

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_X\Data\VX080423\  
 Data File : VX036812.D  
 Acq On : 04 Aug 2023 15:55  
 Operator : JC/MD  
 Sample : ZHC#10  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 16 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 ZHC#10

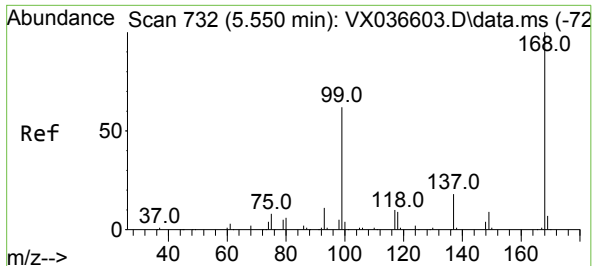
Quant Time: Aug 05 00:12:57 2023  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_X\Method\82X072123W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Jul 21 12:14:12 2023  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|--------|-------|----------|----------|--------|----------|
| -----                         |        |       |          |          |        |          |
| Internal Standards            |        |       |          |          |        |          |
| 1) Pentafluorobenzene         | 5.556  | 168   | 142031   | 50.000   | ug/l   | 0.00     |
| 34) 1,4-Difluorobenzene       | 6.763  | 114   | 261829   | 50.000   | ug/l   | 0.00     |
| 63) Chlorobenzene-d5          | 10.055 | 117   | 244563   | 50.000   | ug/l   | 0.00     |
| 72) 1,4-Dichlorobenzene-d4    | 12.024 | 152   | 109286   | 50.000   | ug/l   | 0.00     |
| System Monitoring Compounds   |        |       |          |          |        |          |
| 33) 1,2-Dichloroethane-d4     | 5.958  | 65    | 100713   | 47.923   | ug/l   | 0.00     |
| Spiked Amount                 | 50.000 | Range | 78 - 117 | Recovery | =      | 95.840%  |
| 35) Dibromofluoromethane      | 5.385  | 113   | 83577    | 46.440   | ug/l   | 0.00     |
| Spiked Amount                 | 50.000 | Range | 75 - 124 | Recovery | =      | 92.880%  |
| 50) Toluene-d8                | 8.647  | 98    | 313086   | 49.057   | ug/l   | 0.00     |
| Spiked Amount                 | 50.000 | Range | 92 - 112 | Recovery | =      | 98.120%  |
| 62) 4-Bromofluorobenzene      | 11.079 | 95    | 119064   | 49.449   | ug/l   | 0.00     |
| Spiked Amount                 | 50.000 | Range | 83 - 123 | Recovery | =      | 98.900%  |
| Target Compounds              |        |       |          |          |        |          |
|                               |        |       |          |          | Qvalue |          |
| 11) Tert butyl alcohol        | 2.947  | 59    | 5361     | 10.775   | ug/l # | 85       |
| 13) Acrolein                  | 2.239  | 56    | 215      | 0.757    | ug/l # | 14       |
| 16) Acetone                   | 2.380  | 43    | 41399    | 47.472   | ug/l   | 94       |
| 18) Methyl Acetate            | 2.709  | 43    | 2470     | 0.673    | ug/l   | 99       |
| 20) Methylene Chloride        | 2.788  | 84    | 6991     | 3.605    | ug/l   | 91       |
| 25) 2-Butanone                | 4.562  | 43    | 17820    | 12.595   | ug/l   | 96       |
| 29) Tetrahydrofuran           | 5.032  | 42    | 775      | 0.850    | ug/l # | 58       |
| 31) Cyclohexane               | 5.550  | 56    | 3302     | 1.135    | ug/l # | 9        |
| 36) 1,1-Dichloropropene       | 5.550  | 75    | 11963    | 4.460    | ug/l # | 51       |
| 37) Ethyl Acetate             | 4.721  | 43    | 7263     | 2.392    | ug/l   | 97       |
| 38) Carbon Tetrachloride      | 5.556  | 117   | 15601    | 5.471    | ug/l # | 15       |
| 43) Isopropyl Acetate         | 6.342  | 43    | 139617   | 26.715   | ug/l   | 95       |
| 48) Methyl methacrylate       | 7.799  | 41    | 111455   | 45.857   | ug/l # | 49       |
| 49) 1,4-Dioxane               | 7.793  | 88    | 150      | 3.055    | ug/l # | 1        |
| 51) 4-Methyl-2-Pentanone      | 8.549  | 43    | 157840   | 54.576   | ug/l # | 37       |
| 53) t-1,3-Dichloropropene     | 8.952  | 75    | 828      | 0.245    | ug/l # | 43       |
| 54) cis-1,3-Dichloropropene   | 8.549  | 75    | 53391    | 14.955   | ug/l # | 53       |
| 57) 1,3-Dichloropropane       | 9.482  | 76    | 6505     | 1.900    | ug/l # | 42       |
| 59) 2-Hexanone                | 9.378  | 43    | 123221   | 57.407   | ug/l # | 26       |
| 74) N-amyl acetate            | 10.896 | 43    | 991      | 0.235    | ug/l # | 47       |
| 76) 1,2,3-Trichloropropane    | 11.079 | 75    | 62202    | 24.198   | ug/l # | 39       |
| 81) trans-1,4-Dichloro-2-b... | 11.079 | 75    | 62202    | 54.847   | ug/l # | 5        |
| -----                         |        |       |          |          |        |          |

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

Quant Time: Aug 05 00:12:57 2023  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_X\Method\82X072123W.M  
Quant Title : SW846 8260  
QLast Update : Fri Jul 21 12:14:12 2023  
Response via : Initial Calibration

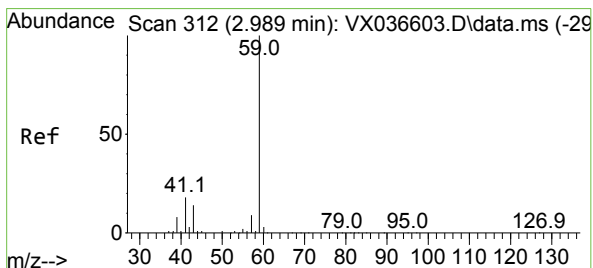
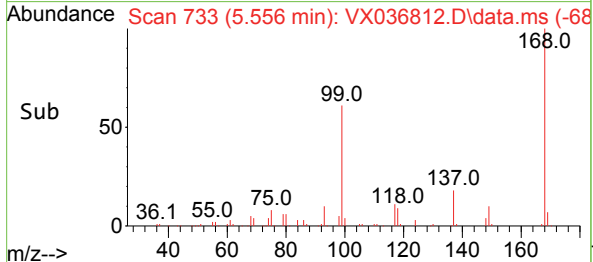
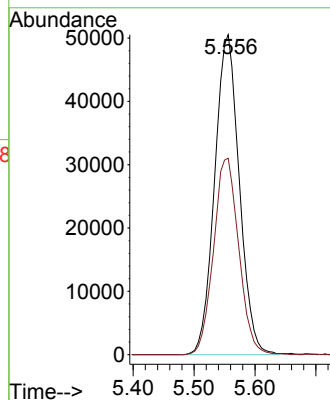
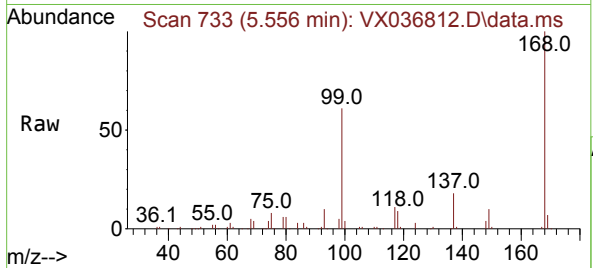




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 5.556 min Scan# 71  
Delta R.T. 0.006 min  
Lab File: VX036812.D  
Acq: 04 Aug 2023 15:55

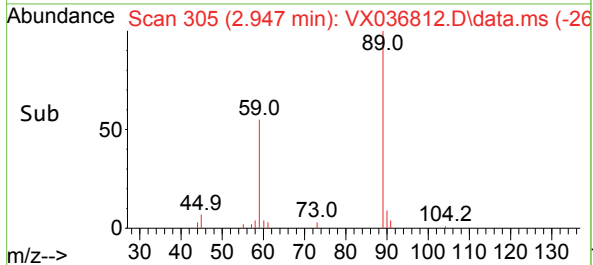
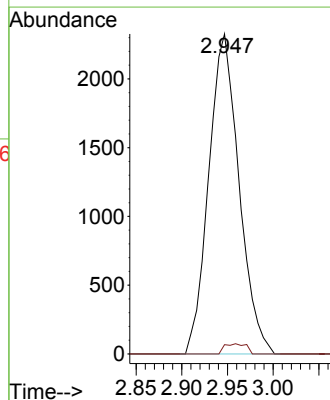
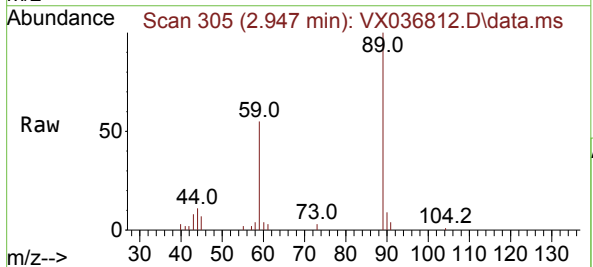
Instrument :  
MSVOA\_X  
ClientSampleId :  
ZHC#10

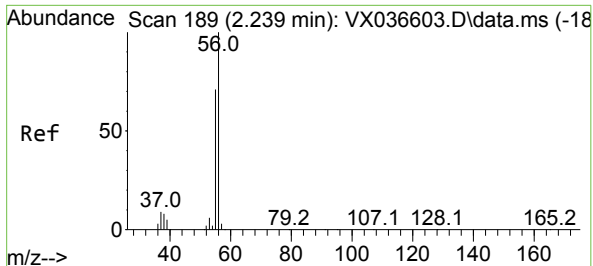
Tgt Ion:168 Resp: 142031  
Ion Ratio Lower Upper  
168 100  
99 61.4 56.6 85.0



