

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU011320\  
 Data File : VU036436.D  
 Acq On : 13 Jan 2020 11:27  
 Operator : JC/MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD05060

Quant Time: Jan 14 16:15:01 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMULM122719WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Mon Jan 13 10:10:32 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 6.29  | 114  | 475999   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.45  | 117  | 458067   | 50.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.83 | 152  | 220519   | 50.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |         |       |          |          |      |         |
|--------------------------------|---------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.61    | 65    | 192098   | 51.79    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 135 | Recovery | =    | 103.58% |
| 7) Chloroethane-d5             | 1.93    | 69    | 165684   | 52.96    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 130 | Recovery | =    | 105.92% |
| 11) 1,1-Dichloroethene-d2      | 2.59    | 63    | 347371   | 54.98    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 109.96% |
| 21) 2-Butanone-d5              | 4.67    | 46    | 298952   | 108.24   | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 40 - 130 | Recovery | =    | 108.24% |
| 24) Chloroform-d               | 5.11    | 84    | 363499   | 56.15    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 112.30% |
| 26) 1,2-Dichloroethane-d4      | 5.74    | 65    | 244687   | 57.01    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 114.02% |
| 32) Benzene-d6                 | 5.77    | 84    | 705506   | 55.32    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 110.64% |
| 36) 1,2-Dichloropropane-d6     | 6.73    | 67    | 229252   | 53.60    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 120 | Recovery | =    | 107.20% |
| 41) Toluene-d8                 | 7.93    | 98    | 653594   | 53.39    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 106.78% |
| 43) trans-1,3-Dichloropropene- | 8.21    | 79    | 124360   | 53.59    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 107.18% |
| 47) 2-Hexanone-d5              | 8.67    | 63    | 238229   | 108.00   | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 45 - 130 | Recovery | =    | 108.00% |
| 57) 1,1,2,2-Tetrachloroethane- | 10.78   | 84    | 353545   | 54.50    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 65 - 120 | Recovery | =    | 109.00% |
| 64) 1,2-Dichlorobenzene-d4     | 12.21   | 152   | 237916   | 51.43    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 102.86% |

## Target Compounds

|                                |      |     |        |               | Ovalue |
|--------------------------------|------|-----|--------|---------------|--------|
| 2) Dichlorodifluoromethane     | 1.39 | 85  | 187463 | 49.309 ug/L   | 99     |
| 3) Chloromethane               | 1.54 | 50  | 166790 | 48.217 ug/L   | 100    |
| 5) Vinyl chloride              | 1.62 | 62  | 175794 | 43.785 ug/L   | 95     |
| 6) Bromomethane                | 1.87 | 94  | 105943 | 54.602 ug/L   | 93     |
| 8) Chloroethane                | 1.95 | 64  | 107244 | 44.395 ug/L   | 99     |
| 9) Trichlorofluoromethane      | 2.16 | 101 | 270830 | 47.981 ug/L   | 100    |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.60 | 101 | 157542 | 56.381 ug/L   | 99     |
| 12) 1,1-Dichloroethene         | 2.60 | 96  | 140260 | 50.921 ug/L   | 81     |
| 13) Acetone                    | 2.66 | 43  | 242990 | 84.819 ug/L   | 98     |
| 14) Carbon disulfide           | 2.82 | 76  | 361536 | 42.415 ug/L   | 100    |
| 15) Methyl Acetate             | 2.98 | 43  | 203537 | 52.835 ug/L   | 97     |
| 16) Methylene chloride         | 3.08 | 84  | 174054 | 51.621 ug/L   | 99     |
| 17) trans-1,2-Dichloroethene   | 3.39 | 96  | 154477 | 51.948 ug/L   | 98     |
| 18) Methyl tert-butyl Ether    | 3.41 | 73  | 576498 | 53.367 ug/L   | 100    |
| 19) 1,1-Dichloroethane         | 3.91 | 63  | 313061 | 52.521 ug/L   | 97     |
| 20) cis-1,2-Dichloroethene     | 4.71 | 96  | 188467 | 52.397 ug/L # | 93     |
| 22) 2-Butanone                 | 4.75 | 43  | 323698 | 95.647 ug/L   | 98     |

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 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD05060

