

Data Path : Z:\svoasrv\HPCHEM1\BNA\_F\Data\BF123021\  
 Data File : BF126419.D  
 Acq On : 30 Dec 2021 14:47  
 Operator : JU/CG  
 Sample : M5239-02 5X  
 Misc :  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :

Quant Time: Dec 30 15:19:08 2021  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_F\Methods\8270-BF122921.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Dec 30 04:30:49 2021  
 Response via : Initial Calibration

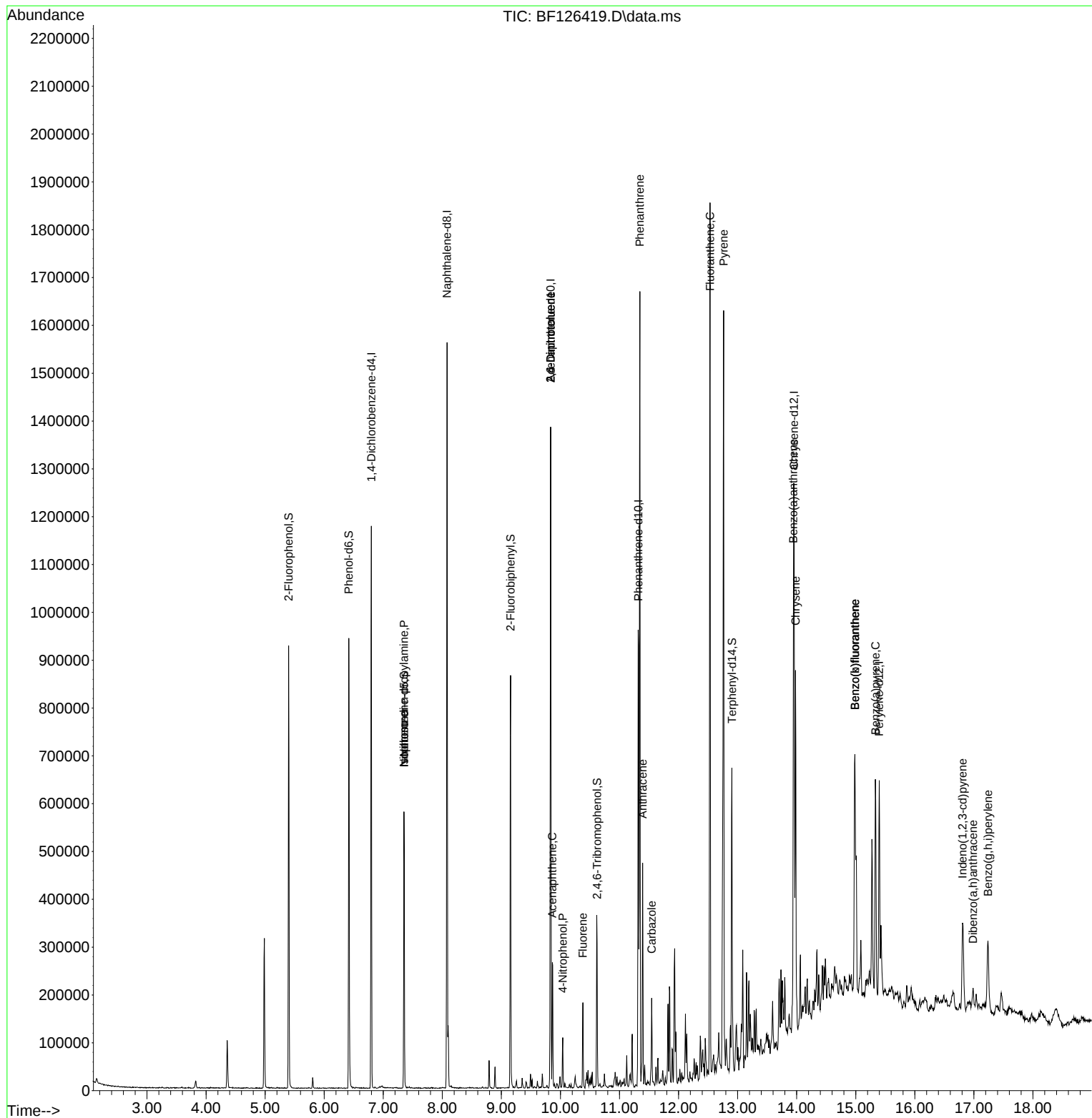
| Compound                      | R.T.   | QIon | Response | Conc      | Units | Dev(Min) |
|-------------------------------|--------|------|----------|-----------|-------|----------|
| -----                         |        |      |          |           |       |          |
| Internal Standards            |        |      |          |           |       |          |
| 1) 1,4-Dichlorobenzene-d4     | 6.798  | 152  | 156501   | 20.000    | ng    | 0.00     |
| 21) Naphthalene-d8            | 8.081  | 136  | 631109   | 20.000    | ng    | 0.00     |
| 39) Acenaphthene-d10          | 9.833  | 164  | 249404   | 20.000    | ng    | 0.00     |
| 64) Phenanthrene-d10          | 11.322 | 188  | 347276   | 20.000    | ng    | 0.00     |
| 76) Chrysene-d12              | 13.957 | 240  | 227605   | 20.000    | ng    | 0.00     |
| 86) Perylene-d12              | 15.398 | 264  | 177376   | 20.000    | ng    | 0.00     |
|                               |        |      |          |           |       |          |
| System Monitoring Compounds   |        |      |          |           |       |          |
| 5) 2-Fluorophenol             | 5.398  | 112  | 241391   | 22.150    | ng    | 0.00     |
| 7) Phenol-d6                  | 6.416  | 99   | 298070   | 21.117    | ng    | -0.01    |
| 23) Nitrobenzene-d5           | 7.351  | 82   | 177714   | 14.459    | ng    | -0.01    |
| 42) 2,4,6-Tribromophenol      | 10.622 | 330  | 33160    | 17.206    | ng    | 0.00     |
| 45) 2-Fluorobiphenyl          | 9.157  | 172  | 250611   | 17.682    | ng    | 0.00     |
| 79) Terphenyl-d14             | 12.904 | 244  | 183828   | 15.692    | ng    | 0.00     |
|                               |        |      |          |           |       |          |
| Target Compounds              |        |      |          |           |       | Qvalue   |
| 19) n-Nitroso-di-n-propyla... | 7.351  | 70   | 21996    | 2.731     | ng    | # 83     |
| 25) Isophorone                | 7.351  | 82   | 177550   | 8.069     | ng    | # 69     |
| 51) 2,6-Dinitrotoluene        | 9.833  | 165  | 32075    | 9.539     | ng    | # 21     |
| 52) Acenaphthene              | 9.863  | 154  | 56745    | 4.119     | ng    | 98       |
| 56) 4-Nitrophenol             | 10.039 | 139  | 12493    | 3.810     | ng    | # 7      |
| 57) 2,4-Dinitrotoluene        | 9.833  | 165  | 32075    | 7.394     | ng    | # 15     |
| 58) Fluorene                  | 10.381 | 166  | 43421    | 3.298     | ng    | 98       |
| 71) Phenanthrene              | 11.345 | 178  | 557972   | 31.427    | ng    | 99       |
| 72) Anthracene                | 11.392 | 178  | 153781   | 8.656     | ng    | 98       |
| 73) Carbazole                 | 11.545 | 167  | 58757    | 3.378     | ng    | 100      |
| 75) Fluoranthene              | 12.533 | 202  | 640569   | 39.531    | ng    | 98       |
| 77) Benzidine                 | 12.904 | 184  | 2402     | Below Cal |       | # 90     |
| 78) Pyrene                    | 12.763 | 202  | 610543   | 31.742    | ng    | 100      |
| 81) Benzo(a)anthracene        | 13.945 | 228  | 294461   | 22.496    | ng    | 98       |
| 83) Chrysene                  | 13.980 | 228  | 255062   | 18.997    | ng    | 95       |
| 87) Indeno(1,2,3-cd)pyrene    | 16.810 | 276  | 106108   | 8.939     | ng    | 98       |
| 88) Benzo(b)fluoranthene      | 14.986 | 252  | 368559   | 34.880    | ng    | 98       |
| 89) Benzo(k)fluoranthene      | 14.986 | 252  | 368559   | 36.006    | ng    | 98       |
| 90) Benzo(a)pyrene            | 15.333 | 252  | 199453   | 22.512    | ng    | 96       |
| 91) Dibenzo(a,h)anthracene    | 16.986 | 278  | 24549    | 2.563     | ng    | 92       |
| 92) Benzo(g,h,i)perylene      | 17.239 | 276  | 107270   | 10.517    | ng    | 98       |
| -----                         |        |      |          |           |       |          |

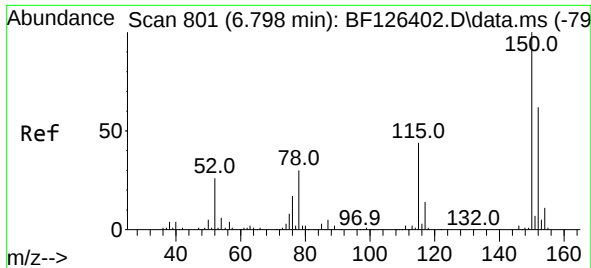
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_F\Data\BF123021\  
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Operator : JU/CG  
Sample : M5239-02 5X  
Misc :  
ALS Vial : 12 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :

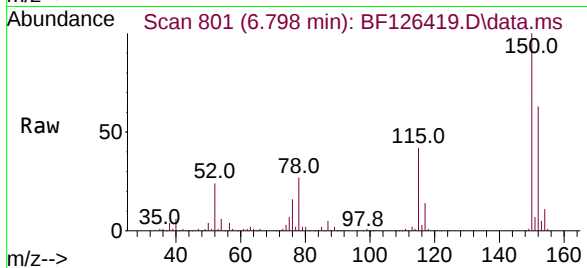
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Quant Method : Z:\svoasrv\HPCHEM1\BNA\_F\Methods\8270-BF122921.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Thu Dec 30 04:30:49 2021  
Response via : Initial Calibration



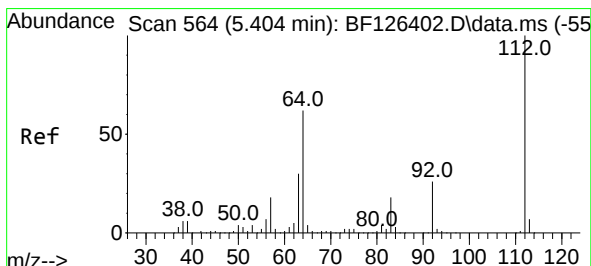
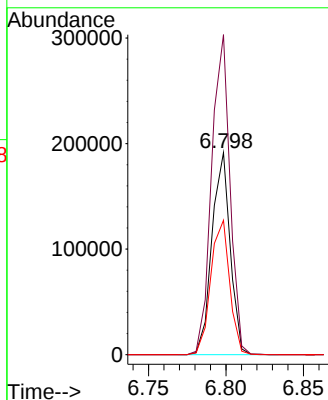
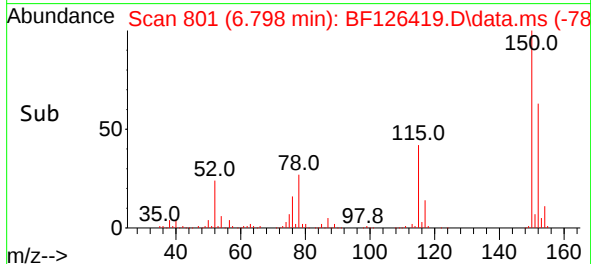


