

Data Path : Z:\svoasrv\HPCHEM1\BNA\_G\Data\BG102825\  
 Data File : BG064606.D  
 Acq On : 28 Oct 2025 17:54  
 Operator : RC/JU  
 Sample : Q3419-05  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 PR132-S16-094119-20251021

Manual Integrations  
 APPROVED

Reviewed By :Rahul Chavli 10/29/2025  
 Supervised By :mohammad ahmed 11/05/2025

Quant Time: Oct 28 18:29:41 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_G\Methods\8270-BG102425.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Oct 24 16:40:26 2025  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------------|--------|------|----------|--------|-------|----------|
| -----                         |        |      |          |        |       |          |
| Internal Standards            |        |      |          |        |       |          |
| 1) 1,4-Dichlorobenzene-d4     | 8.217  | 152  | 35915    | 20.000 | ng    | 0.00     |
| 21) Naphthalene-d8            | 11.037 | 136  | 132339   | 20.000 | ng    | -0.02    |
| 39) Acenaphthene-d10          | 14.839 | 164  | 98576    | 20.000 | ng    | 0.00     |
| 64) Phenanthrene-d10          | 17.577 | 188  | 222776   | 20.000 | ng    | 0.00     |
| 76) Chrysene-d12              | 21.848 | 240  | 285835   | 20.000 | ng    | -0.02    |
| 86) Perylene-d12              | 25.185 | 264  | 312112   | 20.000 | ng    | -0.02    |
|                               |        |      |          |        |       |          |
| System Monitoring Compounds   |        |      |          |        |       |          |
| 5) 2-Fluorophenol             | 5.743  | 112  | 181180   | 84.675 | ng    | 0.00     |
| 7) Phenol-d6                  | 7.347  | 99   | 224152   | 76.343 | ng    | 0.00     |
| 23) Nitrobenzene-d5           | 9.380  | 82   | 129605   | 58.822 | ng    | 0.00     |
| 42) 2,4,6-Tribromophenol      | 16.313 | 330  | 117414   | 82.526 | ng    | 0.00     |
| 45) 2-Fluorobiphenyl          | 13.470 | 172  | 302185   | 46.465 | ng    | 0.00     |
| 79) Terphenyl-d14             | 20.168 | 244  | 662203   | 43.721 | ng    | 0.00     |
|                               |        |      |          |        |       |          |
| Target Compounds              |        |      |          |        |       | Qvalue   |
| 52) Acenaphthene              | 14.903 | 154  | 16489    | 2.892  | ng    | 93       |
| 55) Dibenzofuran              | 15.232 | 168  | 31228    | 3.388  | ng    | # 96     |
| 58) Fluorene                  | 15.879 | 166  | 67155    | 9.330  | ng    | 95       |
| 71) Phenanthrene              | 17.618 | 178  | 763136   | 62.641 | ng    | 99       |
| 72) Anthracene                | 17.706 | 178  | 540820   | 43.640 | ng    | 100      |
| 73) Carbazole                 | 17.964 | 167  | 141763   | 12.972 | ng    | 98       |
| 75) Fluoranthene              | 19.615 | 202  | 1119221  | 73.335 | ng    | 99       |
| 78) Pyrene                    | 19.974 | 202  | 724689   | 38.805 | ng    | 99       |
| 81) Benzo(a)anthracene        | 21.830 | 228  | 288604   | 15.228 | ng    | 100      |
| 83) Chrysene                  | 21.895 | 228  | 306600   | 17.002 | ng    | 98       |
| 84) Bis(2-ethylhexyl)phtha... | 21.736 | 149  | 20966    | 2.486  | ng    | # 95     |
| 88) Benzo(b)fluoranthene      | 24.134 | 252  | 125529   | 6.559  | ng    | 98       |
| 89) Benzo(k)fluoranthene      | 24.192 | 252  | 52630m   | 2.748  | ng    |          |
| 90) Benzo(a)pyrene            | 25.027 | 252  | 78762    | 4.477  | ng    | 99       |
| -----                         |        |      |          |        |       |          |

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

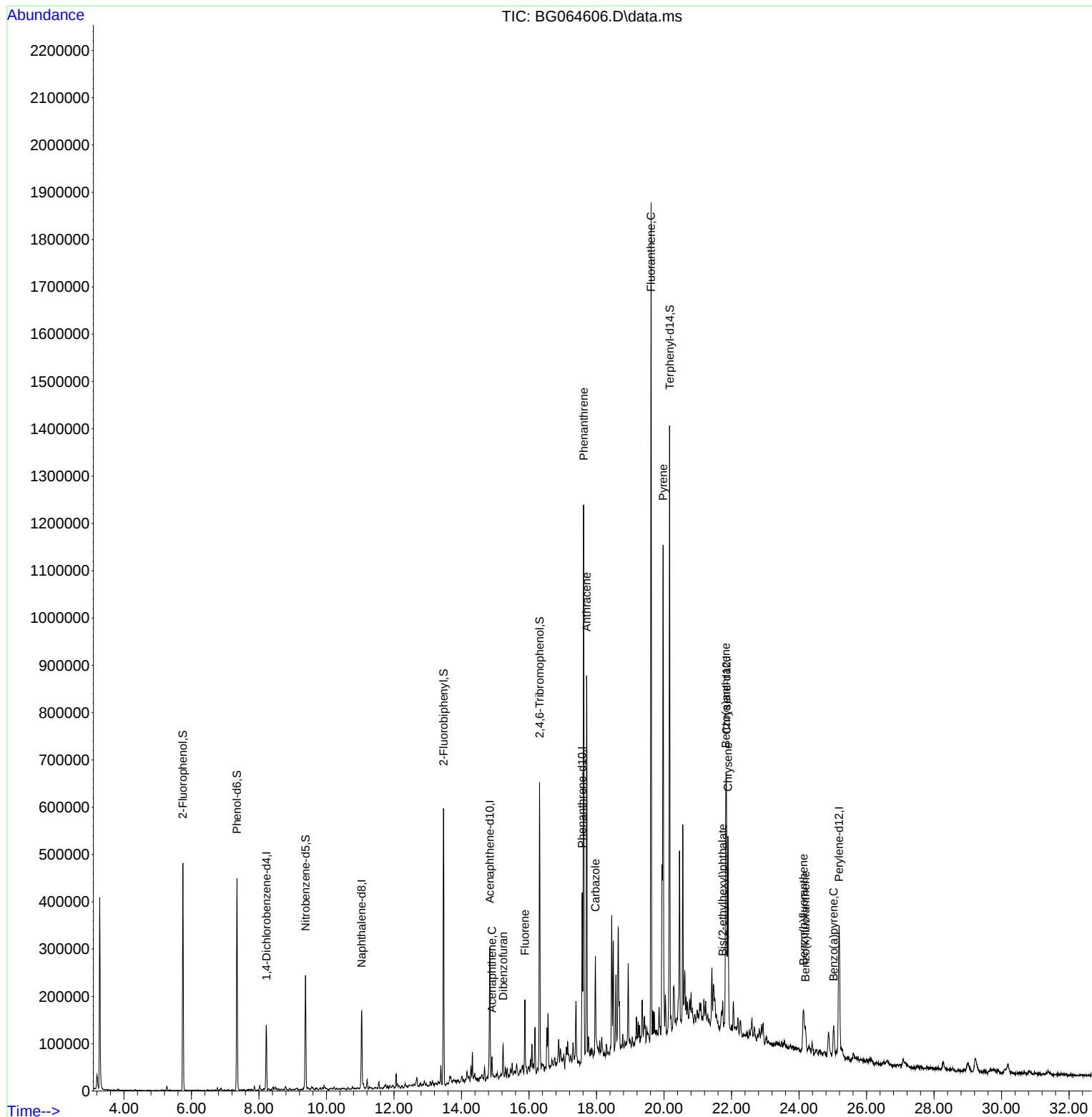
Data Path : Z:\svoasrv\HPCHEM1\BNA\_G\Data\BG102825\  
Data File : BG064606.D  
Acq On : 28 Oct 2025 17:54  
Operator : RC/JU  
Sample : Q3419-05  
Misc :  
ALS Vial : 8 Sample Multiplier: 1

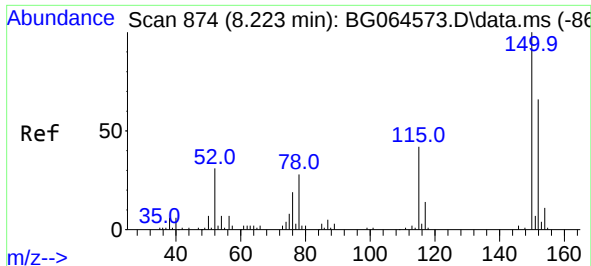
Instrument :  
BNA\_G  
ClientSampleId :  
PR132-S16-094119-20251021

Quant Time: Oct 28 18:29:41 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_G\Methods\8270-BG102425.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Oct 24 16:40:26 2025  
Response via : Initial Calibration

Manual Integrations  
APPROVED

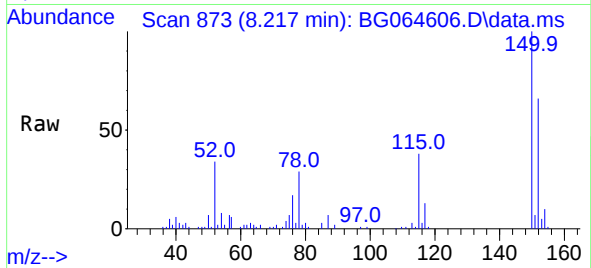
Reviewed By :Rahul Chavli 10/29/2025  
Supervised By :mohammad ahmed 11/05/2025





