

Data Path : Z:\svoasrv\HPCHEM1\BNA\_F\Data\BF070125\  
 Data File : BF142958.D  
 Acq On : 01 Jul 2025 19:32  
 Operator : RC/JU  
 Sample : Q2450-01 5X  
 Misc :  
 ALS Vial : 19 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 PL-2-062725

Quant Time: Jul 02 01:03:42 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_F\Methods\8270-BF061925.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Jun 24 05:28:21 2025  
 Response via : Initial Calibration

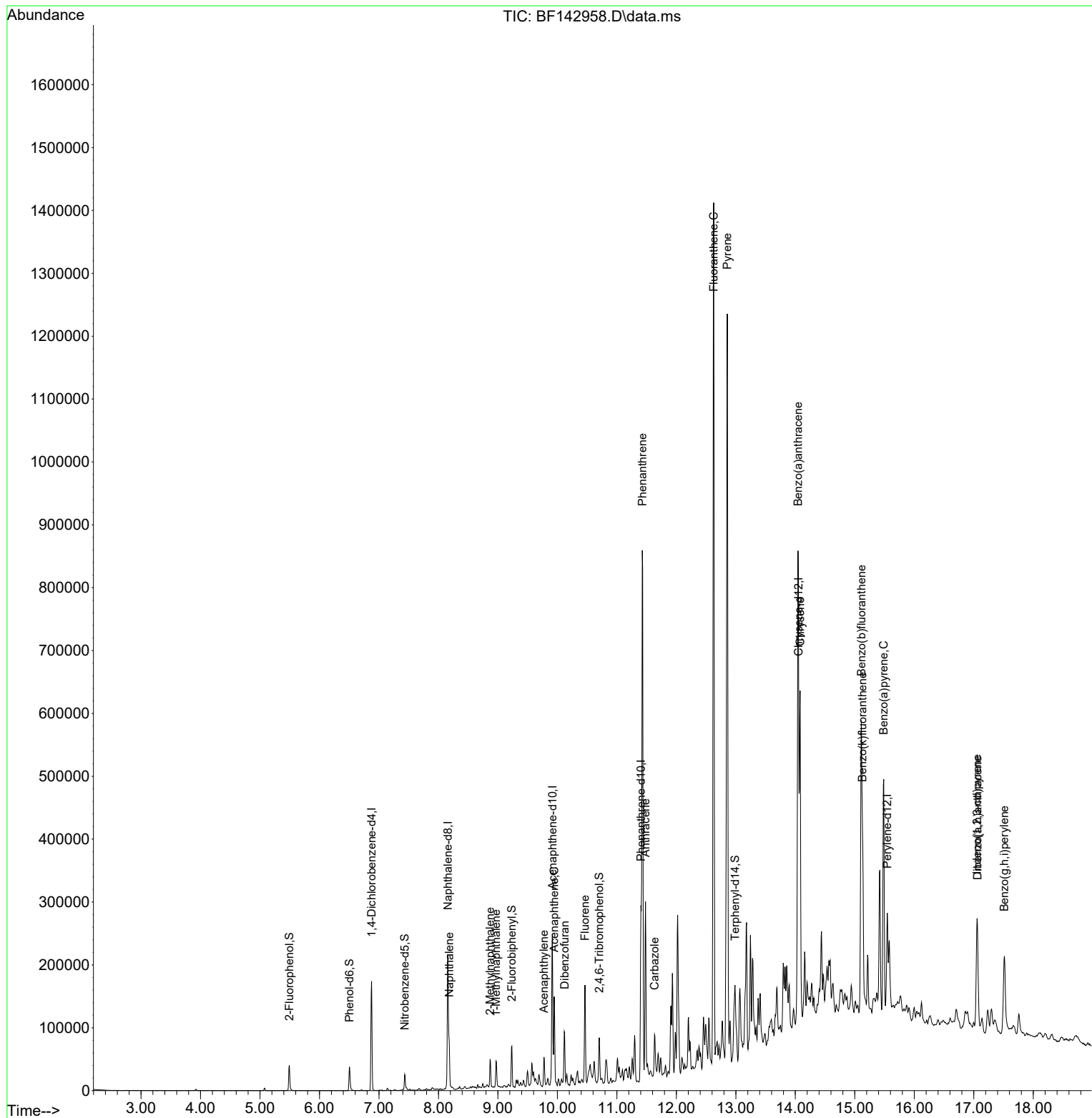
| Compound                    | R.T.   | QIon | Response | Conc    | Units | Dev(Min) |
|-----------------------------|--------|------|----------|---------|-------|----------|
| Internal Standards          |        |      |          |         |       |          |
| 1) 1,4-Dichlorobenzene-d4   | 6.875  | 152  | 38437    | 20.000  | ng    | 0.00     |
| 21) Naphthalene-d8          | 8.157  | 136  | 134866   | 20.000  | ng    | -0.01    |
| 39) Acenaphthene-d10        | 9.916  | 164  | 72232    | 20.000  | ng    | 0.00     |
| 64) Phenanthrene-d10        | 11.404 | 188  | 141902   | 20.000  | ng    | 0.00     |
| 76) Chrysene-d12            | 14.057 | 240  | 110597   | 20.000  | ng    | 0.00     |
| 86) Perylene-d12            | 15.545 | 264  | 85135    | 20.000  | ng    | # 0.00   |
| System Monitoring Compounds |        |      |          |         |       |          |
| 5) 2-Fluorophenol           | 5.493  | 112  | 18514    | 8.019   | ng    | 0.00     |
| 7) Phenol-d6                | 6.504  | 99   | 20022    | 7.351   | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 7.434  | 82   | 11456    | 4.659   | ng    | -0.01    |
| 42) 2,4,6-Tribromophenol    | 10.704 | 330  | 6568     | 8.836   | ng    | -0.01    |
| 45) 2-Fluorobiphenyl        | 9.233  | 172  | 30281    | 5.507   | ng    | -0.01    |
| 79) Terphenyl-d14           | 12.986 | 244  | 45154    | 5.641   | ng    | -0.01    |
| Target Compounds            |        |      |          |         |       |          |
|                             |        |      |          |         |       | Qvalue   |
| 31) Naphthalene             | 8.181  | 128  | 43279    | 6.556   | ng    | 99       |
| 37) 2-Methylnaphthalene     | 8.869  | 142  | 19181    | 4.687   | ng    | 99       |
| 38) 1-Methylnaphthalene     | 8.969  | 142  | 14386    | 3.396   | ng    | 96       |
| 49) Acenaphthylene          | 9.775  | 152  | 25124    | 3.564   | ng    | 98       |
| 52) Acenaphthene            | 9.945  | 154  | 43267    | 10.060  | ng    | 99       |
| 55) Dibenzofuran            | 10.122 | 168  | 43772    | 7.098   | ng    | 98       |
| 58) Fluorene                | 10.463 | 166  | 62327    | 12.941  | ng    | 97       |
| 71) Phenanthrene            | 11.427 | 178  | 463177   | 60.256  | ng    | 99       |
| 72) Anthracene              | 11.480 | 178  | 157597   | 19.991  | ng    | 100      |
| 73) Carbazole               | 11.633 | 167  | 36433    | 5.355   | ng    | 100      |
| 75) Fluoranthene            | 12.627 | 202  | 818256   | 112.164 | ng    | 100      |
| 78) Pyrene                  | 12.857 | 202  | 717037   | 69.167  | ng    | 98       |
| 81) Benzo(a)anthracene      | 14.045 | 228  | 368126   | 49.340  | ng    | 97       |
| 83) Chrysene                | 14.080 | 228  | 265458   | 39.873  | ng    | 98       |
| 87) Indeno(1,2,3-cd)pyrene  | 17.056 | 276  | 129715m  | 20.003  | ng    |          |
| 88) Benzo(b)fluoranthene    | 15.110 | 252  | 330904m  | 67.171  | ng    |          |
| 89) Benzo(k)fluoranthene    | 15.127 | 252  | 100195m  | 21.739  | ng    |          |
| 90) Benzo(a)pyrene          | 15.486 | 252  | 225949   | 47.477  | ng    | 99       |
| 91) Dibenzo(a,h)anthracene  | 17.062 | 278  | 32399    | 6.149   | ng    | # 78     |
| 92) Benzo(g,h,i)perylene    | 17.515 | 276  | 121075   | 23.045  | ng    | 97       |

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

Data Path : Z:\svoasrv\HPCHEM1\BNA\_F\Data\BF070125\  
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Sample : Q2450-01 5X  
Misc :  
ALS Vial : 19 Sample Multiplier: 1

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BNA\_F  
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PL-2-062725

Quant Time: Jul 02 01:03:42 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_F\Methods\8270-BF061925.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Tue Jun 24 05:28:21 2025  
Response via : Initial Calibration

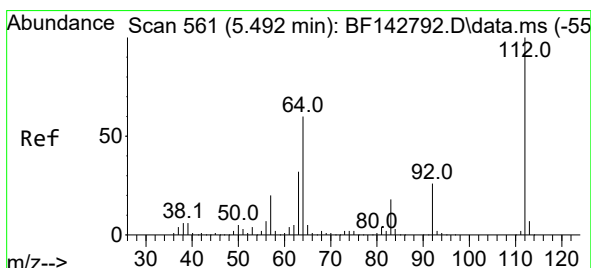
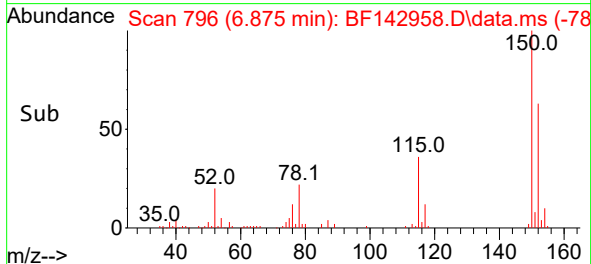
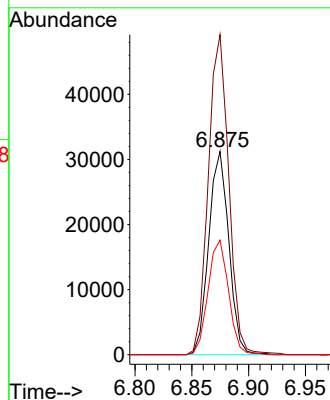
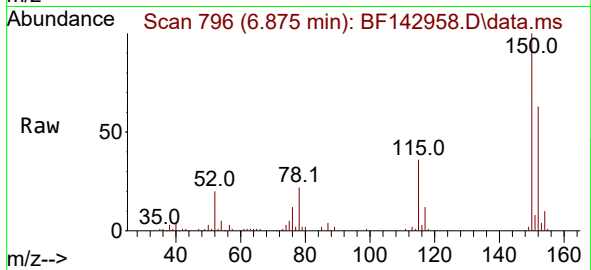




