

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV051320\  
 Data File : VV016056.D  
 Acq On : 13 May 2020 21:31  
 Operator : SY/MD  
 Sample : VSTDCCC005EC  
 Misc : 25.0mL/MSVOA V/WATER  
 ALS Vial : 29 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :

Quant Time: May 14 02:33:31 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVTR050720WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Thu May 14 02:25:38 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.64  | 114  | 156797   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.87  | 117  | 153226   | 5.00 | ug/L  | 0.00     |
| 61) 1,4-Dichlorobenzene-d4 | 11.27 | 152  | 78426    | 5.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.32   | 65    | 45628    | 5.36     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 107.20% |
| 7) Chloroethane-d5             | 1.58   | 69    | 42215    | 5.24     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 104.80% |
| 11) 1,1-Dichloroethene-d2      | 2.13   | 63    | 90363    | 4.94     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 98.80%  |
| 20) 2-Butanone-d5              | 3.94   | 46    | 123398   | 50.86    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 101.72% |
| 24) Chloroform-d               | 4.38   | 84    | 88569    | 4.76     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 95.20%  |
| 26) 1,2-Dichloroethane-d4      | 5.06   | 65    | 50277    | 4.72     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 94.40%  |
| 32) Benzene-d6                 | 5.08   | 84    | 179981   | 4.94     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 98.80%  |
| 36) 1,2-Dichloropropane-d6     | 6.10   | 67    | 55260    | 4.97     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 99.40%  |
| 41) Toluene-d8                 | 7.34   | 98    | 171074   | 4.96     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 99.20%  |
| 45) trans-1,3-Dichloropropene- | 7.64   | 79    | 20053    | 4.59     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 91.80%  |
| 48) 2-Hexanone-d5              | 8.11   | 63    | 93732    | 48.85    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 97.70%  |
| 59) 1,1,2,2-Tetrachloroethane- | 10.24  | 84    | 40115    | 5.13     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 102.60% |
| 65) 1,2-Dichlorobenzene-d4     | 11.65  | 152   | 59503    | 4.67     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 93.40%  |

## Target Compounds

|                                |      |     |        |        | Ovalue  |
|--------------------------------|------|-----|--------|--------|---------|
| 2) Dichlorodifluoromethane     | 1.14 | 85  | 54558  | 4.541  | ug/L 97 |
| 3) Chloromethane               | 1.25 | 50  | 57293  | 4.710  | ug/L 99 |
| 5) Vinyl chloride              | 1.32 | 62  | 55286  | 4.753  | ug/L 98 |
| 6) Bromomethane                | 1.53 | 94  | 32774  | 4.965  | ug/L 96 |
| 8) Chloroethane                | 1.60 | 64  | 38447  | 4.639  | ug/L 99 |
| 9) Trichlorofluoromethane      | 1.77 | 101 | 74873  | 4.693  | ug/L 97 |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.14 | 101 | 42588  | 4.726  | ug/L 98 |
| 12) 1,1-Dichloroethene         | 2.14 | 96  | 39956  | 4.631  | ug/L 94 |
| 13) Acetone                    | 2.22 | 43  | 74998  | 46.855 | ug/L 69 |
| 14) Carbon disulfide           | 2.31 | 76  | 129213 | 4.536  | ug/L 99 |
| 15) Methyl Acetate             | 2.46 | 43  | 18853  | 5.097  | ug/L 96 |
| 16) Methylene chloride         | 2.53 | 84  | 48970  | 4.743  | ug/L 96 |
| 17) Methyl tert-butyl Ether    | 2.79 | 73  | 103869 | 4.633  | ug/L 98 |
| 18) trans-1,2-Dichloroethene   | 2.78 | 96  | 46082  | 4.832  | ug/L 99 |
| 19) 1,1-Dichloroethane         | 3.22 | 63  | 89174  | 4.855  | ug/L 97 |
| 21) 2-Butanone                 | 4.02 | 43  | 117421 | 48.170 | ug/L 97 |
| 22) cis-1,2-Dichloroethene     | 3.94 | 96  | 47639  | 4.772  | ug/L 95 |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV051320\  
 Data File : VV016056.D  
 Acq On : 13 May 2020 21:31  
 Operator : SY/MD  
 Sample : VSTDCCC005EC  
 Misc : 25.0mL/MSVOA V/WATER  
 ALS Vial : 29 Sample Multiplier: 1

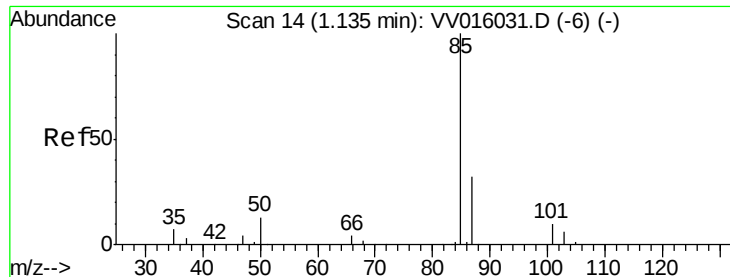
Instrument :  
 MSVOA\_V  
 ClientSampleId :

Quant Time: May 14 02:33:31 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVTR050720WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Thu May 14 02:25:38 2020  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|--------|--------|----------|
| 23) Bromochloromethane         | 4.28  | 128  | 20536    | 4.820  | ug/L   | 94       |
| 25) Chloroform                 | 4.41  | 83   | 96830    | 4.787  | ug/L   | 100      |
| 27) 1,2-Dichloroethane         | 5.16  | 62   | 56434    | 4.541  | ug/L   | 98       |
| 29) 1,1,1-Trichloroethane      | 4.64  | 97   | 81289    | 4.811  | ug/L   | 99       |
| 30) Cyclohexane                | 4.71  | 56   | 79410    | 4.690  | ug/L   | 98       |
| 31) Carbon tetrachloride       | 4.86  | 117  | 67848    | 4.653  | ug/L   | 100      |
| 33) Benzene                    | 5.13  | 78   | 190176   | 4.933  | ug/L   | 100      |
| 34) Trichloroethene            | 5.94  | 95   | 49023    | 4.455  | ug/L   | 100      |
| 35) Methylcyclohexane          | 6.16  | 83   | 76518    | 4.597  | ug/L   | 98       |
| 37) 1,2-Dichloropropane        | 6.20  | 63   | 48842    | 4.987  | ug/L   | 99       |
| 38) Bromodichloromethane       | 6.53  | 83   | 58632    | 4.714  | ug/L   | 97       |
| 39) cis-1,3-Dichloropropene    | 7.05  | 75   | 63134    | 4.561  | ug/L   | 97       |
| 40) 4-Methyl-2-pentanone       | 7.25  | 43   | 300228   | 49.181 | ug/L   | 100      |
| 42) Toluene                    | 7.41  | 91   | 206557   | 5.055  | ug/L   | 99       |
| 43) 1,3,5-Trimethylbenzene     | 10.56 | 105  | 185872   | 4.955  | ug/L # | 100      |
| 44) 1,2,4-Trimethylbenzene     | 10.94 | 105  | 184239   | 4.915  | ug/L # | 100      |
| 46) trans-1,3-Dichloropropene  | 7.67  | 75   | 54334    | 4.647  | ug/L   | 100      |
| 47) 1,1,2-Trichloroethane      | 7.86  | 97   | 31497    | 4.816  | ug/L   | 98       |
| 49) Tetrachloroethene          | 8.00  | 164  | 38020    | 4.952  | ug/L   | 99       |
| 50) 2-Hexanone                 | 8.16  | 43   | 215313   | 49.875 | ug/L   | 99       |
| 51) Dibromochloromethane       | 8.27  | 129  | 34386    | 4.679  | ug/L   | 98       |
| 52) 1,2-Dibromoethane          | 8.37  | 107  | 29455    | 4.856  | ug/L   | 96       |
| 53) Chlorobenzene              | 8.90  | 112  | 130511   | 4.966  | ug/L   | 99       |
| 54) Ethylbenzene               | 9.03  | 91   | 231182   | 4.975  | ug/L   | 99       |
| 55) m,p-xylene                 | 9.16  | 106  | 86064    | 5.002  | ug/L   | 98       |
| 56) o-xylene                   | 9.57  | 106  | 83142    | 5.055  | ug/L   | 97       |
| 57) Styrene                    | 9.58  | 104  | 143022   | 5.198  | ug/L   | 98       |
| 58) Isopropylbenzene           | 9.95  | 105  | 224857   | 4.976  | ug/L   | 99       |
| 60) 1,1,2,2-Tetrachloroethane  | 10.26 | 83   | 37692    | 5.393  | ug/L   | 96       |
| 62) Bromoform                  | 9.75  | 173  | 15763    | 4.375  | ug/L   | 99       |
| 63) 1,3-Dichlorobenzene        | 11.20 | 146  | 102976   | 4.874  | ug/L   | 99       |
| 64) 1,4-Dichlorobenzene        | 11.30 | 146  | 103105   | 4.857  | ug/L   | 99       |
| 66) 1,2-Dichlorobenzene        | 11.67 | 146  | 93789    | 4.904  | ug/L   | 98       |
| 67) 1,2-Dibromo-3-chloropropan | 12.45 | 75   | 6187     | 4.957  | ug/L   | 98       |
| 68) 1,3,5-Trichlorobenzene     | 12.67 | 180  | 70637    | 4.572  | ug/L   | 99       |
| 69) 1,2,4-trichlorobenzene     | 13.28 | 180  | 58919    | 4.439  | ug/L   | 99       |
| 70) Naphthalene                | 13.53 | 128  | 97444    | 4.616  | ug/L   | 99       |
| 71) 1,2,3-Trichlorobenzene     | 13.76 | 180  | 54065    | 4.617  | ug/L   | 98       |

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





#2

Dichlorodifluoromethane

Concen: 4.541 ug/L

RT: 1.14 min Scan# 15

Delta R.T. 0.00 min

Lab File: VV016056.D

Acq: 13 May 2020 21:31

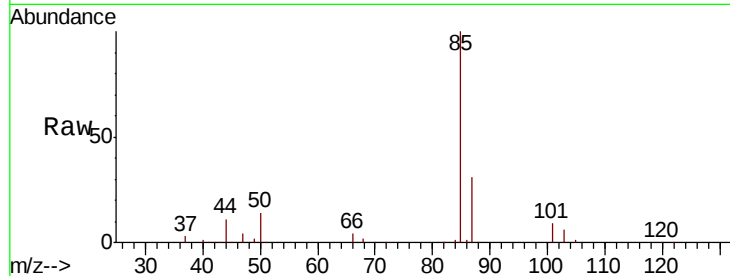
Instrument :  
MSVOA\_V  
ClientSampled :

Tot Ion: 85 Resp: 54558

Ion Ratio Lower Upper

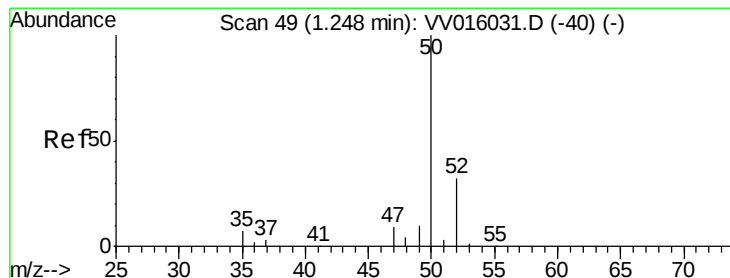
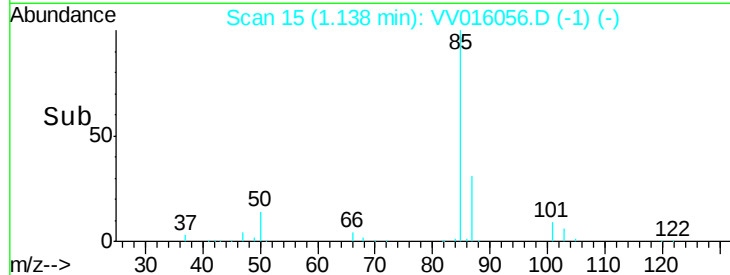
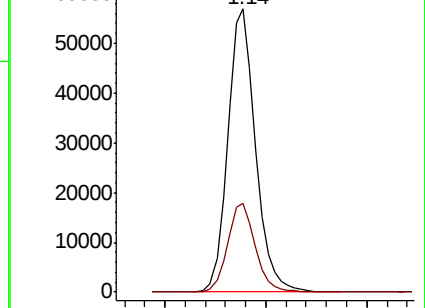
85 100

87 31.3 26.4 39.6



Abundance Ion 85.00 (84.70 to 85.70): VV016031.D (-6) (-)

Ion 87.00 (86.70 to 87.70): VV016031.D (-6) (-)



#3

Chloromethane

Concen: 4.710 ug/L

RT: 1.25 min Scan# 50

Delta R.T. 0.00 min

Lab File: VV016056.D

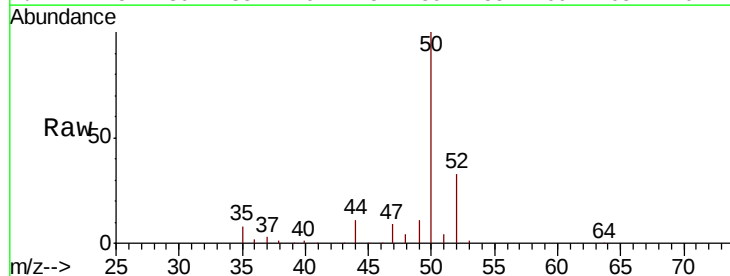
Acq: 13 May 2020 21:31

Tgt Ion: 50 Resp: 57293

Ion Ratio Lower Upper

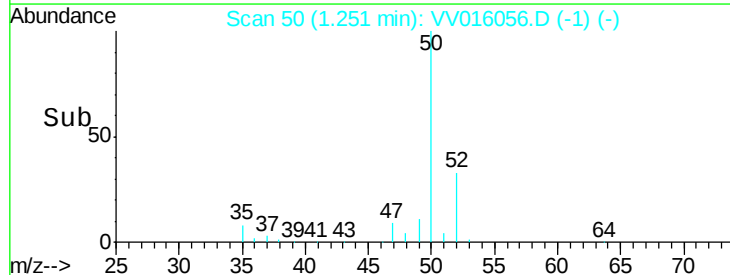
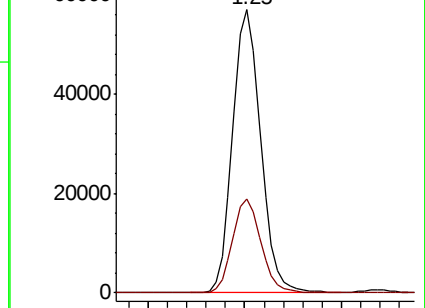
50 100

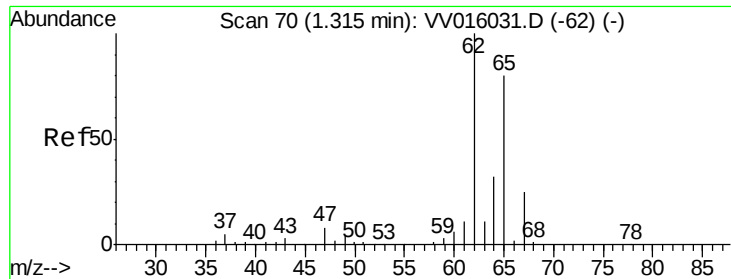
52 33.3 22.8 42.4



Abundance Ion 50.05 (49.75 to 50.75): VV016031.D (-40) (-)

Ion 52.05 (51.75 to 52.75): VV016031.D (-40) (-)





#5

Vinyl chloride

Concen: 4.753 ug/L

RT: 1.32 min Scan# 72

Delta R.T. 0.01 min

Lab File: VV016056.D

Acq: 13 May 2020 21:31

Instrument :

MSVOA\_V

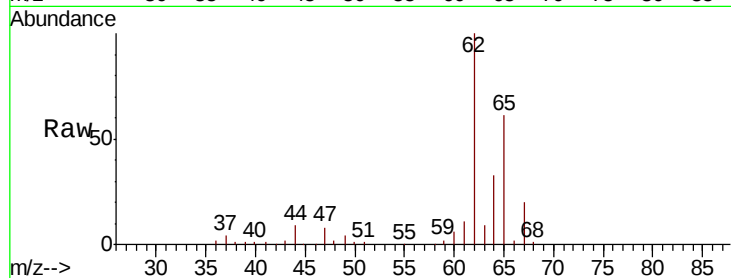
ClientSampled :

Tot Ion: 62 Resp: 55286

Ion Ratio Lower Upper

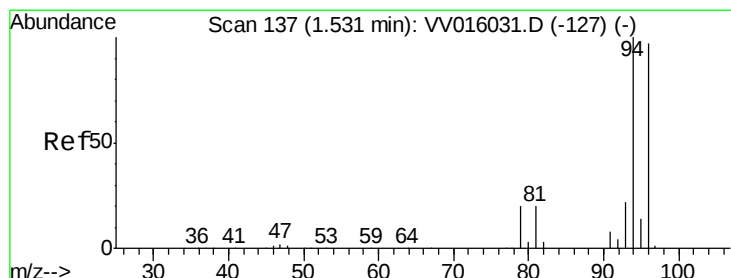
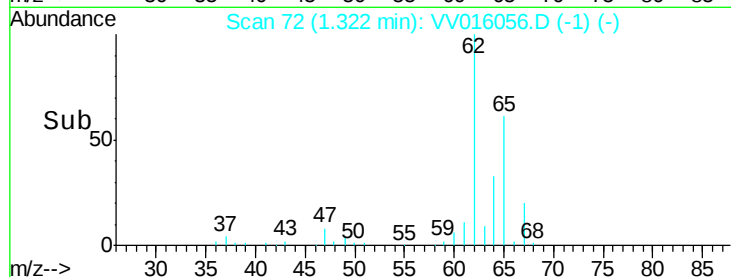
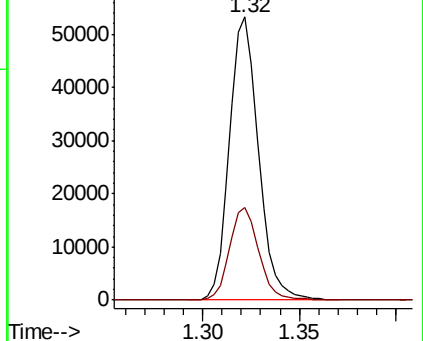
62 100

64 32.9 22.4 41.6



Abundance Ion 62.00 (61.70 to 62.70): VV0

Ion 64.10 (63.80 to 64.80): VV0



#6

Bromomethane

Concen: 4.965 ug/L

RT: 1.53 min Scan# 138

Delta R.T. 0.00 min

Lab File: VV016056.D

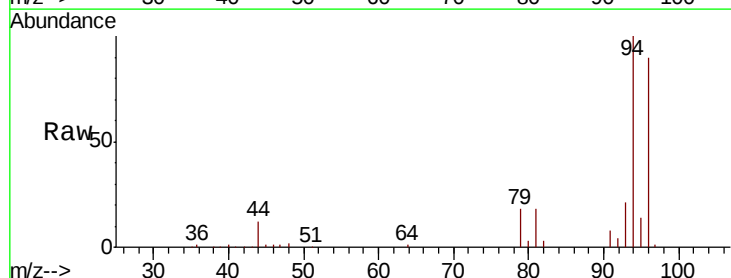
Acq: 13 May 2020 21:31

Tgt Ion: 94 Resp: 32774

Ion Ratio Lower Upper

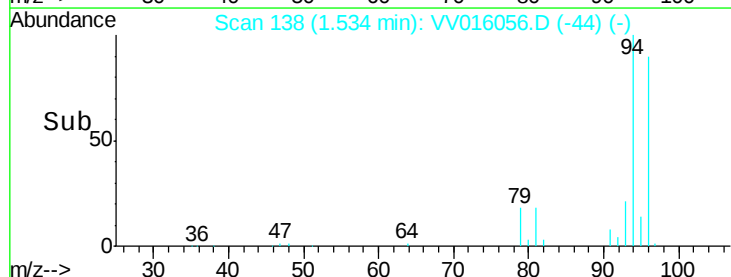
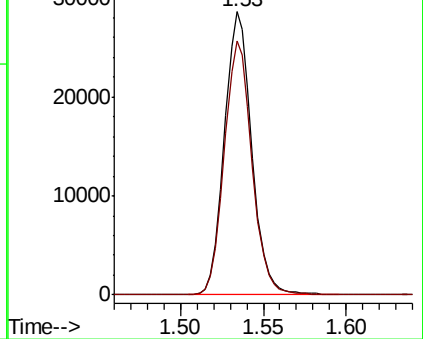
94 100

