

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN011520\  
 Data File : VN059719.D  
 Acq On : 15 Jan 2020 17:15  
 Operator : JC/MD  
 Sample : VSTDCCC050  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050EC

Manual Integrations  
 APPROVED

MMDadoda  
 1/16/2020 10:57:02 AM

Quant Time: Jan 16 04:19:19 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N011320W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Jan 14 08:58:21 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.64  | 168  | 196990   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.56  | 114  | 301056   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.40 | 117  | 272687   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.34 | 152  | 134206   | 50.00 | ug/l  | 0.00     |

|                             |        |     |          |       |         |      |
|-----------------------------|--------|-----|----------|-------|---------|------|
| System Monitoring Compounds |        |     |          |       |         |      |
| 33) 1,2-Dichloroethane-d4   | 8.00   | 65  | 106226   | 48.56 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 97.12%  |      |
| 35) Dibromofluoromethane    | 7.56   | 113 | 91376    | 50.90 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 101.80% |      |
| 50) Toluene-d8              | 10.08  | 98  | 350731   | 50.42 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 100.84% |      |
| 62) 4-Bromofluorobenzene    | 12.40  | 95  | 126702   | 50.53 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 101.06% |      |

| Target Compounds              |      |     |         |         |        | Qvalue |
|-------------------------------|------|-----|---------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.83 | 85  | 123391  | 53.161  | ug/l   | 98     |
| 3) Chloromethane              | 2.04 | 50  | 112390  | 49.834  | ug/l   | 99     |
| 4) Vinyl Chloride             | 2.17 | 62  | 136823  | 53.023  | ug/l   | 97     |
| 5) Bromomethane               | 2.54 | 94  | 85502   | 54.295  | ug/l   | 98     |
| 6) Chloroethane               | 2.68 | 64  | 64474   | 52.812  | ug/l   | 100    |
| 7) Trichlorofluoromethane     | 3.00 | 101 | 167303  | 53.987  | ug/l   | 98     |
| 8) Diethyl Ether              | 3.38 | 74  | 57910   | 53.248  | ug/l   | 84     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.73 | 101 | 95001   | 55.081  | ug/l   | 91     |
| 10) Methyl Iodide             | 3.93 | 142 | 147411  | 52.875  | ug/l   | 95     |
| 11) Tert butyl alcohol        | 4.72 | 59  | 78592   | 213.406 | ug/l # | 85     |
| 12) 1,1-Dichloroethene        | 3.71 | 96  | 94147   | 52.239  | ug/l   | 87     |
| 13) Acrolein                  | 3.57 | 56  | 56700   | 217.496 | ug/l   | 99     |
| 14) Allyl chloride            | 4.29 | 41  | 125257  | 51.563  | ug/l # | 86     |
| 15) Acrylonitrile             | 4.94 | 53  | 205744  | 244.915 | ug/l   | 99     |
| 16) Acetone                   | 3.78 | 43  | 164403  | 219.102 | ug/l   | 96     |
| 17) Carbon Disulfide          | 4.03 | 76  | 261666  | 50.967  | ug/l   | 99     |
| 18) Methyl Acetate            | 4.28 | 43  | 119051  | 46.590  | ug/l # | 90     |
| 19) Methyl tert-butyl Ether   | 5.00 | 73  | 304202  | 51.769  | ug/l   | 95     |
| 20) Methylene Chloride        | 4.52 | 84  | 102193  | 51.676  | ug/l   | 88     |
| 21) trans-1,2-Dichloroethene  | 5.01 | 96  | 101162  | 52.805  | ug/l   | 88     |
| 22) Diisopropyl ether         | 5.91 | 45  | 287112  | 52.154  | ug/l # | 96     |
| 23) Vinyl Acetate             | 5.85 | 43  | 1105345 | 259.333 | ug/l   | 95     |
| 24) 1,1-Dichloroethane        | 5.82 | 63  | 174910  | 51.999  | ug/l   | 97     |
| 25) 2-Butanone                | 6.79 | 43  | 259371  | 209.366 | ug/l   | 93     |
| 26) 2,2-Dichloropropane       | 6.79 | 77  | 166530  | 51.496  | ug/l   | 95     |
| 27) cis-1,2-Dichloroethene    | 6.80 | 96  | 116921  | 53.062  | ug/l   | 88     |
| 28) Bromochloromethane        | 7.16 | 49  | 63793   | 47.450  | ug/l # | 72     |
| 29) Tetrahydrofuran           | 7.18 | 42  | 172844  | 225.500 | ug/l   | 88     |
| 30) Chloroform                | 7.34 | 83  | 185567  | 53.244  | ug/l   | 98     |
| 31) Cyclohexane               | 7.63 | 56  | 156465  | 48.340  | ug/l   | 89     |
| 32) 1,1,1-Trichloroethane     | 7.54 | 97  | 170903  | 53.035  | ug/l   | 95     |
| 36) 1,1-Dichloropropene       | 7.77 | 75  | 139628  | 53.258  | ug/l   | 96     |
| 37) Ethyl Acetate             | 6.89 | 43  | 113346  | 46.096  | ug/l   | 96     |
| 38) Carbon Tetrachloride      | 7.75 | 117 | 154980  | 54.343  | ug/l   | 98     |

