

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN032125\  
 Data File : VN086055.D  
 Acq On : 21 Mar 2025 21:18  
 Operator : JC\MD  
 Sample : Q1610-03  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 22 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 SOIL-PILE

Quant Time: Mar 21 23:05:57 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N031825W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Mar 19 03:20:56 2025  
 Response via : Initial Calibration

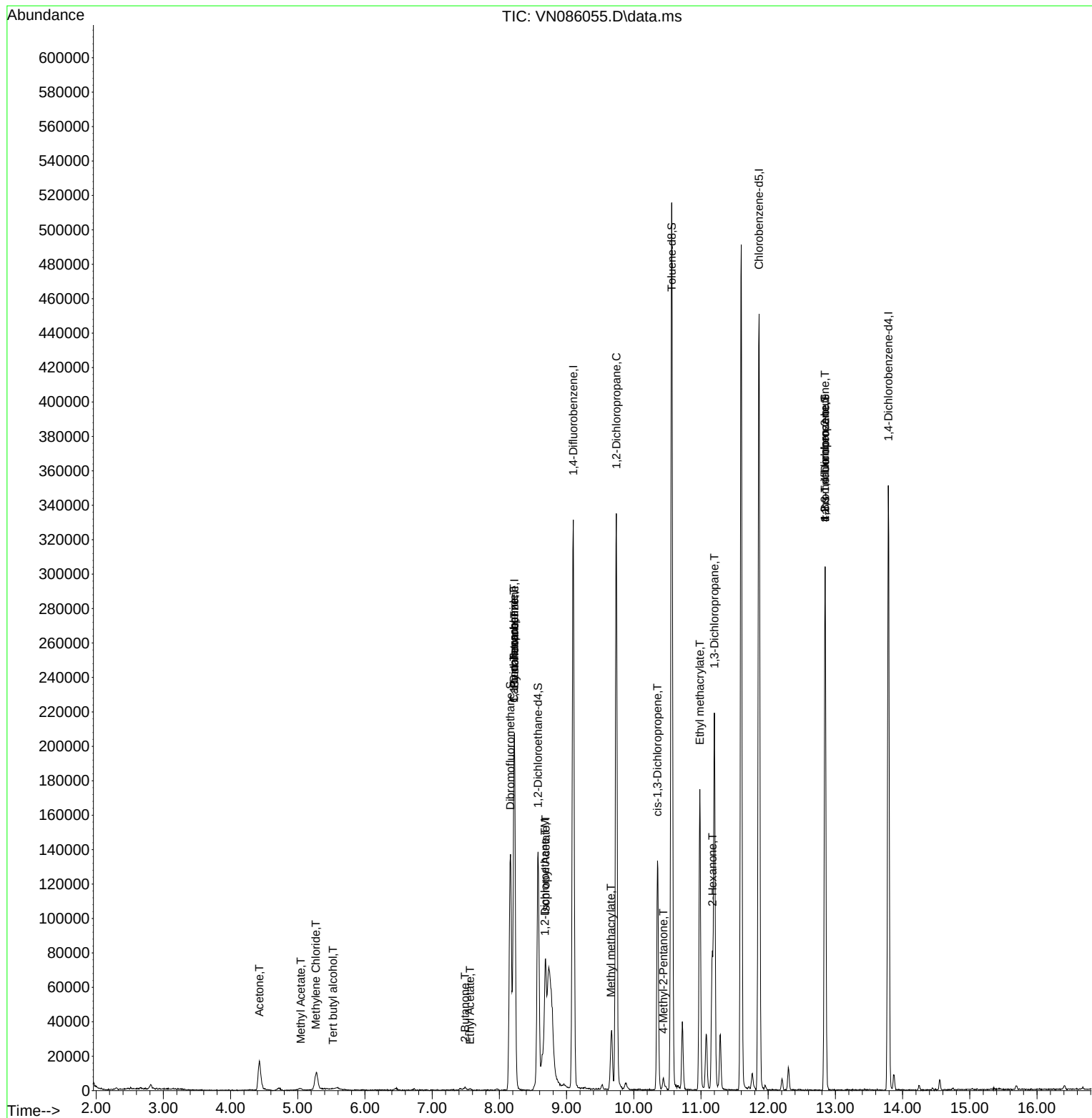
| Compound                      | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|--------|-------|----------|----------|--------|----------|
| Internal Standards            |        |       |          |          |        |          |
| 1) Pentafluorobenzene         | 8.224  | 168   | 151961   | 50.000   | ug/l   | 0.00     |
| 34) 1,4-Difluorobenzene       | 9.100  | 114   | 284628   | 50.000   | ug/l   | 0.00     |
| 63) Chlorobenzene-d5          | 11.865 | 117   | 272284   | 50.000   | ug/l   | 0.00     |
| 72) 1,4-Dichlorobenzene-d4    | 13.788 | 152   | 99637    | 50.000   | ug/l   | 0.00     |
| System Monitoring Compounds   |        |       |          |          |        |          |
| 33) 1,2-Dichloroethane-d4     | 8.577  | 65    | 118499   | 56.947   | ug/l   | 0.00     |
| Spiked Amount                 | 50.000 | Range | 74 - 125 | Recovery | =      | 113.900% |
| 35) Dibromofluoromethane      | 8.165  | 113   | 101119   | 50.899   | ug/l   | 0.00     |
| Spiked Amount                 | 50.000 | Range | 75 - 124 | Recovery | =      | 101.800% |
| 50) Toluene-d8                | 10.565 | 98    | 359896   | 49.915   | ug/l   | 0.00     |
| Spiked Amount                 | 50.000 | Range | 86 - 113 | Recovery | =      | 99.820%  |
| 62) 4-Bromofluorobenzene      | 12.847 | 95    | 105313   | 40.956   | ug/l   | 0.00     |
| Spiked Amount                 | 50.000 | Range | 77 - 121 | Recovery | =      | 81.920%  |
| Target Compounds              |        |       |          |          |        | Qvalue   |
| 11) Tert butyl alcohol        | 5.524  | 59    | 361      | 1.225    | ug/l # | 73       |
| 16) Acetone                   | 4.430  | 43    | 30774    | 48.408   | ug/l   | 97       |
| 18) Methyl Acetate            | 5.047  | 43    | 2206     | 1.403    | ug/l # | 67       |
| 20) Methylene Chloride        | 5.271  | 84    | 8733     | 4.696    | ug/l # | 92       |
| 25) 2-Butanone                | 7.488  | 43    | 3090     | 3.369    | ug/l   | 98       |
| 31) Cyclohexane               | 8.224  | 56    | 2970     | 1.145    | ug/l # | 1        |
| 36) 1,1-Dichloropropene       | 8.218  | 75    | 11758    | 4.495    | ug/l # | 48       |
| 37) Ethyl Acetate             | 7.565  | 43    | 1473     | 0.667    | ug/l # | 64       |
| 38) Carbon Tetrachloride      | 8.218  | 117   | 16335    | 4.749    | ug/l # | 16       |
| 42) 1,2-Dichloroethane        | 8.677  | 62    | 609      | 0.213    | ug/l # | 74       |
| 43) Isopropyl Acetate         | 8.688  | 43    | 102893   | 21.515   | ug/l # | 74       |
| 45) 1,2-Dichloropropane       | 9.741  | 63    | 401      | 0.215    | ug/l # | 44       |
| 48) Methyl methacrylate       | 9.659  | 41    | 2230     | 1.413    | ug/l # | 32       |
| 51) 4-Methyl-2-Pentanone      | 10.441 | 43    | 6154     | 2.918    | ug/l # | 75       |
| 54) cis-1,3-Dichloropropene   | 10.353 | 75    | 25407    | 8.077    | ug/l # | 71       |
| 56) Ethyl methacrylate        | 10.982 | 69    | 1723     | 0.897    | ug/l # | 1        |
| 57) 1,3-Dichloropropane       | 11.200 | 76    | 2484     | 0.760    | ug/l # | 42       |
| 59) 2-Hexanone                | 11.171 | 43    | 58465    | 38.052   | ug/l # | 18       |
| 76) 1,2,3-Trichloropropane    | 12.847 | 75    | 53064    | 23.788   | ug/l # | 1        |
| 81) trans-1,4-Dichloro-2-b... | 12.847 | 75    | 53064    | 62.892   | ug/l # | 16       |

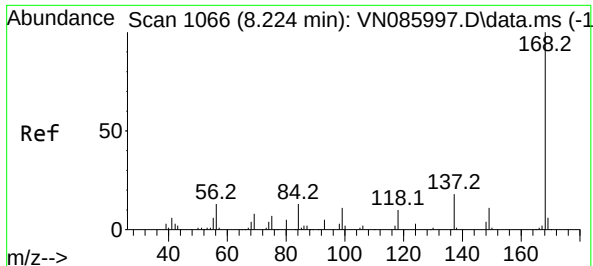
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN032125\  
Data File : VN086055.D  
Acq On : 21 Mar 2025 21:18  
Operator : JC\MD  
Sample : Q1610-03  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 22 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
SOIL-PILE

Quant Time: Mar 21 23:05:57 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N031825W.M  
Quant Title : SW846 8260  
QLast Update : Wed Mar 19 03:20:56 2025  
Response via : Initial Calibration

