

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV112619\  
 Data File : VV013780.D  
 Acq On : 26 Nov 2019 12:16  
 Operator : SY/MD  
 Sample : K5993-09  
 Misc : 25.0mL/MSVOA V/WATER  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :

Quant Time: Nov 27 01:20:52 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVTR112219WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Wed Nov 27 01:18:04 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.66  | 114  | 338203   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.89  | 117  | 334811   | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.29 | 152  | 151599   | 5.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.32   | 65    | 91235    | 4.36     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 87.20%  |
| 7) Chloroethane-d5             | 1.58   | 69    | 86085    | 4.84     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 96.80%  |
| 11) 1,1-Dichloroethene-d2      | 2.12   | 63    | 128724   | 3.65     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 73.00%  |
| 20) 2-Butanone-d5              | 3.96   | 46    | 219374   | 50.41    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 100.82% |
| 24) Chloroform-d               | 4.39   | 84    | 194167   | 4.60     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 92.00%  |
| 26) 1,2-Dichloroethane-d4      | 5.08   | 65    | 101043   | 5.03     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 100.60% |
| 32) Benzene-d6                 | 5.09   | 84    | 397247   | 4.60     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 92.00%  |
| 36) 1,2-Dichloropropane-d6     | 6.11   | 67    | 119287   | 4.63     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 92.60%  |
| 41) Toluene-d8                 | 7.36   | 98    | 312669   | 3.86     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 77.20%  |
| 43) trans-1,3-Dichloropropene- | 7.66   | 79    | 41585    | 4.15     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 83.00%  |
| 46) 2-Hexanone-d5              | 8.14   | 63    | 162678   | 44.02    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 88.04%  |
| 57) 1,1,2,2-Tetrachloroethane- | 10.26  | 84    | 82086    | 4.60     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 92.00%  |
| 64) 1,2-Dichlorobenzene-d4     | 11.67  | 152   | 133905   | 5.00     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 100.00% |

## Target Compounds

|                               |       |     |       |              | Ovalue |
|-------------------------------|-------|-----|-------|--------------|--------|
| 3) Chloromethane              | 1.25  | 50  | 4150  | 0.210 ug/L # | 76     |
| 8) Chloroethane               | 1.65  | 64  | 1423  | 0.117 ug/L # | 52     |
| 13) Acetone                   | 2.22  | 43  | 5085  | 1.671 ug/L   | 78     |
| 14) Carbon disulfide          | 2.31  | 76  | 2800  | 0.075 ug/L # | 90     |
| 16) Methylene chloride        | 2.53  | 84  | 2379  | 0.107 ug/L   | 83     |
| 25) Chloroform                | 4.42  | 83  | 9622  | 0.248 ug/L   | 92     |
| 27) 1,2-Dichloroethane        | 5.09  | 62  | 2622  | 0.118 ug/L   | 98     |
| 35) Methylcyclohexane         | 6.11  | 83  | 29632 | 0.980 ug/L # | 21     |
| 37) 1,2-Dichloropropane       | 6.11  | 63  | 12201 | 0.578 ug/L # | 85     |
| 44) trans-1,3-Dichloropropene | 7.66  | 75  | 2198  | 0.094 ug/L   | 99     |
| 48) 2-Hexanone                | 8.19  | 43  | 9995  | 1.137 ug/L # | 68     |
| 51) Chlorobenzene             | 8.92  | 112 | 3876  | 0.063 ug/L # | 84     |
| 65) 1,2-Dichlorobenzene       | 11.69 | 146 | 4594  | 0.112 ug/L   | 94     |
| 67) 1,3,5-Trichlorobenzene    | 12.69 | 180 | 3633  | 0.098 ug/L   | 98     |
| 70) 1,2,3-Trichlorobenzene    | 13.79 | 180 | 7439  | 0.268 ug/L   | 95     |

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Instrument :  
MSVOA\_V  
ClientSampleId :

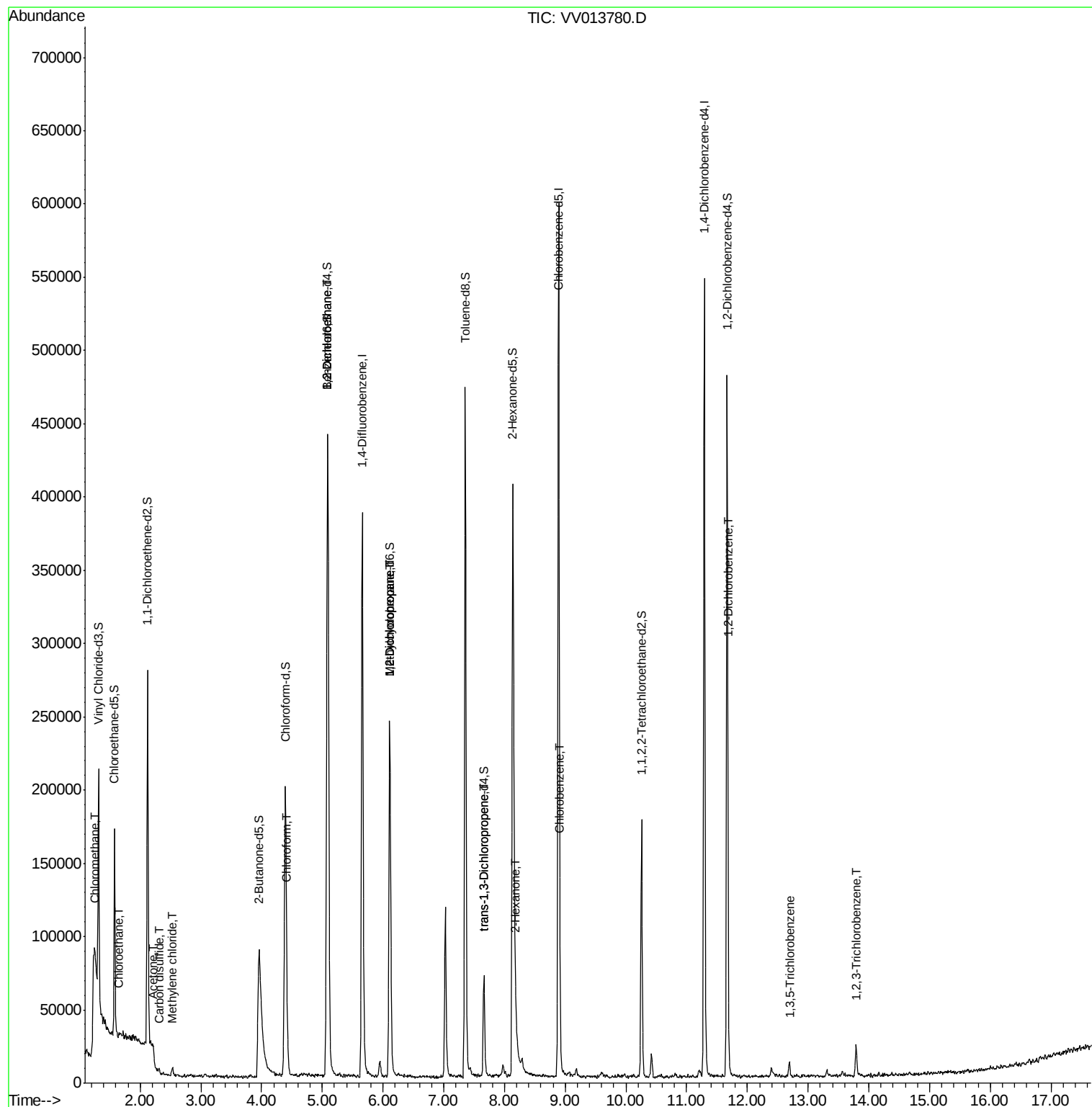
Quant Time: Nov 27 01:20:52 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVTR112219WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Wed Nov 27 01:18:04 2019  
Response via : Initial Calibration

