

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU101819\  
 Data File : VU035283.D  
 Acq On : 18 Oct 2019 21:54  
 Operator : JC/SP  
 Sample : K5419-14DL 5X  
 Misc : 25.0mL/MSVOA U/WATER  
 ALS Vial : 25 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :

Quant Time: Oct 19 03:43:42 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR101719WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Sat Oct 19 03:38:09 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 6.29  | 114  | 331381   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.45  | 117  | 323356   | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.84 | 152  | 133938   | 5.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |        |
|--------------------------------|--------|-------|----------|----------|------|--------|
| 4) Vinyl Chloride-d3           | 1.61   | 65    | 87923    | 4.35     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 87.00% |
| 7) Chloroethane-d5             | 1.93   | 69    | 82426    | 4.46     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 89.20% |
| 11) 1,1-Dichloroethene-d2      | 2.59   | 63    | 123024   | 3.29     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 65.80% |
| 20) 2-Butanone-d5              | 4.71   | 46    | 277082   | 47.72    | ug/L | 0.00   |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 95.44% |
| 24) Chloroform-d               | 5.11   | 84    | 173174   | 4.69     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 93.80% |
| 26) 1,2-Dichloroethane-d4      | 5.75   | 65    | 98514    | 4.81     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 96.20% |
| 32) Benzene-d6                 | 5.77   | 84    | 351740   | 4.76     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 95.20% |
| 36) 1,2-Dichloropropane-d6     | 6.74   | 67    | 114680   | 4.88     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 97.60% |
| 41) Toluene-d8                 | 7.93   | 98    | 322035   | 4.55     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 91.00% |
| 43) trans-1,3-Dichloropropene- | 8.22   | 79    | 47759    | 4.19     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 83.80% |
| 46) 2-Hexanone-d5              | 8.68   | 63    | 222100   | 44.20    | ug/L | 0.00   |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 88.40% |
| 57) 1,1,2,2-Tetrachloroethane- | 10.79  | 84    | 96061    | 4.59     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 91.80% |
| 64) 1,2-Dichlorobenzene-d4     | 12.22  | 152   | 112975   | 4.63     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 92.60% |