#1  
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 8.217 min Scan# 81  
Delta R.T. -0.004 min  
Lab File: BG064606.D  
Acq: 28 Oct 2025 17:54

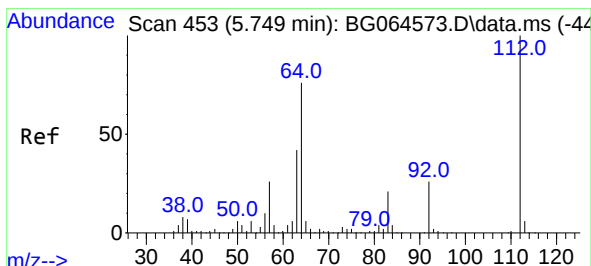
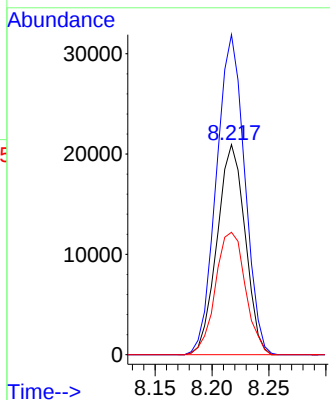
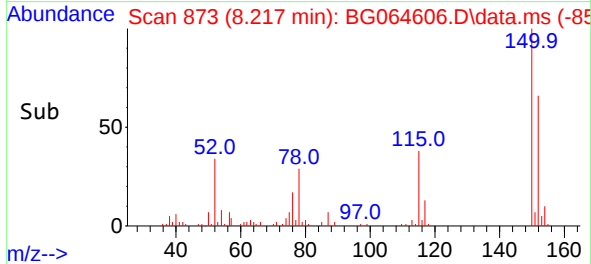
Instrument :  
BNA\_G  
ClientSampleId :  
PR132-S16-094119-20251021



Tgt Ion:152 Resp: 3591  
Ion Ratio Lower Upper  
152 100  
150 152.3 122.2 183.4  
115 58.3 50.8 76.2

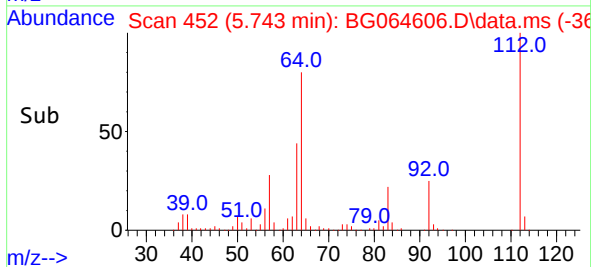
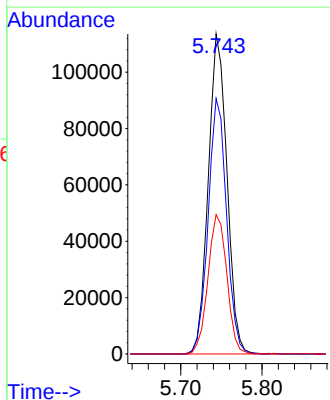
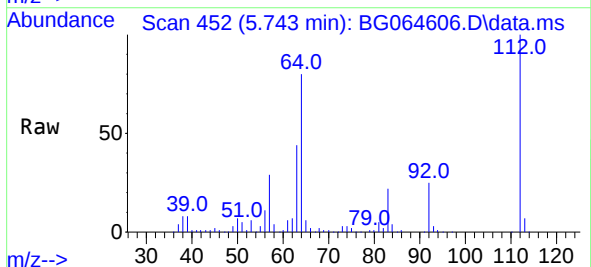
Manual Integrations  
APPROVED

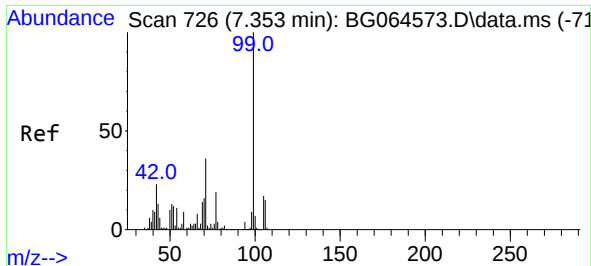
Reviewed By :Rahul Chavli 10/29/2025  
Supervised By :mohammad ahmed 11/05/2025



#5  
2-Fluorophenol  
Concen: 84.675 ng  
RT: 5.743 min Scan# 452  
Delta R.T. -0.004 min  
Lab File: BG064606.D  
Acq: 28 Oct 2025 17:54

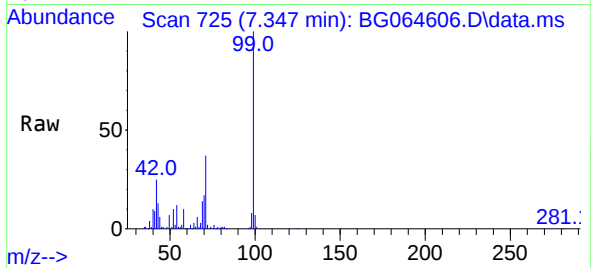
Tgt Ion:112 Resp: 181180  
Ion Ratio Lower Upper  
112 100  
64 79.8 60.7 91.1  
63 43.5 33.4 50.0





#7  
Phenol-d6  
Concen: 76.343 ng  
RT: 7.347 min Scan# 71  
Delta R.T. -0.009 min  
Lab File: BG064606.D  
Acq: 28 Oct 2025 17:54

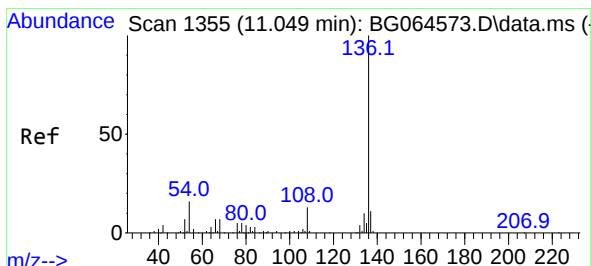
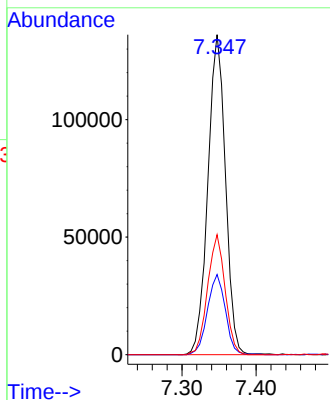
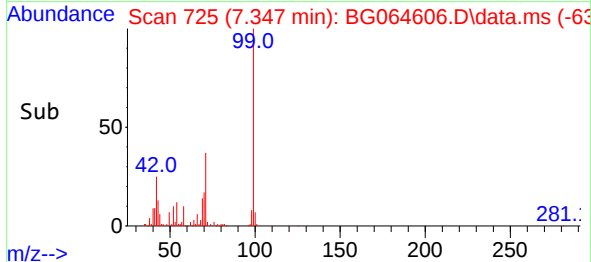
Instrument :  
BNA\_G  
ClientSampleId :  
PR132-S16-094119-20251021



Tgt Ion: 99 Resp: 224152  
Ion Ratio Lower Upper  
99 100  
42 25.0 18.3 27.5  
71 37.5 28.6 43.0

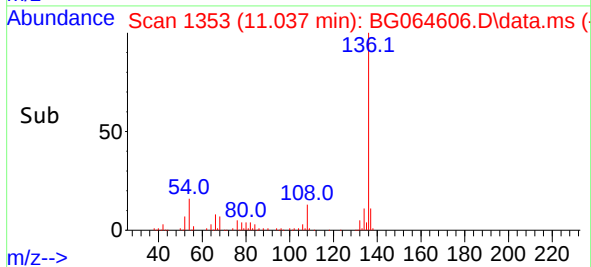
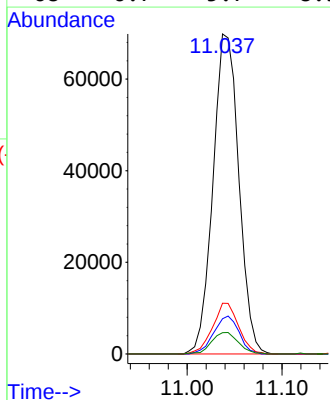
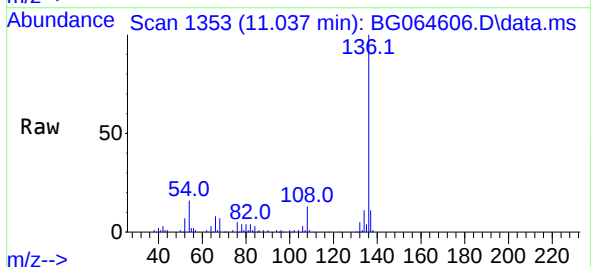
Manual Integrations  
APPROVED

