

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF091719\  
 Data File : BF117107.D  
 Acq On : 17 Sep 2019 15:30  
 Operator : HP/JU  
 Sample : K4883-04  
 Misc :  
 ALS Vial : 15 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 DUP-20190911

Quant Time: Sep 18 03:50:17 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF091319.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Sep 13 16:23:17 2019  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.82  | 152  | 71409    | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 8.10  | 136  | 275928   | 20.00 | ng    | 0.00     |
| 39) Acenaphthene-d10      | 9.85  | 164  | 143441   | 20.00 | ng    | 0.00     |
| 64) Phenanthrene-d10      | 11.33 | 188  | 232591   | 20.00 | ng    | 0.00     |
| 76) Chrysene-d12          | 13.97 | 240  | 155182   | 20.00 | ng    | 0.00     |
| 87) Perylene-d12          | 15.42 | 264  | 133132   | 20.00 | ng    | 0.00     |

|                             |       |     |        |        |    |      |
|-----------------------------|-------|-----|--------|--------|----|------|
| System Monitoring Compounds |       |     |        |        |    |      |
| 5) 2-Fluorophenol           | 5.45  | 112 | 260602 | 56.98  | ng | 0.00 |
| 7) Phenol-d6                | 6.46  | 99  | 205899 | 34.83  | ng | 0.00 |
| 23) Nitrobenzene-d5         | 7.39  | 82  | 492450 | 93.77  | ng | 0.00 |
| 42) 2,4,6-Tribromophenol    | 10.64 | 330 | 177820 | 148.33 | ng | 0.00 |
| 45) 2-Fluorobiphenyl        | 9.17  | 172 | 894910 | 97.55  | ng | 0.00 |
| 79) Terphenyl-d14           | 12.92 | 244 | 775371 | 93.40  | ng | 0.00 |

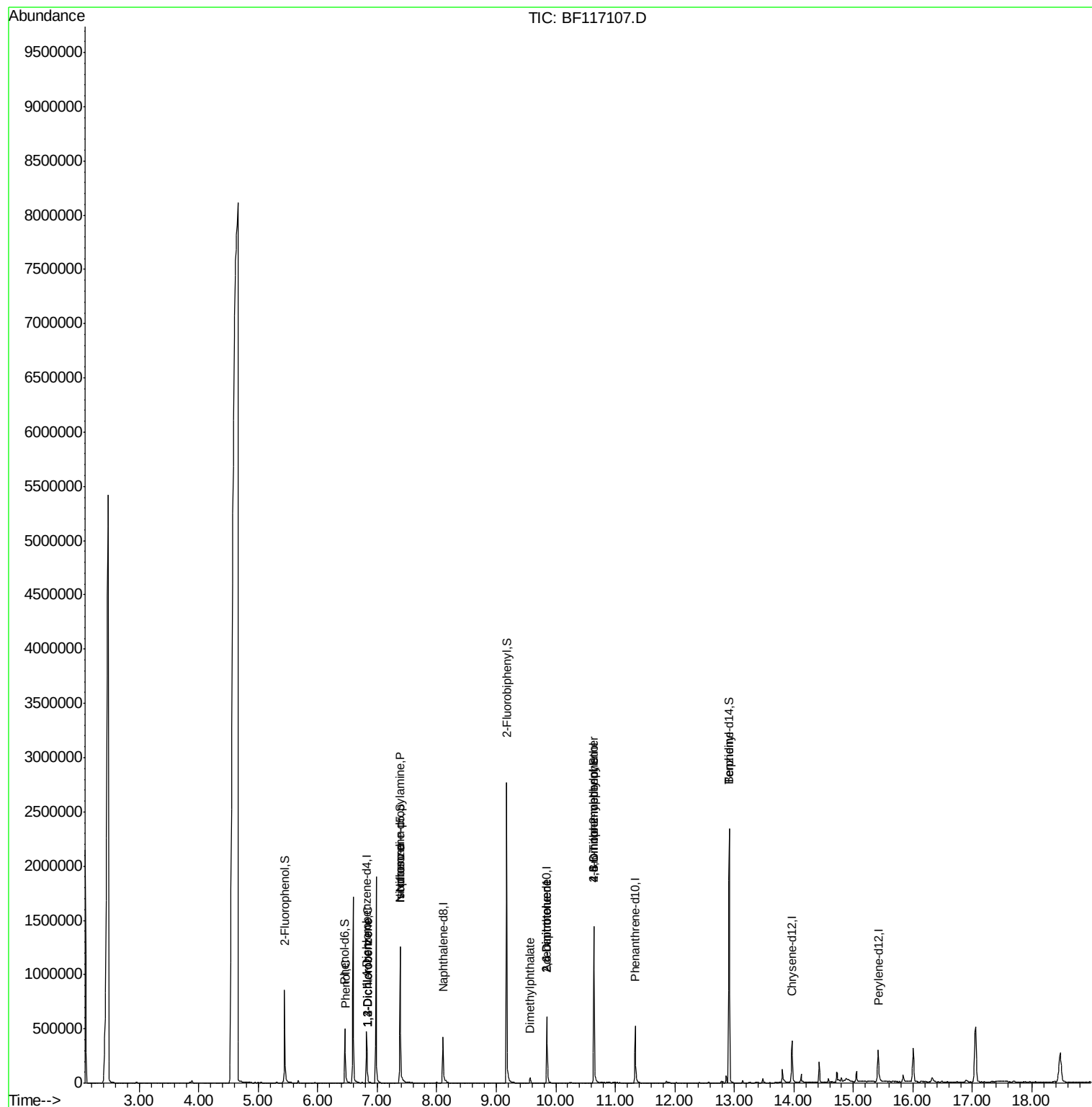
|                                |       |     |        |           |    |      |
|--------------------------------|-------|-----|--------|-----------|----|------|
| Target Compounds               |       |     |        | Qvalue    |    |      |
| 9) Benzaldehyde                | 6.59  | 77  | 12625  | Below Cal | #  | 71   |
| 10) Phenol                     | 6.47  | 94  | 15478  | 2.375     | ng | 94   |
| 12) 1,3-Dichlorobenzene        | 6.84  | 146 | 14225  | 2.569     | ng | 96   |
| 13) 1,4-Dichlorobenzene        | 6.84  | 146 | 14225  | 2.517     | ng | 95   |
| 14) 1,2-Dichlorobenzene        | 6.84  | 146 | 14225  | 2.704     | ng | 97   |
| 19) n-Nitroso-di-n-propylamine | 7.39  | 70  | 65957  | 18.324    | ng | # 78 |
| 25) Isophorone                 | 7.39  | 82  | 492447 | 52.961    | ng | # 66 |
| 50) Dimethylphthalate          | 9.57  | 163 | 26034  | 2.563     | ng | 97   |
| 51) 2,6-Dinitrotoluene         | 9.85  | 165 | 17927  | 8.667     | ng | # 25 |
| 57) 2,4-Dinitrotoluene         | 9.85  | 165 | 17927  | 6.677     | ng | # 19 |
| 65) 4,6-Dinitro-2-methylphenol | 10.64 | 198 | 352    | 7.187     | ng | # 1  |
| 67) 4-Bromophenyl-phenylether  | 10.64 | 248 | 11151  | 4.695     | ng | # 1  |
| 77) Benzidine                  | 12.92 | 184 | 11110  | 2.223     | ng | 96   |

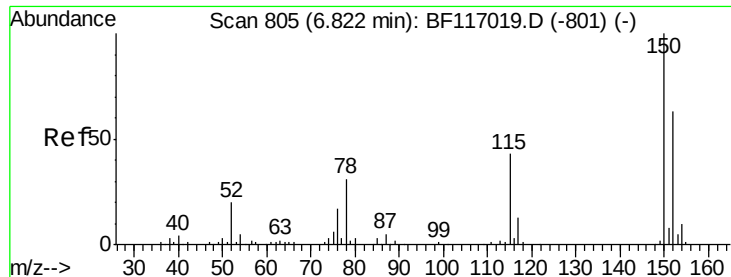
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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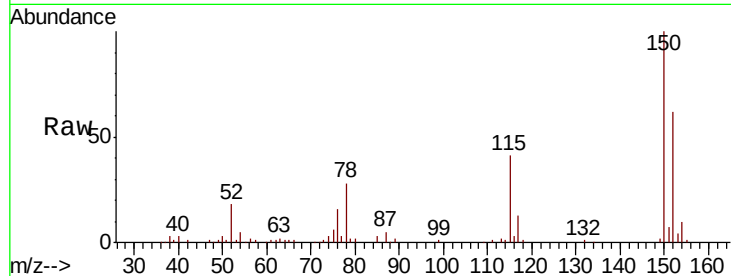


#1

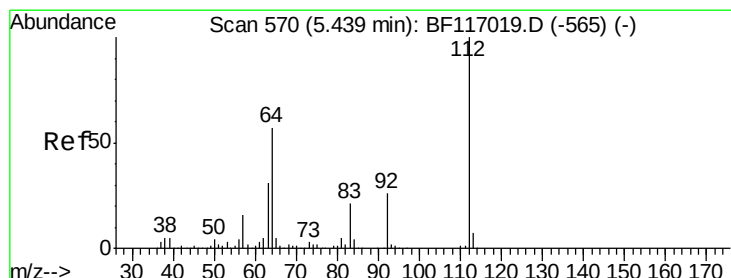
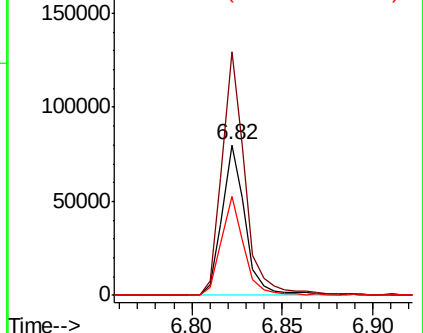
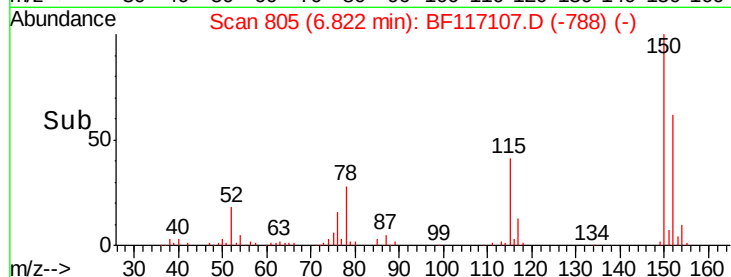
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.82 min Scan# 805  
Delta R.T. 0.00 min  
Lab File: BF117107.D  
Acq: 17 Sep 2019 15:30