## Target Compounds

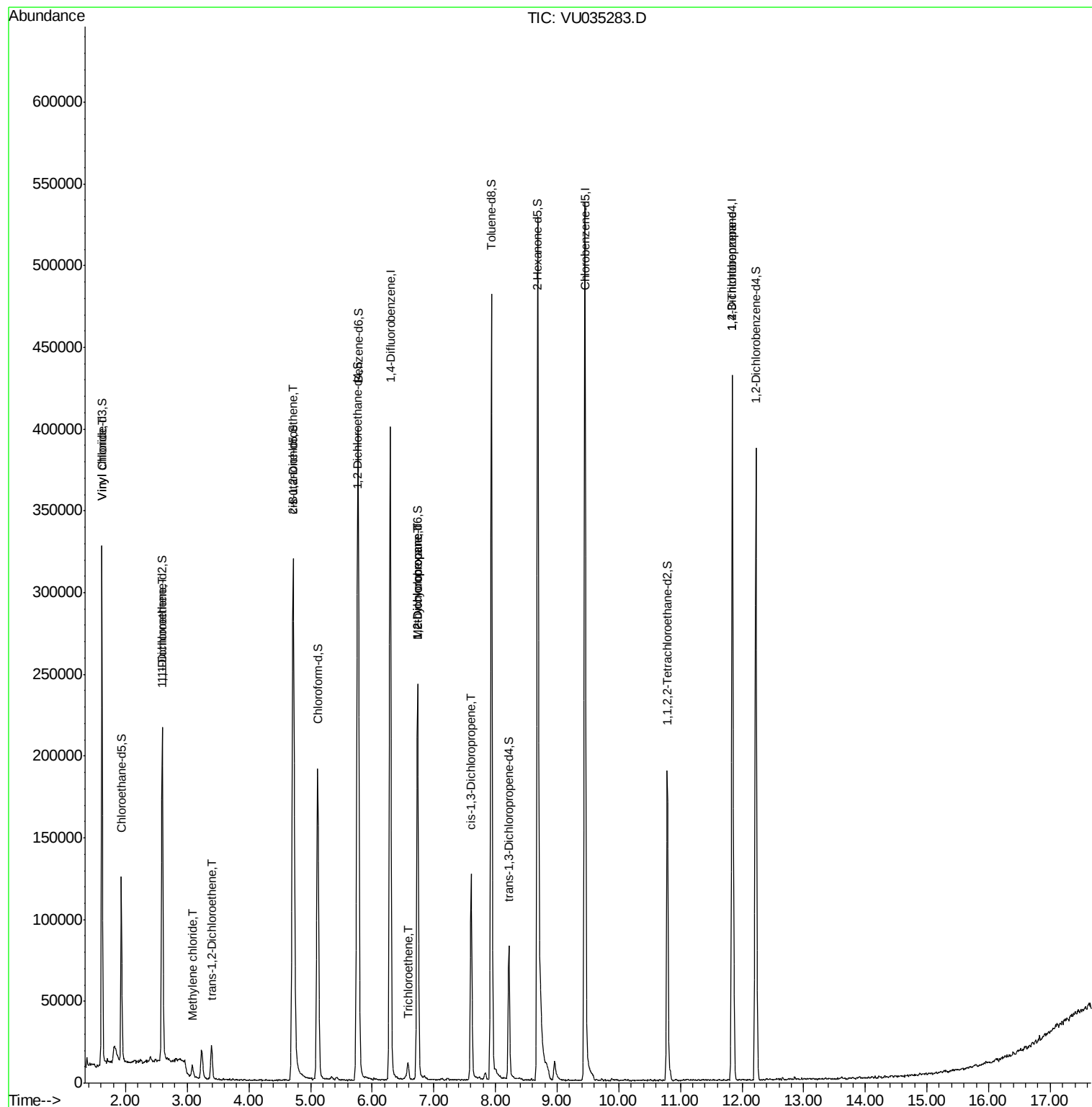
| Target Compounds             | R.T.  | QIon | Response | Conc  | Units  | Ovalue |
|------------------------------|-------|------|----------|-------|--------|--------|
| 5) Vinyl chloride            | 1.62  | 62   | 140581   | 4.893 | ug/L   | 96     |
| 12) 1,1-Dichloroethene       | 2.61  | 96   | 2338     | 0.110 | ug/L # | 1      |
| 16) Methylene chloride       | 3.08  | 84   | 3152     | 0.123 | ug/L   | 96     |
| 18) trans-1,2-Dichloroethene | 3.39  | 96   | 9355     | 0.407 | ug/L   | 97     |
| 22) cis-1,2-Dichloroethene   | 4.72  | 96   | 74510    | 2.934 | ug/L   | 96     |
| 34) Trichloroethene          | 6.58  | 95   | 3054     | 0.119 | ug/L   | 87     |
| 35) Methylcyclohexane        | 6.74  | 83   | 27058    | 0.633 | ug/L # | 19     |
| 37) 1,2-Dichloropropane      | 6.74  | 63   | 12196    | 0.505 | ug/L # | 86     |
| 39) cis-1,3-Dichloropropene  | 7.60  | 75   | 3178     | 0.079 | ug/L # | 30     |
| 59) 1,2,3-Trichloropropane   | 11.84 | 75   | 15733    | 0.935 | ug/L # | 88     |

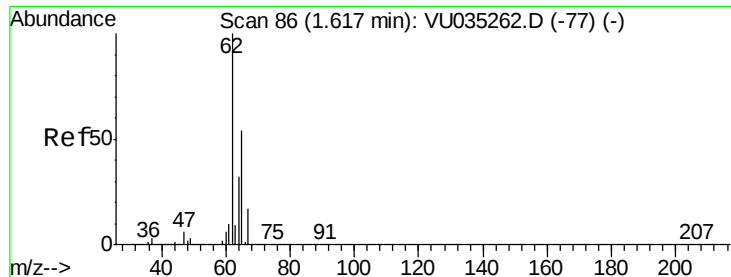
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA U\DATA\VU101819\  
Data File : VU035283.D  
Acq On : 18 Oct 2019 21:54  
Operator : JC/SP  
Sample : K5419-14DL 5X  
Misc : 25.0mL/MSVOA U/WATER  
ALS Vial : 25 Sample Multiplier: 1

Instrument :  
MSVOA\_U  
ClientSampleId :

Quant Time: Oct 19 03:43:42 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR101719WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Sat Oct 19 03:38:09 2019  
Response via : Initial Calibration





