

Data File : VV013758.D  
Acq On : 25 Nov 2019 12:11  
Operator : SY/MD  
Sample : K5941-17DL 4X  
Misc : 25.0mL/MSVOA\_V/WATER  
ALS Vial : 5 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
B0AD1DL

Quant Time: Nov 26 04:39:49 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVTR112219WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Tue Nov 26 04:36:55 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.66  | 114  | 379791   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.89  | 117  | 369533   | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.29 | 152  | 169831   | 5.00 | ug/L  | 0.00     |

#### System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.32   | 65    | 107236   | 4.56     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 91.20%  |
| 7) Chloroethane-d5             | 1.58   | 69    | 97741    | 4.90     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 98.00%  |
| 11) 1,1-Dichloroethene-d2      | 2.13   | 63    | 241713   | 6.11     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 122.20% |
| 20) 2-Butanone-d5              | 3.92   | 46    | 238745   | 48.86    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 97.72%  |
| 24) Chloroform-d               | 4.39   | 84    | 222201   | 4.69     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 93.80%  |
| 26) 1,2-Dichloroethane-d4      | 5.07   | 65    | 109633   | 4.86     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 97.20%  |
| 32) Benzene-d6                 | 5.09   | 84    | 428724   | 4.50     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 90.00%  |
| 36) 1,2-Dichloropropane-d6     | 6.11   | 67    | 134600   | 4.74     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 94.80%  |
| 41) Toluene-d8                 | 7.35   | 98    | 371375   | 4.15     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 83.00%  |
| 43) trans-1,3-Dichloropropene- | 7.66   | 79    | 46896    | 4.24     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 84.80%  |
| 46) 2-Hexanone-d5              | 8.13   | 63    | 171734   | 42.10    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 84.20%  |
| 57) 1,1,2,2-Tetrachloroethane- | 10.25  | 84    | 94480    | 4.79     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 95.80%  |
| 64) 1,2-Dichlorobenzene-d4     | 11.67  | 152   | 155897   | 5.20     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 104.00% |

#### Target Compounds

|                                |      |     |        |               | Qvalue |
|--------------------------------|------|-----|--------|---------------|--------|
| 3) Chloromethane               | 1.25 | 50  | 2262   | 0.102 ug/L    | 84     |
| 5) Vinyl chloride              | 1.32 | 62  | 14414  | 0.635 ug/L #  | 1      |
| 8) Chloroethane                | 1.76 | 64  | 2213   | 0.162 ug/L #  | 52     |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.13 | 101 | 2234   | 0.107 ug/L #  | 20     |
| 12) 1,1-Dichloroethene         | 2.14 | 96  | 191388 | 10.481 ug/L # | 79     |
| 13) Acetone                    | 2.18 | 43  | 8253   | 2.415 ug/L #  | 56     |
| 14) Carbon disulfide           | 2.32 | 76  | 4439   | 0.105 ug/L    | 97     |
| 16) Methylene chloride         | 2.53 | 84  | 7267   | 0.291 ug/L    | 95     |
| 17) Methyl tert-butyl Ether    | 2.80 | 73  | 5614   | 0.112 ug/L #  | 82     |
| 19) 1,1-Dichloroethane         | 3.23 | 63  | 205879 | 5.001 ug/L    | 99     |
| 22) cis-1,2-Dichloroethene     | 3.96 | 96  | 9027   | 0.373 ug/L    | 98     |
| 27) 1,2-Dichloroethane         | 5.18 | 62  | 3663   | 0.147 ug/L #  | 71     |
| 29) 1,1,1-Trichloroethane      | 4.66 | 97  | 18562  | 0.491 ug/L    | 100    |
| 34) Trichloroethene            | 5.96 | 95  | 191662 | 7.665 ug/L    | 97     |
| 35) Methylcyclohexane          | 6.11 | 83  | 32800  | 0.983 ug/L #  | 20     |
| 44) trans-1,3-Dichloropropene  | 7.66 | 75  | 2036   | 0.079 ug/L    | 90     |
| 45) 1,1,2-Trichloroethane      | 7.88 | 97  | 1998   | 0.120 ug/L    | 96     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_V\DATA\VV112519\  
Quantitation Report (Not Reviewed)

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Quant Title : TRACE VOA SOM01.0  
QLast Update : Tue Nov 26 04:36:55 2019  
Response via : Initial Calibration

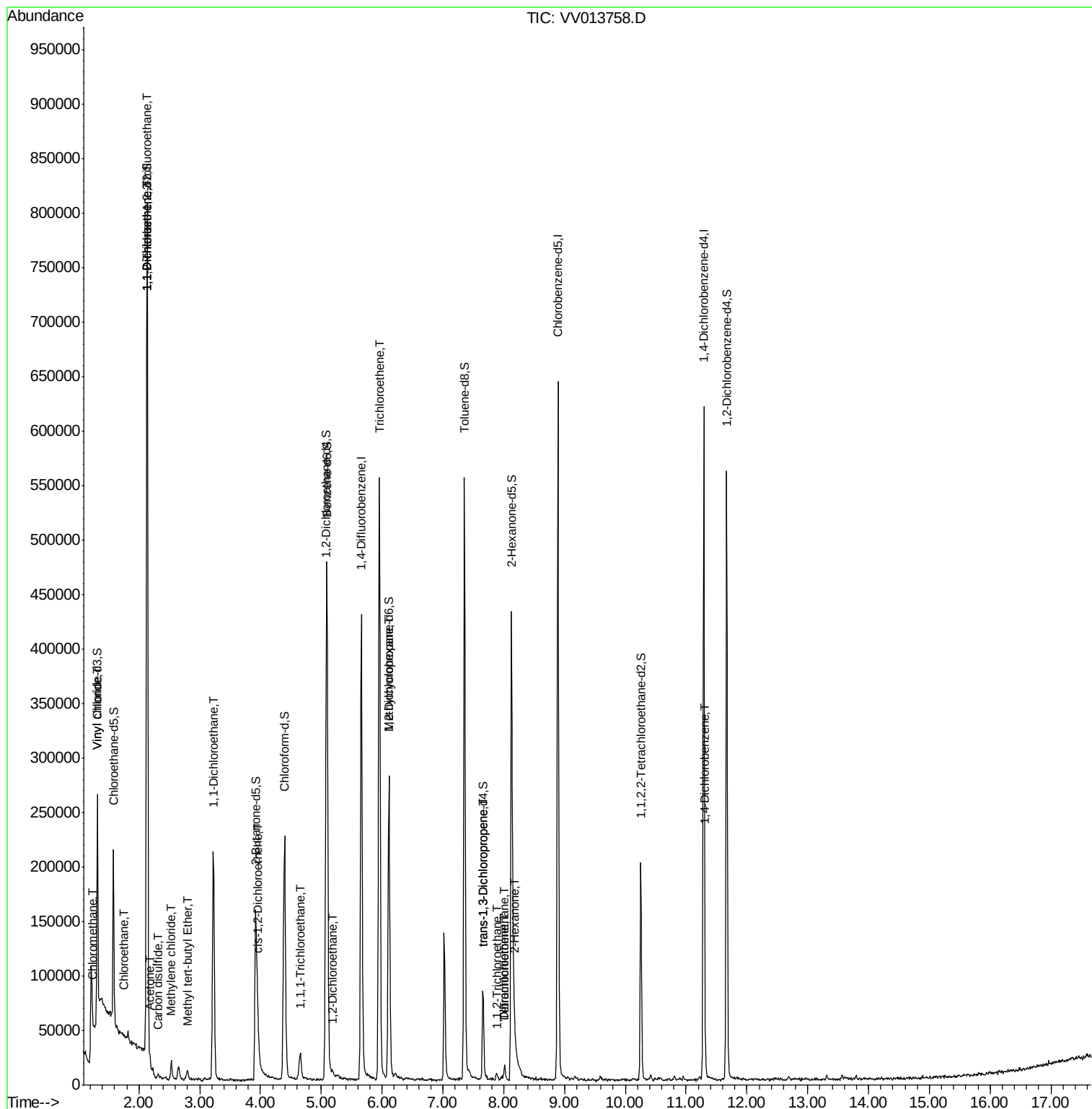
| Internal Standards       | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|--------------------------|-------|------|----------|-------|--------|----------|
| 47) Tetrachloroethene    | 8.02  | 164  | 3347     | 0.154 | ug/L   | 83       |
| 48) 2-Hexanone           | 8.18  | 43   | 7234     | 0.746 | ug/L # | 44       |
| 49) Dibromochloromethane | 8.02  | 129  | 1920     | 0.090 | ug/L # | 10       |
| 63) 1,4-Dichlorobenzene  | 11.32 | 146  | 2706     | 0.054 | ug/L # | 84       |