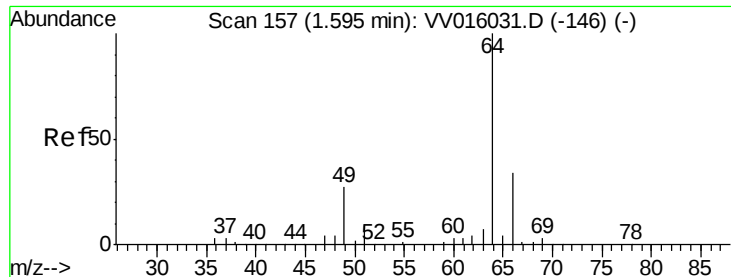
96 89.9 65.4 121.4



Abundance Ion 94.00 (93.70 to 94.70): VV0

Ion 96.00 (95.70 to 96.70): VV0





#8

Chloroethane

Concen: 4.639 ug/L

RT: 1.60 min Scan# 158

Delta R.T. 0.00 min

Lab File: VV016056.D

Acq: 13 May 2020 21:31

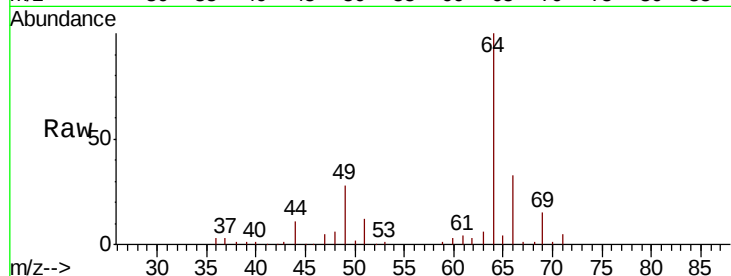
Instrument :  
MSVOA\_V  
ClientSampleId :

Tot Ion: 64 Resp: 38447

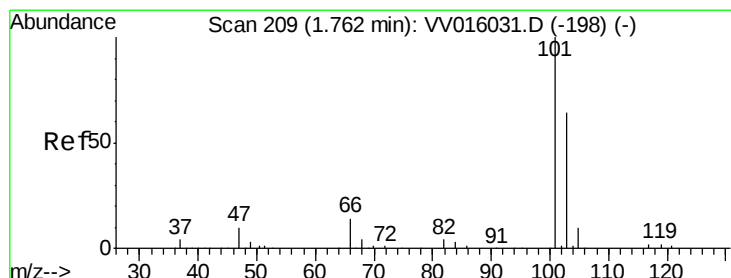
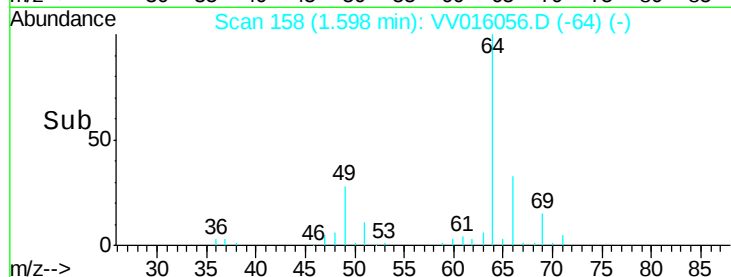
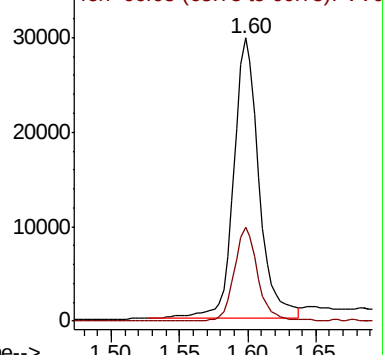
Ion Ratio Lower Upper

64 100

66 33.1 23.6 43.8



Abundance Ion 64.10 (63.80 to 64.80): VV016056.D (-64) (-)



#9

Trichlorofluoromethane

Concen: 4.693 ug/L

RT: 1.77 min Scan# 211

Delta R.T. 0.01 min

Lab File: VV016056.D

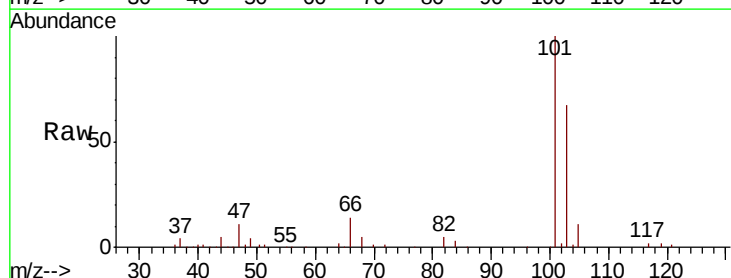
Acq: 13 May 2020 21:31

Tgt Ion:101 Resp: 74873

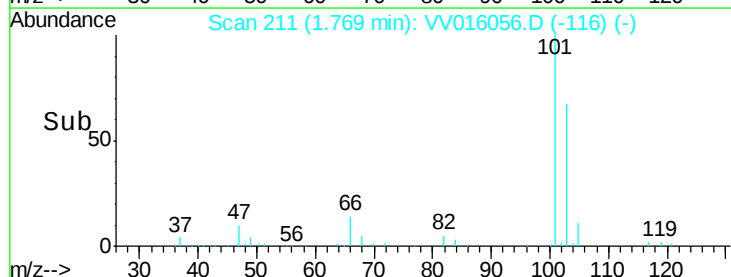
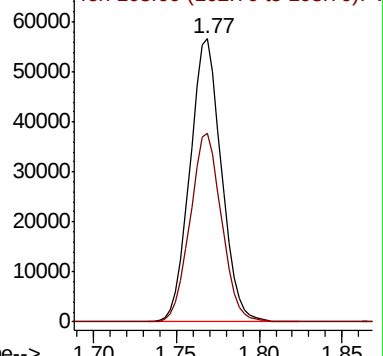
Ion Ratio Lower Upper

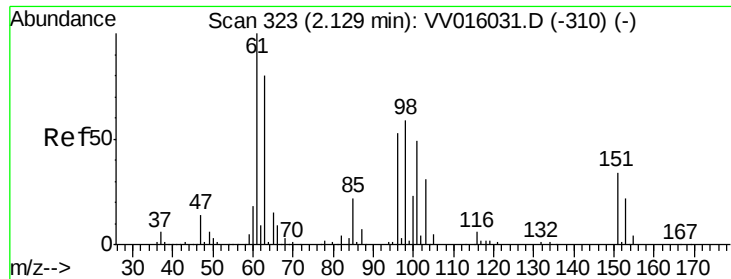
101 100

103 66.6 51.4 77.2



Abundance Ion 101.00 (100.70 to 101.70): VV016056.D (-116) (-)





#10

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

Concen: 4.726 ug/L

RT: 2.14 min Scan# 325

Delta R.T. 0.01 min

Lab File: VV016056.D

Acq: 13 May 2020 21:31

Instrument :

MSVOA\_V

ClientSampled :

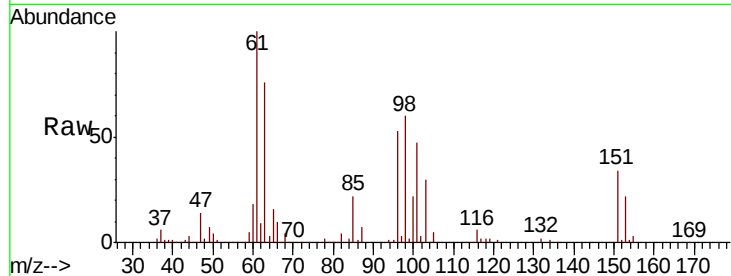
Tot Ion:101 Resp: 42588

Ion Ratio Lower Upper

101 100

85 44.8 35.7 53.5

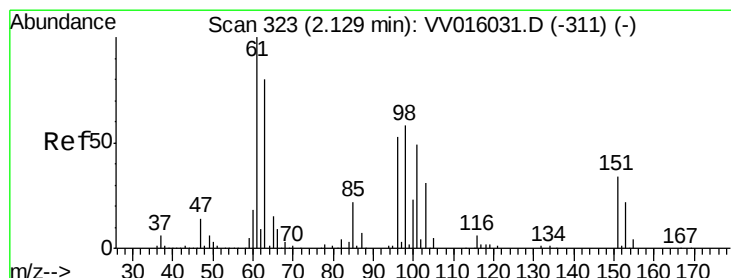
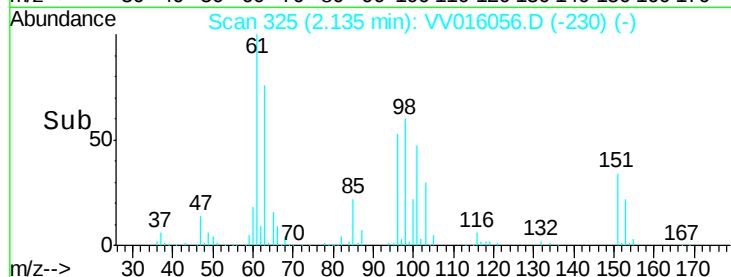
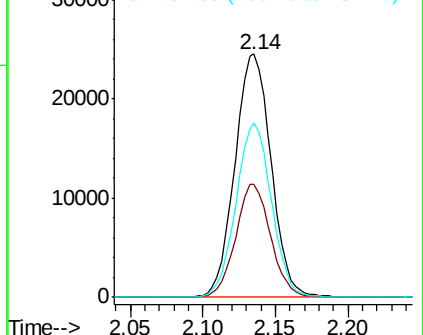
151 70.1 58.0 87.0



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



#12

1,1-Dichloroethene

Concen: 4.631 ug/L

RT: 2.14 min Scan# 325

Delta R.T. 0.01 min

Lab File: VV016056.D

Acq: 13 May 2020 21:31

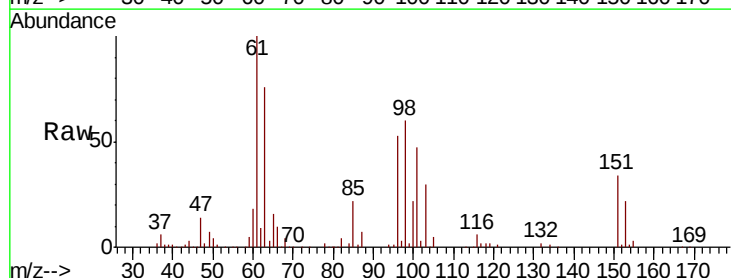
Tgt Ion: 96 Resp: 39956

Ion Ratio Lower Upper

96 100

61 190.2 139.9 259.7

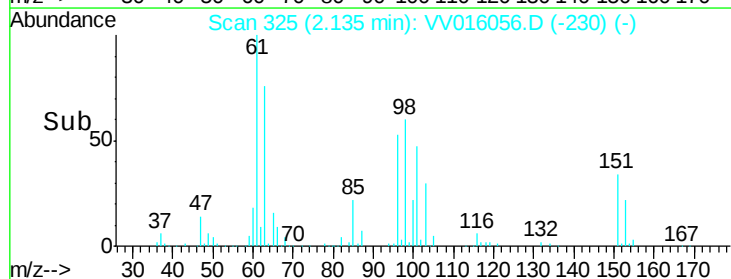
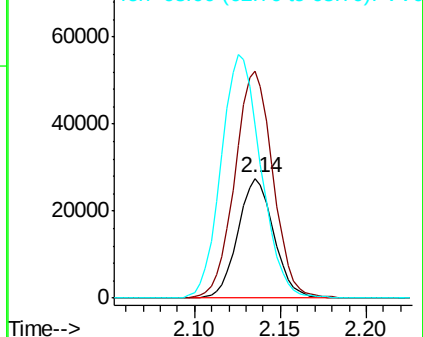
63 145.2 106.4 197.6

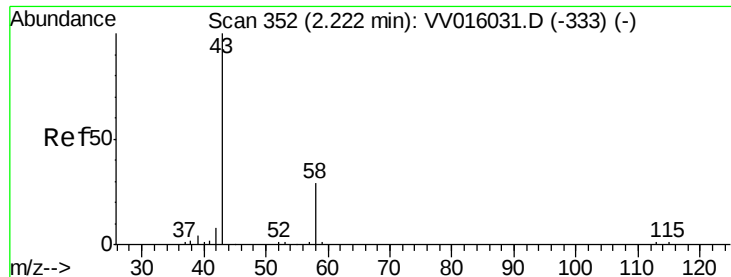


Abundance Ion 96.00 (95.70 to 96.70): VV0

Ion 61.05 (60.75 to 61.75): VV0

Ion 63.00 (62.70 to 63.70): VV0





#13

Acetone

Concen: 46.855 ug/L

RT: 2.22 min Scan# 351

Delta R.T. -0.00 min

Lab File: VV016056.D

Acq: 13 May 2020 21:31

Instrument :

MSVOA\_V

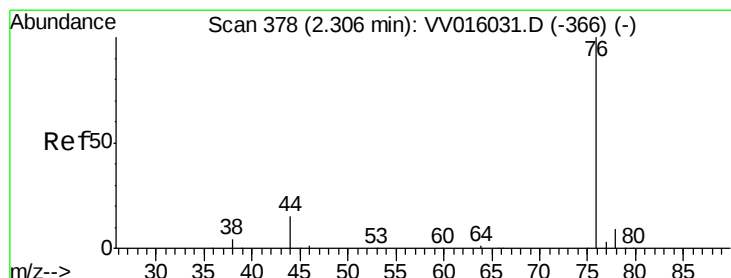
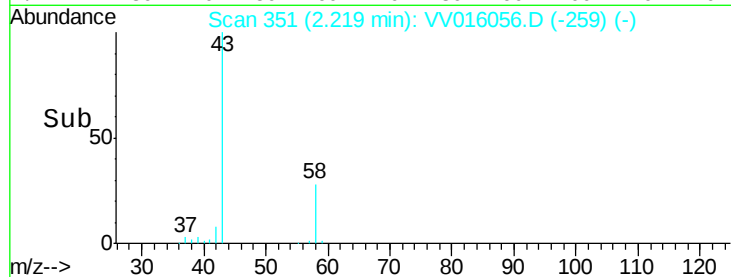
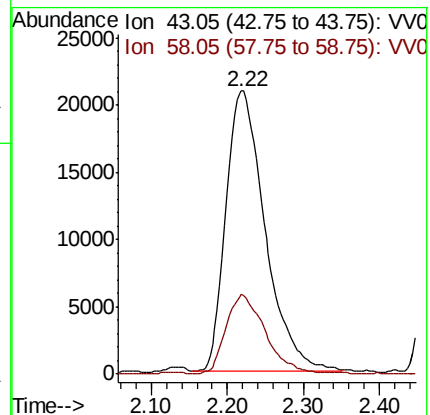
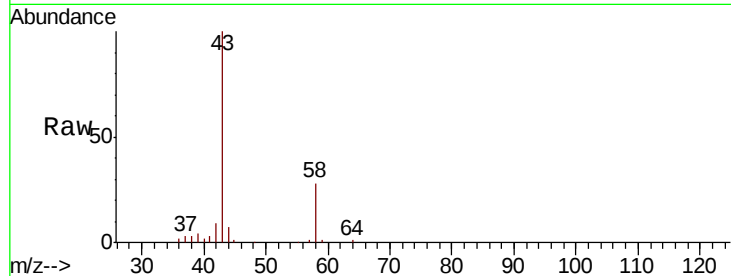
ClientSampleId :

Tot Ion: 43 Resp: 74998

Ion Ratio Lower Upper

43 100

58 28.5 0.0 30.8



#14

Carbon disulfide

Concen: 4.536 ug/L

RT: 2.31 min Scan# 380

Delta R.T. 0.01 min

Lab File: VV016056.D

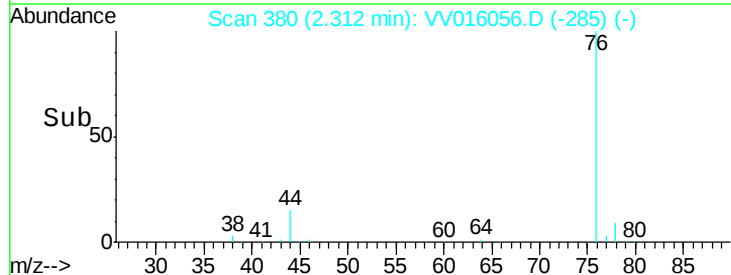
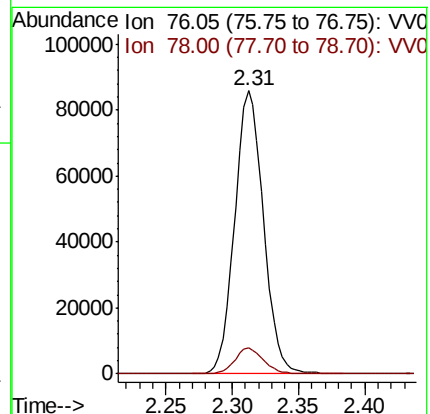
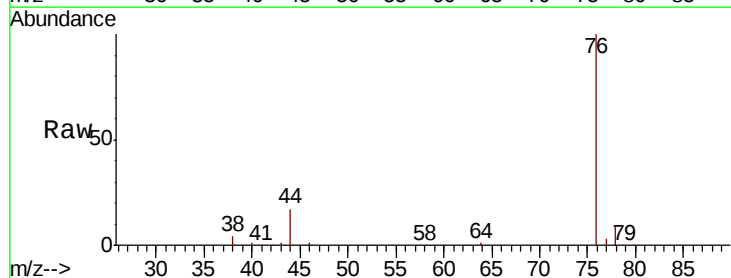
Acq: 13 May 2020 21:31

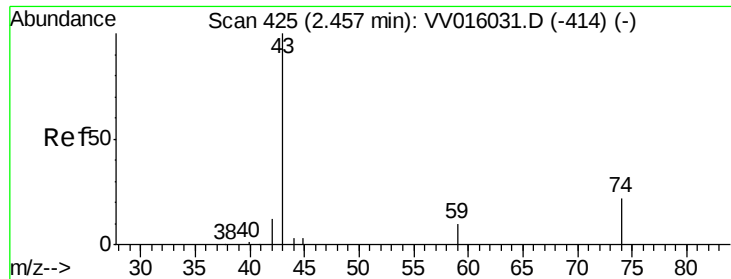
Tgt Ion: 76 Resp: 129213

Ion Ratio Lower Upper

76 100

78 9.1 7.0 10.6

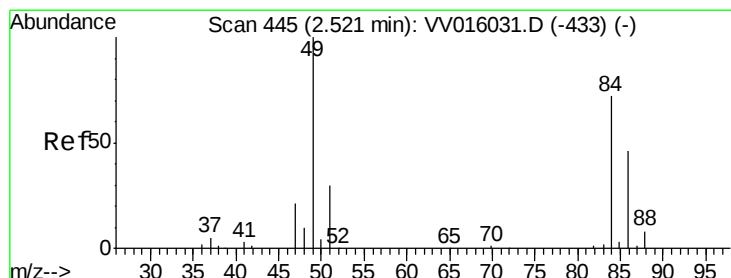
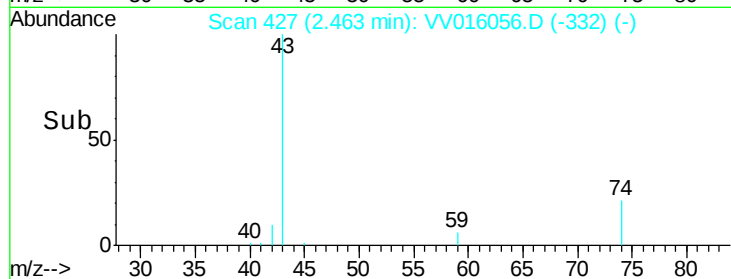
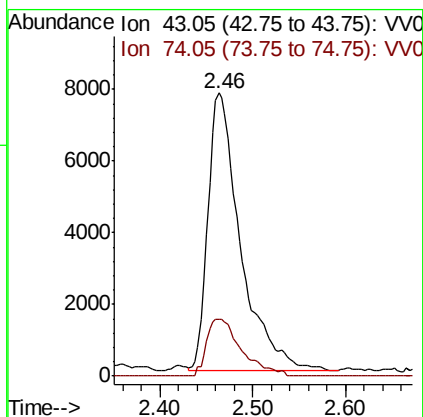
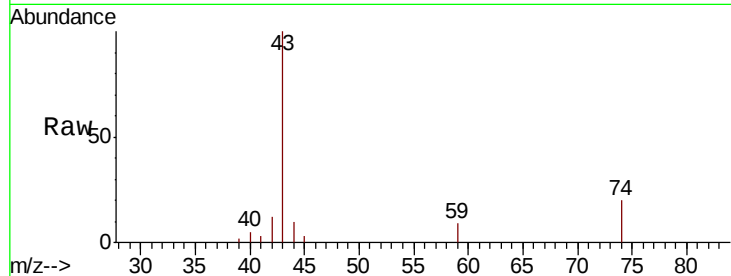




#15  
Methvl Acetate  
Concen: 5.097 ug/L  
RT: 2.46 min Scan# 427  
Delta R.T. 0.01 min  
Lab File: VV016056.D  
Acq: 13 May 2020 21:31

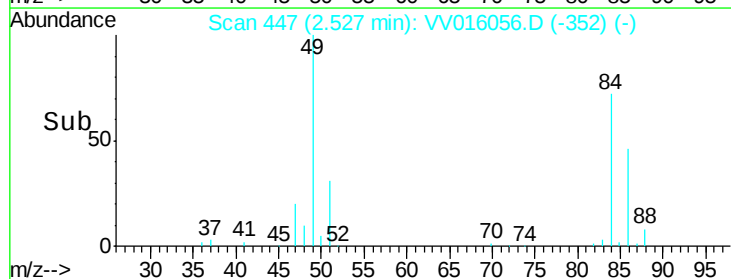
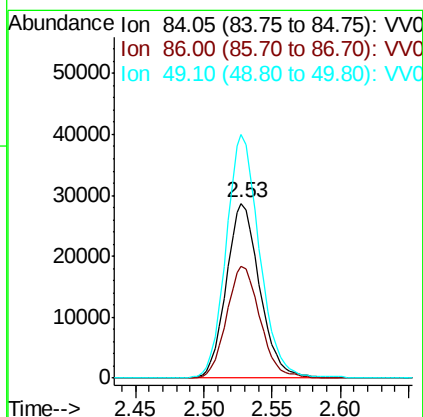
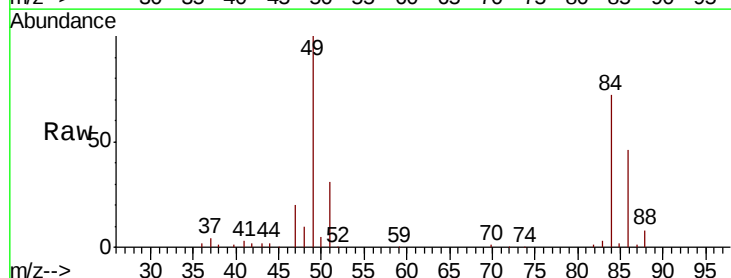
Instrument :  
MSVOA\_V  
ClientSampleId :

