

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF082519\  
 Data File : BF116530.D  
 Acq On : 25 Aug 2019 14:26  
 Operator : HP/JU  
 Sample : K4475-07  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :

Quant Time: Aug 26 06:27:38 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF082319.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Aug 23 13:38:31 2019  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.89  | 152  | 150343   | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 8.16  | 136  | 570903   | 20.00 | ng    | 0.00     |
| 39) Acenaphthene-d10      | 9.92  | 164  | 273169   | 20.00 | ng    | 0.00     |
| 64) Phenanthrene-d10      | 11.40 | 188  | 404961   | 20.00 | ng    | 0.00     |
| 76) Chrysene-d12          | 14.03 | 240  | 213075   | 20.00 | ng    | 0.00     |
| 87) Perylene-d12          | 15.50 | 264  | 228697   | 20.00 | ng    | -0.01    |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|-------|------|----------|-------|-------|----------|
| 5) 2-Fluorophenol           | 5.51  | 112  | 854492   | 83.05 | ng    | 0.01     |
| 7) Phenol-d6                | 6.52  | 99   | 1146092  | 90.84 | ng    | 0.01     |
| 23) Nitrobenzene-d5         | 7.44  | 82   | 734988   | 70.43 | ng    | 0.00     |
| 42) 2,4,6-Tribromophenol    | 10.70 | 330  | 166358   | 70.92 | ng    | 0.00     |
| 45) 2-Fluorobiphenyl        | 9.24  | 172  | 1138248  | 67.10 | ng    | 0.00     |
| 79) Terphenyl-d14           | 12.98 | 244  | 821709   | 72.03 | ng    | 0.00     |

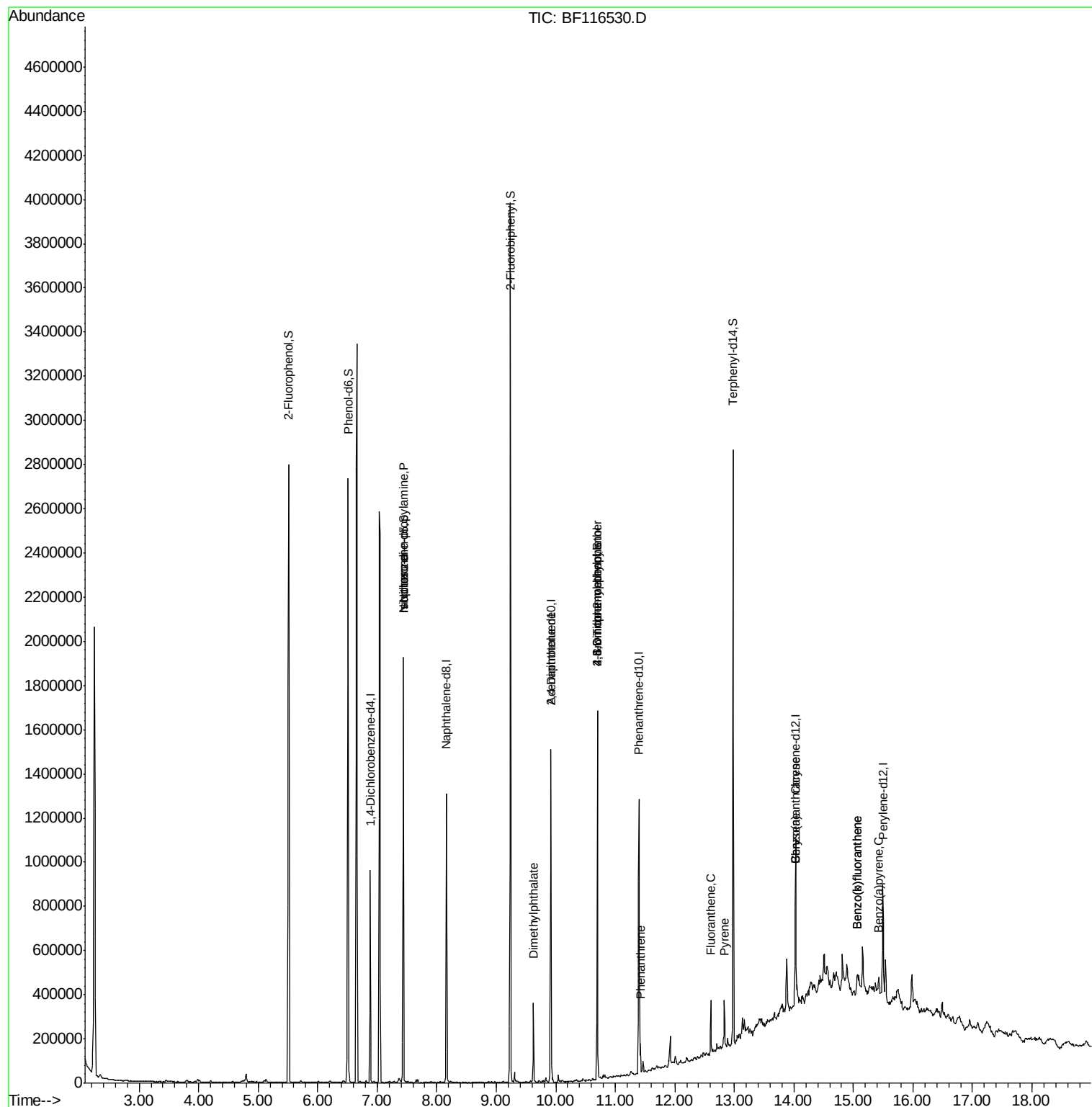
| Target Compounds               | R.T.  | QIon | Response | Conc   | Units | Qvalue |
|--------------------------------|-------|------|----------|--------|-------|--------|
| 19) n-Nitroso-di-n-propylamine | 7.44  | 70   | 100433   | 11.666 | ng    | # 79   |
| 25) Isophorone                 | 7.44  | 82   | 732930   | 35.641 | ng    | # 67   |
| 50) Dimethylphthalate          | 9.63  | 163  | 142444   | 7.474  | ng    | 99     |
| 57) 2,4-Dinitrotoluene         | 9.92  | 165  | 34447    | 6.939  | ng    | # 20   |
| 65) 4,6-Dinitro-2-methylphenol | 10.70 | 198  | 408      | 7.215  | ng    | # 1    |
| 67) 4-Bromophenyl-phenylether  | 10.70 | 248  | 10919    | 2.572  | ng    | # 1    |
| 71) Phenanthrene               | 11.42 | 178  | 48812    | 2.213  | ng    | 97     |
| 75) Fluoranthene               | 12.60 | 202  | 87464    | 3.835  | ng    | 99     |
| 78) Pyrene                     | 12.83 | 202  | 75130    | 4.409  | ng    | 99     |
| 81) Benzo(a)anthracene         | 14.02 | 228  | 32655    | 2.366  | ng    | 97     |
| 83) Chrysene                   | 14.02 | 228  | 32655    | 2.335  | ng    | 93     |
| 88) Benzo(b)fluoranthene       | 15.07 | 252  | 49228    | 3.484  | ng    | # 83   |
| 89) Benzo(k)fluoranthene       | 15.07 | 252  | 49228    | 3.846  | ng    | # 82   |
| 90) Benzo(a)pyrene             | 15.43 | 252  | 25440    | 2.037  | ng    | # 80   |

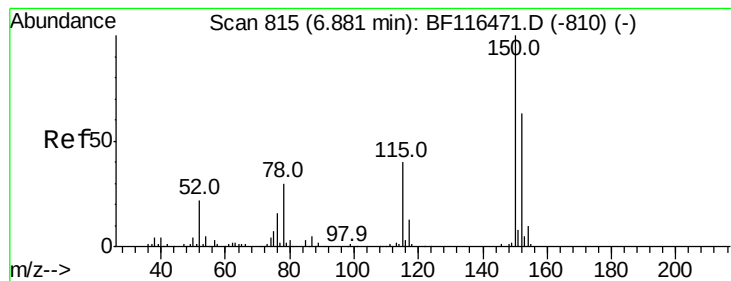
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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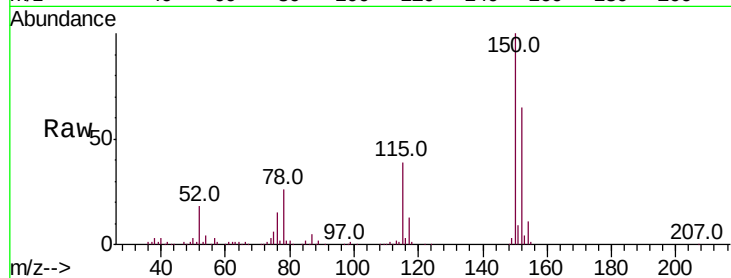


#1

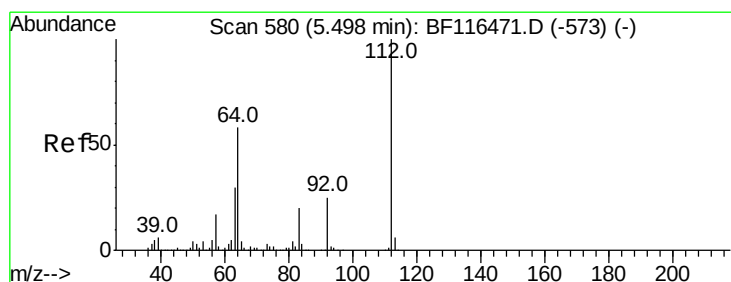
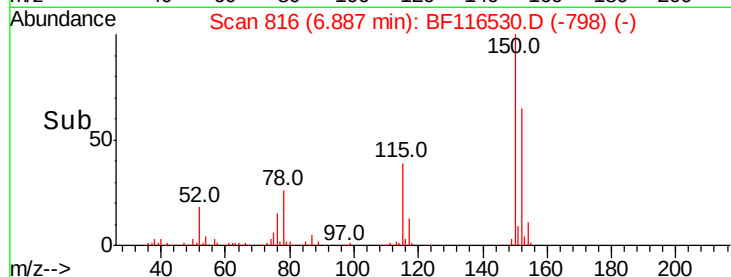
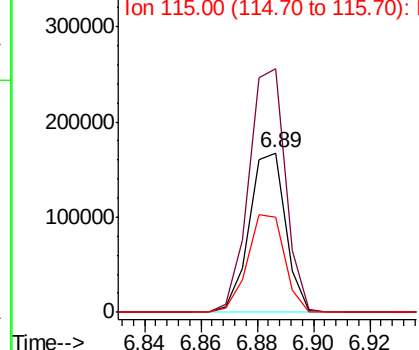
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.89 min Scan# 816  
Delta R.T. 0.01 min  
Lab File: BF116530.D  
Acq: 25 Aug 2019 14:26

