

Data Path : Z:\svoasrv\HPCHEM1\BNA\_F\Data\BF061423\  
 Data File : BF133756.D  
 Acq On : 14 Jun 2023 17:45  
 Operator : CG\JU  
 Sample : 03114-02MSD  
 Misc :  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 MARION-SOIL-0609MSD

Quant Time: Jun 15 01:28:02 2023  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_F\Methods\8270-BF060923.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Jun 14 16:27:59 2023  
 Response via : Initial Calibration

### Manual Integrations APPROVED

Reviewed By :Yogesh Patel 06/15/2023  
 Supervised By :mohammad ahmed 06/16/2023

| Compound                      | R.T.   | QIon | Response | Conc    | Units | Dev(Min) |
|-------------------------------|--------|------|----------|---------|-------|----------|
| -----                         |        |      |          |         |       |          |
| Internal Standards            |        |      |          |         |       |          |
| 1) 1,4-Dichlorobenzene-d4     | 6.833  | 152  | 125476   | 20.000  | ng    | 0.00     |
| 21) Naphthalene-d8            | 8.116  | 136  | 470562   | 20.000  | ng    | 0.00     |
| 39) Acenaphthene-d10          | 9.874  | 164  | 213555   | 20.000  | ng    | 0.00     |
| 64) Phenanthrene-d10          | 11.357 | 188  | 362450   | 20.000  | ng    | 0.00     |
| 76) Chrysene-d12              | 14.004 | 240  | 238198   | 20.000  | ng    | # 0.00   |
| 86) Perylene-d12              | 15.468 | 264  | 277233   | 20.000  | ng    | 0.00     |
| System Monitoring Compounds   |        |      |          |         |       |          |
| 5) 2-Fluorophenol             | 5.463  | 112  | 723685   | 100.407 | ng    | 0.02     |
| 7) Phenol-d6                  | 6.469  | 99   | 820406   | 87.447  | ng    | 0.00     |
| 23) Nitrobenzene-d5           | 7.398  | 82   | 648852   | 75.104  | ng    | 0.00     |
| 42) 2,4,6-Tribromophenol      | 10.663 | 330  | 258612   | 95.668  | ng    | 0.00     |
| 45) 2-Fluorobiphenyl          | 9.192  | 172  | 1127569  | 75.056  | ng    | 0.00     |
| 79) Terphenyl-d14             | 12.945 | 244  | 980700   | 63.707  | ng    | 0.00     |
| Target Compounds              |        |      |          |         |       |          |
|                               |        |      |          |         |       | Qvalue   |
| 2) 1,4-Dioxane                | 2.751  | 88   | 99184    | 31.301  | ng    | # 79     |
| 3) Pyridine                   | 3.463  | 79   | 239090   | 25.887  | ng    | 99       |
| 4) n-Nitrosodimethylamine     | 3.393  | 42   | 186473   | 36.526  | ng    | 98       |
| 6) Aniline                    | 6.498  | 93   | 194127   | 16.428  | ng    | 96       |
| 8) 2-Chlorophenol             | 6.616  | 128  | 293734   | 38.672  | ng    | 99       |
| 9) Benzaldehyde               | 6.386  | 77   | 90433    | 14.529  | ng    | 97       |
| 10) Phenol                    | 6.481  | 94   | 309535   | 31.597  | ng    | 95       |
| 11) bis(2-Chloroethyl)ether   | 6.575  | 93   | 275463   | 37.876  | ng    | 99       |
| 12) 1,3-Dichlorobenzene       | 6.775  | 146  | 307335   | 37.870  | ng    | 98       |
| 13) 1,4-Dichlorobenzene       | 6.851  | 146  | 314215   | 38.307  | ng    | 98       |
| 14) 1,2-Dichlorobenzene       | 7.004  | 146  | 300351   | 40.524  | ng    | 98       |
| 15) Benzyl Alcohol            | 6.975  | 79   | 283822   | 38.734  | ng    | 99       |
| 16) 2,2'-oxybis(1-Chloropr... | 7.110  | 45   | 490723   | 39.804  | ng    | 99       |
| 17) 2-Methylphenol            | 7.086  | 107  | 239094   | 35.514  | ng    | 99       |
| 18) Hexachloroethane          | 7.345  | 117  | 117066   | 41.689  | ng    | 97       |
| 19) n-Nitroso-di-n-propyla... | 7.251  | 70   | 218808   | 36.657  | ng    | 99       |
| 20) 3+4-Methylphenols         | 7.239  | 107  | 287222   | 32.795  | ng    | 91       |
| 22) Acetophenone              | 7.245  | 105  | 415711   | 38.518  | ng    | 97       |
| 24) Nitrobenzene              | 7.422  | 77   | 328540   | 37.766  | ng    | 99       |
| 25) Isophorone                | 7.657  | 82   | 579751   | 36.552  | ng    | 99       |
| 26) 2-Nitrophenol             | 7.733  | 139  | 161592   | 41.389  | ng    | 98       |
| 27) 2,4-Dimethylphenol        | 7.769  | 122  | 255607   | 37.984  | ng    | 100      |
| 28) bis(2-Chloroethoxy)met... | 7.869  | 93   | 339724   | 37.059  | ng    | 99       |
| 29) 2,4-Dichlorophenol        | 7.975  | 162  | 245881   | 37.282  | ng    | 98       |
| 30) 1,2,4-Trichlorobenzene    | 8.057  | 180  | 260286   | 37.827  | ng    | 100      |
| 31) Naphthalene               | 8.139  | 128  | 827806   | 36.108  | ng    | 99       |
| 32) Benzoic acid              | 7.875  | 122  | 103742   | 24.444  | ng    | 98       |
| 33) 4-Chloroaniline           | 8.186  | 127  | 61565    | 6.280   | ng    | 96       |
| 34) Hexachlorobutadiene       | 8.251  | 225  | 163604   | 36.315  | ng    | 100      |
| 35) Caprolactam               | 8.557  | 113  | 68925m   | 31.058  | ng    |          |
| 36) 4-Chloro-3-methylphenol   | 8.669  | 107  | 270762   | 35.617  | ng    | 95       |
| 37) 2-Methylnaphthalene       | 8.827  | 142  | 555010   | 34.843  | ng    | 98       |
| 38) 1-Methylnaphthalene       | 8.927  | 142  | 519281   | 35.427  | ng    | 98       |
| 40) 1,2,4,5-Tetrachloroben... | 8.998  | 216  | 259233   | 39.930  | ng    | 98       |
| 41) Hexachlorocyclopentadiene | 8.980  | 237  | 232622   | 80.404  | ng    | 98       |
| 43) 2,4,6-Trichlorophenol     | 9.110  | 196  | 169026   | 38.961  | ng    | 96       |

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 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Jun 14 16:27:59 2023  
 Response via : Initial Calibration

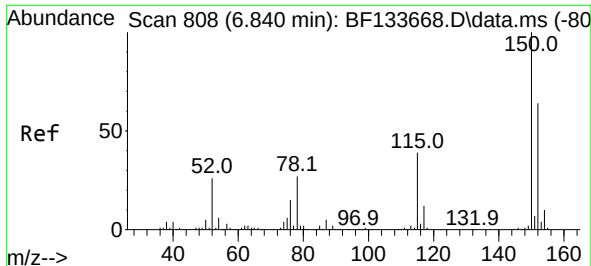
Manual Integrations  
 APPROVED

Reviewed By :Yogesh Patel 06/15/2023  
 Supervised By :mohammad ahmed 06/16/2023

| Compound                      | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------------|--------|------|----------|--------|-------|----------|
| 44) 2,4,5-Trichlorophenol     | 9.151  | 196  | 180701   | 35.802 | ng    | 99       |
| 46) 1,1'-Biphenyl             | 9.292  | 154  | 696708   | 40.451 | ng    | 99       |
| 47) 2-Chloronaphthalene       | 9.322  | 162  | 503480   | 40.752 | ng    | 99       |
| 48) 2-Nitroaniline            | 9.416  | 65   | 176051   | 38.963 | ng    | 98       |
| 49) Acenaphthylene            | 9.733  | 152  | 809374   | 37.639 | ng    | 99       |
| 50) Dimethylphthalate         | 9.598  | 163  | 605421   | 37.981 | ng    | 99       |
| 51) 2,6-Dinitrotoluene        | 9.657  | 165  | 129049   | 39.222 | ng    | # 71     |
| 52) Acenaphthene              | 9.910  | 154  | 498252   | 39.586 | ng    | 99       |
| 53) 3-Nitroaniline            | 9.827  | 138  | 74137    | 18.516 | ng    | 95       |
| 54) 2,4-Dinitrophenol         | 9.933  | 184  | 75622    | 49.390 | ng    | 97       |
| 55) Dibenzofuran              | 10.080 | 168  | 730233   | 38.021 | ng    | 97       |
| 56) 4-Nitrophenol             | 9.992  | 139  | 176158   | 65.190 | ng    | 85       |
| 57) 2,4-Dinitrotoluene        | 10.063 | 165  | 164315   | 39.268 | ng    | 99       |
| 58) Fluorene                  | 10.422 | 166  | 555203   | 37.801 | ng    | 99       |
| 59) 2,3,4,6-Tetrachlorophenol | 10.198 | 232  | 142609   | 37.740 | ng    | 96       |
| 60) Diethylphthalate          | 10.292 | 149  | 613178   | 37.796 | ng    | 98       |
| 61) 4-Chlorophenyl-phenyle... | 10.416 | 204  | 271106   | 37.390 | ng    | 98       |
| 62) 4-Nitroaniline            | 10.445 | 138  | 124980   | 31.836 | ng    | 97       |
| 63) Azobenzene                | 10.574 | 77   | 566654   | 36.896 | ng    | 98       |
| 65) 4,6-Dinitro-2-methylph... | 10.469 | 198  | 58971    | 34.049 | ng    | # 75     |
| 66) n-Nitrosodiphenylamine    | 10.533 | 169  | 492452   | 40.449 | ng    | 99       |
| 67) 4-Bromophenyl-phenylether | 10.904 | 248  | 161410   | 39.899 | ng    | 98       |
| 68) Hexachlorobenzene         | 10.969 | 284  | 173376   | 40.755 | ng    | 99       |
| 69) Atrazine                  | 11.063 | 200  | 154048   | 43.609 | ng    | 97       |
| 70) Pentachlorophenol         | 11.163 | 266  | 162407   | 63.755 | ng    | 99       |
| 71) Phenanthrene              | 11.386 | 178  | 710332   | 38.628 | ng    | 100      |
| 72) Anthracene                | 11.439 | 178  | 727354   | 37.935 | ng    | 98       |
| 73) Carbazole                 | 11.592 | 167  | 648628   | 36.321 | ng    | 99       |
| 74) Di-n-butylphthalate       | 11.921 | 149  | 858576   | 37.503 | ng    | 99       |
| 75) Fluoranthene              | 12.574 | 202  | 681984   | 34.924 | ng    | 99       |
| 77) Benzidine                 | 12.698 | 184  | 159699   | 19.980 | ng    | 99       |
| 78) Pyrene                    | 12.804 | 202  | 684961   | 30.869 | ng    | 100      |
| 80) Butylbenzylphthalate      | 13.421 | 149  | 307586   | 32.836 | ng    | 95       |
| 81) Benzo(a)anthracene        | 13.998 | 228  | 631536   | 38.330 | ng    | 99       |
| 82) 3,3'-Dichlorobenzidine    | 13.957 | 252  | 143452   | 26.188 | ng    | # 99     |
| 83) Chrysene                  | 14.033 | 228  | 586710   | 37.649 | ng    | 99       |
| 84) Bis(2-ethylhexyl)phtha... | 13.980 | 149  | 424619   | 36.814 | ng    | 97       |
| 85) Di-n-octyl phthalate      | 14.598 | 149  | 788899   | 48.131 | ng    | 98       |
| 87) Indeno(1,2,3-cd)pyrene    | 16.933 | 276  | 656017   | 34.395 | ng    | 99       |
| 88) Benzo(b)fluoranthene      | 15.045 | 252  | 699009   | 41.507 | ng    | 98       |
| 89) Benzo(k)fluoranthene      | 15.074 | 252  | 634814   | 38.697 | ng    | 98       |
| 90) Benzo(a)pyrene            | 15.409 | 252  | 592679   | 37.921 | ng    | 98       |
| 91) Dibenzo(a,h)anthracene    | 16.950 | 278  | 561492   | 35.559 | ng    | 99       |
| 92) Benzo(g,h,i)perylene      | 17.374 | 276  | 487483   | 31.138 | ng    | 98       |

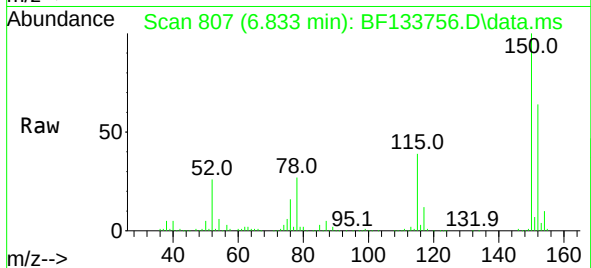
(#) = qualifier out of range (m) = manual integration (+) = signals summed





#1  
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.833 min Scan# 80  
Delta R.T. -0.000 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45

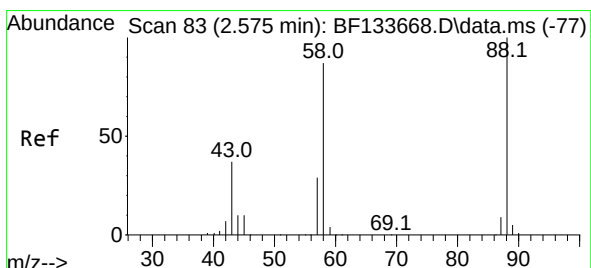
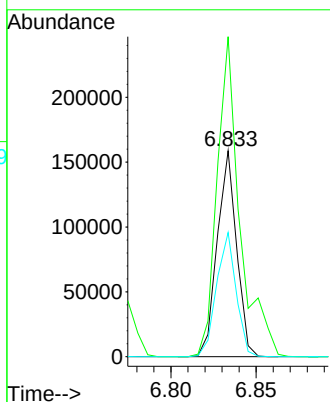
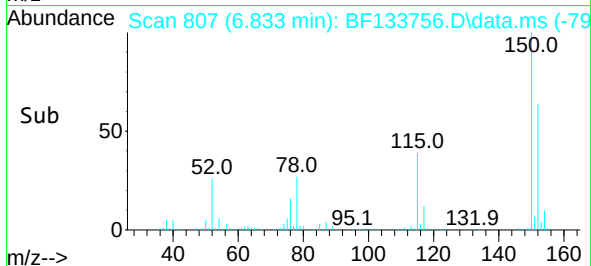
Instrument :  
BNA\_F  
ClientSampleId :  
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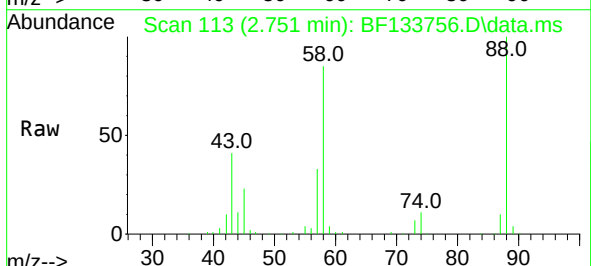
Tgt Ion:152 Resp: 125470  
Ion Ratio Lower Upper  
152 100  
150 155.4 124.3 186.5  
115 60.3 48.5 72.7

Manual Integrations  
APPROVED

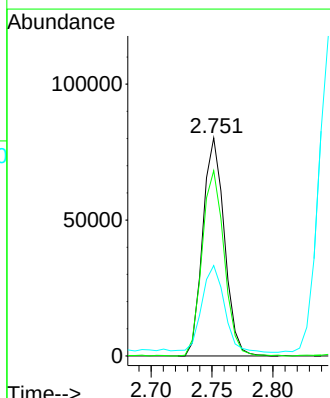
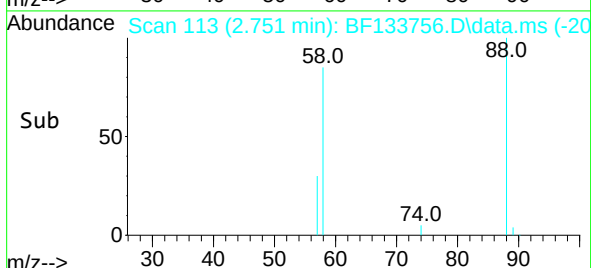
Reviewed By :Yogesh Patel 06/15/2023  
Supervised By :mohammad ahmed 06/16/2023

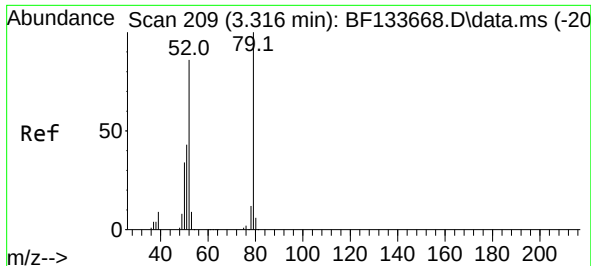


#2  
1,4-Dioxane  
Concen: 31.301 ng  
RT: 2.751 min Scan# 113  
Delta R.T. 0.200 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45



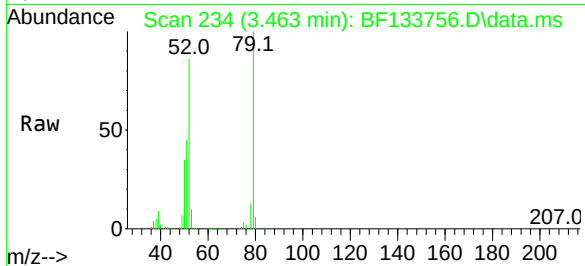
Tgt Ion: 88 Resp: 99184  
Ion Ratio Lower Upper  
88 100  
58 87.1 67.8 101.6  
43 0.0 29.8 44.6#





#3  
Pyridine  
Concen: 25.887 ng  
RT: 3.463 min Scan# 211  
Delta R.T. 0.159 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45

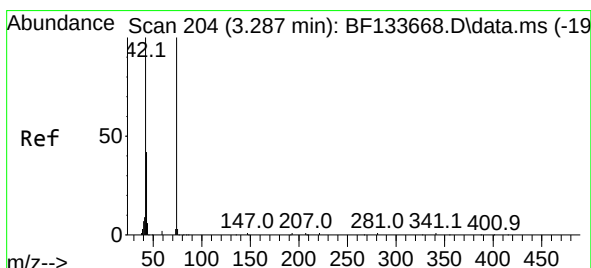
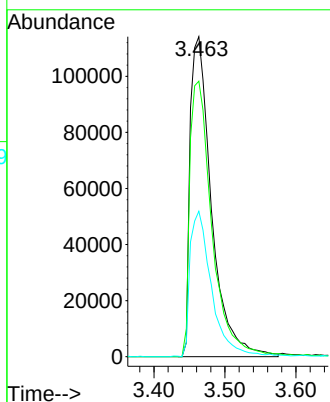
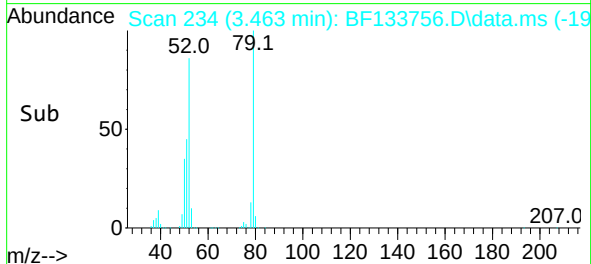
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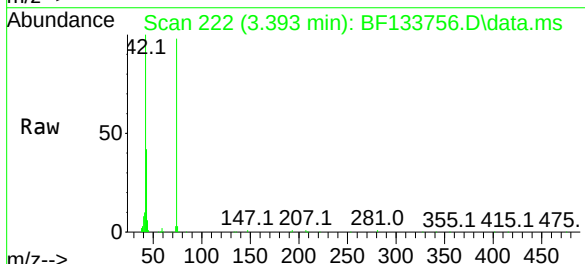
Tgt Ion: 79 Resp: 239090  
Ion Ratio Lower Upper  
79 100  
52 86.1 68.6 102.8  
51 45.5 34.8 52.2

Manual Integrations  
APPROVED

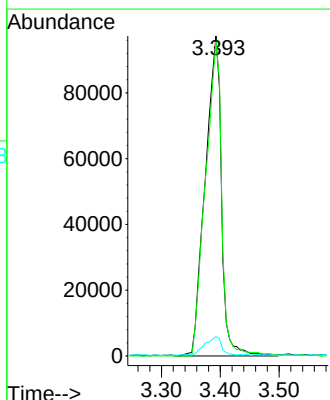
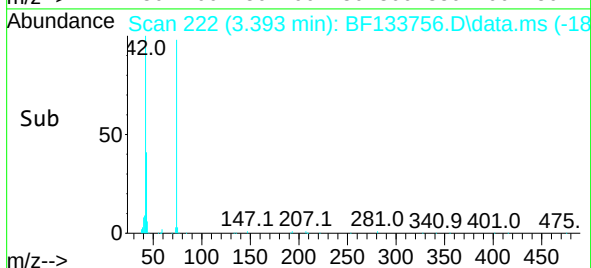
Reviewed By :Yogesh Patel 06/15/2023  
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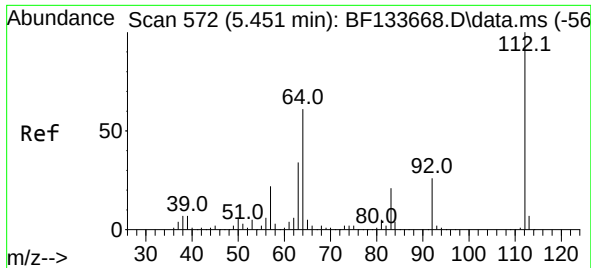


#4  
n-Nitrosodimethylamine  
Concen: 36.526 ng  
RT: 3.393 min Scan# 222  
Delta R.T. 0.135 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45



Tgt Ion: 42 Resp: 186473  
Ion Ratio Lower Upper  
42 100  
74 98.2 79.8 119.8  
44 6.1 4.7 7.1





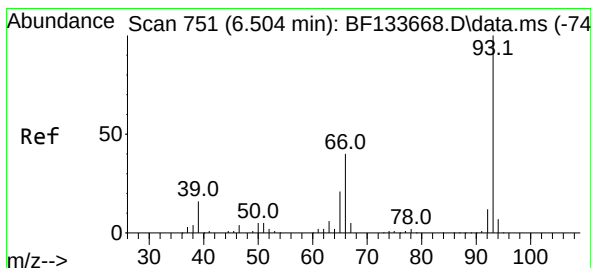
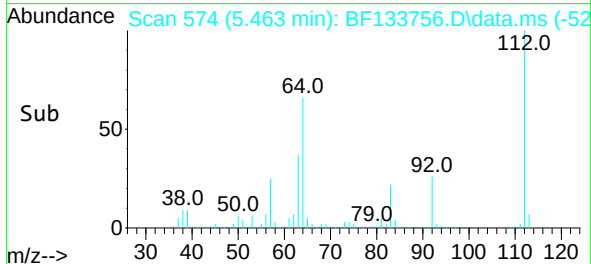
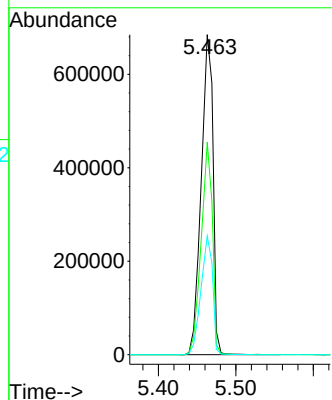
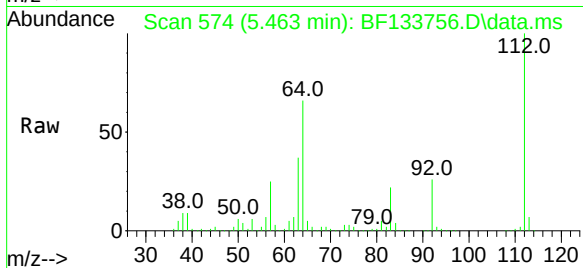
#5  
2-Fluorophenol  
Concen: 100.407 ng  
RT: 5.463 min Scan# 51  
Delta R.T. 0.018 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45

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Tgt Ion:112 Resp: 72368  
Ion Ratio Lower Upper  
112 100  
64 66.3 49.0 73.4  
63 37.1 26.8 40.2

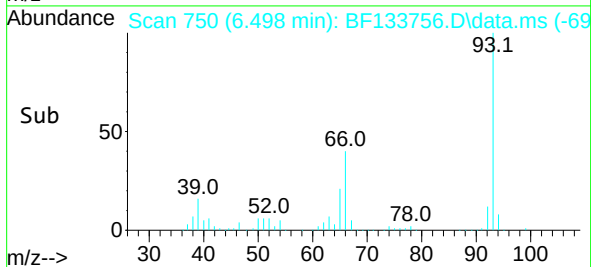
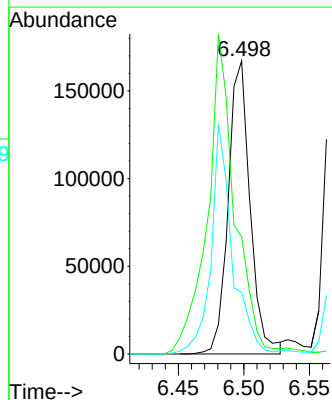
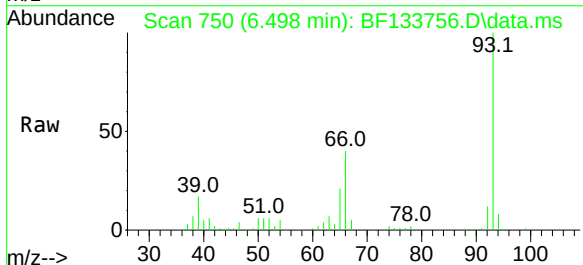
Manual Integrations  
APPROVED

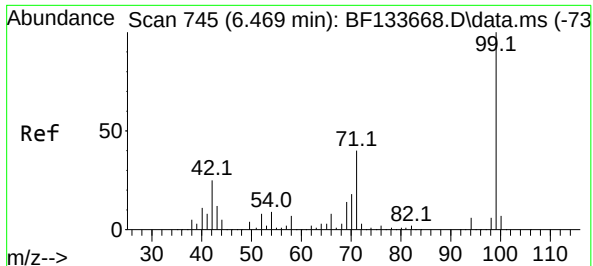
Reviewed By :Yogesh Patel 06/15/2023  
Supervised By :mohammad ahmed 06/16/2023



#6  
Aniline  
Concen: 16.428 ng  
RT: 6.498 min Scan# 750  
Delta R.T. -0.000 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45

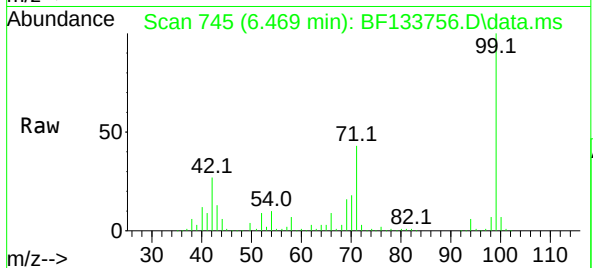
Tgt Ion: 93 Resp: 194127  
Ion Ratio Lower Upper  
93 100  
66 39.9 34.4 51.6  
65 21.1 17.5 26.3





#7  
Phenol-d6  
Concen: 87.447 ng  
RT: 6.469 min Scan# 745  
Delta R.T. -0.000 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45

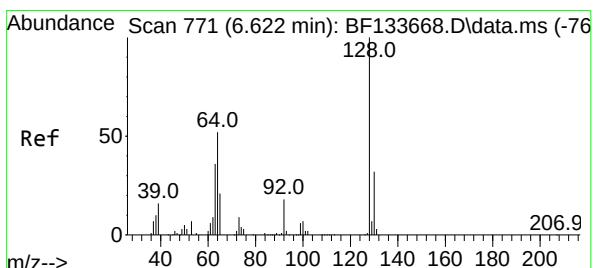
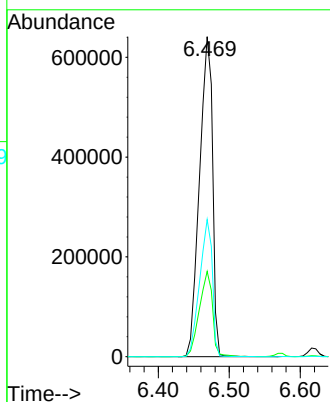
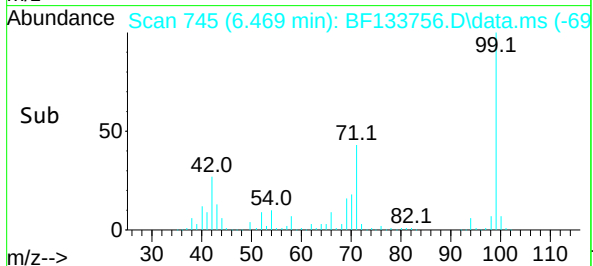
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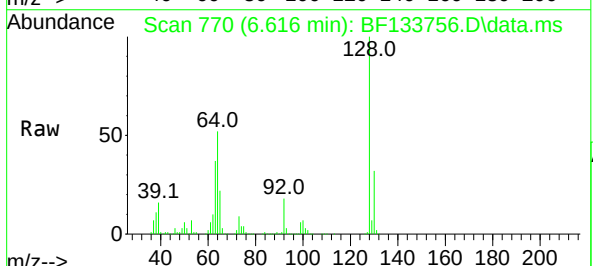
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Ion Ratio Lower Upper  
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42 26.6 19.9 29.9  
71 42.8 32.2 48.4

