

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_U\Data\VU100522\  
 Data File : VU051145.D  
 Acq On : 05 Oct 2022 23:06  
 Operator : JC/MD  
 Sample : N4889-04  
 Misc : 5.0mL/MSVOA\_U/WATER  
 ALS Vial : 35 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :

Quant Time: Oct 06 06:31:35 2022  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_U\Method\SFAMULM092922WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Thu Oct 06 06:20:30 2022  
 Response via : Initial Calibration

| Compound                      | R.T.    | QIon  | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|---------|-------|----------|----------|--------|----------|
| -----                         |         |       |          |          |        |          |
| Internal Standards            |         |       |          |          |        |          |
| 1) 1,4-Difluorobenzene        | 6.253   | 114   | 508593   | 50.000   | ug/L   | 0.00     |
| 28) Chlorobenzene-d5          | 9.430   | 117   | 547416   | 50.000   | ug/L   | 0.01     |
| 58) 1,4-Dichlorobenzene-d4    | 11.812  | 152   | 290464   | 50.000   | ug/L   | 0.00     |
| System Monitoring Compounds   |         |       |          |          |        |          |
| 4) Vinyl Chloride-d3          | 1.597   | 65    | 142058   | 27.561   | ug/L   | 0.00     |
| Spiked Amount                 | 50.000  | Range | 60 - 135 | Recovery | =      | 55.120%# |
| 7) Chloroethane-d5            | 1.900   | 69    | 137116   | 28.638   | ug/L   | 0.00     |
| Spiked Amount                 | 50.000  | Range | 70 - 130 | Recovery | =      | 57.280%# |
| 11) 1,1-Dichloroethene-d2     | 2.562   | 63    | 203599   | 26.741   | ug/L   | 0.00     |
| Spiked Amount                 | 50.000  | Range | 60 - 125 | Recovery | =      | 53.480%# |
| 21) 2-Butanone-d5             | 4.620   | 46    | 279725   | 83.674   | ug/L   | 0.00     |
| Spiked Amount                 | 100.000 | Range | 40 - 130 | Recovery | =      | 83.670%  |
| 24) Chloroform-d              | 5.060   | 84    | 314756   | 37.903   | ug/L   | 0.00     |
| Spiked Amount                 | 50.000  | Range | 70 - 125 | Recovery | =      | 75.800%  |
| 26) 1,2-Dichloroethane-d4     | 5.700   | 65    | 205590   | 39.998   | ug/L   | 0.00     |
| Spiked Amount                 | 50.000  | Range | 70 - 125 | Recovery | =      | 80.000%  |
| 32) Benzene-d6                | 5.726   | 84    | 678688   | 42.338   | ug/L   | 0.00     |
| Spiked Amount                 | 50.000  | Range | 70 - 125 | Recovery | =      | 84.680%  |
| 36) 1,2-Dichloropropane-d6    | 6.697   | 67    | 227550   | 43.745   | ug/L   | 0.00     |
| Spiked Amount                 | 50.000  | Range | 70 - 120 | Recovery | =      | 87.500%  |
| 41) Toluene-d8                | 7.816   | 98    | 68       | 0.005    | ug/L   | -0.08    |
| Spiked Amount                 | 50.000  | Range | 80 - 120 | Recovery | =      | 0.000%#  |
| 43) trans-1,3-Dichloroprop... | 8.230   | 79    | 103201   | 41.595   | ug/L   | 0.05     |
| Spiked Amount                 | 50.000  | Range | 60 - 125 | Recovery | =      | 83.200%  |
| 47) 2-Hexanone-d5             | 8.645   | 63    | 186831   | 88.951   | ug/L   | 0.01     |
| Spiked Amount                 | 100.000 | Range | 45 - 130 | Recovery | =      | 88.950%  |
| 56) 1,1,2,2-Tetrachloroeth... | 10.758  | 84    | 379435   | 41.737   | ug/L   | 0.00     |
| Spiked Amount                 | 50.000  | Range | 65 - 120 | Recovery | =      | 83.480%  |
| 66) 1,2-Dichlorobenzene-d4    | 12.192  | 152   | 276031   | 44.484   | ug/L   | 0.00     |
| Spiked Amount                 | 50.000  | Range | 80 - 120 | Recovery | =      | 88.960%  |
| Target Compounds              |         |       |          |          |        |          |
|                               |         |       |          |          | Qvalue |          |
| 5) Vinyl chloride             | 1.601   | 62    | 28728    | 5.372    | ug/L # | 19       |
| 10) 1,1,2-Trichloro-1,2,2-... | 2.568   | 101   | 3472     | 0.894    | ug/L # | 56       |
| 12) 1,1-Dichloroethene        | 2.575   | 96    | 28604    | 7.887    | ug/L # | 15       |
| 13) Acetone                   | 2.626   | 43    | 10452    | 3.915    | ug/L   | 95       |
| 15) Methyl Acetate            | 2.948   | 43    | 69888    | 14.340   | ug/L   | 97       |
| 19) 1,1-Dichloroethane        | 3.864   | 63    | 646982   | 88.272   | ug/L   | 99       |
| 20) cis-1,2-Dichloroethene    | 4.665   | 96    | 1176915  | 273.180  | ug/L   | 96       |
| 22) 2-Butanone                | 4.703   | 43    | 171067   | 46.381   | ug/L   | 99       |
| 29) Cyclohexane               | 5.385   | 56    | 654703   | 122.829  | ug/L   | 94       |
| 30) 1,1,1-Trichloroethane     | 5.314   | 97    | 1051556  | 163.794  | ug/L   | 99       |
| 34) Trichloroethene           | 6.546   | 95    | 31305    | 7.242    | ug/L   | 92       |
| 35) Methylcyclohexane         | 6.767   | 83    | 3317914  | 563.960  | ug/L   | 96       |
| 37) 1,2-Dichloropropane       | 6.767   | 63    | 29553    | 6.576    | ug/L   | 98       |
| 38) Bromodichloromethane      | 7.076   | 83    | 3578     | 0.597    | ug/L # | 87       |
| 44) trans-1,3-Dichloropropene | 8.234   | 75    | 4448     | 0.691    | ug/L # | 4        |
| 45) 1,1,2-Trichloroethane     | 8.411   | 97    | 73336    | 15.065   | ug/L # | 18       |
| 46) Tetrachloroethene         | 8.578   | 164   | 7794     | 2.379    | ug/L   | 93       |
| 55) Styrene                   | 10.124  | 104   | 2033070  | 165.280  | ug/L # | 1        |
| 61) Isopropylbenzene          | 10.488  | 105   | 1750442  | 92.769   | ug/L   | 99       |

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 ALS Vial : 35 Sample Multiplier: 1

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 MSVOA\_U  
 ClientSampleId :

Quant Time: Oct 06 06:31:35 2022  
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 Quant Title : VOC Analysis  
 QLast Update : Thu Oct 06 06:20:30 2022  
 Response via : Initial Calibration

