

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN100623\  
 Data File : VN079459.D  
 Acq On : 06 Oct 2023 19:56  
 Operator : JC\MD  
 Sample : 04778-03  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 28 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :

Quant Time: Oct 06 23:08:53 2023  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N100523W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Oct 06 03:34:49 2023  
 Response via : Initial Calibration

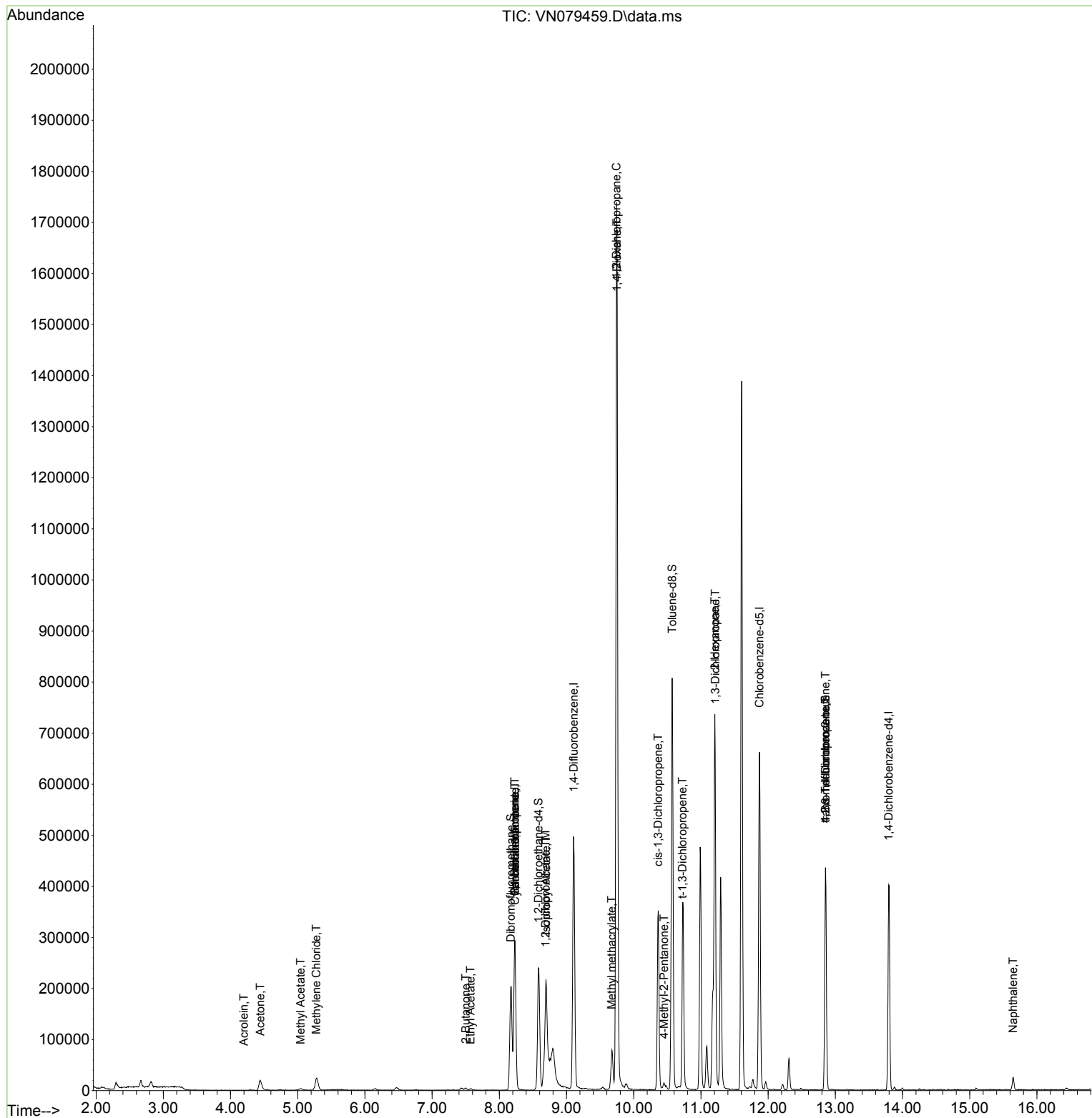
| Compound                      | R.T.   | QIon  | Response | Conc      | Units      | Dev(Min) |
|-------------------------------|--------|-------|----------|-----------|------------|----------|
| -----                         |        |       |          |           |            |          |
| Internal Standards            |        |       |          |           |            |          |
| 1) Pentafluorobenzene         | 8.230  | 168   | 197434   | 50.000    | ug/l       | 0.00     |
| 34) 1,4-Difluorobenzene       | 9.106  | 114   | 412742   | 50.000    | ug/l       | 0.00     |
| 63) Chlorobenzene-d5          | 11.871 | 117   | 371913   | 50.000    | ug/l       | 0.00     |
| 72) 1,4-Dichlorobenzene-d4    | 13.794 | 152   | 107603   | 50.000    | ug/l       | 0.00     |
| System Monitoring Compounds   |        |       |          |           |            |          |
| 33) 1,2-Dichloroethane-d4     | 8.583  | 65    | 197718   | 61.763    | ug/l       | 0.00     |
| Spiked Amount                 | 50.000 | Range | 74 - 125 | Recovery  | = 123.520% |          |
| 35) Dibromofluoromethane      | 8.171  | 113   | 146678   | 49.451    | ug/l       | 0.00     |
| Spiked Amount                 | 50.000 | Range | 75 - 124 | Recovery  | = 98.900%  |          |
| 50) Toluene-d8                | 10.571 | 98    | 544998   | 50.781    | ug/l       | 0.00     |
| Spiked Amount                 | 50.000 | Range | 86 - 113 | Recovery  | = 101.560% |          |
| 62) 4-Bromofluorobenzene      | 12.853 | 95    | 141411   | 41.058    | ug/l       | 0.00     |
| Spiked Amount                 | 50.000 | Range | 83 - 123 | Recovery  | = 82.120%# |          |
| Target Compounds              |        |       |          |           |            |          |
|                               |        |       |          |           | Qvalue     |          |
| 13) Acrolein                  | 4.201  | 56    | 121      | 0.252     | ug/l #     | 16       |
| 16) Acetone                   | 4.442  | 43    | 38466    | 30.295    | ug/l       | 98       |
| 18) Methyl Acetate            | 5.042  | 43    | 7320     | 1.178     | ug/l #     | 71       |
| 20) Methylene Chloride        | 5.277  | 84    | 16519    | 5.404     | ug/l #     | 84       |
| 25) 2-Butanone                | 7.500  | 43    | 6803     | 3.610     | ug/l #     | 81       |
| 31) Cyclohexane               | 8.236  | 56    | 6131     | 1.350     | ug/l #     | 46       |
| 36) 1,1-Dichloropropene       | 8.230  | 75    | 18678    | 4.196     | ug/l #     | 50       |
| 37) Ethyl Acetate             | 7.571  | 43    | 5109     | 1.153     | ug/l #     | 83       |
| 38) Carbon Tetrachloride      | 8.230  | 117   | 22388    | 5.024     | ug/l #     | 16       |
| 42) 1,2-Dichloroethane        | 8.688  | 62    | 1349     | 0.281     | ug/l #     | 73       |
| 43) Isopropyl Acetate         | 8.694  | 43    | 282092   | 36.350    | ug/l #     | 70       |
| 45) 1,2-Dichloropropane       | 9.741  | 63    | 2309     | 0.663     | ug/l #     | 45       |
| 48) Methyl methacrylate       | 9.671  | 41    | 5046     | 1.517     | ug/l #     | 33       |
| 49) 1,4-Dioxane               | 9.747  | 88    | 230      | 3.755     | ug/l #     | 1        |
| 51) 4-Methyl-2-Pentanone      | 10.453 | 43    | 8403     | 1.918     | ug/l #     | 84       |
| 53) t-1,3-Dichloropropene     | 10.724 | 75    | 1126     | 0.241     | ug/l #     | 74       |
| 54) cis-1,3-Dichloropropene   | 10.365 | 75    | 58855    | 11.496    | ug/l #     | 74       |
| 57) 1,3-Dichloropropane       | 11.212 | 76    | 7032     | 1.303     | ug/l #     | 42       |
| 59) 2-Hexanone                | 11.206 | 43    | 93597    | 29.608    | ug/l #     | 47       |
| 75) 1,1,2,2-Tetrachloroethane | 12.865 | 83    | 124      | Below Cal | #          | 1        |
| 76) 1,2,3-Trichloropropane    | 12.853 | 75    | 80201    | 25.851    | ug/l #     | 1        |
| 81) trans-1,4-Dichloro-2-b... | 12.853 | 75    | 80201    | 75.007    | ug/l #     | 15       |
| 95) Naphthalene               | 15.647 | 128   | 20802    | 5.792     | ug/l #     | 95       |
| -----                         |        |       |          |           |            |          |

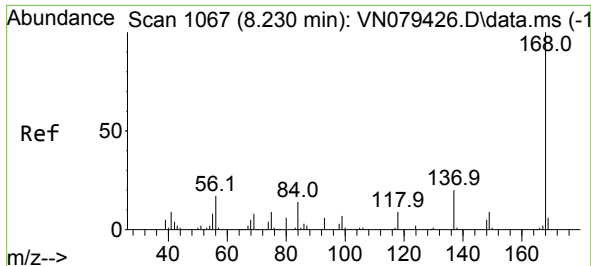
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN100623\  
Data File : VN079459.D  
Acq On : 06 Oct 2023 19:56  
Operator : JC\MD  
Sample : 04778-03  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 28 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :

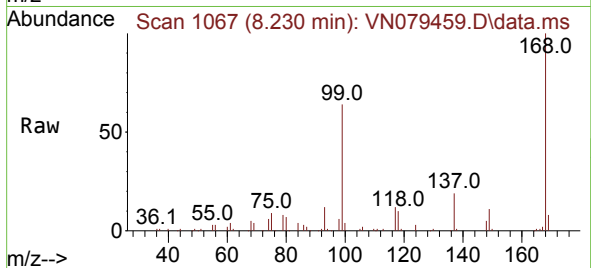
Quant Time: Oct 06 23:08:53 2023  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N100523W.M  
Quant Title : SW846 8260  
QLast Update : Fri Oct 06 03:34:49 2023  
Response via : Initial Calibration