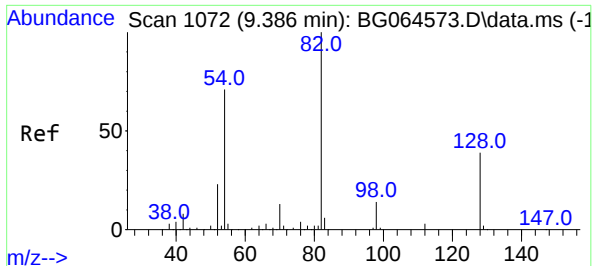
Reviewed By :Rahul Chavli 10/29/2025  
Supervised By :mohammad ahmed 11/05/2025



#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 11.037 min Scan# 1353  
Delta R.T. -0.015 min  
Lab File: BG064606.D  
Acq: 28 Oct 2025 17:54

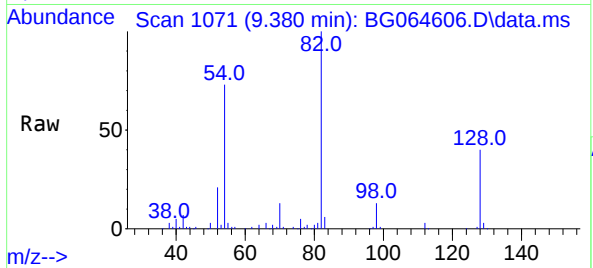
Tgt Ion:136 Resp: 132339  
Ion Ratio Lower Upper  
136 100  
137 11.0 9.2 13.8  
54 15.9 12.6 19.0  
68 6.7 5.7 8.5





#23  
Nitrobenzene-d5  
Concen: 58.822 ng  
RT: 9.380 min Scan# 1072  
Delta R.T. -0.010 min  
Lab File: BG064606.D  
Acq: 28 Oct 2025 17:54

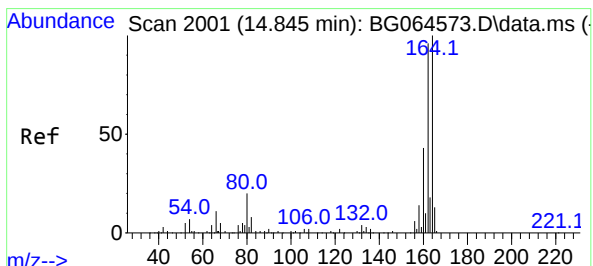
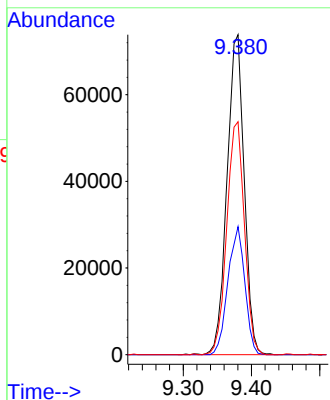
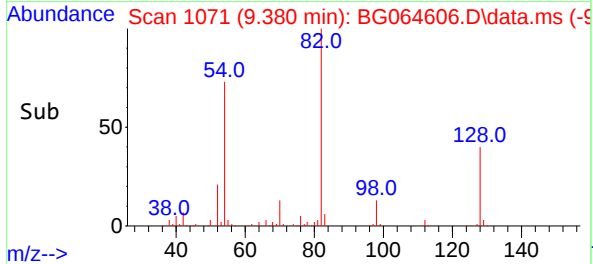
Instrument :  
BNA\_G  
ClientSampleId :  
PR132-S16-094119-20251021



Tgt Ion: 82 Resp: 12960  
Ion Ratio Lower Upper  
82 100  
128 40.0 31.3 46.9  
54 72.8 56.6 84.8

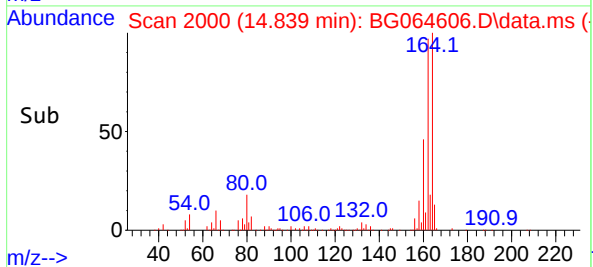
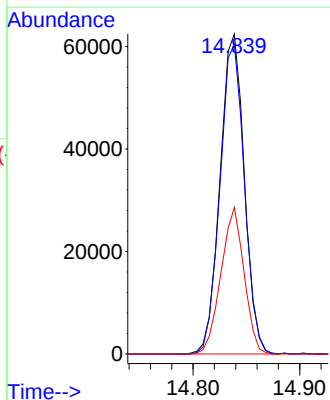
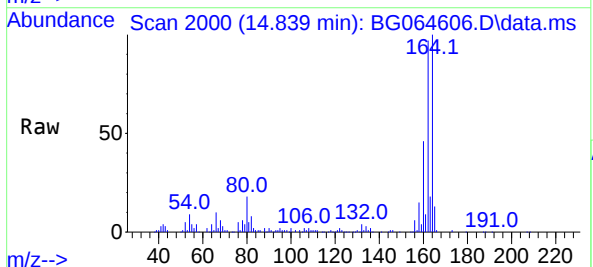
Manual Integrations  
APPROVED

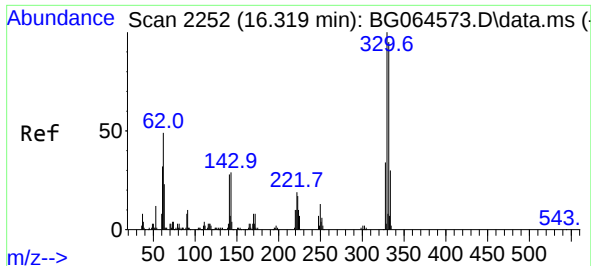
Reviewed By :Rahul Chavli 10/29/2025  
Supervised By :mohammad ahmed 11/05/2025



#39  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 14.839 min Scan# 2000  
Delta R.T. -0.004 min  
Lab File: BG064606.D  
Acq: 28 Oct 2025 17:54

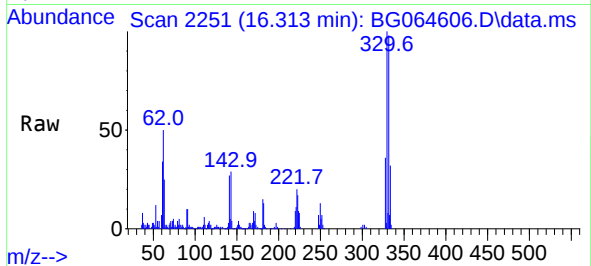
Tgt Ion:164 Resp: 98576  
Ion Ratio Lower Upper  
164 100  
162 96.8 77.0 115.6  
160 45.8 34.4 51.6





#42  
2,4,6-Tribromophenol  
Concen: 82.526 ng  
RT: 16.313 min Scan# 21  
Delta R.T. -0.010 min  
Lab File: BG064606.D  
Acq: 28 Oct 2025 17:54

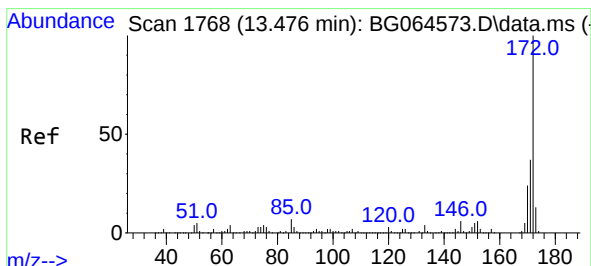
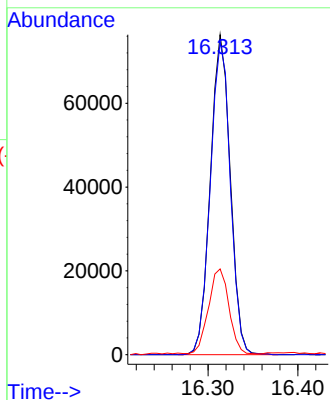
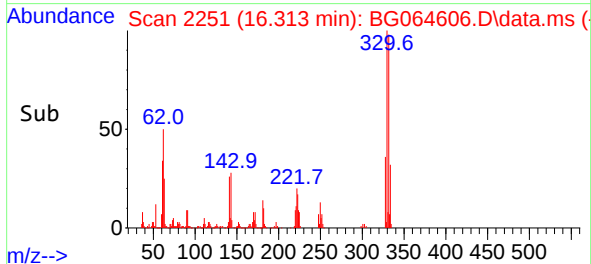
Instrument :  
BNA\_G  
ClientSampleId :  
PR132-S16-094119-20251021



Tgt Ion:330 Resp: 117414  
Ion Ratio Lower Upper  
330 100  
332 98.2 78.0 117.0  
141 27.2 21.8 32.6

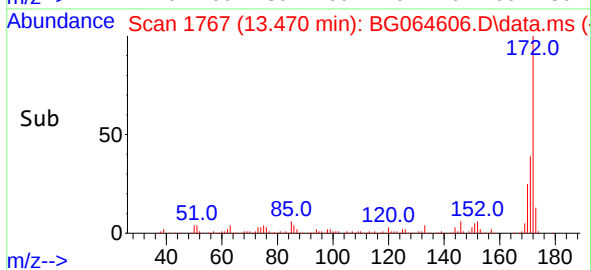
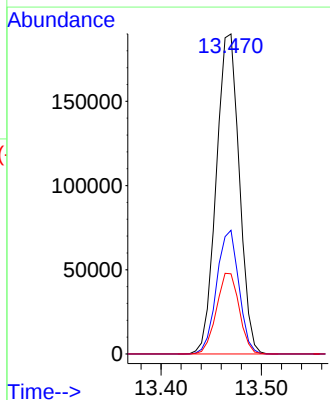
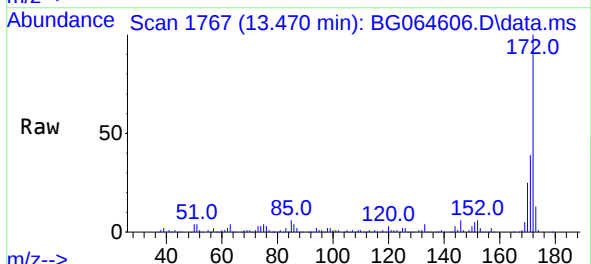
Manual Integrations  
APPROVED

