

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN062920\  
 Data File : VN062181.D  
 Acq On : 29 Jun 2020 10:55  
 Operator : JC/MD  
 Sample : VSTDCCC050  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
 APPROVED

MMDadoda  
 6/30/2020 10:43:20 AM

Quant Time: Jun 30 04:46:14 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N062420W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jun 24 15:33:00 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.62  | 168  | 253740   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.55  | 114  | 450941   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.38 | 117  | 418144   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.32 | 152  | 201660   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 7.99   | 65  | 179844   | 50.51 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 101.02% |      |
| 35) Dibromofluoromethane  | 7.54   | 113 | 141517   | 48.92 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 97.84%  |      |
| 50) Toluene-d8            | 10.06  | 98  | 559100   | 48.35 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 96.70%  |      |
| 62) 4-Bromofluorobenzene  | 12.37  | 95  | 196485   | 50.29 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.58% |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.83 | 85  | 125823  | 43.870  | ug/l | 100    |
| 3) Chloromethane              | 2.03 | 50  | 162252  | 47.999  | ug/l | 98     |
| 4) Vinyl Chloride             | 2.16 | 62  | 193124  | 42.758  | ug/l | 98     |
| 5) Bromomethane               | 2.52 | 94  | 132644  | 45.440  | ug/l | 97     |
| 6) Chloroethane               | 2.66 | 64  | 130812  | 42.397  | ug/l | 98     |
| 7) Trichlorofluoromethane     | 2.98 | 101 | 241972  | 43.478  | ug/l | 100    |
| 8) Diethyl Ether              | 3.37 | 74  | 100573  | 51.752  | ug/l | 100    |
| 9) 1,1,2-Trichlorotrifluoroet | 3.71 | 101 | 141289  | 48.479  | ug/l | 98     |
| 10) Methyl Iodide             | 3.91 | 142 | 169276  | 51.573  | ug/l | 99     |
| 11) Tert butyl alcohol        | 4.73 | 59  | 133270  | 260.672 | ug/l | 100    |
| 12) 1,1-Dichloroethene        | 3.69 | 96  | 138037  | 47.378  | ug/l | 98     |
| 13) Acrolein                  | 3.56 | 56  | 140687  | 281.065 | ug/l | 99     |
| 14) Allyl chloride            | 4.27 | 41  | 210640  | 53.101  | ug/l | 98     |
| 15) Acrylonitrile             | 4.93 | 53  | 367400  | 263.711 | ug/l | 100    |
| 16) Acetone                   | 3.77 | 43  | 323057  | 289.683 | ug/l | 97     |
| 17) Carbon Disulfide          | 4.00 | 76  | 386081  | 46.267  | ug/l | 100    |
| 18) Methyl Acetate            | 4.27 | 43  | 147175  | 51.994  | ug/l | 99     |
| 19) Methyl tert-butyl Ether   | 4.99 | 73  | 493926  | 53.053  | ug/l | 98     |
| 20) Methylene Chloride        | 4.50 | 84  | 169386  | 51.827  | ug/l | 96     |
| 21) trans-1,2-Dichloroethene  | 4.98 | 96  | 153089  | 46.124  | ug/l | 97     |
| 22) Diisopropyl ether         | 5.90 | 45  | 482101  | 53.377  | ug/l | 97     |
| 23) Vinyl Acetate             | 5.84 | 43  | 2053451 | 278.470 | ug/l | 99     |
| 24) 1,1-Dichloroethane        | 5.79 | 63  | 288627  | 49.626  | ug/l | 99     |
| 25) 2-Butanone                | 6.78 | 43  | 465947  | 267.711 | ug/l | 100    |
| 26) 2,2-Dichloropropane       | 6.77 | 77  | 236964  | 48.893  | ug/l | 98     |
| 27) cis-1,2-Dichloroethene    | 6.78 | 96  | 181786  | 48.673  | ug/l | 99     |
| 28) Bromochloromethane        | 7.14 | 49  | 127278  | 50.438  | ug/l | 94     |
| 29) Tetrahydrofuran           | 7.16 | 42  | 300568  | 263.633 | ug/l | 100    |
| 30) Chloroform                | 7.33 | 83  | 290113  | 49.027  | ug/l | 100    |
| 31) Cyclohexane               | 7.61 | 56  | 240691  | 48.925  | ug/l | 98     |
| 32) 1,1,1-Trichloroethane     | 7.53 | 97  | 238793  | 47.852  | ug/l | 98     |
| 36) 1,1-Dichloropropene       | 7.75 | 75  | 215375  | 47.516  | ug/l | 99     |
| 37) Ethyl Acetate             | 6.88 | 43  | 197261  | 52.557  | ug/l | 99     |
| 38) Carbon Tetrachloride      | 7.73 | 117 | 199334  | 46.647  | ug/l | 95     |

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 Sample : VSTDCCC050  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
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 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
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MMDadoda  
 6/30/2020 10:43:20 AM

