

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV092618\  
 Data File : VV007888.D  
 Acq On : 26 Sep 2018 17:03  
 Operator : SY/MD  
 Sample : VSTDCCC050EC  
 Misc : 5.0 mL/MSVOA V/WATER  
 ALS Vial : 13 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD05079

Quant Time: Sep 27 04:56:40 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM092518WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Thu Sep 27 04:55:01 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.67  | 114  | 191732   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.90  | 117  | 190719   | 50.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.30 | 152  | 107933   | 50.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |         |       |          |          |      |          |
|--------------------------------|---------|-------|----------|----------|------|----------|
| 4) Vinyl Chloride-d3           | 1.32    | 65    | 48847    | 40.64    | ug/L | 0.00     |
| Spiked Amount                  | 50.000  | Range | 60 - 135 | Recovery | =    | 81.28%   |
| 7) Chloroethane-d5             | 1.58    | 69    | 46316    | 44.62    | ug/L | 0.00     |
| Spiked Amount                  | 50.000  | Range | 70 - 130 | Recovery | =    | 89.24%   |
| 11) 1,1-Dichloroethene-d2      | 2.14    | 63    | 113666   | 44.38    | ug/L | 0.00     |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 88.76%   |
| 21) 2-Butanone-d5              | 3.95    | 46    | 107169   | 132.30   | ug/L | 0.00     |
| Spiked Amount                  | 100.000 | Range | 40 - 130 | Recovery | =    | 132.30%# |
| 24) Chloroform-d               | 4.41    | 84    | 125794   | 50.39    | ug/L | 0.00     |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 100.78%  |
| 26) 1,2-Dichloroethane-d4      | 5.09    | 65    | 86721    | 48.71    | ug/L | 0.00     |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 97.42%   |
| 32) Benzene-d6                 | 5.10    | 84    | 234432   | 45.90    | ug/L | 0.00     |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 91.80%   |
| 36) 1,2-Dichloropropane-d6     | 6.13    | 67    | 75835    | 47.41    | ug/L | 0.00     |
| Spiked Amount                  | 50.000  | Range | 70 - 120 | Recovery | =    | 94.82%   |
| 41) Toluene-d8                 | 7.36    | 98    | 238548   | 46.33    | ug/L | 0.00     |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 92.66%   |
| 43) trans-1,3-Dichloropropene- | 7.67    | 79    | 35625    | 46.78    | ug/L | 0.00     |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 93.56%   |
| 47) 2-Hexanone-d5              | 8.14    | 63    | 75785    | 112.20   | ug/L | 0.00     |
| Spiked Amount                  | 100.000 | Range | 45 - 130 | Recovery | =    | 112.20%  |
| 57) 1,1,2,2-Tetrachloroethane- | 10.27   | 84    | 115516   | 48.93    | ug/L | 0.00     |
| Spiked Amount                  | 50.000  | Range | 65 - 120 | Recovery | =    | 97.86%   |
| 64) 1,2-Dichlorobenzene-d4     | 11.68   | 152   | 111526   | 46.48    | ug/L | 0.00     |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 92.96%   |

## Target Compounds

|                                |      |     |        |         | Ovalue   |
|--------------------------------|------|-----|--------|---------|----------|
| 2) Dichlorodifluoromethane     | 1.14 | 85  | 69085  | 49.888  | ug/L 100 |
| 3) Chloromethane               | 1.26 | 50  | 63013  | 48.180  | ug/L 100 |
| 5) Vinyl chloride              | 1.33 | 62  | 69001  | 49.154  | ug/L 97  |
| 6) Bromomethane                | 1.53 | 94  | 44115  | 56.748  | ug/L 99  |
| 8) Chloroethane                | 1.60 | 64  | 42536  | 48.580  | ug/L 100 |
| 9) Trichlorofluoromethane      | 1.77 | 101 | 117384 | 49.905  | ug/L 100 |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.14 | 101 | 66652  | 50.704  | ug/L 99  |
| 12) 1,1-Dichloroethene         | 2.14 | 96  | 58285  | 49.408  | ug/L 97  |
| 13) Acetone                    | 2.19 | 43  | 84845  | 86.944  | ug/L 99  |
| 14) Carbon disulfide           | 2.32 | 76  | 147765 | 48.011  | ug/L 98  |
| 15) Methyl Acetate             | 2.46 | 43  | 75361  | 52.643  | ug/L 100 |
| 16) Methylene chloride         | 2.54 | 84  | 65654  | 50.294  | ug/L 98  |
| 17) trans-1,2-Dichloroethene   | 2.79 | 96  | 62811  | 49.907  | ug/L 98  |
| 18) Methyl tert-butyl Ether    | 2.81 | 73  | 200340 | 51.090  | ug/L 99  |
| 19) 1,1-Dichloroethane         | 3.23 | 63  | 110724 | 51.266  | ug/L 99  |
| 20) cis-1,2-Dichloroethene     | 3.97 | 96  | 68375  | 50.140  | ug/L 99  |
| 22) 2-Butanone                 | 4.04 | 43  | 111890 | 100.059 | ug/L 99  |

