

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN101723\  
 Data File : BN028310.D  
 Acq On : 17 Oct 2023 16:01  
 Operator : MA/JU  
 Sample : 03573-03  
 Misc : SFDAM-SIM-MDL-SOIL-01  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 MDL-SOIL-QT3-2023-05

Quant Time: Oct 17 16:39:09 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 10/18/2023  
 Supervised By :mohammad ahmed 10/19/2023

| Compound                    | R.T.   | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|--------|------|----------|-------|---------|----------|
| -----                       |        |      |          |       |         |          |
| Internal Standards          |        |      |          |       |         |          |
| 1) 1,4-Dichlorobenzene-d4   | 7.899  | 152  | 1749     | 0.400 | ng/ul   | 0.00     |
| 4) Naphthalene-d8           | 10.735 | 136  | 5956     | 0.400 | ng/ul # | 0.02     |
| 9) Acenaphthene-d10         | 14.550 | 164  | 3585     | 0.400 | ng/ul   | 0.00     |
| 13) Phenanthrene-d10        | 17.316 | 188  | 7724     | 0.400 | ng/ul   | 0.01     |
| 17) Chrysene-d12            | 21.501 | 240  | 7667     | 0.400 | ng/ul   | 0.00     |
| 23) Perylene-d12            | 23.948 | 264  | 8517     | 0.400 | ng/ul   | 0.00     |
|                             |        |      |          |       |         |          |
| System Monitoring Compounds |        |      |          |       |         |          |
| 3) 1,4-Dioxane-d8           | 3.262  | 96   | 1033     | 0.470 | ng/ul   | 0.00     |
| 6) 2-Methylnaphthalene-d10  | 12.330 | 152  | 3316     | 0.346 | ng/ul   | 0.03     |
| 18) Fluoranthene-d10        | 19.339 | 212  | 9397     | 0.386 | ng/ul   | 0.00     |
|                             |        |      |          |       |         |          |
| Target Compounds            |        |      |          |       |         |          |
|                             |        |      |          |       | Qvalue  |          |
| 2) 1,4-Dioxane              | 3.300  | 88   | 222m     | 0.095 | ng/ul   |          |
| 5) Naphthalene              | 10.784 | 128  | 1208     | 0.071 | ng/ul#  | 68       |
| 7) 2-Methylnaphthalene      | 12.407 | 142  | 692      | 0.065 | ng/ul   | 98       |
| 8) 1-Methylnaphthalene      | 12.605 | 142  | 710      | 0.064 | ng/ul   | 94       |
| 10) Acenaphthylene          | 14.287 | 152  | 1144     | 0.070 | ng/ul#  | 78       |
| 11) Acenaphthene            | 14.615 | 153  | 932      | 0.072 | ng/ul   | 93       |
| 12) Fluorene                | 15.619 | 166  | 1030     | 0.072 | ng/ul#  | 92       |
| 14) Pentachlorophenol       | 16.974 | 266  | 112      | 0.068 | ng/ul#  | 76       |
| 15) Phenanthrene            | 17.358 | 178  | 1674     | 0.073 | ng/ul#  | 85       |
| 16) Anthracene              | 17.460 | 178  | 1362     | 0.066 | ng/ul#  | 78       |
| 19) Fluoranthene            | 19.367 | 202  | 1992     | 0.068 | ng/ul#  | 89       |
| 20) Pyrene                  | 19.738 | 202  | 2092     | 0.069 | ng/ul#  | 91       |
| 21) Benzo(a)anthracene      | 21.489 | 228  | 1877     | 0.067 | ng/ul   | 93       |
| 22) Chrysene                | 21.539 | 228  | 2097     | 0.074 | ng/ul   | 93       |
| 24) Benzo(b)fluoranthene    | 23.196 | 252  | 2203     | 0.070 | ng/ul#  | 53       |
| 25) Benzo(k)fluoranthene    | 23.243 | 252  | 2322     | 0.074 | ng/ul#  | 50       |
| 26) Benzo(a)pyrene          | 23.845 | 252  | 2097     | 0.078 | ng/ul#  | 40       |
| 27) Indeno(1,2,3-cd)pyrene  | 26.525 | 276  | 2788     | 0.086 | ng/ul#  | 48       |
| 28) Dibenzo(a,h)anthracene  | 26.549 | 278  | 2233     | 0.084 | ng/ul#  | 52       |
| 29) Benzo(g,h,i)perylene    | 27.334 | 276  | 2460     | 0.092 | ng/ul#  | 81       |
| -----                       |        |      |          |       |         |          |

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

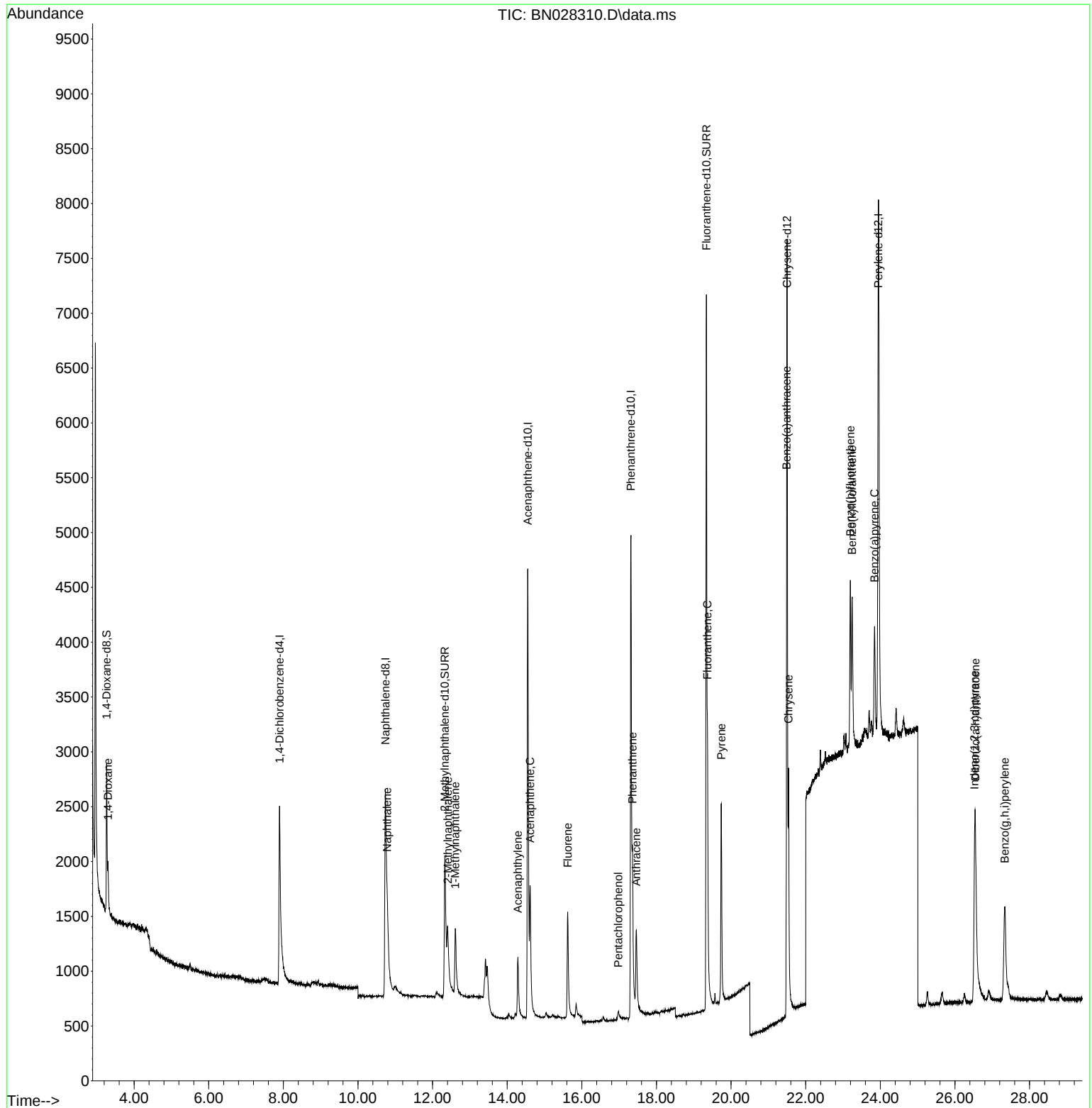
Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN101723\  
Data File : BN028310.D  
Acq On : 17 Oct 2023 16:01  
Operator : MA/JU  
Sample : 03573-03  
Misc : SFDAM-SIM-MDL-SOIL-01  
ALS Vial : 7 Sample Multiplier: 1

