

Data Path : U:\HPCHEM1\BNA F\DATA\BF010418\  
 Data File : BF101898.D  
 Acq On : 4 Jan 2018 18:35  
 Operator : SJ/JU  
 Sample : J1033-05 5X  
 Misc :  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :

Quant Time: Jan 04 23:53:52 2018  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF121417.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Jan 04 14:22:17 2018  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.77  | 152  | 154581   | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 8.05  | 136  | 607804   | 20.00 | ng    | 0.00     |
| 38) Acenaphthene-d10      | 9.81  | 164  | 237594   | 20.00 | ng    | 0.00     |
| 63) Phenanthrene-d10      | 11.30 | 188  | 344913   | 20.00 | ng    | 0.00     |
| 75) Chrysene-d12          | 13.96 | 240  | 265688   | 20.00 | ng    | 0.00     |
| 86) Perylene-d12          | 15.43 | 264  | 214547   | 20.00 | ng    | 0.00     |

|                             |       |     |        |       |    |      |
|-----------------------------|-------|-----|--------|-------|----|------|
| System Monitoring Compounds |       |     |        |       |    |      |
| 5) 2-Fluorophenol           | 5.41  | 112 | 209686 | 20.21 | ng | 0.02 |
| 7) Phenol-d6                | 6.44  | 99  | 282179 | 21.85 | ng | 0.02 |
| 23) Nitrobenzene-d5         | 7.35  | 82  | 172229 | 15.77 | ng | 0.00 |
| 41) 2,4,6-Tribromophenol    | 10.62 | 330 | 27855  | 12.17 | ng | 0.01 |
| 44) 2-Fluorobiphenyl        | 9.13  | 172 | 272565 | 17.80 | ng | 0.00 |
| 78) Terphenyl-d14           | 12.88 | 244 | 161034 | 14.61 | ng | 0.00 |

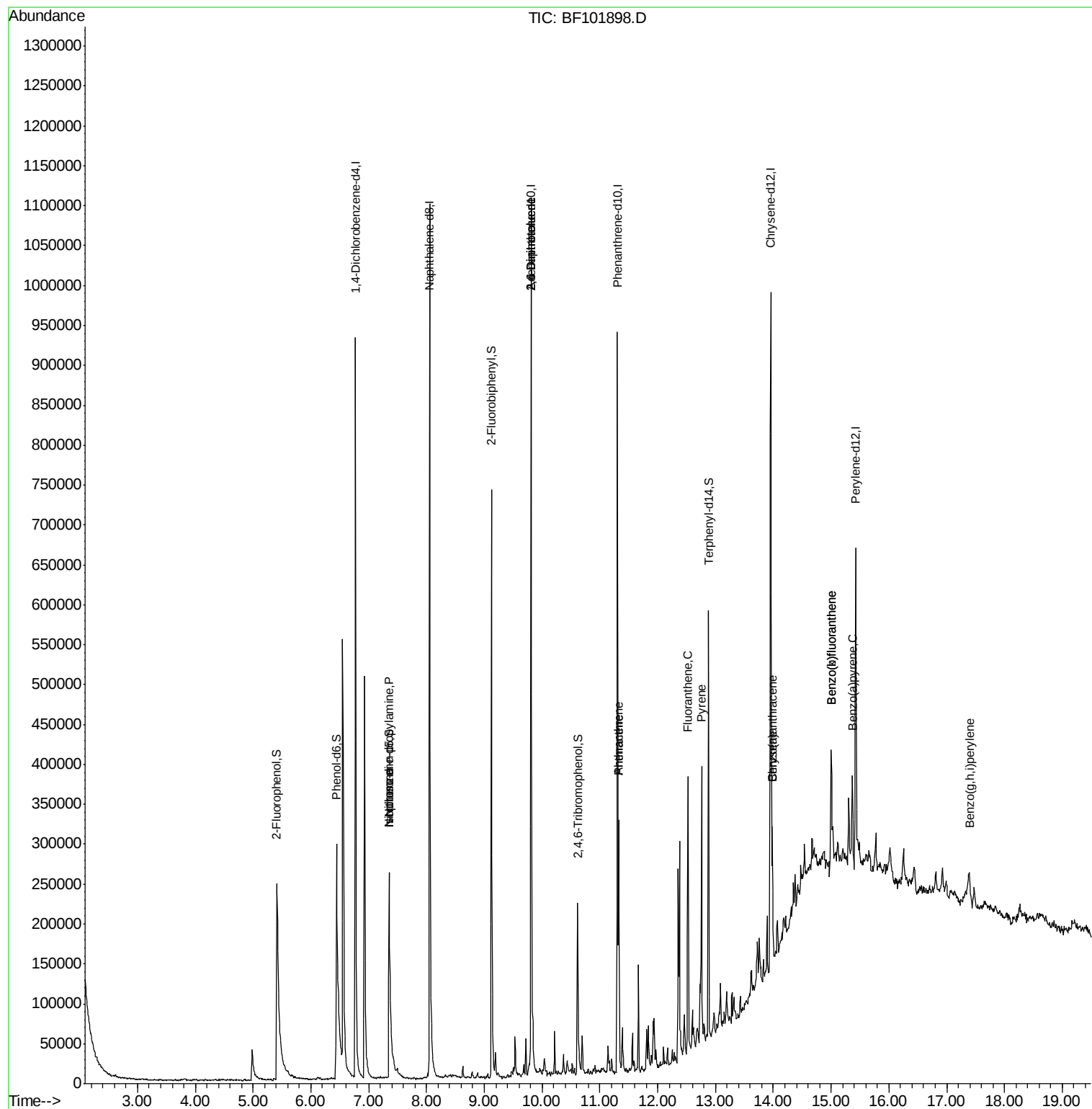
|                                |       |     |        |        |    |      |
|--------------------------------|-------|-----|--------|--------|----|------|
| Target Compounds               |       |     |        | Qvalue |    |      |
| 19) n-Nitroso-di-n-propylamine | 7.35  | 70  | 23708  | 2.795  | ng | # 86 |
| 25) Isophorone                 | 7.35  | 82  | 172229 | 7.863  | ng | # 64 |
| 50) 2,6-Dinitrotoluene         | 9.80  | 165 | 30924  | 7.961  | ng | # 26 |
| 56) 2,4-Dinitrotoluene         | 9.80  | 165 | 30924  | 7.066  | ng | # 23 |
| 70) Phenanthrene               | 11.33 | 178 | 118266 | 6.166  | ng | 99   |
| 71) Anthracene                 | 11.33 | 178 | 118266 | 6.036  | ng | 99   |
| 74) Fluoranthene               | 12.52 | 202 | 146426 | 7.273  | ng | 98   |
| 77) Pyrene                     | 12.76 | 202 | 145899 | 7.317  | ng | 99   |
| 80) Benzo(a)anthracene         | 13.99 | 228 | 68837  | 3.924  | ng | 95   |
| 82) Chrysene                   | 13.99 | 228 | 68837  | 4.156  | ng | 99   |
| 87) Benzo(b)fluoranthene       | 15.00 | 252 | 98430  | 7.527  | ng | # 94 |
| 88) Benzo(k)fluoranthene       | 15.00 | 252 | 98430  | 7.742  | ng | # 97 |
| 89) Benzo(a)pyrene             | 15.37 | 252 | 50136  | 4.159  | ng | # 93 |
| 91) Benzo(a,h,i)perylene       | 17.39 | 276 | 25782  | 2.516  | ng | # 91 |

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

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Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :

Quant Time: Jan 04 23:53:52 2018  
Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF121417.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Thu Jan 04 14:22:17 2018  
Response via : Initial Calibration



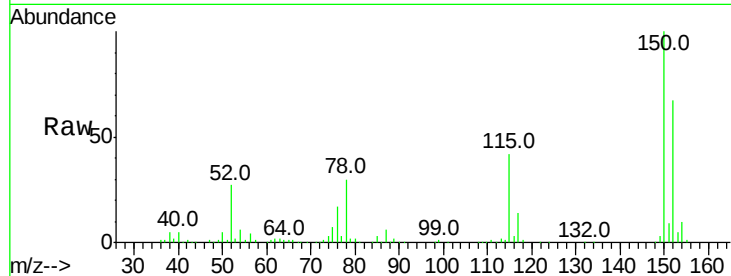


#1

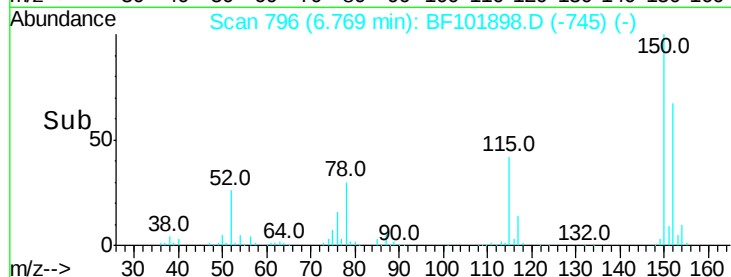
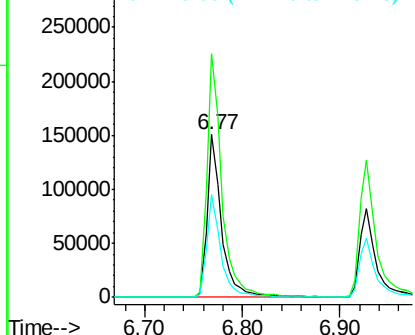
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.77 min Scan# 796  
Delta R.T. -0.00 min  
Lab File: BF101898.D  
Acq: 4 Jan 2018 18:35

Instrument :  
BNA\_F  
ClientSampled :

Tot Ion:152 Resp: 154581  
Ion Ratio Lower Upper  
152 100  
150 149.4 124.6 186.8  
115 62.9 50.1 75.1



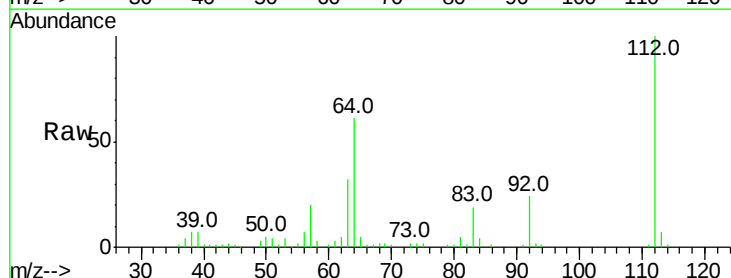
Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 115.00 (114.70 to 115.70): E



