

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_U\DATA\VU112618\  
 Data File : VU028338.D  
 Acq On : 26 Nov 2018 14:57  
 Operator : MD/SY  
 Sample : J5164-09 0.25ppb  
 Misc : 25.0mL/MSVOA\_U/WATER  
 ALS Vial : 13 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 MDL-WATER-03-QT4-2018

Manual Integrations  
 APPROVED

MMDadoda  
 11/30/2018 2:33:42 PM

Quant Time: Nov 27 01:45:11 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\524U0112618DW.M  
 Quant Title : METHOD 524.2 VOLATILES DRINKING WATER  
 QLast Update : Tue Nov 27 01:03:50 2018  
 Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|--------------------|------|------|----------|------|-------|----------|
| 1) Fluorobenzene   | 5.75 | 96   | 46183    | 1.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                            |       |     |          |      |        |      |          |
|----------------------------|-------|-----|----------|------|--------|------|----------|
| 57) 4-Bromofluorobenzene   | 10.31 | 95  | 16619    | 0.98 | ug/l   | 0.00 |          |
| Spiked Amount              | 1.000 |     | Recovery | =    | 98.00% |      |          |
| 68) 1,2-Dichlorobenzene-d4 | 11.86 | 152 | 14053    | 0.89 | ug/l   | 0.00 | MMDadoda |
| Spiked Amount              | 1.000 |     | Recovery | =    | 89.00% |      |          |

## Target Compounds

|                               | R.T. | QIon | Response | Conc  | Units  | Qvalue |                       |
|-------------------------------|------|------|----------|-------|--------|--------|-----------------------|
| 2) Dichlorodifluoromethane    | 1.21 | 85   | 4742     | 0.285 | ug/l   | 97     |                       |
| 3) Chloromethane              | 1.32 | 50   | 7981     | 0.282 | ug/l   | 95     | 11/30/2018 2:33:42 PM |
| 4) Vinyl Chloride             | 1.40 | 62   | 5688     | 0.294 | ug/l   | 96     |                       |
| 5) Bromomethane               | 1.63 | 94   | 2220     | 0.291 | ug/l   | 82     |                       |
| 6) Chloroethane               | 1.70 | 64   | 3782     | 0.335 | ug/l   | 93     |                       |
| 7) Trichlorofluoromethane     | 1.89 | 101  | 6029     | 0.285 | ug/l   | 96     |                       |
| 8) 1,1,2-Trichloro-1,2,2-trif | 2.29 | 101  | 3750     | 0.308 | ug/l # | 87     |                       |
| 9) 1,1-Dichloroethene         | 2.28 | 96   | 2898     | 0.258 | ug/l   | 91     |                       |
| 10) Iodomethane               | 2.41 | 142  | 1975     | 0.260 | ug/l   | 96     |                       |
| 11) Allyl Chloride            | 2.59 | 41   | 8522     | 0.300 | ug/l   | 93     |                       |
| 12) Acrylonitrile             | 2.95 | 53   | 2413     | 0.674 | ug/l   | 90     |                       |
| 13) Acetone                   | 2.35 | 43   | 7961m    | 2.399 | ug/l   |        |                       |
| 14) Carbon Disulfide          | 2.48 | 76   | 13755    | 0.322 | ug/l   | 96     |                       |