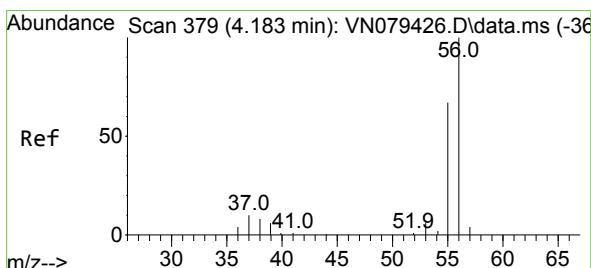
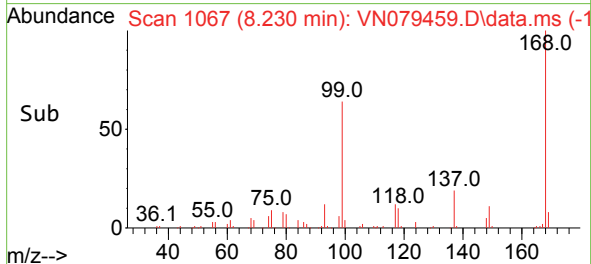
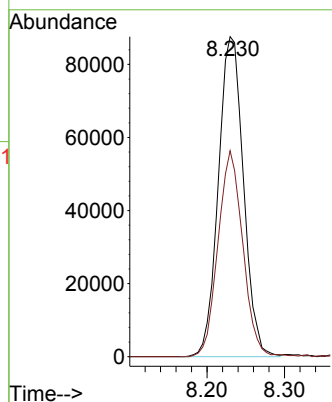


#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.230 min Scan# 1067  
Delta R.T. -0.000 min  
Lab File: VN079459.D  
Acq: 06 Oct 2023 19:56

Instrument :  
MSVOA\_N  
ClientSampleId :

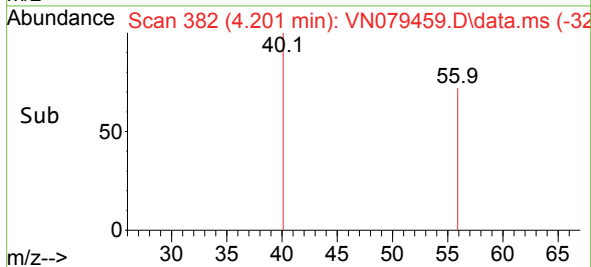
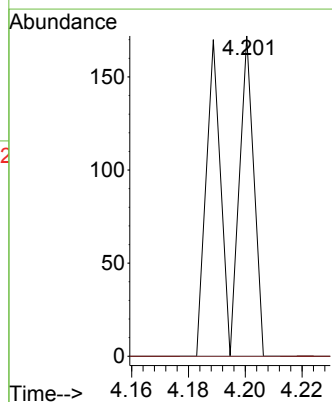
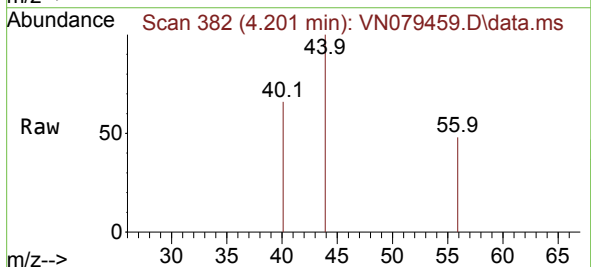


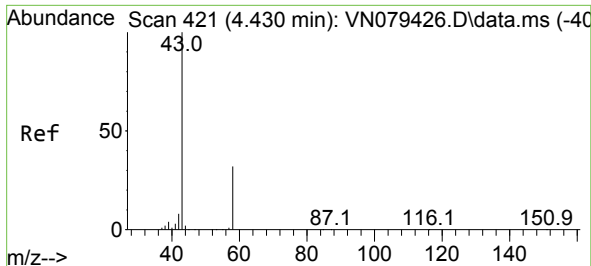
Tgt Ion:168 Resp: 197434  
Ion Ratio Lower Upper  
168 100  
99 64.4 53.0 79.6



#13  
Acrolein  
Concen: 0.252 ug/l  
RT: 4.201 min Scan# 382  
Delta R.T. 0.018 min  
Lab File: VN079459.D  
Acq: 06 Oct 2023 19:56

Tgt Ion: 56 Resp: 121  
Ion Ratio Lower Upper  
56 100  
55 0.0 54.5 81.7#

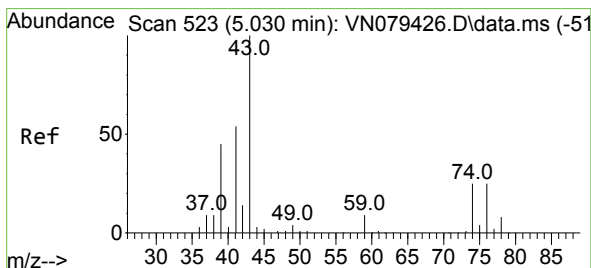
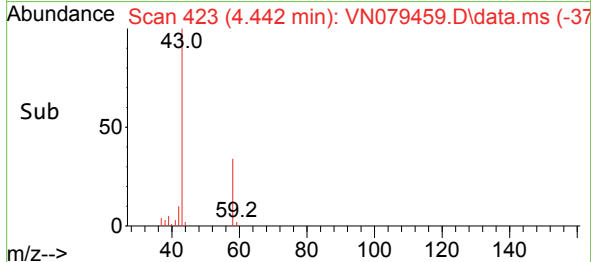
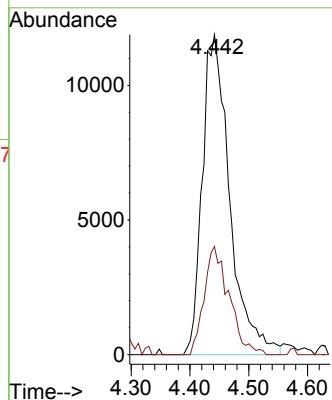
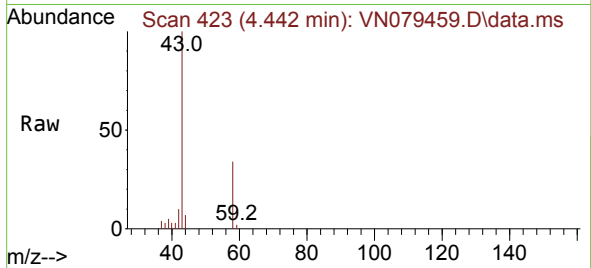




#16  
Acetone  
Concen: 30.295 ug/l  
RT: 4.442 min Scan# 431  
Delta R.T. 0.012 min  
Lab File: VN079459.D  
Acq: 06 Oct 2023 19:56

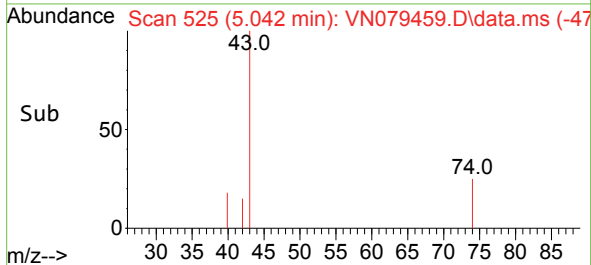
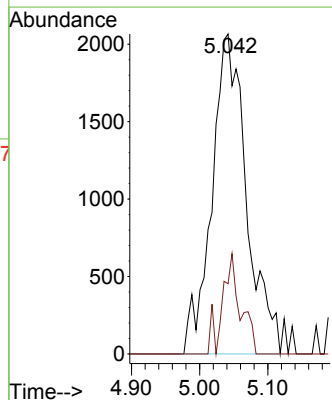
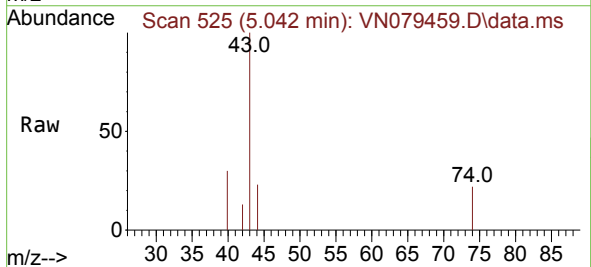
Instrument :  
MSVOA\_N  
ClientSampleId :

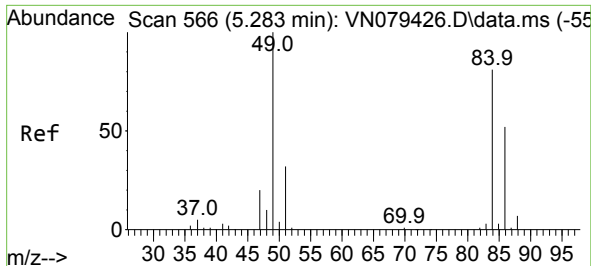
Tgt Ion: 43 Resp: 38466  
Ion Ratio Lower Upper  
43 100  
58 33.8 28.0 42.0



#18  
Methyl Acetate  
Concen: 1.178 ug/l  
RT: 5.042 min Scan# 525  
Delta R.T. 0.012 min  
Lab File: VN079459.D  
Acq: 06 Oct 2023 19:56

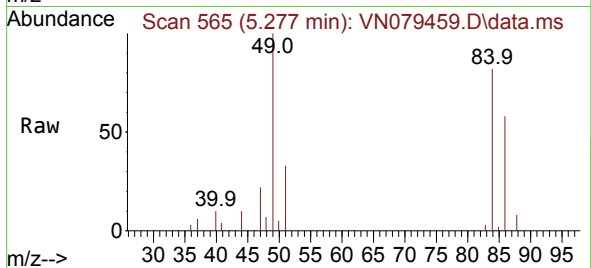
Tgt Ion: 43 Resp: 7320  
Ion Ratio Lower Upper  
43 100  
74 16.5 26.2 39.4#



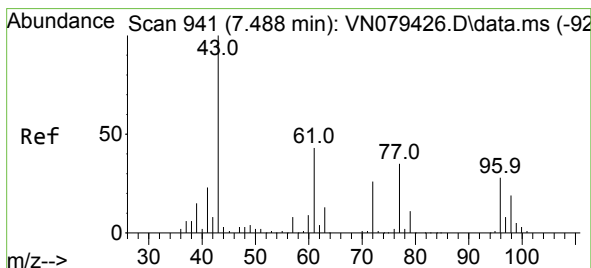
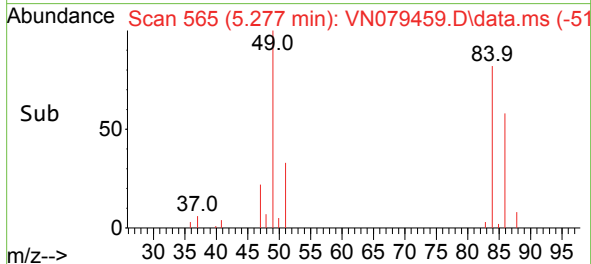
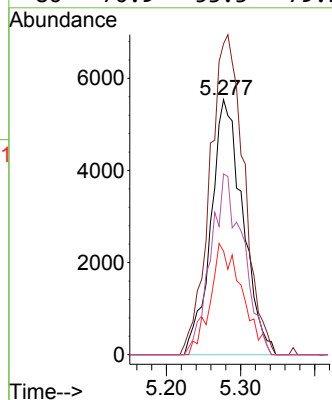