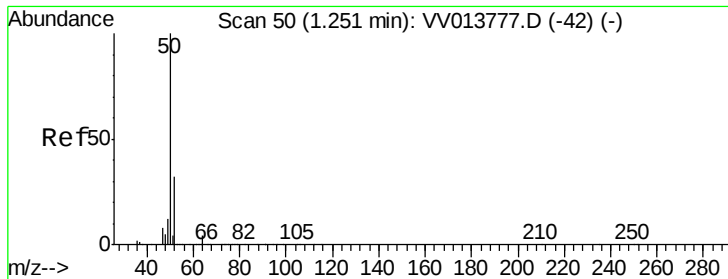
| Internal Standards                                                   | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------------------------------------------------|------|------|----------|------|-------|----------|
| -----                                                                |      |      |          |      |       |          |
| (#)=qualifier out of range (m)=manual integration (+)=signals summed |      |      |          |      |       |          |

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Response via : Initial Calibration





#3

Chloromethane

Concen: 0.210 ug/L

RT: 1.25 min Scan# 50

Delta R.T. -0.00 min

Lab File: VV013780.D

Acq: 26 Nov 2019 12:16

Instrument :

MSVOA\_V

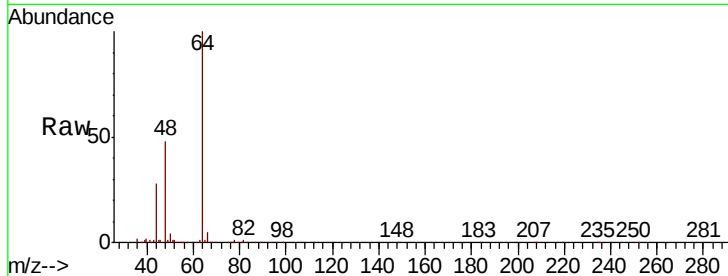
ClientSampled :

Tot Ion: 50 Resp: 4150

Ion Ratio Lower Upper

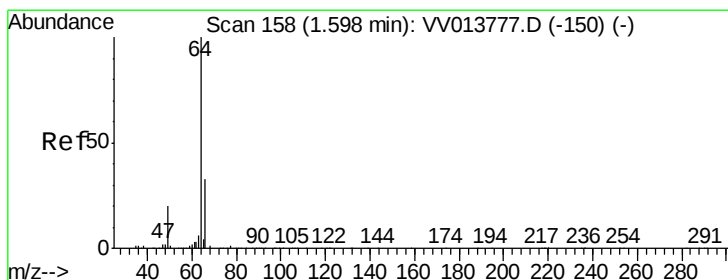
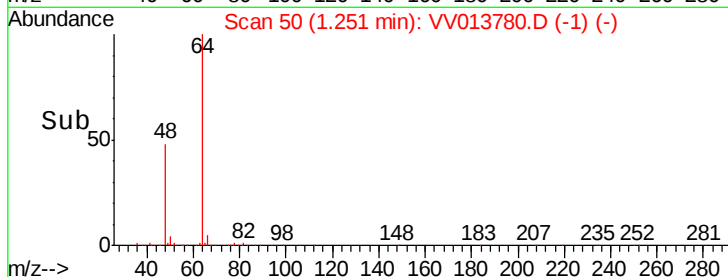
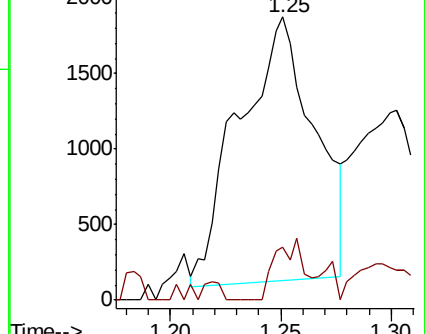
50 100

52 18.7 22.5 41.7#



Abundance Ion 50.05 (49.75 to 50.75): VV0

Ion 52.05 (51.75 to 52.75): VV0



#8

Chloroethane

Concen: 0.117 ug/L

RT: 1.65 min Scan# 174

Delta R.T. 0.05 min

Lab File: VV013780.D

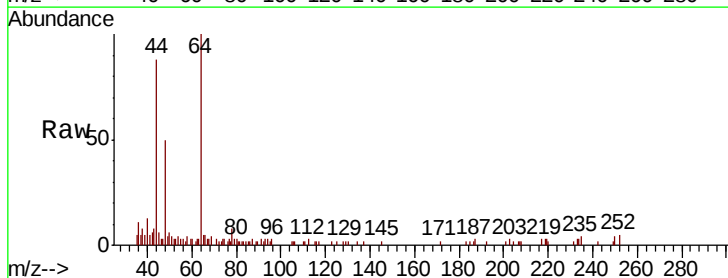
Acq: 26 Nov 2019 12:16

Tgt Ion: 64 Resp: 1423

Ion Ratio Lower Upper

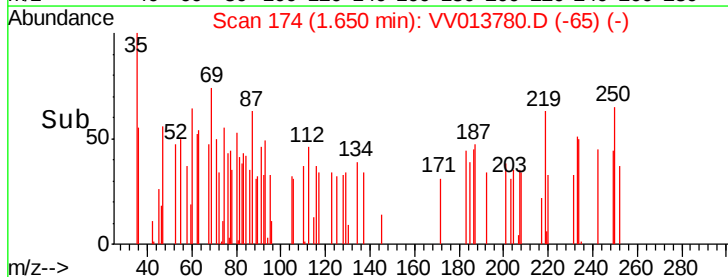
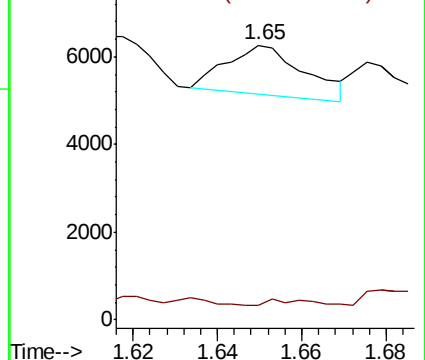
64 100