#5

Vinyl chloride

Concen: 4.893 ug/L

RT: 1.62 min Scan# 87

Delta R.T. 0.00 min

Lab File: VU035283.D

Acq: 18 Oct 2019 21:54

Instrument :

MSVOA\_U

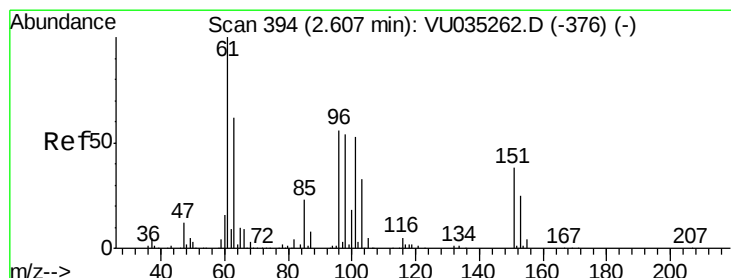
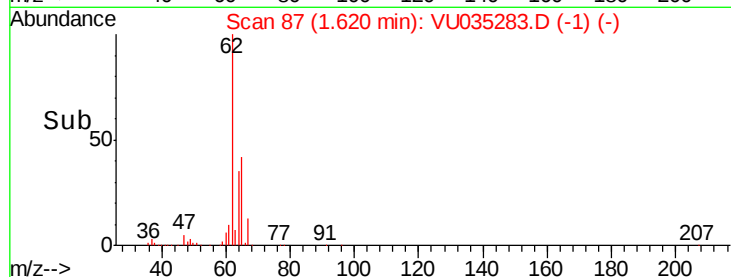
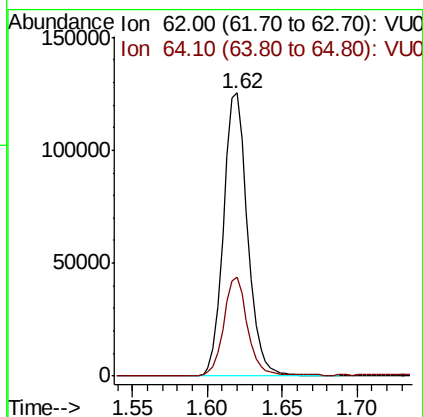
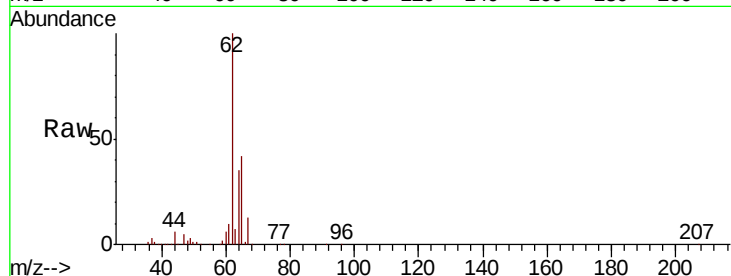
ClientSampled :

Tot Ion: 62 Resp: 140581

Ion Ratio Lower Upper

62 100

64 34.9 22.9 42.5



#12

1,1-Dichloroethene

Concen: 0.110 ug/L

RT: 2.61 min Scan# 394

Delta R.T. -0.00 min

Lab File: VU035283.D

Acq: 18 Oct 2019 21:54

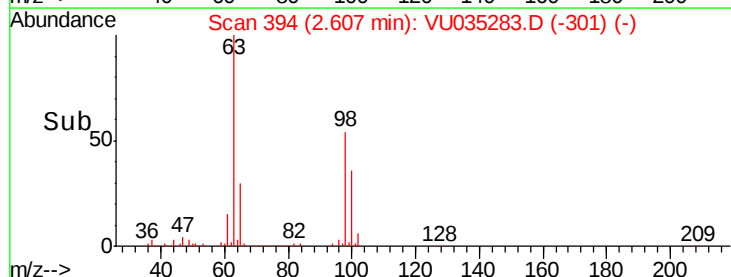
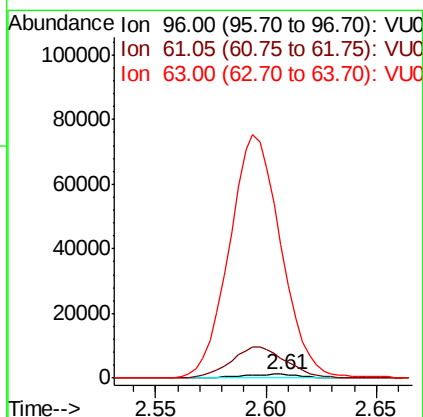
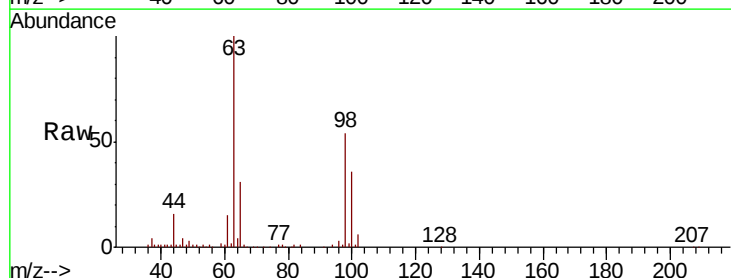
Tgt Ion: 96 Resp: 2338