Instrument :  
BNA\_F  
ClientSampleId :

Tot Ion:152 Resp: 150343  
Ion Ratio Lower Upper  
152 100  
150 152.9 126.7 190.1  
115 59.5 50.9 76.3



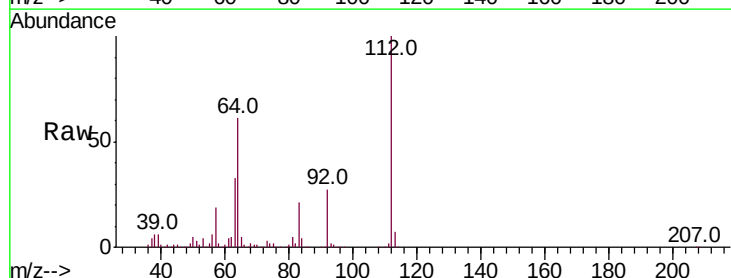
Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 115.00 (114.70 to 115.70): E



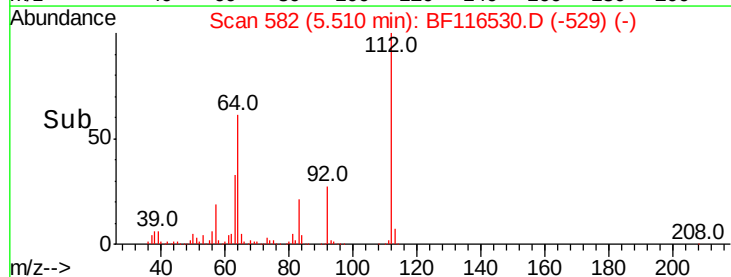
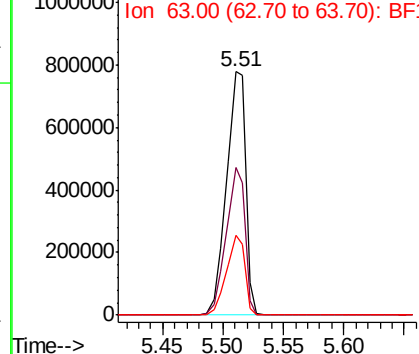
#5

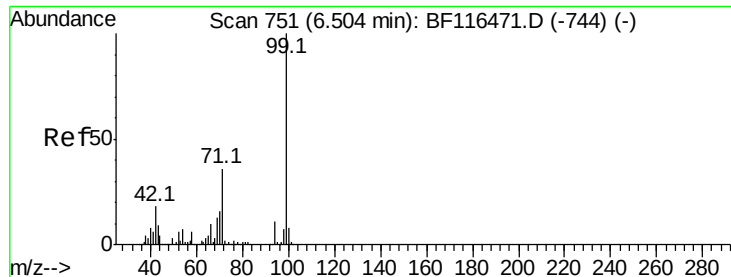
2-Fluorophenol  
Concen: 83.046 ng  
RT: 5.51 min Scan# 582  
Delta R.T. 0.01 min  
Lab File: BF116530.D  
Acq: 25 Aug 2019 14:26

Tgt Ion:112 Resp: 854492  
Ion Ratio Lower Upper  
112 100  
64 60.5 46.3 69.5  
63 32.9 24.2 36.4



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: 90.842 ng

RT: 6.52 min Scan# 753

Delta R.T. 0.01 min

Lab File: BF116530.D

Acq: 25 Aug 2019 14:26

Instrument :

BNA\_F

ClientSampleId :

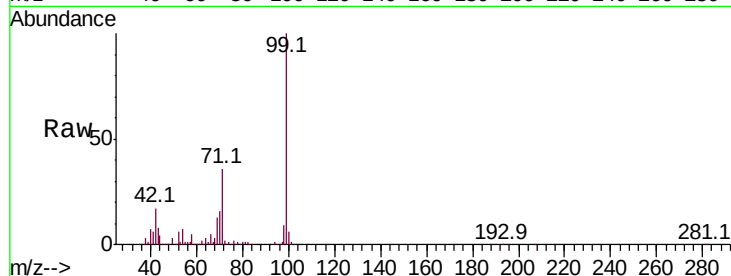
Tot Ion: 99 Resp: 1146092

Ion Ratio Lower Upper

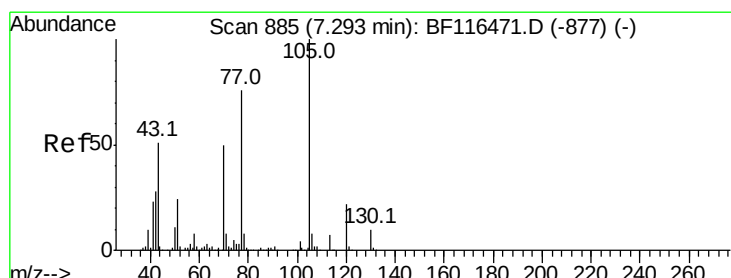
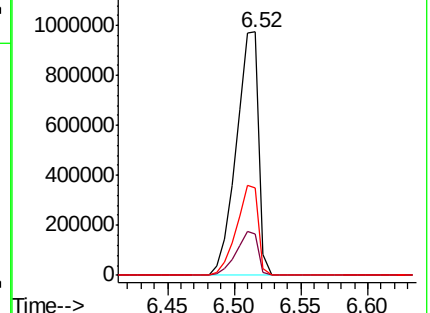
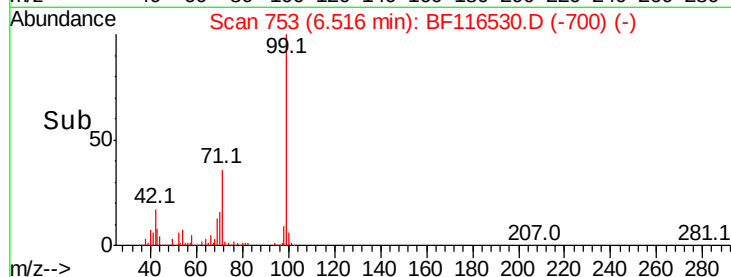
99 100

42 16.9 14.6 21.8

71 35.9 28.5 42.7



Abundance Ion 99.00 (98.70 to 99.70): BF1  
Ion 42.00 (41.70 to 42.70): BF1  
Ion 71.00 (70.70 to 71.70): BF1



#19

n-Nitroso-di-n-propylamine

Concen: 11.666 ng

RT: 7.44 min Scan# 910

Delta R.T. 0.15 min

Lab File: BF116530.D

Acq: 25 Aug 2019 14:26

Tgt Ion: 70 Resp: 100433

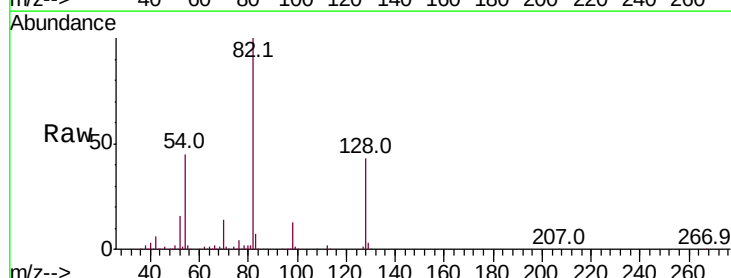
Ion Ratio Lower Upper

70 100

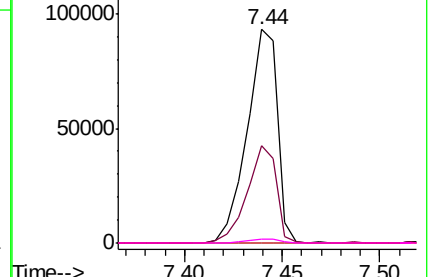
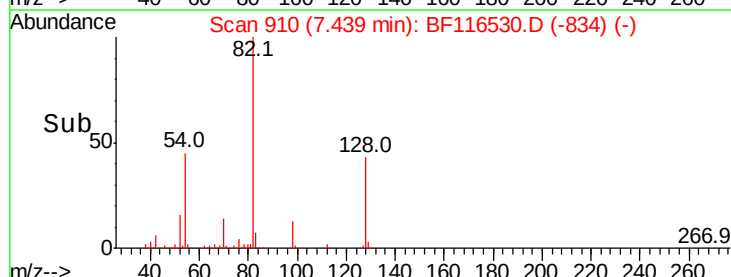
42 45.4 44.4 66.6

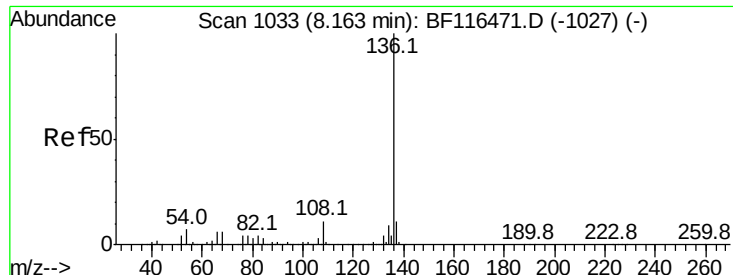
101 0.0 7.1 10.7#

130 1.8 15.8 23.8#



Abundance Ion 70.00 (69.70 to 70.70): BF1  
Ion 42.00 (41.70 to 42.70): BF1  
Ion 101.00 (100.70 to 101.70): BF1  
Ion 130.00 (129.70 to 130.70): BF1