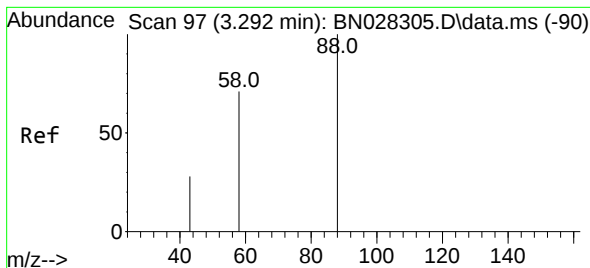
Instrument :  
BNA\_N  
ClientSampleId :  
MDL-SOIL-QT3-2023-05

Quant Time: Oct 17 16:39:09 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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Supervised By :mohammad ahmed 10/19/2023





#2

1,4-Dioxane

Concen: 0.095 ng/ul m

RT: 3.300 min Scan# 91

Delta R.T. -0.000 min

Lab File: BN028310.D

Acq: 17 Oct 2023 16:01

Instrument :

BNA\_N

ClientSampleId :

MDL-SOIL-QT3-2023-05

Tgt Ion: 88 Resp: 22

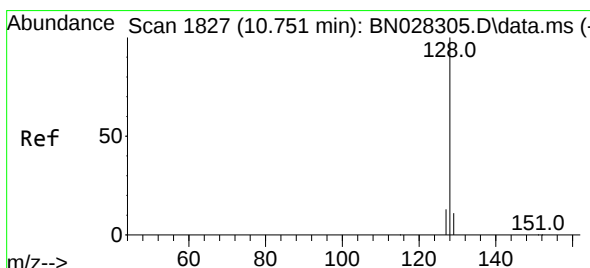
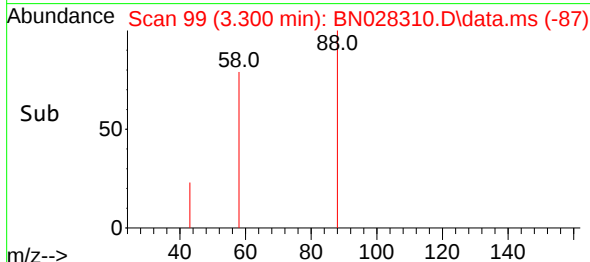
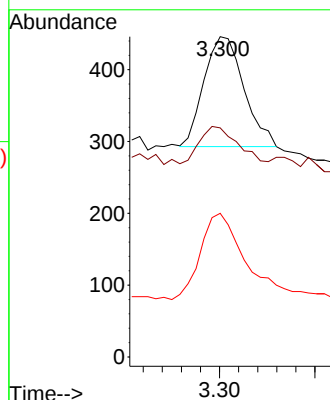
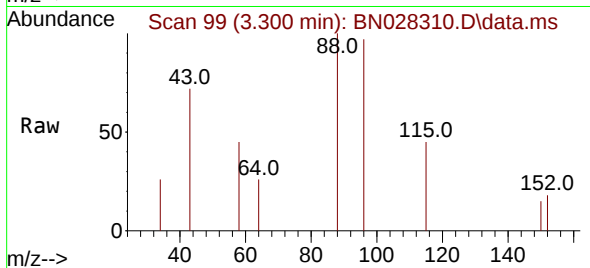
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 88  | 100   |       |       |
| 43  | 71.5  | 33.4  | 50.2  |
| 58  | 44.8  | 45.7  | 68.5  |

Manual Integrations

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#5

Naphthalene

Concen: 0.071 ng/ul

RT: 10.784 min Scan# 1833

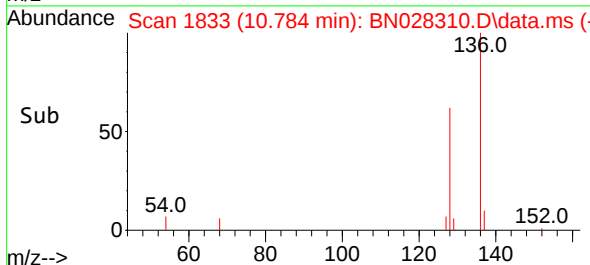
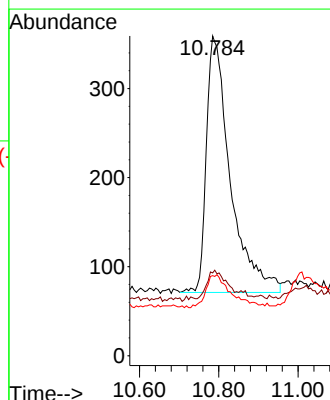
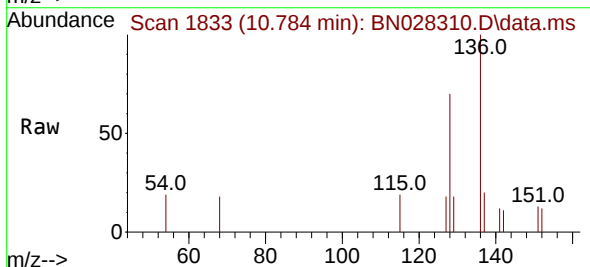
Delta R.T. 0.022 min

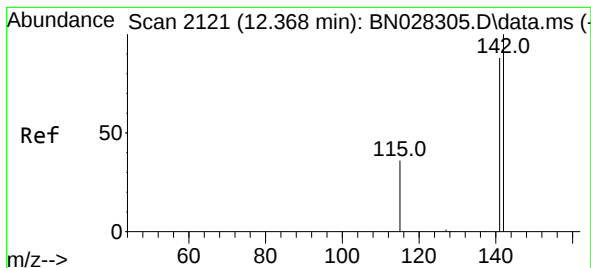
Lab File: BN028310.D

Acq: 17 Oct 2023 16:01

Tgt Ion:128 Resp: 1208

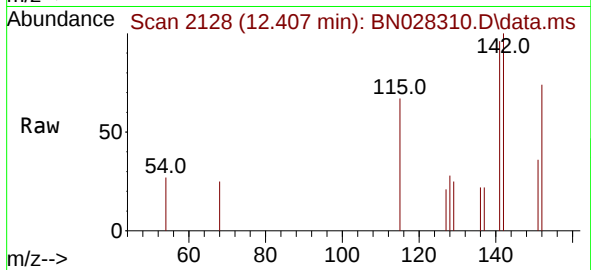
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 128 | 100   |       |       |
| 129 | 25.9  | 9.4   | 14.0# |
| 127 | 25.1  | 11.0  | 16.4# |





