

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN102023\  
 Data File : BN028338.D  
 Acq On : 20 Oct 2023 13:38  
 Operator : MA/JU  
 Sample : 04696-04  
 Misc : SFAM-SIM-MDL-SOIL-02  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 MDL-SOIL-QT4-2023-08

Quant Time: Oct 20 14:22:35 2023  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\SFAM-EPA-SIM-BN100323.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Oct 16 16:16:04 2023  
 Response via : Initial Calibration

### Manual Integrations APPROVED

Reviewed By :Yogesh Patel 10/23/2023  
 Supervised By :mohammad ahmed 10/23/2023

| Compound                    | R.T.   | QIon | Response | Conc  | Units  | Dev(Min) |
|-----------------------------|--------|------|----------|-------|--------|----------|
| -----                       |        |      |          |       |        |          |
| Internal Standards          |        |      |          |       |        |          |
| 1) 1,4-Dichlorobenzene-d4   | 7.887  | 152  | 4070     | 0.400 | ng/ul  | 0.00     |
| 4) Naphthalene-d8           | 10.718 | 136  | 13570    | 0.400 | ng/ul  | 0.00     |
| 9) Acenaphthene-d10         | 14.541 | 164  | 8356     | 0.400 | ng/ul  | 0.00     |
| 13) Phenanthrene-d10        | 17.308 | 188  | 18836    | 0.400 | ng/ul  | 0.00     |
| 17) Chrysene-d12            | 21.495 | 240  | 18437    | 0.400 | ng/ul  | 0.00     |
| 23) Perylene-d12            | 23.948 | 264  | 17228    | 0.400 | ng/ul  | # 0.00   |
|                             |        |      |          |       |        |          |
| System Monitoring Compounds |        |      |          |       |        |          |
| 3) 1,4-Dioxane-d8           | 3.267  | 96   | 2125     | 0.416 | ng/ul  | 0.00     |
| 6) 2-Methylnaphthalene-d10  | 12.313 | 152  | 7578     | 0.347 | ng/ul  | 0.01     |
| 18) Fluoranthene-d10        | 19.329 | 212  | 23284    | 0.398 | ng/ul  | 0.00     |
|                             |        |      |          |       |        |          |
| Target Compounds            |        |      |          |       |        |          |
|                             |        |      |          |       | Qvalue |          |
| 2) 1,4-Dioxane              | 3.300  | 88   | 528m     | 0.098 | ng/ul  |          |
| 5) Naphthalene              | 10.773 | 128  | 2614     | 0.068 | ng/ul# | 87       |
| 7) 2-Methylnaphthalene      | 12.390 | 142  | 1560     | 0.064 | ng/ul  | 95       |
| 8) 1-Methylnaphthalene      | 12.599 | 142  | 1632     | 0.065 | ng/ul  | 97       |
| 10) Acenaphthylene          | 14.277 | 152  | 2472     | 0.065 | ng/ul# | 89       |
| 11) Acenaphthene            | 14.606 | 153  | 2091     | 0.069 | ng/ul  | 98       |
| 12) Fluorene                | 15.614 | 166  | 2325     | 0.069 | ng/ul# | 97       |
| 14) Pentachlorophenol       | 17.033 | 266  | 285m     | 0.071 | ng/ul  |          |
| 15) Phenanthrene            | 17.350 | 178  | 3947     | 0.070 | ng/ul  | 94       |
| 16) Anthracene              | 17.447 | 178  | 3312     | 0.066 | ng/ul# | 92       |
| 19) Fluoranthene            | 19.357 | 202  | 4914     | 0.070 | ng/ul# | 93       |
| 20) Pyrene                  | 19.729 | 202  | 5170     | 0.071 | ng/ul  | 96       |
| 21) Benzo(a)anthracene      | 21.481 | 228  | 4656     | 0.069 | ng/ul  | 97       |
| 22) Chrysene                | 21.530 | 228  | 4821     | 0.071 | ng/ul  | 97       |
| 24) Benzo(b)fluoranthene    | 23.191 | 252  | 4680     | 0.073 | ng/ul  | 69       |
| 25) Benzo(k)fluoranthene    | 23.240 | 252  | 4730     | 0.074 | ng/ul# | 70       |
| 26) Benzo(a)pyrene          | 23.840 | 252  | 4222     | 0.078 | ng/ul# | 58       |
| 27) Indeno(1,2,3-cd)pyrene  | 26.529 | 276  | 4637     | 0.070 | ng/ul# | 99       |
| 28) Dibenzo(a,h)anthracene  | 26.542 | 278  | 3808     | 0.071 | ng/ul# | 72       |
| 29) Benzo(g,h,i)perylene    | 27.330 | 276  | 3930     | 0.073 | ng/ul# | 81       |

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

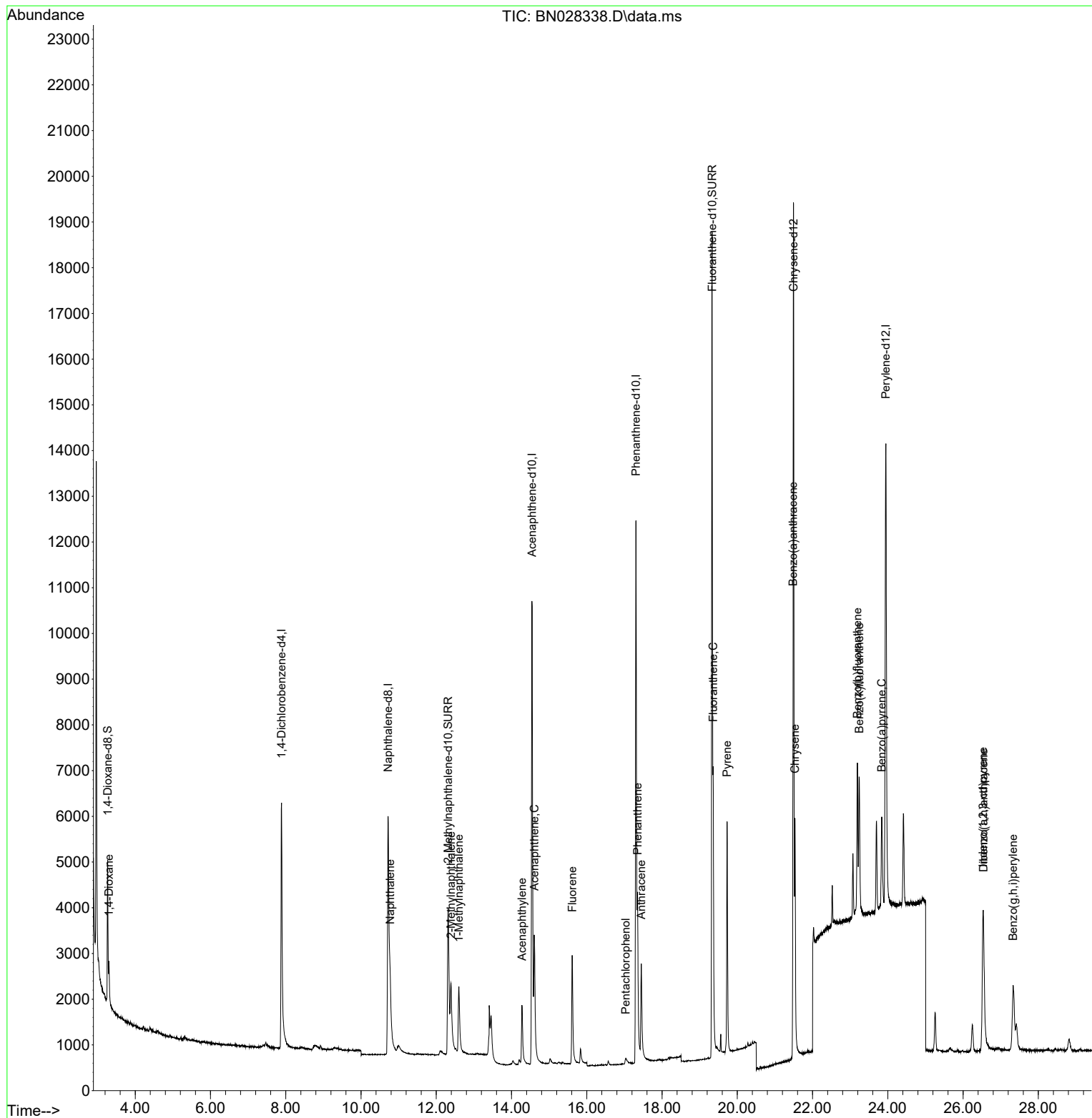
Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN102023\  
Data File : BN028338.D  
Acq On : 20 Oct 2023 13:38  
Operator : MA/JU  
Sample : 04696-04  
Misc : SFAM-SIM-MDL-SOIL-02  
ALS Vial : 6 Sample Multiplier: 1

