

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX121918\  
 Data File : VX006637.D  
 Acq On : 19 Dec 2018 15:24  
 Operator : JC/MD  
 Sample : VX1219WBS01  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VX1219WBS01

Manual Integrations  
 APPROVED

MMDadoda  
 12/20/2018 10:00:22 AM

Quant Time: Dec 20 04:16:11 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  | 591440   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 914082   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 836428   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 440718   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 6.06   | 65  | 322048   | 50.52 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 101.04% |      |
| 35) Dibromofluoromethane  | 5.50   | 113 | 282834   | 48.93 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 97.86%  |      |
| 50) Toluene-d8            | 8.71   | 98  | 1099638  | 50.46 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.92% |      |
| 62) 4-Bromofluorobenzene  | 11.13  | 95  | 407068   | 51.00 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.00% |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.20 | 85  | 108997  | 20.145  | ug/l | 99     |
| 3) Chloromethane              | 1.33 | 50  | 116487  | 19.983  | ug/l | 96     |
| 4) Vinyl Chloride             | 1.41 | 62  | 124127  | 20.389  | ug/l | 100    |
| 5) Bromomethane               | 1.64 | 94  | 122302  | 20.392  | ug/l | 97     |
| 6) Chloroethane               | 1.72 | 64  | 80076   | 18.996  | ug/l | 99     |
| 7) Trichlorofluoromethane     | 1.93 | 101 | 194764  | 20.519  | ug/l | 100    |
| 8) Diethyl Ether              | 2.19 | 74  | 73158   | 19.405  | ug/l | 99     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.39 | 101 | 118973  | 21.348  | ug/l | 99     |
| 10) Methyl Iodide             | 2.51 | 142 | 162011  | 20.308  | ug/l | 98     |
| 11) Tert butyl alcohol        | 3.06 | 59  | 152935  | 107.506 | ug/l | 98     |
| 12) 1,1-Dichloroethene        | 2.38 | 96  | 105611  | 19.986  | ug/l | 94     |
| 13) Acrolein                  | 2.29 | 56  | 84018   | 87.549  | ug/l | 99     |
| 14) Allyl chloride            | 2.73 | 41  | 175668  | 19.749  | ug/l | 99     |
| 15) Acrylonitrile             | 3.15 | 53  | 324018  | 102.585 | ug/l | 99     |
| 16) Acetone                   | 2.45 | 43  | 306540  | 104.673 | ug/l | 97     |
| 17) Carbon Disulfide          | 2.57 | 76  | 248466  | 17.767  | ug/l | 100    |
| 18) Methyl Acetate            | 2.78 | 43  | 176353  | 20.479  | ug/l | 97     |
| 19) Methyl tert-butyl Ether   | 3.20 | 73  | 364135  | 20.762  | ug/l | 98     |
| 20) Methylene Chloride        | 2.85 | 84  | 123144  | 20.335  | ug/l | 97     |
| 21) trans-1,2-Dichloroethene  | 3.17 | 96  | 114350  | 19.530  | ug/l | 99     |
| 22) Diisopropyl ether         | 3.87 | 45  | 336419  | 20.674  | ug/l | 98     |
| 23) Vinyl Acetate             | 3.82 | 43  | 1320357 | 99.197  | ug/l | 99     |
| 24) 1,1-Dichloroethane        | 3.70 | 63  | 194174  | 19.989  | ug/l | 98     |
| 25) 2-Butanone                | 4.70 | 43  | 419186  | 101.760 | ug/l | 98     |
| 26) 2,2-Dichloropropane       | 4.59 | 77  | 140269  | 18.693  | ug/l | 99     |
| 27) cis-1,2-Dichloroethene    | 4.60 | 96  | 128104  | 19.830  | ug/l | 98     |
| 28) Bromochloromethane        | 5.02 | 49  | 86909   | 20.116  | ug/l | 98     |
| 29) Tetrahydrofuran           | 5.15 | 42  | 273425  | 100.778 | ug/l | 98     |
| 30) Chloroform                | 5.21 | 83  | 203217  | 20.202  | ug/l | 96     |
| 31) Cyclohexane               | 5.57 | 56  | 176394  | 19.988  | ug/l | 99     |
| 32) 1,1,1-Trichloroethane     | 5.49 | 97  | 165387  | 19.471  | ug/l | 97     |
| 36) 1,1-Dichloropropene       | 5.80 | 75  | 151387  | 19.996  | ug/l | 100    |
| 37) Ethyl Acetate             | 4.85 | 43  | 155492  | 19.733  | ug/l | 100    |
| 38) Carbon Tetrachloride      | 5.79 | 117 | 141673  | 19.255  | ug/l | 94     |

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 Sample : VX1219WBS01  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VX1219WBS01