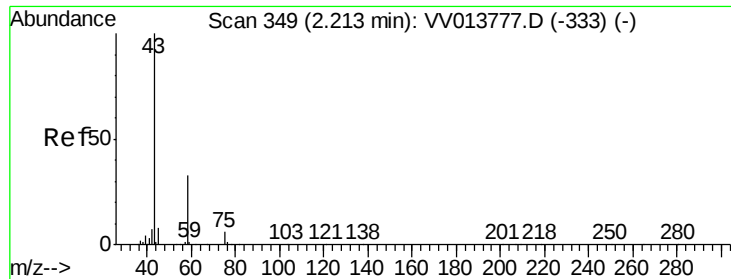
66 5.3 22.6 42.0#



Abundance Ion 64.10 (63.80 to 64.80): VV0

Ion 66.05 (65.75 to 66.75): VV0





#13

Acetone

Concen: 1.671 ug/L

RT: 2.22 min Scan# 351

Delta R.T. 0.01 min

Lab File: VV013780.D

Acq: 26 Nov 2019 12:16

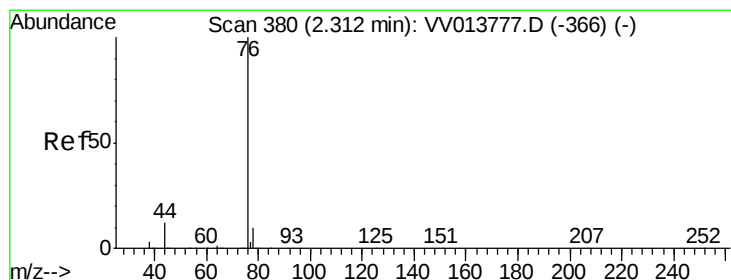
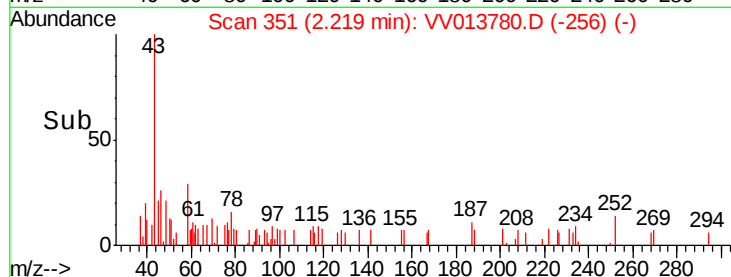
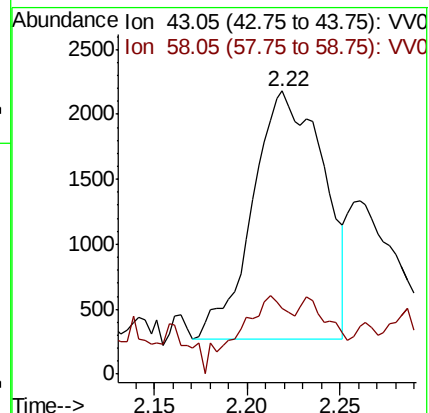
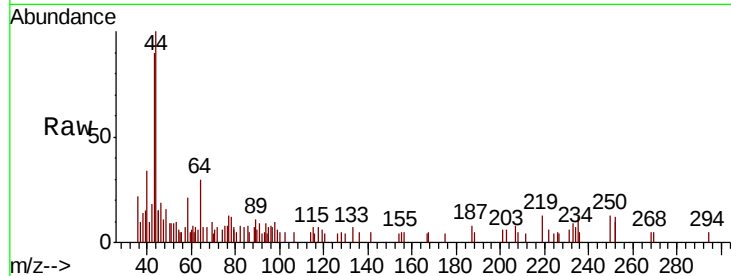
Instrument :  
MSVOA\_V  
ClientSampleId :

Tot Ion: 43 Resp: 5085

Ion Ratio Lower Upper

43 100

58 22.6 0.0 27.2



#14

Carbon disulfide

Concen: 0.075 ug/L

RT: 2.31 min Scan# 380

Delta R.T. -0.00 min

Lab File: VV013780.D

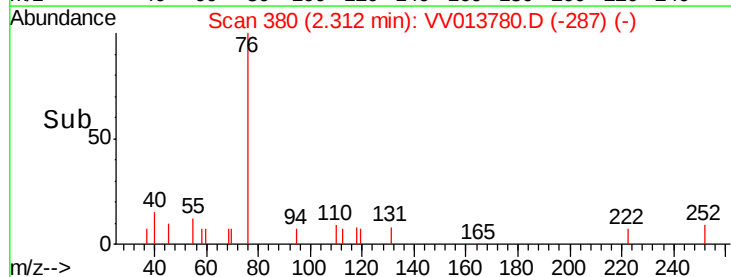
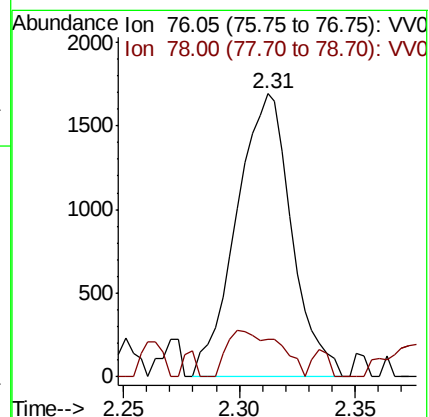
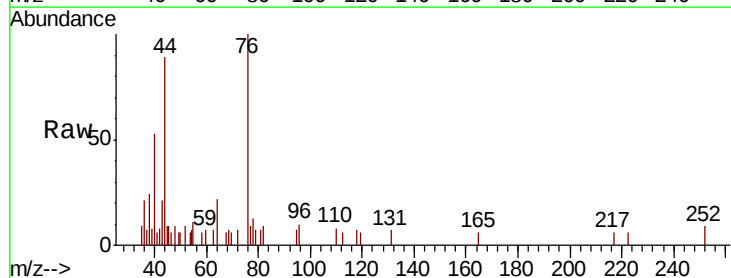
Acq: 26 Nov 2019 12:16