#11  
Tert butyl alcohol  
Concen: 10.775 ug/l  
RT: 2.947 min Scan# 305  
Delta R.T. -0.043 min  
Lab File: VX036812.D  
Acq: 04 Aug 2023 15:55

Tgt Ion: 59 Resp: 5361  
Ion Ratio Lower Upper  
59 100  
57 2.3 6.0 9.0#

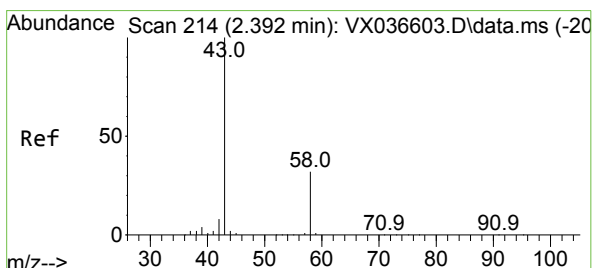
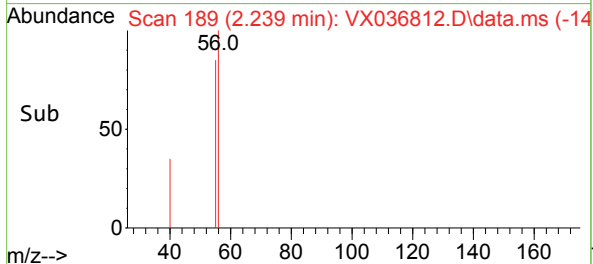
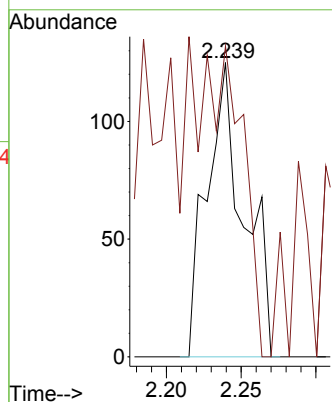
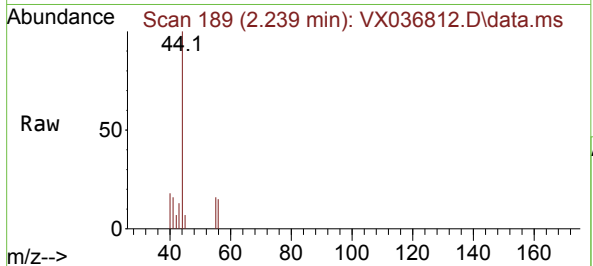




#13  
Acrolein  
Concen: 0.757 ug/l  
RT: 2.239 min Scan# 11  
Delta R.T. 0.000 min  
Lab File: VX036812.D  
Acq: 04 Aug 2023 15:55

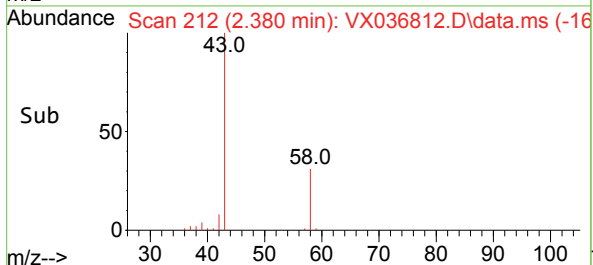
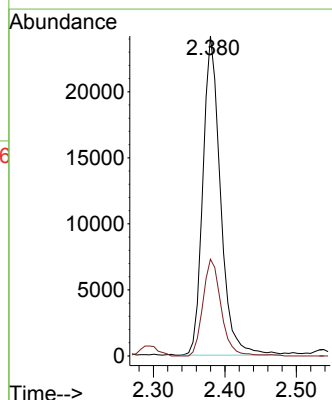
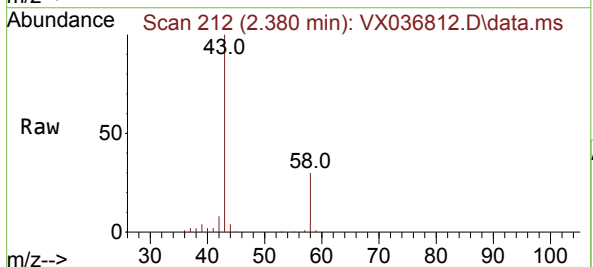
Instrument :  
MSVOA\_X  
ClientSampleId :  
ZHC#10

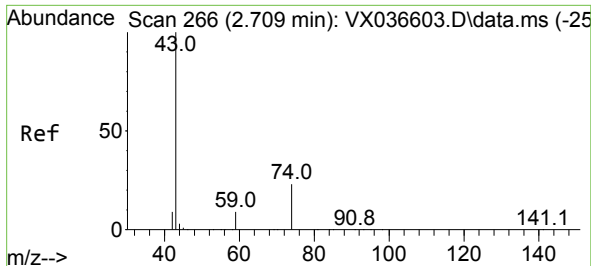
Tgt Ion: 56 Resp: 215  
Ion Ratio Lower Upper  
56 100  
55 0.0 57.1 85.7#



#16  
Acetone  
Concen: 47.472 ug/l  
RT: 2.380 min Scan# 212  
Delta R.T. -0.012 min  
Lab File: VX036812.D  
Acq: 04 Aug 2023 15:55

Tgt Ion: 43 Resp: 41399  
Ion Ratio Lower Upper  
43 100  
58 30.3 21.9 32.9





#18

Methyl Acetate

Concen: 0.673 ug/l

RT: 2.709 min Scan# 2

Delta R.T. 0.000 min

Lab File: VX036812.D

Acq: 04 Aug 2023 15:55

Instrument :

MSVOA\_X

ClientSampleId :

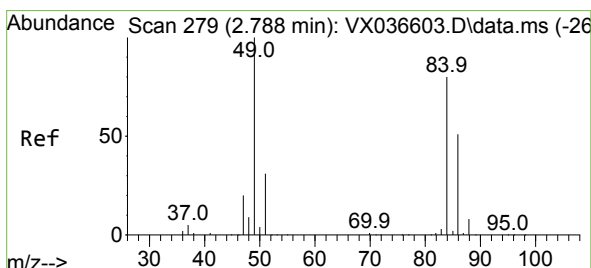
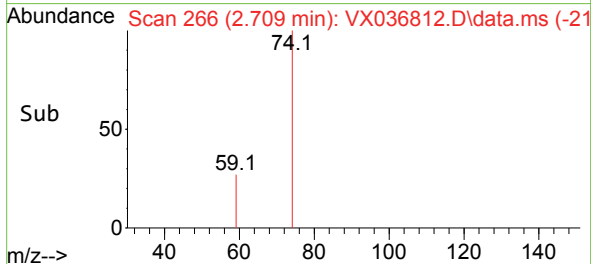
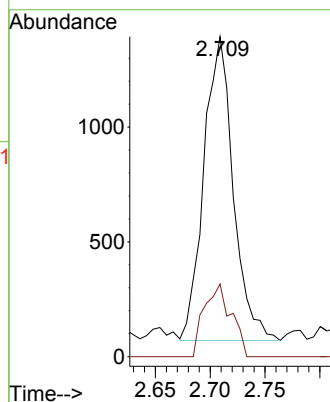
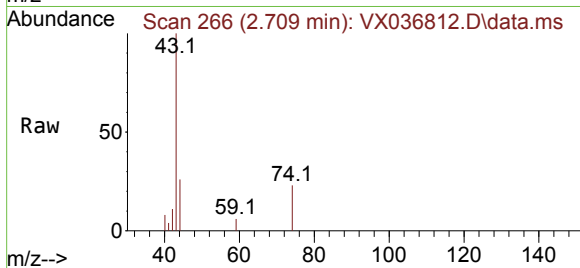
ZHC#10

Tgt Ion: 43 Resp: 2470

Ion Ratio Lower Upper

43 100

74 21.9 17.8 26.8



#20

Methylene Chloride

Concen: 3.605 ug/l

RT: 2.788 min Scan# 279

Delta R.T. 0.000 min

Lab File: VX036812.D

Acq: 04 Aug 2023 15:55

Tgt Ion: 84 Resp: 6991

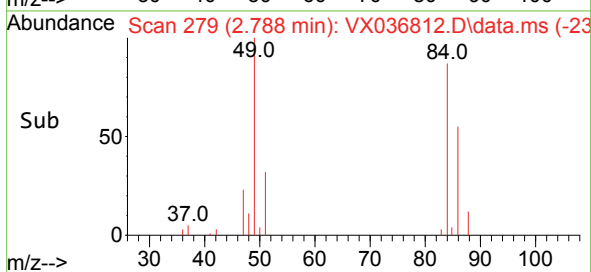
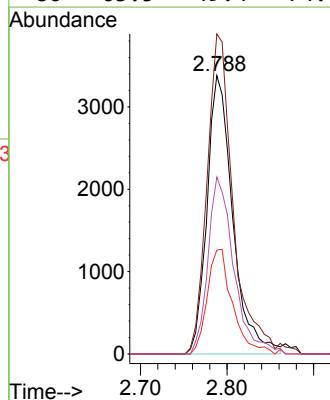
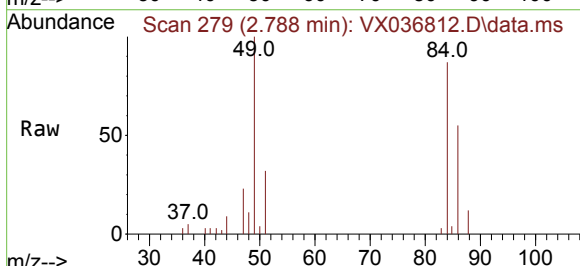
Ion Ratio Lower Upper

