

Data Path : Z:\svoasrv\HPCHEM1\BNA\_G\Data\BG090122\  
 Data File : BG054831.D  
 Acq On : 1 Sep 2022 21:09  
 Operator : CG/JU  
 Sample : N4443-01  
 Misc :  
 ALS Vial : 16 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 HD-01-083022

Manual Integrations  
 APPROVED

Reviewed By : Christian Giraldo 09/02/2022  
 Supervised By : Jagrut Upadhyay 09/02/2022

Quant Time: Sep 02 02:57:14 2022  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_G\Methods\8270-BG082522.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Aug 25 17:50:55 2022  
 Response via : Initial Calibration

| Compound                    | R.T.   | QIon | Response | Conc    | Units | Dev(Min) |
|-----------------------------|--------|------|----------|---------|-------|----------|
| -----                       |        |      |          |         |       |          |
| Internal Standards          |        |      |          |         |       |          |
| 1) 1,4-Dichlorobenzene-d4   | 8.147  | 152  | 56230    | 20.000  | ng    | 0.00     |
| 21) Naphthalene-d8          | 10.974 | 136  | 227040   | 20.000  | ng    | 0.00     |
| 39) Acenaphthene-d10        | 14.781 | 164  | 140674   | 20.000  | ng    | 0.00     |
| 64) Phenanthrene-d10        | 17.531 | 188  | 280145   | 20.000  | ng    | 0.00     |
| 76) Chrysene-d12            | 21.826 | 240  | 253200   | 20.000  | ng    | 0.00     |
| 86) Perylene-d12            | 25.210 | 264  | 264854   | 20.000  | ng    | 0.01     |
|                             |        |      |          |         |       |          |
| System Monitoring Compounds |        |      |          |         |       |          |
| 5) 2-Fluorophenol           | 5.691  | 112  | 377284   | 116.839 | ng    | 0.00     |
| 7) Phenol-d6                | 7.301  | 99   | 500732   | 113.389 | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 9.323  | 82   | 303456   | 70.165  | ng    | 0.00     |
| 42) 2,4,6-Tribromophenol    | 16.267 | 330  | 187470   | 106.650 | ng    | 0.00     |
| 45) 2-Fluorobiphenyl        | 13.406 | 172  | 712518   | 76.128  | ng    | 0.00     |
| 79) Terphenyl-d14           | 20.128 | 244  | 960815   | 75.188  | ng    | 0.00     |
|                             |        |      |          |         |       |          |
| Target Compounds            |        |      |          |         |       | Qvalue   |
| 49) Acenaphthylene          | 14.511 | 152  | 41298    | 3.154   | ng    | 99       |
| 71) Phenanthrene            | 17.572 | 178  | 398027   | 26.671  | ng    | 99       |
| 72) Anthracene              | 17.660 | 178  | 44060    | 3.037   | ng    | 99       |
| 73) Carbazole               | 17.930 | 167  | 32669    | 2.444   | ng    | 96       |
| 75) Fluoranthene            | 19.581 | 202  | 893683   | 49.227  | ng    | 98       |
| 78) Pyrene                  | 19.939 | 202  | 914356   | 51.789  | ng    | 98       |
| 81) Benzo(a)anthracene      | 21.808 | 228  | 427206   | 24.884  | ng    | 97       |
| 83) Chrysene                | 21.873 | 228  | 497546m  | 30.311  | ng    |          |
| 87) Indeno(1,2,3-cd)pyrene  | 29.099 | 276  | 233041   | 11.590  | ng    | # 92     |
| 88) Benzo(b)fluoranthene    | 24.135 | 252  | 627842   | 37.789  | ng    | 96       |
| 89) Benzo(k)fluoranthene    | 24.187 | 252  | 200388m  | 11.984  | ng    |          |
| 90) Benzo(a)pyrene          | 25.051 | 252  | 454646   | 32.029  | ng    | 98       |
| 91) Dibenzo(a,h)anthracene  | 29.146 | 278  | 54359    | 3.318   | ng    | # 75     |
| 92) Benzo(g,h,i)perylene    | 30.327 | 276  | 219028   | 13.235  | ng    | 97       |
| -----                       |        |      |          |         |       |          |

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

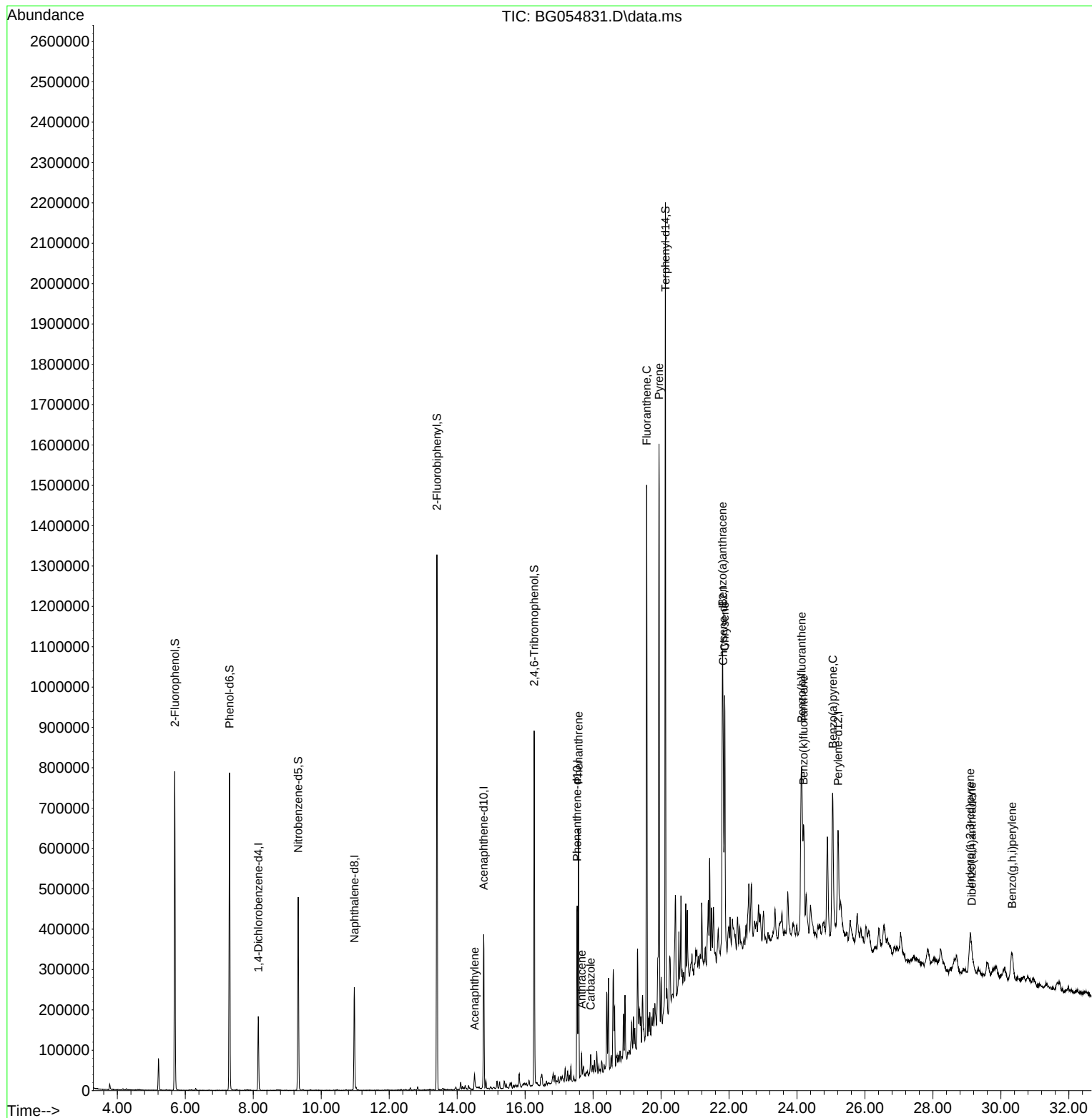
Data Path : Z:\svoasrv\HPCHEM1\BNA\_G\Data\BG090122\  
Data File : BG054831.D  
Acq On : 1 Sep 2022 21:09  
Operator : CG/JU  
Sample : N4443-01  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

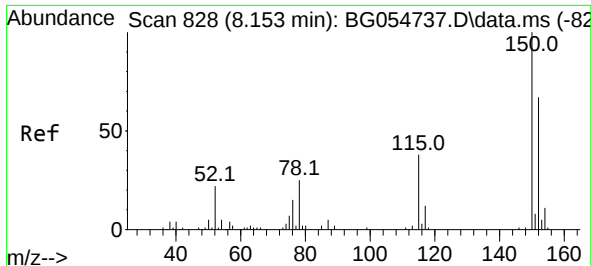
Instrument :  
BNA\_G  
ClientSampleId :  
HD-01-083022

Quant Time: Sep 02 02:57:14 2022  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_G\Methods\8270-BG082522.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Thu Aug 25 17:50:55 2022  
Response via : Initial Calibration

