

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF092019\  
 Data File : BF117204.D  
 Acq On : 20 Sep 2019 23:36  
 Operator : HP/JU  
 Sample : K4964-02DL 5X  
 Misc :  
 ALS Vial : 23 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :

Quant Time: Sep 21 00:39:42 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  | 38189    | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 8.10  | 136  | 154787   | 20.00 | ng    | 0.00     |
| 39) Acenaphthene-d10      | 9.85  | 164  | 73919    | 20.00 | ng    | 0.00     |
| 64) Phenanthrene-d10      | 11.34 | 188  | 93538    | 20.00 | ng    | 0.00     |
| 76) Chrysene-d12          | 13.98 | 240  | 50579    | 20.00 | ng    | 0.00     |
| 87) Perylene-d12          | 15.43 | 264  | 47085    | 20.00 | ng    | 0.01     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|-------|------|----------|-------|-------|----------|
| 5) 2-Fluorophenol           | 5.45  | 112  | 41134    | 16.82 | ng    | 0.00     |
| 7) Phenol-d6                | 6.46  | 99   | 55909    | 17.69 | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 7.38  | 82   | 33958    | 11.53 | ng    | 0.00     |
| 42) 2,4,6-Tribromophenol    | 10.65 | 330  | 9589     | 15.52 | ng    | 0.00     |
| 45) 2-Fluorobiphenyl        | 9.17  | 172  | 72640    | 15.37 | ng    | 0.00     |
| 79) Terphenyl-d14           | 12.92 | 244  | 43342    | 16.02 | ng    | 0.00     |

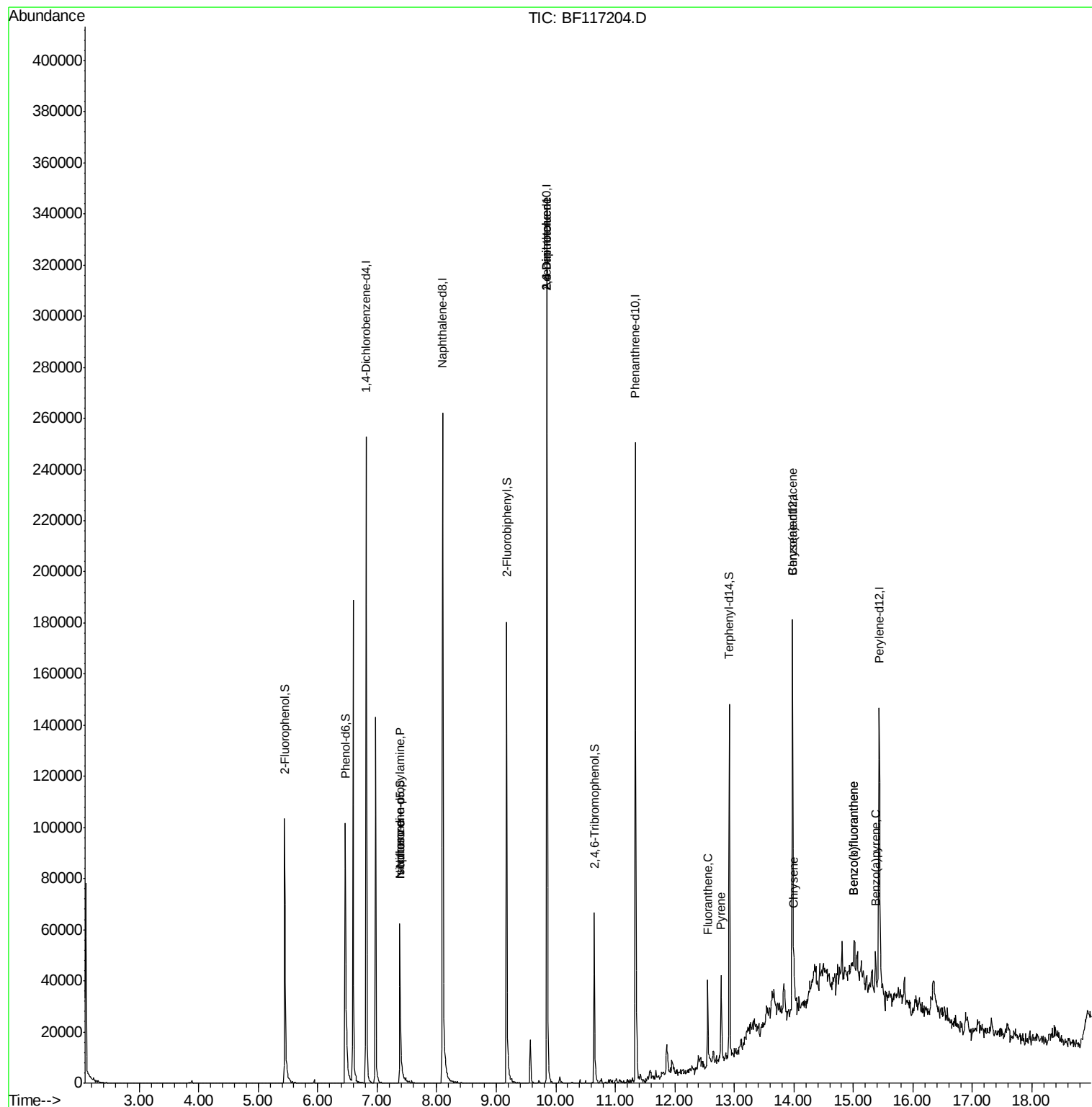
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units | Qvalue |
|--------------------------------|-------|------|----------|-----------|-------|--------|
| 9) Benzaldehyde                | 6.59  | 77   | 1006     | Below Cal |       | 91     |
| 19) n-Nitroso-di-n-propylamine | 7.38  | 70   | 4176     | 2.169 ng  | #     | 75     |
| 25) Isophorone                 | 7.38  | 82   | 33958    | 6.510 ng  | #     | 66     |
| 51) 2,6-Dinitrotoluene         | 9.85  | 165  | 9527     | 8.937 ng  | #     | 24     |
| 57) 2,4-Dinitrotoluene         | 9.85  | 165  | 9527     | 6.885 ng  | #     | 18     |
| 75) Fluoranthene               | 12.55 | 202  | 15817    | 2.897 ng  |       | 100    |
| 78) Pyrene                     | 12.78 | 202  | 14808    | 3.489 ng  |       | 97     |
| 81) Benzo(a)anthracene         | 13.97 | 228  | 8525     | 2.523 ng  |       | 95     |
| 83) Chrysene                   | 14.00 | 228  | 7595     | 2.304 ng  |       | 97     |
| 88) Benzo(b)fluoranthene       | 15.01 | 252  | 12786    | 4.483 ng  | #     | 86     |
| 89) Benzo(k)fluoranthene       | 15.01 | 252  | 12786    | 4.733 ng  | #     | 86     |
| 90) Benzo(a)pyrene             | 15.37 | 252  | 7107     | 2.840 ng  | #     | 87     |

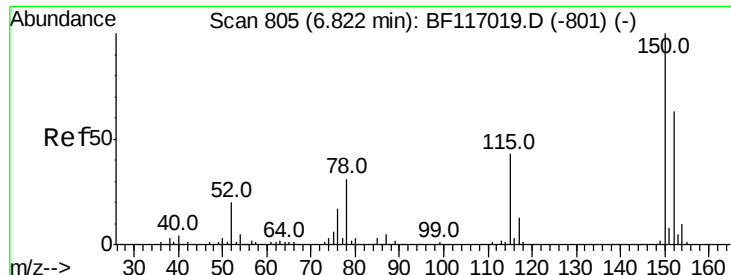
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Misc :  
ALS Vial : 23 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :

Quant Time: Sep 21 00:39:42 2019  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF091319.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
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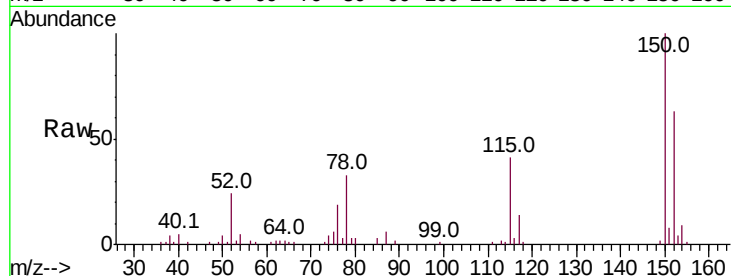


#1

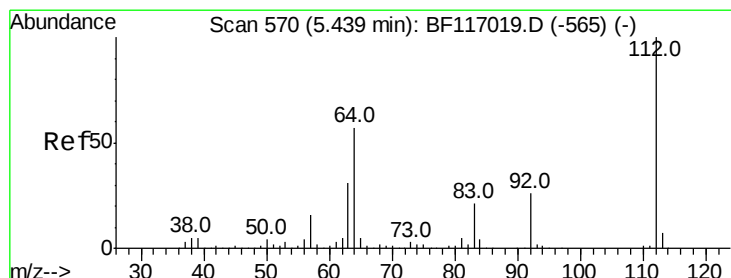
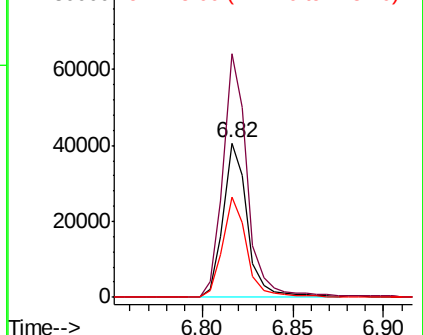
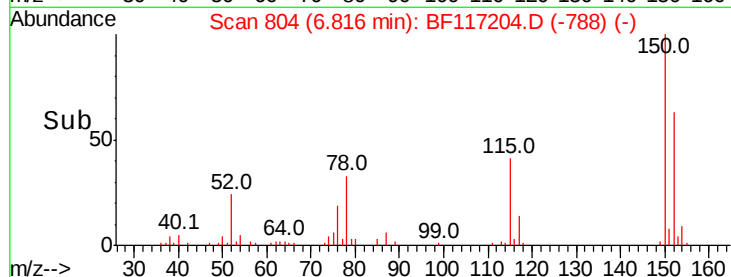
1,4-Dichlorobenzene-d4  
 Concen: 20.000 ng  
 RT: 6.82 min Scan# 804  
 Delta R.T. -0.01 min  
 Lab File: BF117204.D  
 Acq: 20 Sep 2019 23:36