#20  
Methylene Chloride  
Concen: 5.404 ug/l  
RT: 5.277 min Scan# 51  
Delta R.T. -0.006 min  
Lab File: VN079459.D  
Acq: 06 Oct 2023 19:56

Instrument :  
MSVOA\_N  
ClientSampleId :

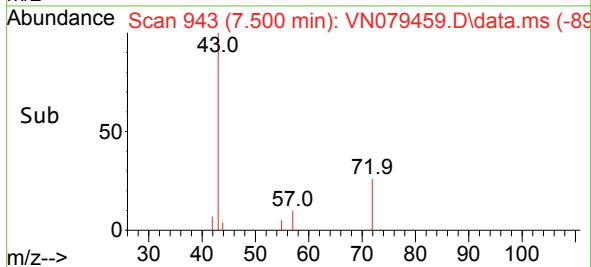
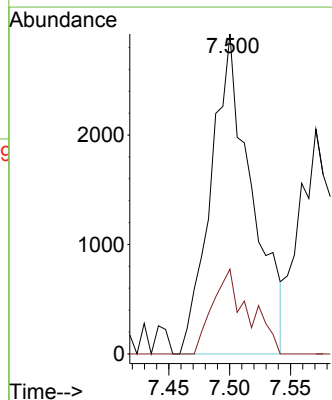
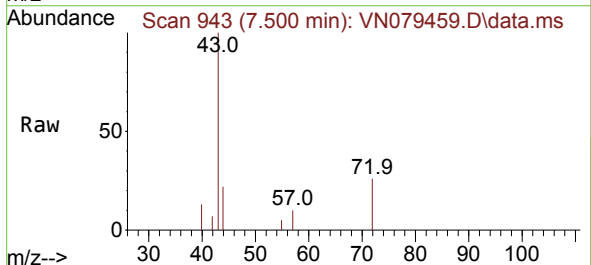


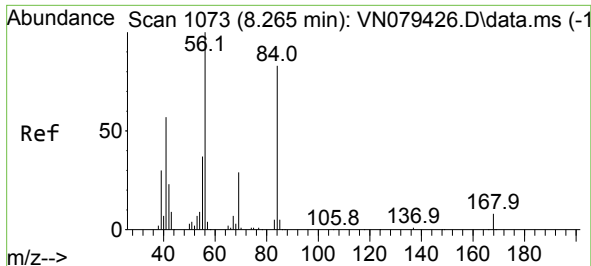
Tgt Ion: 84 Resp: 16519  
Ion Ratio Lower Upper  
84 100  
49 121.9 79.7 119.5#  
51 40.6 25.2 37.8#  
86 70.9 53.3 79.9



#25  
2-Butanone  
Concen: 3.610 ug/l  
RT: 7.500 min Scan# 943  
Delta R.T. 0.012 min  
Lab File: VN079459.D  
Acq: 06 Oct 2023 19:56

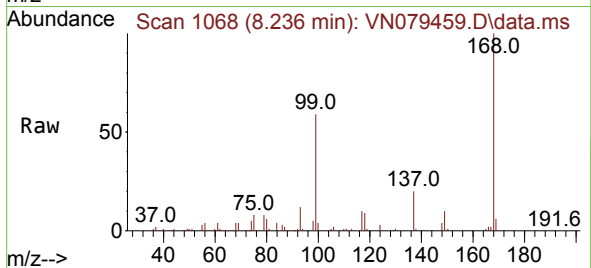
Tgt Ion: 43 Resp: 6803  
Ion Ratio Lower Upper  
43 100  
72 26.5 30.2 45.2#



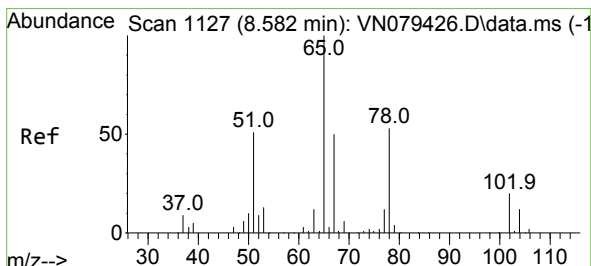
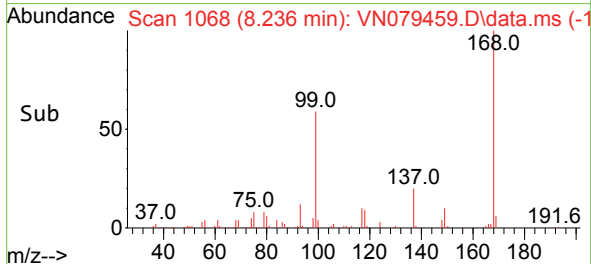
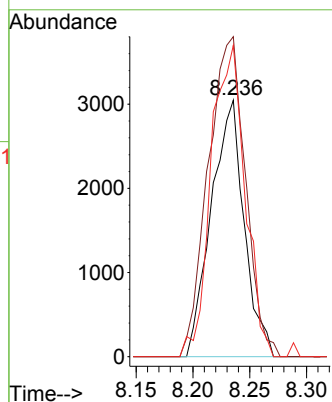


#31  
Cyclohexane  
Concen: 1.350 ug/l  
RT: 8.236 min Scan# 1068  
Delta R.T. -0.029 min  
Lab File: VN079459.D  
Acq: 06 Oct 2023 19:56

Instrument :  
MSVOA\_N  
ClientSampleId :

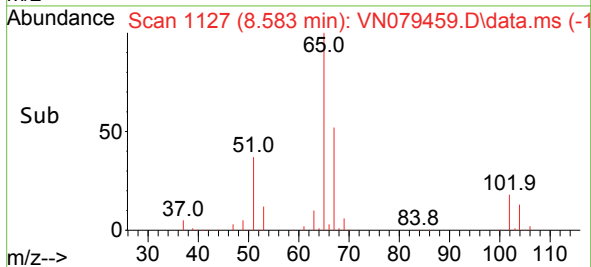
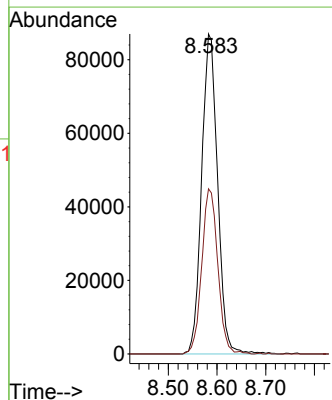
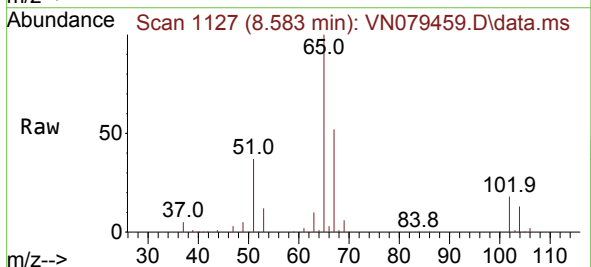


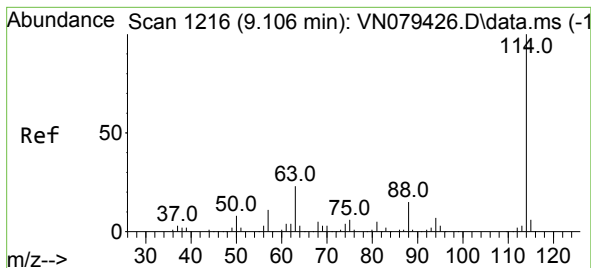
Tgt Ion: 56 Resp: 6131  
Ion Ratio Lower Upper  
56 100  
69 124.8 26.8 40.2#  
84 121.4 81.8 122.6



#33  
1,2-Dichloroethane-d4  
Concen: 61.763 ug/l  
RT: 8.583 min Scan# 1127  
Delta R.T. 0.000 min  
Lab File: VN079459.D  
Acq: 06 Oct 2023 19:56

Tgt Ion: 65 Resp: 197718  
Ion Ratio Lower Upper  
65 100  
67 51.9 0.0 106.6





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.106 min Scan# 114

Delta R.T. 0.000 min

Lab File: VN079459.D

Acq: 06 Oct 2023 19:56

Instrument :

MSVOA\_N

ClientSampleId :

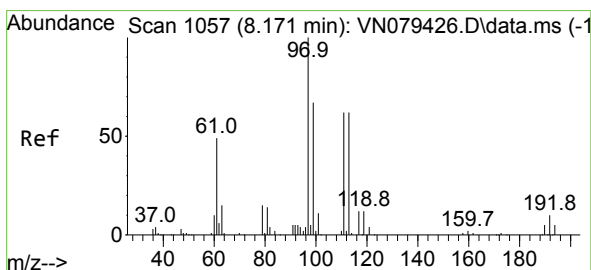
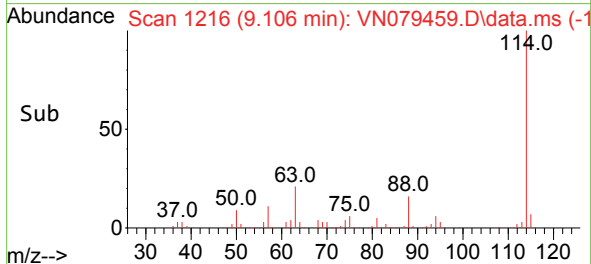
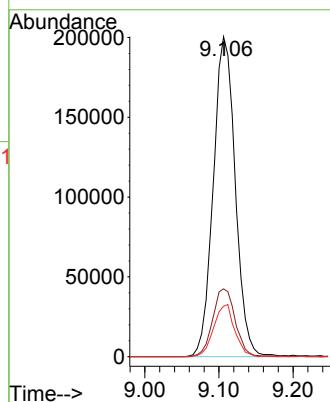
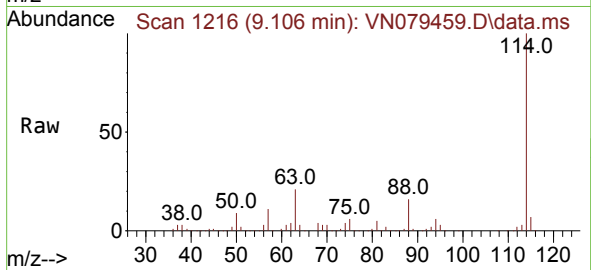
Tgt Ion:114 Resp: 412742

