

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX112118\  
 Data File : VX006163.D  
 Acq On : 22 Nov 2018 09:48  
 Operator : JC/MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 55 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VSTDCCC050EC

Manual Integrations  
 APPROVED

MMDadoda  
 11/26/2018 9:49:40 AM

Quant Time: Nov 22 23:28:44 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X112018W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 21 08:15:54 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 293219   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 438026   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 410197   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 228114   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 6.07   | 65  | 178260   | 52.47 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 104.94% |      |
| 35) Dibromofluoromethane  | 5.50   | 113 | 147020   | 52.29 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 104.58% |      |
| 50) Toluene-d8            | 8.71   | 98  | 553310   | 51.59 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 103.18% |      |
| 62) 4-Bromofluorobenzene  | 11.14  | 95  | 209396   | 52.04 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 104.08% |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.20 | 85  | 108483  | 49.787  | ug/l | 99     |
| 3) Chloromethane              | 1.32 | 50  | 121623  | 44.186  | ug/l | 99     |
| 4) Vinyl Chloride             | 1.41 | 62  | 138294  | 49.394  | ug/l | 96     |
| 5) Bromomethane               | 1.64 | 94  | 67824   | 32.872  | ug/l | 97     |
| 6) Chloroethane               | 1.71 | 64  | 100061  | 70.546  | ug/l | 98     |
| 7) Trichlorofluoromethane     | 1.93 | 101 | 188667  | 51.511  | ug/l | 100    |
| 8) Diethyl Ether              | 2.19 | 74  | 76941   | 49.695  | ug/l | 99     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.39 | 101 | 104020  | 47.895  | ug/l | 99     |
| 10) Methyl Iodide             | 2.51 | 142 | 68468   | 25.145  | ug/l | 99     |
| 11) Tert butyl alcohol        | 3.07 | 59  | 189053  | 261.565 | ug/l | 98     |
| 12) 1,1-Dichloroethene        | 2.37 | 96  | 103597  | 48.930  | ug/l | 98     |
| 13) Acrolein                  | 2.29 | 56  | 81800   | 189.132 | ug/l | 100    |
| 14) Allyl chloride            | 2.73 | 41  | 207488  | 47.900  | ug/l | 99     |
| 15) Acrylonitrile             | 3.15 | 53  | 397620  | 249.066 | ug/l | 99     |
| 16) Acetone                   | 2.45 | 43  | 368114  | 244.155 | ug/l | 98     |
| 17) Carbon Disulfide          | 2.57 | 76  | 414825  | 72.561  | ug/l | 98     |
| 18) Methyl Acetate            | 2.78 | 43  | 204649  | 52.930  | ug/l | 98     |
| 19) Methyl tert-butyl Ether   | 3.20 | 73  | 385284  | 52.646  | ug/l | 100    |
| 20) Methylene Chloride        | 2.85 | 84  | 124637  | 54.649  | ug/l | 98     |
| 21) trans-1,2-Dichloroethene  | 3.16 | 96  | 115110  | 51.963  | ug/l | 95     |
| 22) Diisopropyl ether         | 3.87 | 45  | 512250  | 55.242  | ug/l | 95     |
| 23) Vinyl Acetate             | 3.82 | 43  | 2197965 | 285.706 | ug/l | 99     |
| 24) 1,1-Dichloroethane        | 3.70 | 63  | 225904  | 51.711  | ug/l | 98     |
| 25) 2-Butanone                | 4.70 | 43  | 703977  | 251.555 | ug/l | 99     |
| 26) 2,2-Dichloropropane       | 4.59 | 77  | 135167  | 37.540  | ug/l | 97     |
| 27) cis-1,2-Dichloroethene    | 4.60 | 96  | 158118  | 51.069  | ug/l | 98     |
| 28) Bromochloromethane        | 5.02 | 49  | 134944  | 52.999  | ug/l | 98     |
| 29) Tetrahydrofuran           | 5.15 | 42  | 453836  | 259.966 | ug/l | 99     |
| 30) Chloroform                | 5.21 | 83  | 271501  | 51.285  | ug/l | 99     |
| 31) Cyclohexane               | 5.57 | 56  | 231871  | 50.813  | ug/l | 99     |
| 32) 1,1,1-Trichloroethane     | 5.49 | 97  | 234351  | 54.823  | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 5.80 | 75  | 201881  | 50.661  | ug/l | 99     |
| 37) Ethyl Acetate             | 4.85 | 43  | 260513  | 50.813  | ug/l | 99     |
| 38) Carbon Tetrachloride      | 5.78 | 117 | 204417  | 54.576  | ug/l | 100    |

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 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 55 Sample Multiplier: 1

Instrument :  
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Manual Integrations  
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 11/26/2018 9:49:40 AM