Manual Integrations  
APPROVED

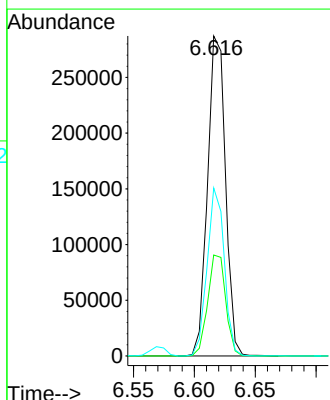
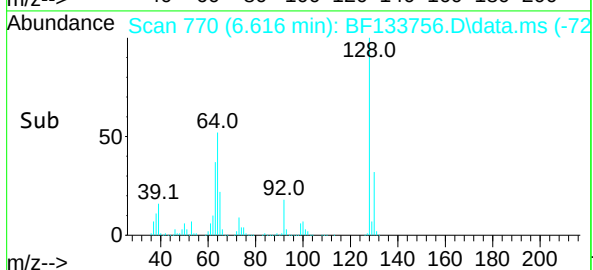
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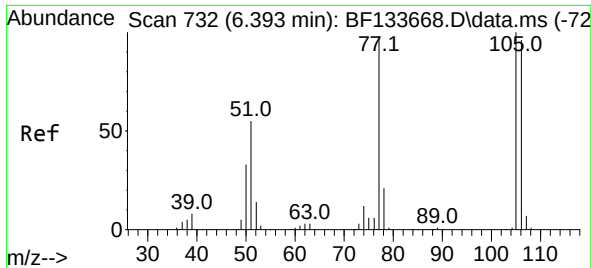


#8  
2-Chlorophenol  
Concen: 38.672 ng  
RT: 6.616 min Scan# 770  
Delta R.T. -0.006 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45



Tgt Ion:128 Resp: 293734  
Ion Ratio Lower Upper  
128 100  
130 31.6 12.3 52.3  
64 52.5 33.1 73.1





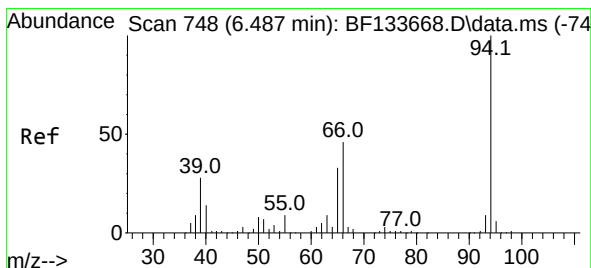
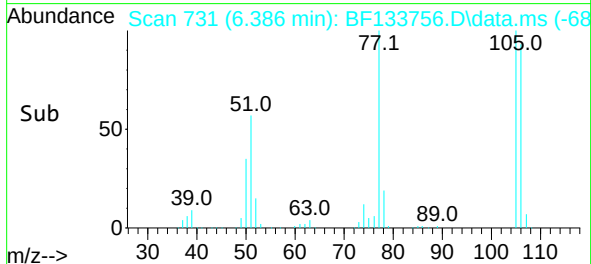
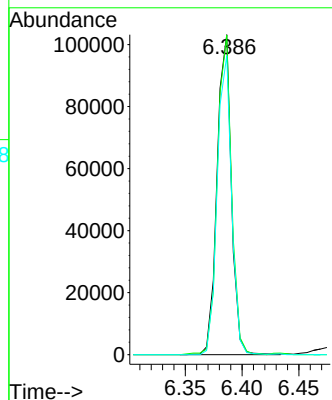
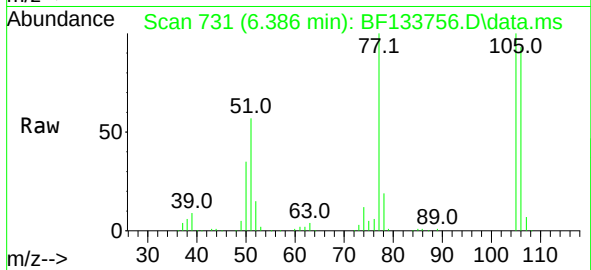
#9  
Benzaldehyde  
Concen: 14.529 ng  
RT: 6.386 min Scan# 71  
Delta R.T. -0.000 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45

Instrument :  
BNA\_F  
ClientSampleId :  
MARION-SOIL-0609MSD

Tgt Ion: 77 Resp: 9043  
Ion Ratio Lower Upper  
77 100  
105 99.8 82.0 122.0  
106 93.4 77.6 117.6

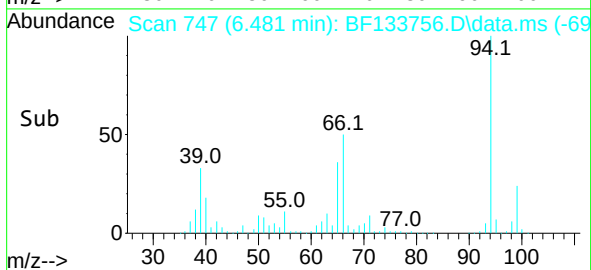
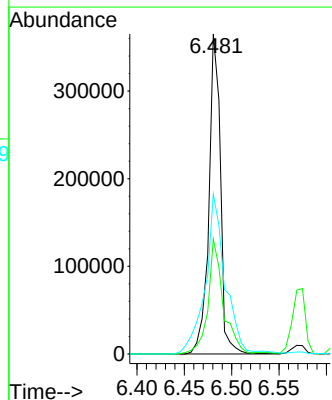
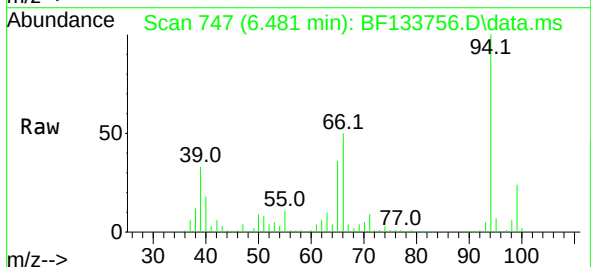
Manual Integrations  
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Reviewed By :Yogesh Patel 06/15/2023  
Supervised By :mohammad ahmed 06/16/2023

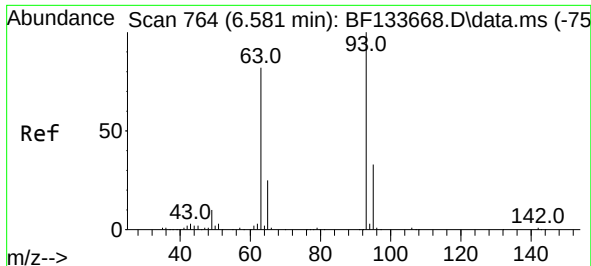


#10  
Phenol  
Concen: 31.597 ng  
RT: 6.481 min Scan# 747  
Delta R.T. -0.000 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45

Tgt Ion: 94 Resp: 309535  
Ion Ratio Lower Upper  
94 100  
65 35.9 13.2 53.2  
66 50.0 26.1 66.1

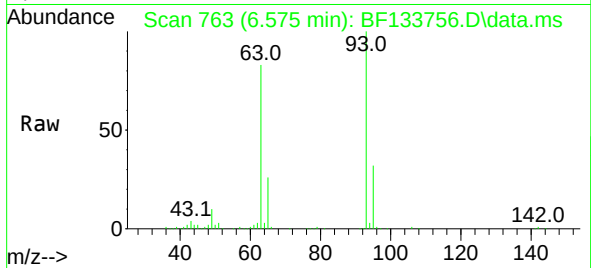






#11  
bis(2-Chloroethyl)ether  
Concen: 37.876 ng  
RT: 6.575 min Scan# 710  
Delta R.T. -0.000 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45

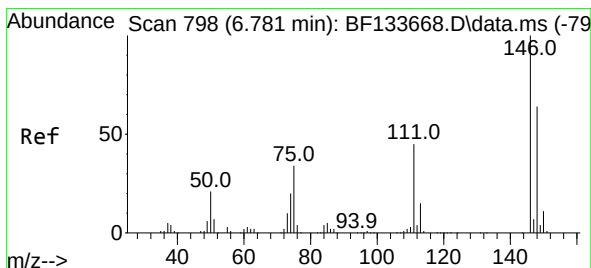
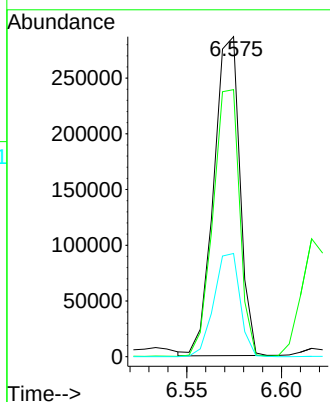
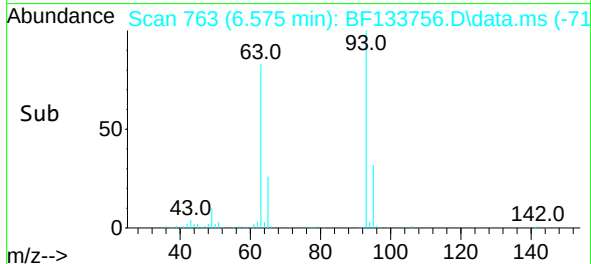
Instrument :  
BNA\_F  
ClientSampleId :  
MARION-SOIL-0609MSD



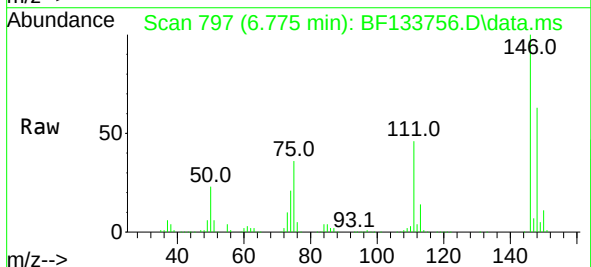
Tgt Ion: 93 Resp: 27546  
Ion Ratio Lower Upper  
93 100  
63 83.4 62.1 102.1  
95 32.2 13.0 53.0

Manual Integrations  
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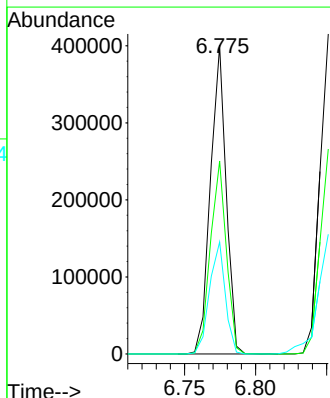
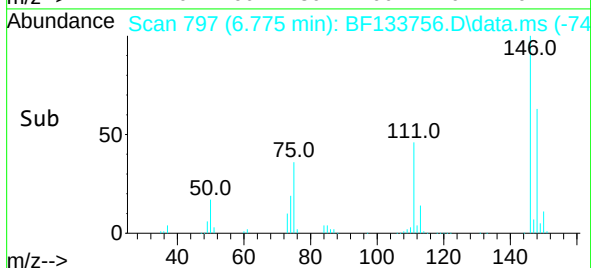
Reviewed By :Yogesh Patel 06/15/2023  
Supervised By :mohammad ahmed 06/16/2023

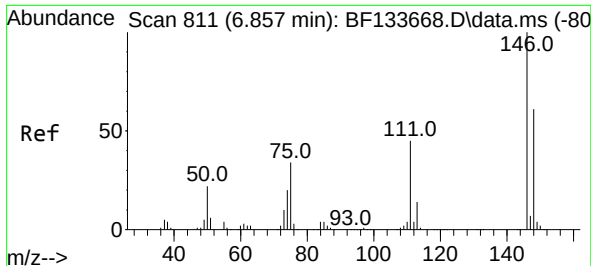


#12  
1,3-Dichlorobenzene  
Concen: 37.870 ng  
RT: 6.775 min Scan# 797  
Delta R.T. -0.000 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45



Tgt Ion:146 Resp: 307335  
Ion Ratio Lower Upper  
146 100  
148 62.5 50.9 76.3  
75 36.3 27.1 40.7





#13

1,4-Dichlorobenzene

Concen: 38.307 ng

RT: 6.851 min Scan# 811

Delta R.T. -0.000 min

Lab File: BF133756.D

Acq: 14 Jun 2023 17:45

Instrument :

BNA\_F

ClientSampleId :

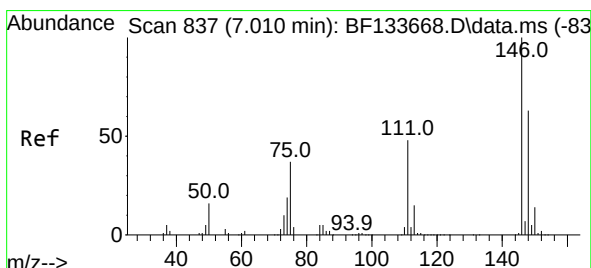
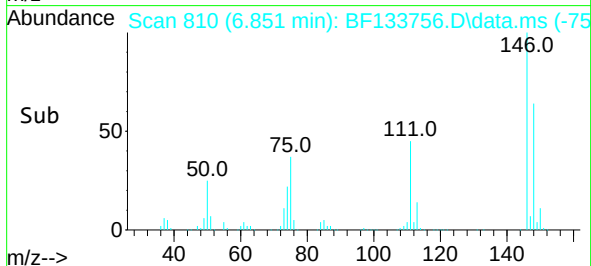
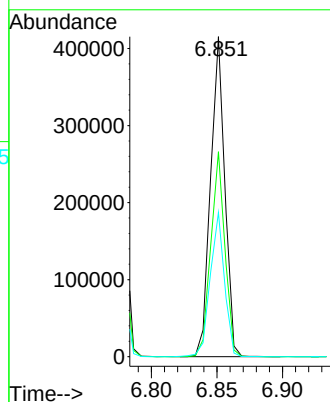
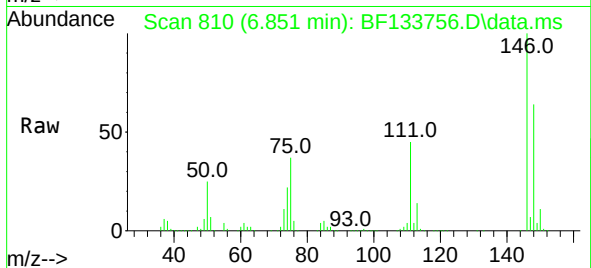
MARION-SOIL-0609MSD

Tgt Ion:146 Resp: 314215  
 Ion Ratio Lower Upper  
 146 100  
 148 64.1 48.9 73.3  
 111 45.0 35.8 53.6

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 06/15/2023  
 Supervised By :mohammad ahmed 06/16/2023



#14

1,2-Dichlorobenzene

Concen: 40.524 ng

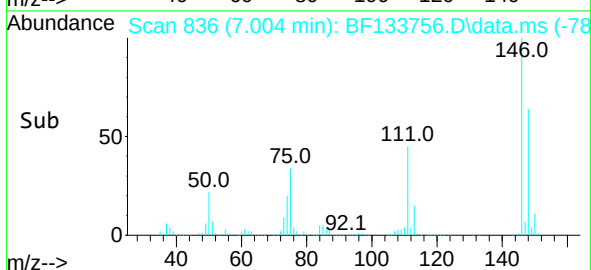
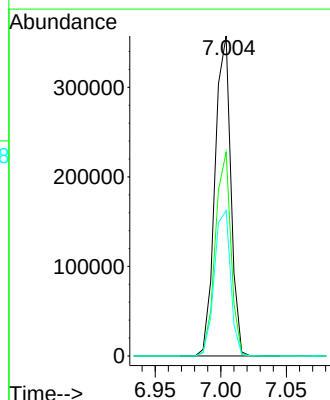
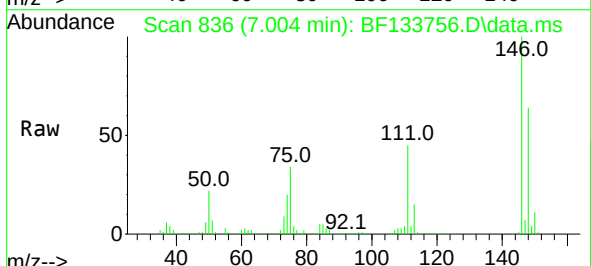
RT: 7.004 min Scan# 836

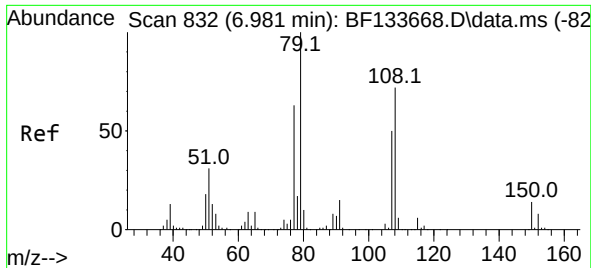
Delta R.T. -0.000 min

Lab File: BF133756.D

Acq: 14 Jun 2023 17:45

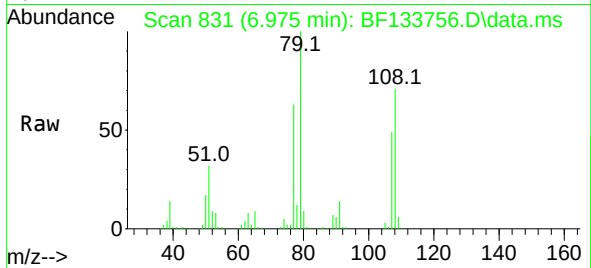
Tgt Ion:146 Resp: 300351  
 Ion Ratio Lower Upper  
 146 100  
 148 63.7 50.6 75.8  
 111 45.5 38.7 58.1





#15  
Benzyl Alcohol  
Concen: 38.734 ng  
RT: 6.975 min Scan# 81  
Delta R.T. -0.000 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45

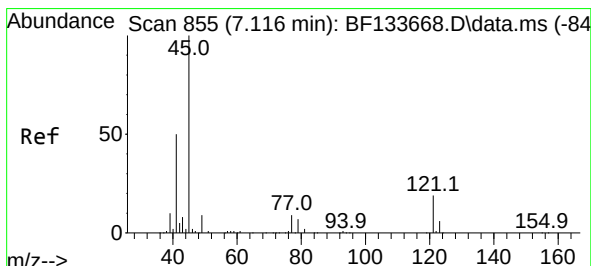
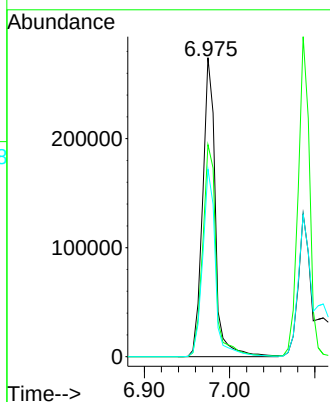
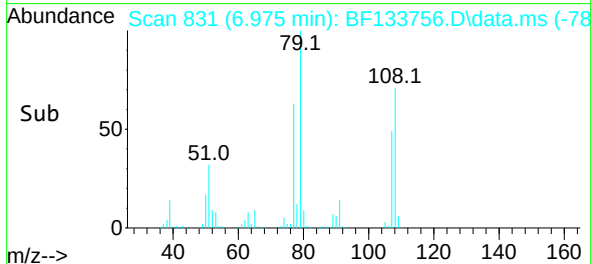
Instrument :  
BNA\_F  
ClientSampleId :  
MARION-SOIL-0609MSD



Tgt Ion: 79 Resp: 28382  
Ion Ratio Lower Upper  
79 100  
108 70.9 57.9 86.9  
77 62.7 50.4 75.6

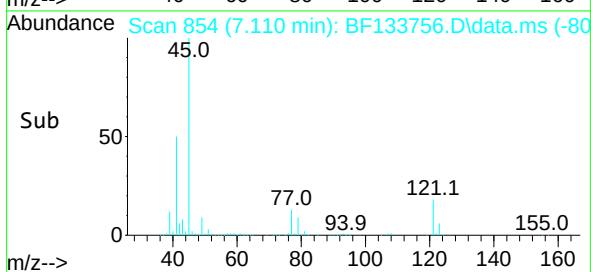
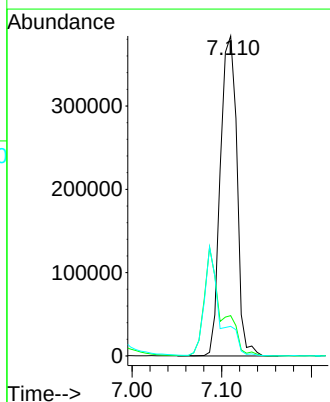
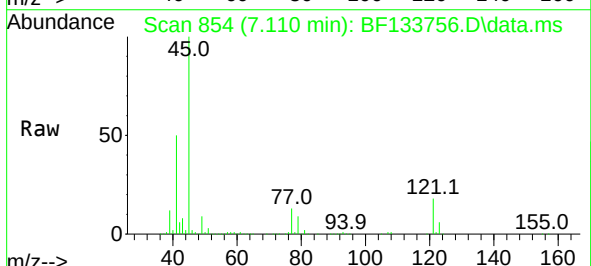
Manual Integrations  
APPROVED

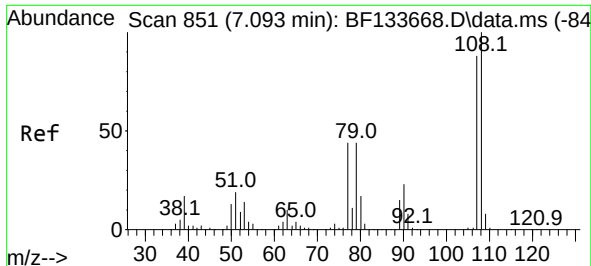
Reviewed By :Yogesh Patel 06/15/2023  
Supervised By :mohammad ahmed 06/16/2023



#16  
2,2'-oxybis(1-Chloropropane)  
Concen: 39.804 ng  
RT: 7.110 min Scan# 854  
Delta R.T. -0.000 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45

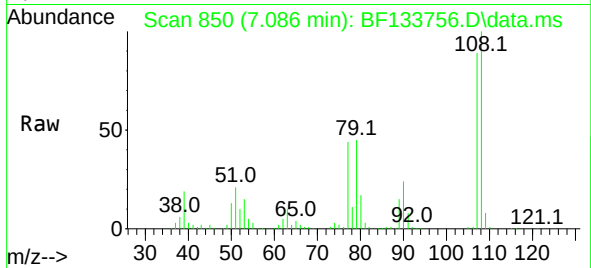
Tgt Ion: 45 Resp: 490723  
Ion Ratio Lower Upper  
45 100  
77 12.6 0.0 32.3  
79 9.2 0.0 29.4





#17  
2-Methylphenol  
Concen: 35.514 ng  
RT: 7.086 min Scan# 81  
Delta R.T. -0.000 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45

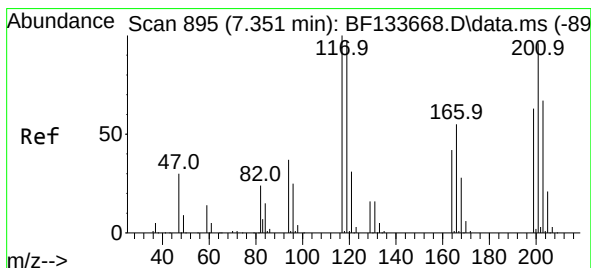
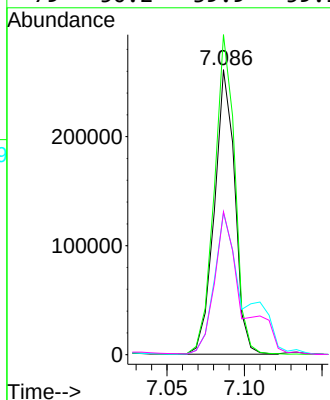
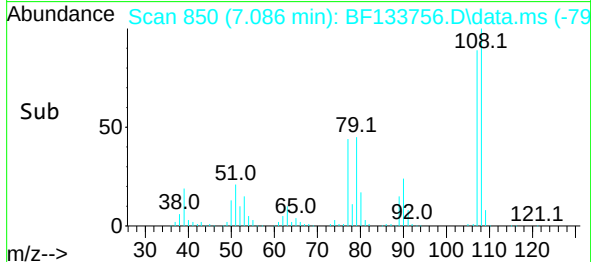
Instrument :  
BNA\_F  
ClientSampleId :  
MARION-SOIL-0609MSD



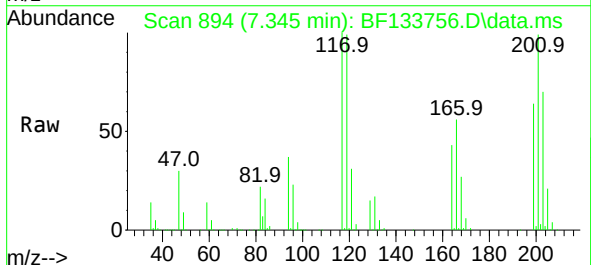
Tgt Ion:107 Resp: 239094  
Ion Ratio Lower Upper  
107 100  
108 112.3 90.9 136.3  
77 49.9 39.8 59.6  
79 50.2 39.9 59.9

Manual Integrations  
APPROVED

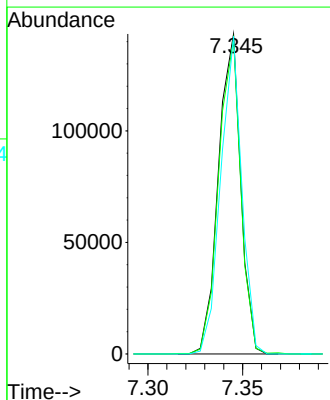
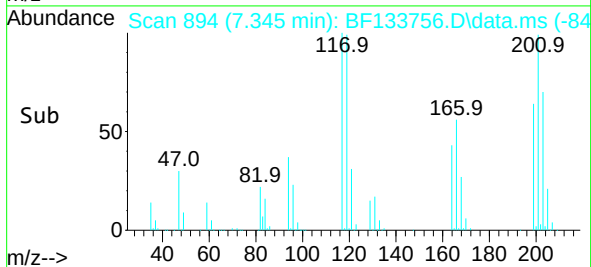
Reviewed By :Yogesh Patel 06/15/2023  
Supervised By :mohammad ahmed 06/16/2023

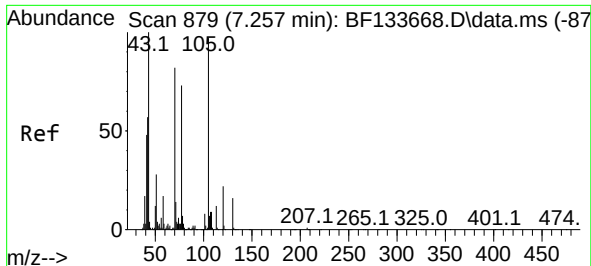


#18  
Hexachloroethane  
Concen: 41.689 ng  
RT: 7.345 min Scan# 894  
Delta R.T. -0.000 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45



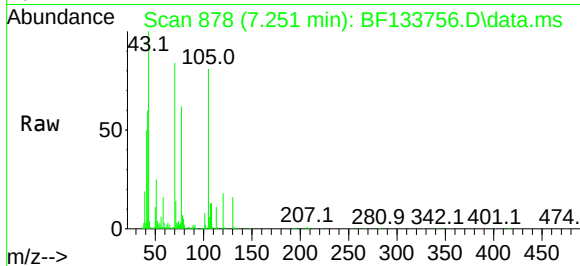
Tgt Ion:117 Resp: 117066  
Ion Ratio Lower Upper  
117 100  
119 98.5 77.3 115.9  
201 99.2 76.8 115.2





#19  
n-Nitroso-di-n-propylamine  
Concen: 36.657 ng  
RT: 7.251 min Scan# 81  
Delta R.T. -0.000 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45

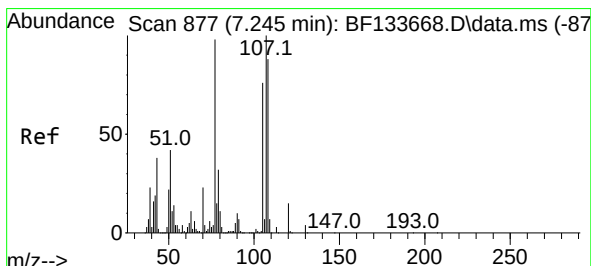
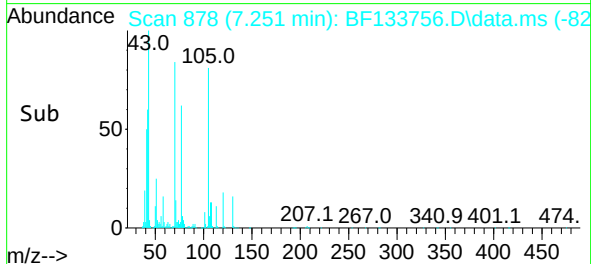
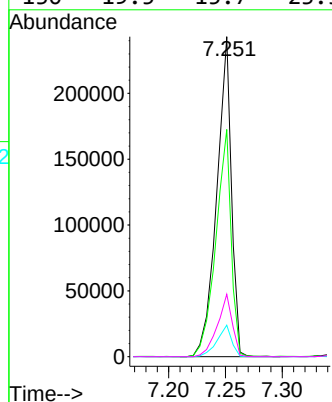
Instrument :  
BNA\_F  
ClientSampleId :  
MARION-SOIL-0609MSD



Tgt Ion: 70 Resp: 218808  
Ion Ratio Lower Upper  
70 100  
42 71.0 55.8 83.8  
101 9.8 8.1 12.1  
130 19.5 15.7 23.5