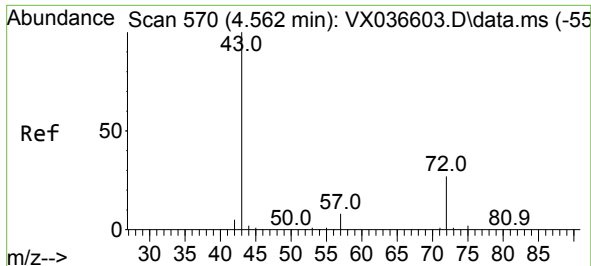
84 100

49 114.9 103.6 155.4

51 37.3 33.8 50.6

86 63.5 49.4 74.0

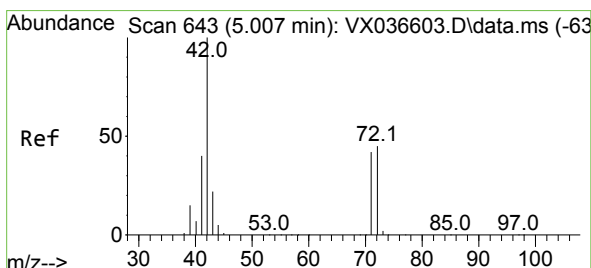
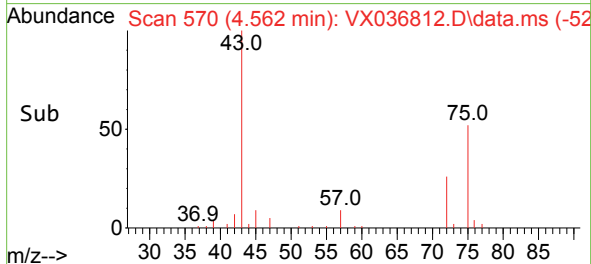
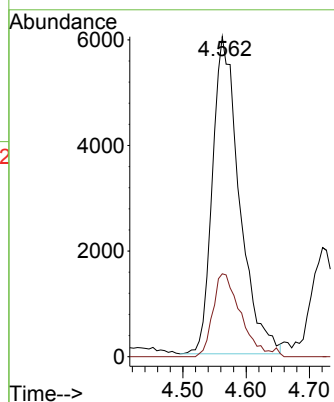
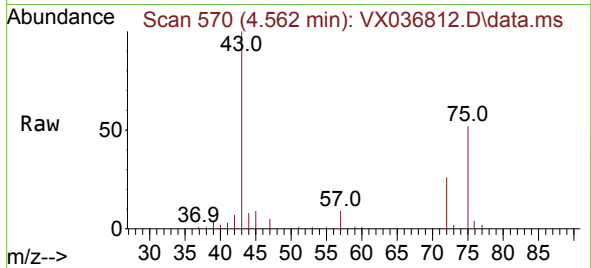




#25  
2-Butanone  
Concen: 12.595 ug/l  
RT: 4.562 min Scan# 51  
Delta R.T. 0.000 min  
Lab File: VX036812.D  
Acq: 04 Aug 2023 15:55

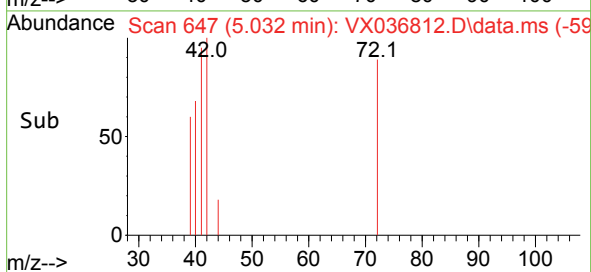
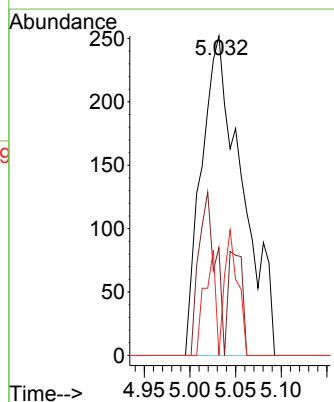
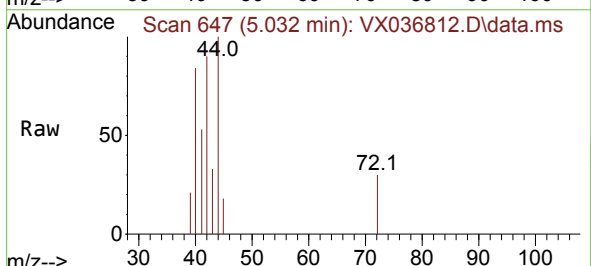
Instrument :  
MSVOA\_X  
ClientSampleId :  
ZHC#10

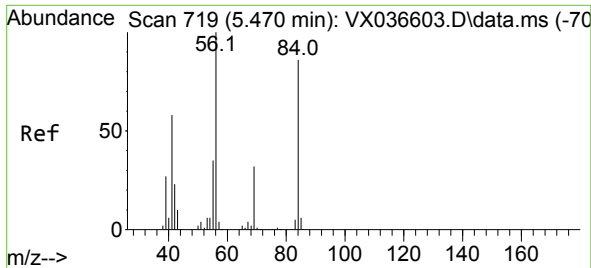
Tgt Ion: 43 Resp: 17820  
Ion Ratio Lower Upper  
43 100  
72 26.1 19.4 29.2



#29  
Tetrahydrofuran  
Concen: 0.850 ug/l  
RT: 5.032 min Scan# 647  
Delta R.T. 0.025 min  
Lab File: VX036812.D  
Acq: 04 Aug 2023 15:55

Tgt Ion: 42 Resp: 775  
Ion Ratio Lower Upper  
42 100  
72 21.4 34.2 51.4#  
71 8.9 32.2 48.2#

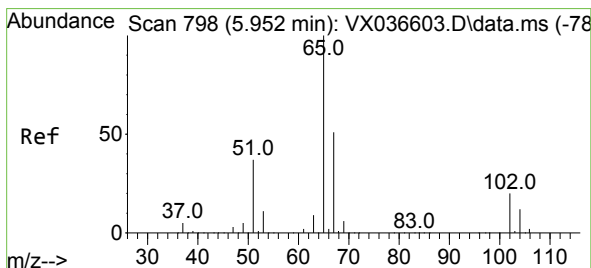
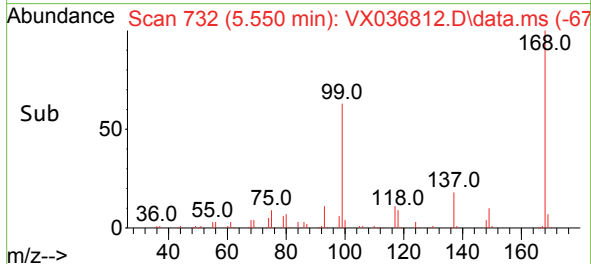
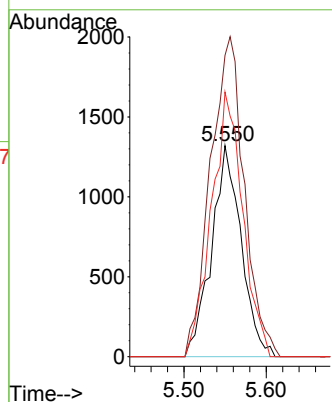
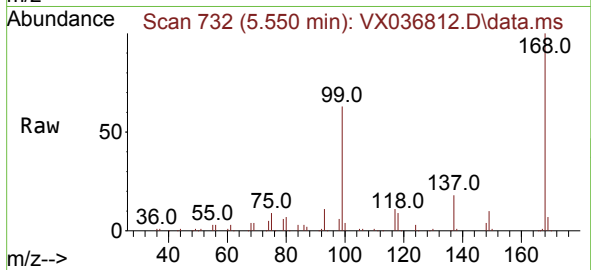




#31  
Cyclohexane  
Concen: 1.135 ug/l  
RT: 5.550 min Scan# 719  
Delta R.T. 0.079 min  
Lab File: VX036812.D  
Acq: 04 Aug 2023 15:55

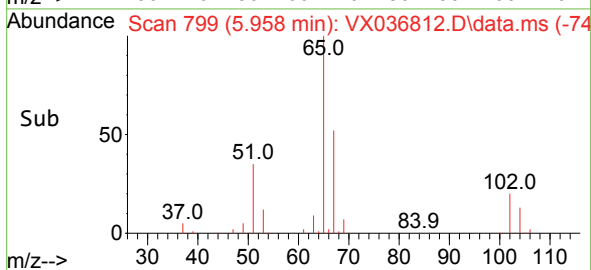
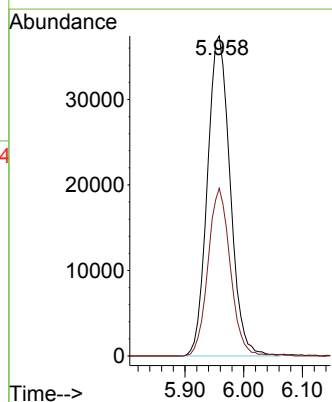
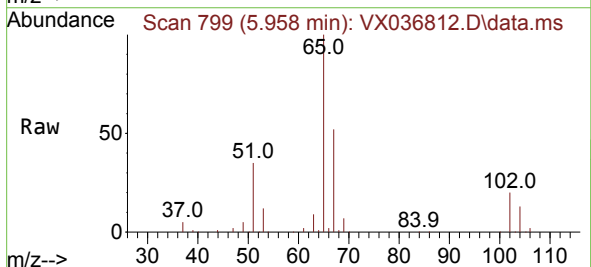
Instrument :  
MSVOA\_X  
ClientSampleId :  
ZHC#10

