

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_U\Data\U091923\  
 Data File : VU055408.D  
 Acq On : 19 Sep 2023 22:27  
 Operator : MD/SY  
 Sample : 04398-05  
 Misc : 25.0mL/MSVOA\_U/WATER  
 ALS Vial : 27 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :

Quant Time: Sep 20 06:10:40 2023  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_U\Method\SFAMUTR091923WMA.M  
 Quant Title : TRACE VOA SFAM1.0  
 QLast Update : Wed Sep 20 06:06:30 2023  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|--------|-------|----------|----------|--------|----------|
| -----                         |        |       |          |          |        |          |
| Internal Standards            |        |       |          |          |        |          |
| 1) 1,4-Difluorobenzene        | 6.248  | 114   | 173048   | 5.000    | ug/L   | 0.00     |
| 28) Chlorobenzene-d5          | 9.415  | 117   | 174864   | 5.000    | ug/L   | 0.00     |
| 58) 1,4-Dichlorobenzene-d4    | 11.811 | 152   | 79567    | 5.000    | ug/L   | 0.00     |
| System Monitoring Compounds   |        |       |          |          |        |          |
| 4) Vinyl Chloride-d3          | 1.596  | 65    | 24605    | 1.407    | ug/L   | 0.00     |
| Spiked Amount                 | 5.000  | Range | 40 - 130 | Recovery | =      | 28.200%# |
| 7) Chloroethane-d5            | 1.911  | 69    | 38571    | 2.502    | ug/L   | 0.00     |
| Spiked Amount                 | 5.000  | Range | 65 - 130 | Recovery | =      | 50.000%# |
| 11) 1,1-Dichloroethene-d2     | 2.563  | 65    | 14062    | 1.953    | ug/L   | 0.00     |
| Spiked Amount                 | 5.000  | Range | 60 - 125 | Recovery | =      | 39.000%# |
| 20) 2-Butanone-d5             | 4.634  | 46    | 168442   | 53.320   | ug/L   | 0.00     |
| Spiked Amount                 | 50.000 | Range | 40 - 130 | Recovery | =      | 106.640% |
| 24) Chloroform-d              | 5.058  | 84    | 105368   | 3.331    | ug/L   | 0.00     |
| Spiked Amount                 | 5.000  | Range | 70 - 125 | Recovery | =      | 66.600%# |
| 26) 1,2-Dichloroethane-d4     | 5.701  | 65    | 60854    | 3.999    | ug/L   | 0.00     |
| Spiked Amount                 | 5.000  | Range | 70 - 130 | Recovery | =      | 80.000%  |
| 32) Benzene-d6                | 5.724  | 84    | 177905   | 2.909    | ug/L   | 0.00     |
| Spiked Amount                 | 5.000  | Range | 70 - 125 | Recovery | =      | 58.200%# |
| 36) 1,2-Dichloropropane-d6    | 6.689  | 67    | 69422    | 3.799    | ug/L   | 0.00     |
| Spiked Amount                 | 5.000  | Range | 60 - 140 | Recovery | =      | 76.000%  |
| 41) Toluene-d8                | 7.898  | 98    | 134791   | 2.418    | ug/L   | 0.00     |
| Spiked Amount                 | 5.000  | Range | 70 - 130 | Recovery | =      | 48.400%# |
| 43) trans-1,3-Dichloroprop... | 8.180  | 79    | 9821     | 1.531    | ug/L   | 0.00     |
| Spiked Amount                 | 5.000  | Range | 55 - 130 | Recovery | =      | 30.600%# |
| 46) 2-Hexanone-d5             | 8.631  | 63    | 80790    | 41.416   | ug/L   | 0.00     |
| Spiked Amount                 | 50.000 | Range | 45 - 130 | Recovery | =      | 82.840%  |
| 56) 1,1,2,2-Tetrachloroeth... | 10.753 | 84    | 59158    | 4.319    | ug/L   | 0.00     |
| Spiked Amount                 | 5.000  | Range | 65 - 120 | Recovery | =      | 86.400%  |
| 66) 1,2-Dichlorobenzene-d4    | 12.193 | 152   | 53986    | 3.362    | ug/L   | 0.00     |
| Spiked Amount                 | 5.000  | Range | 80 - 120 | Recovery | =      | 67.200%# |
| Target Compounds              |        |       |          |          |        |          |
|                               |        |       |          |          | Qvalue |          |
| 3) Chloromethane              | 1.515  | 50    | 2918     | 0.197    | ug/L   | 96       |
| 5) Vinyl chloride             | 1.602  | 62    | 172026   | 10.758   | ug/L   | 99       |
| 12) 1,1-Dichloroethene        | 2.576  | 96    | 22714    | 1.877    | ug/L   | 91       |
| 16) Methylene chloride        | 3.042  | 84    | 17468    | 1.205    | ug/L   | 97       |
| 17) Methyl tert-butyl Ether   | 3.361  | 73    | 11717    | 0.446    | ug/L # | 91       |
| 18) trans-1,2-Dichloroethene  | 3.348  | 96    | 1753     | 0.144    | ug/L   | 92       |
| 19) 1,1-Dichloroethane        | 3.866  | 63    | 19476    | 0.864    | ug/L   | 93       |
| 22) cis-1,2-Dichloroethene    | 4.663  | 96    | 632637   | 44.745   | ug/L   | 98       |
| 27) 1,2-Dichloroethane        | 5.801  | 62    | 3237     | 0.221    | ug/L # | 76       |
| 34) Trichloroethene           | 6.537  | 95    | 492144   | 34.569   | ug/L   | 99       |
| 35) Methylcyclohexane         | 6.689  | 83    | 15993    | 0.780    | ug/L # | 20       |
| 37) 1,2-Dichloropropane       | 6.689  | 63    | 7319     | 0.556    | ug/L # | 91       |
| 47) Tetrachloroethene         | 8.553  | 164   | 5820     | 0.570    | ug/L   | 97       |
| 48) 2-Hexanone                | 8.682  | 43    | 25377    | 5.484    | ug/L # | 85       |
| 49) Dibromochloromethane      | 8.553  | 129   | 5473     | 0.566    | ug/L # | 9        |
| 51) Chlorobenzene             | 9.444  | 112   | 6188     | 0.180    | ug/L   | 85       |
| 61) 1,2,3-Trichloropropane    | 11.746 | 75    | 1029     | 0.166    | ug/L # | 39       |
| 64) 1,3-Dichlorobenzene       | 11.749 | 146   | 2514     | 0.115    | ug/L   | 98       |
| 65) 1,4-Dichlorobenzene       | 11.836 | 146   | 8624     | 0.393    | ug/L   | 91       |

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Sample : 04398-05  
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ALS Vial : 27 Sample Multiplier: 1

Instrument :  
MSVOA\_U  
ClientSampleId :

Quant Time: Sep 20 06:10:40 2023  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_U\Method\SFAMUTR091923WMA.M  
Quant Title : TRACE VOA SFAM1.0  
QLast Update : Wed Sep 20 06:06:30 2023  
Response via : Initial Calibration

