

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\U020719\  
 Data File : VU029370.D  
 Acq On : 07 Feb 2019 15:09  
 Operator : JC/SP  
 Sample : VSTDCCC010  
 Misc : 25.0mL/MSVOA U/WATER  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleID :  
 VSTD01002

Manual Integrations  
 APPROVED

sam  
 2/8/2019 2:28:14 PM

Quant Time: Feb 08 13:08:06 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    | 56365    | 1.00   | ug/l    | 0.00     |
| System Monitoring Compounds   |       |       |          |        |         |          |
| 57) 4-Bromofluorobenzene      | 10.31 | 95    | 22913    | 1.04   | ug/l    | 0.00     |
| Spiked Amount 1.000           |       |       | Recovery | =      | 104.00% |          |
| 68) 1,2-Dichlorobenzene-d4    | 11.86 | 152   | 25995    | 1.15   | ug/l    | 0.00     |
| Spiked Amount 1.000           |       |       | Recovery | =      | 115.00% |          |
| Target Compounds              |       |       |          |        |         |          |
|                               |       |       |          |        | Ovalue  |          |
| 2) Dichlorodifluoromethane    | 1.21  | 85    | 201575   | 9.583  | ug/l    | 98       |
| 3) Chloromethane              | 1.33  | 50    | 173030   | 9.002  | ug/l    | 99       |
| 4) Vinyl Chloride             | 1.40  | 62    | 217058   | 9.632  | ug/l    | 99       |
| 5) Bromomethane               | 1.62  | 94    | 127096   | 10.140 | ug/l    | 94       |
| 6) Chloroethane               | 1.70  | 64    | 131886   | 10.018 | ug/l    | 98       |
| 7) Trichlorofluoromethane     | 1.88  | 101   | 329976   | 10.486 | ug/l    | 97       |
| 8) 1,1,2-Trichloro-1,2,2-trif | 2.29  | 101   | 178529   | 10.745 | ug/l    | 89       |
| 9) 1,1-Dichloroethene         | 2.28  | 96    | 168840   | 10.384 | ug/l    | 72       |
| 10) Iodomethane               | 2.41  | 142   | 257100   | 10.548 | ug/l #  | 77       |
| 11) Allyl Chloride            | 2.59  | 41    | 254401   | 9.330  | ug/l    | 92       |
| 12) Acrylonitrile             | 2.93  | 53    | 70219    | 19.268 | ug/l    | 98       |
| 13) Acetone                   | 2.32  | 43    | 155661   | 44.319 | ug/l #  | 83       |
| 14) Carbon Disulfide          | 2.48  | 76    | 576965   | 10.050 | ug/l    | 100      |
| 15) Methylene Chloride        | 2.70  | 84    | 187258   | 9.498  | ug/l #  | 78       |