Manual Integrations  
 APPROVED

MMDadoda  
 12/20/2018 10:00:22 AM

Quant Time: Dec 20 04:16:11 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   | 200983   | 20.165  | ug/l   | 96       |
| 40) Benzene                    | 6.14  | 78   | 463272   | 20.131  | ug/l   | 98       |
| 41) Methacrylonitrile          | 5.06  | 41   | 86164    | 20.596  | ug/l   | 98       |
| 42) 1,2-Dichloroethane         | 6.19  | 62   | 154801   | 19.741  | ug/l   | 100      |
| 43) Isopropyl Acetate          | 6.46  | 43   | 235371   | 19.632  | ug/l   | 99       |
| 44) Trichloroethene            | 7.21  | 130  | 135526   | 19.458  | ug/l   | 99       |
| 45) 1,2-Dichloropropane        | 7.51  | 63   | 112638   | 20.114  | ug/l   | 96       |
| 46) Dibromomethane             | 7.66  | 93   | 80668    | 19.584  | ug/l   | 98       |
| 47) Bromodichloromethane       | 7.90  | 83   | 132189   | 19.330  | ug/l   | 95       |
| 48) Methyl methacrylate        | 7.77  | 41   | 124778   | 20.466  | ug/l   | 99       |
| 49) 1,4-Dioxane                | 7.75  | 88   | 69009    | 421.087 | ug/l   | 100      |
| 51) 4-Methyl-2-Pentanone       | 8.65  | 43   | 802619   | 105.214 | ug/l   | 99       |
| 52) Toluene                    | 8.78  | 92   | 305155   | 20.526  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 9.04  | 75   | 136394   | 18.596  | ug/l   | 97       |
| 54) cis-1,3-Dichloropropene    | 8.43  | 75   | 156882   | 19.494  | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane      | 9.21  | 97   | 124519   | 20.462  | ug/l   | 98       |
| 56) Ethyl methacrylate         | 9.18  | 69   | 178346   | 20.736  | ug/l   | 99       |
| 57) 1,3-Dichloropropane        | 9.37  | 76   | 198366   | 20.261  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 8.31  | 63   | 461194   | 100.875 | ug/l   | 100      |
| 59) 2-Hexanone                 | 9.49  | 43   | 624208   | 106.946 | ug/l   | 99       |
| 60) Dibromochloromethane       | 9.59  | 129  | 109385   | 18.712  | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 9.67  | 107  | 130969   | 20.246  | ug/l   | 100      |
| 64) Tetrachloroethene          | 9.34  | 164  | 135256   | 20.421  | ug/l   | 98       |
| 65) Chlorobenzene              | 10.14 | 112  | 357488   | 20.202  | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.22 | 131  | 111327   | 20.165  | ug/l   | 99       |
| 67) Ethyl Benzene              | 10.25 | 91   | 584590   | 20.217  | ug/l   | 100      |
| 68) m/p-Xylenes                | 10.36 | 106  | 471229   | 41.300  | ug/l   | 99       |
| 69) o-Xylene                   | 10.69 | 106  | 231461   | 20.543  | ug/l   | 97       |
| 70) Styrene                    | 10.71 | 104  | 372029   | 20.871  | ug/l   | 99       |
| 71) Bromoform                  | 10.86 | 173  | 74395    | 18.066  | ug/l # | 99       |
| 73) Isopropylbenzene           | 11.02 | 105  | 609511   | 20.216  | ug/l   | 100      |
| 74) N-amyl acetate             | 10.90 | 43   | 221748   | 20.547  | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.27 | 83   | 184492   | 20.575  | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane     | 11.30 | 75   | 168386m  | 20.559  | ug/l   |          |
| 77) Bromobenzene               | 11.26 | 156  | 161437   | 19.805  | ug/l   | 99       |
| 78) n-propylbenzene            | 11.36 | 91   | 682751   | 20.564  | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 11.42 | 91   | 408769   | 20.316  | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 11.51 | 105  | 505270   | 20.346  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 11.07 | 75   | 37532    | 16.997  | ug/l # | 85       |
| 82) 4-Chlorotoluene            | 11.51 | 91   | 471583   | 20.433  | ug/l   | 99       |
| 83) tert-Butylbenzene          | 11.77 | 119  | 498849   | 20.071  | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene     | 11.80 | 105  | 518904   | 19.865  | ug/l   | 99       |
| 85) sec-Butylbenzene           | 11.94 | 105  | 625082   | 20.512  | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 12.06 | 119  | 554551   | 20.702  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 12.02 | 146  | 299640   | 20.397  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 12.10 | 146  | 301111   | 19.994  | ug/l   | 98       |
| 89) n-Butylbenzene             | 12.39 | 91   | 471152   | 20.667  | ug/l   | 100      |
| 90) Hexachloroethane           | 12.60 | 117  | 69174    | 18.707  | ug/l   | 97       |
| 91) 1,2-Dichlorobenzene        | 12.39 | 146  | 297339   | 20.233  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 13.00 | 75   | 34880    | 18.800  | ug/l   | 96       |

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Sample : VX1219WBS01  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
VX1219WBS01

Manual Integrations  
APPROVED

MMDadoda  
12/20/2018 10:00:22 AM

Quant Time: Dec 20 04:16:11 2018  
Quant Method : Z:\V0ASRV\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) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.65 | 180  | 205836   | 20.305 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 13.78 | 225  | 95711    | 20.031 | ug/l  | 98       |
| 95) Naphthalene            | 13.83 | 128  | 635799   | 19.651 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 14.02 | 180  | 203469   | 19.440 | ug/l  | 100      |

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

