

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF100818\  
 Data File : BF109689.D  
 Acq On : 9 Oct 2018 11:10  
 Operator : JU/SJ  
 Sample : J5293-03DL2 25X  
 Misc :  
 ALS Vial : 38 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :

Quant Time: Oct 09 11:47:50 2018  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF100818.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Oct 08 16:02:11 2018  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.70  | 152  | 68440    | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 7.97  | 136  | 315303   | 20.00 | ng    | 0.00     |
| 38) Acenaphthene-d10      | 9.72  | 164  | 124579   | 20.00 | ng    | 0.00     |
| 63) Phenanthrene-d10      | 11.20 | 188  | 211196   | 20.00 | ng    | 0.00     |
| 75) Chrysene-d12          | 13.83 | 240  | 177714   | 20.00 | ng    | 0.00     |
| 86) Perylene-d12          | 15.23 | 264  | 159937   | 20.00 | ng    | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|-----------------------------|-------|------|----------|------|-------|----------|
| 5) 2-Fluorophenol           | 0.00  | 112  | 0        | 0.00 | ng    |          |
| 7) Phenol-d6                | 6.42  | 99   | 1285     | 0.25 | ng    | 0.06     |
| 23) Nitrobenzene-d5         | 7.33  | 82   | 2294     | 0.40 | ng    | 0.06     |
| 41) 2,4,6-Tribromophenol    | 10.52 | 330  | 1529     | 1.13 | ng    | 0.00     |
| 44) 2-Fluorobiphenyl        | 9.05  | 172  | 14225    | 1.57 | ng    | 0.00     |
| 78) Terphenyl-d14           | 12.78 | 244  | 14152    | 1.54 | ng    | 0.00     |

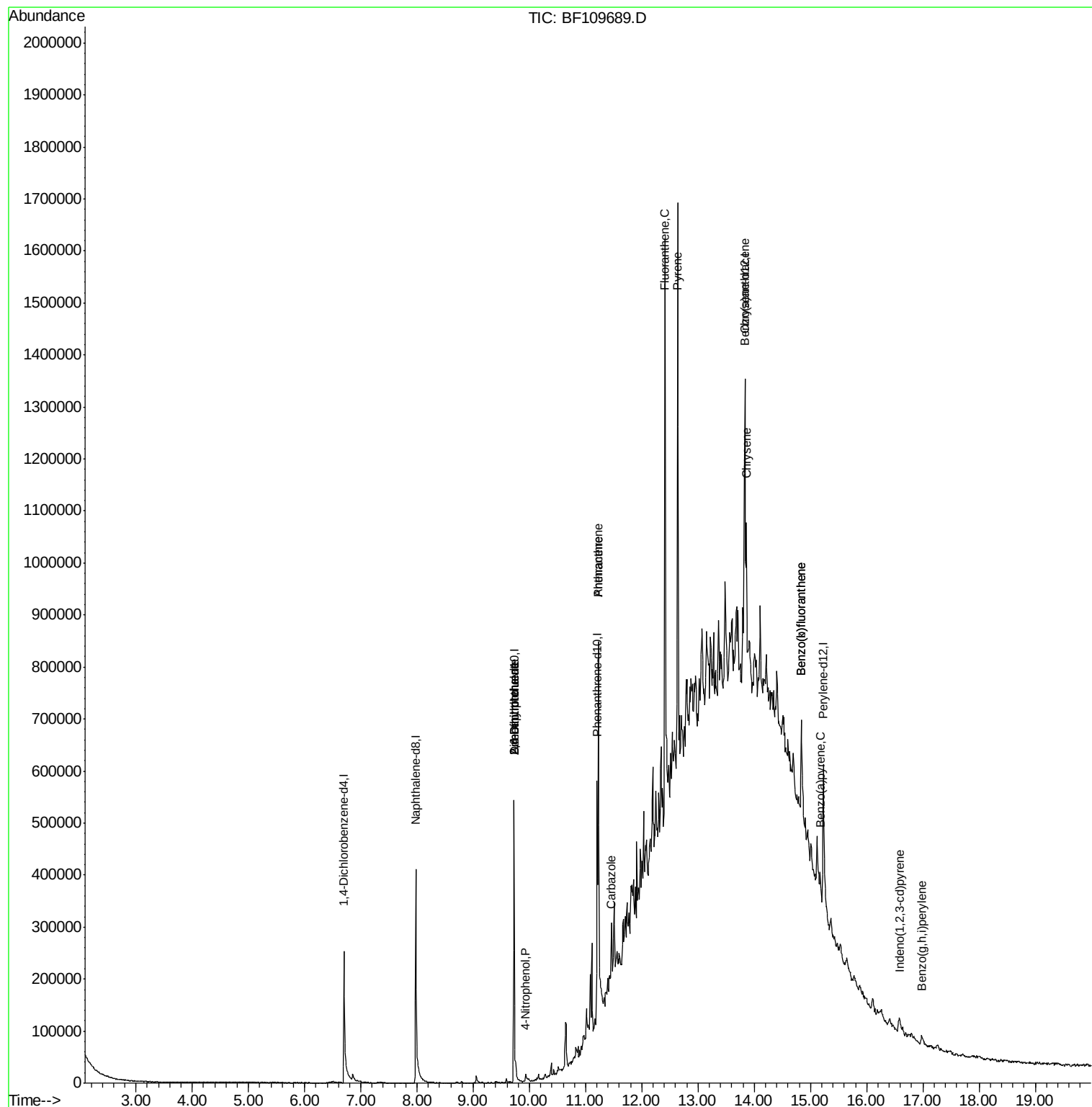
| Target Compounds           | R.T.  | QIon | Response | Conc   | Units | Qvalue |
|----------------------------|-------|------|----------|--------|-------|--------|
| 49) Dimethylphthalate      | 9.73  | 163  | 29288    | 3.206  | ng    | # 1    |
| 50) 2,6-Dinitrotoluene     | 9.72  | 165  | 16352    | 8.256  | ng    | # 21   |
| 55) 4-Nitrophenol          | 9.93  | 139  | 4981     | 4.099  | ng    | # 6    |
| 56) 2,4-Dinitrotoluene     | 9.72  | 165  | 16352    | 6.616  | ng    | # 17   |
| 70) Phenanthrene           | 11.23 | 178  | 311294   | 29.453 | ng    | 99     |
| 71) Anthracene             | 11.23 | 178  | 311294   | 28.492 | ng    | 99     |
| 72) Carbazole              | 11.45 | 167  | 22834    | 2.155  | ng    | # 91   |
| 74) Fluoranthene           | 12.42 | 202  | 527501   | 47.775 | ng    | 97     |
| 77) Pyrene                 | 12.64 | 202  | 470298   | 36.120 | ng    | 99     |
| 80) Benzo(a)anthracene     | 13.82 | 228  | 113894   | 11.614 | ng    | 96     |
| 82) Chrysene               | 13.86 | 228  | 109113   | 10.592 | ng    | 97     |
| 85) Indeno(1,2,3-cd)pyrene | 16.58 | 276  | 20959    | 2.843  | ng    | 96     |
| 87) Benzo(b)fluoranthene   | 14.84 | 252  | 131387   | 14.865 | ng    | # 91   |
| 88) Benzo(k)fluoranthene   | 14.84 | 252  | 131387   | 14.795 | ng    | # 90   |
| 89) Benzo(a)pyrene         | 15.17 | 252  | 23161    | 2.888  | ng    | # 76   |
| 91) Benzo(g,h,i)perylene   | 16.98 | 276  | 16639    | 2.530  | ng    | 97     |

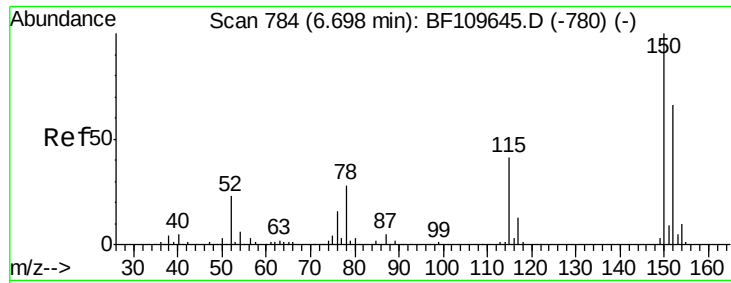
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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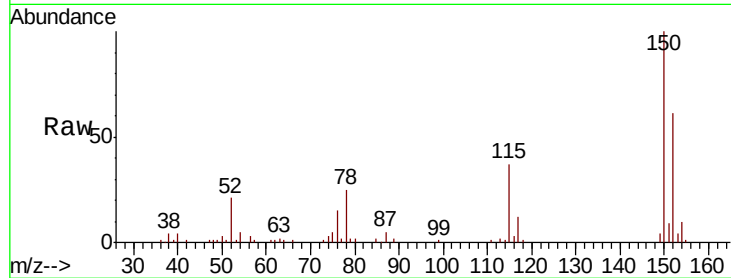


#1

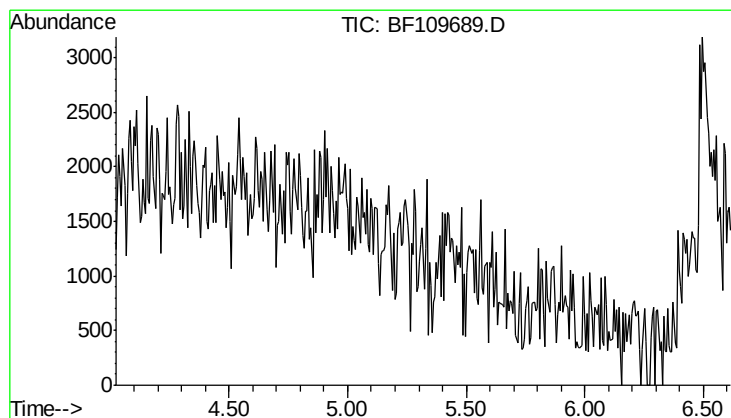
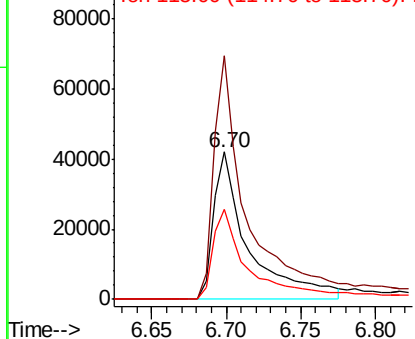
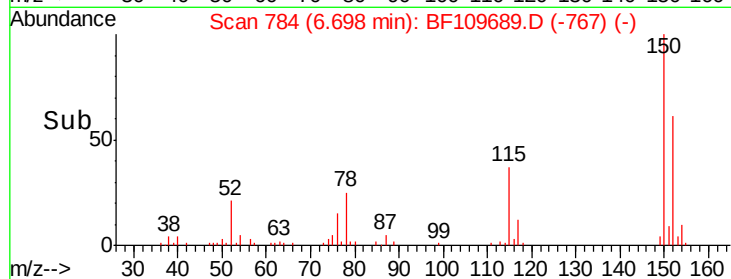
1,4-Dichlorobenzene-d4  
 Concen: 20.000 ng  
 RT: 6.70 min Scan# 784  
 Delta R.T. 0.00 min  
 Lab File: BF109689.D  
 Acq: 9 Oct 2018 11:10

