

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF090418\  
 Data File : BF108746.D  
 Acq On : 4 Sep 2018 17:40  
 Operator : JU/SJ  
 Sample : J4712-12RE 5X  
 Misc :  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :

Quant Time: Sep 05 03:11:12 2018  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF083018.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Aug 30 15:06:55 2018  
 Response via : Initial Calibration

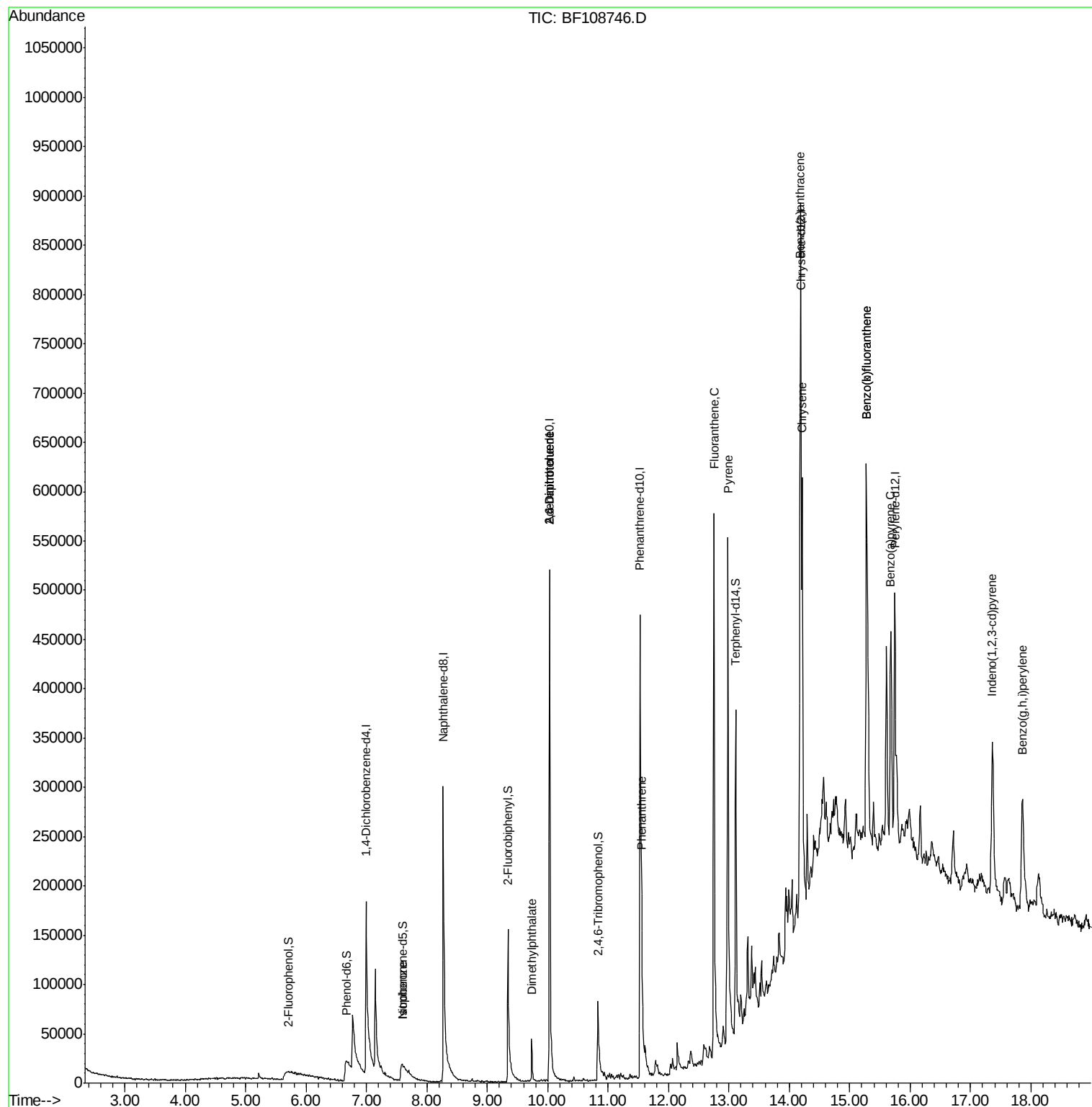
| Internal Standards          | R.T.  | QIon | Response | Conc   | Units | Dev(Min)    |
|-----------------------------|-------|------|----------|--------|-------|-------------|
| 1) 1,4-Dichlorobenzene-d4   | 7.00  | 152  | 62546    | 20.00  | ng    | -0.01       |
| 21) Naphthalene-d8          | 8.27  | 136  | 288758   | 20.00  | ng    | -0.01       |
| 38) Acenaphthene-d10        | 10.03 | 164  | 134482   | 20.00  | ng    | -0.02       |
| 63) Phenanthrene-d10        | 11.53 | 188  | 292038   | 20.00  | ng    | -0.02       |
| 75) Chrysene-d12            | 14.19 | 240  | 245467   | 20.00  | ng    | -0.01       |
| 86) Perylene-d12            | 15.75 | 264  | 181908   | 20.00  | ng    | 0.00        |
| System Monitoring Compounds |       |      |          |        |       |             |
| 5) 2-Fluorophenol           | 5.70  | 112  | 9875     | 2.74   | ng    | 0.05        |
| 7) Phenol-d6                | 6.67  | 99   | 15600    | 3.03   | ng    | 0.02        |
| 23) Nitrobenzene-d5         | 7.60  | 82   | 26503    | 4.66   | ng    | 0.02        |
| 41) 2,4,6-Tribromophenol    | 10.83 | 330  | 23982    | 13.51  | ng    | -0.02       |
| 44) 2-Fluorobiphenyl        | 9.34  | 172  | 108148   | 10.81  | ng    | -0.02       |
| 78) Terphenyl-d14           | 13.11 | 244  | 142042   | 11.24  | ng    | -0.02       |
| Target Compounds            |       |      |          |        |       |             |
| 25) Isophorone              | 7.60  | 82   | 26503    | 2.804  | ng    | Qvalue # 64 |
| 49) Dimethylphthalate       | 9.74  | 163  | 27651    | 2.611  | ng    | 98          |
| 50) 2,6-Dinitrotoluene      | 10.03 | 165  | 16566    | 7.097  | ng    | # 24        |
| 56) 2,4-Dinitrotoluene      | 10.03 | 165  | 16567    | 5.360  | ng    | # 21        |
| 70) Phenanthrene            | 11.55 | 178  | 57376    | 3.892  | ng    | 96          |
| 74) Fluoranthene            | 12.75 | 202  | 341063   | 20.555 | ng    | 93          |
| 77) Pyrene                  | 12.98 | 202  | 281367   | 15.248 | ng    | 99          |
| 80) Benzo(a)anthracene      | 14.18 | 228  | 176123   | 11.770 | ng    | 98          |
| 82) Chrysene                | 14.21 | 228  | 183876   | 12.777 | ng    | 98          |
| 85) Indeno(1,2,3-cd)pyrene  | 17.36 | 276  | 135113   | 13.503 | ng    | # 85        |
| 87) Benzo(b)fluoranthene    | 15.28 | 252  | 367665   | 32.902 | ng    | 96          |
| 88) Benzo(k)fluoranthene    | 15.28 | 252  | 367665   | 33.214 | ng    | # 96        |
| 89) Benzo(a)pyrene          | 15.68 | 252  | 163434   | 16.184 | ng    | 94          |
| 91) Benzo(a,h,i)perylene    | 17.86 | 276  | 142642   | 18.197 | ng    | # 89        |

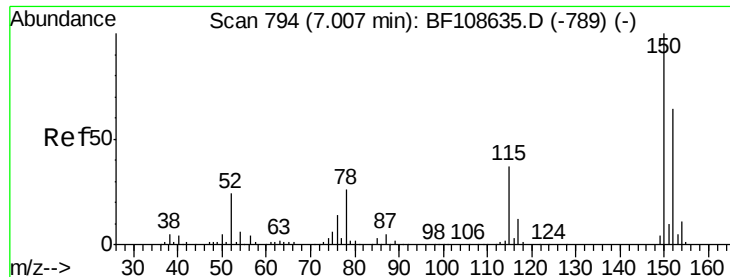
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Instrument :  
BNA\_F  
ClientSampled :

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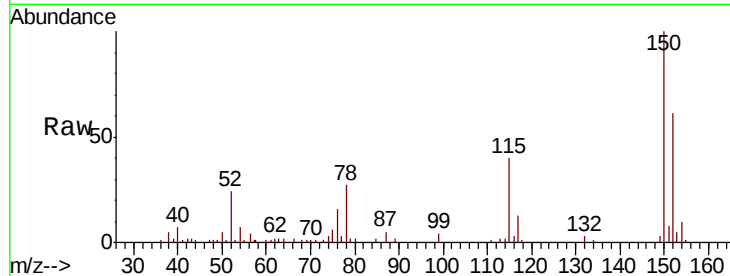


#1

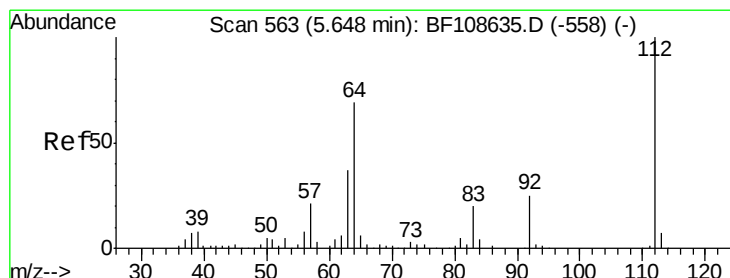
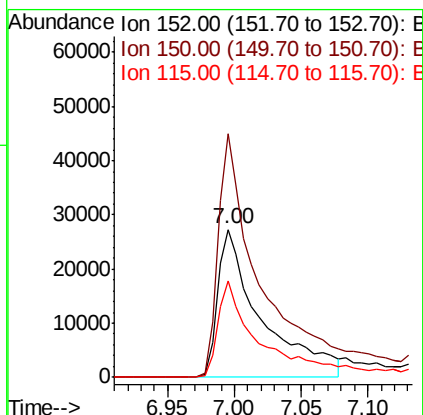
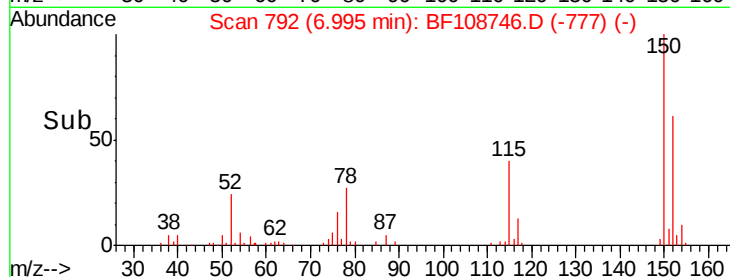
1,4-Dichlorobenzene-d4  
 Concen: 20.000 ng  
 RT: 7.00 min Scan# 792  
 Delta R.T. -0.01 min  
 Lab File: BF108746.D  
 Acq: 4 Sep 2018 17:40