Ion Ratio Lower Upper

114 100

63 21.2 0.0 36.4

88 15.7 0.0 30.6



#35

Dibromofluoromethane

Concen: 49.451 ug/l

RT: 8.171 min Scan# 1057

Delta R.T. 0.000 min

Lab File: VN079459.D

Acq: 06 Oct 2023 19:56

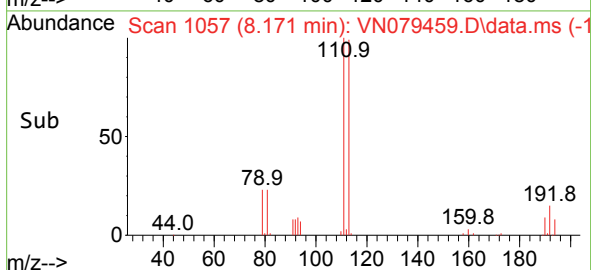
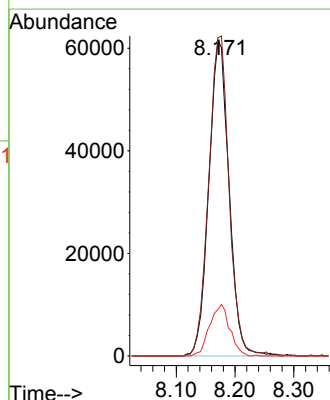
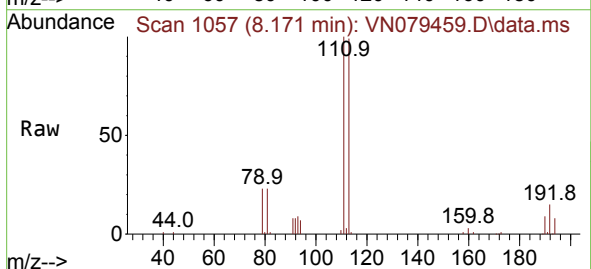
Tgt Ion:113 Resp: 146678

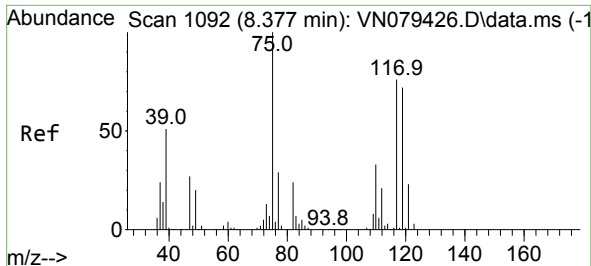
Ion Ratio Lower Upper

113 100

111 102.6 82.6 123.8

192 16.3 12.7 19.1





#36

1,1-Dichloropropene

Concen: 4.196 ug/l

RT: 8.230 min Scan# 1067

Delta R.T. -0.147 min

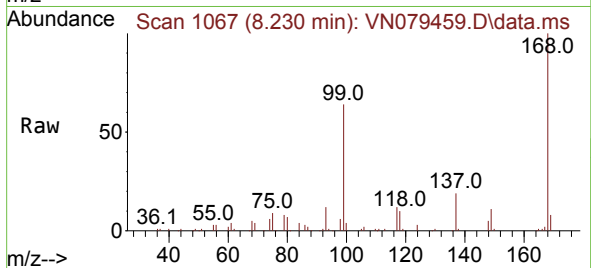
Lab File: VN079459.D

Acq: 06 Oct 2023 19:56

Instrument :

MSVOA\_N

ClientSampleId :



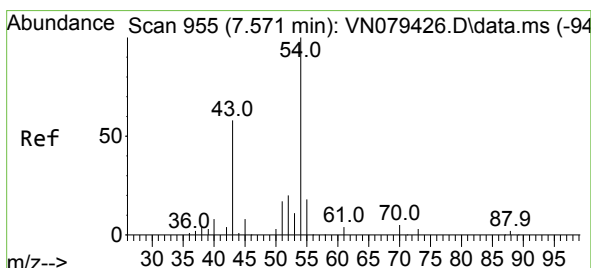
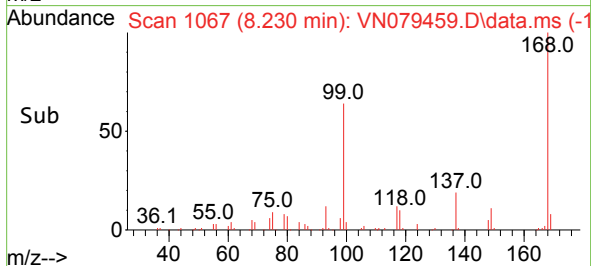
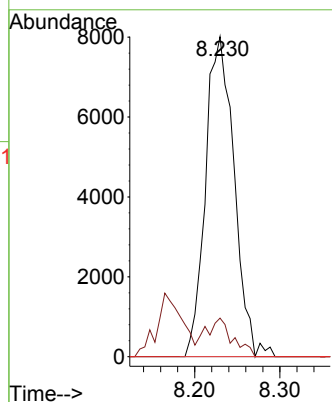
Tgt Ion: 75 Resp: 18678

Ion Ratio Lower Upper

75 100

110 11.4 19.1 57.3#

77 0.0 25.0 37.4#



#37

Ethyl Acetate

Concen: 1.153 ug/l

RT: 7.571 min Scan# 955

Delta R.T. 0.000 min

Lab File: VN079459.D

Acq: 06 Oct 2023 19:56

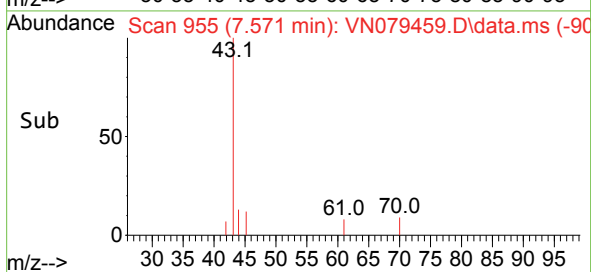
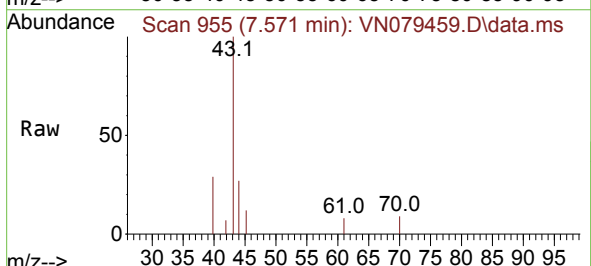
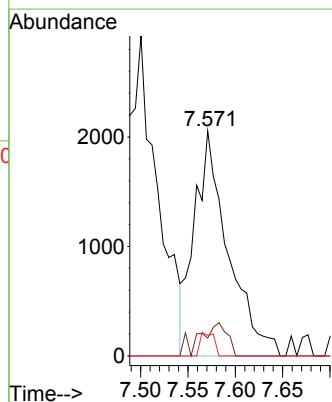
Tgt Ion: 43 Resp: 5109

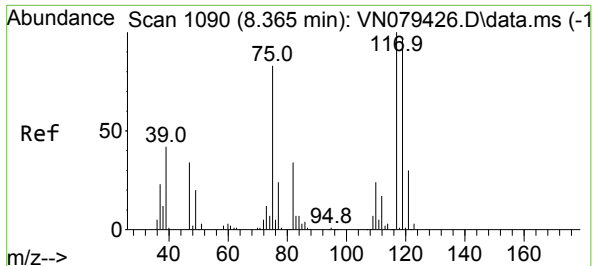
Ion Ratio Lower Upper

43 100

61 12.1 13.2 19.8#

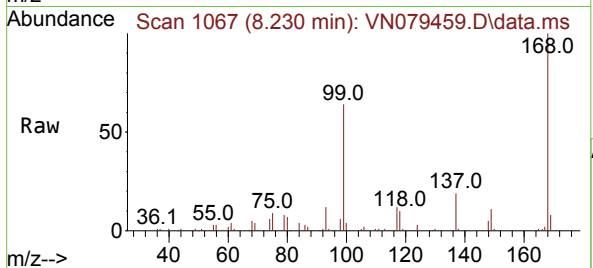
70 4.2 11.3 16.9#



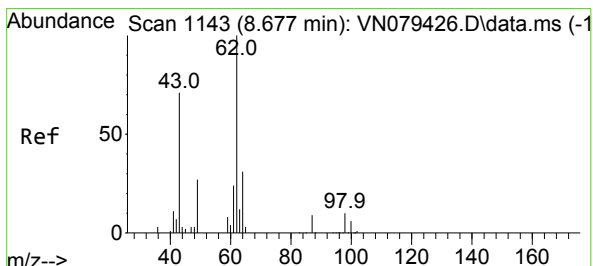
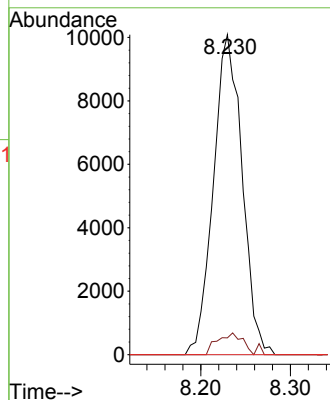
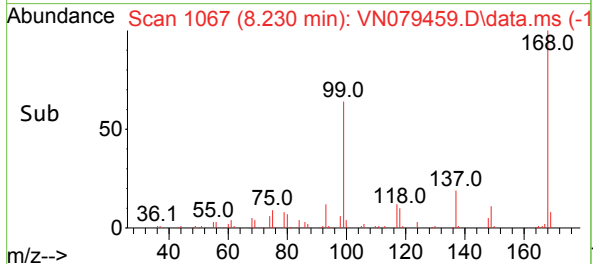


#38  
Carbon Tetrachloride  
Concen: 5.024 ug/l  
RT: 8.230 min Scan# 1107  
Delta R.T. -0.135 min  
Lab File: VN079459.D  
Acq: 06 Oct 2023 19:56

Instrument :  
MSVOA\_N  
ClientSampleId :