Instrument :  
 BNA\_F  
 ClientSampleId :

Tot Ion:152 Resp: 68440  
 Ion Ratio Lower Upper  
 152 100  
 150 165.3 122.7 184.1  
 115 61.5 49.1 73.7



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

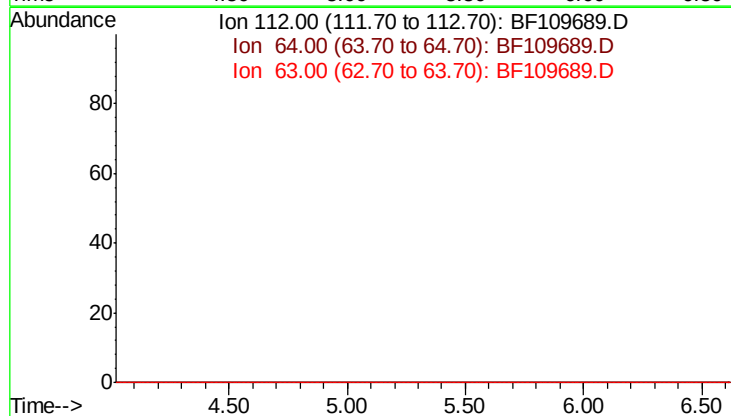


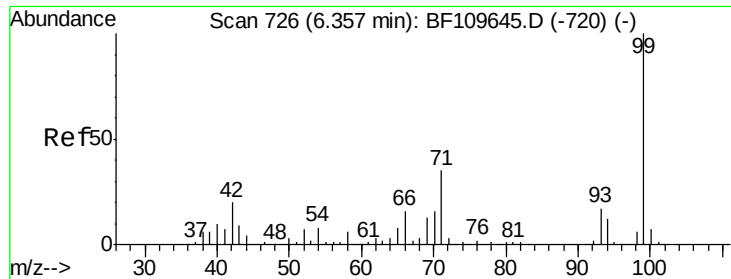
#5

2-Fluorophenol  
 Concen: 0.000 ng  
 Expected RT: 5.32 min

Lab File: BF109689.D  
 Acq: 9 Oct 2018 11:10

Tgt Ion: 112  
 Sig Exp Ratio  
 112 100  
 64 55.1  
 63 29.6





#7

Phenol-d6

Concen: 0.249 ng

RT: 6.42 min Scan# 736

Delta R.T. 0.06 min

Lab File: BF109689.D

Acq: 9 Oct 2018 11:10

Instrument :

BNA\_F

ClientSampleId :

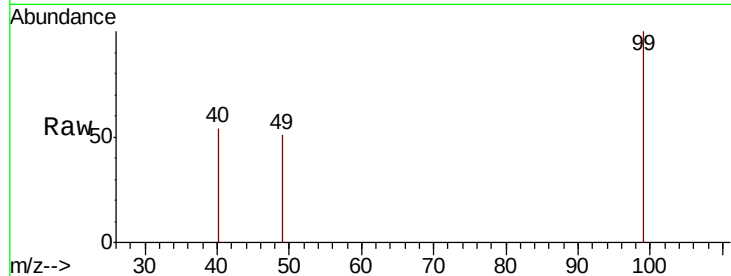
Tot Ion: 99 Resp: 1285

Ion Ratio Lower Upper

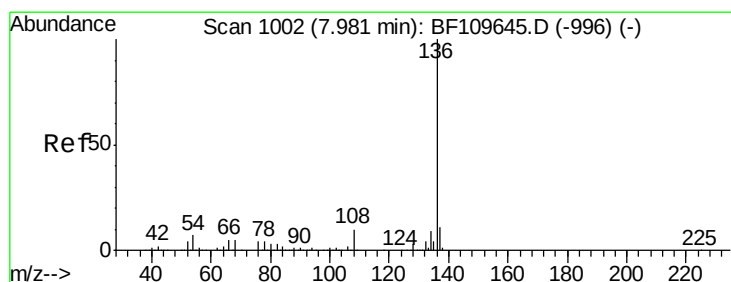
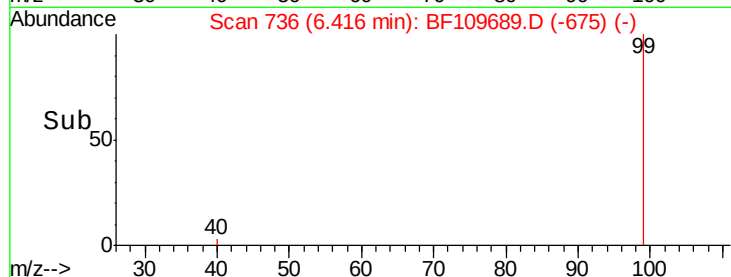
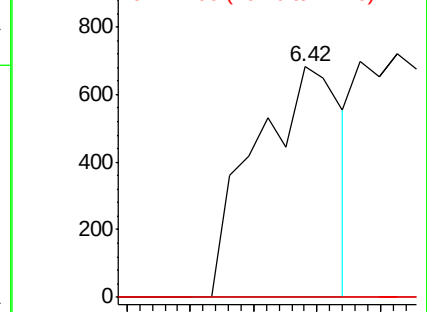
99 100

42 0.0 15.8 23.6#

71 0.0 28.0 42.0#



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



#21

Naphthalene-d8

Concen: 20.000 ng

RT: 7.97 min Scan# 1001

Delta R.T. -0.01 min

Lab File: BF109689.D

Acq: 9 Oct 2018 11:10

Tgt Ion: 136 Resp: 315303

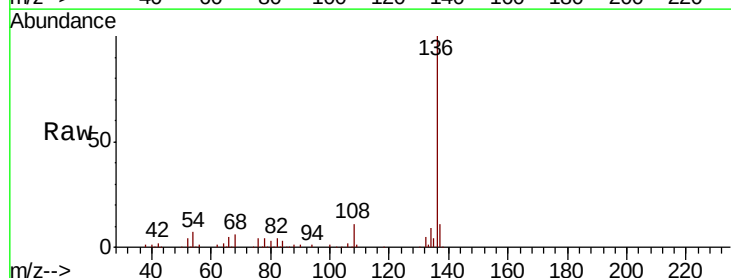
Ion Ratio Lower Upper

136 100

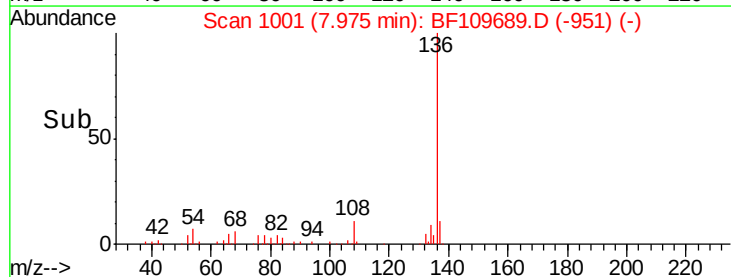
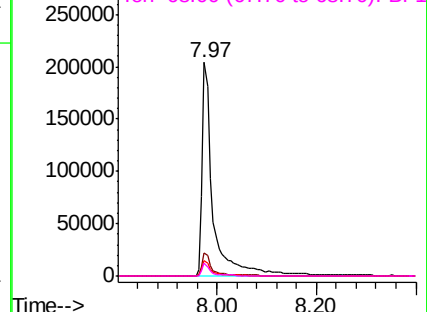
137 10.8 8.8 13.2

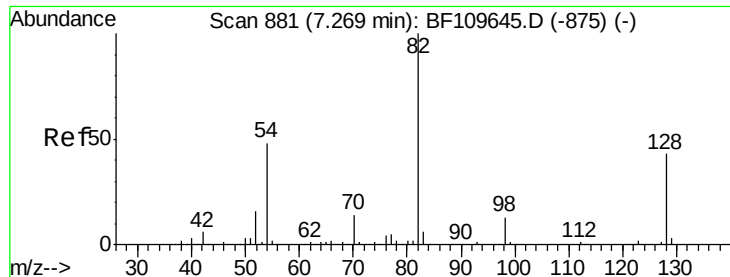
54 6.9 5.4 8.2

68 5.9 4.2 6.2



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): BF1  
Ion 68.00 (67.70 to 68.70): BF1

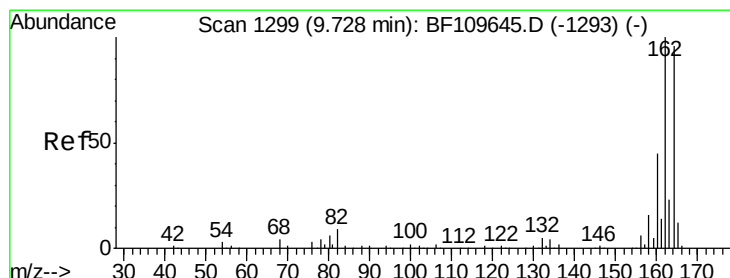
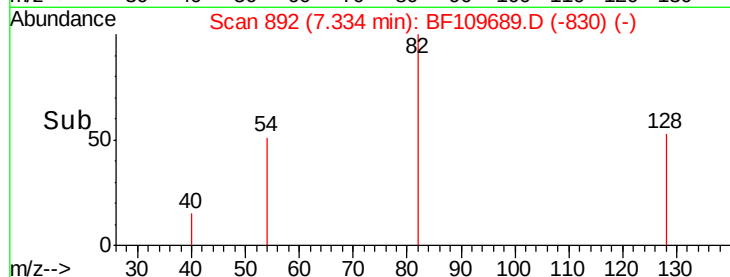
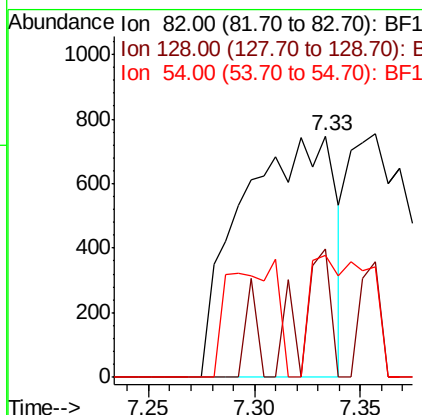
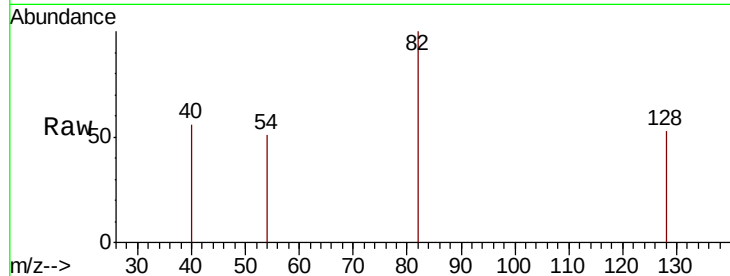




#23  
Nitrobenzene-d5  
Concen: 0.401 ng  
RT: 7.33 min Scan# 892  
Delta R.T. 0.06 min  
Lab File: BF109689.D  
Acq: 9 Oct 2018 11:10

