

Data Path : Z:\svoasrv\HPCHEM1\BNA\_P\Data\BP061025\  
 Data File : BP024895.D  
 Acq On : 10 Jun 2025 15:46  
 Operator : RC/JU  
 Sample : Q2177-02  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 BNA\_P  
 ClientSampleId :  
 B-187-SB01

Quant Time: Jun 10 16:31:38 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_P\Methods\8270E-BP060625.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Jun 06 16:20:27 2025  
 Response via : Initial Calibration

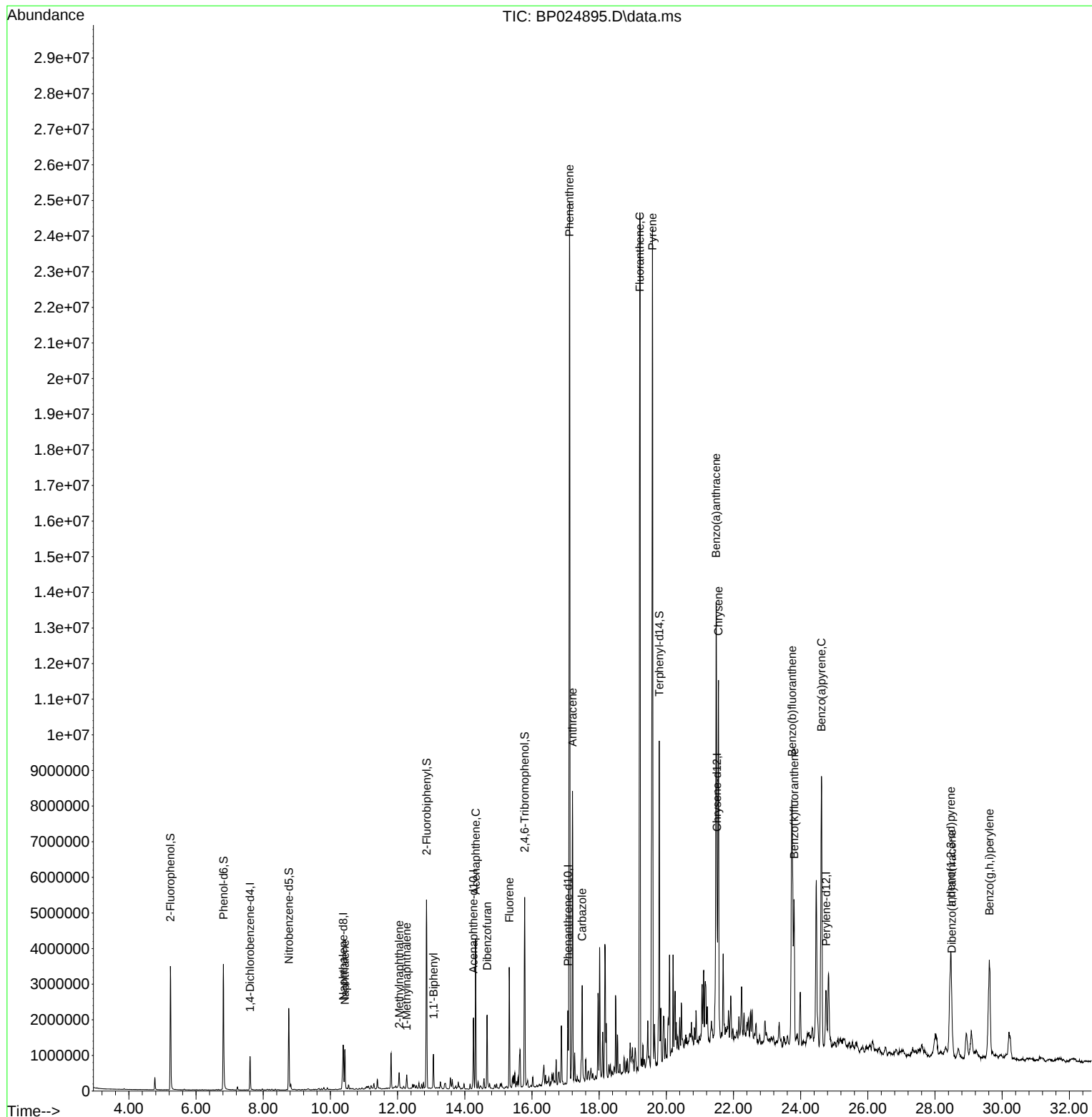
| Compound                    | R.T.   | QIon | Response | Conc    | Units | Dev(Min) |
|-----------------------------|--------|------|----------|---------|-------|----------|
| Internal Standards          |        |      |          |         |       |          |
| 1) 1,4-Dichlorobenzene-d4   | 7.607  | 152  | 259952   | 20.000  | ng    | 0.00     |
| 21) Naphthalene-d8          | 10.378 | 136  | 1064328  | 20.000  | ng    | 0.00     |
| 39) Acenaphthene-d10        | 14.260 | 164  | 672188   | 20.000  | ng    | 0.01     |
| 64) Phenanthrene-d10        | 17.072 | 188  | 1296135  | 20.000  | ng    | 0.01     |
| 76) Chrysene-d12            | 21.507 | 240  | 1315798  | 20.000  | ng    | 0.02     |
| 86) Perylene-d12            | 24.760 | 264  | 1598305  | 20.000  | ng    | 0.04     |
| System Monitoring Compounds |        |      |          |         |       |          |
| 5) 2-Fluorophenol           | 5.237  | 112  | 1643118  | 105.508 | ng    | 0.00     |
| 7) Phenol-d6                | 6.813  | 99   | 2167494  | 105.191 | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 8.760  | 82   | 1358331  | 62.016  | ng    | 0.00     |
| 42) 2,4,6-Tribromophenol    | 15.784 | 330  | 1038010  | 111.694 | ng    | 0.00     |
| 45) 2-Fluorobiphenyl        | 12.860 | 172  | 2956910  | 59.259  | ng    | 0.00     |
| 79) Terphenyl-d14           | 19.789 | 244  | 4128556  | 56.235  | ng    | 0.00     |
| Target Compounds            |        |      |          |         |       |          |
|                             |        |      |          |         |       | Qvalue   |
| 31) Naphthalene             | 10.431 | 128  | 886539   | 16.254  | ng    | 99       |
| 37) 2-Methylnaphthalene     | 12.048 | 142  | 222518   | 6.432   | ng    | 99       |
| 38) 1-Methylnaphthalene     | 12.272 | 142  | 176000   | 4.758   | ng    | 100      |
| 46) 1,1'-Biphenyl           | 13.072 | 154  | 126040   | 2.580   | ng    | 99       |
| 52) Acenaphthene            | 14.325 | 154  | 1406501  | 39.209  | ng    | 99       |
| 55) Dibenzofuran            | 14.666 | 168  | 1281218  | 22.250  | ng    | 99       |
| 58) Fluorene                | 15.325 | 166  | 1366591  | 29.379  | ng    | 99       |
| 71) Phenanthrene            | 17.113 | 178  | 16031932 | 223.828 | ng    | 93       |
| 72) Anthracene              | 17.207 | 178  | 5026222  | 69.288  | ng    | 99       |
| 73) Carbazole               | 17.495 | 167  | 1759204  | 26.164  | ng    | 100      |
| 75) Fluoranthene            | 19.213 | 202  | 17139546 | 206.456 | ng    | 90       |
| 78) Pyrene                  | 19.583 | 202  | 15441651 | 187.846 | ng    | # 92     |
| 81) Benzo(a)anthracene      | 21.483 | 228  | 8125938  | 96.558  | ng    | 98       |
| 83) Chrysene                | 21.554 | 228  | 6757136  | 84.740  | ng    | 96       |
| 87) Indeno(1,2,3-cd)pyrene  | 28.471 | 276  | 5049444  | 43.300  | ng    | 95       |
| 88) Benzo(b)fluoranthene    | 23.742 | 252  | 9105161  | 99.541  | ng    | 98       |
| 89) Benzo(k)fluoranthene    | 23.807 | 252  | 3188599  | 34.246  | ng    | 97       |
| 90) Benzo(a)pyrene          | 24.618 | 252  | 7622631  | 85.331  | ng    | 97       |
| 91) Dibenzo(a,h)anthracene  | 28.501 | 278  | 1152183  | 12.138  | ng    | # 93     |
| 92) Benzo(g,h,i)perylene    | 29.618 | 276  | 4866832  | 51.675  | ng    | 100      |

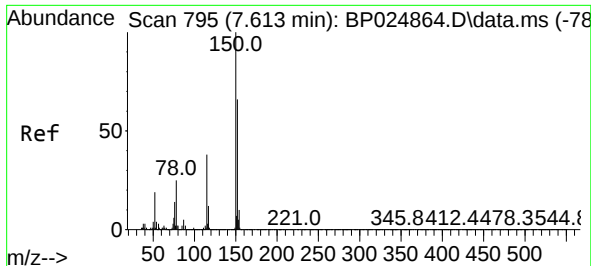
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_P\Data\BP061025\  
Data File : BP024895.D  
Acq On : 10 Jun 2025 15:46  
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Sample : Q2177-02  
Misc :  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
BNA\_P  
ClientSampleId :  
B-187-SB01

Quant Time: Jun 10 16:31:38 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_P\Methods\8270E-BP060625.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Jun 06 16:20:27 2025  
Response via : Initial Calibration

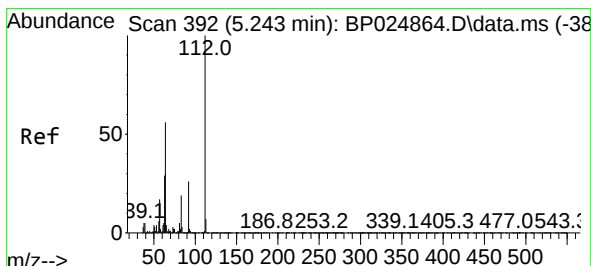
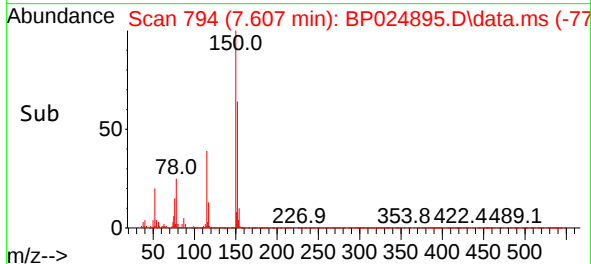
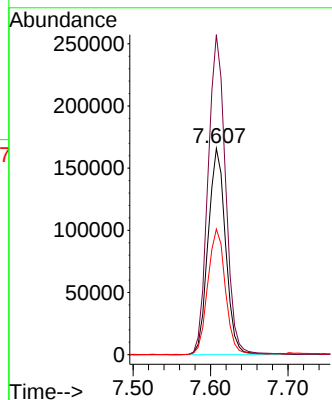
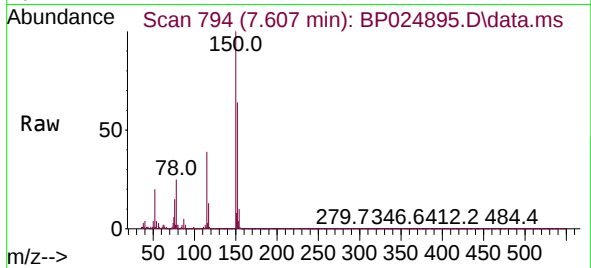




