

Data Path : Z:\svoasrv\HPCHEM1\BNA\_G\Data\BG020323\  
 Data File : BG056540.D  
 Acq On : 3 Feb 2023 15:50  
 Operator : CG/JU  
 Sample : 01404-01  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 NPHACK-SOIL-0201

Manual Integrations  
 APPROVED

Reviewed By : Christian Giraldo 02/06/2023  
 Supervised By : Jagrut Upadhyay 02/06/2023

Quant Time: Feb 04 05:12:23 2023  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_G\Methods\8270-BG012723.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Feb 01 01:15:52 2023  
 Response via : Initial Calibration

| Compound                    | R.T.   | QIon | Response | Conc    | Units | Dev(Min) |
|-----------------------------|--------|------|----------|---------|-------|----------|
| -----                       |        |      |          |         |       |          |
| Internal Standards          |        |      |          |         |       |          |
| 1) 1,4-Dichlorobenzene-d4   | 8.272  | 152  | 41944    | 20.000  | ng    | 0.00     |
| 21) Naphthalene-d8          | 11.104 | 136  | 154949   | 20.000  | ng    | 0.00     |
| 39) Acenaphthene-d10        | 14.894 | 164  | 110984   | 20.000  | ng    | 0.00     |
| 64) Phenanthrene-d10        | 17.632 | 188  | 252104   | 20.000  | ng    | 0.00     |
| 76) Chrysene-d12            | 21.921 | 240  | 235499   | 20.000  | ng    | 0.00     |
| 86) Perylene-d12            | 25.346 | 264  | 260016   | 20.000  | ng    | 0.00     |
|                             |        |      |          |         |       |          |
| System Monitoring Compounds |        |      |          |         |       |          |
| 5) 2-Fluorophenol           | 5.793  | 112  | 277628   | 121.762 | ng    | 0.00     |
| 7) Phenol-d6                | 7.420  | 99   | 379619   | 112.369 | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 9.447  | 82   | 202195   | 74.099  | ng    | 0.00     |
| 42) 2,4,6-Tribromophenol    | 16.375 | 330  | 157205   | 106.546 | ng    | 0.00     |
| 45) 2-Fluorobiphenyl        | 13.519 | 172  | 584062   | 72.962  | ng    | 0.00     |
| 79) Terphenyl-d14           | 20.211 | 244  | 879131   | 65.566  | ng    | 0.00     |
|                             |        |      |          |         |       |          |
| Target Compounds            |        |      |          |         |       | Qvalue   |
| 71) Phenanthrene            | 17.673 | 178  | 136669   | 10.358  | ng    | 97       |
| 72) Anthracene              | 17.761 | 178  | 47721    | 3.523   | ng    | 98       |
| 75) Fluoranthene            | 19.665 | 202  | 296413   | 17.799  | ng    | 99       |
| 78) Pyrene                  | 20.029 | 202  | 271423   | 16.205  | ng    | 99       |
| 81) Benzo(a)anthracene      | 21.903 | 228  | 139566   | 8.477   | ng    | 99       |
| 83) Chrysene                | 21.968 | 228  | 128554m  | 8.311   | ng    |          |
| 87) Indeno(1,2,3-cd)pyrene  | 29.289 | 276  | 85569    | 4.496   | ng    | # 94     |
| 88) Benzo(b)fluoranthene    | 24.254 | 252  | 177059   | 10.971  | ng    | 97       |
| 89) Benzo(k)fluoranthene    | 24.318 | 252  | 57475m   | 3.527   | ng    |          |
| 90) Benzo(a)pyrene          | 25.182 | 252  | 137151   | 8.627   | ng    | 99       |
| 92) Benzo(g,h,i)perylene    | 30.535 | 276  | 80637    | 5.231   | ng    | 96       |
| -----                       |        |      |          |         |       |          |

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

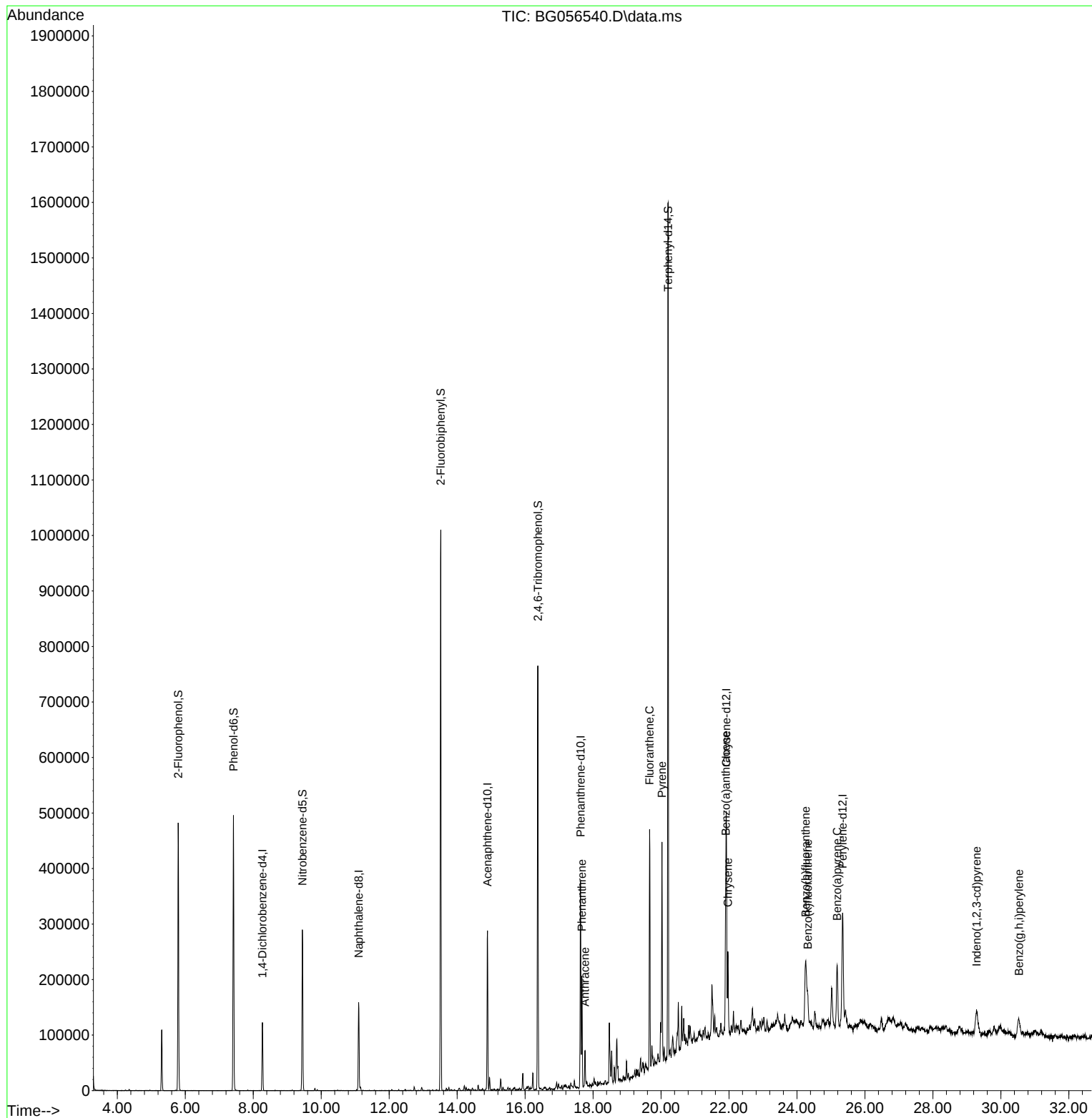
Data Path : Z:\svoasrv\HPCHEM1\BNA\_G\Data\BG020323\  
Data File : BG056540.D  
Acq On : 3 Feb 2023 15:50  
Operator : CG/JU  
Sample : 01404-01  
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ALS Vial : 8 Sample Multiplier: 1

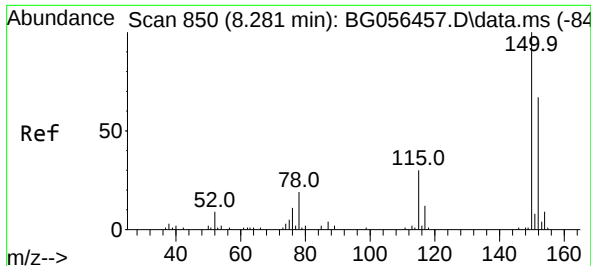
Instrument :  
BNA\_G  
ClientSampleId :  
NPHACK-SOIL-0201

