

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\U102319\  
 Data File : VU035449.D  
 Acq On : 24 Oct 2019 10:01  
 Operator : JC/SP  
 Sample : K5488-06MS  
 Misc : 25.0mL/MSVOA U/WATER  
 ALS Vial : 58 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :

Quant Time: Oct 24 14:22:37 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR101719WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Thu Oct 24 14:19:48 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 6.29  | 114  | 203536   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.45  | 117  | 210523   | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.85 | 152  | 64006    | 5.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |          |
|--------------------------------|--------|-------|----------|----------|------|----------|
| 4) Vinyl Chloride-d3           | 1.62   | 65    | 55392    | 4.46     | ug/L | 0.00     |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 89.20%   |
| 7) Chloroethane-d5             | 1.93   | 69    | 55981    | 4.93     | ug/L | 0.00     |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 98.60%   |
| 11) 1,1-Dichloroethene-d2      | 2.60   | 63    | 108081   | 4.71     | ug/L | 0.00     |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 94.20%   |
| 20) 2-Butanone-d5              | 4.70   | 46    | 238018   | 66.74    | ug/L | 0.00     |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 133.48%# |
| 24) Chloroform-d               | 5.11   | 84    | 115690   | 5.10     | ug/L | 0.00     |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 102.00%  |
| 26) 1,2-Dichloroethane-d4      | 5.75   | 65    | 69316    | 5.52     | ug/L | 0.00     |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 110.40%  |
| 32) Benzene-d6                 | 5.77   | 84    | 214226   | 4.45     | ug/L | 0.00     |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 89.00%   |
| 36) 1,2-Dichloropropane-d6     | 6.74   | 67    | 81398    | 5.32     | ug/L | 0.00     |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 106.40%  |
| 41) Toluene-d8                 | 7.93   | 98    | 168116   | 3.65     | ug/L | 0.00     |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 73.00%   |
| 43) trans-1,3-Dichloropropene- | 8.21   | 79    | 28984    | 3.91     | ug/L | 0.00     |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 78.20%   |
| 46) 2-Hexanone-d5              | 8.68   | 63    | 152846   | 46.72    | ug/L | 0.00     |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 93.44%   |
| 57) 1,1,2,2-Tetrachloroethane- | 10.79  | 84    | 74201    | 5.45     | ug/L | 0.00     |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 109.00%  |
| 64) 1,2-Dichlorobenzene-d4     | 12.22  | 152   | 54924    | 4.71     | ug/L | 0.00     |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 94.20%   |

## Target Compounds

| Target Compounds             | R.T.  | QIon | Response | Conc    | Units  | Ovalue |
|------------------------------|-------|------|----------|---------|--------|--------|
| 5) Vinyl chloride            | 1.62  | 62   | 130742   | 7.409   | ug/L   | 97     |
| 12) 1,1-Dichloroethene       | 2.61  | 96   | 59512    | 4.551   | ug/L   | 85     |
| 13) Acetone                  | 2.67  | 43   | 2444     | 0.985   | ug/L   | 88     |
| 17) Methyl tert-butyl Ether  | 3.43  | 73   | 3744951  | 106.411 | ug/L   | 99     |
| 18) trans-1,2-Dichloroethene | 3.39  | 96   | 265610   | 18.822  | ug/L   | 91     |
| 19) 1,1-Dichloroethane       | 3.92  | 63   | 33739    | 1.322   | ug/L   | 96     |
| 22) cis-1,2-Dichloroethene   | 4.72  | 96   | 1105233  | 70.860  | ug/L   | 96     |
| 25) Chloroform               | 5.14  | 83   | 8390     | 0.300   | ug/L   | 91     |
| 27) 1,2-Dichloroethane       | 5.82  | 62   | 3543     | 0.206   | ug/L # | 74     |
| 33) Benzene                  | 5.82  | 78   | 304079   | 4.909   | ug/L   | 100    |
| 34) Trichloroethene          | 6.58  | 95   | 190074   | 11.414  | ug/L   | 97     |
| 35) Methylcyclohexane        | 6.74  | 83   | 19373    | 0.696   | ug/L # | 19     |
| 42) Toluene                  | 8.01  | 91   | 286991   | 4.197   | ug/L   | 99     |
| 48) 2-Hexanone               | 8.73  | 43   | 11672    | 1.568   | ug/L # | 70     |
| 51) Chlorobenzene            | 9.48  | 112  | 203692   | 4.614   | ug/L   | 98     |
| 59) 1,2,3-Trichloropropane   | 11.84 | 75   | 8804     | 0.804   | ug/L # | 42     |

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MSVOA\_U  
ClientSampleId :

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Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR101719WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Thu Oct 24 14:19:48 2019  
Response via : Initial Calibration

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

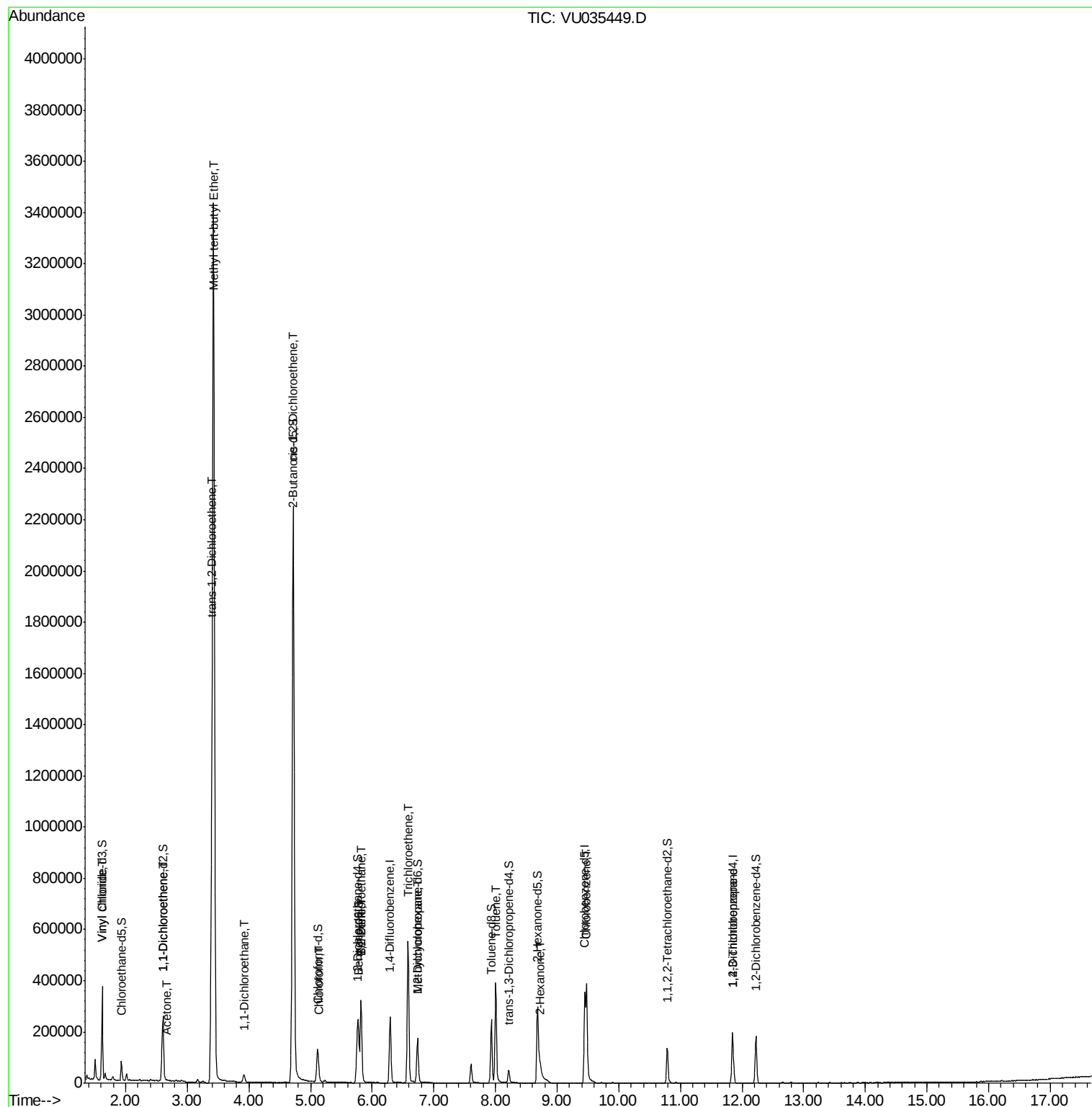
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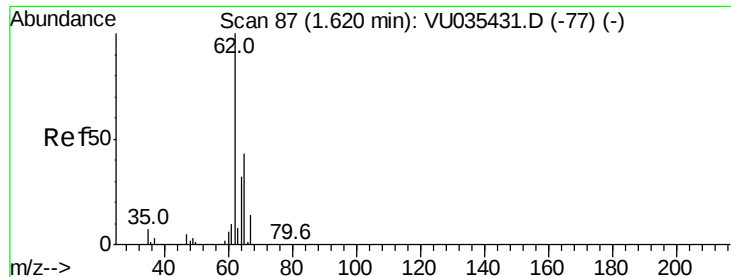
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA U\DATA\VU102319\  
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Quant Title : TRACE VOA SOM01.0  
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Response via : Initial Calibration