#1  
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 7.607 min Scan# 795  
Delta R.T. -0.006 min  
Lab File: BP024895.D  
Acq: 10 Jun 2025 15:46

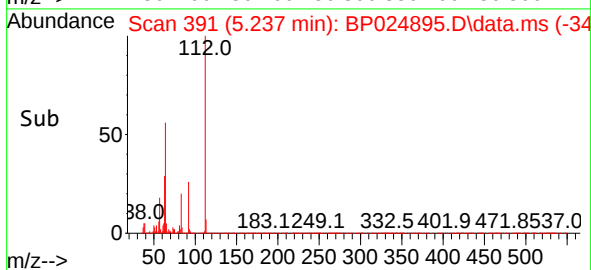
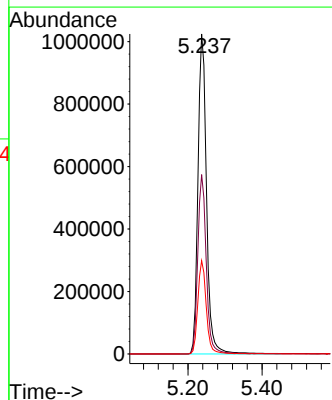
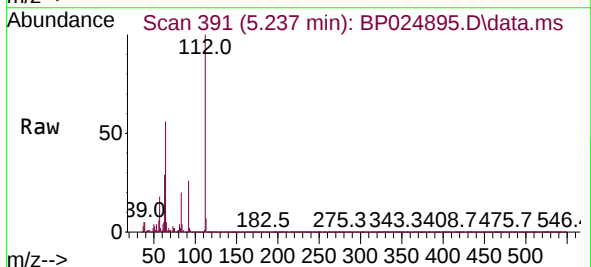
Instrument :  
BNA\_P  
ClientSampleId :  
B-187-SB01

Tgt Ion:152 Resp: 259952  
Ion Ratio Lower Upper  
152 100  
150 155.1 122.1 183.1  
115 60.9 46.4 69.6



#5  
2-Fluorophenol  
Concen: 105.508 ng  
RT: 5.237 min Scan# 391  
Delta R.T. -0.006 min  
Lab File: BP024895.D  
Acq: 10 Jun 2025 15:46

Tgt Ion:112 Resp: 1643118  
Ion Ratio Lower Upper  
112 100  
64 56.1 44.7 67.1  
63 29.2 23.5 35.3



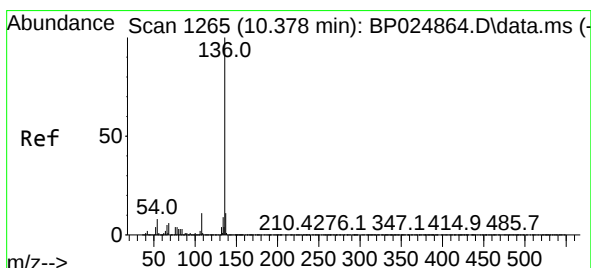
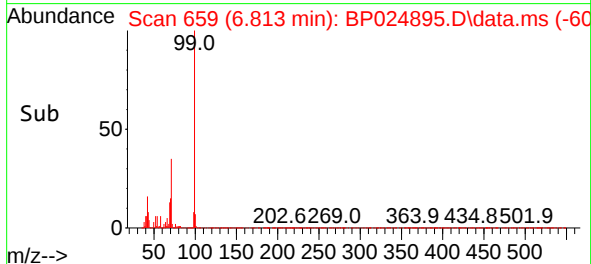
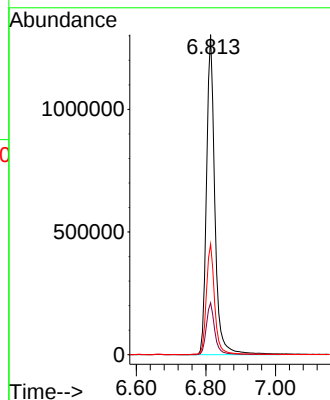
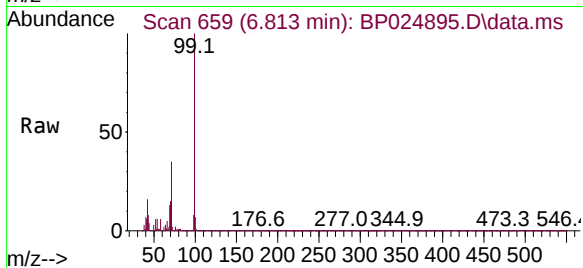


#7  
Phenol-d6  
Concen: 105.191 ng  
RT: 6.813 min Scan# 61  
Delta R.T. -0.000 min  
Lab File: BP024895.D  
Acq: 10 Jun 2025 15:46

Instrument :  
BNA\_P  
ClientSampleId :  
B-187-SB01

Tgt Ion: 99 Resp: 2167494

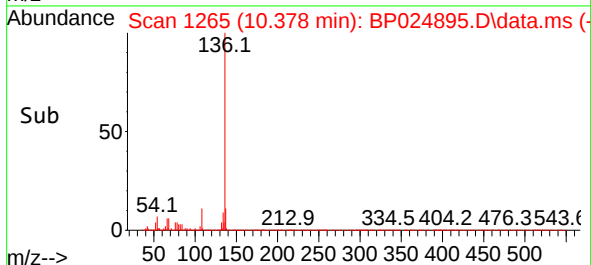
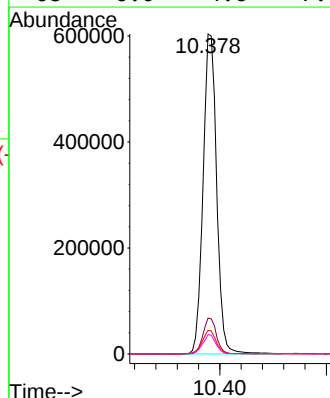
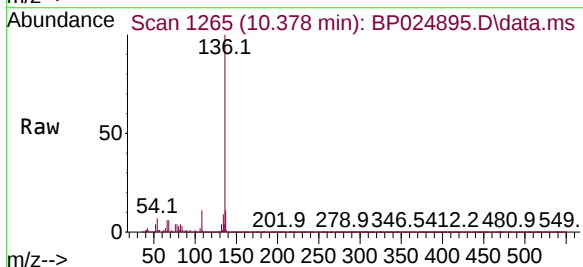
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 99  | 100   |       |       |
| 42  | 16.2  | 13.4  | 20.2  |
| 71  | 34.5  | 27.6  | 41.4  |

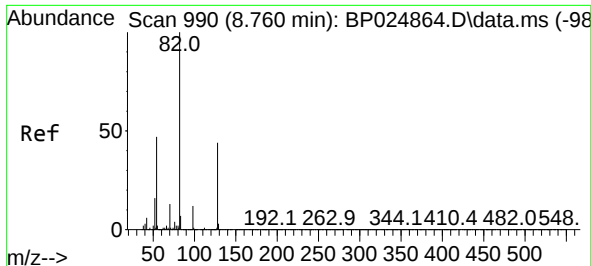


#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 10.378 min Scan# 1265  
Delta R.T. -0.000 min  
Lab File: BP024895.D  
Acq: 10 Jun 2025 15:46

Tgt Ion: 136 Resp: 1064328

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 136 | 100   |       |       |
| 137 | 11.2  | 8.9   | 13.3  |
| 54  | 7.4   | 6.1   | 9.1   |
| 68  | 6.0   | 4.6   | 7.0   |

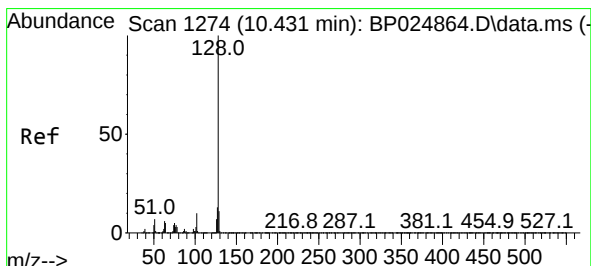
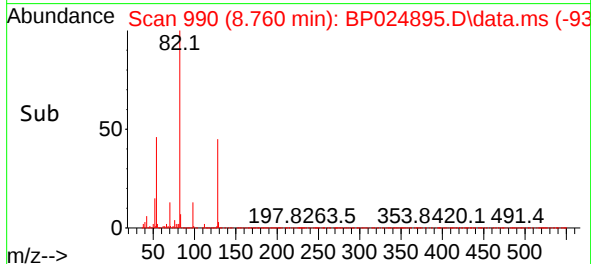
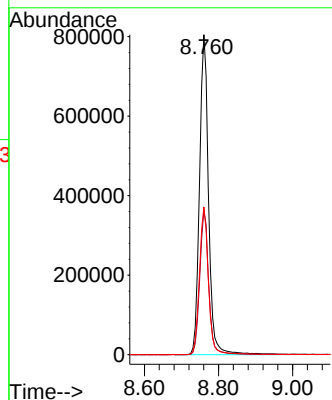
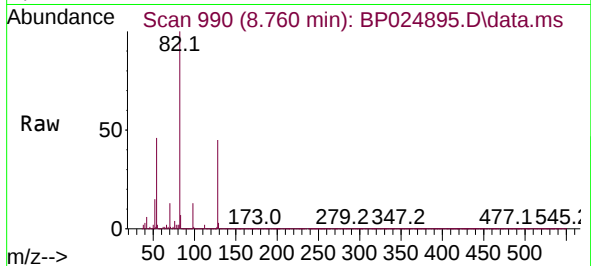




#23  
Nitrobenzene-d5  
Concen: 62.016 ng  
RT: 8.760 min Scan# 990  
Delta R.T. -0.000 min  
Lab File: BP024895.D  
Acq: 10 Jun 2025 15:46

