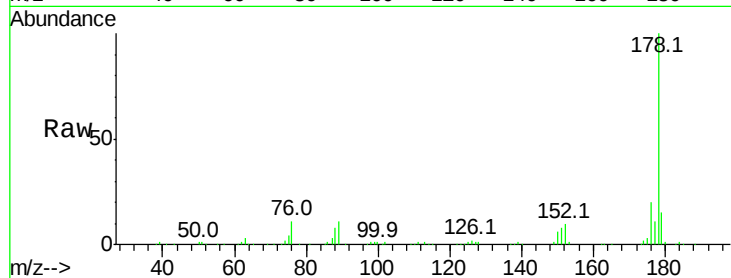




#70  
Phenanthrene  
Concen: 12.105 ng  
RT: 11.21 min Scan# 1551  
Delta R.T. -0.04 min  
Lab File: BF098401.D  
Acq: 9 Sep 2017 22:22

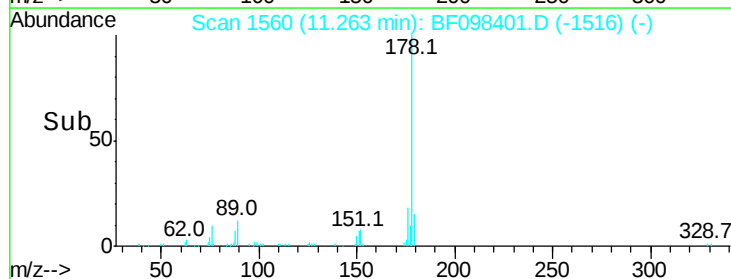
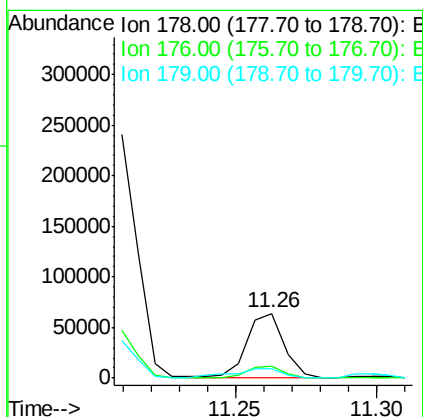
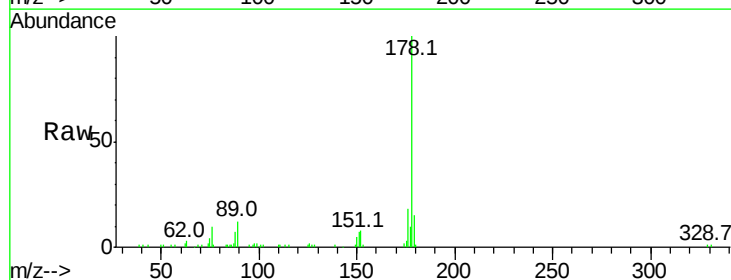
Instrument :  
BNA\_F  
ClientSampleId :

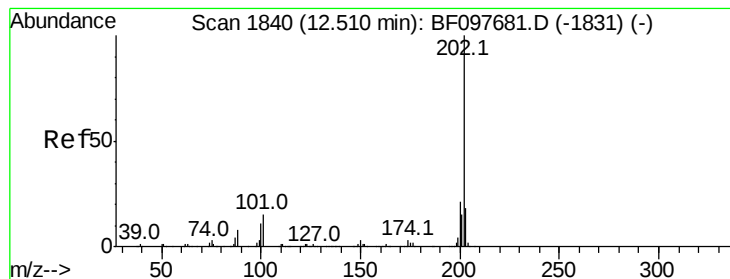
Tot Ion:178 Resp: 184486  
Ion Ratio Lower Upper  
178 100  
176 19.5 16.2 24.4  
179 15.4 12.6 19.0



#71  
Anthracene  
Concen: 3.714 ng  
RT: 11.26 min Scan# 1560  
Delta R.T. -0.04 min  
Lab File: BF098401.D  
Acq: 9 Sep 2017 22:22

