

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\WX073119\  
 Data File : VX011242.D  
 Acq On : 31 Jul 2019 14:05  
 Operator : JC/SP  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
 APPROVED

MMdadoda  
 8/1/2019 11:19:50 AM

Quant Time: Jul 31 17:13:41 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X071619W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jul 24 05:39:23 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.66  | 168  | 184081   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.85  | 114  | 264610   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 247552   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.07 | 152  | 136217   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 6.06  | 65   | 95780    | 48.91 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 97.82%  |          |
| 35) Dibromofluoromethane    | 5.49  | 113  | 85553    | 50.94 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 101.88% |          |
| 50) Toluene-d8              | 8.71  | 98   | 316771   | 50.29 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 100.58% |          |
| 62) 4-Bromofluorobenzene    | 11.13 | 95   | 124082   | 53.59 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 107.18% |          |

| Target Compounds              | R.T. | QIon | Response | Conc    | Units | Qvalue |
|-------------------------------|------|------|----------|---------|-------|--------|
| 2) Dichlorodifluoromethane    | 1.20 | 85   | 86945    | 44.357  | ug/l  | 97     |
| 3) Chloromethane              | 1.32 | 50   | 75029    | 44.322  | ug/l  | 99     |
| 4) Vinyl Chloride             | 1.41 | 62   | 82375    | 47.708  | ug/l  | 99     |
| 5) Bromomethane               | 1.64 | 94   | 46956    | 48.259  | ug/l  | 98     |
| 6) Chloroethane               | 1.71 | 64   | 54329    | 49.513  | ug/l  | 95     |
| 7) Trichlorofluoromethane     | 1.93 | 101  | 152181   | 52.067  | ug/l  | 99     |
| 8) Diethyl Ether              | 2.19 | 74   | 50778    | 50.423  | ug/l  | 98     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.38 | 101  | 87458    | 52.406  | ug/l  | 97     |
| 10) Methyl Iodide             | 2.51 | 142  | 92587    | 42.277  | ug/l  | 100    |
| 11) Tert butyl alcohol        | 3.04 | 59   | 98065    | 215.017 | ug/l  | 100    |
| 12) 1,1-Dichloroethene        | 2.37 | 96   | 77841    | 47.474  | ug/l  | 100    |
| 13) Acrolein                  | 2.29 | 56   | 80596    | 305.859 | ug/l  | 99     |
| 14) Allyl chloride            | 2.73 | 41   | 115474   | 48.484  | ug/l  | 100    |
| 15) Acrylonitrile             | 3.14 | 53   | 224537   | 243.640 | ug/l  | 99     |
| 16) Acetone                   | 2.44 | 43   | 217407   | 245.802 | ug/l  | 95     |
| 17) Carbon Disulfide          | 2.57 | 76   | 163626   | 38.903  | ug/l  | 100    |
| 18) Methyl Acetate            | 2.77 | 43   | 107286   | 53.270  | ug/l  | 98     |
| 19) Methyl tert-butyl Ether   | 3.19 | 73   | 265152   | 50.234  | ug/l  | 99     |
| 20) Methylene Chloride        | 2.85 | 84   | 89531    | 47.765  | ug/l  | 98     |
| 21) trans-1,2-Dichloroethene  | 3.17 | 96   | 81361    | 46.766  | ug/l  | 97     |
| 22) Diisopropyl ether         | 3.85 | 45   | 257048   | 51.173  | ug/l  | 96     |
| 23) Vinyl Acetate             | 3.81 | 43   | 1074676  | 252.507 | ug/l  | 99     |
| 24) 1,1-Dichloroethane        | 3.70 | 63   | 144695   | 49.601  | ug/l  | 99     |
| 25) 2-Butanone                | 4.67 | 43   | 316739   | 249.467 | ug/l  | 98     |
| 26) 2,2-Dichloropropane       | 4.58 | 77   | 119362   | 49.833  | ug/l  | 99     |
| 27) cis-1,2-Dichloroethene    | 4.59 | 96   | 97895    | 48.620  | ug/l  | 99     |
| 28) Bromochloromethane        | 5.01 | 49   | 70832    | 51.527  | ug/l  | 98     |
| 29) Tetrahydrofuran           | 5.12 | 42   | 193669   | 240.806 | ug/l  | 99     |
| 30) Chloroform                | 5.21 | 83   | 159585   | 50.612  | ug/l  | 99     |
| 31) Cyclohexane               | 5.57 | 56   | 126735   | 47.663  | ug/l  | 97     |
| 32) 1,1,1-Trichloroethane     | 5.49 | 97   | 139000   | 50.954  | ug/l  | 100    |
| 36) 1,1-Dichloropropene       | 5.79 | 75   | 111616   | 51.352  | ug/l  | 99     |
| 37) Ethyl Acetate             | 4.83 | 43   | 112939   | 50.745  | ug/l  | 99     |
| 38) Carbon Tetrachloride      | 5.78 | 117  | 121567   | 53.674  | ug/l  | 97     |

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 Acq On : 31 Jul 2019 14:05  
 Operator : JC/SP  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleID :  
 VSTDCCC050