Instrument :  
BNA\_F  
ClientSampleId :  
DUP-20190911

Tot Ion:152 Resp: 71409  
Ion Ratio Lower Upper  
152 100  
150 162.0 127.5 191.3  
115 66.1 55.0 82.4



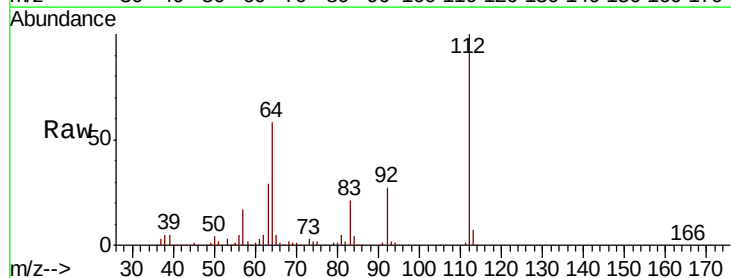
Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 115.00 (114.70 to 115.70): E



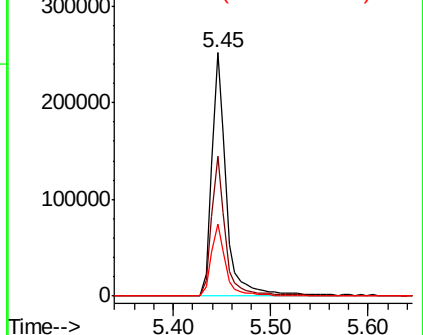
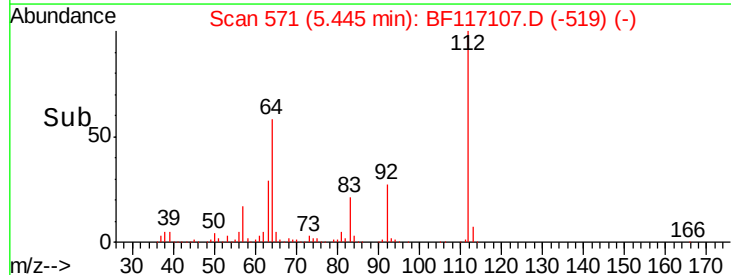
#5

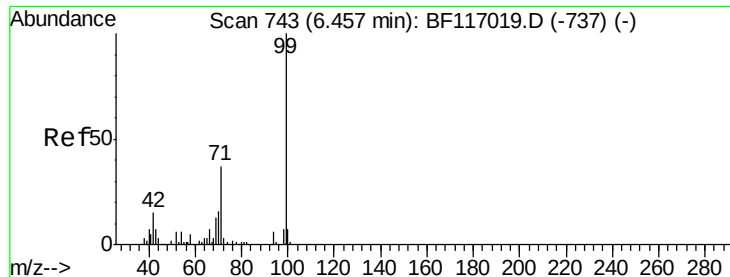
2-Fluorophenol  
Concen: 56.977 ng  
RT: 5.45 min Scan# 571  
Delta R.T. 0.01 min  
Lab File: BF117107.D  
Acq: 17 Sep 2019 15:30

Tgt Ion:112 Resp: 260602  
Ion Ratio Lower Upper  
112 100  
64 57.5 45.7 68.5  
63 29.4 24.9 37.3



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: 34.833 ng

RT: 6.46 min Scan# 743

Delta R.T. 0.00 min

Lab File: BF117107.D

Acq: 17 Sep 2019 15:30

Instrument :

BNA\_F

ClientSampleId :

DUP-20190911

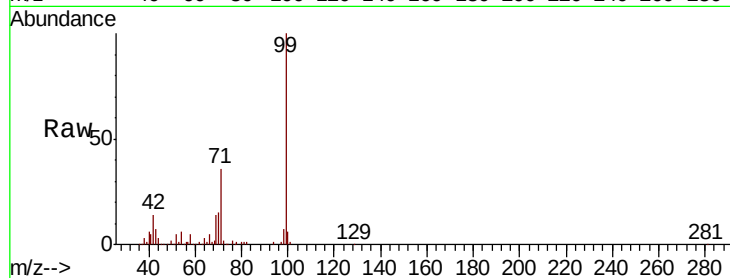
Tot Ion: 99 Resp: 205899

Ion Ratio Lower Upper

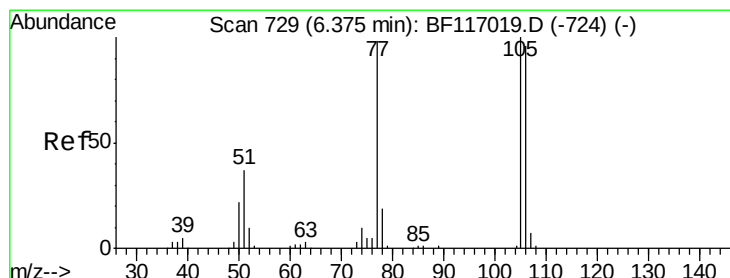
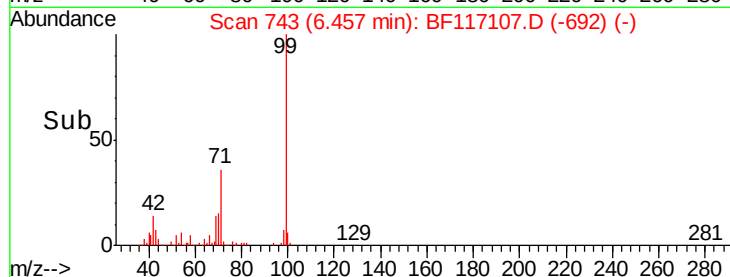
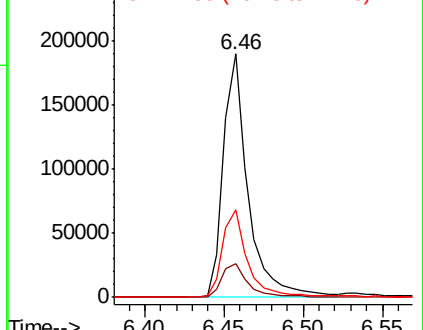
99 100

42 14.0 12.2 18.2

71 36.0 29.8 44.8



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



#9

Benzaldehyde

Concen: Below Cal

RT: 6.59 min Scan# 766

Delta R.T. 0.22 min

Lab File: BF117107.D

Acq: 17 Sep 2019 15:30

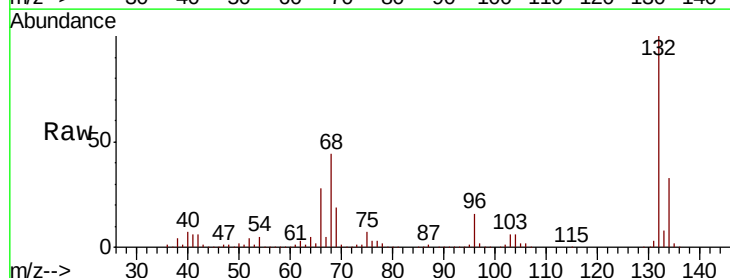
Tgt Ion: 77 Resp: 12625

Ion Ratio Lower Upper

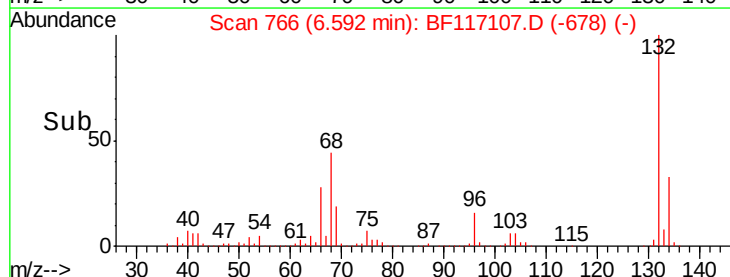
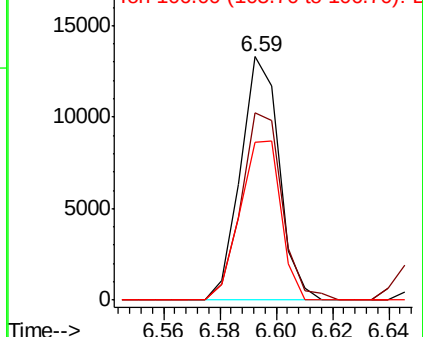
77 100

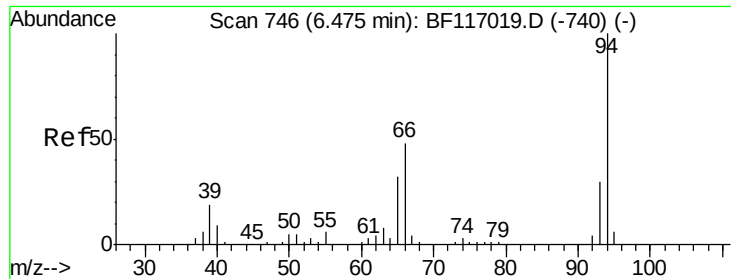
105 76.8 81.8 121.8#

106 64.6 77.3 117.3#



Abundance Ion 77.00 (76.70 to 77.70): BF1  
Ion 105.00 (104.70 to 105.70): E  
Ion 106.00 (105.70 to 106.70): E