#7  
2-Methylnaphthalene  
Concen: 0.065 ng/ul  
RT: 12.407 min Scan# 2121  
Delta R.T. 0.027 min  
Lab File: BN028310.D  
Acq: 17 Oct 2023 16:01

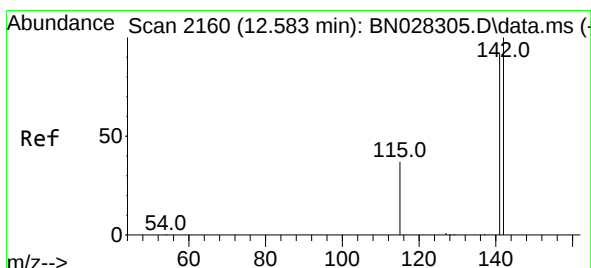
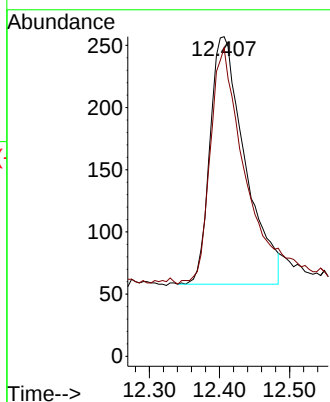
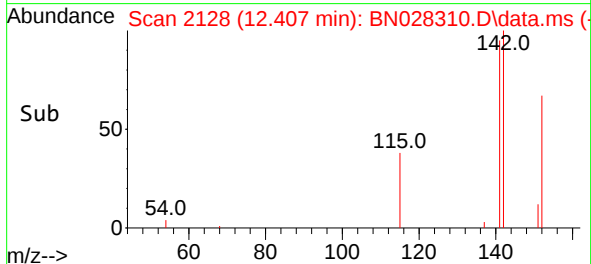
Instrument :  
BNA\_N  
ClientSampleId :  
MDL-SOIL-QT3-2023-05



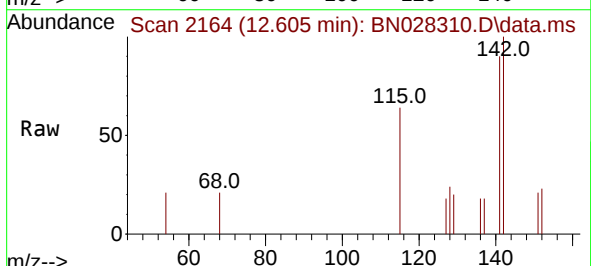
Tgt Ion:142 Resp: 692  
Ion Ratio Lower Upper  
142 100  
141 90.8 70.9 106.3

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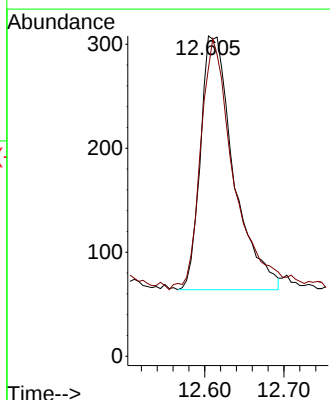
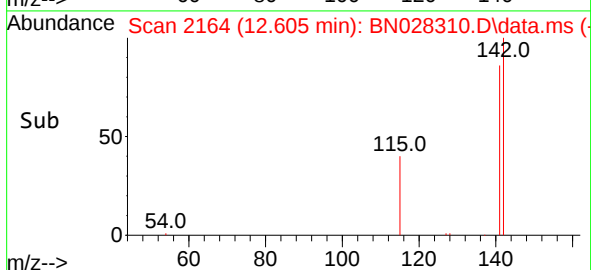
Reviewed By :Yogesh Patel 10/18/2023  
Supervised By :mohammad ahmed 10/19/2023

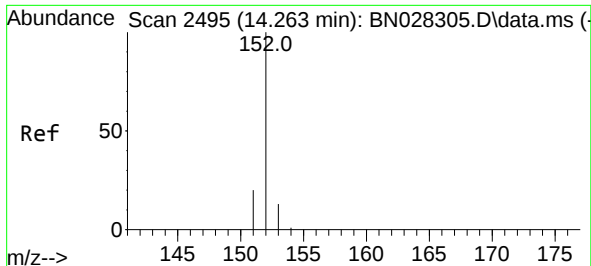


#8  
1-Methylnaphthalene  
Concen: 0.064 ng/ul  
RT: 12.605 min Scan# 2164  
Delta R.T. 0.011 min  
Lab File: BN028310.D  
Acq: 17 Oct 2023 16:01



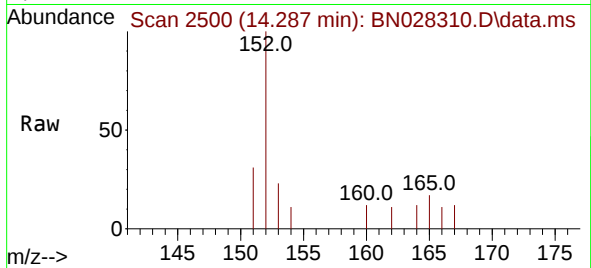
Tgt Ion:142 Resp: 710  
Ion Ratio Lower Upper  
142 100  
141 98.3 74.4 111.6





#10  
Acenaphthylene  
Concen: 0.070 ng/ul  
RT: 14.287 min Scan# 2500  
Delta R.T. 0.014 min  
Lab File: BN028310.D  
Acq: 17 Oct 2023 16:01

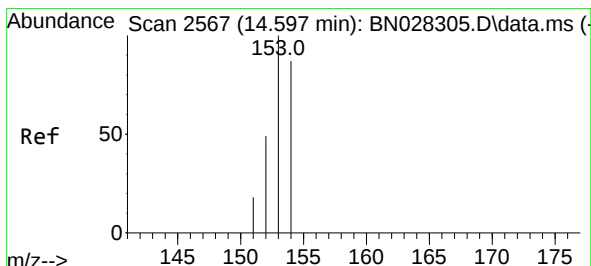
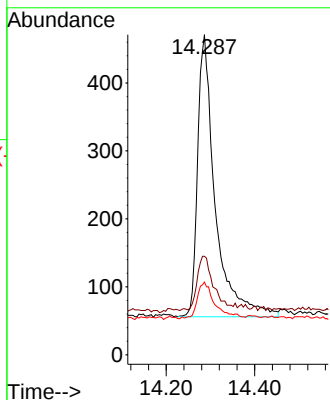
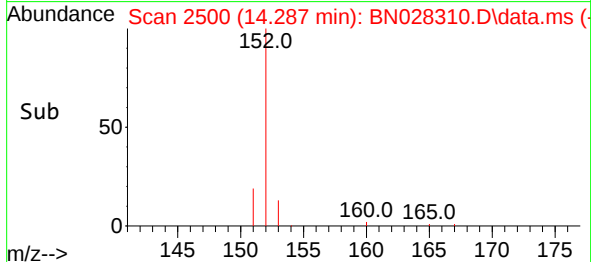
Instrument :  
BNA\_N  
ClientSampleId :  
MDL-SOIL-QT3-2023-05



