

Data Path : Z:\svoasrv\HPCHEM1\BNA\_G\Data\BG122122\  
 Data File : BG056055.D  
 Acq On : 21 Dec 2022 19:27  
 Operator : CG/JU  
 Sample : N6038-22 5X  
 Misc :  
 ALS Vial : 15 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 RB-40-(0-2)

Manual Integrations  
 APPROVED

Reviewed By :Christian Giraldo 12/22/2022  
 Supervised By :mohammad ahmed 12/22/2022

Quant Time: Dec 22 01:27:23 2022  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_G\Methods\8270-BG121322.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Dec 21 01:11:10 2022  
 Response via : Initial Calibration

| Compound                    | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|--------|------|----------|--------|-------|----------|
| -----                       |        |      |          |        |       |          |
| Internal Standards          |        |      |          |        |       |          |
| 1) 1,4-Dichlorobenzene-d4   | 8.366  | 152  | 13131    | 20.000 | ng    | 0.00     |
| 21) Naphthalene-d8          | 11.198 | 136  | 49104    | 20.000 | ng    | # 0.00   |
| 39) Acenaphthene-d10        | 14.970 | 164  | 39890    | 20.000 | ng    | 0.00     |
| 64) Phenanthrene-d10        | 17.708 | 188  | 96466    | 20.000 | ng    | 0.00     |
| 76) Chrysene-d12            | 22.015 | 240  | 97052    | 20.000 | ng    | 0.00     |
| 86) Perylene-d12            | 25.517 | 264  | 113682   | 20.000 | ng    | 0.02     |
|                             |        |      |          |        |       |          |
| System Monitoring Compounds |        |      |          |        |       |          |
| 5) 2-Fluorophenol           | 5.881  | 112  | 11129    | 19.876 | ng    | 0.00     |
| 7) Phenol-d6                | 7.491  | 99   | 12988    | 18.036 | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 9.529  | 82   | 8945     | 12.730 | ng    | -0.01    |
| 42) 2,4,6-Tribromophenol    | 16.445 | 330  | 16914    | 17.585 | ng    | 0.00     |
| 45) 2-Fluorobiphenyl        | 13.595 | 172  | 32479    | 11.419 | ng    | 0.00     |
| 79) Terphenyl-d14           | 20.276 | 244  | 58688    | 10.688 | ng    | 0.00     |
|                             |        |      |          |        |       |          |
| Target Compounds            |        |      |          |        |       | Qvalue   |
| 71) Phenanthrene            | 17.749 | 178  | 20366    | 4.029  | ng    | 99       |
| 72) Anthracene              | 17.837 | 178  | 18804    | 3.760  | ng    | 98       |
| 75) Fluoranthene            | 19.741 | 202  | 303152   | 42.824 | ng    | 98       |
| 78) Pyrene                  | 20.099 | 202  | 316369   | 53.871 | ng    | 100      |
| 81) Benzo(a)anthracene      | 21.991 | 228  | 255265   | 37.378 | ng    | 98       |
| 83) Chrysene                | 22.068 | 228  | 193604m  | 30.248 | ng    |          |
| 87) Indeno(1,2,3-cd)pyrene  | 29.535 | 276  | 90055    | 9.851  | ng    | # 86     |
| 88) Benzo(b)fluoranthene    | 24.400 | 252  | 270966   | 36.829 | ng    | 97       |
| 89) Benzo(k)fluoranthene    | 24.459 | 252  | 124119m  | 16.909 | ng    |          |
| 90) Benzo(a)pyrene          | 25.346 | 252  | 226152   | 36.365 | ng    | 95       |
| 91) Dibenzo(a,h)anthracene  | 29.588 | 278  | 26837    | 3.507  | ng    | # 90     |
| 92) Benzo(g,h,i)perylene    | 30.810 | 276  | 60672    | 8.201  | ng    | # 94     |
| -----                       |        |      |          |        |       |          |

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

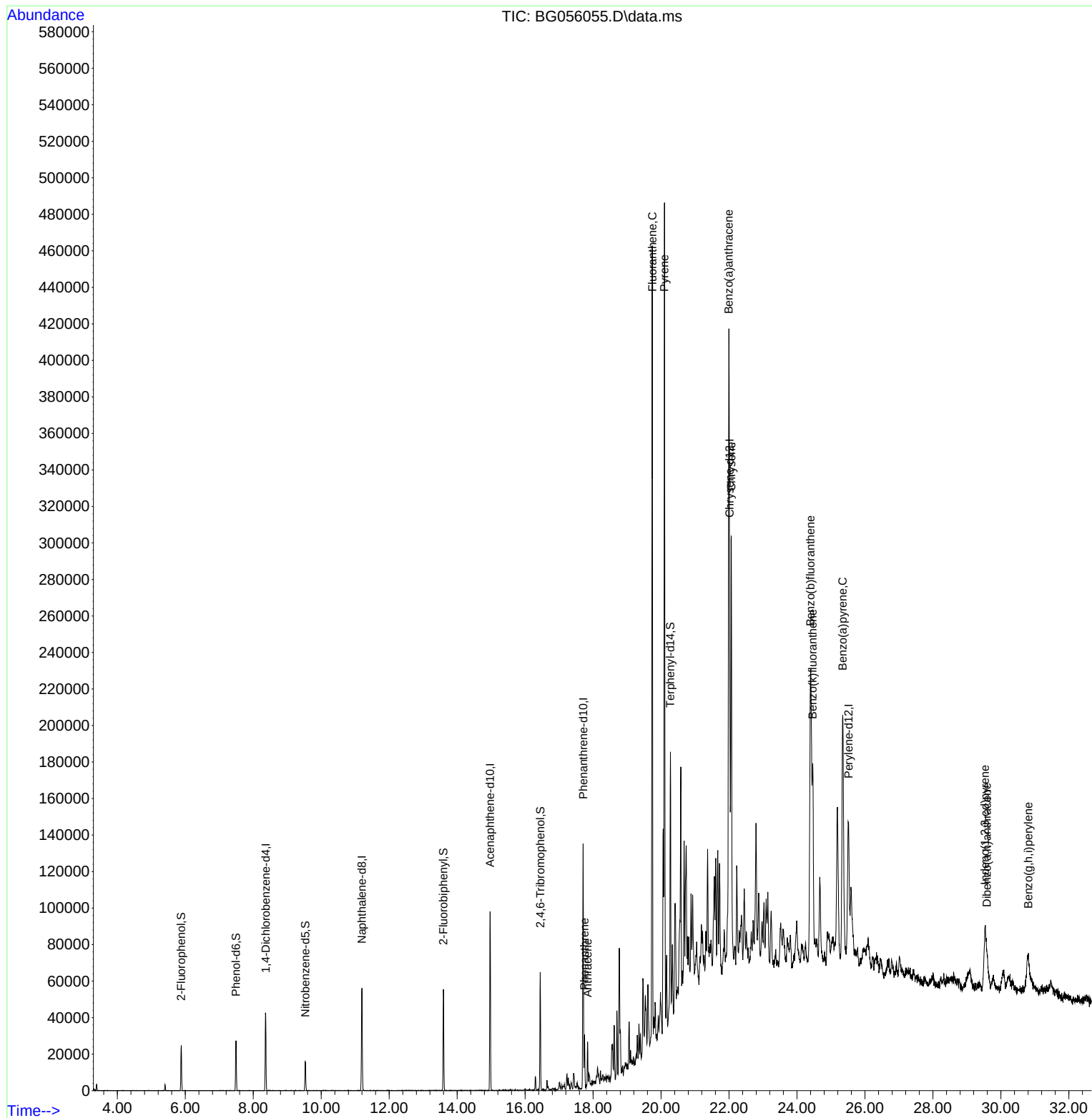
Data Path : Z:\svoasrv\HPCHEM1\BNA\_G\Data\BG122122\  
Data File : BG056055.D  
Acq On : 21 Dec 2022 19:27  
Operator : CG/JU  
Sample : N6038-22 5X  
Misc :  
ALS Vial : 15 Sample Multiplier: 1

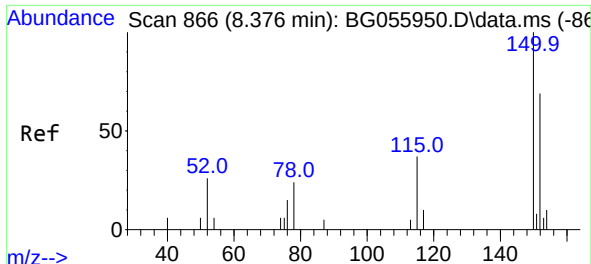
Instrument :  
BNA\_G  
ClientSampleId :  
RB-40-(0-2)

Quant Time: Dec 22 01:27:23 2022  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_G\Methods\8270-BG121322.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Wed Dec 21 01:11:10 2022  
Response via : Initial Calibration

