

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU062519\  
 Data File : VU033038.D  
 Acq On : 25 Jun 2019 08:35  
 Operator : JC/SP  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD05039

Quant Time: Jun 26 07:05:55 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMULM061719WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Tue Jun 25 06:54:49 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.88  | 114  | 186208   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.08  | 117  | 185070   | 50.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.48 | 152  | 96979    | 50.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |         |       |          |          |      |         |
|--------------------------------|---------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.40    | 65    | 53902    | 42.36    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 135 | Recovery | =    | 84.72%  |
| 7) Chloroethane-d5             | 1.67    | 69    | 47272    | 46.58    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 130 | Recovery | =    | 93.16%  |
| 11) 1,1-Dichloroethene-d2      | 2.27    | 63    | 123537   | 48.19    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 96.38%  |
| 21) 2-Butanone-d5              | 4.17    | 46    | 117850   | 111.26   | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 40 - 130 | Recovery | =    | 111.26% |
| 24) Chloroform-d               | 4.64    | 84    | 128858   | 52.09    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 104.18% |
| 26) 1,2-Dichloroethane-d4      | 5.30    | 65    | 85749    | 52.04    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 104.08% |
| 32) Benzene-d6                 | 5.33    | 84    | 235471   | 48.81    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 97.62%  |
| 36) 1,2-Dichloropropane-d6     | 6.32    | 67    | 78525    | 51.09    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 120 | Recovery | =    | 102.18% |
| 41) Toluene-d8                 | 7.56    | 98    | 222266   | 49.20    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 98.40%  |
| 43) trans-1,3-Dichloropropene- | 7.84    | 79    | 39588    | 49.52    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 99.04%  |
| 47) 2-Hexanone-d5              | 8.31    | 63    | 72863    | 101.54   | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 45 - 130 | Recovery | =    | 101.54% |
| 57) 1,1,2,2-Tetrachloroethane- | 10.42   | 84    | 119874   | 50.46    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 65 - 120 | Recovery | =    | 100.92% |
| 64) 1,2-Dichlorobenzene-d4     | 11.85   | 152   | 95857    | 51.08    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 102.16% |

## Target Compounds

|                                |      |     |        |         | Ovalue   |
|--------------------------------|------|-----|--------|---------|----------|
| 2) Dichlorodifluoromethane     | 1.20 | 85  | 101307 | 53.860  | ug/L 100 |
| 3) Chloromethane               | 1.32 | 50  | 83457  | 48.955  | ug/L 100 |
| 5) Vinyl chloride              | 1.40 | 62  | 85801  | 50.742  | ug/L 100 |
| 6) Bromomethane                | 1.62 | 94  | 54096  | 54.368  | ug/L 94  |
| 8) Chloroethane                | 1.69 | 64  | 50005  | 51.374  | ug/L 100 |
| 9) Trichlorofluoromethane      | 1.88 | 101 | 123350 | 51.997  | ug/L 99  |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.28 | 101 | 65327  | 52.501  | ug/L 98  |
| 12) 1,1-Dichloroethene         | 2.28 | 96  | 58352  | 49.763  | ug/L 96  |
| 13) Acetone                    | 2.32 | 43  | 140300 | 95.900  | ug/L 96  |
| 14) Carbon disulfide           | 2.47 | 76  | 178426 | 48.088  | ug/L 99  |
| 15) Methyl Acetate             | 2.61 | 43  | 91599  | 55.235  | ug/L 98  |
| 16) Methylene chloride         | 2.69 | 84  | 71731  | 52.132  | ug/L 98  |
| 17) trans-1,2-Dichloroethene   | 2.97 | 96  | 64313  | 50.576  | ug/L 96  |
| 18) Methyl tert-butyl Ether    | 2.99 | 73  | 216581 | 53.050  | ug/L 98  |
| 19) 1,1-Dichloroethane         | 3.44 | 63  | 130478 | 53.822  | ug/L 100 |
| 20) cis-1,2-Dichloroethene     | 4.22 | 96  | 73134  | 52.794  | ug/L 95  |
| 22) 2-Butanone                 | 4.25 | 43  | 154176 | 101.676 | ug/L 98  |

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 ClientSampleId :  
 VSTD05039

