

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU022619\  
 Data File : VU029675.D  
 Acq On : 26 Feb 2019 12:08  
 Operator : JC/SP  
 Sample : K1560-07 LOD MDL0.25ppb  
 Misc : 25.0mL/MSVOA U/WATER  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 Client Sample ID :  
 LOD-MDL-WATER-01-QT1-2019

Manual Integrations  
 APPROVED

MMDadoda  
 3/5/2019 9:31:58 AM

Quant Time: Feb 27 00:48:07 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    | 60642    | 1.00  | ug/l   | 0.00     |
| System Monitoring Compounds   |       |       |          |       |        |          |
| 57) 4-Bromofluorobenzene      | 10.31 | 95    | 20831    | 0.88  | ug/l   | 0.00     |
| Spiked Amount 1.000           |       |       | Recovery | =     | 88.00% |          |
| 68) 1,2-Dichlorobenzene-d4    | 11.86 | 152   | 23941    | 0.99  | ug/l   | 0.00     |
| Spiked Amount 1.000           |       |       | Recovery | =     | 99.00% |          |
| Target Compounds              |       |       |          |       |        |          |
|                               |       |       |          |       | Ovalue |          |
| 2) Dichlorodifluoromethane    | 1.21  | 85    | 5737     | 0.253 | ug/l   | 97       |
| 3) Chloromethane              | 1.33  | 50    | 5032     | 0.243 | ug/l   | 93       |
| 4) Vinyl Chloride             | 1.40  | 62    | 5872     | 0.242 | ug/l   | 99       |
| 5) Bromomethane               | 1.63  | 94    | 3919     | 0.291 | ug/l   | 95       |
| 6) Chloroethane               | 1.70  | 64    | 3891     | 0.275 | ug/l   | 93       |
| 7) Trichlorofluoromethane     | 1.88  | 101   | 7953     | 0.235 | ug/l   | 100      |
| 8) 1,1,2-Trichloro-1,2,2-trif | 2.29  | 101   | 4740     | 0.265 | ug/l # | 81       |
| 9) 1,1-Dichloroethene         | 2.28  | 96    | 4598     | 0.263 | ug/l   | 66       |
| 10) Iodomethane               | 2.41  | 142   | 2189     | 0.381 | ug/l # | 75       |
| 11) Allyl Chloride            | 2.59  | 41    | 6388     | 0.218 | ug/l # | 78       |
| 12) Acrylonitrile             | 2.94  | 53    | 2354     | 0.600 | ug/l # | 90       |
| 13) Acetone                   | 2.32  | 43    | 4939     | 1.307 | ug/l # | 52       |
| 14) Carbon Disulfide          | 2.47  | 76    | 15414    | 0.250 | ug/l   | 97       |
| 15) Methylene Chloride        | 2.70  | 84    | 8316     | 0.392 | ug/l # | 76       |
| 16) trans-1,2-Dichloroethene  | 2.97  | 96    | 5684     | 0.291 | ug/l   | 79       |
| 17) 1,1-Dichloroethane        | 3.44  | 63    | 8005     | 0.258 | ug/l   | 98       |
| 18) 2-Butanone                | 4.29  | 43    | 5880     | 1.392 | ug/l   | 99       |
| 20) Methylcyclohexane         | 6.41  | 83    | 7291     | 0.242 | ug/l   | 88       |
| 21) 2,2-Dichloropropane       | 4.22  | 77    | 7011     | 0.244 | ug/l # | 89       |
| 22) cis-1,2-Dichloroethene    | 4.23  | 96    | 5289     | 0.287 | ug/l   | 70       |
| 23) Diethyl Ether             | 2.10  | 59    | 3684     | 0.262 | ug/l # | 85       |
| 24) tert-Butyl Alcohol        | 2.84  | 59    | 3822     | 2.618 | ug/l # | 87       |
| 25) Methyl tert-Butyl Ether   | 3.00  | 73    | 12158    | 0.247 | ug/l # | 81       |
| 26) Bromochloromethane        | 4.54  | 128   | 2308     | 0.284 | ug/l   | 65       |
| 27) Chloroform                | 4.68  | 83    | 7593     | 0.252 | ug/l   | 99       |
| 28) 1,1,1-Trichloroethane     | 4.91  | 97    | 6826     | 0.244 | ug/l   | 94       |
| 29) 1,1-Dichloropropene       | 5.14  | 75    | 6196     | 0.255 | ug/l   | 88       |
| 30) Carbon Tetrachloride      | 5.13  | 117   | 5882     | 0.233 | ug/l   | 97       |
| 31) Isopropyl Ether           | 3.58  | 45    | 11369    | 0.243 | ug/l   | 95       |
| 32) Ethyl-t-butyl ether       | 4.08  | 59    | 12074    | 0.258 | ug/l   | 91       |
| 33) Tert-Amyl methyl ether    | 5.58  | 73    | 10702    | 0.252 | ug/l # | 92       |
| 35) Benzene                   | 5.38  | 78    | 17991    | 0.268 | ug/l   | 95       |
| 36) 1,2-Dichloroethane        | 5.41  | 62    | 5303     | 0.261 | ug/l   | 97       |
| 37) Trichloroethene           | 6.19  | 130   | 5519     | 0.287 | ug/l   | 82       |
| 38) 1,2-Dichloropropane       | 6.43  | 63    | 4176     | 0.239 | ug/l # | 78       |
| 41) Tetrahydrofuran           | 4.65  | 42    | 1369m    | 0.478 | ug/l   |          |
| 42) 1-Chlorobutane            | 5.06  | 56    | 8289     | 0.255 | ug/l   | 83       |
| 43) Dibromomethane            | 6.56  | 93    | 2314     | 0.249 | ug/l   | 89       |
| 44) Bromodichloromethane      | 6.75  | 83    | 5204     | 0.220 | ug/l   | 95       |
| 45) 4-Methyl-2-Pentanone      | 7.47  | 43    | 12768    | 1.171 | ug/l # | 87       |
| 46) t-1,4-Dichloro-2-butene   | 10.52 | 75    | 1318m    | 0.248 | ug/l   |          |