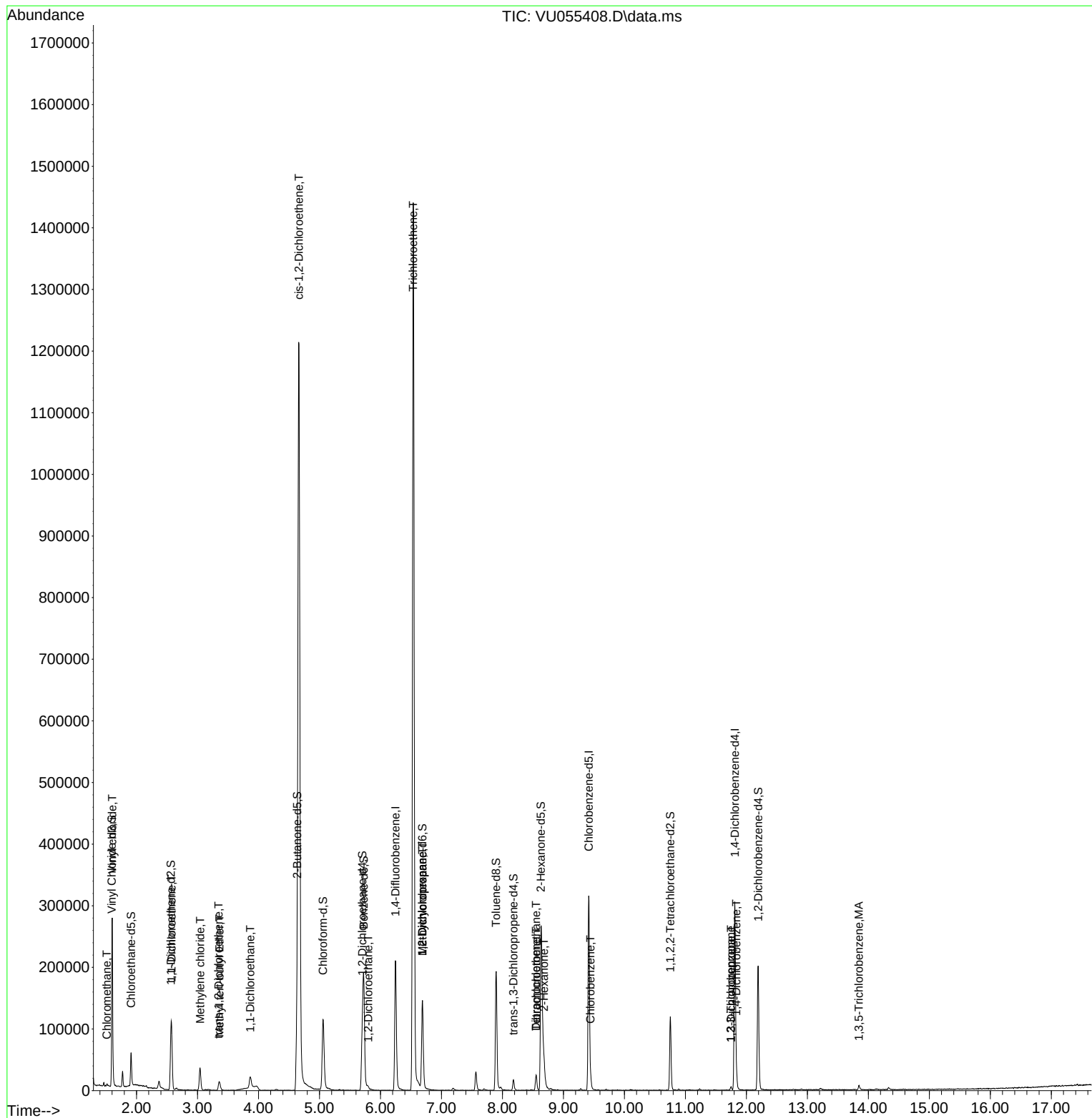
| Compound                   | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|--------|------|----------|-------|-------|----------|
| 69) 1,3,5-Trichlorobenzene | 13.846 | 180  | 2634     | 0.174 | ug/L  | # 95     |

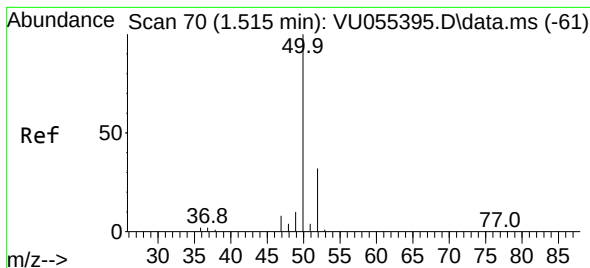
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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QLast Update : Wed Sep 20 06:06:30 2023  
Response via : Initial Calibration





#3

Chloromethane

Concen: 0.197 ug/L

RT: 1.515 min Scan# 70

Delta R.T. -0.000 min

Lab File: VU055408.D

Acq: 19 Sep 2023 22:27

Instrument :

MSVOA\_U

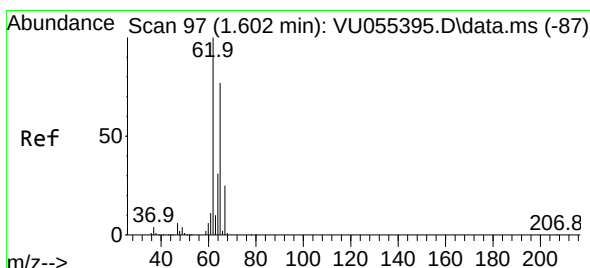
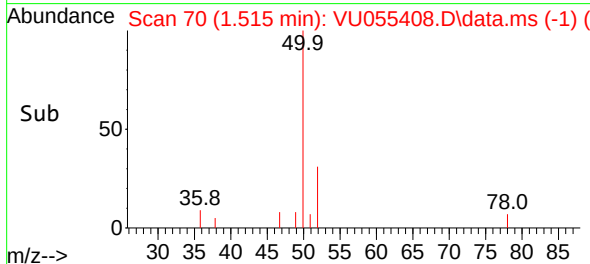
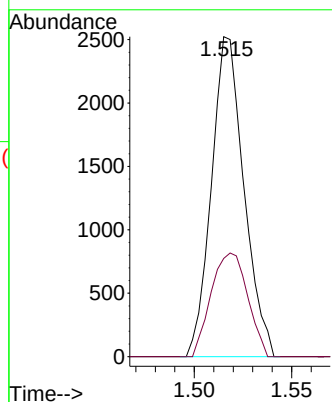
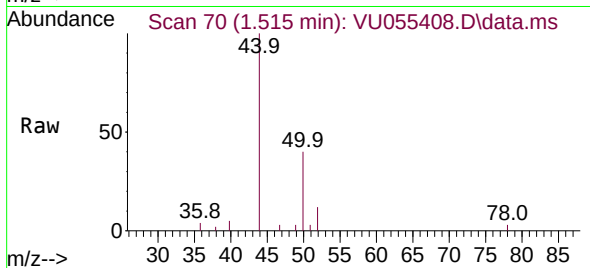
ClientSampleId :

Tgt Ion: 50 Resp: 2918

Ion Ratio Lower Upper

50 100

52 30.7 22.9 42.5



#5

Vinyl chloride

Concen: 10.758 ug/L

RT: 1.602 min Scan# 97

Delta R.T. -0.000 min

Lab File: VU055408.D

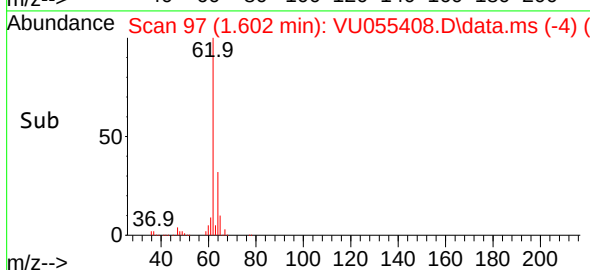
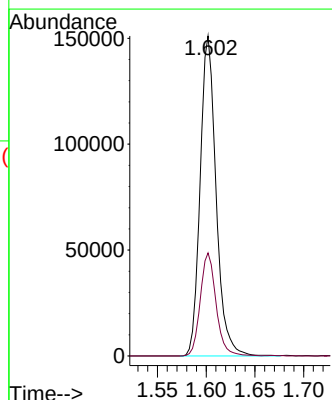
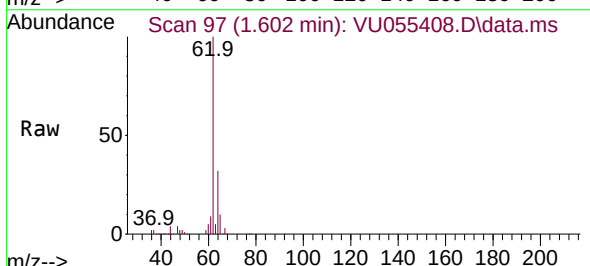
Acq: 19 Sep 2023 22:27

