

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU102219\  
 Data File : VU035367.D  
 Acq On : 22 Oct 2019 16:44  
 Operator : JC/SP  
 Sample : K5461-16DL 10X  
 Misc : 25.0mL/MSVOA U/WATER  
 ALS Vial : 19 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampled :

Quant Time: Oct 23 08:04:54 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR101719WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Wed Oct 23 08:02:08 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 6.29  | 114  | 277890   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.45  | 117  | 272909   | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.84 | 152  | 96683    | 5.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.61   | 65    | 97017    | 5.72     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 114.40% |
| 7) Chloroethane-d5             | 1.93   | 69    | 87855    | 5.67     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 113.40% |
| 11) 1,1-Dichloroethene-d2      | 2.59   | 63    | 125471   | 4.01     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 80.20%  |
| 20) 2-Butanone-d5              | 4.70   | 46    | 240532   | 49.40    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 98.80%  |
| 24) Chloroform-d               | 5.11   | 84    | 161067   | 5.20     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 104.00% |
| 26) 1,2-Dichloroethane-d4      | 5.75   | 65    | 91283    | 5.32     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 106.40% |
| 32) Benzene-d6                 | 5.77   | 84    | 323551   | 5.18     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 103.60% |
| 36) 1,2-Dichloropropane-d6     | 6.73   | 67    | 107073   | 5.40     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 108.00% |
| 41) Toluene-d8                 | 7.93   | 98    | 282906   | 4.74     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 94.80%  |
| 43) trans-1,3-Dichloropropene- | 8.21   | 79    | 40132    | 4.17     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 83.40%  |
| 46) 2-Hexanone-d5              | 8.68   | 63    | 177815   | 41.93    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 83.86%  |
| 57) 1,1,2,2-Tetrachloroethane- | 10.79  | 84    | 87416    | 4.95     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 99.00%  |
| 64) 1,2-Dichlorobenzene-d4     | 12.22  | 152   | 86571    | 4.92     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 98.40%  |

## Target Compounds

| Target Compounds             | R.T.  | QIon | Response | Conc  | Units  | Ovalue |
|------------------------------|-------|------|----------|-------|--------|--------|
| 5) Vinyl chloride            | 1.62  | 62   | 46457    | 1.928 | ug/L   | 88     |
| 12) 1,1-Dichloroethene       | 2.60  | 96   | 1961     | 0.110 | ug/L # | 1      |
| 13) Acetone                  | 2.67  | 43   | 3352     | 0.990 | ug/L   | 86     |
| 16) Methylene chloride       | 3.08  | 84   | 5952     | 0.277 | ug/L   | 98     |
| 17) Methyl tert-butyl Ether  | 3.43  | 73   | 5803     | 0.121 | ug/L # | 86     |
| 18) trans-1,2-Dichloroethene | 3.39  | 96   | 3827     | 0.199 | ug/L   | 84     |
| 19) 1,1-Dichloroethane       | 3.92  | 63   | 7021     | 0.202 | ug/L   | 93     |
| 22) cis-1,2-Dichloroethene   | 4.72  | 96   | 207686   | 9.753 | ug/L   | 100    |
| 25) Chloroform               | 5.14  | 83   | 9840     | 0.257 | ug/L   | 95     |
| 34) Trichloroethene          | 6.58  | 95   | 156147   | 7.233 | ug/L   | 98     |
| 35) Methylcyclohexane        | 6.73  | 83   | 25473    | 0.706 | ug/L # | 18     |
| 37) 1,2-Dichloropropane      | 6.73  | 63   | 11999    | 0.589 | ug/L # | 86     |
| 39) cis-1,3-Dichloropropene  | 7.60  | 75   | 2987     | 0.088 | ug/L # | 52     |
| 47) Tetrachloroethene        | 8.58  | 164  | 1960     | 0.109 | ug/L   | 92     |
| 48) 2-Hexanone               | 8.73  | 43   | 11554    | 1.197 | ug/L # | 96     |
| 49) Dibromochloromethane     | 8.58  | 129  | 1830     | 0.095 | ug/L # | 11     |
| 59) 1,2,3-Trichloropropane   | 11.84 | 75   | 12321    | 0.868 | ug/L   | 93     |

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 Sample : K5461-16DL 10X  
 Misc : 25.0mL/MSVOA U/WATER  
 ALS Vial : 19 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :

Quant Time: Oct 23 08:04:54 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR101719WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Wed Oct 23 08:02:08 2019  
 Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|--------------------|------|------|----------|------|-------|----------|
|--------------------|------|------|----------|------|-------|----------|

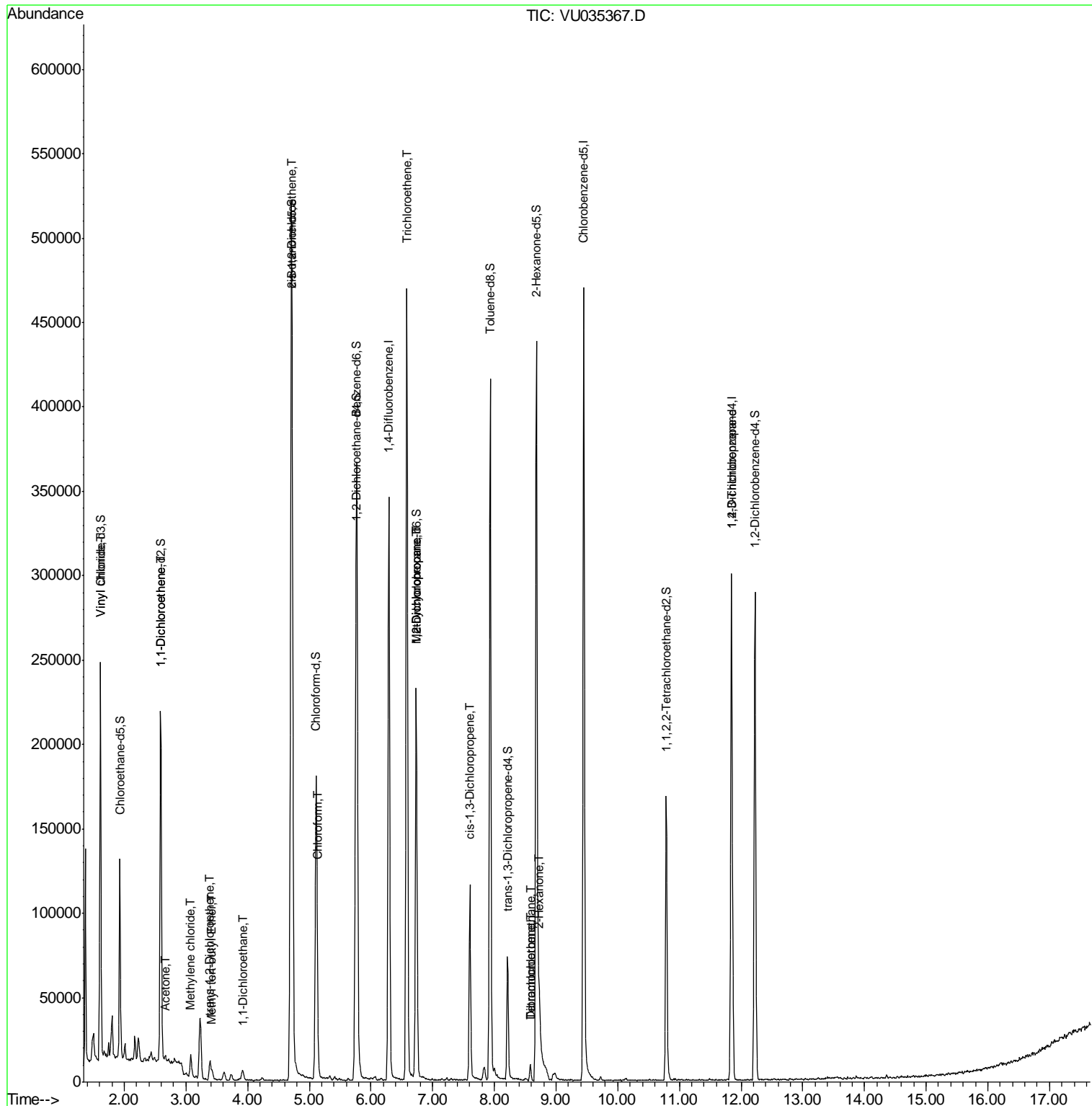
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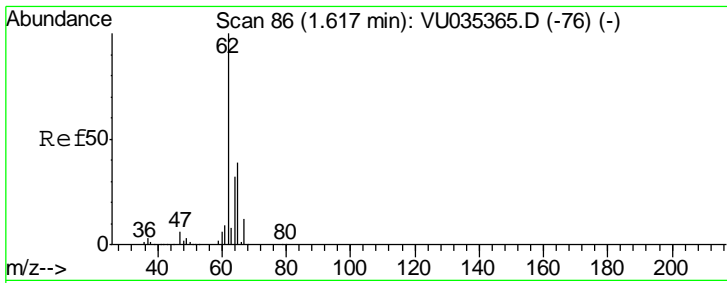
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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 Client Sampled :