#1  
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.875 min Scan# 797  
Delta R.T. -0.006 min  
Lab File: BF142958.D  
Acq: 01 Jul 2025 19:32

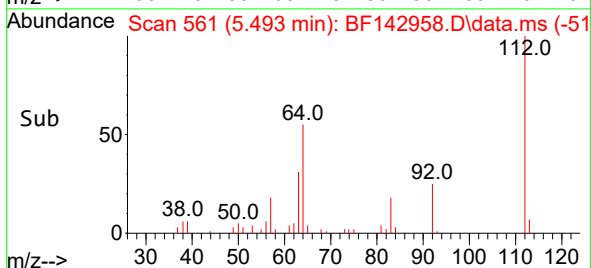
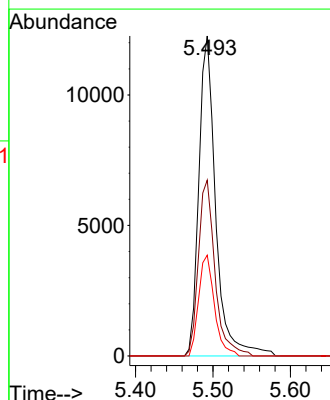
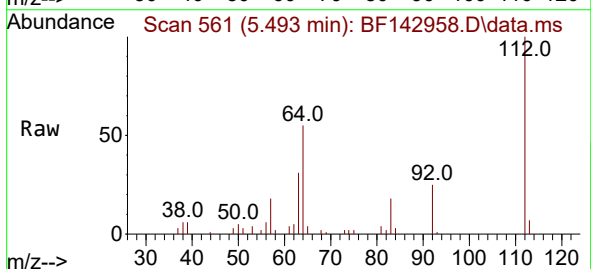
Instrument :  
BNA\_F  
ClientSampleId :  
PL-2-062725

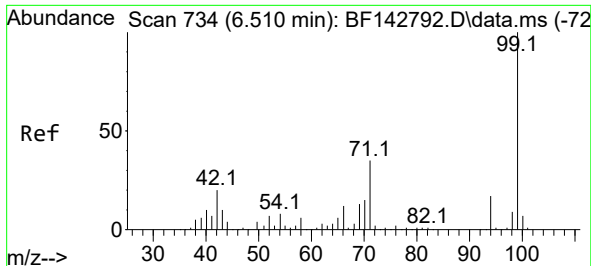
Tgt Ion:152 Resp: 38437  
Ion Ratio Lower Upper  
152 100  
150 157.5 127.2 190.8  
115 56.4 46.6 69.8



#5  
2-Fluorophenol  
Concen: 8.019 ng  
RT: 5.493 min Scan# 561  
Delta R.T. 0.001 min  
Lab File: BF142958.D  
Acq: 01 Jul 2025 19:32

Tgt Ion:112 Resp: 18514  
Ion Ratio Lower Upper  
112 100  
64 54.9 48.2 72.2  
63 31.5 25.7 38.5

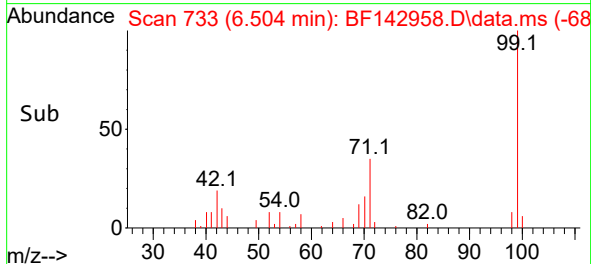
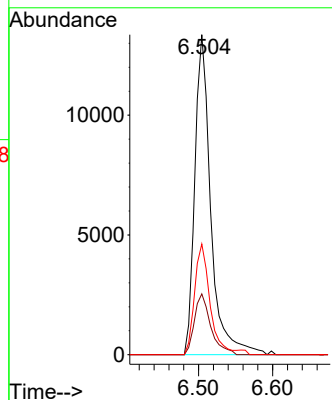
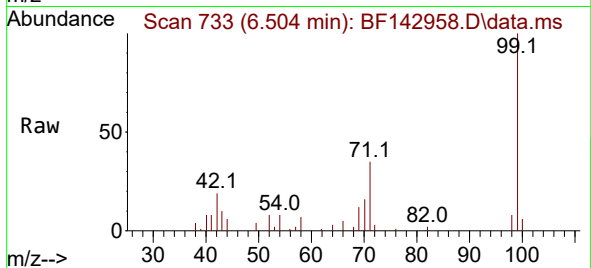




#7  
Phenol-d6  
Concen: 7.351 ng  
RT: 6.504 min Scan# 71  
Delta R.T. -0.006 min  
Lab File: BF142958.D  
Acq: 01 Jul 2025 19:32

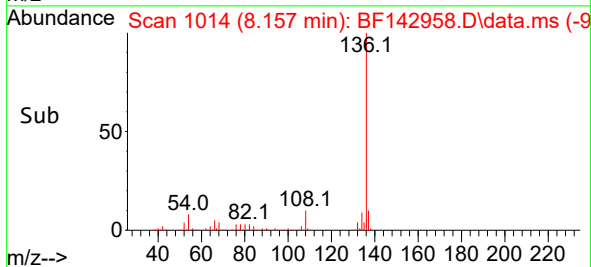
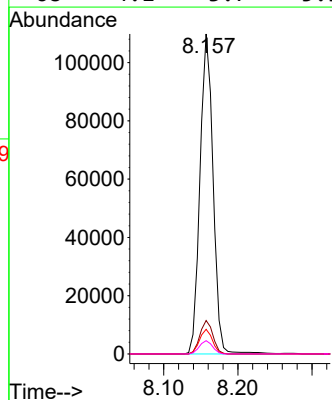
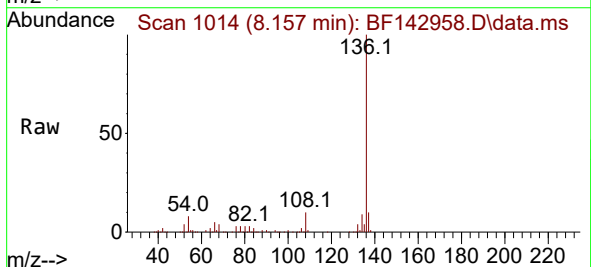
Instrument :  
BNA\_F  
ClientSampleId :  
PL-2-062725

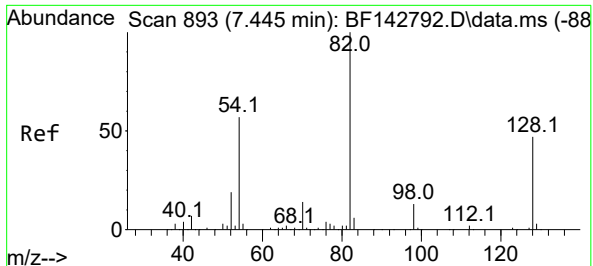
Tgt Ion: 99 Resp: 20022  
Ion Ratio Lower Upper  
99 100  
42 19.0 15.9 23.9  
71 34.6 27.8 41.8



#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 8.157 min Scan# 1014  
Delta R.T. -0.012 min  
Lab File: BF142958.D  
Acq: 01 Jul 2025 19:32

Tgt Ion: 136 Resp: 134866  
Ion Ratio Lower Upper  
136 100  
137 10.5 8.4 12.6  
54 7.7 6.3 9.5  
68 4.1 3.7 5.5





#23

Nitrobenzene-d5

Concen: 4.659 ng

RT: 7.434 min Scan# 89

Delta R.T. -0.011 min

Lab File: BF142958.D

Acq: 01 Jul 2025 19:32

Instrument :

BNA\_F

ClientSampleId :

PL-2-062725

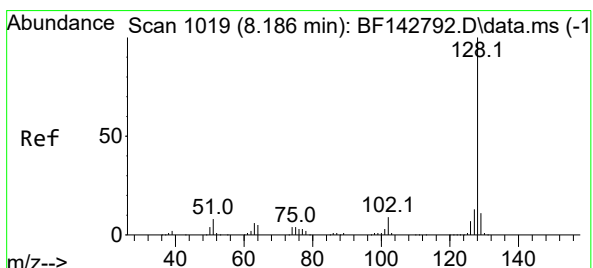
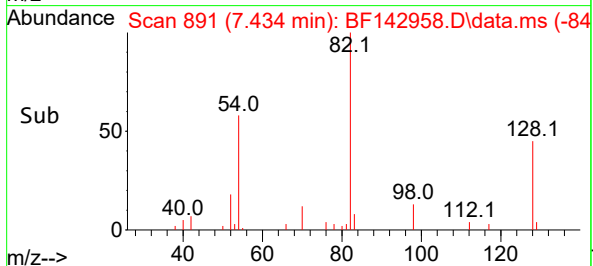
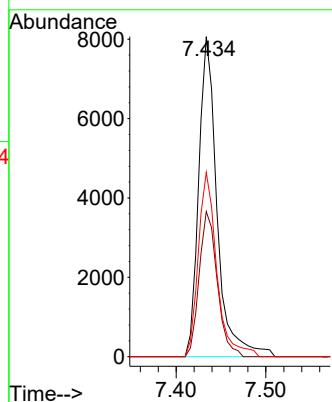
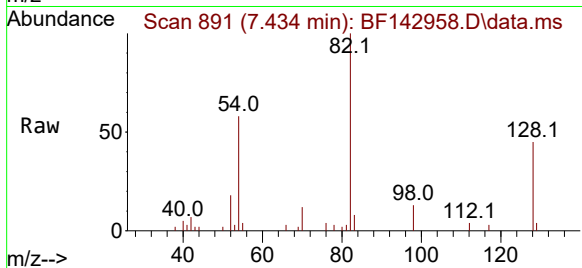
Tgt Ion: 82 Resp: 11456