Manual Integrations  
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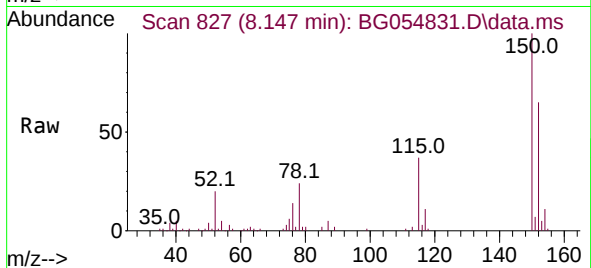
Reviewed By :Christian Giraldo 09/02/2022  
Supervised By :Jagrut Upadhyay 09/02/2022





#1  
 1,4-Dichlorobenzene-d4  
 Concen: 20.000 ng  
 RT: 8.147 min Scan# 81  
 Delta R.T. -0.006 min  
 Lab File: BG054831.D  
 Acq: 1 Sep 2022 21:09

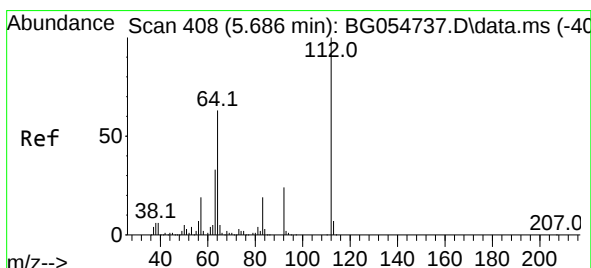
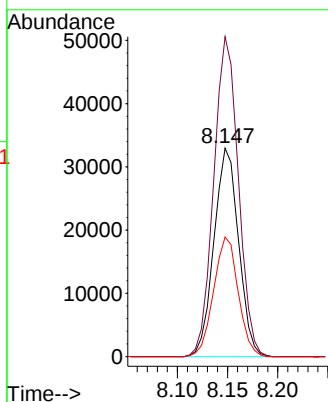
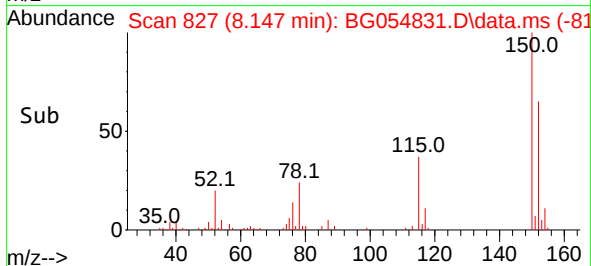
Instrument :  
 BNA\_G  
 ClientSampleId :  
 HD-01-083022



Tgt Ion:152 Resp: 56230  
 Ion Ratio Lower Upper  
 152 100  
 150 153.6 125.2 187.8  
 115 57.4 47.9 71.9

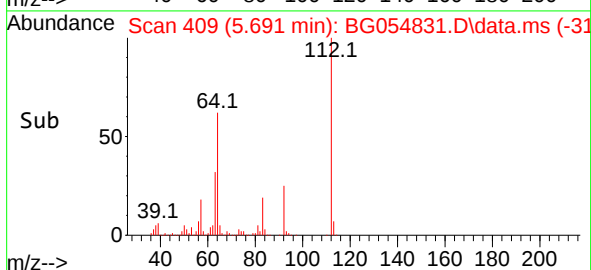
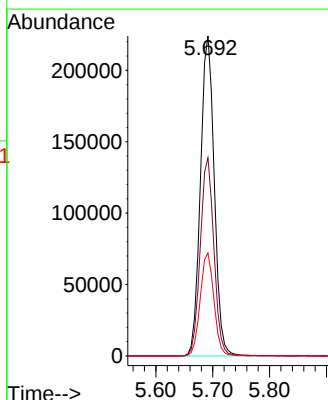
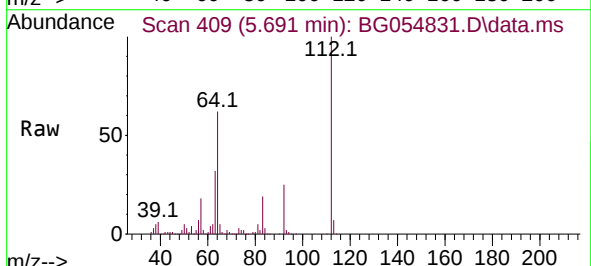
Manual Integrations  
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 Supervised By :Jagrut Upadhyay 09/02/2022



#5  
 2-Fluorophenol  
 Concen: 116.839 ng  
 RT: 5.691 min Scan# 409  
 Delta R.T. 0.006 min  
 Lab File: BG054831.D  
 Acq: 1 Sep 2022 21:09

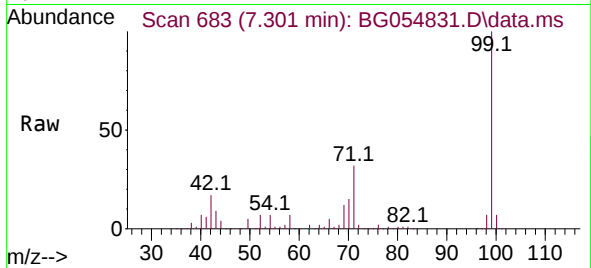
Tgt Ion:112 Resp: 377284  
 Ion Ratio Lower Upper  
 112 100  
 64 61.9 49.3 73.9  
 63 32.1 26.3 39.5





#7  
Phenol-d6  
Concen: 113.389 ng  
RT: 7.301 min Scan# 682  
Delta R.T. 0.006 min  
Lab File: BG054831.D  
Acq: 1 Sep 2022 21:09

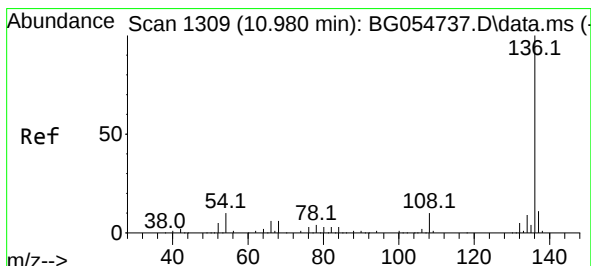
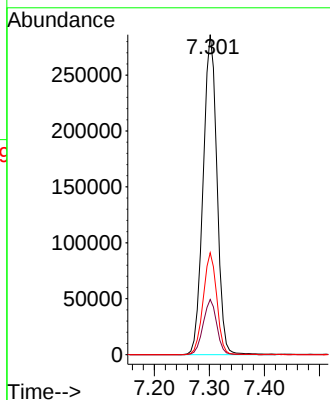
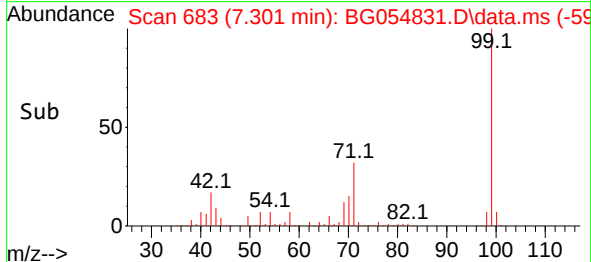
Instrument :  
BNA\_G  
ClientSampleId :  
HD-01-083022



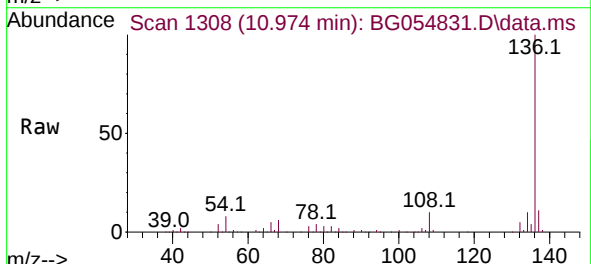
Tgt Ion: 99 Resp: 500732  
Ion Ratio Lower Upper  
99 100  
42 17.2 14.6 22.0  
71 31.8 24.6 37.0

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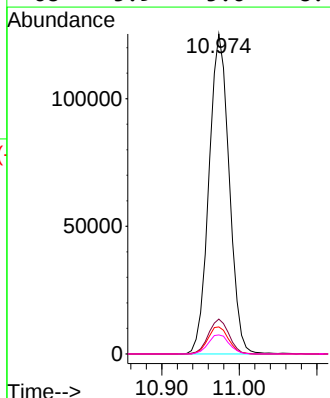
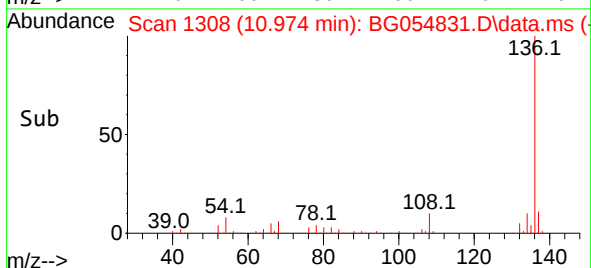
Reviewed By :Christian Giraldo 09/02/2022  
Supervised By :Jagrut Upadhyay 09/02/2022

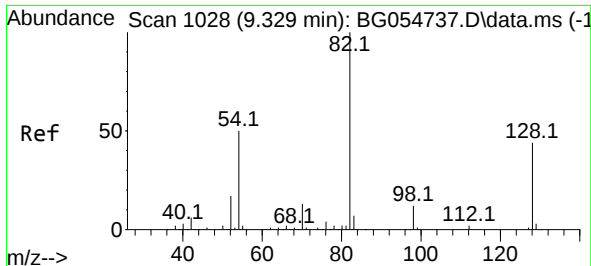


#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 10.974 min Scan# 1308  
Delta R.T. -0.006 min  
Lab File: BG054831.D  
Acq: 1 Sep 2022 21:09