Quant Time: Feb 04 05:12:23 2023  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_G\Methods\8270-BG012723.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Wed Feb 01 01:15:52 2023  
Response via : Initial Calibration

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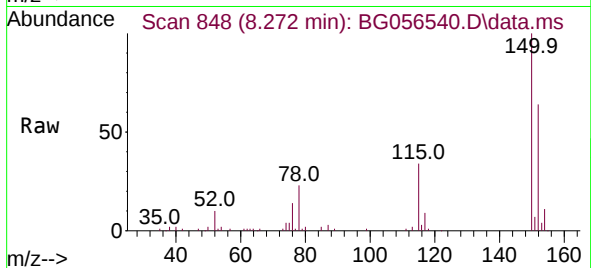
Reviewed By : Christian Giraldo 02/06/2023  
Supervised By : Jagrut Upadhyay 02/06/2023





#1  
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 8.272 min Scan# 84  
Delta R.T. -0.003 min  
Lab File: BG056540.D  
Acq: 3 Feb 2023 15:50

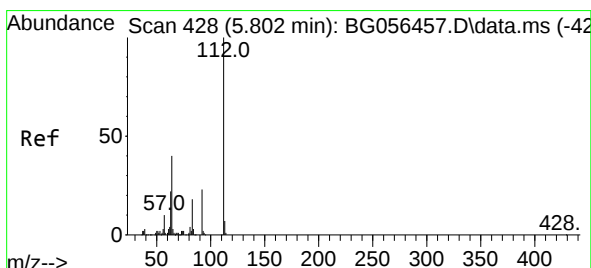
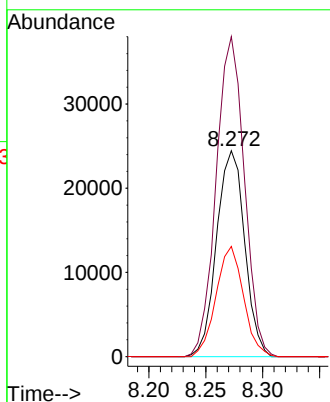
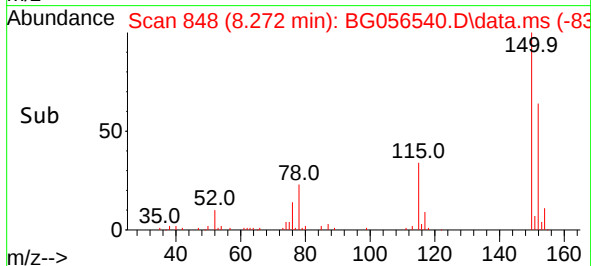
Instrument :  
BNA\_G  
ClientSampleId :  
NPHACK-SOIL-0201



Tgt Ion:152 Resp: 41944  
Ion Ratio Lower Upper  
152 100  
150 155.4 120.2 180.4  
115 53.5 36.3 54.5

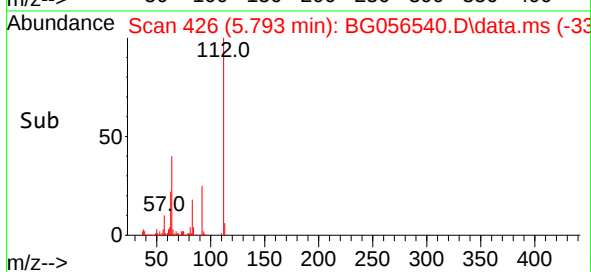
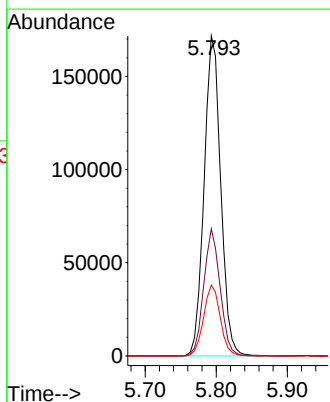
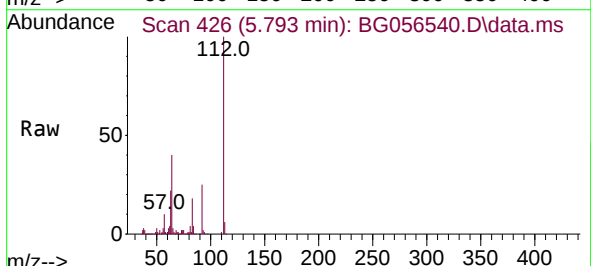
Manual Integrations  
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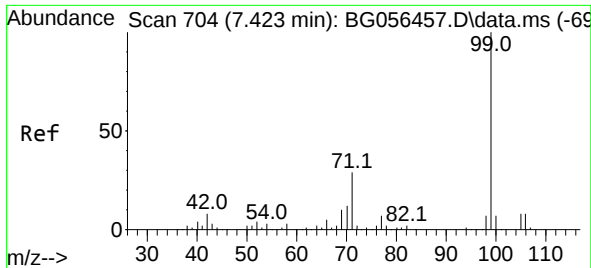
Reviewed By :Christian Giraldo 02/06/2023  
Supervised By :Jagrut Upadhyay 02/06/2023



#5  
2-Fluorophenol  
Concen: 121.762 ng  
RT: 5.793 min Scan# 426  
Delta R.T. -0.003 min  
Lab File: BG056540.D  
Acq: 3 Feb 2023 15:50

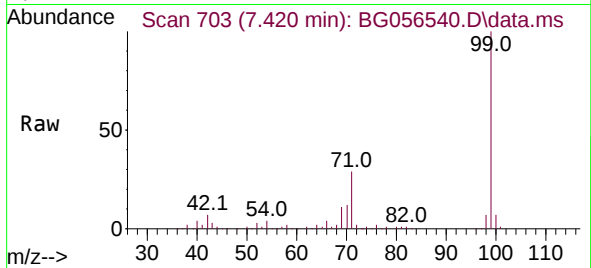
Tgt Ion:112 Resp: 277628  
Ion Ratio Lower Upper  
112 100  
64 39.7 31.9 47.9  
63 22.1 17.4 26.0





#7  
Phenol-d6  
Concen: 112.369 ng  
RT: 7.420 min Scan# 704  
Delta R.T. 0.003 min  
Lab File: BG056540.D  
Acq: 3 Feb 2023 15:50

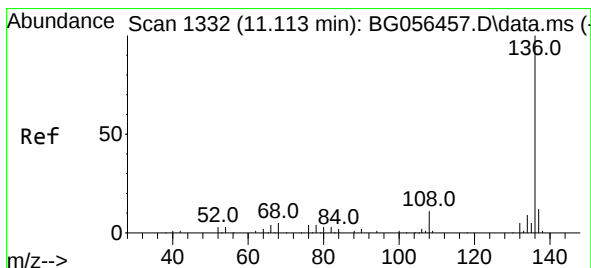
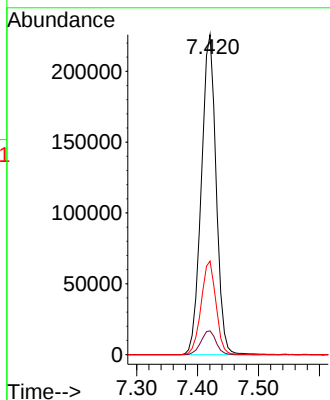
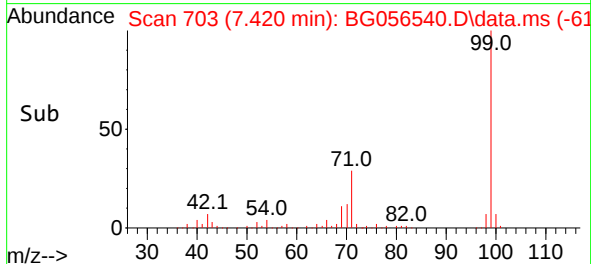
Instrument :  
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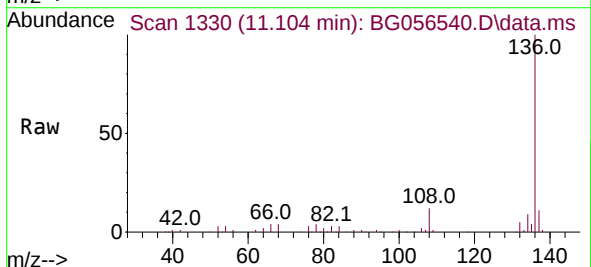
Tgt Ion: 99 Resp: 379619  
Ion Ratio Lower Upper  
99 100  
42 7.4 6.6 10.0  
71 29.2 23.4 35.0

