

Data Path : Z:\svoasrv\HPCHEM1\BNA\_G\Data\BG040423\  
 Data File : BG056980.D  
 Acq On : 5 Apr 2023 1:09  
 Operator : CG/JU  
 Sample : 02170-01 2X  
 Misc :  
 ALS Vial : 15 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 EO-3-033123

Manual Integrations  
 APPROVED

Reviewed By : Christian Giraldo 04/05/2023  
 Supervised By : Jagrut Upadhyay 04/05/2023

Quant Time: Apr 05 04:13:55 2023  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_G\Methods\8270-BG033023.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Mar 31 03:23:11 2023  
 Response via : Initial Calibration

| Compound                    | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|--------|------|----------|--------|-------|----------|
| -----                       |        |      |          |        |       |          |
| Internal Standards          |        |      |          |        |       |          |
| 1) 1,4-Dichlorobenzene-d4   | 8.414  | 152  | 22158    | 20.000 | ng    | 0.00     |
| 21) Naphthalene-d8          | 11.258 | 136  | 88873    | 20.000 | ng    | # 0.00   |
| 39) Acenaphthene-d10        | 15.029 | 164  | 62358    | 20.000 | ng    | 0.00     |
| 64) Phenanthrene-d10        | 17.766 | 188  | 125467   | 20.000 | ng    | 0.00     |
| 76) Chrysene-d12            | 22.090 | 240  | 105012   | 20.000 | ng    | # 0.00   |
| 86) Perylene-d12            | 25.644 | 264  | 108647   | 20.000 | ng    | 0.00     |
|                             |        |      |          |        |       |          |
| System Monitoring Compounds |        |      |          |        |       |          |
| 5) 2-Fluorophenol           | 5.924  | 112  | 42060    | 30.379 | ng    | 0.00     |
| 7) Phenol-d6                | 7.545  | 99   | 64157    | 30.984 | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 9.589  | 82   | 42677    | 19.649 | ng    | 0.00     |
| 42) 2,4,6-Tribromophenol    | 16.509 | 330  | 27562    | 27.667 | ng    | 0.00     |
| 45) 2-Fluorobiphenyl        | 13.654 | 172  | 100732   | 21.905 | ng    | 0.00     |
| 79) Terphenyl-d14           | 20.334 | 244  | 136015   | 21.917 | ng    | 0.00     |
|                             |        |      |          |        |       |          |
| Target Compounds            |        |      |          |        |       | Qvalue   |
| 49) Acenaphthylene          | 14.759 | 152  | 15053    | 2.714  | ng    | # 93     |
| 71) Phenanthrene            | 17.808 | 178  | 31242    | 4.884  | ng    | 99       |
| 75) Fluoranthene            | 19.799 | 202  | 166358   | 20.515 | ng    | 97       |
| 78) Pyrene                  | 20.157 | 202  | 175597   | 24.176 | ng    | 98       |
| 81) Benzo(a)anthracene      | 22.066 | 228  | 152294   | 20.957 | ng    | 99       |
| 83) Chrysene                | 22.143 | 228  | 150689m  | 22.147 | ng    |          |
| 87) Indeno(1,2,3-cd)pyrene  | 29.744 | 276  | 95316    | 11.871 | ng    | # 58     |
| 88) Benzo(b)fluoranthene    | 24.510 | 252  | 262262   | 38.602 | ng    | 100      |
| 89) Benzo(k)fluoranthene    | 24.575 | 252  | 88309m   | 13.020 | ng    |          |
| 90) Benzo(a)pyrene          | 25.480 | 252  | 183383   | 27.468 | ng    | 99       |
| 91) Dibenzo(a,h)anthracene  | 29.791 | 278  | 23456    | 3.554  | ng    | # 94     |
| 92) Benzo(g,h,i)perylene    | 31.025 | 276  | 88784m   | 13.738 | ng    |          |
| -----                       |        |      |          |        |       |          |

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

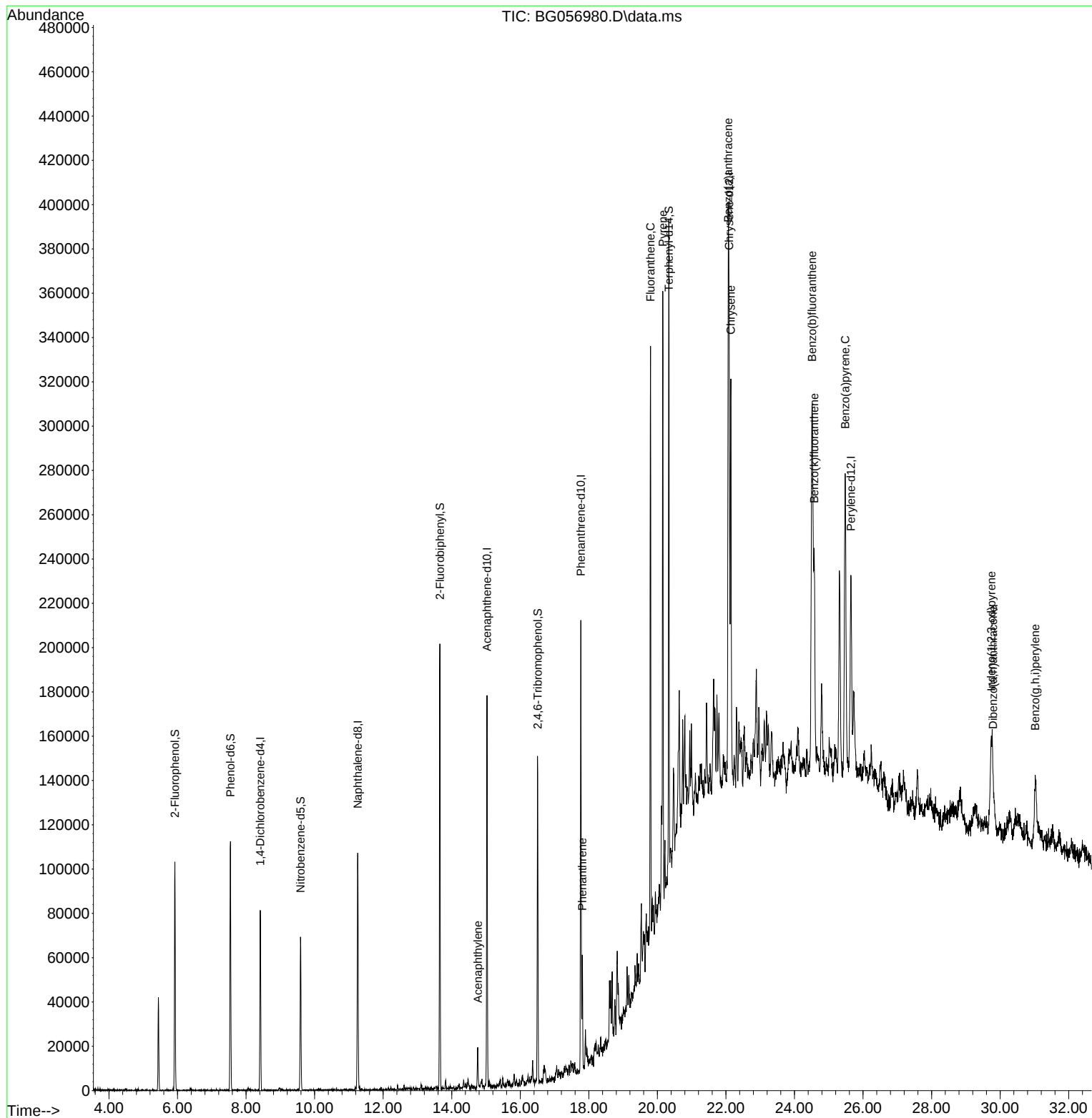
Data Path : Z:\svoasrv\HPCHEM1\BNA\_G\Data\BG040423\  
Data File : BG056980.D  
Acq On : 5 Apr 2023 1:09  
Operator : CG/JU  
Sample : 02170-01 2X  
Misc :  
ALS Vial : 15 Sample Multiplier: 1

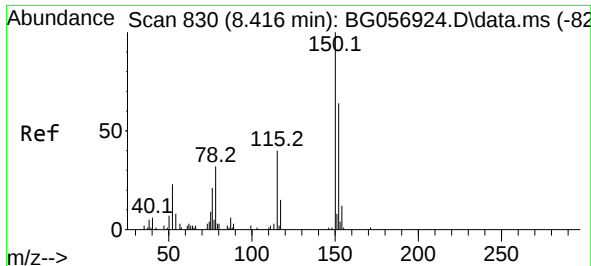
Instrument :  
BNA\_G  
ClientSampleId :  
EO-3-033123

