

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF053019\  
 Data File : BF114691.D  
 Acq On : 31 May 2019 5:10  
 Operator : HP/JU  
 Sample : K2648-03 5X  
 Misc :  
 ALS Vial : 24 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :

Quant Time: May 31 05:49:42 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF052919.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed May 29 19:08:51 2019  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.70  | 152  | 338599   | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 7.98  | 136  | 1212286  | 20.00 | ng    | 0.00     |
| 39) Acenaphthene-d10      | 9.73  | 164  | 528695   | 20.00 | ng    | 0.00     |
| 64) Phenanthrene-d10      | 11.20 | 188  | 966345   | 20.00 | ng    | 0.00     |
| 76) Chrysene-d12          | 13.82 | 240  | 577255   | 20.00 | ng    | 0.00     |
| 87) Perylene-d12          | 15.22 | 264  | 501172   | 20.00 | ng    | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|-------|------|----------|-------|-------|----------|
| 5) 2-Fluorophenol           | 5.29  | 112  | 433879   | 22.50 | ng    | 0.00     |
| 7) Phenol-d6                | 6.32  | 99   | 528440   | 22.74 | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 7.25  | 82   | 239075   | 12.30 | ng    | 0.00     |
| 42) 2,4,6-Tribromophenol    | 10.50 | 330  | 101903   | 20.23 | ng    | 0.00     |
| 45) 2-Fluorobiphenyl        | 9.05  | 172  | 575180   | 5.46  | ng    | 0.00     |
| 79) Terphenyl-d14           | 12.78 | 244  | 544522   | 17.74 | ng    | 0.00     |

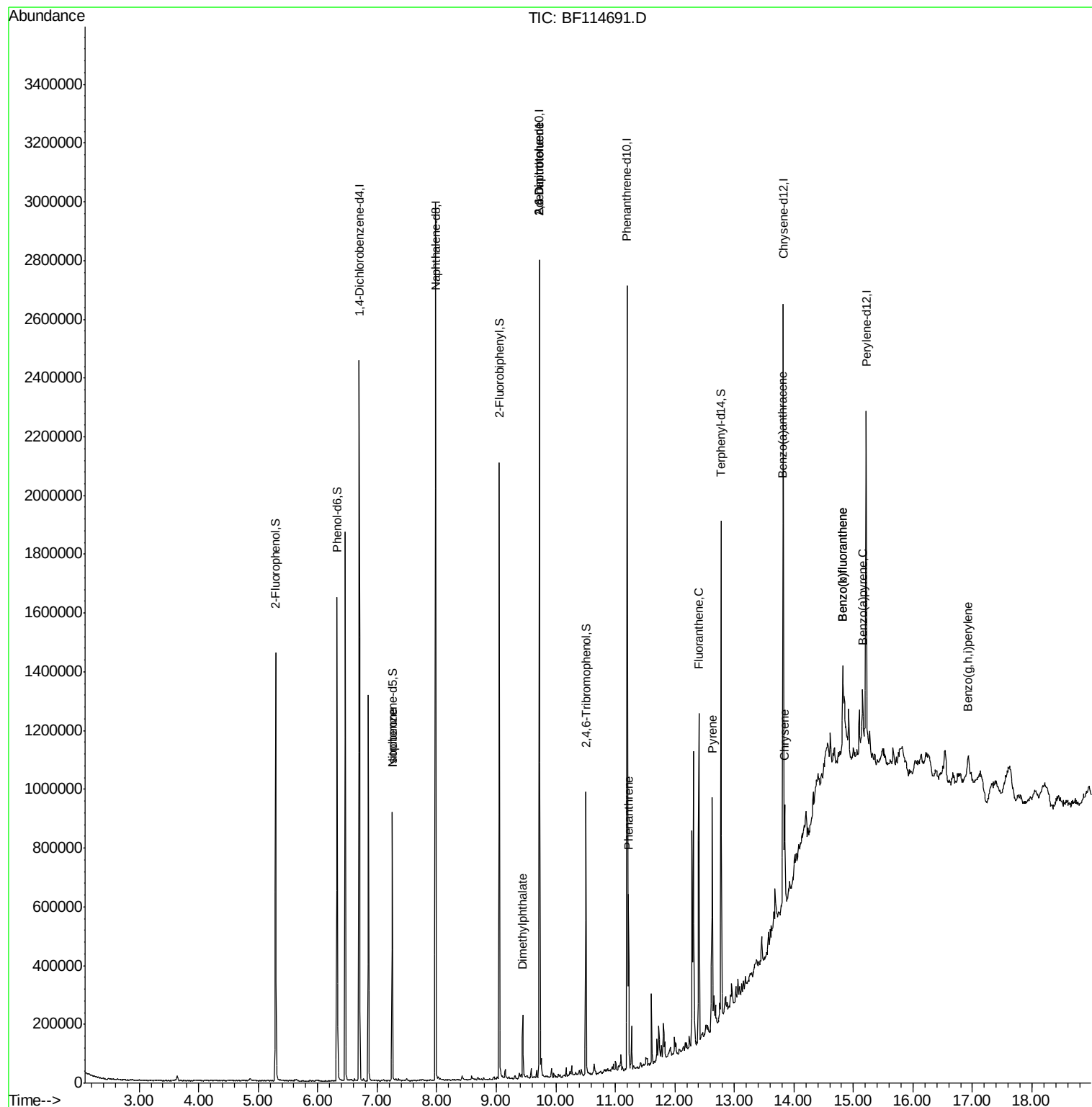
| Target Compounds         | R.T.  | QIon | Response | Conc      | Units | Qvalue |
|--------------------------|-------|------|----------|-----------|-------|--------|
| 9) Benzaldehyde          | 6.46  | 77   | 9767     | Below Cal |       | 82     |
| 25) Isophorone           | 7.25  | 82   | 230637   | 5.914 ng  | #     | 63     |
| 50) Dimethylphthalate    | 9.45  | 163  | 78293    | 2.125 ng  |       | 97     |
| 51) 2,6-Dinitrotoluene   | 9.73  | 165  | 68101    | 7.955 ng  | #     | 31     |
| 57) 2,4-Dinitrotoluene   | 9.73  | 165  | 68101    | 6.199 ng  | #     | 24     |
| 58) Fluorene             | 10.27 | 166  | 8663     | Below Cal |       | 98     |
| 71) Phenanthrene         | 11.22 | 178  | 193884   | 3.933 ng  |       | 95     |
| 74) Di-n-butylphthalate  | 11.77 | 149  | 1375     | Below Cal | #     | 1      |
| 75) Fluoranthene         | 12.40 | 202  | 384021   | 7.523 ng  |       | 96     |
| 78) Pyrene               | 12.63 | 202  | 294475   | 6.030 ng  |       | 97     |
| 81) Benzo(a)anthracene   | 13.81 | 228  | 142140   | 3.204 ng  |       | 99     |
| 83) Chrysene             | 13.84 | 228  | 118557   | 2.797 ng  |       | 96     |
| 88) Benzo(b)fluoranthene | 14.82 | 252  | 177398   | 5.620 ng  | #     | 89     |
| 89) Benzo(k)fluoranthene | 14.82 | 252  | 177398   | 6.466 ng  | #     | 90     |
| 90) Benzo(a)pyrene       | 15.16 | 252  | 84247    | 3.038 ng  | #     | 91     |
| 92) Benzo(g,h,i)perylene | 16.93 | 276  | 66069    | 2.778 ng  |       | 93     |

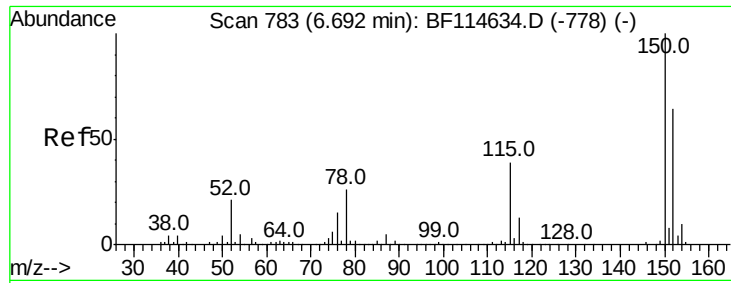
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF053019\  
Data File : BF114691.D  
Acq On : 31 May 2019 5:10  
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Instrument :  
BNA\_F  
ClientSampleId :

Quant Time: May 31 05:49:42 2019  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF052919.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Wed May 29 19:08:51 2019  
Response via : Initial Calibration



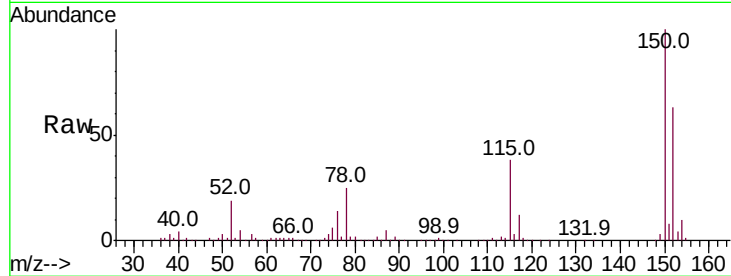


#1

1,4-Dichlorobenzene-d4  
 Concen: 20.000 ng  
 RT: 6.70 min Scan# 784  
 Delta R.T. 0.01 min  
 Lab File: BF114691.D  
 Acq: 31 May 2019 5:10

Instrument :  
 BNA\_F  
 ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 157.6 | 124.4 | 186.6 |
| 115     | 60.5  | 48.7  | 73.1  |