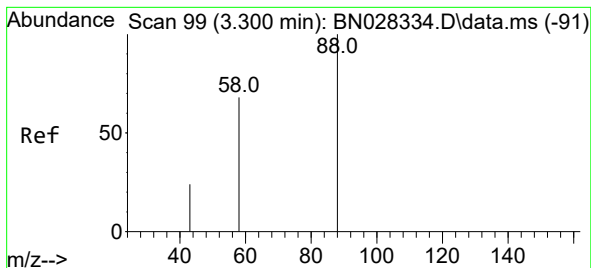
Instrument :  
BNA\_N  
ClientSampleId :  
MDL-SOIL-QT4-2023-08

Quant Time: Oct 20 14:22:35 2023  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\SFAM-EPA-SIM-BN100323.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Oct 16 16:16:04 2023  
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Manual Integrations  
APPROVED

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Supervised By :mohammad ahmed 10/23/2023





#2

1,4-Dioxane

Concen: 0.098 ng/ul m

RT: 3.300 min Scan# 91

Delta R.T. -0.000 min

Lab File: BN028338.D

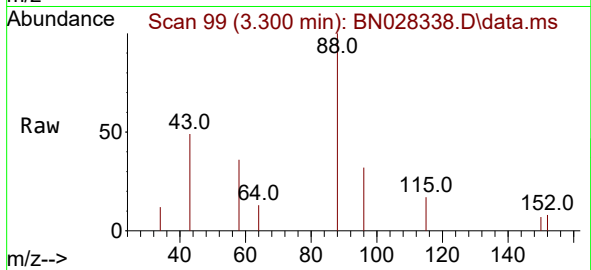
Acq: 20 Oct 2023 13:38

Instrument :

BNA\_N

ClientSampleId :

MDL-SOIL-QT4-2023-08



Tgt Ion: 88 Resp: 528

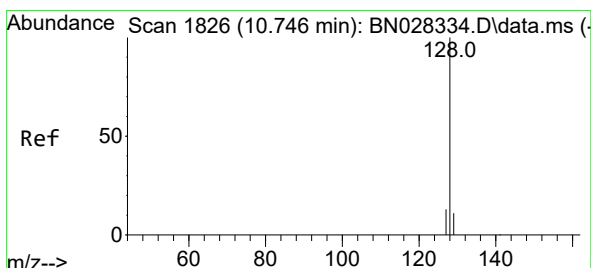
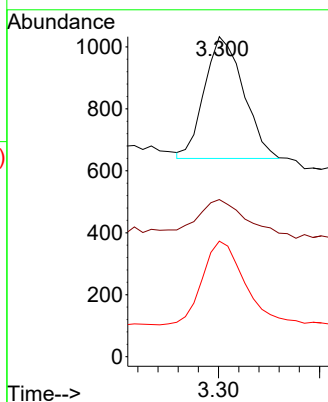
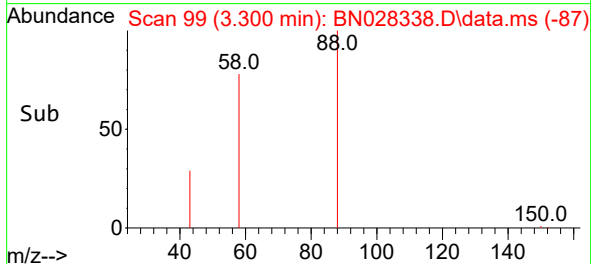
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 88  | 100   |       |       |
| 43  | 49.1  | 33.4  | 50.2  |
| 58  | 36.1  | 45.7  | 68.5  |

Manual Integrations

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#5

Naphthalene

Concen: 0.068 ng/ul

RT: 10.773 min Scan# 1831

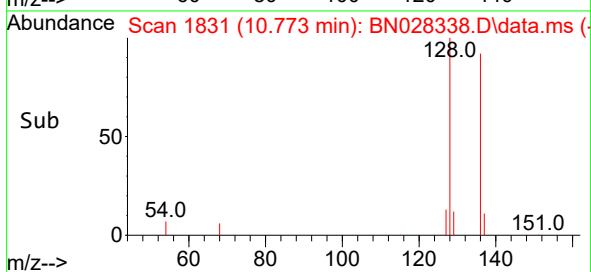
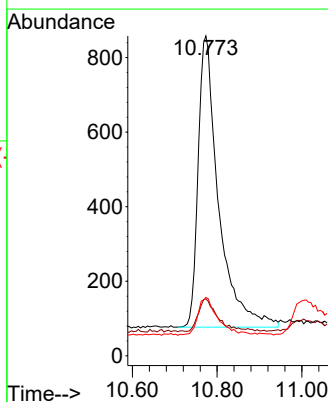
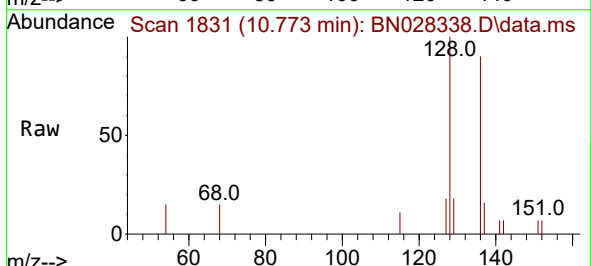
Delta R.T. 0.011 min

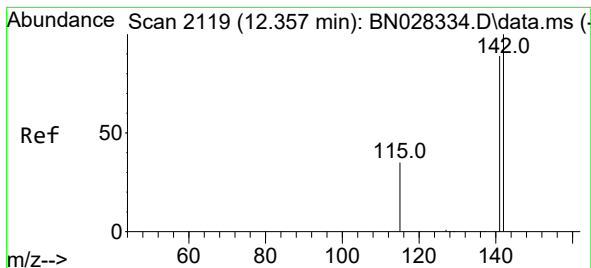
Lab File: BN028338.D

Acq: 20 Oct 2023 13:38

Tgt Ion:128 Resp: 2614

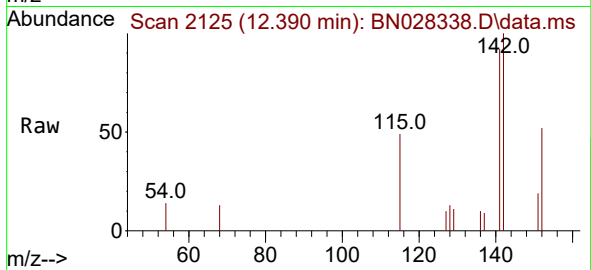
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 128 | 100   |       |       |
| 129 | 17.8  | 9.4   | 14.0# |
| 127 | 18.3  | 11.0  | 16.4# |