#1  
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.798 min Scan# 801  
Delta R.T. 0.000 min  
Lab File: BF126419.D  
Acq: 30 Dec 2021 14:47

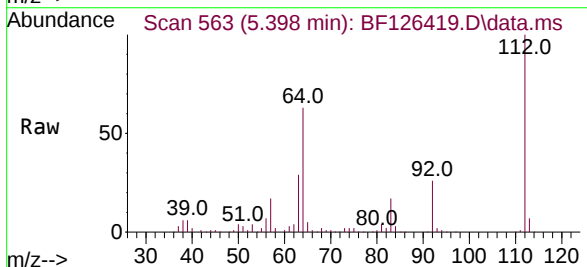
Instrument :  
BNA\_F  
ClientSampleId :



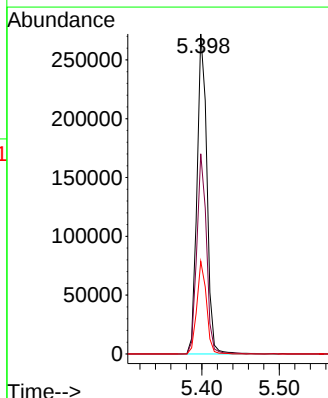
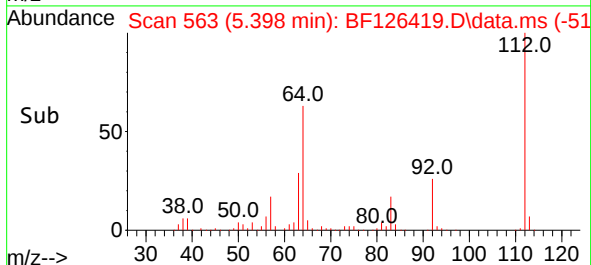
Tgt Ion:152 Resp: 156501  
Ion Ratio Lower Upper  
152 100  
150 158.4 128.1 192.1  
115 66.5 56.7 85.1

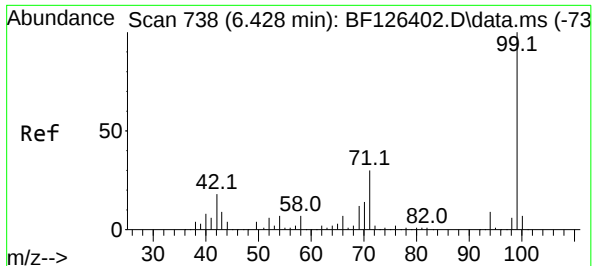


#5  
2-Fluorophenol  
Concen: 22.150 ng  
RT: 5.398 min Scan# 563  
Delta R.T. -0.006 min  
Lab File: BF126419.D  
Acq: 30 Dec 2021 14:47



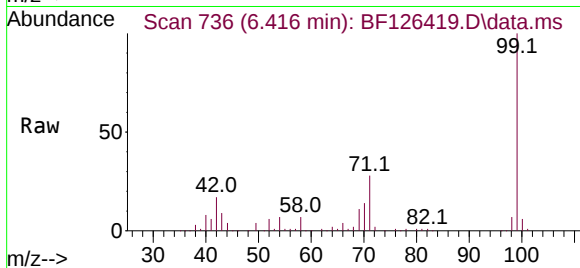
Tgt Ion:112 Resp: 241391  
Ion Ratio Lower Upper  
112 100  
64 62.5 49.5 74.3  
63 28.9 23.9 35.9



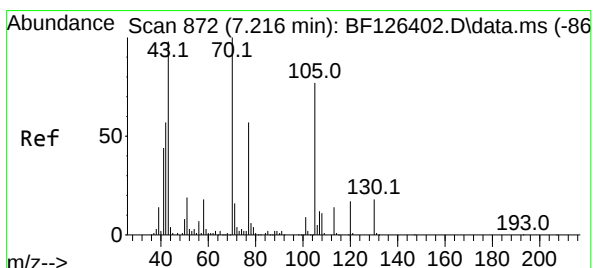
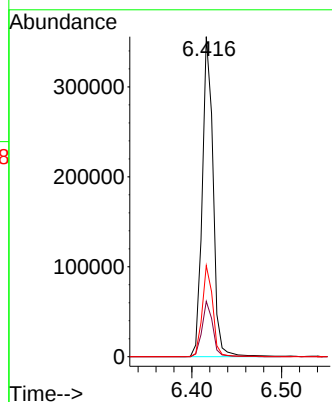
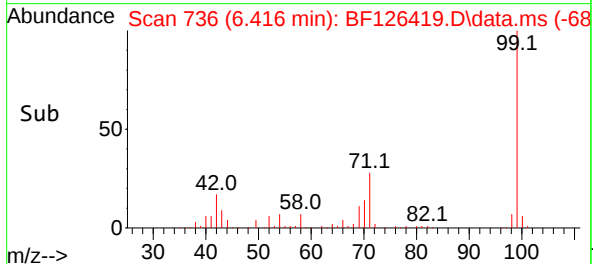


#7  
Phenol-d6  
Concen: 21.117 ng  
RT: 6.416 min Scan# 71  
Delta R.T. -0.012 min  
Lab File: BF126419.D  
Acq: 30 Dec 2021 14:47

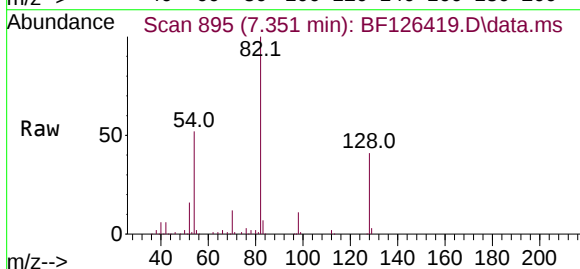
Instrument :  
BNA\_F  
ClientSampleId :



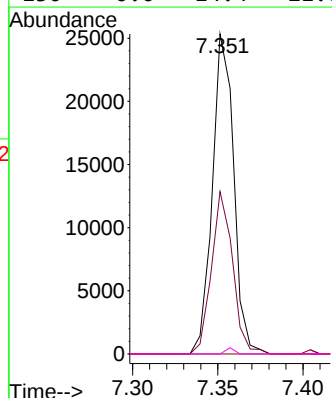
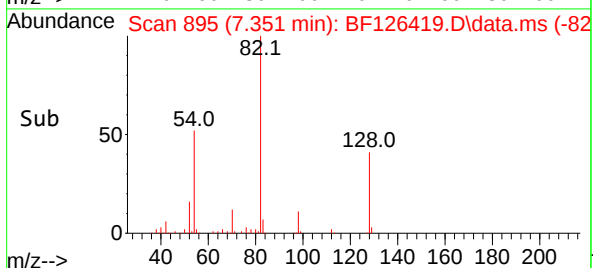
Tgt Ion: 99 Resp: 298070  
Ion Ratio Lower Upper  
99 100  
42 17.3 14.2 21.4  
71 28.5 24.3 36.5

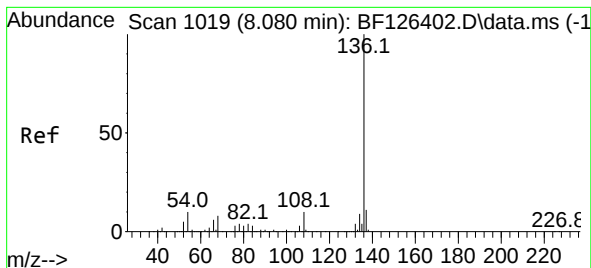


#19  
n-Nitroso-di-n-propylamine  
Concen: 2.731 ng  
RT: 7.351 min Scan# 895  
Delta R.T. 0.135 min  
Lab File: BF126419.D  
Acq: 30 Dec 2021 14:47



Tgt Ion: 70 Resp: 21996  
Ion Ratio Lower Upper  
70 100  
42 50.7 45.8 68.8  
101 0.0 6.9 10.3#  
130 0.0 14.4 21.6#





#21

Naphthalene-d8

Concen: 20.000 ng

RT: 8.081 min Scan# 1019

Delta R.T. 0.000 min

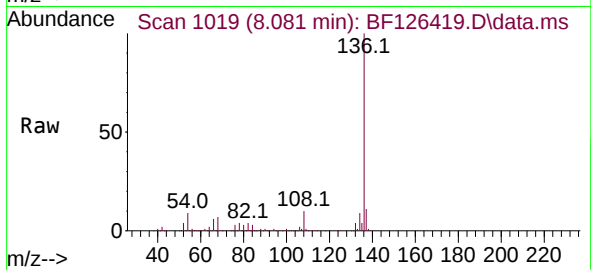
Lab File: BF126419.D

Acq: 30 Dec 2021 14:47

Instrument :

BNA\_F

ClientSampleId :



Tgt Ion:136 Resp: 631109

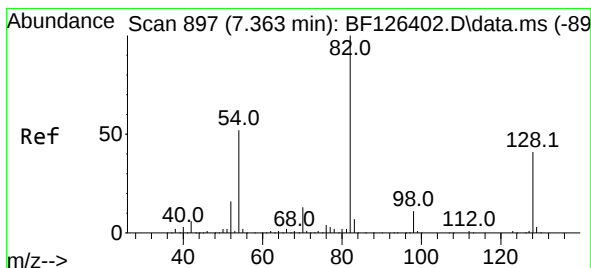
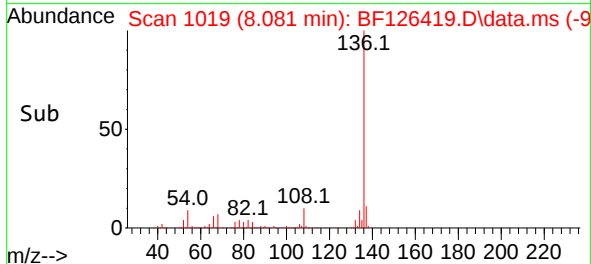
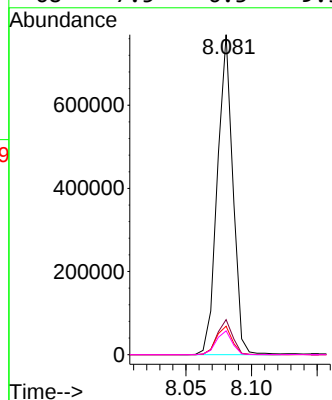
Ion Ratio Lower Upper