Tgt Ion:152 Resp: 1144  
Ion Ratio Lower Upper  
152 100  
151 30.8 16.4 24.6  
153 22.7 10.9 16.3

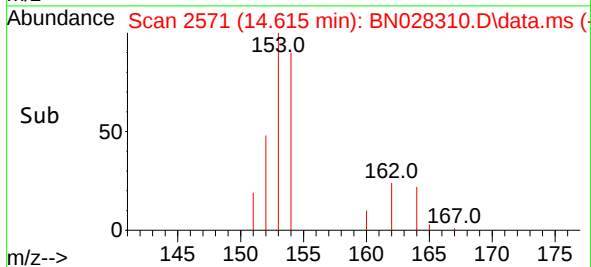
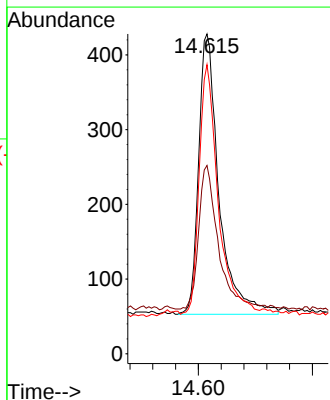
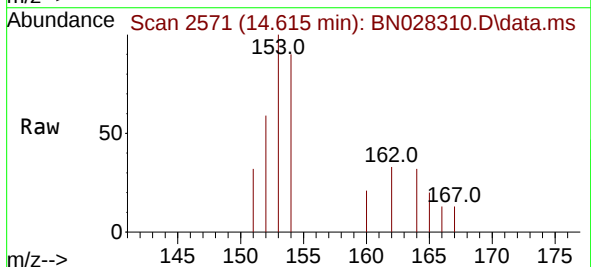
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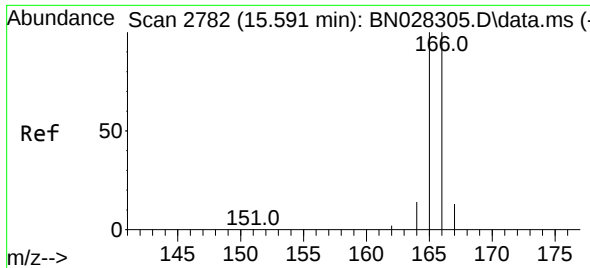
Reviewed By :Yogesh Patel 10/18/2023  
Supervised By :mohammad ahmed 10/19/2023



#11  
Acenaphthene  
Concen: 0.072 ng/ul  
RT: 14.615 min Scan# 2571  
Delta R.T. 0.009 min  
Lab File: BN028310.D  
Acq: 17 Oct 2023 16:01

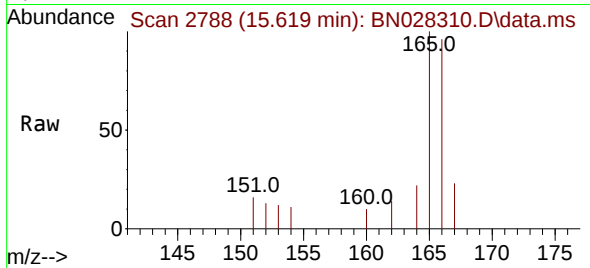
Tgt Ion:153 Resp: 932  
Ion Ratio Lower Upper  
153 100  
152 58.9 39.4 59.0  
154 90.4 70.2 105.4





#12  
Fluorene  
Concen: 0.072 ng/ul  
RT: 15.619 min Scan# 2782  
Delta R.T. 0.018 min  
Lab File: BN028310.D  
Acq: 17 Oct 2023 16:01

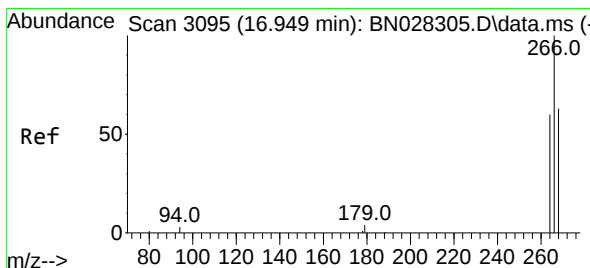
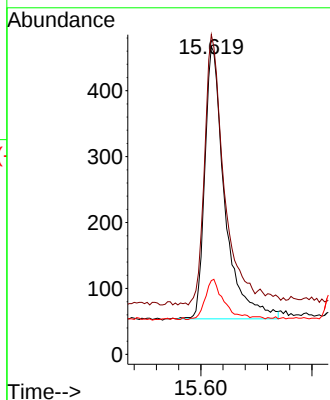
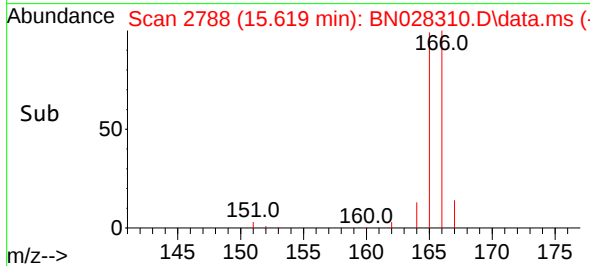
Instrument :  
BNA\_N  
ClientSampleId :  
MDL-SOIL-QT3-2023-05



Tgt Ion:166 Resp: 1030  
Ion Ratio Lower Upper  
166 100  
165 103.9 78.5 117.7  
167 24.0 11.2 16.8

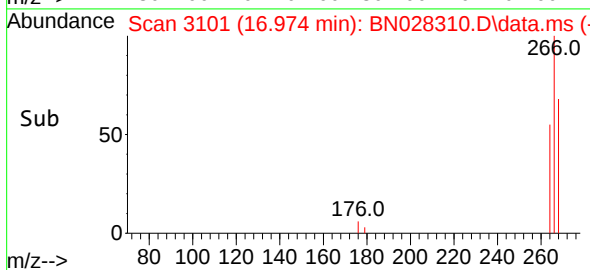
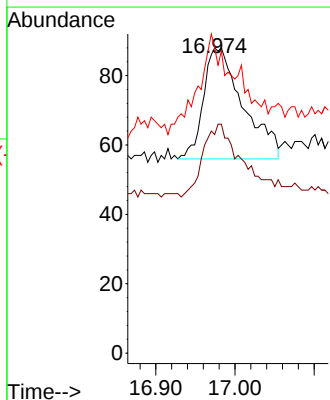
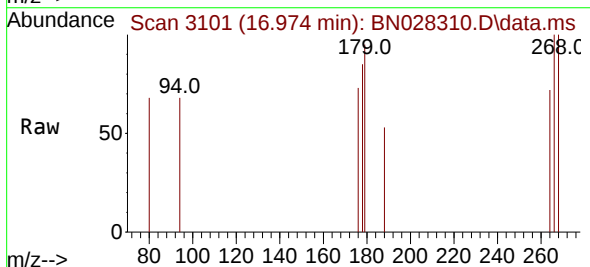
Manual Integrations  
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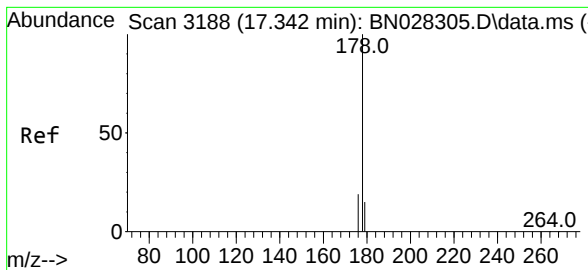
Reviewed By :Yogesh Patel 10/18/2023  
Supervised By :mohammad ahmed 10/19/2023