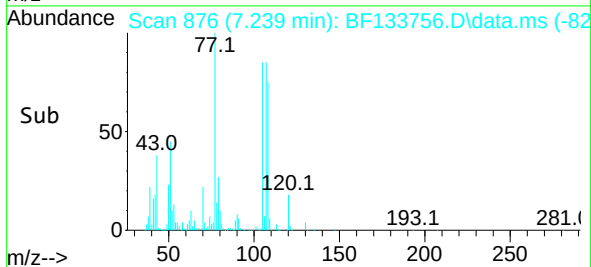
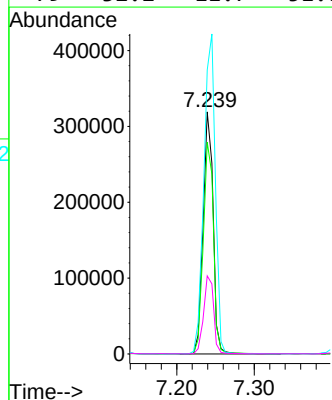
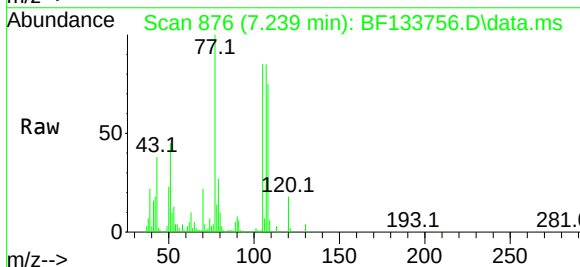
Manual Integrations  
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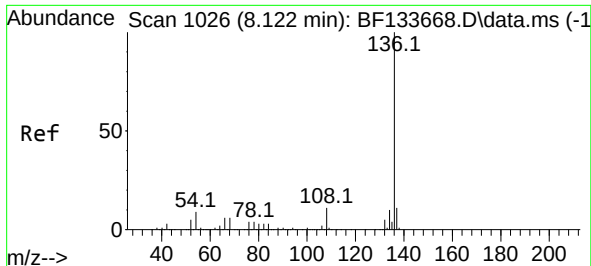
Reviewed By :Yogesh Patel 06/15/2023  
Supervised By :mohammad ahmed 06/16/2023



#20  
3+4-Methylphenols  
Concen: 32.795 ng  
RT: 7.239 min Scan# 876  
Delta R.T. -0.000 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45

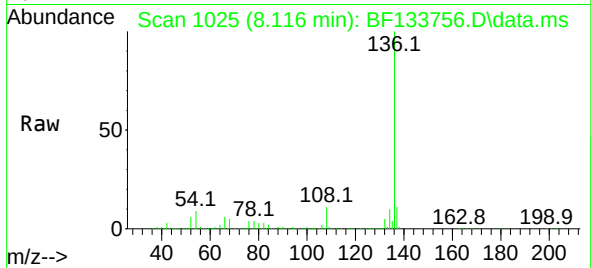
Tgt Ion:107 Resp: 287222  
Ion Ratio Lower Upper  
107 100  
108 87.4 67.9 107.9  
77 117.3 77.7 117.7  
79 32.2 11.7 51.7





#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 8.116 min Scan# 1025  
Delta R.T. -0.000 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45

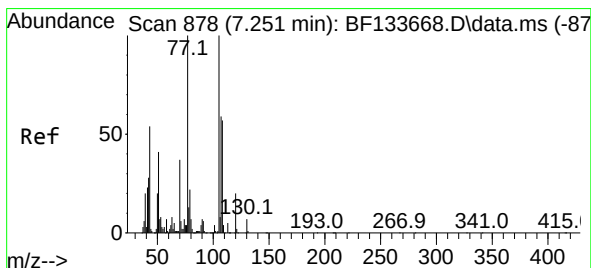
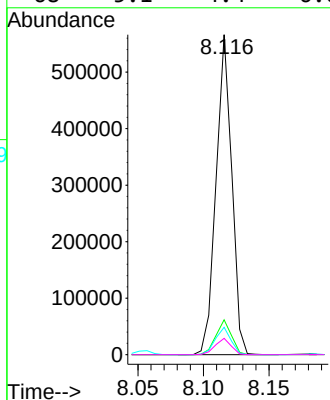
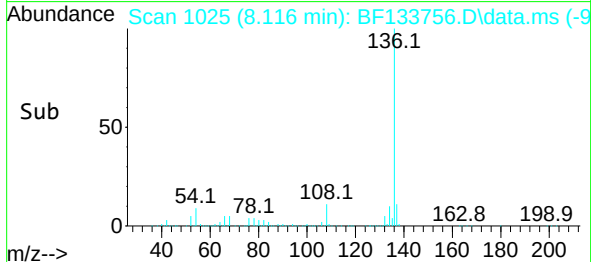
Instrument :  
BNA\_F  
ClientSampleId :  
MARION-SOIL-0609MSD



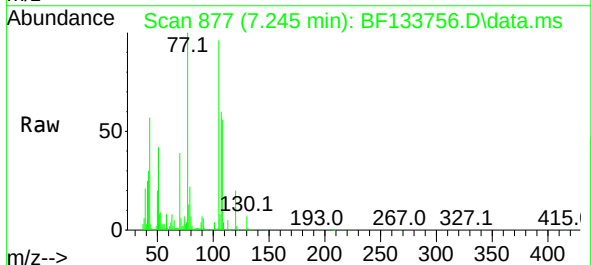
Tgt Ion:136 Resp: 470562  
Ion Ratio Lower Upper  
136 100  
137 10.9 8.8 13.2  
54 8.6 7.4 11.0  
68 5.1 4.4 6.6

Manual Integrations  
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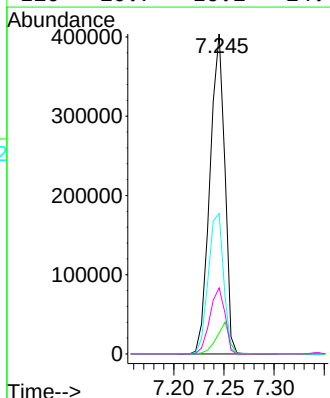
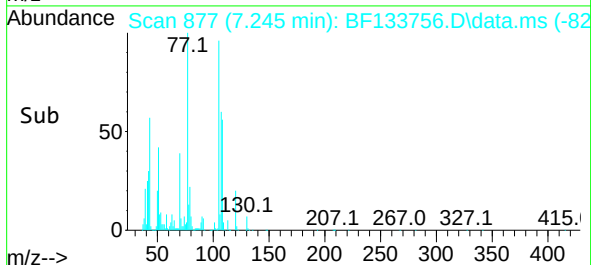
Reviewed By :Yogesh Patel 06/15/2023  
Supervised By :mohammad ahmed 06/16/2023

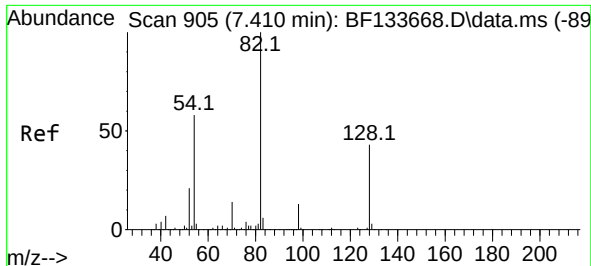


#22  
Acetophenone  
Concen: 38.518 ng  
RT: 7.245 min Scan# 877  
Delta R.T. -0.000 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45



Tgt Ion:105 Resp: 415711  
Ion Ratio Lower Upper  
105 100  
71 6.6 4.8 7.2  
51 43.9 33.0 49.4  
120 20.7 16.2 24.4





#23

Nitrobenzene-d5

Concen: 75.104 ng

RT: 7.398 min Scan# 905

Delta R.T. -0.006 min

Lab File: BF133756.D

Acq: 14 Jun 2023 17:45

Instrument :

BNA\_F

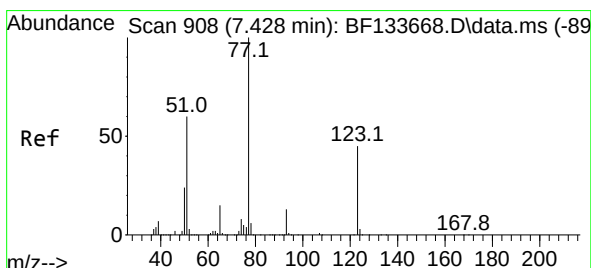
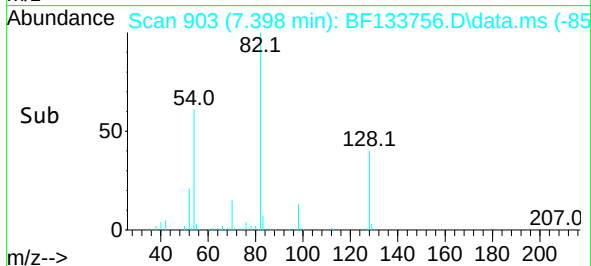
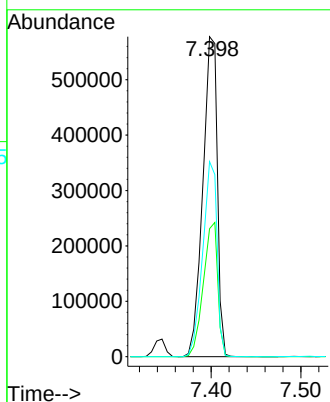
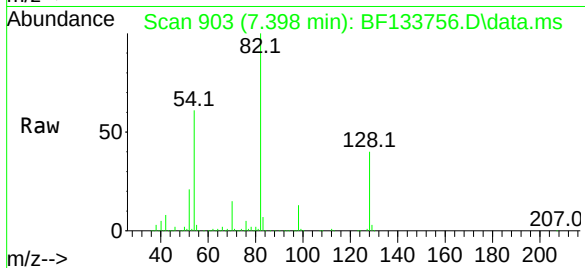
ClientSampleId :

MARION-SOIL-0609MSD

Tgt Ion: 82 Resp: 648852  
 Ion Ratio Lower Upper  
 82 100  
 128 40.0 34.2 51.2  
 54 61.0 46.5 69.7

Manual Integrations  
 APPROVED

Reviewed By :Yogesh Patel 06/15/2023  
 Supervised By :mohammad ahmed 06/16/2023



#24

Nitrobenzene

Concen: 37.766 ng

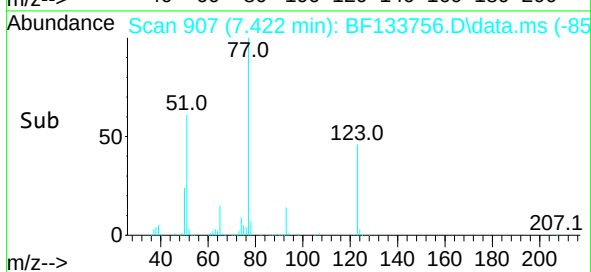
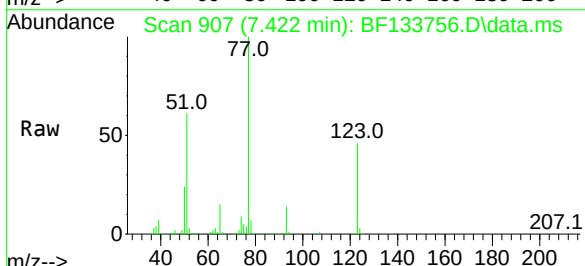
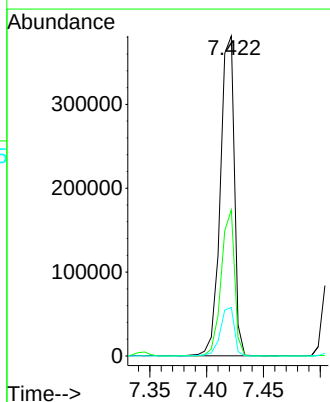
RT: 7.422 min Scan# 907

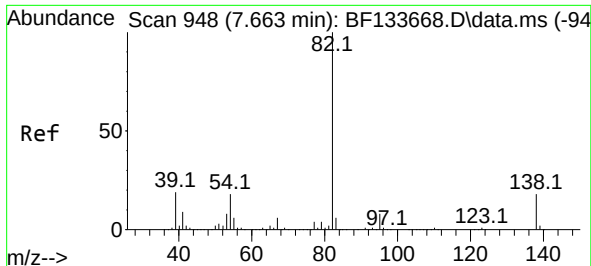
Delta R.T. -0.000 min

Lab File: BF133756.D

Acq: 14 Jun 2023 17:45

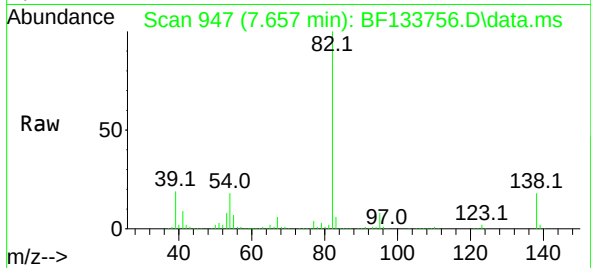
Tgt Ion: 77 Resp: 328540  
 Ion Ratio Lower Upper  
 77 100  
 123 45.6 35.8 53.8  
 65 15.2 11.6 17.4





#25  
Isophorone  
Concen: 36.552 ng  
RT: 7.657 min Scan# 948  
Delta R.T. -0.000 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45

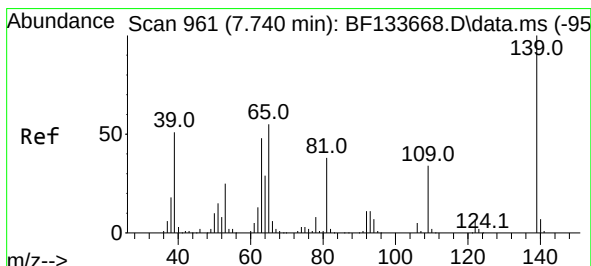
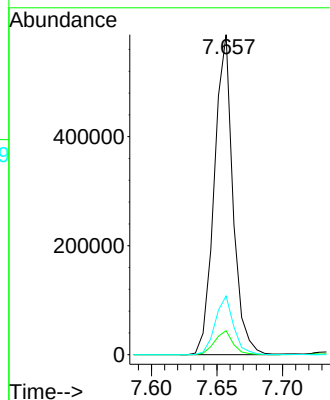
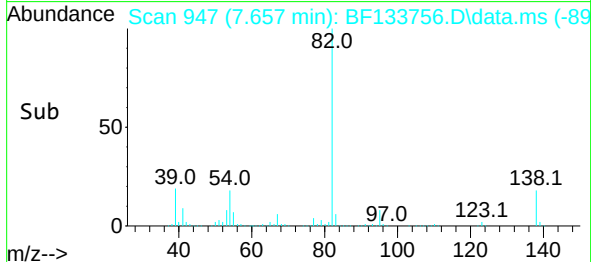
Instrument :  
BNA\_F  
ClientSampleId :  
MARION-SOIL-0609MSD



Tgt Ion: 82 Resp: 57975  
Ion Ratio Lower Upper  
82 100  
95 7.5 6.0 9.0  
138 18.4 14.2 21.2

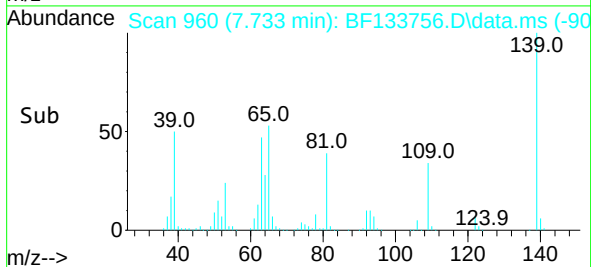
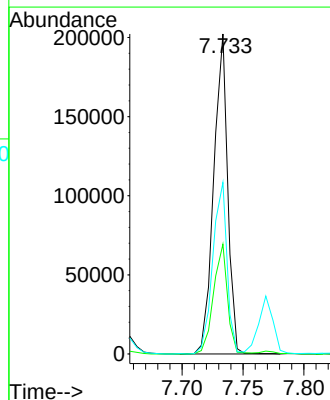
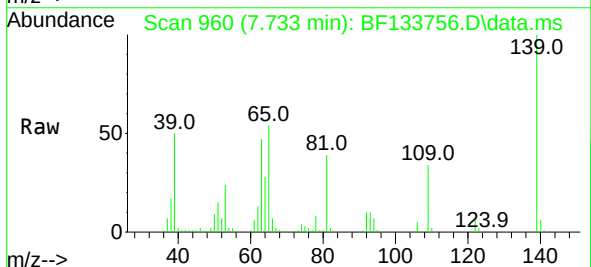
Manual Integrations  
APPROVED

Reviewed By :Yogesh Patel 06/15/2023  
Supervised By :mohammad ahmed 06/16/2023

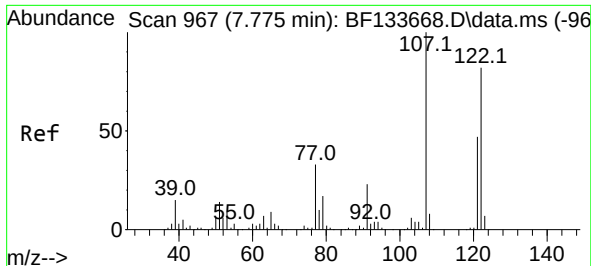


#26  
2-Nitrophenol  
Concen: 41.389 ng  
RT: 7.733 min Scan# 960  
Delta R.T. -0.000 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45

Tgt Ion:139 Resp: 161592  
Ion Ratio Lower Upper  
139 100  
109 34.3 27.0 40.6  
65 53.6 44.2 66.4

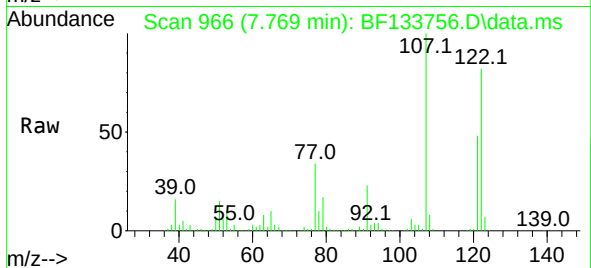






#27  
2,4-Dimethylphenol  
Concen: 37.984 ng  
RT: 7.769 min Scan# 90  
Delta R.T. -0.000 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45

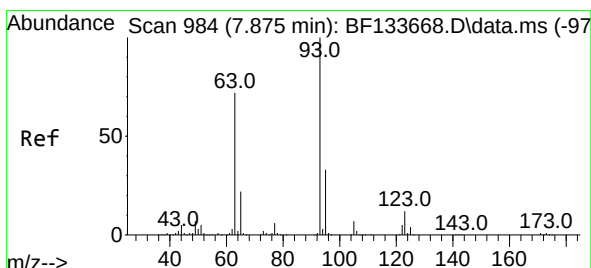
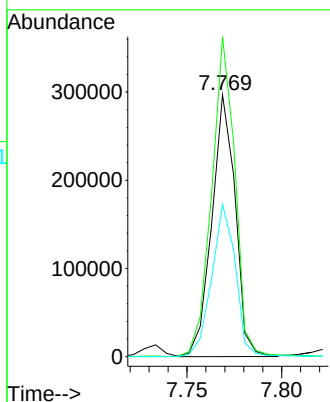
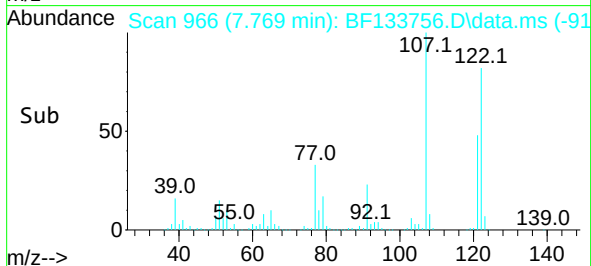
Instrument :  
BNA\_F  
ClientSampleId :  
MARION-SOIL-0609MSD



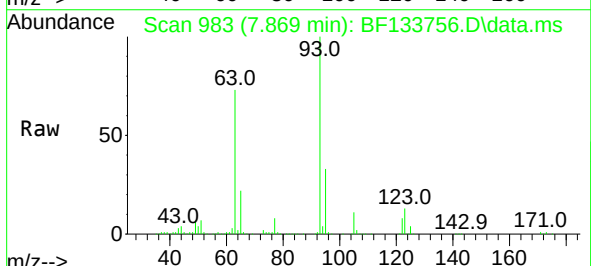
Tgt Ion:122 Resp: 25560  
Ion Ratio Lower Upper  
122 100  
107 122.2 97.8 146.6  
121 58.1 46.1 69.1

Manual Integrations  
APPROVED

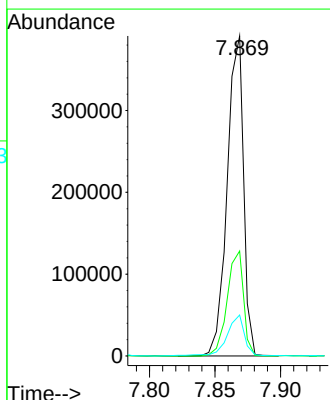
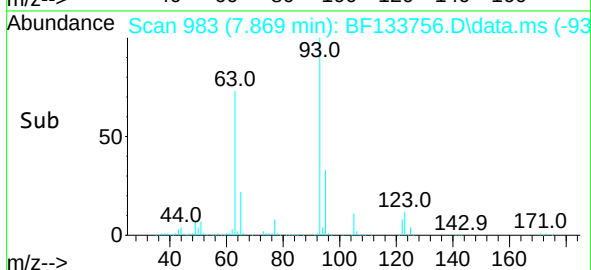
Reviewed By :Yogesh Patel 06/15/2023  
Supervised By :mohammad ahmed 06/16/2023

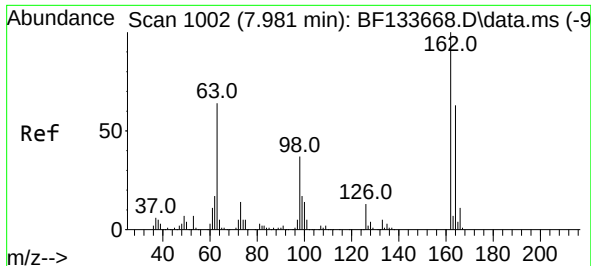


#28  
bis(2-Chloroethoxy)methane  
Concen: 37.059 ng  
RT: 7.869 min Scan# 983  
Delta R.T. -0.000 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45



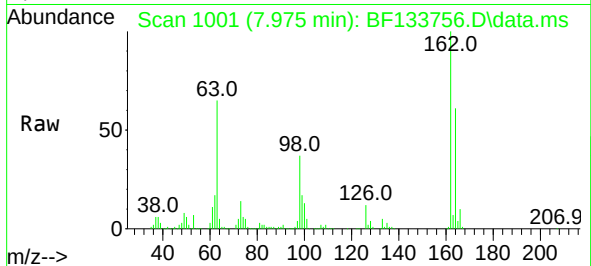
Tgt Ion: 93 Resp: 339724  
Ion Ratio Lower Upper  
93 100  
95 32.8 26.4 39.6  
123 12.8 9.9 14.9





#29  
2,4-Dichlorophenol  
Concen: 37.282 ng  
RT: 7.975 min Scan# 1001  
Delta R.T. -0.000 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45

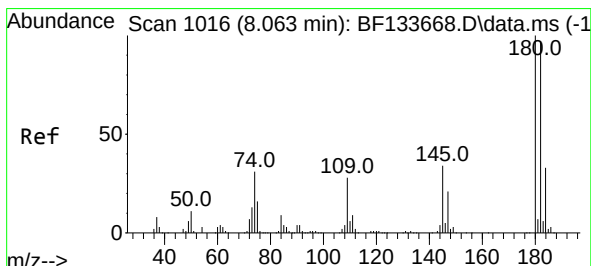
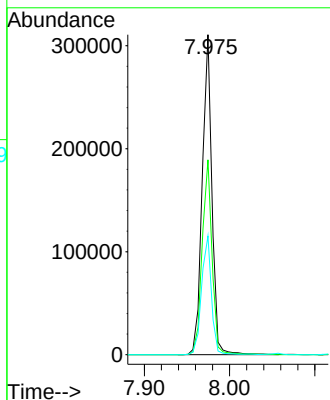
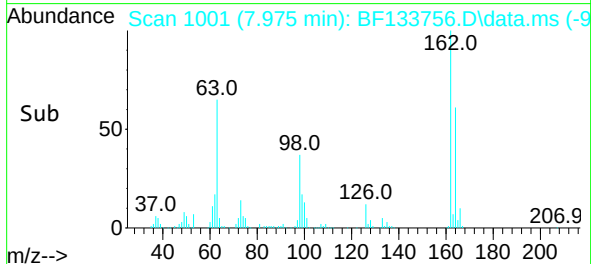
Instrument :  
BNA\_F  
ClientSampleId :  
MARION-SOIL-0609MSD



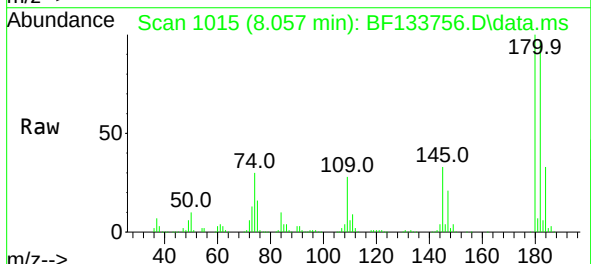
Tgt Ion:162 Resp: 24588  
Ion Ratio Lower Upper  
162 100  
164 60.9 43.4 83.4  
98 37.1 17.4 57.4

Manual Integrations  
APPROVED

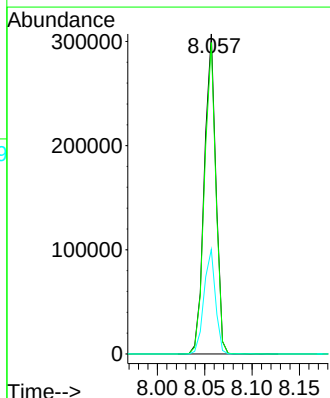
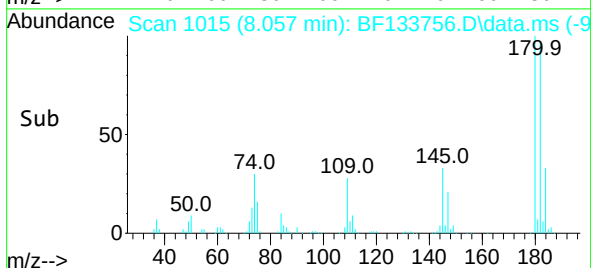
Reviewed By :Yogesh Patel 06/15/2023  
Supervised By :mohammad ahmed 06/16/2023

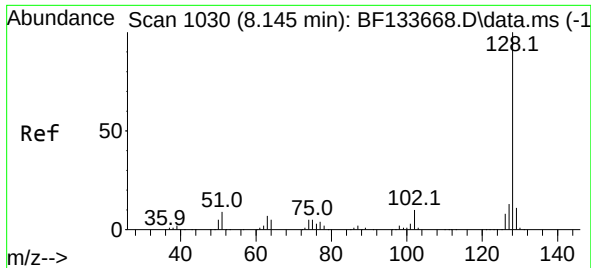


#30  
1,2,4-Trichlorobenzene  
Concen: 37.827 ng  
RT: 8.057 min Scan# 1015  
Delta R.T. -0.000 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45



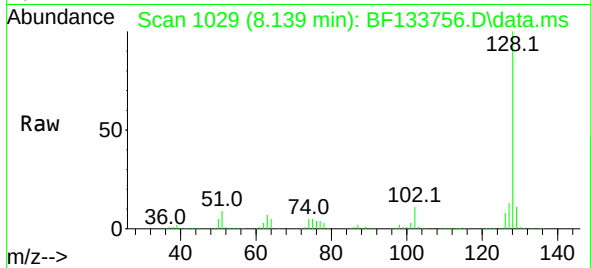
Tgt Ion:180 Resp: 260286  
Ion Ratio Lower Upper  
180 100  
182 97.3 77.8 116.8  
145 32.7 27.0 40.4





#31  
Naphthalene  
Concen: 36.108 ng  
RT: 8.139 min Scan# 1030  
Delta R.T. -0.000 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45

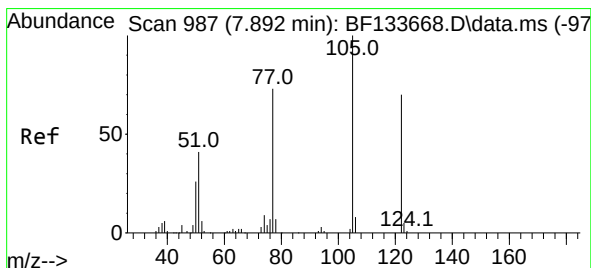
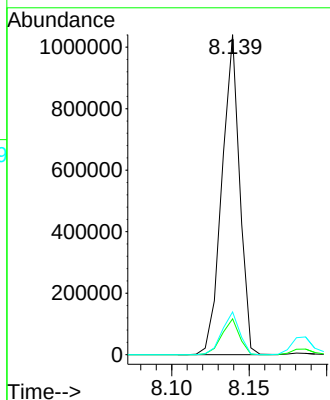
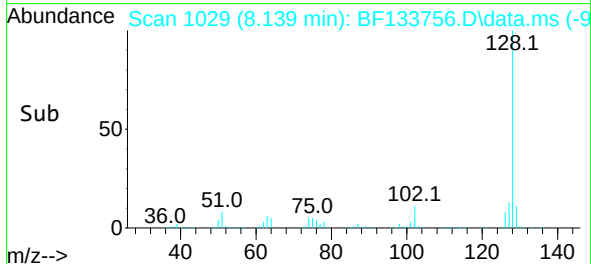
Instrument :  
BNA\_F  
ClientSampleId :  
MARION-SOIL-0609MSD



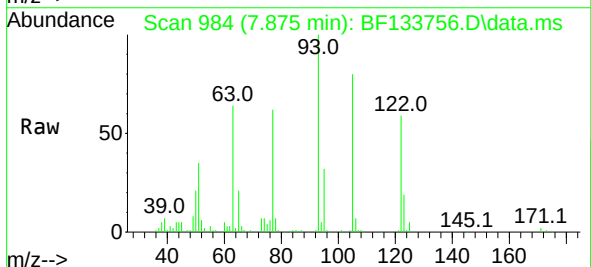
Tgt Ion:128 Resp: 827800  
Ion Ratio Lower Upper  
128 100  
129 11.2 8.9 13.3  
127 13.4 10.5 15.7

