

Data Path : Z:\svoasrv\HPCHEM1\BNA\_F\Data\BF050522\  
 Data File : BF128108.D  
 Acq On : 05 May 2022 21:48  
 Operator : CG\JU  
 Sample : N2667-01  
 Misc :  
 ALS Vial : 19 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 75-HALSTAD-ST-STOCK-PILE

Quant Time: May 06 05:02:50 2022  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_F\Methods\8270-BF042222.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu May 05 17:56:23 2022  
 Response via : Initial Calibration

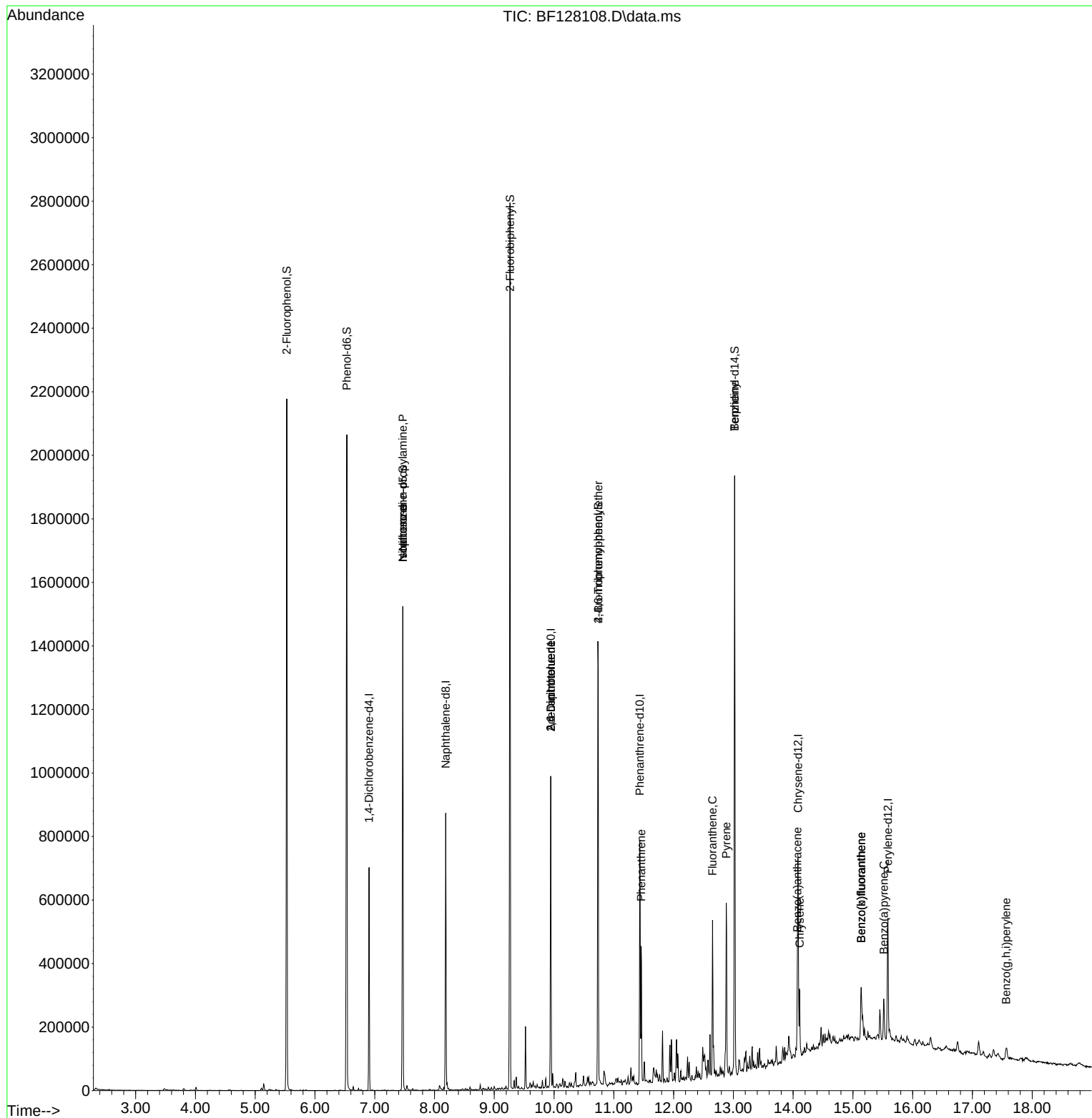
| Compound                      | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------------|--------|------|----------|--------|-------|----------|
| -----                         |        |      |          |        |       |          |
| Internal Standards            |        |      |          |        |       |          |
| 1) 1,4-Dichlorobenzene-d4     | 6.904  | 152  | 87012    | 20.000 | ng    | 0.00     |
| 21) Naphthalene-d8            | 8.187  | 136  | 337470   | 20.000 | ng    | -0.01    |
| 39) Acenaphthene-d10          | 9.945  | 164  | 186149   | 20.000 | ng    | 0.00     |
| 64) Phenanthrene-d10          | 11.433 | 188  | 283719   | 20.000 | ng    | -0.01    |
| 76) Chrysene-d12              | 14.080 | 240  | 188152   | 20.000 | ng    | -0.01    |
| 86) Perylene-d12              | 15.586 | 264  | 169660   | 20.000 | ng    | 0.00     |
|                               |        |      |          |        |       |          |
| System Monitoring Compounds   |        |      |          |        |       |          |
| 5) 2-Fluorophenol             | 5.528  | 112  | 523453   | 95.820 | ng    | 0.00     |
| 7) Phenol-d6                  | 6.534  | 99   | 692357   | 97.674 | ng    | -0.01    |
| 23) Nitrobenzene-d5           | 7.469  | 82   | 486880   | 67.843 | ng    | -0.01    |
| 42) 2,4,6-Tribromophenol      | 10.739 | 330  | 166391   | 88.794 | ng    | 0.00     |
| 45) 2-Fluorobiphenyl          | 9.263  | 172  | 795935   | 72.335 | ng    | 0.00     |
| 79) Terphenyl-d14             | 13.022 | 244  | 615696   | 59.837 | ng    | -0.01    |
|                               |        |      |          |        |       |          |
| Target Compounds              |        |      |          |        |       | Qvalue   |
| 19) n-Nitroso-di-n-propyla... | 7.469  | 70   | 66936    | 15.426 | ng    | # 78     |
| 25) Isophorone                | 7.469  | 82   | 486868   | 40.308 | ng    | # 68     |
| 51) 2,6-Dinitrotoluene        | 9.945  | 165  | 24116    | 8.922  | ng    | # 21     |
| 57) 2,4-Dinitrotoluene        | 9.945  | 165  | 24116    | 6.736  | ng    | # 26     |
| 67) 4-Bromophenyl-phenylether | 10.739 | 248  | 10204    | 3.244  | ng    | # 1      |
| 71) Phenanthrene              | 11.457 | 178  | 153875   | 10.361 | ng    | 99       |
| 75) Fluoranthene              | 12.651 | 202  | 167650   | 10.726 | ng    | 97       |
| 77) Benzidine                 | 13.022 | 184  | 9161     | 2.573  | ng    | # 96     |
| 78) Pyrene                    | 12.880 | 202  | 213521   | 14.058 | ng    | 100      |
| 81) Benzo(a)anthracene        | 14.069 | 228  | 90458    | 7.213  | ng    | 99       |
| 83) Chrysene                  | 14.110 | 228  | 86491    | 7.221  | ng    | 98       |
| 88) Benzo(b)fluoranthene      | 15.139 | 252  | 112555   | 10.562 | ng    | 95       |
| 89) Benzo(k)fluoranthene      | 15.139 | 252  | 112555   | 10.484 | ng    | # 93     |
| 90) Benzo(a)pyrene            | 15.516 | 252  | 60852    | 6.884  | ng    | 98       |
| 92) Benzo(g,h,i)perylene      | 17.562 | 276  | 28329    | 2.960  | ng    | 95       |
| -----                         |        |      |          |        |       |          |

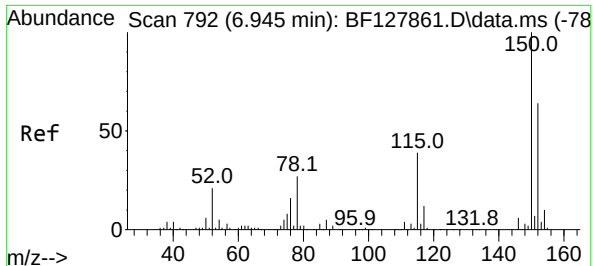
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_F\Data\BF050522\  
Data File : BF128108.D  
Acq On : 05 May 2022 21:48  
Operator : CG\JU  
Sample : N2667-01  
Misc :  
ALS Vial : 19 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
75-HALSTAD-ST-STOCK-PILE

Quant Time: May 06 05:02:50 2022  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_F\Methods\8270-BF042222.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Thu May 05 17:56:23 2022  
Response via : Initial Calibration

