

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080219\  
 Data File : BF115952.D  
 Acq On : 2 Aug 2019 17:51  
 Operator : HP/JU  
 Sample : K4131-11  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 1S-E1-E4-COMP-(0-1)

Quant Time: Aug 02 23:42:42 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF073019.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Jul 31 15:31:51 2019  
 Response via : Initial Calibration

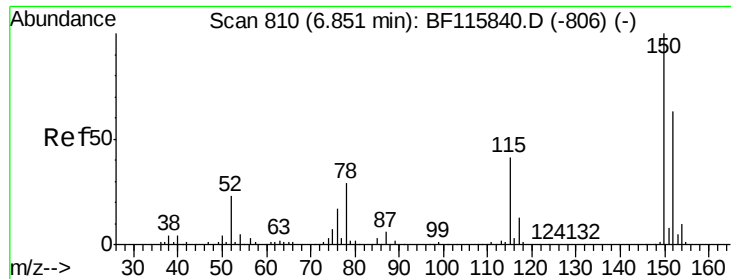
| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.85  | 152  | 125684   | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 8.13  | 136  | 501614   | 20.00 | ng    | 0.00     |
| 39) Acenaphthene-d10      | 9.89  | 164  | 268223   | 20.00 | ng    | 0.00     |
| 64) Phenanthrene-d10      | 11.38 | 188  | 493956   | 20.00 | ng    | 0.00     |
| 76) Chrysene-d12          | 14.02 | 240  | 442854   | 20.00 | ng    | 0.00     |
| 87) Perylene-d12          | 15.49 | 264  | 441669   | 20.00 | ng    | 0.00     |

|                             |       |     |         |       |    |      |
|-----------------------------|-------|-----|---------|-------|----|------|
| System Monitoring Compounds |       |     |         |       |    |      |
| 5) 2-Fluorophenol           | 5.47  | 112 | 575617  | 76.67 | ng | 0.00 |
| 7) Phenol-d6                | 6.48  | 99  | 758127  | 80.04 | ng | 0.00 |
| 23) Nitrobenzene-d5         | 7.41  | 82  | 466710  | 53.71 | ng | 0.00 |
| 42) 2,4,6-Tribromophenol    | 10.68 | 330 | 191398  | 73.60 | ng | 0.00 |
| 45) 2-Fluorobiphenyl        | 9.21  | 172 | 871092  | 60.83 | ng | 0.00 |
| 79) Terphenyl-d14           | 12.96 | 244 | 1055023 | 50.20 | ng | 0.00 |

|                                |       |     |        |        |    |      |
|--------------------------------|-------|-----|--------|--------|----|------|
| Target Compounds               |       |     |        | Qvalue |    |      |
| 19) n-Nitroso-di-n-propylamine | 7.41  | 70  | 62299  | 10.614 | ng | # 79 |
| 25) Isophorone                 | 7.41  | 82  | 466707 | 28.087 | ng | # 66 |
| 50) Dimethylphthalate          | 9.60  | 163 | 58456  | 3.201  | ng | 100  |
| 51) 2,6-Dinitrotoluene         | 9.89  | 165 | 34064  | 8.583  | ng | # 28 |
| 57) 2,4-Dinitrotoluene         | 9.89  | 165 | 34065  | 6.447  | ng | # 24 |
| 67) 4-Bromophenyl-phenylether  | 10.68 | 248 | 11501  | 2.175  | ng | # 1  |
| 71) Phenanthrene               | 11.40 | 178 | 350493 | 13.880 | ng | 99   |
| 72) Anthracene                 | 11.46 | 178 | 100508 | 3.933  | ng | 98   |
| 75) Fluoranthene               | 12.59 | 202 | 735669 | 27.828 | ng | 98   |
| 78) Pyrene                     | 12.82 | 202 | 643581 | 19.279 | ng | 99   |
| 81) Benzo(a)anthracene         | 14.01 | 228 | 383714 | 13.556 | ng | 99   |
| 83) Chrysene                   | 14.04 | 228 | 313044 | 11.392 | ng | 98   |
| 86) Indeno(1,2,3-cd)pyrene     | 16.97 | 276 | 129002 | 5.589  | ng | 98   |
| 88) Benzo(b)fluoranthene       | 15.06 | 252 | 493133 | 19.310 | ng | # 97 |
| 89) Benzo(k)fluoranthene       | 15.06 | 252 | 493133 | 19.825 | ng | 99   |
| 90) Benzo(a)pyrene             | 15.43 | 252 | 249437 | 10.926 | ng | 98   |
| 92) Benzo(a,h,i)perylene       | 17.42 | 276 | 120060 | 6.186  | ng | 99   |

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



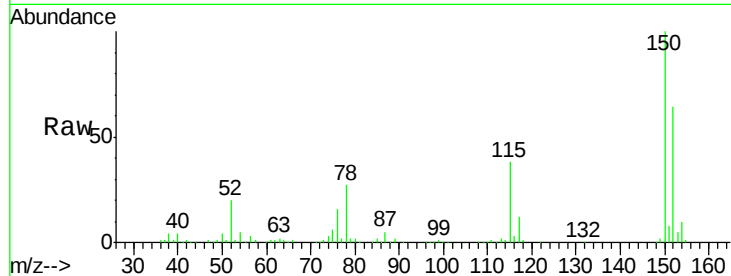


#1

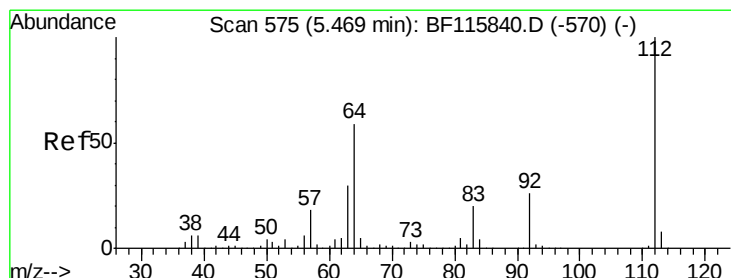
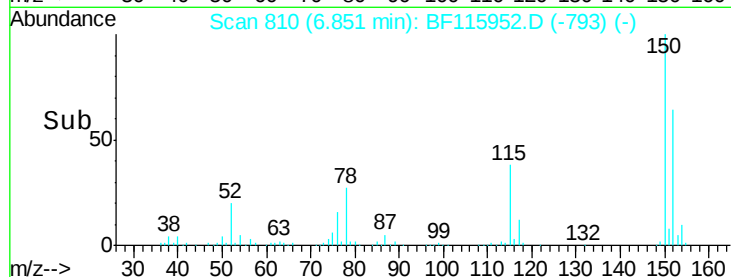
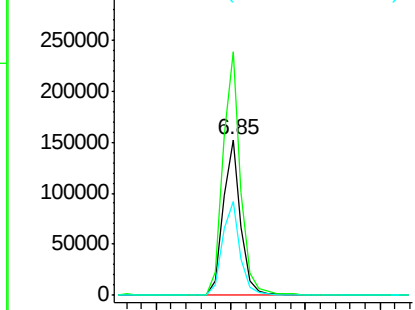
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.85 min Scan# 810  
Delta R.T. 0.00 min  
Lab File: BF115952.D  
Acq: 2 Aug 2019 17:51

Instrument :  
BNA\_F  
ClientSampleId :  
1S-E1-E4-COMP-(0-1)

Tot Ion:152 Resp: 125684  
Ion Ratio Lower Upper  
152 100  
150 156.2 127.4 191.0  
115 60.1 51.8 77.8



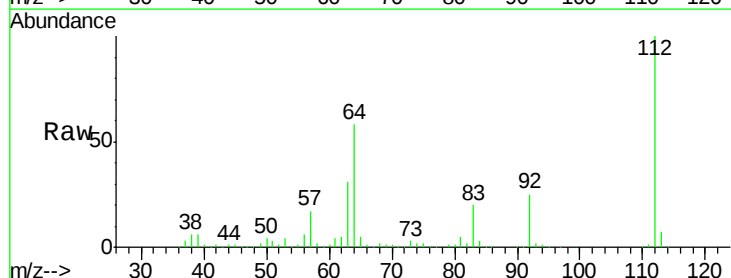
Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 115.00 (114.70 to 115.70): E



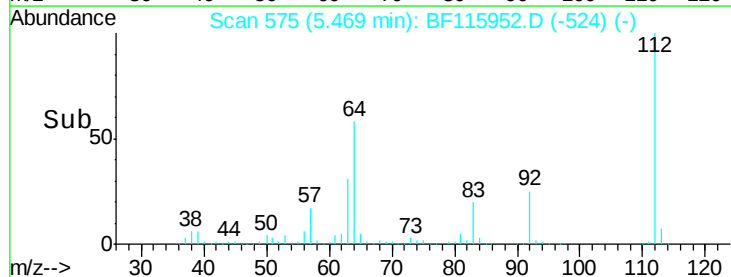
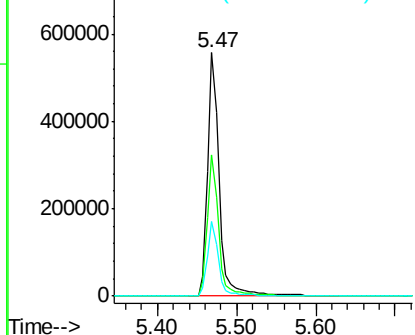
#5

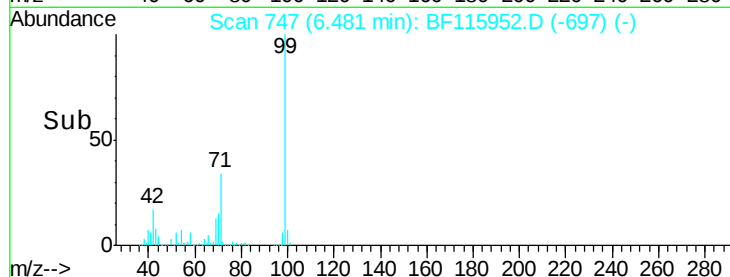
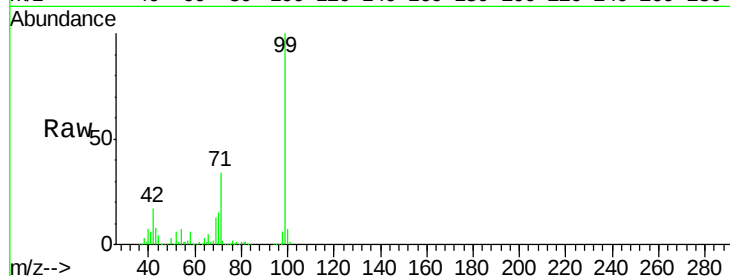
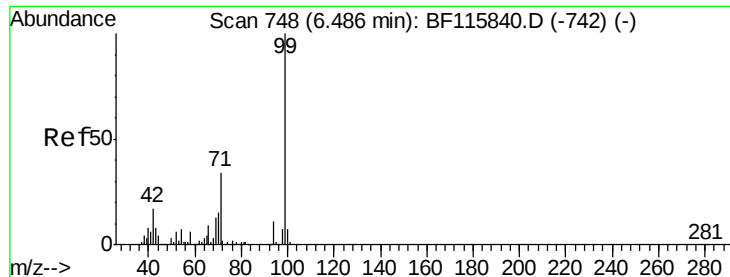
2-Fluorophenol  
Concen: 76.670 ng  
RT: 5.47 min Scan# 575  
Delta R.T. 0.00 min  
Lab File: BF115952.D  
Acq: 2 Aug 2019 17:51