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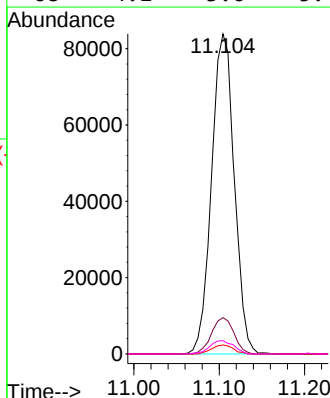
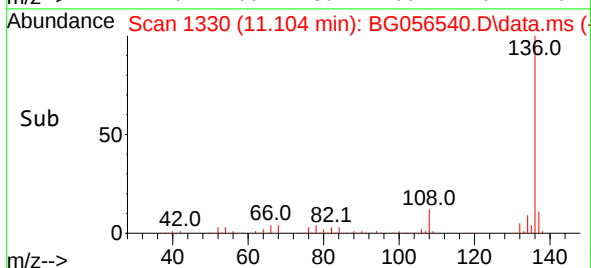
Reviewed By :Christian Giraldo 02/06/2023  
Supervised By :Jagrut Upadhyay 02/06/2023

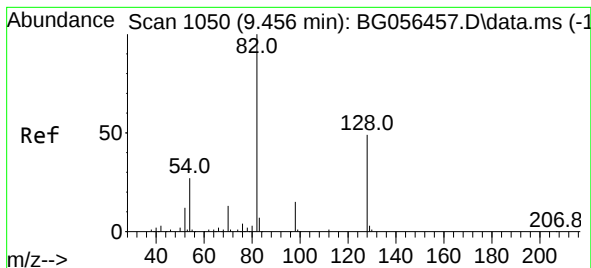


#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 11.104 min Scan# 1330  
Delta R.T. -0.003 min  
Lab File: BG056540.D  
Acq: 3 Feb 2023 15:50



Tgt Ion:136 Resp: 154949  
Ion Ratio Lower Upper  
136 100  
137 11.3 9.4 14.0  
54 2.8 2.2 3.4  
68 4.1 3.6 5.4





#23

Nitrobenzene-d5

Concen: 74.099 ng

RT: 9.447 min Scan# 1048

Delta R.T. -0.009 min

Lab File: BG056540.D

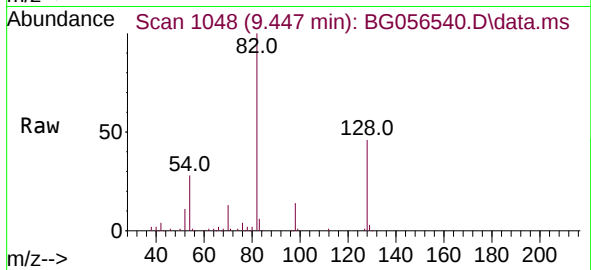
Acq: 3 Feb 2023 15:50

Instrument :

BNA\_G

ClientSampleId :

NPHACK-SOIL-0201



Tgt Ion: 82 Resp: 202195

Ion Ratio Lower Upper

82 100

128 46.1 39.4 59.2

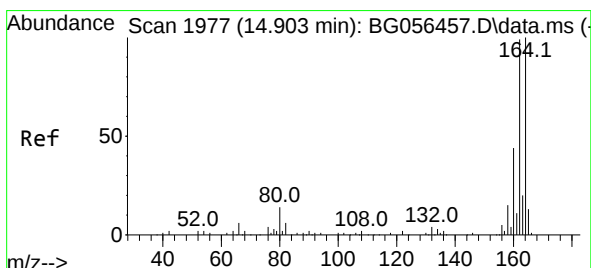
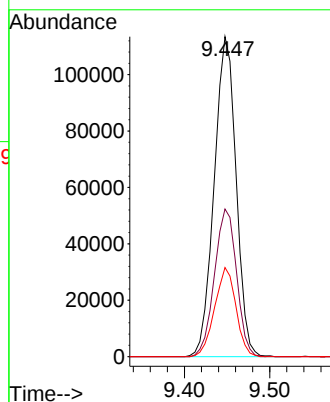
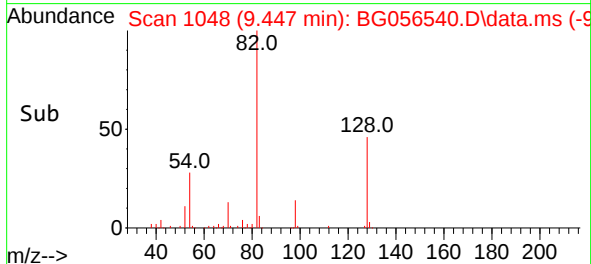
54 27.8 21.4 32.2

Manual Integrations

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#39

Acenaphthene-d10

Concen: 20.000 ng

RT: 14.894 min Scan# 1975

Delta R.T. -0.003 min

Lab File: BG056540.D

Acq: 3 Feb 2023 15:50

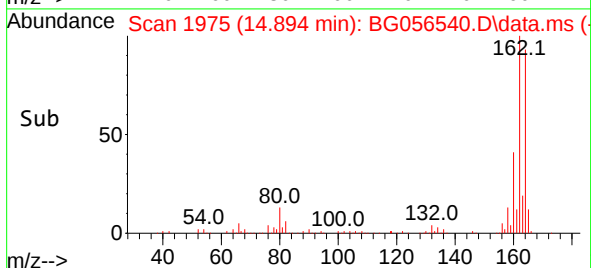
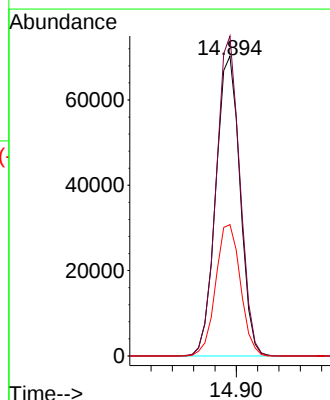
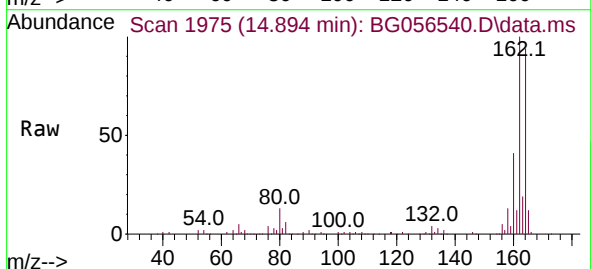
Tgt Ion:164 Resp: 110984

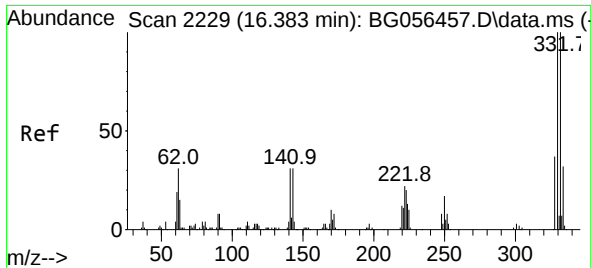
Ion Ratio Lower Upper

164 100

162 106.8 79.6 119.4

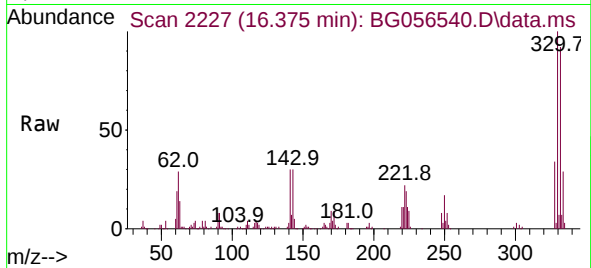
160 43.8 34.9 52.3





#42  
2,4,6-Tribromophenol  
Concen: 106.546 ng  
RT: 16.375 min Scan# 21  
Delta R.T. -0.003 min  
Lab File: BG056540.D  
Acq: 3 Feb 2023 15:50