136 100

137 10.9 8.6 13.0

54 8.9 7.8 11.6

68 7.5 6.3 9.5



#23

Nitrobenzene-d5

Concen: 14.459 ng

RT: 7.351 min Scan# 895

Delta R.T. -0.012 min

Lab File: BF126419.D

Acq: 30 Dec 2021 14:47

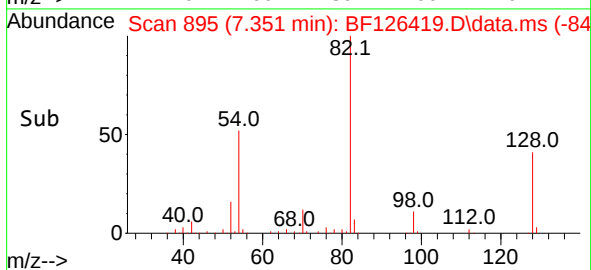
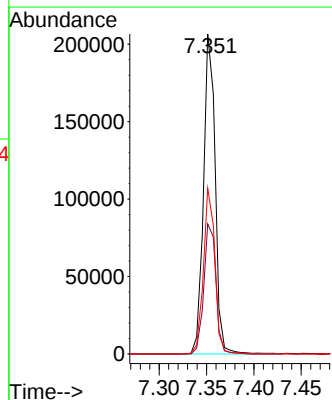
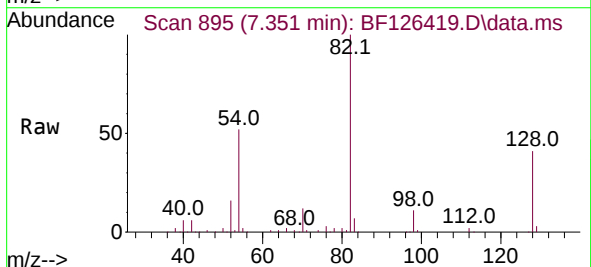
Tgt Ion: 82 Resp: 177714

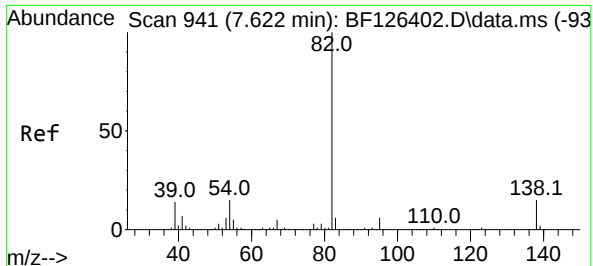
Ion Ratio Lower Upper

82 100

128 40.7 32.7 49.1

54 51.8 41.7 62.5

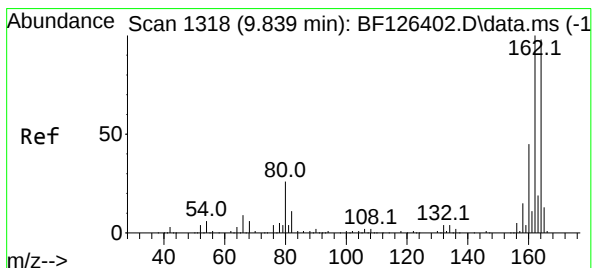
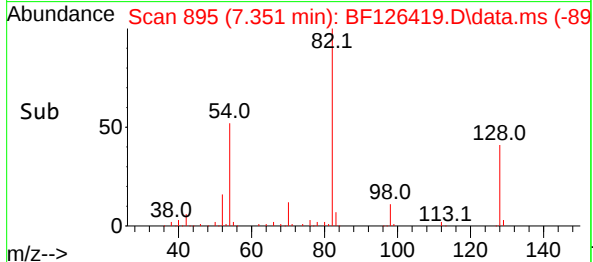
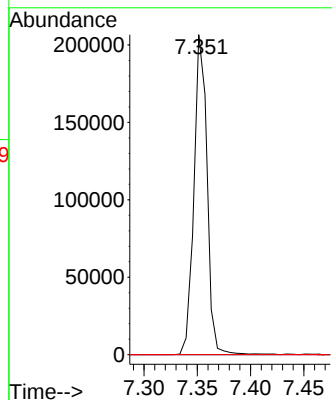
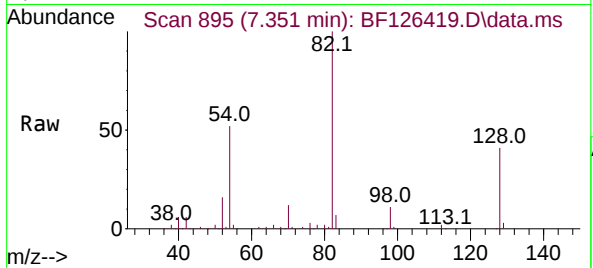




#25  
Isophorone  
Concen: 8.069 ng  
RT: 7.351 min Scan# 895  
Delta R.T. -0.270 min  
Lab File: BF126419.D  
Acq: 30 Dec 2021 14:47

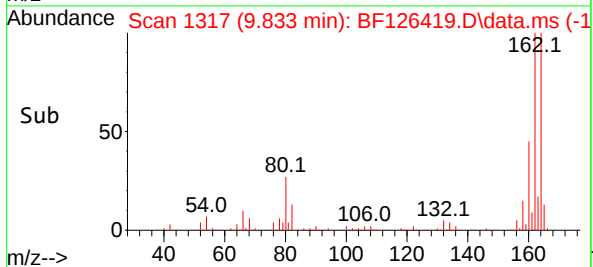
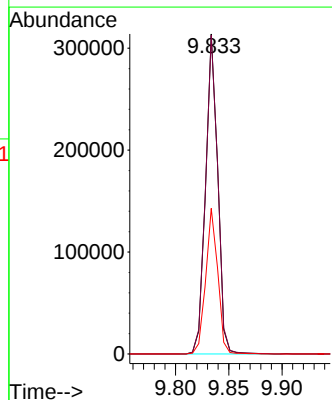
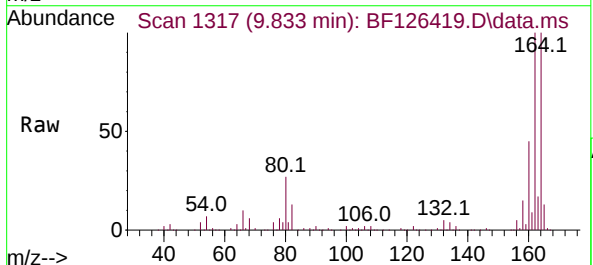
Instrument :  
BNA\_F  
ClientSampleId :

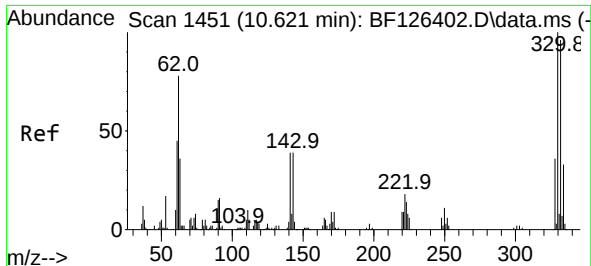
Tgt Ion: 82 Resp: 177550  
Ion Ratio Lower Upper  
82 100  
95 0.0 5.0 7.4#  
138 0.0 12.3 18.5#



#39  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 9.833 min Scan# 1317  
Delta R.T. -0.006 min  
Lab File: BF126419.D  
Acq: 30 Dec 2021 14:47

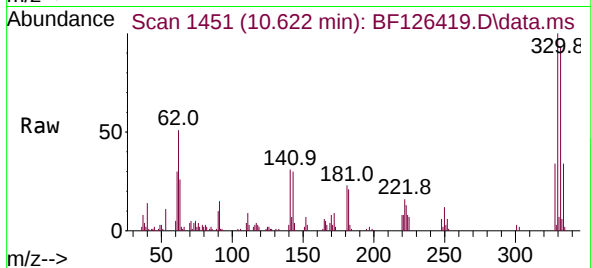
Tgt Ion: 164 Resp: 249404  
Ion Ratio Lower Upper  
164 100  
162 99.6 81.4 122.0  
160 45.5 36.6 54.8



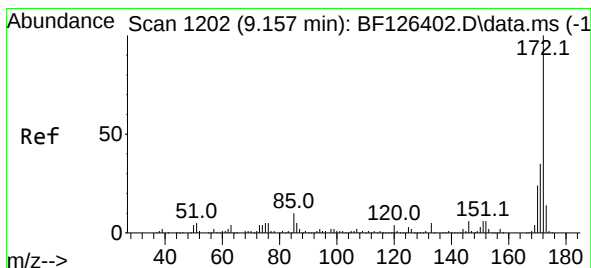
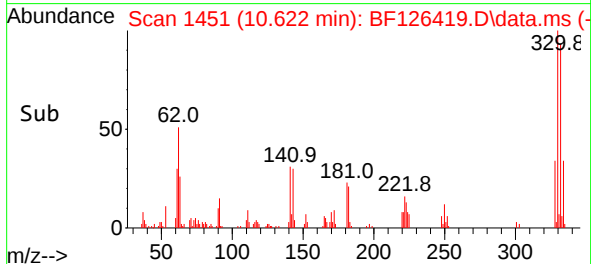
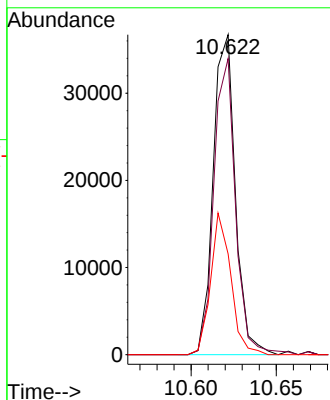


#42  
2,4,6-Tribromophenol  
Concen: 17.206 ng  
RT: 10.622 min Scan# 1451  
Delta R.T. 0.000 min  
Lab File: BF126419.D  
Acq: 30 Dec 2021 14:47

Instrument :  
BNA\_F  
ClientSampleId :

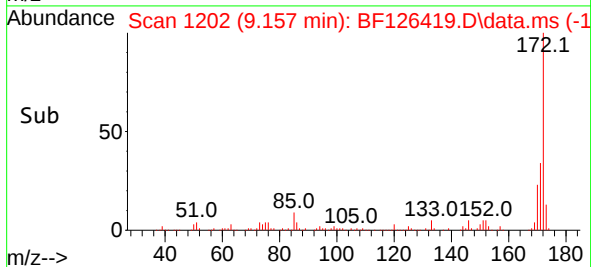
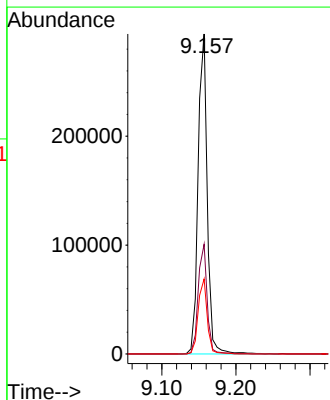
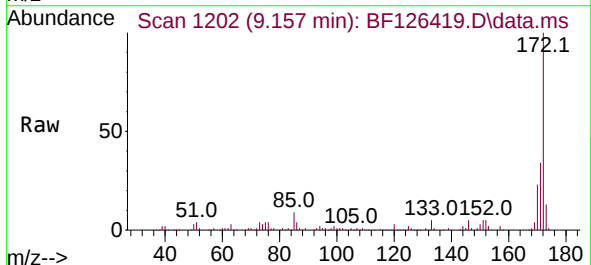


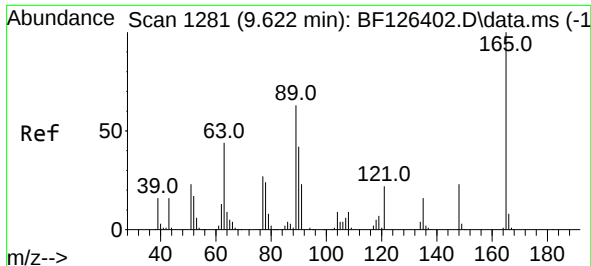
Tgt Ion: 330 Resp: 33160  
Ion Ratio Lower Upper  
330 100  
332 91.2 76.0 114.0  
141 40.4 30.1 45.1