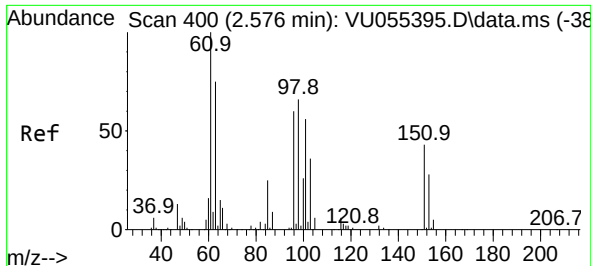
Tgt Ion: 62 Resp: 172026

Ion Ratio Lower Upper

62 100

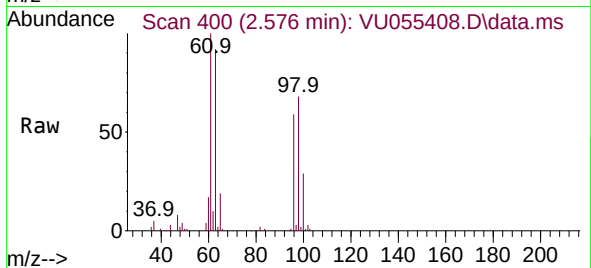
64 32.2 22.3 41.5





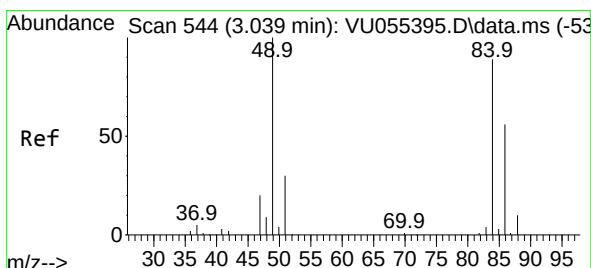
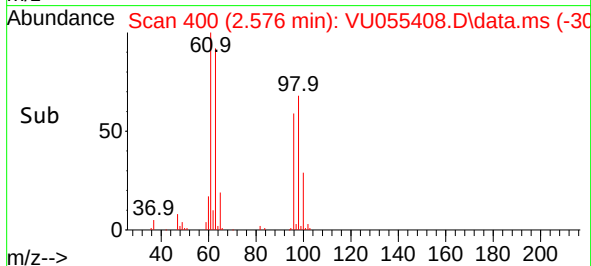
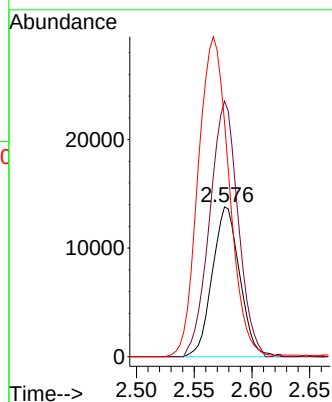
#12  
1,1-Dichloroethene  
Concen: 1.877 ug/L  
RT: 2.576 min Scan# 400  
Delta R.T. -0.000 min  
Lab File: VU055408.D  
Acq: 19 Sep 2023 22:27

Instrument :  
MSVOA\_U  
ClientSampleId :



Tgt Ion: 96 Resp: 22714

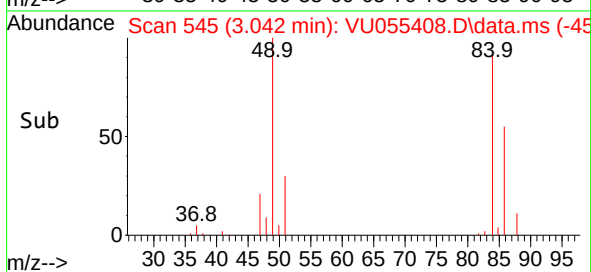
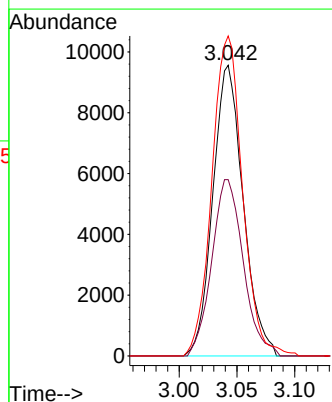
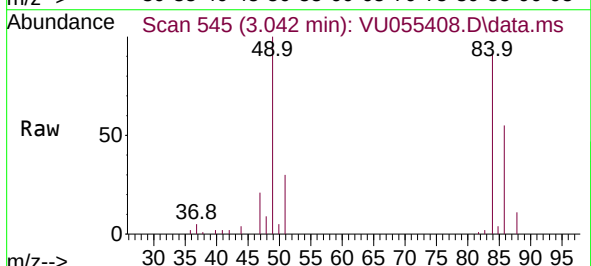
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 96  | 100   |       |       |
| 61  | 170.7 | 114.5 | 212.7 |
| 63  | 156.8 | 98.3  | 182.5 |

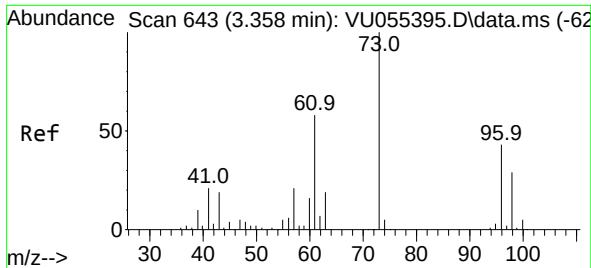


#16  
Methylene chloride  
Concen: 1.205 ug/L  
RT: 3.042 min Scan# 545  
Delta R.T. 0.003 min  
Lab File: VU055408.D  
Acq: 19 Sep 2023 22:27

Tgt Ion: 84 Resp: 17468

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 84  | 100   |       |       |
| 86  | 60.6  | 44.9  | 83.3  |
| 49  | 110.1 | 78.8  | 146.3 |