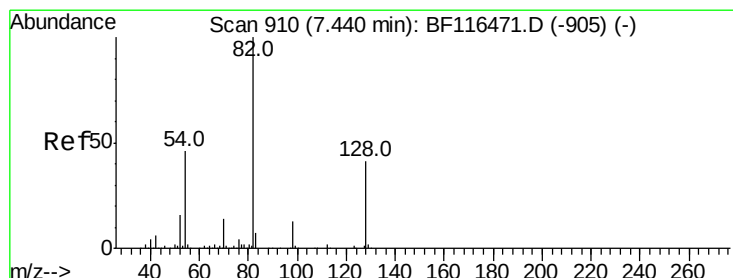
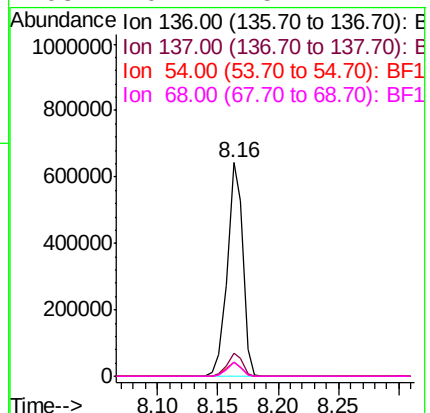
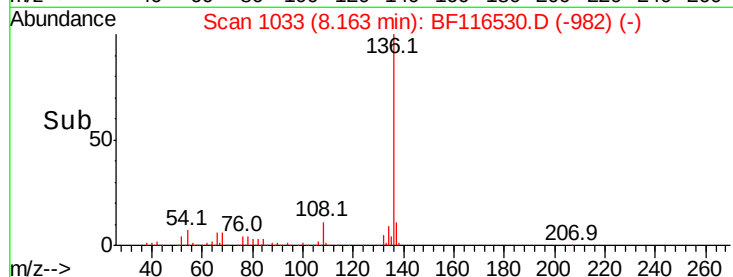
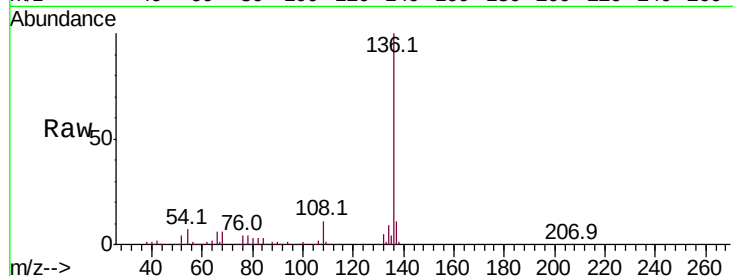




#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 8.16 min Scan# 1033  
Delta R.T. -0.00 min  
Lab File: BF116530.D  
Acq: 25 Aug 2019 14:26

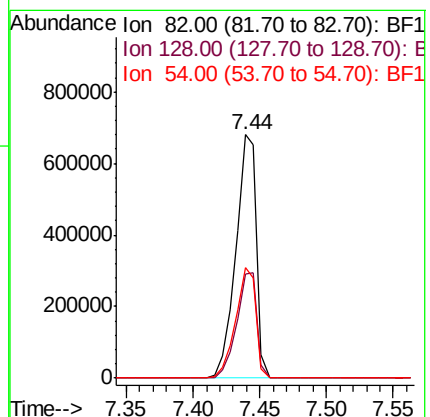
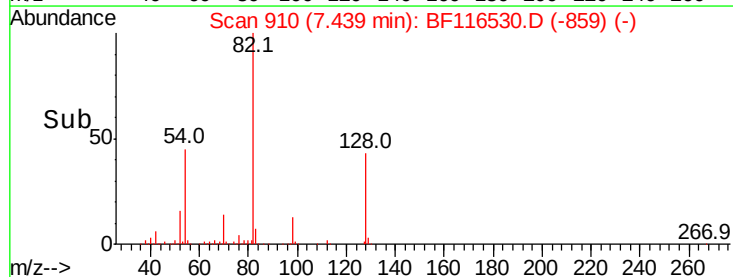
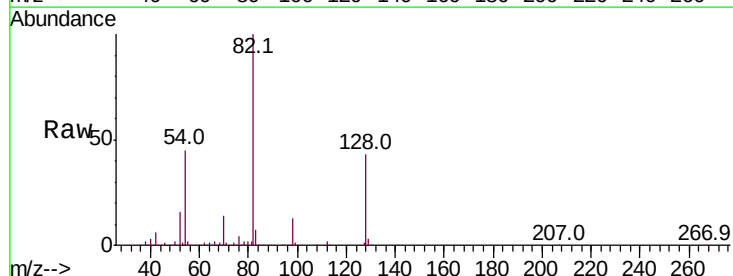
Instrument :  
BNA\_F  
ClientSampleId :

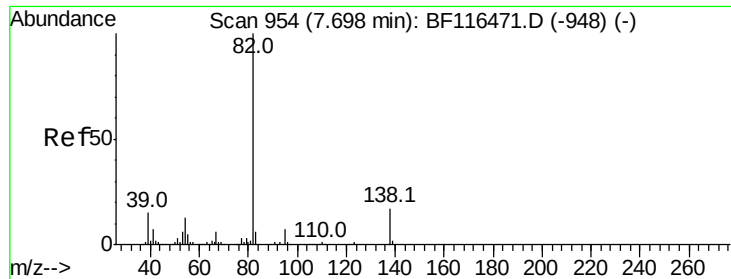
|             |       |        |  |
|-------------|-------|--------|--|
| Tot Ion:136 | Resp: | 570903 |  |
| Ion Ratio   | Lower | Upper  |  |
| 136 100     |       |        |  |
| 137 11.0    | 9.0   | 13.4   |  |
| 54 6.9      | 5.8   | 8.6    |  |
| 68 6.4      | 5.1   | 7.7    |  |



#23  
Nitrobenzene-d5  
Concen: 70.434 ng  
RT: 7.44 min Scan# 910  
Delta R.T. -0.00 min  
Lab File: BF116530.D  
Acq: 25 Aug 2019 14:26

|             |              |
|-------------|--------------|
| Tgt Ion: 82 | Resp: 734988 |
| Ion Ratio   | Lower Upper  |
| 82 100      |              |
| 128 42.7    | 32.2 48.4    |
| 54 45.5     | 36.5 54.7    |





#25

Isophorone

Concen: 35.641 ng

RT: 7.44 min Scan# 910

Delta R.T. -0.26 min

Lab File: BF116530.D

Acq: 25 Aug 2019 14:26

Instrument :

BNA\_F

ClientSampled :

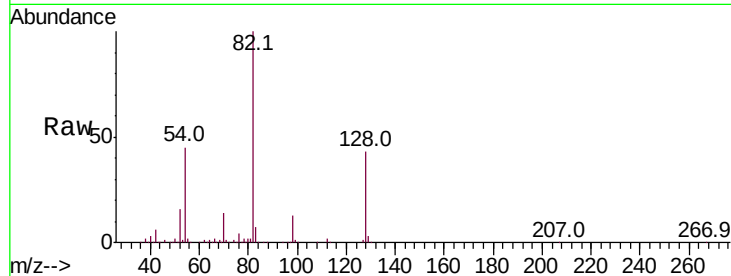
Tot Ion: 82 Resp: 732930

Ion Ratio Lower Upper

82 100

95 0.0 5.3 7.9#

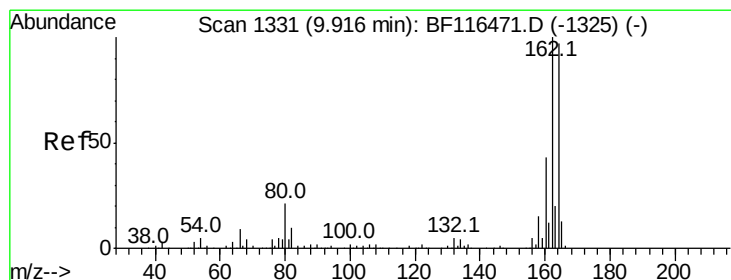
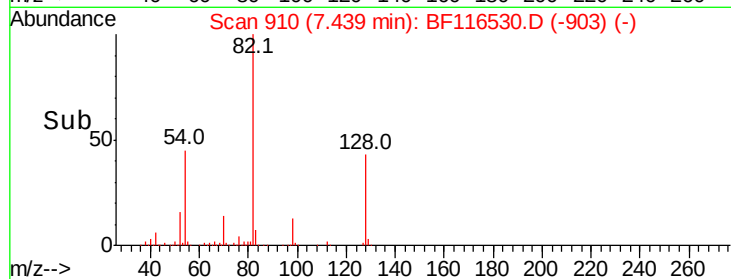
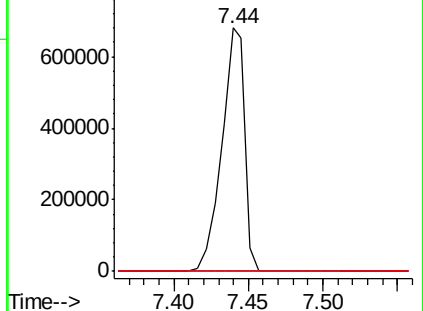
138 0.0 13.3 19.9#



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: 9.92 min Scan# 1331

Delta R.T. -0.00 min

Lab File: BF116530.D

Acq: 25 Aug 2019 14:26

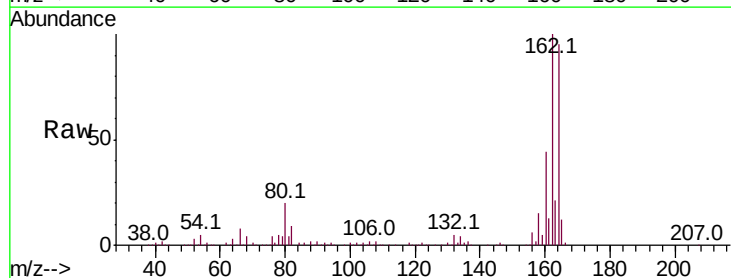
Tgt Ion: 164 Resp: 273169

Ion Ratio Lower Upper

164 100

162 104.8 82.6 123.8

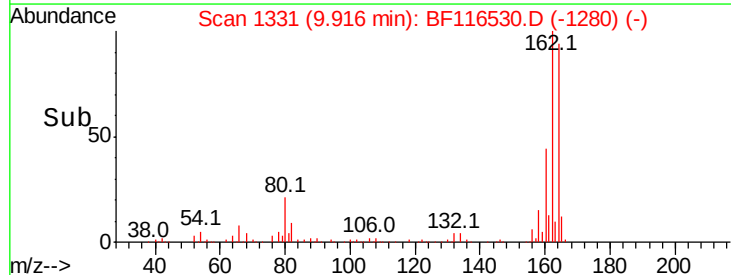
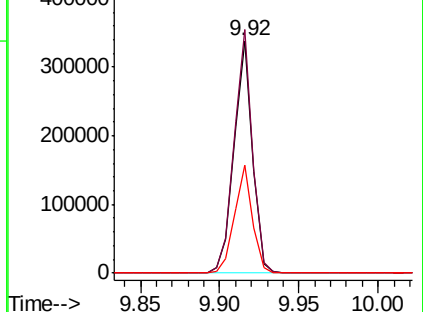
160 46.4 35.8 53.8