Quant Time: Apr 05 04:13:55 2023  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_G\Methods\8270-BG033023.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Mar 31 03:23:11 2023  
Response via : Initial Calibration

Manual Integrations  
APPROVED

Reviewed By :Christian Giraldo 04/05/2023  
Supervised By :Jagrut Upadhyay 04/05/2023





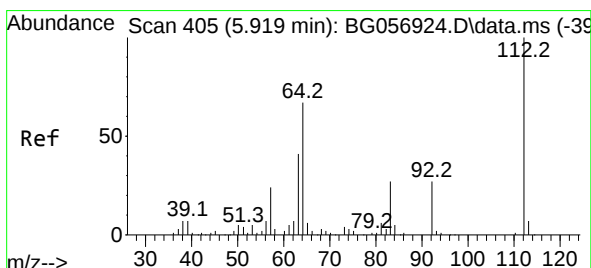
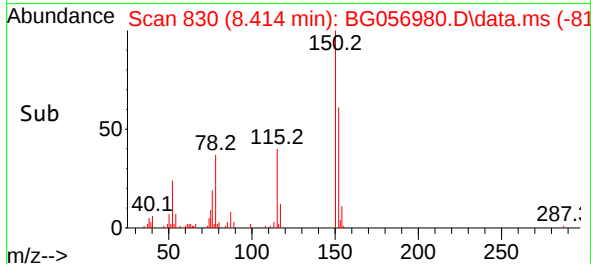
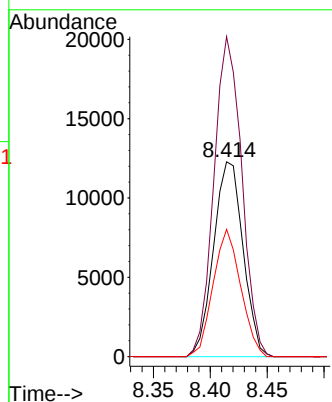
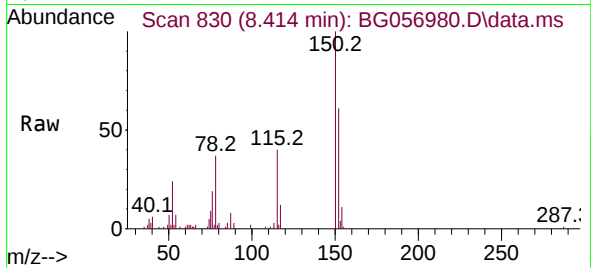
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1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 8.414 min Scan# 830  
Delta R.T. -0.002 min  
Lab File: BG056980.D  
Acq: 5 Apr 2023 1:09

Instrument :  
BNA\_G  
ClientSampleId :  
EO-3-033123

Tgt Ion:152 Resp: 22158  
Ion Ratio Lower Upper  
152 100  
150 164.3 124.1 186.1  
115 65.4 49.1 73.7

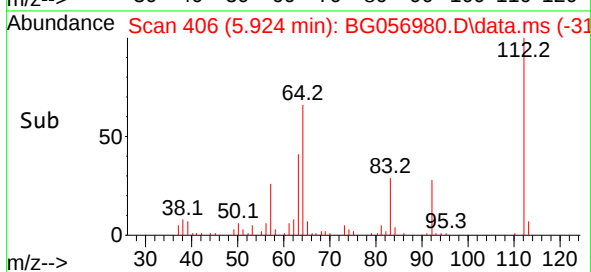
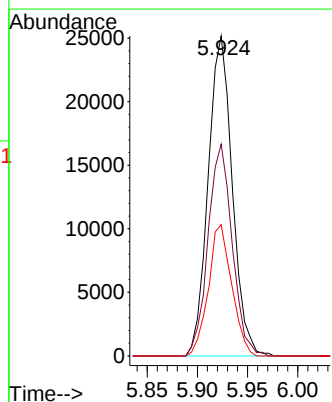
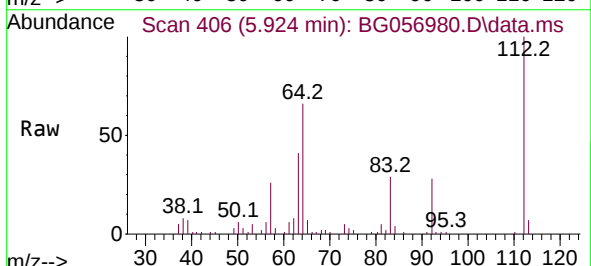
Manual Integrations  
APPROVED

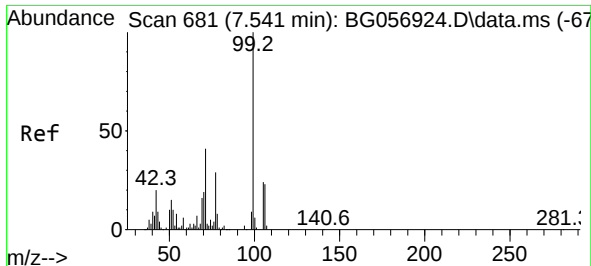
Reviewed By :Christian Giraldo 04/05/2023  
Supervised By :Jagrut Upadhyay 04/05/2023



#5  
2-Fluorophenol  
Concen: 30.379 ng  
RT: 5.924 min Scan# 406  
Delta R.T. 0.004 min  
Lab File: BG056980.D  
Acq: 5 Apr 2023 1:09

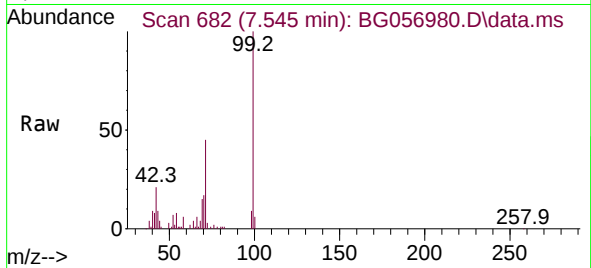
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Ion Ratio Lower Upper  
112 100  
64 66.2 53.2 79.8  
63 41.0 32.6 48.8





#7  
Phenol-d6  
Concen: 30.984 ng  
RT: 7.545 min Scan# 681  
Delta R.T. 0.004 min  
Lab File: BG056980.D  
Acq: 5 Apr 2023 1:09

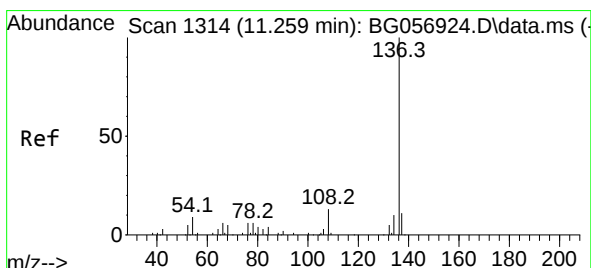
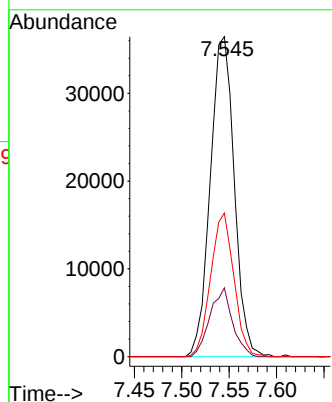
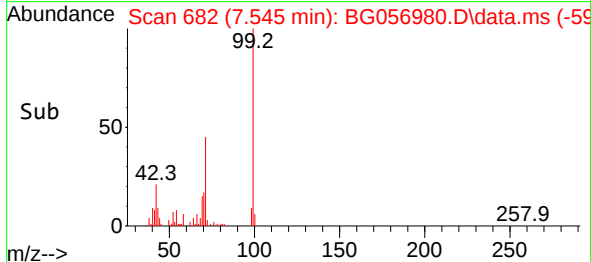
Instrument :  
BNA\_G  
ClientSampleId :  
EO-3-033123



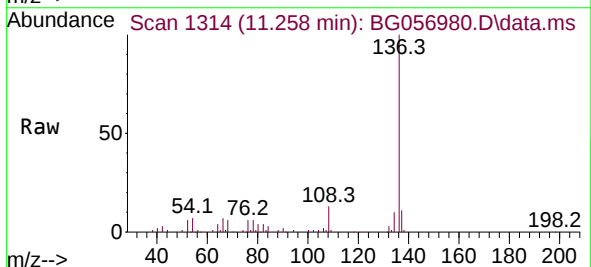
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Ion Ratio Lower Upper  
99 100  
42 21.5 15.7 23.5  
71 44.9 32.5 48.7

