

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN082123\  
 Data File : VN078975.D  
 Acq On : 21 Aug 2023 15:20  
 Operator : JC\MD  
 Sample : 04082-06  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :

Quant Time: Aug 22 00:57:58 2023  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N081523W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Aug 16 02:42:02 2023  
 Response via : Initial Calibration

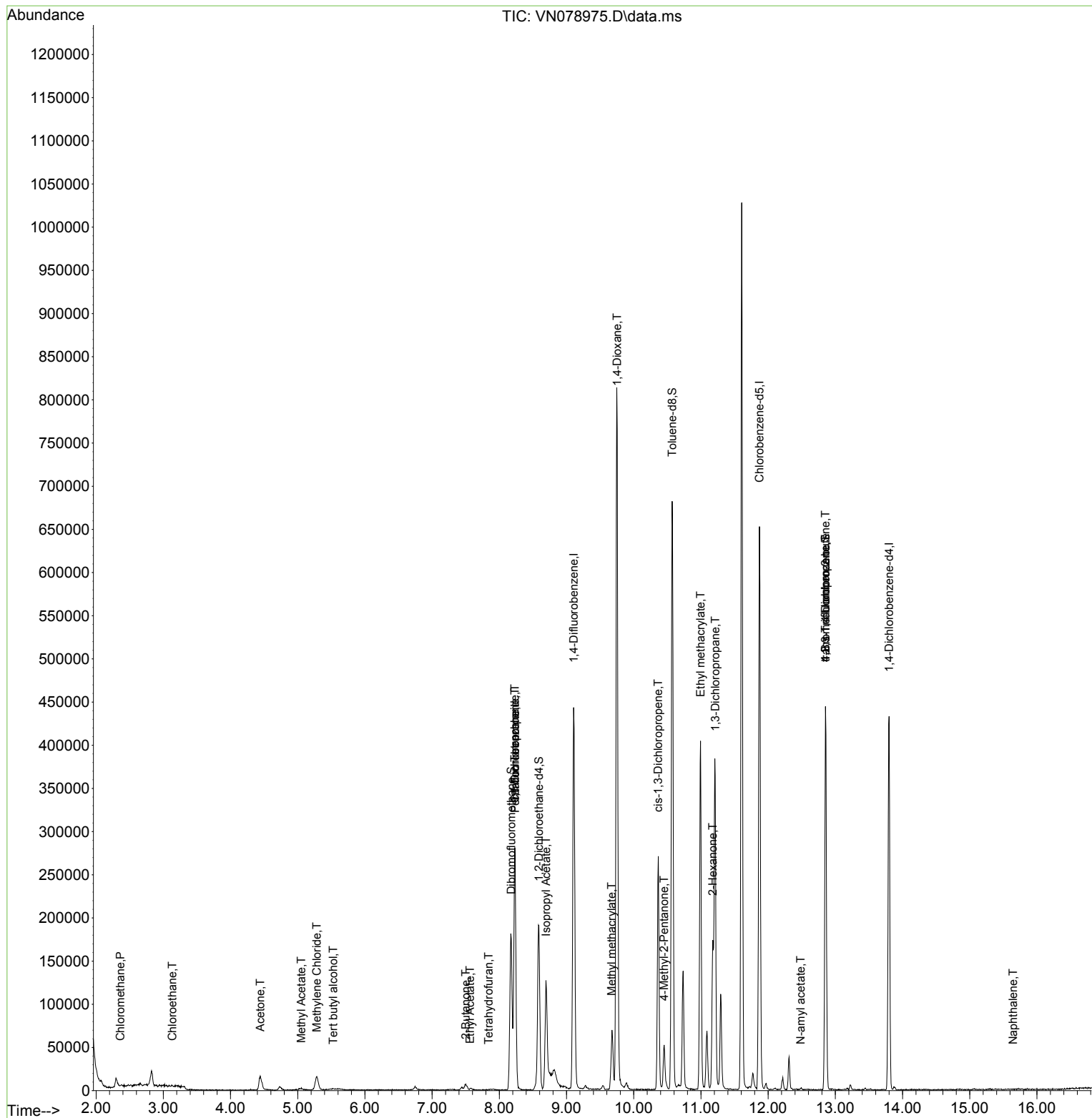
| Compound                      | R.T.   | QIon           | Response | Conc       | Units  | Dev(Min) |
|-------------------------------|--------|----------------|----------|------------|--------|----------|
| -----                         |        |                |          |            |        |          |
| Internal Standards            |        |                |          |            |        |          |
| 1) Pentafluorobenzene         | 8.236  | 168            | 195088   | 50.000     | ug/l   | 0.00     |
| 34) 1,4-Difluorobenzene       | 9.106  | 114            | 374703   | 50.000     | ug/l   | 0.00     |
| 63) Chlorobenzene-d5          | 11.871 | 117            | 359467   | 50.000     | ug/l   | 0.00     |
| 72) 1,4-Dichlorobenzene-d4    | 13.800 | 152            | 113616   | 50.000     | ug/l   | 0.00     |
| System Monitoring Compounds   |        |                |          |            |        |          |
| 33) 1,2-Dichloroethane-d4     | 8.588  | 65             | 152996   | 50.398     | ug/l   | 0.00     |
| Spiked Amount                 | 50.000 | Range 74 - 125 | Recovery | = 100.800% |        |          |
| 35) Dibromofluoromethane      | 8.177  | 113            | 125658   | 49.819     | ug/l   | 0.00     |
| Spiked Amount                 | 50.000 | Range 75 - 124 | Recovery | = 99.640%  |        |          |
| 50) Toluene-d8                | 10.571 | 98             | 466472   | 49.807     | ug/l   | 0.00     |
| Spiked Amount                 | 50.000 | Range 86 - 113 | Recovery | = 99.620%  |        |          |
| 62) 4-Bromofluorobenzene      | 12.853 | 95             | 143316   | 46.817     | ug/l   | 0.00     |
| Spiked Amount                 | 50.000 | Range 83 - 123 | Recovery | = 93.640%  |        |          |
| Target Compounds              |        |                |          |            |        |          |
|                               |        |                |          |            | Qvalue |          |
| 3) Chloromethane              | 2.359  | 50             | 1065     | 0.282      | ug/l # | 42       |
| 6) Chloroethane               | 3.136  | 64             | 928      | 0.401      | ug/l # | 43       |
| 11) Tert butyl alcohol        | 5.530  | 59             | 115      | 0.226      | ug/l # | 72       |
| 16) Acetone                   | 4.442  | 43             | 30375    | 24.250     | ug/l   | 89       |
| 18) Methyl Acetate            | 5.053  | 43             | 5163     | 0.976      | ug/l # | 62       |
| 20) Methylene Chloride        | 5.283  | 84             | 11827    | 4.431      | ug/l # | 84       |
| 25) 2-Butanone                | 7.500  | 43             | 11554    | 5.753      | ug/l # | 82       |
| 29) Tetrahydrofuran           | 7.841  | 42             | 325      | 0.244      | ug/l # | 20       |
| 31) Cyclohexane               | 8.236  | 56             | 5779     | Below Cal  | #      | 58       |
| 36) 1,1-Dichloropropene       | 8.230  | 75             | 17166    | 4.524      | ug/l # | 47       |
| 37) Ethyl Acetate             | 7.565  | 43             | 3390     | 0.799      | ug/l # | 66       |
| 38) Carbon Tetrachloride      | 8.230  | 117            | 22241    | 5.850      | ug/l # | 17       |
| 43) Isopropyl Acetate         | 8.694  | 43             | 153358   | 20.439     | ug/l # | 73       |
| 48) Methyl methacrylate       | 9.671  | 41             | 4494     | 1.322      | ug/l # | 34       |
| 49) 1,4-Dioxane               | 9.753  | 88             | 197      | 3.402      | ug/l # | 1        |
| 51) 4-Methyl-2-Pentanone      | 10.453 | 43             | 40294    | 9.054      | ug/l # | 79       |
| 54) cis-1,3-Dichloropropene   | 10.365 | 75             | 44019    | 9.320      | ug/l # | 69       |
| 56) Ethyl methacrylate        | 10.994 | 69             | 1845     | 0.431      | ug/l # | 1        |
| 57) 1,3-Dichloropropane       | 11.212 | 76             | 3768     | 0.763      | ug/l # | 42       |
| 59) 2-Hexanone                | 11.177 | 43             | 196088   | 60.835     | ug/l # | 19       |
| 74) N-amyl acetate            | 12.482 | 43             | 1086     | 0.227      | ug/l # | 36       |
| 76) 1,2,3-Trichloropropane    | 12.853 | 75             | 80058    | 29.244     | ug/l # | 1        |
| 81) trans-1,4-Dichloro-2-b... | 12.853 | 75             | 80058    | 74.706     | ug/l # | 15       |
| 95) Naphthalene               | 15.647 | 128            | 284      | 2.626      | ug/l # | 70       |
| -----                         |        |                |          |            |        |          |

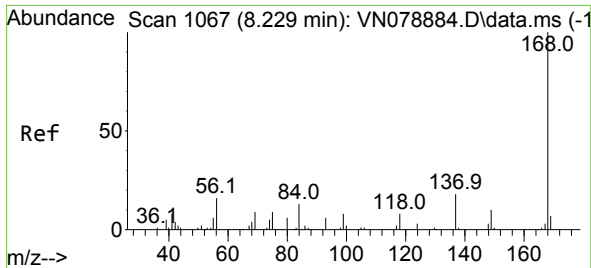
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Title : SW846 8260  
QLast Update : Wed Aug 16 02:42:02 2023  
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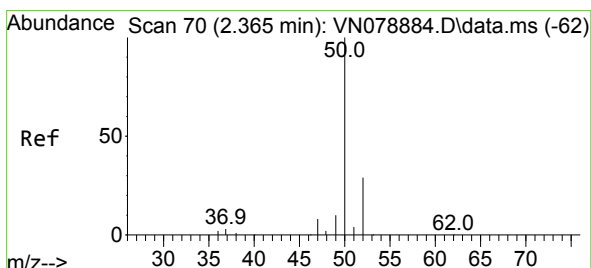
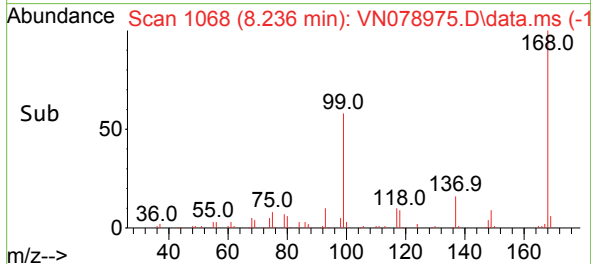
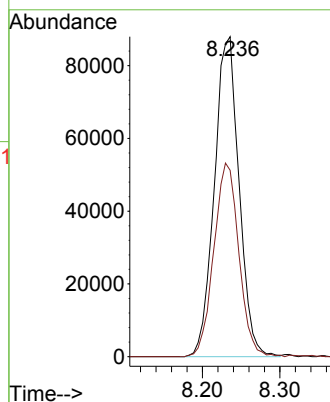
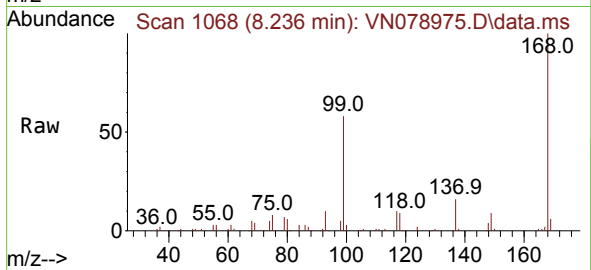




