

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX122118\  
 Data File : VX006739.D  
 Acq On : 21 Dec 2018 23:04  
 Operator : JC/MD  
 Sample : VX1221WBS02  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 30 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VX1221WBS02

Manual Integrations  
 APPROVED

MMDadoda  
 12/22/2018 11:15:34 AM

Quant Time: Dec 22 05:37:51 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X121818W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Dec 19 15:20:58 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 530463   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 837952   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 745878   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 371927   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 6.07   | 65  | 305188   | 53.38 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 106.76% |      |
| 35) Dibromofluoromethane  | 5.51   | 113 | 272787   | 51.48 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.96% |      |
| 50) Toluene-d8            | 8.71   | 98  | 992032   | 49.66 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.32%  |      |
| 62) 4-Bromofluorobenzene  | 11.13  | 95  | 346002   | 47.29 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 94.58%  |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.20 | 85  | 84780   | 17.470  | ug/l | 95     |
| 3) Chloromethane              | 1.33 | 50  | 90963   | 17.399  | ug/l | 95     |
| 4) Vinyl Chloride             | 1.41 | 62  | 107165  | 19.626  | ug/l | 95     |
| 5) Bromomethane               | 1.64 | 94  | 101548  | 18.730  | ug/l | 97     |
| 6) Chloroethane               | 1.73 | 64  | 70301   | 18.594  | ug/l | 97     |
| 7) Trichlorofluoromethane     | 1.93 | 101 | 175610  | 20.628  | ug/l | 100    |
| 8) Diethyl Ether              | 2.19 | 74  | 69388   | 20.521  | ug/l | 98     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.39 | 101 | 100152  | 20.036  | ug/l | 98     |
| 10) Methyl Iodide             | 2.51 | 142 | 136373  | 19.060  | ug/l | 99     |
| 11) Tert butyl alcohol        | 3.08 | 59  | 152701  | 119.681 | ug/l | 100    |
| 12) 1,1-Dichloroethene        | 2.38 | 96  | 95766   | 20.206  | ug/l | 97     |
| 13) Acrolein                  | 2.30 | 56  | 90550   | 105.201 | ug/l | 97     |
| 14) Allyl chloride            | 2.73 | 41  | 159978  | 20.053  | ug/l | 98     |
| 15) Acrylonitrile             | 3.15 | 53  | 322934  | 113.994 | ug/l | 99     |
| 16) Acetone                   | 2.45 | 43  | 280308  | 106.718 | ug/l | 96     |
| 17) Carbon Disulfide          | 2.57 | 76  | 206604  | 16.472  | ug/l | 99     |
| 18) Methyl Acetate            | 2.78 | 43  | 191704  | 24.821  | ug/l | 100    |
| 19) Methyl tert-butyl Ether   | 3.21 | 73  | 343583  | 21.842  | ug/l | 98     |
| 20) Methylene Chloride        | 2.86 | 84  | 110294  | 20.307  | ug/l | 94     |
| 21) trans-1,2-Dichloroethene  | 3.17 | 96  | 103082  | 19.629  | ug/l | 97     |
| 22) Diisopropyl ether         | 3.87 | 45  | 313943  | 21.511  | ug/l | 95     |
| 23) Vinyl Acetate             | 3.83 | 43  | 1232842 | 103.269 | ug/l | 99     |
| 24) 1,1-Dichloroethane        | 3.70 | 63  | 175469  | 20.140  | ug/l | 99     |
| 25) 2-Butanone                | 4.70 | 43  | 407027  | 110.166 | ug/l | 99     |
| 26) 2,2-Dichloropropane       | 4.59 | 77  | 88072   | 13.086  | ug/l | 98     |
| 27) cis-1,2-Dichloroethene    | 4.60 | 96  | 118445  | 20.443  | ug/l | 98     |
| 28) Bromochloromethane        | 5.02 | 49  | 85726   | 22.315  | ug/l | 98     |
| 29) Tetrahydrofuran           | 5.16 | 42  | 271763  | 111.679 | ug/l | 100    |
| 30) Chloroform                | 5.22 | 83  | 188108  | 20.849  | ug/l | 100    |
| 31) Cyclohexane               | 5.57 | 56  | 152923  | 19.321  | ug/l | 96     |
| 32) 1,1,1-Trichloroethane     | 5.50 | 97  | 151317  | 19.863  | ug/l | 98     |
| 36) 1,1-Dichloropropene       | 5.80 | 75  | 133100  | 19.178  | ug/l | 98     |
| 37) Ethyl Acetate             | 4.86 | 43  | 154213  | 21.349  | ug/l | 99     |
| 38) Carbon Tetrachloride      | 5.79 | 117 | 124888  | 18.516  | ug/l | 96     |

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 ALS Vial : 30 Sample Multiplier: 1

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 MSVOA\_X  
 ClientSampleID :  
 VX1221WBS02

Manual Integrations  
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 12/22/2018 11:15:34 AM