Tgt Ion:112 Resp: 575617  
Ion Ratio Lower Upper  
112 100  
64 58.2 46.8 70.2  
63 30.6 24.2 36.2



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: 80.036 ng

RT: 6.48 min Scan# 747

Delta R.T. -0.01 min

Lab File: BF115952.D

Acq: 2 Aug 2019 17:51

Instrument :

BNA\_F

ClientSampleId :

1S-E1-E4-COMP-(0-1)

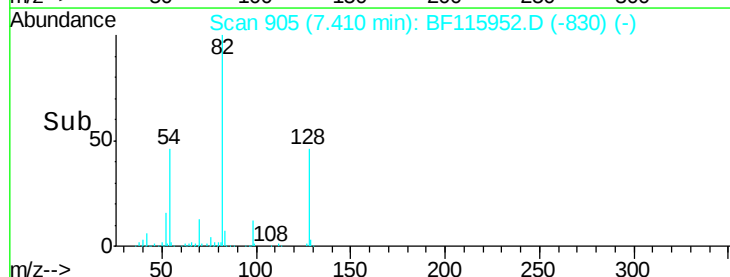
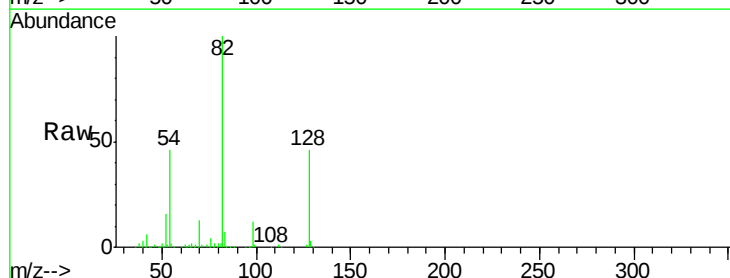
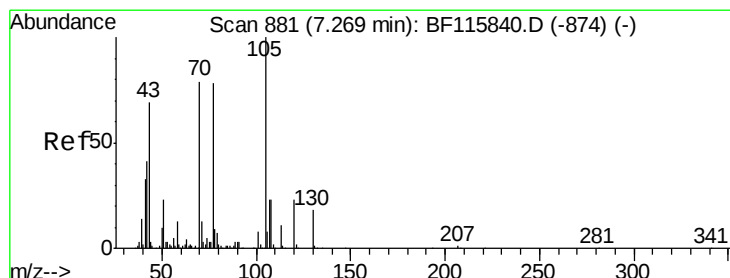
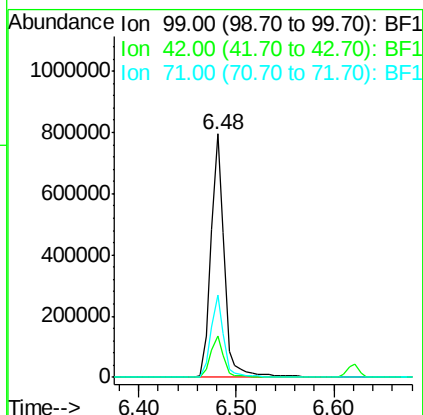
Tot Ion: 99 Resp: 758127

Ion Ratio Lower Upper

99 100

42 17.0 13.8 20.6

71 33.7 27.1 40.7



#19

n-Nitroso-di-n-propylamine

Concen: 10.614 ng

RT: 7.41 min Scan# 905

Delta R.T. 0.14 min

Lab File: BF115952.D

Acq: 2 Aug 2019 17:51

Tgt Ion: 70 Resp: 62299

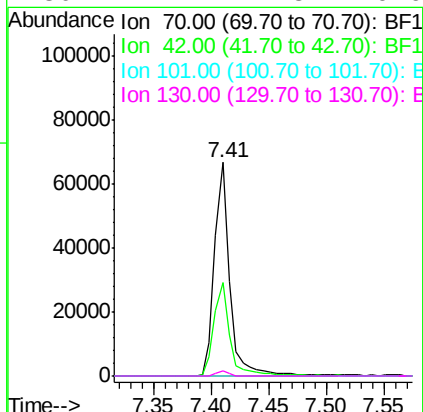
Ion Ratio Lower Upper

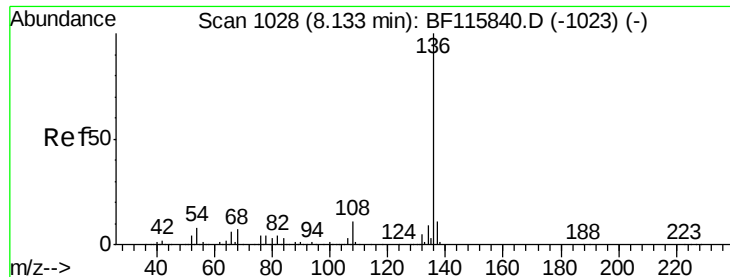
70 100

42 44.0 41.8 62.8

101 0.0 7.7 11.5#

130 2.4 17.8 26.6#





#21

Naphthalene-d8

Concen: 20.000 ng

RT: 8.13 min Scan# 1028

Delta R.T. 0.00 min

Lab File: BF115952.D

Acq: 2 Aug 2019 17:51

Instrument :

BNA\_F

ClientSampleId :

1S-E1-E4-COMP-(0-1)

Tot Ion:136 Resp: 501614

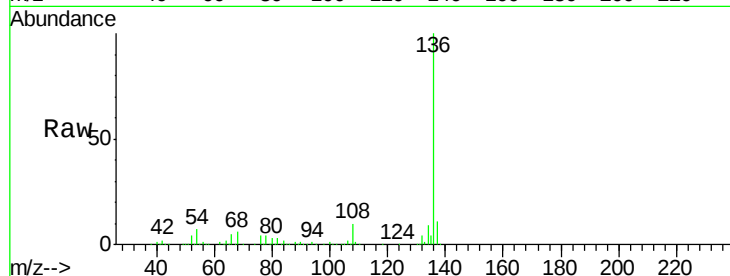
Ion Ratio Lower Upper

136 100

137 11.1 9.1 13.7

54 6.5 6.1 9.1

68 5.8 5.4 8.2

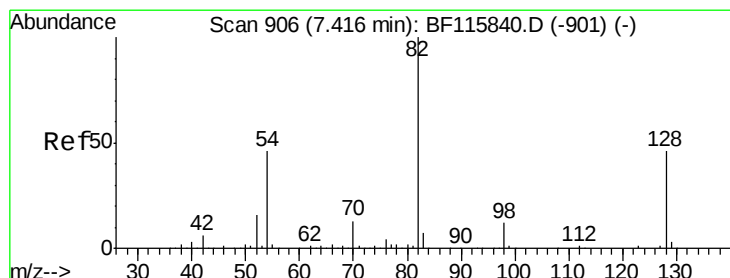
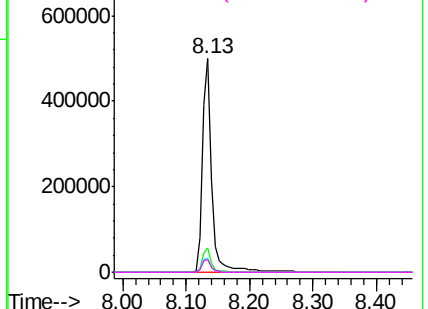
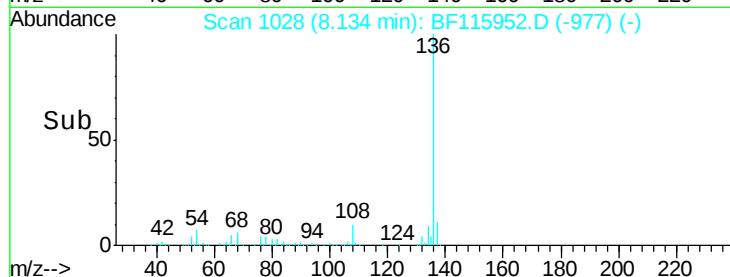


Abundance Ion 136.00 (135.70 to 136.70): E

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: 53.707 ng

RT: 7.41 min Scan# 905

Delta R.T. -0.01 min

Lab File: BF115952.D

Acq: 2 Aug 2019 17:51

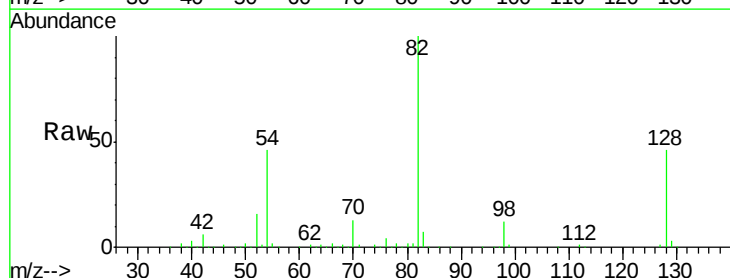
Tgt Ion: 82 Resp: 466710

Ion Ratio Lower Upper

82 100

128 45.7 36.6 55.0

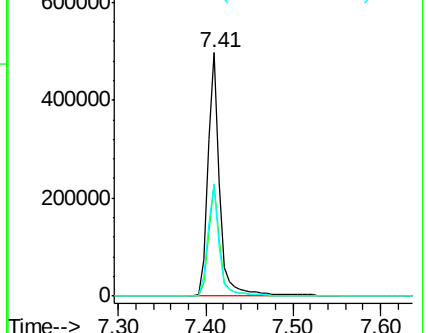
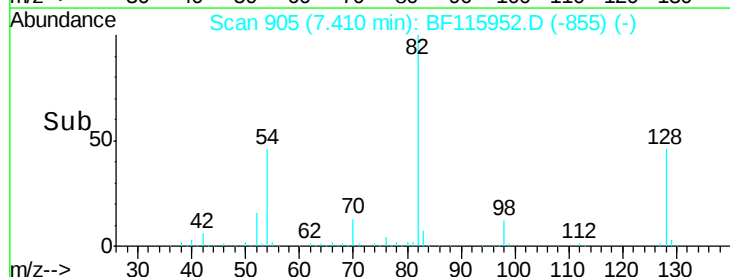
54 45.7 36.6 55.0

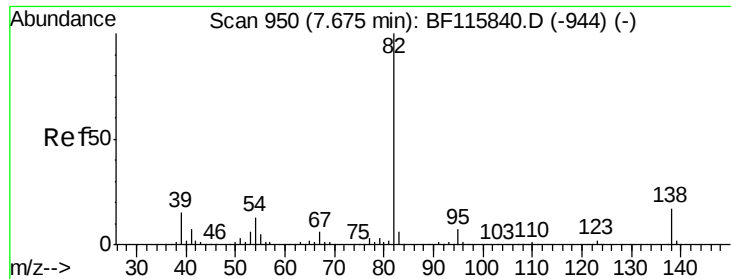


Abundance Ion 82.00 (81.70 to 82.70): BF1

Ion 128.00 (127.70 to 128.70): E

Ion 54.00 (53.70 to 54.70): BF1





#25

Isophorone

Concen: 28.087 ng

RT: 7.41 min Scan# 905

Delta R.T. -0.26 min

Lab File: BF115952.D

Acq: 2 Aug 2019 17:51

Instrument :