Manual Integrations  
APPROVED

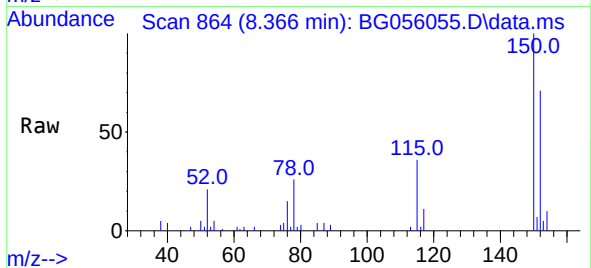
Reviewed By :Christian Giraldo 12/22/2022  
Supervised By :mohammad ahmed 12/22/2022





#1  
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 8.366 min Scan# 80  
Delta R.T. 0.001 min  
Lab File: BG056055.D  
Acq: 21 Dec 2022 19:27

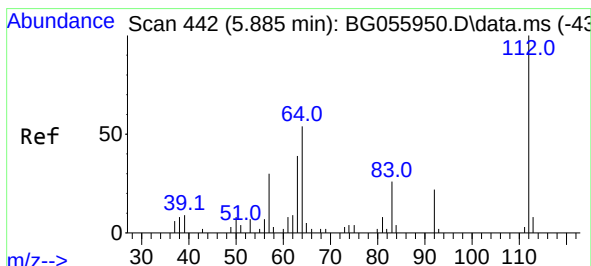
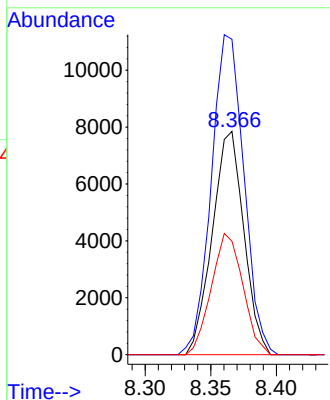
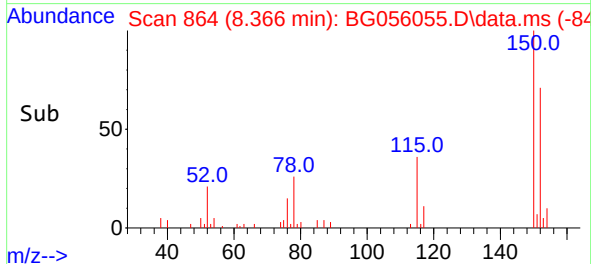
Instrument :  
BNA\_G  
ClientSampleId :  
RB-40-(0-2)



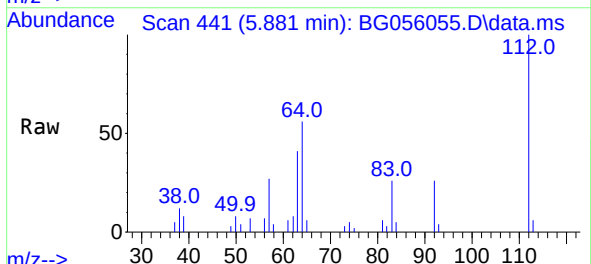
Tgt Ion:152 Resp: 1313  
Ion Ratio Lower Upper  
152 100  
150 141.2 115.7 173.5  
115 50.8 43.0 64.4

Manual Integrations  
APPROVED

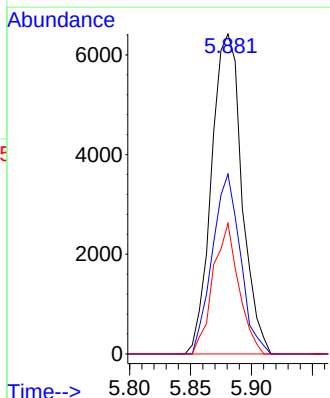
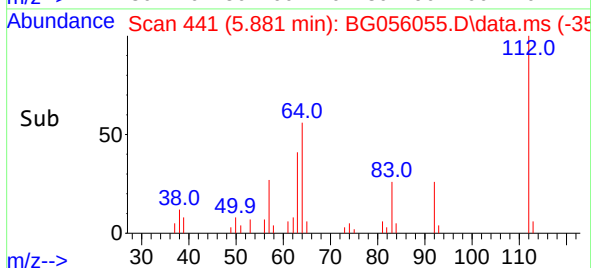
Reviewed By :Christian Giraldo 12/22/2022  
Supervised By :mohammad ahmed 12/22/2022

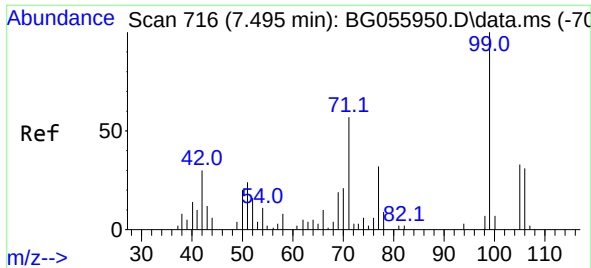


#5  
2-Fluorophenol  
Concen: 19.876 ng  
RT: 5.881 min Scan# 441  
Delta R.T. 0.001 min  
Lab File: BG056055.D  
Acq: 21 Dec 2022 19:27



Tgt Ion:112 Resp: 11129  
Ion Ratio Lower Upper  
112 100  
64 56.2 43.0 64.4  
63 40.8 31.4 47.2





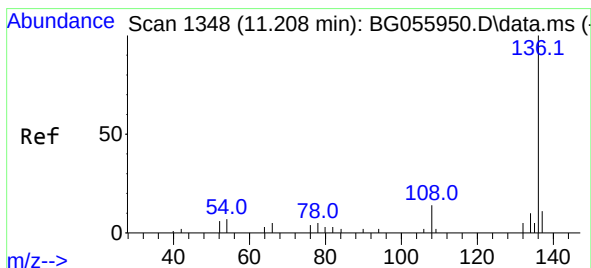
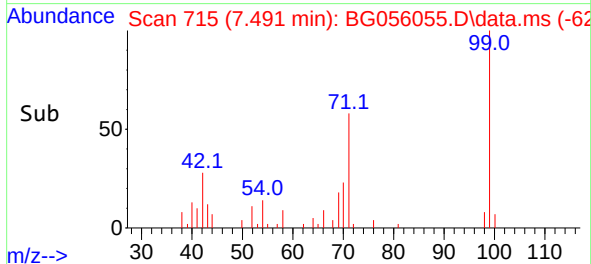
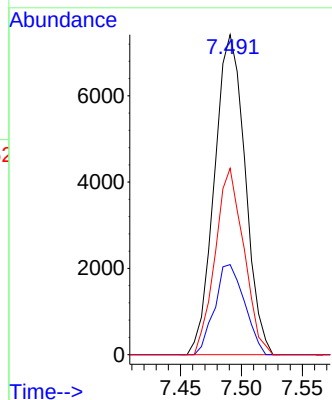
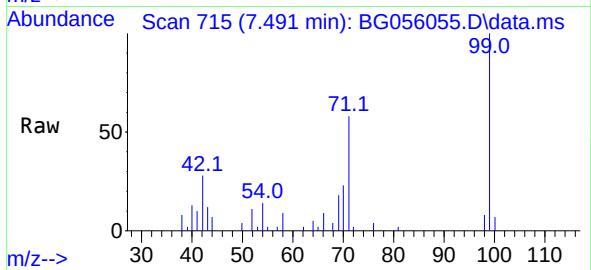
#7  
Phenol-d6  
Concen: 18.036 ng  
RT: 7.491 min Scan# 716  
Delta R.T. -0.005 min  
Lab File: BG056055.D  
Acq: 21 Dec 2022 19:27

Instrument :  
BNA\_G  
ClientSampleId :  
RB-40-(0-2)

Tgt Ion: 99 Resp: 1298  
Ion Ratio Lower Upper  
99 100  
42 28.1 24.3 36.5  
71 58.3 45.6 68.4

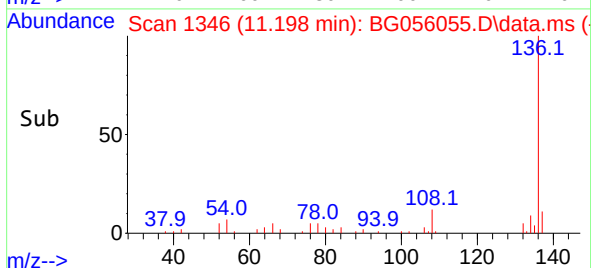
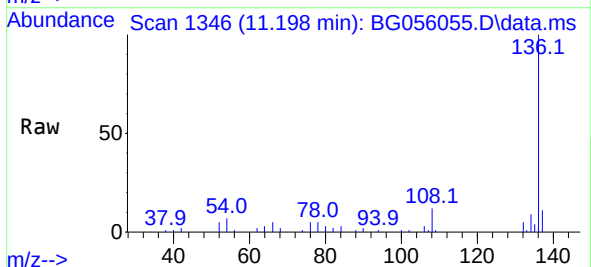
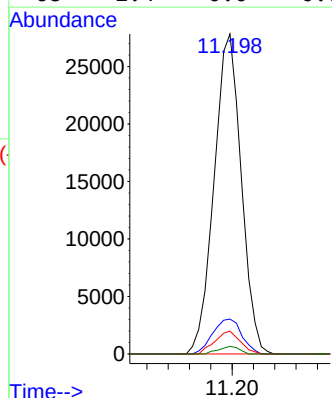
Manual Integrations  
APPROVED

