

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV083118\  
 Data File : VV007313.D  
 Acq On : 31 Aug 2018 20:21  
 Operator : SY/MD  
 Sample : VSTDCCC050  
 Misc : 5.0 mL/MSVOA V/WATER  
 ALS Vial : 26 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD05078

Quant Time: Sep 01 00:04:12 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM083118WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Fri Aug 31 23:57:34 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.67  | 114  | 599645   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.90  | 117  | 579726   | 50.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.30 | 152  | 283830   | 50.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |         |       |          |          |      |         |
|--------------------------------|---------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.32    | 65    | 174317   | 48.10    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 135 | Recovery | =    | 96.20%  |
| 7) Chloroethane-d5             | 1.58    | 69    | 108363   | 47.49    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 130 | Recovery | =    | 94.98%  |
| 11) 1,1-Dichloroethene-d2      | 2.13    | 63    | 334498   | 49.72    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 99.44%  |
| 21) 2-Butanone-d5              | 3.96    | 46    | 289889   | 98.92    | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 40 - 130 | Recovery | =    | 98.92%  |
| 24) Chloroform-d               | 4.41    | 84    | 387373   | 49.55    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 99.10%  |
| 26) 1,2-Dichloroethane-d4      | 5.09    | 65    | 230663   | 49.11    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 98.22%  |
| 32) Benzene-d6                 | 5.10    | 84    | 782246   | 50.21    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 100.42% |
| 36) 1,2-Dichloropropane-d6     | 6.12    | 67    | 249098   | 48.22    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 120 | Recovery | =    | 96.44%  |
| 41) Toluene-d8                 | 7.36    | 98    | 719379   | 51.64    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 103.28% |
| 43) trans-1,3-Dichloropropene- | 7.67    | 79    | 108994   | 47.31    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 94.62%  |
| 47) 2-Hexanone-d5              | 8.14    | 63    | 199143   | 103.47   | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 45 - 130 | Recovery | =    | 103.47% |
| 57) 1,1,2,2-Tetrachloroethane- | 10.27   | 84    | 350259   | 49.78    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 65 - 120 | Recovery | =    | 99.56%  |
| 64) 1,2-Dichlorobenzene-d4     | 11.68   | 152   | 277112   | 48.60    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 97.20%  |

## Target Compounds

| Target Compounds               | R.T. | QIon | Response | Conc  | Units | Ovalue |
|--------------------------------|------|------|----------|-------|-------|--------|
| 2) Dichlorodifluoromethane     | 1.14 | 85   | 234636   | 49.80 | ug/L  | # 87   |
| 3) Chloromethane               | 1.26 | 50   | 256032   | 49.49 | ug/L  | 98     |
| 5) Vinyl chloride              | 1.32 | 62   | 246482   | 50.71 | ug/L  | 99     |
| 6) Bromomethane                | 1.53 | 94   | 122502   | 52.19 | ug/L  | 100    |
| 8) Chloroethane                | 1.59 | 64   | 109657   | 49.59 | ug/L  | 99     |
| 9) Trichlorofluoromethane      | 1.76 | 101  | 313379   | 50.76 | ug/L  | 100    |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.14 | 101  | 191524   | 49.54 | ug/L  | 100    |
| 12) 1,1-Dichloroethene         | 2.14 | 96   | 181356   | 50.26 | ug/L  | 88     |
| 13) Acetone                    | 2.20 | 43   | 174895   | 69.23 | ug/L  | 98     |
| 14) Carbon disulfide           | 2.32 | 76   | 524867   | 48.37 | ug/L  | 100    |
| 15) Methyl Acetate             | 2.47 | 43   | 208931   | 51.21 | ug/L  | 98     |
| 16) Methylene chloride         | 2.54 | 84   | 208161   | 49.23 | ug/L  | 99     |
| 17) trans-1,2-Dichloroethene   | 2.79 | 96   | 195576   | 49.90 | ug/L  | 98     |
| 18) Methyl tert-butyl Ether    | 2.82 | 73   | 607075   | 50.58 | ug/L  | 99     |
| 19) 1,1-Dichloroethane         | 3.23 | 63   | 399930   | 50.46 | ug/L  | 99     |
| 20) cis-1,2-Dichloroethene     | 3.97 | 96   | 227436   | 50.41 | ug/L  | 96     |
| 22) 2-Butanone                 | 4.04 | 43   | 322166   | 91.56 | ug/L  | 99     |

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 Misc : 5.0 mL/MSVOA V/WATER  
 ALS Vial : 26 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD05078