#45  
2-Fluorobiphenyl  
Concen: 17.682 ng  
RT: 9.157 min Scan# 1202  
Delta R.T. 0.000 min  
Lab File: BF126419.D  
Acq: 30 Dec 2021 14:47

Tgt Ion: 172 Resp: 250611  
Ion Ratio Lower Upper  
172 100  
171 34.3 28.3 42.5  
170 23.4 19.0 28.6

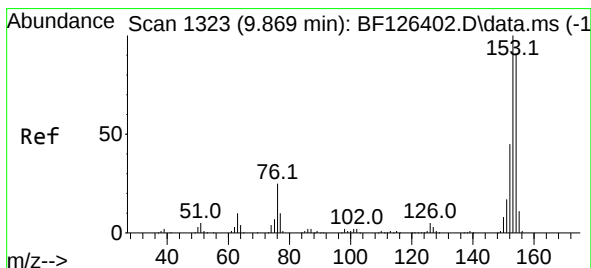
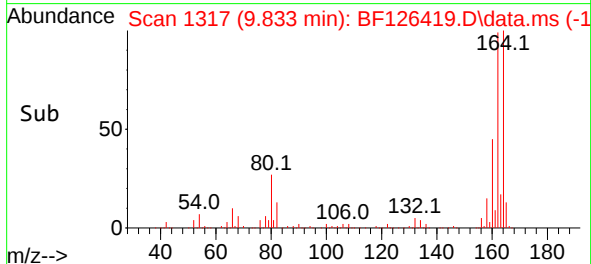
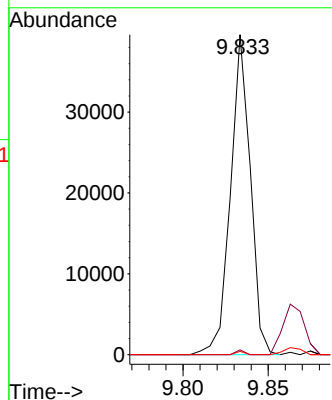
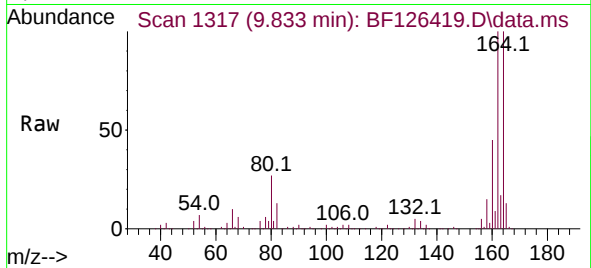




#51  
2,6-Dinitrotoluene  
Concen: 9.539 ng  
RT: 9.833 min Scan# 11  
Delta R.T. 0.212 min  
Lab File: BF126419.D  
Acq: 30 Dec 2021 14:47

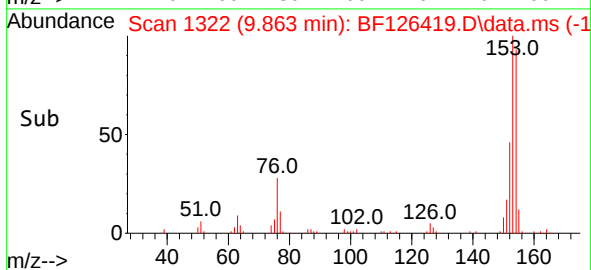
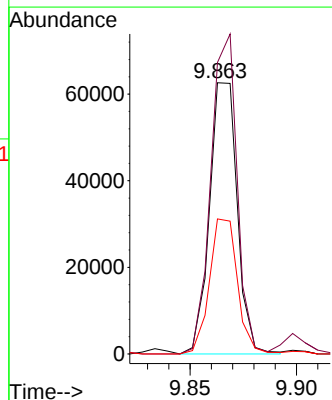
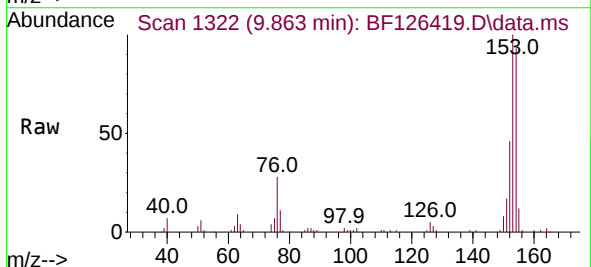
Instrument :  
BNA\_F  
ClientSampleId :

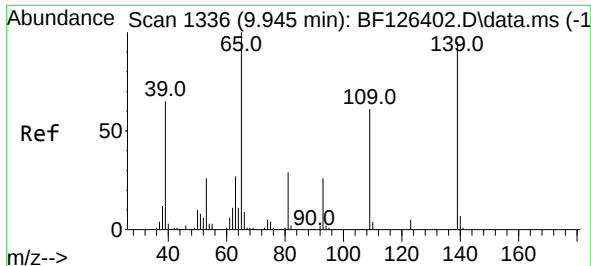
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Ion Ratio Lower Upper  
165 100  
63 1.5 48.4 72.6#  
89 1.1 50.5 75.7#



#52  
Acenaphthene  
Concen: 4.119 ng  
RT: 9.863 min Scan# 1322  
Delta R.T. -0.006 min  
Lab File: BF126419.D  
Acq: 30 Dec 2021 14:47

Tgt Ion:154 Resp: 56745  
Ion Ratio Lower Upper  
154 100  
153 107.5 87.8 131.6  
152 49.8 39.4 59.2

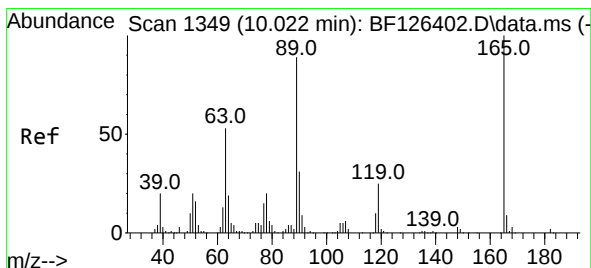
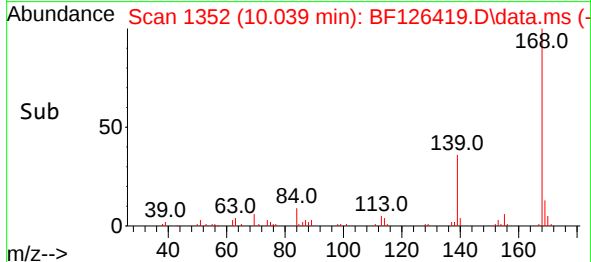
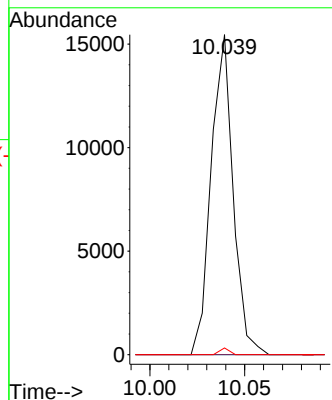
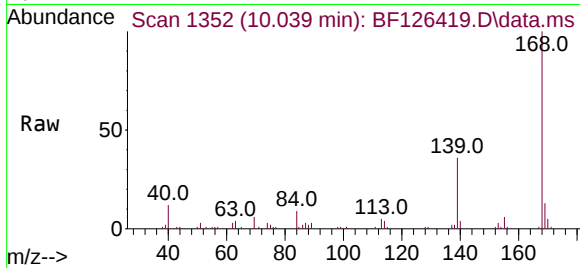




#56  
4-Nitrophenol  
Concen: 3.810 ng  
RT: 10.039 min Scan# 11  
Delta R.T. 0.094 min  
Lab File: BF126419.D  
Acq: 30 Dec 2021 14:47

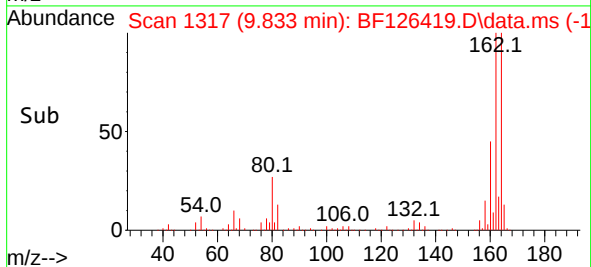
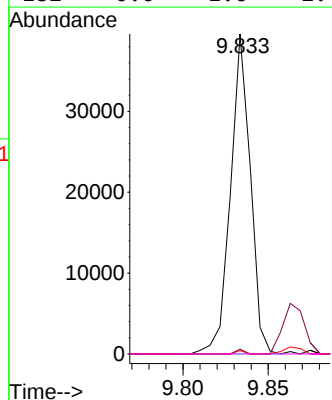
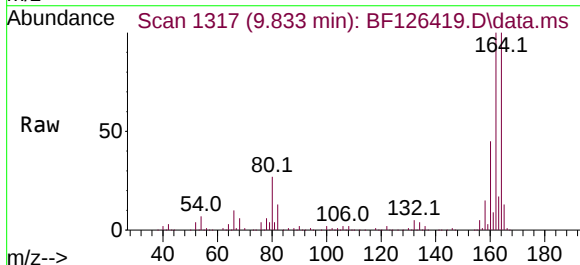
Instrument :  
BNA\_F  
ClientSampleId :

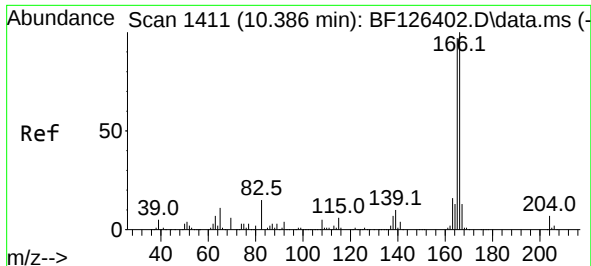
Tgt Ion:139 Resp: 12493  
Ion Ratio Lower Upper  
139 100  
109 0.0 44.1 84.1#  
65 2.1 85.5 125.5#



#57  
2,4-Dinitrotoluene  
Concen: 7.394 ng  
RT: 9.833 min Scan# 1317  
Delta R.T. -0.188 min  
Lab File: BF126419.D  
Acq: 30 Dec 2021 14:47

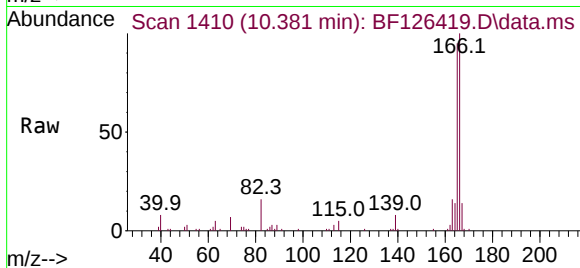
Tgt Ion:165 Resp: 32075  
Ion Ratio Lower Upper  
165 100  
63 1.5 43.0 64.6#  
89 1.1 71.0 106.4#  
182 0.0 1.6 2.4#



