

Data File : VV012343.D  
Acq On : 22 Aug 2019 13:27  
Operator : SY/MD  
Sample : K4454-10DL 5X  
Misc : 5mL/MSVOA\_V/WATER  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
F2C02DL

Quant Time: Aug 23 06:58:58 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM082119WMA.M  
Quant Title : VOC Analysis  
QLast Update : Fri Aug 23 06:55:48 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.66  | 114  | 189420   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.89  | 117  | 182236   | 50.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.29 | 152  | 95724    | 50.00 | ug/L  | 0.00     |

#### System Monitoring Compounds

|                                |         |       |          |          |      |         |
|--------------------------------|---------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.32    | 65    | 39796    | 44.38    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 135 | Recovery | =    | 88.76%  |
| 7) Chloroethane-d5             | 1.55    | 69    | 27235    | 42.36    | ug/L | -0.02   |
| Spiked Amount                  | 50.000  | Range | 70 - 130 | Recovery | =    | 84.72%  |
| 11) 1,1-Dichloroethene-d2      | 2.12    | 63    | 61657    | 34.92    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 69.84%  |
| 21) 2-Butanone-d5              | 3.92    | 46    | 49593    | 70.95    | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 40 - 130 | Recovery | =    | 70.95%  |
| 24) Chloroform-d               | 4.39    | 84    | 115282   | 45.23    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 90.46%  |
| 26) 1,2-Dichloroethane-d4      | 5.07    | 65    | 91566    | 52.09    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 104.18% |
| 32) Benzene-d6                 | 5.09    | 84    | 226281   | 46.56    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 93.12%  |
| 36) 1,2-Dichloropropane-d6     | 6.11    | 67    | 60249    | 45.85    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 120 | Recovery | =    | 91.70%  |
| 41) Toluene-d8                 | 7.36    | 98    | 220139   | 46.48    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 92.96%  |
| 43) trans-1,3-Dichloropropene- | 7.66    | 79    | 36030    | 44.51    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 89.02%  |
| 47) 2-Hexanone-d5              | 8.13    | 63    | 44990    | 82.95    | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 45 - 130 | Recovery | =    | 82.95%  |
| 57) 1,1,2,2-Tetrachloroethane- | 10.26   | 84    | 86162    | 46.04    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 65 - 120 | Recovery | =    | 92.08%  |
| 64) 1,2-Dichlorobenzene-d4     | 11.67   | 152   | 105086   | 49.94    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 99.88%  |

#### Target Compounds

|                                |       |     |       |        |        | Qvalue |
|--------------------------------|-------|-----|-------|--------|--------|--------|
| 5) Vinyl chloride              | 1.32  | 62  | 8862  | 9.687  | ug/L   | 85     |
| 8) Chloroethane                | 1.32  | 64  | 3895  | 7.525  | ug/L   | 88     |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.12  | 101 | 608   | 0.729  | ug/L # | 13     |
| 12) 1,1-Dichloroethene         | 2.12  | 96  | 527   | 0.692  | ug/L # | 1      |
| 17) trans-1,2-Dichloroethene   | 2.79  | 96  | 1517  | 1.316  | ug/L   | 91     |
| 18) Methyl tert-butyl Ether    | 2.80  | 73  | 29405 | 7.698  | ug/L   | 97     |
| 20) cis-1,2-Dichloroethene     | 3.95  | 96  | 82179 | 64.049 | ug/L   | 94     |
| 25) Chloroform                 | 4.42  | 83  | 9434  | 3.947  | ug/L   | 99     |
| 35) Methylcyclohexane          | 6.11  | 83  | 18610 | 9.148  | ug/L # | 20     |
| 37) 1,2-Dichloropropane        | 6.11  | 63  | 8493  | 8.156  | ug/L # | 82     |
| 39) cis-1,3-Dichloropropene    | 7.03  | 75  | 2362  | 1.222  | ug/L   | 83     |
| 44) trans-1,3-Dichloropropene  | 7.66  | 75  | 1636  | 0.888  | ug/L # | 65     |
| 59) 1,2,3-Trichloropropane     | 11.29 | 75  | 7844  | 5.286  | ug/L # | 78     |