Ion Ratio Lower Upper

82 100

128 45.3 37.7 56.5

54 57.6 45.7 68.5



#31

Naphthalene

Concen: 6.556 ng

RT: 8.181 min Scan# 1018

Delta R.T. -0.006 min

Lab File: BF142958.D

Acq: 01 Jul 2025 19:32

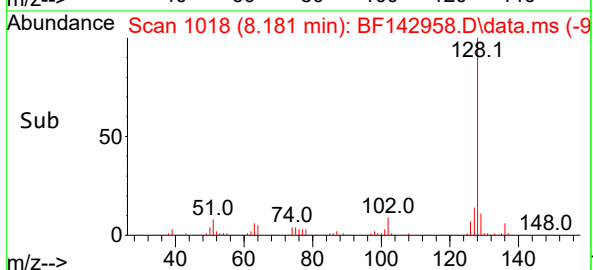
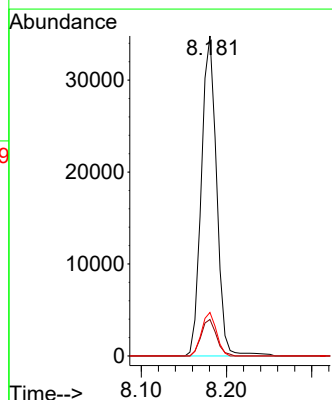
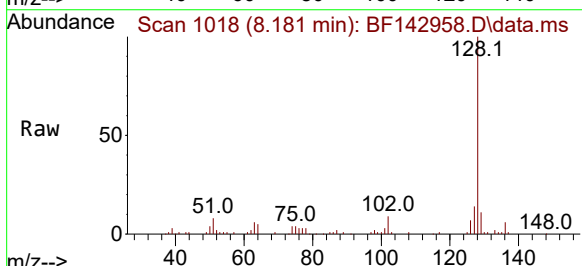
Tgt Ion: 128 Resp: 43279

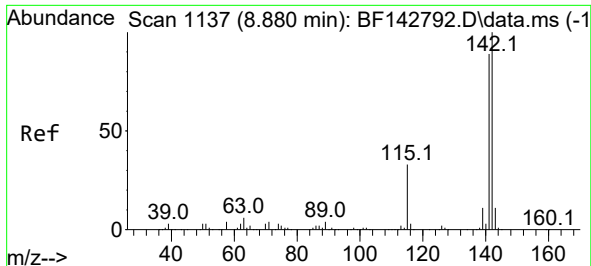
Ion Ratio Lower Upper

128 100

129 11.4 8.9 13.3

127 13.6 10.4 15.6

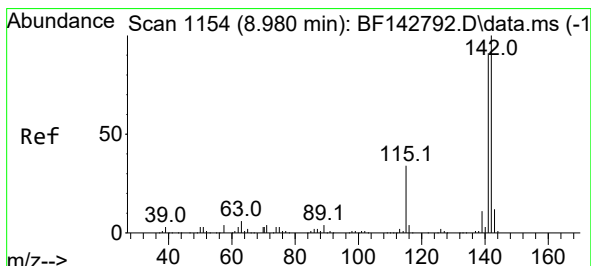
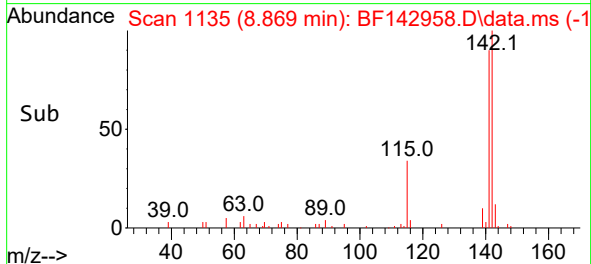
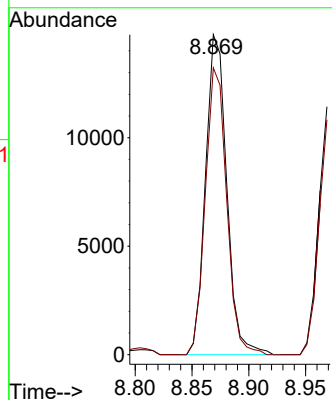
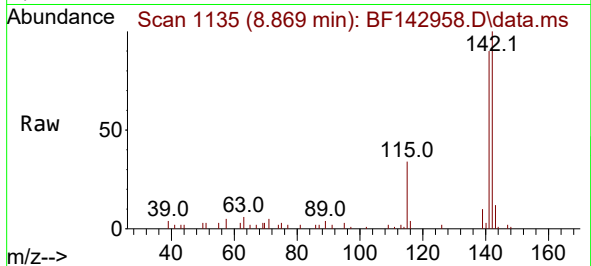




#37  
2-Methylnaphthalene  
Concen: 4.687 ng  
RT: 8.869 min Scan# 1135  
Delta R.T. -0.012 min  
Lab File: BF142958.D  
Acq: 01 Jul 2025 19:32

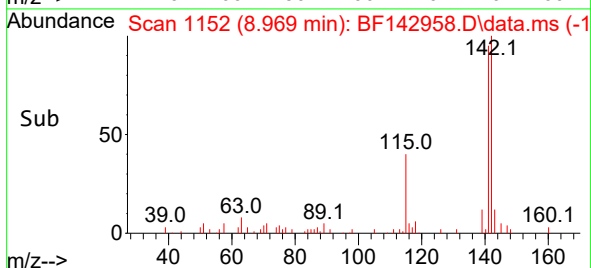
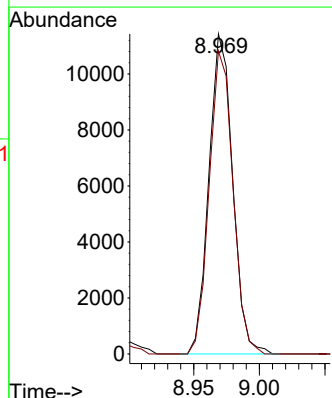
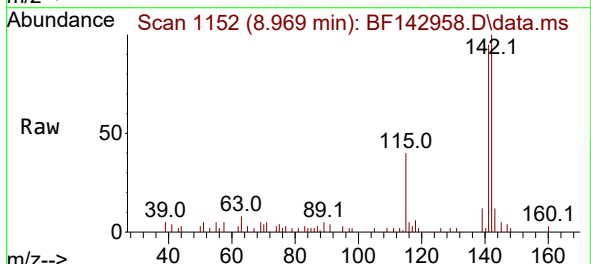
Instrument :  
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PL-2-062725

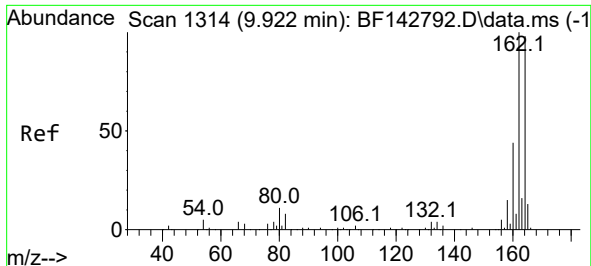
Tgt Ion:142 Resp: 19181  
Ion Ratio Lower Upper  
142 100  
141 89.6 70.9 106.3



#38  
1-Methylnaphthalene  
Concen: 3.396 ng  
RT: 8.969 min Scan# 1152  
Delta R.T. -0.012 min  
Lab File: BF142958.D  
Acq: 01 Jul 2025 19:32

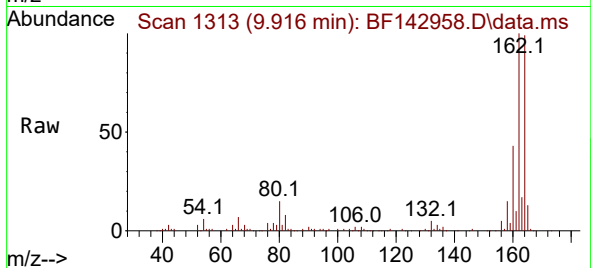
Tgt Ion:142 Resp: 14386  
Ion Ratio Lower Upper  
142 100  
141 94.7 73.0 109.4



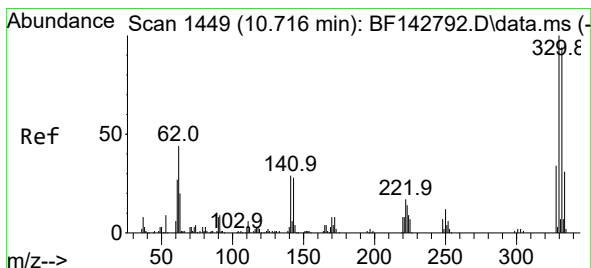
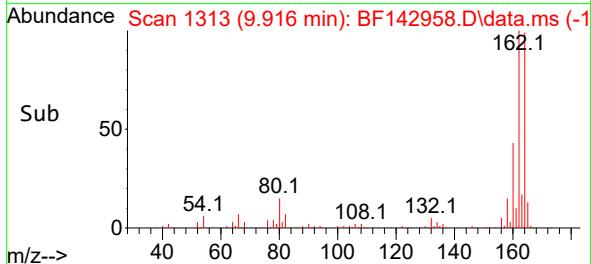
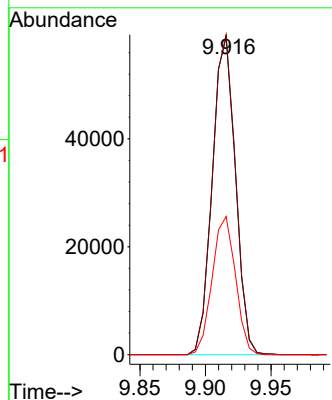


#39  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 9.916 min Scan# 11  
Delta R.T. -0.006 min  
Lab File: BF142958.D  
Acq: 01 Jul 2025 19:32

Instrument :  
BNA\_F  
ClientSampleId :  
PL-2-062725

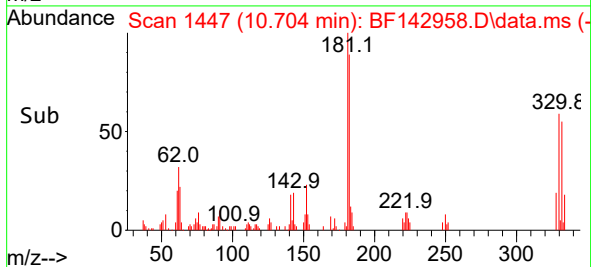
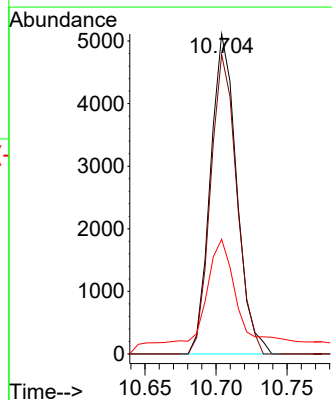
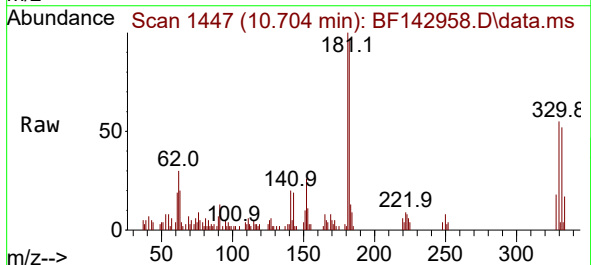