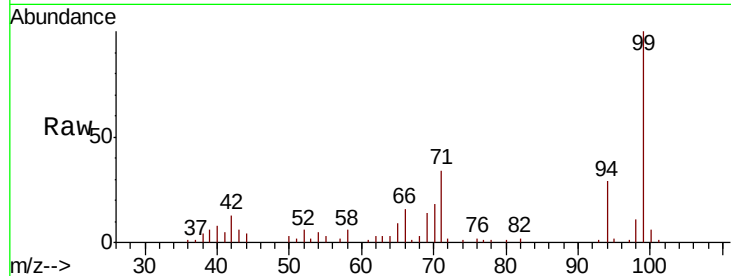




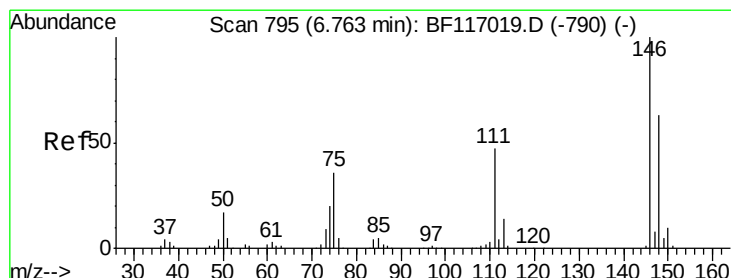
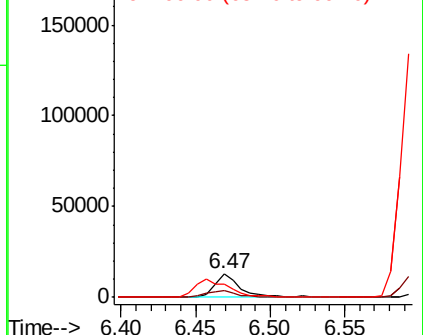
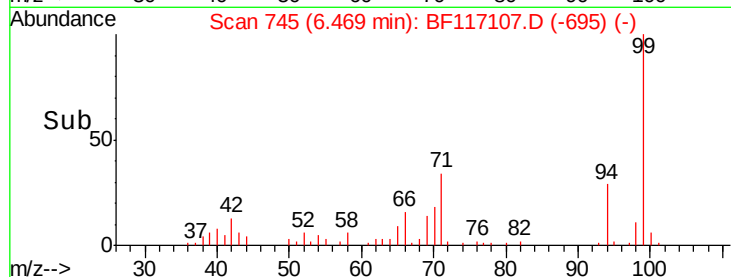
#10  
Phenol  
Concen: 2.375 ng  
RT: 6.47 min Scan# 745  
Delta R.T. -0.01 min  
Lab File: BF117107.D  
Acq: 17 Sep 2019 15:30

Instrument :  
BNA\_F  
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DUP-20190911

Tot Ion: 94 Resp: 15478  
Ion Ratio Lower Upper  
94 100  
65 31.2 12.5 52.5  
66 54.3 28.9 68.9

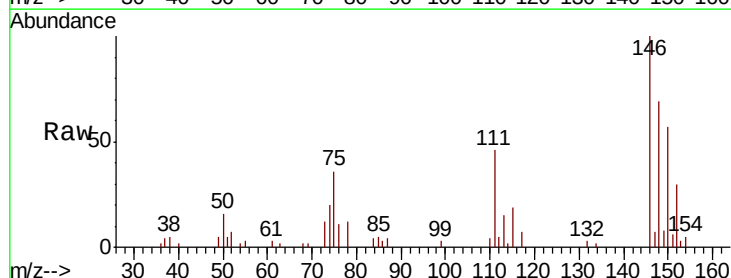


Abundance Ion 94.00 (93.70 to 94.70): BF1  
Ion 65.00 (64.70 to 65.70): BF1  
Ion 66.00 (65.70 to 66.70): BF1

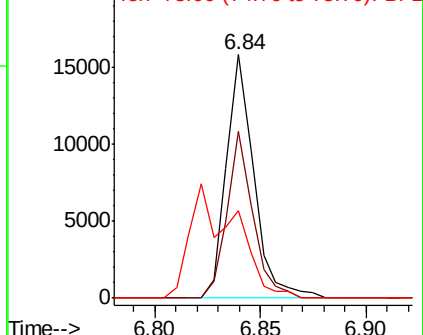
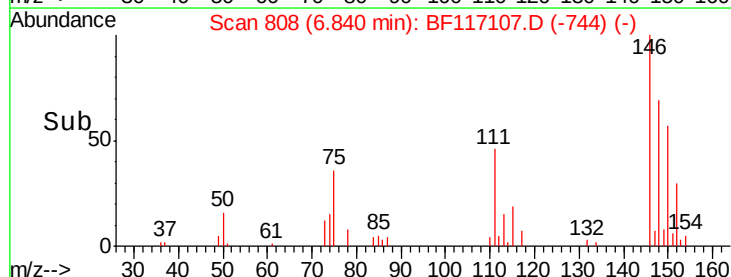


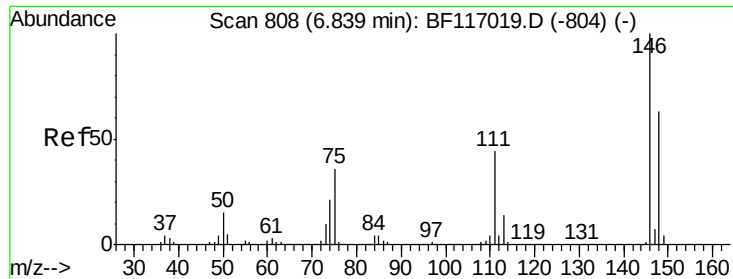
#12  
1,3-Dichlorobenzene  
Concen: 2.569 ng  
RT: 6.84 min Scan# 808  
Delta R.T. 0.08 min  
Lab File: BF117107.D  
Acq: 17 Sep 2019 15:30

Tgt Ion: 146 Resp: 14225  
Ion Ratio Lower Upper  
146 100  
148 68.7 50.8 76.2  
75 36.2 28.7 43.1



Abundance Ion 146.00 (145.70 to 146.70): E  
Ion 148.00 (147.70 to 148.70): E  
Ion 75.00 (74.70 to 75.70): BF1

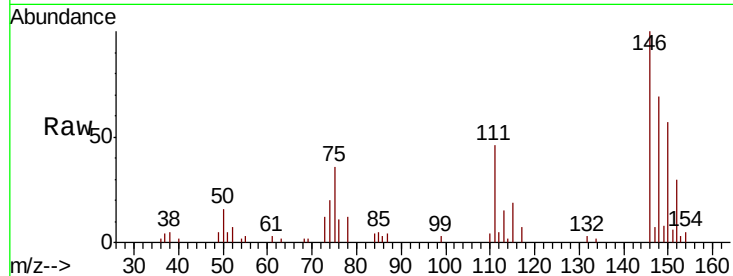




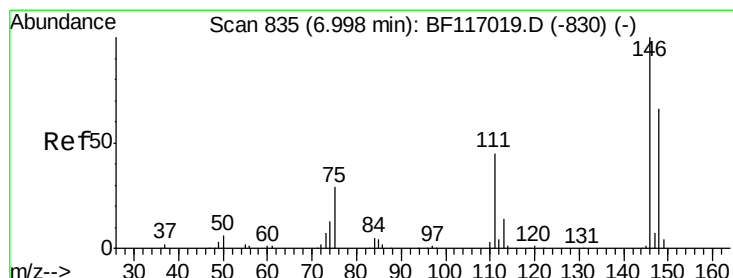
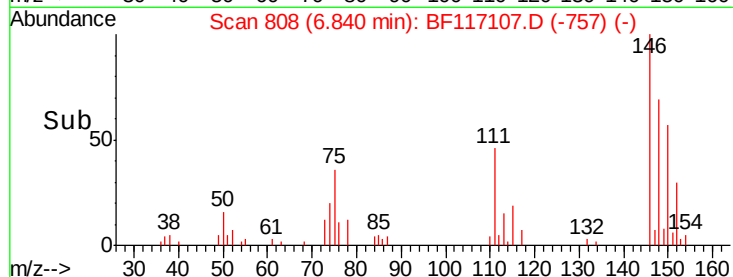
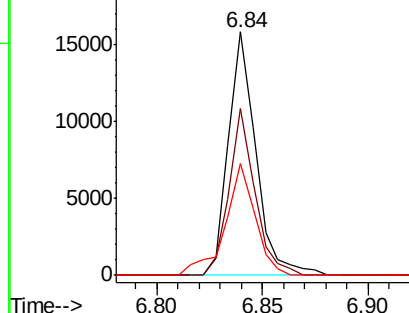
#13  
 1,4-Dichlorobenzene  
 Concen: 2.517 ng  
 RT: 6.84 min Scan# 808  
 Delta R.T. 0.00 min  
 Lab File: BF117107.D  
 Acq: 17 Sep 2019 15:30

Instrument :  
 BNA\_F  
 ClientSampleId :  
 DUP-20190911

Tot Ion:146 Resp: 14225  
 Ion Ratio Lower Upper  
 146 100  
 148 68.7 50.6 76.0  
 111 45.8 35.0 52.6

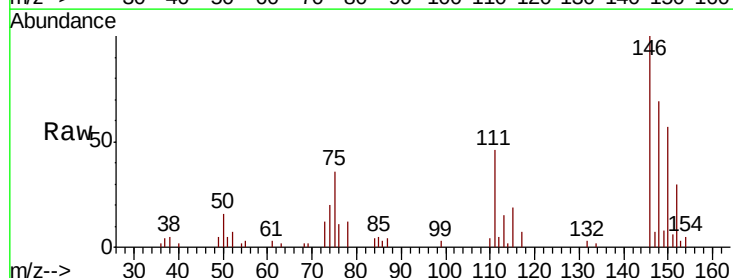


Abundance Ion 146.00 (145.70 to 146.70): E  
 Ion 148.00 (147.70 to 148.70): E  
 Ion 111.00 (110.70 to 111.70): E

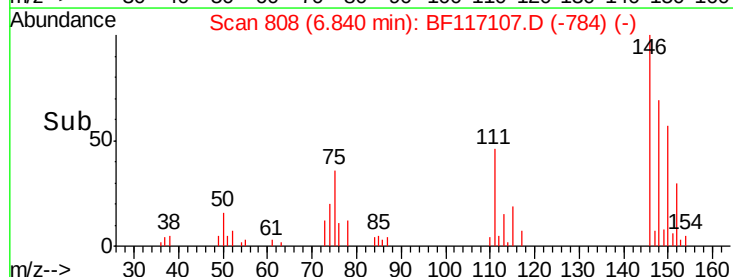
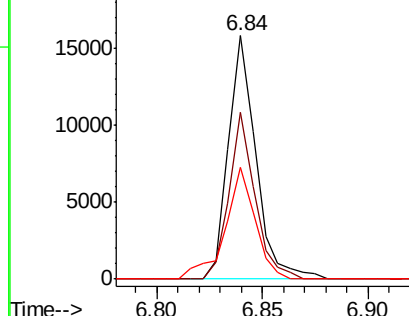


