

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV121719\  
 Data File : VV014082.D  
 Acq On : 17 Dec 2019 10:02  
 Operator : SY/MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA V/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD05084

Quant Time: Dec 18 06:02:38 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM120219WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Mon Dec 16 03:03:29 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.66  | 114  | 716023   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.89  | 117  | 702000   | 50.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.29 | 152  | 389592   | 50.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |         |       |          |          |      |         |
|--------------------------------|---------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.32    | 65    | 261406   | 63.12    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 135 | Recovery | =    | 126.24% |
| 7) Chloroethane-d5             | 1.56    | 69    | 230186   | 53.25    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 130 | Recovery | =    | 106.50% |
| 11) 1,1-Dichloroethene-d2      | 2.13    | 63    | 466538   | 50.95    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 101.90% |
| 21) 2-Butanone-d5              | 3.91    | 46    | 301572   | 103.46   | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 40 - 130 | Recovery | =    | 103.46% |
| 24) Chloroform-d               | 4.39    | 84    | 486405   | 55.93    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 111.86% |
| 26) 1,2-Dichloroethane-d4      | 5.07    | 65    | 293914   | 53.33    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 106.66% |
| 32) Benzene-d6                 | 5.09    | 84    | 955063   | 52.50    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 105.00% |
| 36) 1,2-Dichloropropane-d6     | 6.11    | 67    | 293619   | 53.77    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 120 | Recovery | =    | 107.54% |
| 41) Toluene-d8                 | 7.35    | 98    | 889513   | 53.64    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 107.28% |
| 43) trans-1,3-Dichloropropene- | 7.66    | 79    | 130367   | 49.07    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 98.14%  |
| 47) 2-Hexanone-d5              | 8.12    | 63    | 232595   | 114.08   | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 45 - 130 | Recovery | =    | 114.08% |
| 57) 1,1,2,2-Tetrachloroethane- | 10.25   | 84    | 404449   | 51.15    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 65 - 120 | Recovery | =    | 102.30% |
| 64) 1,2-Dichlorobenzene-d4     | 11.67   | 152   | 376370   | 49.19    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 98.38%  |

## Target Compounds

|                                |      |     |        |         | Ovalue   |
|--------------------------------|------|-----|--------|---------|----------|
| 2) Dichlorodifluoromethane     | 1.14 | 85  | 305667 | 47.944  | ug/L 100 |
| 3) Chloromethane               | 1.25 | 50  | 334929 | 57.462  | ug/L 98  |
| 5) Vinyl chloride              | 1.33 | 62  | 313235 | 51.527  | ug/L 98  |
| 6) Bromomethane                | 1.51 | 94  | 129311 | 35.183  | ug/L 99  |
| 8) Chloroethane                | 1.58 | 64  | 187103 | 46.257  | ug/L 98  |
| 9) Trichlorofluoromethane      | 1.76 | 101 | 421285 | 44.557  | ug/L 99  |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.13 | 101 | 244326 | 45.371  | ug/L 99  |
| 12) 1,1-Dichloroethene         | 2.14 | 96  | 226242 | 43.494  | ug/L 99  |
| 13) Acetone                    | 2.18 | 43  | 436525 | 102.197 | ug/L 97  |
| 14) Carbon disulfide           | 2.31 | 76  | 613585 | 44.730  | ug/L 100 |
| 15) Methyl Acetate             | 2.45 | 43  | 265283 | 50.394  | ug/L 100 |
| 16) Methylene chloride         | 2.53 | 84  | 273311 | 50.456  | ug/L 96  |
| 17) trans-1,2-Dichloroethene   | 2.78 | 96  | 236260 | 46.435  | ug/L 98  |
| 18) Methyl tert-butyl Ether    | 2.80 | 73  | 722788 | 48.952  | ug/L 99  |
| 19) 1,1-Dichloroethane         | 3.22 | 63  | 463766 | 50.592  | ug/L 99  |
| 20) cis-1,2-Dichloroethene     | 3.95 | 96  | 261866 | 47.526  | ug/L 96  |
| 22) 2-Butanone                 | 4.00 | 43  | 442081 | 107.828 | ug/L 93  |

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 Misc : 5.0mL/MSVOA V/WATER  
 ALS Vial : 2 Sample Multiplier: 1

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 MSVOA\_V  
 ClientSampleId :  
 VSTD05084