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 Quant Title : TRACE VOA SOM01.0  
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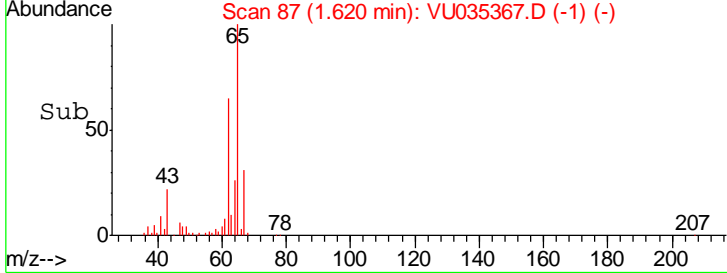
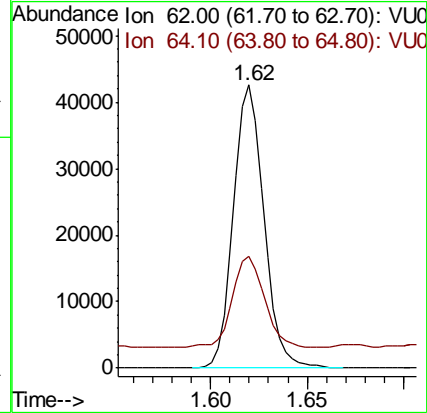
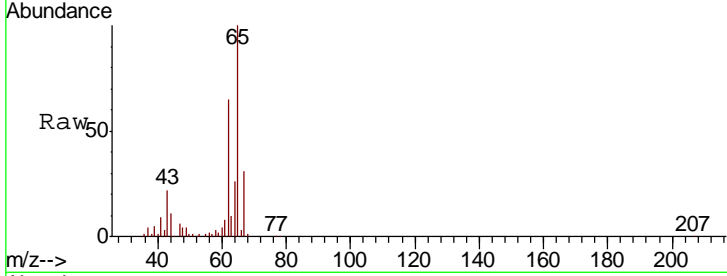




#5  
 Vinyl chloride  
 Concen: 1.928 ug/L  
 RT: 1.62 min Scan# 87  
 Delta R.T. 0.00 min  
 Lab File: VU035367.D  
 Acq: 22 Oct 2019 16:44

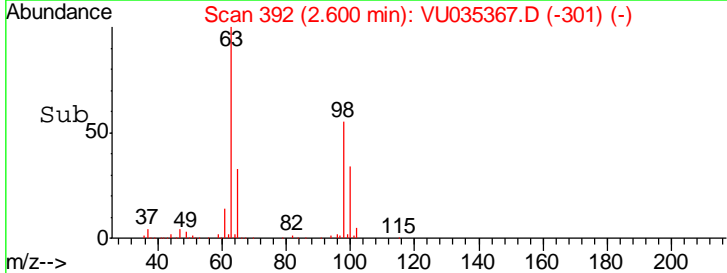
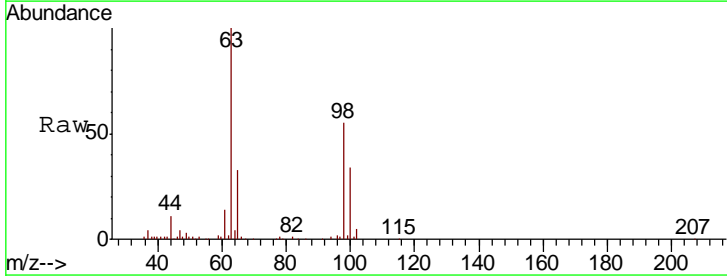
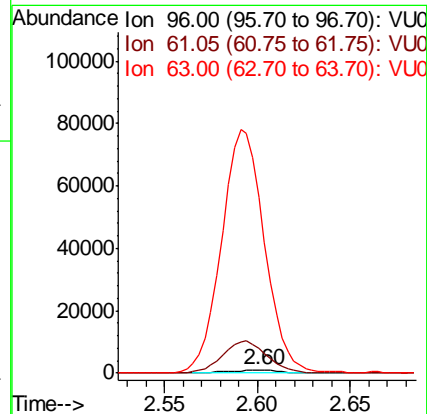
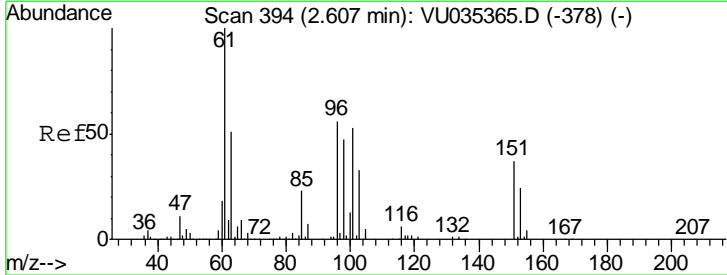
Instrument :  
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 ClientSampled :

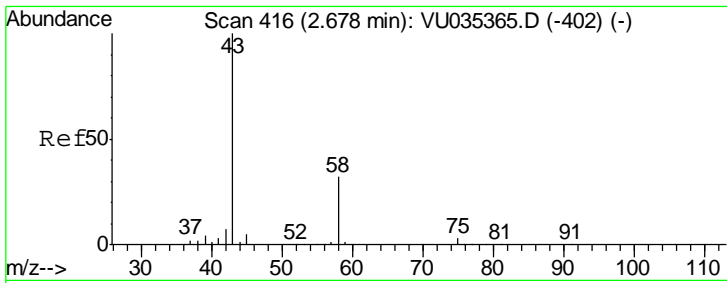
| Tgt Ion | Resp | Lower | Upper |
|---------|------|-------|-------|
| 62      | 100  |       |       |
| 64      | 39.4 | 22.9  | 42.5  |