Tgt Ion:136 Resp: 227040  
Ion Ratio Lower Upper  
136 100  
137 10.9 9.2 13.8  
54 8.4 7.7 11.5  
68 5.9 5.6 8.4





#23

Nitrobenzene-d5

Concen: 70.165 ng

RT: 9.323 min Scan# 1027

Delta R.T. -0.006 min

Lab File: BG054831.D

Acq: 1 Sep 2022 21:09

Instrument :

BNA\_G

ClientSampleId :

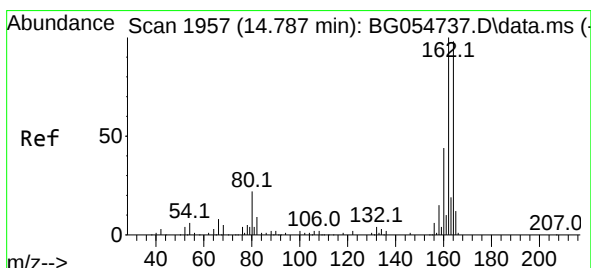
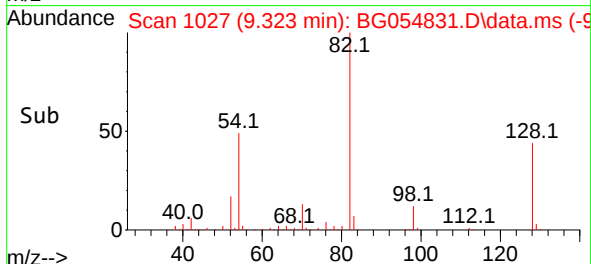
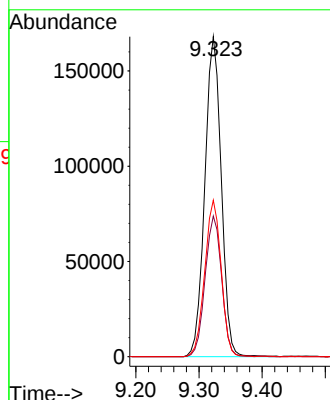
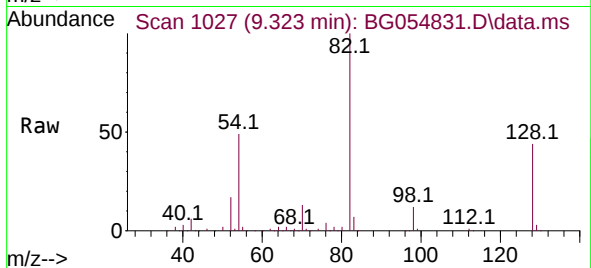
HD-01-083022

Tgt Ion: 82 Resp: 303456  
 Ion Ratio Lower Upper  
 82 100  
 128 43.9 32.2 48.2  
 54 48.9 41.4 62.0

Manual Integrations

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 Supervised By :Jagrut Upadhyay 09/02/2022



#39

Acenaphthene-d10

Concen: 20.000 ng

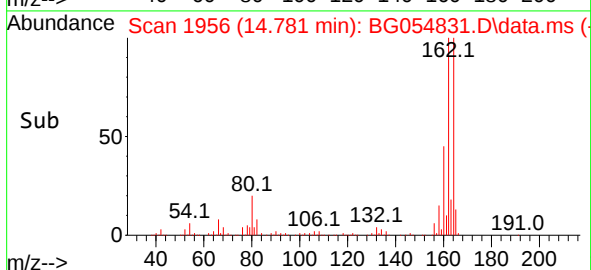
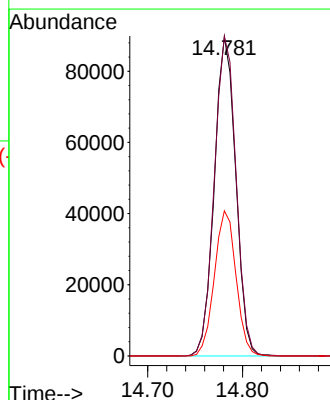
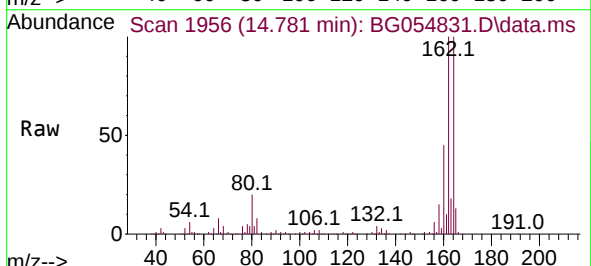
RT: 14.781 min Scan# 1956

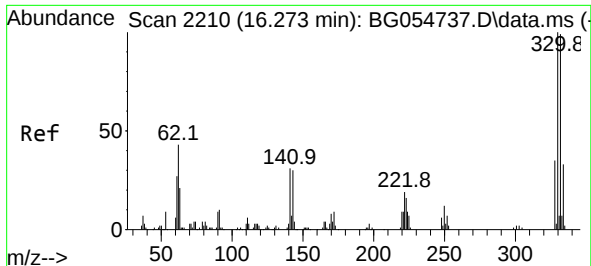
Delta R.T. -0.006 min

Lab File: BG054831.D

Acq: 1 Sep 2022 21:09

Tgt Ion:164 Resp: 140674  
 Ion Ratio Lower Upper  
 164 100  
 162 100.4 83.0 124.4  
 160 45.5 38.0 57.0





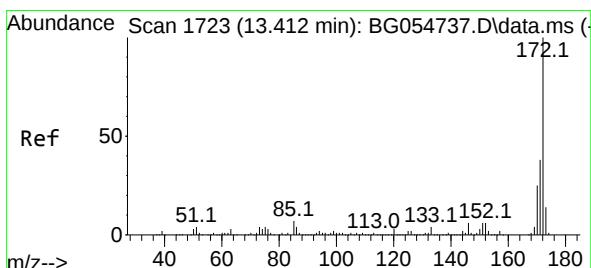
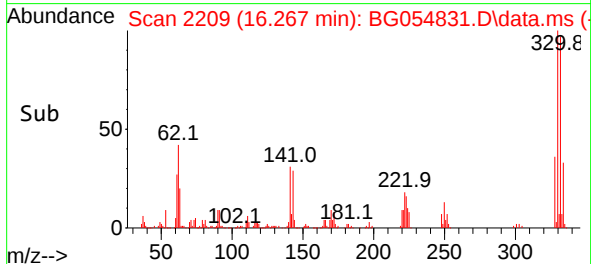
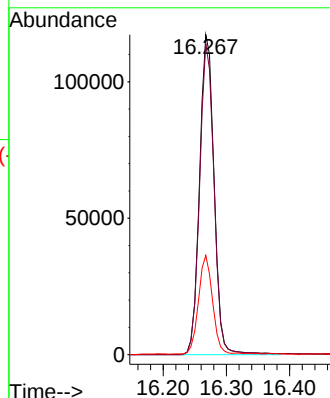
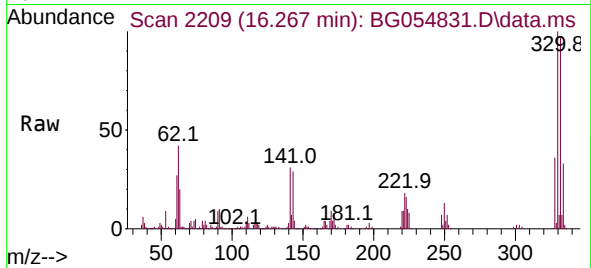
#42  
2,4,6-Tribromophenol  
Concen: 106.650 ng  
RT: 16.267 min Scan# 211  
Delta R.T. -0.006 min  
Lab File: BG054831.D  
Acq: 1 Sep 2022 21:09

Instrument :  
BNA\_G  
ClientSampleId :  
HD-01-083022

Tgt Ion:330 Resp: 187476  
Ion Ratio Lower Upper  
330 100  
332 96.6 79.8 119.6  
141 30.2 26.8 40.2

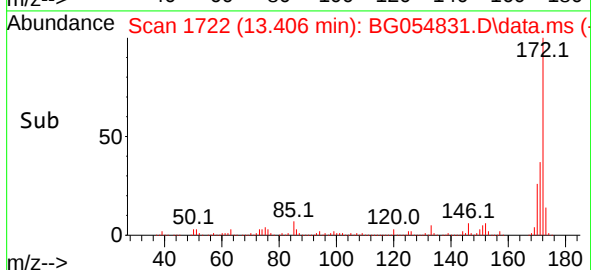
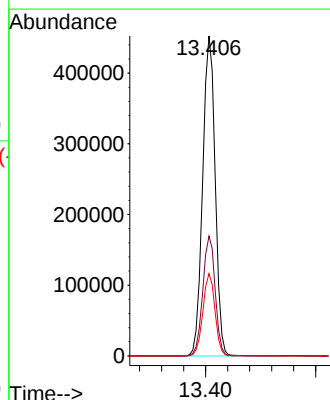
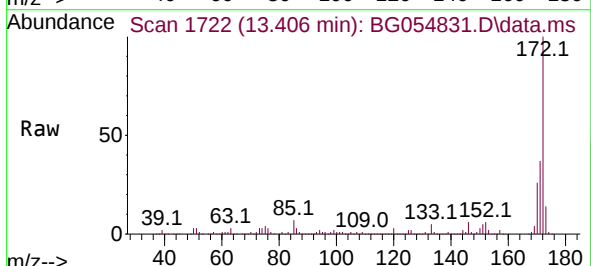
Manual Integrations  
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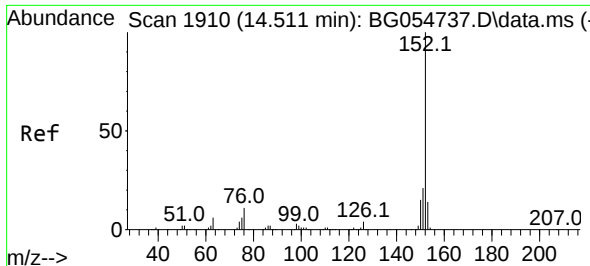
Reviewed By :Christian Giraldo 09/02/2022  
Supervised By :Jagrut Upadhyay 09/02/2022