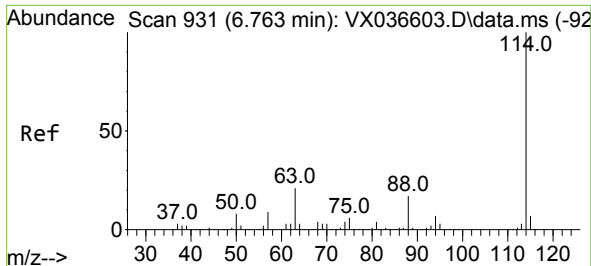
Tgt Ion: 56 Resp: 3302  
Ion Ratio Lower Upper  
56 100  
69 142.8 23.4 35.2#  
84 125.5 65.9 98.9#



#33  
1,2-Dichloroethane-d4  
Concen: 47.923 ug/l  
RT: 5.958 min Scan# 799  
Delta R.T. 0.006 min  
Lab File: VX036812.D  
Acq: 04 Aug 2023 15:55

Tgt Ion: 65 Resp: 100713  
Ion Ratio Lower Upper  
65 100  
67 51.3 0.0 100.2

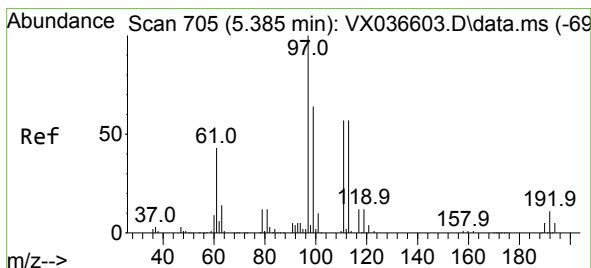
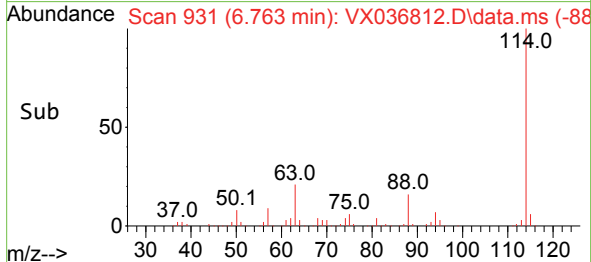
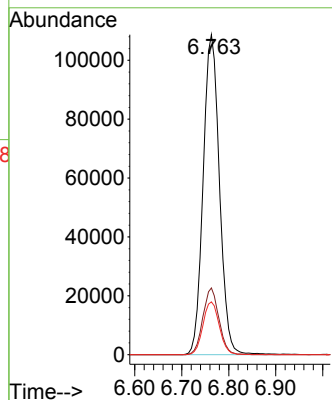
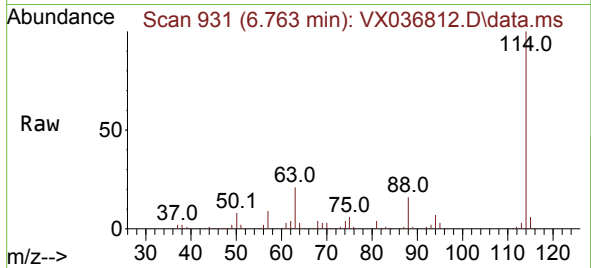




#34  
1,4-Difluorobenzene  
Concen: 50.000 ug/l  
RT: 6.763 min Scan# 91  
Delta R.T. 0.000 min  
Lab File: VX036812.D  
Acq: 04 Aug 2023 15:55

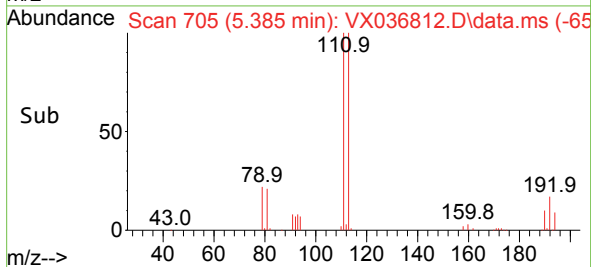
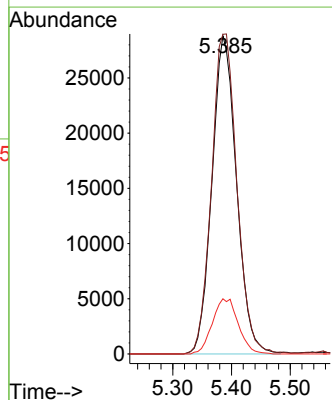
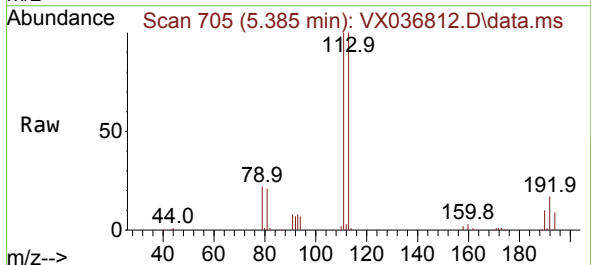
Instrument :  
MSVOA\_X  
ClientSampleId :  
ZHC#10

Tgt Ion:114 Resp: 261829  
Ion Ratio Lower Upper  
114 100  
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88 16.5 0.0 36.6

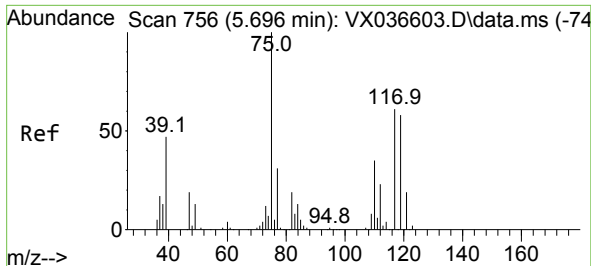


#35  
Dibromofluoromethane  
Concen: 46.440 ug/l  
RT: 5.385 min Scan# 705  
Delta R.T. 0.000 min  
Lab File: VX036812.D  
Acq: 04 Aug 2023 15:55

Tgt Ion:113 Resp: 83577  
Ion Ratio Lower Upper  
113 100  
111 104.0 82.9 124.3  
192 18.3 13.3 19.9



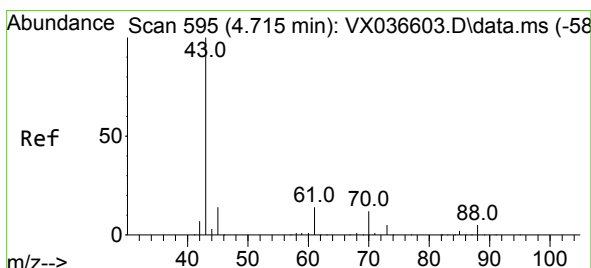
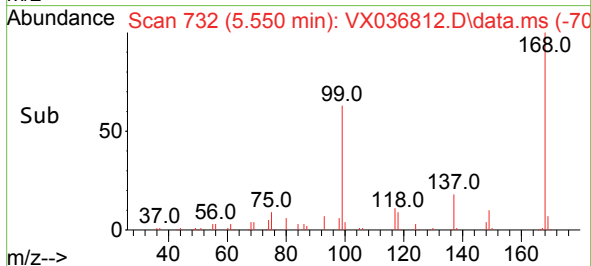
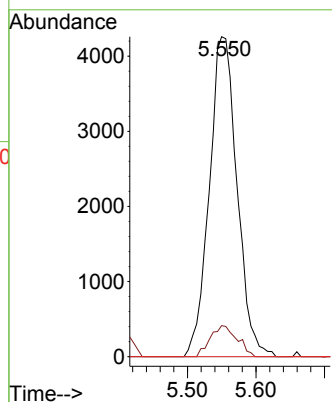
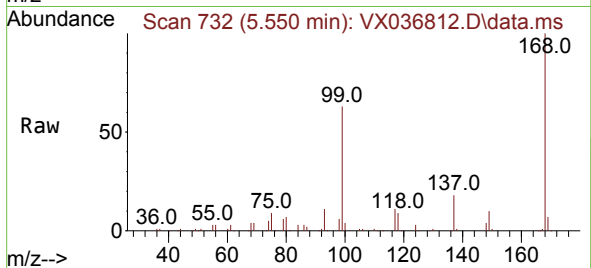




#36  
1,1-Dichloropropene  
Concen: 4.460 ug/l  
RT: 5.550 min Scan# 71  
Delta R.T. -0.146 min  
Lab File: VX036812.D  
Acq: 04 Aug 2023 15:55

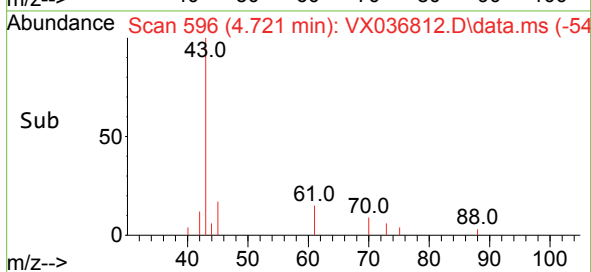
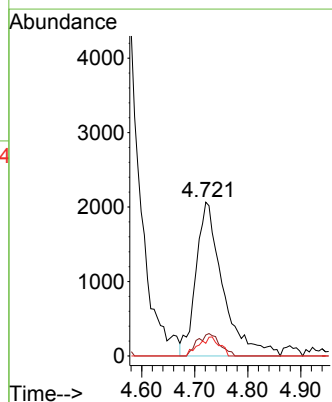
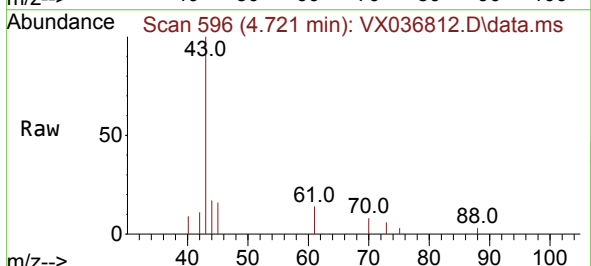
Instrument :  
MSVOA\_X  
ClientSampleId :  
ZHC#10