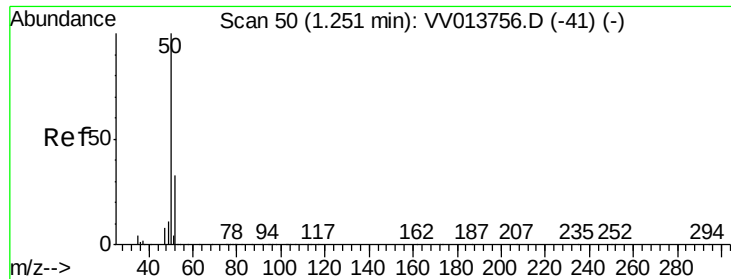
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#3

Chloromethane

Concen: 0.102 ug/L

RT: 1.25 min Scan# 51

Delta R.T. 0.00 min

Lab File: VV013758.D

Acq: 25 Nov 2019 12:11

Instrument :

MSVOA\_V

ClientSampleId :

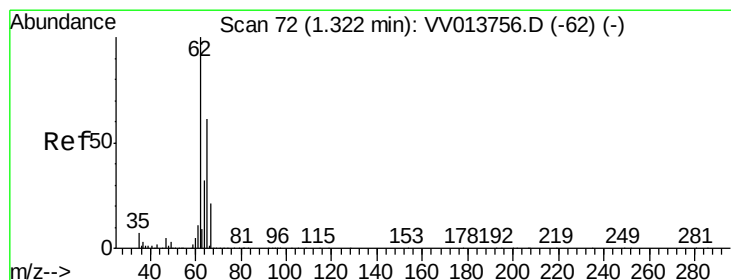
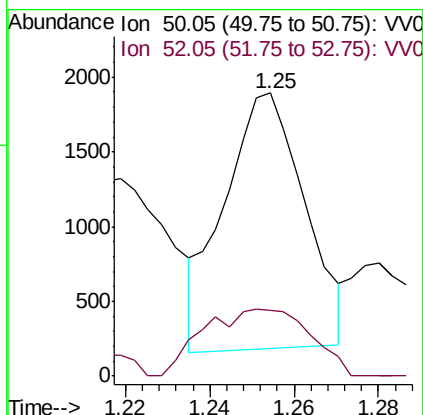
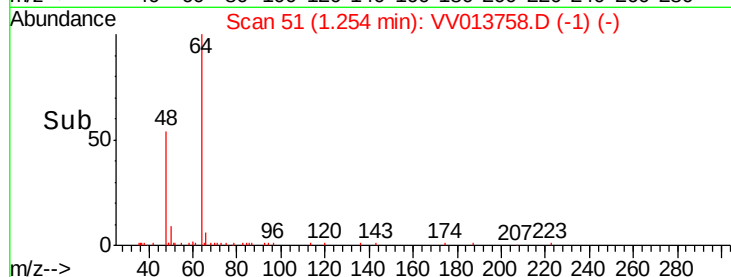
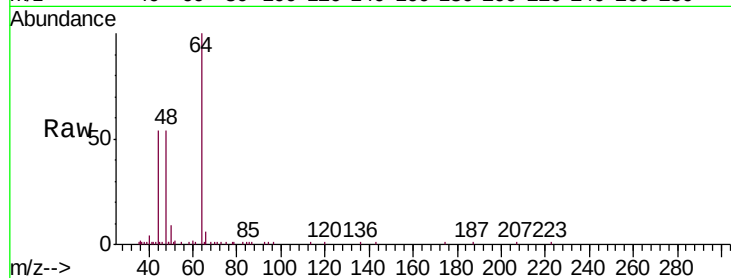
B0AD1DL

Tgt Ion: 50 Resp: 2262

Ion Ratio Lower Upper

50 100

52 23.1 22.5 41.7



#5

Vinyl chloride

Concen: 0.635 ug/L

RT: 1.32 min Scan# 72

Delta R.T. 0.00 min

Lab File: VV013758.D

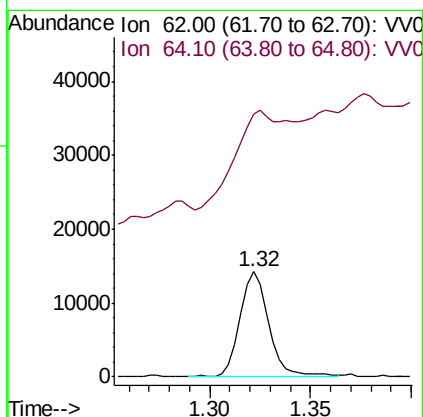
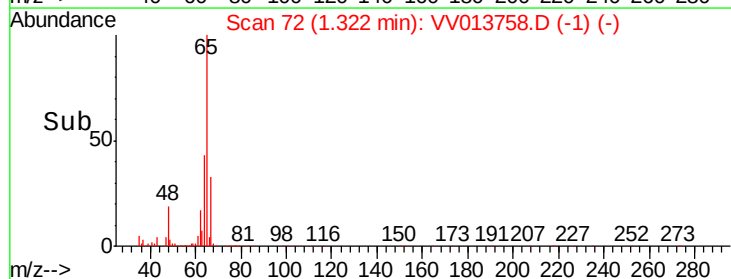
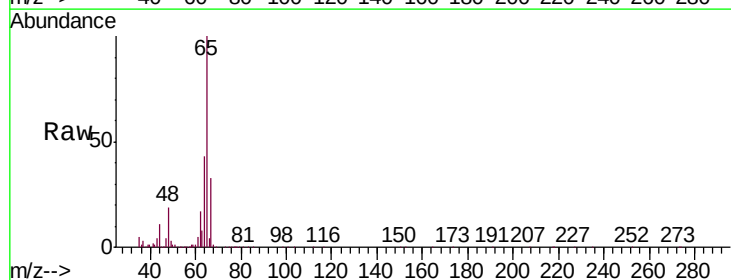
Acq: 25 Nov 2019 12:11

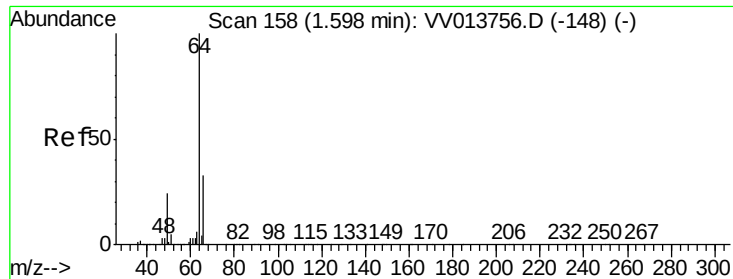
Tgt Ion: 62 Resp: 14414

Ion Ratio Lower Upper

62 100

64 250.2 23.3 43.3#





#8

Chloroethane

Concen: 0.162 ug/L

RT: 1.76 min Scan# 209

Delta R.T. 0.16 min

Lab File: VV013758.D

Acq: 25 Nov 2019 12:11

Instrument :

MSVOA\_V

ClientSampleId :

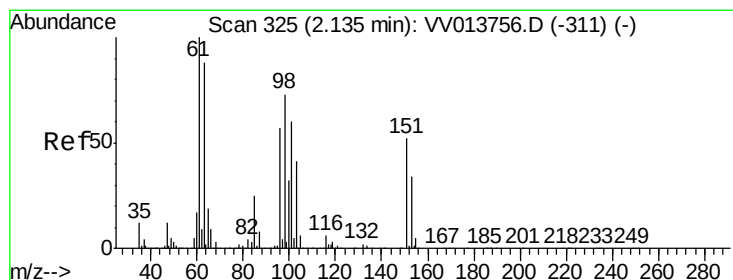
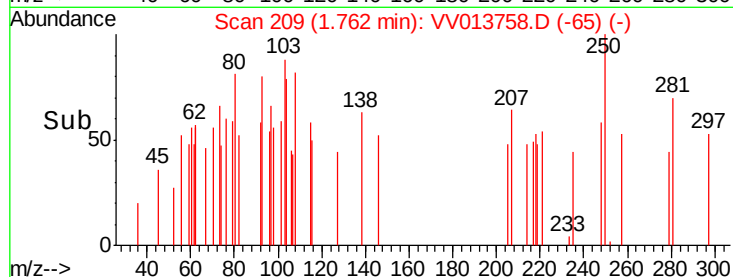
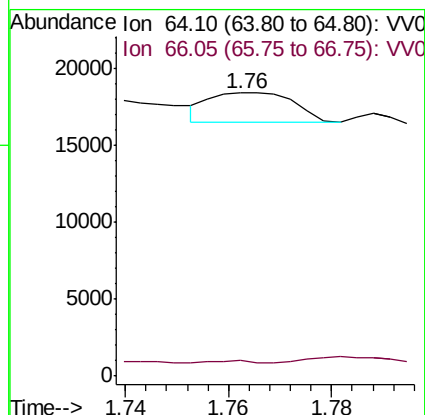
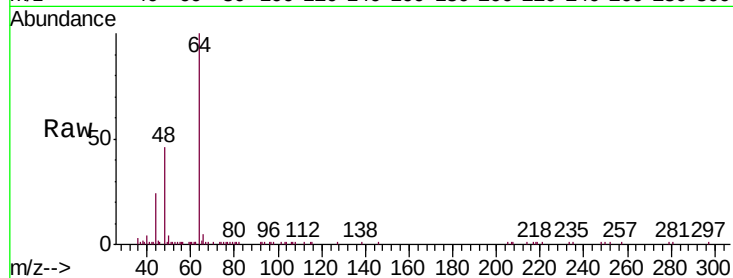
B0AD1DL