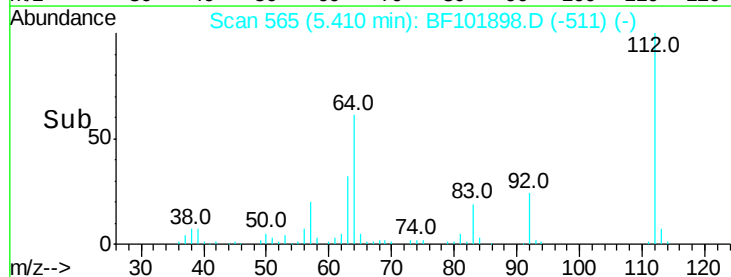
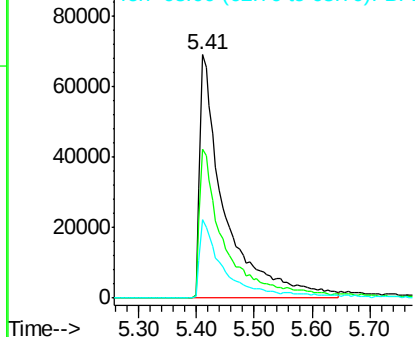
#5

2-Fluorophenol  
Concen: 20.206 ng  
RT: 5.41 min Scan# 565  
Delta R.T. 0.02 min  
Lab File: BF101898.D  
Acq: 4 Jan 2018 18:35

Tgt Ion:112 Resp: 209686  
Ion Ratio Lower Upper  
112 100  
64 60.9 47.9 71.9  
63 32.2 23.7 35.5



Abundance Ion 112.00 (111.70 to 112.70): E  
Ion 64.00 (63.70 to 64.70): BF1  
Ion 63.00 (62.70 to 63.70): BF1





#7

Phenol-d6

Concen: 21.849 ng

RT: 6.44 min Scan# 740

Delta R.T. 0.02 min

Lab File: BF101898.D

Acq: 4 Jan 2018 18:35

Instrument :

BNA\_F

ClientSampleId :

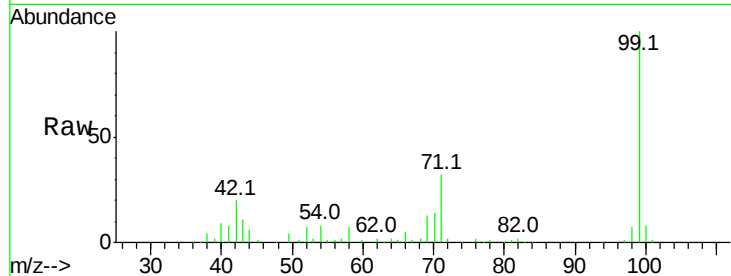
Tot Ion: 99 Resp: 282179

Ion Ratio Lower Upper

99 100

42 20.3 14.5 21.7

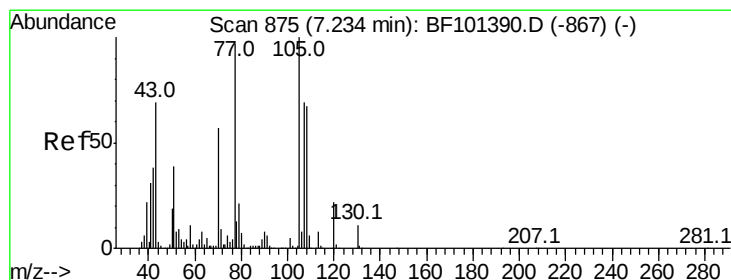
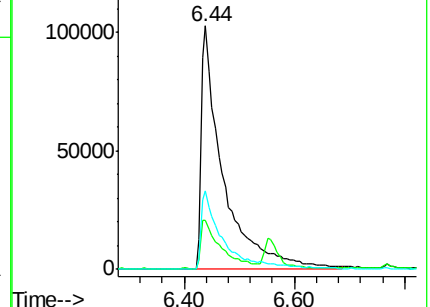
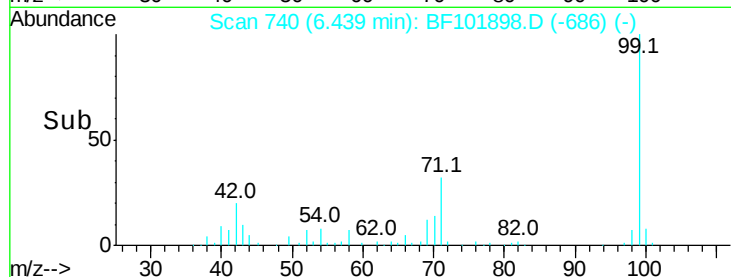
71 32.4 25.4 38.0



Abundance Ion 99.00 (98.70 to 99.70): BF1

Ion 42.00 (41.70 to 42.70): BF1

Ion 71.00 (70.70 to 71.70): BF1



#19

n-Nitroso-di-n-propylamine

Concen: 2.795 ng

RT: 7.35 min Scan# 895

Delta R.T. 0.16 min

Lab File: BF101898.D

Acq: 4 Jan 2018 18:35

Tgt Ion: 70 Resp: 23708

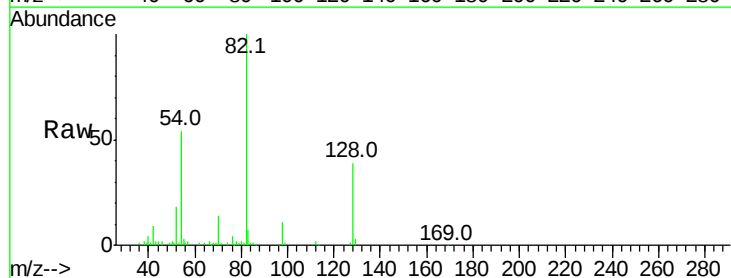
Ion Ratio Lower Upper

70 100

42 60.8 47.5 71.3

101 0.0 7.4 11.2#

130 0.0 16.6 25.0#

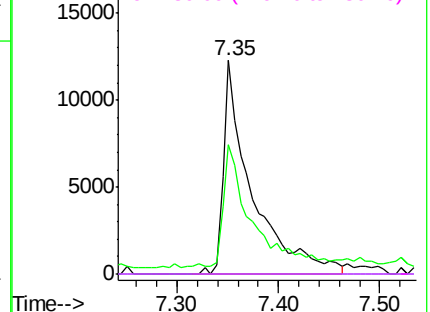
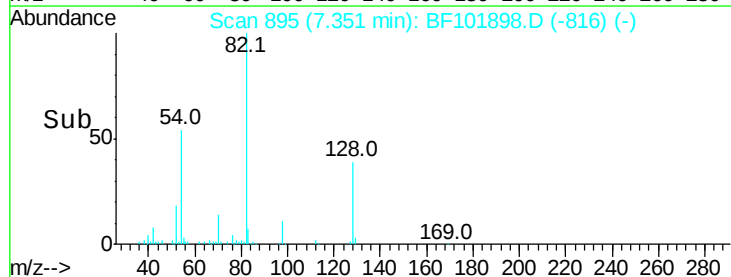


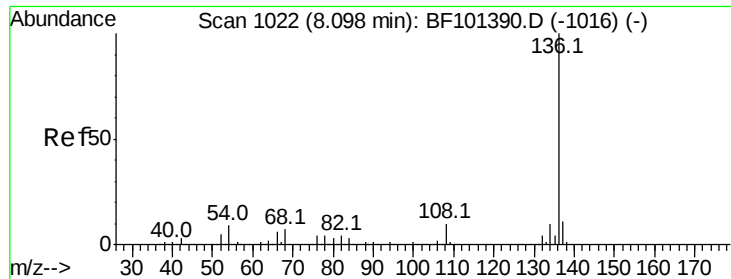
Abundance Ion 70.00 (69.70 to 70.70): BF1

Ion 42.00 (41.70 to 42.70): BF1

Ion 101.00 (100.70 to 101.70): BF1

Ion 130.00 (129.70 to 130.70): BF1

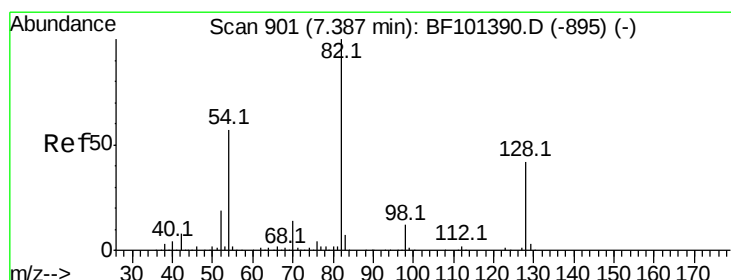
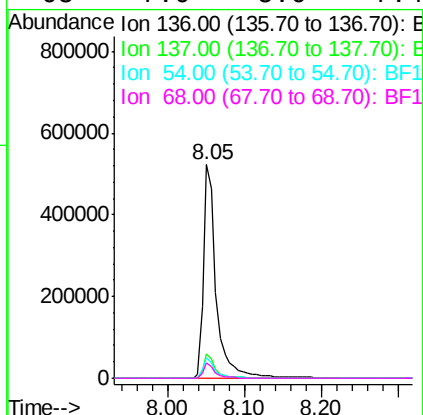
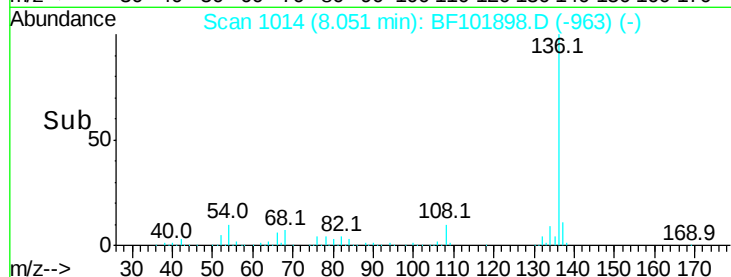
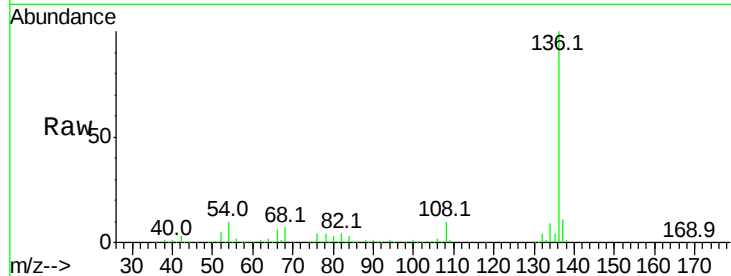