| 15) Methylene Chloride        | 2.70 | 84   | 5369     | 0.392 | ug/l   | 94     |                       |
| 16) trans-1,2-Dichloroethene  | 2.98 | 96   | 3318     | 0.264 | ug/l   | 93     |                       |
| 17) 1,1-Dichloroethane        | 3.45 | 63   | 8172     | 0.291 | ug/l # | 94     |                       |
| 18) 2-Butanone                | 4.30 | 43   | 5896     | 1.189 | ug/l   | 92     |                       |
| 19) Cyclohexane               | 4.99 | 56   | 7410     | 0.304 | ug/l   | 93     |                       |
| 20) Methylcyclohexane         | 6.41 | 83   | 6085     | 0.255 | ug/l   | 89     |                       |
| 21) 2,2-Dichloropropane       | 4.23 | 77   | 6802     | 0.302 | ug/l   | 96     |                       |
| 22) cis-1,2-Dichloroethene    | 4.23 | 96   | 4678     | 0.318 | ug/l   | 99     |                       |
| 23) Diethyl Ether             | 2.11 | 59   | 3024     | 0.268 | ug/l   | 94     |                       |
| 24) tert-Butyl Alcohol        | 2.89 | 59   | 3089m    | 2.730 | ug/l   |        |                       |
| 25) Methyl tert-Butyl Ether   | 3.01 | 73   | 9816     | 0.294 | ug/l   | 92     |                       |
| 26) Bromochloromethane        | 4.56 | 128  | 1729     | 0.308 | ug/l # | 90     |                       |
| 27) Chloroform                | 4.67 | 83   | 10506    | 0.388 | ug/l   | 99     |                       |
| 28) 1,1,1-Trichloroethane     | 4.92 | 97   | 5870     | 0.278 | ug/l   | 96     |                       |
| 29) 1,1-Dichloropropene       | 5.14 | 75   | 6203     | 0.306 | ug/l   | 99     |                       |
| 30) Carbon Tetrachloride      | 5.13 | 117  | 4553     | 0.267 | ug/l   | 90     |                       |
| 31) Isopropyl Ether           | 3.58 | 45   | 14122    | 0.281 | ug/l   | 97     |                       |
| 32) Ethyl-t-butyl ether       | 4.08 | 59   | 11991    | 0.290 | ug/l   | 100    |                       |
| 33) Tert-Amyl methyl ether    | 5.58 | 73   | 9301     | 0.271 | ug/l   | 98     |                       |
| 34) Propionitrile             | 4.39 | 54   | 1756m    | 1.409 | ug/l   |        |                       |
| 35) Benzene                   | 5.39 | 78   | 15964    | 0.268 | ug/l   | 98     |                       |
| 36) 1,2-Dichloroethane        | 5.41 | 62   | 5071     | 0.284 | ug/l # | 85     |                       |
| 37) Trichloroethene           | 6.19 | 130  | 4233     | 0.326 | ug/l # | 73     |                       |
| 38) 1,2-Dichloropropane       | 6.43 | 63   | 4912     | 0.289 | ug/l   | 97     |                       |
| 39) Methacrylonitrile         | 4.57 | 41   | 1645     | 0.246 | ug/l # | 74     |                       |
| 41) Tetrahydrofuran           | 4.67 | 42   | 1708     | 0.509 | ug/l # | 72     |                       |
| 42) 1-Chlorobutane            | 5.07 | 56   | 9718     | 0.302 | ug/l   | 96     |                       |
| 43) Dibromomethane            | 6.57 | 93   | 2077     | 0.287 | ug/l   | 98     |                       |