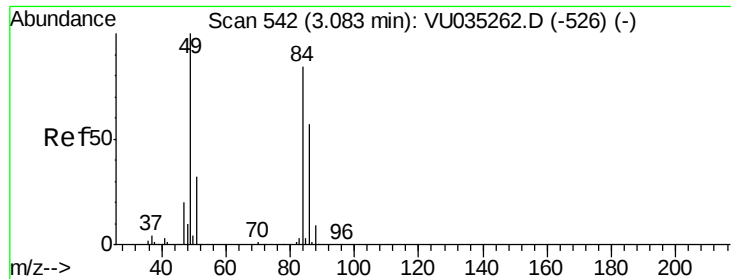
Ion Ratio Lower Upper

96 100

61 509.8 120.6 224.0#

63 3386.1 86.8 161.2#

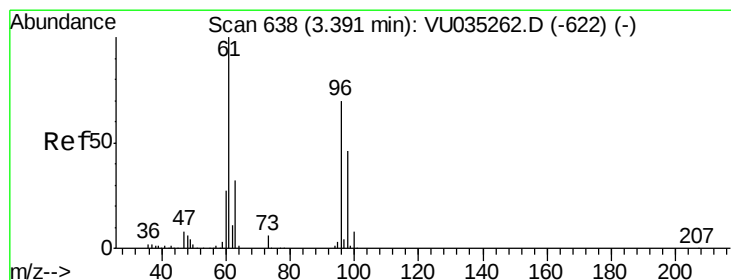
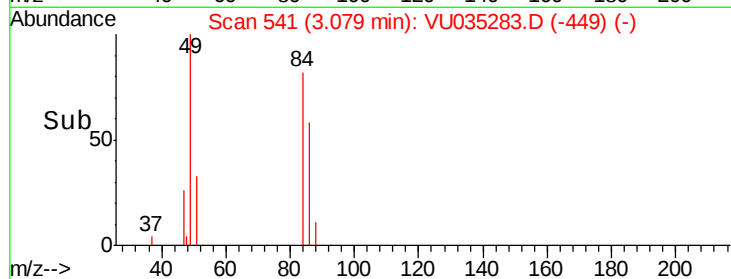
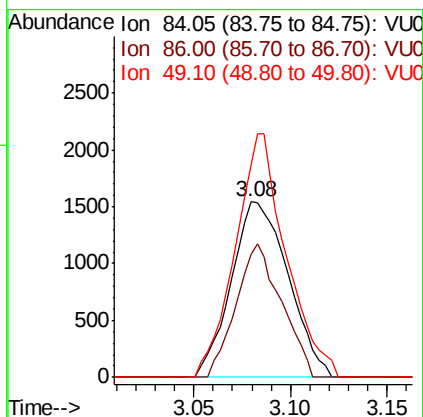
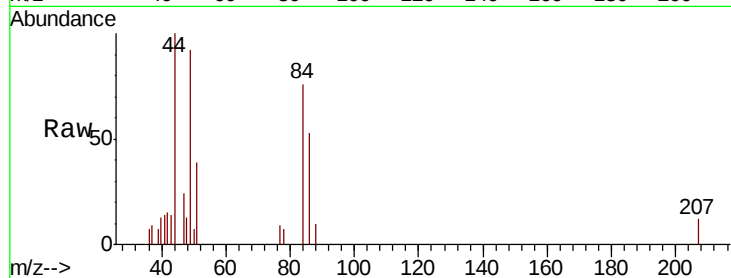