Instrument :  
 BNA\_F  
 ClientSampleId :

Tot Ion:152 Resp: 38189  
 Ion Ratio Lower Upper  
 152 100  
 150 157.5 127.5 191.3  
 115 65.0 55.0 82.4



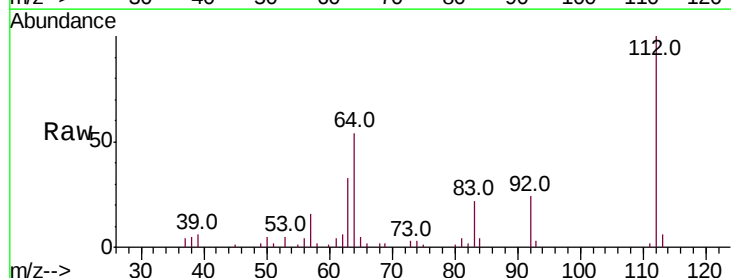
Abundance Ion 152.00 (151.70 to 152.70): E  
 Ion 150.00 (149.70 to 150.70): E  
 Ion 115.00 (114.70 to 115.70): E



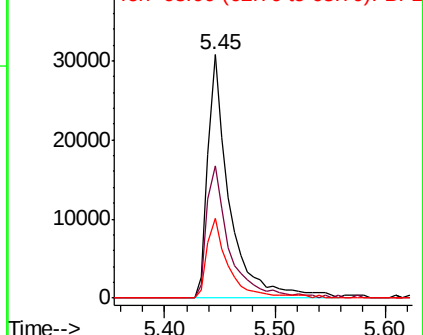
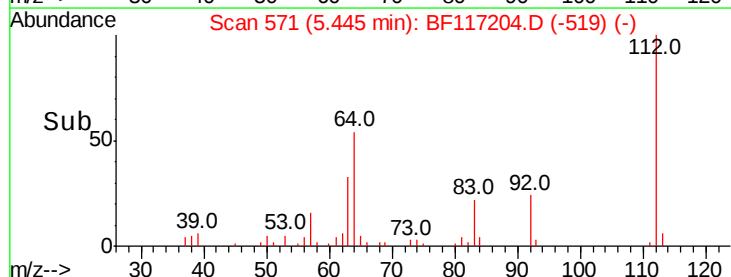
#5

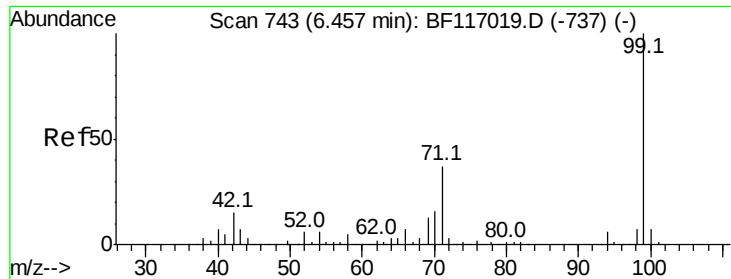
2-Fluorophenol  
 Concen: 16.816 ng  
 RT: 5.45 min Scan# 571  
 Delta R.T. 0.01 min  
 Lab File: BF117204.D  
 Acq: 20 Sep 2019 23:36

Tgt Ion:112 Resp: 41134  
 Ion Ratio Lower Upper  
 112 100  
 64 54.2 45.7 68.5  
 63 32.5 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: 17.686 ng

RT: 6.46 min Scan# 744

Delta R.T. 0.01 min

Lab File: BF117204.D

Acq: 20 Sep 2019 23:36

Instrument :

BNA\_F

ClientSampled :

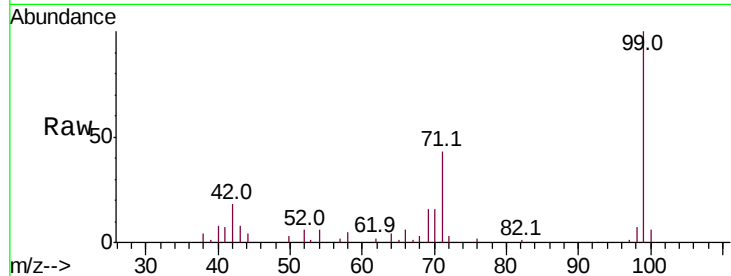
Tot Ion: 99 Resp: 55909

Ion Ratio Lower Upper

99 100

42 17.5 12.2 18.2

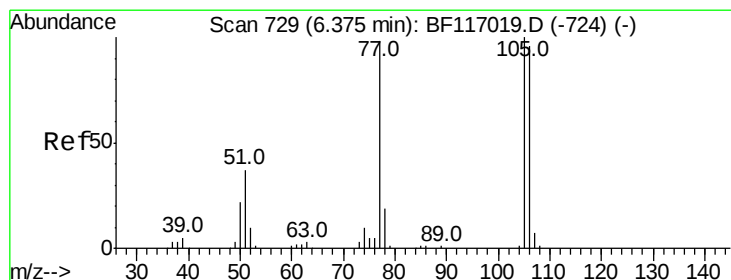
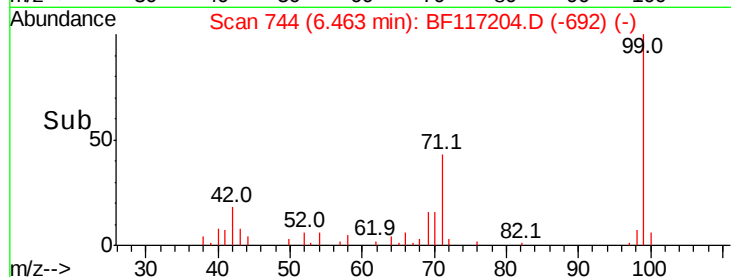
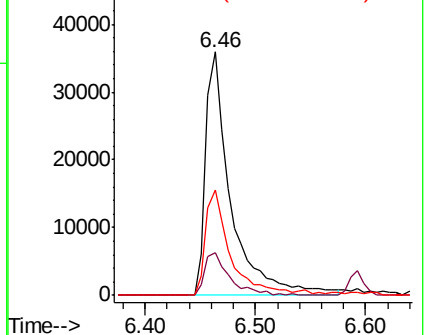
71 43.1 29.8 44.8



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: BF117204.D

Acq: 20 Sep 2019 23:36

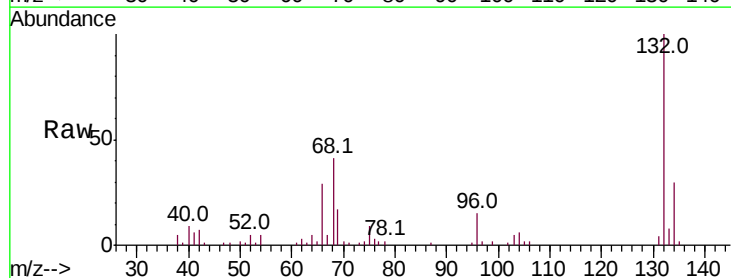
Tgt Ion: 77 Resp: 1006

Ion Ratio Lower Upper

77 100

105 91.0 81.8 121.8

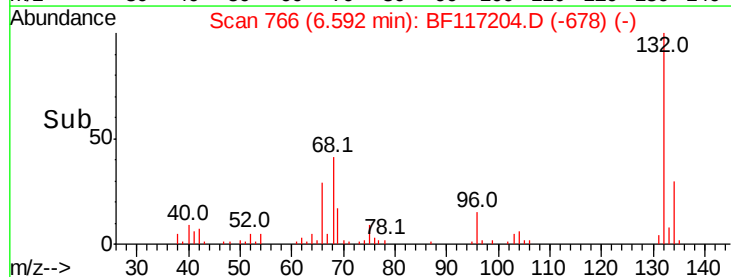
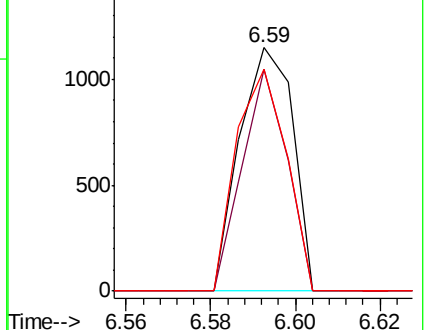
106 90.9 77.3 117.3