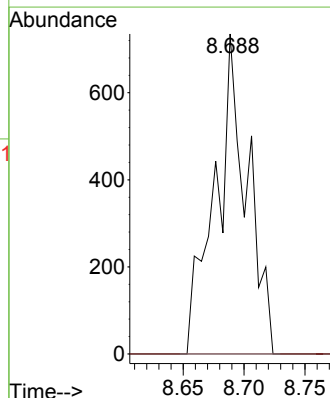
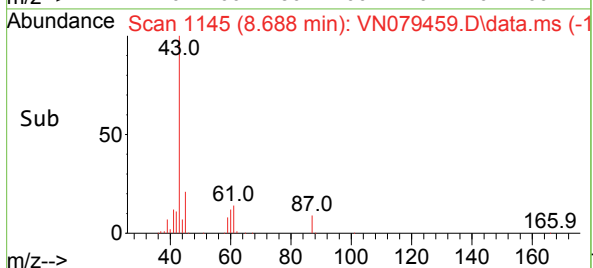
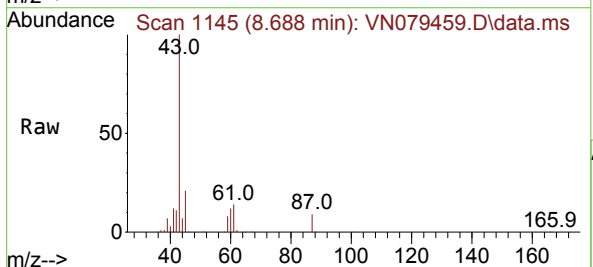


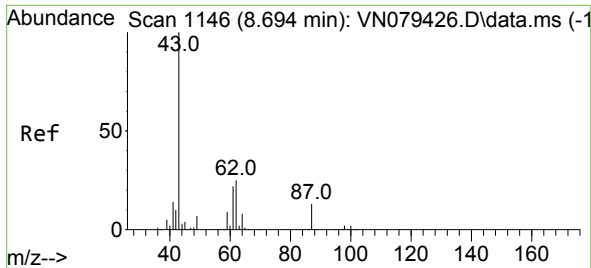
Tgt Ion:117 Resp: 22388  
Ion Ratio Lower Upper  
117 100  
119 5.2 77.3 115.9#  
121 0.0 23.3 34.9#



#42  
1,2-Dichloroethane  
Concen: 0.281 ug/l  
RT: 8.688 min Scan# 1145  
Delta R.T. 0.012 min  
Lab File: VN079459.D  
Acq: 06 Oct 2023 19:56

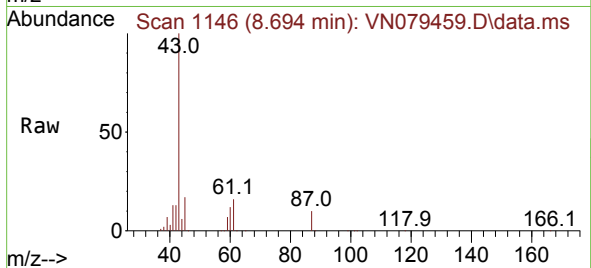
Tgt Ion: 62 Resp: 1349  
Ion Ratio Lower Upper  
62 100  
98 0.0 0.0 19.8



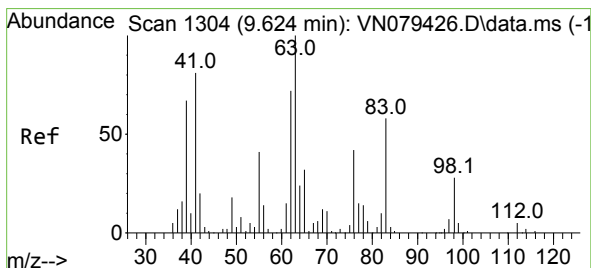
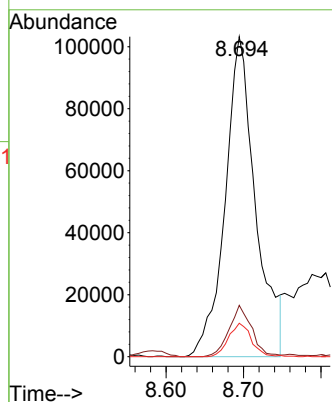
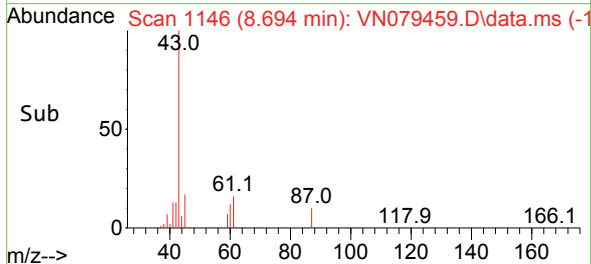


#43  
Isopropyl Acetate  
Concen: 36.350 ug/l  
RT: 8.694 min Scan# 1146  
Delta R.T. 0.000 min  
Lab File: VN079459.D  
Acq: 06 Oct 2023 19:56

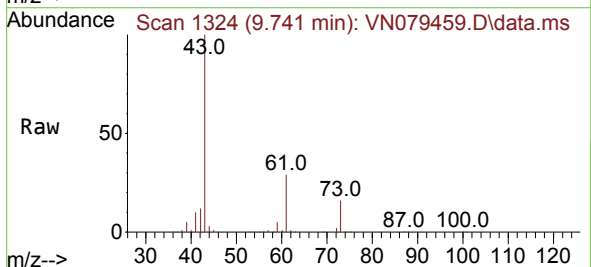
Instrument :  
MSVOA\_N  
ClientSampleId :



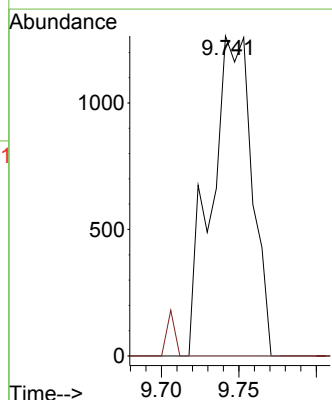
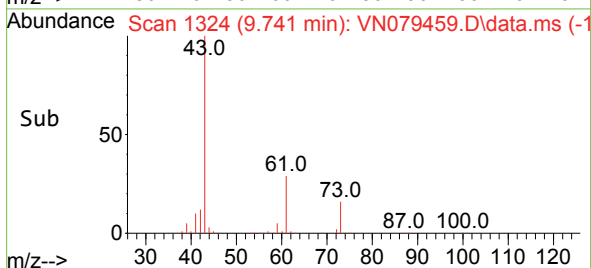
Tgt Ion: 43 Resp: 282092  
Ion Ratio Lower Upper  
43 100  
61 12.0 24.7 37.1#  
87 7.9 14.6 21.8#

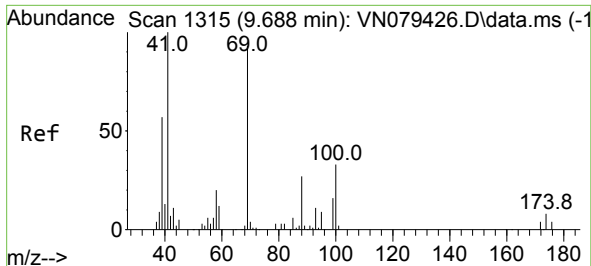


#45  
1,2-Dichloropropane  
Concen: 0.663 ug/l  
RT: 9.741 min Scan# 1324  
Delta R.T. 0.118 min  
Lab File: VN079459.D  
Acq: 06 Oct 2023 19:56



Tgt Ion: 63 Resp: 2309  
Ion Ratio Lower Upper  
63 100  
65 0.0 23.9 35.9#

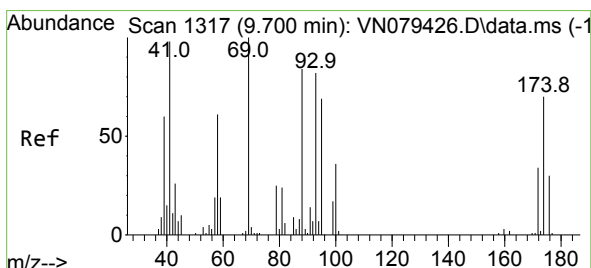
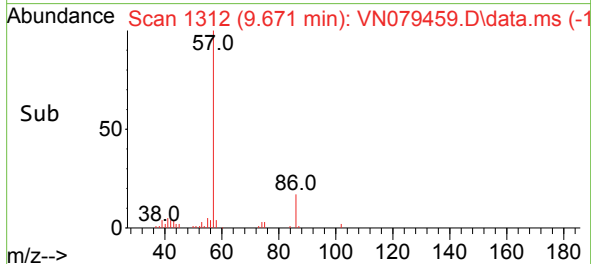
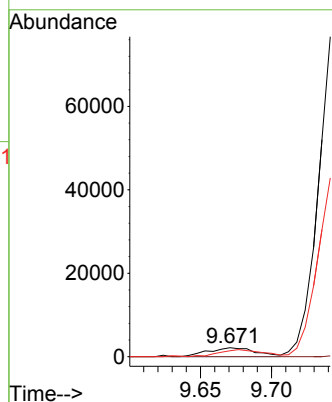
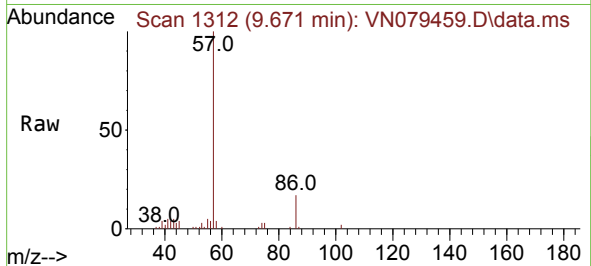




#48  
Methyl methacrylate  
Concen: 1.517 ug/l  
RT: 9.671 min Scan# 1312  
Delta R.T. -0.018 min  
Lab File: VN079459.D  
Acq: 06 Oct 2023 19:56

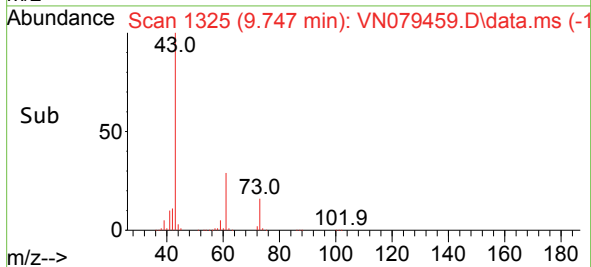
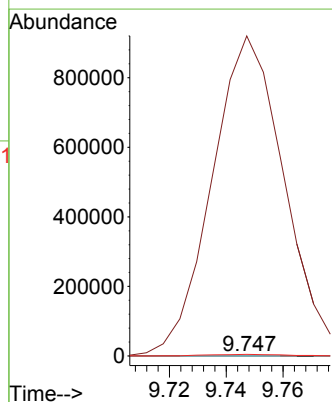
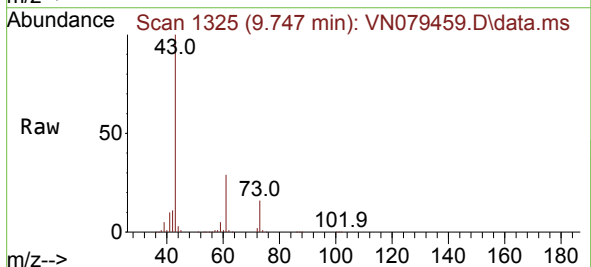
Instrument :  
MSVOA\_N  
ClientSampleId :