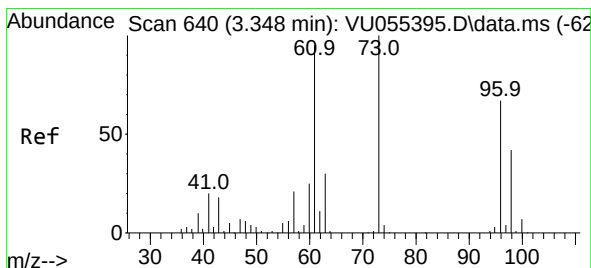
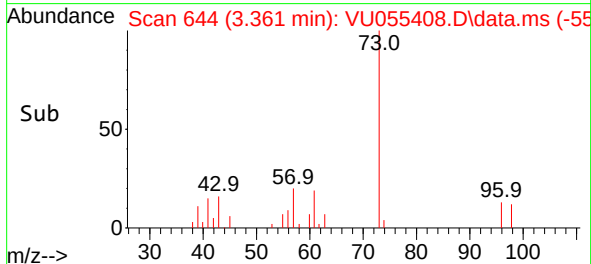
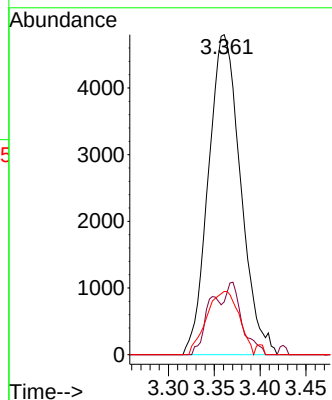
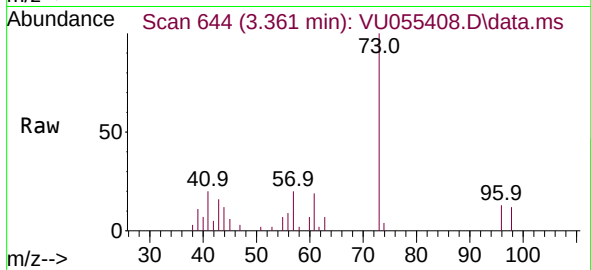




#17  
Methyl tert-butyl Ether  
Concen: 0.446 ug/L  
RT: 3.361 min Scan# 643  
Delta R.T. 0.003 min  
Lab File: VU055408.D  
Acq: 19 Sep 2023 22:27

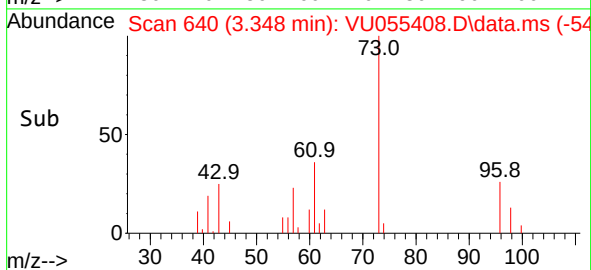
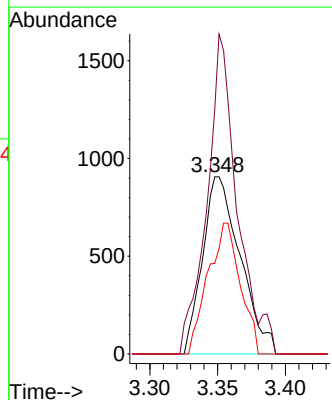
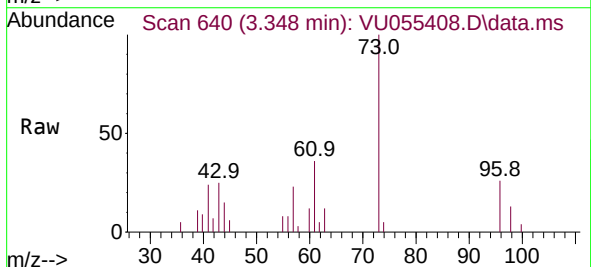
Instrument :  
MSVOA\_U  
ClientSampleId :

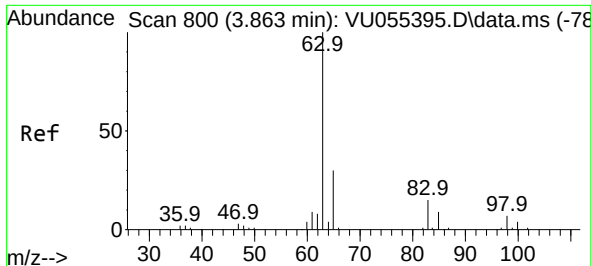
Tgt Ion: 73 Resp: 11717  
Ion Ratio Lower Upper  
73 100  
43 12.2 14.9 22.3#  
57 19.9 17.3 25.9



#18  
trans-1,2-Dichloroethene  
Concen: 0.144 ug/L  
RT: 3.348 min Scan# 640  
Delta R.T. -0.000 min  
Lab File: VU055408.D  
Acq: 19 Sep 2023 22:27

Tgt Ion: 96 Resp: 1753  
Ion Ratio Lower Upper  
96 100  
61 138.1 94.6 175.6  
98 51.1 45.7 84.9





#19

1,1-Dichloroethane

Concen: 0.864 ug/L

RT: 3.866 min Scan# 800

Delta R.T. 0.003 min

Lab File: VU055408.D

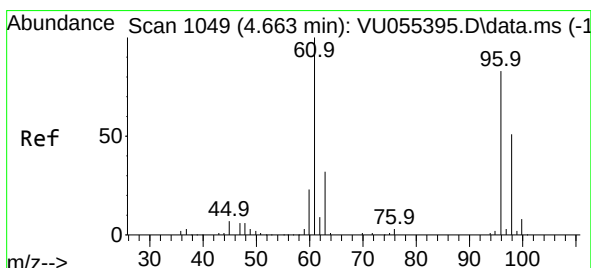
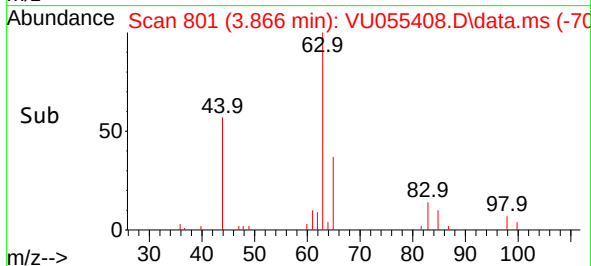
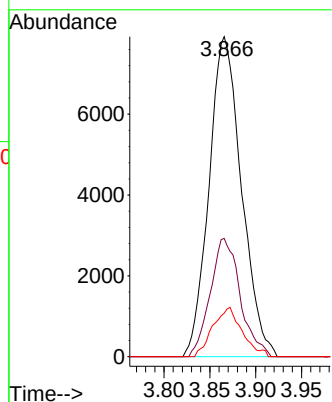
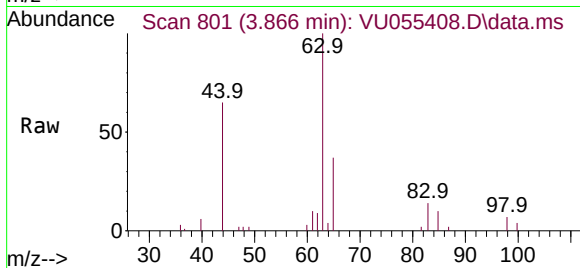
Acq: 19 Sep 2023 22:27

Instrument :

MSVOA\_U

ClientSampleId :

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 63    | Resp: | 19476 |
| Ion Ratio | Lower | Upper |       |
| 63        | 100   |       |       |
| 65        | 36.9  | 22.0  | 41.0  |
| 83        | 13.6  | 10.1  | 18.9  |



#22

cis-1,2-Dichloroethene

Concen: 44.745 ug/L

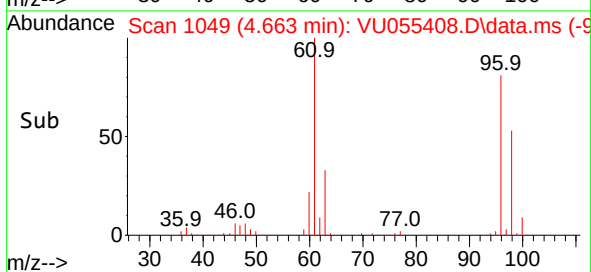
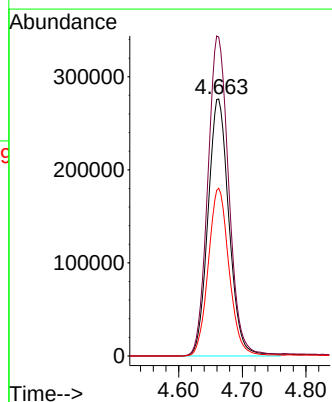
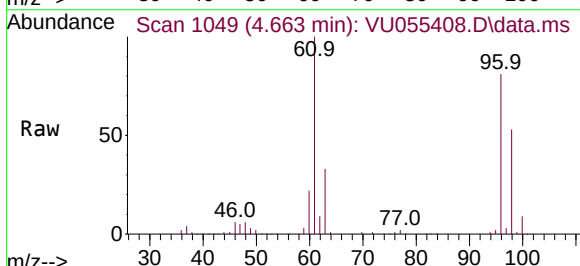
RT: 4.663 min Scan# 1049