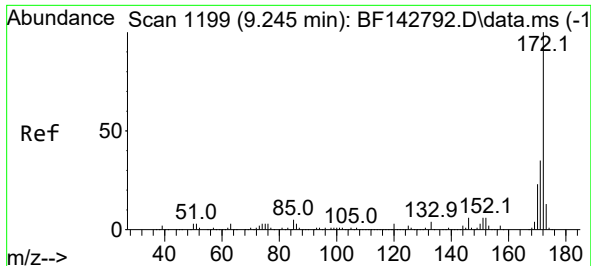
Tgt Ion:164 Resp: 72232  
Ion Ratio Lower Upper  
164 100  
162 100.8 81.8 122.8  
160 43.6 36.0 54.0



#42  
2,4,6-Tribromophenol  
Concen: 8.836 ng  
RT: 10.704 min Scan# 1447  
Delta R.T. -0.012 min  
Lab File: BF142958.D  
Acq: 01 Jul 2025 19:32

Tgt Ion:330 Resp: 6568  
Ion Ratio Lower Upper  
330 100  
332 93.1 75.0 112.6  
141 57.5 25.3 37.9#





#45

2-Fluorobiphenyl

Concen: 5.507 ng

RT: 9.233 min Scan# 1197

Delta R.T. -0.012 min

Lab File: BF142958.D

Acq: 01 Jul 2025 19:32

Instrument :

BNA\_F

ClientSampleId :

PL-2-062725

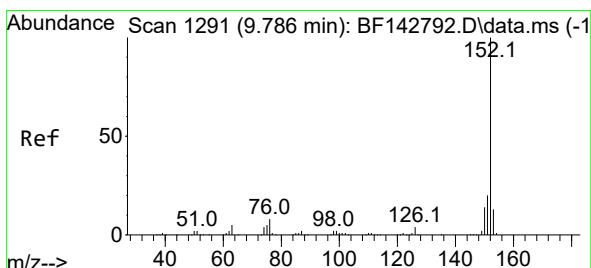
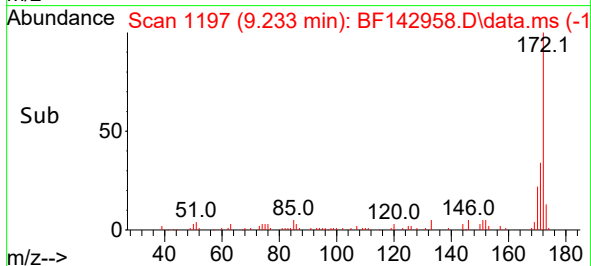
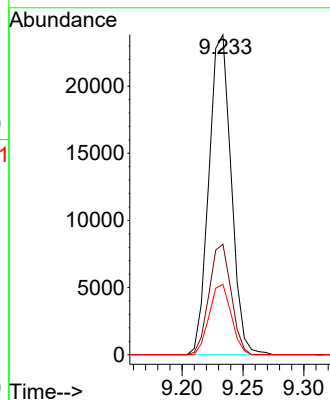
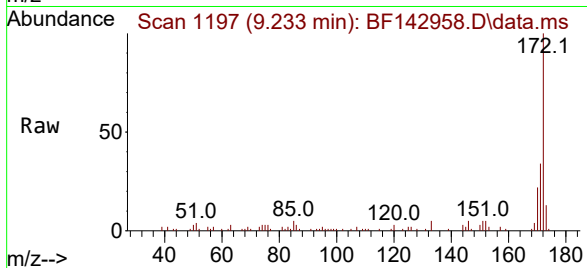
Tgt Ion:172 Resp: 30281

Ion Ratio Lower Upper

172 100

171 34.5 28.2 42.4

170 22.0 18.5 27.7



#49

Acenaphthylene

Concen: 3.564 ng

RT: 9.775 min Scan# 1289

Delta R.T. -0.012 min

Lab File: BF142958.D

Acq: 01 Jul 2025 19:32

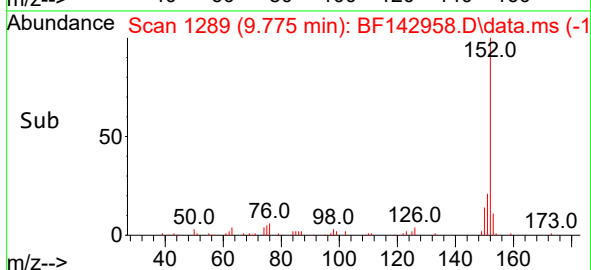
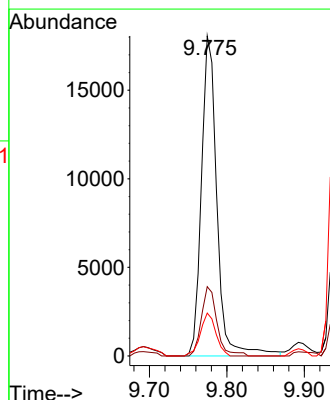
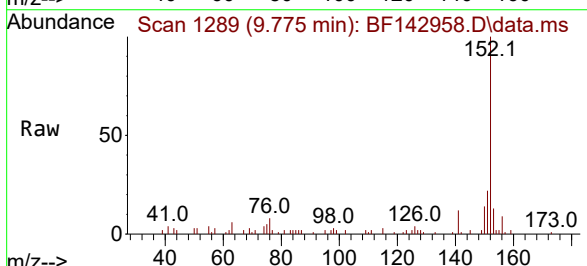
Tgt Ion:152 Resp: 25124

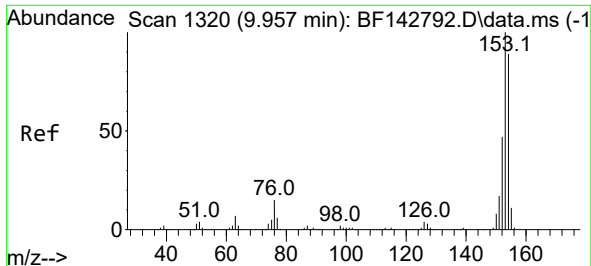
Ion Ratio Lower Upper

152 100

151 21.7 16.1 24.1

153 13.4 10.4 15.6

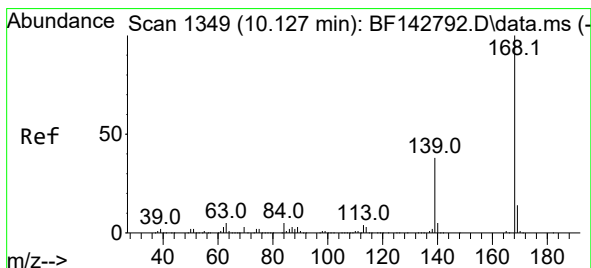
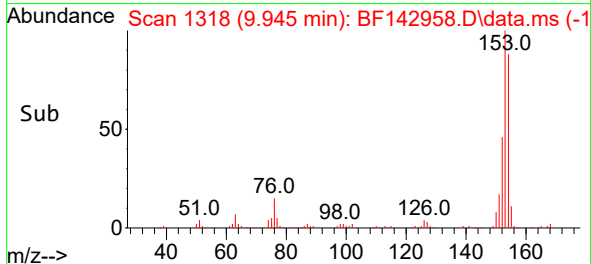
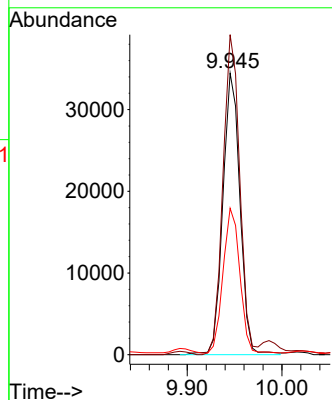
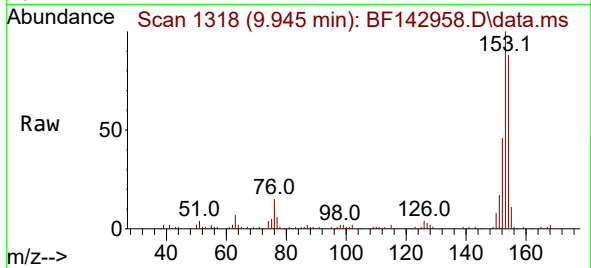




#52  
Acenaphthene  
Concen: 10.060 ng  
RT: 9.945 min Scan# 1318  
Delta R.T. -0.012 min  
Lab File: BF142958.D  
Acq: 01 Jul 2025 19:32

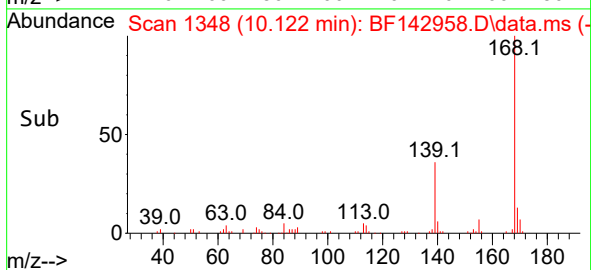
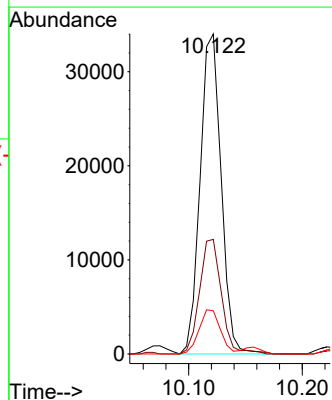
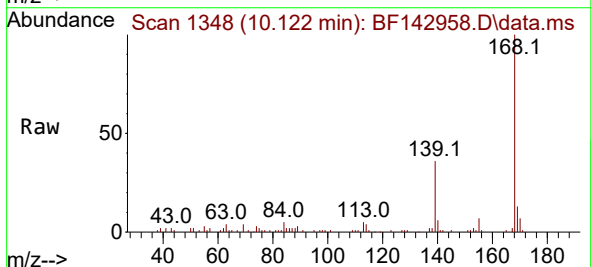
Instrument :  
BNA\_F  
ClientSampleId :  
PL-2-062725

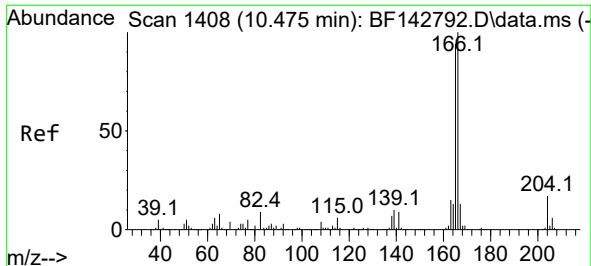
Tgt Ion:154 Resp: 43267  
Ion Ratio Lower Upper  
154 100  
153 113.6 90.0 135.0  
152 52.0 41.9 62.9



#55  
Dibenzofuran  
Concen: 7.098 ng  
RT: 10.122 min Scan# 1348  
Delta R.T. -0.006 min  
Lab File: BF142958.D  
Acq: 01 Jul 2025 19:32