#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 8.05 min Scan# 1014  
Delta R.T. -0.00 min  
Lab File: BF101898.D  
Acq: 4 Jan 2018 18:35

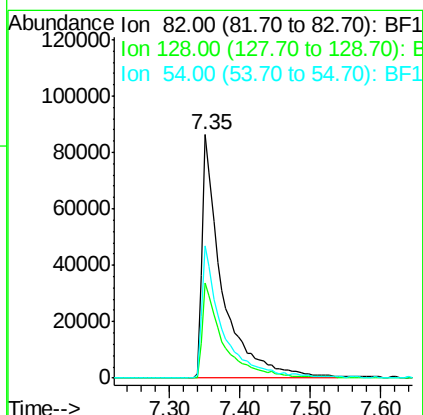
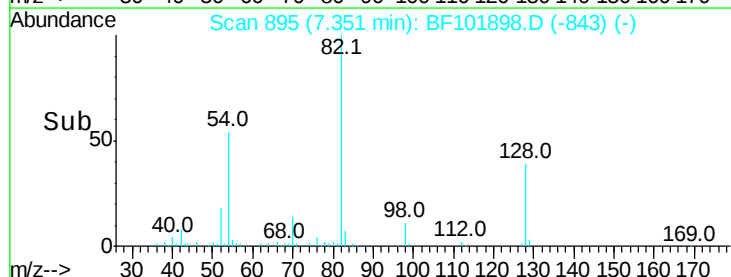
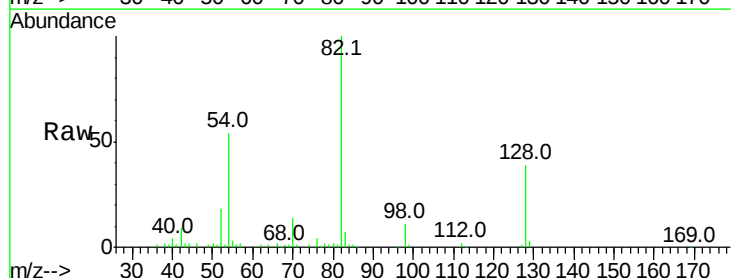
Instrument :  
BNA\_F  
ClientSampleId :

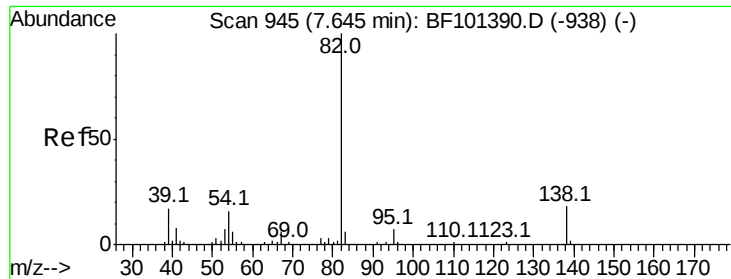
|             |              |
|-------------|--------------|
| Tot Ion:136 | Resp: 607804 |
| Ion Ratio   | Lower Upper  |
| 136 100     |              |
| 137 11.1    | 8.9 13.3     |
| 54 9.7      | 6.6 9.8      |
| 68 7.0      | 5.0 7.4      |



#23  
Nitrobenzene-d5  
Concen: 15.774 ng  
RT: 7.35 min Scan# 895  
Delta R.T. 0.01 min  
Lab File: BF101898.D  
Acq: 4 Jan 2018 18:35

|             |              |
|-------------|--------------|
| Tgt Ion: 82 | Resp: 172229 |
| Ion Ratio   | Lower Upper  |
| 82 100      |              |
| 128 39.2    | 36.1 54.1    |
| 54 54.1     | 41.4 62.2    |





#25

Isophorone

Concen: 7.863 ng

RT: 7.35 min Scan# 895

Delta R.T. -0.25 min

Lab File: BF101898.D

Acq: 4 Jan 2018 18:35

Instrument :

BNA\_F

ClientSampled :

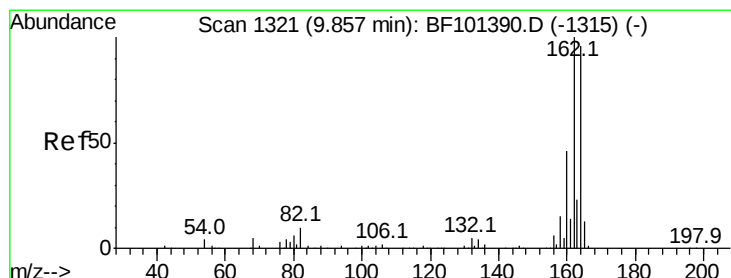
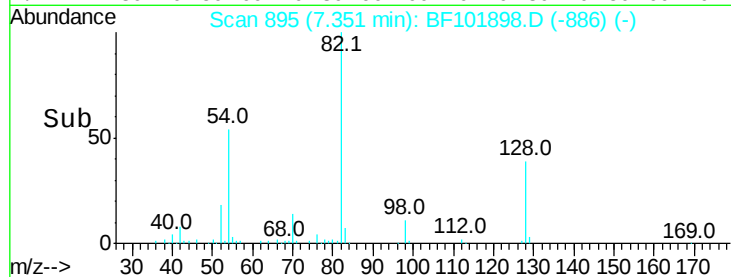
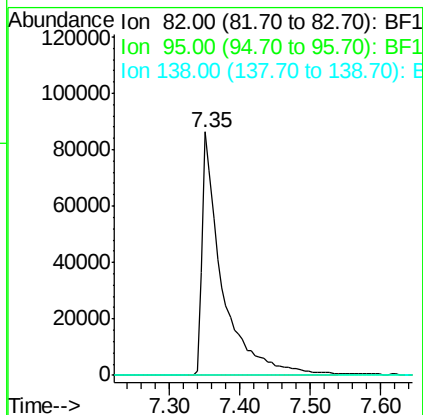
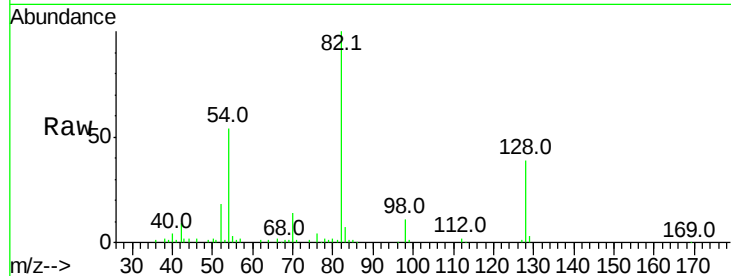
Tot Ion: 82 Resp: 172229

Ion Ratio Lower Upper

82 100

95 0.0 5.2 7.8#

138 0.0 14.9 22.3#



#38

Acenaphthene-d10

Concen: 20.000 ng

RT: 9.81 min Scan# 1313

Delta R.T. 0.01 min

Lab File: BF101898.D

Acq: 4 Jan 2018 18:35

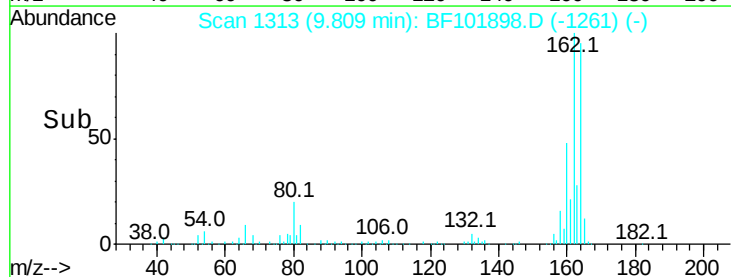
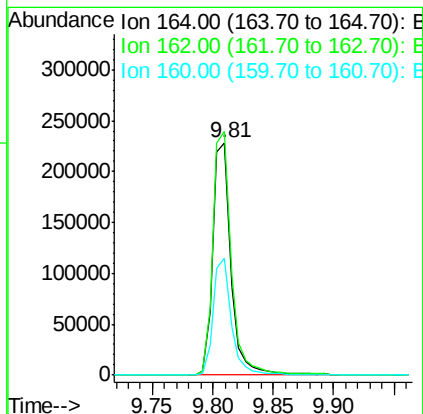
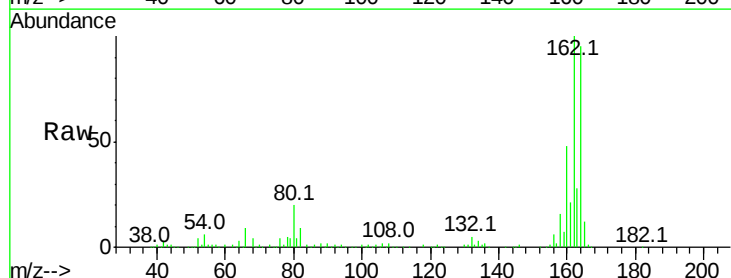
Tgt Ion:164 Resp: 237594

