

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF041620\  
 Data File : BF120041.D  
 Acq On : 16 Apr 2020 17:31  
 Operator : MA/SJ  
 Sample : L2245-26 5X  
 Misc :  
 ALS Vial : 49 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 TP-21B

Quant Time: Apr 17 01:25:06 2020  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF040820.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Apr 16 10:48:04 2020  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.72  | 152  | 136301   | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 8.01  | 136  | 468087   | 20.00 | ng    | 0.00     |
| 39) Acenaphthene-d10      | 9.76  | 164  | 230103   | 20.00 | ng    | 0.00     |
| 64) Phenanthrene-d10      | 11.25 | 188  | 345026   | 20.00 | ng    | 0.00     |
| 76) Chrysene-d12          | 13.89 | 240  | 270518   | 20.00 | ng    | 0.00     |
| 87) Perylene-d12          | 15.32 | 264  | 227698   | 20.00 | ng    | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|-------|------|----------|-------|-------|----------|
| 5) 2-Fluorophenol           | 5.32  | 112  | 304565   | 38.62 | ng    | 0.00     |
| 7) Phenol-d6                | 6.36  | 99   | 388227   | 38.20 | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 7.29  | 82   | 228326   | 25.23 | ng    | -0.01    |
| 42) 2,4,6-Tribromophenol    | 10.55 | 330  | 62166    | 22.07 | ng    | -0.01    |
| 45) 2-Fluorobiphenyl        | 9.09  | 172  | 464836   | 28.68 | ng    | 0.00     |
| 79) Terphenyl-d14           | 12.84 | 244  | 355393   | 22.11 | ng    | -0.01    |

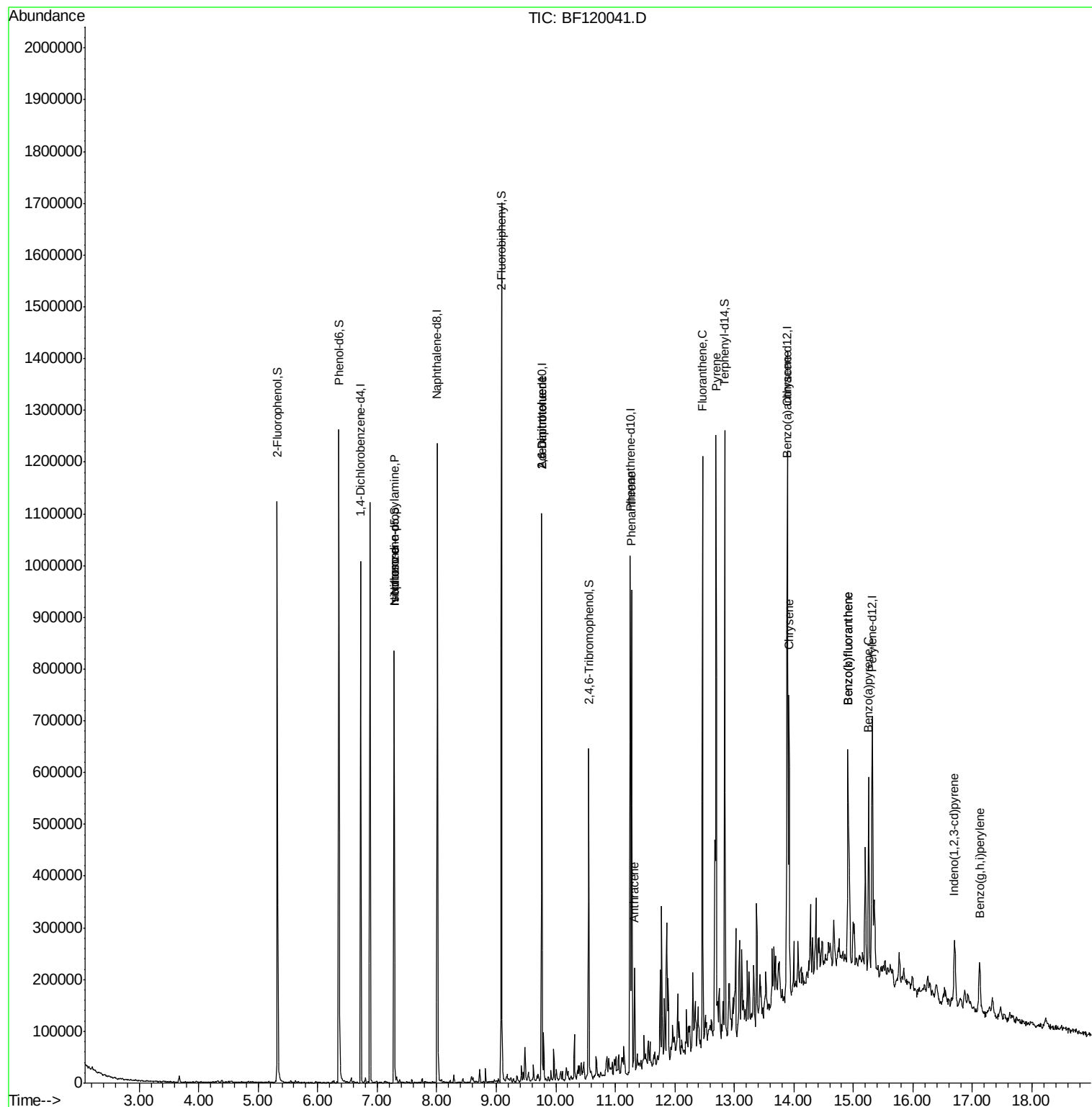
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units | Qvalue |
|--------------------------------|-------|------|----------|-----------|-------|--------|
| 9) Benzaldehyde                | 6.27  | 77   | 939      | Below Cal |       | # 60   |
| 19) n-Nitroso-di-n-propylamine | 7.29  | 70   | 28663    | 4.386     | ng    | # 77   |
| 25) Isophorone                 | 7.29  | 82   | 224467   | 12.869    | ng    | # 65   |
| 51) 2,6-Dinitrotoluene         | 9.76  | 165  | 30761    | 7.893     | ng    | # 19   |
| 57) 2,4-Dinitrotoluene         | 9.76  | 165  | 30761    | 5.990     | ng    | # 22   |
| 71) Phenanthrene               | 11.27 | 178  | 320219   | 17.439    | ng    | 100    |
| 72) Anthracene                 | 11.33 | 178  | 78400    | 4.179     | ng    | 97     |
| 75) Fluoranthene               | 12.46 | 202  | 450947   | 22.760    | ng    | 99     |
| 78) Pyrene                     | 12.69 | 202  | 452675   | 19.850    | ng    | 100    |
| 81) Benzo(a)anthracene         | 13.88 | 228  | 245681   | 13.805    | ng    | 99     |
| 83) Chrysene                   | 13.92 | 228  | 219984   | 12.165    | ng    | 98     |
| 86) Indeno(1,2,3-cd)pyrene     | 16.70 | 276  | 79288    | 4.974     | ng    | 98     |
| 88) Benzo(b)fluoranthene       | 14.91 | 252  | 293464   | 17.916    | ng    | 99     |
| 89) Benzo(k)fluoranthene       | 14.91 | 252  | 293464   | 20.764    | ng    | 98     |
| 90) Benzo(a)pyrene             | 15.26 | 252  | 162564   | 11.804    | ng    | 99     |
| 92) Benzo(g,h,i)perylene       | 17.12 | 276  | 74481    | 6.185     | ng    | # 95   |

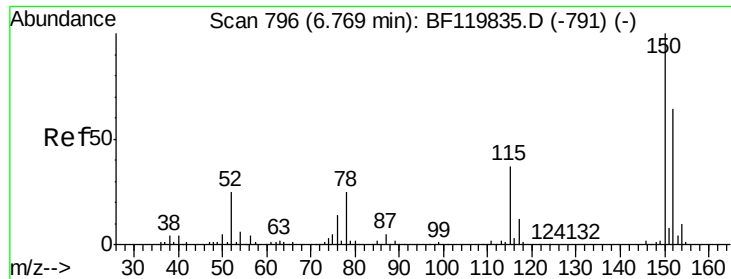
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF041620\  
Data File : BF120041.D  
Acq On : 16 Apr 2020 17:31  
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ALS Vial : 49 Sample Multiplier: 1

Instrument :  
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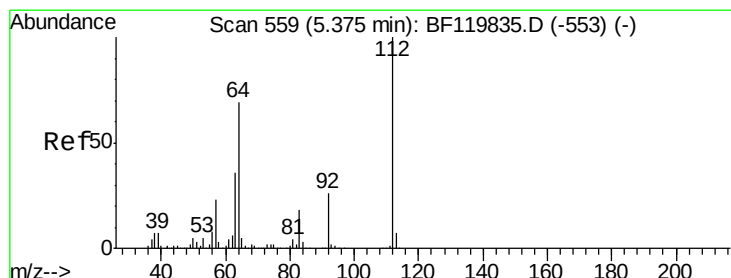
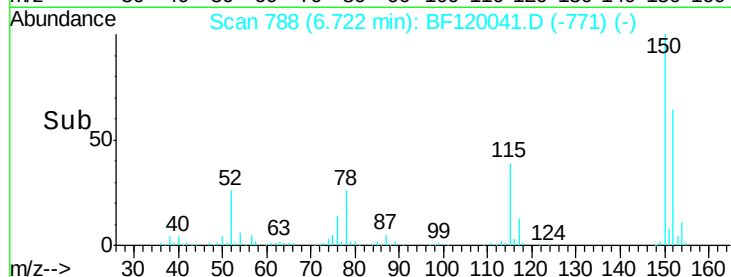
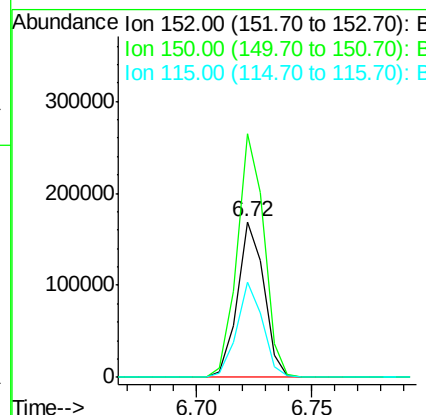
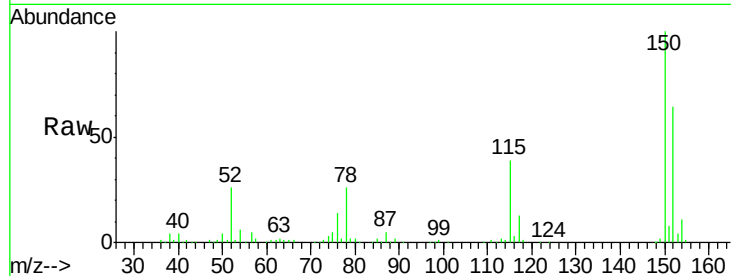


#1

1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.72 min Scan# 788  
Delta R.T. 0.00 min  
Lab File: BF120041.D  
Acq: 16 Apr 2020 17:31