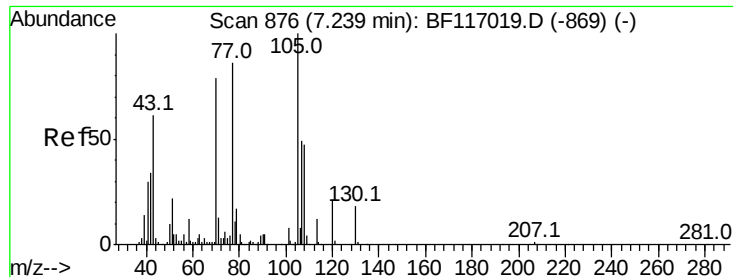


Abundance Ion 77.00 (76.70 to 77.70): BF1

Ion 105.00 (104.70 to 105.70): E

Ion 106.00 (105.70 to 106.70): E

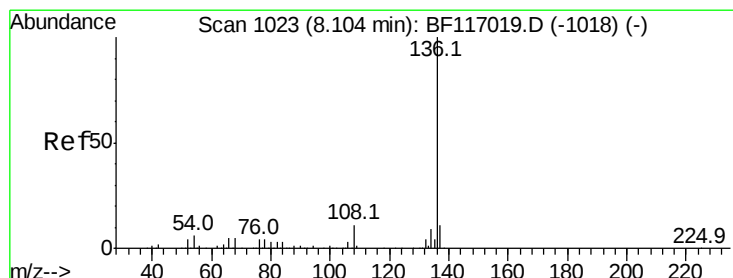
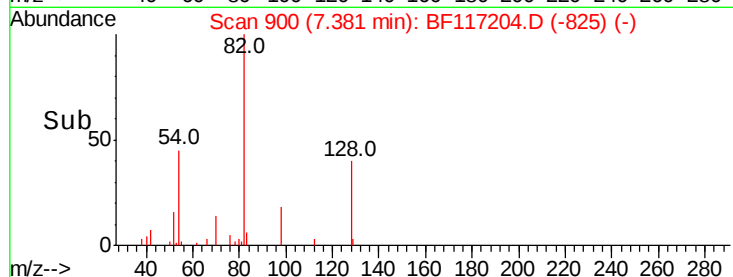
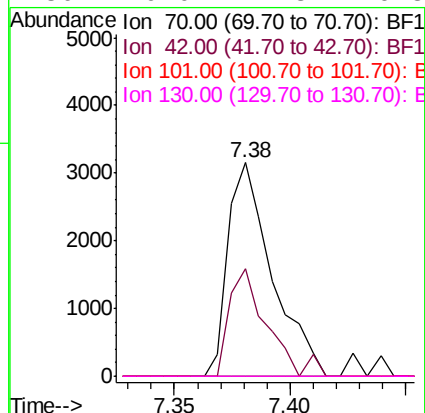
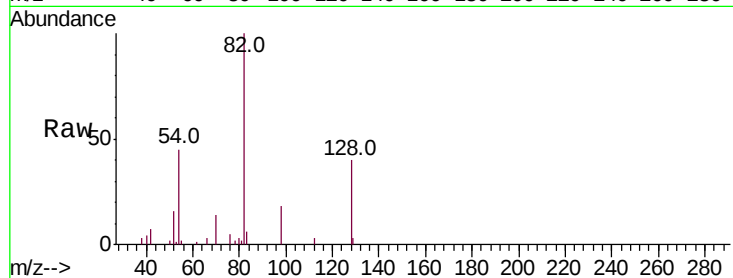




#19  
n-Nitroso-di-n-propylamine  
Concen: 2.169 ng  
RT: 7.38 min Scan# 900  
Delta R.T. 0.14 min  
Lab File: BF117204.D  
Acq: 20 Sep 2019 23:36

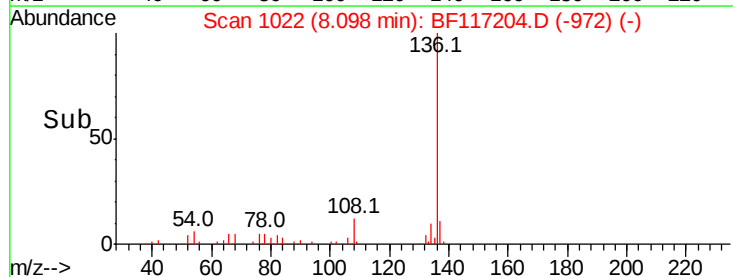
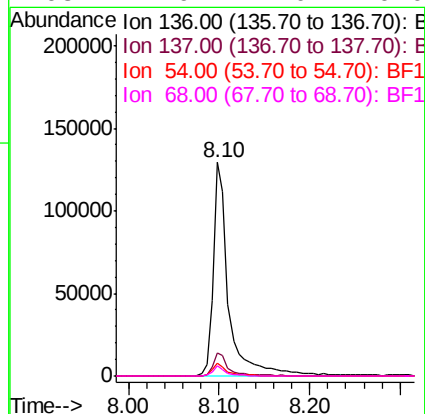
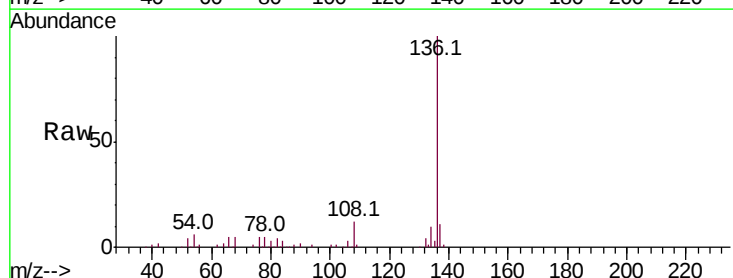
Instrument :  
BNA\_F  
ClientSampled :

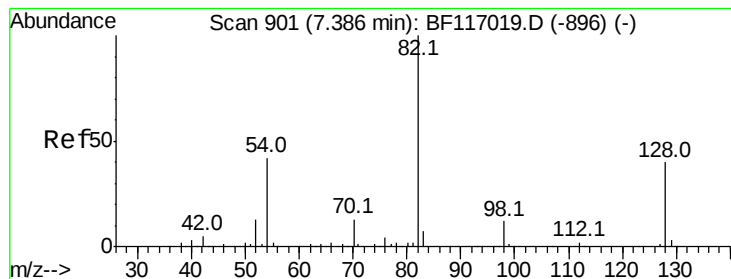
Tot Ion: 70 Resp: 4176  
Ion Ratio Lower Upper  
70 100  
42 50.6 34.0 51.0  
101 0.0 7.8 11.6#  
130 0.0 17.8 26.8#



#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 8.10 min Scan# 1022  
Delta R.T. -0.01 min  
Lab File: BF117204.D  
Acq: 20 Sep 2019 23:36

Tgt Ion: 136 Resp: 154787  
Ion Ratio Lower Upper  
136 100  
137 10.9 9.0 13.4  
54 6.1 4.5 6.7  
68 4.9 4.0 6.0





#23

Nitrobenzene-d5

Concen: 11.527 ng

RT: 7.38 min Scan# 900

Delta R.T. -0.01 min

Lab File: BF117204.D

Acq: 20 Sep 2019 23:36

Instrument :

BNA\_F

ClientSampled :

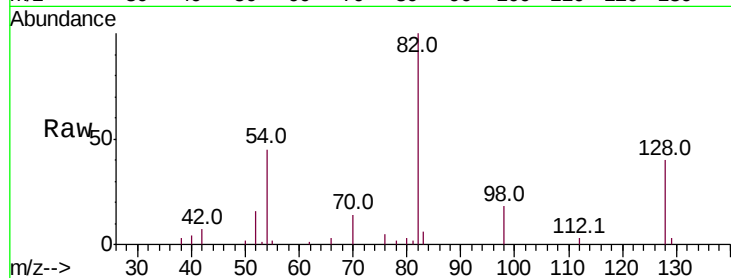
Tot Ion: 82 Resp: 33958

Ion Ratio Lower Upper

82 100

128 40.5 32.3 48.5

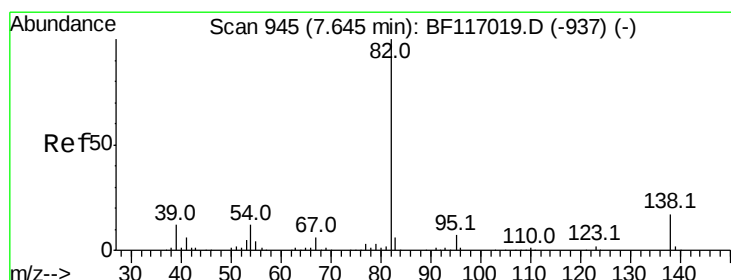
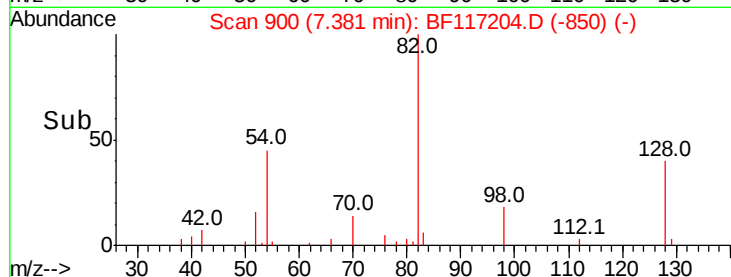
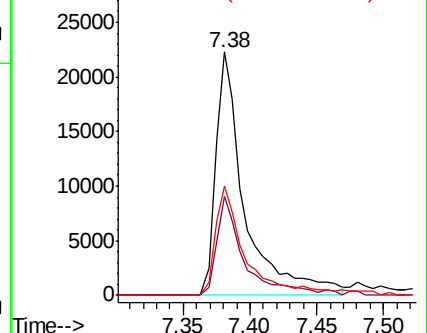
54 44.8 33.3 49.9