Manual Integrations  
APPROVED

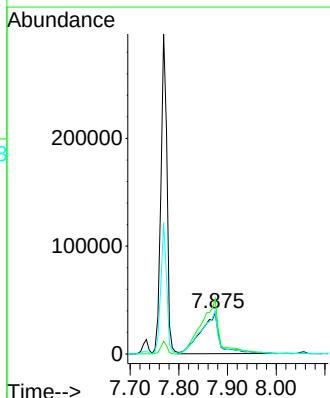
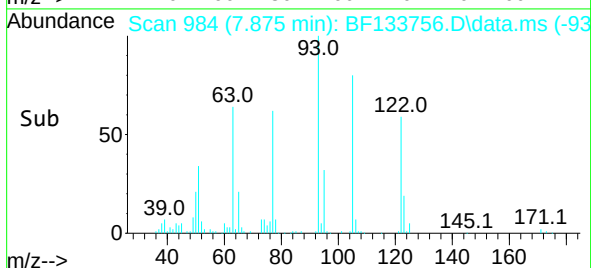
Reviewed By :Yogesh Patel 06/15/2023  
Supervised By :mohammad ahmed 06/16/2023

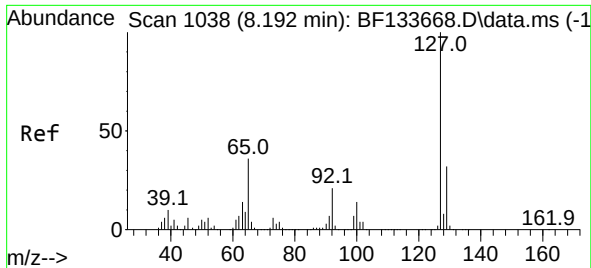


#32  
Benzoic acid  
Concen: 24.444 ng  
RT: 7.875 min Scan# 984  
Delta R.T. -0.012 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45



Tgt Ion:122 Resp: 103742  
Ion Ratio Lower Upper  
122 100  
105 134.4 116.3 156.3  
77 105.1 82.4 122.4





#33  
4-Chloroaniline  
Concen: 6.280 ng  
RT: 8.186 min Scan# 1037  
Delta R.T. -0.000 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45

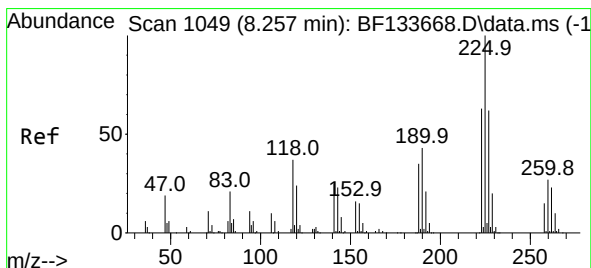
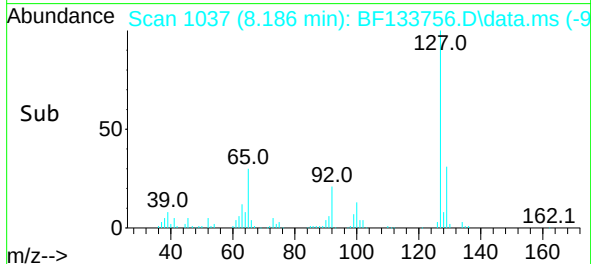
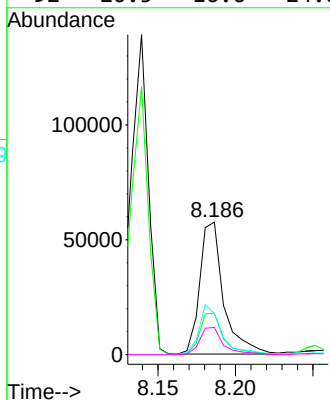
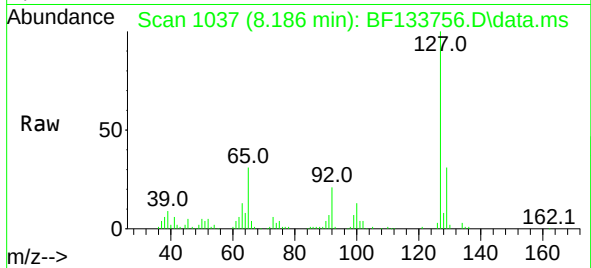
Instrument :  
BNA\_F  
ClientSampleId :  
MARION-SOIL-0609MSD

Tgt Ion:127 Resp: 6156

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 127 | 100   |       |       |
| 129 | 31.3  | 25.6  | 38.4  |
| 65  | 31.1  | 28.9  | 43.3  |
| 92  | 20.5  | 16.6  | 24.8  |

Manual Integrations  
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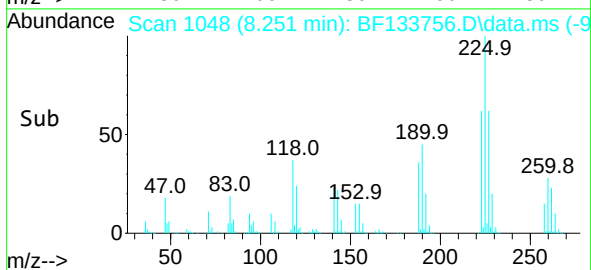
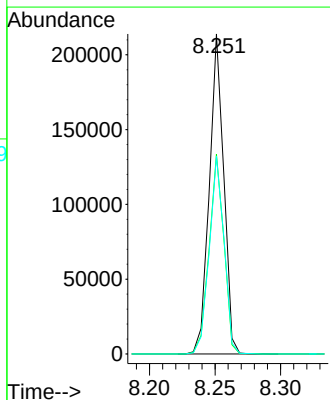
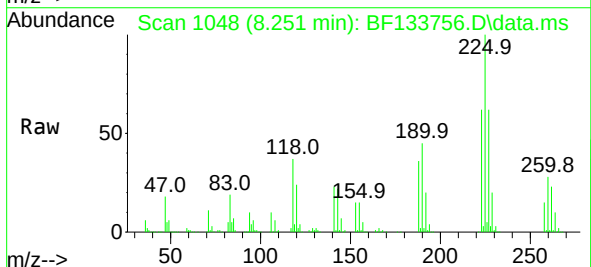
Reviewed By :Yogesh Patel 06/15/2023  
Supervised By :mohammad ahmed 06/16/2023

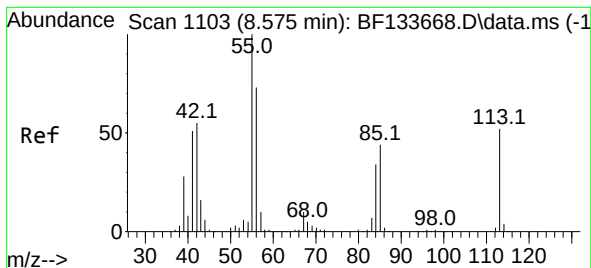


#34  
Hexachlorobutadiene  
Concen: 36.315 ng  
RT: 8.251 min Scan# 1048  
Delta R.T. -0.000 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45

Tgt Ion:225 Resp: 163604

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 225 | 100   |       |       |
| 223 | 62.5  | 50.2  | 75.4  |
| 227 | 61.8  | 49.5  | 74.3  |





#35

Caprolactam

Concen: 31.058 ng m

RT: 8.557 min Scan# 1100

Delta R.T. -0.006 min

Lab File: BF133756.D

Acq: 14 Jun 2023 17:45

Instrument :

BNA\_F

ClientSampleId :

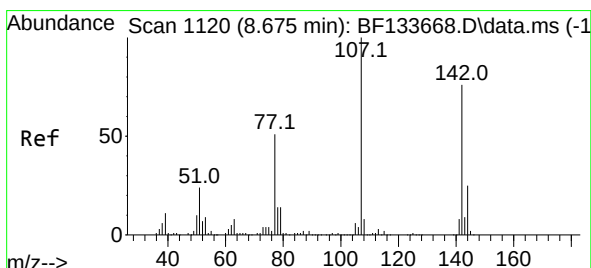
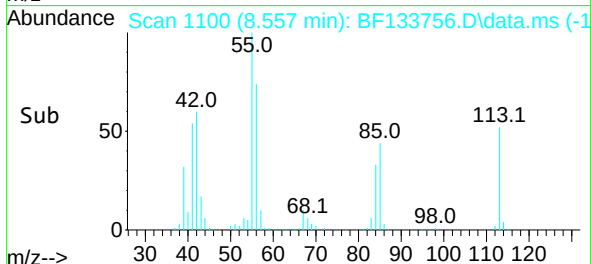
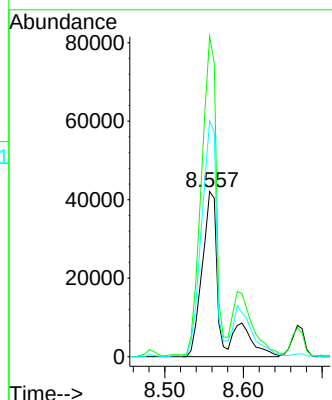
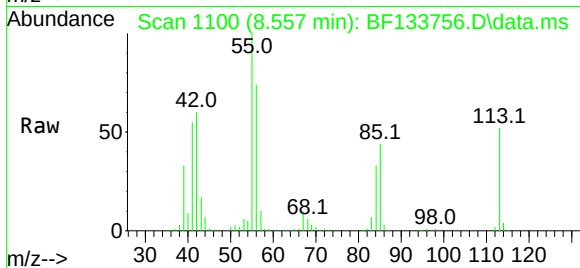
MARION-SOIL-0609MSD

Tgt Ion:113 Resp: 68925  
 Ion Ratio Lower Upper  
 113 100  
 55 193.8 173.3 213.3  
 56 142.8 120.5 160.5

Manual Integrations

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Reviewed By :Yogesh Patel 06/15/2023  
 Supervised By :mohammad ahmed 06/16/2023



#36

4-Chloro-3-methylphenol

Concen: 35.617 ng

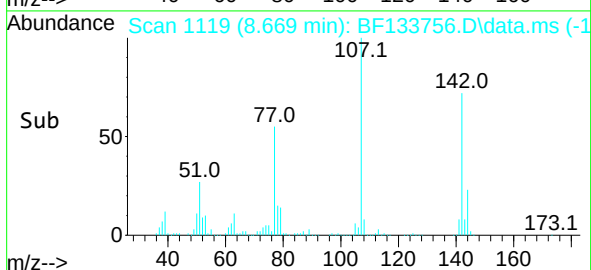
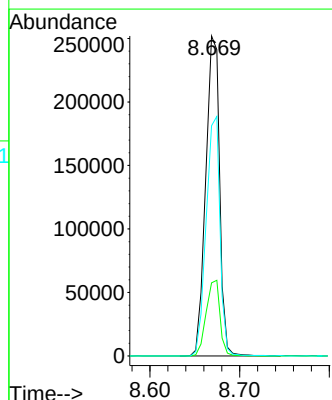
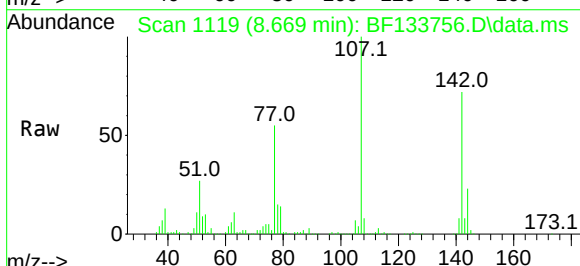
RT: 8.669 min Scan# 1119

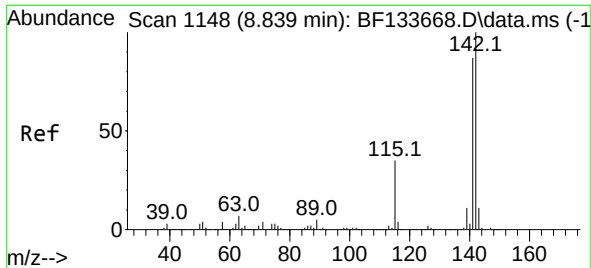
Delta R.T. -0.000 min

Lab File: BF133756.D

Acq: 14 Jun 2023 17:45

Tgt Ion:107 Resp: 270762  
 Ion Ratio Lower Upper  
 107 100  
 144 22.9 19.7 29.5  
 142 72.0 61.1 91.7





#37

2-Methylnaphthalene

Concen: 34.843 ng

RT: 8.827 min Scan# 1146

Delta R.T. -0.006 min

Lab File: BF133756.D

Acq: 14 Jun 2023 17:45

Instrument :

BNA\_F

ClientSampleId :

MARION-SOIL-0609MSD

Tgt Ion:142 Resp: 555010

Ion Ratio Lower Upper

142 100

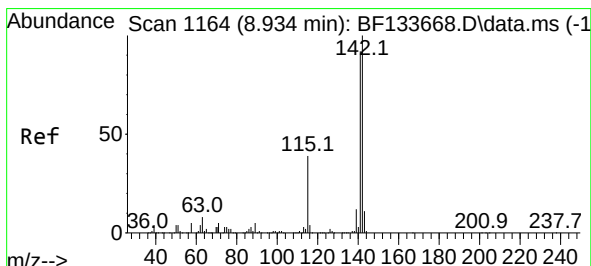
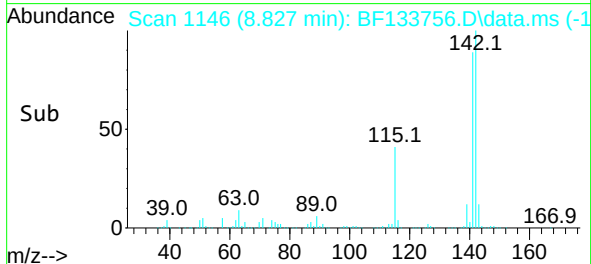
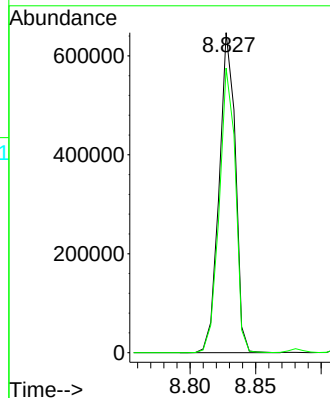
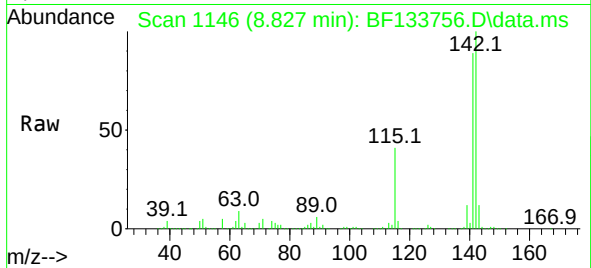
141 88.9 69.8 104.8

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 06/15/2023

Supervised By :mohammad ahmed 06/16/2023



#38

1-Methylnaphthalene

Concen: 35.427 ng

RT: 8.927 min Scan# 1163

Delta R.T. -0.000 min

Lab File: BF133756.D

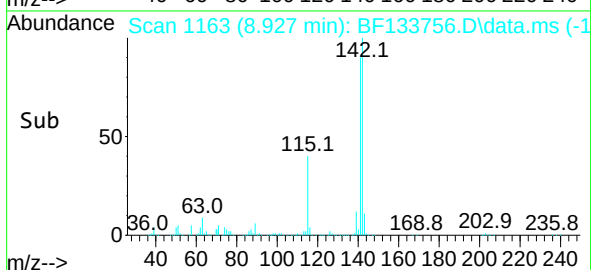
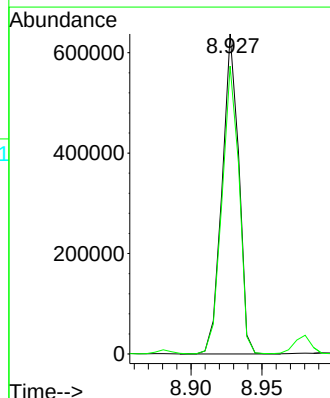
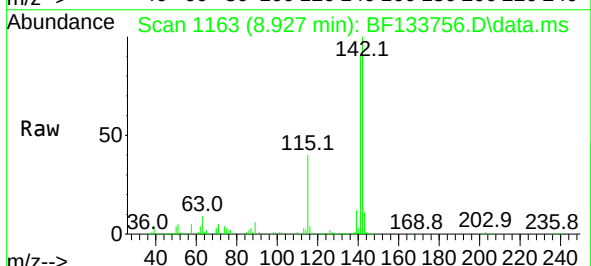
Acq: 14 Jun 2023 17:45

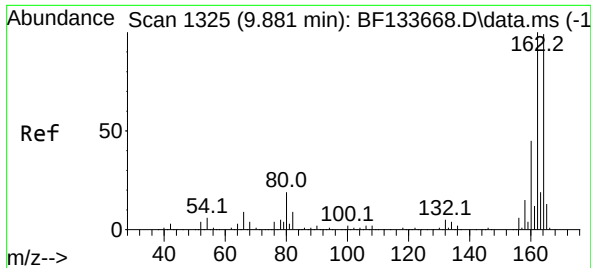
Tgt Ion:142 Resp: 519281

Ion Ratio Lower Upper

142 100

141 90.0 73.4 110.0





#39

Acenaphthene-d10

Concen: 20.000 ng

RT: 9.874 min Scan# 1175

Delta R.T. -0.000 min

Lab File: BF133756.D

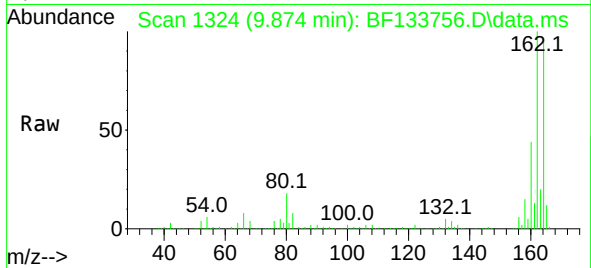
Acq: 14 Jun 2023 17:45

Instrument :

BNA\_F

ClientSampleId :

MARION-SOIL-0609MSD



Tgt Ion:164 Resp: 21355

Ion Ratio Lower Upper

164 100

162 105.4 80.8 121.2

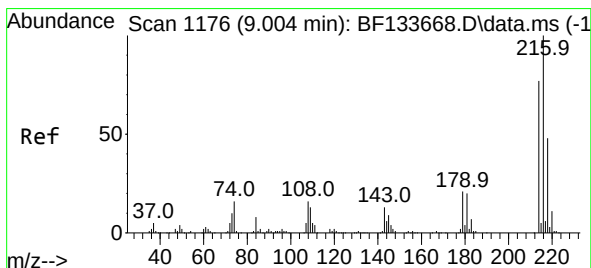
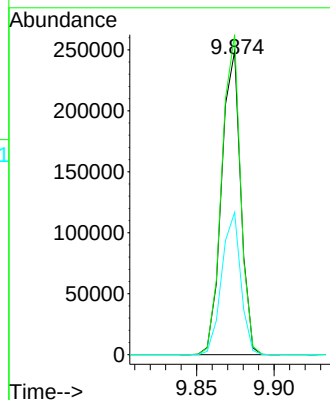
160 46.9 36.7 55.1

Manual Integrations

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Reviewed By :Yogesh Patel 06/15/2023

Supervised By :mohammad ahmed 06/16/2023



#40

1,2,4,5-Tetrachlorobenzene

Concen: 39.930 ng

RT: 8.998 min Scan# 1175

Delta R.T. -0.000 min

Lab File: BF133756.D

Acq: 14 Jun 2023 17:45

Tgt Ion:216 Resp: 259233

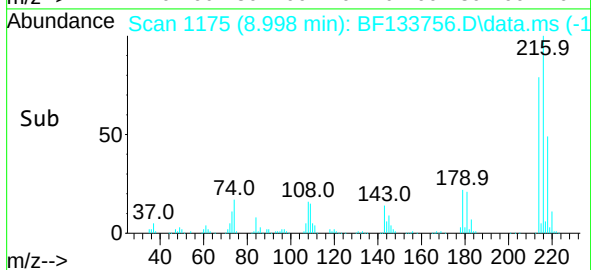
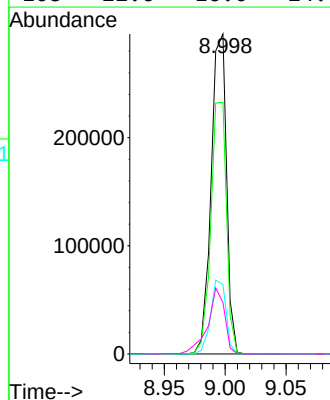
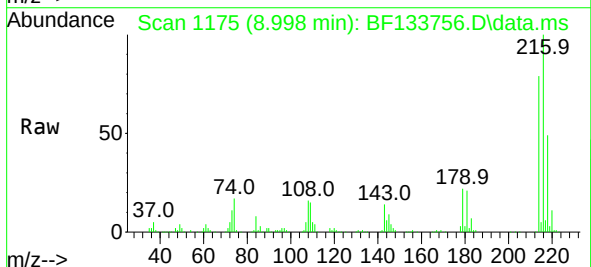
Ion Ratio Lower Upper

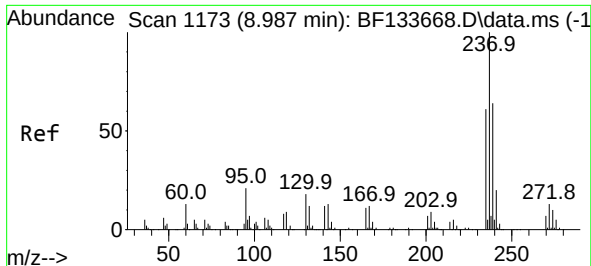
216 100

214 79.8 62.7 94.1

179 23.0 17.6 26.4

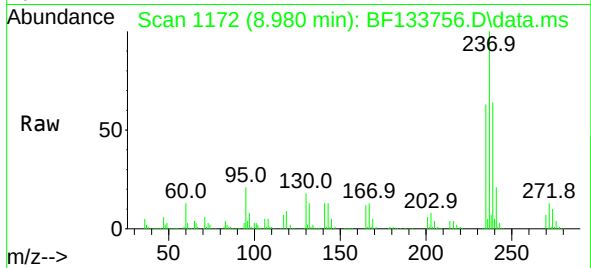
108 22.6 16.0 24.0





#41  
Hexachlorocyclopentadiene  
Concen: 80.404 ng  
RT: 8.980 min Scan# 1173  
Delta R.T. -0.000 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45

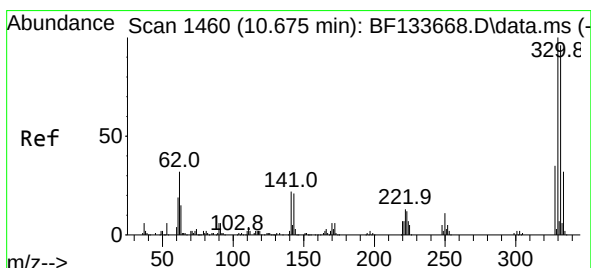
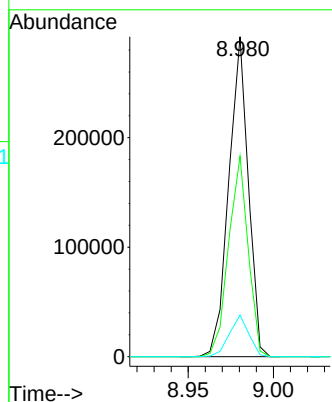
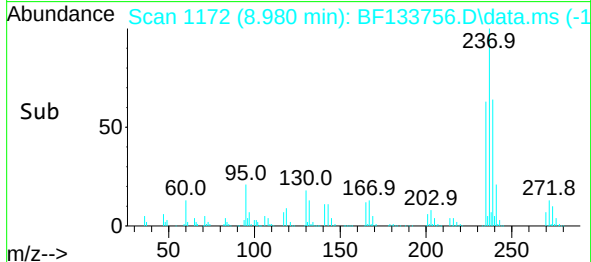
Instrument :  
BNA\_F  
ClientSampleId :  
MARION-SOIL-0609MSD



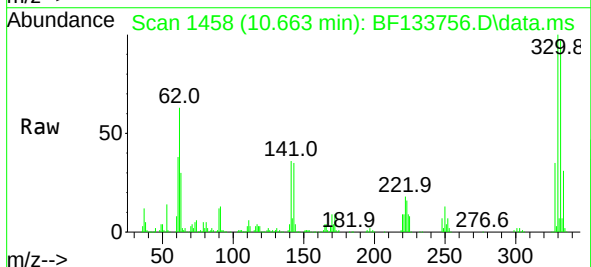
Tgt Ion: 237 Resp: 23262  
Ion Ratio Lower Upper  
237 100  
235 62.6 40.6 80.6  
272 13.0 0.0 32.6

Manual Integrations  
APPROVED

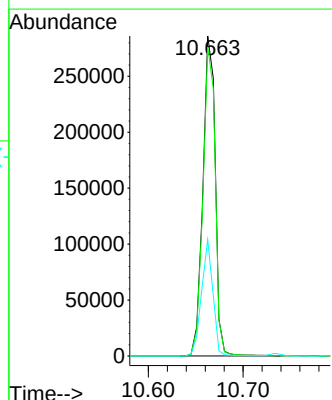
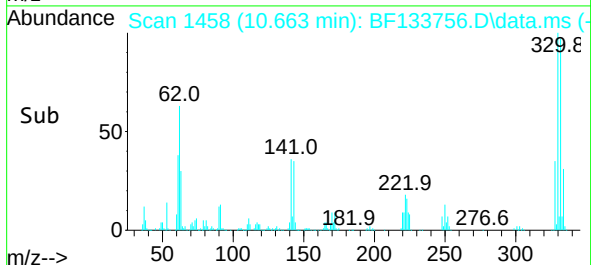
Reviewed By : Yogesh Patel 06/15/2023  
Supervised By : mohammad ahmed 06/16/2023



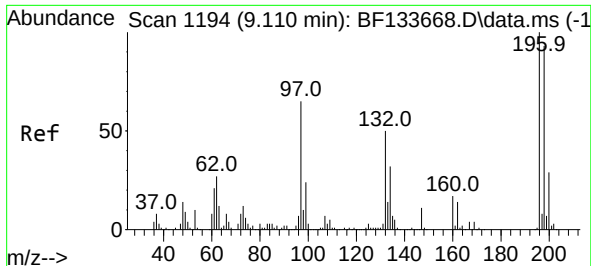
#42  
2,4,6-Tribromophenol  
Concen: 95.668 ng  
RT: 10.663 min Scan# 1458  
Delta R.T. -0.006 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45



Tgt Ion: 330 Resp: 258612  
Ion Ratio Lower Upper  
330 100  
332 96.1 77.2 115.8  
141 33.6 24.9 37.3

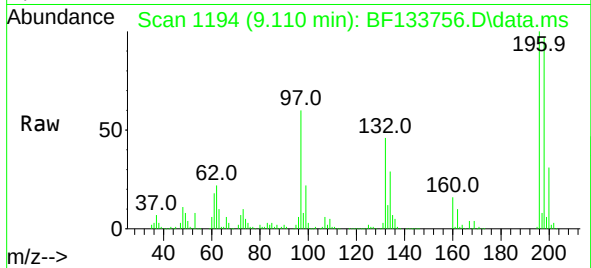






#43  
2,4,6-Trichlorophenol  
Concen: 38.961 ng  
RT: 9.110 min Scan# 1194  
Delta R.T. -0.000 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45

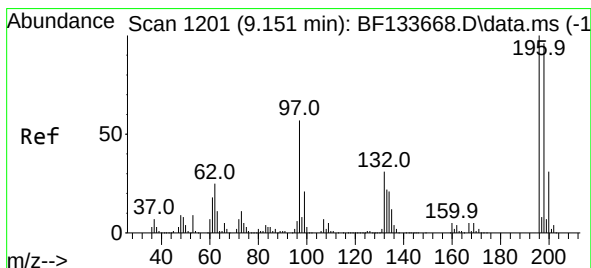
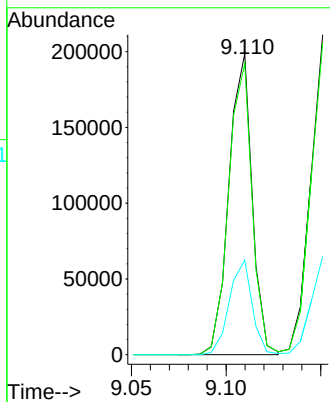
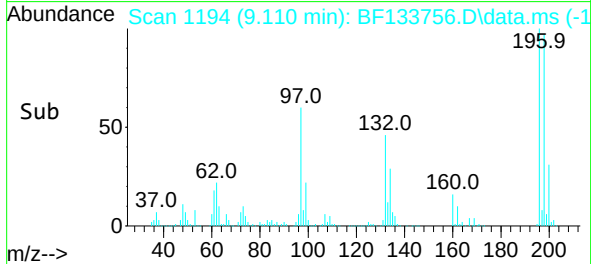
Instrument :  
BNA\_F  
ClientSampleId :  
MARION-SOIL-0609MSD



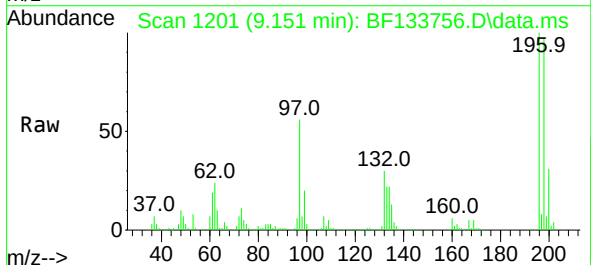
Tgt Ion:196 Resp: 169020  
Ion Ratio Lower Upper  
196 100  
198 96.7 74.5 111.7  
200 31.4 22.9 34.3

