

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU021120\  
 Data File : VU036715.D  
 Acq On : 11 Feb 2020 09:52  
 Operator : JC/MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD050112

Quant Time: Feb 12 02:30:18 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SFAMULM020620W.M  
 Quant Title : VOC Analysis  
 QLast Update : Tue Feb 11 03:31:43 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 6.29  | 114  | 268480   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.44  | 117  | 252748   | 50.00 | ug/L  | 0.00     |
| 58) 1,4-Dichlorobenzene-d4 | 11.83 | 152  | 114942   | 50.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |         |       |          |          |      |        |
|--------------------------------|---------|-------|----------|----------|------|--------|
| 4) Vinyl Chloride-d3           | 1.61    | 65    | 74827    | 41.79    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 60 - 135 | Recovery | =    | 83.58% |
| 7) Chloroethane-d5             | 1.93    | 69    | 72825    | 43.86    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 130 | Recovery | =    | 87.72% |
| 11) 1,1-Dichloroethene-d2      | 2.59    | 63    | 151101   | 44.70    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 89.40% |
| 21) 2-Butanone-d5              | 4.67    | 46    | 133597   | 87.46    | ug/L | 0.00   |
| Spiked Amount                  | 100.000 | Range | 40 - 130 | Recovery | =    | 87.46% |
| 24) Chloroform-d               | 5.11    | 84    | 153419   | 47.34    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 94.68% |
| 26) 1,2-Dichloroethane-d4      | 5.74    | 65    | 103270   | 46.59    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 93.18% |
| 32) Benzene-d6                 | 5.77    | 84    | 305595   | 45.99    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 91.98% |
| 36) 1,2-Dichloropropane-d6     | 6.73    | 67    | 104739   | 47.48    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 120 | Recovery | =    | 94.96% |
| 41) Toluene-d8                 | 7.93    | 98    | 278561   | 45.78    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 91.56% |
| 43) trans-1,3-Dichloropropene- | 8.21    | 79    | 49359    | 46.73    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 93.46% |
| 47) 2-Hexanone-d5              | 8.66    | 63    | 117450   | 93.29    | ug/L | 0.00   |
| Spiked Amount                  | 100.000 | Range | 45 - 130 | Recovery | =    | 93.29% |
| 56) 1,1,2,2-Tetrachloroethane- | 10.78   | 84    | 158071   | 48.63    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 65 - 120 | Recovery | =    | 97.26% |
| 66) 1,2-Dichlorobenzene-d4     | 12.21   | 152   | 97688    | 46.78    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 93.56% |

## Target Compounds

|                                |      |     |        |         | Ovalue   |
|--------------------------------|------|-----|--------|---------|----------|
| 2) Dichlorodifluoromethane     | 1.39 | 85  | 90065  | 48.554  | ug/L 100 |
| 3) Chloromethane               | 1.54 | 50  | 107654 | 48.975  | ug/L 99  |
| 5) Vinyl chloride              | 1.62 | 62  | 119453 | 50.470  | ug/L 100 |
| 6) Bromomethane                | 1.87 | 94  | 71093  | 47.905  | ug/L 98  |
| 8) Chloroethane                | 1.95 | 64  | 73481  | 48.917  | ug/L 99  |
| 9) Trichlorofluoromethane      | 2.16 | 101 | 140593 | 49.989  | ug/L 99  |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.61 | 101 | 85863  | 50.970  | ug/L 99  |
| 12) 1,1-Dichloroethene         | 2.60 | 96  | 81164  | 49.490  | ug/L 97  |
| 13) Acetone                    | 2.66 | 43  | 173309 | 106.800 | ug/L 99  |
| 14) Carbon disulfide           | 2.82 | 76  | 240200 | 49.011  | ug/L 100 |
| 15) Methyl Acetate             | 2.98 | 43  | 110843 | 47.248  | ug/L 99  |
| 16) Methylene chloride         | 3.08 | 84  | 99639  | 49.224  | ug/L 98  |
| 17) trans-1,2-Dichloroethene   | 3.39 | 96  | 87490  | 50.138  | ug/L 98  |
| 18) Methyl tert-butyl Ether    | 3.41 | 73  | 296733 | 48.996  | ug/L 99  |
| 19) 1,1-Dichloroethane         | 3.91 | 63  | 174385 | 50.156  | ug/L 99  |
| 20) cis-1,2-Dichloroethene     | 4.71 | 96  | 100328 | 50.460  | ug/L 99  |
| 22) 2-Butanone                 | 4.75 | 43  | 189626 | 98.458  | ug/L 99  |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU021120\  
 Data File : VU036715.D  
 Acq On : 11 Feb 2020 09:52  
 Operator : JC/MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD050112

