

Data Path : Z:\svoasrv\HPCHEM1\BNA\_G\Data\BG102022\  
 Data File : BG055219.D  
 Acq On : 20 Oct 2022 12:56  
 Operator : CG/JU  
 Sample : N5175-01  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 CONCRETE-1

Manual Integrations  
 APPROVED

Reviewed By : Christian Giraldo 10/21/2022  
 Supervised By : Jagrut Upadhyay 10/21/2022

Quant Time: Oct 20 15:15:02 2022  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_G\Methods\8270-BG101922.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Oct 20 09:21:42 2022  
 Response via : Initial Calibration

| Compound                    | R.T.   | QIon | Response | Conc    | Units | Dev(Min) |
|-----------------------------|--------|------|----------|---------|-------|----------|
| -----                       |        |      |          |         |       |          |
| Internal Standards          |        |      |          |         |       |          |
| 1) 1,4-Dichlorobenzene-d4   | 8.285  | 152  | 57567    | 20.000  | ng    | 0.00     |
| 21) Naphthalene-d8          | 11.117 | 136  | 254545   | 20.000  | ng    | 0.00     |
| 39) Acenaphthene-d10        | 14.895 | 164  | 151783   | 20.000  | ng    | 0.00     |
| 64) Phenanthrene-d10        | 17.627 | 188  | 287403   | 20.000  | ng    | 0.00     |
| 76) Chrysene-d12            | 21.910 | 240  | 236169   | 20.000  | ng    | 0.00     |
| 86) Perylene-d12            | 25.324 | 264  | 248864   | 20.000  | ng    | 0.00     |
|                             |        |      |          |         |       |          |
| System Monitoring Compounds |        |      |          |         |       |          |
| 5) 2-Fluorophenol           | 5.805  | 112  | 271069   | 84.717  | ng    | 0.00     |
| 7) Phenol-d6                | 7.421  | 99   | 478053   | 98.049  | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 9.454  | 82   | 310117   | 58.818  | ng    | 0.00     |
| 42) 2,4,6-Tribromophenol    | 16.375 | 330  | 162730   | 103.467 | ng    | 0.00     |
| 45) 2-Fluorobiphenyl        | 13.526 | 172  | 823065   | 86.616  | ng    | 0.00     |
| 79) Terphenyl-d14           | 20.206 | 244  | 1172658  | 92.519  | ng    | 0.00     |
|                             |        |      |          |         |       |          |
| Target Compounds            |        |      |          |         |       | Qvalue   |
| 52) Acenaphthene            | 14.959 | 154  | 29439    | 3.267   | ng    | 95       |
| 58) Fluorene                | 15.935 | 166  | 33399    | 3.055   | ng    | 95       |
| 71) Phenanthrene            | 17.674 | 178  | 476606   | 31.077  | ng    | 100      |
| 72) Anthracene              | 17.762 | 178  | 122053   | 8.144   | ng    | 98       |
| 75) Fluoranthene            | 19.660 | 202  | 596647   | 35.122  | ng    | 100      |
| 78) Pyrene                  | 20.024 | 202  | 663464   | 37.283  | ng    | 99       |
| 81) Benzo(a)anthracene      | 21.892 | 228  | 324093   | 21.156  | ng    | 99       |
| 83) Chrysene                | 21.963 | 228  | 296320   | 20.771  | ng    | 97       |
| 87) Indeno(1,2,3-cd)pyrene  | 29.237 | 276  | 154240   | 8.911   | ng    | # 88     |
| 88) Benzo(b)fluoranthene    | 24.237 | 252  | 320469   | 21.685  | ng    | # 93     |
| 89) Benzo(k)fluoranthene    | 24.301 | 252  | 97039m   | 6.484   | ng    |          |
| 90) Benzo(a)pyrene          | 25.159 | 252  | 248072   | 19.557  | ng    | # 93     |
| 91) Dibenzo(a,h)anthracene  | 29.301 | 278  | 44062    | 3.107   | ng    | # 88     |
| 92) Benzo(g,h,i)perylene    | 30.471 | 276  | 154627   | 11.256  | ng    | # 87     |
| -----                       |        |      |          |         |       |          |

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

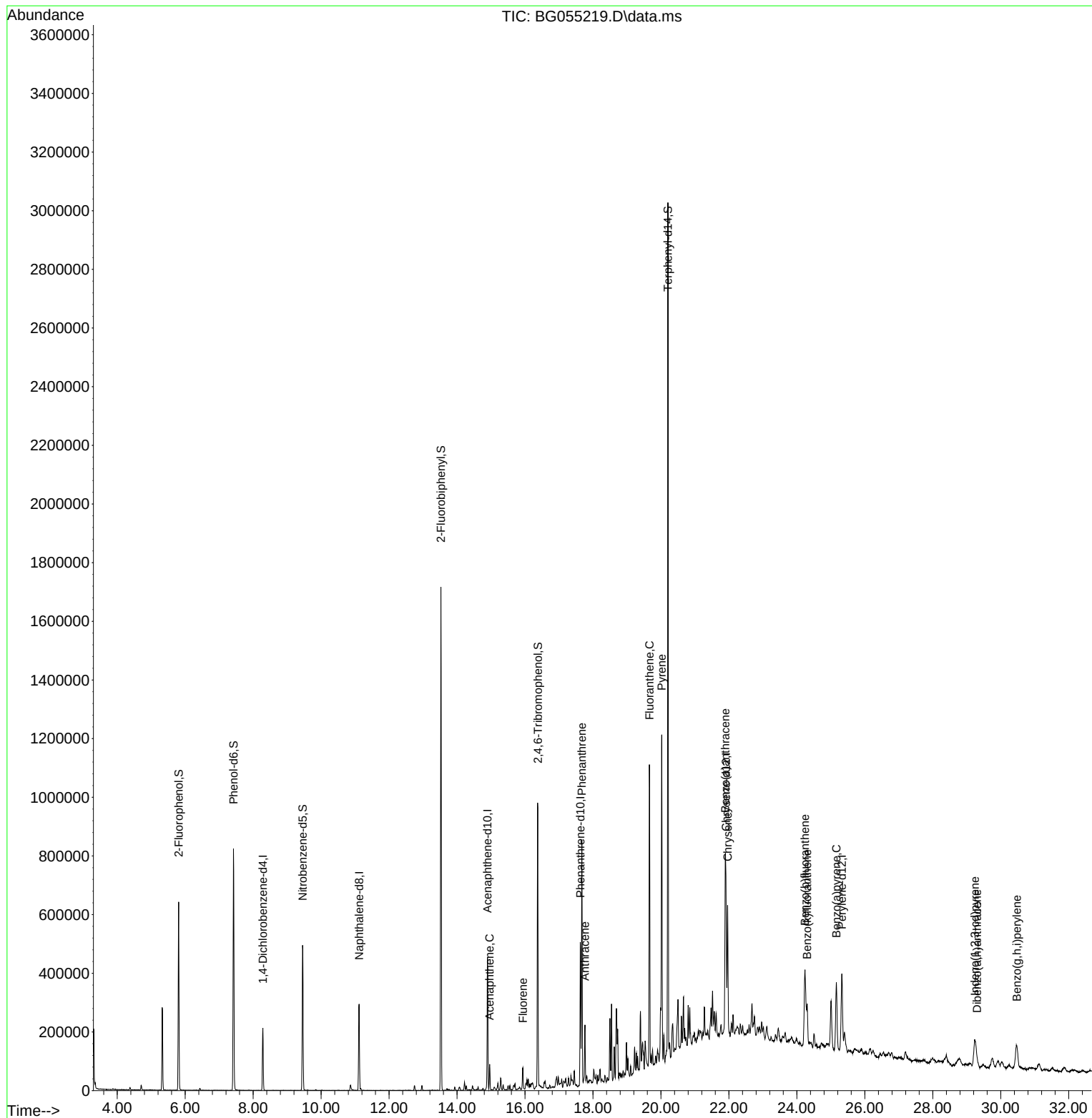
Data Path : Z:\svoasrv\HPCHEM1\BNA\_G\Data\BG102022\  
Data File : BG055219.D  
Acq On : 20 Oct 2022 12:56  
Operator : CG/JU  
Sample : N5175-01  
Misc :  
ALS Vial : 4 Sample Multiplier: 1

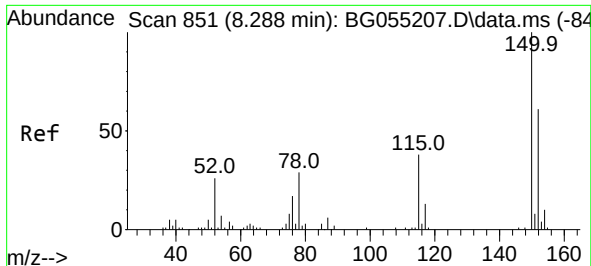
Instrument :  
BNA\_G  
ClientSampleId :  
CONCRETE-1

Quant Time: Oct 20 15:15:02 2022  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_G\Methods\8270-BG101922.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Thu Oct 20 09:21:42 2022  
Response via : Initial Calibration

Manual Integrations  
APPROVED

Reviewed By : Christian Giraldo 10/21/2022  
Supervised By : Jagrut Upadhyay 10/21/2022