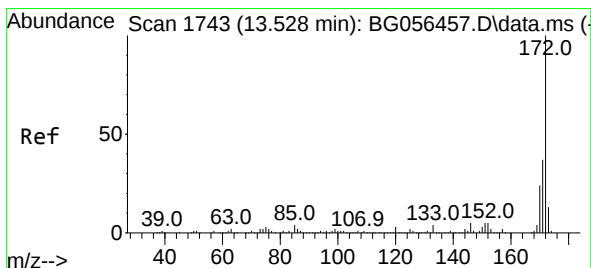
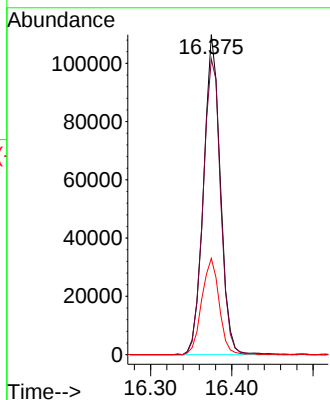
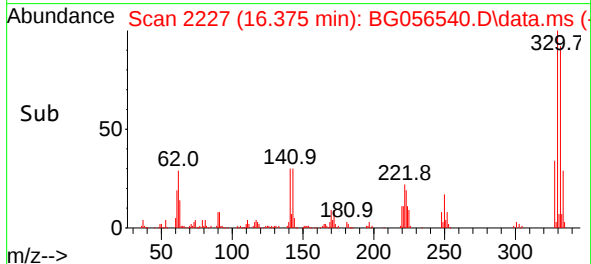
Instrument :  
BNA\_G  
ClientSampleId :  
NPHACK-SOIL-0201



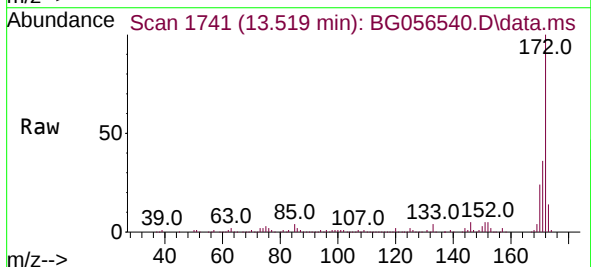
Tgt Ion:330 Resp: 157205  
Ion Ratio Lower Upper  
330 100  
332 96.6 79.0 118.6  
141 31.3 24.2 36.4

Manual Integrations  
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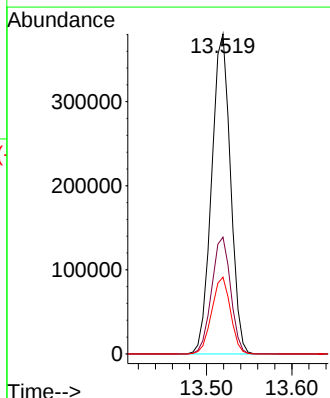
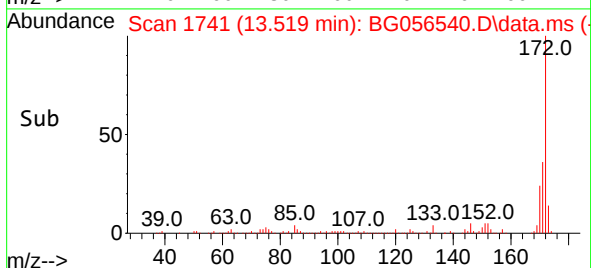
Reviewed By :Christian Giraldo 02/06/2023  
Supervised By :Jagrut Upadhyay 02/06/2023

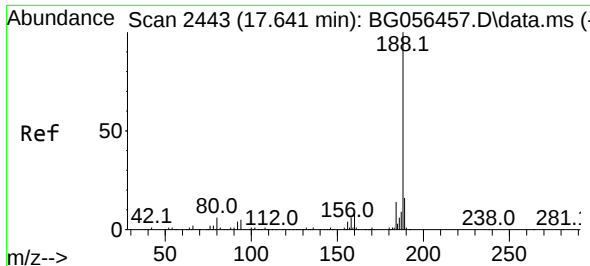


#45  
2-Fluorobiphenyl  
Concen: 72.962 ng  
RT: 13.519 min Scan# 1741  
Delta R.T. -0.003 min  
Lab File: BG056540.D  
Acq: 3 Feb 2023 15:50



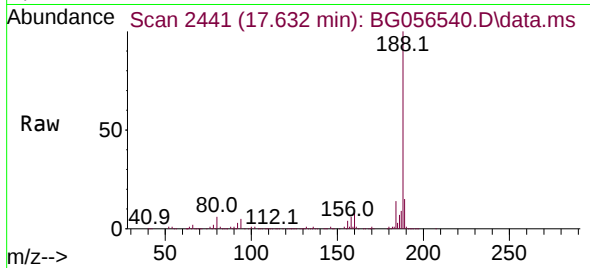
Tgt Ion:172 Resp: 584062  
Ion Ratio Lower Upper  
172 100  
171 36.5 29.5 44.3  
170 24.0 19.2 28.8





#64  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 17.632 min Scan# 2441  
Delta R.T. -0.003 min  
Lab File: BG056540.D  
Acq: 3 Feb 2023 15:50

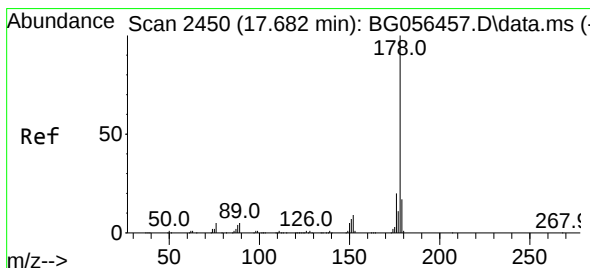
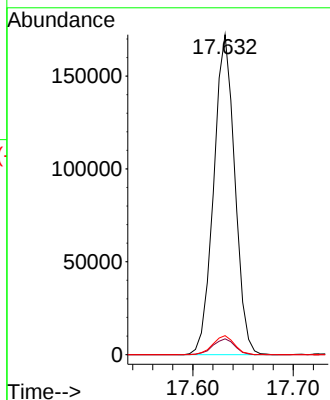
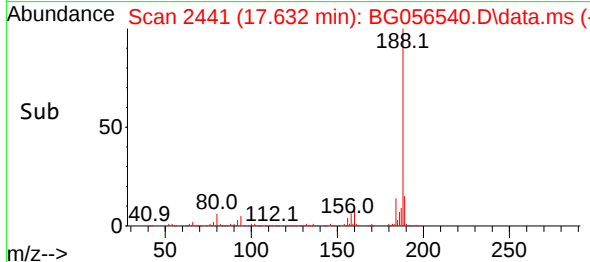
Instrument :  
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ClientSampleId :  
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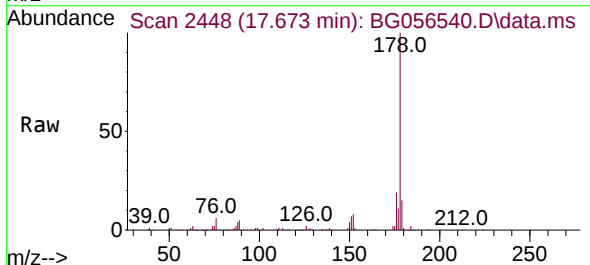
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Ion Ratio Lower Upper  
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94 4.9 4.1 6.1  
80 5.9 5.0 7.4

Manual Integrations  
APPROVED

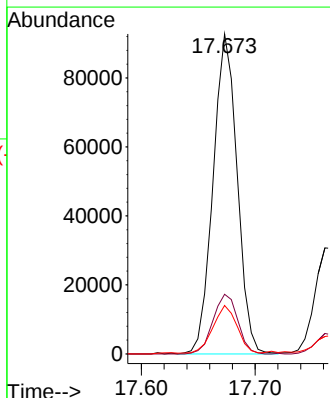
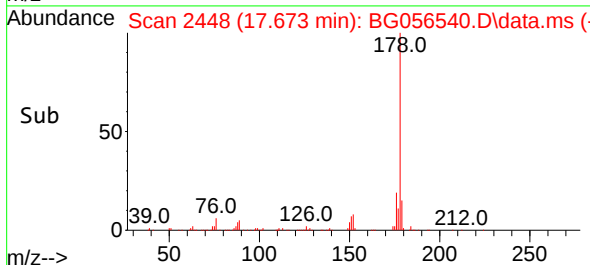
Reviewed By :Christian Giraldo 02/06/2023  
Supervised By :Jagrut Upadhyay 02/06/2023