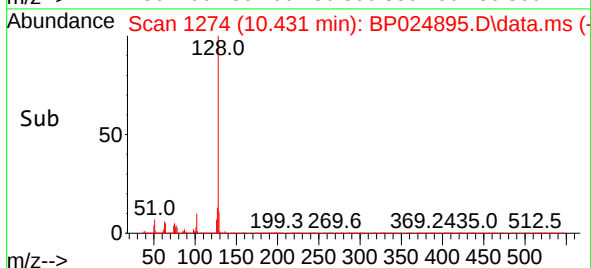
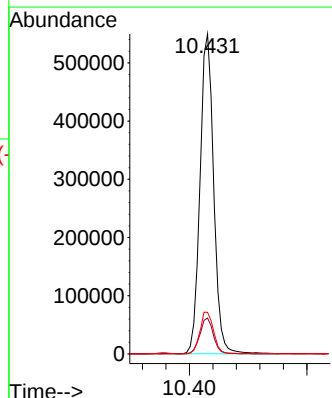
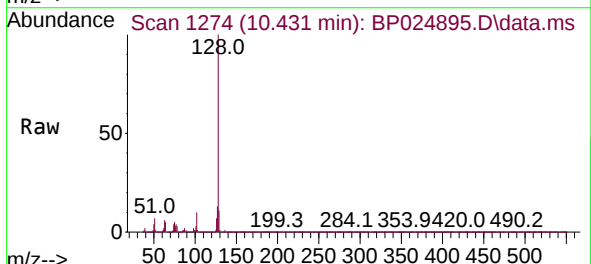
Instrument :  
BNA\_P  
ClientSampleId :  
B-187-SB01

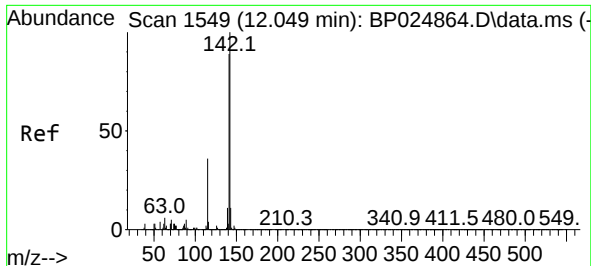
Tgt Ion: 82 Resp: 1358331  
Ion Ratio Lower Upper  
82 100  
128 45.2 35.3 52.9  
54 46.1 37.4 56.0



#31  
Naphthalene  
Concen: 16.254 ng  
RT: 10.431 min Scan# 1274  
Delta R.T. -0.000 min  
Lab File: BP024895.D  
Acq: 10 Jun 2025 15:46

Tgt Ion: 128 Resp: 886539  
Ion Ratio Lower Upper  
128 100  
129 11.2 8.7 13.1  
127 13.0 10.7 16.1

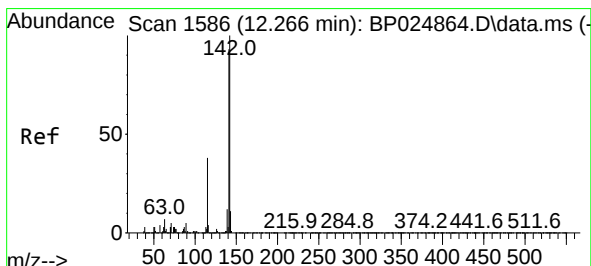
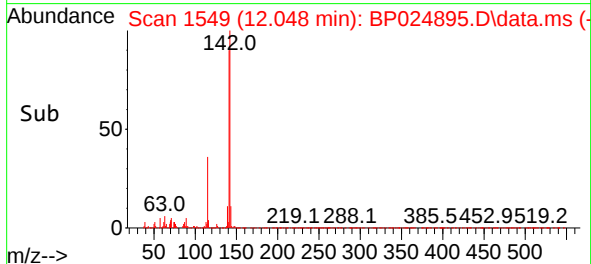
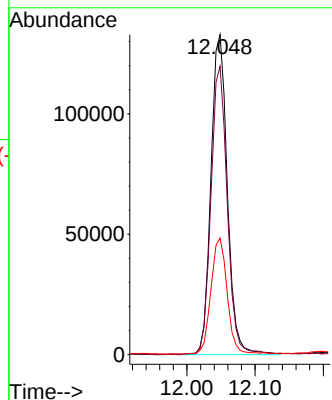
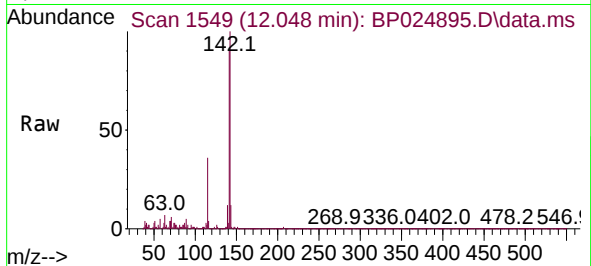




#37  
2-Methylnaphthalene  
Concen: 6.432 ng  
RT: 12.048 min Scan# 1549  
Delta R.T. -0.000 min  
Lab File: BP024895.D  
Acq: 10 Jun 2025 15:46

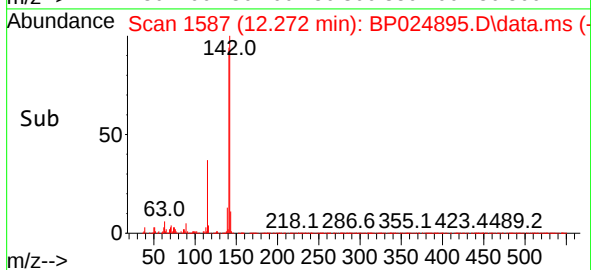
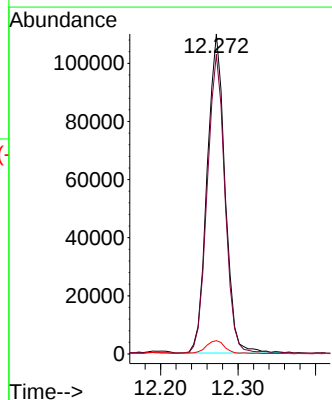
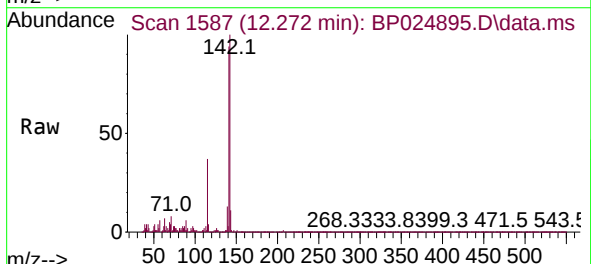
Instrument :  
BNA\_P  
ClientSampleId :  
B-187-SB01

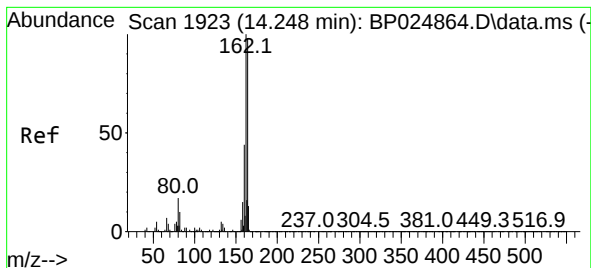
Tgt Ion:142 Resp: 222518  
Ion Ratio Lower Upper  
142 100  
141 90.1 71.2 106.8  
115 36.4 28.5 42.7



#38  
1-Methylnaphthalene  
Concen: 4.758 ng  
RT: 12.272 min Scan# 1587  
Delta R.T. 0.006 min  
Lab File: BP024895.D  
Acq: 10 Jun 2025 15:46

Tgt Ion:142 Resp: 176000  
Ion Ratio Lower Upper  
142 100  
141 93.7 74.7 112.1  
116 4.2 3.4 5.0





#39

Acenaphthene-d10

Concen: 20.000 ng

RT: 14.260 min Scan# 1923

Delta R.T. 0.012 min

Lab File: BP024895.D

Acq: 10 Jun 2025 15:46

Instrument :

BNA\_P

ClientSampleId :

B-187-SB01

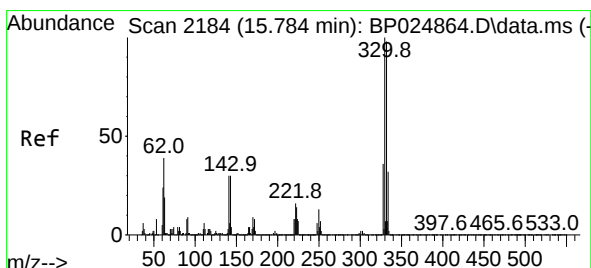
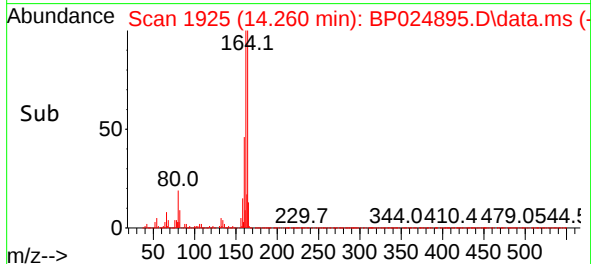
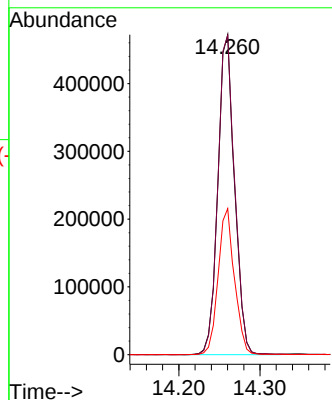
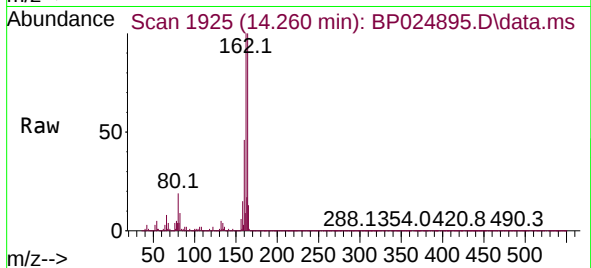
Tgt Ion:164 Resp: 672188

Ion Ratio Lower Upper

164 100

162 99.8 81.6 122.4

160 45.7 36.2 54.2



#42

2,4,6-Tribromophenol

Concen: 111.694 ng

RT: 15.784 min Scan# 2184

Delta R.T. -0.000 min

Lab File: BP024895.D

Acq: 10 Jun 2025 15:46

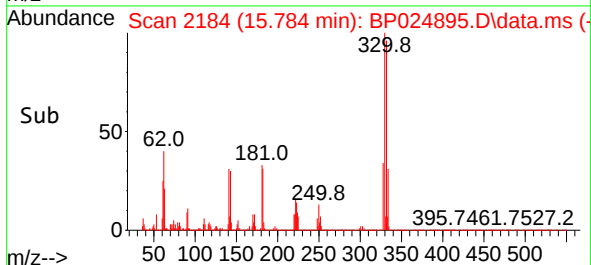
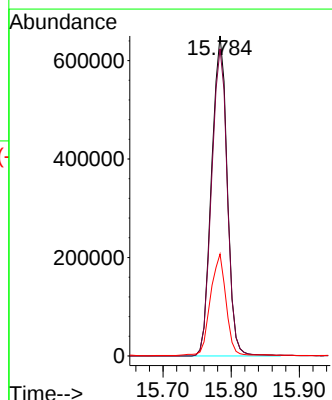
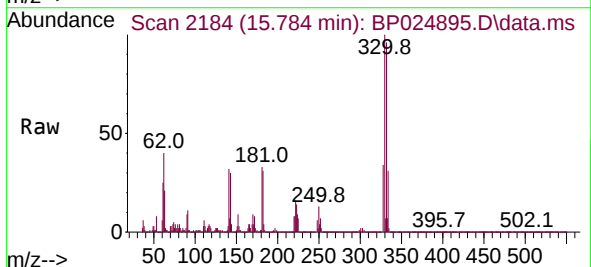
Tgt Ion:330 Resp: 1038010