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: 6.510 ng

RT: 7.38 min Scan# 900

Delta R.T. -0.26 min

Lab File: BF117204.D

Acq: 20 Sep 2019 23:36

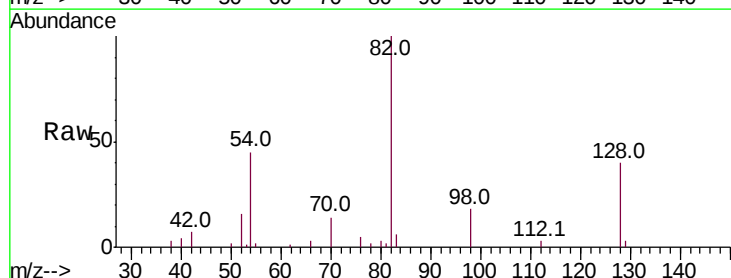
Tgt Ion: 82 Resp: 33958

Ion Ratio Lower Upper

82 100

95 0.0 5.8 8.6#

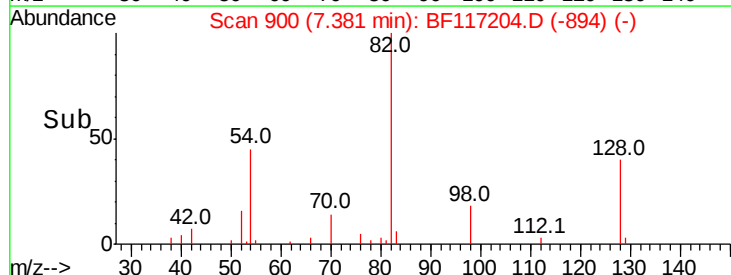
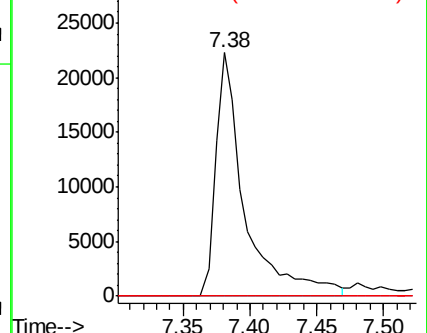
138 0.0 13.5 20.3#

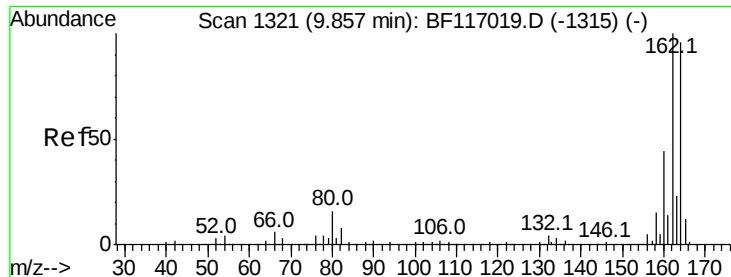


Abundance Ion 82.00 (81.70 to 82.70): BF1

Ion 95.00 (94.70 to 95.70): BF1

Ion 138.00 (137.70 to 138.70): BF1

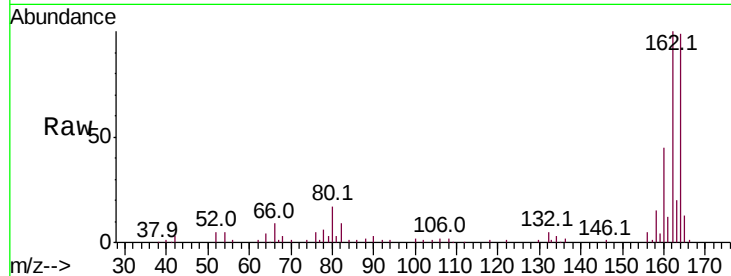




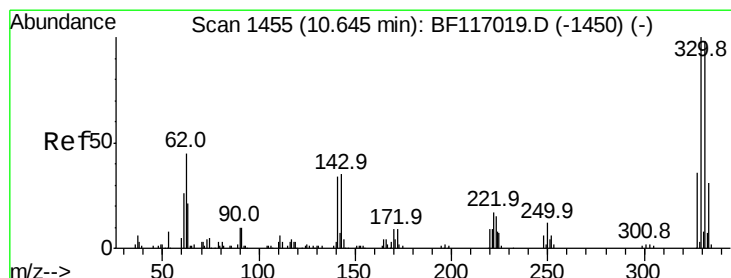
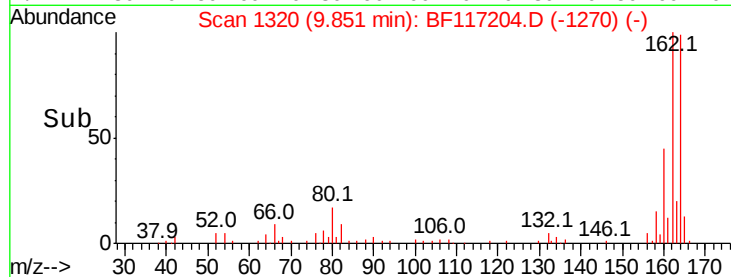
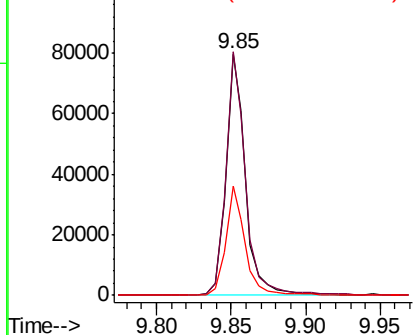
#39  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 9.85 min Scan# 1320  
Delta R.T. -0.01 min  
Lab File: BF117204.D  
Acq: 20 Sep 2019 23:36

Instrument :  
BNA\_F  
ClientSampled :

Tot Ion:164 Resp: 73919  
Ion Ratio Lower Upper  
164 100  
162 101.0 83.4 125.2  
160 45.5 36.4 54.6

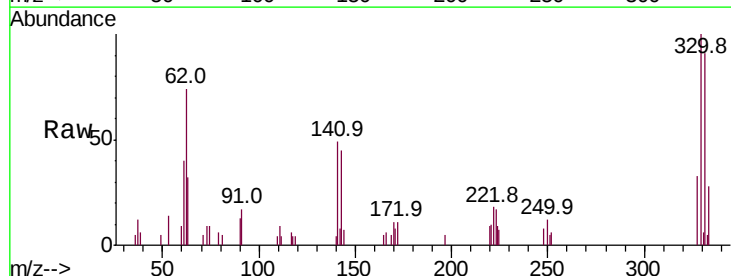


Abundance Ion 164.00 (163.70 to 164.70): E  
Ion 162.00 (161.70 to 162.70): E  
Ion 160.00 (159.70 to 160.70): E

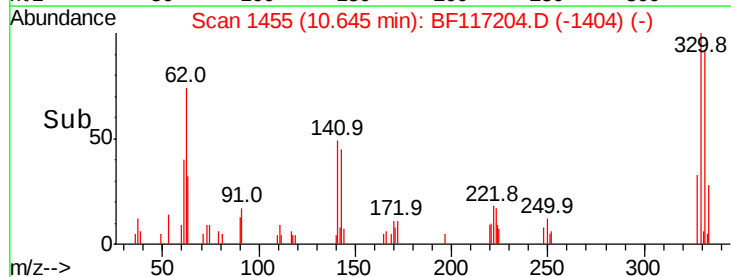
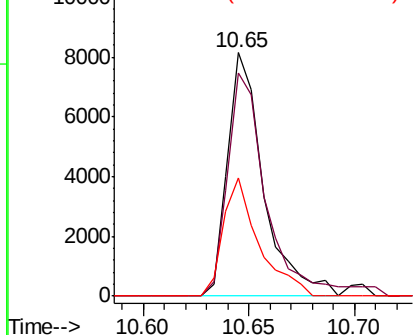


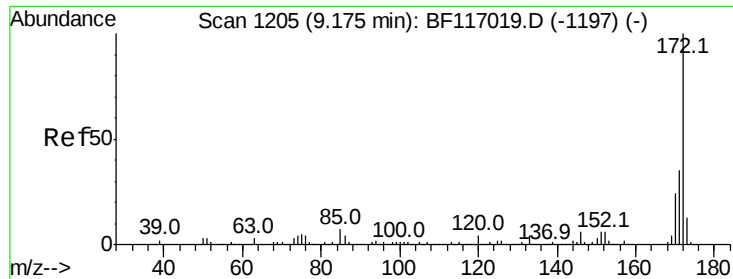
#42  
2,4,6-Tribromophenol  
Concen: 15.521 ng  
RT: 10.65 min Scan# 1455  
Delta R.T. 0.00 min  
Lab File: BF117204.D  
Acq: 20 Sep 2019 23:36

Tgt Ion:330 Resp: 9589  
Ion Ratio Lower Upper  
330 100  
332 100.2 78.0 117.0  
141 47.9 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

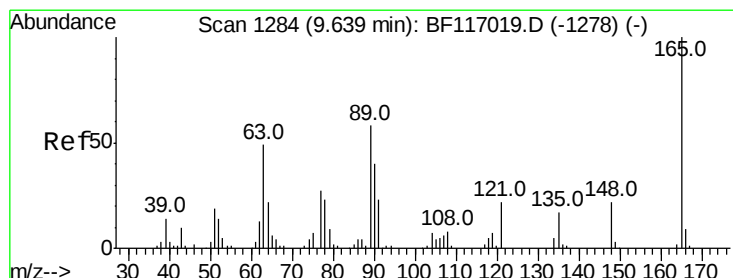
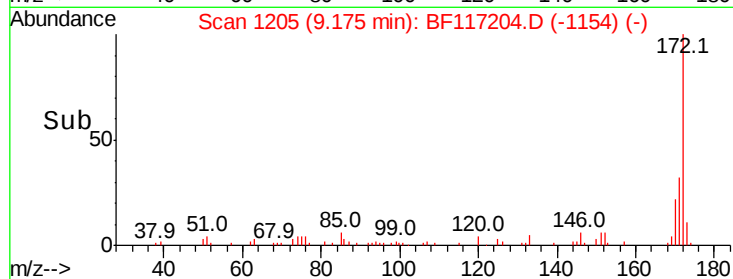
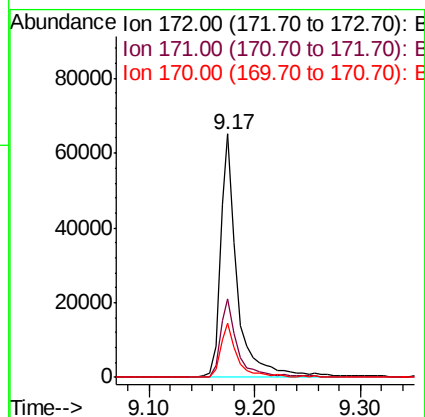
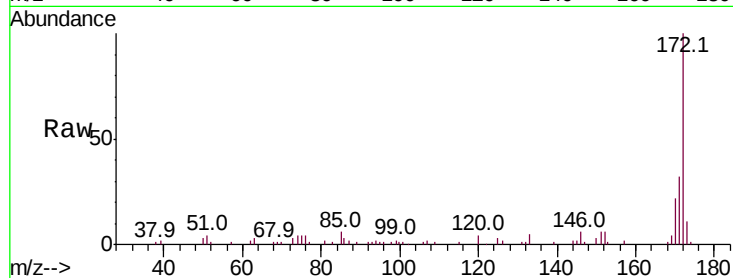