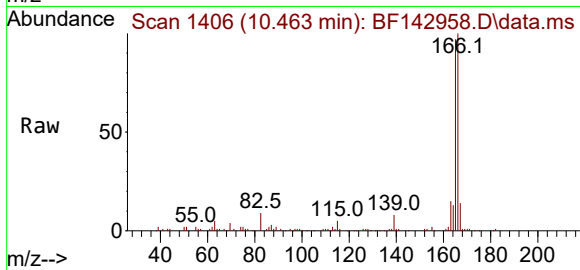
Tgt Ion:168 Resp: 43772  
Ion Ratio Lower Upper  
168 100  
139 35.8 30.2 45.4  
169 13.5 10.8 16.2



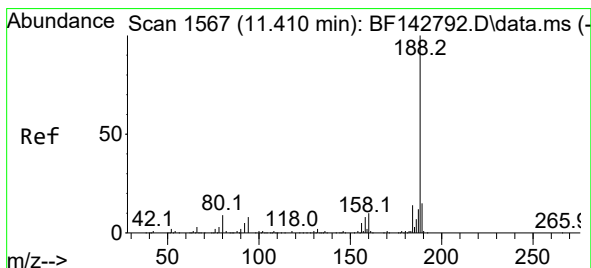
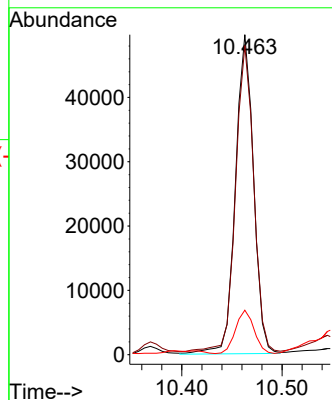
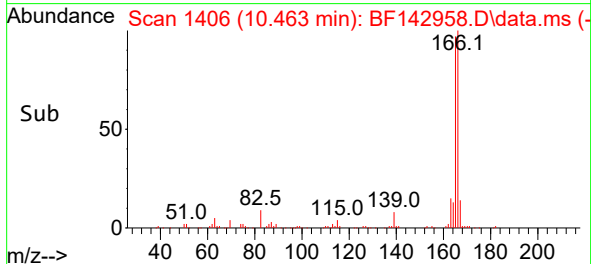


#58  
Fluorene  
Concen: 12.941 ng  
RT: 10.463 min Scan# 1408  
Delta R.T. -0.012 min  
Lab File: BF142958.D  
Acq: 01 Jul 2025 19:32

Instrument :  
BNA\_F  
ClientSampleId :  
PL-2-062725

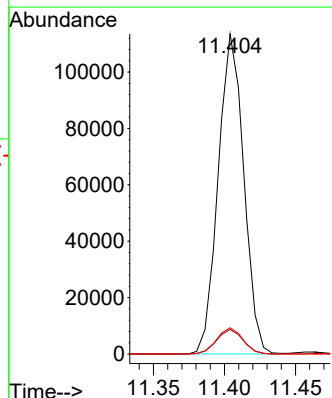
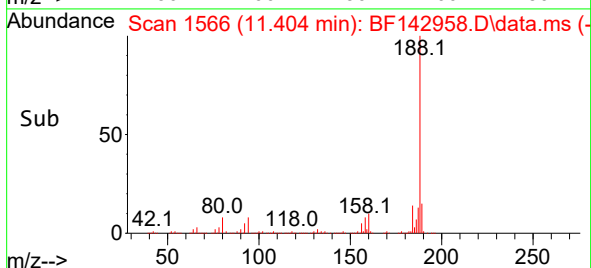
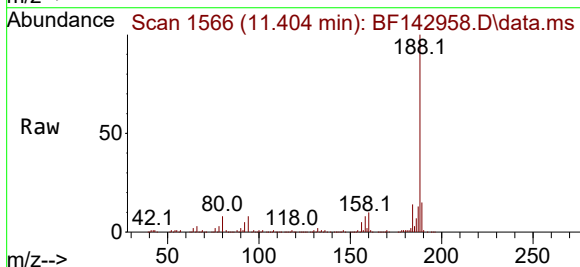


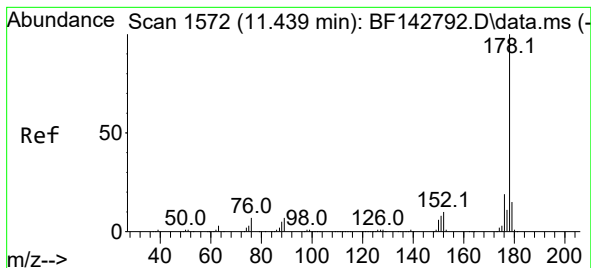
Tgt Ion:166 Resp: 62327  
Ion Ratio Lower Upper  
166 100  
165 96.6 75.2 112.8  
167 13.9 10.6 15.8



#64  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 11.404 min Scan# 1566  
Delta R.T. -0.006 min  
Lab File: BF142958.D  
Acq: 01 Jul 2025 19:32

Tgt Ion:188 Resp: 141902  
Ion Ratio Lower Upper  
188 100  
94 7.6 6.7 10.1  
80 8.2 6.9 10.3





#71

Phenanthrene

Concen: 60.256 ng

RT: 11.427 min Scan# 1

Delta R.T. -0.012 min

Lab File: BF142958.D

Acq: 01 Jul 2025 19:32

Instrument :

BNA\_F

ClientSampleId :

PL-2-062725

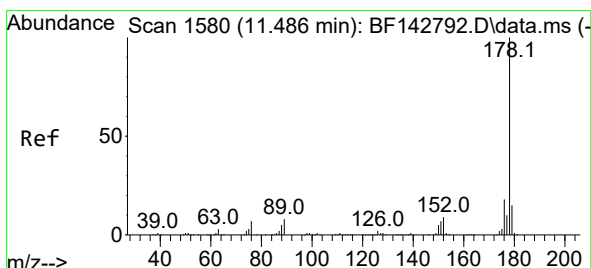
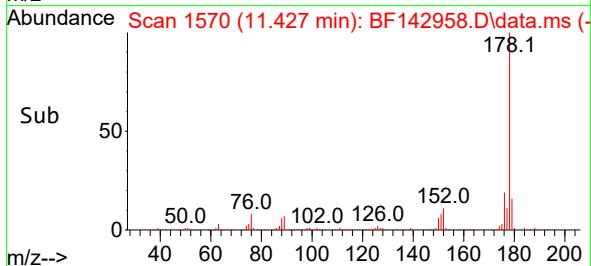
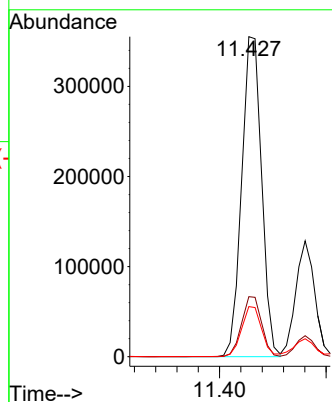
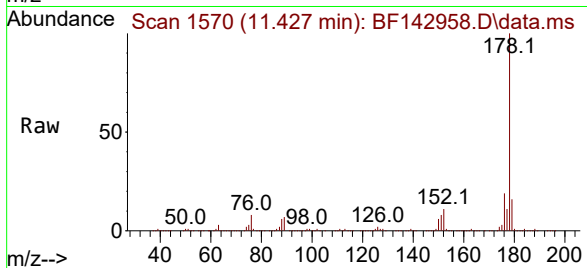
Tgt Ion:178 Resp: 463177

Ion Ratio Lower Upper

178 100

176 18.8 15.1 22.7

179 15.6 12.0 18.0



#72

Anthracene

Concen: 19.991 ng

RT: 11.480 min Scan# 1579

Delta R.T. -0.006 min

Lab File: BF142958.D

Acq: 01 Jul 2025 19:32

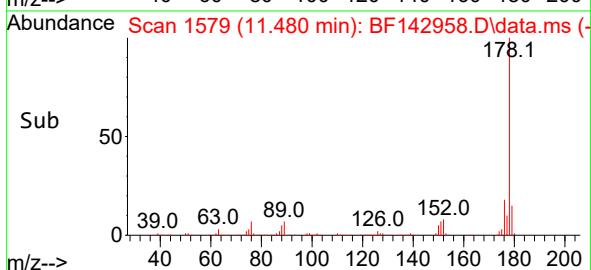
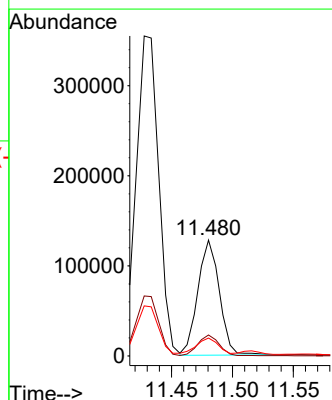
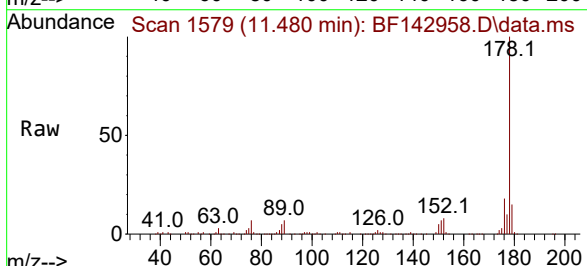
Tgt Ion:178 Resp: 157597

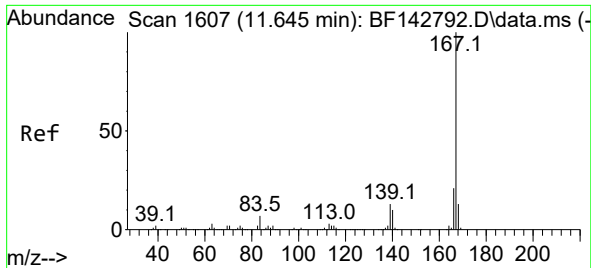
Ion Ratio Lower Upper

178 100

176 18.1 14.6 21.8

179 15.4 12.4 18.6

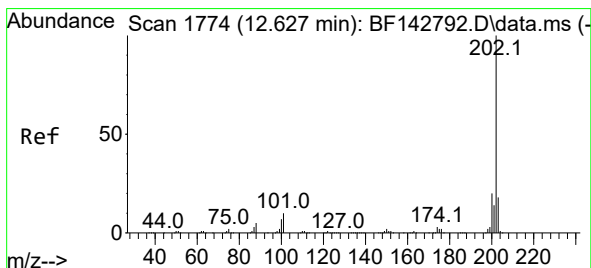
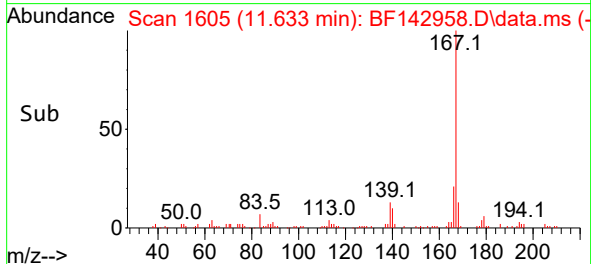
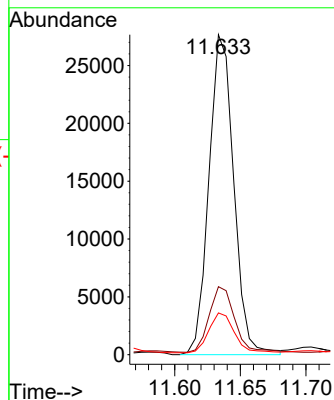
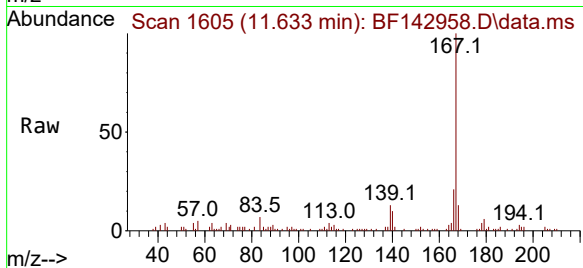