Tgt Ion:178 Resp: 57415  
Ion Ratio Lower Upper  
178 100  
176 17.8 15.8 23.8  
179 15.4 12.7 19.1





#74

Fluoranthene

Concen: 8.883 ng

RT: 12.39 min Scan# 1752

Delta R.T. -0.04 min

Lab File: BF098401.D

Acq: 9 Sep 2017 22:22

Instrument :

BNA\_F

ClientSampleId :

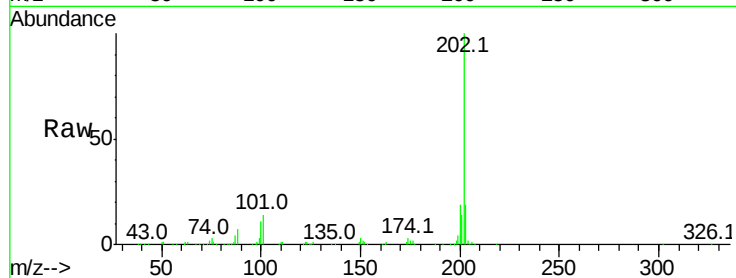
Tot Ion:202 Resp: 141319

Ion Ratio Lower Upper

202 100

101 14.2 0.0 33.2

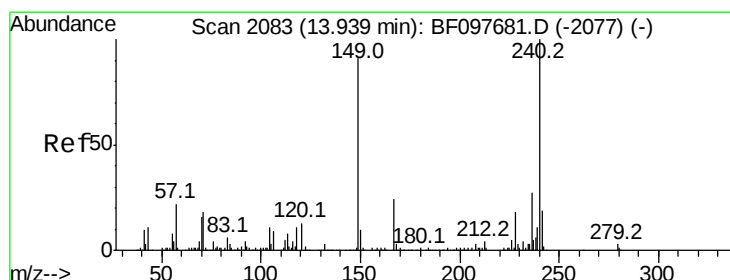
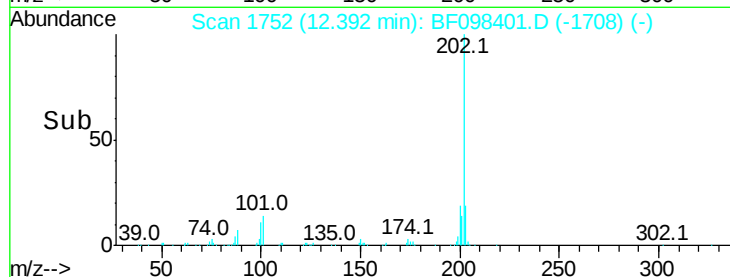
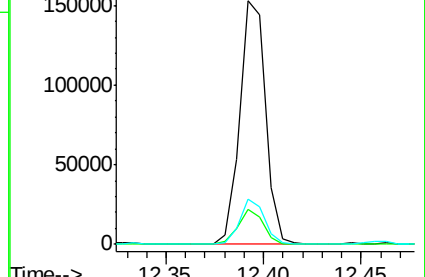
203 18.5 0.0 38.1