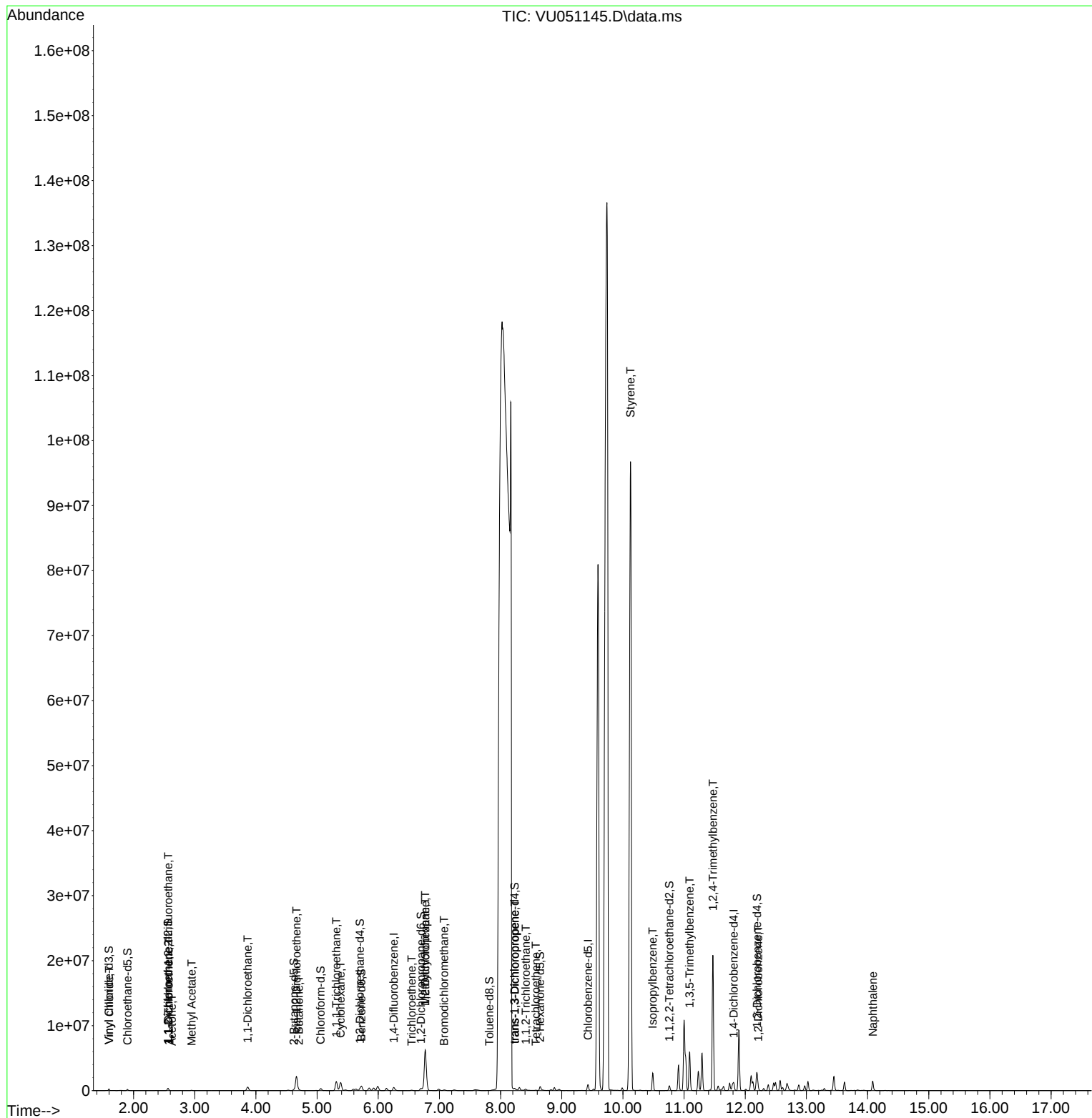
| Compound                   | R.T.   | QIon | Response | Conc    | Units | Dev(Min) |
|----------------------------|--------|------|----------|---------|-------|----------|
| 62) 1,3,5-Trimethylbenzene | 11.089 | 105  | 3276641  | 212.366 | ug/L  | 100      |
| 63) 1,2,4-Trimethylbenzene | 11.471 | 105  | 11634946 | 752.385 | ug/L  | 99       |
| 67) 1,2-Dichlorobenzene    | 12.214 | 146  | 15308    | 1.532   | ug/L  | 95       |
| 71) Naphthalene            | 14.086 | 128  | 1177812  | 60.973  | ug/L  | 99       |

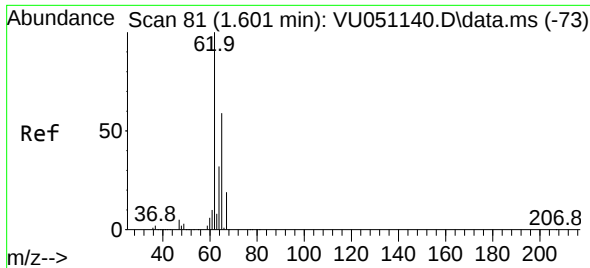
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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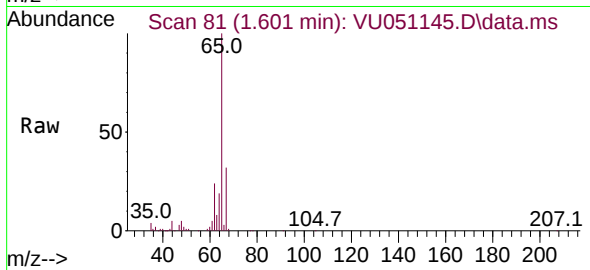
Quant Time: Oct 06 06:31:35 2022  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_U\Method\SFAMULM092922WMA.M  
Quant Title : VOC Analysis  
QLast Update : Thu Oct 06 06:20:30 2022  
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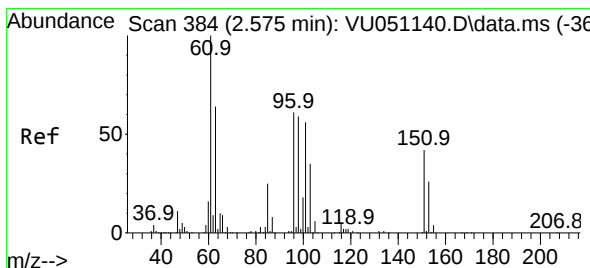
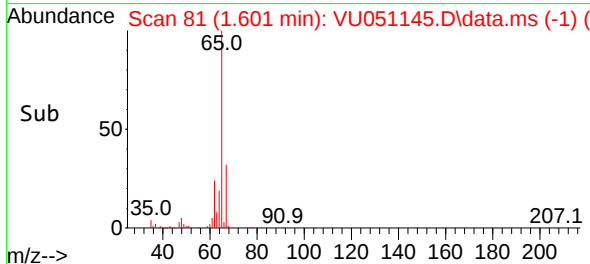
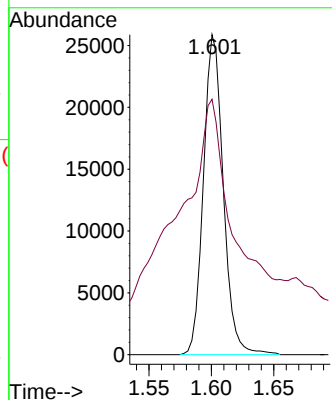


#5  
 Vinyl chloride  
 Concen: 5.372 ug/L  
 RT: 1.601 min Scan# 81  
 Delta R.T. -0.000 min  
 Lab File: VU051145.D  
 Acq: 05 Oct 2022 23:06

Instrument :  
 MSVOA\_U  
 ClientSampleId :

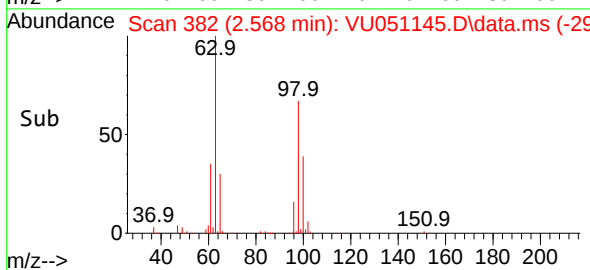
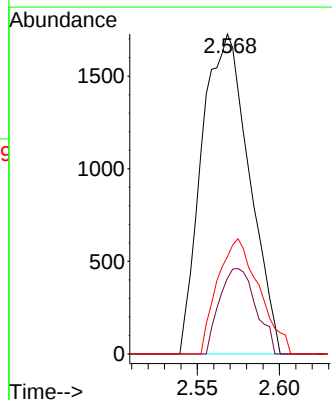
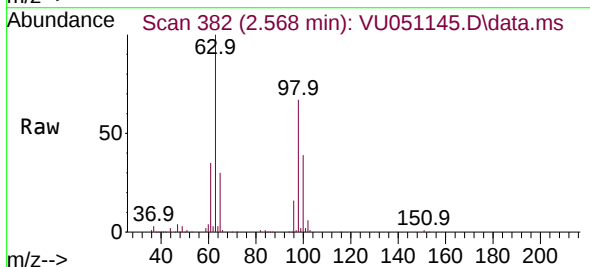


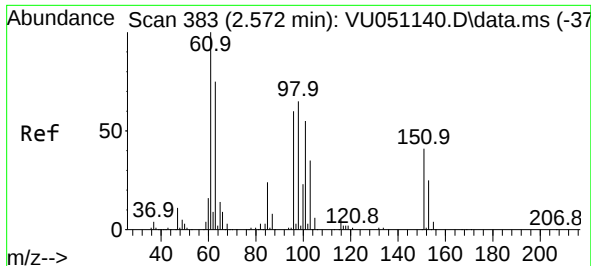
Tgt Ion: 62 Resp: 28728  
 Ion Ratio Lower Upper  
 62 100  
 64 79.8 23.5 43.7#



#10  
 1,1,2-Trichloro-1,2,2-trifluoroethane  
 Concen: 0.894 ug/L  
 RT: 2.568 min Scan# 382  
 Delta R.T. -0.007 min  
 Lab File: VU051145.D  
 Acq: 05 Oct 2022 23:06