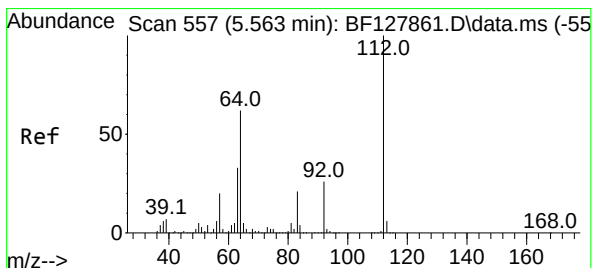
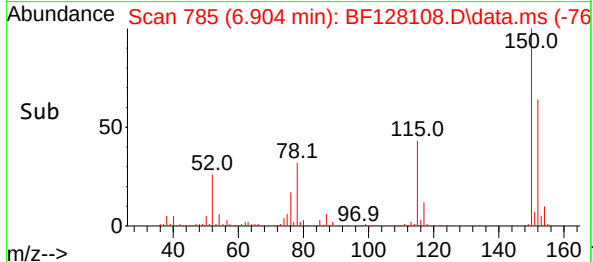
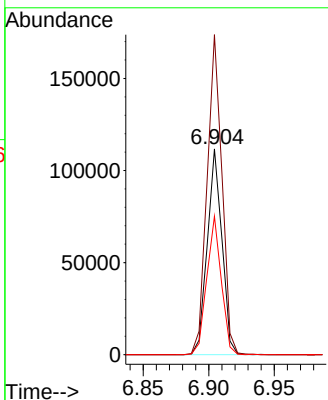
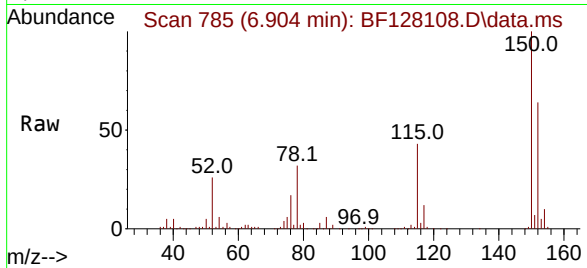




#1  
 1,4-Dichlorobenzene-d4  
 Concen: 20.000 ng  
 RT: 6.904 min Scan# 71  
 Delta R.T. -0.006 min  
 Lab File: BF128108.D  
 Acq: 05 May 2022 21:48

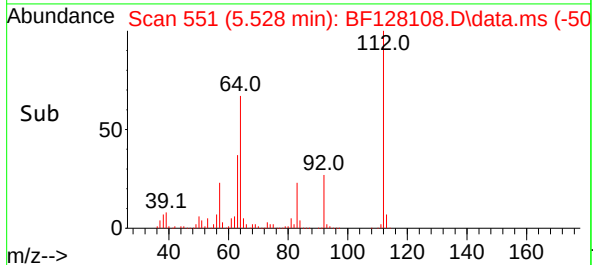
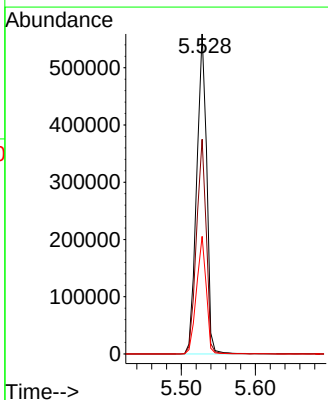
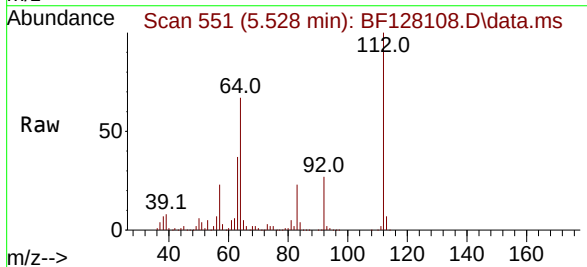
Instrument :  
 BNA\_F  
 ClientSampleId :  
 75-HALSTAD-ST-STOCK-PILE

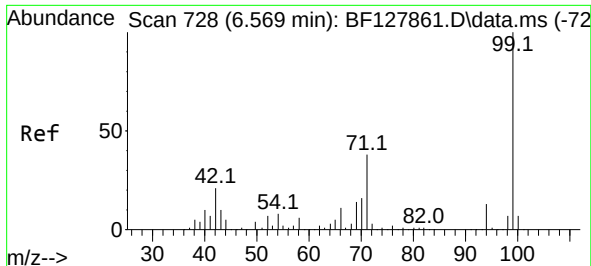
Tgt Ion:152 Resp: 87012  
 Ion Ratio Lower Upper  
 152 100  
 150 155.5 125.3 187.9  
 115 67.2 48.8 73.2



#5  
 2-Fluorophenol  
 Concen: 95.820 ng  
 RT: 5.528 min Scan# 551  
 Delta R.T. -0.006 min  
 Lab File: BF128108.D  
 Acq: 05 May 2022 21:48

Tgt Ion:112 Resp: 523453  
 Ion Ratio Lower Upper  
 112 100  
 64 67.1 49.5 74.3  
 63 36.8 26.3 39.5

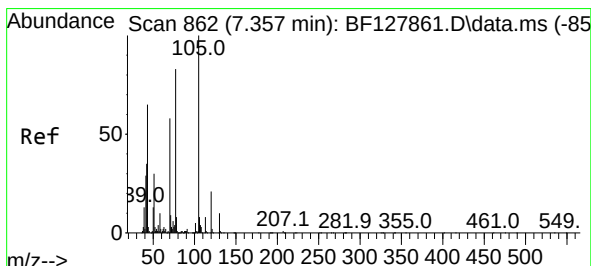
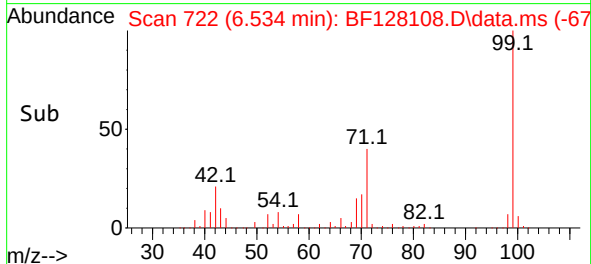
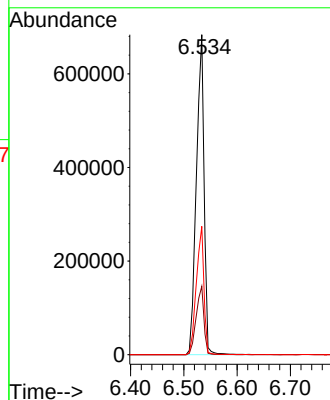
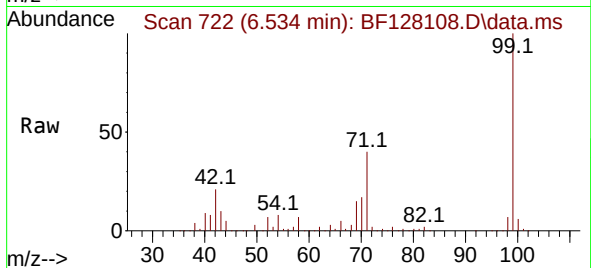




#7  
Phenol-d6  
Concen: 97.674 ng  
RT: 6.534 min Scan# 71  
Delta R.T. -0.012 min  
Lab File: BF128108.D  
Acq: 05 May 2022 21:48

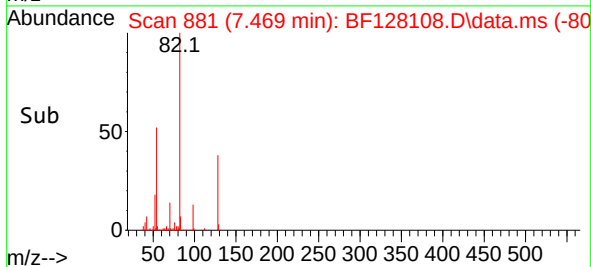
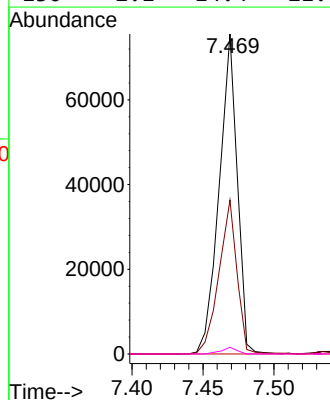
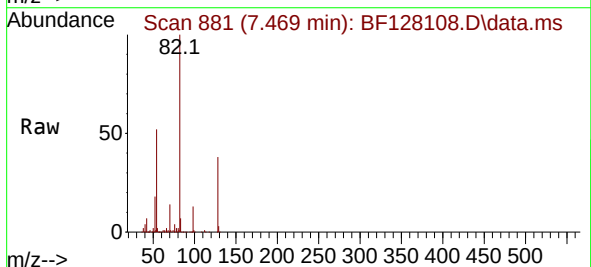
Instrument :  
BNA\_F  
ClientSampleId :  
75-HALSTAD-ST-STOCK-PILE

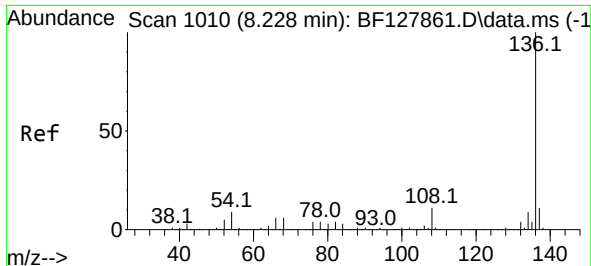
Tgt Ion: 99 Resp: 692357  
Ion Ratio Lower Upper  
99 100  
42 21.4 16.6 24.8  
71 40.1 30.0 45.0



#19  
n-Nitroso-di-n-propylamine  
Concen: 15.426 ng  
RT: 7.469 min Scan# 881  
Delta R.T. 0.141 min  
Lab File: BF128108.D  
Acq: 05 May 2022 21:48

