

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV082518\  
 Data File : VV007195.D  
 Acq On : 25 Aug 2018 11:08  
 Operator : SY/MD  
 Sample : VSTDCCC050  
 Misc : 5.0 mL/MSVOA V/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD05072

Quant Time: Aug 27 01:20:46 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM082418WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Sat Aug 25 00:12:31 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.67  | 114  | 724377   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.90  | 117  | 724906   | 50.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.30 | 152  | 365733   | 50.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |         |       |          |          |      |         |
|--------------------------------|---------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.32    | 65    | 234358   | 46.06    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 135 | Recovery | =    | 92.12%  |
| 7) Chloroethane-d5             | 1.58    | 69    | 197465   | 47.86    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 130 | Recovery | =    | 95.72%  |
| 11) 1,1-Dichloroethene-d2      | 2.13    | 63    | 435155   | 49.16    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 98.32%  |
| 21) 2-Butanone-d5              | 3.96    | 46    | 348579   | 91.93    | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 40 - 130 | Recovery | =    | 91.93%  |
| 24) Chloroform-d               | 4.40    | 84    | 494624   | 50.08    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 100.16% |
| 26) 1,2-Dichloroethane-d4      | 5.09    | 65    | 300974   | 50.39    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 100.78% |
| 32) Benzene-d6                 | 5.10    | 84    | 999077   | 48.51    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 97.02%  |
| 36) 1,2-Dichloropropane-d6     | 6.12    | 67    | 318543   | 47.14    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 120 | Recovery | =    | 94.28%  |
| 41) Toluene-d8                 | 7.36    | 98    | 927508   | 51.16    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 102.32% |
| 43) trans-1,3-Dichloropropene- | 7.67    | 79    | 139952   | 47.39    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 94.78%  |
| 47) 2-Hexanone-d5              | 8.14    | 63    | 196849   | 92.32    | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 45 - 130 | Recovery | =    | 92.32%  |
| 57) 1,1,2,2-Tetrachloroethane- | 10.27   | 84    | 448539   | 49.82    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 65 - 120 | Recovery | =    | 99.64%  |
| 64) 1,2-Dichlorobenzene-d4     | 11.68   | 152   | 356948   | 46.76    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 93.52%  |

## Target Compounds

|                                |      |     |        |        |      | Ovalue |
|--------------------------------|------|-----|--------|--------|------|--------|
| 2) Dichlorodifluoromethane     | 1.14 | 85  | 313557 | 54.12  | ug/L | 98     |
| 3) Chloromethane               | 1.25 | 50  | 339607 | 48.59  | ug/L | 100    |
| 5) Vinyl chloride              | 1.32 | 62  | 307404 | 50.47  | ug/L | 100    |
| 6) Bromomethane                | 1.54 | 94  | 98320  | 49.83  | ug/L | 97     |
| 8) Chloroethane                | 1.60 | 64  | 186547 | 51.60  | ug/L | 98     |
| 9) Trichlorofluoromethane      | 1.77 | 101 | 413355 | 53.42  | ug/L | 99     |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.14 | 101 | 258511 | 55.09  | ug/L | 100    |
| 12) 1,1-Dichloroethene         | 2.14 | 96  | 235302 | 52.51  | ug/L | 99     |
| 13) Acetone                    | 2.20 | 43  | 358223 | 127.96 | ug/L | 94     |
| 14) Carbon disulfide           | 2.32 | 76  | 691131 | 50.33  | ug/L | 100    |
| 15) Methyl Acetate             | 2.47 | 43  | 252158 | 50.52  | ug/L | 99     |
| 16) Methylene chloride         | 2.54 | 84  | 269060 | 52.96  | ug/L | 99     |
| 17) trans-1,2-Dichloroethene   | 2.79 | 96  | 249334 | 51.62  | ug/L | 99     |
| 18) Methyl tert-butyl Ether    | 2.81 | 73  | 741036 | 51.36  | ug/L | 99     |
| 19) 1,1-Dichloroethane         | 3.23 | 63  | 506913 | 51.48  | ug/L | 99     |
| 20) cis-1,2-Dichloroethene     | 3.97 | 96  | 276316 | 48.89  | ug/L | 98     |
| 22) 2-Butanone                 | 4.04 | 43  | 468538 | 107.51 | ug/L | 99     |