#45  
 2-Fluorobiphenyl  
 Concen: 15.365 ng  
 RT: 9.17 min Scan# 1205  
 Delta R.T. 0.00 min  
 Lab File: BF117204.D  
 Acq: 20 Sep 2019 23:36

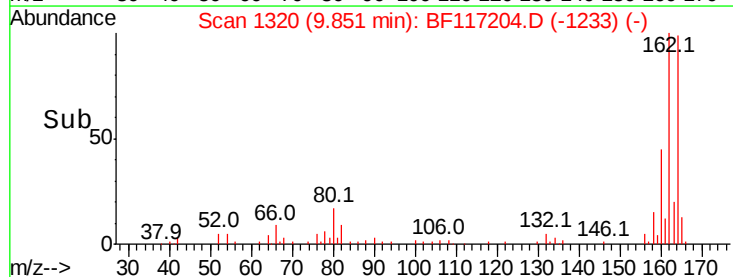
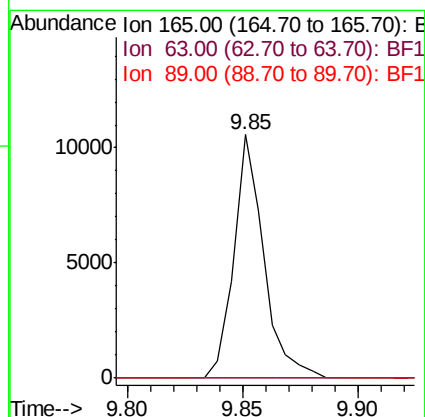
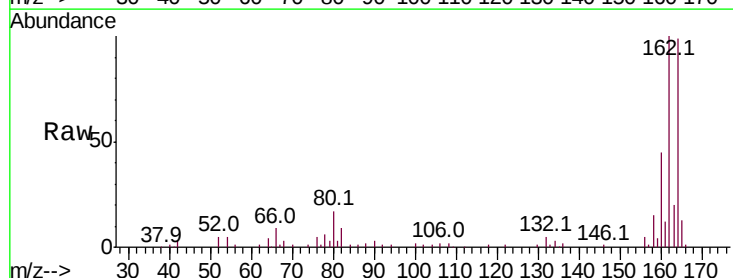
Instrument :  
 BNA\_F  
 ClientSampleId :

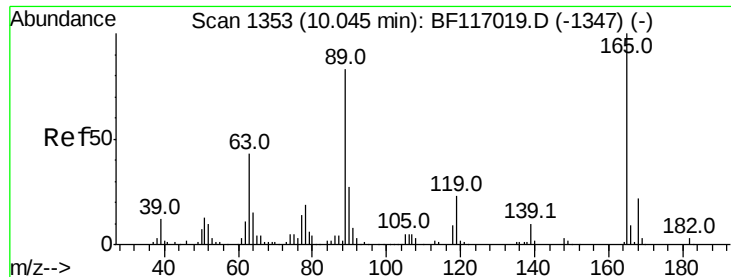
Tot Ion:172 Resp: 72640  
 Ion Ratio Lower Upper  
 172 100  
 171 32.0 28.2 42.2  
 170 22.1 18.9 28.3



#51  
 2,6-Dinitrotoluene  
 Concen: 8.937 ng  
 RT: 9.85 min Scan# 1320  
 Delta R.T. 0.21 min  
 Lab File: BF117204.D  
 Acq: 20 Sep 2019 23:36

Tgt Ion:165 Resp: 9527  
 Ion Ratio Lower Upper  
 165 100  
 63 0.0 41.8 62.8#  
 89 0.0 46.5 69.7#

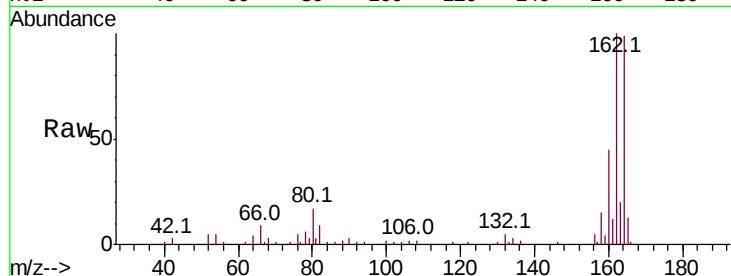




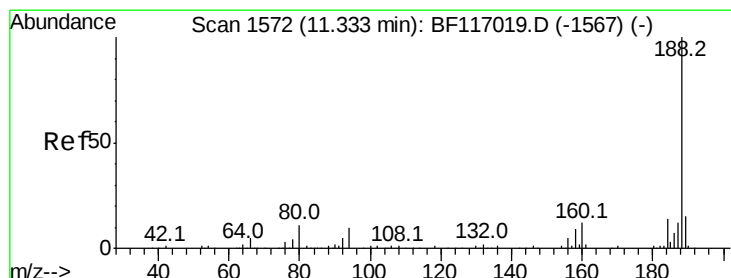
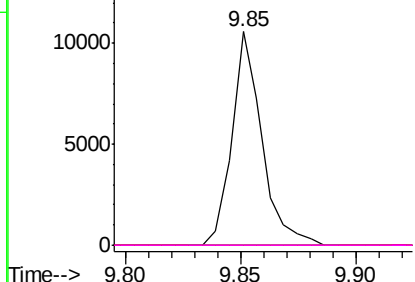
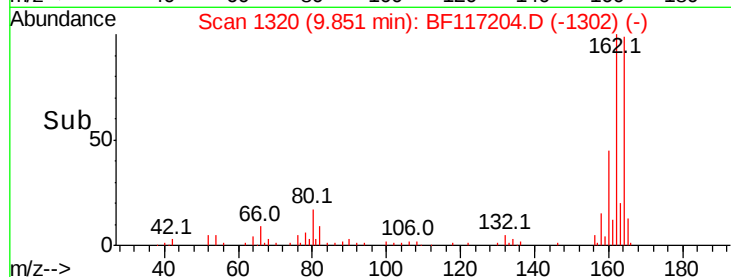
#57  
 2,4-Dinitrotoluene  
 Concen: 6.885 ng  
 RT: 9.85 min Scan# 1320  
 Delta R.T. -0.19 min  
 Lab File: BF117204.D  
 Acq: 20 Sep 2019 23:36

Instrument :  
 BNA\_F  
 ClientSampleId :

Tot Ion:165 Resp: 9527  
 Ion Ratio Lower Upper  
 165 100  
 63 0.0 35.0 52.4#  
 89 0.0 66.1 99.1#  
 182 0.0 2.0 3.0#

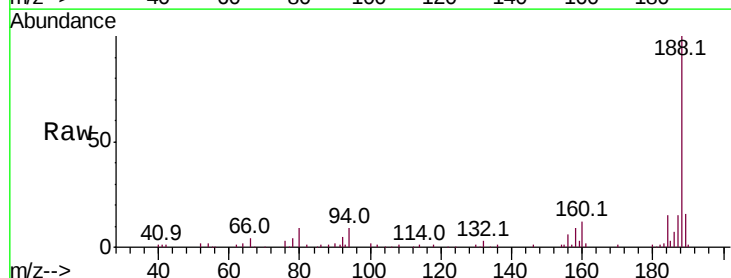


Abundance Ion 165.00 (164.70 to 165.70): E  
 Ion 63.00 (62.70 to 63.70): BF1  
 Ion 89.00 (88.70 to 89.70): BF1  
 Ion 182.00 (181.70 to 182.70): E

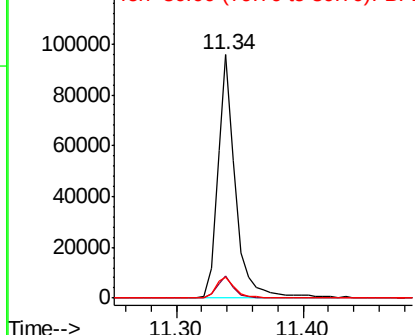
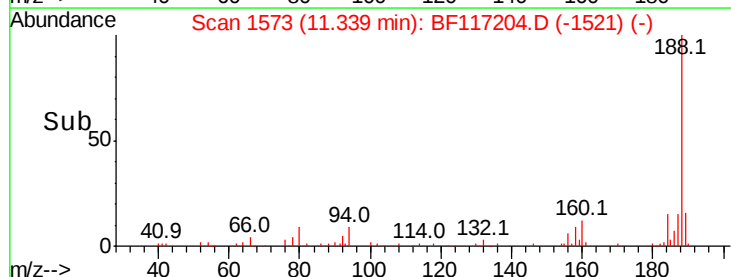