#7  
2-Methylnaphthalene  
Concen: 0.064 ng/ul  
RT: 12.390 min Scan# 2119  
Delta R.T. 0.011 min  
Lab File: BN028338.D  
Acq: 20 Oct 2023 13:38

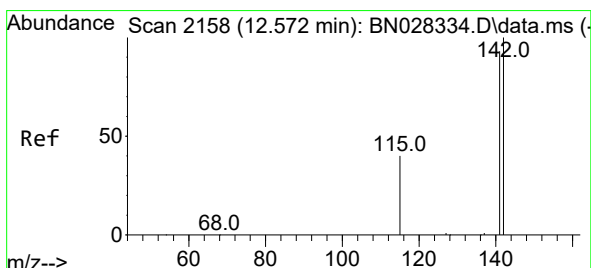
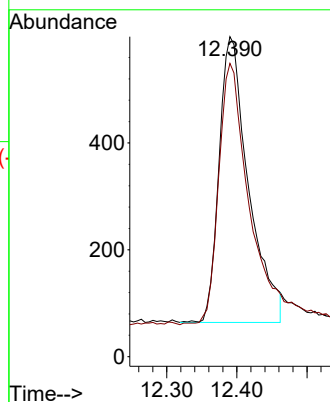
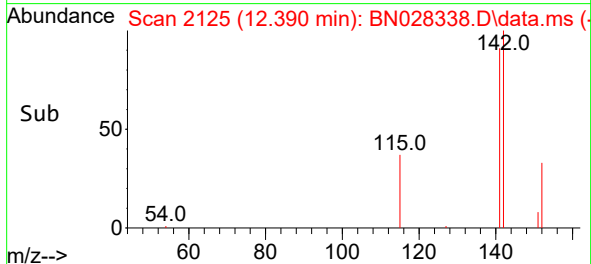
Instrument :  
BNA\_N  
ClientSampleId :  
MDL-SOIL-QT4-2023-08



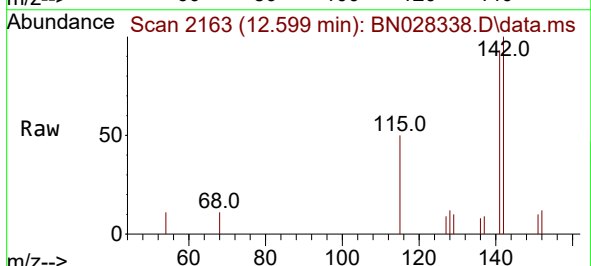
Tgt Ion:142 Resp: 1560  
Ion Ratio Lower Upper  
142 100  
141 93.1 70.9 106.3

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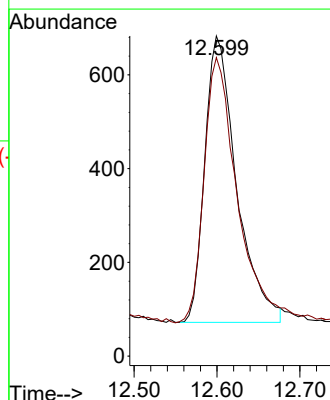
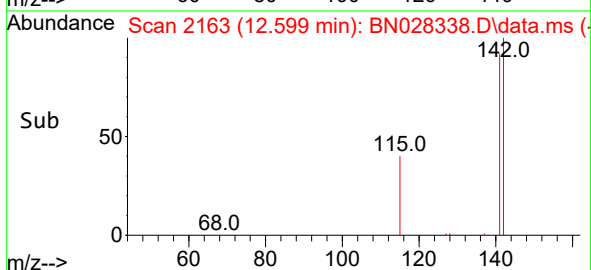
Reviewed By :Yogesh Patel 10/23/2023  
Supervised By :mohammad ahmed 10/23/2023

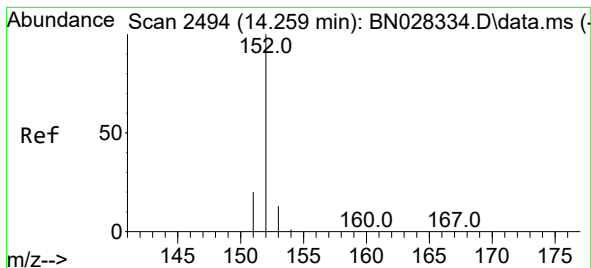


#8  
1-Methylnaphthalene  
Concen: 0.065 ng/ul  
RT: 12.599 min Scan# 2163  
Delta R.T. 0.005 min  
Lab File: BN028338.D  
Acq: 20 Oct 2023 13:38



Tgt Ion:142 Resp: 1632  
Ion Ratio Lower Upper  
142 100  
141 95.8 74.4 111.6





#10

Acenaphthylene

Concen: 0.065 ng/ul

RT: 14.277 min Scan# 2494

Delta R.T. 0.005 min

Lab File: BN028338.D

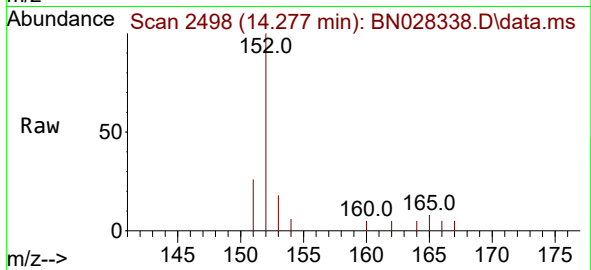
Acq: 20 Oct 2023 13:38

Instrument :

BNA\_N

ClientSampleId :

MDL-SOIL-QT4-2023-08



Tgt Ion:152 Resp: 2472

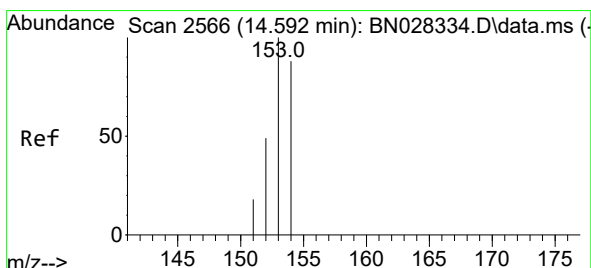
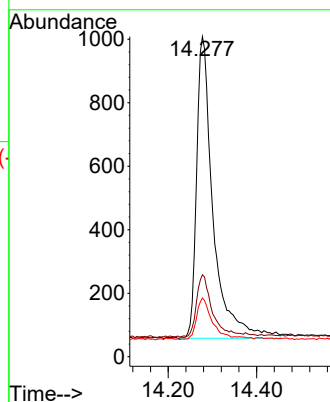
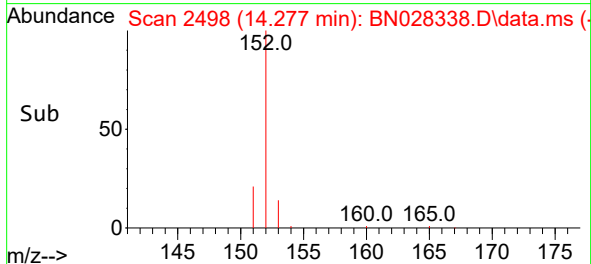
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 152 | 100   |       |       |
| 151 | 25.6  | 16.4  | 24.6  |
| 153 | 18.4  | 10.9  | 16.3  |

