

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU091518\  
 Data File : VU026752.D  
 Acq On : 14 Sep 2018 08:16  
 Operator : MD/SY  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 27 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD05043

Quant Time: Sep 15 00:55:01 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMULM091018WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Sat Sep 15 00:18:06 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.88  | 114  | 181705   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.09  | 117  | 178009   | 50.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.48 | 152  | 94143    | 50.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |         |       |          |          |      |        |
|--------------------------------|---------|-------|----------|----------|------|--------|
| 4) Vinyl Chloride-d3           | 1.40    | 65    | 54056    | 39.92    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 60 - 135 | Recovery | =    | 79.84% |
| 7) Chloroethane-d5             | 1.64    | 69    | 39872    | 36.54    | ug/L | -0.04  |
| Spiked Amount                  | 50.000  | Range | 70 - 130 | Recovery | =    | 73.08% |
| 11) 1,1-Dichloroethene-d2      | 2.25    | 63    | 111539   | 46.03    | ug/L | -0.02  |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 92.06% |
| 21) 2-Butanone-d5              | 4.19    | 46    | 80244    | 95.23    | ug/L | 0.00   |
| Spiked Amount                  | 100.000 | Range | 40 - 130 | Recovery | =    | 95.23% |
| 24) Chloroform-d               | 4.64    | 84    | 102728   | 45.63    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 91.26% |
| 26) 1,2-Dichloroethane-d4      | 5.31    | 65    | 66013    | 44.80    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 89.60% |
| 32) Benzene-d6                 | 5.34    | 84    | 201901   | 43.82    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 87.64% |
| 36) 1,2-Dichloropropane-d6     | 6.33    | 67    | 69322    | 44.84    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 120 | Recovery | =    | 89.68% |
| 41) Toluene-d8                 | 7.57    | 98    | 192324   | 44.49    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 88.98% |
| 43) trans-1,3-Dichloropropene- | 7.85    | 79    | 31388    | 43.67    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 87.34% |
| 47) 2-Hexanone-d5              | 8.32    | 63    | 62187    | 98.58    | ug/L | 0.00   |
| Spiked Amount                  | 100.000 | Range | 45 - 130 | Recovery | =    | 98.58% |
| 57) 1,1,2,2-Tetrachloroethane- | 10.44   | 84    | 105021   | 49.61    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 65 - 120 | Recovery | =    | 99.22% |
| 64) 1,2-Dichlorobenzene-d4     | 11.86   | 152   | 83072    | 44.26    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 88.52% |

## Target Compounds

| Target Compounds               | R.T. | QIon | Response | Conc    | Units | Ovalue |
|--------------------------------|------|------|----------|---------|-------|--------|
| 2) Dichlorodifluoromethane     | 1.20 | 85   | 56229    | 49.160  | ug/L  | 99     |
| 3) Chloromethane               | 1.32 | 50   | 69775    | 46.407  | ug/L  | 99     |
| 5) Vinyl chloride              | 1.40 | 62   | 73120    | 47.064  | ug/L  | 99     |
| 6) Bromomethane                | 1.60 | 94   | 37973    | 41.942  | ug/L  | 99     |
| 8) Chloroethane                | 1.66 | 64   | 38103    | 39.545  | ug/L  | 100    |
| 9) Trichlorofluoromethane      | 1.84 | 101  | 100479   | 51.289  | ug/L  | 99     |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.26 | 101  | 61196    | 54.852  | ug/L  | 98     |
| 12) 1,1-Dichloroethene         | 2.26 | 96   | 55499    | 51.800  | ug/L  | 94     |
| 13) Acetone                    | 2.33 | 43   | 95402    | 99.405  | ug/L  | 100    |
| 14) Carbon disulfide           | 2.45 | 76   | 164115   | 47.162  | ug/L  | 100    |
| 15) Methyl Acetate             | 2.62 | 43   | 75326    | 55.016  | ug/L  | 97     |
| 16) Methylene chloride         | 2.69 | 84   | 66581    | 52.657  | ug/L  | 98     |
| 17) trans-1,2-Dichloroethene   | 2.97 | 96   | 57829    | 50.939  | ug/L  | 98     |
| 18) Methyl tert-butyl Ether    | 3.00 | 73   | 189313   | 54.118  | ug/L  | 99     |
| 19) 1,1-Dichloroethane         | 3.44 | 63   | 117837   | 53.521  | ug/L  | 99     |
| 20) cis-1,2-Dichloroethene     | 4.22 | 96   | 67385    | 52.697  | ug/L  | 99     |
| 22) 2-Butanone                 | 4.27 | 43   | 117845   | 107.244 | ug/L  | 99     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU091518\  
 Data File : VU026752.D  
 Acq On : 14 Sep 2018 08:16  
 Operator : MD/SY  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 27 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD05043