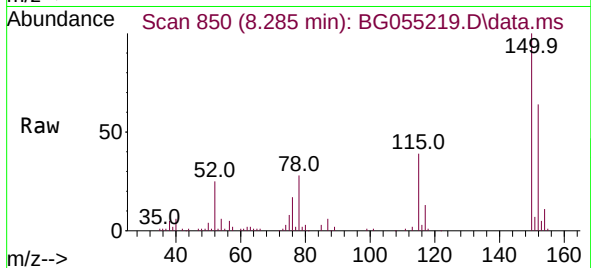
#1  
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 8.285 min Scan# 851  
Delta R.T. -0.003 min  
Lab File: BG055219.D  
Acq: 20 Oct 2022 12:56

Instrument :

BNA\_G

ClientSampleId :

CONCRETE-1

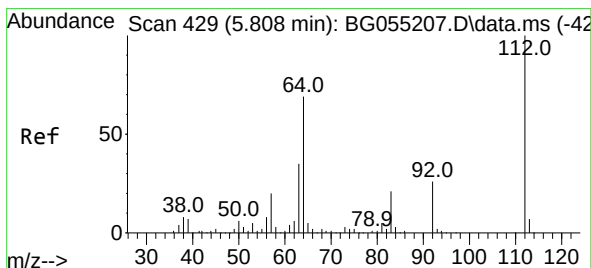
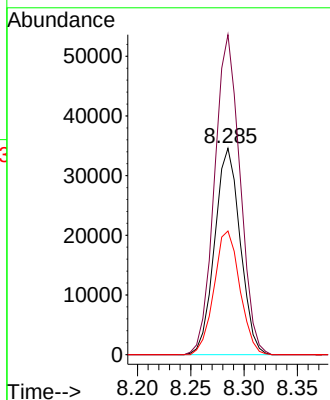
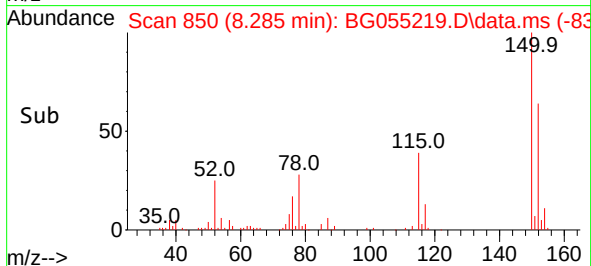


Tgt Ion:152 Resp: 57562  
Ion Ratio Lower Upper  
152 100  
150 155.1 130.2 195.2  
115 59.9 50.0 75.0

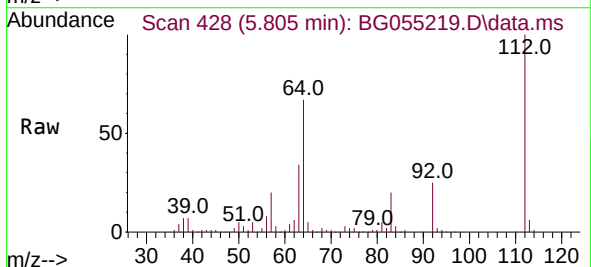
Manual Integrations

APPROVED

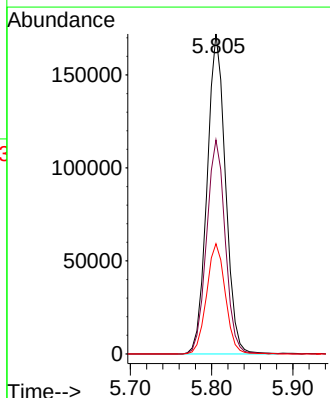
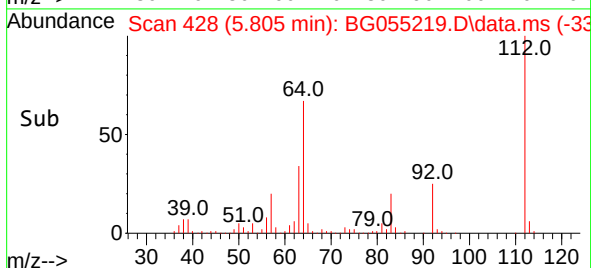
Reviewed By :Christian Giraldo 10/21/2022  
Supervised By :Jagrut Upadhyay 10/21/2022

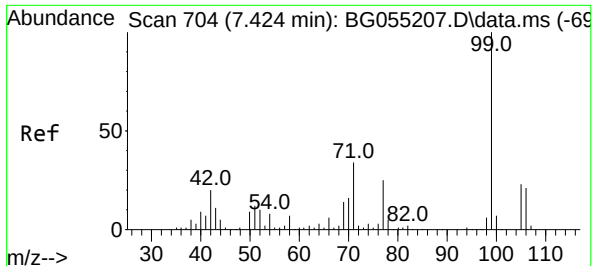


#5  
2-Fluorophenol  
Concen: 84.717 ng  
RT: 5.805 min Scan# 428  
Delta R.T. -0.003 min  
Lab File: BG055219.D  
Acq: 20 Oct 2022 12:56



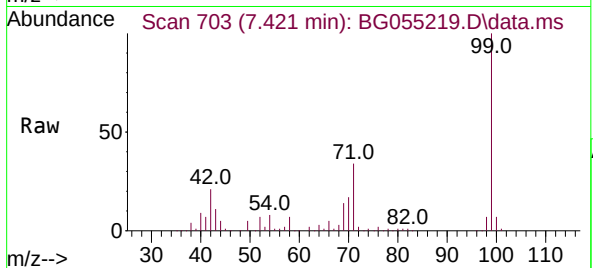
Tgt Ion:112 Resp: 271069  
Ion Ratio Lower Upper  
112 100  
64 66.9 55.1 82.7  
63 34.5 27.8 41.6





#7  
Phenol-d6  
Concen: 98.049 ng  
RT: 7.421 min Scan# 704  
Delta R.T. -0.003 min  
Lab File: BG055219.D  
Acq: 20 Oct 2022 12:56

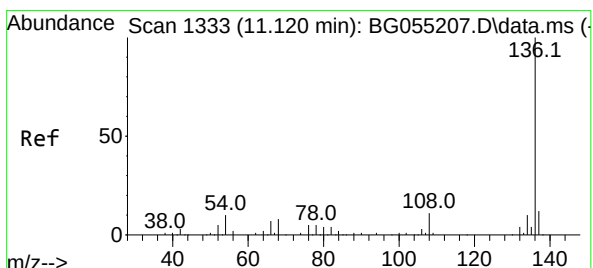
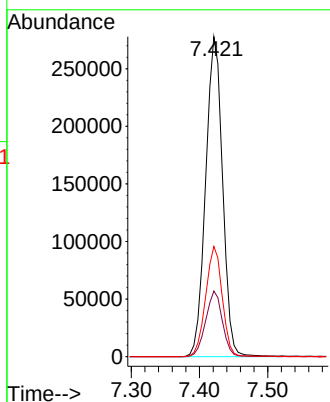
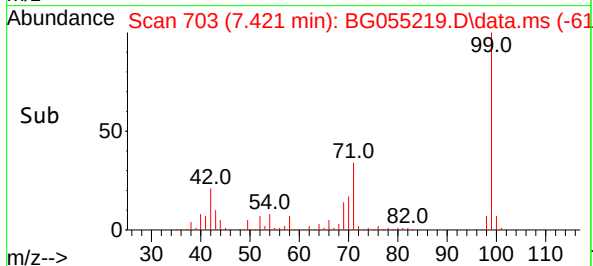
Instrument :  
BNA\_G  
ClientSampleId :  
CONCRETE-1



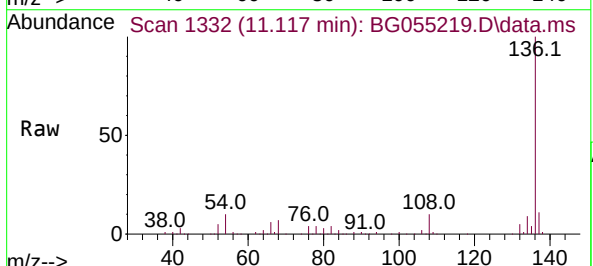
Tgt Ion: 99 Resp: 478053  
Ion Ratio Lower Upper  
99 100  
42 20.5 16.2 24.4  
71 34.4 27.3 40.9

Manual Integrations  
APPROVED

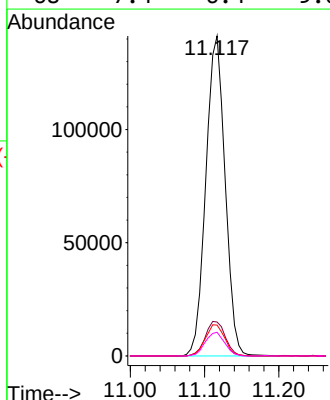
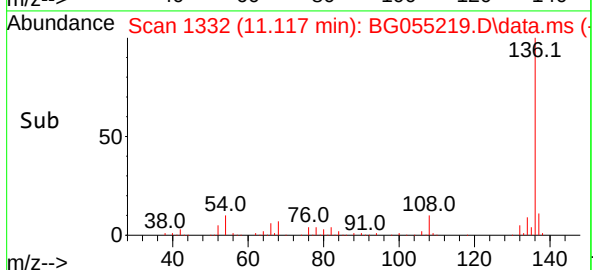
Reviewed By :Christian Giraldo 10/21/2022  
Supervised By :Jagrut Upadhyay 10/21/2022

