

Data Path : Z:\voasrv\HPCHEM1\MSVOA U\Data\VU050219\  
 Data File : VU031699.D  
 Acq On : 02 May 2019 09:57  
 Operator : JC/SP  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD05060

Quant Time: May 03 04:37:12 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMULM042719WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Thu May 02 02:23:23 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.88  | 114  | 935405   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.09  | 117  | 879522   | 50.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.48 | 152  | 402027   | 50.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |         |       |          |          |      |         |
|--------------------------------|---------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.40    | 65    | 372743   | 47.61    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 135 | Recovery | =    | 95.22%  |
| 7) Chloroethane-d5             | 1.68    | 69    | 288768   | 47.73    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 130 | Recovery | =    | 95.46%  |
| 11) 1,1-Dichloroethene-d2      | 2.27    | 63    | 708296   | 45.43    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 90.86%  |
| 21) 2-Butanone-d5              | 4.19    | 46    | 709877   | 100.08   | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 40 - 130 | Recovery | =    | 100.08% |
| 24) Chloroform-d               | 4.64    | 84    | 634121   | 44.23    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 88.46%  |
| 26) 1,2-Dichloroethane-d4      | 5.31    | 65    | 401408   | 42.85    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 85.70%  |
| 32) Benzene-d6                 | 5.33    | 84    | 1260799  | 46.68    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 93.36%  |
| 36) 1,2-Dichloropropane-d6     | 6.32    | 67    | 438930   | 46.19    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 120 | Recovery | =    | 92.38%  |
| 41) Toluene-d8                 | 7.56    | 98    | 1083151  | 46.05    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 92.10%  |
| 43) trans-1,3-Dichloropropene- | 7.85    | 79    | 197473   | 48.41    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 96.82%  |
| 47) 2-Hexanone-d5              | 8.31    | 63    | 462658   | 112.49   | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 45 - 130 | Recovery | =    | 112.49% |
| 57) 1,1,2,2-Tetrachloroethane- | 10.43   | 84    | 599419   | 47.01    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 65 - 120 | Recovery | =    | 94.02%  |
| 64) 1,2-Dichlorobenzene-d4     | 11.85   | 152   | 390021   | 46.13    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 92.26%  |

## Target Compounds

|                                |      |     |         |         | Ovalue   |
|--------------------------------|------|-----|---------|---------|----------|
| 2) Dichlorodifluoromethane     | 1.20 | 85  | 429219  | 41.728  | ug/L 99  |
| 3) Chloromethane               | 1.32 | 50  | 516733  | 41.521  | ug/L 99  |
| 5) Vinyl chloride              | 1.40 | 62  | 495193  | 42.559  | ug/L 100 |
| 6) Bromomethane                | 1.63 | 94  | 251051  | 40.914  | ug/L 100 |
| 8) Chloroethane                | 1.70 | 64  | 284000  | 44.653  | ug/L 98  |
| 9) Trichlorofluoromethane      | 1.88 | 101 | 556531  | 41.958  | ug/L 98  |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.28 | 101 | 333253  | 44.445  | ug/L 99  |
| 12) 1,1-Dichloroethene         | 2.28 | 96  | 321204  | 44.012  | ug/L 95  |
| 13) Acetone                    | 2.34 | 43  | 708532  | 88.679  | ug/L 100 |
| 14) Carbon disulfide           | 2.47 | 76  | 997208  | 41.177  | ug/L 100 |
| 15) Methyl Acetate             | 2.62 | 43  | 551561  | 45.623  | ug/L 97  |
| 16) Methylene chloride         | 2.70 | 84  | 385133  | 44.717  | ug/L 99  |
| 17) trans-1,2-Dichloroethene   | 2.98 | 96  | 342265  | 45.008  | ug/L 96  |
| 18) Methyl tert-butyl Ether    | 2.99 | 73  | 1212673 | 50.053  | ug/L 99  |
| 19) 1,1-Dichloroethane         | 3.44 | 63  | 740097  | 46.212  | ug/L 99  |
| 20) cis-1,2-Dichloroethene     | 4.22 | 96  | 396095  | 48.557  | ug/L 99  |
| 22) 2-Butanone                 | 4.27 | 43  | 910473  | 102.855 | ug/L 98  |

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 Acq On : 02 May 2019 09:57  
 Operator : JC/SP  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD05060