Instrument :  
BNA\_F  
ClientSampleId :  
TP-21B

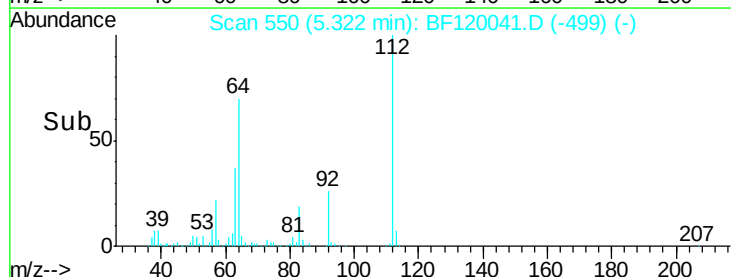
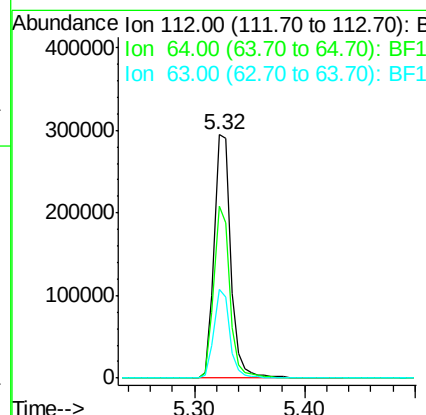
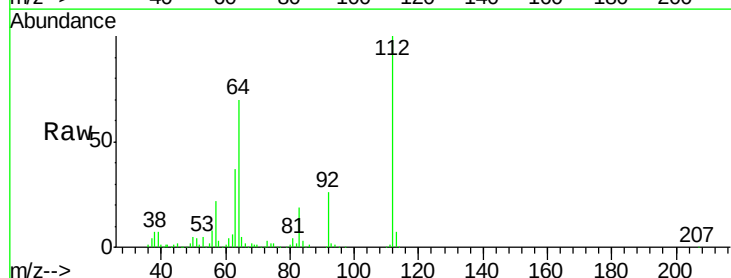
Tot Ion:152 Resp: 136301  
Ion Ratio Lower Upper  
152 100  
150 156.3 124.8 187.2  
115 60.7 46.5 69.7

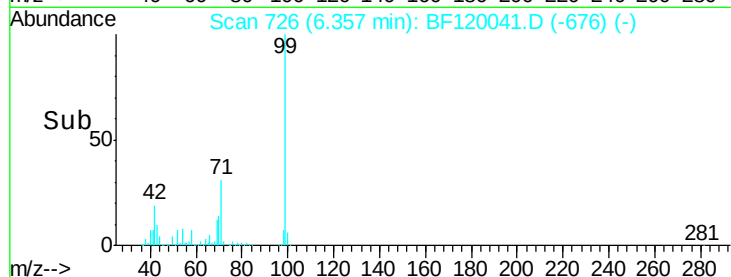
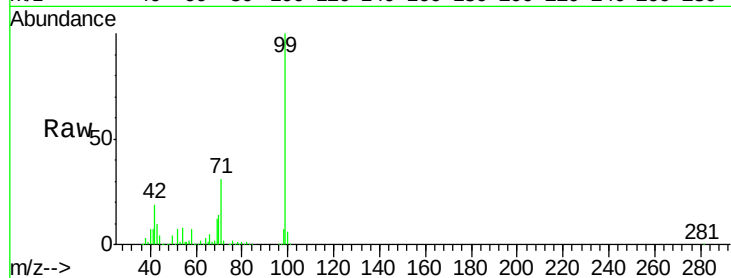
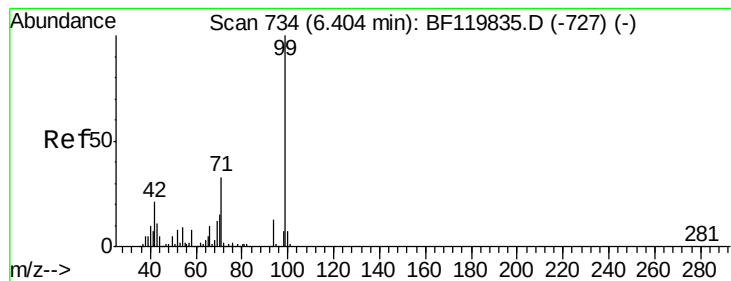


#5

2-Fluorophenol  
Concen: 38.616 ng  
RT: 5.32 min Scan# 550  
Delta R.T. 0.00 min  
Lab File: BF120041.D  
Acq: 16 Apr 2020 17:31

Tgt Ion:112 Resp: 304565  
Ion Ratio Lower Upper  
112 100  
64 70.4 55.5 83.3  
63 36.6 29.1 43.7





#7

Phenol-d6

Concen: 38.201 ng

RT: 6.36 min Scan# 726

Delta R.T. -0.01 min

Lab File: BF120041.D

Acq: 16 Apr 2020 17:31

Instrument :

BNA\_F

ClientSampleId :

TP-21B

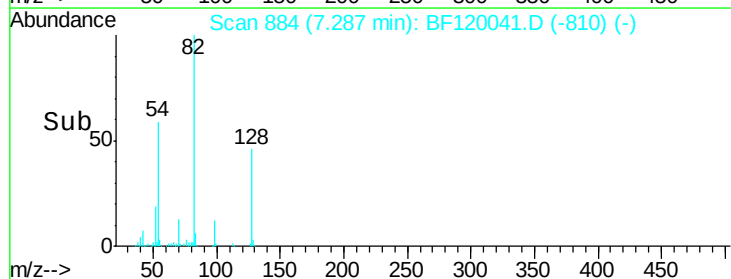
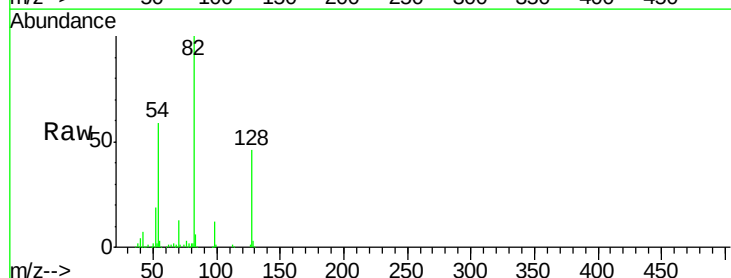
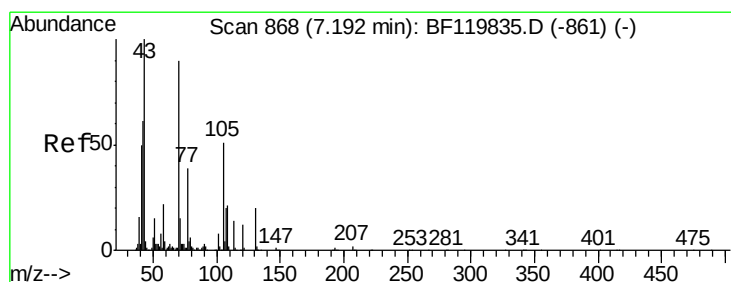
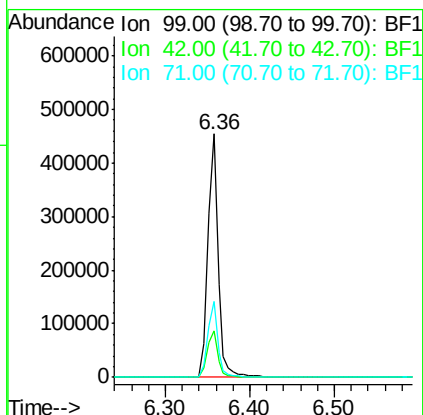
Tot Ion: 99 Resp: 388227

Ion Ratio Lower Upper

99 100

42 19.1 16.9 25.3

71 31.4 26.3 39.5



#19

n-Nitroso-di-n-propylamine

Concen: 4.386 ng

RT: 7.29 min Scan# 884

Delta R.T. 0.14 min

Lab File: BF120041.D

Acq: 16 Apr 2020 17:31

Tgt Ion: 70 Resp: 28663

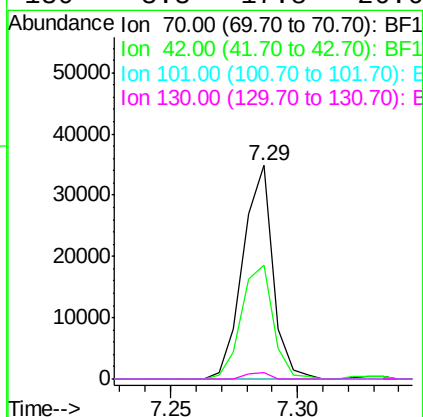
Ion Ratio Lower Upper

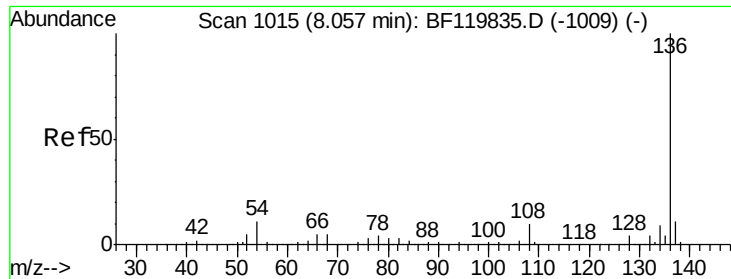
70 100

42 53.6 54.2 81.4#

101 0.0 7.4 11.2#

130 3.3 17.8 26.6#

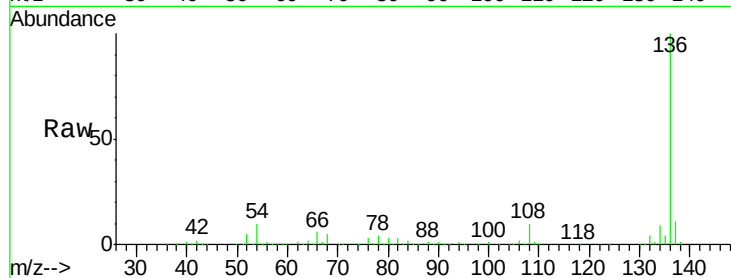




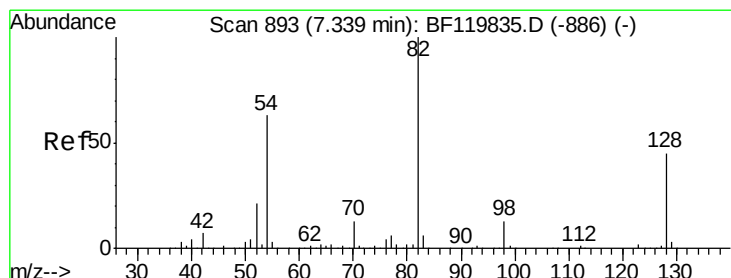
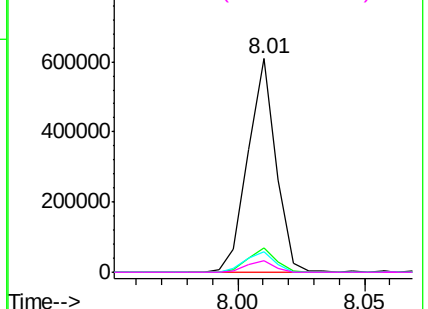
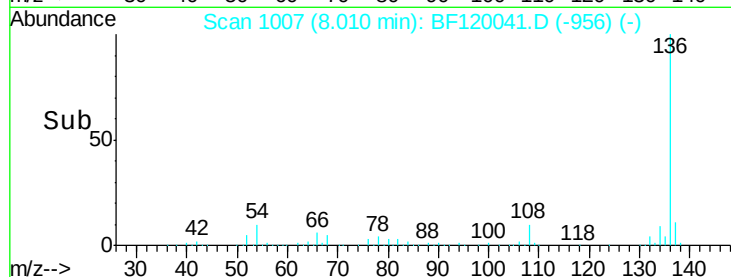
#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 8.01 min Scan# 1007  
Delta R.T. 0.00 min  
Lab File: BF120041.D  
Acq: 16 Apr 2020 17:31