Tgt Ion: 101 Resp: 3472  
 Ion Ratio Lower Upper  
 101 100  
 85 20.4 34.6 52.0#  
 151 31.6 58.6 87.8#





#12

1,1-Dichloroethene

Concen: 7.887 ug/L

RT: 2.575 min Scan# 383

Delta R.T. 0.003 min

Lab File: VU051145.D

Acq: 05 Oct 2022 23:06

Instrument :

MSVOA\_U

ClientSampleId :

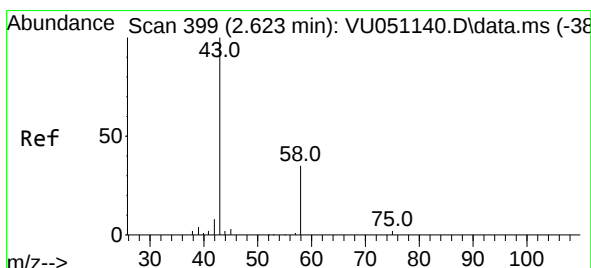
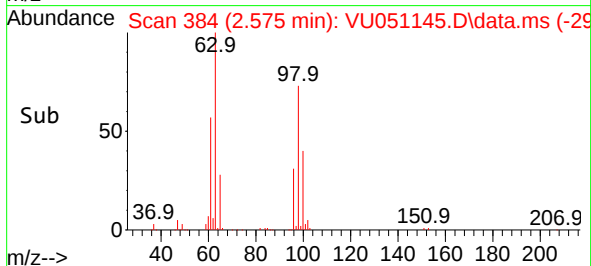
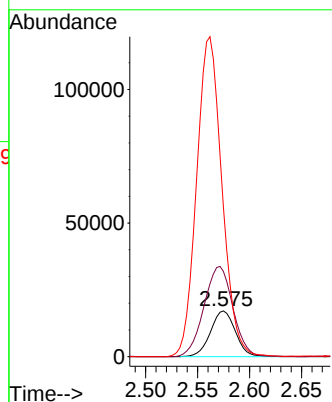
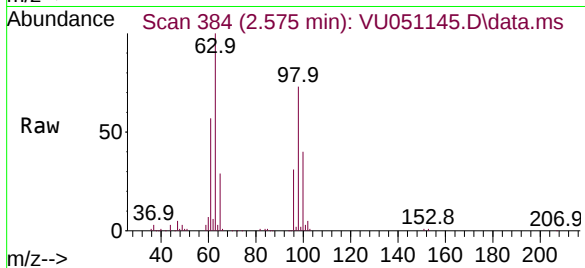
Tgt Ion: 96 Resp: 28604

Ion Ratio Lower Upper

96 100

61 186.1 113.0 209.9

63 326.7 91.7 170.3#



#13

Acetone

Concen: 3.915 ug/L

RT: 2.626 min Scan# 400

Delta R.T. 0.003 min

Lab File: VU051145.D

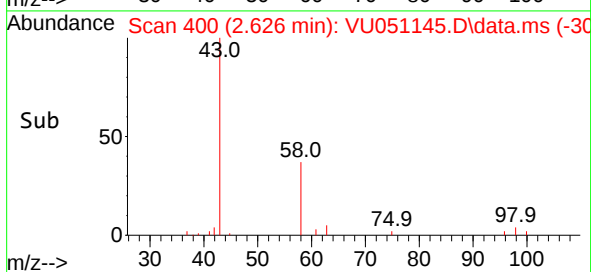
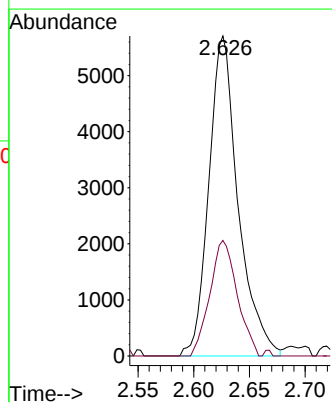
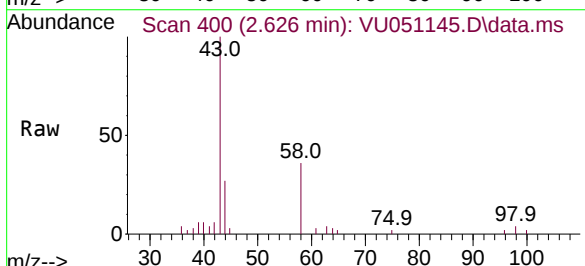
Acq: 05 Oct 2022 23:06

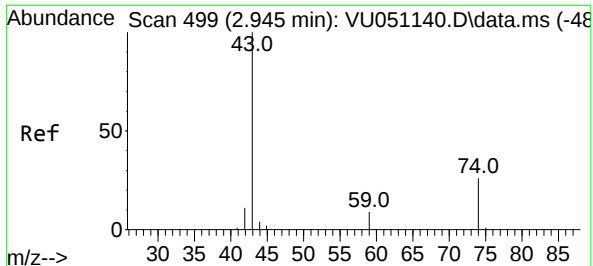
Tgt Ion: 43 Resp: 10452

Ion Ratio Lower Upper

43 100

58 33.6 0.0 73.6

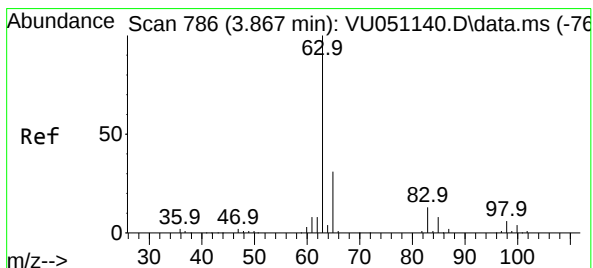
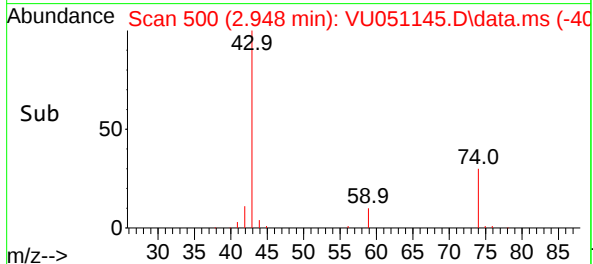
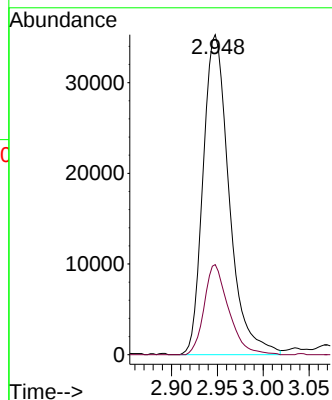
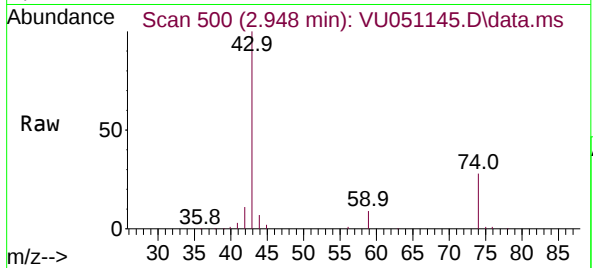




#15  
Methyl Acetate  
Concen: 14.340 ug/L  
RT: 2.948 min Scan# 50  
Delta R.T. 0.003 min  
Lab File: VU051145.D  
Acq: 05 Oct 2022 23:06

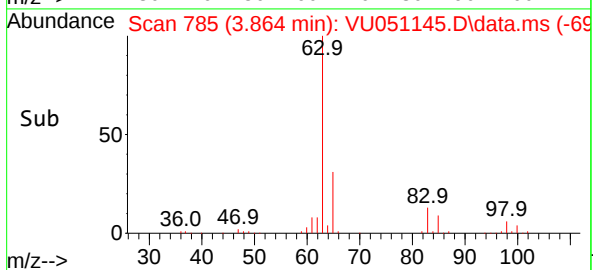
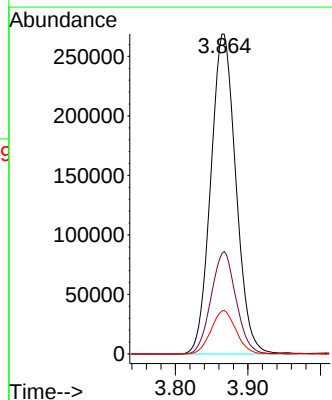
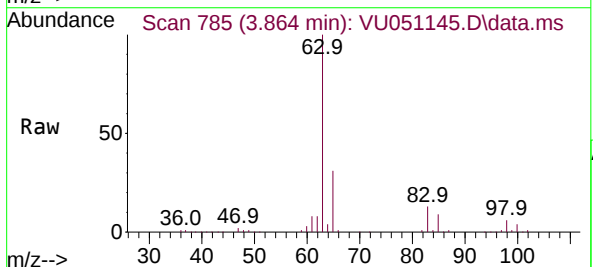
Instrument :  
MSVOA\_U  
ClientSampleId :

