

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU081418\  
 Data File : VU026128.D  
 Acq On : 15 Aug 2018 02:48  
 Operator : MD/SY  
 Sample : VSTDCCC050EC  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 40 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD05058

Quant Time: Aug 16 01:52:56 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMULM080918WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Thu Aug 16 01:50:34 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.89  | 114  | 257656   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.09  | 117  | 247810   | 50.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.49 | 152  | 125695   | 50.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |         |       |          |          |      |        |
|--------------------------------|---------|-------|----------|----------|------|--------|
| 4) Vinyl Chloride-d3           | 1.40    | 65    | 69691    | 37.00    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 60 - 135 | Recovery | =    | 74.00% |
| 7) Chloroethane-d5             | 1.67    | 69    | 63421    | 42.47    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 130 | Recovery | =    | 84.94% |
| 11) 1,1-Dichloroethene-d2      | 2.27    | 63    | 152874   | 42.72    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 85.44% |
| 21) 2-Butanone-d5              | 4.18    | 46    | 144747   | 92.21    | ug/L | 0.00   |
| Spiked Amount                  | 100.000 | Range | 40 - 130 | Recovery | =    | 92.21% |
| 24) Chloroform-d               | 4.65    | 84    | 192346   | 48.16    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 96.32% |
| 26) 1,2-Dichloroethane-d4      | 5.31    | 65    | 124484   | 46.14    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 92.28% |
| 32) Benzene-d6                 | 5.34    | 84    | 349804   | 45.46    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 90.92% |
| 36) 1,2-Dichloropropane-d6     | 6.33    | 67    | 117992   | 47.39    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 120 | Recovery | =    | 94.78% |
| 41) Toluene-d8                 | 7.57    | 98    | 326877   | 44.40    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 88.80% |
| 43) trans-1,3-Dichloropropene- | 7.85    | 79    | 54810    | 43.69    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 87.38% |
| 47) 2-Hexanone-d5              | 8.31    | 63    | 105607   | 93.38    | ug/L | 0.00   |
| Spiked Amount                  | 100.000 | Range | 45 - 130 | Recovery | =    | 93.38% |
| 57) 1,1,2,2-Tetrachloroethane- | 10.44   | 84    | 179313   | 49.25    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 65 - 120 | Recovery | =    | 98.50% |
| 64) 1,2-Dichlorobenzene-d4     | 11.86   | 152   | 143492   | 46.31    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 92.62% |

## Target Compounds

|                                |      |     |        |        |      | Ovalue |
|--------------------------------|------|-----|--------|--------|------|--------|
| 2) Dichlorodifluoromethane     | 1.20 | 85  | 121464 | 54.11  | ug/L | 99     |
| 3) Chloromethane               | 1.33 | 50  | 108565 | 53.90  | ug/L | 99     |
| 5) Vinyl chloride              | 1.40 | 62  | 110341 | 56.77  | ug/L | 100    |
| 6) Bromomethane                | 1.62 | 94  | 47625  | 45.83  | ug/L | 99     |
| 8) Chloroethane                | 1.69 | 64  | 64908  | 55.58  | ug/L | 94     |
| 9) Trichlorofluoromethane      | 1.88 | 101 | 158863 | 57.13  | ug/L | 100    |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.29 | 101 | 89132  | 55.10  | ug/L | 98     |
| 12) 1,1-Dichloroethene         | 2.28 | 96  | 80460  | 54.09  | ug/L | 82     |
| 13) Acetone                    | 2.32 | 43  | 95192  | 97.62  | ug/L | 99     |
| 14) Carbon disulfide           | 2.48 | 76  | 277818 | 56.77  | ug/L | 99     |
| 15) Methyl Acetate             | 2.62 | 43  | 109154 | 53.44  | ug/L | 98     |
| 16) Methylene chloride         | 2.70 | 84  | 106712 | 56.19  | ug/L | 97     |
| 17) trans-1,2-Dichloroethene   | 2.98 | 96  | 93683  | 56.52  | ug/L | 98     |
| 18) Methyl tert-butyl Ether    | 3.00 | 73  | 306568 | 56.28  | ug/L | 99     |
| 19) 1,1-Dichloroethane         | 3.45 | 63  | 185136 | 57.59  | ug/L | 99     |
| 20) cis-1,2-Dichloroethene     | 4.23 | 96  | 110077 | 57.72  | ug/L | 96     |
| 22) 2-Butanone                 | 4.26 | 43  | 150061 | 106.36 | ug/L | 99     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU081418\  
 Data File : VU026128.D  
 Acq On : 15 Aug 2018 02:48  
 Operator : MD/SY  
 Sample : VSTDCCC050EC  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 40 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD05058

