

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN112420\  
 Data File : VN064824.D  
 Acq On : 24 Nov 2020 21:05  
 Operator : JC/MD  
 Sample : VSTDCCC050  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 29 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
 APPROVED

MMDadoda  
 11/25/2020 9:52:11 AM

Quant Time: Nov 25 05:39:32 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N112320W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Nov 23 13:54:12 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.62  | 168  | 191188   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.55  | 114  | 303285   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.38 | 117  | 276070   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.32 | 152  | 135984   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |       |          |          |      |         |
|---------------------------|--------|-------|----------|----------|------|---------|
| 33) 1,2-Dichloroethane-d4 | 7.99   | 65    | 111308   | 50.08    | ug/l | 0.00    |
| Spiked Amount             | 50.000 | Range | 61 - 141 | Recovery | =    | 100.16% |
| 35) Dibromofluoromethane  | 7.55   | 113   | 96704    | 53.29    | ug/l | 0.00    |
| Spiked Amount             | 50.000 | Range | 69 - 133 | Recovery | =    | 106.58% |
| 50) Toluene-d8            | 10.06  | 98    | 376743   | 50.81    | ug/l | 0.00    |
| Spiked Amount             | 50.000 | Range | 65 - 126 | Recovery | =    | 101.62% |
| 62) 4-Bromofluorobenzene  | 12.37  | 95    | 135739   | 51.15    | ug/l | 0.00    |
| Spiked Amount             | 50.000 | Range | 58 - 135 | Recovery | =    | 102.30% |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.83 | 85  | 75592   | 45.620  | ug/l | 99     |
| 3) Chloromethane              | 2.04 | 50  | 97373   | 45.221  | ug/l | 99     |
| 4) Vinyl Chloride             | 2.17 | 62  | 105855  | 47.153  | ug/l | 95     |
| 5) Bromomethane               | 2.52 | 94  | 59312   | 40.270  | ug/l | 99     |
| 6) Chloroethane               | 2.67 | 64  | 67955   | 48.942  | ug/l | 95     |
| 7) Trichlorofluoromethane     | 2.99 | 101 | 148389  | 47.818  | ug/l | 95     |
| 8) Diethyl Ether              | 3.37 | 74  | 59512   | 48.585  | ug/l | 99     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.71 | 101 | 88825   | 47.716  | ug/l | 99     |
| 10) Methyl Iodide             | 3.91 | 142 | 78615   | 32.558  | ug/l | 98     |
| 11) Tert butyl alcohol        | 4.75 | 59  | 78758   | 227.208 | ug/l | 99     |
| 12) 1,1-Dichloroethene        | 3.69 | 96  | 89437   | 48.241  | ug/l | 99     |
| 13) Acrolein                  | 3.57 | 56  | 37464   | 176.943 | ug/l | 95     |
| 14) Allyl chloride            | 4.27 | 41  | 148870  | 48.685  | ug/l | 98     |
| 15) Acrylonitrile             | 4.93 | 53  | 237980  | 248.521 | ug/l | 99     |
| 16) Acetone                   | 3.78 | 43  | 187737  | 256.942 | ug/l | 99     |
| 17) Carbon Disulfide          | 4.01 | 76  | 227299  | 47.484  | ug/l | 99     |
| 18) Methyl Acetate            | 4.28 | 43  | 107387  | 48.884  | ug/l | 99     |
| 19) Methyl tert-butyl Ether   | 5.00 | 73  | 301387  | 50.687  | ug/l | 100    |
| 20) Methylene Chloride        | 4.50 | 84  | 104991  | 45.856  | ug/l | 98     |
| 21) trans-1,2-Dichloroethene  | 4.99 | 96  | 98918   | 48.046  | ug/l | 98     |
| 22) Diisopropyl ether         | 5.90 | 45  | 320149  | 52.308  | ug/l | 98     |
| 23) Vinyl Acetate             | 5.84 | 43  | 1283907 | 262.324 | ug/l | 99     |
| 24) 1,1-Dichloroethane        | 5.80 | 63  | 182168  | 49.803  | ug/l | 100    |
| 25) 2-Butanone                | 6.79 | 43  | 301209  | 254.306 | ug/l | 96     |
| 26) 2,2-Dichloropropane       | 6.78 | 77  | 144006  | 45.393  | ug/l | 99     |
| 27) cis-1,2-Dichloroethene    | 6.78 | 96  | 114153  | 49.274  | ug/l | 99     |
| 28) Bromochloromethane        | 7.15 | 49  | 82008   | 49.009  | ug/l | 98     |
| 29) Tetrahydrofuran           | 7.17 | 42  | 201482  | 246.429 | ug/l | 99     |
| 30) Chloroform                | 7.33 | 83  | 184598  | 48.938  | ug/l | 100    |
| 31) Cyclohexane               | 7.61 | 56  | 146633  | 47.333  | ug/l | 98     |
| 32) 1,1,1-Trichloroethane     | 7.53 | 97  | 160696  | 49.602  | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 7.75 | 75  | 138986  | 49.441  | ug/l | 99     |
| 37) Ethyl Acetate             | 6.88 | 43  | 127913  | 47.237  | ug/l | 100    |
| 38) Carbon Tetrachloride      | 7.73 | 117 | 143953  | 49.215  | ug/l | 97     |

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 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 29 Sample Multiplier: 1

Instrument :  
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 ClientSampleId :  
 VSTDCCC050

