

Data Path : Z:\voasrv\HPCHEM1\MSVOA U\Data\VU051019\  
 Data File : VU031877.D  
 Acq On : 10 May 2019 10:37  
 Operator : JC/SP  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD05039

Quant Time: May 11 00:57:03 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMULM042719WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Fri May 10 05:52:46 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.88  | 114  | 1042767  | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.09  | 117  | 1037286  | 50.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.48 | 152  | 473038   | 50.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |         |       |          |          |      |        |
|--------------------------------|---------|-------|----------|----------|------|--------|
| 4) Vinyl Chloride-d3           | 1.40    | 65    | 388415   | 44.51    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 60 - 135 | Recovery | =    | 89.02% |
| 7) Chloroethane-d5             | 1.67    | 69    | 320875   | 47.58    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 130 | Recovery | =    | 95.16% |
| 11) 1,1-Dichloroethene-d2      | 2.27    | 63    | 743909   | 42.80    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 85.60% |
| 21) 2-Butanone-d5              | 4.17    | 46    | 603253   | 76.29    | ug/L | -0.01  |
| Spiked Amount                  | 100.000 | Range | 40 - 130 | Recovery | =    | 76.29% |
| 24) Chloroform-d               | 4.64    | 84    | 695135   | 43.49    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 86.98% |
| 26) 1,2-Dichloroethane-d4      | 5.30    | 65    | 438142   | 41.96    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 83.92% |
| 32) Benzene-d6                 | 5.33    | 84    | 1392047  | 43.70    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 87.40% |
| 36) 1,2-Dichloropropane-d6     | 6.32    | 67    | 460449   | 41.09    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 120 | Recovery | =    | 82.18% |
| 41) Toluene-d8                 | 7.56    | 98    | 1262678  | 45.51    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 91.02% |
| 43) trans-1,3-Dichloropropene- | 7.85    | 79    | 203370   | 42.28    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 84.56% |
| 47) 2-Hexanone-d5              | 8.31    | 63    | 429455   | 88.54    | ug/L | 0.00   |
| Spiked Amount                  | 100.000 | Range | 45 - 130 | Recovery | =    | 88.54% |
| 57) 1,1,2,2-Tetrachloroethane- | 10.43   | 84    | 666327   | 44.31    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 65 - 120 | Recovery | =    | 88.62% |
| 64) 1,2-Dichlorobenzene-d4     | 11.85   | 152   | 452309   | 45.47    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 90.94% |

## Target Compounds

|                                |      |     |         |        | Ovalue    |
|--------------------------------|------|-----|---------|--------|-----------|
| 2) Dichlorodifluoromethane     | 1.20 | 85  | 510310  | 44.504 | ug/L 100  |
| 3) Chloromethane               | 1.32 | 50  | 556667  | 40.124 | ug/L 99   |
| 5) Vinyl chloride              | 1.40 | 62  | 563365  | 43.433 | ug/L 99   |
| 6) Bromomethane                | 1.61 | 94  | 316886  | 46.327 | ug/L 99   |
| 8) Chloroethane                | 1.69 | 64  | 330233  | 46.576 | ug/L 99   |
| 9) Trichlorofluoromethane      | 1.88 | 101 | 634102  | 42.884 | ug/L 98   |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.28 | 101 | 384289  | 45.975 | ug/L 99   |
| 12) 1,1-Dichloroethene         | 2.28 | 96  | 374537  | 46.036 | ug/L 82   |
| 13) Acetone                    | 2.32 | 43  | 693487  | 77.859 | ug/L 97   |
| 14) Carbon disulfide           | 2.47 | 76  | 1192076 | 44.155 | ug/L 100  |
| 15) Methyl Acetate             | 2.61 | 43  | 468697  | 34.777 | ug/L # 90 |
| 16) Methylene chloride         | 2.70 | 84  | 441464  | 45.980 | ug/L 90   |
| 17) trans-1,2-Dichloroethene   | 2.98 | 96  | 386762  | 45.623 | ug/L 90   |
| 18) Methyl tert-butyl Ether    | 2.99 | 73  | 1194199 | 44.215 | ug/L 96   |
| 19) 1,1-Dichloroethane         | 3.44 | 63  | 771718  | 43.225 | ug/L 99   |
| 20) cis-1,2-Dichloroethene     | 4.22 | 96  | 429407  | 47.221 | ug/L 95   |
| 22) 2-Butanone                 | 4.26 | 43  | 788547  | 79.910 | ug/L 89   |