#12  
 1,1-Dichloroethene  
 Concen: 0.110 ug/L  
 RT: 2.60 min Scan# 392  
 Delta R.T. -0.01 min  
 Lab File: VU035367.D  
 Acq: 22 Oct 2019 16:44

| Tgt Ion | Resp   | Lower | Upper  |
|---------|--------|-------|--------|
| 96      | 100    |       |        |
| 61      | 811.2  | 120.6 | 224.0# |
| 63      | 5862.5 | 86.8  | 161.2# |

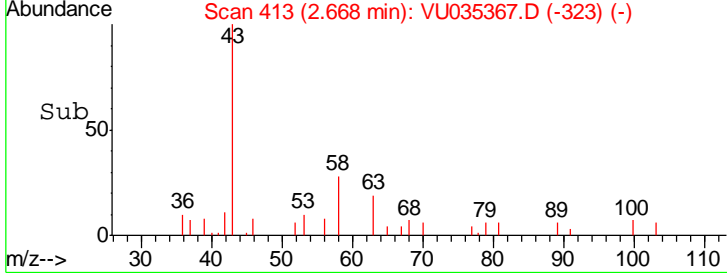
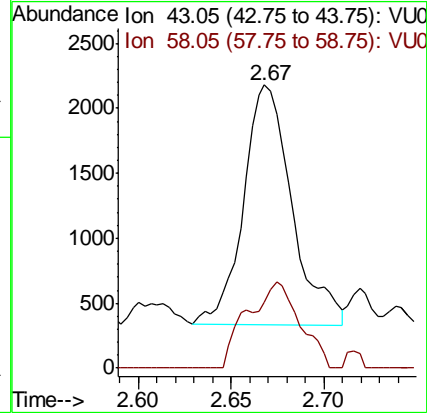
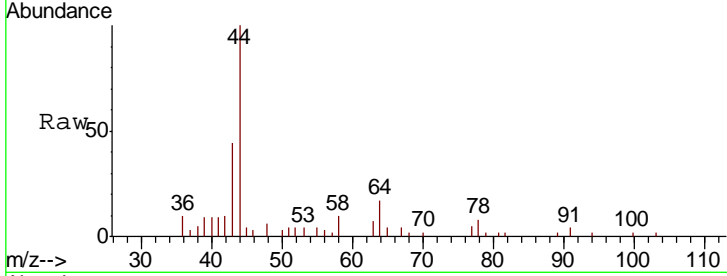




#13  
 Acetone  
 Concen: 0.990 ug/L  
 RT: 2.67 min Scan# 413  
 Delta R.T. -0.01 min  
 Lab File: VU035367.D  
 Acq: 22 Oct 2019 16:44

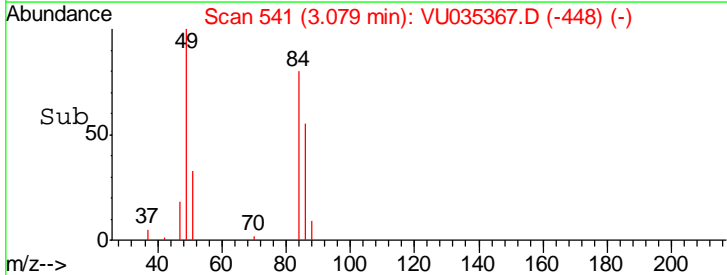
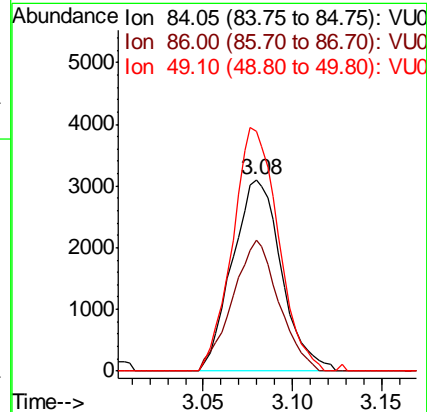
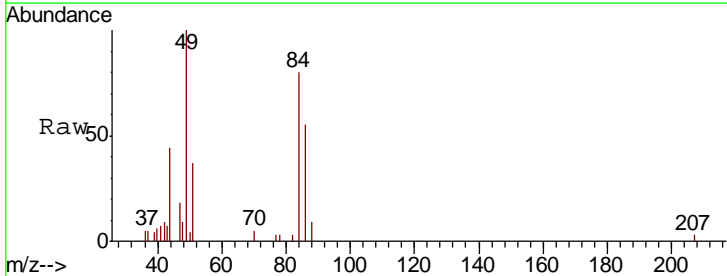
Instrument :  
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 ClientSampled :

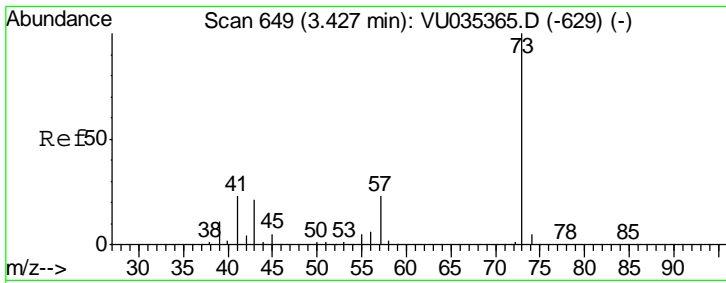
| Tgt Ion | Resp | Lower | Upper |
|---------|------|-------|-------|
| 43      | 100  |       |       |
| 58      | 38.8 | 0.0   | 61.8  |



#16  
 Methylene chloride  
 Concen: 0.277 ug/L  
 RT: 3.08 min Scan# 541  
 Delta R.T. -0.00 min  
 Lab File: VU035367.D  
 Acq: 22 Oct 2019 16:44

| Tgt Ion | Resp  | Lower | Upper |
|---------|-------|-------|-------|
| 84      | 100   |       |       |
| 86      | 68.4  | 45.4  | 84.2  |
| 49      | 125.6 | 86.8  | 161.2 |