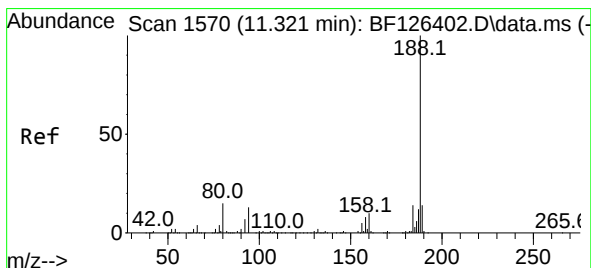
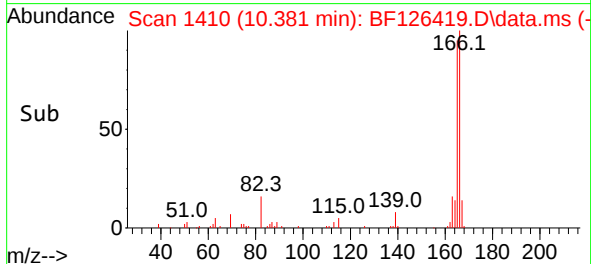
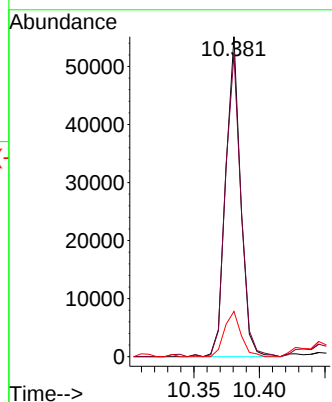


#58  
Fluorene  
Concen: 3.298 ng  
RT: 10.381 min Scan# 1411  
Delta R.T. -0.006 min  
Lab File: BF126419.D  
Acq: 30 Dec 2021 14:47

Instrument :  
BNA\_F  
ClientSampleId :

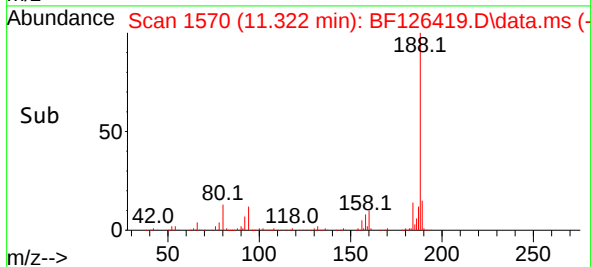
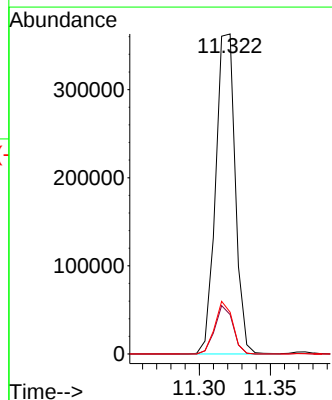
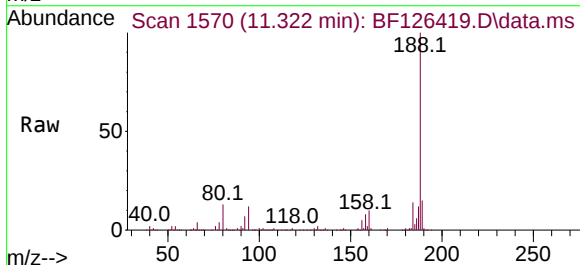


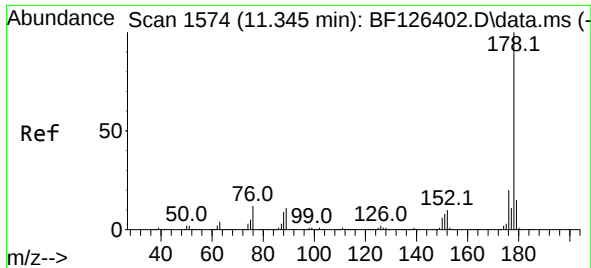
Tgt Ion:166 Resp: 43421  
Ion Ratio Lower Upper  
166 100  
165 94.6 77.7 116.5  
167 14.1 10.7 16.1



#64  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 11.322 min Scan# 1570  
Delta R.T. 0.000 min  
Lab File: BF126419.D  
Acq: 30 Dec 2021 14:47

Tgt Ion:188 Resp: 347276  
Ion Ratio Lower Upper  
188 100  
94 12.3 10.1 15.1  
80 13.1 11.8 17.6

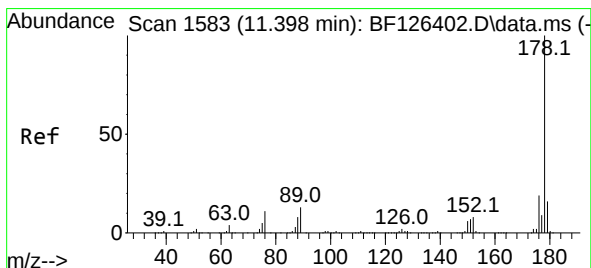
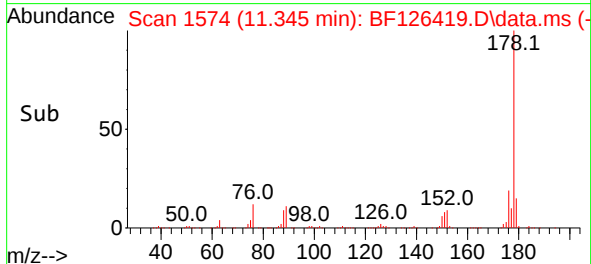
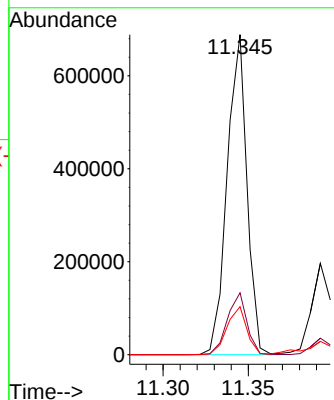
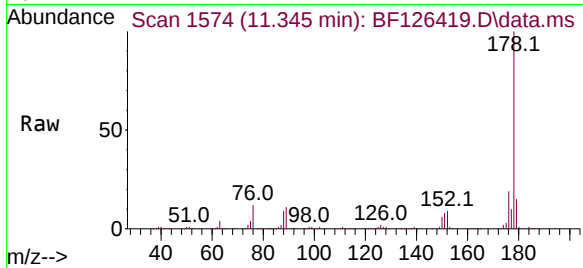




#71  
Phenanthrene  
Concen: 31.427 ng  
RT: 11.345 min Scan# 1574  
Delta R.T. 0.000 min  
Lab File: BF126419.D  
Acq: 30 Dec 2021 14:47

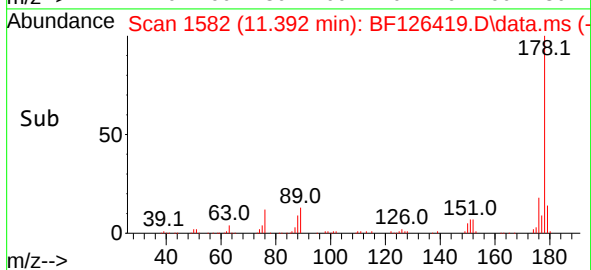
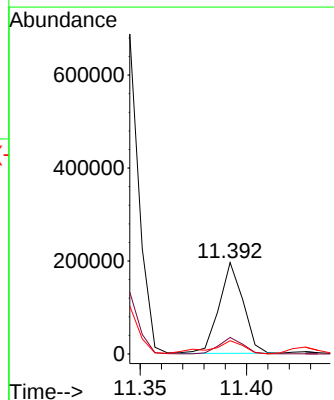
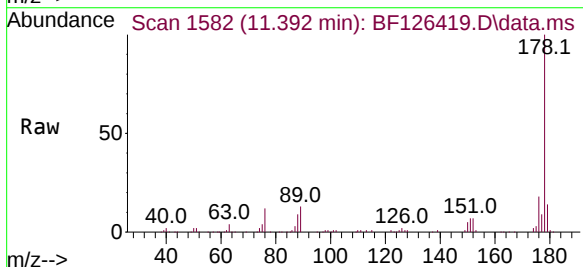
Instrument :  
BNA\_F  
ClientSampleId :

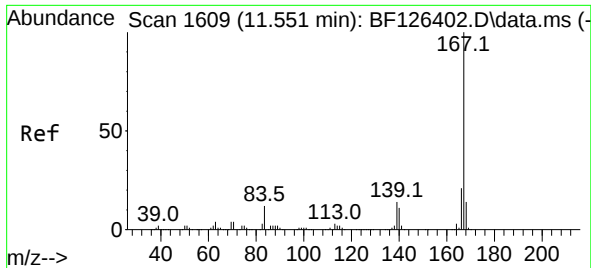
Tgt Ion:178 Resp: 557972  
Ion Ratio Lower Upper  
178 100  
176 19.4 15.7 23.5  
179 15.0 12.3 18.5



#72  
Anthracene  
Concen: 8.656 ng  
RT: 11.392 min Scan# 1582  
Delta R.T. -0.006 min  
Lab File: BF126419.D  
Acq: 30 Dec 2021 14:47

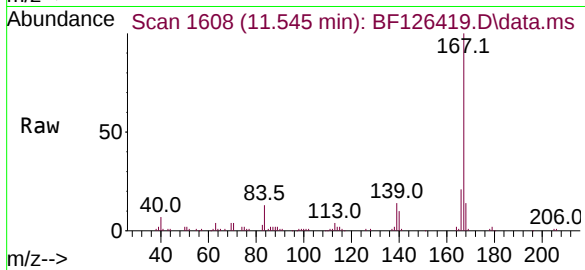
Tgt Ion:178 Resp: 153781  
Ion Ratio Lower Upper  
178 100  
176 18.1 15.0 22.6  
179 14.5 12.5 18.7



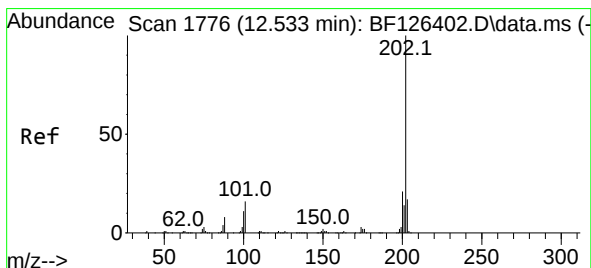
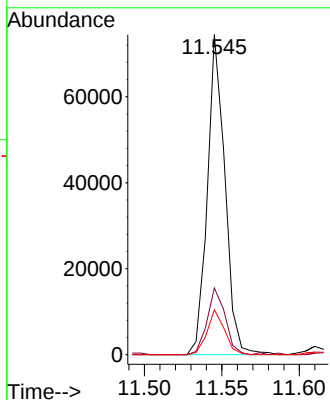
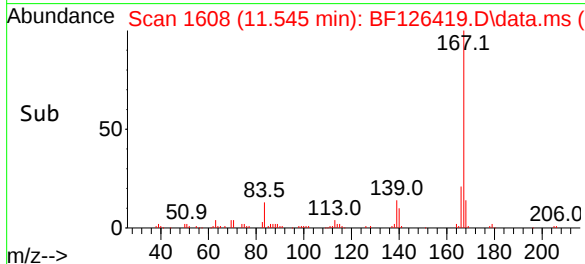


