

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN062220\  
 Data File : VN062040.D  
 Acq On : 23 Jun 2020 8:47  
 Operator : JC/MD  
 Sample : VSTDCCC050  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 55 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050EC

Manual Integrations  
 APPROVED

MMDadoda  
 6/23/2020 12:44:54 PM

Quant Time: Jun 23 11:24:05 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N061620W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jun 17 01:19:44 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.63  | 168  | 150756   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.55  | 114  | 277084   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.38 | 117  | 263986   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.32 | 152  | 128567   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 7.99   | 65  | 107698   | 53.27 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 106.54% |      |
| 35) Dibromofluoromethane  | 7.55   | 113 | 90595    | 51.11 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.22% |      |
| 50) Toluene-d8            | 10.06  | 98  | 349181   | 50.11 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.22% |      |
| 62) 4-Bromofluorobenzene  | 12.37  | 95  | 120528   | 50.42 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.84% |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.83 | 85  | 89606   | 45.706  | ug/l | 99     |
| 3) Chloromethane              | 2.03 | 50  | 91049   | 43.510  | ug/l | 98     |
| 4) Vinyl Chloride             | 2.16 | 62  | 113993  | 45.696  | ug/l | 99     |
| 5) Bromomethane               | 2.52 | 94  | 48083   | 25.100  | ug/l | 97     |
| 6) Chloroethane               | 2.66 | 64  | 81031   | 47.995  | ug/l | 99     |
| 7) Trichlorofluoromethane     | 2.98 | 101 | 147977  | 49.660  | ug/l | 100    |
| 8) Diethyl Ether              | 3.37 | 74  | 55597   | 55.500  | ug/l | 100    |
| 9) 1,1,2-Trichlorotrifluoroet | 3.71 | 101 | 76476   | 50.027  | ug/l | 98     |
| 10) Methyl Iodide             | 3.91 | 142 | 56861   | 32.860  | ug/l | 99     |
| 11) Tert butyl alcohol        | 4.73 | 59  | 75951   | 271.463 | ug/l | 99     |
| 12) 1,1-Dichloroethene        | 3.69 | 96  | 73818   | 48.192  | ug/l | 95     |
| 13) Acrolein                  | 3.56 | 56  | 42390   | 253.498 | ug/l | 99     |
| 14) Allyl chloride            | 4.27 | 41  | 102163  | 50.253  | ug/l | 98     |
| 15) Acrylonitrile             | 4.93 | 53  | 206626  | 298.050 | ug/l | 99     |
| 16) Acetone                   | 3.77 | 43  | 163311  | 273.452 | ug/l | 98     |
| 17) Carbon Disulfide          | 4.00 | 76  | 173637  | 38.742  | ug/l | 99     |
| 18) Methyl Acetate            | 4.27 | 43  | 98777   | 57.448  | ug/l | 99     |
| 19) Methyl tert-butyl Ether   | 4.99 | 73  | 278993  | 54.704  | ug/l | 99     |
| 20) Methylene Chloride        | 4.50 | 84  | 93786   | 48.201  | ug/l | 98     |
| 21) trans-1,2-Dichloroethene  | 4.99 | 96  | 83939   | 47.709  | ug/l | 99     |
| 22) Diisopropyl ether         | 5.90 | 45  | 253173  | 54.452  | ug/l | 99     |
| 23) Vinyl Acetate             | 5.84 | 43  | 1002896 | 274.251 | ug/l | 97     |
| 24) 1,1-Dichloroethane        | 5.79 | 63  | 159820  | 52.510  | ug/l | 99     |
| 25) 2-Butanone                | 6.78 | 43  | 252429  | 289.700 | ug/l | 99     |
| 26) 2,2-Dichloropropane       | 6.77 | 77  | 86829   | 33.908  | ug/l | 97     |
| 27) cis-1,2-Dichloroethene    | 6.78 | 96  | 102125  | 50.306  | ug/l | 99     |
| 28) Bromochloromethane        | 7.15 | 49  | 74019   | 54.620  | ug/l | 95     |
| 29) Tetrahydrofuran           | 7.16 | 42  | 166609  | 290.543 | ug/l | 98     |
| 30) Chloroform                | 7.33 | 83  | 166831  | 51.288  | ug/l | 99     |
| 31) Cyclohexane               | 7.61 | 56  | 117935  | 44.263  | ug/l | 98     |
| 32) 1,1,1-Trichloroethane     | 7.53 | 97  | 140748  | 50.807  | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 7.75 | 75  | 115542  | 45.717  | ug/l | 99     |
| 37) Ethyl Acetate             | 6.88 | 43  | 108462  | 54.957  | ug/l | 99     |
| 38) Carbon Tetrachloride      | 7.73 | 117 | 118491  | 47.344  | ug/l | 98     |

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 Sample : VSTDCCC050  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 55 Sample Multiplier: 1

Instrument :  
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MMDadoda  
 6/23/2020 12:44:54 PM