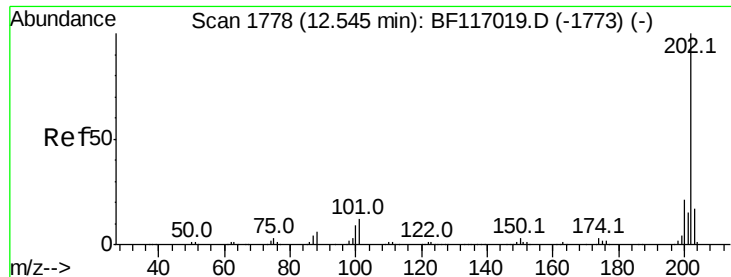
#64  
 Phenanthrene-d10  
 Concen: 20.000 ng  
 RT: 11.34 min Scan# 1573  
 Delta R.T. 0.01 min  
 Lab File: BF117204.D  
 Acq: 20 Sep 2019 23:36

Tgt Ion:188 Resp: 93538  
 Ion Ratio Lower Upper  
 188 100  
 94 9.0 8.2 12.2  
 80 8.7 9.0 13.6#



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





#75

Fluoranthene

Concen: 2.897 ng

RT: 12.55 min Scan# 1779

Delta R.T. 0.01 min

Lab File: BF117204.D

Acq: 20 Sep 2019 23:36

Instrument :

BNA\_F

ClientSampleId :

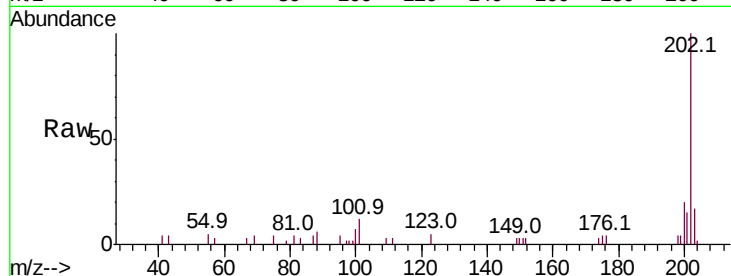
Tot Ion:202 Resp: 15817

Ion Ratio Lower Upper

202 100

101 12.5 0.0 32.3

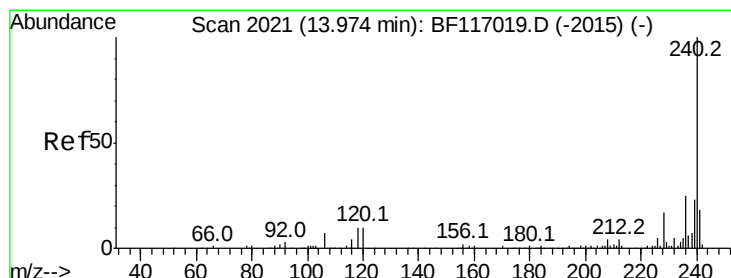
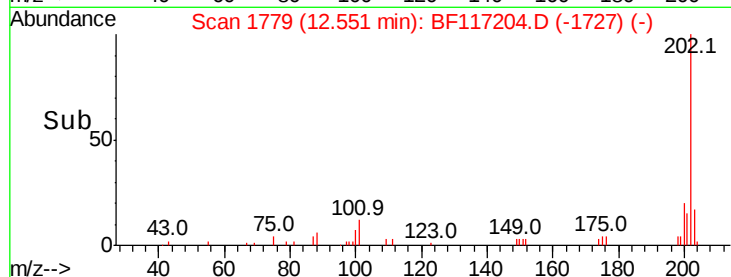
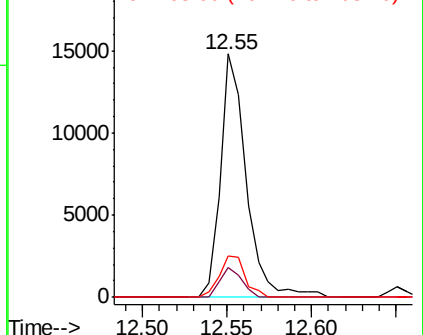
203 17.2 0.0 37.1



Abundance Ion 202.00 (201.70 to 202.70): E

Ion 101.00 (100.70 to 101.70): E

Ion 203.00 (202.70 to 203.70): E



#76

Chrysene-d12

Concen: 20.000 ng

RT: 13.98 min Scan# 2022

Delta R.T. 0.01 min

Lab File: BF117204.D

Acq: 20 Sep 2019 23:36

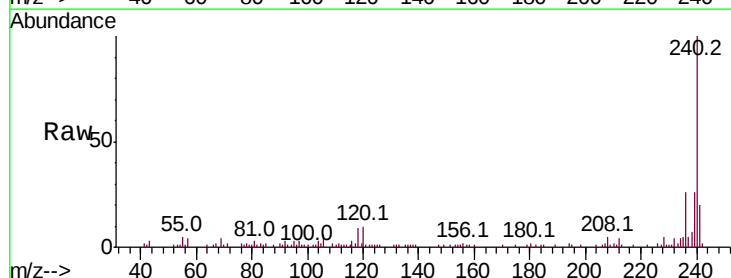
Tgt Ion:240 Resp: 50579

Ion Ratio Lower Upper

240 100

120 9.8 8.3 12.5

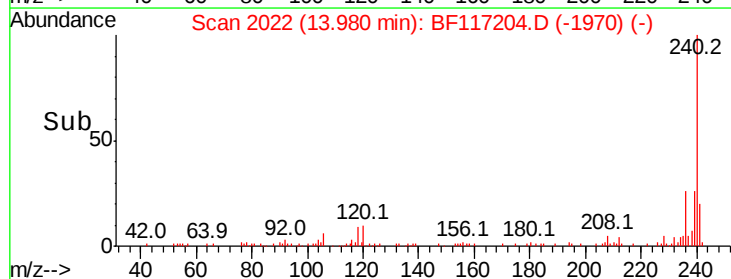
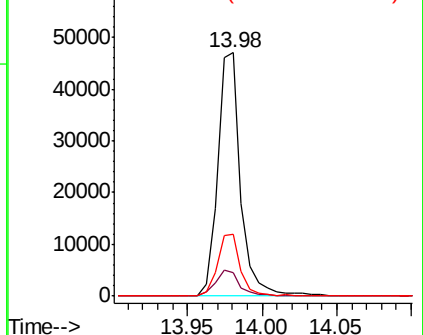
236 25.6 20.3 30.5

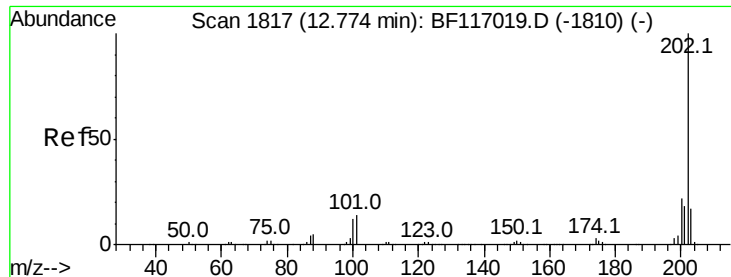


Abundance Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E





#78

Pvrene

Concen: 3.489 ng

RT: 12.78 min Scan# 1818

Delta R.T. 0.01 min

Lab File: BF117204.D

Acq: 20 Sep 2019 23:36

Instrument :

BNA\_F

ClientSampleId :

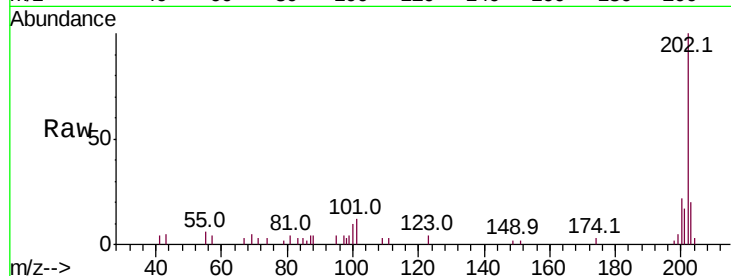
Tot Ion:202 Resp: 14808

Ion Ratio Lower Upper

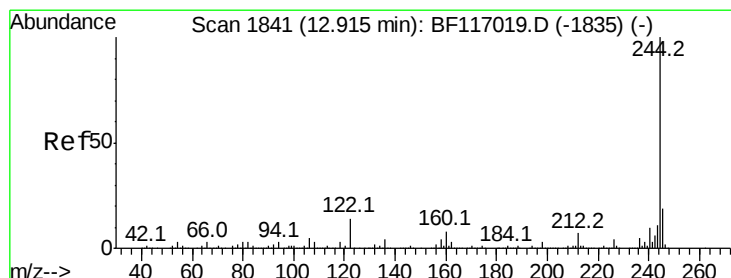
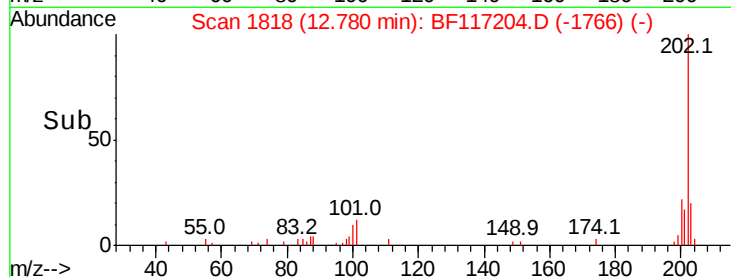
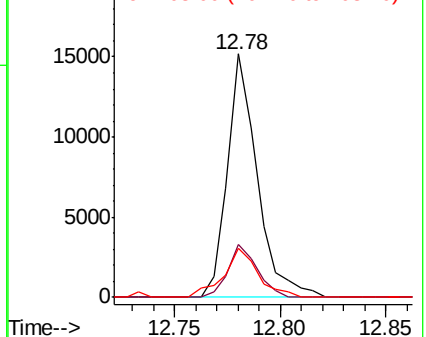
202 100