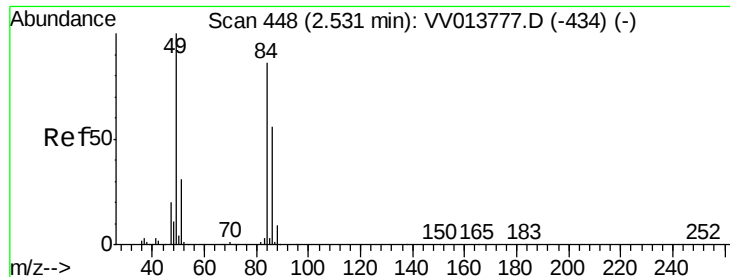
Tgt Ion: 76 Resp: 2800

Ion Ratio Lower Upper

76 100

78 13.1 7.5 11.3#

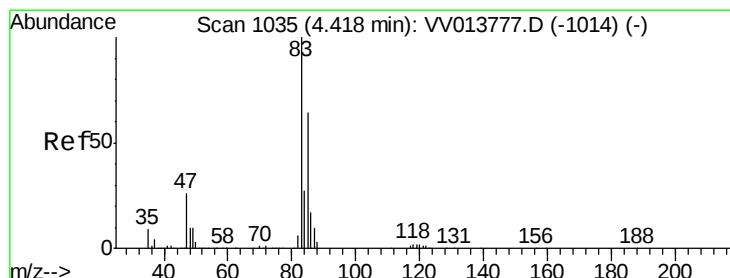
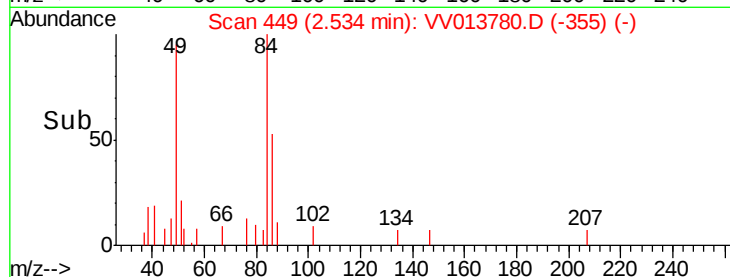
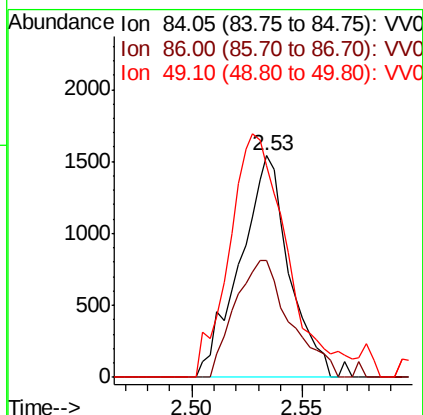
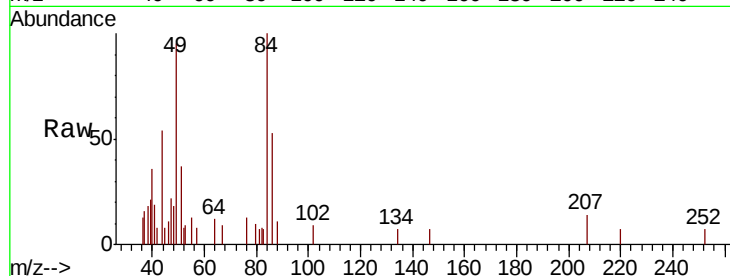




#16  
Methvlene chloride  
Concen: 0.107 ug/L  
RT: 2.53 min Scan# 449  
Delta R.T. 0.00 min  
Lab File: VV013780.D  
Acq: 26 Nov 2019 12:16

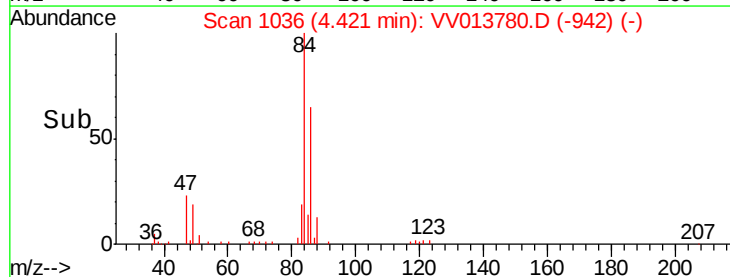
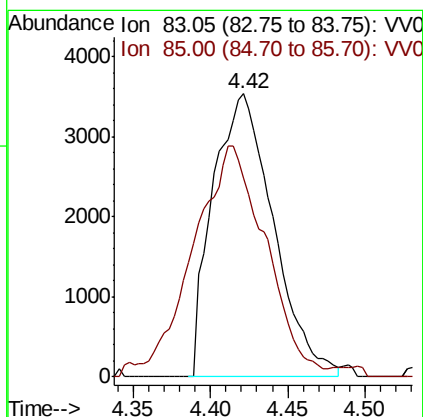
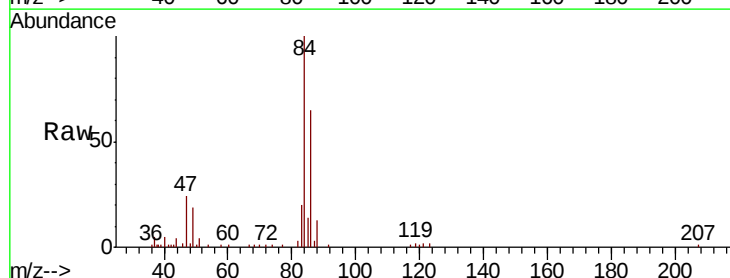
Instrument :  
MSVOA\_V  
ClientSampleId :

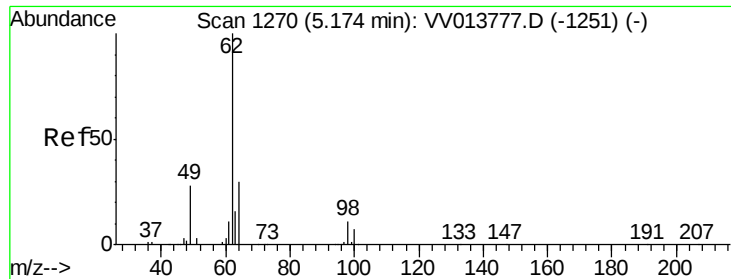
Tot Ion: 84 Resp: 2379  
Ion Ratio Lower Upper  
84 100  
86 53.0 44.0 81.6  
49 95.4 81.5 151.5