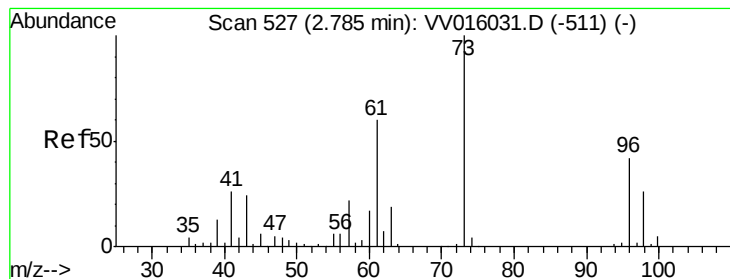
Tot Ion: 43 Resp: 18853  
Ion Ratio Lower Upper  
43 100  
74 22.0 19.2 28.8



#16  
Methylene chloride  
Concen: 4.743 ug/L  
RT: 2.53 min Scan# 447  
Delta R.T. 0.01 min  
Lab File: VV016056.D  
Acq: 13 May 2020 21:31

Tgt Ion: 84 Resp: 48970  
Ion Ratio Lower Upper  
84 100  
86 63.9 45.6 84.8  
49 139.1 93.6 173.8



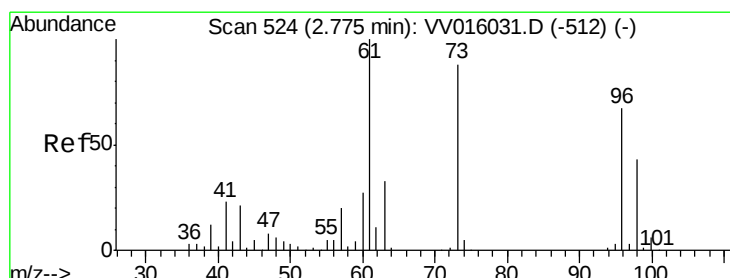
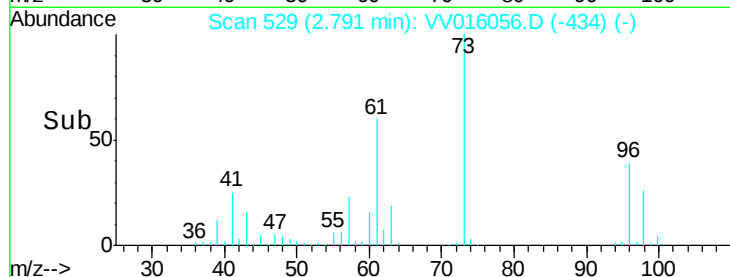
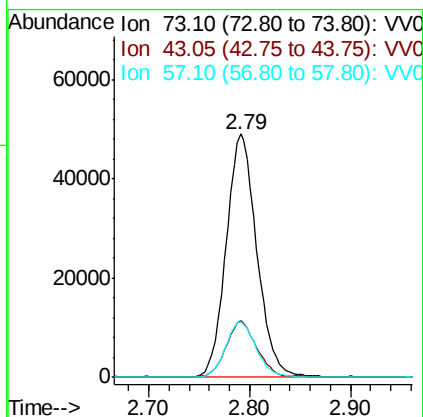
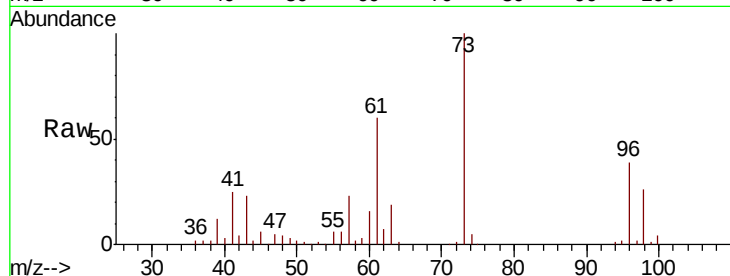


#17

Methvl tert-butvl Ether  
 Concen: 4.633 ug/L  
 RT: 2.79 min Scan# 529  
 Delta R.T. 0.01 min  
 Lab File: VV016056.D  
 Acq: 13 May 2020 21:31

Instrument :  
 MSVOA\_V  
 ClientSampleId :

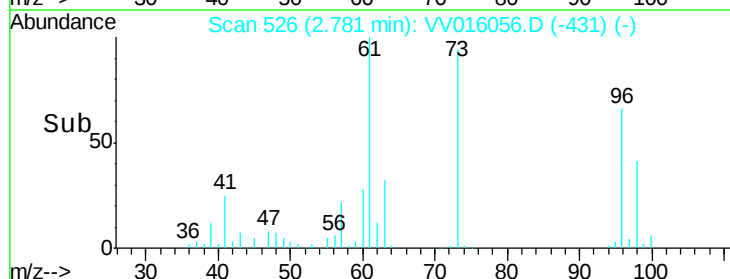
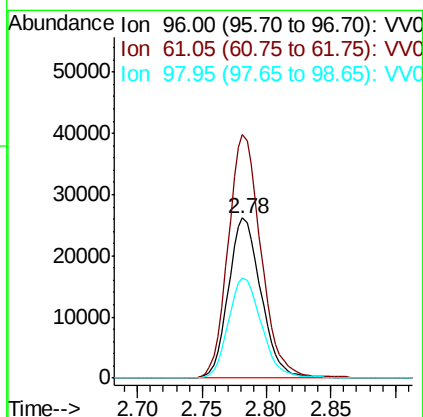
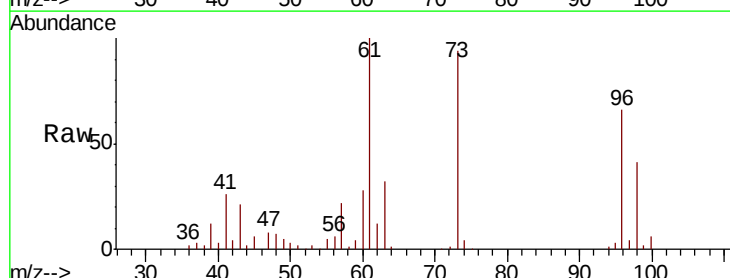
Tot Ion: 73 Resp: 103869  
 Ion Ratio Lower Upper  
 73 100  
 43 22.5 18.8 28.2  
 57 22.8 17.8 26.6

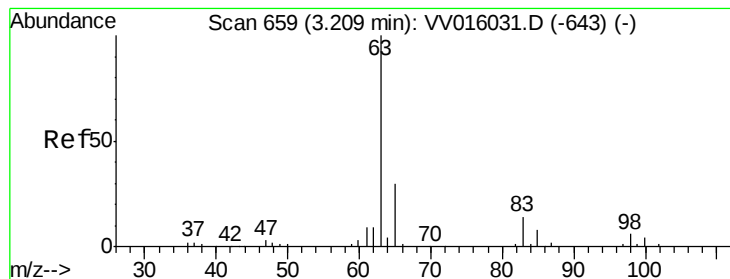


#18

trans-1,2-Dichloroethene  
 Concen: 4.832 ug/L  
 RT: 2.78 min Scan# 526  
 Delta R.T. 0.01 min  
 Lab File: VV016056.D  
 Acq: 13 May 2020 21:31

Tgt Ion: 96 Resp: 46082  
 Ion Ratio Lower Upper  
 96 100  
 61 152.1 105.3 195.5  
 98 62.3 44.0 81.6





#19

1,1-Dichloroethane

Concen: 4.855 ug/L

RT: 3.22 min Scan# 661

Delta R.T. 0.01 min

Lab File: VV016056.D

Acq: 13 May 2020 21:31

Instrument :

MSVOA\_V

ClientSampled :

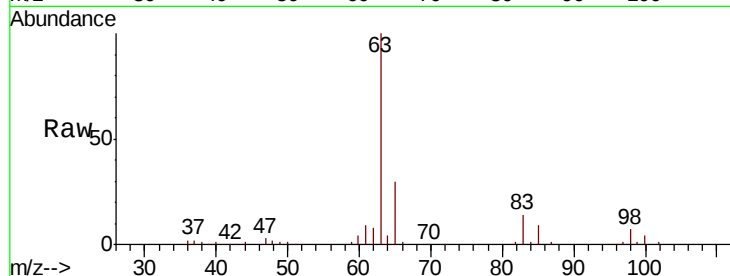
Tot Ion: 63 Resp: 89174

Ion Ratio Lower Upper

63 100

65 29.7 22.0 41.0

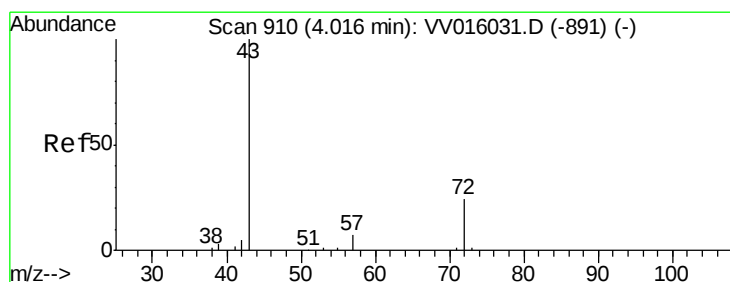
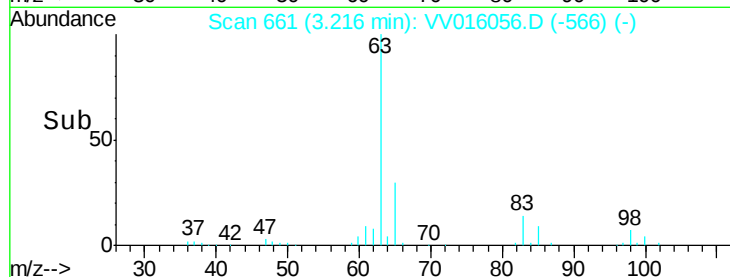
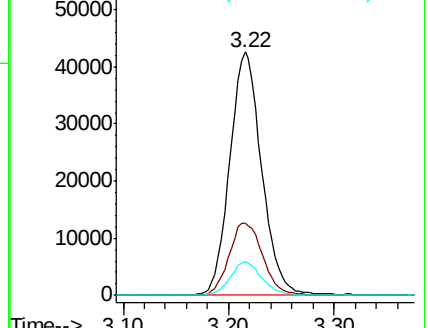
83 13.6 9.8 18.2



Abundance Ion 63.10 (62.80 to 63.80): VV016031.D (-643) (-)

Ion 65.10 (64.80 to 65.80): VV016031.D (-643) (-)

Ion 83.05 (82.75 to 83.75): VV016031.D (-643) (-)



#21

2-Butanone

Concen: 48.170 ug/L

RT: 4.02 min Scan# 911

Delta R.T. 0.00 min

Lab File: VV016056.D

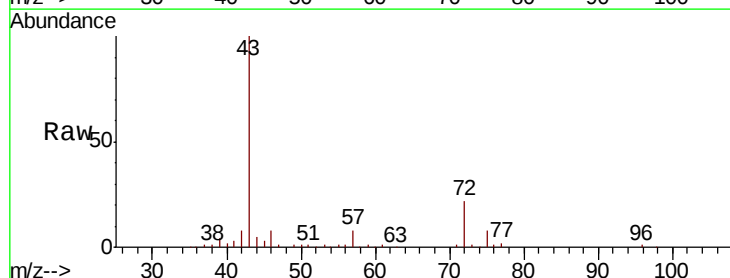
Acq: 13 May 2020 21:31

Tgt Ion: 43 Resp: 117421

Ion Ratio Lower Upper

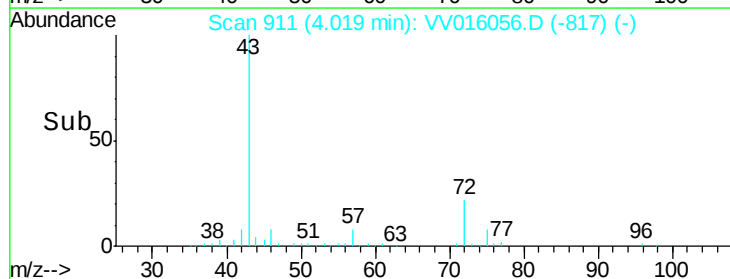
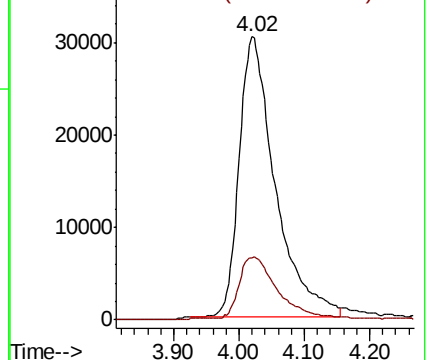
43 100

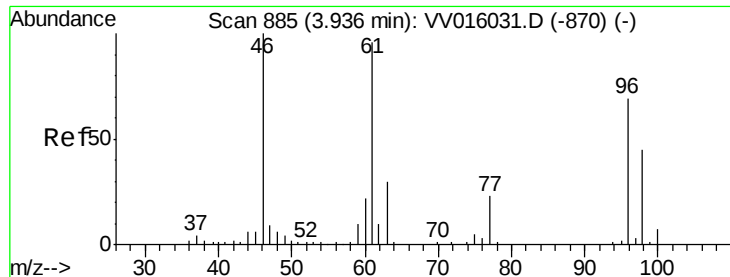
72 22.2 10.5 31.5



Abundance Ion 43.00 (42.70 to 43.70): VV016031.D (-891) (-)

Ion 72.00 (71.70 to 72.70): VV016031.D (-891) (-)



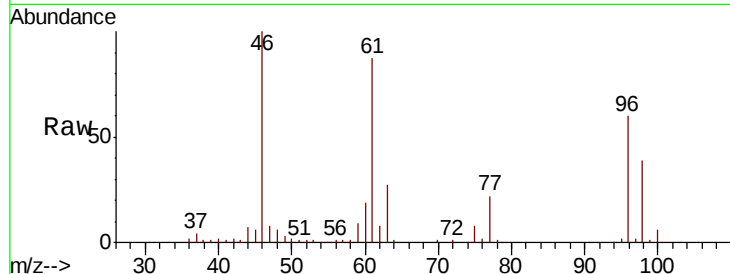


#22

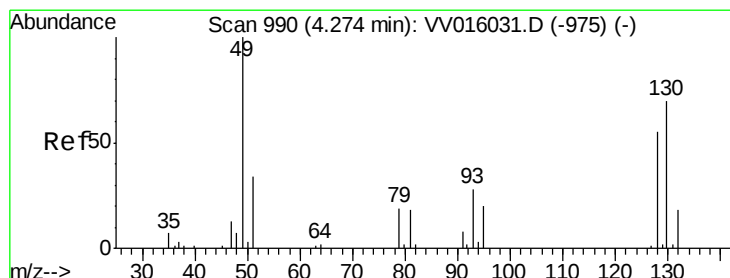
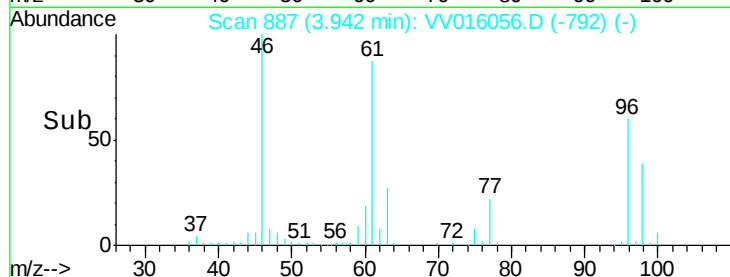
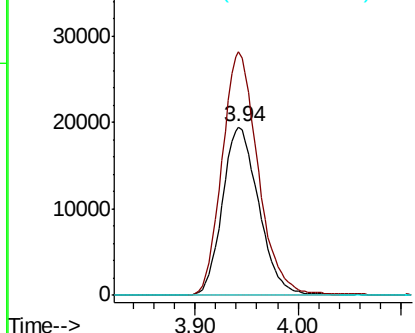
cis-1,2-Dichloroethene  
Concen: 4.772 ug/L  
RT: 3.94 min Scan# 887  
Delta R.T. 0.01 min  
Lab File: VV016056.D  
Acq: 13 May 2020 21:31

Instrument :  
MSVOA\_V  
ClientSampleId :

Tot Ion: 96 Resp: 47639  
Ion Ratio Lower Upper  
96 100  
61 144.9 97.2 180.6  
68 0.0 0.0 0.0



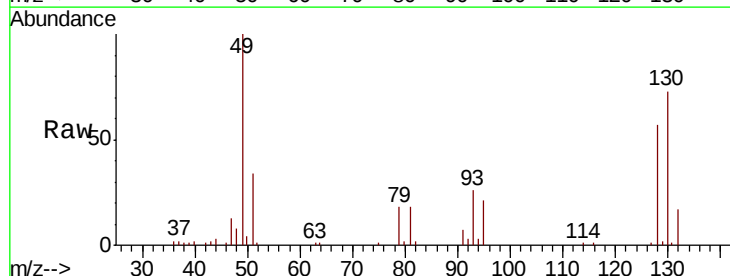
Abundance Ion 96.00 (95.70 to 96.70): VV0  
Ion 61.05 (60.75 to 61.75): VV0  
Ion 68.15 (67.85 to 68.85): VV0



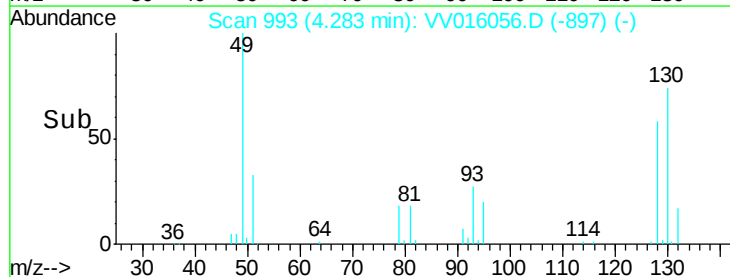
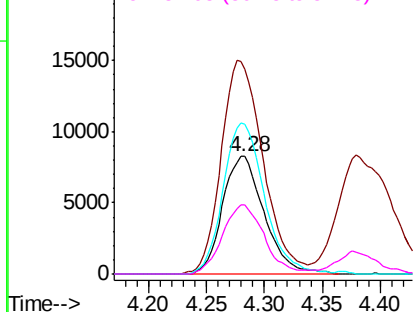
#23

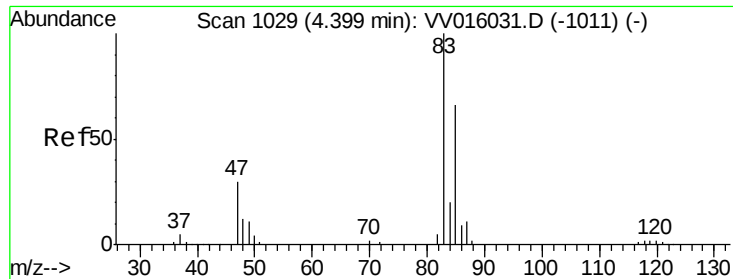
Bromochloromethane  
Concen: 4.820 ug/L  
RT: 4.28 min Scan# 993  
Delta R.T. 0.01 min  
Lab File: VV016056.D  
Acq: 13 May 2020 21:31

Tgt Ion: 128 Resp: 20536  
Ion Ratio Lower Upper  
128 100  
49 174.1 131.3 243.8  
130 127.5 91.8 170.4  
51 58.5 48.8 73.2



Abundance Ion 127.90 (127.60 to 128.60): V  
Ion 49.10 (48.80 to 49.80): VV0  
Ion 129.95 (129.65 to 130.65): V  
Ion 51.05 (50.75 to 51.75): VV0