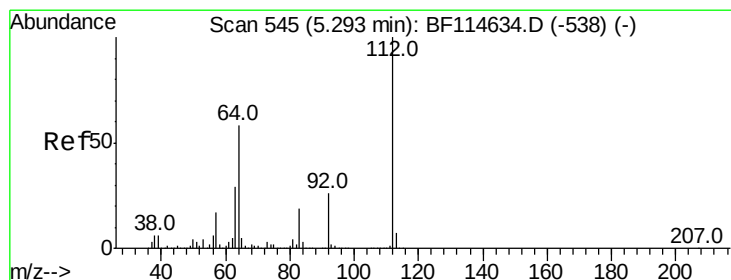
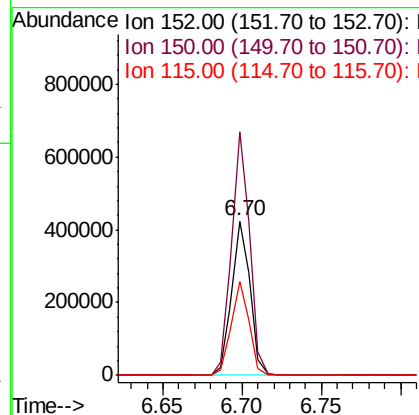
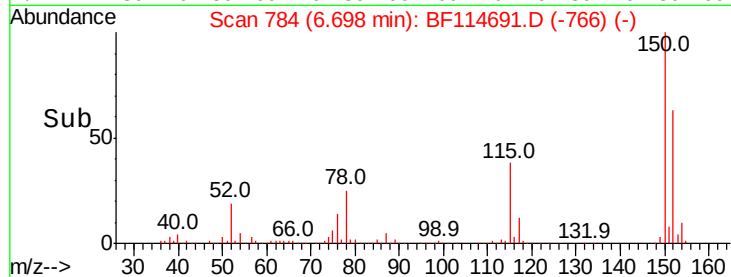


Abundance

Ion 152.00 (151.70 to 152.70): E

Ion 150.00 (149.70 to 150.70): E

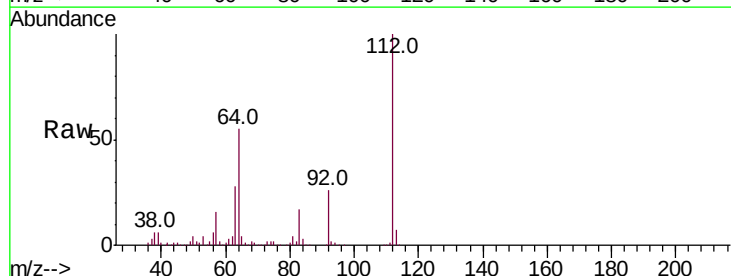
Ion 115.00 (114.70 to 115.70): E



#5

2-Fluorophenol  
 Concen: 22.498 ng  
 RT: 5.29 min Scan# 545  
 Delta R.T. -0.00 min  
 Lab File: BF114691.D  
 Acq: 31 May 2019 5:10

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 55.4  | 46.1  | 69.1  |
| 63      | 27.7  | 23.4  | 35.2  |

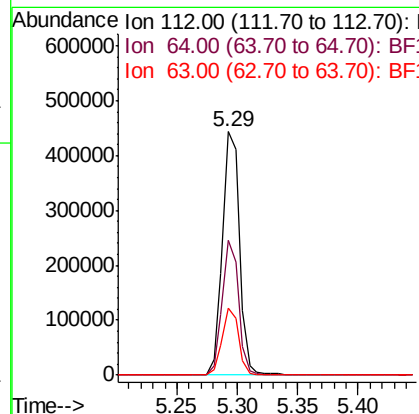
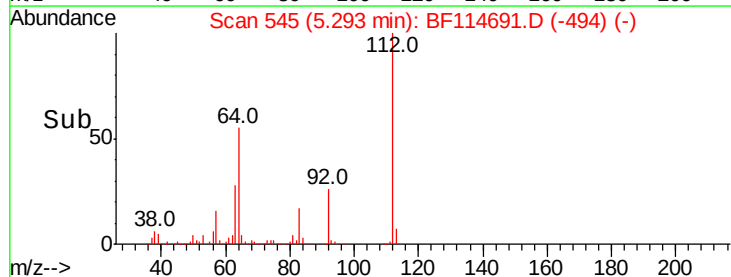


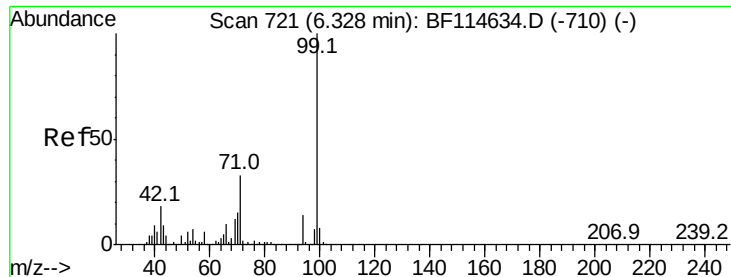
Abundance

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: 22.739 ng

RT: 6.32 min Scan# 720

Delta R.T. -0.01 min

Lab File: BF114691.D

Acq: 31 May 2019 5:10

Instrument :

BNA\_F

ClientSampleId :

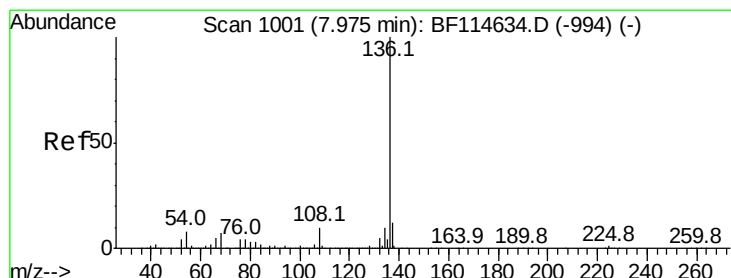
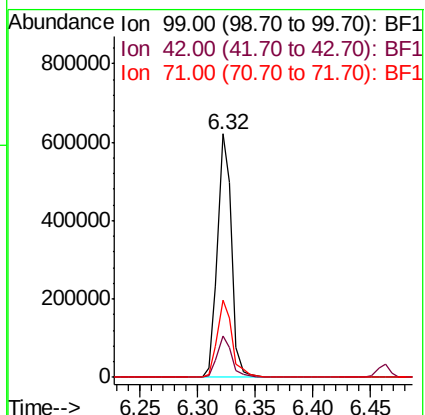
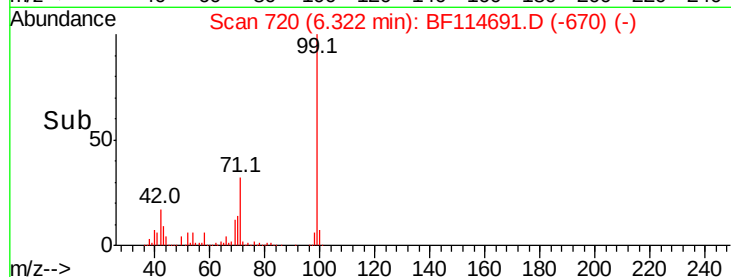
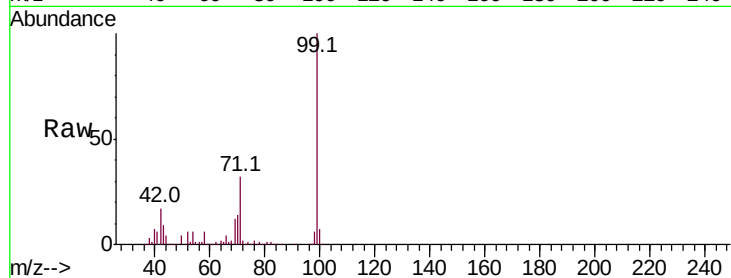
Tot Ion: 99 Resp: 528440

Ion Ratio Lower Upper

99 100

42 16.9 14.7 22.1

71 31.8 26.6 40.0



#21

Naphthalene-d8

Concen: 20.000 ng

RT: 7.98 min Scan# 1002

Delta R.T. 0.01 min

Lab File: BF114691.D

Acq: 31 May 2019 5:10

Tgt Ion: 136 Resp: 1212286

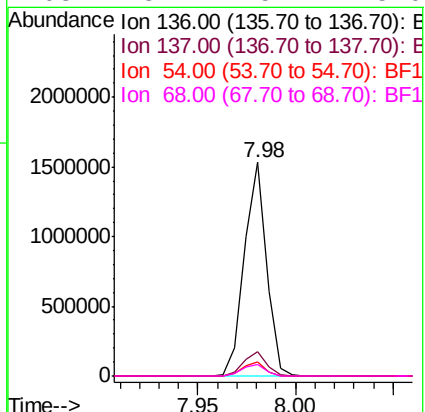
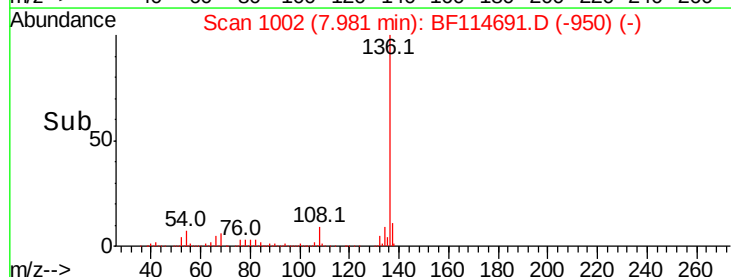
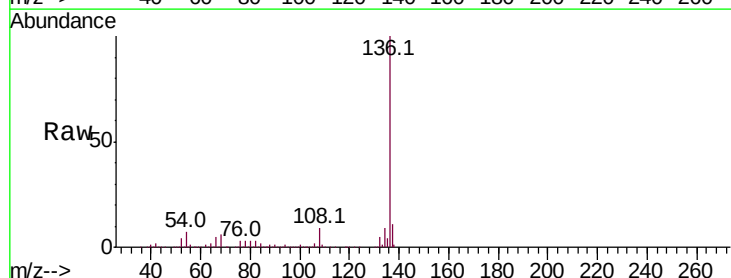
Ion Ratio Lower Upper

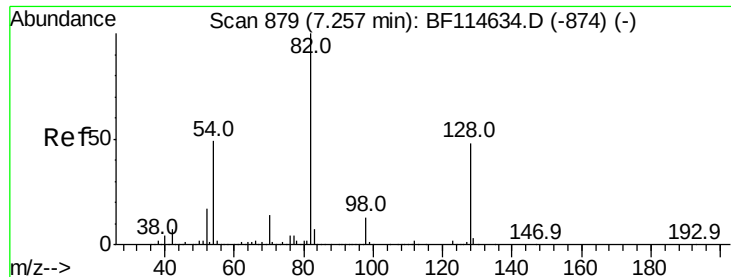
136 100

137 11.4 9.3 13.9

54 6.7 6.3 9.5

68 5.7 5.4 8.0





#23

Nitrobenzene-d5

Concen: 12.304 ng

RT: 7.25 min Scan# 878

Delta R.T. -0.01 min

Lab File: BF114691.D

Acq: 31 May 2019 5:10

Instrument :

