

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN012420\  
 Data File : VN059860.D  
 Acq On : 24 Jan 2020 20:58  
 Operator : JC/MD  
 Sample : VSTDCCC050  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 29 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050EC

Manual Integrations  
 APPROVED

MMDadoda  
 1/27/2020 11:16:08 AM

Quant Time: Jan 25 02:17:05 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N011320W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Jan 18 03:09:32 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.64  | 168  | 178805   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.57  | 114  | 286996   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.40 | 117  | 261073   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.34 | 152  | 125100   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.00   | 65  | 108568   | 54.68 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 109.36% |      |
| 35) Dibromofluoromethane  | 7.56   | 113 | 91260    | 53.32 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 106.64% |      |
| 50) Toluene-d8            | 10.08  | 98  | 335009   | 50.52 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 101.04% |      |
| 62) 4-Bromofluorobenzene  | 12.39  | 95  | 121047   | 50.64 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 101.28% |      |

## Target Compounds

|                               |      |     |        |         |        | Qvalue |
|-------------------------------|------|-----|--------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.83 | 85  | 101194 | 47.981  | ug/l   | 98     |
| 3) Chloromethane              | 2.04 | 50  | 99777  | 48.741  | ug/l   | 97     |
| 4) Vinyl Chloride             | 2.17 | 62  | 128438 | 54.836  | ug/l   | 98     |
| 5) Bromomethane               | 2.53 | 94  | 78521  | 54.933  | ug/l   | 99     |
| 6) Chloroethane               | 2.68 | 64  | 61486  | 55.487  | ug/l   | 98     |
| 7) Trichlorofluoromethane     | 3.00 | 101 | 147567 | 52.461  | ug/l   | 99     |
| 8) Diethyl Ether              | 3.38 | 74  | 57542  | 58.291  | ug/l   | 80     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.74 | 101 | 83664  | 53.441  | ug/l   | 93     |
| 10) Methyl Iodide             | 3.93 | 142 | 141648 | 55.976  | ug/l   | 95     |
| 11) Tert butyl alcohol        | 4.73 | 59  | 90522  | 270.799 | ug/l   | 99     |
| 12) 1,1-Dichloroethene        | 3.72 | 96  | 85381  | 52.193  | ug/l   | 88     |
| 13) Acrolein                  | 3.58 | 56  | 89662  | 378.915 | ug/l   | 96     |
| 14) Allyl chloride            | 4.29 | 41  | 113499 | 51.474  | ug/l # | 82     |
| 15) Acrylonitrile             | 4.94 | 53  | 221776 | 290.848 | ug/l   | 100    |
| 16) Acetone                   | 3.78 | 43  | 198749 | 295.275 | ug/l   | 95     |
| 17) Carbon Disulfide          | 4.03 | 76  | 216071 | 46.366  | ug/l   | 98     |
| 18) Methyl Acetate            | 4.29 | 43  | 142646 | 61.501  | ug/l # | 90     |
| 19) Methyl tert-butyl Ether   | 5.01 | 73  | 305167 | 57.215  | ug/l   | 95     |
| 20) Methylene Chloride        | 4.52 | 84  | 99679  | 55.631  | ug/l   | 88     |
| 21) trans-1,2-Dichloroethene  | 5.01 | 96  | 90309  | 51.934  | ug/l   | 90     |
| 22) Diisopropyl ether         | 5.91 | 45  | 272062 | 54.446  | ug/l # | 96     |
| 23) Vinyl Acetate             | 5.86 | 43  | 908779 | 234.900 | ug/l # | 94     |
| 24) 1,1-Dichloroethane        | 5.82 | 63  | 166914 | 54.668  | ug/l   | 96     |
| 25) 2-Butanone                | 6.80 | 43  | 290003 | 257.901 | ug/l # | 89     |
| 26) 2,2-Dichloropropane       | 6.80 | 77  | 144806 | 49.333  | ug/l   | 95     |
| 27) cis-1,2-Dichloroethene    | 6.80 | 96  | 110717 | 55.357  | ug/l   | 86     |
| 28) Bromochloromethane        | 7.17 | 49  | 61964  | 50.777  | ug/l # | 68     |
| 29) Tetrahydrofuran           | 7.18 | 42  | 187143 | 268.986 | ug/l # | 85     |
| 30) Chloroform                | 7.35 | 83  | 180814 | 57.156  | ug/l   | 98     |
| 31) Cyclohexane               | 7.63 | 56  | 129849 | 44.197  | ug/l   | 90     |
| 32) 1,1,1-Trichloroethane     | 7.55 | 97  | 159257 | 54.447  | ug/l   | 95     |
| 36) 1,1-Dichloropropene       | 7.77 | 75  | 121328 | 48.545  | ug/l   | 96     |
| 37) Ethyl Acetate             | 6.90 | 43  | 119428 | 50.948  | ug/l # | 95     |
| 38) Carbon Tetrachloride      | 7.75 | 117 | 139829 | 51.433  | ug/l   | 99     |

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 Sample : VSTDCCC050  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 29 Sample Multiplier: 1

Instrument :  
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 ClientSampleID :  
 VSTDCCC050EC