Ion Ratio Lower Upper

164 100

162 104.8 86.1 129.1

160 50.2 38.3 57.5

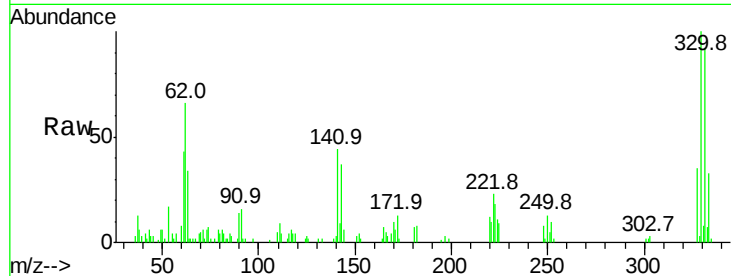




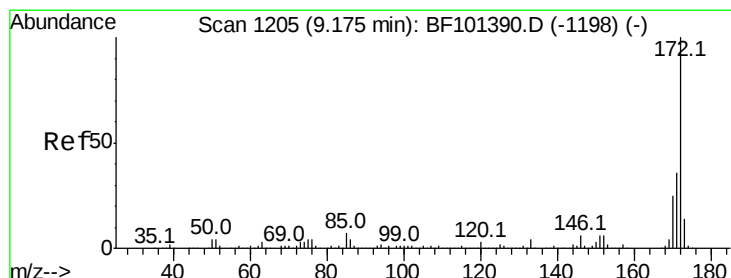
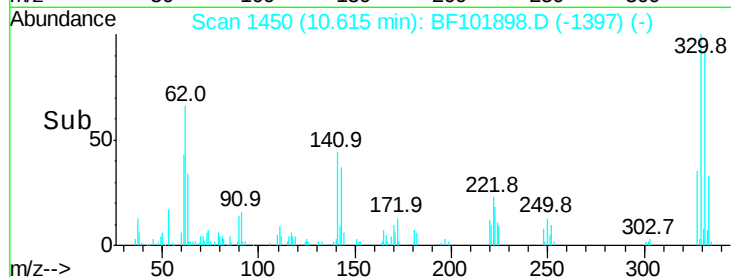
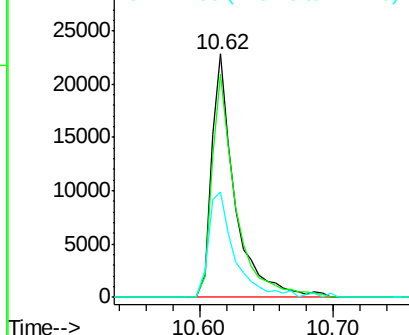
#41  
 2,4,6-Tribromophenol  
 Concen: 12.167 ng  
 RT: 10.62 min Scan# 1450  
 Delta R.T. 0.01 min  
 Lab File: BF101898.D  
 Acq: 4 Jan 2018 18:35

Instrument :  
 BNA\_F  
 ClientSampleId :

Tot Ion:330 Resp: 27855  
 Ion Ratio Lower Upper  
 330 100  
 332 94.3 77.0 115.6  
 141 48.4 29.9 44.9#

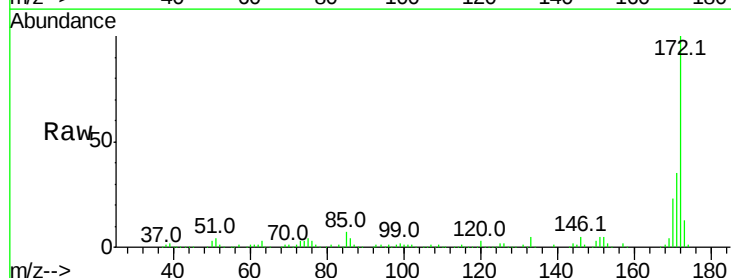


Abundance Ion 329.80 (329.50 to 330.50): E  
 Ion 331.80 (331.50 to 332.50): E  
 Ion 141.00 (140.70 to 141.70): E

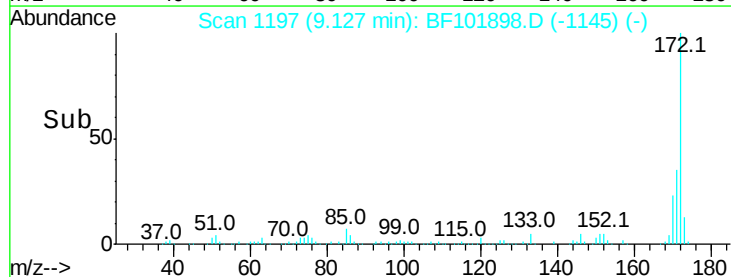
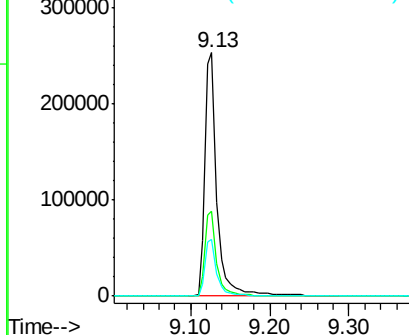


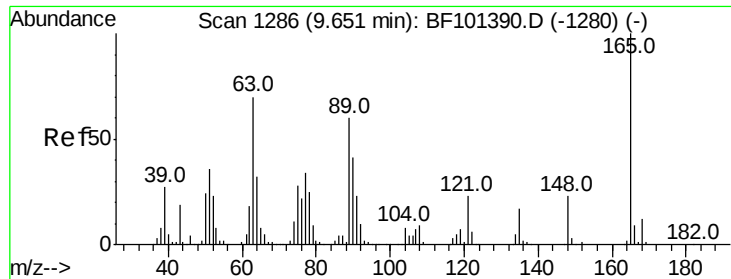
#44  
 2-Fluorobiphenyl  
 Concen: 17.796 ng  
 RT: 9.13 min Scan# 1197  
 Delta R.T. 0.01 min  
 Lab File: BF101898.D  
 Acq: 4 Jan 2018 18:35

Tgt Ion:172 Resp: 272565  
 Ion Ratio Lower Upper  
 172 100  
 171 34.8 29.7 44.5  
 170 23.3 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

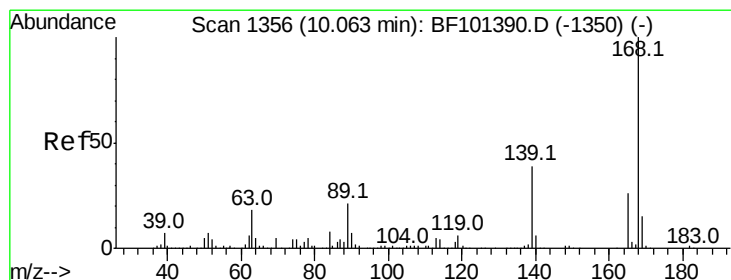
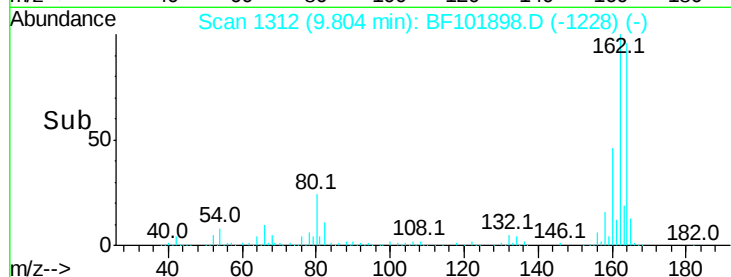
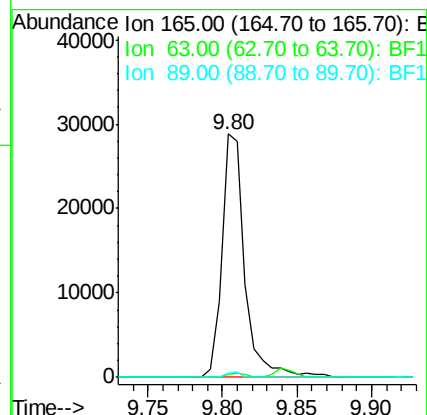
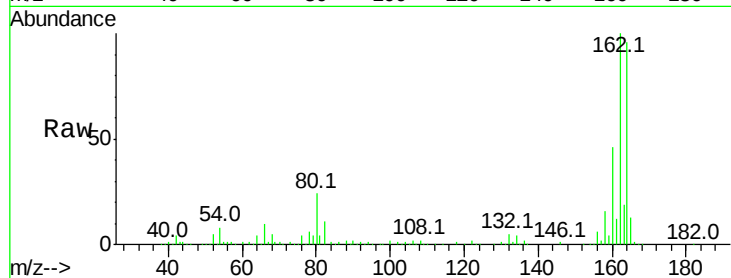




#50  
 2,6-Dinitrotoluene  
 Concen: 7.961 ng  
 RT: 9.80 min Scan# 1312  
 Delta R.T. 0.19 min  
 Lab File: BF101898.D  
 Acq: 4 Jan 2018 18:35

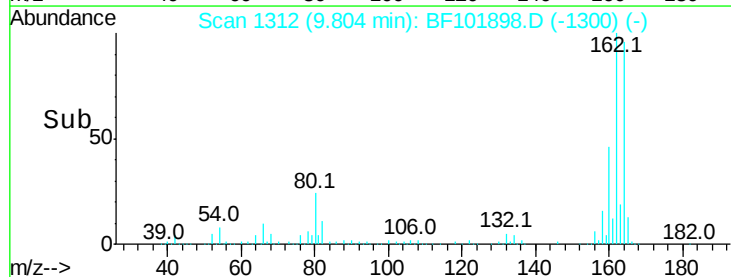
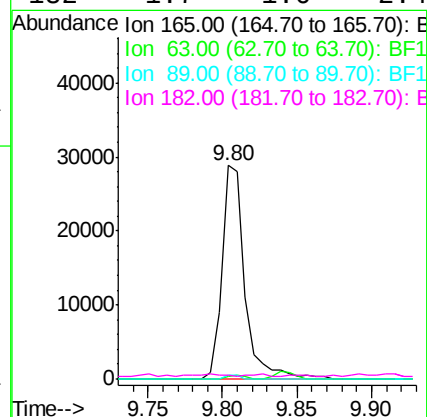
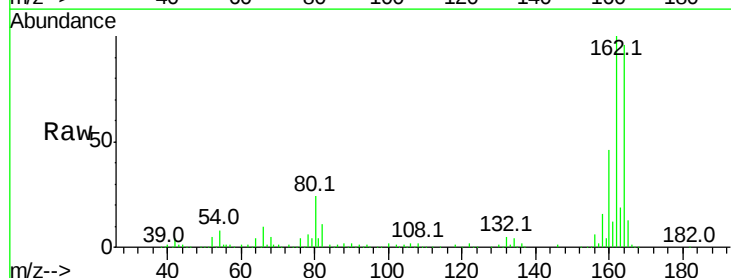
Instrument :  
 BNA\_F  
 ClientSampleId :