Instrument :  
 BNA\_F  
 ClientSampled :

Tot Ion:152 Resp: 62546  
 Ion Ratio Lower Upper  
 152 100  
 150 164.4 124.6 186.8  
 115 65.5 50.1 75.1



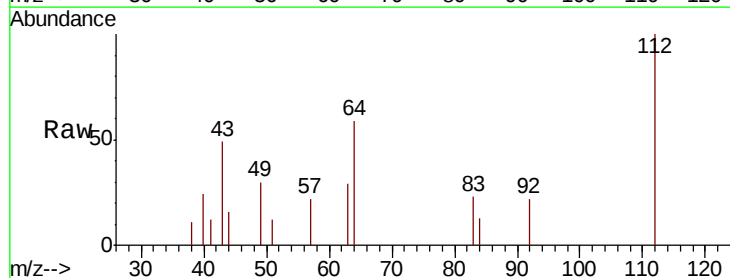
Abundance Ion 152.00 (151.70 to 152.70): E  
 Ion 150.00 (149.70 to 150.70): E  
 Ion 115.00 (114.70 to 115.70): E



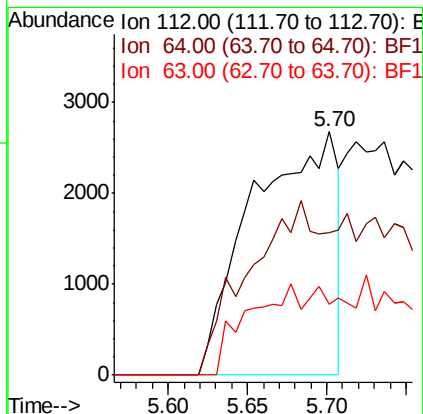
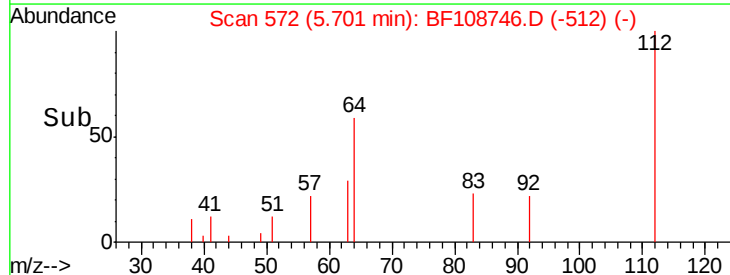
#5

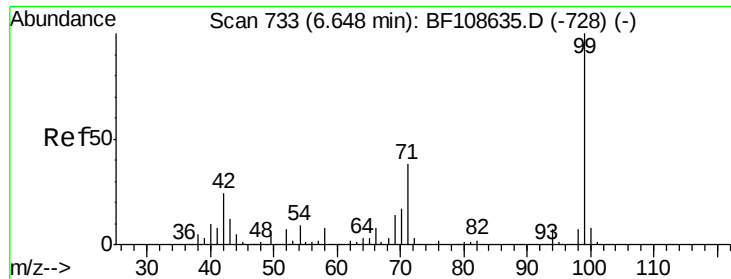
2-Fluorophenol  
 Concen: 2.743 ng  
 RT: 5.70 min Scan# 572  
 Delta R.T. 0.05 min  
 Lab File: BF108746.D  
 Acq: 4 Sep 2018 17:40

Tgt Ion:112 Resp: 9875  
 Ion Ratio Lower Upper  
 112 100  
 64 58.7 47.9 71.9  
 63 29.0 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: 3.025 ng

RT: 6.67 min Scan# 736

Delta R.T. 0.02 min

Lab File: BF108746.D

Acq: 4 Sep 2018 17:40

Instrument :

BNA\_F

ClientSampleId :

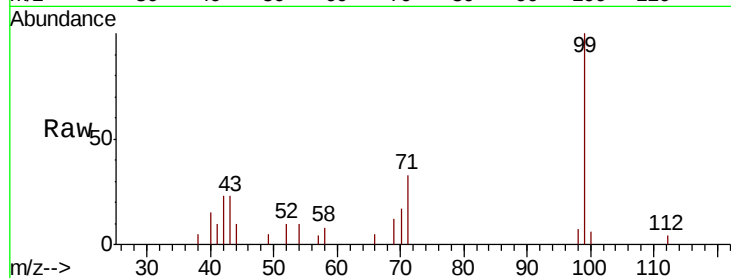
Tot Ion: 99 Resp: 15600

Ion Ratio Lower Upper

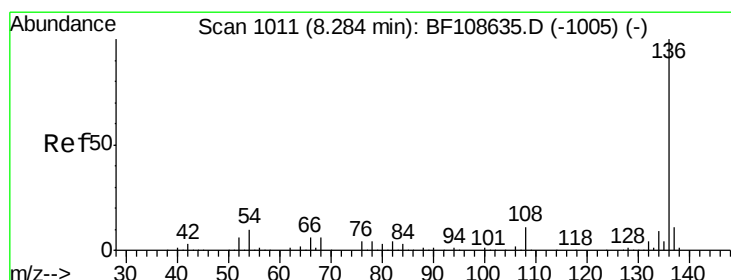
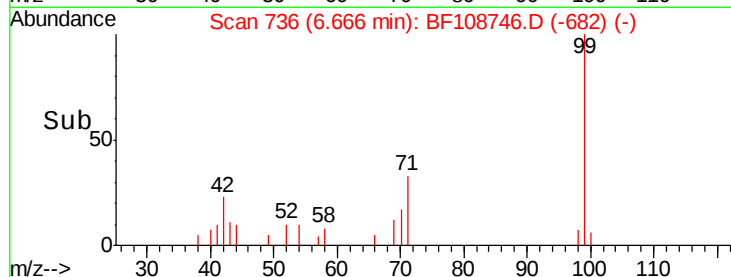
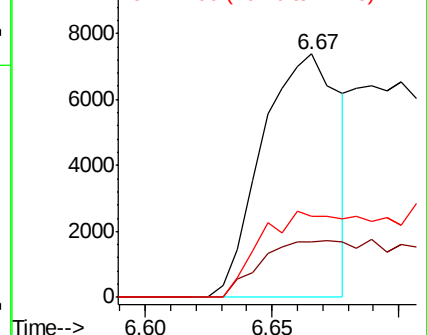
99 100

42 22.6 14.5 21.7#

71 33.3 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



#21

Naphthalene-d8

Concen: 20.000 ng

RT: 8.27 min Scan# 1009

Delta R.T. -0.01 min

Lab File: BF108746.D

Acq: 4 Sep 2018 17:40

Tgt Ion: 136 Resp: 288758

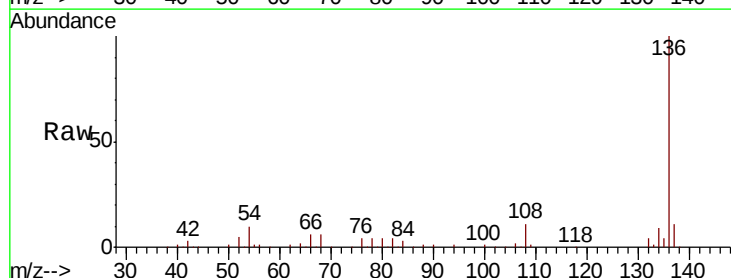
Ion Ratio Lower Upper

136 100

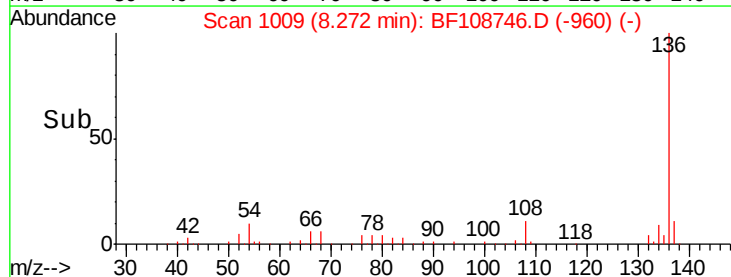
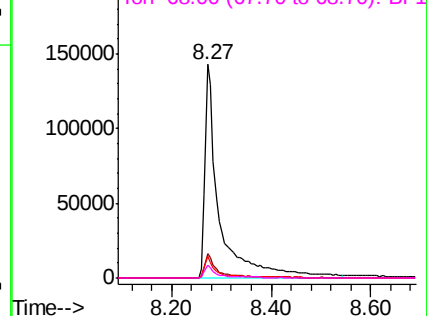
137 11.3 8.9 13.3

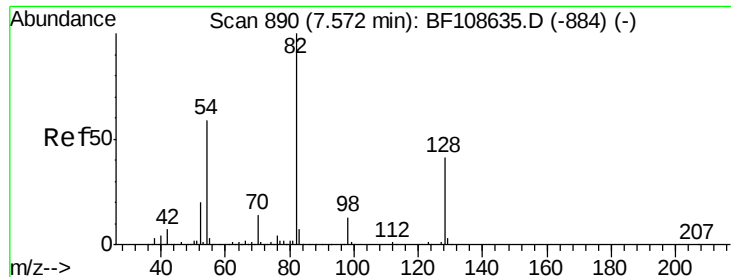
54 10.4 6.6 9.8#

68 5.9 5.0 7.4



Abundance Ion 136.00 (135.70 to 136.70): E  
Ion 137.00 (136.70 to 137.70): E  
Ion 54.00 (53.70 to 54.70): BF1  
Ion 68.00 (67.70 to 68.70): BF1