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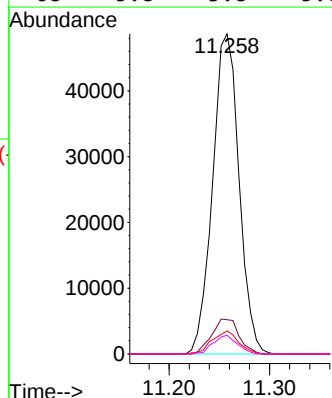
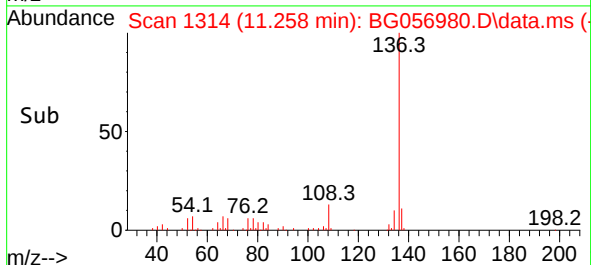
Reviewed By :Christian Giraldo 04/05/2023  
Supervised By :Jagrut Upadhyay 04/05/2023



#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 11.258 min Scan# 1314  
Delta R.T. -0.002 min  
Lab File: BG056980.D  
Acq: 5 Apr 2023 1:09



Tgt Ion:136 Resp: 88873  
Ion Ratio Lower Upper  
136 100  
137 10.7 8.6 13.0  
54 7.2 6.9 10.3  
68 5.8 3.8 5.6#





#23  
Nitrobenzene-d5  
Concen: 19.649 ng  
RT: 9.589 min Scan# 1031  
Delta R.T. -0.007 min  
Lab File: BG056980.D  
Acq: 5 Apr 2023 1:09

Instrument :

BNA\_G

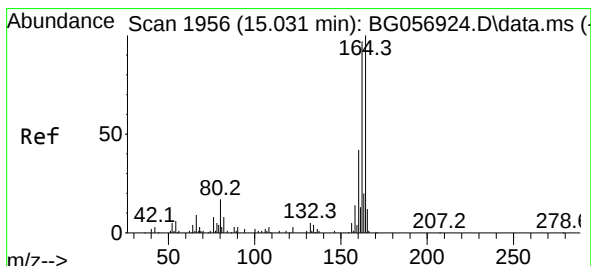
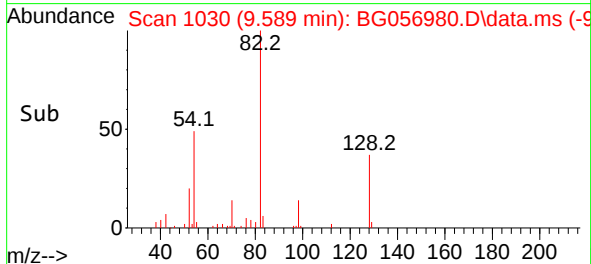
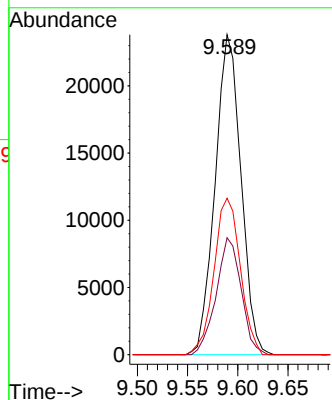
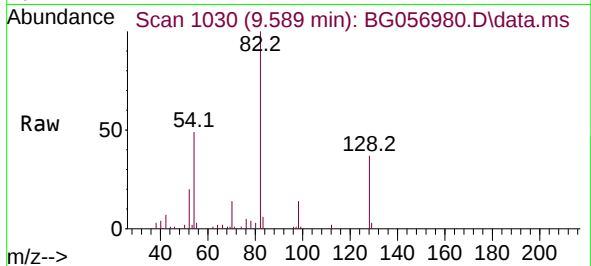
ClientSampleId :

EO-3-033123

Tgt Ion: 82 Resp: 4267  
Ion Ratio Lower Upper  
82 100  
128 36.6 27.9 41.9  
54 48.9 39.4 59.2

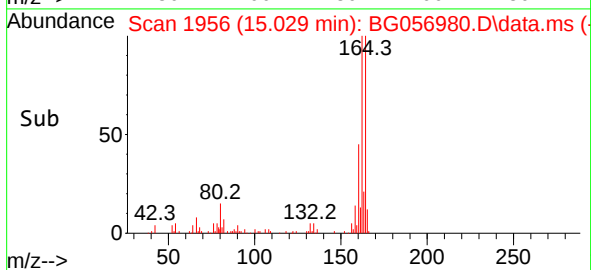
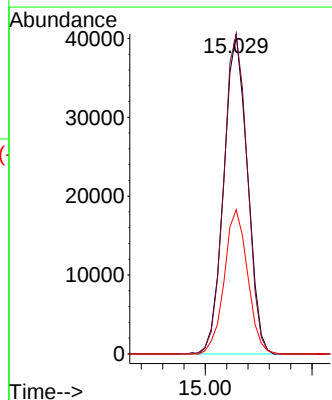
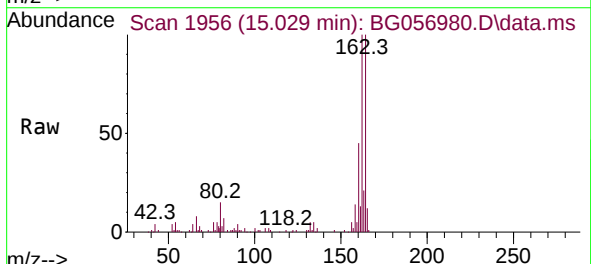
Manual Integrations  
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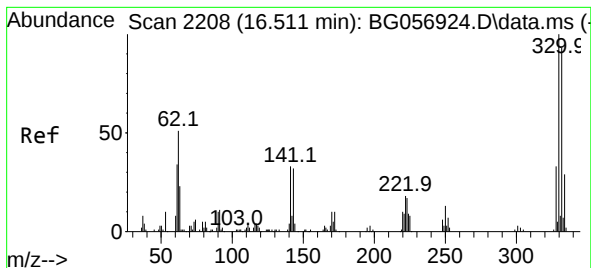
Reviewed By :Christian Giraldo 04/05/2023  
Supervised By :Jagrut Upadhyay 04/05/2023



#39  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 15.029 min Scan# 1956  
Delta R.T. -0.002 min  
Lab File: BG056980.D  
Acq: 5 Apr 2023 1:09

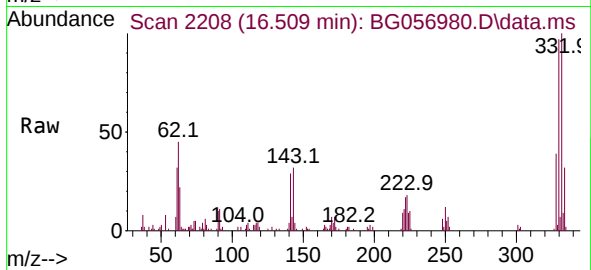
Tgt Ion:164 Resp: 62358  
Ion Ratio Lower Upper  
164 100  
162 99.7 77.8 116.8  
160 45.1 33.5 50.3





#42  
2,4,6-Tribromophenol  
Concen: 27.667 ng  
RT: 16.509 min Scan# 21  
Delta R.T. -0.002 min  
Lab File: BG056980.D  
Acq: 5 Apr 2023 1:09

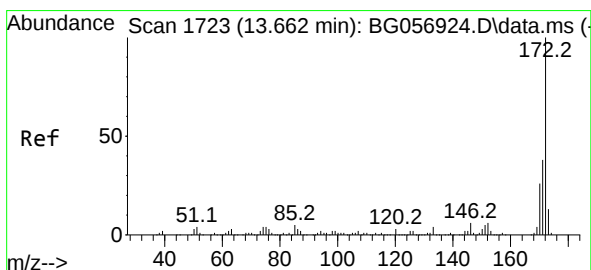
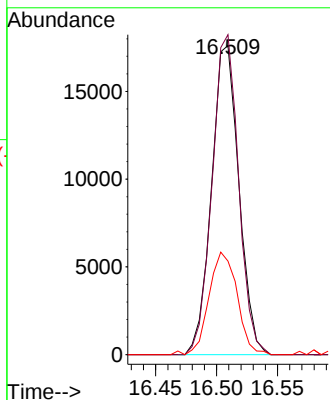
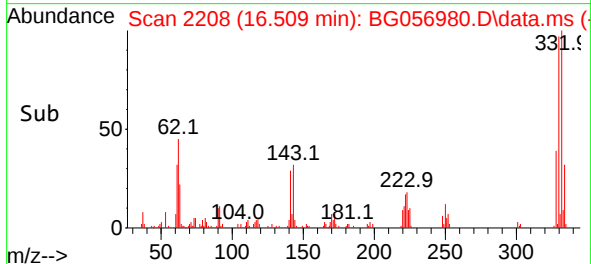
Instrument :  
BNA\_G  
ClientSampleId :  
EO-3-033123