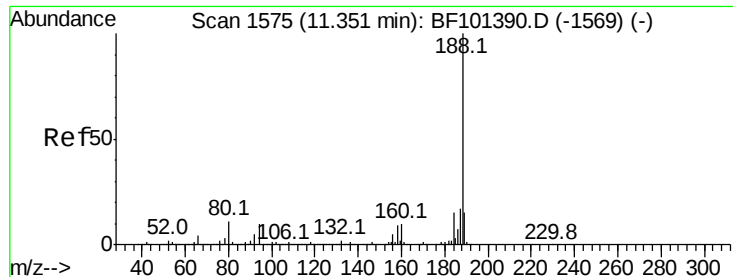
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 165     | 100   |       |       |
| 63      | 1.4   | 44.7  | 67.1# |
| 89      | 1.6   | 44.0  | 66.0# |



#56  
 2,4-Dinitrotoluene  
 Concen: 7.066 ng  
 RT: 9.80 min Scan# 1312  
 Delta R.T. -0.23 min  
 Lab File: BF101898.D  
 Acq: 4 Jan 2018 18:35

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 165     | 100   |       |       |
| 63      | 1.4   | 36.4  | 54.6# |
| 89      | 1.6   | 57.8  | 86.6# |
| 182     | 1.7   | 1.6   | 2.4   |

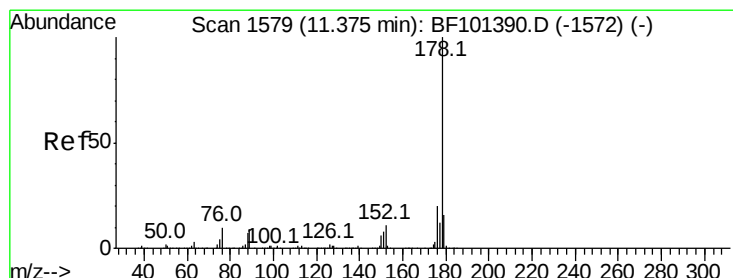
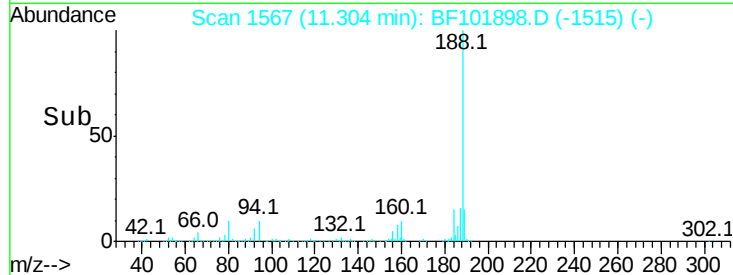
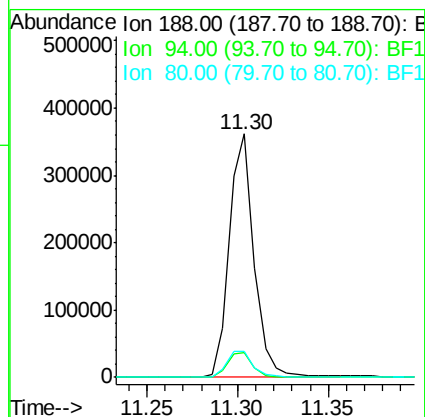
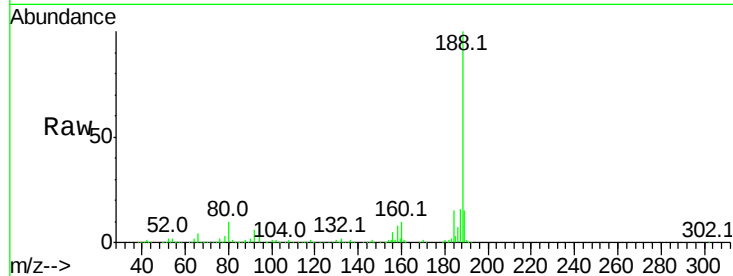




#63  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 11.30 min Scan# 1567  
Delta R.T. 0.01 min  
Lab File: BF101898.D  
Acq: 4 Jan 2018 18:35

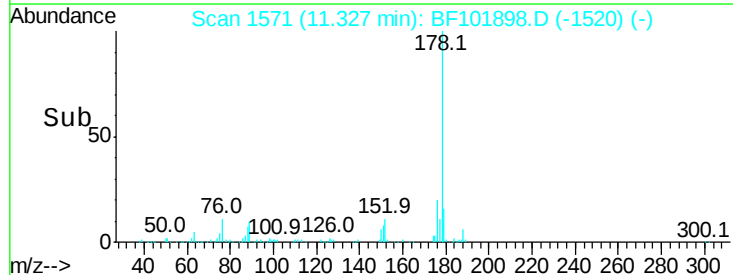
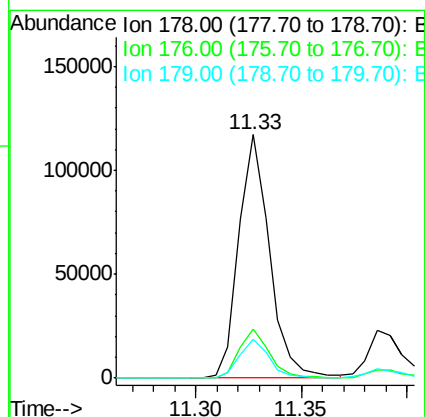
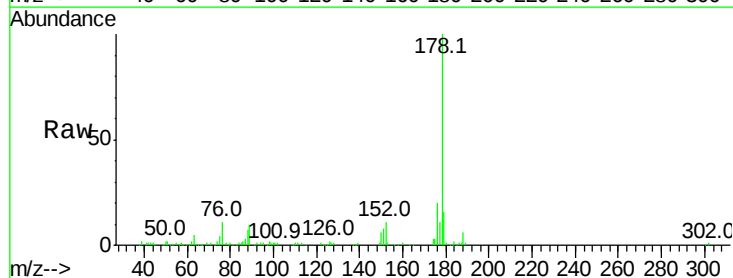
Instrument :  
BNA\_F  
ClientSampleId :

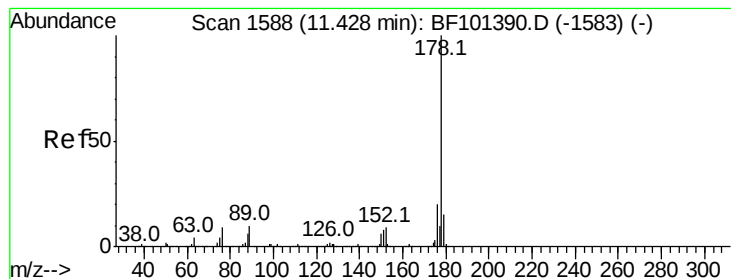
Tot Ion:188 Resp: 344913  
Ion Ratio Lower Upper  
188 100  
94 10.1 8.5 12.7  
80 10.5 9.2 13.8



#70  
Phenanthrene  
Concen: 6.166 ng  
RT: 11.33 min Scan# 1571  
Delta R.T. -0.00 min  
Lab File: BF101898.D  
Acq: 4 Jan 2018 18:35

Tgt Ion:178 Resp: 118266  
Ion Ratio Lower Upper  
178 100  
176 20.2 15.8 23.8  
179 15.9 13.0 19.6





#71

Anthracene

Concen: 6.036 ng

RT: 11.33 min Scan# 1571

Delta R.T. -0.05 min

Lab File: BF101898.D

Acq: 4 Jan 2018 18:35

Instrument :

BNA\_F

ClientSampleId :

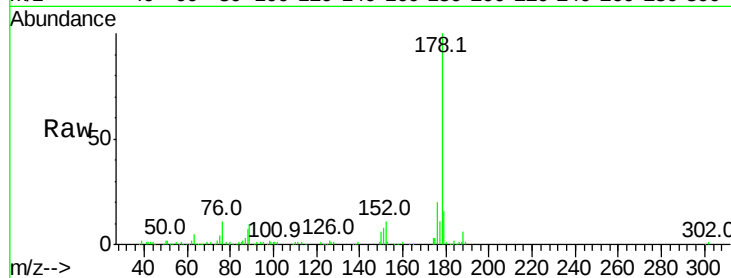
Tot Ion:178 Resp: 118266

Ion Ratio Lower Upper

178 100

176 20.2 15.4 23.2

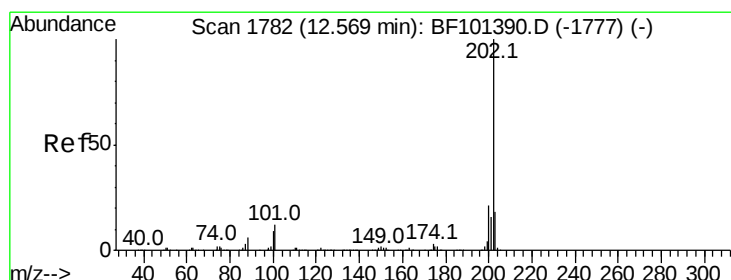
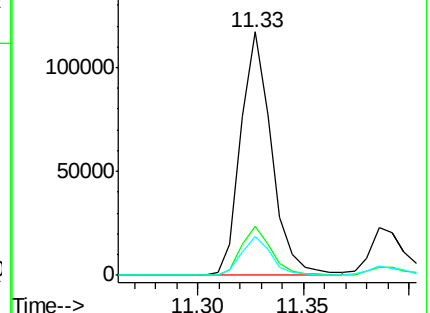
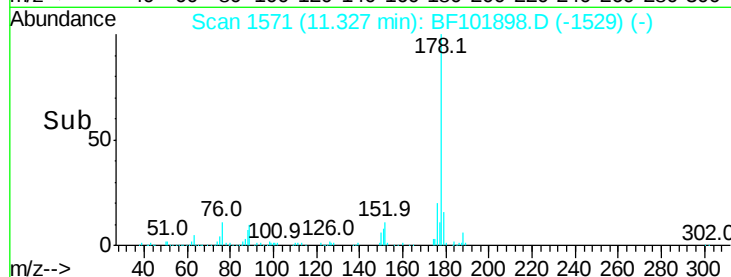
179 15.9 12.6 19.0



Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E



#74

Fluoranthene

Concen: 7.273 ng

RT: 12.52 min Scan# 1774

Delta R.T. -0.00 min

Lab File: BF101898.D

Acq: 4 Jan 2018 18:35

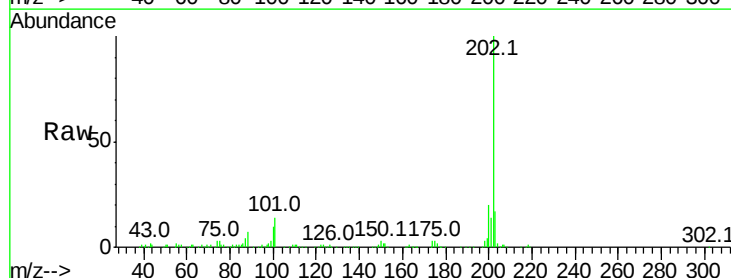
Tgt Ion:202 Resp: 146426

Ion Ratio Lower Upper

202 100

101 13.9 0.0 34.1

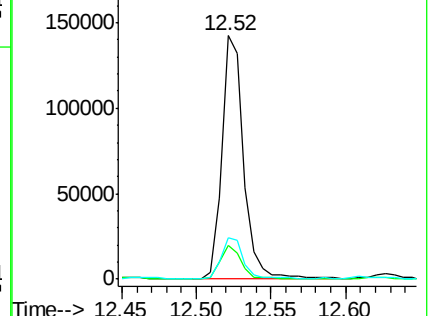
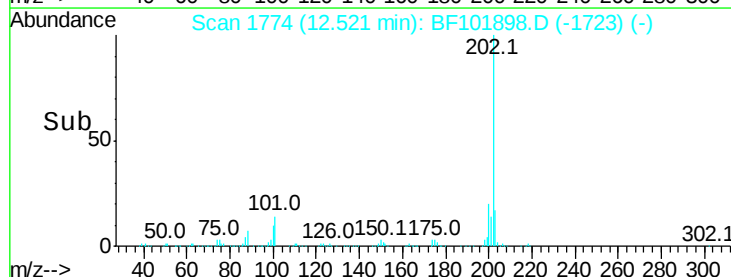
203 17.0 0.0 38.1

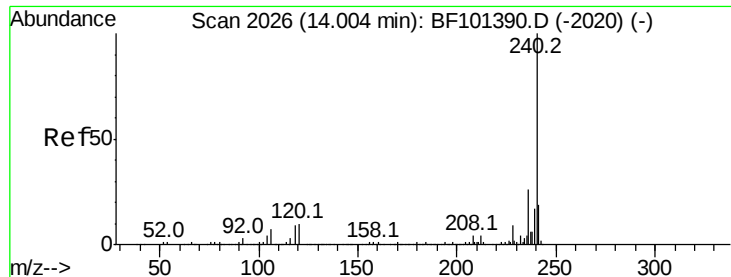


Abundance Ion 202.00 (201.70 to 202.70): E

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: 13.96 min Scan# 2018

Delta R.T. -0.00 min

Lab File: BF101898.D

Acq: 4 Jan 2018 18:35

Instrument :

BNA\_F

ClientSampleId :

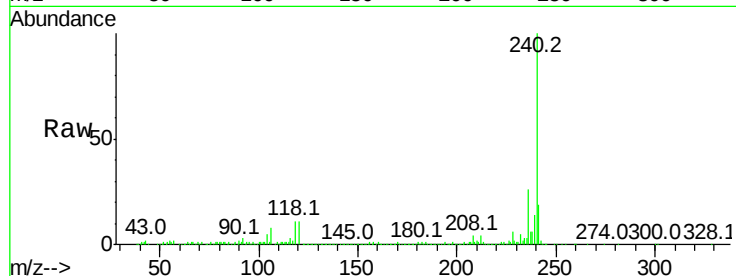
Tot Ion:240 Resp: 265688

Ion Ratio Lower Upper

240 100

120 11.5 9.5 14.3

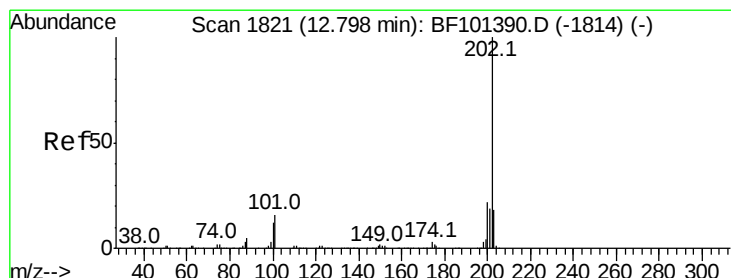
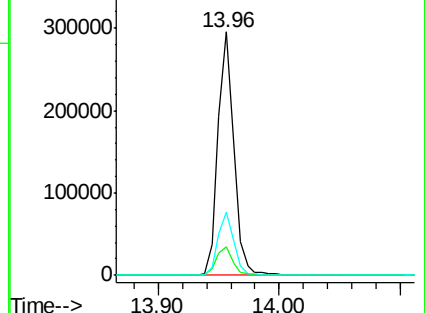
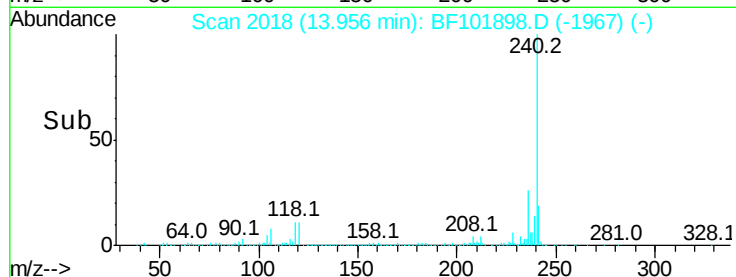
236 26.0 20.7 31.1



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

Pyrene

Concen: 7.317 ng

RT: 12.76 min Scan# 1814

Delta R.T. 0.01 min

Lab File: BF101898.D

Acq: 4 Jan 2018 18:35

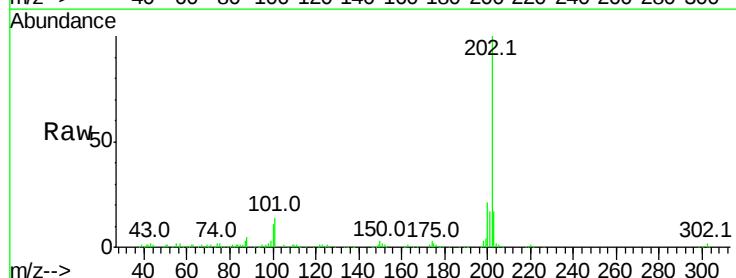
Tgt Ion:202 Resp: 145899

Ion Ratio Lower Upper

202 100

200 20.9 17.4 26.2

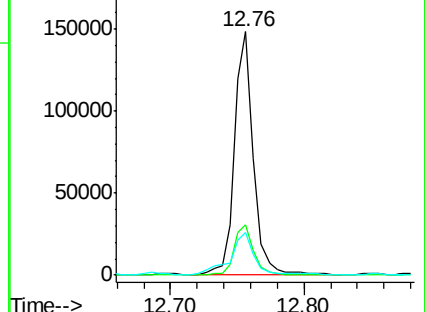
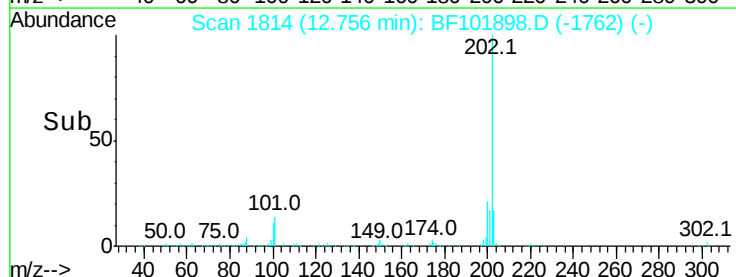
203 17.4 14.3 21.5

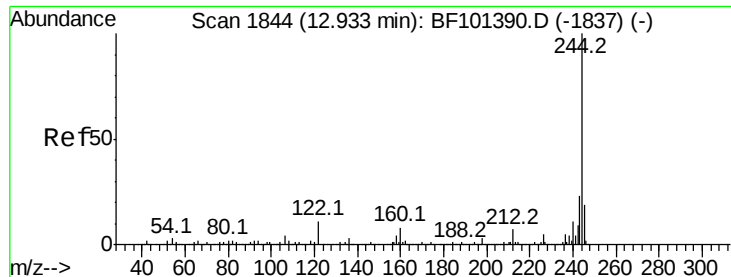


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 200.00 (199.70 to 200.70): E

Ion 203.00 (202.70 to 203.70): E





#78

Terphenyl-d14

Concen: 14.612 ng

RT: 12.88 min Scan# 1835

Delta R.T. -0.00 min

Lab File: BF101898.D

Acq: 4 Jan 2018 18:35

Instrument :

BNA\_F

ClientSampleId :