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 Operator : JC/MD  
 Sample : VSTDCCC050  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleID :  
 VSTDCCC050EC

Manual Integrations  
 APPROVED

MMDadoda  
 1/16/2020 10:57:02 AM

Quant Time: Jan 16 04:19:19 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N011320W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Jan 14 08:58:21 2020  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.06  | 83   | 174679   | 54.036  | ug/l   | 91       |
| 40) Benzene                    | 8.02  | 78   | 411173   | 52.587  | ug/l   | 99       |
| 41) Methacrylonitrile          | 7.14  | 41   | 53987m   | 44.574  | ug/l   |          |
| 42) 1,2-Dichloroethane         | 8.10  | 62   | 138989   | 52.429  | ug/l   | 96       |
| 43) Isopropyl Acetate          | 8.14  | 43   | 205438   | 48.573  | ug/l # | 95       |
| 44) Trichloroethene            | 8.81  | 130  | 119025   | 55.763  | ug/l   | 92       |
| 45) 1,2-Dichloropropane        | 9.10  | 63   | 103112   | 53.294  | ug/l   | 100      |
| 46) Dibromomethane             | 9.19  | 93   | 71485    | 52.377  | ug/l # | 88       |
| 47) Bromodichloromethane       | 9.38  | 83   | 150059   | 54.561  | ug/l   | 98       |
| 48) Methyl methacrylate        | 9.18  | 41   | 91463    | 48.346  | ug/l   | 89       |
| 49) 1,4-Dioxane                | 9.18  | 88   | 31164    | 899.847 | ug/l   | 90       |
| 51) 4-Methyl-2-Pentanone       | 9.97  | 43   | 573744   | 234.668 | ug/l   | 94       |
| 52) Toluene                    | 10.14 | 92   | 266963   | 54.055  | ug/l   | 100      |
| 53) t-1,3-Dichloropropene      | 10.37 | 75   | 165903   | 54.023  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 9.82  | 75   | 179655   | 55.600  | ug/l   | 91       |
| 55) 1,1,2-Trichloroethane      | 10.55 | 97   | 103589   | 52.959  | ug/l   | 97       |
| 56) Ethyl methacrylate         | 10.42 | 69   | 155680   | 52.087  | ug/l   | 90       |
| 57) 1,3-Dichloropropane        | 10.70 | 76   | 167842   | 54.048  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 9.68  | 63   | 270923   | 300.944 | ug/l   | 91       |
| 59) 2-Hexanone                 | 10.74 | 43   | 411275   | 228.336 | ug/l   | 94       |
| 60) Dibromochloromethane       | 10.89 | 129  | 122252   | 54.884  | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 10.99 | 107  | 109988   | 53.649  | ug/l   | 100      |
| 64) Tetrachloroethene          | 10.62 | 164  | 109618   | 49.324  | ug/l   | 95       |
| 65) Chlorobenzene              | 11.43 | 112  | 291891   | 54.460  | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 11.50 | 131  | 113059   | 54.592  | ug/l   | 98       |
| 67) Ethyl Benzene              | 11.50 | 91   | 525036   | 53.962  | ug/l   | 96       |
| 68) m/p-Xylenes                | 11.61 | 106  | 404102   | 109.951 | ug/l   | 92       |
