

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU020519\  
 Data File : VU029353.D  
 Acq On : 05 Feb 2019 18:16  
 Operator : JC/SP  
 Sample : VSTDCCC010  
 Misc : 25.0mL/MSVOA U/WATER  
 ALS Vial : 17 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleID :  
 VSTD01050

Manual Integrations  
 APPROVED

sam  
 2/8/2019 2:26:54 PM

Quant Time: Feb 08 11:51:35 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA U\METHOD\524U020519DW.M  
 Quant Title : METHOD 524.2 VOLATILES DRINKING WATER  
 QLast Update : Fri Feb 08 10:52:46 2019  
 Response via : Initial Calibration

| Internal Standards            | R.T.  | QIon  | Response | Conc   | Units   | Dev(Min) |
|-------------------------------|-------|-------|----------|--------|---------|----------|
| -----                         | ----- | ----- | -----    | -----  | -----   | -----    |
| 1) Fluorobenzene              | 5.74  | 96    | 50774    | 1.00   | ug/l    | 0.00     |
| System Monitoring Compounds   |       |       |          |        |         |          |
| 57) 4-Bromofluorobenzene      | 10.31 | 95    | 21176    | 1.07   | ug/l    | 0.00     |
| Spiked Amount 1.000           |       |       | Recovery | =      | 107.00% |          |
| 68) 1,2-Dichlorobenzene-d4    | 11.86 | 152   | 22630    | 1.11   | ug/l    | 0.00     |
| Spiked Amount 1.000           |       |       | Recovery | =      | 111.00% |          |
| Target Compounds              |       |       |          |        | Ovalue  |          |
| 2) Dichlorodifluoromethane    | 1.21  | 85    | 185454   | 9.787  | ug/l    | 99       |
| 3) Chloromethane              | 1.33  | 50    | 163499   | 9.442  | ug/l    | 98       |
| 4) Vinyl Chloride             | 1.40  | 62    | 200933   | 9.899  | ug/l    | 99       |
| 5) Bromomethane               | 1.62  | 94    | 111660   | 9.889  | ug/l    | 92       |
| 6) Chloroethane               | 1.70  | 64    | 118032   | 9.953  | ug/l    | 100      |
| 7) Trichlorofluoromethane     | 1.88  | 101   | 299943   | 10.581 | ug/l    | 96       |
| 8) 1,1,2-Trichloro-1,2,2-trif | 2.29  | 101   | 157944   | 10.552 | ug/l    | 90       |
| 9) 1,1-Dichloroethene         | 2.28  | 96    | 152550   | 10.415 | ug/l    | 74       |
| 10) Iodomethane               | 2.41  | 142   | 218811   | 9.982  | ug/l #  | 79       |
| 11) Allyl Chloride            | 2.59  | 41    | 241997   | 9.852  | ug/l    | 91       |
| 12) Acrylonitrile             | 2.94  | 53    | 66327    | 20.204 | ug/l    | 97       |
| 13) Acetone                   | 2.32  | 43    | 139095   | 43.963 | ug/l #  | 86       |