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 Quant Title : VOC Analysis  
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 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|--------|--------|----------|
| 23) Bromochloromethane         | 4.54  | 128  | 200661   | 45.411 | ug/L   | 85       |
| 25) Chloroform                 | 4.67  | 83   | 740473   | 43.372 | ug/L   | 100      |
| 27) 1,2-Dichloroethane         | 5.40  | 62   | 600070   | 43.272 | ug/L   | 99       |
| 29) Cyclohexane                | 4.99  | 56   | 702148   | 42.770 | ug/L   | 91       |
| 30) 1,1,1-Trichloroethane      | 4.91  | 97   | 580395   | 39.935 | ug/L   | 99       |
| 31) Carbon tetrachloride       | 5.13  | 117  | 492396   | 39.638 | ug/L   | 99       |
| 33) Benzene                    | 5.38  | 78   | 1722733  | 45.172 | ug/L   | 100      |
| 34) Trichloroethene            | 6.18  | 95   | 417713   | 45.185 | ug/L   | 99       |
| 35) Methylcyclohexane          | 6.41  | 83   | 701032   | 50.600 | ug/L   | 93       |
| 37) 1,2-Dichloropropane        | 6.43  | 63   | 466604   | 43.097 | ug/L   | 99       |
| 38) Bromodichloromethane       | 6.75  | 83   | 552928   | 42.120 | ug/L   | 98       |
| 39) cis-1,3-Dichloropropene    | 7.26  | 75   | 674817   | 47.170 | ug/L   | 99       |
| 40) 4-Methyl-2-pentanone       | 7.45  | 43   | 1255051  | 75.345 | ug/L # | 94       |
| 42) Toluene                    | 7.63  | 91   | 1820867  | 47.931 | ug/L   | 97       |
| 44) trans-1,3-Dichloropropene  | 7.87  | 75   | 577967   | 44.542 | ug/L   | 100      |
| 45) 1,1,2-Trichloroethane      | 8.06  | 97   | 407637   | 45.671 | ug/L   | 99       |
| 46) Tetrachloroethene          | 8.22  | 164  | 289206   | 45.889 | ug/L   | 98       |
| 48) 2-Hexanone                 | 8.36  | 43   | 1100290  | 81.671 | ug/L   | 96       |
| 49) Dibromochloromethane       | 8.47  | 129  | 411204   | 44.278 | ug/L   | 99       |
| 50) 1,2-Dibromoethane          | 8.58  | 107  | 429817   | 45.596 | ug/L   | 97       |
| 51) Chlorobenzene              | 9.12  | 112  | 1067037  | 47.531 | ug/L   | 97       |
| 52) Ethylbenzene               | 9.24  | 91   | 1937217  | 49.160 | ug/L   | 99       |
| 53) m,p-Xylene                 | 9.37  | 106  | 705406   | 51.378 | ug/L   | 96       |
| 54) o-xylene                   | 9.77  | 106  | 707896   | 52.006 | ug/L   | 93       |
| 55) Styrene                    | 9.79  | 104  | 1226800  | 52.753 | ug/L   | 97       |
| 56) Isopropylbenzene           | 10.16 | 105  | 1800858  | 50.313 | ug/L   | 99       |
| 58) 1,1,2,2-Tetrachloroethane  | 10.45 | 83   | 715686   | 45.187 | ug/L   | 98       |
| 59) 1,2,3-Trichloropropane     | 10.49 | 75   | 557322   | 43.417 | ug/L   | 99       |
| 61) Bromoform                  | 9.95  | 173  | 288271   | 41.111 | ug/L   | 99       |
| 62) 1,3-Dichlorobenzene        | 11.41 | 146  | 754928   | 48.212 | ug/L   | 99       |
| 63) 1,4-Dichlorobenzene        | 11.50 | 146  | 800378   | 49.356 | ug/L   | 97       |
| 65) 1,2-Dichlorobenzene        | 11.87 | 146  | 810961   | 48.731 | ug/L   | 98       |
| 66) 1,2-Dibromo-3-chloropropan | 12.65 | 75   | 161705   | 41.867 | ug/L   | 89       |
| 67) 1,3,5-Trichlorobenzene     | 12.88 | 180  | 580658   | 49.511 | ug/L   | 99       |
| 68) 1,2,4-trichlorobenzene     | 13.50 | 180  | 489735   | 52.747 | ug/L   | 100      |
| 69) Naphthalene                | 13.74 | 128  | 1704508  | 53.845 | ug/L   | 100      |
| 70) 1,2,3-Trichlorobenzene     | 13.98 | 180  | 532675   | 50.393 | ug/L   | 100      |

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

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