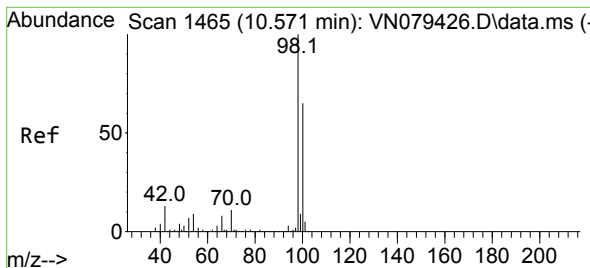
Tgt Ion: 41 Resp: 5046  
Ion Ratio Lower Upper  
41 100  
69 0.0 90.4 135.6#  
39 71.0 54.6 81.8



#49  
1,4-Dioxane  
Concen: 3.755 ug/l  
RT: 9.747 min Scan# 1325  
Delta R.T. 0.047 min  
Lab File: VN079459.D  
Acq: 06 Oct 2023 19:56

Tgt Ion: 88 Resp: 230  
Ion Ratio Lower Upper  
88 100  
43 716277.8 17.0 25.6#  
58 4031.3 47.0 70.4#





#50

Toluene-d8

Concen: 50.781 ug/l

RT: 10.571 min Scan# 1465

Delta R.T. 0.000 min

Lab File: VN079459.D

Acq: 06 Oct 2023 19:56

Instrument :

MSVOA\_N

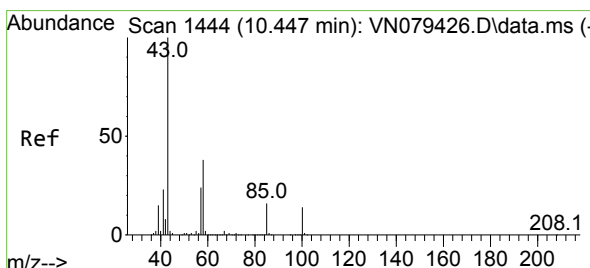
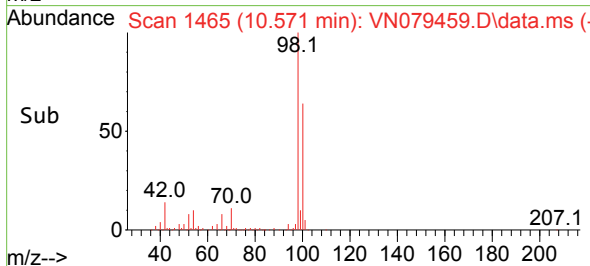
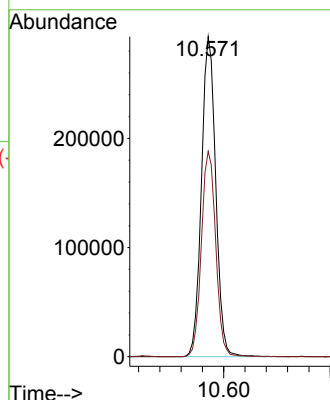
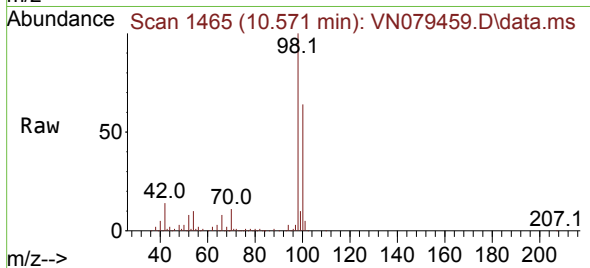
ClientSampleId :

Tgt Ion: 98 Resp: 544998

Ion Ratio Lower Upper

98 100

100 64.6 52.0 78.0



#51

4-Methyl-2-Pentanone

Concen: 1.918 ug/l

RT: 10.453 min Scan# 1445

Delta R.T. 0.006 min

Lab File: VN079459.D

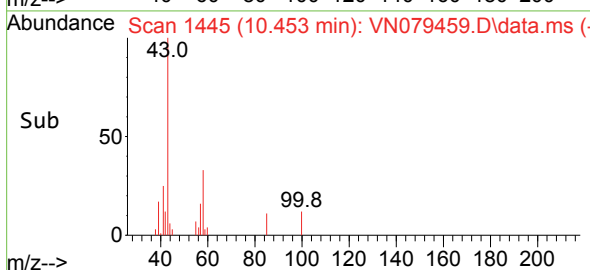
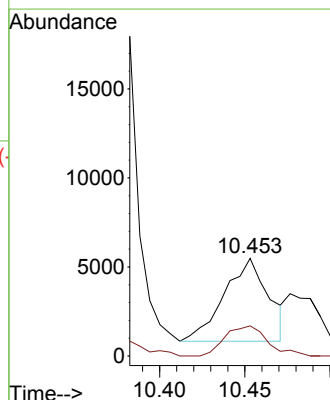
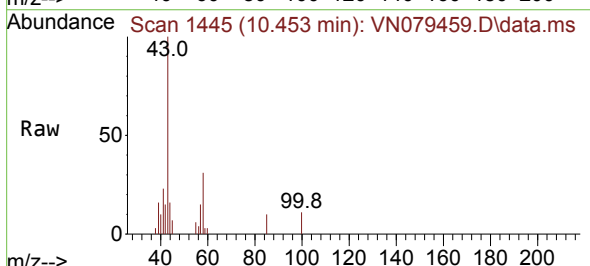
Acq: 06 Oct 2023 19:56

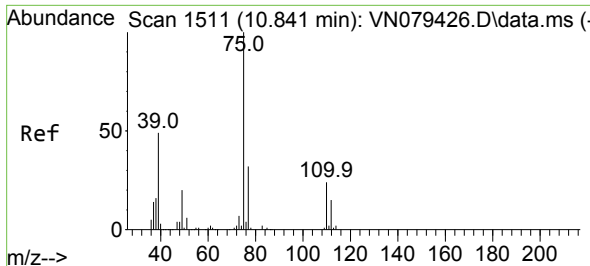
Tgt Ion: 43 Resp: 8403

Ion Ratio Lower Upper

43 100

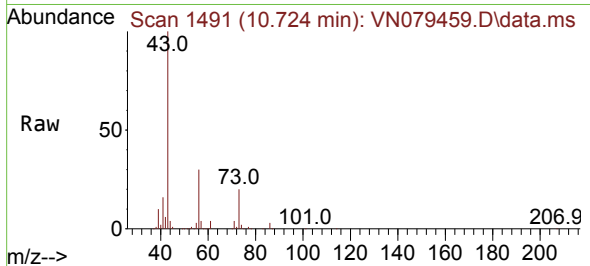
58 34.9 36.6 54.8#



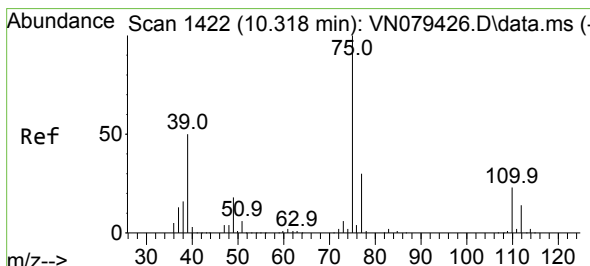
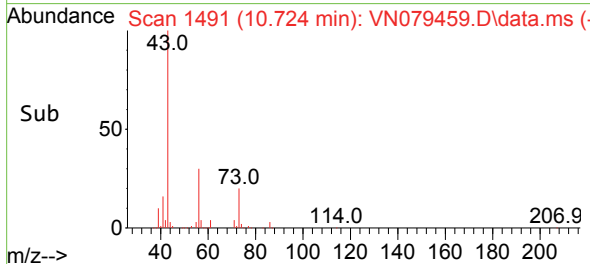
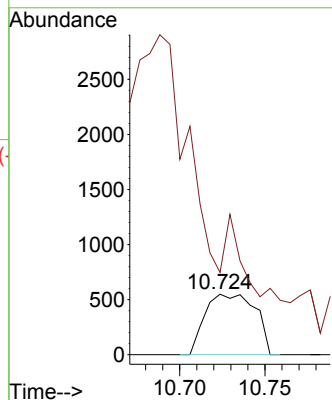


#53  
t-1,3-Dichloropropene  
Concen: 0.241 ug/l  
RT: 10.724 min Scan# 1491  
Delta R.T. -0.118 min  
Lab File: VN079459.D  
Acq: 06 Oct 2023 19:56

Instrument :  
MSVOA\_N  
ClientSampleId :

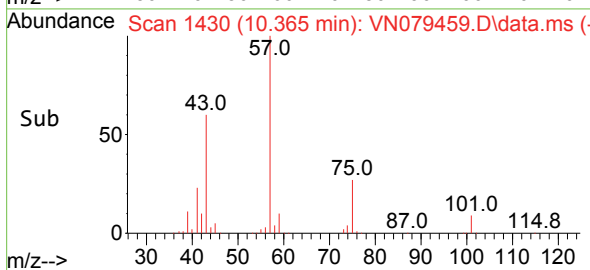
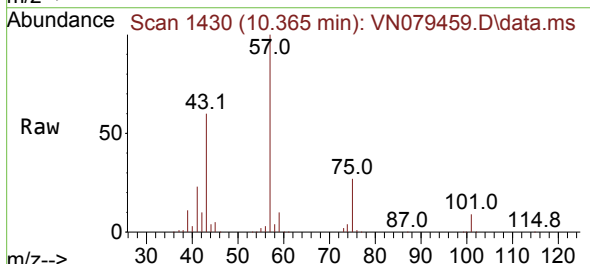
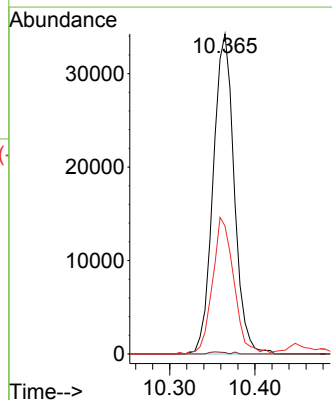


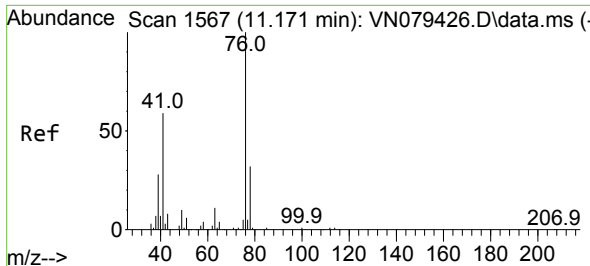
Tgt Ion: 75 Resp: 1126  
Ion Ratio Lower Upper  
75 100  
77 46.1 25.4 38.0#