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 11/25/2020 9:52:11 AM

Quant Time: Nov 25 05:39:32 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N112320W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Nov 23 13:54:12 2020  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.05  | 83   | 152321   | 50.334  | ug/l   | 98       |
| 40) Benzene                    | 8.00  | 78   | 419427   | 48.689  | ug/l   | 97       |
| 41) Methacrylonitrile          | 7.13  | 41   | 58403    | 46.742  | ug/l   | 94       |
| 42) 1,2-Dichloroethane         | 8.08  | 62   | 137934   | 47.465  | ug/l   | 100      |
| 43) Isopropyl Acetate          | 8.13  | 43   | 208007   | 47.737  | ug/l   | 98       |
| 44) Trichloroethene            | 8.80  | 130  | 117924   | 46.396  | ug/l   | 100      |
| 45) 1,2-Dichloropropane        | 9.08  | 63   | 114320   | 51.245  | ug/l   | 97       |
| 46) Dibromomethane             | 9.17  | 93   | 74161    | 49.761  | ug/l   | 97       |
| 47) Bromodichloromethane       | 9.37  | 83   | 149298   | 49.787  | ug/l   | 99       |
| 48) Methyl methacrylate        | 9.17  | 41   | 103100   | 49.518  | ug/l   | 98       |
| 49) 1,4-Dioxane                | 9.17  | 88   | 36075    | 916.728 | ug/l   | 96       |
| 51) 4-Methyl-2-Pentanone       | 9.95  | 43   | 652551   | 249.455 | ug/l   | 100      |
| 52) Toluene                    | 10.12 | 92   | 265096   | 49.970  | ug/l   | 100      |
| 53) t-1,3-Dichloropropene      | 10.35 | 75   | 164735   | 49.322  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 9.81  | 75   | 177330   | 49.533  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 10.53 | 97   | 108036   | 49.524  | ug/l   | 96       |
| 56) Ethyl methacrylate         | 10.40 | 69   | 154715   | 51.394  | ug/l   | 100      |
| 57) 1,3-Dichloropropane        | 10.68 | 76   | 177150   | 49.228  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 9.66  | 63   | 427768   | 258.326 | ug/l   | 100      |
| 59) 2-Hexanone                 | 10.72 | 43   | 472306   | 250.876 | ug/l   | 100      |
| 60) Dibromochloromethane       | 10.87 | 129  | 122337   | 50.450  | ug/l   | 98       |
| 61) 1,2-Dibromoethane          | 10.97 | 107  | 108884   | 49.128  | ug/l   | 99       |
| 64) Tetrachloroethene          | 10.60 | 164  | 116078   | 43.218  | ug/l   | 98       |
| 65) Chlorobenzene              | 11.40 | 112  | 290781   | 49.048  | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 11.48 | 131  | 108602   | 49.846  | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.48 | 91   | 503602   | 50.848  | ug/l   | 99       |
| 68) m/p-Xylenes                | 11.59 | 106  | 389140   | 103.778 | ug/l   | 99       |
| 69) o-Xylene                   | 11.92 | 106  | 185030   | 51.999  | ug/l   | 100      |
| 70) Styrene                    | 11.94 | 104  | 318853   | 53.080  | ug/l   | 100      |
| 71) Bromoform                  | 12.10 | 173  | 83782    | 48.146  | ug/l # | 99       |
| 73) Isopropylbenzene           | 12.22 | 105  | 497393   | 52.586  | ug/l   | 99       |
| 74) N-amyl acetate             | 12.04 | 43   | 189194   | 50.827  | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.48 | 83   | 142011   | 51.224  | ug/l   | 98       |
| 76) 1,2,3-Trichloropropane     | 12.52 | 75   | 148989m  | 50.875  | ug/l   |          |
| 77) Bromobenzene               | 12.50 | 156  | 126094   | 49.448  | ug/l   | 100      |
| 78) n-propylbenzene            | 12.56 | 91   | 559167   | 51.893  | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 12.65 | 91   | 332481   | 49.917  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.70 | 105  | 425166   | 54.079  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.27 | 75   | 48917    | 45.781  | ug/l   | 94       |
| 82) 4-Chlorotoluene            | 12.75 | 91   | 346050   | 49.566  | ug/l   | 98       |
| 83) tert-Butylbenzene          | 12.96 | 119  | 363555   | 55.169  | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene     | 13.01 | 105  | 428424   | 53.897  | ug/l   | 100      |
| 85) sec-Butylbenzene           | 13.14 | 105  | 470830   | 53.812  | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 13.26 | 119  | 433566   | 54.428  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.25 | 146  | 222862   | 49.191  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.33 | 146  | 222473   | 46.433  | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.59 | 91   | 359795   | 51.432  | ug/l   | 100      |
| 90) Hexachloroethane           | 13.85 | 117  | 74292    | 53.686  | ug/l   | 99       |
| 91) 1,2-Dichlorobenzene        | 13.62 | 146  | 219311   | 49.300  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.24 | 75   | 29747    | 47.687  | ug/l   | 99       |

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Quant Time: Nov 25 05:39:32 2020  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N112320W.M  
Quant Title : SW846 8260  
QLast Update : Mon Nov 23 13:54:12 2020  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.88 | 180  | 129437   | 47.036 | ug/l  | 100      |
| 94) Hexachlorobutadiene    | 14.98 | 225  | 61371    | 49.528 | ug/l  | 99       |
| 95) Naphthalene            | 15.10 | 128  | 398835   | 48.377 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.28 | 180  | 125426   | 48.018 | ug/l  | 99       |

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

