

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU080619\  
 Data File : VU033611.D  
 Acq On : 06 Aug 2019 16:09  
 Operator : JC/SP  
 Sample : VSTDCCC050EC  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 11 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD05050

Quant Time: Aug 07 05:31:12 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMULM080519WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Wed Aug 07 05:27:42 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.86  | 114  | 312538   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.07  | 117  | 312659   | 50.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.47 | 152  | 169946   | 50.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |         |       |          |          |      |         |
|--------------------------------|---------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.39    | 65    | 81755    | 40.93    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 135 | Recovery | =    | 81.86%  |
| 7) Chloroethane-d5             | 1.67    | 69    | 76331    | 34.29    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 130 | Recovery | =    | 68.58%# |
| 11) 1,1-Dichloroethene-d2      | 2.26    | 63    | 170347   | 44.04    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 88.08%  |
| 21) 2-Butanone-d5              | 4.14    | 46    | 161870   | 100.04   | ug/L | -0.01   |
| Spiked Amount                  | 100.000 | Range | 40 - 130 | Recovery | =    | 100.04% |
| 24) Chloroform-d               | 4.62    | 84    | 178049   | 46.83    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 93.66%  |
| 26) 1,2-Dichloroethane-d4      | 5.28    | 65    | 112583   | 46.95    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 93.90%  |
| 32) Benzene-d6                 | 5.32    | 84    | 340274   | 44.50    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 89.00%  |
| 36) 1,2-Dichloropropane-d6     | 6.31    | 67    | 110617   | 45.20    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 120 | Recovery | =    | 90.40%  |
| 41) Toluene-d8                 | 7.55    | 98    | 313480   | 44.06    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 88.12%  |
| 43) trans-1,3-Dichloropropene- | 7.83    | 79    | 54974    | 45.16    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 90.32%  |
| 47) 2-Hexanone-d5              | 8.29    | 63    | 118720   | 99.20    | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 45 - 130 | Recovery | =    | 99.20%  |
| 57) 1,1,2,2-Tetrachloroethane- | 10.41   | 84    | 185653   | 49.57    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 65 - 120 | Recovery | =    | 99.14%  |
| 64) 1,2-Dichlorobenzene-d4     | 11.84   | 152   | 138620   | 45.42    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 90.84%  |

## Target Compounds

| Target Compounds               | R.T. | QIon | Response | Conc    | Units | Ovalue |
|--------------------------------|------|------|----------|---------|-------|--------|
| 2) Dichlorodifluoromethane     | 1.20 | 85   | 137463   | 51.434  | ug/L  | 100    |
| 3) Chloromethane               | 1.32 | 50   | 144271   | 49.808  | ug/L  | 99     |
| 5) Vinyl chloride              | 1.40 | 62   | 155963   | 49.212  | ug/L  | 99     |
| 6) Bromomethane                | 1.61 | 94   | 99010    | 39.110  | ug/L  | 98     |
| 8) Chloroethane                | 1.69 | 64   | 95537    | 38.335  | ug/L  | 98     |
| 9) Trichlorofluoromethane      | 1.87 | 101  | 210794   | 51.000  | ug/L  | 97     |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.27 | 101  | 107210   | 51.072  | ug/L  | 99     |
| 12) 1,1-Dichloroethene         | 2.27 | 96   | 100750   | 49.356  | ug/L  | 97     |
| 13) Acetone                    | 2.30 | 43   | 161235   | 100.042 | ug/L  | 99     |
| 14) Carbon disulfide           | 2.46 | 76   | 311618   | 49.248  | ug/L  | 100    |
| 15) Methyl Acetate             | 2.60 | 43   | 130656   | 49.649  | ug/L  | 100    |
| 16) Methylene chloride         | 2.68 | 84   | 122912   | 51.611  | ug/L  | 99     |
| 17) trans-1,2-Dichloroethene   | 2.96 | 96   | 109064   | 50.081  | ug/L  | 99     |
| 18) Methyl tert-butyl Ether    | 2.98 | 73   | 339299   | 50.310  | ug/L  | 99     |
| 19) 1,1-Dichloroethane         | 3.42 | 63   | 210057   | 51.244  | ug/L  | 97     |
| 20) cis-1,2-Dichloroethene     | 4.20 | 96   | 125422   | 52.214  | ug/L  | 100    |
| 22) 2-Butanone                 | 4.23 | 43   | 205902   | 101.711 | ug/L  | 98     |

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 Sample : VSTDCCC050EC  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 11 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD05050