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: 13.82 min Scan# 1995

Delta R.T. -0.04 min

Lab File: BF098401.D

Acq: 9 Sep 2017 22:22

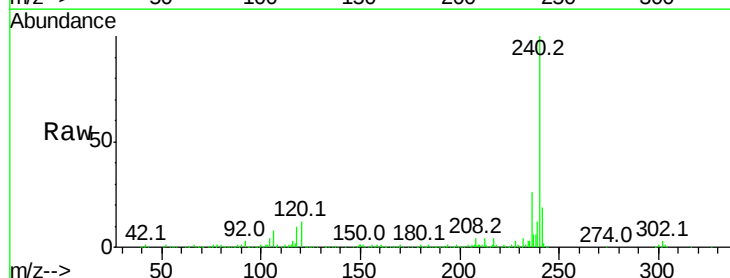
Tgt Ion:240 Resp: 239788

Ion Ratio Lower Upper

240 100

120 12.1 5.8 8.8#

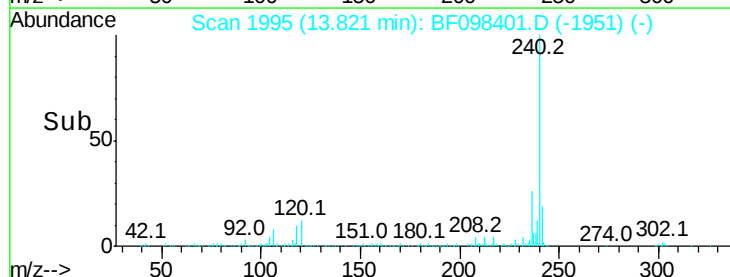
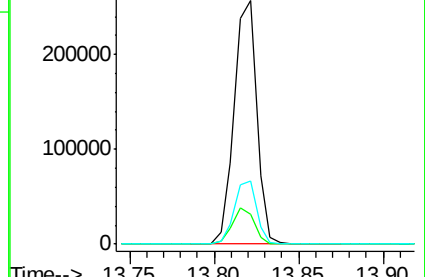
236 26.0 20.5 30.7

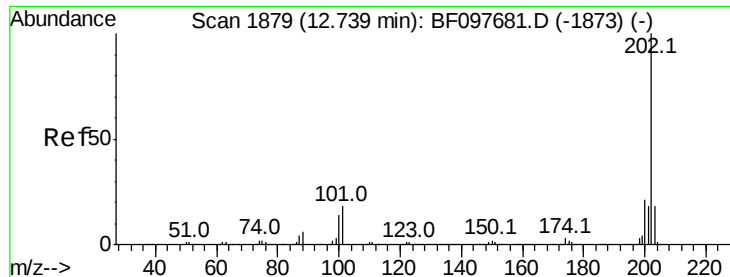


Abundance Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E

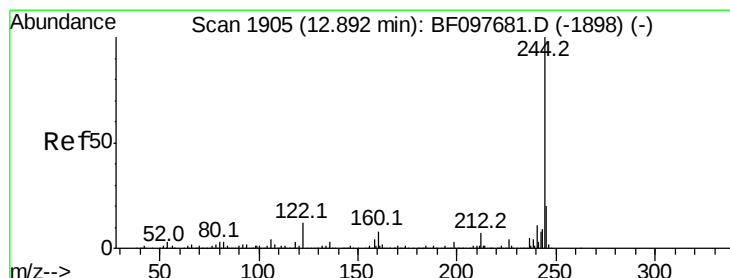
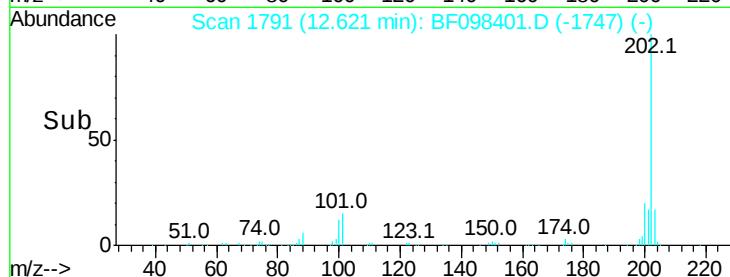
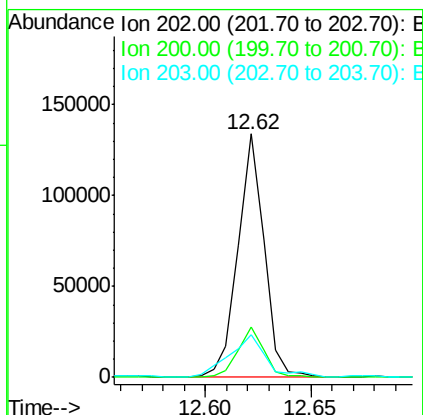
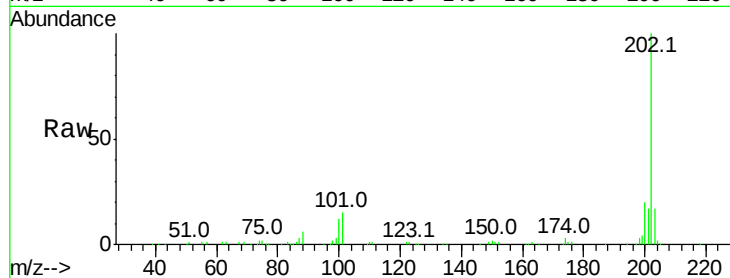