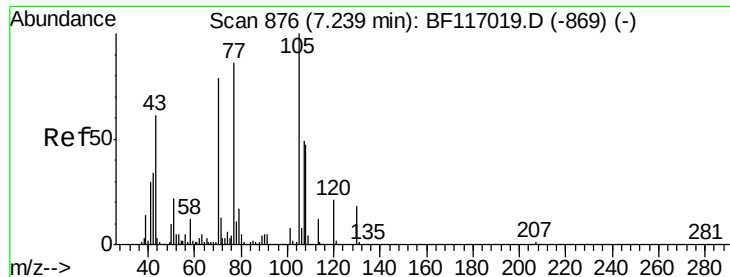
#14  
 1,2-Dichlorobenzene  
 Concen: 2.704 ng  
 RT: 6.84 min Scan# 808  
 Delta R.T. -0.16 min  
 Lab File: BF117107.D  
 Acq: 17 Sep 2019 15:30

Tgt Ion:146 Resp: 14225  
 Ion Ratio Lower Upper  
 146 100  
 148 68.7 52.6 78.8  
 111 45.8 36.2 54.2



Abundance Ion 146.00 (145.70 to 146.70): E  
 Ion 148.00 (147.70 to 148.70): E  
 Ion 111.00 (110.70 to 111.70): E

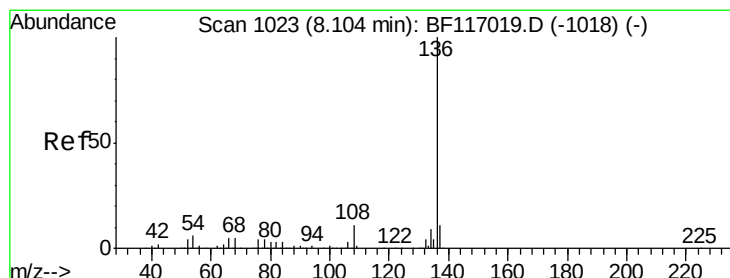
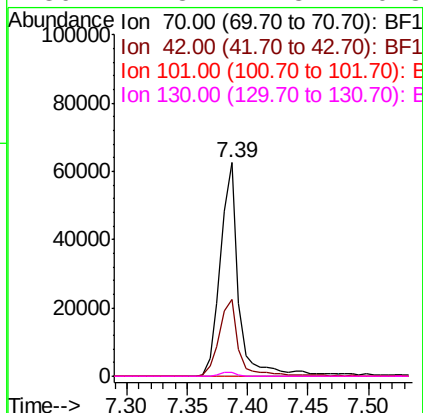
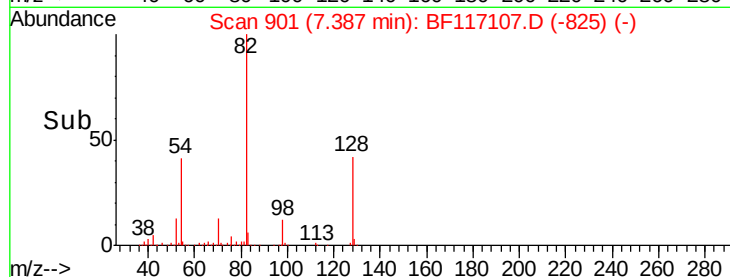
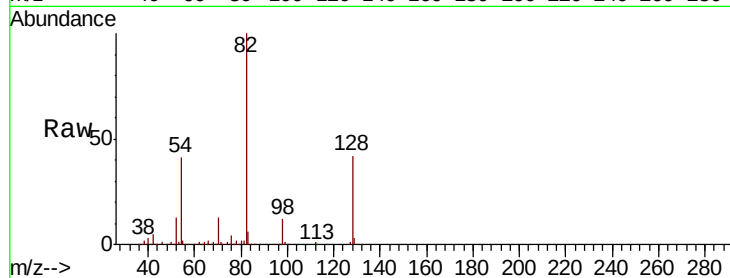




#19  
n-Nitroso-di-n-propylamine  
Concen: 18.324 ng  
RT: 7.39 min Scan# 901  
Delta R.T. 0.15 min  
Lab File: BF117107.D  
Acq: 17 Sep 2019 15:30

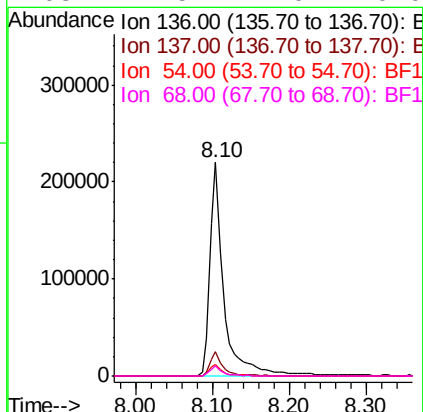
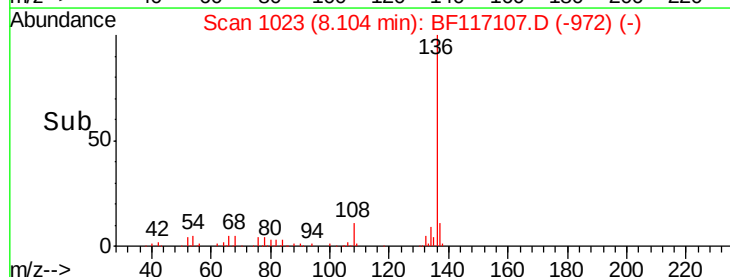
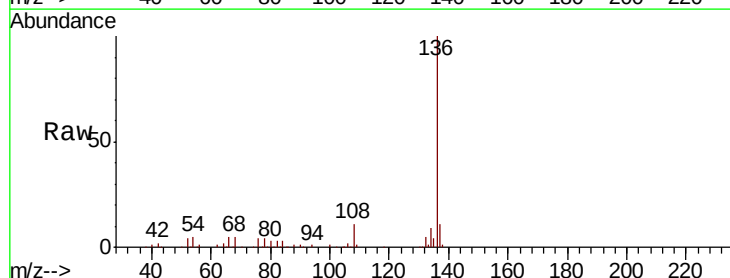
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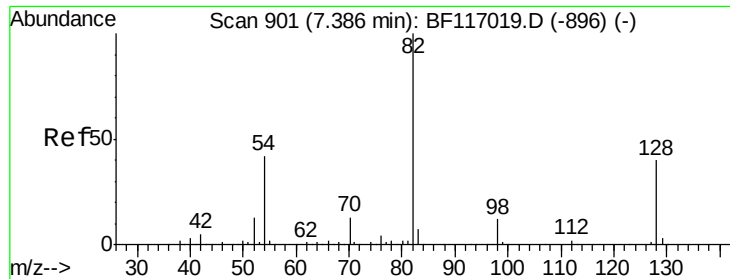
|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 70    | Resp: | 65957 |
| Ion      | Ratio | Lower | Upper |
| 70       | 100   |       |       |
| 42       | 36.0  | 34.0  | 51.0  |
| 101      | 0.0   | 7.8   | 11.6# |
| 130      | 1.8   | 17.8  | 26.8# |



#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 8.10 min Scan# 1023  
Delta R.T. 0.00 min  
Lab File: BF117107.D  
Acq: 17 Sep 2019 15:30

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 136   | Resp: | 275928 |
| Ion      | Ratio | Lower | Upper  |
| 136      | 100   |       |        |
| 137      | 11.2  | 9.0   | 13.4   |
| 54       | 5.5   | 4.5   | 6.7    |
| 68       | 4.5   | 4.0   | 6.0    |

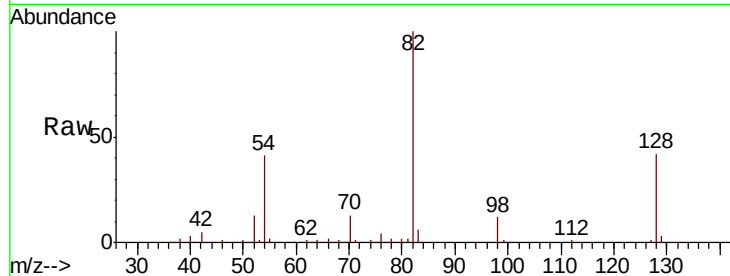




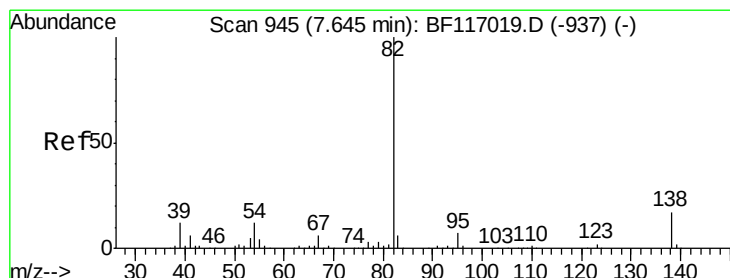
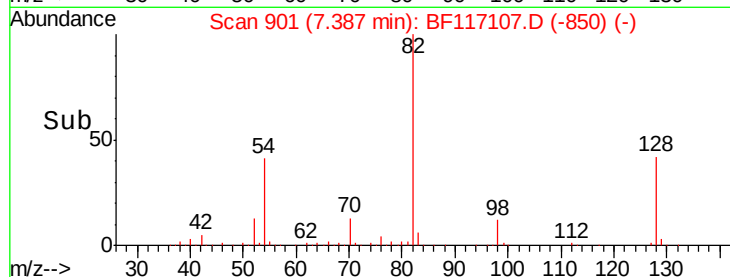
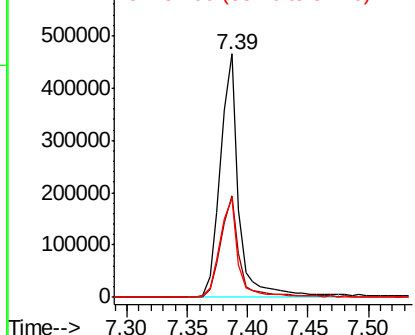
#23  
 Nitrobenzene-d5  
 Concen: 93.773 ng  
 RT: 7.39 min Scan# 901  
 Delta R.T. 0.00 min  
 Lab File: BF117107.D  
 Acq: 17 Sep 2019 15:30