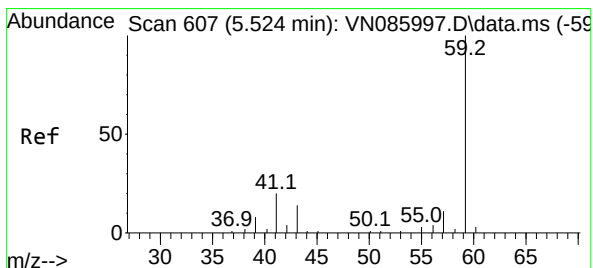
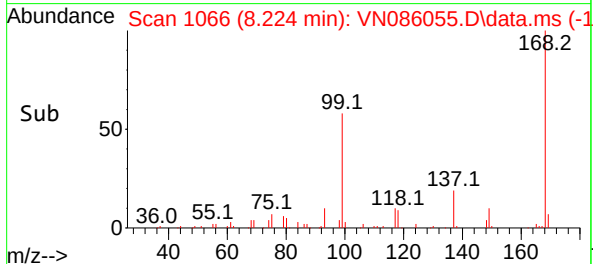
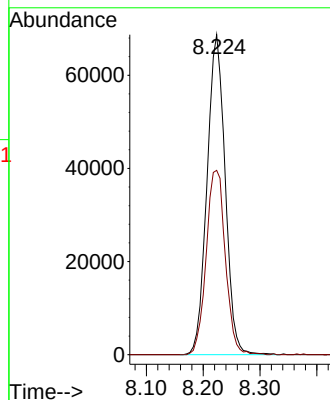
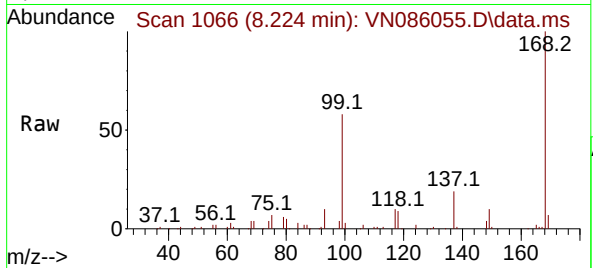




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.224 min Scan# 1066  
Delta R.T. -0.000 min  
Lab File: VN086055.D  
Acq: 21 Mar 2025 21:18

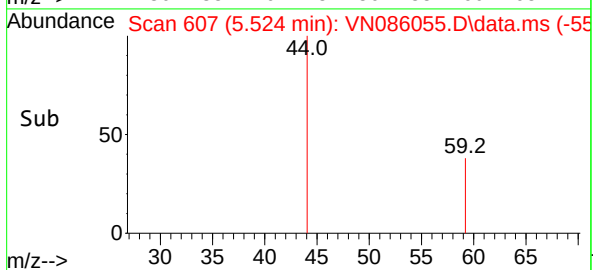
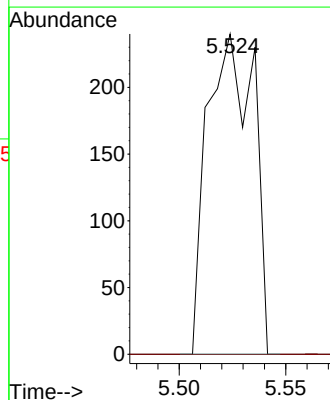
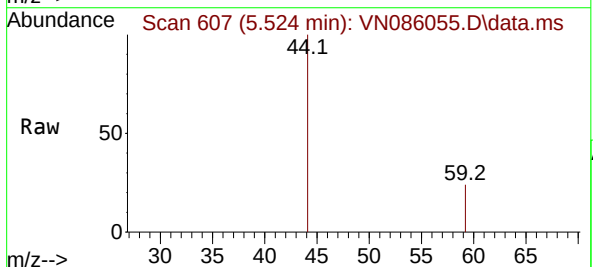
Instrument :  
MSVOA\_N  
ClientSampleId :  
SOIL-PILE

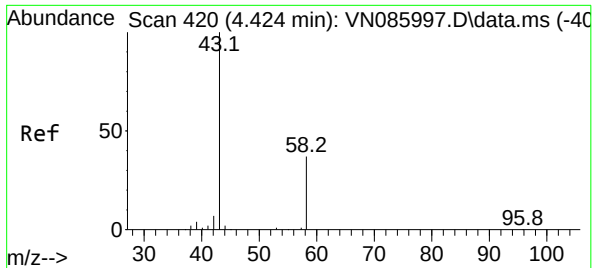
Tgt Ion:168 Resp: 151961  
Ion Ratio Lower Upper  
168 100  
99 57.6 49.4 74.2



#11  
Tert butyl alcohol  
Concen: 1.225 ug/l  
RT: 5.524 min Scan# 607  
Delta R.T. -0.000 min  
Lab File: VN086055.D  
Acq: 21 Mar 2025 21:18

Tgt Ion: 59 Resp: 361  
Ion Ratio Lower Upper  
59 100  
57 0.0 7.9 11.9#

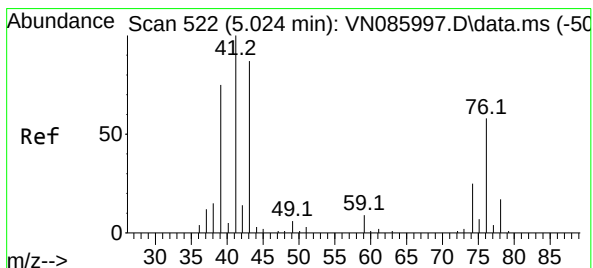
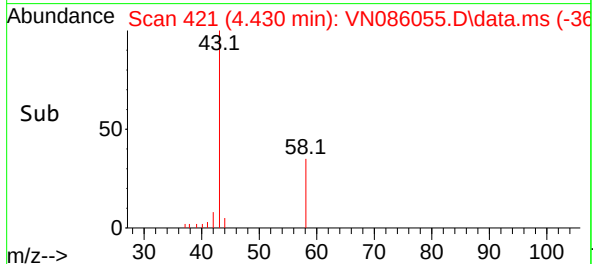
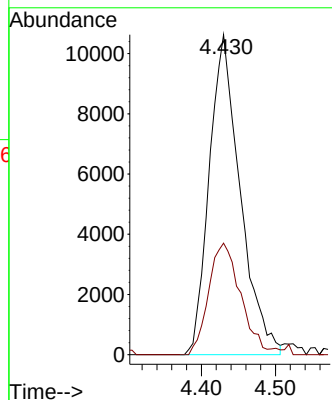
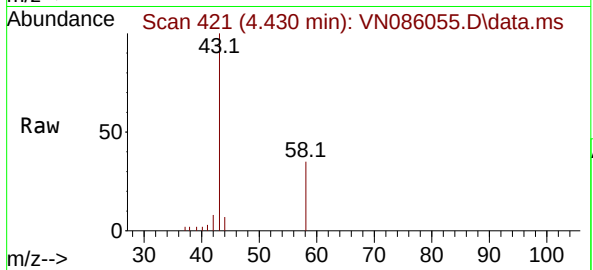




#16  
Acetone  
Concen: 48.408 ug/l  
RT: 4.430 min Scan# 41  
Delta R.T. 0.006 min  
Lab File: VN086055.D  
Acq: 21 Mar 2025 21:18

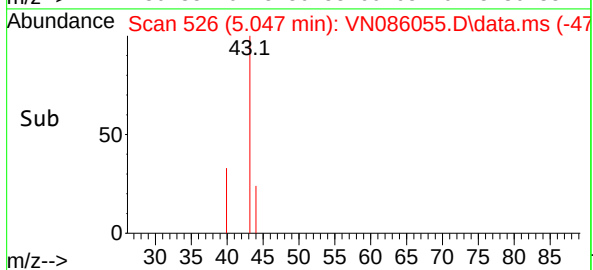
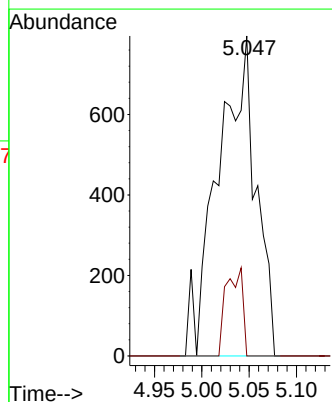
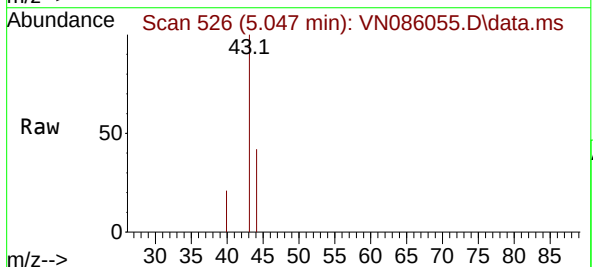
Instrument :  
MSVOA\_N  
ClientSampleId :  
SOIL-PILE

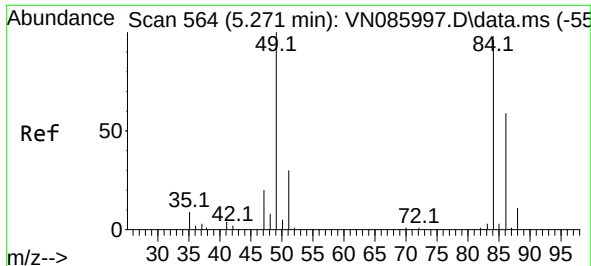
Tgt Ion: 43 Resp: 30774  
Ion Ratio Lower Upper  
43 100  
58 34.8 29.4 44.2



#18  
Methyl Acetate  
Concen: 1.403 ug/l  
RT: 5.047 min Scan# 526  
Delta R.T. 0.023 min  
Lab File: VN086055.D  
Acq: 21 Mar 2025 21:18