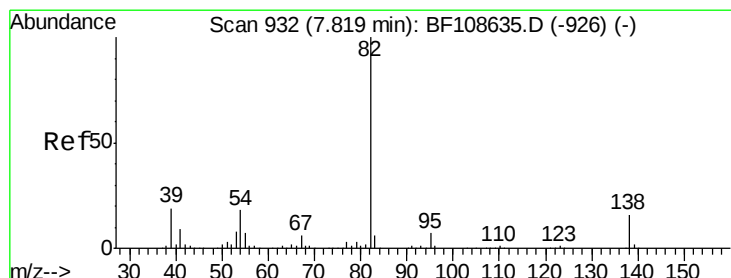
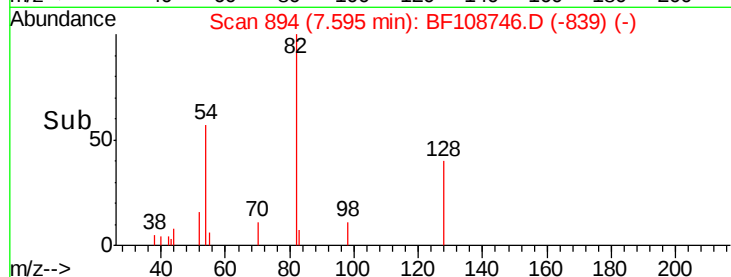
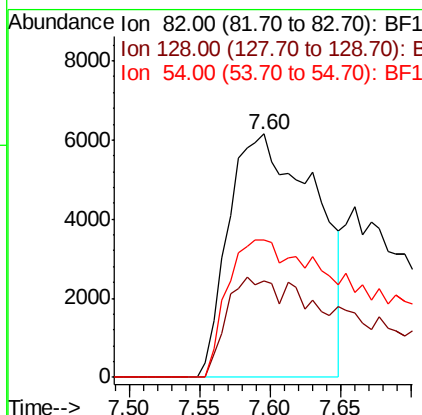
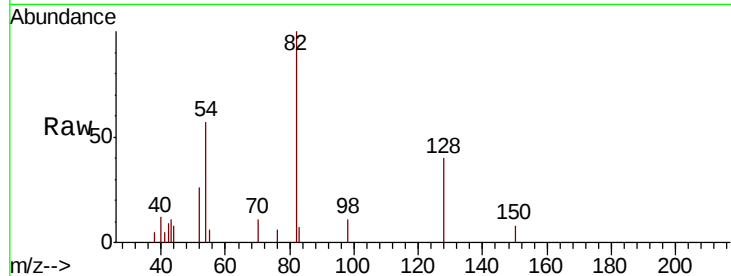




#23  
 Nitrobenzene-d5  
 Concen: 4.659 ng  
 RT: 7.60 min Scan# 894  
 Delta R.T. 0.02 min  
 Lab File: BF108746.D  
 Acq: 4 Sep 2018 17:40

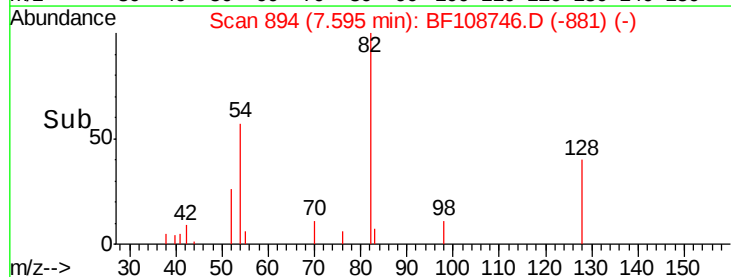
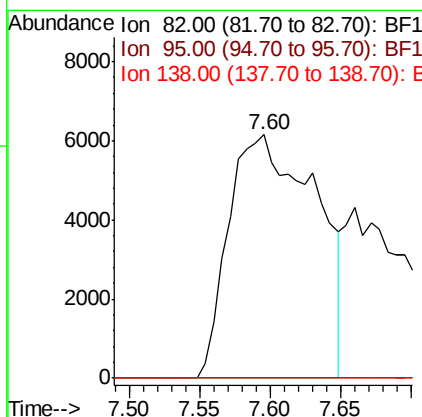
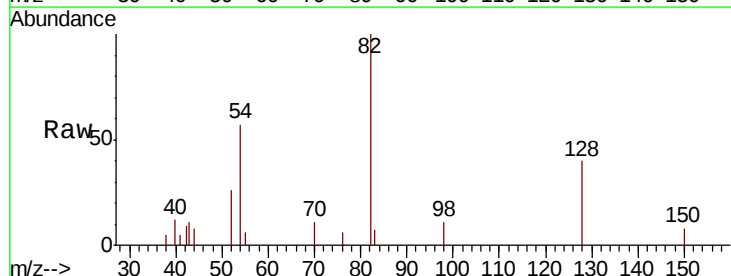
Instrument :  
 BNA\_F  
 ClientSampleId :

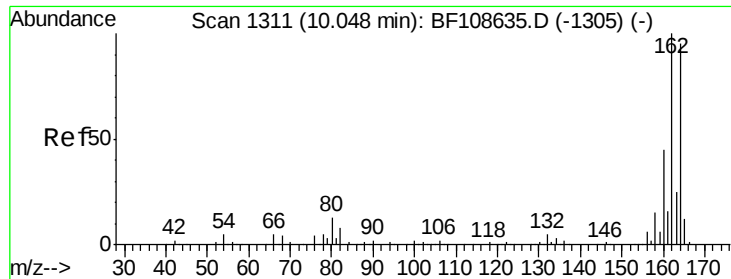
| Tot Ion   | 82    | Resp  | 26503 |
|-----------|-------|-------|-------|
| Ion Ratio | Lower | Upper |       |
| 82        | 100   |       |       |
| 128       | 39.8  | 36.1  | 54.1  |
| 54        | 56.6  | 41.4  | 62.2  |



#25  
 Isophorone  
 Concen: 2.804 ng  
 RT: 7.60 min Scan# 894  
 Delta R.T. -0.22 min  
 Lab File: BF108746.D  
 Acq: 4 Sep 2018 17:40

| Tgt Ion   | 82    | Resp  | 26503 |
|-----------|-------|-------|-------|
| 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: 10.03 min Scan# 1308

Delta R.T. -0.02 min

Lab File: BF108746.D

Acq: 4 Sep 2018 17:40

Instrument :

BNA\_F

ClientSampleId :

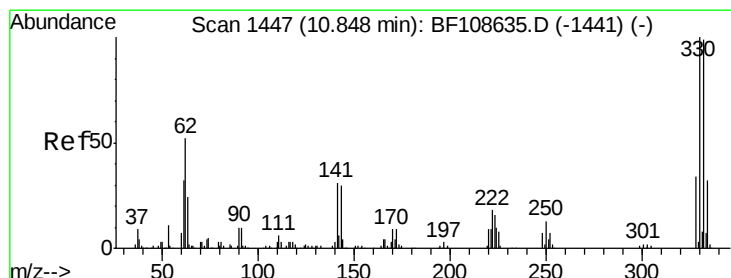
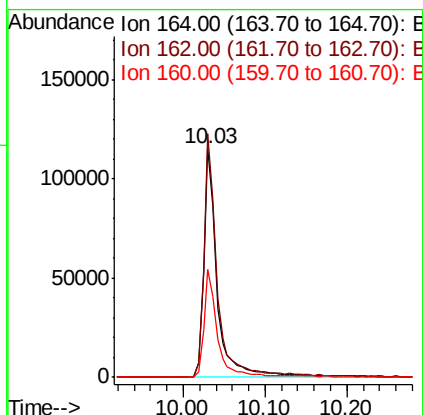
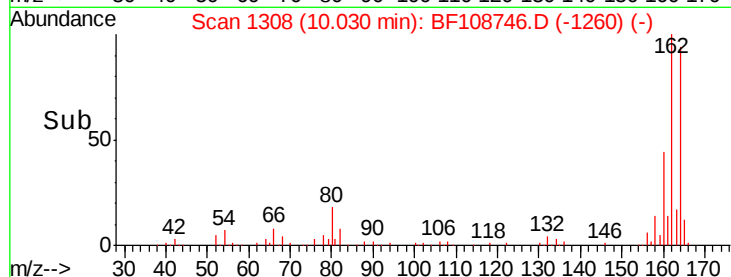
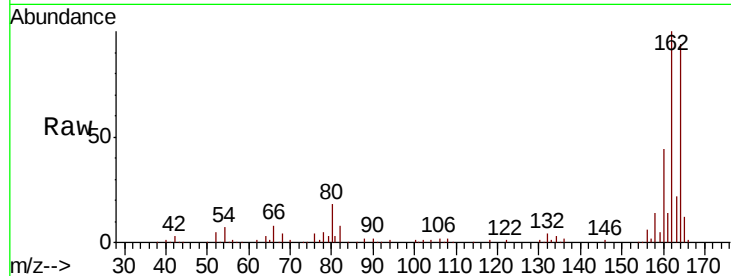
Tot Ion:164 Resp: 134482

Ion Ratio Lower Upper

164 100

162 106.2 86.1 129.1

160 47.1 38.3 57.5



#41

2,4,6-Tribromophenol

Concen: 13.508 ng

RT: 10.83 min Scan# 1444

Delta R.T. -0.02 min

Lab File: BF108746.D

Acq: 4 Sep 2018 17:40

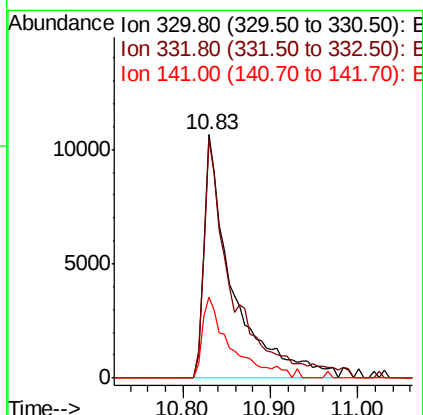
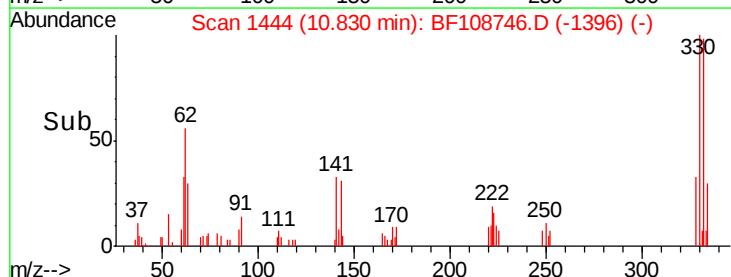
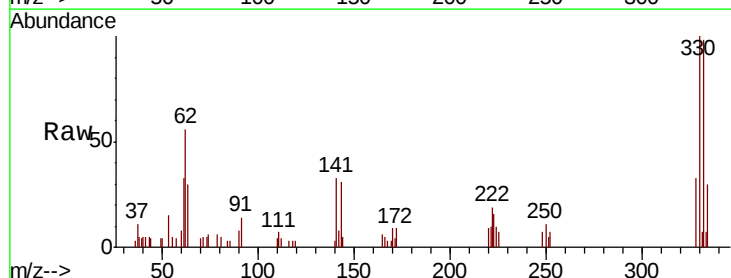
Tgt Ion:330 Resp: 23982