Tgt Ion: 64 Resp: 2213

Ion Ratio Lower Upper

64 100

66 5.5 22.6 42.0#



#10

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

Concen: 0.107 ug/L

RT: 2.13 min Scan# 323

Delta R.T. -0.01 min

Lab File: VV013758.D

Acq: 25 Nov 2019 12:11

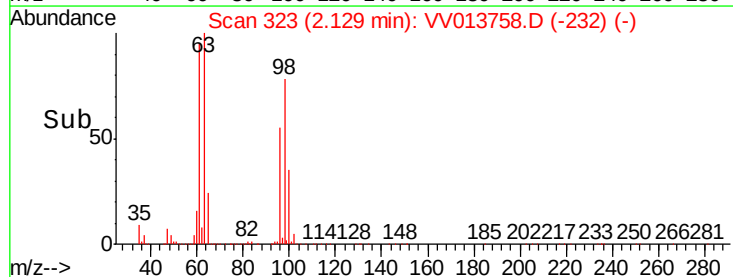
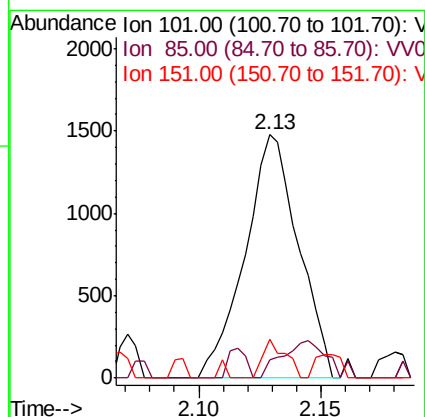
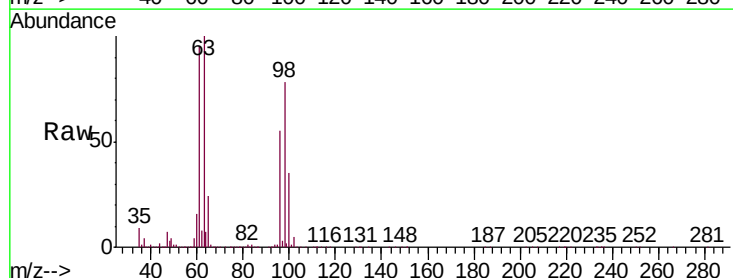
Tgt Ion: 101 Resp: 2234

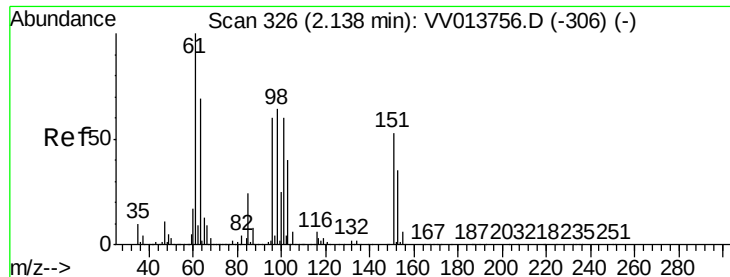
Ion Ratio Lower Upper

101 100

85 0.0 33.4 50.0#

151 6.7 69.4 104.0#

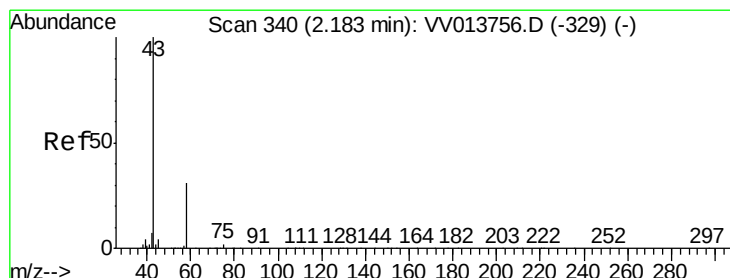
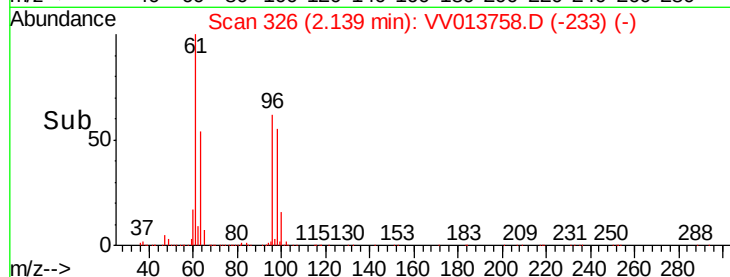
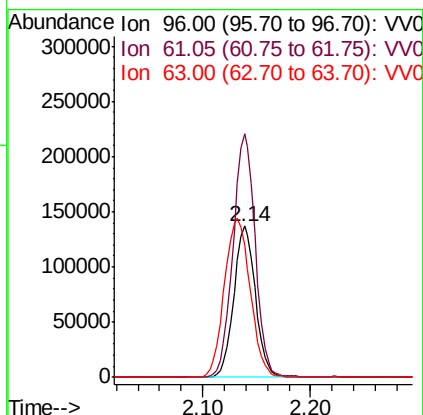
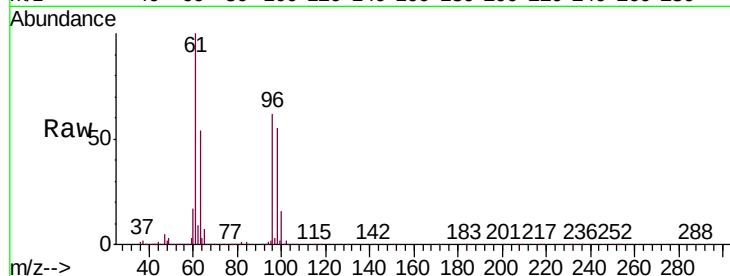




#12  
 1,1-Dichloroethene  
 Concen: 10.481 ug/L  
 RT: 2.14 min Scan# 326  
 Delta R.T. 0.00 min  
 Lab File: VV013758.D  
 Acq: 25 Nov 2019 12:11

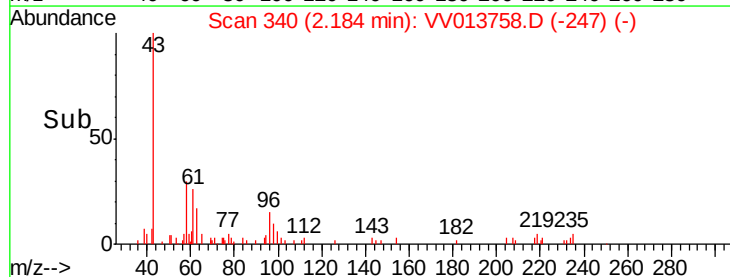
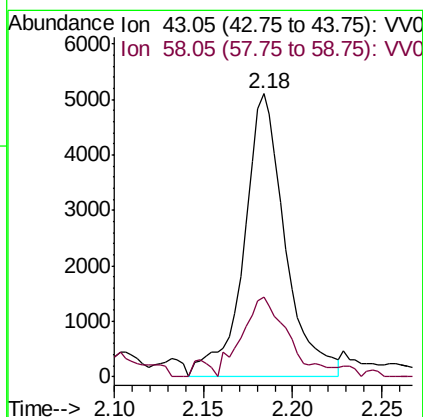
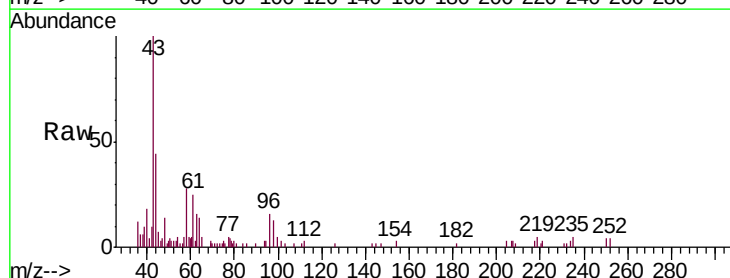
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 B0AD1DL

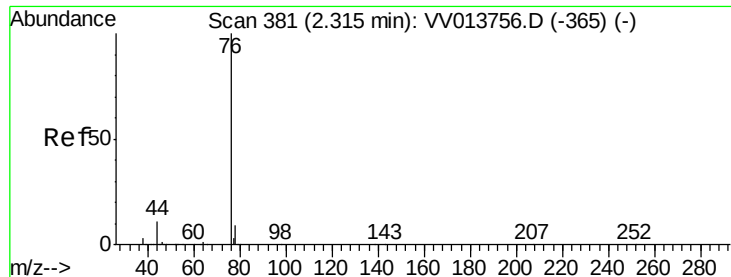
Tgt Ion: 96 Resp: 191388  
 Ion Ratio Lower Upper  
 96 100  
 61 161.0 116.3 215.9  
 63 87.4 96.7 179.7#