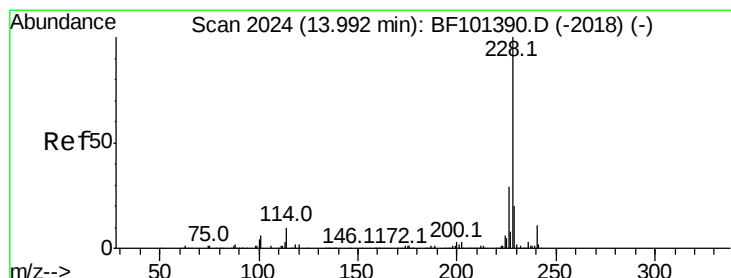
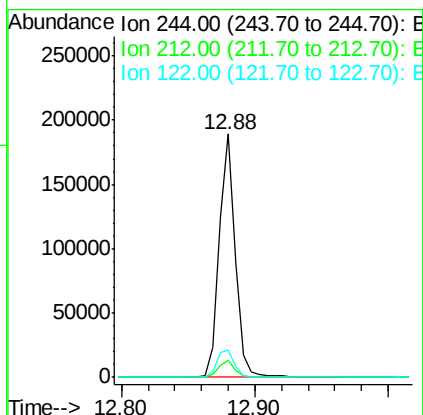
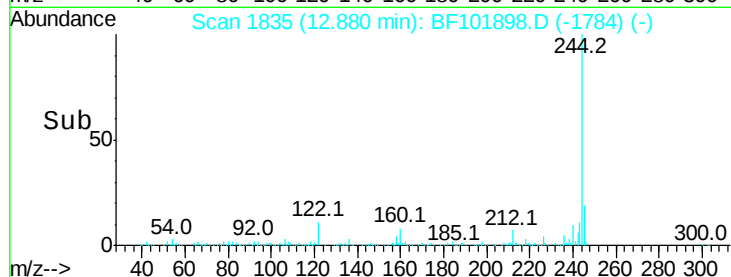
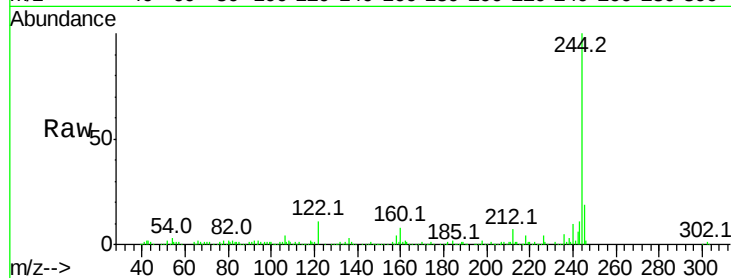
Tot Ion:244 Resp: 161034

Ion Ratio Lower Upper

244 100

212 6.9 5.4 8.0

122 11.4 11.0 16.4



#80

Benzo(a)anthracene

Concen: 3.924 ng

RT: 13.99 min Scan# 2023

Delta R.T. 0.04 min

Lab File: BF101898.D

Acq: 4 Jan 2018 18:35

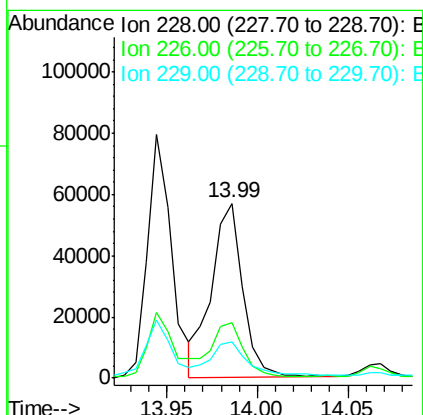
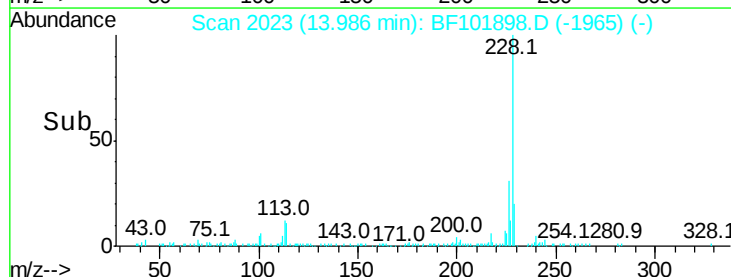
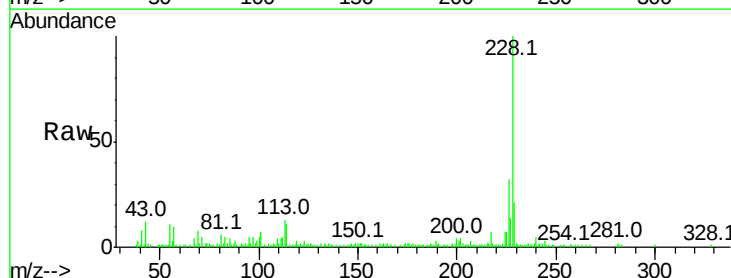
Tgt Ion:228 Resp: 68837

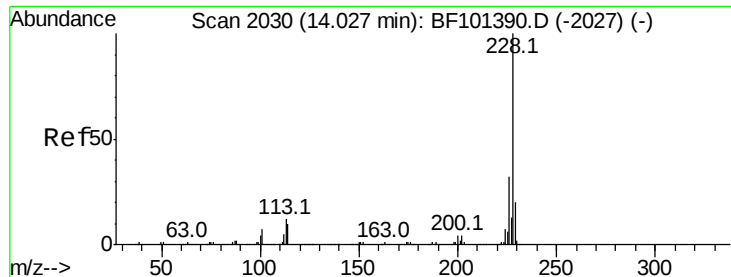
Ion Ratio Lower Upper

228 100

226 32.1 22.6 33.8

229 20.6 15.8 23.6





#82

Chrysene

Concen: 4.156 ng

RT: 13.99 min Scan# 2023

Delta R.T. 0.01 min

Lab File: BF101898.D

Acq: 4 Jan 2018 18:35

Instrument :

BNA\_F

ClientSampleId :

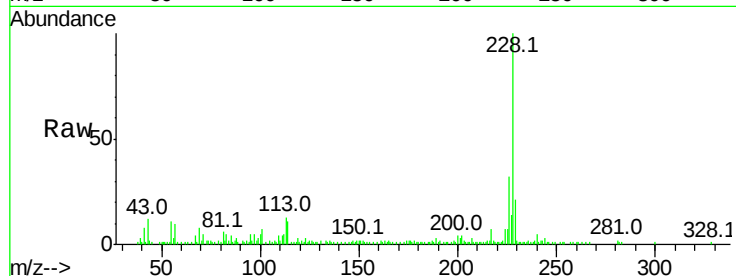
Tot Ion:228 Resp: 68837

Ion Ratio Lower Upper

228 100

226 32.1 25.0 37.6

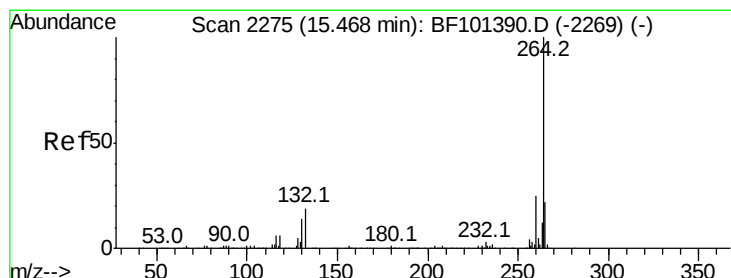
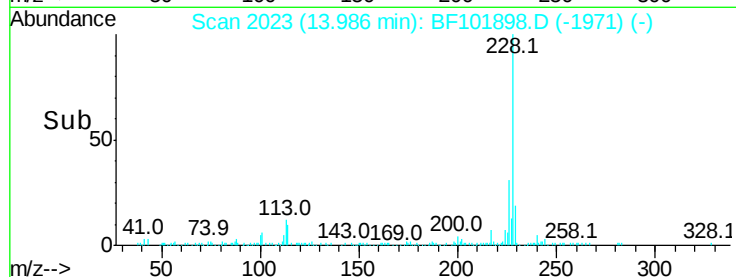
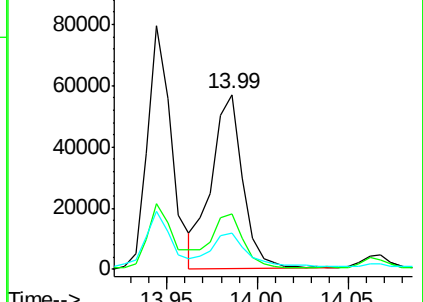
229 20.6 16.2 24.4



Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E



#86

Perylene-d12

Concen: 20.000 ng

RT: 15.43 min Scan# 2268

Delta R.T. 0.01 min

Lab File: BF101898.D

Acq: 4 Jan 2018 18:35

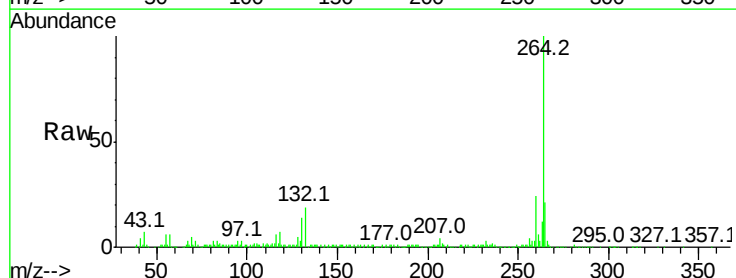
Tgt Ion:264 Resp: 214547

Ion Ratio Lower Upper

264 100

260 23.6 19.2 28.8

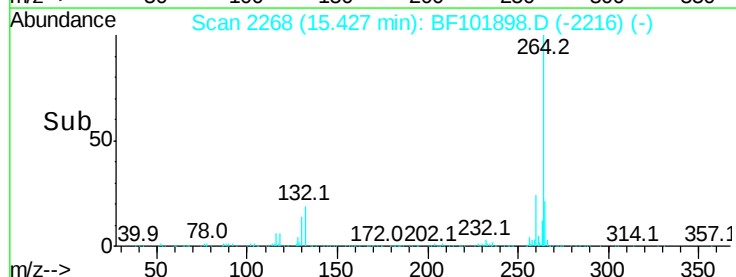
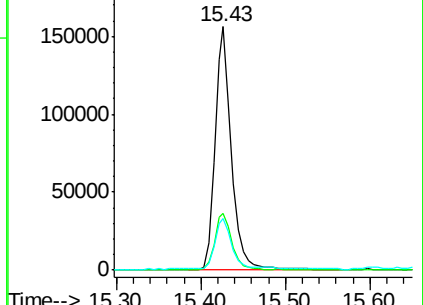
265 21.3 17.5 26.3