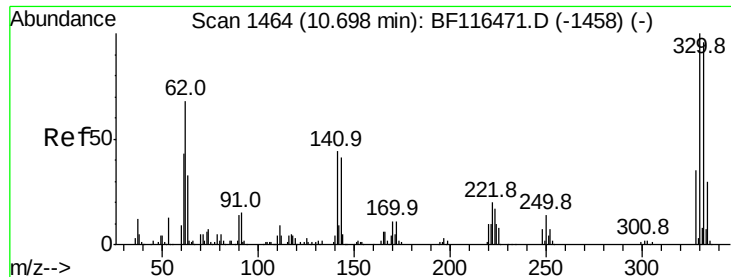


Abundance Ion 164.00 (163.70 to 164.70): E

Ion 162.00 (161.70 to 162.70): E

Ion 160.00 (159.70 to 160.70): E





#42

2,4,6-Tribromophenol

Concen: 70.923 ng

RT: 10.70 min Scan# 1464

Delta R.T. -0.00 min

Lab File: BF116530.D

Acq: 25 Aug 2019 14:26

Instrument :

BNA\_F

ClientSampled :

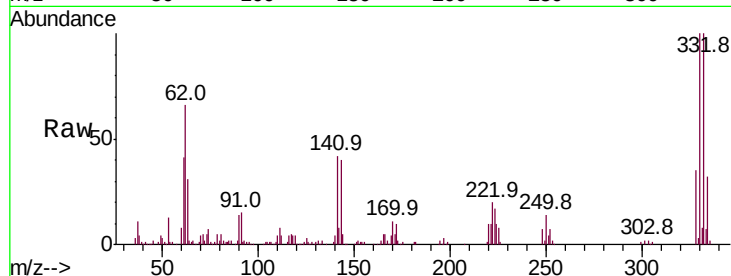
Tot Ion:330 Resp: 166358

Ion Ratio Lower Upper

330 100

332 97.4 77.2 115.8

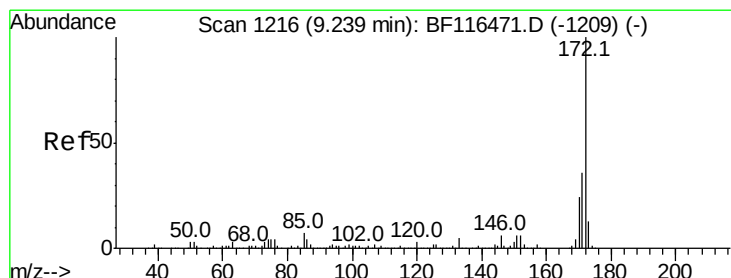
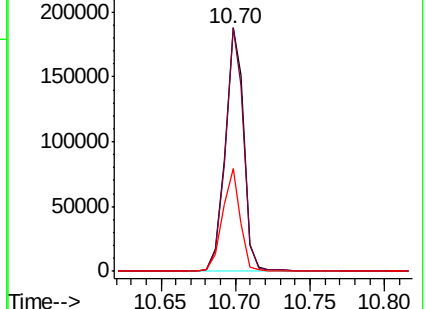
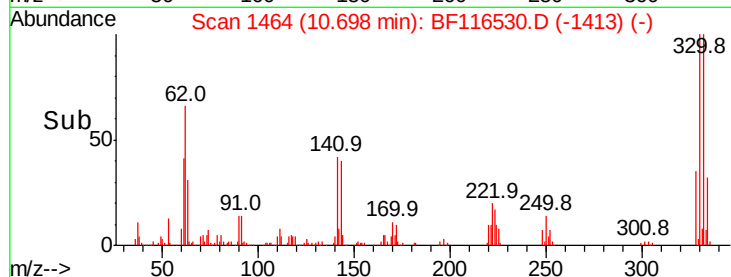
141 40.1 33.3 49.9



Abundance Ion 329.80 (329.50 to 330.50): E

Ion 331.80 (331.50 to 332.50): E

Ion 141.00 (140.70 to 141.70): E



#45

2-Fluorobiphenyl

Concen: 67.103 ng

RT: 9.24 min Scan# 1216

Delta R.T. -0.00 min

Lab File: BF116530.D

Acq: 25 Aug 2019 14:26

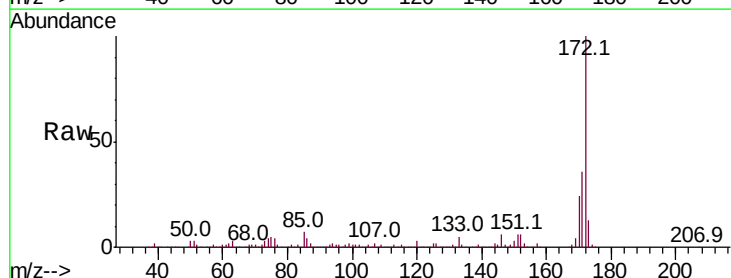
Tgt Ion:172 Resp: 1138248

Ion Ratio Lower Upper

172 100

171 36.3 28.9 43.3

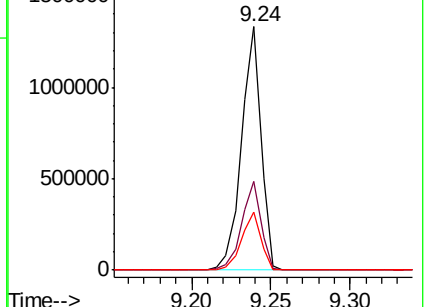
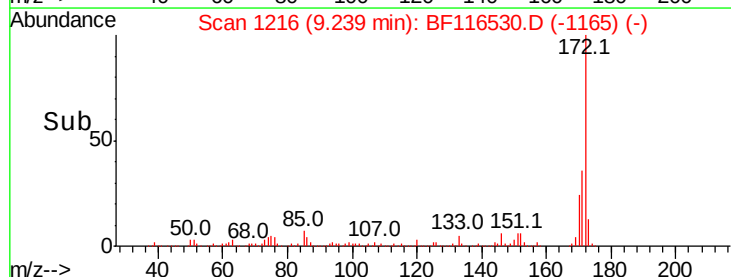
170 23.7 19.4 29.0

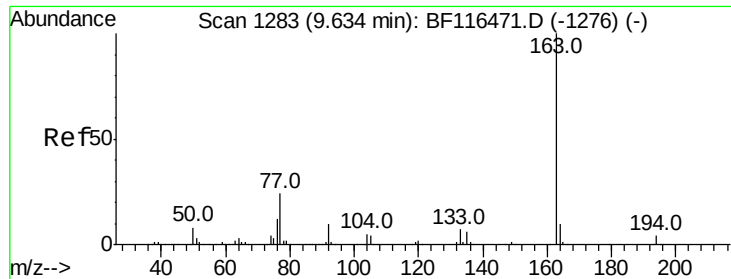


Abundance Ion 172.00 (171.70 to 172.70): E

Ion 171.00 (170.70 to 171.70): E

Ion 170.00 (169.70 to 170.70): E





#50

Dimethylphthalate

Concen: 7.474 ng

RT: 9.63 min Scan# 1282

Delta R.T. -0.01 min

Lab File: BF116530.D

Acq: 25 Aug 2019 14:26

Instrument :

BNA\_F

ClientSampleId :

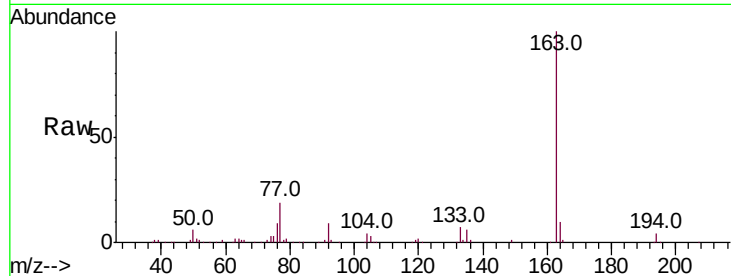
Tot Ion:163 Resp: 142444

Ion Ratio Lower Upper

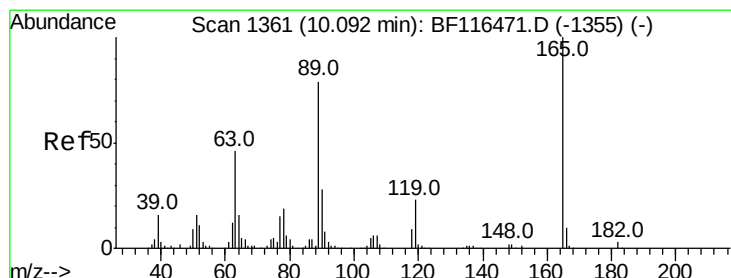
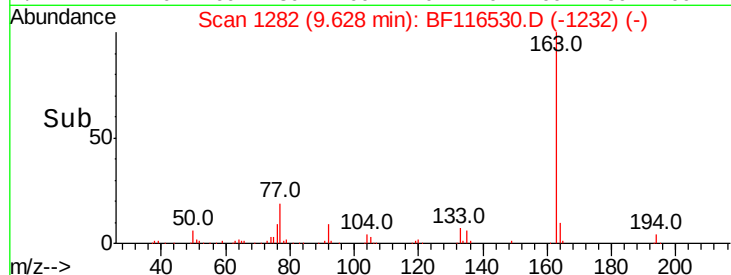
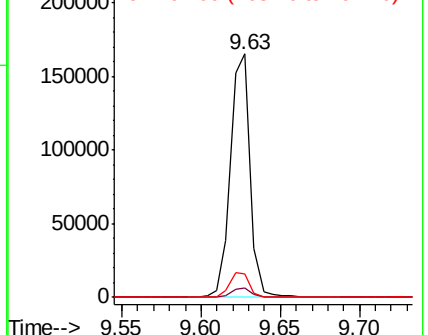
163 100

194 3.9 2.9 4.3

164 9.6 8.2 12.2



Abundance Ion 163.00 (162.70 to 163.70): E  
Ion 194.00 (193.70 to 194.70): E  
Ion 164.00 (163.70 to 164.70): E