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

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD05072

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 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM082418WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Sat Aug 25 00:12:31 2018  
 Response via : Initial Calibration

| Internal Standards              | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|---------------------------------|-------|------|----------|--------|-------|----------|
| 23) Bromochloromethane          | 4.30  | 128  | 149012   | 51.57  | ug/L  | 97       |
| 25) Chloroform                  | 4.43  | 83   | 511694   | 52.95  | ug/L  | 100      |
| 27) 1,2-Dichloroethane          | 5.19  | 62   | 374447   | 52.38  | ug/L  | 100      |
| 29) Cyclohexane                 | 4.73  | 56   | 401728   | 48.83  | ug/L  | 100      |
| 30) 1,1,1-Trichloroethane       | 4.66  | 97   | 426781   | 51.36  | ug/L  | 100      |
| 31) Carbon tetrachloride        | 4.88  | 117  | 371459   | 52.06  | ug/L  | 100      |
| 33) Benzene                     | 5.15  | 78   | 1153166  | 51.36  | ug/L  | 100      |
| 34) Trichloroethene             | 5.96  | 95   | 275352   | 50.43  | ug/L  | 97       |
| 35) Methylcyclohexane           | 6.18  | 83   | 451626   | 52.02  | ug/L  | 98       |
| 37) 1,2-Dichloropropane         | 6.22  | 63   | 306084   | 51.24  | ug/L  | 98       |
| 38) Bromodichloromethane        | 6.56  | 83   | 369760   | 50.90  | ug/L  | 99       |
| 39) cis-1,3-Dichloropropene     | 7.08  | 75   | 417123   | 50.10  | ug/L  | 99       |
| 40) 4-Methyl-2-pentanone        | 7.29  | 43   | 700892   | 100.08 | ug/L  | 97       |
| 42) Toluene                     | 7.43  | 91   | 1190291  | 54.69  | ug/L  | 100      |
| 44) trans-1,3-Dichloropropene   | 7.70  | 75   | 392870   | 50.79  | ug/L  | 98       |
| 45) 1,1,2-Trichloroethane       | 7.89  | 97   | 282628   | 51.10  | ug/L  | 99       |
| 46) Tetrachloroethene           | 8.02  | 164  | 237646   | 52.78  | ug/L  | 98       |
| 48) 2-Hexanone                  | 8.19  | 43   | 624689   | 113.93 | ug/L  | 99       |
| 49) Dibromochloromethane        | 8.30  | 129  | 297094   | 52.37  | ug/L  | 99       |
| 50) 1,2-Dibromoethane           | 8.40  | 107  | 282539   | 50.84  | ug/L  | 96       |
| 51) Chlorobenzene               | 8.93  | 112  | 754270   | 51.25  | ug/L  | 99       |
| 52) Ethylbenzene                | 9.06  | 91   | 1210096  | 53.54  | ug/L  | 100      |
| 53) m,p-Xylene                  | 9.19  | 106  | 483005   | 56.28  | ug/L  | 98       |
| 54) o-xylene                    | 9.59  | 106  | 443227   | 53.66  | ug/L  | 99       |
| 55) Styrene                     | 9.61  | 104  | 816837   | 57.63  | ug/L  | 97       |
| 56) Isopropylbenzene            | 9.98  | 105  | 1172103  | 55.47  | ug/L  | 99       |
| 58) 1,1,1,2,2-Tetrachloroethane | 10.29 | 83   | 461960   | 50.86  | ug/L  | 99       |
| 59) 1,2,3-Trichloropropane      | 10.32 | 75   | 369782   | 50.64  | ug/L  | 99       |
| 61) Bromoform                   | 9.78  | 173  | 218194   | 49.39  | ug/L  | 100      |
| 62) 1,3-Dichlorobenzene         | 11.23 | 146  | 547486   | 49.13  | ug/L  | 99       |
| 63) 1,4-Dichlorobenzene         | 11.32 | 146  | 607683   | 50.68  | ug/L  | 99       |
| 65) 1,2-Dichlorobenzene         | 11.70 | 146  | 612947   | 51.27  | ug/L  | 100      |
| 66) 1,2-Dibromo-3-chloropropan  | 12.48 | 75   | 79864    | 47.29  | ug/L  | 96       |
| 67) 1,3,5-Trichlorobenzene      | 12.70 | 180  | 436849   | 53.73  | ug/L  | 99       |
| 68) 1,2,4-trichlorobenzene      | 13.32 | 180  | 332766   | 54.88  | ug/L  | 98       |
| 69) Naphthalene                 | 13.56 | 128  | 759829   | 46.07  | ug/L  | 99       |
| 70) 1,2,3-Trichlorobenzene      | 13.80 | 180  | 372970   | 57.32  | ug/L  | 99       |

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