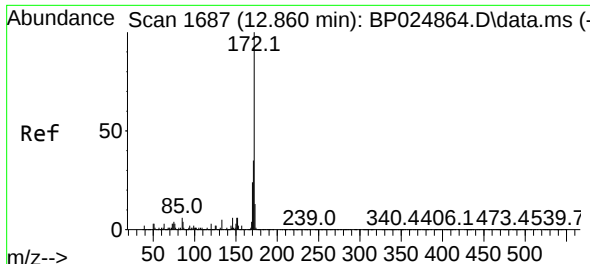
Ion Ratio Lower Upper

330 100

332 96.8 77.7 116.5

141 31.4 26.4 39.6

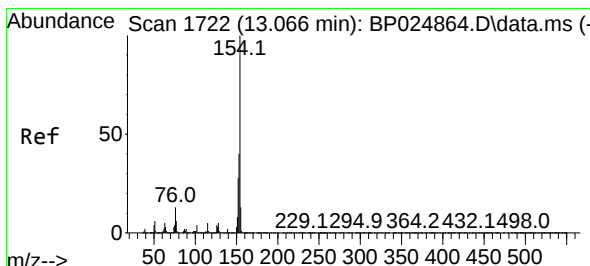
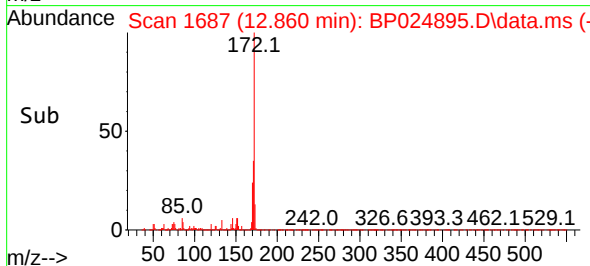
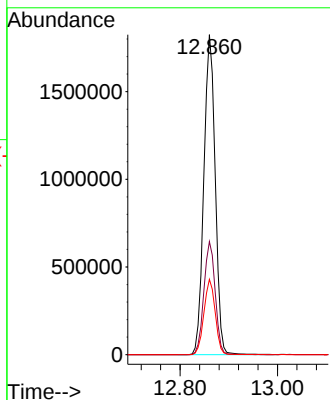
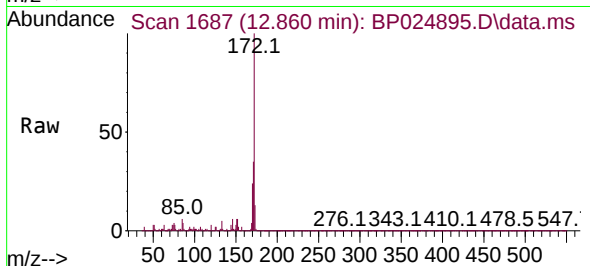




#45  
2-Fluorobiphenyl  
Concen: 59.259 ng  
RT: 12.860 min Scan# 1687  
Delta R.T. -0.000 min  
Lab File: BP024895.D  
Acq: 10 Jun 2025 15:46

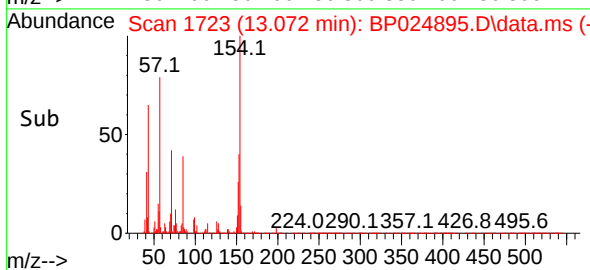
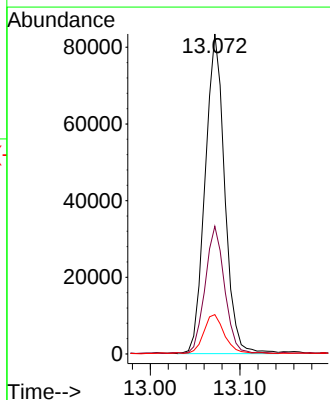
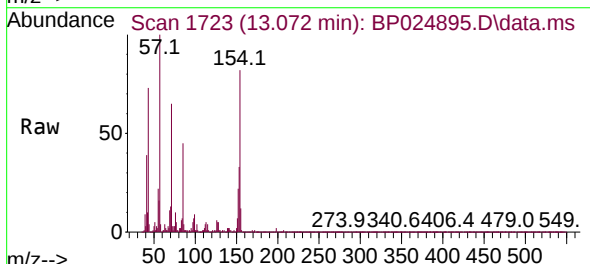
Instrument :  
BNA\_P  
ClientSampleId :  
B-187-SB01

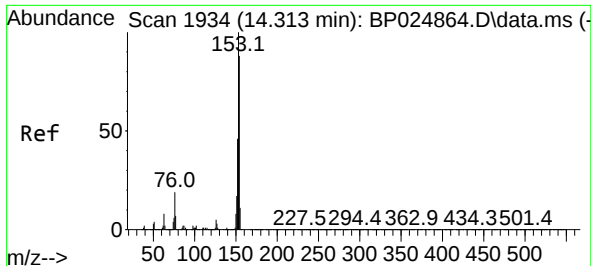
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Ion Ratio Lower Upper  
172 100  
171 35.3 28.3 42.5  
170 23.6 19.0 28.4



#46  
1,1'-Biphenyl  
Concen: 2.580 ng  
RT: 13.072 min Scan# 1723  
Delta R.T. 0.006 min  
Lab File: BP024895.D  
Acq: 10 Jun 2025 15:46

Tgt Ion:154 Resp: 126040  
Ion Ratio Lower Upper  
154 100  
153 39.9 20.3 60.3  
76 12.3 0.0 33.0

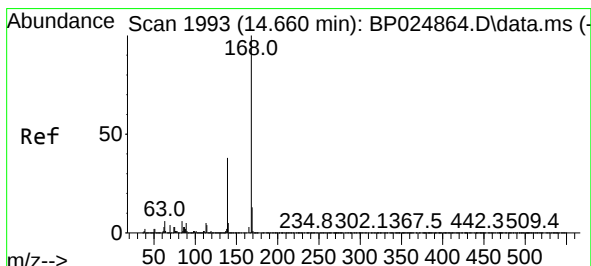
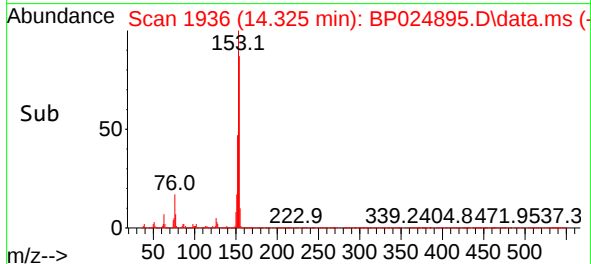
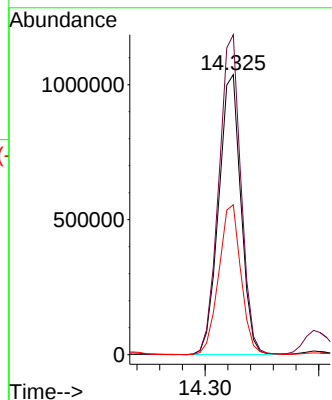
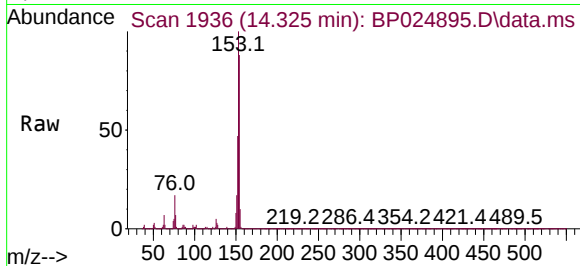




#52  
Acenaphthene  
Concen: 39.209 ng  
RT: 14.325 min Scan# 1936  
Delta R.T. 0.012 min  
Lab File: BP024895.D  
Acq: 10 Jun 2025 15:46

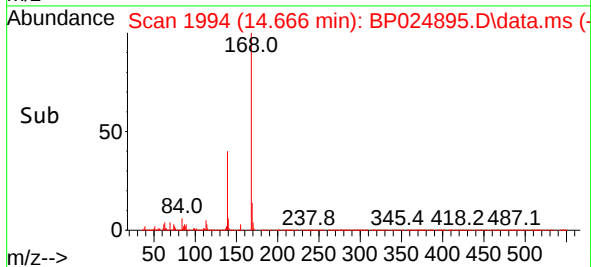
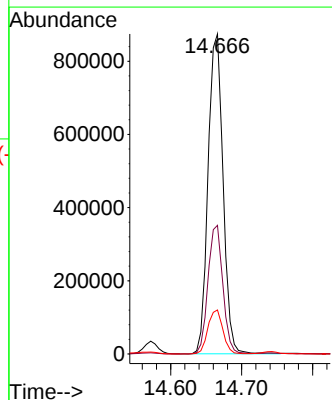
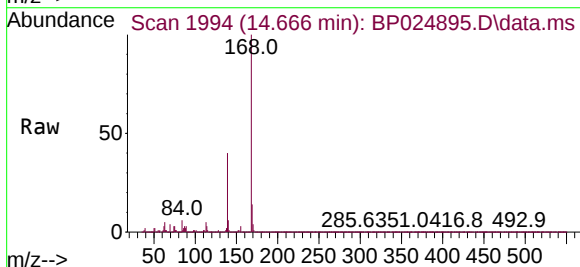
Instrument :  
BNA\_P  
ClientSampleId :  
B-187-SB01

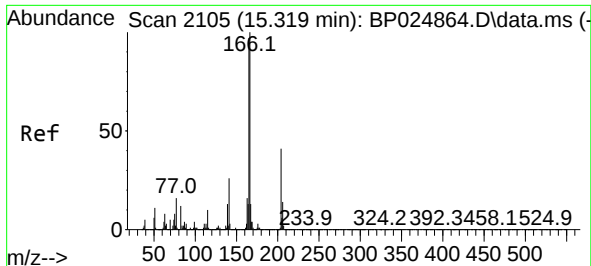
Tgt Ion:154 Resp: 1406501  
Ion Ratio Lower Upper  
154 100  
153 114.3 90.5 135.7  
152 53.5 42.1 63.1