#45  
2-Fluorobiphenyl  
Concen: 76.128 ng  
RT: 13.406 min Scan# 1722  
Delta R.T. -0.006 min  
Lab File: BG054831.D  
Acq: 1 Sep 2022 21:09

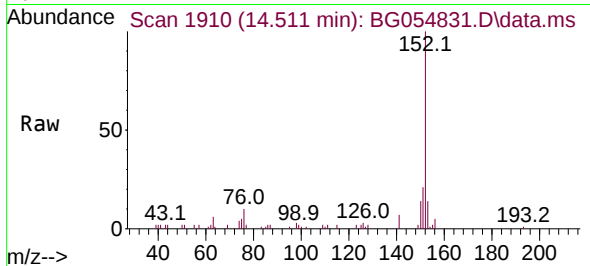
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Ion Ratio Lower Upper  
172 100  
171 37.4 31.2 46.8  
170 25.7 20.6 30.8





#49  
Acenaphthylene  
Concen: 3.154 ng  
RT: 14.511 min Scan# 1910  
Delta R.T. -0.000 min  
Lab File: BG054831.D  
Acq: 1 Sep 2022 21:09

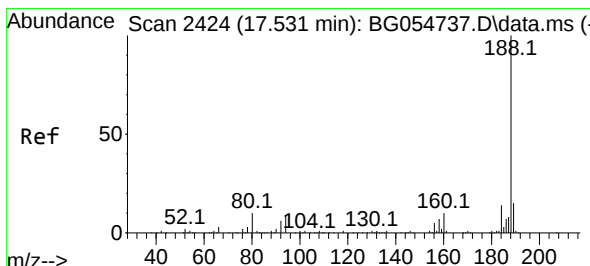
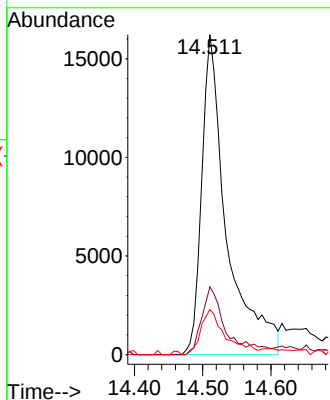
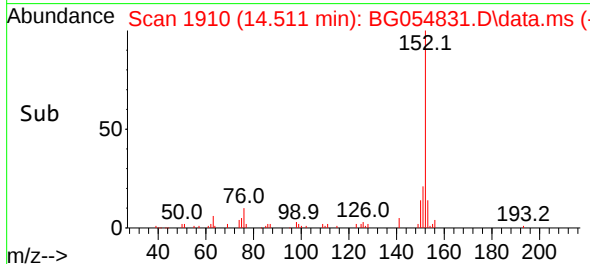
Instrument :  
BNA\_G  
ClientSampleId :  
HD-01-083022



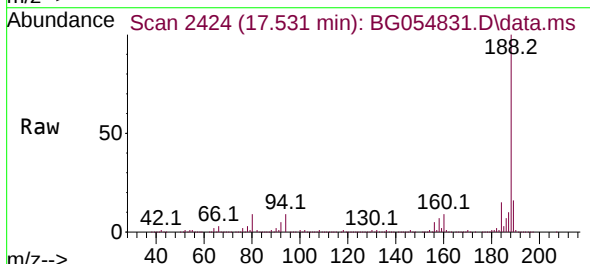
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Ion Ratio Lower Upper  
152 100  
151 21.2 17.3 25.9  
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Manual Integrations  
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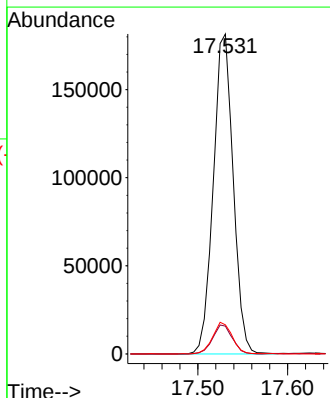
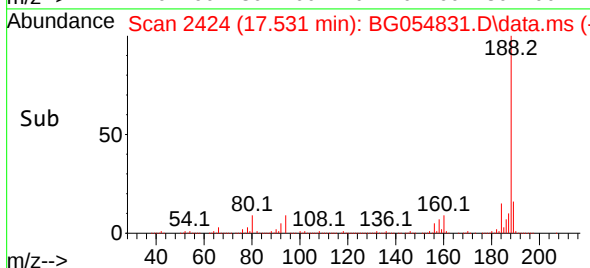
Reviewed By :Christian Giraldo 09/02/2022  
Supervised By :Jagrut Upadhyay 09/02/2022

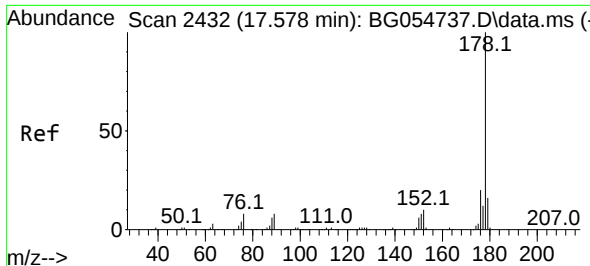


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Phenanthrene-d10  
Concen: 20.000 ng  
RT: 17.531 min Scan# 2424  
Delta R.T. -0.000 min  
Lab File: BG054831.D  
Acq: 1 Sep 2022 21:09



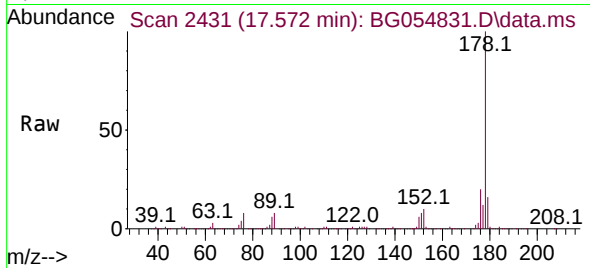
Tgt Ion:188 Resp: 280145  
Ion Ratio Lower Upper  
188 100  
94 8.7 7.0 10.4  
80 9.1 7.9 11.9





#71  
Phenanthrene  
Concen: 26.671 ng  
RT: 17.572 min Scan# 2432  
Delta R.T. -0.006 min  
Lab File: BG054831.D  
Acq: 1 Sep 2022 21:09

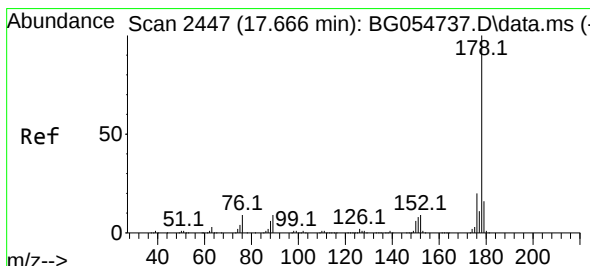
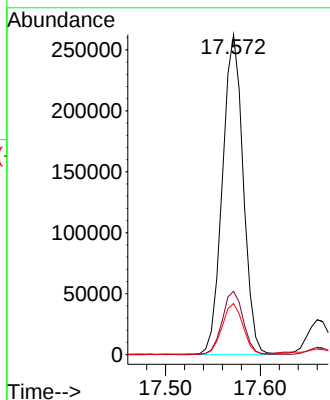
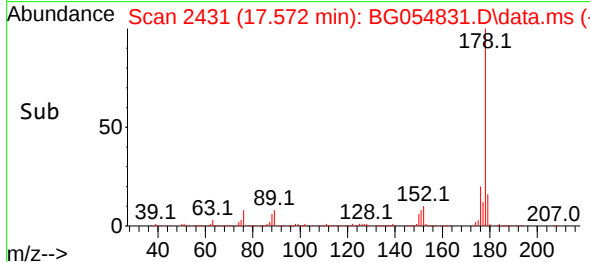
Instrument :  
BNA\_G  
ClientSampleId :  
HD-01-083022