Manual Integrations

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Reviewed By :Yogesh Patel 10/23/2023

Supervised By :mohammad ahmed 10/23/2023



#11

Acenaphthene

Concen: 0.069 ng/ul

RT: 14.606 min Scan# 2569

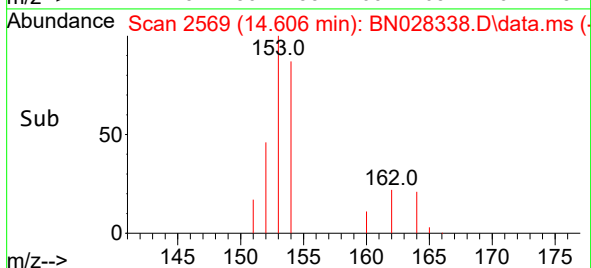
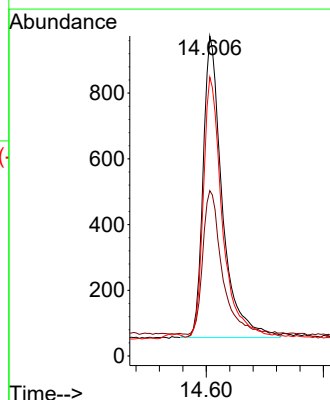
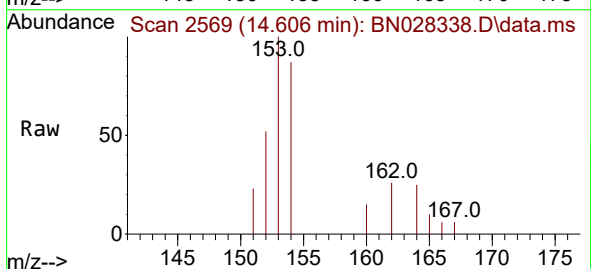
Delta R.T. -0.000 min

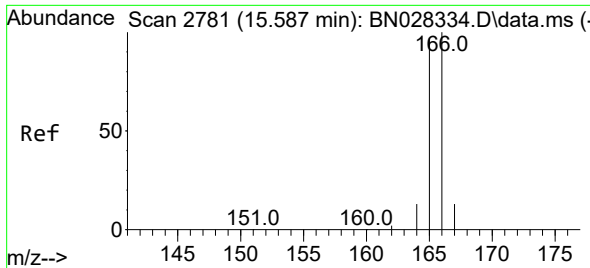
Lab File: BN028338.D

Acq: 20 Oct 2023 13:38

Tgt Ion:153 Resp: 2091

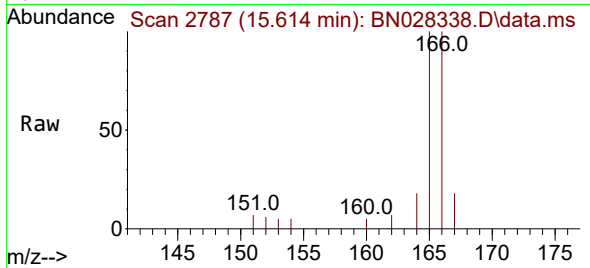
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 153 | 100   |       |       |
| 152 | 51.6  | 39.4  | 59.0  |
| 154 | 87.2  | 70.2  | 105.4 |





#12  
Fluorene  
Concen: 0.069 ng/ul  
RT: 15.614 min Scan# 2115  
Delta R.T. 0.014 min  
Lab File: BN028338.D  
Acq: 20 Oct 2023 13:38

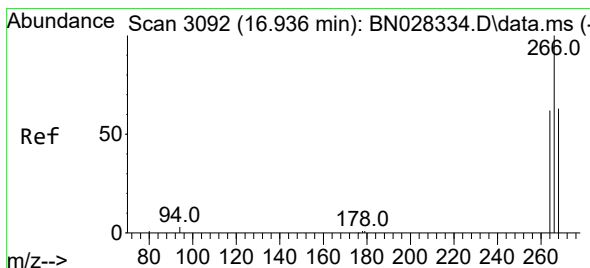
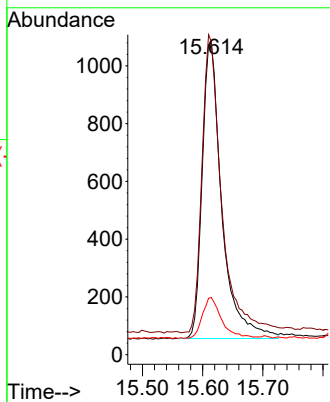
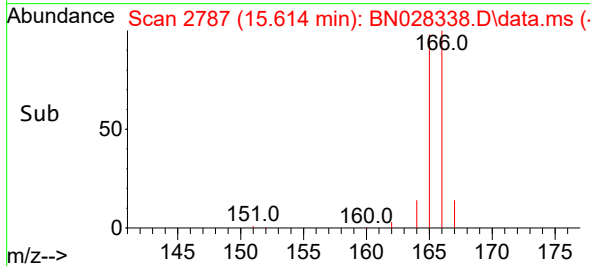
Instrument :  
BNA\_N  
ClientSampleId :  
MDL-SOIL-QT4-2023-08



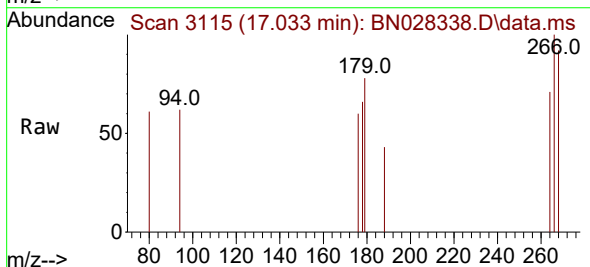
Tgt Ion:166 Resp: 232  
Ion Ratio Lower Upper  
166 100  
165 100.5 78.5 117.7  
167 18.4 11.2 16.8

Manual Integrations  
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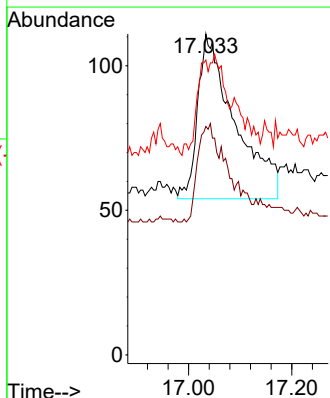
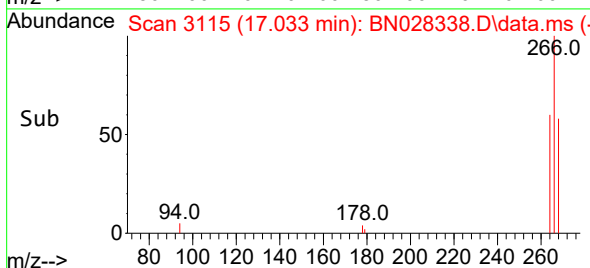
Reviewed By :Yogesh Patel 10/23/2023  
Supervised By :mohammad ahmed 10/23/2023

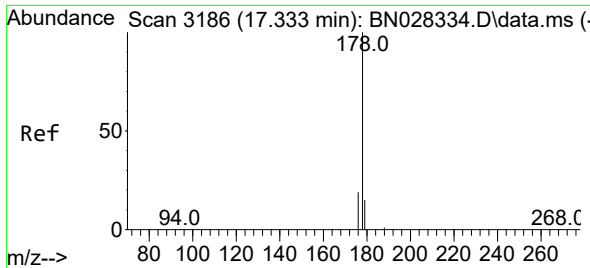


#14  
Pentachlorophenol  
Concen: 0.071 ng/ul m  
RT: 17.033 min Scan# 3115  
Delta R.T. 0.072 min  
Lab File: BN028338.D  
Acq: 20 Oct 2023 13:38