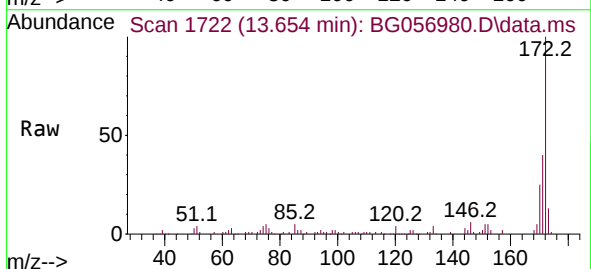
Tgt Ion:330 Resp: 27562  
Ion Ratio Lower Upper  
330 100  
332 99.9 76.1 114.1  
141 34.2 25.8 38.6

Manual Integrations  
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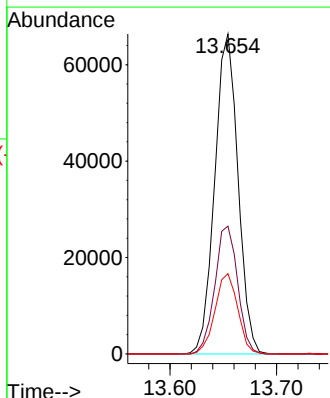
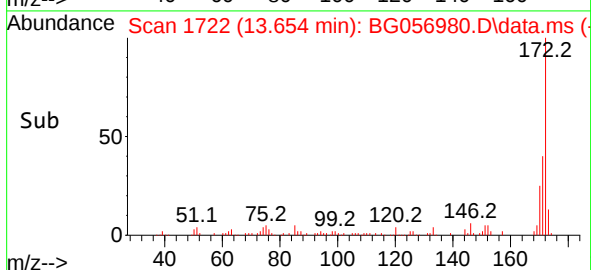
Reviewed By :Christian Giraldo 04/05/2023  
Supervised By :Jagrut Upadhyay 04/05/2023

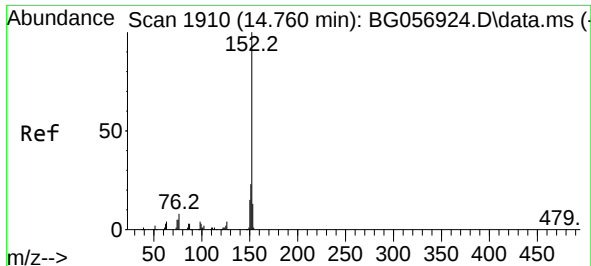


#45  
2-Fluorobiphenyl  
Concen: 21.905 ng  
RT: 13.654 min Scan# 1722  
Delta R.T. -0.007 min  
Lab File: BG056980.D  
Acq: 5 Apr 2023 1:09



Tgt Ion:172 Resp: 100732  
Ion Ratio Lower Upper  
172 100  
171 39.9 30.6 46.0  
170 25.1 20.6 30.8





#49  
Acenaphthylene  
Concen: 2.714 ng  
RT: 14.759 min Scan# 1910  
Delta R.T. -0.002 min  
Lab File: BG056980.D  
Acq: 5 Apr 2023 1:09

Instrument :

BNA\_G

ClientSampleId :

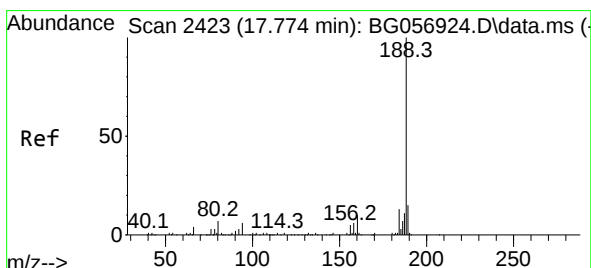
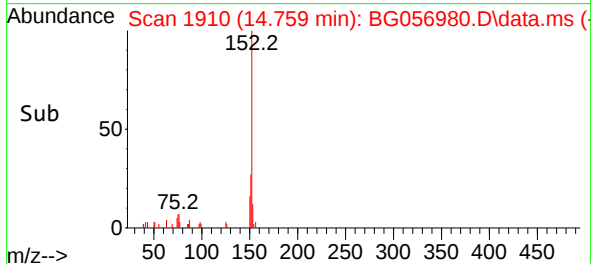
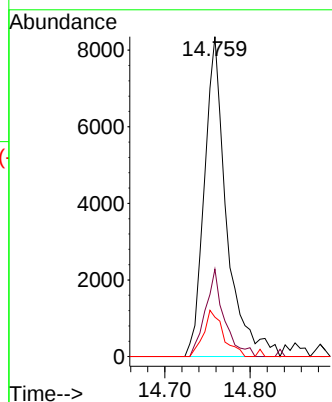
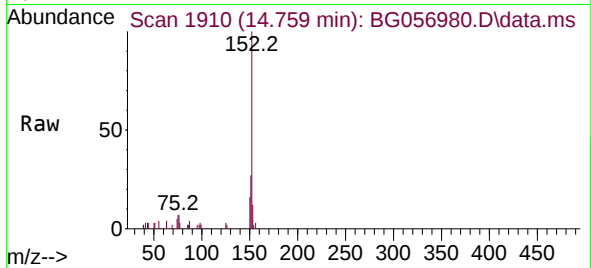
EO-3-033123

Tgt Ion:152 Resp: 15053  
Ion Ratio Lower Upper  
152 100  
151 27.3 18.2 27.2  
153 12.3 10.5 15.7

Manual Integrations

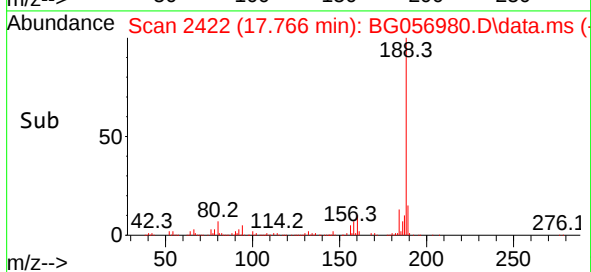
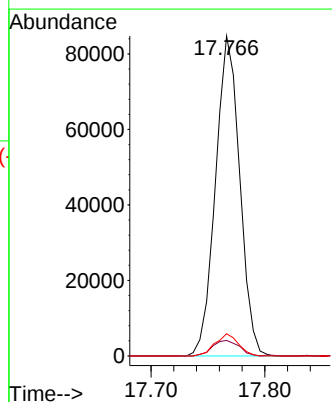
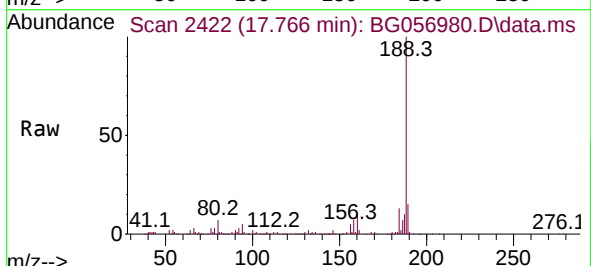
APPROVED

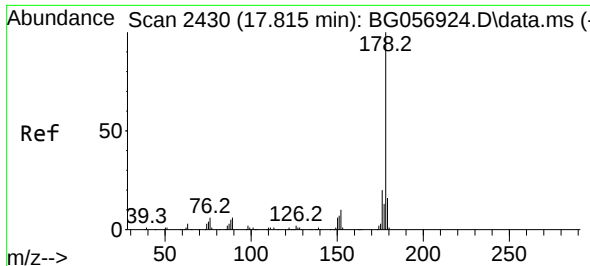
Reviewed By :Christian Giraldo 04/05/2023  
Supervised By :Jagrut Upadhyay 04/05/2023



#64  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 17.766 min Scan# 2422  
Delta R.T. -0.007 min  
Lab File: BG056980.D  
Acq: 5 Apr 2023 1:09

Tgt Ion:188 Resp: 125467  
Ion Ratio Lower Upper  
188 100  
94 4.8 4.6 6.8  
80 6.9 5.5 8.3