Quant Time: Jun 23 11:24:05 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N061620W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jun 17 01:19:44 2020  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 9.05  | 83   | 119914   | 44.064   | ug/l   | 98       |
| 40) Benzene                    | 8.00  | 78   | 367729   | 48.033   | ug/l   | 98       |
| 41) Methacrylonitrile          | 7.12  | 41   | 43055    | 51.017   | ug/l # | 100      |
| 42) 1,2-Dichloroethane         | 8.09  | 62   | 128632   | 49.276   | ug/l   | 99       |
| 43) Isopropyl Acetate          | 8.13  | 43   | 179205   | 53.881   | ug/l # | 90       |
| 44) Trichloroethene            | 8.80  | 130  | 97381    | 48.332   | ug/l   | 100      |
| 45) 1,2-Dichloropropane        | 9.08  | 63   | 95804    | 50.921   | ug/l   | 99       |
| 46) Dibromomethane             | 9.17  | 93   | 64473    | 48.663   | ug/l   | 98       |
| 47) Bromodichloromethane       | 9.37  | 83   | 137145   | 50.553   | ug/l   | 99       |
| 48) Methyl methacrylate        | 9.17  | 41   | 81244    | 53.714   | ug/l   | 97       |
| 49) 1,4-Dioxane                | 9.17  | 88   | 37165    | 1070.243 | ug/l   | 99       |
| 51) 4-Methyl-2-Pentanone       | 9.95  | 43   | 546992   | 278.307  | ug/l   | 99       |
| 52) Toluene                    | 10.12 | 92   | 238047   | 49.510   | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.35 | 75   | 138109   | 47.955   | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 9.81  | 75   | 150365   | 48.070   | ug/l   | 100      |
| 55) 1,1,2-Trichloroethane      | 10.53 | 97   | 101018   | 53.400   | ug/l   | 99       |
| 56) Ethyl methacrylate         | 10.40 | 69   | 138058   | 47.907   | ug/l   | 98       |
| 57) 1,3-Dichloropropane        | 10.68 | 76   | 166816   | 52.051   | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 9.66  | 63   | 285766   | 286.226  | ug/l   | 98       |
| 59) 2-Hexanone                 | 10.72 | 43   | 400196   | 254.608  | ug/l   | 100      |
| 60) Dibromochloromethane       | 10.87 | 129  | 106916   | 50.650   | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 10.98 | 107  | 99739    | 50.492   | ug/l   | 99       |
| 64) Tetrachloroethene          | 10.60 | 164  | 77013    | 45.771   | ug/l   | 99       |
| 65) Chlorobenzene              | 11.40 | 112  | 261311   | 46.911   | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.48 | 131  | 96051    | 49.441   | ug/l   | 100      |
| 67) Ethyl Benzene              | 11.48 | 91   | 460133   | 49.268   | ug/l   | 99       |
| 68) m/p-Xylenes                | 11.59 | 106  | 354795   | 98.519   | ug/l   | 100      |
| 69) o-Xylene                   | 11.92 | 106  | 171549   | 49.925   | ug/l   | 98       |
| 70) Styrene                    | 11.94 | 104  | 294930   | 51.261   | ug/l   | 100      |
| 71) Bromoform                  | 12.10 | 173  | 72043    | 50.859   | ug/l # | 99       |
| 73) Isopropylbenzene           | 12.22 | 105  | 451453   | 49.414   | ug/l   | 100      |
| 74) N-amyl acetate             | 12.04 | 43   | 160857   | 48.703   | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.48 | 83   | 150272   | 50.590   | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 12.53 | 75   | 131697m  | 52.176   | ug/l   |          |
| 77) Bromobenzene               | 12.50 | 156  | 110888   | 48.109   | ug/l   | 98       |
| 78) n-propylbenzene            | 12.56 | 91   | 511307   | 49.048   | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.65 | 91   | 307878   | 49.174   | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.71 | 105  | 376264   | 49.780   | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.27 | 75   | 41518    | 44.863   | ug/l   | 99       |
| 82) 4-Chlorotoluene            | 12.75 | 91   | 316385   | 48.904   | ug/l   | 98       |
| 83) tert-Butylbenzene          | 12.97 | 119  | 315703   | 49.268   | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene     | 13.01 | 105  | 383795   | 51.438   | ug/l   | 99       |
| 85) sec-Butylbenzene           | 13.15 | 105  | 422463   | 50.370   | ug/l   | 98       |
| 86) p-Isopropyltoluene         | 13.26 | 119  | 373197   | 49.935   | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.26 | 146  | 198692   | 47.264   | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.34 | 146  | 198068   | 46.029   | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.59 | 91   | 300344   | 48.120   | ug/l   | 99       |
| 90) Hexachloroethane           | 13.85 | 117  | 70506    | 51.537   | ug/l   | 97       |
| 91) 1,2-Dichlorobenzene        | 13.63 | 146  | 197745   | 48.861   | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.24 | 75   | 26258    | 54.452   | ug/l   | 93       |

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Sample : VSTDCCC050  
Misc : 5.00mL/MSVOA N/WATER  
ALS Vial : 55 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

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6/23/2020 12:44:54 PM

Quant Time: Jun 23 11:24:05 2020  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N061620W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jun 17 01:19:44 2020  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.88 | 180  | 90413    | 47.344 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 14.99 | 225  | 35508    | 47.208 | ug/l  | 98       |
| 95) Naphthalene            | 15.10 | 128  | 271868   | 43.033 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.28 | 180  | 92755    | 49.042 | ug/l  | 98       |

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