#57

2,4-Dinitrotoluene

Concen: 6.939 ng

RT: 9.92 min Scan# 1331

Delta R.T. -0.18 min

Lab File: BF116530.D

Acq: 25 Aug 2019 14:26

Tgt Ion:165 Resp: 34447

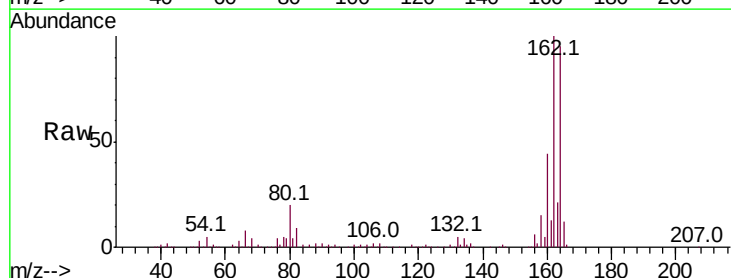
Ion Ratio Lower Upper

165 100

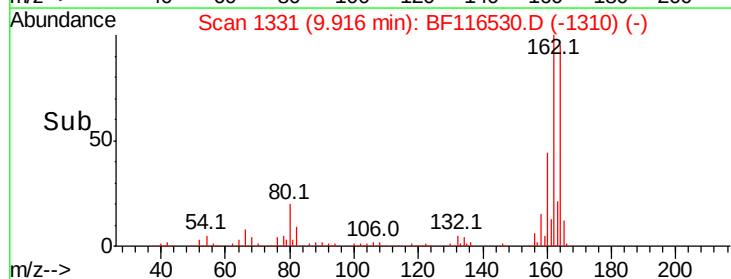
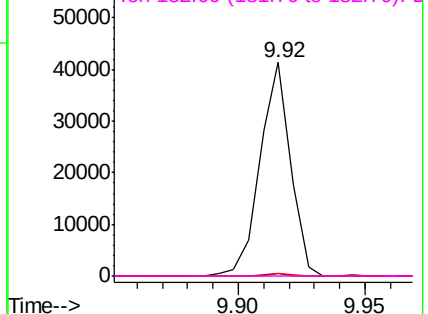
63 1.0 36.9 55.3#

89 1.5 63.4 95.0#

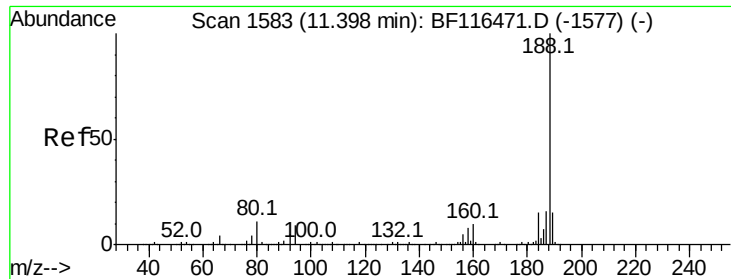
182 0.0 2.1 3.1#



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







#64

Phenanthrene-d10

Concen: 20.000 ng

RT: 11.40 min Scan# 1583

Delta R.T. -0.00 min

Lab File: BF116530.D

Acq: 25 Aug 2019 14:26

Instrument :

BNA\_F

ClientSampleId :

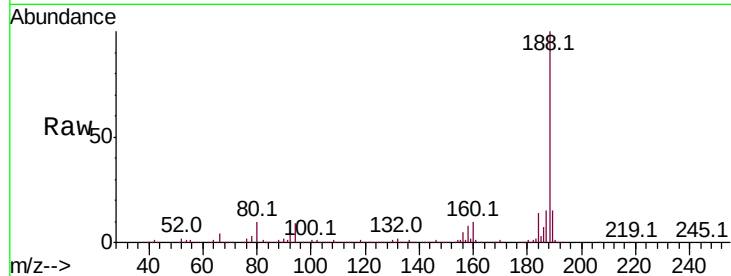
Tot Ion:188 Resp: 404961

Ion Ratio Lower Upper

188 100

94 9.1 7.4 11.2

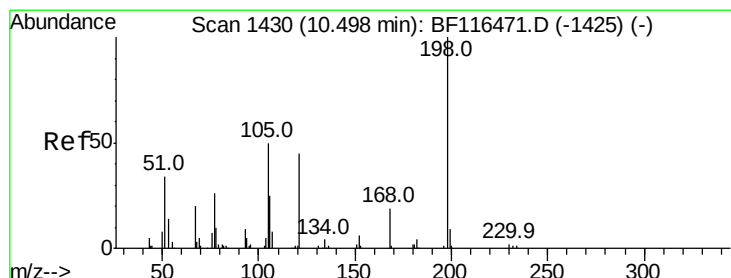
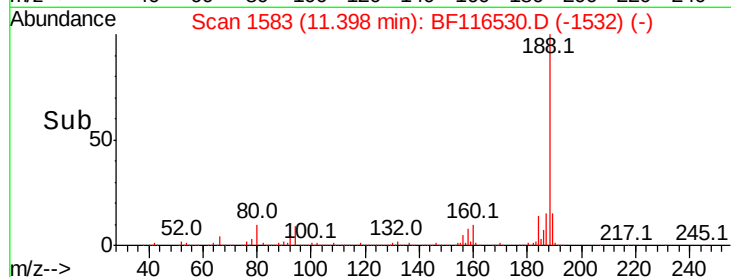
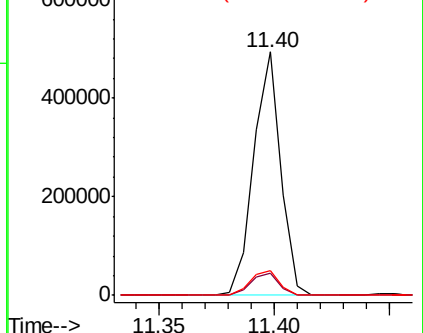
80 10.0 8.6 12.8



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



#65

4,6-Dinitro-2-methylphenol

Concen: 7.215 ng

RT: 10.70 min Scan# 1464

Delta R.T. 0.20 min

Lab File: BF116530.D

Acq: 25 Aug 2019 14:26

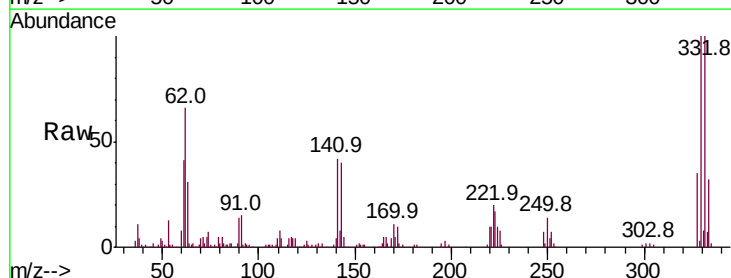
Tgt Ion:198 Resp: 408

Ion Ratio Lower Upper

198 100

51 193.4 30.4 70.4#

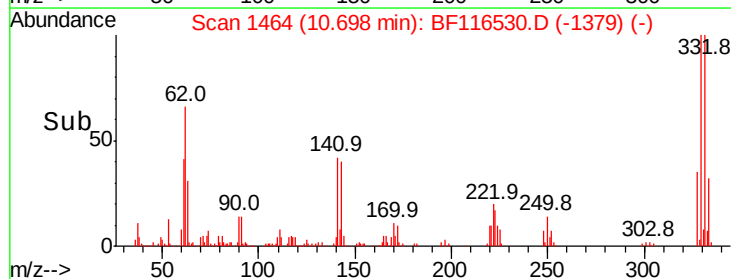
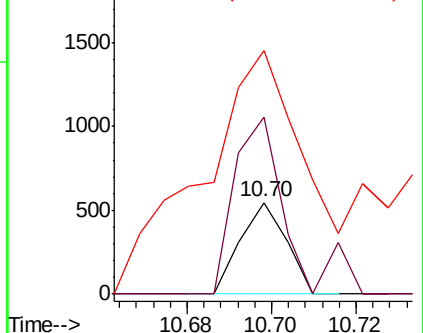
105 265.4 32.8 72.8#

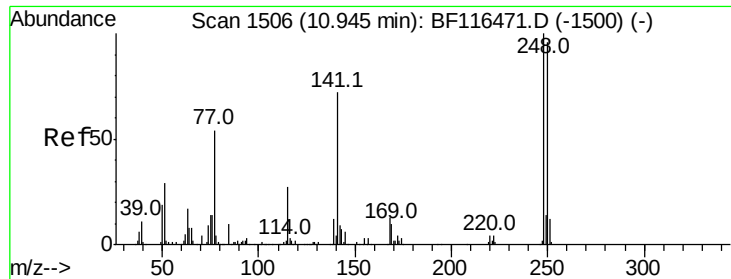


Abundance Ion 198.00 (197.70 to 198.70): E

Ion 51.00 (50.70 to 51.70): BF1

Ion 105.00 (104.70 to 105.70): E

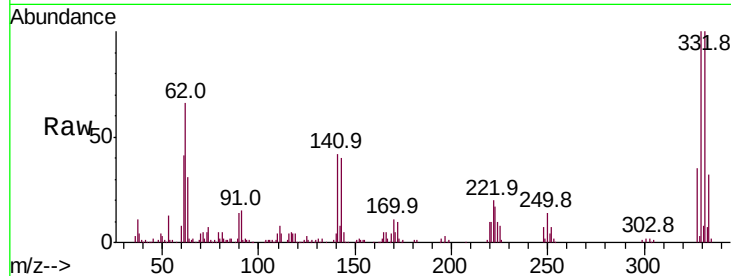




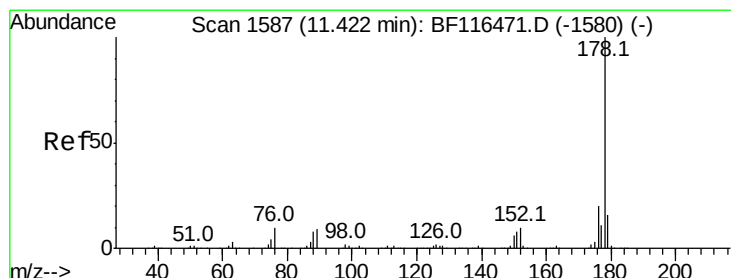
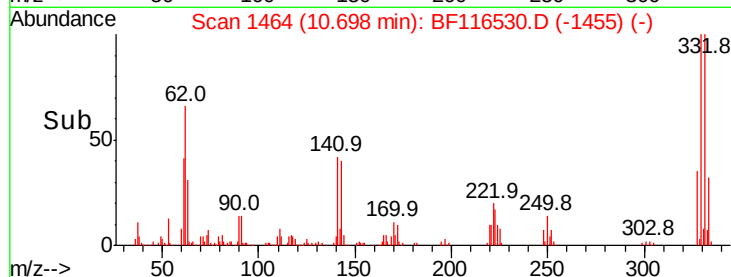
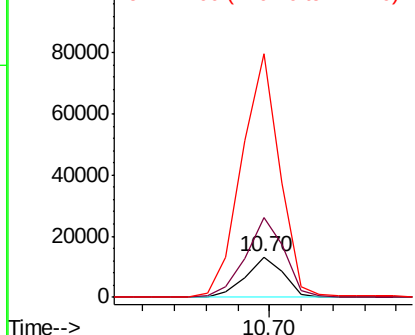
#67  
 4-Bromophenyl-phenylether  
 Concen: 2.572 ng  
 RT: 10.70 min Scan# 1464  
 Delta R.T. -0.25 min  
 Lab File: BF116530.D  
 Acq: 25 Aug 2019 14:26