Instrument :  
BNA\_F  
ClientSampled :  
TP-21B

|             |       |          |
|-------------|-------|----------|
| Tot Ion:136 | Resp: | 468087   |
| Ion Ratio   | Lower | Upper    |
| 136         | 100   |          |
| 137         | 11.4  | 8.7 13.1 |
| 54          | 9.9   | 8.5 12.7 |
| 68          | 5.3   | 3.9 5.9  |

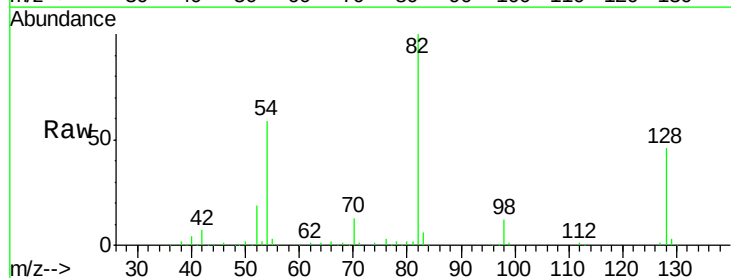


Abundance Ion 136.00 (135.70 to 136.70): E  
Ion 137.00 (136.70 to 137.70): E  
Ion 54.00 (53.70 to 54.70): BF1  
Ion 68.00 (67.70 to 68.70): BF1

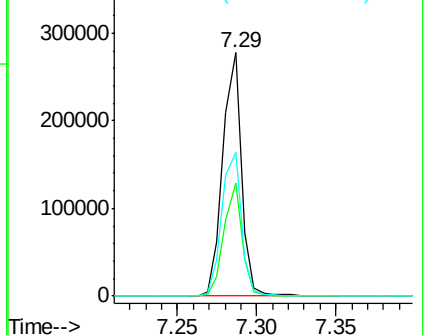
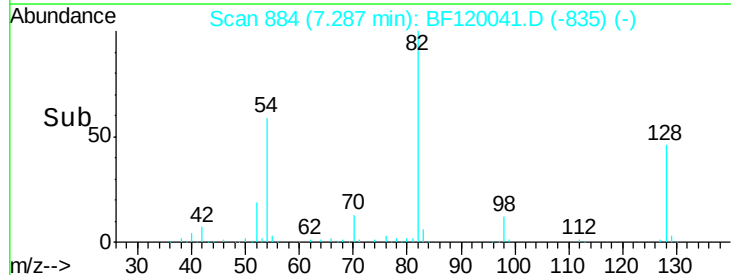


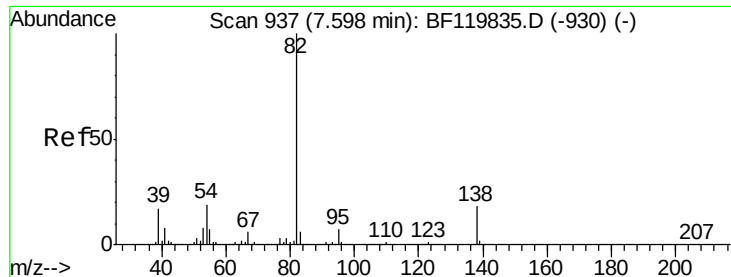
#23  
Nitrobenzene-d5  
Concen: 25.235 ng  
RT: 7.29 min Scan# 884  
Delta R.T. -0.01 min  
Lab File: BF120041.D  
Acq: 16 Apr 2020 17:31

|             |       |           |
|-------------|-------|-----------|
| Tgt Ion: 82 | Resp: | 228326    |
| Ion Ratio   | Lower | Upper     |
| 82          | 100   |           |
| 128         | 46.3  | 36.2 54.4 |
| 54          | 59.1  | 50.4 75.6 |



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: 12.869 ng

RT: 7.29 min Scan# 884

Delta R.T. -0.27 min

Lab File: BF120041.D

Acq: 16 Apr 2020 17:31

Instrument :

BNA\_F

ClientSampleId :

TP-21B

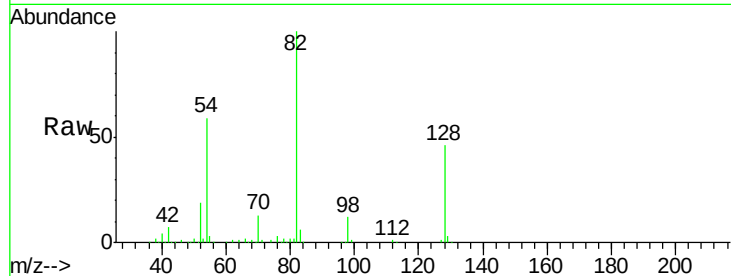
Tot Ion: 82 Resp: 224467

Ion Ratio Lower Upper

82 100

95 0.0 5.8 8.6#

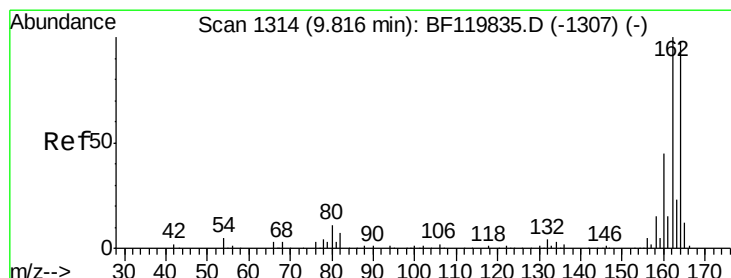
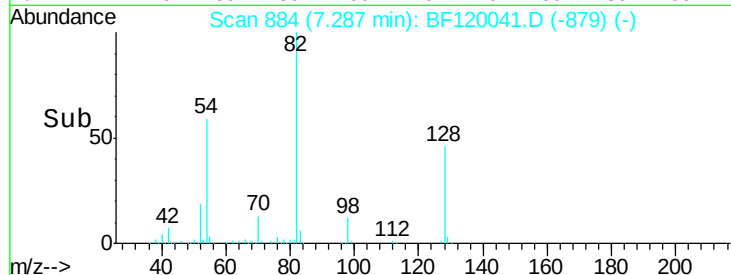
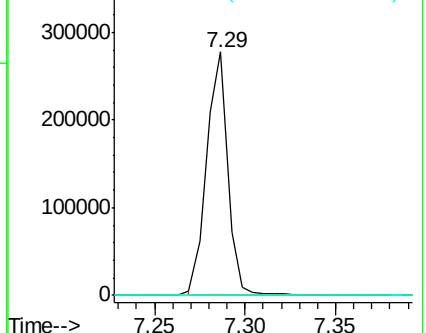
138 0.0 14.5 21.7#



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: 9.76 min Scan# 1305

Delta R.T. -0.01 min

Lab File: BF120041.D

Acq: 16 Apr 2020 17:31

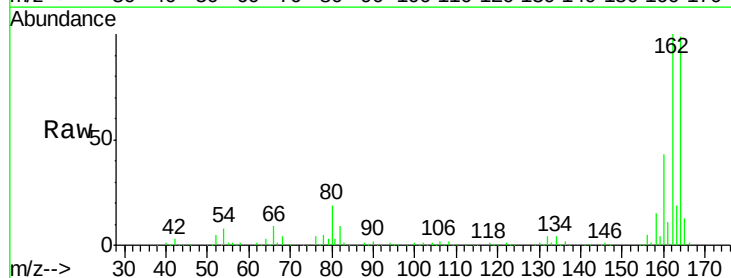
Tgt Ion:164 Resp: 230103

Ion Ratio Lower Upper

164 100

162 101.0 81.9 122.9

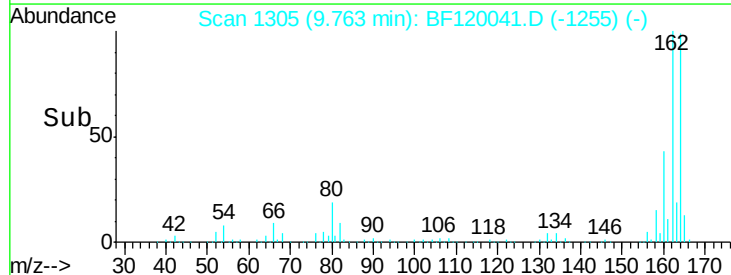
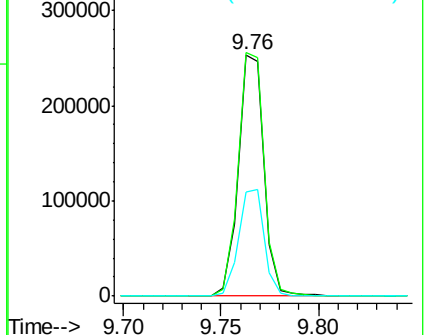
160 43.0 36.6 54.8