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 Misc : 25.0mL/MSVOA\_U/WATER  
 ALS Vial : 13 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
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Quant Time: Nov 27 01:45:11 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\524U0112618DW.M  
 Quant Title : METHOD 524.2 VOLATILES DRINKING WATER  
 QLast Update : Tue Nov 27 01:03:50 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc  | Units  | Dev(Min)                 |
|--------------------------------|-------|------|----------|-------|--------|--------------------------|
| -----                          |       |      |          |       |        |                          |
| 44) Bromodichloromethane       | 6.76  | 83   | 5895     | 0.308 | ug/l   | 87                       |
| 45) 4-Methyl-2-Pentanone       | 7.47  | 43   | 15509    | 1.333 | ug/l   | 97                       |
| 46) t-1,4-Dichloro-2-butene    | 10.51 | 75   | 2475m    | 0.582 | ug/l   |                          |
| 47) Methyl methacrylate        | 6.63  | 69   | 3809     | 0.515 | ug/l # | 93                       |
| 48) Ethyl methacrylate         | 8.03  | 69   | 3780     | 0.256 | ug/l   | 93                       |
| 49) Toluene                    | 7.64  | 92   | 8802     | 0.266 | ug/l   | 98 MMDadoda              |
| 50) t-1,3-Dichloropropene      | 7.88  | 75   | 5083     | 0.277 | ug/l   | 97                       |
| 51) cis-1,3-Dichloropropene    | 7.27  | 75   | 5774     | 0.255 | ug/l   | 96                       |
| 52) 1,1,2-Trichloroethane      | 8.07  | 97   | 2913     | 0.286 | ug/l   | 91                       |
| 53) 1,3-Dichloropropane        | 8.24  | 76   | 5101     | 0.269 | ug/l   | 89                       |
| 54) 2-Hexanone                 | 8.37  | 43   | 11151    | 1.332 | ug/l   | 89 11/30/2018 2:33:42 PM |
| 55) Dibromochloromethane       | 8.48  | 129  | 3158     | 0.292 | ug/l   | 100                      |
| 56) 1,2-Dibromoethane          | 8.59  | 107  | 2470     | 0.267 | ug/l   | 99                       |
| 58) Tetrachloroethene          | 8.23  | 164  | 3775     | 0.317 | ug/l   | 95                       |
| 59) Chlorobenzene              | 9.12  | 112  | 9279     | 0.269 | ug/l   | 93                       |
| 60) 1,1,1,2-Tetrachloroethane  | 9.21  | 131  | 2991     | 0.256 | ug/l   | 98                       |
| 61) Pentachloroethane          | 11.10 | 117  | 2576     | 0.283 | ug/l # | 76                       |
| 62) Hexachloroethane           | 12.14 | 117  | 1933     | 0.227 | ug/l   | 98                       |
| 63) Ethyl Benzene              | 9.25  | 91   | 17308    | 0.272 | ug/l   | 100                      |
| 64) m/p-Xylenes                | 9.37  | 106  | 12042    | 0.523 | ug/l   | 94                       |
| 65) o-Xylene                   | 9.78  | 106  | 6277     | 0.283 | ug/l   | 95                       |
| 66) Styrene                    | 9.79  | 104  | 9848     | 0.258 | ug/l   | 96                       |
| 67) Bromoform                  | 9.95  | 173  | 1515     | 0.250 | ug/l   | 98                       |
| 69) Isopropylbenzene           | 10.16 | 105  | 15543    | 0.261 | ug/l   | 96                       |
| 70) 1,1,2,2-Tetrachloroethane  | 10.46 | 83   | 3778     | 0.277 | ug/l # | 97                       |
| 71) 1,2,3-Trichloropropane     | 10.49 | 75   | 2531m    | 0.266 | ug/l   |                          |
| 72) Bromobenzene               | 10.45 | 156  | 3527     | 0.267 | ug/l   | 91                       |
| 73) n-propylbenzene            | 10.59 | 120  | 4324     | 0.280 | ug/l   | 88                       |
| 74) 2-Chlorotoluene            | 10.66 | 126  | 4080     | 0.302 | ug/l   | 85                       |
| 75) 1,3,5-Trimethylbenzene     | 10.77 | 105  | 12475    | 0.249 | ug/l   | 98                       |
| 76) 4-Chlorotoluene            | 10.77 | 126  | 3630     | 0.265 | ug/l   | 100                      |
| 77) tert-Butylbenzene          | 11.10 | 119  | 11694    | 0.248 | ug/l   | 93                       |
| 78) 1,2,4-Trimethylbenzene     | 11.15 | 105  | 12996    | 0.253 | ug/l   | 100                      |
| 79) sec-Butylbenzene           | 11.32 | 105  | 17246    | 0.262 | ug/l   | 100                      |
| 80) Nitrobenzene               | 12.87 | 77   | 658      | 1.071 | ug/l # | 49                       |
| 81) p-Isopropyltoluene         | 11.48 | 119  | 12988    | 0.249 | ug/l   | 96                       |
| 82) 1,3-Dichlorobenzene        | 11.42 | 146  | 7195     | 0.272 | ug/l   | 98                       |
| 83) 1,4-Dichlorobenzene        | 11.51 | 146  | 7793     | 0.296 | ug/l   | 96                       |
| 84) n-Butylbenzene             | 11.89 | 91   | 14349    | 0.262 | ug/l   | 95                       |
| 85) 1,2-Dichlorobenzene        | 11.88 | 146  | 6785     | 0.269 | ug/l   | 88                       |
| 86) 1,2-Dibromo-3-Chloropropan | 12.66 | 75   | 575      | 0.262 | ug/l # | 85                       |
| 87) 1,2,4-Trichlorobenzene     | 13.50 | 180  | 5139     | 0.290 | ug/l   | 93                       |
| 88) Hexachlorobutadiene        | 13.69 | 225  | 2452     | 0.256 | ug/l   | 93                       |
| 89) Naphthalene                | 13.75 | 128  | 8644     | 0.247 | ug/l   | 95                       |
| 90) 1,2,3-Trichlorobenzene     | 13.99 | 180  | 4614     | 0.276 | ug/l   | 98                       |
| -----                          |       |      |          |       |        |                          |

