

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_U\DATA\VU121018\  
 Data File : VU028545.D  
 Acq On : 10 Dec 2018 11:52  
 Operator : MD/SY  
 Sample : VSTDCCC050EC  
 Misc : 5.0mL/MSVOA\_U/WATER  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD05042

Quant Time: Dec 11 02:54:38 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMULM120718WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Tue Dec 11 02:51:29 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.89  | 114  | 160043   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.09  | 117  | 153352   | 50.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.48 | 152  | 75305    | 50.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |         |       |          |          |      |        |
|--------------------------------|---------|-------|----------|----------|------|--------|
| 4) Vinyl Chloride-d3           | 1.40    | 65    | 59383    | 39.73    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 60 - 135 | Recovery | =    | 79.46% |
| 7) Chloroethane-d5             | 1.68    | 69    | 47823    | 42.68    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 130 | Recovery | =    | 85.36% |
| 11) 1,1-Dichloroethene-d2      | 2.27    | 63    | 115201   | 43.71    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 87.42% |
| 21) 2-Butanone-d5              | 4.17    | 46    | 117189   | 97.63    | ug/L | 0.00   |
| Spiked Amount                  | 100.000 | Range | 40 - 130 | Recovery | =    | 97.63% |
| 24) Chloroform-d               | 4.65    | 84    | 106064   | 44.84    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 89.68% |
| 26) 1,2-Dichloroethane-d4      | 5.31    | 65    | 69842    | 44.78    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 89.56% |
| 32) Benzene-d6                 | 5.34    | 84    | 214615   | 44.76    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 89.52% |
| 36) 1,2-Dichloropropane-d6     | 6.33    | 67    | 78924    | 45.83    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 120 | Recovery | =    | 91.66% |
| 41) Toluene-d8                 | 7.57    | 98    | 192195   | 43.96    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 87.92% |
| 43) trans-1,3-Dichloropropene- | 7.85    | 79    | 35501    | 45.08    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 90.16% |
| 47) 2-Hexanone-d5              | 8.31    | 63    | 82534    | 98.97    | ug/L | 0.00   |
| Spiked Amount                  | 100.000 | Range | 45 - 130 | Recovery | =    | 98.97% |
| 57) 1,1,2,2-Tetrachloroethane- | 10.43   | 84    | 105407   | 47.12    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 65 - 120 | Recovery | =    | 94.24% |
| 64) 1,2-Dichlorobenzene-d4     | 11.86   | 152   | 71793    | 46.99    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 93.98% |

## Target Compounds

|                                |      |     |        |         | Qvalue   |
|--------------------------------|------|-----|--------|---------|----------|
| 2) Dichlorodifluoromethane     | 1.21 | 85  | 67050  | 50.302  | ug/L 98  |
| 3) Chloromethane               | 1.33 | 50  | 101930 | 49.732  | ug/L 98  |
| 5) Vinyl chloride              | 1.40 | 62  | 87553  | 49.352  | ug/L 100 |
| 6) Bromomethane                | 1.62 | 94  | 29217  | 54.871  | ug/L 100 |
| 8) Chloroethane                | 1.70 | 64  | 50242  | 49.421  | ug/L 99  |
| 9) Trichlorofluoromethane      | 1.89 | 101 | 94238  | 50.871  | ug/L 100 |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.29 | 101 | 58145  | 52.263  | ug/L 98  |
| 12) 1,1-Dichloroethene         | 2.28 | 96  | 54922  | 52.093  | ug/L 82  |
| 13) Acetone                    | 2.32 | 43  | 124936 | 93.098  | ug/L 99  |
| 14) Carbon disulfide           | 2.48 | 76  | 189574 | 48.470  | ug/L 99  |
| 15) Methyl Acetate             | 2.61 | 43  | 99275  | 53.083  | ug/L 98  |
| 16) Methylene chloride         | 2.70 | 84  | 69716  | 50.578  | ug/L 99  |
| 17) trans-1,2-Dichloroethene   | 2.98 | 96  | 61237  | 50.092  | ug/L 97  |
| 18) Methyl tert-butyl Ether    | 3.00 | 73  | 214237 | 52.022  | ug/L 99  |
| 19) 1,1-Dichloroethane         | 3.45 | 63  | 131489 | 50.739  | ug/L 99  |
| 20) cis-1,2-Dichloroethene     | 4.23 | 96  | 70749  | 51.027  | ug/L 100 |
| 22) 2-Butanone                 | 4.26 | 43  | 163567 | 103.245 | ug/L 97  |