#5

Vinyl chloride

Concen: 7.409 ug/L

RT: 1.62 min Scan# 87

Delta R.T. 0.00 min

Lab File: VU035449.D

Acq: 24 Oct 2019 10:01

Instrument :

MSVOA\_U

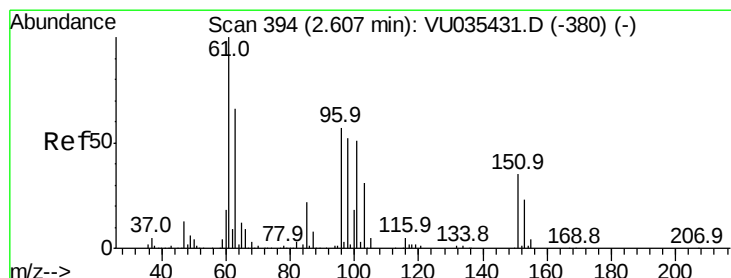
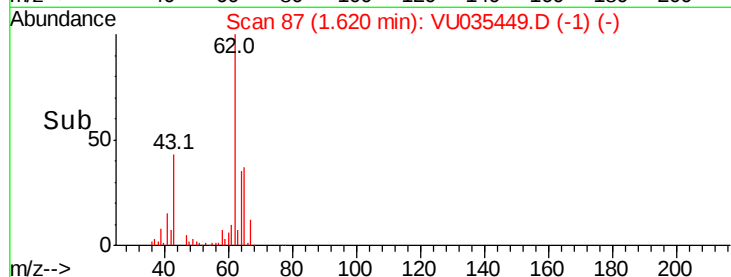
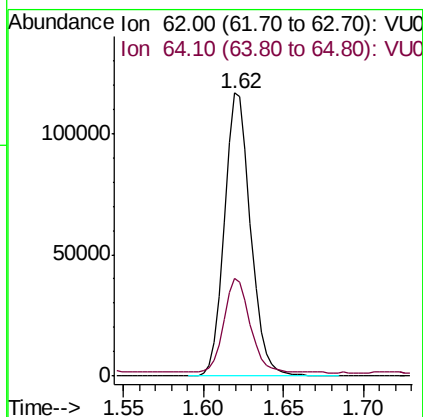
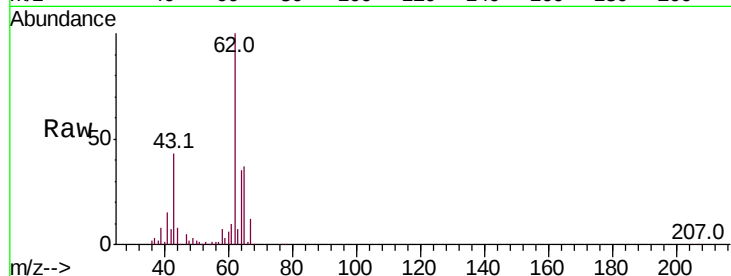
ClientSampled :

Tot Ion: 62 Resp: 130742

Ion Ratio Lower Upper

62 100

64 34.6 22.9 42.5



#12

1,1-Dichloroethene

Concen: 4.551 ug/L

RT: 2.61 min Scan# 395

Delta R.T. 0.00 min

Lab File: VU035449.D

Acq: 24 Oct 2019 10:01

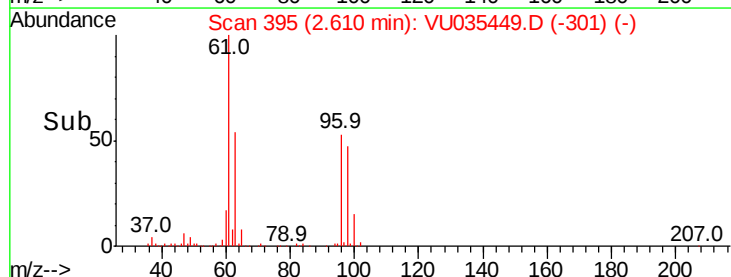
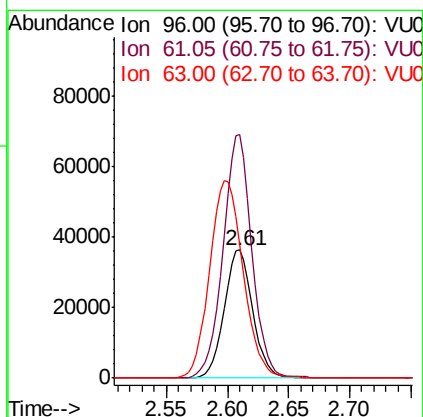
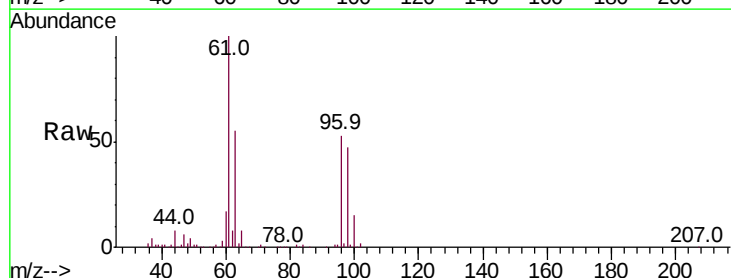
Tgt Ion: 96 Resp: 59512