#73  
 Carbazole  
 Concen: 3.378 ng  
 RT: 11.545 min Scan# 1608  
 Delta R.T. -0.006 min  
 Lab File: BF126419.D  
 Acq: 30 Dec 2021 14:47

Instrument :  
 BNA\_F  
 ClientSampleId :

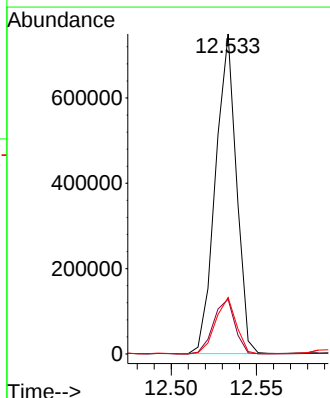
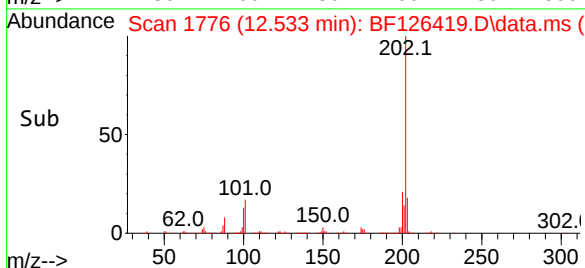
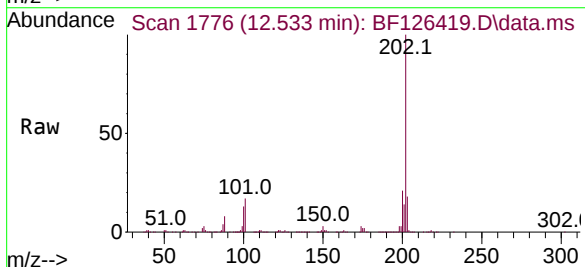


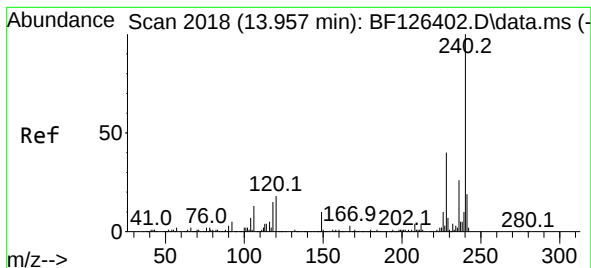
Tgt Ion:167 Resp: 58757  
 Ion Ratio Lower Upper  
 167 100  
 166 20.9 16.9 25.3  
 139 14.0 11.3 16.9



#75  
 Fluoranthene  
 Concen: 39.531 ng  
 RT: 12.533 min Scan# 1776  
 Delta R.T. 0.000 min  
 Lab File: BF126419.D  
 Acq: 30 Dec 2021 14:47

Tgt Ion:202 Resp: 640569  
 Ion Ratio Lower Upper  
 202 100  
 101 17.1 0.0 35.7  
 203 17.6 0.0 37.1





#76

Chrysene-d12

Concen: 20.000 ng

RT: 13.957 min Scan# 20

Delta R.T. 0.000 min

Lab File: BF126419.D

Acq: 30 Dec 2021 14:47

Instrument :

BNA\_F

ClientSampleId :

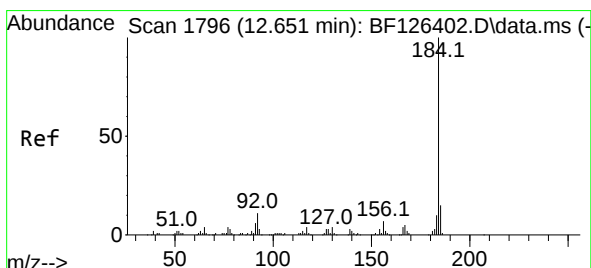
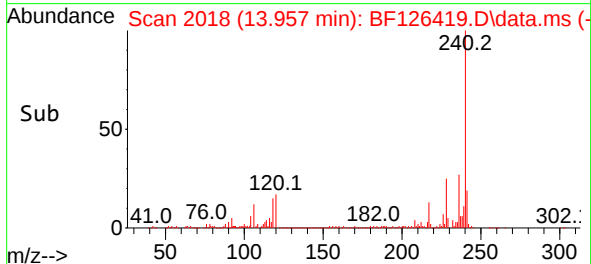
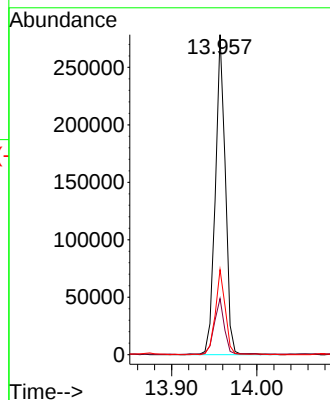
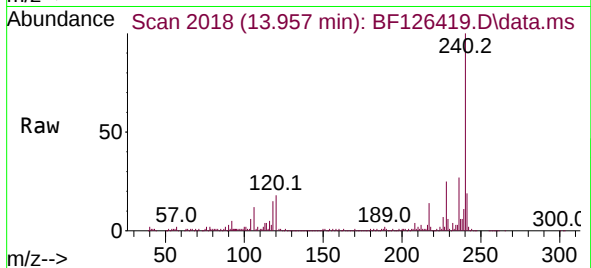
Tgt Ion:240 Resp: 227605

Ion Ratio Lower Upper

240 100

120 17.5 14.4 21.6

236 26.6 20.5 30.7



#77

Benzidine

Concen: Below Cal

RT: 12.904 min Scan# 1839

Delta R.T. 0.253 min

Lab File: BF126419.D

Acq: 30 Dec 2021 14:47

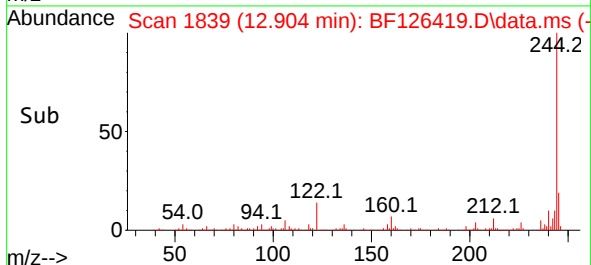
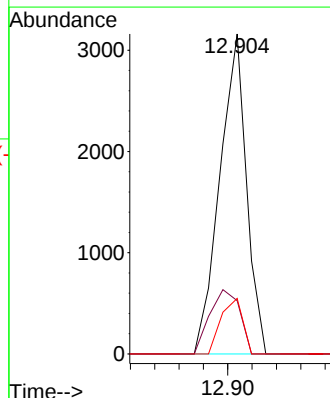
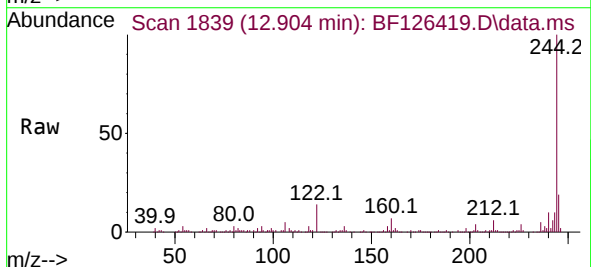
Tgt Ion:184 Resp: 2402

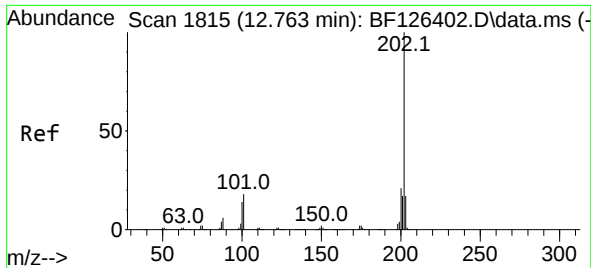
Ion Ratio Lower Upper

184 100

185 16.6 11.8 17.8

183 17.3 8.2 12.2#

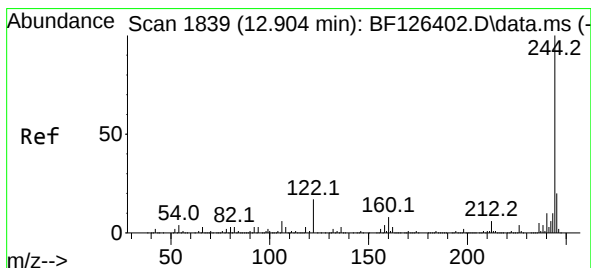
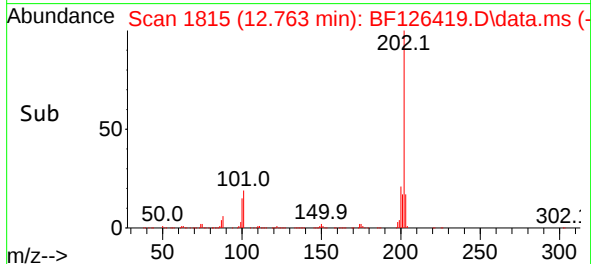
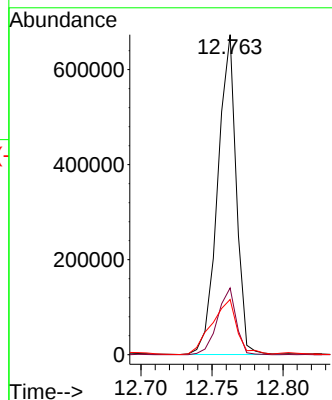
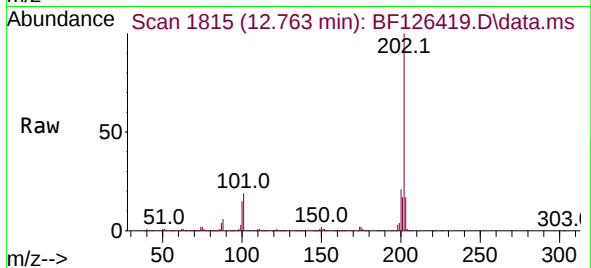




#78  
 Pyrene  
 Concen: 31.742 ng  
 RT: 12.763 min Scan# 1815  
 Delta R.T. 0.000 min  
 Lab File: BF126419.D  
 Acq: 30 Dec 2021 14:47

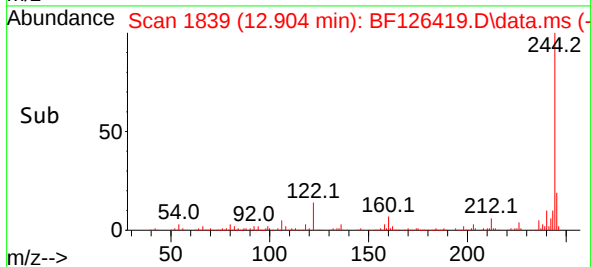
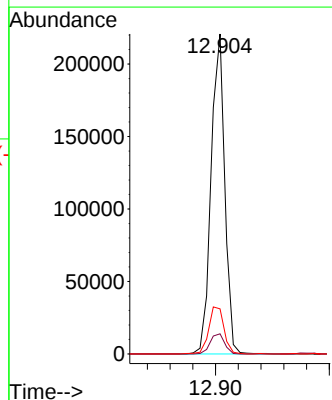
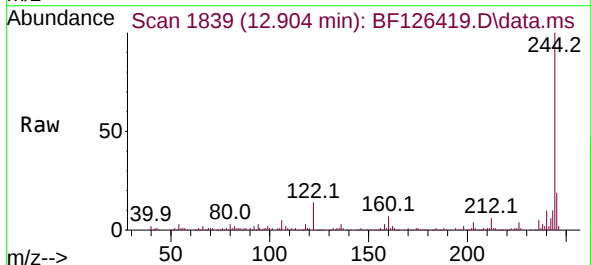
Instrument :  
 BNA\_F  
 ClientSampleId :