#16  
Methylene chloride  
Concen: 0.123 ug/L  
RT: 3.08 min Scan# 541  
Delta R.T. -0.00 min  
Lab File: VU035283.D  
Acq: 18 Oct 2019 21:54

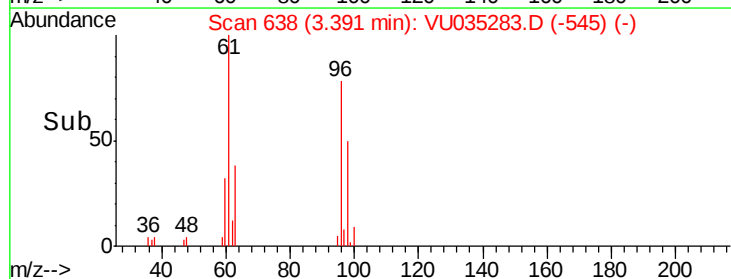
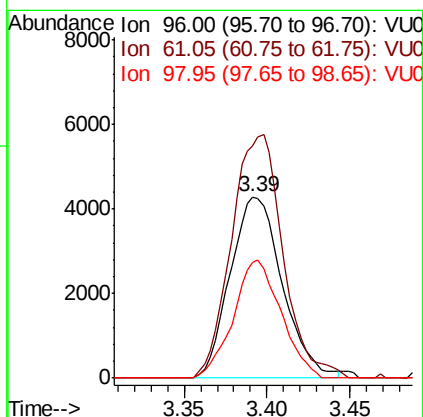
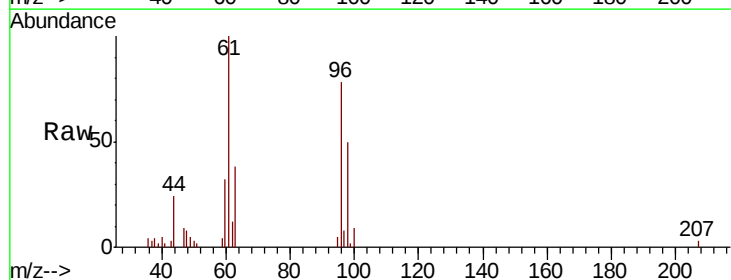
Instrument :  
MSVOA\_U  
ClientSampled :

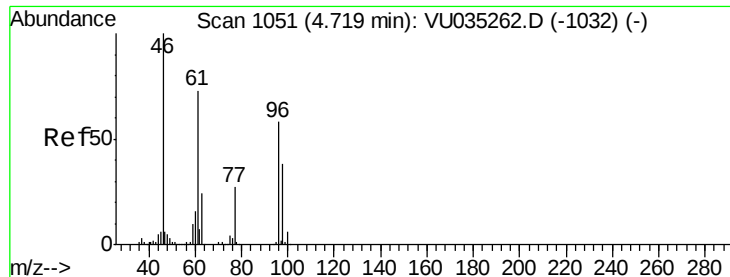
Tot Ion: 84 Resp: 3152  
Ion Ratio Lower Upper  
84 100  
86 70.3 45.4 84.2  
49 121.5 86.8 161.2



#18  
trans-1,2-Dichloroethene  
Concen: 0.407 ug/L  
RT: 3.39 min Scan# 638  
Delta R.T. -0.00 min  
Lab File: VU035283.D  
Acq: 18 Oct 2019 21:54

Tgt Ion: 96 Resp: 9355  
Ion Ratio Lower Upper  
96 100  
61 127.8 93.0 172.6  
98 63.7 43.7 81.1





#22

cis-1,2-Dichloroethene

Concen: 2.934 ug/L

RT: 4.72 min Scan# 1051

Delta R.T. -0.00 min

Lab File: VU035283.D

Acq: 18 Oct 2019 21:54

Instrument :  
MSVOA\_U  
ClientSampleId :