BNA\_F

ClientSampleId :

1S-E1-E4-COMP-(0-1)

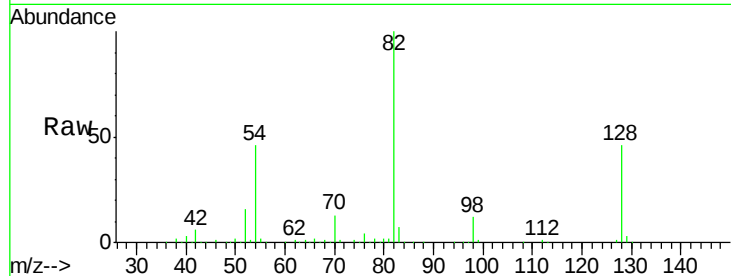
Tot Ion: 82 Resp: 466707

Ion Ratio Lower Upper

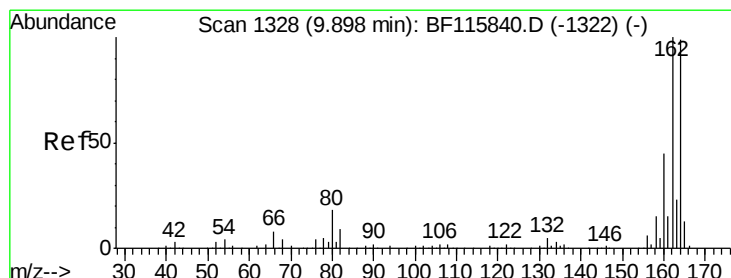
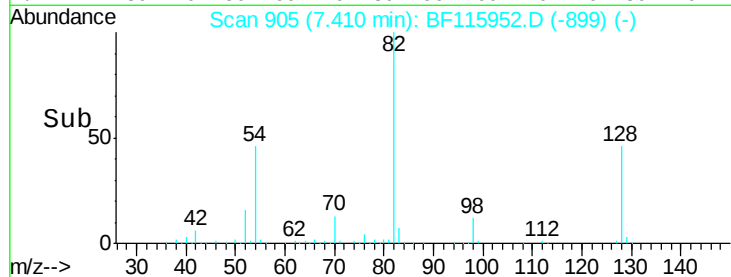
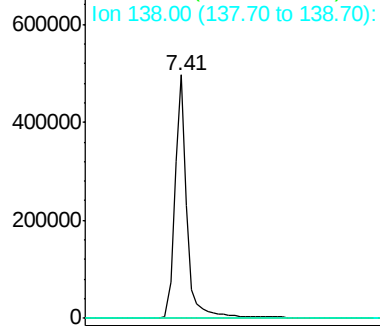
82 100

95 0.0 5.5 8.3#

138 0.0 13.9 20.9#



Abundance Ion 82.00 (81.70 to 82.70): BF115952.D (-899) (-)



#39

Acenaphthene-d10

Concen: 20.000 ng

RT: 9.89 min Scan# 1327

Delta R.T. -0.01 min

Lab File: BF115952.D

Acq: 2 Aug 2019 17:51

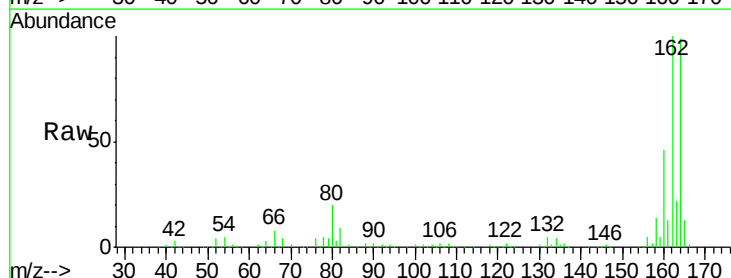
Tgt Ion: 164 Resp: 268223

Ion Ratio Lower Upper

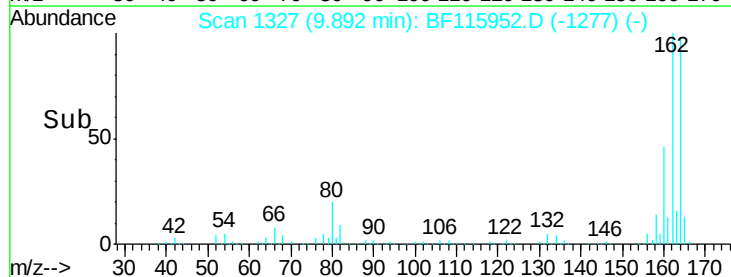
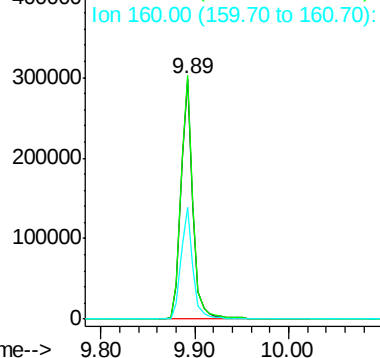
164 100

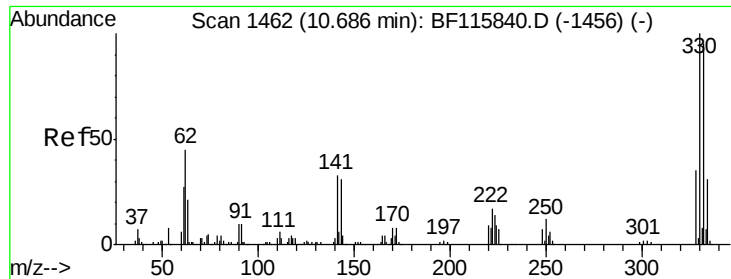
162 101.3 80.8 121.2

160 46.3 36.2 54.4



Abundance Ion 164.00 (163.70 to 164.70): BF115952.D (-1277) (-)

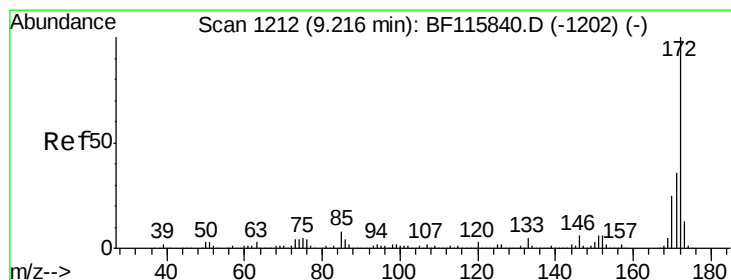
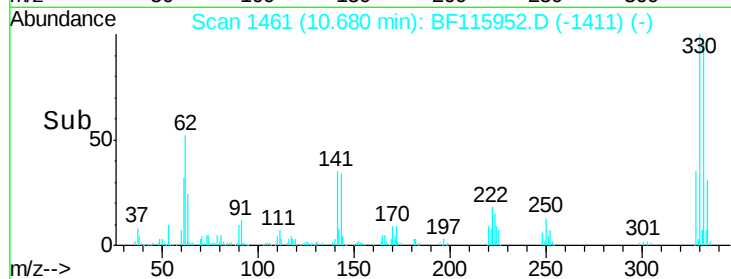
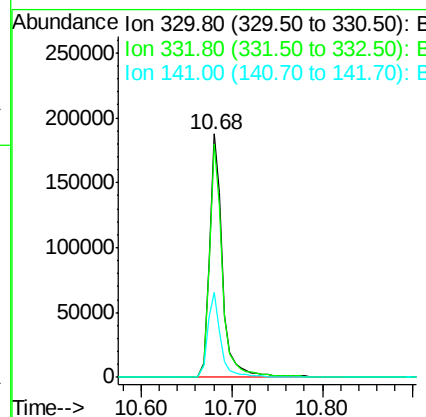
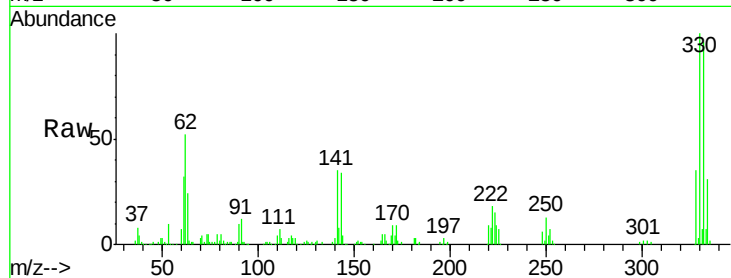




#42  
 2,4,6-Tribromophenol  
 Concen: 73.601 ng  
 RT: 10.68 min Scan# 1461  
 Delta R.T. -0.01 min  
 Lab File: BF115952.D  
 Acq: 2 Aug 2019 17:51

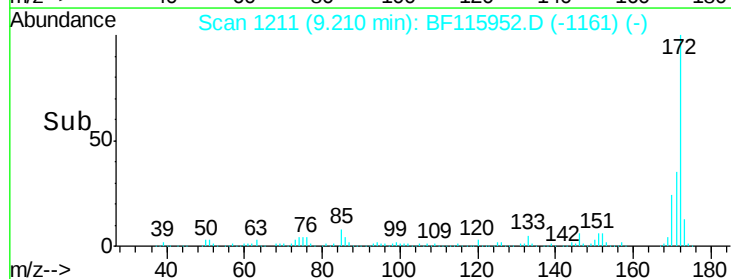
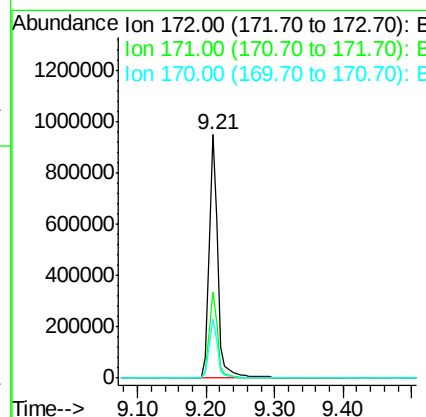
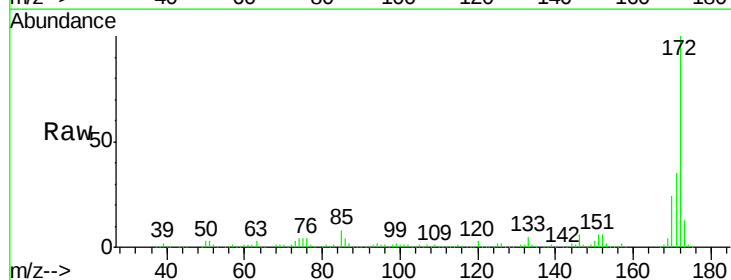
Instrument :  
 BNA\_F  
 ClientSampleId :  
 1S-E1-E4-COMP-(0-1)

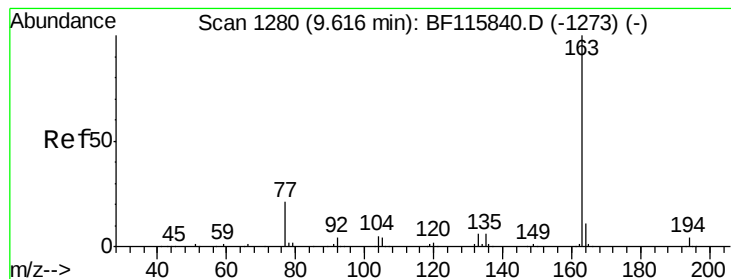
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 330     | 100   |       |       |
| 332     | 95.8  | 77.7  | 116.5 |
| 141     | 35.6  | 28.1  | 42.1  |