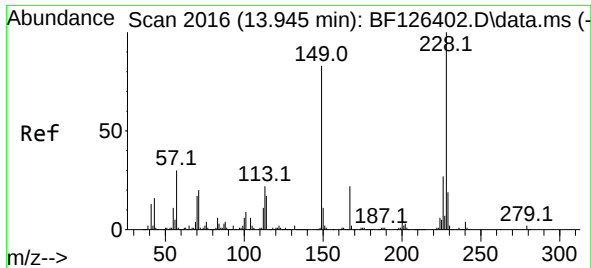
Tgt Ion:202 Resp: 610543  
 Ion Ratio Lower Upper  
 202 100  
 200 20.8 16.6 24.8  
 203 17.2 13.8 20.8



#79  
 Terphenyl-d14  
 Concen: 15.692 ng  
 RT: 12.904 min Scan# 1839  
 Delta R.T. 0.000 min  
 Lab File: BF126419.D  
 Acq: 30 Dec 2021 14:47

Tgt Ion:244 Resp: 183828  
 Ion Ratio Lower Upper  
 244 100  
 212 6.3 5.0 7.4  
 122 14.1 13.3 19.9

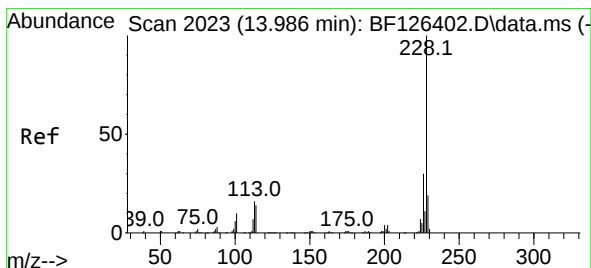
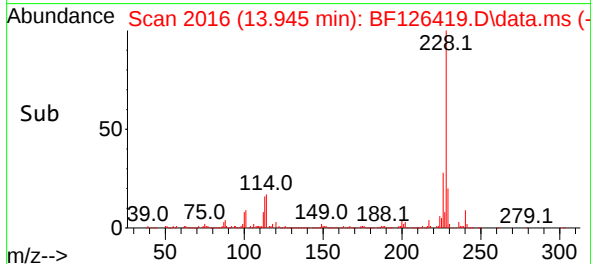
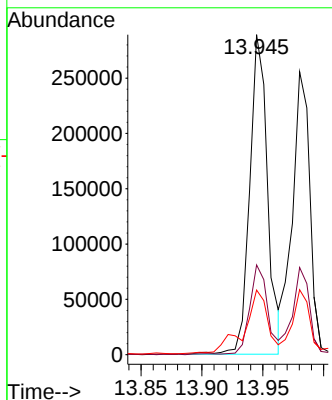
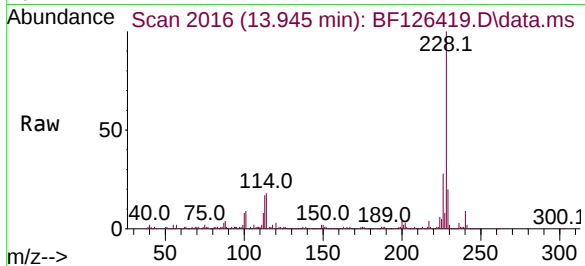




#81  
Benzo(a)anthracene  
Concen: 22.496 ng  
RT: 13.945 min Scan# 2016  
Delta R.T. 0.000 min  
Lab File: BF126419.D  
Acq: 30 Dec 2021 14:47

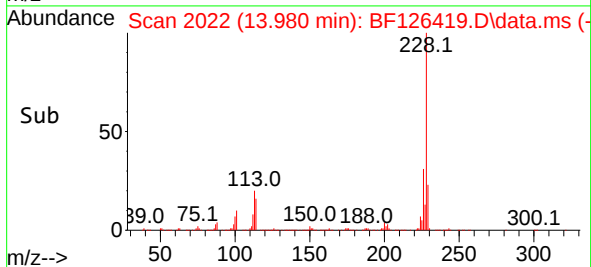
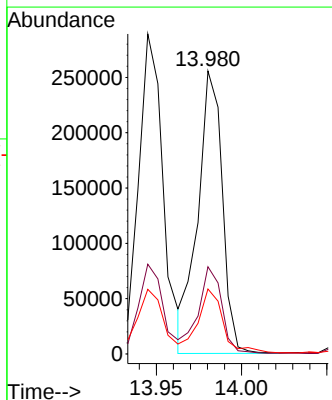
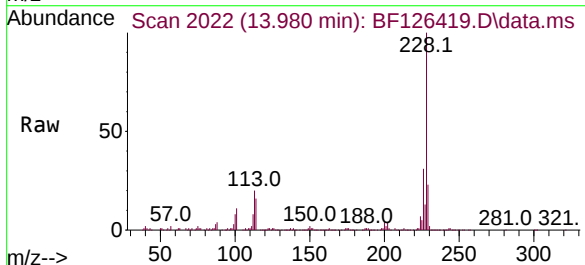
Instrument :  
BNA\_F  
ClientSampleId :

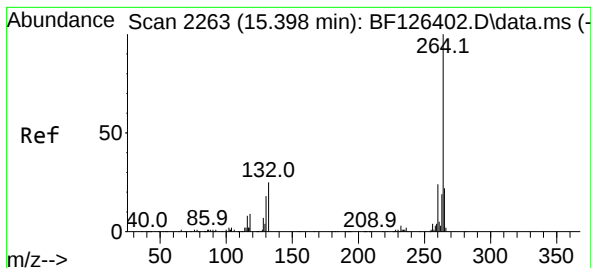
Tgt Ion:228 Resp: 294461  
Ion Ratio Lower Upper  
228 100  
226 28.0 21.4 32.0  
229 20.2 15.4 23.2



#83  
Chrysene  
Concen: 18.997 ng  
RT: 13.980 min Scan# 2022  
Delta R.T. -0.006 min  
Lab File: BF126419.D  
Acq: 30 Dec 2021 14:47

Tgt Ion:228 Resp: 255062  
Ion Ratio Lower Upper  
228 100  
226 30.9 23.7 35.5  
229 23.0 15.5 23.3





#86

Perylene-d12

Concen: 20.000 ng

RT: 15.398 min Scan# 21

Delta R.T. 0.000 min

Lab File: BF126419.D

Acq: 30 Dec 2021 14:47

Instrument :

BNA\_F

ClientSampleId :

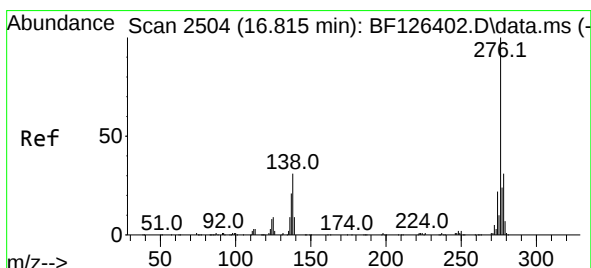
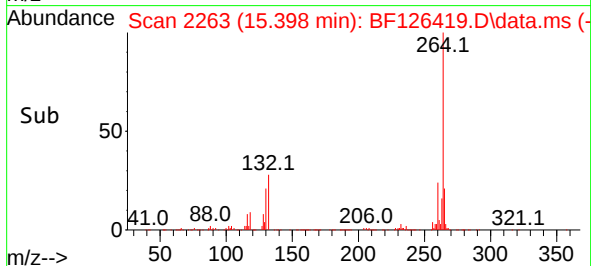
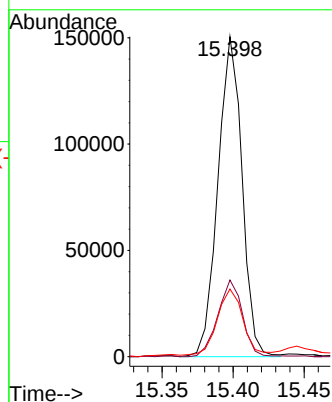
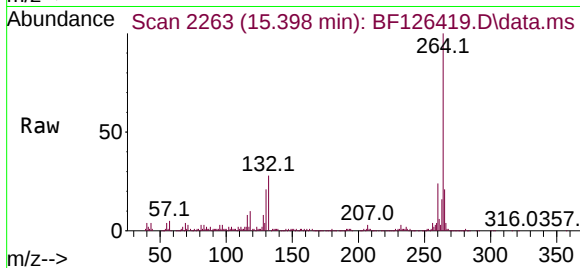
Tgt Ion:264 Resp: 177376

Ion Ratio Lower Upper

264 100

260 24.0 19.2 28.8

265 21.1 17.4 26.2



#87

Indeno(1,2,3-cd)pyrene

Concen: 8.939 ng

RT: 16.810 min Scan# 2503

Delta R.T. -0.006 min

Lab File: BF126419.D

Acq: 30 Dec 2021 14:47

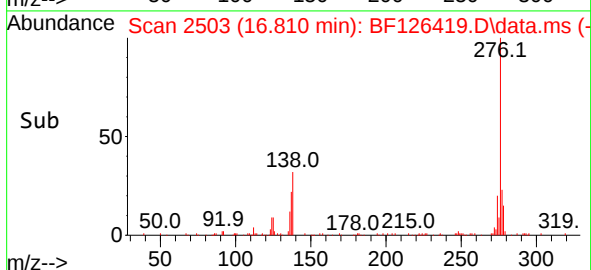
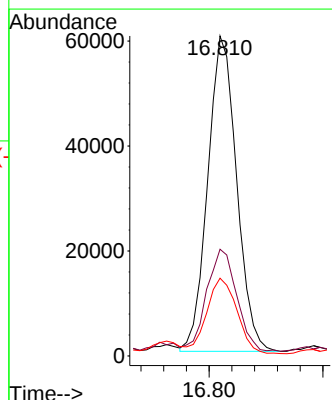
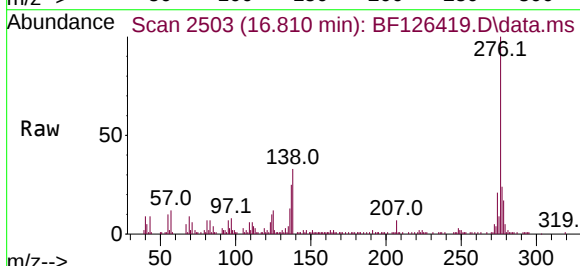
Tgt Ion:276 Resp: 106108