| 14) Carbon Disulfide          | 2.47  | 76    | 525774   | 10.167 | ug/l    | 100      |
| 15) Methylene Chloride        | 2.70  | 84    | 171117   | 9.635  | ug/l #  | 80       |
| 16) trans-1,2-Dichloroethene  | 2.98  | 96    | 172383   | 10.524 | ug/l #  | 79       |
| 17) 1,1-Dichloroethane        | 3.44  | 63    | 252041   | 9.710  | ug/l    | 97       |
| 18) 2-Butanone                | 4.28  | 43    | 177445   | 50.180 | ug/l    | 97       |
| 19) Cyclohexane               | 4.99  | 56    | 219095m  | 9.104  | ug/l    |          |
| 20) Methylcyclohexane         | 6.41  | 83    | 254850   | 10.082 | ug/l #  | 86       |
| 21) 2,2-Dichloropropane       | 4.22  | 77    | 228852   | 9.525  | ug/l    | 91       |
| 22) cis-1,2-Dichloroethene    | 4.22  | 96    | 161982   | 10.498 | ug/l    | 79       |
| 23) Diethyl Ether             | 2.10  | 59    | 120492   | 10.244 | ug/l    | 88       |
| 24) tert-Butyl Alcohol        | 2.84  | 59    | 120342   | 98.453 | ug/l    | 100      |
| 25) Methyl tert-Butyl Ether   | 3.00  | 73    | 431893   | 10.472 | ug/l #  | 86       |
| 26) Bromochloromethane        | 4.54  | 128   | 72102    | 10.579 | ug/l    | 73       |
| 27) Chloroform                | 4.67  | 83    | 263643   | 10.445 | ug/l    | 98       |
| 28) 1,1,1-Trichloroethane     | 4.91  | 97    | 243507   | 10.408 | ug/l    | 95       |
| 29) 1,1-Dichloropropene       | 5.13  | 75    | 201540   | 9.923  | ug/l    | 91       |
| 30) Carbon Tetrachloride      | 5.13  | 117   | 225799   | 10.660 | ug/l    | 100      |
| 31) Isopropyl Ether           | 3.58  | 45    | 392489   | 10.021 | ug/l    | 89       |
| 32) Ethyl-t-butyl ether       | 4.07  | 59    | 391020   | 9.963  | ug/l    | 91       |
| 33) Tert-Amyl methyl ether    | 5.58  | 73    | 369653   | 10.416 | ug/l    | 99       |
| 34) Propionitrile             | 4.33  | 54    | 49953    | 53.742 | ug/l #  | 91       |
| 35) Benzene                   | 5.39  | 78    | 571949   | 10.183 | ug/l    | 99       |
| 36) 1,2-Dichloroethane        | 5.40  | 62    | 171436   | 10.091 | ug/l #  | 91       |
| 37) Trichloroethene           | 6.18  | 130   | 175497   | 10.888 | ug/l    | 86       |
| 38) 1,2-Dichloropropane       | 6.43  | 63    | 147475   | 10.093 | ug/l    | 98       |
| 39) Methacrylonitrile         | 4.55  | 41    | 48364    | 10.161 | ug/l #  | 90       |
| 40) Methyl acrylate           | 4.42  | 55    | 74754    | 10.403 | ug/l #  | 92       |
| 41) Tetrahydrofuran           | 4.65  | 42    | 46070    | 19.214 | ug/l #  | 84       |
| 42) 1-Chlorobutane            | 5.06  | 56    | 267790   | 9.840  | ug/l    | 88       |