| 16) trans-1,2-Dichloroethene  | 2.98  | 96    | 190612   | 10.483 | ug/l #  | 78       |
| 17) 1,1-Dichloroethane        | 3.44  | 63    | 335559   | 11.645 | ug/l    | 97       |
| 18) 2-Butanone                | 4.27  | 43    | 190542   | 48.539 | ug/l    | 96       |
| 19) Cyclohexane               | 4.99  | 56    | 239887m  | 8.979  | ug/l    |          |
| 20) Methylcyclohexane         | 6.41  | 83    | 287113   | 10.232 | ug/l #  | 84       |
| 21) 2,2-Dichloropropane       | 4.22  | 77    | 261753   | 9.814  | ug/l #  | 91       |
| 22) cis-1,2-Dichloroethene    | 4.22  | 96    | 185099   | 10.806 | ug/l    | 75       |
| 23) Diethyl Ether             | 2.10  | 59    | 126980   | 9.725  | ug/l    | 87       |
| 24) tert-Butyl Alcohol        | 2.83  | 59    | 133536   | 98.410 | ug/l    | 98       |
| 25) Methyl tert-Butyl Ether   | 3.00  | 73    | 462848   | 10.109 | ug/l #  | 86       |
| 26) Bromochloromethane        | 4.54  | 128   | 81752    | 10.805 | ug/l    | 72       |
| 27) Chloroform                | 4.67  | 83    | 293306   | 10.467 | ug/l    | 99       |
| 28) 1,1,1-Trichloroethane     | 4.91  | 97    | 270013   | 10.396 | ug/l    | 95       |
| 29) 1,1-Dichloropropene       | 5.13  | 75    | 225881   | 10.018 | ug/l    | 91       |
| 30) Carbon Tetrachloride      | 5.13  | 117   | 253784   | 10.793 | ug/l    | 100      |
| 31) Isopropyl Ether           | 3.57  | 45    | 503801   | 11.587 | ug/l    | 91       |
| 32) Ethyl-t-butyl ether       | 4.07  | 59    | 428299   | 9.830  | ug/l    | 88       |
| 33) Tert-Amyl methyl ether    | 5.58  | 73    | 400991   | 10.178 | ug/l    | 98       |
| 34) Propionitrile             | 4.33  | 54    | 53609    | 51.954 | ug/l #  | 92       |
| 35) Benzene                   | 5.38  | 78    | 639204   | 10.252 | ug/l    | 98       |
| 36) 1,2-Dichloroethane        | 5.40  | 62    | 184895   | 9.804  | ug/l #  | 90       |
| 37) Trichloroethene           | 6.18  | 130   | 197292   | 11.026 | ug/l    | 87       |
| 38) 1,2-Dichloropropane       | 6.43  | 63    | 159701   | 9.846  | ug/l    | 99       |
| 39) Methacrylonitrile         | 4.54  | 41    | 49648    | 9.396  | ug/l #  | 86       |
| 40) Methyl acrylate           | 4.42  | 55    | 80052    | 10.036 | ug/l #  | 91       |
| 41) Tetrahydrofuran           | 4.65  | 42    | 47394    | 17.806 | ug/l #  | 80       |
| 42) 1-Chlorobutane            | 5.06  | 56    | 290906   | 9.630  | ug/l    | 85       |