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

Data File : VV012343.D

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Sample : K4454-10DL 5X

Misc : 5mL/MSVOA V/WATER

```
ALS Vial      : 6      Sample Multiplier: 1
```

**Instrument :**  
MSVOA\_V  
**ClientSampleId :**  
F2C02DL

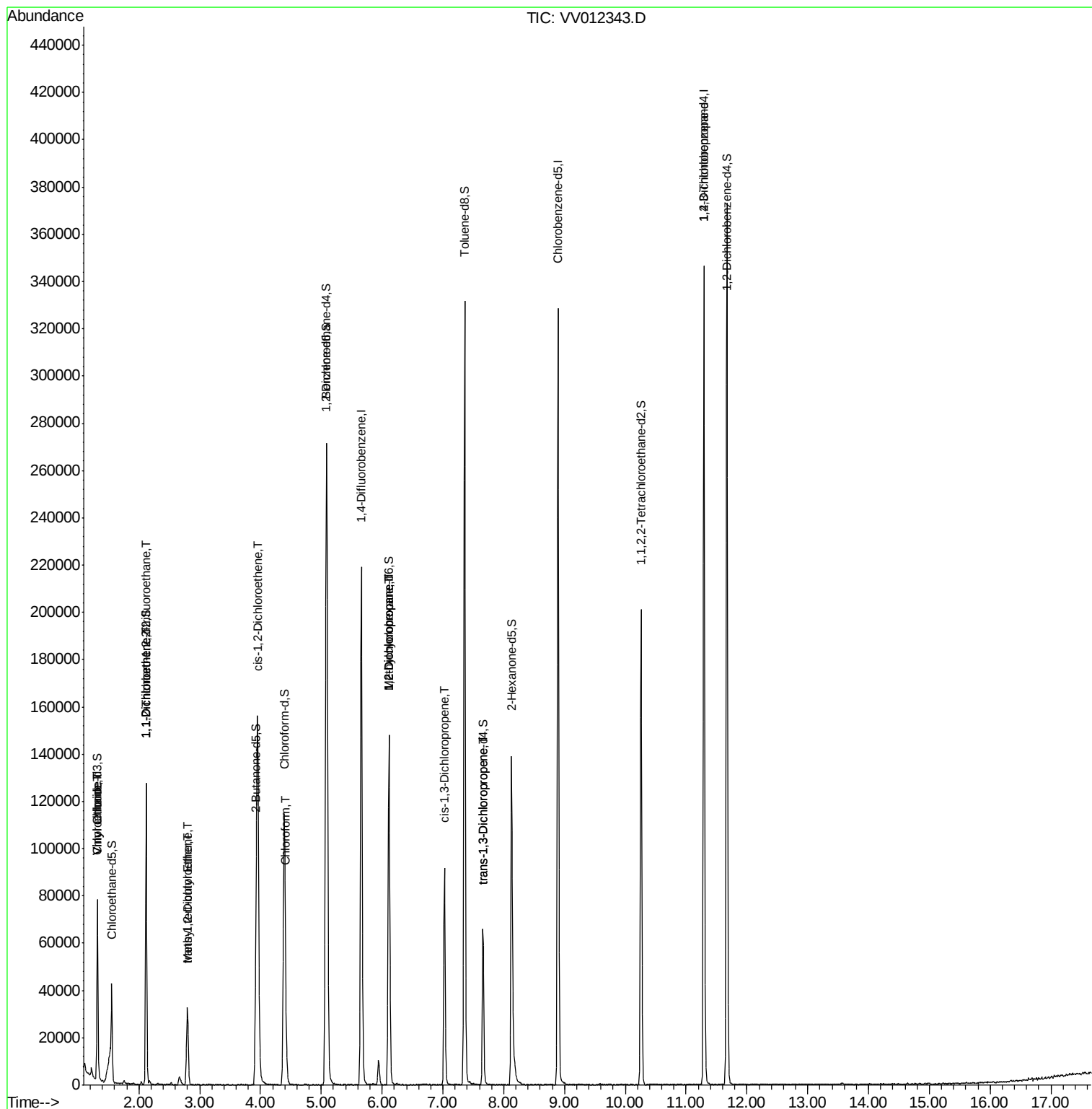
Quant Time: Aug 23 06:58:58 2019

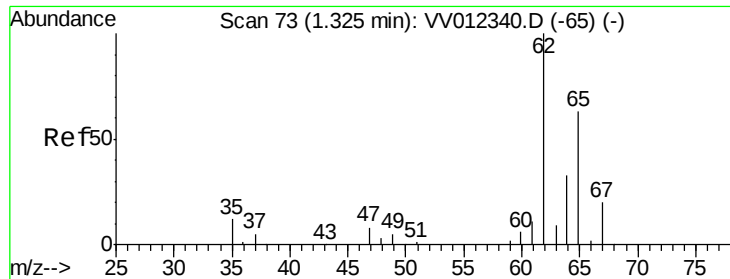
Quant Method : Z:\V0ASRV\HPCHEM1\MSV0A\_V\METHOD\SOMVLM082119WMA.M

Quant Title : VOC Analysis

QLast Update : Fri Aug 23 06:55:48 2019

Response via : Initial Calibration





#5

Vinyl chloride

Concen: 9.687 ug/L

RT: 1.32 min Scan# 72

Delta R.T. -0.00 min

Lab File: VV012343.D

Acq: 22 Aug 2019 13:27

Instrument :

MSVOA\_V

ClientSampled :

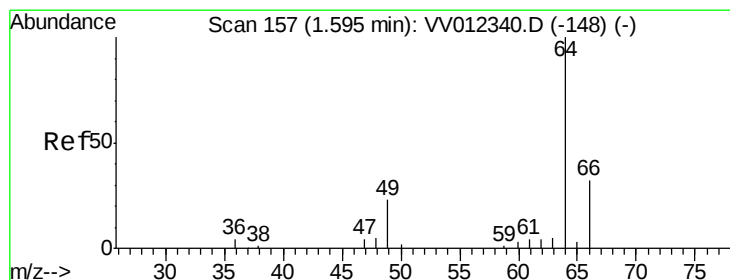
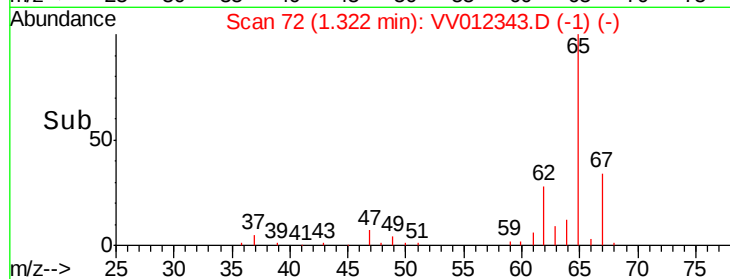
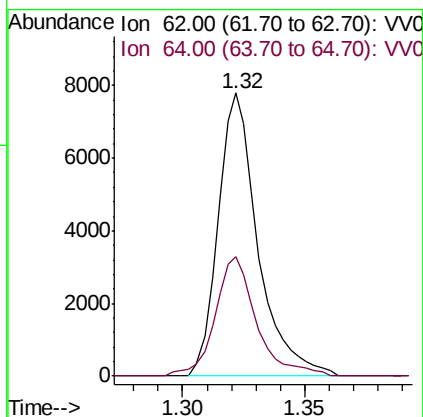
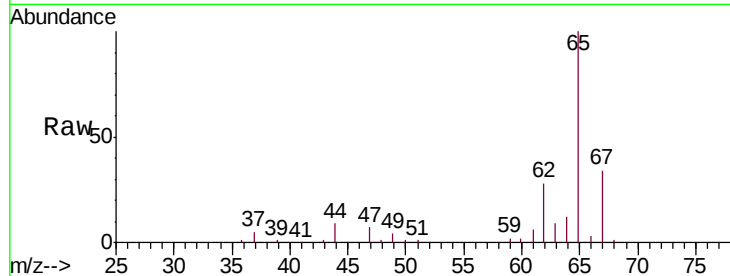
F2C02DL