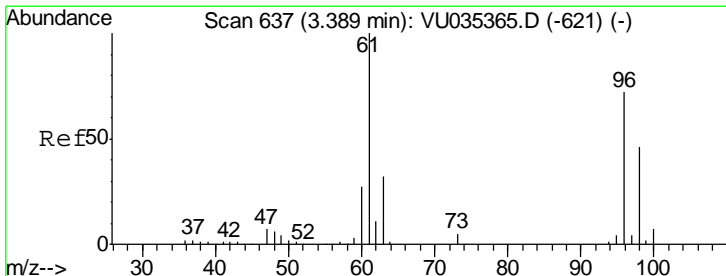
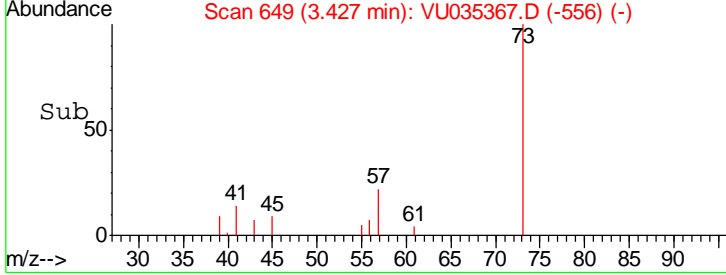
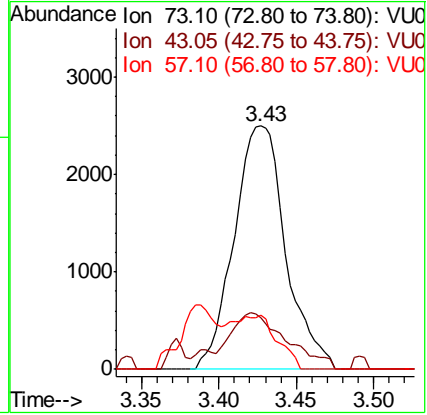
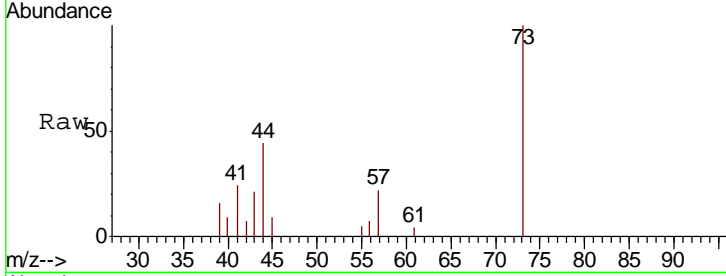




#17  
 Methyl tert-butyl Ether  
 Concen: 0.121 ug/L  
 RT: 3.43 min Scan# 649  
 Delta R.T. -0.00 min  
 Lab File: VU035367.D  
 Acq: 22 Oct 2019 16:44

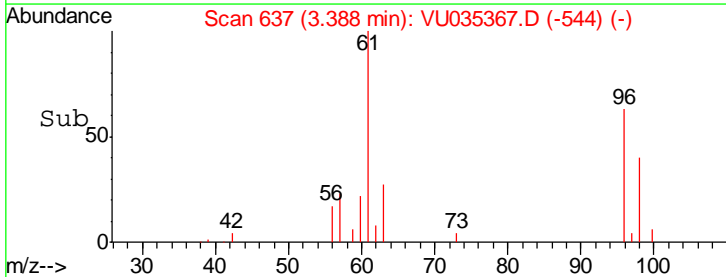
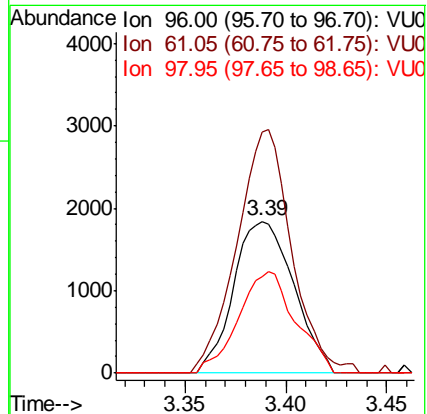
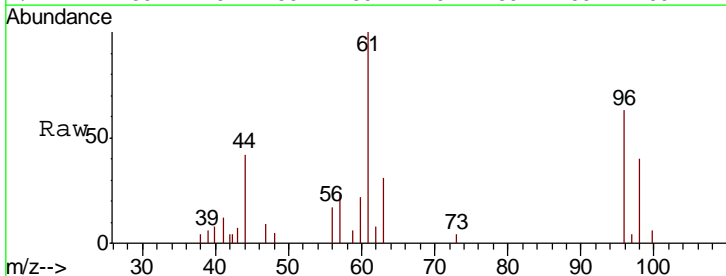
Instrument :  
 MSVOA\_U  
 ClientSampled :

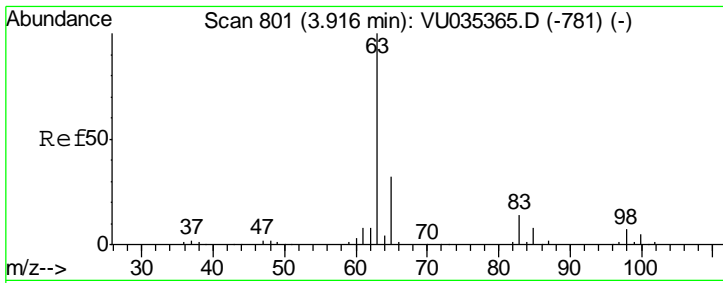
| Tgt Ion | Resp | Lower | Upper |
|---------|------|-------|-------|
| 73      | 5803 |       |       |
| 43      | 25.0 | 16.0  | 24.0# |
| 57      | 13.9 | 17.4  | 26.2# |



#18  
 trans-1,2-Dichloroethene  
 Concen: 0.199 ug/L  
 RT: 3.39 min Scan# 637  
 Delta R.T. -0.00 min  
 Lab File: VU035367.D  
 Acq: 22 Oct 2019 16:44

| Tgt Ion | Resp  | Lower | Upper |
|---------|-------|-------|-------|
| 96      | 3827  |       |       |
| 61      | 159.1 | 93.0  | 172.6 |
| 98      | 64.0  | 43.7  | 81.1  |

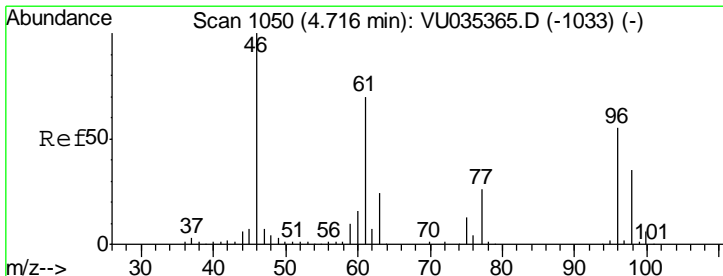
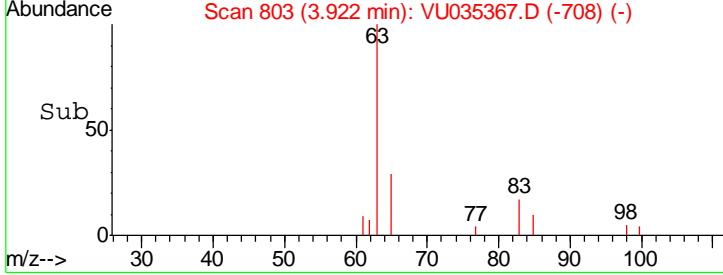
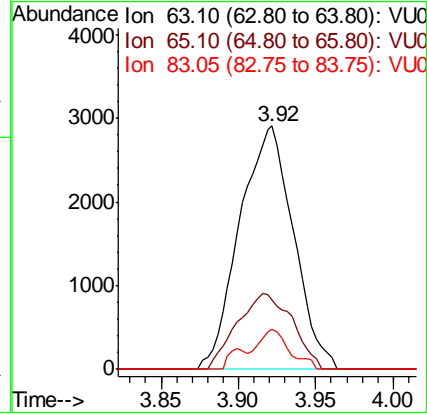
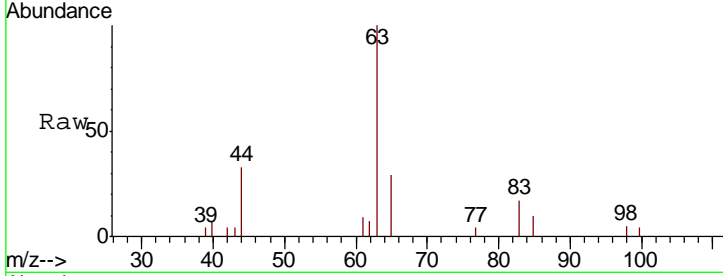