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.236 min Scan# 10  
Delta R.T. 0.006 min  
Lab File: VN078975.D  
Acq: 21 Aug 2023 15:20

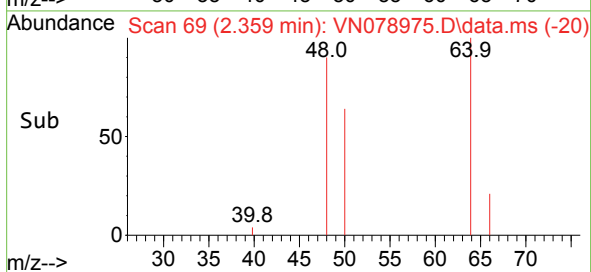
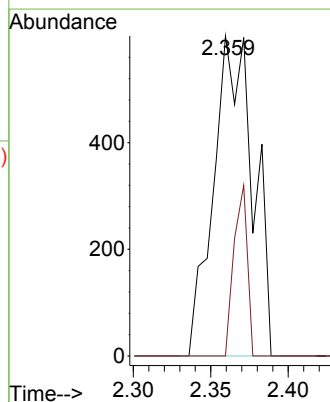
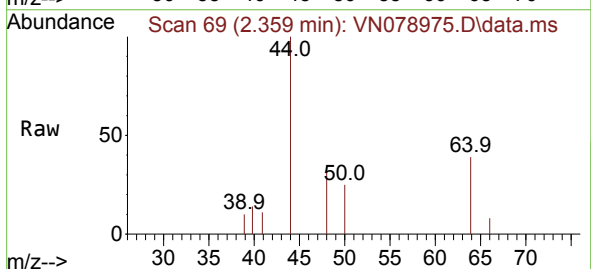
Instrument :  
MSVOA\_N  
ClientSampleId :

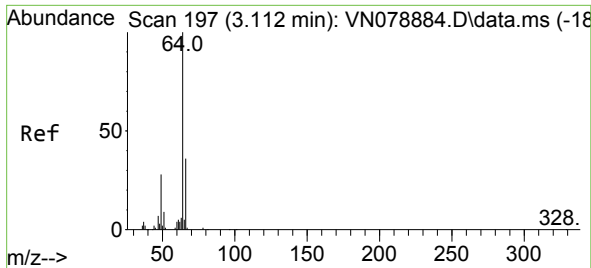
Tgt Ion:168 Resp: 195088  
Ion Ratio Lower Upper  
168 100  
99 58.3 53.0 79.6



#3  
Chloromethane  
Concen: 0.282 ug/l  
RT: 2.359 min Scan# 69  
Delta R.T. -0.012 min  
Lab File: VN078975.D  
Acq: 21 Aug 2023 15:20

Tgt Ion: 50 Resp: 1065  
Ion Ratio Lower Upper  
50 100  
52 0.0 26.5 39.7#

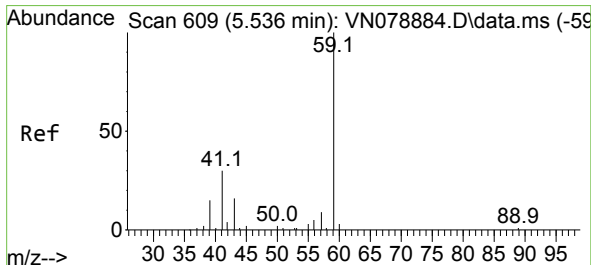
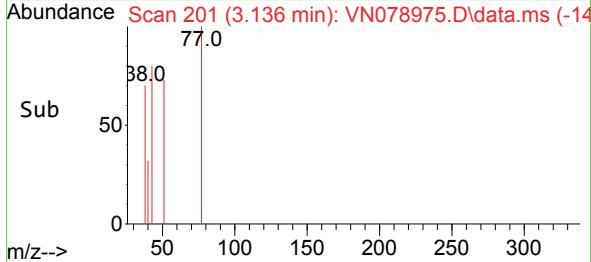
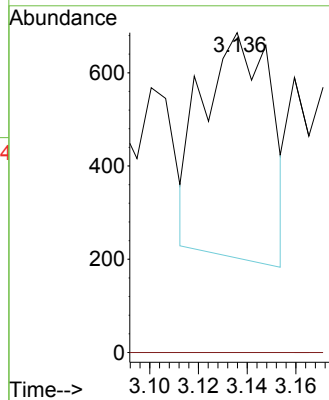
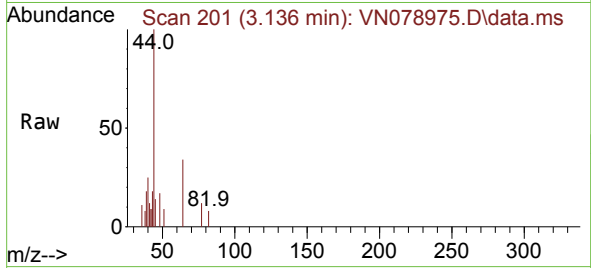




#6  
Chloroethane  
Concen: 0.401 ug/l  
RT: 3.136 min Scan# 201  
Delta R.T. 0.018 min  
Lab File: VN078975.D  
Acq: 21 Aug 2023 15:20

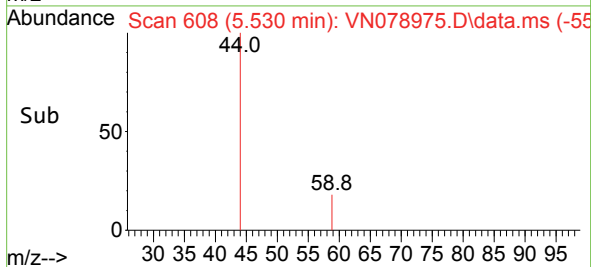
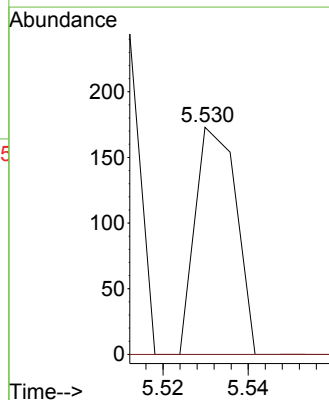
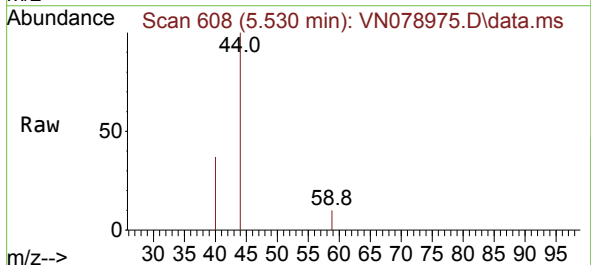
Instrument :  
MSVOA\_N  
ClientSampleId :

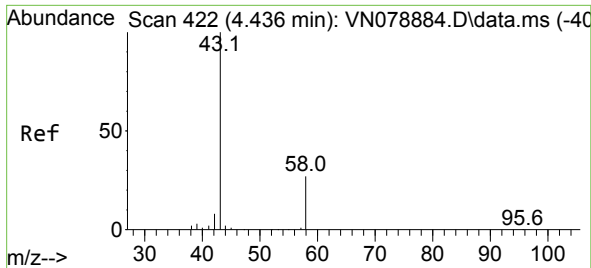
Tgt Ion: 64 Resp: 928  
Ion Ratio Lower Upper  
64 100  
66 0.0 25.4 38.2#



#11  
Tert butyl alcohol  
Concen: 0.226 ug/l  
RT: 5.530 min Scan# 608  
Delta R.T. -0.012 min  
Lab File: VN078975.D  
Acq: 21 Aug 2023 15:20

Tgt Ion: 59 Resp: 115  
Ion Ratio Lower Upper  
59 100  
57 0.0 8.2 12.4#

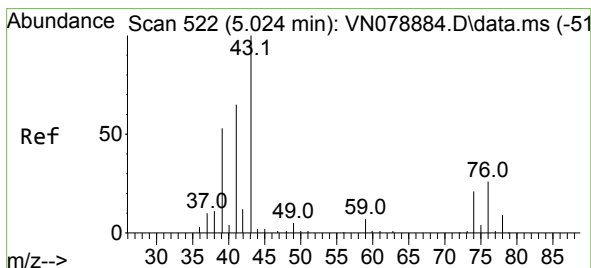
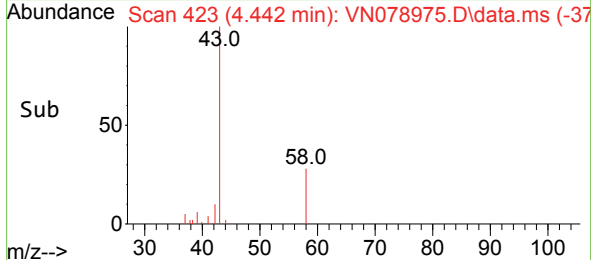
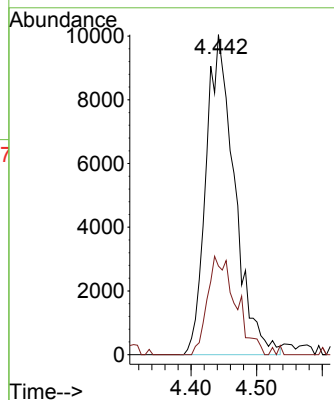
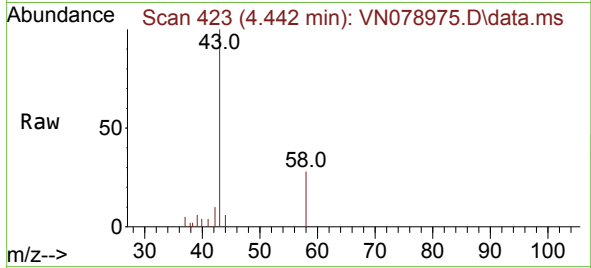




#16  
Acetone  
Concen: 24.250 ug/l  
RT: 4.442 min Scan# 41  
Delta R.T. -0.000 min  
Lab File: VN078975.D  
Acq: 21 Aug 2023 15:20