Instrument :  
 BNA\_F  
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 DUP-20190911

| Tot Ion   | 82    | Resp  | 492450 |
|-----------|-------|-------|--------|
| Ion Ratio | Lower | Upper |        |
| 82        | 100   |       |        |
| 128       | 41.8  | 32.3  | 48.5   |
| 54        | 40.7  | 33.3  | 49.9   |

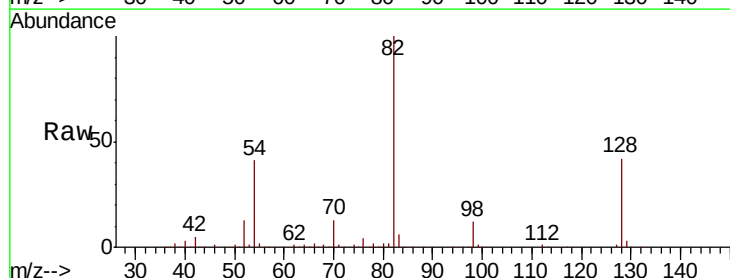


Abundance Ion 82.00 (81.70 to 82.70): BF1  
 Ion 128.00 (127.70 to 128.70): BF1  
 Ion 54.00 (53.70 to 54.70): BF1

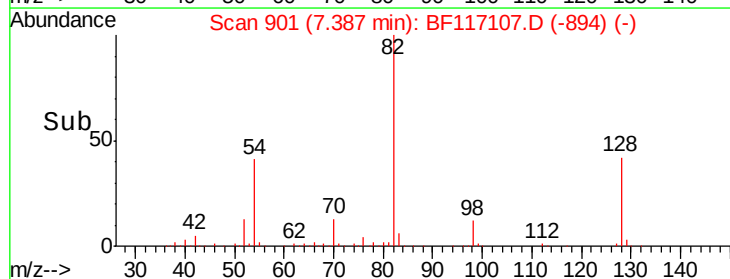
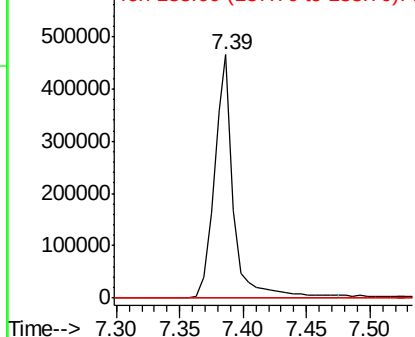


#25  
 Isophorone  
 Concen: 52.961 ng  
 RT: 7.39 min Scan# 901  
 Delta R.T. -0.26 min  
 Lab File: BF117107.D  
 Acq: 17 Sep 2019 15:30

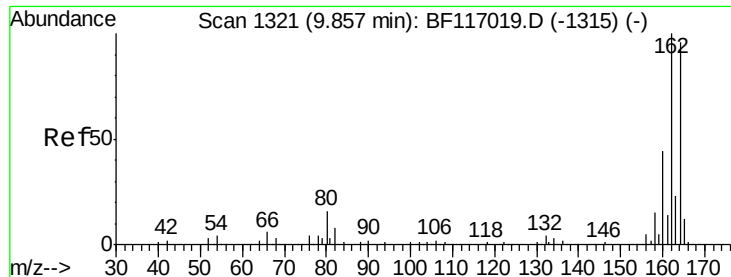
| Tgt Ion   | 82    | Resp  | 492447 |
|-----------|-------|-------|--------|
| Ion Ratio | Lower | Upper |        |
| 82        | 100   |       |        |
| 95        | 0.0   | 5.8   | 8.6#   |
| 138       | 0.0   | 13.5  | 20.3#  |



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: 9.85 min Scan# 1320

Delta R.T. -0.01 min

Lab File: BF117107.D

Acq: 17 Sep 2019 15:30

Instrument :

BNA\_F

ClientSampleId :

DUP-20190911

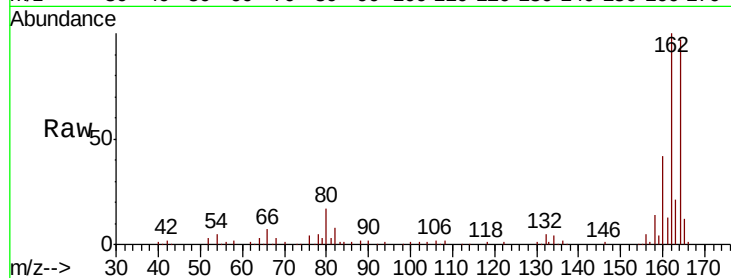
Tot Ion:164 Resp: 143441

Ion Ratio Lower Upper

164 100

162 103.4 83.4 125.2

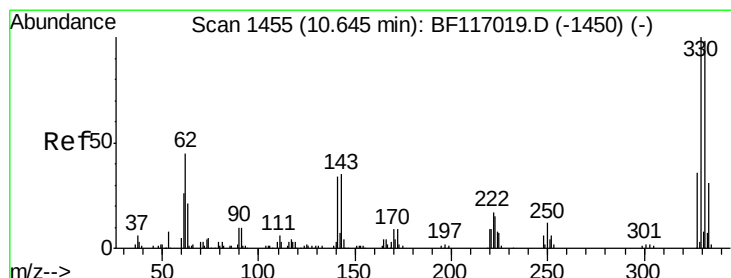
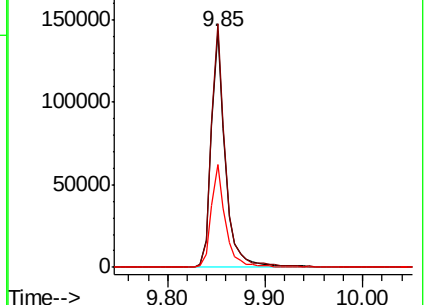
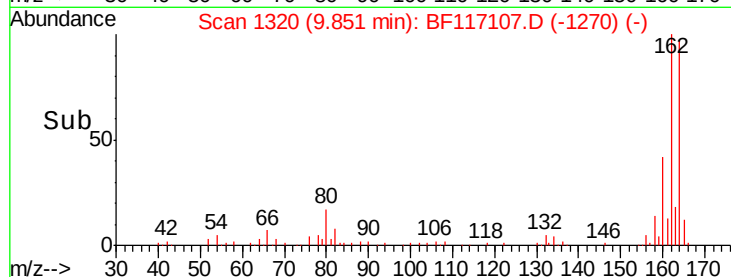
160 43.8 36.4 54.6



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: 148.327 ng

RT: 10.64 min Scan# 1454

Delta R.T. -0.01 min

Lab File: BF117107.D

Acq: 17 Sep 2019 15:30

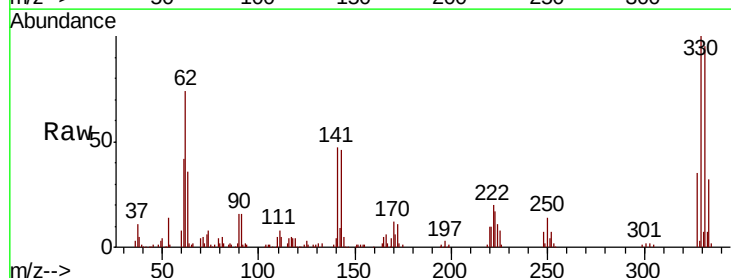
Tgt Ion:330 Resp: 177820

Ion Ratio Lower Upper

330 100

332 96.5 78.0 117.0

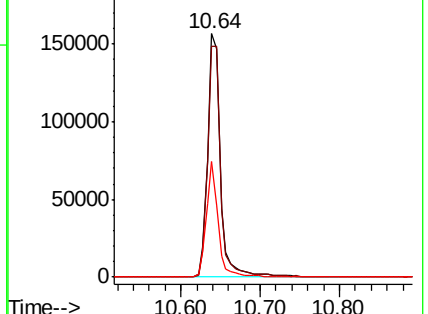
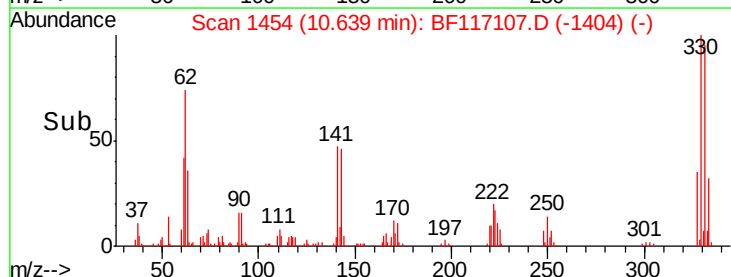
141 44.1 35.8 53.6