Quant Time: Jan 14 16:15:01 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMULM122719WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Mon Jan 13 10:10:32 2020  
 Response via : Initial Calibration

| Internal Standards              | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|---------------------------------|-------|------|----------|--------|--------|----------|
| 23) Bromochloromethane          | 5.02  | 128  | 91285    | 52.868 | ug/L   | 95       |
| 25) Chloroform                  | 5.13  | 83   | 340598   | 53.628 | ug/L   | 98       |
| 27) 1,2-Dichloroethane          | 5.83  | 62   | 260070   | 52.973 | ug/L   | 97       |
| 29) Cyclohexane                 | 5.43  | 56   | 270489   | 50.964 | ug/L   | 99       |
| 30) 1,1,1-Trichloroethane       | 5.36  | 97   | 297996   | 53.079 | ug/L   | 99       |
| 31) Carbon tetrachloride        | 5.56  | 117  | 255617   | 52.525 | ug/L   | 99       |
| 33) Benzene                     | 5.81  | 78   | 693715   | 51.555 | ug/L   | 100      |
| 34) Trichloroethene             | 6.58  | 95   | 184138   | 53.081 | ug/L   | 97       |
| 35) Methylcyclohexane           | 6.80  | 83   | 285032   | 51.477 | ug/L   | 99       |
| 37) 1,2-Dichloropropane         | 6.83  | 63   | 190350   | 52.241 | ug/L # | 95       |
| 38) Bromodichloromethane        | 7.14  | 83   | 271421   | 52.802 | ug/L   | 96       |
| 39) cis-1,3-Dichloropropene     | 7.64  | 75   | 303832   | 49.810 | ug/L   | 100      |
| 40) 4-Methyl-2-pentanone        | 7.83  | 43   | 598982   | 96.739 | ug/L   | 99       |
| 42) Toluene                     | 8.00  | 91   | 759855   | 51.282 | ug/L   | 99       |
| 44) trans-1,3-Dichloropropene   | 8.24  | 75   | 297503   | 52.353 | ug/L   | 98       |
| 45) 1,1,2-Trichloroethane       | 8.43  | 97   | 185058   | 54.439 | ug/L   | 97       |
| 46) Tetrachloroethene           | 8.58  | 164  | 128361   | 51.427 | ug/L   | 97       |
| 48) 2-Hexanone                  | 8.72  | 43   | 457264   | 95.979 | ug/L   | 95       |
| 49) Dibromochloromethane        | 8.84  | 129  | 214546   | 51.418 | ug/L   | 97       |
| 50) 1,2-Dibromoethane           | 8.95  | 107  | 206833   | 52.464 | ug/L   | 94       |
| 51) Chlorobenzene               | 9.47  | 112  | 493493   | 52.767 | ug/L   | 99       |
| 52) Ethylbenzene                | 9.60  | 91   | 873754   | 51.811 | ug/L   | 99       |
| 53) m,p-Xylene                  | 9.72  | 106  | 330430   | 52.820 | ug/L   | 98       |
| 54) o-xylene                    | 10.12 | 106  | 323759   | 51.580 | ug/L   | 100      |
| 55) Styrene                     | 10.14 | 104  | 543276   | 51.189 | ug/L   | 100      |
| 56) Isopropylbenzene            | 10.51 | 105  | 869620   | 53.155 | ug/L   | 100      |
| 58) 1,1,1,2,2-Tetrachloroethane | 10.81 | 83   | 336041   | 52.298 | ug/L   | 100      |
| 59) 1,2,3-Trichloropropane      | 10.85 | 75   | 265228   | 51.880 | ug/L   | 98       |
| 61) Bromoform                   | 10.32 | 173  | 157529   | 48.071 | ug/L   | 98       |
| 62) 1,3-Dichlorobenzene         | 11.77 | 146  | 365087   | 51.232 | ug/L   | 95       |
| 63) 1,4-Dichlorobenzene         | 11.86 | 146  | 370937   | 52.475 | ug/L   | 99       |
| 65) 1,2-Dichlorobenzene         | 12.23 | 146  | 358989   | 50.280 | ug/L   | 93       |
| 66) 1,2-Dibromo-3-chloropropan  | 13.02 | 75   | 76088    | 45.669 | ug/L   | 96       |
| 67) 1,3,5-Trichlorobenzene      | 13.24 | 180  | 236906   | 50.064 | ug/L   | 99       |
| 68) 1,2,4-trichlorobenzene      | 13.86 | 180  | 170545   | 47.555 | ug/L   | 98       |
| 69) Naphthalene                 | 14.10 | 128  | 550008   | 44.632 | ug/L   | 99       |
| 70) 1,2,3-Trichlorobenzene      | 14.35 | 180  | 172492   | 45.799 | ug/L   | 98       |

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