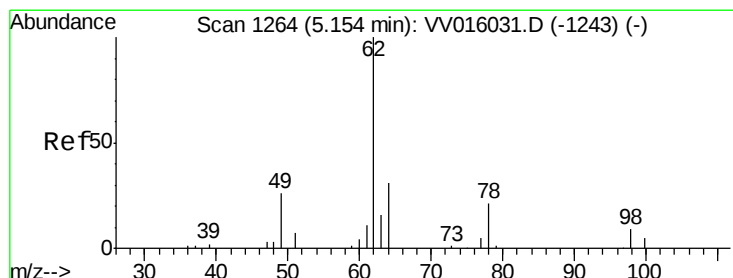
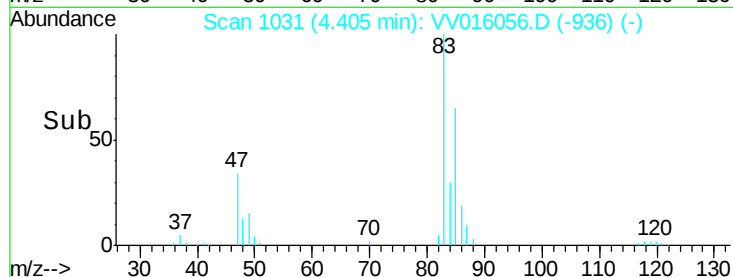
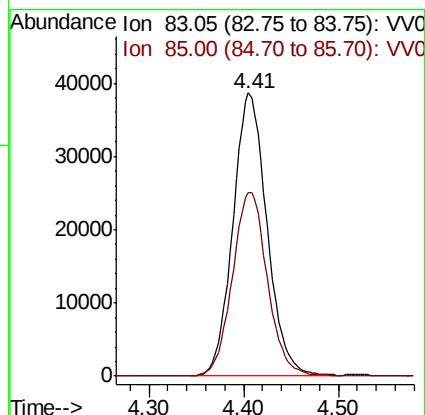
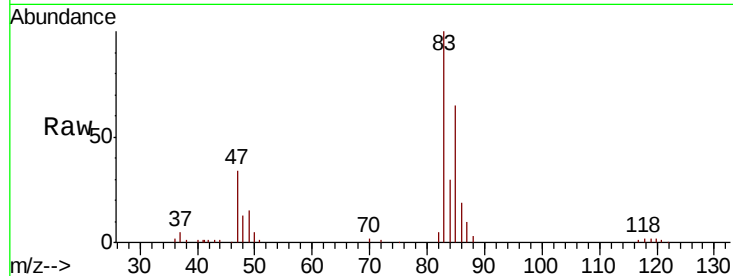




#25  
Chloroform  
Concen: 4.787 ug/L  
RT: 4.41 min Scan# 1031  
Delta R.T. 0.01 min  
Lab File: VV016056.D  
Acq: 13 May 2020 21:31

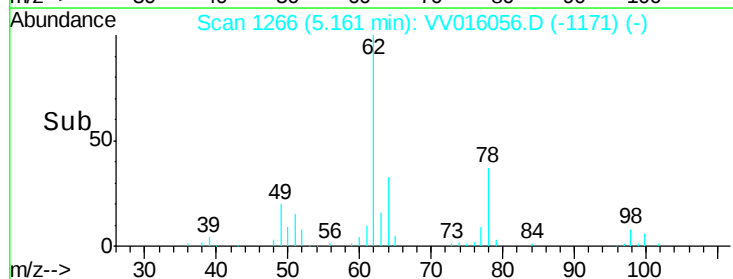
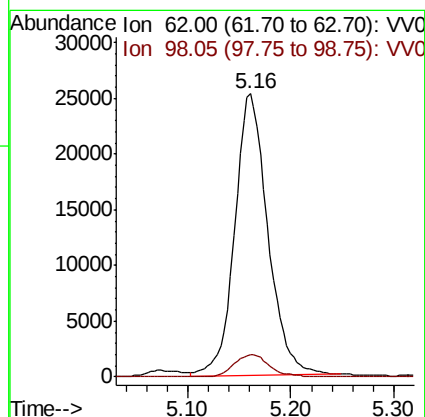
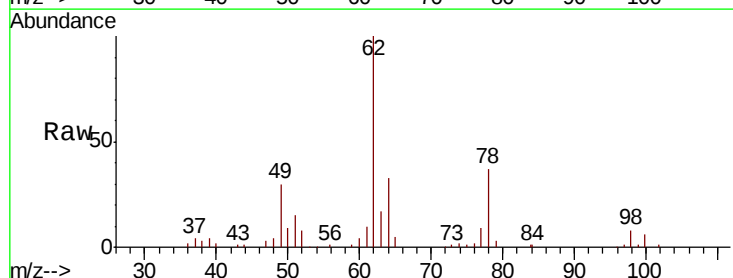
Instrument :  
MSVOA\_V  
ClientSampleId :

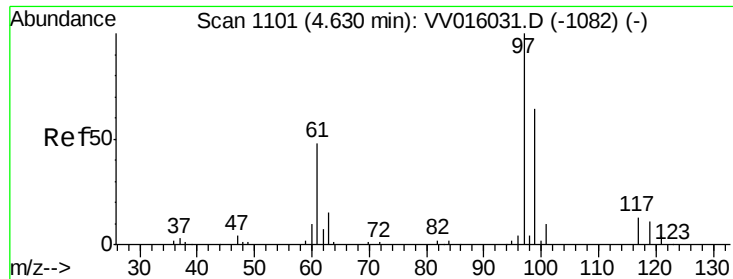
Tot Ion: 83 Resp: 96830  
Ion Ratio Lower Upper  
83 100  
85 65.0 45.7 84.9



#27  
1,2-Dichloroethane  
Concen: 4.541 ug/L  
RT: 5.16 min Scan# 1266  
Delta R.T. 0.01 min  
Lab File: VV016056.D  
Acq: 13 May 2020 21:31

Tgt Ion: 62 Resp: 56434  
Ion Ratio Lower Upper  
62 100  
98 7.8 6.7 10.1

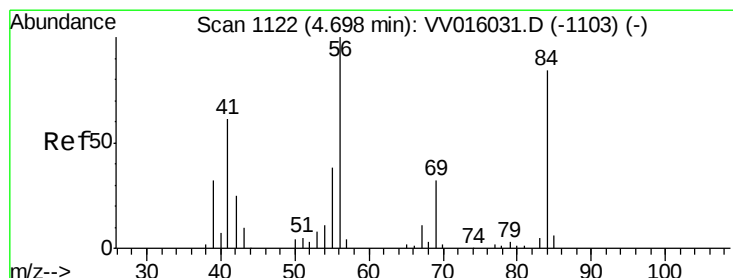
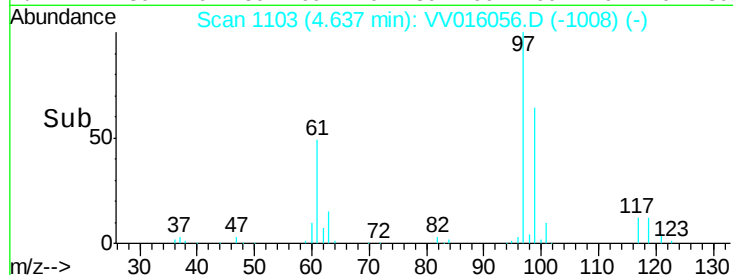
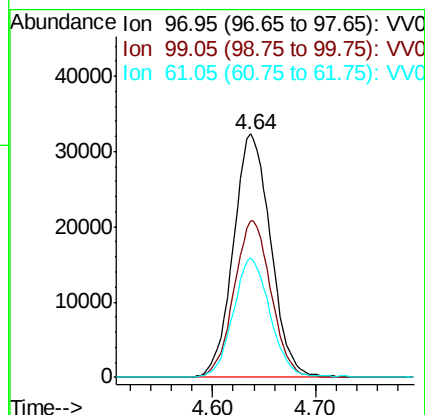
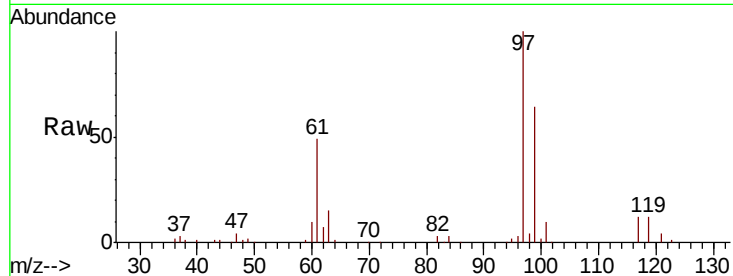




#29  
1,1,1-Trichloroethane  
Concen: 4.811 ug/L  
RT: 4.64 min Scan# 1103  
Delta R.T. 0.01 min  
Lab File: VV016056.D  
Acq: 13 May 2020 21:31

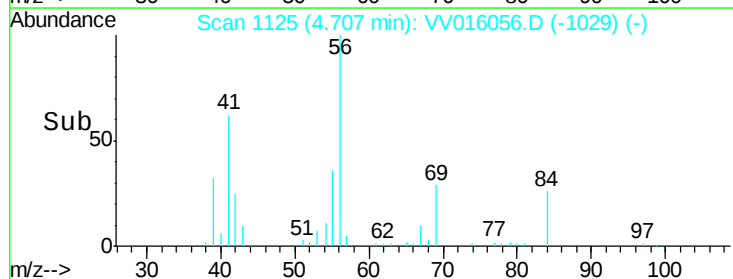
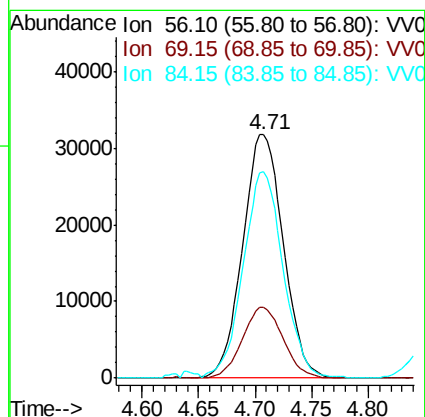
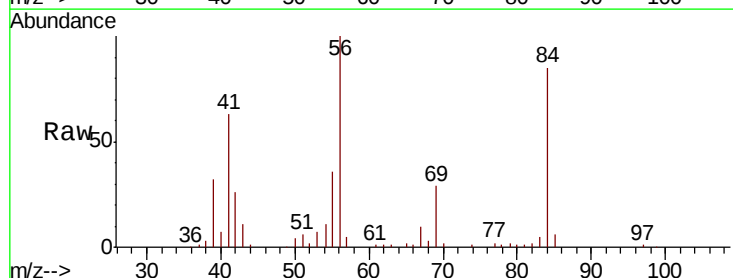
Instrument :  
MSVOA\_V  
ClientSampleId :

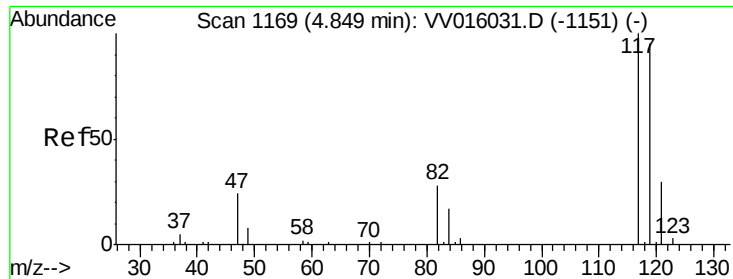
Tot Ion: 97 Resp: 81289  
Ion Ratio Lower Upper  
97 100  
99 63.9 50.7 76.1  
61 48.2 38.8 58.2



#30  
Cyclohexane  
Concen: 4.690 ug/L  
RT: 4.71 min Scan# 1125  
Delta R.T. 0.01 min  
Lab File: VV016056.D  
Acq: 13 May 2020 21:31

Tgt Ion: 56 Resp: 79410  
Ion Ratio Lower Upper  
56 100  
69 29.1 24.2 36.2  
84 83.4 68.3 102.5

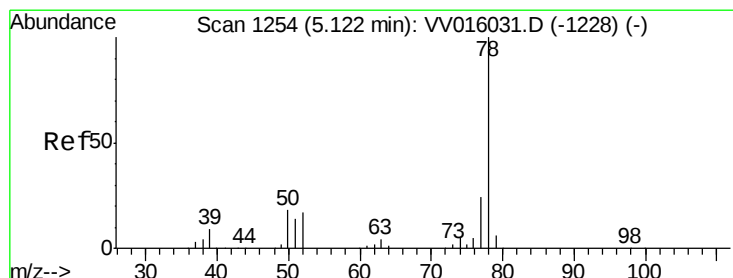
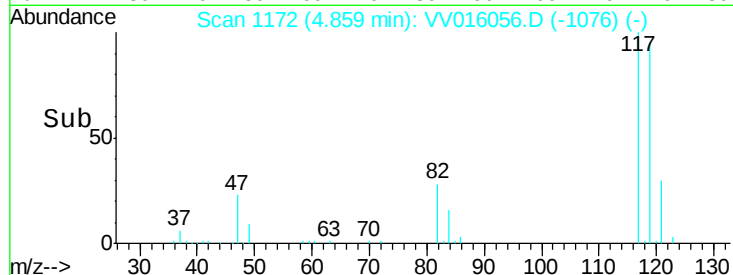
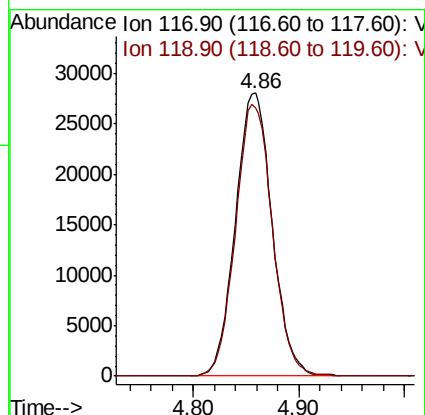
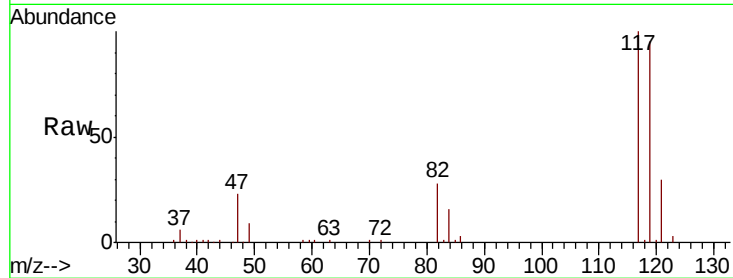




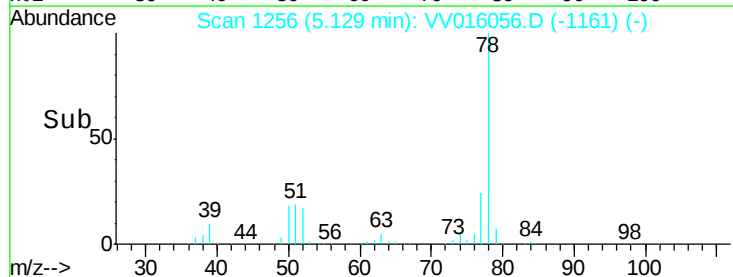
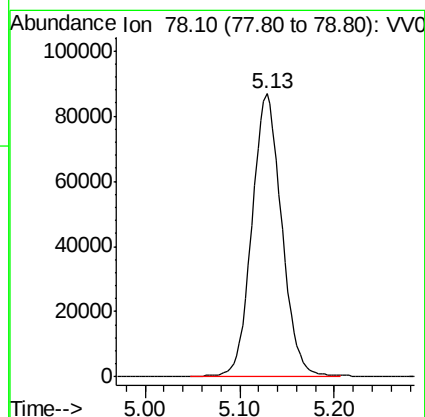
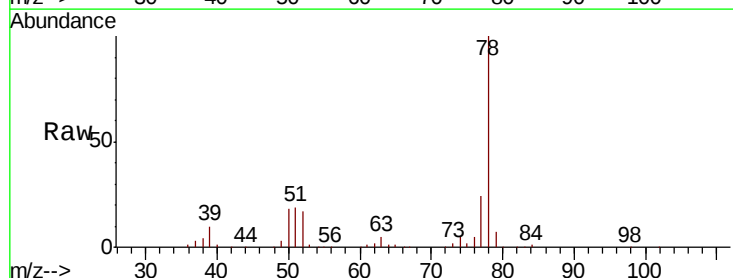
#31  
Carbon tetrachloride  
Concen: 4.653 ug/L  
RT: 4.86 min Scan# 1172  
Delta R.T. 0.01 min  
Lab File: VV016056.D  
Acq: 13 May 2020 21:31

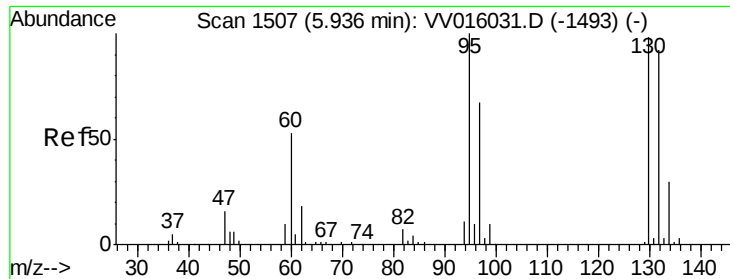
Instrument :  
MSVOA\_V  
ClientSampleId :

Tot Ion:117 Resp: 67848  
Ion Ratio Lower Upper  
117 100  
119 96.3 77.3 115.9



#33  
Benzene  
Concen: 4.933 ug/L  
RT: 5.13 min Scan# 1256  
Delta R.T. 0.01 min  
Lab File: VV016056.D  
Acq: 13 May 2020 21:31  
Tgt Ion: 78 Resp: 190176





#34

Trichloroethene

Concen: 4.455 ug/L

RT: 5.94 min Scan# 1508

Delta R.T. 0.00 min

Lab File: VV016056.D

Acq: 13 May 2020 21:31

Instrument :

MSVOA\_V

ClientSampleId :

Tot Ion: 95 Resp: 49023

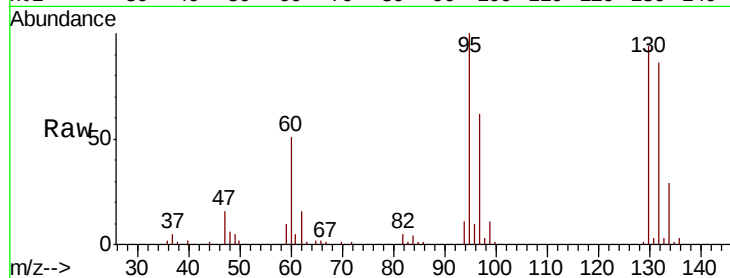
Ion Ratio Lower Upper

95 100

97 61.9 43.3 80.5

132 86.5 60.3 112.1

130 94.5 66.0 122.6



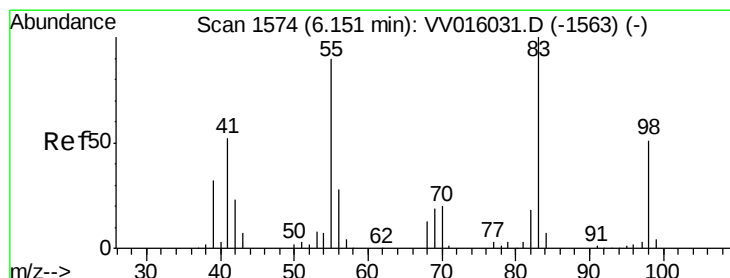
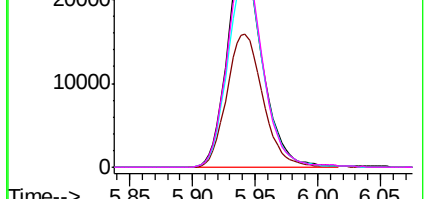
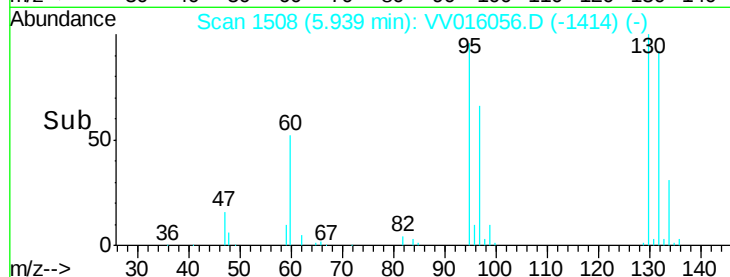
Abundance Ion 95.00 (94.70 to 95.70): VV016031.D (-1493) (-)

Ion 96.95 (96.65 to 97.65): VV016031.D (-1493) (-)

Ion 131.95 (131.65 to 132.65): VV016031.D (-1493) (-)

Ion 129.95 (129.65 to 130.65): VV016031.D (-1493) (-)

Time-->



#35

Methylcyclohexane

Concen: 4.597 ug/L

RT: 6.16 min Scan# 1576

Delta R.T. 0.01 min

Lab File: VV016056.D

Acq: 13 May 2020 21:31

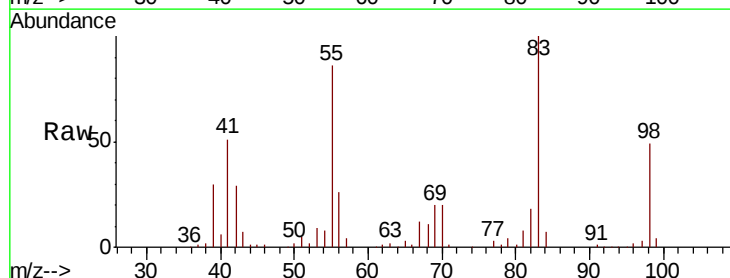
Tgt Ion: 83 Resp: 76518

Ion Ratio Lower Upper

83 100

55 84.4 66.2 99.2

98 48.5 37.9 56.9

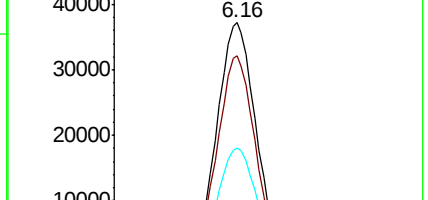
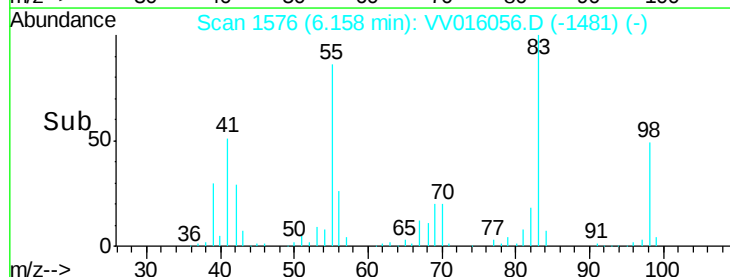


