

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN051820\  
 Data File : VN061429.D  
 Acq On : 18 May 2020 12:00  
 Operator : JC/MD  
 Sample : VSTDICCC050  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICCC050

Manual Integrations  
 APPROVED

MMDadoda  
 5/19/2020 4:25:33 PM

Quant Time: May 18 12:43:24 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N051820W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon May 18 12:26:39 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.63  | 168  | 292840   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.55  | 114  | 539945   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.38 | 117  | 512439   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.32 | 152  | 245590   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 7.99   | 65  | 210170   | 46.77 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 93.54%  |      |
| 35) Dibromofluoromethane  | 7.55   | 113 | 135789   | 50.05 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.10% |      |
| 50) Toluene-d8            | 10.06  | 98  | 634318   | 47.34 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 94.68%  |      |
| 62) 4-Bromofluorobenzene  | 12.37  | 95  | 240341   | 48.61 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 97.22%  |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.83 | 85  | 124976  | 52.752  | ug/l | 100    |
| 3) Chloromethane              | 2.03 | 50  | 189275  | 40.907  | ug/l | 100    |
| 4) Vinyl Chloride             | 2.16 | 62  | 283993  | 40.064  | ug/l | 100    |
| 5) Bromomethane               | 2.54 | 94  | 152922  | 39.811  | ug/l | 100    |
| 6) Chloroethane               | 2.67 | 64  | 185304  | 36.849  | ug/l | 100    |
| 7) Trichlorofluoromethane     | 2.98 | 101 | 336839  | 38.715  | ug/l | 100    |
| 8) Diethyl Ether              | 3.37 | 74  | 96937   | 49.430  | ug/l | 100    |
| 9) 1,1,2-Trichlorotrifluoroet | 3.72 | 101 | 142679  | 51.478  | ug/l | 100    |
| 10) Methyl Iodide             | 3.91 | 142 | 166306  | 48.203  | ug/l | 100    |
| 11) Tert butyl alcohol        | 4.73 | 59  | 130493  | 384.972 | ug/l | 100    |
| 12) 1,1-Dichloroethene        | 3.70 | 96  | 142045  | 47.852  | ug/l | 100    |
| 13) Acrolein                  | 3.56 | 56  | 96586   | 251.679 | ug/l | 100    |
| 14) Allyl chloride            | 4.27 | 41  | 249701  | 47.450  | ug/l | 100    |
| 15) Acrylonitrile             | 4.93 | 53  | 379883  | 262.387 | ug/l | 100    |
| 16) Acetone                   | 3.77 | 43  | 293926  | 259.106 | ug/l | 100    |
| 17) Carbon Disulfide          | 4.01 | 76  | 333741  | 43.687  | ug/l | 100    |
| 18) Methyl Acetate            | 4.28 | 43  | 155143  | 46.738  | ug/l | 100    |
| 19) Methyl tert-butyl Ether   | 4.99 | 73  | 560482  | 48.230  | ug/l | 100    |
| 20) Methylene Chloride        | 4.50 | 84  | 173430  | 48.439  | ug/l | 100    |
| 21) trans-1,2-Dichloroethene  | 4.99 | 96  | 170995  | 47.631  | ug/l | 100    |
| 22) Diisopropyl ether         | 5.90 | 45  | 552819  | 47.223  | ug/l | 100    |
| 23) Vinyl Acetate             | 5.84 | 43  | 2245938 | 235.683 | ug/l | 100    |
| 24) 1,1-Dichloroethane        | 5.80 | 63  | 323455  | 48.377  | ug/l | 100    |
| 25) 2-Butanone                | 6.78 | 43  | 496423  | 264.363 | ug/l | 100    |
| 26) 2,2-Dichloropropane       | 6.77 | 77  | 298125  | 52.071  | ug/l | 100    |
| 27) cis-1,2-Dichloroethene    | 6.78 | 96  | 205236  | 49.229  | ug/l | 100    |
| 28) Bromochloromethane        | 7.15 | 49  | 148698  | 50.648  | ug/l | 100    |
| 29) Tetrahydrofuran           | 7.17 | 42  | 331230  | 259.848 | ug/l | 100    |
| 30) Chloroform                | 7.33 | 83  | 344836  | 49.139  | ug/l | 100    |
| 31) Cyclohexane               | 7.61 | 56  | 293385  | 44.699  | ug/l | 100    |
| 32) 1,1,1-Trichloroethane     | 7.53 | 97  | 311886  | 49.931  | ug/l | 100    |
| 36) 1,1-Dichloropropene       | 7.75 | 75  | 256501  | 47.616  | ug/l | 100    |
| 37) Ethyl Acetate             | 6.88 | 43  | 219609  | 48.904  | ug/l | 100    |
| 38) Carbon Tetrachloride      | 7.73 | 117 | 246010  | 53.272  | ug/l | 100    |