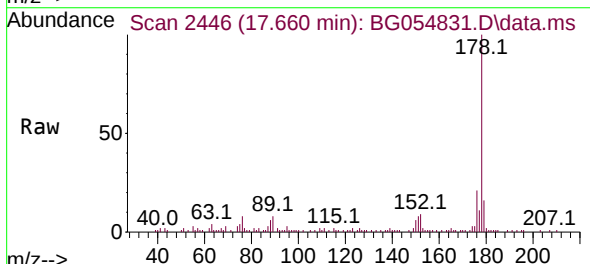
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Ion Ratio Lower Upper  
178 100  
176 19.8 16.6 25.0  
179 16.0 12.8 19.2

Manual Integrations  
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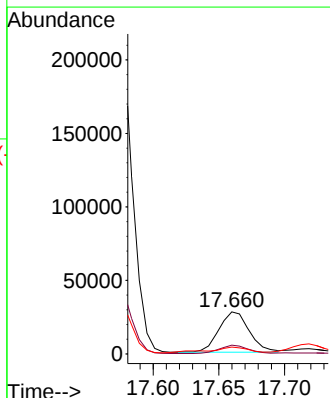
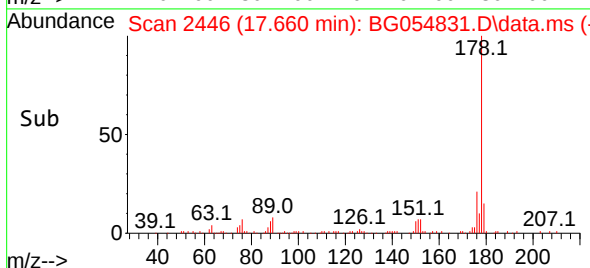
Reviewed By :Christian Giraldo 09/02/2022  
Supervised By :Jagrut Upadhyay 09/02/2022

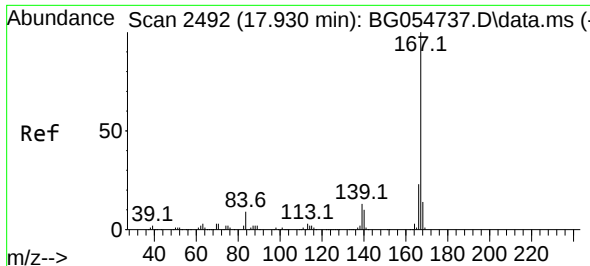


#72  
Anthracene  
Concen: 3.037 ng  
RT: 17.660 min Scan# 2446  
Delta R.T. -0.006 min  
Lab File: BG054831.D  
Acq: 1 Sep 2022 21:09



Tgt Ion:178 Resp: 44060  
Ion Ratio Lower Upper  
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176 20.8 16.2 24.4  
179 16.4 12.9 19.3





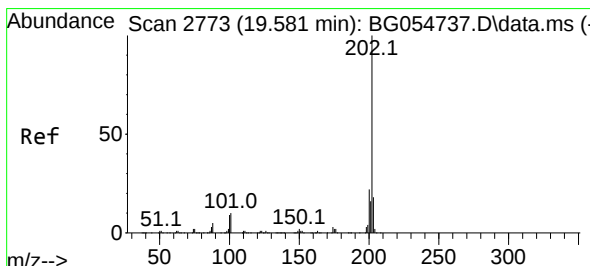
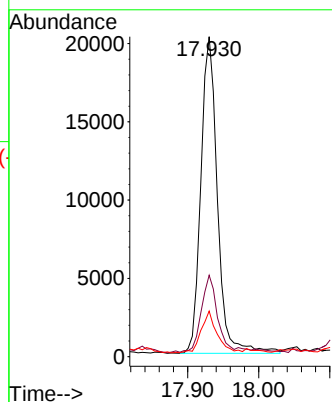
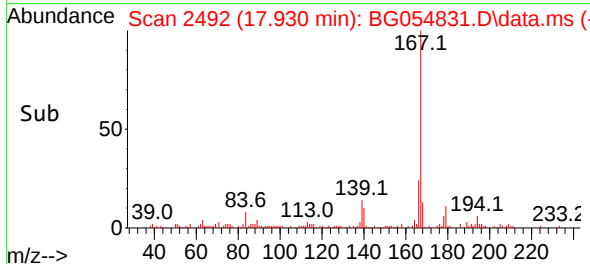
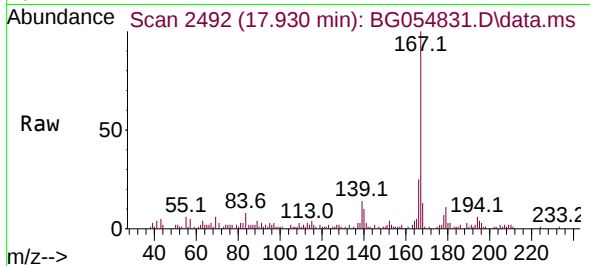
#73  
 Carbazole  
 Concen: 2.444 ng  
 RT: 17.930 min Scan# 2492  
 Delta R.T. -0.000 min  
 Lab File: BG054831.D  
 Acq: 1 Sep 2022 21:09

Instrument :  
 BNA\_G  
 ClientSampleId :  
 HD-01-083022

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 167   | Resp: | 32669 |
| Ion Ratio | Lower | Upper |       |
| 167       | 100   |       |       |
| 166       | 25.4  | 18.8  | 28.2  |
| 139       | 14.2  | 10.2  | 15.4  |

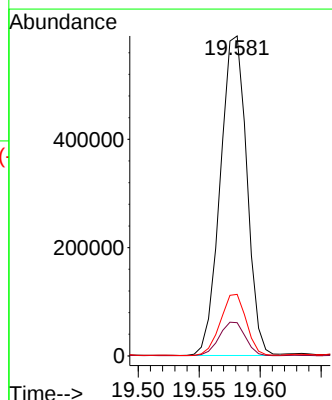
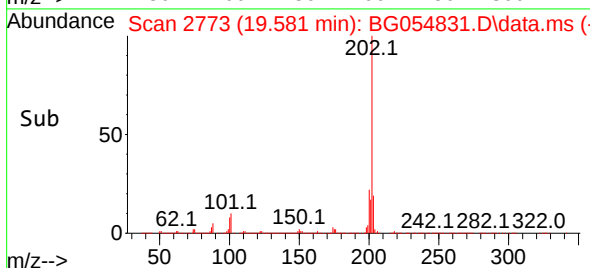
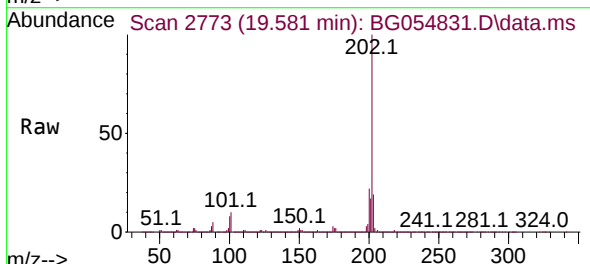
Manual Integrations  
 APPROVED

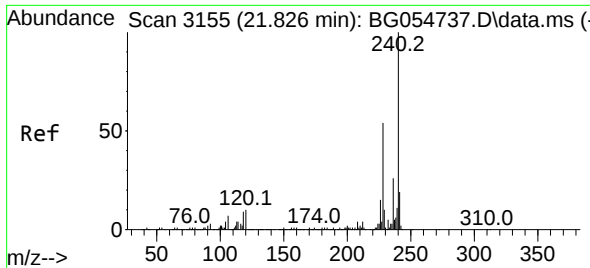
Reviewed By :Christian Giraldo 09/02/2022  
 Supervised By :Jagrut Upadhyay 09/02/2022



#75  
 Fluoranthene  
 Concen: 49.227 ng  
 RT: 19.581 min Scan# 2773  
 Delta R.T. -0.000 min  
 Lab File: BG054831.D  
 Acq: 1 Sep 2022 21:09

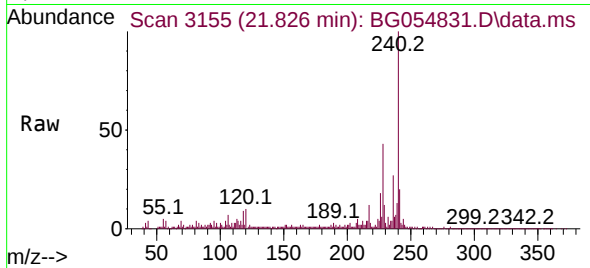
|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 202   | Resp: | 893683 |
| Ion Ratio | Lower | Upper |        |
| 202       | 100   |       |        |
| 101       | 10.4  | 0.0   | 31.4   |
| 203       | 19.2  | 0.0   | 38.6   |





#76  
Chrysene-d12  
Concen: 20.000 ng  
RT: 21.826 min Scan# 3155  
Delta R.T. -0.000 min  
Lab File: BG054831.D  
Acq: 1 Sep 2022 21:09