#19  
 1,1-Dichloroethane  
 Concen: 0.202 ug/L  
 RT: 3.92 min Scan# 803  
 Delta R.T. 0.01 min  
 Lab File: VU035367.D  
 Acq: 22 Oct 2019 16:44

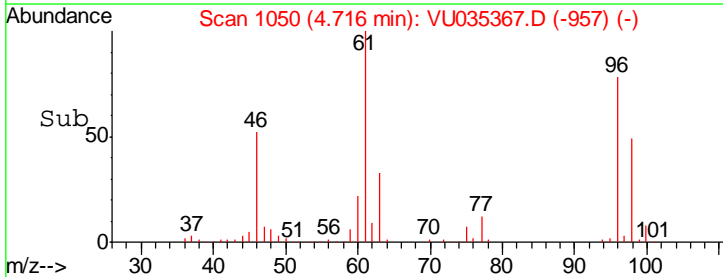
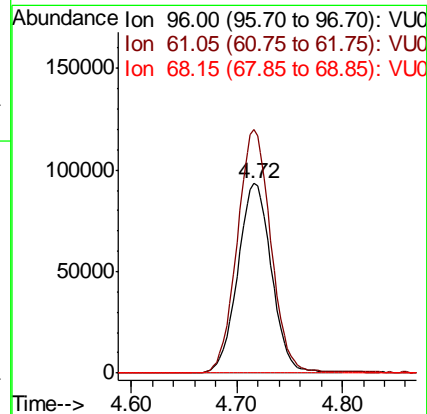
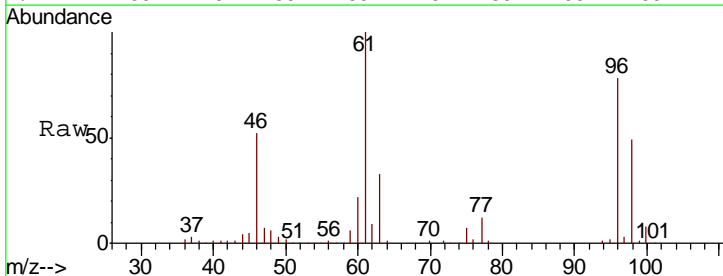
Instrument :  
 MSVOA\_U  
 ClientSampled :

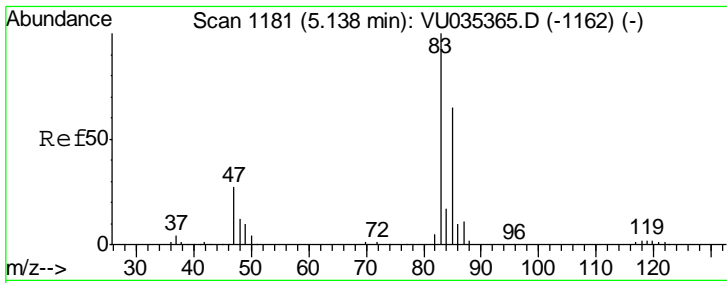
| Tgt Ion | Resp | Lower | Upper |
|---------|------|-------|-------|
| 63      | 7021 |       |       |
| 65      | 28.6 | 22.4  | 41.6  |
| 83      | 16.6 | 9.3   | 17.3  |



#22  
 cis-1,2-Dichloroethene  
 Concen: 9.753 ug/L  
 RT: 4.72 min Scan# 1050  
 Delta R.T. -0.00 min  
 Lab File: VU035367.D  
 Acq: 22 Oct 2019 16:44

| Tgt Ion | Resp   | Lower | Upper |
|---------|--------|-------|-------|
| 96      | 207686 |       |       |
| 61      | 128.4  | 89.7  | 166.5 |
| 68      | 0.0    | 0.0   | 0.0   |

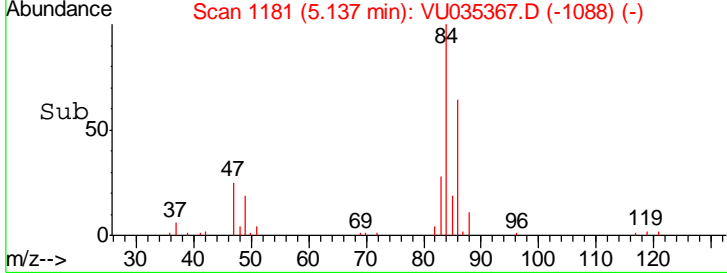
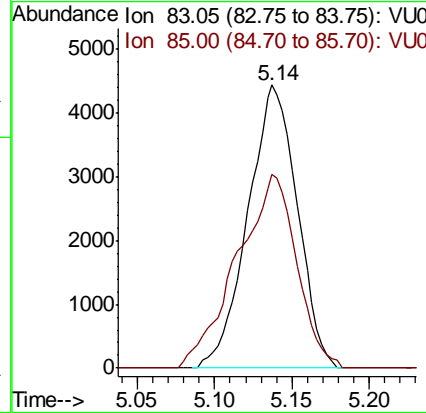
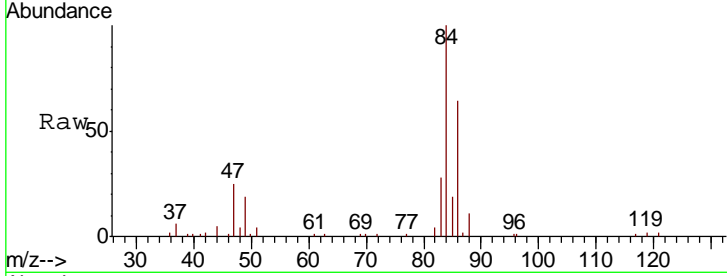




#25  
 Chloroform  
 Concen: 0.257 ug/L  
 RT: 5.14 min Scan# 1181  
 Delta R.T. -0.00 min  
 Lab File: VU035367.D  
 Acq: 22 Oct 2019 16:44