BNA\_F

ClientSampleId :

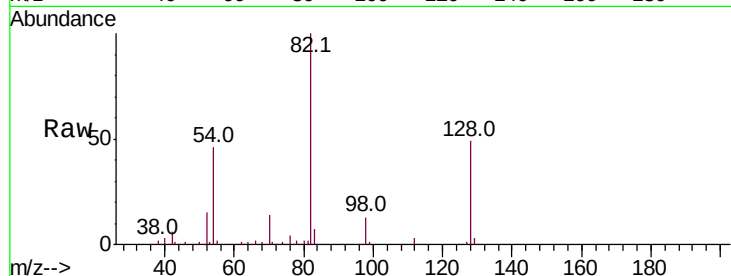
Tot Ion: 82 Resp: 239075

Ion Ratio Lower Upper

82 100

128 48.5 38.5 57.7

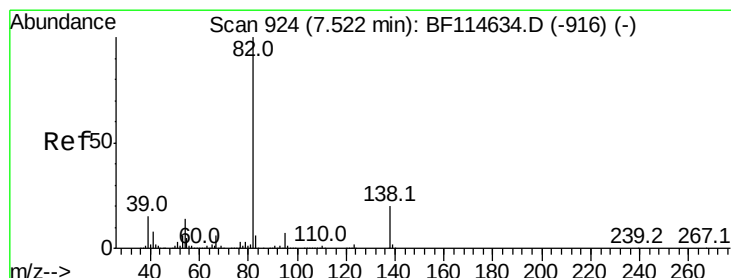
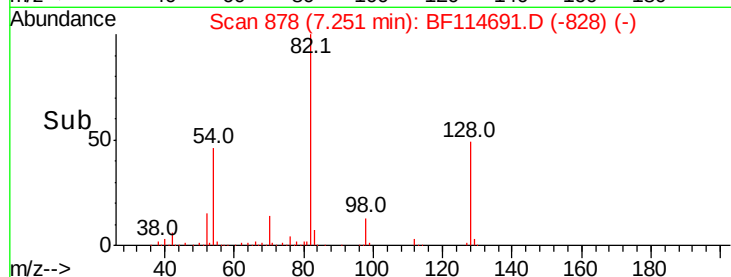
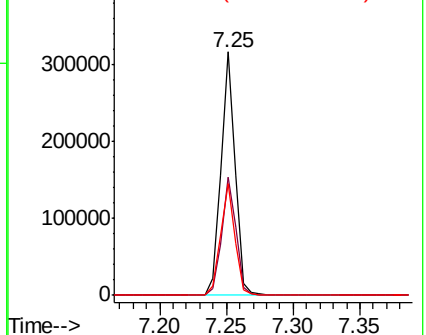
54 46.0 39.1 58.7



Abundance Ion 82.00 (81.70 to 82.70): BF1

Ion 128.00 (127.70 to 128.70): BF1

Ion 54.00 (53.70 to 54.70): BF1



#25

Isophorone

Concen: 5.914 ng

RT: 7.25 min Scan# 878

Delta R.T. -0.27 min

Lab File: BF114691.D

Acq: 31 May 2019 5:10

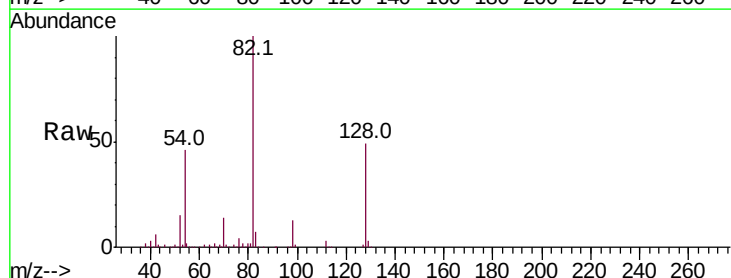
Tgt Ion: 82 Resp: 230637

Ion Ratio Lower Upper

82 100

95 0.0 5.6 8.4#

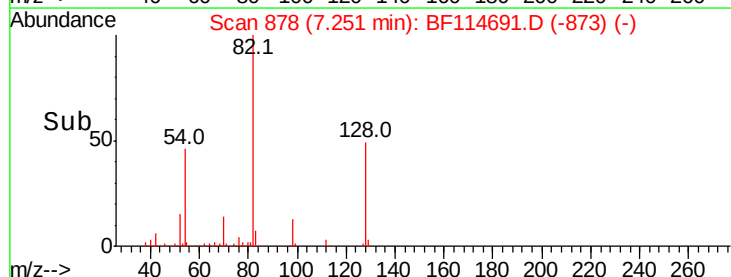
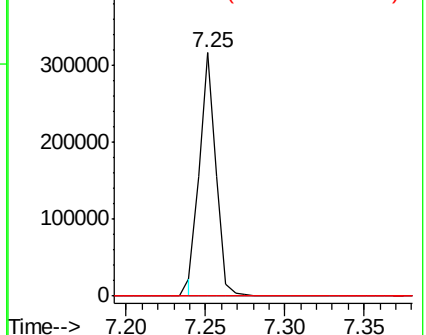
138 0.0 15.9 23.9#

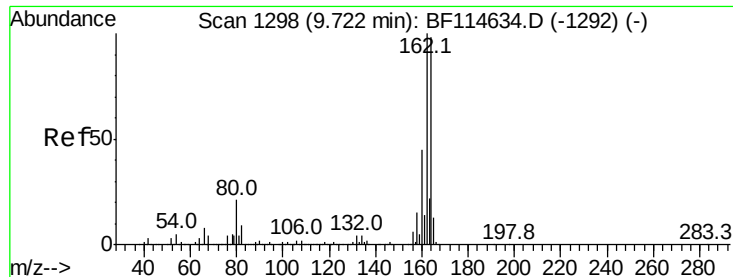


Abundance Ion 82.00 (81.70 to 82.70): BF1

Ion 95.00 (94.70 to 95.70): BF1

Ion 138.00 (137.70 to 138.70): BF1

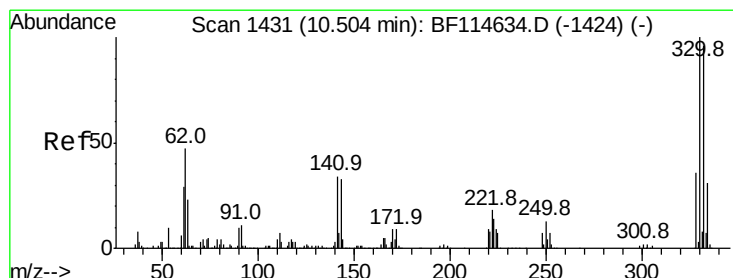
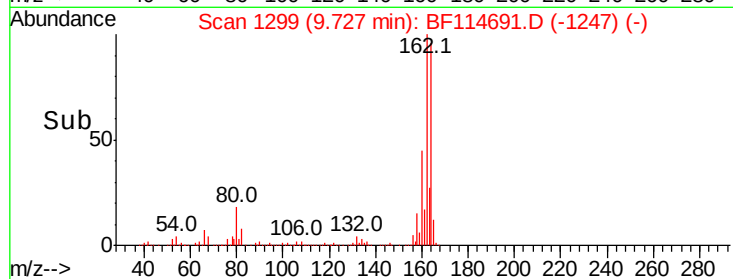
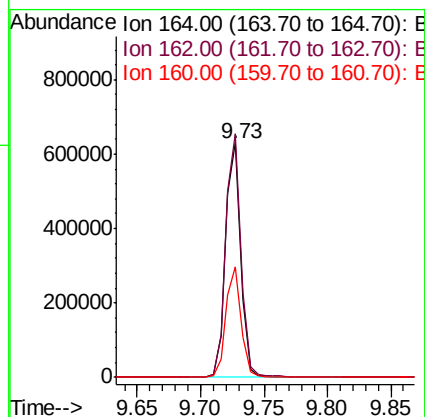
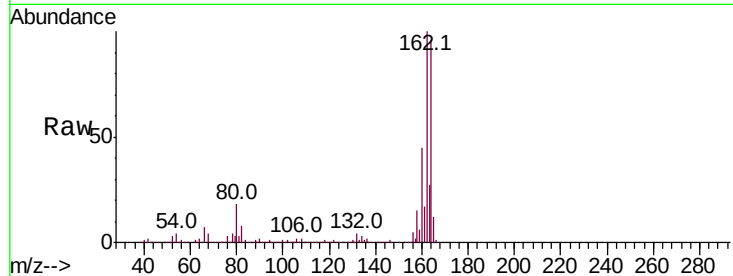




#39  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 9.73 min Scan# 1299  
Delta R.T. 0.01 min  
Lab File: BF114691.D  
Acq: 31 May 2019 5:10