#77  
Pvrene  
Concen: 5.887 ng  
RT: 12.62 min Scan# 1791  
Delta R.T. -0.04 min  
Lab File: BF098401.D  
Acq: 9 Sep 2017 22:22

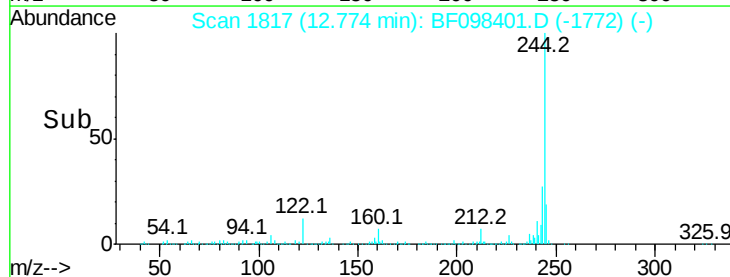
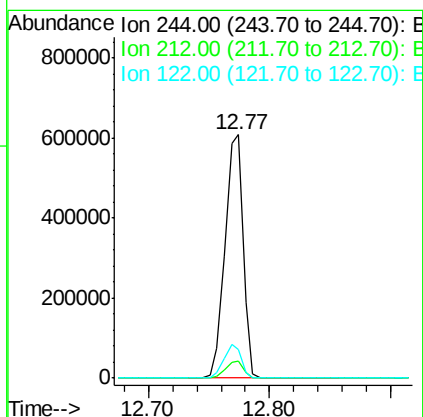
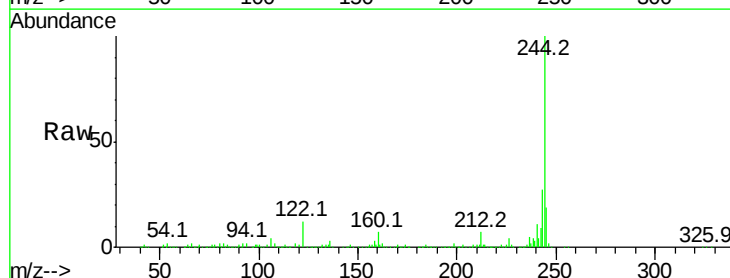
Instrument :  
BNA\_F  
ClientSampleId :

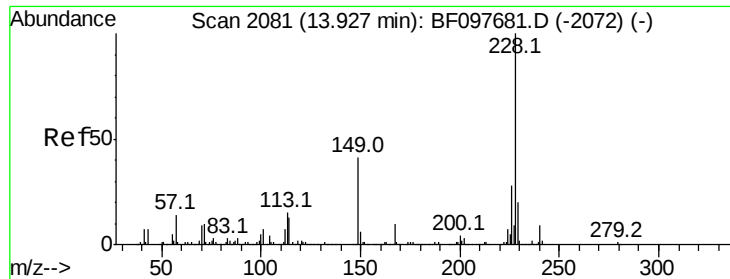
Tot Ion:202 Resp: 115456  
Ion Ratio Lower Upper  
202 100  
200 20.5 17.6 26.4  
203 17.3 14.4 21.6



#78  
Terphenyl-d14  
Concen: 54.917 ng  
RT: 12.77 min Scan# 1817  
Delta R.T. -0.04 min  
Lab File: BF098401.D  
Acq: 9 Sep 2017 22:22

Tgt Ion:244 Resp: 631477  
Ion Ratio Lower Upper  
244 100  
212 6.9 6.0 9.0  
122 11.9 10.3 15.5