Quant Time: Sep 15 00:55:01 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMULM091018WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Sat Sep 15 00:18:06 2018  
 Response via : Initial Calibration

| Internal Standards              | R.T.  | QIon | Response | Conc    | Units | Dev(Min) |
|---------------------------------|-------|------|----------|---------|-------|----------|
| 23) Bromochloromethane          | 4.55  | 128  | 33478    | 51.188  | ug/L  | 94       |
| 25) Chloroform                  | 4.67  | 83   | 118894   | 53.726  | ug/L  | 100      |
| 27) 1,2-Dichloroethane          | 5.40  | 62   | 95456    | 54.322  | ug/L  | 100      |
| 29) Cyclohexane                 | 4.99  | 56   | 102964   | 52.806  | ug/L  | 100      |
| 30) 1,1,1-Trichloroethane       | 4.91  | 97   | 97085    | 51.482  | ug/L  | 99       |
| 31) Carbon tetrachloride        | 5.13  | 117  | 87552    | 51.364  | ug/L  | 98       |
| 33) Benzene                     | 5.39  | 78   | 260445   | 52.247  | ug/L  | 100      |
| 34) Trichloroethene             | 6.18  | 95   | 63769    | 51.468  | ug/L  | 97       |
| 35) Methylcyclohexane           | 6.41  | 83   | 105931   | 53.412  | ug/L  | 100      |
| 37) 1,2-Dichloropropane         | 6.43  | 63   | 74401    | 53.426  | ug/L  | 100      |
| 38) Bromodichloromethane        | 6.76  | 83   | 90891    | 53.258  | ug/L  | 99       |
| 39) cis-1,3-Dichloropropene     | 7.27  | 75   | 108836   | 52.815  | ug/L  | 100      |
| 40) 4-Methyl-2-pentanone        | 7.47  | 43   | 205322   | 115.584 | ug/L  | 99       |
| 42) Toluene                     | 7.64  | 91   | 273169   | 52.871  | ug/L  | 99       |
| 44) trans-1,3-Dichloropropene   | 7.88  | 75   | 103337   | 53.903  | ug/L  | 99       |
| 45) 1,1,2-Trichloroethane       | 8.07  | 97   | 68361    | 55.341  | ug/L  | 99       |
| 46) Tetrachloroethene           | 8.23  | 164  | 53355    | 51.239  | ug/L  | 99       |
| 48) 2-Hexanone                  | 8.37  | 43   | 177522   | 118.367 | ug/L  | 99       |
| 49) Dibromochloromethane        | 8.48  | 129  | 78122    | 54.715  | ug/L  | 99       |
| 50) 1,2-Dibromoethane           | 8.59  | 107  | 70670    | 53.481  | ug/L  | 99       |
| 51) Chlorobenzene               | 9.12  | 112  | 183280   | 54.025  | ug/L  | 99       |
| 52) Ethylbenzene                | 9.25  | 91   | 300771   | 53.827  | ug/L  | 99       |
| 53) m,p-Xylene                  | 9.38  | 106  | 114929   | 54.549  | ug/L  | 99       |
| 54) o-xylene                    | 9.78  | 106  | 116889   | 55.900  | ug/L  | 99       |
| 55) Styrene                     | 9.79  | 104  | 200919   | 56.803  | ug/L  | 98       |
| 56) Isopropylbenzene            | 10.17 | 105  | 302653   | 56.818  | ug/L  | 99       |
| 58) 1,1,1,2,2-Tetrachloroethane | 10.46 | 83   | 127157   | 59.420  | ug/L  | 100      |
| 59) 1,2,3-Trichloropropane      | 10.50 | 75   | 95608    | 58.025  | ug/L  | 100      |
| 61) Bromoform                   | 9.96  | 173  | 63237    | 54.528  | ug/L  | 99       |
| 62) 1,3-Dichlorobenzene         | 11.42 | 146  | 145948   | 53.992  | ug/L  | 99       |
| 63) 1,4-Dichlorobenzene         | 11.51 | 146  | 155404   | 54.269  | ug/L  | 100      |
| 65) 1,2-Dichlorobenzene         | 11.88 | 146  | 161008   | 56.358  | ug/L  | 99       |
| 66) 1,2-Dibromo-3-chloropropan  | 12.66 | 75   | 23885    | 51.750  | ug/L  | 98       |
| 67) 1,3,5-Trichlorobenzene      | 12.89 | 180  | 114955   | 53.612  | ug/L  | 99       |
| 68) 1,2,4-trichlorobenzene      | 13.50 | 180  | 94874    | 50.908  | ug/L  | 99       |
| 69) Naphthalene                 | 13.75 | 128  | 290796   | 50.921  | ug/L  | 100      |
| 70) 1,2,3-Trichlorobenzene      | 13.99 | 180  | 102216   | 50.634  | ug/L  | 100      |

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