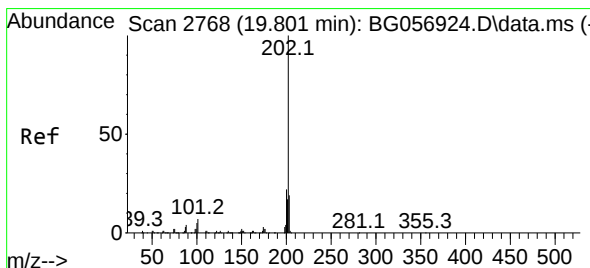
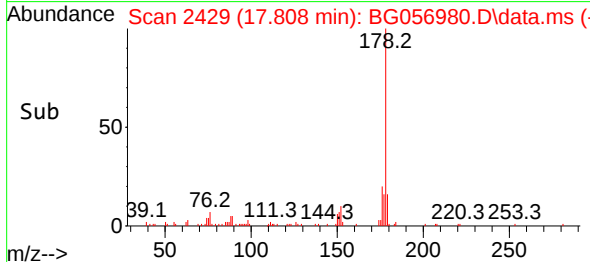
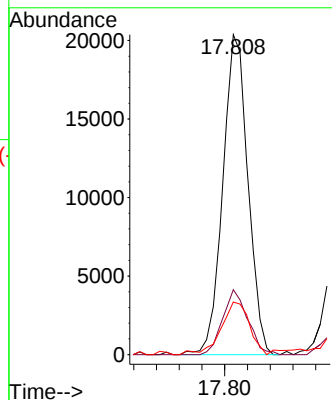
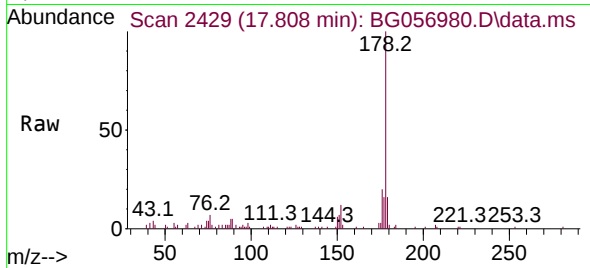
#71  
Phenanthrene  
Concen: 4.884 ng  
RT: 17.808 min Scan# 2430  
Delta R.T. -0.007 min  
Lab File: BG056980.D  
Acq: 5 Apr 2023 1:09

Instrument :  
BNA\_G  
ClientSampleId :  
EO-3-033123

Tgt Ion:178 Resp: 31242  
Ion Ratio Lower Upper  
178 100  
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179 16.4 12.5 18.7

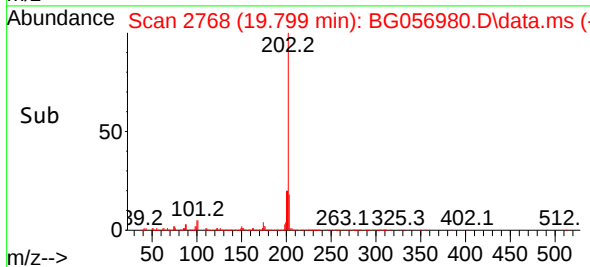
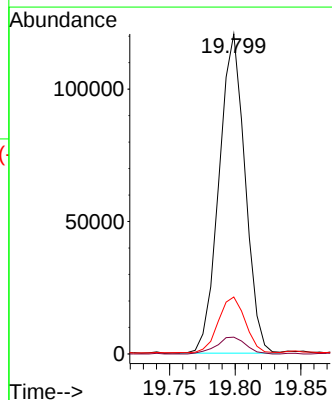
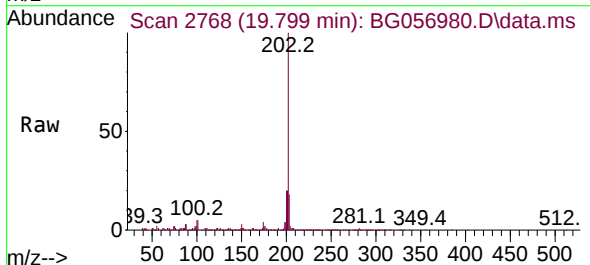
Manual Integrations  
APPROVED

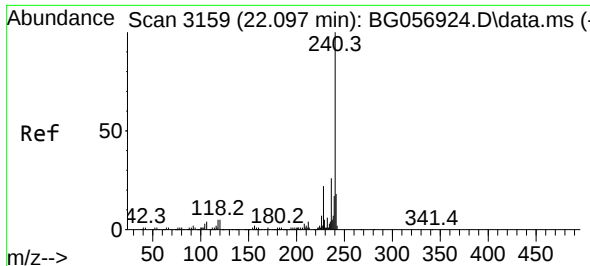
Reviewed By :Christian Giraldo 04/05/2023  
Supervised By :Jagrut Upadhyay 04/05/2023



#75  
Fluoranthene  
Concen: 20.515 ng  
RT: 19.799 min Scan# 2768  
Delta R.T. -0.002 min  
Lab File: BG056980.D  
Acq: 5 Apr 2023 1:09

Tgt Ion:202 Resp: 166358  
Ion Ratio Lower Upper  
202 100  
101 5.2 0.0 26.7  
203 17.8 0.0 39.0





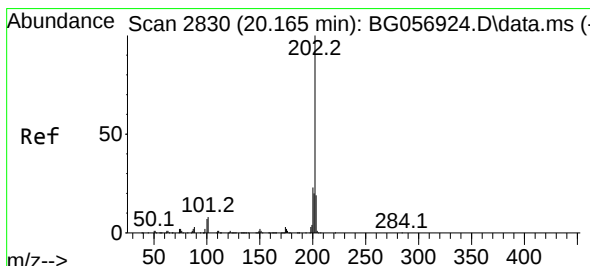
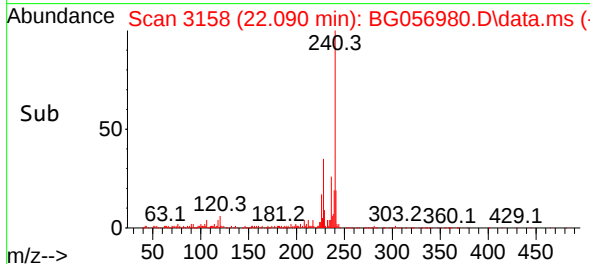
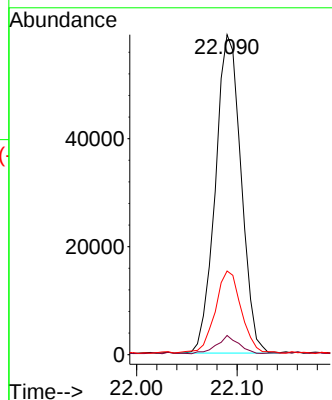
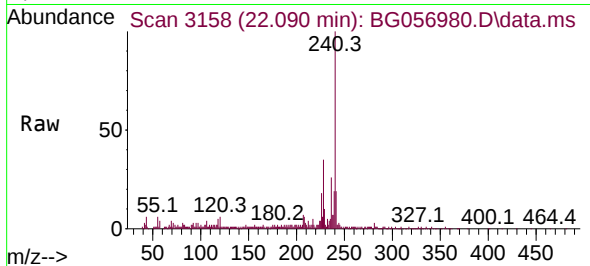
#76  
Chrysene-d12  
Concen: 20.000 ng  
RT: 22.090 min Scan# 3159  
Delta R.T. -0.007 min  
Lab File: BG056980.D  
Acq: 5 Apr 2023 1:09

Instrument :  
BNA\_G  
ClientSampleId :  
EO-3-033123

Tgt Ion:240 Resp: 105012  
Ion Ratio Lower Upper  
240 100  
120 6.0 3.8 5.6  
236 26.1 21.0 31.6