Instrument :  
 BNA\_F  
 ClientSampled :

Tot Ion:248 Resp: 10919  
 Ion Ratio Lower Upper  
 248 100  
 250 197.2 77.0 115.6#  
 141 604.8 57.4 86.0#

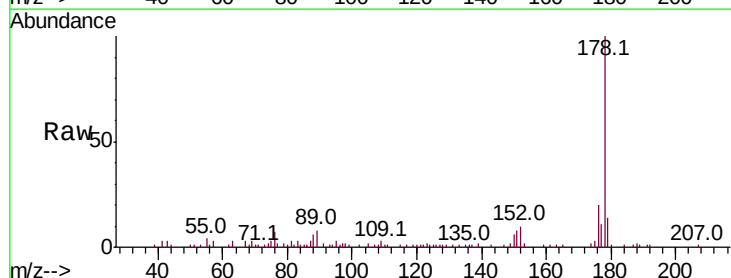


Abundance Ion 248.00 (247.70 to 248.70): E  
 Ion 250.00 (249.70 to 250.70): E  
 Ion 141.00 (140.70 to 141.70): E

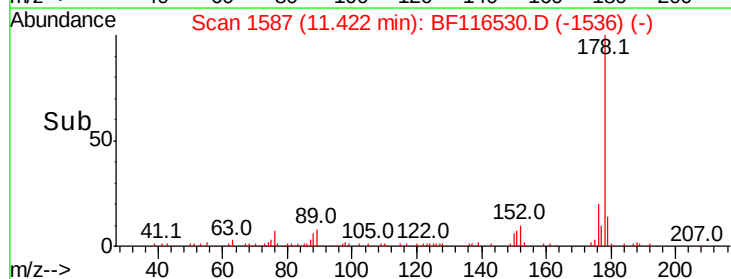
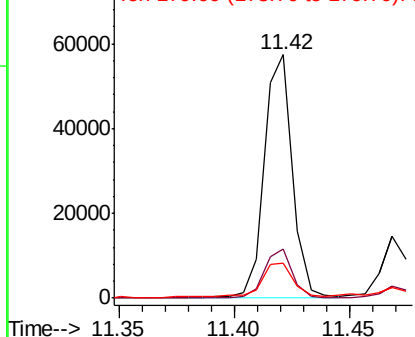


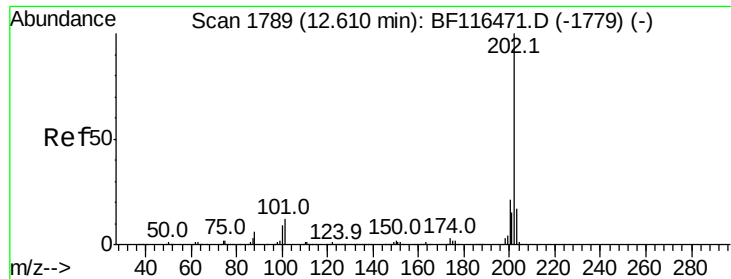
#71  
 Phenanthrene  
 Concen: 2.213 ng  
 RT: 11.42 min Scan# 1587  
 Delta R.T. -0.00 min  
 Lab File: BF116530.D  
 Acq: 25 Aug 2019 14:26

Tgt Ion:178 Resp: 48812  
 Ion Ratio Lower Upper  
 178 100  
 176 20.3 15.8 23.6  
 179 14.2 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: 3.835 ng

RT: 12.60 min Scan# 1788

Delta R.T. -0.01 min

Lab File: BF116530.D

Acq: 25 Aug 2019 14:26

Instrument :

BNA\_F

ClientSampleId :

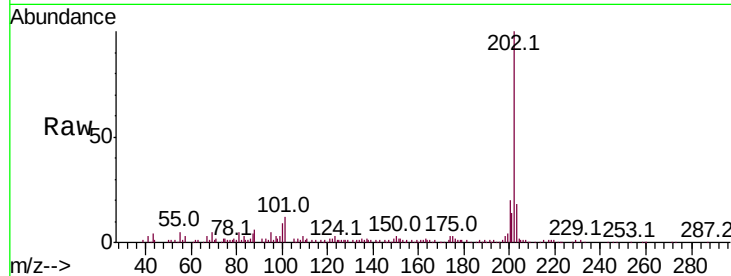
Tot Ion:202 Resp: 87464

Ion Ratio Lower Upper

202 100

101 11.6 0.0 31.5

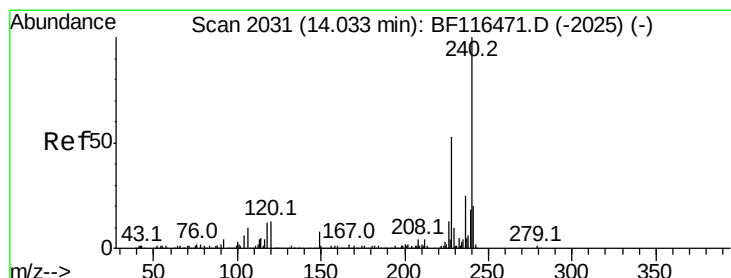
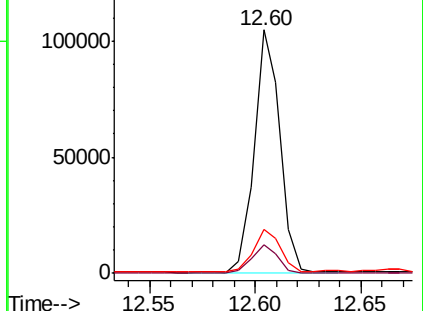
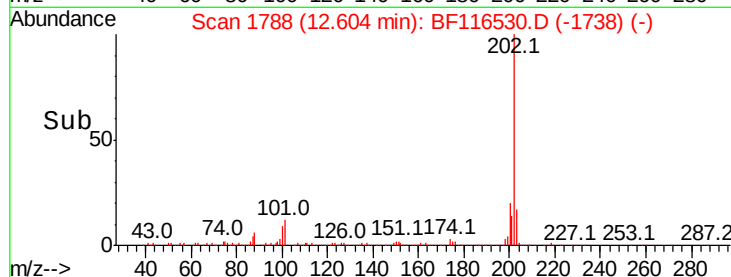
203 18.1 0.0 37.5



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: 14.03 min Scan# 2030

Delta R.T. -0.01 min

Lab File: BF116530.D

Acq: 25 Aug 2019 14:26

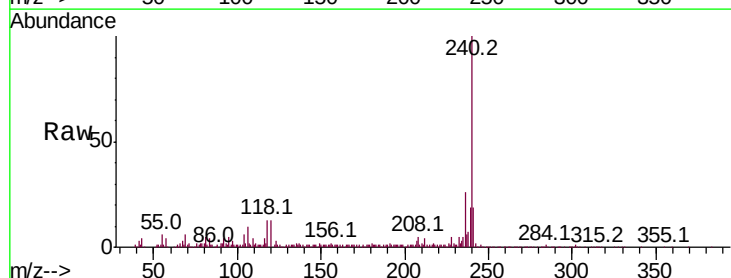
Tgt Ion:240 Resp: 213075

Ion Ratio Lower Upper

240 100

120 13.4 10.5 15.7

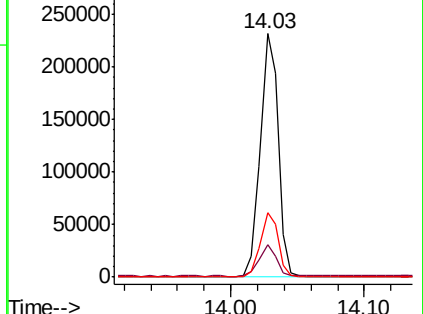
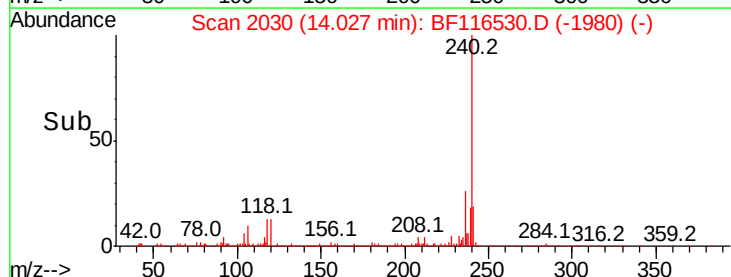
236 26.3 20.2 30.2

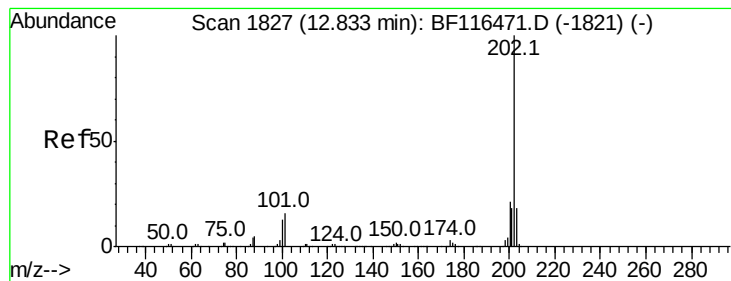


Abundance Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E





#78

Pvrene

Concen: 4.409 ng

RT: 12.83 min Scan# 1827

Delta R.T. -0.00 min

Lab File: BF116530.D

Acq: 25 Aug 2019 14:26

Instrument :

BNA\_F

ClientSampleId :