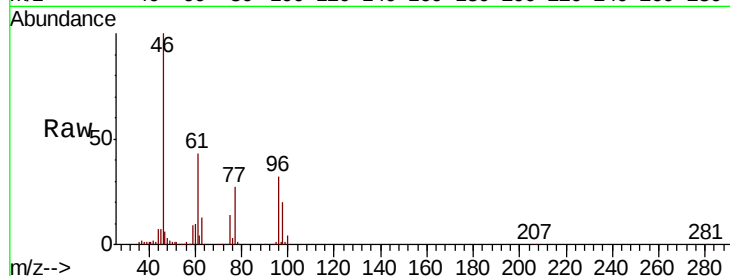
Tot Ion: 96 Resp: 74510

Ion Ratio Lower Upper

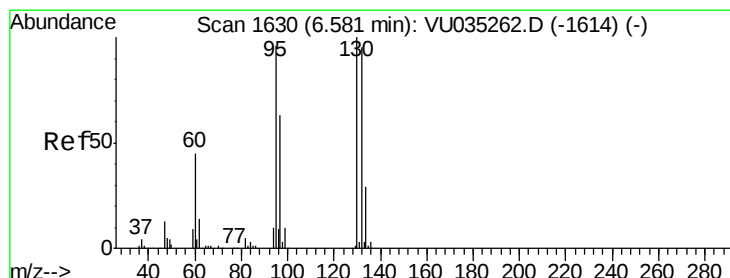
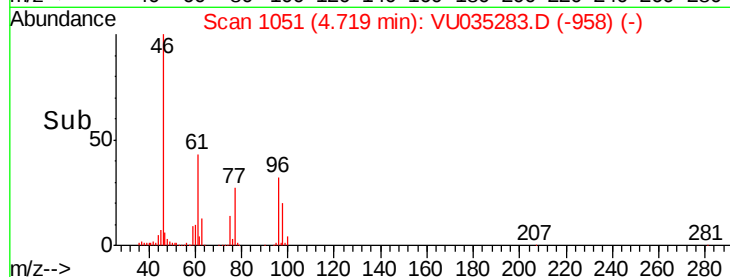
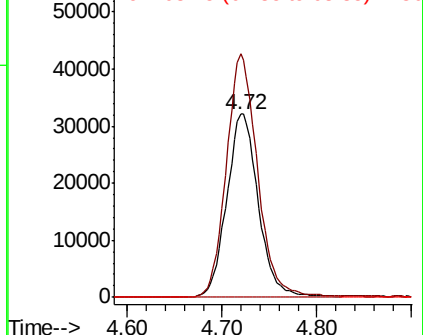
96 100

61 132.9 89.7 166.5

68 0.0 0.0 0.0



Abundance Ion 96.00 (95.70 to 96.70): VU0  
Ion 61.05 (60.75 to 61.75): VU0  
Ion 68.15 (67.85 to 68.85): VU0



#34

Trichloroethene

Concen: 0.119 ug/L

RT: 6.58 min Scan# 1630

Delta R.T. -0.00 min

Lab File: VU035283.D

Acq: 18 Oct 2019 21:54

Tgt Ion: 95 Resp: 3054

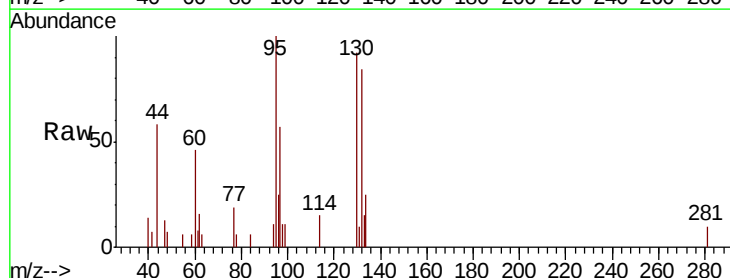
Ion Ratio Lower Upper

95 100

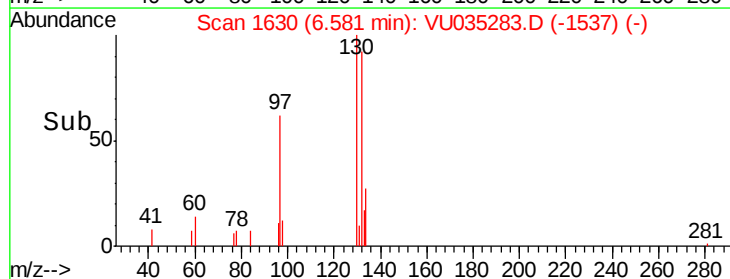
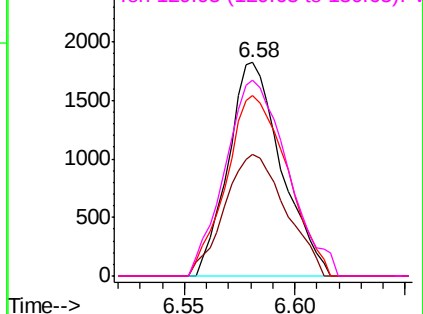
97 56.8 46.6 86.6