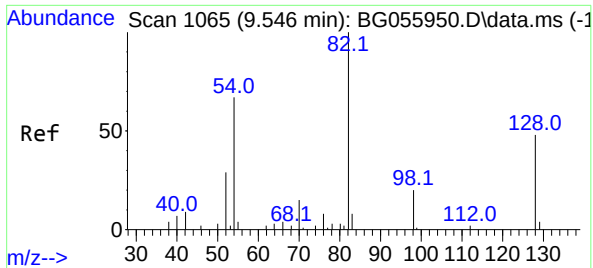
Reviewed By :Christian Giraldo 12/22/2022  
Supervised By :mohammad ahmed 12/22/2022



#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 11.198 min Scan# 1346  
Delta R.T. 0.001 min  
Lab File: BG056055.D  
Acq: 21 Dec 2022 19:27

Tgt Ion:136 Resp: 49104  
Ion Ratio Lower Upper  
136 100  
137 10.9 9.2 13.8  
54 7.2 5.6 8.4  
68 2.4 0.0 0.0#





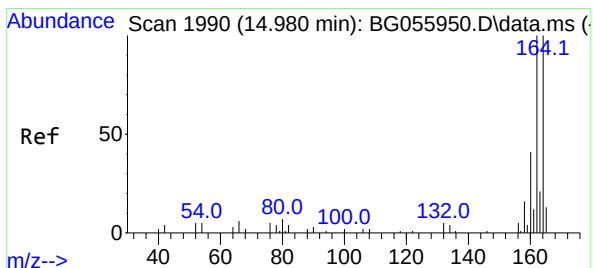
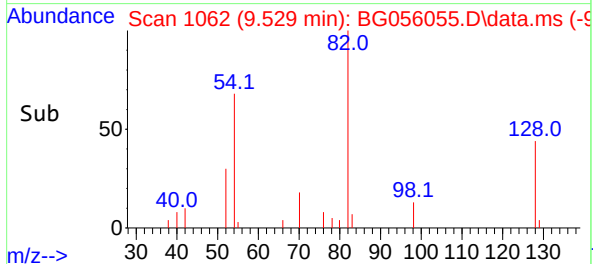
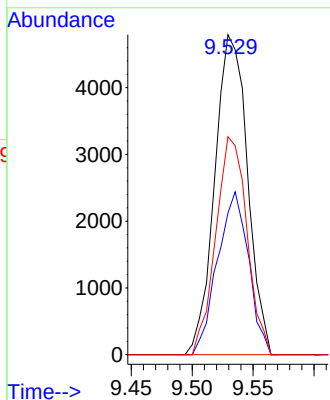
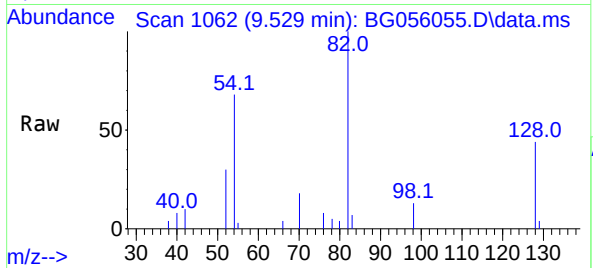
#23  
Nitrobenzene-d5  
Concen: 12.730 ng  
RT: 9.529 min Scan# 1062  
Delta R.T. -0.010 min  
Lab File: BG056055.D  
Acq: 21 Dec 2022 19:27

Instrument :  
BNA\_G  
ClientSampleId :  
RB-40-(0-2)

Tgt Ion: 82 Resp: 8945  
Ion Ratio Lower Upper  
82 100  
128 44.3 38.4 57.6  
54 68.1 53.3 79.9

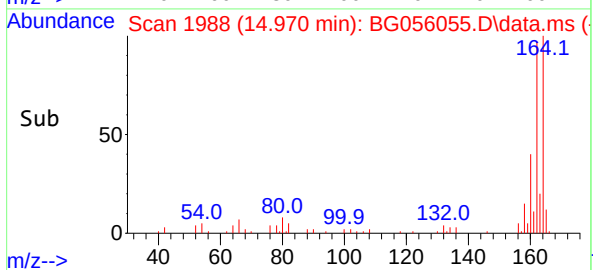
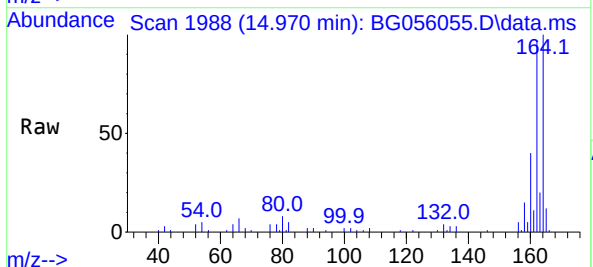
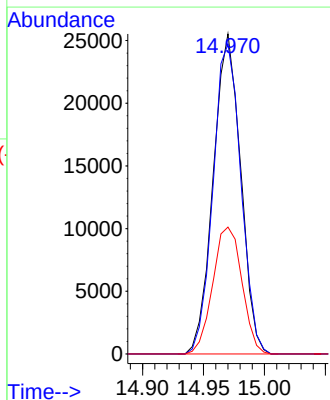
Manual Integrations  
APPROVED

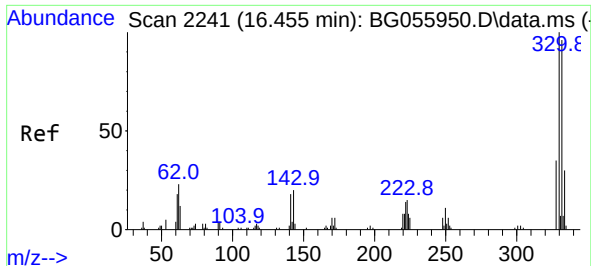
Reviewed By :Christian Giraldo 12/22/2022  
Supervised By :mohammad ahmed 12/22/2022



#39  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 14.970 min Scan# 1988  
Delta R.T. -0.005 min  
Lab File: BG056055.D  
Acq: 21 Dec 2022 19:27

Tgt Ion:164 Resp: 39890  
Ion Ratio Lower Upper  
164 100  
162 96.9 79.8 119.8  
160 39.6 33.0 49.4





#42  
2,4,6-Tribromophenol  
Concen: 17.585 ng  
RT: 16.445 min Scan# 21  
Delta R.T. -0.005 min  
Lab File: BG056055.D  
Acq: 21 Dec 2022 19:27

Instrument :

BNA\_G

ClientSampleId :

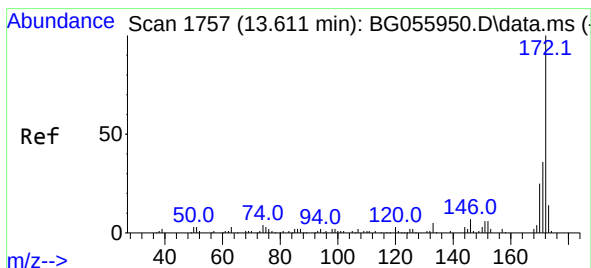
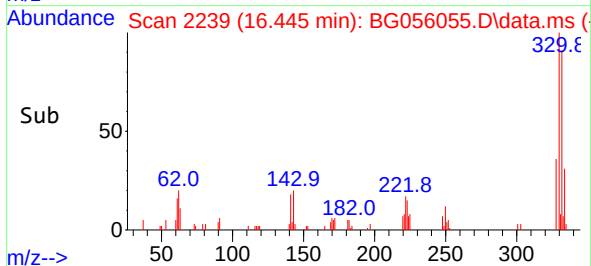
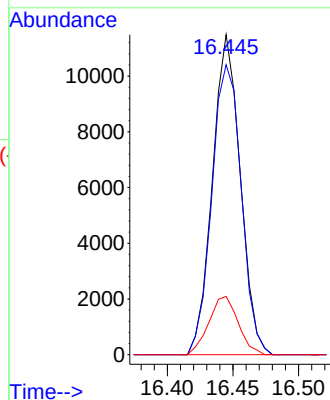
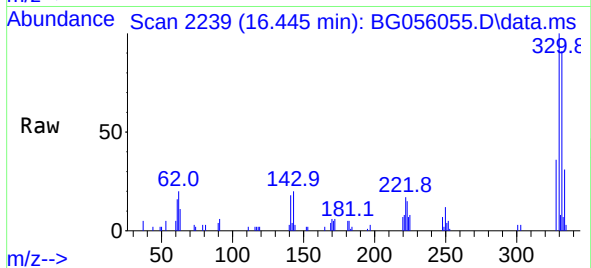
RB-40-(0-2)