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

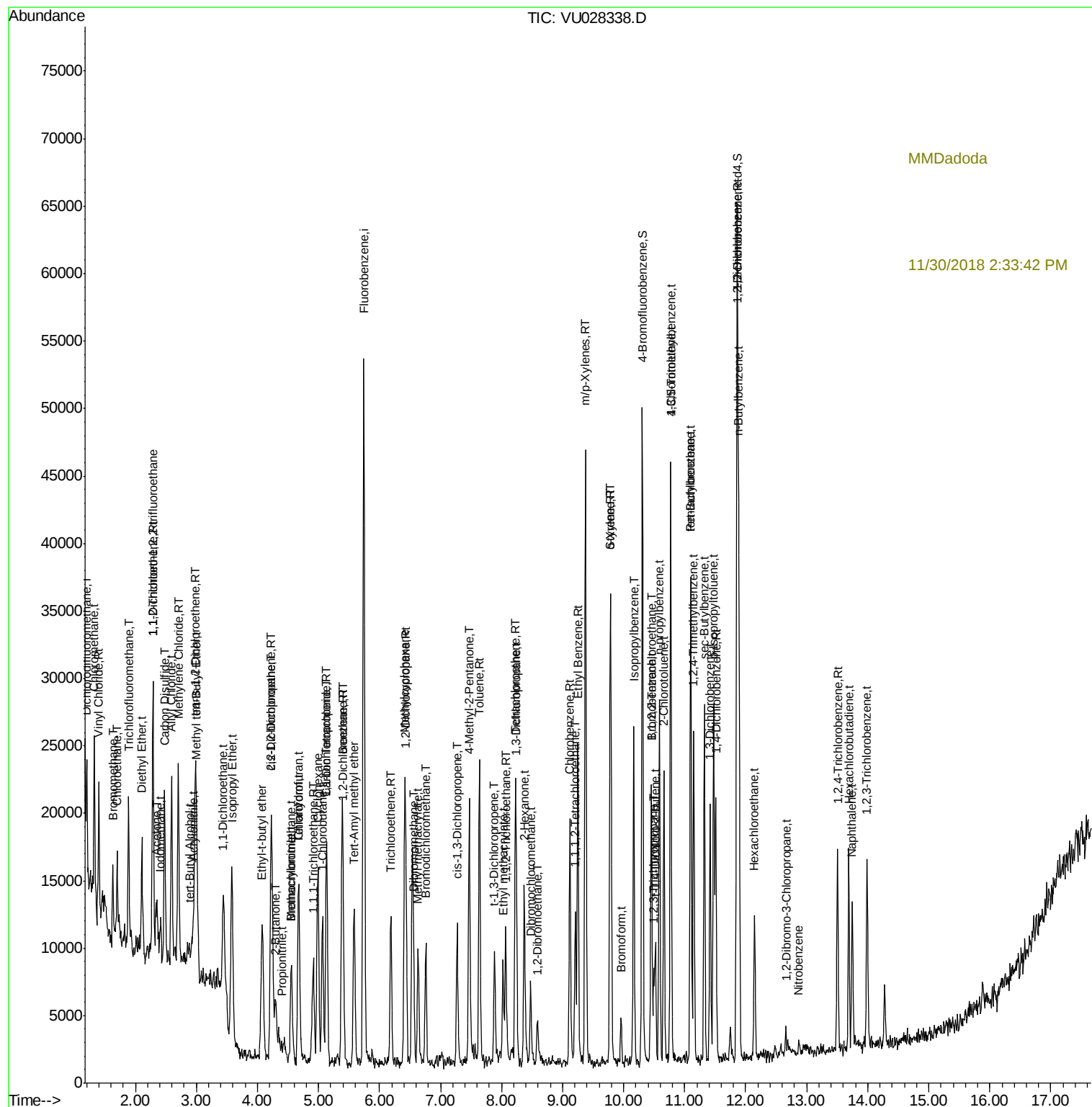
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 ALS Vial : 13 Sample Multiplier: 1

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