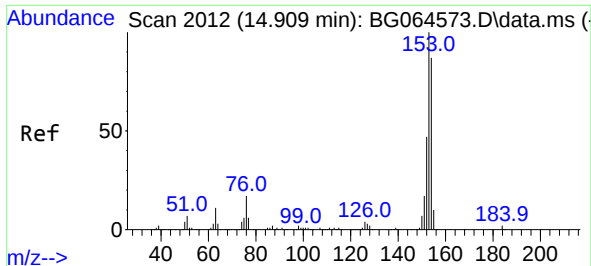
Reviewed By :Rahul Chavli 10/29/2025  
Supervised By :mohammad ahmed 11/05/2025



#45  
2-Fluorobiphenyl  
Concen: 46.465 ng  
RT: 13.470 min Scan# 1767  
Delta R.T. -0.009 min  
Lab File: BG064606.D  
Acq: 28 Oct 2025 17:54

Tgt Ion:172 Resp: 302185  
Ion Ratio Lower Upper  
172 100  
171 38.7 29.4 44.0  
170 25.0 19.1 28.7





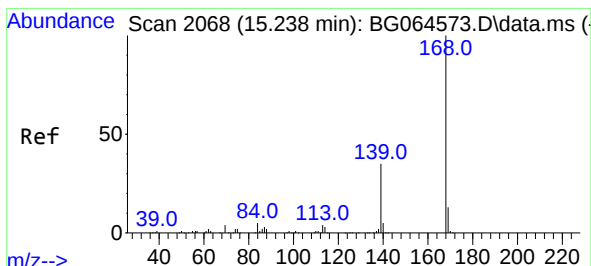
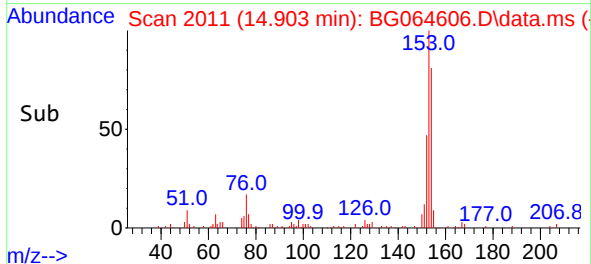
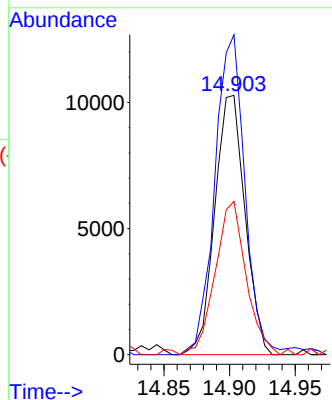
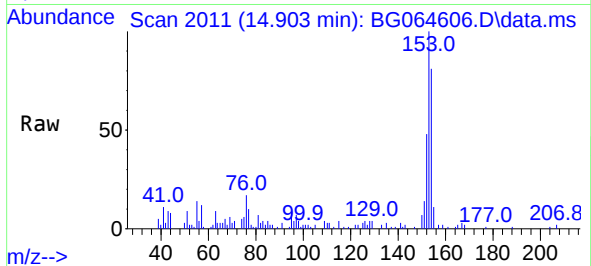
#52  
Acenaphthene  
Concen: 2.892 ng  
RT: 14.903 min Scan# 2011  
Delta R.T. -0.009 min  
Lab File: BG064606.D  
Acq: 28 Oct 2025 17:54

Instrument :  
BNA\_G  
ClientSampleId :  
PR132-S16-094119-20251021

Tgt Ion:154 Resp: 16489  
Ion Ratio Lower Upper  
154 100  
153 123.4 92.2 138.4  
152 59.1 43.2 64.8

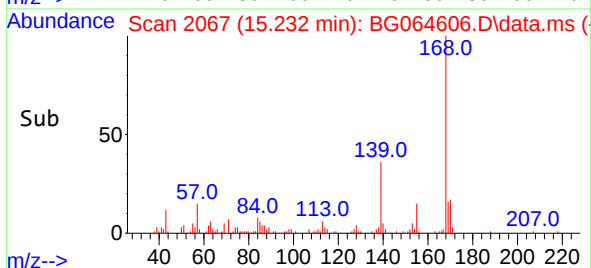
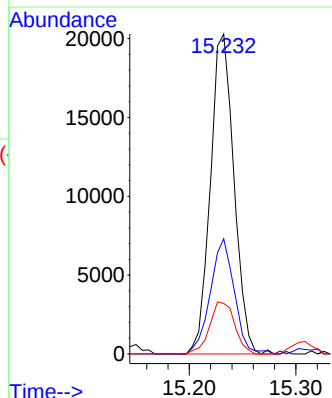
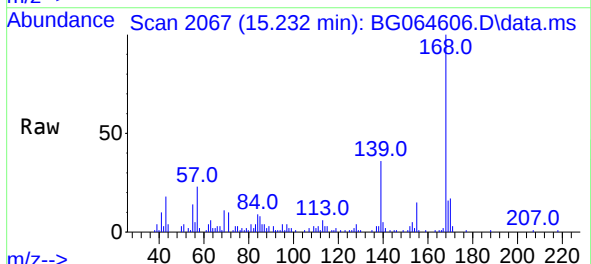
Manual Integrations  
APPROVED

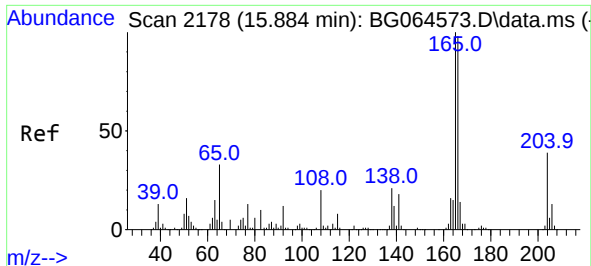
Reviewed By :Rahul Chavli 10/29/2025  
Supervised By :mohammad ahmed 11/05/2025



#55  
Dibenzofuran  
Concen: 3.388 ng  
RT: 15.232 min Scan# 2067  
Delta R.T. -0.009 min  
Lab File: BG064606.D  
Acq: 28 Oct 2025 17:54

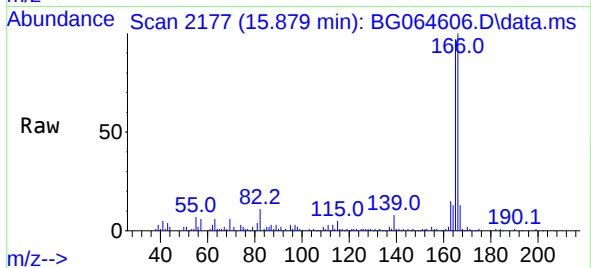
Tgt Ion:168 Resp: 31228  
Ion Ratio Lower Upper  
168 100  
139 36.0 27.8 41.8  
169 15.8 10.3 15.5#





#58  
Fluorene  
Concen: 9.330 ng  
RT: 15.879 min Scan# 2178  
Delta R.T. -0.009 min  
Lab File: BG064606.D  
Acq: 28 Oct 2025 17:54

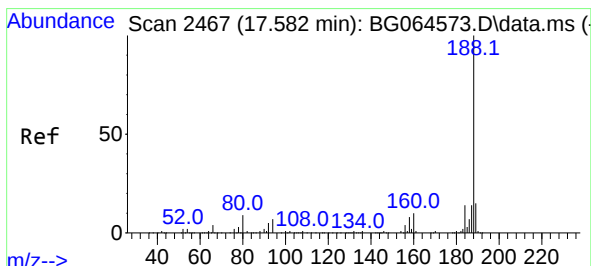
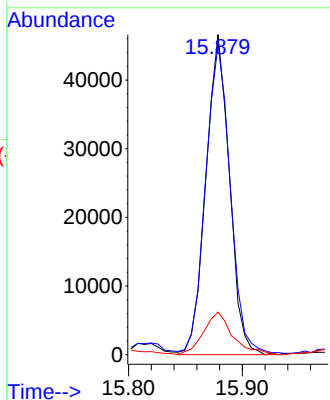
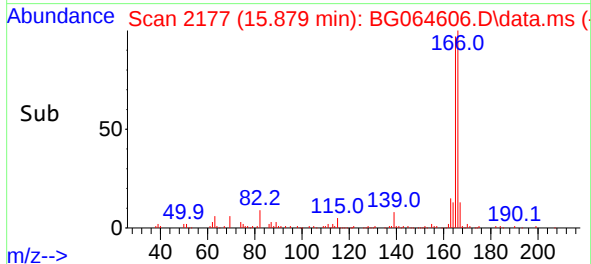
Instrument :  
BNA\_G  
ClientSampleId :  
PR132-S16-094119-20251021