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 Quant Title : VOC Analysis  
 QLast Update : Tue Jun 25 06:54:49 2019  
 Response via : Initial Calibration

| Internal Standards              | R.T.  | QIon | Response | Conc    | Units | Dev(Min) |
|---------------------------------|-------|------|----------|---------|-------|----------|
| 23) Bromochloromethane          | 4.54  | 128  | 38473    | 53.238  | ug/L  | 97       |
| 25) Chloroform                  | 4.67  | 83   | 135062   | 54.025  | ug/L  | 98       |
| 27) 1,2-Dichloroethane          | 5.40  | 62   | 115690   | 56.331  | ug/L  | 98       |
| 29) Cyclohexane                 | 4.99  | 56   | 109924   | 50.868  | ug/L  | 99       |
| 30) 1,1,1-Trichloroethane       | 4.91  | 97   | 118387   | 52.505  | ug/L  | 98       |
| 31) Carbon tetrachloride        | 5.13  | 117  | 107558   | 52.427  | ug/L  | 100      |
| 33) Benzene                     | 5.38  | 78   | 278653   | 52.266  | ug/L  | 100      |
| 34) Trichloroethene             | 6.18  | 95   | 74239    | 52.117  | ug/L  | 98       |
| 35) Methylcyclohexane           | 6.41  | 83   | 117132   | 53.197  | ug/L  | 99       |
| 37) 1,2-Dichloropropane         | 6.42  | 63   | 77148    | 52.753  | ug/L  | 100      |
| 38) Bromodichloromethane        | 6.75  | 83   | 102777   | 52.265  | ug/L  | 100      |
| 39) cis-1,3-Dichloropropene     | 7.26  | 75   | 121861   | 53.485  | ug/L  | 98       |
| 40) 4-Methyl-2-pentanone        | 7.45  | 43   | 252080   | 107.965 | ug/L  | 98       |
| 42) Toluene                     | 7.63  | 91   | 305565   | 52.973  | ug/L  | 100      |
| 44) trans-1,3-Dichloropropene   | 7.87  | 75   | 112089   | 52.377  | ug/L  | 98       |
| 45) 1,1,2-Trichloroethane       | 8.06  | 97   | 72461    | 53.234  | ug/L  | 99       |
| 46) Tetrachloroethene           | 8.22  | 164  | 61444    | 52.640  | ug/L  | 98       |
| 48) 2-Hexanone                  | 8.36  | 43   | 213062   | 103.426 | ug/L  | 99       |
| 49) Dibromochloromethane        | 8.47  | 129  | 84429    | 51.451  | ug/L  | 99       |
| 50) 1,2-Dibromoethane           | 8.58  | 107  | 77798    | 51.465  | ug/L  | 99       |
| 51) Chlorobenzene               | 9.11  | 112  | 196697   | 51.819  | ug/L  | 98       |
| 52) Ethylbenzene                | 9.24  | 91   | 337499   | 52.858  | ug/L  | 100      |
| 53) m,p-Xylene                  | 9.37  | 106  | 125762   | 52.205  | ug/L  | 95       |
| 54) o-xylene                    | 9.77  | 106  | 126536   | 53.786  | ug/L  | 98       |
| 55) Styrene                     | 9.78  | 104  | 214982   | 52.675  | ug/L  | 95       |
| 56) Isopropylbenzene            | 10.16 | 105  | 332057   | 52.374  | ug/L  | 99       |
| 58) 1,1,1,2,2-Tetrachloroethane | 10.45 | 83   | 127992   | 51.965  | ug/L  | 98       |
| 59) 1,2,3-Trichloropropane      | 10.49 | 75   | 102784   | 52.665  | ug/L  | 100      |
| 61) Bromoform                   | 9.95  | 173  | 64148    | 50.657  | ug/L  | 100      |
| 62) 1,3-Dichlorobenzene         | 11.41 | 146  | 155500   | 51.585  | ug/L  | 99       |
| 63) 1,4-Dichlorobenzene         | 11.50 | 146  | 160089   | 51.418  | ug/L  | 99       |
| 65) 1,2-Dichlorobenzene         | 11.87 | 146  | 163456   | 53.107  | ug/L  | 98       |
| 66) 1,2-Dibromo-3-chloropropan  | 12.65 | 75   | 30804    | 52.459  | ug/L  | 96       |
| 67) 1,3,5-Trichlorobenzene      | 12.88 | 180  | 125040   | 51.625  | ug/L  | 98       |
| 68) 1,2,4-trichlorobenzene      | 13.50 | 180  | 105809   | 50.769  | ug/L  | 99       |
| 69) Naphthalene                 | 13.74 | 128  | 302462   | 47.201  | ug/L  | 99       |
| 70) 1,2,3-Trichlorobenzene      | 13.98 | 180  | 108299   | 49.087  | ug/L  | 99       |

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