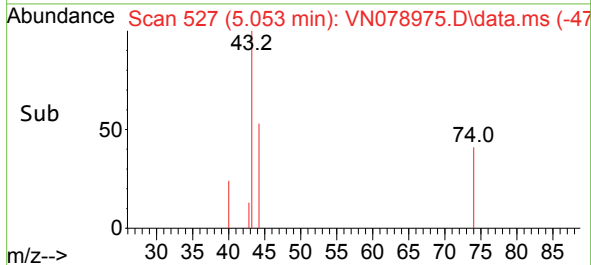
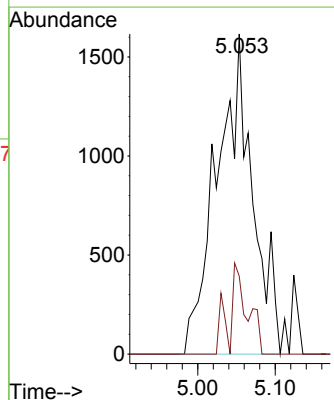
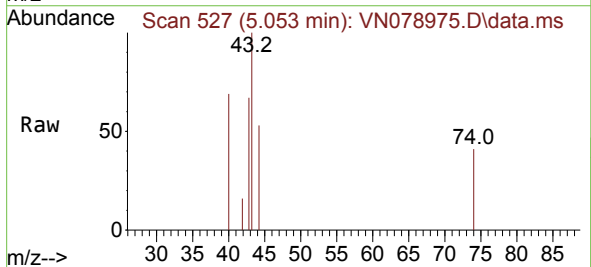
Instrument :  
MSVOA\_N  
ClientSampleId :

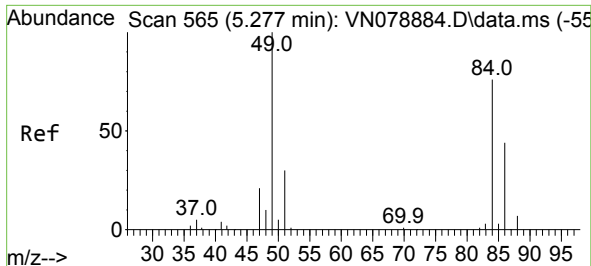
Tgt Ion: 43 Resp: 30375  
Ion Ratio Lower Upper  
43 100  
58 28.4 28.0 42.0



#18  
Methyl Acetate  
Concen: 0.976 ug/l  
RT: 5.053 min Scan# 527  
Delta R.T. 0.011 min  
Lab File: VN078975.D  
Acq: 21 Aug 2023 15:20

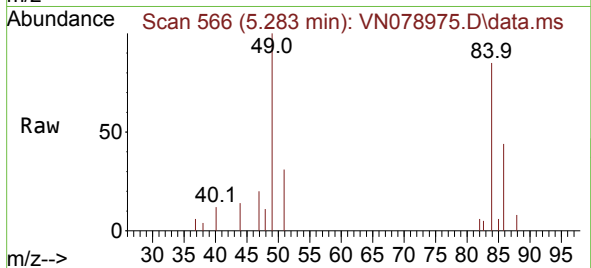
Tgt Ion: 43 Resp: 5163  
Ion Ratio Lower Upper  
43 100  
74 11.4 26.2 39.4#



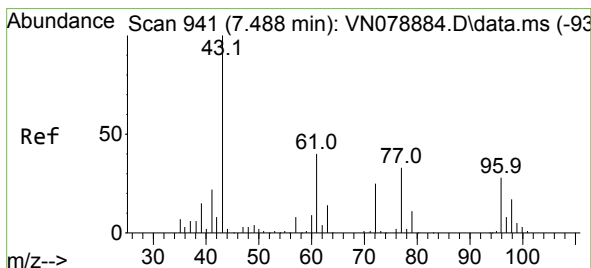
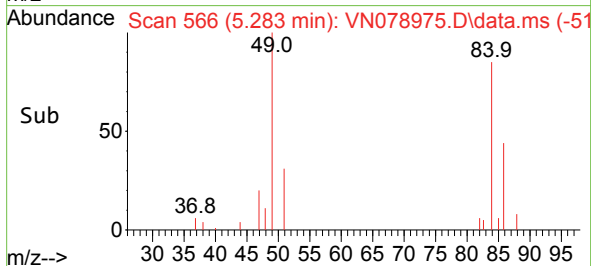
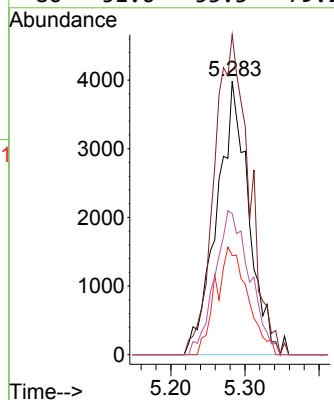


#20  
Methylene Chloride  
Concen: 4.431 ug/l  
RT: 5.283 min Scan# 51  
Delta R.T. -0.000 min  
Lab File: VN078975.D  
Acq: 21 Aug 2023 15:20

Instrument :  
MSVOA\_N  
ClientSampleId :

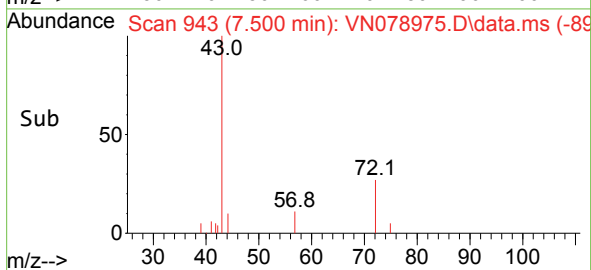
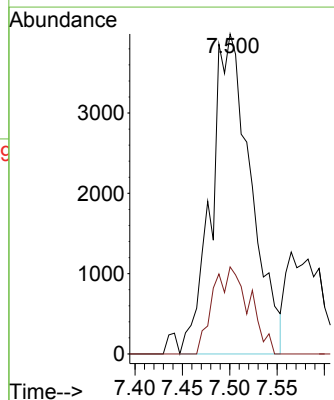
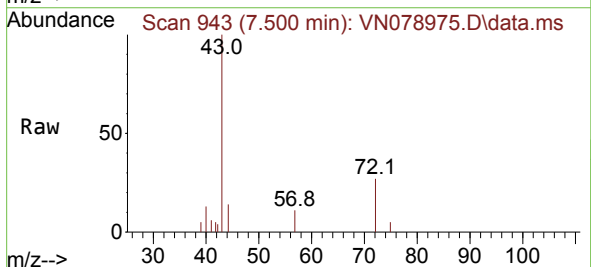


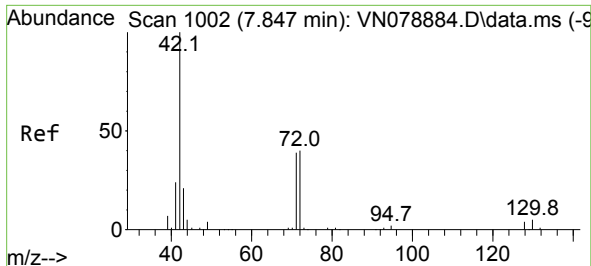
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 84    | Resp: | 11827 |
| Ion      | Ratio | Lower | Upper |
| 84       | 100   |       |       |
| 49       | 117.0 | 79.7  | 119.5 |
| 51       | 36.2  | 25.2  | 37.8  |
| 86       | 51.6  | 53.3  | 79.9# |



#25  
2-Butanone  
Concen: 5.753 ug/l  
RT: 7.500 min Scan# 943  
Delta R.T. 0.006 min  
Lab File: VN078975.D  
Acq: 21 Aug 2023 15:20

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 11554 |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 72       | 27.2  | 30.2  | 45.2# |





#29

Tetrahydrofuran

Concen: 0.244 ug/l

RT: 7.841 min Scan# 10

Delta R.T. -0.006 min

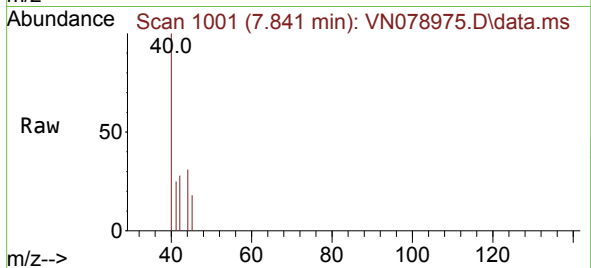
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Acq: 21 Aug 2023 15:20

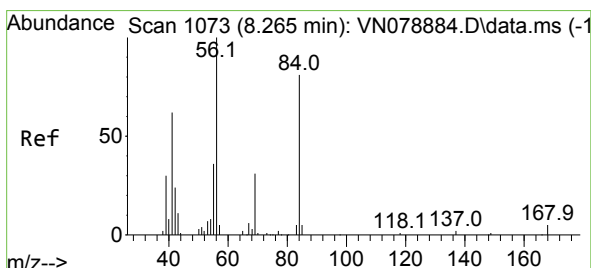
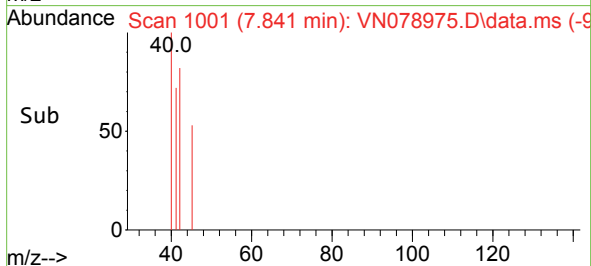
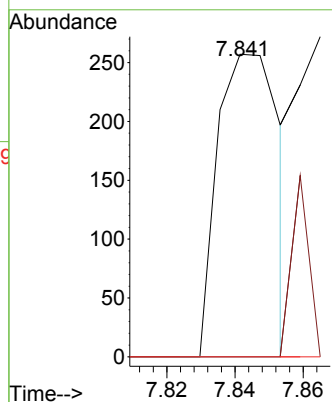
Instrument :

MSVOA\_N

ClientSampleId :



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 42    | Resp: | 325   |
| Ion      | Ratio | Lower | Upper |
| 42       | 100   |       |       |
| 72       | 0.0   | 49.8  | 74.6# |
| 71       | 0.0   | 47.4  | 71.2# |