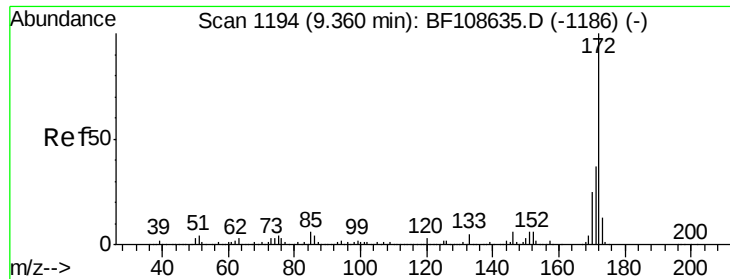
Ion Ratio Lower Upper

330 100

332 99.5 77.0 115.6

141 33.2 29.9 44.9

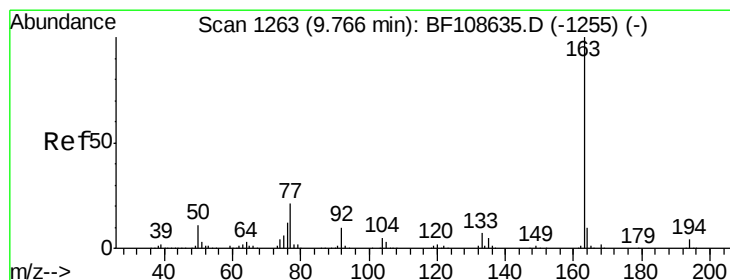
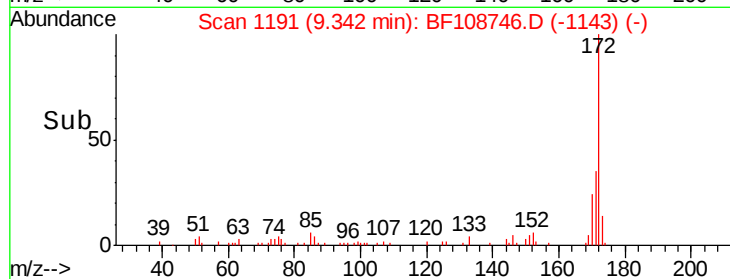
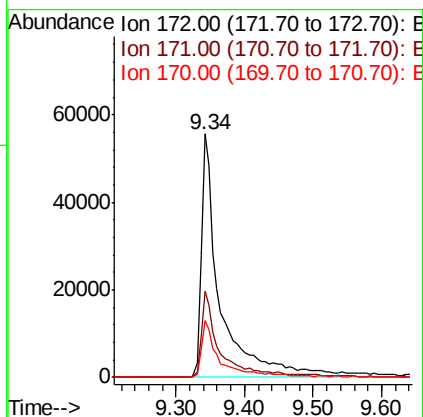
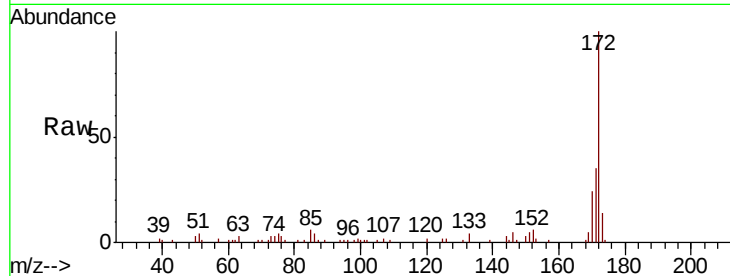




#44  
2-Fluorobiphenyl  
Concen: 10.813 ng  
RT: 9.34 min Scan# 1191  
Delta R.T. -0.02 min  
Lab File: BF108746.D  
Acq: 4 Sep 2018 17:40

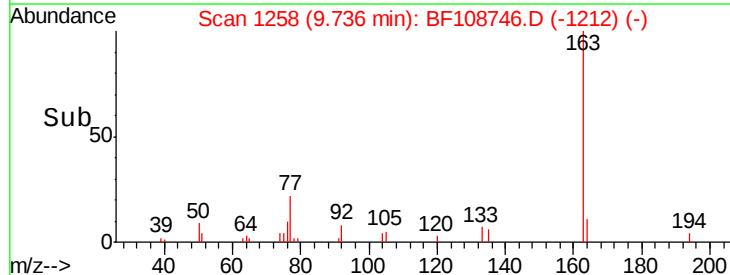
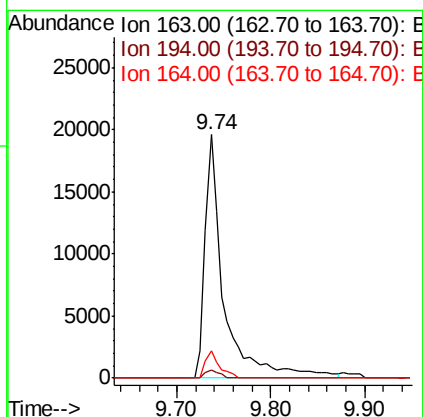
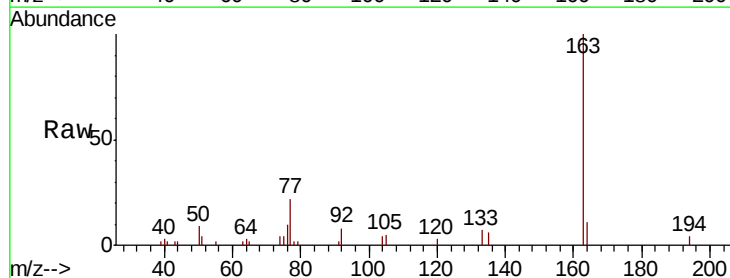
Instrument :  
BNA\_F  
ClientSampleId :

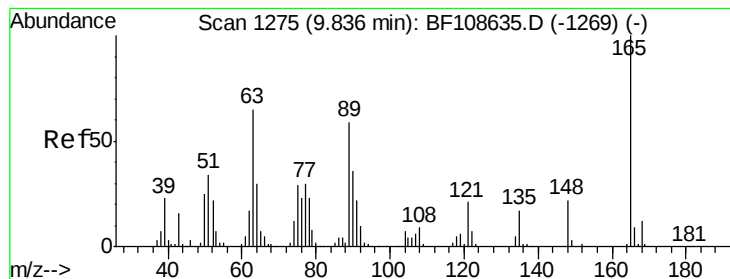
Tot Ion:172 Resp: 108148  
Ion Ratio Lower Upper  
172 100  
171 35.2 29.7 44.5  
170 23.5 19.6 29.4



#49  
Dimethylphthalate  
Concen: 2.611 ng  
RT: 9.74 min Scan# 1258  
Delta R.T. -0.03 min  
Lab File: BF108746.D  
Acq: 4 Sep 2018 17:40

Tgt Ion:163 Resp: 27651  
Ion Ratio Lower Upper  
163 100  
194 3.6 2.7 4.1  
164 11.3 8.2 12.2





#50

2,6-Dinitrotoluene

Concen: 7.097 ng

RT: 10.03 min Scan# 1308

Delta R.T. 0.19 min

Lab File: BF108746.D

Acq: 4 Sep 2018 17:40

Instrument :

BNA\_F

ClientSampleId :

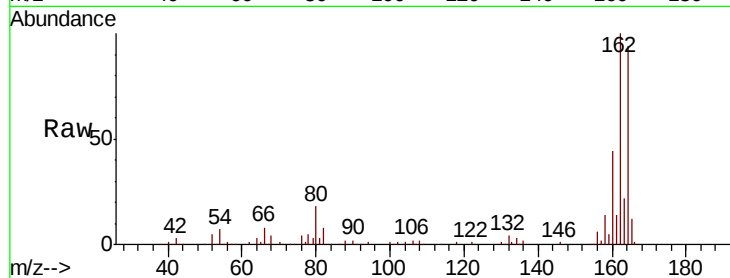
Tot Ion:165 Resp: 16566

Ion Ratio Lower Upper

165 100

63 0.0 44.7 67.1#

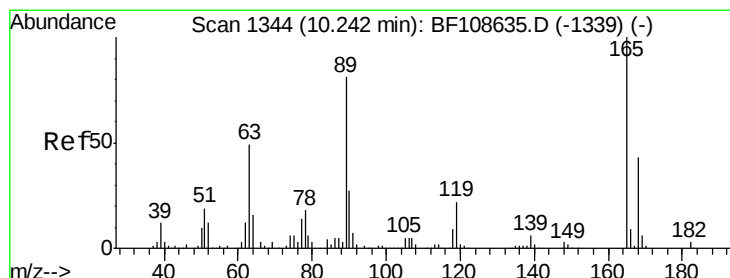
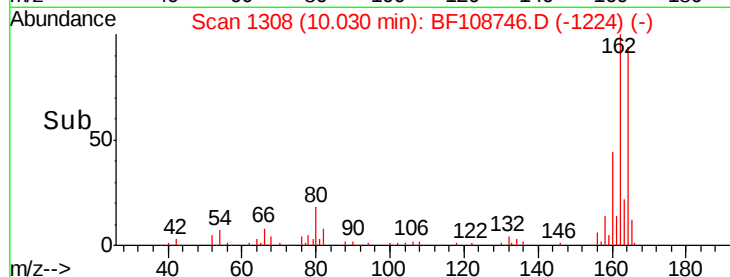
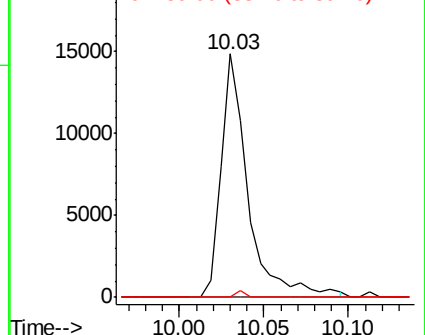
89 0.0 44.0 66.0#