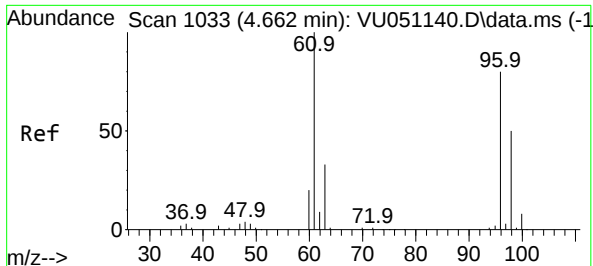
Tgt Ion: 43 Resp: 69888  
Ion Ratio Lower Upper  
43 100  
74 26.4 22.4 33.6



#19  
1,1-Dichloroethane  
Concen: 88.272 ug/L  
RT: 3.864 min Scan# 785  
Delta R.T. -0.003 min  
Lab File: VU051145.D  
Acq: 05 Oct 2022 23:06

Tgt Ion: 63 Resp: 646982  
Ion Ratio Lower Upper  
63 100  
65 31.4 22.6 42.0  
83 13.4 9.4 17.4



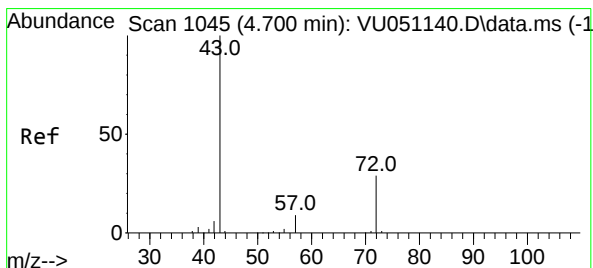
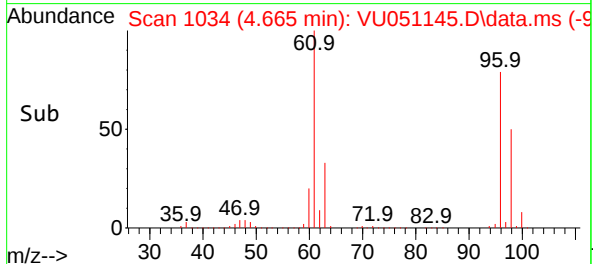
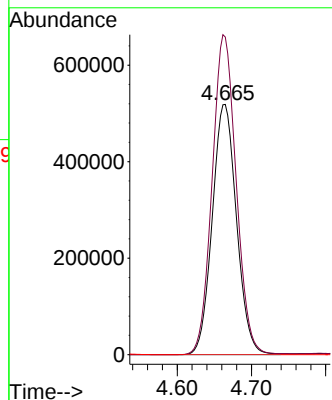
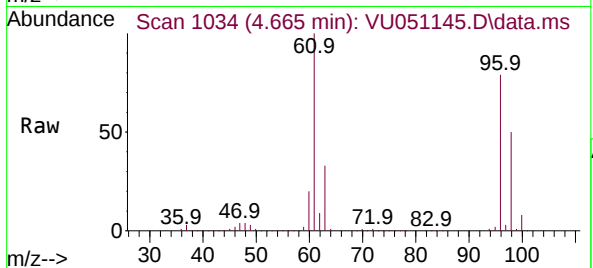


#20  
 cis-1,2-Dichloroethene  
 Concen: 273.180 ug/L  
 RT: 4.665 min Scan# 1033  
 Delta R.T. 0.003 min  
 Lab File: VU051145.D  
 Acq: 05 Oct 2022 23:06

Instrument :  
 MSVOA\_U  
 ClientSampleId :

Tgt Ion: 96 Resp: 1176915  

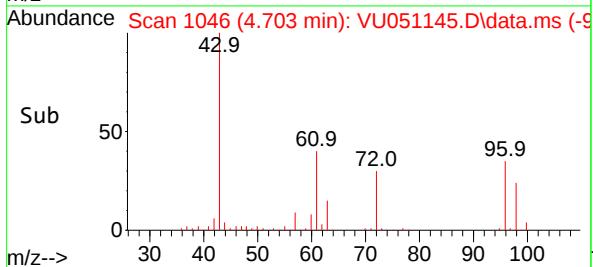
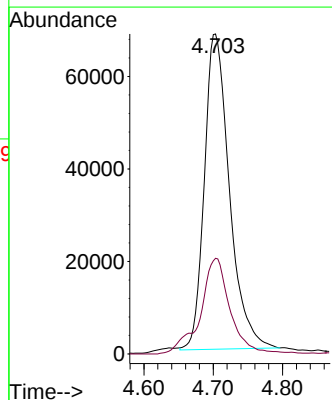
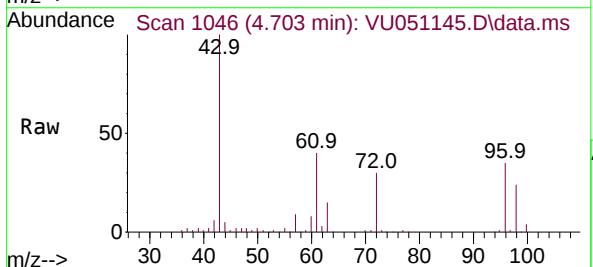
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 96  | 100   |       |       |
| 61  | 126.9 | 85.4  | 158.6 |
| 68  | 0.0   | 0.0   | 0.0   |

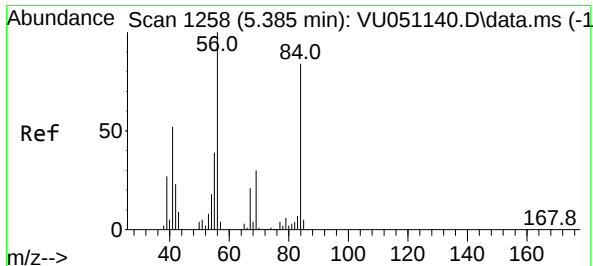


#22  
 2-Butanone  
 Concen: 46.381 ug/L  
 RT: 4.703 min Scan# 1046  
 Delta R.T. 0.003 min  
 Lab File: VU051145.D  
 Acq: 05 Oct 2022 23:06

Tgt Ion: 43 Resp: 171067  

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 43  | 100   |       |       |
| 72  | 30.9  | 15.8  | 47.4  |





#29

Cyclohexane

Concen: 122.829 ug/L

RT: 5.385 min Scan# 1258

Delta R.T. -0.000 min

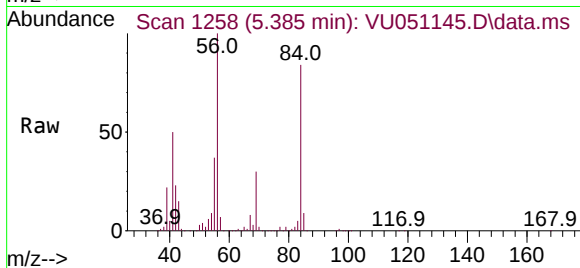
Lab File: VU051145.D

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ClientSampleId :



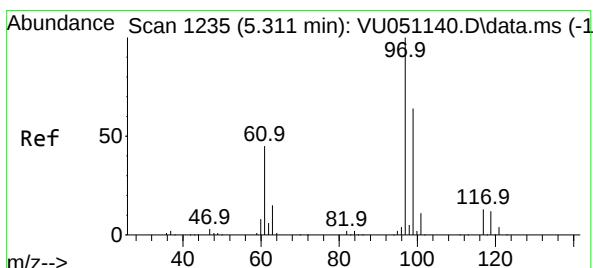
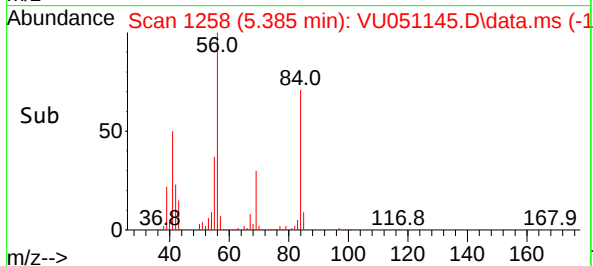
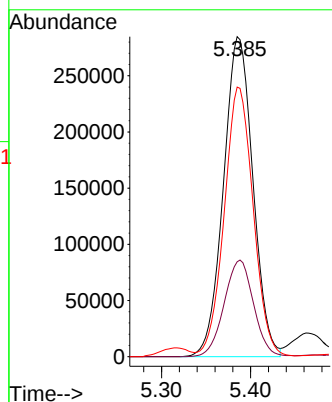
Tgt Ion: 56 Resp: 654703