#13  
 Acetone  
 Concen: 2.415 ug/L  
 RT: 2.18 min Scan# 340  
 Delta R.T. 0.00 min  
 Lab File: VV013758.D  
 Acq: 25 Nov 2019 12:11

Tgt Ion: 43 Resp: 8253  
 Ion Ratio Lower Upper  
 43 100  
 58 31.5 0.0 27.2#





#14

Carbon disulfide

Concen: 0.105 ug/L

RT: 2.32 min Scan# 382

Delta R.T. 0.00 min

Lab File: VV013758.D

Acq: 25 Nov 2019 12:11

Instrument :

MSVOA\_V

ClientSampled :

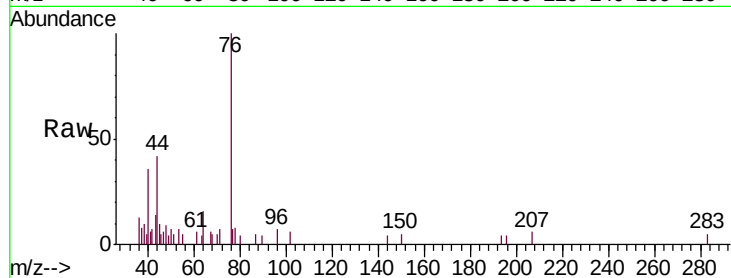
B0AD1DL

Tgt Ion: 76 Resp: 4439

Ion Ratio Lower Upper

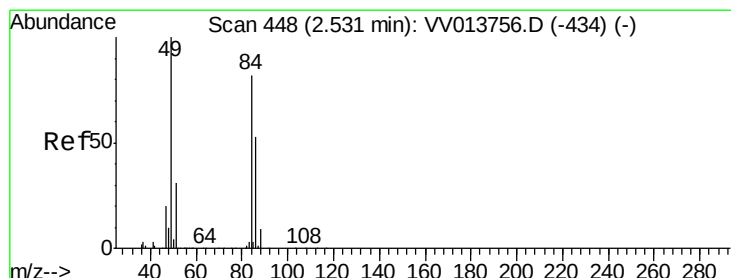
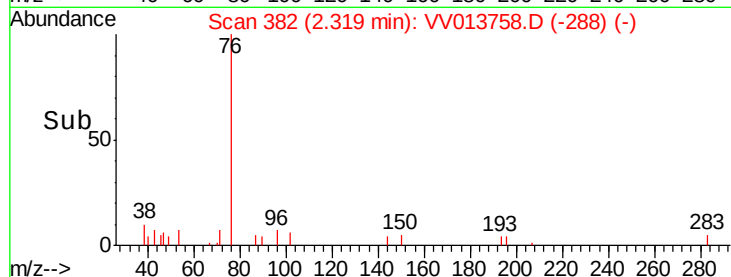
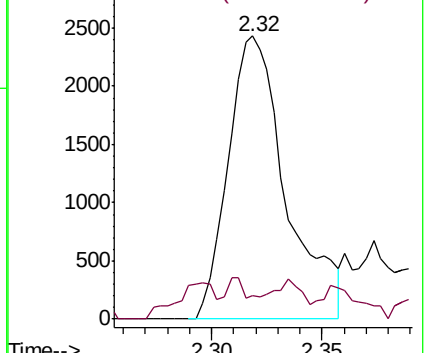
76 100

78 8.3 7.5 11.3



Abundance Ion 76.05 (75.75 to 76.75): VV0

Ion 78.00 (77.70 to 78.70): VV0



#16

Methylene chloride

Concen: 0.291 ug/L

RT: 2.53 min Scan# 449

Delta R.T. 0.00 min

Lab File: VV013758.D

Acq: 25 Nov 2019 12:11

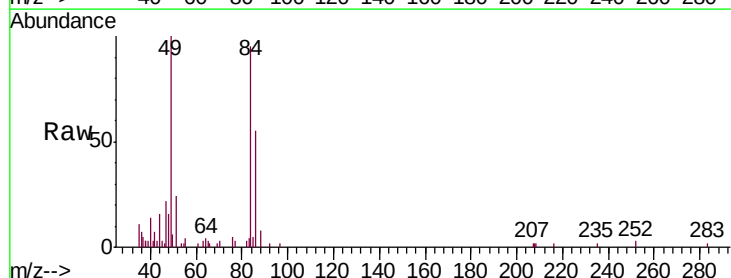
Tgt Ion: 84 Resp: 7267

Ion Ratio Lower Upper

84 100

86 58.3 44.0 81.6

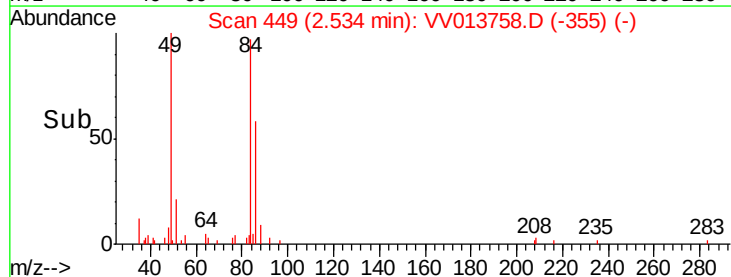
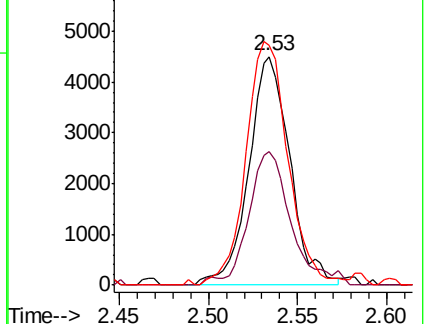
49 111.8 81.5 151.5

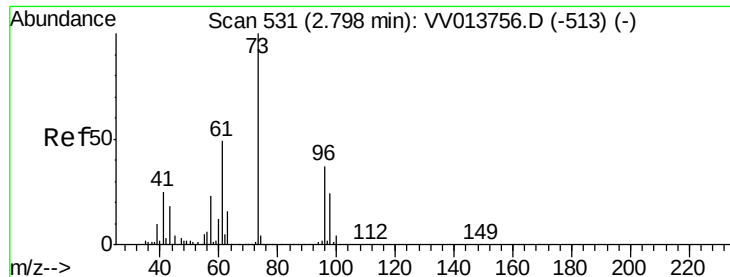


Abundance Ion 84.05 (83.75 to 84.75): VV0

Ion 86.00 (85.70 to 86.70): VV0

Ion 49.10 (48.80 to 49.80): VV0





#17

Methyl tert-butyl Ether

Concen: 0.112 ug/L

RT: 2.80 min Scan# 533

Delta R.T. 0.01 min

Lab File: VV013758.D

Acq: 25 Nov 2019 12:11

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ClientSampleId :

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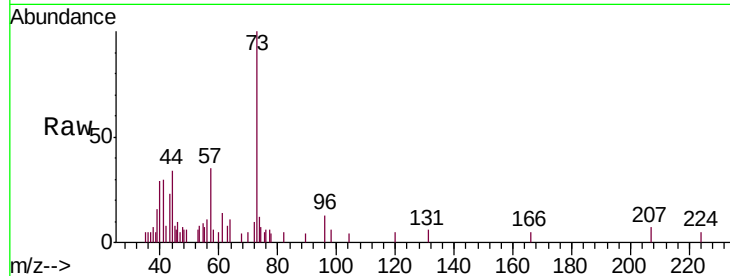
Tgt Ion: 73 Resp: 5614

Ion Ratio Lower Upper

73 100

43 26.8 15.5 23.3#

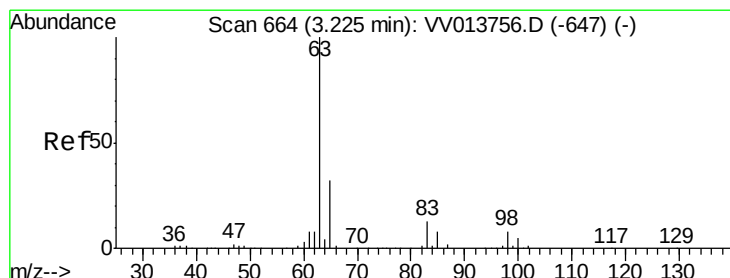
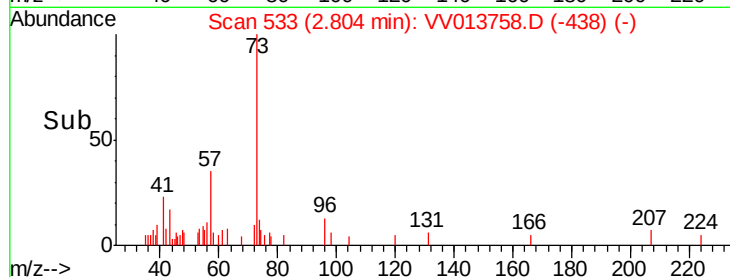
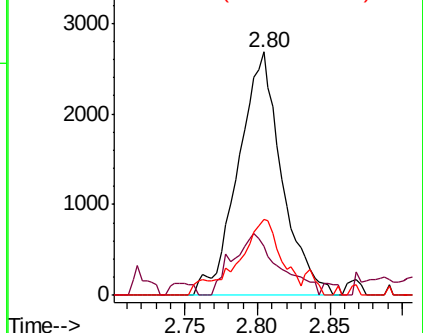
57 31.0 17.5 26.3#