Tgt Ion: 62 Resp: 8862

Ion Ratio Lower Upper

62 100

64 42.2 23.5 43.7



#8

Chloroethane

Concen: 7.525 ug/L

RT: 1.32 min Scan# 72

Delta R.T. -0.27 min

Lab File: VV012343.D

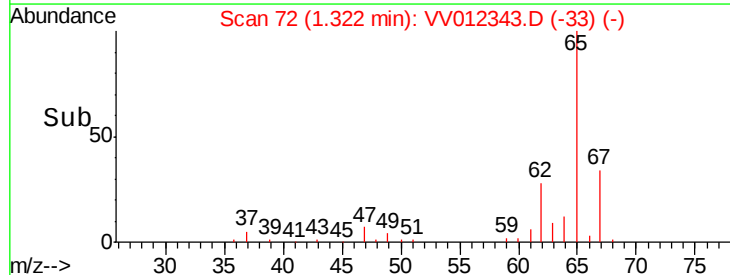
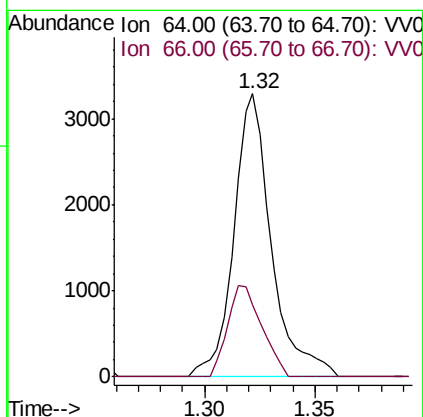
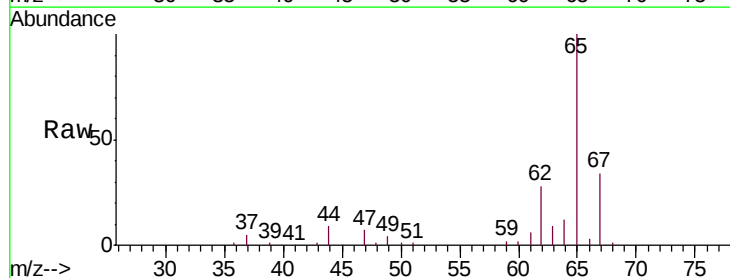
Acq: 22 Aug 2019 13:27

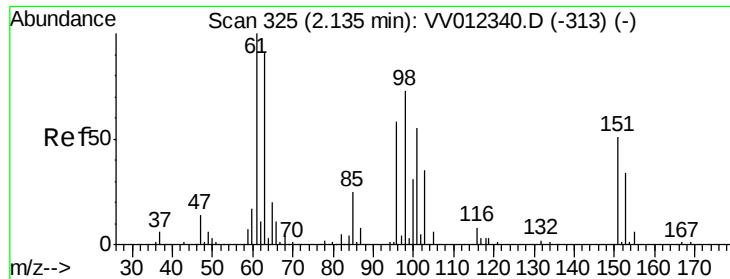
Tgt Ion: 64 Resp: 3895

Ion Ratio Lower Upper

64 100

66 25.6 22.8 42.4





#10

1,1,2-Trichloro-1,2,2-trifluoroethane

Concen: 0.729 ug/L

RT: 2.12 min Scan# 319

Delta R.T. -0.02 min

Lab File: VV012343.D

Acq: 22 Aug 2019 13:27

Instrument :

MSVOA\_V

ClientSampleId :

F2C02DL

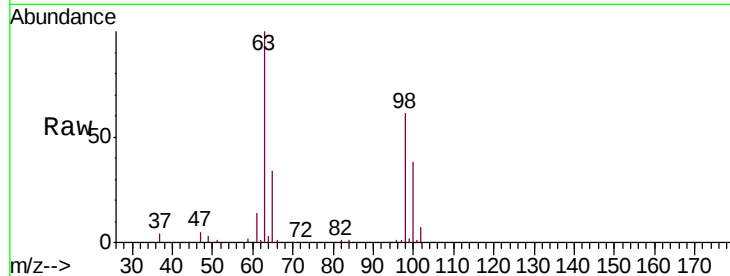
Tgt Ion:101 Resp: 608

Ion Ratio Lower Upper

101 100

85 0.0 33.7 50.5#

151 0.0 73.0 109.6#



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 85.00 (84.70 to 85.70): VV0