Tgt Ion: 43 Resp: 2206  
Ion Ratio Lower Upper  
43 100  
74 12.1 23.9 35.9#

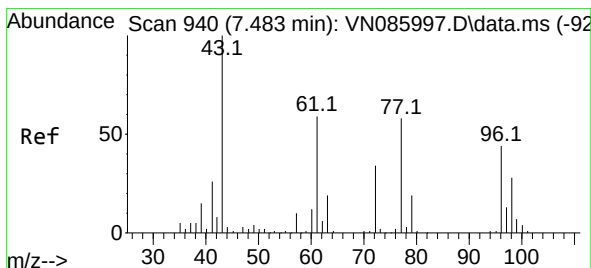
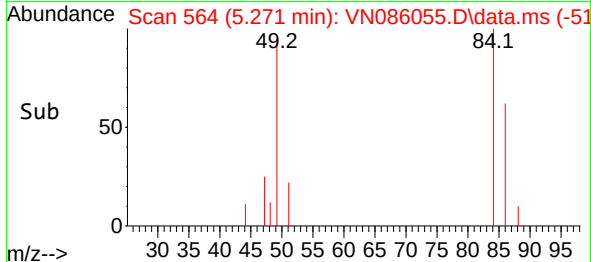
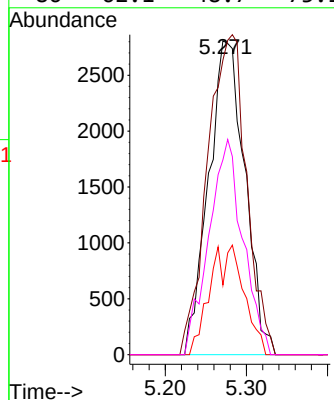
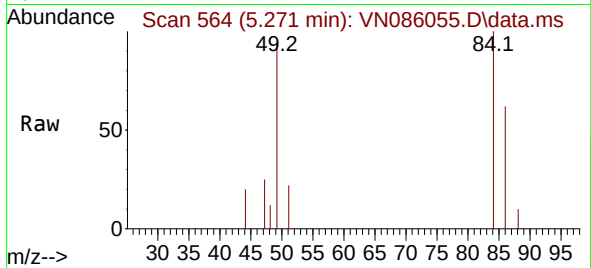




#20  
Methylene Chloride  
Concen: 4.696 ug/l  
RT: 5.271 min Scan# 51  
Delta R.T. -0.000 min  
Lab File: VN086055.D  
Acq: 21 Mar 2025 21:18

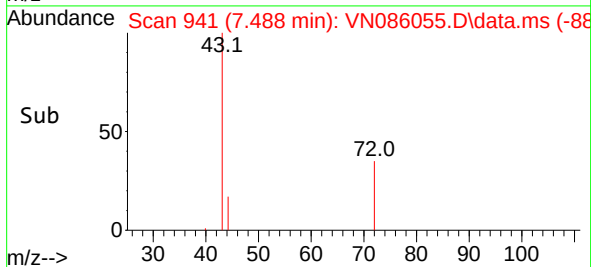
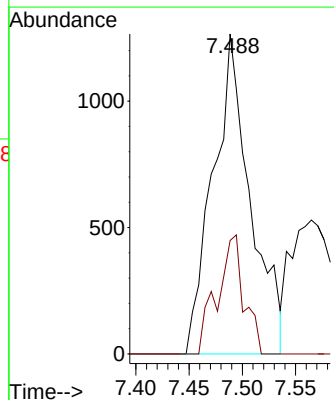
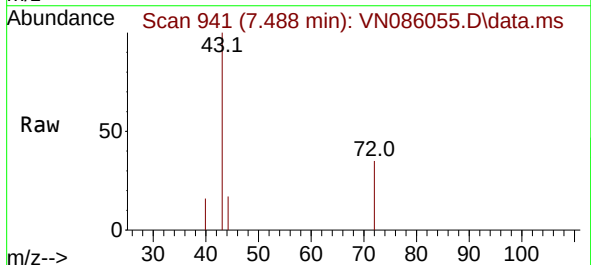
Instrument :  
MSVOA\_N  
ClientSampleId :  
SOIL-PILE

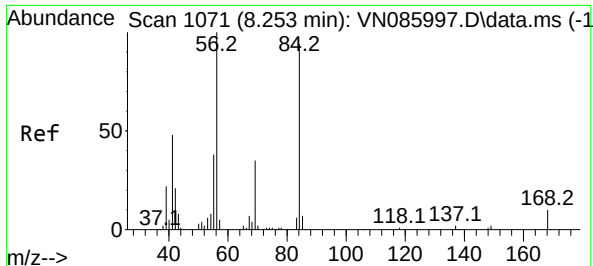
|             |             |
|-------------|-------------|
| Tgt Ion: 84 | Resp: 8733  |
| Ion Ratio   | Lower Upper |
| 84 100      |             |
| 49 93.9     | 83.3 124.9  |
| 51 22.2     | 24.8 37.2#  |
| 86 62.1     | 48.7 73.1   |



#25  
2-Butanone  
Concen: 3.369 ug/l  
RT: 7.488 min Scan# 941  
Delta R.T. 0.006 min  
Lab File: VN086055.D  
Acq: 21 Mar 2025 21:18

|             |             |
|-------------|-------------|
| Tgt Ion: 43 | Resp: 3090  |
| Ion Ratio   | Lower Upper |
| 43 100      |             |
| 72 35.5     | 27.4 41.0   |

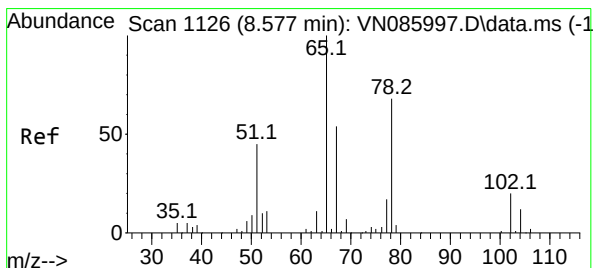
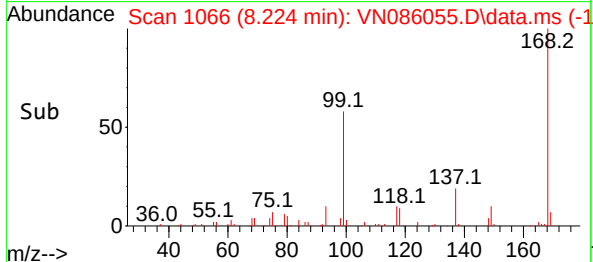
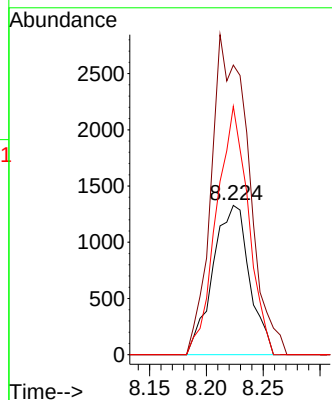
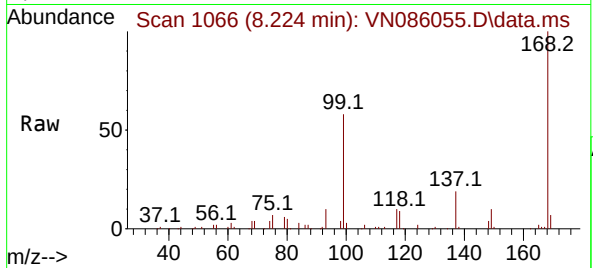




#31  
Cyclohexane  
Concen: 1.145 ug/l  
RT: 8.224 min Scan# 1066  
Delta R.T. -0.030 min  
Lab File: VN086055.D  
Acq: 21 Mar 2025 21:18

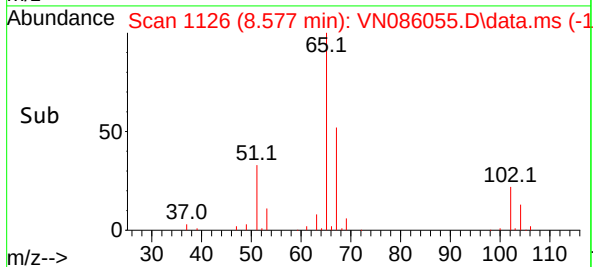
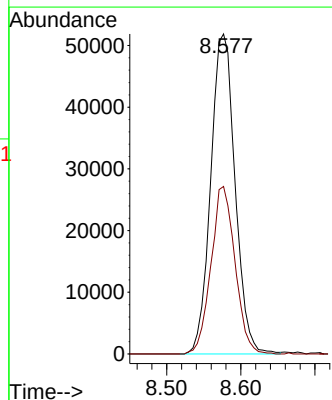
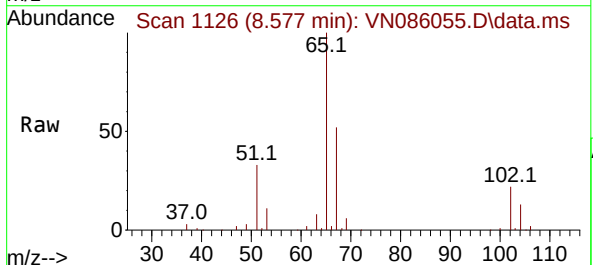
Instrument :  
MSVOA\_N  
ClientSampleId :  
SOIL-PILE

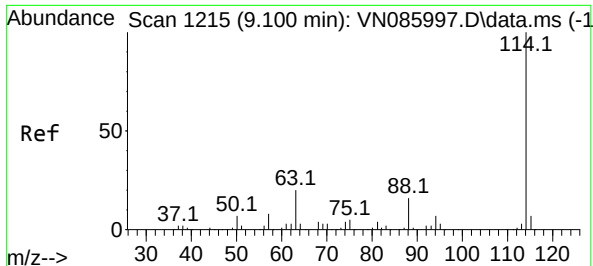
Tgt Ion: 56 Resp: 2970  
Ion Ratio Lower Upper  
56 100  
69 194.0 28.0 42.0#  
84 166.3 75.0 112.6#