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 QLast Update : Fri Feb 08 10:52:46 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|--------|--------|----------|
| 43) Dibromomethane             | 6.56  | 93   | 89092    | 10.307 | ug/l   | 90       |
| 44) Bromodichloromethane       | 6.75  | 83   | 224675   | 10.201 | ug/l   | 97       |
| 45) 4-Methyl-2-Pentanone       | 7.46  | 43   | 479799   | 47.352 | ug/l # | 90       |
| 46) t-1,4-Dichloro-2-butene    | 10.51 | 75   | 96387m   | 19.525 | ug/l   |          |
| 47) Methyl methacrylate        | 6.62  | 69   | 157572   | 20.719 | ug/l # | 73       |
| 48) Ethyl methacrylate         | 8.02  | 69   | 168290   | 10.315 | ug/l   | 77       |
| 49) Toluene                    | 7.63  | 92   | 414159   | 10.380 | ug/l   | 100      |
| 50) t-1,3-Dichloropropene      | 7.88  | 75   | 217024   | 10.052 | ug/l   | 97       |
| 51) cis-1,3-Dichloropropene    | 7.27  | 75   | 260147   | 10.143 | ug/l # | 86       |
| 52) 1,1,2-Trichloroethane      | 8.06  | 97   | 124157   | 10.850 | ug/l   | 98       |
| 53) 1,3-Dichloropropane        | 8.24  | 76   | 205989   | 10.247 | ug/l   | 98       |
| 54) 2-Hexanone                 | 8.36  | 43   | 337662   | 47.541 | ug/l   | 87       |
| 55) Dibromochloromethane       | 8.47  | 129  | 174297   | 10.716 | ug/l   | 99       |
| 56) 1,2-Dibromoethane          | 8.59  | 107  | 121046   | 10.310 | ug/l   | 99       |
| 58) Tetrachloroethene          | 8.22  | 164  | 188523   | 11.323 | ug/l   | 92       |
| 59) Chlorobenzene              | 9.12  | 112  | 487884   | 10.854 | ug/l   | 99       |
| 60) 1,1,1,2-Tetrachloroethane  | 9.21  | 131  | 180744   | 10.883 | ug/l   | 98       |
| 61) Pentachloroethane          | 11.10 | 117  | 139654   | 10.849 | ug/l   | 84       |
| 62) Hexachloroethane           | 12.14 | 117  | 156069   | 11.109 | ug/l   | 95       |
| 63) Ethyl Benzene              | 9.25  | 91   | 819360   | 10.497 | ug/l   | 95       |
| 64) m/p-Xylenes                | 9.37  | 106  | 655254   | 21.601 | ug/l   | 86       |
| 65) o-Xylene                   | 9.78  | 106  | 320693   | 10.770 | ug/l   | 86       |
| 66) Styrene                    | 9.79  | 104  | 539623   | 10.872 | ug/l   | 92       |
| 67) Bromoform                  | 9.95  | 173  | 109662   | 10.838 | ug/l   | 98       |
| 69) Isopropylbenzene           | 10.16 | 105  | 852384   | 10.715 | ug/l   | 95       |
| 70) 1,1,2,2-Tetrachloroethane  | 10.46 | 83   | 153319   | 10.454 | ug/l   | 97       |
| 71) 1,2,3-Trichloropropane     | 10.49 | 75   | 109506m  | 10.872 | ug/l   |          |
| 72) Bromobenzene               | 10.45 | 156  | 222667   | 11.548 | ug/l   | 82       |
| 73) n-propylbenzene            | 10.58 | 120  | 247994   | 11.193 | ug/l   | 75       |
| 74) 2-Chlorotoluene            | 10.66 | 126  | 210656   | 11.165 | ug/l   | 73       |
| 75) 1,3,5-Trimethylbenzene     | 10.77 | 105  | 726363   | 10.591 | ug/l   | 95       |
| 76) 4-Chlorotoluene            | 10.77 | 126  | 217246   | 11.094 | ug/l   | 76       |
| 77) tert-Butylbenzene          | 11.10 | 119  | 737828   | 10.884 | ug/l   | 91       |
| 78) 1,2,4-Trimethylbenzene     | 11.14 | 105  | 737653   | 10.624 | ug/l   | 94       |
| 79) sec-Butylbenzene           | 11.32 | 105  | 950888   | 10.720 | ug/l   | 95       |
| 80) Nitrobenzene               | 12.86 | 77   | 30790    | 47.119 | ug/l # | 88       |
| 81) p-Isopropyltoluene         | 11.47 | 119  | 826721   | 10.995 | ug/l   | 93       |
| 82) 1,3-Dichlorobenzene        | 11.41 | 146  | 429646   | 11.357 | ug/l   | 97       |
| 83) 1,4-Dichlorobenzene        | 11.50 | 146  | 431577   | 11.455 | ug/l   | 96       |
| 84) n-Butylbenzene             | 11.89 | 91   | 733898   | 10.636 | ug/l   | 95       |
| 85) 1,2-Dichlorobenzene        | 11.88 | 146  | 400640   | 11.201 | ug/l   | 97       |
| 86) 1,2-Dibromo-3-Chloropropan | 12.66 | 75   | 26693    | 9.752  | ug/l # | 58       |
| 87) 1,2,4-Trichlorobenzene     | 13.50 | 180  | 301053   | 11.983 | ug/l   | 99       |
| 88) Hexachlorobutadiene        | 13.69 | 225  | 175942   | 12.092 | ug/l   | 99       |
| 89) Naphthalene                | 13.74 | 128  | 496291   | 11.648 | ug/l   | 99       |
| 90) 1,2,3-Trichlorobenzene     | 13.99 | 180  | 269594   | 11.741 | ug/l   | 97       |

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