#45  
 2-Fluorobiphenyl  
 Concen: 60.831 ng  
 RT: 9.21 min Scan# 1211  
 Delta R.T. -0.01 min  
 Lab File: BF115952.D  
 Acq: 2 Aug 2019 17:51

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 35.5  | 29.1  | 43.7  |
| 170     | 24.5  | 20.1  | 30.1  |





#50

Dimethylphthalate

Concen: 3.201 ng

RT: 9.60 min Scan# 1278

Delta R.T. -0.01 min

Lab File: BF115952.D

Acq: 2 Aug 2019 17:51

Instrument :

BNA\_F

ClientSampleId :

1S-E1-E4-COMP-(0-1)

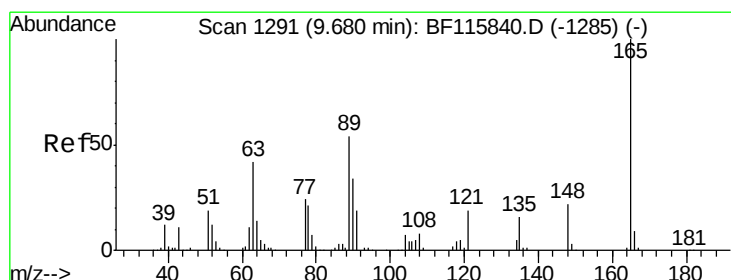
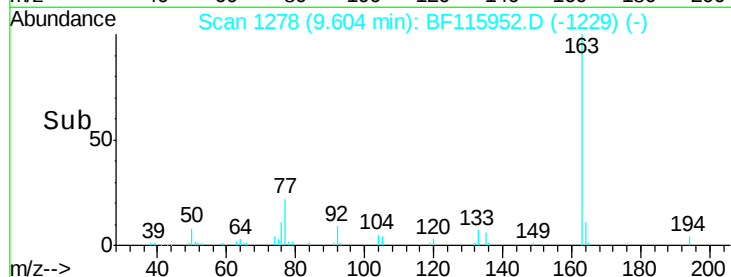
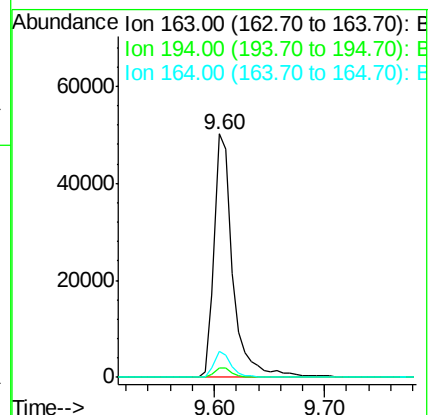
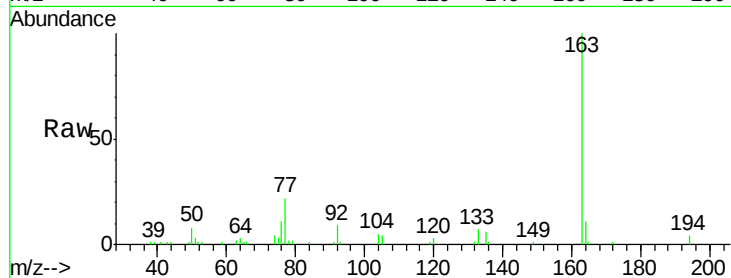
Tot Ion:163 Resp: 58456

Ion Ratio Lower Upper

163 100

194 3.8 3.0 4.6

164 10.5 8.4 12.6



#51

2,6-Dinitrotoluene

Concen: 8.583 ng

RT: 9.89 min Scan# 1327

Delta R.T. 0.21 min

Lab File: BF115952.D

Acq: 2 Aug 2019 17:51

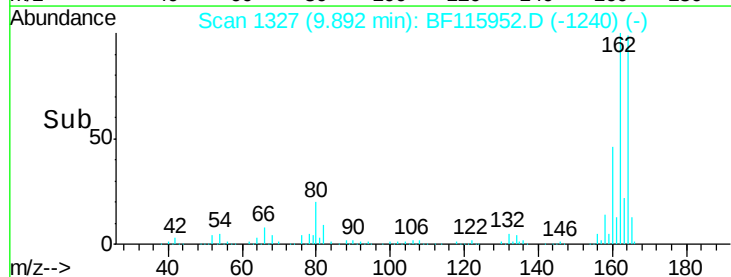
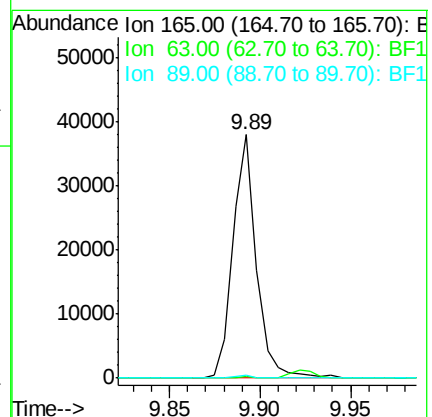
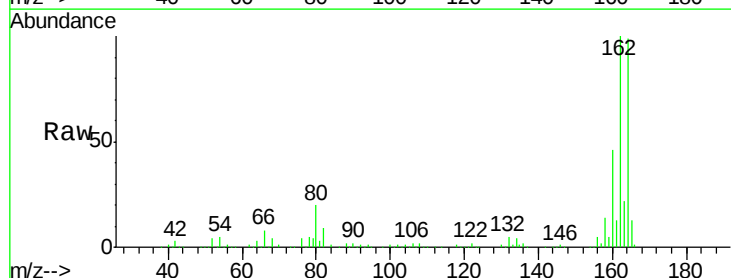
Tgt Ion:165 Resp: 34064

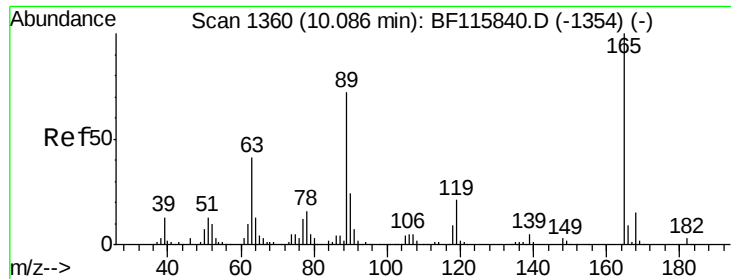
Ion Ratio Lower Upper

165 100

63 0.9 39.4 59.2#

89 1.3 43.0 64.6#

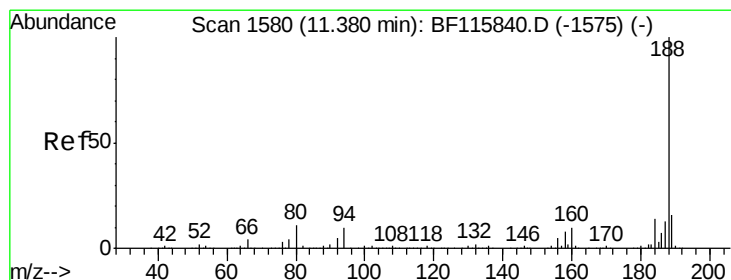
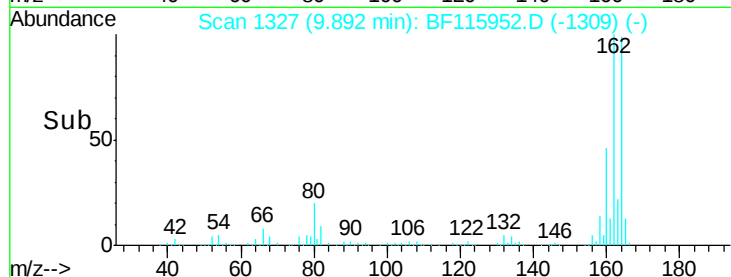
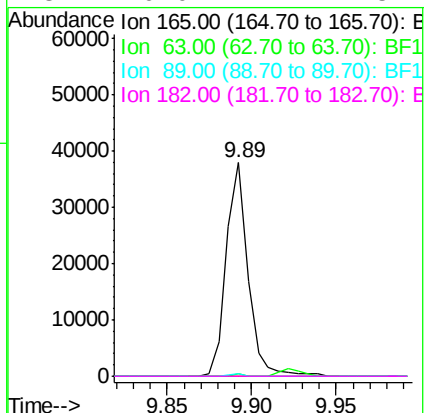
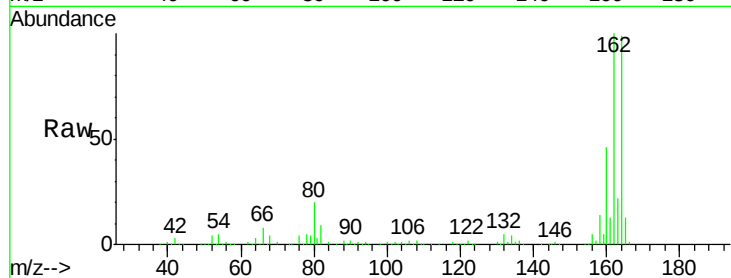




#57  
 2,4-Dinitrotoluene  
 Concen: 6.447 ng  
 RT: 9.89 min Scan# 1327  
 Delta R.T. -0.19 min  
 Lab File: BF115952.D  
 Acq: 2 Aug 2019 17:51

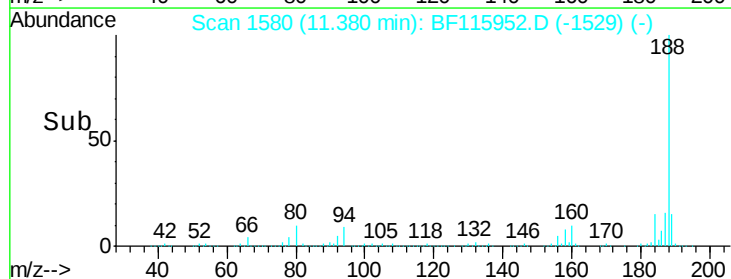
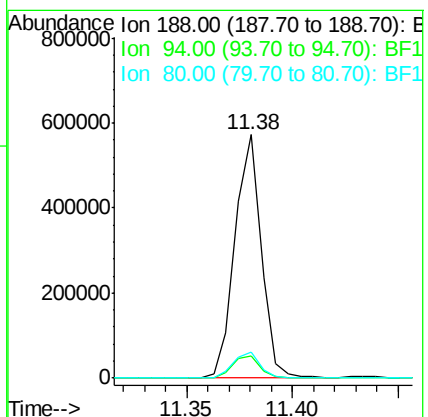
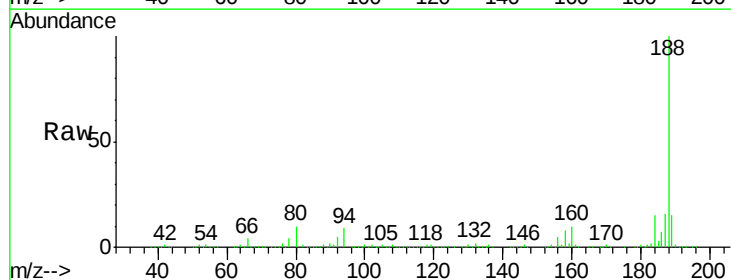
Instrument :  
 BNA\_F  
 ClientSampleId :  
 1S-E1-E4-COMP-(0-1)