Tgt Ion:330 Resp: 16914  
Ion Ratio Lower Upper  
330 100  
332 96.0 76.6 114.8  
141 19.2 15.0 22.4

Manual Integrations

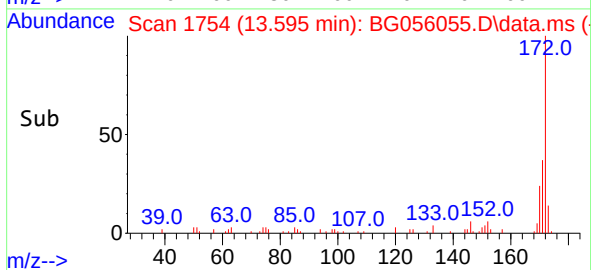
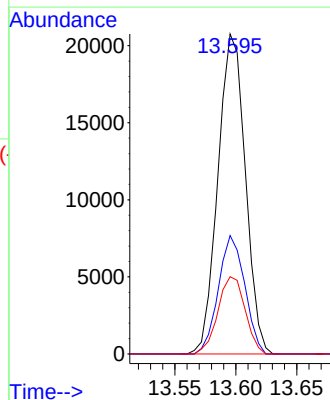
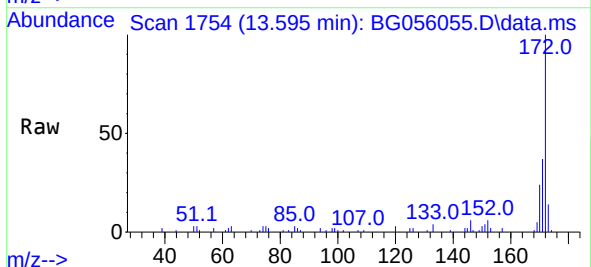
APPROVED

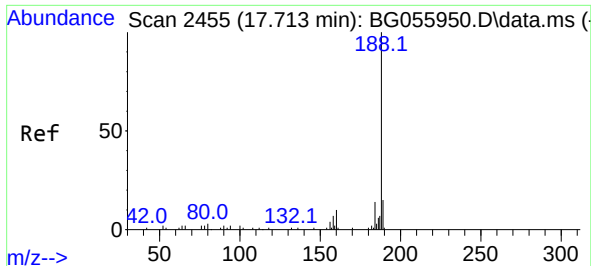
Reviewed By :Christian Giraldo 12/22/2022  
Supervised By :mohammad ahmed 12/22/2022



#45  
2-Fluorobiphenyl  
Concen: 11.419 ng  
RT: 13.595 min Scan# 1754  
Delta R.T. -0.005 min  
Lab File: BG056055.D  
Acq: 21 Dec 2022 19:27

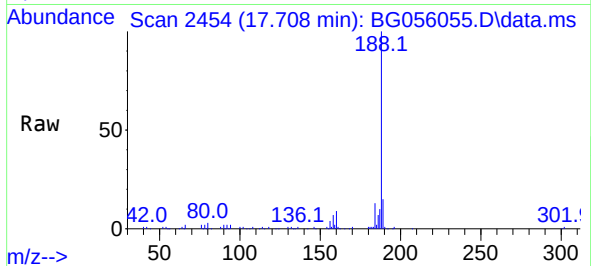
Tgt Ion:172 Resp: 32479  
Ion Ratio Lower Upper  
172 100  
171 37.0 28.6 42.8  
170 24.2 19.9 29.9





#64  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 17.708 min Scan# 2455  
Delta R.T. 0.001 min  
Lab File: BG056055.D  
Acq: 21 Dec 2022 19:27

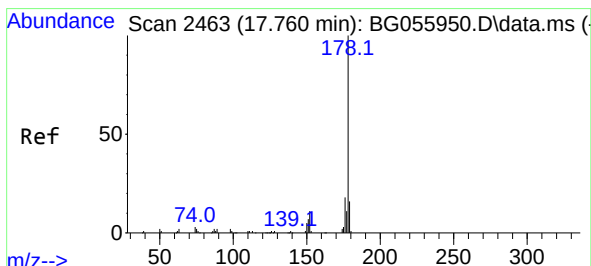
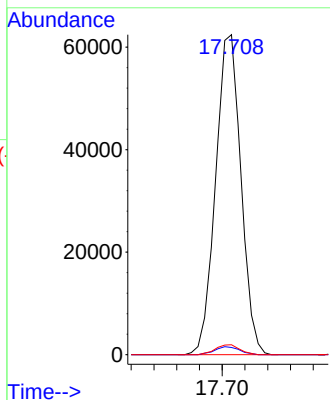
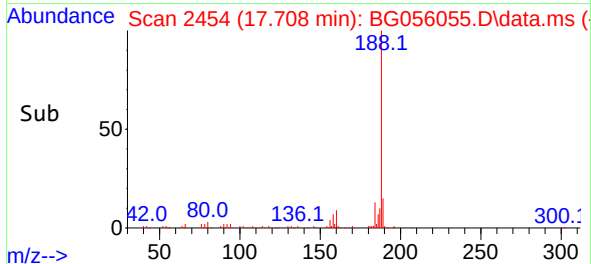
Instrument :  
BNA\_G  
ClientSampleId :  
RB-40-(0-2)



Tgt Ion:188 Resp: 96460  
Ion Ratio Lower Upper  
188 100  
94 2.3 1.8 2.8  
80 3.1 2.4 3.6

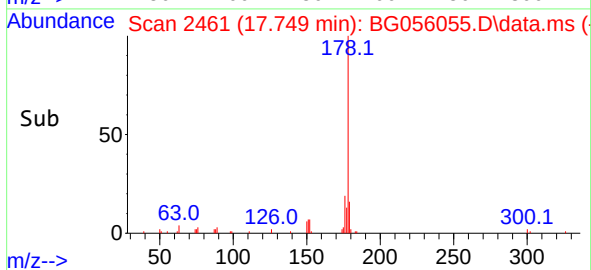
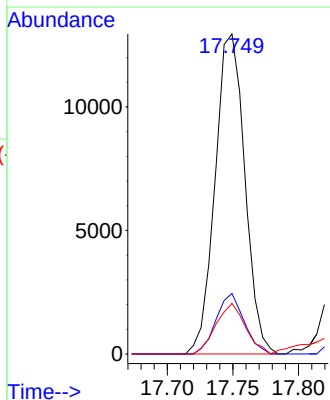
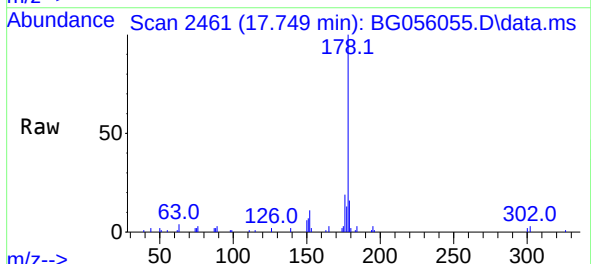
Manual Integrations  
APPROVED

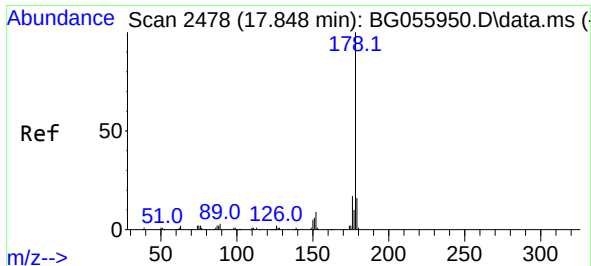
Reviewed By :Christian Giraldo 12/22/2022  
Supervised By :mohammad ahmed 12/22/2022



#71  
Phenanthrene  
Concen: 4.029 ng  
RT: 17.749 min Scan# 2461  
Delta R.T. -0.005 min  
Lab File: BG056055.D  
Acq: 21 Dec 2022 19:27

Tgt Ion:178 Resp: 20366  
Ion Ratio Lower Upper  
178 100  
176 18.9 14.4 21.6  
179 15.8 12.7 19.1