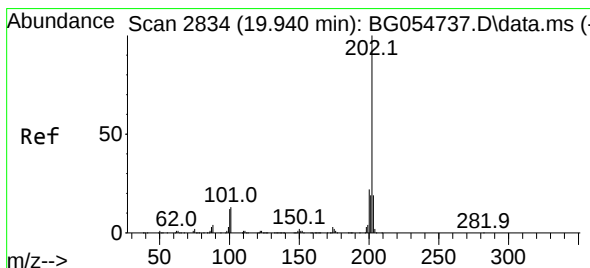
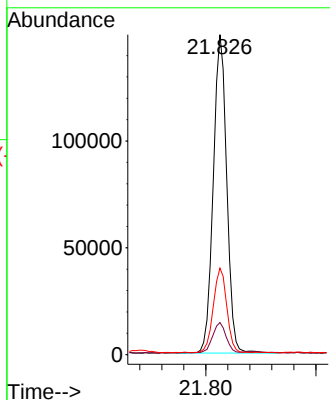
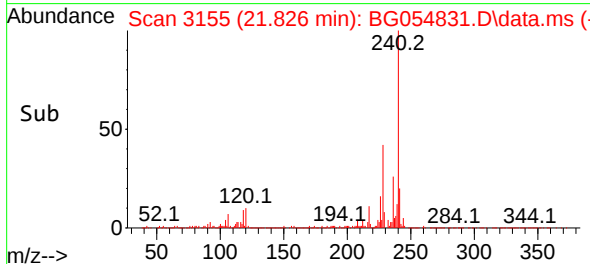
Instrument :  
BNA\_G  
ClientSampleId :  
HD-01-083022



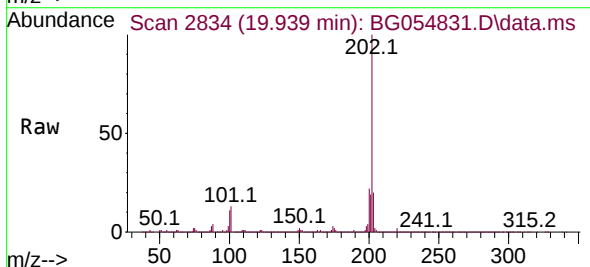
Tgt Ion:240 Resp: 253200  
Ion Ratio Lower Upper  
240 100  
120 10.0 8.2 12.4  
236 27.1 21.2 31.8

Manual Integrations  
APPROVED

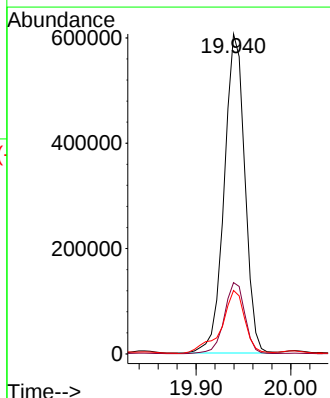
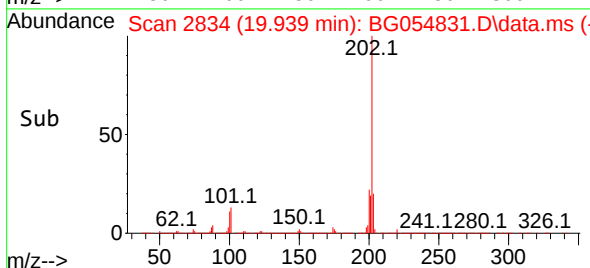
Reviewed By :Christian Giraldo 09/02/2022  
Supervised By :Jagrut Upadhyay 09/02/2022

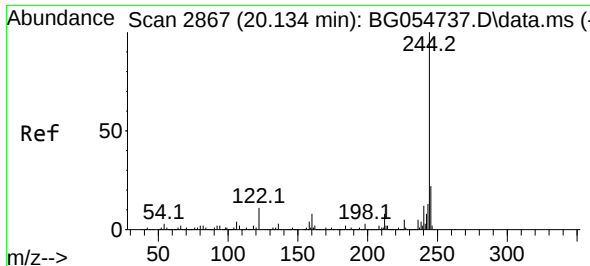


#78  
Pyrene  
Concen: 51.789 ng  
RT: 19.939 min Scan# 2834  
Delta R.T. -0.000 min  
Lab File: BG054831.D  
Acq: 1 Sep 2022 21:09



Tgt Ion:202 Resp: 914356  
Ion Ratio Lower Upper  
202 100  
200 22.3 17.8 26.6  
203 19.8 14.6 21.8





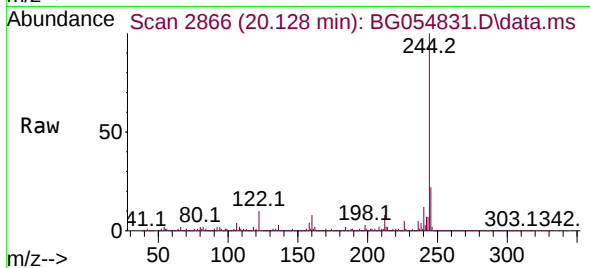
#79  
 Terphenyl-d14  
 Concen: 75.188 ng  
 RT: 20.128 min Scan# 2866  
 Delta R.T. -0.006 min  
 Lab File: BG054831.D  
 Acq: 1 Sep 2022 21:09

Instrument :

BNA\_G

ClientSampleId :

HD-01-083022

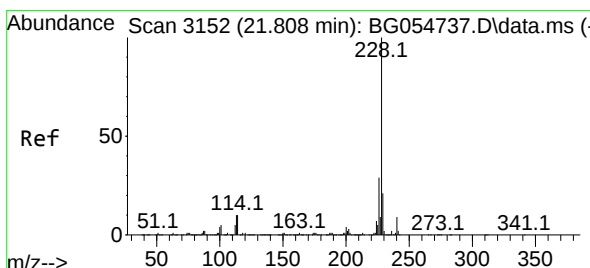
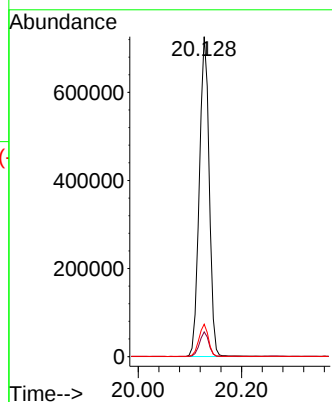
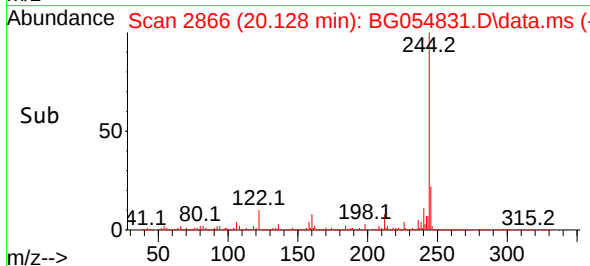


Tgt Ion:244 Resp: 960815  
 Ion Ratio Lower Upper  
 244 100  
 212 7.7 6.2 9.2  
 122 10.1 9.0 13.6

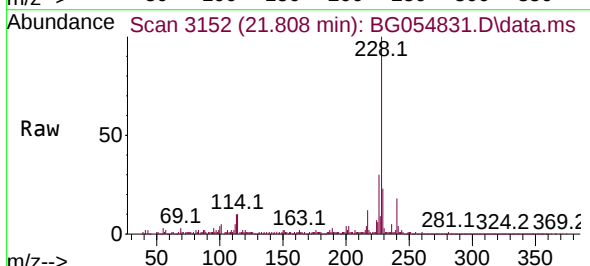
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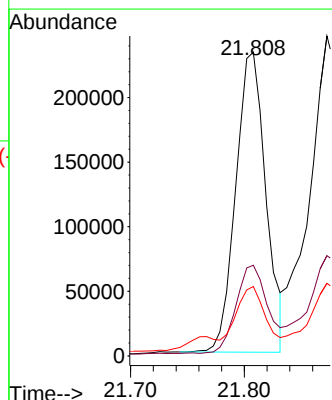
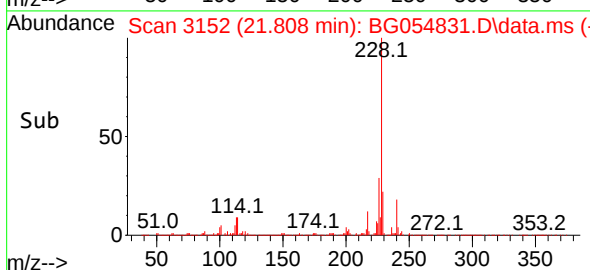
Reviewed By :Christian Giraldo 09/02/2022  
 Supervised By :Jagrut Upadhyay 09/02/2022

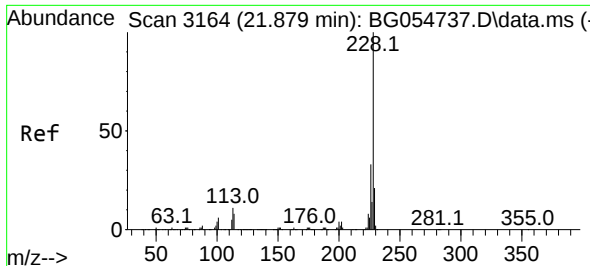


#81  
 Benzo(a)anthracene  
 Concen: 24.884 ng  
 RT: 21.808 min Scan# 3152  
 Delta R.T. -0.000 min  
 Lab File: BG054831.D  
 Acq: 1 Sep 2022 21:09



Tgt Ion:228 Resp: 427206  
 Ion Ratio Lower Upper  
 228 100  
 226 29.9 23.4 35.2  
 229 22.8 16.5 24.7





#83

Chrysene

Concen: 30.311 ng m

RT: 21.873 min Scan# 31

Delta R.T. -0.006 min

Lab File: BG054831.D

Acq: 1 Sep 2022 21:09

Instrument :