200 21.6 17.2 25.8

203 20.4 14.0 21.0



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: 16.018 ng

RT: 12.92 min Scan# 1841

Delta R.T. 0.00 min

Lab File: BF117204.D

Acq: 20 Sep 2019 23:36

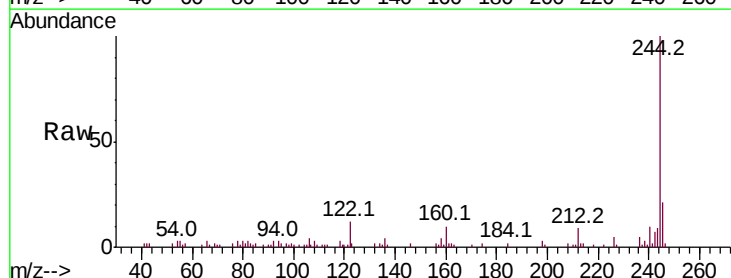
Tgt Ion:244 Resp: 43342

Ion Ratio Lower Upper

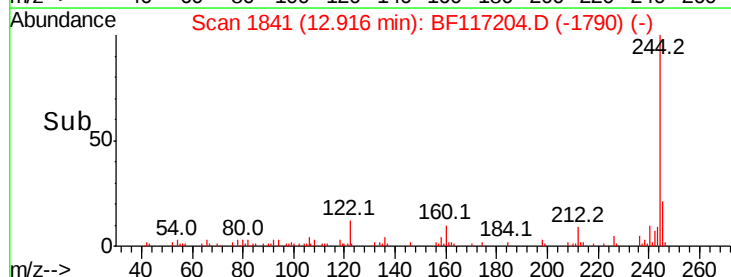
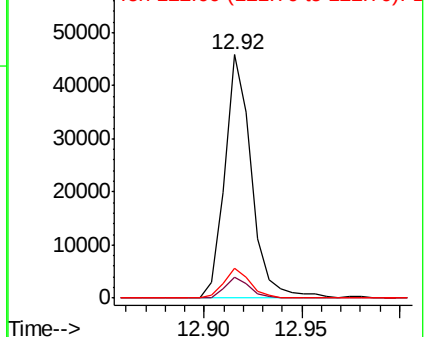
244 100

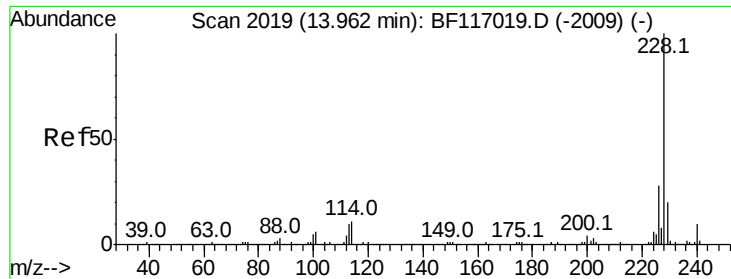
212 8.7 5.8 8.8

122 12.0 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

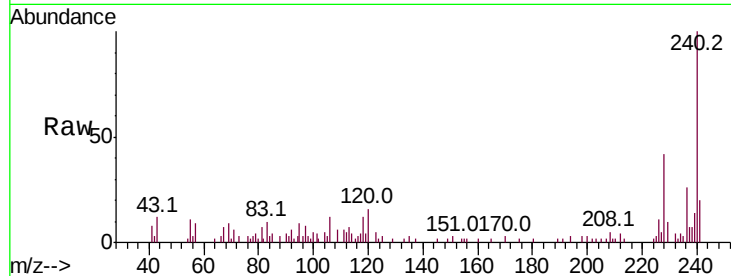




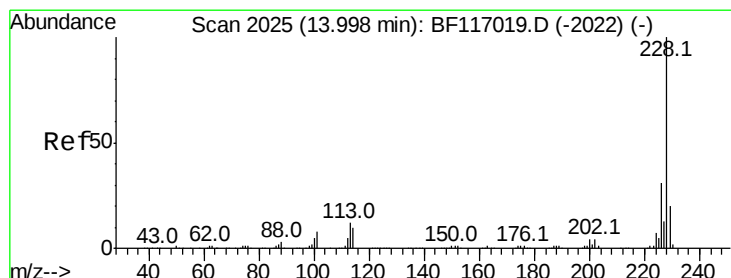
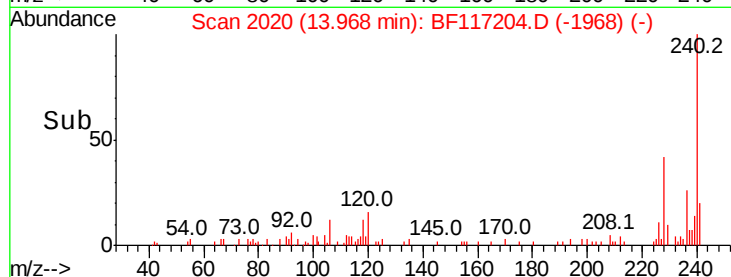
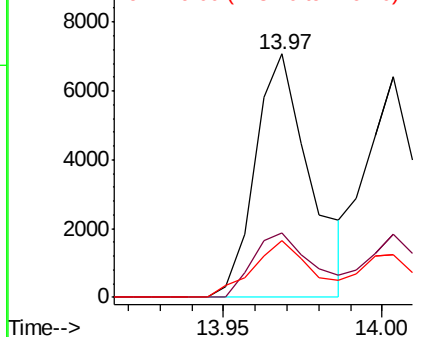
#81  
Benzo(a)anthracene  
Concen: 2.523 ng  
RT: 13.97 min Scan# 2020  
Delta R.T. 0.01 min  
Lab File: BF117204.D  
Acq: 20 Sep 2019 23:36

Instrument :  
BNA\_F  
ClientSampled :

Tot Ion:228 Resp: 8525  
Ion Ratio Lower Upper  
228 100  
226 26.5 22.3 33.5  
229 23.5 15.9 23.9

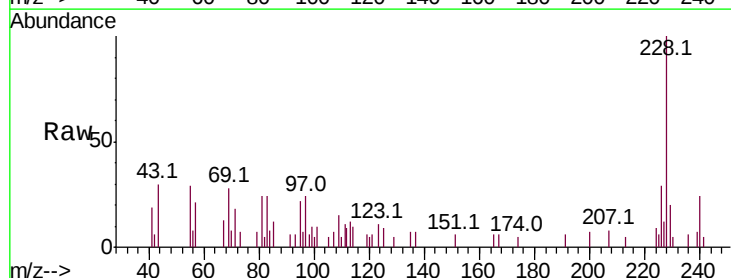


Abundance Ion 228.00 (227.70 to 228.70): E  
Ion 226.00 (225.70 to 226.70): E  
Ion 229.00 (228.70 to 229.70): E

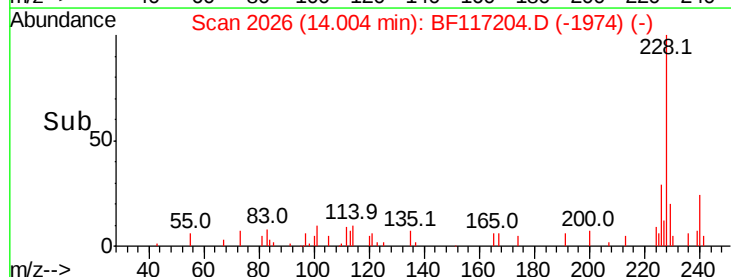
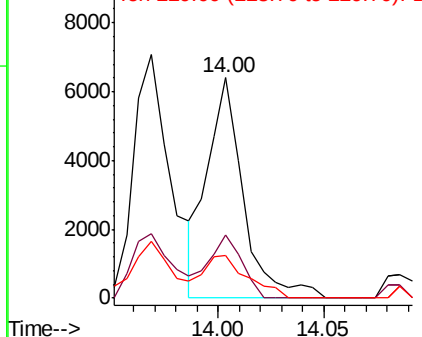


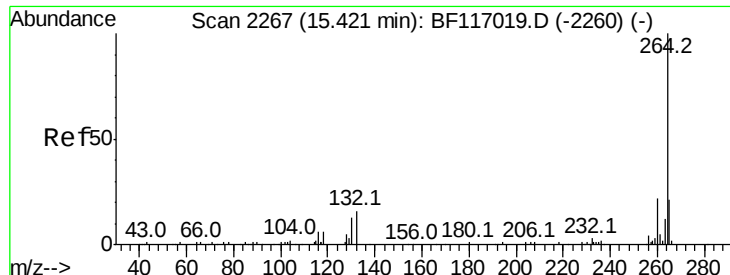
#83  
Chrysene  
Concen: 2.304 ng  
RT: 14.00 min Scan# 2026  
Delta R.T. 0.01 min  
Lab File: BF117204.D  
Acq: 20 Sep 2019 23:36

Tgt Ion:228 Resp: 7595  
Ion Ratio Lower Upper  
228 100  
226 28.8 24.8 37.2  
229 19.6 15.8 23.8



Abundance Ion 228.00 (227.70 to 228.70): E  
Ion 226.00 (225.70 to 226.70): E  
Ion 229.00 (228.70 to 229.70): E