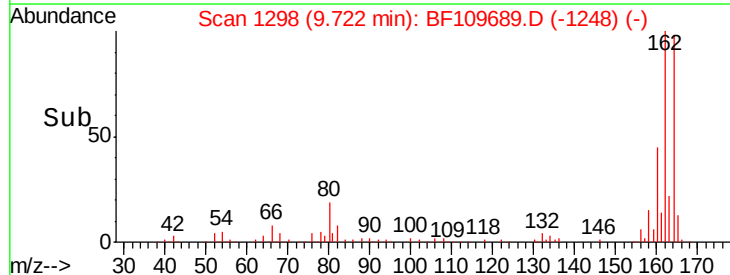
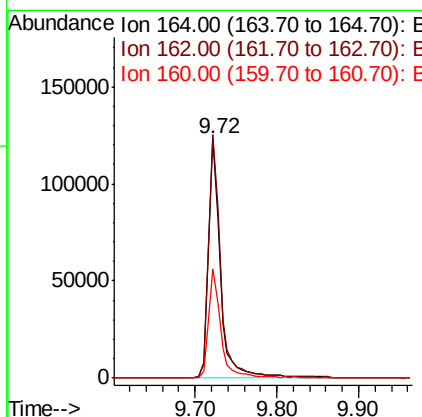
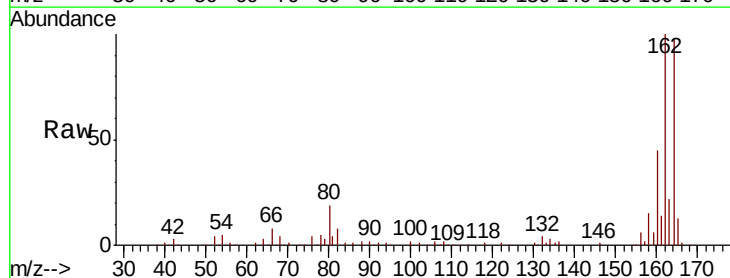
Instrument :  
BNA\_F  
ClientSampleId :

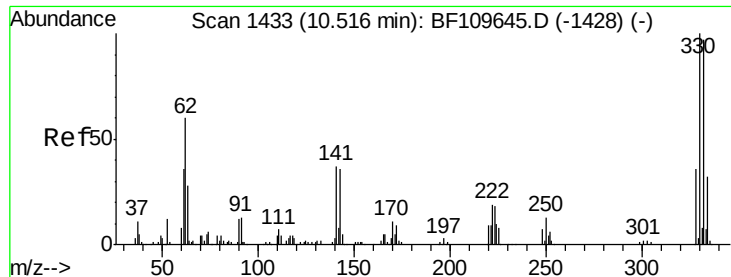
Tot Ion: 82 Resp: 2294  
Ion Ratio Lower Upper  
82 100  
128 53.3 34.2 51.2#  
54 50.6 38.6 58.0



#38  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 9.72 min Scan# 1298  
Delta R.T. -0.01 min  
Lab File: BF109689.D  
Acq: 9 Oct 2018 11:10

Tgt Ion:164 Resp: 124579  
Ion Ratio Lower Upper  
164 100  
162 101.6 83.0 124.6  
160 45.8 37.0 55.6

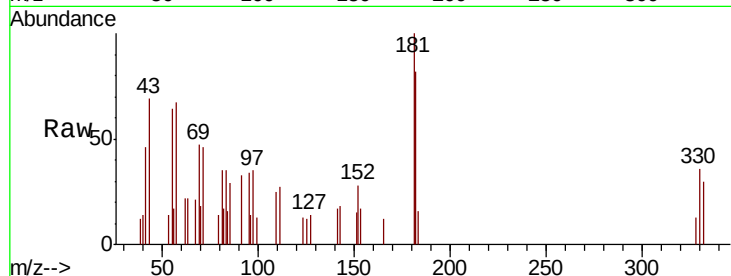




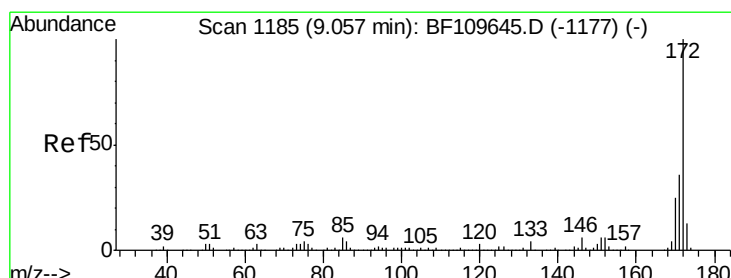
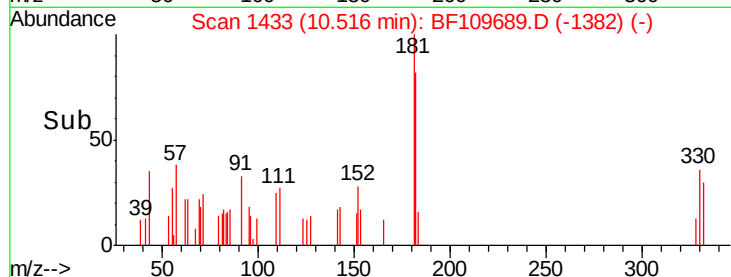
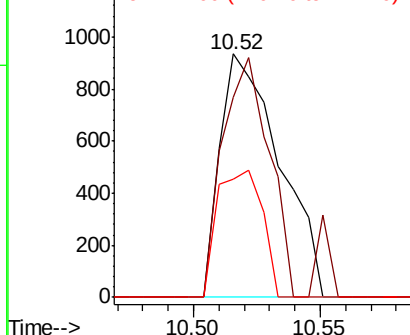
#41  
 2,4,6-Tribromophenol  
 Concen: 1.126 ng  
 RT: 10.52 min Scan# 1433  
 Delta R.T. 0.00 min  
 Lab File: BF109689.D  
 Acq: 9 Oct 2018 11:10

Instrument :  
 BNA\_F  
 ClientSampleId :

Tot Ion:330 Resp: 1529  
 Ion Ratio Lower Upper  
 330 100  
 332 76.8 77.1 115.7#  
 141 39.3 27.0 40.4

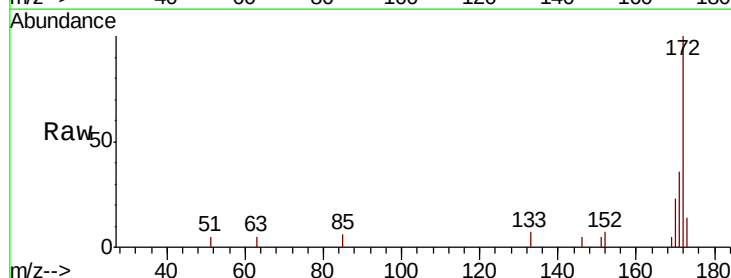


Abundance Ion 329.80 (329.50 to 330.50): E  
 Ion 331.80 (331.50 to 332.50): E  
 Ion 141.00 (140.70 to 141.70): E

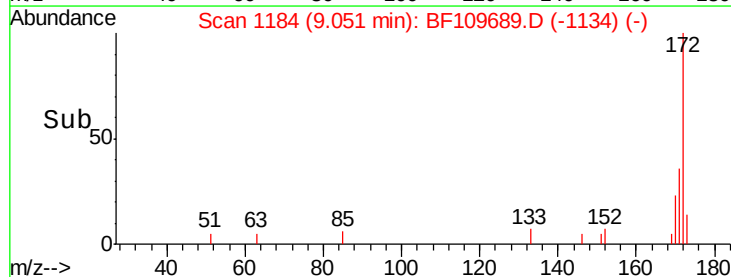
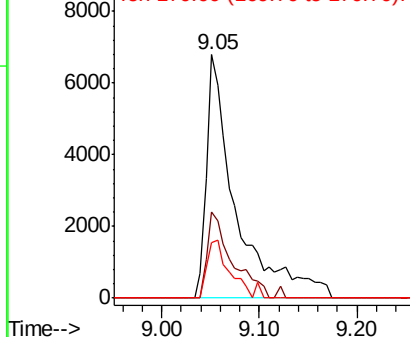


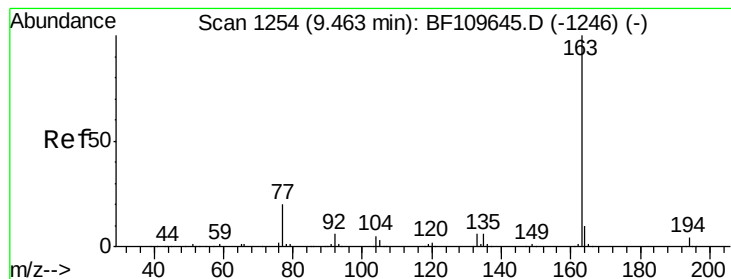
#44  
 2-Fluorobiphenyl  
 Concen: 1.573 ng  
 RT: 9.05 min Scan# 1184  
 Delta R.T. -0.01 min  
 Lab File: BF109689.D  
 Acq: 9 Oct 2018 11:10

Tgt Ion:172 Resp: 14225  
 Ion Ratio Lower Upper  
 172 100  
 171 35.6 28.6 43.0  
 170 23.0 19.7 29.5



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: 3.206 ng

RT: 9.73 min Scan# 1299

Delta R.T. 0.26 min

Lab File: BF109689.D

Acq: 9 Oct 2018 11:10

Instrument :

BNA\_F

ClientSampleId :

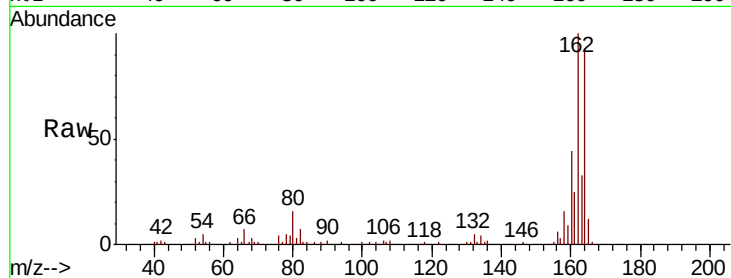
Tot Ion:163 Resp: 29288

Ion Ratio Lower Upper

163 100

194 0.0 3.2 4.8#

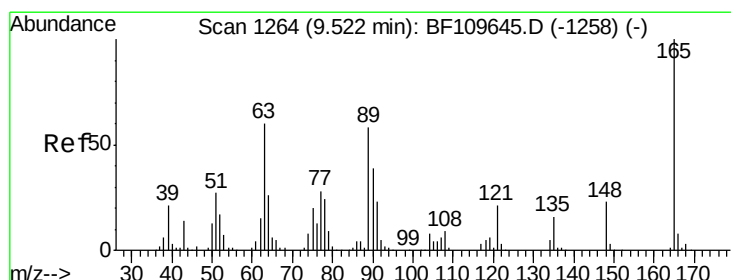
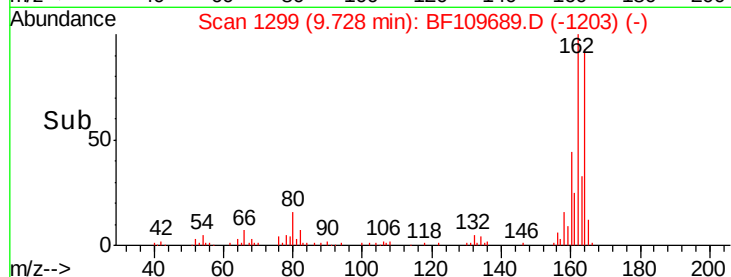
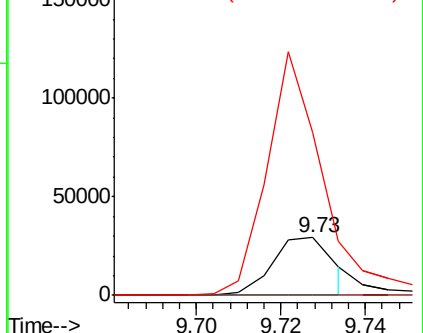
164 282.1 8.1 12.1#