#14  
Pentachlorophenol  
Concen: 0.068 ng/ul  
RT: 16.974 min Scan# 3101  
Delta R.T. 0.013 min  
Lab File: BN028310.D  
Acq: 17 Oct 2023 16:01

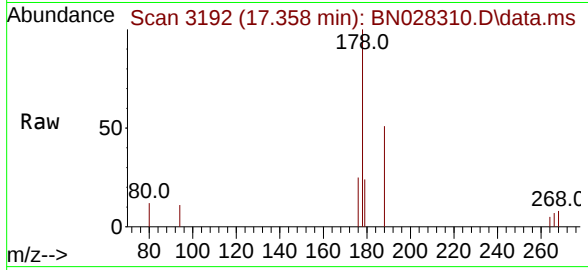
Tgt Ion:266 Resp: 112  
Ion Ratio Lower Upper  
266 100  
264 66.1 49.6 74.4  
268 98.2 52.2 78.4





#15  
Phenanthrene  
Concen: 0.073 ng/u1  
RT: 17.358 min Scan# 3188  
Delta R.T. 0.013 min  
Lab File: BN028310.D  
Acq: 17 Oct 2023 16:01

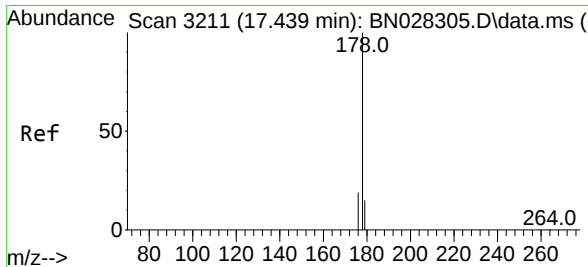
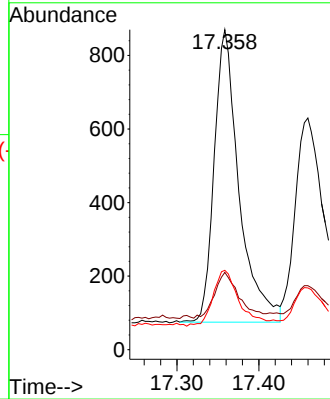
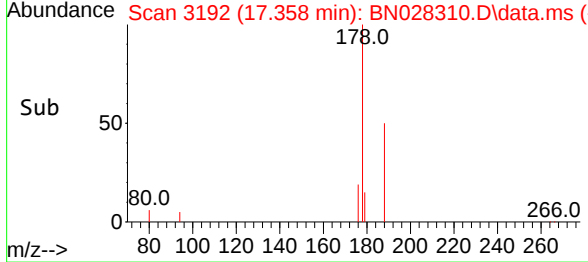
Instrument :  
BNA\_N  
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MDL-SOIL-QT3-2023-05



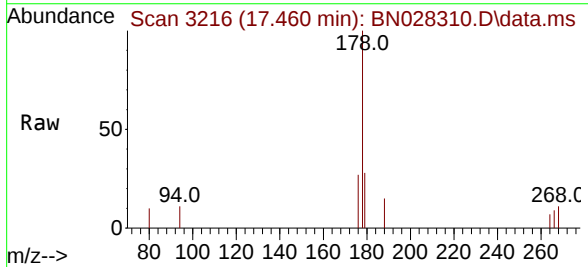
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Ion Ratio Lower Upper  
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176 24.8 15.5 23.3#

Manual Integrations  
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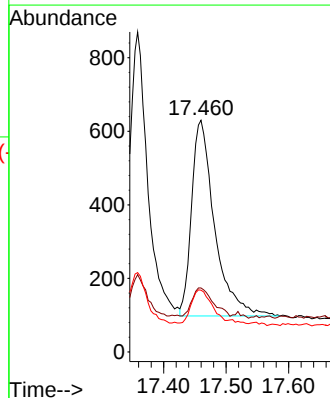
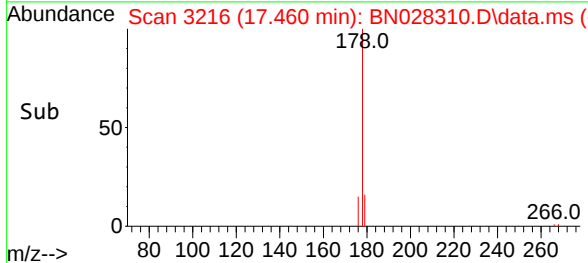
Reviewed By :Yogesh Patel 10/18/2023  
Supervised By :mohammad ahmed 10/19/2023

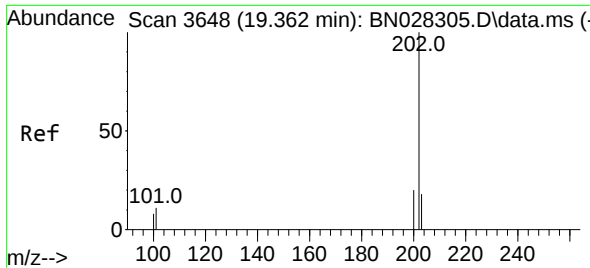


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Anthracene  
Concen: 0.066 ng/u1  
RT: 17.460 min Scan# 3216  
Delta R.T. 0.017 min  
Lab File: BN028310.D  
Acq: 17 Oct 2023 16:01



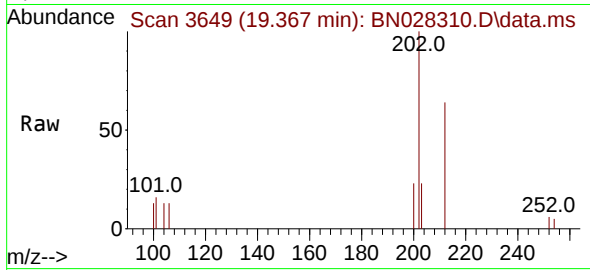
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Ion Ratio Lower Upper  
178 100  
179 27.6 12.8 19.2#  
176 26.7 15.0 22.6#





#19  
Fluoranthene  
Concen: 0.068 ng/u1  
RT: 19.367 min Scan# 3649  
Delta R.T. 0.000 min  
Lab File: BN028310.D  
Acq: 17 Oct 2023 16:01

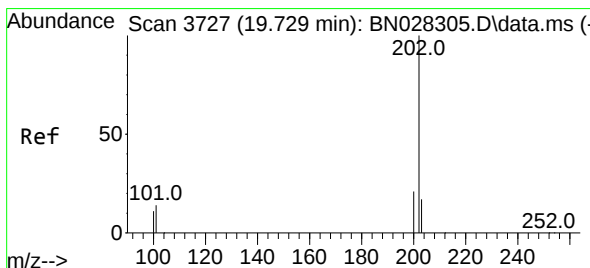
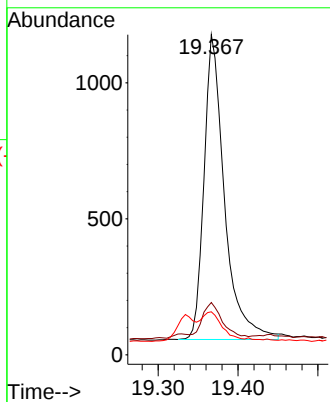
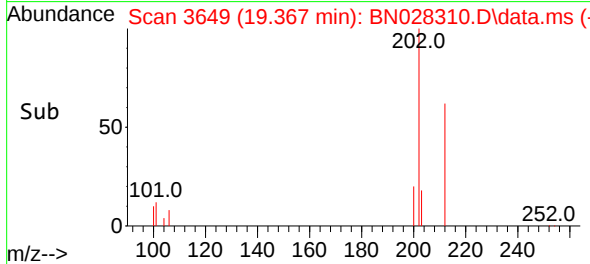
Instrument :  
BNA\_N  
ClientSampleId :  
MDL-SOIL-QT3-2023-05