Quant Time: Aug 07 05:31:12 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMULM080519WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Wed Aug 07 05:27:42 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units | Dev(Min) |
|--------------------------------|-------|------|----------|---------|-------|----------|
| 23) Bromochloromethane         | 4.52  | 128  | 64311    | 51.199  | ug/L  | 98       |
| 25) Chloroform                 | 4.65  | 83   | 221093   | 52.200  | ug/L  | 100      |
| 27) 1,2-Dichloroethane         | 5.38  | 62   | 170977   | 51.669  | ug/L  | 99       |
| 29) Cyclohexane                | 4.97  | 56   | 176730   | 49.631  | ug/L  | 100      |
| 30) 1,1,1-Trichloroethane      | 4.89  | 97   | 183668   | 50.218  | ug/L  | 99       |
| 31) Carbon tetrachloride       | 5.11  | 117  | 162831   | 50.719  | ug/L  | 100      |
| 33) Benzene                    | 5.37  | 78   | 467844   | 50.265  | ug/L  | 100      |
| 34) Trichloroethene            | 6.16  | 95   | 117828   | 49.150  | ug/L  | 99       |
| 35) Methylcyclohexane          | 6.40  | 83   | 192007   | 50.877  | ug/L  | 99       |
| 37) 1,2-Dichloropropane        | 6.41  | 63   | 127950   | 50.334  | ug/L  | 100      |
| 38) Bromodichloromethane       | 6.74  | 83   | 163136   | 50.914  | ug/L  | 100      |
| 39) cis-1,3-Dichloropropene    | 7.25  | 75   | 197099   | 50.987  | ug/L  | 99       |
| 40) 4-Methyl-2-pentanone       | 7.44  | 43   | 358884   | 98.657  | ug/L  | 99       |
| 42) Toluene                    | 7.62  | 91   | 509038   | 51.191  | ug/L  | 99       |
| 44) trans-1,3-Dichloropropene  | 7.86  | 75   | 177516   | 51.033  | ug/L  | 100      |
| 45) 1,1,2-Trichloroethane      | 8.05  | 97   | 120982   | 50.866  | ug/L  | 99       |
| 46) Tetrachloroethene          | 8.21  | 164  | 98786    | 50.225  | ug/L  | 99       |
| 48) 2-Hexanone                 | 8.34  | 43   | 295552   | 101.738 | ug/L  | 99       |
| 49) Dibromochloromethane       | 8.46  | 129  | 135559   | 50.712  | ug/L  | 97       |
| 50) 1,2-Dibromoethane          | 8.57  | 107  | 130690   | 50.168  | ug/L  | 97       |
| 51) Chlorobenzene              | 9.10  | 112  | 323633   | 49.843  | ug/L  | 100      |
| 52) Ethylbenzene               | 9.23  | 91   | 548143   | 50.842  | ug/L  | 99       |
| 53) m,p-Xylene                 | 9.36  | 106  | 212334   | 51.716  | ug/L  | 100      |
| 54) o-xylene                   | 9.76  | 106  | 206778   | 51.416  | ug/L  | 96       |
| 55) Styrene                    | 9.77  | 104  | 360829   | 52.838  | ug/L  | 98       |
| 56) Isopropylbenzene           | 10.15 | 105  | 540272   | 52.074  | ug/L  | 99       |
| 58) 1,1,2,2-Tetrachloroethane  | 10.44 | 83   | 214982   | 50.548  | ug/L  | 99       |
| 59) 1,2,3-Trichloropropane     | 10.48 | 75   | 168414   | 50.584  | ug/L  | 100      |
| 61) Bromoform                  | 9.94  | 173  | 105659   | 49.937  | ug/L  | 99       |
| 62) 1,3-Dichlorobenzene        | 11.40 | 146  | 264850   | 49.673  | ug/L  | 99       |
| 63) 1,4-Dichlorobenzene        | 11.49 | 146  | 265543   | 48.750  | ug/L  | 100      |
| 65) 1,2-Dichlorobenzene        | 11.86 | 146  | 264937   | 49.821  | ug/L  | 99       |
| 66) 1,2-Dibromo-3-chloropropan | 12.64 | 75   | 46970    | 46.868  | ug/L  | 97       |
| 67) 1,3,5-Trichlorobenzene     | 12.87 | 180  | 197516   | 48.115  | ug/L  | 100      |
| 68) 1,2,4-trichlorobenzene     | 13.49 | 180  | 166716   | 47.608  | ug/L  | 99       |
| 69) Naphthalene                | 13.73 | 128  | 491865   | 48.331  | ug/L  | 100      |
| 70) 1,2,3-Trichlorobenzene     | 13.97 | 180  | 177668   | 47.695  | ug/L  | 99       |

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