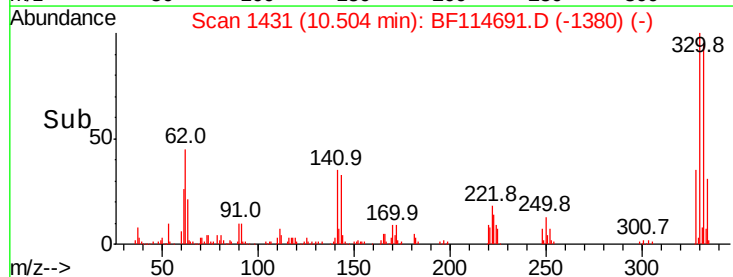
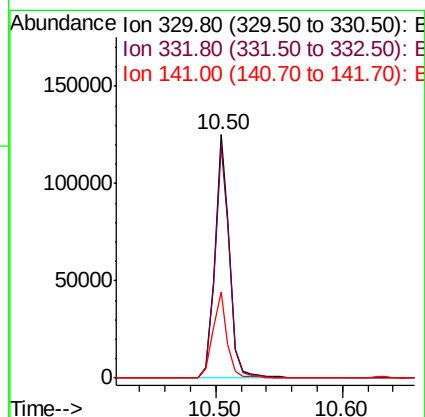
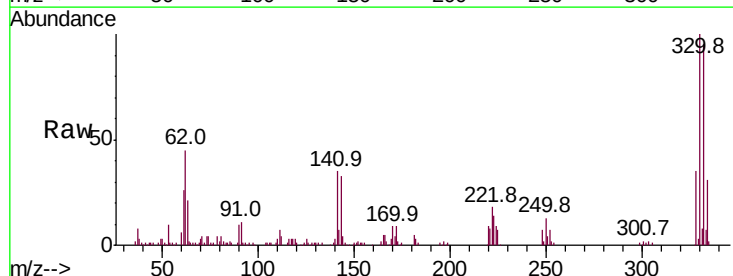
Instrument :  
BNA\_F  
ClientSampleId :

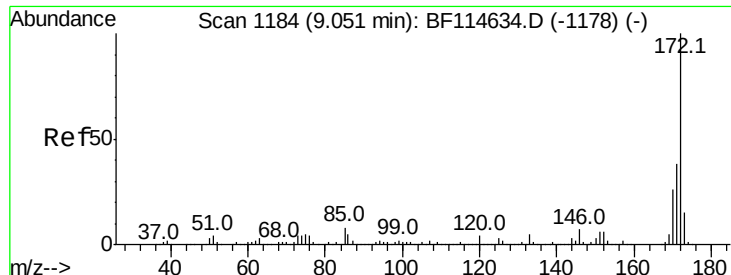
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 164     | 100   |       |       |
| 162     | 103.8 | 81.4  | 122.2 |
| 160     | 46.9  | 36.6  | 54.8  |



#42  
2,4,6-Tribromophenol  
Concen: 20.228 ng  
RT: 10.50 min Scan# 1431  
Delta R.T. -0.00 min  
Lab File: BF114691.D  
Acq: 31 May 2019 5:10

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 330     | 100   |       |       |
| 332     | 95.9  | 75.8  | 113.8 |
| 141     | 35.0  | 27.8  | 41.8  |

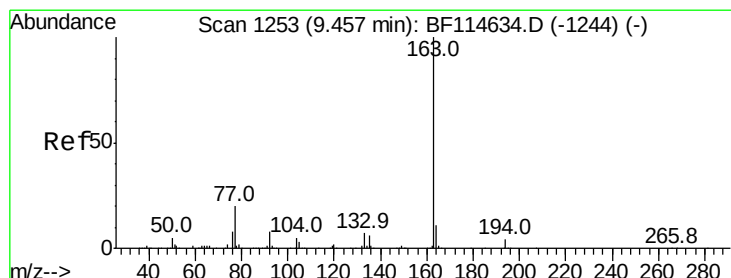
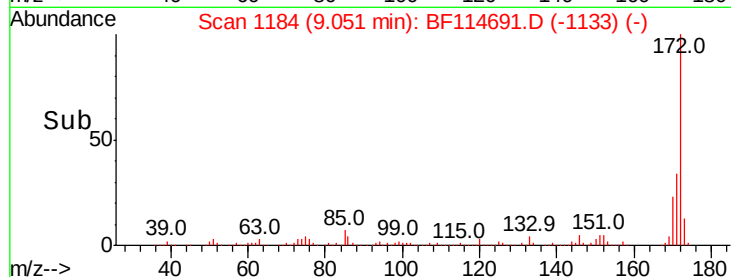
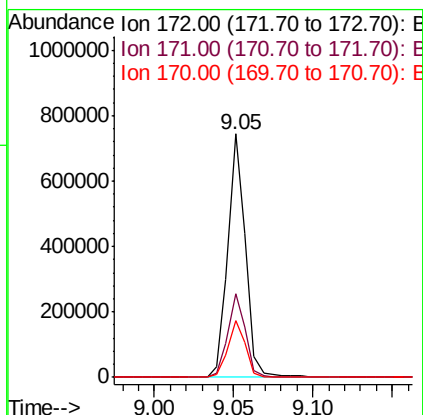
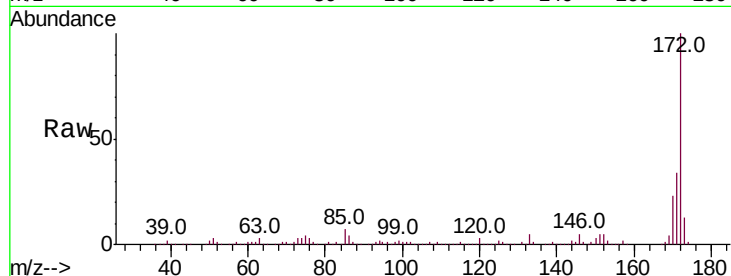




#45  
2-Fluorobiphenyl  
Concen: 5.463 ng  
RT: 9.05 min Scan# 1184  
Delta R.T. 0.00 min  
Lab File: BF114691.D  
Acq: 31 May 2019 5:10

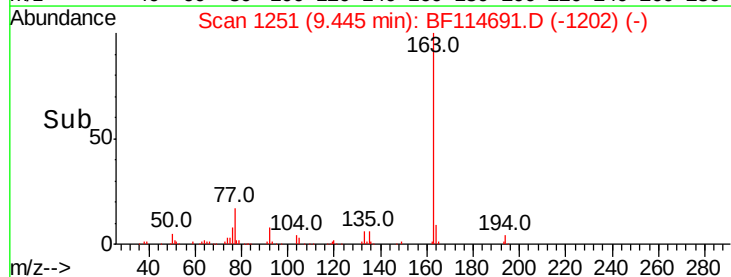
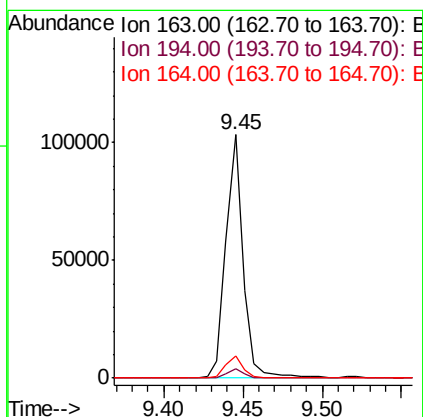
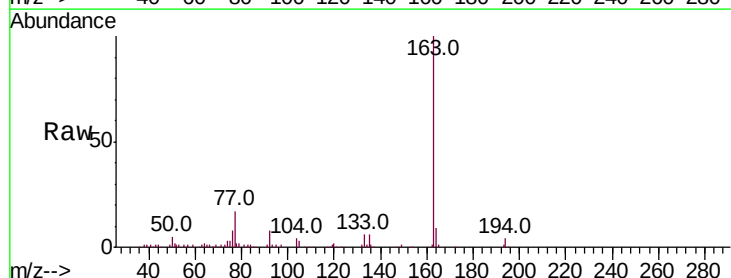
Instrument :  
BNA\_F  
ClientSampleId :

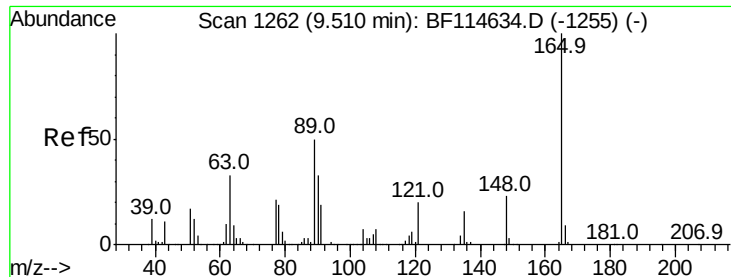
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 34.5  | 30.6  | 45.8  |
| 170     | 23.3  | 20.7  | 31.1  |



#50  
Dimethylphthalate  
Concen: 2.125 ng  
RT: 9.45 min Scan# 1251  
Delta R.T. -0.01 min  
Lab File: BF114691.D  
Acq: 31 May 2019 5:10

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 163     | 100   |       |       |
| 194     | 3.8   | 3.4   | 5.0   |
| 164     | 9.2   | 8.6   | 13.0  |





#51

2,6-Dinitrotoluene

Concen: 7.955 ng

RT: 9.73 min Scan# 1299

Delta R.T. 0.22 min

Lab File: BF114691.D

Acq: 31 May 2019 5:10

Instrument :

BNA\_F

ClientSampleId :

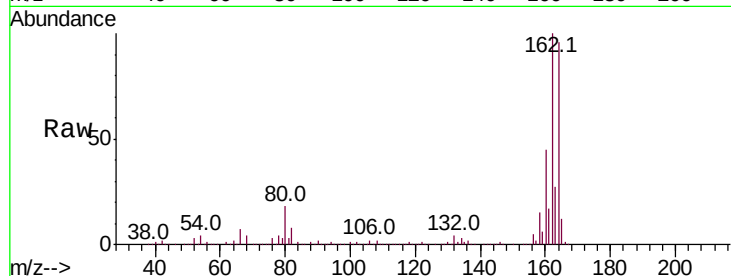
Tot Ion:165 Resp: 68101

Ion Ratio Lower Upper

165 100

63 1.4 36.6 54.8#

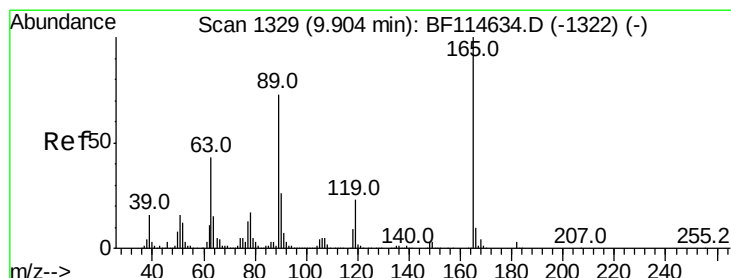
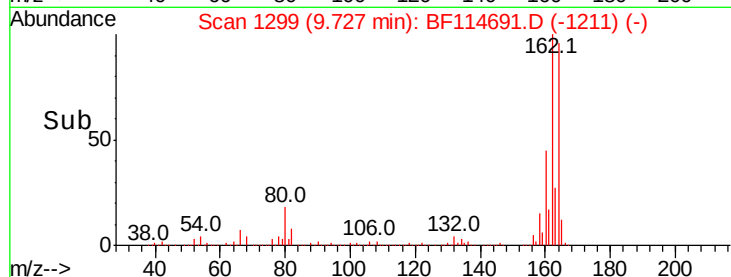
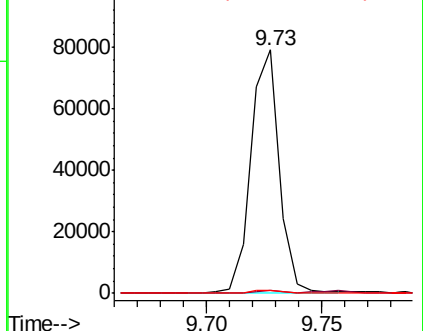
89 1.3 40.2 60.4#