#33  
1,2-Dichloroethane-d4  
Concen: 56.947 ug/l  
RT: 8.577 min Scan# 1126  
Delta R.T. -0.000 min  
Lab File: VN086055.D  
Acq: 21 Mar 2025 21:18

Tgt Ion: 65 Resp: 118499  
Ion Ratio Lower Upper  
65 100  
67 51.6 0.0 102.2





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.100 min Scan# 1

Delta R.T. -0.000 min

Lab File: VN086055.D

Acq: 21 Mar 2025 21:18

Instrument :

MSVOA\_N

ClientSampleId :

SOIL-PILE

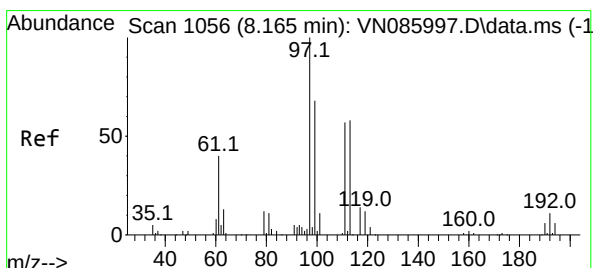
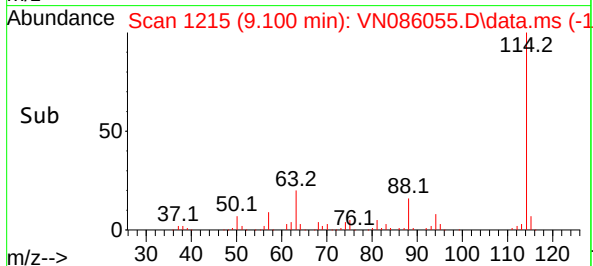
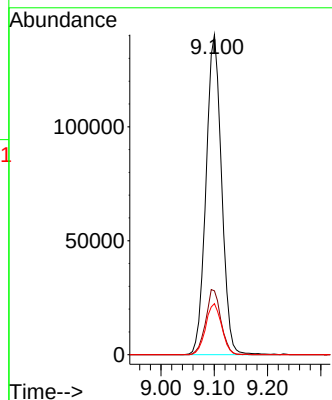
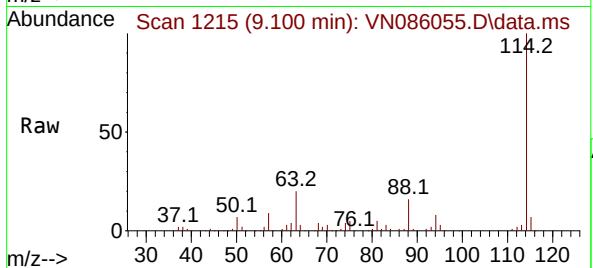
Tgt Ion:114 Resp: 284628

Ion Ratio Lower Upper

114 100

63 20.0 0.0 39.6

88 15.9 0.0 32.6



#35

Dibromofluoromethane

Concen: 50.899 ug/l

RT: 8.165 min Scan# 1056

Delta R.T. -0.000 min

Lab File: VN086055.D

Acq: 21 Mar 2025 21:18

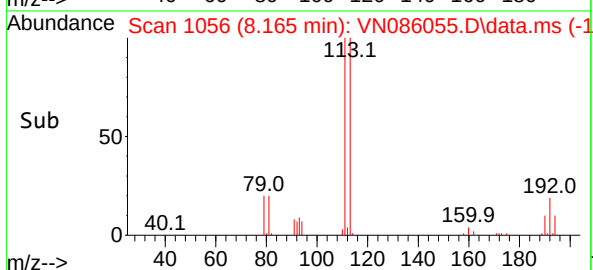
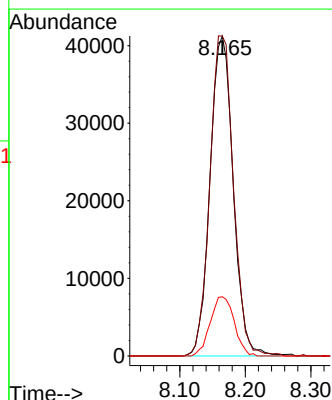
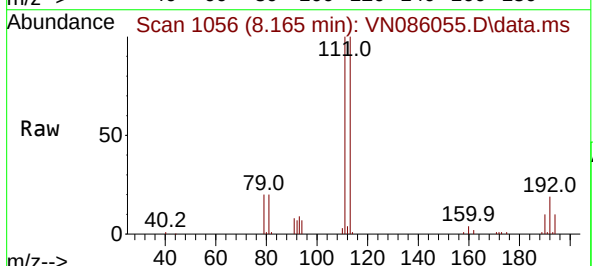
Tgt Ion:113 Resp: 101119

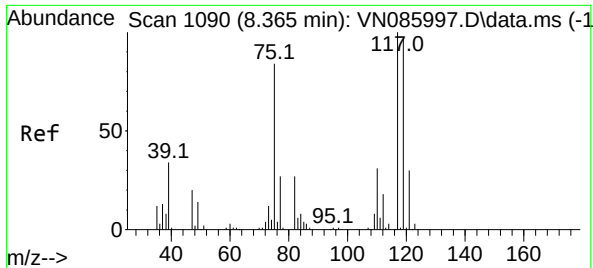
Ion Ratio Lower Upper

113 100

111 101.7 81.8 122.8

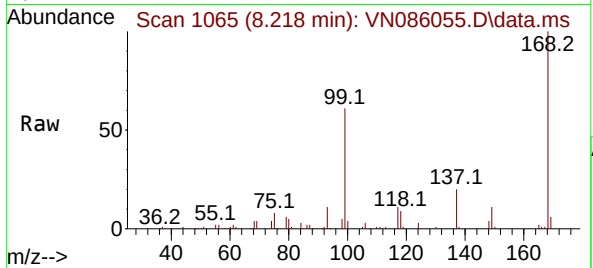
192 19.2 15.9 23.9



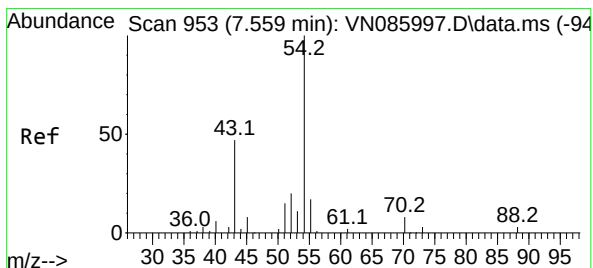
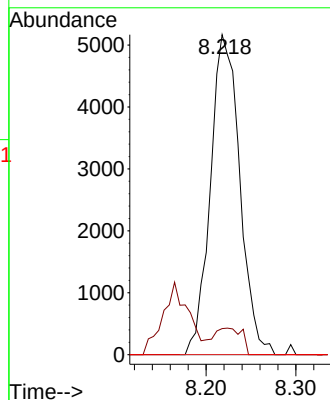
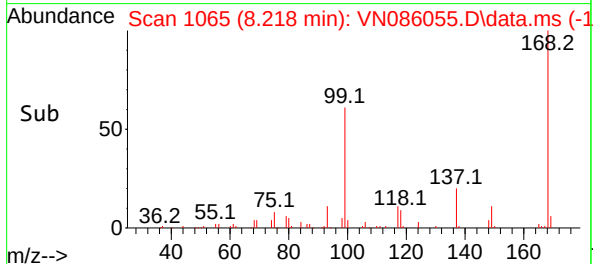


#36  
1,1-Dichloropropene  
Concen: 4.495 ug/l  
RT: 8.218 min Scan# 1065  
Delta R.T. -0.147 min  
Lab File: VN086055.D  
Acq: 21 Mar 2025 21:18

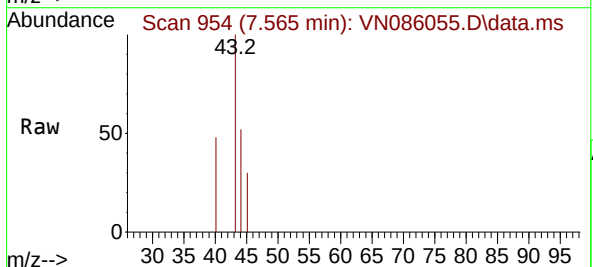
Instrument :  
MSVOA\_N  
ClientSampleId :  
SOIL-PILE



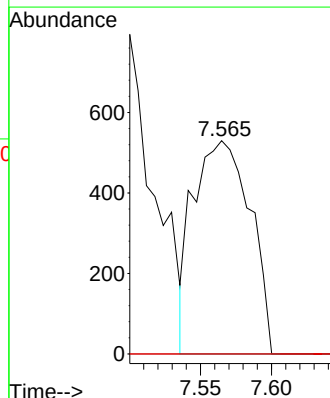
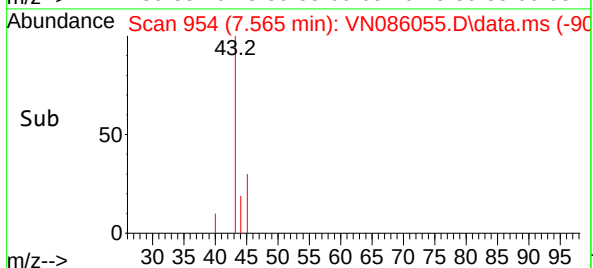
Tgt Ion: 75 Resp: 11758  
Ion Ratio Lower Upper  
75 100  
110 7.9 17.8 53.3#  
77 0.0 25.0 37.4#



