

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN091820\  
 Data File : VN063448.D  
 Acq On : 18 Sep 2020 10:32  
 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  
 9/21/2020 11:49:38 AM

Quant Time: Sep 21 01:43:27 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N091620W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Sep 16 13:05:20 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.62  | 168  | 314108   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.55  | 114  | 527059   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.38 | 117  | 488705   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.32 | 152  | 241002   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |        |      |
|---------------------------|--------|-----|----------|-------|--------|------|
| 33) 1,2-Dichloroethane-d4 | 7.98   | 65  | 229769   | 42.97 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 85.94% |      |
| 35) Dibromofluoromethane  | 7.54   | 113 | 165159   | 45.26 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 90.52% |      |
| 50) Toluene-d8            | 10.06  | 98  | 644226   | 46.96 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 93.92% |      |
| 62) 4-Bromofluorobenzene  | 12.38  | 95  | 246047   | 48.92 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 97.84% |      |

## Target Compounds

|                               |      |     |         |         |        | Qvalue |
|-------------------------------|------|-----|---------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.83 | 85  | 159309  | 44.768  | ug/l   | 99     |
| 3) Chloromethane              | 2.04 | 50  | 192539  | 40.900  | ug/l   | 98     |
| 4) Vinyl Chloride             | 2.16 | 62  | 192164  | 46.073  | ug/l   | 100    |
| 5) Bromomethane               | 2.53 | 94  | 118456  | 47.834  | ug/l   | 97     |
| 6) Chloroethane               | 2.67 | 64  | 110724  | 43.247  | ug/l   | 100    |
| 7) Trichlorofluoromethane     | 2.99 | 101 | 296035  | 47.572  | ug/l   | 97     |
| 8) Diethyl Ether              | 3.37 | 74  | 110092  | 45.383  | ug/l   | 96     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.72 | 101 | 163597  | 46.747  | ug/l   | 100    |
| 10) Methyl Iodide             | 3.91 | 142 | 209670  | 46.018  | ug/l   | 99     |
| 11) Tert butyl alcohol        | 4.72 | 59  | 139057  | 187.727 | ug/l # | 88     |
| 12) 1,1-Dichloroethene        | 3.70 | 96  | 157064  | 44.310  | ug/l   | 99     |
| 13) Acrolein                  | 3.57 | 56  | 67549   | 246.073 | ug/l   | 96     |
| 14) Allyl chloride            | 4.28 | 41  | 311889  | 44.483  | ug/l   | 99     |
| 15) Acrylonitrile             | 4.92 | 53  | 403726  | 214.269 | ug/l   | 100    |
| 16) Acetone                   | 3.77 | 43  | 344379  | 200.405 | ug/l   | 98     |
| 17) Carbon Disulfide          | 4.01 | 76  | 439175  | 42.595  | ug/l   | 100    |
| 18) Methyl Acetate            | 4.27 | 43  | 186727  | 42.803  | ug/l   | 99     |
| 19) Methyl tert-butyl Ether   | 4.98 | 73  | 580383  | 43.931  | ug/l   | 99     |
| 20) Methylene Chloride        | 4.51 | 84  | 189099  | 43.433  | ug/l   | 97     |
| 21) trans-1,2-Dichloroethene  | 4.99 | 96  | 171658  | 43.710  | ug/l   | 95     |
| 22) Diisopropyl ether         | 5.90 | 45  | 624643  | 43.682  | ug/l   | 99     |
| 23) Vinyl Acetate             | 5.84 | 43  | 2618518 | 222.969 | ug/l   | 99     |
| 24) 1,1-Dichloroethane        | 5.79 | 63  | 343165  | 43.956  | ug/l   | 100    |
| 25) 2-Butanone                | 6.78 | 43  | 549090  | 207.761 | ug/l   | 98     |
| 26) 2,2-Dichloropropane       | 6.77 | 77  | 304644  | 44.321  | ug/l   | 100    |
| 27) cis-1,2-Dichloroethene    | 6.78 | 96  | 201116  | 45.244  | ug/l   | 99     |
| 28) Bromochloromethane        | 7.14 | 49  | 168318  | 46.694  | ug/l   | 98     |
| 29) Tetrahydrofuran           | 7.16 | 42  | 367087  | 203.368 | ug/l   | 99     |
| 30) Chloroform                | 7.33 | 83  | 351791  | 44.913  | ug/l   | 99     |
| 31) Cyclohexane               | 7.61 | 56  | 306980  | 41.570  | ug/l   | 99     |
| 32) 1,1,1-Trichloroethane     | 7.53 | 97  | 312385  | 44.840  | ug/l   | 99     |
| 36) 1,1-Dichloropropene       | 7.75 | 75  | 259193  | 46.160  | ug/l   | 100    |
| 37) Ethyl Acetate             | 6.88 | 43  | 240502  | 43.641  | ug/l   | 99     |
| 38) Carbon Tetrachloride      | 7.73 | 117 | 271130  | 47.302  | ug/l   | 97     |