Tgt Ion: 70 Resp: 66936  
Ion Ratio Lower Upper  
70 100  
42 48.1 48.7 73.1#  
101 0.0 7.2 10.8#  
130 2.1 14.4 21.6#

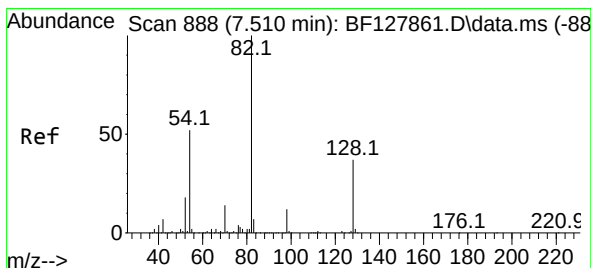
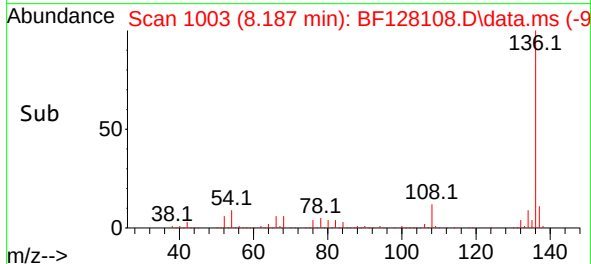
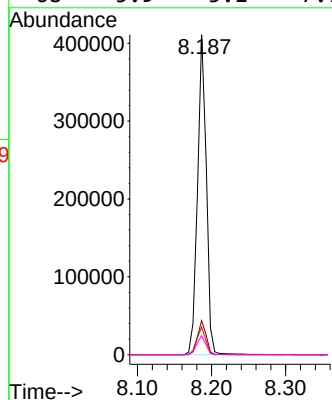
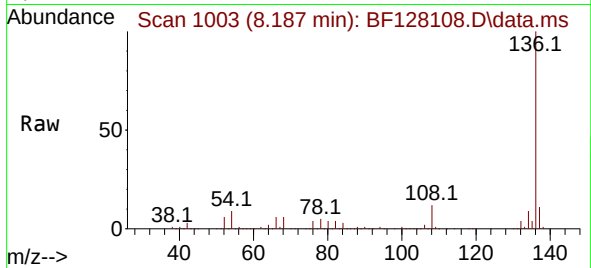




#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 8.187 min Scan# 1010  
Delta R.T. -0.012 min  
Lab File: BF128108.D  
Acq: 05 May 2022 21:48

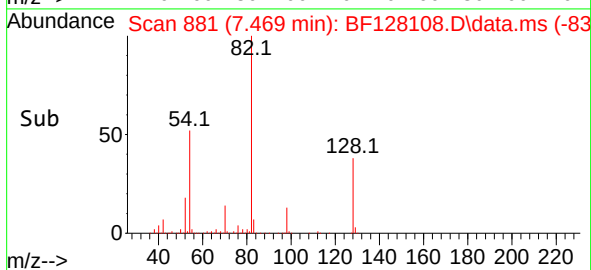
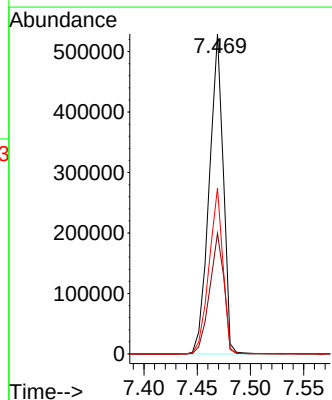
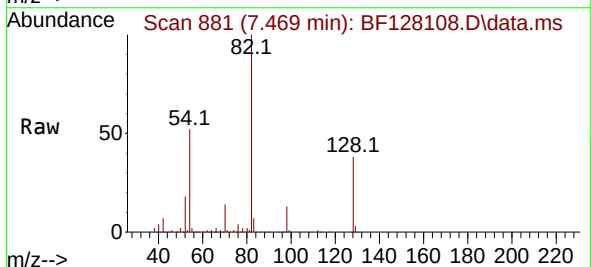
Instrument :  
BNA\_F  
ClientSampleId :  
75-HALSTAD-ST-STOCK-PILE

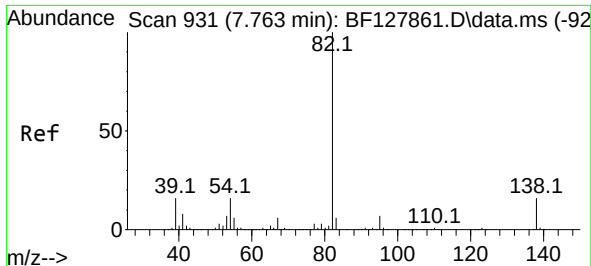
|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 136   | Resp: | 337470 |
| Ion      | Ratio | Lower | Upper  |
| 136      | 100   |       |        |
| 137      | 10.6  | 8.6   | 13.0   |
| 54       | 8.6   | 6.8   | 10.2   |
| 68       | 5.9   | 5.1   | 7.7    |



#23  
Nitrobenzene-d5  
Concen: 67.843 ng  
RT: 7.469 min Scan# 881  
Delta R.T. -0.012 min  
Lab File: BF128108.D  
Acq: 05 May 2022 21:48

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 82    | Resp: | 486880 |
| Ion      | Ratio | Lower | Upper  |
| 82       | 100   |       |        |
| 128      | 37.7  | 30.0  | 45.0   |
| 54       | 51.9  | 41.3  | 61.9   |

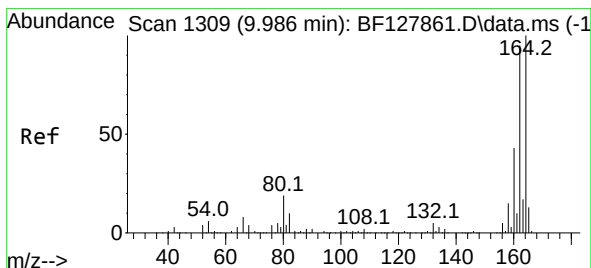
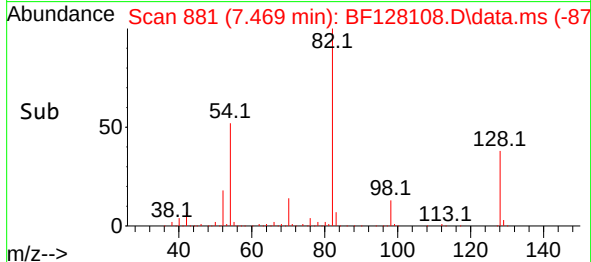
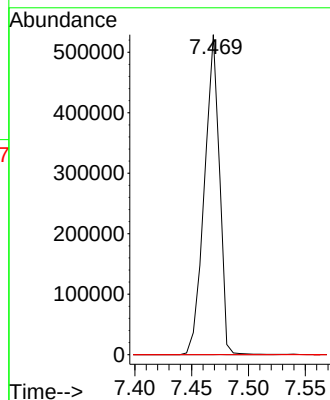
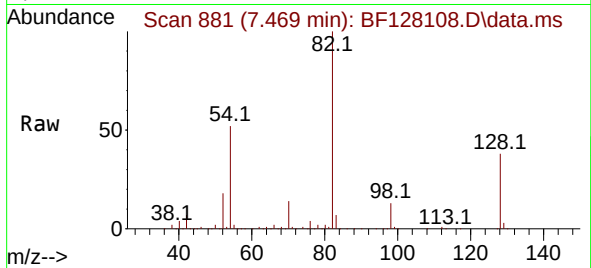




#25  
Isophorone  
Concen: 40.308 ng  
RT: 7.469 min Scan# 81  
Delta R.T. -0.270 min  
Lab File: BF128108.D  
Acq: 05 May 2022 21:48

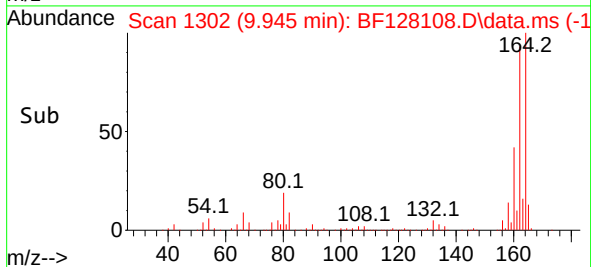
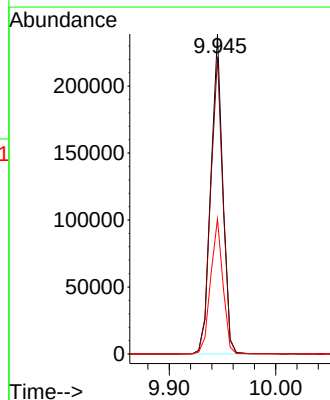
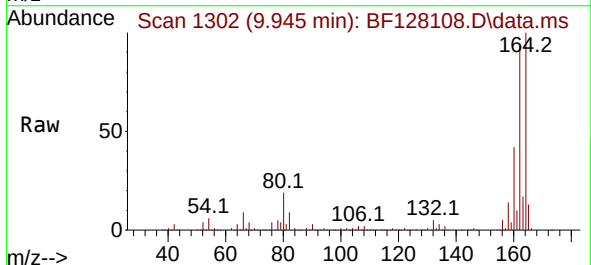
Instrument :  
BNA\_F  
ClientSampleId :  
75-HALSTAD-ST-STOCK-PILE