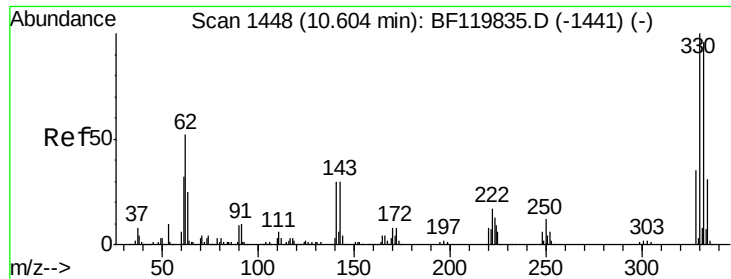


Abundance Ion 164.00 (163.70 to 164.70): E

Ion 162.00 (161.70 to 162.70): E

Ion 160.00 (159.70 to 160.70): E

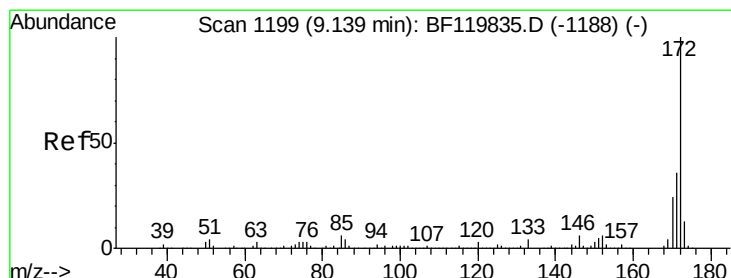
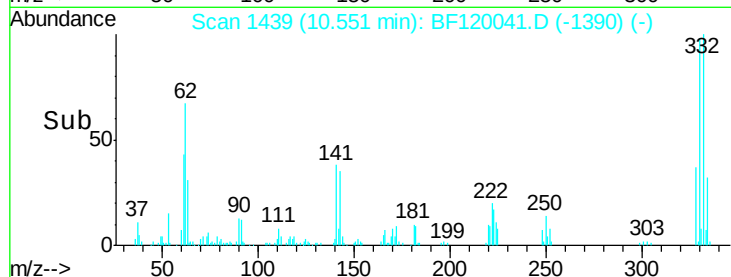
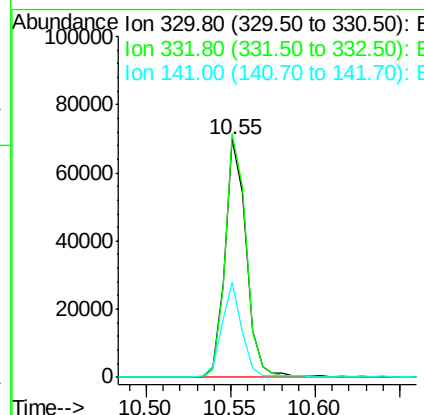
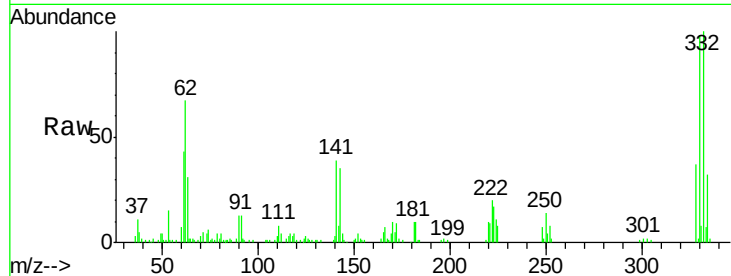




#42  
 2,4,6-Tribromophenol  
 Concen: 22.066 ng  
 RT: 10.55 min Scan# 1439  
 Delta R.T. -0.01 min  
 Lab File: BF120041.D  
 Acq: 16 Apr 2020 17:31

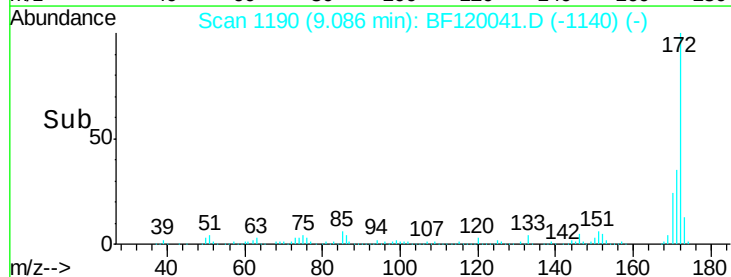
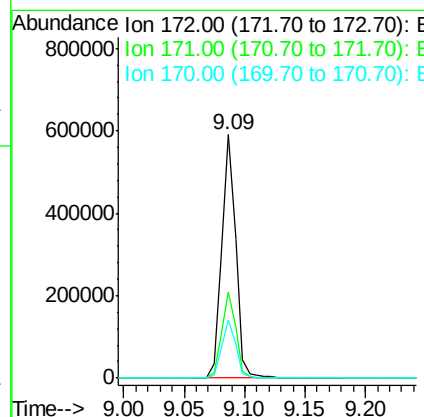
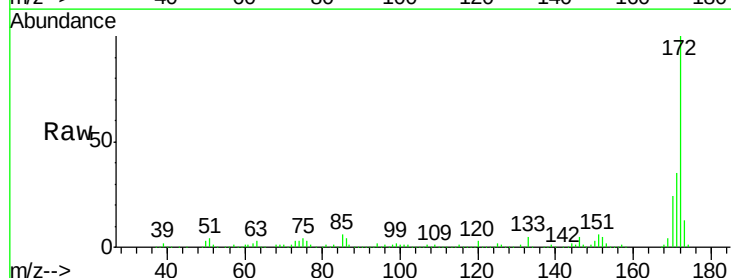
Instrument :  
 BNA\_F  
 ClientSampleId :  
 TP-21B

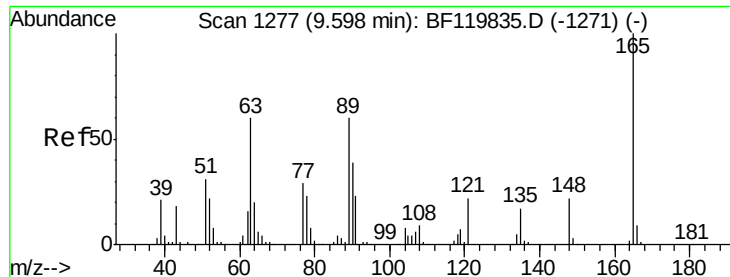
Tot Ion:330 Resp: 62166  
 Ion Ratio Lower Upper  
 330 100  
 332 100.3 76.8 115.2  
 141 38.3 25.1 37.7#



#45  
 2-Fluorobiphenyl  
 Concen: 28.681 ng  
 RT: 9.09 min Scan# 1190  
 Delta R.T. -0.01 min  
 Lab File: BF120041.D  
 Acq: 16 Apr 2020 17:31

Tgt Ion:172 Resp: 464836  
 Ion Ratio Lower Upper  
 172 100  
 171 35.3 28.9 43.3  
 170 23.8 19.4 29.2





#51

2,6-Dinitrotoluene

Concen: 7.893 ng

RT: 9.76 min Scan# 1305

Delta R.T. 0.20 min

Lab File: BF120041.D

Acq: 16 Apr 2020 17:31

Instrument :

BNA\_F

ClientSampleId :

TP-21B

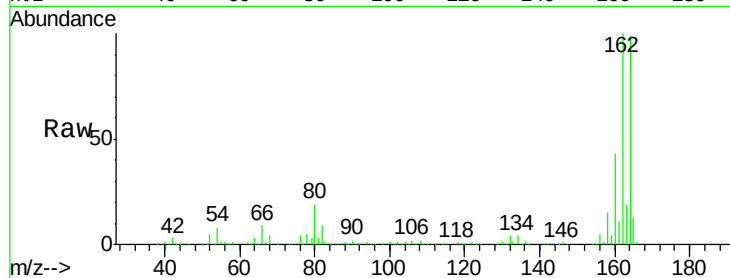
Tot Ion:165 Resp: 30761

Ion Ratio Lower Upper

165 100

63 0.9 55.6 83.4#

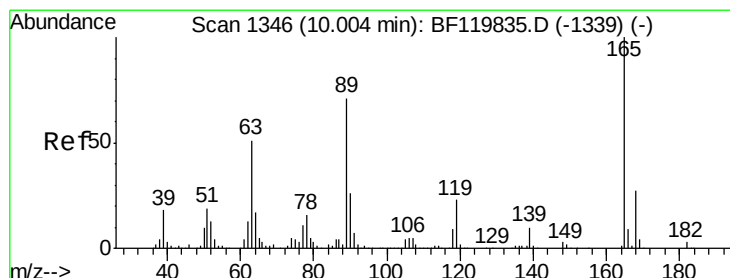
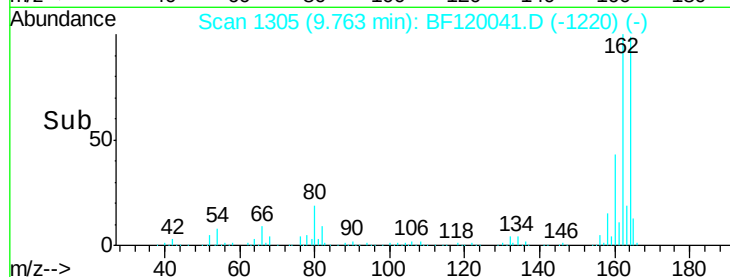
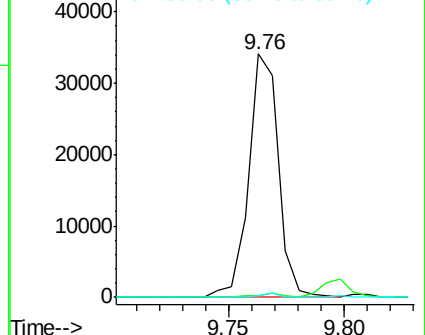
89 1.0 47.9 71.9#



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: 5.990 ng

RT: 9.76 min Scan# 1305

Delta R.T. -0.20 min

Lab File: BF120041.D

Acq: 16 Apr 2020 17:31

Tgt Ion:165 Resp: 30761

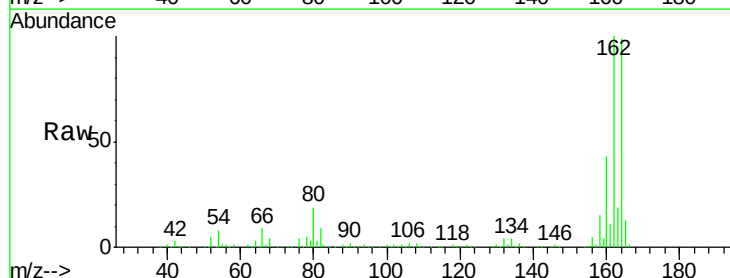
Ion Ratio Lower Upper

165 100

63 0.9 40.8 61.2#

89 1.0 56.9 85.3#

182 0.0 2.0 3.0#

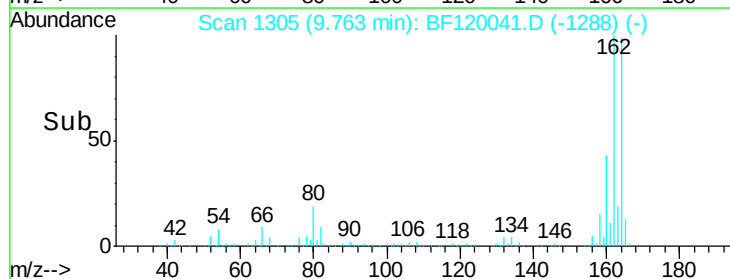
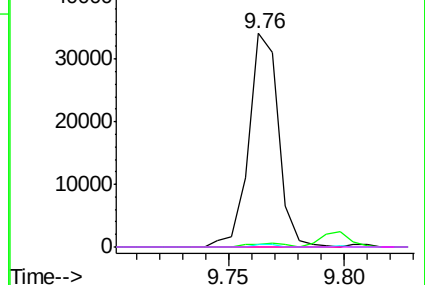