#55  
Dibenzofuran  
Concen: 22.250 ng  
RT: 14.666 min Scan# 1994  
Delta R.T. 0.006 min  
Lab File: BP024895.D  
Acq: 10 Jun 2025 15:46

Tgt Ion:168 Resp: 1281218  
Ion Ratio Lower Upper  
168 100  
139 40.2 31.6 47.4  
169 13.8 10.6 15.8

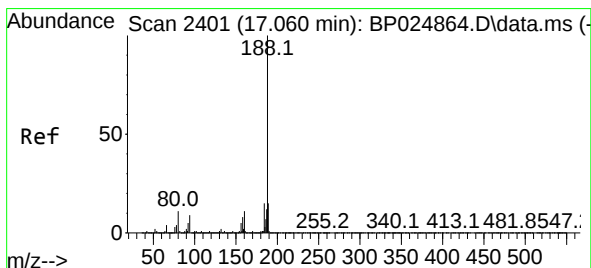
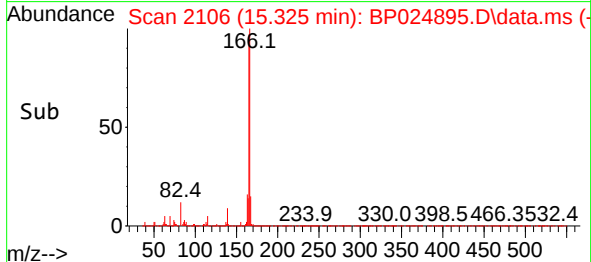
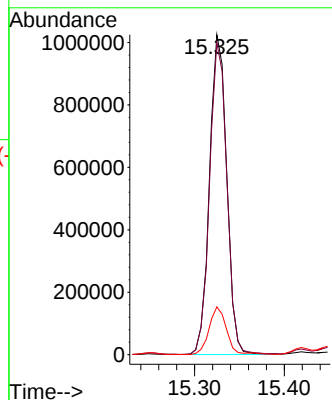
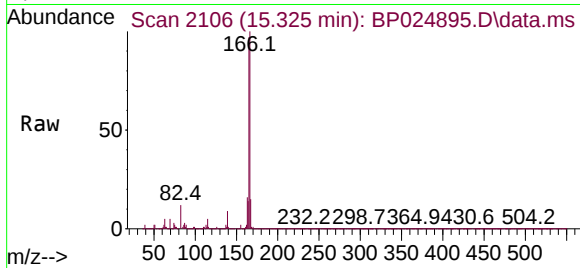




#58  
Fluorene  
Concen: 29.379 ng  
RT: 15.325 min Scan# 2105  
Delta R.T. 0.006 min  
Lab File: BP024895.D  
Acq: 10 Jun 2025 15:46

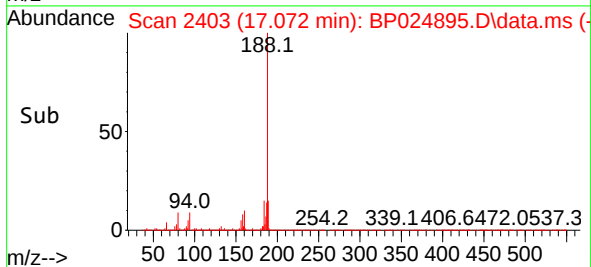
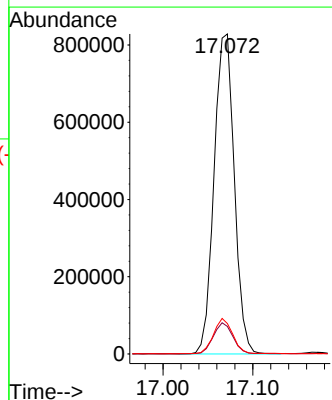
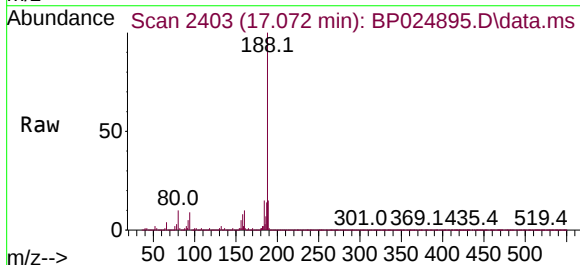
Instrument :  
BNA\_P  
ClientSampleId :  
B-187-SB01

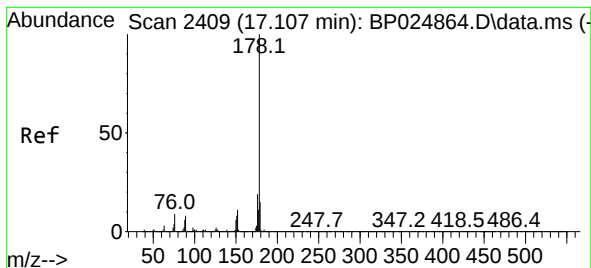
Tgt Ion:166 Resp: 1366591  
Ion Ratio Lower Upper  
166 100  
165 97.5 77.7 116.5  
167 15.0 10.6 16.0



#64  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 17.072 min Scan# 2403  
Delta R.T. 0.012 min  
Lab File: BP024895.D  
Acq: 10 Jun 2025 15:46

Tgt Ion:188 Resp: 1296135  
Ion Ratio Lower Upper  
188 100  
94 8.6 7.3 10.9  
80 9.5 8.5 12.7





#71

Phenanthrene

Concen: 223.828 ng

RT: 17.113 min Scan# 2410

Delta R.T. 0.006 min

Lab File: BP024895.D

Acq: 10 Jun 2025 15:46

Instrument :

BNA\_P

ClientSampleId :

B-187-SB01

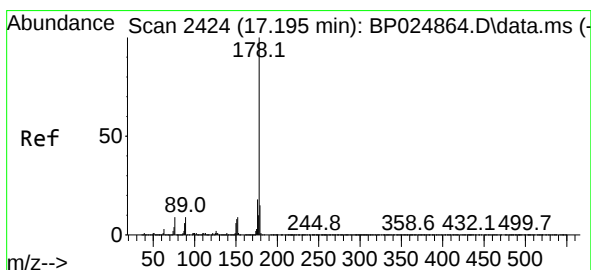
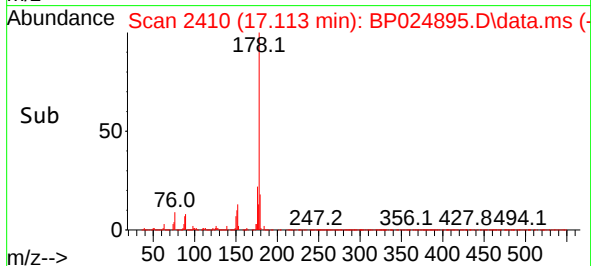
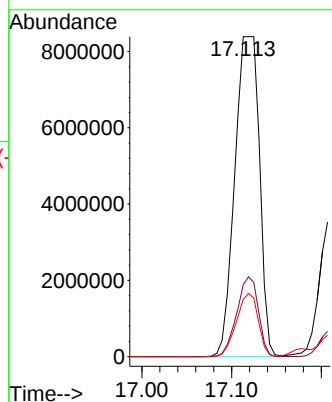
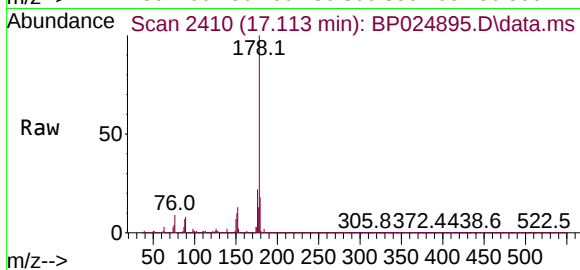
Tgt Ion:178 Resp:16031932

Ion Ratio Lower Upper

178 100

176 22.5 15.3 22.9

179 17.9 12.1 18.1



#72

Anthracene

Concen: 69.288 ng

RT: 17.207 min Scan# 2426

Delta R.T. 0.012 min

Lab File: BP024895.D

Acq: 10 Jun 2025 15:46

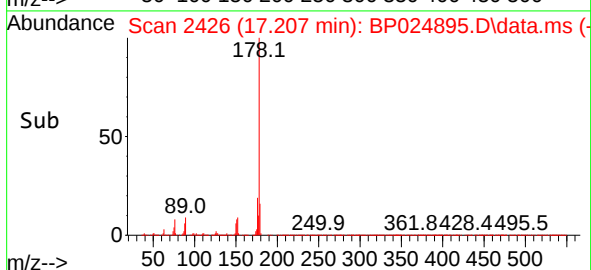
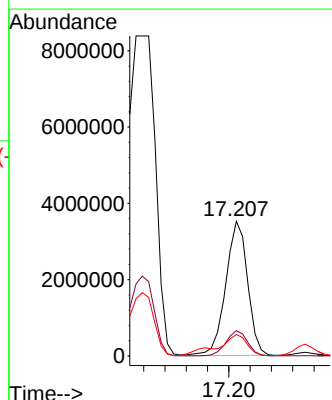
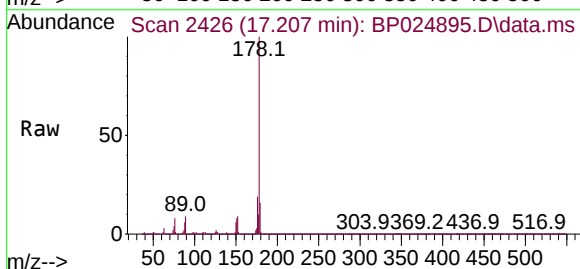
Tgt Ion:178 Resp: 5026222