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



#56

2,4-Dinitrotoluene

Concen: 5.360 ng

RT: 10.03 min Scan# 1308

Delta R.T. -0.21 min

Lab File: BF108746.D

Acq: 4 Sep 2018 17:40

Tgt Ion:165 Resp: 16567

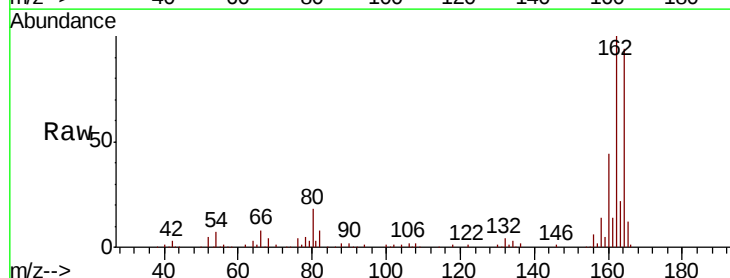
Ion Ratio Lower Upper

165 100

63 0.0 36.4 54.6#

89 0.0 57.8 86.6#

182 0.0 1.6 2.4#

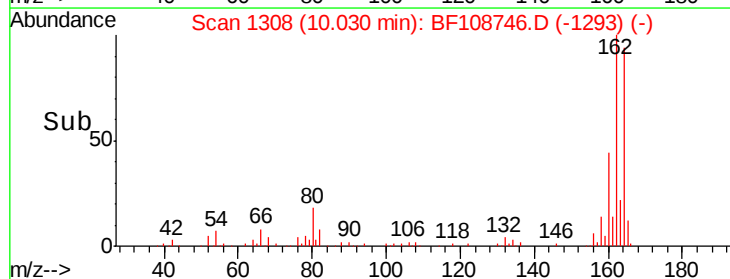
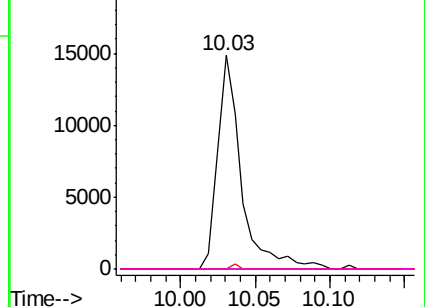


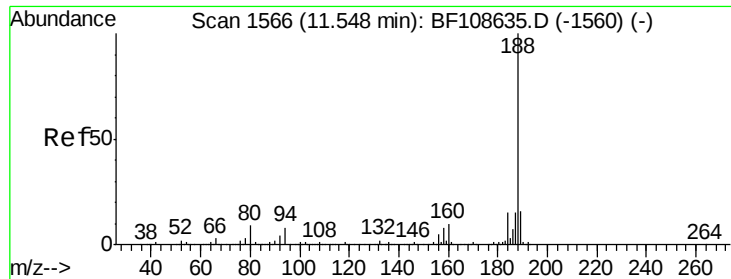
Abundance Ion 165.00 (164.70 to 165.70): E

Ion 63.00 (62.70 to 63.70): BF1

Ion 89.00 (88.70 to 89.70): BF1

Ion 182.00 (181.70 to 182.70): E

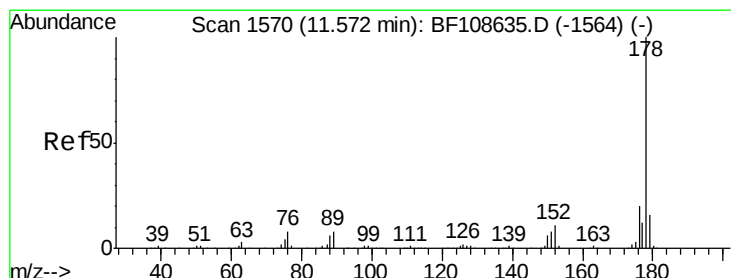
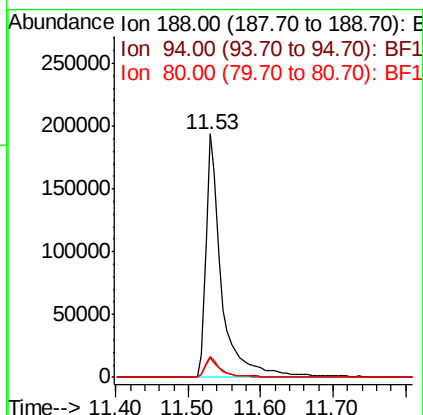
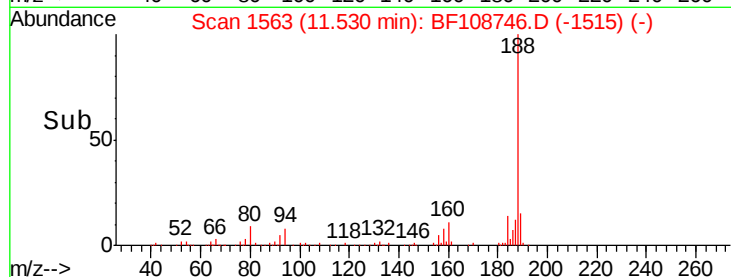
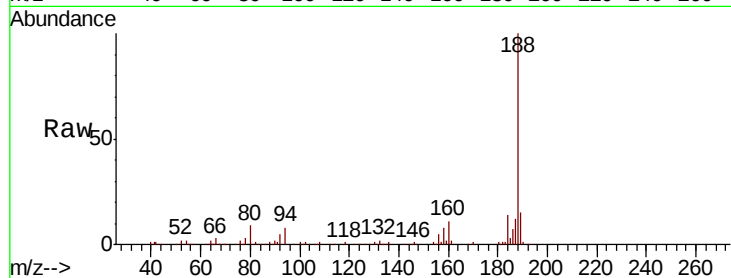




#63  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 11.53 min Scan# 1563  
Delta R.T. -0.02 min  
Lab File: BF108746.D  
Acq: 4 Sep 2018 17:40

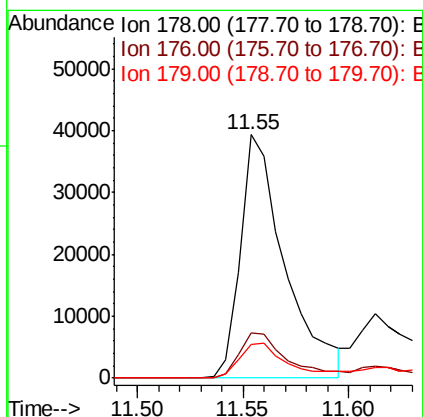
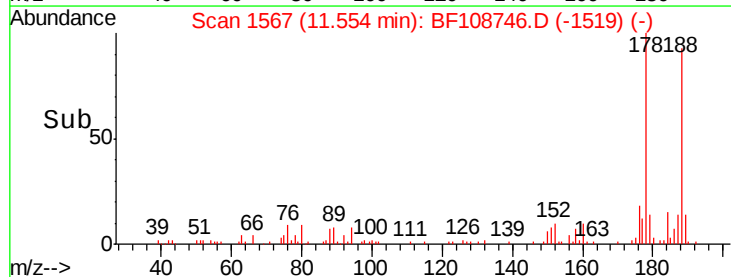
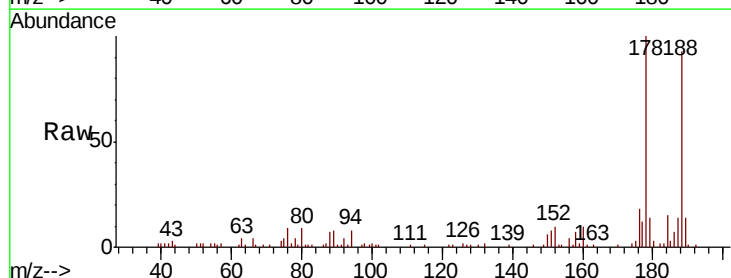
Instrument :  
BNA\_F  
ClientSampled :

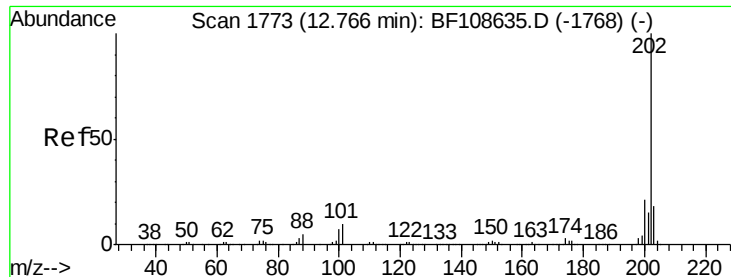
Tot Ion:188 Resp: 292038  
Ion Ratio Lower Upper  
188 100  
94 8.1 8.5 12.7#  
80 8.5 9.2 13.8#



#70  
Phenanthrene  
Concen: 3.892 ng  
RT: 11.55 min Scan# 1567  
Delta R.T. -0.02 min  
Lab File: BF108746.D  
Acq: 4 Sep 2018 17:40

Tgt Ion:178 Resp: 57376  
Ion Ratio Lower Upper  
178 100  
176 18.5 15.8 23.8  
179 13.8 13.0 19.6

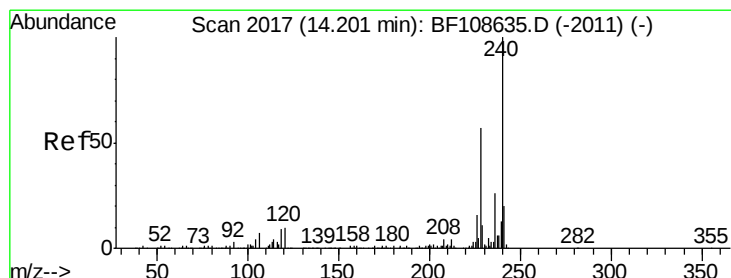
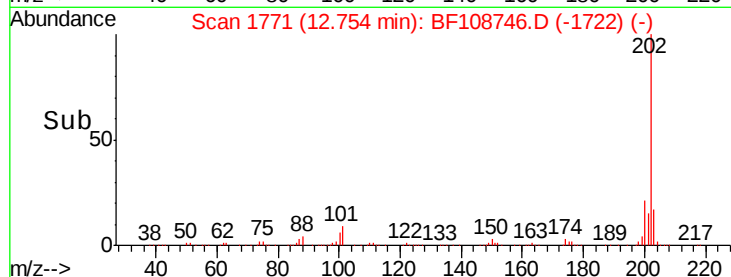
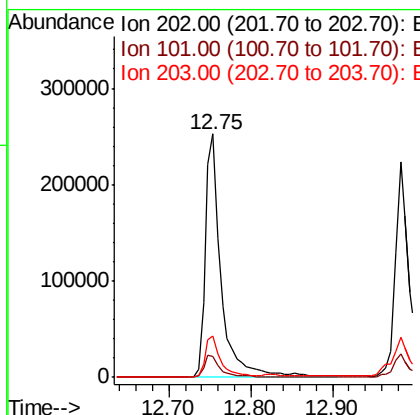
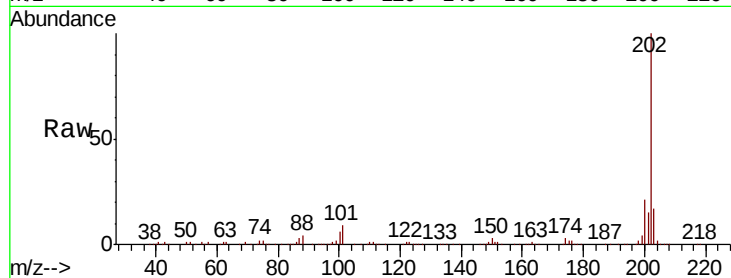