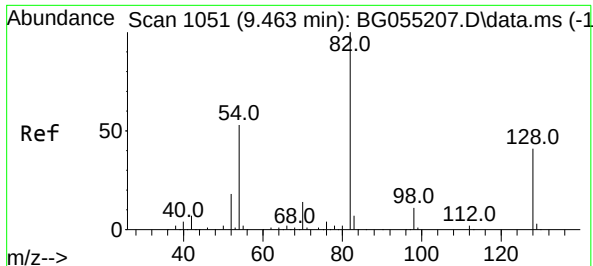


#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 11.117 min Scan# 1332  
Delta R.T. -0.003 min  
Lab File: BG055219.D  
Acq: 20 Oct 2022 12:56



Tgt Ion:136 Resp: 254545  
Ion Ratio Lower Upper  
136 100  
137 10.6 9.3 13.9  
54 9.6 8.2 12.4  
68 7.4 6.4 9.6





#23

Nitrobenzene-d5

Concen: 58.818 ng

RT: 9.454 min Scan# 1049

Delta R.T. -0.009 min

Lab File: BG055219.D

Acq: 20 Oct 2022 12:56

Instrument :

BNA\_G

ClientSampleId :

CONCRETE-1

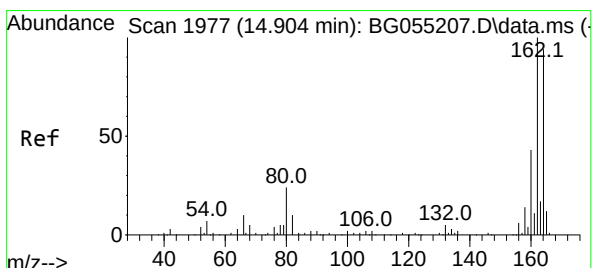
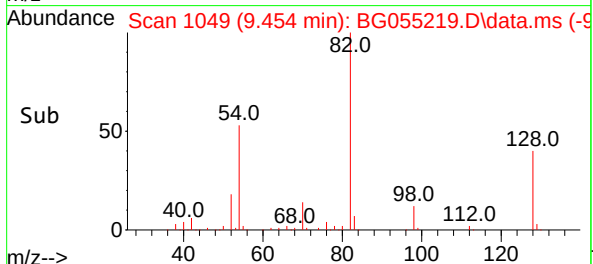
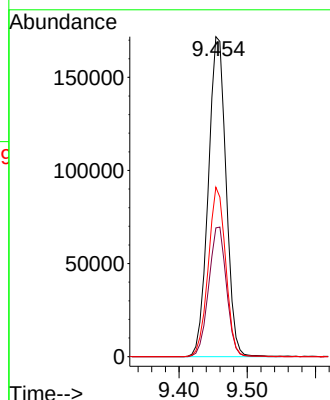
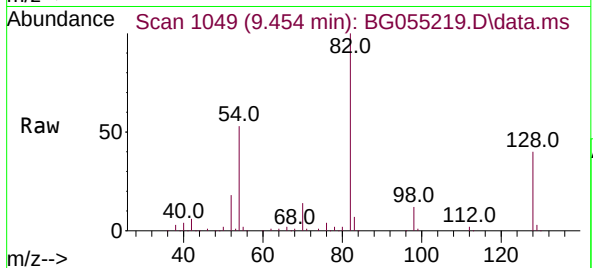
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 82    | Resp: | 31011 |
| Ion Ratio | Lower | Upper |       |
| 82        | 100   |       |       |
| 128       | 40.2  | 32.3  | 48.5  |
| 54        | 52.9  | 42.6  | 63.8  |

Manual Integrations

APPROVED

Reviewed By :Christian Giraldo 10/21/2022

Supervised By :Jagrut Upadhyay 10/21/2022



#39

Acenaphthene-d10

Concen: 20.000 ng

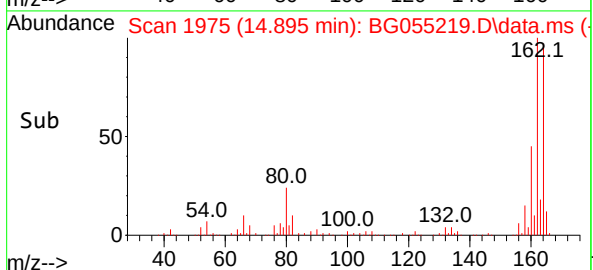
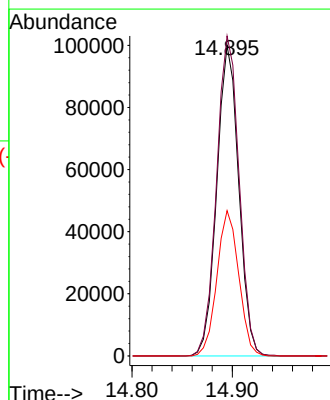
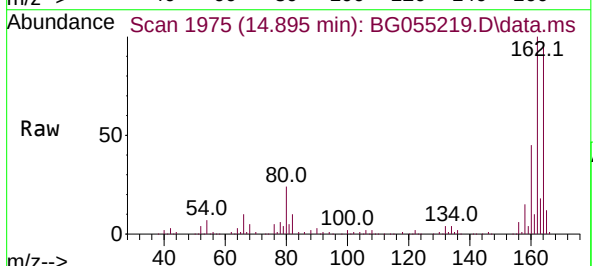
RT: 14.895 min Scan# 1975

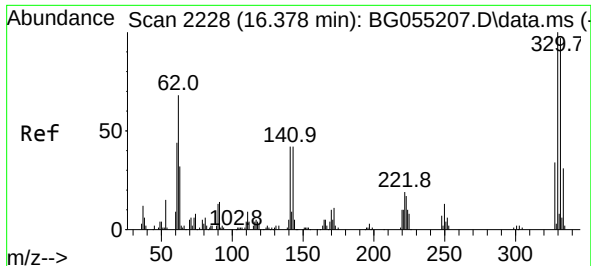
Delta R.T. -0.009 min

Lab File: BG055219.D

Acq: 20 Oct 2022 12:56

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 164   | Resp: | 151783 |
| Ion Ratio | Lower | Upper |        |
| 164       | 100   |       |        |
| 162       | 103.1 | 85.2  | 127.8  |
| 160       | 46.8  | 36.4  | 54.6   |





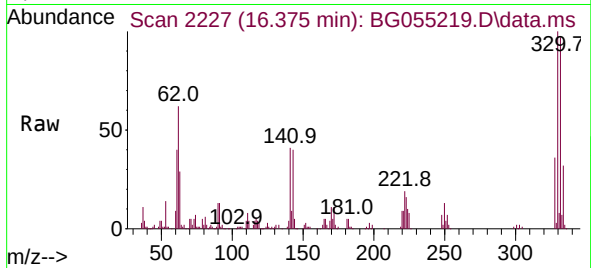
#42  
2,4,6-Tribromophenol  
Concen: 103.467 ng  
RT: 16.375 min Scan# 21  
Delta R.T. -0.003 min  
Lab File: BG055219.D  
Acq: 20 Oct 2022 12:56

Instrument :

BNA\_G

ClientSampleId :

CONCRETE-1

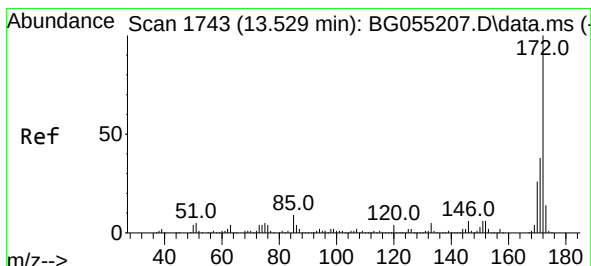
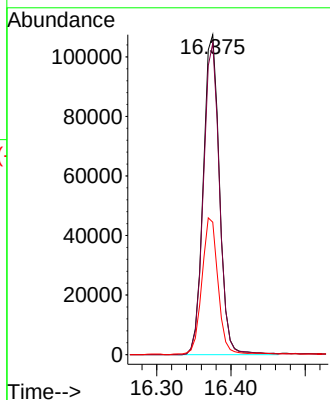
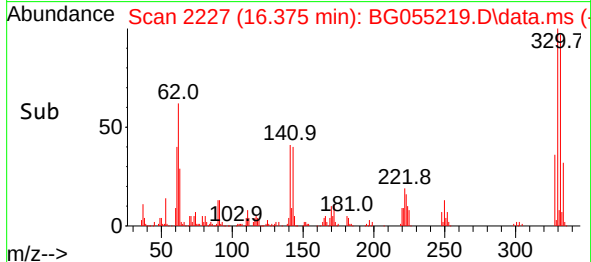


Tgt Ion:330 Resp: 162730  
Ion Ratio Lower Upper  
330 100  
332 96.7 77.5 116.3  
141 42.6 33.5 50.3