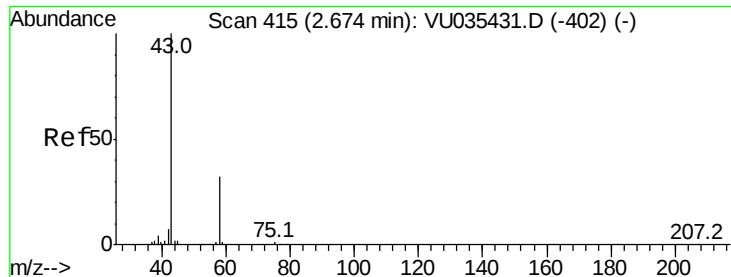
Ion Ratio Lower Upper

96 100

61 190.2 120.6 224.0

63 103.9 86.8 161.2





#13

Acetone

Concen: 0.985 ug/L

RT: 2.67 min Scan# 413

Delta R.T. -0.01 min

Lab File: VU035449.D

Acq: 24 Oct 2019 10:01

Instrument :

MSVOA\_U

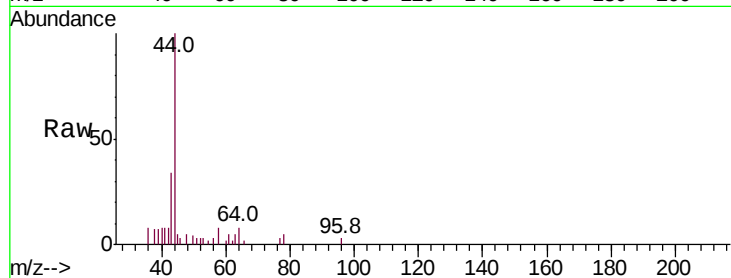
ClientSampleId :

Tot Ion: 43 Resp: 2444

Ion Ratio Lower Upper

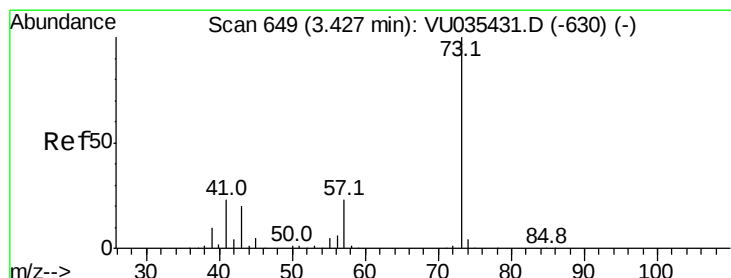
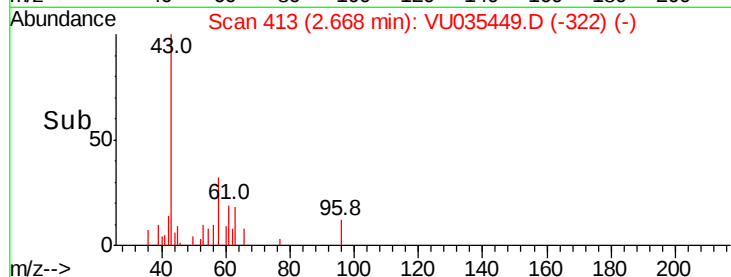
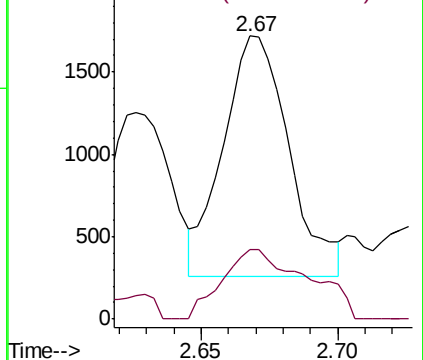
43 100

58 37.5 0.0 61.8



Abundance Ion 43.05 (42.75 to 43.75): VU0

Ion 58.05 (57.75 to 58.75): VU0



#17

Methyl tert-butyl Ether

Concen: 106.411 ug/L

RT: 3.43 min Scan# 649

Delta R.T. 0.00 min

Lab File: VU035449.D

Acq: 24 Oct 2019 10:01

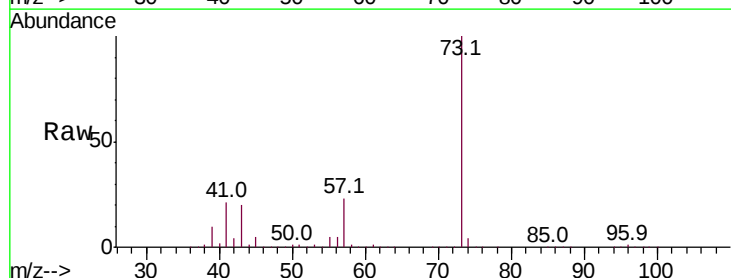
Tgt Ion: 73 Resp: 3744951

Ion Ratio Lower Upper

73 100

43 20.0 16.0 24.0

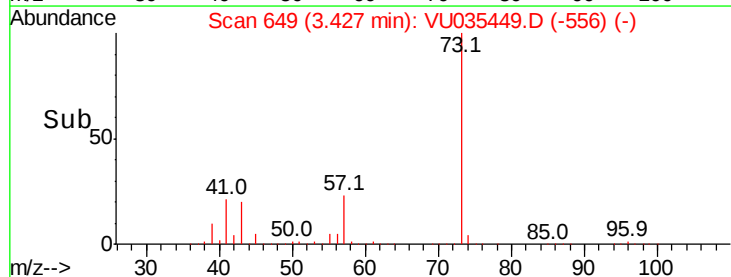
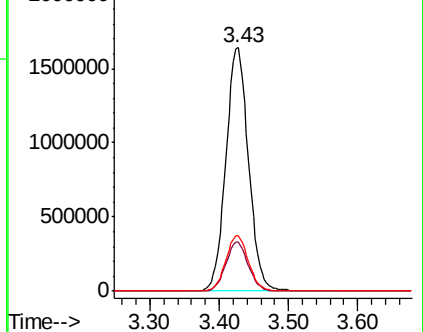
57 22.7 17.4 26.2