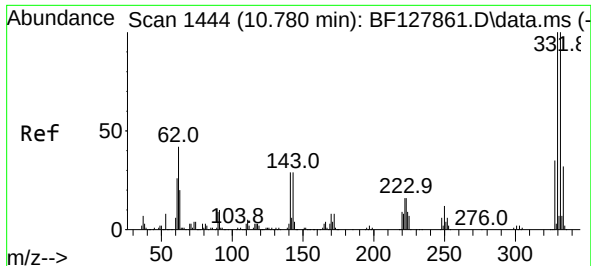
Tgt Ion: 82 Resp: 486868  
Ion Ratio Lower Upper  
82 100  
95 0.0 5.6 8.4#  
138 0.0 12.5 18.7#



#39  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 9.945 min Scan# 1302  
Delta R.T. -0.006 min  
Lab File: BF128108.D  
Acq: 05 May 2022 21:48

Tgt Ion:164 Resp: 186149  
Ion Ratio Lower Upper  
164 100  
162 92.9 76.0 114.0  
160 42.2 34.8 52.2





#42

2,4,6-Tribromophenol

Concen: 88.794 ng

RT: 10.739 min Scan# 1444

Delta R.T. -0.006 min

Lab File: BF128108.D

Acq: 05 May 2022 21:48

Instrument :

BNA\_F

ClientSampleId :

75-HALSTAD-ST-STOCK-PILE

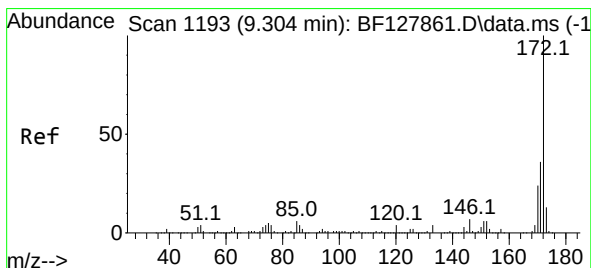
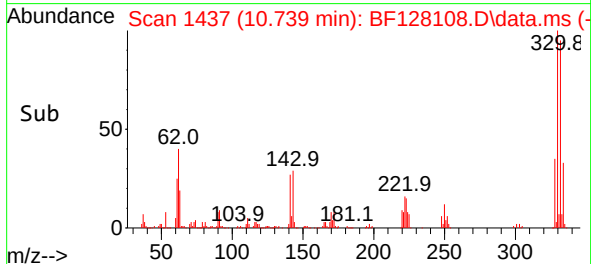
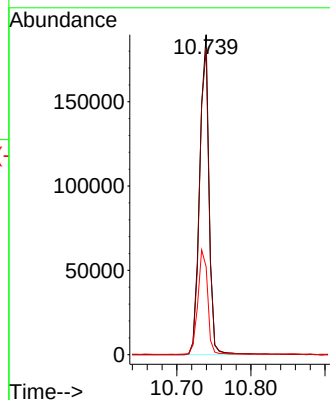
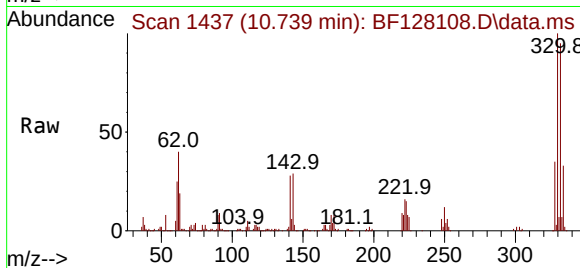
Tgt Ion:330 Resp: 166391

Ion Ratio Lower Upper

330 100

332 97.0 79.0 118.4

141 33.9 28.9 43.3



#45

2-Fluorobiphenyl

Concen: 72.335 ng

RT: 9.263 min Scan# 1186

Delta R.T. -0.006 min

Lab File: BF128108.D

Acq: 05 May 2022 21:48

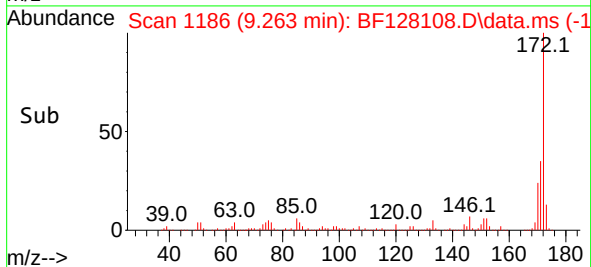
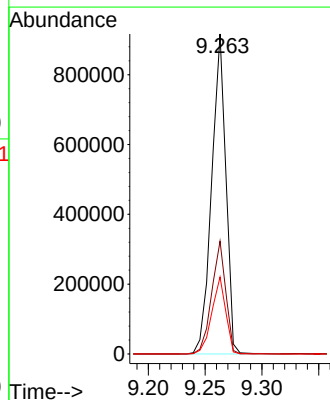
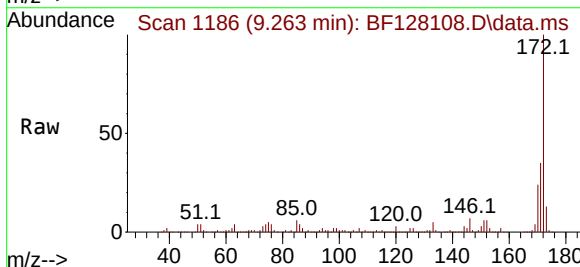
Tgt Ion:172 Resp: 795935

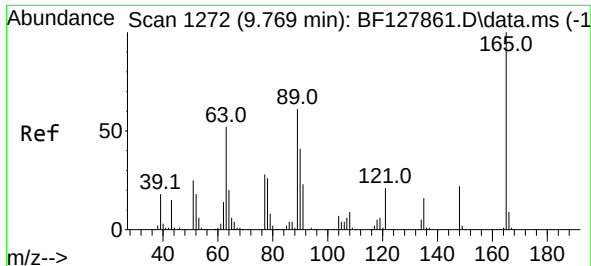
Ion Ratio Lower Upper

172 100

171 35.2 28.6 42.8

170 24.0 19.1 28.7

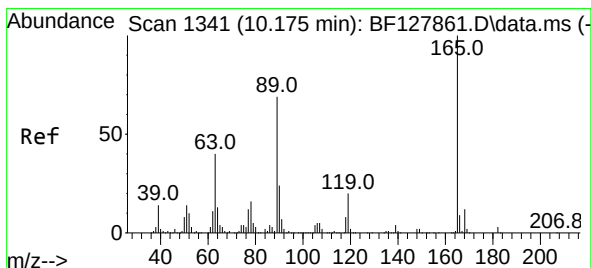
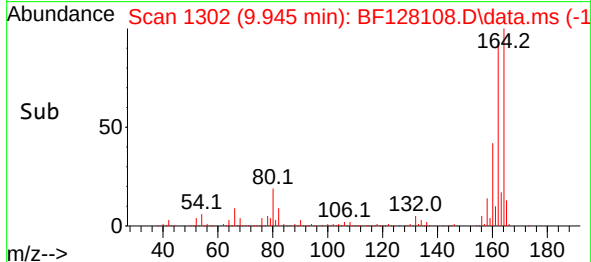
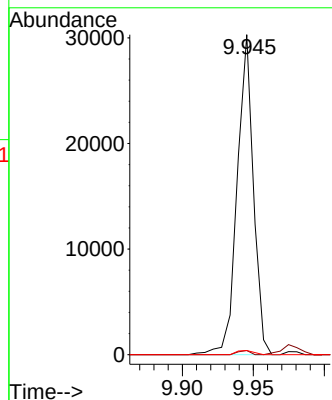
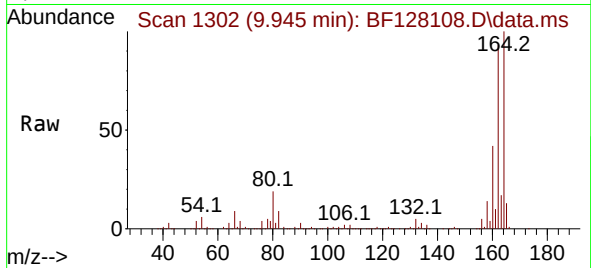




#51  
2,6-Dinitrotoluene  
Concen: 8.922 ng  
RT: 9.945 min Scan# 11  
Delta R.T. 0.206 min  
Lab File: BF128108.D  
Acq: 05 May 2022 21:48

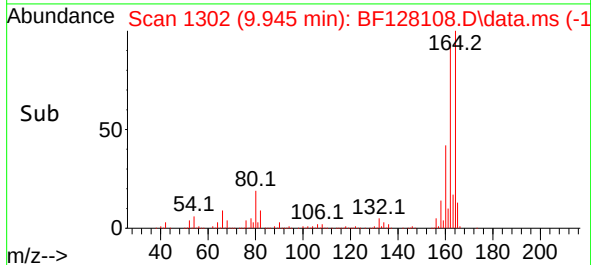
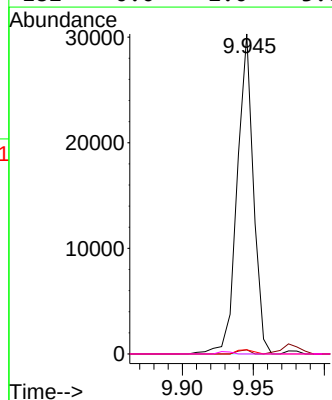
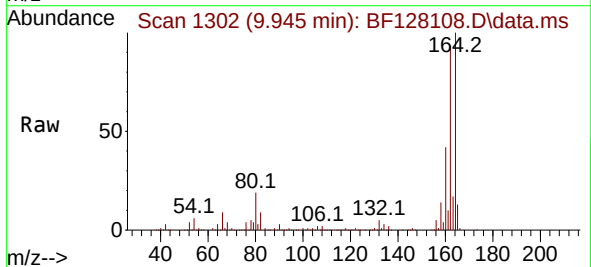
Instrument :  
BNA\_F  
ClientSampleId :  
75-HALSTAD-ST-STOCK-PILE