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| Internal Standards             | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|--------|--------|----------|
| -----                          |       |      |          |        |        |          |
| 43) Dibromomethane             | 6.56  | 93   | 79786    | 10.247 | ug/l   | 91       |
| 44) Bromodichloromethane       | 6.76  | 83   | 205750   | 10.371 | ug/l   | 95       |
| 45) 4-Methyl-2-Pentanone       | 7.46  | 43   | 459124   | 50.301 | ug/l # | 91       |
| 46) t-1,4-Dichloro-2-butene    | 10.51 | 75   | 102204m  | 22.983 | ug/l   |          |
| 47) Methyl methacrylate        | 6.62  | 69   | 148244   | 21.639 | ug/l # | 77       |
| 48) Ethyl methacrylate         | 8.02  | 69   | 156443   | 10.644 | ug/l   | 81       |
| 49) Toluene                    | 7.63  | 92   | 375452   | 10.446 | ug/l   | 100      |
| 50) t-1,3-Dichloropropene      | 7.88  | 75   | 200979   | 10.334 | ug/l   | 95       |
| 51) cis-1,3-Dichloropropene    | 7.27  | 75   | 235815   | 10.207 | ug/l   | 90       |
| 52) 1,1,2-Trichloroethane      | 8.07  | 97   | 107947   | 10.472 | ug/l   | 97       |
| 53) 1,3-Dichloropropane        | 8.24  | 76   | 187079   | 10.331 | ug/l   | 100      |
| 54) 2-Hexanone                 | 8.36  | 43   | 328170   | 51.293 | ug/l   | 90       |
| 55) Dibromochloromethane       | 8.48  | 129  | 156856   | 10.706 | ug/l   | 99       |
| 56) 1,2-Dibromoethane          | 8.59  | 107  | 109810   | 10.383 | ug/l   | 99       |
| 58) Tetrachloroethene          | 8.23  | 164  | 163051   | 10.872 | ug/l   | 94       |
| 59) Chlorobenzene              | 9.12  | 112  | 438941   | 10.841 | ug/l   | 99       |
| 60) 1,1,1,2-Tetrachloroethane  | 9.21  | 131  | 162153   | 10.838 | ug/l   | 97       |
| 61) Pentachloroethane          | 11.10 | 117  | 124803   | 10.763 | ug/l   | 86       |
| 62) Hexachloroethane           | 12.14 | 117  | 140642   | 11.113 | ug/l   | 97       |
| 63) Ethyl Benzene              | 9.25  | 91   | 738627   | 10.505 | ug/l   | 96       |
| 64) m/p-Xylenes                | 9.37  | 106  | 586910   | 21.478 | ug/l   | 87       |
| 65) o-Xylene                   | 9.78  | 106  | 289700   | 10.801 | ug/l   | 87       |
| 66) Styrene                    | 9.79  | 104  | 485261   | 10.853 | ug/l   | 93       |
| 67) Bromoform                  | 9.95  | 173  | 102098   | 11.201 | ug/l   | 99       |
| 69) Isopropylbenzene           | 10.16 | 105  | 767757   | 10.714 | ug/l   | 96       |
| 70) 1,1,2,2-Tetrachloroethane  | 10.46 | 83   | 139877   | 10.587 | ug/l   | 97       |
| 71) 1,2,3-Trichloropropane     | 10.49 | 75   | 91180m   | 10.050 | ug/l   |          |
| 72) Bromobenzene               | 10.45 | 156  | 195615   | 11.262 | ug/l   | 85       |
| 73) n-propylbenzene            | 10.59 | 120  | 217842   | 10.914 | ug/l   | 80       |
| 74) 2-Chlorotoluene            | 10.66 | 126  | 186863   | 10.995 | ug/l   | 80       |
| 75) 1,3,5-Trimethylbenzene     | 10.77 | 105  | 661313   | 10.704 | ug/l   | 96       |
| 76) 4-Chlorotoluene            | 10.77 | 126  | 189075   | 10.719 | ug/l   | 82       |
| 77) tert-Butylbenzene          | 11.10 | 119  | 663530   | 10.865 | ug/l   | 92       |
| 78) 1,2,4-Trimethylbenzene     | 11.14 | 105  | 675619   | 10.802 | ug/l   | 95       |
| 79) sec-Butylbenzene           | 11.32 | 105  | 855292   | 10.704 | ug/l   | 95       |
| 80) Nitrobenzene               | 12.86 | 77   | 31519    | 53.546 | ug/l # | 91       |
| 81) p-Isopropyltoluene         | 11.47 | 119  | 740903   | 10.939 | ug/l   | 94       |
| 82) 1,3-Dichlorobenzene        | 11.41 | 146  | 376205   | 11.039 | ug/l   | 97       |
| 83) 1,4-Dichlorobenzene        | 11.50 | 146  | 374186   | 11.025 | ug/l   | 97       |
| 84) n-Butylbenzene             | 11.89 | 91   | 671667   | 10.806 | ug/l   | 96       |
| 85) 1,2-Dichlorobenzene        | 11.88 | 146  | 356025   | 11.050 | ug/l   | 97       |
| 86) 1,2-Dibromo-3-Chloropropan | 12.66 | 75   | 25243    | 10.238 | ug/l # | 63       |
| 87) 1,2,4-Trichlorobenzene     | 13.50 | 180  | 261507   | 11.555 | ug/l   | 99       |
| 88) Hexachlorobutadiene        | 13.69 | 225  | 153167   | 11.686 | ug/l   | 99       |
| 89) Naphthalene                | 13.74 | 128  | 451306   | 11.758 | ug/l   | 99       |
| 90) 1,2,3-Trichlorobenzene     | 13.98 | 180  | 237483   | 11.482 | ug/l   | 97       |
| -----                          |       |      |          |        |        |          |

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