Ion Ratio Lower Upper

56 100

69 30.2 24.8 37.2

84 82.9 71.8 107.6



#30

1,1,1-Trichloroethane

Concen: 163.794 ug/L

RT: 5.314 min Scan# 1236

Delta R.T. 0.003 min

Lab File: VU051145.D

Acq: 05 Oct 2022 23:06

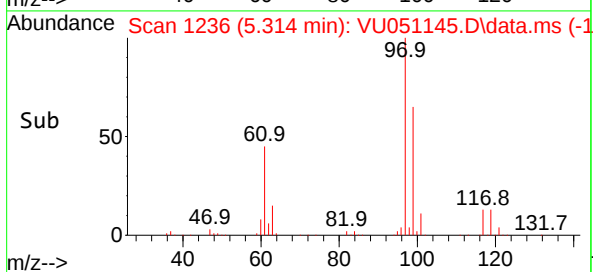
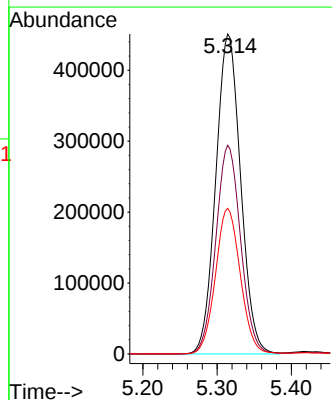
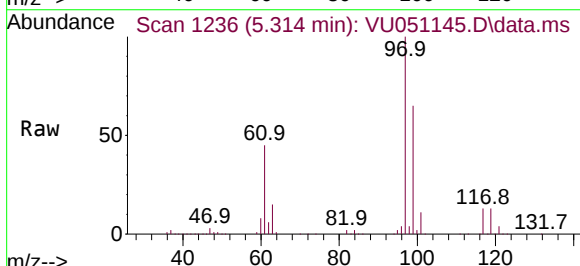
Tgt Ion: 97 Resp: 1051556

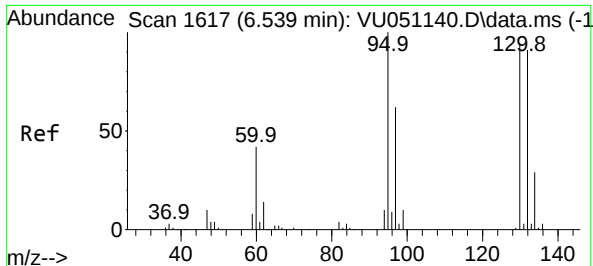
Ion Ratio Lower Upper

97 100

99 65.2 51.4 77.2

61 45.4 36.0 54.0





#34

Trichloroethene

Concen: 7.242 ug/L

RT: 6.546 min Scan# 1

Delta R.T. 0.006 min

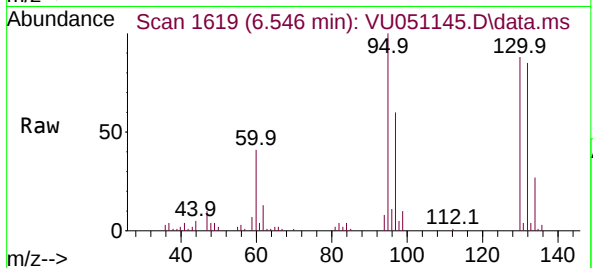
Lab File: VU051145.D

Acq: 05 Oct 2022 23:06

Instrument :

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ClientSampleId :



Tgt Ion: 95 Resp: 31305

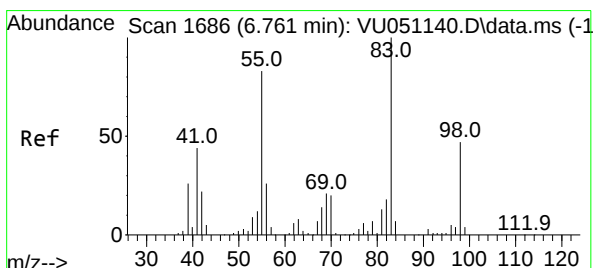
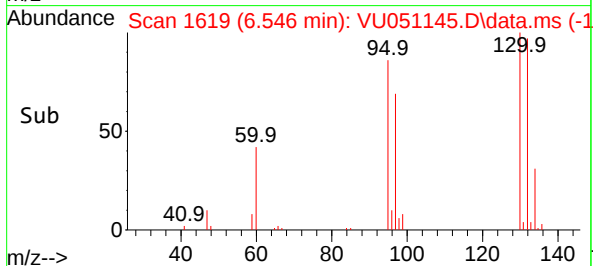
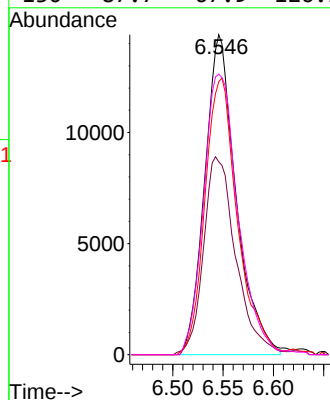
Ion Ratio Lower Upper

95 100

97 60.3 45.9 85.3

132 85.3 64.0 119.0

130 87.7 67.9 126.1



#35

Methylcyclohexane

Concen: 563.960 ug/L

RT: 6.767 min Scan# 1688

Delta R.T. 0.006 min

Lab File: VU051145.D

Acq: 05 Oct 2022 23:06

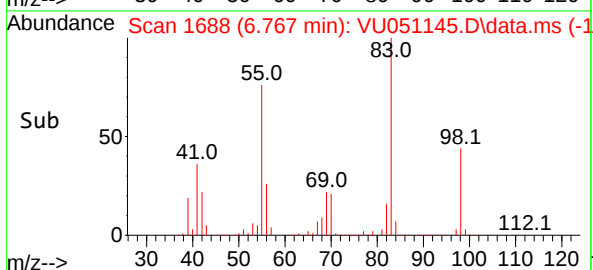
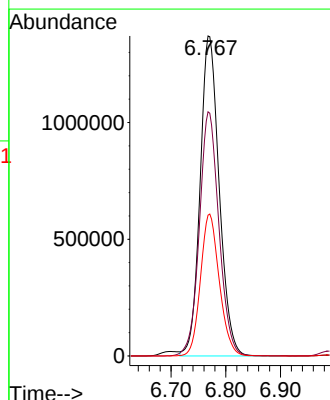
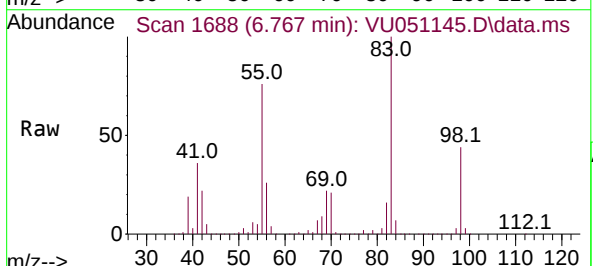
Tgt Ion: 83 Resp: 3317914

