

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\U040219\  
 Data File : VU030614.D  
 Acq On : 02 Apr 2019 22:08  
 Operator : JC/SP  
 Sample : VSTDIC0.5  
 Misc : 25.0mL/MSVOA U/WATER  
 ALS Vial : 11 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTDIC0.5

Manual Integrations  
 APPROVED

MMDadoda  
 4/3/2019 11:43:46 AM

Quant Time: Apr 03 02:18:54 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA U\METHOD\524U040219DW.M  
 Quant Title : METHOD 524.2 VOLATILES DRINKING WATER  
 QLast Update : Wed Apr 03 01:47:43 2019  
 Response via : Initial Calibration

| Internal Standards            | R.T.  | QIon  | Response | Conc  | Units  | Dev(Min) |
|-------------------------------|-------|-------|----------|-------|--------|----------|
| -----                         | ----- | ----- | -----    | ----- | -----  | -----    |
| 1) Fluorobenzene              | 5.74  | 96    | 34562    | 1.00  | ug/l   | 0.00     |
| System Monitoring Compounds   |       |       |          |       |        |          |
| 57) 4-Bromofluorobenzene      | 10.31 | 95    | 10458    | 0.82  | ug/l   | 0.00     |
| Spiked Amount 1.000           |       |       | Recovery | =     | 82.00% |          |
| 68) 1,2-Dichlorobenzene-d4    | 11.86 | 152   | 11321    | 0.80  | ug/l   | 0.00     |
| Spiked Amount 1.000           |       |       | Recovery | =     | 80.00% |          |
| Target Compounds              |       |       |          |       |        |          |
|                               |       |       |          |       | Ovalue |          |
| 2) Dichlorodifluoromethane    | 1.20  | 85    | 7604     | 0.584 | ug/l   | 91       |
| 3) Chloromethane              | 1.33  | 50    | 9171     | 0.621 | ug/l   | 96       |
| 4) Vinyl Chloride             | 1.40  | 62    | 8615     | 0.661 | ug/l   | 94       |
| 5) Bromomethane               | 1.63  | 94    | 4516     | 0.629 | ug/l   | 99       |
| 6) Chloroethane               | 1.70  | 64    | 4751     | 0.636 | ug/l   | 99       |
| 7) Trichlorofluoromethane     | 1.88  | 101   | 9417     | 0.566 | ug/l   | 100      |
| 8) 1,1,2-Trichloro-1,2,2-trif | 2.28  | 101   | 4908     | 0.551 | ug/l   | 95       |
| 9) 1,1-Dichloroethene         | 2.28  | 96    | 4587     | 0.522 | ug/l   | 77       |
| 10) Iodomethane               | 2.41  | 142   | 5913     | 0.720 | ug/l   | 96       |
| 11) Allyl Chloride            | 2.59  | 41    | 9794     | 0.717 | ug/l   | 93       |
| 12) Acrylonitrile             | 2.94  | 53    | 3145     | 1.518 | ug/l # | 90       |
| 13) Acetone                   | 2.32  | 43    | 8490     | 4.646 | ug/l   | 99       |