#31

Cyclohexane

Concen: Below Cal

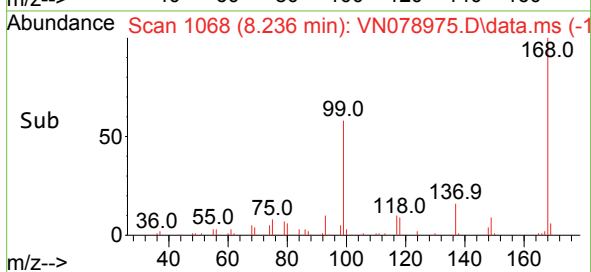
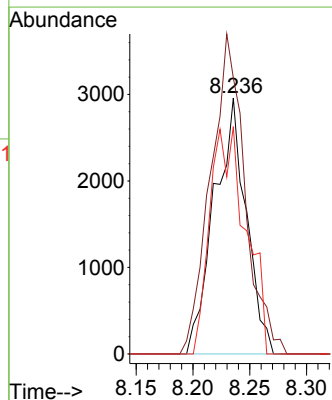
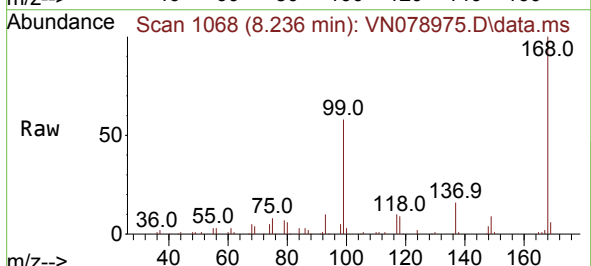
RT: 8.236 min Scan# 1068

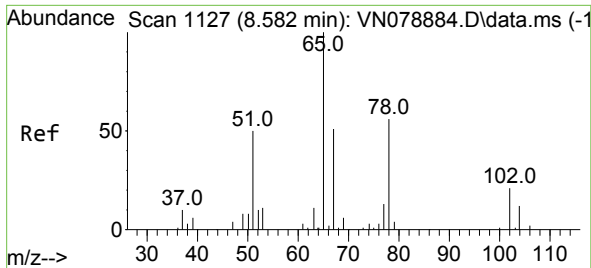
Delta R.T. -0.029 min

Lab File: VN078975.D

Acq: 21 Aug 2023 15:20

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 56    | Resp: | 5779  |
| Ion      | Ratio | Lower | Upper |
| 56       | 100   |       |       |
| 69       | 107.8 | 26.8  | 40.2# |
| 84       | 88.8  | 81.8  | 122.6 |





#33

1,2-Dichloroethane-d4

Concen: 50.398 ug/l

RT: 8.588 min Scan# 1127

Delta R.T. 0.005 min

Lab File: VN078975.D

Acq: 21 Aug 2023 15:20

Instrument :

MSVOA\_N

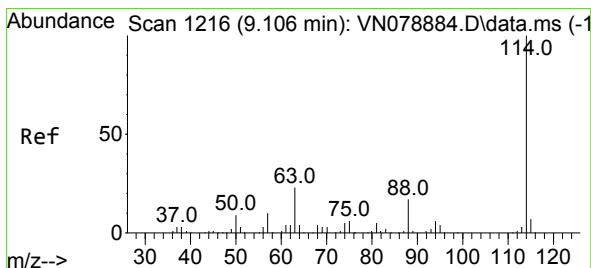
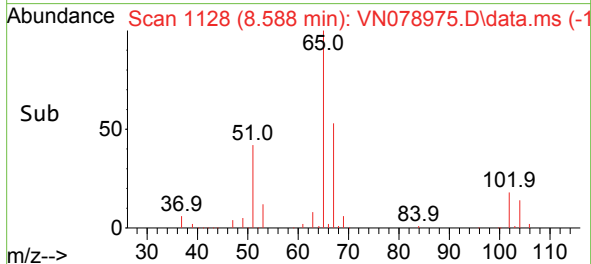
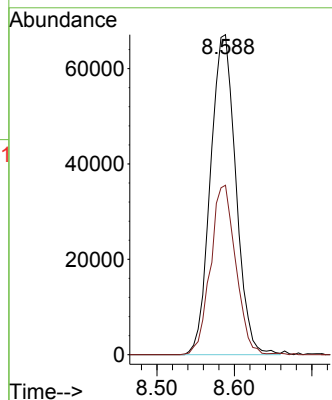
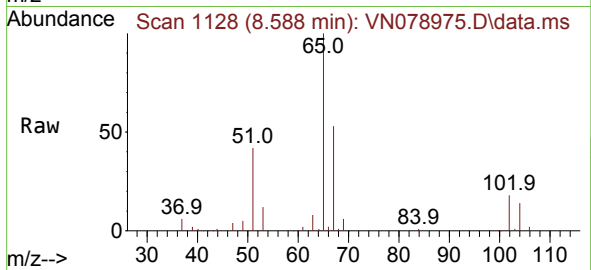
ClientSampleId :

Tgt Ion: 65 Resp: 152996

Ion Ratio Lower Upper

65 100

67 52.5 0.0 106.6



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.106 min Scan# 1216

Delta R.T. -0.006 min

Lab File: VN078975.D

Acq: 21 Aug 2023 15:20

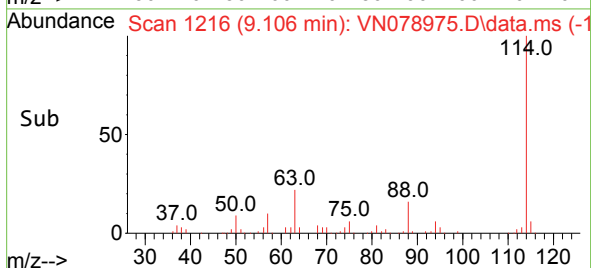
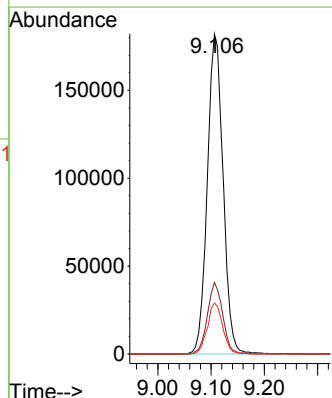
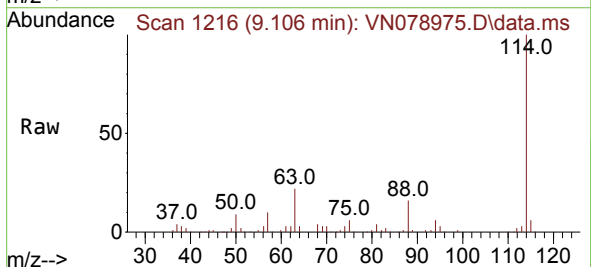
Tgt Ion: 114 Resp: 374703

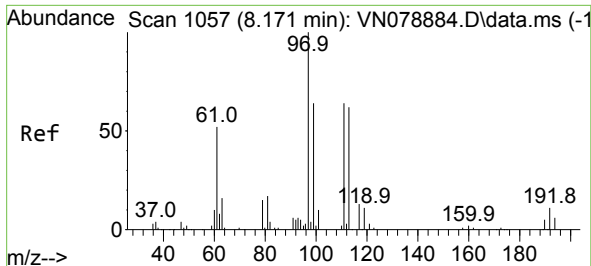
Ion Ratio Lower Upper

114 100

63 22.3 0.0 36.4

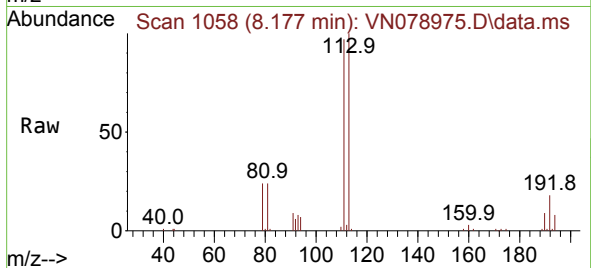
88 15.9 0.0 30.6



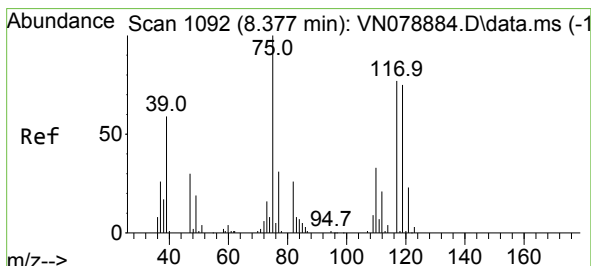
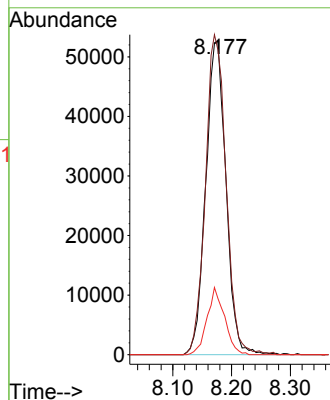
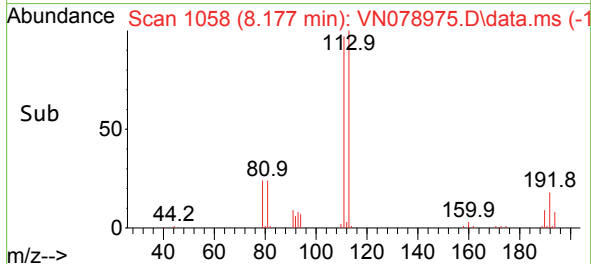


#35  
Dibromofluoromethane  
Concen: 49.819 ug/l  
RT: 8.177 min Scan# 1057  
Delta R.T. 0.006 min  
Lab File: VN078975.D  
Acq: 21 Aug 2023 15:20

Instrument :  
MSVOA\_N  
ClientSampleId :

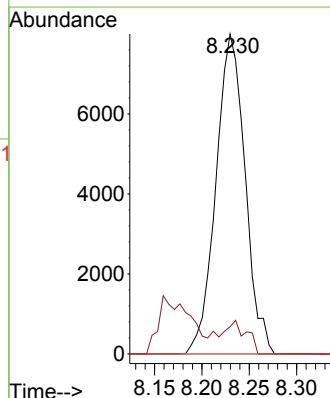
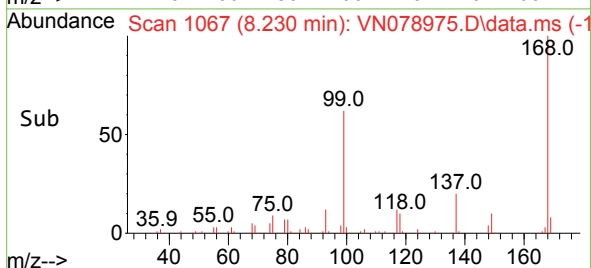
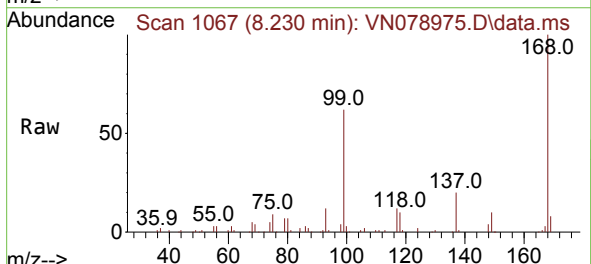