#74  
 Fluoranthene  
 Concen: 20.555 ng  
 RT: 12.75 min Scan# 1771  
 Delta R.T. -0.01 min  
 Lab File: BF108746.D  
 Acq: 4 Sep 2018 17:40

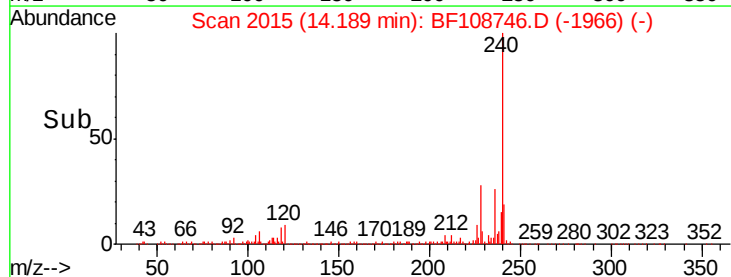
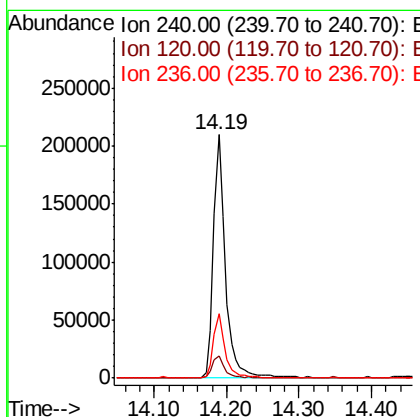
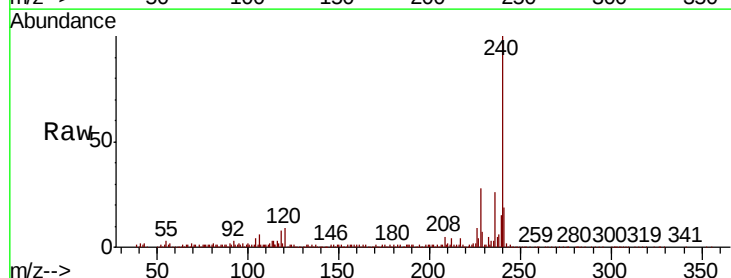
Instrument :  
 BNA\_F  
 ClientSampleId :

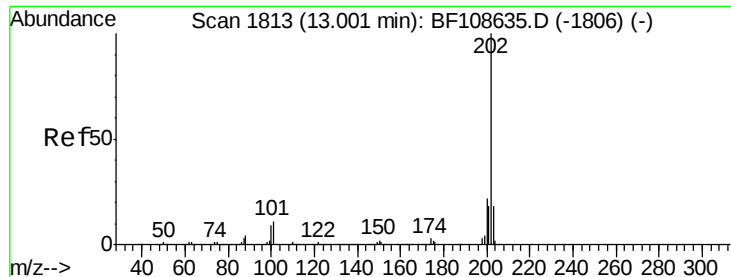
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 8.7   | 0.0   | 34.1  |
| 203     | 17.0  | 0.0   | 38.1  |



#75  
 Chrysene-d12  
 Concen: 20.000 ng  
 RT: 14.19 min Scan# 2015  
 Delta R.T. -0.01 min  
 Lab File: BF108746.D  
 Acq: 4 Sep 2018 17:40

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 240     | 100   |       |       |
| 120     | 9.0   | 9.5   | 14.3# |
| 236     | 26.2  | 20.7  | 31.1  |





#77

Pvrene

Concen: 15.248 ng

RT: 12.98 min Scan# 1810

Delta R.T. -0.02 min

Lab File: BF108746.D

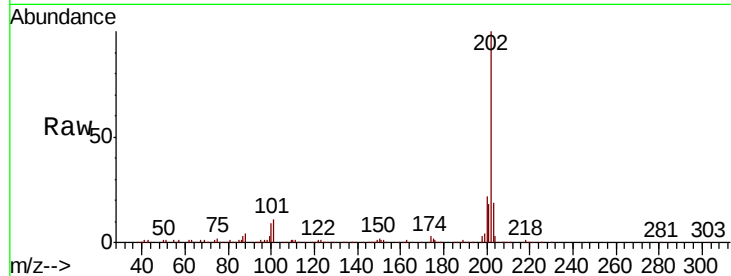
Acq: 4 Sep 2018 17:40

Instrument :

BNA\_F

ClientSampleId :

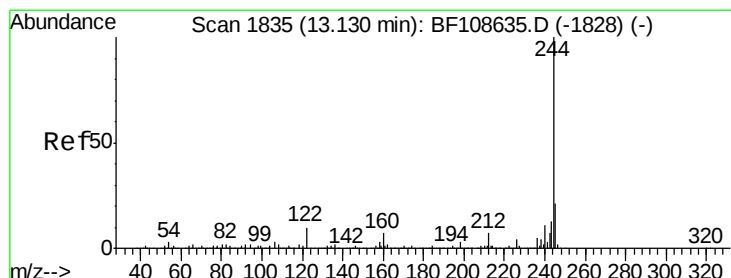
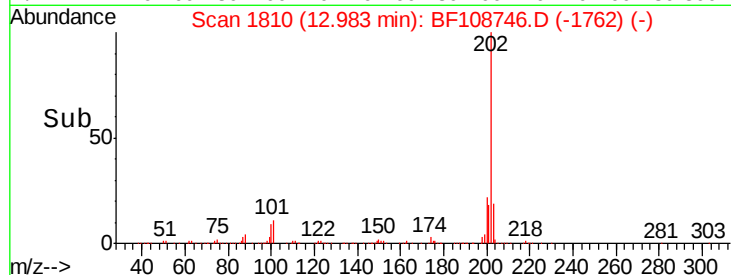
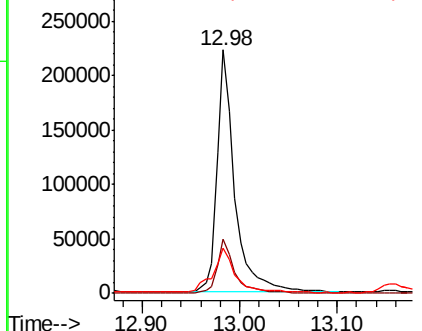
|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 202   | Resp: | 281367 |
| Ion      | Ratio | Lower | Upper  |
| 202      | 100   |       |        |
| 200      | 22.0  | 17.4  | 26.2   |
| 203      | 18.6  | 14.3  | 21.5   |



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: 11.243 ng

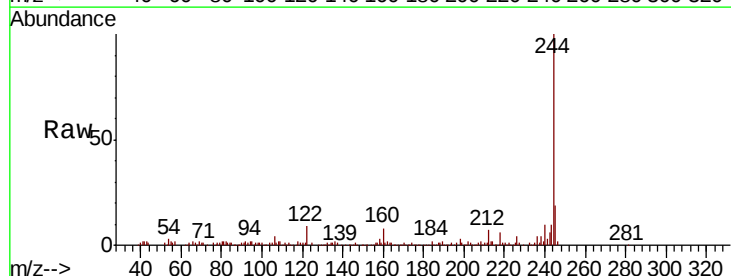
RT: 13.11 min Scan# 1832

Delta R.T. -0.02 min

Lab File: BF108746.D

Acq: 4 Sep 2018 17:40

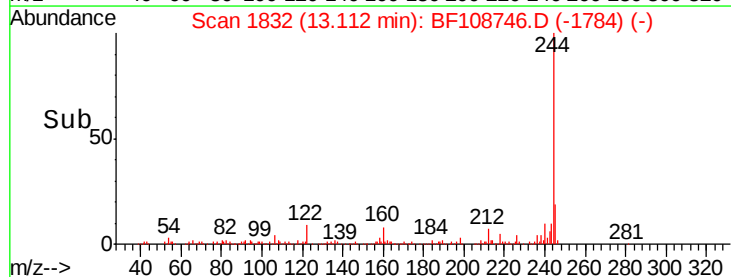
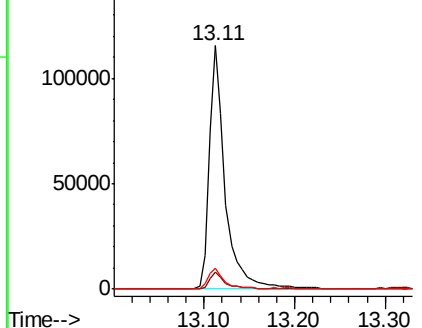
|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 244   | Resp: | 142042 |
| Ion      | Ratio | Lower | Upper  |
| 244      | 100   |       |        |
| 212      | 6.9   | 5.4   | 8.0    |
| 122      | 8.8   | 11.0  | 16.4#  |