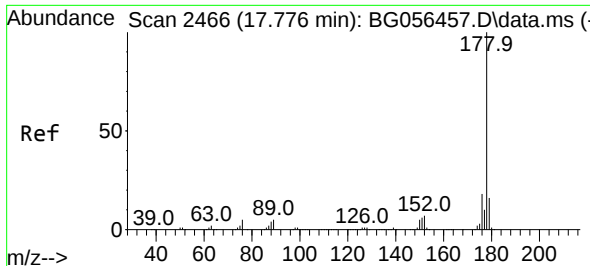


#71  
Phenanthrene  
Concen: 10.358 ng  
RT: 17.673 min Scan# 2448  
Delta R.T. -0.003 min  
Lab File: BG056540.D  
Acq: 3 Feb 2023 15:50



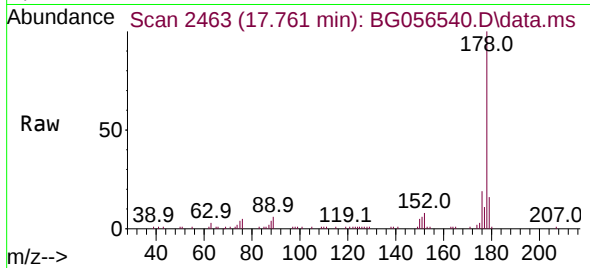
Tgt Ion:178 Resp: 136669  
Ion Ratio Lower Upper  
178 100  
176 18.6 15.6 23.4  
179 15.1 13.3 19.9





#72  
 Anthracene  
 Concen: 3.523 ng  
 RT: 17.761 min Scan# 2463  
 Delta R.T. -0.009 min  
 Lab File: BG056540.D  
 Acq: 3 Feb 2023 15:50

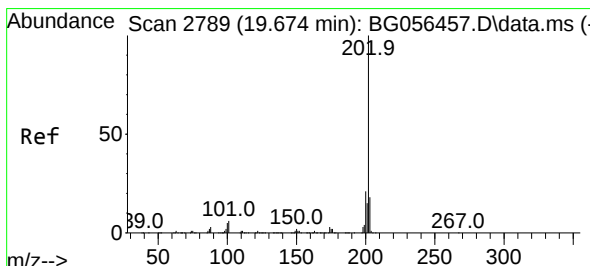
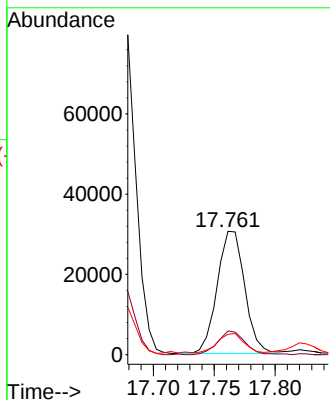
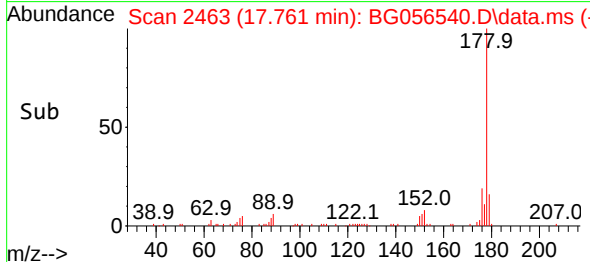
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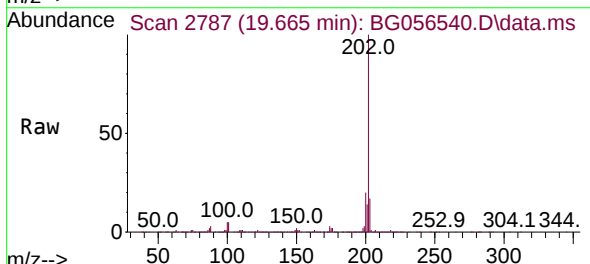
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 Ion Ratio Lower Upper  
 178 100  
 176 19.2 14.5 21.7  
 179 16.4 12.5 18.7

Manual Integrations  
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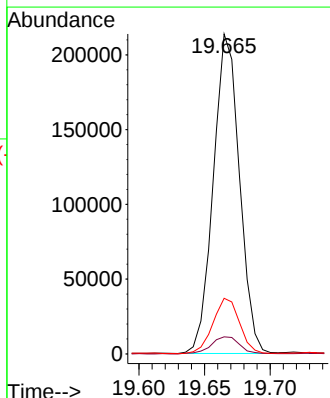
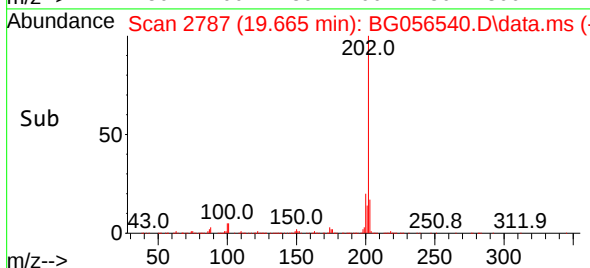
Reviewed By :Christian Giraldo 02/06/2023  
 Supervised By :Jagrut Upadhyay 02/06/2023

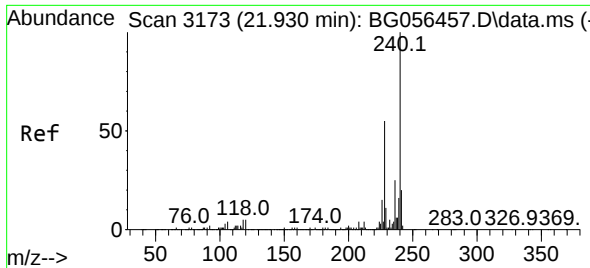


#75  
 Fluoranthene  
 Concen: 17.799 ng  
 RT: 19.665 min Scan# 2787  
 Delta R.T. -0.003 min  
 Lab File: BG056540.D  
 Acq: 3 Feb 2023 15:50



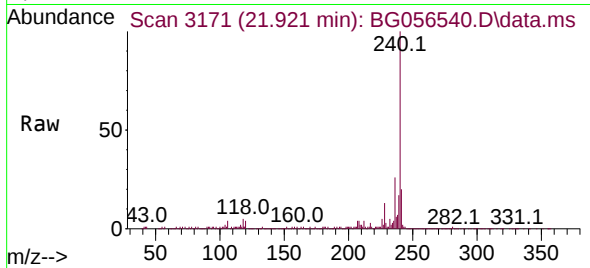
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 Ion Ratio Lower Upper  
 202 100  
 101 5.3 0.0 25.6  
 203 17.4 0.0 38.1





#76  
Chrysene-d12  
Concen: 20.000 ng  
RT: 21.921 min Scan# 3173  
Delta R.T. -0.003 min  
Lab File: BG056540.D  
Acq: 3 Feb 2023 15:50

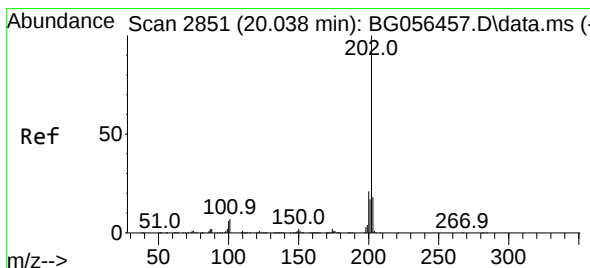
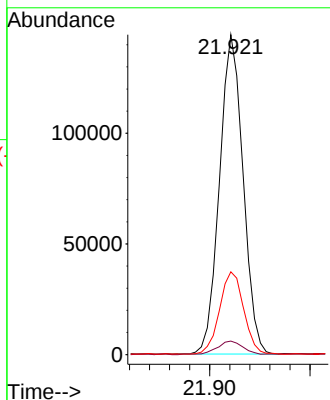
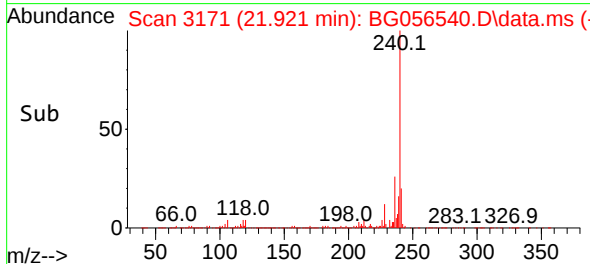
Instrument :  
BNA\_G  
ClientSampleId :  
NPHACK-SOIL-0201