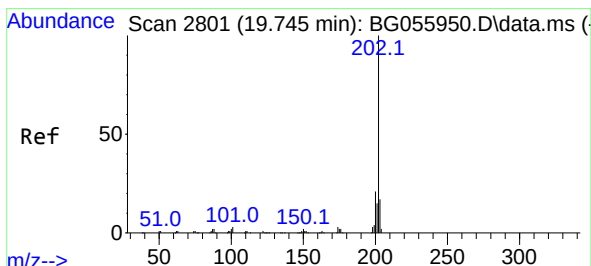
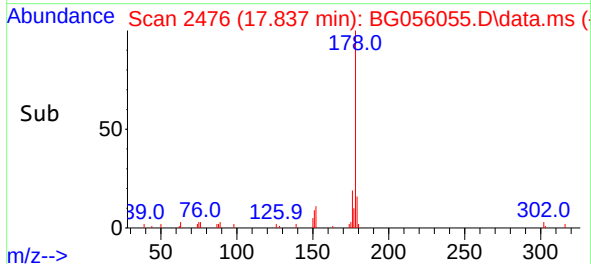
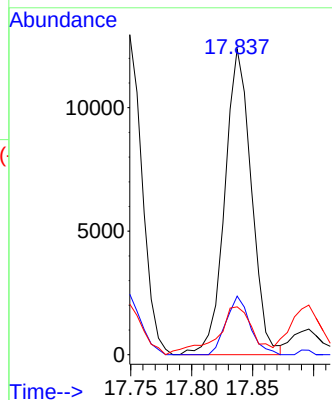
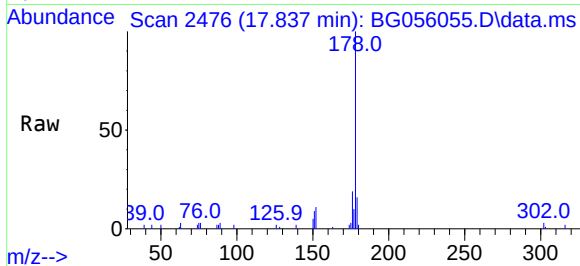
#72  
 Anthracene  
 Concen: 3.760 ng  
 RT: 17.837 min Scan# 2478  
 Delta R.T. -0.005 min  
 Lab File: BG056055.D  
 Acq: 21 Dec 2022 19:27

Instrument :  
 BNA\_G  
 ClientSampleId :  
 RB-40-(0-2)

Tgt Ion:178 Resp: 18804  
 Ion Ratio Lower Upper  
 178 100  
 176 19.2 13.9 20.9  
 179 15.6 12.7 19.1

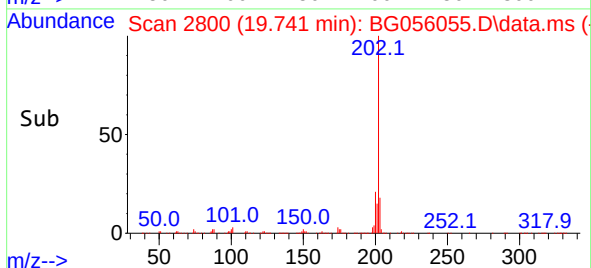
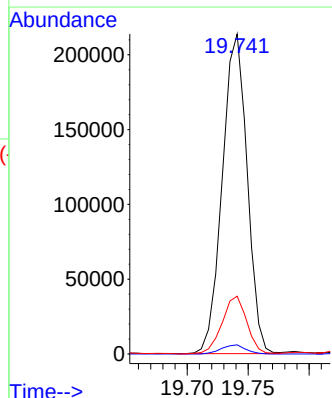
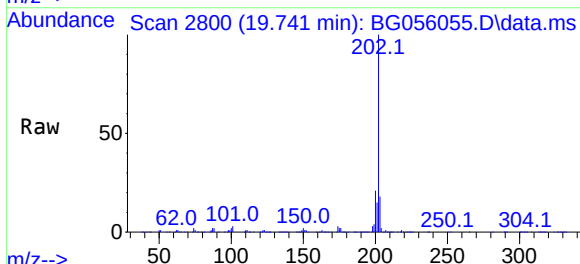
Manual Integrations  
 APPROVED

Reviewed By :Christian Giraldo 12/22/2022  
 Supervised By :mohammad ahmed 12/22/2022

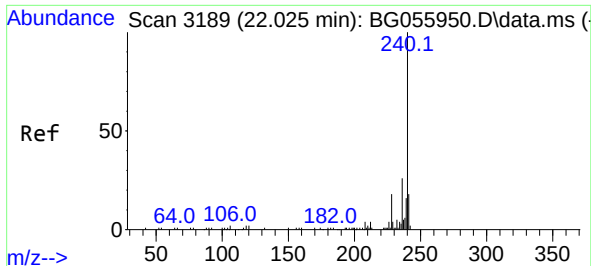


#75  
 Fluoranthene  
 Concen: 42.824 ng  
 RT: 19.741 min Scan# 2800  
 Delta R.T. 0.001 min  
 Lab File: BG056055.D  
 Acq: 21 Dec 2022 19:27

Tgt Ion:202 Resp: 303152  
 Ion Ratio Lower Upper  
 202 100  
 101 2.8 0.0 22.6  
 203 18.0 0.0 37.1

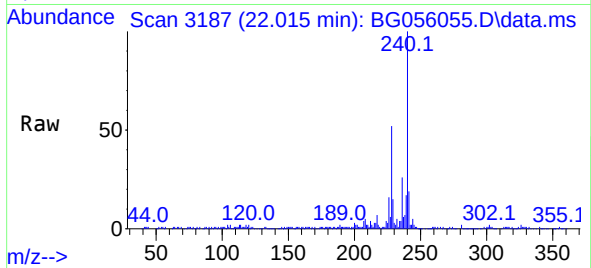






#76  
Chrysene-d12  
Concen: 20.000 ng  
RT: 22.015 min Scan# 3189  
Delta R.T. 0.001 min  
Lab File: BG056055.D  
Acq: 21 Dec 2022 19:27

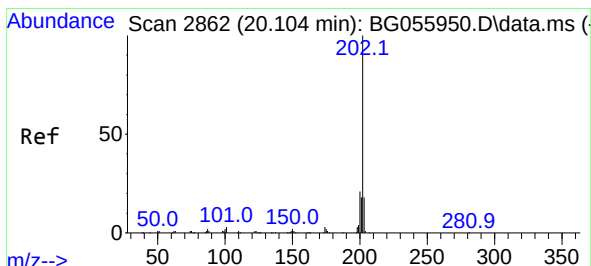
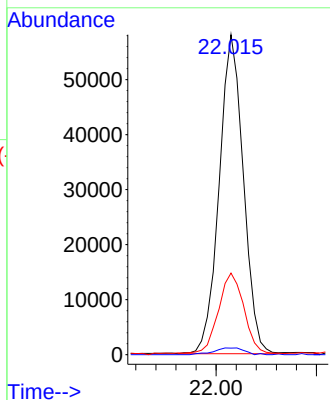
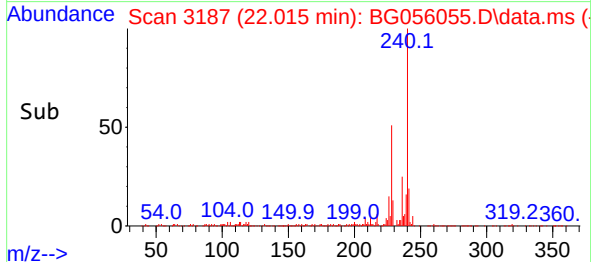
Instrument :  
BNA\_G  
ClientSampleId :  
RB-40-(0-2)



Tgt Ion:240 Resp: 97052  
Ion Ratio Lower Upper  
240 100  
120 2.1 1.7 2.5  
236 25.5 21.1 31.7

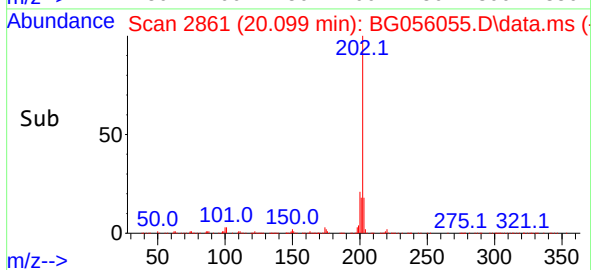
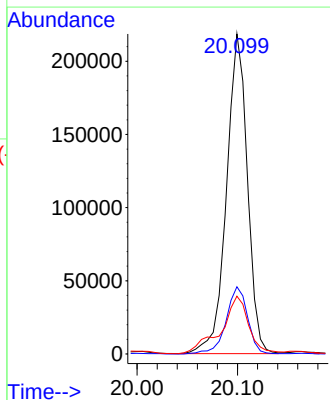
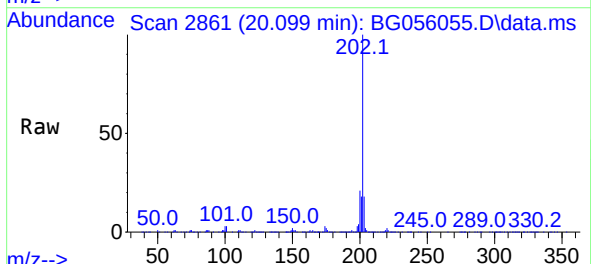
Manual Integrations  
APPROVED