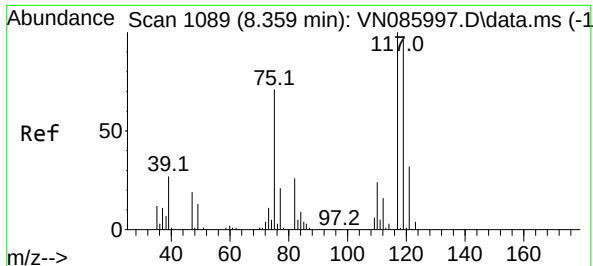
#37  
Ethyl Acetate  
Concen: 0.667 ug/l  
RT: 7.565 min Scan# 954  
Delta R.T. 0.006 min  
Lab File: VN086055.D  
Acq: 21 Mar 2025 21:18



Tgt Ion: 43 Resp: 1473  
Ion Ratio Lower Upper  
43 100  
61 0.0 13.0 19.4#  
70 0.0 11.0 16.6#

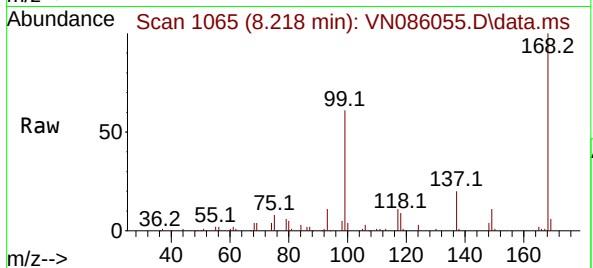




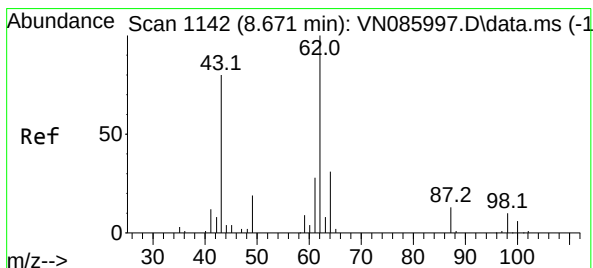
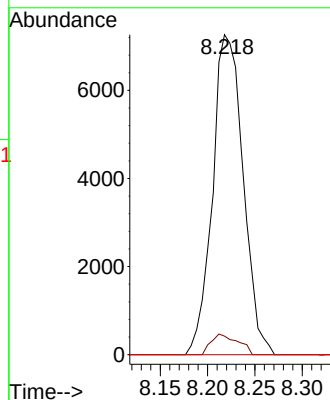
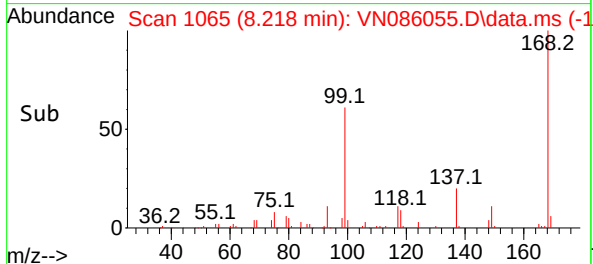


#38  
Carbon Tetrachloride  
Concen: 4.749 ug/l  
RT: 8.218 min Scan# 1065  
Delta R.T. -0.141 min  
Lab File: VN086055.D  
Acq: 21 Mar 2025 21:18

Instrument :  
MSVOA\_N  
ClientSampleId :  
SOIL-PILE

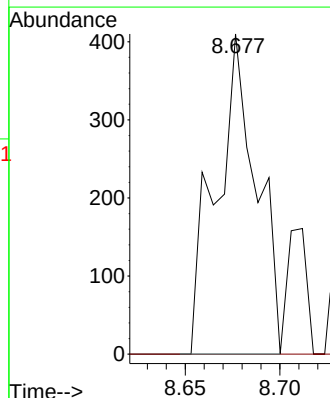
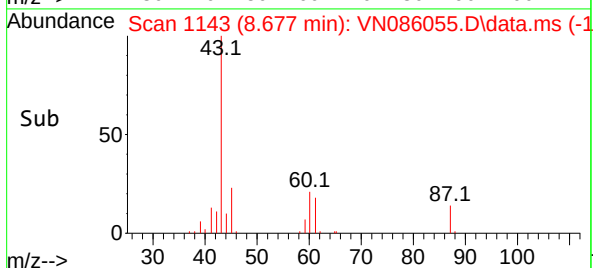
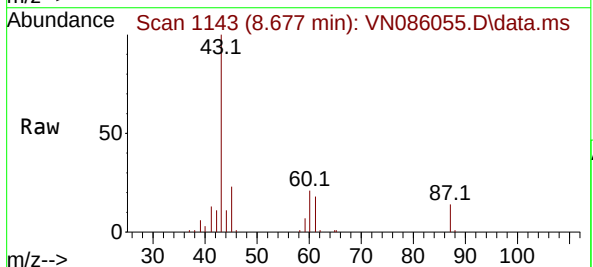


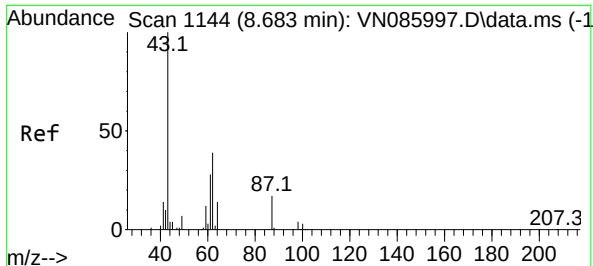
Tgt Ion:117 Resp: 16335  
Ion Ratio Lower Upper  
117 100  
119 5.8 77.0 115.4#  
121 0.0 25.6 38.4#



#42  
1,2-Dichloroethane  
Concen: 0.213 ug/l  
RT: 8.677 min Scan# 1143  
Delta R.T. 0.006 min  
Lab File: VN086055.D  
Acq: 21 Mar 2025 21:18

Tgt Ion: 62 Resp: 609  
Ion Ratio Lower Upper  
62 100  
98 0.0 0.0 18.6

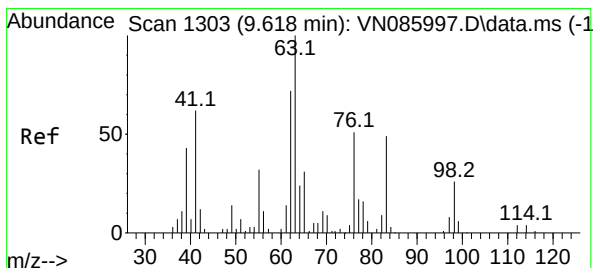
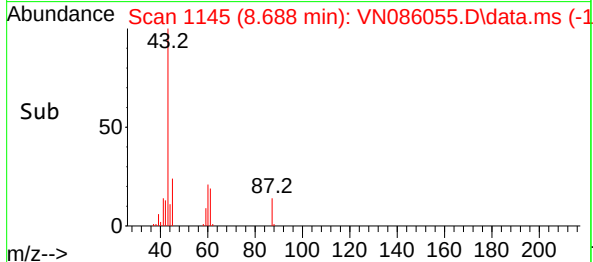
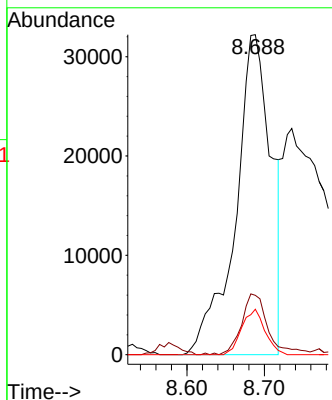
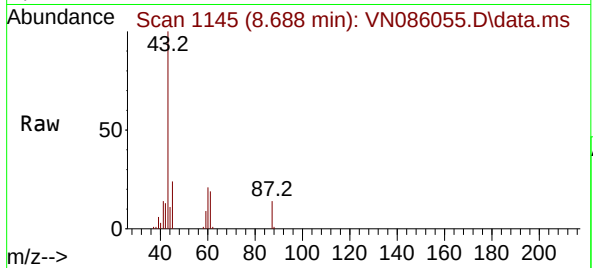




#43  
Isopropyl Acetate  
Concen: 21.515 ug/l  
RT: 8.688 min Scan# 1144  
Delta R.T. 0.006 min  
Lab File: VN086055.D  
Acq: 21 Mar 2025 21:18

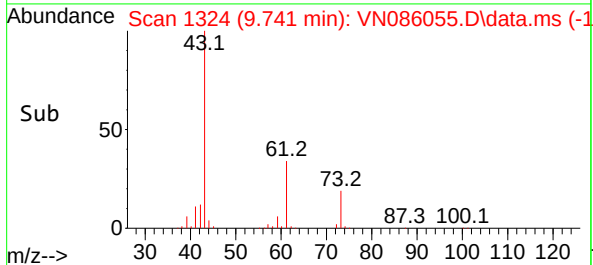
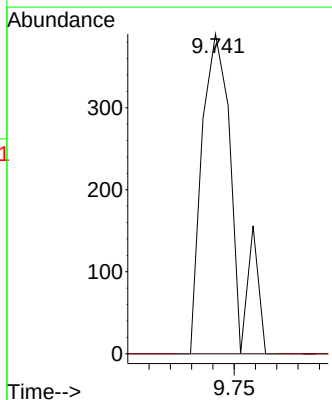
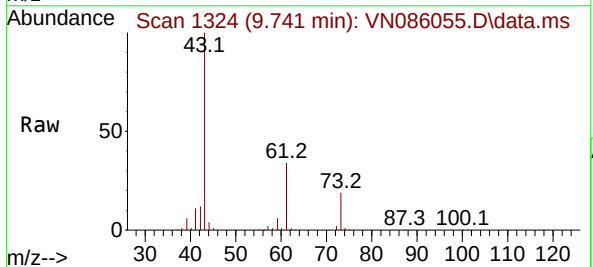
Instrument :  
MSVOA\_N  
ClientSampleId :  
SOIL-PILE