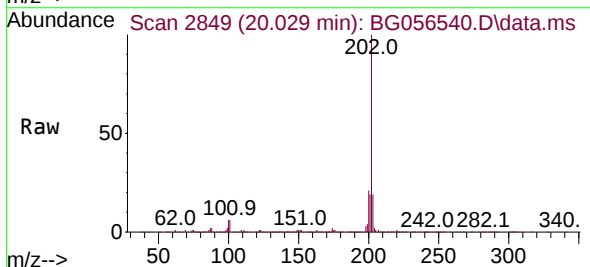
Tgt Ion:240 Resp: 235499  
Ion Ratio Lower Upper  
240 100  
120 4.2 3.8 5.8  
236 25.9 20.2 30.2

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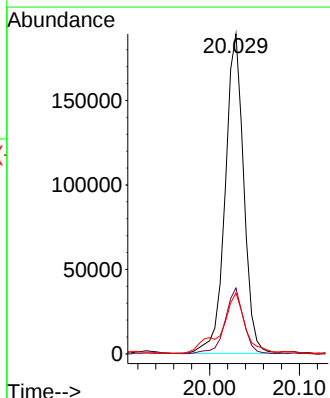
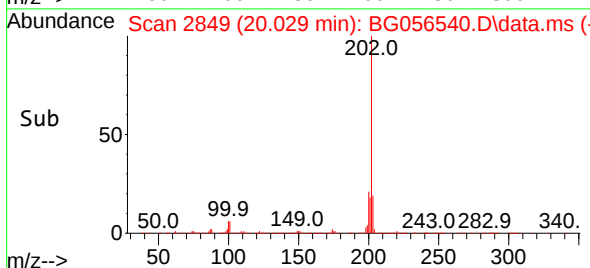
Reviewed By :Christian Giraldo 02/06/2023  
Supervised By :Jagrut Upadhyay 02/06/2023

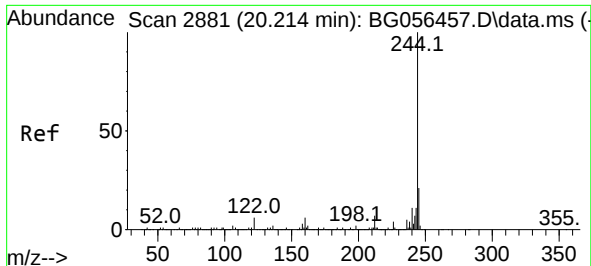


#78  
Pyrene  
Concen: 16.205 ng  
RT: 20.029 min Scan# 2849  
Delta R.T. -0.003 min  
Lab File: BG056540.D  
Acq: 3 Feb 2023 15:50



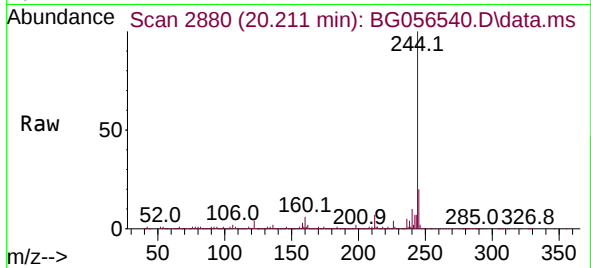
Tgt Ion:202 Resp: 271423  
Ion Ratio Lower Upper  
202 100  
200 20.6 16.7 25.1  
203 19.0 14.4 21.6





#79  
 Terphenyl-d14  
 Concen: 65.566 ng  
 RT: 20.211 min Scan# 2880  
 Delta R.T. 0.003 min  
 Lab File: BG056540.D  
 Acq: 3 Feb 2023 15:50

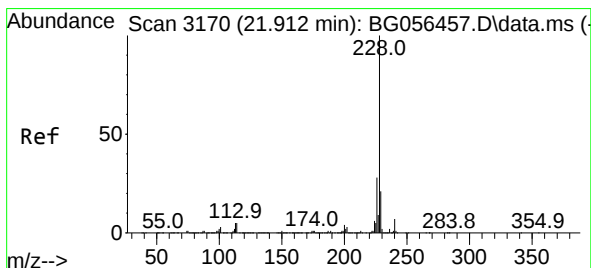
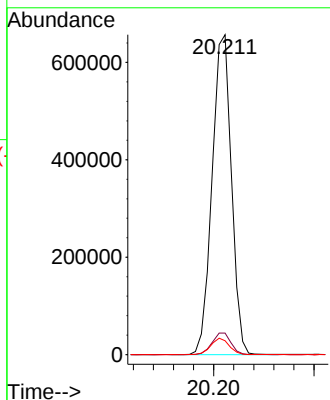
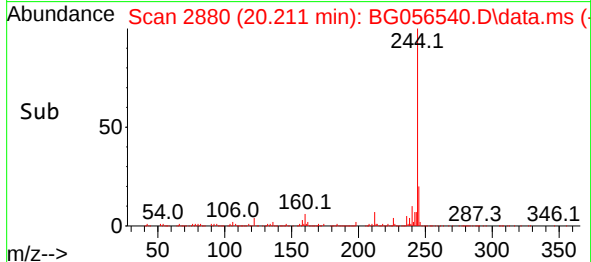
Instrument :  
 BNA\_G  
 ClientSampleId :  
 NPHACK-SOIL-0201



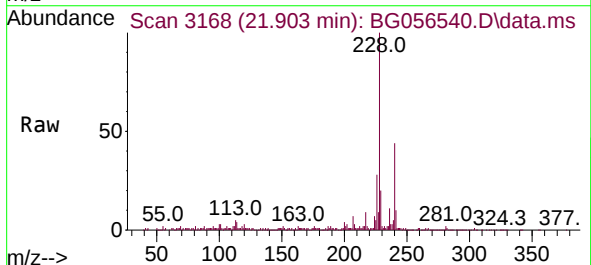
Tgt Ion:244 Resp: 87913  
 Ion Ratio Lower Upper  
 244 100  
 212 6.7 5.5 8.3  
 122 4.4 4.4 6.6

Manual Integrations  
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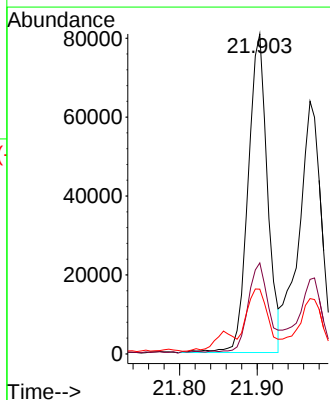
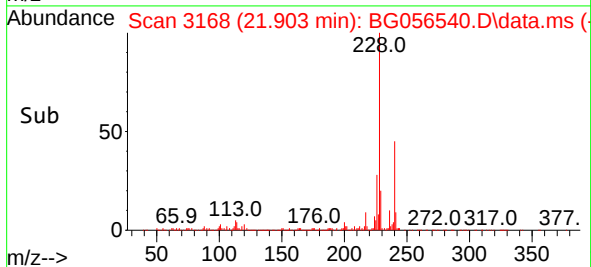
Reviewed By :Christian Giraldo 02/06/2023  
 Supervised By :Jagrut Upadhyay 02/06/2023

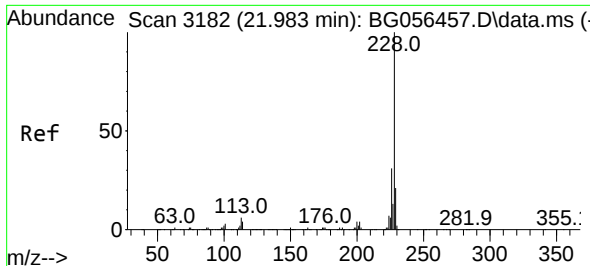


#81  
 Benzo(a)anthracene  
 Concen: 8.477 ng  
 RT: 21.903 min Scan# 3168  
 Delta R.T. 0.003 min  
 Lab File: BG056540.D  
 Acq: 3 Feb 2023 15:50