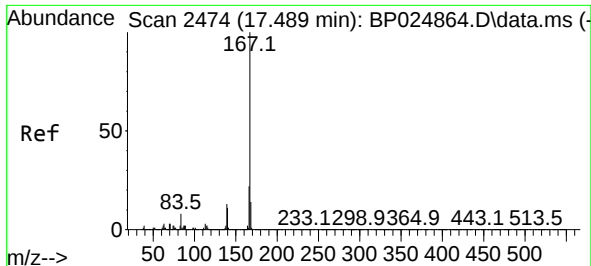
Ion Ratio Lower Upper

178 100

176 18.8 14.7 22.1

179 15.9 12.3 18.5

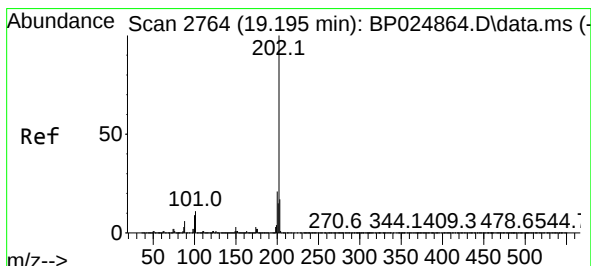
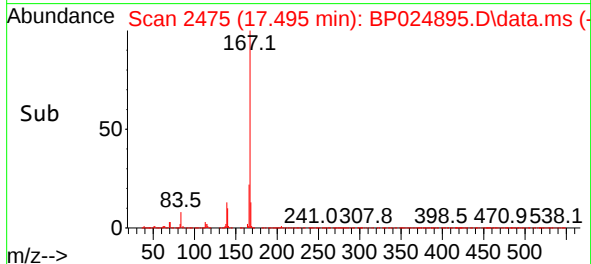
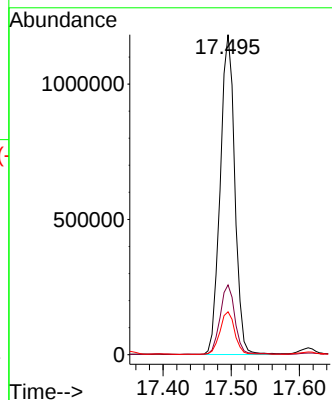
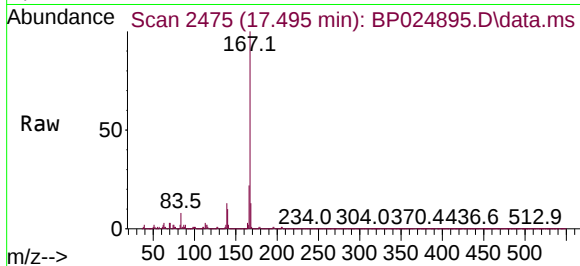




#73  
 Carbazole  
 Concen: 26.164 ng  
 RT: 17.495 min Scan# 2474  
 Delta R.T. 0.006 min  
 Lab File: BP024895.D  
 Acq: 10 Jun 2025 15:46

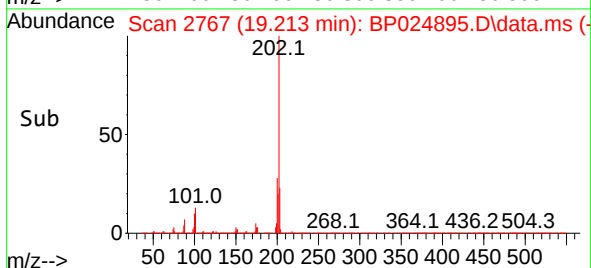
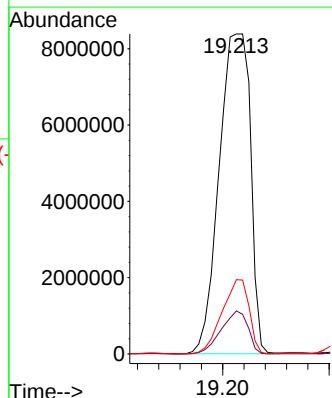
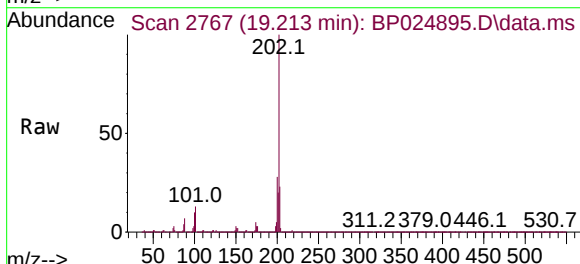
Instrument :  
 BNA\_P  
 ClientSampleId :  
 B-187-SB01

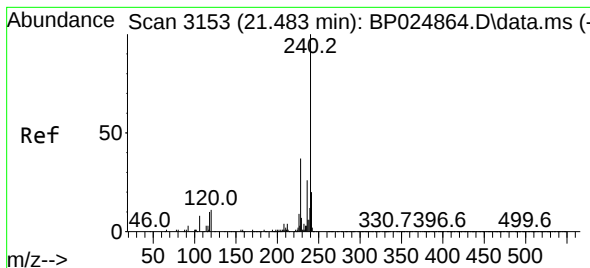
Tgt Ion:167 Resp: 1759204  
 Ion Ratio Lower Upper  
 167 100  
 166 21.8 17.3 25.9  
 139 13.4 10.8 16.2



#75  
 Fluoranthene  
 Concen: 206.456 ng  
 RT: 19.213 min Scan# 2767  
 Delta R.T. 0.018 min  
 Lab File: BP024895.D  
 Acq: 10 Jun 2025 15:46

Tgt Ion:202 Resp:17139546  
 Ion Ratio Lower Upper  
 202 100  
 101 13.5 0.0 31.4  
 203 23.2 0.0 37.5





#76

Chrysene-d12

Concen: 20.000 ng

RT: 21.507 min Scan# 31

Delta R.T. 0.023 min

Lab File: BP024895.D

Acq: 10 Jun 2025 15:46

Instrument :

BNA\_P

ClientSampleId :

B-187-SB01

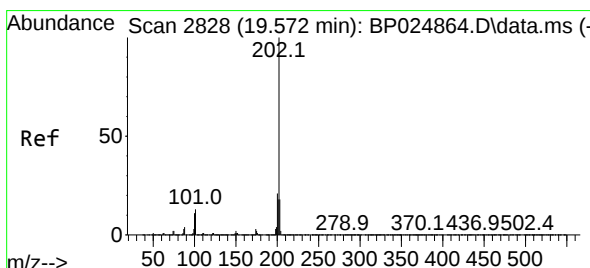
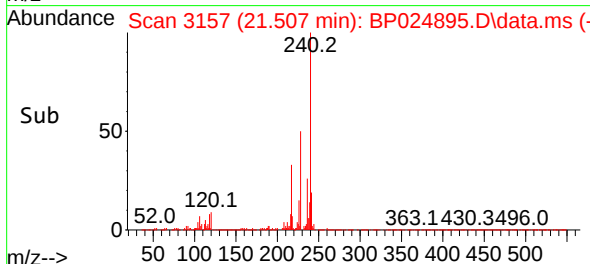
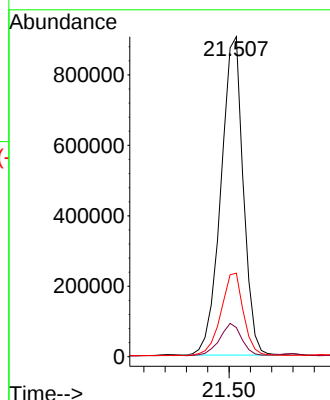
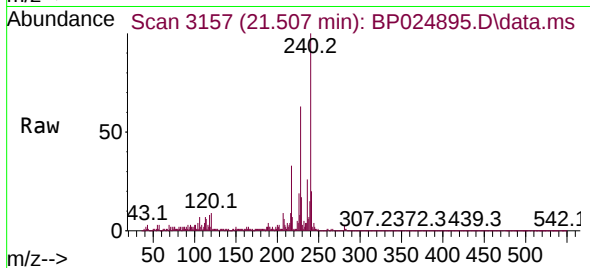
Tgt Ion:240 Resp: 1315798

Ion Ratio Lower Upper

240 100

120 9.1 8.9 13.3

236 26.1 20.9 31.3



#78

Pyrene

Concen: 187.846 ng

RT: 19.583 min Scan# 2830

Delta R.T. 0.012 min

Lab File: BP024895.D

Acq: 10 Jun 2025 15:46

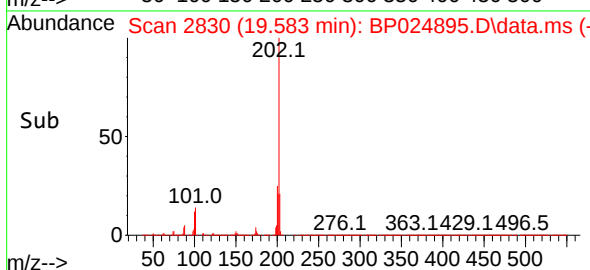
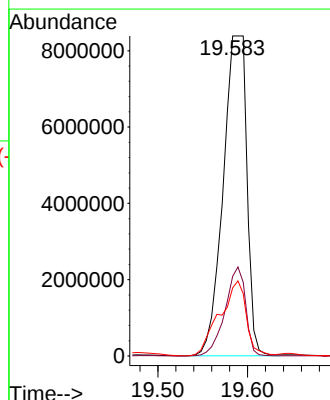
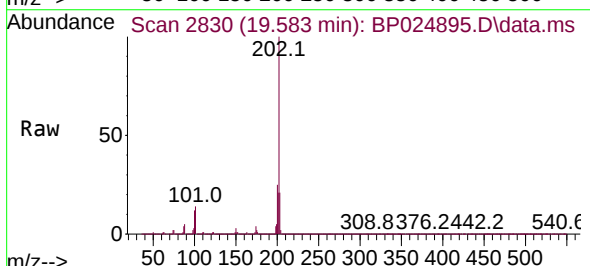
Tgt Ion:202 Resp:15441651

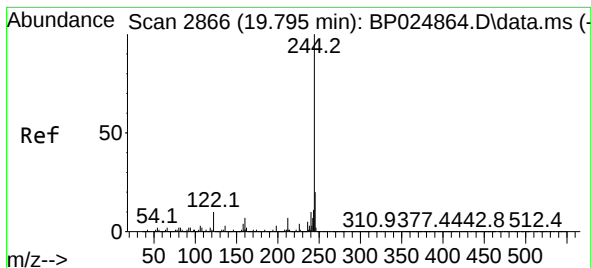
Ion Ratio Lower Upper

202 100

200 24.9 17.1 25.7

203 21.3 14.0 21.0#





#79

Terphenyl-d14

Concen: 56.235 ng

RT: 19.789 min Scan# 21

Delta R.T. -0.006 min

Lab File: BP024895.D

Acq: 10 Jun 2025 15:46

Instrument :

BNA\_P

ClientSampleId :

