

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU032119\  
 Data File : VU030293.D  
 Acq On : 22 Mar 2019 02:14  
 Operator : JC/SP  
 Sample : VSTDCCC050EC  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 45 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD05052

Quant Time: Mar 22 05:22:23 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMULM031919WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Fri Mar 22 05:14:44 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.88  | 114  | 545900   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.09  | 117  | 538017   | 50.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.48 | 152  | 275571   | 50.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |         |       |          |          |      |         |
|--------------------------------|---------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.40    | 65    | 167469   | 45.37    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 135 | Recovery | =    | 90.74%  |
| 7) Chloroethane-d5             | 1.68    | 69    | 141193   | 47.84    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 130 | Recovery | =    | 95.68%  |
| 11) 1,1-Dichloroethene-d2      | 2.27    | 63    | 314612   | 46.72    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 93.44%  |
| 21) 2-Butanone-d5              | 4.17    | 46    | 297129   | 108.50   | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 40 - 130 | Recovery | =    | 108.50% |
| 24) Chloroform-d               | 4.65    | 84    | 330655   | 48.81    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 97.62%  |
| 26) 1,2-Dichloroethane-d4      | 5.31    | 65    | 188556   | 48.80    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 97.60%  |
| 32) Benzene-d6                 | 5.34    | 84    | 686967   | 48.45    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 96.90%  |
| 36) 1,2-Dichloropropane-d6     | 6.33    | 67    | 214595   | 48.92    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 120 | Recovery | =    | 97.84%  |
| 41) Toluene-d8                 | 7.56    | 98    | 635990   | 47.71    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 95.42%  |
| 43) trans-1,3-Dichloropropene- | 7.85    | 79    | 98379    | 46.05    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 92.10%  |
| 47) 2-Hexanone-d5              | 8.31    | 63    | 235927   | 103.71   | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 45 - 130 | Recovery | =    | 103.71% |
| 57) 1,1,2,2-Tetrachloroethane- | 10.43   | 84    | 337373   | 50.14    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 65 - 120 | Recovery | =    | 100.28% |
| 64) 1,2-Dichlorobenzene-d4     | 11.86   | 152   | 266543   | 48.18    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 96.36%  |

## Target Compounds

| Target Compounds               | R.T. | QIon | Response | Conc   | Units | Ovalue |
|--------------------------------|------|------|----------|--------|-------|--------|
| 2) Dichlorodifluoromethane     | 1.21 | 85   | 215102   | 46.540 | ug/L  | 99     |
| 3) Chloromethane               | 1.33 | 50   | 216145   | 48.313 | ug/L  | 100    |
| 5) Vinyl chloride              | 1.40 | 62   | 234278   | 49.331 | ug/L  | 99     |
| 6) Bromomethane                | 1.62 | 94   | 129137   | 50.247 | ug/L  | 98     |
| 8) Chloroethane                | 1.70 | 64   | 135488   | 48.253 | ug/L  | 99     |
| 9) Trichlorofluoromethane      | 1.88 | 101  | 292219   | 48.452 | ug/L  | 99     |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.29 | 101  | 172621   | 47.070 | ug/L  | 99     |
| 12) 1,1-Dichloroethene         | 2.28 | 96   | 175294   | 48.131 | ug/L  | 97     |
| 13) Acetone                    | 2.32 | 43   | 195893   | 68.458 | ug/L  | 99     |
| 14) Carbon disulfide           | 2.48 | 76   | 498895   | 45.863 | ug/L  | 99     |
| 15) Methyl Acetate             | 2.61 | 43   | 210772   | 50.652 | ug/L  | 97     |
| 16) Methylene chloride         | 2.70 | 84   | 205441   | 49.737 | ug/L  | 99     |
| 17) trans-1,2-Dichloroethene   | 2.98 | 96   | 183851   | 47.901 | ug/L  | 100    |
| 18) Methyl tert-butyl Ether    | 3.00 | 73   | 563320   | 51.022 | ug/L  | 99     |
| 19) 1,1-Dichloroethane         | 3.44 | 63   | 334412   | 50.656 | ug/L  | 99     |
| 20) cis-1,2-Dichloroethene     | 4.22 | 96   | 213497   | 50.770 | ug/L  | 97     |
| 22) 2-Butanone                 | 4.26 | 43   | 311762   | 92.701 | ug/L  | 99     |