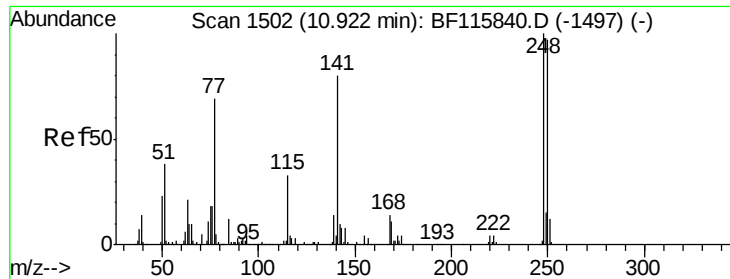
|             |       |            |
|-------------|-------|------------|
| Tot Ion:165 | Resp: | 34065      |
| Ion Ratio   | Lower | Upper      |
| 165         | 100   |            |
| 63          | 0.9   | 33.2 49.8# |
| 89          | 1.3   | 57.3 85.9# |
| 182         | 0.0   | 2.1 3.1#   |



#64  
 Phenanthrene-d10  
 Concen: 20.000 ng  
 RT: 11.38 min Scan# 1580  
 Delta R.T. 0.00 min  
 Lab File: BF115952.D  
 Acq: 2 Aug 2019 17:51

|             |       |          |
|-------------|-------|----------|
| Tgt Ion:188 | Resp: | 493956   |
| Ion Ratio   | Lower | Upper    |
| 188         | 100   |          |
| 94          | 9.4   | 8.0 12.0 |
| 80          | 10.4  | 8.6 12.8 |

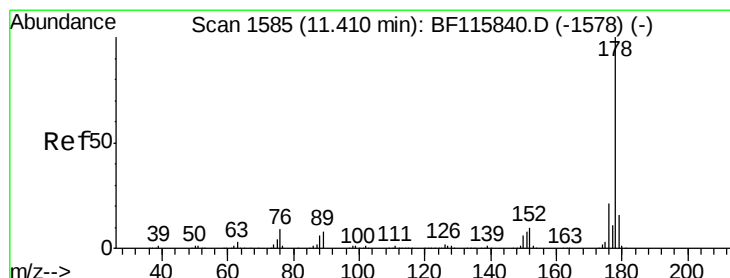
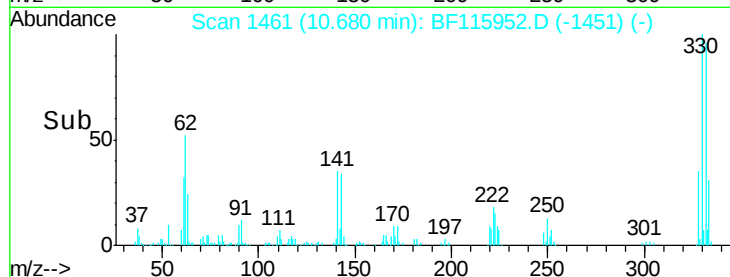
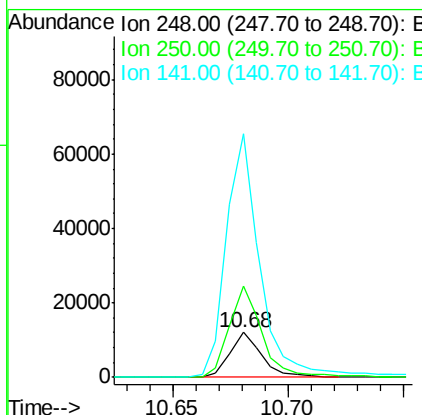
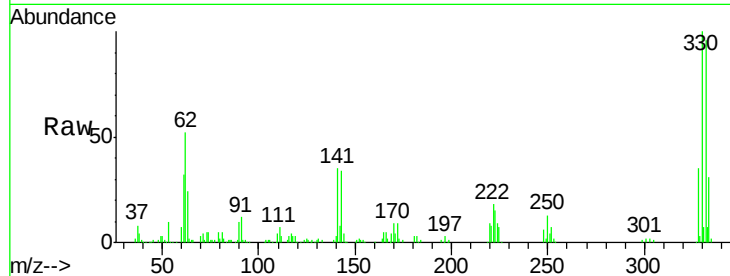




#67  
 4-Bromophenyl-phenylether  
 Concen: 2.175 ng  
 RT: 10.68 min Scan# 1461  
 Delta R.T. -0.24 min  
 Lab File: BF115952.D  
 Acq: 2 Aug 2019 17:51

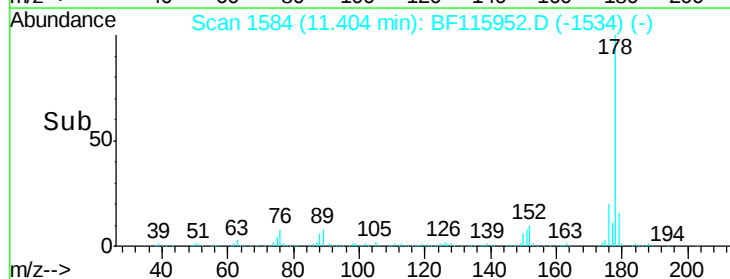
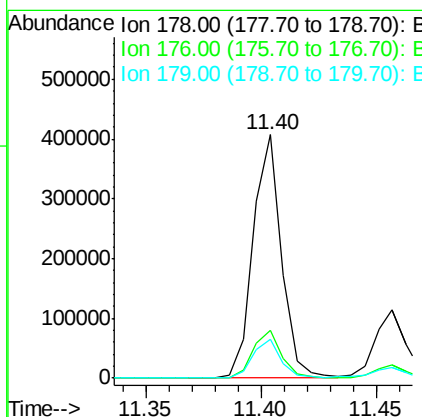
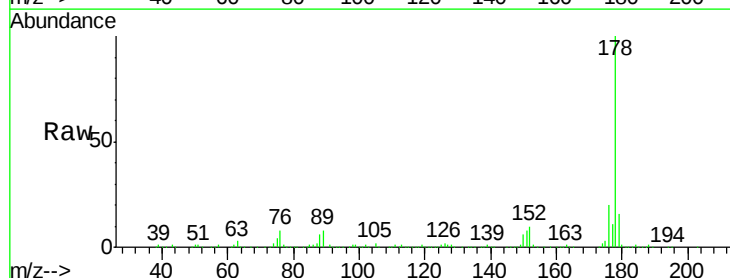
Instrument :  
 BNA\_F  
 ClientSampleId :  
 1S-E1-E4-COMP-(0-1)

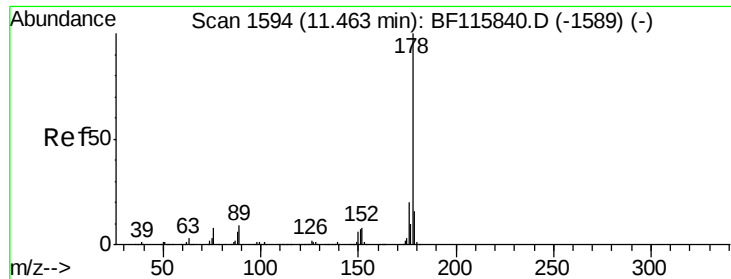
|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 248   | Resp: | 11501  |
| Ion      | Ratio | Lower | Upper  |
| 248      | 100   |       |        |
| 250      | 202.8 | 77.8  | 116.6# |
| 141      | 542.3 | 64.3  | 96.5#  |



#71  
 Phenanthrene  
 Concen: 13.880 ng  
 RT: 11.40 min Scan# 1584  
 Delta R.T. -0.01 min  
 Lab File: BF115952.D  
 Acq: 2 Aug 2019 17:51

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 178   | Resp: | 350493 |
| Ion      | Ratio | Lower | Upper  |
| 178      | 100   |       |        |
| 176      | 19.9  | 16.5  | 24.7   |
| 179      | 15.7  | 12.6  | 18.8   |





#72

Anthracene

Concen: 3.933 ng

RT: 11.46 min Scan# 1593

Delta R.T. -0.01 min

Lab File: BF115952.D

Acq: 2 Aug 2019 17:51

Instrument :

BNA\_F

ClientSampleId :

1S-E1-E4-COMP-(0-1)

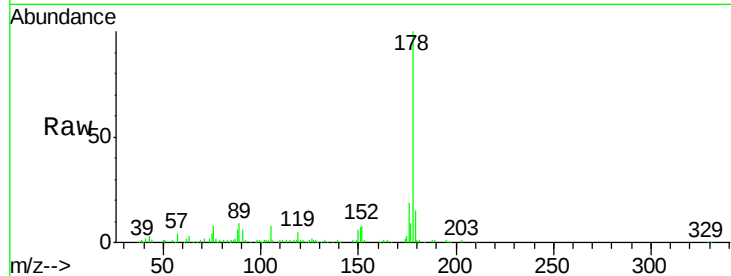
Tot Ion:178 Resp: 100508

Ion Ratio Lower Upper

178 100

176 18.7 15.7 23.5

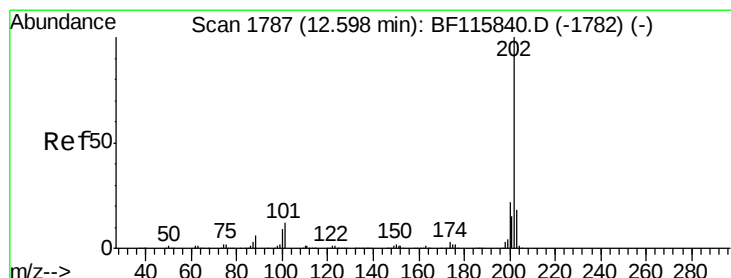
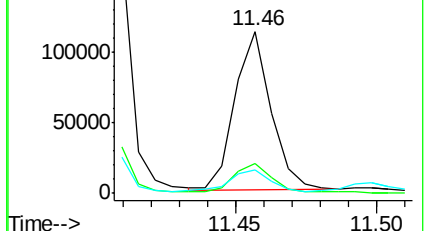
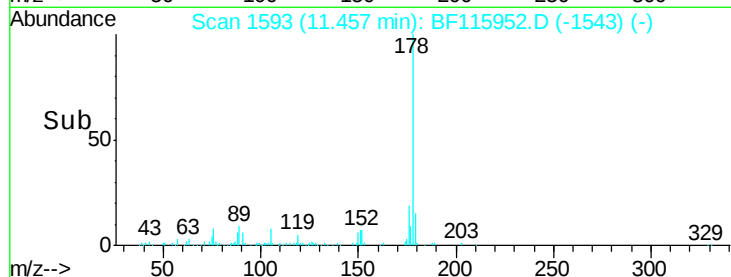
179 14.7 12.4 18.6



Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E



#75

Fluoranthene

Concen: 27.828 ng

RT: 12.59 min Scan# 1786

Delta R.T. -0.01 min

Lab File: BF115952.D

Acq: 2 Aug 2019 17:51

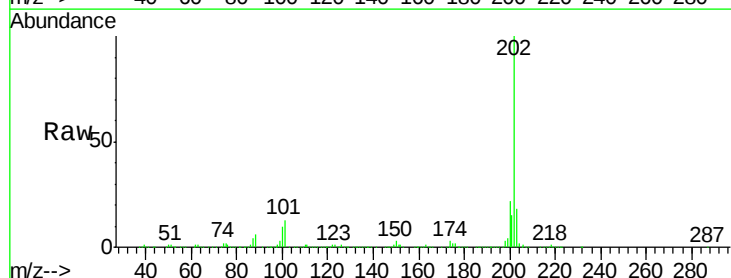
Tgt Ion:202 Resp: 735669

Ion Ratio Lower Upper

202 100

101 12.9 0.0 31.5

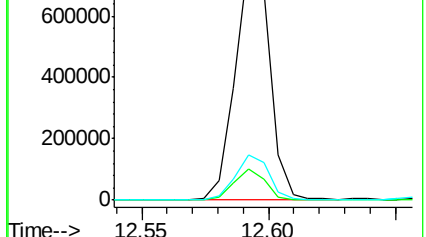
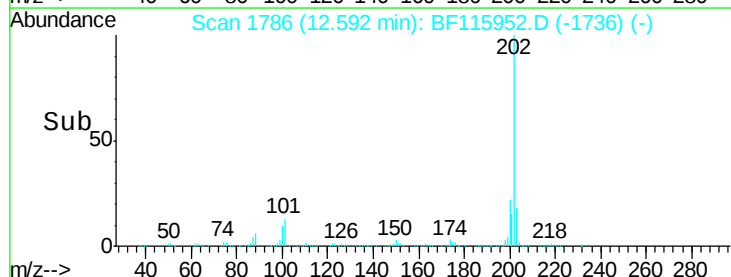
203 18.5 0.0 37.9

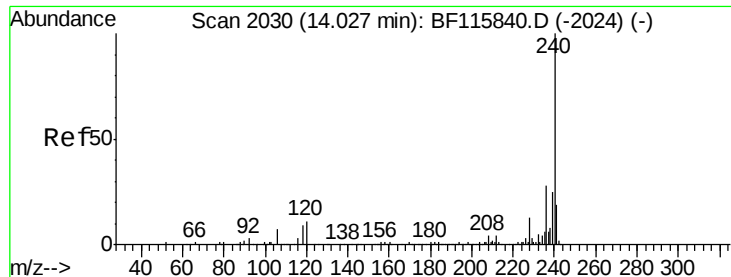


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 101.00 (100.70 to 101.70): E

Ion 203.00 (202.70 to 203.70): E

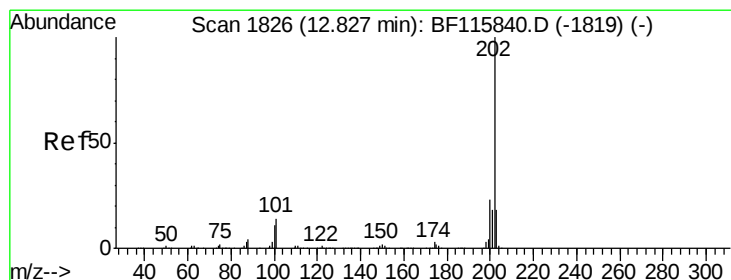
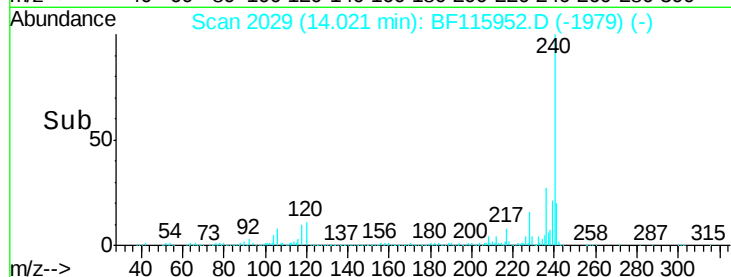
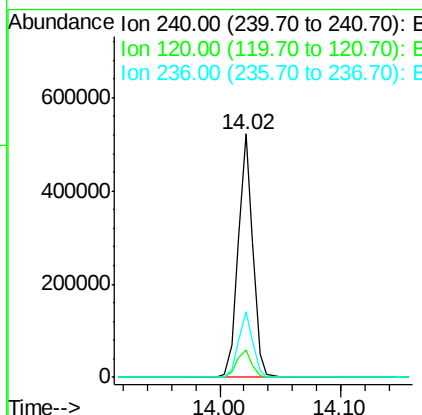
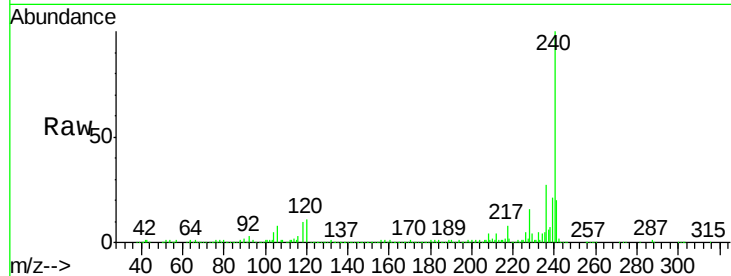




#76  
Chrysene-d12  
Concen: 20.000 ng  
RT: 14.02 min Scan# 2029  
Delta R.T. -0.01 min  
Lab File: BF115952.D  
Acq: 2 Aug 2019 17:51

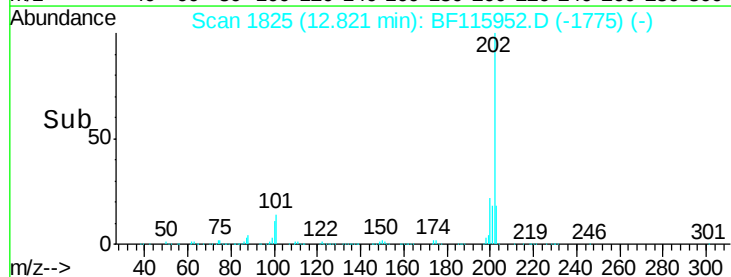
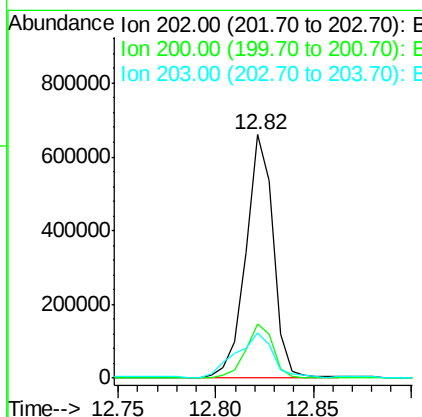
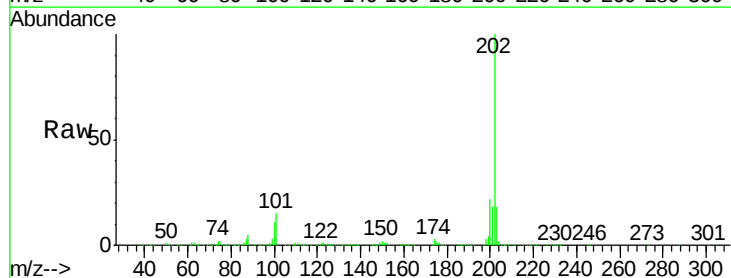
Instrument :  
BNA\_F  
ClientSampleId :  
1S-E1-E4-COMP-(0-1)

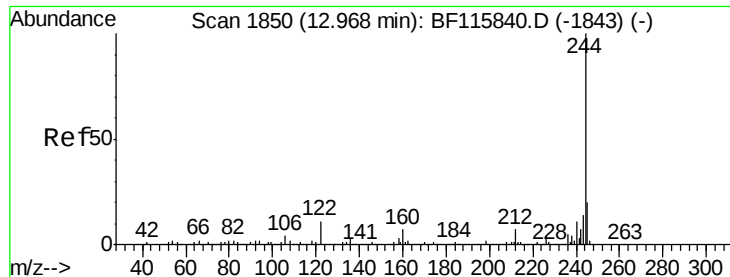
Tot Ion:240 Resp: 442854  
Ion Ratio Lower Upper  
240 100  
120 11.4 8.5 12.7  
236 27.0 22.2 33.2



#78  
Pyrene  
Concen: 19.279 ng  
RT: 12.82 min Scan# 1825  
Delta R.T. -0.01 min  
Lab File: BF115952.D  
Acq: 2 Aug 2019 17:51

Tgt Ion:202 Resp: 643581  
Ion Ratio Lower Upper  
202 100  
200 22.2 18.2 27.2  
203 18.4 14.3 21.5





#79

Terphenyl-d14

Concen: 50.200 ng

RT: 12.96 min Scan# 1849

Delta R.T. -0.01 min

Lab File: BF115952.D

Acq: 2 Aug 2019 17:51

Instrument :

BNA\_F

ClientSampleId :

1S-E1-E4-COMP-(0-1)

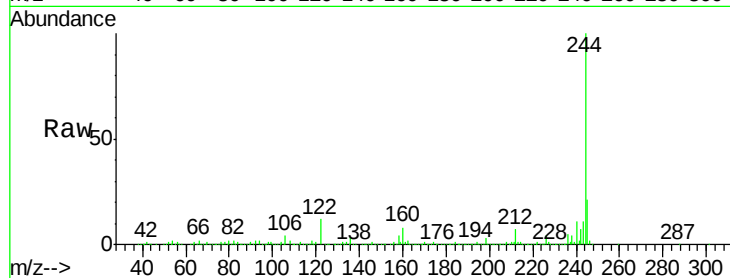
Tot Ion:244 Resp: 1055023

Ion Ratio Lower Upper

244 100

212 7.0 5.6 8.4

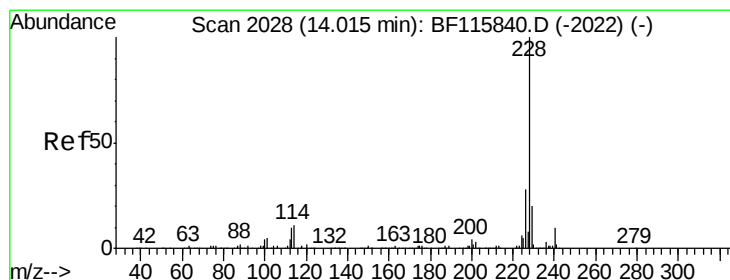
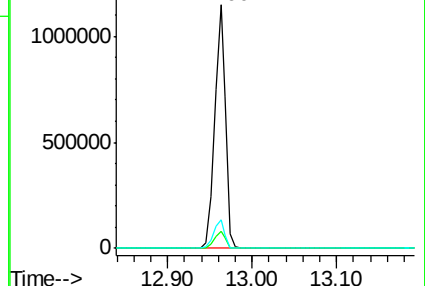
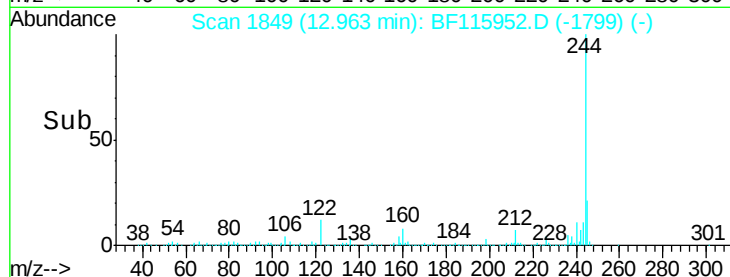
122 11.8 8.6 13.0



