

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU021519\  
 Data File : VU029492.D  
 Acq On : 15 Feb 2019 12:25  
 Operator : JC/SP  
 Sample : VSTDICV050  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VICV46

Quant Time: Feb 15 23:30:51 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMULM021519WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Fri Feb 15 23:28:02 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.88  | 114  | 453214   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.09  | 117  | 445296   | 50.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.48 | 152  | 244442   | 50.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |         |       |          |          |      |         |
|--------------------------------|---------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.40    | 65    | 171505   | 51.64    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 135 | Recovery | =    | 103.28% |
| 7) Chloroethane-d5             | 1.68    | 69    | 148495   | 50.30    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 130 | Recovery | =    | 100.60% |
| 11) 1,1-Dichloroethene-d2      | 2.27    | 63    | 284429   | 43.82    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 87.64%  |
| 21) 2-Butanone-d5              | 4.17    | 46    | 212487   | 105.14   | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 40 - 130 | Recovery | =    | 105.14% |
| 24) Chloroform-d               | 4.64    | 84    | 283982   | 52.72    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 105.44% |
| 26) 1,2-Dichloroethane-d4      | 5.31    | 65    | 173469   | 50.87    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 101.74% |
| 32) Benzene-d6                 | 5.34    | 84    | 576830   | 51.48    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 102.96% |
| 36) 1,2-Dichloropropane-d6     | 6.33    | 67    | 172498   | 51.17    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 120 | Recovery | =    | 102.34% |
| 41) Toluene-d8                 | 7.56    | 98    | 585958   | 51.24    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 102.48% |
| 43) trans-1,3-Dichloropropene- | 7.85    | 79    | 94276    | 52.72    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 105.44% |
| 47) 2-Hexanone-d5              | 8.31    | 63    | 193187   | 102.91   | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 45 - 130 | Recovery | =    | 102.91% |
| 57) 1,1,2,2-Tetrachloroethane- | 10.43   | 84    | 283345   | 49.74    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 65 - 120 | Recovery | =    | 99.48%  |
| 64) 1,2-Dichlorobenzene-d4     | 11.86   | 152   | 267524   | 50.78    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 101.56% |

## Target Compounds

|                                |      |     |        |             | Ovalue |
|--------------------------------|------|-----|--------|-------------|--------|
| 2) Dichlorodifluoromethane     | 1.21 | 85  | 158391 | 50.970 ug/L | 100    |
| 3) Chloromethane               | 1.33 | 50  | 141160 | 51.780 ug/L | 98     |
| 5) Vinyl chloride              | 1.40 | 62  | 189708 | 51.240 ug/L | 98     |
| 6) Bromomethane                | 1.62 | 94  | 104438 | 61.809 ug/L | 100    |
| 8) Chloroethane                | 1.69 | 64  | 123411 | 50.116 ug/L | 99     |
| 9) Trichlorofluoromethane      | 1.88 | 101 | 299734 | 50.787 ug/L | 98     |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.28 | 101 | 142558 | 45.157 ug/L | 96     |
| 12) 1,1-Dichloroethene         | 2.28 | 96  | 128887 | 42.944 ug/L | 97     |
| 13) Acetone                    | 2.32 | 43  | 197968 | 91.669 ug/L | 99     |
| 14) Carbon disulfide           | 2.47 | 76  | 400072 | 50.898 ug/L | 99     |
| 15) Methyl Acetate             | 2.61 | 43  | 142194 | 50.728 ug/L | 99     |
| 16) Methylene chloride         | 2.70 | 84  | 146202 | 50.342 ug/L | 99     |
| 17) trans-1,2-Dichloroethene   | 2.98 | 96  | 140256 | 50.632 ug/L | 98     |
| 18) Methyl tert-butyl Ether    | 3.00 | 73  | 428168 | 49.925 ug/L | 99     |
| 19) 1,1-Dichloroethane         | 3.44 | 63  | 240460 | 50.201 ug/L | 100    |
| 20) cis-1,2-Dichloroethene     | 4.22 | 96  | 165411 | 51.390 ug/L | 96     |
| 22) 2-Butanone                 | 4.26 | 43  | 243649 | 98.859 ug/L | 100    |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU021519\  
 Data File : VU029492.D  
 Acq On : 15 Feb 2019 12:25  
 Operator : JC/SP  
 Sample : VSTDICV050  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VICV46