Abundance Ion 163.00 (162.70 to 163.70): E

Ion 194.00 (193.70 to 194.70): E

Ion 164.00 (163.70 to 164.70): E



#50

2,6-Dinitrotoluene

Concen: 8.256 ng

RT: 9.72 min Scan# 1298

Delta R.T. 0.20 min

Lab File: BF109689.D

Acq: 9 Oct 2018 11:10

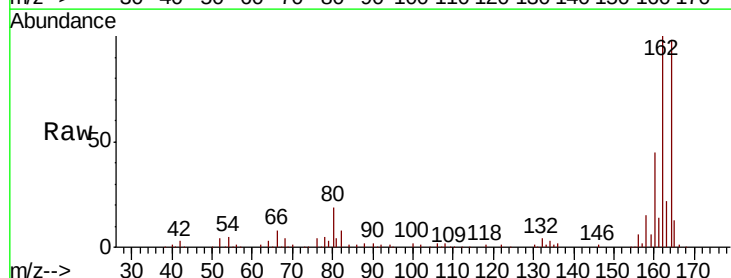
Tgt Ion:165 Resp: 16352

Ion Ratio Lower Upper

165 100

63 0.0 48.9 73.3#

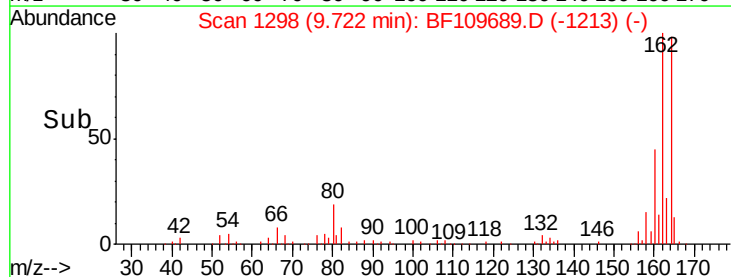
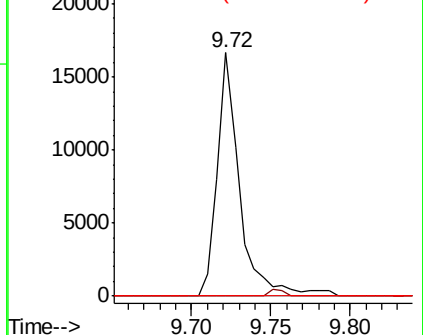
89 0.0 46.6 69.8#

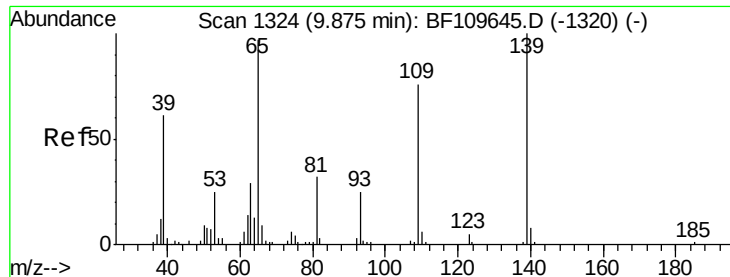


Abundance Ion 165.00 (164.70 to 165.70): E

Ion 63.00 (62.70 to 63.70): BF1

Ion 89.00 (88.70 to 89.70): BF1

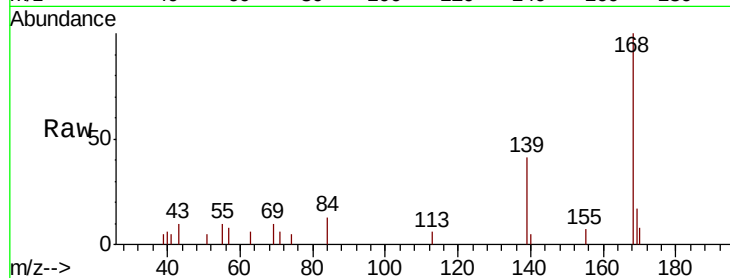




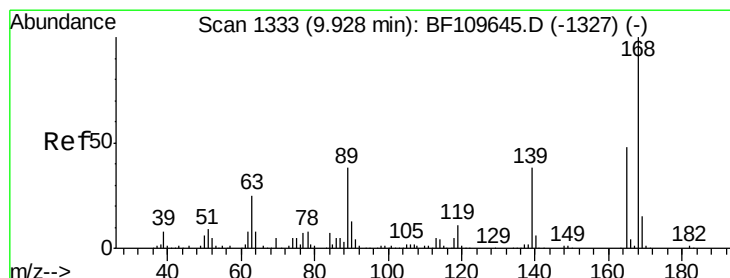
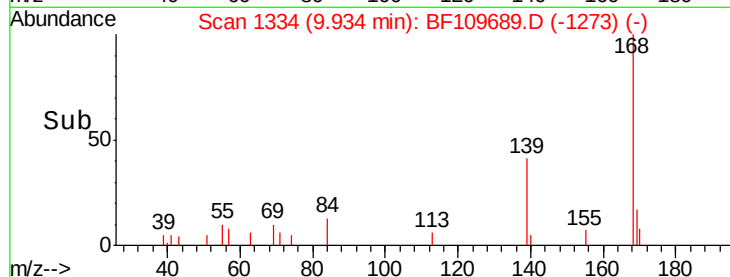
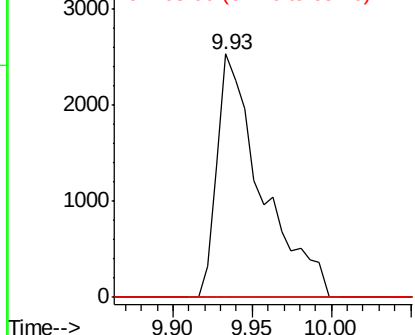
#55  
4-Nitrophenol  
Concen: 4.099 ng  
RT: 9.93 min Scan# 1334  
Delta R.T. 0.06 min  
Lab File: BF109689.D  
Acq: 9 Oct 2018 11:10

Instrument :  
BNA\_F  
ClientSampleId :

Tot Ion:139 Resp: 4981  
Ion Ratio Lower Upper  
139 100  
109 0.0 55.8 95.8#  
65 0.0 77.9 117.9#

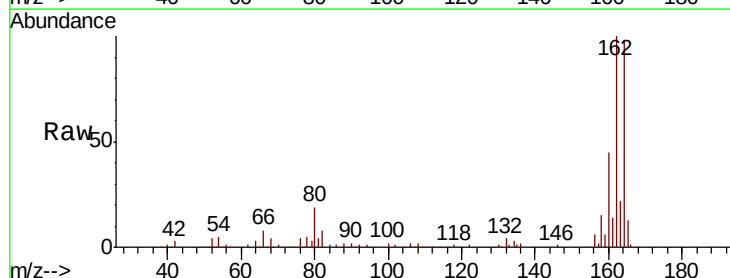


Abundance Ion 139.00 (138.70 to 139.70): E  
Ion 109.00 (108.70 to 109.70): E  
Ion 65.00 (64.70 to 65.70): BF1

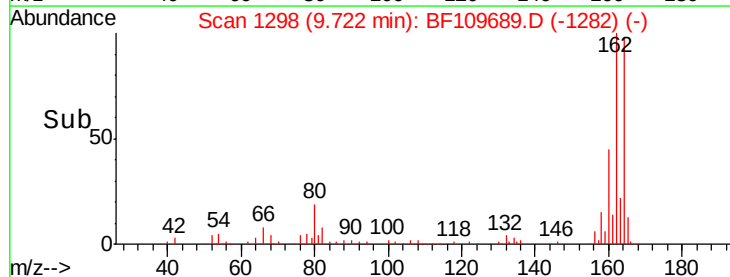
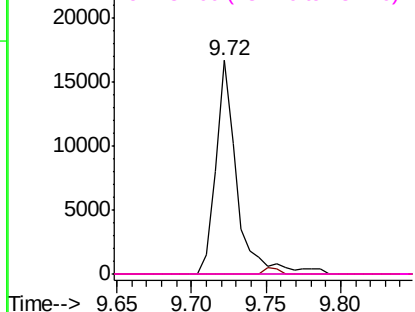


#56  
2,4-Dinitrotoluene  
Concen: 6.616 ng  
RT: 9.72 min Scan# 1298  
Delta R.T. -0.21 min  
Lab File: BF109689.D  
Acq: 9 Oct 2018 11:10

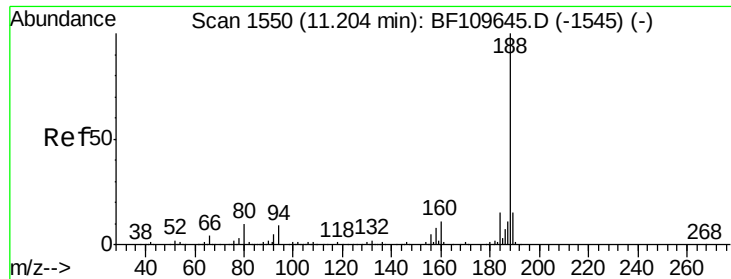
Tgt Ion:165 Resp: 16352  
Ion Ratio Lower Upper  
165 100  
63 0.0 44.8 67.2#  
89 0.0 62.2 93.4#  
182 0.0 2.1 3.1#



Abundance Ion 165.00 (164.70 to 165.70): E  
Ion 63.00 (62.70 to 63.70): BF1  
Ion 89.00 (88.70 to 89.70): BF1  
Ion 182.00 (181.70 to 182.70): E