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



#57

2,4-Dinitrotoluene

Concen: 6.199 ng

RT: 9.73 min Scan# 1299

Delta R.T. -0.18 min

Lab File: BF114691.D

Acq: 31 May 2019 5:10

Tgt Ion:165 Resp: 68101

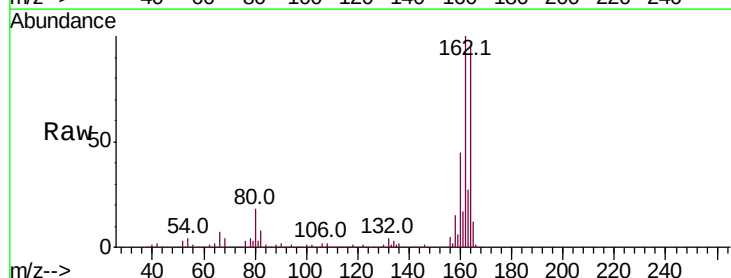
Ion Ratio Lower Upper

165 100

63 1.4 34.8 52.2#

89 1.3 58.5 87.7#

182 0.0 2.2 3.2#

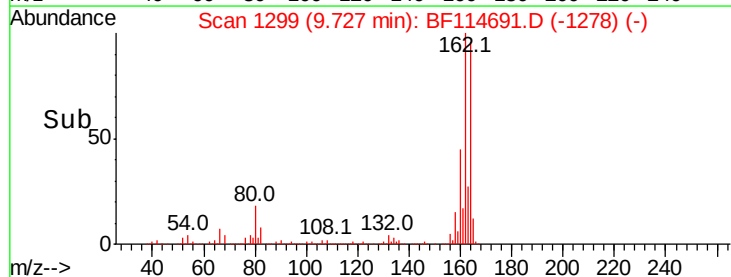
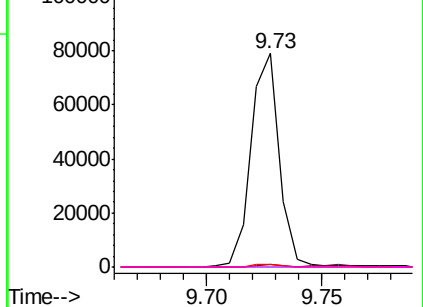


Abundance Ion 165.00 (164.70 to 165.70): E

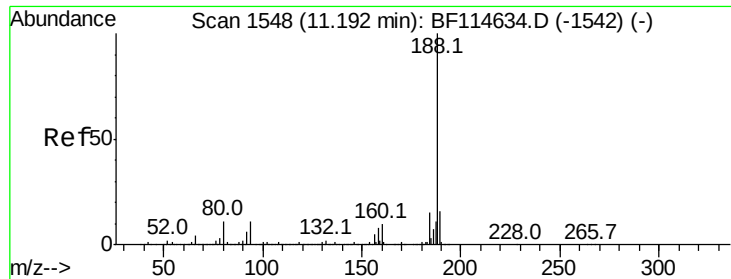
Ion 63.00 (62.70 to 63.70): BF1

Ion 89.00 (88.70 to 89.70): BF1

Ion 182.00 (181.70 to 182.70): BF1



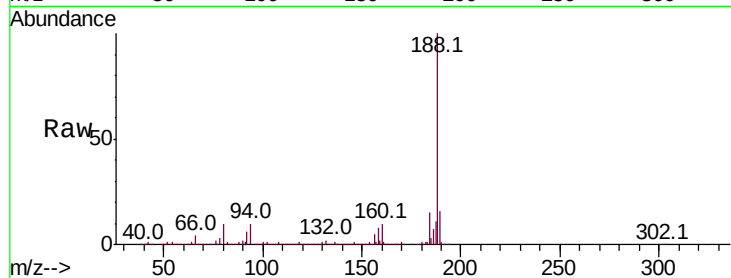




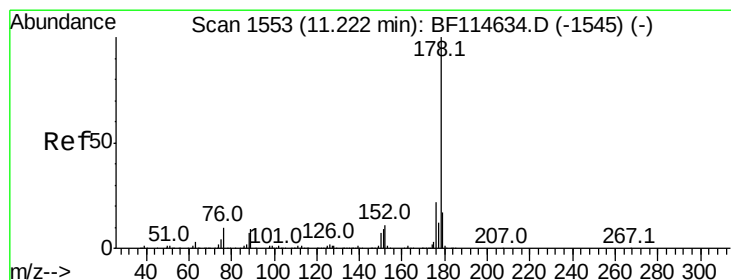
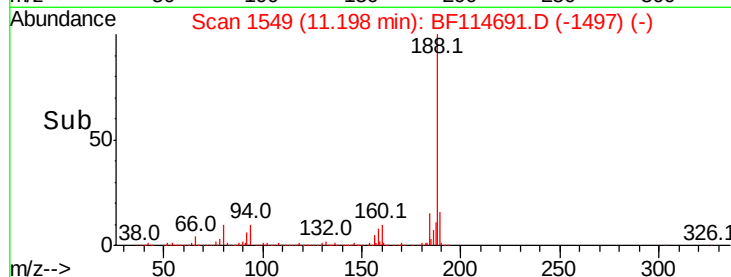
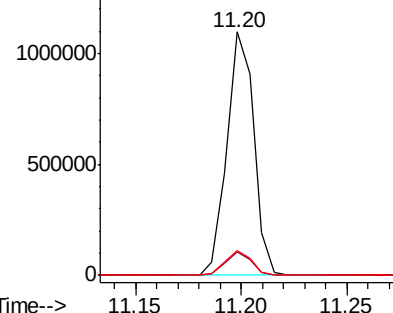
#64  
 Phenanthrene-d10  
 Concen: 20.000 ng  
 RT: 11.20 min Scan# 1549  
 Delta R.T. 0.01 min  
 Lab File: BF114691.D  
 Acq: 31 May 2019 5:10

Instrument :  
 BNA\_F  
 ClientSampled :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 188     | 100   |       |       |
| 94      | 9.6   | 8.6   | 13.0  |
| 80      | 10.4  | 9.0   | 13.6  |

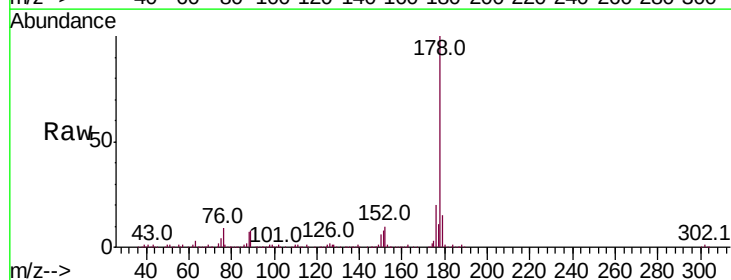


Abundance Ion 188.00 (187.70 to 188.70): E  
 Ion 94.00 (93.70 to 94.70): BF1  
 Ion 80.00 (79.70 to 80.70): BF1

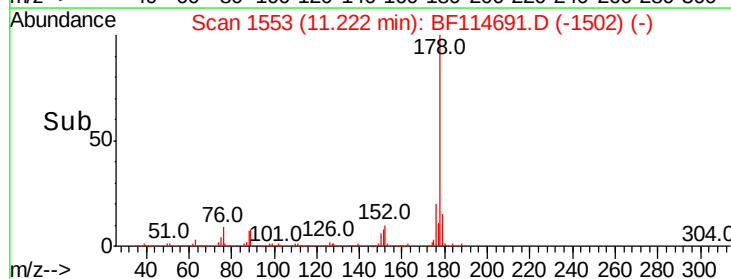
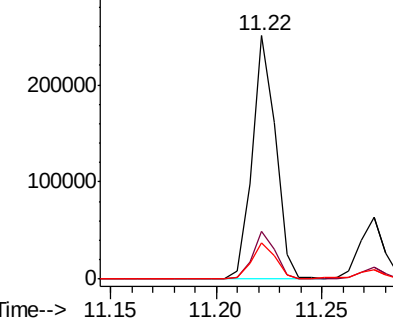


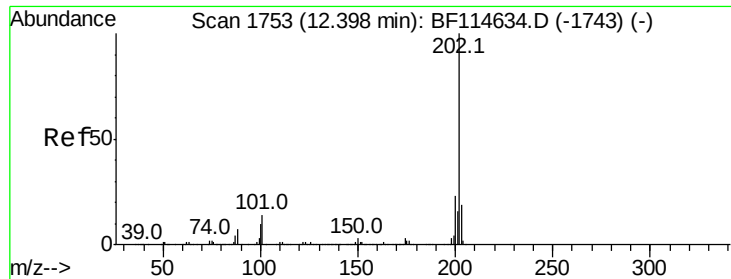
#71  
 Phenanthrene  
 Concen: 3.933 ng  
 RT: 11.22 min Scan# 1553  
 Delta R.T. 0.00 min  
 Lab File: BF114691.D  
 Acq: 31 May 2019 5:10

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 176     | 19.5  | 17.2  | 25.8  |
| 179     | 15.1  | 13.9  | 20.9  |