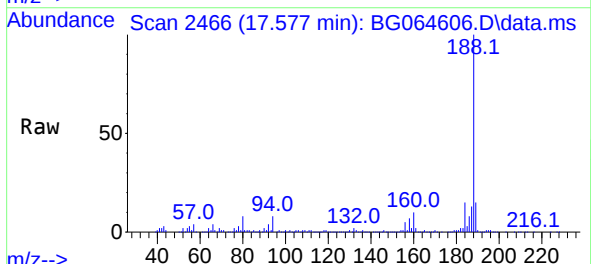
Tgt Ion:166 Resp: 6715  
Ion Ratio Lower Upper  
166 100  
165 96.9 81.5 122.3  
167 13.3 11.4 17.0

Manual Integrations  
APPROVED

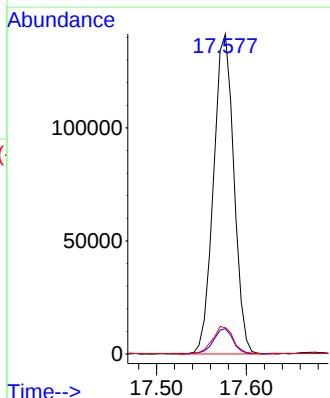
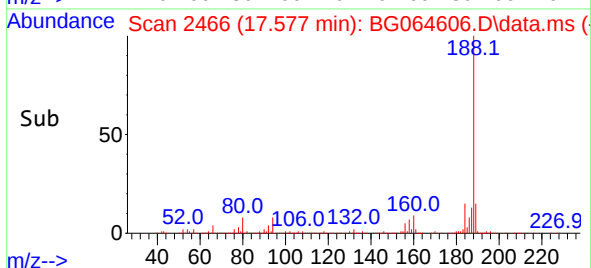
Reviewed By :Rahul Chavli 10/29/2025  
Supervised By :mohammad ahmed 11/05/2025

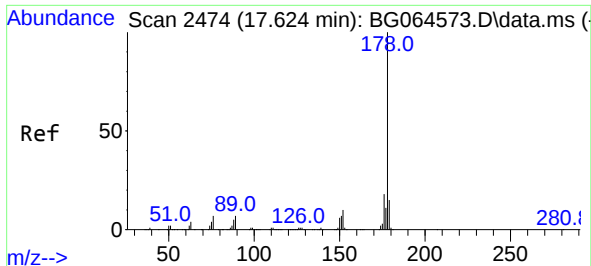


#64  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 17.577 min Scan# 2466  
Delta R.T. -0.003 min  
Lab File: BG064606.D  
Acq: 28 Oct 2025 17:54



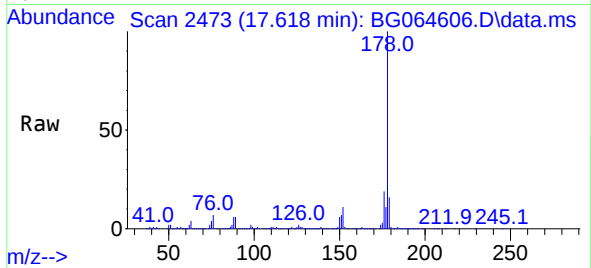
Tgt Ion:188 Resp: 222776  
Ion Ratio Lower Upper  
188 100  
94 7.9 5.7 8.5  
80 8.2 6.8 10.2





#71  
Phenanthrene  
Concen: 62.641 ng  
RT: 17.618 min Scan# 2473  
Delta R.T. -0.009 min  
Lab File: BG064606.D  
Acq: 28 Oct 2025 17:54

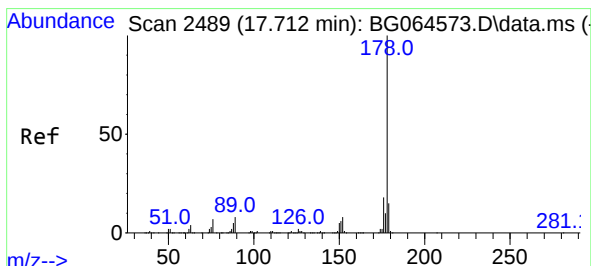
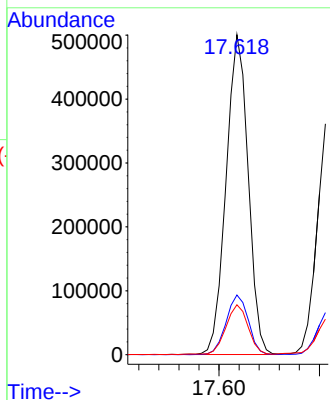
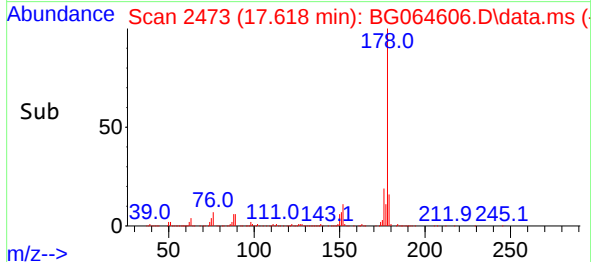
Instrument :  
BNA\_G  
ClientSampleId :  
PR132-S16-094119-20251021



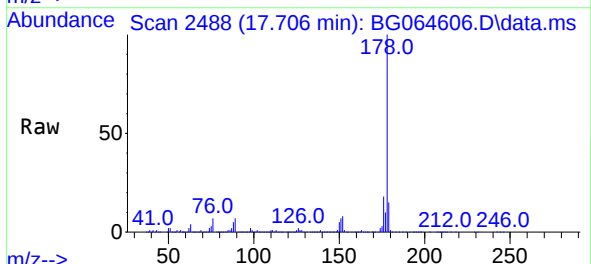
Tgt Ion:178 Resp: 763130  
Ion Ratio Lower Upper  
178 100  
176 18.6 14.7 22.1  
179 15.6 12.2 18.4

Manual Integrations  
APPROVED

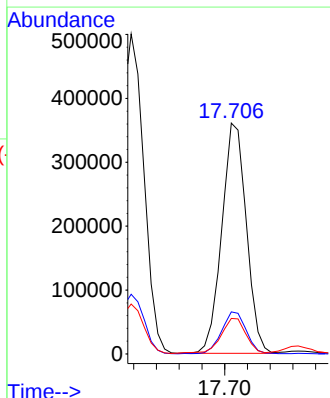
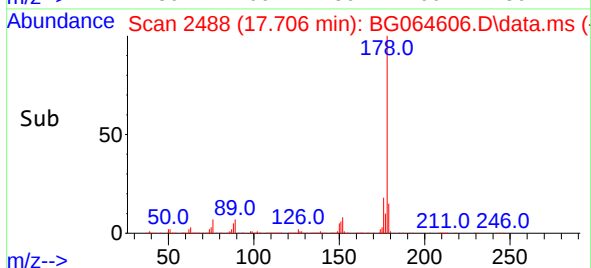
Reviewed By :Rahul Chavli 10/29/2025  
Supervised By :mohammad ahmed 11/05/2025

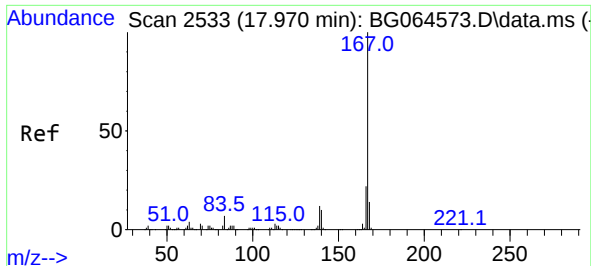


#72  
Anthracene  
Concen: 43.640 ng  
RT: 17.706 min Scan# 2488  
Delta R.T. -0.009 min  
Lab File: BG064606.D  
Acq: 28 Oct 2025 17:54



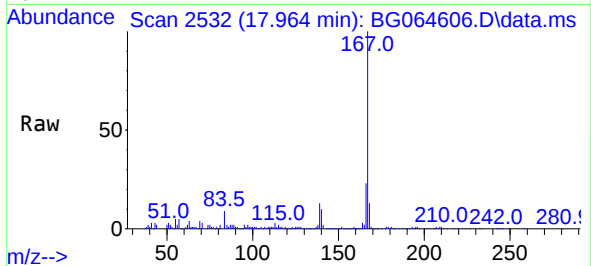
Tgt Ion:178 Resp: 540820  
Ion Ratio Lower Upper  
178 100  
176 18.2 14.4 21.6  
179 15.4 12.4 18.6





#73  
 Carbazole  
 Concen: 12.972 ng  
 RT: 17.964 min Scan# 2533  
 Delta R.T. -0.009 min  
 Lab File: BG064606.D  
 Acq: 28 Oct 2025 17:54