Ion 151.00 (150.70 to 151.70): V

2.12

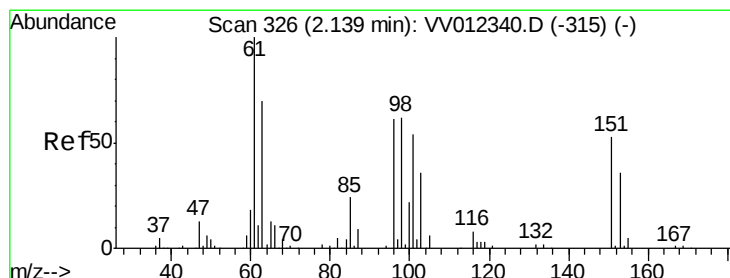
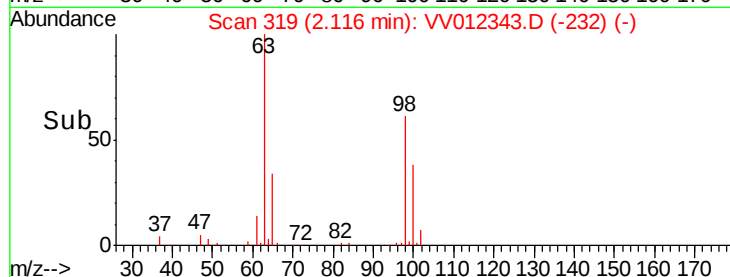
400

200

0

2.10 2.12 2.14

Time-->



#12

1,1-Dichloroethene

Concen: 0.692 ug/L

RT: 2.12 min Scan# 321

Delta R.T. -0.02 min

Lab File: VV012343.D

Acq: 22 Aug 2019 13:27

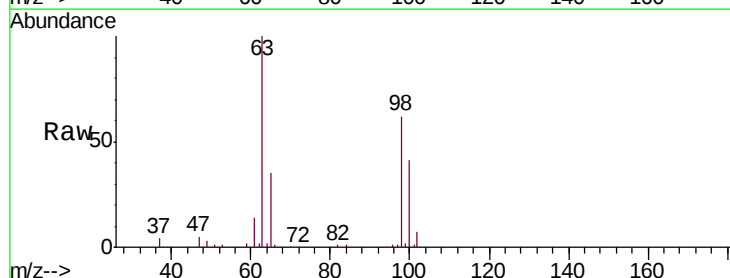
Tgt Ion: 96 Resp: 527

Ion Ratio Lower Upper

96 100

61 1352.6 122.6 227.8#

63 9906.6 98.6 183.2#



Abundance Ion 96.00 (95.70 to 96.70): VV0

Ion 61.00 (60.70 to 61.70): VV0

Ion 63.00 (62.70 to 63.70): VV0

60000

50000

40000

30000

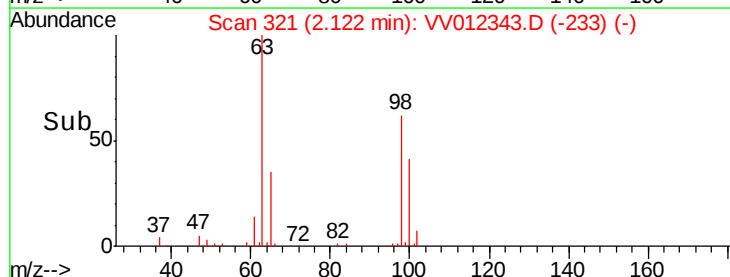
20000

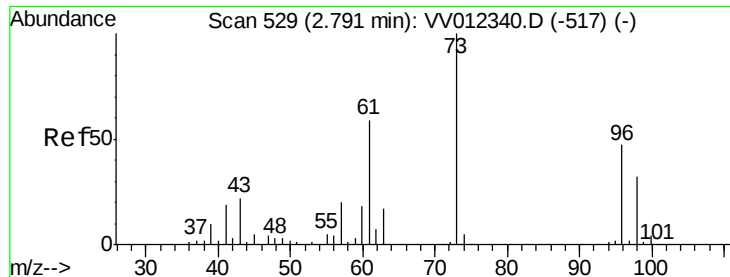
10000

0

2.10 2.12 2.14

Time-->





#17

trans-1,2-Dichloroethene

Concen: 1.316 ug/L

RT: 2.79 min Scan# 528

Delta R.T. -0.00 min

Lab File: VV012343.D

Acq: 22 Aug 2019 13:27

Instrument :

MSVOA\_V

ClientSampleId :

F2C02DL

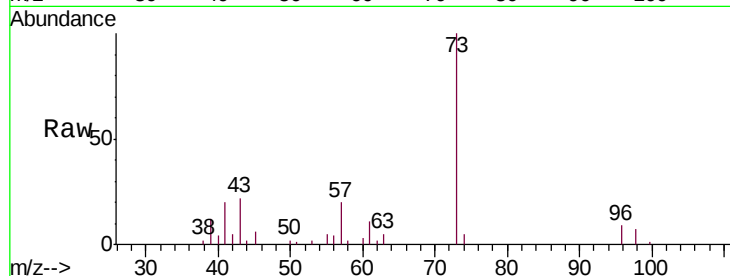
Tgt Ion: 96 Resp: 1517

Ion Ratio Lower Upper

96 100

61 127.7 87.0 161.6

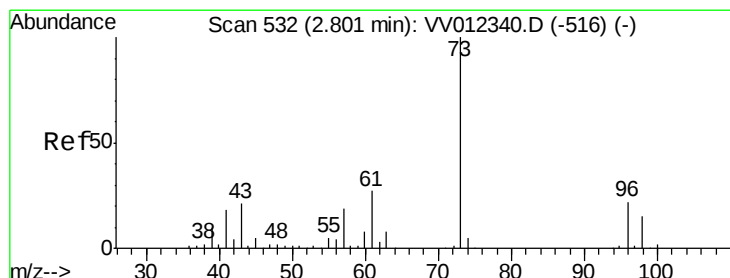
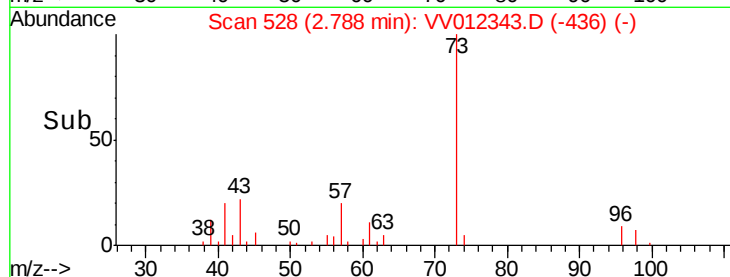
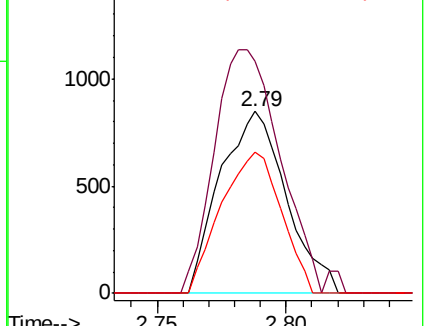
98 78.0 43.8 81.4