Abundance Ion 73.10 (72.80 to 73.80): VV0

Ion 43.05 (42.75 to 43.75): VV0

Ion 57.10 (56.80 to 57.80): VV0



#19

1,1-Dichloroethane

Concen: 5.001 ug/L

RT: 3.23 min Scan# 664

Delta R.T. 0.00 min

Lab File: VV013758.D

Acq: 25 Nov 2019 12:11

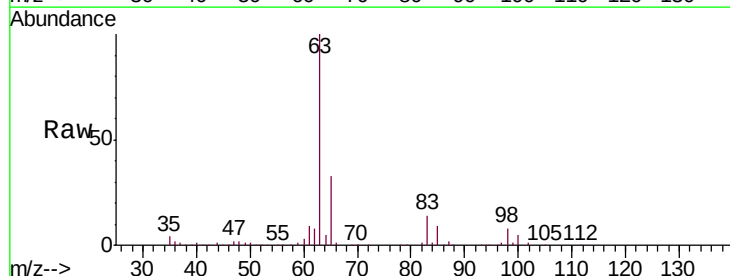
Tgt Ion: 63 Resp: 205879

Ion Ratio Lower Upper

63 100

65 33.2 22.7 42.1

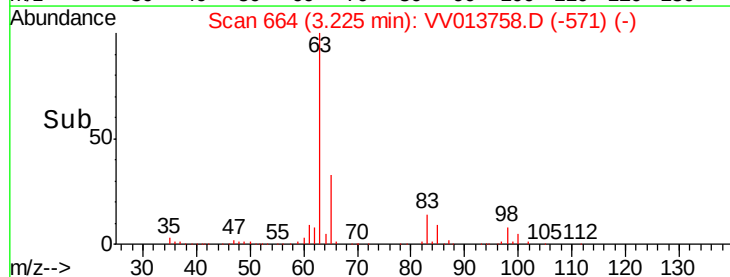
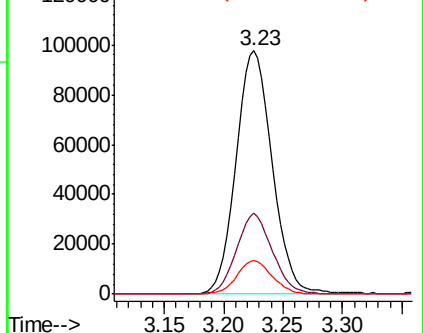
83 13.6 9.2 17.2



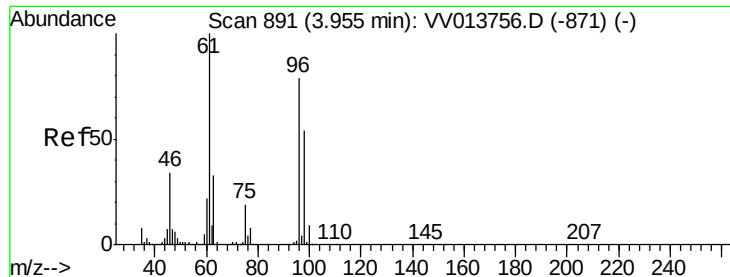
Abundance Ion 63.10 (62.80 to 63.80): VV0

Ion 65.10 (64.80 to 65.80): VV0

Ion 83.05 (82.75 to 83.75): VV0





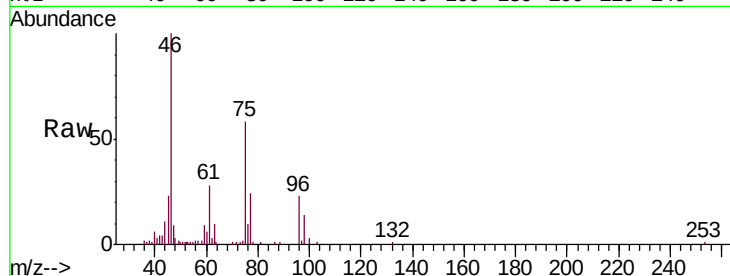


#22

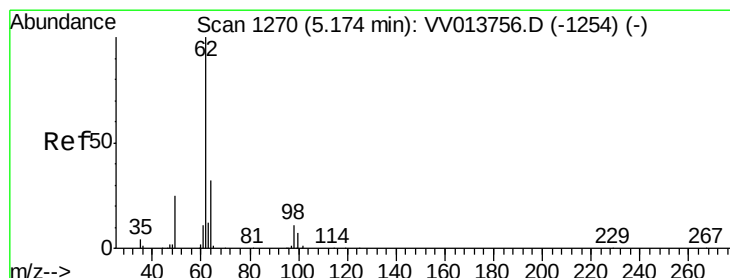
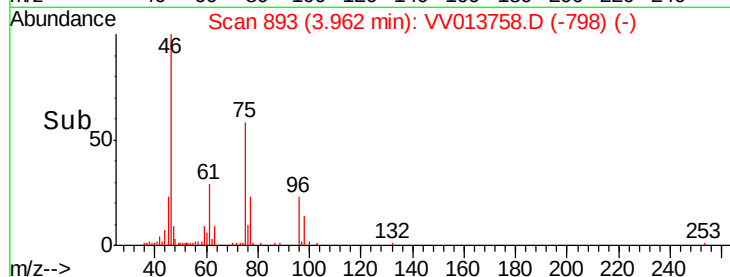
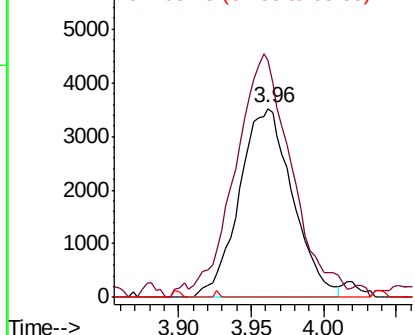
cis-1,2-Dichloroethene  
 Concen: 0.373 ug/L  
 RT: 3.96 min Scan# 893  
 Delta R.T. 0.01 min  
 Lab File: VV013758.D  
 Acq: 25 Nov 2019 12:11

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 B0AD1DL

Tgt Ion: 96 Resp: 9027  
 Ion Ratio Lower Upper  
 96 100  
 61 125.5 86.1 159.9  
 68 0.0 0.0 0.0



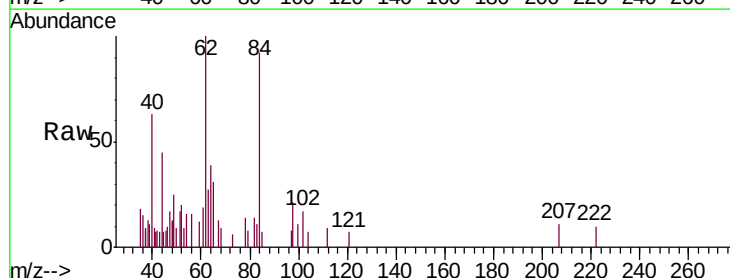
Abundance Ion 96.00 (95.70 to 96.70): VV0  
 Ion 61.05 (60.75 to 61.75): VV0  
 Ion 68.15 (67.85 to 68.85): VV0



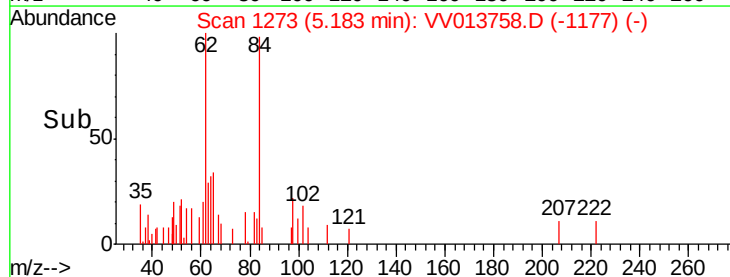
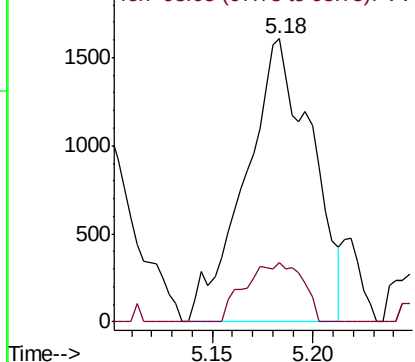
#27