#73  
 Carbazole  
 Concen: 5.355 ng  
 RT: 11.633 min Scan# 1605  
 Delta R.T. -0.012 min  
 Lab File: BF142958.D  
 Acq: 01 Jul 2025 19:32

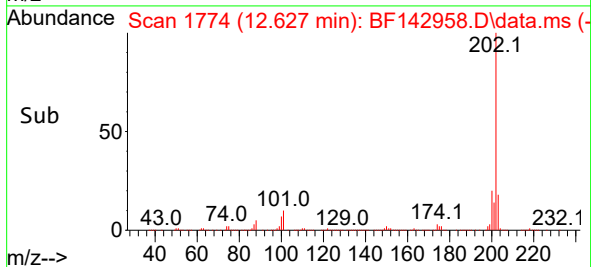
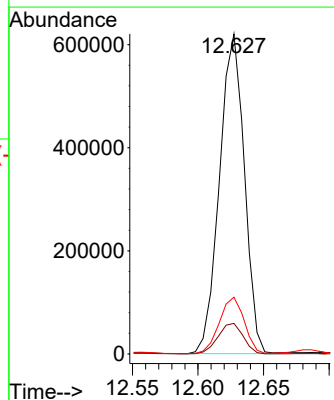
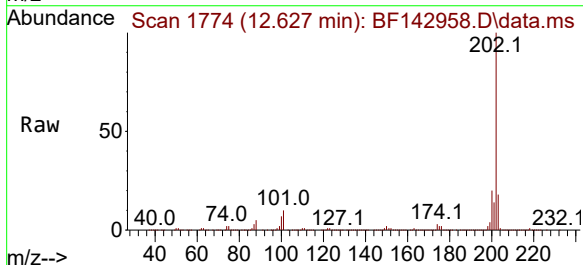
Instrument :  
 BNA\_F  
 ClientSampleId :  
 PL-2-062725

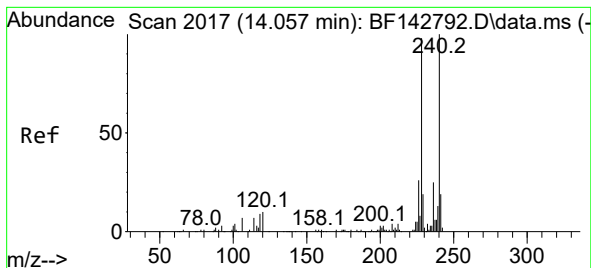
Tgt Ion:167 Resp: 36433  
 Ion Ratio Lower Upper  
 167 100  
 166 21.3 17.0 25.4  
 139 13.1 10.2 15.2



#75  
 Fluoranthene  
 Concen: 112.164 ng  
 RT: 12.627 min Scan# 1774  
 Delta R.T. 0.000 min  
 Lab File: BF142958.D  
 Acq: 01 Jul 2025 19:32

Tgt Ion:202 Resp: 818256  
 Ion Ratio Lower Upper  
 202 100  
 101 9.6 0.0 29.7  
 203 17.7 0.0 37.5





#76

Chrysene-d12

Concen: 20.000 ng

RT: 14.057 min Scan# 2017

Delta R.T. 0.000 min

Lab File: BF142958.D

Acq: 01 Jul 2025 19:32

Instrument :

BNA\_F

ClientSampleId :

PL-2-062725

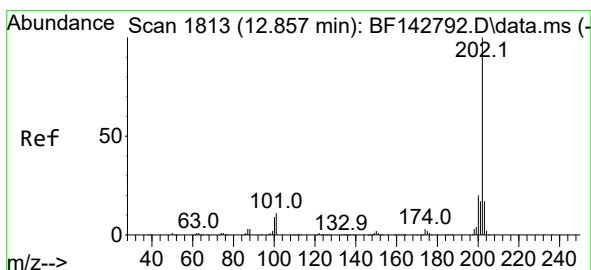
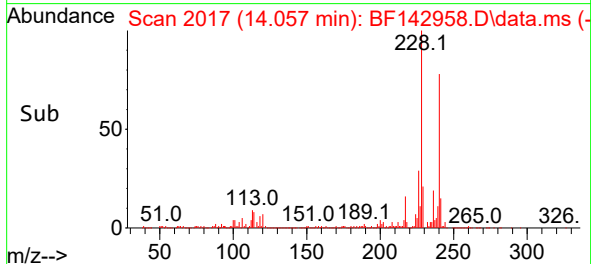
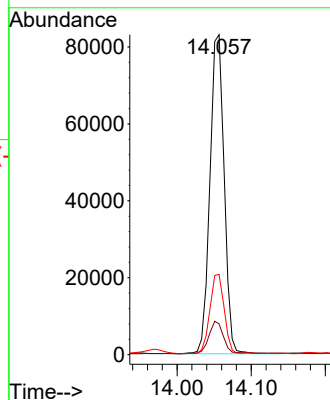
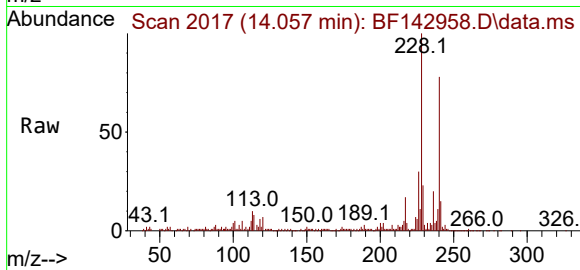
Tgt Ion:240 Resp: 110597

Ion Ratio Lower Upper

240 100

120 9.6 8.2 12.2

236 25.1 19.8 29.8



#78

Pyrene

Concen: 69.167 ng

RT: 12.857 min Scan# 1813

Delta R.T. 0.000 min

Lab File: BF142958.D

Acq: 01 Jul 2025 19:32

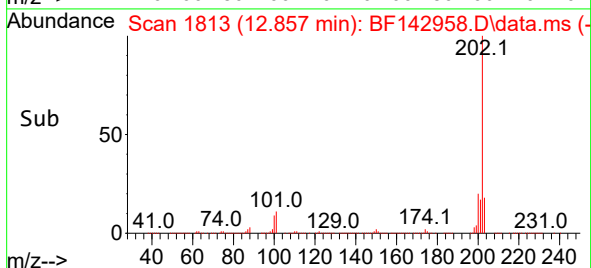
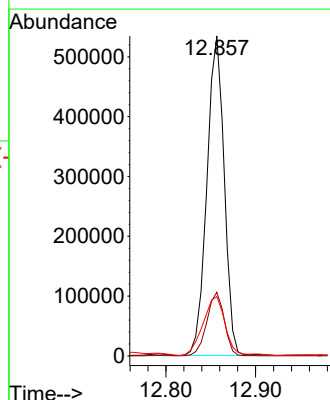
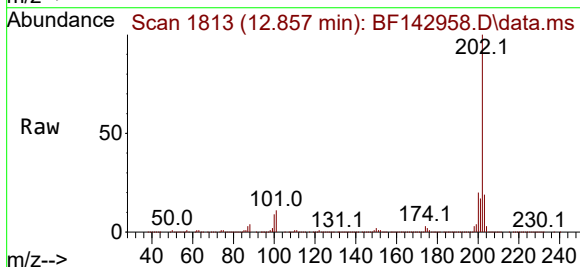
Tgt Ion:202 Resp: 717037

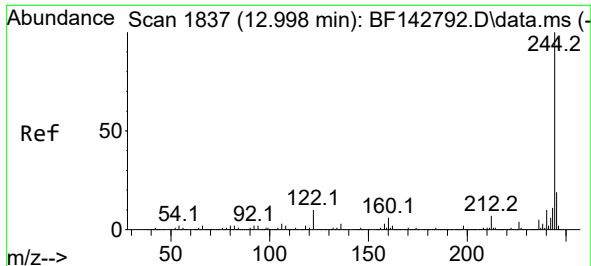
Ion Ratio Lower Upper

202 100

200 19.9 15.7 23.5

203 18.5 13.8 20.6

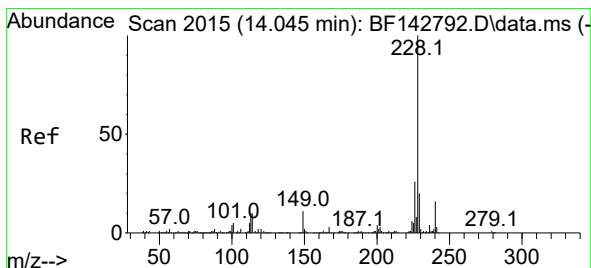
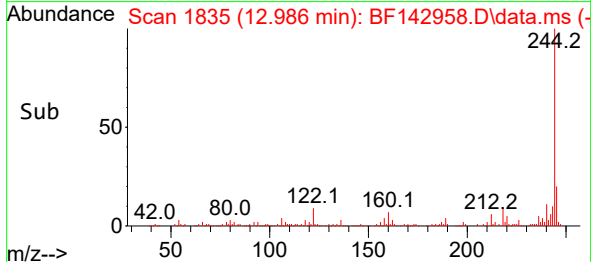
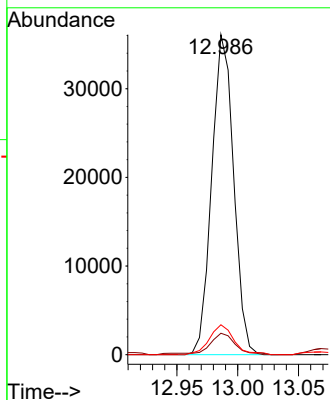
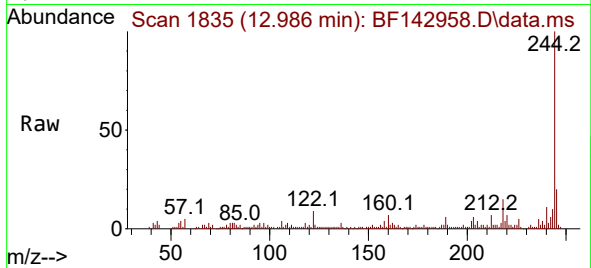