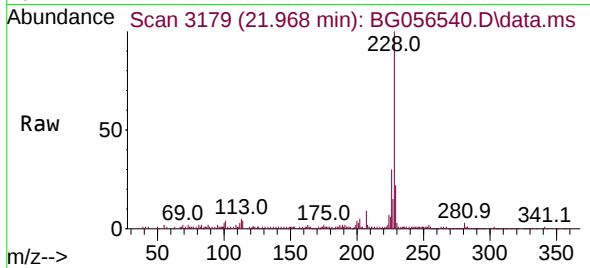
Tgt Ion:228 Resp: 139566  
 Ion Ratio Lower Upper  
 228 100  
 226 28.4 22.4 33.6  
 229 20.2 16.5 24.7





#83  
Chrysene  
Concen: 8.311 ng m  
RT: 21.968 min Scan# 3182  
Delta R.T. -0.009 min  
Lab File: BG056540.D  
Acq: 3 Feb 2023 15:50

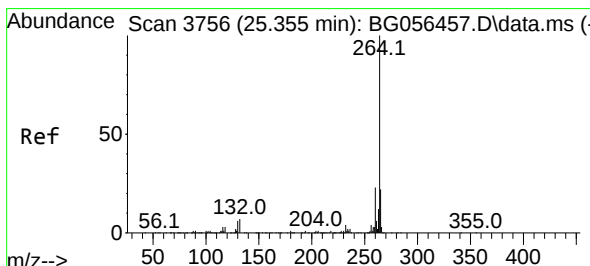
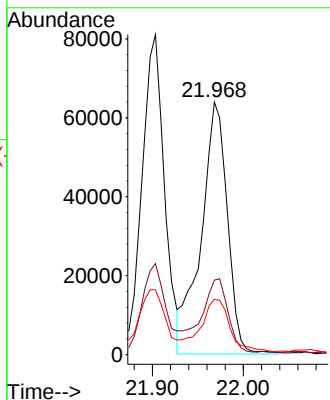
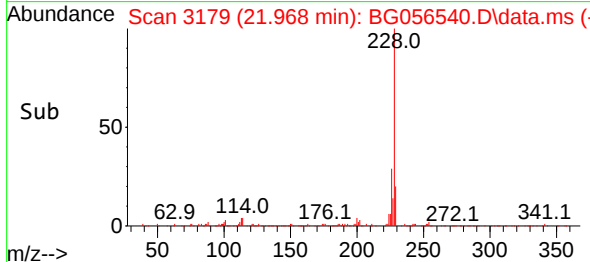
Instrument :  
BNA\_G  
ClientSampleId :  
NPHACK-SOIL-0201



Tgt Ion:228 Resp: 128554  
Ion Ratio Lower Upper  
228 100  
226 29.5 25.0 37.4  
229 21.9 16.4 24.6

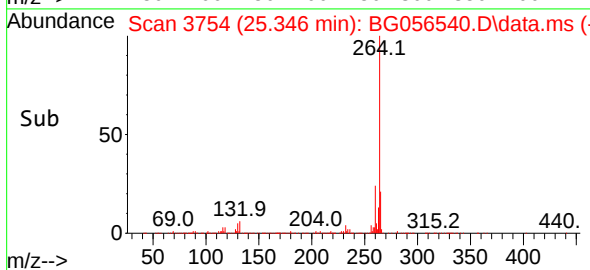
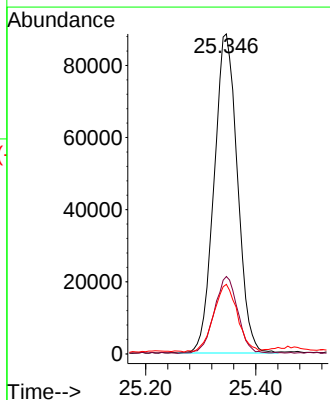
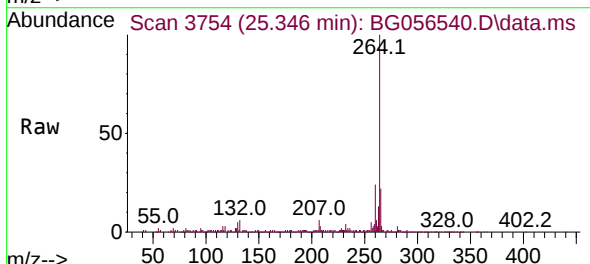
Manual Integrations  
APPROVED

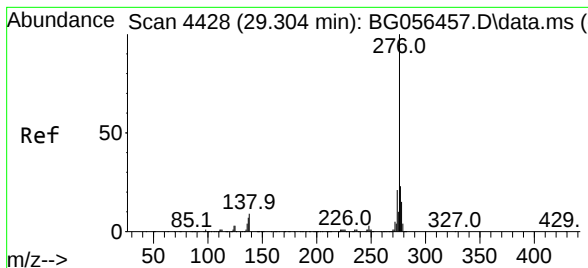
Reviewed By :Christian Giraldo 02/06/2023  
Supervised By :Jagrut Upadhyay 02/06/2023



#86  
Perylene-d12  
Concen: 20.000 ng  
RT: 25.346 min Scan# 3754  
Delta R.T. 0.003 min  
Lab File: BG056540.D  
Acq: 3 Feb 2023 15:50

Tgt Ion:264 Resp: 260016  
Ion Ratio Lower Upper  
264 100  
260 24.2 18.2 27.4  
265 21.7 18.1 27.1





#87

Indeno(1,2,3-cd)pyrene

Concen: 4.496 ng

RT: 29.289 min Scan# 4428

Delta R.T. 0.009 min

Lab File: BG056540.D

Acq: 3 Feb 2023 15:50

Instrument :

BNA\_G

ClientSampleId :

NPHACK-SOIL-0201

Tgt Ion:276 Resp: 85569

Ion Ratio Lower Upper

276 100

138 7.3 9.4 14.2

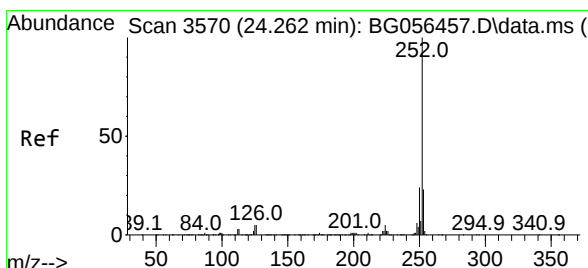
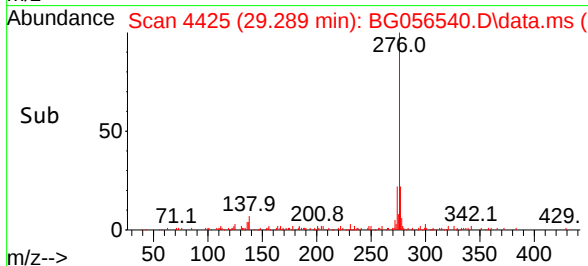
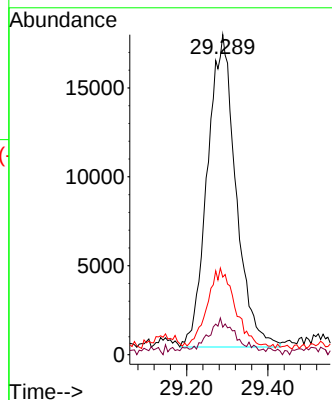
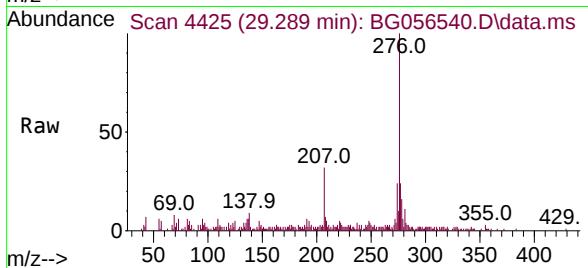
277 23.7 20.3 30.5

Manual Integrations

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Reviewed By :Christian Giraldo 02/06/2023