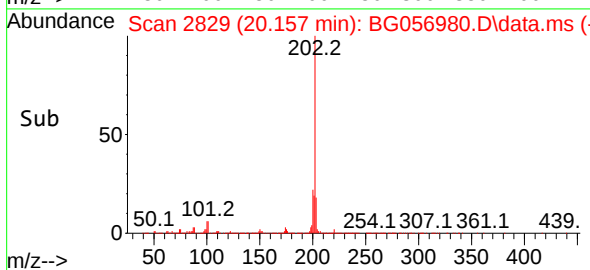
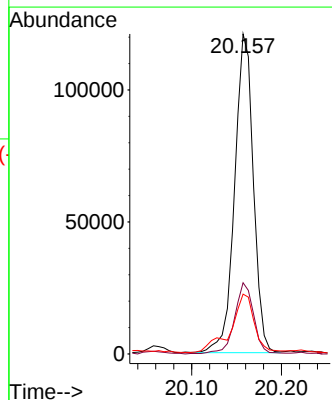
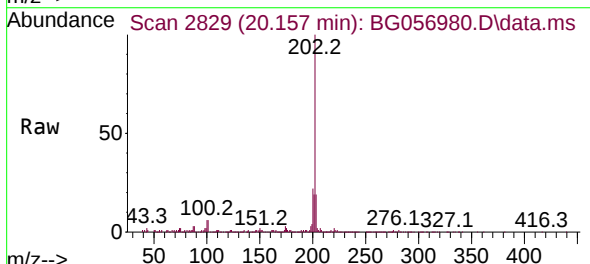
Manual Integrations  
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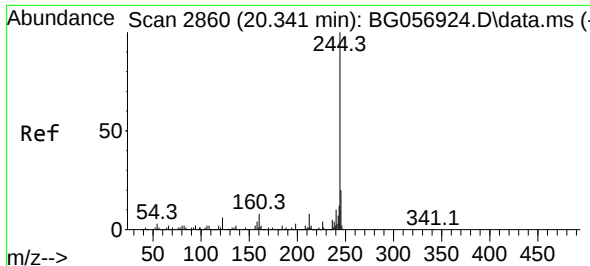
Reviewed By :Christian Giraldo 04/05/2023  
Supervised By :Jagrut Upadhyay 04/05/2023



#78  
Pyrene  
Concen: 24.176 ng  
RT: 20.157 min Scan# 2829  
Delta R.T. -0.007 min  
Lab File: BG056980.D  
Acq: 5 Apr 2023 1:09

Tgt Ion:202 Resp: 175597  
Ion Ratio Lower Upper  
202 100  
200 22.2 18.7 28.1  
203 18.7 15.4 23.2





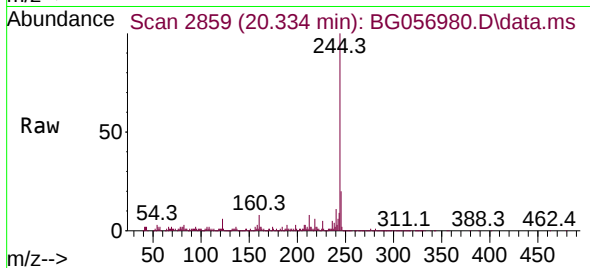
#79  
 Terphenyl-d14  
 Concen: 21.917 ng  
 RT: 20.334 min Scan# 2860  
 Delta R.T. -0.007 min  
 Lab File: BG056980.D  
 Acq: 5 Apr 2023 1:09

Instrument :

BNA\_G

ClientSampleId :

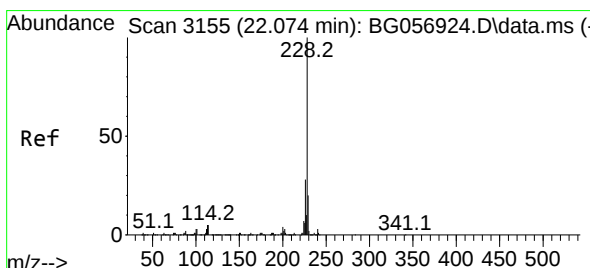
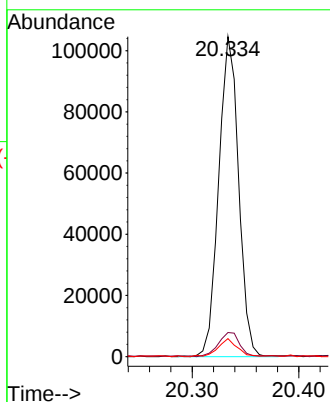
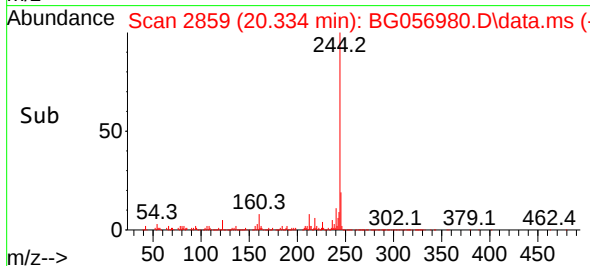
EO-3-033123



Tgt Ion:244 Resp: 136015  
 Ion Ratio Lower Upper  
 244 100  
 212 7.6 6.1 9.1  
 122 5.6 5.0 7.4

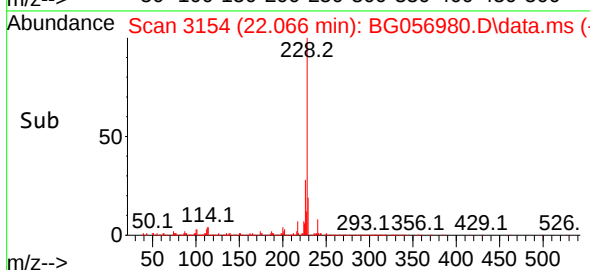
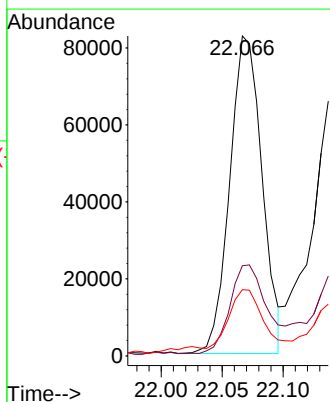
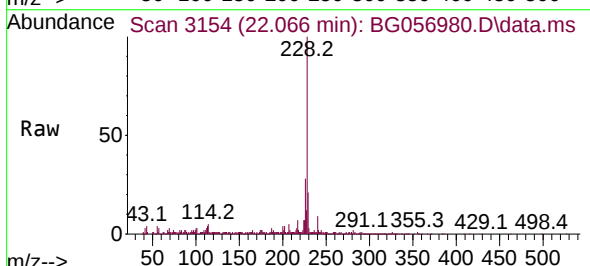
Manual Integrations  
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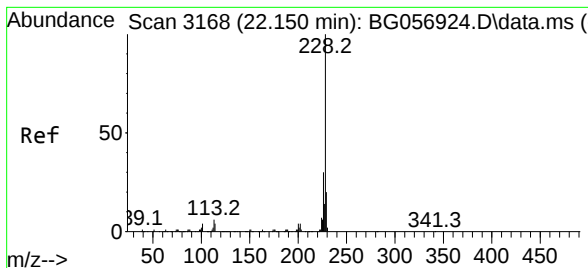
Reviewed By :Christian Giraldo 04/05/2023  
 Supervised By :Jagrut Upadhyay 04/05/2023



#81  
 Benzo(a)anthracene  
 Concen: 20.957 ng  
 RT: 22.066 min Scan# 3154  
 Delta R.T. -0.007 min  
 Lab File: BG056980.D  
 Acq: 5 Apr 2023 1:09

Tgt Ion:228 Resp: 152294  
 Ion Ratio Lower Upper  
 228 100  
 226 28.2 22.1 33.1  
 229 20.7 16.1 24.1





#83

Chrysene

Concen: 22.147 ng m

RT: 22.143 min Scan# 3168

Delta R.T. -0.007 min

Lab File: BG056980.D

Acq: 5 Apr 2023 1:09

Instrument :

BNA\_G

ClientSampleId :

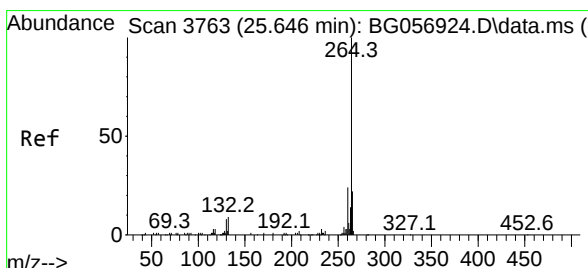
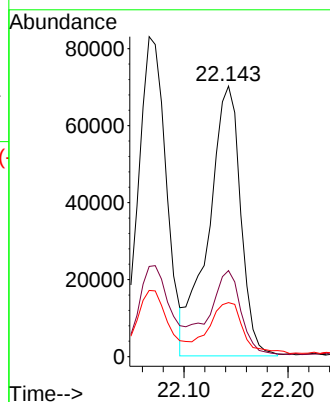
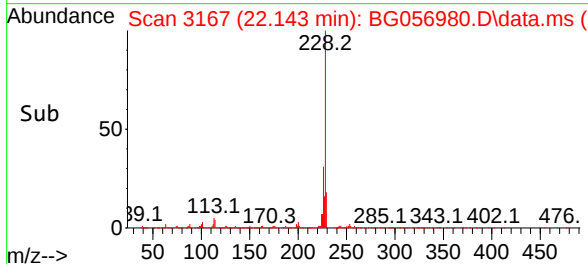
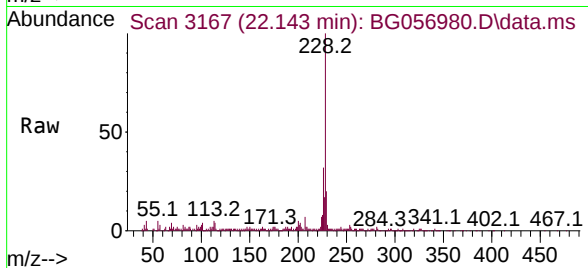
EO-3-033123

|             |              |
|-------------|--------------|
| Tgt Ion:228 | Resp: 150689 |
| Ion Ratio   | Lower Upper  |
| 228 100     |              |
| 226 31.8    | 24.1 36.1    |
| 229 20.0    | 15.6 23.4    |