#79  
 Terphenyl-d14  
 Concen: 5.641 ng  
 RT: 12.986 min Scan# 1835  
 Delta R.T. -0.012 min  
 Lab File: BF142958.D  
 Acq: 01 Jul 2025 19:32

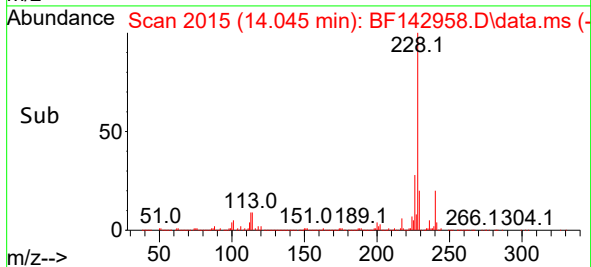
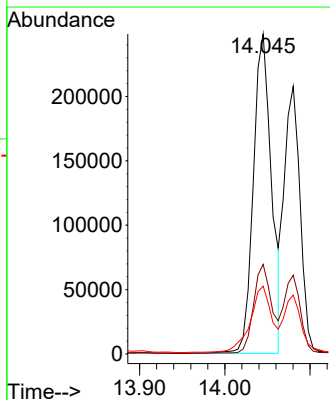
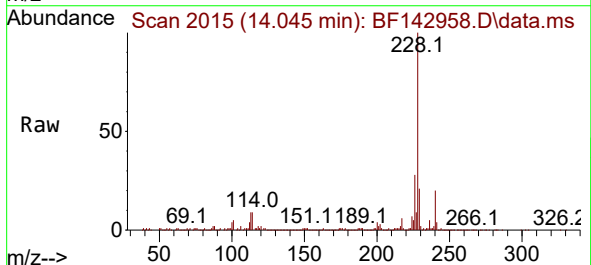
Instrument :  
 BNA\_F  
 ClientSampleId :  
 PL-2-062725

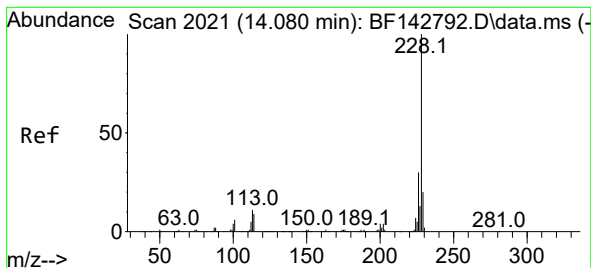
Tgt Ion:244 Resp: 45154  
 Ion Ratio Lower Upper  
 244 100  
 212 6.7 5.4 8.0  
 122 9.4 8.2 12.2



#81  
 Benzo(a)anthracene  
 Concen: 49.340 ng  
 RT: 14.045 min Scan# 2015  
 Delta R.T. 0.000 min  
 Lab File: BF142958.D  
 Acq: 01 Jul 2025 19:32

Tgt Ion:228 Resp: 368126  
 Ion Ratio Lower Upper  
 228 100  
 226 28.0 21.2 31.8  
 229 21.2 15.6 23.4





#83

Chrysene

Concen: 39.873 ng

RT: 14.080 min Scan# 2021

Delta R.T. 0.000 min

Lab File: BF142958.D

Acq: 01 Jul 2025 19:32

Instrument :

BNA\_F

ClientSampleId :

PL-2-062725

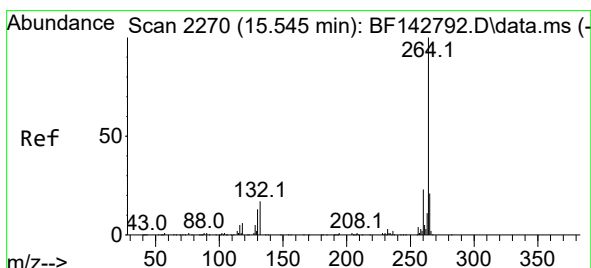
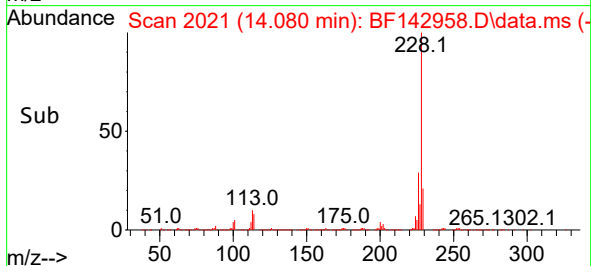
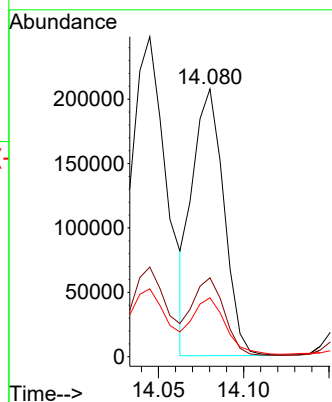
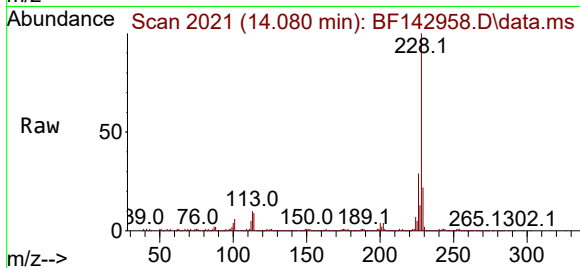
Tgt Ion:228 Resp: 265458

Ion Ratio Lower Upper

228 100

226 29.4 23.7 35.5

229 22.0 15.7 23.5



#86

Perylene-d12

Concen: 20.000 ng

RT: 15.545 min Scan# 2270

Delta R.T. 0.000 min

Lab File: BF142958.D

Acq: 01 Jul 2025 19:32

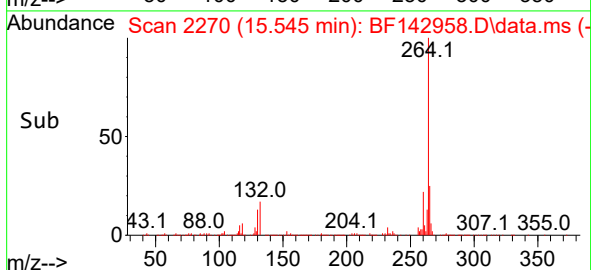
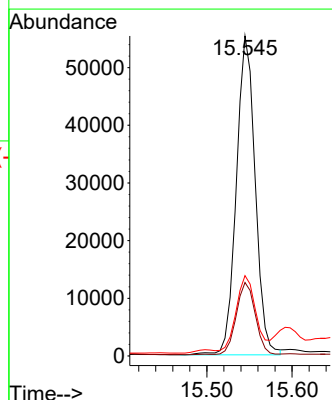
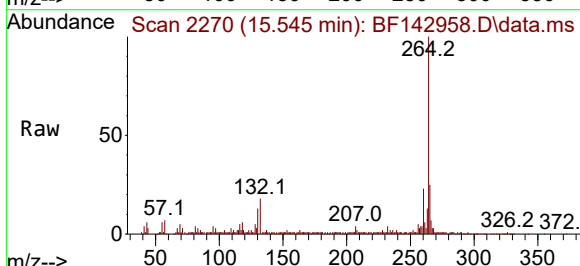
Tgt Ion:264 Resp: 85135

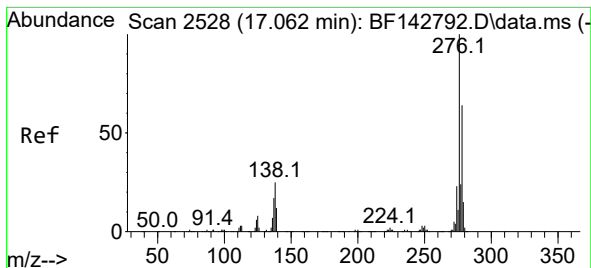
Ion Ratio Lower Upper

264 100

260 22.9 18.1 27.1

265 25.1 16.6 25.0#





#87

Indeno(1,2,3-cd)pyrene

Concen: 20.003 ng m

RT: 17.056 min Scan# 2196

Delta R.T. -0.006 min

Lab File: BF142958.D

Acq: 01 Jul 2025 19:32

Instrument :

BNA\_F

ClientSampleId :

PL-2-062725

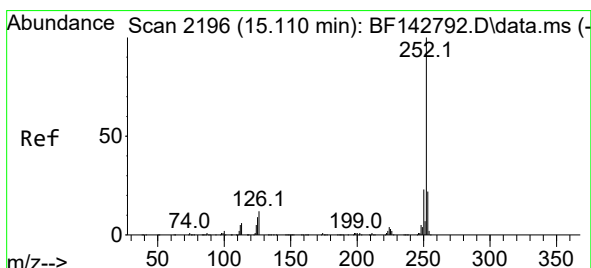
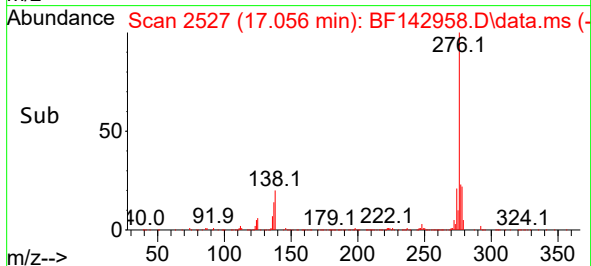
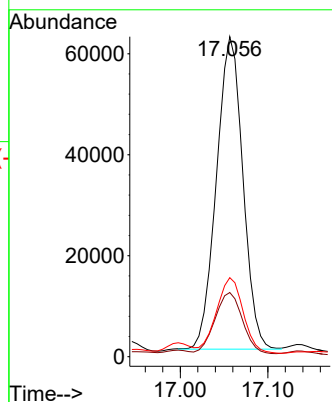
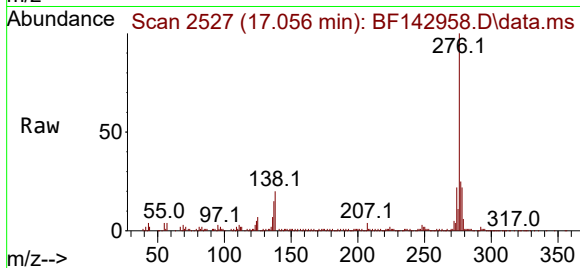
Tgt Ion:276 Resp: 129715