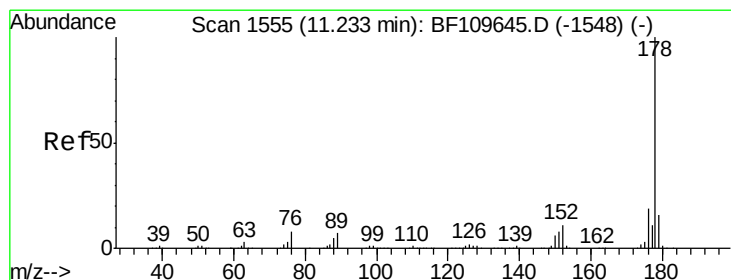
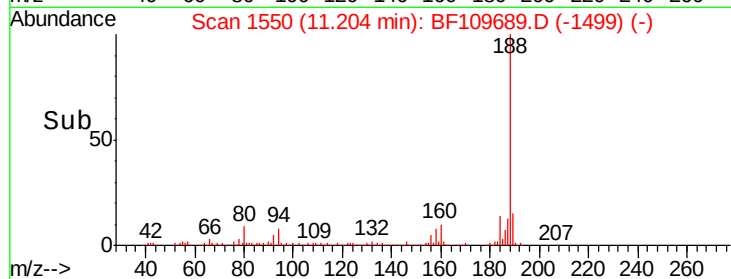
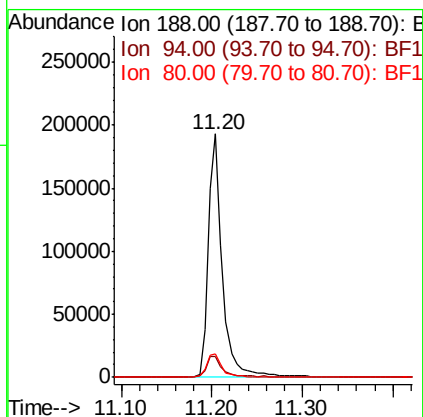
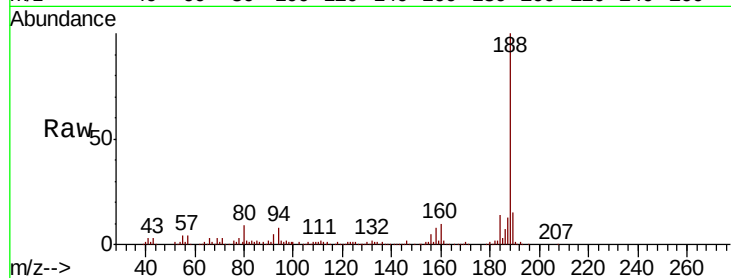




#63  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 11.20 min Scan# 1550  
Delta R.T. 0.00 min  
Lab File: BF109689.D  
Acq: 9 Oct 2018 11:10

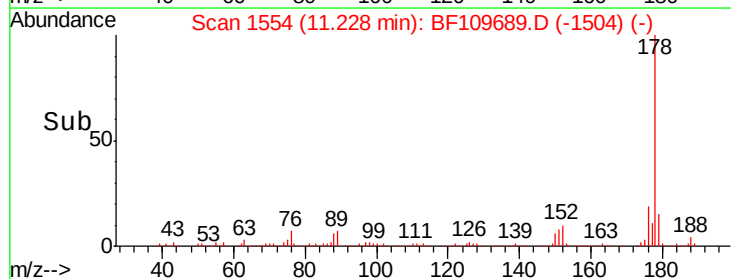
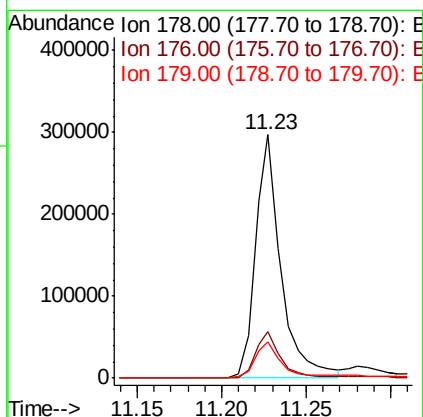
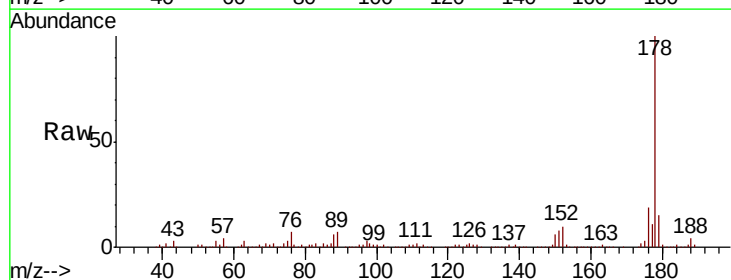
Instrument :  
BNA\_F  
ClientSampled :

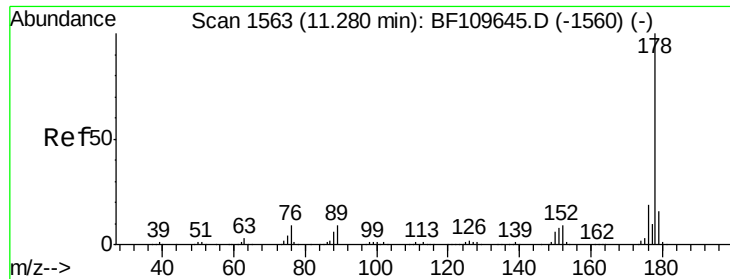
Tot Ion:188 Resp: 211196  
Ion Ratio Lower Upper  
188 100  
94 8.5 7.2 10.8  
80 9.5 7.9 11.9



#70  
Phenanthrene  
Concen: 29.453 ng  
RT: 11.23 min Scan# 1554  
Delta R.T. -0.01 min  
Lab File: BF109689.D  
Acq: 9 Oct 2018 11:10

Tgt Ion:178 Resp: 311294  
Ion Ratio Lower Upper  
178 100  
176 19.3 15.5 23.3  
179 15.2 12.5 18.7

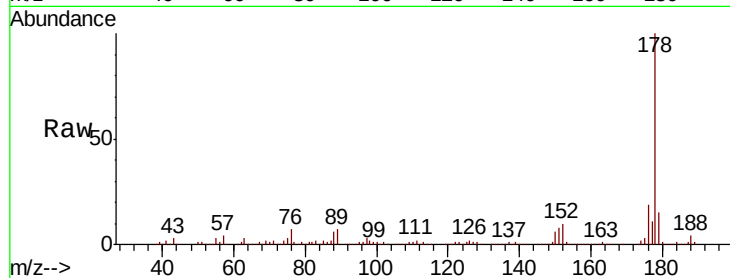




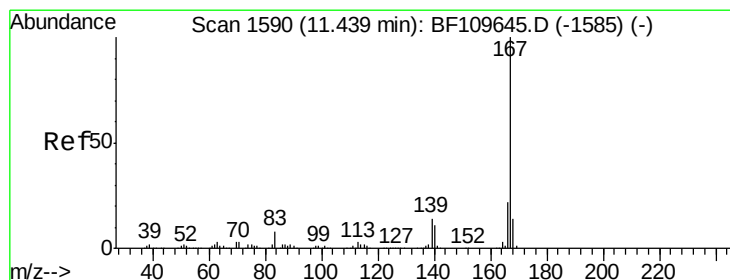
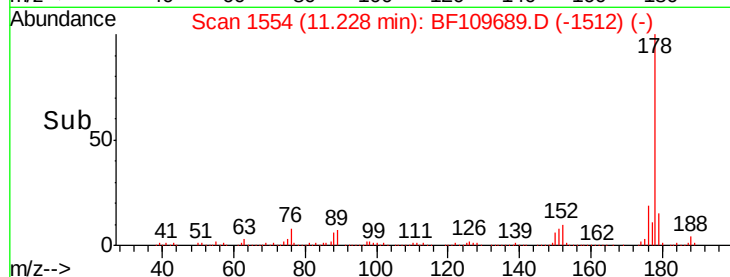
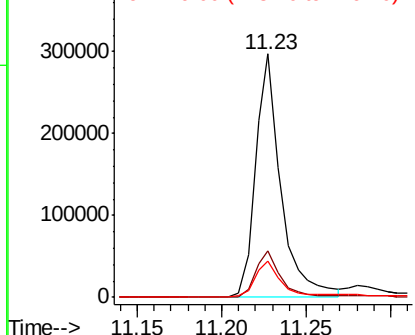
#71  
 Anthracene  
 Concen: 28.492 ng  
 RT: 11.23 min Scan# 1554  
 Delta R.T. -0.05 min  
 Lab File: BF109689.D  
 Acq: 9 Oct 2018 11:10

Instrument :  
 BNA\_F  
 ClientSampleId :

Tot Ion:178 Resp: 311294  
 Ion Ratio Lower Upper  
 178 100  
 176 19.3 15.4 23.2  
 179 15.2 12.6 18.8

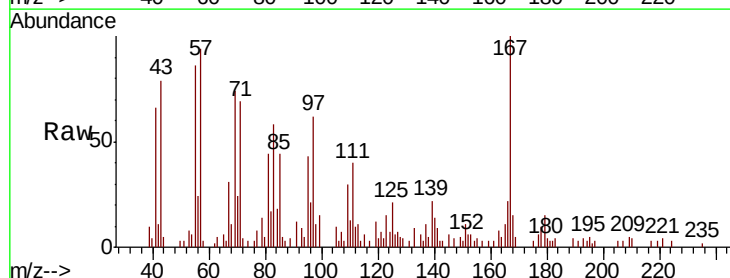


Abundance Ion 178.00 (177.70 to 178.70): E  
 Ion 176.00 (175.70 to 176.70): E  
 Ion 179.00 (178.70 to 179.70): E

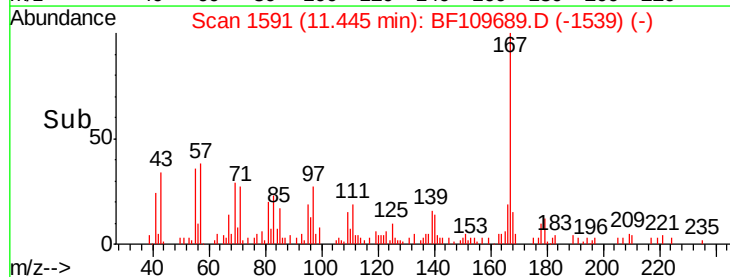
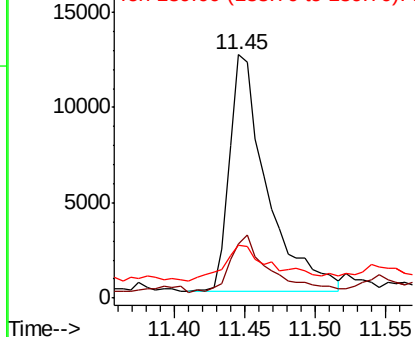


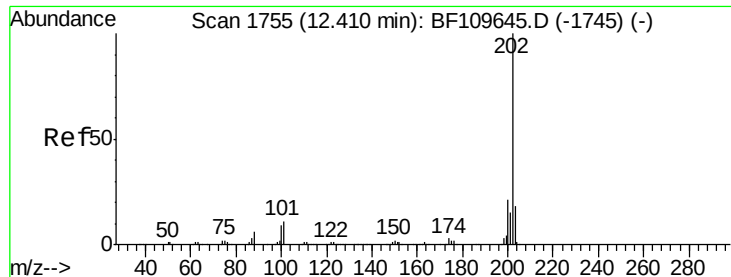
#72  
 Carbazole  
 Concen: 2.155 ng  
 RT: 11.45 min Scan# 1591  
 Delta R.T. 0.01 min  
 Lab File: BF109689.D  
 Acq: 9 Oct 2018 11:10

Tgt Ion:167 Resp: 22834  
 Ion Ratio Lower Upper  
 167 100  
 166 22.3 17.4 26.0  
 139 21.9 10.9 16.3#



