

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU061819\  
 Data File : VU032826.D  
 Acq On : 18 Jun 2019 15:55  
 Operator : JC/SP  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 20 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD05054

Quant Time: Jun 19 01:33:14 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMULM061719WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Wed Jun 19 01:26:44 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.88  | 114  | 225918   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.08  | 117  | 219787   | 50.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.48 | 152  | 119235   | 50.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |         |       |          |          |      |         |
|--------------------------------|---------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.39    | 65    | 60179    | 38.98    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 135 | Recovery | =    | 77.96%  |
| 7) Chloroethane-d5             | 1.67    | 69    | 51809    | 42.07    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 130 | Recovery | =    | 84.14%  |
| 11) 1,1-Dichloroethene-d2      | 2.27    | 63    | 129214   | 41.54    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 83.08%  |
| 21) 2-Butanone-d5              | 4.17    | 46    | 133615   | 103.97   | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 40 - 130 | Recovery | =    | 103.97% |
| 24) Chloroform-d               | 4.64    | 84    | 137353   | 45.76    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 91.52%  |
| 26) 1,2-Dichloroethane-d4      | 5.30    | 65    | 91115    | 45.57    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 91.14%  |
| 32) Benzene-d6                 | 5.33    | 84    | 251044   | 43.82    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 87.64%  |
| 36) 1,2-Dichloropropane-d6     | 6.32    | 67    | 83766    | 45.90    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 120 | Recovery | =    | 91.80%  |
| 41) Toluene-d8                 | 7.56    | 98    | 235824   | 43.95    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 87.90%  |
| 43) trans-1,3-Dichloropropene- | 7.84    | 79    | 43980    | 46.32    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 92.64%  |
| 47) 2-Hexanone-d5              | 8.31    | 63    | 88478    | 103.82   | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 45 - 130 | Recovery | =    | 103.82% |
| 57) 1,1,2,2-Tetrachloroethane- | 10.42   | 84    | 135107   | 47.88    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 65 - 120 | Recovery | =    | 95.76%  |
| 64) 1,2-Dichlorobenzene-d4     | 11.85   | 152   | 105422   | 45.69    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 91.38%  |

## Target Compounds

|                                |      |     |        |        | Ovalue   |
|--------------------------------|------|-----|--------|--------|----------|
| 2) Dichlorodifluoromethane     | 1.20 | 85  | 110713 | 48.515 | ug/L 99  |
| 3) Chloromethane               | 1.32 | 50  | 98022  | 47.392 | ug/L 99  |
| 5) Vinyl chloride              | 1.40 | 62  | 97489  | 47.520 | ug/L 99  |
| 6) Bromomethane                | 1.62 | 94  | 57062  | 47.268 | ug/L 97  |
| 8) Chloroethane                | 1.69 | 64  | 55712  | 47.176 | ug/L 98  |
| 9) Trichlorofluoromethane      | 1.88 | 101 | 138306 | 48.053 | ug/L 100 |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.28 | 101 | 73249  | 48.520 | ug/L 97  |
| 12) 1,1-Dichloroethene         | 2.28 | 96  | 67898  | 47.726 | ug/L 90  |
| 13) Acetone                    | 2.32 | 43  | 140578 | 79.200 | ug/L 98  |
| 14) Carbon disulfide           | 2.47 | 76  | 204940 | 45.525 | ug/L 99  |
| 15) Methyl Acetate             | 2.61 | 43  | 101497 | 50.445 | ug/L 98  |
| 16) Methylene chloride         | 2.69 | 84  | 79976  | 47.907 | ug/L 99  |
| 17) trans-1,2-Dichloroethene   | 2.97 | 96  | 74078  | 48.016 | ug/L 100 |
| 18) Methyl tert-butyl Ether    | 2.99 | 73  | 248418 | 50.152 | ug/L 99  |
| 19) 1,1-Dichloroethane         | 3.44 | 63  | 145277 | 49.393 | ug/L 99  |
| 20) cis-1,2-Dichloroethene     | 4.22 | 96  | 83478  | 49.669 | ug/L 98  |
| 22) 2-Butanone                 | 4.25 | 43  | 164400 | 89.362 | ug/L 99  |

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 ALS Vial : 20 Sample Multiplier: 1

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 MSVOA\_U  
 ClientSampleId :  
 VSTD05054