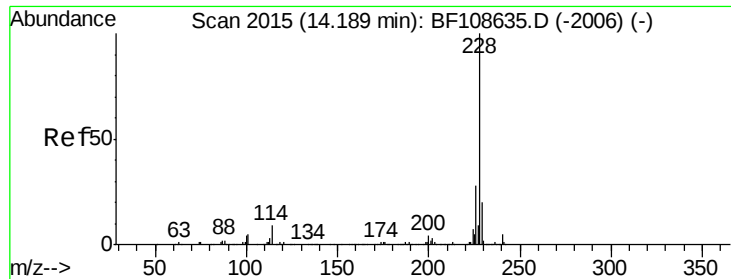


Abundance Ion 244.00 (243.70 to 244.70): E

Ion 212.00 (211.70 to 212.70): E

Ion 122.00 (121.70 to 122.70): E

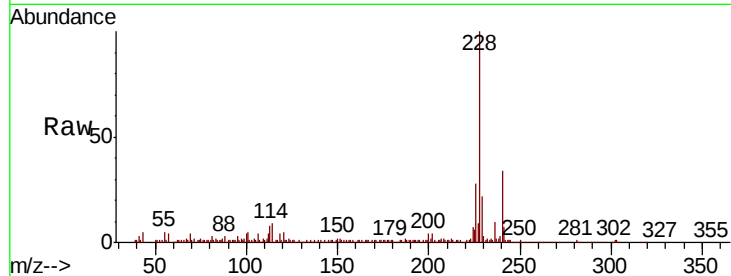




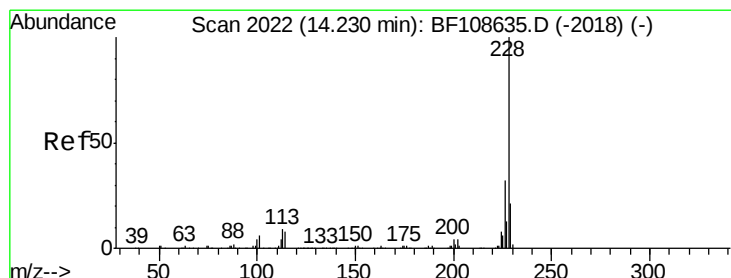
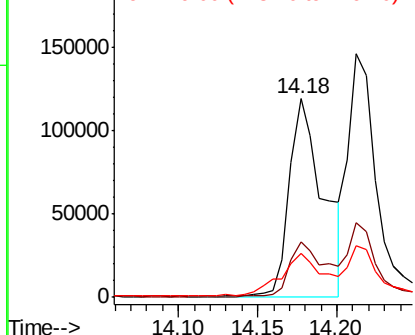
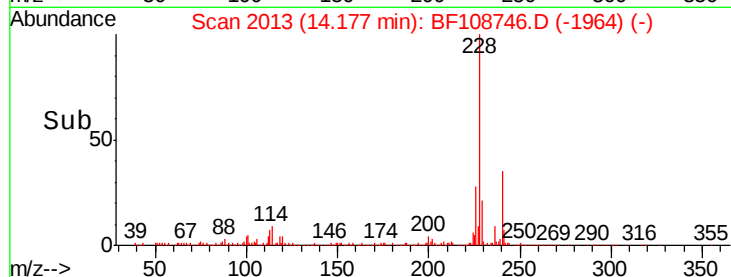
#80  
Benzo(a)anthracene  
Concen: 11.770 ng  
RT: 14.18 min Scan# 2013  
Delta R.T. -0.01 min  
Lab File: BF108746.D  
Acq: 4 Sep 2018 17:40

Instrument :  
BNA\_F  
ClientSampleId :

Tot Ion:228 Resp: 176123  
Ion Ratio Lower Upper  
228 100  
226 28.2 22.6 33.8  
229 22.0 15.8 23.6

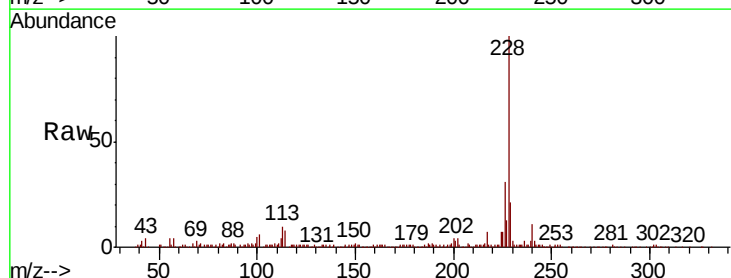


Abundance Ion 228.00 (227.70 to 228.70): E  
Ion 226.00 (225.70 to 226.70): E  
Ion 229.00 (228.70 to 229.70): E

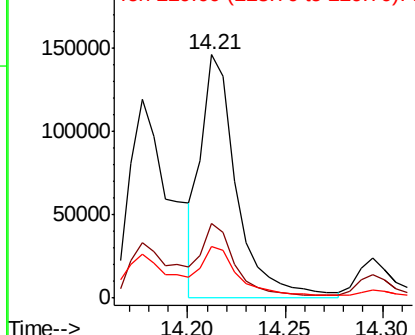
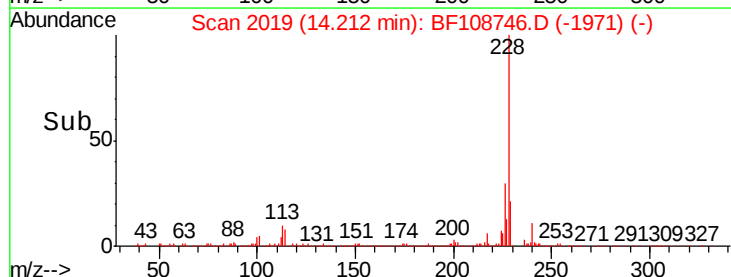


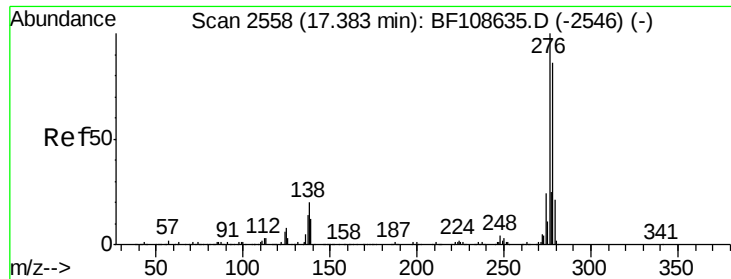
#82  
Chrysene  
Concen: 12.777 ng  
RT: 14.21 min Scan# 2019  
Delta R.T. -0.02 min  
Lab File: BF108746.D  
Acq: 4 Sep 2018 17:40

Tgt Ion:228 Resp: 183876  
Ion Ratio Lower Upper  
228 100  
226 30.5 25.0 37.6  
229 21.4 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

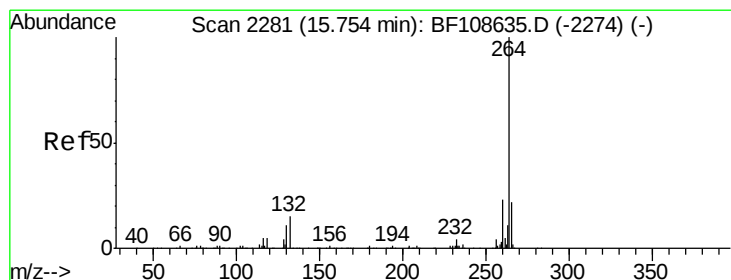
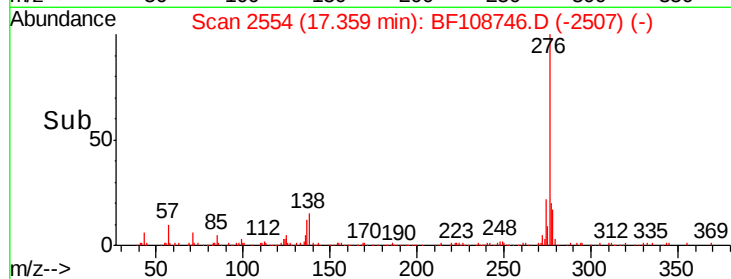
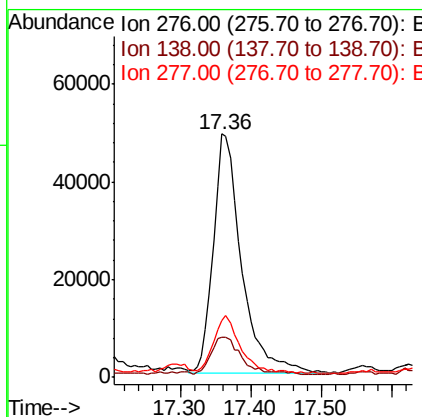
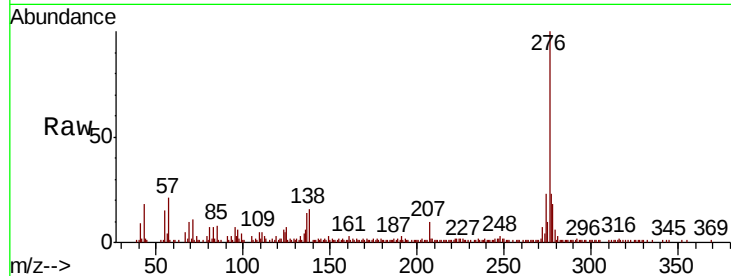




#85  
 Indeno(1,2,3-cd)pyrene  
 Concen: 13.503 ng  
 RT: 17.36 min Scan# 2554  
 Delta R.T. -0.02 min  
 Lab File: BF108746.D  
 Acq: 4 Sep 2018 17:40

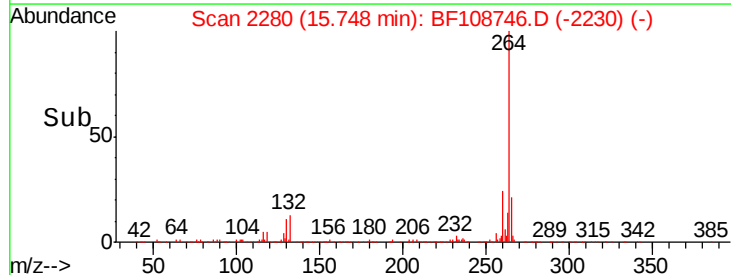
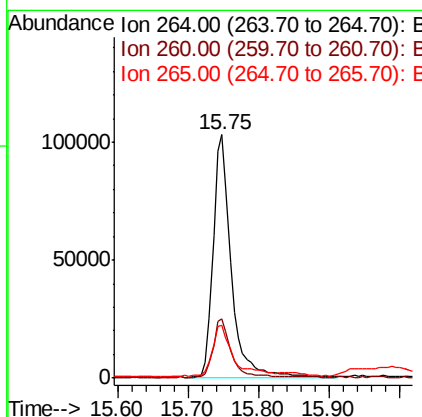
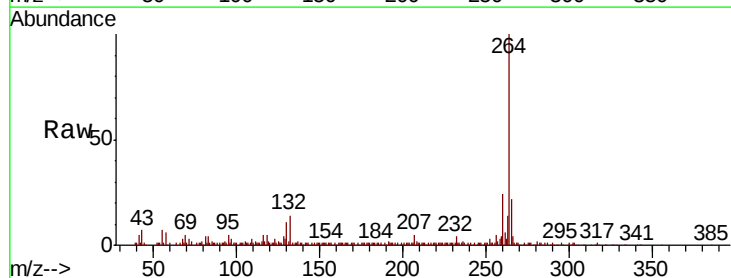
Instrument :  
 BNA\_F  
 ClientSampleId :