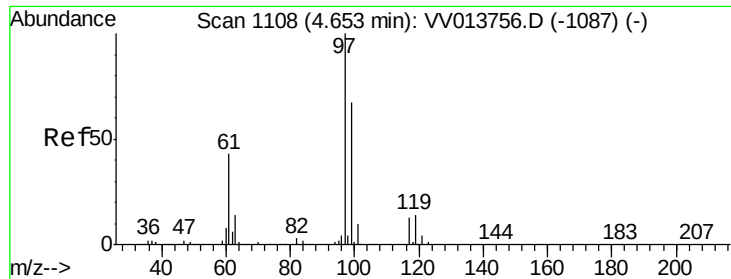
1,2-Dichloroethane  
 Concen: 0.147 ug/L  
 RT: 5.18 min Scan# 1273  
 Delta R.T. 0.01 min  
 Lab File: VV013758.D  
 Acq: 25 Nov 2019 12:11

Tgt Ion: 62 Resp: 3663  
 Ion Ratio Lower Upper  
 62 100  
 98 20.9 8.2 12.2#



Abundance Ion 62.00 (61.70 to 62.70): VV0  
 Ion 98.05 (97.75 to 98.75): VV0

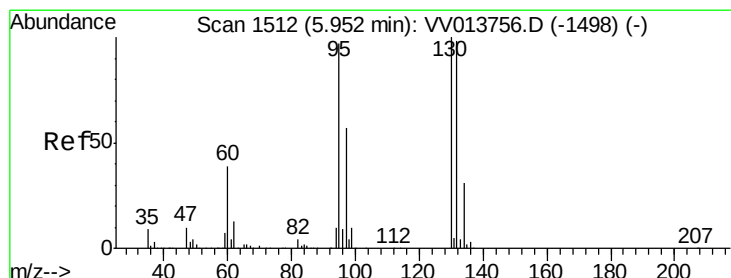
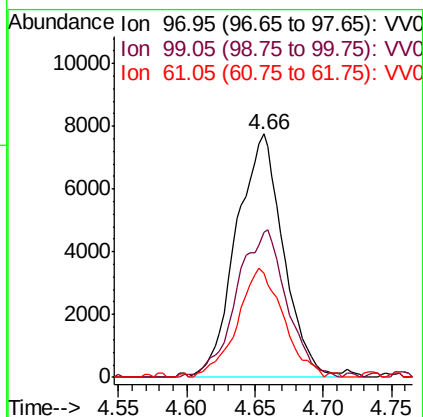
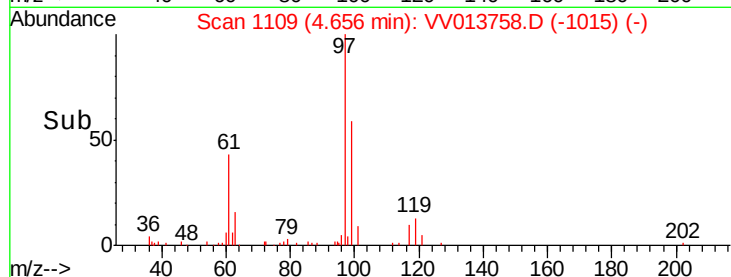
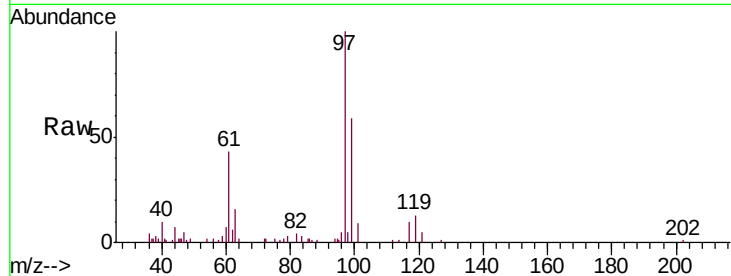




#29  
 1,1,1-Trichloroethane  
 Concen: 0.491 ug/L  
 RT: 4.66 min Scan# 1109  
 Delta R.T. 0.00 min  
 Lab File: VV013758.D  
 Acq: 25 Nov 2019 12:11

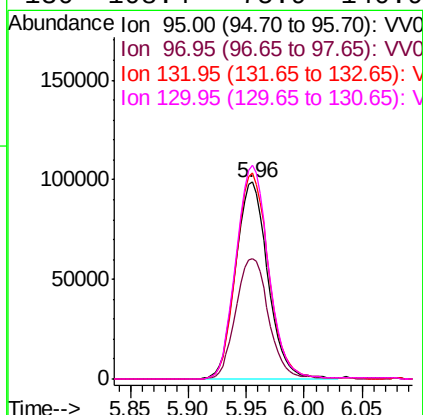
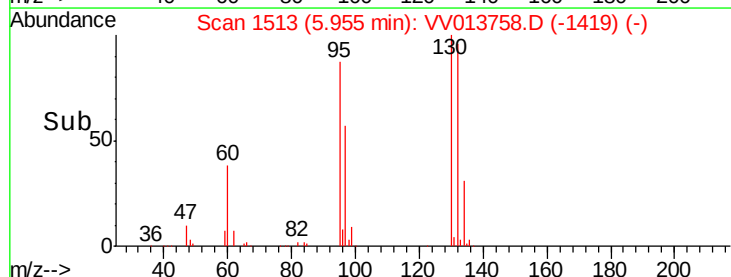
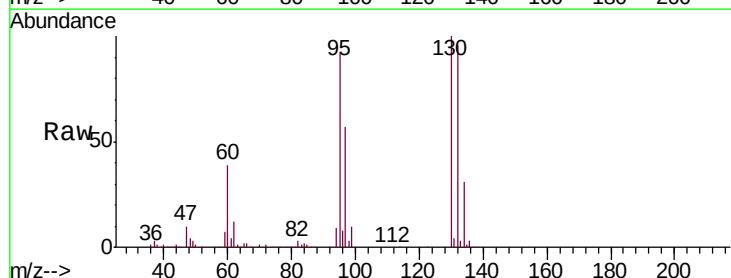
Instrument :  
 MSVOA\_V  
 ClientSampleID :  
 B0AD1DL

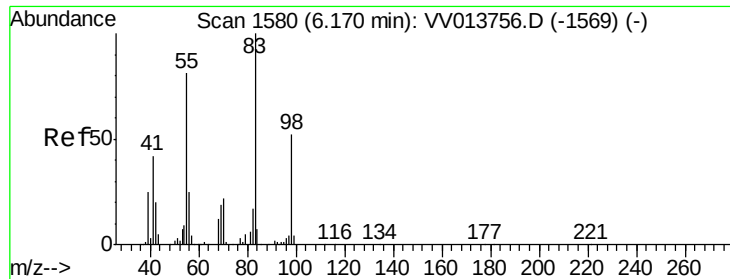
Tgt Ion: 97 Resp: 18562  
 Ion Ratio Lower Upper  
 97 100  
 99 64.4 51.7 77.5  
 61 43.8 35.0 52.6



#34  
 Trichloroethene  
 Concen: 7.665 ug/L  
 RT: 5.96 min Scan# 1513  
 Delta R.T. 0.00 min  
 Lab File: VV013758.D  
 Acq: 25 Nov 2019 12:11

Tgt Ion: 95 Resp: 191662  
 Ion Ratio Lower Upper  
 95 100  
 97 61.3 45.6 84.8  
 132 104.3 70.5 130.9  
 130 108.4 75.9 140.9

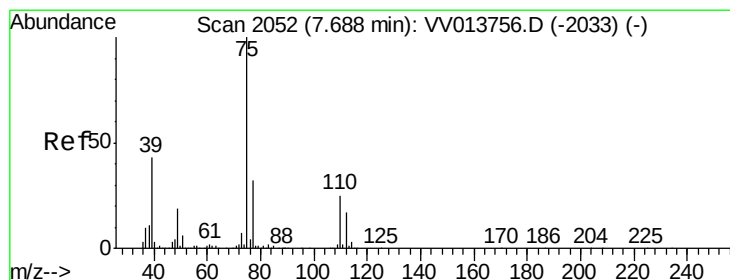
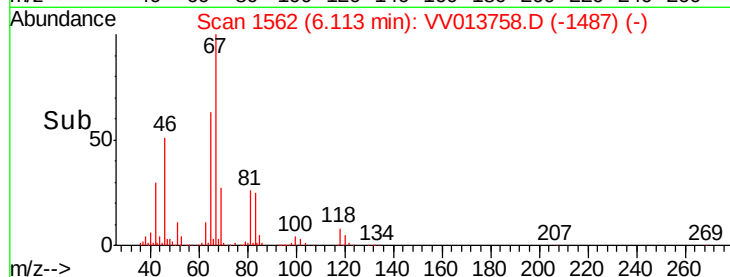
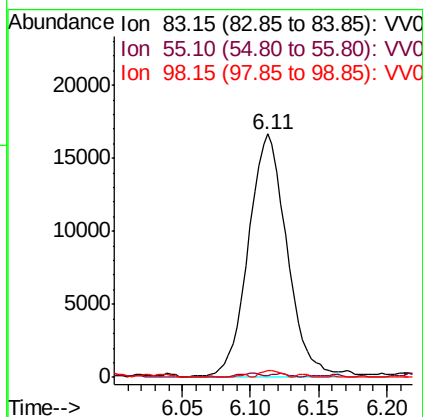
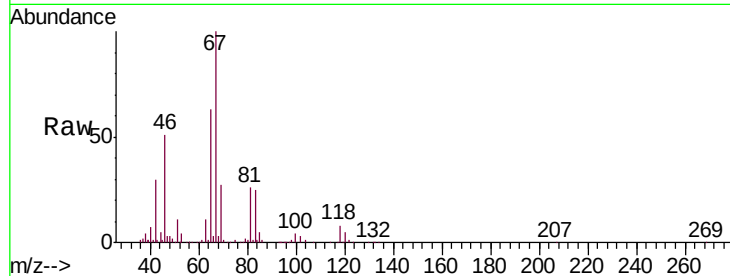