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: 7.523 ng

RT: 12.40 min Scan# 1754

Delta R.T. 0.01 min

Lab File: BF114691.D

Acq: 31 May 2019 5:10

Instrument :

BNA\_F

ClientSampleId :

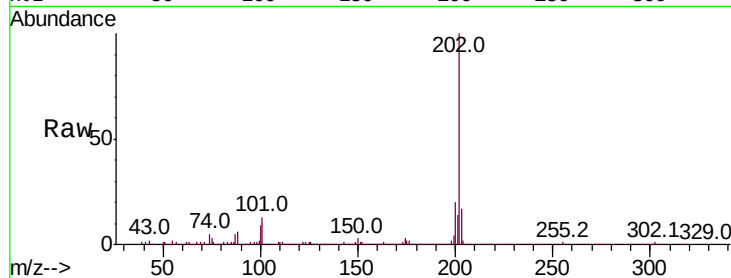
Tot Ion:202 Resp: 384021

Ion Ratio Lower Upper

202 100

101 12.6 0.0 33.9

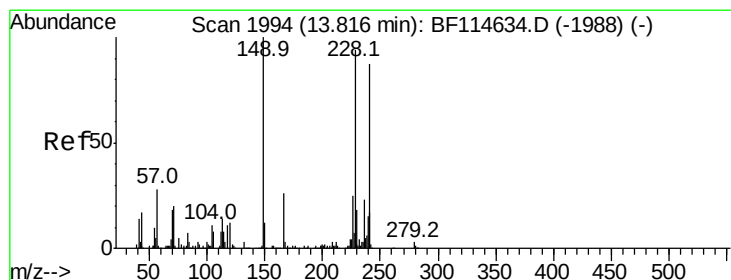
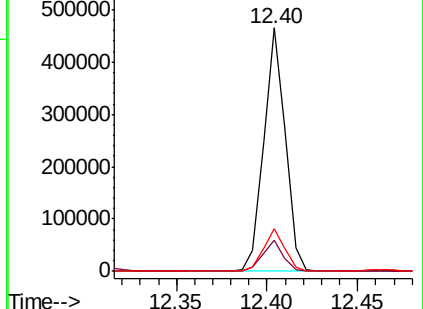
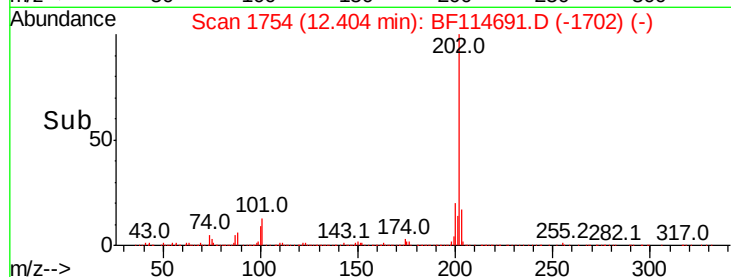
203 17.4 0.0 39.1



Abundance Ion 202.00 (201.70 to 202.70): E

Ion 101.00 (100.70 to 101.70): E

Ion 203.00 (202.70 to 203.70): E



#76

Chrysene-d12

Concen: 20.000 ng

RT: 13.82 min Scan# 1995

Delta R.T. 0.01 min

Lab File: BF114691.D

Acq: 31 May 2019 5:10

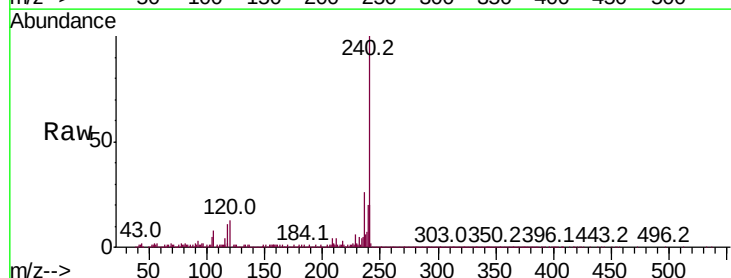
Tgt Ion:240 Resp: 577255

Ion Ratio Lower Upper

240 100

120 13.0 11.2 16.8

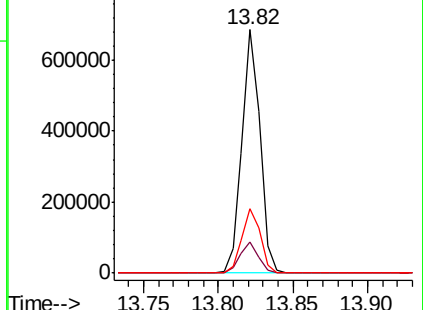
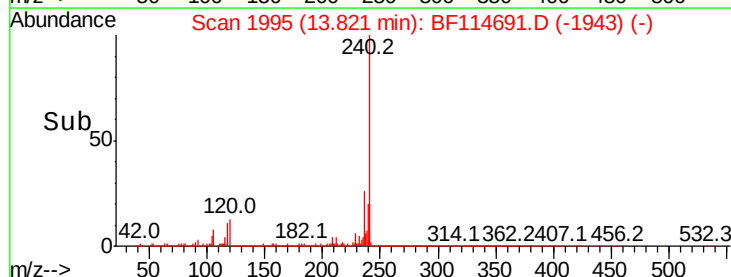
236 26.3 21.2 31.8

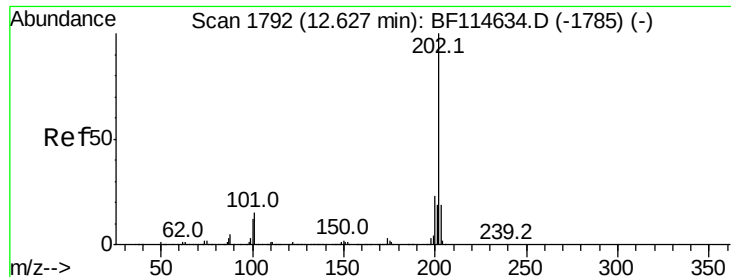


Abundance Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E





#78

Pvrene

Concen: 6.030 ng

RT: 12.63 min Scan# 1792

Delta R.T. -0.00 min

Lab File: BF114691.D

Acq: 31 May 2019 5:10

Instrument :

BNA\_F

ClientSampleId :

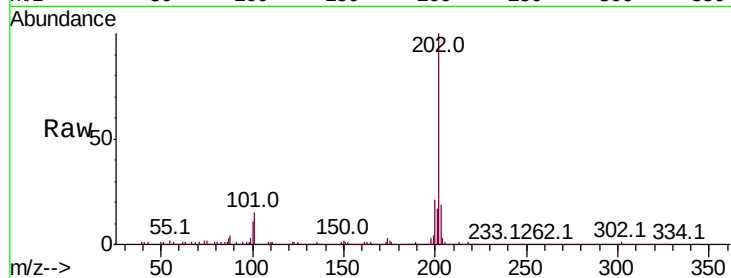
Tot Ion:202 Resp: 294475

Ion Ratio Lower Upper

202 100

200 20.7 18.6 28.0

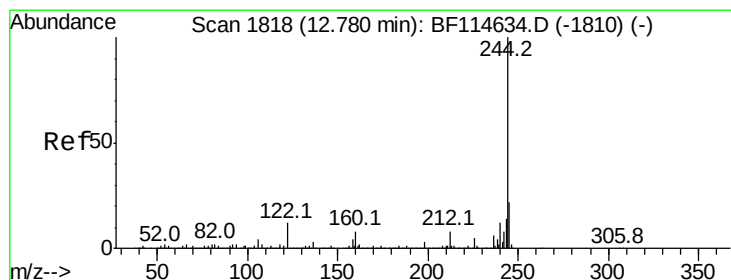
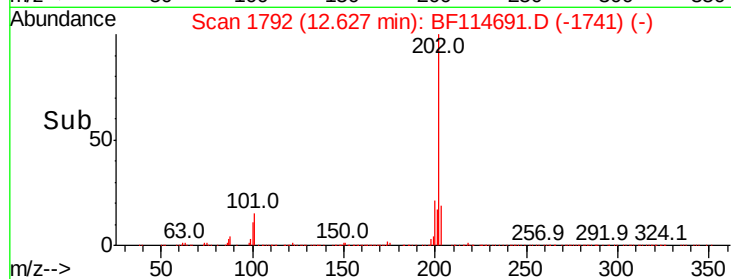
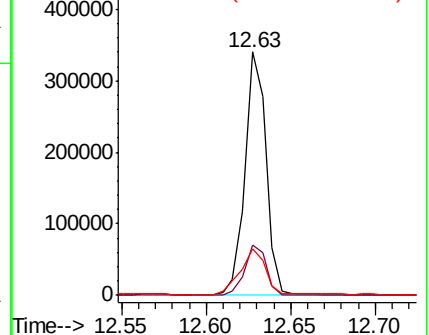
203 18.9 15.4 23.2



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



#79

Terphenyl-d14

Concen: 17.735 ng

RT: 12.78 min Scan# 1818

Delta R.T. -0.00 min

Lab File: BF114691.D

Acq: 31 May 2019 5:10

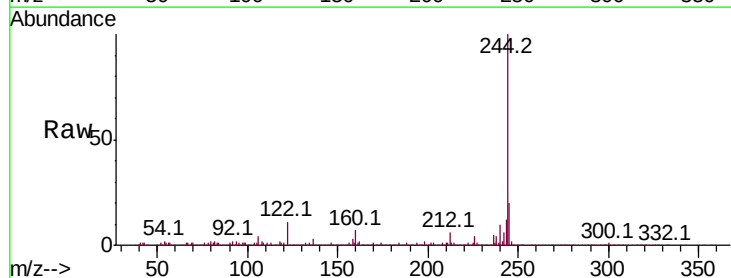
Tgt Ion:244 Resp: 544522

Ion Ratio Lower Upper

244 100

212 6.1 6.1 9.1

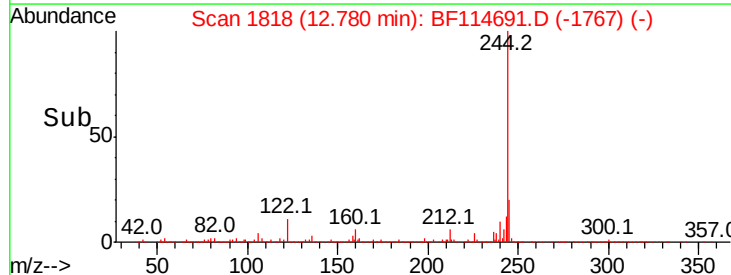
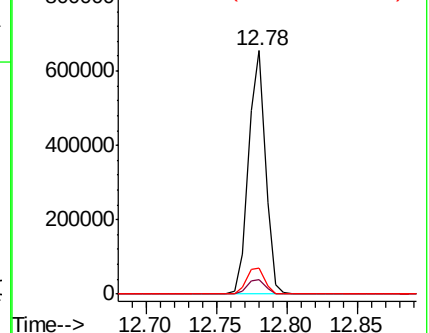
122 10.7 9.8 14.8