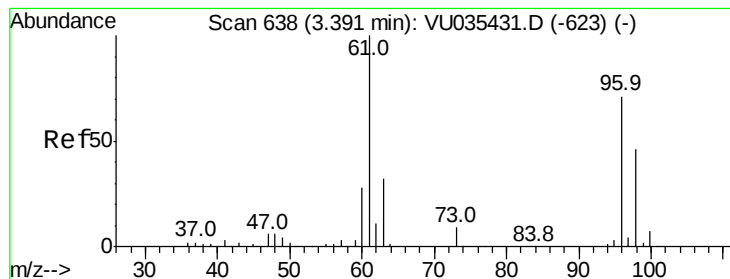


Abundance Ion 73.10 (72.80 to 73.80): VU0

Ion 43.05 (42.75 to 43.75): VU0

Ion 57.10 (56.80 to 57.80): VU0





#18

trans-1,2-Dichloroethene

Concen: 18.822 ug/L

RT: 3.39 min Scan# 639

Delta R.T. 0.00 min

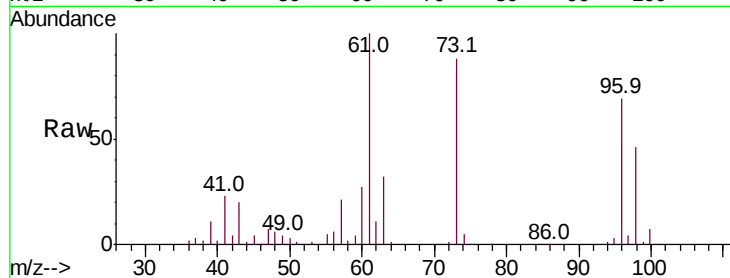
Lab File: VU035449.D

Acq: 24 Oct 2019 10:01

Instrument :  
MSVOA\_U  
ClientSampled :

Tot Ion: 96 Resp: 265610

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 96  | 100   |       |       |
| 61  | 145.2 | 93.0  | 172.6 |
| 98  | 66.1  | 43.7  | 81.1  |

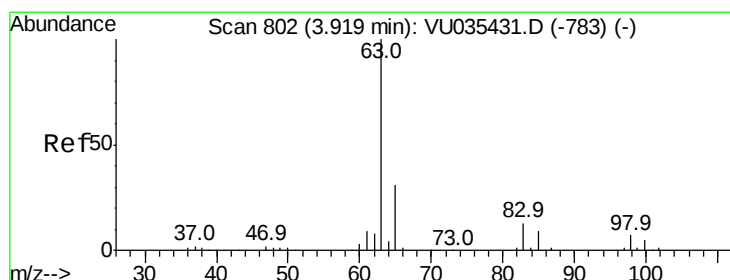
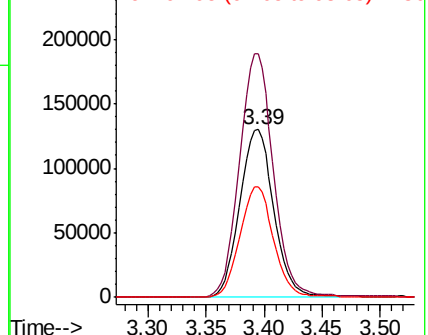
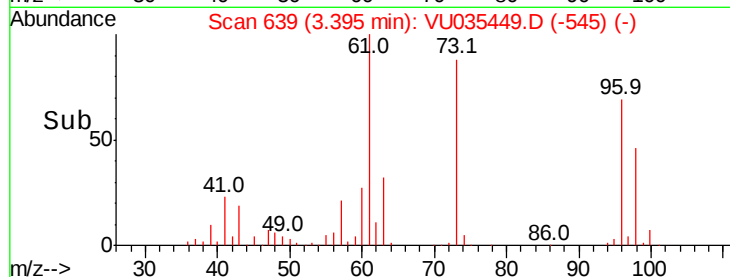


Abundance

Ion 96.00 (95.70 to 96.70): VU0

Ion 61.05 (60.75 to 61.75): VU0

Ion 97.95 (97.65 to 98.65): VU0



#19

1,1-Dichloroethane

Concen: 1.322 ug/L

RT: 3.92 min Scan# 802

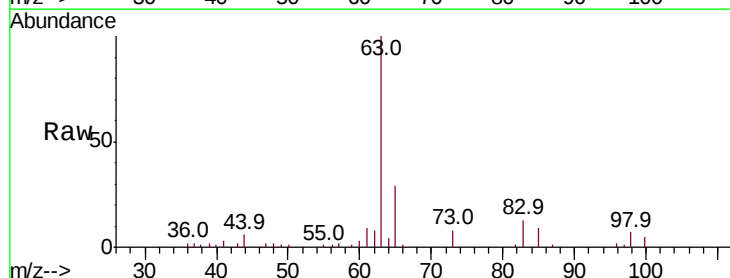
Delta R.T. 0.00 min

Lab File: VU035449.D

Acq: 24 Oct 2019 10:01

Tgt Ion: 63 Resp: 33739

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 63  | 100   |       |       |
| 65  | 29.3  | 22.4  | 41.6  |
| 83  | 13.1  | 9.3   | 17.3  |

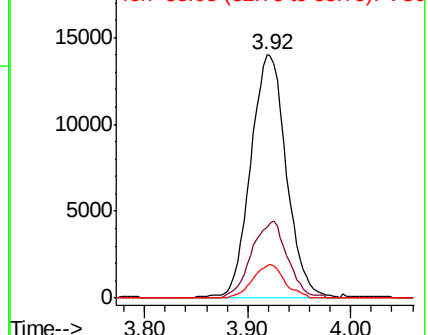
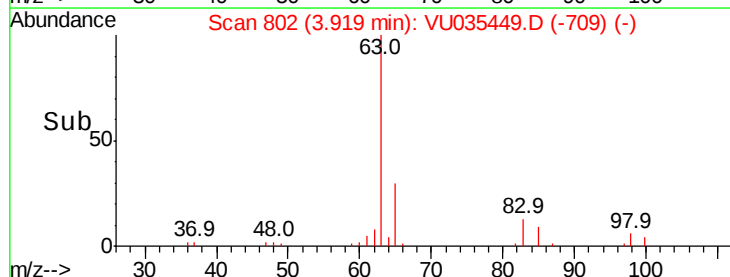


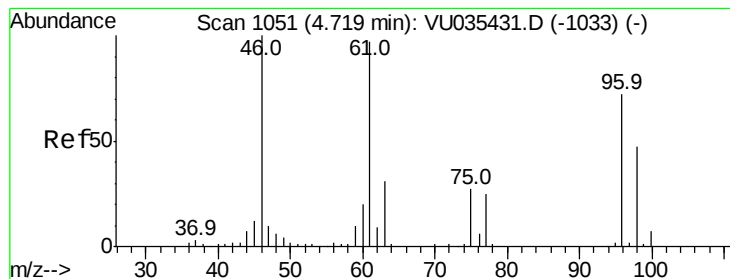
Abundance

Ion 63.10 (62.80 to 63.80): VU0

Ion 65.10 (64.80 to 65.80): VU0

Ion 83.05 (82.75 to 83.75): VU0





#22

cis-1,2-Dichloroethene

Concen: 70.860 ug/L

RT: 4.72 min Scan# 1051

Delta R.T. 0.00 min

Lab File: VU035449.D

Acq: 24 Oct 2019 10:01

Instrument :  
MSVOA\_U  
ClientSampled :