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| Internal Standards             | R.T.  | QIon | Response | Conc    | Units | Dev(Min) |
|--------------------------------|-------|------|----------|---------|-------|----------|
| 23) Bromochloromethane         | 4.55  | 128  | 32038    | 51.748  | ug/L  | 93       |
| 25) Chloroform                 | 4.67  | 83   | 123654   | 51.815  | ug/L  | 99       |
| 27) 1,2-Dichloroethane         | 5.40  | 62   | 100740   | 51.071  | ug/L  | 99       |
| 29) Cyclohexane                | 5.00  | 56   | 130592   | 51.456  | ug/L  | 100      |
| 30) 1,1,1-Trichloroethane      | 4.91  | 97   | 98349    | 51.659  | ug/L  | 99       |
| 31) Carbon tetrachloride       | 5.13  | 117  | 79801    | 51.811  | ug/L  | 99       |
| 33) Benzene                    | 5.39  | 78   | 284523   | 52.014  | ug/L  | 100      |
| 34) Trichloroethene            | 6.19  | 95   | 67637    | 50.907  | ug/L  | 97       |
| 35) Methylcyclohexane          | 6.41  | 83   | 118052   | 52.702  | ug/L  | 100      |
| 37) 1,2-Dichloropropane        | 6.43  | 63   | 84744    | 51.824  | ug/L  | 99       |
| 38) Bromodichloromethane       | 6.76  | 83   | 92594    | 51.490  | ug/L  | 99       |
| 39) cis-1,3-Dichloropropene    | 7.27  | 75   | 120838   | 52.068  | ug/L  | 99       |
| 40) 4-Methyl-2-pentanone       | 7.46  | 43   | 271407   | 108.998 | ug/L  | 99       |
| 42) Toluene                    | 7.64  | 91   | 286873   | 51.624  | ug/L  | 98       |
| 44) trans-1,3-Dichloropropene  | 7.88  | 75   | 110767   | 51.746  | ug/L  | 100      |
| 45) 1,1,2-Trichloroethane      | 8.06  | 97   | 66942    | 52.242  | ug/L  | 99       |
| 46) Tetrachloroethene          | 8.22  | 164  | 47931    | 50.985  | ug/L  | 99       |
| 48) 2-Hexanone                 | 8.36  | 43   | 221471   | 105.114 | ug/L  | 99       |
| 49) Dibromochloromethane       | 8.48  | 129  | 68161    | 52.584  | ug/L  | 98       |
| 50) 1,2-Dibromoethane          | 8.58  | 107  | 71801    | 53.429  | ug/L  | 100      |
| 51) Chlorobenzene              | 9.12  | 112  | 176264   | 52.653  | ug/L  | 98       |
| 52) Ethylbenzene               | 9.25  | 91   | 318007   | 51.692  | ug/L  | 100      |
| 53) m,p-Xylene                 | 9.37  | 106  | 116722   | 52.411  | ug/L  | 98       |
| 54) o-xylene                   | 9.78  | 106  | 114214   | 52.228  | ug/L  | 97       |
| 55) Styrene                    | 9.79  | 104  | 196581   | 52.943  | ug/L  | 100      |
| 56) Isopropylbenzene           | 10.16 | 105  | 298250   | 52.321  | ug/L  | 99       |
| 58) 1,1,2,2-Tetrachloroethane  | 10.46 | 83   | 124442   | 52.874  | ug/L  | 100      |
| 59) 1,2,3-Trichloropropane     | 10.49 | 75   | 98773    | 53.459  | ug/L  | 100      |
| 61) Bromoform                  | 9.96  | 173  | 50738    | 52.652  | ug/L  | 100      |
| 62) 1,3-Dichlorobenzene        | 11.41 | 146  | 131136   | 51.023  | ug/L  | 99       |
| 63) 1,4-Dichlorobenzene        | 11.51 | 146  | 132930   | 51.110  | ug/L  | 99       |
| 65) 1,2-Dichlorobenzene        | 11.88 | 146  | 132110   | 51.446  | ug/L  | 100      |
| 66) 1,2-Dibromo-3-chloropropan | 12.66 | 75   | 26252    | 51.922  | ug/L  | 99       |
| 67) 1,3,5-Trichlorobenzene     | 12.89 | 180  | 98062    | 52.539  | ug/L  | 98       |
| 68) 1,2,4-trichlorobenzene     | 13.50 | 180  | 90172    | 51.506  | ug/L  | 99       |
| 69) Naphthalene                | 13.74 | 128  | 309363   | 53.240  | ug/L  | 99       |
| 70) 1,2,3-Trichlorobenzene     | 13.99 | 180  | 93485    | 53.458  | ug/L  | 99       |

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

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