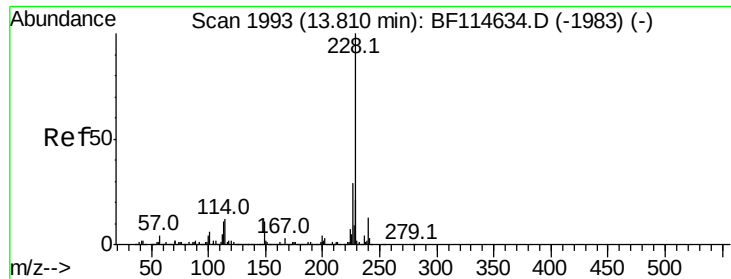


Abundance Ion 244.00 (243.70 to 244.70): E

Ion 212.00 (211.70 to 212.70): E

Ion 122.00 (121.70 to 122.70): E





#81

Benzo(a)anthracene

Concen: 3.204 ng

RT: 13.81 min Scan# 1993

Delta R.T. -0.00 min

Lab File: BF114691.D

Acq: 31 May 2019 5:10

Instrument :

BNA\_F

ClientSampleId :

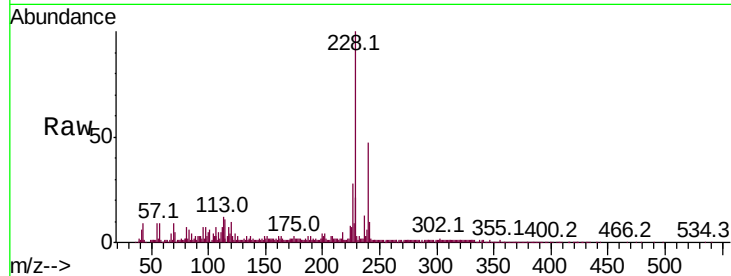
Tot Ion:228 Resp: 142140

Ion Ratio Lower Upper

228 100

226 28.4 23.0 34.6

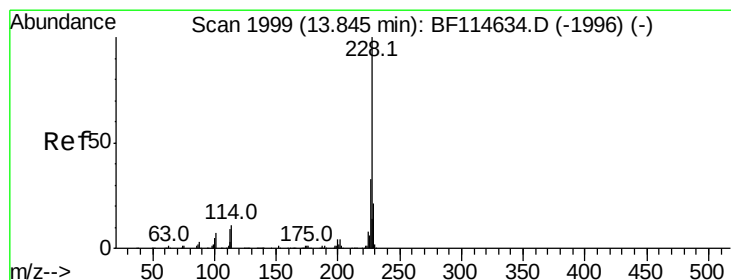
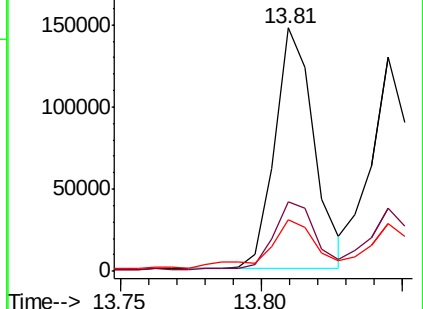
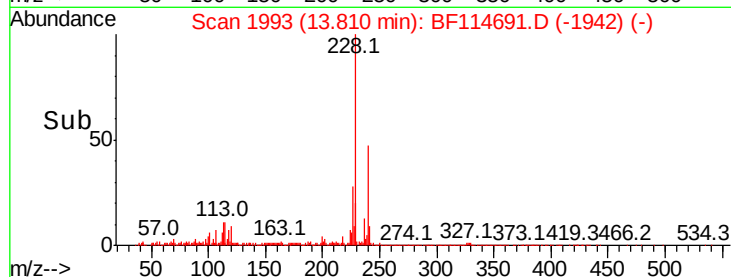
229 21.3 17.0 25.4



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



#83

Chrysene

Concen: 2.797 ng

RT: 13.84 min Scan# 1999

Delta R.T. -0.00 min

Lab File: BF114691.D

Acq: 31 May 2019 5:10

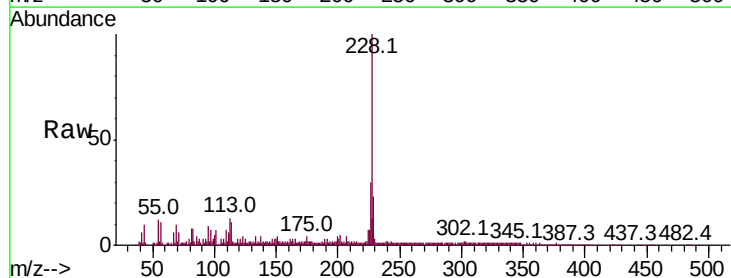
Tgt Ion:228 Resp: 118557

Ion Ratio Lower Upper

228 100

226 29.8 26.4 39.6

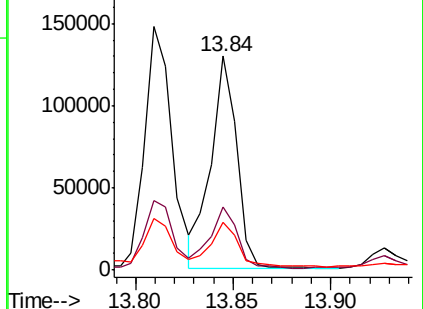
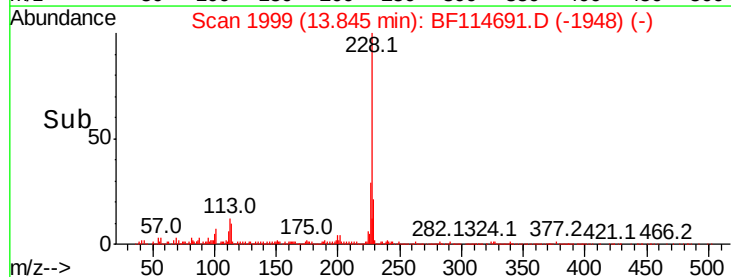
229 22.5 17.1 25.7

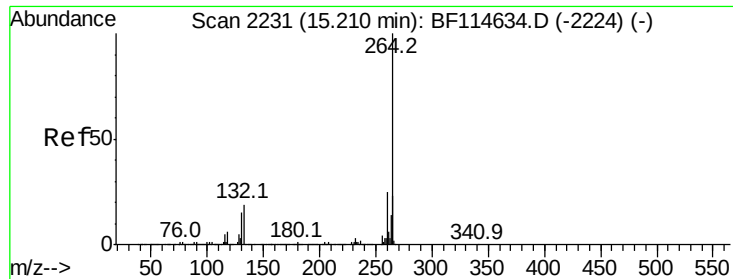


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E





#87

Pervlene-d12

Concen: 20.000 ng

RT: 15.22 min Scan# 2232

Delta R.T. 0.01 min

Lab File: BF114691.D

Acq: 31 May 2019 5:10

Instrument :

BNA\_F

ClientSampleId :

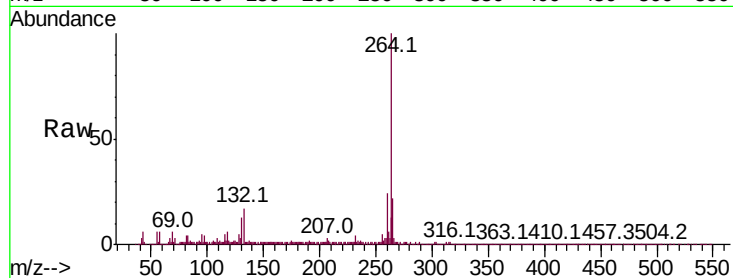
Tot Ion:264 Resp: 501172

Ion Ratio Lower Upper

264 100

260 23.6 19.7 29.5

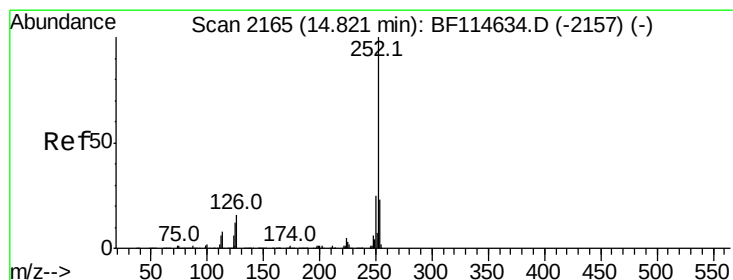
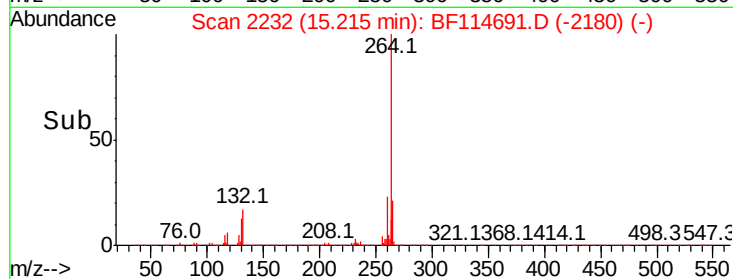
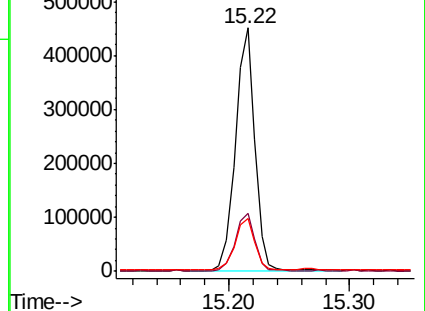
265 21.9 18.1 27.1