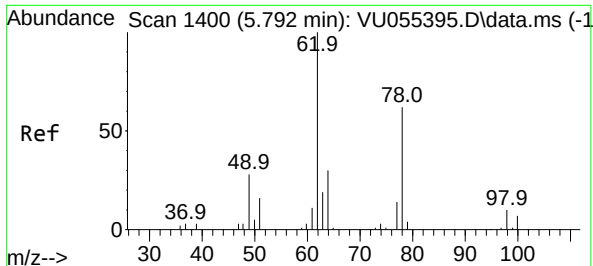
Delta R.T. -0.000 min

Lab File: VU055408.D

Acq: 19 Sep 2023 22:27

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 96    | Resp: | 632637 |
| Ion Ratio | Lower | Upper |        |
| 96        | 100   |       |        |
| 61        | 124.1 | 87.8  | 163.2  |
| 98        | 65.3  | 44.4  | 82.4   |

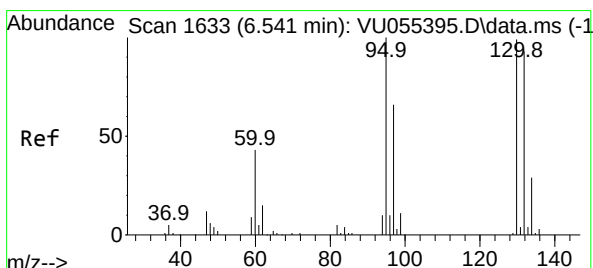
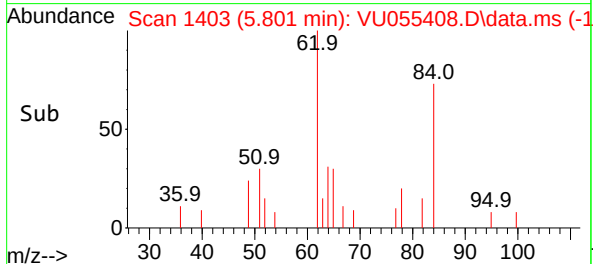
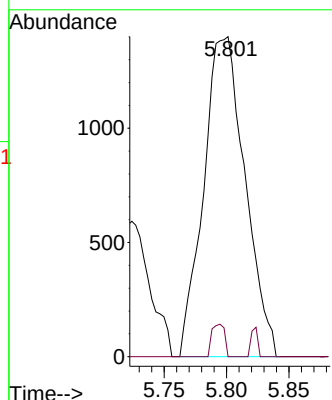
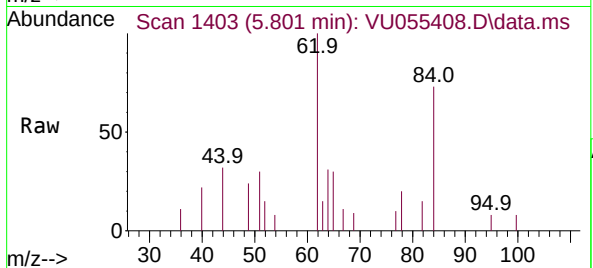




#27  
1,2-Dichloroethane  
Concen: 0.221 ug/L  
RT: 5.801 min Scan# 1403  
Delta R.T. 0.009 min  
Lab File: VU055408.D  
Acq: 19 Sep 2023 22:27

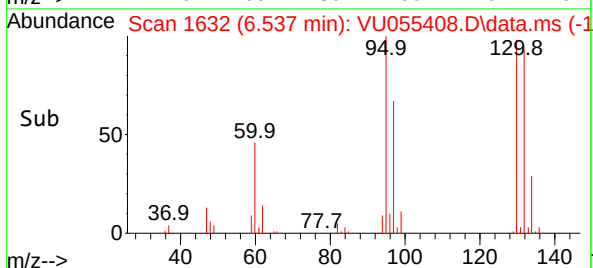
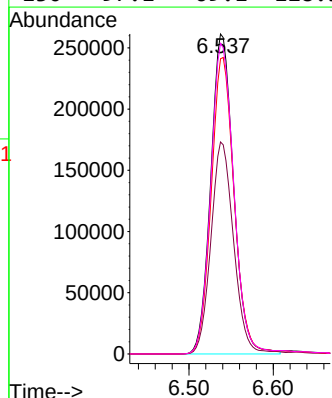
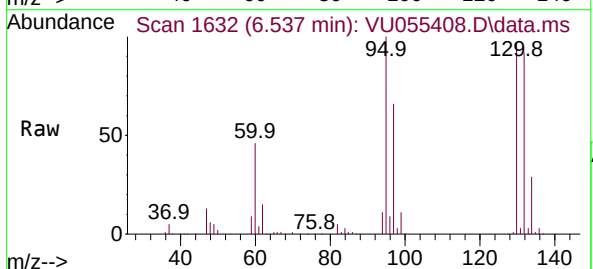
Instrument :  
MSVOA\_U  
ClientSampleId :

Tgt Ion: 62 Resp: 3237  
Ion Ratio Lower Upper  
62 100  
98 0.0 7.0 10.4#

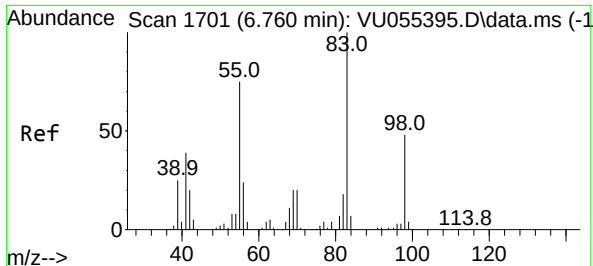


#34  
Trichloroethene  
Concen: 34.569 ug/L  
RT: 6.537 min Scan# 1632  
Delta R.T. -0.003 min  
Lab File: VU055408.D  
Acq: 19 Sep 2023 22:27

Tgt Ion: 95 Resp: 492144  
Ion Ratio Lower Upper  
95 100  
97 66.2 45.4 84.2  
132 92.3 65.2 121.2  
130 97.1 69.1 128.3