B-187-SB01

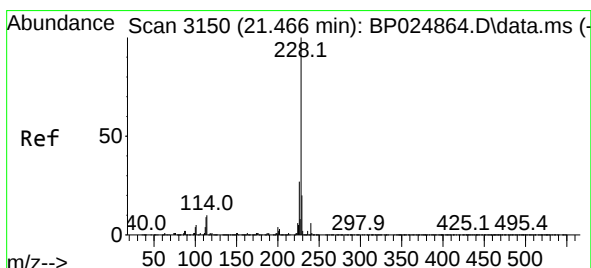
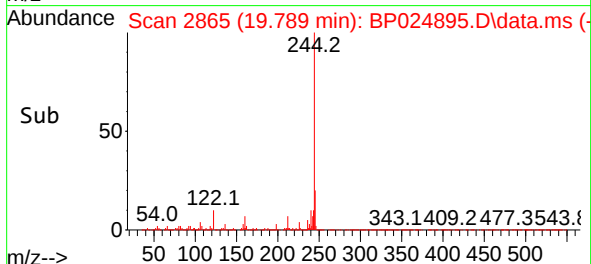
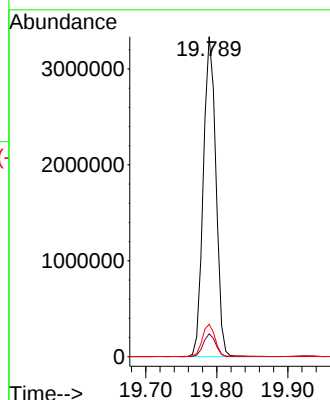
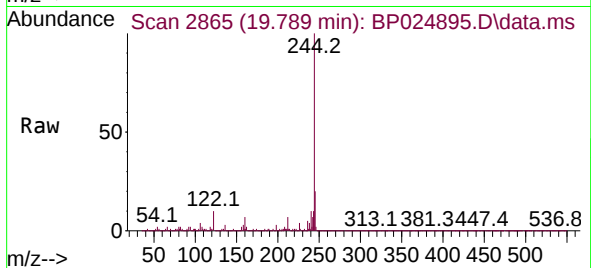
Tgt Ion:244 Resp: 4128556

Ion Ratio Lower Upper

244 100

212 7.2 5.6 8.4

122 10.1 7.7 11.5



#81

Benzo(a)anthracene

Concen: 96.558 ng

RT: 21.483 min Scan# 3153

Delta R.T. 0.018 min

Lab File: BP024895.D

Acq: 10 Jun 2025 15:46

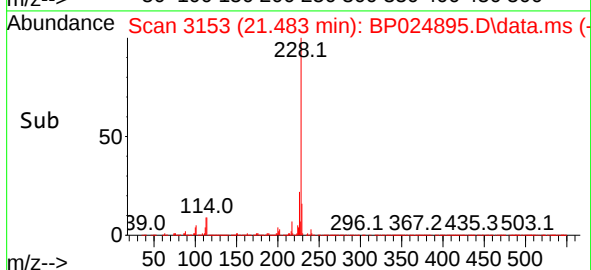
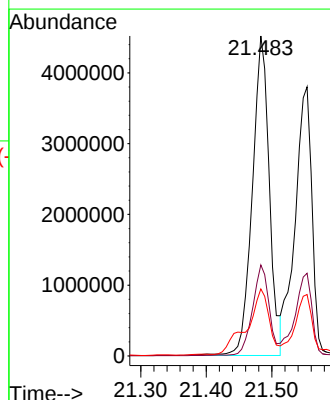
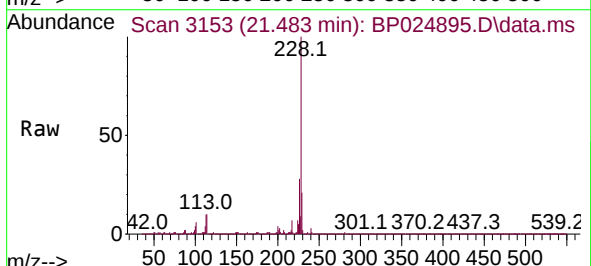
Tgt Ion:228 Resp: 8125938

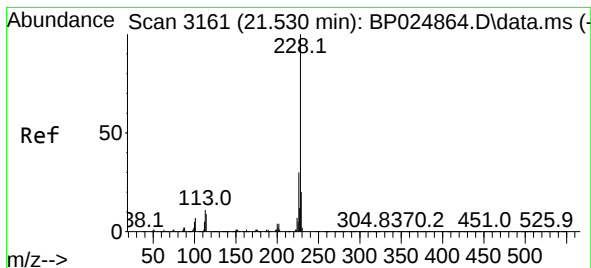
Ion Ratio Lower Upper

228 100

226 28.5 22.1 33.1

229 21.0 15.9 23.9





#83

Chrysene

Concen: 84.740 ng

RT: 21.554 min Scan# 3165

Delta R.T. 0.023 min

Lab File: BP024895.D

Acq: 10 Jun 2025 15:46

Instrument :

BNA\_P

ClientSampleId :

B-187-SB01

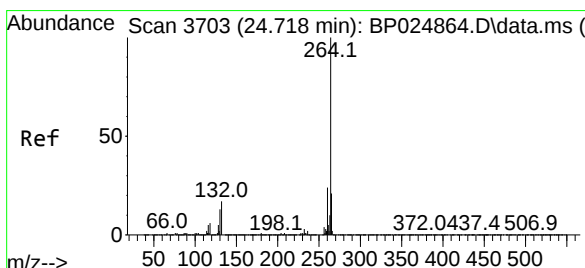
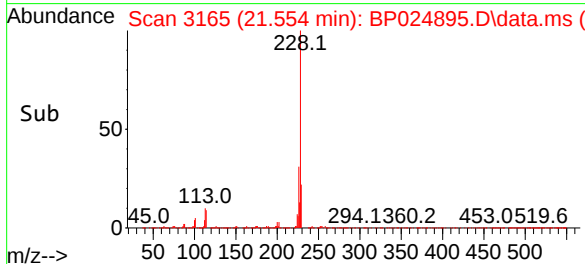
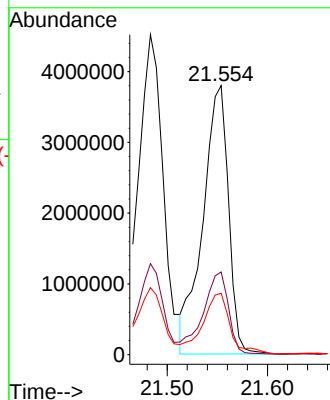
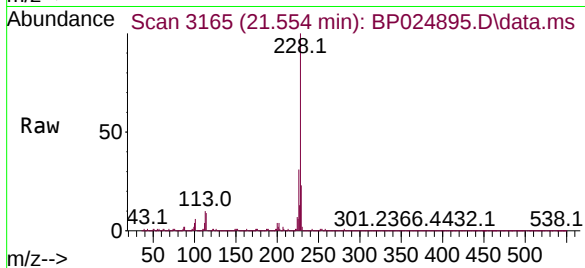
Tgt Ion:228 Resp: 6757136

Ion Ratio Lower Upper

228 100

226 30.7 23.8 35.6

229 22.9 15.6 23.4



#86

Perylene-d12

Concen: 20.000 ng

RT: 24.760 min Scan# 3710

Delta R.T. 0.041 min

Lab File: BP024895.D

Acq: 10 Jun 2025 15:46

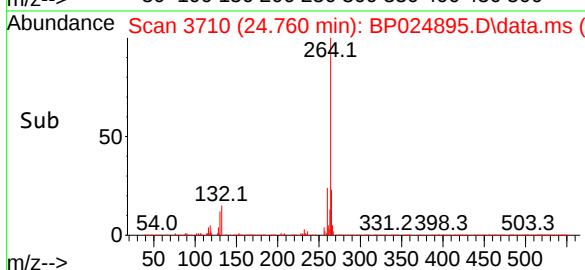
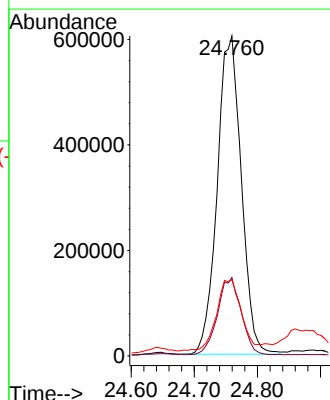
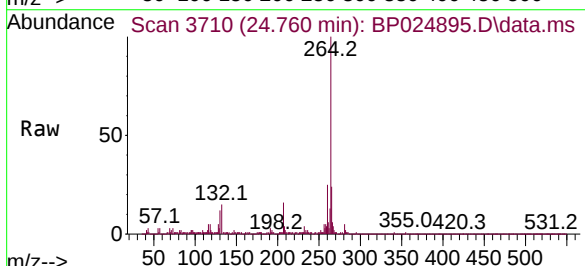
Tgt Ion:264 Resp: 1598305

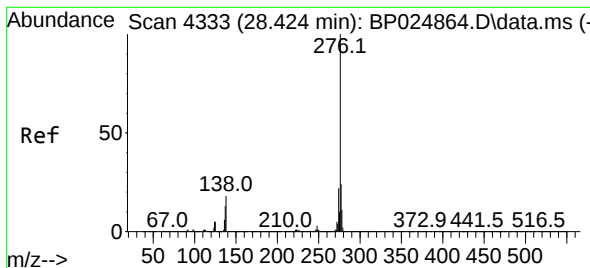
Ion Ratio Lower Upper

264 100

260 24.5 19.0 28.4

265 23.8 17.4 26.0





#87

Indeno(1,2,3-cd)pyrene

Concen: 43.300 ng

RT: 28.471 min Scan# 41

Delta R.T. 0.047 min

Lab File: BP024895.D

Acq: 10 Jun 2025 15:46

Instrument :

BNA\_P

ClientSampleId :

B-187-SB01

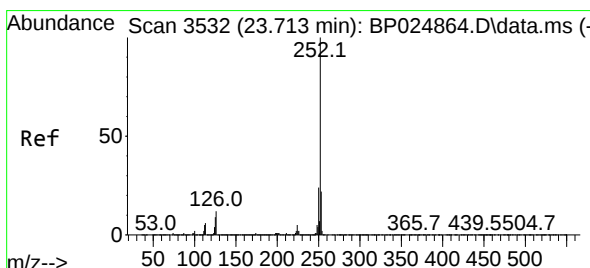
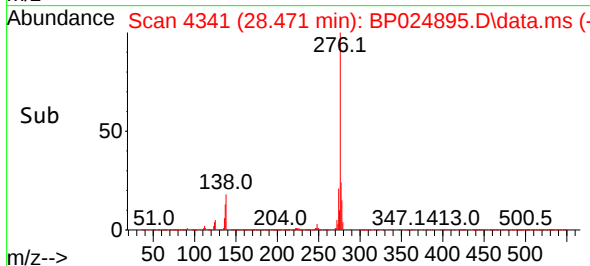
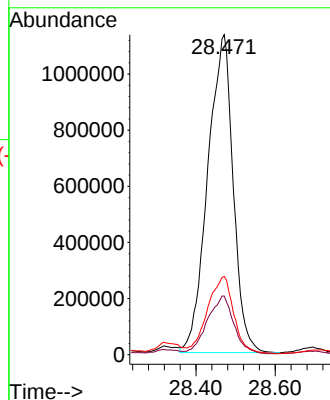
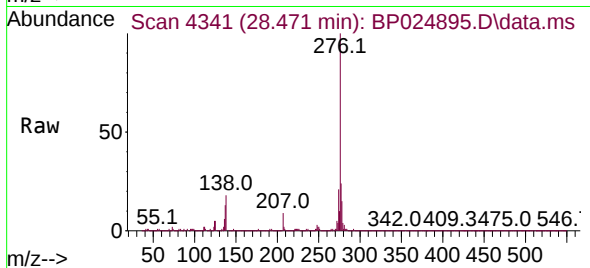
Tgt Ion:276 Resp: 5049444