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 Quant Title : SW846 8260  
 QLast Update : Wed Sep 16 13:05:20 2020  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.05  | 83   | 285707   | 46.882  | ug/l   | 98       |
| 40) Benzene                    | 8.00  | 78   | 740747   | 46.213  | ug/l   | 98       |
| 41) Methacrylonitrile          | 7.13  | 41   | 122464m  | 49.408  | ug/l   |          |
| 42) 1,2-Dichloroethane         | 8.08  | 62   | 305050   | 47.324  | ug/l   | 99       |
| 43) Isopropyl Acetate          | 8.12  | 43   | 428036   | 43.437  | ug/l   | 99       |
| 44) Trichloroethene            | 8.80  | 130  | 186413   | 47.949  | ug/l   | 100      |
| 45) 1,2-Dichloropropane        | 9.08  | 63   | 201048   | 46.053  | ug/l   | 99       |
| 46) Dibromomethane             | 9.17  | 93   | 133911   | 46.670  | ug/l   | 99       |
| 47) Bromodichloromethane       | 9.37  | 83   | 282193   | 47.340  | ug/l   | 98       |
| 48) Methyl methacrylate        | 9.16  | 41   | 210593   | 43.498  | ug/l   | 97       |
| 49) 1,4-Dioxane                | 9.16  | 88   | 57259    | 824.142 | ug/l   | 97       |
| 51) 4-Methyl-2-Pentanone       | 9.95  | 43   | 1235224  | 223.907 | ug/l   | 100      |
| 52) Toluene                    | 10.12 | 92   | 468113   | 48.574  | ug/l   | 100      |
| 53) t-1,3-Dichloropropene      | 10.35 | 75   | 316476   | 47.557  | ug/l   | 98       |
| 54) cis-1,3-Dichloropropene    | 9.80  | 75   | 331032   | 47.160  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 10.53 | 97   | 180953   | 47.272  | ug/l   | 97       |
| 56) Ethyl methacrylate         | 10.40 | 69   | 281015   | 47.025  | ug/l   | 99       |
| 57) 1,3-Dichloropropane        | 10.68 | 76   | 319201   | 46.241  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 9.66  | 63   | 727346   | 232.023 | ug/l   | 98       |
| 59) 2-Hexanone                 | 10.72 | 43   | 909349   | 227.525 | ug/l   | 99       |
| 60) Dibromochloromethane       | 10.87 | 129  | 206804   | 47.821  | ug/l   | 98       |
| 61) 1,2-Dibromoethane          | 10.98 | 107  | 189436   | 47.634  | ug/l   | 98       |
| 64) Tetrachloroethene          | 10.60 | 164  | 168950   | 50.770  | ug/l   | 95       |
| 65) Chlorobenzene              | 11.41 | 112  | 494020   | 47.622  | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.48 | 131  | 184966   | 48.641  | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.48 | 91   | 932895   | 47.753  | ug/l   | 98       |
| 68) m/p-Xylenes                | 11.59 | 106  | 695432   | 98.731  | ug/l   | 97       |
| 69) o-Xylene                   | 11.92 | 106  | 329586   | 49.120  | ug/l   | 99       |
| 70) Styrene                    | 11.94 | 104  | 563217   | 50.054  | ug/l   | 99       |
| 71) Bromoform                  | 12.10 | 173  | 135594   | 47.864  | ug/l # | 100      |
| 73) Isopropylbenzene           | 12.22 | 105  | 903724   | 46.795  | ug/l   | 100      |
| 74) N-amyl acetate             | 12.04 | 43   | 397950   | 43.530  | ug/l   | 100      |
| 75) 1,1,2,2-Tetrachloroethane  | 12.48 | 83   | 254063   | 42.487  | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane     | 12.53 | 75   | 273620m  | 45.870  | ug/l   |          |
| 77) Bromobenzene               | 12.50 | 156  | 208157   | 47.916  | ug/l   | 94       |
| 78) n-propylbenzene            | 12.57 | 91   | 1063536  | 47.282  | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.65 | 91   | 633225   | 46.962  | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 12.71 | 105  | 760816   | 47.243  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 12.27 | 75   | 94198    | 43.294  | ug/l   | 100      |
| 82) 4-Chlorotoluene            | 12.75 | 91   | 672935   | 47.234  | ug/l   | 99       |
| 83) tert-Butylbenzene          | 12.97 | 119  | 617709   | 46.474  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.01 | 105  | 765347   | 47.050  | ug/l   | 99       |
| 85) sec-Butylbenzene           | 13.15 | 105  | 840387   | 47.236  | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.26 | 119  | 755466   | 48.142  | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 13.26 | 146  | 381527   | 47.384  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.34 | 146  | 386191   | 47.175  | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.59 | 91   | 704885   | 48.733  | ug/l   | 99       |
| 90) Hexachloroethane           | 13.85 | 117  | 134930   | 45.156  | ug/l   | 99       |
| 91) 1,2-Dichlorobenzene        | 13.63 | 146  | 370704   | 46.894  | ug/l   | 100      |
| 92) 1,2-Dibromo-3-Chloropropan | 14.24 | 75   | 58154    | 40.840  | ug/l   | 98       |

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| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.88 | 180  | 220575   | 47.330 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 14.98 | 225  | 97389    | 50.478 | ug/l  | 99       |
| 95) Naphthalene            | 15.10 | 128  | 691337   | 44.901 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.28 | 180  | 201013   | 44.640 | ug/l  | 97       |

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