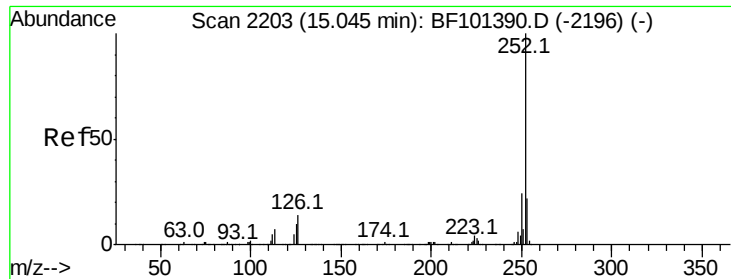


Abundance Ion 264.00 (263.70 to 264.70): E

Ion 260.00 (259.70 to 260.70): E

Ion 265.00 (264.70 to 265.70): E





#87

Benzo(b)fluoranthene

Concen: 7.527 ng

RT: 15.00 min Scan# 2196

Delta R.T. 0.01 min

Lab File: BF101898.D

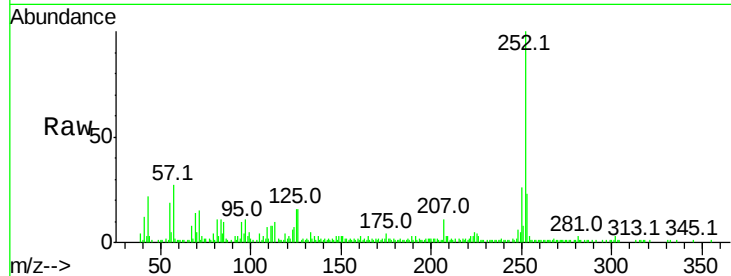
Acq: 4 Jan 2018 18:35

Instrument :

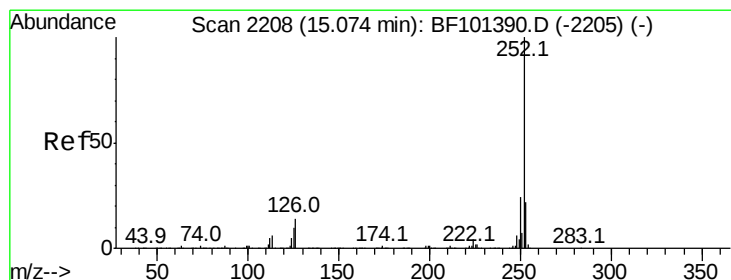
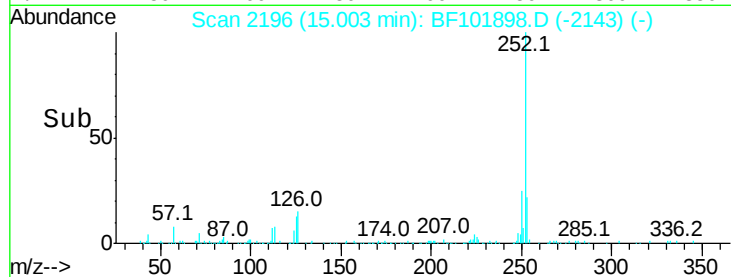
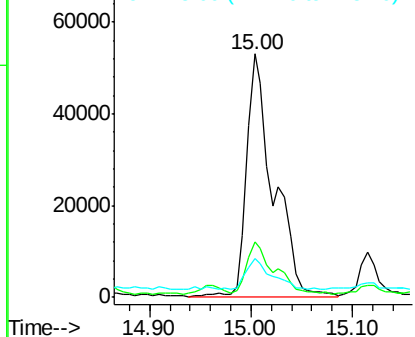
BNA\_F

ClientSampleId :

|             |       |           |
|-------------|-------|-----------|
| Tot Ion:252 | Resp: | 98430     |
| Ion Ratio   | Lower | Upper     |
| 252         | 100   |           |
| 253         | 22.8  | 17.0 25.6 |
| 125         | 15.8  | 9.0 13.6# |



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



#88

Benzo(k)fluoranthene

Concen: 7.742 ng

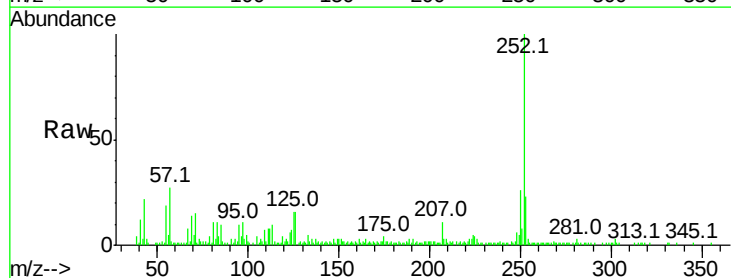
RT: 15.00 min Scan# 2196

Delta R.T. -0.02 min

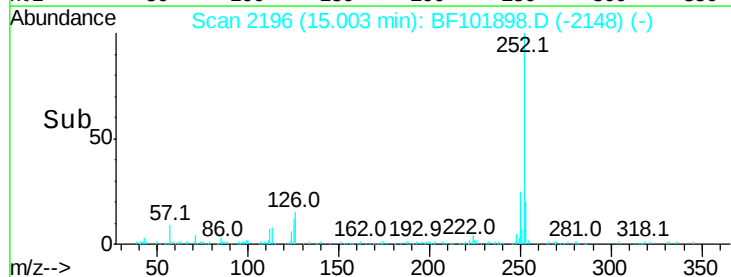
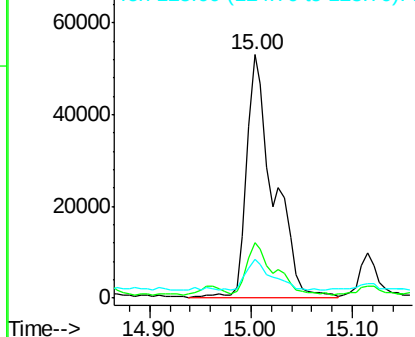
Lab File: BF101898.D

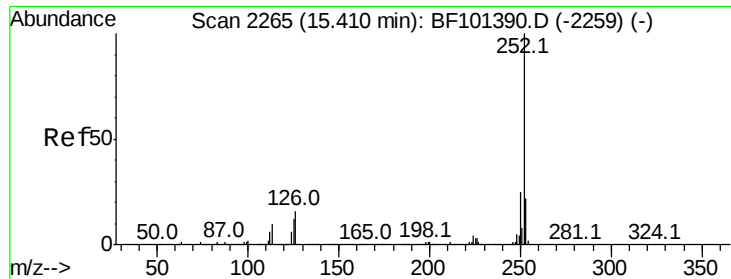
Acq: 4 Jan 2018 18:35

|             |       |            |
|-------------|-------|------------|
| Tgt Ion:252 | Resp: | 98430      |
| Ion Ratio   | Lower | Upper      |
| 252         | 100   |            |
| 253         | 22.8  | 17.9 26.9  |
| 125         | 15.8  | 10.2 15.2# |



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: 4.159 ng

RT: 15.37 min Scan# 2259

Delta R.T. 0.01 min

Lab File: BF101898.D

Acq: 4 Jan 2018 18:35

Instrument :

BNA\_F

ClientSampleId :

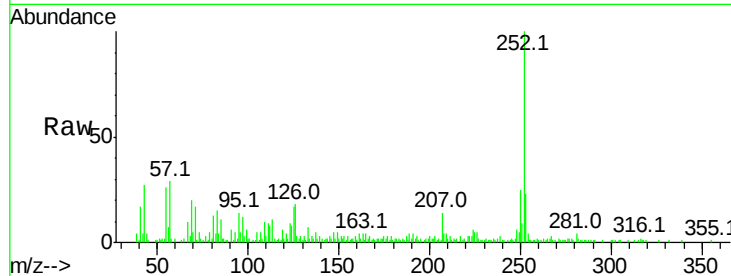
Tot Ion:252 Resp: 50136

Ion Ratio Lower Upper

252 100

253 23.3 17.1 25.7

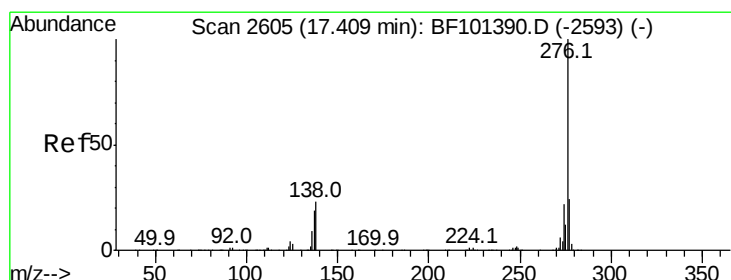
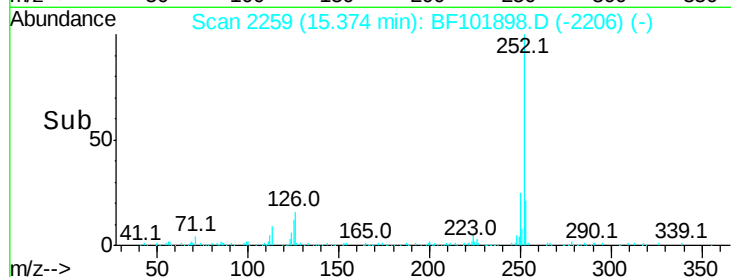
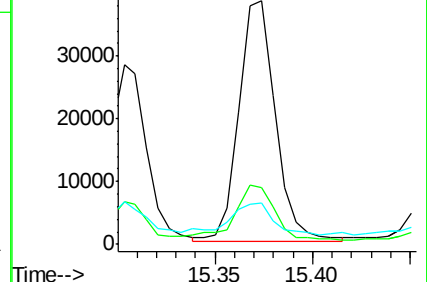
125 17.1 9.8 14.6#



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



#91

Benzo(g,h,i)perylene

Concen: 2.516 ng

RT: 17.39 min Scan# 2601

Delta R.T. 0.04 min

Lab File: BF101898.D

Acq: 4 Jan 2018 18:35

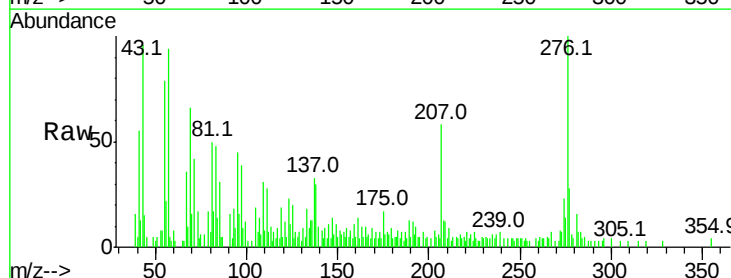
Tgt Ion:276 Resp: 25782

Ion Ratio Lower Upper

276 100

277 28.3 17.9 26.9#

138 30.2 21.8 32.8



Abundance Ion 276.00 (275.70 to 276.70): E

Ion 277.00 (276.70 to 277.70): E

Ion 138.00 (137.70 to 138.70): E