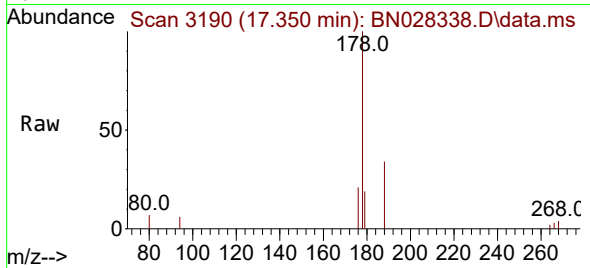
Tgt Ion:266 Resp: 285  
Ion Ratio Lower Upper  
266 100  
264 1.1 49.6 74.4#  
268 6.3 52.2 78.4#





#15  
Phenanthrene  
Concen: 0.070 ng/u1  
RT: 17.350 min Scan# 3186  
Delta R.T. 0.005 min  
Lab File: BN028338.D  
Acq: 20 Oct 2023 13:38

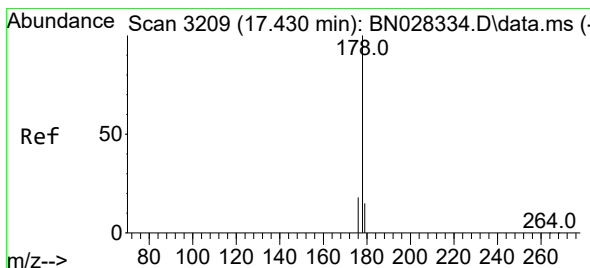
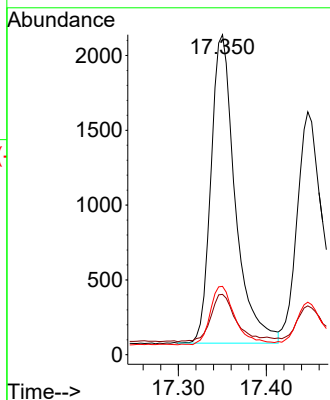
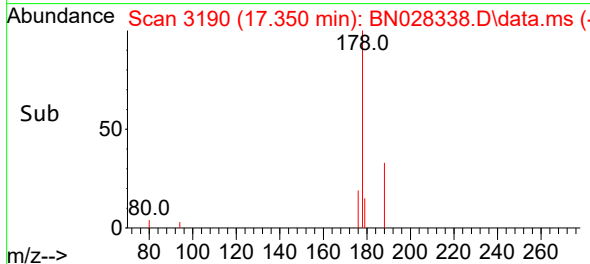
Instrument :  
BNA\_N  
ClientSampleId :  
MDL-SOIL-QT4-2023-08



Tgt Ion:178 Resp: 3947  
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179 18.8 12.6 19.0  
176 21.4 15.5 23.3

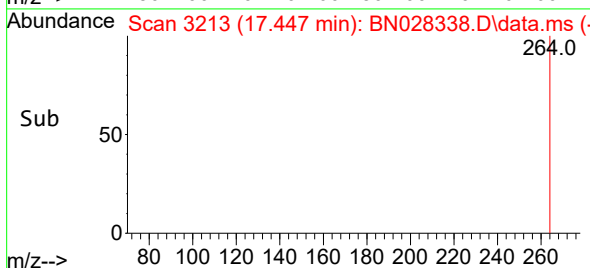
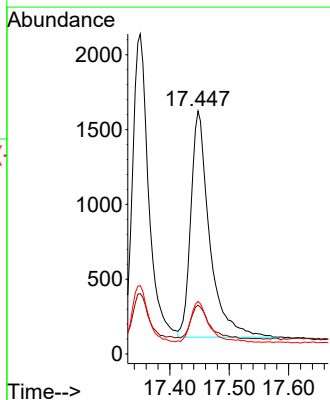
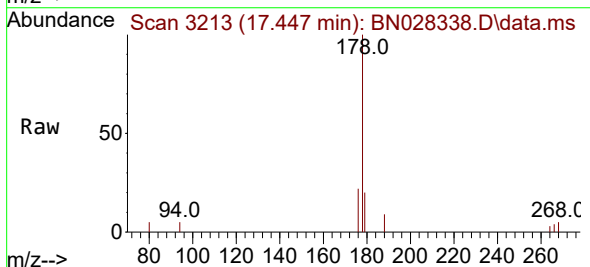
Manual Integrations  
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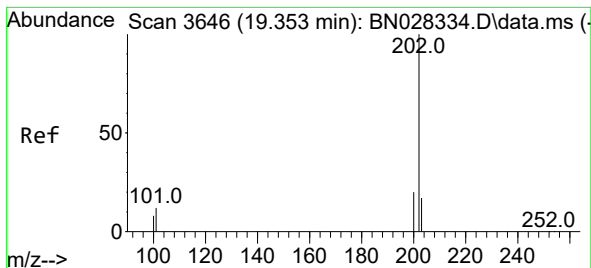
Reviewed By :Yogesh Patel 10/23/2023  
Supervised By :mohammad ahmed 10/23/2023



#16  
Anthracene  
Concen: 0.066 ng/u1  
RT: 17.447 min Scan# 3213  
Delta R.T. 0.005 min  
Lab File: BN028338.D  
Acq: 20 Oct 2023 13:38

Tgt Ion:178 Resp: 3312  
Ion Ratio Lower Upper  
178 100  
179 20.1 12.8 19.2#  
176 21.6 15.0 22.6





#19

Fluoranthene

Concen: 0.070 ng/ul

RT: 19.357 min Scan# 3646

Delta R.T. -0.009 min

Lab File: BN028338.D

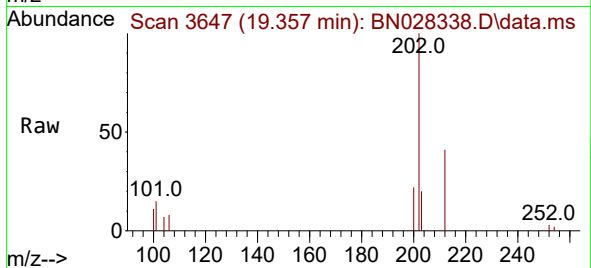
Acq: 20 Oct 2023 13:38

Instrument :

BNA\_N

ClientSampleId :

MDL-SOIL-QT4-2023-08



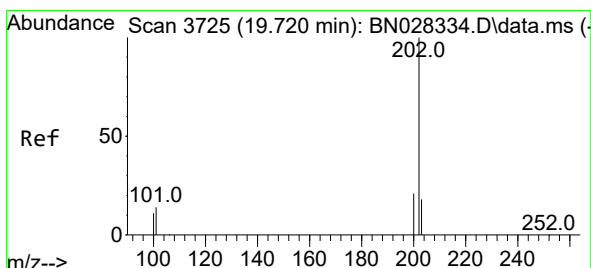
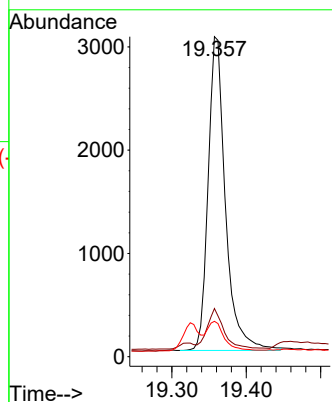
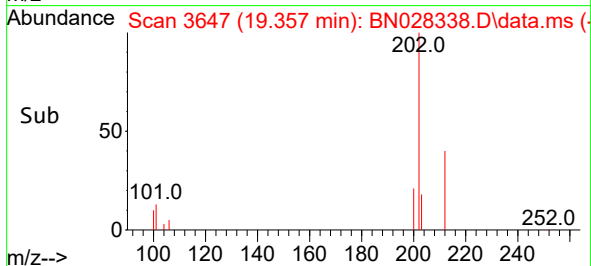
|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 202   | Resp: | 4914 |
| Ion Ratio | Lower | Upper |      |
| 202       | 100   |       |      |
| 101       | 15.0  | 9.6   | 14.4 |
| 100       | 11.1  | 7.4   | 11.0 |