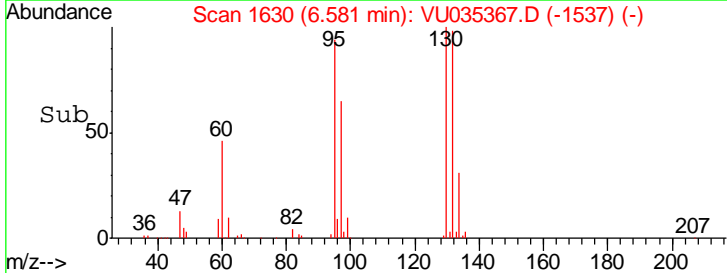
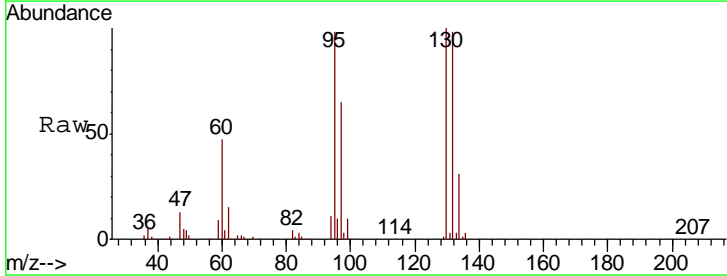
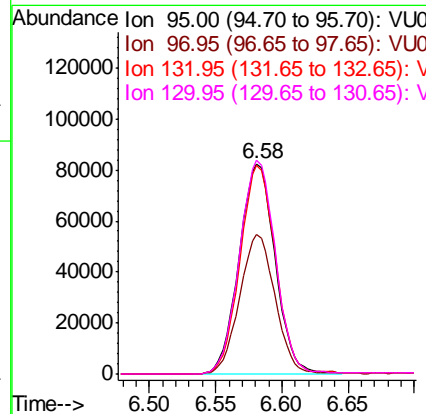
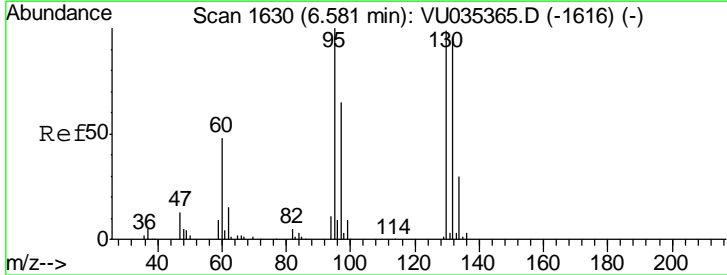
Instrument : MSVOA\_U  
 ClientSampled :

| Tgt Ion | Resp | Lower | Upper |
|---------|------|-------|-------|
| 83      | 9840 |       |       |
| 85      | 68.6 | 45.1  | 83.9  |

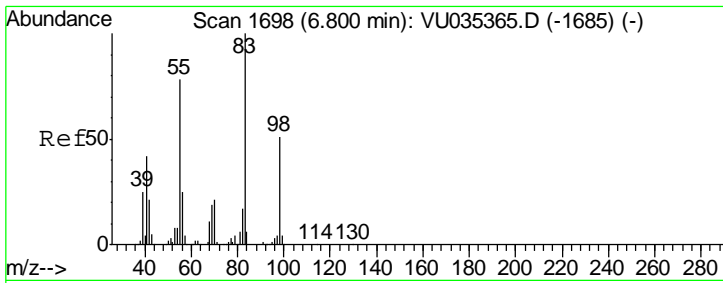


#34  
 Trichloroethene  
 Concen: 7.233 ug/L  
 RT: 6.58 min Scan# 1630  
 Delta R.T. -0.00 min  
 Lab File: VU035367.D  
 Acq: 22 Oct 2019 16:44

| Tgt Ion | Resp   | Lower | Upper |
|---------|--------|-------|-------|
| 95      | 156147 |       |       |
| 97      | 66.3   | 46.6  | 86.6  |
| 132     | 99.5   | 68.7  | 127.7 |
| 130     | 101.7  | 73.9  | 137.3 |



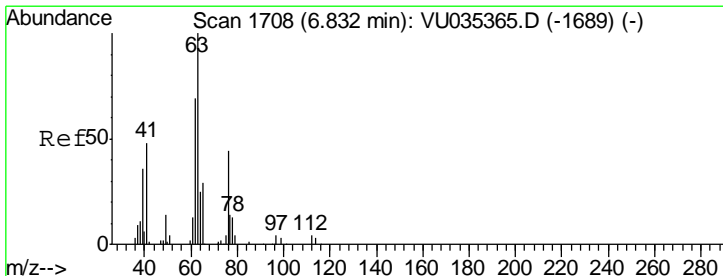
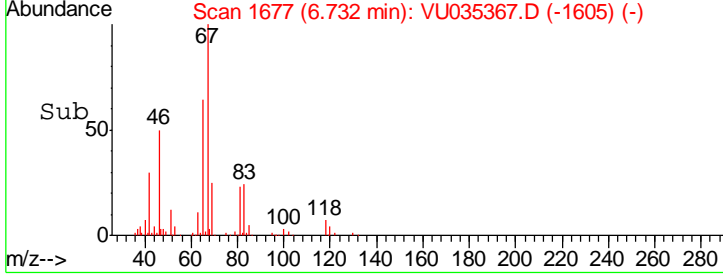
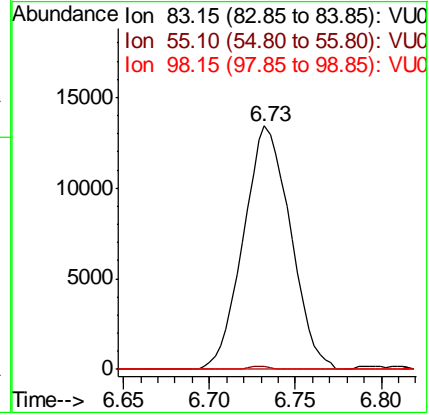
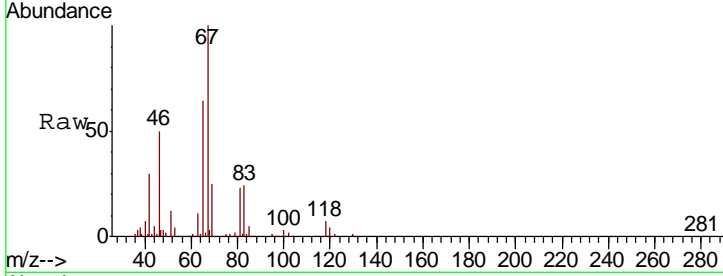




#35  
 Methylcyclohexane  
 Concen: 0.706 ug/L  
 RT: 6.73 min Scan# 1677  
 Delta R.T. -0.07 min  
 Lab File: VU035367.D  
 Acq: 22 Oct 2019 16:44

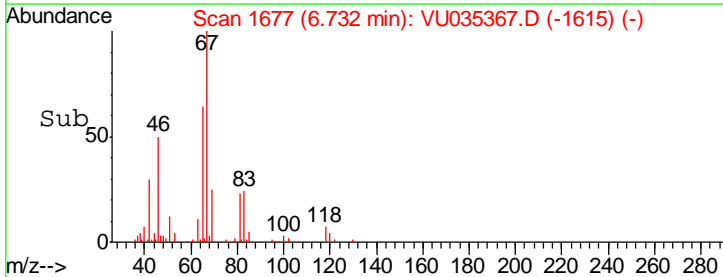
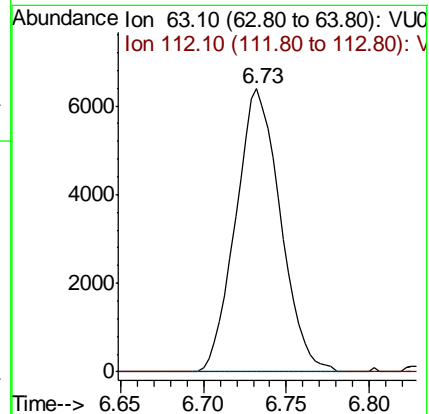
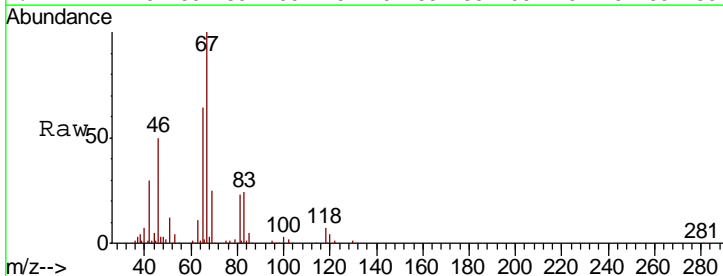
Instrument :  
 MSVOA\_U  
 ClientSampled :

