

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU091919\  
 Data File : VU034656.D  
 Acq On : 19 Sep 2019 18:17  
 Operator : JC/SP  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD05058

Quant Time: Sep 20 03:46:54 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMULM091919WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Thu Sep 19 17:44:37 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.86  | 114  | 481348   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.07  | 117  | 462799   | 50.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.46 | 152  | 220568   | 50.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |         |       |          |          |      |         |
|--------------------------------|---------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.39    | 65    | 244132   | 49.54    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 135 | Recovery | =    | 99.08%  |
| 7) Chloroethane-d5             | 1.67    | 69    | 206498   | 54.22    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 130 | Recovery | =    | 108.44% |
| 11) 1,1-Dichloroethene-d2      | 2.26    | 63    | 429858   | 51.51    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 103.02% |
| 21) 2-Butanone-d5              | 4.16    | 46    | 416440   | 110.27   | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 40 - 130 | Recovery | =    | 110.27% |
| 24) Chloroform-d               | 4.62    | 84    | 370537   | 51.72    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 103.44% |
| 26) 1,2-Dichloroethane-d4      | 5.29    | 65    | 265980   | 50.51    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 101.02% |
| 32) Benzene-d6                 | 5.32    | 84    | 722969   | 50.40    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 100.80% |
| 36) 1,2-Dichloropropane-d6     | 6.31    | 67    | 254312   | 50.72    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 120 | Recovery | =    | 101.44% |
| 41) Toluene-d8                 | 7.54    | 98    | 691456   | 50.67    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 101.34% |
| 43) trans-1,3-Dichloropropene- | 7.83    | 79    | 125088   | 52.09    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 104.18% |
| 47) 2-Hexanone-d5              | 8.29    | 63    | 268849   | 106.76   | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 45 - 130 | Recovery | =    | 106.76% |
| 57) 1,1,2,2-Tetrachloroethane- | 10.41   | 84    | 339647   | 48.82    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 65 - 120 | Recovery | =    | 97.64%  |
| 64) 1,2-Dichlorobenzene-d4     | 11.84   | 152   | 230080   | 49.75    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 99.50%  |

## Target Compounds

|                                |      |     |        |        | Ovalue   |
|--------------------------------|------|-----|--------|--------|----------|
| 2) Dichlorodifluoromethane     | 1.20 | 85  | 235782 | 47.526 | ug/L 100 |
| 3) Chloromethane               | 1.32 | 50  | 277776 | 46.743 | ug/L 98  |
| 5) Vinyl chloride              | 1.40 | 62  | 260122 | 47.926 | ug/L 99  |
| 6) Bromomethane                | 1.62 | 94  | 171759 | 57.942 | ug/L 96  |
| 8) Chloroethane                | 1.69 | 64  | 156083 | 49.953 | ug/L 97  |
| 9) Trichlorofluoromethane      | 1.87 | 101 | 334076 | 48.816 | ug/L 98  |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.27 | 101 | 157462 | 47.988 | ug/L 97  |
| 12) 1,1-Dichloroethene         | 2.27 | 96  | 157600 | 50.043 | ug/L 92  |
| 13) Acetone                    | 2.32 | 43  | 346002 | 78.758 | ug/L 98  |
| 14) Carbon disulfide           | 2.46 | 76  | 511615 | 48.147 | ug/L 100 |
| 15) Methyl Acetate             | 2.60 | 43  | 289047 | 49.254 | ug/L 99  |
| 16) Methylene chloride         | 2.68 | 84  | 188131 | 47.159 | ug/L 99  |
| 17) trans-1,2-Dichloroethene   | 2.96 | 96  | 163644 | 47.527 | ug/L 95  |
| 18) Methyl tert-butyl Ether    | 2.98 | 73  | 620163 | 48.548 | ug/L 99  |
| 19) 1,1-Dichloroethane         | 3.42 | 63  | 373345 | 47.266 | ug/L 97  |
| 20) cis-1,2-Dichloroethene     | 4.20 | 96  | 194180 | 48.232 | ug/L 98  |
| 22) 2-Butanone                 | 4.24 | 43  | 475893 | 91.053 | ug/L 99  |

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 ALS Vial : 9 Sample Multiplier: 1