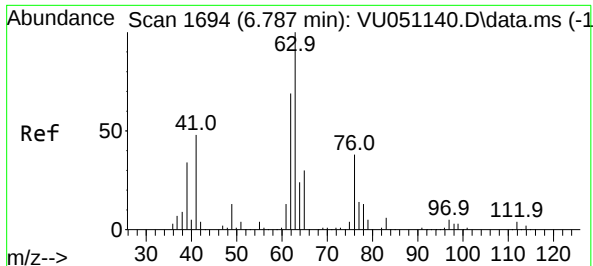
Ion Ratio Lower Upper

83 100

55 78.5 59.3 88.9

98 43.7 36.0 54.0

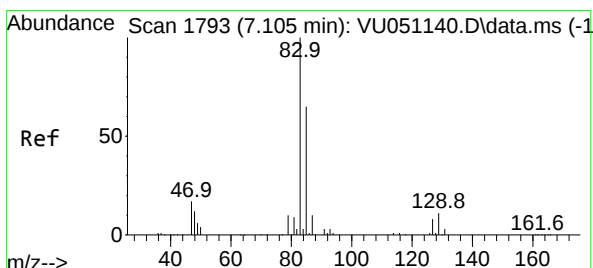
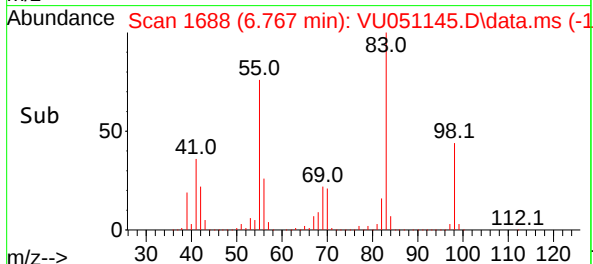
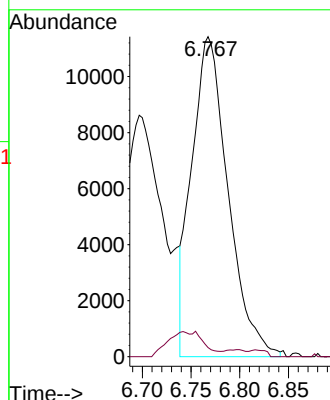
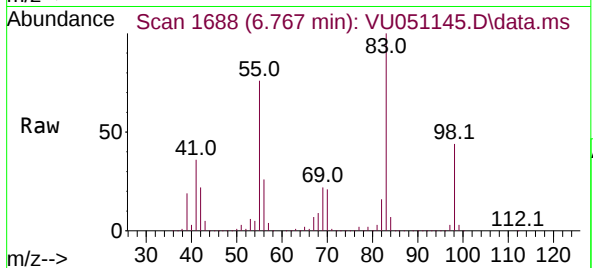




#37  
1,2-Dichloropropane  
Concen: 6.576 ug/L  
RT: 6.767 min Scan# 1  
Delta R.T. -0.019 min  
Lab File: VU051145.D  
Acq: 05 Oct 2022 23:06

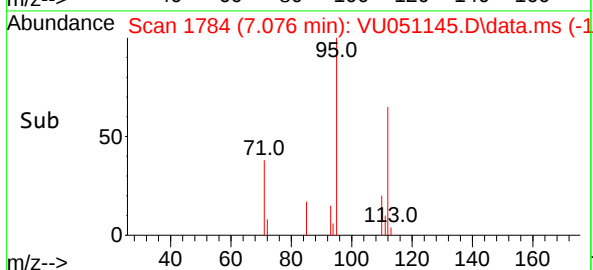
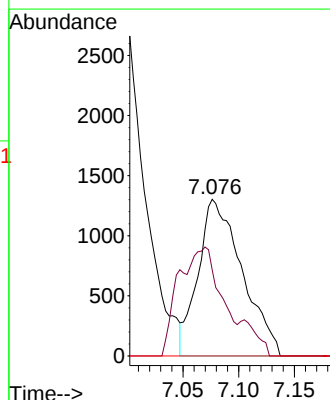
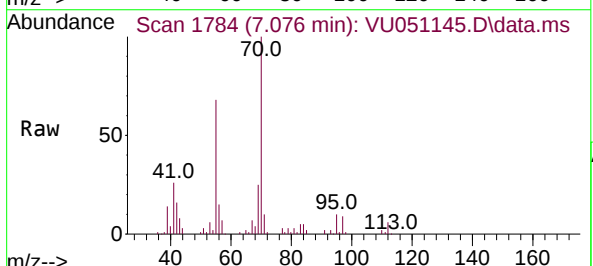
Instrument :  
MSVOA\_U  
ClientSampleId :

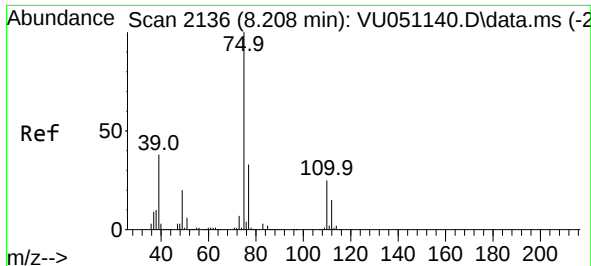
Tgt Ion: 63 Resp: 29553  
Ion Ratio Lower Upper  
63 100  
112 4.7 3.3 4.9



#38  
Bromodichloromethane  
Concen: 0.597 ug/L  
RT: 7.076 min Scan# 1784  
Delta R.T. -0.029 min  
Lab File: VU051145.D  
Acq: 05 Oct 2022 23:06

Tgt Ion: 83 Resp: 3578  
Ion Ratio Lower Upper  
83 100  
85 55.0 45.1 83.7  
127 0.0 6.7 10.1#

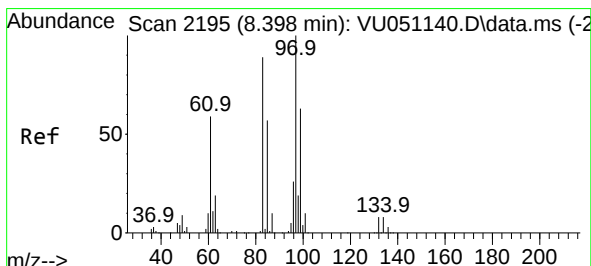
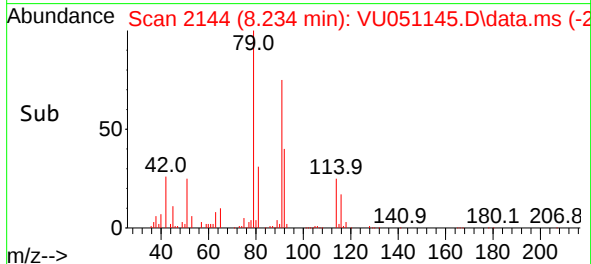
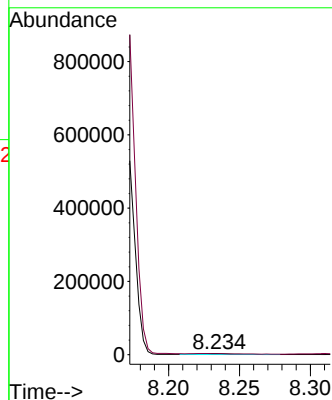
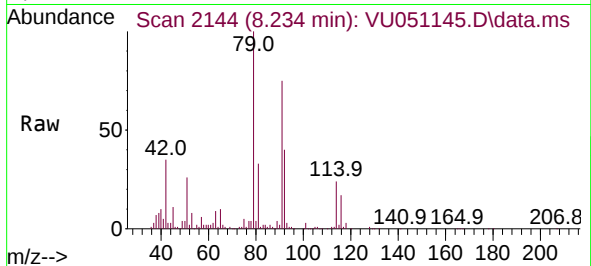




#44  
trans-1,3-Dichloropropene  
Concen: 0.691 ug/L  
RT: 8.234 min Scan# 2136  
Delta R.T. 0.026 min  
Lab File: VU051145.D  
Acq: 05 Oct 2022 23:06

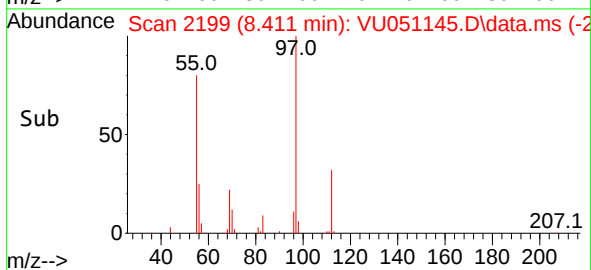
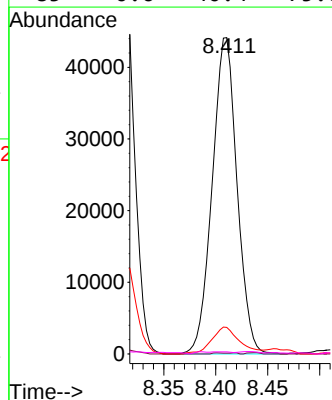
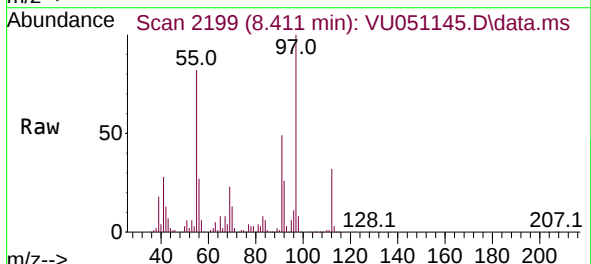
Instrument :  
MSVOA\_U  
ClientSampleId :