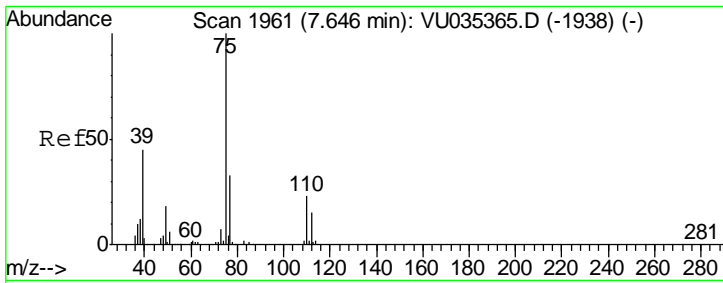
| Tgt Ion | Resp  | Lower | Upper |
|---------|-------|-------|-------|
| 83      | 25473 |       |       |
| 55      | 0.5   | 60.4  | 90.6# |
| 98      | 0.0   | 39.5  | 59.3# |



#37  
 1,2-Dichloropropane  
 Concen: 0.589 ug/L  
 RT: 6.73 min Scan# 1677  
 Delta R.T. -0.10 min  
 Lab File: VU035367.D  
 Acq: 22 Oct 2019 16:44

| Tgt Ion | Resp  | Lower | Upper |
|---------|-------|-------|-------|
| 63      | 11999 |       |       |
| 112     | 0.0   | 3.7   | 5.5#  |

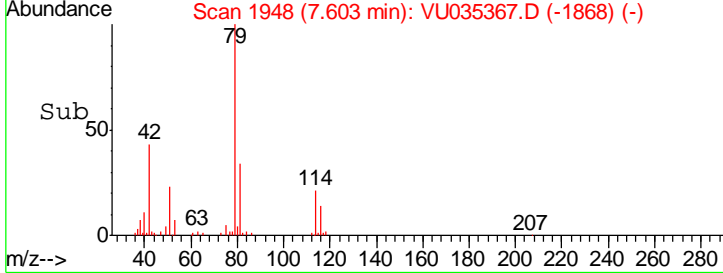
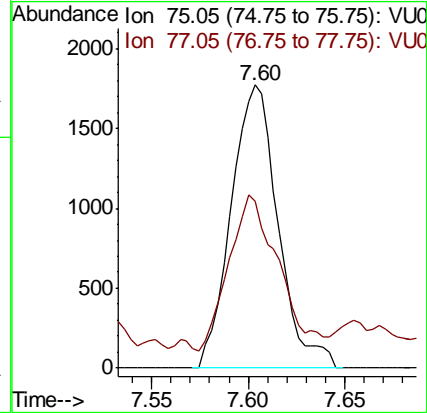
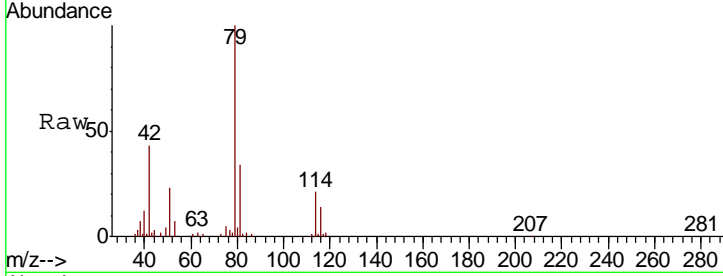




#39  
 cis-1,3-Dichloropropene  
 Concen: 0.088 ug/L  
 RT: 7.60 min Scan# 1948  
 Delta R.T. -0.04 min  
 Lab File: VU035367.D  
 Acq: 22 Oct 2019 16:44

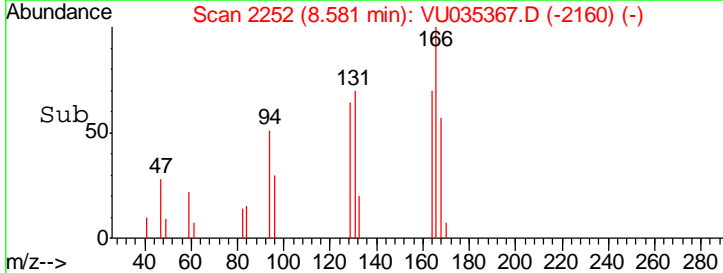
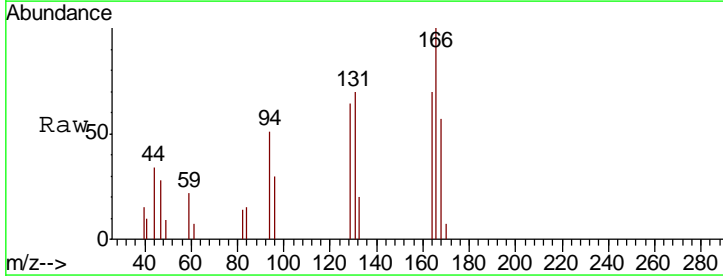
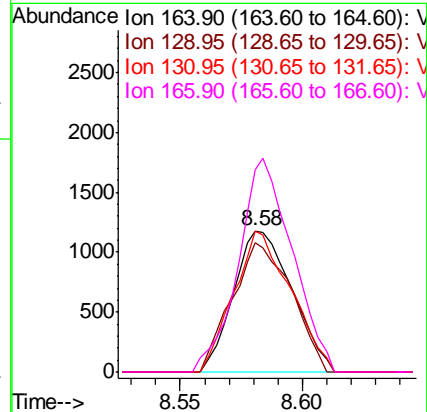
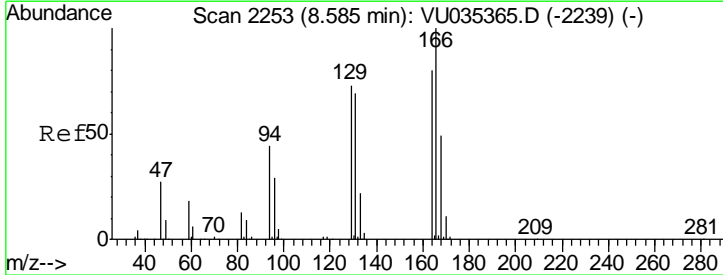
Instrument :  
 MSVOA\_U  
 ClientSampled :

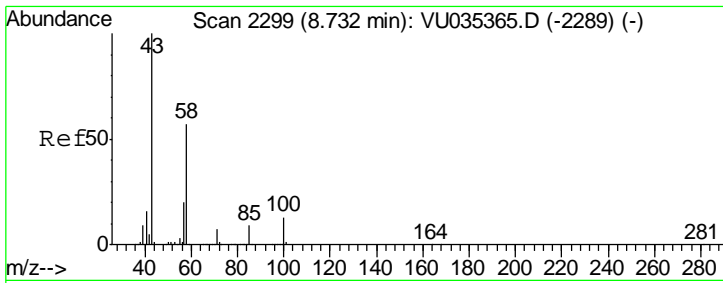
| Tgt Ion | Resp | Lower | Upper |
|---------|------|-------|-------|
| 75      | 2987 |       |       |
| 75      | 100  |       |       |
| 77      | 59.2 | 22.7  | 42.1# |