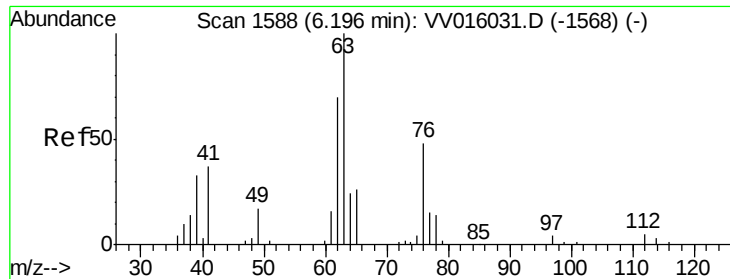
Abundance Ion 83.15 (82.85 to 83.85): VV016031.D (-1563) (-)

Ion 55.10 (54.80 to 55.80): VV016031.D (-1563) (-)

Ion 98.15 (97.85 to 98.85): VV016031.D (-1563) (-)

Time-->

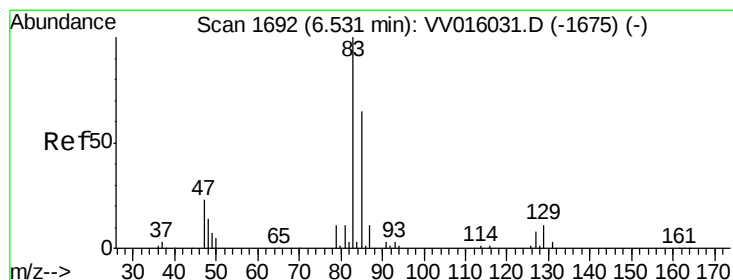
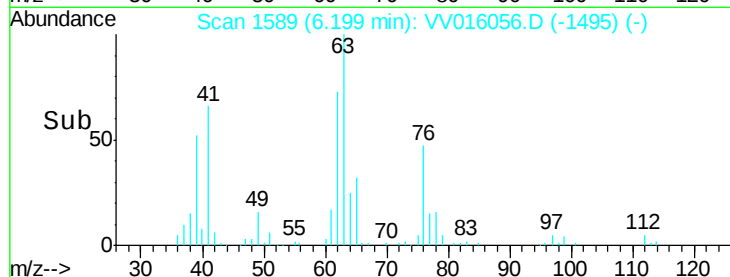
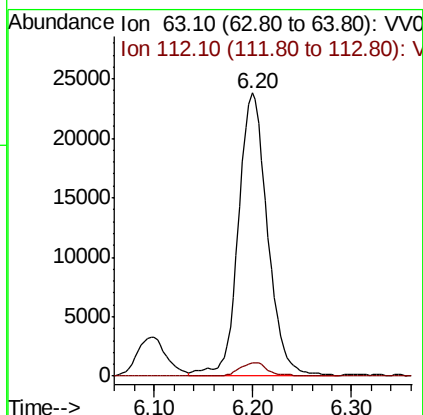
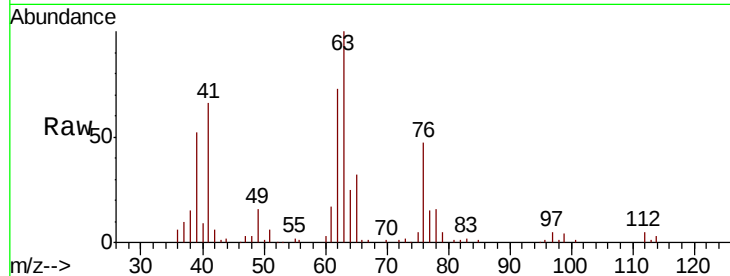




#37  
 1,2-Dichloropropane  
 Concen: 4.987 ug/L  
 RT: 6.20 min Scan# 1589  
 Delta R.T. 0.00 min  
 Lab File: VV016056.D  
 Acq: 13 May 2020 21:31

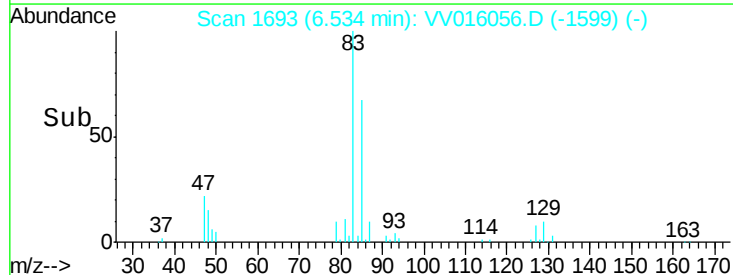
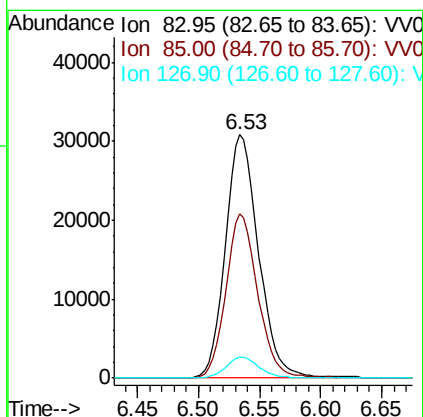
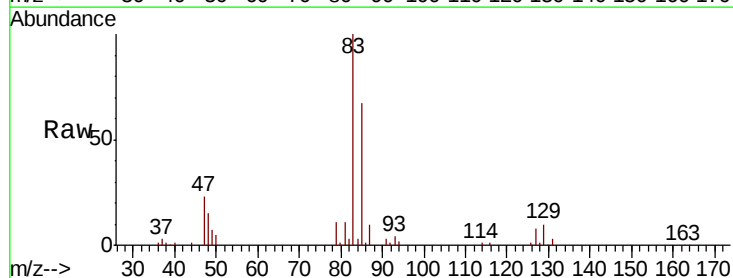
Instrument :  
 MSVOA\_V  
 ClientSampleId :

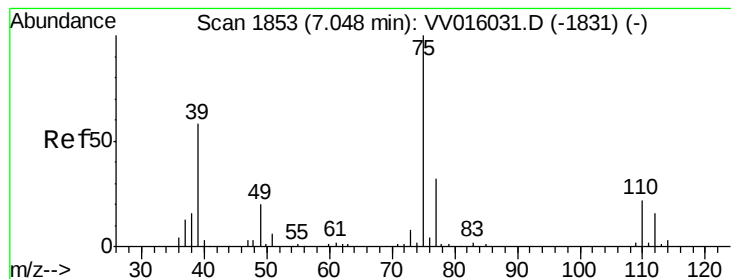
Tot Ion: 63 Resp: 48842  
 Ion Ratio Lower Upper  
 63 100  
 112 4.5 3.4 5.0



#38  
 Bromodichloromethane  
 Concen: 4.714 ug/L  
 RT: 6.53 min Scan# 1693  
 Delta R.T. 0.00 min  
 Lab File: VV016056.D  
 Acq: 13 May 2020 21:31

Tgt Ion: 83 Resp: 58632  
 Ion Ratio Lower Upper  
 83 100  
 85 67.4 45.5 84.5  
 127 8.4 6.2 9.4



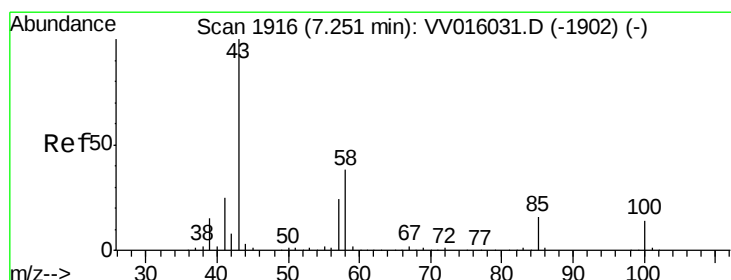
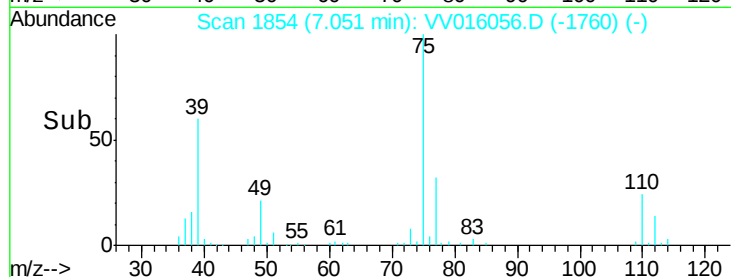
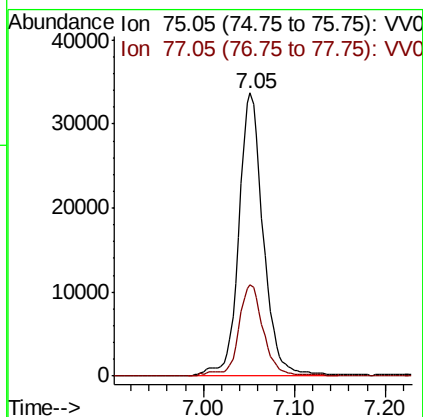
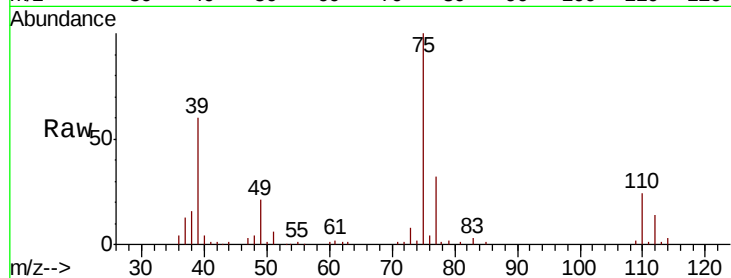


#39

cis-1,3-Dichloropropene  
Concen: 4.561 ug/L  
RT: 7.05 min Scan# 1854  
Delta R.T. 0.00 min  
Lab File: VV016056.D  
Acq: 13 May 2020 21:31

Instrument :  
MSVOA\_V  
ClientSampleId :

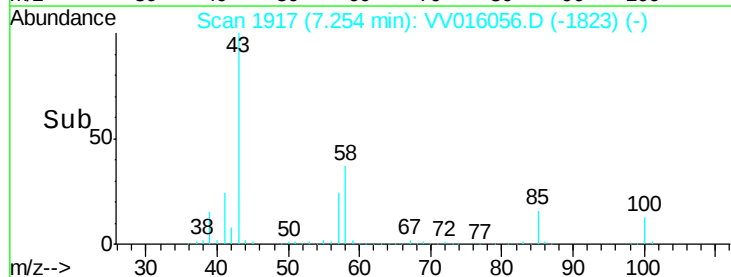
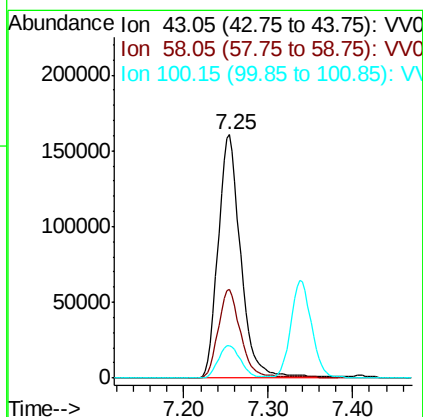
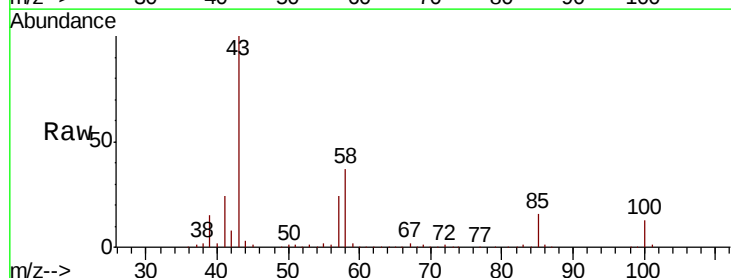
Tot Ion: 75 Resp: 63134  
Ion Ratio Lower Upper  
75 100  
77 32.2 21.3 39.5

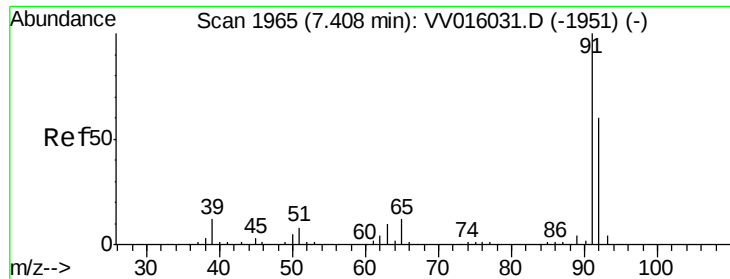


#40

4-Methyl-2-pentanone  
Concen: 49.181 ug/L  
RT: 7.25 min Scan# 1917  
Delta R.T. 0.00 min  
Lab File: VV016056.D  
Acq: 13 May 2020 21:31

Tgt Ion: 43 Resp: 300228  
Ion Ratio Lower Upper  
43 100  
58 35.9 29.0 43.4  
100 13.5 10.9 16.3





#42

Toluene

Concen: 5.055 ug/L

RT: 7.41 min Scan# 1966

Delta R.T. 0.00 min

Lab File: VV016056.D

Acq: 13 May 2020 21:31

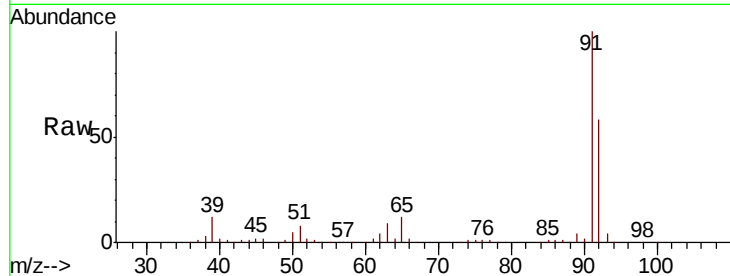
Instrument :  
MSVOA\_V  
ClientSampled :

Tot Ion: 91 Resp: 206557

Ion Ratio Lower Upper

91 100

92 58.3 40.1 74.5



Abundance Ion 91.15 (90.85 to 91.85): VV016031.D (-1951) (-)

Ion 92.15 (91.85 to 92.85): VV016031.D (-1951) (-)

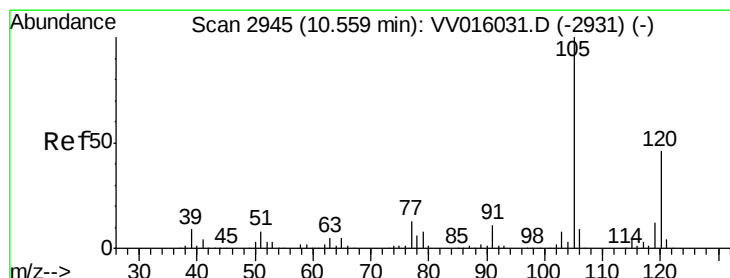
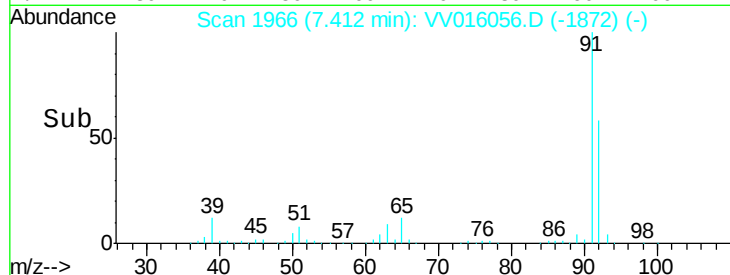
7.41

100000

50000

0

Time--> 7.30 7.35 7.40 7.45 7.50



#43

1,3,5-Trimethylbenzene

Concen: 4.955 ug/L

RT: 10.56 min Scan# 2945

Delta R.T. -0.00 min

Lab File: VV016056.D

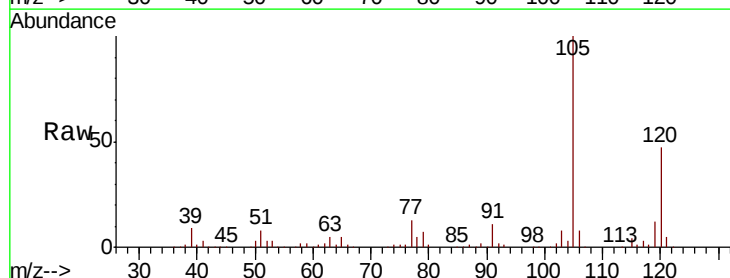
Acq: 13 May 2020 21:31

Tgt Ion:105 Resp: 185872

Ion Ratio Lower Upper

105 100

120 47.6 0.0 0.0#



Abundance Ion 105.00 (104.70 to 105.70): VV016031.D (-2931) (-)

Ion 120.00 (119.70 to 120.70): VV016031.D (-2931) (-)

10.56

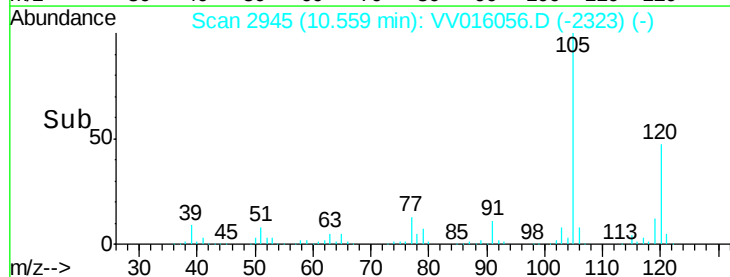
150000

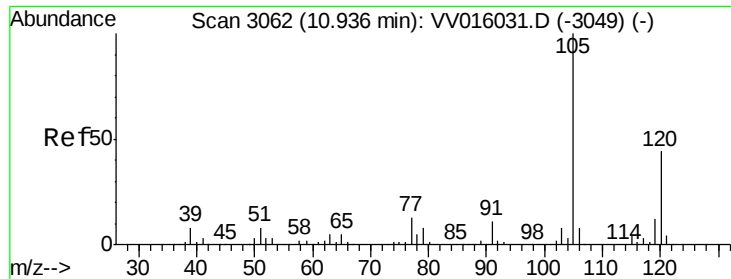
100000

50000

0

Time--> 10.50 10.55 10.60

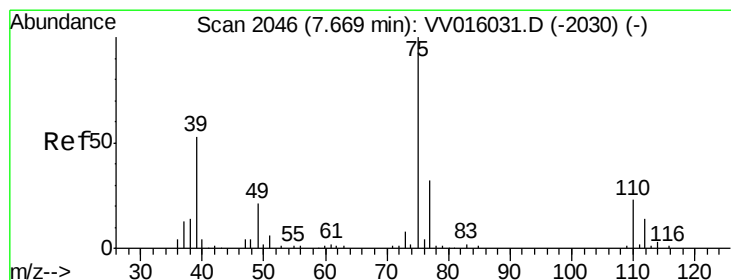
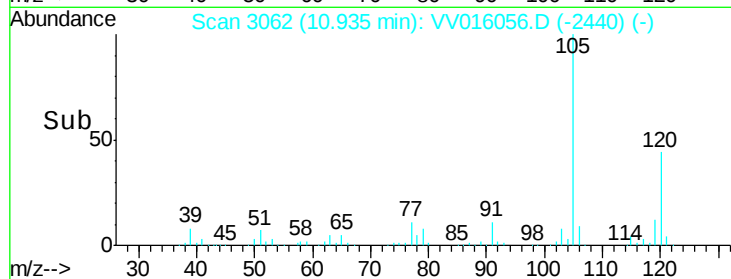
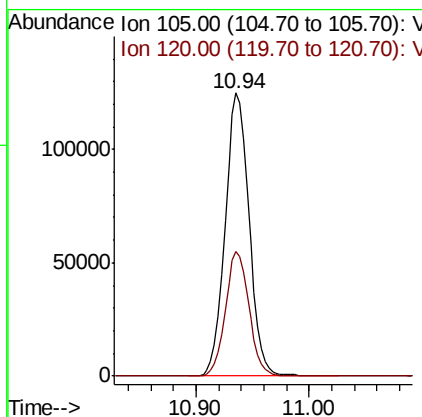
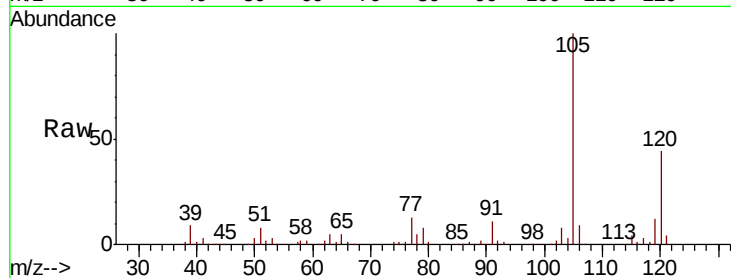