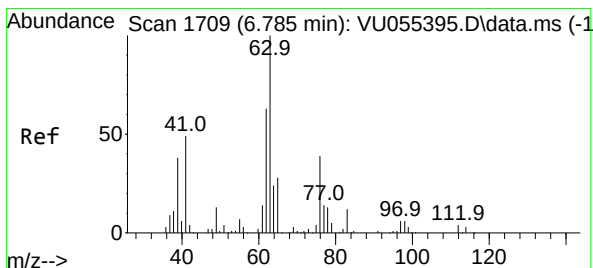
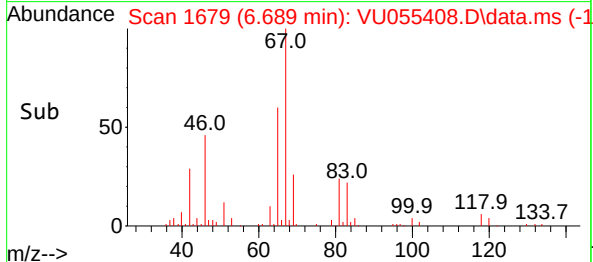
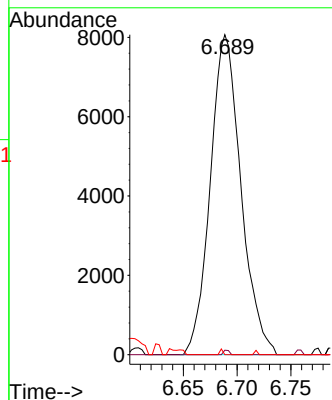
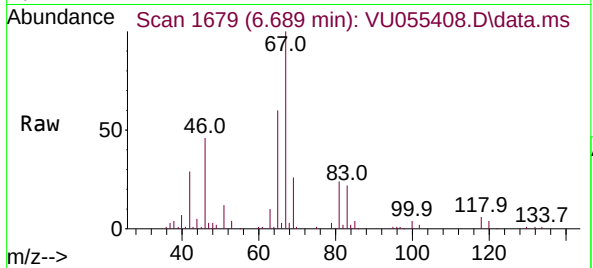




#35  
Methylcyclohexane  
Concen: 0.780 ug/L  
RT: 6.689 min Scan# 1679  
Delta R.T. -0.071 min  
Lab File: VU055408.D  
Acq: 19 Sep 2023 22:27

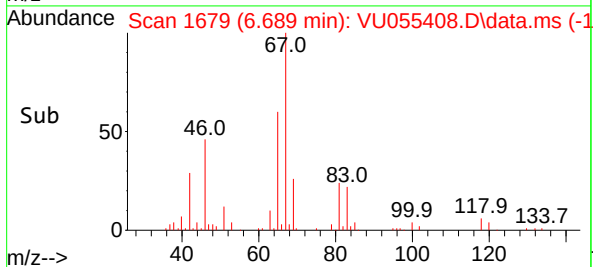
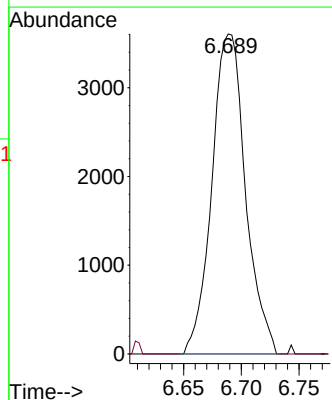
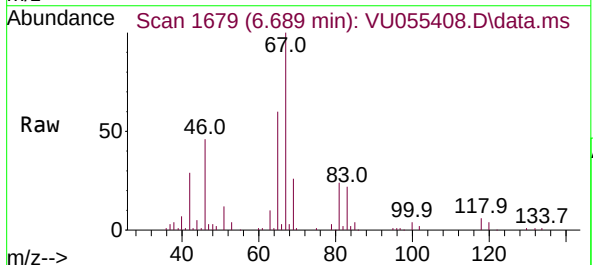
Instrument :  
MSVOA\_U  
ClientSampleId :

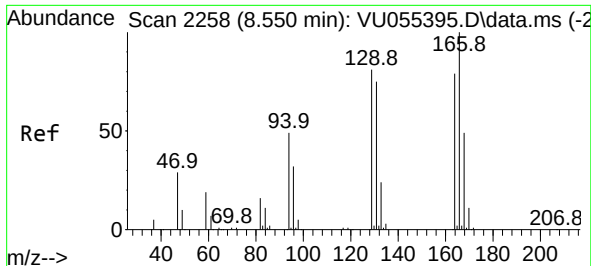
Tgt Ion: 83 Resp: 15993  
Ion Ratio Lower Upper  
83 100  
55 0.3 59.1 88.7#  
98 0.0 36.3 54.5#



#37  
1,2-Dichloropropane  
Concen: 0.556 ug/L  
RT: 6.689 min Scan# 1679  
Delta R.T. -0.097 min  
Lab File: VU055408.D  
Acq: 19 Sep 2023 22:27

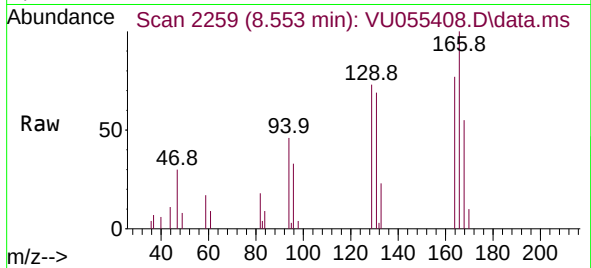
Tgt Ion: 63 Resp: 7319  
Ion Ratio Lower Upper  
63 100  
112 0.7 3.0 4.6#



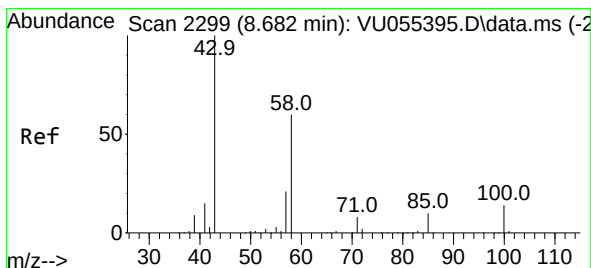
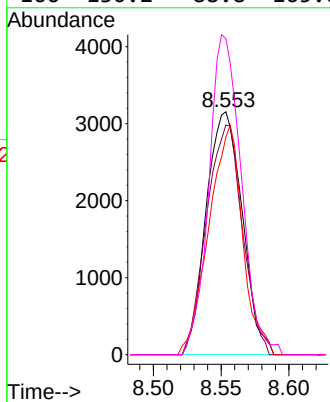
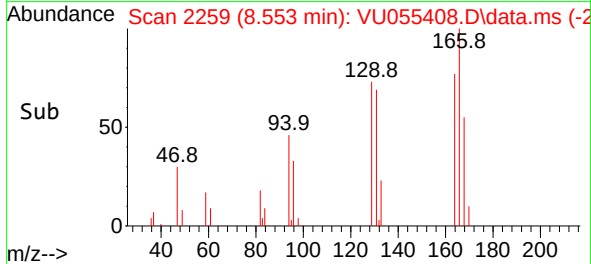


#47  
Tetrachloroethene  
Concen: 0.570 ug/L  
RT: 8.553 min Scan# 21  
Delta R.T. 0.003 min  
Lab File: VU055408.D  
Acq: 19 Sep 2023 22:27

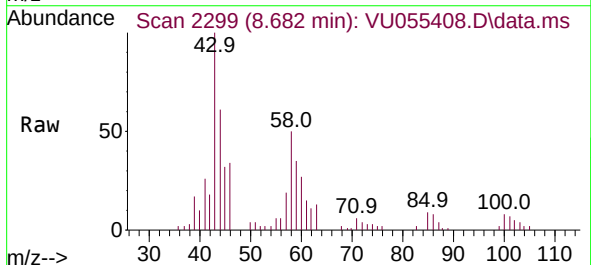
Instrument :  
MSVOA\_U  
ClientSampleId :