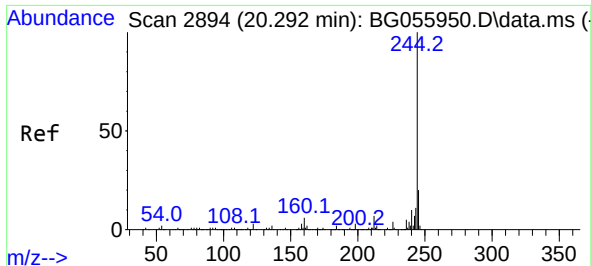
Reviewed By :Christian Giraldo 12/22/2022  
Supervised By :mohammad ahmed 12/22/2022



#78  
Pyrene  
Concen: 53.871 ng  
RT: 20.099 min Scan# 2861  
Delta R.T. 0.001 min  
Lab File: BG056055.D  
Acq: 21 Dec 2022 19:27

Tgt Ion:202 Resp: 316369  
Ion Ratio Lower Upper  
202 100  
200 21.0 16.7 25.1  
203 18.1 14.6 21.8





#79  
 Terphenyl-d14  
 Concen: 10.688 ng  
 RT: 20.276 min Scan# 21  
 Delta R.T. -0.005 min  
 Lab File: BG056055.D  
 Acq: 21 Dec 2022 19:27

Instrument :

BNA\_G

ClientSampleId :

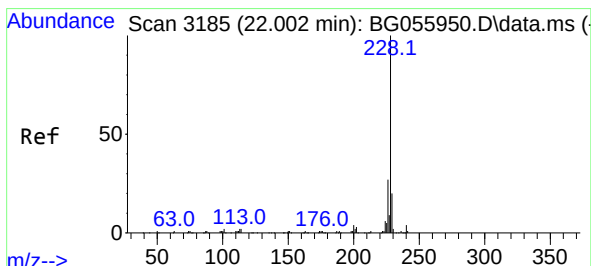
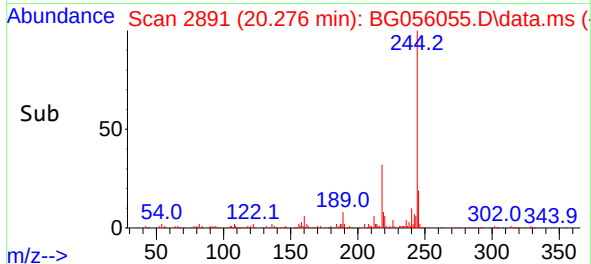
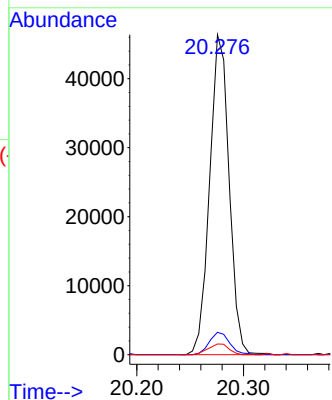
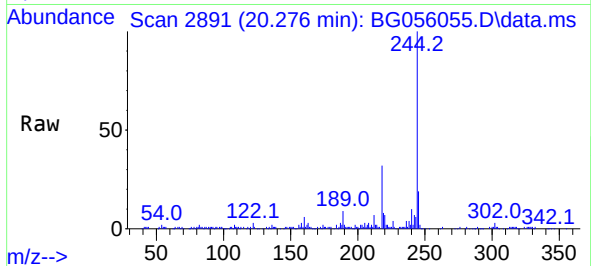
RB-40-(0-2)

Tgt Ion:244 Resp: 5868  
 Ion Ratio Lower Upper  
 244 100  
 212 7.0 5.8 8.6  
 122 3.3 2.5 3.7

Manual Integrations

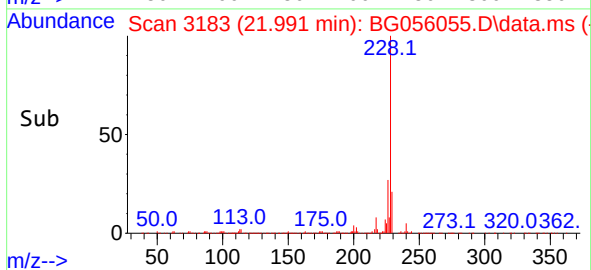
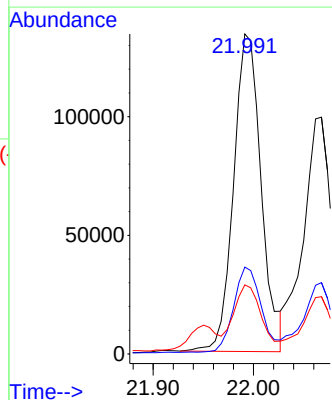
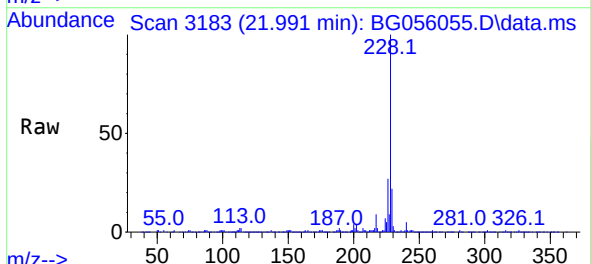
APPROVED

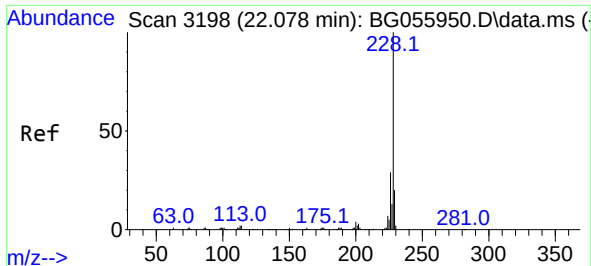
Reviewed By :Christian Giraldo 12/22/2022  
 Supervised By :mohammad ahmed 12/22/2022



#81  
 Benzo(a)anthracene  
 Concen: 37.378 ng  
 RT: 21.991 min Scan# 3183  
 Delta R.T. -0.005 min  
 Lab File: BG056055.D  
 Acq: 21 Dec 2022 19:27

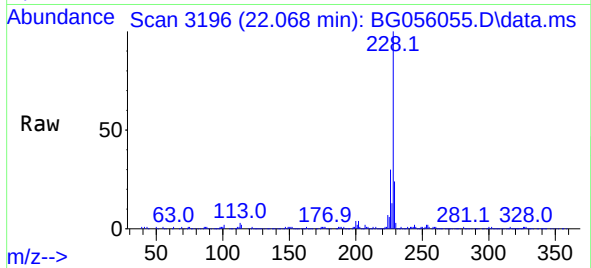
Tgt Ion:228 Resp: 255265  
 Ion Ratio Lower Upper  
 228 100  
 226 27.1 21.8 32.6  
 229 21.6 15.9 23.9





#83  
Chrysene  
Concen: 30.248 ng m  
RT: 22.068 min Scan# 3198  
Delta R.T. 0.001 min  
Lab File: BG056055.D  
Acq: 21 Dec 2022 19:27

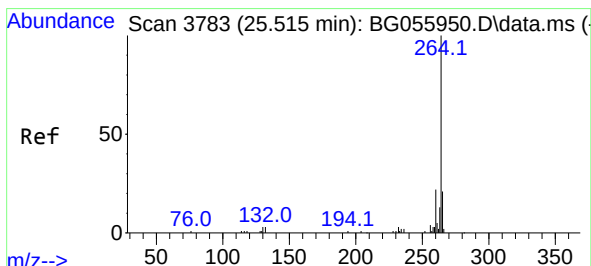
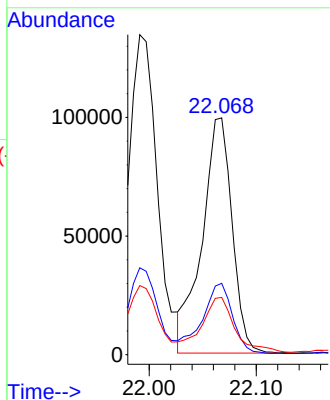
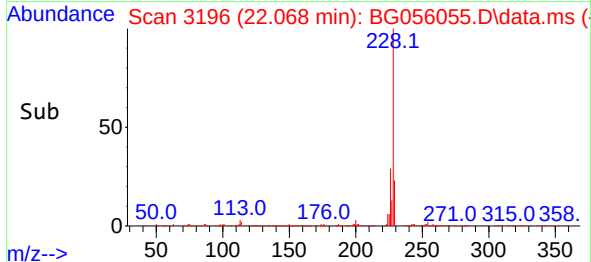
Instrument :  
BNA\_G  
ClientSampleId :  
RB-40-(0-2)