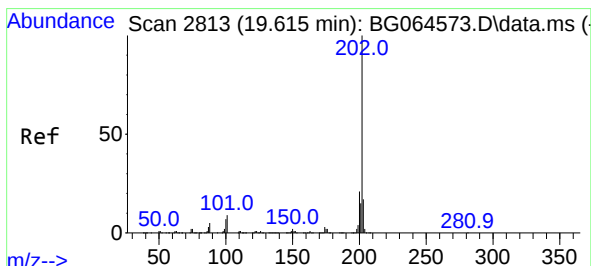
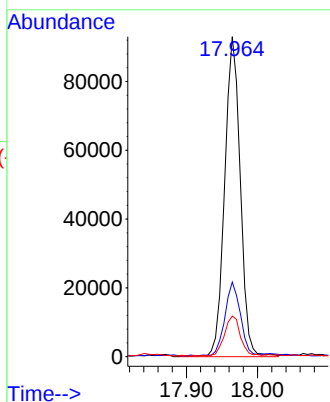
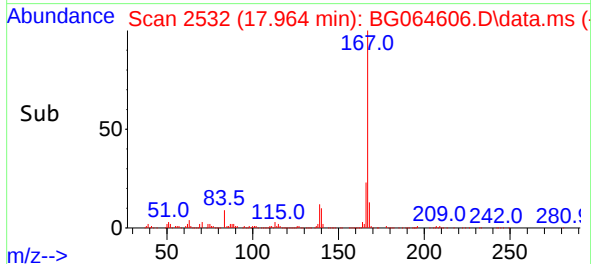
Instrument : BNA\_G  
 ClientSampleId : PR132-S16-094119-20251021



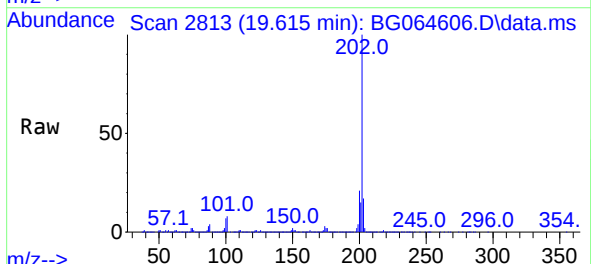
Tgt Ion:167 Resp: 141763  
 Ion Ratio Lower Upper  
 167 100  
 166 23.3 17.9 26.9  
 139 12.7 9.7 14.5

Manual Integrations  
 APPROVED

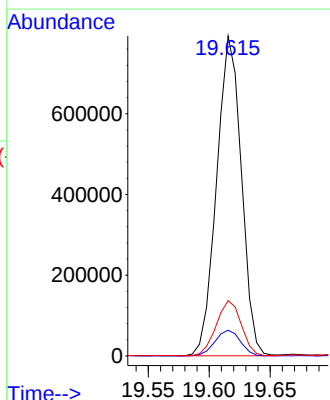
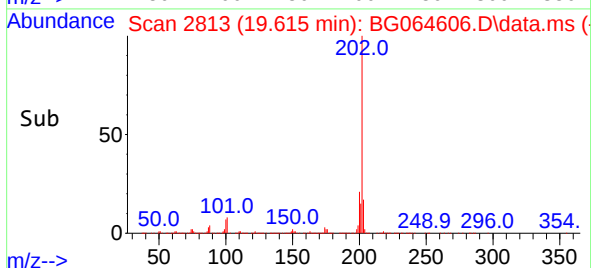
Reviewed By :Rahul Chavli 10/29/2025  
 Supervised By :mohammad ahmed 11/05/2025

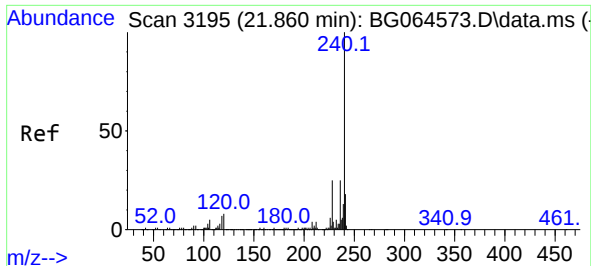


#75  
 Fluoranthene  
 Concen: 73.335 ng  
 RT: 19.615 min Scan# 2813  
 Delta R.T. -0.004 min  
 Lab File: BG064606.D  
 Acq: 28 Oct 2025 17:54



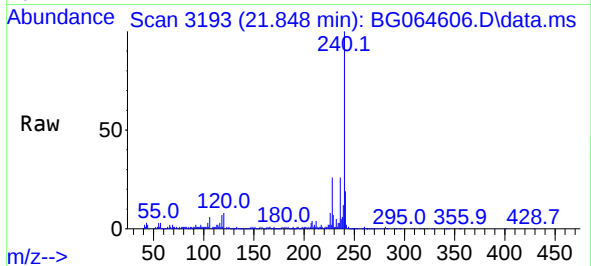
Tgt Ion:202 Resp: 1119221  
 Ion Ratio Lower Upper  
 202 100  
 101 8.1 0.0 28.7  
 203 17.3 0.0 37.0





#76  
Chrysene-d12  
Concen: 20.000 ng  
RT: 21.848 min Scan# 3193  
Delta R.T. -0.015 min  
Lab File: BG064606.D  
Acq: 28 Oct 2025 17:54

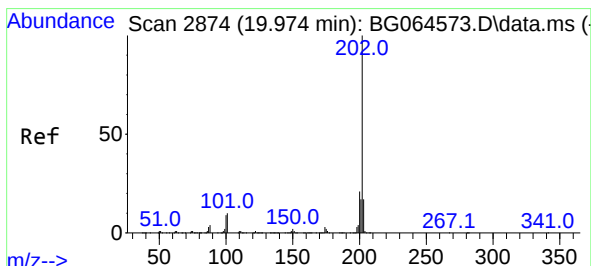
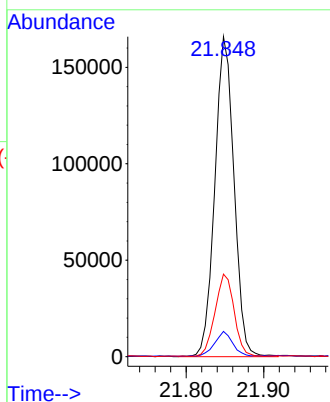
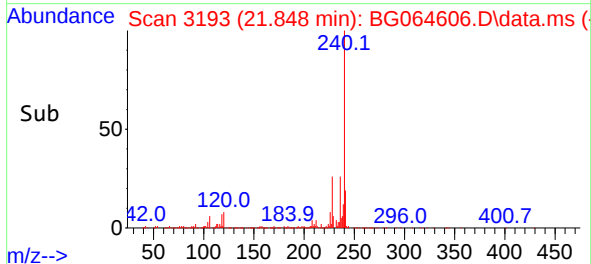
Instrument :  
BNA\_G  
ClientSampleId :  
PR132-S16-094119-20251021



Tgt Ion:240 Resp: 285835  
Ion Ratio Lower Upper  
240 100  
120 7.9 6.5 9.7  
236 25.8 20.2 30.2

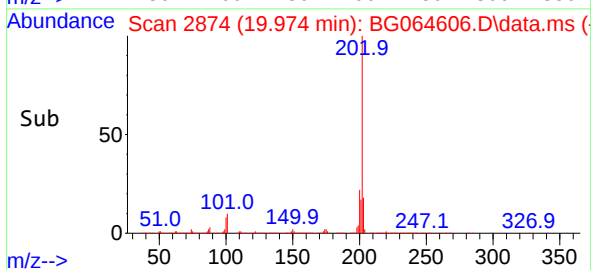
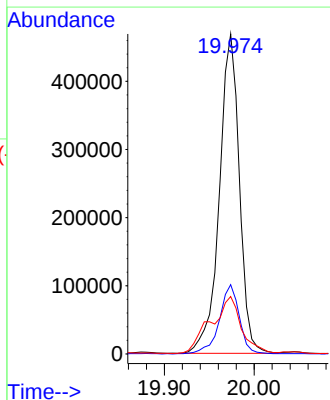
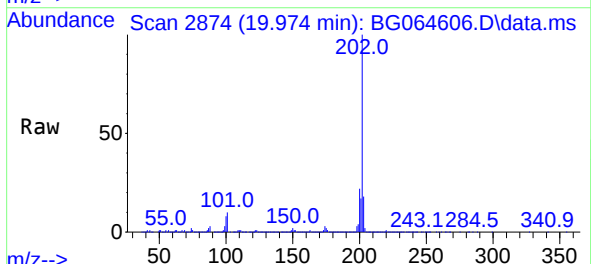
Manual Integrations  
APPROVED

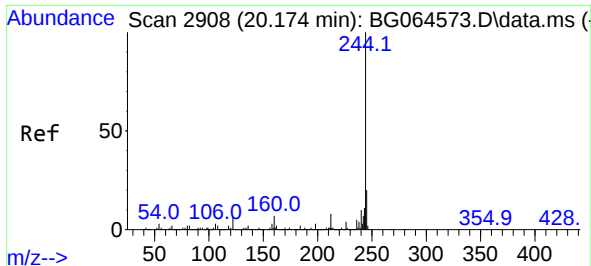
Reviewed By :Rahul Chavli 10/29/2025  
Supervised By :mohammad ahmed 11/05/2025



#78  
Pyrene  
Concen: 38.805 ng  
RT: 19.974 min Scan# 2874  
Delta R.T. -0.004 min  
Lab File: BG064606.D  
Acq: 28 Oct 2025 17:54