Manual Integrations  
APPROVED

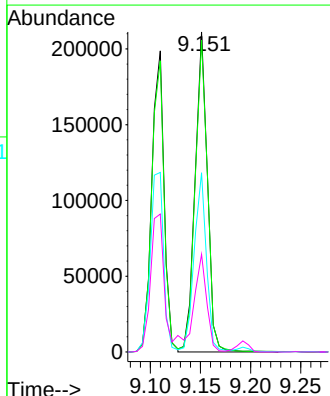
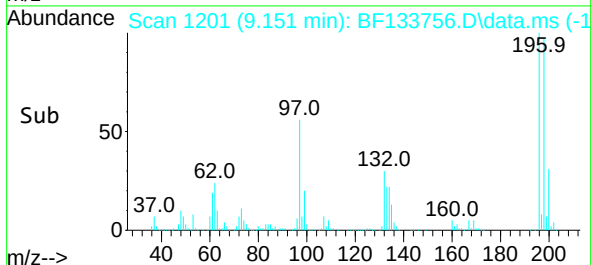
Reviewed By :Yogesh Patel 06/15/2023  
Supervised By :mohammad ahmed 06/16/2023

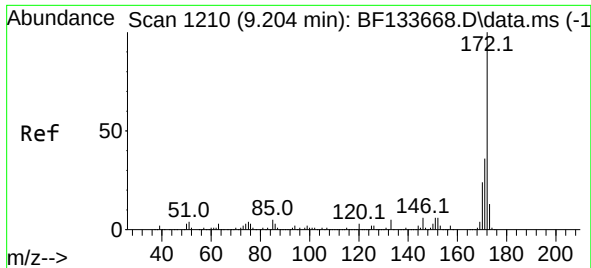


#44  
2,4,5-Trichlorophenol  
Concen: 35.802 ng  
RT: 9.151 min Scan# 1201  
Delta R.T. -0.000 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45



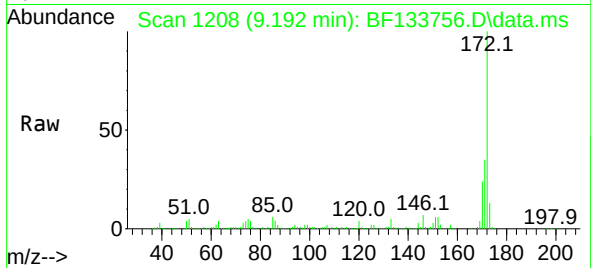
Tgt Ion:196 Resp: 180701  
Ion Ratio Lower Upper  
196 100  
198 97.4 76.8 115.2  
97 56.0 45.4 68.2  
132 30.5 24.6 37.0





#45  
2-Fluorobiphenyl  
Concen: 75.056 ng  
RT: 9.192 min Scan# 1208  
Delta R.T. -0.000 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45

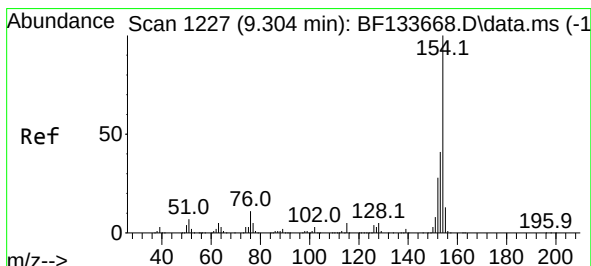
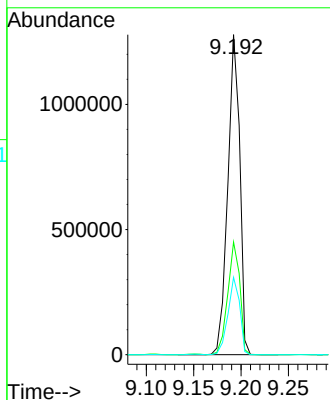
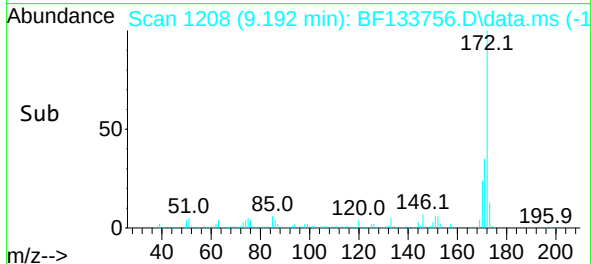
Instrument :  
BNA\_F  
ClientSampleId :  
MARION-SOIL-0609MSD



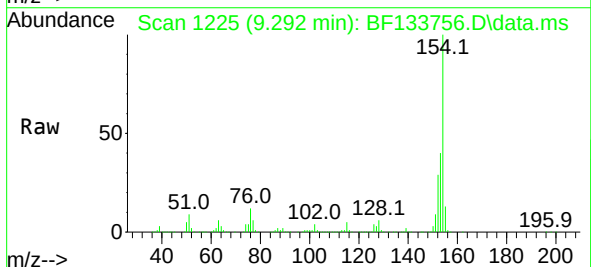
Tgt Ion:172 Resp: 1127569  
Ion Ratio Lower Upper  
172 100  
171 35.2 28.6 43.0  
170 24.1 19.1 28.7

Manual Integrations  
APPROVED

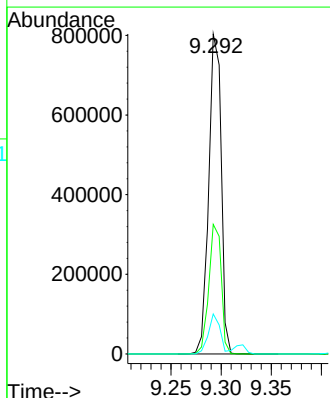
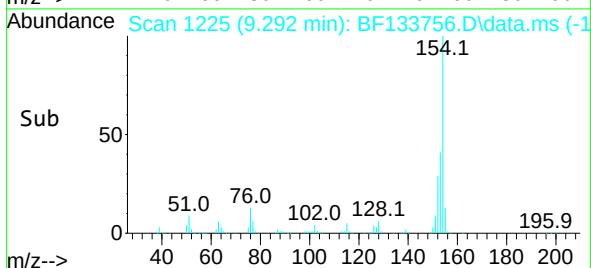
Reviewed By :Yogesh Patel 06/15/2023  
Supervised By :mohammad ahmed 06/16/2023

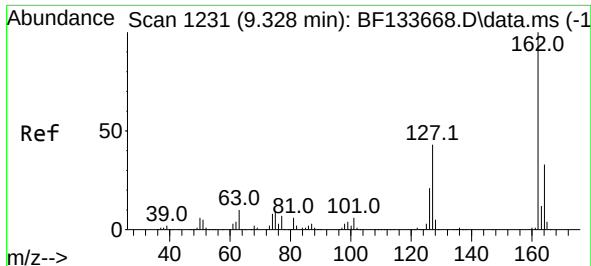


#46  
1,1'-Biphenyl  
Concen: 40.451 ng  
RT: 9.292 min Scan# 1225  
Delta R.T. -0.006 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45



Tgt Ion:154 Resp: 696708  
Ion Ratio Lower Upper  
154 100  
153 40.5 20.6 60.6  
76 12.5 0.0 31.0





#47

2-Chloronaphthalene

Concen: 40.752 ng

RT: 9.322 min Scan# 1230

Delta R.T. -0.000 min

Lab File: BF133756.D

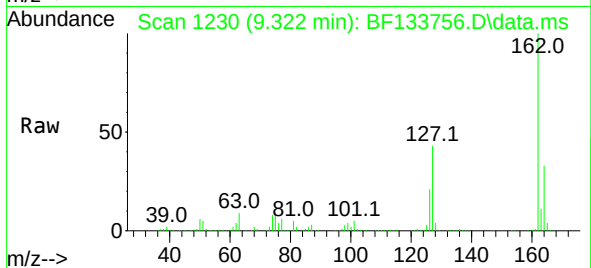
Acq: 14 Jun 2023 17:45

Instrument :

BNA\_F

ClientSampleId :

MARION-SOIL-0609MSD



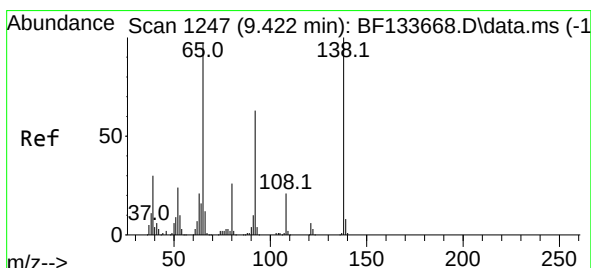
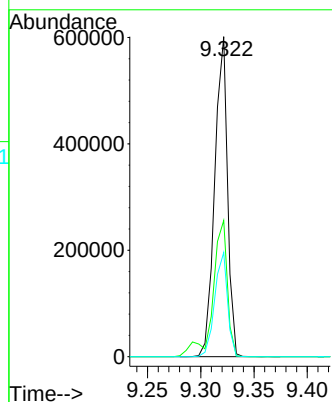
|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 162   | Resp: | 503480 |
| Ion Ratio | Lower | Upper |        |
| 162       | 100   |       |        |
| 127       | 42.6  | 34.6  | 52.0   |
| 164       | 32.6  | 26.4  | 39.6   |

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 06/15/2023

Supervised By :mohammad ahmed 06/16/2023



#48

2-Nitroaniline

Concen: 38.963 ng

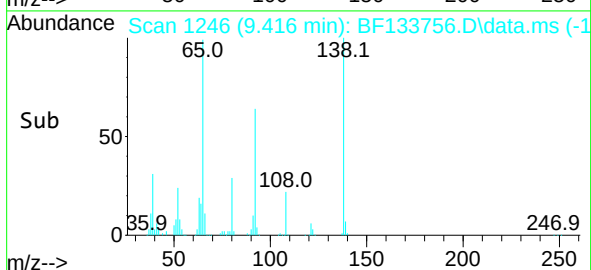
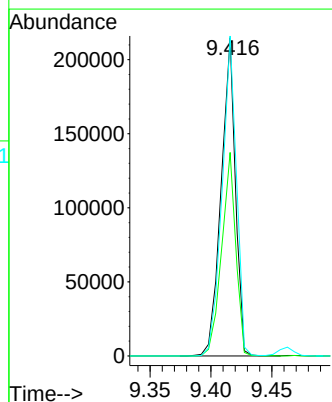
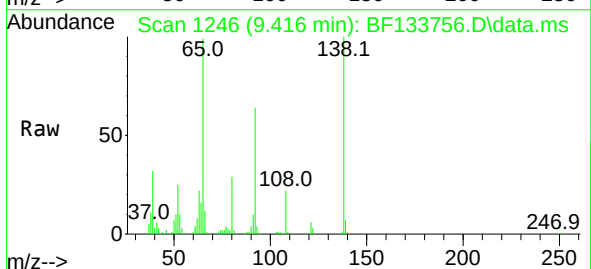
RT: 9.416 min Scan# 1246

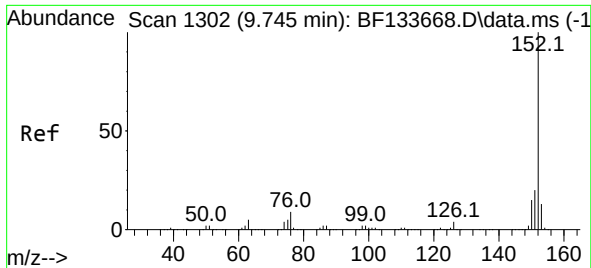
Delta R.T. -0.000 min

Lab File: BF133756.D

Acq: 14 Jun 2023 17:45

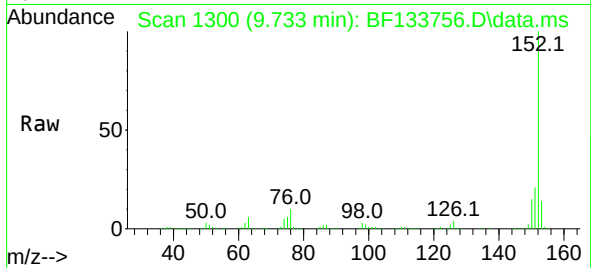
|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 65    | Resp: | 176051 |
| Ion Ratio | Lower | Upper |        |
| 65        | 100   |       |        |
| 92        | 63.9  | 51.8  | 77.6   |
| 138       | 100.6 | 82.1  | 123.1  |





#49  
Acenaphthylene  
Concen: 37.639 ng  
RT: 9.733 min Scan# 11  
Delta R.T. -0.006 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45

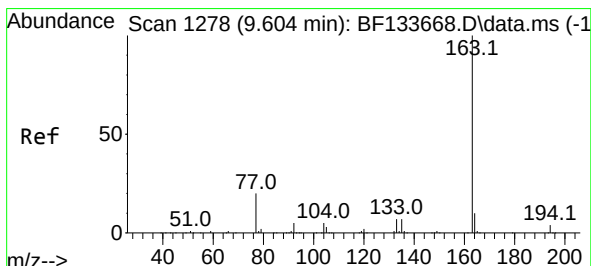
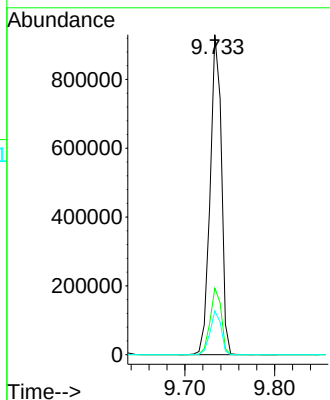
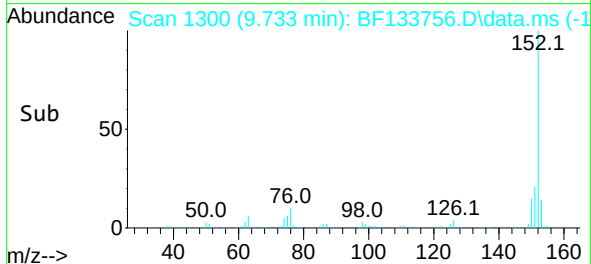
Instrument :  
BNA\_F  
ClientSampleId :  
MARION-SOIL-0609MSD



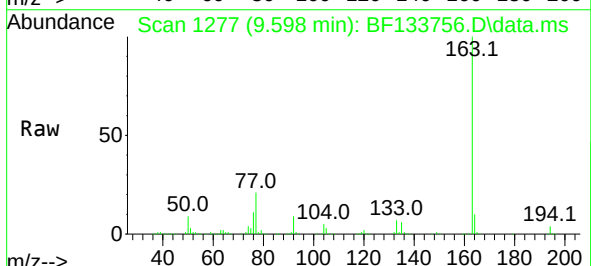
Tgt Ion:152 Resp: 809374  
Ion Ratio Lower Upper  
152 100  
151 20.8 16.2 24.4  
153 13.6 10.4 15.6

Manual Integrations  
APPROVED

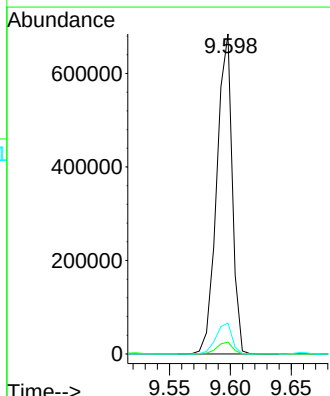
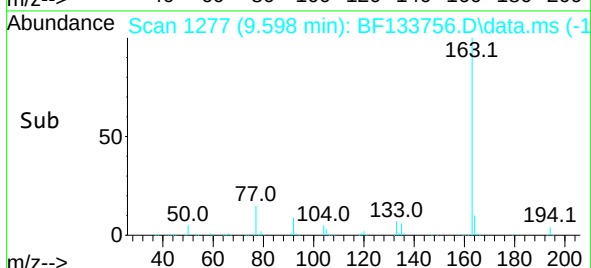
Reviewed By :Yogesh Patel 06/15/2023  
Supervised By :mohammad ahmed 06/16/2023

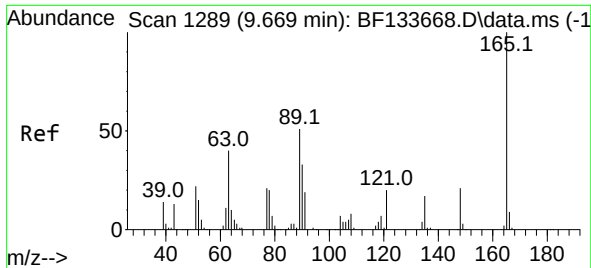


#50  
Dimethylphthalate  
Concen: 37.981 ng  
RT: 9.598 min Scan# 1277  
Delta R.T. -0.000 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45



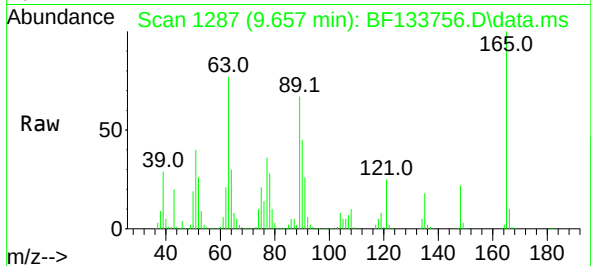
Tgt Ion:163 Resp: 605421  
Ion Ratio Lower Upper  
163 100  
194 3.7 3.2 4.8  
164 9.6 8.0 12.0





#51  
2,6-Dinitrotoluene  
Concen: 39.222 ng  
RT: 9.657 min Scan# 1287  
Delta R.T. -0.006 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45

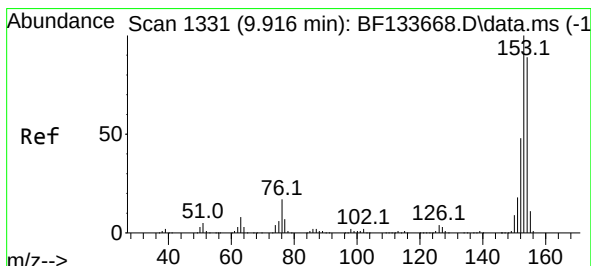
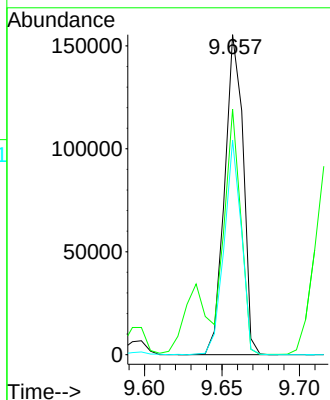
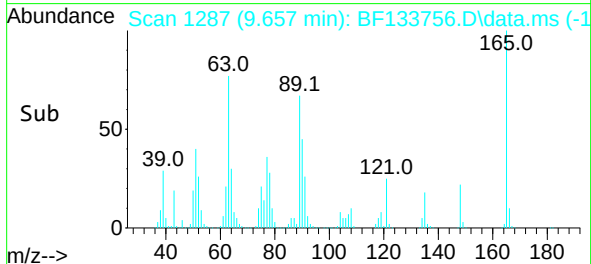
Instrument :  
BNA\_F  
ClientSampleId :  
MARION-SOIL-0609MSD



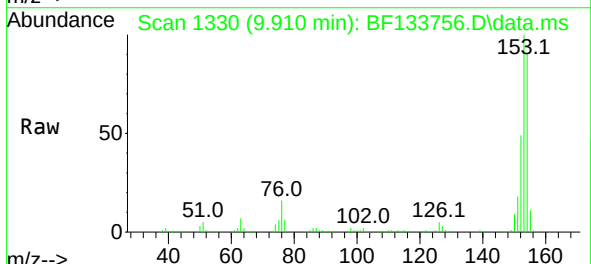
Tgt Ion:165 Resp: 129049  
Ion Ratio Lower Upper  
165 100  
63 76.7 42.1 63.1  
89 67.1 40.9 61.3

Manual Integrations  
APPROVED

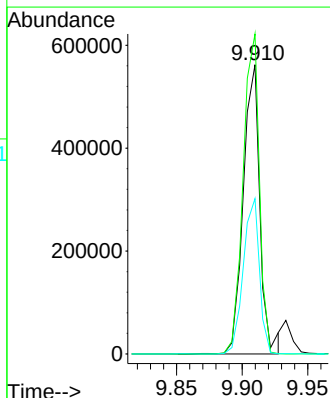
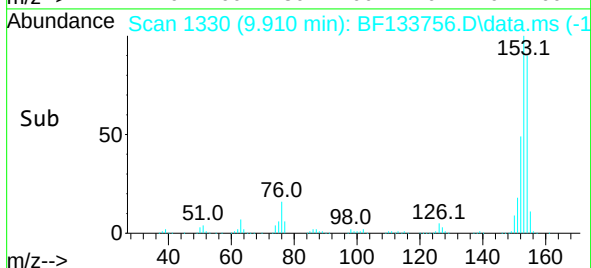
Reviewed By :Yogesh Patel 06/15/2023  
Supervised By :mohammad ahmed 06/16/2023

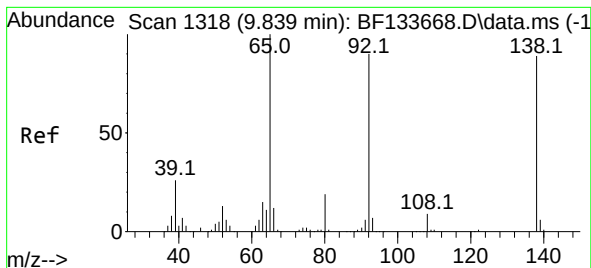


#52  
Acenaphthene  
Concen: 39.586 ng  
RT: 9.910 min Scan# 1330  
Delta R.T. -0.000 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45



Tgt Ion:154 Resp: 498252  
Ion Ratio Lower Upper  
154 100  
153 110.6 89.8 134.8  
152 53.7 43.4 65.2





#53

3-Nitroaniline

Concen: 18.516 ng

RT: 9.827 min Scan# 11

Delta R.T. -0.000 min

Lab File: BF133756.D

Acq: 14 Jun 2023 17:45

Instrument :

BNA\_F

ClientSampleId :

MARION-SOIL-0609MSD

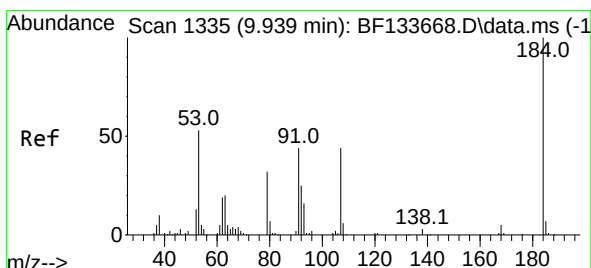
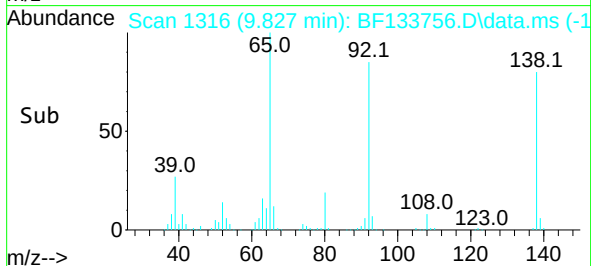
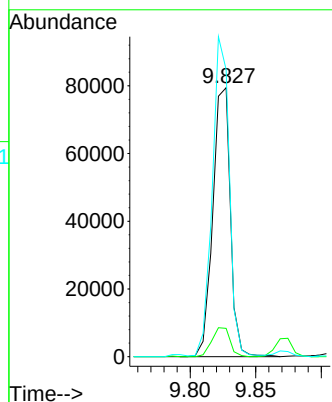
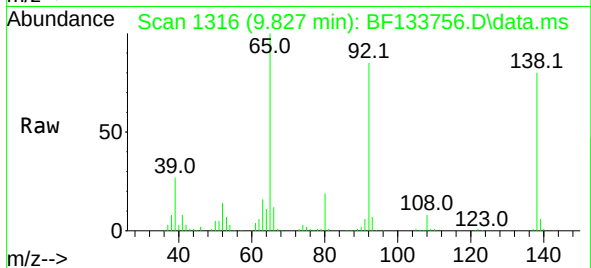
|             |       |            |
|-------------|-------|------------|
| Tgt Ion:138 | Resp: | 7413       |
| Ion Ratio   | Lower | Upper      |
| 138         | 100   |            |
| 108         | 10.5  | 8.2 12.4   |
| 92          | 106.7 | 81.0 121.6 |

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 06/15/2023

Supervised By :mohammad ahmed 06/16/2023



#54

2,4-Dinitrophenol

Concen: 49.390 ng

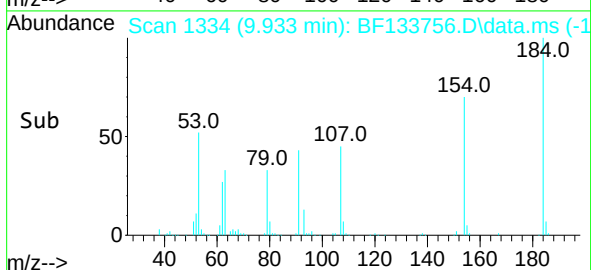
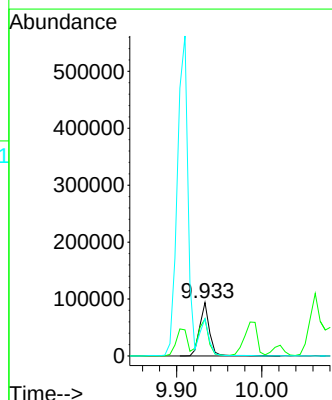
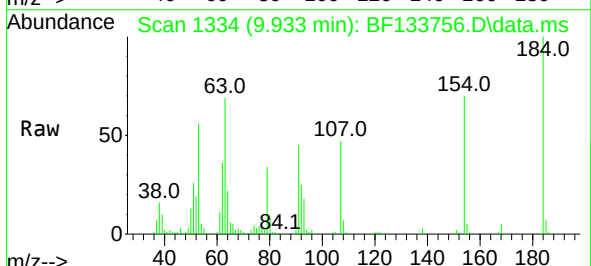
RT: 9.933 min Scan# 1334

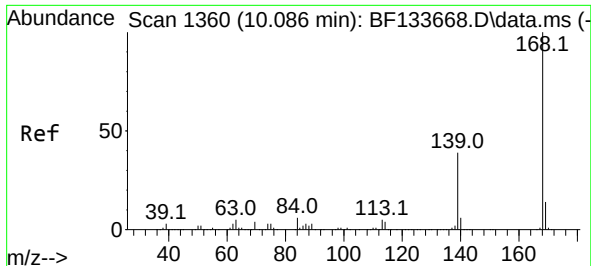
Delta R.T. -0.000 min

Lab File: BF133756.D

Acq: 14 Jun 2023 17:45

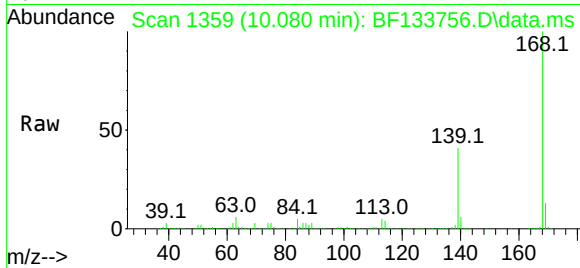
|             |       |           |
|-------------|-------|-----------|
| Tgt Ion:184 | Resp: | 75622     |
| Ion Ratio   | Lower | Upper     |
| 184         | 100   |           |
| 63          | 69.3  | 55.3 82.9 |
| 154         | 69.6  | 51.9 77.9 |





#55  
Dibenzofuran  
Concen: 38.021 ng  
RT: 10.080 min Scan# 1359  
Delta R.T. -0.000 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45

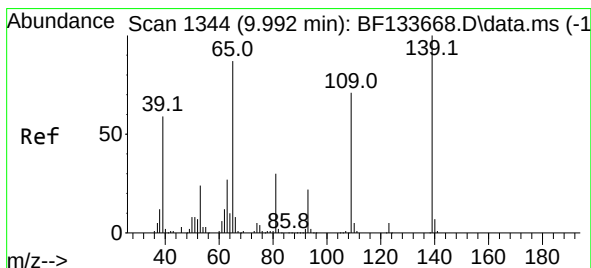
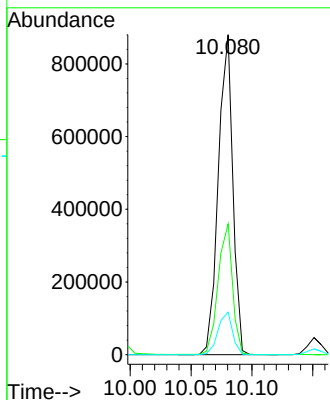
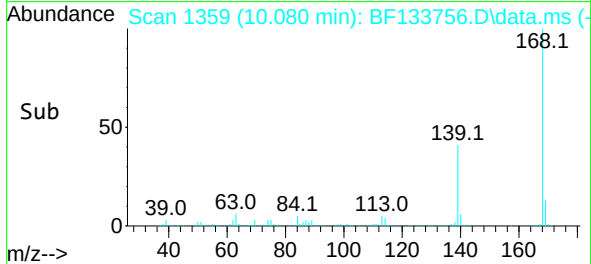
Instrument :  
BNA\_F  
ClientSampleId :  
MARION-SOIL-0609MSD



Tgt Ion:168 Resp: 73023  
Ion Ratio Lower Upper  
168 100  
139 40.9 30.9 46.3  
169 13.3 10.9 16.3