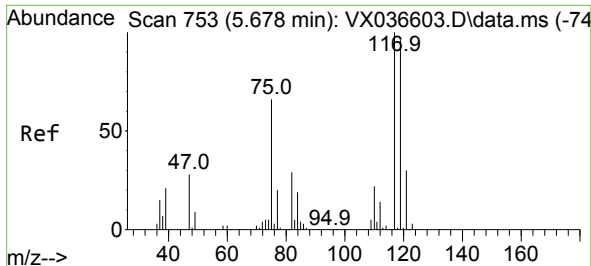
Tgt Ion: 75 Resp: 11963  
Ion Ratio Lower Upper  
75 100  
110 9.4 17.0 50.9#  
77 0.0 24.7 37.1#



#37  
Ethyl Acetate  
Concen: 2.392 ug/l  
RT: 4.721 min Scan# 596  
Delta R.T. 0.006 min  
Lab File: VX036812.D  
Acq: 04 Aug 2023 15:55

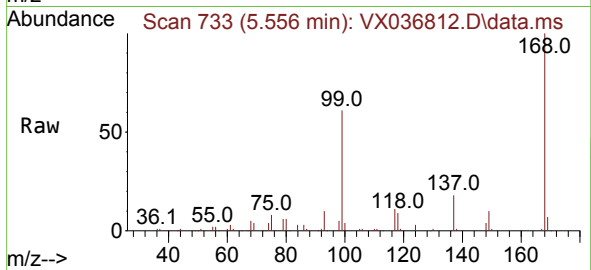
Tgt Ion: 43 Resp: 7263  
Ion Ratio Lower Upper  
43 100  
61 12.1 10.6 16.0  
70 9.5 8.3 12.5



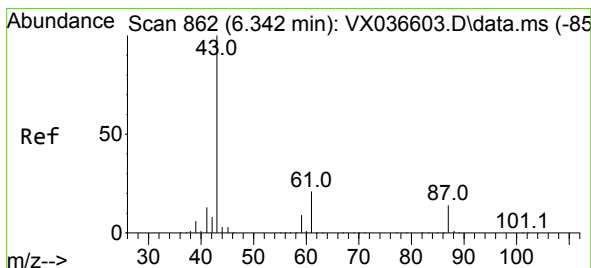
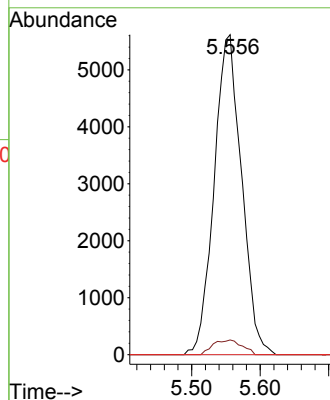
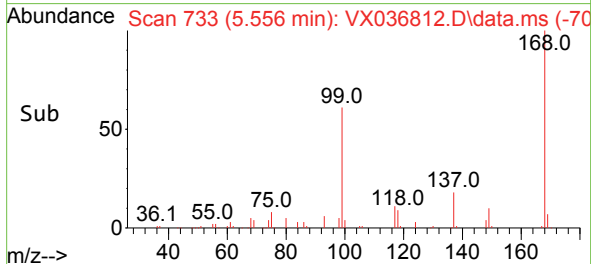


#38  
Carbon Tetrachloride  
Concen: 5.471 ug/l  
RT: 5.556 min Scan# 711  
Delta R.T. -0.122 min  
Lab File: VX036812.D  
Acq: 04 Aug 2023 15:55

Instrument :  
MSVOA\_X  
ClientSampleId :  
ZHC#10

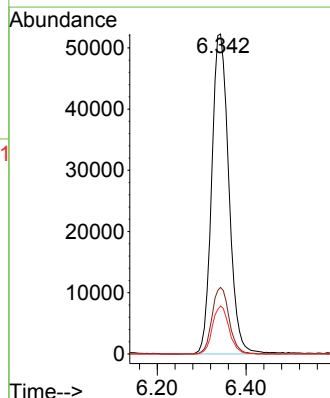
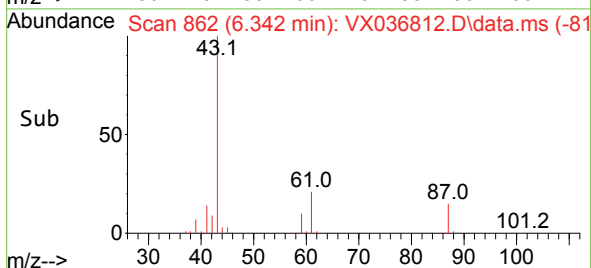
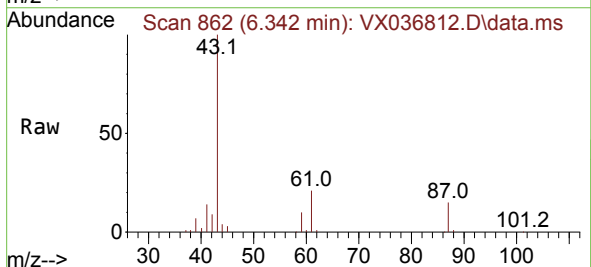


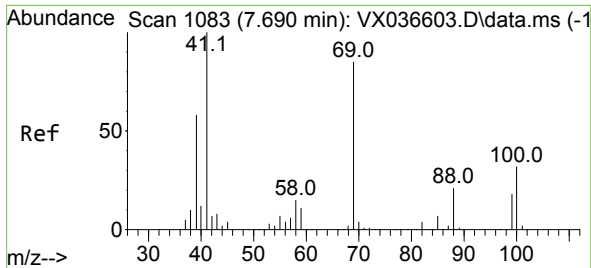
Tgt Ion:117 Resp: 15601  
Ion Ratio Lower Upper  
117 100  
119 4.6 78.2 117.2#  
121 0.0 24.4 36.6#



#43  
Isopropyl Acetate  
Concen: 26.715 ug/l  
RT: 6.342 min Scan# 862  
Delta R.T. 0.000 min  
Lab File: VX036812.D  
Acq: 04 Aug 2023 15:55

Tgt Ion: 43 Resp: 139617  
Ion Ratio Lower Upper  
43 100  
61 20.8 15.2 22.8  
87 14.5 9.8 14.6

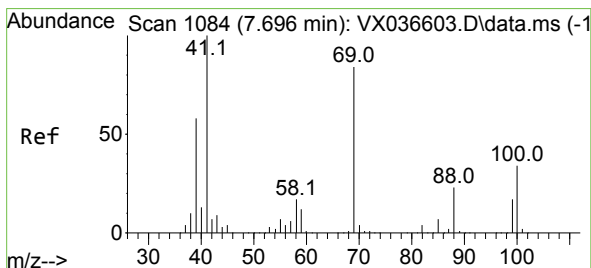
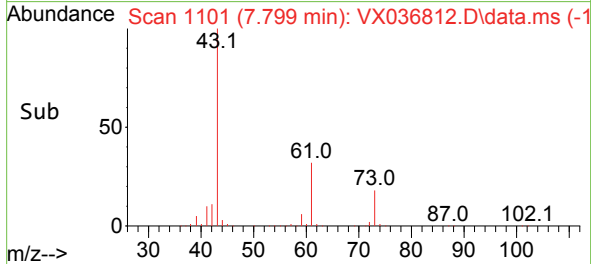
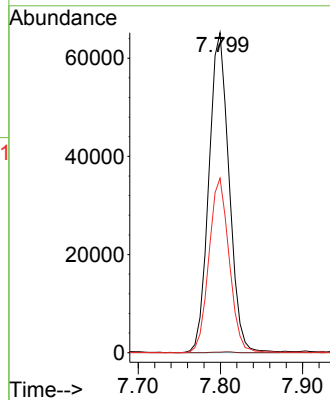
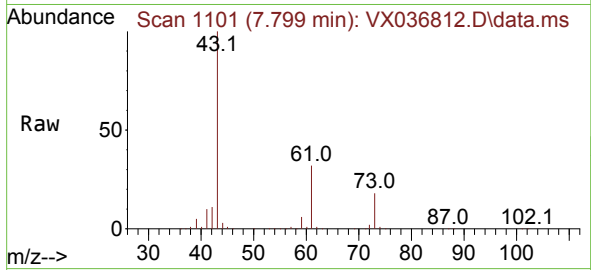




#48  
Methyl methacrylate  
Concen: 45.857 ug/l  
RT: 7.799 min Scan# 1101  
Delta R.T. 0.110 min  
Lab File: VX036812.D  
Acq: 04 Aug 2023 15:55

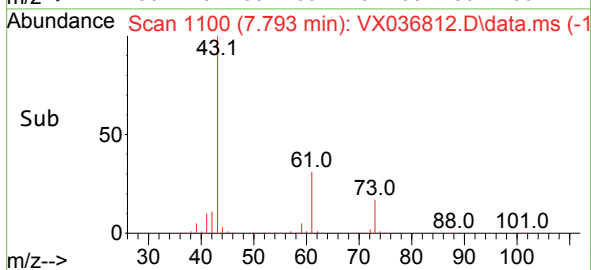
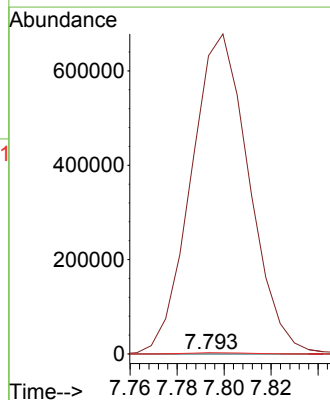
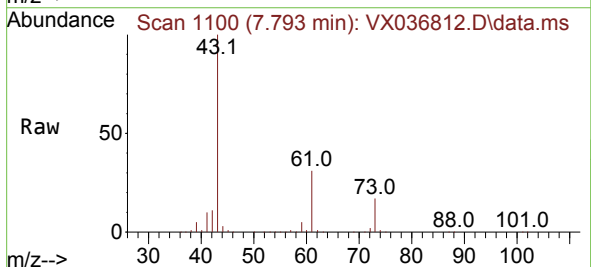
Instrument :  
MSVOA\_X  
ClientSampleId :  
ZHC#10