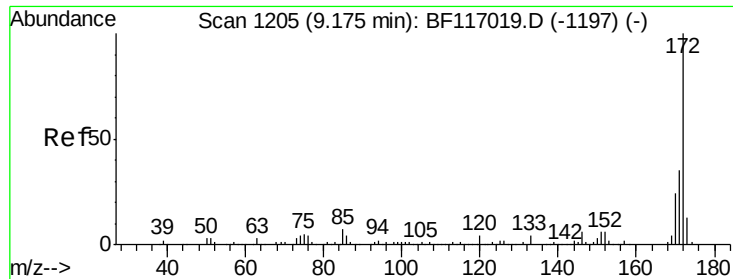


Abundance Ion 329.80 (329.50 to 330.50): E

Ion 331.80 (331.50 to 332.50): E

Ion 141.00 (140.70 to 141.70): E

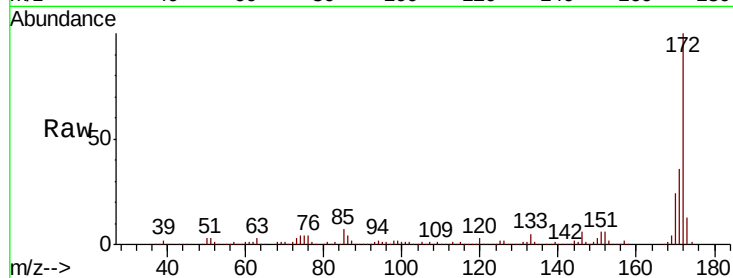




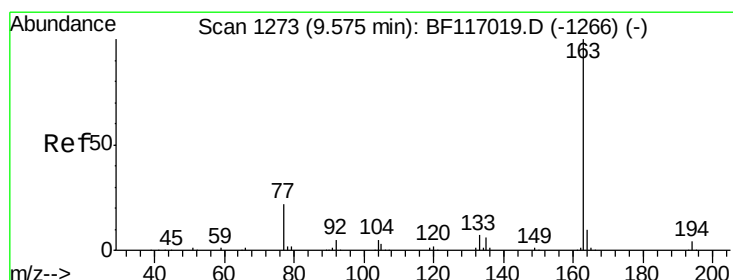
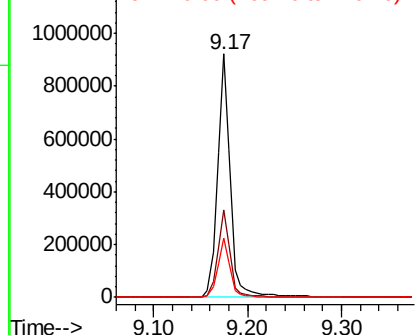
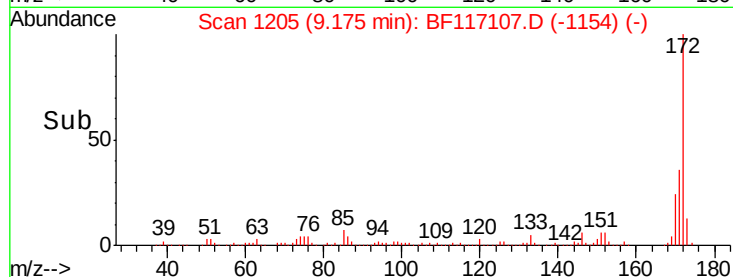
#45  
2-Fluorobiphenyl  
Concen: 97.549 ng  
RT: 9.17 min Scan# 1205  
Delta R.T. 0.00 min  
Lab File: BF117107.D  
Acq: 17 Sep 2019 15:30

Instrument :  
BNA\_F  
ClientSampleId :  
DUP-20190911

Tot Ion:172 Resp: 894910  
Ion Ratio Lower Upper  
172 100  
171 35.9 28.2 42.2  
170 24.2 18.9 28.3

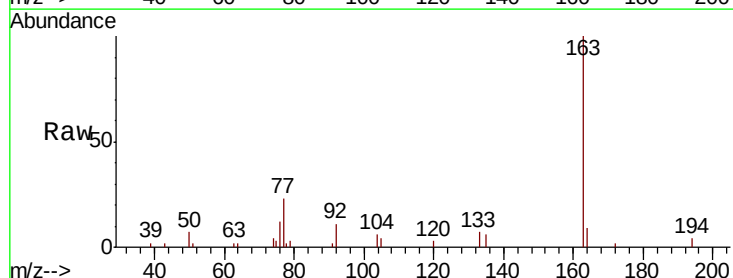


Abundance Ion 172.00 (171.70 to 172.70): E  
Ion 171.00 (170.70 to 171.70): E  
Ion 170.00 (169.70 to 170.70): E

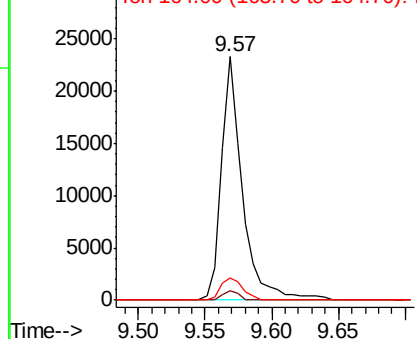
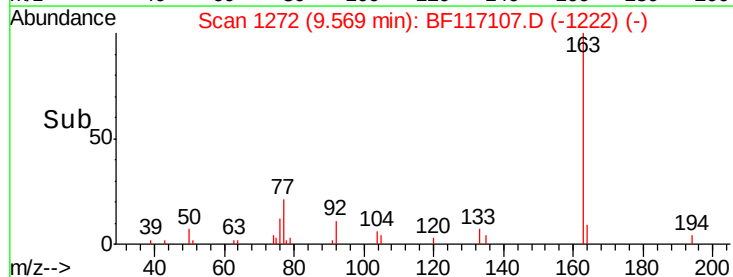


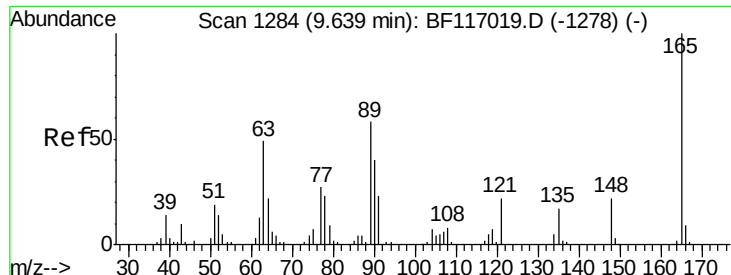
#50  
Dimethylphthalate  
Concen: 2.563 ng  
RT: 9.57 min Scan# 1272  
Delta R.T. -0.01 min  
Lab File: BF117107.D  
Acq: 17 Sep 2019 15:30

Tgt Ion:163 Resp: 26034  
Ion Ratio Lower Upper  
163 100  
194 3.9 2.9 4.3  
164 9.0 8.2 12.4



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

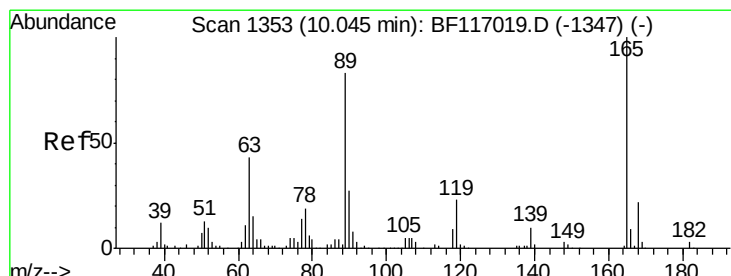
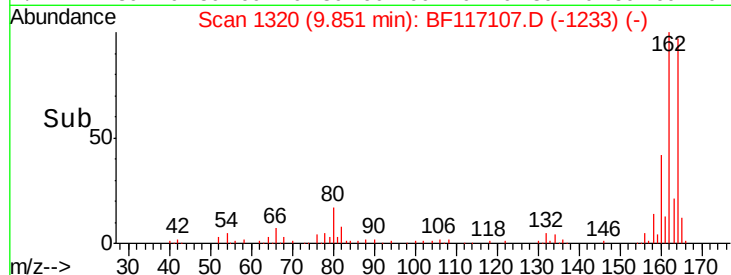
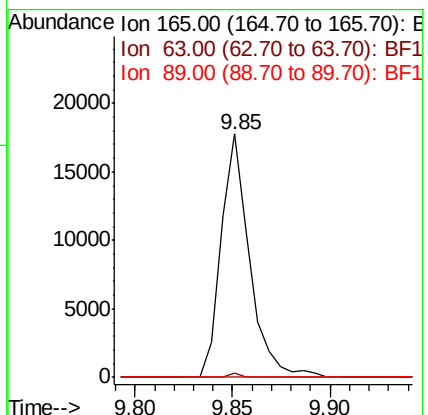
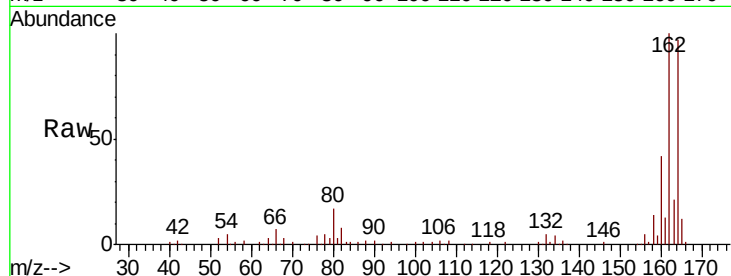




#51  
 2,6-Dinitrotoluene  
 Concen: 8.667 ng  
 RT: 9.85 min Scan# 1320  
 Delta R.T. 0.21 min  
 Lab File: BF117107.D  
 Acq: 17 Sep 2019 15:30

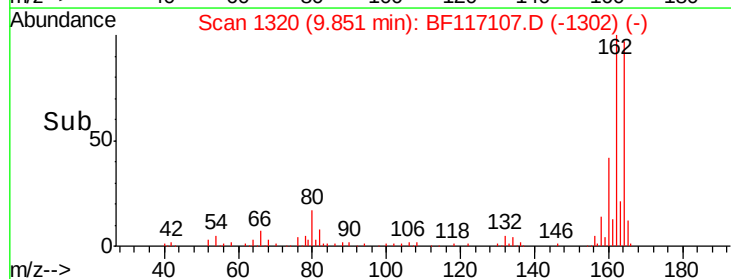
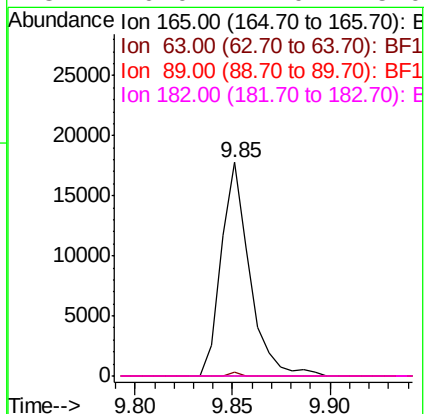
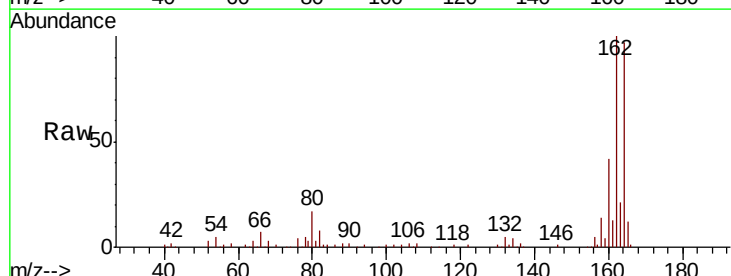
Instrument :  
 BNA\_F  
 ClientSampleId :  
 DUP-20190911