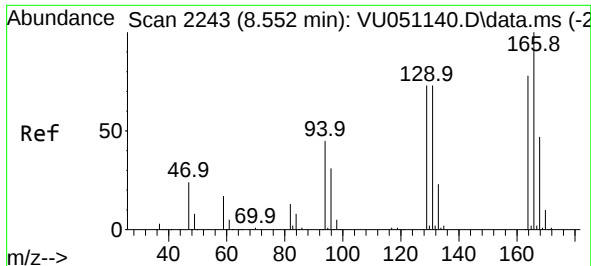
Tgt Ion: 75 Resp: 4448  
Ion Ratio Lower Upper  
75 100  
77 86.5 22.7 42.3#



#45  
1,1,2-Trichloroethane  
Concen: 15.065 ug/L  
RT: 8.411 min Scan# 2199  
Delta R.T. 0.013 min  
Lab File: VU051145.D  
Acq: 05 Oct 2022 23:06

Tgt Ion: 97 Resp: 73336  
Ion Ratio Lower Upper  
97 100  
99 0.2 44.4 82.4#  
83 8.4 61.7 114.5#  
85 0.6 40.4 75.0#

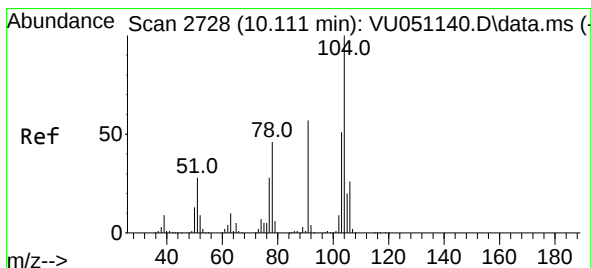
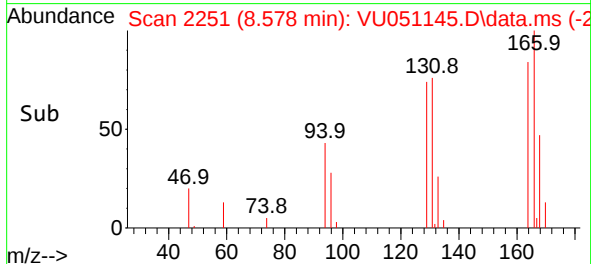
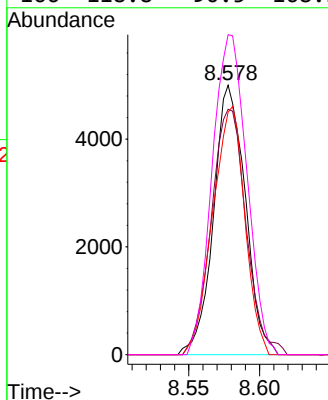
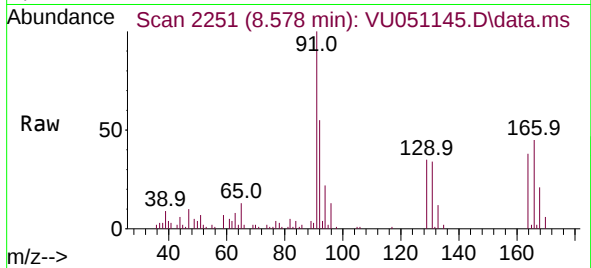




#46  
Tetrachloroethene  
Concen: 2.379 ug/L  
RT: 8.578 min Scan# 21  
Delta R.T. 0.026 min  
Lab File: VU051145.D  
Acq: 05 Oct 2022 23:06

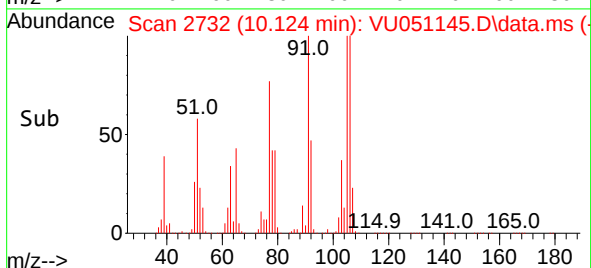
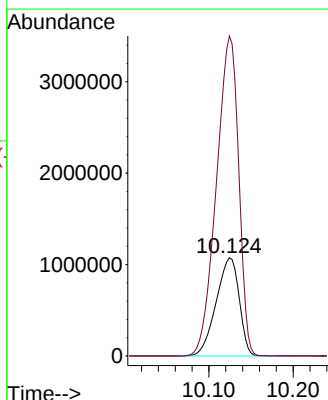
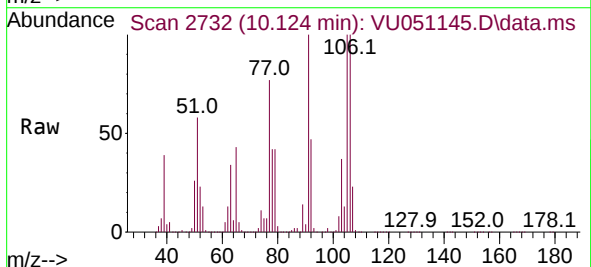
Instrument :  
MSVOA\_U  
ClientSampleId :

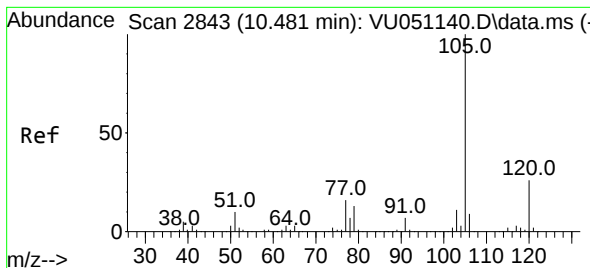
Tgt Ion:164 Resp: 7794  
Ion Ratio Lower Upper  
164 100  
129 91.1 68.1 126.5  
131 92.5 67.8 126.0  
166 118.8 90.5 168.1



#55  
Styrene  
Concen: 165.280 ug/L  
RT: 10.124 min Scan# 2732  
Delta R.T. 0.013 min  
Lab File: VU051145.D  
Acq: 05 Oct 2022 23:06

Tgt Ion:104 Resp: 2033070  
Ion Ratio Lower Upper  
104 100  
78 325.6 31.0 57.6#





#61

Isopropylbenzene

Concen: 92.769 ug/L

RT: 10.488 min Scan# 21

Delta R.T. 0.006 min

Lab File: VU051145.D

Acq: 05 Oct 2022 23:06

Instrument :

MSVOA\_U

ClientSampleId :

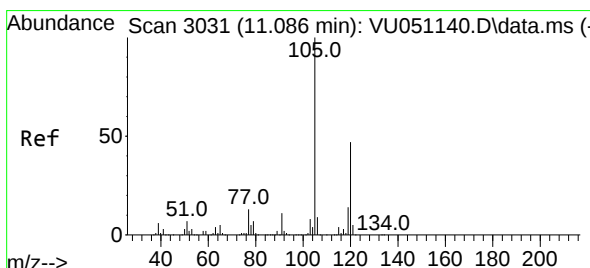
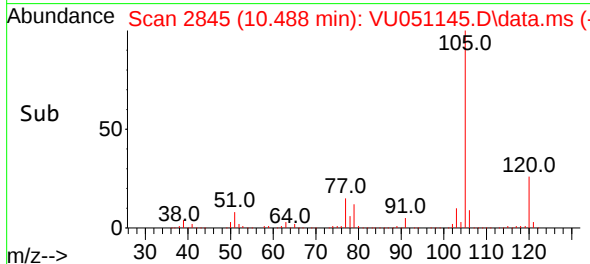
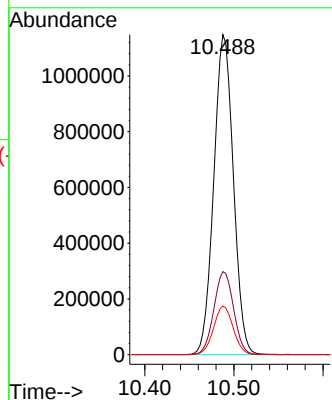
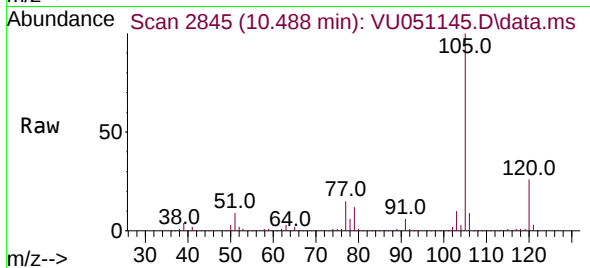
Tgt Ion:105 Resp: 1750442