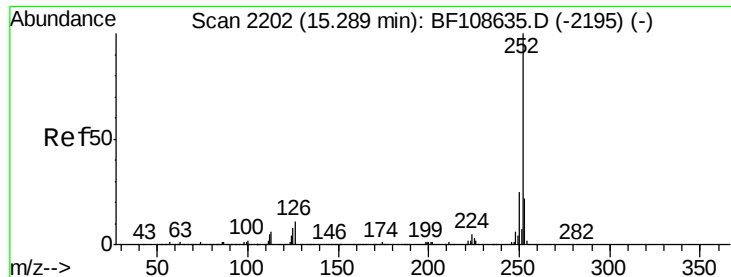
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 17.6  | 25.0  | 37.6# |
| 277     | 23.7  | 20.1  | 30.1  |



#86  
 Perylene-d12  
 Concen: 20.000 ng  
 RT: 15.75 min Scan# 2280  
 Delta R.T. -0.01 min  
 Lab File: BF108746.D  
 Acq: 4 Sep 2018 17:40

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 24.4  | 19.2  | 28.8  |
| 265     | 21.8  | 17.5  | 26.3  |





#87

Benzo(b)fluoranthene

Concen: 32.902 ng

RT: 15.28 min Scan# 2200

Delta R.T. -0.01 min

Lab File: BF108746.D

Acq: 4 Sep 2018 17:40

Instrument :

BNA\_F

ClientSampleId :

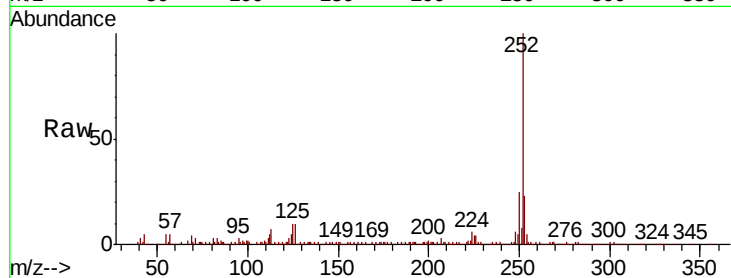
Tot Ion:252 Resp: 367665

Ion Ratio Lower Upper

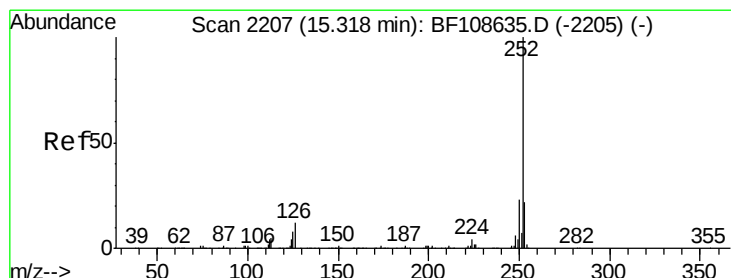
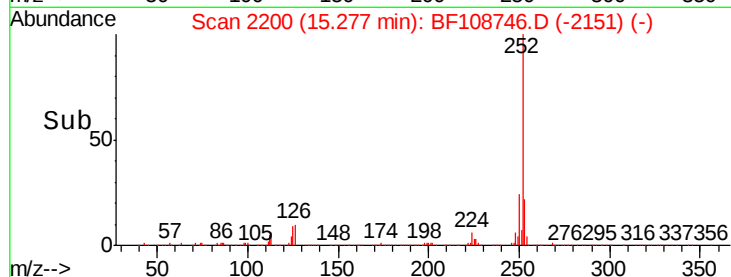
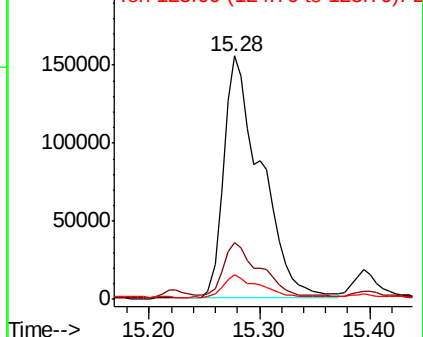
252 100

253 23.4 17.0 25.6

125 10.0 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: 33.214 ng

RT: 15.28 min Scan# 2200

Delta R.T. -0.04 min

Lab File: BF108746.D

Acq: 4 Sep 2018 17:40

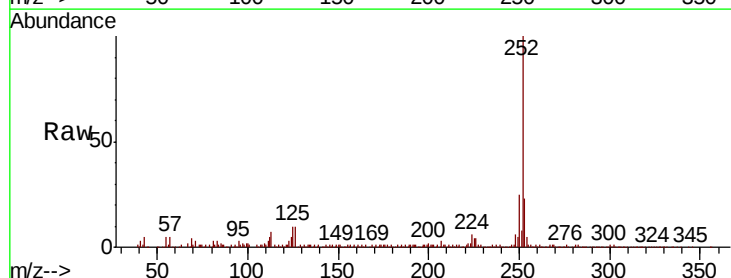
Tgt Ion:252 Resp: 367665

Ion Ratio Lower Upper

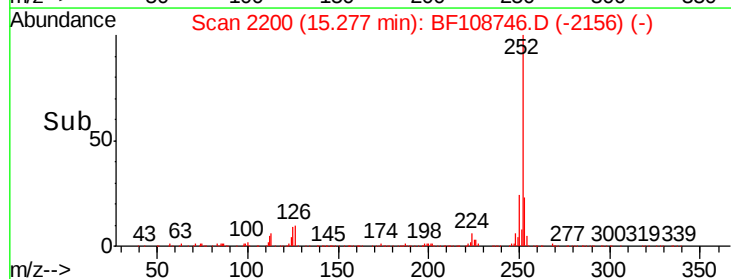
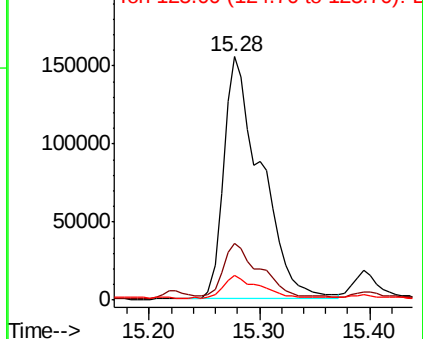
252 100

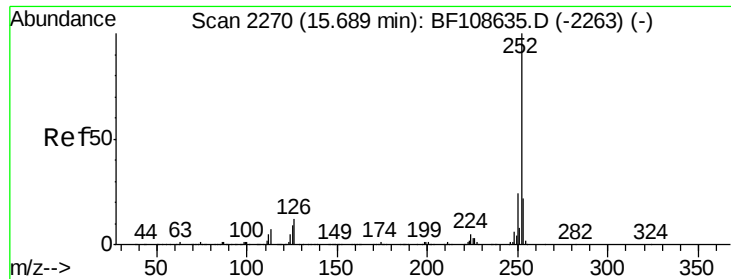
253 23.4 17.9 26.9

125 10.0 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: 16.184 ng

RT: 15.68 min Scan# 2268

Delta R.T. -0.01 min

Lab File: BF108746.D

Acq: 4 Sep 2018 17:40

Instrument :

BNA\_F

ClientSampleId :

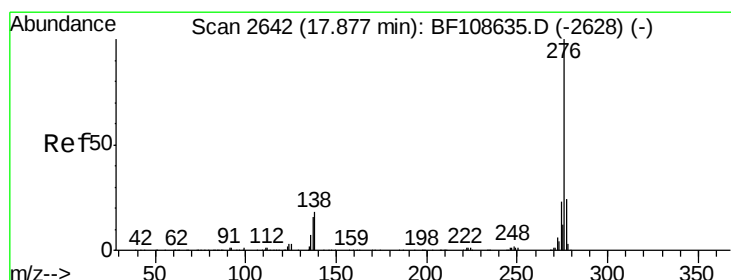
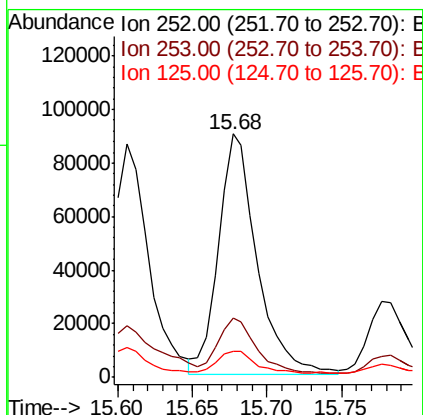
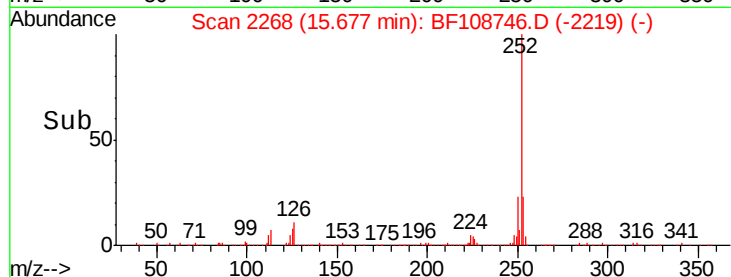
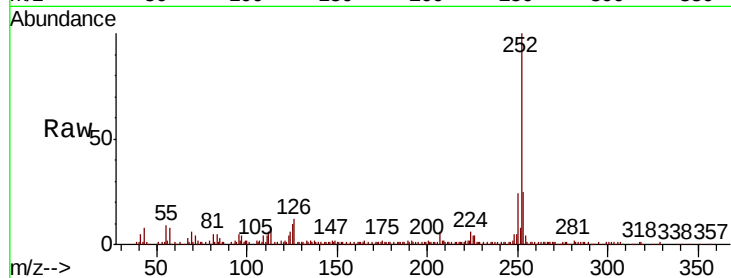
Tot Ion:252 Resp: 163434

Ion Ratio Lower Upper

252 100

253 24.5 17.1 25.7

125 10.4 9.8 14.6



#91

Benzo(g,h,i)perylene

Concen: 18.197 ng

RT: 17.86 min Scan# 2639

Delta R.T. -0.02 min

Lab File: BF108746.D

Acq: 4 Sep 2018 17:40

Tgt Ion:276 Resp: 142642

Ion Ratio Lower Upper

276 100

277 24.1 17.9 26.9

138 18.3 21.8 32.8#