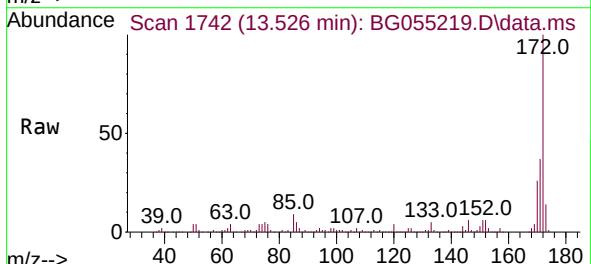
Manual Integrations

APPROVED

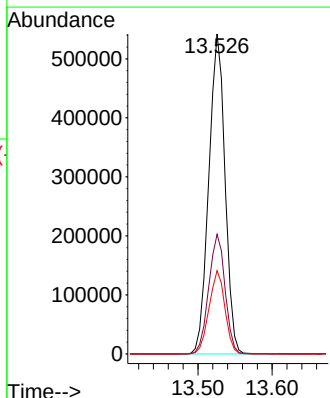
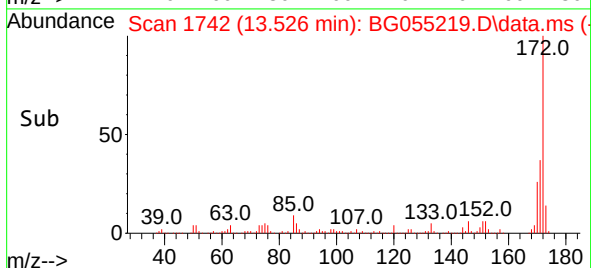
Reviewed By :Christian Giraldo 10/21/2022  
Supervised By :Jagrut Upadhyay 10/21/2022

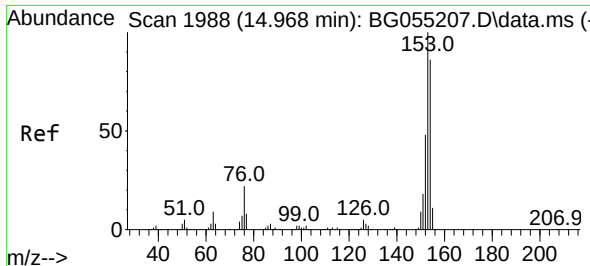


#45  
2-Fluorobiphenyl  
Concen: 86.616 ng  
RT: 13.526 min Scan# 1742  
Delta R.T. -0.003 min  
Lab File: BG055219.D  
Acq: 20 Oct 2022 12:56



Tgt Ion:172 Resp: 823065  
Ion Ratio Lower Upper  
172 100  
171 37.4 30.3 45.5  
170 26.0 20.6 30.8





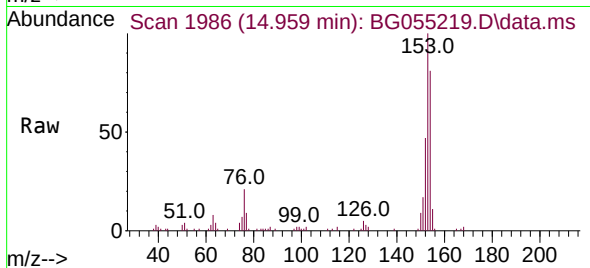
#52  
Acenaphthene  
Concen: 3.267 ng  
RT: 14.959 min Scan# 1986  
Delta R.T. -0.009 min  
Lab File: BG055219.D  
Acq: 20 Oct 2022 12:56

Instrument :

BNA\_G

ClientSampleId :

CONCRETE-1

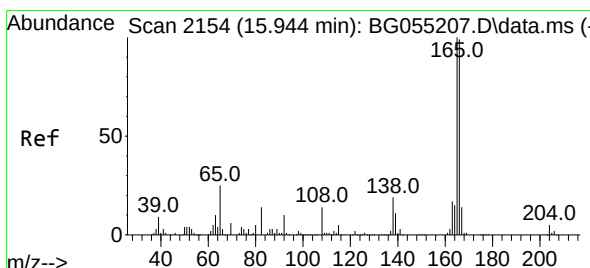
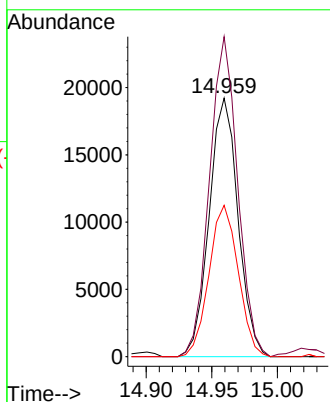
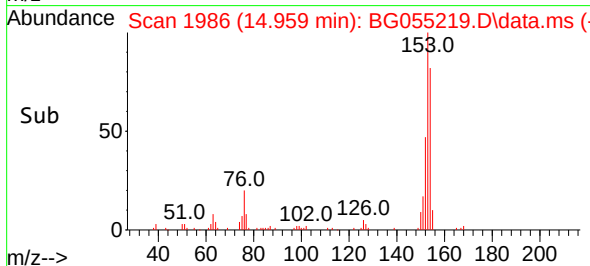


Tgt Ion:154 Resp: 29439  
Ion Ratio Lower Upper  
154 100  
153 123.8 93.3 139.9  
152 58.5 45.1 67.7

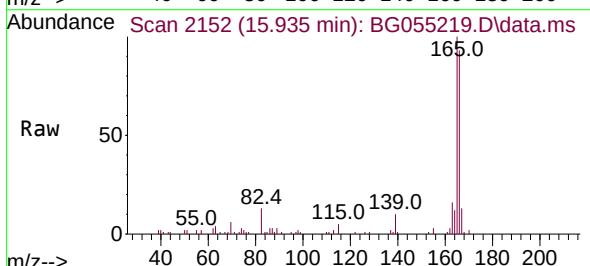
Manual Integrations

APPROVED

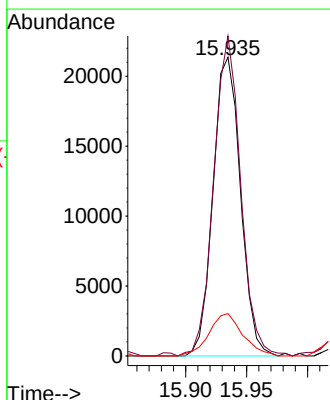
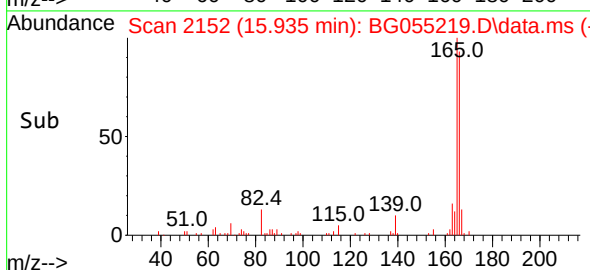
Reviewed By :Christian Giraldo 10/21/2022  
Supervised By :Jagrut Upadhyay 10/21/2022

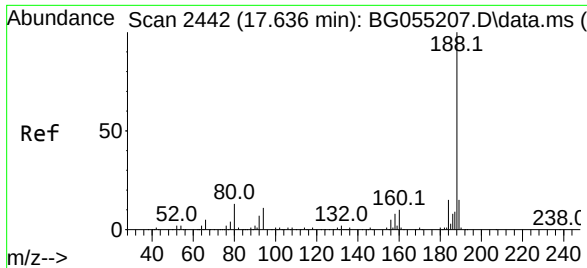


#58  
Fluorene  
Concen: 3.055 ng  
RT: 15.935 min Scan# 2152  
Delta R.T. -0.009 min  
Lab File: BG055219.D  
Acq: 20 Oct 2022 12:56



Tgt Ion:166 Resp: 33399  
Ion Ratio Lower Upper  
166 100  
165 107.2 81.0 121.6  
167 14.2 11.0 16.4





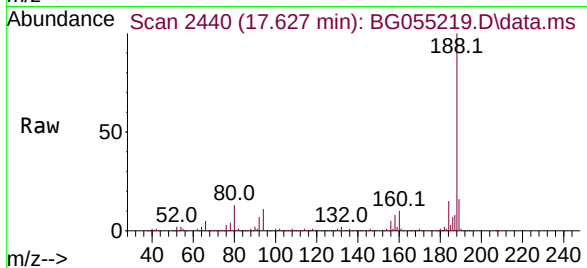
#64  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 17.627 min Scan# 2442  
Delta R.T. -0.009 min  
Lab File: BG055219.D  
Acq: 20 Oct 2022 12:56

Instrument :

BNA\_G

ClientSampleId :

CONCRETE-1

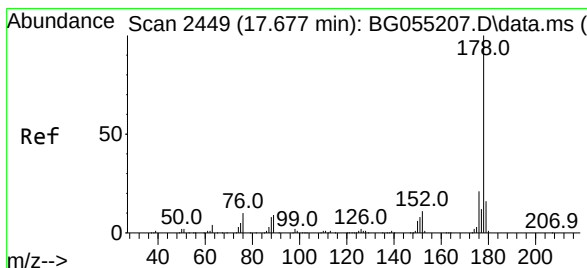
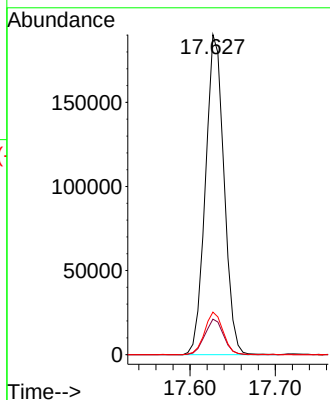
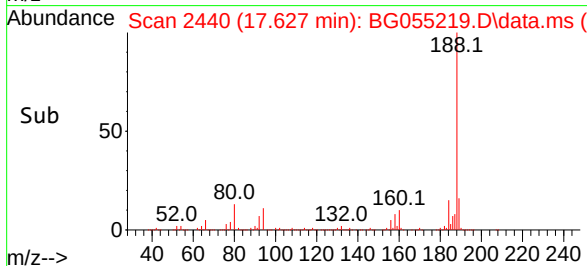