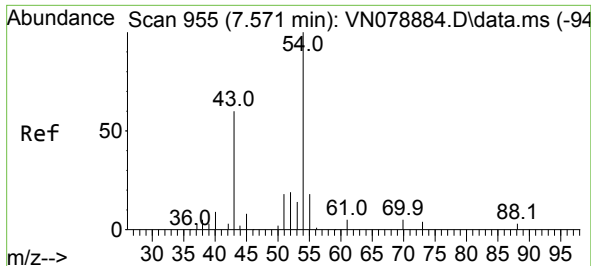
Tgt Ion:113 Resp: 125658  
Ion Ratio Lower Upper  
113 100  
111 104.3 82.6 123.8  
192 18.6 12.7 19.1



#36  
1,1-Dichloropropene  
Concen: 4.524 ug/l  
RT: 8.230 min Scan# 1067  
Delta R.T. -0.147 min  
Lab File: VN078975.D  
Acq: 21 Aug 2023 15:20

Tgt Ion: 75 Resp: 17166  
Ion Ratio Lower Upper  
75 100  
110 7.4 19.1 57.3#  
77 0.0 25.0 37.4#





#37

Ethyl Acetate

Concen: 0.799 ug/l

RT: 7.565 min Scan# 91

Delta R.T. -0.006 min

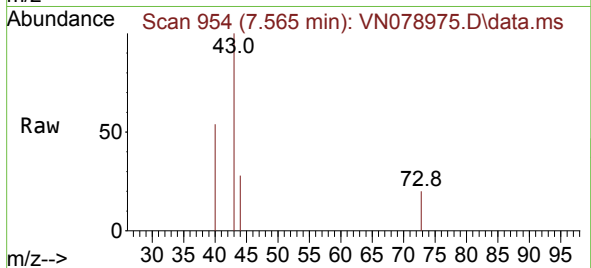
Lab File: VN078975.D

Acq: 21 Aug 2023 15:20

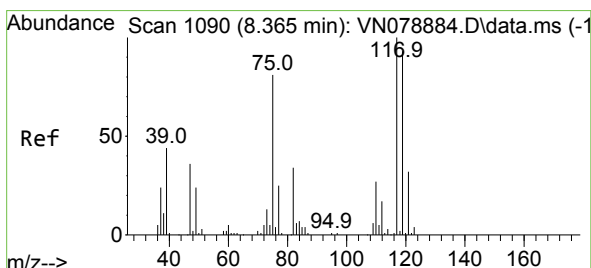
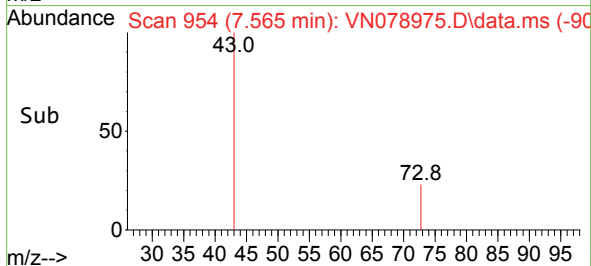
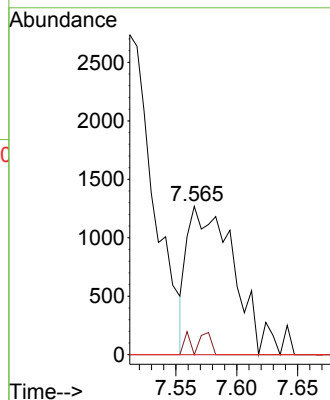
Instrument :

MSVOA\_N

ClientSampleId :



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 3390  |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 61       | 2.1   | 13.2  | 19.8# |
| 70       | 0.0   | 11.3  | 16.9# |



#38

Carbon Tetrachloride

Concen: 5.850 ug/l

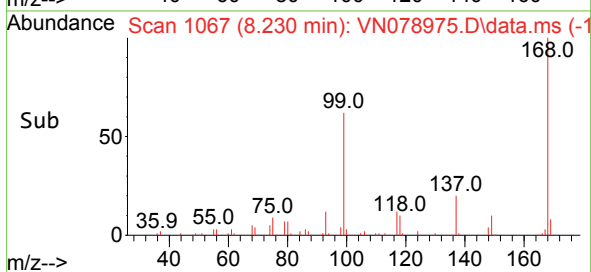
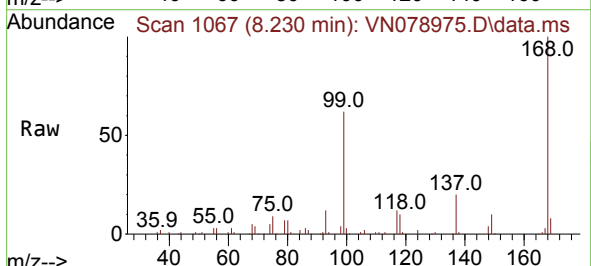
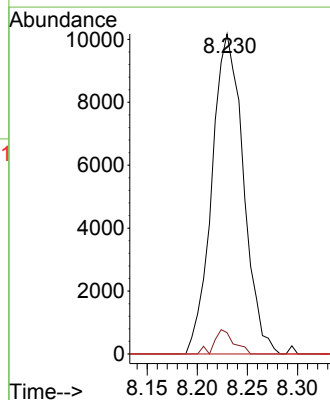
RT: 8.230 min Scan# 1067

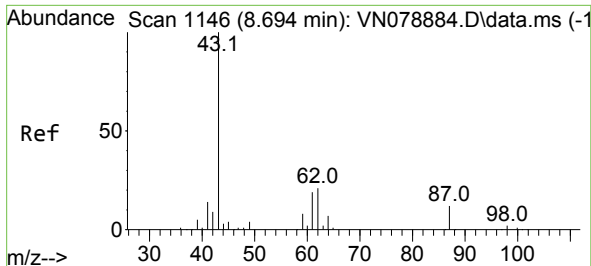
Delta R.T. -0.141 min

Lab File: VN078975.D

Acq: 21 Aug 2023 15:20

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 117   | Resp: | 22241  |
| Ion      | Ratio | Lower | Upper  |
| 117      | 100   |       |        |
| 119      | 6.7   | 77.3  | 115.9# |
| 121      | 0.0   | 23.3  | 34.9#  |

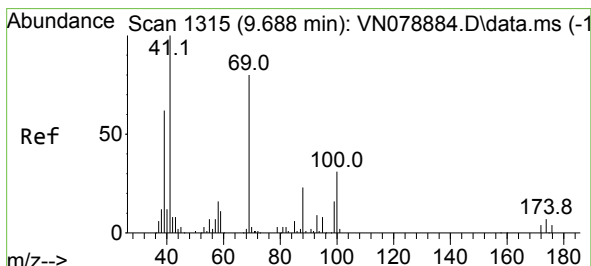
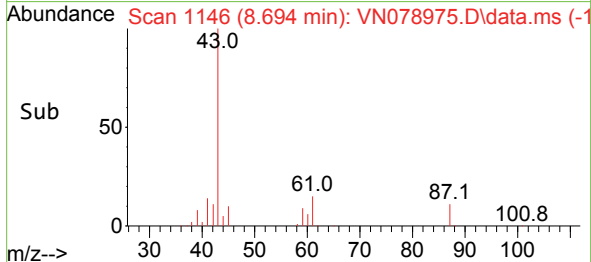
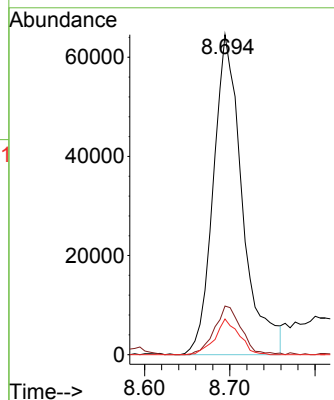
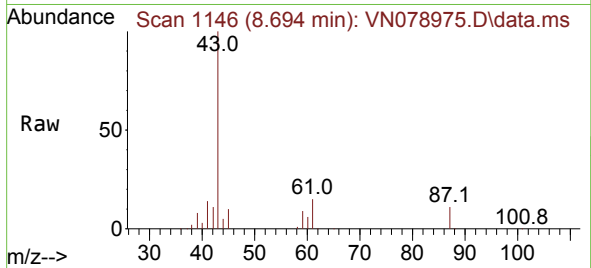




#43  
Isopropyl Acetate  
Concen: 20.439 ug/l  
RT: 8.694 min Scan# 1146  
Delta R.T. 0.000 min  
Lab File: VN078975.D  
Acq: 21 Aug 2023 15:20

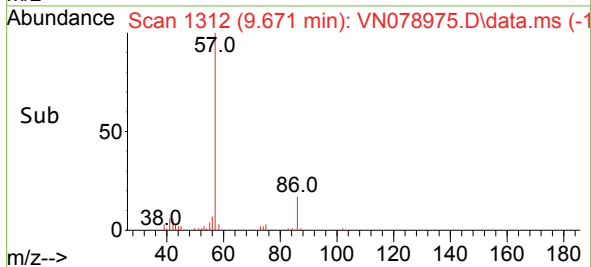
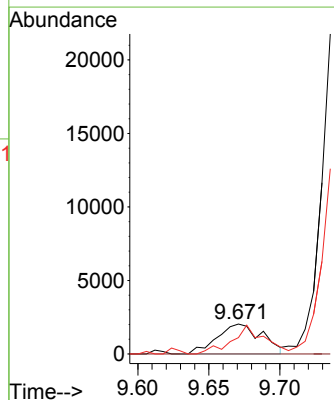
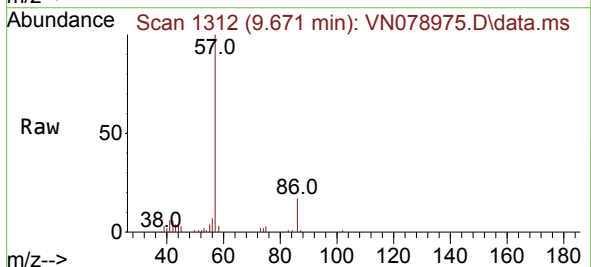
Instrument :  
MSVOA\_N  
ClientSampleId :

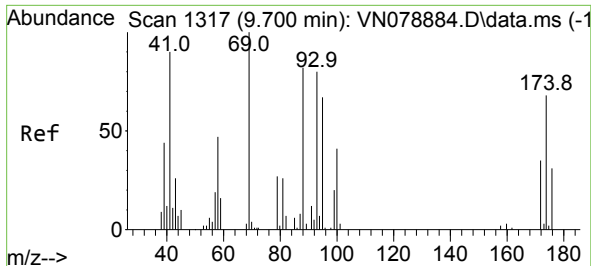
Tgt Ion: 43 Resp: 153358  
Ion Ratio Lower Upper  
43 100  
61 14.0 24.7 37.1#  
87 9.2 14.6 21.8#



#48  
Methyl methacrylate  
Concen: 1.322 ug/l  
RT: 9.671 min Scan# 1312  
Delta R.T. -0.017 min  
Lab File: VN078975.D  
Acq: 21 Aug 2023 15:20

Tgt Ion: 41 Resp: 4494  
Ion Ratio Lower Upper  
41 100  
69 0.0 90.4 135.6#  
39 69.5 54.6 81.8