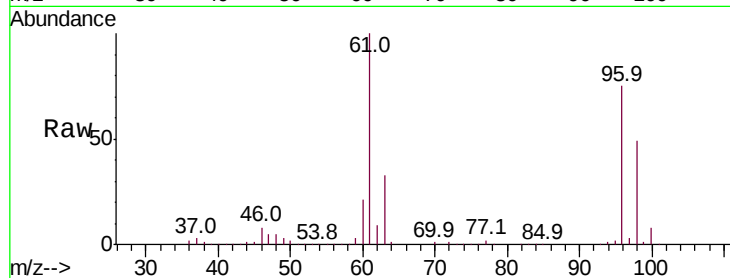
Tot Ion: 96 Resp: 1105233

Ion Ratio Lower Upper

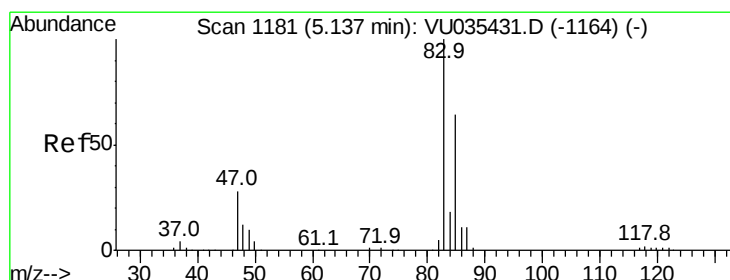
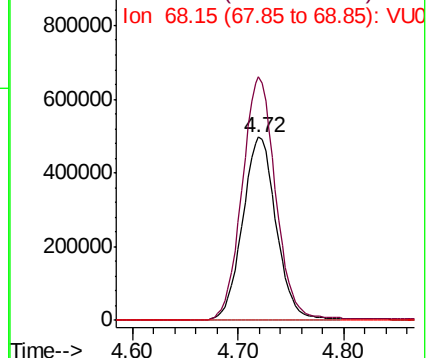
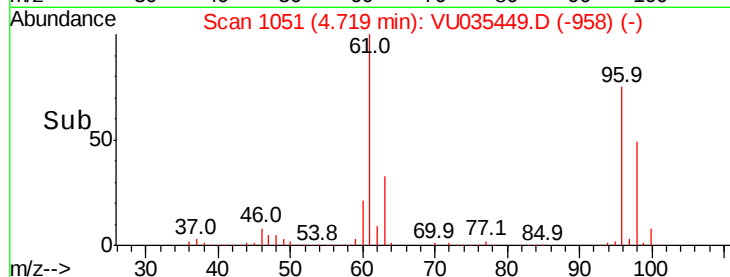
96 100

61 132.8 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



#25

Chloroform

Concen: 0.300 ug/L

RT: 5.14 min Scan# 1181

Delta R.T. 0.00 min

Lab File: VU035449.D

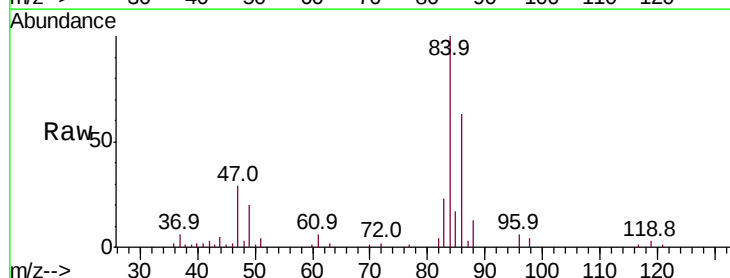
Acq: 24 Oct 2019 10:01

Tgt Ion: 83 Resp: 8390

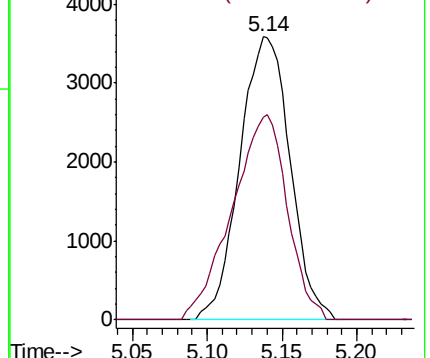
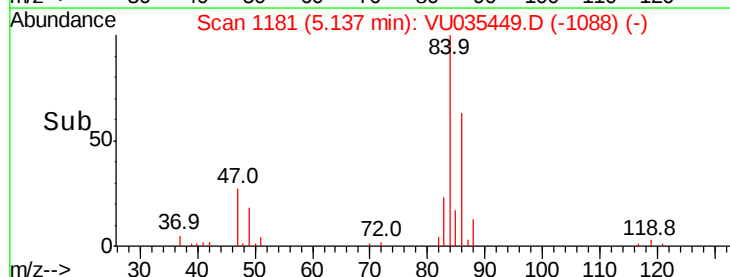
Ion Ratio Lower Upper

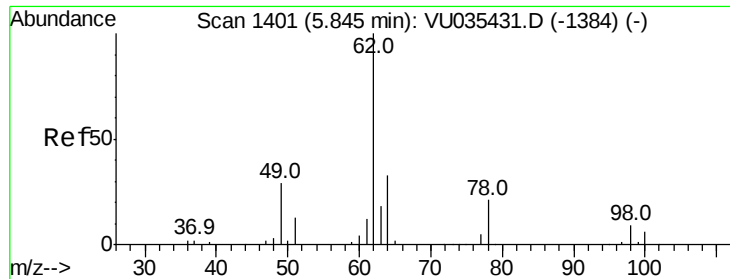
83 100

85 71.8 45.1 83.9



Abundance Ion 83.05 (82.75 to 83.75): VU0  
Ion 85.00 (84.70 to 85.70): VU0





#27

1,2-Dichloroethane

Concen: 0.206 ug/L

RT: 5.82 min Scan# 1392

Delta R.T. -0.03 min

Lab File: VU035449.D

Acq: 24 Oct 2019 10:01

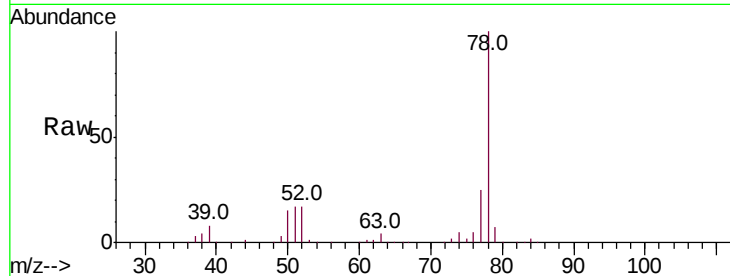
Instrument :  
MSVOA\_U  
ClientSampleId :