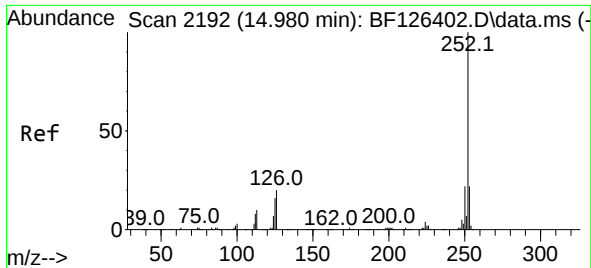
Ion Ratio Lower Upper

276 100

138 34.9 29.2 43.8

277 24.9 19.8 29.8

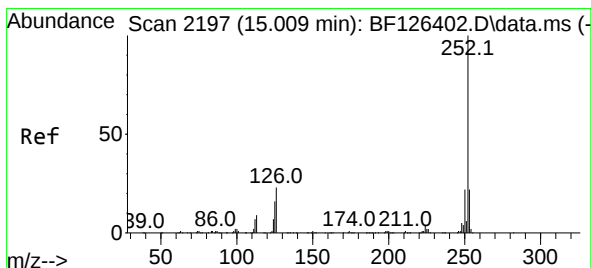
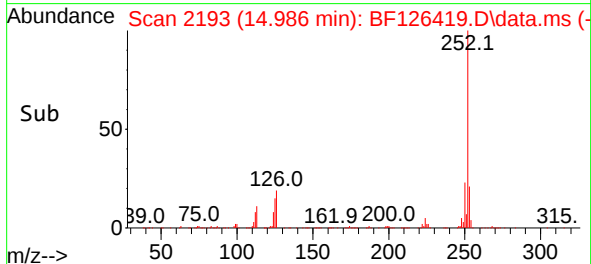
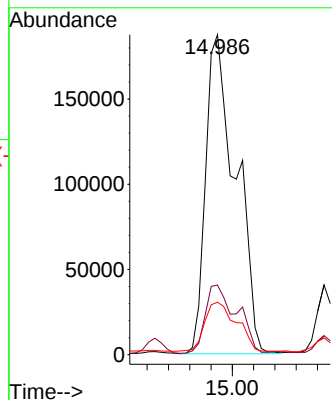
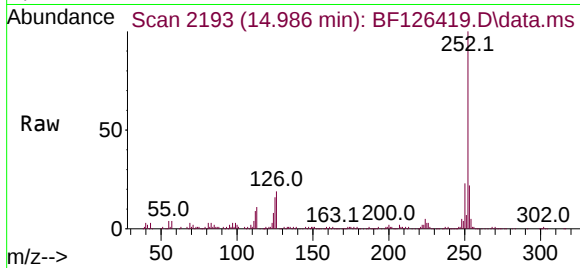




#88  
Benzo(b)fluoranthene  
Concen: 34.880 ng  
RT: 14.986 min Scan# 2193  
Delta R.T. 0.006 min  
Lab File: BF126419.D  
Acq: 30 Dec 2021 14:47

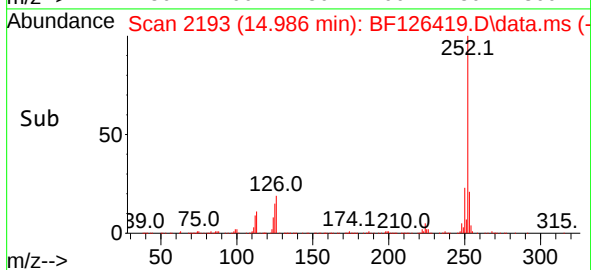
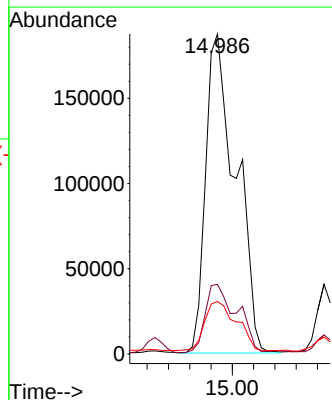
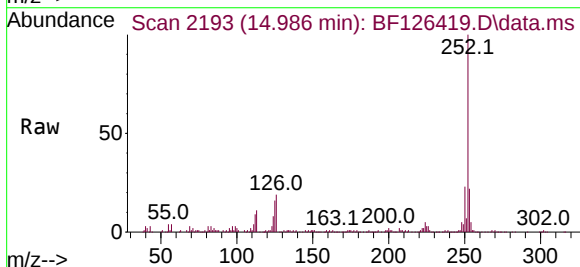
Instrument :  
BNA\_F  
ClientSampleId :

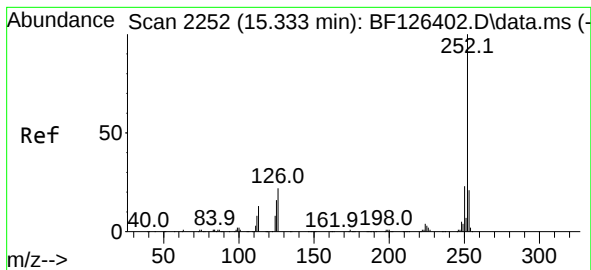
Tgt Ion:252 Resp: 368559  
Ion Ratio Lower Upper  
252 100  
253 21.8 17.8 26.8  
125 16.4 12.4 18.6



#89  
Benzo(k)fluoranthene  
Concen: 36.006 ng  
RT: 14.986 min Scan# 2193  
Delta R.T. -0.023 min  
Lab File: BF126419.D  
Acq: 30 Dec 2021 14:47

Tgt Ion:252 Resp: 368559  
Ion Ratio Lower Upper  
252 100  
253 21.8 17.5 26.3  
125 16.4 11.8 17.6





#90

Benzo(a)pyrene

Concen: 22.512 ng

RT: 15.333 min Scan# 21

Delta R.T. 0.000 min

Lab File: BF126419.D

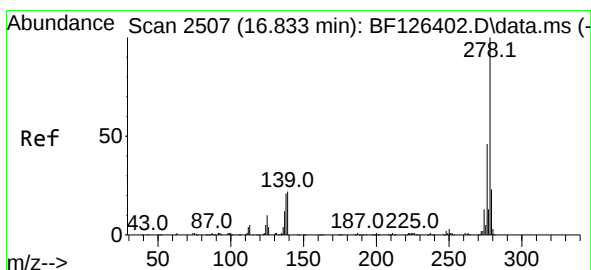
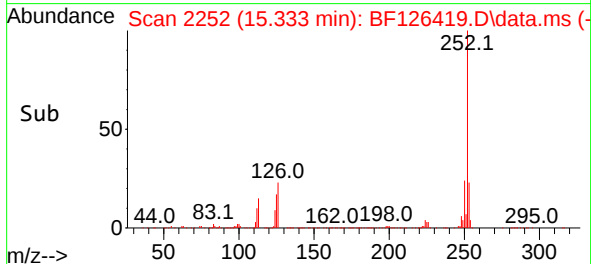
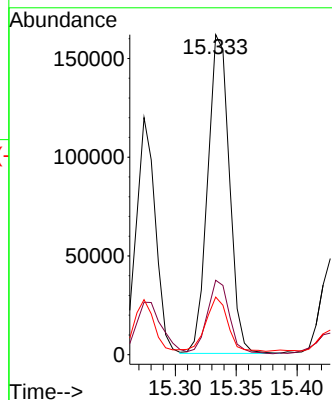
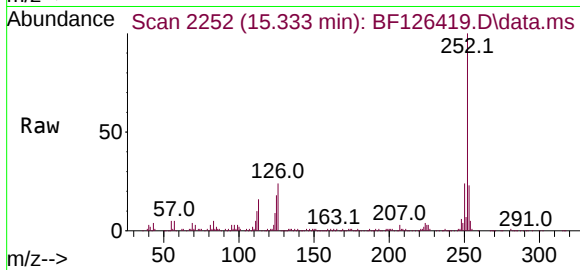
Acq: 30 Dec 2021 14:47

Instrument :

BNA\_F

ClientSampleId :

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 252   | Resp: | 199453 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 23.2  | 17.1  | 25.7   |
| 125       | 18.0  | 13.0  | 19.6   |



#91

Dibenzo(a,h)anthracene

Concen: 2.563 ng

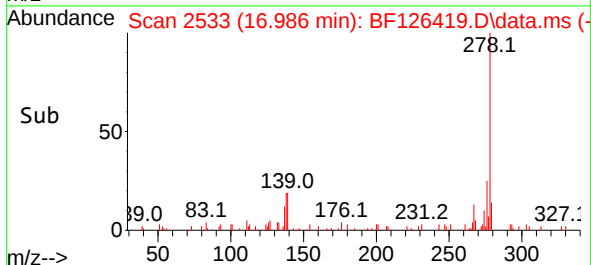
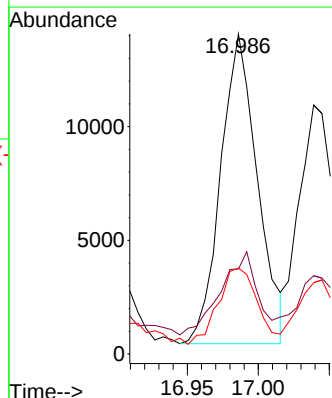
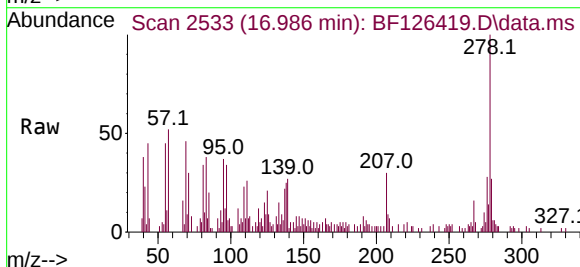
RT: 16.986 min Scan# 2533

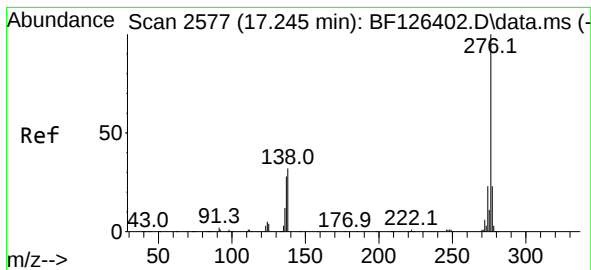
Delta R.T. 0.153 min

Lab File: BF126419.D

Acq: 30 Dec 2021 14:47

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 278   | Resp: | 24549 |
| Ion Ratio | Lower | Upper |       |
| 278       | 100   |       |       |
| 139       | 26.5  | 18.0  | 27.0  |
| 279       | 26.9  | 18.6  | 27.8  |





#92

Benzo(g,h,i)perylene

Concen: 10.517 ng

RT: 17.239 min Scan# 21

Delta R.T. -0.006 min

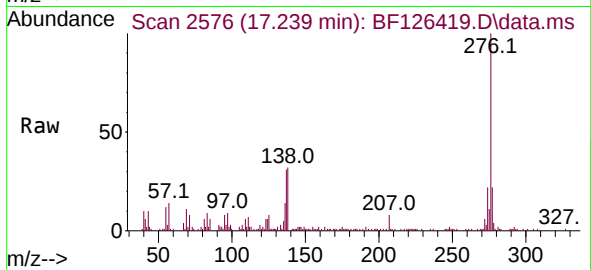
Lab File: BF126419.D

Acq: 30 Dec 2021 14:47

Instrument :

BNA\_F

ClientSampleId :



Tgt Ion:276 Resp: 107270

Ion Ratio Lower Upper

276 100

277 21.7 18.5 27.7

138 32.0 25.9 38.9