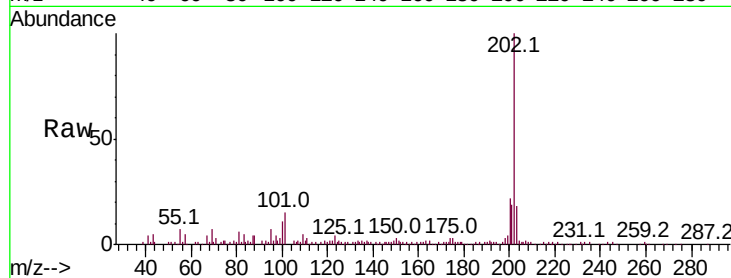
Tot Ion:202 Resp: 75130

Ion Ratio Lower Upper

202 100

200 21.7 17.0 25.4

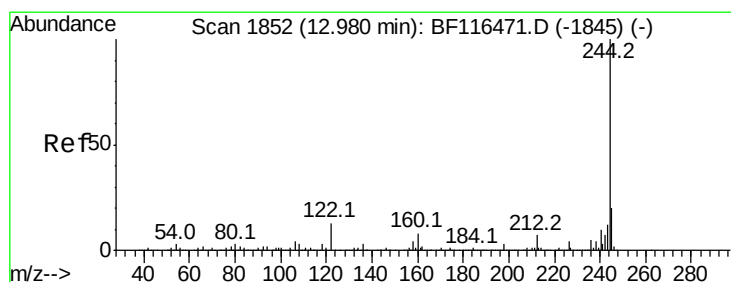
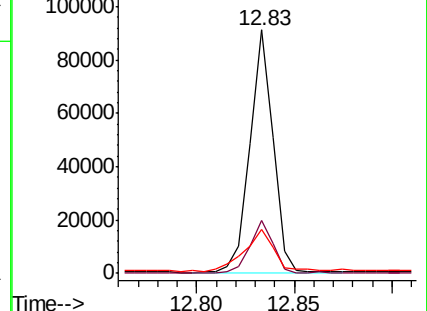
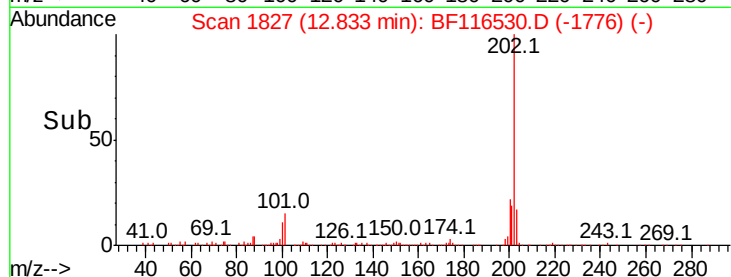
203 18.1 14.2 21.4



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: 72.034 ng

RT: 12.98 min Scan# 1852

Delta R.T. -0.00 min

Lab File: BF116530.D

Acq: 25 Aug 2019 14:26

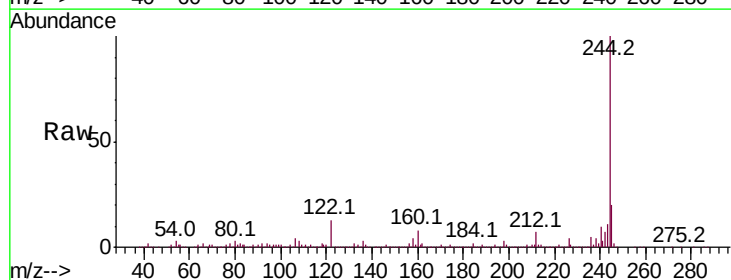
Tgt Ion:244 Resp: 821709

Ion Ratio Lower Upper

244 100

212 7.2 5.7 8.5

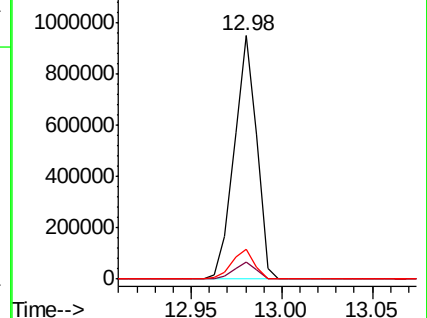
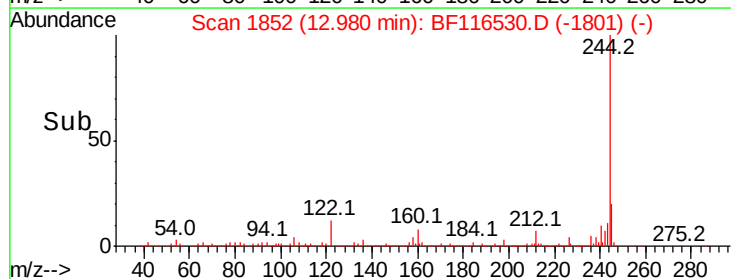
122 12.5 10.2 15.4

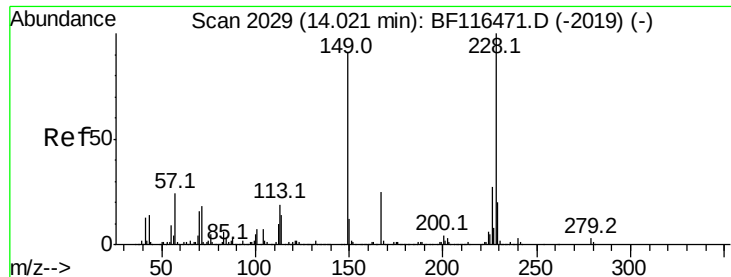


Abundance Ion 244.00 (243.70 to 244.70): E

Ion 212.00 (211.70 to 212.70): E

Ion 122.00 (121.70 to 122.70): E

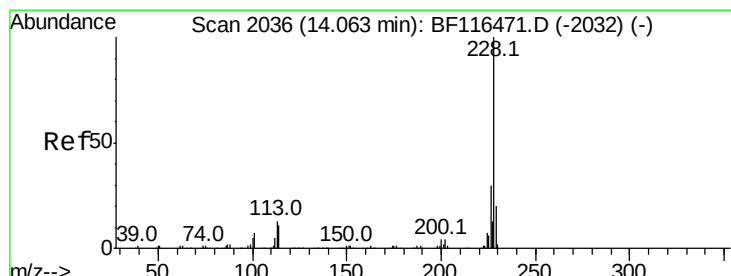
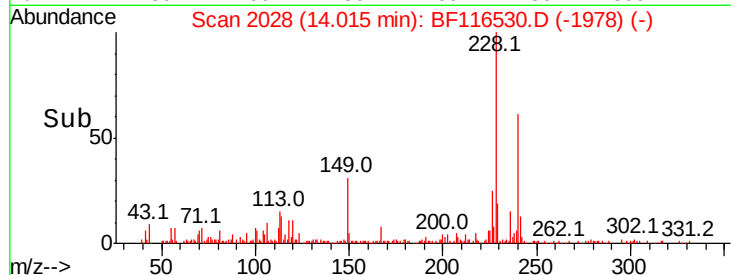
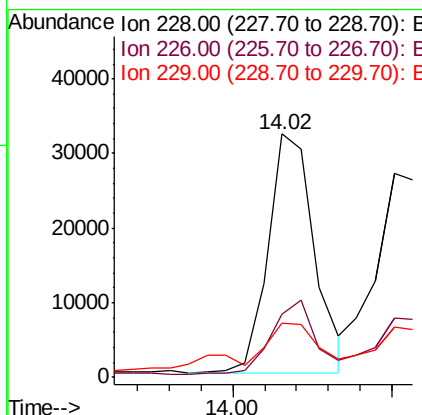
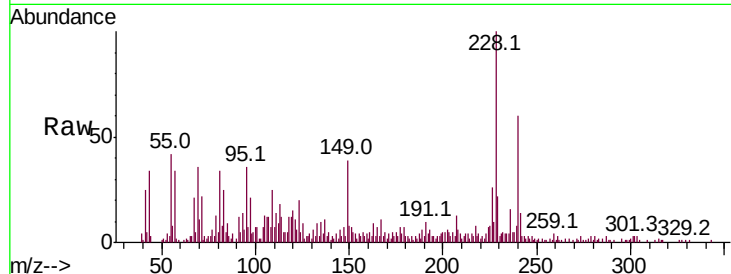




#81  
Benzo(a)anthracene  
Concen: 2.366 ng  
RT: 14.02 min Scan# 2028  
Delta R.T. -0.01 min  
Lab File: BF116530.D  
Acq: 25 Aug 2019 14:26

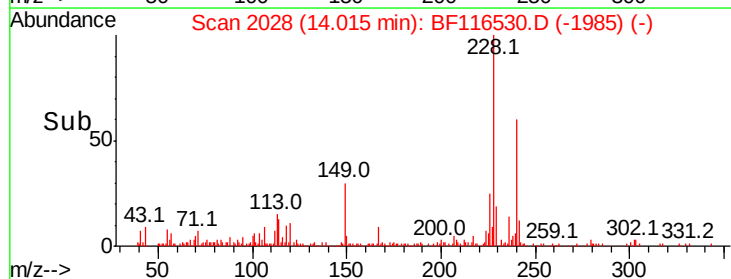
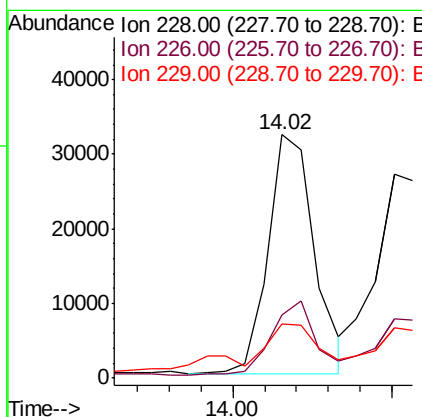
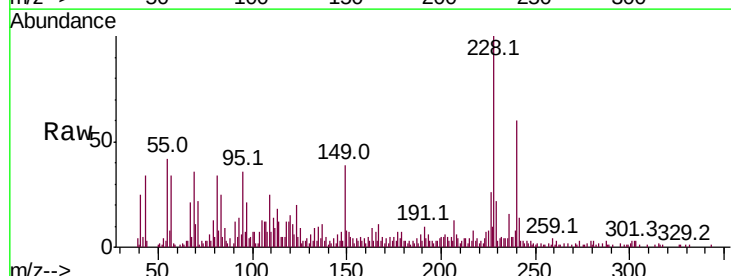
Instrument :  
BNA\_F  
ClientSampleId :