#25  
Chloroform  
Concen: 0.248 ug/L  
RT: 4.42 min Scan# 1036  
Delta R.T. 0.00 min  
Lab File: VV013780.D  
Acq: 26 Nov 2019 12:16

Tgt Ion: 83 Resp: 9622  
Ion Ratio Lower Upper  
83 100  
85 70.4 45.1 83.7





#27

1,2-Dichloroethane

Concen: 0.118 ug/L

RT: 5.09 min Scan# 1245

Delta R.T. -0.08 min

Lab File: VV013780.D

Acq: 26 Nov 2019 12:16

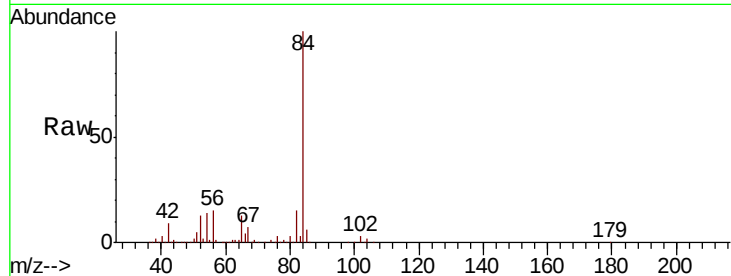
Instrument :  
MSVOA\_V  
ClientSampled :

Tot Ion: 62 Resp: 2622

Ion Ratio Lower Upper

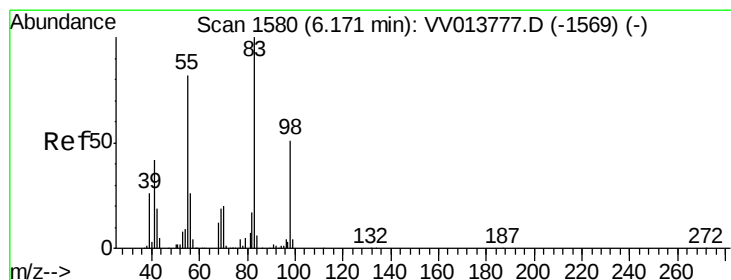
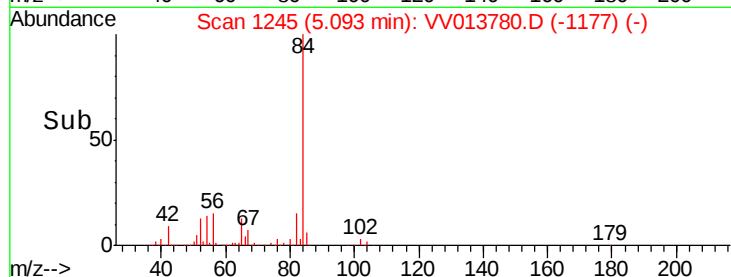
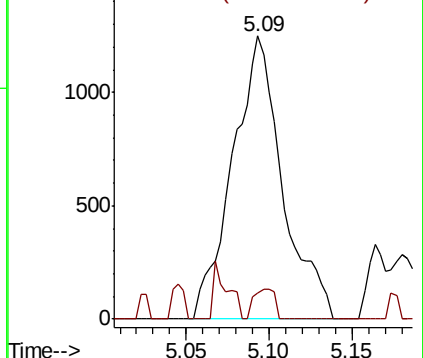
62 100

98 9.3 8.2 12.2



Abundance Ion 62.00 (61.70 to 62.70): VV0

Ion 98.05 (97.75 to 98.75): VV0



#35

Methylcyclohexane

Concen: 0.980 ug/L

RT: 6.11 min Scan# 1561

Delta R.T. -0.06 min

Lab File: VV013780.D

Acq: 26 Nov 2019 12:16

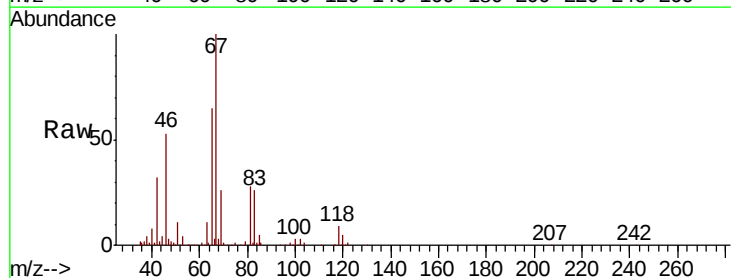
Tgt Ion: 83 Resp: 29632

Ion Ratio Lower Upper

83 100

55 1.1 60.3 90.5#

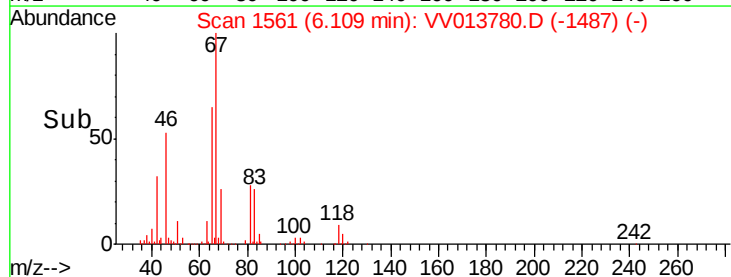
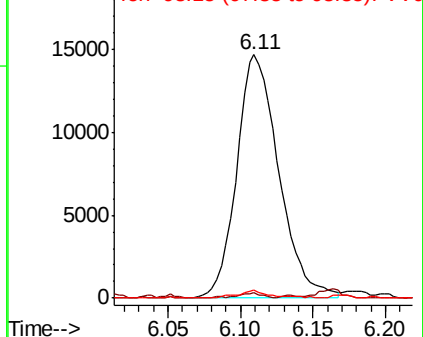
98 2.2 38.1 57.1#