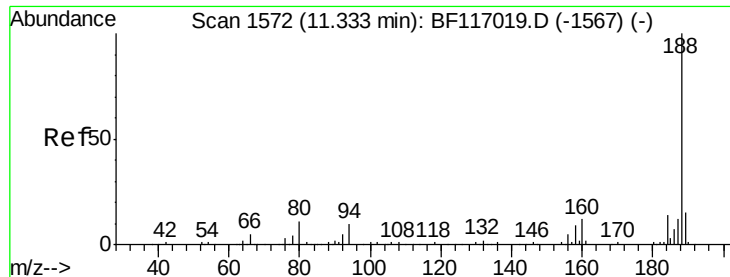
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 165     | 100   |       |       |
| 63      | 1.7   | 41.8  | 62.8# |
| 89      | 0.0   | 46.5  | 69.7# |



#57  
 2,4-Dinitrotoluene  
 Concen: 6.677 ng  
 RT: 9.85 min Scan# 1320  
 Delta R.T. -0.19 min  
 Lab File: BF117107.D  
 Acq: 17 Sep 2019 15:30

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 165     | 100   |       |       |
| 63      | 1.7   | 35.0  | 52.4# |
| 89      | 0.0   | 66.1  | 99.1# |
| 182     | 0.0   | 2.0   | 3.0#  |





#64

Phenanthrene-d10

Concen: 20.000 ng

RT: 11.33 min Scan# 1572

Delta R.T. 0.00 min

Lab File: BF117107.D

Acq: 17 Sep 2019 15:30

Instrument :

BNA\_F

ClientSampleId :

DUP-20190911

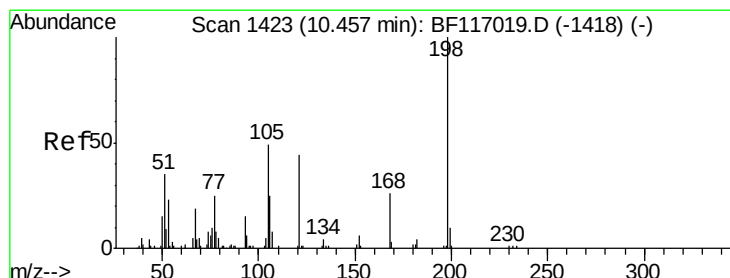
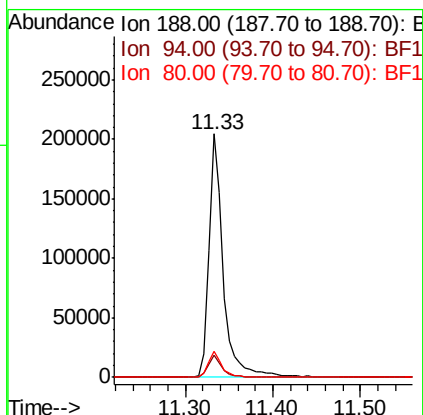
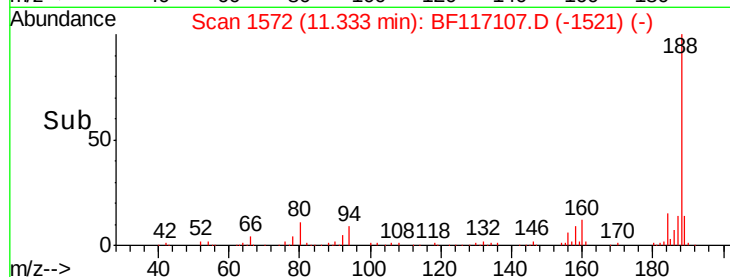
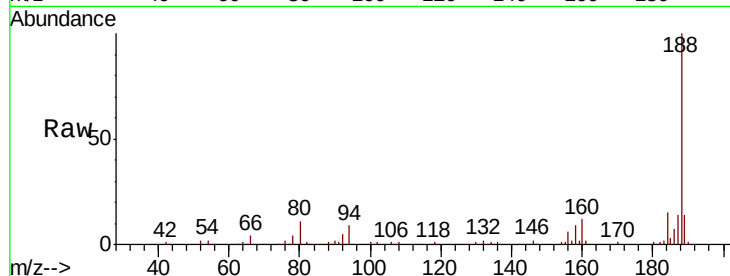
Tot Ion:188 Resp: 232591

Ion Ratio Lower Upper

188 100

94 9.0 8.2 12.2

80 10.5 9.0 13.6



#65

4,6-Dinitro-2-methylphenol

Concen: 7.187 ng

RT: 10.64 min Scan# 1454

Delta R.T. 0.18 min

Lab File: BF117107.D

Acq: 17 Sep 2019 15:30

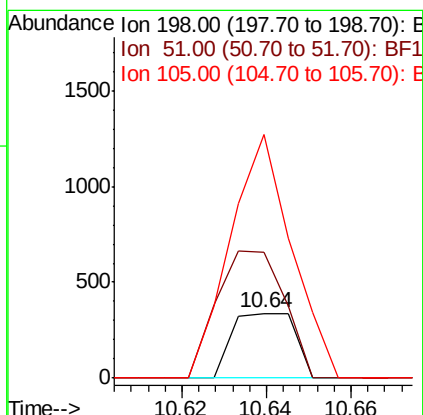
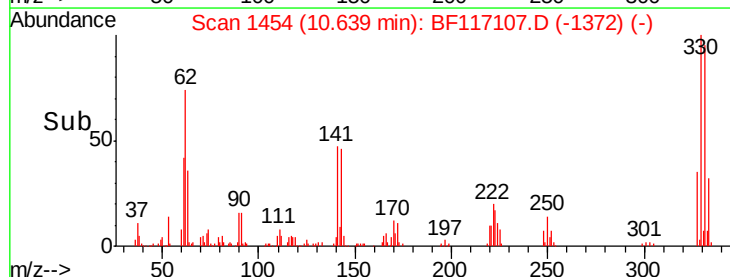
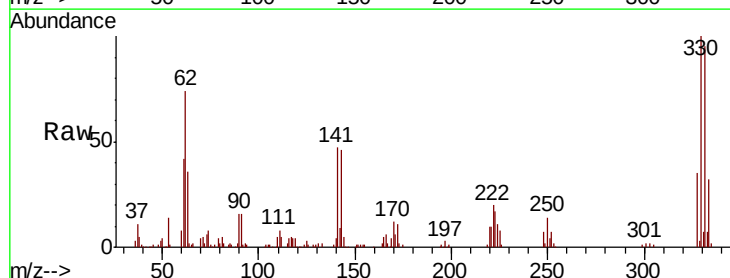
Tgt Ion:198 Resp: 352

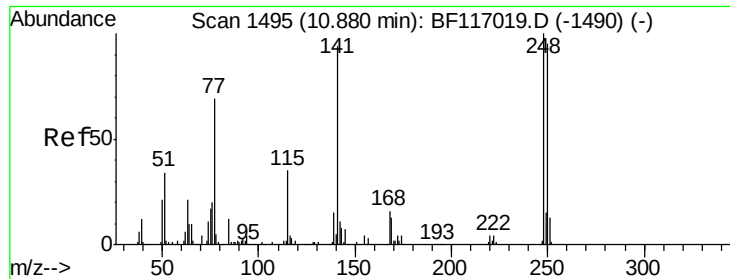
Ion Ratio Lower Upper

198 100

51 194.1 18.7 58.7#

105 376.0 30.2 70.2#

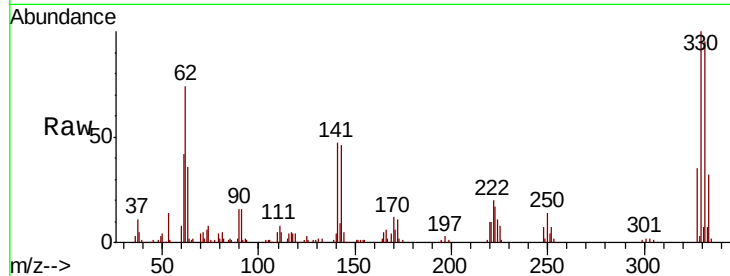




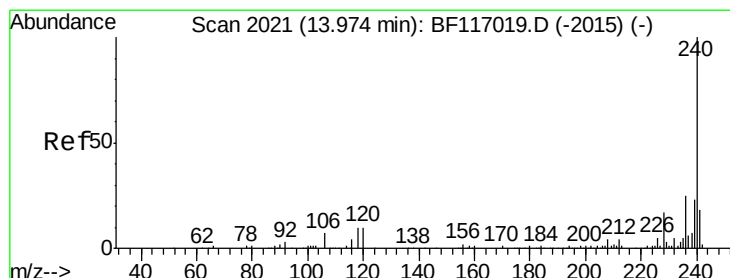
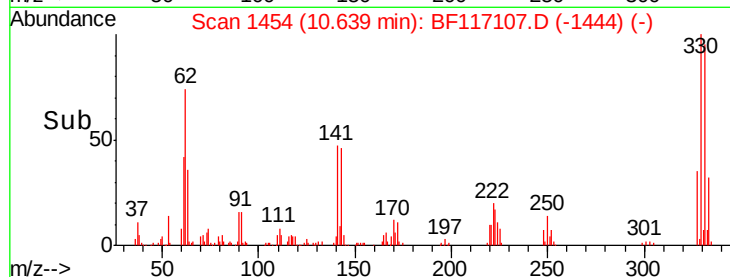
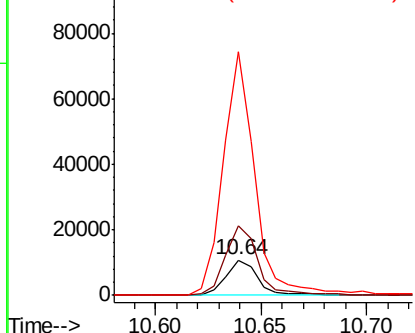
#67  
 4-Bromophenyl-phenylether  
 Concen: 4.695 ng  
 RT: 10.64 min Scan# 1454  
 Delta R.T. -0.24 min  
 Lab File: BF117107.D  
 Acq: 17 Sep 2019 15:30

