

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU081319\  
 Data File : VU033781.D  
 Acq On : 13 Aug 2019 14:59  
 Operator : JC/SP  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD05041

Quant Time: Aug 14 04:23:09 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SFAMULM081319W.M  
 Quant Title : VOC Analysis  
 QLast Update : Wed Aug 14 04:16:08 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.86  | 114  | 455495   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.07  | 117  | 439928   | 50.00 | ug/L  | 0.00     |
| 58) 1,4-Dichlorobenzene-d4 | 11.47 | 152  | 236012   | 50.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |         |       |          |          |      |         |
|--------------------------------|---------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.39    | 65    | 189397   | 43.78    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 135 | Recovery | =    | 87.56%  |
| 7) Chloroethane-d5             | 1.67    | 69    | 182180   | 45.22    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 130 | Recovery | =    | 90.44%  |
| 11) 1,1-Dichloroethene-d2      | 2.26    | 63    | 322931   | 45.71    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 91.42%  |
| 21) 2-Butanone-d5              | 4.16    | 46    | 227142   | 94.38    | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 40 - 130 | Recovery | =    | 94.38%  |
| 24) Chloroform-d               | 4.62    | 84    | 298335   | 44.16    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 88.32%  |
| 26) 1,2-Dichloroethane-d4      | 5.29    | 65    | 184260   | 44.06    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 88.12%  |
| 32) Benzene-d6                 | 5.32    | 84    | 591810   | 46.96    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 93.92%  |
| 36) 1,2-Dichloropropane-d6     | 6.31    | 67    | 186949   | 45.90    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 120 | Recovery | =    | 91.80%  |
| 41) Toluene-d8                 | 7.55    | 98    | 559302   | 47.59    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 95.18%  |
| 43) trans-1,3-Dichloropropene- | 7.83    | 79    | 93510    | 48.11    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 96.22%  |
| 47) 2-Hexanone-d5              | 8.30    | 63    | 166765   | 102.33   | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 45 - 130 | Recovery | =    | 102.33% |
| 56) 1,1,2,2-Tetrachloroethane- | 10.41   | 84    | 268559   | 46.20    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 65 - 120 | Recovery | =    | 92.40%  |
| 66) 1,2-Dichlorobenzene-d4     | 11.85   | 152   | 223039   | 46.78    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 93.56%  |

## Target Compounds

| Target Compounds               | R.T. | QIon | Response | Conc    | Units | Ovalue |
|--------------------------------|------|------|----------|---------|-------|--------|
| 2) Dichlorodifluoromethane     | 1.20 | 85   | 221006   | 48.674  | ug/L  | 99     |
| 3) Chloromethane               | 1.32 | 50   | 220696   | 46.815  | ug/L  | 98     |
| 5) Vinyl chloride              | 1.39 | 62   | 243162   | 47.634  | ug/L  | 98     |
| 6) Bromomethane                | 1.62 | 94   | 159412   | 42.544  | ug/L  | 99     |
| 8) Chloroethane                | 1.69 | 64   | 175463   | 48.093  | ug/L  | 98     |
| 9) Trichlorofluoromethane      | 1.87 | 101  | 315592   | 48.113  | ug/L  | 100    |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.27 | 101  | 158708   | 49.435  | ug/L  | 97     |
| 12) 1,1-Dichloroethene         | 2.27 | 96   | 154941   | 49.052  | ug/L  | 94     |
| 13) Acetone                    | 2.32 | 43   | 227091   | 103.597 | ug/L  | 95     |
| 14) Carbon disulfide           | 2.46 | 76   | 481820   | 48.183  | ug/L  | 100    |
| 15) Methyl Acetate             | 2.60 | 43   | 171361   | 46.766  | ug/L  | 100    |
| 16) Methylene chloride         | 2.68 | 84   | 172159   | 47.739  | ug/L  | 97     |
| 17) trans-1,2-Dichloroethene   | 2.96 | 96   | 160900   | 48.946  | ug/L  | 99     |
| 18) Methyl tert-butyl Ether    | 2.98 | 73   | 491220   | 50.270  | ug/L  | 99     |
| 19) 1,1-Dichloroethane         | 3.42 | 63   | 297609   | 47.118  | ug/L  | 98     |
| 20) cis-1,2-Dichloroethene     | 4.20 | 96   | 177857   | 49.272  | ug/L  | 97     |
| 22) 2-Butanone                 | 4.24 | 43   | 273816   | 102.823 | ug/L  | 99     |

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 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD05041