#47  
 Tetrachloroethene  
 Concen: 0.109 ug/L  
 RT: 8.58 min Scan# 2252  
 Delta R.T. -0.00 min  
 Lab File: VU035367.D  
 Acq: 22 Oct 2019 16:44

| Tgt Ion | Resp  | Lower | Upper |
|---------|-------|-------|-------|
| 164     | 1960  |       |       |
| 164     | 100   |       |       |
| 129     | 91.5  | 65.2  | 121.0 |
| 131     | 99.7  | 62.9  | 116.9 |
| 166     | 142.7 | 91.5  | 169.9 |

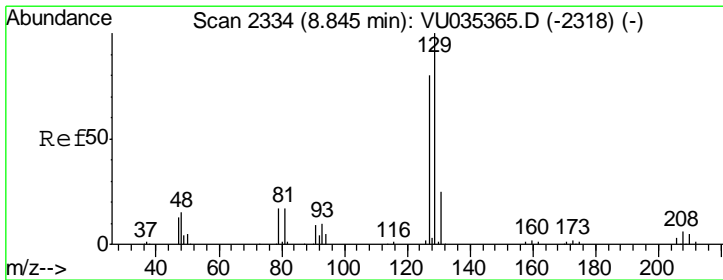
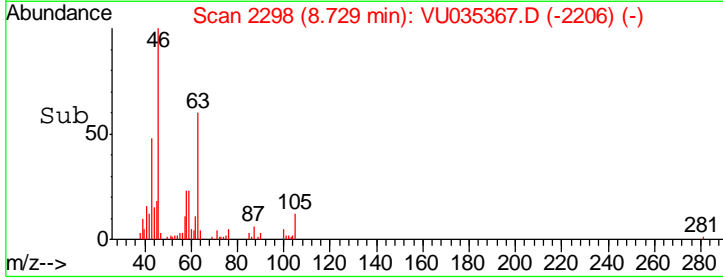
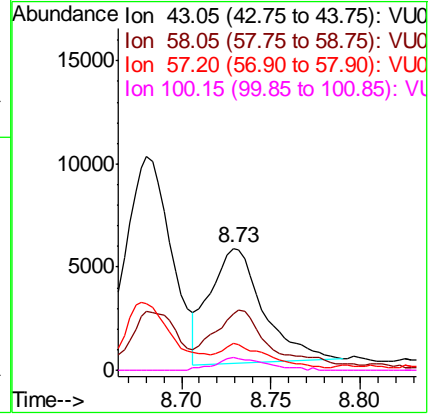
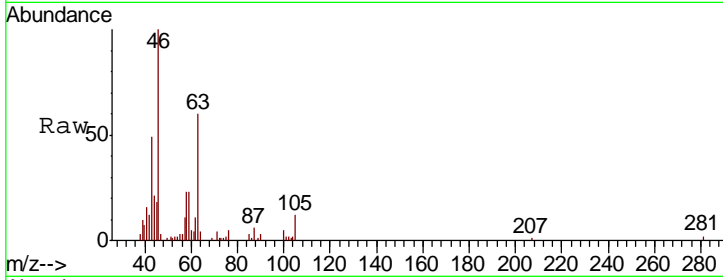




#48  
 2-Hexanone  
 Concen: 1.197 ug/L  
 RT: 8.73 min Scan# 2298  
 Delta R.T. -0.00 min  
 Lab File: VU035367.D  
 Acq: 22 Oct 2019 16:44

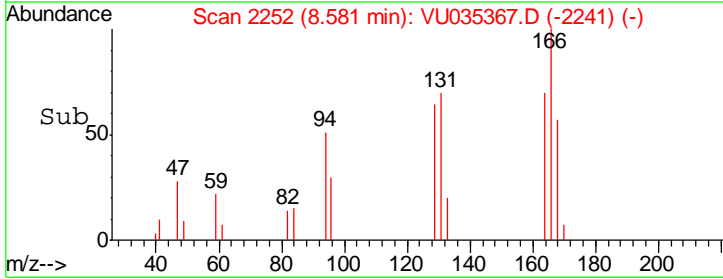
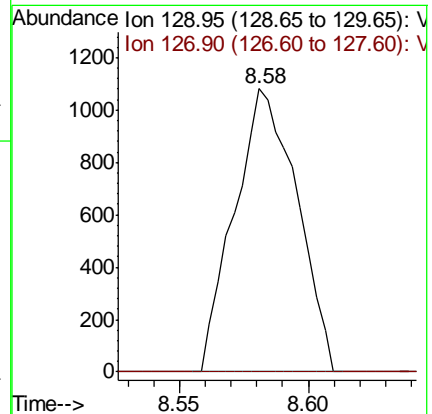
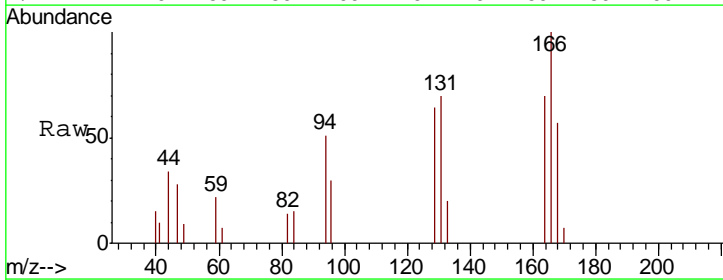
Instrument : MSVOA\_U  
 ClientSampled :

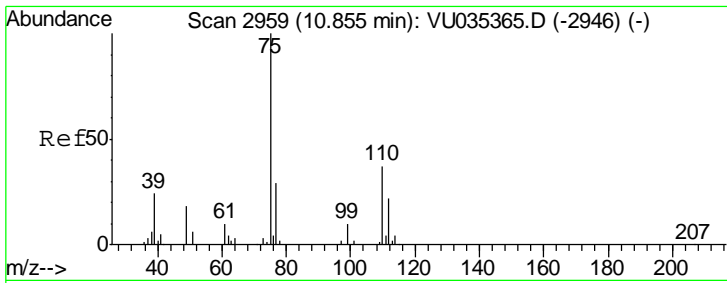
| Tgt Ion | Resp  | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 11554 |       |       |
| 58      | 59.4  | 45.1  | 67.7  |
| 57      | 18.8  | 16.0  | 24.0  |
| 100     | 10.4  | 10.4  | 15.6# |



#49  
 Dibromochloromethane  
 Concen: 0.095 ug/L  
 RT: 8.58 min Scan# 2252  
 Delta R.T. -0.26 min  
 Lab File: VU035367.D  
 Acq: 22 Oct 2019 16:44

| Tgt Ion | Resp | Lower | Upper |
|---------|------|-------|-------|
| 129     | 1830 |       |       |
| 127     | 0.0  | 53.8  | 99.8# |





#59  
 1,2,3-Trichloropropane  
 Concen: 0.868 ug/L  
 RT: 11.84 min Scan# 3266  
 Delta R.T. 0.99 min  
 Lab File: VU035367.D  
 Acq: 22 Oct 2019 16:44

Instrument :  
 MSVOA\_U  
 ClientSampled :

Tot Ion: 75 Resp: 12321  
 Ion Ratio Lower Upper  
 75 100  
 77 36.6 26.2 39.2