Manual Integrations

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Supervised By :mohammad ahmed 10/23/2023



#20

Pyrene

Concen: 0.071 ng/ul

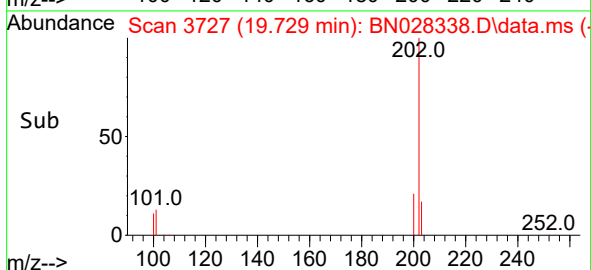
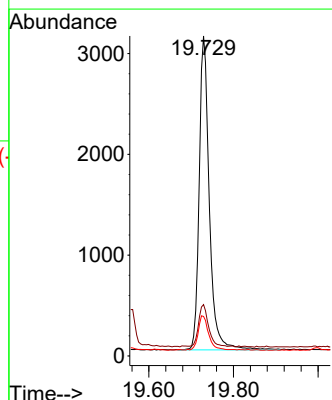
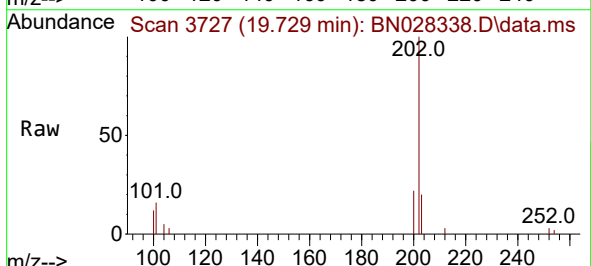
RT: 19.729 min Scan# 3727

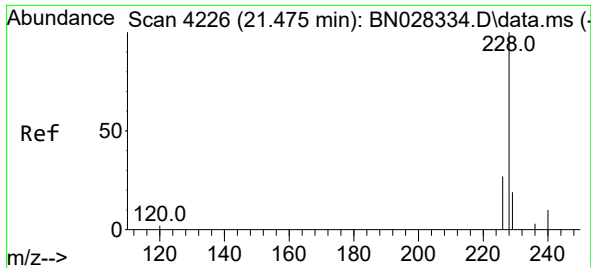
Delta R.T. -0.004 min

Lab File: BN028338.D

Acq: 20 Oct 2023 13:38

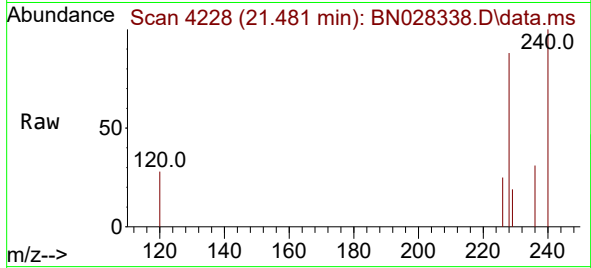
|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 202   | Resp: | 5170 |
| Ion Ratio | Lower | Upper |      |
| 202       | 100   |       |      |
| 101       | 16.1  | 11.2  | 16.8 |
| 100       | 12.4  | 9.1   | 13.7 |





#21  
Benzo(a)anthracene  
Concen: 0.069 ng/ul  
RT: 21.481 min Scan# 41  
Delta R.T. -0.003 min  
Lab File: BN028338.D  
Acq: 20 Oct 2023 13:38

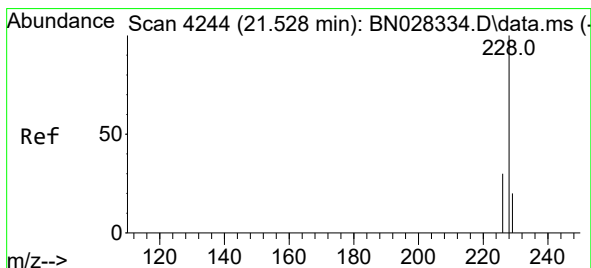
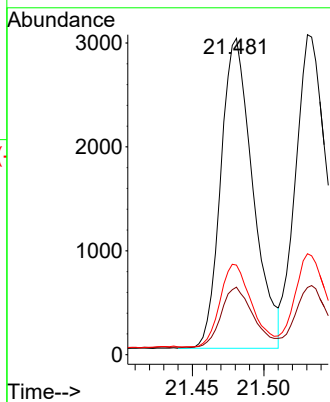
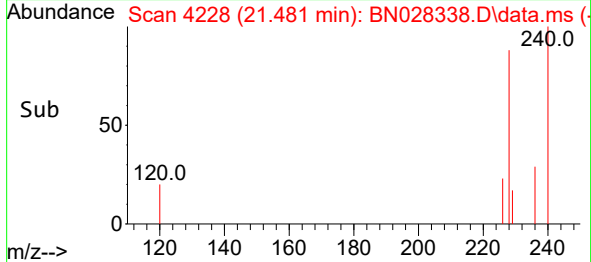
Instrument :  
BNA\_N  
ClientSampleId :  
MDL-SOIL-QT4-2023-08



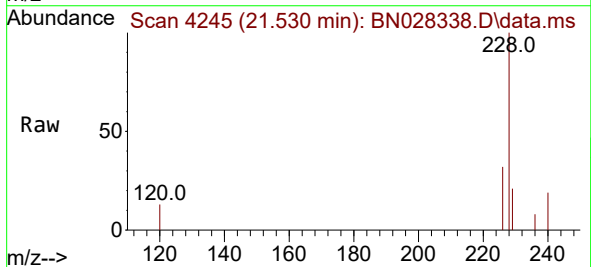
Tgt Ion:228 Resp: 4650  
Ion Ratio Lower Upper  
228 100  
229 21.3 16.0 24.0  
226 28.3 21.5 32.3

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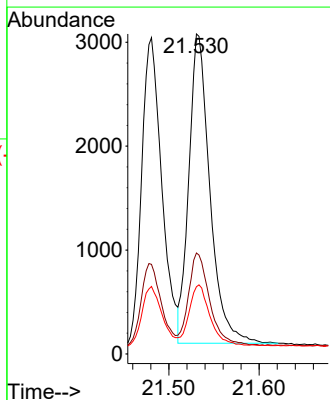
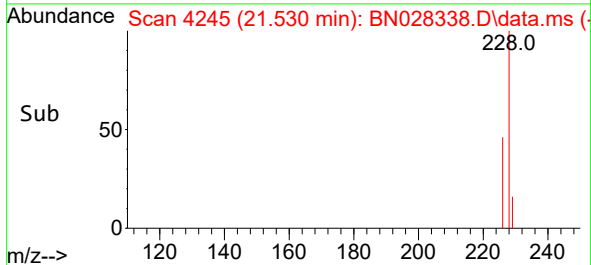
Reviewed By :Yogesh Patel 10/23/2023  
Supervised By :mohammad ahmed 10/23/2023