| 14) Carbon Disulfide          | 2.47  | 76    | 18492    | 0.600 | ug/l   | 98       |
| 15) Methylene Chloride        | 2.69  | 84    | 7579     | 0.718 | ug/l   | 94       |
| 16) trans-1,2-Dichloroethene  | 2.98  | 96    | 5473     | 0.542 | ug/l   | 96       |
| 17) 1,1-Dichloroethane        | 3.44  | 63    | 11289    | 0.637 | ug/l   | 96       |
| 18) 2-Butanone                | 4.29  | 43    | 9030     | 3.546 | ug/l   | 97       |
| 19) Cyclohexane               | 4.99  | 56    | 8865m    | 0.584 | ug/l   |          |
| 20) Methylcyclohexane         | 6.41  | 83    | 6777     | 0.425 | ug/l   | 94       |
| 21) 2,2-Dichloropropane       | 4.22  | 77    | 8674     | 0.588 | ug/l   | 95       |
| 22) cis-1,2-Dichloroethene    | 4.23  | 96    | 5585m    | 0.497 | ug/l   |          |
| 23) Diethyl Ether             | 2.11  | 59    | 4736     | 0.682 | ug/l   | 95       |
| 24) tert-Butyl Alcohol        | 2.83  | 59    | 5476     | 7.122 | ug/l   | 95       |
| 25) Methyl tert-Butyl Ether   | 3.00  | 73    | 14963    | 0.649 | ug/l   | 99       |
| 26) Bromochloromethane        | 4.55  | 128   | 2420     | 0.495 | ug/l   | 96       |
| 27) Chloroform                | 4.67  | 83    | 10194    | 0.556 | ug/l   | 100      |
| 28) 1,1,1-Trichloroethane     | 4.90  | 97    | 8420     | 0.561 | ug/l   | 94       |
| 29) 1,1-Dichloropropene       | 5.14  | 75    | 6968     | 0.511 | ug/l   | 96       |
| 30) Carbon Tetrachloride      | 5.13  | 117   | 7715     | 0.577 | ug/l   | 97       |
| 31) Isopropyl Ether           | 3.58  | 45    | 18599    | 0.717 | ug/l   | 96       |
| 32) Ethyl-t-butyl ether       | 4.08  | 59    | 14617    | 0.608 | ug/l # | 64       |
| 33) Tert-Amyl methyl ether    | 5.58  | 73    | 10997    | 0.510 | ug/l   | 97       |
| 34) Propionitrile             | 4.35  | 54    | 1946m    | 2.797 | ug/l   |          |
| 35) Benzene                   | 5.39  | 78    | 20919    | 0.525 | ug/l   | 95       |
| 36) 1,2-Dichloroethane        | 5.41  | 62    | 6654     | 0.601 | ug/l # | 91       |
| 37) Trichloroethene           | 6.19  | 130   | 5424     | 0.487 | ug/l   | 92       |
| 38) 1,2-Dichloropropane       | 6.44  | 63    | 6671     | 0.643 | ug/l # | 84       |
| 39) Methacrylonitrile         | 4.57  | 41    | 2376     | 0.764 | ug/l # | 75       |
| 40) Methyl acrylate           | 4.46  | 55    | 2037m    | 0.432 | ug/l   |          |
| 41) Tetrahydrofuran           | 4.66  | 42    | 2914     | 1.698 | ug/l # | 71       |
| 42) 1-Chlorobutane            | 5.06  | 56    | 11285    | 0.612 | ug/l   | 99       |