BNA\_G

ClientSampleId :

HD-01-083022

Tgt Ion:228 Resp: 497546

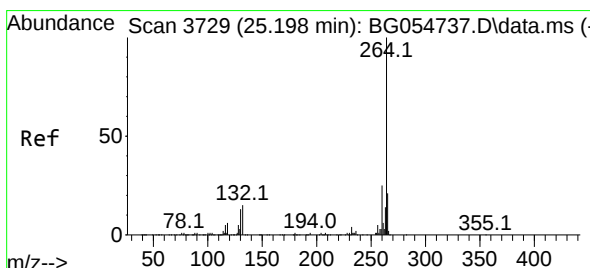
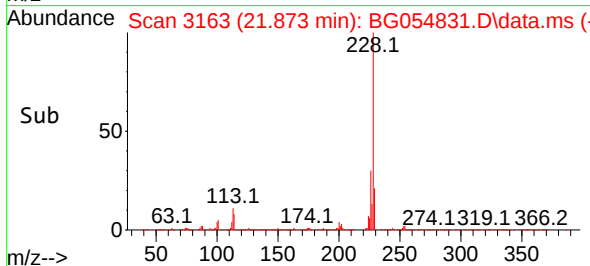
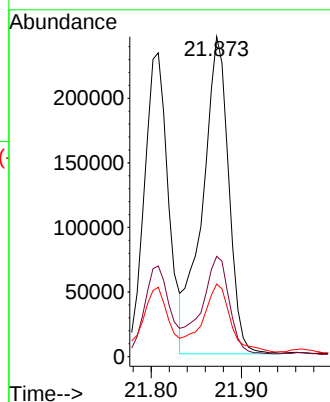
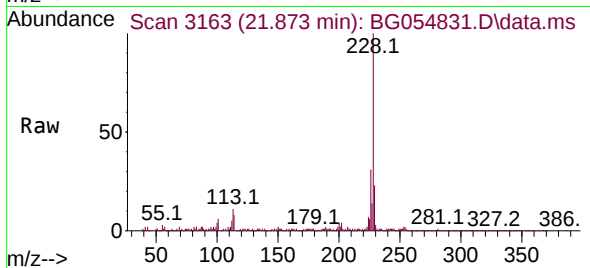
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 228 | 100   |       |       |
| 226 | 31.3  | 25.5  | 38.3  |
| 229 | 22.7  | 16.8  | 25.2  |

Manual Integrations

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Reviewed By :Christian Giraldo 09/02/2022

Supervised By :Jagrut Upadhyay 09/02/2022



#86

Perylene-d12

Concen: 20.000 ng

RT: 25.210 min Scan# 3731

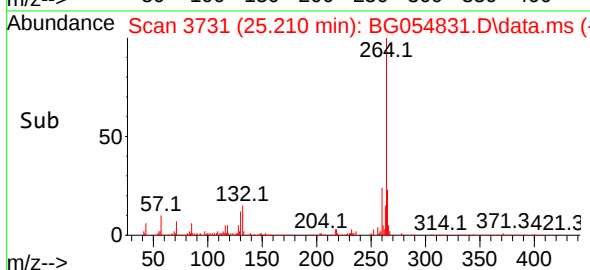
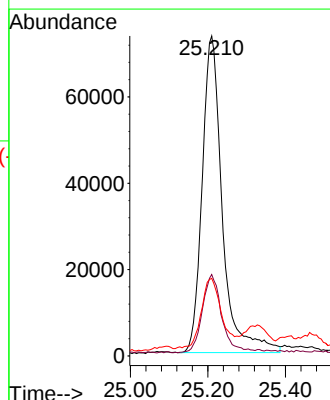
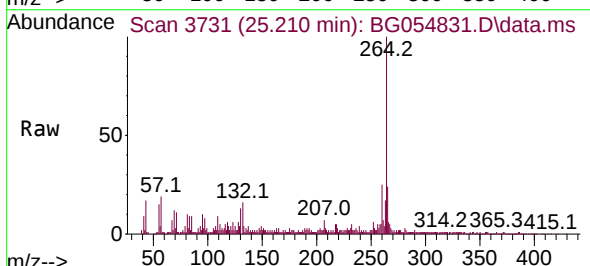
Delta R.T. 0.012 min

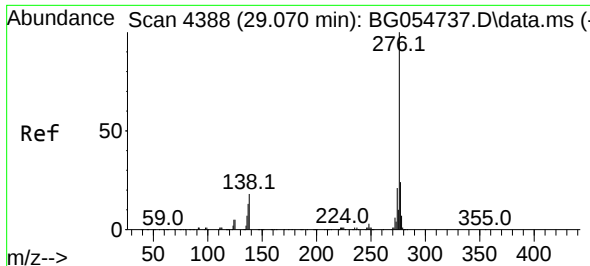
Lab File: BG054831.D

Acq: 1 Sep 2022 21:09

Tgt Ion:264 Resp: 264854

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 264 | 100   |       |       |
| 260 | 25.4  | 19.9  | 29.9  |
| 265 | 24.2  | 16.9  | 25.3  |





#87  
Indeno(1,2,3-cd)pyrene  
Concen: 11.590 ng  
RT: 29.099 min Scan# 4388  
Delta R.T. 0.029 min  
Lab File: BG054831.D  
Acq: 1 Sep 2022 21:09

Instrument :

BNA\_G

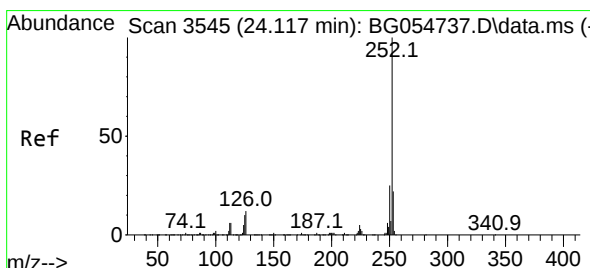
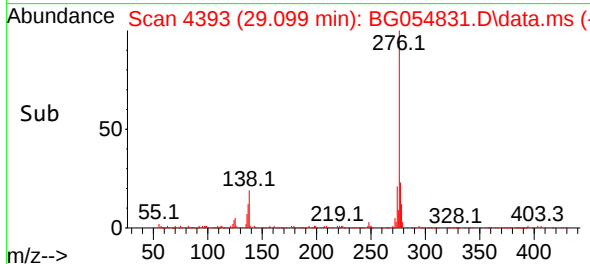
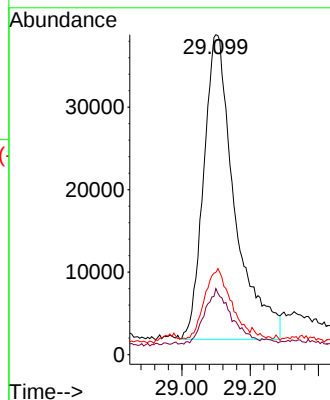
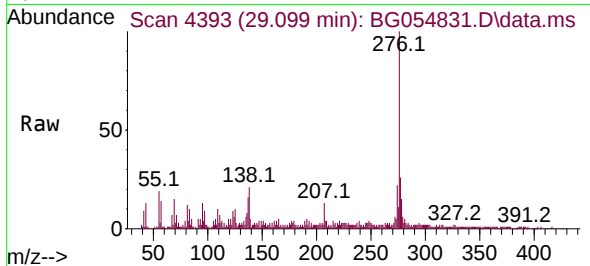
ClientSampleId :

HD-01-083022

Tgt Ion:276 Resp: 23304  
Ion Ratio Lower Upper  
276 100  
138 15.9 12.0 18.0  
277 19.6 20.2 30.4

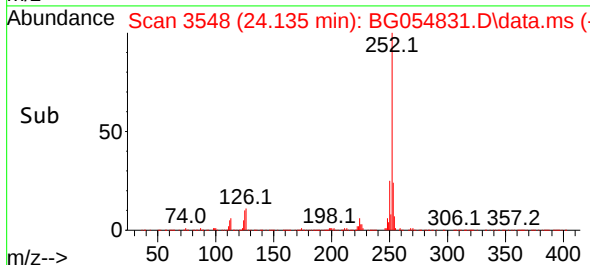
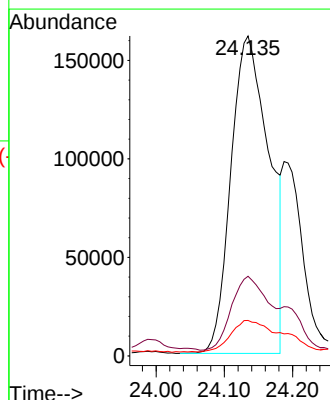
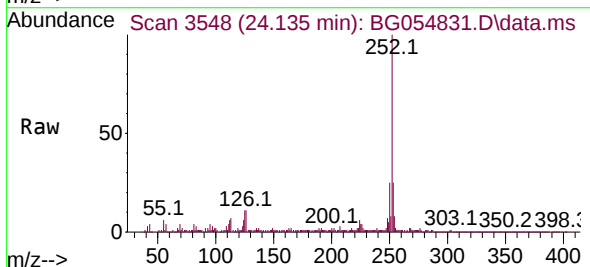
Manual Integrations  
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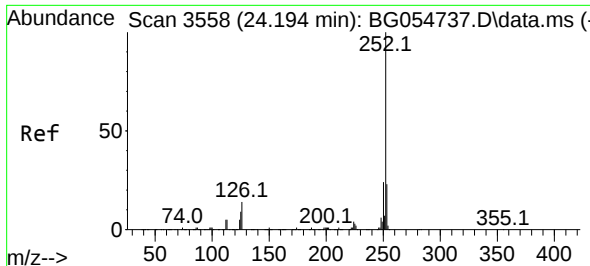
Reviewed By :Christian Giraldo 09/02/2022  
Supervised By :Jagrut Upadhyay 09/02/2022