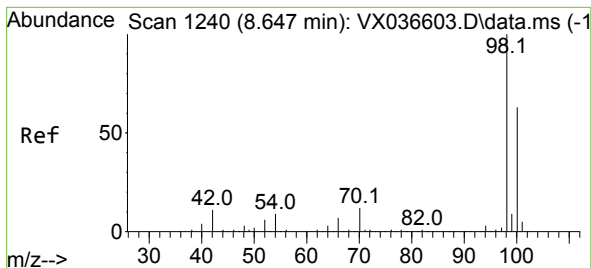
Tgt Ion: 41 Resp: 111455  
Ion Ratio Lower Upper  
41 100  
69 0.2 59.2 88.8#  
39 54.6 47.7 71.5



#49  
1,4-Dioxane  
Concen: 3.055 ug/l  
RT: 7.793 min Scan# 1100  
Delta R.T. 0.098 min  
Lab File: VX036812.D  
Acq: 04 Aug 2023 15:55

Tgt Ion: 88 Resp: 150  
Ion Ratio Lower Upper  
88 100  
43 782846.7 0.0 0.0#  
58 3199.3 60.1 90.1#





#50

Toluene-d8

Concen: 49.057 ug/l

RT: 8.647 min Scan# 11

Delta R.T. 0.000 min

Lab File: VX036812.D

Acq: 04 Aug 2023 15:55

Instrument :

MSVOA\_X

ClientSampleId :

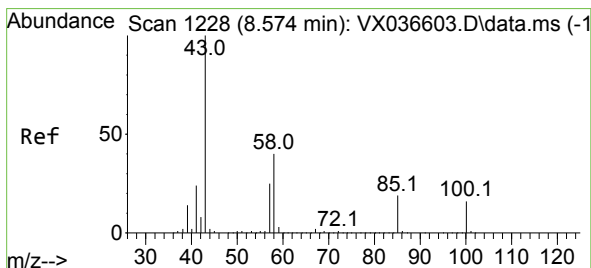
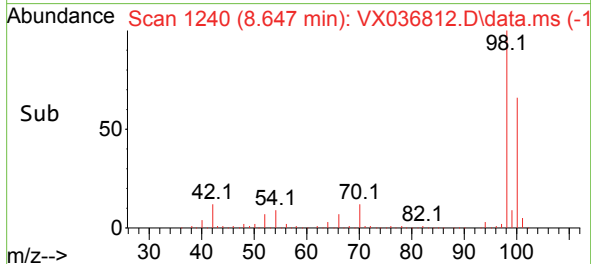
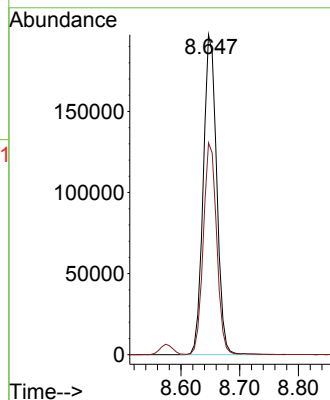
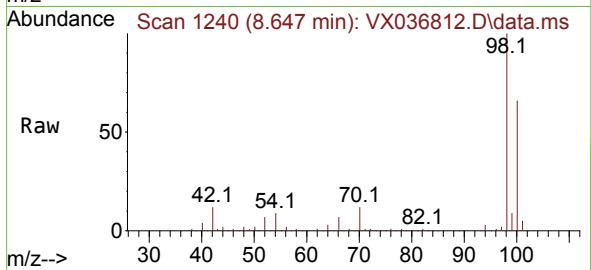
ZHC#10

Tgt Ion: 98 Resp: 313086

Ion Ratio Lower Upper

98 100

100 65.6 53.1 79.7



#51

4-Methyl-2-Pentanone

Concen: 54.576 ug/l

RT: 8.549 min Scan# 1224

Delta R.T. -0.024 min

Lab File: VX036812.D

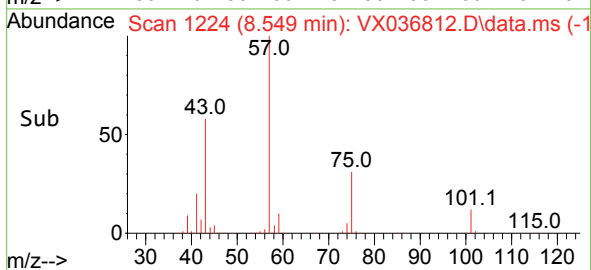
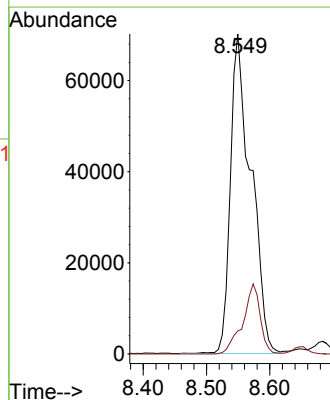
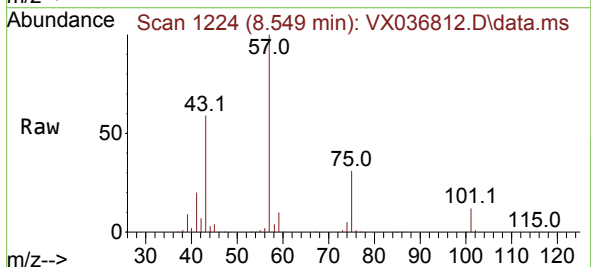
Acq: 04 Aug 2023 15:55

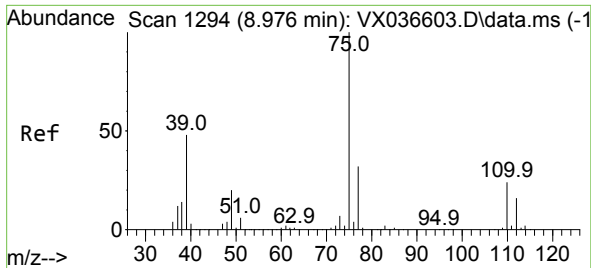
Tgt Ion: 43 Resp: 157840

Ion Ratio Lower Upper

43 100

58 0.0 30.4 45.6#

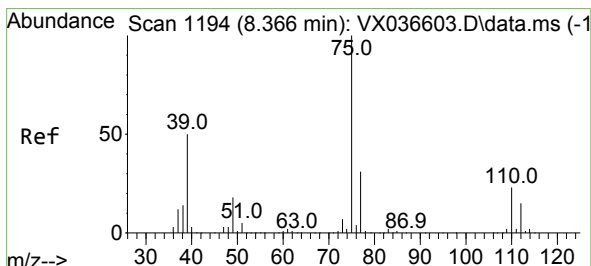
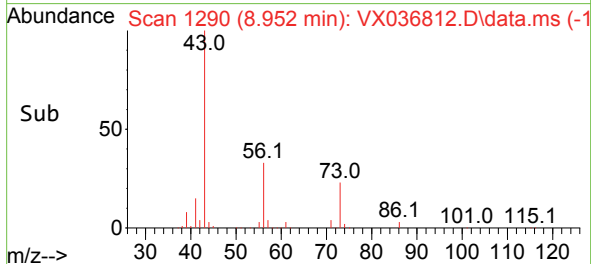
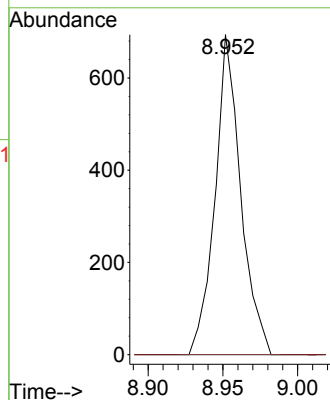
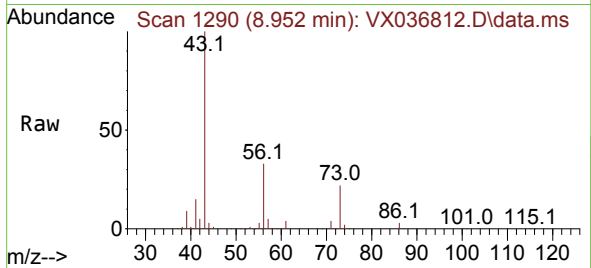




#53  
 t-1,3-Dichloropropene  
 Concen: 0.245 ug/l  
 RT: 8.952 min Scan# 11  
 Delta R.T. -0.024 min  
 Lab File: VX036812.D  
 Acq: 04 Aug 2023 15:55

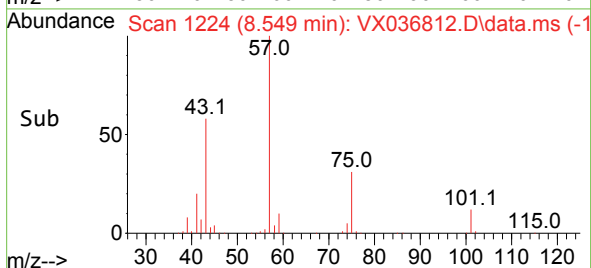
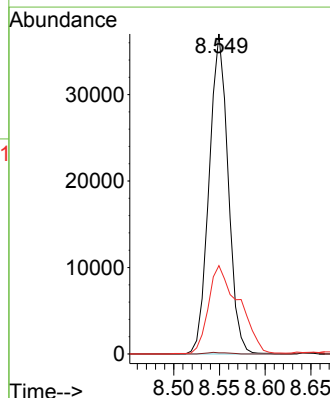
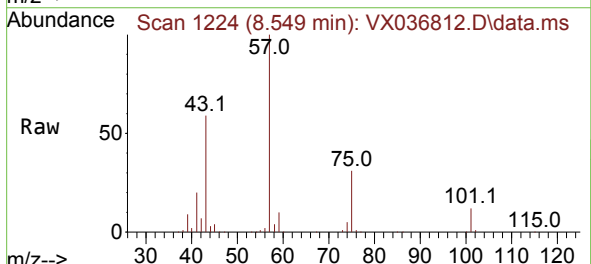
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 ZHC#10