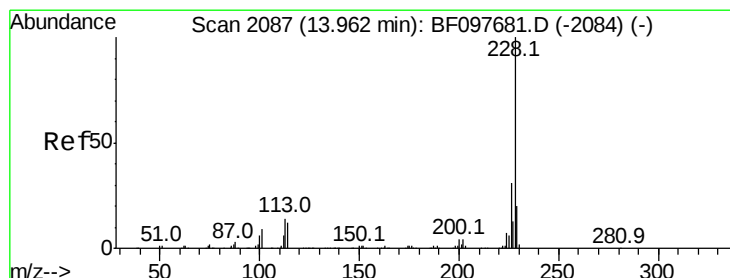
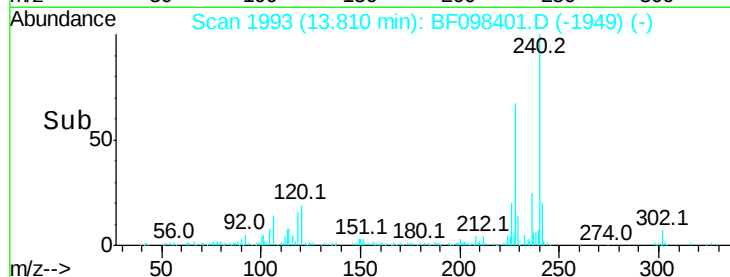
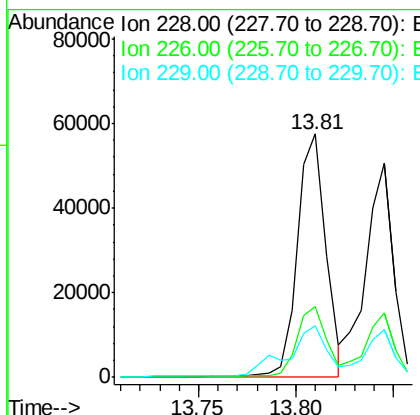
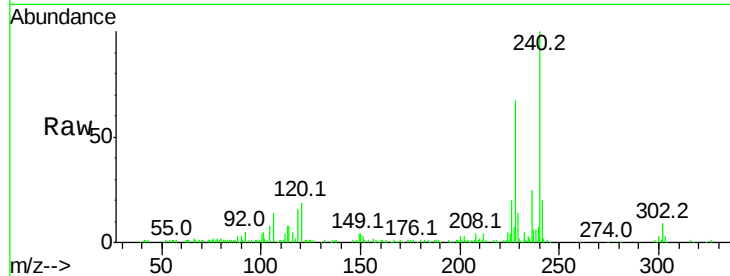




#80  
Benzo(a)anthracene  
Concen: 4.080 ng  
RT: 13.81 min Scan# 1993  
Delta R.T. -0.04 min  
Lab File: BF098401.D  
Acq: 9 Sep 2017 22:22

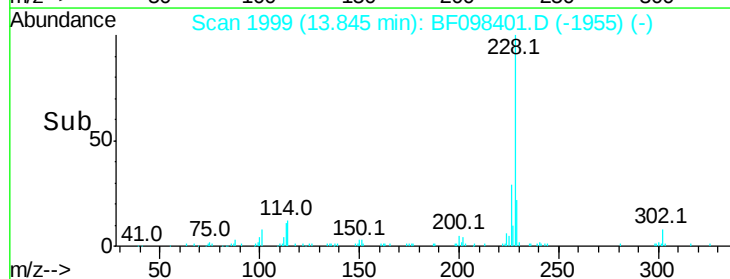
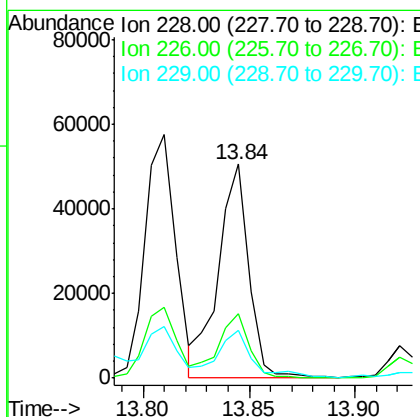
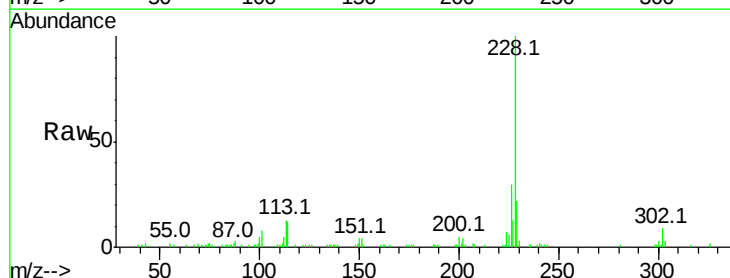
Instrument :  
BNA\_F  
ClientSampleId :