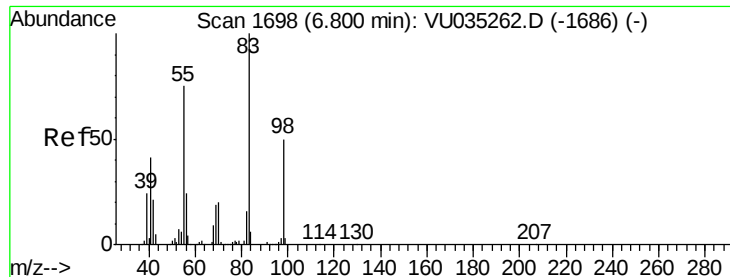
132 84.2 68.7 127.7

130 91.6 73.9 137.3



Abundance Ion 95.00 (94.70 to 95.70): VU0  
Ion 96.95 (96.65 to 97.65): VU0  
Ion 131.95 (131.65 to 132.65): V  
Ion 129.95 (129.65 to 130.65): V

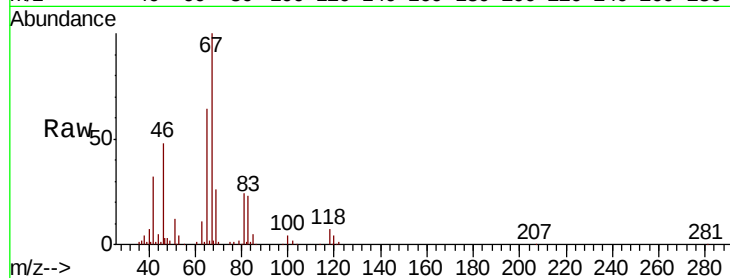




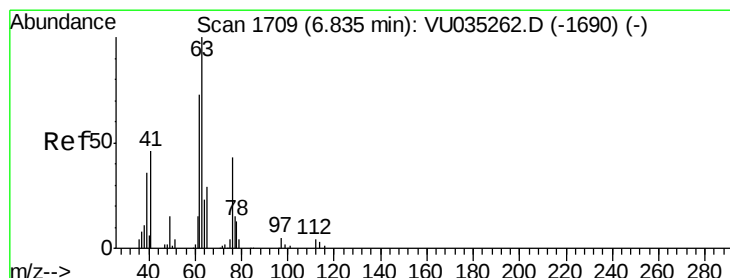
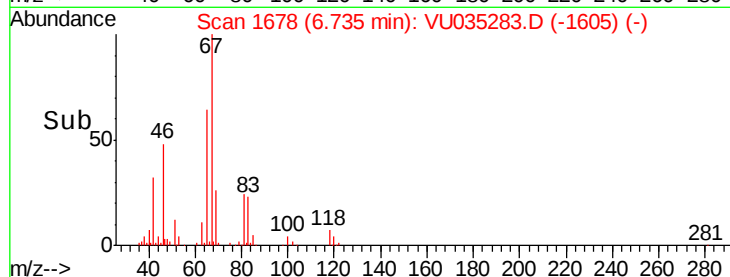
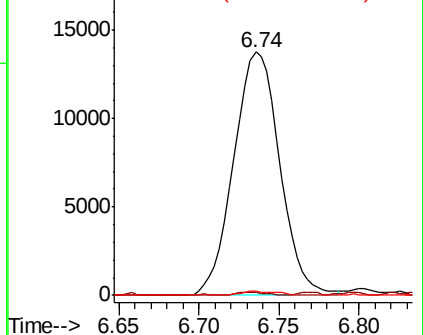
#35  
Methylcyclohexane  
Concen: 0.633 ug/L  
RT: 6.74 min Scan# 1678  
Delta R.T. -0.06 min  
Lab File: VU035283.D  
Acq: 18 Oct 2019 21:54

Instrument :  
MSVOA\_U  
ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 83      | 100   |       |       |
| 55      | 0.8   | 60.4  | 90.6# |
| 98      | 1.2   | 39.5  | 59.3# |