Abundance Ion 165.00 (164.70 to 165.70): E

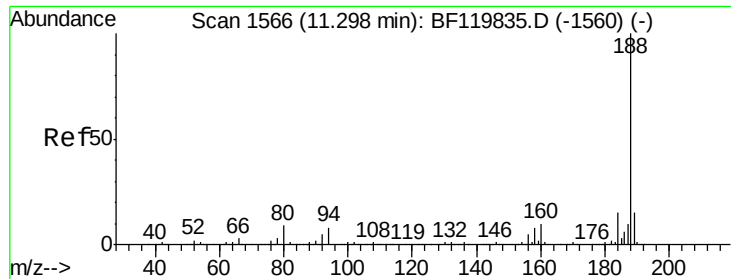
Ion 63.00 (62.70 to 63.70): BF1

Ion 89.00 (88.70 to 89.70): BF1

Ion 182.00 (181.70 to 182.70): E



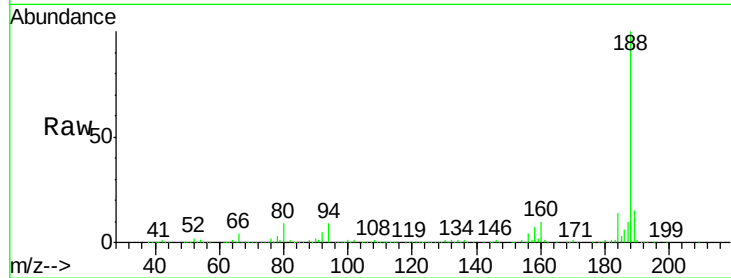




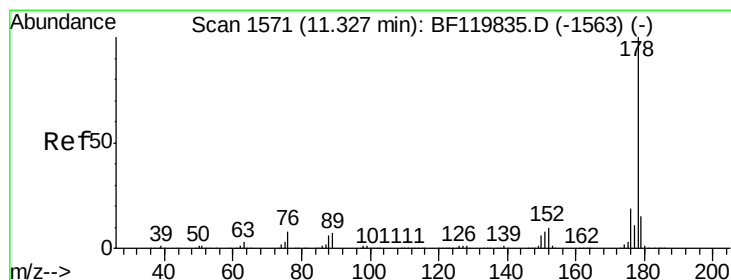
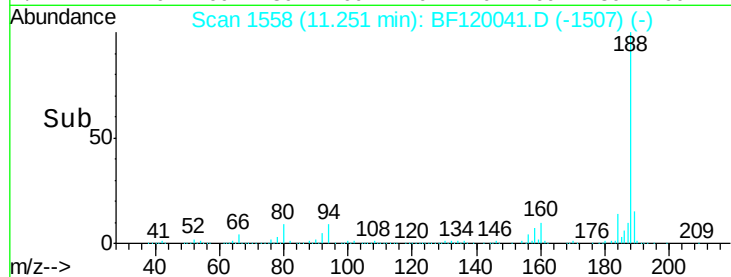
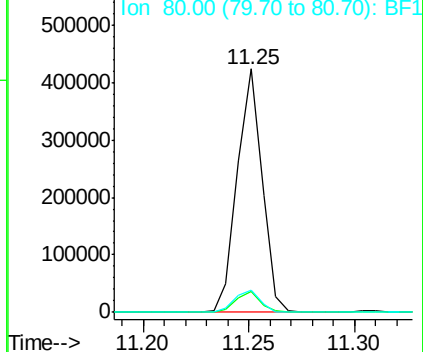
#64  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 11.25 min Scan# 1558  
Delta R.T. 0.00 min  
Lab File: BF120041.D  
Acq: 16 Apr 2020 17:31

Instrument :  
BNA\_F  
ClientSampled :  
TP-21B

Tot Ion:188 Resp: 345026  
Ion Ratio Lower Upper  
188 100  
94 8.8 6.7 10.1  
80 8.9 7.4 11.2

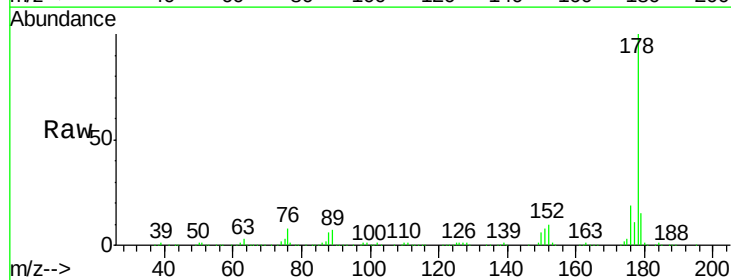


Abundance Ion 188.00 (187.70 to 188.70): E  
Ion 94.00 (93.70 to 94.70): BF1  
Ion 80.00 (79.70 to 80.70): BF1

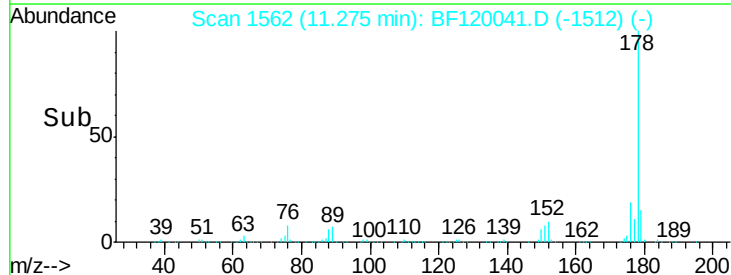
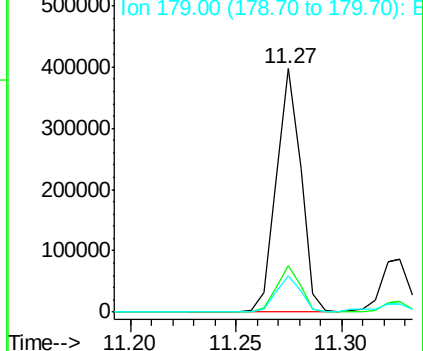


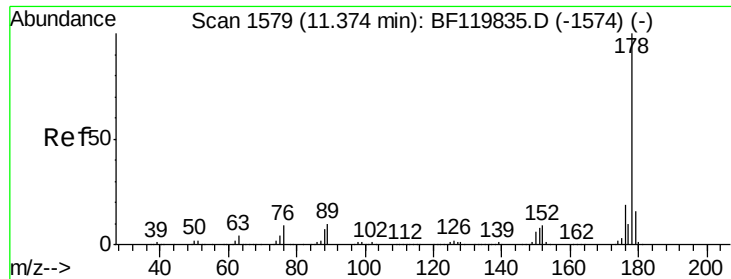
#71  
Phenanthrene  
Concen: 17.439 ng  
RT: 11.27 min Scan# 1562  
Delta R.T. -0.01 min  
Lab File: BF120041.D  
Acq: 16 Apr 2020 17:31

Tgt Ion:178 Resp: 320219  
Ion Ratio Lower Upper  
178 100  
176 18.9 15.1 22.7  
179 15.1 12.2 18.4



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

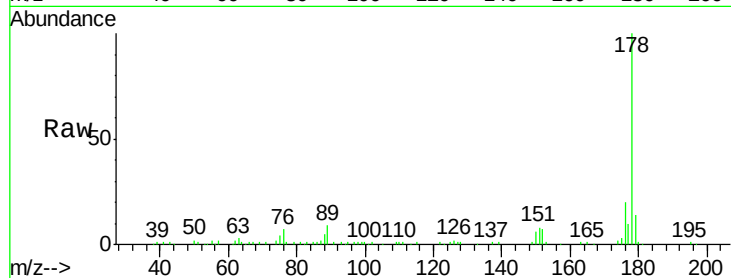




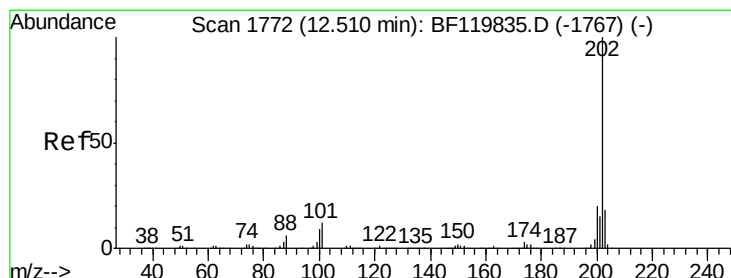
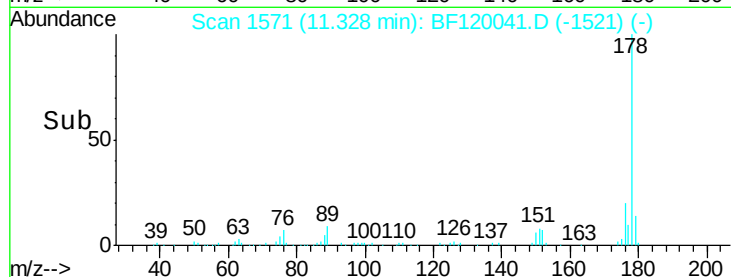
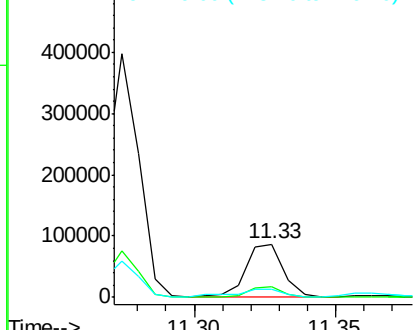
#72  
 Anthracene  
 Concen: 4.179 ng  
 RT: 11.33 min Scan# 1571  
 Delta R.T. -0.01 min  
 Lab File: BF120041.D  
 Acq: 16 Apr 2020 17:31

Instrument :  
 BNA\_F  
 ClientSampleId :  
 TP-21B

Tot Ion:178 Resp: 78400  
 Ion Ratio Lower Upper  
 178 100  
 176 19.8 15.4 23.2  
 179 14.0 12.8 19.2

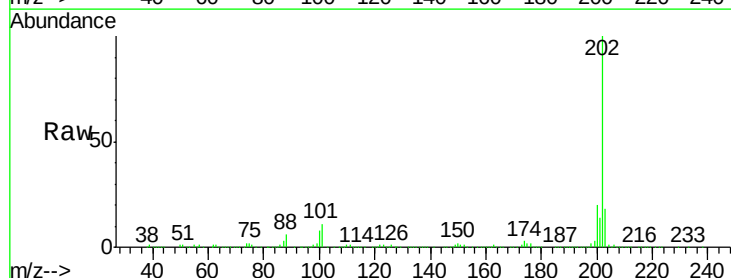


Abundance Ion 178.00 (177.70 to 178.70): E  
 Ion 176.00 (175.70 to 176.70): E  
 Ion 179.00 (178.70 to 179.70): E