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



#81

Benzo(a)anthracene

Concen: 13.556 ng

RT: 14.01 min Scan# 2027

Delta R.T. -0.01 min

Lab File: BF115952.D

Acq: 2 Aug 2019 17:51

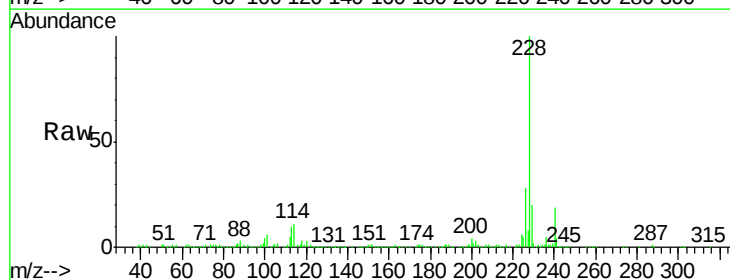
Tgt Ion:228 Resp: 383714

Ion Ratio Lower Upper

228 100

226 27.8 22.5 33.7

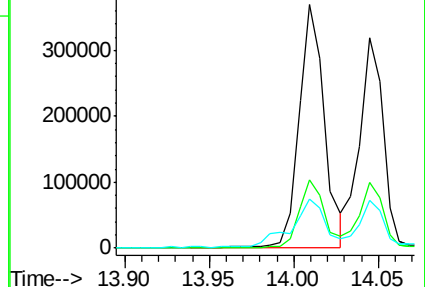
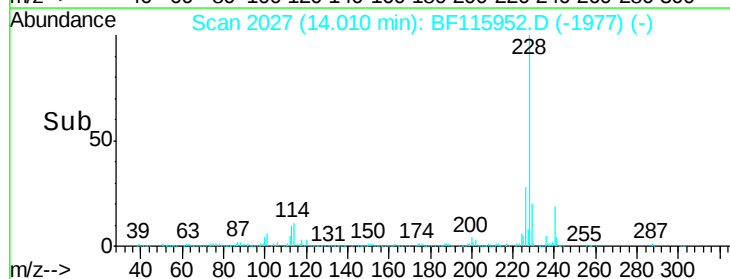
229 20.3 16.1 24.1

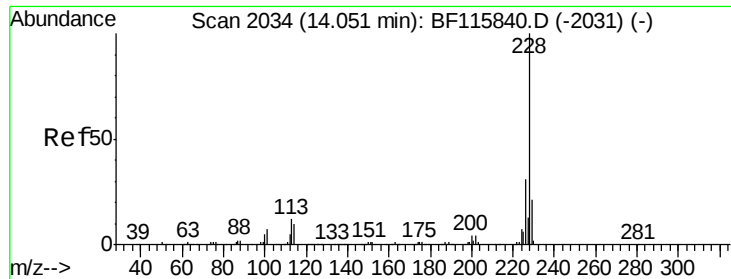


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E





#83

Chrysene

Concen: 11.392 ng

RT: 14.04 min Scan# 2033

Delta R.T. -0.01 min

Lab File: BF115952.D

Acq: 2 Aug 2019 17:51

Instrument :

BNA\_F

ClientSampleId :

1S-E1-E4-COMP-(0-1)

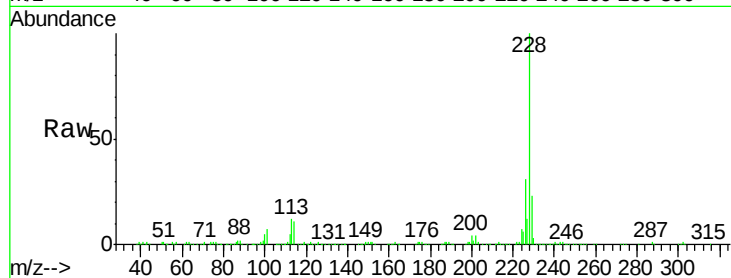
Tot Ion:228 Resp: 313044

Ion Ratio Lower Upper

228 100

226 31.0 24.8 37.2

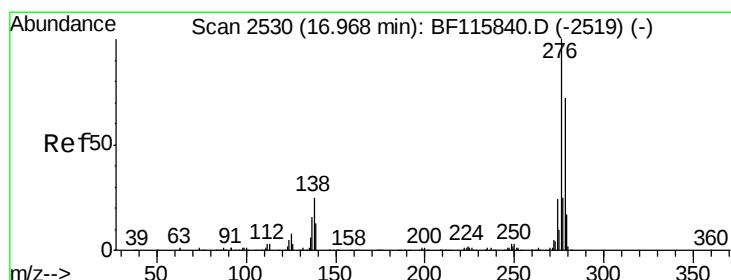
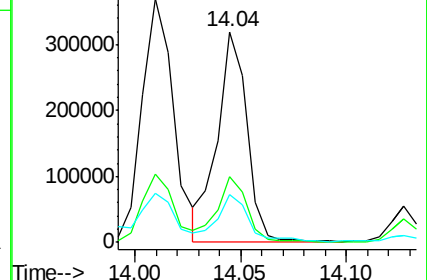
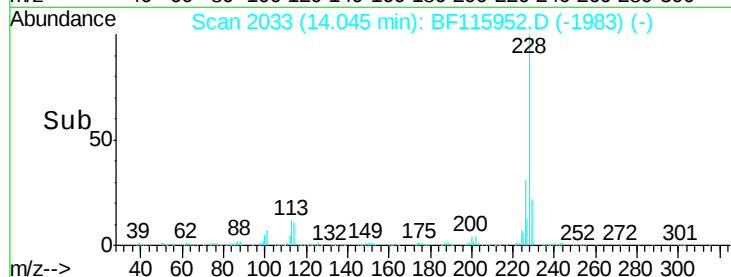
229 22.9 16.4 24.6



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



#86

Indeno(1,2,3-cd)pyrene

Concen: 5.589 ng

RT: 16.97 min Scan# 2530

Delta R.T. 0.00 min

Lab File: BF115952.D

Acq: 2 Aug 2019 17:51

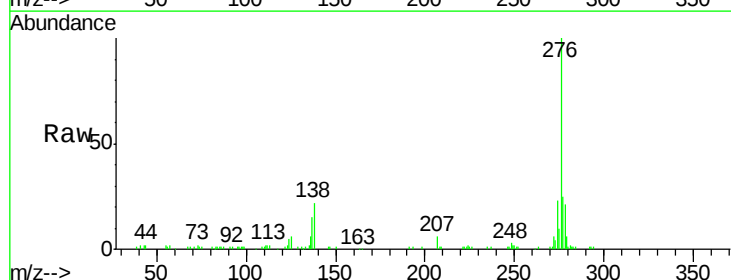
Tgt Ion:276 Resp: 129002

Ion Ratio Lower Upper

276 100

138 22.7 19.6 29.4

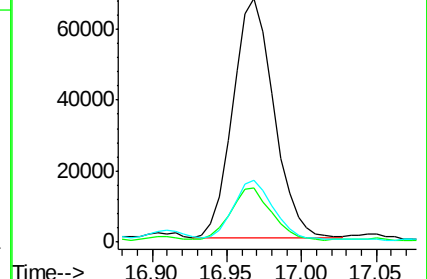
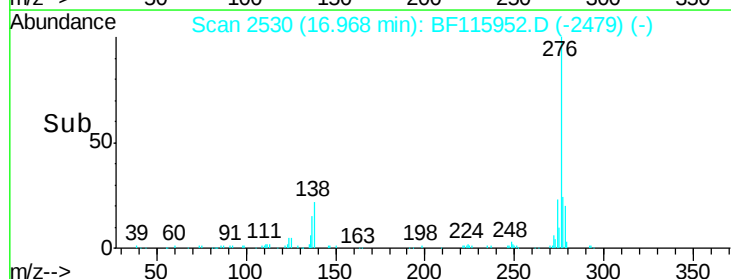
277 24.4 20.1 30.1

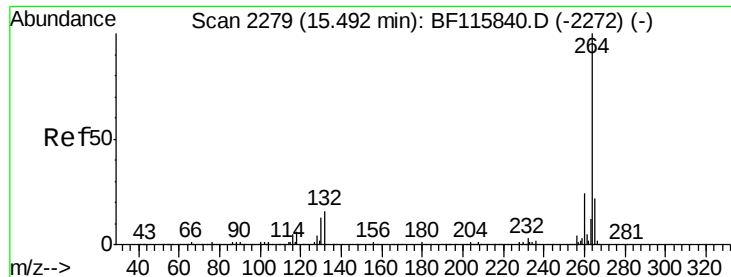


Abundance Ion 276.00 (275.70 to 276.70): E

Ion 138.00 (137.70 to 138.70): E

Ion 277.00 (276.70 to 277.70): E

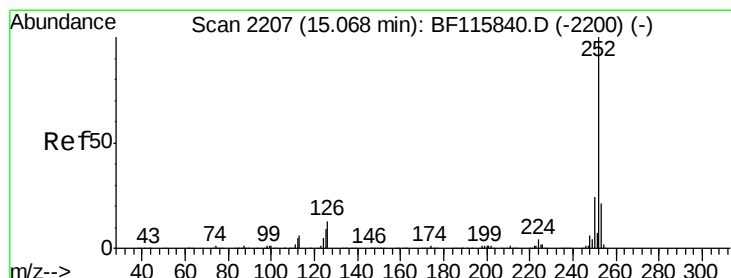
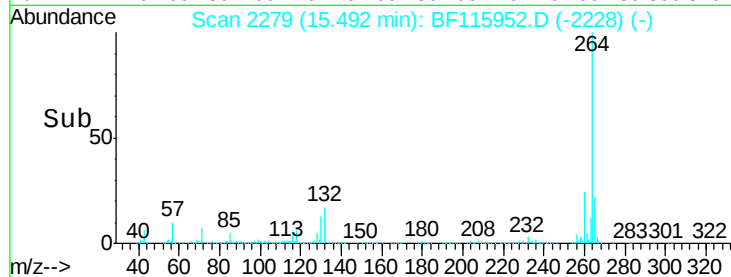
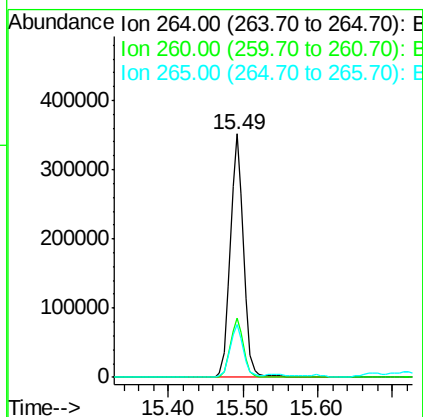
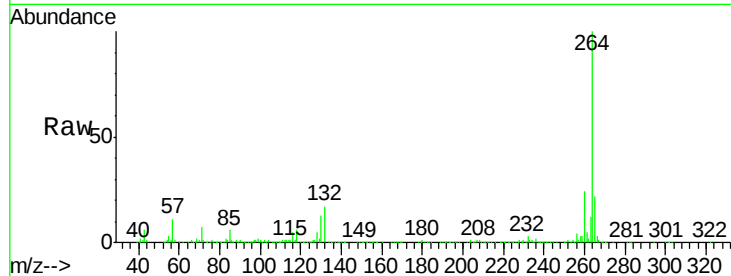