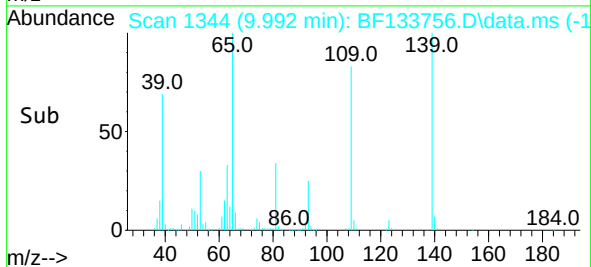
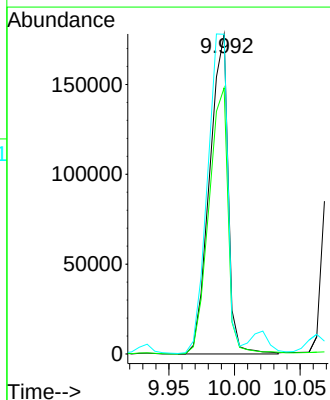
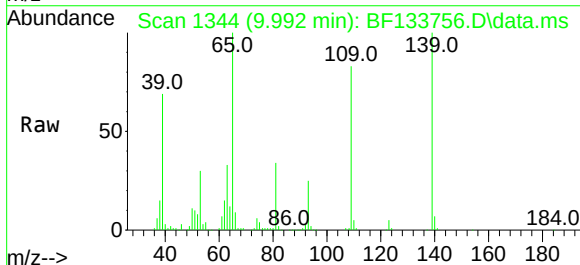
Manual Integrations  
APPROVED

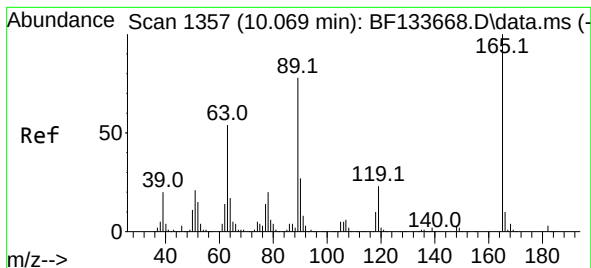
Reviewed By :Yogesh Patel 06/15/2023  
Supervised By :mohammad ahmed 06/16/2023



#56  
4-Nitrophenol  
Concen: 65.190 ng  
RT: 9.992 min Scan# 1344  
Delta R.T. 0.006 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45

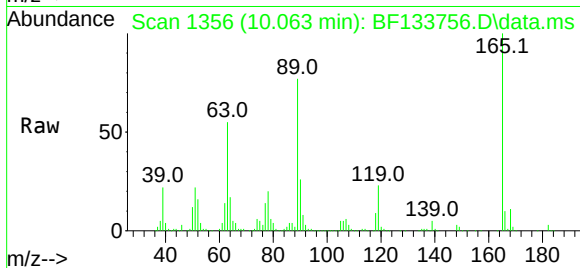
Tgt Ion:139 Resp: 176158  
Ion Ratio Lower Upper  
139 100  
109 83.3 50.7 90.7  
65 100.1 67.1 107.1





#57  
2,4-Dinitrotoluene  
Concen: 39.268 ng  
RT: 10.063 min Scan# 11  
Delta R.T. -0.000 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45

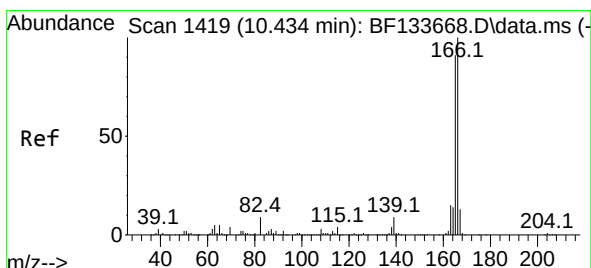
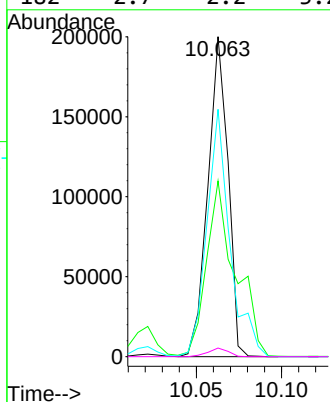
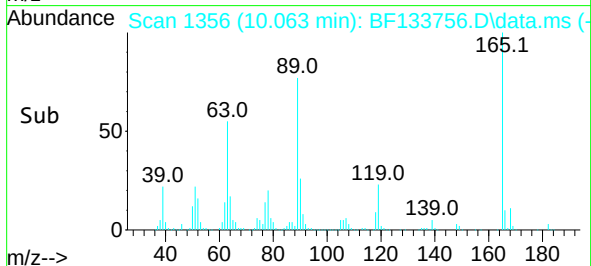
Instrument :  
BNA\_F  
ClientSampleId :  
MARION-SOIL-0609MSD



Tgt Ion:165 Resp: 164315  
Ion Ratio Lower Upper  
165 100  
63 54.9 43.0 64.6  
89 77.3 62.6 93.8  
182 2.7 2.2 3.2

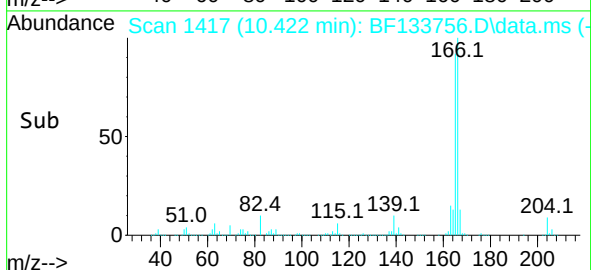
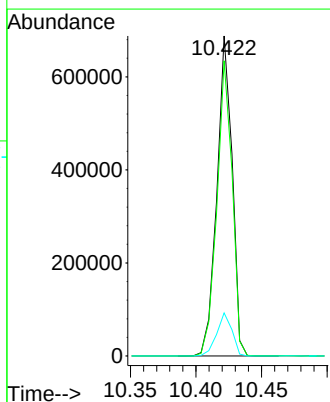
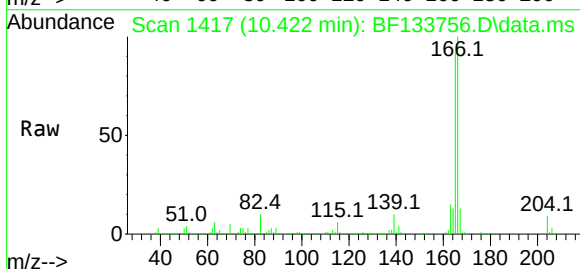
Manual Integrations  
APPROVED

Reviewed By :Yogesh Patel 06/15/2023  
Supervised By :mohammad ahmed 06/16/2023

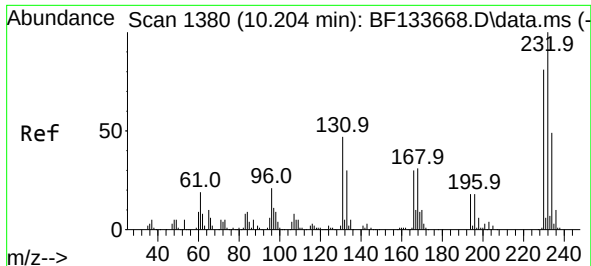


#58  
Fluorene  
Concen: 37.801 ng  
RT: 10.422 min Scan# 1417  
Delta R.T. -0.006 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45

Tgt Ion:166 Resp: 555203  
Ion Ratio Lower Upper  
166 100  
165 92.3 73.1 109.7  
167 13.5 10.5 15.7

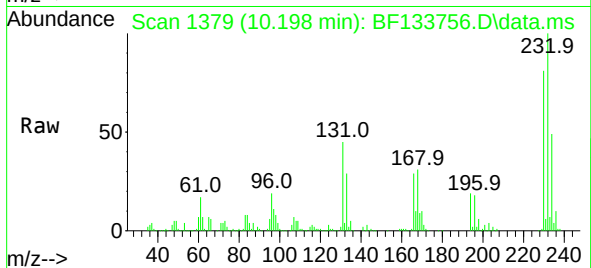






#59  
2,3,4,6-Tetrachlorophenol  
Concen: 37.740 ng  
RT: 10.198 min Scan# 1379  
Delta R.T. -0.000 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45

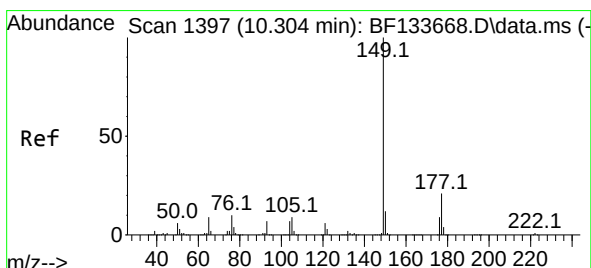
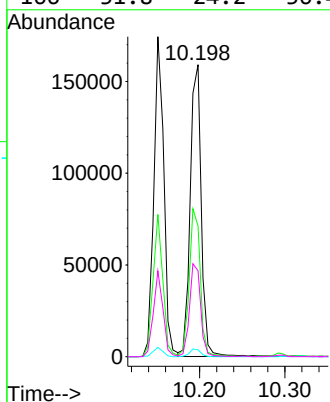
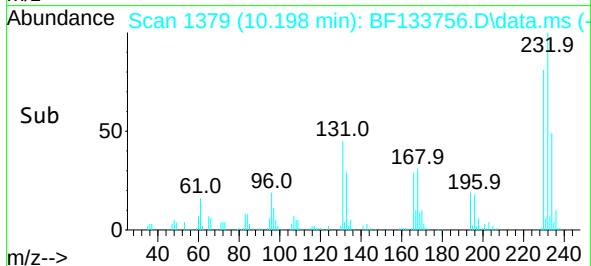
Instrument :  
BNA\_F  
ClientSampleId :  
MARION-SOIL-0609MSD



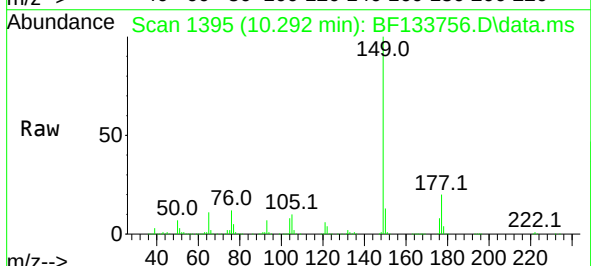
Tgt Ion:232 Resp: 142609  
Ion Ratio Lower Upper  
232 100  
131 50.4 38.0 57.0  
130 2.6 1.8 2.8  
166 31.8 24.2 36.4

Manual Integrations  
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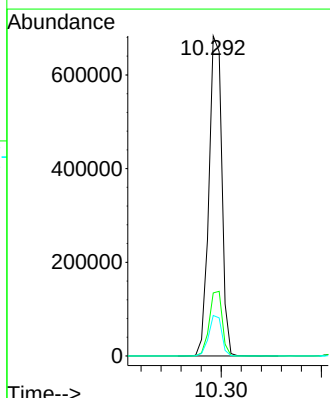
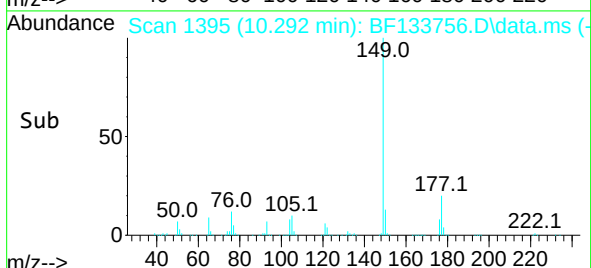
Reviewed By :Yogesh Patel 06/15/2023  
Supervised By :mohammad ahmed 06/16/2023

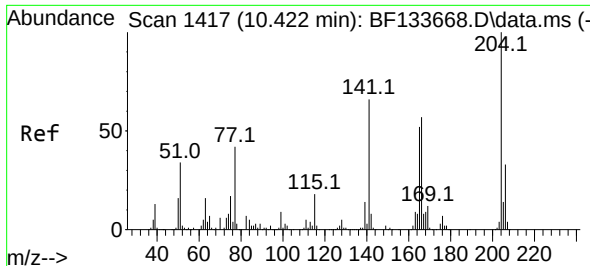


#60  
Diethylphthalate  
Concen: 37.796 ng  
RT: 10.292 min Scan# 1395  
Delta R.T. -0.006 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45



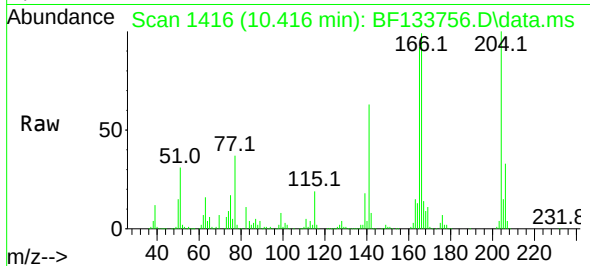
Tgt Ion:149 Resp: 613178  
Ion Ratio Lower Upper  
149 100  
177 19.7 17.0 25.6  
150 12.6 10.0 15.0





#61  
4-Chlorophenyl-phenylether  
Concen: 37.390 ng  
RT: 10.416 min Scan# 1416  
Delta R.T. -0.000 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45

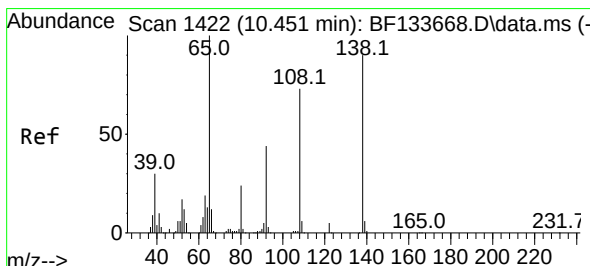
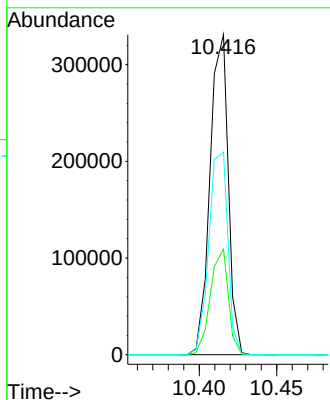
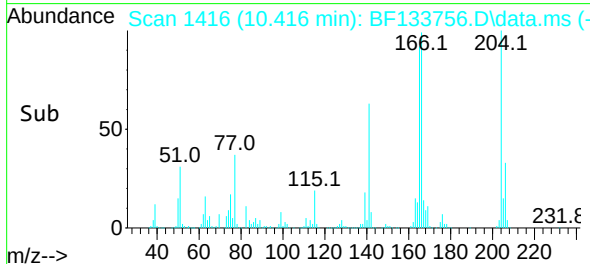
Instrument :  
BNA\_F  
ClientSampleId :  
MARION-SOIL-0609MSD



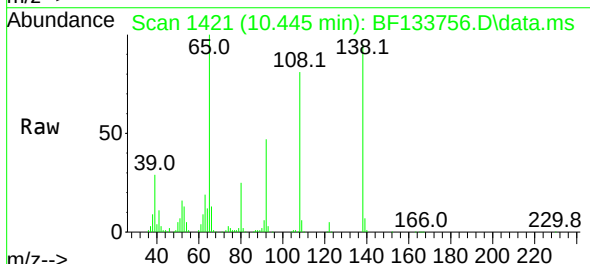
Tgt Ion:204 Resp: 271100  
Ion Ratio Lower Upper  
204 100  
206 33.1 26.4 39.6  
141 63.3 52.8 79.2

Manual Integrations  
APPROVED

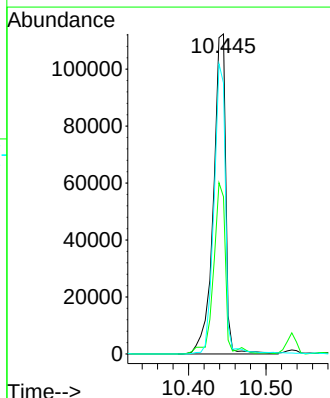
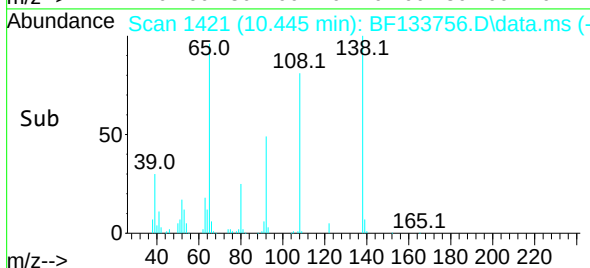
Reviewed By :Yogesh Patel 06/15/2023  
Supervised By :mohammad ahmed 06/16/2023

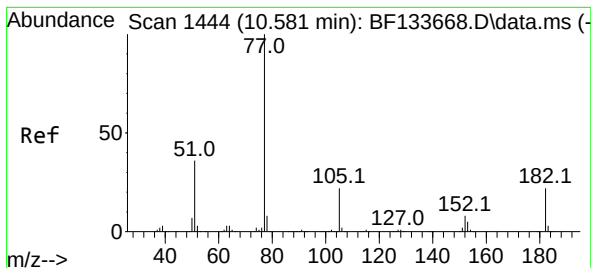


#62  
4-Nitroaniline  
Concen: 31.836 ng  
RT: 10.445 min Scan# 1421  
Delta R.T. -0.000 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45



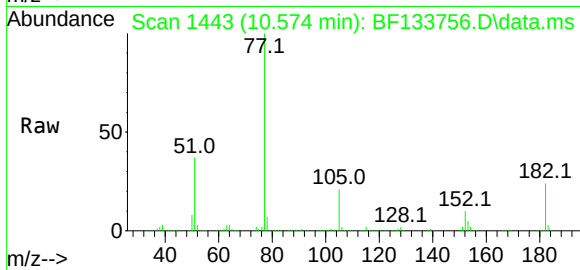
Tgt Ion:138 Resp: 124980  
Ion Ratio Lower Upper  
138 100  
92 49.2 28.9 68.9  
108 84.7 61.0 101.0





#63  
Azobenzene  
Concen: 36.896 ng  
RT: 10.574 min Scan# 1443  
Delta R.T. -0.000 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45

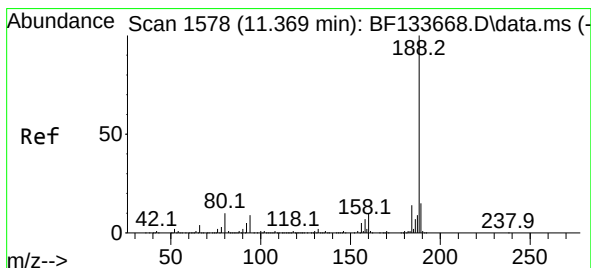
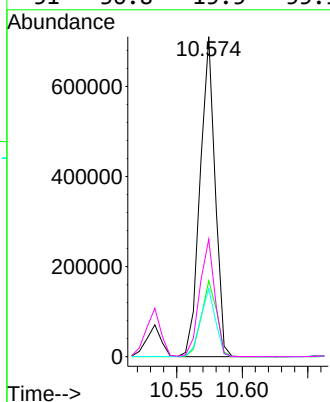
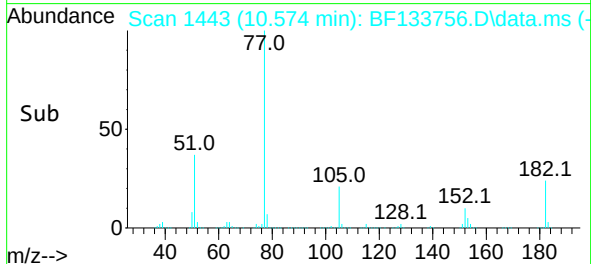
Instrument :  
BNA\_F  
ClientSampleId :  
MARION-SOIL-0609MSD



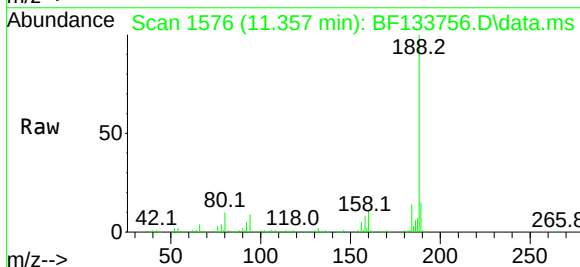
Tgt Ion: 77 Resp: 566654  
Ion Ratio Lower Upper  
77 100  
182 23.7 1.6 41.6  
105 21.3 1.6 41.6  
51 36.8 15.5 55.5

Manual Integrations  
APPROVED

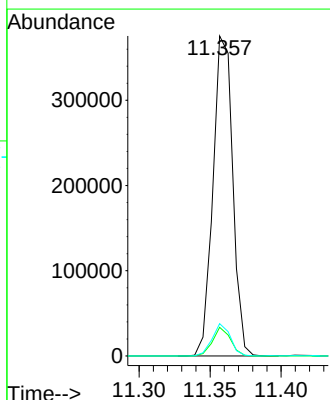
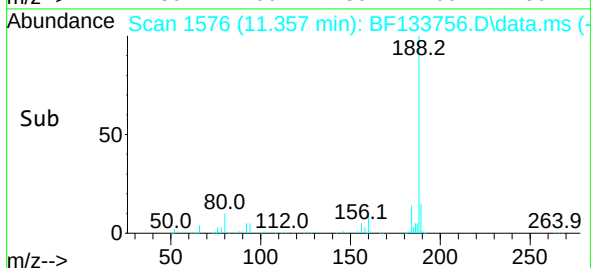
Reviewed By :Yogesh Patel 06/15/2023  
Supervised By :mohammad ahmed 06/16/2023

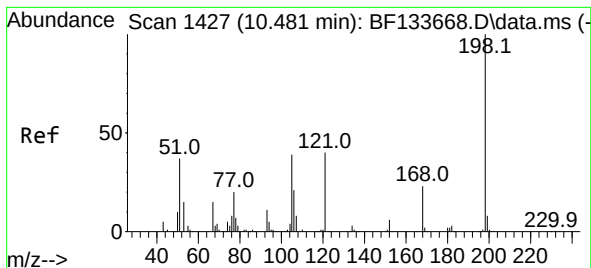


#64  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 11.357 min Scan# 1576  
Delta R.T. -0.006 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45



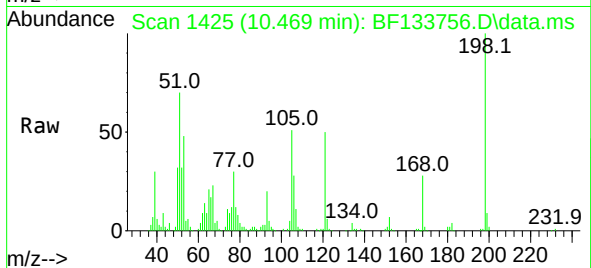
Tgt Ion:188 Resp: 362450  
Ion Ratio Lower Upper  
188 100  
94 9.0 6.8 10.2  
80 10.1 7.8 11.6





#65  
4,6-Dinitro-2-methylphenol  
Concen: 34.049 ng  
RT: 10.469 min Scan# 1425  
Delta R.T. -0.006 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45

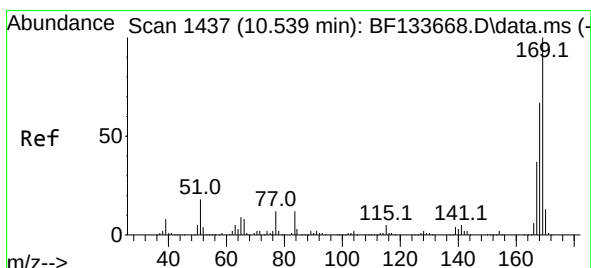
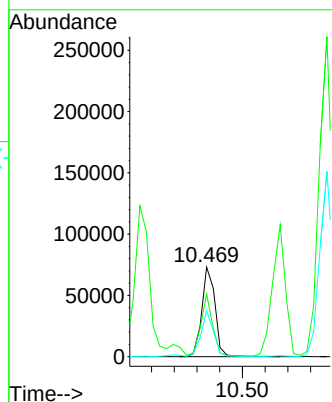
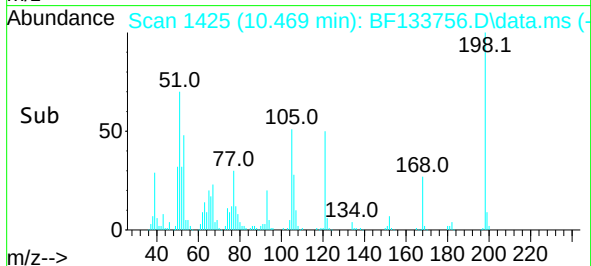
Instrument :  
BNA\_F  
ClientSampleId :  
MARION-SOIL-0609MSD



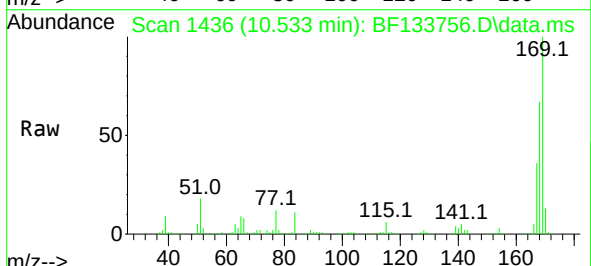
Tgt Ion:198 Resp: 5897  
Ion Ratio Lower Upper  
198 100  
51 70.0 27.5 67.5  
105 51.1 21.0 61.0

Manual Integrations  
APPROVED

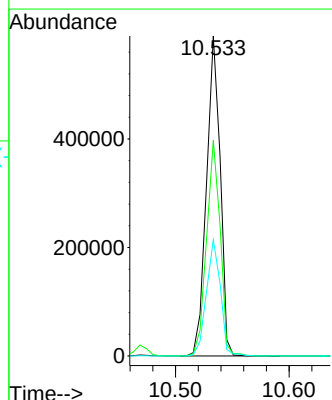
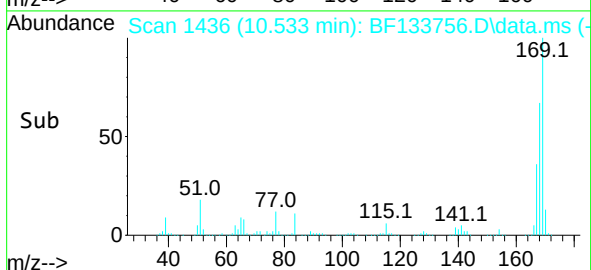
Reviewed By :Yogesh Patel 06/15/2023  
Supervised By :mohammad ahmed 06/16/2023

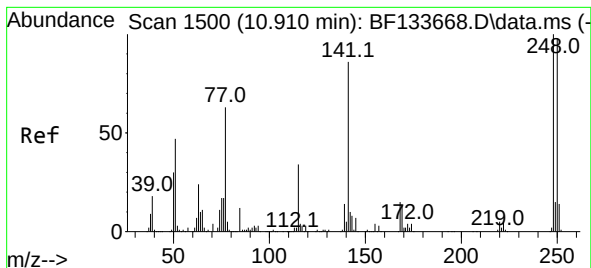


#66  
n-Nitrosodiphenylamine  
Concen: 40.449 ng  
RT: 10.533 min Scan# 1436  
Delta R.T. -0.000 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45



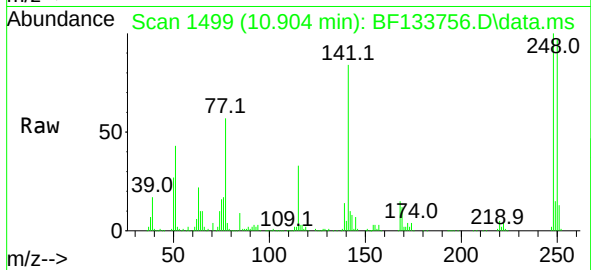
Tgt Ion:169 Resp: 492452  
Ion Ratio Lower Upper  
169 100  
168 67.4 53.7 80.5  
167 36.3 29.8 44.8





#67  
4-Bromophenyl-phenylether  
Concen: 39.899 ng  
RT: 10.904 min Scan# 1499  
Delta R.T. -0.000 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45

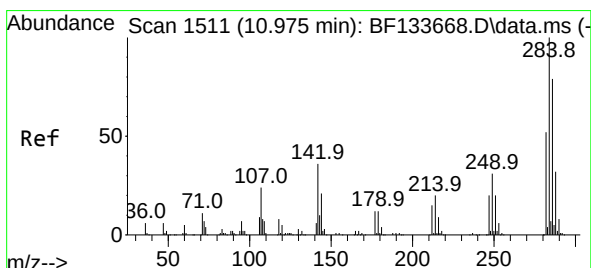
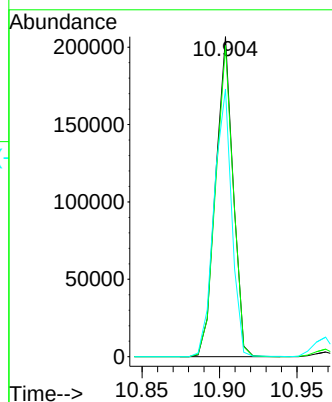
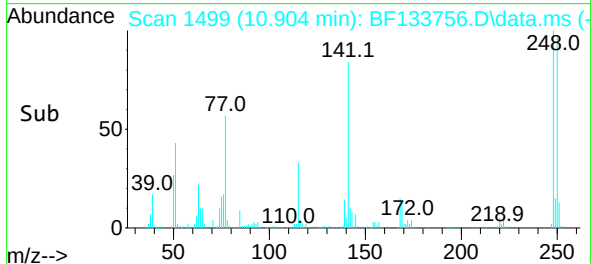
Instrument :  
BNA\_F  
ClientSampleId :  
MARION-SOIL-0609MSD



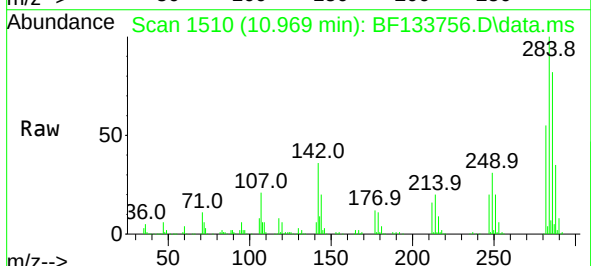
Tgt Ion:248 Resp: 161410  
Ion Ratio Lower Upper  
248 100  
250 97.2 78.3 117.5  
141 83.6 69.0 103.6