Tgt Ion:188 Resp: 287403  
Ion Ratio Lower Upper  
188 100  
94 11.1 8.6 12.8  
80 13.3 10.4 15.6

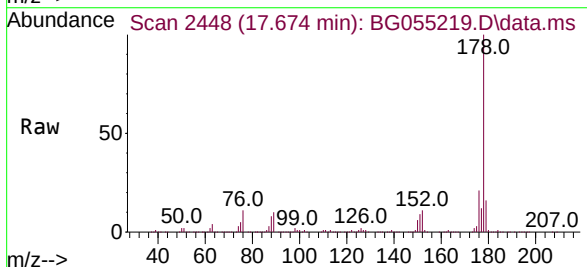
Manual Integrations

APPROVED

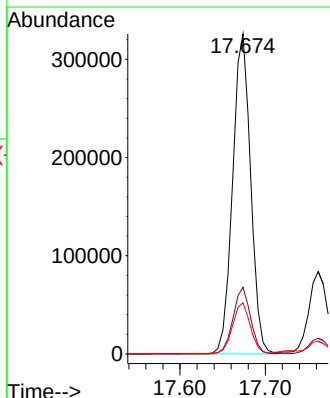
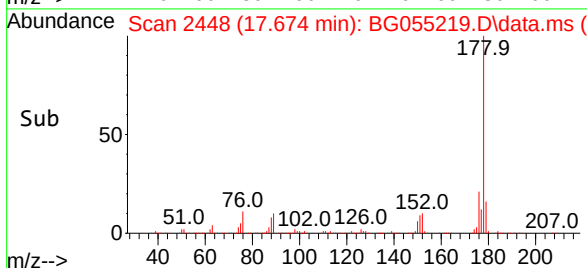
Reviewed By :Christian Giraldo 10/21/2022  
Supervised By :Jagrut Upadhyay 10/21/2022



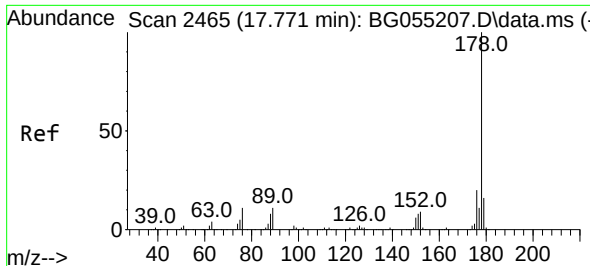
#71  
Phenanthrene  
Concen: 31.077 ng  
RT: 17.674 min Scan# 2448  
Delta R.T. -0.003 min  
Lab File: BG055219.D  
Acq: 20 Oct 2022 12:56



Tgt Ion:178 Resp: 476606  
Ion Ratio Lower Upper  
178 100  
176 20.8 16.4 24.6  
179 16.0 12.8 19.2

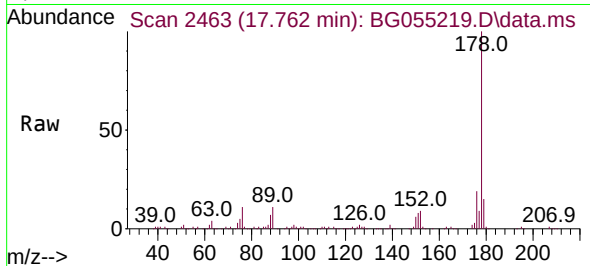






#72  
 Anthracene  
 Concen: 8.144 ng  
 RT: 17.762 min Scan# 2463  
 Delta R.T. -0.009 min  
 Lab File: BG055219.D  
 Acq: 20 Oct 2022 12:56

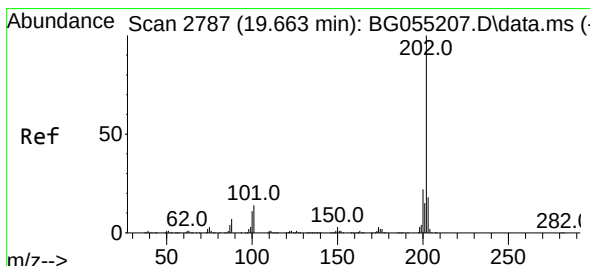
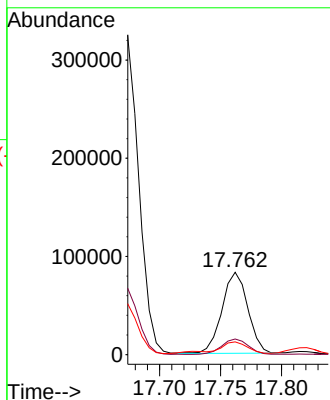
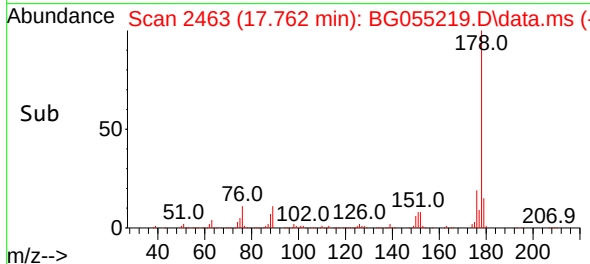
Instrument :  
 BNA\_G  
 ClientSampleId :  
 CONCRETE-1



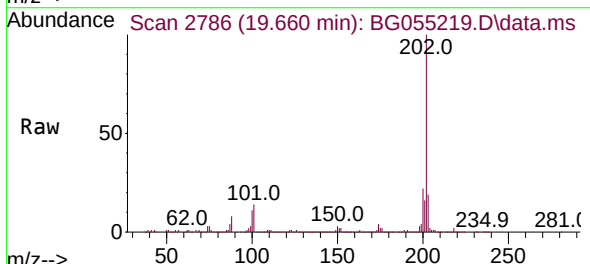
Tgt Ion:178 Resp: 122053  
 Ion Ratio Lower Upper  
 178 100  
 176 19.0 16.2 24.2  
 179 15.4 13.0 19.4

Manual Integrations  
 APPROVED

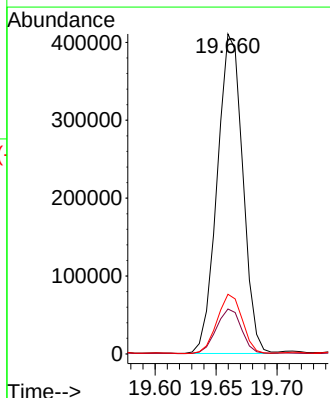
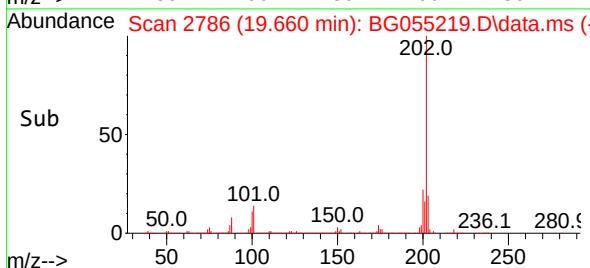
Reviewed By :Christian Giraldo 10/21/2022  
 Supervised By :Jagrut Upadhyay 10/21/2022

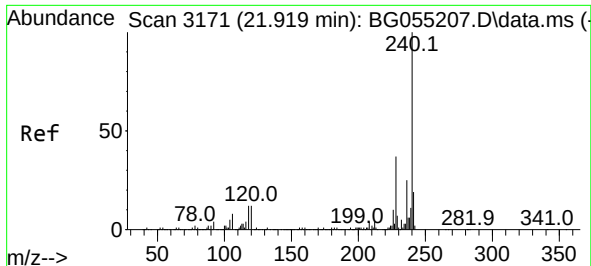


#75  
 Fluoranthene  
 Concen: 35.122 ng  
 RT: 19.660 min Scan# 2786  
 Delta R.T. -0.003 min  
 Lab File: BG055219.D  
 Acq: 20 Oct 2022 12:56



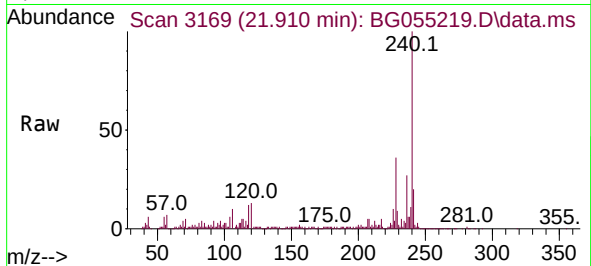
Tgt Ion:202 Resp: 596647  
 Ion Ratio Lower Upper  
 202 100  
 101 14.0 0.0 34.2  
 203 18.6 0.0 38.5





#76  
Chrysene-d12  
Concen: 20.000 ng  
RT: 21.910 min Scan# 3171  
Delta R.T. -0.009 min  
Lab File: BG055219.D  
Acq: 20 Oct 2022 12:56