Abundance Ion 96.00 (95.70 to 96.70): VV0

Ion 61.00 (60.70 to 61.70): VV0

Ion 98.00 (97.70 to 98.70): VV0



#18

Methyl tert-butyl Ether

Concen: 7.698 ug/L

RT: 2.80 min Scan# 531

Delta R.T. -0.00 min

Lab File: VV012343.D

Acq: 22 Aug 2019 13:27

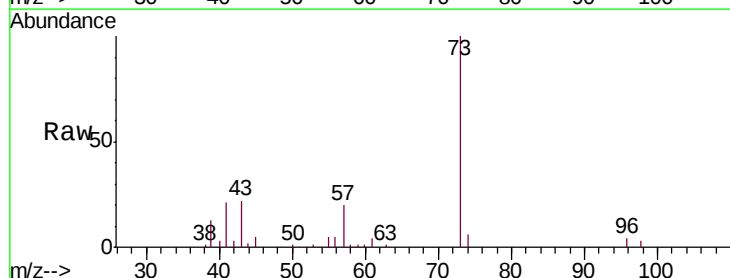
Tgt Ion: 73 Resp: 29405

Ion Ratio Lower Upper

73 100

43 22.6 16.6 25.0

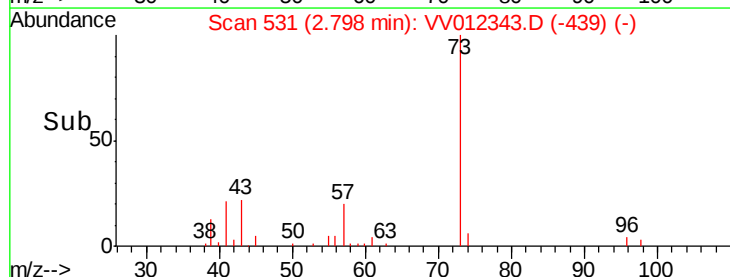
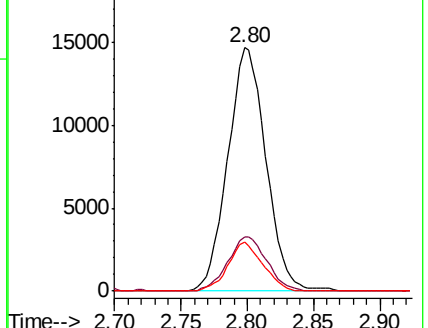
57 18.3 15.0 22.6