Manual Integrations  
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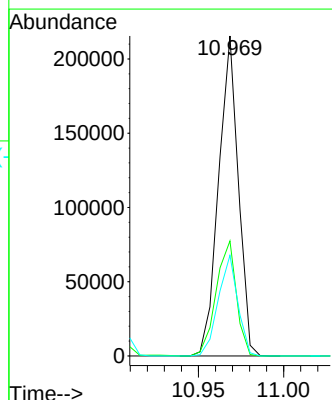
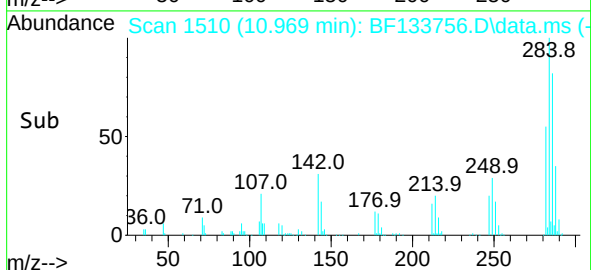
Reviewed By :Yogesh Patel 06/15/2023  
Supervised By :mohammad ahmed 06/16/2023

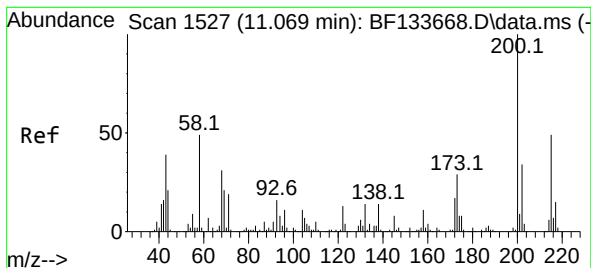


#68  
Hexachlorobenzene  
Concen: 40.755 ng  
RT: 10.969 min Scan# 1510  
Delta R.T. -0.000 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45



Tgt Ion:284 Resp: 173376  
Ion Ratio Lower Upper  
284 100  
142 35.9 28.6 42.8  
249 31.4 24.6 36.8





#69

Atrazine

Concen: 43.609 ng

RT: 11.063 min Scan# 1526

Delta R.T. -0.000 min

Lab File: BF133756.D

Acq: 14 Jun 2023 17:45

Instrument :

BNA\_F

ClientSampleId :

MARION-SOIL-0609MSD

Tgt Ion:200 Resp: 15404

Ion Ratio Lower Upper

200 100

173 26.3 8.7 48.7

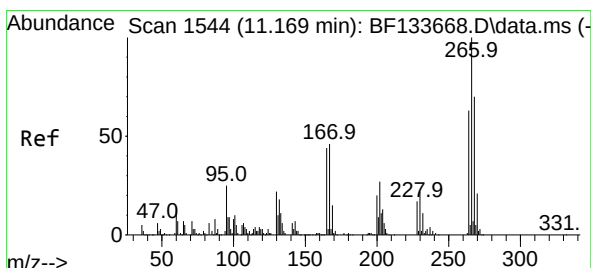
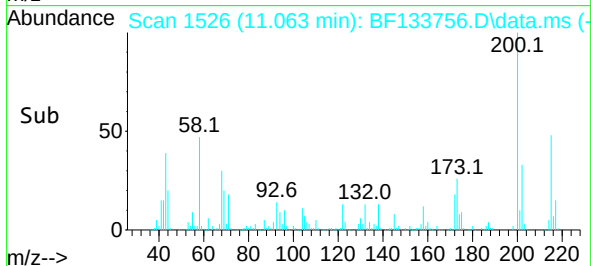
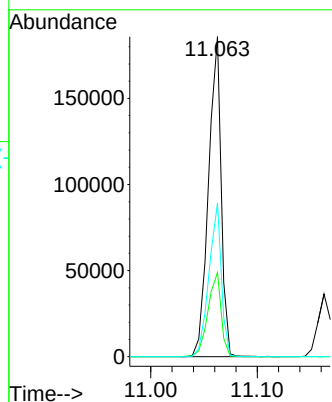
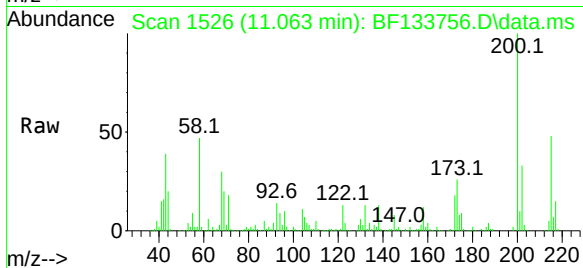
215 47.9 29.0 69.0

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 06/15/2023

Supervised By :mohammad ahmed 06/16/2023



#70

Pentachlorophenol

Concen: 63.755 ng

RT: 11.163 min Scan# 1543

Delta R.T. -0.000 min

Lab File: BF133756.D

Acq: 14 Jun 2023 17:45

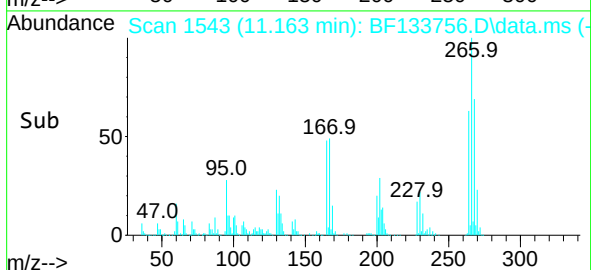
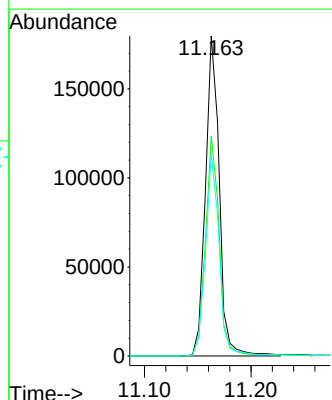
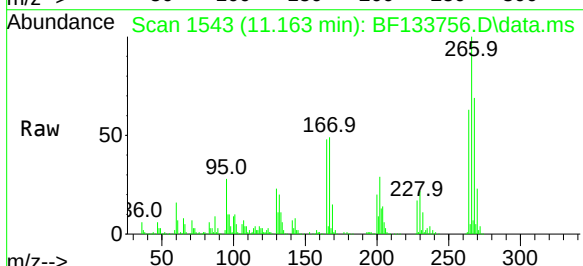
Tgt Ion:266 Resp: 162407

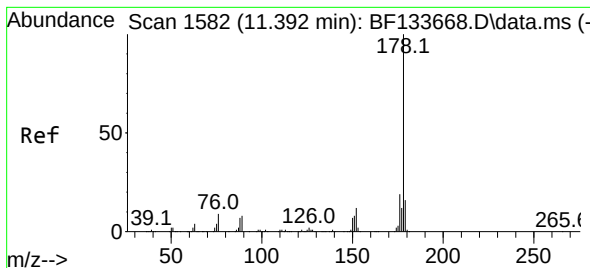
Ion Ratio Lower Upper

266 100

268 68.7 55.7 83.5

264 63.0 50.7 76.1





#71

Phenanthrene

Concen: 38.628 ng

RT: 11.386 min Scan# 1581

Delta R.T. -0.000 min

Lab File: BF133756.D

Acq: 14 Jun 2023 17:45

Instrument :

BNA\_F

ClientSampleId :

MARION-SOIL-0609MSD

Tgt Ion:178 Resp: 710332

Ion Ratio Lower Upper

178 100

176 19.8 15.6 23.4

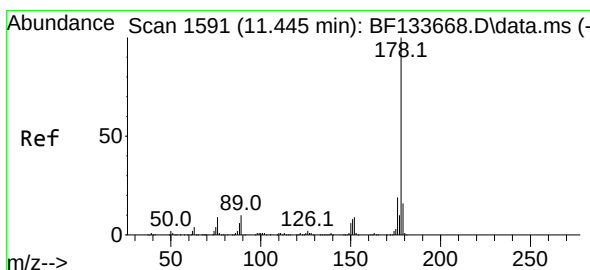
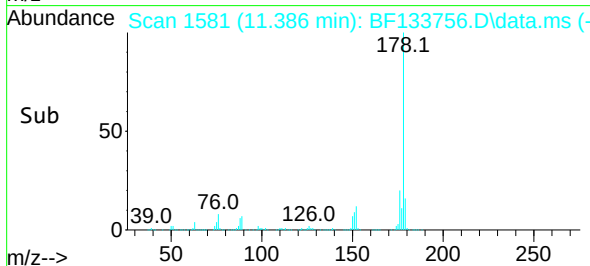
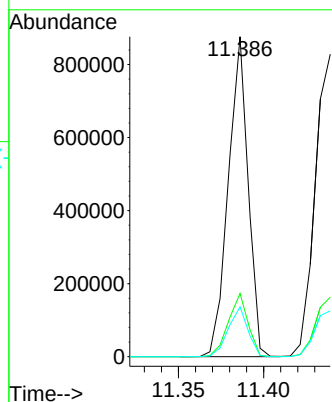
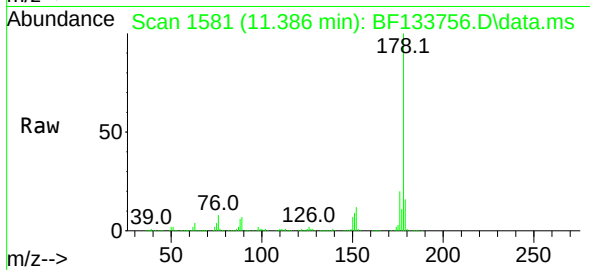
179 15.6 12.4 18.6

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 06/15/2023

Supervised By :mohammad ahmed 06/16/2023



#72

Anthracene

Concen: 37.935 ng

RT: 11.439 min Scan# 1590

Delta R.T. -0.000 min

Lab File: BF133756.D

Acq: 14 Jun 2023 17:45

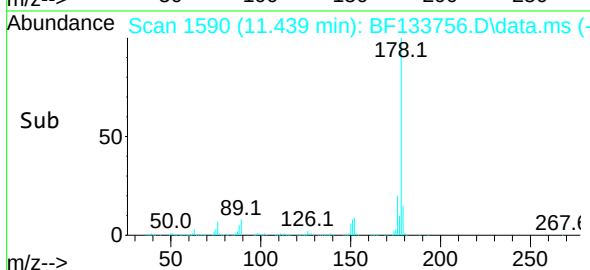
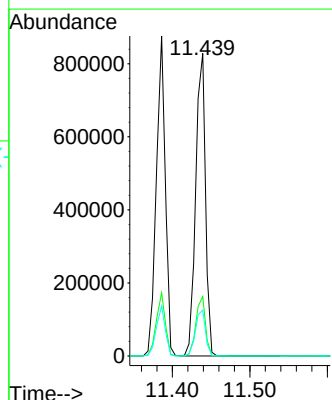
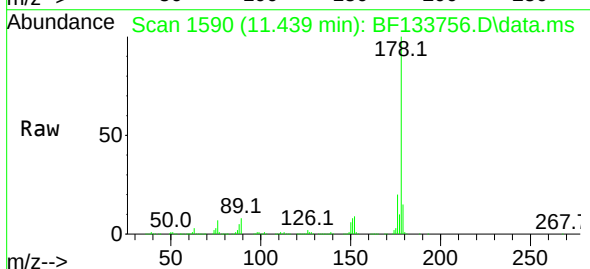
Tgt Ion:178 Resp: 727354

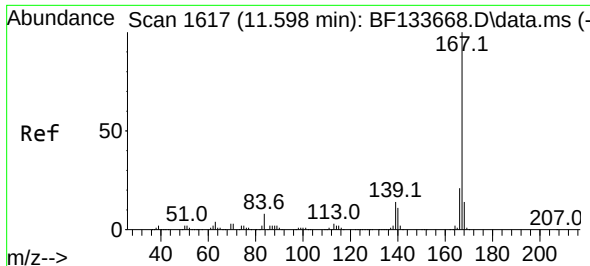
Ion Ratio Lower Upper

178 100

176 19.7 15.1 22.7

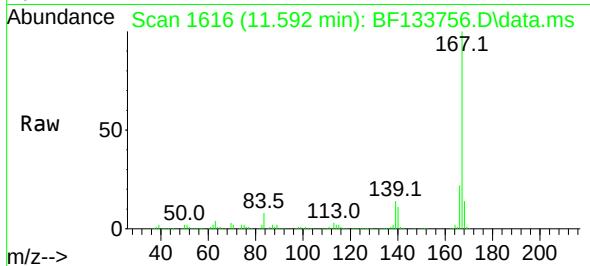
179 15.2 12.6 18.8





#73  
 Carbazole  
 Concen: 36.321 ng  
 RT: 11.592 min Scan# 1616  
 Delta R.T. -0.006 min  
 Lab File: BF133756.D  
 Acq: 14 Jun 2023 17:45

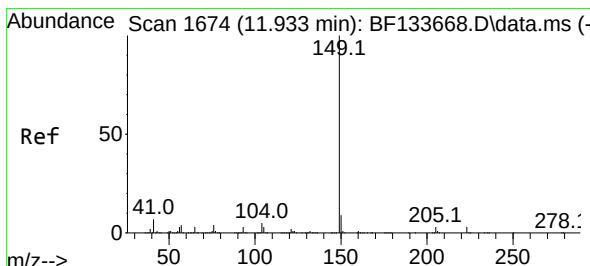
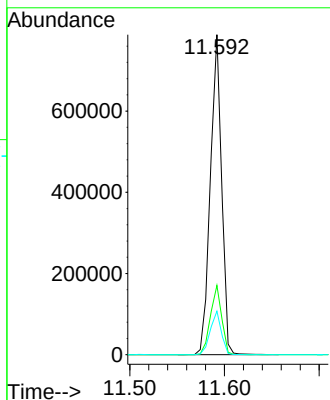
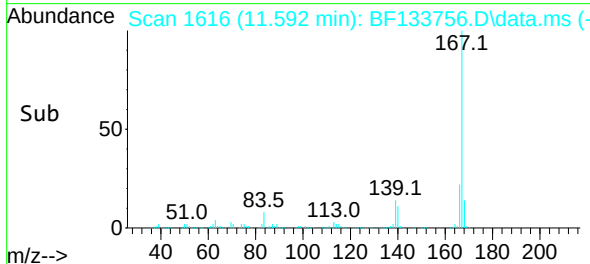
Instrument :  
 BNA\_F  
 ClientSampleId :  
 MARION-SOIL-0609MSD



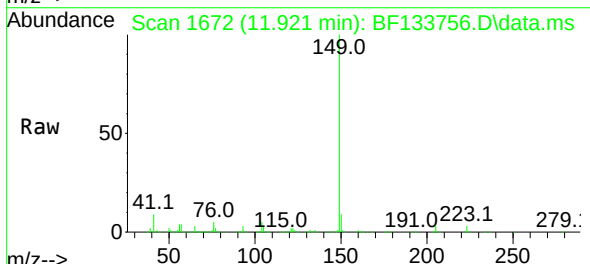
Tgt Ion:167 Resp: 648628  
 Ion Ratio Lower Upper  
 167 100  
 166 21.7 17.0 25.6  
 139 13.6 11.2 16.8

Manual Integrations  
 APPROVED

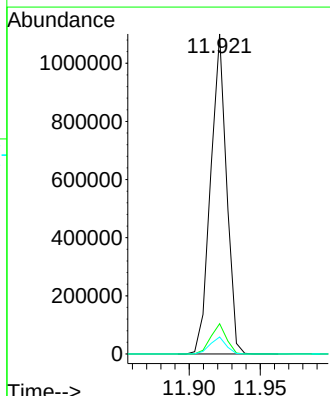
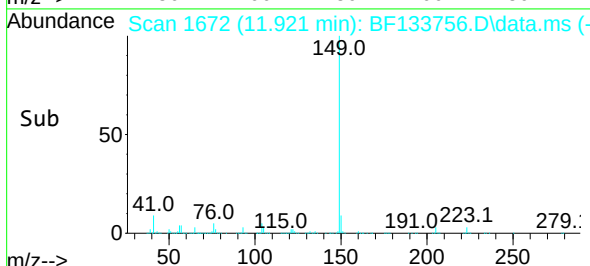
Reviewed By :Yogesh Patel 06/15/2023  
 Supervised By :mohammad ahmed 06/16/2023



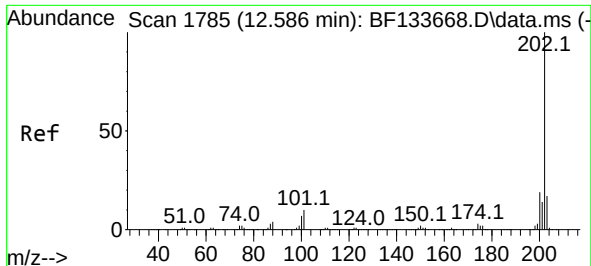
#74  
 Di-n-butylphthalate  
 Concen: 37.503 ng  
 RT: 11.921 min Scan# 1672  
 Delta R.T. -0.000 min  
 Lab File: BF133756.D  
 Acq: 14 Jun 2023 17:45



Tgt Ion:149 Resp: 858576  
 Ion Ratio Lower Upper  
 149 100  
 150 9.5 7.4 11.0  
 104 5.3 3.8 5.8

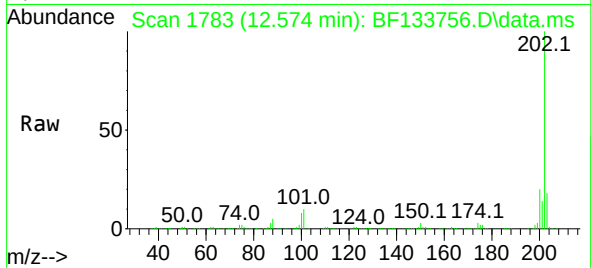






#75  
Fluoranthene  
Concen: 34.924 ng  
RT: 12.574 min Scan# 1783  
Delta R.T. -0.006 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45

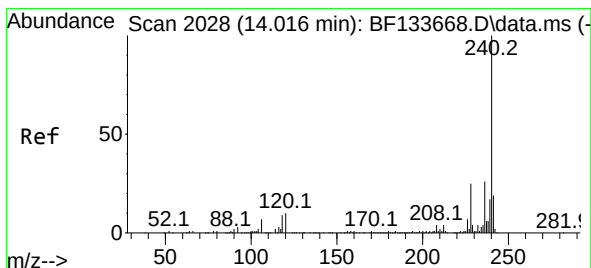
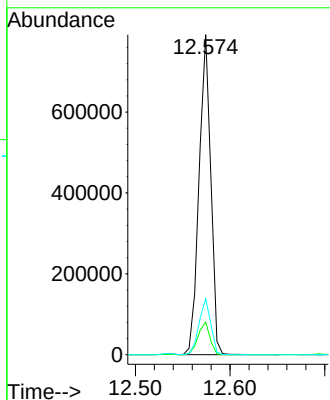
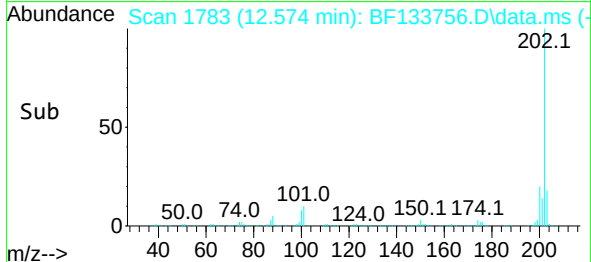
Instrument :  
BNA\_F  
ClientSampleId :  
MARION-SOIL-0609MSD



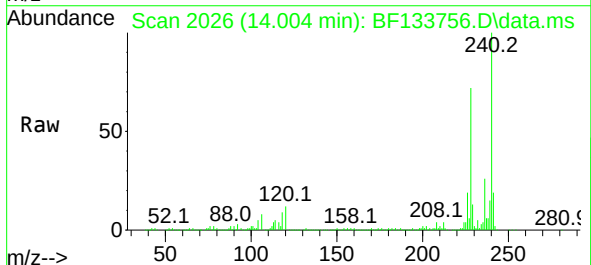
Tgt Ion:202 Resp: 681984  
Ion Ratio Lower Upper  
202 100  
101 10.2 0.0 29.6  
203 17.5 0.0 37.4

Manual Integrations  
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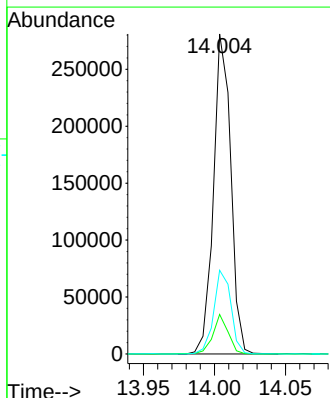
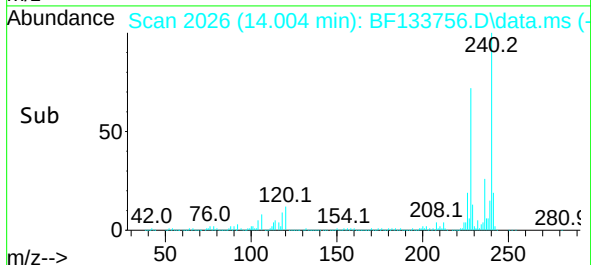
Reviewed By :Yogesh Patel 06/15/2023  
Supervised By :mohammad ahmed 06/16/2023

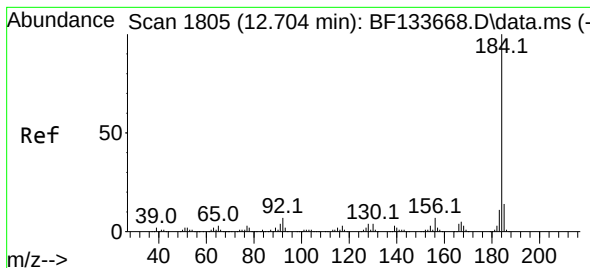


#76  
Chrysene-d12  
Concen: 20.000 ng  
RT: 14.004 min Scan# 2026  
Delta R.T. -0.006 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45



Tgt Ion:240 Resp: 238198  
Ion Ratio Lower Upper  
240 100  
120 12.4 8.1 12.1#  
236 26.1 20.5 30.7





#77

Benzidine

Concen: 19.980 ng

RT: 12.698 min Scan# 1804

Delta R.T. -0.000 min

Lab File: BF133756.D

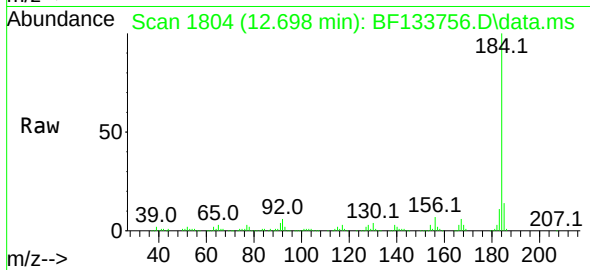
Acq: 14 Jun 2023 17:45

Instrument :

BNA\_F

ClientSampleId :

MARION-SOIL-0609MSD



Tgt Ion:184 Resp: 159699

Ion Ratio Lower Upper

184 100

185 13.9 11.6 17.4

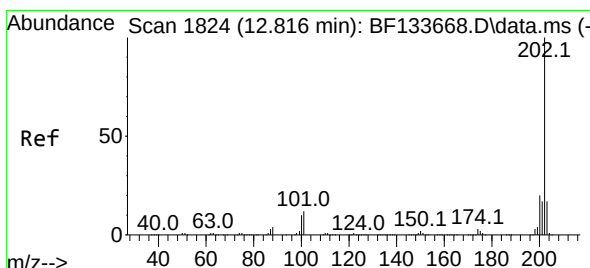
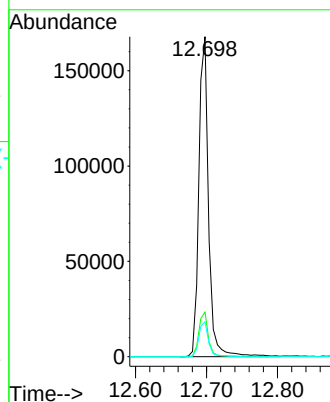
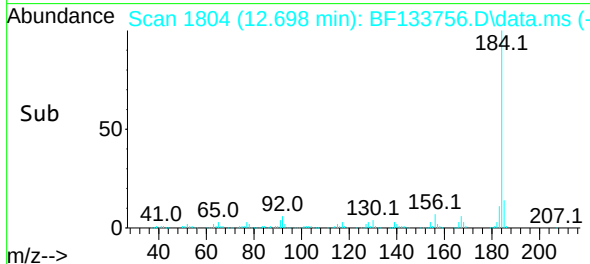
183 10.9 8.4 12.6

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 06/15/2023

Supervised By :mohammad ahmed 06/16/2023



#78

Pyrene

Concen: 30.869 ng

RT: 12.804 min Scan# 1822

Delta R.T. -0.006 min

Lab File: BF133756.D

Acq: 14 Jun 2023 17:45

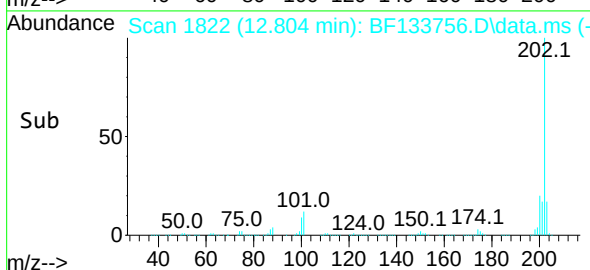
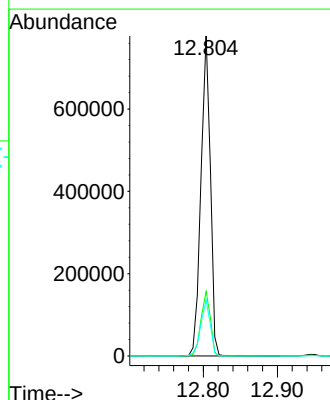
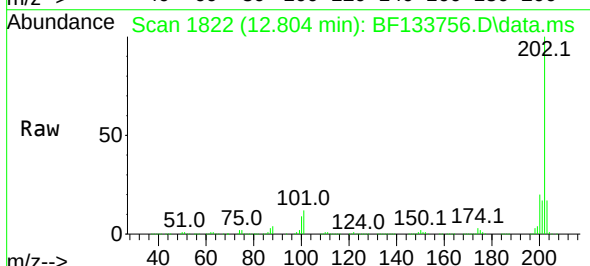
Tgt Ion:202 Resp: 684961

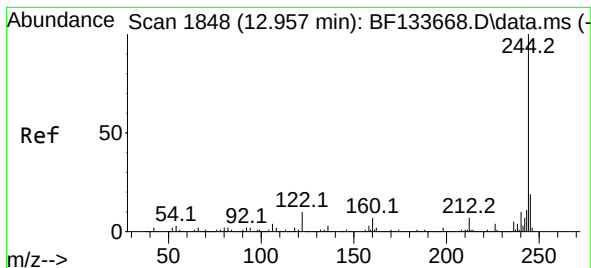
Ion Ratio Lower Upper

202 100

200 20.1 16.2 24.2

203 17.3 13.9 20.9





#79

Terphenyl-d14

Concen: 63.707 ng

RT: 12.945 min Scan# 1846

Delta R.T. -0.006 min

Lab File: BF133756.D

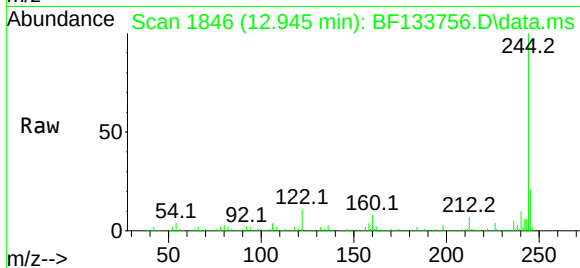
Acq: 14 Jun 2023 17:45

Instrument :

BNA\_F

ClientSampleId :

MARION-SOIL-0609MSD



Tgt Ion:244 Resp: 980700

Ion Ratio Lower Upper

244 100

212 7.1 5.4 8.2

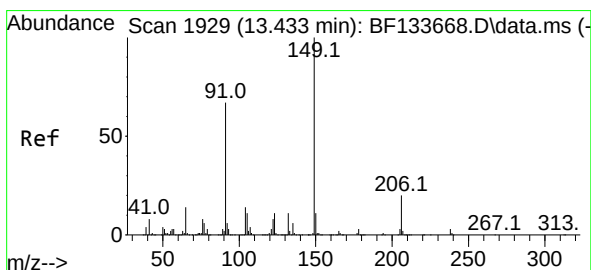
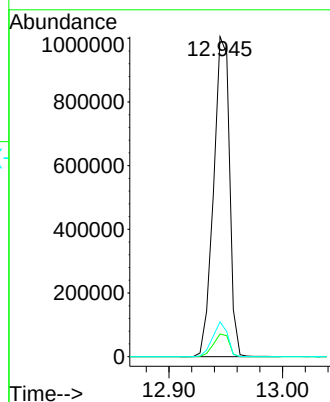
122 10.9 8.1 12.1