Manual Integrations

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Reviewed By :Christian Giraldo 04/05/2023  
Supervised By :Jagrut Upadhyay 04/05/2023



#86

Perylene-d12

Concen: 20.000 ng

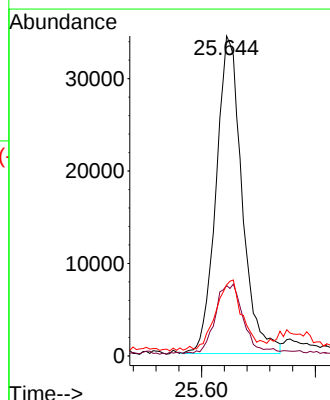
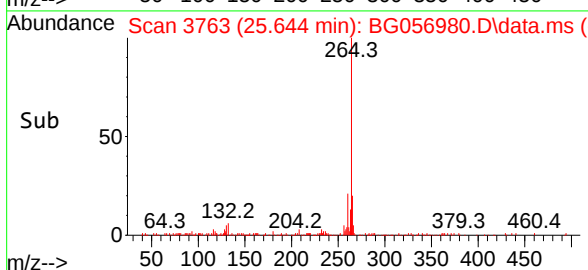
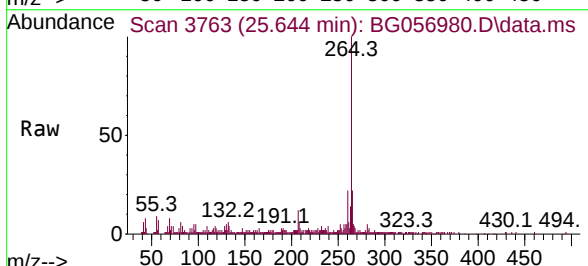
RT: 25.644 min Scan# 3763

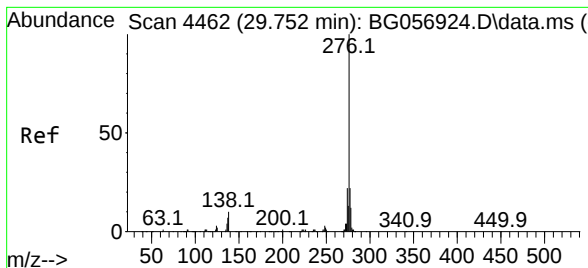
Delta R.T. -0.002 min

Lab File: BG056980.D

Acq: 5 Apr 2023 1:09

|             |              |
|-------------|--------------|
| Tgt Ion:264 | Resp: 108647 |
| Ion Ratio   | Lower Upper  |
| 264 100     |              |
| 260 22.0    | 19.0 28.4    |
| 265 22.2    | 17.8 26.6    |





#87

Indeno(1,2,3-cd)pyrene

Concen: 11.871 ng

RT: 29.744 min Scan# 4462

Delta R.T. -0.007 min

Lab File: BG056980.D

Acq: 5 Apr 2023 1:09

Instrument :

BNA\_G

ClientSampleId :

EO-3-033123

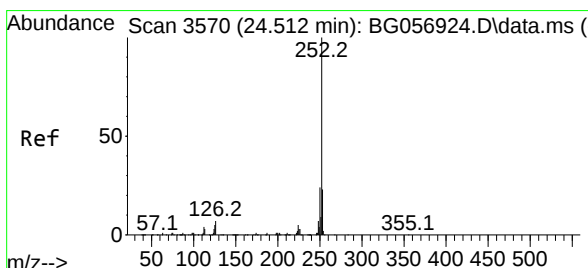
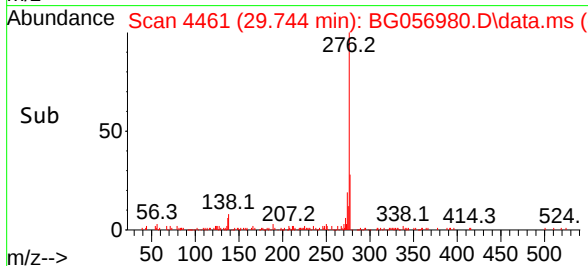
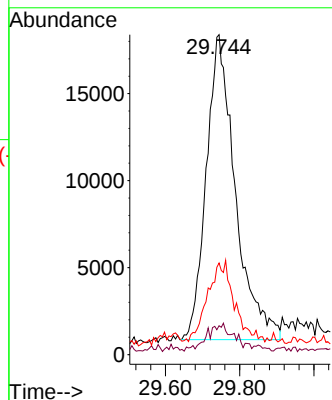
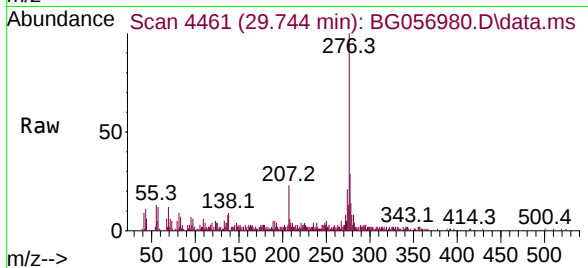
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 276   | Resp: | 95316 |
| Ion Ratio | Lower | Upper |       |
| 276       | 100   |       |       |
| 138       | 3.6   | 7.7   | 11.5  |
| 277       | 0.0   | 21.0  | 31.4  |

Manual Integrations

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Reviewed By :Christian Giraldo 04/05/2023

Supervised By :Jagrut Upadhyay 04/05/2023



#88

Benzo(b)fluoranthene

Concen: 38.602 ng

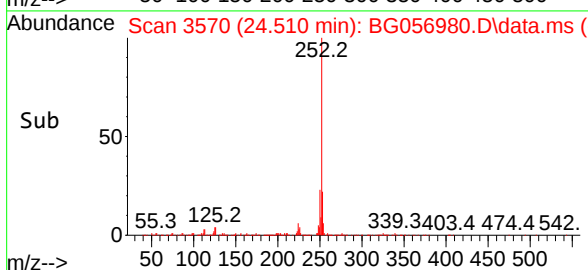
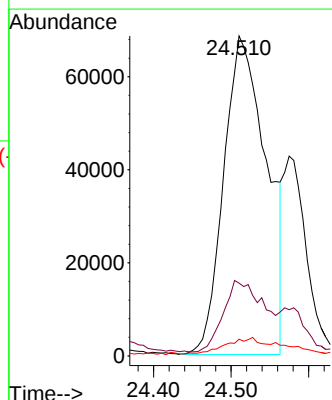
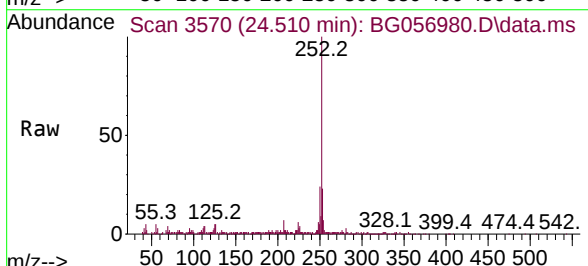
RT: 24.510 min Scan# 3570

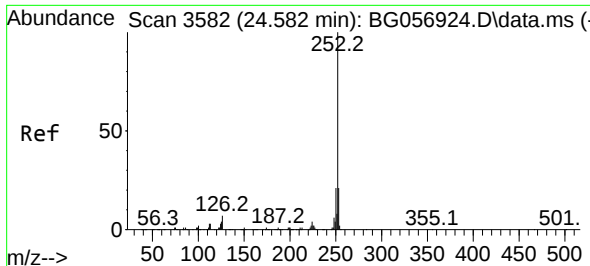
Delta R.T. -0.002 min

Lab File: BG056980.D

Acq: 5 Apr 2023 1:09

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 252   | Resp: | 262262 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 22.7  | 18.1  | 27.1   |
| 125       | 5.2   | 4.2   | 6.4    |