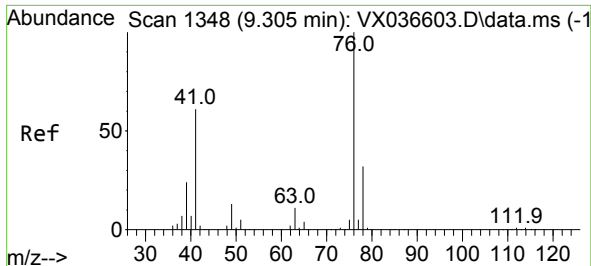
Tgt Ion: 75 Resp: 828  
 Ion Ratio Lower Upper  
 75 100  
 77 0.0 25.7 38.5#



#54  
 cis-1,3-Dichloropropene  
 Concen: 14.955 ug/l  
 RT: 8.549 min Scan# 1224  
 Delta R.T. 0.183 min  
 Lab File: VX036812.D  
 Acq: 04 Aug 2023 15:55

Tgt Ion: 75 Resp: 53391  
 Ion Ratio Lower Upper  
 75 100  
 77 0.3 25.3 37.9#  
 39 27.5 46.7 70.1#





#57

1,3-Dichloropropane

Concen: 1.900 ug/l

RT: 9.482 min Scan# 1

Delta R.T. 0.177 min

Lab File: VX036812.D

Acq: 04 Aug 2023 15:55

Instrument :

MSVOA\_X

ClientSampleId :

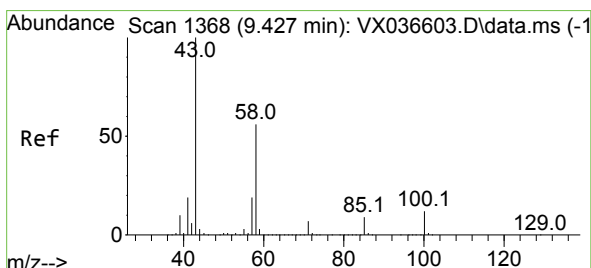
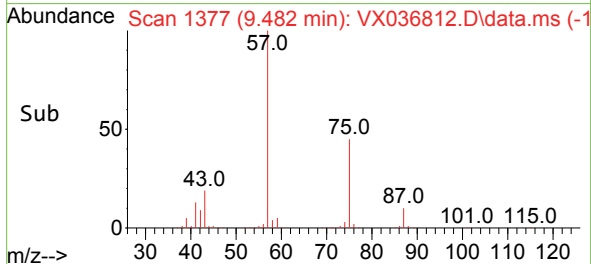
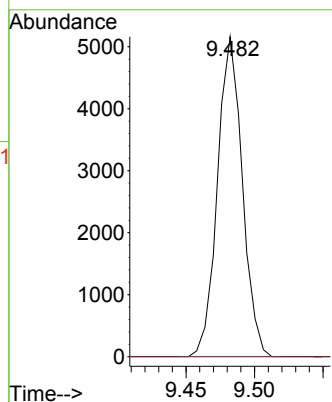
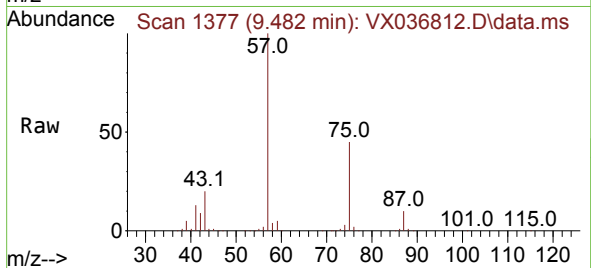
ZHC#10

Tgt Ion: 76 Resp: 6505

Ion Ratio Lower Upper

76 100

78 0.0 26.1 39.1#



#59

2-Hexanone

Concen: 57.407 ug/l

RT: 9.378 min Scan# 1360

Delta R.T. -0.049 min

Lab File: VX036812.D

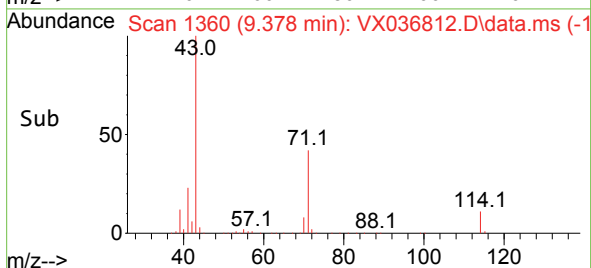
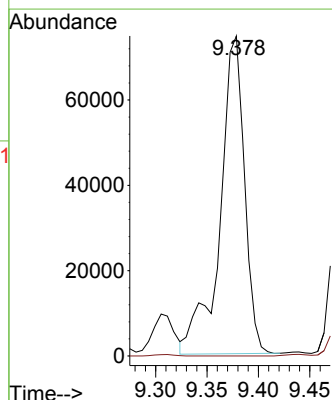
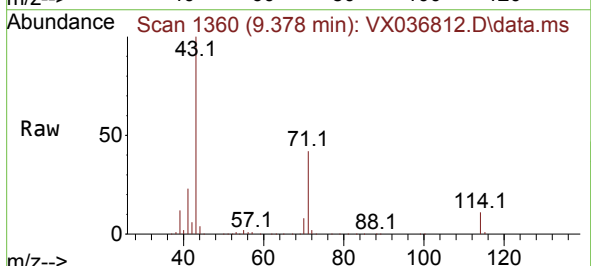
Acq: 04 Aug 2023 15:55

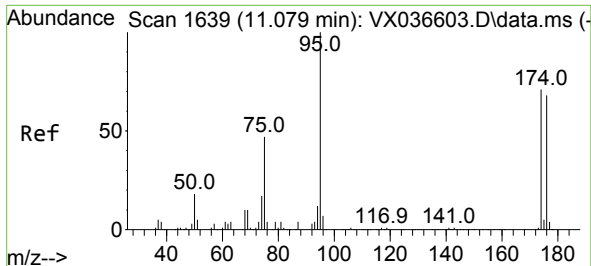
Tgt Ion: 43 Resp: 123221

Ion Ratio Lower Upper

43 100

58 0.0 26.2 78.5#

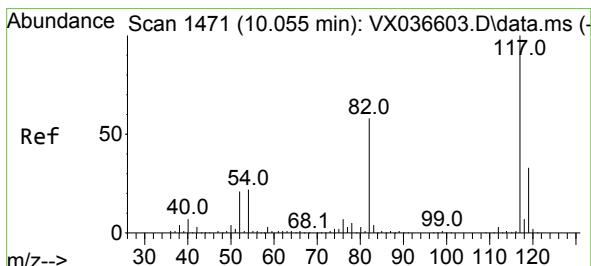
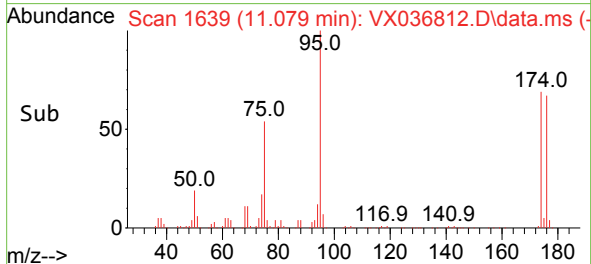
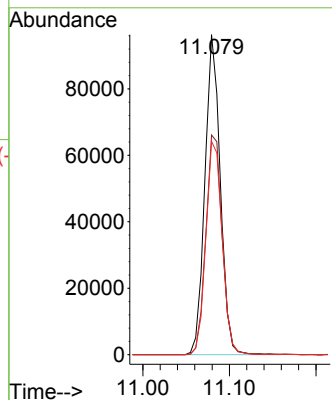
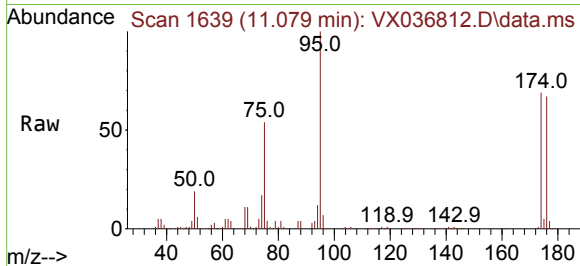




#62  
4-Bromofluorobenzene  
Concen: 49.449 ug/l  
RT: 11.079 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: VX036812.D  
Acq: 04 Aug 2023 15:55

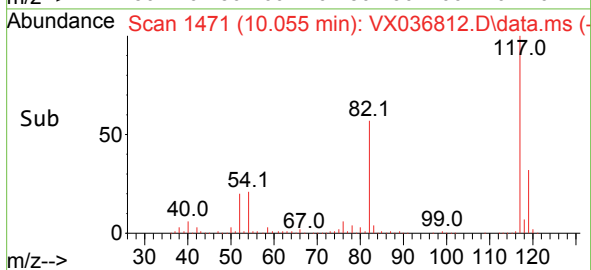
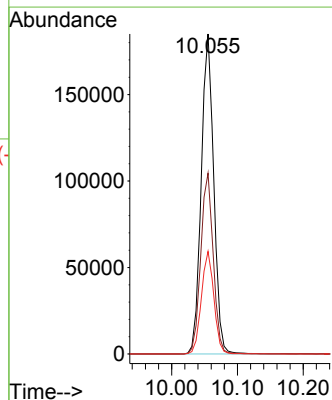
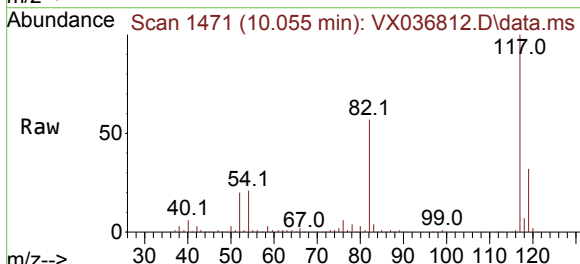
Instrument :  
MSVOA\_X  
ClientSampleId :  
ZHC#10