#49

1,4-Dioxane

Concen: 3.402 ug/l

RT: 9.753 min Scan# 1317

Delta R.T. 0.053 min

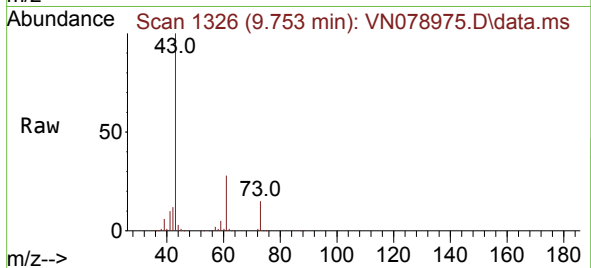
Lab File: VN078975.D

Acq: 21 Aug 2023 15:20

Instrument :

MSVOA\_N

ClientSampleId :



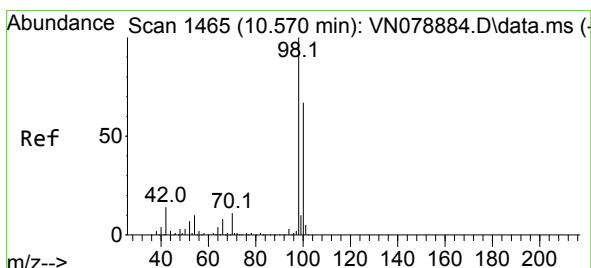
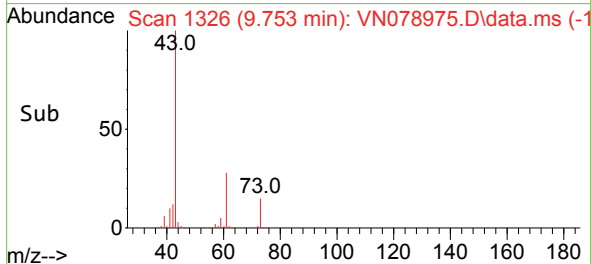
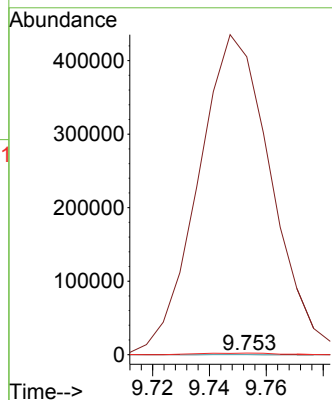
Tgt Ion: 88 Resp: 197

Ion Ratio Lower Upper

88 100

43 400749.7 17.0 25.6#

58 2097.0 47.0 70.4#



#50

Toluene-d8

Concen: 49.807 ug/l

RT: 10.571 min Scan# 1465

Delta R.T. -0.000 min

Lab File: VN078975.D

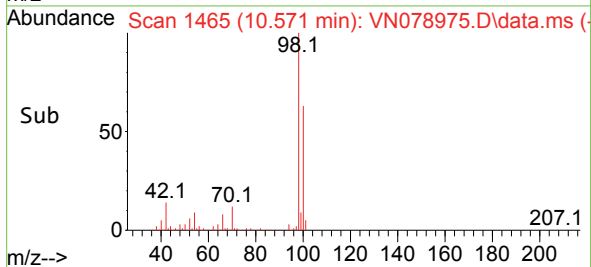
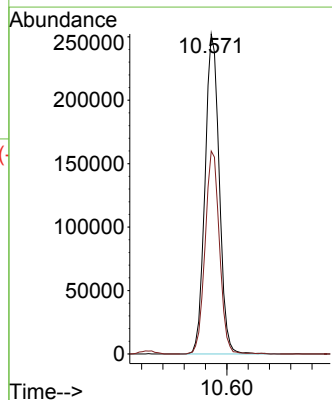
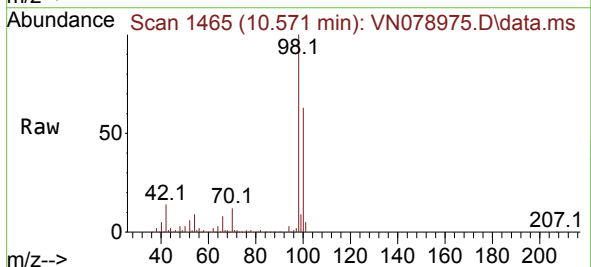
Acq: 21 Aug 2023 15:20

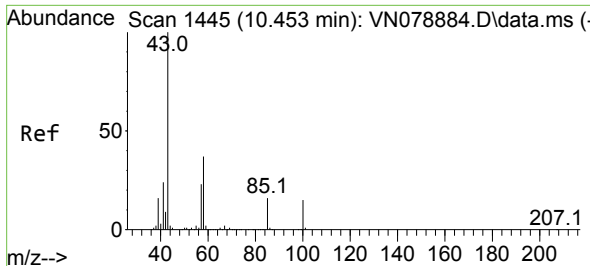
Tgt Ion: 98 Resp: 466472

Ion Ratio Lower Upper

98 100

100 64.0 52.0 78.0





#51

4-Methyl-2-Pentanone

Concen: 9.054 ug/l

RT: 10.453 min Scan# 1445

Delta R.T. 0.000 min

Lab File: VN078975.D

Acq: 21 Aug 2023 15:20

Instrument :

MSVOA\_N

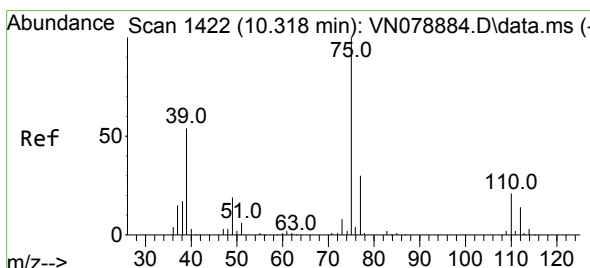
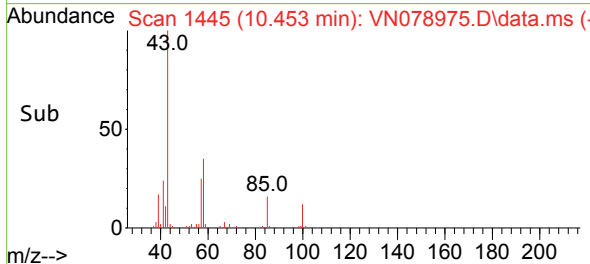
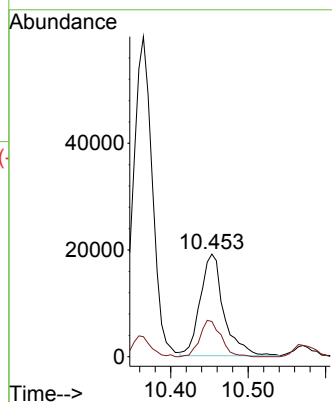
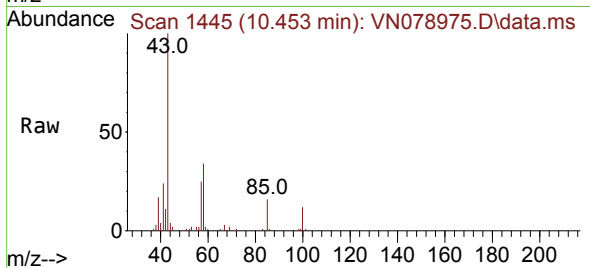
ClientSampleId :

Tgt Ion: 43 Resp: 40294

Ion Ratio Lower Upper

43 100

58 32.0 36.6 54.8#



#54

cis-1,3-Dichloropropene

Concen: 9.320 ug/l

RT: 10.365 min Scan# 1430

Delta R.T. 0.047 min

Lab File: VN078975.D

Acq: 21 Aug 2023 15:20

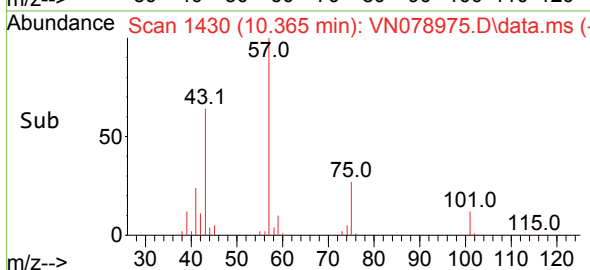
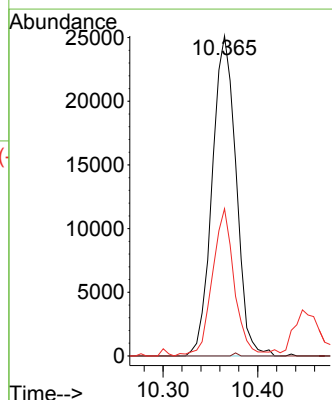
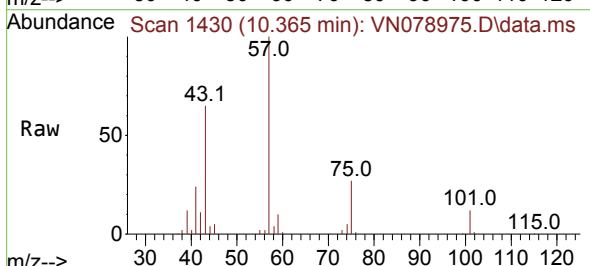
Tgt Ion: 75 Resp: 44019

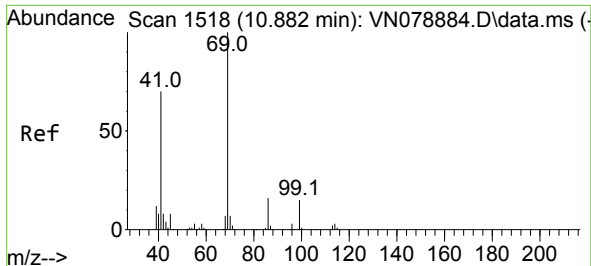
Ion Ratio Lower Upper

75 100

77 0.0 26.1 39.1#

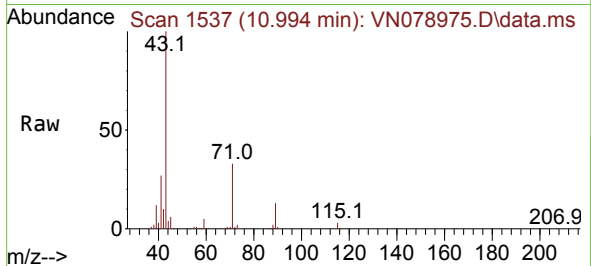
39 45.2 31.6 47.4



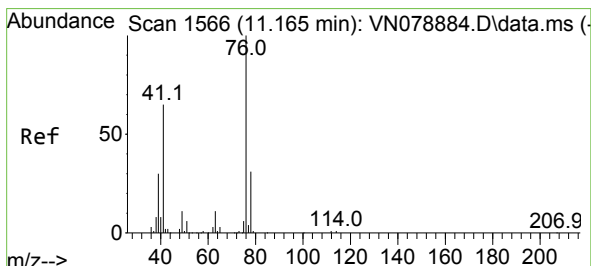
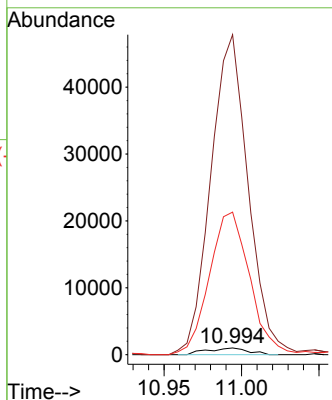
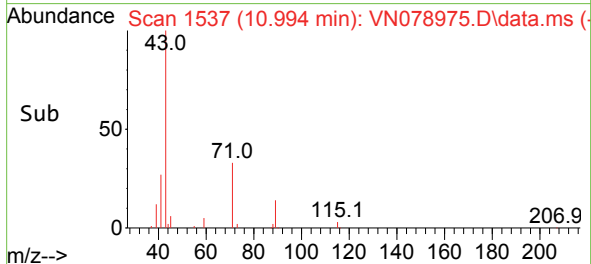