Tot Ion: 62 Resp: 3543

Ion Ratio Lower Upper

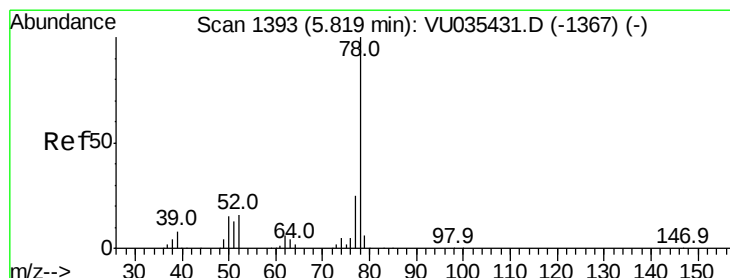
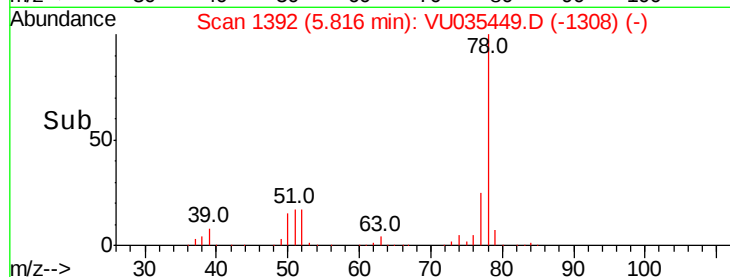
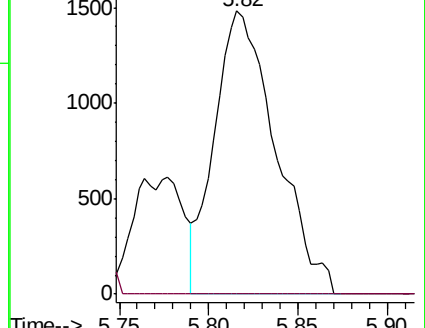
62 100

98 0.0 7.8 11.6#



Abundance Ion 62.00 (61.70 to 62.70): VU035431.D (-1384) (-)

Ion 98.05 (97.75 to 98.75): VU035431.D (-1384) (-)



#33

Benzene

Concen: 4.909 ug/L

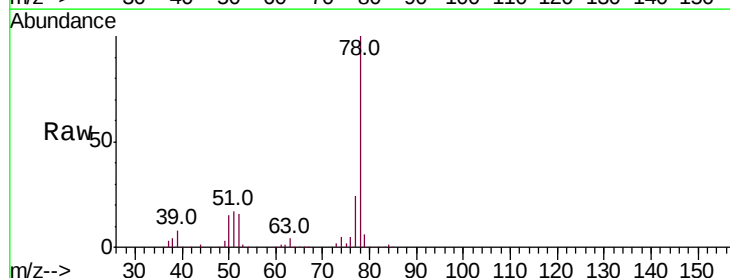
RT: 5.82 min Scan# 1393

Delta R.T. 0.00 min

Lab File: VU035449.D

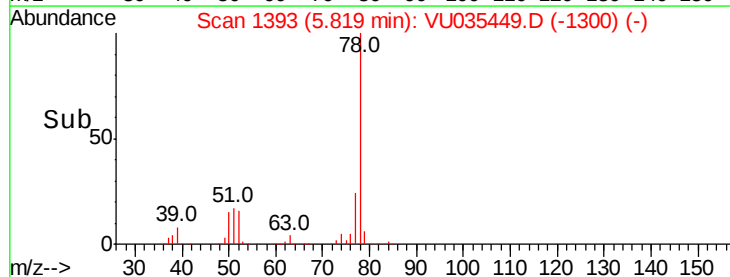
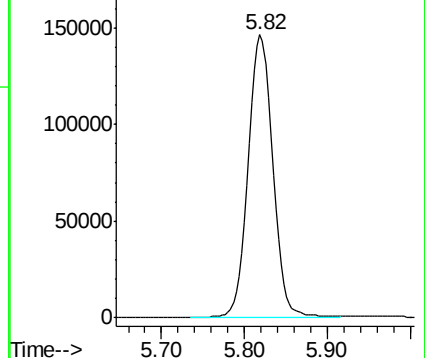
Acq: 24 Oct 2019 10:01

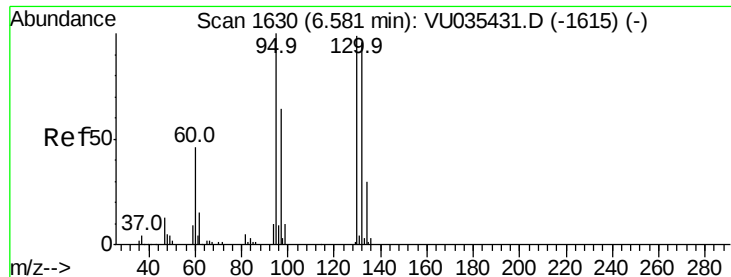
Tgt Ion: 78 Resp: 304079



Abundance Ion 78.10 (77.80 to 78.80): VU035431.D (-1367) (-)

Ion 78.10 (77.80 to 78.80): VU035431.D (-1367) (-)





#34

Trichloroethene

Concen: 11.414 ug/L

RT: 6.58 min Scan# 1630

Delta R.T. 0.00 min

Lab File: VU035449.D

Acq: 24 Oct 2019 10:01

Instrument :

MSVOA\_U

ClientSampled :

Tot Ion: 95 Resp: 190074

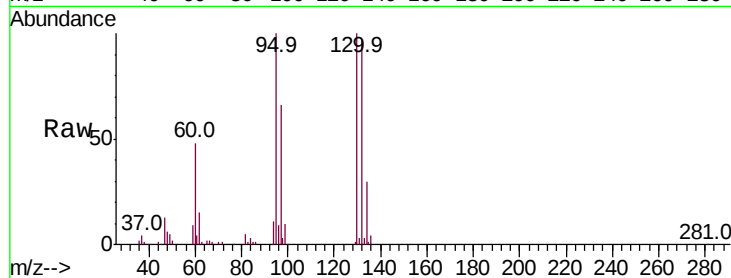
Ion Ratio Lower Upper

95 100

97 65.6 46.6 86.6

132 97.1 68.7 127.7

130 99.6 73.9 137.3

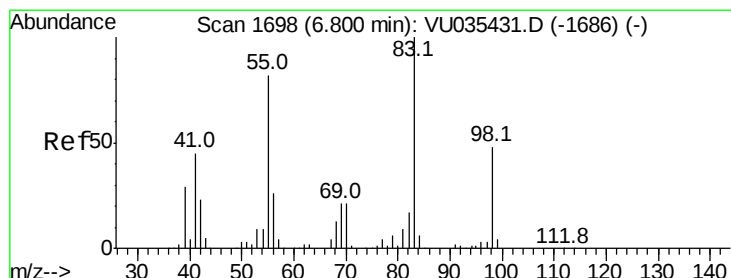
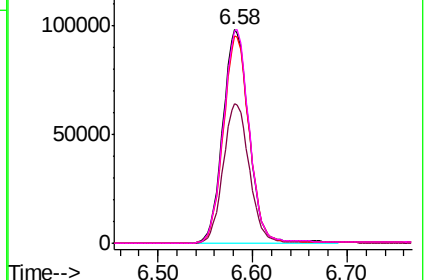
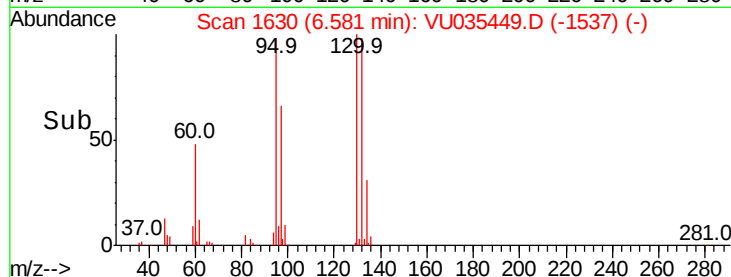