Manual Integrations  
 APPROVED

MMdadoda  
 8/1/2019 11:19:50 AM

Quant Time: Jul 31 17:13:41 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X071619W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jul 24 05:39:23 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 7.46  | 83   | 143972   | 51.078  | ug/l   | 99       |
| 40) Benzene                    | 6.14  | 78   | 342180   | 51.394  | ug/l   | 99       |
| 41) Methacrylonitrile          | 5.04  | 41   | 64459    | 51.019  | ug/l   | 97       |
| 42) 1,2-Dichloroethane         | 6.19  | 62   | 122842   | 53.065  | ug/l   | 99       |
| 43) Isopropyl Acetate          | 6.44  | 43   | 190000   | 51.918  | ug/l   | 98       |
| 44) Trichloroethene            | 7.21  | 130  | 100389   | 50.939  | ug/l   | 93       |
| 45) 1,2-Dichloropropane        | 7.51  | 63   | 88105    | 51.992  | ug/l   | 98       |
| 46) Dibromomethane             | 7.66  | 93   | 64160    | 52.986  | ug/l   | 98       |
| 47) Bromodichloromethane       | 7.90  | 83   | 119778   | 55.569  | ug/l   | 99       |
| 48) Methyl methacrylate        | 7.76  | 41   | 93107    | 52.226  | ug/l   | 97       |
| 49) 1,4-Dioxane                | 7.73  | 88   | 49279    | 988.178 | ug/l   | 99       |
| 51) 4-Methyl-2-Pentanone       | 8.64  | 43   | 645863   | 272.252 | ug/l   | 99       |
| 52) Toluene                    | 8.78  | 92   | 226492   | 51.784  | ug/l   | 100      |
| 53) t-1,3-Dichloropropene      | 9.04  | 75   | 128840   | 55.590  | ug/l   | 97       |
| 54) cis-1,3-Dichloropropene    | 8.43  | 75   | 139407   | 54.055  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 9.21  | 97   | 95887    | 53.244  | ug/l   | 98       |
| 56) Ethyl methacrylate         | 9.18  | 69   | 144290   | 54.774  | ug/l   | 99       |
| 57) 1,3-Dichloropropane        | 9.37  | 76   | 151707   | 53.102  | ug/l   | 98       |
| 58) 2-Chloroethyl Vinyl ether  | 8.31  | 63   | 349471   | 277.908 | ug/l   | 99       |
| 59) 2-Hexanone                 | 9.49  | 43   | 500544   | 272.035 | ug/l   | 99       |
| 60) Dibromochloromethane       | 9.58  | 129  | 104913   | 50.587  | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 9.67  | 107  | 104083   | 54.459  | ug/l   | 99       |
| 64) Tetrachloroethene          | 9.34  | 164  | 100955   | 51.840  | ug/l   | 99       |
| 65) Chlorobenzene              | 10.13 | 112  | 260274   | 51.190  | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.22 | 131  | 97230    | 54.410  | ug/l   | 99       |
| 67) Ethyl Benzene              | 10.25 | 91   | 455539   | 52.636  | ug/l   | 100      |
| 68) m/p-Xylenes                | 10.35 | 106  | 352476   | 106.175 | ug/l   | 99       |
| 69) o-Xylene                   | 10.69 | 106  | 170823   | 52.724  | ug/l   | 99       |
| 70) Styrene                    | 10.71 | 104  | 295958   | 54.797  | ug/l   | 99       |
| 71) Bromoform                  | 10.85 | 173  | 78426    | 48.293  | ug/l # | 99       |
| 73) Isopropylbenzene           | 11.02 | 105  | 473455   | 51.439  | ug/l   | 100      |
| 74) N-amyl acetate             | 10.90 | 43   | 176380   | 50.153  | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.26 | 83   | 154167   | 51.182  | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane     | 11.29 | 75   | 129453m  | 52.664  | ug/l   |          |
| 77) Bromobenzene               | 11.26 | 156  | 126382   | 49.780  | ug/l   | 98       |
| 78) n-propylbenzene            | 11.36 | 91   | 536932   | 52.796  | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 11.42 | 91   | 312369   | 51.130  | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 11.51 | 105  | 401687   | 52.228  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 11.07 | 75   | 44593    | 46.283  | ug/l   | 96       |
| 82) 4-Chlorotoluene            | 11.51 | 91   | 372787   | 52.427  | ug/l   | 100      |
| 83) tert-Butylbenzene          | 11.77 | 119  | 398188   | 52.709  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 11.80 | 105  | 406081   | 52.386  | ug/l   | 99       |
| 85) sec-Butylbenzene           | 11.94 | 105  | 476959   | 53.882  | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 12.06 | 119  | 447010   | 54.623  | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 12.02 | 146  | 230119   | 52.229  | ug/l   | 100      |
| 88) 1,4-Dichlorobenzene        | 12.10 | 146  | 232574   | 51.469  | ug/l   | 98       |
| 89) n-Butylbenzene             | 12.38 | 91   | 388329   | 55.466  | ug/l   | 100      |
| 90) Hexachloroethane           | 12.60 | 117  | 69590    | 53.914  | ug/l   | 96       |
| 91) 1,2-Dichlorobenzene        | 12.39 | 146  | 228428   | 52.313  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 13.00 | 75   | 32940    | 52.317  | ug/l   | 94       |

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Operator : JC/SP  
Sample : VSTDCCC050  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
VSTDCCC050

Manual Integrations  
APPROVED

MMdadoda  
8/1/2019 11:19:50 AM

Quant Time: Jul 31 17:13:41 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X071619W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jul 24 05:39:23 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.65 | 180  | 157370   | 53.178 | ug/l  | 98       |
| 94) Hexachlorobutadiene    | 13.78 | 225  | 81555    | 55.613 | ug/l  | 99       |
| 95) Naphthalene            | 13.83 | 128  | 481917   | 55.148 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 14.02 | 180  | 159324   | 54.110 | ug/l  | 98       |

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