#87  
Pervlene-d12  
Concen: 20.000 ng  
RT: 15.49 min Scan# 2279  
Delta R.T. 0.00 min  
Lab File: BF115952.D  
Acq: 2 Aug 2019 17:51

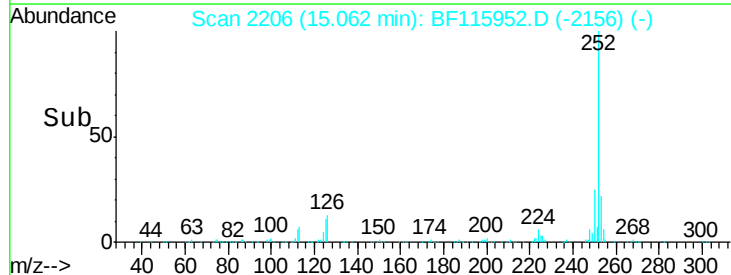
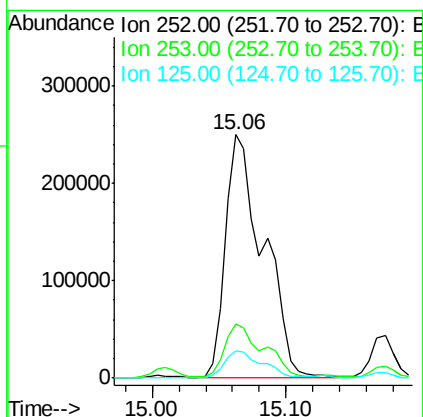
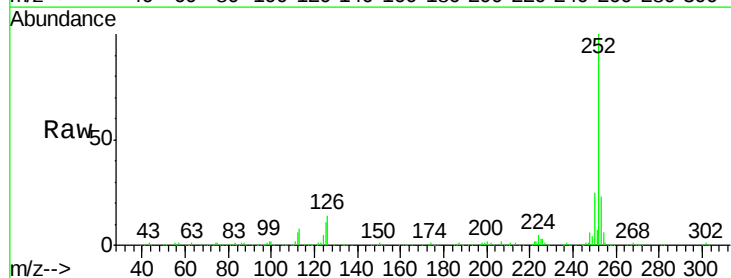
Instrument :  
BNA\_F  
ClientSampleId :  
1S-E1-E4-COMP-(0-1)

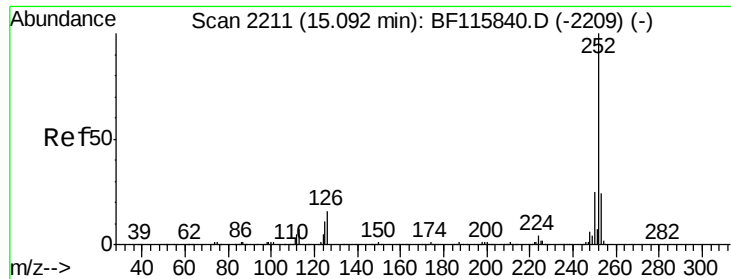
Tot Ion:264 Resp: 441669  
Ion Ratio Lower Upper  
264 100  
260 24.3 19.4 29.2  
265 21.8 17.5 26.3



#88  
Benzo(b)fluoranthene  
Concen: 19.310 ng  
RT: 15.06 min Scan# 2206  
Delta R.T. -0.01 min  
Lab File: BF115952.D  
Acq: 2 Aug 2019 17:51

Tgt Ion:252 Resp: 493133  
Ion Ratio Lower Upper  
252 100  
253 22.5 17.2 25.8  
125 11.3 7.4 11.0#





#89

Benzo(k)fluoranthene

Concen: 19.825 ng

RT: 15.06 min Scan# 2206

Delta R.T. -0.03 min

Lab File: BF115952.D

Acq: 2 Aug 2019 17:51

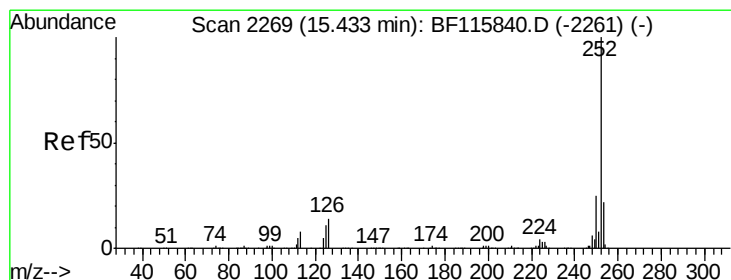
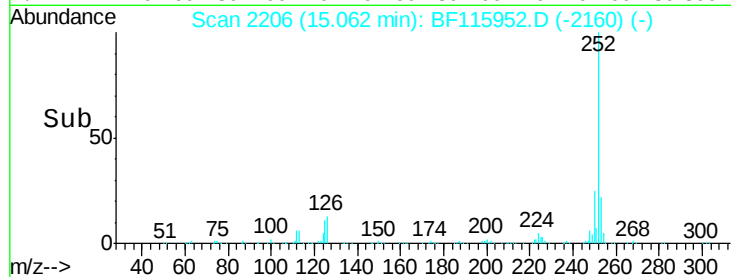
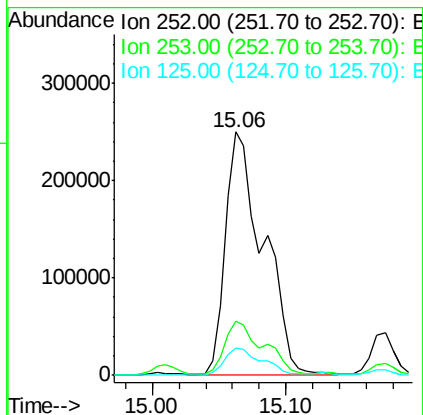
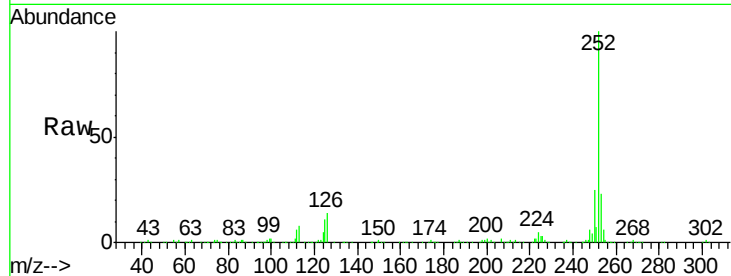
Instrument :

BNA\_F

ClientSampleId :

1S-E1-E4-COMP-(0-1)

|             |       |           |
|-------------|-------|-----------|
| Tot Ion:252 | Resp: | 493133    |
| Ion Ratio   | Lower | Upper     |
| 252         | 100   |           |
| 253         | 22.5  | 18.2 27.4 |
| 125         | 11.3  | 8.9 13.3  |



#90

Benzo(a)pyrene

Concen: 10.926 ng

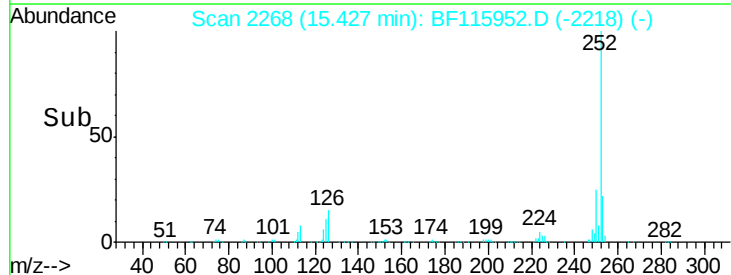
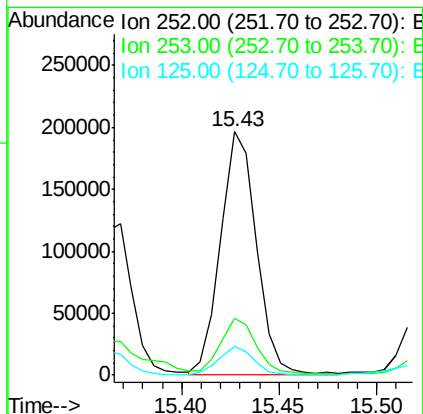
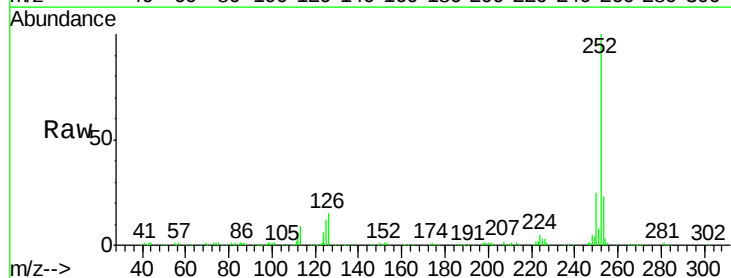
RT: 15.43 min Scan# 2268

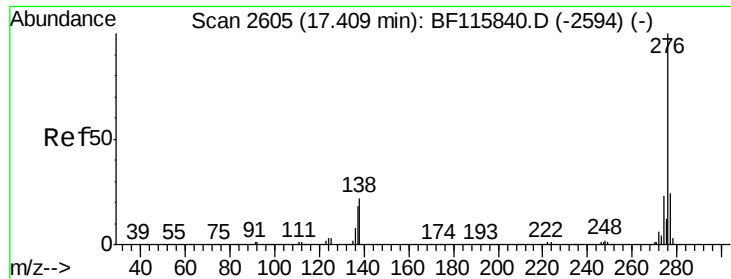
Delta R.T. -0.01 min

Lab File: BF115952.D

Acq: 2 Aug 2019 17:51

|             |       |           |
|-------------|-------|-----------|
| Tgt Ion:252 | Resp: | 249437    |
| Ion Ratio   | Lower | Upper     |
| 252         | 100   |           |
| 253         | 23.4  | 17.8 26.6 |
| 125         | 11.7  | 8.8 13.2  |

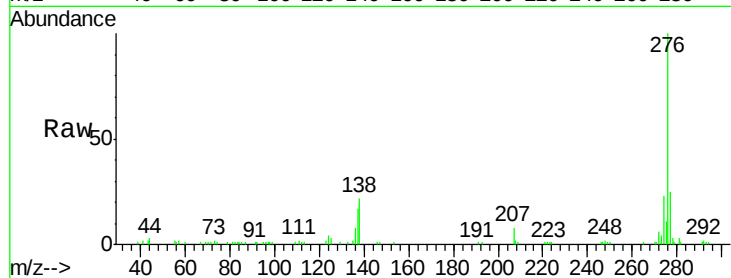




#92  
 Benzo(a,h,i)perylene  
 Concen: 6.186 ng  
 RT: 17.42 min Scan# 2606  
 Delta R.T. 0.01 min  
 Lab File: BF115952.D  
 Acq: 2 Aug 2019 17:51

Instrument :  
 BNA\_F  
 ClientSampleId :  
 1S-E1-E4-COMP-(0-1)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 25.2  | 19.5  | 29.3  |
| 138     | 21.7  | 17.8  | 26.8  |



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