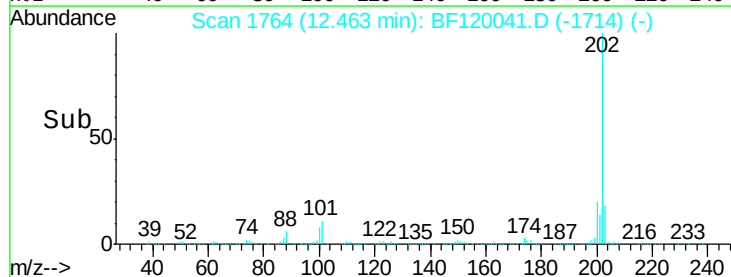
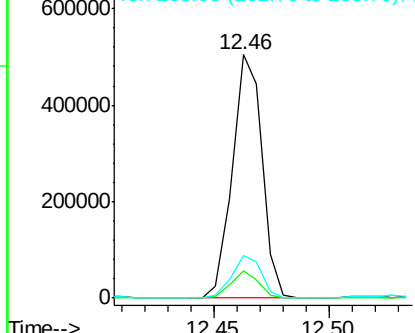


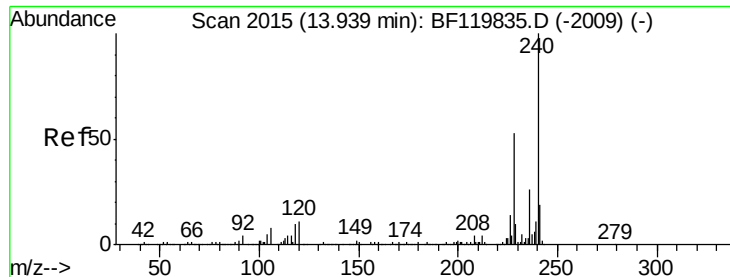
#75  
 Fluoranthene  
 Concen: 22.760 ng  
 RT: 12.46 min Scan# 1764  
 Delta R.T. -0.01 min  
 Lab File: BF120041.D  
 Acq: 16 Apr 2020 17:31

Tgt Ion:202 Resp: 450947  
 Ion Ratio Lower Upper  
 202 100  
 101 11.5 0.0 32.3  
 203 17.7 0.0 37.6



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: 13.89 min Scan# 2007

Delta R.T. -0.01 min

Lab File: BF120041.D

Acq: 16 Apr 2020 17:31

Instrument :

BNA\_F

ClientSampleId :

TP-21B

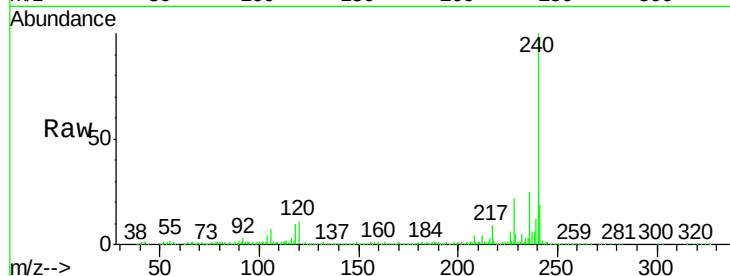
Tot Ion:240 Resp: 270518

Ion Ratio Lower Upper

240 100

120 11.3 9.0 13.6

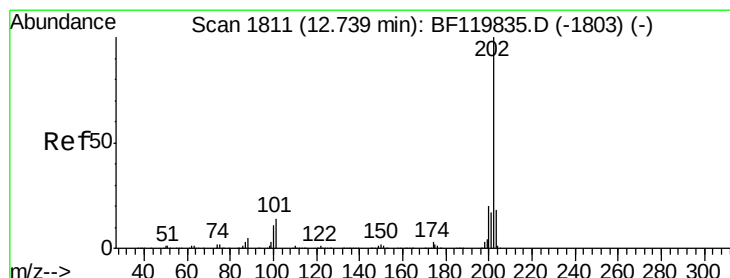
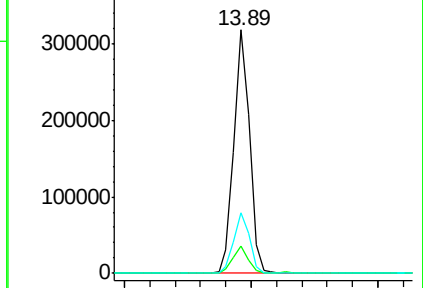
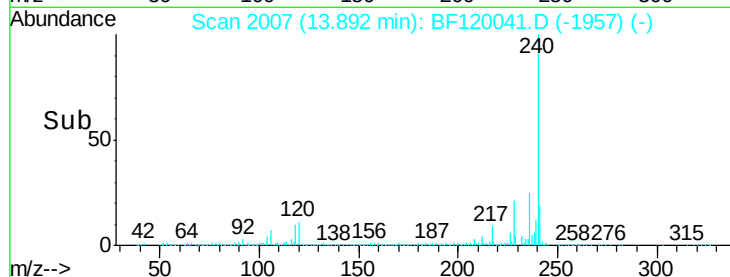
236 24.7 20.7 31.1



Abundance Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E



#78

Pyrene

Concen: 19.850 ng

RT: 12.69 min Scan# 1803

Delta R.T. -0.01 min

Lab File: BF120041.D

Acq: 16 Apr 2020 17:31

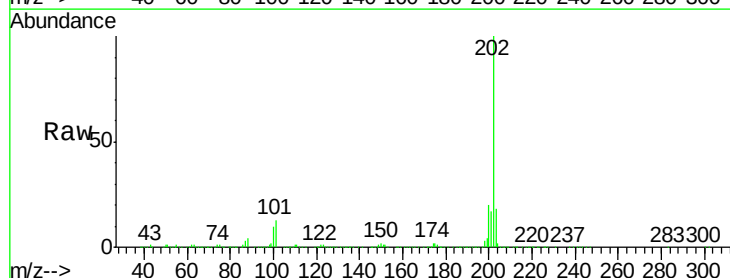
Tgt Ion:202 Resp: 452675

Ion Ratio Lower Upper

202 100

200 20.2 16.2 24.2

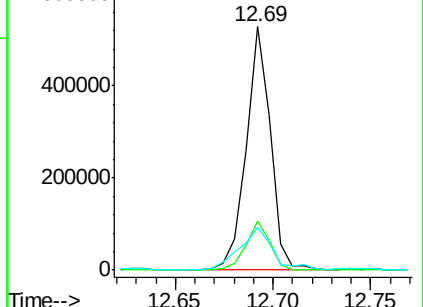
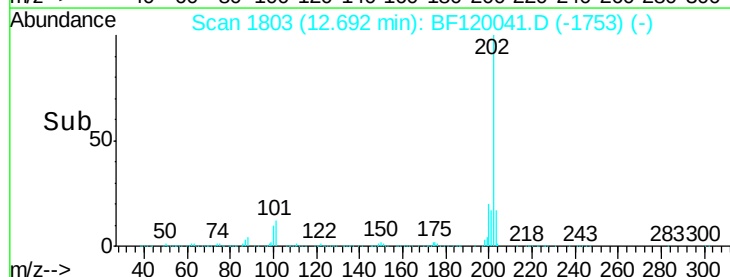
203 17.5 14.1 21.1

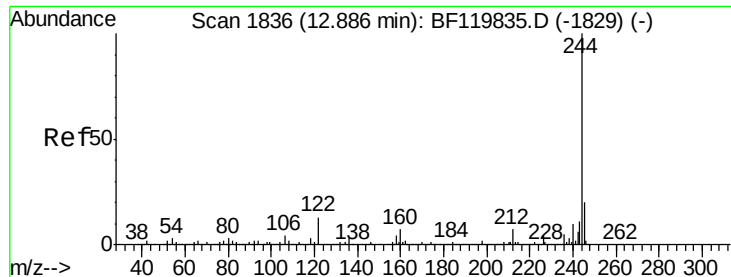


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 200.00 (199.70 to 200.70): E

Ion 203.00 (202.70 to 203.70): E





#79

Terphenyl-d14

Concen: 22.106 ng

RT: 12.84 min Scan# 1828

Delta R.T. -0.01 min

Lab File: BF120041.D

Acq: 16 Apr 2020 17:31

Instrument :

BNA\_F

ClientSampleId :

TP-21B

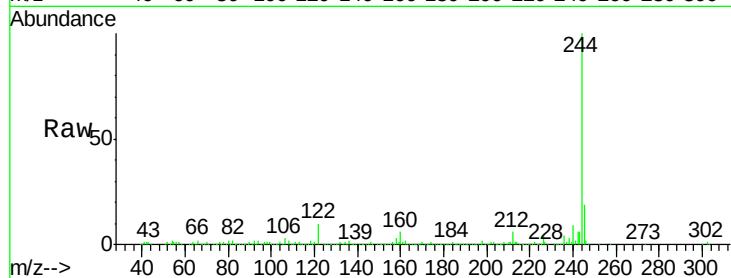
Tot Ion:244 Resp: 355393

Ion Ratio Lower Upper

244 100

212 6.0 5.4 8.0

122 9.9 10.3 15.5#



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

12.84

400000

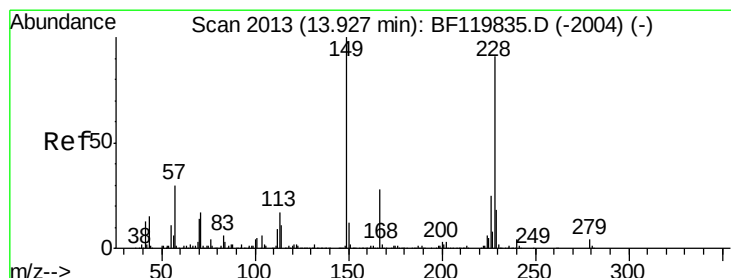
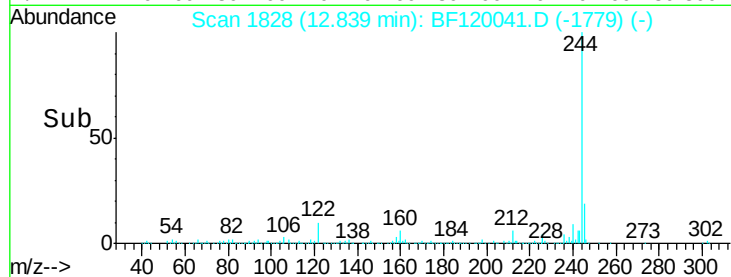
300000