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 Quant Title : VOC Analysis  
 QLast Update : Fri Mar 22 05:14:44 2019  
 Response via : Initial Calibration

| Internal Standards              | R.T.  | QIon | Response | Conc    | Units | Dev(Min) |
|---------------------------------|-------|------|----------|---------|-------|----------|
| 23) Bromochloromethane          | 4.55  | 128  | 111813   | 49.680  | uq/L  | 97       |
| 25) Chloroform                  | 4.67  | 83   | 335989   | 48.852  | uq/L  | 99       |
| 27) 1,2-Dichloroethane          | 5.40  | 62   | 240887   | 49.414  | uq/L  | 100      |
| 29) Cyclohexane                 | 4.99  | 56   | 285628   | 48.860  | uq/L  | 99       |
| 30) 1,1,1-Trichloroethane       | 4.91  | 97   | 287433   | 49.572  | uq/L  | 99       |
| 31) Carbon tetrachloride        | 5.13  | 117  | 247488   | 48.214  | uq/L  | 99       |
| 33) Benzene                     | 5.39  | 78   | 789405   | 50.856  | uq/L  | 100      |
| 34) Trichloroethene             | 6.18  | 95   | 203570   | 49.757  | uq/L  | 98       |
| 35) Methylcyclohexane           | 6.41  | 83   | 301863   | 47.052  | uq/L  | 99       |
| 37) 1,2-Dichloropropane         | 6.43  | 63   | 201212   | 50.614  | uq/L  | 99       |
| 38) Bromodichloromethane        | 6.76  | 83   | 255664   | 50.019  | uq/L  | 99       |
| 39) cis-1,3-Dichloropropene     | 7.27  | 75   | 307941   | 48.280  | uq/L  | 99       |
| 40) 4-Methyl-2-pentanone        | 7.46  | 43   | 559493   | 102.403 | uq/L  | 98       |
| 42) Toluene                     | 7.63  | 91   | 857415   | 50.749  | uq/L  | 99       |
| 44) trans-1,3-Dichloropropene   | 7.88  | 75   | 270151   | 48.948  | uq/L  | 99       |
| 45) 1,1,2-Trichloroethane       | 8.06  | 97   | 205379   | 50.329  | uq/L  | 99       |
| 46) Tetrachloroethene           | 8.22  | 164  | 167943   | 48.584  | uq/L  | 99       |
| 48) 2-Hexanone                  | 8.36  | 43   | 440726   | 97.188  | uq/L  | 98       |
| 49) Dibromochloromethane        | 8.47  | 129  | 223712   | 48.888  | uq/L  | 100      |
| 50) 1,2-Dibromoethane           | 8.58  | 107  | 223735   | 49.452  | uq/L  | 98       |
| 51) Chlorobenzene               | 9.12  | 112  | 545413   | 48.794  | uq/L  | 99       |
| 52) Ethylbenzene                | 9.25  | 91   | 920972   | 50.194  | uq/L  | 100      |
| 53) m,p-Xylene                  | 9.37  | 106  | 357739   | 50.606  | uq/L  | 100      |
| 54) o-xylene                    | 9.78  | 106  | 352342   | 50.704  | uq/L  | 99       |
| 55) Styrene                     | 9.79  | 104  | 596246   | 50.642  | uq/L  | 100      |
| 56) Isopropylbenzene            | 10.16 | 105  | 900036   | 50.097  | uq/L  | 100      |
| 58) 1,1,1,2,2-Tetrachloroethane | 10.45 | 83   | 349589   | 50.239  | uq/L  | 98       |
| 59) 1,2,3-Trichloropropane      | 10.49 | 75   | 266231   | 49.550  | uq/L  | 99       |
| 61) Bromoform                   | 9.95  | 173  | 174745   | 49.104  | uq/L  | 100      |
| 62) 1,3-Dichlorobenzene         | 11.41 | 146  | 430218   | 48.933  | uq/L  | 98       |
| 63) 1,4-Dichlorobenzene         | 11.50 | 146  | 443548   | 48.636  | uq/L  | 99       |
| 65) 1,2-Dichlorobenzene         | 11.87 | 146  | 438082   | 48.769  | uq/L  | 98       |
| 66) 1,2-Dibromo-3-chloropropan  | 12.65 | 75   | 72758    | 48.446  | uq/L  | 98       |
| 67) 1,3,5-Trichlorobenzene      | 12.88 | 180  | 327453   | 47.656  | uq/L  | 99       |
| 68) 1,2,4-trichlorobenzene      | 13.50 | 180  | 282605   | 46.509  | uq/L  | 100      |
| 69) Naphthalene                 | 13.74 | 128  | 863524   | 44.793  | uq/L  | 100      |
| 70) 1,2,3-Trichlorobenzene      | 13.98 | 180  | 298440   | 47.071  | uq/L  | 99       |

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