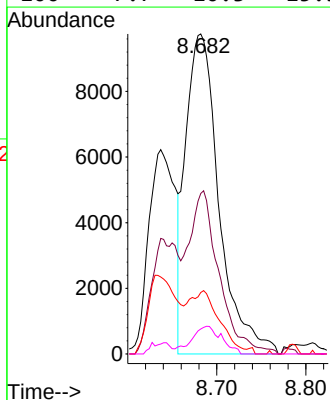
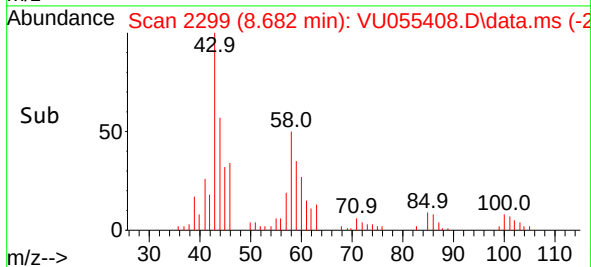
Tgt Ion:164 Resp: 5820  
Ion Ratio Lower Upper  
164 100  
129 94.6 67.4 125.2  
131 89.6 66.4 123.2  
166 130.2 88.8 165.0

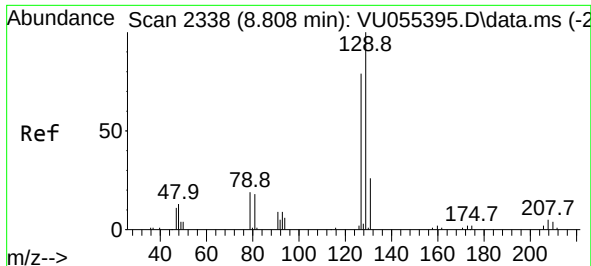


#48  
2-Hexanone  
Concen: 5.484 ug/L  
RT: 8.682 min Scan# 2299  
Delta R.T. -0.000 min  
Lab File: VU055408.D  
Acq: 19 Sep 2023 22:27



Tgt Ion: 43 Resp: 25377  
Ion Ratio Lower Upper  
43 100  
58 47.0 48.5 72.7#  
57 18.4 17.0 25.4  
100 7.7 10.3 15.5#





#49

Dibromochloromethane

Concen: 0.566 ug/L

RT: 8.553 min Scan# 21

Delta R.T. -0.254 min

Lab File: VU055408.D

Acq: 19 Sep 2023 22:27

Instrument :

MSVOA\_U

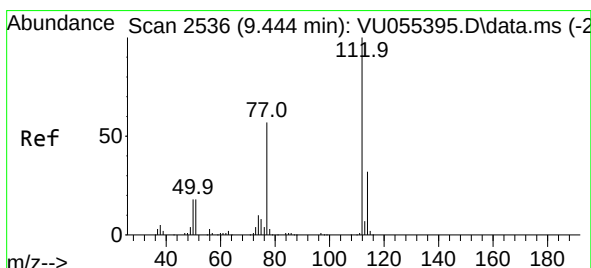
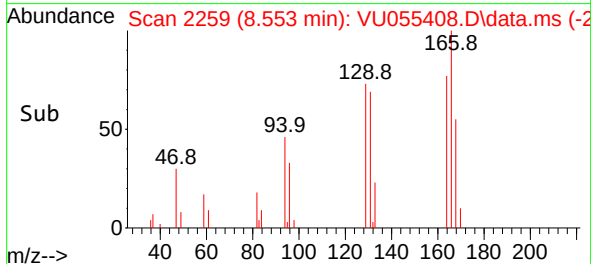
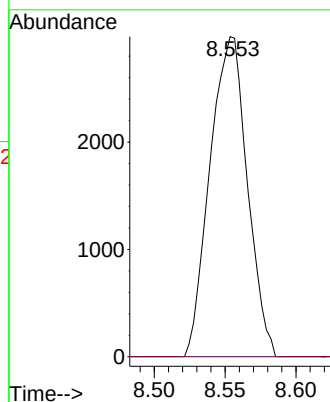
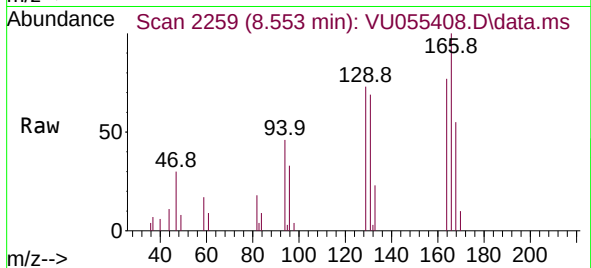
ClientSampleId :

Tgt Ion:129 Resp: 5473

Ion Ratio Lower Upper

129 100

127 0.0 56.8 105.6#



#51

Chlorobenzene

Concen: 0.180 ug/L

RT: 9.444 min Scan# 2536

Delta R.T. -0.000 min

Lab File: VU055408.D

Acq: 19 Sep 2023 22:27

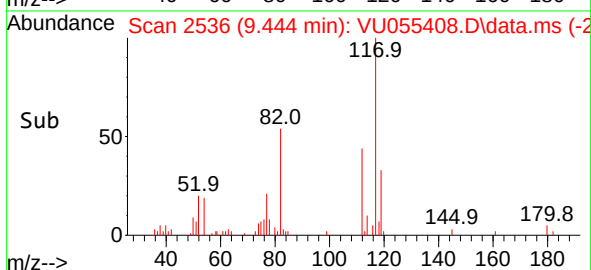
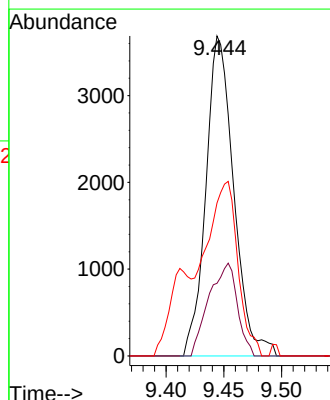
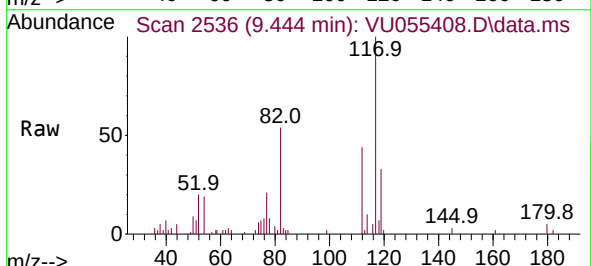
Tgt Ion:112 Resp: 6188