200000

100000

0

Time-->



#81

Benzo(a)anthracene

Concen: 13.805 ng

RT: 13.88 min Scan# 2005

Delta R.T. -0.01 min

Lab File: BF120041.D

Acq: 16 Apr 2020 17:31

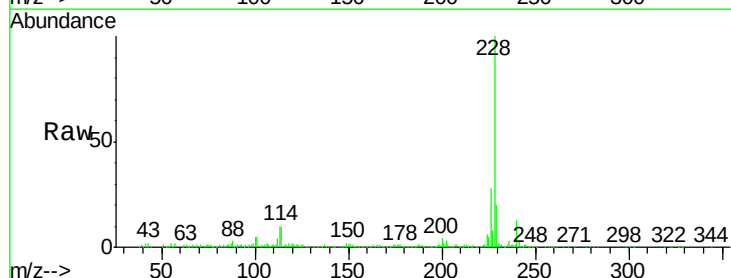
Tgt Ion:228 Resp: 245681

Ion Ratio Lower Upper

228 100

226 27.6 21.9 32.9

229 20.5 15.9 23.9



Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E

13.88

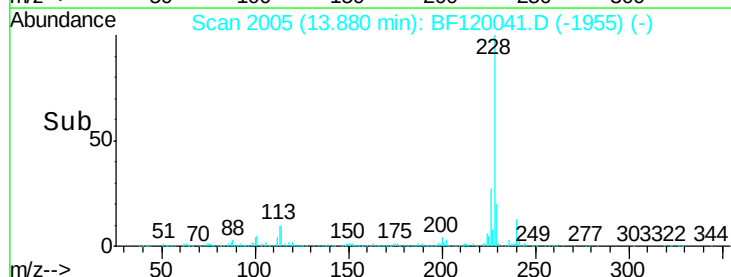
300000

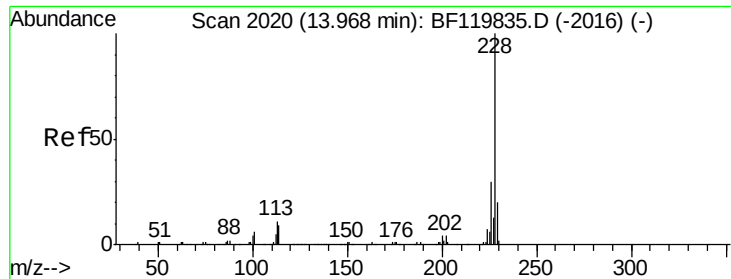
200000

100000

0

Time-->

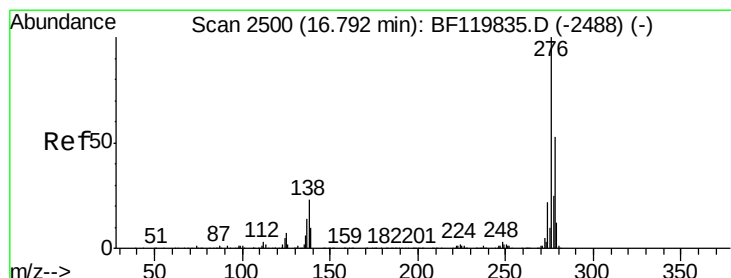
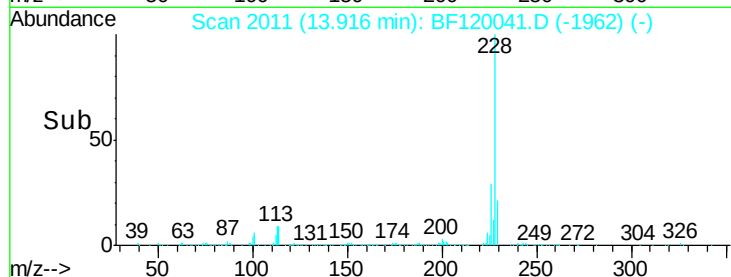
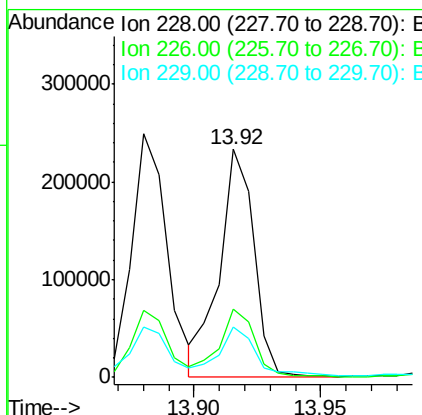
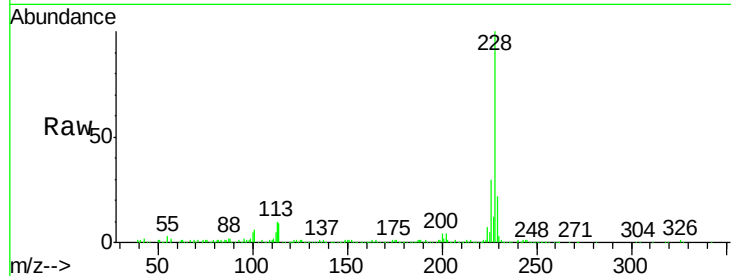




#83  
 Chrysene  
 Concen: 12.165 ng  
 RT: 13.92 min Scan# 2011  
 Delta R.T. -0.01 min  
 Lab File: BF120041.D  
 Acq: 16 Apr 2020 17:31

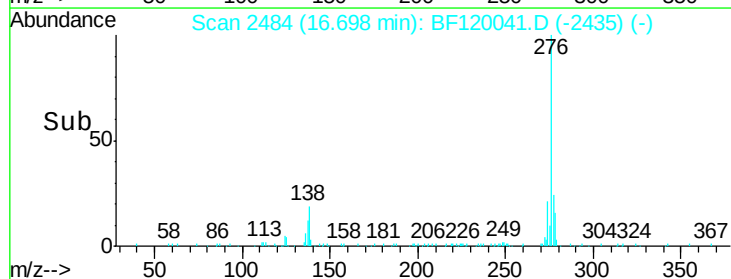
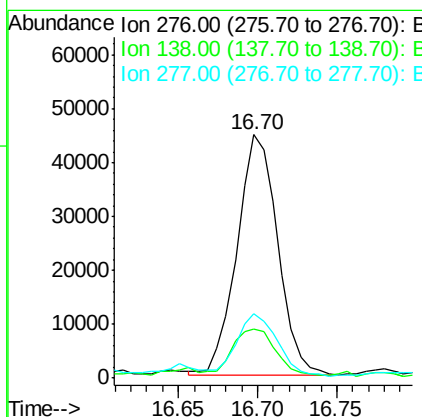
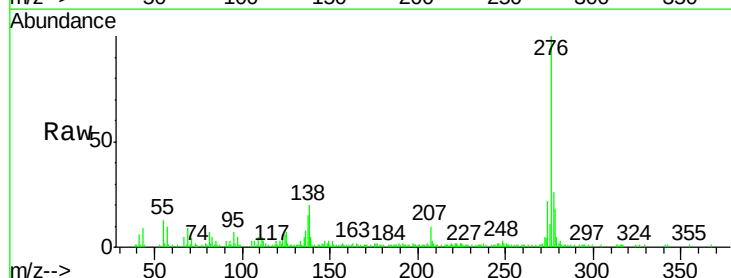
Instrument :  
 BNA\_F  
 ClientSampleId :  
 TP-21B

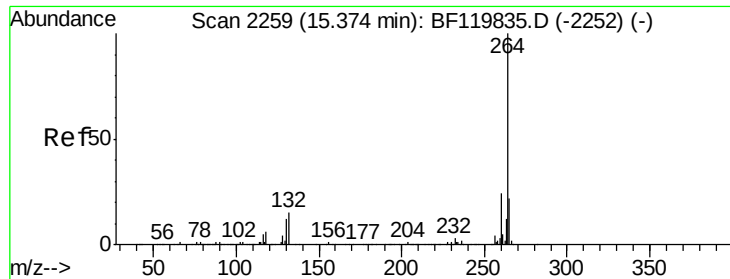
|     |         |       |        |
|-----|---------|-------|--------|
| Tot | Ion:228 | Resp: | 219984 |
| Ion | Ratio   | Lower | Upper  |
| 228 | 100     |       |        |
| 226 | 29.8    | 24.2  | 36.2   |
| 229 | 21.9    | 15.9  | 23.9   |



#86  
 Indeno(1,2,3-cd)pyrene  
 Concen: 4.974 ng  
 RT: 16.70 min Scan# 2484  
 Delta R.T. -0.01 min  
 Lab File: BF120041.D  
 Acq: 16 Apr 2020 17:31

|     |         |       |       |
|-----|---------|-------|-------|
| Tgt | Ion:276 | Resp: | 79288 |
| Ion | Ratio   | Lower | Upper |
| 276 | 100     |       |       |
| 138 | 20.9    | 18.0  | 27.0  |
| 277 | 25.9    | 20.1  | 30.1  |





#87

Pervlene-d12

Concen: 20.000 ng

RT: 15.32 min Scan# 2249

Delta R.T. -0.01 min

Lab File: BF120041.D

Acq: 16 Apr 2020 17:31

Instrument :

BNA\_F

ClientSampleId :

TP-21B

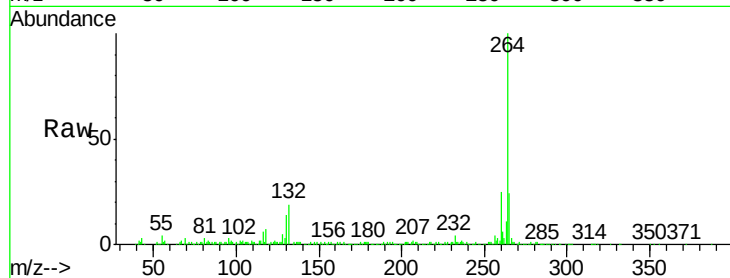
Tot Ion:264 Resp: 227698

Ion Ratio Lower Upper

264 100

260 24.7 19.3 28.9

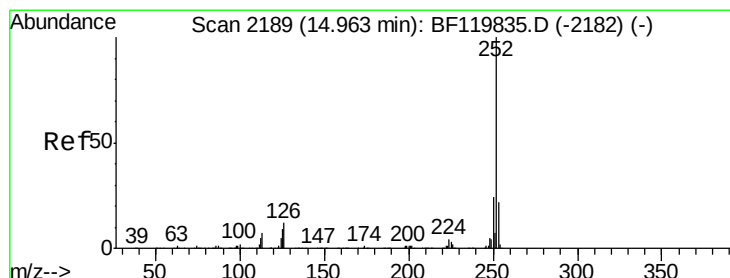
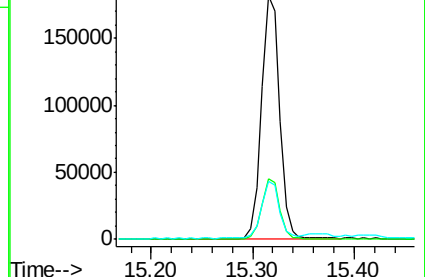
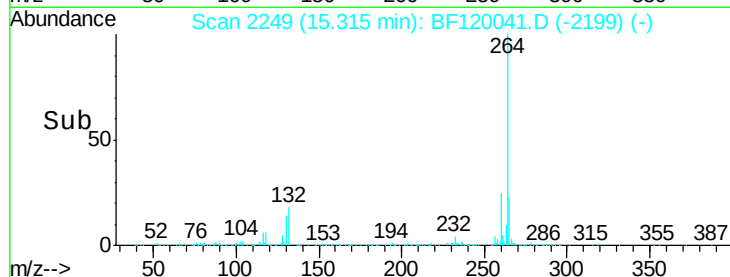
265 23.7 17.6 26.4