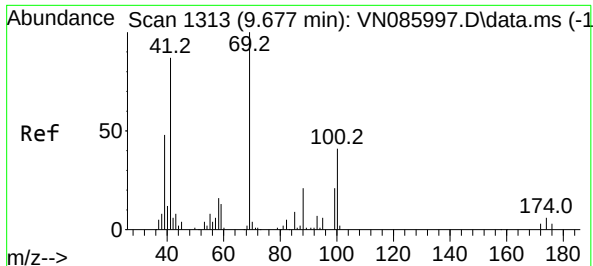
Tgt Ion: 43 Resp: 102893  
Ion Ratio Lower Upper  
43 100  
61 14.1 25.0 37.6#  
87 9.3 13.0 19.4#



#45  
1,2-Dichloropropane  
Concen: 0.215 ug/l  
RT: 9.741 min Scan# 1324  
Delta R.T. 0.123 min  
Lab File: VN086055.D  
Acq: 21 Mar 2025 21:18

Tgt Ion: 63 Resp: 401  
Ion Ratio Lower Upper  
63 100  
65 0.0 24.7 37.1#





#48

Methyl methacrylate

Concen: 1.413 ug/l

RT: 9.659 min Scan# 11

Delta R.T. -0.018 min

Lab File: VN086055.D

Acq: 21 Mar 2025 21:18

Instrument :

MSVOA\_N

ClientSampleId :

SOIL-PILE

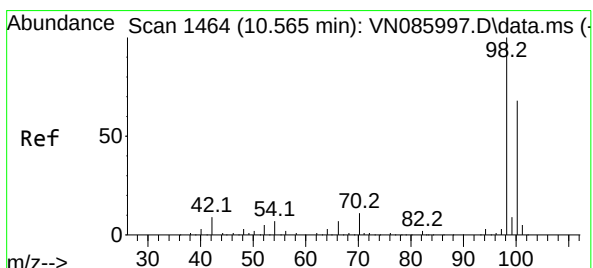
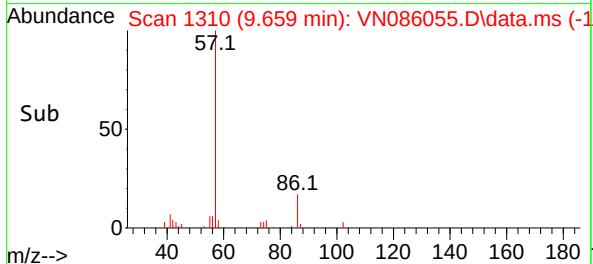
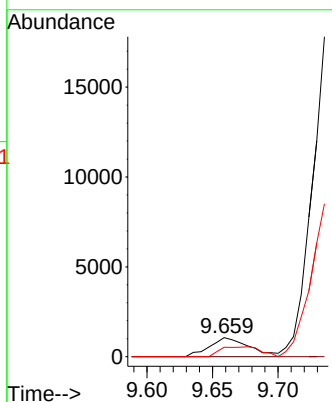
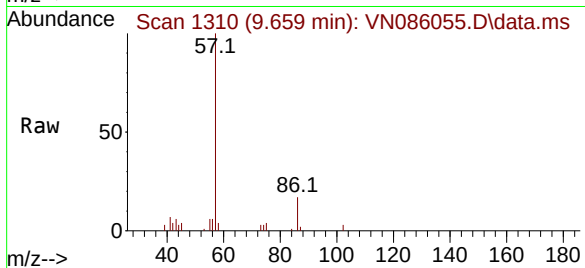
Tgt Ion: 41 Resp: 2230

Ion Ratio Lower Upper

41 100

69 0.0 83.1 124.7#

39 52.9 45.6 68.4



#50

Toluene-d8

Concen: 49.915 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. -0.000 min

Lab File: VN086055.D

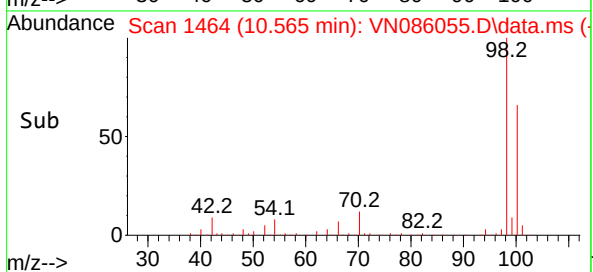
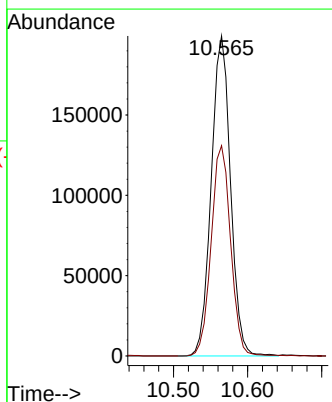
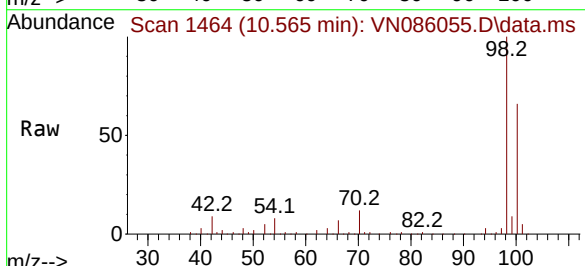
Acq: 21 Mar 2025 21:18

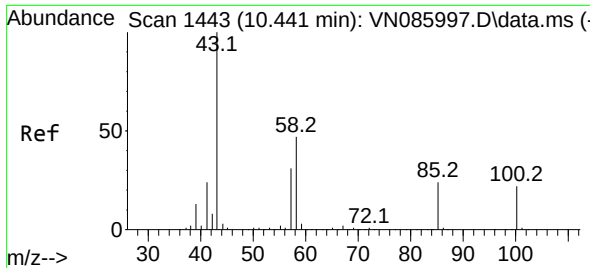
Tgt Ion: 98 Resp: 359896

Ion Ratio Lower Upper

98 100

100 66.3 53.1 79.7

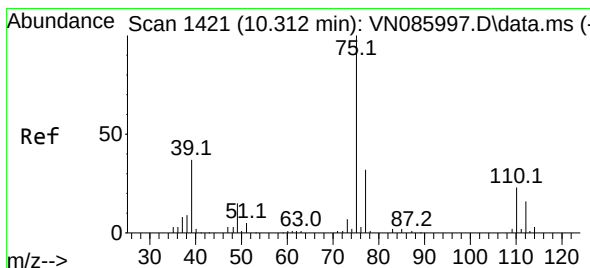
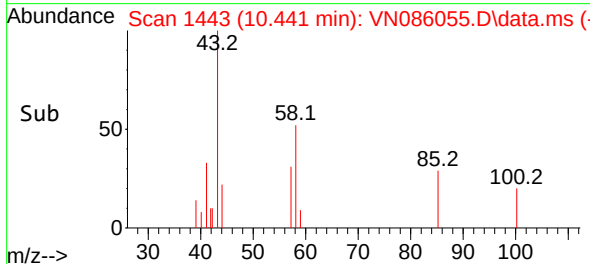
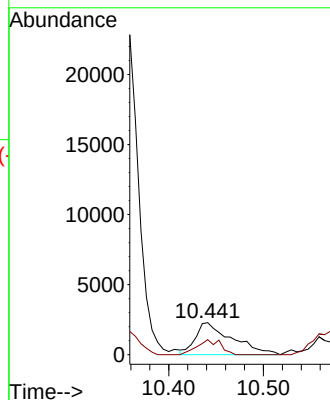
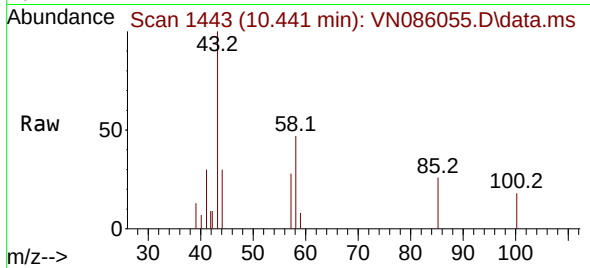




#51  
4-Methyl-2-Pentanone  
Concen: 2.918 ug/l  
RT: 10.441 min Scan# 1443  
Delta R.T. -0.000 min  
Lab File: VN086055.D  
Acq: 21 Mar 2025 21:18

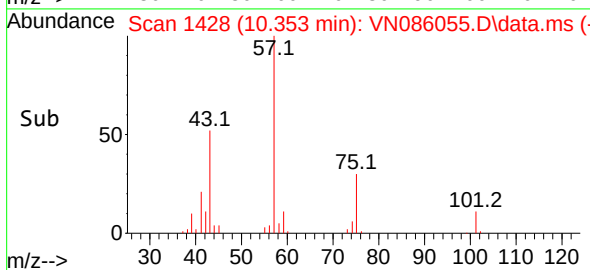
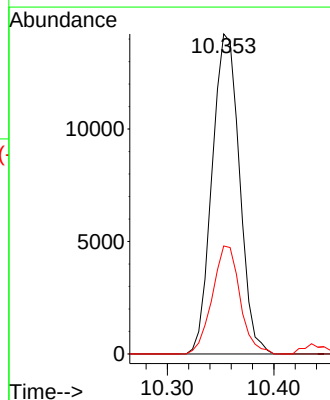
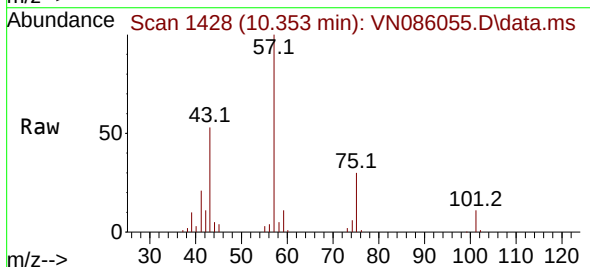
Instrument :  
MSVOA\_N  
ClientSampleId :  
SOIL-PILE