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



#88

Benzo(b)fluoranthene

Concen: 5.620 ng

RT: 14.82 min Scan# 2165

Delta R.T. -0.00 min

Lab File: BF114691.D

Acq: 31 May 2019 5:10

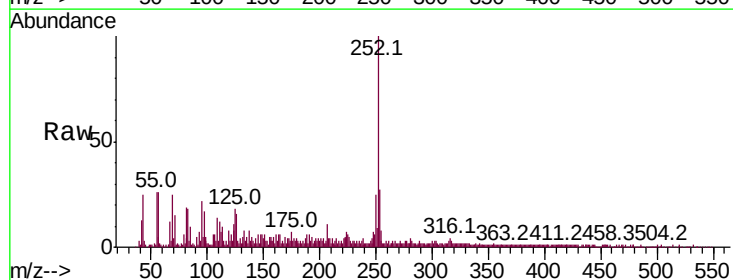
Tgt Ion:252 Resp: 177398

Ion Ratio Lower Upper

252 100

253 27.5 18.7 28.1

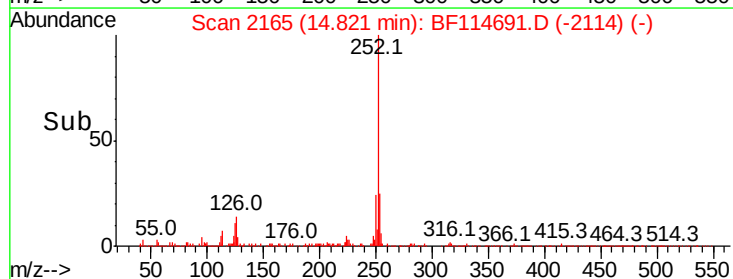
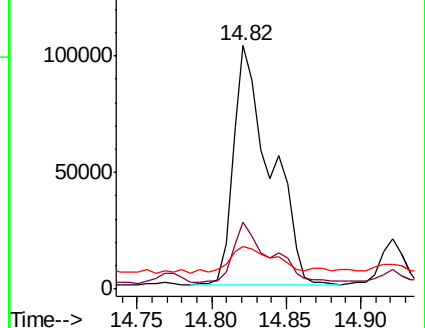
125 17.6 9.4 14.2#

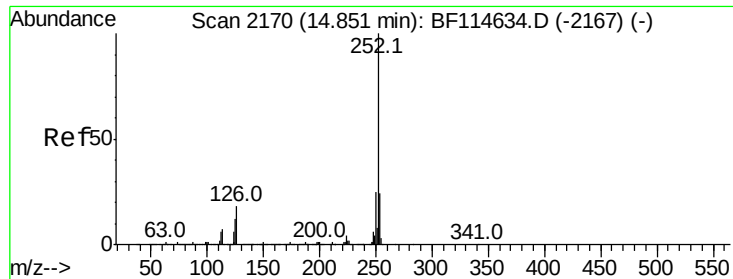


Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E

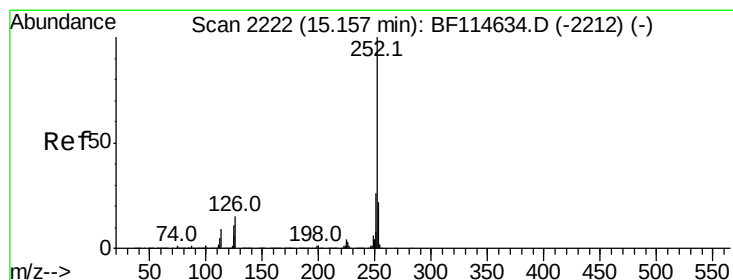
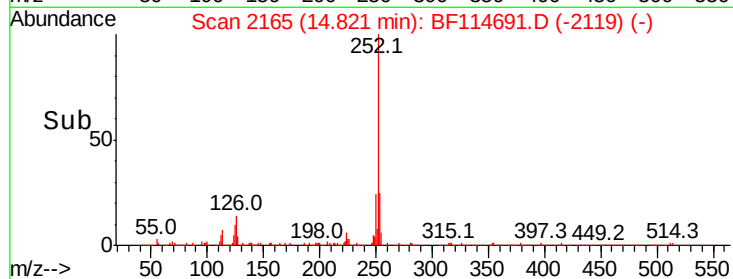
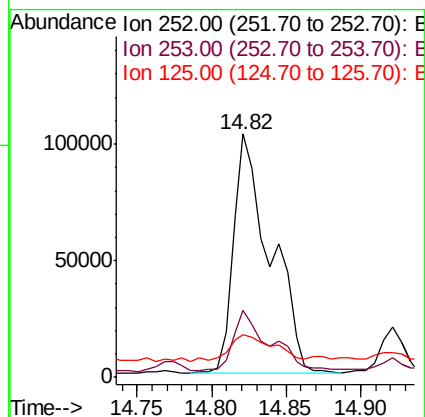
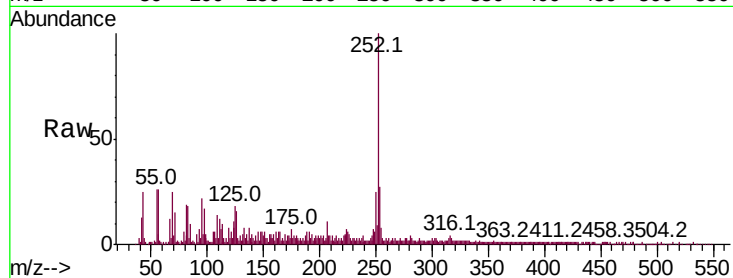




#89  
Benzo(k)fluoranthene  
Concen: 6.466 ng  
RT: 14.82 min Scan# 2165  
Delta R.T. -0.03 min  
Lab File: BF114691.D  
Acq: 31 May 2019 5:10

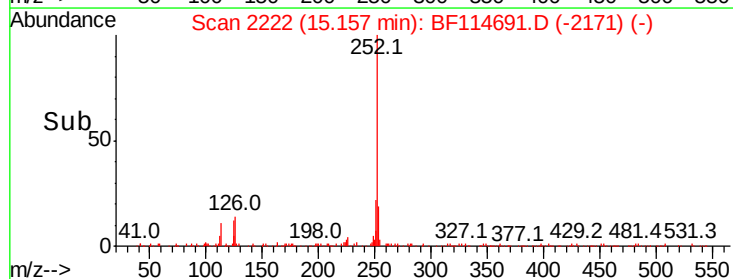
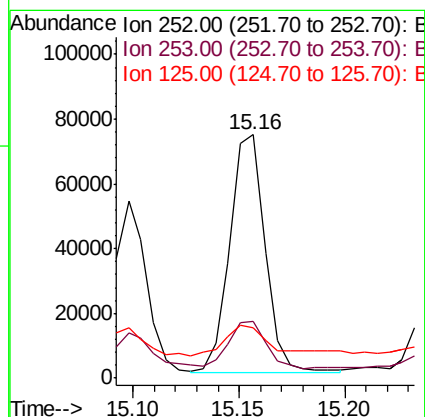
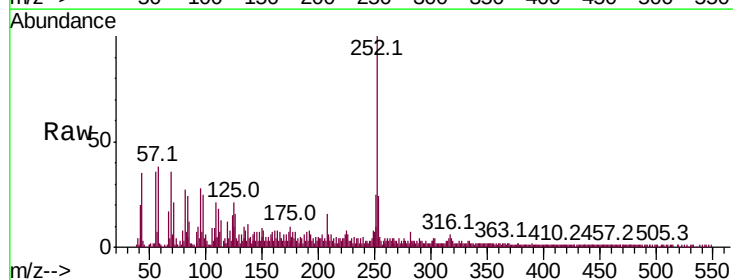
Instrument :  
BNA\_F  
ClientSampleId :

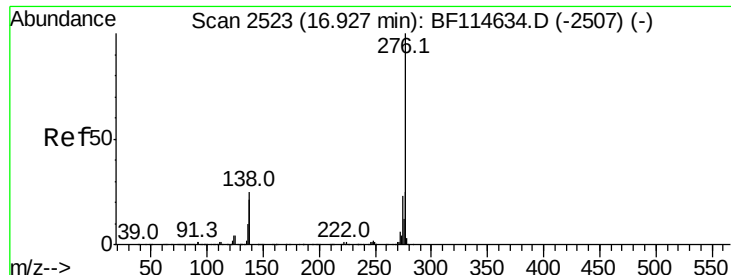
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 27.5  | 18.9  | 28.3  |
| 125     | 17.6  | 9.5   | 14.3  |



#90  
Benzo(a)pyrene  
Concen: 3.038 ng  
RT: 15.16 min Scan# 2222  
Delta R.T. -0.00 min  
Lab File: BF114691.D  
Acq: 31 May 2019 5:10

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.5  | 18.0  | 27.0  |
| 125     | 20.5  | 9.2   | 13.8  |





#92

Benzo(a,h,i)perylene

Concen: 2.778 ng

RT: 16.93 min Scan# 2524

Delta R.T. 0.01 min

Lab File: BF114691.D

Acq: 31 May 2019 5:10

Instrument :

BNA\_F

ClientSampleId :

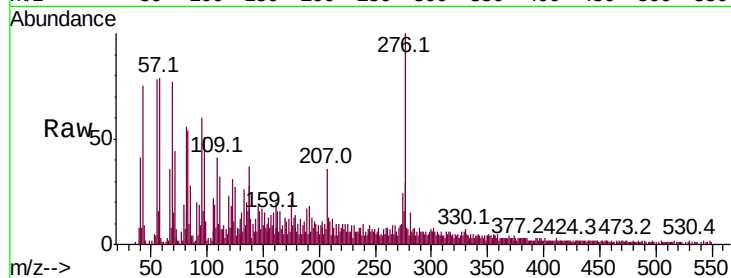
Tot Ion:276 Resp: 66069

Ion Ratio Lower Upper

276 100

277 29.0 19.7 29.5

138 27.6 19.8 29.8



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