#35  
Methylcyclohexane  
Concen: 0.983 ug/L  
RT: 6.11 min Scan# 1562  
Delta R.T. -0.06 min  
Lab File: VV013758.D  
Acq: 25 Nov 2019 12:11

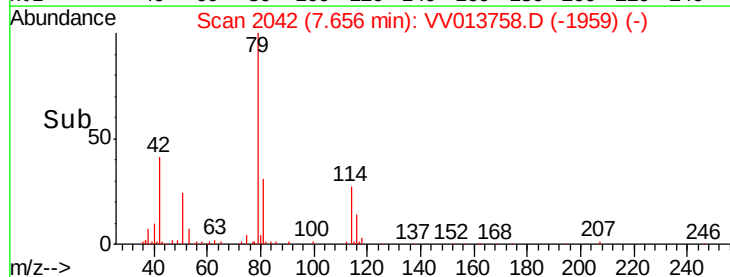
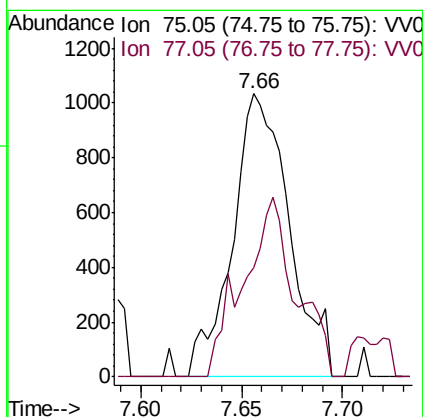
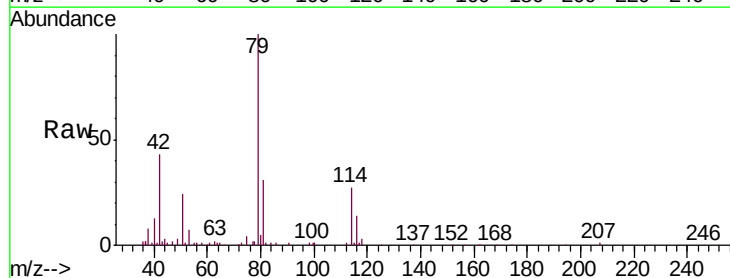
Instrument :  
MSVOA\_V  
ClientSampleId :  
B0AD1DL

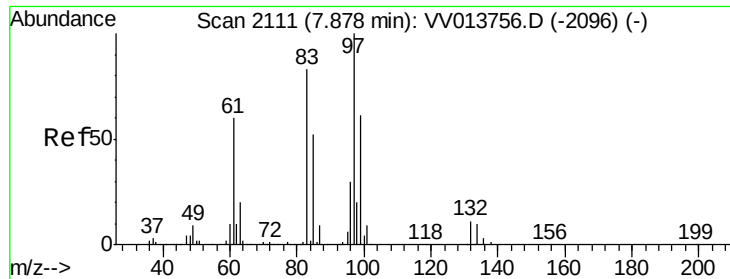
Tgt Ion: 83 Resp: 32800  
Ion Ratio Lower Upper  
83 100  
55 0.8 60.3 90.5#  
98 1.5 38.1 57.1#



#44  
trans-1,3-Dichloropropene  
Concen: 0.079 ug/L  
RT: 7.66 min Scan# 2042  
Delta R.T. -0.03 min  
Lab File: VV013758.D  
Acq: 25 Nov 2019 12:11

Tgt Ion: 75 Resp: 2036  
Ion Ratio Lower Upper  
75 100  
77 38.8 23.0 42.8

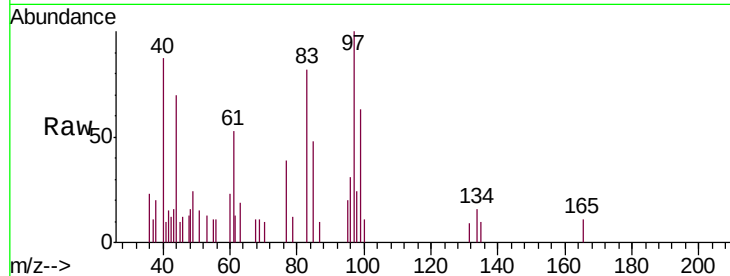




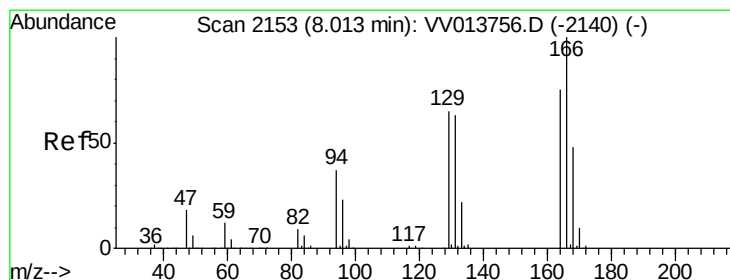
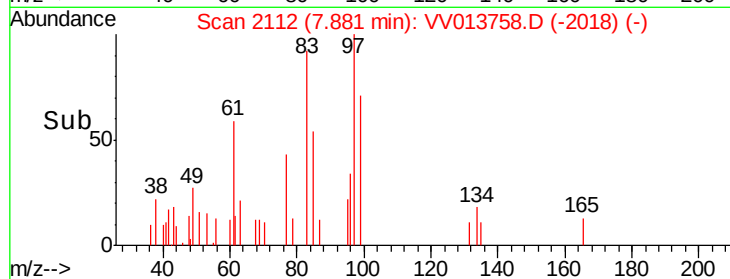
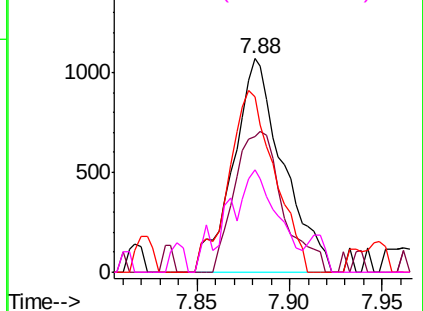
#45  
 1,1,2-Trichloroethane  
 Concen: 0.120 ug/L  
 RT: 7.88 min Scan# 2112  
 Delta R.T. 0.00 min  
 Lab File: VV013758.D  
 Acq: 25 Nov 2019 12:11

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 B0AD1DL

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 97    | Resp: | 1998  |
| Ion      | Ratio | Lower | Upper |
| 97       | 100   |       |       |
| 99       | 63.3  | 44.2  | 82.0  |
| 83       | 82.3  | 59.7  | 110.9 |
| 85       | 48.1  | 38.3  | 71.1  |

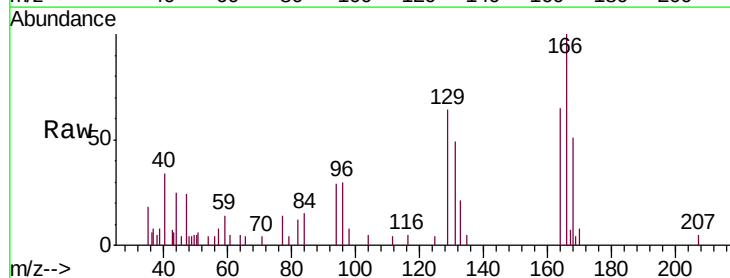


Abundance Ion 96.95 (96.65 to 97.65): VV013758.D (-2096) (-)  
 Ion 99.05 (98.75 to 99.75): VV013758.D (-2096) (-)  
 Ion 82.95 (82.65 to 83.65): VV013758.D (-2096) (-)  
 Ion 85.00 (84.70 to 85.70): VV013758.D (-2096) (-)