Abundance Ion 167.00 (166.70 to 167.70): E  
 Ion 166.00 (165.70 to 166.70): E  
 Ion 139.00 (138.70 to 139.70): E





#74

Fluoranthene

Concen: 47.775 ng

RT: 12.42 min Scan# 1756

Delta R.T. 0.01 min

Lab File: BF109689.D

Acq: 9 Oct 2018 11:10

Instrument :

BNA\_F

ClientSampleId :

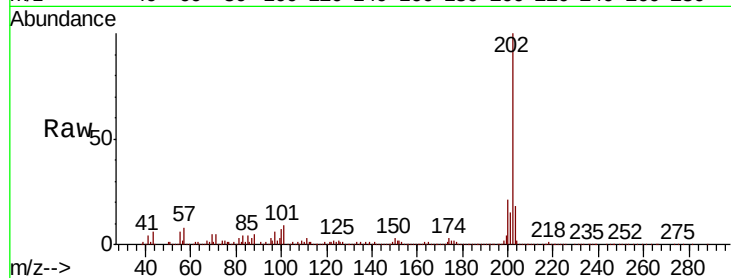
Tot Ion:202 Resp: 527501

Ion Ratio Lower Upper

202 100

101 9.0 0.0 31.4

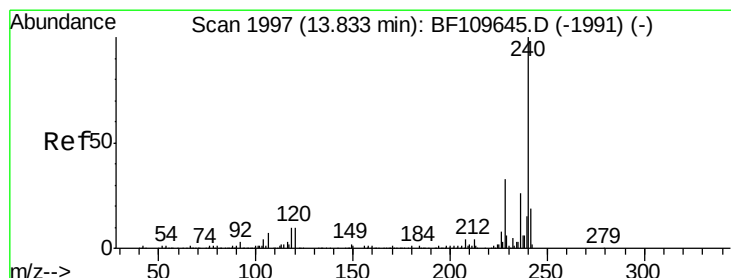
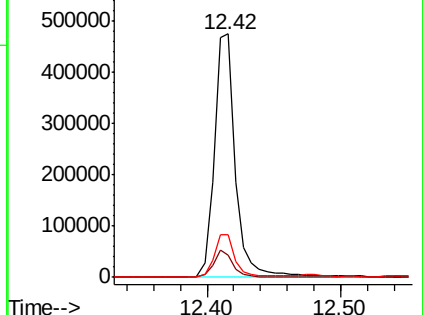
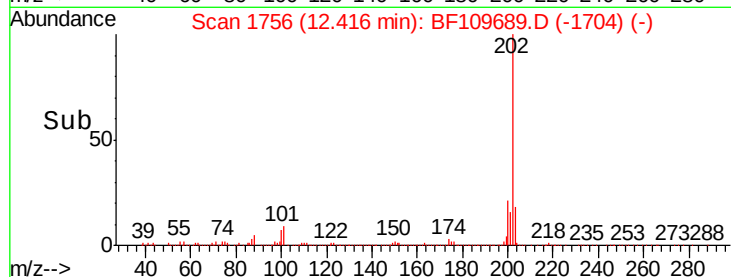
203 17.7 0.0 37.7



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: 13.83 min Scan# 1997

Delta R.T. 0.00 min

Lab File: BF109689.D

Acq: 9 Oct 2018 11:10

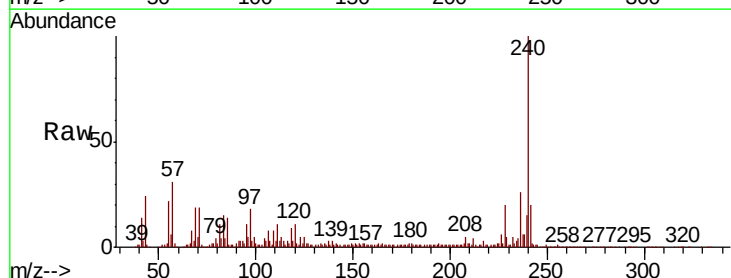
Tgt Ion:240 Resp: 177714

Ion Ratio Lower Upper

240 100

120 10.9 8.3 12.5

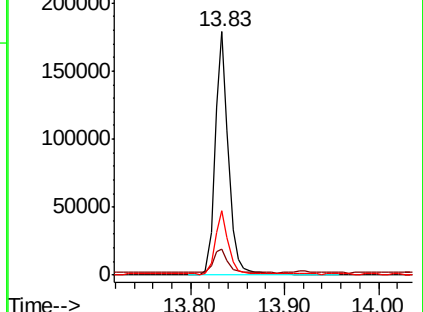
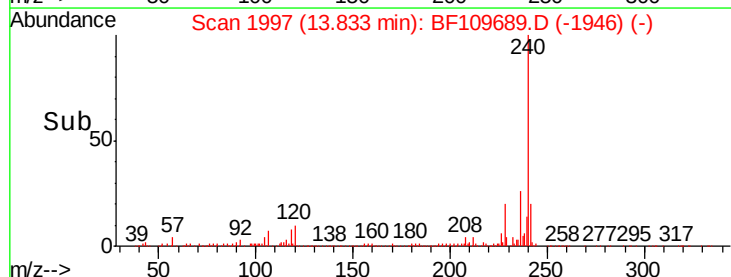
236 26.4 21.2 31.8

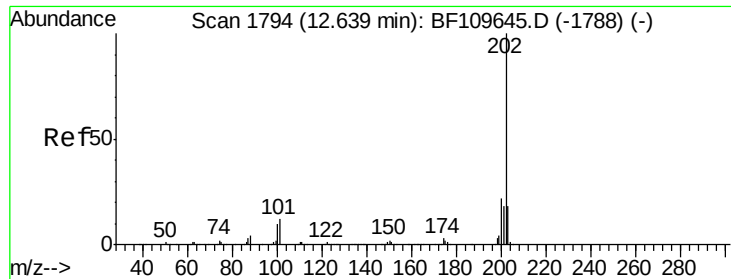


Abundance Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E

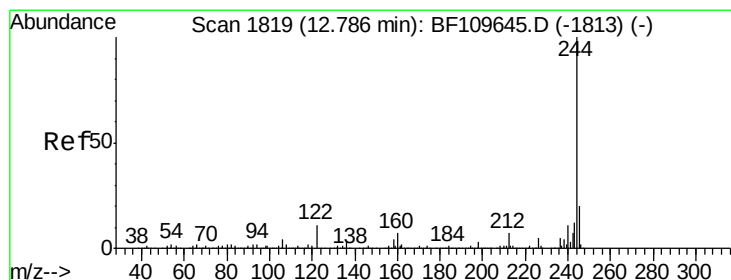
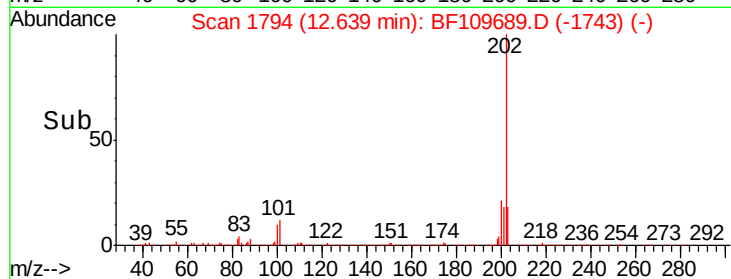
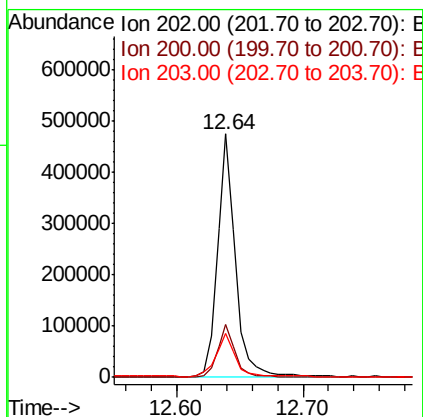
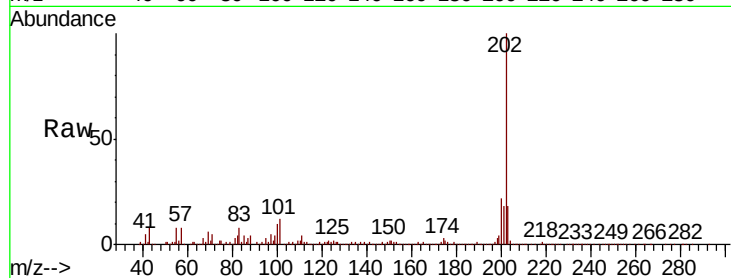




#77  
Pvrene  
Concen: 36.120 ng  
RT: 12.64 min Scan# 1794  
Delta R.T. 0.00 min  
Lab File: BF109689.D  
Acq: 9 Oct 2018 11:10

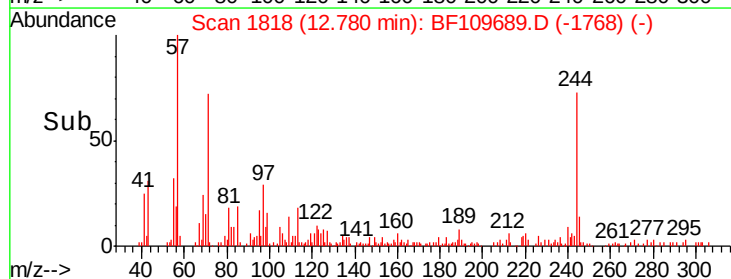
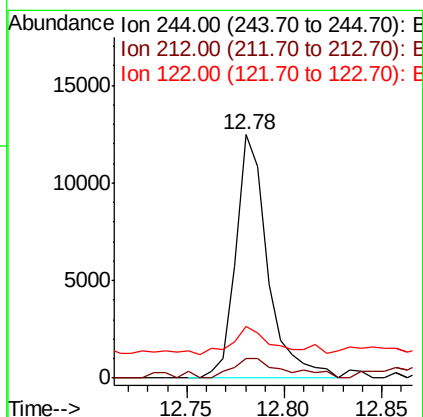
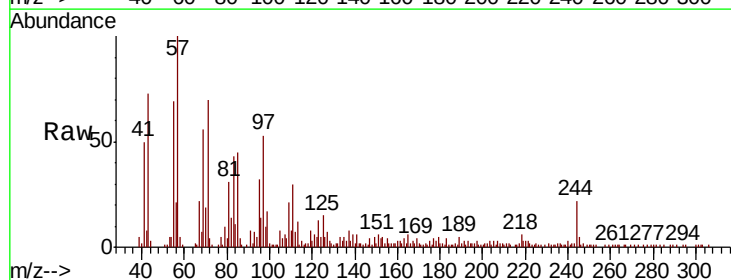
Instrument :  
BNA\_F  
ClientSampleId :

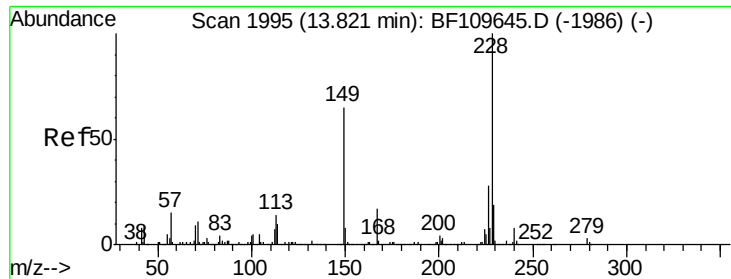
Tot Ion:202 Resp: 470298  
Ion Ratio Lower Upper  
202 100  
200 21.5 17.8 26.6  
203 17.9 14.2 21.4