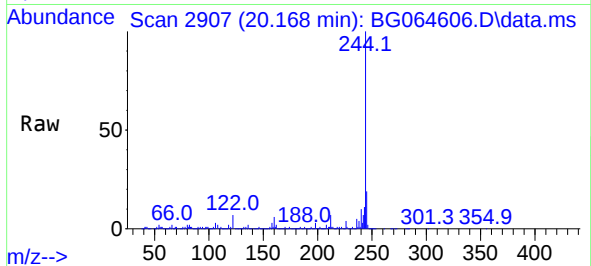
Tgt Ion:202 Resp: 724689  
Ion Ratio Lower Upper  
202 100  
200 21.6 17.0 25.4  
203 17.9 13.8 20.6





#79  
Terphenyl-d14  
Concen: 43.721 ng  
RT: 20.168 min Scan# 2907  
Delta R.T. -0.009 min  
Lab File: BG064606.D  
Acq: 28 Oct 2025 17:54

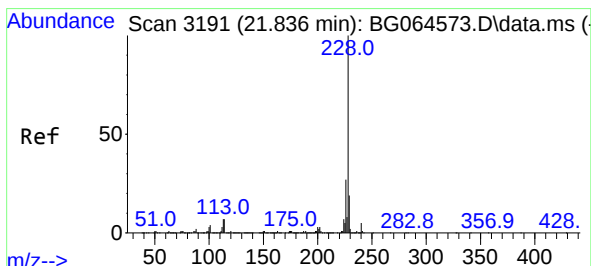
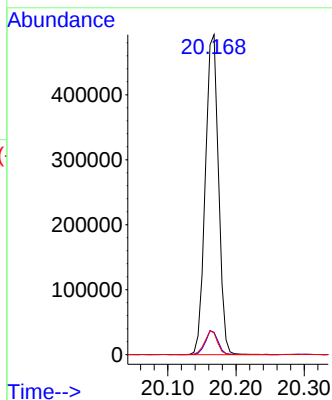
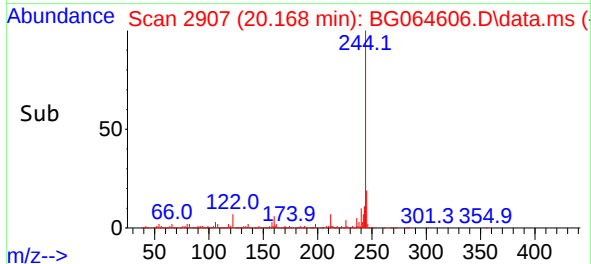
Instrument :  
BNA\_G  
ClientSampleId :  
PR132-S16-094119-20251021



Tgt Ion:244 Resp: 66220  
Ion Ratio Lower Upper  
244 100  
212 7.0 6.1 9.1  
122 6.8 5.6 8.4

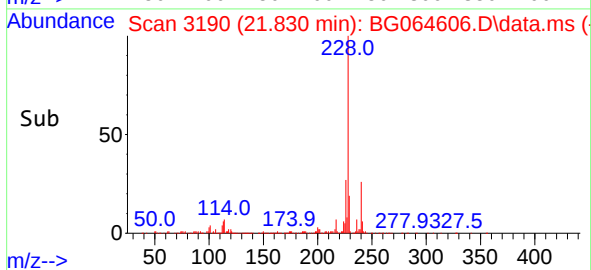
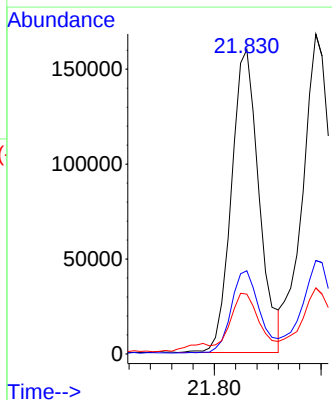
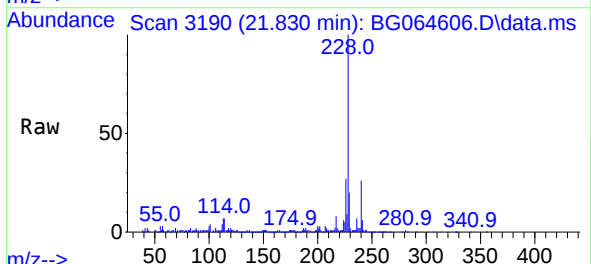
Manual Integrations  
APPROVED

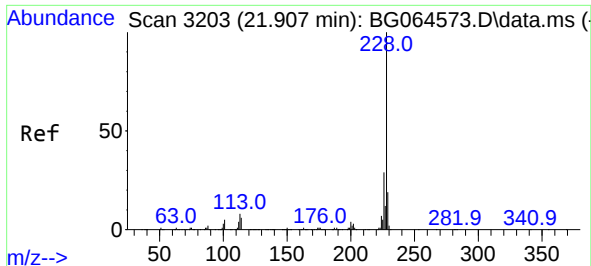
Reviewed By :Rahul Chavli 10/29/2025  
Supervised By :mohammad ahmed 11/05/2025



#81  
Benzo(a)anthracene  
Concen: 15.228 ng  
RT: 21.830 min Scan# 3190  
Delta R.T. -0.009 min  
Lab File: BG064606.D  
Acq: 28 Oct 2025 17:54

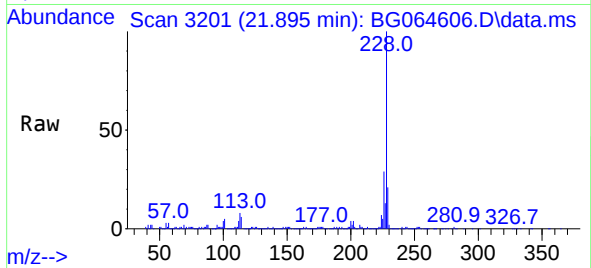
Tgt Ion:228 Resp: 288604  
Ion Ratio Lower Upper  
228 100  
226 27.4 21.9 32.9  
229 19.7 15.6 23.4





#83  
Chrysene  
Concen: 17.002 ng  
RT: 21.895 min Scan# 3174  
Delta R.T. -0.015 min  
Lab File: BG064606.D  
Acq: 28 Oct 2025 17:54

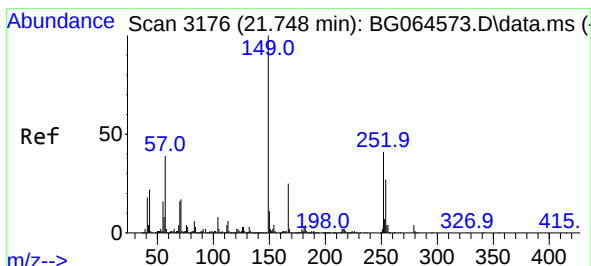
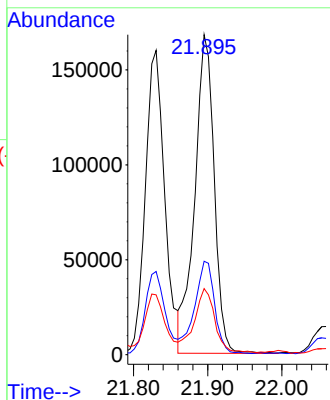
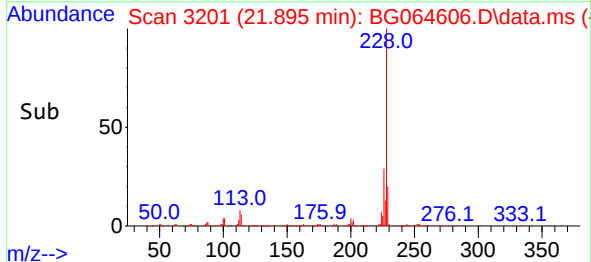
Instrument :  
BNA\_G  
ClientSampleId :  
PR132-S16-094119-20251021



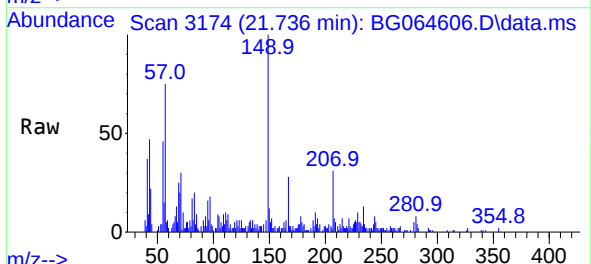
Tgt Ion:228 Resp: 306600  
Ion Ratio Lower Upper  
228 100  
226 29.2 23.3 34.9  
229 20.7 15.2 22.8

Manual Integrations  
APPROVED

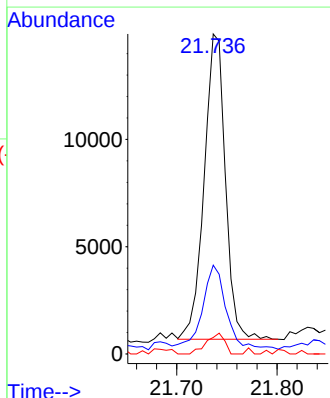
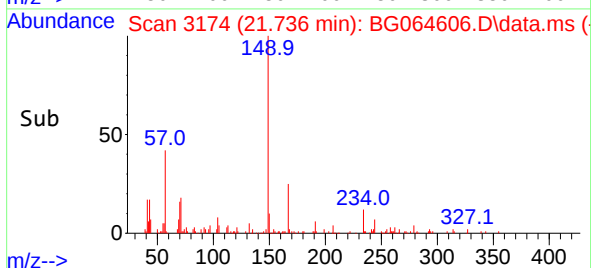
Reviewed By :Rahul Chavli 10/29/2025  
Supervised By :mohammad ahmed 11/05/2025