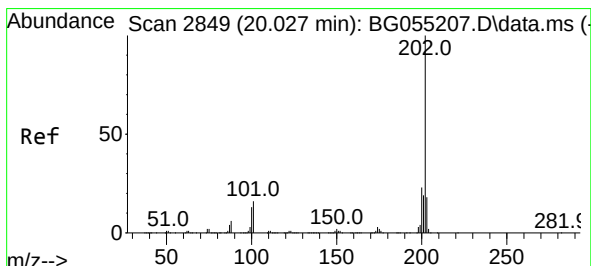
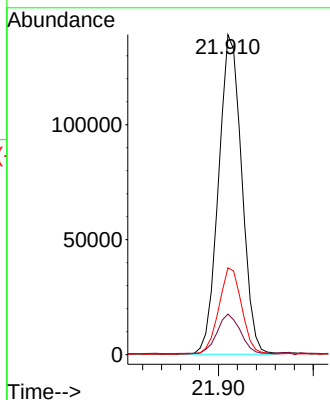
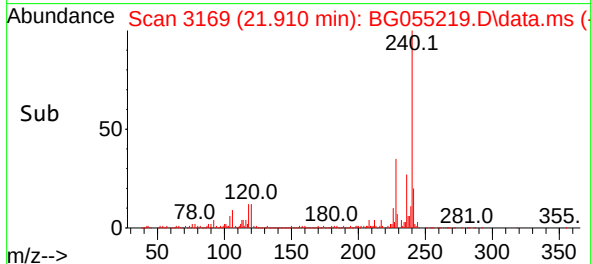
Instrument :  
BNA\_G  
ClientSampleId :  
CONCRETE-1



Tgt Ion:240 Resp: 236169  
Ion Ratio Lower Upper  
240 100  
120 12.7 9.2 13.8  
236 27.1 20.4 30.6

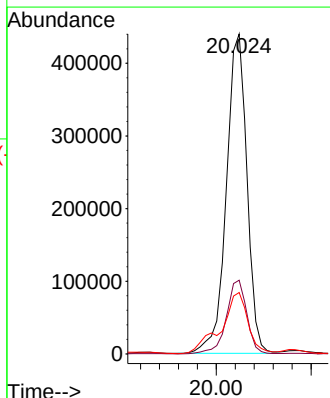
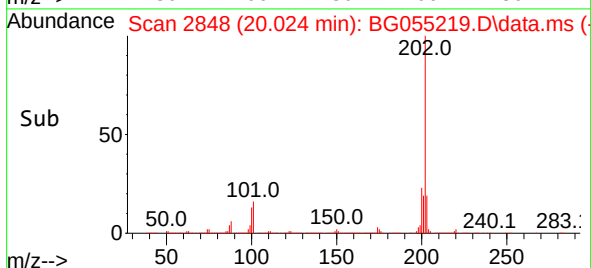
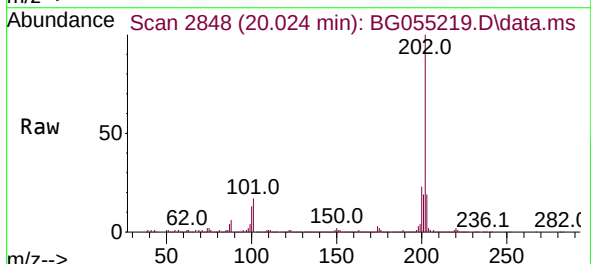
Manual Integrations  
APPROVED

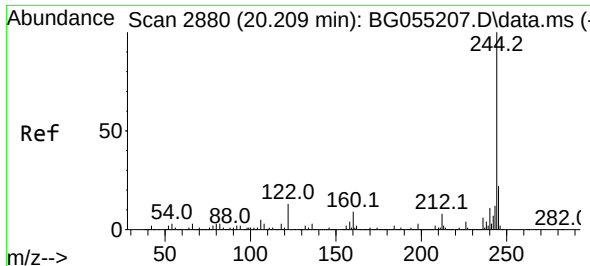
Reviewed By :Christian Giraldo 10/21/2022  
Supervised By :Jagrut Upadhyay 10/21/2022



#78  
Pyrene  
Concen: 37.283 ng  
RT: 20.024 min Scan# 2848  
Delta R.T. -0.003 min  
Lab File: BG055219.D  
Acq: 20 Oct 2022 12:56

Tgt Ion:202 Resp: 663464  
Ion Ratio Lower Upper  
202 100  
200 23.0 18.2 27.2  
203 19.2 14.6 22.0





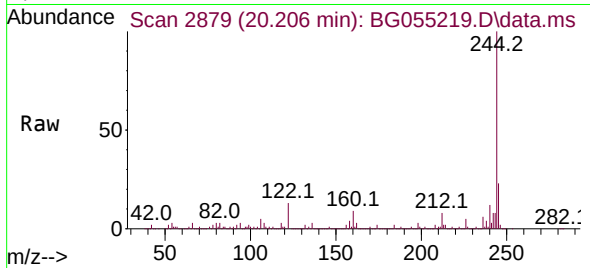
#79  
 Terphenyl-d14  
 Concen: 92.519 ng  
 RT: 20.206 min Scan# 2880  
 Delta R.T. -0.003 min  
 Lab File: BG055219.D  
 Acq: 20 Oct 2022 12:56

Instrument :

BNA\_G

ClientSampleId :

CONCRETE-1

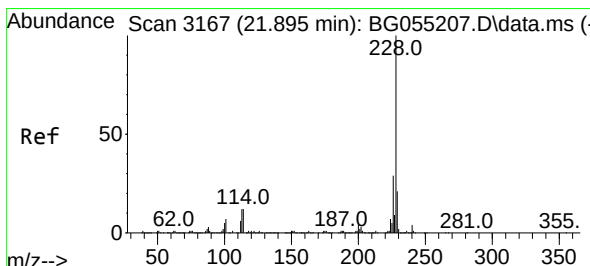
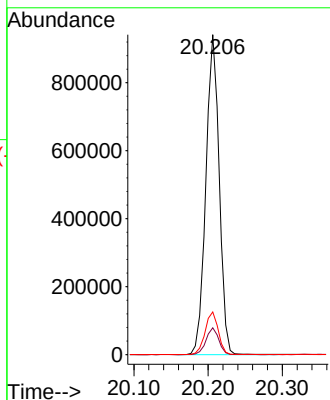
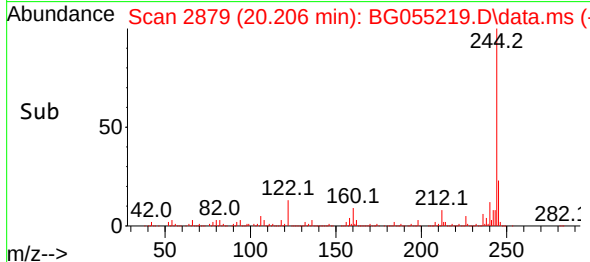


Tgt Ion:244 Resp: 1172658  
 Ion Ratio Lower Upper  
 244 100  
 212 8.4 6.3 9.5  
 122 13.3 10.0 15.0

Manual Integrations

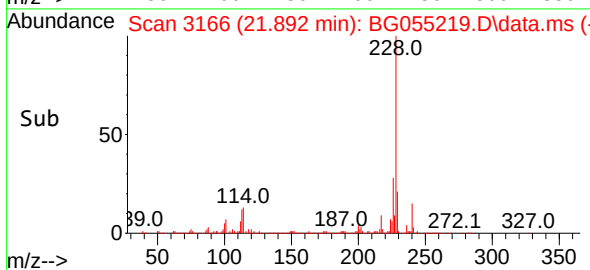
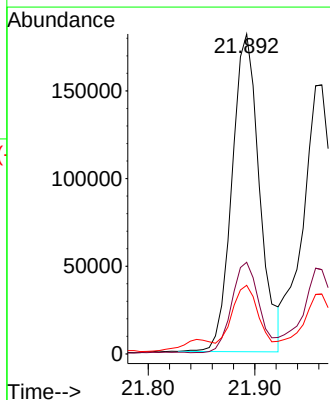
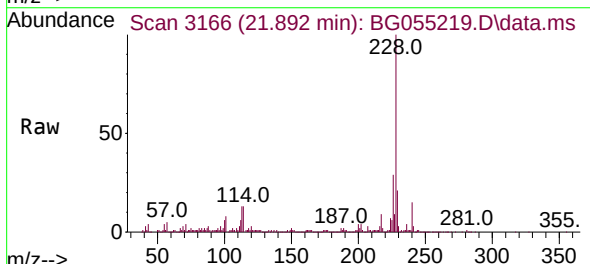
APPROVED

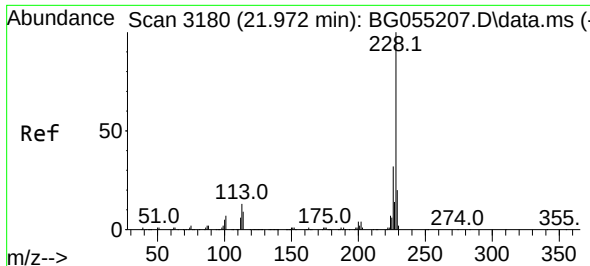
Reviewed By :Christian Giraldo 10/21/2022  
 Supervised By :Jagrut Upadhyay 10/21/2022



#81  
 Benzo(a)anthracene  
 Concen: 21.156 ng  
 RT: 21.892 min Scan# 3166  
 Delta R.T. -0.003 min  
 Lab File: BG055219.D  
 Acq: 20 Oct 2022 12:56