Quant Time: Feb 12 02:30:18 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SFAMULM020620W.M  
 Quant Title : VOC Analysis  
 QLast Update : Tue Feb 11 03:31:43 2020  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|--------------------------------|-------|------|----------|--------|-------|----------|
| 23) Bromochloromethane         | 5.02  | 128  | 45811    | 49.169 | ug/L  | 97       |
| 25) Chloroform                 | 5.13  | 83   | 171197   | 50.629 | ug/L  | 97       |
| 27) 1,2-Dichloroethane         | 5.83  | 62   | 140411   | 49.378 | ug/L  | 98       |
| 29) Cyclohexane                | 5.43  | 56   | 158656   | 48.868 | ug/L  | 99       |
| 30) 1,1,1-Trichloroethane      | 5.36  | 97   | 134137   | 49.961 | ug/L  | 99       |
| 31) Carbon tetrachloride       | 5.56  | 117  | 106905   | 49.176 | ug/L  | 98       |
| 33) Benzene                    | 5.81  | 78   | 384125   | 50.247 | ug/L  | 100      |
| 34) Trichloroethene            | 6.58  | 95   | 94689    | 50.089 | ug/L  | 98       |
| 35) Methylcyclohexane          | 6.80  | 83   | 166207   | 49.924 | ug/L  | 99       |
| 37) 1,2-Dichloropropane        | 6.83  | 63   | 103473   | 50.195 | ug/L  | 99       |
| 38) Bromodichloromethane       | 7.14  | 83   | 125048   | 49.918 | ug/L  | 98       |
| 39) cis-1,3-Dichloropropene    | 7.64  | 75   | 164152   | 49.838 | ug/L  | 99       |
| 40) 4-Methyl-2-pentanone       | 7.83  | 43   | 305888   | 93.918 | ug/L  | 99       |
| 42) Toluene                    | 8.00  | 91   | 414040   | 50.122 | ug/L  | 100      |
| 44) trans-1,3-Dichloropropene  | 8.24  | 75   | 142621   | 49.566 | ug/L  | 98       |
| 45) 1,1,2-Trichloroethane      | 8.43  | 97   | 92359    | 49.112 | ug/L  | 97       |
| 46) Tetrachloroethene          | 8.58  | 164  | 64450    | 48.583 | ug/L  | 99       |
| 48) 2-Hexanone                 | 8.72  | 43   | 257218   | 96.812 | ug/L  | 99       |
| 49) Dibromochloromethane       | 8.84  | 129  | 90964    | 49.454 | ug/L  | 98       |
| 50) 1,2-Dibromoethane          | 8.95  | 107  | 96013    | 48.598 | ug/L  | 99       |
| 51) Chlorobenzene              | 9.47  | 112  | 245405   | 49.337 | ug/L  | 99       |
| 52) Ethylbenzene               | 9.60  | 91   | 450823   | 49.668 | ug/L  | 99       |
| 53) m,p-Xylene                 | 9.72  | 106  | 167978   | 50.166 | ug/L  | 99       |
| 54) o-xylene                   | 10.12 | 106  | 164914   | 49.717 | ug/L  | 99       |
| 55) Styrene                    | 10.14 | 104  | 279296   | 50.522 | ug/L  | 100      |
| 57) 1,1,2,2-Tetrachloroethane  | 10.81 | 83   | 165923   | 48.963 | ug/L  | 98       |
| 59) Bromoform                  | 10.32 | 173  | 63349    | 49.885 | ug/L  | 100      |
| 60) 1,2,3-Trichloropropane     | 10.85 | 75   | 131619   | 48.680 | ug/L  | 99       |
| 61) Isopropylbenzene           | 10.51 | 105  | 431680   | 50.437 | ug/L  | 100      |
| 62) 1,3,5-Trimethylbenzene     | 11.11 | 105  | 373155   | 50.853 | ug/L  | 99       |
| 63) 1,2,4-Trimethylbenzene     | 11.49 | 105  | 369066   | 50.369 | ug/L  | 99       |
| 64) 1,3-Dichlorobenzene        | 11.77 | 146  | 179007   | 49.733 | ug/L  | 99       |
| 65) 1,4-Dichlorobenzene        | 11.86 | 146  | 177457   | 48.971 | ug/L  | 99       |
| 67) 1,2-Dichlorobenzene        | 12.23 | 146  | 178477   | 48.975 | ug/L  | 99       |
| 68) 1,2-Dibromo-3-chloropropan | 13.01 | 75   | 35617    | 46.096 | ug/L  | 97       |
| 69) 1,3,5-Trichlorobenzene     | 13.23 | 180  | 122394   | 49.038 | ug/L  | 99       |
| 70) 1,2,4-trichlorobenzene     | 13.85 | 180  | 98203    | 47.185 | ug/L  | 100      |
| 71) Naphthalene                | 14.10 | 128  | 336455   | 45.862 | ug/L  | 99       |
| 72) 1,2,3-Trichlorobenzene     | 14.34 | 180  | 94387    | 45.521 | ug/L  | 100      |

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