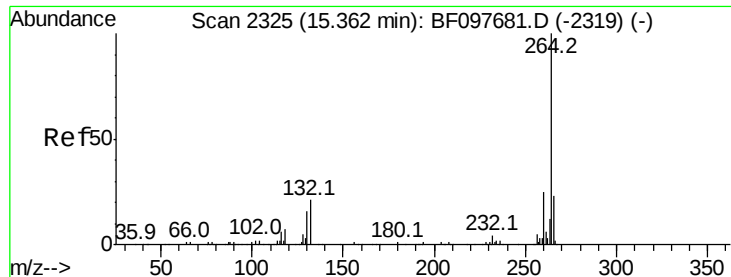
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 29.3  | 22.6  | 33.8  |
| 229     | 21.1  | 16.3  | 24.5  |



#82  
Chrysene  
Concen: 3.557 ng  
RT: 13.84 min Scan# 1999  
Delta R.T. -0.04 min  
Lab File: BF098401.D  
Acq: 9 Sep 2017 22:22

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 30.0  | 24.9  | 37.3  |
| 229     | 22.3  | 15.8  | 23.6  |



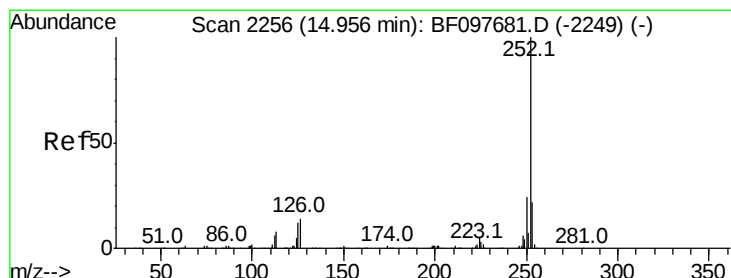
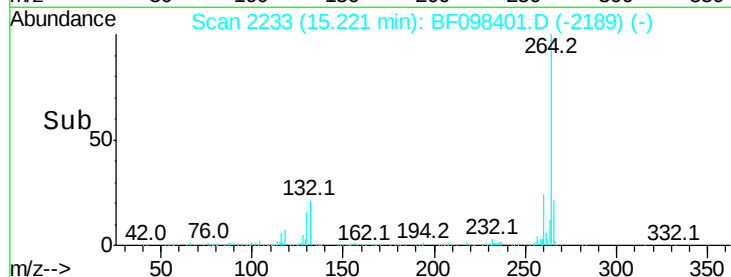
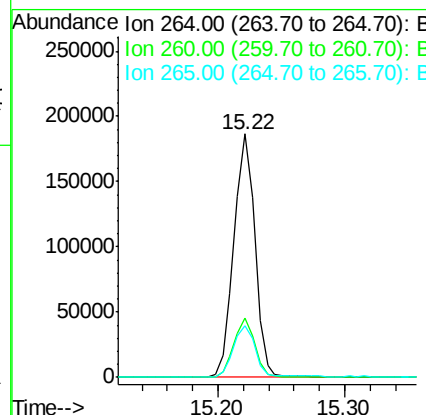
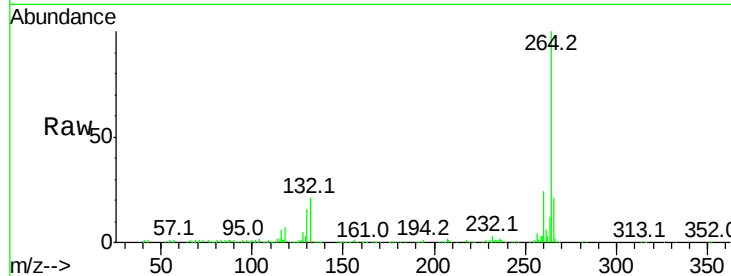