#54  
cis-1,3-Dichloropropene  
Concen: 11.496 ug/l  
RT: 10.365 min Scan# 1430  
Delta R.T. 0.047 min  
Lab File: VN079459.D  
Acq: 06 Oct 2023 19:56

Tgt Ion: 75 Resp: 58855  
Ion Ratio Lower Upper  
75 100  
77 0.5 26.1 39.1#  
39 39.5 31.6 47.4





#57

1,3-Dichloropropane

Concen: 1.303 ug/l

RT: 11.212 min Scan# 1574

Delta R.T. 0.041 min

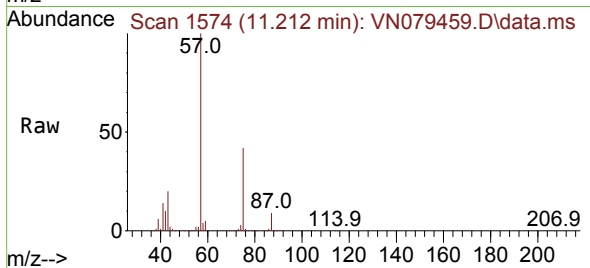
Lab File: VN079459.D

Acq: 06 Oct 2023 19:56

Instrument :

MSVOA\_N

ClientSampleId :

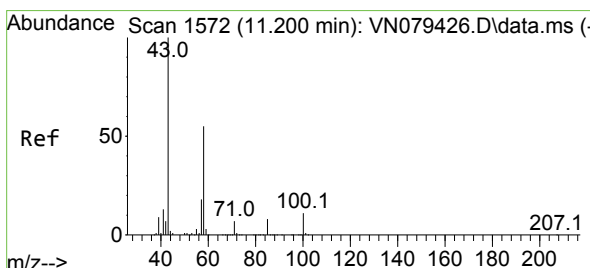
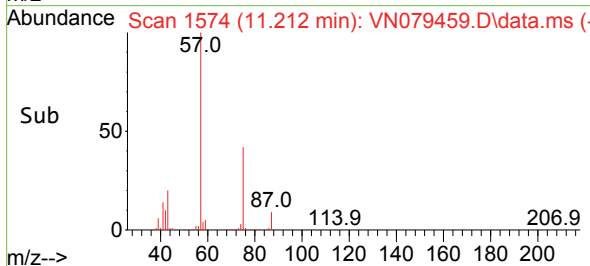
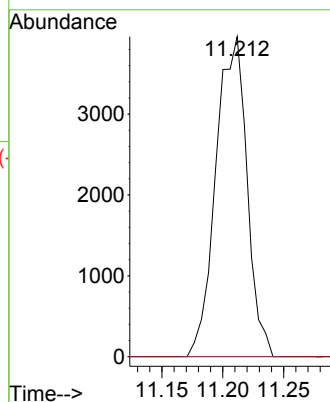


Tgt Ion: 76 Resp: 7032

Ion Ratio Lower Upper

76 100

78 0.0 26.1 39.1#



#59

2-Hexanone

Concen: 29.608 ug/l

RT: 11.206 min Scan# 1573

Delta R.T. 0.006 min

Lab File: VN079459.D

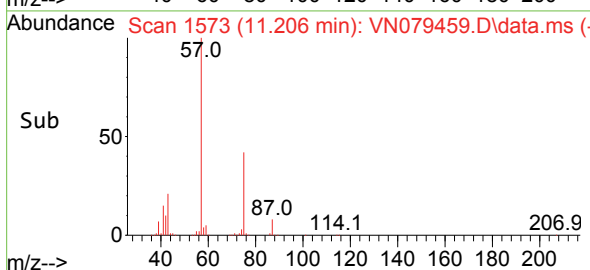
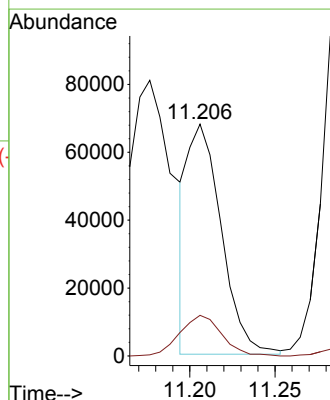
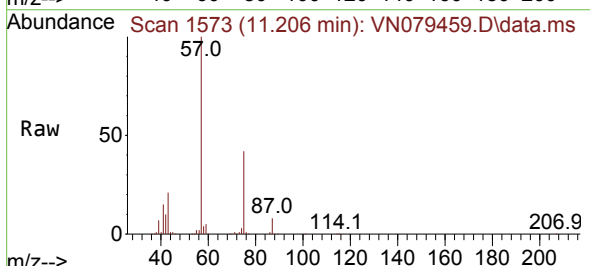
Acq: 06 Oct 2023 19:56

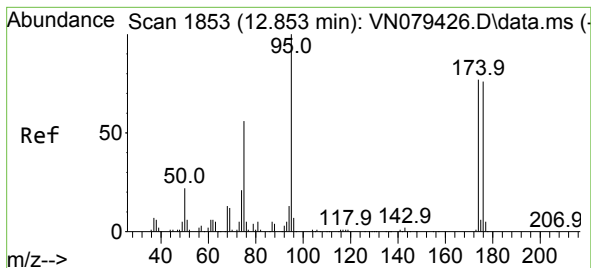
Tgt Ion: 43 Resp: 93597

Ion Ratio Lower Upper

43 100

58 22.0 31.7 95.1#

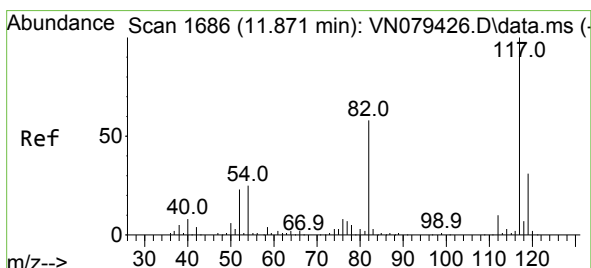
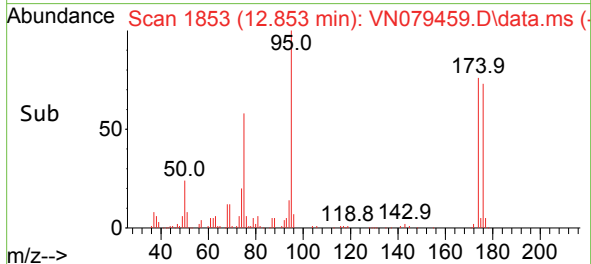
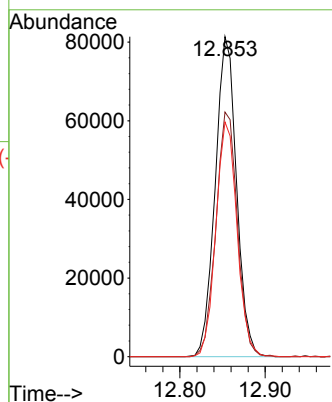
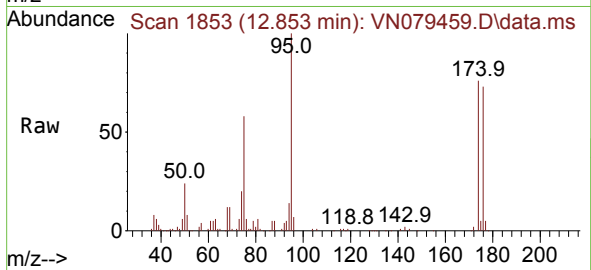




#62  
4-Bromofluorobenzene  
Concen: 41.058 ug/l  
RT: 12.853 min Scan# 1853  
Delta R.T. 0.000 min  
Lab File: VN079459.D  
Acq: 06 Oct 2023 19:56

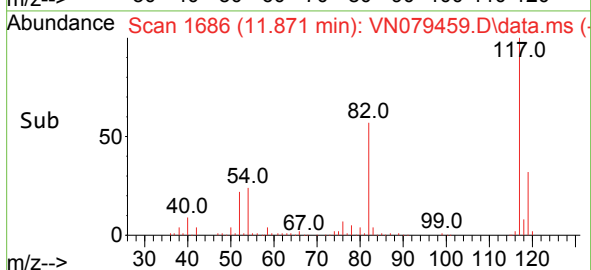
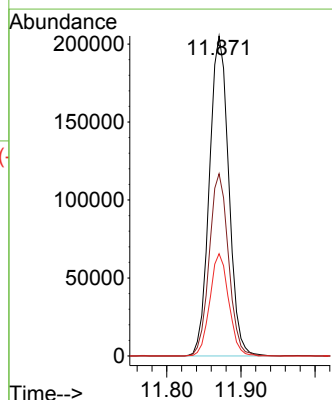
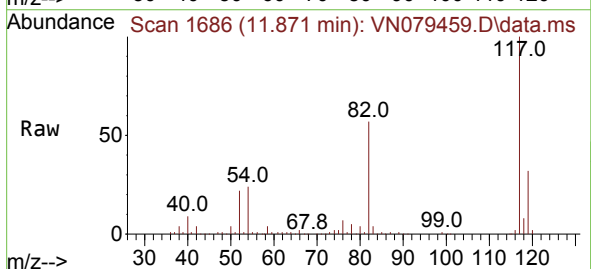
Instrument :  
MSVOA\_N  
ClientSampleId :

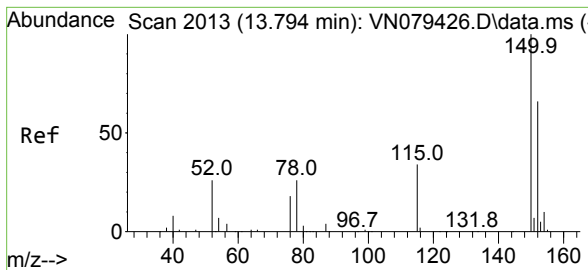
Tgt Ion: 95 Resp: 141411  
Ion Ratio Lower Upper  
95 100  
174 77.0 0.0 143.8  
176 73.0 0.0 135.8



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.871 min Scan# 1686  
Delta R.T. 0.000 min  
Lab File: VN079459.D  
Acq: 06 Oct 2023 19:56

Tgt Ion: 117 Resp: 371913  
Ion Ratio Lower Upper  
117 100  
82 57.0 44.0 66.0  
119 31.9 25.6 38.4





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.794 min Scan# 20

Delta R.T. 0.000 min

Lab File: VN079459.D

Acq: 06 Oct 2023 19:56

Instrument :