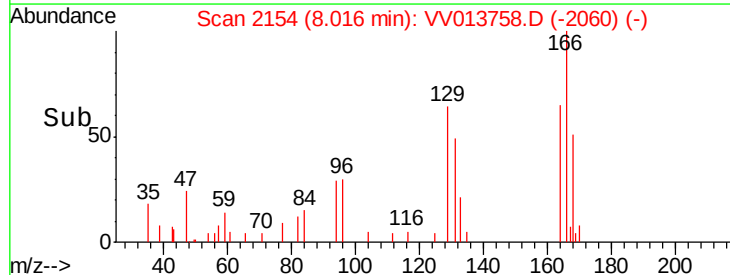
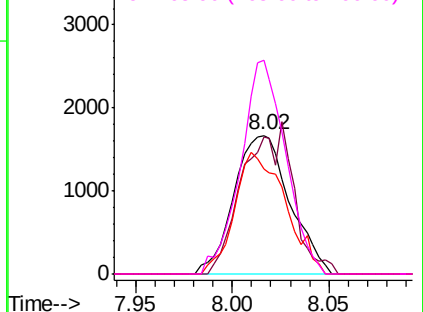


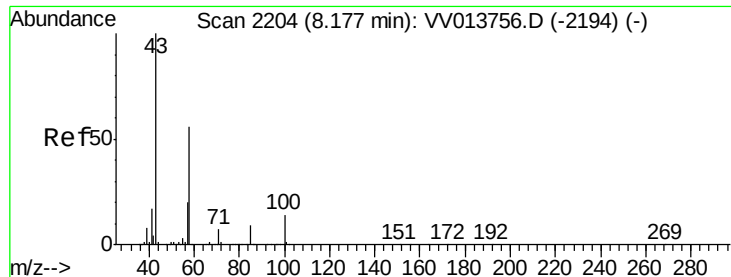
#47  
 Tetrachloroethene  
 Concen: 0.154 ug/L  
 RT: 8.02 min Scan# 2154  
 Delta R.T. 0.00 min  
 Lab File: VV013758.D  
 Acq: 25 Nov 2019 12:11

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 164   | Resp: | 3347  |
| Ion      | Ratio | Lower | Upper |
| 164      | 100   |       |       |
| 129      | 98.5  | 60.3  | 112.1 |
| 131      | 76.0  | 59.9  | 111.3 |
| 166      | 154.3 | 89.1  | 165.5 |



Abundance Ion 163.90 (163.60 to 164.60): VV013758.D (-2060) (-)  
 Ion 128.95 (128.65 to 129.65): VV013758.D (-2060) (-)  
 Ion 130.95 (130.65 to 131.65): VV013758.D (-2060) (-)  
 Ion 165.90 (165.60 to 166.60): VV013758.D (-2060) (-)

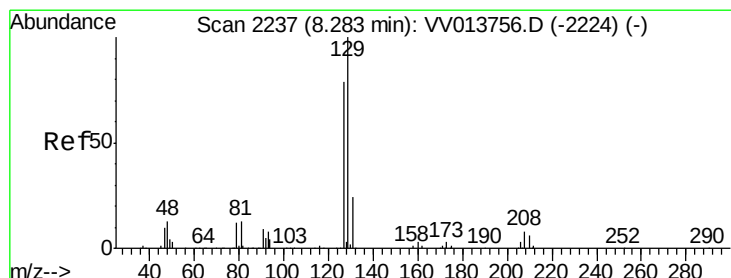
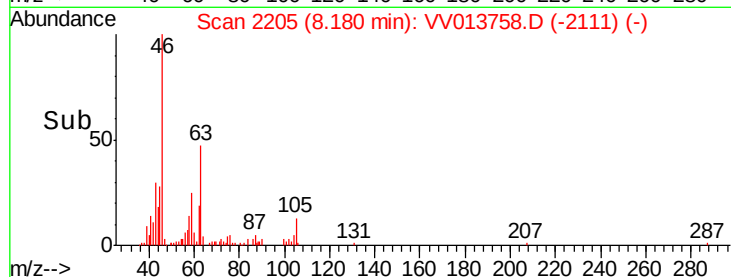
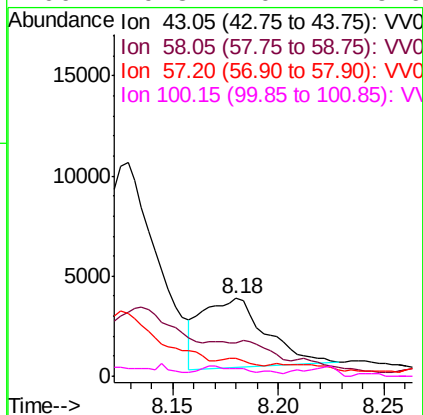
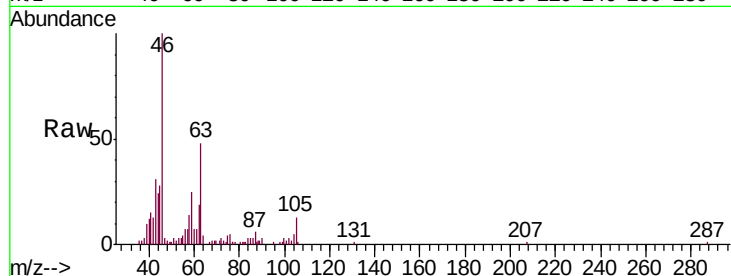




#48  
2-Hexanone  
Concen: 0.746 ug/L  
RT: 8.18 min Scan# 2205  
Delta R.T. 0.00 min  
Lab File: VV013758.D  
Acq: 25 Nov 2019 12:11

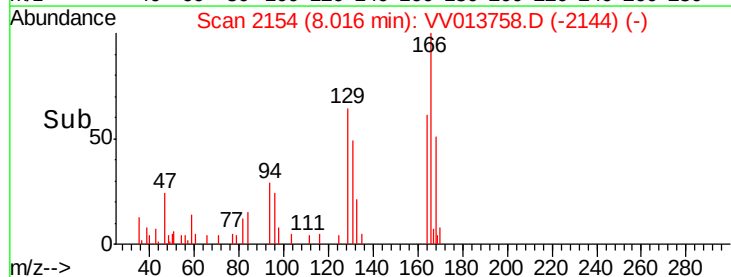
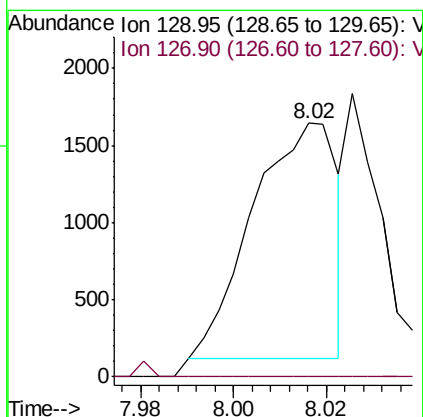
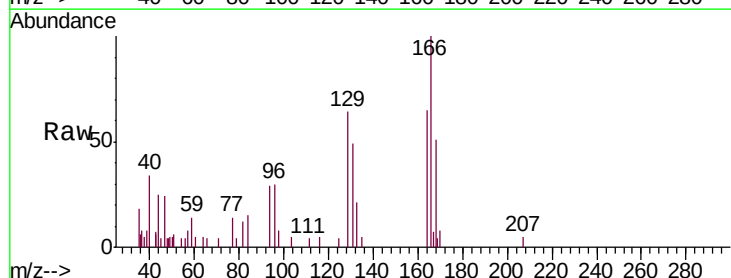
Instrument :  
MSVOA\_V  
ClientSampleId :  
B0AD1DL

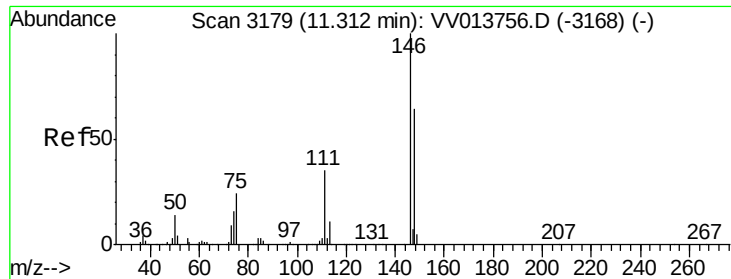
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 7234  |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 58       | 0.0   | 43.2  | 64.8# |
| 57       | 4.9   | 15.4  | 23.2# |
| 100      | 9.8   | 10.4  | 15.6# |



#49  
Dibromochloromethane  
Concen: 0.090 ug/L  
RT: 8.02 min Scan# 2154  
Delta R.T. -0.27 min  
Lab File: VV013758.D  
Acq: 25 Nov 2019 12:11

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 129   | Resp: | 1920   |
| Ion      | Ratio | Lower | Upper  |
| 129      | 100   |       |        |
| 127      | 0.0   | 55.7  | 103.5# |





#63  
 1,4-Dichlorobenzene  
 Concen: 0.054 ug/L  
 RT: 11.32 min Scan# 3180  
 Delta R.T. 0.00 min  
 Lab File: VV013758.D  
 Acq: 25 Nov 2019 12:11

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 B0AD1DL

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 52.4  | 25.0  | 46.4  |
| 148     | 57.7  | 45.4  | 84.2  |