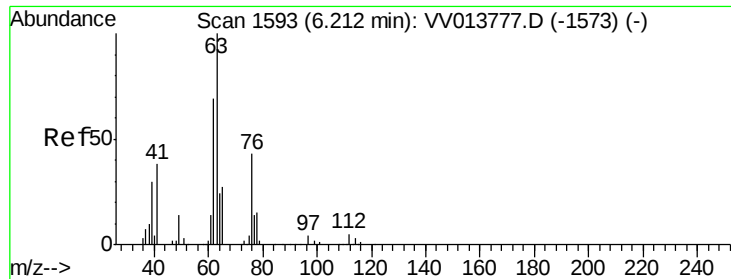


Abundance Ion 83.15 (82.85 to 83.85): VV0

Ion 55.10 (54.80 to 55.80): VV0

Ion 98.15 (97.85 to 98.85): VV0

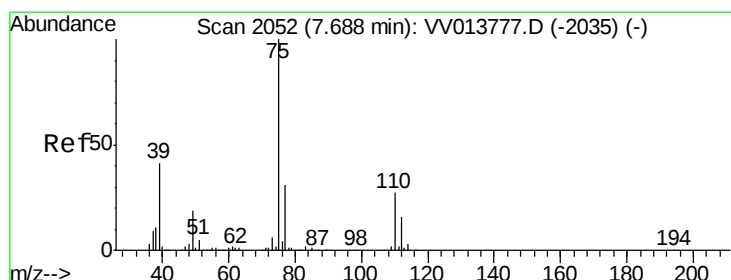
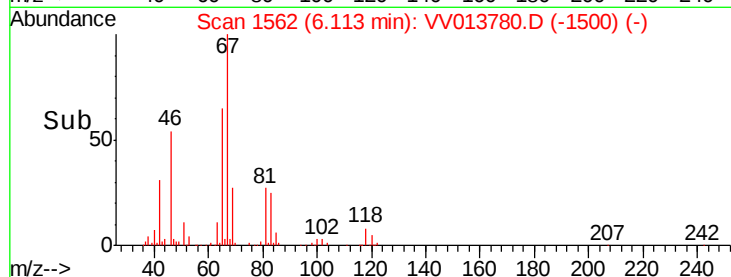
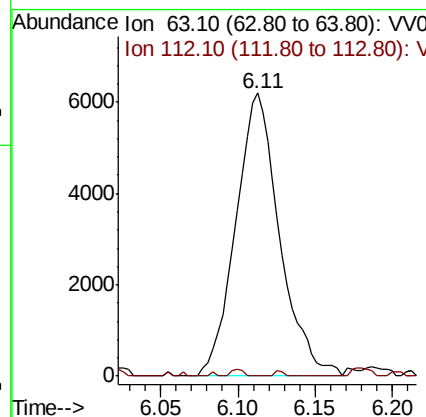
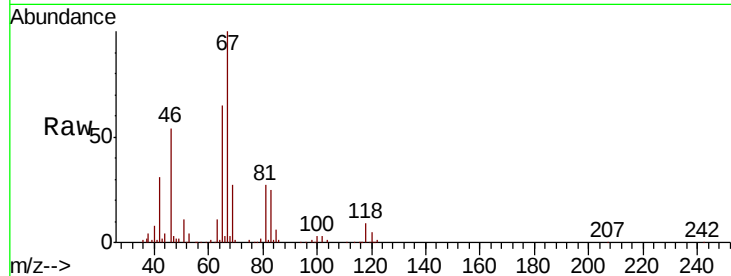




#37  
 1,2-Dichloropropane  
 Concen: 0.578 ug/L  
 RT: 6.11 min Scan# 1562  
 Delta R.T. -0.10 min  
 Lab File: VV013780.D  
 Acq: 26 Nov 2019 12:16

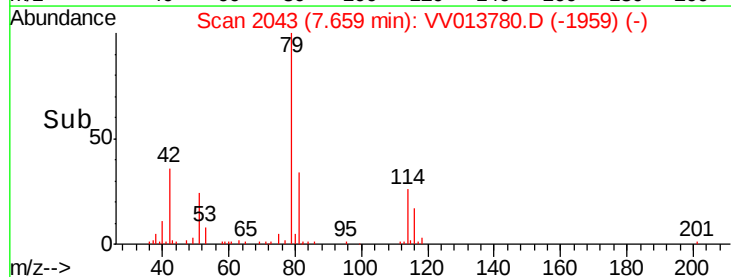
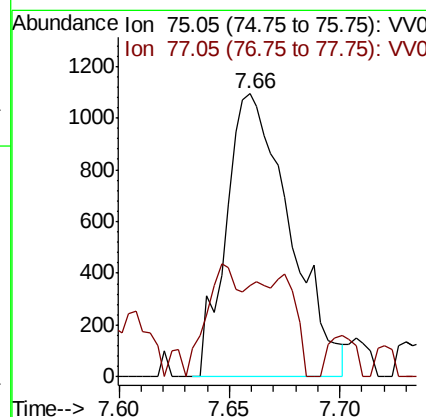
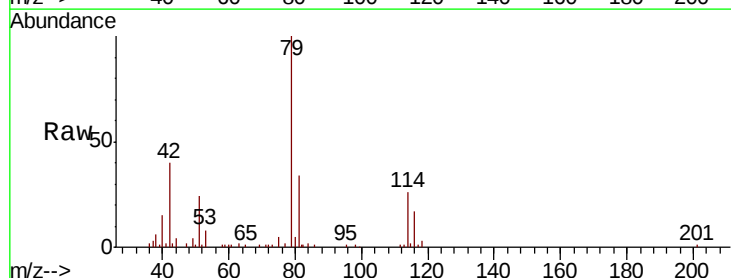
Instrument :  
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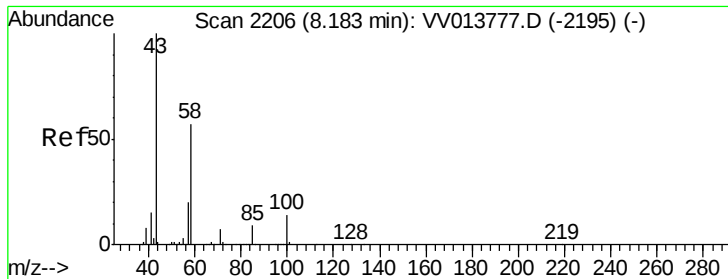
Tot Ion: 63 Resp: 12201  
 Ion Ratio Lower Upper  
 63 100  
 112 0.4 4.4 6.6#



#44  
 trans-1,3-Dichloropropene  
 Concen: 0.094 ug/L  
 RT: 7.66 min Scan# 2043  
 Delta R.T. -0.03 min  
 Lab File: VV013780.D  
 Acq: 26 Nov 2019 12:16