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 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM120219WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Mon Dec 16 03:03:29 2019  
 Response via : Initial Calibration

| Internal Standards              | R.T.  | QIon | Response | Conc    | Units | Dev(Min) |
|---------------------------------|-------|------|----------|---------|-------|----------|
| 23) Bromochloromethane          | 4.29  | 128  | 148744   | 48.862  | uq/L  | 99       |
| 25) Chloroform                  | 4.42  | 83   | 477440   | 48.719  | uq/L  | 98       |
| 27) 1,2-Dichloroethane          | 5.17  | 62   | 358300   | 50.740  | uq/L  | 100      |
| 29) Cyclohexane                 | 4.72  | 56   | 375793   | 45.819  | uq/L  | 99       |
| 30) 1,1,1-Trichloroethane       | 4.65  | 97   | 401515   | 47.378  | uq/L  | 99       |
| 31) Carbon tetrachloride        | 4.87  | 117  | 368321   | 48.654  | uq/L  | 98       |
| 33) Benzene                     | 5.14  | 78   | 1009849  | 48.305  | uq/L  | 100      |
| 34) Trichloroethene             | 5.95  | 95   | 253575   | 45.224  | uq/L  | 98       |
| 35) Methylcyclohexane           | 6.17  | 83   | 398941   | 47.420  | uq/L  | 98       |
| 37) 1,2-Dichloropropane         | 6.21  | 63   | 263665   | 52.110  | uq/L  | 100      |
| 38) Bromodichloromethane        | 6.55  | 83   | 352983   | 49.192  | uq/L  | 99       |
| 39) cis-1,3-Dichloropropene     | 7.06  | 75   | 395061   | 49.597  | uq/L  | 99       |
| 40) 4-Methyl-2-pentanone        | 7.26  | 43   | 682073   | 103.667 | uq/L  | 99       |
| 42) Toluene                     | 7.42  | 91   | 1084411  | 50.274  | uq/L  | 99       |
| 44) trans-1,3-Dichloropropene   | 7.69  | 75   | 355436   | 49.277  | uq/L  | 97       |
| 45) 1,1,2-Trichloroethane       | 7.87  | 97   | 258114   | 51.393  | uq/L  | 97       |
| 46) Tetrachloroethene           | 8.01  | 164  | 239424   | 47.320  | uq/L  | 97       |
| 48) 2-Hexanone                  | 8.17  | 43   | 590663   | 112.225 | uq/L  | 97       |
| 49) Dibromochloromethane        | 8.28  | 129  | 299557   | 48.794  | uq/L  | 99       |
| 50) 1,2-Dibromoethane           | 8.39  | 107  | 269132   | 48.645  | uq/L  | 99       |
| 51) Chlorobenzene               | 8.92  | 112  | 700720   | 47.087  | uq/L  | 99       |
| 52) Ethylbenzene                | 9.05  | 91   | 1145973  | 48.193  | uq/L  | 100      |
| 53) m,p-Xylene                  | 9.17  | 106  | 451021   | 49.049  | uq/L  | 100      |
| 54) o-xylene                    | 9.58  | 106  | 429175   | 47.735  | uq/L  | 99       |
| 55) Styrene                     | 9.60  | 104  | 777810   | 50.143  | uq/L  | 99       |
| 56) Isopropylbenzene            | 9.97  | 105  | 1150396  | 47.603  | uq/L  | 100      |
| 58) 1,1,1,2,2-Tetrachloroethane | 10.28 | 83   | 419430   | 51.299  | uq/L  | 98       |
| 59) 1,2,3-Trichloropropane      | 10.31 | 75   | 321930   | 47.017  | uq/L  | 100      |
| 61) Bromoform                   | 9.77  | 173  | 238739   | 50.094  | uq/L  | 100      |
| 62) 1,3-Dichlorobenzene         | 11.22 | 146  | 601377   | 47.043  | uq/L  | 99       |
| 63) 1,4-Dichlorobenzene         | 11.31 | 146  | 613973   | 46.458  | uq/L  | 99       |
| 65) 1,2-Dichlorobenzene         | 11.68 | 146  | 627914   | 49.105  | uq/L  | 99       |
| 66) 1,2-Dibromo-3-chloropropan  | 12.47 | 75   | 83235    | 46.837  | uq/L  | 98       |
| 67) 1,3,5-Trichlorobenzene      | 12.69 | 180  | 482459   | 46.475  | uq/L  | 99       |
| 68) 1,2,4-trichlorobenzene      | 13.31 | 180  | 396351   | 42.314  | uq/L  | 99       |
| 69) Naphthalene                 | 13.55 | 128  | 984106   | 40.013  | uq/L  | 100      |
| 70) 1,2,3-Trichlorobenzene      | 13.79 | 180  | 445828   | 45.512  | uq/L  | 99       |

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