#78  
Terphenyl-d14  
Concen: 1.542 ng  
RT: 12.78 min Scan# 1818  
Delta R.T. -0.01 min  
Lab File: BF109689.D  
Acq: 9 Oct 2018 11:10

Tgt Ion:244 Resp: 14152  
Ion Ratio Lower Upper  
244 100  
212 8.1 5.8 8.8  
122 21.3 8.7 13.1#





#80

Benzo(a)anthracene

Concen: 11.614 ng

RT: 13.82 min Scan# 1995

Delta R.T. 0.00 min

Lab File: BF109689.D

Acq: 9 Oct 2018 11:10

Instrument :

BNA\_F

ClientSampleId :

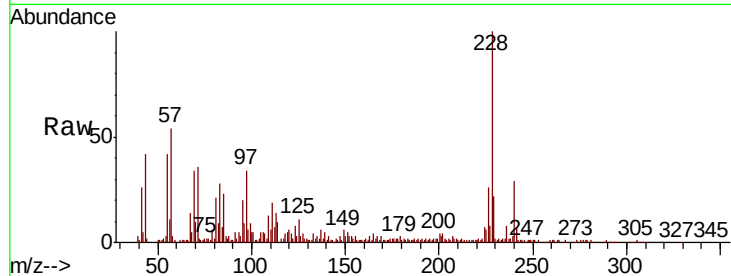
Tot Ion:228 Resp: 113894

Ion Ratio Lower Upper

228 100

226 26.3 22.1 33.1

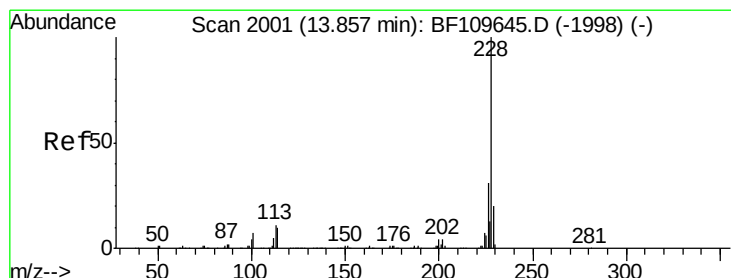
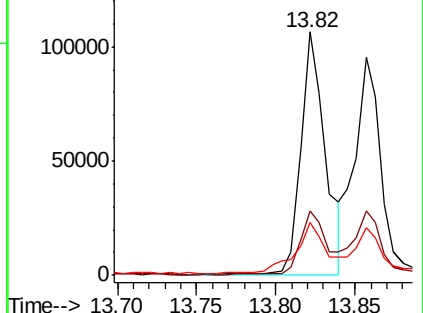
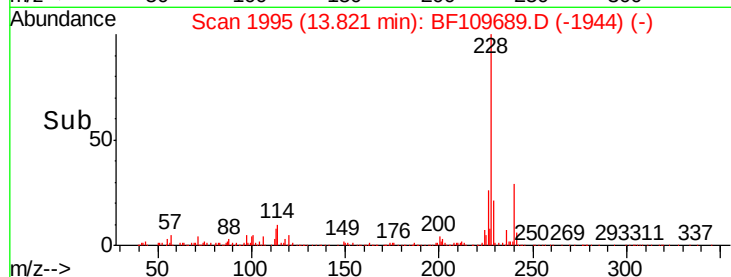
229 21.7 15.6 23.4



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



#82

Chrysene

Concen: 10.592 ng

RT: 13.86 min Scan# 2001

Delta R.T. 0.00 min

Lab File: BF109689.D

Acq: 9 Oct 2018 11:10

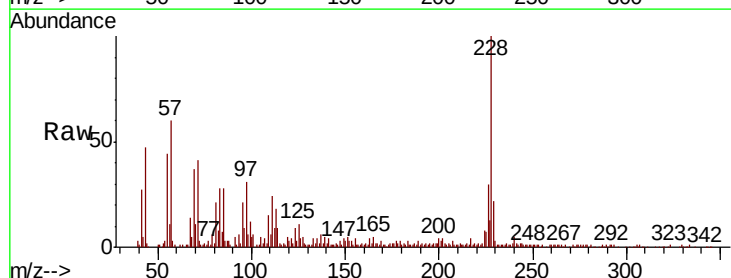
Tgt Ion:228 Resp: 109113

Ion Ratio Lower Upper

228 100

226 29.8 24.7 37.1

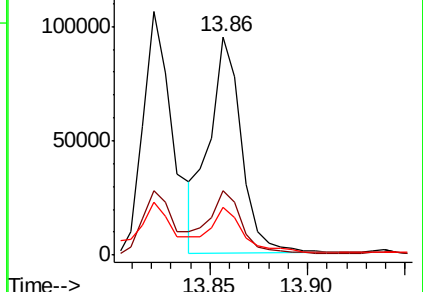
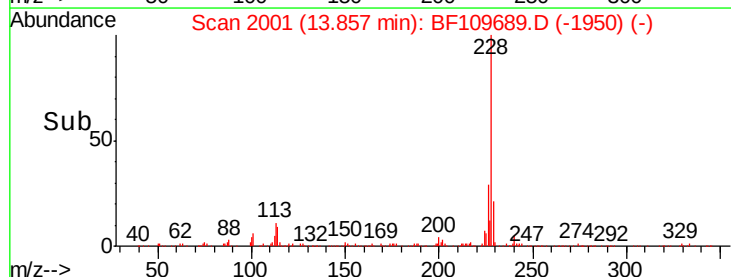
229 21.6 15.9 23.9

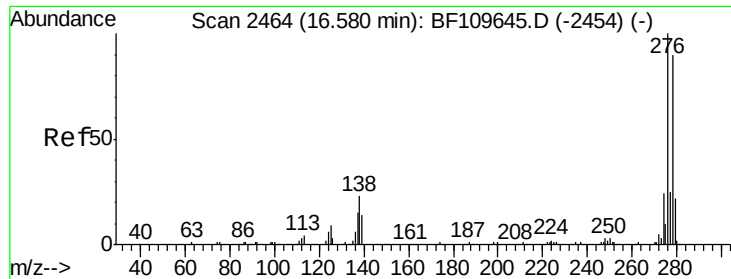


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E

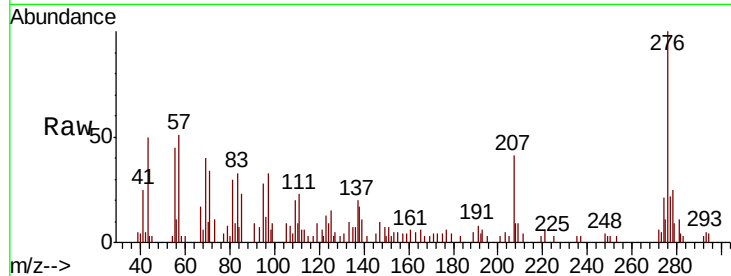




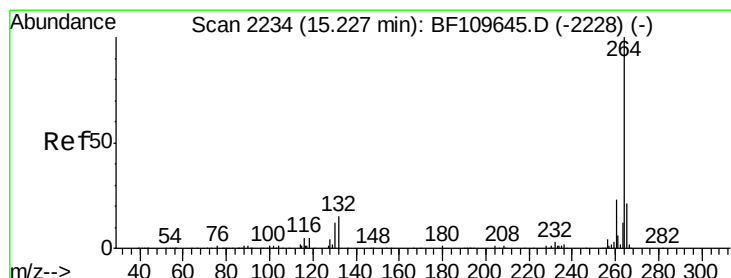
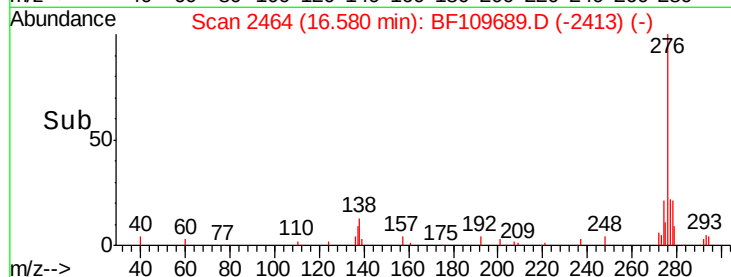
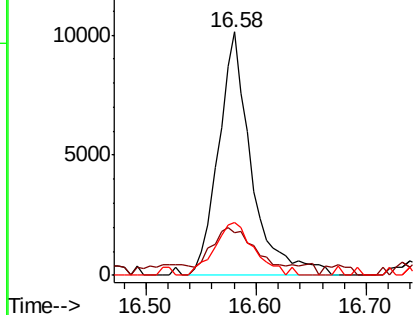
#85  
 Indeno(1,2,3-cd)pyrene  
 Concen: 2.843 ng  
 RT: 16.58 min Scan# 2464  
 Delta R.T. 0.00 min  
 Lab File: BF109689.D  
 Acq: 9 Oct 2018 11:10

Instrument :  
 BNA\_F  
 ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 20.7  | 18.5  | 27.7  |
| 277     | 26.3  | 20.0  | 30.0  |

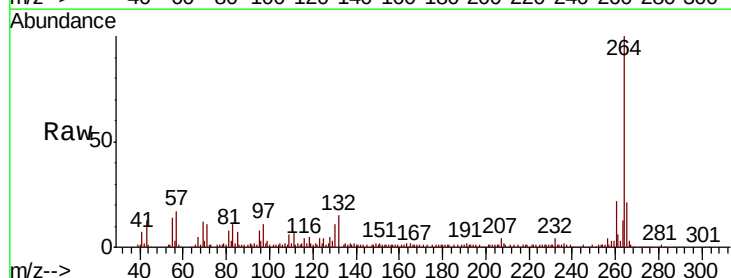


Abundance Ion 276.00 (275.70 to 276.70): E  
 Ion 138.00 (137.70 to 138.70): E  
 Ion 277.00 (276.70 to 277.70): E

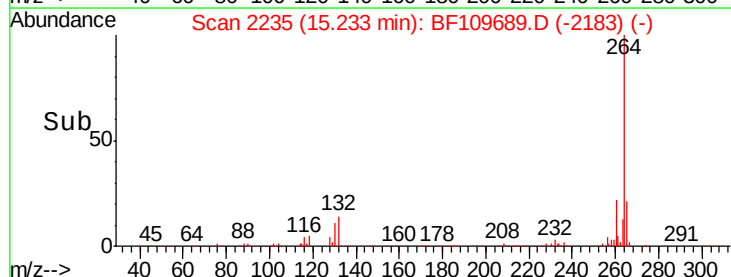
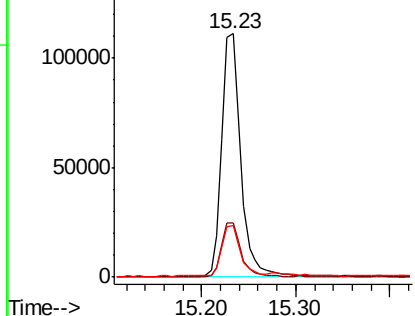