Tgt Ion:202 Resp: 1992  
Ion Ratio Lower Upper  
202 100  
101 16.3 9.6 14.4#  
100 13.4 7.4 11.0#

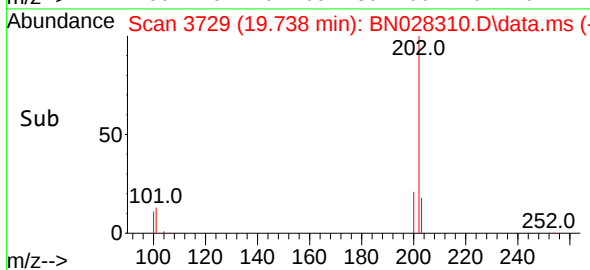
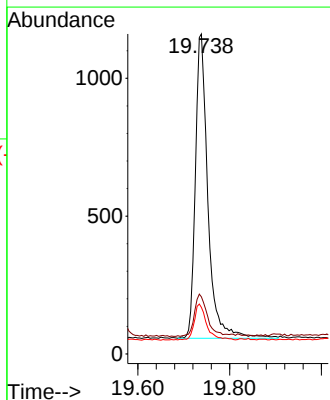
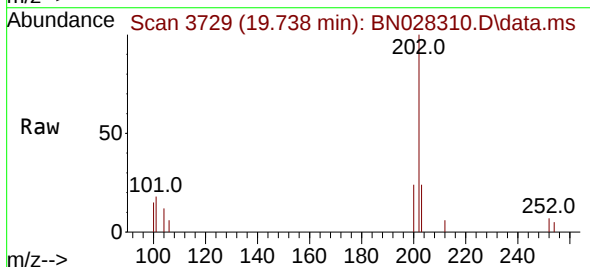
Manual Integrations  
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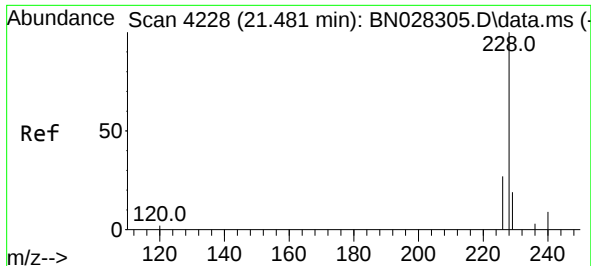
Reviewed By :Yogesh Patel 10/18/2023  
Supervised By :mohammad ahmed 10/19/2023



#20  
Pyrene  
Concen: 0.069 ng/u1  
RT: 19.738 min Scan# 3729  
Delta R.T. 0.005 min  
Lab File: BN028310.D  
Acq: 17 Oct 2023 16:01

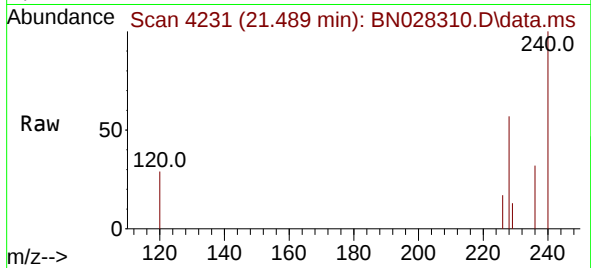
Tgt Ion:202 Resp: 2092  
Ion Ratio Lower Upper  
202 100  
101 17.8 11.2 16.8#  
100 14.6 9.1 13.7#





#21  
Benzo(a)anthracene  
Concen: 0.067 ng/u1  
RT: 21.489 min Scan# 4228  
Delta R.T. 0.006 min  
Lab File: BN028310.D  
Acq: 17 Oct 2023 16:01

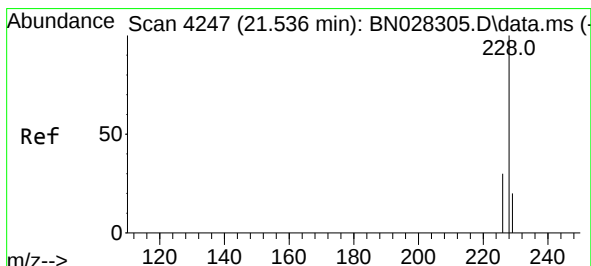
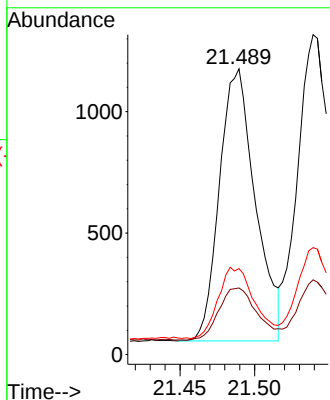
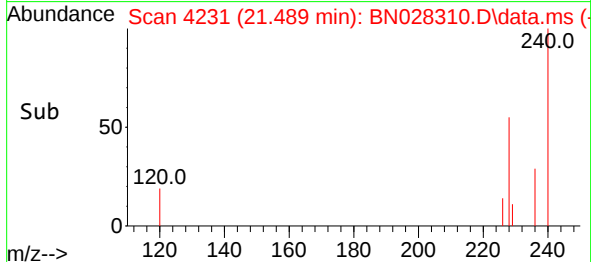
Instrument :  
BNA\_N  
ClientSampleId :  
MDL-SOIL-QT3-2023-05



Tgt Ion:228 Resp: 187  
Ion Ratio Lower Upper  
228 100  
229 23.3 16.0 24.0  
226 30.1 21.5 32.3

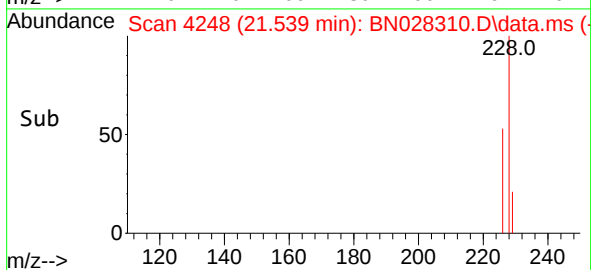
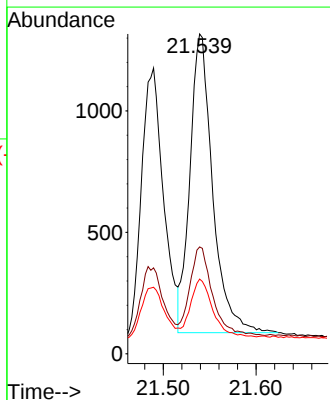
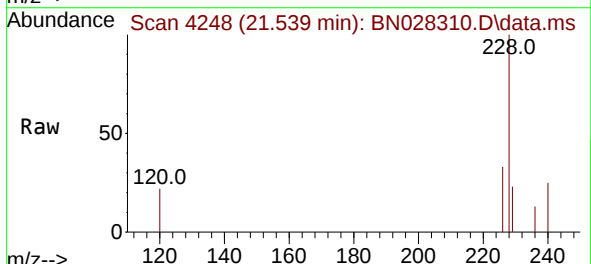
Manual Integrations  
APPROVED