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 06/15/2023

Supervised By :mohammad ahmed 06/16/2023



#80

Butylbenzylphthalate

Concen: 32.836 ng

RT: 13.421 min Scan# 1927

Delta R.T. -0.006 min

Lab File: BF133756.D

Acq: 14 Jun 2023 17:45

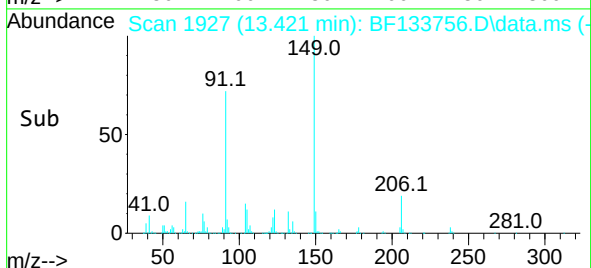
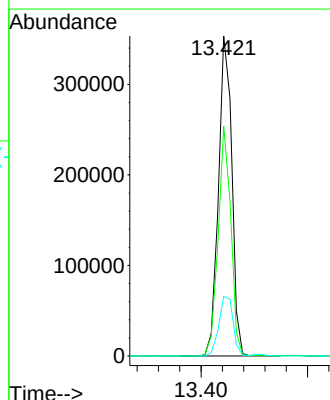
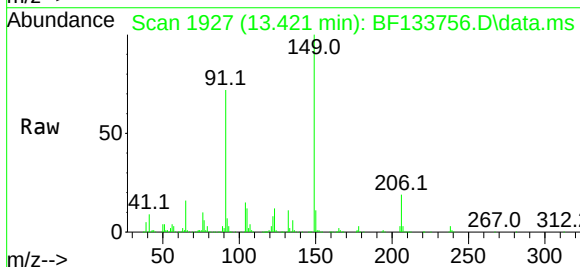
Tgt Ion:149 Resp: 307586

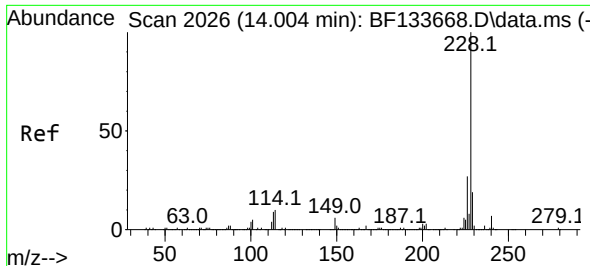
Ion Ratio Lower Upper

149 100

91 71.8 54.0 81.0

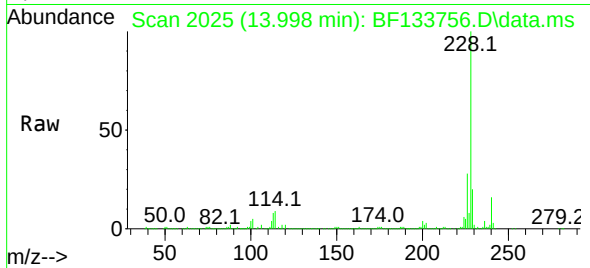
206 18.6 15.6 23.4





#81  
Benzo(a)anthracene  
Concen: 38.330 ng  
RT: 13.998 min Scan# 2018  
Delta R.T. -0.000 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45

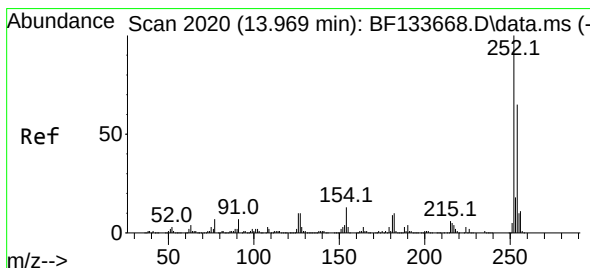
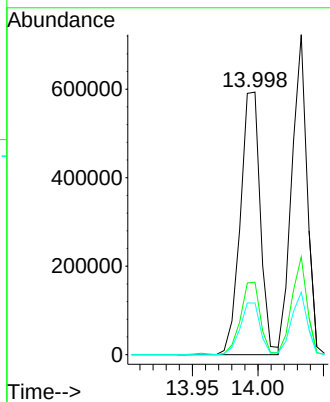
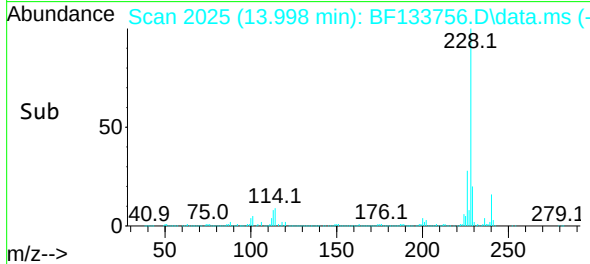
Instrument :  
BNA\_F  
ClientSampleId :  
MARION-SOIL-0609MSD



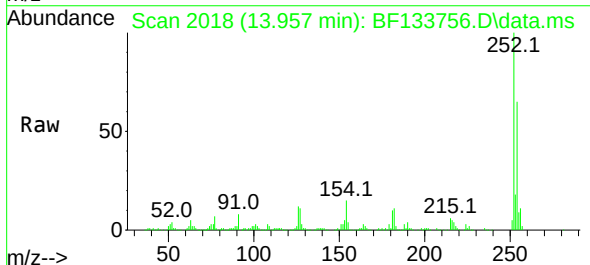
Tgt Ion:228 Resp: 631530  
Ion Ratio Lower Upper  
228 100  
226 27.6 21.7 32.5  
229 19.7 15.4 23.2

Manual Integrations  
APPROVED

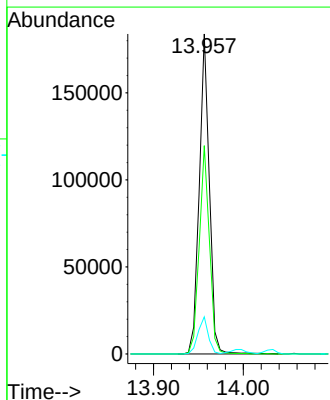
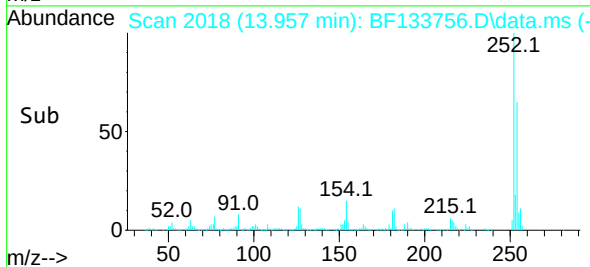
Reviewed By :Yogesh Patel 06/15/2023  
Supervised By :mohammad ahmed 06/16/2023

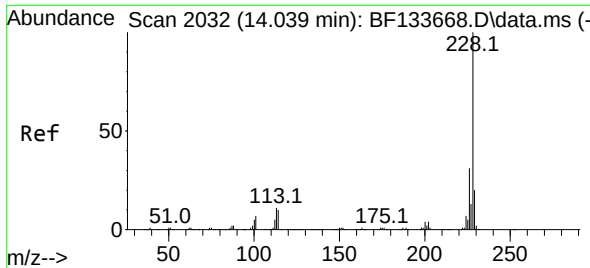


#82  
3,3'-Dichlorobenzidine  
Concen: 26.188 ng  
RT: 13.957 min Scan# 2018  
Delta R.T. -0.000 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45



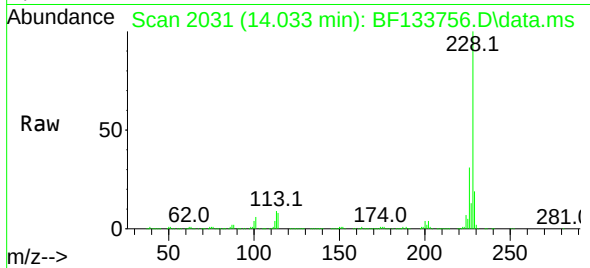
Tgt Ion:252 Resp: 143452  
Ion Ratio Lower Upper  
252 100  
254 65.1 51.9 77.9  
126 11.6 7.7 11.5





#83  
Chrysene  
Concen: 37.649 ng  
RT: 14.033 min Scan# 2032  
Delta R.T. -0.000 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45

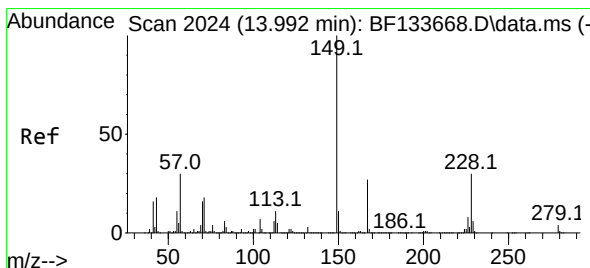
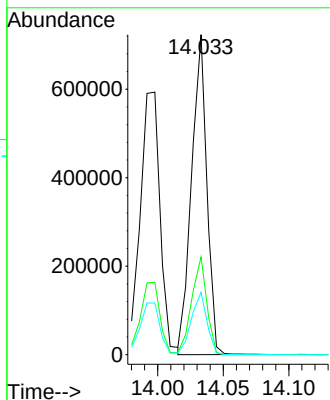
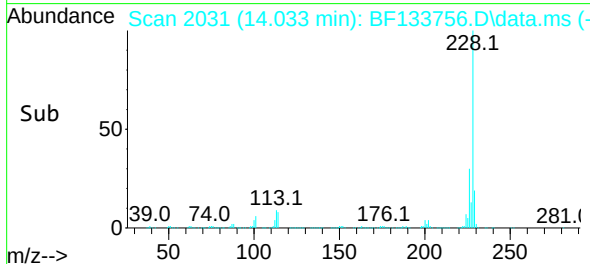
Instrument :  
BNA\_F  
ClientSampleId :  
MARION-SOIL-0609MSD



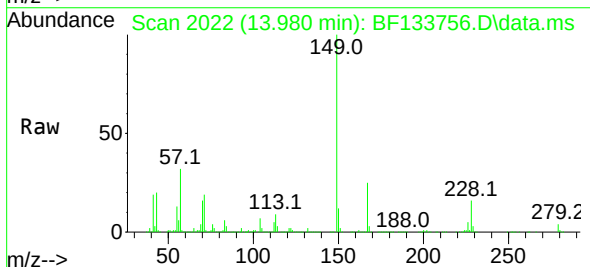
Tgt Ion:228 Resp: 586710  
Ion Ratio Lower Upper  
228 100  
226 30.6 25.0 37.6  
229 19.5 15.8 23.8

Manual Integrations  
APPROVED

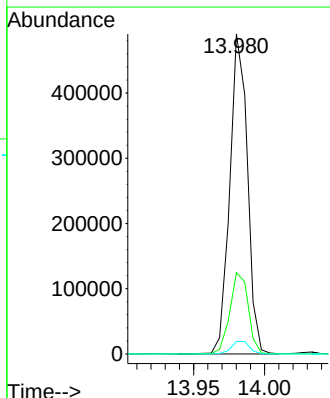
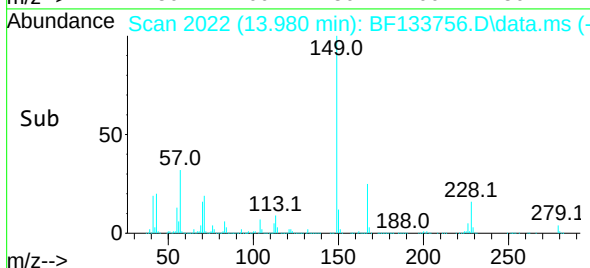
Reviewed By :Yogesh Patel 06/15/2023  
Supervised By :mohammad ahmed 06/16/2023

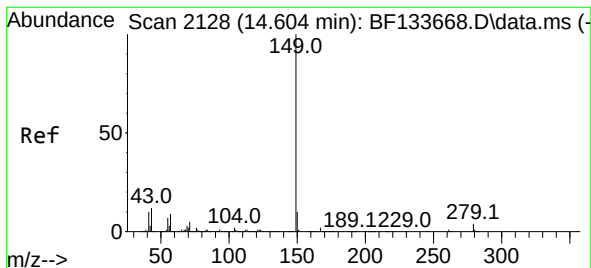


#84  
Bis(2-ethylhexyl)phthalate  
Concen: 36.814 ng  
RT: 13.980 min Scan# 2022  
Delta R.T. -0.006 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45



Tgt Ion:149 Resp: 424619  
Ion Ratio Lower Upper  
149 100  
167 25.5 21.8 32.8  
279 3.9 3.3 4.9





#85

Di-n-octyl phthalate

Concen: 48.131 ng

RT: 14.598 min Scan# 2127

Delta R.T. -0.000 min

Lab File: BF133756.D

Acq: 14 Jun 2023 17:45

Instrument :

BNA\_F

ClientSampleId :

MARION-SOIL-0609MSD

Tgt Ion:149 Resp: 78889

Ion Ratio Lower Upper

149 100

167 1.5 1.4 2.0

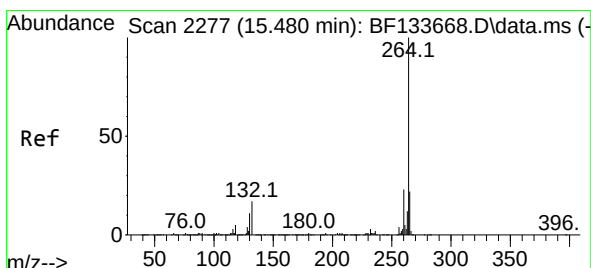
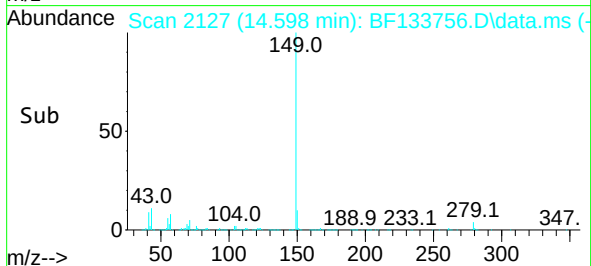
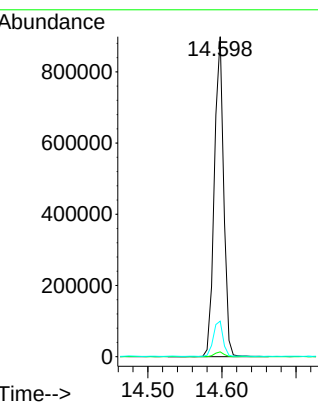
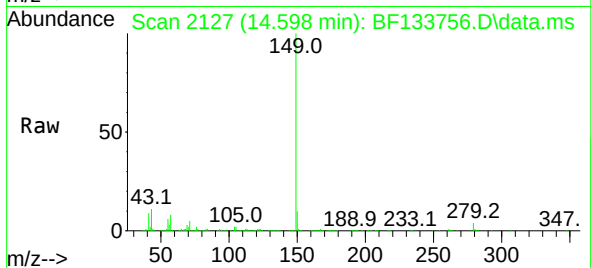
43 11.5 8.7 13.1

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 06/15/2023

Supervised By :mohammad ahmed 06/16/2023



#86

Perylene-d12

Concen: 20.000 ng

RT: 15.468 min Scan# 2275

Delta R.T. -0.000 min

Lab File: BF133756.D

Acq: 14 Jun 2023 17:45

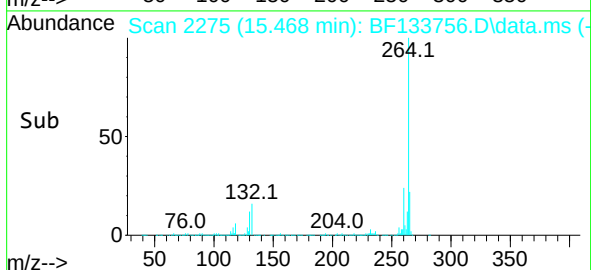
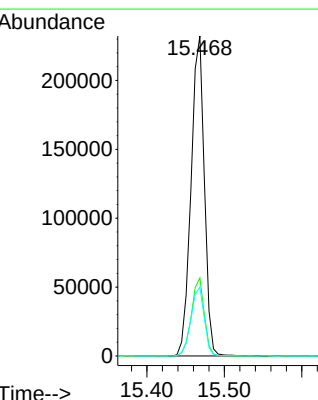
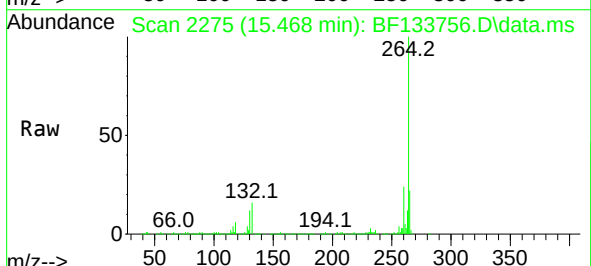
Tgt Ion:264 Resp: 277233

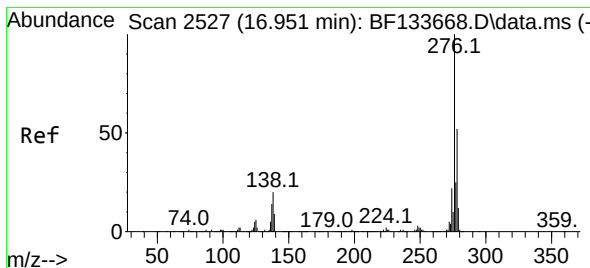
Ion Ratio Lower Upper

264 100

260 24.4 18.2 27.2

265 21.5 17.8 26.6





#87

Indeno(1,2,3-cd)pyrene

Concen: 34.395 ng

RT: 16.933 min Scan# 21

Delta R.T. -0.006 min

Lab File: BF133756.D

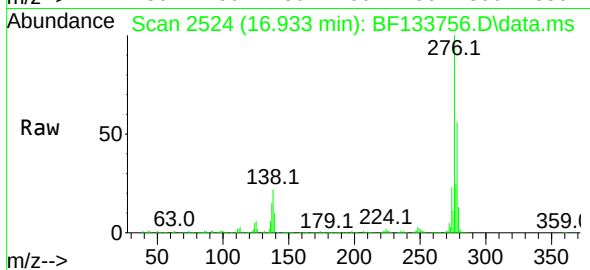
Acq: 14 Jun 2023 17:45

Instrument :

BNA\_F

ClientSampleId :

MARION-SOIL-0609MSD



Tgt Ion:276 Resp: 65601

Ion Ratio Lower Upper

276 100

138 23.3 17.9 26.9

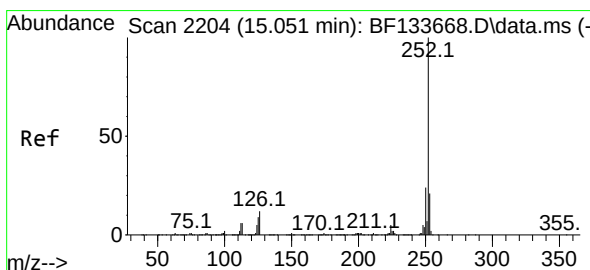
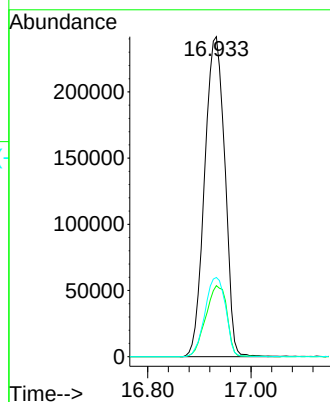
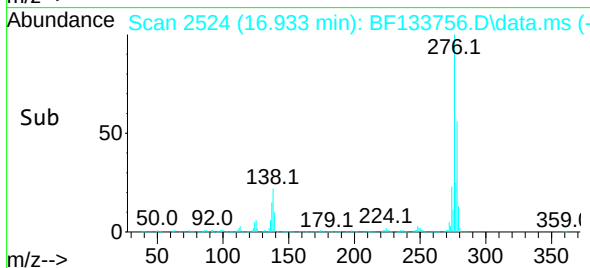
277 25.4 20.3 30.5

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 06/15/2023

Supervised By :mohammad ahmed 06/16/2023



#88

Benzo(b)fluoranthene

Concen: 41.507 ng

RT: 15.045 min Scan# 2203

Delta R.T. -0.000 min

Lab File: BF133756.D

Acq: 14 Jun 2023 17:45

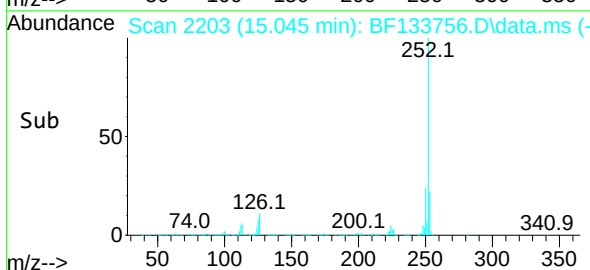
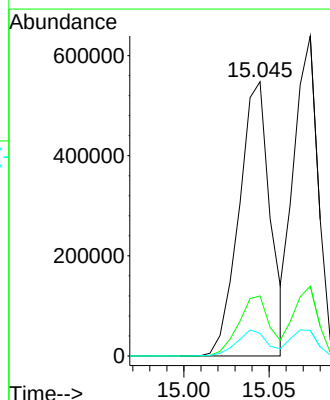
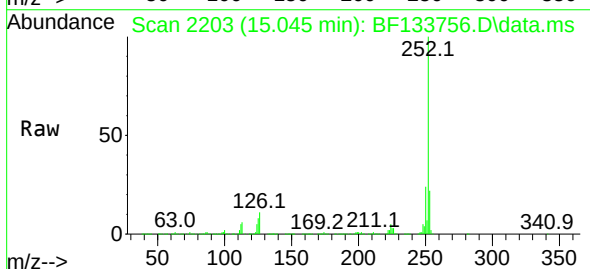
Tgt Ion:252 Resp: 699009

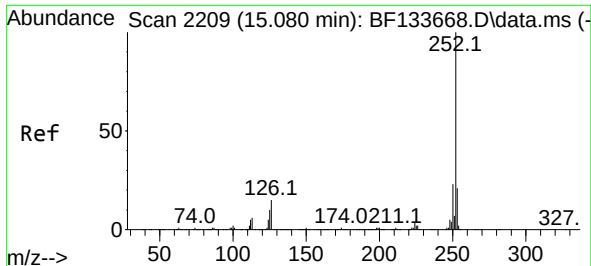
Ion Ratio Lower Upper

252 100

253 21.9 17.0 25.6

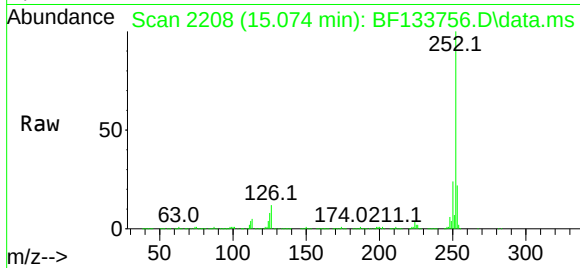
125 8.2 7.3 10.9





#89  
Benzo(k)fluoranthene  
Concen: 38.697 ng  
RT: 15.074 min Scan# 2208  
Delta R.T. -0.000 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45

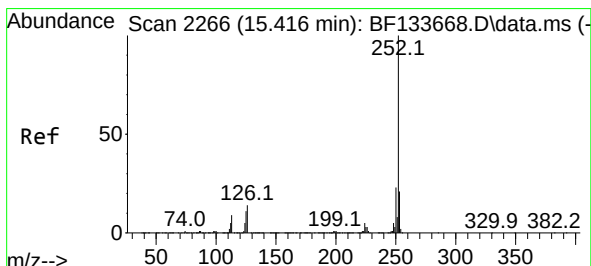
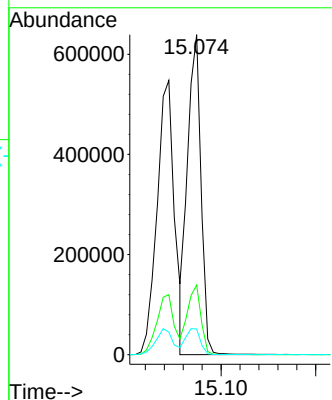
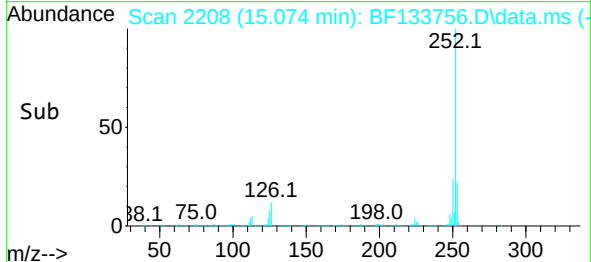
Instrument :  
BNA\_F  
ClientSampleId :  
MARION-SOIL-0609MSD



Tgt Ion:252 Resp: 634814  
Ion Ratio Lower Upper  
252 100  
253 21.8 17.0 25.4  
125 8.0 7.8 11.6

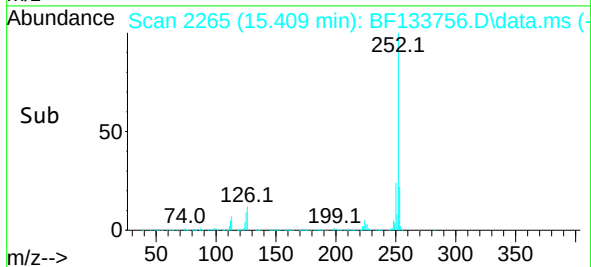
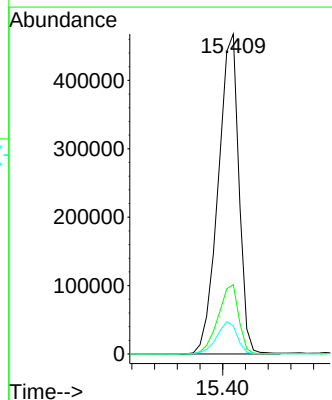
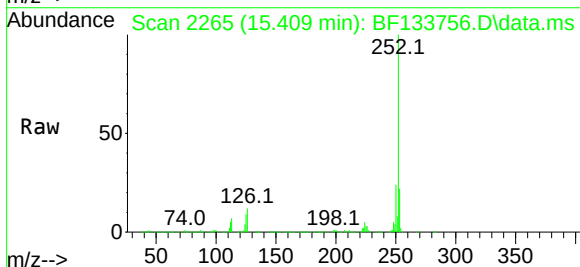
Manual Integrations  
APPROVED

Reviewed By :Yogesh Patel 06/15/2023  
Supervised By :mohammad ahmed 06/16/2023

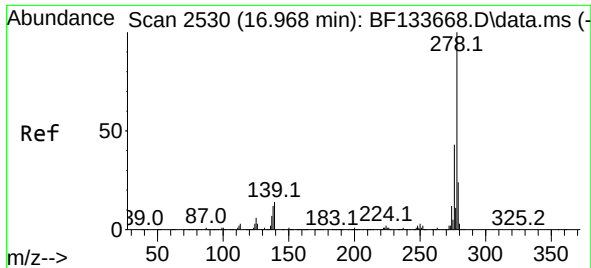


#90  
Benzo(a)pyrene  
Concen: 37.921 ng  
RT: 15.409 min Scan# 2265  
Delta R.T. -0.000 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45

Tgt Ion:252 Resp: 592679  
Ion Ratio Lower Upper  
252 100  
253 21.7 17.1 25.7  
125 8.8 8.6 13.0

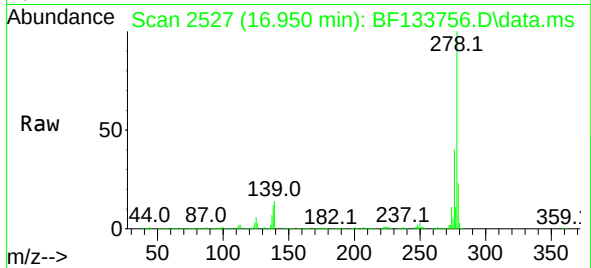






#91  
Dibenzo(a,h)anthracene  
Concen: 35.559 ng  
RT: 16.950 min Scan# 21  
Delta R.T. -0.000 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45

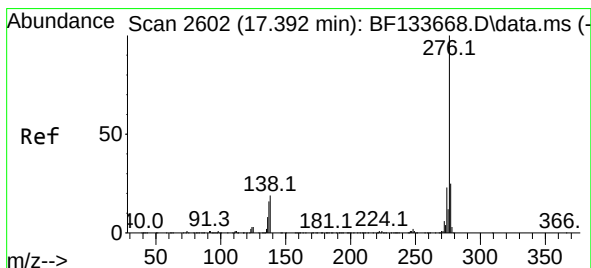
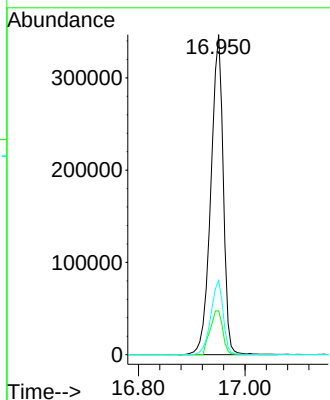
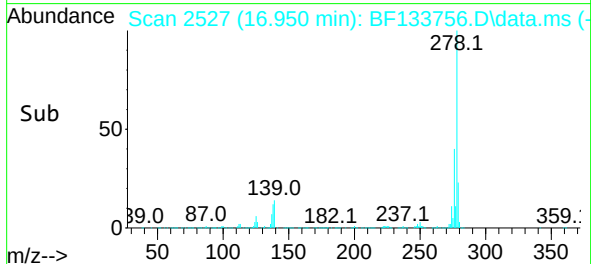
Instrument :  
BNA\_F  
ClientSampleId :  
MARION-SOIL-0609MSD



Tgt Ion: 278 Resp: 561492  
Ion Ratio Lower Upper  
278 100  
139 13.7 11.4 17.2  
279 23.2 19.0 28.4

Manual Integrations  
APPROVED

Reviewed By :Yogesh Patel 06/15/2023  
Supervised By :mohammad ahmed 06/16/2023



#92  
Benzo(g,h,i)perylene  
Concen: 31.138 ng  
RT: 17.374 min Scan# 2599  
Delta R.T. -0.006 min  
Lab File: BF133756.D  
Acq: 14 Jun 2023 17:45

Tgt Ion: 276 Resp: 487483  
Ion Ratio Lower Upper  
276 100  
277 24.2 19.8 29.8  
138 19.8 15.0 22.4