MSVOA\_N

ClientSampleId :

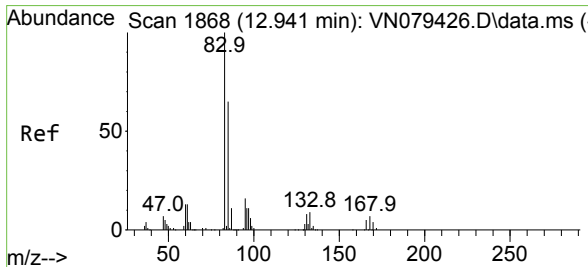
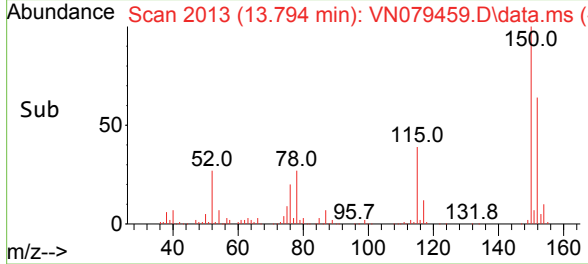
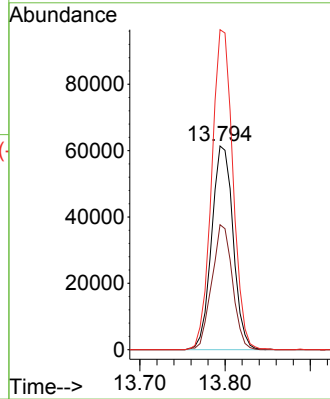
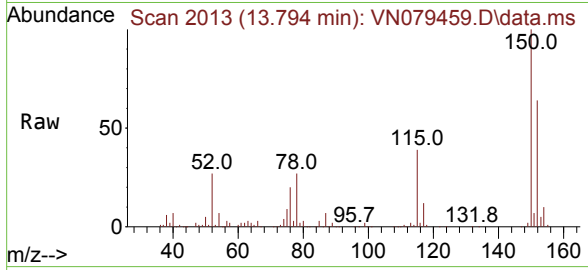
Tgt Ion:152 Resp: 107603

Ion Ratio Lower Upper

152 100

115 58.9 32.3 96.8

150 155.3 0.0 355.8



#75

1,1,2,2-Tetrachloroethane

Concen: Below Cal

RT: 12.865 min Scan# 1855

Delta R.T. -0.076 min

Lab File: VN079459.D

Acq: 06 Oct 2023 19:56

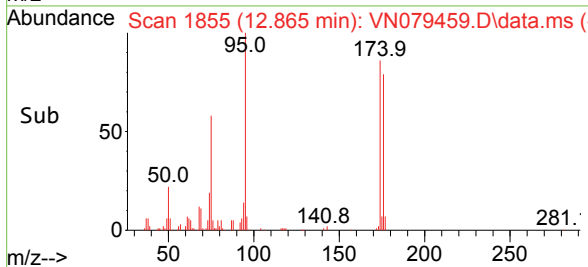
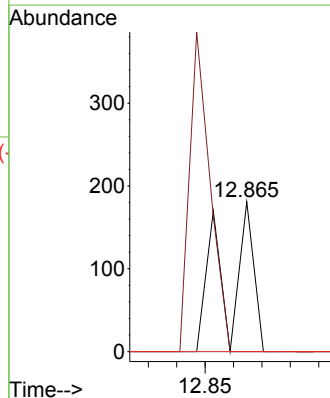
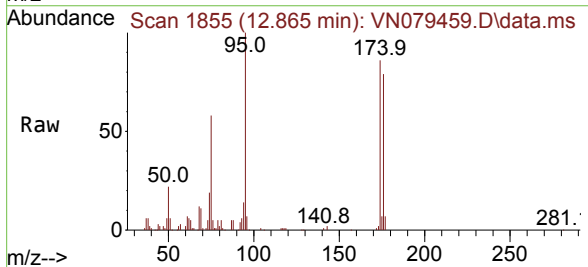
Tgt Ion: 83 Resp: 124

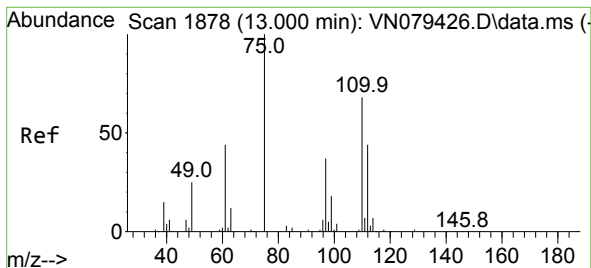
Ion Ratio Lower Upper

83 100

131 156.5 5.0 15.0#

85 0.0 31.9 95.7#





#76

1,2,3-Trichloropropane

Concen: 25.851 ug/l

RT: 12.853 min Scan# 1853

Delta R.T. -0.147 min

Lab File: VN079459.D

Acq: 06 Oct 2023 19:56

Instrument :

MSVOA\_N

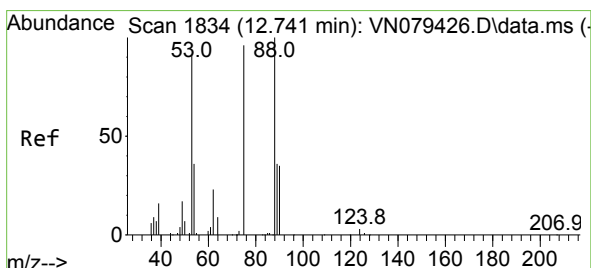
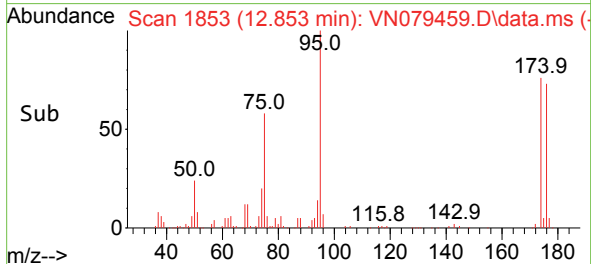
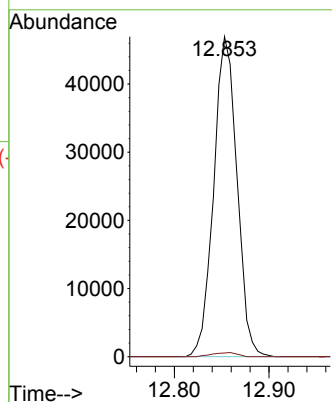
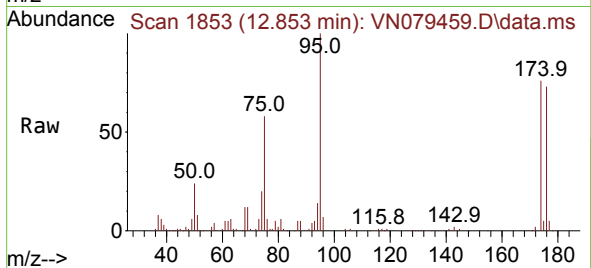
ClientSampleId :

Tgt Ion: 75 Resp: 80201

Ion Ratio Lower Upper

75 100

77 1.4 84.5 253.5#



#81

trans-1,4-Dichloro-2-butene

Concen: 75.007 ug/l

RT: 12.853 min Scan# 1853

Delta R.T. 0.112 min

Lab File: VN079459.D

Acq: 06 Oct 2023 19:56

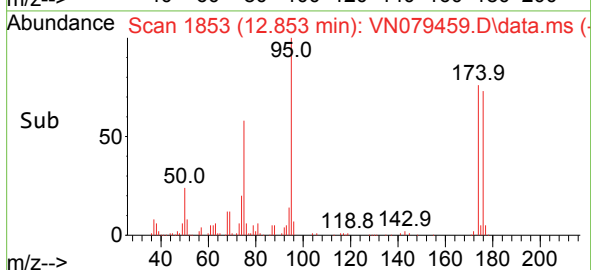
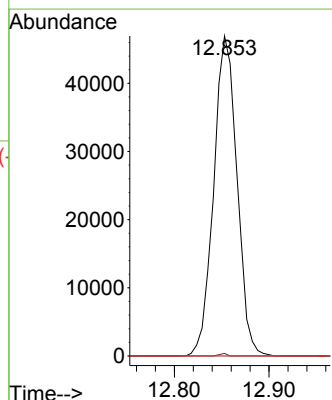
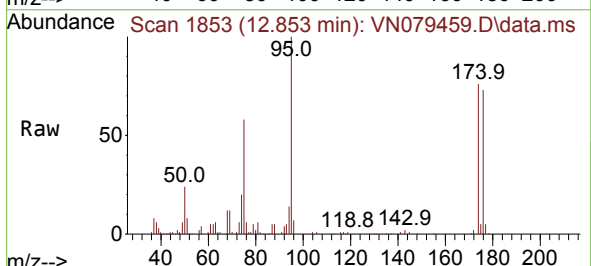
Tgt Ion: 75 Resp: 80201

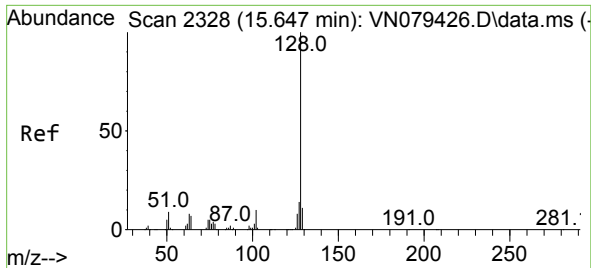
Ion Ratio Lower Upper

75 100

53 0.2 67.4 101.2#

89 0.0 38.8 58.2#





#95

Naphthalene

Concen: 5.792 ug/l

RT: 15.647 min Scan# 21

Delta R.T. -0.000 min

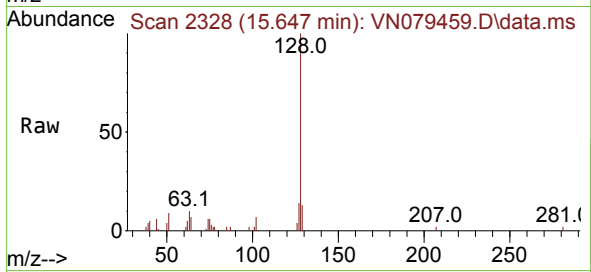
Lab File: VN079459.D

Acq: 06 Oct 2023 19:56

Instrument :

MSVOA\_N

ClientSampleId :



Tgt Ion:128 Resp: 20802

Ion Ratio Lower Upper

128 100

127 16.4 10.0 15.0#

129 10.9 8.7 13.1