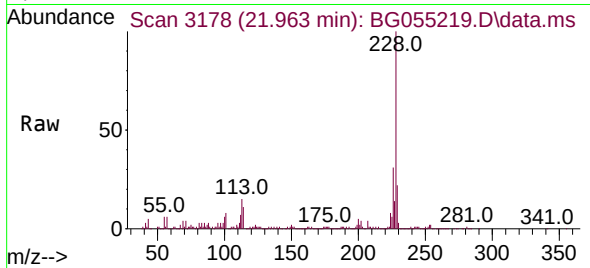
Tgt Ion:228 Resp: 324093  
 Ion Ratio Lower Upper  
 228 100  
 226 28.6 23.1 34.7  
 229 21.4 16.5 24.7





#83  
Chrysene  
Concen: 20.771 ng  
RT: 21.963 min Scan# 3180  
Delta R.T. -0.009 min  
Lab File: BG055219.D  
Acq: 20 Oct 2022 12:56

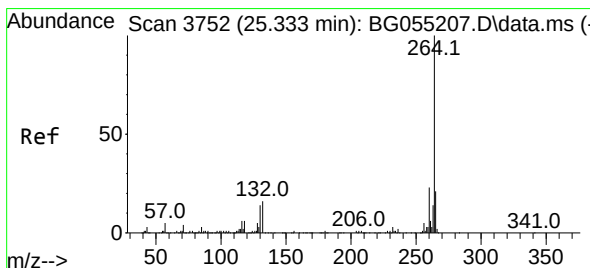
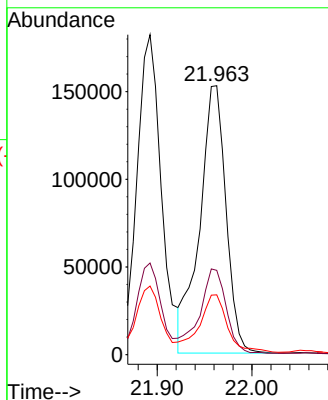
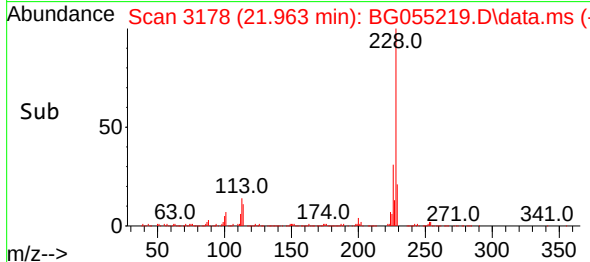
Instrument :  
BNA\_G  
ClientSampleId :  
CONCRETE-1



Tgt Ion:228 Resp: 296320  
Ion Ratio Lower Upper  
228 100  
226 31.3 25.4 38.2  
229 22.2 15.8 23.8

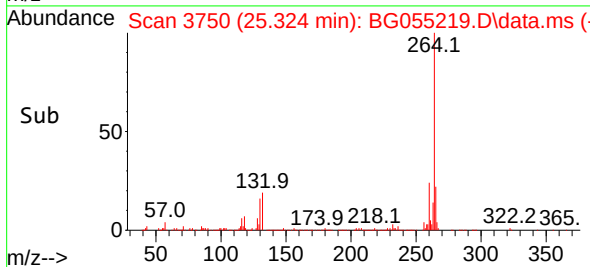
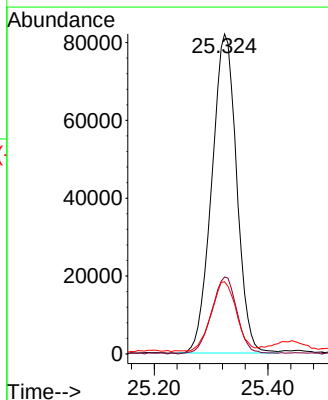
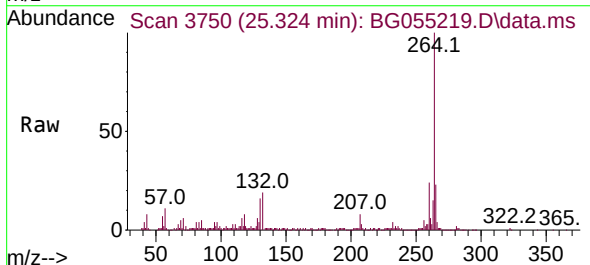
Manual Integrations  
APPROVED

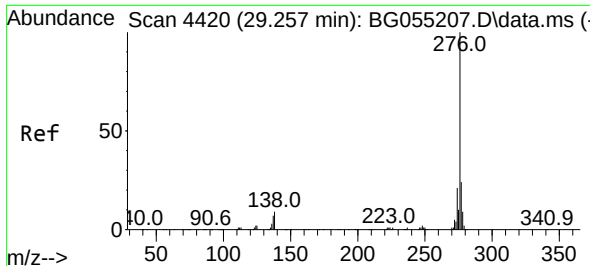
Reviewed By :Christian Giraldo 10/21/2022  
Supervised By :Jagrut Upadhyay 10/21/2022



#86  
Perylene-d12  
Concen: 20.000 ng  
RT: 25.324 min Scan# 3750  
Delta R.T. -0.009 min  
Lab File: BG055219.D  
Acq: 20 Oct 2022 12:56

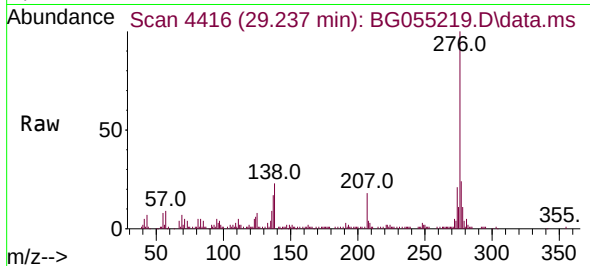
Tgt Ion:264 Resp: 248864  
Ion Ratio Lower Upper  
264 100  
260 24.0 18.6 27.8  
265 22.5 17.1 25.7





#87  
 Indeno(1,2,3-cd)pyrene  
 Concen: 8.911 ng  
 RT: 29.237 min Scan# 4416  
 Delta R.T. -0.021 min  
 Lab File: BG055219.D  
 Acq: 20 Oct 2022 12:56

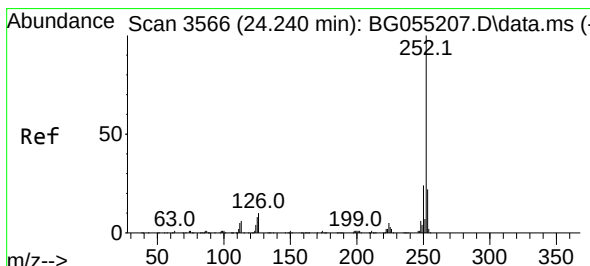
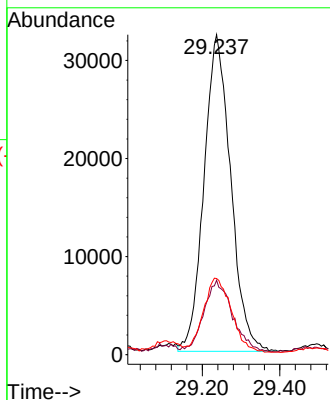
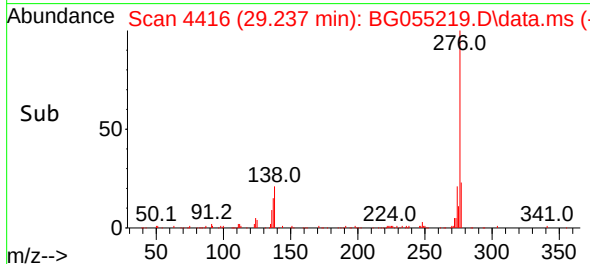
Instrument :  
 BNA\_G  
 ClientSampleId :  
 CONCRETE-1



Tgt Ion:276 Resp: 154240  
 Ion Ratio Lower Upper  
 276 100  
 138 24.3 9.5 14.3#  
 277 24.3 20.5 30.7#

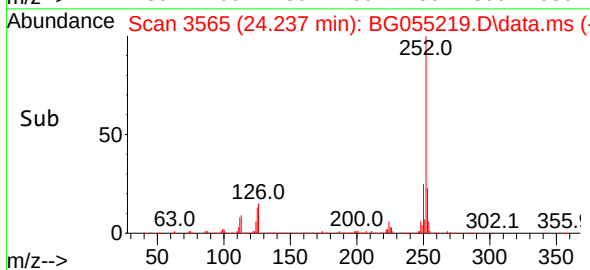
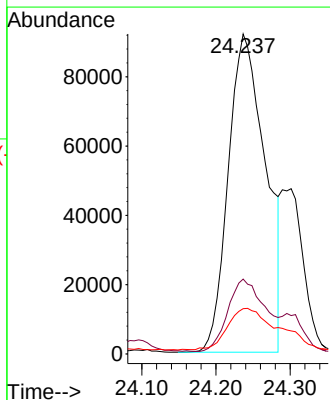
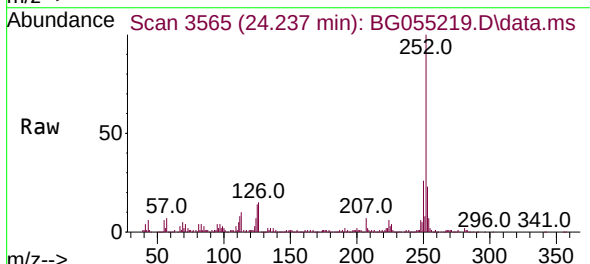
Manual Integrations  
 APPROVED