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Quant Time: Feb 27 00:48:07 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) |
|-------------------------------|-------|------|----------|-------|--------|----------|
| -----                         |       |      |          |       |        |          |
| 47) Methyl methacrylate       | 6.63  | 69   | 3856     | 0.471 | ug/l # | 73       |
| 48) Ethyl methacrylate        | 8.03  | 69   | 3563m    | 0.203 | ug/l   |          |
| 49) Toluene                   | 7.64  | 92   | 10559    | 0.246 | ug/l   | 99       |
| 50) t-1,3-Dichloropropene     | 7.88  | 75   | 4674     | 0.201 | ug/l   | 94       |
| 51) cis-1,3-Dichloropropene   | 7.27  | 75   | 5731     | 0.208 | ug/l # | 83       |
| 52) 1,1,2-Trichloroethane     | 8.07  | 97   | 3200     | 0.260 | ug/l # | 88       |
| 53) 1,3-Dichloropropane       | 8.24  | 76   | 5700     | 0.264 | ug/l   | 95       |
| 54) 2-Hexanone                | 8.38  | 43   | 8750     | 1.145 | ug/l   | 82       |
| 55) Dibromochloromethane      | 8.48  | 129  | 3941     | 0.225 | ug/l   | 97       |
| 56) 1,2-Dibromoethane         | 8.59  | 107  | 3217     | 0.255 | ug/l   | 99       |
| 58) Tetrachloroethene         | 8.23  | 164  | 5141     | 0.287 | ug/l   | 89       |
| 59) Chlorobenzene             | 9.12  | 112  | 12265    | 0.254 | ug/l   | 99       |
| 60) 1,1,1,2-Tetrachloroethane | 9.21  | 131  | 4192     | 0.235 | ug/l   | 93       |
| 61) Pentachloroethane         | 11.10 | 117  | 3157     | 0.228 | ug/l   | 94       |
| 63) Ethyl Benzene             | 9.25  | 91   | 20654    | 0.246 | ug/l   | 92       |
| 64) m/p-Xylenes               | 9.37  | 106  | 15172    | 0.465 | ug/l   | 90       |
| 65) o-Xylene                  | 9.78  | 106  | 7912     | 0.247 | ug/l   | 84       |
| 66) Styrene                   | 9.79  | 104  | 12189    | 0.228 | ug/l   | 95       |
| 69) Isopropylbenzene          | 10.16 | 105  | 20321    | 0.237 | ug/l   | 97       |
| 70) 1,1,2,2-Tetrachloroethane | 10.46 | 83   | 3837     | 0.243 | ug/l   | 90       |
| 71) 1,2,3-Trichloropropane    | 10.49 | 75   | 2863m    | 0.264 | ug/l   |          |
| 72) Bromobenzene              | 10.45 | 156  | 5971     | 0.288 | ug/l   | 80       |
| 73) n-propylbenzene           | 10.58 | 120  | 5381     | 0.226 | ug/l   | 85       |
| 74) 2-Chlorotoluene           | 10.66 | 126  | 5166     | 0.254 | ug/l   | 87       |
| 75) 1,3,5-Trimethylbenzene    | 10.77 | 105  | 16633    | 0.225 | ug/l   | 96       |
| 76) 4-Chlorotoluene           | 10.77 | 126  | 5576     | 0.265 | ug/l   | 69       |
| 77) tert-Butylbenzene         | 11.10 | 119  | 16870    | 0.231 | ug/l   | 90       |
| 78) 1,2,4-Trimethylbenzene    | 11.15 | 105  | 16796    | 0.225 | ug/l   | 97       |
| 79) sec-Butylbenzene          | 11.32 | 105  | 22501    | 0.236 | ug/l   | 94       |
| 81) p-Isopropyltoluene        | 11.47 | 119  | 18145    | 0.224 | ug/l # | 94       |
| 82) 1,3-Dichlorobenzene       | 11.42 | 146  | 11330    | 0.278 | ug/l   | 95       |
| 83) 1,4-Dichlorobenzene       | 11.51 | 146  | 11246    | 0.277 | ug/l   | 95       |
| 84) n-Butylbenzene            | 11.89 | 91   | 15676    | 0.211 | ug/l   | 98       |
| 85) 1,2-Dichlorobenzene       | 11.88 | 146  | 10528    | 0.274 | ug/l   | 97       |
| 87) 1,2,4-Trichlorobenzene    | 13.50 | 180  | 6227     | 0.230 | ug/l   | 93       |
| 88) Hexachlorobutadiene       | 13.69 | 225  | 3945     | 0.252 | ug/l   | 97       |
| 89) Naphthalene               | 13.75 | 128  | 12039    | 0.263 | ug/l # | 92       |
| 90) 1,2,3-Trichlorobenzene    | 13.99 | 180  | 6621     | 0.268 | ug/l   | 94       |
| -----                         |       |      |          |       |        |          |

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

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