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 Quant Title : VOC Analysis  
 QLast Update : Thu Sep 19 17:44:37 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|--------|--------|----------|
| 23) Bromochloromethane         | 4.52  | 128  | 91297    | 47.377 | ug/L   | 95       |
| 25) Chloroform                 | 4.65  | 83   | 369318   | 47.481 | ug/L   | 98       |
| 27) 1,2-Dichloroethane         | 5.38  | 62   | 323342   | 48.123 | ug/L   | 99       |
| 29) Cyclohexane                | 4.97  | 56   | 366083   | 47.924 | ug/L   | 100      |
| 30) 1,1,1-Trichloroethane      | 4.89  | 97   | 299928   | 47.616 | ug/L   | 99       |
| 31) Carbon tetrachloride       | 5.11  | 117  | 256419   | 47.765 | ug/L   | 98       |
| 33) Benzene                    | 5.37  | 78   | 780604   | 48.633 | ug/L   | 100      |
| 34) Trichloroethene            | 6.16  | 95   | 189693   | 47.853 | ug/L   | 97       |
| 35) Methylcyclohexane          | 6.39  | 83   | 324633   | 48.258 | ug/L   | 98       |
| 37) 1,2-Dichloropropane        | 6.41  | 63   | 227072   | 47.511 | ug/L # | 97       |
| 38) Bromodichloromethane       | 6.73  | 83   | 276139   | 47.643 | ug/L   | 99       |
| 39) cis-1,3-Dichloropropene    | 7.25  | 75   | 351004   | 48.878 | ug/L   | 100      |
| 40) 4-Methyl-2-pentanone       | 7.44  | 43   | 887973   | 97.316 | ug/L   | 99       |
| 42) Toluene                    | 7.61  | 91   | 826574   | 47.650 | ug/L   | 97       |
| 44) trans-1,3-Dichloropropene  | 7.86  | 75   | 321796   | 49.707 | ug/L   | 99       |
| 45) 1,1,2-Trichloroethane      | 8.04  | 97   | 183683   | 47.980 | ug/L   | 96       |
| 46) Tetrachloroethene          | 8.21  | 164  | 135024   | 48.424 | ug/L   | 94       |
| 48) 2-Hexanone                 | 8.34  | 43   | 673239   | 94.469 | ug/L   | 98       |
| 49) Dibromochloromethane       | 8.45  | 129  | 206817   | 48.467 | ug/L   | 99       |
| 50) 1,2-Dibromoethane          | 8.57  | 107  | 200260   | 48.536 | ug/L   | 100      |
| 51) Chlorobenzene              | 9.10  | 112  | 497934   | 47.220 | ug/L   | 98       |
| 52) Ethylbenzene               | 9.23  | 91   | 930437   | 47.632 | ug/L   | 99       |
| 53) m,p-Xylene                 | 9.35  | 106  | 330405   | 47.755 | ug/L   | 97       |
| 54) o-xylene                   | 9.76  | 106  | 327069   | 47.794 | ug/L   | 98       |
| 55) Styrene                    | 9.77  | 104  | 557152   | 48.098 | ug/L   | 98       |
| 56) Isopropylbenzene           | 10.14 | 105  | 871520   | 47.232 | ug/L   | 99       |
| 58) 1,1,2,2-Tetrachloroethane  | 10.43 | 83   | 347732   | 47.291 | ug/L   | 97       |
| 59) 1,2,3-Trichloropropane     | 10.47 | 75   | 276480   | 46.316 | ug/L   | 100      |
| 61) Bromoform                  | 9.94  | 173  | 150191   | 49.456 | ug/L   | 99       |
| 62) 1,3-Dichlorobenzene        | 11.39 | 146  | 365627   | 47.867 | ug/L   | 99       |
| 63) 1,4-Dichlorobenzene        | 11.49 | 146  | 368502   | 47.358 | ug/L   | 99       |
| 65) 1,2-Dichlorobenzene        | 11.85 | 146  | 369316   | 47.852 | ug/L   | 98       |
| 66) 1,2-Dibromo-3-chloropropan | 12.63 | 75   | 81976    | 49.971 | ug/L   | 98       |
| 67) 1,3,5-Trichlorobenzene     | 12.86 | 180  | 253254   | 49.484 | ug/L   | 99       |
| 68) 1,2,4-trichlorobenzene     | 13.48 | 180  | 224524   | 55.787 | ug/L   | 98       |
| 69) Naphthalene                | 13.72 | 128  | 805345   | 57.803 | ug/L   | 99       |
| 70) 1,2,3-Trichlorobenzene     | 13.97 | 180  | 225954   | 54.563 | ug/L   | 98       |

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