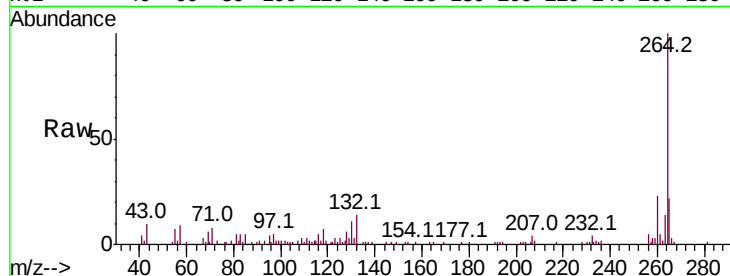


#87  
Pervlene-d12  
Concen: 20.000 ng  
RT: 15.43 min Scan# 2269  
Delta R.T. 0.01 min  
Lab File: BF117204.D  
Acq: 20 Sep 2019 23:36

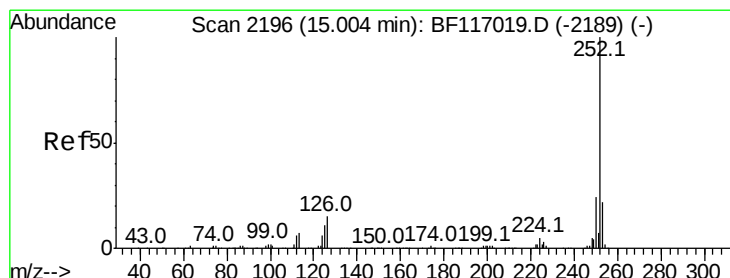
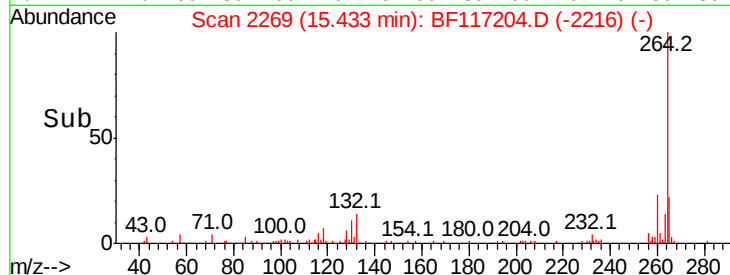
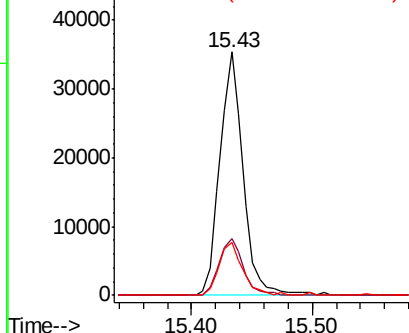
Instrument :  
BNA\_F  
ClientSampleId :

Tot Ion:264 Resp: 47085  

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 264 | 100   |       |       |
| 260 | 23.1  | 17.6  | 26.4  |
| 265 | 21.8  | 16.6  | 24.8  |



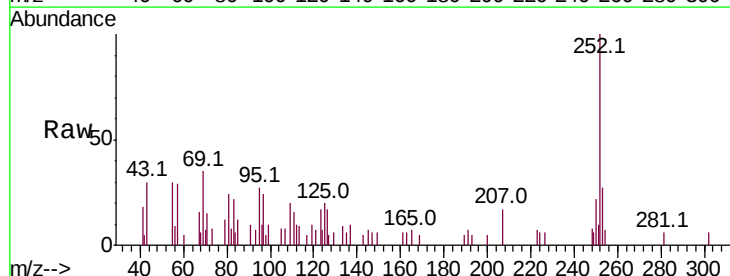
Abundance Ion 264.00 (263.70 to 264.70): E  
Ion 260.00 (259.70 to 260.70): E  
Ion 265.00 (264.70 to 265.70): E



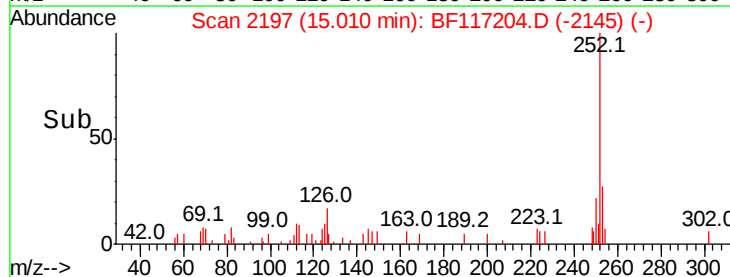
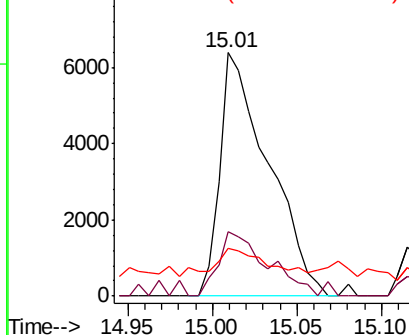
#88  
Benzo(b)fluoranthene  
Concen: 4.483 ng  
RT: 15.01 min Scan# 2197  
Delta R.T. 0.01 min  
Lab File: BF117204.D  
Acq: 20 Sep 2019 23:36

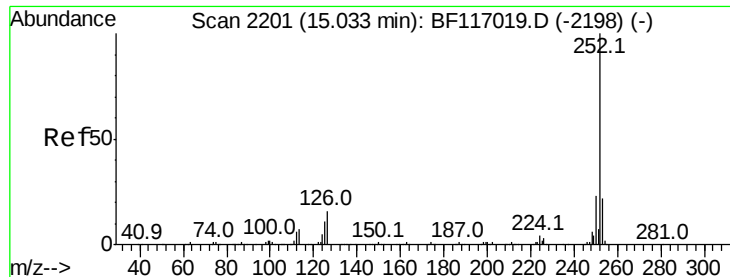
Tgt Ion:252 Resp: 12786  

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 252 | 100   |       |       |
| 253 | 26.7  | 17.6  | 26.4# |
| 125 | 19.5  | 8.6   | 12.8# |



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: 4.733 ng

RT: 15.01 min Scan# 2197

Delta R.T. -0.02 min

Lab File: BF117204.D

Acq: 20 Sep 2019 23:36

Instrument :

BNA\_F

ClientSampleId :

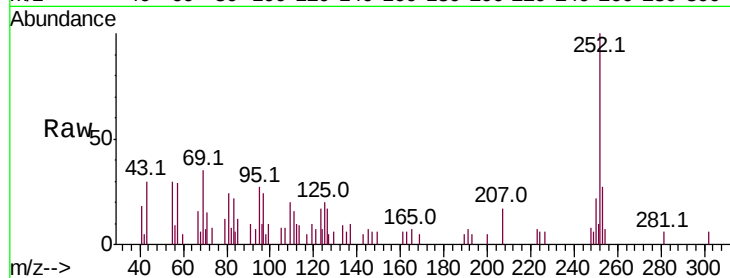
Tot Ion:252 Resp: 12786

Ion Ratio Lower Upper

252 100

253 26.7 17.4 26.2#

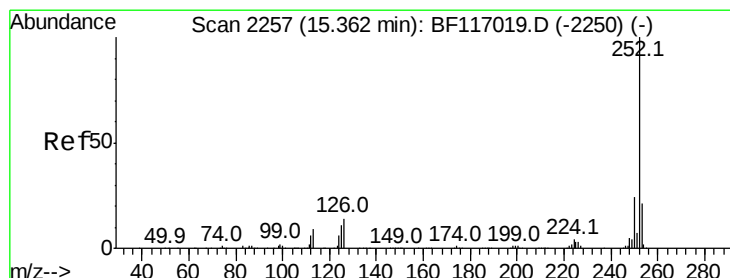
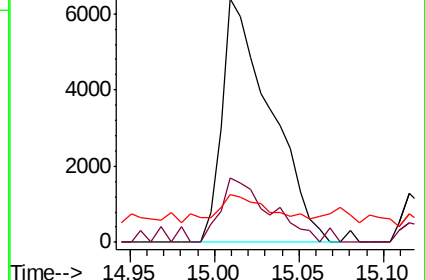
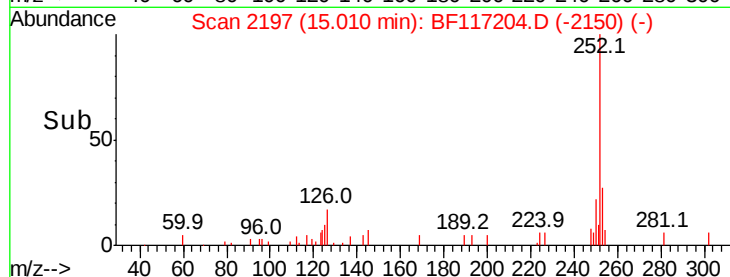
125 19.5 8.8 13.2#



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



#90

Benzo(a)pyrene

Concen: 2.840 ng

RT: 15.37 min Scan# 2258

Delta R.T. 0.01 min

Lab File: BF117204.D

Acq: 20 Sep 2019 23:36

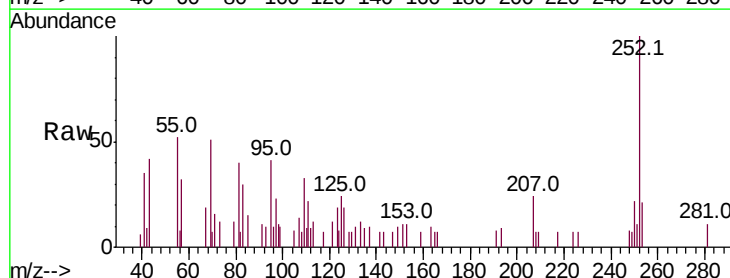
Tgt Ion:252 Resp: 7107

Ion Ratio Lower Upper

252 100

253 21.1 16.6 25.0

125 24.4 8.9 13.3#



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