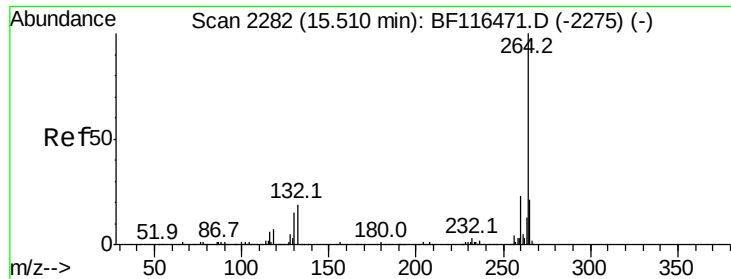
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 26.1  | 21.8  | 32.6  |
| 229     | 22.0  | 15.9  | 23.9  |



#83  
Chrysene  
Concen: 2.335 ng  
RT: 14.02 min Scan# 2028  
Delta R.T. -0.05 min  
Lab File: BF116530.D  
Acq: 25 Aug 2019 14:26

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 26.1  | 24.2  | 36.2  |
| 229     | 22.0  | 15.8  | 23.6  |





#87

Pervlene-d12

Concen: 20.000 ng

RT: 15.50 min Scan# 2280

Delta R.T. -0.01 min

Lab File: BF116530.D

Acq: 25 Aug 2019 14:26

Instrument :

BNA\_F

ClientSampleId :

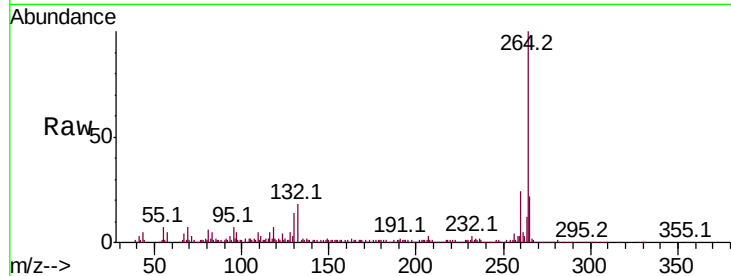
Tot Ion:264 Resp: 228697

Ion Ratio Lower Upper

264 100

260 23.6 18.8 28.2

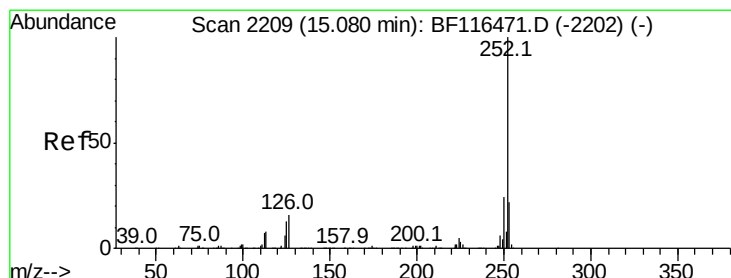
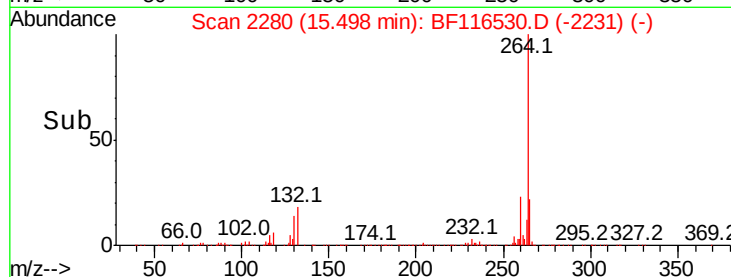
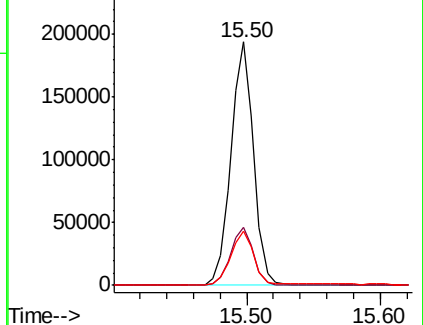
265 22.0 17.1 25.7



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: 3.484 ng

RT: 15.07 min Scan# 2207

Delta R.T. -0.01 min

Lab File: BF116530.D

Acq: 25 Aug 2019 14:26

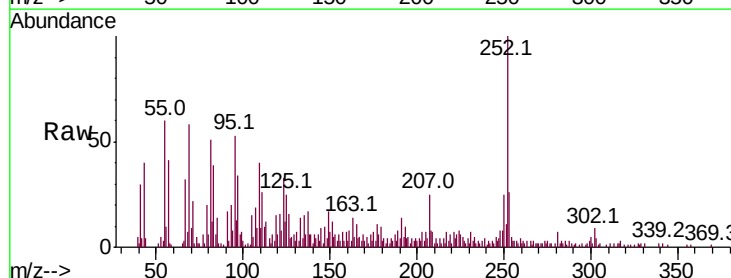
Tgt Ion:252 Resp: 49228

Ion Ratio Lower Upper

252 100

253 25.6 17.5 26.3

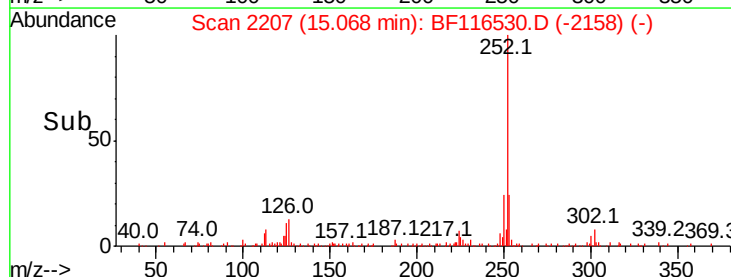
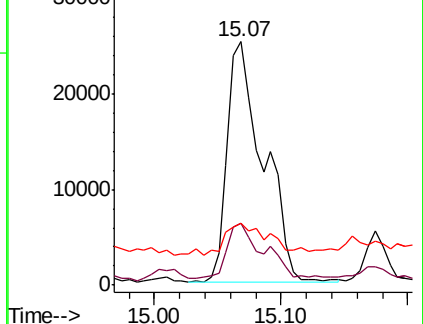
125 25.2 10.1 15.1#

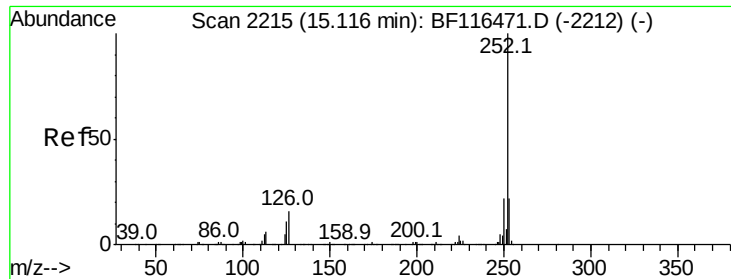


Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E

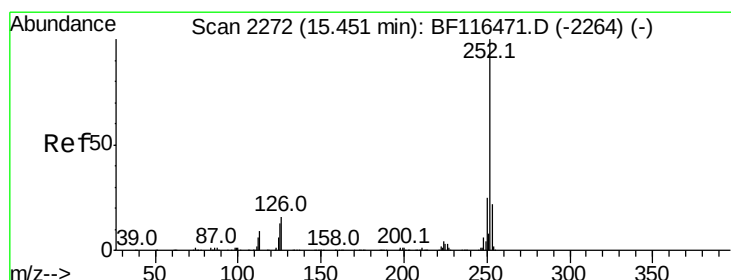
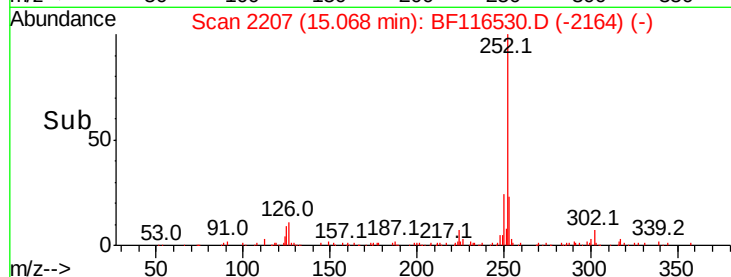
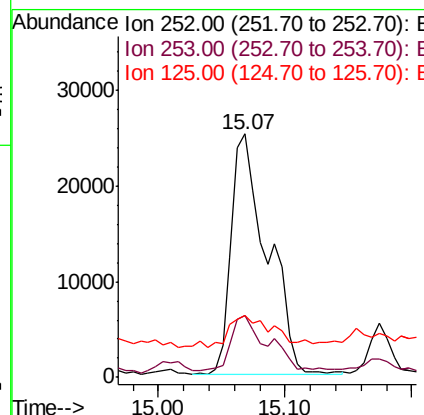
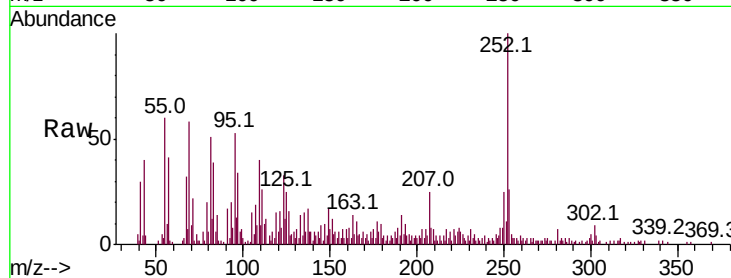




#89  
Benzo(k)fluoranthene  
Concen: 3.846 ng  
RT: 15.07 min Scan# 2207  
Delta R.T. -0.05 min  
Lab File: BF116530.D  
Acq: 25 Aug 2019 14:26

Instrument :  
BNA\_F  
ClientSampleId :

Tot Ion:252 Resp: 49228  
Ion Ratio Lower Upper  
252 100  
253 25.6 17.4 26.2  
125 25.2 9.1 13.7#



#90  
Benzo(a)pyrene  
Concen: 2.037 ng  
RT: 15.43 min Scan# 2269  
Delta R.T. -0.02 min  
Lab File: BF116530.D  
Acq: 25 Aug 2019 14:26

Tgt Ion:252 Resp: 25440  
Ion Ratio Lower Upper  
252 100  
253 26.0 17.2 25.8#  
125 27.8 10.2 15.4#