#44  
 1,2,4-Trimethylbenzene  
 Concen: 4.915 ug/L  
 RT: 10.94 min Scan# 3062  
 Delta R.T. -0.00 min  
 Lab File: VV016056.D  
 Acq: 13 May 2020 21:31

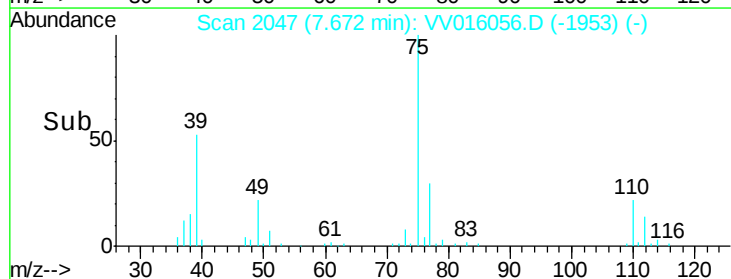
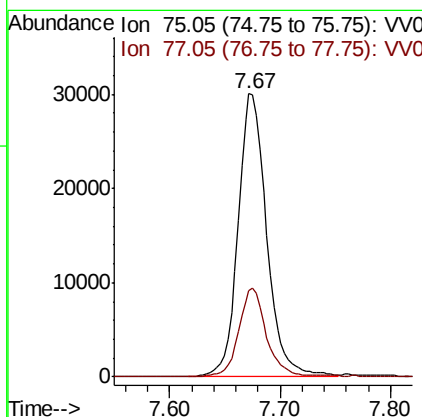
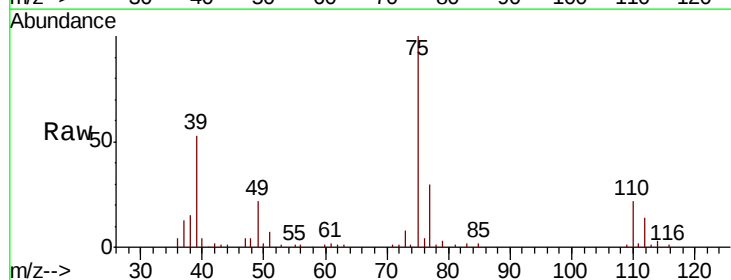
Instrument :  
 MSVOA\_V  
 ClientSampled :

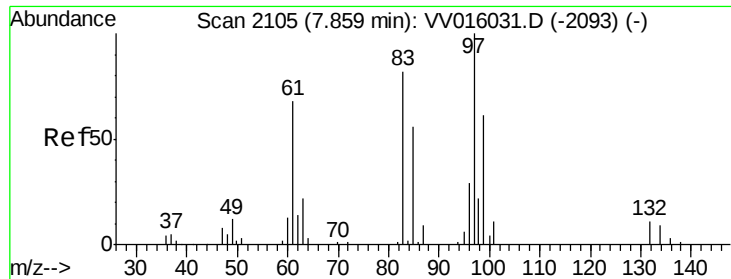
Tot Ion:105 Resp: 184239  
 Ion Ratio Lower Upper  
 105 100  
 120 43.5 0.0 0.0#



#46  
 trans-1,3-Dichloropropene  
 Concen: 4.647 ug/L  
 RT: 7.67 min Scan# 2047  
 Delta R.T. 0.00 min  
 Lab File: VV016056.D  
 Acq: 13 May 2020 21:31

Tgt Ion: 75 Resp: 54334  
 Ion Ratio Lower Upper  
 75 100  
 77 30.3 21.3 39.6

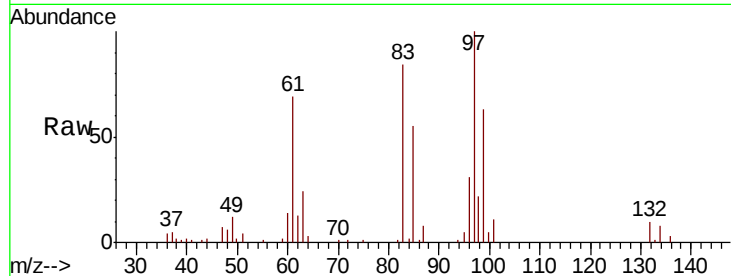




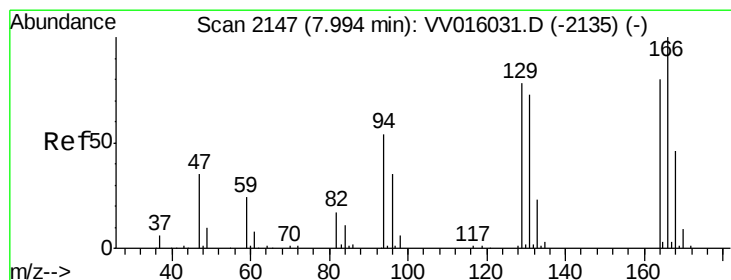
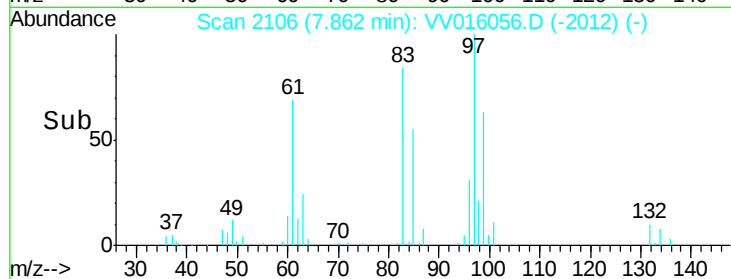
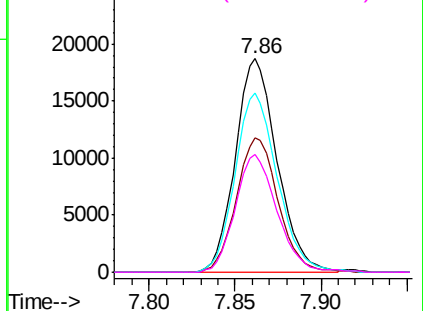
#47  
 1,1,2-Trichloroethane  
 Concen: 4.816 ug/L  
 RT: 7.86 min Scan# 2106  
 Delta R.T. 0.00 min  
 Lab File: VV016056.D  
 Acq: 13 May 2020 21:31

Instrument :  
 MSVOA\_V  
 ClientSampled :

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 97    | Resp: | 31497 |
| Ion      | Ratio | Lower | Upper |
| 97       | 100   |       |       |
| 99       | 63.0  | 42.1  | 78.1  |
| 83       | 83.9  | 59.2  | 110.0 |
| 85       | 55.0  | 38.6  | 71.8  |

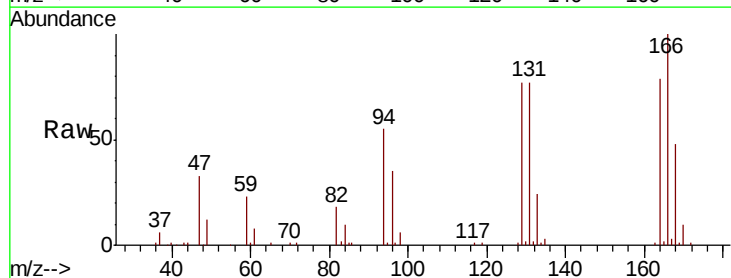


Abundance Ion 96.95 (96.65 to 97.65): VV016056.D (-2012) (-)

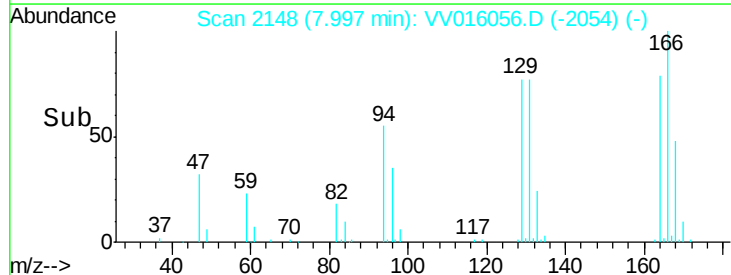
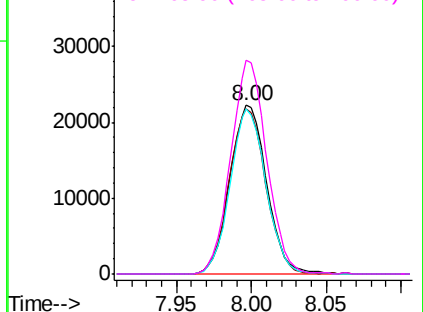


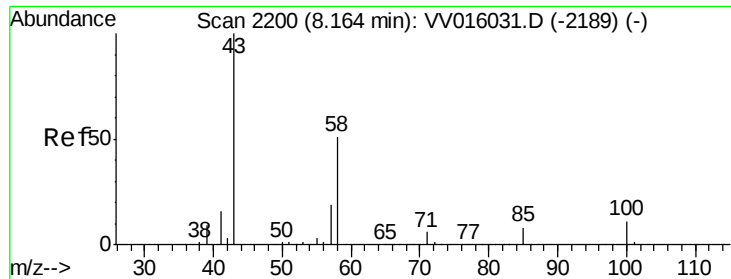
#49  
 Tetrachloroethene  
 Concen: 4.952 ug/L  
 RT: 8.00 min Scan# 2148  
 Delta R.T. 0.00 min  
 Lab File: VV016056.D  
 Acq: 13 May 2020 21:31

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 164   | Resp: | 38020 |
| Ion      | Ratio | Lower | Upper |
| 164      | 100   |       |       |
| 129      | 98.0  | 69.7  | 129.4 |
| 131      | 97.9  | 66.8  | 124.2 |
| 166      | 126.6 | 89.1  | 165.5 |



Abundance Ion 163.90 (163.60 to 164.60): VV016056.D (-2054) (-)

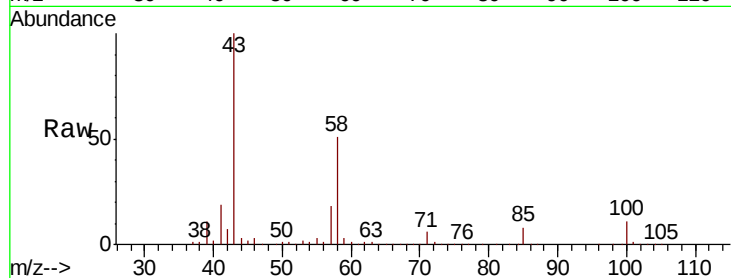




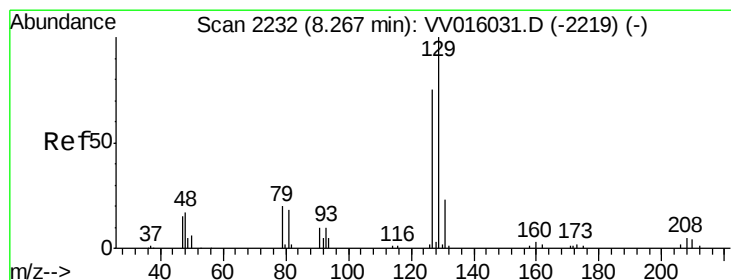
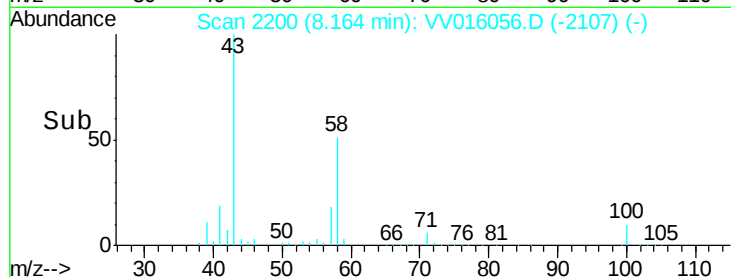
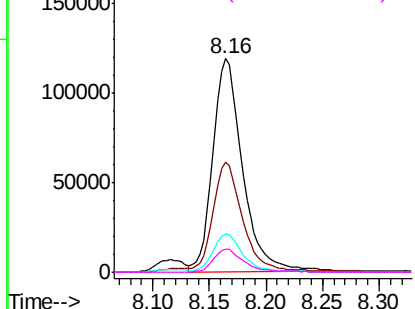
#50  
2-Hexanone  
Concen: 49.875 ug/L  
RT: 8.16 min Scan# 2200  
Delta R.T. -0.00 min  
Lab File: VV016056.D  
Acq: 13 May 2020 21:31

Instrument :  
MSVOA\_V  
ClientSampled :

Tot Ion: 43 Resp: 215313  
Ion Ratio Lower Upper  
43 100  
58 51.9 40.8 61.2  
57 17.8 14.7 22.1  
100 11.1 9.0 13.6

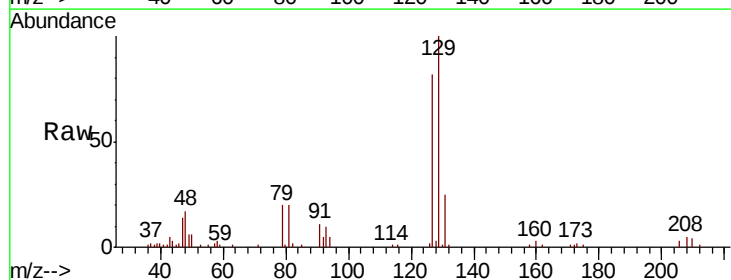


Abundance Ion 43.05 (42.75 to 43.75): VV0  
Ion 58.05 (57.75 to 58.75): VV0  
Ion 57.20 (56.90 to 57.90): VV0  
Ion 100.15 (99.85 to 100.85): VV0

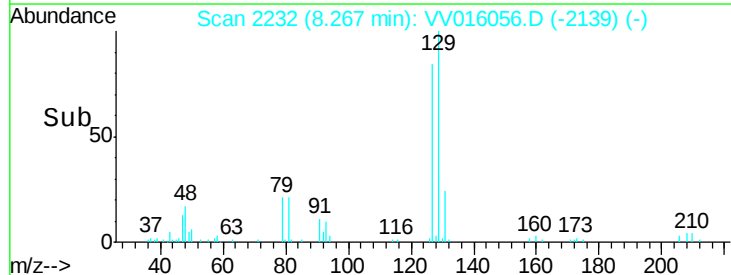
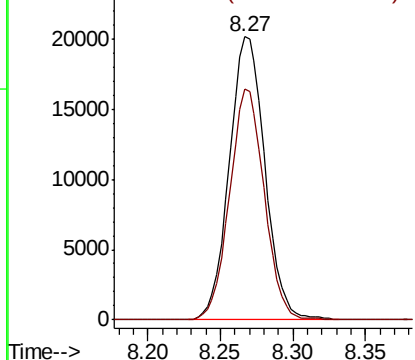


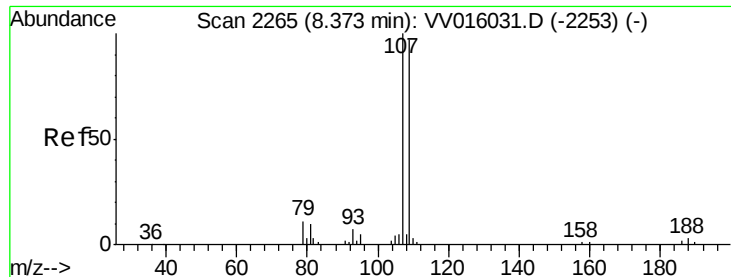
#51  
Dibromochloromethane  
Concen: 4.679 ug/L  
RT: 8.27 min Scan# 2232  
Delta R.T. -0.00 min  
Lab File: VV016056.D  
Acq: 13 May 2020 21:31

Tgt Ion: 129 Resp: 34386  
Ion Ratio Lower Upper  
129 100  
127 81.5 56.0 104.0



Abundance Ion 128.95 (128.65 to 129.65): V  
Ion 126.90 (126.60 to 127.60): V

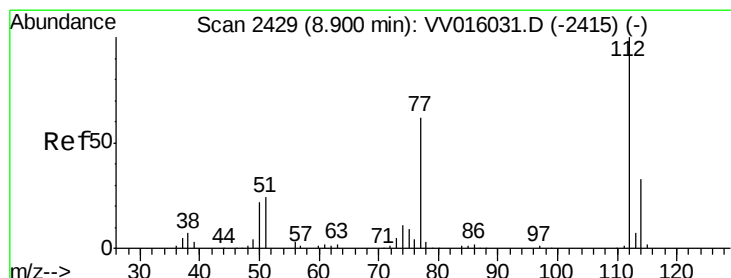
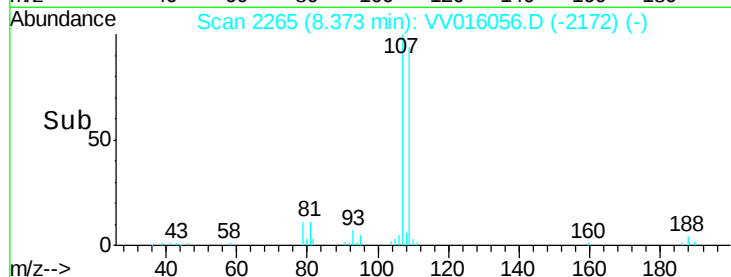
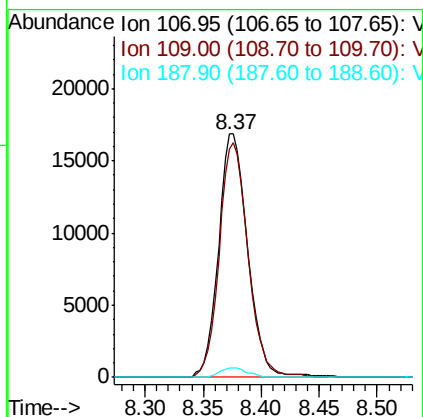
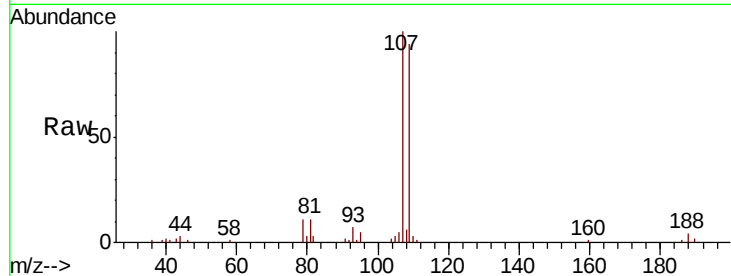




#52  
 1,2-Dibromoethane  
 Concen: 4.856 ug/L  
 RT: 8.37 min Scan# 2265  
 Delta R.T. -0.00 min  
 Lab File: VV016056.D  
 Acq: 13 May 2020 21:31

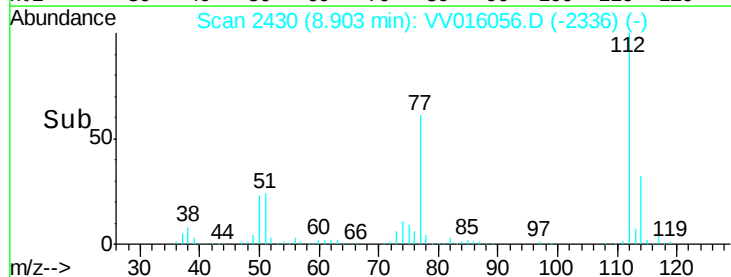
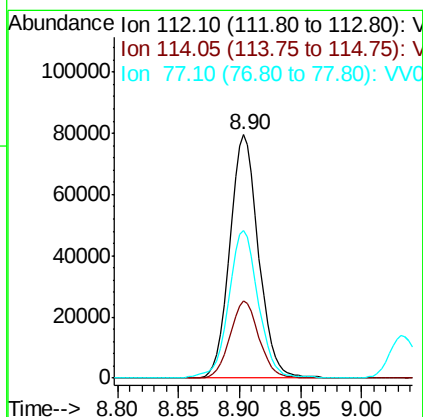
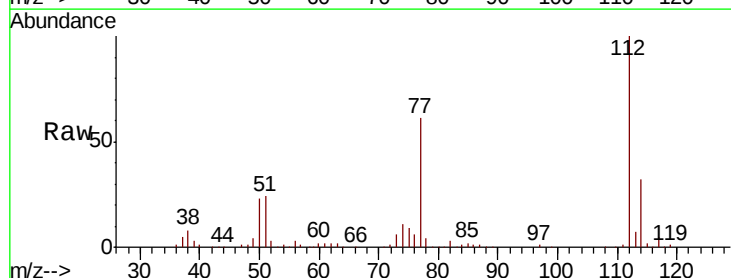
Instrument :  
 MSVOA\_V  
 ClientSampleId :

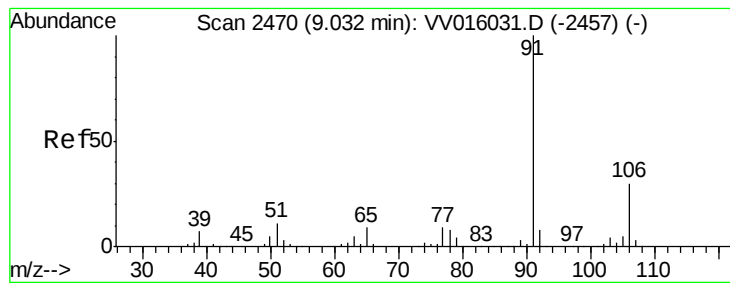
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 107     | 100   |       |       |
| 109     | 94.0  | 68.9  | 127.9 |
| 188     | 3.8   | 2.7   | 4.1   |