Supervised By :Jagrut Upadhyay 02/06/2023



#88

Benzo(b)fluoranthene

Concen: 10.971 ng

RT: 24.254 min Scan# 3568

Delta R.T. 0.003 min

Lab File: BG056540.D

Acq: 3 Feb 2023 15:50

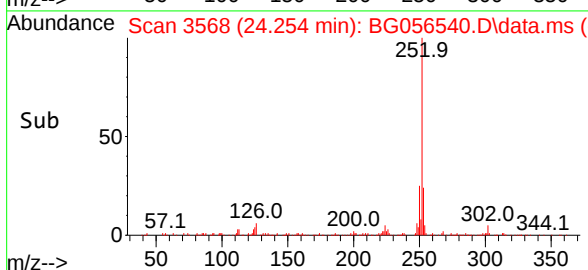
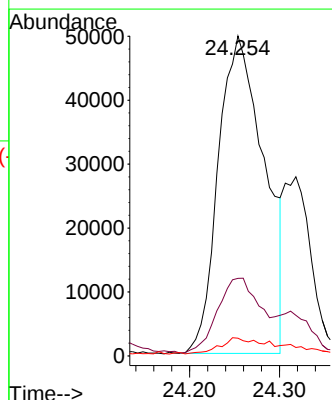
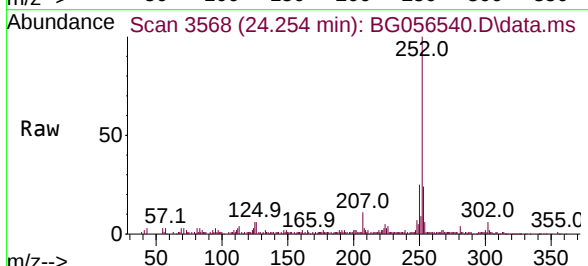
Tgt Ion:252 Resp: 177059

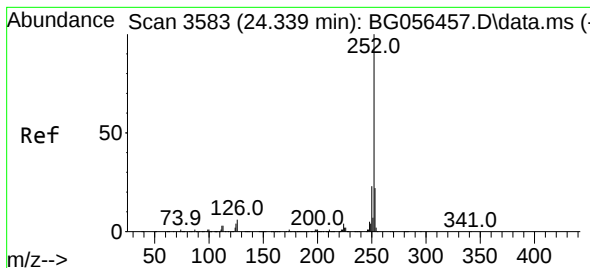
Ion Ratio Lower Upper

252 100

253 24.2 18.1 27.1

125 5.5 3.9 5.9





#89

Benzo(k)fluoranthene

Concen: 3.527 ng m

RT: 24.318 min Scan# 3579

Delta R.T. -0.003 min

Lab File: BG056540.D

Acq: 3 Feb 2023 15:50

Instrument :

BNA\_G

ClientSampleId :

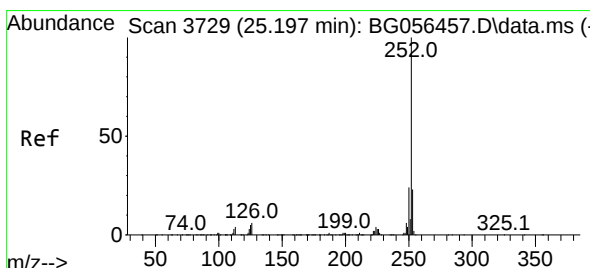
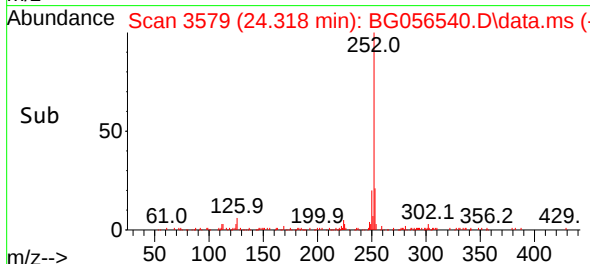
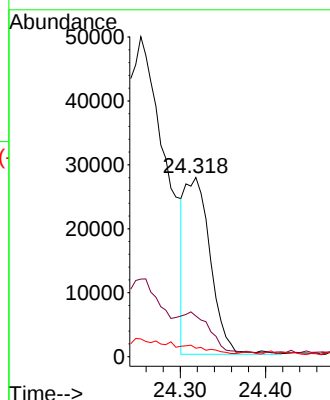
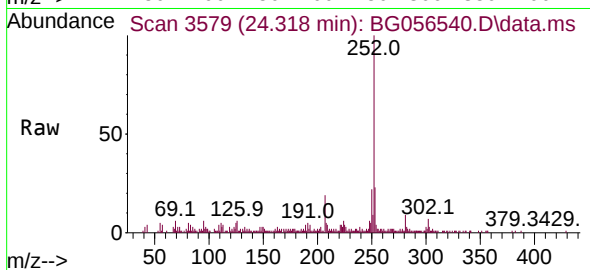
NPHACK-SOIL-0201

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 252   | Resp: | 57475 |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 22.7  | 17.5  | 26.3  |
| 125       | 4.7   | 3.4   | 5.0   |

Manual Integrations

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Reviewed By :Christian Giraldo 02/06/2023  
Supervised By :Jagrut Upadhyay 02/06/2023



#90

Benzo(a)pyrene

Concen: 8.627 ng

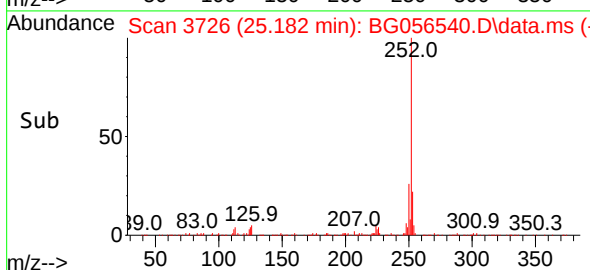
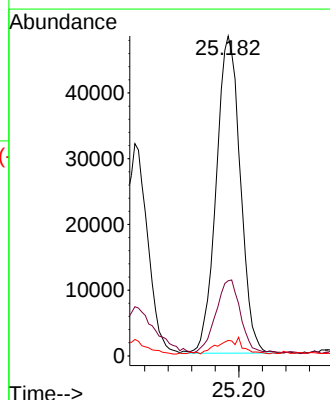
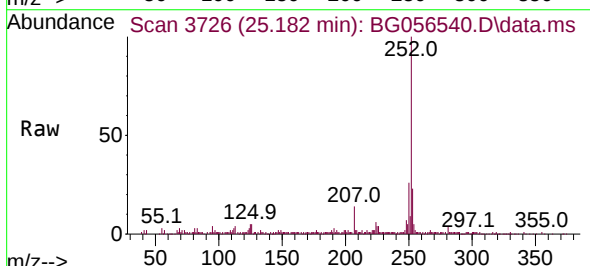
RT: 25.182 min Scan# 3726

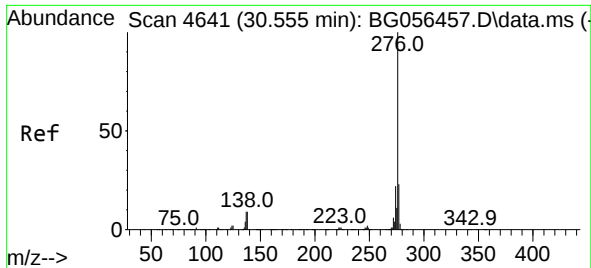
Delta R.T. -0.003 min

Lab File: BG056540.D

Acq: 3 Feb 2023 15:50

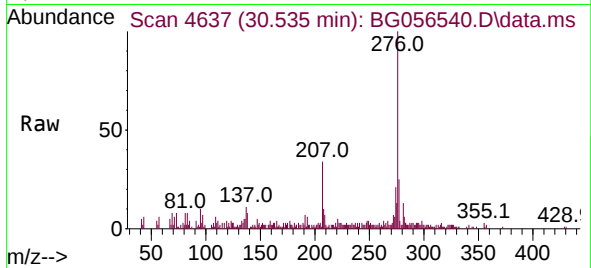
|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 252   | Resp: | 137151 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 23.5  | 18.4  | 27.6   |
| 125       | 4.8   | 4.1   | 6.1    |





#92  
Benzo(g,h,i)perylene  
Concen: 5.231 ng  
RT: 30.535 min Scan# 4637  
Delta R.T. 0.009 min  
Lab File: BG056540.D  
Acq: 3 Feb 2023 15:50

Instrument :  
BNA\_G  
ClientSampleId :  
NPHACK-SOIL-0201



Tgt Ion:276 Resp: 80632  
Ion Ratio Lower Upper  
276 100  
277 25.4 18.5 27.7  
138 8.5 7.4 11.0

Manual Integrations  
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Reviewed By :Christian Giraldo 02/06/2023  
Supervised By :Jagrut Upadhyay 02/06/2023