Tgt Ion:165 Resp: 24116  
Ion Ratio Lower Upper  
165 100  
63 1.3 49.5 74.3#  
89 1.3 49.0 73.4#

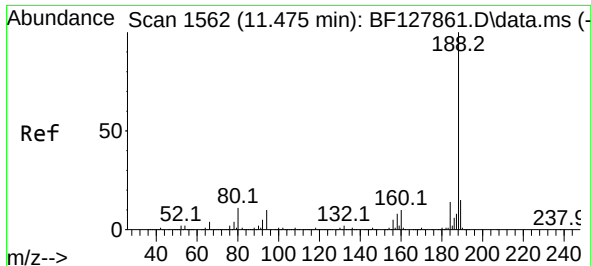


#57  
2,4-Dinitrotoluene  
Concen: 6.736 ng  
RT: 9.945 min Scan# 1302  
Delta R.T. -0.200 min  
Lab File: BF128108.D  
Acq: 05 May 2022 21:48

Tgt Ion:165 Resp: 24116  
Ion Ratio Lower Upper  
165 100  
63 1.3 32.6 49.0#  
89 1.3 55.2 82.8#  
182 0.0 2.0 3.0#



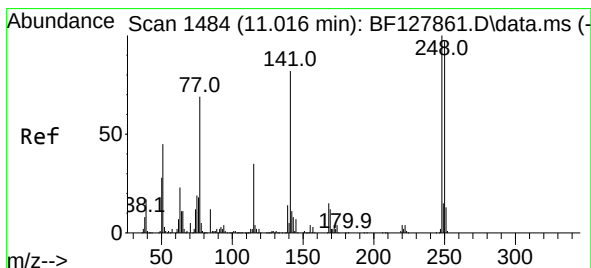
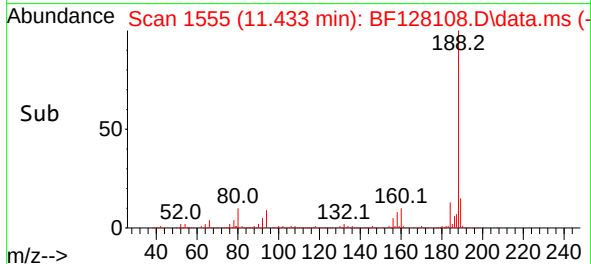
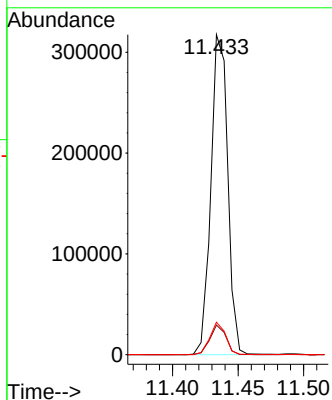
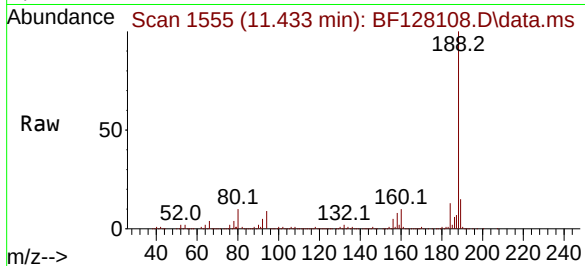




#64  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 11.433 min Scan# 11  
Delta R.T. -0.012 min  
Lab File: BF128108.D  
Acq: 05 May 2022 21:48

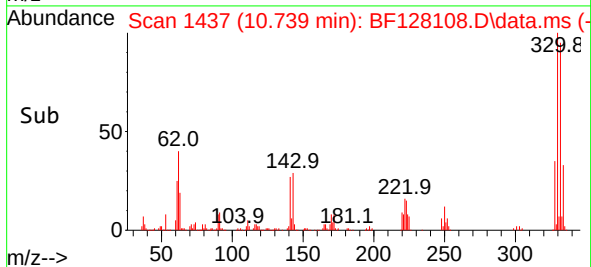
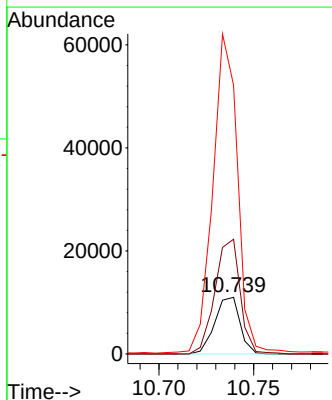
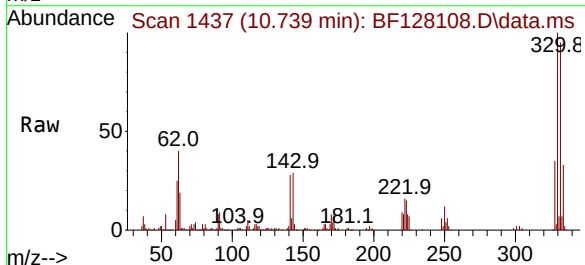
Instrument :  
BNA\_F  
ClientSampleId :  
75-HALSTAD-ST-STOCK-PILE

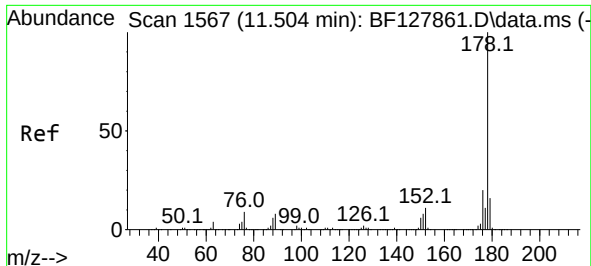
Tgt Ion:188 Resp: 283719  
Ion Ratio Lower Upper  
188 100  
94 9.3 8.0 12.0  
80 10.2 8.9 13.3



#67  
4-Bromophenyl-phenylether  
Concen: 3.244 ng  
RT: 10.739 min Scan# 1437  
Delta R.T. -0.247 min  
Lab File: BF128108.D  
Acq: 05 May 2022 21:48

Tgt Ion:248 Resp: 10204  
Ion Ratio Lower Upper  
248 100  
250 202.4 77.7 116.5#  
141 474.4 65.6 98.4#

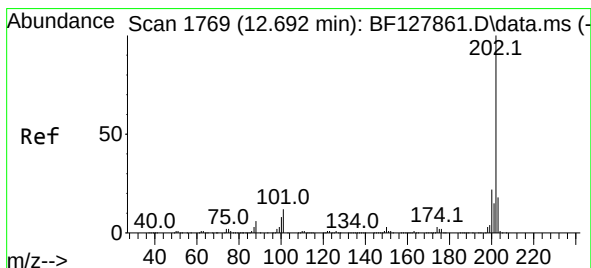
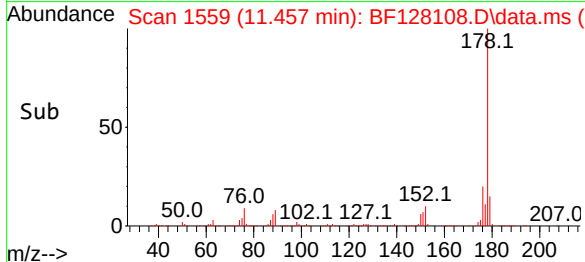
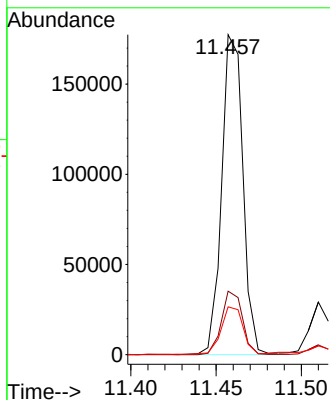
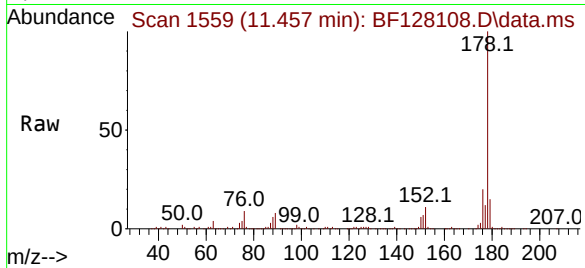




#71  
Phenanthrene  
Concen: 10.361 ng  
RT: 11.457 min Scan# 11  
Delta R.T. -0.017 min  
Lab File: BF128108.D  
Acq: 05 May 2022 21:48