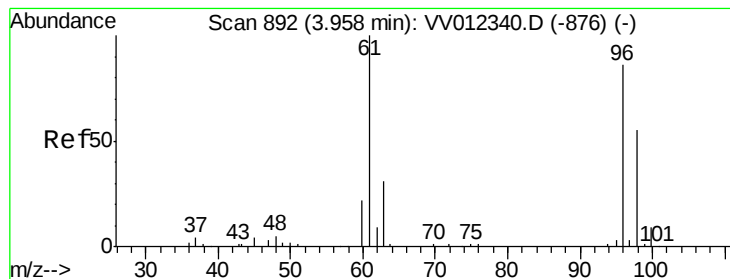


Abundance Ion 73.00 (72.70 to 73.70): VV0

Ion 43.00 (42.70 to 43.70): VV0

Ion 57.00 (56.70 to 57.70): VV0



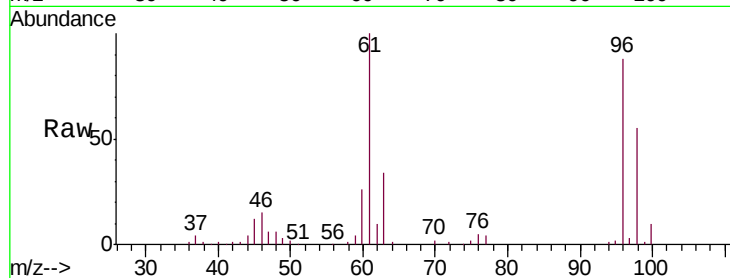


#20

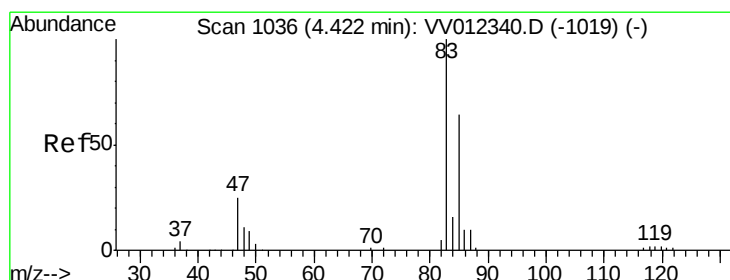
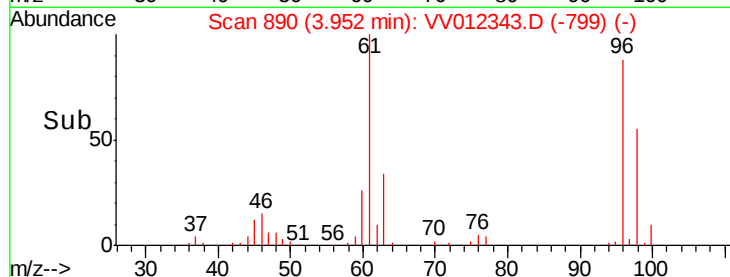
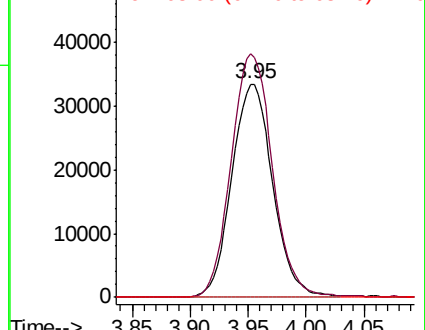
cis-1,2-Dichloroethene  
 Concen: 64.049 ug/L  
 RT: 3.95 min Scan# 890  
 Delta R.T. -0.01 min  
 Lab File: VV012343.D  
 Acq: 22 Aug 2019 13:27

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 F2C02DL

Tgt Ion: 96 Resp: 82179  
 Ion Ratio Lower Upper  
 96 100  
 61 114.2 84.4 156.7  
 68 0.0 0.0 0.0



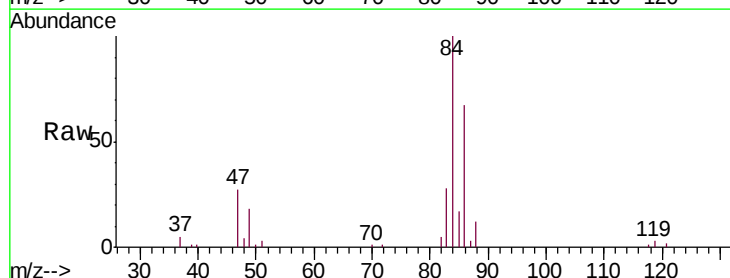
Abundance Ion 96.00 (95.70 to 96.70): VV0  
 Ion 61.00 (60.70 to 61.70): VV0  
 Ion 68.00 (67.70 to 68.70): VV0



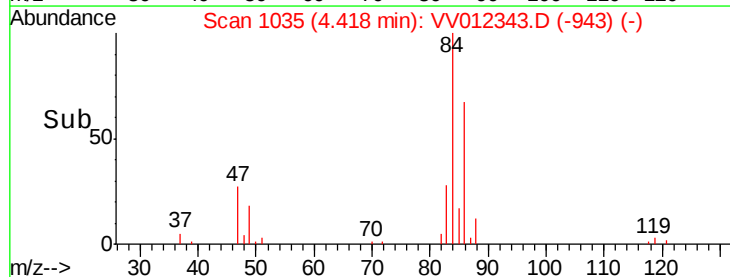
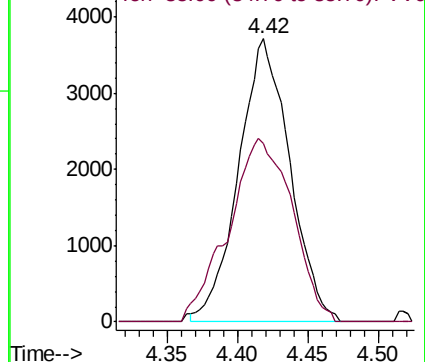
#25

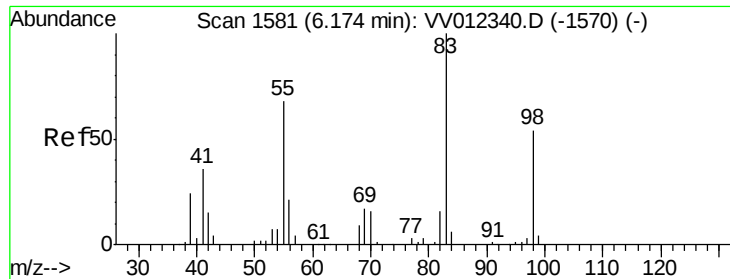
Chloroform  
 Concen: 3.947 ug/L  
 RT: 4.42 min Scan# 1035  
 Delta R.T. -0.00 min  
 Lab File: VV012343.D  
 Acq: 22 Aug 2019 13:27