| 69) o-Xylene                   | 11.94 | 106  | 193579   | 53.800  | ug/l   | 94       |
| 70) Styrene                    | 11.96 | 104  | 329919   | 54.795  | ug/l   | 96       |
| 71) Bromoform                  | 12.12 | 173  | 90033    | 54.273  | ug/l # | 97       |
| 73) Isopropylbenzene           | 12.24 | 105  | 524393   | 53.278  | ug/l   | 99       |
| 74) N-amyl acetate             | 12.06 | 43   | 185816   | 48.653  | ug/l   | 96       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.50 | 83   | 143886   | 50.427  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 12.55 | 75   | 135131m  | 59.831  | ug/l   |          |
| 77) Bromobenzene               | 12.52 | 156  | 133161   | 53.424  | ug/l   | 80       |
| 78) n-propylbenzene            | 12.59 | 91   | 594126   | 53.780  | ug/l   | 97       |
| 79) 2-Chlorotoluene            | 12.67 | 91   | 341765   | 52.003  | ug/l   | 94       |
| 80) 1,3,5-Trimethylbenzene     | 12.73 | 105  | 439951   | 53.150  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 12.29 | 75   | 52002    | 49.445  | ug/l   | 94       |
| 82) 4-Chlorotoluene            | 12.77 | 91   | 354551   | 53.786  | ug/l   | 96       |
| 83) tert-Butylbenzene          | 12.99 | 119  | 378711   | 52.899  | ug/l   | 94       |
| 84) 1,2,4-Trimethylbenzene     | 13.03 | 105  | 439483   | 53.666  | ug/l   | 98       |
| 85) sec-Butylbenzene           | 13.17 | 105  | 505984   | 53.794  | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 13.28 | 119  | 473159   | 54.365  | ug/l   | 97       |
| 87) 1,3-Dichlorobenzene        | 13.28 | 146  | 237066   | 54.754  | ug/l   | 98       |
| 88) 1,4-Dichlorobenzene        | 13.36 | 146  | 234823   | 54.366  | ug/l   | 96       |
| 89) n-Butylbenzene             | 13.61 | 91   | 410897   | 55.371  | ug/l   | 98       |
| 90) Hexachloroethane           | 13.87 | 117  | 88032    | 54.061  | ug/l   | 88       |
| 91) 1,2-Dichlorobenzene        | 13.65 | 146  | 229460   | 53.608  | ug/l   | 97       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.27 | 75   | 29204    | 47.584  | ug/l   | 81       |

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Sample : VSTDCCC050  
Misc : 5.00mL/MSVOA N/WATER  
ALS Vial : 12 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

Manual Integrations  
APPROVED

MMDadoda  
1/16/2020 10:57:02 AM

Quant Time: Jan 16 04:19:19 2020  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N011320W.M  
Quant Title : SW846 8260  
QLast Update : Tue Jan 14 08:58:21 2020  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.91 | 180  | 142486   | 55.399 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 15.01 | 225  | 75922    | 53.567 | ug/l  | 99       |
| 95) Naphthalene            | 15.13 | 128  | 367730   | 50.266 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.31 | 180  | 131972   | 52.716 | ug/l  | 99       |

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