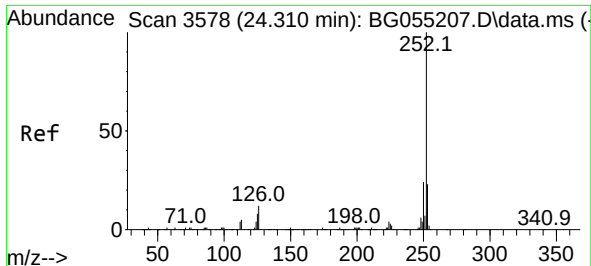
Reviewed By :Christian Giraldo 10/21/2022  
 Supervised By :Jagrut Upadhyay 10/21/2022



#88  
 Benzo(b)fluoranthene  
 Concen: 21.685 ng  
 RT: 24.237 min Scan# 3565  
 Delta R.T. -0.003 min  
 Lab File: BG055219.D  
 Acq: 20 Oct 2022 12:56

Tgt Ion:252 Resp: 320469  
 Ion Ratio Lower Upper  
 252 100  
 253 23.4 17.8 26.6  
 125 14.1 6.2 9.2#





#89

Benzo(k)fluoranthene

Concen: 6.484 ng m

RT: 24.301 min Scan# 3578

Delta R.T. -0.009 min

Lab File: BG055219.D

Acq: 20 Oct 2022 12:56

Instrument :

BNA\_G

ClientSampleId :

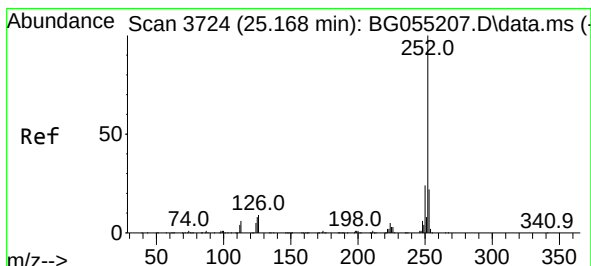
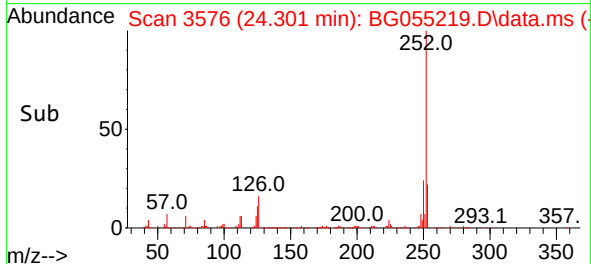
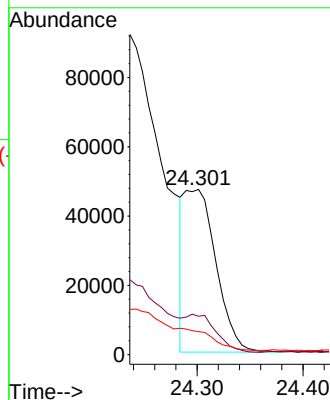
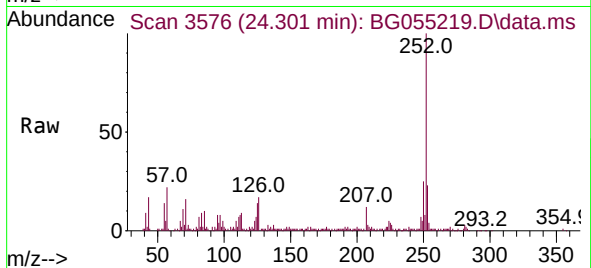
CONCRETE-1

Tgt Ion:252 Resp: 97039  
 Ion Ratio Lower Upper  
 252 100  
 253 23.2 18.0 27.0  
 125 14.0 6.5 9.7

Manual Integrations

APPROVED

Reviewed By :Christian Giraldo 10/21/2022  
 Supervised By :Jagrut Upadhyay 10/21/2022



#90

Benzo(a)pyrene

Concen: 19.557 ng

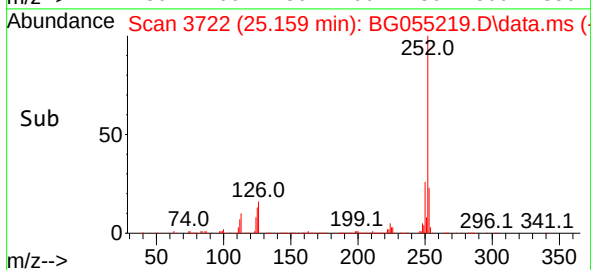
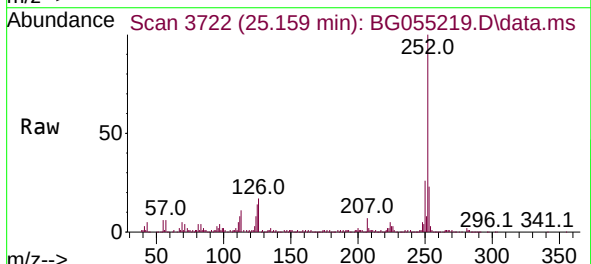
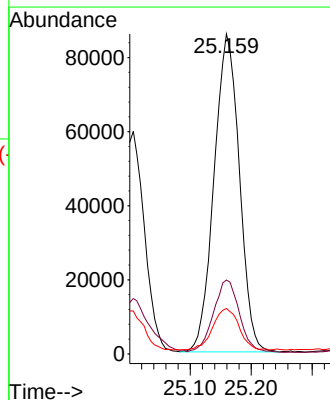
RT: 25.159 min Scan# 3722

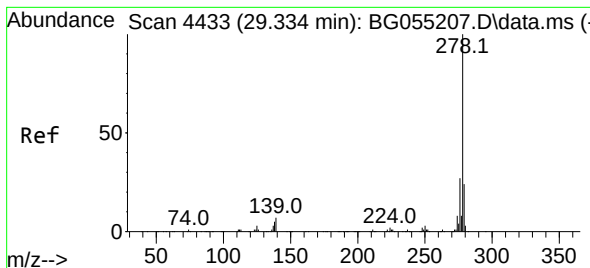
Delta R.T. -0.009 min

Lab File: BG055219.D

Acq: 20 Oct 2022 12:56

Tgt Ion:252 Resp: 248072  
 Ion Ratio Lower Upper  
 252 100  
 253 23.1 17.4 26.2  
 125 14.2 6.2 9.2





#91

Dibenzo(a,h)anthracene

Concen: 3.107 ng

RT: 29.301 min Scan# 4433

Delta R.T. -0.032 min

Lab File: BG055219.D

Acq: 20 Oct 2022 12:56

Instrument :

BNA\_G

ClientSampleId :

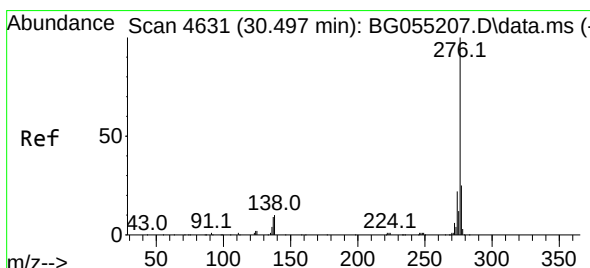
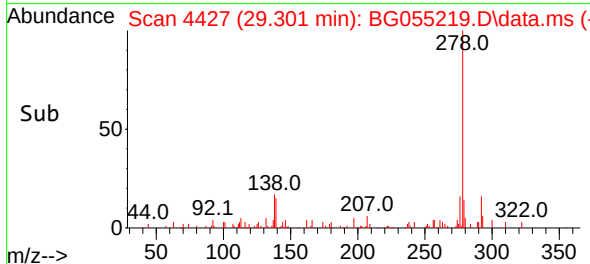
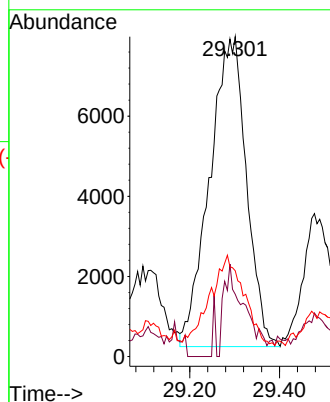
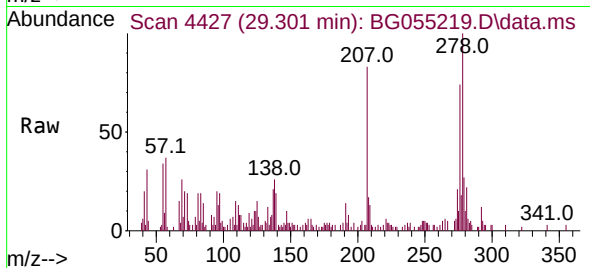
CONCRETE-1

Tgt Ion:278 Resp: 44062  
 Ion Ratio Lower Upper  
 278 100  
 139 19.5 5.6 8.4#  
 279 26.8 19.5 29.3

Manual Integrations

APPROVED

Reviewed By :Christian Giraldo 10/21/2022  
 Supervised By :Jagrut Upadhyay 10/21/2022



#92

Benzo(g,h,i)perylene

Concen: 11.256 ng

RT: 30.471 min Scan# 4626

Delta R.T. -0.027 min

Lab File: BG055219.D

Acq: 20 Oct 2022 12:56

Tgt Ion:276 Resp: 154627  
 Ion Ratio Lower Upper  
 276 100  
 277 23.6 19.7 29.5  
 138 24.1 8.0 12.0#