Tgt Ion: 83 Resp: 9434  
 Ion Ratio Lower Upper  
 83 100  
 85 63.0 44.5 82.7



Abundance Ion 83.00 (82.70 to 83.70): VV0  
 Ion 85.00 (84.70 to 85.70): VV0

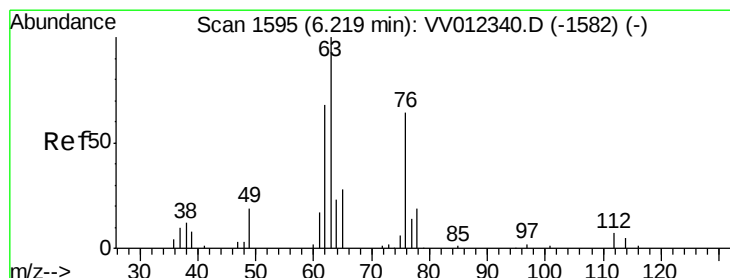
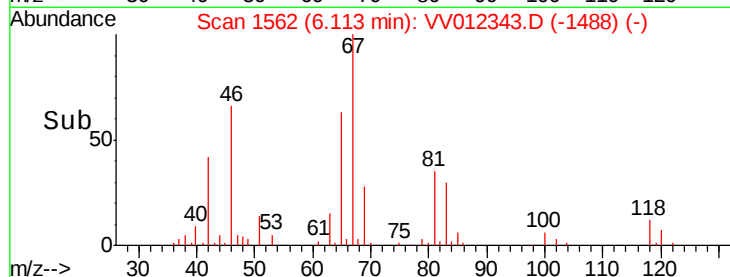
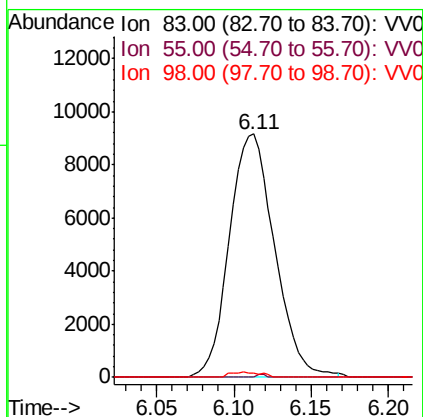
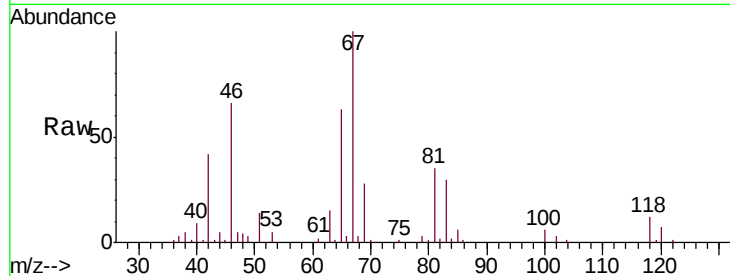




#35  
Methylcyclohexane  
Concen: 9.148 ug/L  
RT: 6.11 min Scan# 1562  
Delta R.T. -0.06 min  
Lab File: VV012343.D  
Acq: 22 Aug 2019 13:27

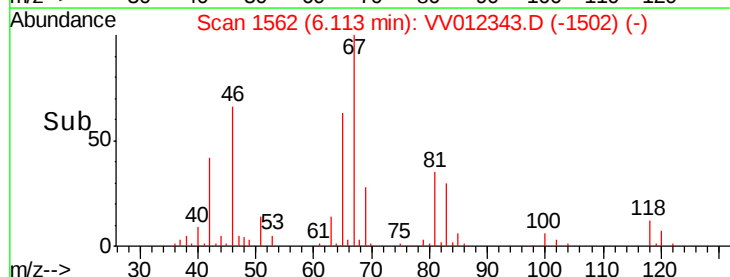
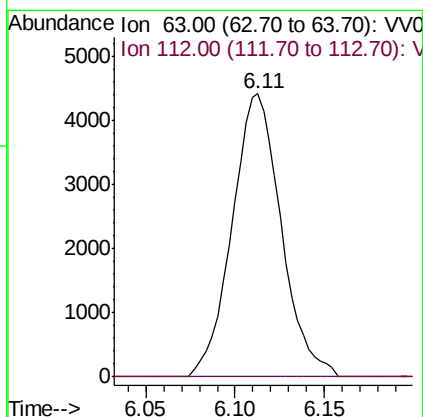
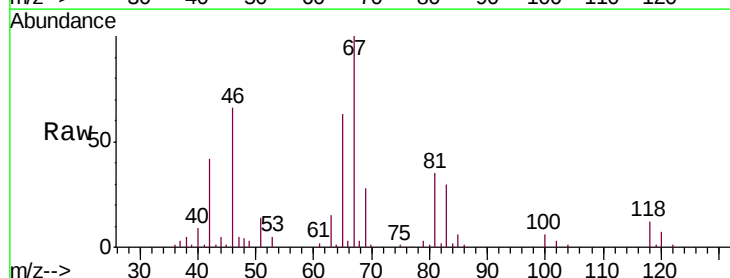
Instrument :  
MSVOA\_V  
ClientSampleId :  
F2C02DL

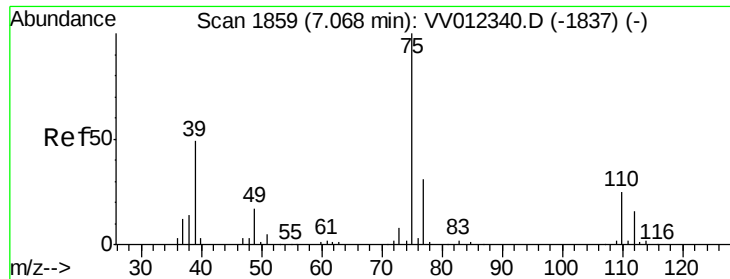
Tgt Ion: 83 Resp: 18610  
Ion Ratio Lower Upper  
83 100  
55 0.2 56.2 84.4#  
98 1.1 42.2 63.4#



#37  
1,2-Dichloropropane  
Concen: 8.156 ug/L  
RT: 6.11 min Scan# 1562  
Delta R.T. -0.11 min  
Lab File: VV012343.D  
Acq: 22 Aug 2019 13:27