#88  
Benzo(b)fluoranthene  
Concen: 37.789 ng  
RT: 24.135 min Scan# 3548  
Delta R.T. 0.017 min  
Lab File: BG054831.D  
Acq: 1 Sep 2022 21:09

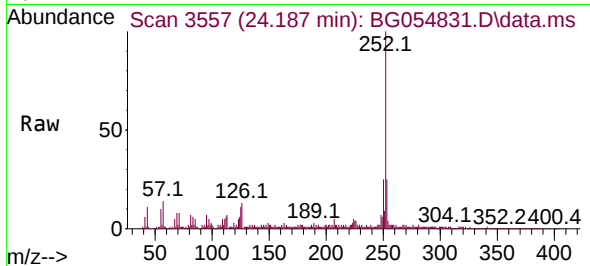
Tgt Ion:252 Resp: 627842  
Ion Ratio Lower Upper  
252 100  
253 24.9 18.0 27.0  
125 11.1 8.1 12.1





#89  
Benzo(k)fluoranthene  
Concen: 11.984 ng m  
RT: 24.187 min Scan# 3558  
Delta R.T. -0.006 min  
Lab File: BG054831.D  
Acq: 1 Sep 2022 21:09

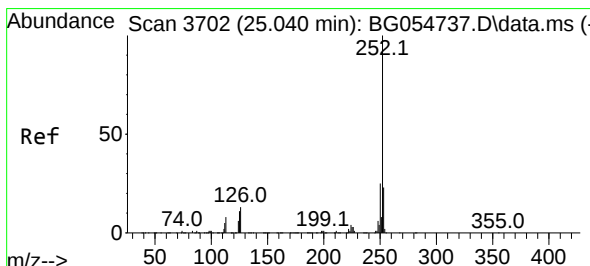
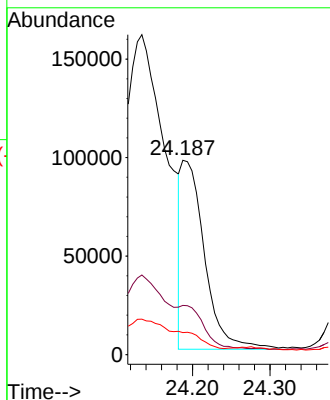
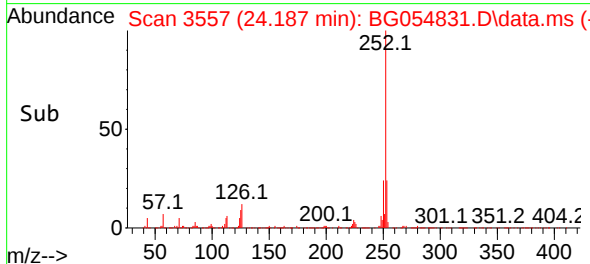
Instrument :  
BNA\_G  
ClientSampleId :  
HD-01-083022



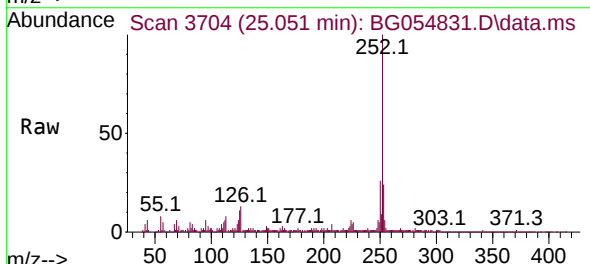
Tgt Ion:252 Resp: 200388  
Ion Ratio Lower Upper  
252 100  
253 25.3 17.8 26.8  
125 11.3 8.2 12.4

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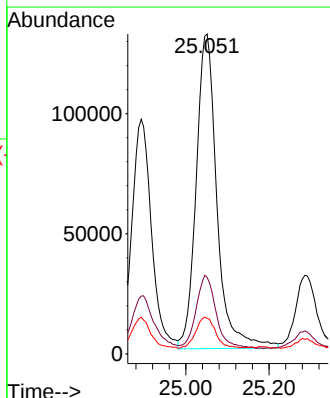
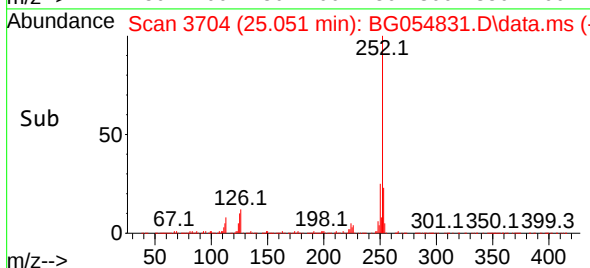
Reviewed By :Christian Giraldo 09/02/2022  
Supervised By :Jagrut Upadhyay 09/02/2022

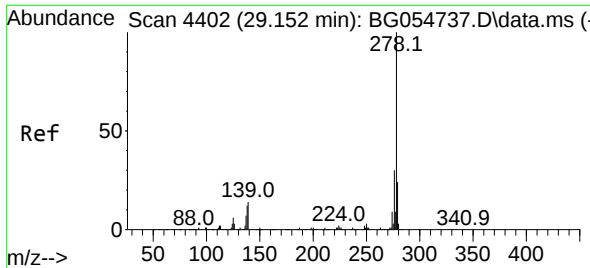


#90  
Benzo(a)pyrene  
Concen: 32.029 ng  
RT: 25.051 min Scan# 3704  
Delta R.T. 0.012 min  
Lab File: BG054831.D  
Acq: 1 Sep 2022 21:09



Tgt Ion:252 Resp: 454646  
Ion Ratio Lower Upper  
252 100  
253 23.9 18.3 27.5  
125 11.1 8.8 13.2





#91  
Dibenzo(a,h)anthracene  
Concen: 3.318 ng  
RT: 29.146 min Scan# 4402  
Delta R.T. -0.006 min  
Lab File: BG054831.D  
Acq: 1 Sep 2022 21:09

Instrument :

BNA\_G

ClientSampleId :

HD-01-083022

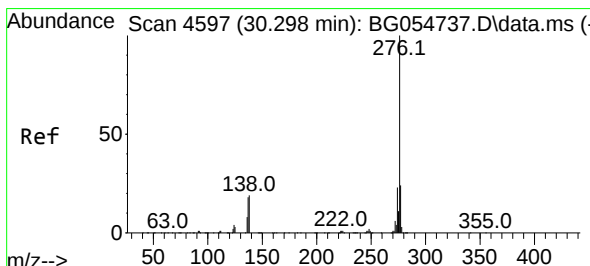
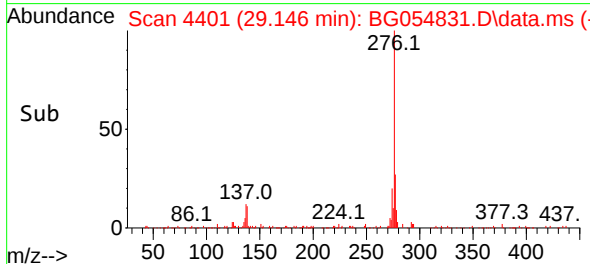
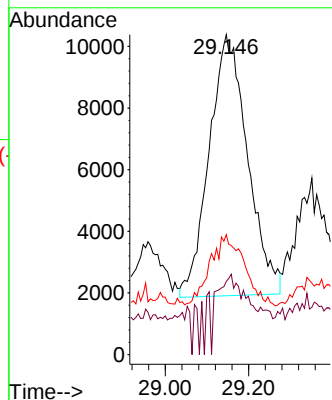
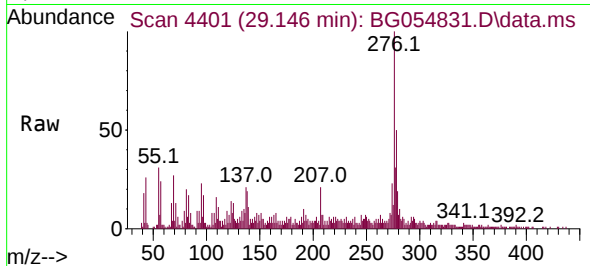
Tgt Ion:278 Resp: 54359  
Ion Ratio Lower Upper  
278 100  
139 22.9 11.4 17.2  
279 37.5 19.3 28.9

Manual Integrations

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Reviewed By :Christian Giraldo 09/02/2022

Supervised By :Jagrut Upadhyay 09/02/2022



#92  
Benzo(g,h,i)perylene  
Concen: 13.235 ng  
RT: 30.327 min Scan# 4602  
Delta R.T. 0.029 min  
Lab File: BG054831.D  
Acq: 1 Sep 2022 21:09

Tgt Ion:276 Resp: 219028  
Ion Ratio Lower Upper  
276 100  
277 25.8 19.4 29.0  
138 20.1 16.6 25.0