#86  
Pervlene-d12  
Concen: 20.000 ng  
RT: 15.22 min Scan# 2233  
Delta R.T. -0.04 min  
Lab File: BF098401.D  
Acq: 9 Sep 2017 22:22

Instrument :  
BNA\_F  
ClientSampleId :

Tot Ion:264 Resp: 215016  

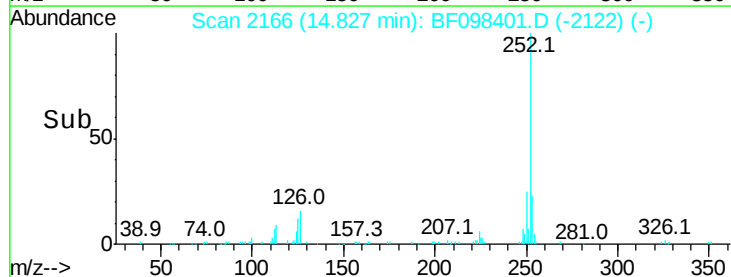
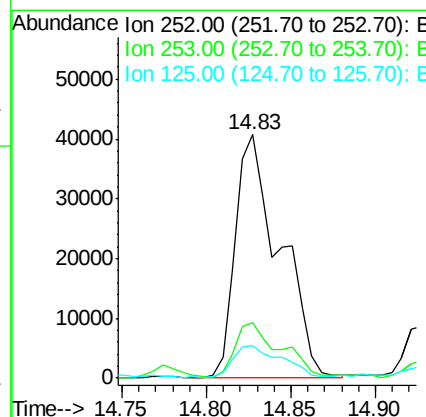
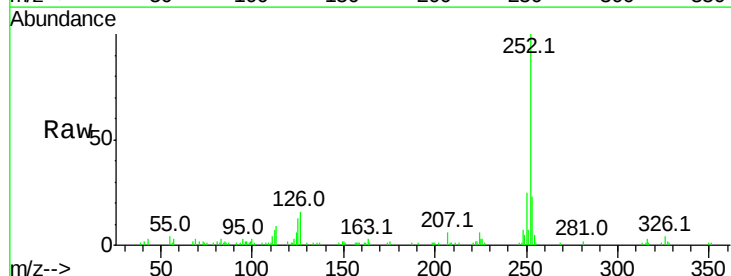
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 264 | 100   |       |       |
| 260 | 24.2  | 19.5  | 29.3  |
| 265 | 20.9  | 17.2  | 25.8  |

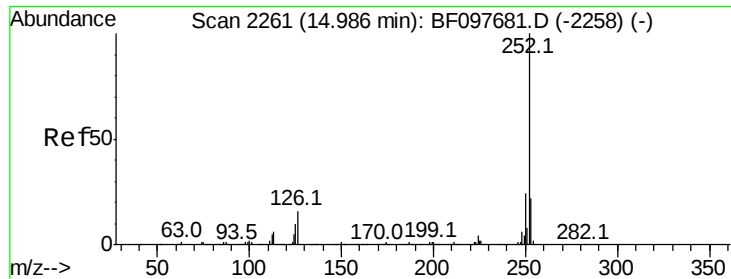


#87  
Benzo(b)fluoranthene  
Concen: 5.494 ng  
RT: 14.83 min Scan# 2166  
Delta R.T. -0.04 min  
Lab File: BF098401.D  
Acq: 9 Sep 2017 22:22

Tgt Ion:252 Resp: 74464  

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 252 | 100   |       |       |
| 253 | 22.5  | 18.1  | 27.1  |
| 125 | 13.3  | 9.8   | 14.8  |