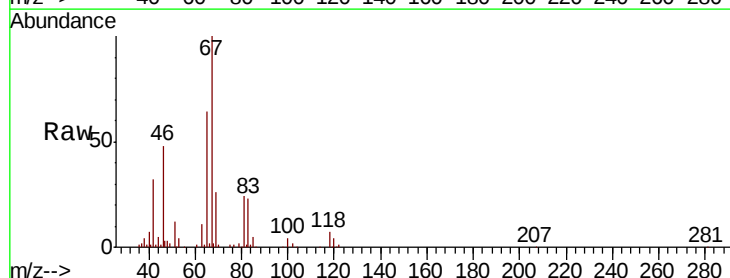


Abundance Ion 83.15 (82.85 to 83.85): VU035262.D (-1686) (-)

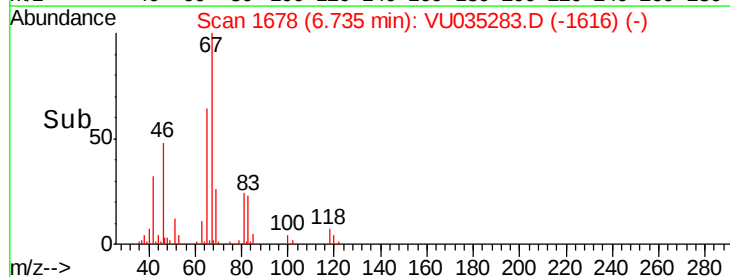
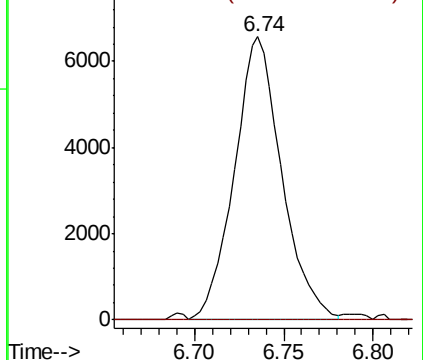


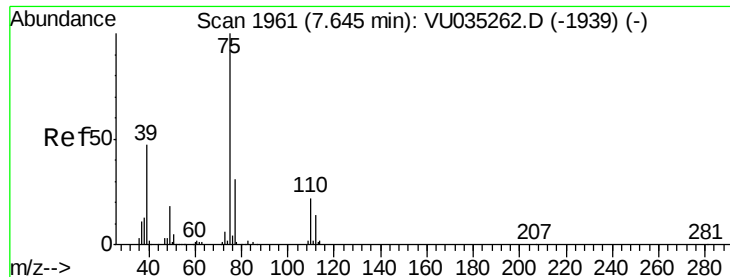
#37  
1,2-Dichloropropane  
Concen: 0.505 ug/L  
RT: 6.74 min Scan# 1678  
Delta R.T. -0.10 min  
Lab File: VU035283.D  
Acq: 18 Oct 2019 21:54

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 63      | 100   |       |       |
| 112     | 0.0   | 3.7   | 5.5#  |



Abundance Ion 63.10 (62.80 to 63.80): VU035262.D (-1690) (-)





#39

cis-1,3-Dichloropropene

Concen: 0.079 ug/L

RT: 7.60 min Scan# 1948

Delta R.T. -0.04 min

Lab File: VU035283.D

Acq: 18 Oct 2019 21:54

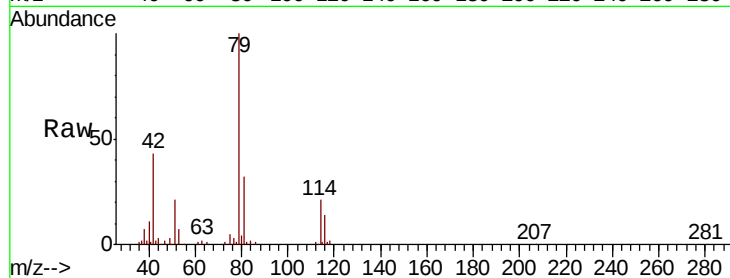
Instrument :  
MSVOA\_U  
ClientSampleId :

Tot Ion: 75 Resp: 3178

Ion Ratio Lower Upper

75 100

77 71.9 22.7 42.1#



Abundance Ion 75.05 (74.75 to 75.75): VU035262.D (-1939) (-)

Ion 77.05 (76.75 to 77.75): VU035262.D (-1939) (-)

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

Abundance Ion 75.05 (74.75 to 75.75): VU035262.D (-1939) (-)

Ion 77.05 (76.75 to 77.75): VU035262.D (-1939) (-)

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60

7.60