Instrument :  
 BNA\_F  
 ClientSampleID :  
 DUP-20190911

Tot Ion:248 Resp: 11151  
 Ion Ratio Lower Upper  
 248 100  
 250 195.6 76.2 114.4#  
 141 685.8 75.0 112.4#

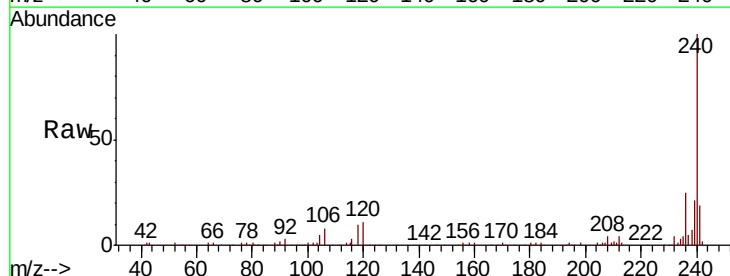


Abundance Ion 248.00 (247.70 to 248.70): E  
 Ion 250.00 (249.70 to 250.70): E  
 Ion 141.00 (140.70 to 141.70): E

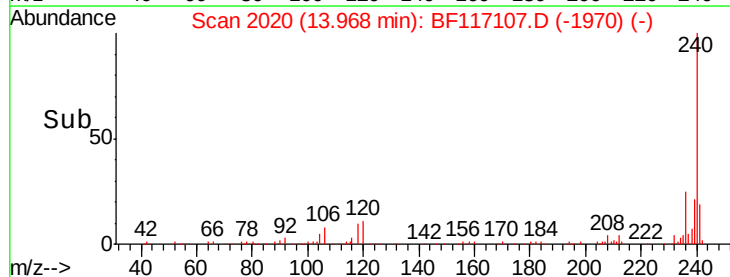
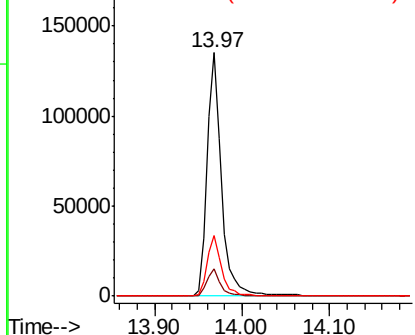


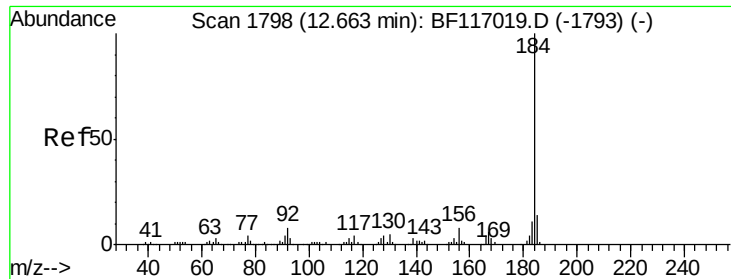
#76  
 Chrysene-d12  
 Concen: 20.000 ng  
 RT: 13.97 min Scan# 2020  
 Delta R.T. -0.01 min  
 Lab File: BF117107.D  
 Acq: 17 Sep 2019 15:30

Tgt Ion:240 Resp: 155182  
 Ion Ratio Lower Upper  
 240 100  
 120 11.3 8.3 12.5  
 236 24.9 20.3 30.5



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





#77

Benzidine

Concen: 2.223 ng

RT: 12.92 min Scan# 1841

Delta R.T. 0.25 min

Lab File: BF117107.D

Acq: 17 Sep 2019 15:30

Instrument :

BNA\_F

ClientSampleId :

DUP-20190911

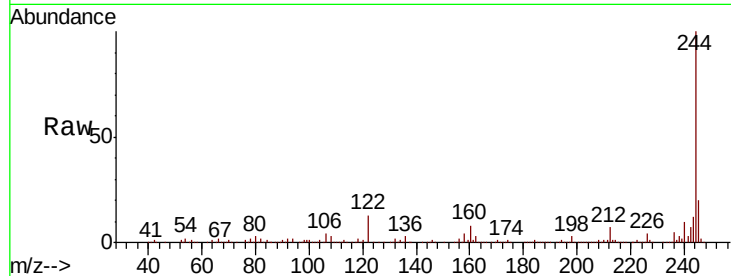
Tot Ion:184 Resp: 11110

Ion Ratio Lower Upper

184 100

185 13.0 11.6 17.4

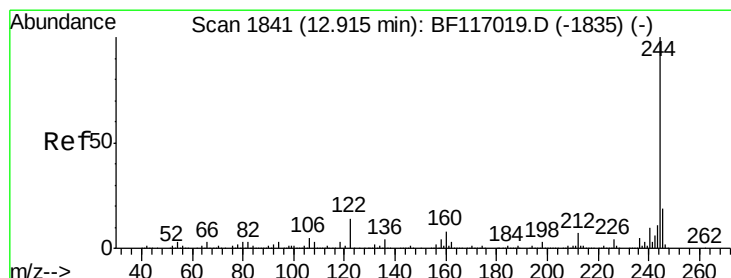
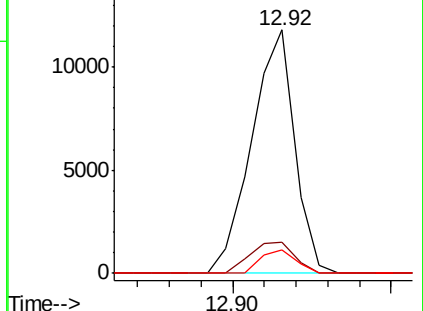
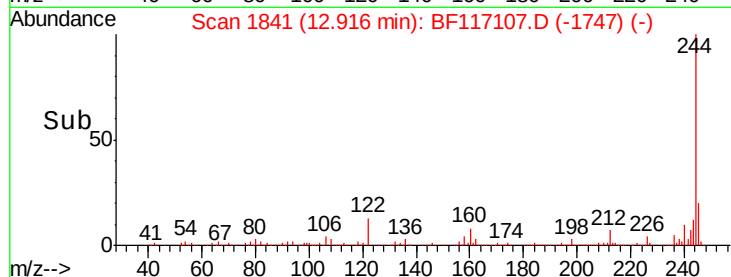
183 9.5 9.0 13.4



Abundance Ion 184.00 (183.70 to 184.70): E

Ion 185.00 (184.70 to 185.70): E

Ion 183.00 (182.70 to 183.70): E



#79

Terphenyl-d14

Concen: 93.396 ng

RT: 12.92 min Scan# 1841

Delta R.T. 0.00 min

Lab File: BF117107.D

Acq: 17 Sep 2019 15:30

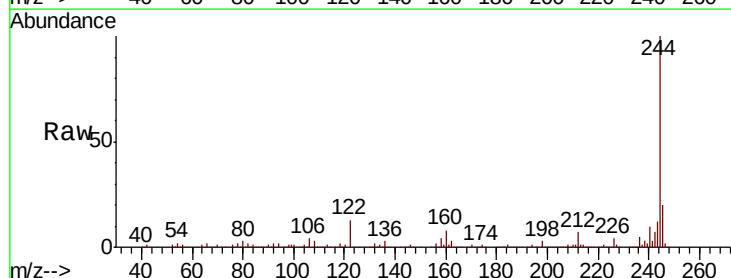
Tgt Ion:244 Resp: 775371

Ion Ratio Lower Upper

244 100

212 7.4 5.8 8.8

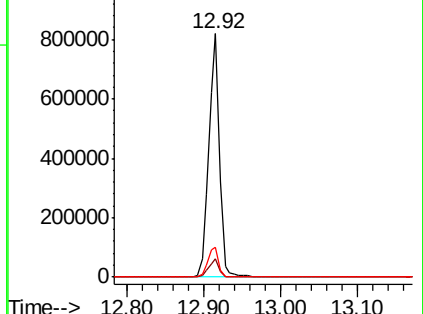
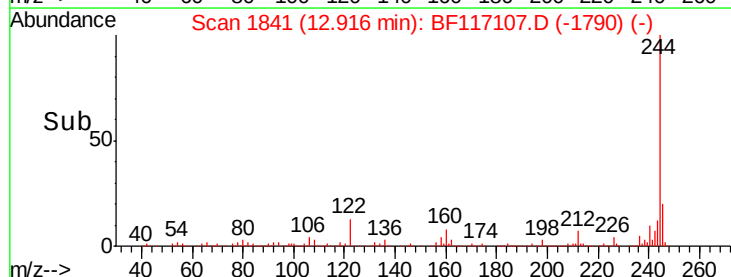
122 12.5 11.3 16.9

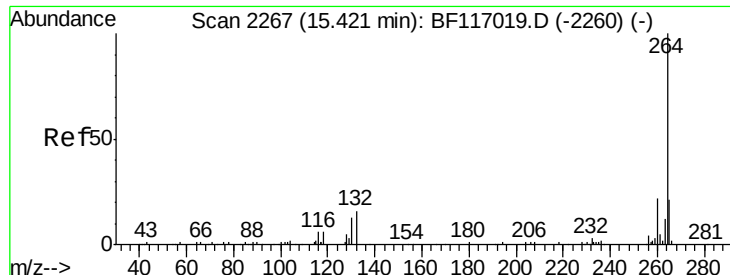


Abundance Ion 244.00 (243.70 to 244.70): E

Ion 212.00 (211.70 to 212.70): E

Ion 122.00 (121.70 to 122.70): E





#87  
Pervlene-d12  
Concen: 20.000 ng  
RT: 15.42 min Scan# 2266  
Delta R.T. -0.01 min  
Lab File: BF117107.D  
Acq: 17 Sep 2019 15:30

Instrument :  
BNA\_F  
ClientSampleId :  
DUP-20190911

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 22.7  | 17.6  | 26.4  |
| 265     | 20.9  | 16.6  | 24.8  |