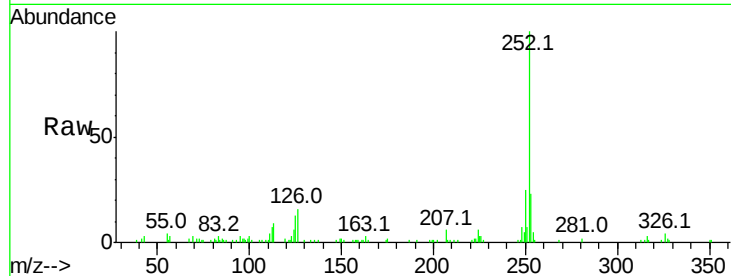




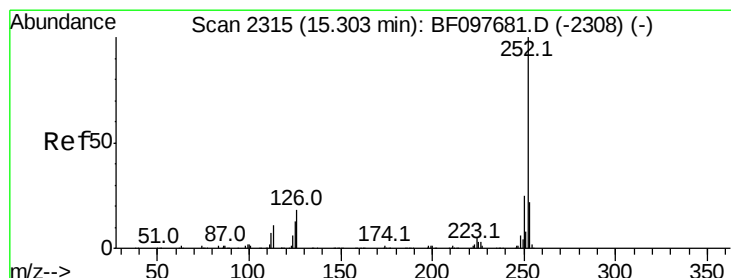
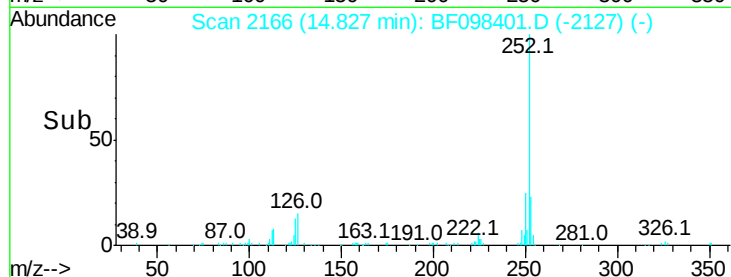
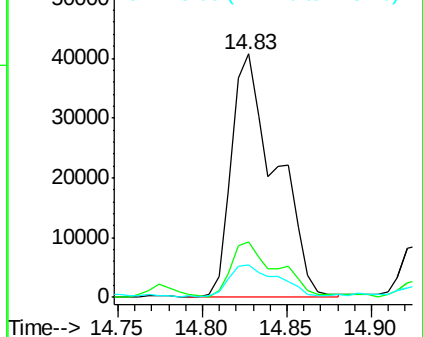
#88  
Benzo(k)fluoranthene  
Concen: 5.848 ng  
RT: 14.83 min Scan# 2166  
Delta R.T. -0.07 min  
Lab File: BF098401.D  
Acq: 9 Sep 2017 22:22

Instrument :  
BNA\_F  
ClientSampled :

Tot Ion:252 Resp: 74464  
Ion Ratio Lower Upper  
252 100  
253 22.5 18.4 27.6  
125 13.3 13.1 19.7

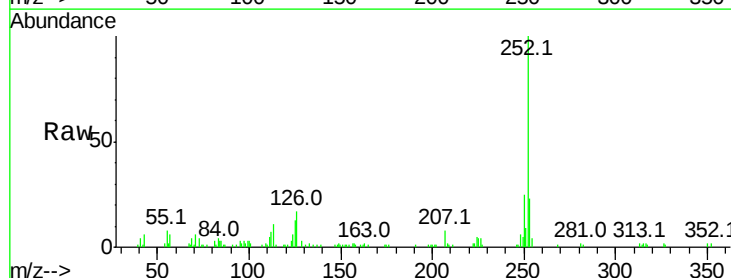


Abundance Ion 252.00 (251.70 to 252.70): E  
Ion 253.00 (252.70 to 253.70): E  
Ion 125.00 (124.70 to 125.70): E



#89  
Benzo(a)pyrene  
Concen: 3.348 ng  
RT: 15.16 min Scan# 2223  
Delta R.T. -0.05 min  
Lab File: BF098401.D  
Acq: 9 Sep 2017 22:22

Tgt Ion:252 Resp: 40166  
Ion Ratio Lower Upper  
252 100  
253 23.2 17.5 26.3  
125 12.9 11.0 16.4



Abundance Ion 252.00 (251.70 to 252.70): E  
Ion 253.00 (252.70 to 253.70): E  
Ion 125.00 (124.70 to 125.70): E