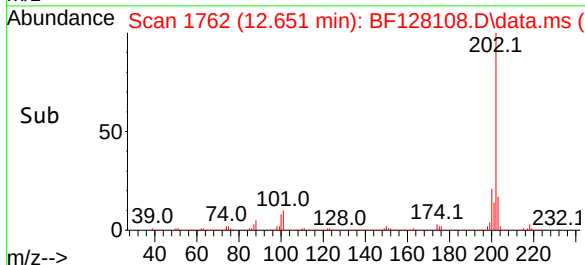
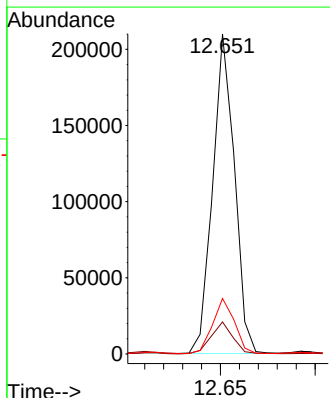
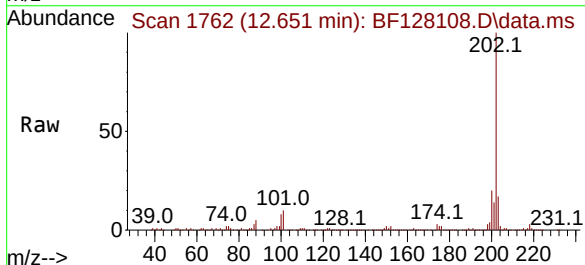
Instrument :  
BNA\_F  
ClientSampleId :  
75-HALSTAD-ST-STOCK-PILE

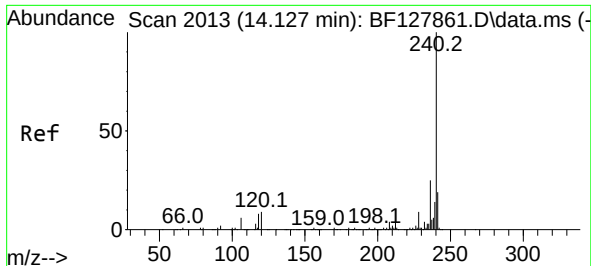
Tgt Ion:178 Resp: 153875  
Ion Ratio Lower Upper  
178 100  
176 19.9 15.7 23.5  
179 15.0 12.6 19.0



#75  
Fluoranthene  
Concen: 10.726 ng  
RT: 12.651 min Scan# 1762  
Delta R.T. -0.012 min  
Lab File: BF128108.D  
Acq: 05 May 2022 21:48

Tgt Ion:202 Resp: 167650  
Ion Ratio Lower Upper  
202 100  
101 10.0 0.0 31.6  
203 17.3 0.0 38.1

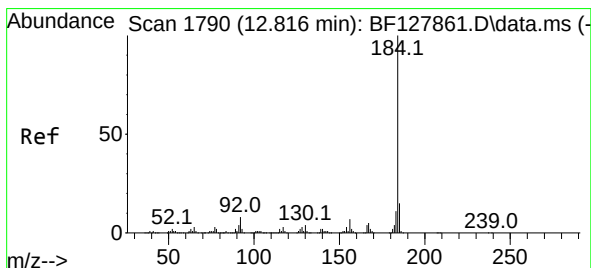
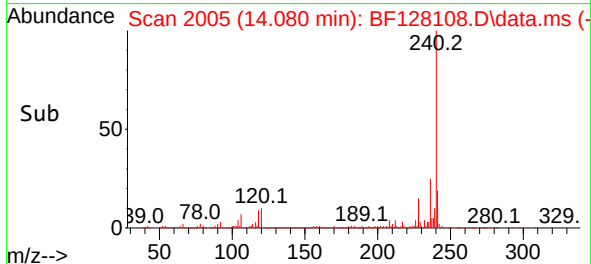
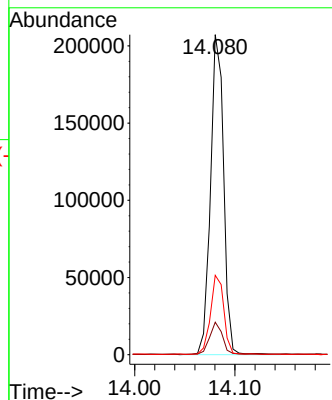
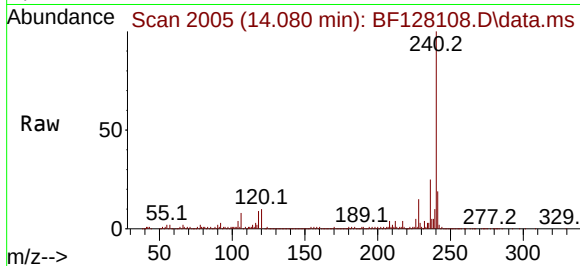




#76  
Chrysene-d12  
Concen: 20.000 ng  
RT: 14.080 min Scan# 20  
Delta R.T. -0.012 min  
Lab File: BF128108.D  
Acq: 05 May 2022 21:48

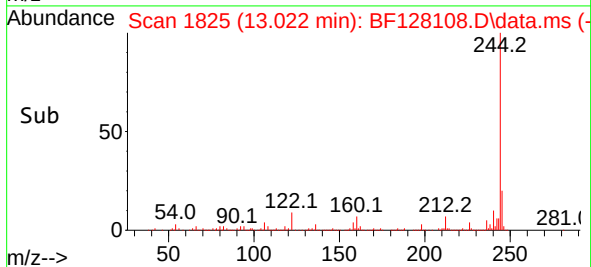
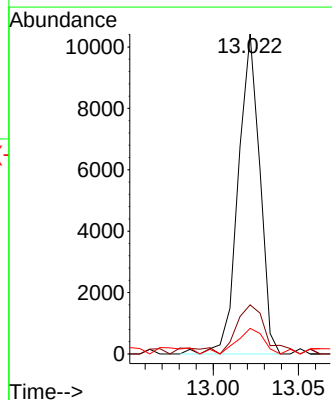
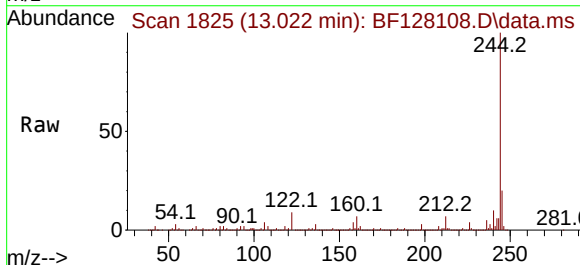
Instrument :  
BNA\_F  
ClientSampleId :  
75-HALSTAD-ST-STOCK-PILE

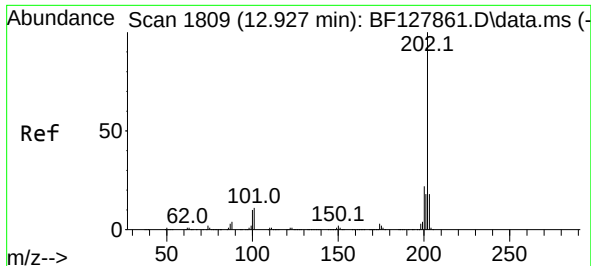
Tgt Ion:240 Resp: 188152  
Ion Ratio Lower Upper  
240 100  
120 10.2 7.0 10.6  
236 24.8 20.3 30.5



#77  
Benzidine  
Concen: 2.573 ng  
RT: 13.022 min Scan# 1825  
Delta R.T. 0.241 min  
Lab File: BF128108.D  
Acq: 05 May 2022 21:48

Tgt Ion:184 Resp: 9161  
Ion Ratio Lower Upper  
184 100  
185 15.3 12.1 18.1  
183 8.0 9.0 13.4#

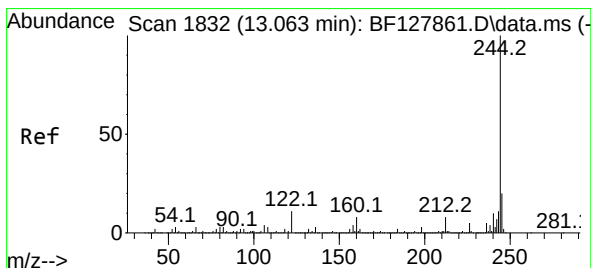
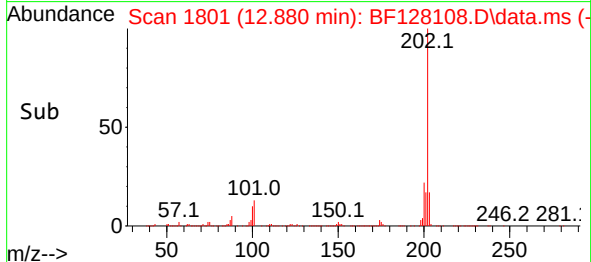
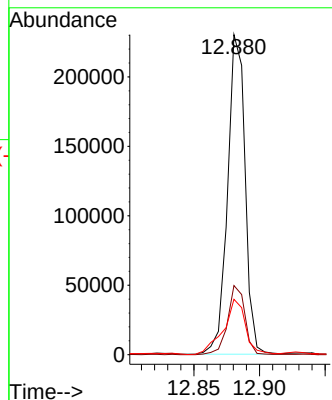
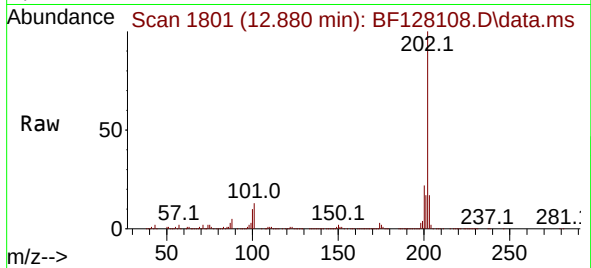




#78  
Pyrene  
Concen: 14.058 ng  
RT: 12.880 min Scan# 1801  
Delta R.T. -0.012 min  
Lab File: BF128108.D  
Acq: 05 May 2022 21:48