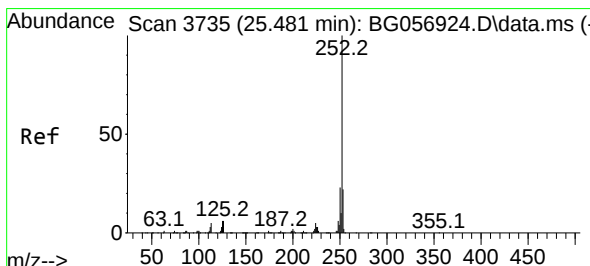
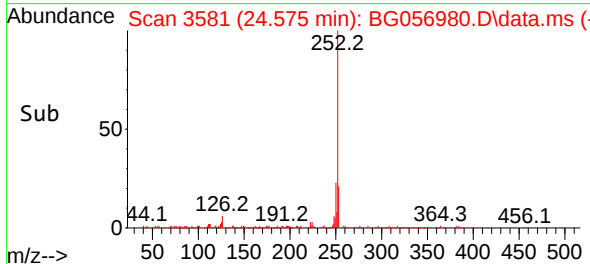
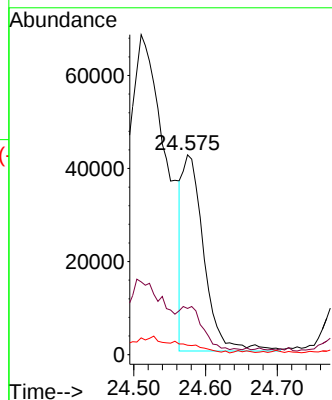
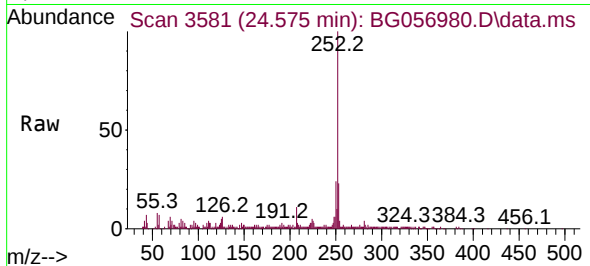
#89  
Benzo(k)fluoranthene  
Concen: 13.020 ng m  
RT: 24.575 min Scan# 3582  
Delta R.T. -0.007 min  
Lab File: BG056980.D  
Acq: 5 Apr 2023 1:09

Instrument :  
BNA\_G  
ClientSampleId :  
EO-3-033123

Tgt Ion:252 Resp: 88309  
Ion Ratio Lower Upper  
252 100  
253 23.1 17.1 25.7  
125 4.7 3.8 5.6

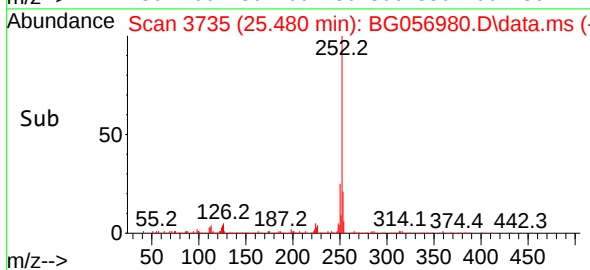
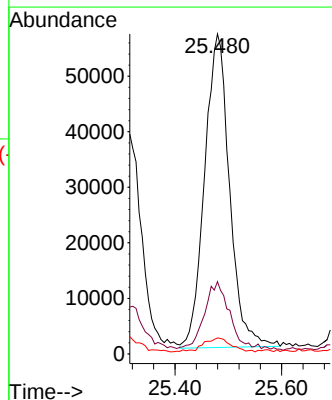
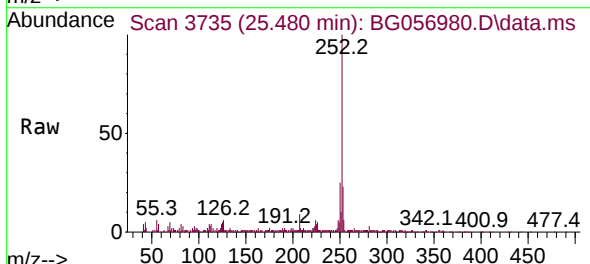
Manual Integrations  
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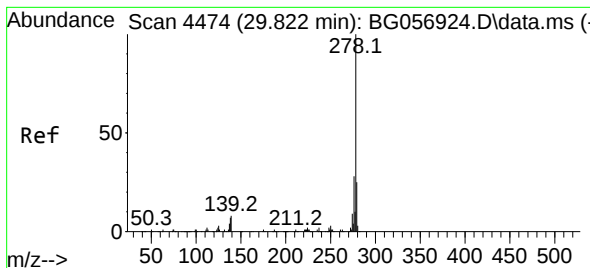
Reviewed By :Christian Giraldo 04/05/2023  
Supervised By :Jagrut Upadhyay 04/05/2023



#90  
Benzo(a)pyrene  
Concen: 27.468 ng  
RT: 25.480 min Scan# 3735  
Delta R.T. -0.002 min  
Lab File: BG056980.D  
Acq: 5 Apr 2023 1:09

Tgt Ion:252 Resp: 183383  
Ion Ratio Lower Upper  
252 100  
253 22.6 17.6 26.4  
125 5.0 4.5 6.7





#91

Dibenzo(a,h)anthracene

Concen: 3.554 ng

RT: 29.791 min Scan# 4474

Delta R.T. -0.031 min

Lab File: BG056980.D

Acq: 5 Apr 2023 1:09

Instrument :

BNA\_G

ClientSampleId :

EO-3-033123

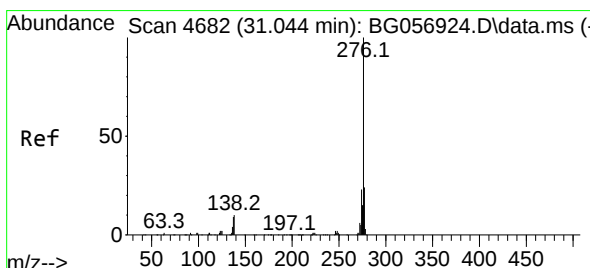
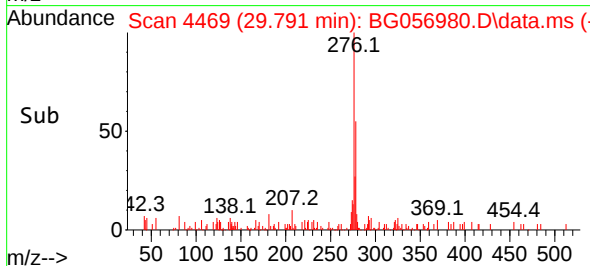
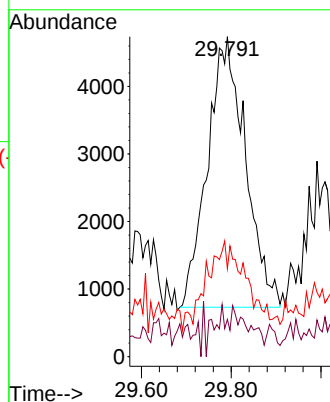
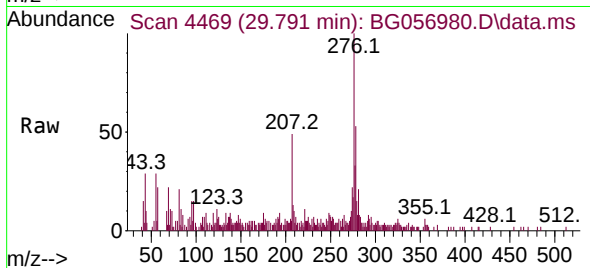
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 278   | Resp: | 23456 |
| Ion Ratio | Lower | Upper |       |
| 278       | 100   |       |       |
| 139       | 11.6  | 6.4   | 9.6   |
| 279       | 27.5  | 20.2  | 30.2  |

Manual Integrations

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Reviewed By :Christian Giraldo 04/05/2023

Supervised By :Jagrut Upadhyay 04/05/2023



#92

Benzo(g,h,i)perylene

Concen: 13.738 ng m

RT: 31.025 min Scan# 4679

Delta R.T. -0.019 min

Lab File: BG056980.D

Acq: 5 Apr 2023 1:09

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 276   | Resp: | 88784 |
| Ion Ratio | Lower | Upper |       |
| 276       | 100   |       |       |
| 277       | 23.9  | 19.1  | 28.7  |
| 138       | 9.4   | 8.2   | 12.2  |