Quant Time: Sep 01 00:04:12 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM083118WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Fri Aug 31 23:57:34 2018  
 Response via : Initial Calibration

| Internal Standards              | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|---------------------------------|-------|------|----------|--------|-------|----------|
| 23) Bromochloromethane          | 4.31  | 128  | 116201   | 49.66  | ug/L  | 99       |
| 25) Chloroform                  | 4.44  | 83   | 400419   | 51.34  | ug/L  | 100      |
| 27) 1,2-Dichloroethane          | 5.19  | 62   | 296375   | 51.08  | ug/L  | 100      |
| 29) Cyclohexane                 | 4.73  | 56   | 325855   | 52.04  | ug/L  | 99       |
| 30) 1,1,1-Trichloroethane       | 4.66  | 97   | 336708   | 51.03  | ug/L  | 99       |
| 31) Carbon tetrachloride        | 4.88  | 117  | 287484   | 50.48  | ug/L  | 100      |
| 33) Benzene                     | 5.15  | 78   | 917745   | 52.26  | ug/L  | 100      |
| 34) Trichloroethene             | 5.96  | 95   | 214131   | 50.33  | ug/L  | 99       |
| 35) Methylcyclohexane           | 6.18  | 83   | 345334   | 51.34  | ug/L  | 100      |
| 37) 1,2-Dichloropropane         | 6.23  | 63   | 245465   | 51.78  | ug/L  | 99       |
| 38) Bromodichloromethane        | 6.56  | 83   | 292925   | 50.41  | ug/L  | 99       |
| 39) cis-1,3-Dichloropropene     | 7.08  | 75   | 327666   | 49.57  | ug/L  | 98       |
| 40) 4-Methyl-2-pentanone        | 7.29  | 43   | 586273   | 108.47 | ug/L  | 98       |
| 42) Toluene                     | 7.44  | 91   | 923527   | 53.26  | ug/L  | 98       |
| 44) trans-1,3-Dichloropropene   | 7.70  | 75   | 304832   | 49.64  | ug/L  | 100      |
| 45) 1,1,2-Trichloroethane       | 7.89  | 97   | 227144   | 51.47  | ug/L  | 99       |
| 46) Tetrachloroethene           | 8.02  | 164  | 180638   | 50.65  | ug/L  | 98       |
| 48) 2-Hexanone                  | 8.20  | 43   | 467645   | 106.87 | ug/L  | 99       |
| 49) Dibromochloromethane        | 8.30  | 129  | 232366   | 50.16  | ug/L  | 100      |
| 50) 1,2-Dibromoethane           | 8.40  | 107  | 224148   | 50.87  | ug/L  | 100      |
| 51) Chlorobenzene               | 8.93  | 112  | 589533   | 50.61  | ug/L  | 99       |
| 52) Ethylbenzene                | 9.06  | 91   | 943535   | 52.61  | ug/L  | 99       |
| 53) m,p-Xylene                  | 9.19  | 106  | 369121   | 54.52  | ug/L  | 97       |
| 54) o-xylene                    | 9.59  | 106  | 353101   | 53.72  | ug/L  | 100      |
| 55) Styrene                     | 9.61  | 104  | 651598   | 56.93  | ug/L  | 100      |
| 56) Isopropylbenzene            | 9.98  | 105  | 909826   | 54.52  | ug/L  | 99       |
| 58) 1,1,1,2,2-Tetrachloroethane | 10.29 | 83   | 369033   | 51.84  | ug/L  | 98       |
| 59) 1,2,3-Trichloropropane      | 10.32 | 75   | 295147   | 52.46  | ug/L  | 100      |
| 61) Bromoform                   | 9.78  | 173  | 168192   | 48.09  | ug/L  | 98       |
| 62) 1,3-Dichlorobenzene         | 11.23 | 146  | 410889   | 49.11  | ug/L  | 99       |
| 63) 1,4-Dichlorobenzene         | 11.32 | 146  | 450419   | 49.66  | ug/L  | 100      |
| 65) 1,2-Dichlorobenzene         | 11.70 | 146  | 468226   | 51.24  | ug/L  | 100      |
| 66) 1,2-Dibromo-3-chloropropan  | 12.48 | 75   | 72106    | 48.64  | ug/L  | 92       |
| 67) 1,3,5-Trichlorobenzene      | 12.70 | 180  | 319262   | 49.33  | ug/L  | 100      |
| 68) 1,2,4-trichlorobenzene      | 13.31 | 180  | 251262   | 48.61  | ug/L  | 100      |
| 69) Naphthalene                 | 13.56 | 128  | 736769   | 51.11  | ug/L  | 100      |
| 70) 1,2,3-Trichlorobenzene      | 13.80 | 180  | 292881   | 52.21  | ug/L  | 99       |

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