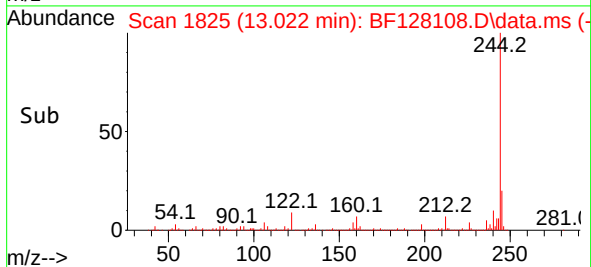
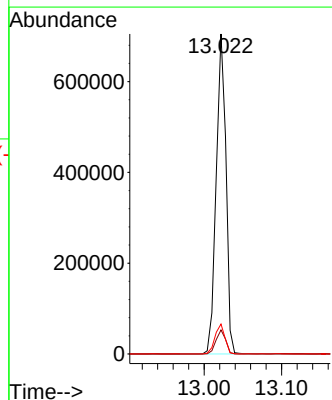
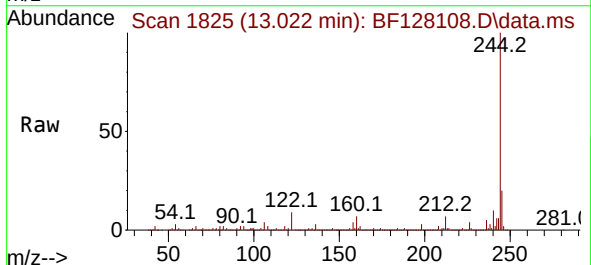
Instrument :  
BNA\_F  
ClientSampleId :  
75-HALSTAD-ST-STOCK-PILE

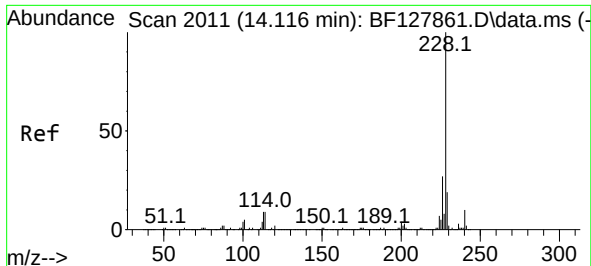
Tgt Ion:202 Resp: 213521  
Ion Ratio Lower Upper  
202 100  
200 21.6 17.4 26.2  
203 17.3 14.0 21.0



#79  
Terphenyl-d14  
Concen: 59.837 ng  
RT: 13.022 min Scan# 1825  
Delta R.T. -0.012 min  
Lab File: BF128108.D  
Acq: 05 May 2022 21:48

Tgt Ion:244 Resp: 615696  
Ion Ratio Lower Upper  
244 100  
212 7.5 6.2 9.4  
122 9.4 8.6 12.8

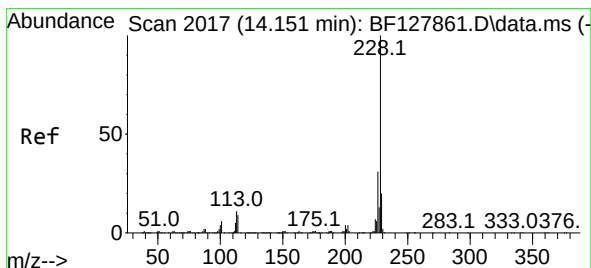
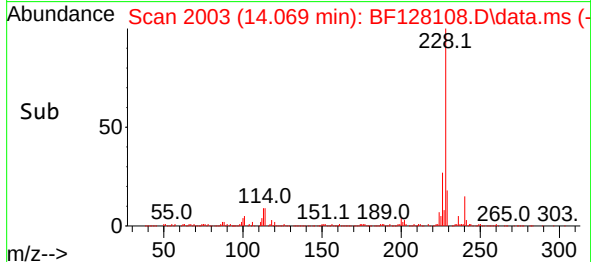
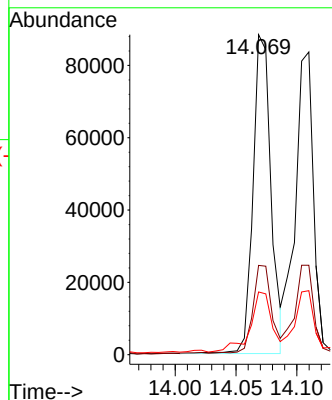
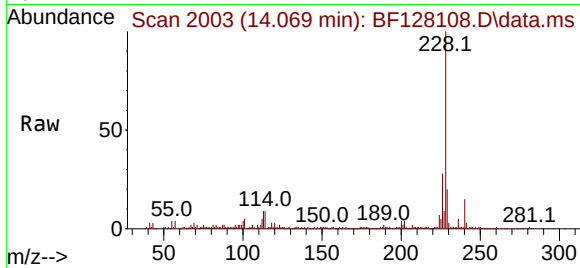




#81  
Benzo(a)anthracene  
Concen: 7.213 ng  
RT: 14.069 min Scan# 2010  
Delta R.T. -0.012 min  
Lab File: BF128108.D  
Acq: 05 May 2022 21:48

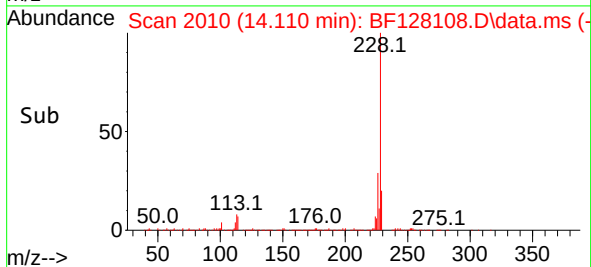
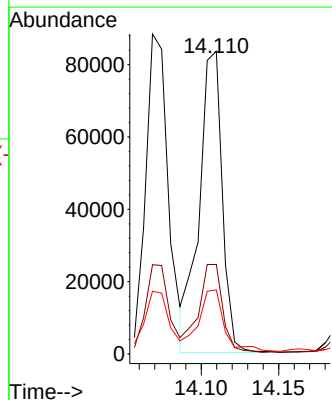
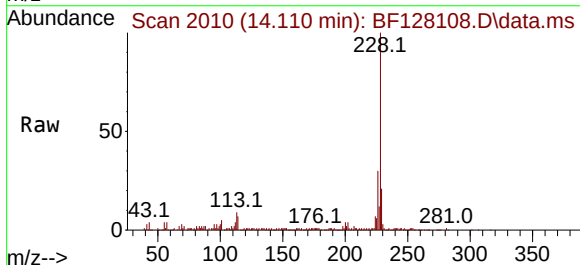
Instrument :  
BNA\_F  
ClientSampleId :  
75-HALSTAD-ST-STOCK-PILE

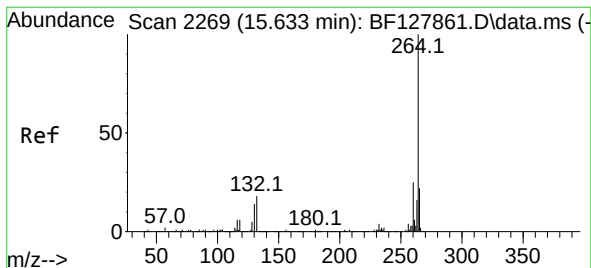
Tgt Ion:228 Resp: 90458  
Ion Ratio Lower Upper  
228 100  
226 27.9 21.7 32.5  
229 19.6 15.4 23.2



#83  
Chrysene  
Concen: 7.221 ng  
RT: 14.110 min Scan# 2010  
Delta R.T. -0.012 min  
Lab File: BF128108.D  
Acq: 05 May 2022 21:48

Tgt Ion:228 Resp: 86491  
Ion Ratio Lower Upper  
228 100  
226 29.5 24.4 36.6  
229 21.2 15.8 23.8





#86

Perylene-d12

Concen: 20.000 ng

RT: 15.586 min Scan# 2185

Delta R.T. -0.006 min

Lab File: BF128108.D

Acq: 05 May 2022 21:48

Instrument :

BNA\_F

ClientSampleId :

75-HALSTAD-ST-STOCK-PILE

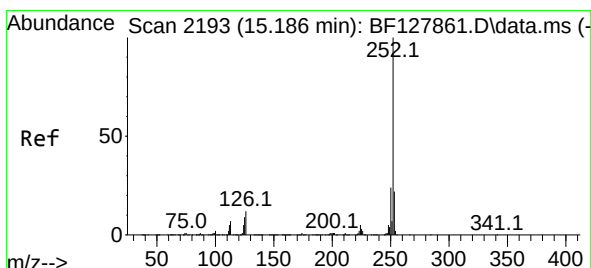
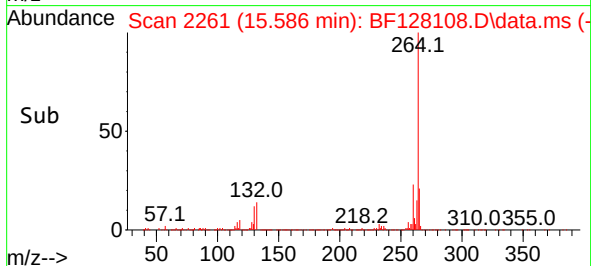
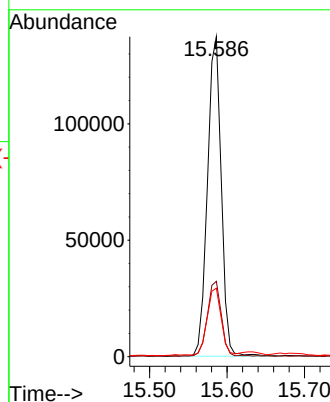
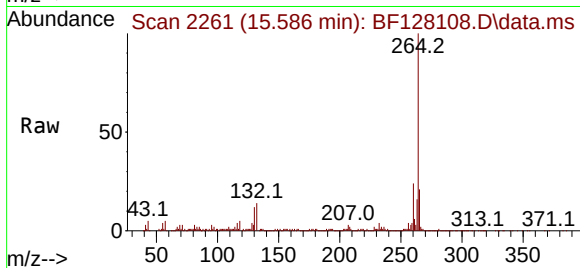
Tgt Ion:264 Resp: 169660