Ion Ratio Lower Upper

276 100

138 4.4 20.2 30.4#

277 4.6 19.8 29.6#



#88

Benzo(b)fluoranthene

Concen: 67.171 ng m

RT: 15.110 min Scan# 2196

Delta R.T. 0.000 min

Lab File: BF142958.D

Acq: 01 Jul 2025 19:32

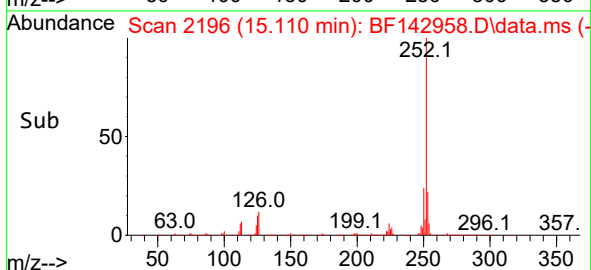
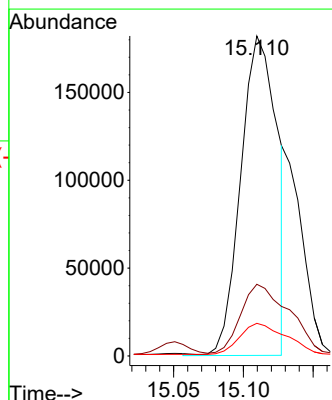
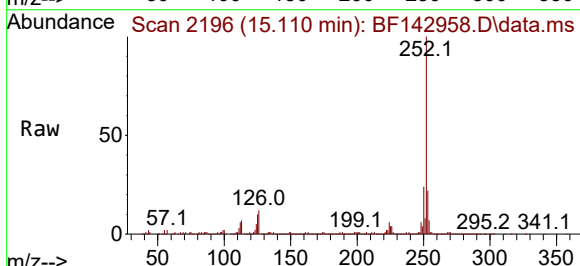
Tgt Ion:252 Resp: 330904

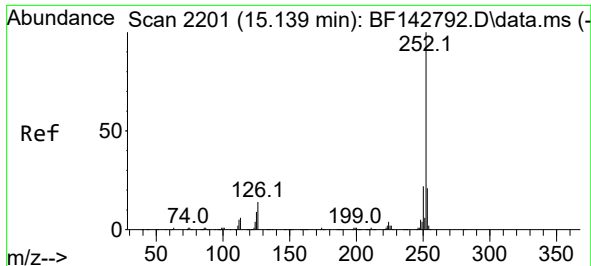
Ion Ratio Lower Upper

252 100

253 22.4 17.5 26.3

125 10.2 7.4 11.0

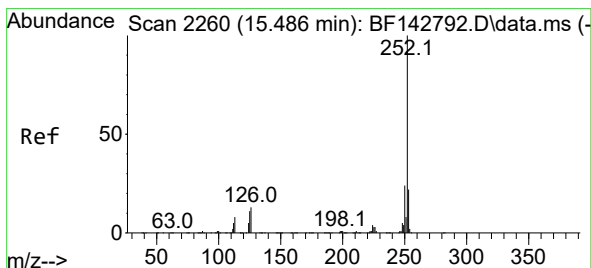
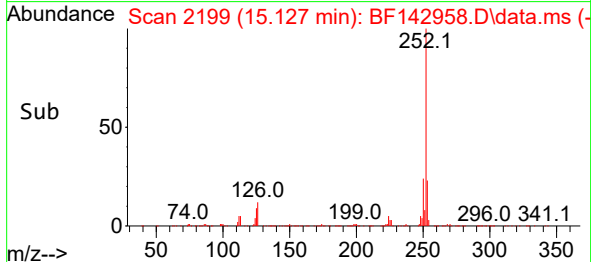
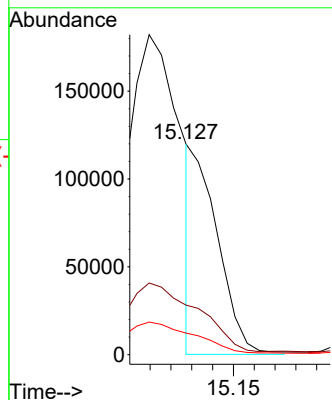
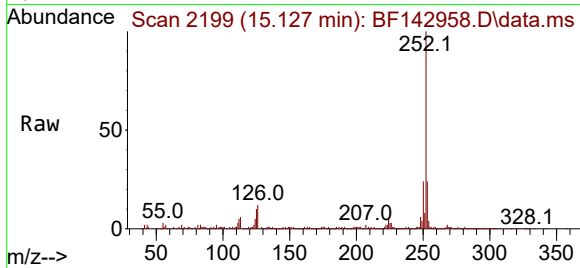




#89  
Benzo(k)fluoranthene  
Concen: 21.739 ng m  
RT: 15.127 min Scan# 21  
Delta R.T. -0.012 min  
Lab File: BF142958.D  
Acq: 01 Jul 2025 19:32

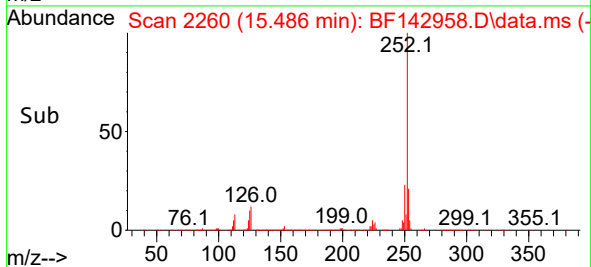
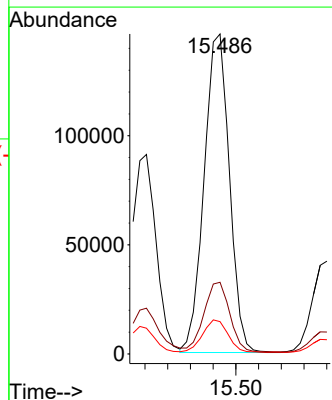
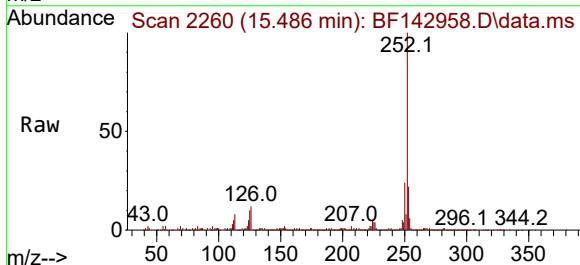
Instrument :  
BNA\_F  
ClientSampleId :  
PL-2-062725

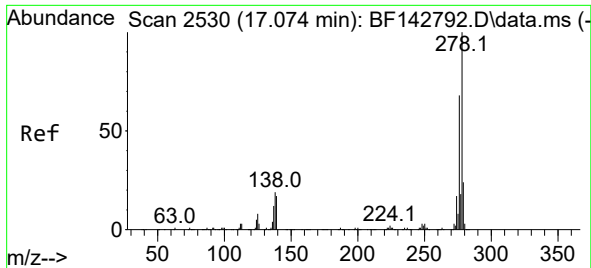
Tgt Ion:252 Resp: 100195  
Ion Ratio Lower Upper  
252 100  
253 23.5 17.2 25.8  
125 10.3 7.4 11.2



#90  
Benzo(a)pyrene  
Concen: 47.477 ng  
RT: 15.486 min Scan# 2260  
Delta R.T. 0.000 min  
Lab File: BF142958.D  
Acq: 01 Jul 2025 19:32

Tgt Ion:252 Resp: 225949  
Ion Ratio Lower Upper  
252 100  
253 22.4 17.5 26.3  
125 10.1 8.6 12.8

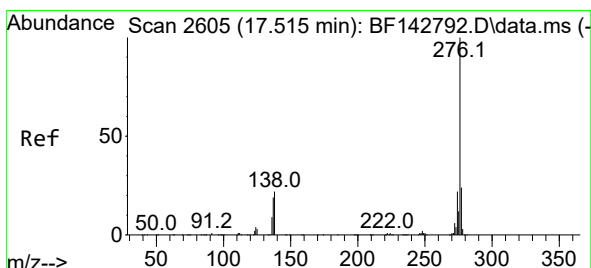
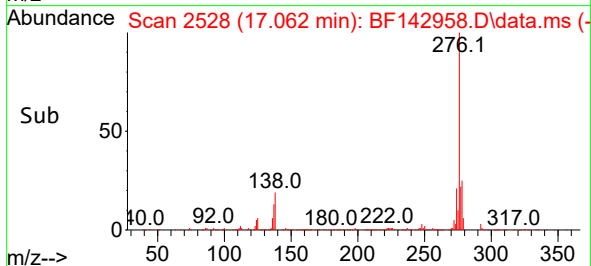
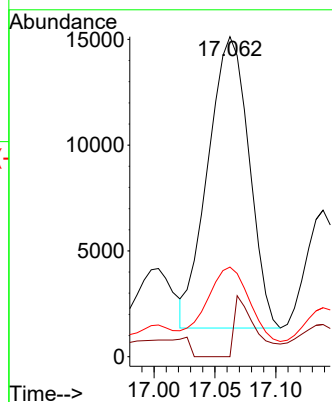
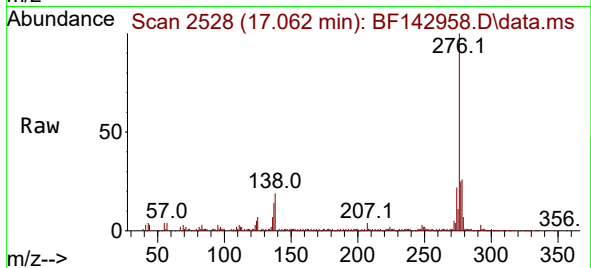




#91  
Dibenzo(a,h)anthracene  
Concen: 6.149 ng  
RT: 17.062 min Scan# 21  
Delta R.T. -0.012 min  
Lab File: BF142958.D  
Acq: 01 Jul 2025 19:32

Instrument :  
BNA\_F  
ClientSampleId :  
PL-2-062725

Tgt Ion:278 Resp: 32399  
Ion Ratio Lower Upper  
278 100  
139 0.0 13.5 20.3#  
279 28.0 18.8 28.2



#92  
Benzo(g,h,i)perylene  
Concen: 23.045 ng  
RT: 17.515 min Scan# 2605  
Delta R.T. 0.000 min  
Lab File: BF142958.D  
Acq: 01 Jul 2025 19:32

Tgt Ion:276 Resp: 121075  
Ion Ratio Lower Upper  
276 100  
277 24.4 18.8 28.2  
138 20.3 17.6 26.4