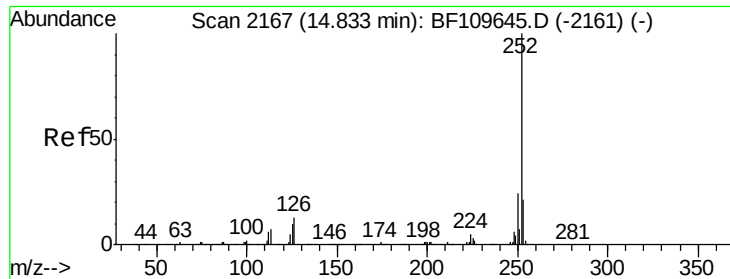
#86  
 Perylene-d12  
 Concen: 20.000 ng  
 RT: 15.23 min Scan# 2235  
 Delta R.T. 0.01 min  
 Lab File: BF109689.D  
 Acq: 9 Oct 2018 11:10

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 22.3  | 18.7  | 28.1  |
| 265     | 21.3  | 16.7  | 25.1  |



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

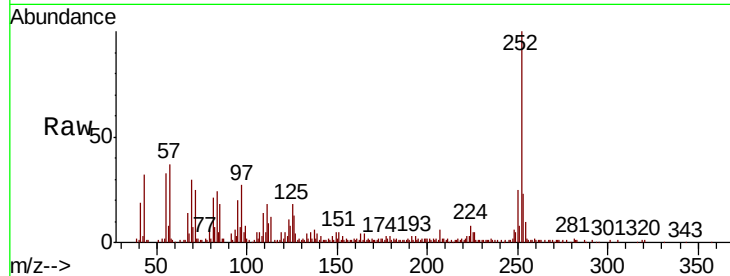




#87  
Benzo(b)fluoranthene  
Concen: 14.865 ng  
RT: 14.84 min Scan# 2168  
Delta R.T. 0.01 min  
Lab File: BF109689.D  
Acq: 9 Oct 2018 11:10

Instrument :  
BNA\_F  
ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.0  | 17.2  | 25.8  |
| 125     | 18.5  | 8.2   | 12.4  |

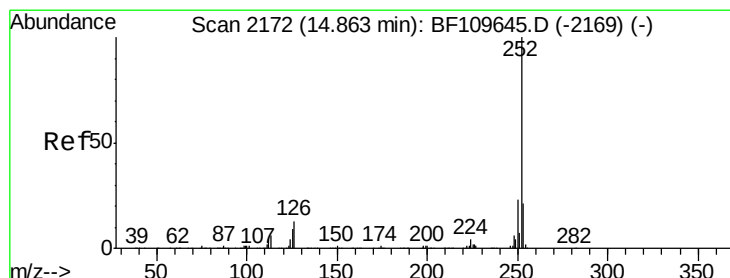
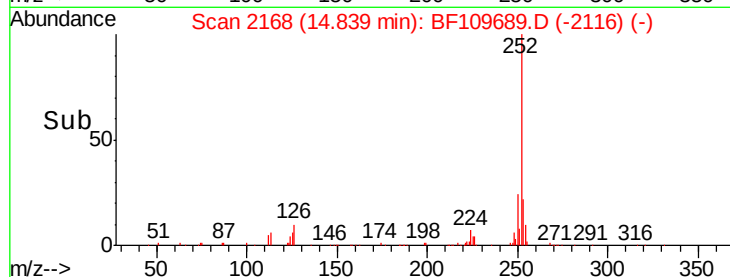
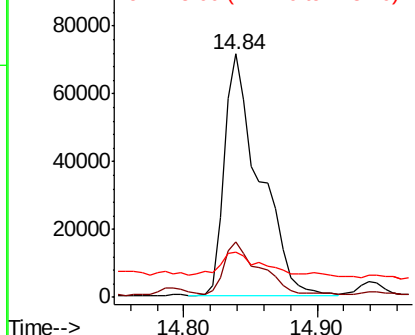


Abundance

Ion 252.00 (251.70 to 252.70): E

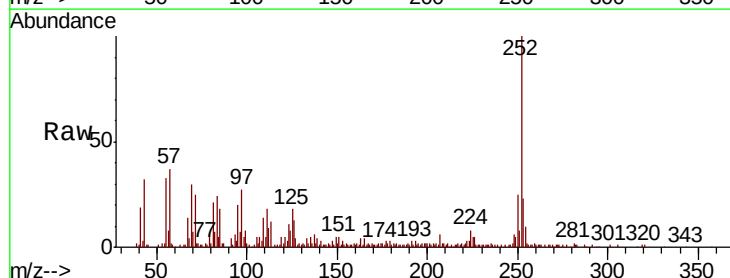
Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E



#88  
Benzo(k)fluoranthene  
Concen: 14.795 ng  
RT: 14.84 min Scan# 2168  
Delta R.T. -0.02 min  
Lab File: BF109689.D  
Acq: 9 Oct 2018 11:10

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.0  | 17.2  | 25.8  |
| 125     | 18.5  | 7.4   | 11.0  |

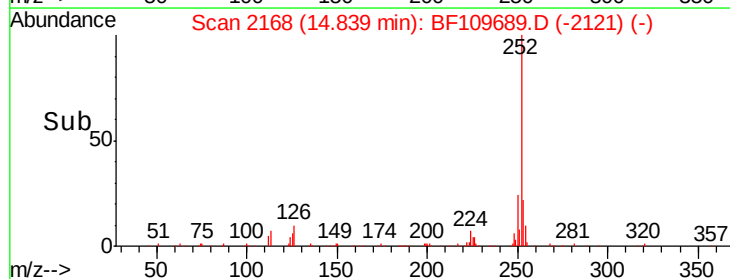
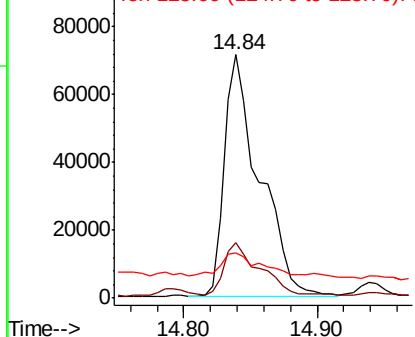


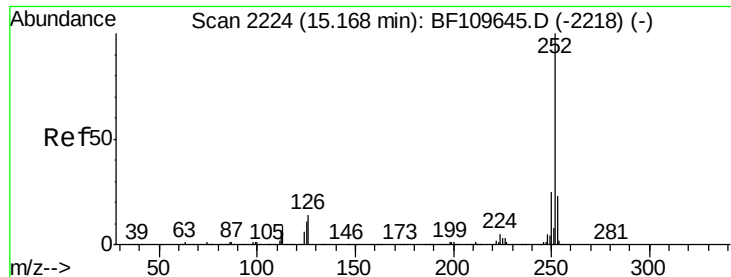
Abundance

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

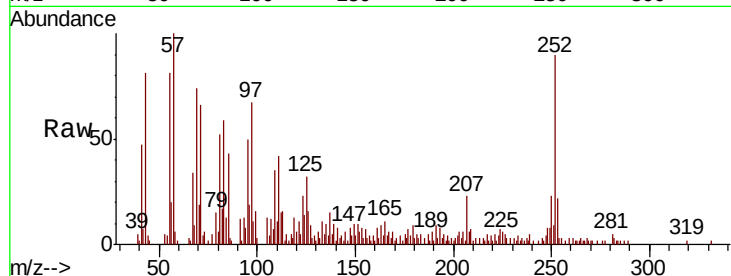




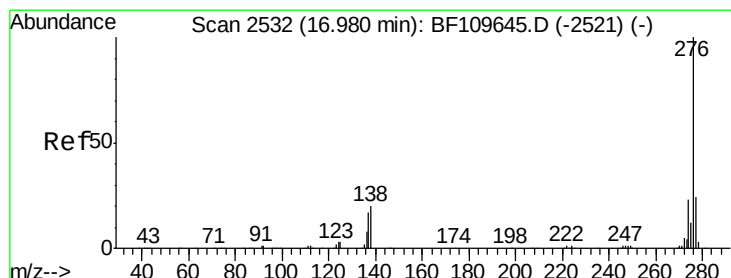
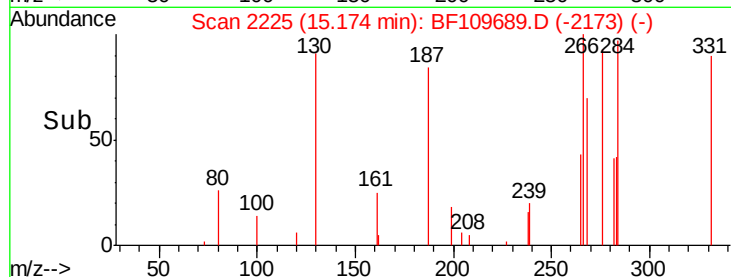
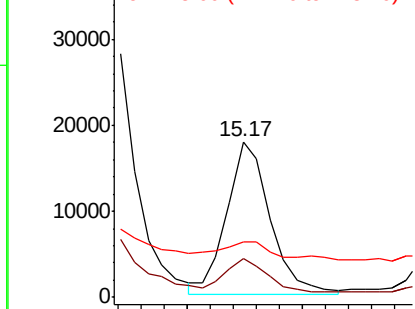
#89  
Benzo(a)pyrene  
Concen: 2.888 ng  
RT: 15.17 min Scan# 2225  
Delta R.T. 0.01 min  
Lab File: BF109689.D  
Acq: 9 Oct 2018 11:10

Instrument :  
BNA\_F  
ClientSampleId :

Tot Ion:252 Resp: 23161  
Ion Ratio Lower Upper  
252 100  
253 24.9 18.2 27.4  
125 35.3 9.0 13.6#

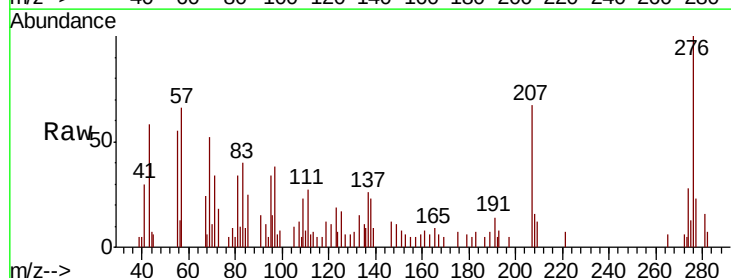


Abundance Ion 252.00 (251.70 to 252.70): E  
Ion 253.00 (252.70 to 253.70): E  
Ion 125.00 (124.70 to 125.70): E



#91  
Benzo(g,h,i)perylene  
Concen: 2.530 ng  
RT: 16.98 min Scan# 2532  
Delta R.T. 0.00 min  
Lab File: BF109689.D  
Acq: 9 Oct 2018 11:10

Tgt Ion:276 Resp: 16639  
Ion Ratio Lower Upper  
276 100  
277 23.0 18.8 28.2  
138 22.6 16.0 24.0



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