#56  
Ethyl methacrylate  
Concen: 0.431 ug/l  
RT: 10.994 min Scan# 1537  
Delta R.T. 0.117 min  
Lab File: VN078975.D  
Acq: 21 Aug 2023 15:20

Instrument :  
MSVOA\_N  
ClientSampleId :

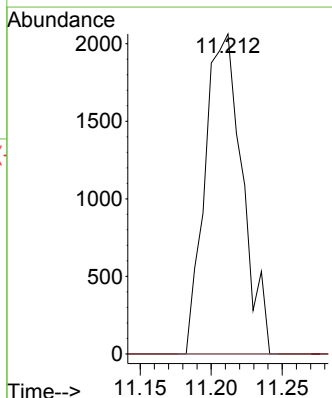
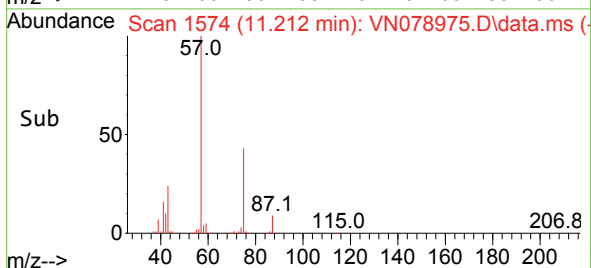
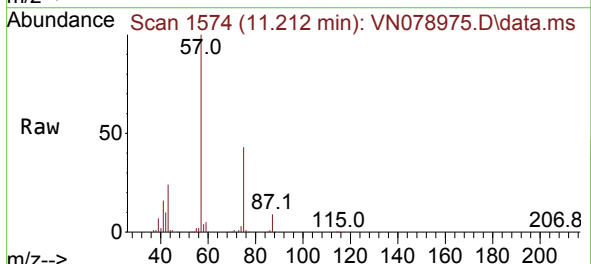


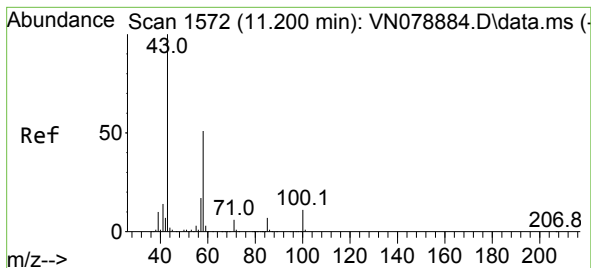
Tgt Ion: 69 Resp: 1845  
Ion Ratio Lower Upper  
69 100  
41 4389.9 39.6 59.4#  
39 2108.2 28.6 43.0#



#57  
1,3-Dichloropropane  
Concen: 0.763 ug/l  
RT: 11.212 min Scan# 1574  
Delta R.T. 0.047 min  
Lab File: VN078975.D  
Acq: 21 Aug 2023 15:20

Tgt Ion: 76 Resp: 3768  
Ion Ratio Lower Upper  
76 100  
78 0.0 26.1 39.1#

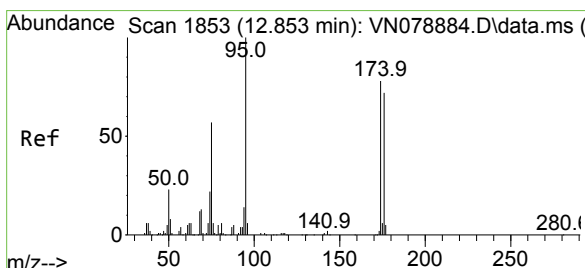
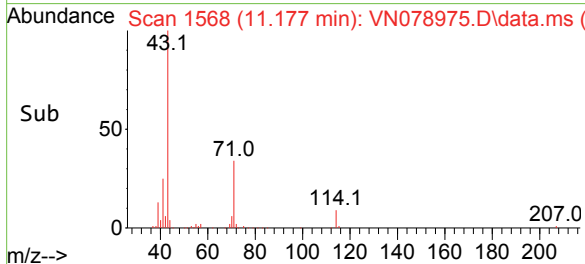
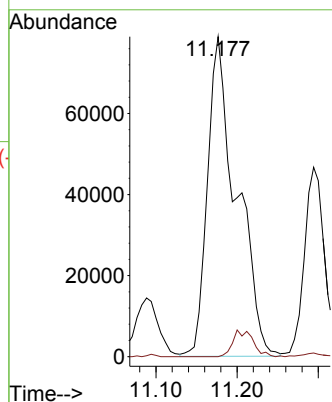
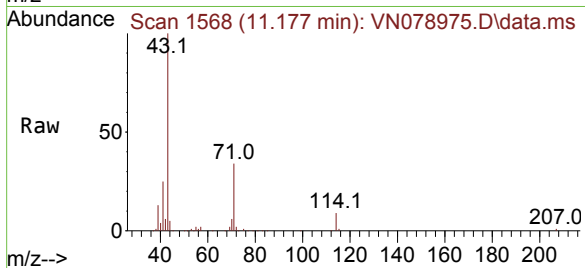




#59  
2-Hexanone  
Concen: 60.835 ug/l  
RT: 11.177 min Scan# 1568  
Delta R.T. -0.023 min  
Lab File: VN078975.D  
Acq: 21 Aug 2023 15:20

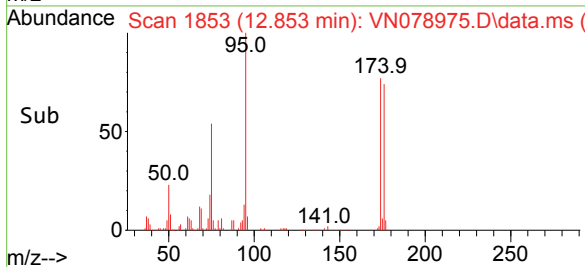
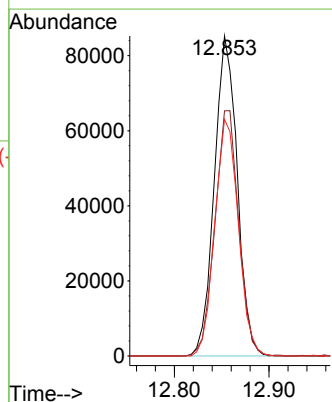
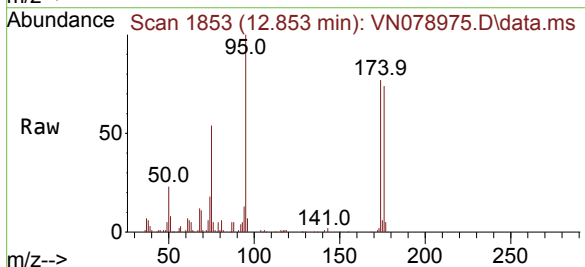
Instrument :  
MSVOA\_N  
ClientSampleId :

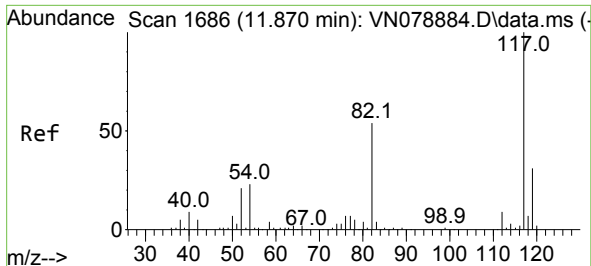
Tgt Ion: 43 Resp: 196088  
Ion Ratio Lower Upper  
43 100  
58 0.0 31.7 95.1#



#62  
4-Bromofluorobenzene  
Concen: 46.817 ug/l  
RT: 12.853 min Scan# 1853  
Delta R.T. -0.000 min  
Lab File: VN078975.D  
Acq: 21 Aug 2023 15:20

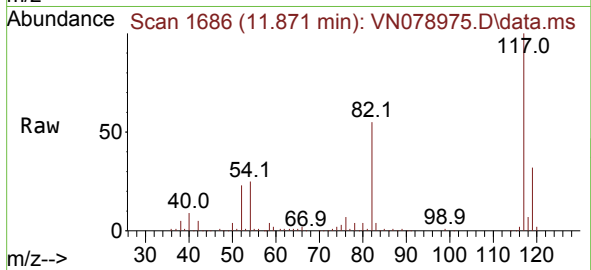
Tgt Ion: 95 Resp: 143316  
Ion Ratio Lower Upper  
95 100  
174 79.8 0.0 143.8  
176 76.2 0.0 135.8



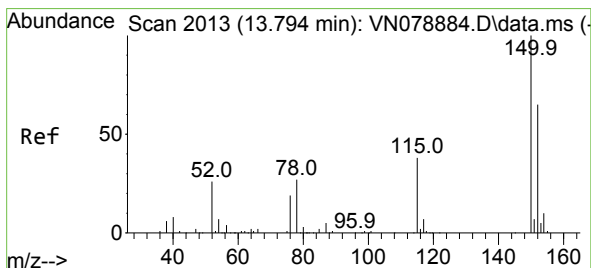
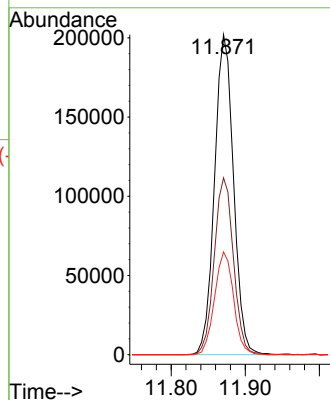
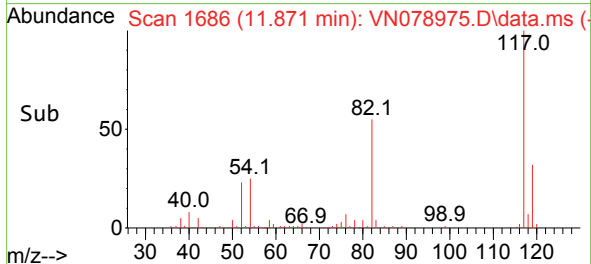