Abundance Ion 95.00 (94.70 to 95.70): VU0

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: 0.696 ug/L

RT: 6.74 min Scan# 1678

Delta R.T. -0.06 min

Lab File: VU035449.D

Acq: 24 Oct 2019 10:01

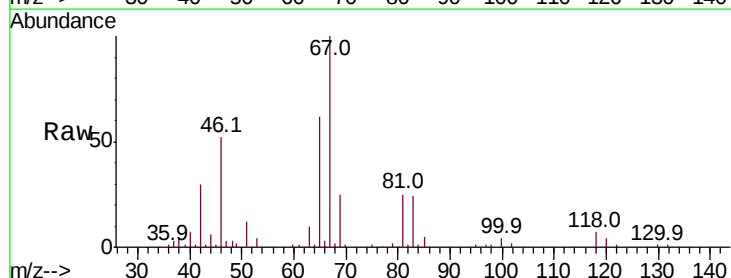
Tgt Ion: 83 Resp: 19373

Ion Ratio Lower Upper

83 100

55 0.8 60.4 90.6#

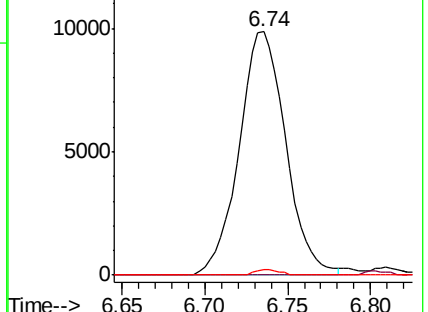
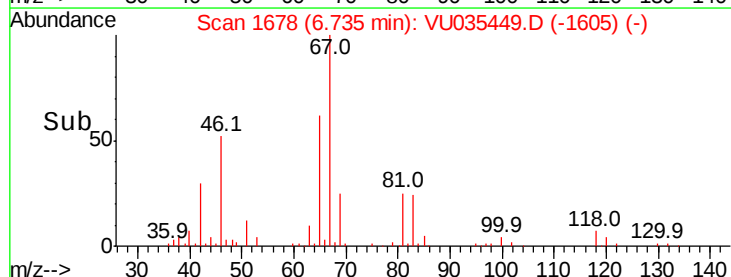
98 1.1 39.5 59.3#

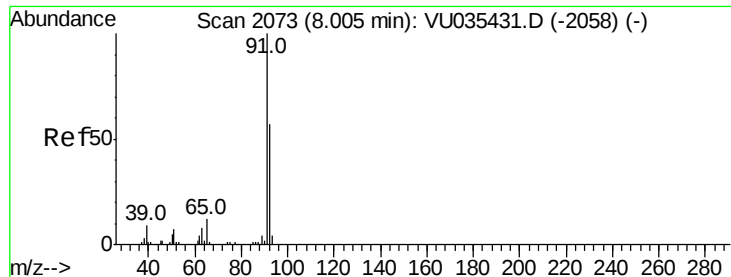


Abundance Ion 83.15 (82.85 to 83.85): VU0

Ion 55.10 (54.80 to 55.80): VU0

Ion 98.15 (97.85 to 98.85): VU0





#42

Toluene

Concen: 4.197 ug/L

RT: 8.01 min Scan# 2073

Delta R.T. 0.00 min

Lab File: VU035449.D

Acq: 24 Oct 2019 10:01

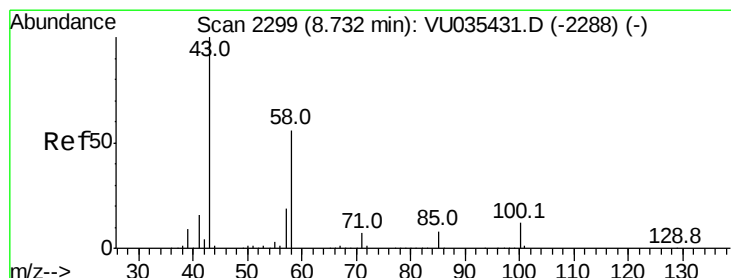
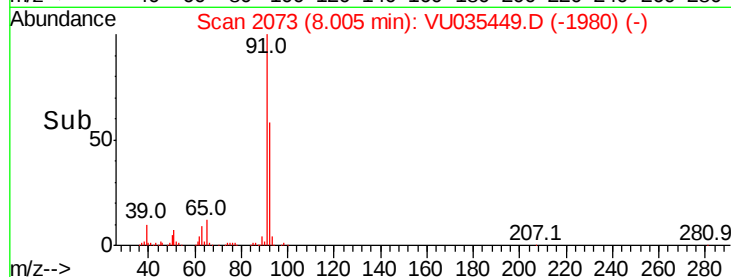
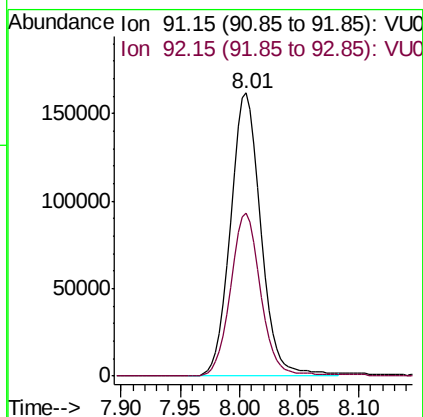
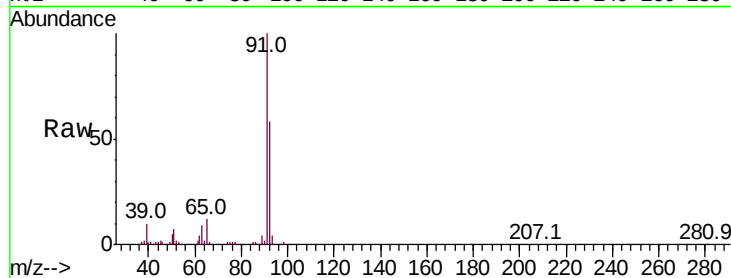
Instrument :  
MSVOA\_U  
ClientSampleId :