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: 17.916 ng

RT: 14.91 min Scan# 2180

Delta R.T. -0.01 min

Lab File: BF120041.D

Acq: 16 Apr 2020 17:31

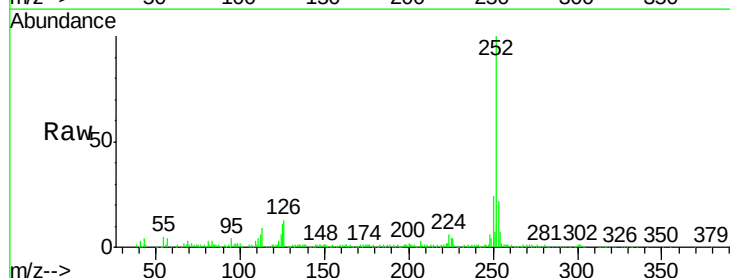
Tgt Ion:252 Resp: 293464

Ion Ratio Lower Upper

252 100

253 21.9 17.7 26.5

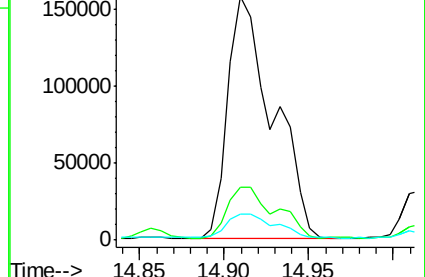
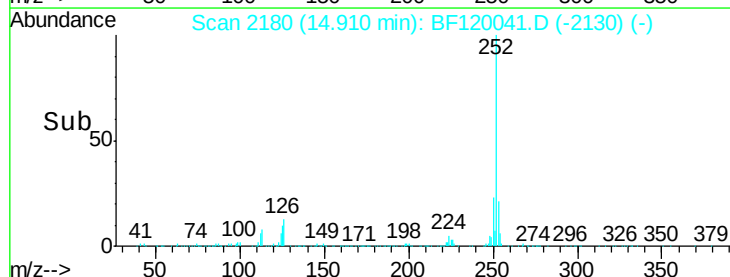
125 10.8 7.4 11.2

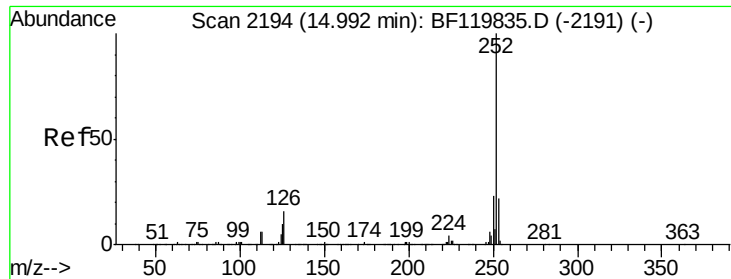


Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E





#89

Benzo(k)fluoranthene

Concen: 20.764 ng

RT: 14.91 min Scan# 2180

Delta R.T. -0.04 min

Lab File: BF120041.D

Acq: 16 Apr 2020 17:31

Instrument :

BNA\_F

ClientSampleId :

TP-21B

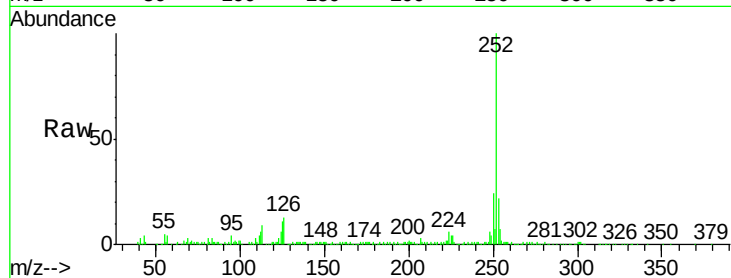
Tot Ion:252 Resp: 293464

Ion Ratio Lower Upper

252 100

253 21.9 17.8 26.8

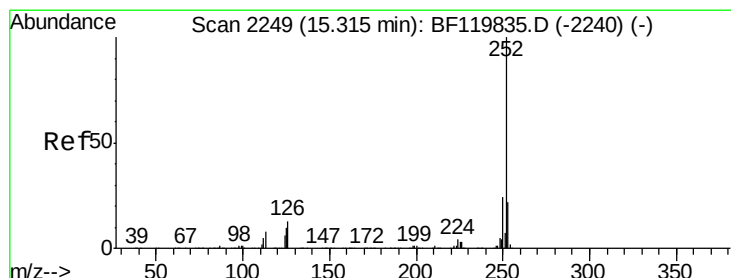
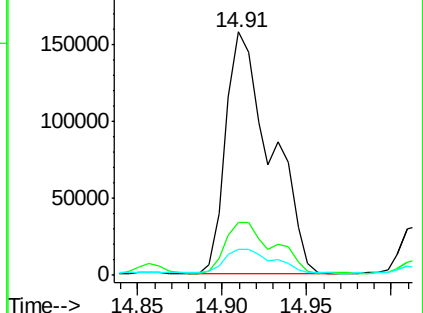
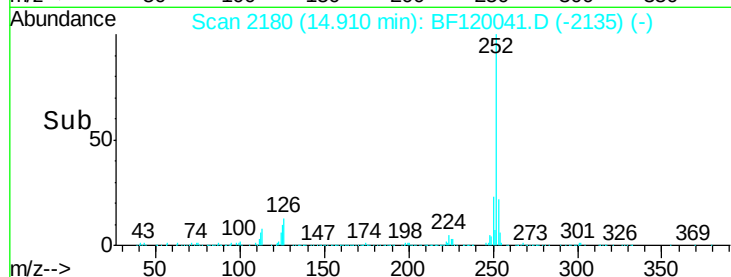
125 10.8 7.7 11.5



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



#90

Benzo(a)pyrene

Concen: 11.804 ng

RT: 15.26 min Scan# 2239

Delta R.T. -0.01 min

Lab File: BF120041.D

Acq: 16 Apr 2020 17:31

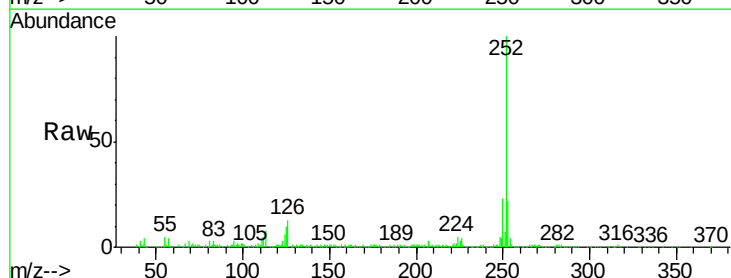
Tgt Ion:252 Resp: 162564

Ion Ratio Lower Upper

252 100

253 22.3 17.4 26.2

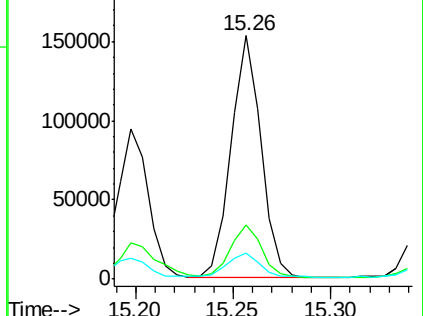
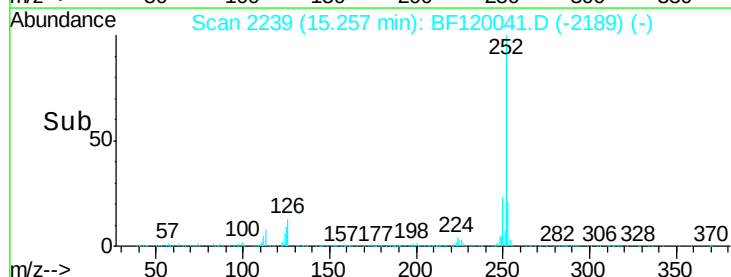
125 10.5 8.3 12.5

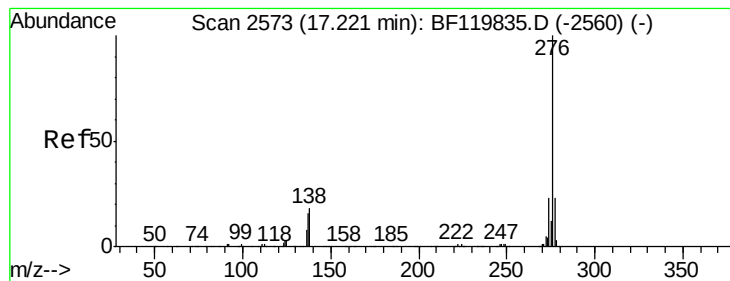


Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E





#92

Benzo(a,h,i)perylene

Concen: 6.185 ng

RT: 17.12 min Scan# 2555

Delta R.T. -0.02 min

Lab File: BF120041.D

Acq: 16 Apr 2020 17:31

Instrument :

BNA\_F

ClientSampleId :

TP-21B

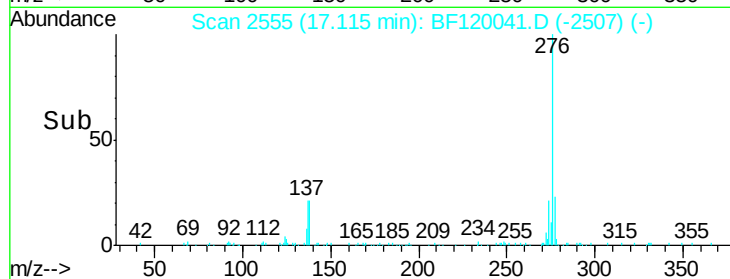
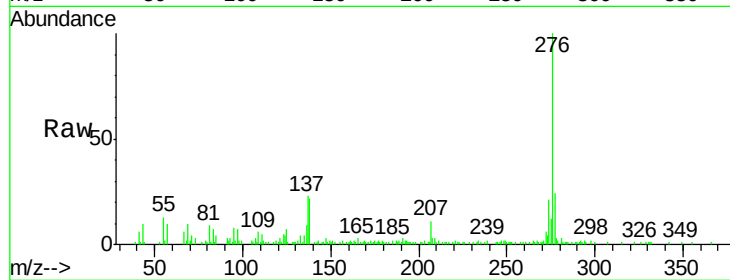
Tot Ion: 276 Resp: 74481

Ion Ratio Lower Upper

276 100

277 24.2 18.5 27.7

138 22.4 14.6 22.0#



Abundance Ion 276.00 (275.70 to 276.70): E

Ion 277.00 (276.70 to 277.70): E

Ion 138.00 (137.70 to 138.70): E