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Quant Time: Apr 03 02:18:54 2019  
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 Quant Title : METHOD 524.2 VOLATILES DRINKING WATER  
 QLast Update : Wed Apr 03 01:47:43 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|-------|--------|----------|
| -----                          |       |      |          |       |        |          |
| 43) Dibromomethane             | 6.56  | 93   | 2716     | 0.514 | ug/l   | 87       |
| 44) Bromodichloromethane       | 6.76  | 83   | 7518     | 0.591 | ug/l # | 97       |
| 45) 4-Methyl-2-Pentanone       | 7.47  | 43   | 18519    | 3.234 | ug/l   | 99       |
| 46) t-1,4-Dichloro-2-butene    | 10.52 | 75   | 2052m    | 0.983 | ug/l   |          |
| 47) Methyl methacrylate        | 6.64  | 69   | 4073     | 0.896 | ug/l # | 89       |
| 48) Ethyl methacrylate         | 8.03  | 69   | 4086     | 0.485 | ug/l   | 92       |
| 49) Toluene                    | 7.64  | 92   | 10720    | 0.453 | ug/l   | 87       |
| 50) t-1,3-Dichloropropene      | 7.89  | 75   | 6021     | 0.530 | ug/l   | 96       |
| 51) cis-1,3-Dichloropropene    | 7.27  | 75   | 7409     | 0.524 | ug/l   | 97       |
| 52) 1,1,2-Trichloroethane      | 8.07  | 97   | 4267     | 0.574 | ug/l # | 91       |
| 53) 1,3-Dichloropropane        | 8.24  | 76   | 7026     | 0.557 | ug/l   | 98       |
| 54) 2-Hexanone                 | 8.38  | 43   | 10827    | 2.665 | ug/l   | 95       |
| 55) Dibromochloromethane       | 8.48  | 129  | 4261     | 0.482 | ug/l   | 93       |
| 56) 1,2-Dibromoethane          | 8.59  | 107  | 3411     | 0.481 | ug/l   | 92       |
| 58) Tetrachloroethene          | 8.22  | 164  | 4399     | 0.438 | ug/l # | 85       |
| 59) Chlorobenzene              | 9.12  | 112  | 12719    | 0.476 | ug/l   | 94       |
| 60) 1,1,1,2-Tetrachloroethane  | 9.21  | 131  | 4743     | 0.498 | ug/l   | 96       |
| 61) Pentachloroethane          | 11.10 | 117  | 3426     | 0.466 | ug/l   | 98       |
| 62) Hexachloroethane           | 12.14 | 117  | 3326     | 0.457 | ug/l   | 93       |
| 63) Ethyl Benzene              | 9.25  | 91   | 18490    | 0.416 | ug/l   | 99       |
| 64) m/p-Xylenes                | 9.37  | 106  | 12342    | 0.718 | ug/l   | 92       |
| 65) o-Xylene                   | 9.78  | 106  | 6494     | 0.386 | ug/l   | 94       |
| 66) Styrene                    | 9.80  | 104  | 11099    | 0.399 | ug/l   | 97       |
| 67) Bromoform                  | 9.96  | 173  | 2556     | 0.510 | ug/l # | 88       |
| 69) Isopropylbenzene           | 10.16 | 105  | 17348    | 0.393 | ug/l   | 97       |
| 70) 1,1,2,2-Tetrachloroethane  | 10.46 | 83   | 5325     | 0.573 | ug/l   | 87       |
| 71) 1,2,3-Trichloropropane     | 10.49 | 75   | 4009m    | 0.573 | ug/l   |          |
| 72) Bromobenzene               | 10.45 | 156  | 4723     | 0.414 | ug/l   | 95       |
| 73) n-propylbenzene            | 10.58 | 120  | 4610     | 0.372 | ug/l   | 96       |
| 74) 2-Chlorotoluene            | 10.66 | 126  | 4371     | 0.402 | ug/l   | 99       |
| 75) 1,3,5-Trimethylbenzene     | 10.77 | 105  | 13647    | 0.363 | ug/l   | 96       |
| 76) 4-Chlorotoluene            | 10.77 | 126  | 4279     | 0.386 | ug/l   | 93       |
| 77) tert-Butylbenzene          | 11.10 | 119  | 15084    | 0.412 | ug/l   | 97       |
| 78) 1,2,4-Trimethylbenzene     | 11.15 | 105  | 14534    | 0.380 | ug/l   | 100      |
| 79) sec-Butylbenzene           | 11.32 | 105  | 20230    | 0.412 | ug/l   | 99       |
| 81) p-Isopropyltoluene         | 11.47 | 119  | 14553    | 0.356 | ug/l   | 98       |
| 82) 1,3-Dichlorobenzene        | 11.42 | 146  | 9636     | 0.420 | ug/l   | 97       |
| 83) 1,4-Dichlorobenzene        | 11.51 | 146  | 8988     | 0.389 | ug/l   | 97       |
| 84) n-Butylbenzene             | 11.89 | 91   | 14738    | 0.380 | ug/l   | 96       |
| 85) 1,2-Dichlorobenzene        | 11.88 | 146  | 9292     | 0.434 | ug/l   | 95       |
| 86) 1,2-Dibromo-3-Chloropropan | 12.66 | 75   | 559      | 0.413 | ug/l # | 66       |
| 87) 1,2,4-Trichlorobenzene     | 13.51 | 180  | 5175     | 0.343 | ug/l   | 93       |
| 88) Hexachlorobutadiene        | 13.69 | 225  | 3194     | 0.387 | ug/l   | 93       |
| 89) Naphthalene                | 13.75 | 128  | 7716     | 0.323 | ug/l   | 99       |
| 90) 1,2,3-Trichlorobenzene     | 13.99 | 180  | 4797     | 0.347 | ug/l   | 99       |
| -----                          |       |      |          |       |        |          |

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

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