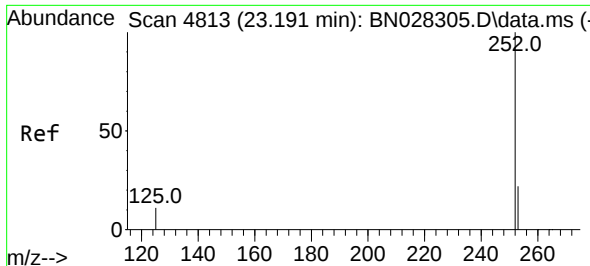
Reviewed By :Yogesh Patel 10/18/2023  
Supervised By :mohammad ahmed 10/19/2023



#22  
Chrysene  
Concen: 0.074 ng/u1  
RT: 21.539 min Scan# 4248  
Delta R.T. 0.003 min  
Lab File: BN028310.D  
Acq: 17 Oct 2023 16:01

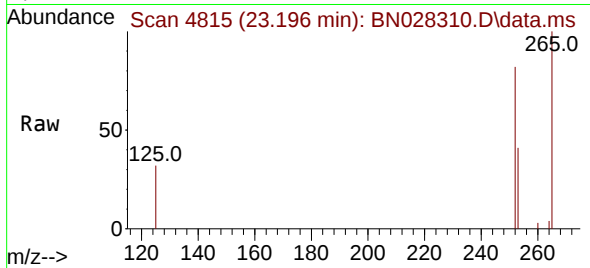
Tgt Ion:228 Resp: 2097  
Ion Ratio Lower Upper  
228 100  
226 33.4 23.8 35.8  
229 23.4 16.0 24.0





#24  
Benzo(b)fluoranthene  
Concen: 0.070 ng/ul  
RT: 23.196 min Scan# 4813  
Delta R.T. 0.003 min  
Lab File: BN028310.D  
Acq: 17 Oct 2023 16:01

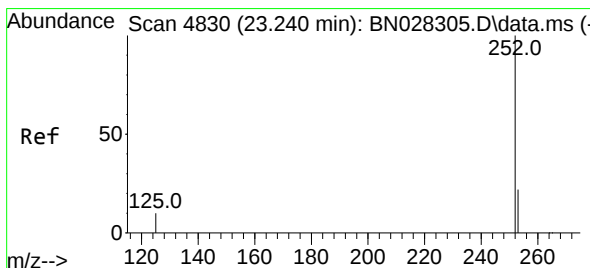
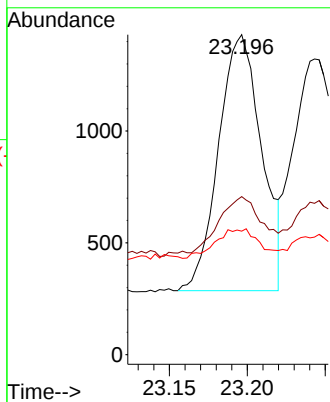
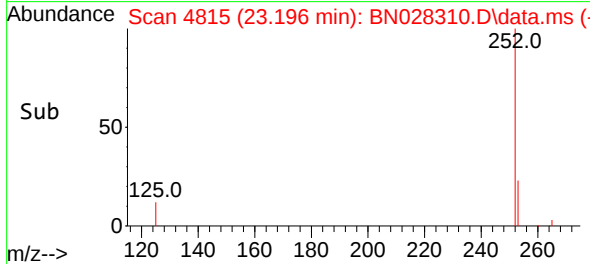
Instrument :  
BNA\_N  
ClientSampleId :  
MDL-SOIL-QT3-2023-05



Tgt Ion:252 Resp: 2200  
Ion Ratio Lower Upper  
252 100  
253 49.4 0.0 54.0  
125 38.6 0.0 31.4

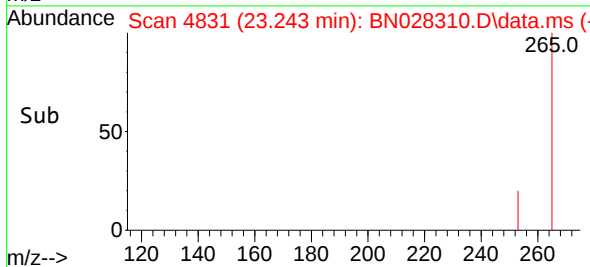
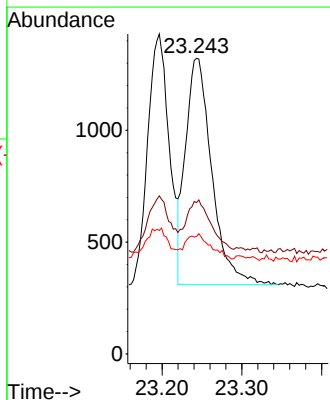
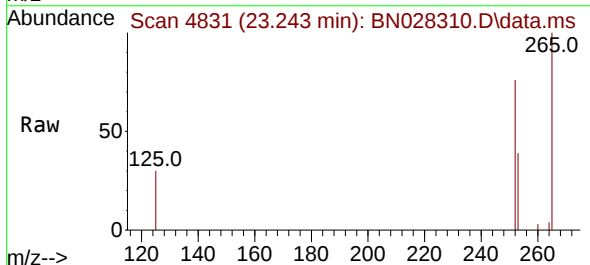
Manual Integrations  
APPROVED

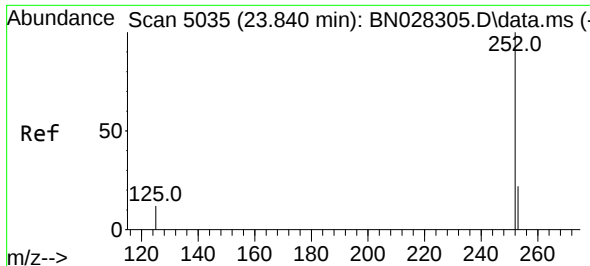
Reviewed By :Yogesh Patel 10/18/2023  
Supervised By :mohammad ahmed 10/19/2023



#25  
Benzo(k)fluoranthene  
Concen: 0.074 ng/ul  
RT: 23.243 min Scan# 4831  
Delta R.T. 0.003 min  
Lab File: BN028310.D  
Acq: 17 Oct 2023 16:01

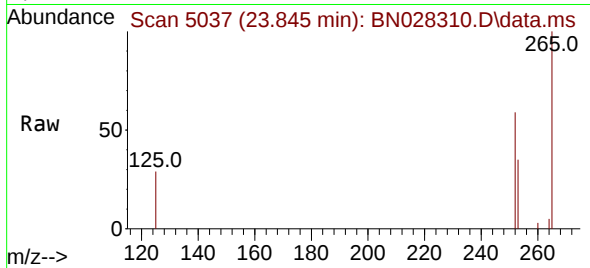
Tgt Ion:252 Resp: 2322  
Ion Ratio Lower Upper  
252 100  
253 51.2 21.8 32.8#  
125 39.8 12.8 19.2#





#26  
Benzo(a)pyrene  
Concen: 0.078 ng/ul  
RT: 23.845 min Scan# 5035  
Delta R.T. 0.003 min  
Lab File: BN028310.D  
Acq: 17 Oct 2023 16:01