Tgt Ion:228 Resp: 193604  
Ion Ratio Lower Upper  
228 100  
226 30.1 23.1 34.7  
229 24.2 15.7 23.5

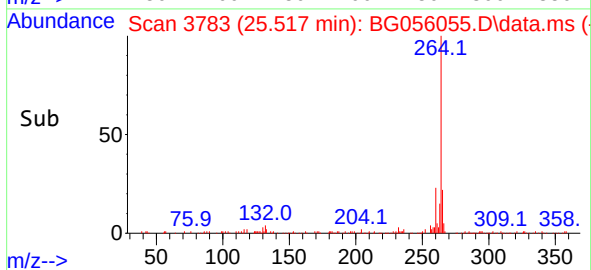
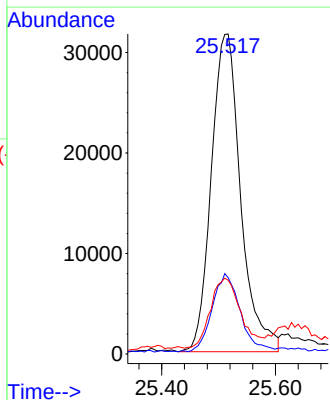
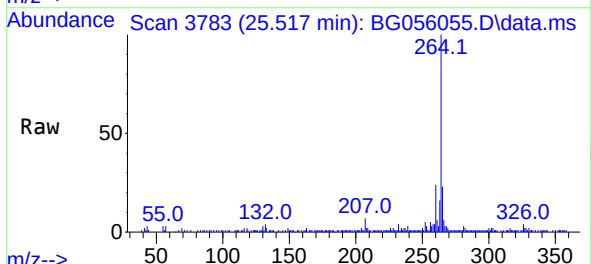
Manual Integrations  
APPROVED

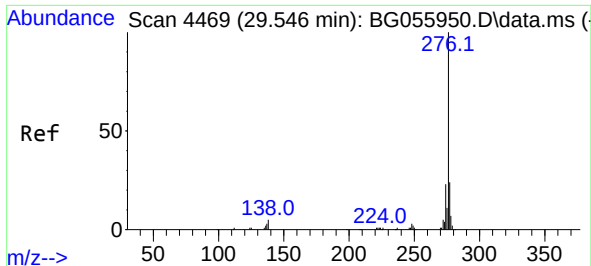
Reviewed By :Christian Giraldo 12/22/2022  
Supervised By :mohammad ahmed 12/22/2022



#86  
Perylene-d12  
Concen: 20.000 ng  
RT: 25.517 min Scan# 3783  
Delta R.T. 0.019 min  
Lab File: BG056055.D  
Acq: 21 Dec 2022 19:27

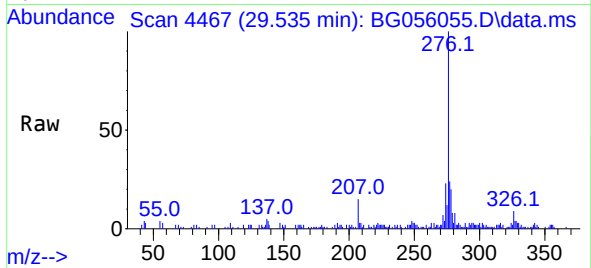
Tgt Ion:264 Resp: 113682  
Ion Ratio Lower Upper  
264 100  
260 23.8 17.8 26.8  
265 23.0 16.6 25.0





#87  
 Indeno(1,2,3-cd)pyrene  
 Concen: 9.851 ng  
 RT: 29.535 min Scan# 4467  
 Delta R.T. 0.013 min  
 Lab File: BG056055.D  
 Acq: 21 Dec 2022 19:27

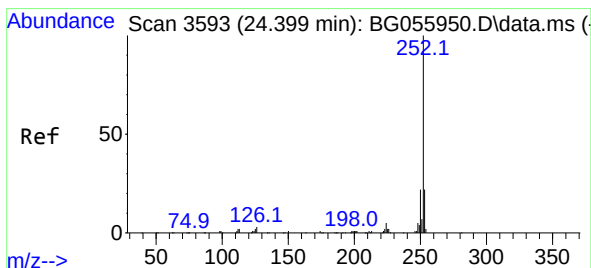
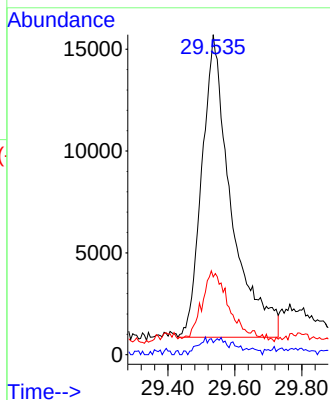
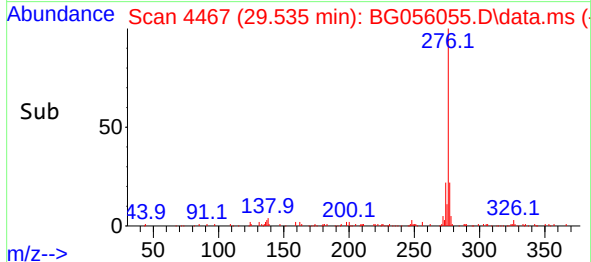
Instrument :  
 BNA\_G  
 ClientSampleId :  
 RB-40-(0-2)



Tgt Ion:276 Resp: 9005  
 Ion Ratio Lower Upper  
 276 100  
 138 0.0 3.0 4.4  
 277 18.1 20.4 30.6

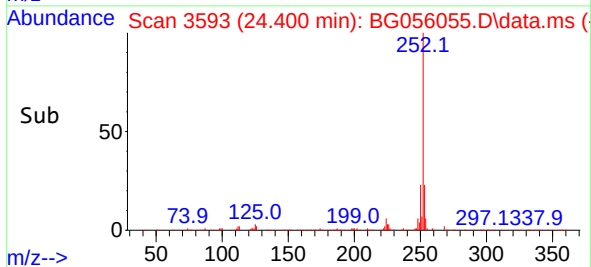
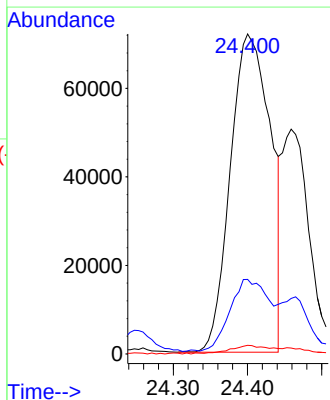
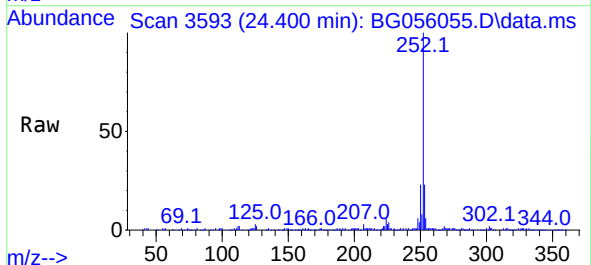
Manual Integrations  
 APPROVED

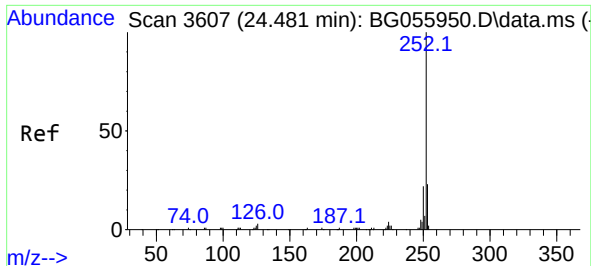
Reviewed By :Christian Giraldo 12/22/2022  
 Supervised By :mohammad ahmed 12/22/2022



#88  
 Benzo(b)fluoranthene  
 Concen: 36.829 ng  
 RT: 24.400 min Scan# 3593  
 Delta R.T. 0.013 min  
 Lab File: BG056055.D  
 Acq: 21 Dec 2022 19:27

Tgt Ion:252 Resp: 270966  
 Ion Ratio Lower Upper  
 252 100  
 253 23.3 17.4 26.0  
 125 2.7 1.8 2.8





#89

Benzo(k)fluoranthene

Concen: 16.909 ng m

RT: 24.459 min Scan# 3

Delta R.T. -0.005 min

Lab File: BG056055.D

Acq: 21 Dec 2022 19:27

Instrument :