Quant Time: Feb 15 23:30:51 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMULM021519WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Fri Feb 15 23:28:02 2019  
 Response via : Initial Calibration

| Internal Standards              | R.T.  | QIon | Response | Conc    | Units | Dev(Min) |
|---------------------------------|-------|------|----------|---------|-------|----------|
| 23) Bromochloromethane          | 4.54  | 128  | 89479    | 50.711  | ug/L  | 97       |
| 25) Chloroform                  | 4.67  | 83   | 267277   | 50.012  | ug/L  | 99       |
| 27) 1,2-Dichloroethane          | 5.40  | 62   | 207717   | 50.553  | ug/L  | 100      |
| 29) Cyclohexane                 | 4.99  | 56   | 229099   | 51.989  | ug/L  | 97       |
| 30) 1,1,1-Trichloroethane       | 4.91  | 97   | 238609   | 50.537  | ug/L  | 98       |
| 31) Carbon tetrachloride        | 5.13  | 117  | 219007   | 51.249  | ug/L  | 98       |
| 33) Benzene                     | 5.39  | 78   | 580637   | 50.858  | ug/L  | 100      |
| 34) Trichloroethene             | 6.18  | 95   | 160903   | 52.317  | ug/L  | 98       |
| 35) Methylcyclohexane           | 6.41  | 83   | 265607   | 52.002  | ug/L  | 99       |
| 37) 1,2-Dichloropropane         | 6.43  | 63   | 155770   | 51.976  | ug/L  | 99       |
| 38) Bromodichloromethane        | 6.75  | 83   | 209098   | 51.753  | ug/L  | 99       |
| 39) cis-1,3-Dichloropropene     | 7.27  | 75   | 259552   | 53.679  | ug/L  | 100      |
| 40) 4-Methyl-2-pentanone        | 7.46  | 43   | 433659   | 102.900 | ug/L  | 99       |
| 42) Toluene                     | 7.63  | 91   | 686624   | 50.856  | ug/L  | 98       |
| 44) trans-1,3-Dichloropropene   | 7.88  | 75   | 239712   | 52.604  | ug/L  | 100      |
| 45) 1,1,2-Trichloroethane       | 8.06  | 97   | 161575   | 50.581  | ug/L  | 99       |
| 46) Tetrachloroethene           | 8.22  | 164  | 153858   | 51.111  | ug/L  | 99       |
| 48) 2-Hexanone                  | 8.36  | 43   | 366848   | 99.645  | ug/L  | 99       |
| 49) Dibromochloromethane        | 8.47  | 129  | 196534   | 50.750  | ug/L  | 99       |
| 50) 1,2-Dibromoethane           | 8.58  | 107  | 182917   | 51.684  | ug/L  | 99       |
| 51) Chlorobenzene               | 9.12  | 112  | 475307   | 51.292  | ug/L  | 98       |
| 52) Ethylbenzene                | 9.25  | 91   | 787274   | 51.342  | ug/L  | 99       |
| 53) m,p-Xylene                  | 9.37  | 106  | 311850   | 50.664  | ug/L  | 97       |
| 54) o-xylene                    | 9.78  | 106  | 315439   | 51.018  | ug/L  | 99       |
| 55) Styrene                     | 9.79  | 104  | 531320   | 50.905  | ug/L  | 97       |
| 56) Isopropylbenzene            | 10.16 | 105  | 823679   | 50.911  | ug/L  | 100      |
| 58) 1,1,1,2,2-Tetrachloroethane | 10.45 | 83   | 282604   | 50.030  | ug/L  | 99       |
| 59) 1,2,3-Trichloropropane      | 10.49 | 75   | 213039   | 49.856  | ug/L  | 100      |
| 61) Bromoform                   | 9.95  | 173  | 161202   | 48.970  | ug/L  | 99       |
| 62) 1,3-Dichlorobenzene         | 11.41 | 146  | 405977   | 52.090  | ug/L  | 97       |
| 63) 1,4-Dichlorobenzene         | 11.50 | 146  | 403723   | 51.474  | ug/L  | 99       |
| 65) 1,2-Dichlorobenzene         | 11.88 | 146  | 409263   | 50.305  | ug/L  | 99       |
| 66) 1,2-Dibromo-3-chloropropan  | 12.65 | 75   | 67387    | 53.228  | ug/L  | 93       |
| 67) 1,3,5-Trichlorobenzene      | 12.88 | 180  | 318625   | 53.573  | ug/L  | 99       |
| 68) 1,2,4-trichlorobenzene      | 13.50 | 180  | 290288   | 56.432  | ug/L  | 100      |
| 69) Naphthalene                 | 13.74 | 128  | 946461   | 59.860  | ug/L  | 100      |
| 70) 1,2,3-Trichlorobenzene      | 13.98 | 180  | 303131   | 55.492  | ug/L  | 99       |

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