#53  
 Chlorobenzene  
 Concen: 4.966 ug/L  
 RT: 8.90 min Scan# 2430  
 Delta R.T. 0.00 min  
 Lab File: VV016056.D  
 Acq: 13 May 2020 21:31

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 114     | 31.6  | 21.6  | 40.0  |
| 77      | 60.9  | 48.6  | 73.0  |





#54

Ethylbenzene

Concen: 4.975 ug/L

RT: 9.03 min Scan# 2470

Delta R.T. -0.00 min

Lab File: VV016056.D

Acq: 13 May 2020 21:31

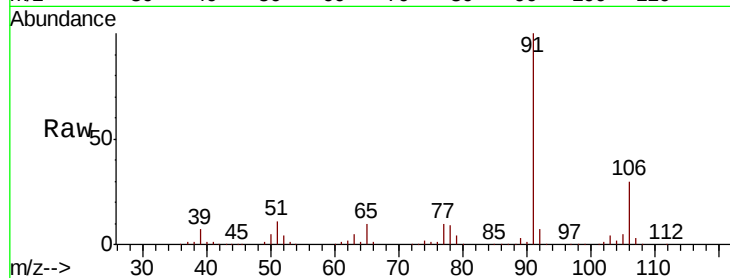
Instrument :  
MSVOA\_V  
ClientSampleId :

Tot Ion: 91 Resp: 231182

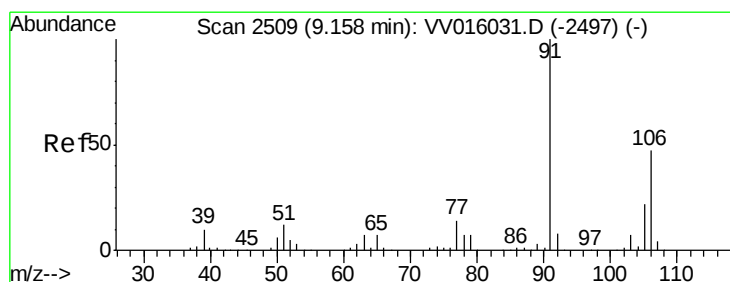
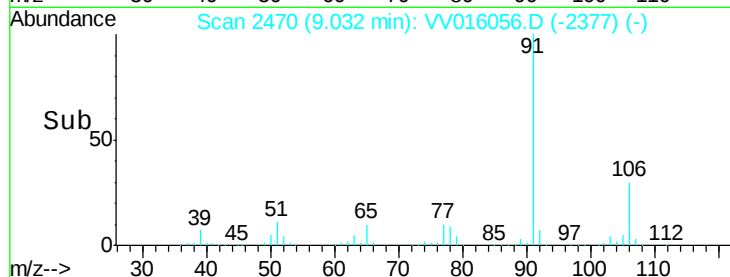
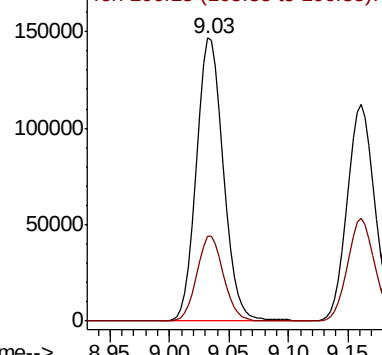
Ion Ratio Lower Upper

91 100

106 29.9 20.6 38.4



Abundance Ion 91.15 (90.85 to 91.85): VV016056.D (-2377) (-)



#55

m,p-xylene

Concen: 5.002 ug/L

RT: 9.16 min Scan# 2510

Delta R.T. 0.00 min

Lab File: VV016056.D

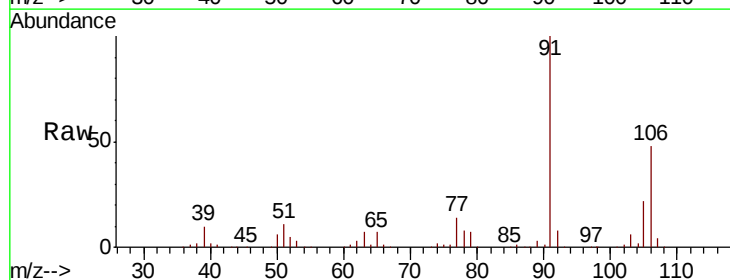
Acq: 13 May 2020 21:31

Tgt Ion: 106 Resp: 86064

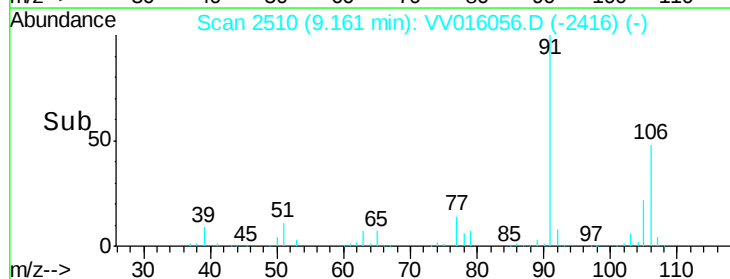
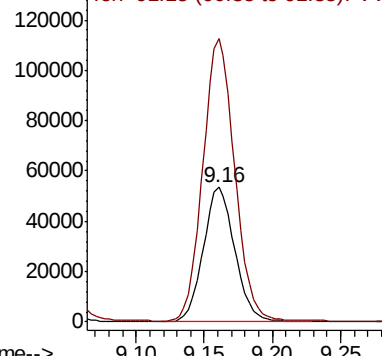
Ion Ratio Lower Upper

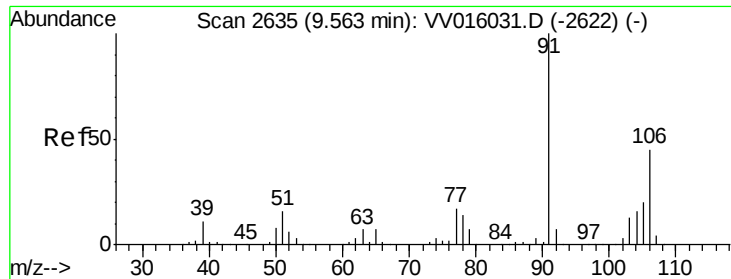
106 100

91 210.2 149.9 278.3



Abundance Ion 106.15 (105.85 to 106.85): VV016056.D (-2416) (-)

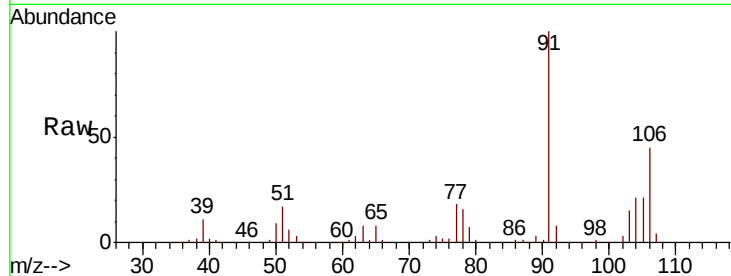




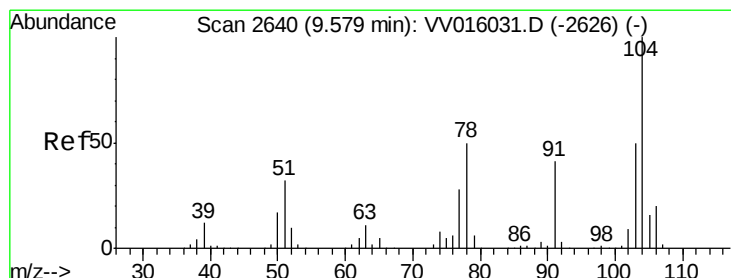
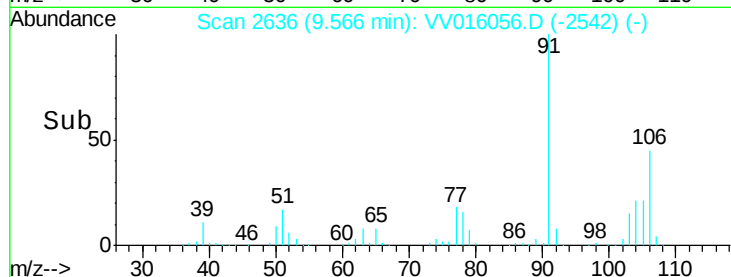
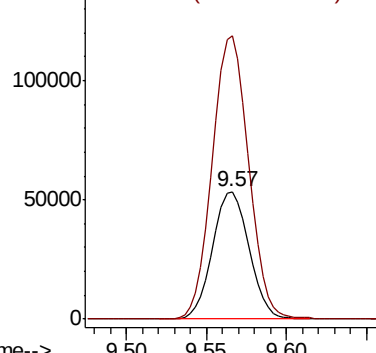
#56  
o-xylene  
Concen: 5.055 ug/L  
RT: 9.57 min Scan# 2636  
Delta R.T. 0.00 min  
Lab File: VV016056.D  
Acq: 13 May 2020 21:31

Instrument :  
MSVOA\_V  
ClientSampled :

Tot Ion:106 Resp: 83142  
Ion Ratio Lower Upper  
106 100  
91 222.5 159.7 296.5

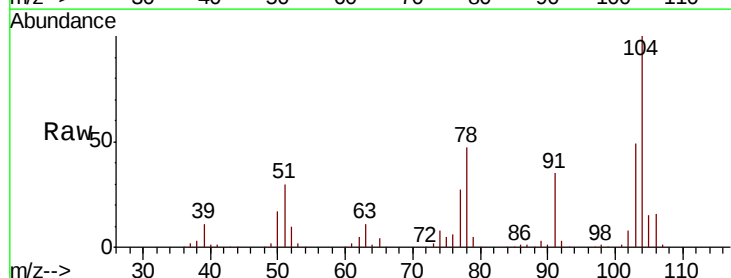


Abundance Ion 106.15 (105.85 to 106.85): V  
Ion 91.15 (90.85 to 91.85): VV0

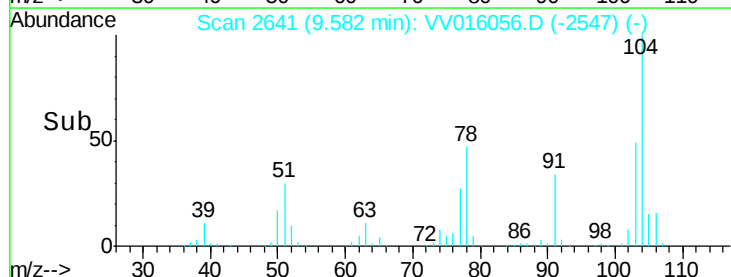
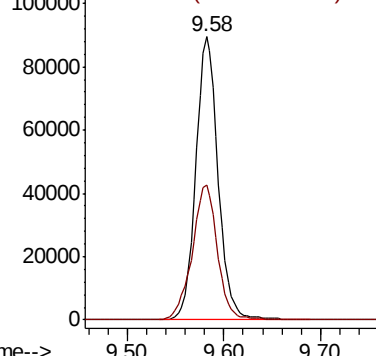


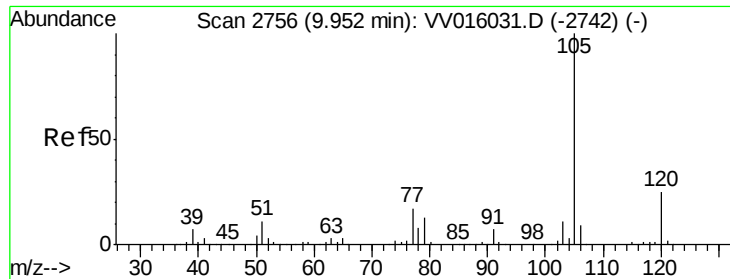
#57  
Styrene  
Concen: 5.198 ug/L  
RT: 9.58 min Scan# 2641  
Delta R.T. 0.00 min  
Lab File: VV016056.D  
Acq: 13 May 2020 21:31

Tgt Ion:104 Resp: 143022  
Ion Ratio Lower Upper  
104 100  
78 47.5 33.9 63.0



Abundance Ion 104.10 (103.80 to 104.80): V  
Ion 78.10 (77.80 to 78.80): VV0





#58

Isopropylbenzene

Concen: 4.976 ug/L

RT: 9.95 min Scan# 2756

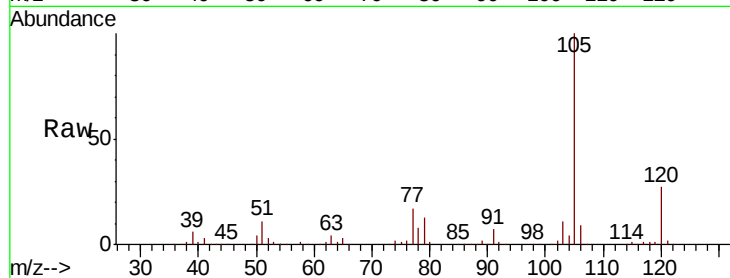
Delta R.T. -0.00 min

Lab File: VV016056.D

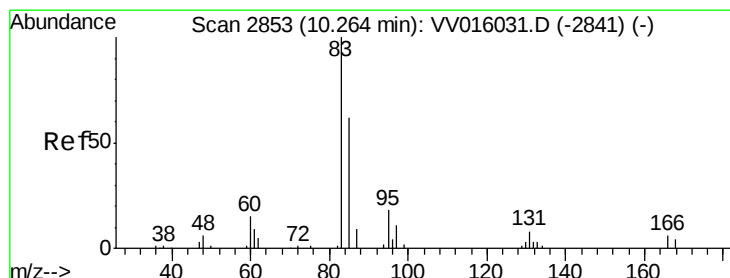
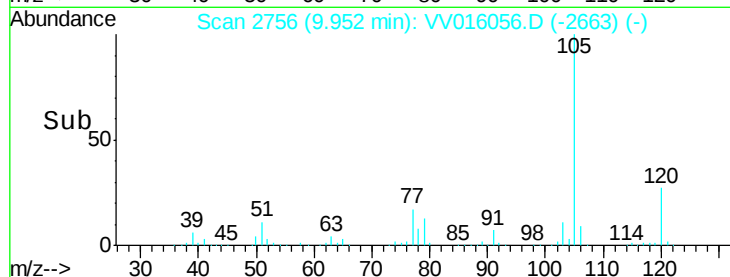
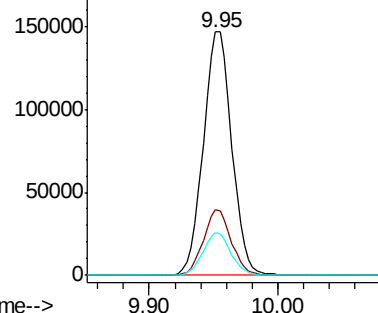
Acq: 13 May 2020 21:31

Instrument :  
MSVOA\_V  
ClientSampleId :

|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 105   | Resp: | 224857 |
| Ion      | Ratio | Lower | Upper  |
| 105      | 100   |       |        |
| 120      | 26.2  | 20.8  | 31.2   |
| 77       | 17.2  | 14.1  | 21.1   |



Abundance Ion 105.05 (104.75 to 105.75): V  
Ion 120.10 (119.80 to 120.80): V  
Ion 77.10 (76.80 to 77.80): V



#60

1,1,2,2-Tetrachloroethane

Concen: 5.393 ug/L

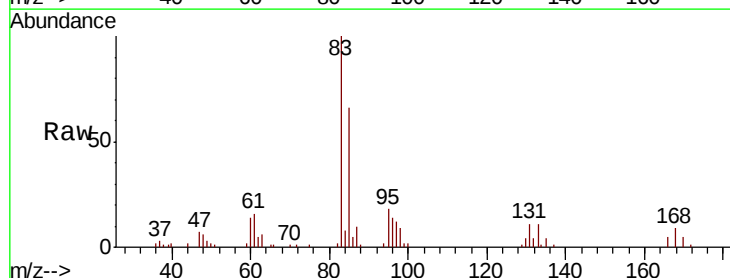
RT: 10.26 min Scan# 2853

Delta R.T. -0.00 min

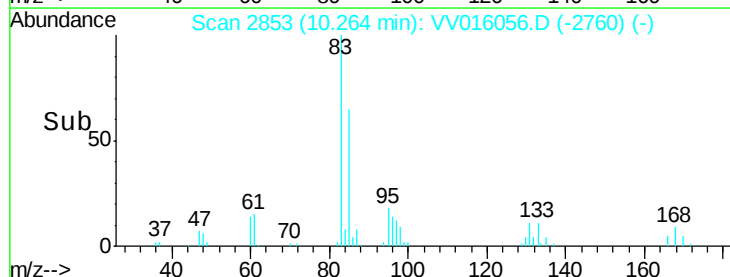
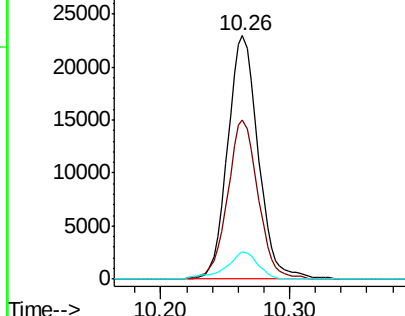
Lab File: VV016056.D

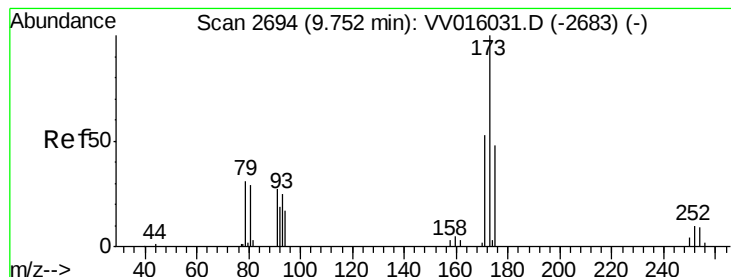
Acq: 13 May 2020 21:31

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 83    | Resp: | 37692 |
| Ion      | Ratio | Lower | Upper |
| 83       | 100   |       |       |
| 85       | 65.6  | 44.0  | 81.6  |
| 131      | 11.1  | 7.7   | 11.5  |



Abundance Ion 82.95 (82.65 to 83.65): VV0  
Ion 85.00 (84.70 to 85.70): VV0  
Ion 130.95 (130.65 to 131.65): V





#62

Bromoform

Concen: 4.375 ug/L

RT: 9.75 min Scan# 2694

Delta R.T. -0.00 min

Lab File: VV016056.D

Acq: 13 May 2020 21:31

Instrument :  
MSVOA\_V  
ClientSampled :

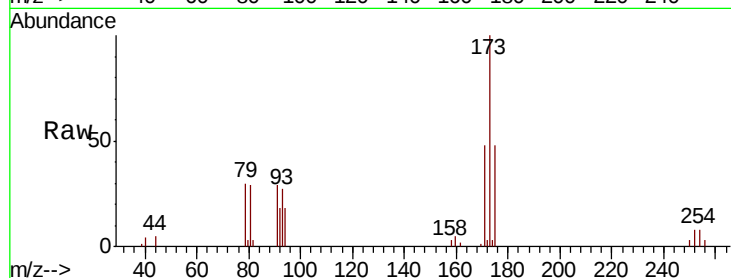
Tot Ion:173 Resp: 15763

Ion Ratio Lower Upper

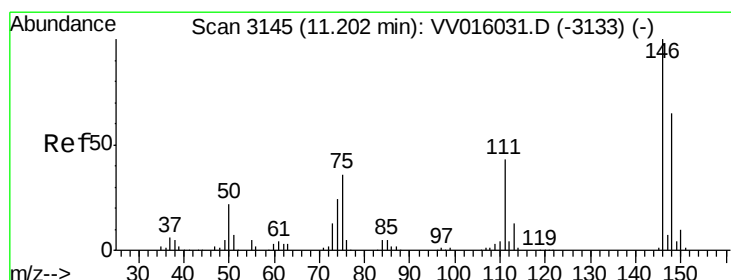
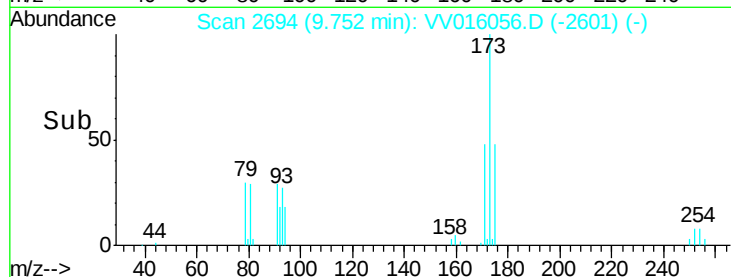
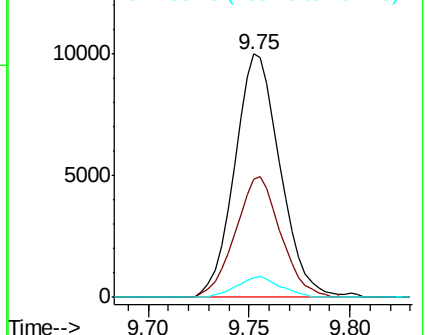
173 100

175 49.5 39.8 59.8

254 8.3 7.1 10.7



Abundance Ion 172.90 (172.60 to 173.60): V  
Ion 174.90 (174.60 to 175.60): V  
Ion 253.75 (253.45 to 254.45): V