Quant Time: Aug 14 04:23:09 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SFAMULM081319W.M  
 Quant Title : VOC Analysis  
 QLast Update : Wed Aug 14 04:16:08 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units | Dev(Min) |
|--------------------------------|-------|------|----------|---------|-------|----------|
| 23) Bromochloromethane         | 4.52  | 128  | 91686    | 49.019  | ug/L  | 94       |
| 25) Chloroform                 | 4.65  | 83   | 303440   | 46.225  | ug/L  | 99       |
| 27) 1,2-Dichloroethane         | 5.38  | 62   | 239240   | 46.917  | ug/L  | 98       |
| 29) Cyclohexane                | 4.97  | 56   | 261515   | 54.085  | ug/L  | 99       |
| 30) 1,1,1-Trichloroethane      | 4.89  | 97   | 260478   | 48.273  | ug/L  | 98       |
| 31) Carbon tetrachloride       | 5.11  | 117  | 240743   | 50.234  | ug/L  | 98       |
| 33) Benzene                    | 5.36  | 78   | 673046   | 50.005  | ug/L  | 100      |
| 34) Trichloroethene            | 6.16  | 95   | 175709   | 49.277  | ug/L  | 98       |
| 35) Methylcyclohexane          | 6.40  | 83   | 280088   | 53.893  | ug/L  | 97       |
| 37) 1,2-Dichloropropane        | 6.41  | 63   | 177622   | 48.431  | ug/L  | 100      |
| 38) Bromodichloromethane       | 6.74  | 83   | 228269   | 48.236  | ug/L  | 100      |
| 39) cis-1,3-Dichloropropene    | 7.25  | 75   | 278256   | 51.398  | ug/L  | 100      |
| 40) 4-Methyl-2-pentanone       | 7.44  | 43   | 455834   | 99.894  | ug/L  | 98       |
| 42) Toluene                    | 7.62  | 91   | 727313   | 51.164  | ug/L  | 100      |
| 44) trans-1,3-Dichloropropene  | 7.86  | 75   | 254113   | 51.532  | ug/L  | 99       |
| 45) 1,1,2-Trichloroethane      | 8.05  | 97   | 167046   | 48.261  | ug/L  | 99       |
| 46) Tetrachloroethene          | 8.21  | 164  | 146888   | 52.525  | ug/L  | 98       |
| 48) 2-Hexanone                 | 8.34  | 43   | 380487   | 108.933 | ug/L  | 99       |
| 49) Dibromochloromethane       | 8.46  | 129  | 192894   | 49.917  | ug/L  | 100      |
| 50) 1,2-Dibromoethane          | 8.57  | 107  | 182956   | 50.386  | ug/L  | 100      |
| 51) Chlorobenzene              | 9.10  | 112  | 464959   | 50.259  | ug/L  | 99       |
| 52) Ethylbenzene               | 9.23  | 91   | 781424   | 52.241  | ug/L  | 100      |
| 53) m,p-Xylene                 | 9.36  | 106  | 299599   | 53.581  | ug/L  | 99       |
| 54) o-xylene                   | 9.76  | 106  | 293499   | 53.355  | ug/L  | 96       |
| 55) Styrene                    | 9.77  | 104  | 504296   | 54.005  | ug/L  | 98       |
| 57) 1,1,2,2-Tetrachloroethane  | 10.44 | 83   | 277740   | 47.976  | ug/L  | 99       |
| 59) Bromoform                  | 9.94  | 173  | 147274   | 48.843  | ug/L  | 100      |
| 60) 1,2,3-Trichloropropane     | 10.48 | 75   | 223917   | 47.152  | ug/L  | 99       |
| 61) Isopropylbenzene           | 10.15 | 105  | 766347   | 52.449  | ug/L  | 100      |
| 62) 1,3,5-Trimethylbenzene     | 10.76 | 105  | 644220   | 54.615  | ug/L  | 99       |
| 63) 1,2,4-Trimethylbenzene     | 11.13 | 105  | 647913   | 55.358  | ug/L  | 99       |
| 64) 1,3-Dichlorobenzene        | 11.40 | 146  | 377713   | 51.530  | ug/L  | 99       |
| 65) 1,4-Dichlorobenzene        | 11.49 | 146  | 384103   | 51.127  | ug/L  | 100      |
| 67) 1,2-Dichlorobenzene        | 11.86 | 146  | 375435   | 50.403  | ug/L  | 99       |
| 68) 1,2-Dibromo-3-chloropropan | 12.64 | 75   | 64353    | 48.592  | ug/L  | 97       |
| 69) 1,3,5-Trichlorobenzene     | 12.87 | 180  | 298445   | 53.903  | ug/L  | 99       |
| 70) 1,2,4-trichlorobenzene     | 13.49 | 180  | 263462   | 57.373  | ug/L  | 98       |
| 71) Naphthalene                | 13.73 | 128  | 804308   | 58.841  | ug/L  | 99       |
| 72) 1,2,3-Trichlorobenzene     | 13.97 | 180  | 269519   | 55.991  | ug/L  | 99       |

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