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 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N011320W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Jan 18 03:09:32 2020  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 9.06  | 83   | 140981   | 45.748   | ug/l   | 91       |
| 40) Benzene                    | 8.02  | 78   | 383110   | 51.399   | ug/l   | 99       |
| 41) Methacrylonitrile          | 7.15  | 41   | 60882m   | 52.730   | ug/l   |          |
| 42) 1,2-Dichloroethane         | 8.10  | 62   | 139234   | 55.094   | ug/l   | 96       |
| 43) Isopropyl Acetate          | 8.14  | 43   | 211098   | 52.357   | ug/l # | 94       |
| 44) Trichloroethene            | 8.82  | 130  | 106478   | 52.329   | ug/l   | 92       |
| 45) 1,2-Dichloropropane        | 9.10  | 63   | 98993    | 53.671   | ug/l   | 100      |
| 46) Dibromomethane             | 9.19  | 93   | 72044    | 55.373   | ug/l   | 91       |
| 47) Bromodichloromethane       | 9.39  | 83   | 147513   | 56.262   | ug/l   | 99       |
| 48) Methyl methacrylate        | 9.18  | 41   | 95469    | 52.936   | ug/l   | 91       |
| 49) 1,4-Dioxane                | 9.18  | 88   | 36509    | 1105.826 | ug/l   | 89       |
| 51) 4-Methyl-2-Pentanone       | 9.97  | 43   | 614621   | 263.702  | ug/l   | 94       |
| 52) Toluene                    | 10.14 | 92   | 245904   | 52.230   | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.37 | 75   | 160199   | 54.721   | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 9.82  | 75   | 165490   | 53.725   | ug/l   | 93       |
| 55) 1,1,2-Trichloroethane      | 10.55 | 97   | 104691   | 56.144   | ug/l   | 97       |
| 56) Ethyl methacrylate         | 10.42 | 69   | 153477   | 53.866   | ug/l   | 91       |
| 57) 1,3-Dichloropropane        | 10.70 | 76   | 166871   | 56.367   | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 9.68  | 63   | 243461   | 283.687  | ug/l   | 91       |
| 59) 2-Hexanone                 | 10.74 | 43   | 452220   | 263.368  | ug/l   | 94       |
| 60) Dibromochloromethane       | 10.89 | 129  | 121520   | 57.228   | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 10.99 | 107  | 110568   | 56.574   | ug/l   | 98       |
| 64) Tetrachloroethene          | 10.62 | 164  | 138432   | 65.060   | ug/l   | 96       |
| 65) Chlorobenzene              | 11.43 | 112  | 271195   | 52.849   | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.50 | 131  | 110148   | 55.552   | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.50 | 91   | 469117   | 50.360   | ug/l   | 97       |
| 68) m/p-Xylenes                | 11.61 | 106  | 358431   | 101.863  | ug/l   | 94       |
| 69) o-Xylene                   | 11.94 | 106  | 175990   | 51.087   | ug/l   | 95       |
| 70) Styrene                    | 11.96 | 104  | 296149   | 51.375   | ug/l   | 97       |
| 71) Bromoform                  | 12.12 | 173  | 92849    | 58.460   | ug/l # | 99       |
| 73) Isopropylbenzene           | 12.24 | 105  | 467268   | 50.930   | ug/l   | 100      |
| 74) N-amyl acetate             | 12.06 | 43   | 180687   | 50.753   | ug/l   | 95       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.50 | 83   | 148744   | 55.924   | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 12.55 | 75   | 127788m  | 60.698   | ug/l   |          |
| 77) Bromobenzene               | 12.52 | 156  | 122094   | 52.550   | ug/l   | 84       |
| 78) n-propylbenzene            | 12.59 | 91   | 518916   | 50.391   | ug/l   | 97       |
| 79) 2-Chlorotoluene            | 12.67 | 91   | 309949   | 50.595   | ug/l   | 94       |
| 80) 1,3,5-Trimethylbenzene     | 12.73 | 105  | 390988   | 50.673   | ug/l   | 98       |
| 81) trans-1,4-Dichloro-2-buten | 12.29 | 75   | 53023    | 54.086   | ug/l   | 93       |
| 82) 4-Chlorotoluene            | 12.77 | 91   | 317363   | 51.649   | ug/l   | 95       |
| 83) tert-Butylbenzene          | 12.99 | 119  | 338948   | 50.791   | ug/l   | 95       |
| 84) 1,2,4-Trimethylbenzene     | 13.03 | 105  | 393329   | 51.526   | ug/l   | 99       |
| 85) sec-Butylbenzene           | 13.17 | 105  | 442930   | 50.518   | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 13.28 | 119  | 406735   | 50.135   | ug/l   | 98       |
| 87) 1,3-Dichlorobenzene        | 13.28 | 146  | 210328   | 52.115   | ug/l   | 97       |
| 88) 1,4-Dichlorobenzene        | 13.36 | 146  | 210601   | 52.308   | ug/l   | 97       |
| 89) n-Butylbenzene             | 13.61 | 91   | 343355   | 49.637   | ug/l   | 98       |
| 90) Hexachloroethane           | 13.87 | 117  | 78677    | 51.833   | ug/l   | 88       |
| 91) 1,2-Dichlorobenzene        | 13.65 | 146  | 211493   | 53.007   | ug/l   | 97       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.26 | 75   | 30912    | 54.328   | ug/l   | 82       |

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ALS Vial : 29 Sample Multiplier: 1

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ClientSampleId :  
VSTDCCC050EC

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Quant Title : SW846 8260  
QLast Update : Sat Jan 18 03:09:32 2020  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.90 | 180  | 124673   | 52.002 | ug/l  | 100      |
| 94) Hexachlorobutadiene    | 15.00 | 225  | 64344    | 48.703 | ug/l  | 99       |
| 95) Naphthalene            | 15.13 | 128  | 349806   | 51.297 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.31 | 180  | 120128   | 51.477 | ug/l  | 99       |

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