Quant Time: Nov 22 23:28:44 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X112018W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 21 08:15:54 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 7.46  | 83   | 223803   | 49.297   | ug/l   | 99       |
| 40) Benzene                    | 6.14  | 78   | 598962   | 51.017   | ug/l   | 99       |
| 41) Methacrylonitrile          | 5.06  | 41   | 145570   | 51.522   | ug/l   | 99       |
| 42) 1,2-Dichloroethane         | 6.20  | 62   | 219557   | 50.021   | ug/l   | 100      |
| 43) Isopropyl Acetate          | 6.46  | 43   | 394391   | 53.267   | ug/l   | 99       |
| 44) Trichloroethene            | 7.21  | 130  | 161453   | 49.479   | ug/l   | 99       |
| 45) 1,2-Dichloropropane        | 7.52  | 63   | 162064   | 52.160   | ug/l   | 98       |
| 46) Dibromomethane             | 7.66  | 93   | 107306   | 50.430   | ug/l   | 100      |
| 47) Bromodichloromethane       | 7.90  | 83   | 209365   | 53.200   | ug/l   | 99       |
| 48) Methyl methacrylate        | 7.77  | 41   | 210036   | 55.934   | ug/l   | 100      |
| 49) 1,4-Dioxane                | 7.75  | 88   | 89633    | 1006.118 | ug/l   | 99       |
| 51) 4-Methyl-2-Pentanone       | 8.65  | 43   | 1398064  | 263.389  | ug/l   | 100      |
| 52) Toluene                    | 8.79  | 92   | 380575   | 52.408   | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 9.04  | 75   | 207500   | 50.527   | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 8.43  | 75   | 227680   | 50.151   | ug/l   | 97       |
| 55) 1,1,2-Trichloroethane      | 9.21  | 97   | 158891   | 50.522   | ug/l   | 99       |
| 56) Ethyl methacrylate         | 9.18  | 69   | 248319   | 50.664   | ug/l   | 99       |
| 57) 1,3-Dichloropropane        | 9.37  | 76   | 263897   | 50.907   | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 8.31  | 63   | 658200   | 241.058  | ug/l   | 100      |
| 59) 2-Hexanone                 | 9.49  | 43   | 1098354  | 260.739  | ug/l   | 100      |
| 60) Dibromochloromethane       | 9.59  | 129  | 170800   | 55.394   | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 9.67  | 107  | 168708   | 52.070   | ug/l   | 99       |
| 64) Tetrachloroethene          | 9.34  | 164  | 159344   | 47.204   | ug/l   | 97       |
| 65) Chlorobenzene              | 10.14 | 112  | 433192   | 51.485   | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.22 | 131  | 157574   | 54.549   | ug/l   | 100      |
| 67) Ethyl Benzene              | 10.25 | 91   | 742915   | 53.925   | ug/l   | 99       |
| 68) m/p-Xylenes                | 10.36 | 106  | 576475   | 107.459  | ug/l   | 100      |
| 69) o-Xylene                   | 10.70 | 106  | 277668   | 54.187   | ug/l   | 100      |
| 70) Styrene                    | 10.71 | 104  | 468088   | 56.024   | ug/l   | 100      |
| 71) Bromoform                  | 10.86 | 173  | 140742   | 54.431   | ug/l # | 99       |
| 73) Isopropylbenzene           | 11.02 | 105  | 759798   | 55.049   | ug/l   | 100      |
| 74) N-amyl acetate             | 10.90 | 43   | 369557   | 52.417   | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.27 | 83   | 266503   | 51.236   | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane     | 11.30 | 75   | 243225m  | 51.790   | ug/l   |          |
| 77) Bromobenzene               | 11.26 | 156  | 203313   | 52.584   | ug/l   | 99       |
| 78) n-propylbenzene            | 11.36 | 91   | 884994   | 55.058   | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 11.42 | 91   | 516571   | 53.122   | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 11.51 | 105  | 637074   | 54.746   | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 11.07 | 75   | 61618    | 44.376   | ug/l   | 97       |
| 82) 4-Chlorotoluene            | 11.51 | 91   | 613680   | 54.077   | ug/l   | 99       |
| 83) tert-Butylbenzene          | 11.77 | 119  | 635131   | 55.907   | ug/l   | 100      |
| 84) 1,2,4-Trimethylbenzene     | 11.80 | 105  | 656351   | 55.294   | ug/l   | 100      |
| 85) sec-Butylbenzene           | 11.94 | 105  | 762357   | 54.863   | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 12.07 | 119  | 685001   | 55.290   | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 12.02 | 146  | 369806   | 51.873   | ug/l   | 100      |
| 88) 1,4-Dichlorobenzene        | 12.10 | 146  | 373489   | 50.537   | ug/l   | 99       |
| 89) n-Butylbenzene             | 12.39 | 91   | 599810   | 53.473   | ug/l   | 99       |
| 90) Hexachloroethane           | 12.60 | 117  | 112861   | 57.085   | ug/l   | 99       |
| 91) 1,2-Dichlorobenzene        | 12.39 | 146  | 376452   | 51.650   | ug/l   | 100      |
| 92) 1,2-Dibromo-3-Chloropropan | 13.00 | 75   | 65176    | 54.000   | ug/l   | 98       |

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Sample : VSTDCCC050  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 55 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
VSTDCCC050EC

Manual Integrations  
APPROVED

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11/26/2018 9:49:40 AM

Quant Time: Nov 22 23:28:44 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X112018W.M  
Quant Title : SW846 8260  
QLast Update : Wed Nov 21 08:15:54 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.65 | 180  | 277637   | 54.073 | ug/l  | 98       |
| 94) Hexachlorobutadiene    | 13.78 | 225  | 125805   | 50.275 | ug/l  | 100      |
| 95) Naphthalene            | 13.83 | 128  | 872689   | 57.802 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 14.02 | 180  | 283673   | 54.193 | ug/l  | 99       |

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