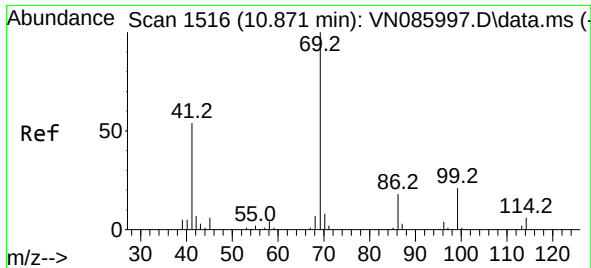
Tgt Ion: 43 Resp: 6154  
Ion Ratio Lower Upper  
43 100  
58 30.0 37.4 56.0#



#54  
cis-1,3-Dichloropropene  
Concen: 8.077 ug/l  
RT: 10.353 min Scan# 1428  
Delta R.T. 0.041 min  
Lab File: VN086055.D  
Acq: 21 Mar 2025 21:18

Tgt Ion: 75 Resp: 25407  
Ion Ratio Lower Upper  
75 100  
77 0.0 25.3 37.9#  
39 33.8 29.6 44.4

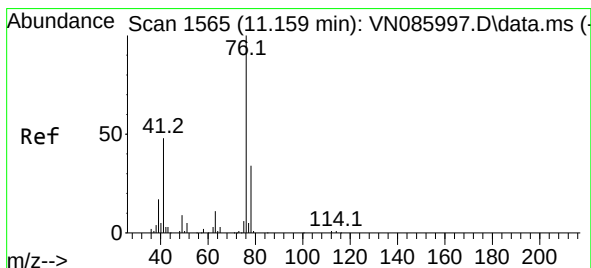
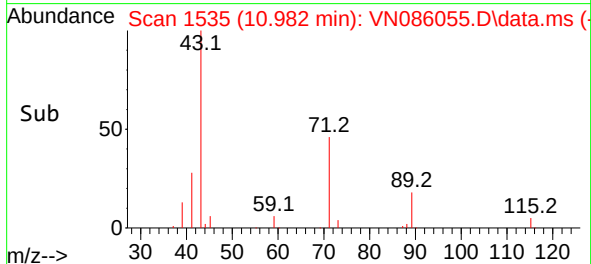
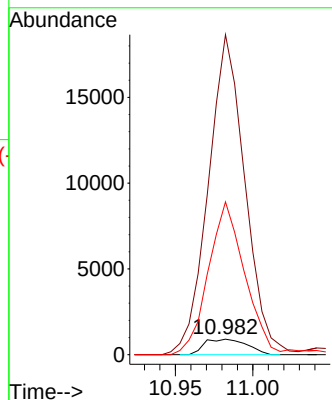
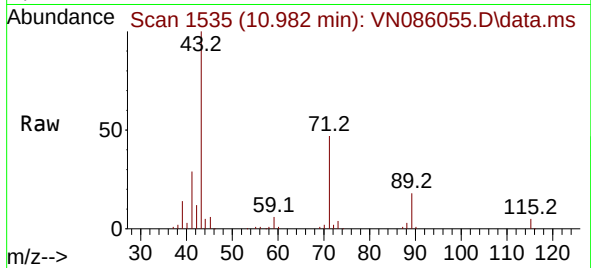




#56  
Ethyl methacrylate  
Concen: 0.897 ug/l  
RT: 10.982 min Scan# 11  
Delta R.T. 0.111 min  
Lab File: VN086055.D  
Acq: 21 Mar 2025 21:18

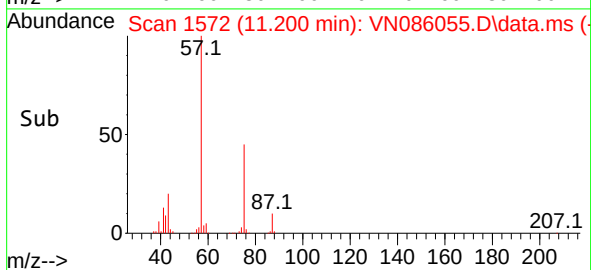
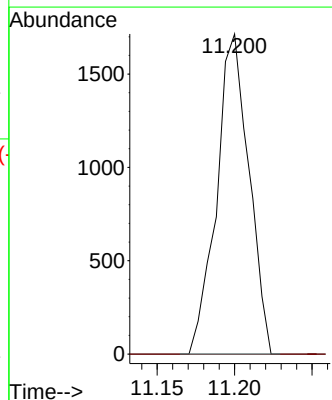
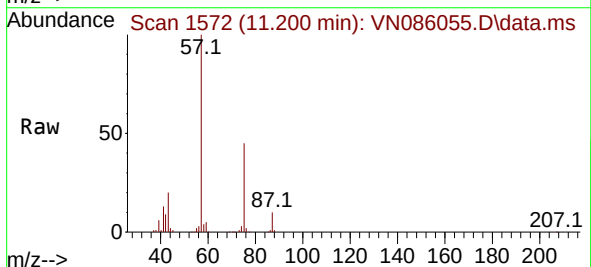
Instrument :  
MSVOA\_N  
ClientSampleId :  
SOIL-PILE

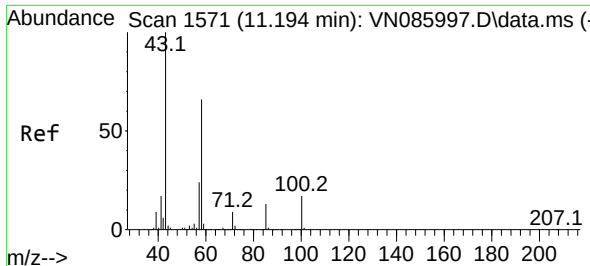
Tgt Ion: 69 Resp: 1723  
Ion Ratio Lower Upper  
69 100  
41 1781.3 41.6 62.4#  
39 854.6 21.8 32.8#



#57  
1,3-Dichloropropane  
Concen: 0.760 ug/l  
RT: 11.200 min Scan# 1572  
Delta R.T. 0.041 min  
Lab File: VN086055.D  
Acq: 21 Mar 2025 21:18

Tgt Ion: 76 Resp: 2484  
Ion Ratio Lower Upper  
76 100  
78 0.0 25.8 38.6#

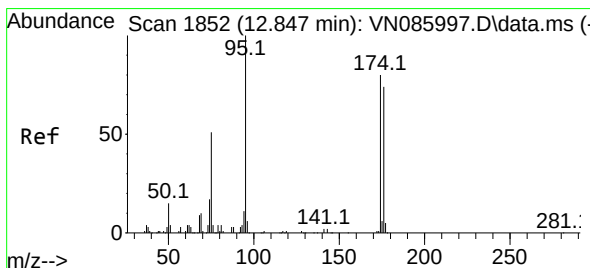
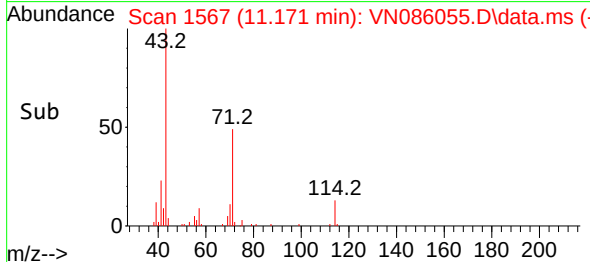
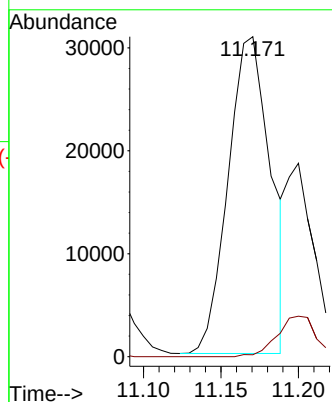
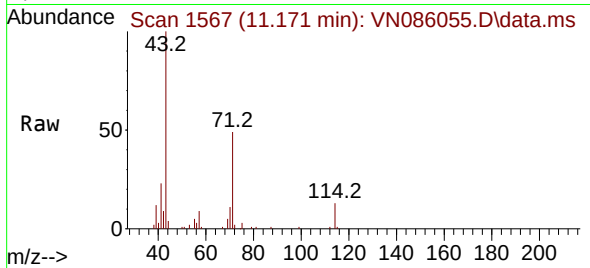




#59  
2-Hexanone  
Concen: 38.052 ug/l  
RT: 11.171 min Scan# 11171  
Delta R.T. -0.024 min  
Lab File: VN086055.D  
Acq: 21 Mar 2025 21:18