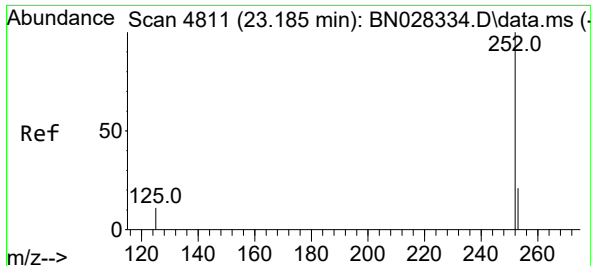


#22  
Chrysene  
Concen: 0.071 ng/ul  
RT: 21.530 min Scan# 4245  
Delta R.T. -0.005 min  
Lab File: BN028338.D  
Acq: 20 Oct 2023 13:38



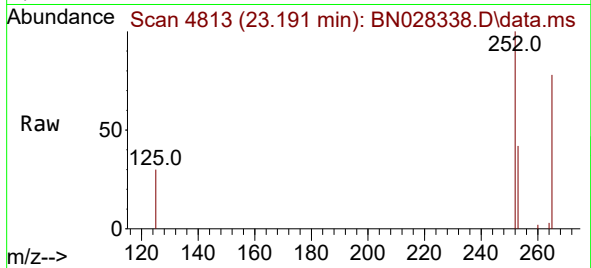
Tgt Ion:228 Resp: 4821  
Ion Ratio Lower Upper  
228 100  
226 31.6 23.8 35.8  
229 21.0 16.0 24.0





#24  
Benzo(b)fluoranthene  
Concen: 0.073 ng/ul  
RT: 23.191 min Scan# 4811  
Delta R.T. -0.003 min  
Lab File: BN028338.D  
Acq: 20 Oct 2023 13:38

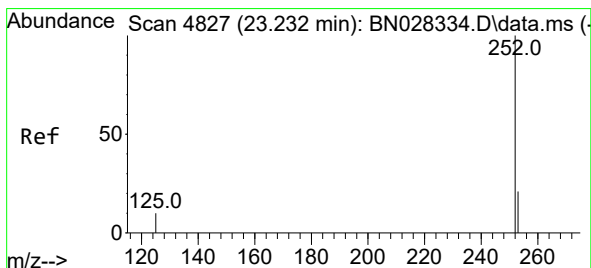
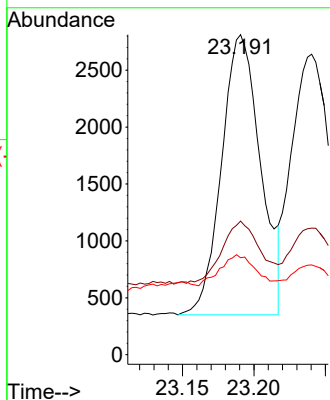
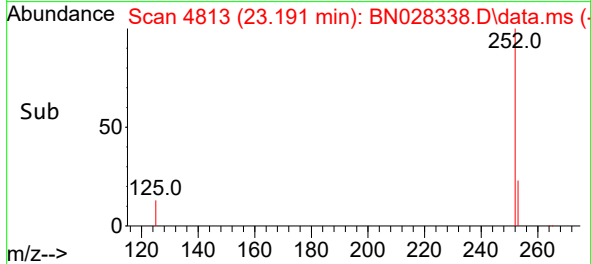
Instrument :  
BNA\_N  
ClientSampleId :  
MDL-SOIL-QT4-2023-08



Tgt Ion:252 Resp: 4680  
Ion Ratio Lower Upper  
252 100  
253 41.7 0.0 54.0  
125 30.3 0.0 31.4

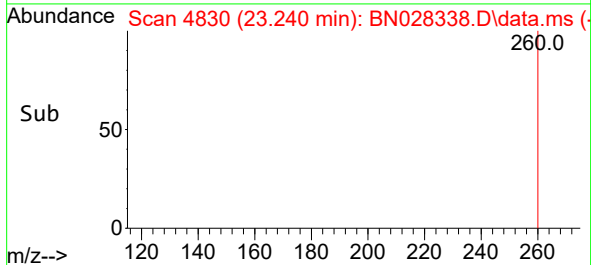
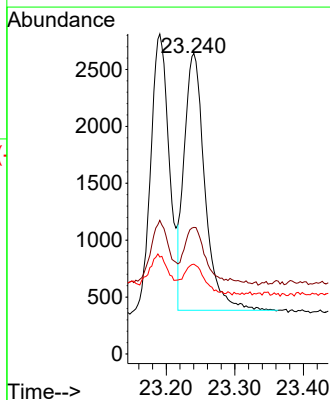
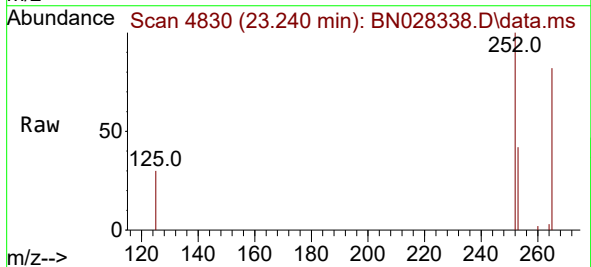
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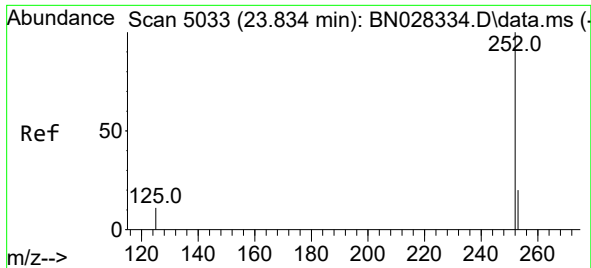
Reviewed By :Yogesh Patel 10/23/2023  
Supervised By :mohammad ahmed 10/23/2023



#25  
Benzo(k)fluoranthene  
Concen: 0.074 ng/ul  
RT: 23.240 min Scan# 4830  
Delta R.T. 0.000 min  
Lab File: BN028338.D  
Acq: 20 Oct 2023 13:38

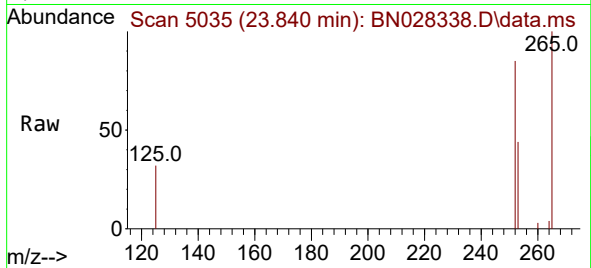
Tgt Ion:252 Resp: 4730  
Ion Ratio Lower Upper  
252 100  
253 42.1 21.8 32.8#  
125 29.9 12.8 19.2#





#26  
Benzo(a)pyrene  
Concen: 0.078 ng/ul  
RT: 23.840 min Scan# 5033  
Delta R.T. -0.003 min  
Lab File: BN028338.D  
Acq: 20 Oct 2023 13:38