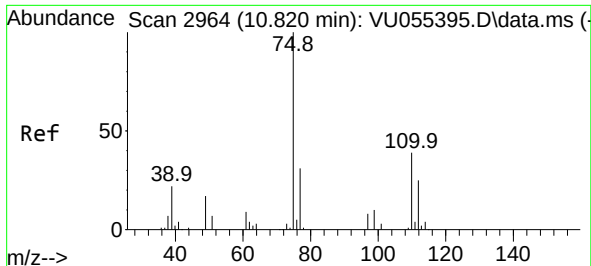
Ion Ratio Lower Upper

112 100

114 22.7 22.0 40.8

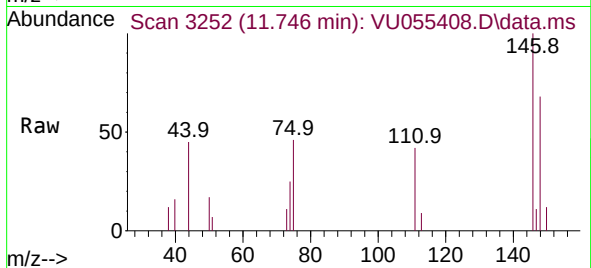
77 47.8 46.9 70.3



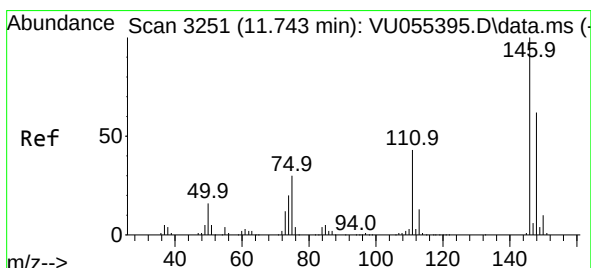
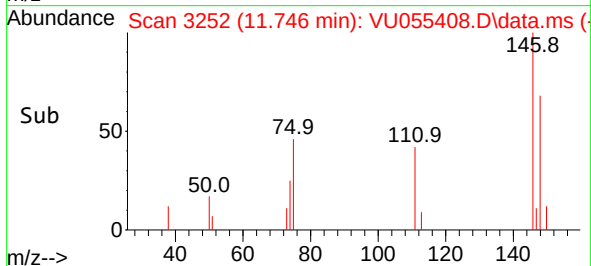
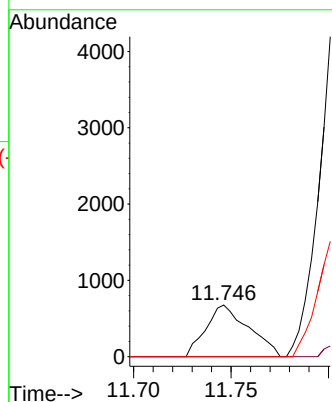


#61  
1,2,3-Trichloropropane  
Concen: 0.166 ug/L  
RT: 11.746 min Scan# 31  
Delta R.T. 0.926 min  
Lab File: VU055408.D  
Acq: 19 Sep 2023 22:27

Instrument :  
MSVOA\_U  
ClientSampleId :

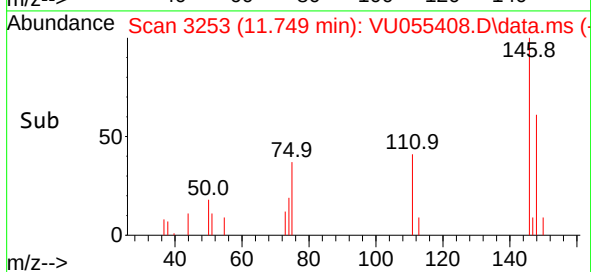
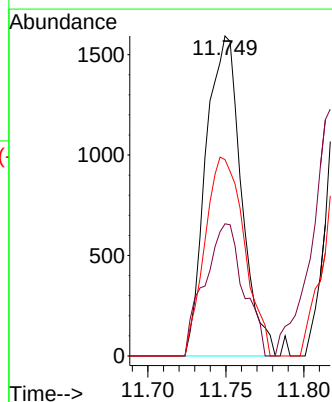
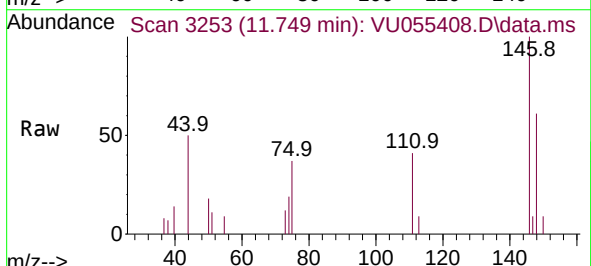


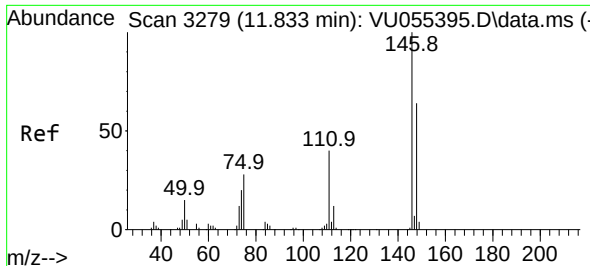
Tgt Ion: 75 Resp: 1029  
Ion Ratio Lower Upper  
75 100  
110 0.0 30.6 45.8#  
77 0.0 26.7 40.1#



#64  
1,3-Dichlorobenzene  
Concen: 0.115 ug/L  
RT: 11.749 min Scan# 3253  
Delta R.T. 0.006 min  
Lab File: VU055408.D  
Acq: 19 Sep 2023 22:27

Tgt Ion:146 Resp: 2514  
Ion Ratio Lower Upper  
146 100  
111 41.3 28.8 53.6  
148 61.3 44.6 82.8





#65

1,4-Dichlorobenzene

Concen: 0.393 ug/L

RT: 11.836 min Scan# 31

Delta R.T. 0.003 min

Lab File: VU055408.D

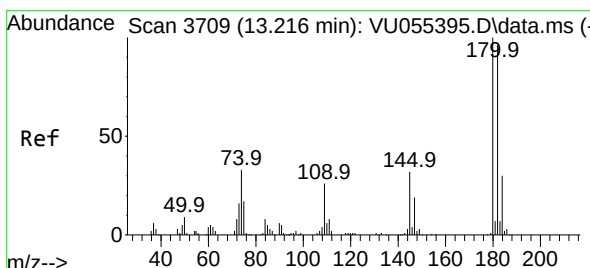
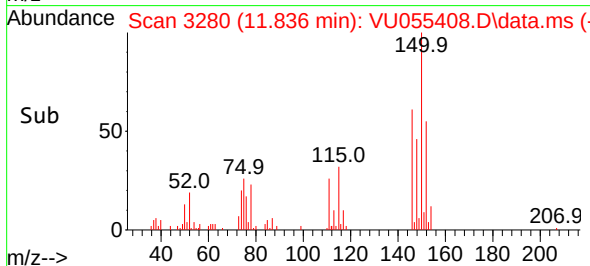
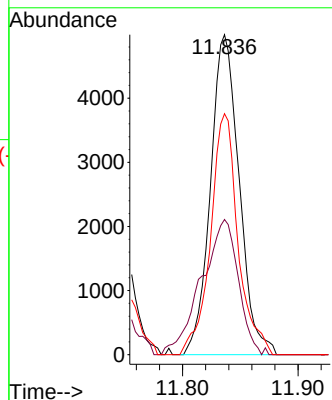
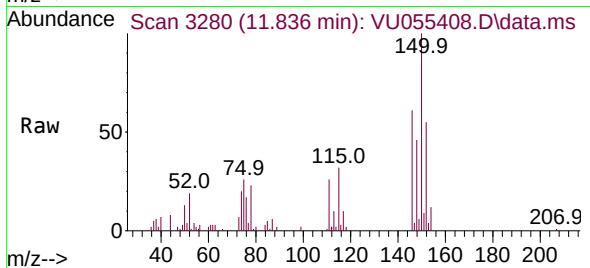
Acq: 19 Sep 2023 22:27

Instrument :

MSVOA\_U

ClientSampleId :

|             |       |           |
|-------------|-------|-----------|
| Tgt Ion:146 | Resp: | 8624      |
| Ion Ratio   | Lower | Upper     |
| 146         | 100   |           |
| 111         | 42.2  | 29.0 53.8 |
| 148         | 75.3  | 45.4 84.4 |



#69

1,3,5-Trichlorobenzene

Concen: 0.174 ug/L

RT: 13.846 min Scan# 3905

Delta R.T. 0.630 min

Lab File: VU055408.D

Acq: 19 Sep 2023 22:27

|             |       |            |
|-------------|-------|------------|
| Tgt Ion:180 | Resp: | 2634       |
| Ion Ratio   | Lower | Upper      |
| 180         | 100   |            |
| 182         | 95.3  | 77.1 115.7 |
| 184         | 25.8  | 24.0 36.0  |
| 145         | 22.4  | 25.2 37.8# |