Quant Time: Aug 16 01:52:56 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMULM080918WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Thu Aug 16 01:50:34 2018  
 Response via : Initial Calibration

| Internal Standards              | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|---------------------------------|-------|------|----------|--------|--------|----------|
| 23) Bromochloromethane          | 4.55  | 128  | 58941    | 58.03  | ug/L   | 96       |
| 25) Chloroform                  | 4.68  | 83   | 194363   | 58.06  | ug/L   | 100      |
| 27) 1,2-Dichloroethane          | 5.41  | 62   | 154410   | 55.85  | ug/L   | 99       |
| 29) Cyclohexane                 | 5.00  | 56   | 152428   | 55.03  | ug/L   | 100      |
| 30) 1,1,1-Trichloroethane       | 4.92  | 97   | 173767   | 55.58  | ug/L   | 100      |
| 31) Carbon tetrachloride        | 5.14  | 117  | 161554   | 56.58  | ug/L   | 99       |
| 33) Benzene                     | 5.39  | 78   | 406291   | 57.56  | ug/L   | 100      |
| 34) Trichloroethene             | 6.19  | 95   | 99877    | 54.17  | ug/L   | 98       |
| 35) Methylcyclohexane           | 6.42  | 83   | 158835   | 56.42  | ug/L   | 99       |
| 37) 1,2-Dichloropropane         | 6.44  | 63   | 112828   | 58.42  | ug/L   | 100      |
| 38) Bromodichloromethane        | 6.76  | 83   | 149287   | 58.02  | ug/L   | 97       |
| 39) cis-1,3-Dichloropropene     | 7.27  | 75   | 163107   | 55.73  | ug/L   | 98       |
| 40) 4-Methyl-2-pentanone        | 7.46  | 43   | 286891   | 108.12 | ug/L   | 99       |
| 42) Toluene                     | 7.64  | 91   | 436727   | 58.29  | ug/L   | 99       |
| 44) trans-1,3-Dichloropropene   | 7.88  | 75   | 155871   | 55.95  | ug/L   | 97       |
| 45) 1,1,2-Trichloroethane       | 8.07  | 97   | 105176   | 57.12  | ug/L   | 98       |
| 46) Tetrachloroethene           | 8.23  | 164  | 87701    | 55.89  | ug/L   | 98       |
| 48) 2-Hexanone                  | 8.36  | 43   | 221495   | 107.14 | ug/L   | 99       |
| 49) Dibromochloromethane        | 8.48  | 129  | 126802   | 57.11  | ug/L   | 97       |
| 50) 1,2-Dibromoethane           | 8.59  | 107  | 113213   | 56.46  | ug/L # | 99       |
| 51) Chlorobenzene               | 9.12  | 112  | 287065   | 56.83  | ug/L   | 100      |
| 52) Ethylbenzene                | 9.25  | 91   | 470834   | 57.43  | ug/L   | 99       |
| 53) m,p-Xylene                  | 9.38  | 106  | 185984   | 59.37  | ug/L   | 97       |
| 54) o-xylene                    | 9.78  | 106  | 182416   | 58.68  | ug/L   | 96       |
| 55) Styrene                     | 9.80  | 104  | 312414   | 60.36  | ug/L   | 98       |
| 56) Isopropylbenzene            | 10.17 | 105  | 474557   | 59.25  | ug/L   | 100      |
| 58) 1,1,1,2,2-Tetrachloroethane | 10.46 | 83   | 178084   | 56.91  | ug/L   | 99       |
| 59) 1,2,3-Trichloropropane      | 10.50 | 75   | 140115   | 56.25  | ug/L   | 100      |
| 61) Bromoform                   | 9.96  | 173  | 95556    | 56.15  | ug/L   | 99       |
| 62) 1,3-Dichlorobenzene         | 11.42 | 146  | 220994   | 56.48  | ug/L   | 98       |
| 63) 1,4-Dichlorobenzene         | 11.51 | 146  | 223661   | 54.52  | ug/L   | 97       |
| 65) 1,2-Dichlorobenzene         | 11.88 | 146  | 240187   | 57.66  | ug/L   | 98       |
| 66) 1,2-Dibromo-3-chloropropan  | 12.66 | 75   | 38751    | 53.01  | ug/L   | 94       |
| 67) 1,3,5-Trichlorobenzene      | 12.89 | 180  | 162796   | 55.66  | ug/L   | 99       |
| 68) 1,2,4-trichlorobenzene      | 13.51 | 180  | 127119   | 51.40  | ug/L   | 98       |
| 69) Naphthalene                 | 13.74 | 128  | 394786   | 49.48  | ug/L   | 100      |
| 70) 1,2,3-Trichlorobenzene      | 13.99 | 180  | 144205   | 54.25  | ug/L   | 99       |

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

