

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\WX100518\  
 Data File : VX005090.D  
 Acq On : 06 Oct 2018 01:59  
 Operator : JC/MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 23 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VSTDCCC050EC

Manual Integrations  
 APPROVED

MMDadoda  
 10/8/2018 2:02:41 PM

Quant Time: Oct 06 06:53:55 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X092618W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Oct 03 04:00:03 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 214536   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 303896   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 295411   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 185342   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 6.07   | 65  | 148659   | 48.51 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 97.02%  |      |
| 35) Dibromofluoromethane  | 5.50   | 113 | 130047   | 50.49 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.98% |      |
| 50) Toluene-d8            | 8.71   | 98  | 448117   | 52.34 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 104.68% |      |
| 62) 4-Bromofluorobenzene  | 11.14  | 95  | 169428   | 54.93 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 109.86% |      |

## Target Compounds

|                               |      |     |         |         |        | Qvalue |
|-------------------------------|------|-----|---------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.20 | 85  | 147458  | 50.411  | ug/l   | 99     |
| 3) Chloromethane              | 1.32 | 50  | 162044  | 45.660  | ug/l   | 98     |
| 4) Vinyl Chloride             | 1.40 | 62  | 166942  | 50.155  | ug/l   | 98     |
| 5) Bromomethane               | 1.64 | 94  | 110769  | 56.120  | ug/l   | 97     |
| 6) Chloroethane               | 1.71 | 64  | 97707   | 54.053  | ug/l   | 95     |
| 7) Trichlorofluoromethane     | 1.92 | 101 | 218328  | 52.984  | ug/l   | 94     |
| 8) Diethyl Ether              | 2.19 | 74  | 91953   | 51.366  | ug/l   | 97     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.38 | 101 | 120619  | 51.387  | ug/l   | 99     |
| 10) Methyl Iodide             | 2.51 | 142 | 149844  | 47.706  | ug/l   | 93     |
| 11) Tert butyl alcohol        | 3.09 | 59  | 231745  | 270.444 | ug/l   | 98     |
| 12) 1,1-Dichloroethene        | 2.37 | 96  | 116532  | 50.130  | ug/l   | 94     |
| 13) Acrolein                  | 2.29 | 56  | 74867   | 122.796 | ug/l   | 98     |
| 14) Allyl chloride            | 2.72 | 41  | 265474  | 52.341  | ug/l   | 96     |
| 15) Acrylonitrile             | 3.15 | 53  | 497478  | 263.722 | ug/l   | 96     |
| 16) Acetone                   | 2.45 | 43  | 458679  | 256.360 | ug/l   | 99     |
| 17) Carbon Disulfide          | 2.56 | 76  | 316989  | 45.381  | ug/l   | 100    |
| 18) Methyl Acetate            | 2.78 | 43  | 306527  | 67.619  | ug/l   | 96     |
| 19) Methyl tert-butyl Ether   | 3.21 | 73  | 460043  | 57.375  | ug/l   | 92     |
| 20) Methylene Chloride        | 2.85 | 84  | 136459  | 52.498  | ug/l # | 83     |
| 21) trans-1,2-Dichloroethene  | 3.16 | 96  | 124253  | 48.829  | ug/l   | 89     |
| 22) Diisopropyl ether         | 3.87 | 45  | 472972  | 55.378  | ug/l # | 95     |
| 23) Vinyl Acetate             | 3.83 | 43  | 2052400 | 262.525 | ug/l   | 100    |
| 24) 1,1-Dichloroethane        | 3.69 | 63  | 254792  | 50.011  | ug/l   | 99     |
| 25) 2-Butanone                | 4.71 | 43  | 691540  | 262.211 | ug/l   | 93     |
| 26) 2,2-Dichloropropane       | 4.58 | 77  | 142637  | 40.205  | ug/l   | 100    |
| 27) cis-1,2-Dichloroethene    | 4.60 | 96  | 145092  | 51.040  | ug/l   | 95     |
| 28) Bromochloromethane        | 5.01 | 49  | 123176  | 51.341  | ug/l   | 98     |
| 29) Tetrahydrofuran           | 5.16 | 42  | 461757  | 281.697 | ug/l   | 98     |
| 30) Chloroform                | 5.21 | 83  | 241528  | 50.162  | ug/l   | 100    |
| 31) Cyclohexane               | 5.57 | 56  | 204388  | 52.416  | ug/l # | 81     |
| 32) 1,1,1-Trichloroethane     | 5.49 | 97  | 208979  | 53.144  | ug/l   | 94     |
| 36) 1,1-Dichloropropene       | 5.80 | 75  | 172000  | 48.947  | ug/l   | 95     |
| 37) Ethyl Acetate             | 4.86 | 43  | 240687  | 51.599  | ug/l   | 99     |
| 38) Carbon Tetrachloride      | 5.78 | 117 | 177084  | 47.940  | ug/l   | 93     |

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 Acq On : 06 Oct 2018 01:59  
 Operator : JC/MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 23 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleID :  
 VSTDCCC050EC