Tgt Ion: 75 Resp: 2198  
 Ion Ratio Lower Upper  
 75 100  
 77 32.4 23.0 42.8

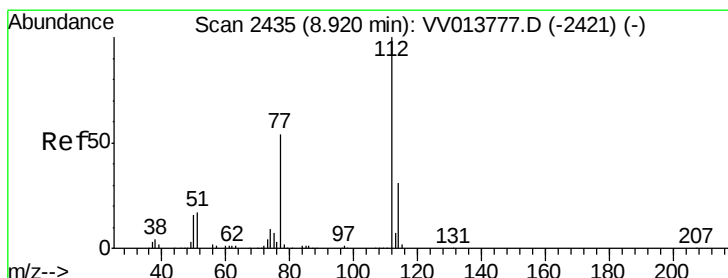
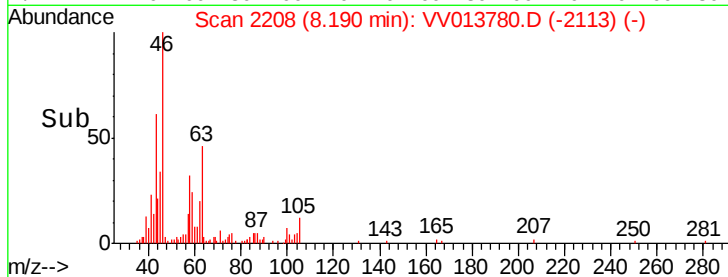
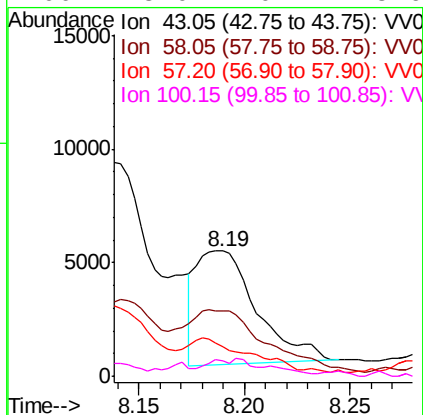
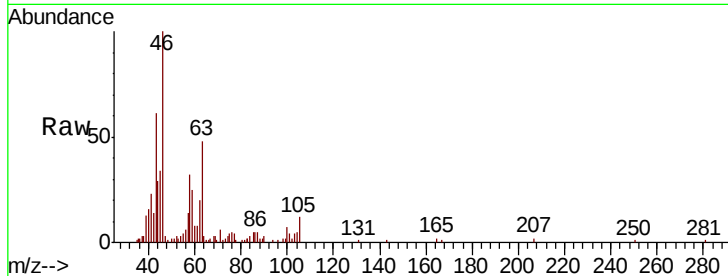




#48  
2-Hexanone  
Concen: 1.137 ug/L  
RT: 8.19 min Scan# 2208  
Delta R.T. 0.01 min  
Lab File: VV013780.D  
Acq: 26 Nov 2019 12:16

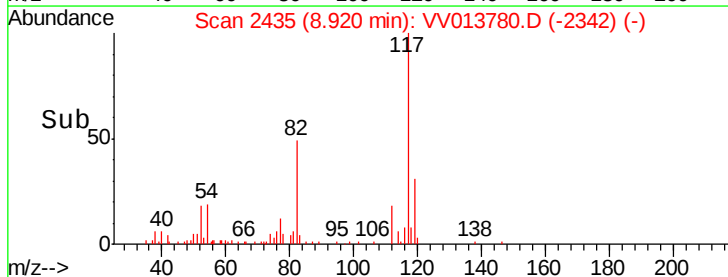
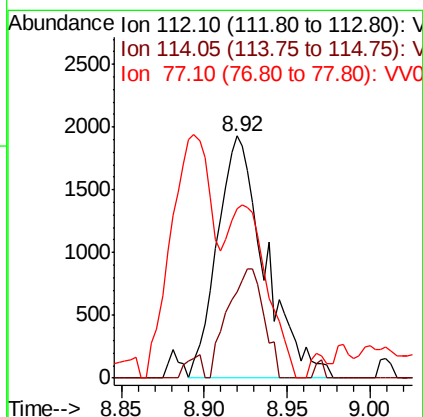
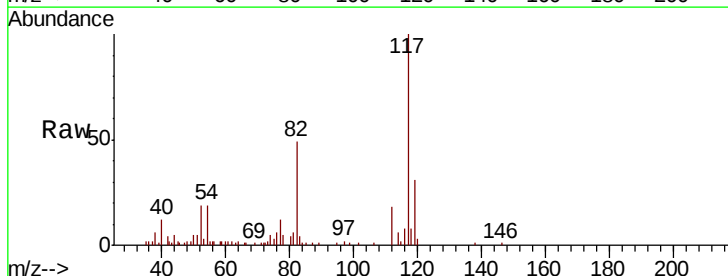
Instrument :  
MSVOA\_V  
ClientSampled :

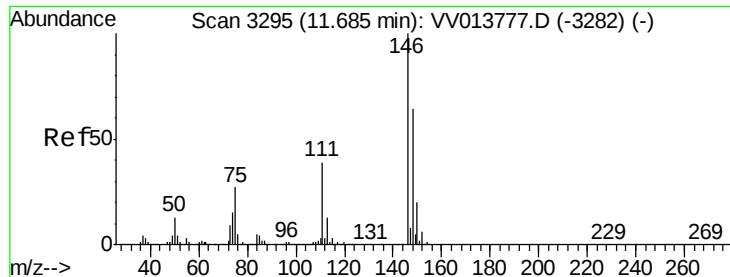
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 58      | 81.0  | 43.2  | 64.8# |
| 57      | 29.1  | 15.4  | 23.2# |
| 100     | 5.0   | 10.4  | 15.6# |



#51  
Chlorobenzene  
Concen: 0.063 ug/L  
RT: 8.92 min Scan# 2435  
Delta R.T. -0.00 min  
Lab File: VV013780.D  
Acq: 26 Nov 2019 12:16

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 114     | 35.6  | 21.8  | 40.6  |
| 77      | 69.8  | 44.2  | 66.4# |





#65

1,2-Dichlorobenzene

Concen: 0.112 ug/L

RT: 11.69 min Scan# 3296

Delta R.T. 0.00 min

Lab File: VV013780.D

Acq: 26 Nov 2019 12:16

Instrument :

MSVOA\_V

ClientSampleId :