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 Quant Title : SW846 8260  
 QLast Update : Mon May 18 12:26:39 2020  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 9.05  | 83   | 313492   | 48.898   | ug/l   | 100      |
| 40) Benzene                    | 8.00  | 78   | 769489   | 48.534   | ug/l   | 100      |
| 41) Methacrylonitrile          | 7.13  | 41   | 102039   | 48.967   | ug/l   | 100      |
| 42) 1,2-Dichloroethane         | 8.09  | 62   | 275425   | 48.329   | ug/l   | 100      |
| 43) Isopropyl Acetate          | 8.12  | 43   | 395654   | 45.822   | ug/l   | 100      |
| 44) Trichloroethene            | 8.80  | 130  | 202485   | 49.425   | ug/l   | 100      |
| 45) 1,2-Dichloropropane        | 9.08  | 63   | 193973   | 48.568   | ug/l   | 100      |
| 46) Dibromomethane             | 9.18  | 93   | 134488   | 50.076   | ug/l   | 100      |
| 47) Bromodichloromethane       | 9.37  | 83   | 290292   | 49.788   | ug/l   | 100      |
| 48) Methyl methacrylate        | 9.17  | 41   | 180717   | 46.251   | ug/l   | 100      |
| 49) 1,4-Dioxane                | 9.17  | 88   | 43251    | 1706.574 | ug/l   | 100      |
| 51) 4-Methyl-2-Pentanone       | 9.95  | 43   | 1122728  | 241.471  | ug/l   | 100      |
| 52) Toluene                    | 10.13 | 92   | 502491   | 49.930   | ug/l   | 100      |
| 53) t-1,3-Dichloropropene      | 10.35 | 75   | 323028   | 50.662   | ug/l   | 100      |
| 54) cis-1,3-Dichloropropene    | 9.81  | 75   | 331768   | 49.333   | ug/l   | 100      |
| 55) 1,1,2-Trichloroethane      | 10.54 | 97   | 191882   | 51.246   | ug/l   | 100      |
| 56) Ethyl methacrylate         | 10.40 | 69   | 302934   | 49.481   | ug/l   | 100      |
| 57) 1,3-Dichloropropane        | 10.68 | 76   | 329880   | 50.566   | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 9.66  | 63   | 641143   | 247.940  | ug/l   | 100      |
| 59) 2-Hexanone                 | 10.72 | 43   | 811930   | 254.916  | ug/l   | 100      |
| 60) Dibromochloromethane       | 10.87 | 129  | 217320   | 52.204   | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 10.98 | 107  | 201587   | 51.185   | ug/l   | 100      |
| 64) Tetrachloroethene          | 10.60 | 164  | 198805   | 49.553   | ug/l   | 100      |
| 65) Chlorobenzene              | 11.41 | 112  | 525426   | 49.403   | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 11.48 | 131  | 191767   | 51.083   | ug/l   | 100      |
| 67) Ethyl Benzene              | 11.48 | 91   | 989620   | 50.230   | ug/l   | 100      |
| 68) m/p-Xylenes                | 11.59 | 106  | 754775   | 101.976  | ug/l   | 100      |
| 69) o-Xylene                   | 11.92 | 106  | 361210   | 50.313   | ug/l   | 100      |
| 70) Styrene                    | 11.94 | 104  | 618358   | 51.301   | ug/l   | 100      |
| 71) Bromoform                  | 12.10 | 173  | 141229   | 53.416   | ug/l # | 100      |
| 73) Isopropylbenzene           | 12.22 | 105  | 977071   | 48.881   | ug/l   | 100      |
| 74) N-amyl acetate             | 12.04 | 43   | 358651   | 45.875   | ug/l   | 100      |
| 75) 1,1,2,2-Tetrachloroethane  | 12.48 | 83   | 267680   | 46.978   | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane     | 12.53 | 75   | 254034m  | 49.527   | ug/l   |          |
| 77) Bromobenzene               | 12.50 | 156  | 212846   | 48.651   | ug/l   | 100      |
| 78) n-propylbenzene            | 12.56 | 91   | 1135362  | 48.726   | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.65 | 91   | 654388   | 47.903   | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 12.71 | 105  | 820583   | 49.052   | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.27 | 75   | 95939    | 48.916   | ug/l   | 100      |
| 82) 4-Chlorotoluene            | 12.75 | 91   | 691272   | 48.161   | ug/l   | 100      |
| 83) tert-Butylbenzene          | 12.97 | 119  | 698226   | 48.926   | ug/l   | 100      |
| 84) 1,2,4-Trimethylbenzene     | 13.01 | 105  | 827734   | 49.585   | ug/l   | 100      |
| 85) sec-Butylbenzene           | 13.15 | 105  | 951201   | 49.382   | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.26 | 119  | 852487   | 50.982   | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 13.26 | 146  | 396892   | 50.027   | ug/l   | 100      |
| 88) 1,4-Dichlorobenzene        | 13.34 | 146  | 401169   | 49.239   | ug/l   | 100      |
| 89) n-Butylbenzene             | 13.59 | 91   | 776342   | 51.167   | ug/l   | 100      |
| 90) Hexachloroethane           | 13.85 | 117  | 119905   | 52.046   | ug/l   | 100      |
| 91) 1,2-Dichlorobenzene        | 13.63 | 146  | 384210   | 50.659   | ug/l   | 100      |
| 92) 1,2-Dibromo-3-Chloropropan | 14.24 | 75   | 54808    | 50.030   | ug/l   | 100      |

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| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.88 | 180  | 217691   | 52.347 | ug/l  | 100      |
| 94) Hexachlorobutadiene    | 14.98 | 225  | 91724    | 57.274 | ug/l  | 100      |
| 95) Naphthalene            | 15.10 | 128  | 703223   | 52.215 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.28 | 180  | 211268   | 50.832 | ug/l  | 100      |

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