Manual Integrations  
 APPROVED

MMDadoda  
 10/8/2018 2:02:41 PM

Quant Time: Oct 06 06:53:55 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X092618W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Oct 03 04:00:03 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 7.46  | 83   | 188807   | 52.619   | ug/l # | 86       |
| 40) Benzene                    | 6.14  | 78   | 538341   | 48.934   | ug/l   | 95       |
| 41) Methacrylonitrile          | 5.06  | 41   | 138980   | 53.726   | ug/l   | 97       |
| 42) 1,2-Dichloroethane         | 6.20  | 62   | 190578   | 49.003   | ug/l   | 98       |
| 43) Isopropyl Acetate          | 6.46  | 43   | 359011   | 53.325   | ug/l   | 98       |
| 44) Trichloroethene            | 7.21  | 130  | 137752   | 50.935   | ug/l   | 95       |
| 45) 1,2-Dichloropropane        | 7.52  | 63   | 140278   | 51.996   | ug/l   | 98       |
| 46) Dibromomethane             | 7.66  | 93   | 89897    | 53.021   | ug/l   | 99       |
| 47) Bromodichloromethane       | 7.90  | 83   | 174020   | 54.819   | ug/l   | 97       |
| 48) Methyl methacrylate        | 7.78  | 41   | 179789   | 58.835   | ug/l   | 100      |
| 49) 1,4-Dioxane                | 7.76  | 88   | 80595    | 1061.609 | ug/l   | 96       |
| 51) 4-Methyl-2-Pentanone       | 8.65  | 43   | 1232037  | 290.636  | ug/l   | 99       |
| 52) Toluene                    | 8.79  | 92   | 317967   | 52.600   | ug/l   | 97       |
| 53) t-1,3-Dichloropropene      | 9.04  | 75   | 187336   | 52.223   | ug/l   | 93       |
| 54) cis-1,3-Dichloropropene    | 8.44  | 75   | 202772   | 53.967   | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 9.22  | 97   | 136684   | 51.619   | ug/l   | 96       |
| 56) Ethyl methacrylate         | 9.18  | 69   | 215752   | 50.199   | ug/l   | 97       |
| 57) 1,3-Dichloropropane        | 9.37  | 76   | 227101   | 51.532   | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 8.32  | 63   | 578147   | 253.206  | ug/l   | 99       |
| 59) 2-Hexanone                 | 9.50  | 43   | 988548   | 279.842  | ug/l   | 95       |
| 60) Dibromochloromethane       | 9.59  | 129  | 140918   | 53.214   | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 9.68  | 107  | 140936   | 49.699   | ug/l   | 95       |
| 64) Tetrachloroethene          | 9.34  | 164  | 149115   | 51.287   | ug/l   | 95       |
| 65) Chlorobenzene              | 10.14 | 112  | 362344   | 47.833   | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.23 | 131  | 134346   | 50.447   | ug/l   | 99       |
| 67) Ethyl Benzene              | 10.26 | 91   | 618927   | 51.463   | ug/l   | 96       |
| 68) m/p-Xylenes                | 10.36 | 106  | 480935   | 102.335  | ug/l   | 95       |
| 69) o-Xylene                   | 10.70 | 106  | 232047   | 53.757   | ug/l   | 99       |
| 70) Styrene                    | 10.71 | 104  | 395934   | 49.083   | ug/l   | 99       |
| 71) Bromoform                  | 10.86 | 173  | 117885   | 51.705   | ug/l   | 97       |
| 73) Isopropylbenzene           | 11.02 | 105  | 634941   | 54.350   | ug/l   | 100      |
| 74) N-amyl acetate             | 10.90 | 43   | 313075   | 48.800   | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.27 | 83   | 226615   | 47.653   | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 11.30 | 75   | 208933m  | 50.295   | ug/l   |          |
| 77) Bromobenzene               | 11.26 | 156  | 169394   | 49.921   | ug/l   | 100      |
| 78) n-propylbenzene            | 11.36 | 91   | 726040   | 54.165   | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 11.42 | 91   | 436786   | 52.278   | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 11.51 | 105  | 540835   | 50.513   | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 11.08 | 75   | 61147    | 40.537   | ug/l   | 99       |
| 82) 4-Chlorotoluene            | 11.51 | 91   | 515472   | 52.416   | ug/l   | 99       |
| 83) tert-Butylbenzene          | 11.77 | 119  | 529958   | 55.098   | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene     | 11.81 | 105  | 558293   | 50.562   | ug/l   | 99       |
| 85) sec-Butylbenzene           | 11.94 | 105  | 650500   | 55.524   | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 12.07 | 119  | 581905   | 54.822   | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 12.02 | 146  | 314085   | 49.570   | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 12.10 | 146  | 320270   | 48.965   | ug/l   | 99       |
| 89) n-Butylbenzene             | 12.39 | 91   | 511977   | 53.110   | ug/l   | 99       |
| 90) Hexachloroethane           | 12.60 | 117  | 93364    | 52.829   | ug/l   | 98       |
| 91) 1,2-Dichlorobenzene        | 12.40 | 146  | 321607   | 48.570   | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 13.00 | 75   | 55929    | 53.564   | ug/l   | 99       |

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Data File : VX005090.D  
Acq On : 06 Oct 2018 01:59  
Operator : JC/MD  
Sample : VSTDCCC050  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 23 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
VSTDCCC050EC

Manual Integrations  
APPROVED

MMDadoda  
10/8/2018 2:02:41 PM

Quant Time: Oct 06 06:53:55 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X092618W.M  
Quant Title : SW846 8260  
QLast Update : Wed Oct 03 04:00:03 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.65 | 180  | 243783   | 52.484 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 13.79 | 225  | 120341   | 49.962 | ug/l  | 100      |
| 95) Naphthalene            | 13.83 | 128  | 782003   | 50.714 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 14.02 | 180  | 251678   | 52.452 | ug/l  | 100      |

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