BNA\_G

ClientSampleId :

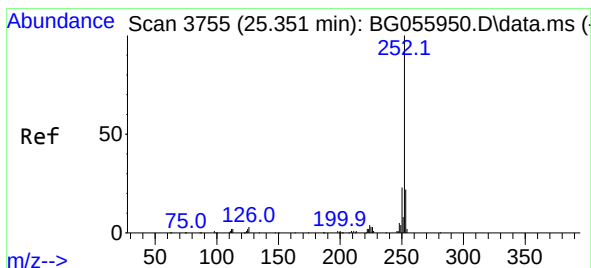
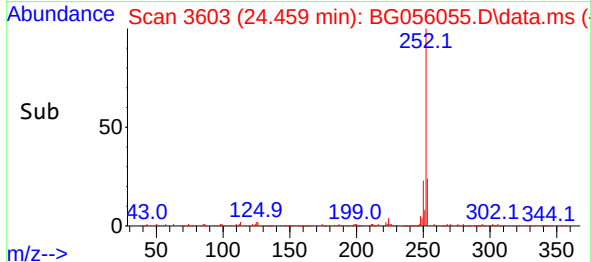
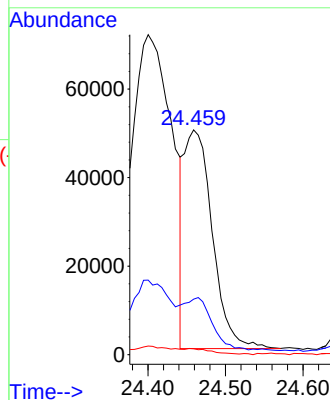
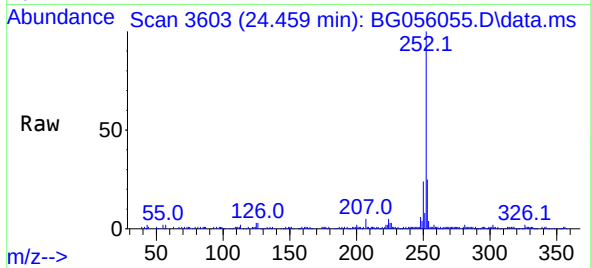
RB-40-(0-2)

Tgt Ion:252 Resp: 124119  
 Ion Ratio Lower Upper  
 252 100  
 253 24.7 18.2 27.2  
 125 2.6 2.0 3.0

Manual Integrations

APPROVED

Reviewed By :Christian Giraldo 12/22/2022  
 Supervised By :mohammad ahmed 12/22/2022



#90

Benzo(a)pyrene

Concen: 36.365 ng

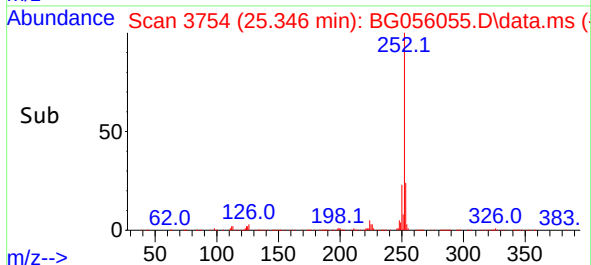
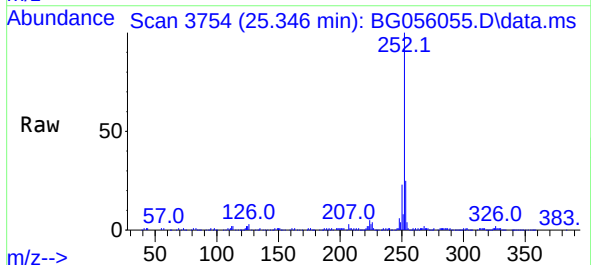
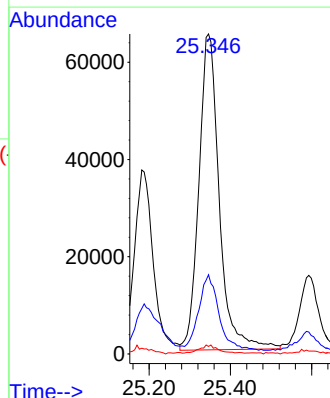
RT: 25.346 min Scan# 3754

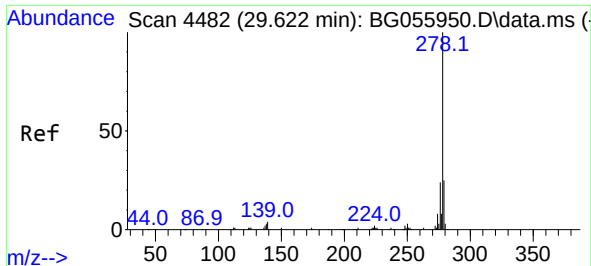
Delta R.T. 0.013 min

Lab File: BG056055.D

Acq: 21 Dec 2022 19:27

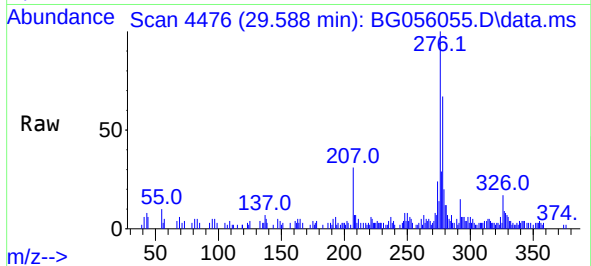
Tgt Ion:252 Resp: 226152  
 Ion Ratio Lower Upper  
 252 100  
 253 24.7 17.7 26.5  
 125 2.4 1.9 2.9





#91  
Dibenzo(a,h)anthracene  
Concen: 3.507 ng  
RT: 29.588 min Scan# 4482  
Delta R.T. -0.005 min  
Lab File: BG056055.D  
Acq: 21 Dec 2022 19:27

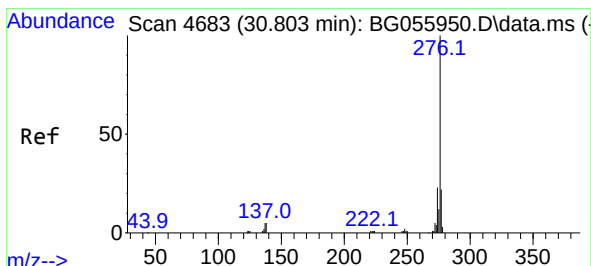
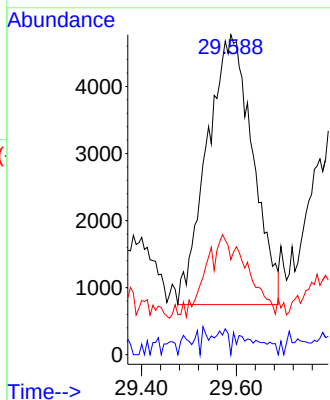
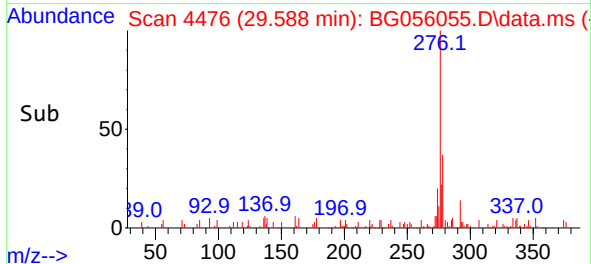
Instrument :  
BNA\_G  
ClientSampleId :  
RB-40-(0-2)



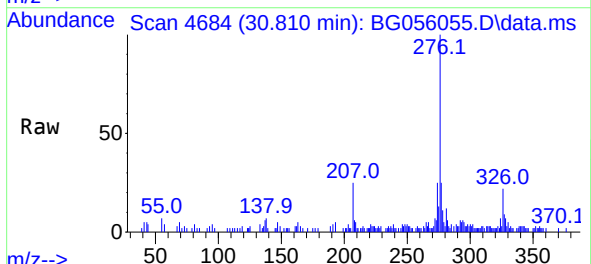
Tgt Ion:278 Resp: 2683  
Ion Ratio Lower Upper  
278 100  
139 0.0 2.9 4.3  
279 29.7 20.0 30.0

Manual Integrations  
APPROVED

Reviewed By :Christian Giraldo 12/22/2022  
Supervised By :mohammad ahmed 12/22/2022



#92  
Benzo(g,h,i)perylene  
Concen: 8.201 ng  
RT: 30.810 min Scan# 4684  
Delta R.T. 0.019 min  
Lab File: BG056055.D  
Acq: 21 Dec 2022 19:27



Tgt Ion:276 Resp: 60672  
Ion Ratio Lower Upper  
276 100  
277 25.4 17.8 26.6  
138 6.5 3.8 5.6