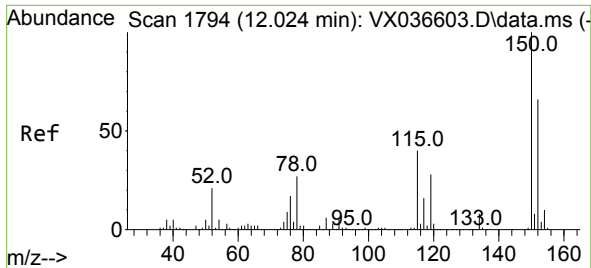
Tgt Ion: 95 Resp: 119064  
Ion Ratio Lower Upper  
95 100  
174 72.9 0.0 135.6  
176 70.7 0.0 131.0



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.055 min Scan# 1471  
Delta R.T. 0.000 min  
Lab File: VX036812.D  
Acq: 04 Aug 2023 15:55

Tgt Ion: 117 Resp: 244563  
Ion Ratio Lower Upper  
117 100  
82 56.5 46.2 69.4  
119 32.0 25.5 38.3

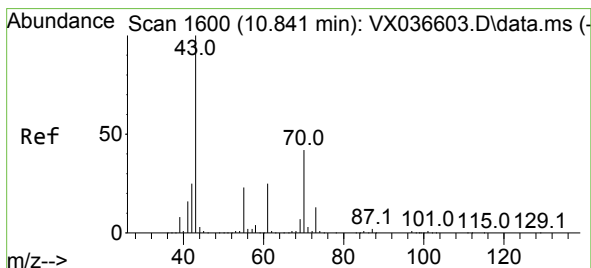
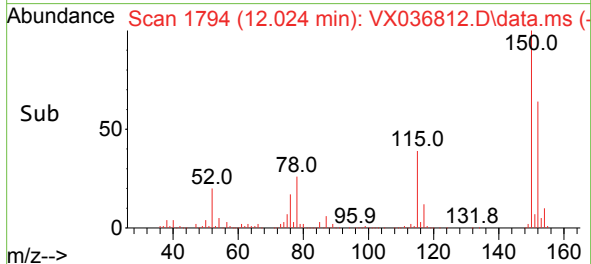
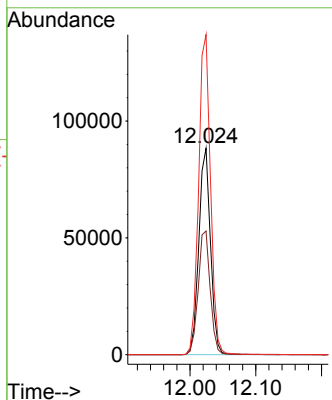
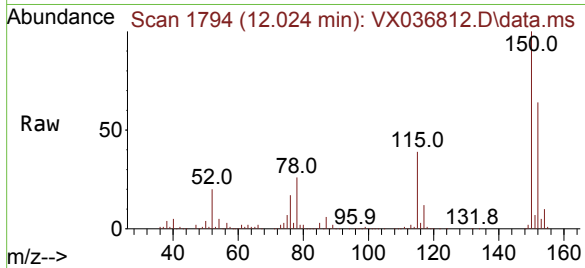




#72  
 1,4-Dichlorobenzene-d4  
 Concen: 50.000 ug/l  
 RT: 12.024 min Scan# 11  
 Delta R.T. 0.000 min  
 Lab File: VX036812.D  
 Acq: 04 Aug 2023 15:55

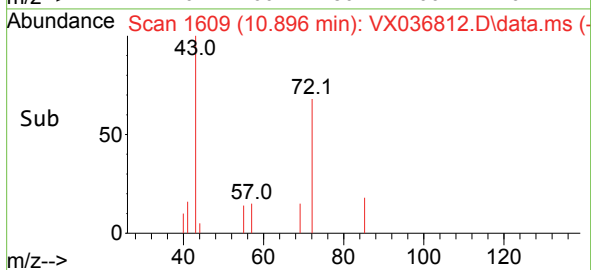
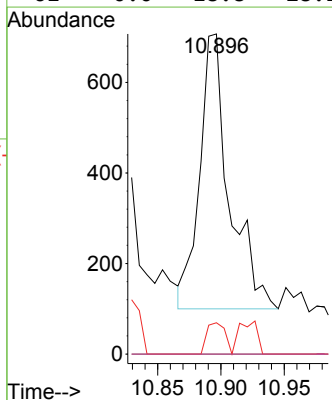
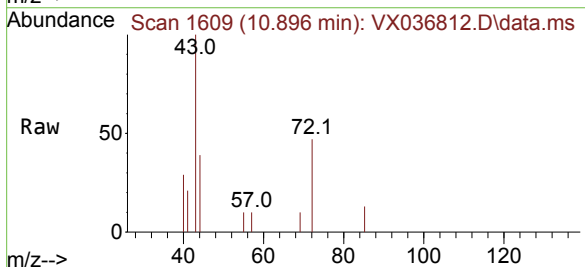
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 ZHC#10

Tgt Ion:152 Resp: 109286  
 Ion Ratio Lower Upper  
 152 100  
 115 61.6 43.3 129.9  
 150 157.7 0.0 345.0

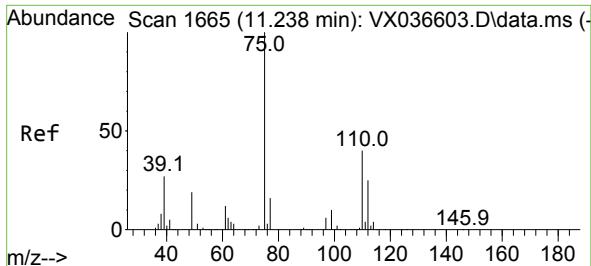


#74  
 N-ethyl acetate  
 Concen: 0.235 ug/l  
 RT: 10.896 min Scan# 1609  
 Delta R.T. 0.055 min  
 Lab File: VX036812.D  
 Acq: 04 Aug 2023 15:55

Tgt Ion: 43 Resp: 991  
 Ion Ratio Lower Upper  
 43 100  
 70 0.0 32.9 49.3#  
 55 7.1 19.3 28.9#  
 61 0.0 18.8 28.2#



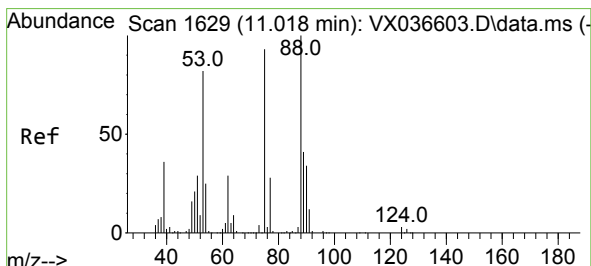
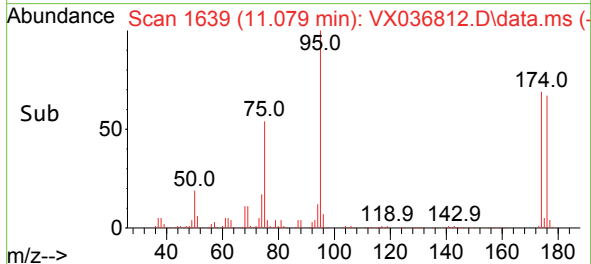
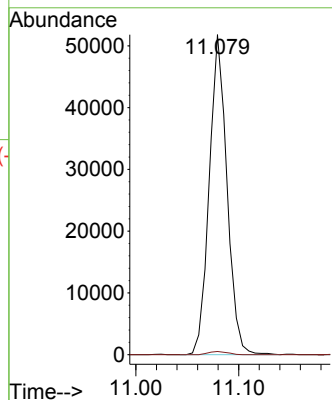
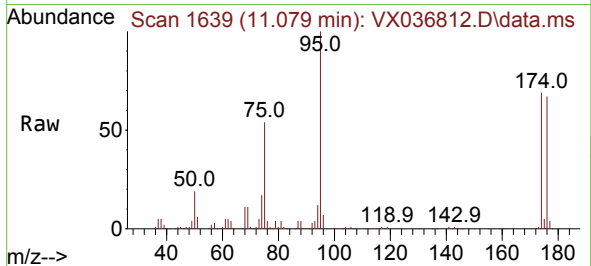




#76  
1,2,3-Trichloropropane  
Concen: 24.198 ug/l  
RT: 11.079 min Scan# 1639  
Delta R.T. -0.158 min  
Lab File: VX036812.D  
Acq: 04 Aug 2023 15:55

Instrument :  
MSVOA\_X  
ClientSampleId :  
ZHC#10

Tgt Ion: 75 Resp: 62202  
Ion Ratio Lower Upper  
75 100  
77 1.1 19.1 57.5#



#81  
trans-1,4-Dichloro-2-butene  
Concen: 54.847 ug/l  
RT: 11.079 min Scan# 1639  
Delta R.T. 0.061 min  
Lab File: VX036812.D  
Acq: 04 Aug 2023 15:55

Tgt Ion: 75 Resp: 62202  
Ion Ratio Lower Upper  
75 100  
53 0.0 90.5 135.7#  
89 0.0 36.9 55.3#