Tgt Ion: 63 Resp: 8493  
Ion Ratio Lower Upper  
63 100  
112 0.0 4.7 7.1#

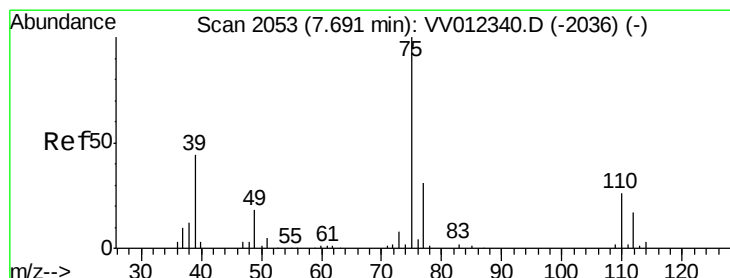
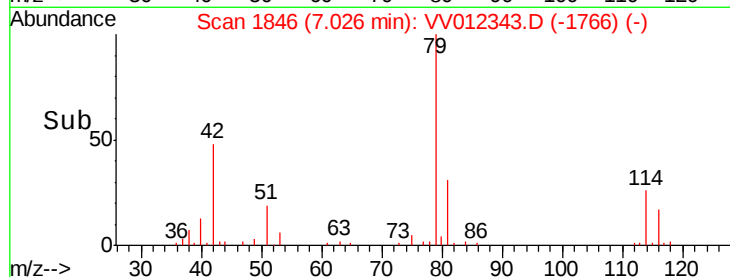
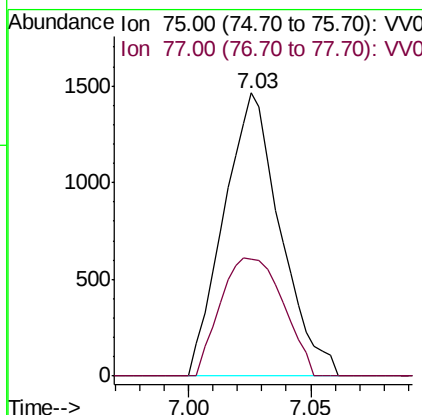
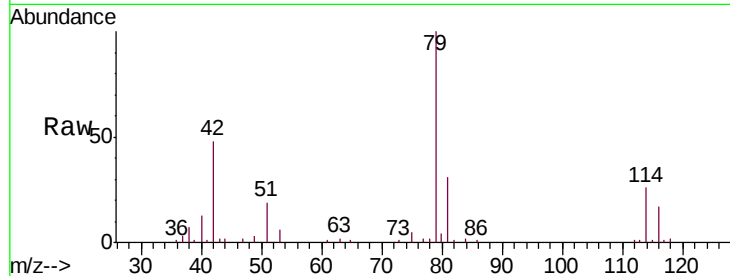




#39  
 cis-1,3-Dichloropropene  
 Concen: 1.222 ug/L  
 RT: 7.03 min Scan# 1846  
 Delta R.T. -0.04 min  
 Lab File: VV012343.D  
 Acq: 22 Aug 2019 13:27

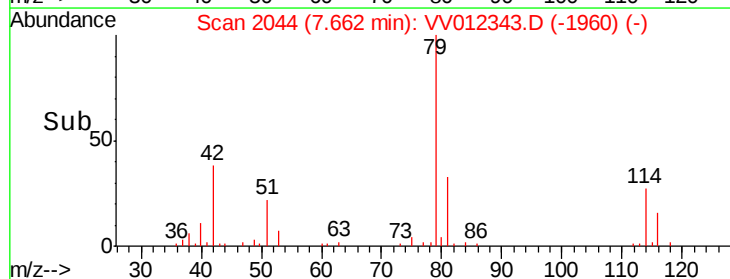
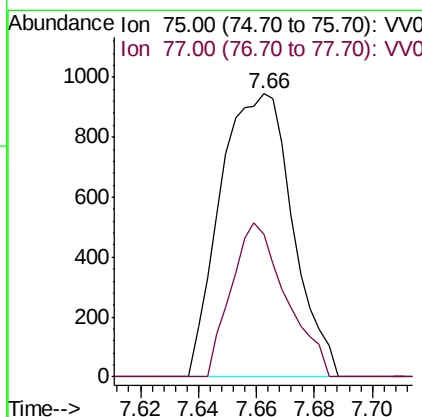
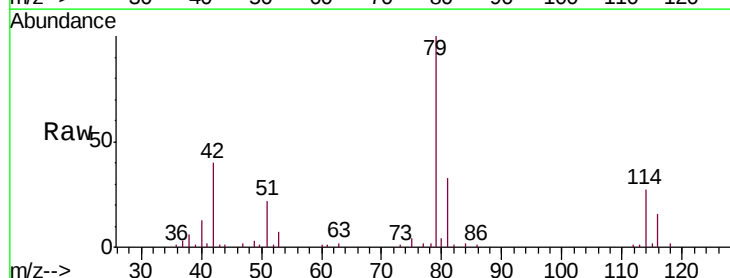
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 F2C02DL

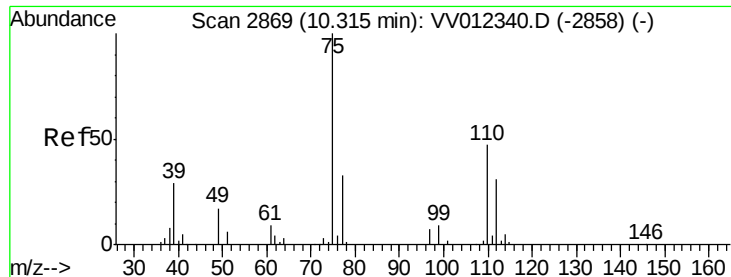
Tgt Ion: 75 Resp: 2362  
 Ion Ratio Lower Upper  
 75 100  
 77 41.6 22.5 41.7



#44  
 trans-1,3-Dichloropropene  
 Concen: 0.888 ug/L  
 RT: 7.66 min Scan# 2044  
 Delta R.T. -0.03 min  
 Lab File: VV012343.D  
 Acq: 22 Aug 2019 13:27

Tgt Ion: 75 Resp: 1636  
 Ion Ratio Lower Upper  
 75 100  
 77 50.3 21.7 40.3#





#59

1,2,3-Trichloropropane

Concen: 5.286 ug/L

RT: 11.29 min Scan# 3172

Delta R.T. 0.97 min

Lab File: VV012343.D

Acq: 22 Aug 2019 13:27

Instrument :

MSVOA\_V

ClientSampleId :

F2C02DL

Tgt Ion: 75 Resp: 7844

Ion Ratio Lower Upper

75 100

77 46.0 26.8 40.2#