Ion Ratio Lower Upper

264 100

260 23.5 20.1 30.1

265 21.4 17.5 26.3



#88

Benzo(b)fluoranthene

Concen: 10.562 ng

RT: 15.139 min Scan# 2185

Delta R.T. -0.012 min

Lab File: BF128108.D

Acq: 05 May 2022 21:48

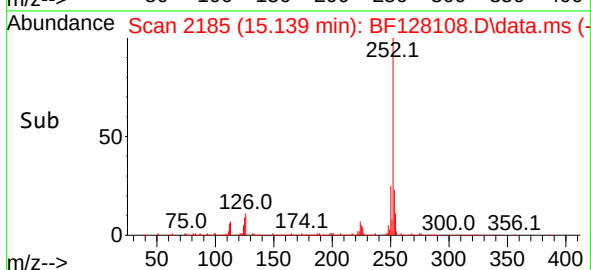
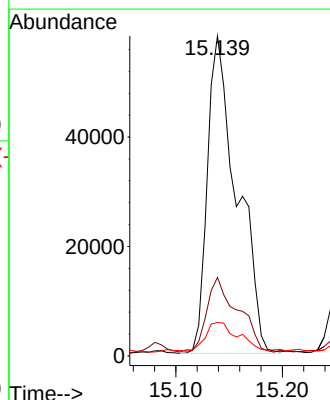
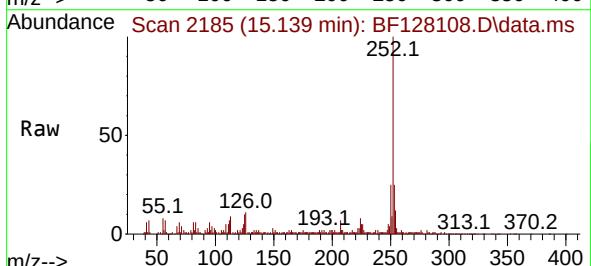
Tgt Ion:252 Resp: 112555

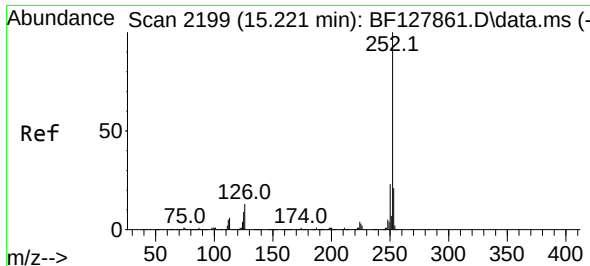
Ion Ratio Lower Upper

252 100

253 24.6 17.4 26.2

125 10.4 7.4 11.2

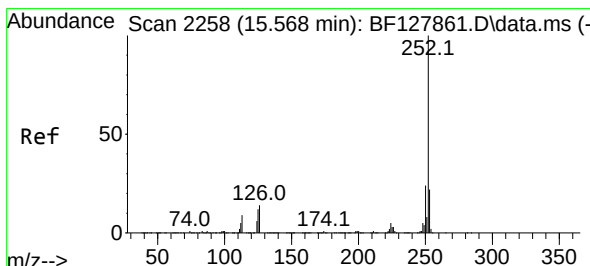
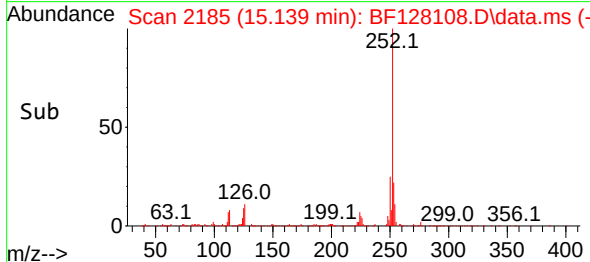
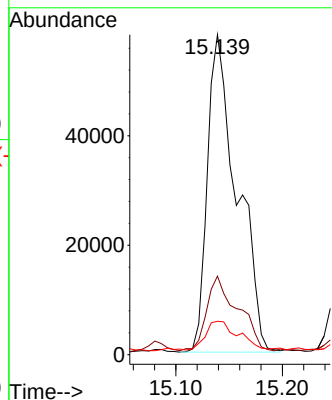
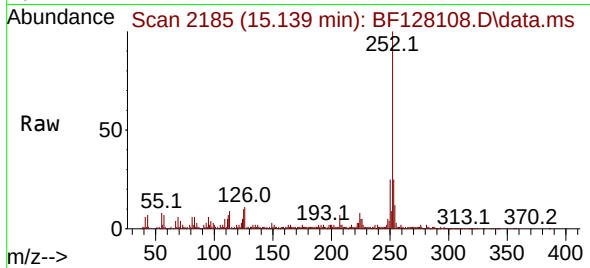




#89  
Benzo(k)fluoranthene  
Concen: 10.484 ng  
RT: 15.139 min Scan# 2199  
Delta R.T. -0.041 min  
Lab File: BF128108.D  
Acq: 05 May 2022 21:48

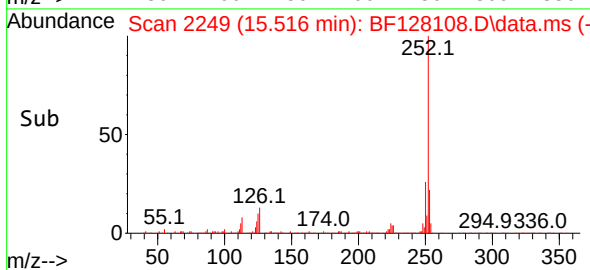
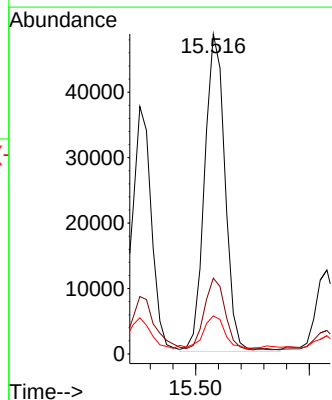
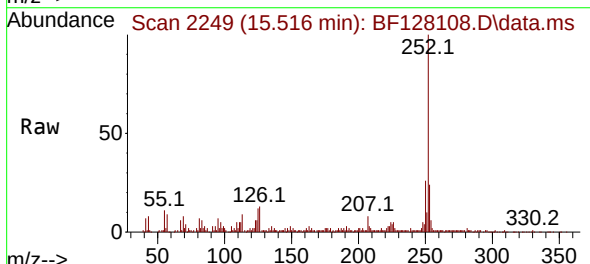
Instrument :  
BNA\_F  
ClientSampleId :  
75-HALSTAD-ST-STOCK-PILE

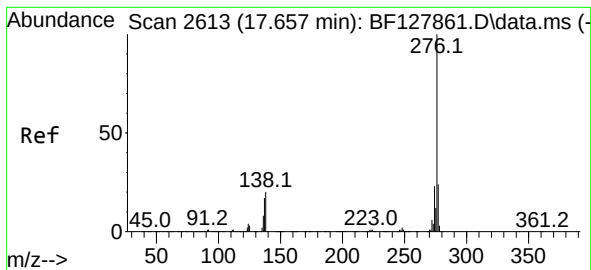
Tgt Ion:252 Resp: 112555  
Ion Ratio Lower Upper  
252 100  
253 24.6 17.0 25.4  
125 10.4 6.8 10.2#



#90  
Benzo(a)pyrene  
Concen: 6.884 ng  
RT: 15.516 min Scan# 2249  
Delta R.T. -0.017 min  
Lab File: BF128108.D  
Acq: 05 May 2022 21:48

Tgt Ion:252 Resp: 60852  
Ion Ratio Lower Upper  
252 100  
253 23.7 17.8 26.6  
125 11.9 9.2 13.8





#92

Benzo(g,h,i)perylene

Concen: 2.960 ng

RT: 17.562 min Scan# 21

Delta R.T. -0.035 min

Lab File: BF128108.D

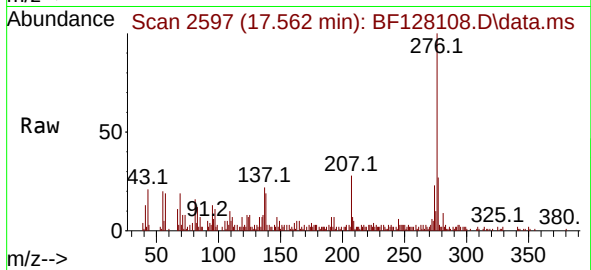
Acq: 05 May 2022 21:48

Instrument :

BNA\_F

ClientSampleId :

75-HALSTAD-ST-STOCK-PILE



Tgt Ion:276 Resp: 28329

Ion Ratio Lower Upper

276 100

277 27.2 18.8 28.2

138 18.9 16.2 24.2