Quant Time: May 03 04:37:12 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMULM042719WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Thu May 02 02:23:23 2019  
 Response via : Initial Calibration

| Internal Standards              | R.T.  | QIon | Response | Conc    | Units | Dev(Min) |
|---------------------------------|-------|------|----------|---------|-------|----------|
| 23) Bromochloromethane          | 4.55  | 128  | 181755   | 45.854  | ug/L  | 95       |
| 25) Chloroform                  | 4.67  | 83   | 687116   | 44.866  | ug/L  | 100      |
| 27) 1,2-Dichloroethane          | 5.40  | 62   | 549919   | 44.208  | ug/L  | 99       |
| 29) Cyclohexane                 | 4.99  | 56   | 700695   | 50.338  | ug/L  | 98       |
| 30) 1,1,1-Trichloroethane       | 4.91  | 97   | 552082   | 44.801  | ug/L  | 100      |
| 31) Carbon tetrachloride        | 5.13  | 117  | 465725   | 44.216  | ug/L  | 100      |
| 33) Benzene                     | 5.38  | 78   | 1569732  | 48.544  | ug/L  | 100      |
| 34) Trichloroethene             | 6.18  | 95   | 386730   | 49.337  | ug/L  | 98       |
| 35) Methylcyclohexane           | 6.41  | 83   | 610098   | 51.935  | ug/L  | 96       |
| 37) 1,2-Dichloropropane         | 6.43  | 63   | 443106   | 48.268  | ug/L  | 99       |
| 38) Bromodichloromethane        | 6.75  | 83   | 511170   | 45.924  | ug/L  | 96       |
| 39) cis-1,3-Dichloropropene     | 7.26  | 75   | 653760   | 53.895  | ug/L  | 100      |
| 40) 4-Methyl-2-pentanone        | 7.46  | 43   | 1476929  | 104.570 | ug/L  | 99       |
| 42) Toluene                     | 7.63  | 91   | 1584778  | 49.199  | ug/L  | 98       |
| 44) trans-1,3-Dichloropropene   | 7.87  | 75   | 555974   | 50.533  | ug/L  | 100      |
| 45) 1,1,2-Trichloroethane       | 8.06  | 97   | 370297   | 48.929  | ug/L  | 99       |
| 46) Tetrachloroethene           | 8.22  | 164  | 258884   | 48.446  | ug/L  | 94       |
| 48) 2-Hexanone                  | 8.36  | 43   | 1199417  | 104.998 | ug/L  | 98       |
| 49) Dibromochloromethane        | 8.47  | 129  | 370681   | 47.074  | ug/L  | 98       |
| 50) 1,2-Dibromoethane           | 8.58  | 107  | 393604   | 49.244  | ug/L  | 97       |
| 51) Chlorobenzene               | 9.12  | 112  | 952208   | 50.024  | ug/L  | 99       |
| 52) Ethylbenzene                | 9.24  | 91   | 1760100  | 52.677  | ug/L  | 100      |
| 53) m,p-Xylene                  | 9.37  | 106  | 627653   | 53.915  | ug/L  | 95       |
| 54) o-xylene                    | 9.77  | 106  | 624048   | 54.070  | ug/L  | 95       |
| 55) Styrene                     | 9.79  | 104  | 1063242  | 53.921  | ug/L  | 99       |
| 56) Isopropylbenzene            | 10.16 | 105  | 1640232  | 54.045  | ug/L  | 100      |
| 58) 1,1,1,2,2-Tetrachloroethane | 10.45 | 83   | 650226   | 48.418  | ug/L  | 99       |
| 59) 1,2,3-Trichloropropane      | 10.49 | 75   | 527554   | 48.470  | ug/L  | 98       |
| 61) Bromoform                   | 9.95  | 173  | 268831   | 45.110  | ug/L  | 100      |
| 62) 1,3-Dichlorobenzene         | 11.41 | 146  | 676641   | 50.845  | ug/L  | 100      |
| 63) 1,4-Dichlorobenzene         | 11.50 | 146  | 692218   | 50.226  | ug/L  | 98       |
| 65) 1,2-Dichlorobenzene         | 11.87 | 146  | 695073   | 49.144  | ug/L  | 98       |
| 66) 1,2-Dibromo-3-chloropropan  | 12.65 | 75   | 148154   | 45.134  | ug/L  | 92       |
| 67) 1,3,5-Trichlorobenzene      | 12.88 | 180  | 493238   | 49.485  | ug/L  | 99       |
| 68) 1,2,4-trichlorobenzene      | 13.50 | 180  | 422746   | 53.575  | ug/L  | 98       |
| 69) Naphthalene                 | 13.74 | 128  | 1576997  | 58.616  | ug/L  | 100      |
| 70) 1,2,3-Trichlorobenzene      | 13.98 | 180  | 435497   | 48.477  | ug/L  | 98       |

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