Ion Ratio Lower Upper

105 100

120 26.1 21.1 31.7

77 15.2 12.8 19.2



#62

1,3,5-Trimethylbenzene

Concen: 212.366 ug/L

RT: 11.089 min Scan# 3032

Delta R.T. 0.003 min

Lab File: VU051145.D

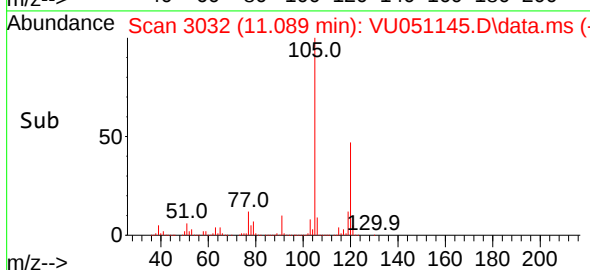
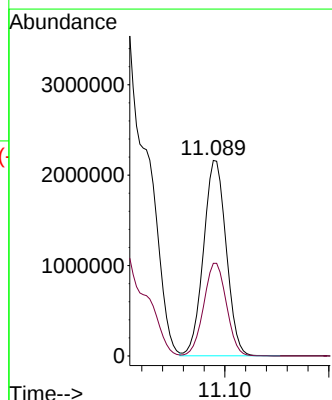
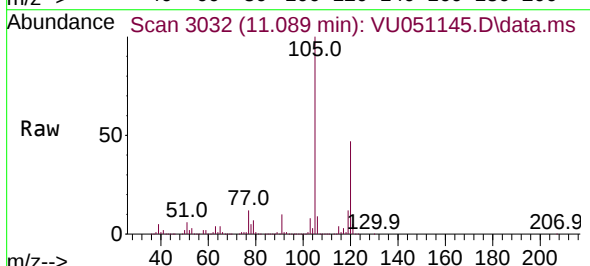
Acq: 05 Oct 2022 23:06

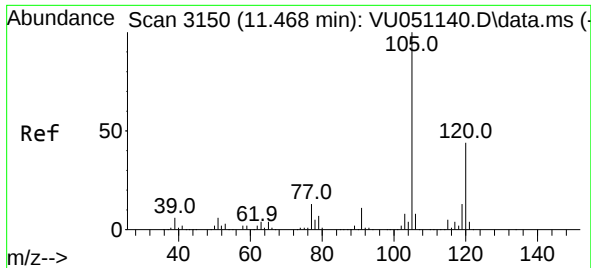
Tgt Ion:105 Resp: 3276641

Ion Ratio Lower Upper

105 100

120 47.6 37.8 56.8

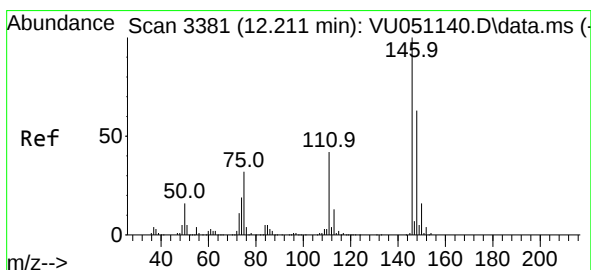
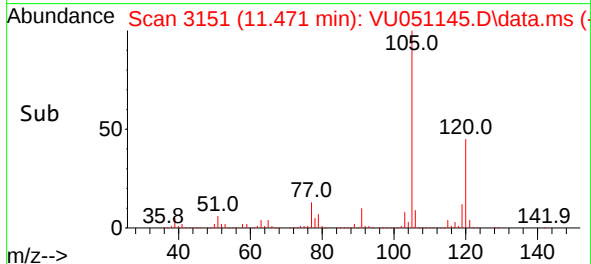
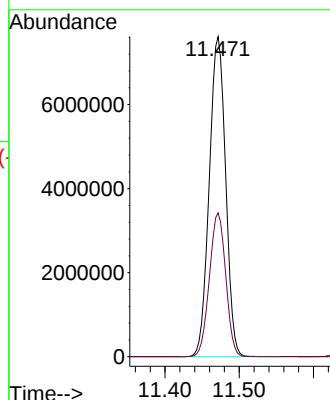
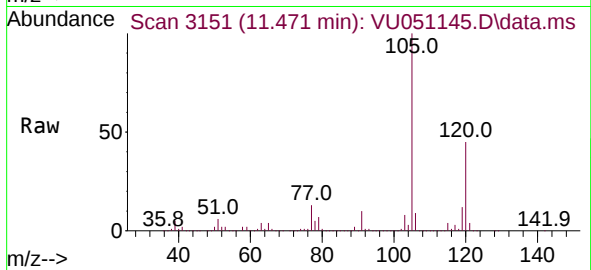




#63  
1,2,4-Trimethylbenzene  
Concen: 752.385 ug/L  
RT: 11.471 min Scan# 3150  
Delta R.T. 0.003 min  
Lab File: VU051145.D  
Acq: 05 Oct 2022 23:06

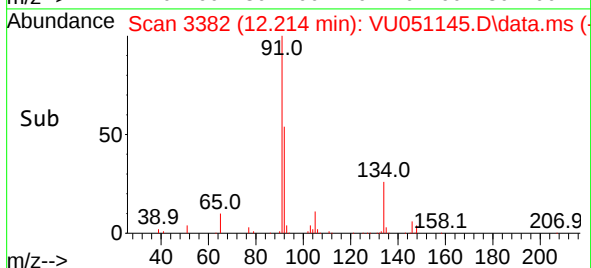
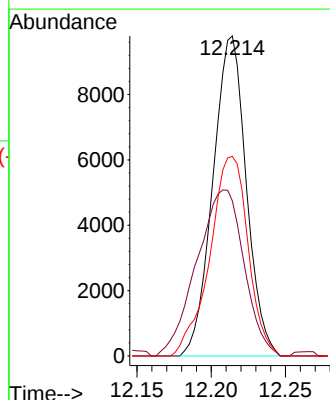
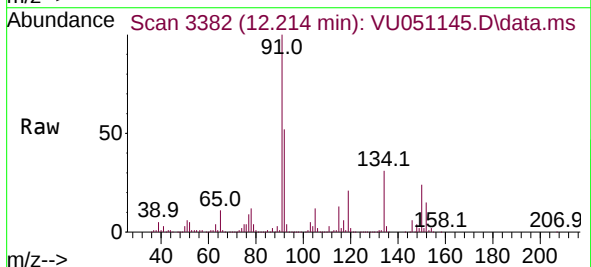
Instrument :  
MSVOA\_U  
ClientSampleId :

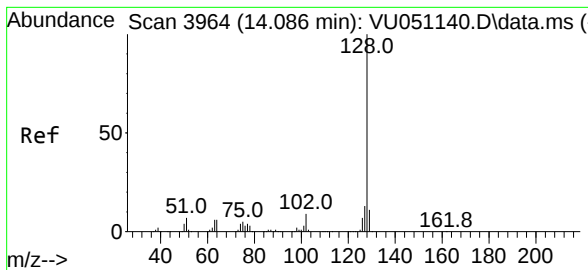
Tgt Ion:105 Resp:11634946  
Ion Ratio Lower Upper  
105 100  
120 44.8 35.5 53.3



#67  
1,2-Dichlorobenzene  
Concen: 1.532 ug/L  
RT: 12.214 min Scan# 3382  
Delta R.T. 0.003 min  
Lab File: VU051145.D  
Acq: 05 Oct 2022 23:06

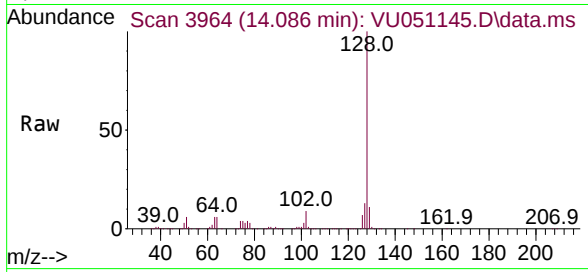
Tgt Ion:146 Resp: 15308  
Ion Ratio Lower Upper  
146 100  
111 48.5 33.7 50.5  
148 62.4 50.8 76.2





#71  
Naphthalene  
Concen: 60.973 ug/L  
RT: 14.086 min Scan# 3964  
Delta R.T. -0.000 min  
Lab File: VU051145.D  
Acq: 05 Oct 2022 23:06

Instrument :  
MSVOA\_U  
ClientSampleId :



Tgt Ion:128 Resp: 1177812  
Ion Ratio Lower Upper  
128 100  
127 13.0 10.7 16.1  
129 10.8 8.6 13.0