Quant Time: Jun 30 04:46:14 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N062420W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jun 24 15:33:00 2020  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 9.04  | 83   | 258904   | 52.132   | ug/l   | 99       |
| 40) Benzene                    | 8.00  | 78   | 664121   | 48.072   | ug/l   | 99       |
| 41) Methacrylonitrile          | 7.12  | 41   | 72400m   | 41.608   | ug/l   |          |
| 42) 1,2-Dichloroethane         | 8.08  | 62   | 235171   | 50.383   | ug/l   | 99       |
| 43) Isopropyl Acetate          | 8.12  | 43   | 332627   | 54.365   | ug/l   | 99       |
| 44) Trichloroethene            | 8.80  | 130  | 161719   | 46.405   | ug/l   | 98       |
| 45) 1,2-Dichloropropane        | 9.08  | 63   | 172308   | 50.555   | ug/l   | 100      |
| 46) Dibromomethane             | 9.17  | 93   | 114294   | 49.460   | ug/l   | 97       |
| 47) Bromodichloromethane       | 9.37  | 83   | 233987   | 50.148   | ug/l   | 99       |
| 48) Methyl methacrylate        | 9.17  | 41   | 152863   | 55.722   | ug/l   | 96       |
| 49) 1,4-Dioxane                | 9.17  | 88   | 61507    | 1011.016 | ug/l   | 94       |
| 51) 4-Methyl-2-Pentanone       | 9.95  | 43   | 981663   | 274.611  | ug/l   | 99       |
| 52) Toluene                    | 10.12 | 92   | 417569   | 49.537   | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.35 | 75   | 270080   | 52.613   | ug/l   | 100      |
| 54) cis-1,3-Dichloropropene    | 9.81  | 75   | 288925   | 52.866   | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane      | 10.53 | 97   | 167778   | 50.634   | ug/l   | 98       |
| 56) Ethyl methacrylate         | 10.40 | 69   | 246243   | 55.685   | ug/l   | 98       |
| 57) 1,3-Dichloropropane        | 10.68 | 76   | 290963   | 51.016   | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 9.66  | 63   | 474805   | 252.052  | ug/l   | 98       |
| 59) 2-Hexanone                 | 10.72 | 43   | 727178   | 281.709  | ug/l   | 99       |
| 60) Dibromochloromethane       | 10.87 | 129  | 174854   | 49.843   | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 10.98 | 107  | 169507   | 49.786   | ug/l   | 99       |
| 64) Tetrachloroethene          | 10.60 | 164  | 130395   | 45.652   | ug/l   | 97       |
| 65) Chlorobenzene              | 11.40 | 112  | 443194   | 48.265   | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.48 | 131  | 157954   | 49.746   | ug/l   | 100      |
| 67) Ethyl Benzene              | 11.48 | 91   | 800652   | 51.628   | ug/l   | 99       |
| 68) m/p-Xylenes                | 11.59 | 106  | 611579   | 101.959  | ug/l   | 98       |
| 69) o-Xylene                   | 11.92 | 106  | 286008   | 50.536   | ug/l   | 94       |
| 70) Styrene                    | 11.94 | 104  | 498542   | 52.820   | ug/l   | 99       |
| 71) Bromoform                  | 12.10 | 173  | 116006   | 51.385   | ug/l # | 100      |
| 73) Isopropylbenzene           | 12.22 | 105  | 779456   | 49.933   | ug/l   | 99       |
| 74) N-amyl acetate             | 12.04 | 43   | 299850   | 52.035   | ug/l   | 97       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.48 | 83   | 252150   | 48.540   | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 12.53 | 75   | 223188m  | 47.014   | ug/l   |          |
| 77) Bromobenzene               | 12.50 | 156  | 182217   | 47.018   | ug/l   | 95       |
| 78) n-propylbenzene            | 12.56 | 91   | 912153   | 51.085   | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 12.65 | 91   | 532749   | 49.353   | ug/l   | 98       |
| 80) 1,3,5-Trimethylbenzene     | 12.71 | 105  | 651359   | 51.473   | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 12.27 | 75   | 85906    | 52.847   | ug/l   | 97       |
| 82) 4-Chlorotoluene            | 12.75 | 91   | 557143   | 49.911   | ug/l   | 98       |
| 83) tert-Butylbenzene          | 12.97 | 119  | 541280   | 49.981   | ug/l   | 97       |
| 84) 1,2,4-Trimethylbenzene     | 13.01 | 105  | 655180   | 51.840   | ug/l   | 98       |
| 85) sec-Butylbenzene           | 13.15 | 105  | 760073   | 53.115   | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.26 | 119  | 683055   | 54.482   | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.26 | 146  | 332758   | 48.897   | ug/l   | 100      |
| 88) 1,4-Dichlorobenzene        | 13.34 | 146  | 332053   | 47.335   | ug/l   | 100      |
| 89) n-Butylbenzene             | 13.59 | 91   | 577328   | 55.388   | ug/l   | 100      |
| 90) Hexachloroethane           | 13.85 | 117  | 122792   | 49.919   | ug/l   | 99       |
| 91) 1,2-Dichlorobenzene        | 13.63 | 146  | 323388   | 49.004   | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.24 | 75   | 43715    | 52.532   | ug/l   | 95       |

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ALS Vial : 2 Sample Multiplier: 1

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Quant Title : SW846 8260  
QLast Update : Wed Jun 24 15:33:00 2020  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.88 | 180  | 151338   | 52.496 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 14.98 | 225  | 67106    | 53.594 | ug/l  | 98       |
| 95) Naphthalene            | 15.10 | 128  | 428482   | 45.010 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.28 | 180  | 150741   | 51.137 | ug/l  | 99       |

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