#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.871 min Scan# 11  
Delta R.T. -0.000 min  
Lab File: VN078975.D  
Acq: 21 Aug 2023 15:20

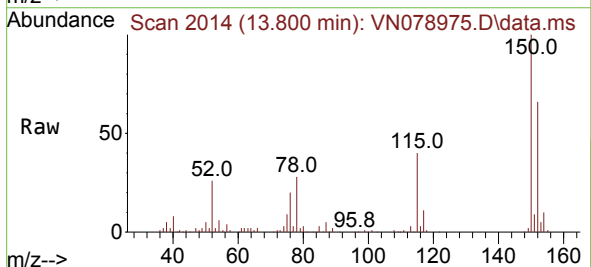
Instrument :  
MSVOA\_N  
ClientSampleId :



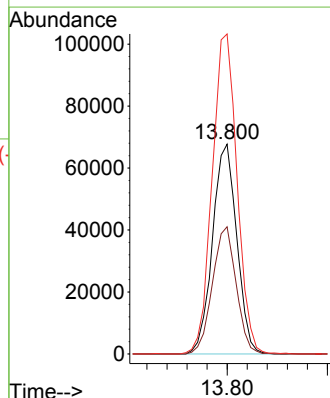
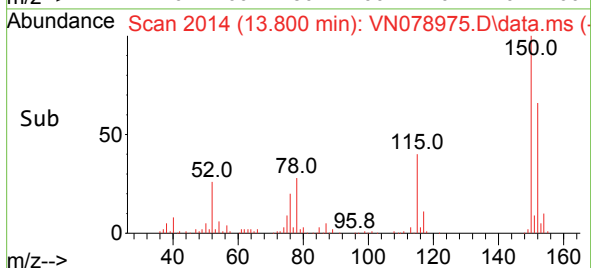
Tgt Ion:117 Resp: 359467  
Ion Ratio Lower Upper  
117 100  
82 55.3 44.0 66.0  
119 32.1 25.6 38.4

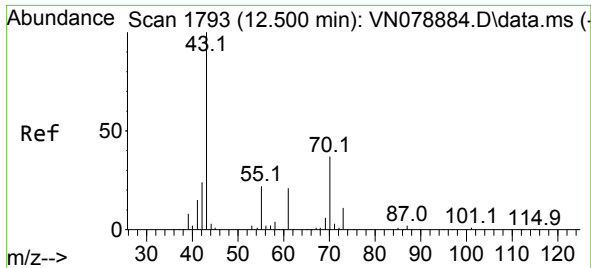


#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.800 min Scan# 2014  
Delta R.T. 0.006 min  
Lab File: VN078975.D  
Acq: 21 Aug 2023 15:20



Tgt Ion:152 Resp: 113616  
Ion Ratio Lower Upper  
152 100  
115 59.3 32.3 96.8  
150 156.2 0.0 355.8

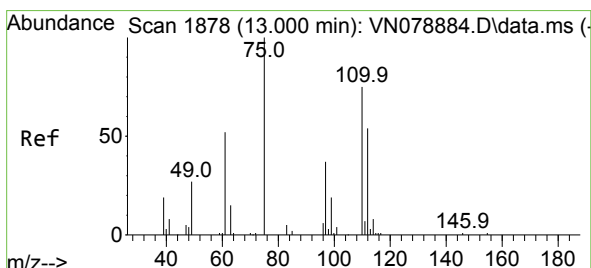
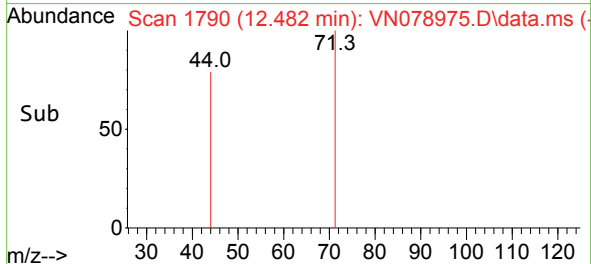
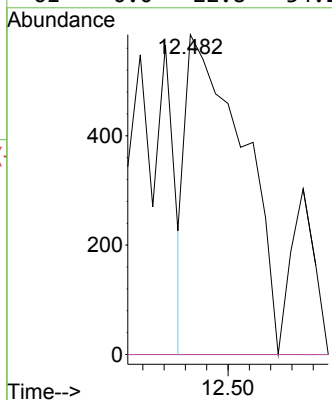
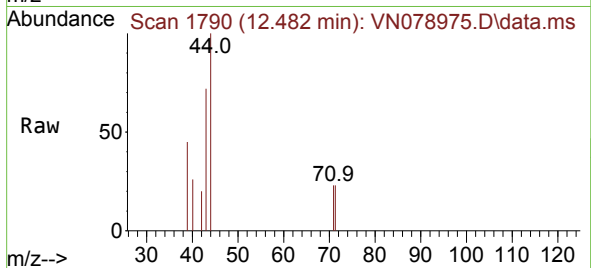




#74  
N-amy1 acetate  
Concen: 0.227 ug/l  
RT: 12.482 min Scan# 11  
Delta R.T. -0.018 min  
Lab File: VN078975.D  
Acq: 21 Aug 2023 15:20

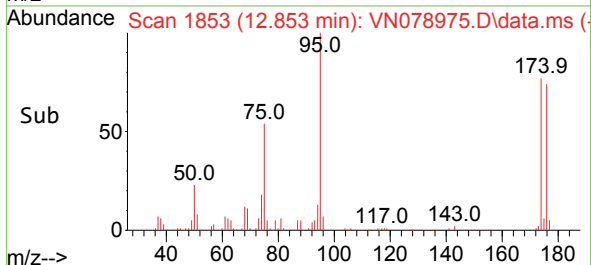
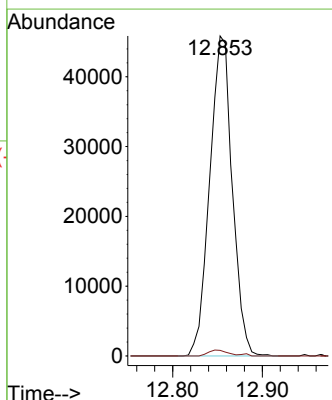
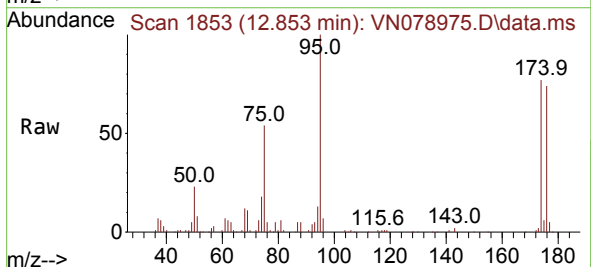
Instrument :  
MSVOA\_N  
ClientSampleId :

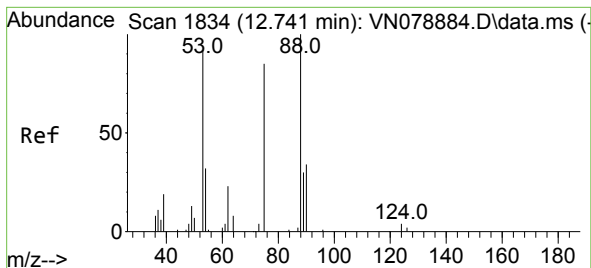
Tgt Ion: 43 Resp: 1086  
Ion Ratio Lower Upper  
43 100  
70 0.0 43.4 65.2#  
55 0.0 21.4 32.0#  
61 0.0 22.8 34.2#



#76  
1,2,3-Trichloropropane  
Concen: 29.244 ug/l  
RT: 12.853 min Scan# 1853  
Delta R.T. -0.147 min  
Lab File: VN078975.D  
Acq: 21 Aug 2023 15:20

Tgt Ion: 75 Resp: 80058  
Ion Ratio Lower Upper  
75 100  
77 1.8 84.5 253.5#

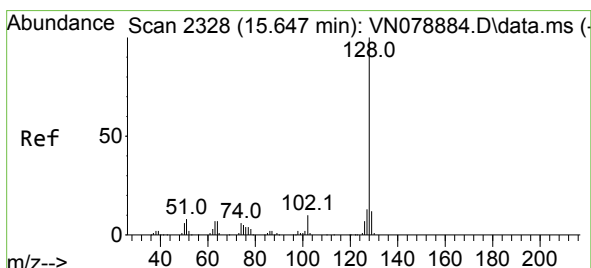
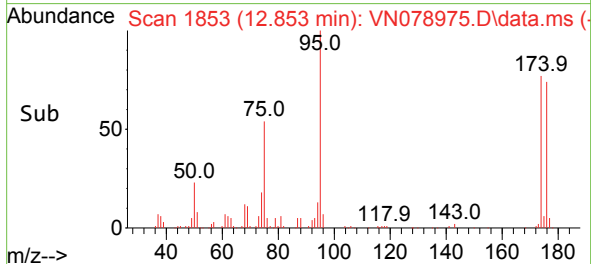
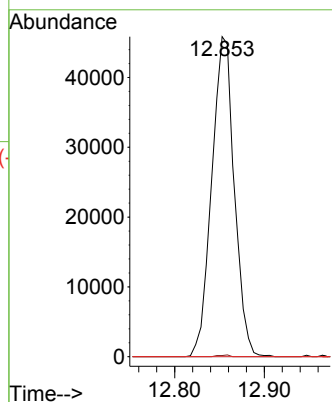
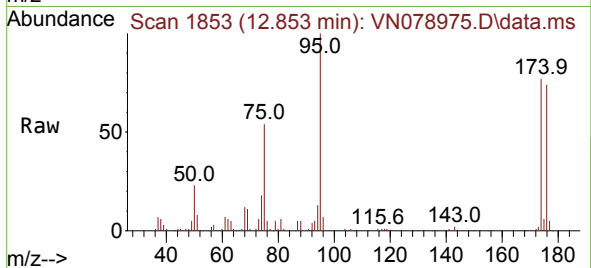




#81  
trans-1,4-Dichloro-2-butene  
Concen: 74.706 ug/l  
RT: 12.853 min Scan# 1853  
Delta R.T. 0.112 min  
Lab File: VN078975.D  
Acq: 21 Aug 2023 15:20

Instrument :  
MSVOA\_N  
ClientSampleId :

Tgt Ion: 75 Resp: 80058  
Ion Ratio Lower Upper  
75 100  
53 0.3 67.4 101.2#  
89 0.0 38.8 58.2#



#95  
Naphthalene  
Concen: 2.626 ug/l  
RT: 15.647 min Scan# 2328  
Delta R.T. -0.000 min  
Lab File: VN078975.D  
Acq: 21 Aug 2023 15:20

Tgt Ion:128 Resp: 284  
Ion Ratio Lower Upper  
128 100  
127 0.0 10.0 15.0#  
129 0.0 8.7 13.1#