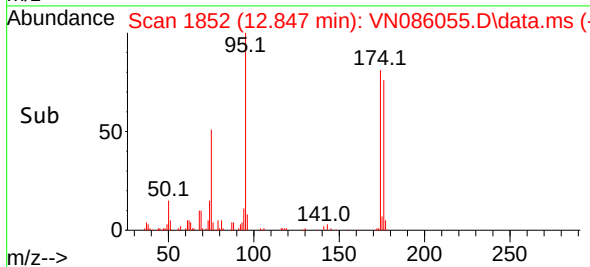
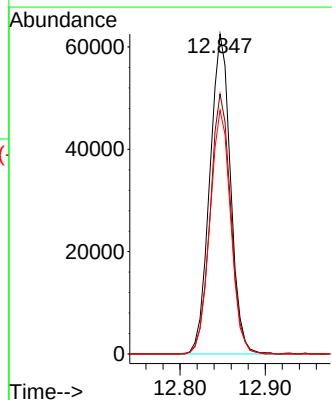
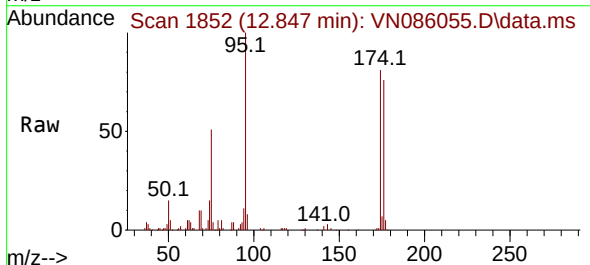
Instrument :  
MSVOA\_N  
ClientSampleId :  
SOIL-PILE

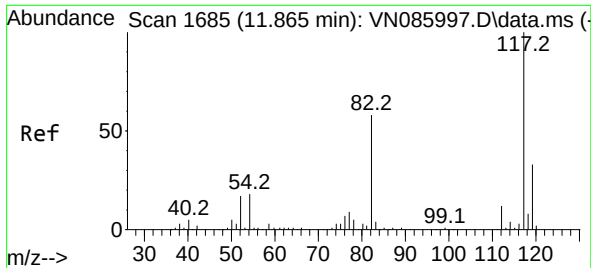
Tgt Ion: 43 Resp: 58465  
Ion Ratio Lower Upper  
43 100  
58 0.0 32.4 97.2#



#62  
4-Bromofluorobenzene  
Concen: 40.956 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. -0.000 min  
Lab File: VN086055.D  
Acq: 21 Mar 2025 21:18

Tgt Ion: 95 Resp: 105313  
Ion Ratio Lower Upper  
95 100  
174 81.3 0.0 156.8  
176 76.5 0.0 152.2

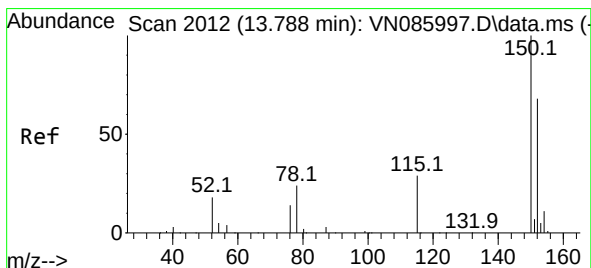
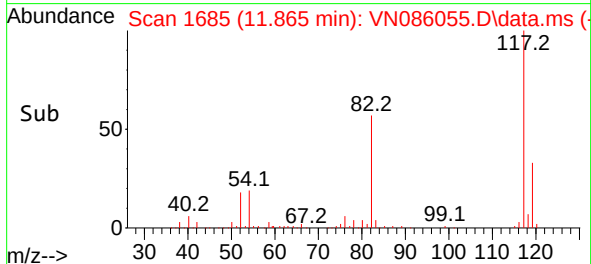
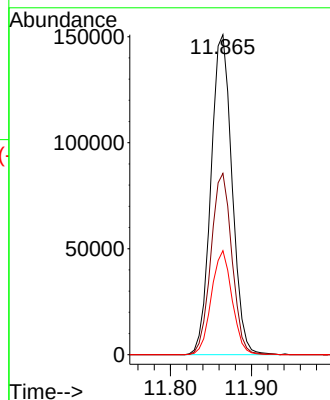
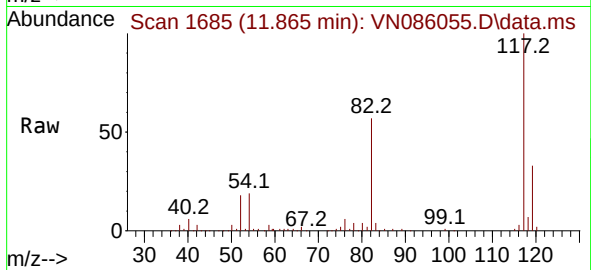




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.865 min Scan# 11  
Delta R.T. -0.000 min  
Lab File: VN086055.D  
Acq: 21 Mar 2025 21:18

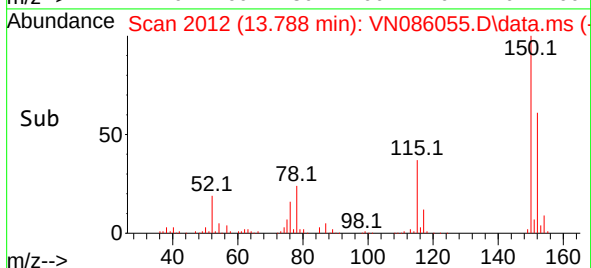
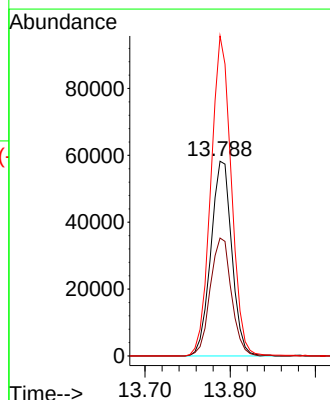
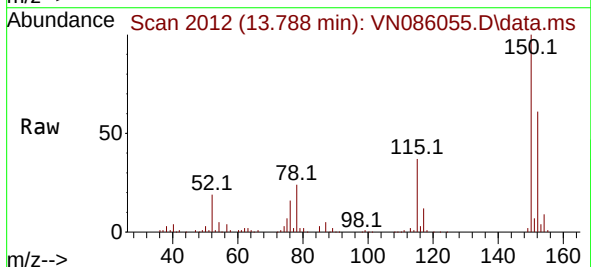
Instrument :  
MSVOA\_N  
ClientSampleId :  
SOIL-PILE

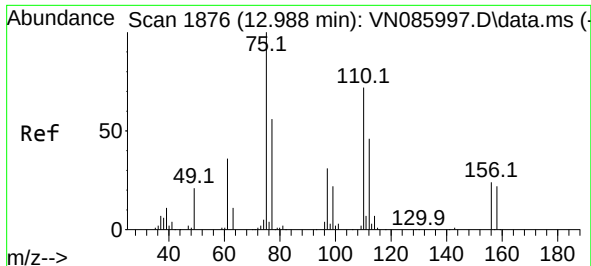
Tgt Ion:117 Resp: 272284  
Ion Ratio Lower Upper  
117 100  
82 56.7 46.7 70.1  
119 32.5 26.5 39.7



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.788 min Scan# 2012  
Delta R.T. -0.000 min  
Lab File: VN086055.D  
Acq: 21 Mar 2025 21:18

Tgt Ion:152 Resp: 99637  
Ion Ratio Lower Upper  
152 100  
115 61.2 31.1 93.2  
150 160.2 0.0 359.6

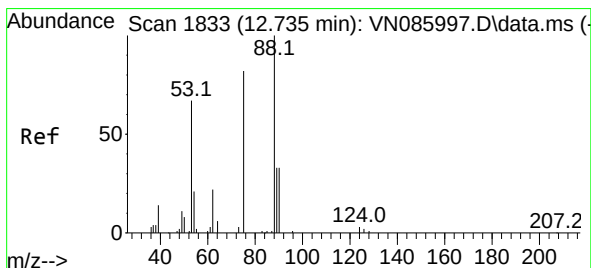
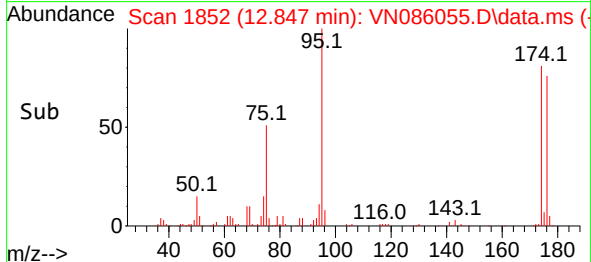
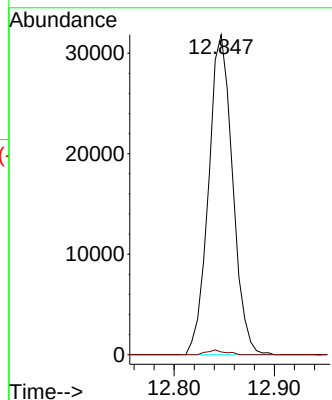
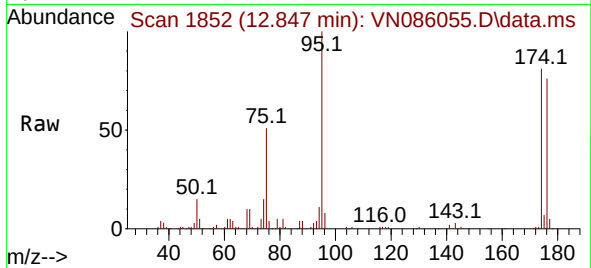




#76  
1,2,3-Trichloropropane  
Concen: 23.788 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. -0.141 min  
Lab File: VN086055.D  
Acq: 21 Mar 2025 21:18

Instrument :  
MSVOA\_N  
ClientSampleId :  
SOIL-PILE

Tgt Ion: 75 Resp: 53064  
Ion Ratio Lower Upper  
75 100  
77 1.1 83.7 251.0#



#81  
trans-1,4-Dichloro-2-butene  
Concen: 62.892 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. 0.112 min  
Lab File: VN086055.D  
Acq: 21 Mar 2025 21:18

Tgt Ion: 75 Resp: 53064  
Ion Ratio Lower Upper  
75 100  
53 0.0 66.0 99.0#  
89 0.0 36.9 55.3#