Tot Ion: 91 Resp: 286991

Ion Ratio Lower Upper

91 100

92 57.7 39.9 74.1



#48

2-Hexanone

Concen: 1.568 ug/L

RT: 8.73 min Scan# 2298

Delta R.T. -0.00 min

Lab File: VU035449.D

Acq: 24 Oct 2019 10:01

Tgt Ion: 43 Resp: 11672

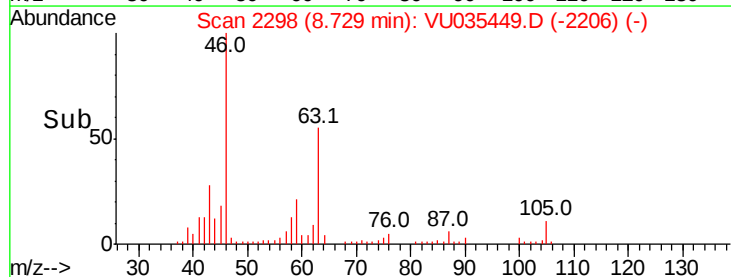
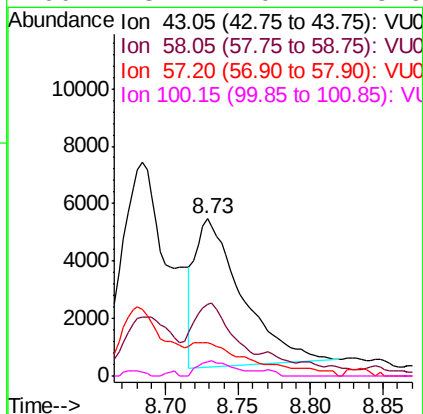
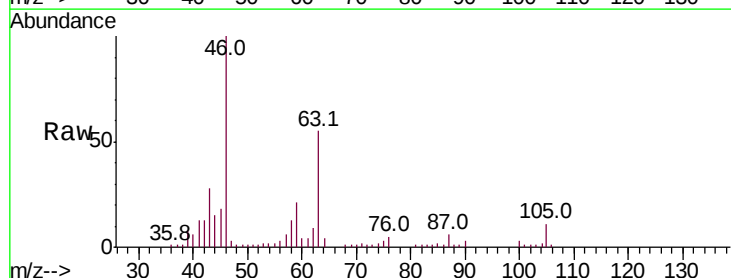
Ion Ratio Lower Upper

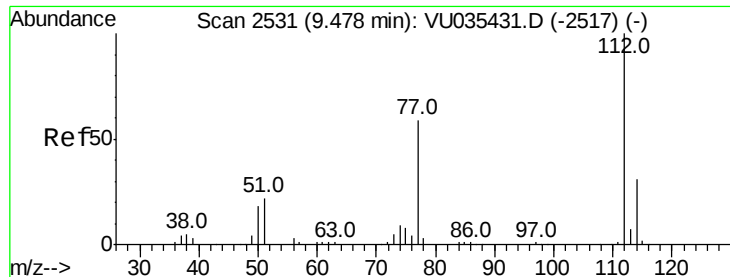
43 100

58 29.2 45.1 67.7#

57 30.8 16.0 24.0#

100 8.1 10.4 15.6#

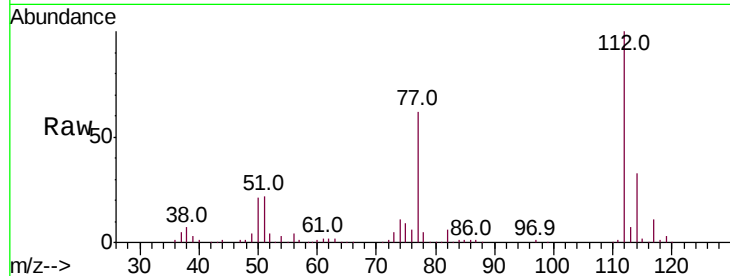




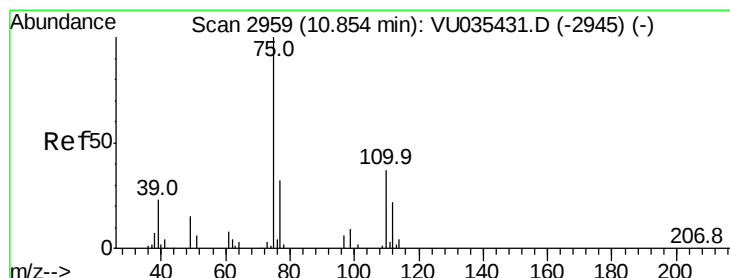
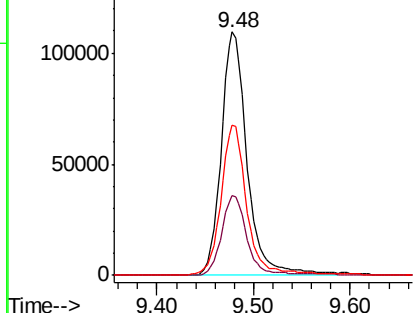
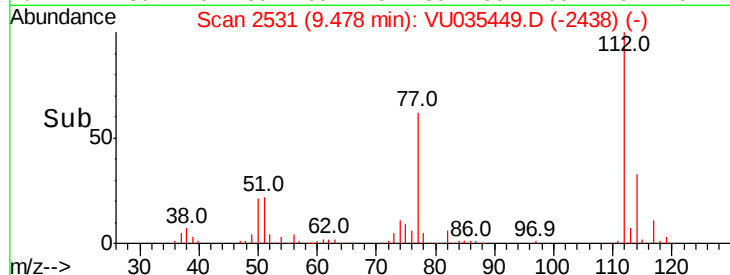
#51  
Chlorobenzene  
Concen: 4.614 ug/L  
RT: 9.48 min Scan# 2531  
Delta R.T. 0.00 min  
Lab File: VU035449.D  
Acq: 24 Oct 2019 10:01

Instrument :  
MSVOA\_U  
ClientSampleId :

Tot Ion:112 Resp: 203692  
Ion Ratio Lower Upper  
112 100  
114 32.6 23.0 42.8  
77 61.9 47.5 71.3

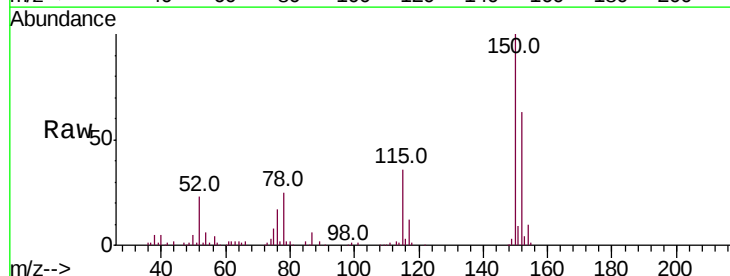


Abundance Ion 112.10 (111.80 to 112.80): V  
Ion 114.05 (113.75 to 114.75): V  
Ion 77.10 (76.80 to 77.80): V



#59  
1,2,3-Trichloropropane  
Concen: 0.804 ug/L  
RT: 11.84 min Scan# 3267  
Delta R.T. 0.99 min  
Lab File: VU035449.D  
Acq: 24 Oct 2019 10:01

Tgt Ion: 75 Resp: 8804  
Ion Ratio Lower Upper  
75 100  
77 0.0 26.2 39.2#



Abundance Ion 75.00 (74.70 to 75.70): VU  
Ion 77.00 (76.70 to 77.70): VU