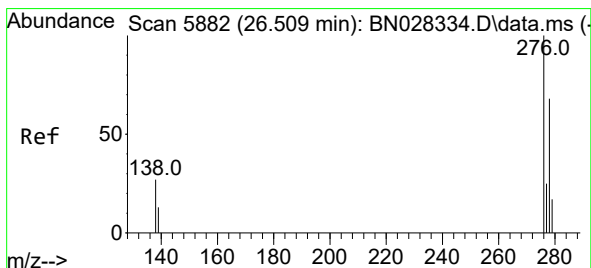
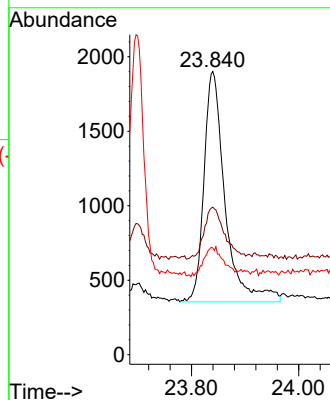
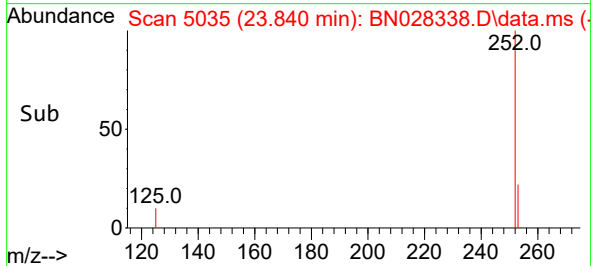
Instrument :  
BNA\_N  
ClientSampleId :  
MDL-SOIL-QT4-2023-08



Tgt Ion:252 Resp: 422  
Ion Ratio Lower Upper  
252 100  
253 52.1 23.4 35.2  
125 37.7 15.3 22.9

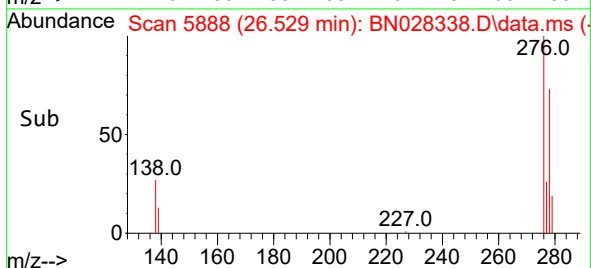
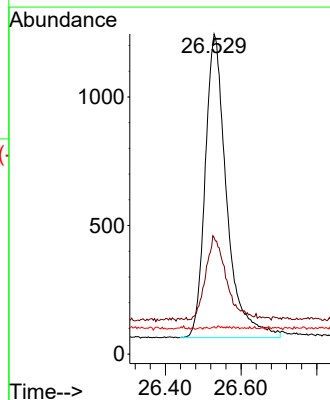
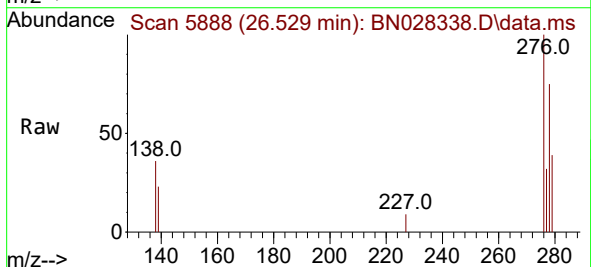
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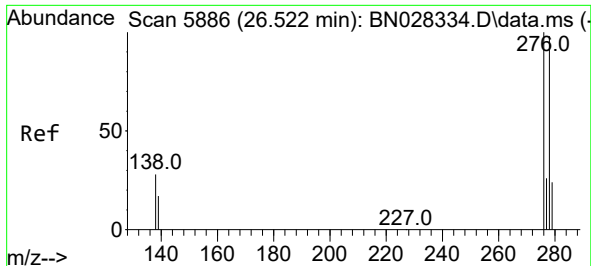
Reviewed By :Yogesh Patel 10/23/2023  
Supervised By :mohammad ahmed 10/23/2023



#27  
Indeno(1,2,3-cd)pyrene  
Concen: 0.070 ng/ul  
RT: 26.529 min Scan# 5888  
Delta R.T. 0.004 min  
Lab File: BN028338.D  
Acq: 20 Oct 2023 13:38

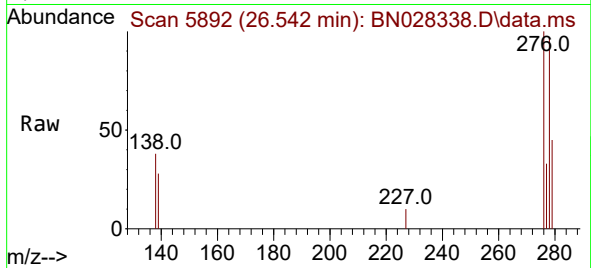
Tgt Ion:276 Resp: 4637  
Ion Ratio Lower Upper  
276 100  
138 27.6 21.6 32.4  
227 0.1 0.2 0.2





#28  
Dibenzo(a,h)anthracene  
Concen: 0.071 ng/ul  
RT: 26.542 min Scan# 5892  
Delta R.T. -0.003 min  
Lab File: BN028338.D  
Acq: 20 Oct 2023 13:38

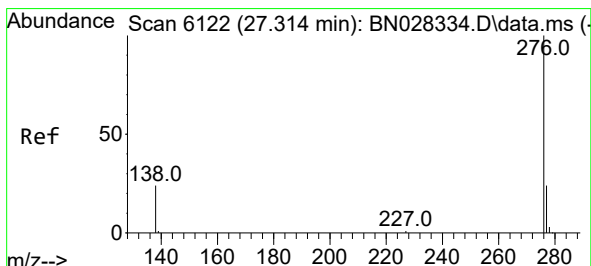
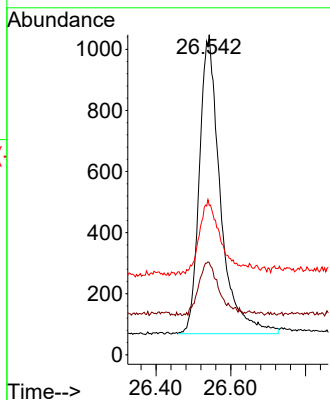
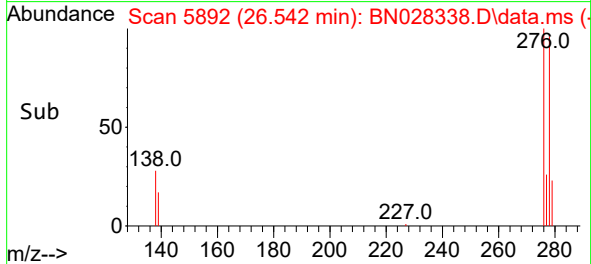
Instrument :  
BNA\_N  
ClientSampleId :  
MDL-SOIL-QT4-2023-08



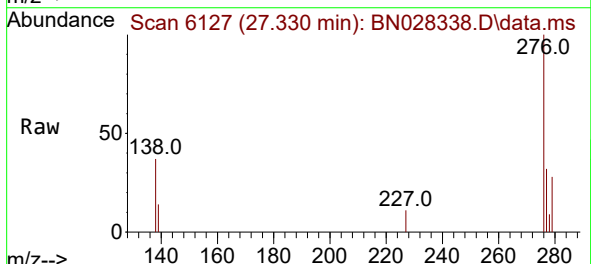
Tgt Ion:278 Resp: 3808  
Ion Ratio Lower Upper  
278 100  
139 28.8 15.9 23.9#  
279 46.7 22.8 34.2#

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Reviewed By :Yogesh Patel 10/23/2023  
Supervised By :mohammad ahmed 10/23/2023



#29  
Benzo(g,h,i)perylene  
Concen: 0.073 ng/ul  
RT: 27.330 min Scan# 6127  
Delta R.T. 0.000 min  
Lab File: BN028338.D  
Acq: 20 Oct 2023 13:38



Tgt Ion:276 Resp: 3930  
Ion Ratio Lower Upper  
276 100  
138 37.4 19.8 29.6#  
277 32.0 20.6 31.0#