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 Quant Title : VOC Analysis  
 QLast Update : Wed Jun 19 01:26:44 2019  
 Response via : Initial Calibration

| Internal Standards              | R.T.  | QIon | Response | Conc    | Units | Dev(Min) |
|---------------------------------|-------|------|----------|---------|-------|----------|
| 23) Bromochloromethane          | 4.54  | 128  | 44284    | 50.508  | ug/L  | 99       |
| 25) Chloroform                  | 4.67  | 83   | 150032   | 49.464  | ug/L  | 98       |
| 27) 1,2-Dichloroethane          | 5.40  | 62   | 125682   | 50.439  | ug/L  | 99       |
| 29) Cyclohexane                 | 4.99  | 56   | 128055   | 49.898  | ug/L  | 98       |
| 30) 1,1,1-Trichloroethane       | 4.91  | 97   | 129386   | 48.319  | ug/L  | 98       |
| 31) Carbon tetrachloride        | 5.13  | 117  | 117691   | 48.305  | ug/L  | 99       |
| 33) Benzene                     | 5.38  | 78   | 310102   | 48.977  | ug/L  | 100      |
| 34) Trichloroethene             | 6.18  | 95   | 83217    | 49.192  | ug/L  | 98       |
| 35) Methylcyclohexane           | 6.41  | 83   | 130374   | 49.858  | ug/L  | 99       |
| 37) 1,2-Dichloropropane         | 6.42  | 63   | 86445    | 49.773  | ug/L  | 100      |
| 38) Bromodichloromethane        | 6.75  | 83   | 112105   | 48.003  | ug/L  | 99       |
| 39) cis-1,3-Dichloropropene     | 7.26  | 75   | 139017   | 51.377  | ug/L  | 100      |
| 40) 4-Methyl-2-pentanone        | 7.45  | 43   | 282754   | 101.973 | ug/L  | 99       |
| 42) Toluene                     | 7.63  | 91   | 341310   | 49.823  | ug/L  | 99       |
| 44) trans-1,3-Dichloropropene   | 7.87  | 75   | 127756   | 50.268  | ug/L  | 99       |
| 45) 1,1,2-Trichloroethane       | 8.06  | 97   | 79006    | 48.874  | ug/L  | 96       |
| 46) Tetrachloroethene           | 8.22  | 164  | 68185    | 49.188  | ug/L  | 99       |
| 48) 2-Hexanone                  | 8.36  | 43   | 236204   | 96.549  | ug/L  | 100      |
| 49) Dibromochloromethane        | 8.47  | 129  | 92576    | 47.505  | ug/L  | 98       |
| 50) 1,2-Dibromoethane           | 8.58  | 107  | 89732    | 49.983  | ug/L  | 98       |
| 51) Chlorobenzene               | 9.11  | 112  | 219645   | 48.724  | ug/L  | 98       |
| 52) Ethylbenzene                | 9.24  | 91   | 384875   | 50.757  | ug/L  | 99       |
| 53) m,p-Xylene                  | 9.37  | 106  | 144890   | 50.645  | ug/L  | 100      |
| 54) o-xylene                    | 9.77  | 106  | 141620   | 50.689  | ug/L  | 98       |
| 55) Styrene                     | 9.79  | 104  | 245541   | 50.660  | ug/L  | 99       |
| 56) Isopropylbenzene            | 10.16 | 105  | 384666   | 51.089  | ug/L  | 99       |
| 58) 1,1,1,2,2-Tetrachloroethane | 10.45 | 83   | 143725   | 49.135  | ug/L  | 99       |
| 59) 1,2,3-Trichloropropane      | 10.49 | 75   | 113925   | 49.153  | ug/L  | 99       |
| 61) Bromoform                   | 9.95  | 173  | 70635    | 45.368  | ug/L  | 100      |
| 62) 1,3-Dichlorobenzene         | 11.41 | 146  | 182770   | 49.314  | ug/L  | 98       |
| 63) 1,4-Dichlorobenzene         | 11.50 | 146  | 188191   | 49.161  | ug/L  | 99       |
| 65) 1,2-Dichlorobenzene         | 11.87 | 146  | 186799   | 49.362  | ug/L  | 97       |
| 66) 1,2-Dibromo-3-chloropropan  | 12.65 | 75   | 34156    | 47.310  | ug/L  | 100      |
| 67) 1,3,5-Trichlorobenzene      | 12.88 | 180  | 147245   | 49.446  | ug/L  | 98       |
| 68) 1,2,4-trichlorobenzene      | 13.50 | 180  | 135930   | 53.048  | ug/L  | 98       |
| 69) Naphthalene                 | 13.74 | 128  | 419353   | 53.228  | ug/L  | 99       |
| 70) 1,2,3-Trichlorobenzene      | 13.98 | 180  | 136338   | 50.261  | ug/L  | 99       |

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