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 Misc : 5.0 mL/MSVOA V/WATER  
 ALS Vial : 13 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD05079

Quant Time: Sep 27 04:56:40 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM092518WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Thu Sep 27 04:55:01 2018  
 Response via : Initial Calibration

| Internal Standards              | R.T.  | QIon | Response | Conc    | Units | Dev(Min) |
|---------------------------------|-------|------|----------|---------|-------|----------|
| 23) Bromochloromethane          | 4.31  | 128  | 36713    | 51.745  | ug/L  | 98       |
| 25) Chloroform                  | 4.43  | 83   | 124269   | 48.478  | ug/L  | 98       |
| 27) 1,2-Dichloroethane          | 5.19  | 62   | 102638   | 50.519  | ug/L  | 98       |
| 29) Cyclohexane                 | 4.73  | 56   | 99032    | 48.555  | ug/L  | 98       |
| 30) 1,1,1-Trichloroethane       | 4.67  | 97   | 109150   | 50.530  | ug/L  | 99       |
| 31) Carbon tetrachloride        | 4.88  | 117  | 96554    | 50.593  | ug/L  | 99       |
| 33) Benzene                     | 5.15  | 78   | 257345   | 50.179  | ug/L  | 100      |
| 34) Trichloroethene             | 5.96  | 95   | 69276    | 48.696  | ug/L  | 97       |
| 35) Methylcyclohexane           | 6.18  | 83   | 112537   | 50.423  | ug/L  | 98       |
| 37) 1,2-Dichloropropane         | 6.23  | 63   | 68641    | 50.187  | ug/L  | 99       |
| 38) Bromodichloromethane        | 6.56  | 83   | 87667    | 50.645  | ug/L  | 99       |
| 39) cis-1,3-Dichloropropene     | 7.08  | 75   | 105572   | 53.169  | ug/L  | 98       |
| 40) 4-Methyl-2-pentanone        | 7.28  | 43   | 197762   | 102.320 | ug/L  | 98       |
| 42) Toluene                     | 7.44  | 91   | 292257   | 50.579  | ug/L  | 99       |
| 44) trans-1,3-Dichloropropene   | 7.70  | 75   | 100814   | 51.084  | ug/L  | 98       |
| 45) 1,1,2-Trichloroethane       | 7.89  | 97   | 68264    | 49.945  | ug/L  | 99       |
| 46) Tetrachloroethene           | 8.02  | 164  | 66131    | 48.376  | ug/L  | 98       |
| 48) 2-Hexanone                  | 8.19  | 43   | 164760   | 107.855 | ug/L  | 98       |
| 49) Dibromochloromethane        | 8.30  | 129  | 75930    | 50.807  | ug/L  | 98       |
| 50) 1,2-Dibromoethane           | 8.40  | 107  | 75000    | 51.033  | ug/L  | 100      |
| 51) Chlorobenzene               | 8.93  | 112  | 198662   | 49.672  | ug/L  | 99       |
| 52) Ethylbenzene                | 9.06  | 91   | 326586   | 50.036  | ug/L  | 99       |
| 53) m,p-Xylene                  | 9.19  | 106  | 125586   | 50.502  | ug/L  | 100      |
| 54) o-xylene                    | 9.59  | 106  | 121838   | 50.437  | ug/L  | 99       |
| 55) Styrene                     | 9.61  | 104  | 216764   | 52.389  | ug/L  | 97       |
| 56) Isopropylbenzene            | 9.98  | 105  | 332371   | 50.480  | ug/L  | 99       |
| 58) 1,1,1,2,2-Tetrachloroethane | 10.29 | 83   | 113899   | 50.992  | ug/L  | 100      |
| 59) 1,2,3-Trichloropropane      | 10.32 | 75   | 91494    | 50.251  | ug/L  | 99       |
| 61) Bromoform                   | 9.78  | 173  | 56420    | 49.569  | ug/L  | 98       |
| 62) 1,3-Dichlorobenzene         | 11.23 | 146  | 166161   | 49.203  | ug/L  | 99       |
| 63) 1,4-Dichlorobenzene         | 11.32 | 146  | 174506   | 48.626  | ug/L  | 99       |
| 65) 1,2-Dichlorobenzene         | 11.69 | 146  | 173036   | 49.376  | ug/L  | 99       |
| 66) 1,2-Dibromo-3-chloropropan  | 12.48 | 75   | 23611    | 51.493  | ug/L  | 96       |
| 67) 1,3,5-Trichlorobenzene      | 12.70 | 180  | 141111   | 49.563  | ug/L  | 99       |
| 68) 1,2,4-trichlorobenzene      | 13.31 | 180  | 123276   | 51.319  | ug/L  | 99       |
| 69) Naphthalene                 | 13.56 | 128  | 326081   | 55.492  | ug/L  | 100      |
| 70) 1,2,3-Trichlorobenzene      | 13.80 | 180  | 125523   | 51.608  | ug/L  | 100      |

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