#63

1,3-Dichlorobenzene

Concen: 4.874 ug/L

RT: 11.20 min Scan# 3145

Delta R.T. -0.00 min

Lab File: VV016056.D

Acq: 13 May 2020 21:31

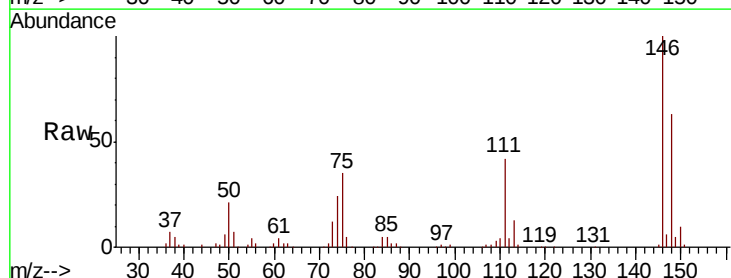
Tgt Ion:146 Resp: 102976

Ion Ratio Lower Upper

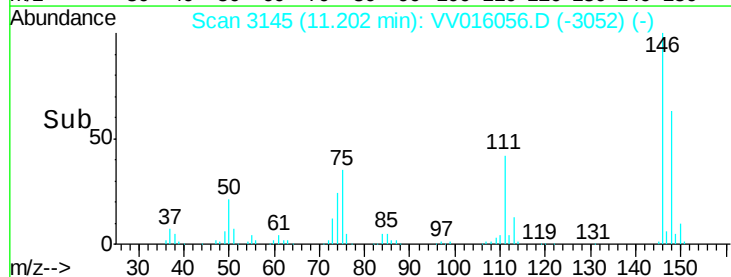
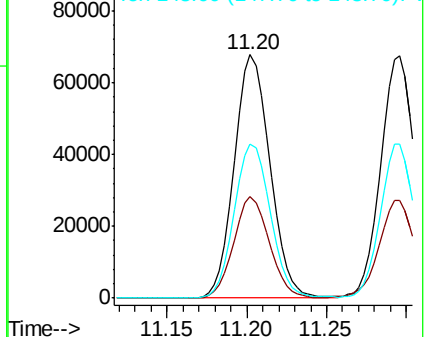
146 100

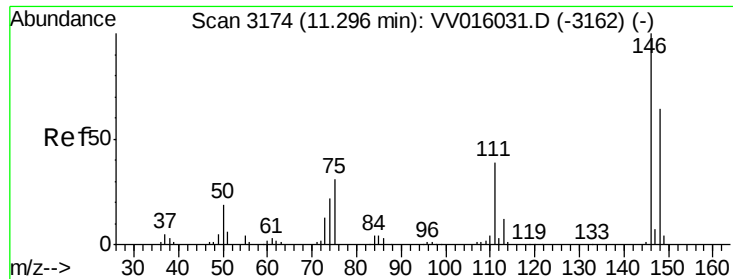
111 41.6 28.7 53.3

148 63.1 44.0 81.8



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





#64

1,4-Dichlorobenzene

Concen: 4.857 ug/L

RT: 11.30 min Scan# 3174

Delta R.T. -0.00 min

Lab File: VV016056.D

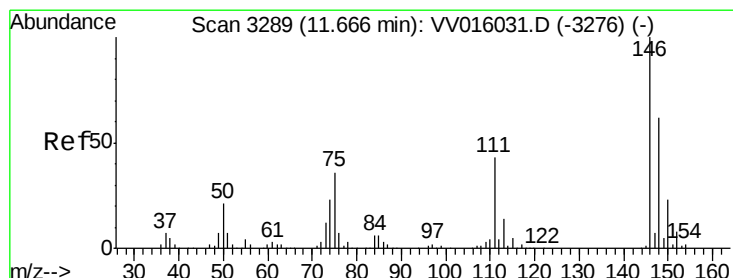
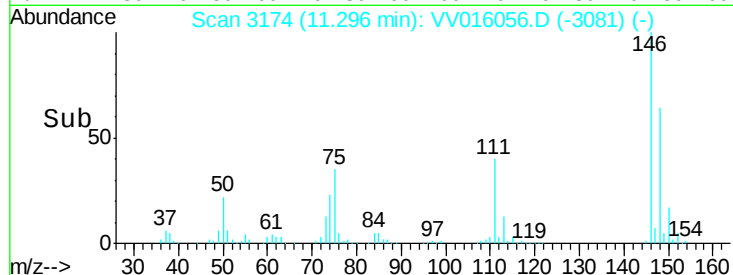
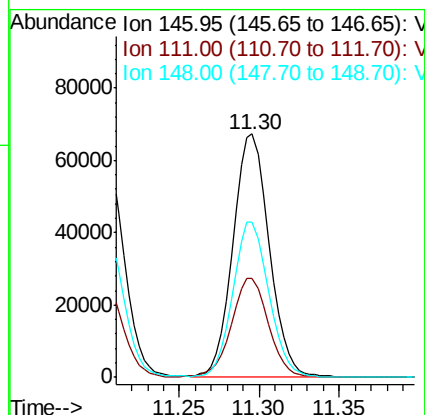
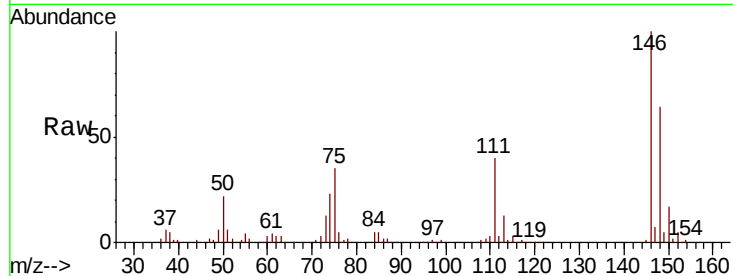
Acq: 13 May 2020 21:31

Instrument :

MSVOA\_V

ClientSampled :

|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 146   | Resp: | 103105 |
| Ion      | Ratio | Lower | Upper  |
| 146      | 100   |       |        |
| 111      | 40.5  | 28.9  | 53.7   |
| 148      | 63.7  | 44.6  | 82.8   |



#66

1,2-Dichlorobenzene

Concen: 4.904 ug/L

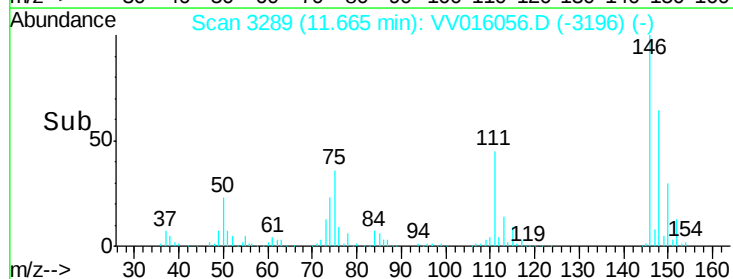
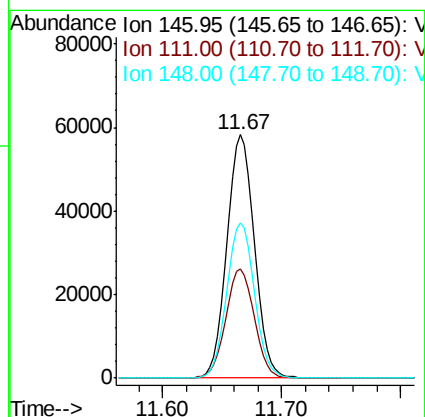
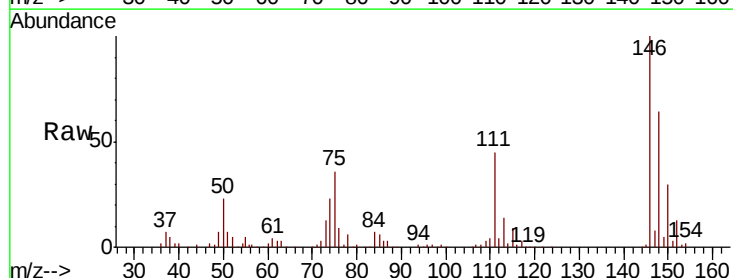
RT: 11.67 min Scan# 3289

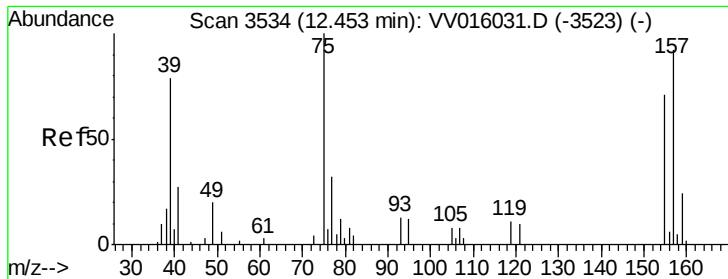
Delta R.T. -0.00 min

Lab File: VV016056.D

Acq: 13 May 2020 21:31

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 146   | Resp: | 93789 |
| Ion      | Ratio | Lower | Upper |
| 146      | 100   |       |       |
| 111      | 44.9  | 37.0  | 55.4  |
| 148      | 64.0  | 49.8  | 74.6  |

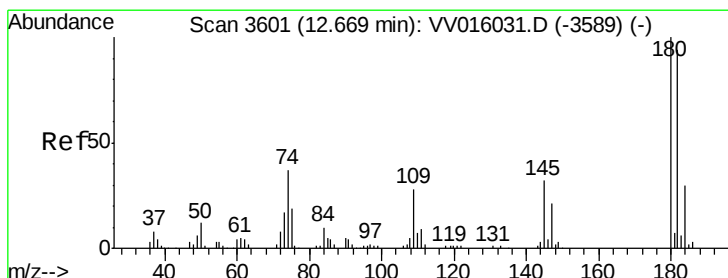
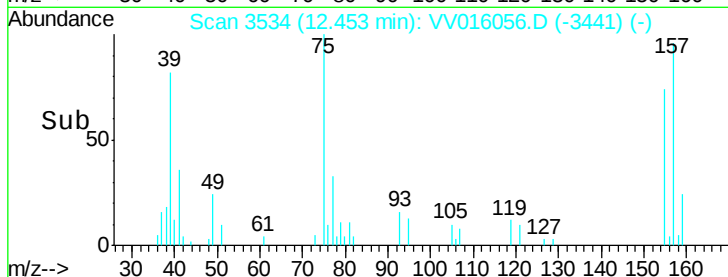
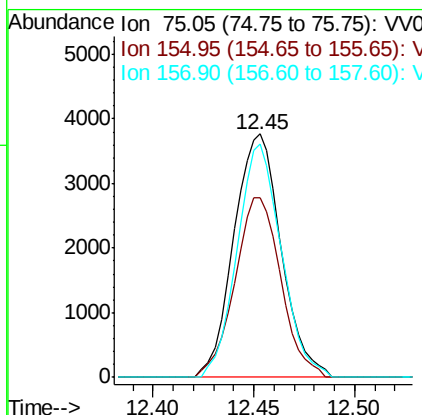
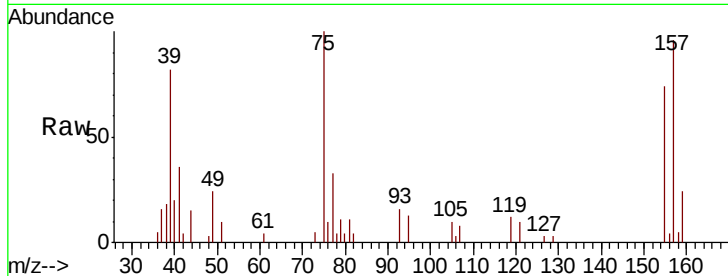




#67  
 1,2-Dibromo-3-chloropropane  
 Concen: 4.957 ug/L  
 RT: 12.45 min Scan# 3534  
 Delta R.T. -0.00 min  
 Lab File: VV016056.D  
 Acq: 13 May 2020 21:31

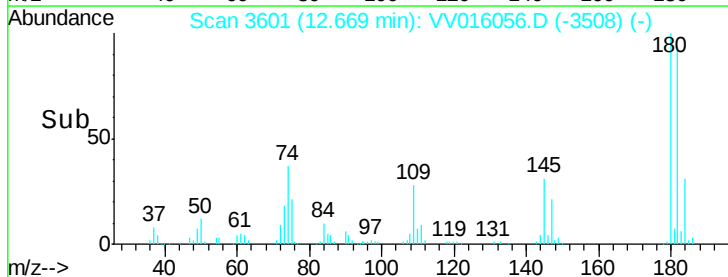
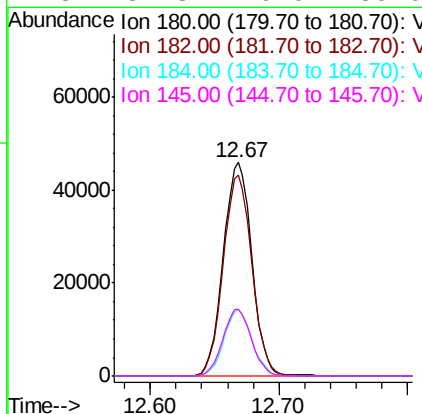
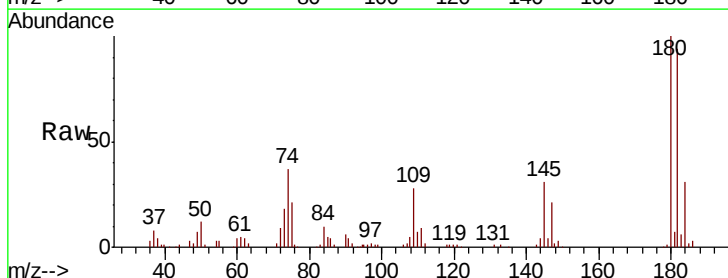
Instrument :  
 MSVOA\_V  
 ClientSampleId :

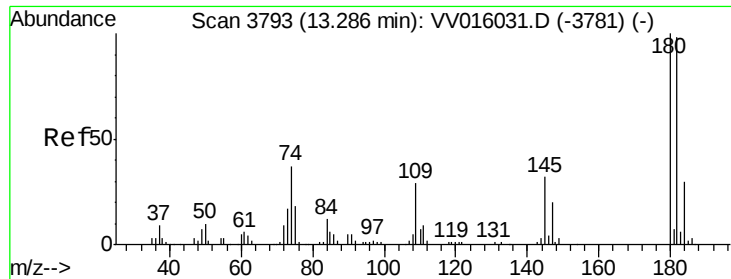
Tot Ion: 75 Resp: 6187  
 Ion Ratio Lower Upper  
 75 100  
 155 73.7 58.2 87.4  
 157 96.0 79.4 119.2



#68  
 1,3,5-Trichlorobenzene  
 Concen: 4.572 ug/L  
 RT: 12.67 min Scan# 3601  
 Delta R.T. -0.00 min  
 Lab File: VV016056.D  
 Acq: 13 May 2020 21:31

Tgt Ion: 180 Resp: 70637  
 Ion Ratio Lower Upper  
 180 100  
 182 94.2 75.8 113.6  
 184 30.1 24.6 36.8  
 145 31.3 26.0 39.0

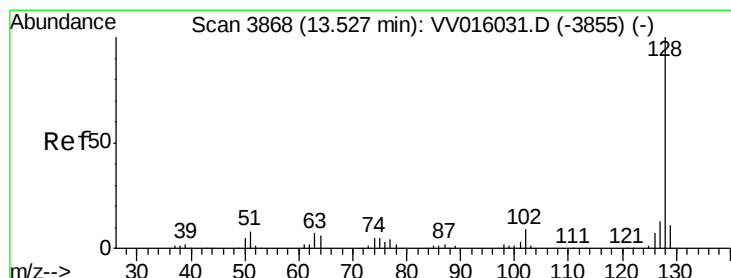
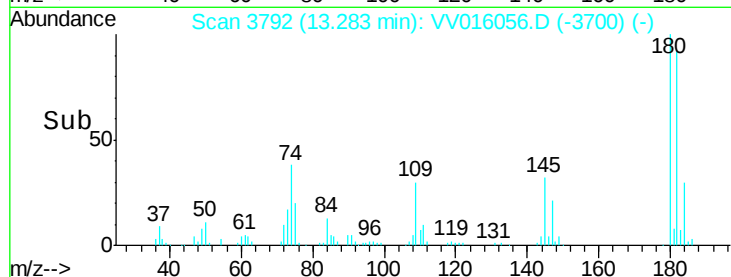
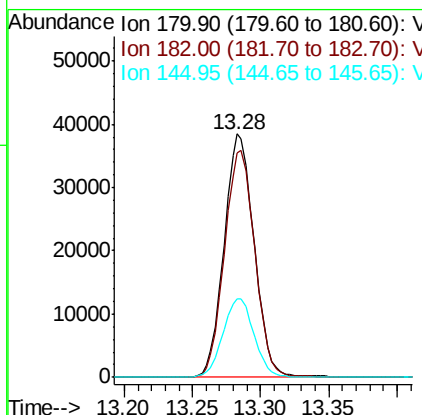
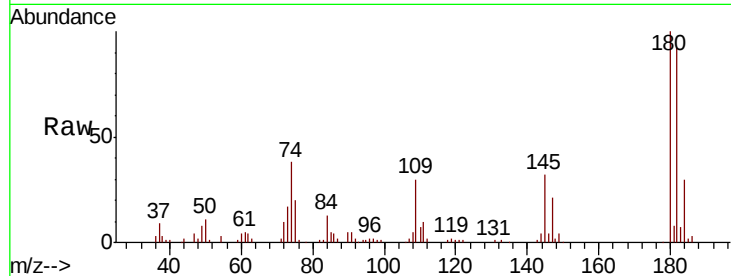




#69  
 1,2,4-trichlorobenzene  
 Concen: 4.439 ug/L  
 RT: 13.28 min Scan# 3792  
 Delta R.T. -0.00 min  
 Lab File: VV016056.D  
 Acq: 13 May 2020 21:31

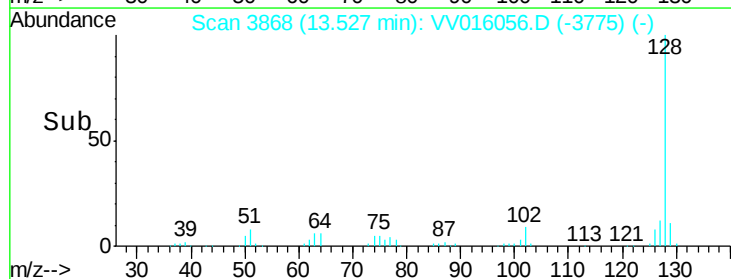
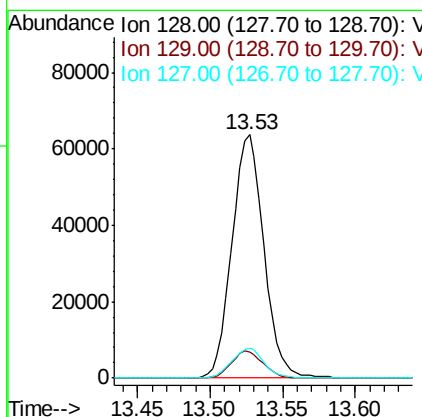
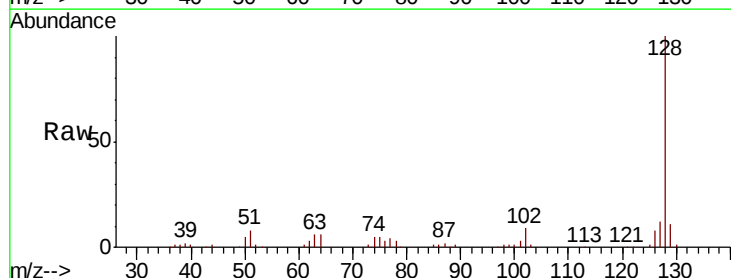
Instrument :  
 MSVOA\_V  
 ClientSampleId :

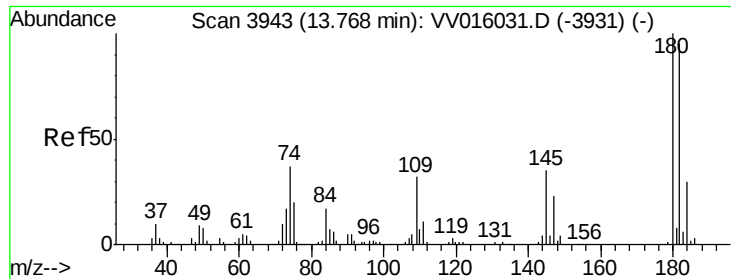
Tot Ion:180 Resp: 58919  
 Ion Ratio Lower Upper  
 180 100  
 182 94.4 76.7 115.1  
 145 33.1 26.4 39.6



#70  
 Naphthalene  
 Concen: 4.616 ug/L  
 RT: 13.53 min Scan# 3868  
 Delta R.T. -0.00 min  
 Lab File: VV016056.D  
 Acq: 13 May 2020 21:31

Tgt Ion:128 Resp: 97444  
 Ion Ratio Lower Upper  
 128 100  
 129 11.0 8.5 12.7  
 127 12.5 10.2 15.2





#71  
 1,2,3-Trichlorobenzene  
 Concen: 4.617 ug/L  
 RT: 13.76 min Scan# 3942  
 Delta R.T. -0.00 min  
 Lab File: VV016056.D  
 Acq: 13 May 2020 21:31

Instrument :  
 MSVOA\_V  
 ClientSampleId :

Tot Ion:180 Resp: 54065  
 Ion Ratio Lower Upper  
 180 100  
 182 94.4 77.0 115.6  
 145 34.5 28.3 42.5