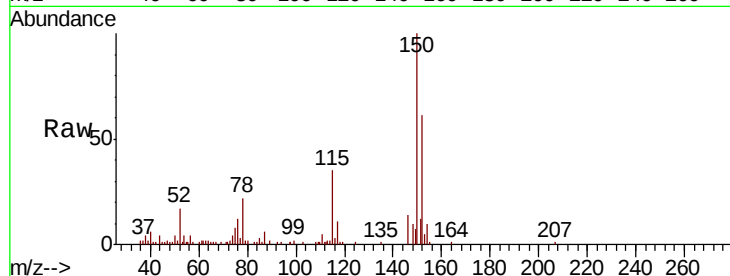
Tot Ion:146 Resp: 4594

Ion Ratio Lower Upper

146 100

111 36.6 31.3 46.9

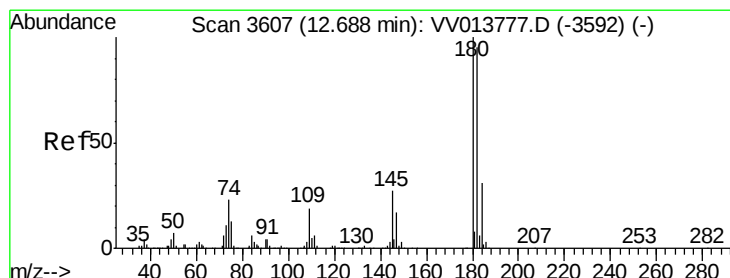
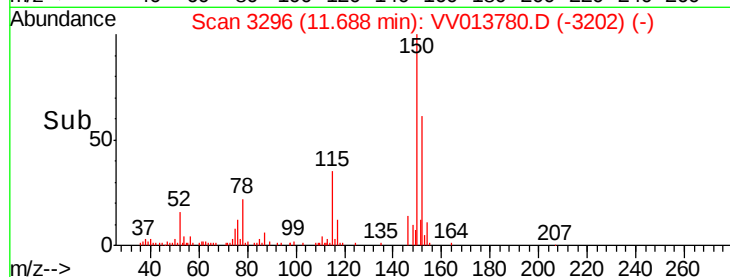
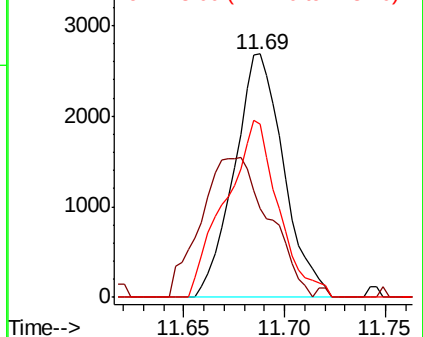
148 71.2 52.2 78.2



Abundance Ion 145.95 (145.65 to 146.65): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V



#67

1,3,5-Trichlorobenzene

Concen: 0.098 ug/L

RT: 12.69 min Scan# 3608

Delta R.T. 0.00 min

Lab File: VV013780.D

Acq: 26 Nov 2019 12:16

Tgt Ion:180 Resp: 3633

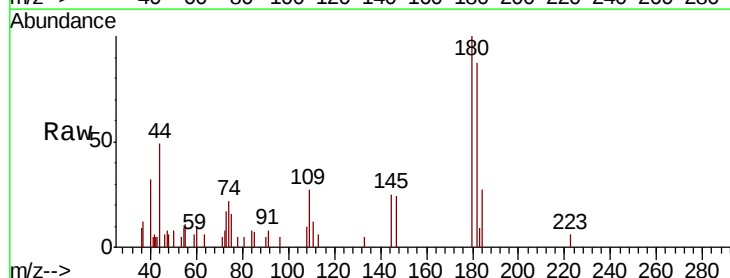
Ion Ratio Lower Upper

180 100

182 96.5 74.8 112.2

184 29.5 23.2 34.8

145 26.3 21.3 31.9

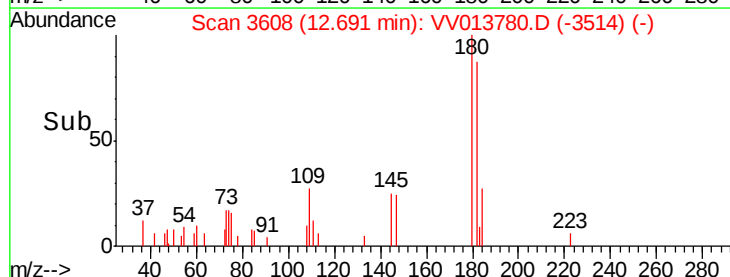
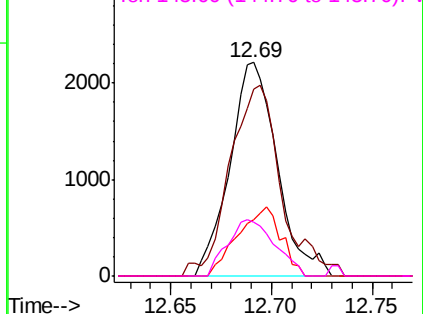


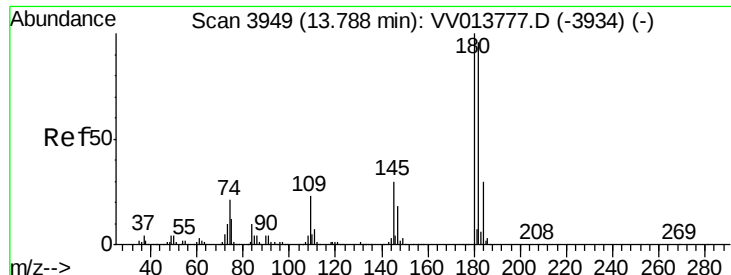
Abundance Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

Ion 184.00 (183.70 to 184.70): V

Ion 145.00 (144.70 to 145.70): V

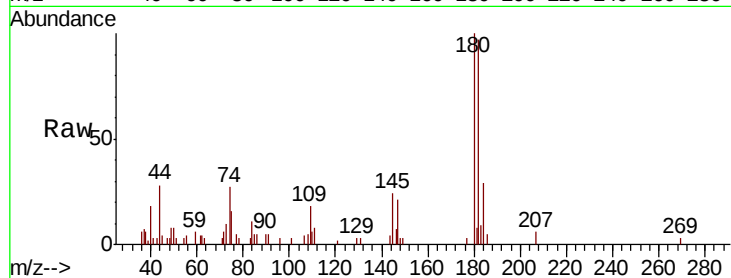




#70  
 1,2,3-Trichlorobenzene  
 Concen: 0.268 ug/L  
 RT: 13.79 min Scan# 3950  
 Delta R.T. 0.00 min  
 Lab File: VV013780.D  
 Acq: 26 Nov 2019 12:16

Instrument :  
 MSVOA\_V  
 ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 93.7  | 78.5  | 117.7 |
| 145     | 26.4  | 23.8  | 35.8  |



Abundance

Ion 179.90 (179.60 to 180.60): V

Ion 181.90 (181.60 to 182.60): V

Ion 144.95 (144.65 to 145.65): V