Ion Ratio Lower Upper

276 100

138 18.9 18.6 27.8

277 25.0 20.2 30.4



#88

Benzo(b)fluoranthene

Concen: 99.541 ng

RT: 23.742 min Scan# 3537

Delta R.T. 0.029 min

Lab File: BP024895.D

Acq: 10 Jun 2025 15:46

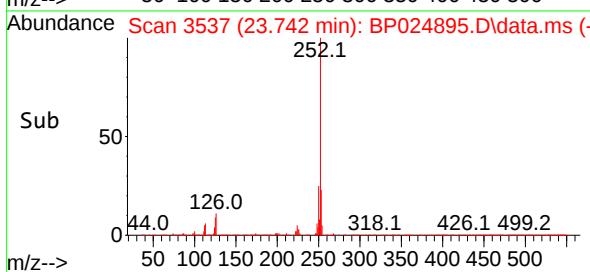
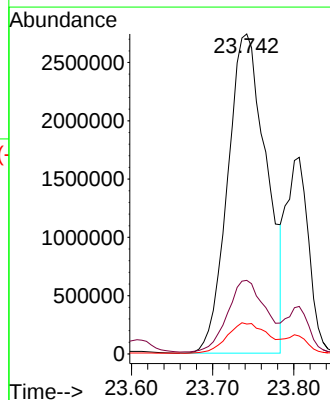
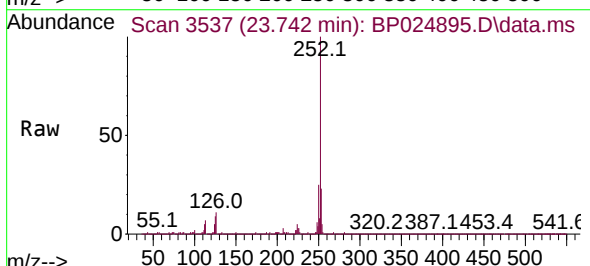
Tgt Ion:252 Resp: 9105161

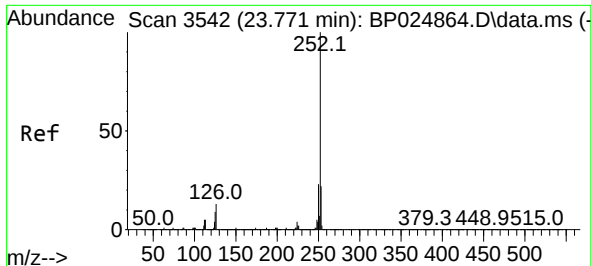
Ion Ratio Lower Upper

252 100

253 23.0 17.6 26.4

125 9.4 7.1 10.7

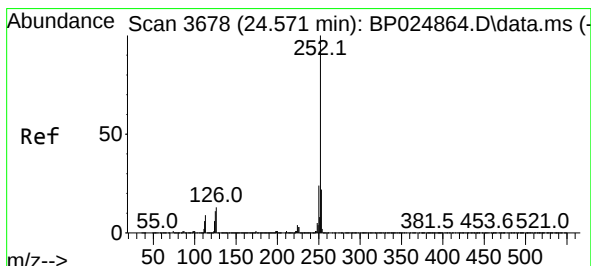
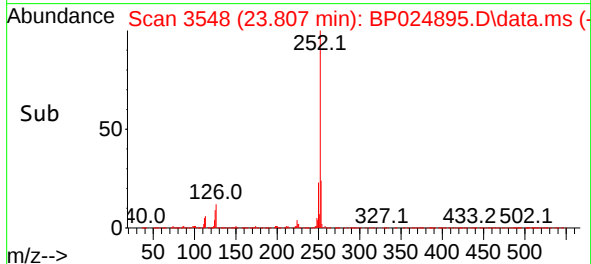
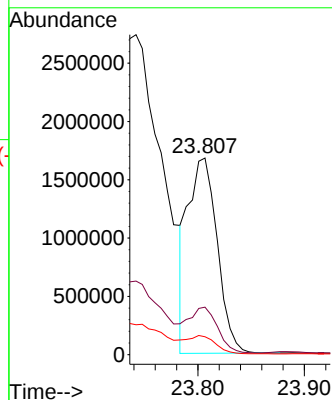
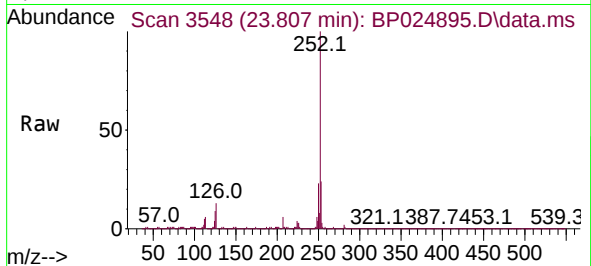




#89  
Benzo(k)fluoranthene  
Concen: 34.246 ng  
RT: 23.807 min Scan# 31  
Delta R.T. 0.035 min  
Lab File: BP024895.D  
Acq: 10 Jun 2025 15:46

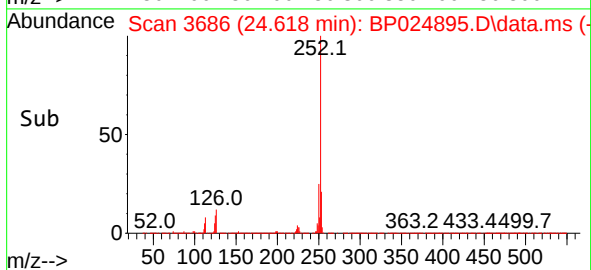
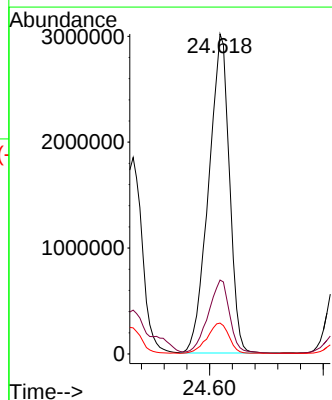
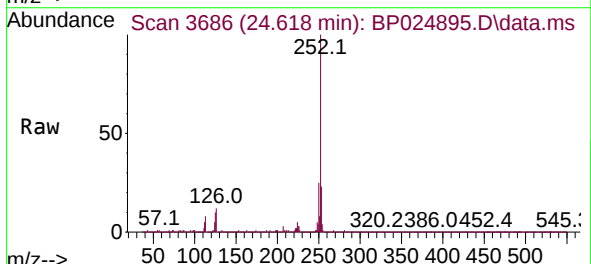
Instrument :  
BNA\_P  
ClientSampleId :  
B-187-SB01

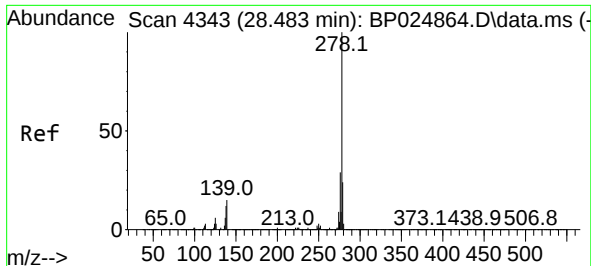
Tgt Ion:252 Resp: 3188599  
Ion Ratio Lower Upper  
252 100  
253 24.2 17.7 26.5  
125 9.1 7.4 11.0



#90  
Benzo(a)pyrene  
Concen: 85.331 ng  
RT: 24.618 min Scan# 3686  
Delta R.T. 0.047 min  
Lab File: BP024895.D  
Acq: 10 Jun 2025 15:46

Tgt Ion:252 Resp: 7622631  
Ion Ratio Lower Upper  
252 100  
253 23.1 17.5 26.3  
125 9.6 8.8 13.2

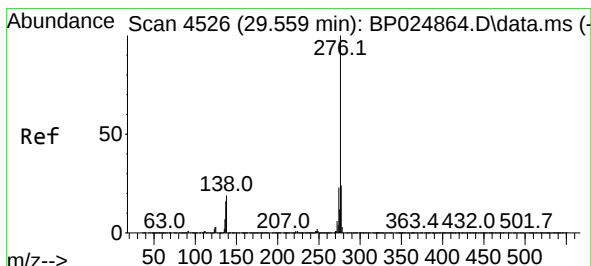
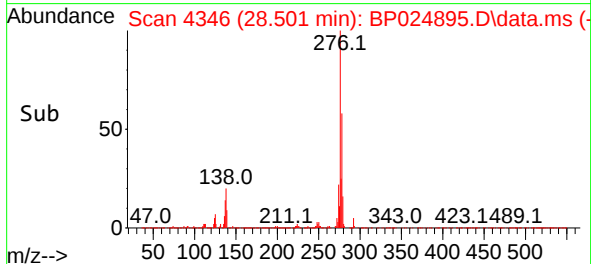
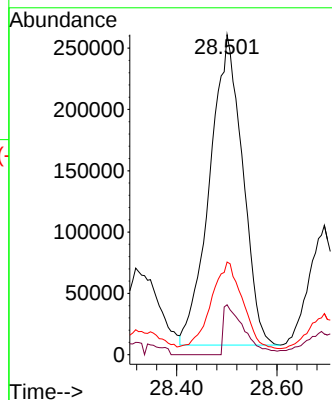
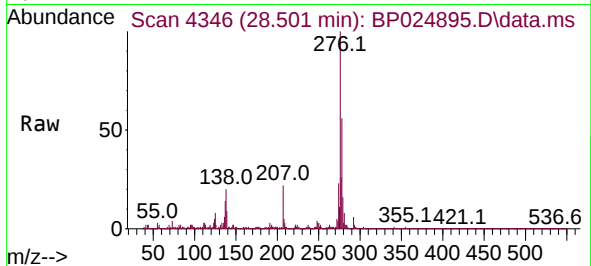




#91  
Dibenzo(a,h)anthracene  
Concen: 12.138 ng  
RT: 28.501 min Scan# 41  
Delta R.T. 0.018 min  
Lab File: BP024895.D  
Acq: 10 Jun 2025 15:46

Instrument :  
BNA\_P  
ClientSampleId :  
B-187-SB01

Tgt Ion:278 Resp: 1152183  
Ion Ratio Lower Upper  
278 100  
139 15.6 12.0 18.0  
279 28.9 19.1 28.7#



#92  
Benzo(g,h,i)perylene  
Concen: 51.675 ng  
RT: 29.618 min Scan# 4536  
Delta R.T. 0.059 min  
Lab File: BP024895.D  
Acq: 10 Jun 2025 15:46

Tgt Ion:276 Resp: 4866832  
Ion Ratio Lower Upper  
276 100  
277 24.0 19.1 28.7  
138 19.4 15.4 23.2