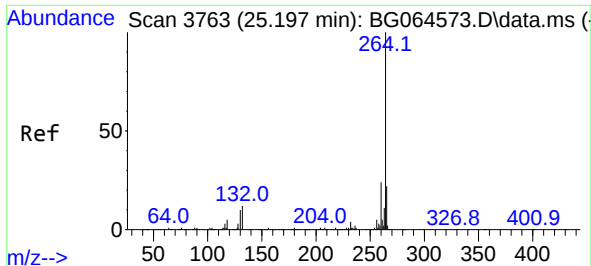


#84  
Bis(2-ethylhexyl)phthalate  
Concen: 2.486 ng  
RT: 21.736 min Scan# 3174  
Delta R.T. -0.015 min  
Lab File: BG064606.D  
Acq: 28 Oct 2025 17:54



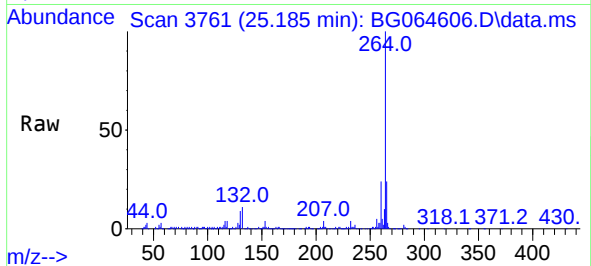
Tgt Ion:149 Resp: 20966  
Ion Ratio Lower Upper  
149 100  
167 27.7 20.0 30.0  
279 5.2 3.1 4.7#





#86  
Perylene-d12  
Concen: 20.000 ng  
RT: 25.185 min Scan# 31  
Delta R.T. -0.015 min  
Lab File: BG064606.D  
Acq: 28 Oct 2025 17:54

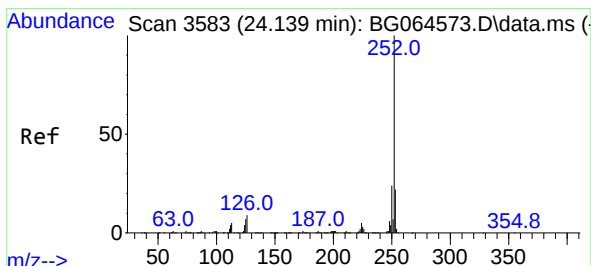
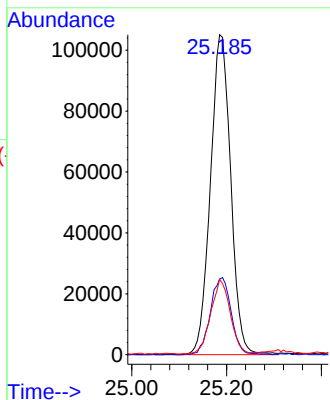
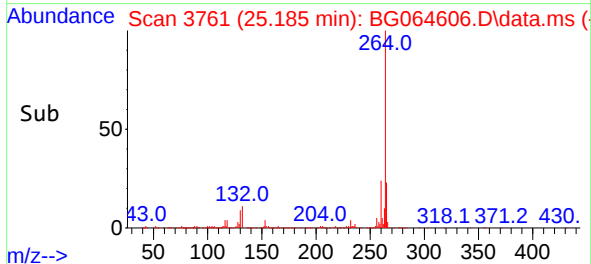
Instrument :  
BNA\_G  
ClientSampleId :  
PR132-S16-094119-20251021



Tgt Ion:264 Resp: 31211  
Ion Ratio Lower Upper  
264 100  
260 23.6 19.0 28.4  
265 23.6 17.6 26.4

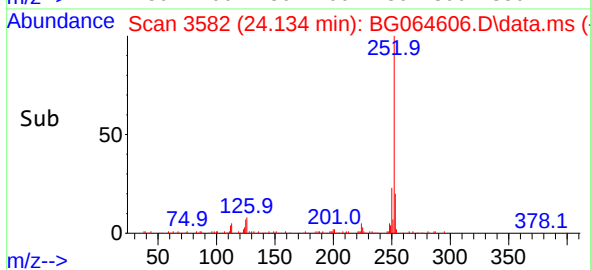
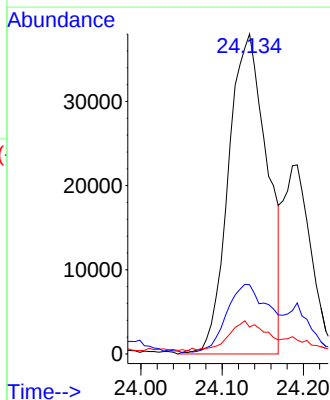
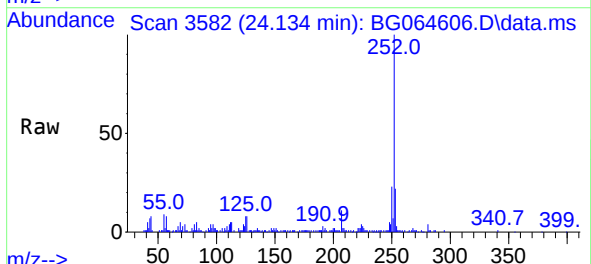
Manual Integrations  
APPROVED

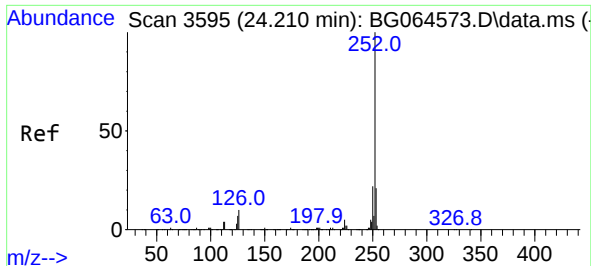
Reviewed By :Rahul Chavli 10/29/2025  
Supervised By :mohammad ahmed 11/05/2025



#88  
Benzo(b)fluoranthene  
Concen: 6.559 ng  
RT: 24.134 min Scan# 3582  
Delta R.T. -0.009 min  
Lab File: BG064606.D  
Acq: 28 Oct 2025 17:54

Tgt Ion:252 Resp: 125529  
Ion Ratio Lower Upper  
252 100  
253 21.7 17.8 26.8  
125 8.4 5.6 8.4





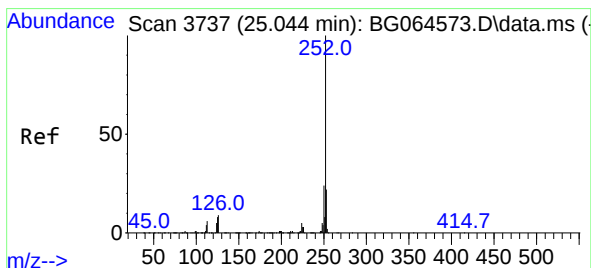
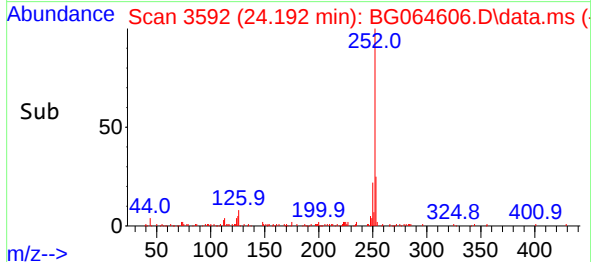
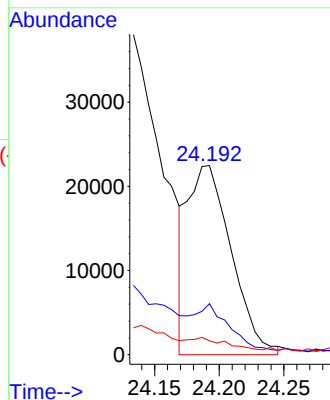
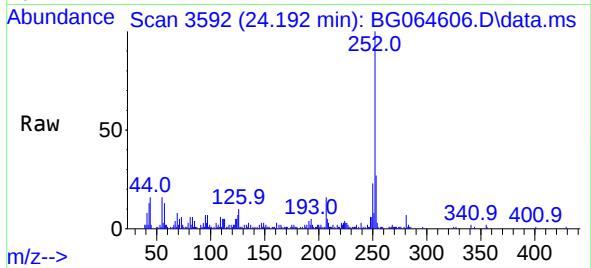
#89  
Benzo(k)fluoranthene  
Concen: 2.748 ng m  
RT: 24.192 min Scan# 3  
Delta R.T. -0.027 min  
Lab File: BG064606.D  
Acq: 28 Oct 2025 17:54

Instrument :  
BNA\_G  
ClientSampleId :  
PR132-S16-094119-20251021

Tgt Ion:252 Resp: 52630  
Ion Ratio Lower Upper  
252 100  
253 27.0 16.8 25.2  
125 7.4 5.4 8.0

Manual Integrations  
APPROVED

Reviewed By :Rahul Chavli 10/29/2025  
Supervised By :mohammad ahmed 11/05/2025



#90  
Benzo(a)pyrene  
Concen: 4.477 ng  
RT: 25.027 min Scan# 3734  
Delta R.T. -0.033 min  
Lab File: BG064606.D  
Acq: 28 Oct 2025 17:54

Tgt Ion:252 Resp: 78762  
Ion Ratio Lower Upper  
252 100  
253 21.3 17.6 26.4  
125 8.1 6.1 9.1