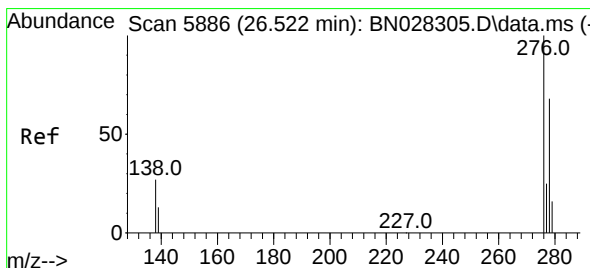
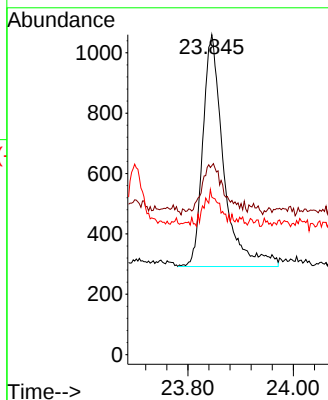
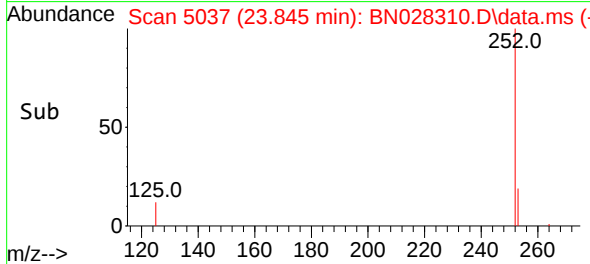
Instrument :  
BNA\_N  
ClientSampleId :  
MDL-SOIL-QT3-2023-05



Tgt Ion:252 Resp: 209  
Ion Ratio Lower Upper  
252 100  
253 59.1 23.4 35.2  
125 49.2 15.3 22.9

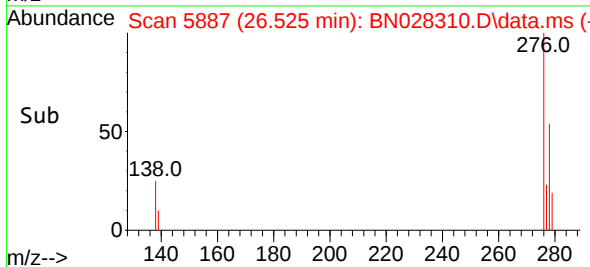
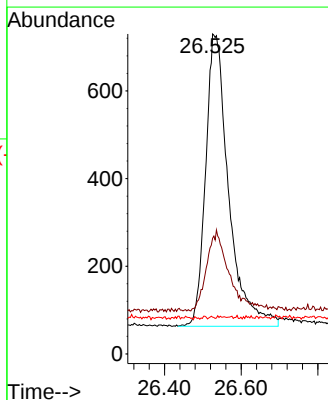
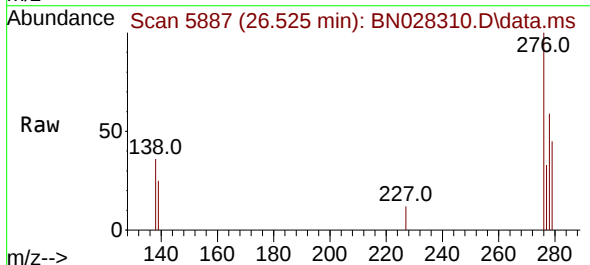
Manual Integrations  
APPROVED

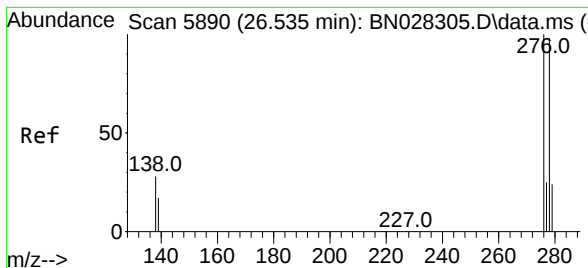
Reviewed By :Yogesh Patel 10/18/2023  
Supervised By :mohammad ahmed 10/19/2023



#27  
Indeno(1,2,3-cd)pyrene  
Concen: 0.086 ng/ul  
RT: 26.525 min Scan# 5887  
Delta R.T. 0.000 min  
Lab File: BN028310.D  
Acq: 17 Oct 2023 16:01

Tgt Ion:276 Resp: 2788  
Ion Ratio Lower Upper  
276 100  
138 0.0 21.6 32.4  
227 0.2 0.2 0.2





#28

Dibenzo(a,h)anthracene

Concen: 0.084 ng/ul

RT: 26.549 min Scan# 5894

Delta R.T. 0.004 min

Lab File: BN028310.D

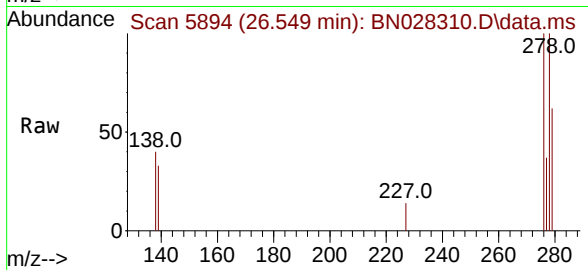
Acq: 17 Oct 2023 16:01

Instrument :

BNA\_N

ClientSampleId :

MDL-SOIL-QT3-2023-05



Tgt Ion:278 Resp: 223

Ion Ratio Lower Upper

278 100

139 32.9 15.9 23.9

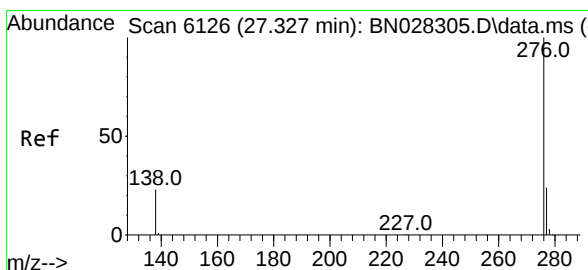
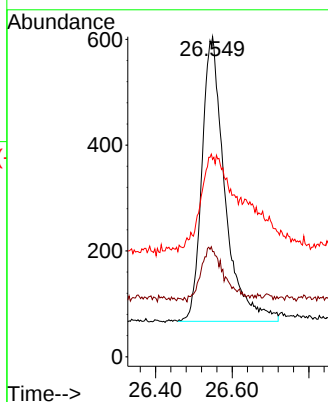
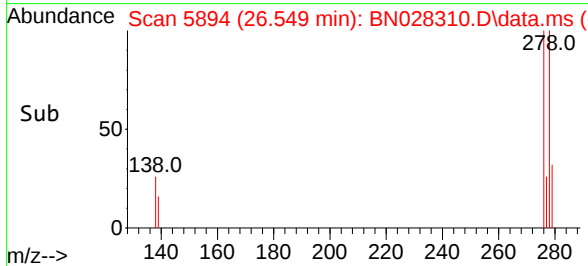
279 61.7 22.8 34.2

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 10/18/2023

Supervised By :mohammad ahmed 10/19/2023



#29

Benzo(g,h,i)perylene

Concen: 0.092 ng/ul

RT: 27.334 min Scan# 6128

Delta R.T. 0.004 min

Lab File: BN028310.D

Acq: 17 Oct 2023 16:01

Tgt Ion:276 Resp: 2460

Ion Ratio Lower Upper

276 100

138 35.3 19.8 29.6

277 34.6 20.6 31.0