Quant Time: Dec 22 05:37:51 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X121818W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Dec 19 15:20:58 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 7.46  | 83   | 161723   | 17.700  | ug/l   | 98       |
| 40) Benzene                    | 6.15  | 78   | 420365   | 19.926  | ug/l   | 100      |
| 41) Methacrylonitrile          | 5.06  | 41   | 85215    | 22.220  | ug/l   | 99       |
| 42) 1,2-Dichloroethane         | 6.20  | 62   | 144672   | 20.125  | ug/l   | 99       |
| 43) Isopropyl Acetate          | 6.46  | 43   | 226094   | 20.571  | ug/l   | 99       |
| 44) Trichloroethene            | 7.22  | 130  | 120363   | 18.851  | ug/l   | 93       |
| 45) 1,2-Dichloropropane        | 7.52  | 63   | 105772   | 20.604  | ug/l   | 95       |
| 46) Dibromomethane             | 7.66  | 93   | 74317    | 19.681  | ug/l   | 98       |
| 47) Bromodichloromethane       | 7.90  | 83   | 117623   | 18.762  | ug/l   | 99       |
| 48) Methyl methacrylate        | 7.77  | 41   | 118831   | 21.261  | ug/l   | 98       |
| 49) 1,4-Dioxane                | 7.76  | 88   | 63999    | 426.232 | ug/l   | 99       |
| 51) 4-Methyl-2-Pentanone       | 8.65  | 43   | 777869   | 111.233 | ug/l   | 99       |
| 52) Toluene                    | 8.79  | 92   | 264174   | 19.383  | ug/l   | 97       |
| 53) t-1,3-Dichloropropene      | 9.04  | 75   | 115273   | 17.145  | ug/l   | 98       |
| 54) cis-1,3-Dichloropropene    | 8.44  | 75   | 135754   | 18.401  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 9.21  | 97   | 114524   | 20.529  | ug/l   | 98       |
| 56) Ethyl methacrylate         | 9.18  | 69   | 157021   | 19.915  | ug/l   | 95       |
| 57) 1,3-Dichloropropane        | 9.37  | 76   | 181909   | 20.268  | ug/l   | 98       |
| 58) 2-Chloroethyl Vinyl ether  | 8.31  | 63   | 432998   | 103.313 | ug/l   | 100      |
| 59) 2-Hexanone                 | 9.49  | 43   | 586202   | 109.559 | ug/l   | 100      |
| 60) Dibromochloromethane       | 9.59  | 129  | 98570    | 18.433  | ug/l   | 98       |
| 61) 1,2-Dibromoethane          | 9.67  | 107  | 122605   | 20.675  | ug/l   | 99       |
| 64) Tetrachloroethene          | 9.34  | 164  | 117517   | 19.897  | ug/l   | 96       |
| 65) Chlorobenzene              | 10.14 | 112  | 306450   | 19.421  | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.22 | 131  | 99755    | 20.262  | ug/l   | 98       |
| 67) Ethyl Benzene              | 10.25 | 91   | 503390   | 19.523  | ug/l   | 99       |
| 68) m/p-Xylenes                | 10.36 | 106  | 395655   | 38.886  | ug/l   | 99       |
| 69) o-Xylene                   | 10.70 | 106  | 196151   | 19.523  | ug/l   | 97       |
| 70) Styrene                    | 10.71 | 104  | 309037   | 19.442  | ug/l   | 99       |
| 71) Bromoform                  | 10.86 | 173  | 68892    | 18.590  | ug/l   | 99       |
| 73) Isopropylbenzene           | 11.02 | 105  | 520678   | 20.463  | ug/l   | 99       |
| 74) N-amyl acetate             | 10.90 | 43   | 198484   | 21.793  | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.27 | 83   | 171111   | 22.612  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 11.30 | 75   | 147663m  | 21.363  | ug/l   |          |
| 77) Bromobenzene               | 11.26 | 156  | 137557   | 19.997  | ug/l   | 98       |
| 78) n-propylbenzene            | 11.36 | 91   | 566540   | 20.220  | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 11.42 | 91   | 336291   | 19.805  | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 11.51 | 105  | 421155   | 20.096  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 11.07 | 75   | 29121    | 15.969  | ug/l # | 81       |
| 82) 4-Chlorotoluene            | 11.51 | 91   | 388307   | 19.937  | ug/l   | 99       |
| 83) tert-Butylbenzene          | 11.77 | 119  | 427132   | 20.364  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 11.80 | 105  | 438876   | 19.909  | ug/l   | 100      |
| 85) sec-Butylbenzene           | 11.94 | 105  | 510298   | 19.843  | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 12.07 | 119  | 457116   | 20.221  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 12.02 | 146  | 247545   | 19.967  | ug/l   | 100      |
| 88) 1,4-Dichlorobenzene        | 12.10 | 146  | 243392   | 19.151  | ug/l   | 98       |
| 89) n-Butylbenzene             | 12.39 | 91   | 368856   | 19.172  | ug/l   | 98       |
| 90) Hexachloroethane           | 12.60 | 117  | 58092    | 18.631  | ug/l   | 96       |
| 91) 1,2-Dichlorobenzene        | 12.39 | 146  | 244712   | 19.732  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 13.00 | 75   | 32038    | 20.462  | ug/l   | 96       |

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| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.65 | 180  | 162823   | 19.033 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 13.79 | 225  | 73177    | 18.148 | ug/l  | 97       |
| 95) Naphthalene            | 13.83 | 128  | 554941   | 20.325 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 14.02 | 180  | 169945   | 19.240 | ug/l  | 98       |

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

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